ISSN: 0090-1423

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VOLUME 31, 1990

SUBJECT INDEX B-Ch

U.S. DEPARTMENT OF HEALTH
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National Library of Medicine Cataloging in Publication

ZW
1
I384

Cumulated Index medicus. -- Vol. 1 (Jan.-Dec.1960)-
.-- Chicago : American Medical Association ;
Washington, D.C. : Supt. of Docs., U.S. G.P.O.
[distributor], 1961-
v.
Vols. for 1965- issued by the National Library of Medicine.
Continues: Quarterly cumulative Index medicus.
Annual cumulation of the monthly issues of Index medicus.
Vols. for 1971-1978 issued as DHEW publication ; no. (NIH) 72-259, etc.; for 1979- as NIH publication ; no. 80-259, etc.
Issues for 1967- include Bibliography of medical reviews.
ISSN 0090-1423 = Cumulated Index medicus.

1. Bibliography of Medicine 2. Medicine - indexes I. American Medical Association. II. National Library of Medicine (U.S.). III. Bibliography of medical reviews IV. Index medicus V. Series: DHEW publication ; no. (NIH) 72-259, etc. VI. Series: NIH publication ; no. 80-259, etc.

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This book is printed on acid-free paper for permanence.

Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through September 30, 1991

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

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ABNORMALITIES

Absence of the inferior vena cava. Chapman JP Jr, et al. **Ann Thorac Surg** 1967 Mar;3(3):228–34

Computed tomographic diagnosis of left superior vena cava and absence of the azygos vein: case report. Kullnig P, et al. **Cardiovasc Intervent Radiol** 1990 Feb–Mar;13(1):47–9

Anomalous inferior vena cava with azygos continuation, dysgenesis of lung, and clinically suspected absence of left pericardium. Matsuoka T, et al. **Chest** 1990 Mar;97(3):747–9

Mediastinal radiographic abnormality caused by anomalous venous drainage: how often is it seen in Afro–Americans? Payne CB Jr, et al. **J Natl Med Assoc** 1990 Mar;82(3):220–1

An autopsy case of azygos lobe and the extra–pulmonary course of the bronchial veins in man. Chiba S, et al. **Okajimas Folia Anat Jpn** 1990 Mar;66(6):313–37 (95 ref.)

Congenital absence of the intrahepatic segment of the inferior vena cava with azygos continuation presenting as a mediastinal mass. Beedie RJ, et al. **Postgrad Med J** 1989 Apr;65(762):253–5

[Surgical correction for a case of partial anomalous pulmonary venous drainage with dextrocardia, situs inversus and azygos continuation of inferior vena cava] Hirooka S, et al. **Kyobu Geka** 1990 Apr;43(4):296–9 (Eng. Abstr.) **(Jpn)**

[A case of defective inferior vena cava] Shimizu M, et al. **Rinsho Hoshasen** 1989 Dec;34(13):1621–2 **(Jpn)**

EMBRYOLOGY

[Development of the ascending lumbar and azygos veins in human embryogenesis] Petrenko VM. **Arkh Anat Gistol Embriol** 1990 Jun;98(6):65–70 (Eng. Abstr.) **(Rus)**

INJURIES

Azygos vein transection in blunt chest trauma [letter; comment] Stemp LI. **J Trauma** 1990 Jun;30(6):751–2 Comment on: J Trauma 1989 Jun;29(6):889–90.

[Injury of the azygos vein. A new complication of upper digestive endoscopy] Scotte M, et al. **Ann Chir** 1990; 44(1):49–51 (Eng. Abstr.) **(Fre)**

PATHOLOGY

[Epithelioid hemangioendothelioma of the azygos vein] Nataf P, et al. **Arch Mal Coeur** 1989 Nov;82(11):1919–22 (10 ref.) (Eng. Abstr.) **(Fre)**

[Dilatation of the azygos vein in agenesis of the inferior vena cava] Stetter G, et al. **Rontgenpraxis** 1989 Nov; 42(11):389–91 **(Ger)**

PHYSIOPATHOLOGY

Effects of non–shunting operation on azygos venous blood flow in cirrhotic patients. Kokudo N, et al. **Gut** 1989 Oct; 30(10):1396–400

[Influence of the sclerosing of esophageal varices on portal pressure and azygos venous blood flow] Bourbon P, et al. **Gastroenterol Clin Biol** 1990;14(3):244–7 (Eng. Abstr.) **(Fre)**

[Evaluation of the relationship between esophageal varices and azygos vein using percutaneous transhepatic cine–portography] Kimura T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Dec;86(12):2749–56 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

CT appearance of the retroaortic anastomoses of the azygos system. Takasugi JE, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):41–4

SURGERY

[Effect of porto–azygous disconnection with or without low esophageal transection on esophageal varices and portal pressure] Zhong DC. **Chung Hua Wai Ko Tsa Chih** 1989 Nov;27(11):680–3, 702 (Eng. Abstr.) **(Chi)**

TRANSPLANTATION

Use of azygos vein as interposition graft for surgical unifocalization of pulmonary blood supply. Iyer KS, et al. **Ann Thorac Surg** 1989 Dec;48(6):776–8

Azygous flap technique for reinforcement of esophageal closure. Kosloske AM. **J Pediatr Surg** 1990 Jul;25(7):793–4

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BABESIA

DRUG EFFECTS

In vitro killing of Babesia bovis by the ornithine analog alpha–monofluoromethyldehydroornithine methyl ester. Jasmer DP, et al. **J Protozool** 1989 Sep–Oct;36(5):493–7

GENETICS

Babesia bovis: evidence for selection of subpopulations during attenuation. Carson CA, et al. **Exp Parasitol** 1990 May; 70(4):404–10

Babesia bovis: gene isolation and characterization using a mung bean nuclease–derived expression library. Tripp CA, et al. **Exp Parasitol** 1989 Oct;69(3):211–25

Isolation and characterization of a gene associated with a virulent strain of Babesia microti. Tetzlaff CL, et al. **Mol Biochem Parasitol** 1990 May;40(2):183–92

GROWTH & DEVELOPMENT

Development of Babesia ovata in the haemolymph of the tick, Haemaphysalis longicornis. Higuchi S, et al. **Kitasato Arch Exp Med** 1989 Sep;62(2–3):123–7

Development of Babesia ovata in the midgut of the tick, Haemaphysalis longicornis. Higuchi S, et al. **Nippon Juigaku Zasshi** 1989 Dec;51(6):1129–35

Growth of Babesia bovis parasites in stationary and suspension cultures and their use in experimental vaccination of cattle. Timms P, et al. **Res Vet Sci** 1989 Nov;47(3):309–14

IMMUNOLOGY

Comparison of immunogenicity and virulence between Babesia bigemina parasites from continuous culture and from a splenectomised calf. Jorgensen WK, et al. **Aust Vet J** 1989 Nov;66(11):371–2

Concentration of Babesia bigemina–infected erythrocytes using a dextran sulphate affinity column. Goodger BV, et al. **Int J Parasitol** 1989 Dec;19(8):939–41

A slide enzyme–linked immunosorbent assay (SELISA) for the diagnosis of Babesia bovis infections and for the screening of Babesia–specific monoclonal antibodies. Kung'u MW, et al. **Int J Parasitol** 1990 May;20(3):341–5

Molecular characterization of Babesia bovis merozoite surface proteins bearing epitopes immunodominant in protected cattle. Hines SA, et al. **Mol Biochem Parasitol** 1989 Nov;37(1):1–9

Identification of common surface antigens among Babesia bigemina isolates by using monoclonal antibodies. Figueroa JV, et al. **Parasitology** 1990 Apr;100 Pt 2:161–75

A monoclonal antibody–derived antigen of Babesia divergens: characterization and investigation of its ability to protect gerbils against virulent homologous challenge. Winger CM, et al. **Parasitology** 1989 Dec;99 Pt 3:341–8

Prevalence of antibodies against Babesia canis in dogs in an endemic area. Bobade PA, et al. **Rev Elev Med Vet Pays Trop** 1989;42(2):211–7

Application of exoantigens of Babesia and Plasmodium in vaccine development. James MA. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:67–72 (58 ref.)

Immunoprophylactic control of bovine babesiosis: role of exoantigens of Babesia. Montenegro–James S. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:85–94 (39 ref.)

Development of babesial vaccines. Timms P. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:73–9 (25 ref.)

Antibody response and duration of latent infection in sheep following experimental infection with Babesia ovis. Habela M, et al. **Vet Parasitol** 1990 Feb;35(1–2):1–10

Vaccination against bovine babesiosis with drug–controlled live parasites [published erratum appears in Vet Rec 1989 Dec 23–30;125(26–27):646] Gray JS, et al. **Vet Rec** 1989 Sep 30;125(14):369–72

ISOLATION & PURIFICATION

Recently developed methods for the detection of babesial infections. Reiter I, et al. **Trans R Soc Trop Med Hyg** 1989; 83 Suppl:21–3 (23 ref.)

Characterization of a repetitive DNA probe for Babesia bigemina. Buening GM, et al. **Vet Parasitol** 1990 May; 36(1–2):11–20

Isolation and identification of Babesia ovis in Extremadura (Spain). Habela M, et al. **Vet Parasitol** 1990 Mar;35(3):233–8

METABOLISM

Babesia bovis—effects of phospholipid translocation and adenosine tri–phosphate consumption. Commins MA, et al. **Int J Parasitol** 1990 May;20(3):395–6

Calcium–dependent protein phosphorylation in Babesia bovis and its role in growth regulation. Ray A, et al. **J Parasitol** 1990 Apr;76(2):153–61

Purine salvage and metabolism in Babesia bovis. Matias C, et al. **Parasitol Res** 1990;76(3):207–13

PATHOGENICITY

Study of virulence and vector transmission of Babesia bovis by use of cloned parasite lines. Timms P, et al. **Infect Immun** 1990 Jul;58(7):2171–6

PHYSIOLOGY

Borrelia burgdorferi and Babesia microti: efficiency of transmission from reservoirs to vector ticks (Ixodes dammini). Mather TN, et al. **Exp Parasitol** 1990 Jan; 70(1):55–61

Increased glucose permeability in Babesia bovis–infected erythrocytes. Upston JM, et al. **Int J Parasitol** 1990 Feb; 20(1):69–76

Transmission of Babesia odocoilei in white–tailed deer (Odocoileus virginianus) by Ixodes scapularis (Acari: Ixodidae). Waldrup KA, et al. **J Wildl Dis** 1990 Jul; 26(3):390–1

Sexual cycle of Babesia divergens confirmed by DNA measurements. Mackenstedt U, et al. **Parasitol Res** 1990; 76(3):199–206

The impact of cultural and environmental changes on the epidemiology and control of human babesiosis. Healy G. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:35–8 (14 ref.)

ULTRASTRUCTURE

Morphological observations of Babesia ovata in bovine lymphocyte. Higuchi S, et al. **Kitasato Arch Exp Med** 1989 Sep;62(2–3):135–8

The fine structure of developmental stages of Babesia caballi in the salivary glands of Hyalomma truncatum. Blouin EF, et al. **Onderstepoort J Vet Res** 1989 Sep;56(3):189–93

BABESIASIS see BABESIOSIS

BABESIOSIS

Malaria and babesiosis. 3rd International Congress on Maleria and Babesiosis. Annecy, France, September 7–11, 1987. Proceedings. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:1–107

BLOOD

Babesia bovis—effects of phospholipid translocation and adenosine tri–phosphate consumption. Commins MA, et al. **Int J Parasitol** 1990 May;20(3):395–6

Concentration of Babesia bigemina–infected erythrocytes using a dextran sulphate affinity column. Goodger BV, et al. **Int J Parasitol** 1989 Dec;19(8):939–41

Serum hemolytic activity in dogs infected with Babesia gibsoni. Onishi T, et al. **J Parasitol** 1990 Aug;76(4):564–7

Babesia equi and Trypanosoma vivax infections in donkeys. Kyewalabye Kaggwa E, et al. **Rev Elev Med Vet Pays Trop** 1989;42(2):205–10

Flow cytometric enumeration of reticulocyte in the peripheral blood from canine infected with Babesia gibsoni. Uemura T, et al. **Zentralbl Veterinarmed [B]** 1990 Aug; 37(6):468–72

COMPLICATIONS

Babesiosis, asplenia, and AIDS [letter] Ong KR, et al. **Lancet** 1990 Jul 14;336(8707):112

DIAGNOSIS

Life–threatening babesiosis in a women from Wisconsin. Iacopino V, et al. **Arch Intern Med** 1990 Jul;150(7):1527–8

A slide enzyme–linked immunosorbent assay (SELISA) for the diagnosis of Babesia bovis infections and for the screening of Babesia–specific monoclonal antibodies. Kung'u MW, et al. **Int J Parasitol** 1990 May;20(3):341–5

Recently developed methods for the detection of babesial infections. Reiter I, et al. **Trans R Soc Trop Med Hyg** 1989; 83 Suppl:21–3 (23 ref.)

DRUG THERAPY

Redwater fever [letter] Rutter JM. **Vet Rec** 1990 Jul 28; 127(4):94–5

[Babesia divergens: activity of long-acting oxytetracycline in the gerbil, Meriones unguiculatus] Losson B, et al. **Ann Rech Vet** 1989;20(4):501–7 (Eng. Abstr.) (Fre)

EPIDEMIOLOGY

From the Centers for Disease Control. Babesiosis—Connecticut. **JAMA** 1989 Oct 20;262(15):2067

Babesiosis: under-reporting or case-clustering? Clarke CS, et al. **Postgrad Med J** 1989 Aug;65(766):591–3

The impact of cultural and environmental changes on the epidemiology and control of human babesiosis. Healy G. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:35–8 (14 ref.)

Bovine Babesia bigemina seroreactors in Jamaica. McGinnis B, et al. **Trop Anim Health Prod** 1989 Nov;21(4):227–8

Outbreaks of babesiosis in domestic livestock in the eastern region of the Sudan. Mohamed AA, et al. **Trop Anim Health Prod** 1990 May;22(2):123–5

Tick-borne diseases of cattle in Paraguay. I. Seroepidemiological studies on anaplasmosis and babesiosis. Payne RC, et al. **Trop Anim Health Prod** 1990 Feb; 22(1):53–60

Identification of Babesia bovis and Cowdria ruminantium on the island of Unguja, Zanzibar. Flach EJ, et al. **Vet Rec** 1990 Jan 20;126(3):57–9

Parasitic diseases. Babesiosis in Connecticut. **Wkly Epidemiol Rec** 1990 Aug 3;65(31):243–4 (Eng, Fre)

GENETICS

Increase in micronucleated erythrocytes associated with babesiosis in Syrian golden hamsters. Ormiston BG, et al. **Mutat Res** 1989 Nov;227(3):173–7

HISTORY

Long odyssey of babesiosis. Moss SW. **N J Med** 1990 Apr; 87(4):291–4

A biblical disease updated. Earle DP. **Trans Am Clin Climatol Assoc** 1988;100:132–41

IMMUNOLOGY

Inverse age resistance to experimental Babesia divergens infection in cattle. Christensson DA. **Acta Vet Scand** 1989; 30(4):453–64

Studies on route of immunization with a mixture of killed parasites and adjuvants against Babesia rodhaini infection in mice. Saeki H, et al. **Nippon Juigaku Zasshi** 1989 Dec; 51(6):1173–8

Effect of Corynebacterium parvum bacterin on artificial immunity against Babesia rodhaini infection in mice. Saeki H, et al. **Nippon Juigaku Zasshi** 1989 Dec;51(6):1255–7

Prevalence of antibodies against Babesia canis in dogs in an endemic area. Bobade PA, et al. **Rev Elev Med Vet Pays Trop** 1989;42(2):211–7

Immunopathophysiology of babesial infections. Wright IG, et al. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:11–3 (23 ref.)

Antibody response and duration of latent infection in sheep following experimental infection with Babesia ovis. Habela M, et al. **Vet Parasitol** 1990 Feb;35(1–2):1–10

PARASITOLOGY

Comparison of immunogenicity and virulence between Babesia bigemina parasites from continuous culture and from a splenectomised calf. Jorgensen WK, et al. **Aust Vet J** 1989 Nov;66(11):371–2

Sexual cycle of Babesia divergens confirmed by DNA measurements. Mackenstedt U, et al. **Parasitol Res** 1990; 76(3):199–206

PHYSIOPATHOLOGY

Increased erythrophagocytic activity of macrophages in dogs with Babesia gibsoni infection. Murase T, et al. **Nippon Juigaku Zasshi** 1990 Apr;52(2):321–7

PREVENTION & CONTROL

Protection against Babesia infection in beagles immunized with Toxoplasma lysate antigen. Sato M, et al. **Nippon Juigaku Zasshi** 1990 Feb;52(1):155–8

A monoclonal antibody-derived antigen of Babesia divergens: characterization and investigation of its ability to protect gerbils against virulent homologous challenge. Winger CM, et al. **Parasitology** 1989 Dec;99 Pt 3:341–8

Growth of Babesia bovis parasites in stationary and suspension cultures and their use in experimental vaccination of cattle. Timms P, et al. **Res Vet Sci** 1989 Nov;47(3):309–14

Immunoprophylactic control of bovine babesiosis: role of exoantigens of Babesia. Montenegro-James S. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:85–94 (39 ref.)

Vaccination against canine babesiosis: an overview of field observations. Moreau Y, et al. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:95–6

A reappraisal of vector control strategies for babesiosis. Smith RD, et al. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:43–52 (37 ref.)

Development of babesial vaccines. Timms P. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:73–9 (25 ref.)

Australian frozen vaccines for the control of babesiosis and anaplasmosis in cattle—a review. Dalgliesh RJ, et al. **Trop Anim Health Prod** 1990 Feb;22(1):44–52 (19 ref.)

Tick-borne diseases of cattle in Paraguay. II. Immunisation against anaplasmosis and babesiosis. Payne RC, et al. **Trop Anim Health Prod** 1990 May;22(2):101–8

Estimation of the potential demand for a bovine babesiosis and anaplasmosis vaccine in Argentina. Späth EJ, et al. **Vet Parasitol** 1990 May;36(1–2):131–40

Vaccination against bovine babesiosis with drug-controlled live parasites [published erratum appears in Vet Rec 1989 Dec 23–30;125(26–27):646] Gray JS, et al. **Vet Rec** 1989 Sep 30;125(14):369–72

Bovine babesiosis on Nevis—implications for tick control. Hadrill DJ, et al. **Vet Rec** 1990 Apr 21;126(16):403–4

THERAPY

[2 cases of severe human babesiosis treated successfully (letter)] Gorenflot A, et al. **Presse Med** 1990 Feb 24; 19(7):335 (Fre)

TRANSMISSION

Study of virulence and vector transmission of Babesia bovis by use of cloned parasite lines. Timms P, et al. **Infect Immun** 1990 Jul;58(7):2171–6

Transmission of Babesia odocoilei in white-tailed deer (Odocoileus virginianus) by Ixodes scapularis (Acari: Ixodidae). Waldrup KA, et al. **J Wildl Dis** 1990 Jul; 26(3):390–1

The transovarial transmission of Babesia caballi by Hyalomma truncatum. De Waal DT. **Onderstepoort J Vet Res** 1990 Mar;57(1):99–100

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BACILLACEAE

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A cytochrome o-type oxidase of the thermophilic bacterium PS3 grown under air-limited conditions. Sone N, et al. **J Biochem (Tokyo)** 1990 Apr;107(4):597–602

ISOLATION & PURIFICATION

Isolation of Sporosarcina ureae from a bronchial biopsy in a child with cystic fibrosis [letter] Chomarat M, et al. **Eur J Clin Microbiol Infect Dis** 1990 Apr;9(4):302–3

PHYSIOLOGY

Physiology of Sporolactobacillus strains isolated from different habitats and the indication of in vitro antagonism against Bacillus species. Holzapfel WH, et al. **Int J Food Microbiol** 1988 Oct;7(2):161–8

RADIATION EFFECTS

Resistance of vegetative cells and endospores of Sporolactobacillus to gamma-irradiation. Botha SJ, et al. **Int J Food Microbiol** 1988 Oct;7(2):169–72

BACILLUS

Variation of the surface properties of Bacillus licheniformis according to age, temperature and aeration. Herben PF, et al. **Biochim Biophys Acta** 1990 Feb 26;1033(2):184–8

Studies on the efficacy and persistence of the microbial agent bacillus sphaericus against larvae of culex pipiens pallens. Zhen TM, et al. **Chin Med J [Engl]** 1989 Jun;102(6):464–8

Resistance to the Bacillus sphaericus toxin in cultured mosquito cells. Schroeder JM, et al. **In Vitro Cell Dev Biol** 1989 Oct;25(10):887–91

Evaluation of Bacillus sphaericus to control breeding of malaria vectors. Ansari MA, et al. **Indian J Malariol** 1989 Mar;26(1):25–31

Small scale field trials of Bacillus sphaericus (strain 2362) against anopheline and culicine mosquito larvae in southern Mexico. Arredondo-Jiménez JI, et al. **J Am Mosq Control Assoc** 1990 Jun;6(2):300–5

Control of Culex pipiens by Bacillus sphaericus and role of nontarget arthropods in its recycling. Karch S, et al. **J Am Mosq Control Assoc** 1990 Mar;6(1):47–54

Relative potency of Bacillus thuringiensis var. israelensis and Bacillus sphaericus 2362 for Mansonia titillans and Mansonia dyari. Lord JC, et al. **J Am Mosq Control Assoc** 1990 Jun;6(2):325–7

The effect of Bacillus sphaericus upon the susceptibility of Anopheles quadrimaculatus to Plasmodium berghei. Young MD, et al. **J Am Mosq Control Assoc** 1990 Mar;6(1):139–40

The effects of controlled exposure to formaldehyde vapour on spores of Bacillus globigii NCTC 10073. Cross GL, et al. **J Appl Bacteriol** 1990 May;68(5):461–9

Bacillus sphaericus as mosquito larvicide. Aziz A, et al. **JPMA** 1989 Aug;39(8):199–201

New facts and trends in bacteriological control of mosquitoes. de Barjac H. **Mem Inst Oswaldo Cruz** 1989; 84 Suppl 3:101–5 (16 ref.)

Heat resistance of Bacillus spores exposed to food processing conditions. Pendurkar SH, et al. **Nahrung** 1990;34(2):177–80

Long residual activity of Bacillus sphaericus 1593 against Culex quinquefasciatus larvae in artificial pools. Pantuwatana S, et al. **Southeast Asian J Trop Med Public Health** 1989 Sep; 20(3):421–7

[Use of bacteria in the control of medically important diptera] Habib ME. **Mem Inst Oswaldo Cruz** 1989;84 Suppl 3:31–4 (Por)

[Use of bacterial insecticides for the control of Culicidae and Simuliidae in Rio Grande do Sul] Ruas Neto A, et al. **Mem Inst Oswaldo Cruz** 1989;84 Suppl 3:39–45 (Por)

[Action of microbe-antagonists on bacilli and corynebacteria of the skin of the breast in nursing women] Reznik SR, et al. **Mikrobiol Zh** 1989 May-Jun;51(3):43–7 (Eng. Abstr.) (Rus)

ANALYSIS

The poly-alpha- and -beta-1,4-glucuronic acid moiety of teichuronopeptide from the cell wall of the alkalophilic Bacillus strain C-125. Aono R. **Biochem J** 1990 Sep 1; 270(2):363–7

Sequence determination of unknown cyclic peptide antibiotics by fast atom bombardment mass spectrometry. Ishikawa K, et al. **Biomed Environ Mass Spectrom** 1990 Jul;19(7):395–9

The MerR metalloregulatory protein binds mercuric ion as a tricoordinate, metal-bridged dimer. Helmann JD, et al. **Science** 1990 Feb 23;247(4945):946–8

[A selective inhibitor of cAMP-dependent protein kinase isolated from an alkalophilic strain of Bacillus species] Murakami K, et al. **Nippon Saikingaku Zasshi** 1989 Nov; 44(6):789–96 (Eng. Abstr.) (Jpn)

[Formation and physico-chemical characteristics of exopolysaccharides from various bacteria of the Bacillus genus] Pirog TP, et al. **Mikrobiol Zh** 1985 Nov-Dec; 47(6):27–32 (Eng. Abstr.) (Rus)

CLASSIFICATION

Bacillus thiaminolyticus sp. nov., nom. rev. Nakamura LK. **Int J Syst Bacteriol** 1990 Jul;40(3):242–6

Numerical classification and identification of Bacillus sphaericus including some strains pathogenic for mosquito larvae. Alexander B, et al. **J Gen Microbiol** 1990 Feb;136 (Pt 2):367–76

[Study on the discrimination of bacteria by gas chromatographic profiles of cellular monosaccharides] Zhou F, et al. **Wei Sheng Wu Hsueh Pao** 1990 Feb; 30(1):7–15 (Eng. Abstr.) (Chi)

DRUG EFFECTS

Submicromolar Ag+ increases passive Na+ permeability and inhibits the respiration-supported formation of Na+ gradient in Bacillus FTU vesicles. Semeykina AL, et al. **FEBS Lett** 1990 Aug 20;269(1):69–72

Suppression of tyrocidine production by purine nucleotides and related substances in Bacillus brevis. Oyama M, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1–3):277–9

Sporulation of a bacitracin-sensitive mutant of Bacillus licheniformis is self-inhibited by bacitracin. Podlesek Z, et al. **J Gen Microbiol** 1989 Nov;135 (Pt 11):2813–8

Uncoupler-resistant mutants of bacteria. Krulwich TA, et al. **Microbiol Rev** 1990 Mar;54(1):52–65 (112 ref.)

ENZYMOLOGY

Production of bacterial thermostable alpha-amylase by solid-state fermentation: a potential tool for achieving economy in enzyme production and starch hydrolysis. Lonsane BK, et al. **Adv Appl Microbiol** 1990;35:1–56 (181 ref.)

Enzyme activities and antibiotic susceptibility of colonial variants of Bacillus subtilis and Bacillus licheniformis. Carlisle GE, et al. **Appl Environ Microbiol** 1989 Nov; 55(11):3026–8

The Glu residue in the conserved Asn-Glu-Pro sequence of two highly divergent endo-beta-1,4-glucanases is essential for enzymatic activity. Baird SD, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):1035–9

Conserved residues of liquefying alpha-amylases are concentrated in the vicinity of active site. Vihinen M, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):61–5

Kinetic study of the irreversible thermal denaturation of Bacillus licheniformis alpha-amylase. Violet M, et al. **Biochem J** 1989 Nov 1;263(3):665–70

The alpha-amylase of the caldoactive bacterium Bacillus caldovelox. Bealin-Kelly FJ, et al. **Biochem Soc Trans** 1990 Apr;18(2):310–1

Primary structure of a zinc protease from Bacillus mesentericus strain 76. Stoeva S, et al. **Biochemistry** 1990 Jan 16;29(2):527–34

Selection and application of antibodies modifying the function of beta-lactamase. Bibi E, et al. **Biochim Biophys Acta** 1990 Aug 17;1035(2):237–41

Immunoelectron microscopic localization of the F1F0 ATPase (ATP synthase) on the cytoplasmic membrane of alkalophilic Bacillus firmus RAB. Rohde M, et al. **Biochim Biophys Acta** 1989 Oct 16;985(2):233–5

Restriction endonucleases from microorganisms isolated in Brazil: an isoschizomer of HaeIII from a thermophilic Bacillus sp. Cruz AK, et al. **Braz J Med Biol Res** 1989; 22(11):1321–8

Formation of a cycloinulo-oligosaccharide from inulin by an extracellular enzyme of Bacillus circulans OKUMZ 31B. Kawamura M, et al. **Carbohydr Res** 1989 Oct 23;192:83–90

Effects of reduced malto-oligosaccharides on the thermal stability of pullulanase from Bacillus acidopullulyticus. Kusano S, et al. **Carbohydr Res** 1990 May 15;199(1):83–9

Purification and properties of an oligo-1,6-D-glucosidase from an alkalophilic Bacillus species. Yamamoto M, et al. **Carbohydr Res** 1990 Mar 25;197:227–35

Complete amino acid sequence of alpha-acetolactate decarboxylase from Bacillus brevis. Svendsen I, et al. **Carlsberg Res Commun** 1989;54(4):157–63

Effects of sonication and growth temperature on the cytochrome oxidase activity of Bacillus species. Liu JK, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1989 Nov;22(4):249–60

Thermostable alanine dehydrogenase from thermophilic Bacillus sphaericus DSM 462. Purification, characterization and kinetic mechanism. Ohshima T, et al. **Eur J Biochem** 1990 Aug 17;191(3):715–20

The proline-activating activity of the multienzyme gramicidin S synthetase 2 can be recovered on a 115-kDa tryptic fragment. Skarpeid HJ, et al. **Eur J Biochem** 1990 Feb 14;187(3):627–33

Purification of a DNA methyltransferase from Bacillus natto B3364. Kim EL, et al. **FEBS Lett** 1989 Sep 25;255(2):361–4

A new isoschizomer, BnaI, of the BamHI restriction endonuclease. Kim EL, et al. **Gene** 1989 Aug 15;80(2):363–8

Extra cellular hydrolytic enzyme secretion in Bacillus thuringiensis H14 & B. sphaericus & their significance in media design. Kuppusamy M, et al. **Indian J Med Res** 1990 Mar;91:149–50

Hemicellulases of Bacillus species: preliminary comparative studies on production and properties of mannanases and galactanases. Araujo A, et al. **J Appl Bacteriol** 1990 Mar; 68(3):253–61

Purification and characterization of thermostable aspartate aminotransferase from a thermophilic Bacillus species. Sung MH, et al. **J Bacteriol** 1990 Mar;172(3):1345–51

Chitinase system of Bacillus circulans WL-12 and importance of chitinase A1 in chitin degradation. Watanabe T, et al. **J Bacteriol** 1990 Jul;172(7):4017–22

M(III)-facilitated recovery and concentration of enzymes from mesophilic and thermophilic organisms. Collingwood TN, et al. **J Biochem Biophys Methods** 1989 Oct;19(4):281–6

Analysis of cyclomaltodextrin glucanotransferase isoenzymes by isoelectric focusing in immobilized pH gradients. Mattsson P, et al. **J Biochem Biophys Methods** 1990 Mar; 20(3):237–46

A novel aco-type cytochrome-c oxidase from a facultative alkalophilic Bacillus: purification, and some molecular and enzymatic features. Qureshi MH, et al. **J Biochem (Tokyo)** 1990 Mar;107(3):480–5

Purification and characterization of alpha-L-fucosidase from Bacillus circulans grown on porcine gastric mucin. Tsuji Y, et al. **J Biochem (Tokyo)** 1990 Feb;107(2):324–30

Stereospecificity of reactions catalyzed by bacterial D-amino acid transaminase. Martínez del Pozo A, et al. **J Biol Chem** 1989 Oct 25;264(30):17784–9

Amino acid residues stabilizing a Bacillus alpha-amylase against irreversible thermoinactivation. Suzuki Y, et al. **J Biol Chem** 1989 Nov 15;264(32):18933–8

Distribution of charges in Bacillus intermedius 7P ribonuclease determines the number of cooperatively melting regions of the globule. Protasevich II, et al. **J Biomol Struct Dyn** 1987 Apr;4(5):885–93

Construction of a chimeric series of Bacillus cyclomaltodextrin glucanotransferases and analysis of the thermal stabilities and pH optima of the enzymes. Kaneko T, et al. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3447–57

Structure of [4Fe-4S] ferredoxin from Bacillus thermoproteolyticus refined at 2.3 A resolution. Structural comparisons of bacterial ferredoxins. Fukuyama K, et al. **J Mol Biol** 1989 Nov 20;210(2):383–98

Maltodextrin-dependent crystallization of cyclomaltodextrin glucanotransferase from Bacillus circulans. Lawson CL, et al. **J Mol Biol** 1990 Aug 20;214(4):807–9

Membrane-bound succinate dehydrogenase of Bacillus pumilus strain 5: effects of modulators of monoelectron transfer. Eze MO, et al. **Microbios** 1989;60(242):45–51

Capping and alpha-helix stability. Serrano L, et al. **Nature** 1989 Nov 16;342(6247):296–9

Isolation and identification of restriction endonuclease BshKI. Moissidou A, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8884

Restriction endonuclease from thermophilic bacterial species I. Isolation and characterization of BsiEI. Mok YK, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4954

Isolation and identification of restriction endonuclease BshGI. Scarpelis G, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8883

BbrPI, a novel PmaCI isoschizomer from Bacillus brevis recognizing 5'-CAC/GTG-3'. Vesely Z, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3423

Isolation and identification of restriction endonuclease BshFI. Vlatakis G, et al. **Nucleic Acids Res** 1989 Nov 11; 17(21):8882

BmyI, a novel SduI isoschizomer from Bacillus mycoides recognizing 5'-GDGCH/C-3'. Wagner E, et al. **Nucleic Acids Res** 1990 May 25;18(10):3088

Functional interaction among catalytic residues in subtilisin BPN'. Carter P, et al. **Proteins** 1990;7(4):335–42

Beta-lactamase of Bacillus licheniformis 749/C at 2 A resolution. Moews PC, et al. **Proteins** 1990;7(2):156–71

Barnase and barstar: two small proteins to fold and fit together. Hartley RW. **Trends Biochem Sci** 1989 Nov; 14(11):450–4 (19 ref.)

Excretion into the culture medium of a Bacillus beta-glucanase after overproduction in Escherichia coli. Riethdorf S, et al. **Z Naturforsch [C]** 1990 Mar-Apr; 45(3–4):240–4

[Pharmacokinetic properties of pancreatic and microbial ribonucleases] Kurinenko BM, et al. **Antibiot Khimioter** 1989 Oct;34(10):761–6 (Eng. Abstr.) (Rus)

[Various physico-chemical properties of proteolytic enzymes of various strains of the Bacillus genus] Bondarchuk AA, et al. **Mikrobiol Zh** 1986 Sep-Oct;48(5):7–10 (Eng. Abstr.) (Rus)

[Multiple forms of the alkaline serine proteinase of Bacillus mesentericus] Koltukova NV, et al. **Mikrobiol Zh** 1983 Nov-Dec;45(6):90–2 (Eng. Abstr.) (Rus)

[Hydrolase biosynthesis by morphological variants of Bacillus mesentericus as dependent on the storage conditions] Koltukova NV, et al. **Mikrobiol Zh** 1990 Jan-Feb; 52(1):10–4 (Eng. Abstr.) (Rus)

[The enzyme activity of bacilli showing promise for incorporation into biopreparations] Slabospitskaia AT, et al. **Mikrobiol Zh** 1990 Mar-Apr;52(2):9–14 (Eng. Abstr.) (Rus)

[The collagenolytic activity of bacteria of the genus Bacillus isolated from different ecological sources] Slabospitskaia AT, et al. **Mikrobiol Zh** 1989 Nov-Dec;51(6):54–6 (Eng. Abstr.) (Rus)

[Production and characteristics of lytic enzymes of the thermophilic strain of Bacillus sp. 86] Zakharova IIa, et al. **Mikrobiol Zh** 1984 May-Jun;46(3):27–30 (Eng. Abstr.) (Rus)

[Thrombolytic activity of Bacillus mesentericus at different conditions of nitrogen nutrition of a culture] Cherkesova GV, et al. **Mikrobiologiia** 1989 Nov-Dec;58(6):915–9 (Eng. Abstr.) (Rus)

[Substrate specificity of enzymes from Bacillus mesentericus] Nesterova NG, et al. **Mikrobiologiia** 1989 Jul-Aug; 58(4):553–6 (Eng. Abstr.) (Rus)

[Determination of the substrate specificity of Bpu101 restrictase with an unusual recognition segment] Degtiarev SKh, et al. **Mol Biol (Mosk)** 1989 Jul-Aug;23(4):1051–6 (Eng. Abstr.) (Rus)

[Localization of energy domains in Bacillus intermedius 7P ribonuclease] Grishina IB, et al. **Mol Biol (Mosk)** 1989 Sep-Oct;23(5):1455–68 (Eng. Abstr.) (Rus)

[New producers of site-specific endonucleases from microorganisms of the Bacillus genus] Kramarov VM, et al. **Mol Gen Mikrobiol Virusol** 1989 Jun;(6):42–5 (Eng. Abstr.) (Rus)

[Various physico-chemical properties of the amylolytic complex from Bacillus mesentericus] Koltukova NV, et al. **Prikl Biokhim Mikrobiol** 1990 Jan-Feb;26(1):50–4 (Eng. Abstr.) (Rus)

GENETICS

Two Bacillus beta-mannanases having different COOH termini are produced in Escherichia coli carrying pMAH5. Akino T, et al. **Appl Environ Microbiol** 1989 Dec; 55(12):3178–83

Transfer of the toxin protein genes of Bacillus sphaericus into Bacillus thuringiensis subsp. israelensis and their expression. Bourgouin C, et al. **Appl Environ Microbiol** 1990 Feb;56(2):340–4

Cloning and characterization of two genes from Bacillus polymyxa expressing beta-glucosidase activity in Escherichia coli. González-Candelas L, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3173–7

Transformation of Bacillus polymyxa with plasmid DNA. Mallonee DH, et al. **Appl Environ Microbiol** 1989 Oct; 55(10):2517–21

Molecular cloning of the 130-kilodalton mosquitocidal delta-endotoxin gene of Bacillus thuringiensis subsp. israelensis in Bacillus sphaericus. Trisrisook M, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1710–6

On the respective roles of the two proteins encoded by the Bacillus sphaericus 1593M toxin genes expressed in Escherichia coli and Bacillus subtilis. de la Torre F, et al. **Biochem Biophys Res Commun** 1989 Nov 15; 164(3):1417–22

Nucleotide sequence of the raw-starch-digesting amylase gene from Bacillus sp. B1018 and its strong homology to the cyclodextrin glucanotransferase genes. Itkor P, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):630–6

Bacillus amyloliquefaciens alpha-amylase signal sequence fused in frame with human proinsulin is properly processed by Bacillus subtilis cells. Novikov AA, et al. **Biochem Biophys Res Commun** 1990 May 31;169(1):297–301

Cloning of aminoglycoside phosphotransferase (APH) gene from antibiotic-producing strain of Bacillus circulans into a high-expression vector, pKK223-3. Purification, properties and location of the enzyme. Sarwar M, et al. **Biochem J** 1990 Jun 15;268(3):671–7

The role of lysine-234 in beta-lactamase catalysis probed by site-directed mutagenesis. Ellerby LM, et al. **Biochemistry** 1990 Jun 19;29(24):5797–806

Cloning and expression of raw-starch-digesting alpha-amylase gene from Bacillus circulans F-2 in Escherichia coli. Kim CH, et al. **Biochim Biophys Acta** 1990 Apr 6;1048(2–3):223–30

Structure and function of L-lactate dehydrogenases from thermophilic, mesophilic and psychrophilic bacteria, IX. Identification, isolation and nucleotide sequence of two L-lactate dehydrogenase genes of the psychrophilic bacterium Bacillus psychrosaccharolyticus. Vckovski V, et al. **Biol Chem Hoppe Seyler** 1990 Feb;371(2):103–10

Bacillus brevis, a host bacterium for efficient extracellular production of useful proteins. Udaka S, et al. **Biotechnol Genet Eng Rev** 1989;7:113–46 (74 ref.)

The multifunctional peptide synthetase performing the first step of penicillin biosynthesis in Penicillium chrysogenum is a 421,073 dalton protein similar to Bacillus brevis peptide antibiotic synthetases. Smith DJ, et al. **EMBO J** 1990 Sep; 9(9):2743–50

A fourth subunit is present in cytochrome c oxidase from the thermophilic bacterium PS3. Sone N, et al. **FEBS Lett** 1990 Mar 26;262(2):249–52

Expression in Escherichia coli of the carboxy terminal domain of the BLAR sensory-transducer protein of Bacillus licheniformis as a water-soluble Mr 26,000 penicillin-binding protein. Joris B, et al. **FEMS Microbiol Lett** 1990 Jun 15;58(1):107–13

Transformation of Bacillus amyloliquefaciens by electroporation. Vehmaanperä J. **FEMS Microbiol Lett** 1989 Oct 1;52(1–2):165–9

Cloning and characterization of the Bacillus sphaericus genes controlling the bioconversion of pimelate into dethiobiotin. Gloeckler R, et al. **Gene** 1990 Mar 1;87(1):63–70

Cloning of the biotin synthetase gene from Bacillus sphaericus and expression in Escherichia coli and Bacilli. Otsuka I, et al. **Gene** 1989 Aug 1;80(1):39–48

The structure of the trpE, trpD and 5'trpC genes of Bacillus pumilus. Rivas MV, et al. **Gene** 1990 Mar 1;87(1):71–8

Investigation into the nature of a Bacillus promoter cloned into a promoter-probe plasmid. Teixeira AV, et al. **Gene** 1989 Sep 1;81(1):159–63

Nucleotide sequences of genes encoding heat-stable and heat-labile glyceraldehyde-3-phosphate dehydrogenases; amino acid sequence and protein thermostability. Tesfay HS, et al. **Gene** 1989 Oct 30;82(2):237–48

Structure of the gene encoding beta-1,3-glucanase A1 of Bacillus circulans WL-12. Yahata N, et al. **Gene** 1990 Jan 31;86(1):113–7

Use of both translation initiation sites of the middle wall protein gene in Bacillus brevis 47. Adachi T, et al. **J Bacteriol** 1990 Jan;172(1):511–3

Molecular cloning, expression, and characterization of endo-beta-1,4-glucanase genes from Bacillus polymyxa and Bacillus circulans. Baird SD, et al. **J Bacteriol** 1990 Mar;172(3):1576–86

Construction by site-directed mutagenesis of a 39-kilodalton mosquitocidal protein similar to the larva-processed toxin of Bacillus sphaericus 2362. Broadwell AH, et al. **J Bacteriol** 1990 Jul;172(7):4032–6

The 42- and 51-kilodalton mosquitocidal proteins of Bacillus sphaericus 2362: construction of recombinants with enhanced expression and in vivo studies of processing and toxicity. Broadwell AH, et al. **J Bacteriol** 1990 May; 172(5):2217–23

Synthesis and secretion of a Bacillus circulans WL-12 1,3-1,4-beta-D-glucanase in Escherichia coli. Bueno A, et al. **J Bacteriol** 1990 Apr;172(4):2160–7

Cloning of aldB, which encodes alpha-acetolactate decarboxylase, an exoenzyme from Bacillus brevis. Diderichsen B, et al. **J Bacteriol** 1990 Aug;172(8):4315–21

Conserved structures of cell wall protein genes among protein-producing Bacillus brevis strains. Ebisu S, et al. **J Bacteriol** 1990 Mar;172(3):1312–20

Gramicidin S biosynthesis operon containing the structural genes grsA and grsB has an open reading frame encoding a protein homologous to fatty acid thioesterases. Krätzschmar J, et al. **J Bacteriol** 1989 Oct;171(10):5422–9

Mobilization of closely related plasmids pUB110 and pBC16 by Bacillus plasmid pXO503 requires trans-acting open reading frame beta. Selinger LB, et al. **J Bacteriol** 1990 Jun;172(6):3290–7

Cloning of the crystalline cell wall protein gene of Bacillus licheniformis NM 105. Tang M, et al. **J Bacteriol** 1989 Dec; 171(12):6637–48

In vitro reconstitution of a hexagonal array with a surface layer protein synthesized by Bacillus subtilis harboring the surface layer protein gene from Bacillus brevis 47. Tsuboi A, et al. **J Bacteriol** 1989 Dec;171(12):6747–52

Identification of BlaR, the signal transducer for beta-lactamase production in Bacillus licheniformis, as a penicillin-binding protein with strong homology to the OXA-2 beta-lactamase (class D) of Salmonella typhimurium. Zhu YF, et al. **J Bacteriol** 1990 Feb; 172(2):1137–41

Cloning and nucleotide sequences of the BanI restriction-modification genes in Bacillus aneurinolyticus. Maekawa Y, et al. **J Biochem (Tokyo)** 1990 Apr; 107(4):645–9

Use of amber suppressors to investigate the thermostability of Bacillus licheniformis alpha-amylase. Amino acid replacements at 6 histidine residues reveal a critical position at His-133. Declerck N, et al. **J Biol Chem** 1990 Sep 15; 265(26):15481–8

Gene cloning of chitinase A1 from Bacillus circulans WL-12 revealed its evolutionary relationship to Serratia chitinase

and to the type III homology units of fibronectin. Watanabe T, et al. **J Biol Chem** 1990 Sep 15;265(26):15659–65

Protoplast transformation of Bacillus licheniformis MC14. Jensen KK, et al. **J Gen Microbiol** 1989 Aug;135 (Pt 8):2283–7

Cloning and nucleotide sequence of senN, a novel 'Bacillus natto' (B. subtilis) gene that regulates expression of extracellular protein genes. Wong SL, et al. **J Gen Microbiol** 1988 Dec;134 (Pt 12):3269–76

Nucleotide sequence of the Bacillus licheniformis homologue of the sporulation locus spoIIA of Bacillus subtilis. Yudkin MD, et al. **J Gen Microbiol** 1989 Apr;135 (Pt 4):767–75

System for secretion of heterologous proteins in Bacillus subtilis. Nagarajan V. **Methods Enzymol** 1990;185:214–23

Nucleotide sequence of two toxin genes from Bacillus sphaericus IAB59: sequence comparisons between five highly toxinogenic strains. Berry C, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7516

Nucleotide sequence of a 1,3–1,4–beta–glucanase–encoding gene in Bacillus circulans WL–12. Bueno A, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4248

The complete sequence of the Bacillus amyloliquefaciens proviral H2, BamHI methylase gene. Connaughton JF, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):4002

Nucleotide sequence of a cyclodextrin glucosyltransferase gene, cgtA, from Bacillus licheniformis. Hill DE, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):199

Sequence of the gene encoding the ATP synthase beta subunit from alkaliphilic Bacillus firmus RAB. Ivey DM, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1296

The gram–positive cloning vector pBD64 arose by a 1844 bp deletion of pC194 derived DNA. Minton NP, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1651

Similarity of minus origins of replication and flanking open reading frames of plasmids pUB110, pTB913 and pMV158. van der Lelie D, et al. **Nucleic Acids Res** 1989 Sep 25; 17(18):7283–94

[Study on Bacillus pumilus as a recipient strain for genetic engineering of Bacillus] Chen QM, et al. **I Chuan Hsueh Pao** 1989;16(3):206–12 (Eng. Abstr.) **(Chi)**

[The cloning and determination of the nucleotide sequence of the RNAse gene in Bacillus intermedius] Nurkiianova KM, et al. **Dokl Akad Nauk SSSR** 1989;309(6):1476–9 **(Rus)**

[Isolation of mRNA from protoplasts of spore–forming bacteria and study of its translation products] Sharipova FR, et al. **Mikrobiologiia** 1989 May–Jun;58(3):365–9 (Eng. Abstr.) **(Rus)**

[BsiI—a new unusual restriction endonuclease] Degtiarev SKh, et al. **Mol Biol (Mosk)** 1990 Jan–Feb;24(1):244–7 (Eng. Abstr.) **(Rus)**

[Cloning the alpha–amylase gene of Bacillus amyloliquefaciens in cyanobacteria cells] Elanskaia IV, et al. **Mol Gen Mikrobiol Virusol** 1989 Sep;(9):7–11 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Effect of redox potential on Bacillus subtilis and Bacillus licheniformis in broth and in pasteurized sausage mixtures. Rödel W, et al. **Int J Food Microbiol** 1990 May; 10(3–4):291–301

Kinetics of bacterial growth in simple intravenous solutions and admixtures. Akpan UE, et al. **J Clin Pharm Ther** 1989 Oct;14(5):393–401

Clearance of Bacillus sphaericus and Bacillus thuringiensis ssp. israelensis from mammals. Siegel JP, et al. **J Econ Entomol** 1990 Apr;83(2):347–55

Comparison of development of Bacillus thuringiensis subsp. israelensis and Bacillus sphaericus in mosquito larvae. Pantuwatana S, et al. **J Invertebr Pathol** 1990 Mar; 55(2):189–201

The origin of the rotation of one end of a cell relative to the other end during growth of gram–positive rods. Koch AL. **J Theor Biol** 1989 Dec 7;141(3):391–402

The development of Bacillus thuringiensis and Bacillus sphaericus as biocontrol agents: from research to industrial production. Fridlender B, et al. **Mem Inst Oswaldo Cruz** 1989;84 Suppl 3:123–7 (15 ref.)

Cultivation of Bacillus piliformis (Tyzzer) in mouse fibroblasts (3T3 cells). Spencer TH, et al. **Vet Microbiol** 1990 Apr;22(2–3):291–7

IMMUNOLOGY

Protein and antigenic heterogeneity among isolates of Bacillus piliformis. Riley LK, et al. **Infect Immun** 1990 Apr; 58(4):1010–6

ISOLATION & PURIFICATION

Infected foreign body due to Bacillus licheniformis in rheumatoid arthritis [letter] David LA, et al. **Br J Rheumatol** 1990 Aug;29(4):320

Study of the Bacillus flora of Nigerian spices. Antai SP. **Int J Food Microbiol** 1988 May;6(3):259–61

Simplified identification of aerobic spore–formers in the investigation of foods. Deák T, et al. **Int J Food Microbiol** 1988 Mar;6(2):115–25

[A method for the study of aerobic microorganisms] Gracheva MN, et al. **Gig Sanit** 1989 Jul;(7):35–8 **(Rus)**

[L–forms of aerobic spore–forming bacteria isolated from urologic patients] Rudenko AV, et al. **Mikrobiol Zh** 1989 May–Jun;51(3):63–5 (Eng. Abstr.) **(Rus)**

METABOLISM

Organization and expression of genes involved in the biosynthesis of antibiotics and other secondary metabolites. Martín MF, et al. **Annu Rev Microbiol** 1989;43:173–206 (166 ref.)

Microbiological aspects of aerobic thermophilic treatment of swine waste. Beaudet R, et al. **Appl Environ Microbiol** 1990 Apr;56(4):971–6

L–lysine production at 50 degrees C by mutants of a newly isolated and characterized methylotrophic Bacillus sp. Schendel FJ, et al. **Appl Environ Microbiol** 1990 Apr; 56(4):963–70

Loss of alkalophily in cell–wall–component–defective mutants derived from alkalophilic Bacillus C–125. Isolation and partial characterization of the mutants. Aono R, et al. **Biochem J** 1990 Mar 15;266(3):933–6

Functional characteristics of phosphatidylinositol–specific phospholipases C from Bacillus cereus and Bacillus thuringiensis. Volwerk JJ, et al. **FEMS Microbiol Lett** 1989 Oct 15;52(3):237–41

pH homeostasis and bioenergetic work in alkalophiles. Krulwich TA, et al. **FEMS Microbiol Rev** 1990 Jun; 6(2–3):271–8 (43 ref.)

The influence of salt and temperature on the natural fermentation of African locust bean. Ikenebomeh MJ. **Int J Food Microbiol** 1989 May;8(2):133–9

Pumilacidin, a complex of new antiviral antibiotics. Production, isolation, chemical properties, structure and biological activity. Naruse N, et al. **J Antibiot (Tokyo)** 1990 Mar;43(3):267–80

Efficiency factors and ATP/ADP ratios in nitrogen–fixing Bacillus polymyxa and Bacillus azotofixans. Kanamori K, et al. **J Bacteriol** 1990 Apr;172(4):1962–8

Chloride transport pathways and their bioenergetic implications in the obligate acidophile Bacillus coagulans. McLaggan D, et al. **J Bacteriol** 1990 Mar;172(3):1485–90

Surface hydrophobicity of spores of Bacillus spp. Koshikawa T, et al. **J Gen Microbiol** 1989 Oct;135 (Pt 10):2717–22

[Production of new antibiotics. Problems and prospects] Dudnik IuV. **Antibiot Khimioter** 1989 Nov;34(11):807–10 **(Rus)**

[Effect of the producer type on the nature of antibiotic fermentation] Rudakova AV, et al. **Antibiot Khimioter** 1990 Apr;35(4):14–6 (Eng. Abstr.) **(Rus)**

[Detection of a sodium pump in the terminal segment of the bacterial respiratory chain] Verkhovskaia ML, et al. **Biokhimiia** 1989 Sep;54(9):1457–66 (Eng. Abstr.) **(Rus)**

[The effect of the cultivation conditions on lectin production by representative bacteria in the genus Bacillus] Podgorskii VS, et al. **Mikrobiol Zh** 1989 Nov–Dec;51(6):30–4 **(Rus)**

[Prospects for using thermoacidophilic bacteria in biotechnology] Podgorskii VS, et al. **Mikrobiol Zh** 1986 Nov–Dec;48(6):91–4 (26 ref.) (Eng. Abstr.) **(Rus)**

[Optimization of the nutrient medium composition for directed biosynthesis of Bacillus mesentericus lectins] Simonenko IA. **Mikrobiol Zh** 1989 May–Jun;51(3):3–6 (Eng. Abstr.) **(Rus)**

[Various characteristics of lipid metabolism of Bacillus brevis var. G.–B.] Zarubina AP, et al. **Prikl Biokhim Mikrobiol** 1989 Sep–Oct;25(5):658–63 (Eng. Abstr.) **(Rus)**

[The role of membrane processes in Au(III) and Au(0) accumulation by bacteria] Karamushka VI, et al. **Ukr Biokhim Zh** 1990 Jan–Feb;62(1):76–82 (Eng. Abstr.) **(Rus)**

PATHOGENICITY

Differences in susceptibility to peroral inoculation with Bacillus piliformis spores in rats and mice. Itoh T, et al. **Jikken Dobutsu** 1990 Jul;39(3):425–8

[Pathogenicity factors of cultures of Staphylococcus and Bacillus, isolated from soup concentrates] Kirilenko OA, et al. **Mikrobiol Zh** 1984 Jul–Aug;46(4):74–6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Characterization & larvicidal activity of indigenous isolates of Bacillus sphaericus from natural breeding habitats. Manonmani AM, et al. **Indian J Med Res** 1990 May; 91:223–7

Physiology of Sporolactobacillus strains isolated from different habitats and the indication of in vitro antagonism against Bacillus species. Holzapfel WH, et al. **Int J Food Microbiol** 1988 Oct;7(2):161–8

Specific inhibition of the Na(+)–driven flagellar motors of alkalophilic Bacillus strains by the amiloride analog phenamil. Atsumi T, et al. **J Bacteriol** 1990 Mar; 172(3):1634–9

Initial phase of infection with Tyzzer's organism in cultured mouse hepatocytes. Kawamura S, et al. **J Gen Microbiol** 1989 Jul;135 (Pt 7):2099–106

[Applications of bacterial pathogens to the mosquito control] Lu KH, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 Jul;6(7):344–9 (Eng. Abstr.) **(Chi)**

[Heat and ozone resistance of Bacillus spores isolated from laboratory animals] Pan TM, et al. **Jikken Dobutsu** 1990 Jul;39(3):371–6 (Eng. Abstr.) **(Jpn)**

[Effect of various microorganisms on the activity of levorin] Ivanova LN, et al. **Antibiot Khimioter** 1989 Nov; 34(11):819–22 (Eng. Abstr.) **(Rus)**

[Spore–forming bacteria in carp and rainbow trout, raised in waste waters from a steam power plant] Kotliar AN, et al. **Mikrobiol Zh** 1984 Mar–Apr;46(2):6–10 (Eng. Abstr.) **(Rus)**

[The biological properties of bacteria of the genus Bacillus isolated from the human body] Reznik SR, et al. **Mikrobiol Zh** 1985 May–Jun;47(3):53–9 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[The radiobiological characteristics of the P+ variant of Bacillus brevis var. G.—B. in relation to gramicidin S synthesis] Parkhomenko IM, et al. **Biol Nauki** 1990; (3):48–55 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Parasporal bodies of Bacillus laterosporus sporangia. Montaldi FA, et al. **J Bacteriol** 1990 Apr;172(4):2168–71

Structure, surface charge, and self–assembly of the S–layer lattice from Bacillus coagulans E38–66. Pum D, et al. **J Bacteriol** 1989 Oct;171(10):5296–303

Ultrastructure of a Bacillus sp. strain KL8 isolated from indoor dust. Kari M, et al. **J Basic Microbiol** 1990; 30(2):99–104

Three–dimensional structure of the surface protein layer (MW layer) of Bacillus brevis 47. Tsuboi A, et al. **J Ultrastruct Mol Struct Res** 1989 Aug;102(2):178–87

Bacillus–shaped deposits composed of hexahedrally based crystals in human dental calculus. Kodaka T, et al. **Scanning Microsc** 1989 Sep;3(3):843–53; discussion 853–4

BACILLUS ANTHRACIS

Biological warfare. Gruinard Island handed back [news] Aldhous P. **Nature** 1990 Apr 26;344(6269):801

[The effect of lethal anthrax toxin on the functional activity of peritoneal mononuclear phagocytes and polymorphonuclear neutrophils in mice] Abalakin VA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Feb;(2):62–7 (Eng. Abstr.) **(Rus)**

[Specific intoxication in anthrax infection] Kolesnik VS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Sep;(9):14–8 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

[Study on the discrimination of bacteria by gas chromatographic profiles of cellular monosaccharides] Zhou F, et al. **Wei Sheng Wu Hsueh Pao** 1990 Feb; 30(1):7–15 (Eng. Abstr.) **(Chi)**

ENZYMOLOGY

Characterization of ATP and calmodulin–binding properties of a truncated form of Bacillus anthracis adenylate cyclase. Labruyère E, et al. **Biochemistry** 1990 May 22; 29(20):4922–8

A–type ATP binding consensus sequences are critical for the catalytic activity of the calmodulin–sensitive adenylyl cyclase from Bacillus anthracis. Xia ZG, et al. **J Biol Chem** 1990 Apr 25;265(12):6517–20

GENETICS

Nucleotide sequence and analysis of the lethal factor gene (lef) from Bacillus anthracis. Bragg TS, et al. **Gene** 1989 Sep 1;81(1):45–54

A deleted variant of Bacillus anthracis protective antigen is non–toxic and blocks anthrax toxin action in vivo. Singh Y, et al. **J Biol Chem** 1989 Nov 15;264(32):19103–7

[Construction and study of strains of the Siberian ulcer pathogen possessing various sets of plasmids] Eremin SA, et al. **Mol Gen Mikrobiol Virusol** 1989 Oct;(10):35–8 **(Rus)**

[Conjugation transfer of the pAMbeta1 plasmid to Bacillus anthracis] Puzanova OB, et al. **Mol Gen Mikrobiol Virusol** 1990 Apr;(4):19–21 (Eng. Abstr.) **(Rus)**

[Cryotransformation of Bacillus anthracis by the DNA of pUB110 plasmid] Puzanova OB, et al. **Mol Gen Mikrobiol Virusol** 1989 Dec;(12):26–30 (Eng. Abstr.) **(Rus)**

[Transduction and conjugation transfer of the pXO2 plasmid in Bacillus anthracis] Stepanov AS, et al. **Mol Gen Mikrobiol Virusol** 1989 Dec;(12):39–43 (Eng. Abstr.) **(Rus)**

[The use of plasmid screening for the differentiation of Bacillus anthracis strains from closely related species of soil bacilli] Akhmedziarov IuA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Nov;(11):26–8 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

[The possibility of the germination of spores of pathogenic clostridia and bacilli in soil] Volkova VP, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Sep–Oct;(5):791–5 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Anthrax vaccine development: a continuing story. Hambleton

P, et al. **Adv Biotechnol Processes** 1990;13:105–22 (91 ref.)
Monoclonal antibodies against spore antigens of Bacillus anthracis. Phillips AP, et al. **FEMS Microbiol Immunol** 1988 Dec;1(3):169–78
Expression of the Bacillus anthracis protective antigen gene by baculovirus and vaccinia virus recombinants. Iacono-Connors LC, et al. **Infect Immun** 1990 Feb; 58(2):366–72
Immunization against anthrax with aromatic compound-dependent (Aro-) mutants of Bacillus anthracis and with recombinant strains of Bacillus subtilis that produce anthrax protective antigen. Ivins BE, et al. **Infect Immun** 1990 Feb;58(2):303–8
Production and characterization of monoclonal antibodies against the lethal factor component of Bacillus anthracis lethal toxin. Little SF, et al. **Infect Immun** 1990 Jun; 58(6):1606–13
Identification of Bacillus anthracis by using monoclonal antibody to cell wall galactose-N-acetylglucosamine polysaccharide. Ezzell JW Jr, et al. **J Clin Microbiol** 1990 Feb;28(2):223–31
Resistance to the Sterne strain of B. anthracis: phagocytic cell responses of resistant and susceptible mice. Welkos SL, et al. **Microb Pathog** 1989 Jul;7(1):15–35
Immunosuppression in caprine trypanosomiasis: effects of acute Trypanosoma congolense infection on antibody response to anthrax spore vaccine. Mwangi DM, et al. **Trop Anim Health Prod** 1990 May;22(2):95–100
[Immunosuppressive action of the lethal toxin of Bacillus anthracis in mice] Abalakin VA. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jun;(6):94–9 (Eng. Abstr.) **(Rus)**
[The detection of specific antigens in experimental anthrax] Abalakin VA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Dec;(12):63–8 (Eng. Abstr.) **(Rus)**
[The effect of the protective antigen of Bacillus anthracis on the formation of immunity under the action of live anthrax vaccines] Abalakin VA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 May;(5):72–5 (Eng. Abstr.) **(Rus)**

BACILLUS CALMETTE GUERIN VACCINE see **BCG VACCINE**

BACILLUS CEREUS

Treatment of multiple brain abscesses caused by Bacillus cereus. Jenson HB, et al. **Pediatr Infect Dis J** 1989 Nov; 8(11):795–8

CLASSIFICATION

[Study on the discrimination of bacteria by gas chromatographic profiles of cellular monosaccharides] Zhou F, et al. **Wei Sheng Wu Hsueh Pao** 1990 Feb; 30(1):7–15 (Eng. Abstr.) **(Chi)**

DRUG EFFECTS

Dynamic light-scattering studies on the effect of heat and disinfectants on spores of Bacillus cereus. Molina-Garcia AD, et al. **Biochem J** 1989 Nov 1;263(3):883–8

ENZYMOLOGY

Phospholipids chiral at phosphorus. Stereochemical mechanism of reactions catalyzed by phosphatidylinositide-specific phospholipase C from Bacillus cereus and guinea pig uterus. Lin GL, et al. **Biochemistry** 1990 Mar 20;29(11):2747–57
A comparative study of enzyme variation in Bacillus cereus and Bacillus thuringiensis. Zahner V, et al. **J Appl Bacteriol** 1989 Sep;67(3):275–82
Sequencing the gene for an imipenem-cefoxitin-hydrolyzing enzyme (CfiA) from Bacteroides fragilis TAL2480 reveals strong similarity between CfiA and Bacillus cereus beta-lactamase II. Thompson JS, et al. **J Bacteriol** 1990 May;172(5):2584–93
Identification of the reactive cysteinyl residue and ATP binding site in Bacillus cereus glutamine synthetase by chemical modification. Nakano Y, et al. **J Biochem (Tokyo)** 1990 Feb;107(2):180–3
Purification of phospholipase-C from Bacillus cereus by affinity chromatography on 2-(4-aminophenylsulphoxyl)ethyl-cellulose. Kamberov E, et al. **J Chromatogr** 1990 Feb 23;525(2):307–18
Effect of phospholipase C from Bacillus cereus on the release of membrane-bound choline-O-acetyltransferase from rat hippocampal tissue. Carroll PT, et al. **J Neurochem** 1990 Mar;54(3):1047–55
[Characteristics of kinetics of phospholipid hydrolysis by phospholipase C from Bacillus cereus. Hydrolysis of phosphatidylcholine in the presence of deoxycholate-] Voronin MV, et al. **Biokhimiia** 1990 Jan;55(1):87–94 (Eng. Abstr.) **(Rus)**

GENETICS

Phosphatidylinositol-specific phospholipase C of Bacillus cereus: cloning, sequencing, and relationship to other phospholipases. Kuppe A, et al. **J Bacteriol** 1989 Nov; 171(11):6077–83
Nucleotide sequence of the glutamine synthetase gene (glnA) and its upstream region from Bacillus cereus. Nakano Y, et al. **J Biochem (Tokyo)** 1989 Aug;106(2):209–15
Nucleotide sequence of the tetracycline resistance gene of pBC16 from Bacillus cereus. Palva A, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1635
[The genetic transfer, heredity and phenotypic 'expression of plasmid RP4::Mu cts genes in Bacillus cereus] Timakova NV, et al. **Biull Eksp Biol Med** 1990 Mar;109(3):299–301 (Eng. Abstr.) **(Rus)**
[Transduction ability of mutants of phage CP51, virulent for bacteria of the Bacillus cereus group] Koretskaia NG, et al. **Genetika** 1989 Jun;25(6):1013–20 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

The inhibition of the growth of Bacillus cereus in liver sausage. Asplund K, et al. **Int J Food Microbiol** 1988 Dec 31;7(4):349–52
Survival and growth of food poisoning bacteria following inoculation into cottage cheese varieties. Sims GR, et al. **Int J Food Microbiol** 1989 Nov;9(3):173–95
Survival and growth of Bacillus cereus in Egyptian bread and its effect on bread staling. Rizk IR, et al. **Nahrung** 1989;33(9):839–44

ISOLATION & PURIFICATION

Complete visual recovery after Bacillus cereus endophthalmitis in a child. Beer PM, et al. **Am J Ophthalmol** 1990 Aug 15;110(2):212–3
Analytical methods for Bacillus cereus and other Bacillus species. Shinagawa K. **Int J Food Microbiol** 1990 Mar; 10(2):125–41 (40 ref.)
Detective work in continuous ambulatory peritoneal dialysis. al-Wali W, et al. **J Infect** 1990 Mar;20(2):151–4
[The importance of Bacillus cereus in food poisoning] Stec E. **Przegl Epidemiol** 1989;43(4):345–54 (249 ref.) (Eng. Abstr.) **(Pol)**

METABOLISM

Toxin production by Bacillus cereus dairy isolates in milk at low temperatures. Christiansson A, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2595–600
Psychrotrophic strains of Bacillus cereus producing enterotoxin. van Netten P, et al. **J Appl Bacteriol** 1990 Jul; 69(1):73–9
Apparent phosphate retrieval system in Bacillus cereus. Guddal PH, et al. **J Bacteriol** 1989 Oct;171(10):5702–6
Bacereutin, an antifungal antibiotic isolated from metabolites of Bacillus cereus CHU 130. Tschen JS, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Oct;13(4):258–61
[Dynamics of accumulation of extracellular lipoteichoic acid in Bacillus cereus] Pronin SV, et al. **Prikl Biokhim Mikrobiol** 1990 Jan-Feb;26(1):61–6 (Eng. Abstr.) **(Rus)**

PATHOGENICITY

A novel bicomponent hemolysin from Bacillus cereus. Beecher DJ, et al. **Infect Immun** 1990 Jul;58(7):2220–7
A second species of Bacillus causing primary cutaneous disease. Henrickson KJ. **Int J Dermatol** 1990 Jan-Feb; 29(1):19–20
[Acute keratitis and contamination of contact lens care systems with Bacillus cereus] van Setten GB, et al. **Klin Monatsbl Augenheilkd** 1989 Jul;195(1):28–31 (Eng. Abstr.) **(Ger)**
[Determination of the enterotoxic properties of Bacillus cereus] Stec E. **Przegl Epidemiol** 1989;43(4):355–65 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

N-acetylmuramic acid inhibits spore germination and germination enzymes. Brown WC, et al. **J Basic Microbiol** 1990;30(2):67–72
Studies on the cellular defense reactions of the madeira cockroach, Leucophaea maderae: in vitro phagocytosis of different strains of Bacillus cereus and their effect on hemocyte viability. Rahmet-Alla M, et al. **J Invertebr Pathol** 1990 May;55(3):350–6
[An alternative to spore formation pathway of viability preservation of Bacillus cereus cells in extreme conditions] Pronin SV, et al. **Dokl Akad Nauk SSSR** 1989 Nov-Dec; 309(1):223–6 **(Rus)**

RADIATION EFFECTS

Observations on biochemical changes in irradiated spores of Bacillus cereus. Farkas J, et al. **Acta Microbiol Acad Sci Hung** 1965;12(1):15–28

BACILLUS MEGATERIUM

ANALYSIS

Isolation, characterization and biological activities of a toxin from Bacillus megaterium (B-23). Bhattacharyya B, et al. **Indian J Exp Biol** 1989 Dec;27(12):1060–3
Role of outer coat in resistance of Bacillus megaterium spore. Nishihara T, et al. **J Biochem (Tokyo)** 1989 Aug; 106(2):270–3

ENZYMOLOGY

Enzymatic properties of isozymes and variants of glucose dehydrogenase from Bacillus megaterium. Mitamura T, et al. **Eur J Biochem** 1989 Dec 8;186(1-2):389–93

GENETICS

Identification of germination gene of Bacillus megaterium. Tani K, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):402–6
Isolation and characterization of a unique division mutant of Bacillus megaterium. Lach DA, et al. **J Gen Microbiol** 1990 Mar;136 (Pt 3):545–53

GROWTH & DEVELOPMENT

[The effect of 3',5'-cyclic adenylic acid (cAMP) on the growth of bacteria] Yan RX, et al. **Wei Sheng Wu Hsueh Pao** 1989 Feb;29(1):20–5 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

[Effect of Bacillus megaterium H on the immune response to heterologous antigen in mice] Zatula DG, et al. **Mikrobiol Zh** 1986 Jan-Feb;48(1):77–81 (Eng. Abstr.) **(Rus)**

METABOLISM

[The effect of copper compounds on pigment formation in Bacillus subtilis and Bacillus megaterium] Shliakhov EN, et al. **Mikrobiol Zh** 1985 Nov-Dec;47(6):33–6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

L-alanine and inosine enhancement of glucose triggering in Bacillus megaterium spores. Bédard J, et al. **Can J Microbiol** 1989 Aug;35(8):760–3

ULTRASTRUCTURE

Dynamic structure of bacterial ribosomal 5S RNA helices II and III of B. megaterium 5S RNA. Kim JH, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):1068–74

BACILLUS STEAROTHERMOPHILUS

ANALYSIS

Conformational and thermodynamic effects of naturally occurring base methylations in a ribosomal RNA hairpin of Bacillus stearothermophilus. Heus HA, et al. **Eur J Biochem** 1990 Mar 10;188(2):275–81
Stereochemistry and lifetime of the GTP hydrolysis intermediate at the active site of elongation factor Tu from Bacillus stearothermophilus as inferred from the 17O-55Mn superhyperfine interaction. Kalbitzer HR, et al. **Eur J Biochem** 1990 Mar 10;188(2):355–9

ENZYMOLOGY

Direct phase determination for the molecular envelope of tryptophanyl-tRNA synthetase from Bacillus stearothermophilus by X-ray contrast variation. Carter CW Jr, et al. **Acta Crystallogr A** 1990 Jan 1;46 (Pt 1):57–68
A single amino acid substitution in lactate dehydrogenase improves the catalytic efficiency with an alternative coenzyme. Feeney R, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):667–72
On the effects of replacing the carboxylate-binding arginine-171 by hydrophobic tyrosine or tryptophan residues in the L-lactate dehydrogenase from Bacillus stearothermophilus. Luyten MA, et al. **Biochemistry** 1989 Aug 8;28(16):6605–10
Electron transferase activity of diaphorase (NADH: acceptor oxidoreductase) from Bacillus stearothermophilus. Matsue T, et al. **Biochim Biophys Acta** 1990 Mar 29;1038(1):29–38
Studies on the interactions of glycerol dehydrogenase from Bacillus stearothermophilus with Zn2+ ions and NADH. Spencer P, et al. **Biochim Biophys Acta** 1990 Aug 1; 1040(1):130–3
Phosphorescence properties of Trp-84 and Trp-310 in glyceraldehyde-3-phosphate dehydrogenase from Bacillus stearothermophilus. Gabellieri E, et al. **Biophys Chem** 1989 Jul;33(3):257–64
Characterization of a thermostable Bacillus stearothermophilus alpha-amylase. Vihinen M, et al. **Biotechnol Appl Biochem** 1990 Aug;12(4):427–35
Identification of a reversible structural transition in the metal-depleted glycerol dehydrogenase from Bacillus stearothermophilus. Spencer P, et al. **FEBS Lett** 1990 Jan 1;259(2):297–300
Subchronic toxicity studies in dogs and in utero rats fed diets containing Bacillus stearothermophilus alpha-amylase from a natural or recombinant DNA host. MacKenzie KM, et al. **Food Chem Toxicol** 1989 Sep;27(9):599–606
Site-directed mutagenesis of a thermostable alpha-amylase from Bacillus stearothermophilus: putative role of three conserved residues. Vihinen M, et al. **J Biochem (Tokyo)** 1990 Feb;107(2):267–72
Structural basis of the allosteric behaviour of phosphofructokinase. Schirmer T, et al. **Nature** 1990 Jan 11;343(6254):140–5
A new type II restriction endonuclease, BsmA I, from Bacillus stearothermophilus. Kong HM, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):686

Isolation and identification of restriction endonuclease BsiSI. Rina M, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1654
Isolation and identification of restriction endonuclease BsiKI [published erratum appears in Nucleic Acids Res 1990 May 11;18(9):2852] Rina M, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1655
Isolation and identification of restriction endonuclease BseAI. Thanos D, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8881
Random mutagenesis used to probe the structure and function of Bacillus stearothermophilus alpha-amylase. Holm L, et al. **Protein Eng** 1990 Jan;3(3):181-91
Structure determination and refinement of Bacillus stearothermophilus lactate dehydrogenase. Piontek K, et al. **Proteins** 1990;7(1):74-92
[Isolation, purification and properties of restrictase and methylase BstN1 from Bacillus stearothermophilus] Baryshev MM, et al. **Biokhimiia** 1989 Nov;54(11):1894-903 (Eng. Abstr.) **(Rus)**

GENETICS

Expression of the insecticidal protein gene from Bacillus thuringiensis subsp. aizawai in Bacillus subtilis and in the thermophile Bacillus stearothermophilus by using the alpha-amylase promoter of the thermophile. Nakamura K, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3208-13
Cloning and sequence analysis of the genes encoding the alpha and beta subunits of the E1 component of the pyruvate dehydrogenase multienzyme complex of Bacillus stearothermophilus. Hawkins CF, et al. **Eur J Biochem** 1990 Jul 31;191(2):337-46
Phylogenetic and biochemical evidence for a secondary structure model of a small cytoplasmic RNA from Bacilli. Struck JC, et al. **Eur J Biochem** 1990 Aug 28;192(1):17-24
Expression in Escherichia coli of a sub-gene encoding the lipoyl domain of the pyruvate dehydrogenase complex of Bacillus stearothermophilus [published erratum appears in FEBS Lett 1990 Jul 30;268(1):306] Dardel F, et al. **FEBS Lett** 1990 May 21;264(2):206-10
Characterization of the Bacillus stearothermophilus manganese superoxide dismutase gene and its ability to complement copper/zinc superoxide dismutase deficiency in Saccharomyces cerevisiae. Bowler C, et al. **J Bacteriol** 1990 Mar;172(3):1539-46
Cloning and nucleotide sequences of the Bacillus stearothermophilus neutral protease gene and its transcriptional activator gene. Nishiya Y, et al. **J Bacteriol** 1990 Sep;172(9):4861-9
Nucleotide sequence and cloning in Bacillus subtilis of the Bacillus stearothermophilus pleiotropic regulatory gene degT. Takagi M, et al. **J Bacteriol** 1990 Jan;172(1):411-8
Genetic map of the Bacillus stearothermophilus NUB36 chromosome. Vallier H, et al. **J Bacteriol** 1990 Feb; 172(2):793-801
Nucleotide sequence of the neopullulanase gene from Bacillus stearothermophilus. Kuriki T, et al. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1521-8
Protoplast transformation of Bacillus stearothermophilus NUB36 by plasmid DNA. Wu LJ, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1315-24
Complete nucleotide sequences of two phosphoglucoisomerase isozymes from Bacillus stearothermophilus. Tao WF, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10107-8
[Expression of xylE gene in Bacillus stearothermophilus] He XS, et al. **I Chuan Hsueh Pao** 1990;17(1):46-52 (Eng. Abstr.) **(Chi)**

GROWTH & DEVELOPMENT

Composition of polar lipid acyl chains of Bacillus stearothermophilus as affected by temperature and calcium. Martins LO, et al. **Biochim Biophys Acta** 1990 Jun 28; 1045(1):17-20
[Defective function of bioindicators for steam sterilization] Botzenhart K, et al. **Zentralbl Hyg Umweltmed** 1990 May; 190(1-2):182-7 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

The evaluation of the recovery capacity of media for heat-treated Bacillus stearothermophilus spore strips. Brown GD, et al. **Int J Food Microbiol** 1988 Oct; 7(2):109-14

METABOLISM

Maltogenic amylases of Bacillus stearothermophilus. Brosnan MP, et al. **Biochem Soc Trans** 1990 Apr;18(2):311-2
Metal ion dependence of phosphorothioate ATP analogues in the Bacillus stearothermophilus tyrosyl-tRNA synthetase reaction. Garcia GA, et al. **Biochemistry** 1990 Feb 13;29(6):1643-8
The metabolism of aromatic ring fission products by Bacillus stearothermophilus strain IC3. Adams D, et al. **J Gen Microbiol** 1988 Dec;134 (Pt 12):3179-85

PHYSIOLOGY

The effect of air on the moist-heat resistance of Bacillus stearothermophilus spores. Scruton MW. **J Hosp Infect** 1989 Nov;14(4):339-50

BACILLUS SUBTILIS

Crystallization of the Bacillus subtilis histidine-containing phosphocarrier protein HPr and of some of its site-directed mutants. Kapadia G, et al. **J Mol Biol** 1990 Mar 5; 212(1):1-2

ANALYSIS

Purification and properties of the DNA-binding protein HPB12 from Bacillus subtilis nucleoid. Salti V, et al. **Biochim Biophys Acta** 1989 Nov 2;1009(2):161-7
Overproduction, purification, and characterization of Bacillus subtilis RNA polymerase sigma A factor. Chang BY, et al. **J Bacteriol** 1990 Jun;172(6):3257-63
Isolation of a secY homologue from Bacillus subtilis: evidence for a common protein export pathway in eubacteria. Suh JW, et al. **Mol Microbiol** 1990 Feb;4(2):305-14

CYTOLOGY

A highly structured model for simulation of batch and continuous cultures of B. subtilis and examination of cellular differentiation. Jeong J, et al. **Ann N Y Acad Sci** 1990;589:82-90
Structural biology. Putting a twist in the tale [news] Galloway J. **Nature** 1990 Feb 8;343(6258):513-4
[Protoplast reversion in Bacillus subtilis] Valerianov Ts, et al. **Acta Microbiol Bulg** 1990;25:35-9 (Eng. Abstr.) **(Bul)**

DRUG EFFECTS

Lysis and aberrant morphology of Bacillus subtilis cells caused by surfactants and their relation to autolysin activity. Tsuchido T, et al. **Antimicrob Agents Chemother** 1990 May;34(5):781-5
Uptake of L-[14C]-alanine by glutaraldehyde-treated and untreated spores of Bacillus subtilis. Power EG, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1-3):271-6
MM 45289, a potent glycopeptide antibiotic which interacts weakly with diacetyl-L-lysyl-D-alanyl-D-alanine. Good VM, et al. **J Antibiot (Tokyo)** 1990 May;43(5):550-5
Inactivation of B. subtilis spores and E. coli endotoxin by ethylene oxide. Pedersen MR, et al. **J Clin Pharm Ther** 1989 Oct;14(5):373-80
Changes in the antibacterial activity of melanin-bound drugs. Fukuda M, et al. **Ophthalmic Res** 1990;22(2):123-7
Disinfection with gaseous formaldehyde. Fifth Part: Influence of albumin, mucin and blood on the bactericidal and sporicidal effectiveness. Casella ML, et al. **Zentralbl Hyg Umweltmed** 1989 Oct;189(1):37-49

ENZYMOLOGY

Enzyme activities and antibiotic susceptibility of colonial variants of Bacillus subtilis and Bacillus licheniformis. Carlisle GE, et al. **Appl Environ Microbiol** 1989 Nov; 55(11):3026-8
Secretion of the alpha-galactosidase from Cyamopsis tetragonoloba (guar) by Bacillus subtilis. Overbeeke N, et al. **Appl Environ Microbiol** 1990 May;56(5):1429-34
High-level expression of Bacillus subtilis tryptophanyl-tRNA synthetase in Escherichia coli. Shi W, et al. **Biochem Cell Biol** 1990 Feb;68(2):492-5
Secretion of Bacillus subtilis levansucrase. Fe(III) could act as a cofactor in an efficient coupling of the folding and translocation processes. Chambert R, et al. **Biochem J** 1990 Jan 15;265(2):375-82
Monofunctional chorismate mutase from Bacillus subtilis: purification of the protein, molecular cloning of the gene, and overexpression of the gene product in Escherichia coli. Gray JV, et al. **Biochemistry** 1990 Jan 16;29(2):376-83
Binding of Bacillus subtilis ermC' methyltransferase to 23S rRNA. Su SL, et al. **Biochemistry** 1990 Jun 26; 29(25):6033-42
Proteolytic specificity of the neutral zinc proteinase from Bacillus mesentericus strain 76 determined by digestion of an alpha-globin chain. Stoeva S, et al. **Biol Chem Hoppe Seyler** 1989 Oct;370(10):1139-43
Purification and properties of phosphoribosyl-diphosphate synthetase from Bacillus subtilis. Arnvig K, et al. **Eur J Biochem** 1990 Aug 28;192(1):195-200
Structural features of neutral protease from Bacillus subtilis deduced from model-building and limited proteolysis experiments. Signor G, et al. **Eur J Biochem** 1990 Apr 30; 189(2):221-7
Effect of polyelectrolytes on serine proteinase secretion by Bacillus subtilis. Artemov AV, et al. **FEBS Lett** 1990 Mar 12;262(1):33-5
EPR characterization of soluble fragments of succinate dehydrogenase from mutant strains of Bacillus subtilis. Maguire JJ, et al. **FEBS Lett** 1989 Oct 9;256(1-2):195-9
Regulation of extracellular proteins and alpha-amylase secretion by temperature in Bacillus subtilis. Hao J, et al. **Folia Microbiol (Praha)** 1989;34(3):179-84
Hemicellulases of Bacillus species: preliminary comparative studies on production and properties of mannanases and galactanases. Araujo A, et al. **J Appl Bacteriol** 1990 Mar; 68(3):253-61
Aspartokinase III, a new isozyme in Bacillus subtilis 168. Graves LM, et al. **J Bacteriol** 1990 Jan;172(1):218-23
Isolation and characterization of a novel extracellular metalloprotease from Bacillus subtilis. Rufo GA Jr, et al. **J Bacteriol** 1990 Feb;172(2):1019-23
Intracellular serine protease 1 of Bacillus subtilis is formed in vivo as an unprocessed, active protease in stationary cells. Sheehan SM, et al. **J Bacteriol** 1990 Jan;172(1):473-6
Bacillopeptidase F of Bacillus subtilis: purification of the protein and cloning of the gene [published erratum appears in J Bacteriol 1990 Sep;172(9):5520-1] Sloma A, et al. **J Bacteriol** 1990 Mar;172(3):1470-7
Desensitization of Bacillus subtilis aspartokinase I to allosteric inhibition by meso-diaminopimelate allows aspartokinase I to function in amino acid biosynthesis during exponential growth. Zhang JJ, et al. **J Bacteriol** 1990 Aug; 172(8):4690-3
Aspartokinase II from Bacillus subtilis is degraded in response to nutrient limitation. Graves LM, et al. **J Biol Chem** 1990 Sep 5;265(25):14947-55
Spectroscopic characterization of the iron-sulfur cluster in Bacillus subtilis glutamine phosphoribosylpyrophosphate amidotransferase. Oñate YA, et al. **J Biol Chem** 1989 Nov 5;264(31):18386-91
The lumazine synthase-riboflavin synthase complex of Bacillus subtilis. Crystallization of reconstituted icosahedral beta-subunit capsids. Schott K, et al. **J Biol Chem** 1990 Jul 25;265(21):12686-9
Riboflavin synthases of Bacillus subtilis. Purification and amino acid sequence of the alpha subunit. Schott K, et al. **J Biol Chem** 1990 Mar 15;265(8):4204-9
Enhancement of the thermostability of subtilisin E by introduction of a disulfide bond engineered on the basis of structural comparison with a thermophilic serine protease. Takagi H, et al. **J Biol Chem** 1990 Apr 25; 265(12):6874-8
Levansucrase of Bacillus subtilis: effects on the secretion process of single amino acid substitutions in the mature part of the protein. Benyahia F, et al. **J Gen Microbiol** 1988 Dec;134 (Pt 12):3259-68
Enhanced secretion of Escherichia coli beta-lactamase by a spontaneous erythromycin-resistant mutant of Bacillus subtilis. Nagami Y, et al. **J Gen Microbiol** 1989 Apr;135 (Pt 4):777-85
Purification, enzymatic properties, and reconstitution of cytochrome-c oxidase from Bacillus subtilis. de Vrij W, et al. **Methods Enzymol** 1986;126:159-73
Molecular properties, genetics, and biosynthesis of Bacillus subtilis succinate dehydrogenase complex. Hederstedt L. **Methods Enzymol** 1986;126:399-414
Ribosomal RNA terminal maturase: ribonuclease M5 from Bacillus subtilis. Pace NR, et al. **Methods Enzymol** 1990; 181:366-74
Expression of the recE gene during induction of the SOS response in Bacillus subtilis recombination-deficient strains. Gassel M, et al. **Mol Microbiol** 1989 Sep;3(9):1269-76
Pro-subtilisin E: purification and characterization of its autoprocessing to active subtilisin E in vitro. Ohta Y, et al. **Mol Microbiol** 1990 Feb;4(2):295-304
[Antibacterial spectrum of liosubtilin G10X] Biziuliavichius GA, et al. **Antibiot Khimioter** 1989 Aug;34(8):579-81 (Eng. Abstr.) **(Rus)**
[Effect of the conditions for preserving a Bacillus subtilis 21/3 culture on its destructive activity] Garbara SV, et al. **Mikrobiol Zh** 1983 Sep-Oct;45(5):17-20 (Eng. Abstr.) **(Rus)**
[The products of the enzymatic hydrolysis of casein and elastin by Bacillus subtilis protease] Kolchinskaia ID, et al. **Mikrobiol Zh** 1983 Sep-Oct;45(5):13-6 (Eng. Abstr.) **(Rus)**

GENETICS

Transduction in Bacillus subtilis. Csiszár K, et al. **Acta Microbiol Acad Sci Hung** 1965;12(1):73-89
Expression of the insecticidal protein gene from Bacillus thuringiensis subsp. aizawai in Bacillus subtilis and in the thermophile Bacillus stearothermophilus by using the alpha-amylase promoter of the thermophile. Nakamura K, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3208-13
The Bacillus subtilis menCD promoter is responsive to extracellular pH. Hill KF, et al. **Arch Microbiol** 1990; 153(4):355-9
Bacillus amyloliquefaciens alpha-amylase signal sequence fused in frame with human proinsulin is properly processed by Bacillus subtilis cells. Novikov AA, et al. **Biochem Biophys Res Commun** 1990 May 31;169(1):297-301
Genetic mapping of katB, a locus that affects catalase 2 levels in Bacillus subtilis. Loewen PC. **Can J Microbiol** 1989 Aug; 35(8):807-10
The developmental fate of S. coelicolor hyphae depends upon a gene product homologous with the motility sigma factor of B. subtilis. Chater KF, et al. **Cell** 1989 Oct 6;59(1):133-43
A forespore checkpoint for mother cell gene expression during development in B. subtilis. Cutting S, et al. **Cell** 1990 Jul 27;62(2):239-50
Tus and the terminators: the arrest of replication in prokaryotes. Kuempel PL, et al. **Cell** 1989 Nov 17; 59(4):581-3 (18 ref.)
Isolation of a dnaA mutant of Bacillus subtilis defective in initiation of replication: amount of DnaA protein determines cells' initiation potential. Moriya S, et al. **EMBO J** 1990 Sep;9(9):2905-10
The amino acid sequence of the CCGG recognizing DNA methyltransferase M.BsuFI: implications for the analysis of sequence recognition by cytosine DNA methyltransferases. Walter J, et al. **EMBO J** 1990 Apr; 9(4):1007-13
Evidence for posttranscriptional regulation of synthesis of

the Bacillus subtilis Gnt repressor. Fujita Y, et al. **FEBS Lett** 1990 Jul 2;267(1):71–4

Genetic transformation of intact cells of Bacillus subtilis by electroporation. Brigidi P, et al. **FEMS Microbiol Lett** 1990 Jan 15;55(1–2):135–8

The expression of a highly expressed Bacillus subtilis gene is not reduced by introduction of multiple codons normally not present in such genes. Loshon CA, et al. **FEMS Microbiol Lett** 1989 Nov;53(1–2):59–63

Plasmid transformation in Bacillus subtilis NB22, an antifungal–antibiotic iturin producer. Matsuno Y, et al. **FEMS Microbiol Lett** 1990 Jan 15;55(1–2):227–9

The structural gene for aspartokinase II in Bacillus subtilis is closely linked to the sdh operon. Petricek M, et al. **FEMS Microbiol Lett** 1989 Oct 1;52(1–2):85–7

Transfer of transposon Tn916 from Bacillus subtilis to Thermus aquaticus. Sen S, et al. **FEMS Microbiol Lett** 1990 Jan 15;55(1–2):131–4

Genetics of the phosphotransferase system of Bacillus subtilis. Fouet A, et al. **FEMS Microbiol Rev** 1989 Jun; 5(1–2):175–82 (29 ref.)

Comparative expression of the pC194 cat gene in Streptococcus pneumoniae, Bacillus subtilis and Escherichia coli. Ballester S, et al. **Gene** 1990 Jan 31; 86(1):71–9

The cloned polC gene of Bacillus subtilis: characterization of the azp12 mutation and controlled in vitro synthesis of active DNA polymerase III. Barnes MH, et al. **Gene** 1989 Dec 21;85(1):177–86

A new bacteriophage vector for cloning in Bacillus subtilis and the use of phi 105 for protein synthesis in maxicells. East AK, et al. **Gene** 1989 Sep 1;81(1):35–43

Development of a beta-galactosidase alpha-complementation system for molecular cloning in Bacillus subtilis. Haima P, et al. **Gene** 1990 Jan 31;86(1):63–9

Structurally stable Bacillus subtilis cloning vectors. Jannière L, et al. **Gene** 1990 Mar 1;87(1):53–61

Nucleotide sequence of the Synechococcus sp. PCC7942 branching enzyme gene (glgB): expression in Bacillus subtilis. Kiel JA, et al. **Gene** 1990 Apr 30;89(1):77–84

Nucleotide sequence of a Bacillus subtilis arginine regulatory gene and homology of its product to the Escherichia coli arginine repressor. North AK, et al. **Gene** 1989 Aug 1; 80(1):29–38

Cloning of the biotin synthetase gene from Bacillus sphaericus and expression in Escherichia coli and Bacilli. Ohsawa I, et al. **Gene** 1989 Aug 1;80(1):39–48

The apparent specificity of NotI (5'-GCGGCCGC-3') is enhanced by M.FnuDII or M.BepI methyltransferases (5'-mCGCG-3'): cutting bacterial chromosomes into a few large pieces. Qiang BQ, et al. **Gene** 1990 Mar 30;88(1):101–5

Expression of the rtp gene of Bacillus subtilis is required for replication fork arrest at the chromosome terminus. Smith MT, et al. **Gene** 1989 Dec 21;85(1):187–92

Synthesis and refolding of human tissue-type plasminogen activator in Bacillus subtilis. Wang LF, et al. **Gene** 1989 Dec 7;84(1):127–33

Development of an inducible and enhancible expression and secretion system in Bacillus subtilis. Wong SL. **Gene** 1989 Nov 30;83(2):215–23

Effects of internal deletions on the priming activity of the phage phi 29 terminal protein. Zaballos A, et al. **Gene** 1989 Nov 30;83(2):187–95

Nucleotide sequence of the sacS locus of Bacillus subtilis reveals the presence of two regulatory genes. Zukowski MM, et al. **Gene** 1990 May 31;90(1):153–5

The Bacillus subtilis gene for the development transcription factor sigma K is generated by excision of a dispensable DNA element containing a sporulation recombinase gene. Kunkel B, et al. **Genes Dev** 1990 Apr;4(4):525–35

Temporal and spatial control of the mother-cell regulatory gene spoIIID of Bacillus subtilis. Kunkel B, et al. **Genes Dev** 1989 Nov;3(11):1735–44

A Bacillus subtilis regulatory gene product for genetic competence and sporulation resembles sensor protein members of the bacterial two-component signal-transduction systems. Weinrauch Y, et al. **Genes Dev** 1990 May;4(5):860–72

Isolation of Bacillus subtilis transformation-deficient mutants and mapping of competence genes. Mastromei G, et al. **Genet Res** 1989 Aug;54(1):1–5

Orientation of genes in the Bacillus subtilis chromosome. Zeigler DR, et al. **Genetics** 1990 Aug;125(4):703–8

Molecular cloning of a Bacillus subtilis gene involved in cell division, sporulation, and exoenzyme secretion [published erratum appears in Idengaku Zasshi 1989 Dec;64(6):503] Sadaie Y. **Idengaku Zasshi** 1989 Apr;64(2):111–9

Cloning and characterization of a cluster of linked Bacillus subtilis late competence mutations. Albano M, et al. **J Bacteriol** 1989 Oct;171(10):5376–85

Nucleotide sequence and genetic organization of the Bacillus subtilis comG operon. Albano M, et al. **J Bacteriol** 1989 Oct;171(10):5386–404

The Bacillus subtilis outB gene is highly homologous to an Escherichia coli ntr-like gene. Albertini AM, et al. **J Bacteriol** 1990 Sep;172(9):5482–5

The spoIIJ gene, which regulates early developmental steps in Bacillus subtilis, belongs to a class of environmentally responsive genes. Antoniewski C, et al. **J Bacteriol** 1990 Jan;172(1):86–93

Regulation of histidine and proline degradation enzymes by amino acid availability in Bacillus subtilis. Atkinson MR, et al. **J Bacteriol** 1990 Sep;172(9):4758–65

Temporal regulation of the Bacillus subtilis early sporulation gene spo0F. Bai U, et al. **J Bacteriol** 1990 Sep;172(9):5432–9

Nucleotide sequence and insertional inactivation of a Bacillus subtilis gene that affects cell division, sporulation, and temperature sensitivity. Beall B, et al. **J Bacteriol** 1989 Dec; 171(12):6821–34

Mechanism of erythromycin-induced ermC mRNA stability in Bacillus subtilis. Bechhofer DH, et al. **J Bacteriol** 1989 Nov;171(11):5803–11

Characterization of an inducible oxidative stress system in Bacillus subtilis. Bol DK, et al. **J Bacteriol** 1990 Jun; 172(6):3503–6

The Bacillus subtilis 168 alkaline phosphatase III gene: impact of a phoAIII mutation on total alkaline phosphatase synthesis. Bookstein C, et al. **J Bacteriol** 1990 Jul; 172(7):3730–7

Identification of cis-acting sequences required for translational autoregulation of the ermC methylase. Breidt F, et al. **J Bacteriol** 1990 Jul;172(7):3661–8

A membrane protein with similarity to N-methylphenylalanine pilins is essential for DNA binding by competent Bacillus subtilis. Breitling R, et al. **J Bacteriol** 1990 Mar;172(3):1499–508

Construction by site-directed mutagenesis of a 39-kilodalton mosquitocidal protein similar to the larva-processed toxin of Bacillus sphaericus 2362. Broadwell AH, et al. **J Bacteriol** 1990 Jul;172(7):4032–6

Genetic selection and DNA sequences of 4.5S RNA homologs. Brown S, et al. **J Bacteriol** 1989 Dec; 171(12):6517–20

Induction of levansucrase in Bacillus subtilis: an antiterminination mechanism negatively controlled by the phosphotransferase system. Crutz AM, et al. **J Bacteriol** 1990 Feb;172(2):1043–50

The sacT gene regulating the sacPA operon in Bacillus subtilis shares strong homology with transcriptional antiterminators. Debarbouille M, et al. **J Bacteriol** 1990 Jul;172(7):3966–73

Growth medium-independent genetic competence mutants of Bacillus subtilis. Dubnau D, et al. **J Bacteriol** 1990 Jul; 172(7):4048–55

Molecular cloning, nucleotide sequencing, and expression of the Bacillus subtilis (natto) IAM1212 alpha-amylase gene, which encodes an alpha-amylase structurally similar to but enzymatically distinct from that of B. subtilis 2633. Emori M, et al. **J Bacteriol** 1990 Sep;172(9):4901–8

Isolation and characterization of mutations in the gene encoding an endogenous Bacillus subtilis beta-galactosidase and its regulator. Errington J, et al. **J Bacteriol** 1990 Jan; 172(1):488–90

A target for carbon source-dependent negative regulation of the citB promoter of Bacillus subtilis. Fouet A, et al. **J Bacteriol** 1990 Feb;172(2):835–44

Multiple regulatory sites in the Bacillus subtilis citB promoter region. Fouet A, et al. **J Bacteriol** 1990 Sep;172(9):5408–15

Timing of spoII gene expression relative to septum formation during sporulation of Bacillus subtilis. Gholamhoseinian A, et al. **J Bacteriol** 1989 Oct;171(10):5747–9

Cloning and characterization of the regulatory Bacillus subtilis competence genes comA and comB. Guillen N, et al. **J Bacteriol** 1989 Oct;171(10):5354–61

Cloning and expression of a Bacillus subtilis division initiation gene for which a homolog has not been identified in another organism. Harry EJ, et al. **J Bacteriol** 1989 Dec; 171(12):6835–9

Secretory S complex of Bacillus subtilis: sequence analysis and identity to pyruvate dehydrogenase. Hemilä H, et al. **J Bacteriol** 1990 Sep;172(9):5052–63

A novel Bacillus subtilis gene involved in negative control of sporulation and degradative-enzyme production. Honjo M, et al. **J Bacteriol** 1990 Apr;172(4):1783–90

Evidence for two structural genes for alkaline phosphatase in Bacillus subtilis. Hulett FM, et al. **J Bacteriol** 1990 Feb; 172(2):735–40

Structural similarity among Escherichia coli FtsW and RodA proteins and Bacillus subtilis SpoVE protein, which function in cell division, cell elongation, and spore formation, respectively. Ikeda M, et al. **J Bacteriol** 1989 Nov;171(11):6375–8

Characterization of chromosomal DNA amplifications with associated tetracycline resistance in Bacillus subtilis. Ives CL, et al. **J Bacteriol** 1990 Sep;172(9):4936–44

Phenotypes of Bacillus subtilis mutants altered in the precursor-specific region of sigma E. Jonas RM, et al. **J Bacteriol** 1990 Aug;172(8):4178–86

Physical map of the Bacillus cereus chromosome. Kolstø AB, et al. **J Bacteriol** 1990 Jul;172(7):3821–5

The ermC leader peptide: amino acid alterations leading to differential efficiency of induction by macrolide-lincosamide-streptogramin B antibiotics. Mayford M, et al. **J Bacteriol** 1990 Jul;172(7):3772–9

Molecular cloning and characterization of comC, a late competence gene of Bacillus subtilis. Mohan S, et al. **J Bacteriol** 1989 Nov;171(11):6043–51

Transcriptional regulation of comC: evidence for a competence-specific transcription factor in Bacillus subtilis. Mohan S, et al. **J Bacteriol** 1990 Jul;172(7):4064–71

Signal transduction pathway controlling synthesis of a class of degradative enzymes in Bacillus subtilis: expression of the regulatory genes and analysis of mutations in degS and degU. Msadek T, et al. **J Bacteriol** 1990 Feb;172(2):824–34

Bacillus subtilis mutant allele sup-3 causes lysine insertion at ochre codons: use of sup-3 in studies of translational attenuation. Mulbry WW, et al. **J Bacteriol** 1989 Oct; 171(10):5322–4

Cloning and characterization of srfB, a regulatory gene involved in surfactin production and competence in Bacillus subtilis. Nakano MM, et al. **J Bacteriol** 1989 Oct; 171(10):5347–53

Dramatic increase in negative superhelicity of plasmid DNA in the forespore compartment of sporulating cells of Bacillus subtilis. Nicholson WL, et al. **J Bacteriol** 1990 Jan; 172(1):7–14

Characterization of the gene for a protein kinase which phosphorylates the sporulation-regulatory proteins Spo0A and Spo0F of Bacillus subtilis. Perego M, et al. **J Bacteriol** 1989 Nov;171(11):6187–96

Cloning and characterization of the hemA region of the Bacillus subtilis chromosome. Petricek M, et al. **J Bacteriol** 1990 May;172(5):2250–8

Role of sigma H in expression of the fumarase gene (citG) in vegetative cells of Bacillus subtilis 168. Price VA, et al. **J Bacteriol** 1989 Nov;171(11):5933–9

Independent genes for two threonyl-tRNA synthetases in Bacillus subtilis. Putzer H, et al. **J Bacteriol** 1990 Aug; 172(8):4593–602

Negative regulator of sigma G-controlled gene expression in stationary-phase Bacillus subtilis. Rather PN, et al. **J Bacteriol** 1990 Feb;172(2):709–15

Erythromycin induces expression of the chloramphenicol acetyltransferase gene cat-86. Rogers EJ, et al. **J Bacteriol** 1990 Aug;172(8):4694–5

Suppression of early competence mutations in Bacillus subtilis by mec mutations. Roggiani M, et al. **J Bacteriol** 1990 Jul; 172(7):4056–63

The cisA cistron of Bacillus subtilis sporulation gene spoIVC encodes a protein homologous to a site-specific recombinase. Sato T, et al. **J Bacteriol** 1990 Feb; 172(2):1092–8

Construction and properties of a temperature-sensitive mutation in the gene for the bacteriophage SPO1 DNA-binding protein TF1. Sayre MH, et al. **J Bacteriol** 1990 Aug;172(8):4672–81

Isolation and molecular genetic characterization of the Bacillus subtilis gene (infB) encoding protein synthesis initiation factor 2. Shazand K, et al. **J Bacteriol** 1990 May; 172(5):2675–87

Bacillopeptidase F of Bacillus subtilis: purification of the protein and cloning of the gene. Sloma A, et al. **J Bacteriol** 1990 Sep;172(9):5520–1

Gene encoding a novel extracellular metalloprotease in Bacillus subtilis. Sloma A, et al. **J Bacteriol** 1990 Feb; 172(2):1024–9

Structural alterations in the Bacillus subtilis Spo0A regulatory protein which suppress mutations at several spo0 loci. Spiegelman G, et al. **J Bacteriol** 1990 Sep; 172(9):5011–9

Nucleotide sequence and cloning in Bacillus subtilis of the Bacillus stearothermophilus pleiotropic regulatory gene degT. Takagi M, et al. **J Bacteriol** 1990 Jan;172(1):411–8

Sigma H-directed transcription of citG in Bacillus subtilis. Tatti KM, et al. **J Bacteriol** 1989 Nov;171(11):5928–32

In vitro reconstitution of a hexagonal array with a surface layer protein synthesized by Bacillus subtilis harboring the surface layer protein gene from Bacillus brevis 47. Tsuboi A, et al. **J Bacteriol** 1989 Dec;171(12):6747–52

Characterization of the spoIVB and recN loci of Bacillus subtilis. Van Hoy BE, et al. **J Bacteriol** 1990 Mar; 172(3):1306–11

Complex character of senS, a novel gene regulating expression of extracellular-protein genes of Bacillus subtilis. Wang LF, et al. **J Bacteriol** 1990 Apr; 172(4):1939–47

Sequence and transcription mapping of Bacillus subtilis competence genes comB and comA, one of which is related to a family of bacterial regulatory determinants. Weinrauch Y, et al. **J Bacteriol** 1989 Oct;171(10):5362–75

Characterization of PBSX, a defective prophage of Bacillus subtilis. Wood HE, et al. **J Bacteriol** 1990 May; 172(5):2667–74

Comparison of the three aspartokinase isozymes in Bacillus subtilis Marburg and 168. Zhang JJ, et al. **J Bacteriol** 1990 Feb;172(2):701–8

Transcriptional organization of a cloned chemotaxis locus of Bacillus subtilis. Zuberi AR, et al. **J Bacteriol** 1990 Apr; 172(4):1870–6

A mutation in P23, the first gene in the RNA polymerase sigma A (sigma 43) operon, affects sporulation in Bacillus subtilis. Zuberi AR, et al. **J Bacteriol** 1990 Apr; 172(4):2175–7

Purification and characterization of an initiation protein for chromosomal replication, DnaA, in Bacillus subtilis. Fukuoka T, et al. **J Biochem (Tokyo)** 1990 May; 107(5):732–9

The blasticidin S resistance gene (bsr) selectable in a single copy state in the Bacillus subtilis chromosome. Itaya M, et al. **J Biochem (Tokyo)** 1990 Jun;107(6):799–801

Cloning and characterization of a Bacillus subtilis gene homologous to E. coli secY. Nakamura K, et al. **J Biochem (Tokyo)** 1990 Apr;107(4):603–7

Chlamydia trachomatis RNA polymerase major sigma subunit. Sequence and structural comparison of conserved and unique regions with Escherichia coli sigma 70 and

Bacillus subtilis sigma 43. Koehler JE, et al. **J Biol Chem** 1990 Aug 5;265(22):13206–14

Signal transduction by the bacterial phosphotransferase system. Diauxie and the crr gene (J. Monod revisited). Roseman S, et al. **J Biol Chem** 1990 Feb 25;265(6):2993–6 (18 ref.)

Bacillus subtilis 13-kilodalton cytochrome c-550 encoded by cccA consists of a membrane-anchor and a heme domain. von Wachenfeldt C, et al. **J Biol Chem** 1990 Aug 15; 265(23):13939–48

Cloning, genetic organization, and characterization of a structural gene encoding bacillopeptidase F from Bacillus subtilis. Wu XC, et al. **J Biol Chem** 1990 Apr 25; 265(12):6845–50

Chromosomal location of the Bacillus subtilis aspartokinase II gene and nucleotide sequence of the adjacent genes homologous to uvrC and trx of Escherichia coli. Chen NY, et al. **J Gen Microbiol** 1989 Nov;135 (Pt 11):2931–40

Use of a novel cassette to label phenotypically a cryptic plasmid of Bacillus subtilis and map loci involved in its stable maintenance. Gleave AP, et al. **J Gen Microbiol** 1990 May;136 (Pt 5):905–12

New suppressor mutation sur0B of spo0B and spo0F mutations in Bacillus subtilis. Shoji K, et al. **J Gen Microbiol** 1988 Dec;134 (Pt 12):3249–57

Dissection of the expression signals of the spoA gene of Bacillus subtilis: glucose represses sporulation-specific expression. Yamashita S, et al. **J Gen Microbiol** 1989 May; 135 (Pt 5):1335–45

Cloning and sequencing of the gerD gene of Bacillus subtilis. Yon JR, et al. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3431–45

Expression of levansucrase-beta-galactosidase hybrids inhibits secretion and is lethal in Bacillus subtilis. Zagorec M, et al. **J Gen Microbiol** 1990 Jun;136 (Pt 6):1137–43

Chloramphenicol-induced translational activation of cat messenger RNA in vitro. Dick T, et al. **J Mol Biol** 1990 Apr 20;212(4):661–8

Identification of the replication terminator protein binding sites in the terminus region of the Bacillus subtilis chromosome and stoichiometry of the binding. Lewis PJ, et al. **J Mol Biol** 1990 Jul 5;214(1):73–84

Levanase operon of Bacillus subtilis includes a fructose-specific phosphotransferase system regulating the expression of the operon. Martin-Verstraete I, et al. **J Mol Biol** 1990 Aug 5;214(3):657–71

Bend induced by the phage phi 29 transcriptional activator in the viral late promoter is required for activation. Rojo F, et al. **J Mol Biol** 1990 Feb 20;211(4):713–25

Regulation of Bacillus subtilis glutamine synthetase gene expression by the product of the glnR gene. Schreier HJ, et al. **J Mol Biol** 1989 Nov 5;210(1):51–63

Cascade regulation of spore coat gene expression in Bacillus subtilis. Zheng LB, et al. **J Mol Biol** 1990 Apr 20; 212(4):645–60

Expression of heterologous genes in Bacillus subtilis. Henner DJ. **Methods Enzymol** 1990;185:199–201

Inducible expression of regulatory genes in Bacillus subtilis. Henner DJ. **Methods Enzymol** 1990;185:223–8

Regulated promoter for high-level expression of heterologous genes in Bacillus subtilis. Le Grice SF. **Methods Enzymol** 1990;185:201–14

System for secretion of heterologous proteins in Bacillus subtilis. Nagarajan V. **Methods Enzymol** 1990;185:214–23

Invertrons, a class of structurally and functionally related genetic elements that includes linear DNA plasmids, transposable elements, and genomes of adeno-type viruses. Sakaguchi K. **Microbiol Rev** 1990 Mar;54(1):66–74 (72 ref.)

Genetic transformation and cell morphology of Bacillus subtilis grown in Mg+(+)-limited chemostat culture. Sevinc MS, et al. **Microbios** 1990;62(250):29–35

Multiple active forms of a novel serine protease from Bacillus subtilis. Brückner R, et al. **Mol Gen Genet** 1990 May; 221(3):486–90

In vivo selected promoter and ribosome binding site up-mutations: demonstration that the Escherichia coli bla promoter and a Shine-Dalgarno region with low complementarity to the 16 S ribosomal RNA function in Bacillus subtilis. Hung A, et al. **Mol Gen Genet** 1989 Oct; 219(1-2):129–36

Analysis of structural and biological parameters affecting plasmid deletion formation in Bacillus subtilis. Kupsch J, et al. **Mol Gen Genet** 1989 Sep;218(3):402–8

Primary structure of the tms and prs genes of Bacillus subtilis. Nilsson D, et al. **Mol Gen Genet** 1989 Sep;218(3):565–71

Translational coupling in a penP-lacZ gene fusion in Bacillus subtilis and Escherichia coli: use of AUA as a restart codon. Peijnenburg AA, et al. **Mol Gen Genet** 1990 Apr; 221(2):267–72

Differential gene expression during sporulation in Bacillus subtilis: regulation of the spoVJ gene. Errington J, et al. **Mol Microbiol** 1989 Aug;3(8):1053–60

The regulation of transcription of the gerA spore germination operon of Bacillus subtilis. Feavers IM, et al. **Mol Microbiol** 1990 Feb;4(2):275–82

The nucleotide sequence of the rodC operon of Bacillus subtilis. Honeyman AL, et al. **Mol Microbiol** 1989 Sep; 3(9):1257–68

The life-cycle proteins RodA of Escherichia coli and SpoVE of Bacillus subtilis have very similar primary structures. Joris B, et al. **Mol Microbiol** 1990 Mar;4(3):513–7

Identification of Bacillus subtilis genes expressed early during sporulation. Mathiopoulos C, et al. **Mol Microbiol** 1989 Aug;3(8):1071–81

Differential gene expression during sporulation in Bacillus subtilis: structure and regulation of the spoIIID gene. Stevens CM, et al. **Mol Microbiol** 1990 Apr;4(4):543–51

The transition state transcription regulator AbrB of Bacillus subtilis is autoregulated during vegetative growth. Strauch MA, et al. **Mol Microbiol** 1989 Sep;3(9):1203–9

Pseudo-allelic relationship between non-homologous genes concerned with biosynthesis of polyglycerol phosphate and polyribitol phosphate teichoic acids in Bacillus subtilis strains 168 and W23. Young M, et al. **Mol Microbiol** 1989 Dec;3(12):1805–12

Isolation of a Bacillus subtilis mutant defective in constitutive O6-alkylguanine-DNA alkyltransferase. Morohoshi F, et al. **Mutat Res** 1990 Jan;235(1):15–23

Genetic transfer of the stable L form state to intact bacterial cells. Wyrick PB, et al. **Nature** 1973 Aug 24; 244(5417):505–7

Molecular analysis of the replication region of the conjugative Streptococcus agalactiae plasmid pIP501 in Bacillus subtilis. Comparison with plasmids pAM beta 1 and pSM19035. Brantl S, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4783–90

Functional analysis of the Bacillus subtilis bacteriophage SPP1 pac site. Bravo A, et al. **Nucleic Acids Res** 1990 May 25;18(10):2881–6

The generation of concatemeric plasmid DNA in Bacillus subtilis as a consequence of bacteriophage SPP1 infection. Bravo A, et al. **Nucleic Acids Res** 1990 Aug 25; 18(16):4651–7

Solid phase synthesis of the 5'-half of the initiator t-RNA from B. subtilis. Chaix C, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7381–93

Transcriptional start sites of the staphylokinase 42D promoter in E. coli and B. subtilis. Ellinger T, et al. **Nucleic Acids Res** 1990 Jan 25;18(2):383

Heat-inducible translational coupling in Bacillus subtilis. Fujiwara S, et al. **Nucleic Acids Res** 1990 Feb 25; 18(4):739–44

Nucleotide sequence of a Bacillus subtilis gene homologous to the dnaK gene of Escherichia coli. Hearne CM, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8373

Cloning and analysis of the spc ribosomal protein operon of Bacillus subtilis: comparison with the spc operon of Escherichia coli. Henkin TM, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7469–86

Nucleotide sequence of the sporulation gene spoIIGA from Bacillus subtilis. Masuda ES, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):657

Nucleotide sequence of the Bacillus subtilis argF gene encoding ornithine carbamoyltransferase. Mountain A, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4594

Revised nucleotide sequence of the sporulation gene spoVE from Bacillus subtilis. Sato T, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):4021

Nucleotide sequence of the Bacillus subtilis argC gene encoding N-acetylglutamate-gamma-semialdehyde dehydrogenase. Smith MC, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4595

The nucleotide sequence of the recE+ gene of Bacillus subtilis. Stranathan MC, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4249

Complete nucleotide sequence of the Bacillus subtilis dnaK gene. Wetzstein M, et al. **Nucleic Acids Res** 1990 Apr 25; 18(8):2172

Nucleotide sequence of a Bacillus subtilis gene homologous to the grpE gene of E. coli located immediately upstream of the dnaK gene. Wetzstein M, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1289

Sequence limits of DNA strands in the arrest replication fork at the Bacillus subtilis chromosome terminus. Williams NK, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):9947–56

Nucleotide sequence of the diaminopimelate-decarboxylase gene from Bacillus subtilis. Yamamoto J, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10105

Sequence of the Bacillus subtilis spectinomycin resistance gene region. Yoshikawa H, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1647

Identification and nucleotide sequence of the minimal replicon of the low-copy-number plasmid pBS2. Darabi A, et al. **Plasmid** 1989 Nov;22(3):281–6

Overreplication of the origin region in the dnaB37 mutant of Bacillus subtilis: postinitiation control of chromosomal replication. Henckes G, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8660–4

Genetic evidence that RNA polymerase associated with sigma A factor uses a sporulation-specific promoter in Bacillus subtilis. Kenney TJ, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9109–13

AbrB, a regulator of gene expression in Bacillus, interacts with the transcription initiation regions of a sporulation gene and an antibiotic biosynthesis gene. Robertson JB, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8457–61

The SpoOA protein of Bacillus subtilis is a repressor of the abrB gene. Strauch M, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1801–5

Site-directed mutagenesis of a catabolite repression operator sequence in Bacillus subtilis. Weickert MJ, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6238–42

Chromosomal rearrangement during sporulation of Bacillus subtilis leads to the generation of a new sigma factor. Rapoport G. **Res Microbiol** 1989 May-Jun;140(4-5):275–6

[Genetic analysis of ribosomal protein S13 and BL18 mutants in Bacillus subtilis] Bai YL, et al. **I Chuan Hsueh Pao** 1988; 15(4):270–6 (Eng. Abstr.) **(Chi)**

[Regulation of initiation of chromosomal replication in bacteria; role of DnaA protein and the regulation of its expression in Bacillus subtilis] Ogasawara N, et al. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(9):1135–48 **(Jpn)**

[Mapping the functional segment of the initiation of replication in the pE194 Staphylococcus aureus plasmid in Bacillus subtilis cells] Khasanov FK. **Dokl Akad Nauk SSSR** 1989 Sep-Oct;308(1):208–11 **(Rus)**

[Long-wave ultraviolet sunlight spectrum attenuates the mutagenic effect of short-wave ultraviolet light on Bacillus subtilis cells] Lotareva OV, et al. **Dokl Akad Nauk SSSR** 1989;308(4):989–93 **(Rus)**

[Mutants of Bacillus subtilis resistant to lysine analog S-2 aminoethyl-L-cysteine] Shevchenko TN, et al. **Genetika** 1989 Nov;25(11):1937–45 (Eng. Abstr.) **(Rus)**

[Absence of various manifestations of adaptive response in Bacillus subtilis transformants] Zherebtsov SV. **Genetika** 1990 May;26(5):826–32 (Eng. Abstr.) **(Rus)**

[Genome polymorphism in dissociative variants of Bacillus subtilis (mesentericus) 76. Identification of dissociants using genome fingerprinting] Ivanov PL, et al. **Mol Biol (Mosk)** 1990 Mar-Apr;24(2):560–5 (Eng. Abstr.) **(Rus)**

[Unusual structure of the regulatory region of the riboflavin biosynthesis operon in Bacillus subtilis] Mironov VN, et al. **Mol Biol (Mosk)** 1990 Jan-Feb;24(1):256–61 (Eng. Abstr.) **(Rus)**

[The effect of various rec-mutations on the frequency of the Tn917 transposition in Bacillus subtilis cells] Gavrilova EV, et al. **Mol Gen Mikrobiol Virusol** 1989 Oct;(10):38–40 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Accumulation of the insecticidal crystal protein of Bacillus thuringiensis subsp. kurstaki in post-exponential-phase Bacillus subtilis. Crissman JW, et al. **Appl Environ Microbiol** 1989 Sep;55(9):2302–7

The relative rotation of the ends of Bacillus subtilis during growth. Koch AL. **Arch Microbiol** 1990;153(6):569–73

Effect of redox potential on Bacillus subtilis and Bacillus licheniformis in broth and in pasteurized sausage mixtures. Rödel W, et al. **Int J Food Microbiol** 1990 May; 10(3-4):291–301

Effect of heat and ultrasonic waves on the survival of two strains of Bacillus subtilis. Garcia ML, et al. **J Appl Bacteriol** 1989 Dec;67(6):619–28

Effect of date extract on growth and spore germination of Bacillus subtilis. Sallal AK, et al. **Microbios** 1989; 59(240-241):203–10

Bacillus subtilis expressing a haemolysin gene from Listeria monocytogenes can grow in mammalian cells. Bielecki J, et al. **Nature** 1990 May 10;345(6271):175–6

METABOLISM

Bacitracin-induced proteins in Bacillus subtilis and Bacillus thuringiensis and their relationship with resistance. García-Patrone M. **Antimicrob Agents Chemother** 1990 May;34(5):796–802

Rhizocticin A, an antifungal phosphono-oligopeptide of Bacillus subtilis ATCC 6633: biological properties. Kugler M, et al. **Arch Microbiol** 1990;153(3):276–81

Stretch-activated composite ion channels in Bacillus subtilis. Zoratti M, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):443–50

Coproduction of surfactin and iturin A, lipopeptides with surfactant and antifungal properties, by Bacillus subtilis. Sandrin C, et al. **Biotechnol Appl Biochem** 1990 Aug; 12(4):370–5

Specific inhibition of iturin biosynthesis by cerulenin. Hourdou ML, et al. **Can J Microbiol** 1990 Mar;36(3):164–8

Production of diphtheria toxin CRM228 in B. subtilis. Hemilä H, et al. **FEMS Microbiol Lett** 1989 Nov;53(1-2):193–8

delta-Aminolevulinic acid biosynthesis in Escherichia coli and Bacillus subtilis involves formation of glutamyl-tRNA. O'Neill GP, et al. **FEMS Microbiol Lett** 1989 Aug; 51(3):255–9

Production and secretion of pertussis toxin subunits in Bacillus subtilis. Saris P, et al. **FEMS Microbiol Lett** 1990 Mar 1;56(1-2):143–8

Immunoelectron microscopy of Bacillus subtilis cells secreting human interferon alpha 1 or staphylokinase. Wagner B, et al. **FEMS Microbiol Lett** 1989 Dec; 53(3):327–32

Glutaraldehyde: its uptake by sporing and non-sporing bacteria, rubber, plastic and an endoscope. Power EG, et al. **J Appl Bacteriol** 1989 Sep;67(3):329–42

Methyl group turnover on methyl-accepting chemotaxis proteins during chemotaxis by Bacillus subtilis. Thoelke MS, et al. **J Biol Chem** 1990 Feb 5;265(4):1928–32

Cell wall composition and surface properties in Bacillus subtilis: anomalous effect of incubation temperature on the phage-binding properties of bacteria containing varied amounts of teichoic acid. Archibald AR, et al. **J Gen Microbiol** 1989 Mar;135 (Pt 3):667–73

Fatty acid and beta-amino acid syntheses in strains of Bacillus

subtilis producing iturinic antibiotics. Hourdou ML, et al. **Lipids** 1989 Nov;24(11):940–4

DNA replication of plasmids from gram-positive bacteria in Bacillus subtilis. Plasmid pUB110 as a model system. Alonso JC. **Microbiologia** 1989 Jun;5(1):5–12 (42 ref.)

Mycosubtilins B and C: minor antibiotics from mycosubtilis-producer Bacillus subtilis. Besson F, et al. **Microbios** 1990;62(251):93–9

Defects in the nutrient-dependent methylation of a membrane-associated protein in spo mutants of Bacillus subtilis. Golden KJ, et al. **Mol Gen Genet** 1989 Dec; 220(1):1–7

[The effect of synthetic proteinase inhibitors of the level of human recombinant proinsulin production, secreted by a genetically engineered strain of Bacillus subtilis] Parfenova EV, et al. **Bioorg Khim** 1989 Jul;15(7):987–9 (Eng. Abstr.) **(Rus)**

[The effect of copper compounds on pigment formation in Bacillus subtilis and Bacillus megaterium] Shliakhov EN, et al. **Mikrobiol Zh** 1985 Nov–Dec;47(6):33–6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

A vitamin-K2-binding factor secreted from Bacillus subtilis. Ikeda H, et al. **Eur J Biochem** 1990 Aug 28;192(1):219–24

Repression of sporulation: isolation and characterization of repression-resistant mutants of Bacillus subtilis. Bhaduri S, et al. **J Appl Bacteriol** 1989 Nov;67(5):497–504

Effects of antibiotics on synthesis and persistence of sigma E in sporulating Bacillus subtilis. Jonas RM, et al. **J Bacteriol** 1990 Aug;172(8):4616–23

Studies of sigma D-dependent functions in Bacillus subtilis. Márquez LM, et al. **J Bacteriol** 1990 Jun;172(6):3435–43

Energy and calcium ion dependence of proteolysis during sporulation of Bacillus subtilis cells. O'Hara MB, et al. **J Bacteriol** 1990 Aug;172(8):4161–70

Bacteriophage-enhanced sporulation: comparison of spore-converting bacteriophages PMB12 and SP10. Silver-Mysliwiec TH, et al. **J Bacteriol** 1990 Apr; 172(4):1948–53

Methyl transfer in chemotaxis toward sugars by Bacillus subtilis. Thoelke MS, et al. **J Bacteriol** 1990 Feb; 172(2):1148–50

Biochemical analysis of the Bacillus subtilis 1604 spore germination response. Venkatasubramanian P, et al. **J Gen Microbiol** 1989 Oct;135 (Pt 10):2723–33

The role of the sporulation gene spoIIIE in the regulation of prespore-specific gene expression in Bacillus subtilis. Foulger D, et al. **Mol Microbiol** 1989 Sep;3(9):1247–55

[Studies on ultraweak luminescence of bacteria] Wang Y, et al. **Wei Sheng Wu Hsueh Pao** 1990 Feb;30(1):58–62 (Eng. Abstr.) **(Chi)**

[The surface membrane charge of bacteria and its role in serine proteinase secretion by Bacillus subtilis cells] Artemov AV, et al. **Biol Nauki** 1990;(2):113–9 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Genotoxic action of sunlight upon Bacillus subtilis spores: monitoring studies at Tokyo, Japan. Munakata N. **J Radiat Res (Tokyo)** 1989 Dec;30(4):338–51

ULTRASTRUCTURE

Physicochemical interaction of Escherichia coli cell envelopes and Bacillus subtilis cell walls with two clays and ability of the composite to immobilize heavy metals from solution. Walker SG, et al. **Appl Environ Microbiol** 1989 Nov;55(11):2976–84

Evaluation of freeze-substitution and conventional embedding protocols for routine electron microscopic processing of eubacteria. Graham LL, et al. **J Bacteriol** 1990 Apr;172(4):2141–9

Effect of chemical fixatives on accurate preservation of Escherichia coli and Bacillus subtilis structure in cells prepared by freeze-substitution. Graham LL, et al. **J Bacteriol** 1990 Apr;172(4):2150–9

Improved sectioning and ultrastructure of bacteria and animal cells embedded in Lowicryl. Bénichou JC, et al. **J Electron Microsc Tech** 1990 Apr;14(4):289–97

Cell wall assembly in Bacillus subtilis: partial conservation of polar wall material and the effect of growth conditions on the pattern of incorporation of new material at the polar caps. Clarke-Sturman AJ, et al. **J Gen Microbiol** 1989 Mar; 135 (Pt 3):657–65

Cell wall assembly in Bacillus subtilis: visualization of old and new wall material by electron microscopic examination of samples stained selectively for teichoic acid and teichuronic acid [published erratum appears in J Gen Microbiol 1989 Jan;135(Pt 6):1777] Merad T, et al. **J Gen Microbiol** 1989 Mar;135 (Pt 3):645–55

BACILLUS THURINGIENSIS

Evaluation of Bactimos wettable powder, granules and briquets against mosquito larvae in Malaysia. Sulaiman S, et al. **Acta Trop (Basel)** 1990 May;47(4):189–95

Susceptibility of adult phlebotomine sandflies (Diptera: Psychodidae) to Bacillus thuringiensis var. israeliensis. Yuval B, et al. **Ann Trop Med Parasitol** 1989 Apr; 83(2):195–6

Toxicity of protease-resistant domains from the delta-endotoxin of Bacillus thuringiensis subsp. israelensis in Culex quinquefasciatus and Aedes aegypti bioassays. Pfannenstiel MA, et al. **Appl Environ Microbiol** 1990 Jan; 56(1):162–6

Characterization of the cysteine residues and disulphide linkages in the protein crystal of Bacillus thuringiensis. Bietlot HP, et al. **Biochem J** 1990 Apr 15;267(2):309–15

The toxicity of two Bacillus thuringiensis delta-endotoxins to gypsy moth larvae is inversely related to the affinity of binding sites on midgut brush border membranes for the toxins. Wolfersberger MG. **Experientia** 1990 May 15; 46(5):475–7

Salt marsh mosquito control in Portsmouth, Rhode Island. Christie GD. **J Am Mosq Control Assoc** 1990 Mar; 6(1):144–7

Field trial of Abate and Teknar for Simulium (Diptera: Simuliidae) control in India. Das SC, et al. **J Am Mosq Control Assoc** 1990 Mar;6(1):135–7

Effect of Bacillus thuringiensis israelensis (H-14) on the isopod Asellus forbesi and spring Aedes mosquitoes in Michigan. Knepper RG, et al. **J Am Mosq Control Assoc** 1989 Dec;5(4):596–8

Relative potency of Bacillus thuringiensis var. israelensis and Bacillus sphaericus 2362 for Mansonia titillans and Mansonia dyari. Lord JC, et al. **J Am Mosq Control Assoc** 1990 Jun;6(2):325–7

Efficacy of various Bacillus thuringiensis var. israelensis formulations against Psorophora columbiae larvae as assessed in small rice plots, 1984–88. Meisch MV, et al. **J Am Mosq Control Assoc** 1990 Mar;6(1):93–5

Field efficacy of Vectobac-12AS and Vectobac-24AS against black fly larvae in New Brunswick streams (Diptera: Simuliidae). Riley CM, et al. **J Am Mosq Control Assoc** 1990 Mar;6(1):43–6

A new method of testing Bacillus thuringiensis var. israelensis (H-14) formulations on Aedes taeniorhynchus in an abandoned rice impoundment in South Carolina. Wallace FL, et al. **J Am Mosq Control Assoc** 1989 Dec;5(4):593–5

Light microscope immunolocation of Bacillus thuringiensis kurstaki delta-endotoxin in the midgut and Malpighian tubules of the tobacco budworm, Heliothis virescens. Ryerse JS, et al. **J Invertebr Pathol** 1990 Jul;56(1):86–90

Secondary structure of the entomocidal toxin from Bacillus thuringiensis subsp. kurstaki HD-73. Choma CT, et al. **J Protein Chem** 1990 Feb;9(1):87–94

Molecular cloning and expression of Bacillus thuringiensis subsp. galleriae insecticidal crystal protein genes in Escherichia coli. Chen Q, et al. **Sci China [B]** 1989 Jul; 32(7):830–6

Mechanism of insect resistance to the microbial insecticide Bacillus thuringiensis. Van Rie J, et al. **Science** 1990 Jan 5;247(4938):72–4

Preliminary field evaluation of a Malaysian isolate of Bacillus thuringiensis serotype H-14 against Culex pseudovishnui. Lee HL, et al. **Southeast Asian J Trop Med Public Health** 1990 Mar; 21(1):143–4

[Use of bacteria in the control of medically important diptera] Habib ME. **Mem Inst Oswaldo Cruz** 1989;84 Suppl 3:31–4 **(Por)**

[The quantitative determination of Bacillus thuringiensis beta-exotoxin in insecticidal biopreparations] Efimtsev EI, et al. **Biol Nauki** 1990;(2):119–26 (Eng. Abstr.) **(Rus)**

[Substantiation of safe levels of biological environmental pollutants (dendrobacillin, thuringin and dietary protein) in reservoir water] Kogal RE, et al. **Gig Sanit** 1990 May; (5):11–2 **(Rus)**

[Control of Simuliidae with an emulsifiable concentrate of Bacillus thuringiensis] Araújo-Coutinho CJ, et al. **Bol Of Sanit Panam** 1990 Mar;108(3):213–9 (Eng. Abstr.) **(Spa)**

ANALYSIS

Simple method for the isolation of the antilepidopteran toxin from Bacillus thuringiensis subsp. kurstaki. Venkateswerlu G, et al. **Biotechnol Appl Biochem** 1990 Jun;12(3):245–51

Identification of beta-exotoxin production, plasmids encoding beta-exotoxin, and a new exotoxin in Bacillus thuringiensis by using high-performance liquid chromatography. Levinson BL, et al. **J Bacteriol** 1990 Jun; 172(6):3172–9

Location of the dipteran specificity region in a lepidopteran-dipteran crystal protein from Bacillus thuringiensis. Widner WR, et al. **J Bacteriol** 1990 Jun; 172(6):2826–32

Bacillus thuringiensis insecticidal delta-endotoxin: diversity of crystal proteins and its relatedness to the toxicity spectrum. Haider MZ, et al. **J Basic Microbiol** 1990; 30(4):251–8

[Proteins and proteinase-resistant polypeptides of delta-endotoxins from Bacillus thuringiensis and their insecticidal activity] Li RS, et al. **Wei Sheng Wu Hsueh Pao** 1989 Dec;29(6):397–404 (Eng. Abstr.) **(Chi)**

CLASSIFICATION

Occurrence of two pathotypes in Bacillus thuringiensis subsp. fukuokaensis (flagellar serotype 3a:3d:3e). Ohba M, et al. **J Invertebr Pathol** 1990 Mar;55(2):293–4

[Presence of flagellar antigenic subfactors in serotype 1 of Bacillus thuringiensis] Wang Y, et al. **Wei Sheng Wu Hsueh Pao** 1990 Apr;30(2):158–60 (Eng. Abstr.) **(Chi)**

DRUG EFFECTS

[The effect of mineral salts on the growth and development of Bacillus thuringiensis strain H14 266/2-1] Osadchaia AI, et al. **Mikrobiol Zh** 1989 Sep–Oct;51(5):26–8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Improved purification and biochemical properties of phosphatidylinositol-specific phospholipase C from Bacillus thuringiensis. Kupke T, et al. **Eur J Biochem** 1989 Oct 20;185(1):151–5

Antibody against Bacillus thuringiensis phosphatidylinositol-phospholipase C: some examples of its potential uses. Théveniau MA, et al. **Immunol Cell Biol** 1990 Apr;68 (Pt 2):87–93

Extra cellular hydrolytic enzyme secretion in Bacillus thuringiensis H14 & B. sphaericus & their significance in media design. Kuppusamy M, et al. **Indian J Med Res** 1990 Mar;91:149–50

A comparative study of enzyme variation in Bacillus cereus and Bacillus thuringiensis. Zahner V, et al. **J Appl Bacteriol** 1989 Sep;67(3):275–82

GENETICS

Transfer of the toxin protein genes of Bacillus sphaericus into Bacillus thuringiensis subsp. israelensis and their expression. Bourgouin C, et al. **Appl Environ Microbiol** 1990 Feb;56(2):340–4

Plasmid transfer between strains of Bacillus thuringiensis infecting Galleria mellonella and Spodoptera littoralis. Jarrett P, et al. **Appl Environ Microbiol** 1990 Jun; 56(6):1608–14

Expression of Bacillus thuringiensis delta-endotoxin genes during vegetative growth. Mettus AM, et al. **Appl Environ Microbiol** 1990 Apr;56(4):1128–34

Expression of the insecticidal protein gene from Bacillus thuringiensis subsp. aizawai in Bacillus subtilis and in the thermophile Bacillus stearothermophilus by using the alpha-amylase promoter of the thermophile. Nakamura K, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3208–13

Molecular cloning of the 130-kilodalton mosquitocidal delta-endotoxin gene of Bacillus thuringiensis subsp. israelensis in Bacillus sphaericus. Trisriscok M, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1710–6

Purification and characterization of Bacillus thuringiensis var. tenebrionis insecticidal proteins produced in E. coli. MacIntosh SC, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):665–72

Comparative analysis of the individual protoxin components in P1 crystals of Bacillus thuringiensis subsp. kurstaki isolates NRD-12 and HD-1. Masson L, et al. **Biochem J** 1990 Jul 15;269(2):507–12

Directed mutagenesis of selected regions of a Bacillus thuringiensis entomocidal protein. Ahmad W, et al. **FEMS Microbiol Lett** 1990 Mar 1;56(1-2):97–104

Transformation of Bacillus thuringiensis vegetative cells by electroporation. Masson L, et al. **FEMS Microbiol Lett** 1989 Aug;51(3):273–7

Development of mutants of the mosquitocidal bacterium Bacillus thuringiensis subspecies morrisoni (PG-14) toxic to lepidopterous or dipterous insects. Padua LE, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1-3):257–62

Heterologous expression of a mutated toxin gene from Bacillus thuringiensis subsp. tenebrionis. Rhim SL, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1-3):95–9

A novel phage genome integrated into a plasmid in Bacillus thuringiensis strain AF101. Kanda K, et al. **J Gen Microbiol** 1989 Nov;135 (Pt 11):3035–41

Construction of genetically engineered baculovirus insecticides containing the Bacillus thuringiensis subsp. kurstaki HD-73 delta endotoxin. Merryweather AT, et al. **J Gen Virol** 1990 Jul;71 (Pt 7):1535–44

New facts and trends in bacteriological control of mosquitoes. de Barjac H. **Mem Inst Oswaldo Cruz** 1989; 84 Suppl 3:101–5 (16 ref.)

Genetic manipulations in auto-induced protoplasts of Bacillus thuringiensis. Rubinstein CP, et al. **Mem Inst Oswaldo Cruz** 1989;84 Suppl 3:35–7

Specificity of Bacillus thuringiensis for lepidopteran larvae: factors involved in vivo and in the structure of a purified protoxin. Arvidson H, et al. **Mol Microbiol** 1989 Nov; 3(11):1533–43

Nucleotide sequence of a coleopteran-active toxin gene from a new isolate of Bacillus thuringiensis subsp. tolworthi. Sick A, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1305

GROWTH & DEVELOPMENT

Growth & toxicity of Bacillus thuringiensis var israelensis. Desai SY, et al. **Indian J Med Res** 1989 Sep;89:314–21

Clearance of Bacillus sphaericus and Bacillus thuringiensis ssp. israelensis from mammals. Siegel JP, et al. **J Econ Entomol** 1990 Apr;83(2):347–55

Comparison of development of Bacillus thuringiensis subsp. israelensis and Bacillus sphaericus in mosquito larvae. Pantuwatana S, et al. **J Invertebr Pathol** 1990 Mar; 55(2):189–201

The development of Bacillus thuringiensis and Bacillus

sphaericus as biocontrol agents: from research to industrial production. Fridlender B, et al.
Mem Inst Oswaldo Cruz 1989;84 Suppl 3:123–7 (15 ref.)
[Intensification of the growth and development of Bacillus thuringiensis H14 266/2–1 by optimizing the nutrient medium] Osadchaia AI, et al. **Mikrobiol Zh** 1989 Sep–Oct; 51(5):20–5 (Eng. Abstr.) **(Rus)**
[The effect of the method of inoculation on the growth and variability of Bacillus thuringiensis H14 266/2–1] Osadchaia AI, et al. **Mikrobiol Zh** 1989 Nov–Dec;51(6):45–50 **(Rus)**

IMMUNOLOGY

[Antigenic structure of endotoxins from Bacillus thuringiensis] Iagudin VIa, et al.
Prikl Biokhim Mikrobiol 1990 Jan–Feb;26(1):85–92 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Public health implications of the microbial pesticide Bacillus thuringiensis: an epidemiological study, Oregon, 1985–86. Green M, et al. **Am J Public Health** 1990 Jul;80(7):848–52

METABOLISM

Bacitracin–induced proteins in Bacillus subtilis and Bacillus thuringiensis and their relationship with resistance. García–Patrone M. **Antimicrob Agents Chemother** 1990 May;34(5):796–802
Binding and aggregation of the 25–kilodalton toxin of Bacillus thuringiensis subsp. israelensis to cell membranes and alteration by monoclonal antibodies and amino acid modifiers. Chow E, et al. **Appl Environ Microbiol** 1989 Nov;55(11):2779–88
Accumulation of the insecticidal crystal protein of Bacillus thuringiensis subsp. kurstaki in post–exponential–phase Bacillus subtilis. Crissman JW, et al.
Appl Environ Microbiol 1989 Sep;55(9):2302–7
Receptors on the brush border membrane of the insect midgut as determinants of the specificity of Bacillus thuringiensis delta–endotoxins. Van Rie J, et al.
Appl Environ Microbiol 1990 May;56(5):1378–85
Acute toxicity of temephos, fenoxycarb, diflubenzuron, and methoprene and bacillus thuringiensis var. israelensis to the mummichog (Fundulus heteroclitus). Lee BM, et al.
Bull Environ Contam Toxicol 1989 Dec;43(6):827–32
Unusual proteolysis of the protoxin and toxin from Bacillus thuringiensis. Structural implications. Choma CT, et al.
Eur J Biochem 1990 May 20;189(3):523–7
Characterization of the mammalian toxicity of the crystal polypeptides of Bacillus thuringiensis subsp. israelensis. Mayes ME, et al. **Fundam Appl Toxicol** 1989 Aug; 13(2):310–22
Influence of media composition on the production of delta–endotoxin by Bacillus thuringiensis var. thuringiensis. Mummigatti SG, et al. **J Invertebr Pathol** 1990 Mar; 55(2):147–51
Enhancement of Bacillus thuringiensis subsp. kurstaki toxin activity by cell lysates. Pang AS, et al.
J Invertebr Pathol 1990 May;55(3):444–6

PATHOGENICITY

Toxicity to Spodoptera exigua and Trichoplusia ni of individual P1 protoxins and sporulated cultures of Bacillus thuringiensis subsp. kurstaki HD–1 and NRD–12. Moar WJ, et al. **Appl Environ Microbiol** 1990 Aug;56(8):2480–3
The construction of Bacillus thuringiensis strains expressing novel entomocidal delta–endotoxin combinations.
Crickmore N, et al. **Biochem J** 1990 Aug 15;270(1):133–6
Bacillus thuringiensis potency bioassays against Heliothis armigera, Earias insulana and Spodoptera littoralis larvae based on standardized diets. Navon A, et al.
J Invertebr Pathol 1990 May;55(3):387–93

PHYSIOLOGY

A broad evaluation of B.t.i. for black fly (Diptera: Simuliidae) control in a Michigan river: efficacy, carry and nontarget effects on invertebrates and fish. Merritt RW, et al.
J Am Mosq Control Assoc 1989 Sep;5(3):397–415
Methacrylate embedding as a new technique for histopathological studies on the effect of Bacillus thuringiensis against Culex pipiens. Hussein MA, et al.
J Egypt Soc Parasitol 1990 Jun;20(1):197–201
Resistance to Bacillus thuringiensis by the Indian meal moth, Plodia interpunctella: comparison of midgut proteinases from susceptible and resistant larvae. Johnson DE, et al.
J Invertebr Pathol 1990 Mar;55(2):235–44
[Application and environmental impact of the biocontrol agent—Bacillus thuringiensis subsp. israelensis for vector control] Hsu TH.
Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1990 Jul;6(7):330–6 (Eng. Abstr.) **(Chi)**
[Applications of bacterial pathogens to the mosquito control] Lu KH, et al.
Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1990 Jul;6(7):344–9 (Eng. Abstr.) **(Chi)**

RADIATION EFFECTS

Plasmid–associated sensitivity of Bacillus thuringiensis to UV light. Benoit TG, et al. **Appl Environ Microbiol** 1990 Aug; 56(8):2282–6

ULTRASTRUCTURE

Characterization of the parasporal inclusion of Bacillus thuringiensis subsp. kyushuensis. Held GA, et al.
J Bacteriol 1990 Jan;172(1):481–3
Characterization of a dynamic S layer on Bacillus thuringiensis. Luckevich MD, et al. **J Bacteriol** 1989 Dec; 171(12):6656–67
The Bacillus thuringiensis delta–endotoxin. Evidence for a two domain structure of the minimal toxic fragment. Convents D, et al. **J Biol Chem** 1990 Jan 25;265(3):1369–75

BACITRACIN

ADVERSE EFFECTS

Intraoperative anaphylactic shock after bacitracin irrigation. Sprung J, et al. **Anesth Analg** 1990 Oct;71(4):430–3
Myospherulosis of the mastoid antrum: a case report. Gillespie CA, et al. **Auris Nasus Larynx** 1990;16(4):199–207

ANALYSIS

Foam countercurrent chromatography of bacitracin with nitrogen and additive–free water. Oka H, et al.
Anal Chem 1989 Sep 1;61(17):1998–2000
Foam counter–current chromatography of bacitracin. I. Batch separation with nitrogen and water free of additives. Oka H, et al. **J Chromatogr** 1989 Nov 17;482(1):197–205
Bacitracin–associated peptides and contaminated L–tryptophan [letter] Barnhart ER, et al. **Lancet** 1990 Sep 22;336(8717):742

BIOSYNTHESIS

[Effect of the producer type on the nature of antibiotic fermentation] Rudakova AV, et al. **Antibiot Khimioter** 1990 Apr;35(4):14–6 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Bacitracin–induced proteins in Bacillus subtilis and Bacillus thuringiensis and their relationship with resistance. García–Patrone M. **Antimicrob Agents Chemother** 1990 May;34(5):796–802
The effect of inhibitors of endogenous opioid degradation, bacitracin, bestatin, captopril, and D–phenylalanine, on digoxin–induced arrhythmias in guinea pigs. Rabkin SW, et al. **Can J Physiol Pharmacol** 1989 Aug;67(8):857–63
Selective inhibition of [3H]nitrendipine binding to brain and cardiac membranes by bacitracin. Smith JD, et al.
Can J Physiol Pharmacol 1989 Dec;67(12):1591–5
Effect of the insulin degradation inhibitors bacitracin and chloroquine on insulin binding data to H35 rat hepatoma cells. de Vries CP, et al. **Diabete Metab** 1990 Mar–Apr; 16(2):70–6
Bacitracin and a bacitracin–zinc complex damage DNA and carbohydrate in the presence of iron and copper salts. Quinlan GJ, et al. **Free Radic Res Commun** 1989;7(1):37–44
Experimental studies on membrane permeability defects of drug–resistant bacteria. Mukherjee K, et al.
Indian J Med Res 1989 Jul;89:238–42
Sporulation of a bacitracin–sensitive mutant of Bacillus licheniformis is self–inhibited by bacitracin. Podlesek Z, et al. **J Gen Microbiol** 1989 Nov;135 (Pt 11):2813–8
The effect of zinc bacitracin and roxarsone on performance of broiler chickens when fed in combination with narasin. Waldroup PW, et al. **Poult Sci** 1990 Jun;69(6):898–901

BACK

Relationship of muscle strength of back and upper extremity with level of physical activity in healthy women [letter; comment] Machover S. **Am J Phys Med Rehabil** 1989 Dec; 68(6):300–1 Comment on: Am J Phys Med Rehabil 1989 Jun;68(3):134–8.
Pictorial essay. Physical signs in low back pain. Murtagh J. **Aust Fam Physician** 1989 Dec;18(12):1561–2
Leiomyosarcoma following therapeutic irradiation for ankylosing spondylitis. Stevens GN, et al. **Br J Radiol** 1990 Sep;63(753):730–2
Effect of backrest on central venous pressure in pediatric cardiac surgery. Callow LB, et al. **Nurs Res** 1989 Nov–Dec; 38(6):336–8
[Paresthetic notalgia. Report of 2 cases] Alberico G, et al. **G Ital Dermatol Venereol** 1989 Mar;124(3):73–4 (Eng. Abstr.) **(Ita)**
[Effect of press stimulation applied to back skin on gastric emptying and serum gastrin response to solid food] Asada T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Dec; 86(12):2705–12 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

The anatomy of the subscapular artery and its effects on flap design in the rabbit. Angel MF, et al. **Ann Plast Surg** 1990 Feb;24(2):152–5

INJURIES

Back injuries to fast bowlers in cricket: a prospective study. Foster D, et al. **Br J Sports Med** 1989 Sep;23(3):150–4
Expenditures for nonspecific back injuries in the workplace. Federspiel CF, et al. **J Occup Med** 1989 Nov;31(11):919–24
A muscular endurance training program for symmetrical and asymmetrical manual lifting tasks. Genaidy AM, et al. **J Occup Med** 1990 Mar;32(3):226–33
Aggressive early medical management by a specialist in physical medicine and rehabilitation: effect on lost time due to injuries in hospital employees. Haig AJ, et al.
J Occup Med 1990 Mar;32(3):241–4
Severity of disability due to occupational low back injury after lumbar laminectomy for degenerative disc disease. Ryan J, et al. **J Occup Med** 1990 May;32(5):468–72
The role of psychological disturbance in extending disability time among compensable back injured industrial workers. Leavitt F. **J Psychosom Res** 1990;34(4):447–53
Loss prevention case of the month. A missed opportunity? Avery JK. **J Tenn Med Assoc** 1990 Apr;83(4):194–5
Abdominal CT in the evaluation of patients with stab wounds of the back [letter; comment] Henneman PL. **J Trauma** 1990 Jun;30(6):754–5 Comment on: J Trauma 1989 Sep;29(9):1226–8; discussion 1228–30.
Back injuries require integration of aggressive and passive treatment. van Oort G, et al. **Occup Health Saf** 1990 Jan; 59(1):22–4
Pain clinic #13. Comprehensive pain center treatment of low back workers' compensation injuries. An industrial medicine clinical outcome follow–up comparison. Tollison CD, et al. **Orthop Rev** 1989 Oct;18(10):1115–7, 1121–2, 1125–6
Psychometric study of forms A and B of the Multidimensional Health Locus of Control scale. Cooper D, et al. **Psychol Rep** 1990 Jun;66(3 Pt 1):859–64
Results of a multicenter trial using an intensive active exercise program for the treatment of acute soft tissue and back injuries. Mitchell RI, et al. **Spine** 1990 Jun;15(6):514–21
Risk for occupational low–back injury after lumbar laminectomy for degenerative disc disease. Ryan J, et al. **Spine** 1990 Jun;15(6):500–3
Management of penetrating back trauma. Berne TV.
Surg Clin North Am 1990 Jun;70(3):671–6 (17 ref.)
[Severe frostbite of rare location] Orlov AN, et al.
Vestn Khir 1990 Feb;144(2):76–7 **(Rus)**

PHYSIOLOGY

Isometric muscle strength and quantitative electromyography of back muscles in wrestlers and tennis players. Sward L, et al. **Am J Sports Med** 1990 Jul–Aug;18(4):382–6
Reproducibility of trunk isoinertial performances in the sagittal, coronal, and transverse planes. Parnianpour M, et al. **Bull Hosp Jt Dis Orthop Inst** 1989 Fall;49(2):148–54
Back controversy [letter; comment] McGill SM, et al.
Phys Ther 1990 Jun;70(6):394–6 Comment on: Phys Ther 1989 Jan;69(1):38–45.
Twisting of the human back in forward flexion. Hindle RJ, et al. **Proc Inst Mech Eng [H]** 1989;203(H2):83–9

PHYSIOPATHOLOGY

Back strain and permanent function loss. **J Occup Med** 1990 May;32(5):477–8

SURGERY

Acne of the heel: acne vulgaris complicating a free vascularized latissimus dorsi musculocutaneous flap. Dubrow TJ, et al. **Ann Plast Surg** 1989 Oct;23(4):349–51
Scapulectomy with latissimus dorsi musculocutaneous flap in the treatment of sarcoma of the upper back. Westreich M, et al. **Ann Plast Surg** 1989 Oct;23(4):337–40
Retroperitoneal transposition of rectus abdominis myocutaneous flaps to the perineum and back. Mixter RC, et al. **Plast Reconstr Surg** 1990 Mar;85(3):437–41

BACKACHE

Current trends in low back pain research. Proceedings of the VI Medical Symposium of the Yrjö Jahansson Foundation. August 17–19, 1988, Porvoo, Finland.
Ann Med 1989 Oct;21(5):321–401
Medical research on a complaint: orientation and priorities. Miettinen OS, et al. **Ann Med** 1989 Oct;21(5):399–401
Disabling backache in France, Switzerland, and The Netherlands: contrasting sociopolitical constraints on clinical judgment. Hadler NM. **J Occup Med** 1989 Oct; 31(10):823–31
Randomized controlled trial of an educational booklet for patients presenting with back pain in general practice. Roland M, et al. **J R Coll Gen Pract** 1989 Jun;39(323):244–6
Low back syndromes. The challenge of accurate diagnosis and management. Bassam BA. **Postgrad Med** 1990 Mar; 87(4):209–15, 218
Low back pain as the only presenting symptom in Streptococcus sanguis endocarditis [letter] Kerr KG.
Rev Infect Dis 1989 Sep–Oct;11(5):836–7
Chronic low–back pain: intercorrelation of repeated measures for pain and disability. Grönblad M, et al.
Scand J Rehabil Med 1990;22(2):73–7
[Symposium: Mechanical low backache up to date. Abstracts. 30 September 1989, Ghent] **Acta Belg Med Phys** 1989 Oct–Dec;12(4):109–35 **(Dut)**
[Back pain in children, rounded back, Scheuermann's disease] Carlioz H. **Ann Pediatr (Paris)** 1989 Nov;36(9):642–3 **(Fre)**

BLOOD

Age related alteration in levels of keratan sulfate in sera of orthopaedic patients. Motoyoshi H, et al.

Nippon Seikeigeka Gakkai Zasshi 1989 Dec;63(12):1464–8

CHEMICALLY INDUCED

Treatment of neocaine–MPF–induced back pain with calcium chloride [letter; comment] Dirkes WE Jr. Anesth Analg 1990 Apr;70(4):461–2 Comment on: Anesth Analg 1989 Jul;69(1):113–5.

CLASSIFICATION

The classification of low back pain. Mooney V. Ann Med 1989 Oct;21(5):321–5 (21 ref.)

COMPLICATIONS

Agoraphobia, back pain and rheumatic diseases [letter] [see comments] Leak A, et al. Br J Rheumatol 1989 Dec; 28(6):554–5 Comment in: Br J Rheumatol 1990 Jun;29(3):239.

Back pain, phobia and female [letter; comment] McCarthy C, et al. Br J Rheumatol 1990 Jun;29(3):239 Comment on: Br J Rheumatol 1989 Dec;28(6):554–5.

Behavioral management of sleep disturbances secondary to chronic pain. Morin CM, et al. J Behav Ther Exp Psychiatry 1989 Dec;20(4):295–302

Bertolotti's syndrome revisited. Transitional vertebrae of the lumbar spine. Elster AD. Spine 1989 Dec;14(12):1373–7

DIAGNOSIS

The incidence of herniated disc and varicella zoster virus infection in lumboradicular syndrome. Jensen PK, et al. Acta Neurol Scand 1989 Aug;80(2):142–4

Disc degeneration in young gymnasts. A magnetic resonance imaging study. Tertti M, et al. Am J Sports Med 1990 Mar–Apr;18(2):206–8

Pictorial essay. Physical signs in low back pain. Murtagh J. Aust Fam Physician 1989 Dec;18(12):1561–2

Back pain: the primrose path—a case report. Dugan LO, et al. Indiana Med 1990 Feb;83(2):114–6

Interexaminer reliability of the electromagnetic radiation receiver for determining lumbar spinal joint dysfunction in subjects with low back pain. Gemmell HA, et al. J Manipulative Physiol Ther 1990 Mar–Apr;13(3):134–7

Distribution of pain provoked from lumbar facet joints and related structures during diagnostic spinal infiltration. Marks R. Pain 1989 Oct;39(1):37–40

Reliability of clinical measurements of forward bending using the modified fingertip–to–floor method. Gauvin MG, et al. Phys Ther 1990 Jul;70(7):443–7

"Progressive isoinertial lifting evaluation" [letter] Khalil T, et al. Spine 1990 Apr;15(4):342–3

Low–back pain. Factors of value in predicting outcome. Lacroix JM, et al. Spine 1990 Jun;15(6):495–9

A new approach to the low–back physical examination. Behavioral assessment of mechanical signs. Spratt KF, et al. Spine 1990 Feb;15(2):96–102

[Low backache and sciatic pain in aged persons. Apropos of 59 hospitalized cases] Gabellon–Bochud I, et al. Rev Med Suisse Romande 1990 Apr;110(4):355–60 (Fre)

[Acute lumbago. Guidelines for clinical practice] Benini A. Schweiz Rundsch Med Prax 1990 Mar 6;79(10):280–3 (7 ref.) (Eng. Abstr.) (Ger)

[Persistent leg pain (clinical conference)] Satz N, et al. Schweiz Rundsch Med Prax 1990 Jul 3;79(27–28):866–8 (Eng. Abstr.) (Ger)

[Diagnosis of lumbar spine pain: are simple anatomic concepts sufficient for common practice?] Schlapbach P. Schweiz Rundsch Med Prax 1990 May 15;79(20):627–30 (52 ref.) (Eng. Abstr.) (Ger)

[Radiculopathy and the organization of health services: applicability verification of a technic for analyzing time factors in diagnostic procedures] Marinelli G, et al. Ann Ig 1989 May–Aug;1(3–4):577–90 (Eng. Abstr.) (Ita)

[Symptomatic pelvic girdle relaxation. Clinical aspects] Moen MH, et al. Tidsskr Nor Laegeforen 1990 Jun 30; 110(17):2211–2 (Eng. Abstr.) (Nor)

[Use of psychological diagnostic methods in cases of chronic pain] Chodak M. Pol Tyg Lek 1989 May 15;44(20):460–4 (25 ref.) (Eng. Abstr.) (Pol)

[Differential diagnosis of vertebral syndromes] Popelianskiĭ AIa. Sov Med 1989;(9):87–91 (Rus)

DRUG THERAPY

Cyclobenzaprine and naproxen versus naproxen alone in the treatment of acute low back pain and muscle spasm. Borenstein DG, et al. Clin Ther 1990 Mar–Apr;12(2):125–31

The use of epidural steroids in the treatment of lumbar radicular pain [letter] Kirkpatrick AF. J Bone Joint Surg [Am] 1990 Jul;72(6):948–9

Epidural steroid injection in non–specific low backache. Sagar JV, et al. J Indian Med Assoc 1989 Sep;87(9):208–9

Photoallergic reaction induced by piroxicam. Sunohara A, et al. Photodermatol 1989 Aug;6(4):188–90

[Treatment of patients with lumbar disc prolapse with ibuprofen. A controlled clinical trial] Abild KL, et al. Ugeskr Laeger 1990 May 21;152(21):1526–8 (Eng. Abstr.) (Dan)

[Clinical double–blind study with idrocilamide ointment in the treatment of acute lumbago] Stehman M, et al. Acta Belg Med Phys 1990 Jan–Mar;13(1):29–32 (Fre, Dut)

[Evaluation of thiocolchicoside as monotherapy in low back pain. Results of a randomized study versus placebo] Marcel C, et al. Presse Med 1990 Jun 16;19(24):1133–6 (Eng. Abstr.) (Fre)

[Intramuscular etofenamate in the treatment of acute lumbago. Effectiveness and tolerance in comparison with intramuscular diclofenac–Na] Stratz T. Fortschr Med 1990 Apr 30;108(13):264–6 (Eng. Abstr.) (Ger)

[Results of a double–blind study of diclofenac + vitamin B1, B6, B12 versus diclofenac in patients with acute pain of the lumbar vertebrae. A multicenter study] Brüggemann G, et al. Klin Wochenschr 1990 Jan 19;68(2):116–20 (Eng. Abstr.) (Ger)

[Reduced diclofenac administration by B vitamins: results of a randomized double–blind study with reduced daily doses of diclofenac (75 mg diclofenac versus 75 mg diclofenac plus B vitamins) in acute lumbar vertebral syndromes] Kuhlwein A, et al. Klin Wochenschr 1990 Jan 19;68(2):107–15 (Eng. Abstr.) (Ger)

[Peridural analgesia in the combined treatment of neurologic syndromes in lumbar osteochondrosis] Iudel'son IaB, et al. Zh Nevropatol Psikhiatr 1990;90(4):28–32 (Eng. Abstr.) (Rus)

[Treatment of vertebrogenic lumbosacral radiculitis and lumbar ischialgia by transcutaneous–cavitary electrophoresis of drugs] Neĭmark EZ, et al. Zh Nevropatol Psikhiatr 1989;89(12):30–2 (Eng. Abstr.) (Rus)

ECONOMICS

The cost of compensable low back pain. Webster BS, et al. J Occup Med 1990 Jan;32(1):13–5

[What do the waiting lists cost? A study of patients with backache] Skouen JS, et al. Tidsskr Nor Laegeforen 1989 Nov 10;109(31):3235–8 (Eng. Abstr.) (Nor)

EPIDEMIOLOGY

The back pain epidemic [editorial] Acta Orthop Scand 1989 Dec;60(6):633–4

Descriptive epidemiology and public health aspects of low back pain. Heliövaara M, et al. Ann Med 1989 Oct; 21(5):327–33

Prevalence of back pain among fulltime United States workers. Leigh JP, et al. Br J Ind Med 1989 Sep; 46(9):651–7

Low back pain. Borenstein D. Curr Opin Rheumatol 1990 Apr;2(2):233–41 (25 ref.)

The problems of low back pain in Africa. Mulimba JO. East Afr Med J 1990 Apr;67(4):250–3

Long–term sick leave and disability pensioning due to back disorders of tractor drivers exposed to whole–body vibration. Boshuizen HC, et al. Int Arch Occup Environ Health 1990;62(2):117–22

Strenuous working conditions and musculo–skeletal disorders among female hospital workers. Estryn–Behar M, et al. Int Arch Occup Environ Health 1990;62(1):47–57

Epidemiology of primary health problems in Beirut. Armenian HK, et al. J Epidemiol Community Health 1989 Dec;43(4):315–8

Incidence of sacroiliac joint dysfunction and low back pain in fit college students. Gemmell HA, et al. J Manipulative Physiol Ther 1990 Feb;13(2):63–7

Prevalence of back pain in a sample of Czechoslovak industrial population. Preliminary results of an ongoing study. Nohejl J, et al. Scand J Rheumatol 1989;18(6):437–40

Research perspectives in low–back pain. Report of a 1988 workshop. Frymoyer JW, et al. Spine 1989 Dec; 14(12):1384–90

The relationship of low–back pain to pregnancy and gynecologic factors. Svensson HO, et al. Spine 1990 May; 15(5):371–5

Back pain and radiologic changes in the thoraco–lumbar spine of athletes. Swärd L, et al. Spine 1990 Feb;15(2):124–9

[Low back pain for all in the year 2000?] Bendix T, et al. Ugeskr Laeger 1990 Jul 16;152(29):2119–20 (Dan)

[Back pain at the French National Electricity and Gas Company] Chevalier A, et al. Rev Epidemiol Sante Publique 1990;38(1):35–40 (Eng. Abstr.) (Fre)

[Critical review of the epidemiology of backache] Coste J, et al. Rev Epidemiol Sante Publique 1989;37(4):371–83 (85 ref.) (Eng. Abstr.) (Fre)

[Epidemiology of back pain. Current knowledge and perspectives] Coste J, et al. Rev Rhum Mal Osteoartic 1989 Dec;56(12):861–7 (65 ref.) (Fre)

[The incidence of low back pain in hotel and restaurant workers] Sajatović J, et al. Reumatizam 1988;35(1–6):49–52 (Eng. Abstr.) (Scr)

ETIOLOGY

Paravertebral polymyositis. Rozhold O, et al. Acta Univ Palacki Olomuc Fac Med 1989;121:313–21

Back pain pitfalls. Spoelhof GD, et al. Am Fam Physician 1989 Oct;40(4):133–8

Low back pain as the presenting symptom of metastatic angiosarcoma. Braker A, et al. Am J Phys Med Rehabil 1990 Aug;69(4):180–3

Night backache in pregnancy. Hypothetical pathophysiological mechanisms [see comments] Fast A, et al. Am J Phys Med Rehabil 1989 Oct;68(5):227–9 Comment in: Am J Phys Med Rehabil 1990 Apr;69(2):108.

Back pain after epidural Nesacaine–MPF [letter; comment] Anesth Analg 1990 Feb;70(2):224–6 Comment on: Anesth Analg 1989 Jul;69(1):113–5.

Diagnostic imaging procedures for the lumbar spine [published erratum appears in Ann Intern Med 1989 Dec 15;111(12):1050] [see comments] Deyo RA, et al. Ann Intern Med 1989 Dec 1;111(11):865–7 (27 ref.) Comment in: Ann Intern Med 1990 Feb 15;112(4):310–1.

Risk factors for low back pain and sciatica. Heliövaara M. Ann Med 1989 Aug;21(4):257–64 (102 ref.)

Where is the lumbar pain coming from? Mooney V. Ann Med 1989 Oct;21(5):373–9

Risk indicators in low back pain. Pope MH. Ann Med 1989 Oct;21(5):387–92 (98 ref.)

A chronic contained rupture of an abdominal aortic aneurysm complicated with severe back pain. Nakagawa Y, et al. Ann Vasc Surg 1990 Mar;4(2):189–92

Low–back pain and intravenous drug abusers [letter] Chandrasekar PH. Arch Intern Med 1990 May;150(5):1125, 1128

Peripheral arthrocentesis in the work–up of acute low back pain. Leventhal LJ, et al. Arch Phys Med Rehabil 1990 Mar;71(3):253–4

Concurrent musculoskeletal pain in a patient with symptomatic lower extremity arterial insufficiency. Sliwa JA, et al. Arch Phys Med Rehabil 1989 Nov;70(12):848–50

Pseudo–radiculopathy in subacute trochanteric bursitis of the subgluteus maximus bursa. Swezey RL. Arch Phys Med Rehabil 1976 Aug;57(8):387–90

Spondylolisthesis. A common cause of back pain in Greenland. Simper LB. Arctic Med Res 1988;47 Suppl 1:449–51

Epidural anaesthesia and long term backache after childbirth [letter] BMJ 1990 Aug 18–25;301(6748):385–6

Epidural anaesthesia and long term backache after childbirth. MacArthur C, et al. BMJ 1990 Jul 7;301(6742):9–12

Back pain in women with chronic pelvic inflammatory disease and inflammatory sacroiliac disease [letter] Celinska E, et al. Br J Rheumatol 1989 Oct;28(5):456–7

Back pain following general anaesthesia and surgery: evaluation of risk factors and the effect of an inflatable lumbar support. Hickmott KC, et al. Br J Surg 1990 May; 77(5):571–5

Lumbar pain in stage 1 testicular germ cell tumours: a symptom preceding radiological abnormality. Smith DB, et al. Br J Urol 1989 Sep;64(3):302–4

Waterbeds and low back pain? [letter; comment] Lantos G. Can Med Assoc J 1989 Dec 15;141(12):1222, 1224 Comment on: Can Med Assoc J 1989 Jun 1;140(11):1265, 1268.

Radiology pathology conference. A 9–year–old girl with a 4–week history of low back pain. Calamari GA, et al. Clin Imaging 1990 May;14(2):159–65

Lumbar spine stabilization: indications. Dunsker SB. Clin Neurosurg 1990;36:147–58 (21 ref.)

Mediastinal mass in a man with back pain. Don S, et al. Indiana Med 1989 Oct;82(10):768–9

Self–reported back pain in tractor drivers exposed to whole–body vibration. Boshuizen HC, et al. Int Arch Occup Environ Health 1990;62(2):109–15

Stress reaction of the pars interarticularis leading to spondylolysis. A cause of adolescent low back pain. Weir MR, et al. J Adolesc Health Care 1989 Nov;10(6):573–7

Experimental verification of facet load transmission by direct measurement of facet lamina contact pressure. el–Bohy AA, et al. J Biomech 1989;22(8–9):931–41

Streptococcus viridans osteomyelitis with endocarditis presenting as acute onset lower back pain. Buchman AL. J Emerg Med 1990 May–Jun;8(3):291–4

Innervation of annulus fibrosis in low back pain [letter] [published erratum appears in Lancet 1990 Aug 4;336(8710):324] Coppes MH, et al. Lancet 1990 Jul 21; 336(8708):189–90

Back pain with cardiovascular collapse in a pediatric emergency department patient. Griggs JR, et al. Pediatr Emerg Care 1990 Mar;6(1):17–20

Association between direction of lateral lumbar shift, movement tests, and side of symptoms in patients with low back pain syndrome. Tenhula JA, et al. Phys Ther 1990 Aug;70(8):480–6

Back pain [see comments] Merriam B. Practitioner 1989 May 8;233(1468):649–50 Comment in: Practitioner 1989 Sep 8;233(1474):1129.

Precision diagnosis in back pain [letter; comment] Mulholland R. Practitioner 1989 Sep 8;233(1474):1129 Comment on: Practitioner 1989 May 8;233(1468):649–50.

Risk indicators for low back trouble. Biering–Sørensen F, et al. Scand J Rehabil Med 1989;21(3):151–7

Predictors of sciatic pain among concrete reinforcement workers and house painters—a five–year follow–up. Riihimäki H, et al. Scand J Work Environ Health 1989 Dec; 15(6):415–23

Directionality in the association between lumbar degenerative changes and back pain [letter] Rossignol M. Scand J Work Environ Health 1990 Aug;16(4):293

Morbidity from subarachnoid spinal anaesthesia—a prospective study on the post–operative morbidity from subarachnoid spinal anaesthesia. Tay HB, et al. Singapore Med J 1989 Aug;30(4):350–5

Case report 564: Giant intraosseous schwannoma. Abdelwahab IF, et al. Skeletal Radiol 1989;18(6):466–9

Bone scan: a useful test for evaluating patients with low back pain. Collier BD, et al. Skeletal Radiol 1990;19(4):267–70

Significance of lumbosacral list and low–back pain. A

controlled radiographic study. Arangio GA, et al. **Spine** 1990 Mar;15(3):208–10

Coronal and sagittal plane spinal deformities correlating with back pain and pulmonary function in adult idiopathic scoliosis. Jackson RP, et al. **Spine** 1989 Dec;14(12):1391–7

Adhesions of the ventral lumbar dura. An adjunct source of discogenic pain? Parke WW, et al. **Spine** 1990 Apr; 15(4):300–3

Cervical pain and discomfort among dentists. Epidemiological, clinical and therapeutic aspects. Part 1. A survey of pain and discomfort. Rundcrantz BL, et al. **Swed Dent J** 1990;14(2):71–80

Malignant spinal cord compression: when a backache signals danger. Frierson-Stroud L. **Tex Med** 1990 Jan;86(1):48–52

[Anomalies of the lumbosacral nerve roots with low backache and sciatica] Wu RZ. **Chung Hua Wai Ko Tsa Chih** 1989 Dec;27(12):715–7, 779 (Eng. Abstr.) **(Chi)**

[Disease of the locomotor system in a shoe factory] Kutěj P. **Cesk Zdrav** 1990 Mar;38(3):141–4 (Eng. Abstr.) **(Cze)**

[Leg length inequality and lumbago] Sterckx A. **Acta Belg Med Phys** 1989 Jul–Sep;12(3):95–102 (59 ref.) **(Fre)**

[A misdiagnosed nosological entity: the pyramidal muscle syndrome] Gauthier C, et al. **Rev Med Suisse Romande** 1990 Apr;110(4):351–4 **(Fre)**

[Microtraumatic pathology of the lumbar isthmus: isthmic lysis or spondylolysis] Drevet JG, et al. **Rev Rhum Mal Osteoartic** 1990 May;57(5):385–92 (Eng. Abstr.) **(Fre)**

[A rare cause of febrile backache, retroperitoneal fibrosis. Apropos of a probably iatrogenic case] Ruel M, et al. **Rev Rhum Mal Osteoartic** 1990 May;57(5):415–7 **(Fre)**

[Chronic lumbar vertebragenic pain, pathomechanism and diagnosis] Verbiest H. **Aktuel Probl Chir Orthop** 1989; 35:11–37 (88 ref.) **(Ger)**

[Lumbalgia, lumboischialgia. 1: Symptoms and examination findings] von Albert HH. **Fortschr Med** 1990 Jun 10; 108(17):341–2 **(Ger)**

[Lumbalgia, lumboischialgia. 2: Instrumental diagnosis, differential diagnosis] von Albert HH. **Fortschr Med** 1990 Jun 20;108(18):363–4 **(Ger)**

[What is your diagnosis? Vertebrogenic lumbar syndrome caused by peri- and intradural metastases of a small-cell bronchial carcinoma] Brückle W. **Schweiz Rundsch Med Prax** 1990 May 2;79(18):545–6 **(Ger)**

[What is your diagnosis? Lumboradicular syndrome] Müller B. **Schweiz Rundsch Med Prax** 1990 Apr 3;79(14):411–2 **(Ger)**

[Synovial cyst of the intervertebral joint as cause of a lumboradicular syndrome] Senn M, et al. **Schweiz Rundsch Med Prax** 1990 Mar 6;79(10):284–6 (Eng. Abstr.) **(Ger)**

[The differential diagnosis of lumbar disk prolapse] Sturzenegger M. **Schweiz Rundsch Med Prax** 1989 Sep 19; 78(38):1023–36 (200 ref.) (Eng. Abstr.) **(Ger)**

[National Research Program. Part B: Chronicity of backache] Keel P, et al. **Soz Praventivmed** 1990;35(2):46–58 (82 ref.) (Eng. Abstr.) **(Ger)**

[Lumbar backache from the neurologic viewpoint] Jahns M, et al. **Z Arztl Fortbild (Jena)** 1990;84(12):605–7 (10 ref.) **(Ger)**

[Heterometry of the lower limbs: clinico-statistical findings on the incidence and correlation with lumbago symptoms] Bartolozzi P, et al. **Arch Putti Chir Organi Mov** 1989; 37(2):317–24 (Eng. Abstr.) **(Ita)**

[A case of bacterial endocarditis manifested by severe back pain as initial symptom] Tsuchiya H, et al. **Nippon Naika Gakkai Zasshi** 1989 Dec;78(12):1781–2 **(Jpn)**

[Pelvic girdle relaxation] Evensen AR. **Tidsskr Nor Laegeforen** 1990 Jun 30;110(17):2179–80 (6 ref.) **(Nor)**

[Magnetic tomography and backache] Hald JK, et al. **Tidsskr Nor Laegeforen** 1990 Apr 30;110(11):1359–60 (Eng. Abstr.) **(Nor)**

[Pain in the lumbosacral region in pelvic congestion syndrome in women working under conditions of limited motor activity] Menkiszak J. **Ann Acad Med Stetin** 1989; 35:167–78 (Eng. Abstr.) **(Pol)**

[Relation of the incidence of pain of the lumbar spine and the type of occupation] Stryła W, et al. **Med Pr** 1989; 40(5):288–93 (Eng. Abstr.) **(Pol)**

[Diagnosis and conservative treatment of compression syndromes in lumbar osteochondrosis] Sitel' AB. **Zh Nevropatol Psikhiatr** 1990;90(4):35–8 (Eng. Abstr.) **(Rus)**

[Spinal disorders and sedentary occupations] Orlić I. **Arh Hig Rada Toksikol** 1989 Dec;40(4):393–8 (Eng. Abstr.) **(Scr)**

[Prevalence of the lumbar pain syndrome in a selected sample from the Institute for Rehabilitation in Ilidža] Radulović R, et al. **Med Arh** 1989;43(1):67–71 **(Scr)**

[Acute lumbar syndrome in tourists] Brozičević V, et al. **Reumatizam** 1988;35(1–6):84–7 (Eng. Abstr.) **(Scr)**

[Identification of degenerative processes as a cause of lumbar pain syndrome] Dürrigl P, et al. **Reumatizam** 1988; 35(1–6):44–8 (Eng. Abstr.) **(Scr)**

[The effect of the cervical and lumbar syndrome on work capacity] Kapor M. **Reumatizam** 1988;35(1–6):57–65 (Eng. Abstr.) **(Scr)**

[Low back pain in pregnancy] Kršnjavi H, et al. **Reumatizam** 1988;35(1–6):53–6 (Eng. Abstr.) **(Scr)**

[Is it possible to objectively study back pain in orthopedic practice?] Vojtaššák J, et al. **Acta Chir Orthop Traumatol Cech** 1990 Feb;57(1):65–9 (Eng. Abstr.) **(Slo)**

[Lumbosciatic syndrome caused by aneurysm of the abdominal aorta (letter)] Castañeda-Sanz S, et al. **Med Clin (Barc)** 1989 Dec 16;93(20):800 **(Spa)**

[Notalgia paresthetica (letter)] Pinazo I, et al. **Neurologia** 1989 Oct;4(8):301 **(Spa)**

[The old enigma of chiropractors] Lane L. **Lakartidningen** 1989 Nov 29;86(48):4209 **(Swe)**

HISTORY

An historical perspective on low back pain and disability. Allan DB, et al. **Acta Orthop Scand Suppl** 1989;234:1–23 (166 ref.)

METABOLISM

Immunoreactive substance P is decreased in saliva of patients with chronic back pain syndromes. Parris WC, et al. **Anesth Analg** 1990 Jan;70(1):63–7

PATHOLOGY

Infrared thermographic imaging, magnetic resonance imaging, CT scan and myelography in low back pain. Thomas D, et al. **Br J Rheumatol** 1990 Aug;29(4):268–73

PHYSIOPATHOLOGY

Analysis of nocturnal back pain in pregnancy [letter; comment] LaBan MM. **Am J Phys Med Rehabil** 1990 Apr; 69(2):108 Comment on: Am J Phys Med Rehabil 1989 Oct;68(5):227–9.

Mechanical disorders of the lumbar spine. Porter RW. **Ann Med** 1989 Oct;21(5):361–6 (45 ref.)

Sacroiliac dysfunction [letter; comment] Strauss S. **Aust Fam Physician** 1989 Oct;18(10):1304–5 Comment on: Aust Fam Physician 1989 Jun;18(6):623–4, 626–7, 629.

Range of lumbar flexion in chronic low back pain. Akinpelu AO, et al. **Cent Afr J Med** 1989 Jul;35(7):430–2

Biomechanical considerations for clinical application in athletes with low back pain. Deusinger RH. **Clin Sports Med** 1989 Oct;8(4):703–15 (63 ref.)

Segmental hypermobility in lumbar spine and entrapment of dorsal rami. Sihvonen T, et al. **Electromyogr Clin Neurophysiol** 1990 Apr–May; 30(3):175–80

Temporal stability of paraspinal electromyographic recordings in low back pain and non-pain subjects. Arena JG, et al. **Int J Psychophysiol** 1990 Jul;9(1):31–7

The recognition of mechanically induced pelvic pain and organic dysfunction in the low back pain patient. Browning JE. **J Manipulative Physiol Ther** 1989 Oct;12(5):369–73 (20 ref.)

Sensitivity study of H-reflex alterations in idiopathic low back pain patients vs. a healthy population [letter; comment] Nelson WA. **J Manipulative Physiol Ther** 1989 Dec;12(6):497–8 Comment on: J Manipulative Physiol Ther 1989 Apr;12(2):71–8.

Fatigue, recovery, and low back pain in varsity rowers. Roy SH, et al. **Med Sci Sports Exerc** 1990 Aug;22(4):463–9

True myotonic discharge in caudi equina syndrome [letter] Haig AJ. **Muscle Nerve** 1990 Jun;13(6):559

Chronic low back pain and the reaction to repeated acute pain stimulation. Peters ML, et al. **Pain** 1989 Oct; 39(1):69–76

Correlations between muscle regions and average total muscle activity: support for the back. Cahn TS, et al. **Percept Mot Skills** 1990 Jun;70(3 Pt 1):851–7

Anterior dysfunction of the sacroiliac joint as a major factor in the etiology of idiopathic low back pain syndrome. DonTigny RL. **Phys Ther** 1990 Apr;70(4):250–65; discussion 262–5 (122 ref.)

Patterns of hip rotation range of motion: a comparison between healthy subjects and patients with low back pain. Ellison JB, et al. **Phys Ther** 1990 Sep;70(9):537–41

Centralization phenomenon. Its usefulness in evaluating and treating referred pain. Donelson R, et al. **Spine** 1990 Mar; 15(3):211–3

Low-back pain in pregnancy. Abdominal muscles, sit-up performance, and back pain. Fast A, et al. **Spine** 1990 Jan; 15(1):28–30

Anthropometric characteristics, passive hip flexion, and spinal mobility in relation to back pain in athletes. Swärd L, et al. **Spine** 1990 May;15(5):376–82

PREVENTION & CONTROL

The effect of body mechanics instruction on work performance among young workers. McCauley M. **Am J Occup Ther** 1990 May;44(5):402–7

Evaluation of a maternity cushion (Ozzlo pillow) for backache and insomnia in late pregnancy. Thomas IL, et al. **Aust N Z J Obstet Gynaecol** 1989 May;29(2):133–8

Back to basics with ProFlex. de Ruiter M. **Ergonomics** 1990 Mar;33(3):383–5

Trunk strength during asymmetric trunk motion. Marras WS, et al. **Hum Factors** 1989 Dec;31(6):667–77

A muscular endurance training program for symmetrical and asymmetrical manual lifting tasks. Genaidy AM, et al. **J Occup Med** 1990 Mar;32(3):226–33

Work-associated back problems: collaborative solutions. Straker LM. **J Soc Occup Med** 1990 Summer;40(2):75–9

Computerized dynamometry may help manage worker low-back dysfunction. Maravino TA. **Occup Health Saf** 1989 Oct;58(11):64, 66, 68 passim

Kinetic lifting and handling—a preventive approach. Smith C. **Radiogr Today** 1989 Sep;55(628):11–5

[Development of backache toward chronicity (subject of Part B of Program No. 26 of the Swiss National Research Foundation)] Keel P. **Rev Med Suisse Romande** 1990 May; 110(5):479–82 **(Fre)**

PSYCHOLOGY

Sulpirid in patients hospitalized in an internal ward. Plevová J, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):269–70

Determinants of pain behaviour in patients with chronic low back pain. Estlander AM. **Ann Med** 1989 Oct;21(5):381–5

Negative and positive cognition in depressed and nondepressed chronic-pain patients. Ingram RE, et al. **Health Psychol** 1990;9(3):300–14

Psychosomatic avoidance of conflict in back pain. Coen SJ, et al. **J Am Acad Psychoanal** 1989 Fall;17(3):359–76

Alexithymia among empirically derived subgroups of chronic back pain patients. Kinder BN, et al. **J Pers Assess** 1990 Spring;54(1–2):351–62

The role of psychological disturbance in extending disability time among compensable back injured industrial workers. Leavitt F. **J Psychosom Res** 1990;34(4):447–53

Chronic low back pain patient and spouse. Saarijärvi S, et al. **J Psychosom Res** 1990;34(1):117–22

Validation of an observation method of pain assessment in non-chronic back pain. Jensen IB, et al. **Pain** 1989 Dec; 39(3):267–74

Behavioral assessment of low back pain: identification of pain behavior subgroups. Keefe FJ, et al. **Pain** 1990 Feb; 40(2):153–60

Analyzing chronic low back pain: the relative contribution of pain coping strategies. Keefe FJ, et al. **Pain** 1990 Mar; 40(3):293–301

Clinical assessment and interpretation of abnormal illness behaviour in low back pain. Waddell G, et al. **Pain** 1989 Oct;39(1):41–53

Psychometric study of forms A and B of the Multidimensional Health Locus of Control scale. Cooper D, et al. **Psychol Rep** 1990 Jun;66(3 Pt 1):859–64

Correlation of chronic low-back pain behavior and muscle function examination of the flexion-relaxation response. Ahern DK, et al. **Spine** 1990 Feb;15(2):92–5

Life events and psychological disturbance in patients with low-back pain. Craufurd DI, et al. **Spine** 1990 Jun; 15(6):490–4

[Psychological stress before, during and after hospitalization for low back disease. Patients' experience illustrated by qualitative interviews] Jensen E, et al. **Ugeskr Laeger** 1990 Apr 16;152(16):1151–6 (Eng. Abstr.) **(Dan)**

[The social and occupational situation of patients 2 1/2 years after hospitalization for low back pain] Nielsen A, et al. **Ugeskr Laeger** 1990 Apr 16;152(16):1156–9 (Eng. Abstr.) **(Dan)**

[Lumbar facet joint syndrome. Significance of non-organic signs. A randomized placebo-controlled clinical study] Lilius G, et al. **Rev Chir Orthop** 1989;75(7):493–500 (26 ref.) (Eng. Abstr.) **(Fre)**

RADIOGRAPHY

Functional radiography of the lumbar spine. Friberg O. **Ann Med** 1989 Oct;21(5):341–6

The non-invasive investigation of lumbar disc degeneration in patients with chronic low back pain. Buirski G. **Australas Radiol** 1989 Aug;33(3):233–6

Survey of general practitioners' opinions on the role of radiology in patients with low back pain. Owen JP, et al. **Br J Gen Pract** 1990 Mar;40(332):98–101

Assessment of a single lumbar spine radiograph in low back pain. Padley S, et al. **Br J Radiol** 1990 Jul;63(751):535–6

Low back pain [letter; comment] Sellar R. **Clin Radiol** 1990 Mar;41(3):217 Comment on: Clin Radiol 1989 Jan;40(1):6–10.

Clinical relevance of discography combined with CT scanning. A study of 100 patients. Antti-Poika I, et al. **J Bone Joint Surg [Br]** 1990 May;72(3):480–5

Stress X-rays and the low back pain patient. Phillips RB, et al. **J Manipulative Physiol Ther** 1990 Mar–Apr; 13(3):127–33

[Ambulatory myelography using iohexol (Omnipaque): methods and results] Wilms G, et al. **J Belge Radiol** 1989 Jun;72(3):159–64 (Eng. Abstr.) **(Dut)**

[A comparative study of myelography and CAT in patients with lumbo-sciatica] Pulido P, et al. **Rev Clin Esp** 1990 Feb;186(2):63–7 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

Scintigraphic evaluation of lumbosacral pain in brucellosis. Cordero-Sánchez M, et al. **Arthritis Rheum** 1990 Jul; 33(7):1052–5

Bone SPECT evaluation of patients with persistent back pain following lumbar spinal fusion [letter; comment] Slizofski WJ. **J Nucl Med** 1989 Oct;30(10):1739 Comment on: J Nucl Med 1989 Apr;30(4):490–6.

Vertebral SPET. Hogg P. **Radiogr Today** 1990 May; 56(636):39

REHABILITATION

Rehabilitation of the athlete with low back dysfunction. Snyder-Mackler L. **Clin Sports Med** 1989 Oct;8(4):717–29 (31 ref.)

Low back injury in industry: the value of a recovery program. McElligott J, et al. **Conn Med** 1989 Dec; 53(12):711–5

Low back pain. Thakur SK. **J Indian Med Assoc** 1989 Sep; 87(9):221–2

Aggressive early medical management by a specialist in physical medicine and rehabilitation: effect on lost time due to injuries in hospital employees. Haig AJ, et al. **J Occup Med** 1990 Mar;32(3):241–4

Rehabilitation in chronic back pain: employment status after four years. Wigley RD, et al. **N Z Med J** 1990 Jan 24; 103(882):9–10

Independent evaluation of a multidisciplinary rehabilitation program for chronic low back pain. Cassisi JE, et al. **Neurosurgery** 1989 Dec;25(6):877–83

Back injuries require integration of aggressive and passive treatment. van Oort G, et al. **Occup Health Saf** 1990 Jan; 59(1):22–4

Back school relieves patients' pain. Simon WH, et al. **Pa Med** 1990 Jan;93(1):40–4

Determinants of return-to-work among low back pain patients. Gallagher RM, et al. **Pain** 1989 Oct;39(1):55–67

IsoStation B-200 [letter] McGavin JC. **Phys Ther** 1989 Nov; 69(11):989–90

Test instrument for predicting the effect of rigid braces in cases with low back pain. Willner SW. **Prosthet Orthot Int** 1990 Apr;14(1):22–6

Biofeedback in back muscle strengthening. Asfour SS, et al. **Spine** 1990 Jun;15(6):510–3

Effect of training frequency and specificity on isometric lumbar extension strength. Graves JE, et al. **Spine** 1990 Jun;15(6):504–9

An open controlled assessment of osteopathic manipulation in nonspecific low-back pain. MacDonald RS, et al. **Spine** 1990 May;15(5):364–70

Results of a multicenter trial using an intensive active exercise program for the treatment of acute soft tissue and back injuries. Mitchell RI, et al. **Spine** 1990 Jun;15(6):514–21

[Patients' condition 1 year following surgery for a lumbosacral radicular syndrome (letter)] Pal TM. **Ned Tijdschr Geneeskd** 1990 Feb 24;134(8):406–7 **(Dut)**

[Assessment of the effectiveness of inpatient rehabilitation measures in patients with chronic low back pain: a prospective, randomized, controlled study] Jäckel WH, et al. **Rehabilitation (Stuttg)** 1990 May;29(2):129–33 (Eng. Abstr.) **(Ger)**

[Sports in functional rehabilitation of the lumbar spine] Martini G, et al. **Clin Ter** 1990 Jun 15;133(5):329–39 (Eng. Abstr.) **(Ita)**

SURGERY

Psychological vulnerability as a predictor for short-term outcome in lumbar spine surgery. A prospective study (Part II). Thorvaldsen P, et al. **Acta Neurochir (Wien)** 1990; 102(1–2):58–61

MR imaging of the postoperative lumbar spine: assessment with gadopentetate dimeglumine. Ross JS, et al. **AJNR** 1990 Jul-Aug;11(4):771–6

A neurosurgical profile of spinal disorders in Sri Lanka. Samarasinghe C. **Ceylon Med J** 1989 Jun;34(2):49–63 (45 ref.)

Percutaneous rhizolysis: why does it work? [letter] Stuckey RH. **Med J Aust** 1990 May 7;152(9):500

The relief of low back pain with the WARP abdominoplasty: a preliminary report. Toranto IR. **Plast Reconstr Surg** 1990 Apr;85(4):545–55

Lumbar disorders: when and when not to operate. Manders KL. **Semin Neurol** 1989 Sep;9(3):186–92 (8 ref.)

Surgery for pain. Pawl RP. **Semin Neurol** 1989 Sep; 9(3):257–68 (37 ref.)

Nonoperative versus operative intervention in low back disorders. Sugar O. **Semin Neurol** 1989 Sep;9(3):176–85 (48 ref.)

Simultaneous combined anterior and posterior fusion. An independent analysis of a treatment for the disabled low-back pain patient. Kozak JA, et al. **Spine** 1990 Apr; 15(4):322–8

Lumbar percutaneous facet rhizotomy. Silvers HR. **Spine** 1990 Jan;15(1):36–40

[Results of intersomatic arthrodeses in essential lumbalgia] Goutallier D, et al. **Rev Rhum Mal Osteoartic** 1990 Feb; 57(2):91–7 (Eng. Abstr.) **(Fre)**

THERAPY

Relief of low back pain in labor by using intracutaneous nerve stimulation (INS) with sterile water papules. Lytzen T, et al. **Acta Obstet Gynecol Scand** 1989;68(4):341–3

Can trials of physical treatments be blinded? The example of transcutaneous electrical nerve stimulation for chronic pain. Deyo RA, et al. **Am J Phys Med Rehabil** 1990 Feb; 69(1):6–10

Scientific validity and the iliopsoas [letter] Haig AJ. **Arch Phys Med Rehabil** 1989 Oct;70(10):789

Low-energy laser treatment and exercise for chronic low back pain: double-blind controlled trial. Klein RG, et al. **Arch Phys Med Rehabil** 1990 Jan;71(1):34–7

Low back pain: comparison of chiropractic and hospital outpatient treatment [letter] **BMJ** 1990 Jun 23; 300(6740):1647–50

Low back pain: comparison of chiropractic and hospital outpatient treatment [letter] **BMJ** 1990 Aug 11; 301(6747):341–2

Low back pain: comparison of chiropractic and hospital outpatient treatment [letter] Meade TW, et al. **BMJ** 1990 Jun 30;300(6741):1723

Low back pain of mechanical origin: randomised comparison of chiropractic and hospital outpatient treatment. Meade TW, et al. **BMJ** 1990 Jun 2;300(6737):1431–7

Differential treatment responses on somatic pain indicators after EMG biofeedback training in back pain patients. Biedermann HJ, et al. **Int J Psychosom** 1989;36(1–4):53–7

Psychosomatics of back pain and the use of yoga. Nespor K. **Int J Psychosom** 1989;36(1–4):72–8 (29 ref.)

Readers' thoughts on treating low back pain with counterstrain technique [letter] **J Am Osteopath Assoc** 1989 Nov;89(11):1379, 1384, 1387 passim

Nonoperative treatment for painful adolescent spondylolysis or spondylolisthesis. Pizzutillo PD, et al. **J Pediatr Orthop** 1989 Sep-Oct;9(5):538–40

Loss prevention case of the month. A missed opportunity? Avery JK. **J Tenn Med Assoc** 1990 Apr;83(4):194–5

Acupuncture of Yanglao (S.I. 6) point in the treatment of lumbar pain. Dong SH. **J Tradit Chin Med** 1982 Jun; 2(2):124

Chiropracters and low back pain [editorial] **Lancet** 1990 Jul 28;336(8709):220

Chiropractors and low back pain [letter] **Lancet** 1990 Sep 1;336(8714):572–3

A controlled trial of transcutaneous electrical nerve stimulation (TENS) and exercise for chronic low back pain. Deyo RA, et al. **N Engl J Med** 1990 Jun 7;322(23):1627–34

Pain clinic #13. Comprehensive pain center treatment of low back workers' compensation injuries. An industrial medicine clinical outcome follow-up comparison. Tollison CD, et al. **Orthop Rev** 1989 Oct;18(10):1115–7, 1121–2, 1125–6

Parturition pain treated by intracutaneous injections of sterile water. Ader L, et al. **Pain** 1990 May;41(2):133–8

Back pain. Brown P, et al. **Practitioner** 1990 Feb 22; 234(1483):139–42

Therapies for back pain. Frank A. **Practitioner** 1990 Feb 8; 234(1482):113–5

Psychological factors in the treatment of chronic low back pain. Follow-up study of a back school intervention. Julkunen J, et al. **Psychother Psychosom** 1988;50(4):173–81

Interdisciplinary perspectives on mechanisms and management of low back pain. Ahern DK, et al. **R I Med J** 1990 Jan;73(1):21–31

Conservative treatment of acute low-back pain. A prospective randomized trial: McKenzie method of treatment versus patient education in "mini back school". Stankovic R, et al. **Spine** 1990 Feb;15(2):120–3

[Treatment of lumbar backache with muscular training (letter)] Ofeldt T, et al. **Ugeskr Laeger** 1989 Oct 9; 151(41):2676–7 **(Dan)**

[Treatment of low back pain with muscular exercise (letter)] Ofeldt T, et al. **Ugeskr Laeger** 1990 Jan 15;152(3):177–8 **(Dan)**

[Lumbago, lumbo-ischialgia, 3: Therapy] von Albert HH. **Fortschr Med** 1990 Jul 10;108(20):400–1 **(Ger)**

[Percutaneous radiofrequency neurotomy of lumbar medial branch (facet rhizotomy)—a report of 6 cases] Yamagami H, et al. **Masui** 1990 Apr;39(4):491–5 (Eng. Abstr.) **(Jpn)**

[Modulation of the nociceptive flexor reflex by the electrostimulation of auricular acupuncture points] Vashchenko EA, et al. **Fiziol Zh** 1989 Jul-Aug;35(4):85–90 (Eng. Abstr.) **(Rus)**

[Effect of electric stimulation of auricular acupuncture points on H-reflex] Vashchenko EA, et al. **Fiziol Zh** 1989 Nov-Dec;35(6):88–91 (Eng. Abstr.) **(Rus)**

[Organization of the treatment of patients with neurological manifestations of lumbar osteochondrosis] Antonov IP, et al. **Klin Med (Mosk)** 1990 Feb;68(2):125–8 (Eng. Abstr.) **(Rus)**

[Treatment by dissection of trigger zones of neuromyofibrosis and post-isomeric relaxation of patients with lumbar osteochondrosis syndromes] Popelianskiĭ IaIu, et al. **Revmatologiia (Mosk)** 1989 Jul-Sep;(3):66–9 **(Rus)**

[Stimulation methods of reflexotherapy in the treatment of vertebrogenic lumbosacral pain syndromes (a review)] Evtushenko SK, et al. **Zh Nevropatol Psikhiatr** 1990; 90(5):127–9 (39 ref.) **(Rus)**

[Spinal manipulation for pain relief] Lane L. **Lakartidningen** 1989 Sep 27;86(39):3256–7 **(Swe)**

VETERINARY

Methods of stimulating acupuncture points for treatment of chronic back pain in horses. Klide AM, et al. **J Am Vet Med Assoc** 1989 Nov 15;195(10):1375–9

BACKGROUND RADIATION see under **RADIATION, IONIZING**

BACLOFEN

ADMINISTRATION & DOSAGE

Intrathecal baclofen therapy granted treatment IND status [news] **Clin Pharm** 1990 Jun;9(6):408

Intrathecal baclofen for long-term treatment of spasticity: a multi-centre study. Ochs G, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug;52(8):933–9

Effects of intrathecal baclofen on voluntary motor control in spastic paresis. Latash ML, et al. **J Neurosurg** 1990 Mar; 72(3):388–92

Chronic intrathecal baclofen administration for control of severe spasticity. Lazorthes Y, et al. **J Neurosurg** 1990 Mar; 72(3):393–402

From the Food and Drug Administration. Nightingale SL. **JAMA** 1990 May 9;263(18):2421

Intrathecal baclofen for cerebral spasticity [letter; comment] Dralle D, et al. **Lancet** 1989 Oct 14;2(8668):916 Comment on: Lancet 1989 Aug 26;2(8661):503–4.

Intrathecal baclofen [letter] [see comments] Taveira da Silva A. **N Engl J Med** 1989 Nov 16;321(20):1414–5 Comment in: N Engl J Med 1990 May 24;322(21):1533–4.

[Treatment of spasticity using an intrathecal infusion of baclofen] Meyerson B, et al. **Lakartidningen** 1989 Nov 22; 86(47):4125–8 (Eng. Abstr.) **(Swe)**

ADVERSE EFFECTS

Baclofen-induced epilepsy. Rush JM, et al. **J R Soc Med** 1990 Feb;83(2):115–6

ANALOGS & DERIVATIVES

Baclofen and phaclofen modulate GABA release from slices of rat cerebral cortex and spinal cord but not from retina. Neal MJ, et al. **Br J Pharmacol** 1989 Sep;98(1):105–12

Effects of the putative antagonists phaclofen and delta-aminovaleric acid on GABAB receptor biochemistry. Robinson TN, et al. **Br J Pharmacol** 1989 Nov;98(3):833–40

Phaclofen-insensitive presynaptic inhibitory action of (+/-)-baclofen in neonatal rat motoneurones in vitro. Wang MY, et al. **Br J Pharmacol** 1990 Feb;99(2):413–21

Phaclofen antagonizes the depressant effect of baclofen on spinal reflex transmission in rats. Wüllner U, et al. **Brain Res** 1989 Sep 4;496(1–2):341–4

Stimulation by phaclofen of inositol 1,4,5-triphosphate production in cultured neurons from chick tectum. Michler A, et al. **Eur J Pharmacol** 1989 Aug 29;167(3):423–5

Bicuculline- and phaclofen-sensitive components of N-methyl-D-aspartate-induced hyperpolarizations in rat dorsolateral septal nucleus neurones. Gallagher JP, et al. **J Physiol (Lond)** 1989 Nov;418:367–77

A new alcohol antagonist: phaclofen. Allan AM, et al. **Life Sci** 1989;45(19):1771–9

Thioether analogues of baclofen, phaclofen and saclofen. Allan RD, et al. **Neurosci Lett** 1990 May 4;112(2–3):223–8

Inhibition of baclofen binding to rat cerebellar membranes by phaclofen, saclofen, 3-aminopropylphosphonic acid and related GABAB receptor antagonists. Drew CA, et al. **Neurosci Lett** 1990 May 18;113(1):107–10

Antagonism at GABAB receptors by saclofen and related sulphonic analogues of baclofen and GABA. Kerr DI, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):239–44

Blockade of the late IPSP in rat CA1 hippocampal neurons by 2-hydroxy-saclofen. Lambert NA, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):125–8

Phaclofen antagonizes post-tetanic disinhibition in the rat dentate gyrus. Mott DD, et al. **Neurosci Lett** 1990 Mar 2;110(1–2):131–6

Phaclofen inhibition of the slow inhibitory postsynaptic potential in hippocampal slice cultures: a possible role for the GABAB-mediated inhibitory postsynaptic potential. Malouf AT, et al. **Neuroscience** 1990;35(1):53–61

ANALYSIS

Determination of baclofen and alpha-baclofen in rat liver homogenate and human urine using solid-phase extraction, o-phthalaldehyde-tert.-butyl thiol derivatization and high-performance liquid chromatography with amperometric detection. Wall GM, et al. **J Chromatogr** 1989 Jun 30;491(1):151–62

ANTAGONISTS & INHIBITORS

Gastric acid inhibitory action of a GABA-related compound, 3-amino-3-phenylpropionic acid, in the rat. Hara N, et al. **Eur J Pharmacol** 1990 Apr 10;179(1–2):17–23

CHEMICAL SYNTHESIS

[Studies of synthesis and structure-activity relationships of analogs of the muscle relaxant—baclofen] Guo ZW, et al. **Yao Hsueh Hsueh Pao** 1990;25(1):11–7 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

[The isolation and detection of baclofen and midocalm in cadaveric material] Kobzar' IaV, et al. **Sud Med Ekspert** 1989 Oct-Dec;32(4):48–9 **(Rus)**

METABOLISM

Inhibition of baclofen binding to rat cerebellar membranes by phaclofen, saclofen, 3-aminopropylphosphonic acid and related GABAB receptor antagonists. Drew CA, et al. **Neurosci Lett** 1990 May 18;113(1):107–10

Carbachol reduces IK,baclofen, but not IK,GABA in guinea pig hippocampal slices. Müller W, et al. **Neurosci Lett** 1989

Jul 31;102(2-3):229-34

PHARMACOKINETICS

Plasma and urinary excretion kinetics of oral baclofen in healthy subjects. Wuis EW, et al. **Eur J Clin Pharmacol** 1989;37(2):181-4

Pharmacokinetics of baclofen in spastic patients receiving multiple oral doses. Wuis EW, et al. **Pharm Weekbl [Sci]** 1990 Apr 27;12(2):71-4

PHARMACOLOGY

Inhibitory and stimulant effects of baclofen on gastric acid secretion. Blandizzi C, et al. **Acta Physiol Hung** 1990;75 Suppl:37-8

Depression of the vestibulo-ocular and optokinetic responses by intrafloccular microinjection of GABA-A and GABA-B agonists in the rabbit. Van Neerven J, et al. **Arch Ital Biol** 1989 Oct;127(4):243-63

Post-training systemic and intra-amygdala administration of the GABA-B agonist baclofen impairs retention. Castellano C, et al. **Behav Neural Biol** 1989 Sep;52(2):170-9

Baclofen and phaclofen modulate GABA release from slices of rat cerebral cortex and spinal cord but not from retina. Neal MJ, et al. **Br J Pharmacol** 1989 Sep;98(1):105-12

Phaclofen-insensitive presynaptic inhibitory action of (+/-)-baclofen in neonatal rat motoneurones in vitro. Wang MY, et al. **Br J Pharmacol** 1990 Feb;99(2):413-21

Presynaptic inhibition by neuropeptide Y and baclofen in hippocampus: insensitivity to pertussis toxin treatment. Colmers WF, et al. **Brain Res** 1989 Sep 25;498(1):99-104

The central medial nucleus: thalamic site of seizure regulation. Miller JW, et al. **Brain Res** 1990 Feb 5; 508(2):297-300

Some characteristics of baclofen-evoked responses of primary afferents in frog spinal cord. Padjen AL, et al. **Brain Res** 1990 May 21;516(2):201-7

Phaclofen antagonizes the depressant effect of baclofen on spinal reflex transmission in rats. Wüllner U, et al. **Brain Res** 1989 Sep 4;496(1-2):341-4

Tizanidine vs. baclofen in the treatment of spasticity in patients with multiple sclerosis. Rice GP. **Can J Neurol Sci** 1989 Nov;16(4):451

Inhibition by gamma-amino-n-butyric acid and baclofen of gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Cancer Res** 1990 Aug 15;50(16):4931-4

Body temperature-dependent action of baclofen in rat stomach. Relation to acid secretion and ulcerogenicity. Takeuchi K, et al. **Dig Dis Sci** 1990 Apr;35(4):458-66

The effects of baclofen and pertussis toxin on epileptiform activity induced in the hippocampal slice by magnesium depletion. Lewis DV, et al. **Epilepsy Res** 1989 Sep-Oct; 4(2):109-18

An analysis of anticonvulsant actions of GABA agonists (progabide and baclofen) in the kindling model of epilepsy. Sato K, et al. **Epilepsy Res** 1990 Mar;5(2):117-24

Baclofen inhibits amygdala kindling in immature rats. Wurpel JN, et al. **Epilepsy Res** 1990 Jan-Feb;5(1):1-7

Baclofen induces spontaneous, rhythmic sharp waves in the rat hippocampal slice. Lewis DV, et al. **Exp Neurol** 1989 Nov;106(2):181-6

Food intake suppressant effect of baclofen in rats. Zarrindast MR, et al. **Gen Pharmacol** 1989;20(5):701-3

GABAergic drugs and lordosis behavior in the female rat. Agmo A, et al. **Horm Behav** 1989 Sep;23(3):368-80

Accumulation of cyclic AMP elicited by vasoactive intestinal peptide is potentiated by noradrenaline, histamine, adenosine, baclofen, phorbol esters, and ouabain in mouse cerebral cortical slices: studies on the role of arachidonic acid metabolites and protein kinase C. Schaad NC, et al. **J Neurochem** 1989 Dec;53(6):1941-51

Modulation of A10 dopamine neurons by gamma-aminobutyric acid agonists. Kalivas PW, et al. **J Pharmacol Exp Ther** 1990 May;253(2):858-66

Reduction by baclofen of monosynaptic EPSPs in lumbosacral motoneurones of the anaesthetized cat. Edwards FR, et al. **J Physiol (Lond)** 1989 Sep;416:539-56

On the presynaptic action of baclofen at inhibitory synapses between cultured rat hippocampal neurones. Harrison NL. **J Physiol (Lond)** 1990 Mar;422:433-46

Effects of GABA antagonists and structural GABA analogues on baclofen stimulated gastric acid secretion in the rat. Hara N, et al. **Jpn J Pharmacol** 1990 Feb; 52(2):345-52

Direct evidence indicating that a GABA-mimetic stimulates acid secretion through central mechanisms. Hara N, et al. **Jpn J Pharmacol** 1990 Jun;53(2):271-4

Acid secretagogue mechanisms of a GABA-mimetic (PCPGABA) in the anesthetized rat: effects of hypothermia. Hara N, et al. **Life Sci** 1990;46(24):1793-9

Effect of gastrin monoclonal antibody 28.2 on acid response to chemical vagal stimulation in rats. Yang H, et al. **Life Sci** 1989;45(25):2413-8

Pre- and postsynaptic GABAB receptors in the hippocampus have different pharmacological properties. Dutar P, et al. **Neuron** 1988 Sep;1(7):585-91

Effects of D-baclofen and L-baclofen on the trigeminal nucleus. Fromm GH, et al. **Neuropharmacology** 1990 Mar; 29(3):249-54

Thioether analogues of baclofen, phaclofen and saclofen. Allan RD, et al. **Neurosci Lett** 1990 May 4;112(2-3):223-8

Antagonism at GABAB receptors by saclofen and related sulphonic analogues of baclofen and GABA. Kerr DI, et al. **Neurosci Lett** 1989 Dec 15;107(1-3):239-44

Baclofen facilitates the development of long-term potentiation in the rat dentate gyrus. Mott DD, et al. **Neurosci Lett** 1990 May 31;113(2):222-6

Effects of potassium channel blockers on baclofen-induced suppression of paroxysmal discharges in rat neo-cortical slices. Ong J, et al. **Neurosci Lett** 1990 May 4; 112(2-3):216-22

Differing actions of baclofen and 3-amino-propylphosphinic acid in rat neocortical slices. Ong J, et al. **Neurosci Lett** 1990 Feb 5;109(1-2):169-73

Effects of agonists and antagonists at the GABA/benzodiazepine receptor on conditioned suppression in rats. Shephard RA, et al. **Pharmacol Biochem Behav** 1990 May;36(1):39-43

Mechanisms of general anesthesia: brain regional responses to baclofen. Lewis JL, et al. **Physiol Behav** 1989 Jul; 46(1):3-8

Baclofen does not protect against cerebral ischemia in rats. Rosenbaum DM, et al. **Stroke** 1990 Jan;21(1):138-40

[The effect of muscle relaxants on the function of the vestibulo-ocular reflex arc] Ječábek J, et al. **Cesk Neurol Neurochir** 1990 Mar;53(2):83-8 (Eng. Abstr.) (Cze)

[Modulation using racemic and levo-rotary baclofen of the trigeminal reflex in man] Leardi MG, et al. **Boll Soc Ital Biol Sper** 1990 Mar;66(3):271-7 (Eng. Abstr.) (Ita)

[The effect of baclofen on the nociceptive reactions of the blood pressure in waking rats] Ignatov IuD, et al. **Farmakol Toksikol** 1989 Nov-Dec;52(6):61-4 (Eng. Abstr.) (Rus)

POISONING

Failure of physostigmine in treatment of acute severe intrathecal baclofen intoxication [letter; comment] Saltuari L, et al. **N Engl J Med** 1990 May 24;322(21):1533-4 Comment on: N Engl J Med 1989 Nov 16;321(20):1414-5.

[Is absorption hemoperfusion effective in the treatment of baclofen poisoning?] Monhart V, et al. **Vnitr Lek** 1989 Nov; 35(11):1125-31 (Eng. Abstr.) (Cze)

THERAPEUTIC USE

Atypical facial pain, ectasia of the basilar artery, and baclofen: a case report. Martins IP, et al. **Headache** 1989 Oct;29(9):581-3

Baclofen therapy for intractable hiccoughs [letter] Bhalotra R. **J Clin Gastroenterol** 1990 Feb;12(1):122

Intrathecal baclofen and the H-reflex. Macdonell RA, et al. **J Neurol Neurosurg Psychiatry** 1989 Sep;52(9):1110-2

Clinical pharmacology of drugs used to treat head and face pain. Fromm GH. **Neurol Clin** 1990 Feb;8(1):143-51 (41 ref.)

[Severe tetanus and intrathecal baclofen] Saissy JM, et al. **Ann Fr Anesth Reanim** 1990;9(2):183-4 (Eng. Abstr.) (Fre)

[Intraoperative suppression of spasticity using intrathecal baclofen] Müller H, et al. **Anaesthesist** 1990 Jan;39(1):22-5 (Eng. Abstr.) (Ger)

BACLOPHEN see **BACLOFEN**

BACTEREMIA see **SEPTICEMIA**

BACTERIA

Gastrointestinal effects of water reuse for public park irrigation. Durand R, et al. **Am J Public Health** 1989 Dec; 79(12):1659-60

The Williams bacterial filter. Use in the intensive care unit. Hellewell J, et al. **Anaesthesia** 1967 Jul;22(3):497-503

Conformational study of the chromosomal protein MC1 from the archaebacterium Methanosarcina barkeri. Imbert M, et al. **Biochim Biophys Acta** 1990 May 8;1038(3):346-54

Bacterial capsules. **Curr Top Microbiol Immunol** 1990; 150:1-162

Abstracts of papers presented at the 42nd meeting of the Deutsche Gesellschaft fur Hygiene und Mikrobiologie. Hannover, October 4-6, 1989. **Int J Med Microbiol** 1990 Mar;272(3):355-400

Oral health and disease related to medical problems. A symposium. Turku, Finland, 24-26 August 1989. Proceedings. **J Clin Periodontol** 1990 Aug;17(7 (Pt 2)):473-524

Failure of water to lyse polymorphonuclear neutrophils completely. Role of pH and implications for assessment of bacterial killing [letter] Gargan RA, et al. **J Immunol Methods** 1989 Nov 30;124(2):289-91

How do bacteria cause chronic arthritis? [editorial] Phillips PE. **J Rheumatol** 1989 Aug;16(8):1017-9

The normal microflora: new concepts in health promotion. Tannock GW. **Microbiol Sci** 1988 Jan;5(1):4-8 (27 ref.)

A survey of buoyant density of microorganisms in pure cultures and natural samples. Guerrero R, et al. **Microbiologia** 1985 Sep;1(1-2):53-65 (37 ref.)

Patent power. The oil-eating bacterium that spawned an industry. Erickson D. **Sci Am** 1990 Jun;262(6):88, 93

[Dr. Sklenar's Kombucha mushroom infusion--a biological cancer therapy. Documentation No. 18] Hauser SP. **Schweiz Rundsch Med Prax** 1990 Feb 27;79(9):243-6 (Eng. Abstr.) (Ger)

[63d symposia of the Japan Society of Bacteriology. Tokushima, 27-29 March 1990. Abstracts] **Nippon Saikingaku Zasshi** 1990 Jan;45(1):49-504 (Jpn)

[List of bacteria officially published from 1985 to 1989] Koseri Y. **Nippon Saikingaku Zasshi** 1990 May; 45(3):665-721 (Jpn)

[The use of bacterial preparations in the treatment of asthma in children] Negut E, et al. **Rev Ig [Bacteriol]** 1989 Jul-Sep; 34(3):277-83 (15 ref.) (Rum)

ANALYSIS

Quantitative determination of various hopanoids in microorganisms. Schulenberg-Schell H, et al. **Anal Biochem** 1989 Aug 15;181(1):120-4

Direct analysis of bacterial fatty acids by Curie-point pyrolysis tandem mass spectrometry. DeLuca S, et al. **Anal Chem** 1990 Jul 15;62(14):1465-72

Neutral sugar composition and gravimetric yield of plant and bacterial fractions of feces. Cabotaje LM, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1786-92

Molecular analysis of deep-subsurface bacteria. Jiménez L. **Appl Environ Microbiol** 1990 Jul;56(7):2108-13

Cytochrome c'' isolated from Methylophilus methylotrophus. An example of bis-histidine-co-ordinated Fe3+ haem, with near-perpendicular orientation of the ligands. Berry MJ, et al. **Biochem J** 1990 Sep 1;270(2):413-7

Substrate reduction properties of dinitrogenase activated in vitro are dependent upon the presence of homocitrate or its analogues during iron-molybdenum cofactor synthesis. Imperial J, et al. **Biochemistry** 1989 Sep 19;28(19):7796-9

Bacterial phospholipid analysis by fast atom bombardment mass spectrometry. Pramanik BN, et al. **Biomed Environ Mass Spectrom** 1990 Mar;19(3):164-70

Secondary and tertiary structure characteristics of Megasphaera elsdenii flavodoxin in the reduced state as determined by two-dimensional 1H NMR. van Mierlo CP, et al. **Eur J Biochem** 1990 May 20;189(3):589-600

Selective solubilization of chlorosome proteins in Chloroflexus aurantiacus. Eckhardt A, et al. **FEBS Lett** 1990 Jul 16;267(2):199-202

Thioredoxin and related proteins in procaryotes. Gleason FK, et al. **FEMS Microbiol Rev** 1988 Dec;4(4):271-97 (164 ref.)

Numerical analysis of electrophoretic protein patterns of Group EF-4 bacteria, predominantly from dog-bite wounds of humans. Holmes B, et al. **J Appl Bacteriol** 1990 Jan;68(1):81-91

Primary structure of the chromosomal proteins MC1a, MC1b, and MC1c from the archaebacterium Methanothrix soehngenii. Chartier F, et al. **J Biol Chem** 1989 Oct 15; 264(29):17006-15

The primary structure of a halorhodopsin from Natronobacterium pharaonis. Structural, functional and evolutionary implications for bacterial rhodopsins and halorhodopsins. Lanyi JK, et al. **J Biol Chem** 1990 Jan 25;265(3):1253-60

Archaebacterial histone-like proteins. Purification and characterization of helix stabilizing DNA binding proteins from the acidothermophile Sulfolobus acidocaldarius. Reddy TR, et al. **J Biol Chem** 1989 Oct 15; 264(29):17298-308

A simple chromatographic procedure for the detection of cyclized archaebacterial glycerol-bisdiphytanyl-glycerol tetraether core lipids. Trincone A, et al. **J Gen Microbiol** 1988 Dec;134 (Pt 12):3159-63

Purification of glycerol dialkyl nonitol tetraether from Sulfolobus acidocaldarius. Lo SL, et al. **J Lipid Res** 1989 Jun;30(6):944-9

D-aminoacids and microwaves [letter; comment] Segal W. **Lancet** 1990 Jul 7;336(8706):49 Comment on: Lancet 1990 Mar 31;335(8692):792.

Small, heat-stable, DNA-binding proteins from Caulobacter crescentus. Paterczyk B, et al. **Microbios** 1990; 61(248-249):135-43

[The use of ribonucleic acids as markers for the measuring of microbial protein yield in the rumen. 2. The effect of sample treatment, the time of sampling and the composition of the ration on the RNA:N ratio in rumen microbes] Schönhusen U, et al. **Arch Tierernahr** 1990 Jan-Feb; 40(1-2):75-84 (Eng. Abstr.) (Ger)

[A rapid method for determining the qualitative composition of bacterial polyamines] Zherebilo OE, et al. **Mikrobiol Zh** 1985 Jan-Feb;47(1):83-6 (Eng. Abstr.) (Rus)

[Free amino acids of some unicellular organisms] Trubachev IN, et al. **Vopr Pitan** 1989 Sep-Oct;(5):62-4 (Rus)

CLASSIFICATION

Immunological identification and distribution of dissimilatory heme cd1 and nonheme copper nitrite reductases in denitrifying bacteria. Coyne MS, et al. **Appl Environ Microbiol** 1989 Nov;55(11):2924-31

Alternate gram staining technique using a fluorescent lectin. Sizemore RK, et al. **Appl Environ Microbiol** 1990 Jul; 56(7):2245-7

Evolutionary relationship of some stalked and budding bacteria (genera Caulobacter, "Hyphobacter", Hyphomonas and Hyphomicrobium) as studied by the new integral taxonomical method. Nikitin DI, et al. **Arch Microbiol** 1990;153(2):123-8

Mollicutes: what are they? [editorial; comment] Garner A. **Br J Ophthalmol** 1989 Nov;73(11):859 Comment on: Br J Ophthalmol 1989 Nov;73(11):865–70.

Numerical analysis of sodium dodecyl sulphate–polyacrylamide gel electrophoretic protein patterns for the classification, identification and typing of medically important bacteria. Costas M. **Electrophoresis** 1990 May;11(5):382–91

Rapid determination of bacterial ribosomal RNA sequences by direct sequencing of enzymatically amplified DNA. Böttger EC. **FEMS Microbiol Lett** 1989 Nov;53(1–2):171–6

Lack of precision in commercial identification systems: correction using Bayesian analysis. Berger SA. **J Appl Bacteriol** 1990 Mar;68(3):285–8

Mechanism of gram variability in select bacteria. Beveridge TJ. **J Bacteriol** 1990 Mar;172(3):1609–20

Comparison of plaque microflora between Chinese and Caucasian population groups. Cao CF, et al. **J Clin Periodontol** 1990 Feb;17(2):115–8

New molecular techniques for microbial epidemiology and the diagnosis of infectious diseases. Eisenstein BI. **J Infect Dis** 1990 Apr;161(4):595–602 (119 ref.)

Chromosomal DNA fingerprinting—a new method of species and strain identification applicable to microbial pathogens. Owen RJ. **J Med Microbiol** 1989 Oct;30(2):89–99 (53 ref.)

Morphotypes of the subgingival microflora in diabetic adolescents in Finland. Sandholm L, et al. **J Periodontol** 1989 Sep;60(9):526–8

Archaebacteria: their phylogenetic relationship with the eubacterial and eukaryotic kingdoms. Sanz JL, et al. **Microbiologia** 1988 Feb;4(1):5–27 (127 ref.)

Acetylaminofluorene-labelled ribosomal RNA for use in molecular epidemiology and taxonomy. Grimont F, et al. **Res Microbiol** 1989 Sep;140(7):447–54

Type, frequency, and antimicrobial sensitivity patterns of bacteria in an Iranian hospital during the 1980s. Sadeghi E. **Rev Infect Dis** 1990 May–Jun;12(3):543–6

[Microbiological diagnosis of microorganisms tentatively designated as "SP organisms"] Aldová E, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Dec;38(6):321–9 (Eng. Abstr.) **(Cze)**

[Lipid analysis in bacterial taxonomy: proposal for a standardized method] Asselineau C, et al. **Biochem Cell Biol** 1990 Jan;68(1):379–86 (Eng. Abstr.) **(Fre)**

[Taxonomy for the clinician: a real problem? (letter)] Altwegg M. **Schweiz Med Wochenschr** 1989 Oct 28; 119(43):1530–1 **(Ger)**

[A study on bacteria within stones in urolithiasis] Oka T, et al. **Hinyokika Kiyo** 1989 Sep;35(9):1469–74 (Eng. Abstr.) **(Jpn)**

[Current trends in the systematics of bacteria] Romanovskaia VA. **Mikrobiol Zh** 1989 Sep–Oct;51(5):82–94 (56 ref.) **(Rus)**

CYTOLOGY

Gram stain results from amniocentesis in patients with preterm premature rupture of membranes—comparison of maternal and fetal characteristics. Asrat T, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):887–9

Size-selective grazing on bacteria by natural assemblages of estuarine flagellates and ciliates. Gonzalez JM, et al. **Appl Environ Microbiol** 1990 Mar;56(3):583–9

The bacterial cell cycle. Lutkenhaus J. **Curr Opin Cell Biol** 1990 Apr;2(2):241–5 (30 ref.)

Differentiation of the bacterial cell division site. Cook WR, et al. **Int Rev Cytol** 1989;118:1–31 (115 ref.)

DRUG EFFECTS

Effect of TiF4 solutions on bacterial growth in vitro and on tooth surfaces. Skartveit L, et al. **Acta Odontol Scand** 1990 Jun;48(3):169–74

Interactions between antibiotics and antineoplastic drugs on antibacterial activity in vitro. Henriksson R, et al. **Acta Oncol** 1990;29(1):43–6

Antibacterial spectrum and some other characteristics of an antimicrobial factor produced by Yersinia ruckeri. Wasteson U, et al. **Acta Vet Scand** 1989;30(3):253–7

Review and evaluation of the effects of xenobiotic chemicals on microorganisms in soil. Hicks RJ, et al. **Adv Appl Microbiol** 1990;35:195–253 (93 ref.)

Comparative in-vitro antibacterial activity of two brands of antibiotics against clinical isolates of some bacterial genera. Odelola HA, et al. **Afr J Med Med Sci** 1989 Dec; 18(4):307–10

Antimicrobial activity of vancomycin, gentamicin, and tobramycin in peritoneal dialysis solution. Drake JM, et al. **Am J Hosp Pharm** 1990 Jul;47(7):1604–6

Epidemiology and mechanisms of antimicrobial resistance. Parry MF. **Am J Infect Control** 1989 Oct;17(5):286–94 (28 ref.)

Effect of the abscess environment on the antimicrobial activity of ciprofloxacin. Bryant RE, et al. **Am J Med** 1989 Nov 30;87(5A):23S–27S

In vitro antimicrobial activity and susceptibility testing of ofloxacin. Current status. Fuchs PC. **Am J Med** 1989 Dec 29;87(6C):10S–13S (38 ref.)

Bacterial resistance to the quinolone antimicrobial agents. Hooper DC, et al. **Am J Med** 1989 Dec 29;87(6C):17S–23S (108 ref.)

Aztreonam susceptibility testing. A retrospective analysis. Parry MF. **Am J Med** 1990 Mar 23;88(3C):7S–11S; discussion 38S–42S

The comparative in vitro activity of ofloxacin and selected ophthalmic antimicrobial agents against ocular bacterial isolates. Osato MS, et al. **Am J Ophthalmol** 1989 Oct 15; 108(4):380–6

The effect of local anesthetics on bacterial proliferation: TAC versus lidocaine. Martin JR, et al. **Ann Emerg Med** 1990 Sep;19(9):987–90

The evolution of fluorinated quinolones: pharmacology, microbiological activity, clinical uses, and toxicities. Siporin C. **Annu Rev Microbiol** 1989;43:601–27 (252 ref.)

In vitro and in vivo activities of QA-241, a new tricyclic quinolone derivative. Asahara M, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1144–52

In vitro activities of tosufloxacin, temafloxacin, and A-56620 against pathogens of diarrhea. Bryan JP, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):368–70

Antibacterial and immunostimulatory properties of chemotactic N-formyl peptide conjugates of ampicillin and amoxicillin. Bycroft BW, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1516–21

Lipoteichoic acid as a new target for activity of antibiotics: mode of action of daptomycin (LY146032). Canepari P, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1220–6

In vitro susceptibilities of oral bacterial isolates to spiramycin. Chan EC, et al. **Antimicrob Agents Chemother** 1989 Nov; 33(11):2016–8

Role of autolysins in the activities of imipenem and CGP 31608, a novel penem, against slowly growing bacteria. Cozens RM, et al. **Antimicrob Agents Chemother** 1989 Oct; 33(10):1819–21

Comparative in vitro activity of WIN 57273, a new fluoroquinolone antimicrobial agent. Eliopoulos GM, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1154–9

Comparative in vitro activities of piperacillin–tazobactam and ticarcillin–clavulanate. Fass RJ, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1268–74

Quantitative analysis of antimicrobial effect kinetics in an in vitro dynamic model. Firsov AA, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1312–7

In vitro antibacterial spectrum of E1040 compared with those of cefpirome and ceftazidime and disk diffusion interpretive criteria for E1040. Fuchs PC, et al. **Antimicrob Agents Chemother** 1990 May;34(5):914–7

In vitro activities of irloxacin and E-3846, two new quinolones. García-Rodríguez JA, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1262–7

In vitro activity of CP-65,207, a new penem antimicrobial agent, in comparison with those of other agents. Gootz T, et al. **Antimicrob Agents Chemother** 1989 Aug; 33(8):1160–6

In vitro activity of dactimicin, a novel pseudodisaccharide aminoglycoside, compared with activities of other aminoglycosides. Gu JW, et al. **Antimicrob Agents Chemother** 1989 Nov;33(11):1998–2003

In vitro activity of Ro 23-9424, a dual-action cephalosporin, compared with activities of other antibiotics. Gu JW, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):189–95

In vitro bactericidal activities of gentamicin, cefazolin, and imipenem in peritoneal dialysis fluids. Halstead DC, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1553–6

In vitro evaluation of WIN 57273, a new broad-spectrum fluoroquinolone. Jones RN, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):305–13

In vitro activity of AT-4140 against clinical bacterial isolates. Kojima T, et al. **Antimicrob Agents Chemother** 1989 Nov; 33(11):1980–8

Comparative in vitro activities of pristinamycin and other antimicrobial agents against genital pathogens. Lefevre JC, et al. **Antimicrob Agents Chemother** 1989 Dec;33(12):2152–4

Antimicrobial activity of N,N'-dialkylpolymethylenediamines against some dental plaque bacteria. Murata Y, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1636–8

In vitro and in vivo antibacterial activities of AT-4140, a new broad-spectrum quinolone. Nakamura S, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1167–73

Postantibiotic effects of imipenem, norfloxacin, and amikacin in vitro and in vivo. Renneberg J, et al. **Antimicrob Agents Chemother** 1989 Oct;33(10):1714–20

beta-Lactamase stability and in vitro activity of oral cephalosporins against strains possessing well-characterized mechanisms of resistance. Sanders CC. **Antimicrob Agents Chemother** 1989 Aug;33(8):1313–7

In vitro activities of lomefloxacin and temafloxacin against pathogens causing diarrhea. Segreti J, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1385–7

Binding and killing of bacteria by bismuth subsalicylate. Sox TE, et al. **Antimicrob Agents Chemother** 1989 Dec; 33(12):2075–82

Randomized, double-blind comparison of the efficacies, costs, and vaginal flora alterations with single-dose ceftriaxone and multidose cefazolin prophylaxis in vaginal hysterectomy. Stiver HG, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1194–7

In vitro activity of E-1040, a 3-substituted cephalosporin, against pathogens from cystic fibrosis sputum. Stutman HR, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1366–70

In vitro investigation of BK-218, a new oral and parenteral cephalosporin. Szabó I, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):349–54

Ex vivo study of serum bactericidal titers and killing rates of daptomycin (LY146032) combined or not combined with amikacin compared with those of vancomycin. Van der Auwera P. **Antimicrob Agents Chemother** 1989 Oct; 33(10):1783–90

In vitro activity of Bay v 3522, a new cephalosporin, compared with activities of other agents. Wise R, et al. **Antimicrob Agents Chemother** 1990 May;34(5):813–8

In vitro antibacterial activity and interactions with beta-lactamases and penicillin-binding proteins of the new monocarbam antibiotic U-78608. Zurenko GE, et al. **Antimicrob Agents Chemother** 1990 May;34(5):884–8

In vitro activity of norfloxacin and other antibacterial agents against gastro-intestinal pathogens isolated in Sweden. Olsson-Liljequist B, et al. **APMIS** 1990 Feb;98(2):150–5

Comparative toxicities of selected industrial chemicals to microorganisms and other aquatic organisms. Vaishnav DD, et al. **Arch Environ Contam Toxicol** 1990 Jul–Aug; 19(4):624–8

In vitro antimicrobial activity of defensins against ocular pathogens. Cullor JS, et al. **Arch Ophthalmol** 1990 Jun; 108(6):861–4

Synthesis and antimicrobial evaluation of some arylhydrazones of 4-[(2-methylimidazo[1,2-a]pyridine-3-yl)azo]benzoic acid hydrazide. Cesur Z, et al. **Arch Pharm (Weinheim)** 1990 Mar;323(3):141–4

In vitro study of the response of rumen microorganisms to different doses of abierixin, a new antibiotic ionophore, according to the nature of nitrogen supplies. Hillaire MC, et al. **Arch Tierernahr** 1990 Jan–Feb;40(1–2):65–74

Antibiotic resistance in general practice. Hammond L. **Aust Fam Physician** 1990 May;19(5):723–4, 727, 730–1

Studies on heterocyclic compounds: 1,3-thiazolidin-4-one derivatives. IV. Biological activity of variously substituted 2,3-diaryl-1,3-thiazolidin-4-ones. Piscopo E, et al. **Boll Soc Ital Biol Sper** 1989 Sep;65(9):853–9

Studies on heterocyclic compounds: 1,3-thiazolidin-4-one derivatives. III. Biological activity of halogenated 2,3-diaryl-1,3-thiazolidin-4-ones. Piscopo E, et al. **Boll Soc Ital Biol Sper** 1989 Jun;65(6):535–41

Feeding antibiotic-contaminated waste milk to calves—effects on physical performance and antibiotic sensitivity of gut flora. Wray C, et al. **Br Vet J** 1990 Jan–Feb;146(1):80–7

Inactivation of DNA polymerase 1, alpha-amylase and protease by basic dyes and inhibition of microbial growth. Ogawa T, et al. **Bull Environ Contam Toxicol** 1990 Jul; 45(1):107–12

Effect of thiol compounds and flavins on mercury and organomercurial degrading enzymes in mercury resistant aquatic bacteria. Pahan K, et al. **Bull Environ Contam Toxicol** 1990 Feb;44(2):216–23

Phytogrowth-inhibitory and antibacterial activities of 2,5-dihydroxy-1,4-dithiane and its derivatives. Inamori Y, et al. **Chem Pharm Bull (Tokyo)** 1990 Jan;38(1):243–5

Biopolymers from marine invertebrates. X. Mode of action of an antibacterial glycoprotein, aplysianin E, from eggs of a sea hare, Aplysia kurodai. Kisugi J, et al. **Chem Pharm Bull (Tokyo)** 1989 Nov;37(11):3050–3

Fluoroquinolone antimicrobial agents. Wolfson JS, et al. **Clin Microbiol Rev** 1989 Oct;2(4):378–424 (885 ref.)

Multicenter in vitro comparison of piperacillin and nine other antibacterials against 1,629 clinical isolates. Greenberg RN, et al. **Clin Ther** 1990 Jan–Feb;12(1):61–70

The fluoroquinolone antimicrobials: structure, antimicrobial activity, pharmacokinetics, clinical use in domestic animals and toxicity. Vancutsem PM, et al. **Cornell Vet** 1990 Apr; 80(2):173–86 (55 ref.)

Selective decontamination of the digestive tract in Kuwait [letter] Abu-Zidan FM, et al. **Crit Care Med** 1989 Dec; 17(12):1364

Ethanol tolerance in bacteria. Ingram LO. **Crit Rev Biotechnol** 1990;9(4):305–19 (33 ref.)

Norfloxacin, ciprofloxacin, and ofloxacin: current clinical roles. Hooper DC, et al. **Curr Clin Top Infect Dis** 1989; 10:194–240 (295 ref.)

Penicillin-binding proteins and beta-lactamases: their effects on the use of cephalosporins and other new beta-lactams. Neu HC. **Curr Clin Top Infect Dis** 1987;8:37–61 (103 ref.)

Monitoring antimicrobial drug resistance in hospital microorganisms. Definition of problems and methods. Møller JK. **Dan Med Bull** 1990 Jun;37(3):263–74 (167 ref.)

Lomefloxacin, a new fluoroquinolone. Studies on in vitro antimicrobial spectrum, potency, and development of resistance. Aldridge KE, et al. **Diagn Microbiol Infect Dis** 1989 May–Jun;12(3):221–33

Statistical criteria for selecting quality control limits for broth microdilution susceptibility tests with 39 different antimicrobial agents. Collaborative Antimicrobial Susceptibility Testing Group. Barry AL, et al. **Diagn Microbiol Infect Dis** 1989 Sep–Oct;12(5):413–20

A ten-laboratory study of lomefloxacin (NY-198 or SC 47111) antimicrobial activity in Argentina. Bianchini HN, et al. **Diagn Microbiol Infect Dis** 1989 May–Jun;12(3 Suppl):45S–50S

Lomefloxacin (SC-47111 or NY-198). Comparative antimicrobial activity against 2002 clinical isolates from hospitals in Mexico City. Durazo F, et al. **Diagn Microbiol Infect Dis** 1990 Jan–Feb;13(1):71–5

Comparative in vitro activity of piperacillin combined with the beta-lactamase inhibitor tazobactam (YTR 830).

Eliopoulos GM, et al. **Diagn Microbiol Infect Dis** 1989 Nov-Dec;12(6):481-8

In vitro activity of lomefloxacin against Chlamydia trachomatis, Neisseria gonorrhoeae, Haemophilus ducreyi, Mycoplasma hominis, and Ureaplasma urealyticum. Hoban D, et al. **Diagn Microbiol Infect Dis** 1989 May-Jun;12(3 Suppl):83S-86S

Cefmetazole (CS-1170), a "new" cephamycin with a decade of clinical experience. Jones RN. **Diagn Microbiol Infect Dis** 1989 Sep-Oct;12(5):367-79 (74 ref.)

In vitro evaluation of ramoplanin (A16686 or MDL62198). A new depsipeptide complex for potential topical use. Jones RN, et al. **Diagn Microbiol Infect Dis** 1989 May-Jun; 12(3):279-82

Activity of ticarcillin/clavulanate and piperacillin/tazobactam (YTR 830; CL-298,741) against clinical isolates and against mutants derepressed for class I beta-lactamase. Knapp CC, et al. **Diagn Microbiol Infect Dis** 1989 Nov-Dec;12(6):511-5

Comparative in vitro activity of cefoperazone and various combinations of cefoperazone/sulbactam. Knapp CC, et al. **Diagn Microbiol Infect Dis** 1990 Jan-Feb;13(1):45-9

Lomefloxacin activity against 2,813 clinical isolates: a collaborative study at three medical centers in Brazil. Magalhaes M, et al. **Diagn Microbiol Infect Dis** 1989 May-Jun;12(3 Suppl):35S-39S

In vitro antimicrobial activity and postantibiotic effect of lomefloxacin, a new difluoroquinolone. Molinari G, et al. **Diagn Microbiol Infect Dis** 1989 May-Jun;12(3 Suppl):53S-56S

Overview of mechanisms of bacterial resistance. Neu HC. **Diagn Microbiol Infect Dis** 1989 Jul-Aug;12(4 Suppl):109S-116S (37 ref.)

Tazobactam prevention of emergence of resistance. Neu HC, et al. **Diagn Microbiol Infect Dis** 1989 Nov-Dec; 12(6):477-80

Comparative in vitro activity of a new fluorinated 4-quinolone, QA-241. Niu WW, et al. **Diagn Microbiol Infect Dis** 1989 May-Jun;12(3):243-51

Comparative in vitro activity of lomefloxacin, a difluoro-quinolone. Robbins MJ, et al. **Diagn Microbiol Infect Dis** 1989 May-Jun;12(3 Suppl):65S-76S

In vitro activity of lomefloxacin (NY-198 or SC 47111). Shah PM, et al. **Diagn Microbiol Infect Dis** 1989 May-Jun;12(3 Suppl):97S-101S

In vitro activity of lomefloxacin (SC 47111 or NY-198), a new quinolone antimicrobial, against clinical isolates of common pathogens. Sonstein SA, et al. **Diagn Microbiol Infect Dis** 1989 May-Jun;12(3 Suppl):21S-28S

Bactericidal activity of lomefloxacin SC 47111 (NY-198) and ciprofloxacin against selected pathogens. Stratton CW, et al. **Diagn Microbiol Infect Dis** 1989 May-Jun;12(3 Suppl):29S-34S

Antimicrobial activity of lomefloxacin (NY-198, SC 47111) against bacterial strains from Venezuela. Torres JR. **Diagn Microbiol Infect Dis** 1989 May-Jun;12(3 Suppl):41S-43S

In vitro evaluation of lomefloxacin activity in Colombia. Trujillo H, et al. **Diagn Microbiol Infect Dis** 1989 May-Jun; 12(3 Suppl):51S-52S

Comparative in vitro activity of lomefloxacin (SC 47111 or NY-198) against fresh clinical bacterial isolates. Wright DN, et al. **Diagn Microbiol Infect Dis** 1989 May-Jun;12(3 Suppl):7S-11S

Antibacterial activity and beta-lactamase stability of MDL 19,592, an oral cephalosporin. Yu KW, et al. **Diagn Microbiol Infect Dis** 1989 Sep-Oct;12(5):441-3

Cefixime. Leggett NJ, et al. **DICP** 1990 May;24(5):489-95 (36 ref.)

Effect on colonization resistance: an important criterion in selecting antibiotics. Vollaard EJ, et al. **DICP** 1990 Jan; 24(1):60-6 (52 ref.)

Effects of commonly used bowel preparations on the large bowel mucosal-associated and luminal microflora in the rat model. Lindsey JT, et al. **Dis Colon Rectum** 1990 Jul; 33(7):554-60

Netilmicin. A review of its antibacterial activity, pharmacokinetic properties and therapeutic use. Campoli-Richards DM, et al. **Drugs** 1989 Nov;38(5):703-56 (178 ref.)

Bacteriolytic combination effect of cefminox and piperacillin evaluated by turbidimetry. Goi H, et al. **Drugs Exp Clin Res** 1989;15(9):397-407

Comparative antimicrobial activities of ribostamycin, gentamicin, ampicillin and lincomycin in vitro and in vivo. Inouye S, et al. **Drugs Exp Clin Res** 1989;15(10):465-76

Antimicrobial activity of dactimicin in vitro compared with that of dibekacin, netilmicin, sisomicin and micronomicin. Inouye S, et al. **Drugs Exp Clin Res** 1989;15(10):455-63

Antibacterial activity of norfloxacin against 1700 relatively resistant clinical isolates. Qadri SM, et al. **Drugs Exp Clin Res** 1989;15(8):349-53

Once-daily aminoglycoside administration: new strategies for an old drug. Kovarik JM, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):761-9 (40 ref.)

Low-dose ciprofloxacin for selective decontamination of the digestive tract in human volunteers. Meijer-Severs GJ, et al. **Eur J Clin Microbiol Infect Dis** 1990 Apr;9(4):285-7

Biological studies on 1,2-benzisothiazole derivatives. III. Evaluation of antibacterial, antifungal and DNA-damaging activities of 1,2-benzisothiazolin-3-ones. Massimo G, et al. **Farmaco** 1990 Apr;45(4):439-46

The effect of synthetic iron chelators on bacterial growth in human serum. Brock JH, et al. **FEMS Microbiol Immunol** 1988 Jan;1(1):55-60

Antibacterial activity of phosphono dipeptides based on 1-amino-1-methylethanephosphonic acid. Zboińska E, et al. **FEMS Microbiol Lett** 1990 Jun 15;58(1):23-8

The absence of direct antimicrobial activity in extracts of cytotoxic lymphocytes. Joag S, et al. **Immunol Lett** 1989 Sep;22(3):195-8

Studies on synergism between penicillins and ambodryl (bromodiphenhydramine HCl), an antihistamine with antimicrobial property. Ray S, et al. **Indian J Exp Biol** 1990 Mar;28(3):253-8

Drug interaction of promethazine & other non-conventional antimicrobial chemotherapeutic agents. Chakrabarty AN, et al. **Indian J Med Res** 1989 Jul;89:233-7

Susceptibility pattern of bacterial isolates to lomefloxacin. Lalitha MK, et al. **Indian J Med Res** 1990 May;91:182-4

Susceptibility of clinical isolates to cephalosporins [letter] Rattan A. **Indian Pediatr** 1989 Sep;26(9):965-6

In vitro activity of cefpirome compared with other third generation cephalosporins against nosocomial isolates in Argentina. Casellas JM, et al. **Infection** 1990 May-Jun; 18(3):193-5

Antibacterial effect of the glucose oxidase-glucose system on food-poisoning organisms. Tiina M, et al. **Int J Food Microbiol** 1989 May;8(2):165-74

Bacteriological quality of broiler carcasses as affected by in-plant lactic acid decontamination. van der Marel GM, et al. **Int J Food Microbiol** 1988 Feb;6(1):31-42

Beta-lactamases, beta-lactamase inhibitors, and skin and skin-structure infections. Neu HC. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):896-904 (27 ref.)

Antimicrobial activity of environmental surface disinfectants in the absence and presence of bioburden [see comments] Christensen RP, et al. **J Am Dent Assoc** 1989 Oct; 119(4):493-505 Comment in: J Am Dent Assoc 1990 Jan;120(1):10-4.

Antibacterial properties of the bicyclic pyrazolidinones. Allen NE, et al. **J Antibiot (Tokyo)** 1990 Jan;43(1):92-9

Synthesis and antibacterial activity of C-2 carboxyethenylthio-carbapenem derivatives. Basker MJ, et al. **J Antibiot (Tokyo)** 1990 Jul;43(7):847-57

Synthesis and structure-activity relations in the class of 2-(pyridyl)penems. Bedeschi A, et al. **J Antibiot (Tokyo)** 1990 Mar;43(3):306-13

Structure-activity relationships of some arylglycine analogues and catechol isosteres of BRL 36650, a 6 alpha-formamido penicillin. Best DJ, et al. **J Antibiot (Tokyo)** 1990 May;43(5):574-7

6-(substituted methylene)penems, potent broad spectrum inhibitors of bacterial beta-lactamase. II. Racemic furyl and thienyl derivatives. Broom NJ, et al. **J Antibiot (Tokyo)** 1990 Jan;43(1):76-82

CP-84,657, a potent polyether anticoccidial related to portmicin and produced by Actinomadura sp. Dirlam JP, et al. **J Antibiot (Tokyo)** 1990 Jun;43(6):668-79

A80915, a new antibiotic complex produced by Streptomyces aculeolatus. Discovery, taxonomy, fermentation, isolation, characterization, and antibacterial evaluation. Fukuda DS, et al. **J Antibiot (Tokyo)** 1990 Jun;43(6):623-33

SF2487, a new polyether antibiotic produced by Actinomadura. Hatsu M, et al. **J Antibiot (Tokyo)** 1990 Mar;43(3):259-66

Amikacin analogs with a fluorinated amino acid side chain. Hoshi H, et al. **J Antibiot (Tokyo)** 1990 Jul;43(7):858-72

MK4588, a new antibiotic related to xanthocillin. Itoh J, et al. **J Antibiot (Tokyo)** 1990 May;43(5):456-61

Altromycins, novel pluramycin-like antibiotics. I. Taxonomy of the producing organism, fermentation and antibacterial activity. Jackson M, et al. **J Antibiot (Tokyo)** 1990 Mar; 43(3):223-8

Direct introduction of a formamido group into the 7 alpha (6 alpha)-position of cephalosporins (penicillins). Kamachi H, et al. **J Antibiot (Tokyo)** 1990 Jul;43(7):820-9

Fosfadecin and fosfocytocin, new nucleotide antibiotics produced by bacteria. Katayama N, et al. **J Antibiot (Tokyo)** 1990 Mar;43(3):238-46

LL-D49194 antibiotics, a novel family of antitumor agents: taxonomy, fermentation and biological properties. Maiese WM, et al. **J Antibiot (Tokyo)** 1990 Mar;43(3):253-8

Isolation, characterization and structures of PA-46101 A and B. Matsumoto M, et al. **J Antibiot (Tokyo)** 1990 Jul; 43(7):739-47

Chemical modification of erythromycins. IV. Synthesis and biological properties of 6-O-methylerythromycin B. Morimoto S, et al. **J Antibiot (Tokyo)** 1990 May;43(5):544-9

Chemical modification of erythromycins. II. Synthesis and antibacterial activity of O-alkyl derivatives of erythromycin A. Morimoto S, et al. **J Antibiot (Tokyo)** 1990 Mar;43(3):286-94

Chemical modification of erythromycins. V. Synthesis and antibacterial activity of 4"-O-methyl derivatives of erythromycin a 11,12-cyclic carbonate. Morimoto S, et al. **J Antibiot (Tokyo)** 1990 May;43(5):566-9

Chemical modification of erythromycins. III. In vitro and in vivo antibacterial activities of new semisynthetic 6-O-methylerythromycins A, TE-031 (clarithromycin) and TE-032. Morimoto S, et al. **J Antibiot (Tokyo)** 1990 Mar;43(3):295-305

Chemical modification of erythromycins. VI. Structure and antibacterial activity of acid degradation products of 6-O-methylerythromycins A. Morimoto S, et al. **J Antibiot (Tokyo)** 1990 May;43(5):570-3

Synthesis and antibacterial activity of novel 2-methyl-1-oxacephalosporins. Okonogi T, et al. **J Antibiot (Tokyo)** 1990 Apr;43(4):357-71

A new aminothiazolylcephalosporin having 1-carboxyethoxyimino group, ME1228. Shibahara S, et al. **J Antibiot (Tokyo)** 1990 Jan;43(1):62-9

A novel carbapenem antibiotic, SM-7338 structure-activity relationships. Sunagawa M, et al. **J Antibiot (Tokyo)** 1990 May;43(5):519-32

New orally active cephalosporin esters. Yamada H, et al. **J Antibiot (Tokyo)** 1990 May;43(5):578-83

Meropenem (SM7338)—a new carbapenem. Twenty-Eighth Interscience Conference on Antimicrobial Agents and Chemotherapy. Los Angeles, California, 1988. Fourth European Congress of Clinical Microbiology. Nice, France, 1989. Selected papers. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:1-320

Interactions of tazobactam and clavulanate with inducibly- and constitutively-expressed Class I beta-lactamases. Akova M, et al. **J Antimicrob Chemother** 1990 Feb; 25(2):199-208

A simple stacked disc technique for testing bacterial susceptibility to antimicrobial agents in combination with sulbactam. Barry AL, et al. **J Antimicrob Chemother** 1989 Dec;24(6):1016-8

In-vitro activity of meropenem imipenem, the penem HRE 664 and ceftazidine against clinical isolates from West Germany. Bauernfeind A, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:73-84

Comparative in-vitro activity of meropenem against clinical isolates including Enterobacteriaceae with expanded-spectrum beta-lactamases. Chanal C, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:133-41

In-vitro activity of meropenem against clinical isolates obtained in Canada. Clarke AM, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:47-55

Bactericidal activity of meropenem and interactions with other antibiotics. Ferrara A, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:239-50

Lincomycin disc susceptibility testing criteria [letter] Fuchs PC, et al. **J Antimicrob Chemother** 1990 Jun;25(6):1024-5

Use of the Malthus Microbial Growth Analyser to study the post antibiotic effect of antibiotics [published erratum appears in J Antimicrob Chemother 1990 Apr;25(4):727] Gould IM, et al. **J Antimicrob Chemother** 1989 Oct; 24(4):523-31

Inhibition of beta-lactamases by tazobactam and in-vitro antibacterial activity of tazobactam combined with piperacillin. Higashitani F, et al. **J Antimicrob Chemother** 1990 Apr;25(4):567-74

In-vitro activity of DR-3355, an optically active isomer of ofloxacin, against bacterial pathogens associated with travellers' diarrhoea. Inagaki Y, et al. **J Antimicrob Chemother** 1989 Oct;24(4):547-9

Bacteriostatic and bactericidal in-vitro activity of meropenem against clinical isolates, including Mycobacterium avium complex. Inderlied CB, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:85-99

An increase in the antimicrobial activity in vitro of fosfomycin under anaerobic conditions. Inouye S, et al. **J Antimicrob Chemother** 1989 Nov;24(5):657-66

In-vitro studies of meropenem. Jones RN, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:9-29

Comparative in-vitro activity of meropenem on clinical isolates from the United Kingdom. King A, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:31-45

Interactions of meropenem, with beta-lactamases, including enzymes with extended-spectrum activity against third-generation cephalosporins. Labia R, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:219-23

A continuous culture system for susceptibility testing [letter; comment] Lewis RJ. **J Antimicrob Chemother** 1989 Sep; 24(3):464 Comment on: J Antimicrob Chemother 1988 Dec;22(6):899-904.

The postantibiotic effect of meropenem and imipenem on selected bacteria. Nadler HL, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:225-31

The in-vitro activity, pharmacokinetics and tissue penetration of temafloxacin. Nye K, et al. **J Antimicrob Chemother** 1989 Sep;24(3):415-24

In-vitro studies with ramoplanin (MDL 62,198): a novel lipoglycopeptide antimicrobial. O'Hare MD, et al. **J Antimicrob Chemother** 1990 Feb;25(2):217-20

Development of a meropenem susceptibility disc: drug content, preliminary interpretive and quality control criteria and potency bioassay. Pitkin DH, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:251-8

Relationship of high tissue concentrations of azithromycin to bactericidal activity and efficacy in vivo. Retsema JA, et al. **J Antimicrob Chemother** 1990 Jan;25 Suppl A:83-9

In-vitro activity of cefetamet (Ro 15-8074) compared with other oral agents. Rozgonyi F, et al. **J Antimicrob Chemother** 1989 Oct;24(4):539-46

In-vitro activity of meropenem against clinical isolates in a multicentre study in Italy. Schito GC, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:57-72

Enhancement of leucocyte killing of resistant bacteria selected during exposure to aminoglycosides or quinolones. Schlaeffer F, et al. **J Antimicrob Chemother** 1990 Jun; 25(6):941–8

Susceptibility testing recommendations for ticarcillin/clavulanic acid in the Stokes' disc diffusion test [letter; comment] Sutherland R. **J Antimicrob Chemother** 1989 Sep;24(3):463–4 Comment on: J Antimicrob Chemother 1989 Feb;23(2):285–7.

Antimicrobial therapy and temperature [letter] Van Esser JW, et al. **J Antimicrob Chemother** 1990 Apr;25(4):716

Roxithromycin versus erythromycin: cross-resistance or cross-susceptibility? [letter] Varaldo PE, et al. **J Antimicrob Chemother** 1990 Apr;25(4):705–6

The antimicrobial activity of fusidic acid. Verbist L. **J Antimicrob Chemother** 1990 Feb;25 Suppl B:1–5 (20 ref.)

In-vitro activity of ciprofloxacin and other agents against oral bacteria. Wade WG. **J Antimicrob Chemother** 1989 Nov;24(5):683–7

Antibacterial properties of meropenem towards clinical isolates, beta-lactamase producers and laboratory mutants. Wiedemann B, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:197–205

Effect of phenoxyethanol, chlorhexidine and their combination on subgingival plaque bacteria. Wilson M, et al. **J Antimicrob Chemother** 1990 Jun;25(6):921–9

The in-vitro activity of cefpodoxime: a comparison with other oral cephalosporins. Wise R, et al. **J Antimicrob Chemother** 1990 Apr;25(4):541–50

Interactions of meropenem with class I chromosomal beta-lactamases. Yang YJ, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:207–17

Performance profiles of topical antimicrobials in vitro. Hart AP, et al. **J Appl Bacteriol** 1989 Sep;67(3):317–27

The bactericidal effect of isoascorbic acid combined with mild heat. Mackey BM, et al. **J Appl Bacteriol** 1989 Dec; 67(6):629–38

Techniques used for the determination of antimicrobial resistance and sensitivity in bacteria. Antimicrobial Agents Research Group. Piddock LJ. **J Appl Bacteriol** 1990 Apr; 68(4):307–18 (61 ref.)

Efficacy of chlorhexidine and sanguinarine mouthrinses on selected salivary microflora. Hoover JN, et al. **J Can Dent Assoc** 1990 Apr;56(4):325–7

In vitro and in vivo efficacy of YTR-830H and piperacillin combinations versus beta-lactamase-producing bacteria. Kuck NA, et al. **J Chemother** 1989 Jun;1(3):155–61

Comparative study of the in vitro antibacterial activity of ciprofloxacin and thirteen other antimicrobial drugs with respect to recently isolated pathogens. Maccanti O, et al. **J Chemother** 1990 Feb;2(1):31–6

In vitro comparison of the activity of cefotaxime and desacetylated cefotaxime and of their combination. Nanetti A, et al. **J Chemother** 1990 Jun;2(3):159–63

Evaluation of ciprofloxacin's activity against recent clinical isolates. Nani E, et al. **J Chemother** 1989 Aug;1(4):223–5

Antibacterial activity of the sulbactam-ampicillin combination. Sessarego FV, et al. **J Chemother** 1989 Dec; 1(6):384–7

Resistance to antibiotics and inorganic ions in virulent bacterial strains from a hospital. Vazquez F, et al. **J Chemother** 1989 Aug;1(4):233–9

Temafloxacin disk potency and tentative interpretive criteria for susceptibility tests. Barry AL, et al. **J Clin Microbiol** 1989 Dec;27(12):2861–3

Interpretive criteria for disk diffusion susceptibility testing of mupirocin, a topical antibiotic. Fuchs PC, et al. **J Clin Microbiol** 1990 Mar;28(3):608–9

Stability of viable-bacterium counts in liquid media used for preparation of inocula and subsequent impact on antimicrobial susceptibility test results. Hindler JA, et al. **J Clin Microbiol** 1990 Jun;28(6):1271–5

Bacteriostatic and bactericidal actions of boric acid against bacteria and fungi commonly found in urine. Meers PD, et al. **J Clin Pathol** 1990 Jun;43(6):484–7

The survival of subgingival plaque bacteria in an amine fluoride-containing gel. Bansal GS, et al. **J Clin Periodontol** 1990 Aug;17(7 Pt 1):414–8

The effects of 0.5% chlorhexidine and 0.2% triclosan containing toothpastes on salivary bacterial counts. Jenkins S, et al. **J Clin Periodontol** 1990 Feb;17(2):85–9

Effect of cleaning-in-place disinfectants on wild bacterial strains isolated from a milking line. Mattila T, et al. **J Dairy Res** 1990 Feb;57(1):33–9

Effects of fluoride on the microbial ecology of dental plaque. Bowden GH. **J Dent Res** 1990 Feb;69 Spec No:653–9; discussion 682–3 (66 ref.)

Prevention of population shifts in oral microbial communities in vitro by low fluoride concentrations. Bradshaw DJ, et al. **J Dent Res** 1990 Feb;69(2):436–41

Biochemical effects of fluoride on oral bacteria. Hamilton IR. **J Dent Res** 1990 Feb;69 Spec No:660–7; discussion 682–3 (80 ref.)

The effect of fluoride on the stability of oral bacterial communities in vitro. Marsh PD, et al. **J Dent Res** 1990 Feb;69 Spec No:668–71; discussion 682–3

Antibacterial activity of the leaves of Phyllanthus discoideus. Mensah JL, et al. **J Ethnopharmacol** 1990 Feb;28(1):129–33

Antimicrobial activity of some American algae. Perez RM, et al. **J Ethnopharmacol** 1990 Apr;29(1):111–6

The antimicrobial activity of Fleroxacin RO 23–6240, a third generation fluoroquinolone derivative, tested in vitro. Lázničková T, et al. **J Hyg Epidemiol Microbiol Immunol** 1990;34(1):77–80

Use of serum ultrafiltrate in the serum dilution test. Leggett JE, et al. **J Infect Dis** 1989 Oct;160(4):616–23

Perspective: the serum dilution test. MacLowry JD. **J Infect Dis** 1989 Oct;160(4):624–6 (10 ref.)

Antimicrobial susceptibility of bacteria isolated in 1985—with special reference to prevalence of methicillin-resistant staphylococcus aureus and activities of cefazolin, cefotaxime and piperacillin. Lee SY, et al. **J Korean Med Sci** 1987 Mar;2(1):35–42

Quinolone antibacterial agents substituted at the 7-position with spiroamines. Synthesis and structure-activity relationships. Culbertson TP, et al. **J Med Chem** 1990 Aug; 33(8):2270–5

Evaluation of the activity of four antimicrobial agents using an in vitro rapid micromethod against oral streptococci and various bacterial strains implicated in periodontitis. Chraïbi DI, et al. **J Periodont Res** 1990 Jul;25(4):201–6

Effect of 6 months use of a dentifrice and oral rinse containing sanguinaria extract and zinc chloride upon the microflora of the dental plaque and oral soft tissues. Harper DS, et al. **J Periodontol** 1990 Jun;61(6):359–63

Irrigation with 0.06% chlorhexidine in naturally occurring gingivitis. II. 6 months microbiological observations. Newman MG, et al. **J Periodontol** 1990 Jul;61(7):427–33

Susceptibility and resistance of plaque bacteria to minocycline. O'Connor BC, et al. **J Periodontol** 1990 Apr; 61(4):228–33

In vitro activity of a chlorhexidine-containing mouthwash against subgingival bacteria. Wade WG, et al. **J Periodontol** 1989 Sep;60(9):521–5

Susceptibility of oral bacteria to phenoxyethanol and phenoxyethanol/chlorhexidine combinations. Wilson M, et al. **J Periodontol** 1990 Aug;61(8):536–41

Bactericidal effects of photoactivated porphyrins—an alternative approach to antimicrobial drugs. Malik Z, et al. **J Photochem Photobiol B** 1990 May;5(3–4):281–93 (52 ref.)

Bactericidal effect of a disinfectant dental stone on irreversible hydrocolloid impressions and stone casts. Scutt RW. **J Prosthet Dent** 1989 Nov;62(5):605–7

An in vitro study of the antibacterial and antifungal properties of an irreversible hydrocolloid impression material impregnated with disinfectant. Tobias RS, et al. **J Prosthet Dent** 1989 Nov;62(5):601–5

Antibacterial properties of propolis (bee glue). Grange JM, et al. **J R Soc Med** 1990 Mar;83(3):159–60 (21 ref.)

Implications of beta-lactamase-inhibitor combinations. Fuchs PC, et al. **J Reprod Med** 1990 Mar;35(3 Suppl):317–21

Development of beta-lactamase inhibitors. Sutherland R. **J Reprod Med** 1990 Mar;35(3 Suppl):307–12

In vitro activity of five tetracyclines and some other antimicrobial agents against four porcine respiratory tract pathogens. Pijpers A, et al. **J Vet Pharmacol Ther** 1989 Sep;12(3):267–76

Preliminary screening of some Egyptian weeds for antimicrobial activity. El-Abyad MS, et al. **Microbios** 1990; 62(250):47–57

In vitro antibacterial effect of the essential oil of Thymus longiflorus Boiss. Cruz T, et al. **Microbios** 1989; 60(242):59–61

Antimicrobial activity of some 2-aminopyrimidines. Ghannoum M, et al. **Microbios** 1989;60(242):23–33

Chlorhexidine inactivation by saliva. Spijkervet FK, et al. **Oral Surg Oral Med Oral Pathol** 1990 Apr;69(4):444–9

The effects of contrast dye on bacterial growth: an in vitro model. Lee WA, et al. **Orthopedics** 1990 Mar;13(3):341–3

Synthesis and antimicrobial effect of some pyrimidine derivatives. el-Bahaie S, et al. **Pharmazie** 1990 Mar; 45(3):216–7

Salicylanilide and its heterocyclic analogues. A comparative study of their antimicrobial activity. Daidone G, et al. **Pharmazie** 1990 Jun;45(6):441–2

Solubilization of chrysin by a non-aromatic amine oxide. Masárová L, et al. **Pharmazie** 1989 Dec;44(12):865–6

Preoperative antibiotics and capsular contracture in augmentation mammaplasty. Gylbert L, et al. **Plast Reconstr Surg** 1990 Aug;86(2):260–7; discussion 268–9

Comparison of ozone and formaldehyde as poultry hatchery disinfectants. Whistler PE, et al. **Poult Sci** 1989 Oct; 68(10):1345–50

In vitro antibacterial activity of bismuth subsalicylate. Cornick NA, et al. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S9–10

Effect of bismuth subsalicylate on fecal microflora. Gorbach SL, et al. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S21–3

In vitro and in vivo effects of three bismuth compounds on fermentation by colonic bacteria. León-Barúa R, et al. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S24–9

In vitro antimicrobial activity of bismuth subsalicylate and other bismuth salts. Manhart MD. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S11–5

In vivo and in vitro antibacterial activity of conglutinin, a mammalian plasma lectin. Friis-Christiansen P, et al. **Scand J Immunol** 1990 Apr;31(4):453–60

In vitro activity of some newer quinolone compounds. Lim VK. **Singapore Med J** 1989 Feb;30(1):63–5

[Comparison of bacteriostatic ability of oleum of Perilla frutescens (L.) Britt., Cinnamomum cassia Presl and Nipagin A] Zhang Z, et al. **Chung Kuo Chung Yao Tsa Chih** 1990 Feb;15(2):95–7, 126–7 (Eng. Abstr.) (Chi)

[Molecular and epidemiological bases of bacterial resistance to antibiotics] Guillot JF. **Ann Rech Vet** 1990;21(1):1–11 (22 ref.) (Eng. Abstr.) (Fre)

[Study of the antimicrobial action of various essential oils extracted from Malagasy plants. II: Lauraceae] Raharivelomanana PJ, et al. **Arch Inst Pasteur Madagascar** 1989;56(1):261–71 (Eng. Abstr.) (Fre)

[The new quinolones] Lontie M. **J Pharm Belg** 1989 Jul–Aug; 44(4):292–301 (26 ref.) (Eng. Abstr.) (Fre)

[Model of bacteriologic effectiveness testing of disinfectants for veterinary medicine] Kleiner U, et al. **Arch Exp Veterinarmed** 1990;44(1):103–16 (Eng. Abstr.) (Ger)

[In vitro evaluation of lomefloxacin] Dette GA, et al. **Arzneimittelforschung** 1989 Aug;39(8):832–5 (Eng. Abstr.) (Ger)

[In-vitro activity of enoxacin: a multicenter study] Wiedemann B, et al. **Infection** 1989;17 Suppl 1:S3–5 (Eng. Abstr.) (Ger)

[The determination of the sensitivity of bacteria to therapeutic drugs] Linzenmeier G. **Int J Med Microbiol** 1990 Jun;273(2):261–76 (24 ref.) (Ger)

[A comment on the contribution by H. Rosin: "Beta-lactam antibiotics"] Cullmann W, et al. **Internist (Berl)** 1989 Sep; 30(9):628–9 (Ger)

[Antibacterial action of some saturated and unsaturated long-chain carboxylic acids and their bis(2-chloroethyl)aminoethyl esters in vitro] Jossifova LT, et al. **Pharmazie** 1989 Dec;44(12):854–6 (Eng. Abstr.) (Ger)

[Antimicrobial activity of quaternary ammonium compounds] Krysiński J. **Pharmazie** 1990 Jun;45(6):422–3 (Eng. Abstr.) (Ger)

[Rates of resistance of mastitis pathogens from cows in Switzerland] Hartmann H. **Schweiz Arch Tierheilkd** 1990; 132(6):325–9 (Eng. Abstr.) (Ger)

[The depletion of chemical disinfectants during their use (local consumption)] Hunger K. **Zentralbl Hyg Umweltmed** 1990 May;190(1–2):177–81 (Eng. Abstr.) (Ger)

[Methodological possibilities for in vitro evaluation of the antibiotic sensitivity of bacterial plaque from periodontal pockets] Caravaglio N, et al. **Ann Ig** 1989 Sep–Oct; 1(5):1269–78 (Eng. Abstr.) (Ita)

[Recent topics on cell-membrane impairment by bacteriocidal substances—special reference to defensin and perforin] Kohashi O. **Fukuoka Igaku Zasshi** 1989 Aug; 80(8):401–3 (Jpn)

[Chronological changes in bacteria isolated from the urinary tract and their drug sensitivities] Fukatsu H, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1149–56 (Eng. Abstr.) (Jpn)

[Urinary tract infection associated with urinary calculi. 2. Effects of antibiotics on bacteria within infected stones] Takeuchi H, et al. **Hinyokika Kiyo** 1989 May;35(5):755–61 (Eng. Abstr.) (Jpn)

[Hospital and district differences in susceptibilities to antibiotics of main clinical isolates] Igari J, et al. **Jpn J Antibiot** 1990 Feb;43(2):362–73 (Eng. Abstr.) (Jpn)

[Susceptibility of bacteria isolated from patients with lower respiratory tract infections to antibiotics (1986)] Ikemoto H, et al. **Jpn J Antibiot** 1989 Nov;42(11):2324–53 (Eng. Abstr.) (Jpn)

[Susceptibility of bacteria isolated from patients with lower respiratory tract infections to antibiotics (1987)] Ikemoto H, et al. **Jpn J Antibiot** 1990 Jan;43(1):147–80 (Eng. Abstr.) (Jpn)

[The influence of cefpodoxime proxetil on the intestinal bacterial flora] Iwata S, et al. **Jpn J Antibiot** 1989 Jul; 42(7):1667–84 (Eng. Abstr.) (Jpn)

[The influence of cefteram pivoxil on the intestinal bacterial flora] Iwata S, et al. **Jpn J Antibiot** 1989 Aug;42(8):1761–79 (Eng. Abstr.) (Jpn)

[Comparative studies on activities of antimicrobial agents against causative organisms isolated from urinary tract infections (1986). III. Secular changes in susceptibility] Kosaki N, et al. **Jpn J Antibiot** 1989 Oct;42(10):2189–312 (Eng. Abstr.) (Jpn)

[Combined effect of sulbactam/cefoperazone and other antibiotics against clinical isolates of multi-resistant strains. I. Effect of sulbactam against beta-lactams resistant strains and in vitro combined effect of sulbactam/cefoperazone with each of piperacillin, latamoxef, ceftazidime, fosfomycin and doxycycline] Kouda M, et al. **Jpn J Antibiot** 1990 Apr;43(4):636–58 (Eng. Abstr.) (Jpn)

[Clinical laboratory approach to estimating the effective administration dose of imipenem/cilastatin. Evaluation of the disk susceptibility test and its interpretation system] Matsuo K, et al. **Jpn J Antibiot** 1989 Nov;42(11):2377–92 (Eng. Abstr.) (Jpn)

[Effect of rokitamycin on bacterial flora in human feces] Motohiro T, et al. **Jpn J Antibiot** 1990 Feb;43(2):285–317 (Eng. Abstr.) (Jpn)

[Laboratory and clinical studies of cefodizime in pediatric field] Nakao Y, et al. **Jpn J Antibiot** 1989 Jun;42(6):1336–45 (Eng. Abstr.) (Jpn)

[Laboratory and clinical studies of norfloxacin in pediatric field] Nishimura T, et al. **Jpn J Antibiot** 1990 May;

43(5):860–71 (Eng. Abstr.) (Jpn)
[Laboratory and clinical studies on norfloxacin in pediatrics] Sato Y, et al. **Jpn J Antibiot** 1990 May;43(5):826–36 (Eng. Abstr.) (Jpn)
[Tosufloxacin tosilate] Shimada K. **Jpn J Antibiot** 1990 Apr; 43(4):583–602 (37 ref.) (Jpn)
[Laboratory and clinical studies on norfloxacin in the pediatric field] Toyonaga Y, et al. **Jpn J Antibiot** 1990 May; 43(5):808–25 (Eng. Abstr.) (Jpn)
[An experimental consideration of the improved (1974) Kelsy–Sykes test for bactericidal effect of disinfectants] Akiyama S, et al. **Kansenshogaku Zasshi** 1989 Jun; 63(6):575–83 (Eng. Abstr.) (Jpn)
[Studies on respiratory infections in primary care clinic (II). Distribution and antibiotic sensitivity to 45 agents of bacteria isolated from patients with respiratory infections visiting a doctor in private practice] Watanabe A, et al. **Kansenshogaku Zasshi** 1990 Jan;64(1):66–75 (Eng. Abstr.) (Jpn)
[Study on bacterial infection by the investigation of antimicrobial susceptibility of various clinical isolates. III. Comparison of drug susceptibility between the isolates from the materials of out– and in–patients, and among the isolates from the materials of different hospital units] Yamazaki E, et al. **Kansenshogaku Zasshi** 1989 Sep;63(9):1013–21 (Eng. Abstr.) (Jpn)
[Comparison of the bactericidal effects of acid glutaraldehyde and alkaline glutaraldehyde] Su SC, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Sep; 5(9):510–5 (Eng. Abstr.) (Jpn)
[Antibacterial and bactericidal activities of Japanese green tea] Toda M, et al. **Nippon Saikingaku Zasshi** 1989 Jul; 44(4):669–72 (Eng. Abstr.) (Jpn)
[Studies on FK482. II. Synthesis and structure–activity relationships of 7 beta–[(Z)–2–(2–aminothiazol–4–yl)–2–substituted acetamido]–3–vinyl–3–cephem–4–carboxylic acid derivatives] Inamoto Y, et al. **Yakugaku Zasshi** 1990 Apr; 110(4):246–57 (Eng. Abstr.) (Jpn)
[Molecular mechanism of N4–aminocytidine mutagenesis] Negishi K. **Yakugaku Zasshi** 1990 May;110(5):293–303 (33 ref.) (Eng. Abstr.) (Jpn)
[Synthetic cephalosporins. III. Synthesis and antibacterial activity of 7–[2–(2–Aminothiazol–4–yl)–3–carboxy–2–propenoamido]cep hal osporins and related compounds] Sakagami K, et al. **Yakugaku Zasshi** 1989 Jun;109(6):377–87 (Eng. Abstr.) (Jpn)
[Synthetic cephalosporins. IV. Synthesis and antibacterial activity of 7 beta–[(Z)–2–(2–aminothiazol–4–yl)–2–(O–substituted oxyimino)acetamido]–3–(1,2,3–triazol–1–yl)methyl–3–cephem–4–carboxylic acid and related compounds] Sakagami K, et al. **Yakugaku Zasshi** 1989 Dec; 109(12):957–61 (Eng. Abstr.) (Jpn)
[Studies on quinolone antibacterials. I. Synthesis and antibacterial activity of 7–(2–aminoethoxy)–, 7–(2–aminoethylthio)–, and 7–(2–aminoethylamino)–1–cyclopropyl–6–fluoro–1,4–dihydro–4–oxo qui noline –3–carboxylic acids and their derivatives] Yoshida T, et al. **Yakugaku Zasshi** 1990 Apr; 110(4):258–67 (Eng. Abstr.) (Jpn)
[Effectiveness of new quarternary ammonium chloride compounds against selected bacteria and fungi. XXI. Synthesis of alkoxymethyl–3,4–dimethyl– pyridine and 1–ethyloxymethyl–3–alkylthiomethylimidazole chlorides] Pernak J, et al. **Acta Pol Pharm** 1989;46(2):119–26 (Eng. Abstr.) (Pol)
[In vitro susceptibility to a new antimicrobial agent (imipenem) of pathogens isolated from inpatients at various centers] de Godoy CV, et al. **Rev Inst Med Trop Sao Paulo** 1989 May–Jun;31(3):169–76 (Eng. Abstr.) (Por)
[Effect of sisomicin on intestinal microflora and colonization resistance in rats and their offspring] Anufrieva RG, et al. **Antibiot Khimioter** 1989 Aug;34(8):596–601 (Eng. Abstr.) (Rus)
[Microbiological control of drug resistance of causative agents in suppurative–septic infections in newborn infants] Belokrysenko SS, et al. **Antibiot Khimioter** 1990 May; 35(5):21–4 (Eng. Abstr.) (Rus)
[The molecular organization of the bacterial outer membrane and its penetration by antibiotics with beta–lactam and aminoglycoside structures] Griaznova NS, et al. **Antibiot Khimioter** 1989 Dec;34(12):925–32 (59 ref.) (Rus)
[Influence of enterococci on the recovery of intestinal microflora changed by antibiotic therapy and carbohydrate nutrition] Korshunov VM, et al. **Antibiot Khimioter** 1989 Jun;34(6):433–7 (Eng. Abstr.) (Rus)
[Ecological aspects of modern chemotherapy] Navashin SM. **Antibiot Khimioter** 1989 Jun;34(6):406–9 (Rus)
[Microbial ecology of the upper respiratory tracts and antibiotics] Pruzhniak OV, et al. **Antibiot Khimioter** 1989 Jun;34(6):415–9 (Rus)
[Penicillin and the biochemistry of the microbial cell] Sazykin IuO. **Antibiot Khimioter** 1989 Jul;34(7):486–96 (Rus)
[Aminoglycoside–inactivating enzymes: current status of the problem] Taisova AS. **Antibiot Khimioter** 1990 Jun; 35(6):51–5 (53 ref.) (Rus)
[Effect of antibiotics on intestinal microflora and production of metabolites] Tamm AO, et al. **Antibiot Khimioter** 1989 Jun;34(6):409–14 (35 ref.) (Eng. Abstr.) (Rus)
[Use of microcomputers in determining the sensitivity of bacteria to antibiotics] Nakhaba VA, et al. **Lab Delo** 1990; (3):60–1 (Rus)
[Phagocytic reaction of the leukocytes in relation to chloramine–resistant opportunistic microbes] Balakliets NI, et al. **Mikrobiol Zh** 1985 Mar–Apr;47(2):78–81 (Eng. Abstr.) (Rus)
[The sensitivity to antibiotics and chloramine B of opportunistic microorganisms isolated from patients] Balakliets NI, et al. **Mikrobiol Zh** 1989 Nov–Dec;51(6):83–6 (Eng. Abstr.) (Rus)
[A modified method of determining the sensitivity of bacteria to furazolidone] Gorshevikova EV, et al. **Mikrobiol Zh** 1986 Nov–Dec;48(6):86–7 (Eng. Abstr.) (Rus)
[Antimicrobial activity of mycotoxins] Kharchenko SN. **Mikrobiol Zh** 1986 Jan–Feb;48(1):71–7 (Eng. Abstr.) (Rus)
[Antimicrobial properties of phenylheptatrienol in vitro and in vivo] Smirnov VV, et al. **Mikrobiol Zh** 1984 May–Jun; 46(3):7–10 (Eng. Abstr.) (Rus)
[The development of a method of nitrosoguanidine inactivation in the mutagenic treatment of bacteria] Kulichenko AN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Aug;(8):5–7 (Eng. Abstr.) (Rus)
[Comparison of in vitro activity of ciprofloxacin and pefloxacin against strains isolated from clinical material] Kumelj M, et al. **Plucne Bolesti** 1989 Jul–Dec;41(3–4):193–5 (Eng. Abstr.) (Scr)

ENZYMOLOGY

Microbial superoxide dismutases. Hassan HM. **Adv Genet** 1989;26:65–97 (210 ref.)
Emergence and persistence of beta–lactamase–producing bacteria in the upper respiratory tract in children treated with beta–lactam antibiotics. Eliasson I, et al. **Am J Med** 1990 May 14;88(5A):51S–55S
Secretion of phospholipases by bacterial pathogens may initiate preterm labor [letter] Bennett PR, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):241–2
A microtiter plate–based system for the semiautomated growth and assay of bacterial cells for beta–galactosidase activity. Menzel R. **Anal Biochem** 1989 Aug 15;181(1):40–50
The bacterial phosphoenolpyruvate: glycose phosphotransferase system. Meadow ND, et al. **Annu Rev Biochem** 1990;59:497–542 (331 ref.)
In vitro evaluation of BRL 42715, a novel beta–lactamase inhibitor. Coleman K, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1580–7
Inhibitory effects of quinolone antibacterial agents on eucaryotic topoisomerases and related test systems. Gootz TD, et al. **Antimicrob Agents Chemother** 1990 Jan; 34(1):8–12 (52 ref.)
In vitro inhibition of bacterial DNA gyrase by cinodine, a glycocinnamoylspermidine antibiotic. Osburne MS, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1450–2
Biochemical characteristics and physiological significance of major DNA topoisomerases. Sutcliffe JA, et al. **Antimicrob Agents Chemother** 1989 Dec;33(12):2027–33 (116 ref.)
Diverse potential of beta–lactamase inhibitors to induce class I enzymes. Weber DA, et al. **Antimicrob Agents Chemother** 1990 Jan;34(1):156–8
Characterization of sodium dodecyl sulfate–resistant proteolytic activity in the hyperthermophilic archaebacterium Pyrococcus furiosus. Blumentals II, et al. **Appl Environ Microbiol** 1990 Jul;56(7):1992–8
Enzymatic profiles of 11 barophilic bacteria under in situ conditions: evidence for pressure modulation of phenotype. Straube WL, et al. **Appl Environ Microbiol** 1990 Mar; 56(3):812–4
Survey of microbial oxygenases: trichloroethylene degradation by propane–oxidizing bacteria. Wackett LP, et al. **Appl Environ Microbiol** 1989 Nov;55(11):2960–4
Effect of environmental toxicants on enzyme biosynthesis: a comparison of beta–galactosidase, alpha–glucosidase and tryptophanase. Dutton RJ, et al. **Arch Environ Contam Toxicol** 1990 May–Jun;19(3):395–8
Cytochrome oxidase from thermophilic bacterium PS3 contains a fourth protein subunit. Gai WZ, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):414–21
A novel a–type terminal oxidase from Sulfolobus acidocaldarius with cytochrome c oxidase activity. Wakagi T, et al. **Biochem Biophys Res Commun** 1989 Dec 29; 165(3):1110–4
A halophilic extracellular protease from a halophilic archaebacterium strain 172 P1. Kamekura M, et al. **Biochem Cell Biol** 1990 Jan;68(1):352–9
Purification and properties of RNA polymerase from acidophilic heterotroph SJH. Beebee TJ. **Biochem Int** 1989 Dec;19(6):1223–9
Further kinetic and molecular characterization of an extremely heat–stable carboxylesterase from the thermoacidophilic archaebacterium Sulfolobus acidocaldarius. Sobek H, et al. **Biochem J** 1989 Aug 1; 261(3):993–8
F1 ATPase from the thermophilic bacterium PS3 (TF1) shows ATP modulation of oxygen exchange. Kasho VN, et al. **Biochemistry** 1989 Aug 22;28(17):6949–54
Isolation and characterization of an intracellular aminopeptidase from the extreme thermophilic archaebacterium Sulfolobus solfataricus. Hanner M, et al. **Biochim Biophys Acta** 1990 Feb 26;1033(2):148–53
Protein phosphorylation in prokaryotes. **Biochimie** 1989 Sep–Oct;71(9–10):987–1105
Protein phosphorylation in the bacterial chemotaxis system. Simon MI, et al. **Biochimie** 1989 Sep–Oct;71(9–10):1013–9 (31 ref.)
Roles of O–acetyl–L–homoserine sulfhydrylases in micro–organisms. Yamagata S. **Biochimie** 1989 Nov–Dec; 71(11–12):1125–43 (109 ref.)
PQQ and quinoprotein research—the first decade. Duine JA. **Biofactors** 1989 Dec;2(2):87–94 (73 ref.)
Lactate dehydrogenase from the extreme halophilic archaebacterium Halobacterium marismortui. Hecht K, et al. **Biol Chem Hoppe Seyler** 1990 Jun;371(6):515–9
Biodegradation of polyethylene foils by bacterial and liver homogenates. Wasserbauer R, et al. **Biomaterials** 1990 Jan; 11(1):36–40
Prospective study about the incidence of B lactamase producing bacteriae in otitis media in the population of the emergency room of the University Pediatric Hospital. Colón I, et al. **Bol Asoc Med P R** 1990 May;82(5):234–6
Determination of peptidyl dipeptidase activity in 24 bacterial species. Stevens J, et al. **Can J Microbiol** 1990 Jan; 36(1):56–9
Enzymatic sulfation of quercetin by arylsulfotransferase from a human intestinal bacterium. Koizumi M, et al. **Chem Pharm Bull (Tokyo)** 1990 Mar;38(3):794–6
Microbial enzymes for oxidation of organic molecules. Sariaslani FS. **Crit Rev Biotechnol** 1989;9(3):171–257 (383 ref.)
Interaction between cortisol and microbial proteases. Kuo WN, et al. **Cytobios** 1989;59(238–239):177–83
Bacterial enzymes: their role in the formation of mutagens and carcinogens in the intestine. Mallett AK, et al. **Dig Dis** 1990;8(2):71–9 (74 ref.)
Cytochrome aa3 from Sulfolobus acidocaldarius. A single–subunit, quinol–oxidizing archaebacterial terminal oxidase. Anemüller S, et al. **Eur J Biochem** 1990 Jul 31; 191(2):297–305
Molecular and cellular studies of tryptophanyl–tRNA synthetase using monoclonal antibodies. Evaluation of a common antigenic determinant in eukaryotic, prokaryotic and archaebacterial enzymes which maps outside the catalytic domain. Beresten SF, et al. **Eur J Biochem** 1989 Oct 1;184(3):575–81
Cloning and sequencing of the gene coding for aspartate aminotransferase from the thermoacidophilic archaebacterium Sulfolobus solfataricus. Cubellis MV, et al. **Eur J Biochem** 1989 Dec 8;186(1–2):375–81
Purification and characterization of a DNA polymerase from the archaebacterium Thermoplasma acidophilum. Hamal A, et al. **Eur J Biochem** 1990 Jul 5;190(3):517–21
Properties and primary structure of the L–malate dehydrogenase from the extremely thermophilic archaebacterium Methanothermus fervidus. Honka E, et al. **Eur J Biochem** 1990 Mar 30;188(3):623–32
Purification and characterization of serine–glyoxylate aminotransferase from a serine–producing methylotroph, Hyphomicrobium methylovorum GM2. Izumi Y, et al. **Eur J Biochem** 1990 Jun 20;190(2):285–90
Purification and characterization of hydroxypyruvate reductase from a serine–producing methylotroph, Hyphomicrobium methylovorum GM2. Izumi Y, et al. **Eur J Biochem** 1990 Jun 20;190(2):279–84
Thermostable beta–galactosidase from the archaebacterium Sulfolobus solfataricus. Purification and properties. Pisani FM, et al. **Eur J Biochem** 1990 Jan 26;187(2):321–8
The same domain motif for ubiquinone reduction in mitochondrial or chloroplast NADH dehydrogenase and bacterial glucose dehydrogenase. Friedrich T, et al. **FEBS Lett** 1990 Jun 4;265(1–2):37–40
Crystallization and preliminary X–ray crystallographic study of the quinoprotein methanol dehydrogenase from bacterium W3A1. Xia ZX, et al. **FEBS Lett** 1989 Nov 20; 258(1):175–6
Antigenic conservation of the ureases of spiral– and helical–shaped bacteria colonising the stomachs of man and animals. Newell DG, et al. **FEMS Microbiol Lett** 1989 Nov; 53(1–2):183–6
How is nitrogenase regulated by oxygen? Hill S. **FEMS Microbiol Rev** 1988 Apr–Jun;4(2):111–29 (179 ref.)
Sialic acid, serendipity, and sugar transport: discovery of the bacterial phosphotransferase system. Roseman S. **FEMS Microbiol Rev** 1989 Jun;5(1–2):3–11
Isocitrate dehydrogenase from thermophilic and mesophilic bacteria. Isolation and some characteristics. Edlin JD, et al. **Int J Biochem** 1989;21(11):1203–10
Purification and properties of a thermophilic and thermostable DNA polymerase from the archaebacterium Sulfolobus solfataricus. Rella R, et al. **Ital J Biochem** 1990 Mar–Apr;39(2):83–99
Identification of three genes coding for aminoglycoside–modifying enzymes by means of the polymerase chain reaction. Vliegenthart JS, et al. **J Antimicrob Chemother** 1990 May;25(5):759–65
Purification and characterization of an alpha–glucosidase from a hyperthermophilic archaebacterium, Pyrococcus furiosus, exhibiting a temperature optimum of 105 to 115 degrees C. Costantino HR, et al. **J Bacteriol** 1990 Jul; 172(7):3654–60
Copper–zinc superoxide dismutase of Caulobacter crescentus: cloning, sequencing, and mapping of the gene and

periplasmic location of the enzyme. Steinman HM, et al. **J Bacteriol** 1990 Jun;172(6):2901–10

Glyceraldehyde–3–phosphate dehydrogenase from the hyperthermophilic archaebacterium Pyrococcus woesei: characterization of the enzyme, cloning and sequencing of the gene, and expression in Escherichia coli. Zwickl P, et al. **J Bacteriol** 1990 Aug;172(8):4329–38

Microbial DNA topoisomerases and their inhibition by antibiotics. Zimmer C, et al. **J Basic Microbiol** 1990; 30(3):209–24 (119 ref.)

Signal peptidases and signal peptide hydrolases. Dev IK, et al. **J Bioenerg Biomembr** 1990 Jun;22(3):271–90 (133 ref.)

Sodium–transport NADH–quinone reductase of a marine Vibrio alginolyticus. Unemoto T, et al. **J Bioenerg Biomembr** 1989 Dec;21(6):649–62 (54 ref.)

Characterization of ribonuclease P from the archaebacterium Sulfolobus solfataricus. Darr SC, et al. **J Biol Chem** 1990 Aug 5;265(22):12927–32

Enzymic properties of thermopsin. Fusek M, et al. **J Biol Chem** 1990 Jan 25;265(3):1496–501

The reconstituted alpha 3 beta 3 delta complex of the thermostable F1–ATPase. Yokoyama K, et al. **J Biol Chem** 1989 Dec 25;264(36):21837–41

The ATPase activity of the alpha 3 beta 3 complex of the F1–ATPase of the thermophilic bacterium PS3 is inactivated on modification of tyrosine 307 in a single beta subunit by 7–chloro–4–nitrobenzofurazan. Yoshida M, et al. **J Biol Chem** 1990 Feb 15;265(5):2483–7

DNA substrate specificity of reverse gyrase from extremely thermophilic archaebacteria. Slesarev AI, et al. **J Biomol Struct Dyn** 1990 Feb;7(4):935–42

Sialidase (neuraminidase) activity among gram–negative anaerobic and capnophilic bacteria. Moncla BJ, et al. **J Clin Microbiol** 1990 Mar;28(3):422–5

Glutathione transferase in bacteria: subunit composition and antigenic characterization. Piccolomini R, et al. **J Gen Microbiol** 1989 Nov;135 (Pt 11):3119–25

Evolutionary relationships among bacterial carbamoyltransferases. Tricot C, et al. **J Gen Microbiol** 1989 Sep;135 (Pt 9):2453–64

A solid–phase immunoassay for detection of IgA1 protease activity on agar plates. Brown TA, et al. **J Immunol Methods** 1989 Oct 24;123(2):241–7

Estimation of immunoglobulin protease activity by quantitative rocket immunoelectrophoresis. Lassiter MO, et al. **J Immunol Methods** 1989 Sep 29;123(1):63–9

Small–angle neutron scattering from the reconstituted TF1 of H(+)–ATPase from thermophilic bacterium PS3 with deuterated subunits. Ito Y, et al. **J Mol Biol** 1990 May 20;213(2):289–302

Preliminary X–ray crystallographic study of malate dehydrogenases from the thermoacidophilic Archaebacteria Thermoplasma acidophilum and Sulfolobus acidocaldarius. Stezowski JJ, et al. **J Mol Biol** 1989 Aug 5;208(3):507–8

Biomembranes. Part N. Transport in bacteria, mitochondria, and chloroplasts: protonmotive force. **Methods Enzymol** 1986;126:1–832

Functional reconstitution of bacterial cytochrome oxidases in planar lipid bilayers. Hamamoto T, et al. **Methods Enzymol** 1986;126:123–38

A simple, one–step purification for cytochrome b from the bc1 complexes of bacteria. Payne WE, et al. **Methods Enzymol** 1986;126:325–31

Proton permeability of membrane sector (F0) of H(+)–transporting ATP synthase (F0F1) from a thermophilic bacterium. Sone N, et al. **Methods Enzymol** 1986;126:604–7

Cytochrome bc1 complexes of microorganisms. Trumpower BL. **Microbiol Rev** 1990 Jun;54(2):101–29 (188 ref.)

Fluorogenic detection of atypical coliforms from water samples. Cenci G, et al. **Microbiologica** 1990 Apr; 13(2):121–9

Glucanase–producing organisms in human dental plaques. Johnson JH. **Microbios** 1990;61(247):89–98

Archaebacterial reverse gyrase cleavage–site specificity is similar to that of eubacterial DNA topoisomerases I. Kovalsky OI, et al. **Nucleic Acids Res** 1990 May 11; 18(9):2801–5

Screening and characterization of restriction endonucleases from a bacterial culture collection in Hong Kong. Leung SM, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10133

The bacterial Kdp K(+)–ATPase and its relation to other transport ATPases, such as the Na+/K(+)– and Ca2(+)–ATPases in higher organisms. Epstein W, et al. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):479–86; discussion 486–7 (37 ref.)

Structural aspects of proton–pumping ATPases. Walker JE, et al. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):367–78 (56 ref.)

An attempt to unify the structure of polymerases. Delarue M, et al. **Protein Eng** 1990 May;3(6):461–7

Involvement of the bacterial phosphotransferase system in diverse mechanisms of transcriptional regulation. Saier MH Jr. **Res Microbiol** 1989 Jul–Aug;140(6):349–52

The intestinal microflora and the colon cancer connection. Gorbach SL, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S252–61 (74 ref.)

[Catalases, produced by microorganisms] Nikol'skaia EA, et al. **Mikrobiol Zh** 1984 Jul–Aug;46(4):83–93 (118 ref.) (Rus)

[A rapid penicillinase paper strip test for the detection of beta–lactamase] Petreska–Sibinovska D. **Srp Arh Celok Lek** 1989 Jan–Feb;117(1–2):39–46 (Eng. Abstr.) (Sec)

GENETICS

Methods for studying bacterial gene transfer in soil by conjugation and transduction. Stotzky G, et al. **Adv Appl Microbiol** 1990;35:57–169 (194 ref.)

Tracking genetically engineered microorganisms. Newman AR. **Anal Chem** 1989 Sep 1;61(17):1001A–1003A

Role of the DNA/membrane complex in prokaryotic DNA replication. Firshein W. **Annu Rev Microbiol** 1989; 43:89–120 (148 ref.)

Genetic basis of starvation survival in nondifferentiating bacteria. Matin A, et al. **Annu Rev Microbiol** 1989; 43:293–316 (109 ref.)

Genetics and regulation of bacterial lipid metabolism. Vanden Boom T, et al. **Annu Rev Microbiol** 1989;43:317–43 (136 ref.)

Plasmid–mediated 4–quinolone resistance: a real or apparent absence? Courvalin P. **Antimicrob Agents Chemother** 1990 May;34(5):681–4 (23 ref.)

Nomenclature for tetracycline resistance determinants. Levy SB, et al. **Antimicrob Agents Chemother** 1989 Aug; 33(8):1373–4

Outer membrane barrier as a mechanism of antimicrobial resistance. Nikaido H. **Antimicrob Agents Chemother** 1989 Nov;33(11):1831–6 (60 ref.)

Characterization of the Tet M determinants in urogenital and respiratory bacteria. Roberts MC. **Antimicrob Agents Chemother** 1990 Mar;34(3):476–8

Genetic basis of tetracycline resistance in urogenital bacteria. Roberts MC, et al. **Antimicrob Agents Chemother** 1990 Feb; 34(2):261–4

Purification of DNA for bacterial productivity estimates. Burnison BK, et al. **Appl Environ Microbiol** 1990 Feb; 56(2):362–5

Model to predict aerial dispersal of bacteria during environmental release. Knudsen GR. **Appl Environ Microbiol** 1989 Oct;55(10):2641–7

DNA hybridization to compare species compositions of natural bacterioplankton assemblages. Lee S, et al. **Appl Environ Microbiol** 1990 Mar;56(3):739–46

Comparison of phenotypic diversity and DNA heterogeneity in a population of soil bacteria. Torsvik V, et al. **Appl Environ Microbiol** 1990 Mar;56(3):776–81

High diversity in DNA of soil bacteria. Torsvik V, et al. **Appl Environ Microbiol** 1990 Mar;56(3):782–7

Homology and distribution of CO dehydrogenase structural genes in carboxydotrophic bacteria. Kraut M, et al. **Arch Microbiol** 1989;152(4):335–41

Complete nucleotide sequences of seven eubacterial genes coding for the elongation factor Tu: functional, structural and phylogenetic evaluations. Ludwig W, et al. **Arch Microbiol** 1990;153(3):241–7

Mutation rates to 4–quinolone resistance. Smith JT. **Arzneimittelforschung** 1990 Jan;40(1):65–8

Conserved N–terminal sequences in the flagellins of archaebacteria. Kalmokoff ML, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):154–60

Structural analysis of prokaryotic and eukaryotic 5S rRNAs by RNase H. Lorenz S, et al. **Biochimie** 1989 Nov–Dec; 71(11–12):1185–91

The polymerase chain reaction colony miniprep. Zon LI, et al. **Biotechniques** 1989 Jul–Aug;7(7):696–8

Partition–mediated incompatibility of bacterial plasmids. Austin S, et al. **Cell** 1990 Feb 9;60(3):351–4 (20 ref.)

Genetics of capsular polysaccharide production in bacteria. Boulnois GJ, et al. **Curr Top Microbiol Immunol** 1990; 150:1–18 (72 ref.)

Sequence analysis of the peptide–elongation factor EF–2 gene, downstream from those of ribosomal proteins H–S12 and H–S7, from the archaebacterial extreme halophile, Halobacterium halobium. Itoh T. **Eur J Biochem** 1989 Dec 8;186(1–2):213–9

Molecular genetic analysis of bacterial plasmid promiscuity. Krishnapillai V. **FEMS Microbiol Rev** 1988 Sep;4(3):223–37 (85 ref.)

Overproduction of microbial products. Second international symposium. České Budějovice (Czechoslovakia), July 3–8, 1988. Abstracts. **Folia Microbiol (Praha)** 1989;34(5):353–449

Expression of cloned restriction and modification genes, hjaIRM from Hyphomonas jannaschiana in Escherichia coli. Danaher RJ, et al. **Gene** 1990 Apr 30;89(1):129–32

Genes encoding the 7S RNA and tRNA(Ser) are linked to one of the two rRNA operons in the genome of the extremely thermophilic archaebacterium Methanothermus fervidus. Haas ES, et al. **Gene** 1990 May 31;90(1):51–9

Fluctuation analysis: the probability distribution of the number of mutants under different conditions. Stewart FM, et al. **Genetics** 1990 Jan;124(1):175–85

Evolutionary principles and the regulation of engineered bacteria. Davis BD. **Genome** 1989;31(2):864–9 (4 ref.)

Experimental studies on membrane permeability defects of drug–resistant bacteria. Mukherjee K, et al. **Indian J Med Res** 1989 Jul;89:238–42

A Caulobacter gene involved in polar morphogenesis. Driks A, et al. **J Bacteriol** 1990 Apr;172(4):2113–23

Differential expression of gap and pgk genes within the gap operon of Zymomonas mobilis. Eddy CK, et al. **J Bacteriol** 1989 Dec;171(12):6549–54

Circularity of the Caulobacter crescentus chromosome determined by pulsed–field gel electrophoresis. Ely B, et al. **J Bacteriol** 1990 Mar;172(3):1262–6

Expression of the Caulobacter heat shock gene dnaK is developmentally controlled during growth at normal temperatures. Gomes SL, et al. **J Bacteriol** 1990 Jun; 172(6):3051–9

Phenotypic characterization of the archaebacterial genus Sulfolobus: comparison of five wild–type strains. Grogan DW. **J Bacteriol** 1989 Dec;171(12):6710–9

A plasmid vector with a selectable marker for halophilic archaebacteria. Holmes ML, et al. **J Bacteriol** 1990 Feb; 172(2):756–61

Bacterial cell shape regulation: testing of additional predictions unique to the two–competing–sites model for peptidoglycan assembly and isolation of conditional rod–shaped mutants from some wild–type cocci. Lleo MM, et al. **J Bacteriol** 1990 Jul;172(7):3758–71

Brucella abortus 16S rRNA and lipid A reveal a phylogenetic relationship with members of the alpha–2 subdivision of the class Proteobacteria. Moreno E, et al. **J Bacteriol** 1990 Jul;172(7):3569–76

Chromosome map of the thermophilic archaebacterium Thermococcus celer. Noll KM. **J Bacteriol** 1989 Dec; 171(12):6720–5

Identification, distribution, and sequence analysis of new insertion elements in Caulobacter crescentus. Ohta N, et al. **J Bacteriol** 1990 Jan;172(1):236–42

Conservation of hydrogenase and polyferredoxin structures in the hyperthermophilic archaebacterium Methanothermus fervidus. Steigerwald VJ, et al. **J Bacteriol** 1990 Aug;172(8):4715–8

Purification, characterization, and gene cloning of thermopsin, a thermostable acid protease from Sulfolobus acidocaldarius. Lin X, et al. **J Biol Chem** 1990 Jan 25; 265(3):1490–5

Ribonuclease P: function and variation. Pace NR, et al. **J Biol Chem** 1990 Mar 5;265(7):3587–90 (42 ref.)

Mutants of luminous bacteria selected for bioluminescent toxicity tests. Wagner A, et al. **J Biolumin Chemilumin** 1989 Jul;4(1):342–5

Factors affecting conjugal transfer of plasmids encoding mercury resistance from pure cultures and mixed natural suspensions of epilithic bacteria. Rochelle PA, et al. **J Gen Microbiol** 1989 Feb;135 (Pt 2):409–24

The isolation and comparison of cellulase genes from two strains of Ruminococcus albus. Ware CE, et al. **J Gen Microbiol** 1989 Apr;135 (Pt 4):921–30

Organization and structure of the Methanococcus transcriptional unit homologous to the Escherichia coli "spectinomycin operon". Implications for the evolutionary relationship of 70 S and 80 S ribosomes. Auer J, et al. **J Mol Biol** 1989 Sep 5;209(1):21–36

Secondary structural elements exclusive to the sequences flanking ribosomal RNAs lend support to the monophyletic nature of the archaebacteria. Kjems J, et al. **J Mol Evol** 1990 Jul;31(1):25–32

Sequence alignment and evolutionary comparison of the L10 equivalent and L12 equivalent ribosomal proteins from archaebacteria, eubacteria, and eucaryotes. Shimmin LC, et al. **J Mol Evol** 1989 Nov;29(5):448–62

Small ribosomal subunit RNA sequences, evolutionary relationships among different life forms, and mitochondrial origins. Van de Peer Y, et al. **J Mol Evol** 1990 May; 30(5):463–76

Codon preferences in free–living microorganisms. Andersson SG, et al. **Microbiol Rev** 1990 Jun;54(2):198–210 (101 ref.)

Expression of sigma 54 (ntrA)–dependent genes is probably united by a common mechanism. Kustu S, et al. **Microbiol Rev** 1989 Sep;53(3):367–76 (133 ref.)

Evolution and phylogenetic distribution of the specialized isozymes of 3–deoxy–D–arabino–heptulosonate 7–phosphate synthase in superfamily–B prokaryotes. Jensen RA, et al. **Microbiol Sci** 1988 Oct;5(10):316–9 (21 ref.)

The use of bacterial genes encoding herbicide tolerance in constructing transgenic plants. Piruzian ES, et al. **Microbiol Sci** 1988 Aug;5(8):242–8 (53 ref.)

Greasy proteins [news] Pugsley AP. **Microbiol Sci** 1988 May; 5(5):153–5

Organization and evolution of the bacterial genome. Sukhodolets VV. **Microbiol Sci** 1988 Jul;5(7):202–6 (37 ref.)

Structure of the archaebacterial 7S RNA molecule. Kaine BP. **Mol Gen Genet** 1990 May;221(3):315–21

Identification and characterization of a defective SSV1 genome integrated into a tRNA gene in the archaebacterium Sulfolobus sp. B12. Reiter WD, et al. **Mol Gen Genet** 1990 Mar;221(1):65–71

Cloning and nucleotide sequence of an archaebacterial glutamine synthetase gene: phylogenetic implications. Sanangelantoni AM, et al. **Mol Gen Genet** 1990 Apr; 221(2):187–94

New perspectives in tetracycline resistance. Salyers AA, et al. **Mol Microbiol** 1990 Jan;4(1):151–6 (34 ref.)

Relationships from gene sequences [letter] Cedergren R, et al. **Nature** 1990 Jun 7;345(6275):484

Genetic diversity in Sargasso Sea bacterioplankton [see comments] Giovannoni SJ, et al. **Nature** 1990 May 3; 345(6270):60–3 Comment in: Nature 1990 May 3:345(6270):20.

Microbial ecology. Variation among the masses [news; comment] Olsen GJ. **Nature** 1990 May 3;345(6270):20 Comment on: Nature 1990 May 3;345(6270):60–3. Comment on: Nature 1990 May 3;345(6270):63–5.

Nucleotide sequence of the gene for elongation factor EF-1 alpha from the extreme thermophilic archaebacterium Thermococcus celer. Auer J, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):3989

Structure, organization and evolution of the L1 equivalent ribosomal protein gene of the archaebacterium Methanococcus vannielii. Baier G, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):719–24

Cassettes of the Streptoalloteichus hindustanus ble gene for transformation of lower and higher eukaryotes to phleomycin resistance. Drocourt D, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):4009

Isolation and direct complete nucleotide determination of entire genes. Characterization of a gene coding for 16S ribosomal RNA. Edwards U, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):7843–53

Organization of a ribosomal RNA gene cluster from the archaebacterium Methanothrix soehngenii. Eggen R, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1306

Coat protein TP4 of the virus TTV1: primary structure of the gene and the protein. Neumann H, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9475

A rapid semi-automated microtiter plate method for analysis and sequencing by PCR from bacterial stocks. Schofield JP, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9498

Circular chromosomal DNA in the sulfur-dependent archaebacterium Sulfolobus acidocaldarius. Yamagishi A, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1133–6

DNA methylation: evolution of a bacterial immune function into a regulator of gene expression and genome structure in higher eukaryotes. Bestor TH. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1235):179–87 (32 ref.)

Structures and homologies of carbohydrate: phosphotransferase system (PTS) proteins. Lengeler JW, et al. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):489–504 (44 ref.)

Conservation of the regulatory subunit for the Clp ATP-dependent protease in prokaryotes and eukaryotes. Gottesman S, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(9):3513–7

In vitro transcription of two rRNA genes of the archaebacterium Sulfolobus sp. B12 indicates a factor requirement for specific initiation. Hüdepohl U, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5851–5

Evolutionary relationship of archaebacteria, eubacteria, and eukaryotes inferred from phylogenetic trees of duplicated genes. Iwabe N, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9355–9

Genes for tryptophan biosynthesis in the archaebacterium Haloferax volcanii. Lam WL, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6614–8

FlbD of Caulobacter crescentus is a homologue of the NtrC (NRI) protein and activates sigma 54-dependent flagellar gene promoters. Ramakrishnan G, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2369–73

Towards a natural system of organisms: proposal for the domains Archaea, Bacteria, and Eucarya. Woese CR, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4576–9

Bacterial molecular epidemiology based on a nonradioactive probe complementary to ribosomal RNA. Altwegg M, et al. **Res Microbiol** 1989 May-Jun;140(4–5):325–33

A breath of fresh air—respiratory control demystified. Cole ST. **Res Microbiol** 1989 May-Jun;140(4–5):277–9

Turbo-screening of bacterial colonies using microwave denaturation on paper filters. Forster A, et al. **Trends Genet** 1990 May;6(5):141

[Risk assessment of the industrial application of genetically engineered microorganisms] Smalla K, et al. **Z Gesamte Hyg** 1989;35(8):475–7 (Eng. Abstr.) **(Ger)**

[Stability of plasmids and competition of plasmid-containing and plasmid-free strains during continuous cultivation] Filonov AE, et al. **Antibiot Khimioter** 1990 May;35(5):46–50 (68 ref.) **(Rus)**

[Genetic determination of degradation of ampholytic surfactants] Ovcharov LF, et al. **Mikrobiologiia** 1989 Nov-Dec;58(6):1043–4 (Eng. Abstr.) **(Rus)**

[Molecular biology of pathogenic bacteria] Smirnov GB, et al. **Vestn Akad Med Nauk SSSR** 1989;(7):13–9 (14 ref.) **(Rus)**

GROWTH & DEVELOPMENT

The risk of bacterial growth in units of blood that have warmed to more than 10 degrees C. Saxena S, et al. **Am J Clin Pathol** 1990 Jul;94(1):80–3

Bacterial overgrowth. Kirsch M. **Am J Gastroenterol** 1990 Mar;85(3):231–7 (74 ref.)

Evaluation of the insulin jet injector as a potential source of infection. Price JP, et al. **Am J Infect Control** 1989 Oct; 17(5):258–63

Bacterial surface contamination of patients' linen: isolation precautions versus standard care. Weinstein SA, et al. **Am J Infect Control** 1989 Oct;17(5):264–7

The hyperthermophilic archaebacterium, Pyrococcus furiosus. Development of culturing protocols, perspectives on scaleup, and potential applications. Blumentals II, et al. **Ann N Y Acad Sci** 1990;589:301–14

The ecology of the human intestine and its consequences for overgrowth by pathogens such as Clostridium difficile. van der Waaij D. **Annu Rev Microbiol** 1989;43:69–87 (108 ref.)

Effect of organic amendments on bacterial multiplication in lake water. Henis Y, et al. **Antonie Van Leeuwenhoek** 1990; 57(1):9–20

Growth rate determination of heterogeneous microbial population in swine manure. Ghaly AE, et al. **Appl Biochem Biotechnol** 1989 Oct;22(1):59–78

Lyophilization of rumen fluid for use in culture media. Dehority BA, et al. **Appl Environ Microbiol** 1989 Dec; 55(12):3237–9

Effect of growth rate and hydrophobicity on bacteria surviving protozoan grazing. Gurijala KR, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1631–5

Aerobic and anaerobic growth of rifampin-resistant denitrifying bacteria in soil. Murray RE, et al. **Appl Environ Microbiol** 1990 Feb;56(2):323–8

Stability of antibiotics under growth conditions for thermophilic anaerobes. Peteranderl R, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1981–3

Differential effects of sodium on hydrogen- and glucose-dependent growth of the acetogenic bacterium Acetogenium kivui. Yang HC, et al. **Appl Environ Microbiol** 1990 Jan;56(1):81–6

The effects of age, environmental temperature and relative humidity on the bacterial flora of the upper respiratory tract in calves. Woldehiwet Z, et al. **Br Vet J** 1990 May-Jun;146(3):211–8

Bacterial growth kinetics: modelling and evaluation of two-compartment radioassay. Boonkitticharoen V, et al. **Can J Microbiol** 1989 Sep;35(9):874–80

Bacterial colonization of domestic reverse-osmosis water filtration units. Payment P. **Can J Microbiol** 1989 Nov; 35(11):1065–7

Quantitative aspects of septicemia. Yagupsky P, et al. **Clin Microbiol Rev** 1990 Jul;3(3):269–79 (106 ref.)

Bacterial contamination of weaning foods and drinking water in rural Bangladesh. Henry FJ, et al. **Epidemiol Infect** 1990 Feb;104(1):79–85

Bacteriological quality of on-farm manufactured goat cheese. Tham WA, et al. **Epidemiol Infect** 1990 Feb;104(1):87–100

The survival patterns of selected faecal bacteria in tropical fresh waters. Wright RC. **Epidemiol Infect** 1989 Dec; 103(3):603–11

A tracheoscopic technique for obtaining uncontaminated lower airway secretions for bacterial culture in the horse [see comments] Darien BJ, et al. **Equine Vet J** 1990 May; 22(3):170–3 Comment in: Equine Vet J 1990 May;22(3):147–8.

Dynamics of microbial growth and cell composition in batch culture. Wanner U, et al. **FEMS Microbiol Rev** 1990 Mar; 6(1):19–43 (181 ref.)

The effects of a hydrocolloid dressing on bacterial growth and the healing process of leg ulcers. Annoni F, et al. **Int Angiol** 1989 Oct-Dec;8(4):224–8

Endotoxin and bacterial contamination of dialysis center water and dialysate; a cross sectional survey. Harding GB, et al. **Int J Artif Organs** 1990 Jan;13(1):39–43

Pharmacopoeia of culture media for food microbiology—additional monographs. **Int J Food Microbiol** 1989 Sep;9(2):85–144

The microbial ecology of tape ketan fermentation. Ardhana MM, et al. **Int J Food Microbiol** 1989 Nov;9(3):157–65

Microbiological quality of ayib, a traditional Ethiopian cottage cheese. Ashenafi M. **Int J Food Microbiol** 1990 May;10(3–4):263–8

Drinking water microbiology—new directions toward water quality enhancement. Geldreich EE. **Int J Food Microbiol** 1989 Dec;9(4):295–312 (69 ref.)

The bacteriology of fresh and spoiling Lake Victorian Nile perch (Lates niloticus). Gram L, et al. **Int J Food Microbiol** 1990 May;10(3–4):303–16

Microbiological safety of traditional and starter-mediated processes for the manufacture of Italian dry sausage. Holley RA, et al. **Int J Food Microbiol** 1988 Aug;7(1):49–62

Bacteriological examinations of chilled, cured canned pork hams and shoulders using a conventional microbiological technique and the DEFT method. Liberski DJ. **Int J Food Microbiol** 1990 Jan;10(1):19–22

Preincubation time and the use of oxygen indicators in determining the microbiological quality of aseptically packed pea and tomato soup. Mattila T, et al. **Int J Food Microbiol** 1989 Nov;9(3):205–14

Adequate protection of the public against food-transmitted diseases of microbial aetiology. Achievements and challenges, half a century after the introduction of the Prescott-Meyer-Wilson strategy of active intervention. Mossel DA. **Int J Food Microbiol** 1989 Dec;9(4):271–94 (206 ref.)

Survival of pathogenic microorganisms in an egg-nog-like product containing 7% ethanol. Notermans S, et al. **Int J Food Microbiol** 1990 May;10(3–4):209–17

A simple nutrient-tolerance (NT) test for the characterization of the different types of oligocarbotolerant and oligocarbophile water bacteria from non-carbonated mineral water. Schmidt-Lorenz W, et al. **Int J Food Microbiol** 1990 Mar;10(2):157–76

In-home pasteurization of raw goat's milk by microwave treatment. Thompson JS, et al. **Int J Food Microbiol** 1990 Jan;10(1):59–64

Ruminal fermentation pattern, bacterial population and ruminal degradation of feed ingredients as influenced by ruminal ammonia concentration. Song MK, et al. **J Anim Sci** 1990 Apr;68(4):1110–20

A predictive model for combined temperature and water activity on microbial growth during the growth phase. Davey KR. **J Appl Bacteriol** 1989 Nov;67(5):483–8

The inhibition by CO2 of the growth and metabolism of micro-organisms. Dixon NM, et al. **J Appl Bacteriol** 1989 Aug;67(2):109–36 (260 ref.)

Association of bacteria with the fungal fermentation of soybean tempe. Mulyowidarso RK, et al. **J Appl Bacteriol** 1990 Jan;68(1):43–7

Changes in bacterial populations during red tides caused by Mesodinium rubrum and Gymnodinium catenatum in North West Coast of Spain. Romalde JL, et al. **J Appl Bacteriol** 1990 Feb;68(2):123–32

The survival and transfer of microbial contamination via cloths, hands and utensils. Scott E, et al. **J Appl Bacteriol** 1990 Mar;68(3):271–8

Investigations of the effectiveness of detergent washing, drying and chemical disinfection on contamination of cleaning cloths. Scott E, et al. **J Appl Bacteriol** 1990 Mar; 68(3):279–83

Electronic particle counting for evaluating the quality of air in operating theatres: a potential basis for standards? Seal DV, et al. **J Appl Bacteriol** 1990 Mar;68(3):225–30

Characterization of the H2- and CO-dependent chemolithotrophic potentials of the acetogens Clostridium thermoaceticum and Acetogenium kivui. Daniel SL, et al. **J Bacteriol** 1990 Aug;172(8):4464–71

Some environmental and nutritional factors affecting growth of associated microorganisms of agadagidi. Sanni AI. **J Basic Microbiol** 1989;29(9):617–22

Effects of synthetic retinoids on the growth of bacteria and their susceptibility to antibiotics. Flemetakis AC, et al. **J Chemother** 1989 Dec;1(6):374–6

In vitro simulation of in vivo conditions: physical state of the culture medium. Lorian V. **J Clin Microbiol** 1989 Nov; 27(11):2403–6 (45 ref.)

The effect of udder preparation before milking and contamination from the milking plant on bacterial numbers in bulk milk of eight dairy herds. McKinnon CH, et al. **J Dairy Res** 1990 Aug;57(3):307–18

A survey of the microflora of raw and pasteurized milk and the sources of contamination in a milk processing plant in Addis Ababa, Ethiopia. Mahari T, et al. **J Dairy Res** 1990 May;57(2):233–8

Comparison of rapid tests for assessing UHT milk sterility. Reinheimer JA, et al. **J Dairy Res** 1990 May;57(2):239–43

Effects of amino acids and peptides on rumen microbial growth yields. Argyle JL, et al. **J Dairy Sci** 1989 Aug; 72(8):2017–27

Effects of centrifugation speed and freezing on composition of ruminal bacterial samples collected from defaunated sheep. Hsu JT, et al. **J Dairy Sci** 1990 Jan;73(1):149–52

Viability of bacteria in some intravenous fluids [letter] Acheampong YB. **J Hosp Infect** 1990 Jan;15(1):104–6

A new semiquantitative culture method for early detection of surgical incisional wound infection. Yip AW, et al. **J Infect Dis** 1990 May;161(5):972–6

The rapid evaluation of intestinal bacterial growth using a conjugate of ursodeoxycholic acid with para-aminobenzoic acid. Maeda Y, et al. **J Pharmacobiodyn** 1989 May; 12(5):272–80

Endometrial bacteria in asymptomatic, nonpregnant women. Hemsell DL, et al. **J Reprod Med** 1989 Nov;34(11):872–4

Model for the feedback control system of bacterial growth. II. Growth in continuous culture. Bleecken S. **J Theor Biol** 1989 Dec 7;141(3):325–62

Strategies for microbial growth at reduced water activities. Hocking AD. **Microbiol Sci** 1988 Sep;5(9):280–4 (43 ref.)

Influence of several feeds on bacteria in sheep and goat rumen liquor in vitro. Gonzalez-Lopez J, et al. **Microbios** 1990; 62(251):75–81

Antagonistic action of lactic cultures toward spoilage and pathogenic microorganisms in food. Kivanç M. **Nahrung** 1990;34(3):273–7

The microbiological quality of Erzincan (Savak) Tulum cheese from Turkish retail markets. Kivanç M. **Nahrung** 1989;33(9):895–900

Relationship of microbiological quality and oxidative stability of raw broiler meat during cold storage. Lillard HS, et al. **Poult Sci** 1989 Sep;68(9):1307–9

Food preservatives and the microbiological consequences of their reduction or omission. Roberts TA, et al. **Proc Nutr Soc** 1990 Feb;49(1):1–12 (21 ref.)

Quantification of nasopharyngeal bacteria for diagnosis of respiratory tract infection in children. Söderström M, et al. **Scand J Infect Dis** 1990;22(3):333–7

The 30-minute rule for reissuing blood: are we needlessly discarding units? [published erratum appears in Transfusion 1990 Feb;30(2):103] Hamill TR. **Transfusion** 1990 Jan; 30(1):58–62 (48 ref.)

Effects of room-temperature exposure on bacterial growth in stored red cells. Hamill TR, et al. **Transfusion** 1990 May; 30(4):302–6

Bacterial growth in mastitic whey in relation to bacterial association with mastitis. Kaartinen L, et al. **Vet Microbiol** 1989 Dec;21(2):155–63

Competitive exclusion—Salmonella in poultry [letter] Fowler NG, et al. **Vet Rec** 1989 Nov 11;125(20):512

Competitive exclusion—Salmonella in poultry [letter] Schneitz CE, et al. **Vet Rec** 1989 Dec 2;125(23):585

Differences in the intestinal microflora of normal and dystrophic BIO 8262 Nij Syrian hamsters. Engelen DP, et al. **Z Versuchstierkd** 1990;33(2):91–6

Magnitude of faecal contamination of rural community well waters in Nigeria and its relationship to well and water properties. Ogan MT. **Zentralbl Hyg Umweltmed** 1989 Dec; 189(3):277–83

Effect of frequent milkings on milk NAGase, plasmin, trypsin inhibitory capacity and the quality of whey as the growth medium for mastitis pathogens. Kaartinen L, et al. **Zentralbl Veterinarmed [B]** 1990 Jul;37(5):337–44

[Determination of thermograms of bacterial growth] Xie CL, et al. **Wei Sheng Wu Hsueh Pao** 1989 Apr;29(2):149–51 (Eng. Abstr.) (Chi)

[Long-term cryopreservation of microbial strains relevant to food hygiene] Beutling D. **Arch Exp Veterinarmed** 1989 Nov;43(6):835–41 (Eng. Abstr.) (Ger)

[The secondary microbial colonization of organ samples for bacterial meat examination] Schüppel H, et al. **Arch Exp Veterinarmed** 1989 Nov;43(6):849–54 (Eng. Abstr.) (Ger)

[The problems of the estimation of bacterial contamination in viral drinking water vaccines for poultry] Jungbäck C. **Berl Munch Tierarztl Wochenschr** 1990 Mar 1;103(3):81–3 (Eng. Abstr.) (Ger)

[Experiences with the testing of the microbial count in drinking water from two laying hen battery sheds] Adrian U, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Nov–Dec; 96(10):504–6 (Eng. Abstr.) (Ger)

[The basis of the disinfection of water] Carlson S. **Schriftenr Ver Wasser Boden Lufthyg** 1989;81:25–49 (34 ref.) (Ger)

[The determination of the growth rate of bacteria in the inspection of denitrification plants for drinking water purification] Werner P, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;81:161–74 (12 ref.) (Ger)

[The quantitative recovery of microbes during testing of disinfectants for instruments] Höller C, et al. **Zentralbl Hyg Umweltmed** 1990 Feb;189(4):300–11 (Eng. Abstr.) (Ger)

[Medical wastes. 2. Comparative studies of the microbial contamination of wastes from medical practices of different disciplines and household garbage] Jager E, et al. **Zentralbl Hyg Umweltmed** 1990 May;190(1–2):188–206 (Eng. Abstr.) (Ger)

[Induction of a microbial colonization of the walls of copper pipes through which drinking water flows] Tuschewitzki GJ. **Zentralbl Hyg Umweltmed** 1990 May;190(1–2):62–71 (Eng. Abstr.) (Ger)

[A mechanism of development of spatial–temporal orderliness in bacterial systems] Polezhaev AA, et al. **Biofizika** 1990 Mar–Apr;35(2):302–6 (Eng. Abstr.) (Rus)

[Formation of microbial biocenosis of wheat in a manned spacecraft] Drugova NA, et al. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):39–43 (Eng. Abstr.) (Rus)

[A diffusion chamber for growing microorganisms in vivo] Bilko IP. **Mikrobiol Zh** 1986 Jul–Aug;48(4):84–8 (Eng. Abstr.) (Rus)

[A method for assessing the degree of synchronization of microorganism cultures] Ivanov VN. **Mikrobiol Zh** 1985 Mar–Apr;47(2):95–101 (Eng. Abstr.) (Rus)

[The dynamics of the microorganism count of active sludge during the aerobic treatment of sewage] Tsygankov SP, et al. **Mikrobiol Zh** 1985 Jan–Feb;47(1):36–40 (Eng. Abstr.) (Rus)

[Hydrophilic–hydrophobic properties of microorganisms under various culturing conditions] Nikovskaia GN, et al. **Mikrobiologiia** 1989 May–Jun;58(3):448–51 (Eng. Abstr.) (Rus)

[Bacteriological comparison of colostrum and mature human milk] Atalay S, et al. **Mikrobiyol Bul** 1989 Apr;23(2):127–32 (Eng. Abstr.) (Tur)

[Microbiological analysis of well water samples in the rural areas near Ankara] Yuluğ N, et al. **Mikrobiyol Bul** 1988 Apr;22(2):164–71 (Eng. Abstr.) (Tur)

IMMUNOLOGY

Deficient intracellular killing of bacteria by murine alveolar macrophages. Nibbering PH, et al. **Am J Respir Cell Mol Biol** 1989 Nov;1(5):417–22

Molecular mechanisms of immunoglobulin A defense. Childers NK, et al. **Annu Rev Microbiol** 1989;43:503–36 (151 ref.)

Antiviral and antibacterial lipids in human milk and infant formula feeds. Isaacs CE, et al. **Arch Dis Child** 1990 Aug; 65(8):861–4

Occurrence of gamma-globulin-like antigens in bacteria. Schlesinger D, et al. **Arch Immunol Ther Exp (Warsz)** 1971; 19(5):689–93

Immunity to bacteria. Kaufmann SH. **Curr Opin Immunol** 1989–90 Feb;2(3):353–9 (30 ref.)

Immunity to bacteria and fungi. Kaufmann SH. **Curr Opin Immunol** 1989 Feb;1(3):431–40 (66 ref.)

Lymphokines and bacteria, that induce tumoricidal activity, trigger a different secretory response in macrophages. Keller R, et al. **Eur J Immunol** 1990 Mar;20(3):695–8

Is the conventional doctrine about macrophage activation still true? van Furth R, et al. **FEMS Microbiol Immunol** 1989 Apr;1(5):287–92

Bactericidal power of neutrophils in protein calorie malnutrition. Nayak KC, et al. **Indian J Pediatr** 1989 May–Jun;56(3):371–7

Abstracts of papers presented at the 42nd meeting of the Deutsche Gesellschaft für Hygiene und Mikrobiologie. Hannover, October 4–6, 1989. **Int J Med Microbiol** 1990 May;273(1):68–141

Digestive tract microflora liberates low molecular weight peptides with immunotriggering activity. Pulverer G, et al. **Int J Med Microbiol** 1990 Mar;272(3):318–27

Opsonophagocytosis of bacteria studied by chemiluminescence in microtitre plates. Hastings JG, et al. **J Biolumin Chemilumin** 1989 Jul;4(1):267–71

Immunological applications of type III Fc binding proteins. Comparison of different sources of protein G. Faulmann EL, et al. **J Immunol Methods** 1989 Oct 24;123(2):269–81

Complement C3 deposition onto bacteria by neonatal serum is not enhanced after the infusion of intravenous immunoglobulin. Lassiter HA, et al. **J Perinatol** 1990 Mar; 10(1):27–31

Cell wall fragments from major residents of the human intestinal flora induce chronic arthritis in rats. Severijnen AJ, et al. **J Rheumatol** 1989 Aug;16(8):1061–8

Suppression of the immune response by micro-organisms. Reimann S, et al. **Scand J Immunol** 1990 May;31(5):543–6

Inhibition of Dermatophilus congolensis by substances produced by bacteria found on the skin. Kingali JM, et al. **Vet Microbiol** 1990 Apr;22(2–3):237–40

New concepts in the interaction between T cells and bacteria. Finberg RW. **Year Immunol** 1989–90;6:140–51 (31 ref.)

Non-oxidative antibacterial activity of bovine neutrophil granule proteins towards mastitis pathogens. Grieve PA, et al. **Zentralbl Veterinarmed [B]** 1989 Sep;36(7):500–8

[Urinary tract infections in the elderly; what is its significance? (letter)] Statius van Eps LW, et al. **Ned Tijdschr Geneeskd** 1990 Jun 9;134(23):1153–4 (Dut)

[Natural killers and microorganisms: their reciprocal conditional dependence] Lomakin MS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Oct;(10):102–9 (55 ref.) (Rus)

ISOLATION & PURIFICATION

Bacteriological characterization of the effusion material in an animal model for serous and purulent otitis media. Johansson U, et al. **Acta Otolaryngol (Stockh)** 1990 Jul–Aug;110(1–2):100–4

The use of DNA probes to detect and identify microorganisms. Kohne DE. **Adv Exp Med Biol** 1990; 263:11–35 (6 ref.)

The rapid detection of clinically significant bacteria. Tilton RC. **Adv Exp Med Biol** 1990;263:111–4

Bacteria recovered from distilled water and inhalation therapy equipment. Moffet HL, et al. **Am J Dis Child** 1967 Jul;114(1):7–12

Microbial contamination of contact lens storage cases and solutions. Wilson LA, et al. **Am J Ophthalmol** 1990 Aug 15;110(2):193–8

Special consideration in wound bacteriology [editorial] Edlich RF. **Ann Emerg Med** 1990 Sep;19(9):1069

Incidence of multiple antibiotic resistances in organisms isolated from cases of infantile diarrhoea in a Nigerian oral rehydration therapy clinic. Lamikanra A, et al. **Ann Trop Paediatr** 1989 Dec;9(4):256–60

Evaluation of Stuart's transport medium containing penicillinase. An in vitro study. Brief report. Andreasen JJ, et al. **APMIS** 1989 Nov;97(11):1049–51

Test–retest reliability of the nasopharyngeal culture in children. Hemlin C, et al. **APMIS** 1989 Oct;97(10):887–90

Isolation of microorganisms capable of degrading isoquinoline under aerobic conditions. Aislabie J, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3247–9

Type of closure prevents microbial contamination of cosmetics during consumer use. Brannan DK, et al. **Appl Environ Microbiol** 1990 May;56(5):1476–9

New screening test to determine the acceptability of 0.45-micron membrane filters for analysis of water. Brenner KP, et al. **Appl Environ Microbiol** 1990 Jan;56(1):54–64

Effects of betaine on enumeration of airborne bacteria. Marthi B, et al. **Appl Environ Microbiol** 1990 May;56(5):1286–9

Construction and applications of DNA probes for detection of polychlorinated biphenyl-degrading genotypes in toxic organic-contaminated soil environments. Walia S, et al. **Appl Environ Microbiol** 1990 Jan;56(1):254–9

Contamination risks associated with electrosurgery [comment] Sebben JE. **Arch Dermatol** 1990 Jun; 126(6):805–8 Comment on: Arch Dermatol 1990 Jun;126(6):751–5.

Bacteria in epidermal cysts [letter;] Valentine MC. **Arch Dermatol** 1990 Aug;126(8):1103

Development of a bacteria-independent model of the multiple organ failure syndrome. Steinberg S, et al. **Arch Surg** 1989 Dec;124(12):1390–5

The efficacy of rubber dam isolation in reducing atmospheric bacterial contamination. Samaranayake LP, et al. **ASDC J Dent Child** 1989 Nov–Dec;56(6):442–4

Microbiological assays as predictors of the response to periodontal therapy. Newcomb GM, et al. **Aust Dent J** 1990 Jun;35(3):261–5

Contamination of contact lens storage cases by Acanthamoeba and bacteria. Larkin DF, et al. **Br J Ophthalmol** 1990 Mar;74(3):133–5

Bacterial contamination of contrast media stored after opening. Lisle D, et al. **Br J Radiol** 1990 Jul;63(751):532–4

Breast abscesses [letter; comment] Dixon JM. **Br J Surg** 1989 Jun;76(6):655 Comment on: Br J Surg 1989 Jan;76(1):103.

Biofilms, bacteria and bladder catheters. A clinical study. Ramsay JW, et al. **Br J Urol** 1989 Oct;64(4):395–8

Comparison of different membranes for use in the colony-immunoblot technique. Rodrigue L, et al. **Can J Microbiol** 1990 Mar;36(3):231–5

Glycocalyx positive bacteria isolated from chronic osteomyelitis and septic arthritis. Alam SI, et al. **Ceylon Med J** 1990 Mar;35(1):21–3

Yield of percutaneous needle lung aspiration in lung abscess. Peña Griñan N, et al. **Chest** 1990 Jan;97(1):69–74

Peripheral teflon catheters. Potential source for bacterial contamination of orthopedic implants? Wilkins J, et al. **Clin Orthop** 1990 May;(254):251–4

Qualitative intravascular catheter tip cultures do not predict catheter-related bacteremia. Nahass RG, et al. **Diagn Microbiol Infect Dis** 1990 May–Jun;13(3):223–6

Comparison of two commercial broth-culture systems for microbial detection in dialysates of patients on continuous ambulatory peritoneal dialysis. Saubolle MA, et al. **Diagn Microbiol Infect Dis** 1989 Nov–Dec;12(6):457–61

A comparison of oxoid signal with nonradiometric BACTEC NR-660 for detection of bacteremia. Schwabe LD, et al. **Diagn Microbiol Infect Dis** 1990 Jan–Feb;13(1):3–8

Importance of blood volume cultured in the detection of bacteremia. Arpi M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):838–42

Detection of bloodstream infections in children. Campos JM. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):815–24 (95 ref.)

Blood cultures: an overview. Washington JA. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):803–6 (24 ref.)

The bacteriology of operated renal stones. Bratell S, et al. **Eur Urol** 1990;17(1):58–61

Bacteriological findings in patients with bone marrow transplantation (Karl Marx University Leipzig, 1985–1987). Wonitzki C, et al. **Folia Haematol (Leipz)** 1989; 116(3–4):569–76

Response of lower genital tract flora to external pelvic irradiation. Gordon AN, et al. **Gynecol Oncol** 1989 Nov; 35(2):233–5

Quantitative bacteriology of intraoperative wound tissue in contaminated surgery. Becker GD, et al. **Head Neck** 1990 Jul–Aug;12(4):293–7

Conjunctival microbial flora in leprosy. Garg SP, et al. **Indian J Lepr** 1990 Jan–Mar;62(1):39–44

Clinicobacteriological correlates of congenital dacryocystitis. Bareja U, et al. **Indian J Ophthalmol** 1990 Apr–Jun; 38(2):66–9

A bacteriological study of the vagina in non specific vaginitis (NSV). Babu MH, et al. **Indian J Pathol Microbiol** 1987 Apr;30(2):127–34

Bacterial contamination of reconstituted oral rehydration solution. Nagarajan L, et al. **Indian Pediatr** 1990 Jan; 27(1):21–6

Changes in aerobic microflora of skin and gills of Mediterranean sardines (Sardina pilchardus) during storage in ice. Gennari M, et al. **Int J Food Microbiol** 1988 Jun; 6(4):341–7

A survey on the microbiological quality of various cheeses in Turkey. Kivanç M. **Int J Food Microbiol** 1989 Aug; 9(1):73–7

Microbiological quality of fresh pasta dumplings sold in Bologna and the surrounding district. Trovatelli LD, et al. **Int J Food Microbiol** 1988 Aug;7(1):19–24

The influence of extrinsic factors on the microbiological spoilage pattern of ground beef. von Holy A, et al. **Int J Food Microbiol** 1988 Jun;6(4):269–80

Isolation of Neisseria gonorrheae and concomitant bacterial microflora from urine obtained by suprapubic bladder puncture in women with gonococcal urethritis. Péč J Jr, et al. **Int Urol Nephrol** 1990;22(2):167–71

Effect of bile drainage from the choledochus on bacterial concentration. Chaimoff C, et al. **Isr J Med Sci** 1989 Dec; 25(12):723–5

Comparison of bacteria isolated from specimens obtained by use of endoscopic guarded tracheal swabbing and percutaneous tracheal aspiration in horses [see comments] Sweeney CR, et al. **J Am Vet Med Assoc** 1989 Nov 1; 195(9):1225–9 Comment in: J Am Vet Med Assoc 1990 Feb 1;196(3):392–3.

Species-specific oligodeoxynucleotide probes for the identification of periodontal bacteria. Dix K, et al. **J Clin Microbiol** 1990 Feb;28(2):319–23

Rapid detection of bacteria in cerebrospinal fluid by immunofluorescence staining on membrane filters. Lim LC, et al. **J Clin Microbiol** 1990 Apr;28(4):670–5

Agreement between visual and automated UniScept API readings. O'Hara CM, et al. **J Clin Microbiol** 1990 Mar; 28(3):452–4

Controlled comparison of a new Becton Dickinson agar slant blood culture system with Roche Septi-Chek for the detection of bacteremia and fungemia. Reimer LG, et al. **J Clin Microbiol** 1989 Dec;27(12):2637–9

Three-year experience with sonicated vascular catheter cultures in a clinical microbiology laboratory. Sherertz RJ, et al. **J Clin Microbiol** 1990 Jan;28(1):76–82

Effect of altered headspace atmosphere on yield and speed of detection of the Oxoid Signal blood culture system versus the BACTEC radiometric system. Weinstein MP, et al. **J Clin Microbiol** 1990 Apr;28(4):795–7

Comparative evaluation of radiometric tryptic soy broth versus radiometric tryptic soy broth with 10% sucrose for

detection of bacteremia and fungemia in pediatric patients. Weinstein MP, et al. **J Clin Microbiol** 1989 Nov; 27(11):2448–50

Rapid microbial detection and enumeration using gel microdroplets and colorimetric or fluorescence indicator systems. Williams GB, et al. **J Clin Microbiol** 1990 May; 28(5):1002–8

Immunohistochemical identification of bacteria in tissue sections [letter; comment] Feldman RG, et al. **J Clin Pathol** 1989 Nov;42(11):1228–9 Comment on: J Clin Pathol 1989 Mar;42(3):329–30.

ACP Broadsheet 124: May 1990. Examination of faeces for bacterial pathogens. Pedler SJ, et al. **J Clin Pathol** 1990 May;43(5):410–5

Reproducibility of microbiological samples from periodontal pockets. Dahlén G, et al. **J Clin Periodontol** 1990 Feb; 17(2):73–7

Suspected periodontopathogens in erupting third molar sites of periodontally healthy individuals. Mombelli A, et al. **J Clin Periodontol** 1990 Jan;17(1):48–54

Darkground microscopy of subgingival plaque from the top to the bottom of the periodontal pocket. Omar AA, et al. **J Clin Periodontol** 1990 Jul;17(6):364–70

Improved metabolic control, clinical periodontal status and subgingival microbiology in insulin-dependent diabetes mellitus. A prospective study. Sastrowijoto SH, et al. **J Clin Periodontol** 1990 Apr;17(4):233–42

Effect of dietary components on the indigenous oral bacterial flora of BALB/c mice. Blais JF, et al. **J Dent Res** 1990 Mar;69(3):868–73

Comparative microbiological and immunological studies of subgingival dental plaque from man and baboons. McMahon KT, et al. **J Dent Res** 1990 Jan;69(1):55–9

A microbiological study of early caries of approximal surfaces in schoolchildren. Marsh PD, et al. **J Dent Res** 1989 Jul;68(7):1151–4

Limit of resolution of flow cytometry for the detection of selected bacterial species. Obernesser MS, et al. **J Dent Res** 1990 Sep;69(9):1592–8

Aetiologic agents of diarrhoeal diseases in hospitalised children in Rawalpindi, Pakistan. Khan MM, et al. **J Diarrhoeal Dis Res** 1988 Sep–Dec;6(3–4):228–31

Bacterial flora in hepatic encephalopathy in bilharzial and non-bilharzial patients. el Hawey A, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2 Suppl):797–804

Skin sampling–validation of a pad method and comparison with commonly used methods. Hambraeus A, et al. **J Hosp Infect** 1990 Jul;16(1):19–27

Hygienic status of food handlers. Dumavibhat B, et al. **J Med Assoc Thai** 1989 Oct;72(10):577–82

Bacteria from solid tumours. Brook I. **J Med Microbiol** 1990 Jul;32(3):207–10

Bacterial contamination rate of urine collected in a urine bag from healthy non-toilet-trained male infants. Schlager TA, et al. **J Pediatr** 1990 May;116(5):738–9

Hyperosmolal formula in neonatal piglets: effects on gastrointestinal hormone concentrations, enteric bacterial titers, and small intestinal histology. Szabo JS, et al. **J Pediatr Gastroenterol Nutr** 1990 Jul;11(1):109–14

Microscopic characterization of root surface-associated microbial plaque in localized juvenile periodontitis. Douglass KD, et al. **J Periodontol** 1990 Aug;61(8):475–84

Effect of 0.12% chlorhexidine on bacterial recolonization following periodontal surgery. Newman MG, et al. **J Periodontol** 1989 Oct;60(10):577–81

The accuracy and efficacy of disinfection by spray atomization on elastomeric impressions. Drennon DG, et al. **J Prosthet Dent** 1989 Oct;62(4):468–75

The presence and identification of organisms transmitted to dental laboratories. Powell GL, et al. **J Prosthet Dent** 1990 Aug;64(2):235–7

Ecological studies on intestinal microbial flora of Kenyan children with diarrhoea. Tazume S, et al. **J Trop Med Hyg** 1990 Jun;93(3):215–21

Bacteriology of upper urinary tract stones. Hugosson J, et al. **J Urol** 1990 May;143(5):965–8

Microflora associated with the skin of the bowhead whale (Balaena mysticetus). Shotts EB Jr, et al. **J Wildl Dis** 1990 Jul;26(3):351–9

Comparison of the intestinal bacteria in specific pathogen free mice from different breeders. Hirayama K, et al. **Jikken Dobutsu** 1990 Apr;39(2):263–7

Annual report on findings of infectious agents in Japan 1987. **Jpn J Med Sci Biol** 1988;41 Suppl:1–117

A study of microbial flora of conjunctival sac in newborns. Lee PW, et al. **Korean J Ophthalmol** 1989 Jun;3(1):38–41

Mixed gastric infection by Gastrospirillum hominis and Helicobacter pylori [letter] Queiroz DM, et al. **Lancet** 1990 Aug 25;336(8713):507–8

Enumeration and identification of bacteria from environmental samples using nucleic acid probes. Hazen TC, et al. **Microbiol Sci** 1988 Nov;5(11):340–3 (23 ref.)

Dacus oleae microbial symbionts. Manousis T, et al. **Microbiol Sci** 1988 May;5(5):149–52 (25 ref.)

Isolation of methanogenic bacteria able to grow in high salt concentration. Pérez-Fillol M, et al. **Microbiologia** 1985 Sep;1(1–2):29–33

Isolation and characterization of moderately halophilic nonmotile rods from different saline habitats. Quesada E, et al. **Microbiologia** 1985 Sep;1(1–2):89–96

Isolation of acid producing sorbitol-adapted bacteria from dental plaque using selective agar media. Linke HA, et al. **Microbios** 1990;61(246):39–48

A mycological and bacteriological survey on feed ingredients and mixed poultry feeds in Reunion island. Bauduret P. **Mycopathologia** 1990 Mar;109(3):157–64

Oral complications of cancer therapies. Surveillance cultures. Schimpff SC. **NCI Monogr** 1990;(9):37–42

Bacteriologic findings of post-cesarean endometritis in adolescents. Berenson AB, et al. **Obstet Gynecol** 1990 Apr; 75(4):627–9

Relationship of bacteriologic characteristics to semen indices in men attending an infertility clinic. Hillier SL, et al. **Obstet Gynecol** 1990 May;75(5):800–4

The risk of intentional dissolution of the smear layer after mechanical preparation of root canals. Gutiérrez JH, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jul;70(1):96–108

Bacteria on stumps of amputees and the effect of antiseptics. Köhler P, et al. **Prosthet Orthot Int** 1989 Dec;13(3):149–51

Proposal of an easy method to improve routine sputum bacteriology. Spada EL, et al. **Respiration** 1989; 56(3–4):137–46

Clinical study on bacteria detected in the upper and lower respiratory tracts in patients with sinobronchial syndrome. Matsunaga T, et al. **Rhinology** 1989 Sep;27(3):169–78

The etiology of bacterial cellulitis as determined by fine-needle aspiration. Sigurdsson AF, et al. **Scand J Infect Dis** 1989;21(5):537–42

Airborne bacteria and viruses. Cox CS. **Sci Prog** 1989;73(292 Pt 4):469–99 (11 ref.)

Altered motility and bacterial flora after functional end-to-end anastomosis. Hocking MP, et al. **Surgery** 1990 Aug;108(2):384–91; discussion 391–2

Biliary stones and bacteriae in bile study in 211 consecutive cases. Matin MA, et al. **Tokushima J Exp Med** 1989 Jun; 36(1–2):11–6

Ants: potential mechanical vectors of hospital infections in Trinidad. Chadee DD, et al. **Trans R Soc Trop Med Hyg** 1990 Mar–Apr;84(2):297

Summer mastitis in heifers: a bacteriological examination of secretions from clinical cases of summer mastitis in Denmark. Madsen M, et al. **Vet Microbiol** 1990 May; 22(4):319–28

[Clinical significance of quantitative bacterial culture of the sub-eschar tissue in burns] Ma KX. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Sep;3(3):195–7 **(Chi)**

[Direct smear and staining of a burned tissue homogenate to predict the quantity of bacteria] Qin XJ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Mar;5(1):45–6 **(Chi)**

[On clinical examination of bacteria invading the deep tissues on burns] Tian FQ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Dec;1(4):289–91 (Eng. Abstr.) **(Chi)**

[The ratios and kinds of clinical bacteria isolated in Taiwan's large-size hospitals] Tsai WC, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1989 Feb;22(1):46–58 (Eng. Abstr.) **(Chi)**

[Synantrophic flies and other insects in the area of a hospital and microflora detected on their body surfaces] Daniel M, et al. **Cesk Epidemiol Mikrobiol Imunol** 1990 Jan; 39(1):21–31 (Eng. Abstr.) **(Cze)**

[The effectiveness of taking measures against infection in eye surgery. Microbiological study] Hakenová J, et al. **Cesk Oftalmol** 1990 Jul;46(4):307–11 (Eng. Abstr.) **(Cze)**

[Microbial contamination of tube feeding solutions] Jørgensen L, et al. **Ugeskr Laeger** 1990 Jun 18;152(25):1824–7 (Eng. Abstr.) **(Dan)**

[Thrombocyte concentrate infusions—a study of the frequency of contamination and its clinical significance] Mortensen LS, et al. **Ugeskr Laeger** 1990 Aug 20; 152(34):2431–3 (Eng. Abstr.) **(Dan)**

[Microbiologic studies of cysts and abscesses of Bartholin's gland] Quentin R, et al. **Rev Fr Gynecol Obstet** 1990 May; 85(5):328 **(Fre)**

[The nature of bacterial species isolated in the laboratory of a small hospital] Landry P, et al. **Rev Med Suisse Romande** 1990 Jul;110(7):625–32 **(Fre)**

[The effect of different centrifugation conditions in the isolation of mixed rumen bacteria on their content of nitrogen and diaminopimelic acid: use of duodenal content as raw material] Krawielitzki R, et al. **Arch Tierernahr** 1989 Oct;39(10):813–21 (Eng. Abstr.) **(Ger)**

[The microbiological study of pus and other inflammatory exudates] **Int J Med Microbiol** 1989 Nov;272(1):71–86 (4 ref.) **(Ger)**

[Ten years of quality control in the microscopic detection of acid-fast bacilli] Reinhardt A. **Z Erkr Atmungsorgane** 1989;173(1):75–80 (Eng. Abstr.) **(Ger)**

[Bacteria of the Flexibacter/Sporocytophaga group and violet-pigmented bacteria as indicators for hygienically doubtful drinking water] Schindler PR, et al. **Zentralbl Hyg Umweltmed** 1989 Oct;189(1):29–36 (Eng. Abstr.) **(Ger)**

[Effect of the isolation medium and isolation conditions on the isolation of the bacterial species spectrum in drinking water] Wernicke F, et al. **Zentralbl Hyg Umweltmed** 1990 May;190(1–2):26–38 (Eng. Abstr.) **(Ger)**

[Heterogeneity of microbial flora responsible for respiratory infections in AIDS] Sanduzzi A, et al. **Arch Monaldi Mal Torace** 1988 Mar–Apr;43(2):149–54 (Eng. Abstr.) **(Ita)**

[Bacterial flora of the external ear: preliminary data] Cavallo GP, et al. **G Batteriol Virol Immunol** 1988 Jan–Dec; 81(1–12):129–31 **(Ita)**

[Detection of beta-lactamase-producing strains isolated from urinary tract and their drug susceptibility] Fukatsu H, et al. **Hinyokika Kiyo** 1990 May;36(5):569–75 (Eng. Abstr.) **(Jpn)**

[Statistical studies on bacteria isolated from urinary tract infections(report 5)] Okada K, et al. **Hinyokika Kiyo** 1990 Mar;36(3):319–31 (Eng. Abstr.) **(Jpn)**

[Comparative study of the bacterial flora in both uterocervical and uterine regions] Chimura T, et al. **Jpn J Antibiot** 1990 Feb;43(2):321–5 (Eng. Abstr.) **(Jpn)**

[Comparative studies on activities of antimicrobial agents against causative organisms isolated from urinary tract infections (1986). II. Background of patients] Kosakai N, et al. **Jpn J Antibiot** 1989 Oct;42(10):2175–88 (Eng. Abstr.) **(Jpn)**

[Bacterial etiological factors of diarrhea in the stool of infants hospitalized in January 1987] Torbicka E, et al. **Przegl Epidemiol** 1989;43(4):366–72 (Eng. Abstr.) **(Pol)**

[Bacteria detected in the duodenal aspirate of patients with biliary tract disorders] Bur...veanu C, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Jan–Mar;93(1):139–43 (Eng. Abstr.) **(Rum)**

[Dynamics of microbial contamination of air in animal breeding farm housing] Eglite ME, et al. **Gig Sanit** 1989 Nov;(11):78–9 **(Rus)**

[Study of dissemination and penetration of microorganisms in protective clothing] Mol'kova VL, et al. **Gig Tr Prof Zabol** 1989;(9):40–3 (Eng. Abstr.) **(Rus)**

[The interaction of metal-containing carbon sorbents with pathogenic microflora] Grigor'ev AV, et al. **Klin Khir** 1990; (3):42–4 (Eng. Abstr.) **(Rus)**

[The identification and fibrinolytic activity of microorganisms—the causative agents of a banal urinary infection] Zhila VV. **Mikrobiol Zh** 1983 Sep–Oct;45(5):83–7 (Eng. Abstr.) **(Rus)**

[Clinico-bacteriologic and immunologic characteristics of healthy newborn infants and their mothers] Cherkasskaia RS, et al. **Pediatriia** 1990;(4):21–5 (Eng. Abstr.) **(Rus)**

[The nonspecific microflora of patients with newly detected active pulmonary tuberculosis complicated by bronchial obstruction] Selina LG, et al. **Probl Tuberk** 1989;(9):38–41 (Eng. Abstr.) **(Rus)**

[Rapid methods of detection of bacteria in the bile] Buianov VM, et al. **Sov Med** 1989;(11):30–4 (Eng. Abstr.) **(Rus)**

[Microbial landscape in diffuse suppurative peritonitis with a background of antibacterial therapy] Karimov ShI, et al. **Sov Med** 1989;(8):66–70 **(Rus)**

[Relation between microbiological monitoring and the risk of hospital infection in obstetrical departments] Bašić F, et al. **Med Arh** 1989;43(1):31–6 (Eng. Abstr.) **(Scr)**

[Study of bacteriologic contamination of porcelain and plastic dishes as well as eating utensils in a hospital environment] Bašić F, et al. **Med Arh** 1984;38(2):85–8 (Eng. Abstr.) **(Scr)**

[The effect of immunologic and bacteriologic factors on the surgical outcome in palatoschisis] Hasanbegović-Ferović D. **Med Arh** 1987;41(4):159–61 (Eng. Abstr.) **(Scr)**

[Serum immunoglobulin levels and bacteriologic status of the tonsils in children with tonsillectomies] Purišić S, et al. **Med Arh** 1985;39(6):261–3 **(Scr)**

[Clinical evaluation of the stool culture in acute diarrhea] Navarro González J, et al. **An Esp Pediatr** 1989 Jun; 30(6):457–62 (Eng. Abstr.) **(Spa)**

[Experimental peritonitis: sequential bacteriologic study of the lymph and blood] Gramática L, et al. **Rev Esp Enferm Apar Dig** 1989 Dec;76(6 Pt 1):589–91 (Eng. Abstr.) **(Spa)**

[The identification and comparison of gram-negative Enterobacteriaceae and non-fermentative bacteria by the conventional manual method and the Quantum II microbiology system] Akyön Y, et al. **Mikrobiyol Bul** 1988 Jan;22(1):8–16 (Eng. Abstr.) **(Tur)**

[Bacteria isolated from urine and renal tissue samples and their relation to renal histology] Gökalp A, et al. **Mikrobiyol Bul** 1988 Jan;22(1):1–7 (Eng. Abstr.) **(Tur)**

METABOLISM

Intracolonic bacterial metabolism. Bustos Fernández L, et al. **Acta Gastroenterol Latinoam** 1989;19(4):187–96 (61 ref.)

In vitro fermentation of neutral monosaccharides by ruminal and human fecal microflora. Barry JL, et al. **Acta Vet Scand Suppl** 1989;86:93–5

Microbial digestion in the large intestine in relation to monogastric and polygastric herbivores. Tisserand JL. **Acta Vet Scand Suppl** 1989;86:83–92 (43 ref.)

Microbial levan. Han YW. **Adv Appl Microbiol** 1990; 35:171–94 (71 ref.)

Circulating ionic currents in micro-organisms. Gow NA. **Adv Microb Physiol** 1989;30:89–123 (76 ref.)

Trends and perspectives in nitrogen fixation research. Postgate J. **Adv Microb Physiol** 1989;30:1–22 (75 ref.)

Physiology, biochemistry and genetics of bacterial glycogen synthesis. Preiss J, et al. **Adv Microb Physiol** 1989; 30:183–238 (130 ref.)

Autotrophic nitrification in bacteria. Prosser JI. **Adv Microb Physiol** 1989;30:125–81 (110 ref.)

Role of cellular design in bacterial metal accumulation and mineralization. Beveridge TJ. **Annu Rev Microbiol** 1989; 43:147–71 (110 ref.)

Evolution of a biosynthetic pathway: the tryptophan

paradigm. Crawford IP. **Annu Rev Microbiol** 1989; 43:567–600 (69 ref.)
Alkalophilic bacteria. Krulwich TA, et al. **Annu Rev Microbiol** 1989;43:435–63 (146 ref.)
Bacterial exopolysaccharides—their nature and production. Sutherland IW. **Antibiot Chemother** 1989;42:50–5 (13 ref.)
Outer membrane permeability and beta-lactamase stability of dipolar ionic cephalosporins containing methoxyimino substituents. Nikaido H, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):337–42
Combined heterotrophic nitrification and aerobic denitrification in Thiosphaera pantotropha and other bacteria. Robertson LA, et al. **Antonie Van Leeuwenhoek** 1990 Apr;57(3):139–52 (55 ref.)
Binding of bacteria to carbohydrates immobilized on beads to demonstrate the presence of cell-associated hemagglutinins in Vibrio cholerae. Sanchez J, et al. **APMIS** 1990 Apr;98(4):353–7
Detection of ruminal bacteria that degrade toxic dihydroxypyridine compounds produced from mimosine. Allison MJ, et al. **Appl Environ Microbiol** 1990 Mar; 56(3):590–4
Substrate interactions during aerobic biodegradation of benzene. Arvin E, et al. **Appl Environ Microbiol** 1989 Dec; 55(12):3221–5
Tetrachloroethene transformation to trichloroethene and cis-1,2-dichloroethene by sulfate-reducing enrichment cultures. Bagley DM, et al. **Appl Environ Microbiol** 1990 Aug;56(8):2511–6
Stable carbon isotope analysis of nucleic acids to trace sources of dissolved substrates used by estuarine bacteria. Coffin RB, et al. **Appl Environ Microbiol** 1990 Jul; 56(7):2012–20
Bacterial degradation of styrene involving a novel flavin adenine dinucleotide-dependent styrene monooxygenase. Hartmans S, et al. **Appl Environ Microbiol** 1990 May; 56(5):1347–51
Thymidine uptake, thymidine incorporation, and thymidine kinase activity in marine bacterium isolates. Jeffrey WH, et al. **Appl Environ Microbiol** 1990 May;56(5):1367–72
Pyrite oxidation by thermophilic archaebacteria. Larsson L, et al. **Appl Environ Microbiol** 1990 Mar;56(3):697–701
Layered structure of bacterial aggregates produced in an upflow anaerobic sludge bed and filter reactor. MacLeod FA, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1598–607
Bacterial secondary production on vascular plant detritus: relationships to detritus composition and degradation rate. Moran MA, et al. **Appl Environ Microbiol** 1989 Sep; 55(9):2178–89
Bacterial sorption of heavy metals. Mullen MD, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3143–9
Organomercurial-volatilizing bacteria in the mercury-polluted sediment of Minamata Bay, Japan. Nakamura K, et al. **Appl Environ Microbiol** 1990 Jan; 56(1):304–5
Chlorinated biphenyl mineralization by individual populations and consortia of freshwater bacteria. Pettigrew CA, et al. **Appl Environ Microbiol** 1990 Jul;56(7):2036–45
Inoculum size as a factor limiting success of inoculation for biodegradation. Ramadan MA, et al. **Appl Environ Microbiol** 1990 May;56(5):1392–6
Production of poly-(beta-hydroxybutyric-co-beta-hydroxyvaleric) acids. Ramsay BA, et al. **Appl Environ Microbiol** 1990 Jul; 56(7):2093–8
Phosphonate utilization by bacterial cultures and enrichments from environmental samples. Schowanek D, et al. **Appl Environ Microbiol** 1990 Apr;56(4):895–903
Microbial degradation of seven amides by suspended bacterial populations. Steen WC, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2545–9
Ammonia-oxidizing bacteria in a chloraminated distribution system: seasonal occurrence, distribution and disinfection resistance. Wolfe RL, et al. **Appl Environ Microbiol** 1990 Feb;56(2):451–62
Constituents of salivary supernatant responsible for stimulation of oxygen uptake by the bacteria in human salivary sediment. Korayem M, et al. **Arch Oral Biol** 1990; 35(2):145–52
Incorporation of soya oil hydrolysate in the diet of defaunated or refaunated sheep: effect on rumen fermentation in vitro. Broudiscou L, et al. **Arch Tierernahr** 1990 Apr;40(4):329–37
Calditol tetraether lipids of the archaebacterium Sulfolobus solfataricus. Biosynthetic studies. Nicolaus B, et al. **Biochem J** 1990 Mar 15;266(3):785–91
Testosterone metabolism by human axillary bacteria. Rennie PJ, et al. **Biochem Soc Trans** 1989 Dec;17(6):1017–8
Red shift of absorption maxima in chlorobiineae through enzymic methylation of their antenna bacteriochlorophylls. Bobe FW, et al. **Biochemistry** 1990 May 8;29(18):4340–8
Unusual redox properties of electron-transfer flavoprotein from Methylophilus methylotrophus. Byron CM, et al. **Biochemistry** 1989 Oct 17;28(21):8582–7
Biosynthetic studies of substituent homologation in bacteriochlorophylls c and d. Huster MS, et al. **Biochemistry** 1990 May 8;29(18):4348–55
Inhibition by trimethylamine of methylamine oxidation by Paracoccus denitrificans and bacterium W3A1. Davidson VL, et al. **Biochim Biophys Acta** 1990 Apr 26; 1016(3):339–43
The role of futile cycles in the energetics of bacterial growth. Neijssel OM, et al. **Biochim Biophys Acta** 1990 Jul 25; 1018(2–3):252–5
Polyphosphate as a source of phosphoryl group in protein modification in the archaebacterium Sulfolobus acidocaldarius. Skorko R. **Biochimie** 1989 Sep–Oct; 71(9–10):1089–93
Derivatives of glutamic acid and trehalose which can be transformed into long-living free radicals by the loss of an electron are identified in some bacteria. Biniukov VI, et al. **Biofactors** 1989 Dec;2(2):95–7
Roles of trace metals in transcriptional control of microbial secondary metabolism. Weinberg ED. **Biol Met** 1990; 2(4):191–6 (48 ref.)
Characterization of new bacterial transformation products of 1,1,1-trichloro-2,2-bis-(4-chlorophenyl) ethane (DDT) by gas chromatography/mass spectrometry. Massé R, et al. **Biomed Environ Mass Spectrom** 1989 Sep;18(9):741–52
Rapid analysis of bacterial adhesion in a microplate assay. Shea C, et al. **Biotechniques** 1990 Jun;8(6):610–1
A fast spheroplast formation procedure in some 2,5-diketo-D-gluconate- and 2-keto-L-gulonate-producing bacteria. Verma V, et al. **Biotechniques** 1989 May;7(5):449–52
The effect of bacterial products on human fibroblast and keratinocyte detachment and viability. Taylor D, et al. **Br J Dermatol** 1990 Jan;122(1):23–8
Effects of some poorly digestible carbohydrates on bile acid bacterial transformations in the rat [published erratum appears in Br J Nutr 1989 Sep;62(2):following 525] Andrieux C, et al. **Br J Nutr** 1989 Jul;62(1):103–19
Lipid metabolism of liquid-associated and solid-adherent bacteria in rumen contents of dairy cows offered lipid-supplemented diets. Bauchart D, et al. **Br J Nutr** 1990 May;63(3):563–78
Dietary modification of potential vitamin K supply from enteric bacterial menaquinones in rats. Mathers JC, et al. **Br J Nutr** 1990 May;63(3):639–52
Biodegradation of azo dyes in multistage rotating biological contactor immobilized by assimilating bacteria. Ogawa T, et al. **Bull Environ Contam Toxicol** 1990 Apr;44(4):561–6
Nitrification of swine waste. Blouin M, et al. **Can J Microbiol** 1990 Apr;36(4):273–8
Mineralization of [14C]hexadecane and [14C]phenanthrene in crude oil: specificity among bacterial isolates. Foght JM, et al. **Can J Microbiol** 1990 Mar;36(3):169–75
Effect of pH on acid production from sorbitol in washed cell suspensions of oral bacteria. Kalfas S, et al. **Caries Res** 1990;24(2):107–12
Metabolism of gentiopicroside (gentiopicrin) by human intestinal bacteria. el-Sedawy AI, et al. **Chem Pharm Bull (Tokyo)** 1989 Sep;37(9):2435–7
The use of microbial membranes to achieve anaerobiosis. Adler HI. **Crit Rev Biotechnol** 1990;10(2):119–27 (37 ref.)
Bacterial membranes. Higgins CF. **Curr Opin Cell Biol** 1989 Aug;1(4):701–5 (8 ref.)
DNA-binding of sulfur-containing metabolites from 35S-(pentachlorobutadienyl)-L-cysteine in bacteria and isolated renal tubular cells. Vamvakas S, et al. **Drug Metabol Drug Interact** 1988;6(3–4):349–58
13C-NMR study of acetate assimilation in Thermoproteus neutrophilus. Schäfer S, et al. **Eur J Biochem** 1989 Dec 22;186(3):695–700
Lipid transport in microorganisms. Daum G, et al. **Experientia** 1990 Jun 15;46(6):586–92 (56 ref.)
D-amino acids in mouse tissues are not of microbial origin. Nagata Y, et al. **Experientia** 1990 May 15;46(5):466–8
Establishment of cellulolytic bacteria in the digestive tract of conventionally reared young mice: effect of the dietary cellulose content in the adult. Boulahrouf A, et al. **FEMS Microbiol Lett** 1990 May;57(1–2):87–90
An examination of proton translocation and energy conservation during heterotrophic nitrification. Castignetti D, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1–3):175–81
A simple plate-assay for the screening of L-malic acid producing microorganisms. Peleg Y, et al. **FEMS Microbiol Lett** 1990 Feb;55(3):233–6
Papers presented at the meeting "Group Translocation in Bacterial Membrane Transport." Paris, France, 7–9 September 1988. **FEMS Microbiol Rev** 1989 Jun; 5(1–2):1–200
Structure, function and evolution of bacterial ferredoxins. Bruschi M, et al. **FEMS Microbiol Rev** 1988 Apr–Jun; 4(2):155–75 (120 ref.)
Microbial metabolism of mandelate: a microcosm of diversity. Fewson CA. **FEMS Microbiol Rev** 1988 Apr–Jun; 4(2):85–110 (189 ref.)
Microbial metabolism of short-chain unsaturated hydrocarbons. Hartmans S, et al. **FEMS Microbiol Rev** 1989 Sep;5(3):235–64 (177 ref.)
The relationship between metabolite production and the growth efficiency of the producing organism. Linton JD. **FEMS Microbiol Rev** 1990 Mar;6(1):1–18 (66 ref.)
Microbiological methods for the cleanup of soil and ground water contaminated with halogenated organic compounds. Morgan P, et al. **FEMS Microbiol Rev** 1989 Dec; 5(4):277–99 (191 ref.)
Compounds isolated at the Department of Biogenesis of Natural Substances, Institute of Microbiology, Czechoslovak Academy of Sciences, in 1984–1988. Podojil M, et al. **Folia Microbiol (Praha)** 1989;34(6):525–35
Metabolic characteristics of bacterial cells entrapped in beaded calcium alginate and/or pectate gels. Tóth D, et al. **Folia Microbiol (Praha)** 1989;34(6):515–24
Potentiation of ferrous sulphate and ascorbate on the microbial transformation of endogenous trimethylamine N-oxide to trimethylamine and dimethylamine in squid extracts. Lin JK, et al. **Food Chem Toxicol** 1989 Sep; 27(9):613–8
Occurrence of protein phosphorylation in various bacterial species. Dadssi M, et al. **Int J Biochem** 1990;22(5):493–9
The microbial ecology of soybean soaking for tempe production. Mulyowidarso RK, et al. **Int J Food Microbiol** 1989 Feb;8(1):35–46
Effect of accelerated natural lactic fermentation of infant food ingredients on some pathogenic microorganisms. Nout MJ, et al. **Int J Food Microbiol** 1989 Jul;8(4):351–61
Heme-dependent and heme-independent nitrite reduction by lactic acid bacteria results in different N-containing products. Wolf G, et al. **Int J Food Microbiol** 1990 May; 10(3–4):323–9
Effects of monensin and pH on the production and utilization of pyro-glutamate, a novel product of ruminal glutamine deamination. Russell JB, et al. **J Anim Sci** 1989 Sep; 67(9):2370–6
Novel pharmaceutical compounds from marine bacteria. Austin B. **J Appl Bacteriol** 1989 Nov;67(5):461–70 (49 ref.)
Influence of retention time on degradation of pancreatic enzymes by human colonic bacteria grown in a 3-stage continuous culture system. Macfarlane GT, et al. **J Appl Bacteriol** 1989 Nov;67(5):520–7
The detrimental effects of air on silage. Woolford MK. **J Appl Bacteriol** 1990 Feb;68(2):101–16 (115 ref.)
Energy coupling in bacterial periplasmic permeases. Ames GF, et al. **J Bacteriol** 1990 Aug;172(8):4133–7 (38 ref.)
Relationship between the acceptor/donor radioactivity ratio and cross-linking in bacterial peptidoglycan: application to surface synthesis during the division cycle. Cooper S. **J Bacteriol** 1990 Sep;172(9):5506–10
Molecular relationship of chromosomal genes encoding biphenyl/polychlorinated biphenyl catabolism: some soil bacteria possess a highly conserved bph operon. Furukawa K, et al. **J Bacteriol** 1989 Oct;171(10):5467–72
Chemiosmotic energy conversion of the archaebacterial thermoacidophile Sulfolobus acidocaldarius: oxidative phosphorylation and the presence of an F0-related N,N'-dicyclohexylcarbodiimide-binding proteolipid. Lübben M, et al. **J Bacteriol** 1989 Nov;171(11):6106–16
Mechanisms of bacterial degradation and transformation of chlorinated monoaromatic compounds. Häggblom M. **J Basic Microbiol** 1990;30(2):115–41 (165 ref.)
Microbial synthesis of metabolites with antihypertensive activity: aspects of fermentation derived inhibitors of angiotensin-converting enzyme (ACE). Manthey A, et al. **J Basic Microbiol** 1989;29(9):623–39
Protein export in bacteria: structure, function, and molecular genetics. **J Bioenerg Biomembr** 1990 Jun;22(3):209–491
Na+-driven bacterial flagellar motors. Imae Y, et al. **J Bioenerg Biomembr** 1989 Dec;21(6):705–16 (36 ref.)
Biophysical studies of signal peptides: implications for signal sequence functions and the involvement of lipid in protein export. Jones JD, et al. **J Bioenerg Biomembr** 1990 Jun; 22(3):213–32 (55 ref.)
The Na+ cycle of extreme alkalophiles: a secondary Na+/H+ antiporter and Na+/solute symporters. Krulwich TA, et al. **J Bioenerg Biomembr** 1989 Dec; 21(6):663–77 (53 ref.)
Sodium, protons, and energy coupling in the methanogenic bacteria. Lancaster JR Jr. **J Bioenerg Biomembr** 1989 Dec; 21(6):717–40 (127 ref.)
The sodium cycle: a novel type of bacterial energetics. Skulachev VP. **J Bioenerg Biomembr** 1989 Dec; 21(6):635–47 (82 ref.)
Protein export in bacteria: an overview. Tai PC. **J Bioenerg Biomembr** 1990 Jun;22(3):209–12 (7 ref.)
A comparison of fibronectinolytic activities from several oral bacteria. Pellat B, et al. **J Biol Buccale** 1989 Dec; 17(4):255–61 (78 ref.)
Spectroscopic characterization of the novel iron-sulfur cluster in Pyrococcus furiosus ferredoxin. Conover RC, et al. **J Biol Chem** 1990 May 25;265(15):8533–41
The kinetic and isotopic competence of nitric oxide as an intermediate in denitrification. Goretski J, et al. **J Biol Chem** 1990 Jan 15;265(2):889–95
Protein composition of Vitreoscilla hemoglobin inclusion bodies produced in Escherichia coli. Hart RA, et al. **J Biol Chem** 1990 Jul 25;265(21):12728–33
Characterization of a tungsten-iron-sulfur protein exhibiting novel spectroscopic and redox properties from the hyperthermophilic archaebacterium Pyrococcus furiosus. Mukund S, et al. **J Biol Chem** 1990 Jul 15;265(20):11508–16
Effect of slime production on the antibiotic susceptibility of isolates from prosthetic infections. Selan L, et al. **J Chemother** 1989 Dec;1(6):369–73
Assay of heat-labile enterotoxins by their ADP-ribosyltransferase activities. Narayanan J, et al. **J Clin Microbiol** 1989 Nov;27(11):2414–9
Fermentation of carbohydrates under aerobic and anaerobic conditions by intestinal microflora from infants. Ross LF, et al. **J Clin Microbiol** 1989 Nov;27(11):2529–34
A simple continuous culture system for rumen microbial digestion study and effects of defaunation and dilution rates. Fuchigami M, et al. **J Dairy Sci** 1989 Nov;72(11):3070–8
Effects of fish meals on rumen bacterial fermentation in continuous culture. Hoover WH, et al. **J Dairy Sci** 1989

Nov;72(11):2991–8
Microbial inoculation of alfalfa haylage: ensiling characteristics and milk production response when fed to early lactation dairy cows. Kent BA, et al. **J Dairy Sci** 1989 Sep;72(9):2325–30
Comparison of nitrogen–15 and diaminopimelic acid for estimating bacterial protein synthesis of lactating cows fed diets of varying protein degradability. Sadik MS, et al. **J Dairy Sci** 1990 Mar;73(3):694–702
Plaque fluid as a bacterial milieu. Edgar WM, et al. **J Dent Res** 1990 Jun;69(6):1332–6 (37 ref.)
Bacterial ethylene synthesis from 2–oxo–4–thiobutyric acid and from methionine. Mansouri S, et al. **J Gen Microbiol** 1989 Nov;135 (Pt 11):2819–27
Oestrogen binding by and effect of oestrogen on trichomonads and bacteria. Sugarman B, et al. **J Med Microbiol** 1990 Aug;32(4):227–32
Effects of bacterial fermentation end products on intestinal function: implications for intestinal dysfunction. Murray RD. **J Pediatr** 1990 Jul;117(1 Pt 2):S59–63 (30 ref.)
Bacterial products, cytokines and sleep. Krueger JM, et al. **J Rheumatol Suppl** 1989 Nov;19:52–7 (74 ref.)
The deconjugation ability of bacteria isolated from the jejunal fluids in the blind loop syndrome with high 14CO2 excretion—using the breath analysis technique and thin–layer chromatography. Shindo K, et al. **Life Sci** 1989; 45(24):2275–83
Anion–exchange mechanisms in bacteria. Maloney PC, et al. **Microbiol Rev** 1990 Mar;54(1):1–17 (106 ref.)
Insertion of proteins into bacterial membranes: mechanism, characteristics, and comparisons with the eucaryotic process. Saier MH Jr, et al. **Microbiol Rev** 1989 Sep; 53(3):333–66 (347 ref.)
Protein phosphorylation and regulation of adaptive responses in bacteria. Stock JB, et al. **Microbiol Rev** 1989 Dec; 53(4):450–90 (450 ref.)
Influence of interfaces on microbial activity. van Loosdrecht MC, et al. **Microbiol Rev** 1990 Mar;54(1):75–87 (107 ref.)
Microbial digestion of hemicelluloses in the rumen. Hespell RB. **Microbiol Sci** 1988 Dec;5(12):362–5 (28 ref.)
Microbial production and metabolism of epoxides. Weijers CA, et al. **Microbiol Sci** 1988 May;5(5):156–9 (53 ref.)
Secretion, processing and activation of bacterial extracellular proteases. Wandersman C. **Mol Microbiol** 1989 Dec; 3(12):1825–31 (55 ref.)
Microbial metabolism studies of the antimalarial drug arteether. Lee IS, et al. **Pharm Res** 1990 Feb;7(2):199–203
Microbial membrane transport systems. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):339–513
Mechanisms of sodium transport in bacteria. Dimroth P. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):465–77 (44 ref.)
Periplasmic binding protein–dependent transport systems: the membrane–associated components. Higgins CF, et al. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):353–64; discussion 364–5 (53 ref.)
Resolution and reconstitution of anion exchange reactions. Maloney PC. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):437–54 (76 ref.)
Atomic structures of periplasmic binding proteins and the high–affinity active transport systems in bacteria. Quiocho FA. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):341–51; discussion 351–2
Effect of alanine–producing bacteria on the growth of chicks. Furuse M, et al. **Poult Sci** 1990 Jun;69(6):1023–6
Dietary genotoxins and the human colonic microflora. Van Tassell RL, et al. **Prog Clin Biol Res** 1990;340E:149–58 (27 ref.)
Bacteria effective in Alaska cleanup [news] Crawford M. **Science** 1990 Mar 30;247(4950):1537
Effect of bacterial products on neutrophil migration in vitro. Ras G, et al. **Thorax** 1990 Apr;45(4):276–80
Formation of bobierrite (magnesium phosphate) crystal aggregates by bacteria from human urine and renal calculi. del Moral A, et al. **Urol Int** 1989;44(4):222–6
[Microbial metabolites in the large intestinal sections of swine fed rations rich in crude fiber] Schnabel E, et al. **Arch Tierernahr** 1990 Jan–Feb;40(1–2):39–45 (Eng. Abstr.) **(Ger)**
[Loading of polystyrene solid phases with microbial agents and their polysaccharide antigens for the screening of monoclonal antibodies] Mehl M, et al. **J Basic Microbiol** 1989;29(6):361–7 (Eng. Abstr.) **(Ger)**
[Bacterial resistance to antibiotics: biologic and ecologic aspects] Cavallo G. **G Batteriol Virol Immunol** 1988 Jan–Dec;81(1–12):96–116 (18 ref.) (Eng. Abstr.) **(Ita)**
[Study of the conditions for reproducing the processes of antibiotic biosynthesis. Determining the limiting stage of the process of mass transfer of oxygen] Kuz'mina LM, et al. **Antibiot Khimioter** 1990 Mar;35(3):3–6 (Eng. Abstr.) **(Rus)**
[Effect of antibiotics on excretion of various microbial metabolites with feces] Shenderov BA, et al. **Antibiot Khimioter** 1989 Sep;34(9):665–9 (Eng. Abstr.) **(Rus)**
[Alkoxylipids of prokaryotes] Dembitskiĭ VM. **Biol Nauki** 1989;(10):5–18 (88 ref.) **(Rus)**
[Free iron in bacteria] Kurbanov IS, et al. **Izv Akad Nauk SSSR [Biol]** 1990 May–Jun;(3):443–7 (Eng. Abstr.) **(Rus)**
[The current concepts of methylglyoxal metabolism in microorganisms] Alekseev VS, et al. **Mikrobiol Zh** 1989 Jul–Aug;51(4):100–9 (94 ref.) **(Rus)**
[Energy expenditure for the consumption of mineral components from the environment by microorganisms] Ivanov VN. **Mikrobiol Zh** 1986 Jul–Aug;48(4):3–8 (Eng. Abstr.) **(Rus)**
[Energy of the transmembrane DNA transfer in bacteria] Sabel'nikov AG. **Mol Gen Mikrobiol Virusol** 1989 Nov; (11):3–13 (74 ref.) (Eng. Abstr.) **(Rus)**
[A comparative study of the biological value of proteins in products of hydrogen–oxidizing bacteria biomass processing] Radionov VN, et al. **Vopr Pitan** 1989 Nov–Dec; (6):32–5 (Eng. Abstr.) **(Rus)**

PATHOGENICITY

The mounting interest in bacterial and viral pathogenicity. Smith H. **Annu Rev Microbiol** 1989;43:1–22 (71 ref.)
The role of intestinal barrier failure and bacterial translocation in the development of systemic infection and multiple organ failure. Deitch EA. **Arch Surg** 1990 Mar; 125(3):403–4 (3 ref.)
Invasion strategies and intracellular growth of bacterial pathogens. Harley VS, et al. **Biochem Soc Trans** 1989 Dec; 17(6):1118
Colonization factor antigens of human pathogens. Evans DJ Jr, et al. **Curr Top Microbiol Immunol** 1990;151:129–45 (61 ref.)
Mechanisms of iron acquisition and bacterial virulence. Martínez JL, et al. **FEMS Microbiol Rev** 1990 Mar; 6(1):45–56 (159 ref.)
Properties of the cell surfaces of pathogenic bacteria. Doyle RJ, et al. **Int Rev Cytol** 1989;118:33–92 (168 ref.)
The concept of iudirect pathogenicity by beta–lactamase production, especially in ear, nose and throat infection. Brook I. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:63–72 (52 ref.)
Molecular characterization of bacterial virulence factors and the consequences for vaccine design. The 1988 Fleming lecture. Dougan G. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1397–406 (81 ref.)
Pathogenicity and the microbe in vivo. The 1989 Fred Griffith Review Lecture. Smith H. **J Gen Microbiol** 1990 Mar;136 (Pt 3):377–93 (158 ref.)
Exploring the bacterial surface and floating on the Dead Sea. Ryter A, et al. **Res Microbiol** 1989 May–Jun; 140(4–5):279–80
Bad news bacteria [news] Wright K. **Science** 1990 Jul 6; 249(4964):22–4
[Genetic regulatory mechanisms of bacterial virulence] Hacker J, et al. **Immun Infekt** 1989 Dec;17(6):199–205 (42 ref.) (Eng. Abstr.) **(Ger)**
[Use of cell culture for the assessment of pathogenicity of destructive microorganisms] Zagornaia NB, et al. **Gig Sanit** 1990 Apr;(4):46–7 **(Rus)**
[The phytopathogenic properties of bacteria isolated from urologic patients] Gvozdiak RI, et al. **Mikrobiol Zh** 1986 Mar–Apr;48(2):30–3 (Eng. Abstr.) **(Rus)**
[The mechanisms of the intraphagocytic parasitism of Legionella and other bacteria] Tartakovskiĭ IS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Dec;(12):93–100 (42 ref.) **(Rus)**

PHYSIOLOGY

Control mechanisms of the large–intestinal microflora and its influence on the host. Freter R. **Acta Gastroenterol Latinoam** 1989;19(4):197–217 (58 ref.)
Carbohydrates inhibit the potentiating effect of bacteria, endotoxin and virus on basophil histamine release. Norn S, et al. **Agents Actions** 1990 Apr;30(1–2):53–6
Production of prostaglandin E2 by human amnion in vitro in response to addition of media conditioned by microorganisms associated with chorioamnionitis and preterm labor. Lamont RF, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):819–25
On the nature of enduring modifications induced in cells and organisms. Rubin H. **Am J Physiol** 1990 Feb;258(2 Pt 1):L19–24 (28 ref.)
Interactions of respiratory pathogens with host cell surface and extracellular matrix components. Roberts DD. **Am J Respir Cell Mol Biol** 1990 Sep;3(3):181–6 (50 ref.)
Growth stimulation of Treponema denticola by periodontal microorganisms. ter Steeg PF, et al. **Antonie Van Leeuwenhoek** 1990 Feb;57(2):63–70
Adhesion and motility of gliding bacteria on substrata with different surface free energies. Burchard RP, et al. **Appl Environ Microbiol** 1990 Aug;56(8):2529–34
Equilibrium temperature in a clump of bacteria heated in fluid. Davey KR. **Appl Environ Microbiol** 1990 Feb; 56(2):566–8
Phenotypic study of bacteria associated with the caribbean sclerosponge, Ceratoporella nicholsoni. Santavy DL, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1750–62
The value of asymmetric signal processing in klinokinesis. Dusenbery DB. **Biol Cybern** 1989;61(5):401–4
Scanning and transmission electron microscopic observations of bacteria adhering to ileal epithelial cells in growing broiler and White Leghorn chickens. Yamauchi K, et al. **Br Poult Sci** 1990 Mar;31(1):129–37
Isolation of marine bacteria with antiviral properties. Girones R, et al. **Can J Microbiol** 1989 Nov;35(11):1015–21
Surface recognition among oral bacteria: multigeneric coaggregations and their mediators. Kolenbrander PE. **Crit Rev Microbiol** 1989;17(2):137–59 (209 ref.)
The biologic significance of bacterial encapsulation. Cross AS. **Curr Top Microbiol Immunol** 1990;150:87–95 (51 ref.)
Application of living microbial cells entrapped with synthetic resin prepolymers. Fukui S, et al. **Experientia** 1989 Dec 1;45(11–12):1055–61 (32 ref.)
Physical methods for characterization of microbial surfaces. Krekeler C, et al. **Experientia** 1989 Dec 1; 45(11–12):1047–55 (88 ref.)
Bacterial adaptation to oxidative stress: implications for pathogenesis and interaction with phagocytic cells. Hassett DJ, et al. **FASEB J** 1989 Dec;3(14):2574–82 (114 ref.)
Acquired thermotolerance and heat shock in the extremely thermophilic archaebacterium Sulfolobus sp. strain B12. Trent JD, et al. **J Bacteriol** 1990 Mar;172(3):1478–84
Hyperthermus butylicus, a hyperthermophilic sulfur–reducing archaebacterium that ferments peptides. Zillig W, et al. **J Bacteriol** 1990 Jul;172(7):3959–65
Properties and photochemistry of a halorhodopsin from the haloalkalophile, Natronobacterium pharaonis. Duschl A, et al. **J Biol Chem** 1990 Jan 25;265(3):1261–7
Detection of high–risk groups and individuals for periodontal diseases: laboratory markers based on the microbiological analysis of subgingival plaque. Maiden MF, et al. **J Clin Periodontol** 1990 Jan;17(1):1–13 (102 ref.)
Ecosystems: development, functions and consequences of disturbances, with special reference to the oral cavity. Midtvedt T. **J Clin Periodontol** 1990 Aug;17(7 (Pt 2)):474–8
Future research ecosystems: consequences of disturbances and use of antimicrobial agents. Preus HR. **J Clin Periodontol** 1990 Aug;17(7 (Pt 2)):530–1
Proceedings of the 9th symposium on Microbial Sciences. July 20, 21, 1989, Fukuoka. **J Pharmacobiodyn** 1990 Feb; 13(2):S27–43
Oral glutamine reduces bacterial translocation following abdominal radiation. Souba WW, et al. **J Surg Res** 1990 Jan;48(1):1–5
Hyperoxidant states cause microbial cell differentiation by cell isolation from dioxygen. Hansberg W, et al. **J Theor Biol** 1990 Jan 23;142(2):201–21
A model for bacterial flagellar motor: free energy transduction and self–organization of rotational motion. Murata T, et al. **J Theor Biol** 1989 Aug 22;139(4):531–59
Hemorrhagic shock–induced bacterial translocation: the role of neutrophils and hydroxyl radicals. Deitch EA, et al. **J Trauma** 1990 Aug;30(8):942–51; discussion 951–2
Bacteriotherapy for Clostridium difficile diarrhoea [letter] Tvede M, et al. **Lancet** 1990 Jan 13;335(8681):110
Cancer and cell wall deficient bacteria. Macomber PB. **Med Hypotheses** 1990 May;32(1):1–9 (63 ref.)
Bacterial proteins which form membrane pores: a biophysical approach. Pattus F, et al. **Microbiol Sci** 1988 Jul;5(7):207–10 (34 ref.)
Functions of the flagellar modes of rotation in bacterial motility and chemotaxis. Eisenbach M. **Mol Microbiol** 1990 Feb;4(2):161–7 (27 ref.)
New approaches for controlling dental plaque pathogenicity. Kleinberg I. **N Y State Dent J** 1990 May;56(5):31–4 (18 ref.)
Occurrence of magnetic bacteria in soil. Fassbinder JW, et al. **Nature** 1990 Jan 11;343(6254):161–3
Signal transduction in bacteria. Stock JB, et al. **Nature** 1990 Mar 29;344(6265):395–400 (49 ref.)
Cold adaptation of microorganisms. Russell NJ. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1237):595–608, discussion 608–11 (73 ref.)
The phototoxic inhibitory effect and phototoxic killing effect of micro–organisms. Faergemann J, et al. **Photodermatol Photoimmunol Photomed** 1990 Feb;7(1):35–7
Regulation and role of phospholipases in host–bacteria interaction. Elsbach P, et al. **Prog Clin Biol Res** 1990; 349:1–9 (12 ref.)
Pushing the envelope of life [news] Pool R. **Science** 1990 Jan 12;247(4939):158–60
Food without fiber promotes bacterial translocation from the gut. Spaeth G, et al. **Surgery** 1990 Aug;108(2):240–6; discussion 246–7
Swarming phenomena, basis of a method to identify motile bacteria densitometrically. Blessing B, et al. **Z Naturforsch [C]** 1989 Nov–Dec;44(11–12):1058–60
[Bacterial ecology of the digestive tract] Raibaud P. **Ann Gastroenterol Hepatol (Paris)** 1990 May;26(3):119–22 (10 ref.) **(Fre)**
[Thermal sterilization in the revision of the sterilization section of the East German medical reference] Machmerth R, et al. **Z Gesamte Hyg** 1990 Feb;36(2):74–6 (0 ref.) (Eng. Abstr.) **(Ger)**
[Protein phosphorylation and signal transduction in bacteria] Aiba H, et al. **Tanpakushitsu Kakusan Koso** 1990 Jul; 35(9):1537–49 (43 ref.) **(Jpn)**
[Theoretical estimation of the transmembrane difference of the electrochemical potential of ions as an energy depot in microorganisms] Ivanov VN. **Mikrobiol Zh** 1989 May–Jun;51(3):13–6 (Eng. Abstr.) **(Rus)**
[Weightlessness and elementary biological processes] Parfenov GP. **Probl Kosm Biol** 1988;57:1–272 (627 ref.) (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Bacterial genes involved in response to near–ultraviolet

radiation. Eisenstark A. **Adv Genet** 1989;26:99–147 (242 ref.)
Potentiation of radiation–induced bacterial cell killing by binuclear rhodium(II) carboxylates. Richmond RC, et al. **Radiat Res** 1989 Dec;120(3):403–15
Potentiation of radiation–induced bacterial cell killing by binuclear rhodium(II) complexes and their amines. Richmond RC, et al. **Radiat Res** 1989 Dec;120(3):416–29
[The inactivation of mycoplasmas and bacteria in calf serum by 60Co gamma rays] Bender E, et al. **Arch Exp Veterinarmed** 1989;43(5):783–8 (Eng. Abstr.) (Ger)
[Continuous reduction of air pathogen concentration by central physical procedures] Weisswange TG. **Biomed Tech (Berlin)** 1989;34 Suppl:238–9 (Ger)
[Use of UV radiation for the disinfection of water. IV. Microbiological studies of the UV sensitivity of different aged cells of E. faecium, E. coli and P. aeruginosa] Martiny H, et al. **Zentralbl Hyg Umweltmed** 1990 May; 190(1–2):39–50 (Eng. Abstr.) (Ger)
[UV–inactivation of microorganisms in water] Sommer R, et al. **Zentralbl Hyg Umweltmed** 1989 Dec;189(3):214–24 (Eng. Abstr.) (Ger)
[Possibility of using gamma irradiation for disinfection of mud and seawater in balneologic practice] Polishchuk RF, et al. **Gig Sanit** 1989 Jun;(6):65–6 (Rus)
[Possibilities of using bacterial cultures for the biological indication of relatively small doses of gamma radiation] Torosian MV, et al. **Radiobiologiia** 1989 Nov–Dec; 29(6):765–8 (Eng. Abstr.) (Rus)
[The effect of riboxine on prophage induction and the survival of bacterial cultures exposed to gamma irradiation] Torosian MV, et al. **Radiobiologiia** 1990 May–Jun; 30(3):390–4 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

A light– and electron–microscopic study of bacterial invasion in Whipple's disease. Dobbins WO 3d, et al. **Am J Pathol** 1967 Aug;51(2):225–42
Enumeration and biomass estimation of planktonic bacteria and viruses by transmission electron microscopy. Børsheim KY, et al. **Appl Environ Microbiol** 1990 Feb;56(2):352–6
Electron microscopy study of the bacteria adherent to the rumen wall in young conventional lambs. Rieu F, et al. **Can J Microbiol** 1990 Feb;36(2):140–4
Visualization of the bacterial polysaccharide capsule. Bayer ME. **Curr Top Microbiol Immunol** 1990;150:129–57 (89 ref.)
Distribution of microorganisms with particular reference to encapsulated bacteria in kefir grains. Toba T, et al. **Int J Food Microbiol** 1990 May;10(3–4):219–24
Structural and chemical characterization of the S layer of a Pseudomonas–like bacterium. Austin JW, et al. **J Bacteriol** 1990 Feb;172(2):808–17
Attachment of the adhesive holdfast organelle to the cellular stalk of Caulobacter crescentus. Ong CJ, et al. **J Bacteriol** 1990 Mar;172(3):1448–56
Staining bacterial flagella easily. Heimbrook ME, et al. **J Clin Microbiol** 1989 Nov;27(11):2612–5
Development of methods for observing of bacteria and fungi by electron microscopy. Osumi M. **J Electron Microsc (Tokyo)** 1989;38 Suppl:S150–5
A scanning electron micrographical study of root surfaces and subgingival bacteria after hand and ultrasonic instrumentation. Garnick JJ, et al. **J Periodontol** 1989 Aug; 60(8):441–7
Evaluation of a simple staining method for flagella using "flagella staining solution–Shionogi". Inoue K, et al. **Jpn J Med Sci Biol** 1990 Feb;43(1):23–7
Periseptal annuli: organelles involved in the bacterial cell division process. Rothfield LI, et al. **Microbiol Sci** 1988 Jun;5(6):182–5 (20 ref.)

BACTERIA, AEROBIC

Dry rehydratable film for enumeration of total aerobic bacteria in foods: collaborative study. Curiale MS, et al. **J Assoc Off Anal Chem** 1990 Mar–Apr;73(2):242–8

CLASSIFICATION

Classification of the spoilage flora of fish, with special reference to Shewanella putrefaciens. Stenström IM, et al. **J Appl Bacteriol** 1990 Jun;68(6):601–18

DRUG EFFECTS

Systemic prophylaxis with doxycycline in intestinal surgery on patients with high incidence of abnormal fecal flora. Myrvold HE, et al. **Acta Chir Scand** 1989 Apr–May; 155(4–5):277–80
Hatching eggs sanitized with chlorine dioxide foam: egg hatchability and bactericidal properties. Patterson PH, et al. **Avian Dis** 1990 Jan–Mar;34(1):1–6
Antimicrobial activity of Ro 24–6778, a covalent bonding of desmethylfleroxacin and desacetylcefotaxime. Jones RN. **Diagn Microbiol Infect Dis** 1990 May–Jun;13(3):253–9
Piperacillin/tazobactam (YTR 830) combination. Comparative antimicrobial activity against 5889 recent aerobic clinical isolates and 60 Bacteroides fragilis group strains. Jones RN, et al. **Diagn Microbiol Infect Dis** 1989 Nov–Dec;12(6):489–94
Effect of lomefloxacin on the normal oral and intestinal microflora. Edlund C, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jan;9(1):35–9
Antibacterial activity of the new carbapenem meropenem (SM–7338) against clinical isolates. Ravizzola G, et al. **Eur J Clin Microbiol Infect Dis** 1989 Dec;8(12):1053–61
Comparative in vitro activity of the new oral penem ALP–201 against aerobic and anaerobic bacteria. Rylander M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Oct; 8(10):919–24
Efficacy of clavulanate–potentiated antibiotics against Bacteroides species and artificially associated cultures of aerobes and anaerobes. Werner H, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:55–61
A 7–year survey of drug resistance in aerobic and anaerobic fecal bacteria of surgical inpatients: clinical relevance and relation to local antibiotic consumption. Kling PA, et al. **Scand J Infect Dis** 1989;21(6):589–96
[Common pathogens of surgical infections and their drug sensitivities] Zhang YP. **Chung Hua Wai Ko Tsa Chih** 1989 Apr;27(4):215–6, 253 (Eng. Abstr.) (Chi)
[Sensitivity of aerobic bacteria and Candida species to chlormidazole hydrochloride in vitro] Krasiejko I, et al. **Pol Tyg Lek** 1990 Jan 22–29;45(4–5):91–2 (Eng. Abstr.) (Pol)

ENZYMOLOGY

Restriction endonuclease AfaI from Acidiphilium facilis, a new isoschizomer of RsaI: purification and properties. Dou D, et al. **Biochim Biophys Acta** 1989 Sep 21;1009(1):83–6
Two types of cytochrome cd1 in the aerobic photosynthetic bacterium, Erythrobacter sp. OCh 114. Doi M, et al. **Eur J Biochem** 1989 Oct 1;184(3):521–7
[Biological characteristics and proteolytic activity of strains of aerobic sporulating bacteria isolated from pathological material] Bondarchuk AA, et al. **Mikrobiol Zh** 1986 May–Jun;48(3):18–22 (Eng. Abstr.) (Rus)
[Hyaluronidase activity of spore aerobic bacteria, isolated from various ecological sources] Slabospitskaia AT. **Mikrobiol Zh** 1985 Jul–Aug;47(4):71–4 (Eng. Abstr.) (Rus)

GENETICS

S–layer protein gene of Acetogenium kivui: cloning and expression in Escherichia coli and determination of the nucleotide sequence. Peters J, et al. **J Bacteriol** 1989 Nov; 171(11):6307–15

GROWTH & DEVELOPMENT

Occlusive dressings. Does dressing type influence the growth of common bacterial pathogens? Marshall DA, et al. **Arch Surg** 1990 Sep;125(9):1136–9
The aerobic psychotrophic populations on meat and meat contact surfaces in a meat production system and on meat stored at chill temperatures. Nortjé GL, et al. **J Appl Bacteriol** 1990 Apr;68(4):335–44
Effects of high–energy electron irradiation of chicken meat on Salmonella and aerobic plate count. Heath JL, et al. **Poult Sci** 1990 Jan;69(1):150–6

ISOLATION & PURIFICATION

Aerobic and anaerobic microbiology of paronychia. Brook I. **Ann Emerg Med** 1990 Sep;19(9):994–6
The bacteriology of gangrenous and perforated appendicitis—revisited. Bennion RS, et al. **Ann Surg** 1990 Feb;211(2):165–71
The bacteriology of chronic venous ulcers treated with occlusive hydrocolloid dressings. Gilchrist B, et al. **Br J Dermatol** 1989 Sep;121(3):337–44
Bacterial flora in mothers and babies with reference to causative agent in neonatal septicemia. Bhatia BD, et al. **Indian Pediatr** 1989 May;26(5):455–9
Aerobic and anaerobic microbiology of biliary tract disease. Brook I. **J Clin Microbiol** 1989 Oct;27(10):2373–5
Comparison of the nasal bacterial floras in two groups of healthy subjects and in patients with acute maxillary sinusitis. Jousimies–Somer HR, et al. **J Clin Microbiol** 1989 Dec;27(12):2736–43
The nonpuerperal breast infection: aerobic and anaerobic microbial recovery from acute and chronic disease. Edmiston CE Jr, et al. **J Infect Dis** 1990 Sep;162(3):695–9
Comparison of culture methods for enumeration of microaerophilic bacteria in marine sediments. Ferrara–Guerrero MJ, et al. **Res Microbiol** 1989 Mar–Apr; 140(3):255–61
Aerobic and anaerobic microbiology of intra–abdominal abscesses in children. Brook I. **South Med J** 1989 Dec; 82(12):1479–82
Jejunal flora of patients with megaoesophagus secondary to Chagas disease. Machado WM, et al. **Trans R Soc Trop Med Hyg** 1989 Mar–Apr;83(2):199–201
[The development of an aerobic intestinal microflora in newborn infants] Sonnenborn U, et al. **Fortschr Med** 1990 Jul 20;108(21):420–4 (Eng. Abstr.) (Ger)
[Aerobic bacteriological cultures taken from the vagina and cervix mucus of women free of complaints] Horváth A, et al. **Orv Hetil** 1989 Oct 29;130(44):2351–2352, 2355 (Eng. Abstr.) (Hun)
[The aerobic air microflora in airplanes on various international routes] Năstoiu I, et al. **Rev Ig [Bacteriol]** 1989 Jul–Sep;34(3):241–7 (Eng. Abstr.) (Rum)
[Brain abscess bacteriology and antibiotic sensitivity] Celik E, et al. **Mikrobiyol Bul** 1989 Jan;23(1):12–22 (Eng. Abstr.) (Tur)

METABOLISM

Combined heterotrophic nitrification and aerobic denitrification in Thiosphaera pantotropha and other bacteria. Robertson LA, et al. **Antonie Van Leeuwenhoek** 1990 Apr;57(3):139–52 (55 ref.)
Interconversion of androst–16–ene steroids by human axillary aerobic coryneform bacteria. Rennie PJ, et al. **Biochem Soc Trans** 1989 Dec;17(6):1027–8
Anaerobic degradation of acetone and higher ketones via carboxylation by newly isolated denitrifying bacteria [published erratum appears in J Gen Microbiol 1989 Oct;135(Pt 10):2789] Platen H, et al. **J Gen Microbiol** 1989 Apr;135 (Pt 4):883–91

BACTERIA, ANAEROBIC

Comparative efficacy of cefoperazone, cefoperazone plus sulbactam, ciprofloxacin, clindamycin, metronidazole, and penicillin G against anaerobic bacteria in an animal model. Moody JA, et al. **J Lab Clin Med** 1990 Feb;115(2):190–5
International Symposium on Anaerobic Bacteria and Bacterial Infections. Monte Carlo, Monaco, 25–28 September 1988. Proceedings. **Rev Infect Dis** 1990 Jan–Feb; 12 Suppl 2:S121–261

ANALYSIS

Rapid presumptive diagnosis of anaerobic infections in animals by gas–liquid chromatography. van den Bogaard AE, et al. **Am J Vet Res** 1989 Sep;50(9):1454–9
Identification of phenolyl cobamide from the homoacetogenic bacterium Sporomusa ovata. Stupperich E, et al. **Eur J Biochem** 1989 Dec 22;186(3):657–61

CLASSIFICATION

Accuracy and reproducibility of the 4–hour ATB 32A method for anaerobe identification. Kitch TT, et al. **J Clin Microbiol** 1989 Nov;27(11):2509–13
Current taxonomy of medically important nonsporing anaerobes. Hofstad T. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S122–6 (44 ref.)
Application of chemotaxonomic techniques to the taxonomy of anaerobic bacteria. Hardie JM. **Scand J Infect Dis Suppl** 1989;62:7–14 (44 ref.)
New diagnostic methods for anaerobic bacteria. Romond C. **Scand J Infect Dis Suppl** 1989;62:35–40 (29 ref.)
Preliminary study of the anaerobic bacteria isolated from subgingival plaque from sheep. McCourtie J, et al. **Vet Microbiol** 1989 Dec;21(2):139–46
[Application of ion chromatography to identification of anaerobic bacteria] Fan X, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Mar;21(1):107–10 (Eng. Abstr.) (Chi)
[The taxonomy of obligate anaerobic bacteria] Kochemasova ZN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Nov; (11):19–23 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Systemic prophylaxis with doxycycline in intestinal surgery on patients with high incidence of abnormal fecal flora. Myrvold HE, et al. **Acta Chir Scand** 1989 Apr–May; 155(4–5):277–80
Susceptibility of anaerobic bacteria to ALP 201. Nord CE, et al. **Antimicrob Agents Chemother** 1989 Dec;33(12):2137–9
An update on the in vitro activity of ceftizoxime and other cephalosporin/cephamycin antimicrobial agents against clinically significant anaerobic bacteria. Aldridge KE. **Clin Ther** 1990;12 Suppl C:3–12 (16 ref.)
Susceptibility testing of anaerobes—fact, fancy, and wishful thinking. Goldstein EJ, et al. **Clin Ther** 1989 Nov–Dec; 11(6):710–23 (27 ref.)
In vitro activity of cefoperazone/sulbactam and other antimicrobials against anaerobic bacteria. D'Amato RF, et al. **Diagn Microbiol Infect Dis** 1990 Jan–Feb;13(1):51–5
Mechanisms of resistance in anaerobes and new developments in testing. Finegold SM. **Diagn Microbiol Infect Dis** 1989 Jul–Aug;12(4 Suppl):117S–120S (28 ref.)
Patterns of resistance to anaerobic organisms in Australia. Munro R. **Diagn Microbiol Infect Dis** 1989 Jul–Aug;12(4 Suppl):159S–163S
In vitro activity of meropenem (SM–7338), imipenem, and five other antibiotics against anaerobic clinical isolates. Murray PR, et al. **Diagn Microbiol Infect Dis** 1990 Jan–Feb; 13(1):57–61
Effect of lomefloxacin on the normal oral and intestinal microflora. Edlund C, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jan;9(1):35–9
Susceptibility of anaerobic bacteria to the new streptogramin RP 59500 in vitro. Nord CE, et al. **Eur J Clin Microbiol Infect Dis** 1989 Dec;8(12):1064–7
Antibacterial activity of the new carbapenem meropenem (SM–7338) against clinical isolates. Ravizzola G, et al. **Eur J Clin Microbiol Infect Dis** 1989 Dec;8(12):1053–61
Comparative in vitro activity of the new oral penem ALP–201 against aerobic and anaerobic bacteria. Rylander M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Oct; 8(10):919–24
In–vitro activity of azithromycin against various Gram–negative bacilli and anaerobic bacteria. Kitzis MD, et al. **J Antimicrob Chemother** 1990 Jan;25 Suppl A:15–8

Comparative serum bactericidal activity of ceftizoxime/metronidazole, ceftizoxime, clindamycin, and imipenem against obligate anaerobic bacteria. Kowalsky SF, et al. **J Antimicrob Chemother** 1990 May;25(5):767–75

Comparative in-vitro activity of azithromycin and erythromycin against Gram-positive cocci, Haemophilus influenzae and anaerobes. Maskell JP, et al. **J Antimicrob Chemother** 1990 Jan;25 Suppl A:19–24

Susceptibility of anaerobic bacteria to meropenem. Nord CE, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:113–7

The growth-inhibitory properties of meropenem against anaerobes of clinical importance. Watt B, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:119–24

Efficacy of clavulanate-potentiated antibiotics against Bacteroides species and artificially associated cultures of aerobes and anaerobes. Werner H, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:55–61

A multicentre study to evaluate the effect of sulbactam/ampicillin combination on anaerobic micro-organisms. Leone F, et al. **J Int Med Res** 1990 May-Jun;18(3):191–200

Ceftriaxone prophylaxis in surgery [letter] Villiger JW, et al. **N Z Med J** 1990 May 23;103(890):251

Multilaboratory evaluation of an agar diffusion disk susceptibility test for rapidly growing anaerobic bacteria. Barry AL, et al. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 2:S210–7

Resistance to beta-lactam antibiotics in anaerobic bacteria. Nord CE, et al. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 2:S231–4 (39 ref.)

Antimicrobial susceptibility testing of anaerobic bacteria: review and update on the role of the National Committee for Clinical Laboratory Standards. Thornsberry C. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 2:S218–22 (10 ref.)

Effect of erythromycin acistrate and erythromycin stearate on human colonic microflora. Kaukoranta-Tolvanen SS, et al. **Scand J Infect Dis** 1989;21(6):717–20

A 7-year survey of drug resistance in aerobic and anaerobic fecal bacteria of surgical inpatients: clinical relevance and relation to local antibiotic consumption. Kling PA, et al. **Scand J Infect Dis** 1989;21(6):589–96

Mechanisms of antimicrobial resistance in anaerobic bacteria: the predictive approach [see comments] Baquero F, et al. **Scand J Infect Dis Suppl** 1989;62:25–8 Comment in: Scand J Infect Dis 1990;22(2):247–8.

In vitro activity of teicoplanin, vancomycin, A16686, clindamycin, erythromycin and fusidic acid against anaerobic bacteria. Hassan H, et al. **Singapore Med J** 1990 Feb;31(1):56–8

A multicenter international study on the activity of sulbactam/ampicillin, ampicillin, and cefoxitin against anaerobic bacteria and introduction of a new model of susceptibility testing in mixed infections. Heizmann WR, et al. **Suppl Int J Gynecol Obstet** 1989;2:7–12; discussion 47–8

[Common pathogens of surgical infections and their drug sensitivities] Zhang YP. **Chung Hua Wai Ko Tsa Chih** 1989 Apr;27(4):215–6, 253 (Eng. Abstr.) **(Chi)**

[Therapeutic potential of ofloxacin in hospital medicine. A French multicenter study] Carbon C, et al. **Pathol Biol (Paris)** 1990 May;38(5):397–400 (Eng. Abstr.) **(Fre)**

[Comparative antibacterial activity of cefpodoxime, cefuroxime and cefaclor against strict anaerobic bacteria] Dubreuil L, et al. **Pathol Biol (Paris)** 1990 May;38(5):343–6 (Eng. Abstr.) **(Fre)**

[In vitro antibacterial activity of lomefloxacin, a new fluoroquinolone, against hospital strains. Results of a multicenter study] Soussy CJ, et al. **Pathol Biol (Paris)** 1990 May;38(5):390–6 (Eng. Abstr.) **(Fre)**

[In vitro antibacterial activity of clarithromycin, a new macrolide antibiotic, and regression curve] Soussy CJ, et al. **Pathol Biol (Paris)** 1990 May;38(5):401–6 (Eng. Abstr.) **(Fre)**

[In vitro antibacterial activity of rokitamycin, a new macrolide antibiotic. Results of a multicenter study] Soussy CJ, et al. **Pathol Biol (Paris)** 1990 May;38(5):407–12 (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

In vitro activity of amoxycillin plus clavulanic acid and ticarcillin plus clavulanic acid compared with that of other antibiotics against anaerobic bacteria. Pierard D, et al. **Acta Clin Belg** 1989;44(4):228–36

Azoreductase activity of anaerobic bacteria isolated from human intestinal microflora. Rafii F, et al. **Appl Environ Microbiol** 1990 Jul;56(7):2146–51

The sodium ion translocating adenosinetriphosphatase of Propionigenium modestum pumps protons at low sodium ion concentrations. Laubinger W, et al. **Biochemistry** 1989 Sep 5;28(18):7194–8

Amino acid sequence of alcohol dehydrogenase from the thermophiiic bacterium Thermoanaerobium brockii. Peretz M, et al. **Biochemistry** 1989 Aug 8;28(16):6549–55

Hydrodynamic, structural and magnetic properties of Megasphaera elsdenii Fe hydrogenase reinvestigated. Filipiak M, et al. **Eur J Biochem** 1989 Nov 20;185(3):547–53

Purification and characterization of formyl-coenzyme A transferase from Oxalobacter formigenes. Baetz AL, et al. **J Bacteriol** 1990 Jul;172(7):3537–40

GENETICS

Cloning, sequence analysis, and expression of genes encoding xylan-degrading enzymes from the thermophile "Caldocellum saccharolyticum". Lüthi E, et al. **Appl Environ Microbiol** 1990 Apr;56(4):1017–24

Phylogenetic evidence for the relationship between the genera Mobiluncus and Actinomyces. Lassnig C, et al. **FEMS Microbiol Lett** 1989 Nov;53(1–2):17–21

GROWTH & DEVELOPMENT

Most-probable-number procedures for enumerating ruminal bacteria, including the simultaneous estimation of total and cellulolytic numbers in one medium. Dehority BA, et al. **Appl Environ Microbiol** 1989 Nov;55(11):2789–92

Characterization of the acclimation period before anaerobic dehalogenation of halobenzoates. Linkfield TG, et al. **Appl Environ Microbiol** 1989 Nov;55(11):2773–8

Increase in colonic methanogens and total anaerobes in aging rats. Maczulak AE, et al. **Appl Environ Microbiol** 1989 Oct; 55(10):2468–73

Occlusive dressings. Does dressing type influence the growth of common bacterial pathogens? Marshall DA, et al. **Arch Surg** 1990 Sep;125(9):1136–9

Evaluation of two single-plate incubation systems and the anaerobic chamber for the cultivation of anaerobic bacteria. Downes J, et al. **J Clin Microbiol** 1990 Feb;28(2):246–8

Comparison of four commercial brucella agar media for growth of anaerobic organisms. Mangels JI, et al. **J Clin Microbiol** 1989 Oct;27(10):2268–71

Comparison of solid media for cultivation of anaerobes. Heginbothom M, et al. **J Clin Pathol** 1990 Mar;43(3):253–6

Short-chain fatty acid and organic acid concentrations in feces of healthy human volunteers and their correlations with anaerobe cultural counts during systemic ceftriaxone administration. Meijer-Severs GJ, et al. **Scand J Gastroenterol** 1990 Jul;25(7):698–704

Droplet application for protecting chicks against Salmonella colonisation by competitive exclusion. Schneitz C, et al. **Vet Rec** 1990 May 19;126(20):510

[Improving the microanaerostat model MI-752 and manufacturing simple microanaerostatic devices for cultivation of anaerobes] Bazhenov LG, et al. **Lab Delo** 1989;(10):72–4 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Demonstration of heterogeneity among the antigenic proteins of Mobiluncus species. Schwebke JR, et al. **J Clin Microbiol** 1990 Mar;28(3):463–8

Characterisation of monoclonal antibodies for detection of Mobiluncus spp. in genital specimens. Ison CA, et al. **J Med Microbiol** 1989 Oct;30(2):129–36

[Inhibition of the immune response due to the volatile fatty acids produced by anaerobic bacteria in the periodontal pocket] Eftimiadi C, et al. **Minerva Stomatol** 1990 May; 39(5):357–60 (Eng. Abstr.) **(Ita)**

ISOLATION & PURIFICATION

Mobiluncus and clue cells as predictors of PID after first-trimester abortion. Larsson PG, et al. **Acta Obstet Gynecol Scand** 1989;68(3):217–20

Aerobic and anaerobic microbiology of paronychia. Brook I. **Ann Emerg Med** 1990 Sep;19(9):994–6

The bacteriology of gangrenous and perforated appendicitis—revisited. Bennion RS, et al. **Ann Surg** 1990 Feb;211(2):165–71

The bacteriology of chronic venous ulcers treated with occlusive hydrocolloid dressings. Gilchrist B, et al. **Br J Dermatol** 1989 Sep;121(3):337–44

Anaerobic pleuropulmonary infection [editorial] Finegold SM. **Chest** 1990 Jan;97(1):1–2

Mobiluncus species and other anaerobic bacteria in non-puerperal breast abscesses. Sturm AW. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):789–92

Anaerobic bacteremia in the elderly. Terpenning MS. **Gerontology** 1989;35(2–3):130–6

Treatment of bacterial vaginosis in women with vaginal bleeding complications or discharge and harboring Mobiluncus. Larsson PG, et al. **Gynecol Obstet Invest** 1990; 29(4):296–300

Etiology of liver abscess with special reference to anaerobic bacteria. Gupta U, et al. **Indian J Med Res** 1990 Jan;91:21–3

Standardisation of quantitative direct gas liquid chromatography for early detection of bacteria in blood cultures. Hazarika M, et al. **Indian J Med Res** 1989 Nov; 89:389–95

Anaerobic bacteria in brain abscess, a review; observation of 18 consecutive cases. Narayan K, et al. **Indian J Pathol Microbiol** 1989 Jan;32(1):57–61 (12 ref.)

Aerobic and anaerobic microbiology of biliary tract disease. Brook I. **J Clin Microbiol** 1989 Oct;27(10):2373–5

Comparison of the nasal bacterial floras in two groups of healthy subjects and in patients with acute maxillary sinusitis. Jousimies-Somer HR, et al. **J Clin Microbiol** 1989 Dec;27(12):2736–43

Evaluation of the ATB 32 A system for identification of anaerobic bacteria isolated from clinical specimens. Looney WJ, et al. **J Clin Microbiol** 1990 Jul;28(7):1519–24

Comparison of different medium bases for the semiquantitative isolation of anaerobes from vaginal secretions. Sheppard A, et al. **J Clin Microbiol** 1990 Mar; 28(3):455–7

Accuracy and reproducibility of the MicroScan rapid anaerobe identification system with an automated reader. Stoakes L, et al. **J Clin Microbiol** 1990 Jun;28(6):1135–8

Anaerobic bacterial bacteremia: 12-year experience in two military hospitals [see comments] Brook I. **J Infect Dis** 1989 Dec;160(6):1071–5 Comment in: J Infect Dis 1990 May;161(5):1038.

The nonpuerperal breast infection: aerobic and anaerobic microbial recovery from acute and chronic disease. Edmiston CE Jr, et al. **J Infect Dis** 1990 Sep;162(3):695–9

Bacteriological analysis of pyogenic infections of the brain. Szuwart U, et al. **Neurosurg Rev** 1990;13(2):113–8

The microbiology of periapical granulomas. Iwu C, et al. **Oral Surg Oral Med Oral Pathol** 1990 Apr;69(4):502–5

Anaerobic bacteria and bacterial infections: perspectives on treatment and resistance in Italy. Panichi G, et al. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 2:S152–6

New methods for identification of obligate anaerobes. Phillips I. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 2:S127–32 (45 ref.)

Short-chain fatty acid and organic acid concentrations in feces of 10 human volunteers and their correlation with anaerobe cultural over a 15-month period. Meijer-Severs GJ, et al. **Scand J Gastroenterol** 1989 Dec;24(10):1276–80

Aerobic and anaerobic microbiology of intra-abdominal abscesses in children. Brook I. **South Med J** 1989 Dec; 82(12):1479–82

Jejunal flora of patients with megaoesophagus secondary to Chagas disease. Machado WM, et al. **Trans R Soc Trop Med Hyg** 1989 Mar-Apr;83(2):199–201

The obligate and facultatively anaerobic bacterial flora of the normal feline gingival margin. Love DN, et al. **Vet Microbiol** 1990 Apr;22(2–3):267–75

[The bacteriology of normal wound healing following tooth extraction with special reference to anaerobic microorganism diagnosis] Stiebe B, et al. **Zahn Mund Kieferheilkd** 1990;78(3):247–51 (Eng. Abstr.) **(Ger)**

[Anaerobic microflora of the contents of the upper maxillary sinuses in patients with chronic sinusitis] Fal' NI, et al. **Mikrobiol Zh** 1984 Jul-Aug;46(4):23–5 (Eng. Abstr.) **(Rus)**

[Use of sebacic acid for identifying anaerobic bacteria using gas phase chromatography] Larrinaga A, et al. **Rev Argent Microbiol** 1989 Apr-Jun;21(2):55–61 (Eng. Abstr.) **(Spa)**

[Brain abscess bacteriology and antibiotic sensitivity] Celik E, et al. **Mikrobiyol Bul** 1989 Jan;23(1):12–22 (Eng. Abstr.) **(Tur)**

METABOLISM

Determination of intracellular pyridine nucleotide levels by bioluminescence using anaerobic bacteria as a model. Schmid U, et al. **Anal Biochem** 1989 Jul;180(1):17–23

Biochemistry of acetate catabolism in anaerobic chemotrophic bacteria. Thauer RK, et al. **Annu Rev Microbiol** 1989;43:43–67 (180 ref.)

Metabolic diversity among the dissimilatory sulfate-reducing bacteria. Albert Jan Kluyver memorial lecture. Pfennig N. **Antonie Van Leeuwenhoek** 1989 Aug;56(2):127–38 (51 ref.)

Anaerobic dechlorination of 2,4-dichlorophenol in freshwater sediments in the presence of sulfate. Kohring GW, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2735–7

Reductive dehalogenation of dichloroanilines by anaerobic microorganisms in fresh and dichlorophenol-acclimated pond sediment. Struijs J, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2527–31

Reductive dechlorination of 3-chlorobenzoate is coupled to ATP production and growth in an anaerobic bacterium, strain DCB-1. Dolfing J. **Arch Microbiol** 1990;153(3):264–6

Strain DCB-1 conserves energy for growth from reductive dechlorination coupled to formate oxidation. Mohn WW, et al. **Arch Microbiol** 1990;153(3):267–71

Evidence for oxidative thiolytic cleavage of acetoin in Pelobacter carbinolicus analogous to aerobic oxidative decarboxylation of pyruvate. Oppermann FB, et al. **FEMS Microbiol Lett** 1989 Jul 1;51(1):113–8

Hydrolysis of iodothyronine conjugates by intestinal bacteria. Hazenberg MP, et al. **FEMS Microbiol Rev** 1988 Feb; 4(1):9–16 (68 ref.)

Pyrogallol-to-phloroglucinol conversion and other hydroxyl-transfer reactions catalyzed by cell extracts of Pelobacter acidigallici. Brune A, et al. **J Bacteriol** 1990 Feb;172(2):1070–6

Gas chromatographic-mass spectral studies after methylation of metabolites produced by some anaerobic bacteria in spent media. Carlier JP, et al. **J Chromatogr** 1989 Sep 1; 493(2):257–73

Anaerobic biodegradation of hydrocarbons. Bertrand JC, et al. **Sci Prog** 1989;73(291 Pt 3):333–50

[Inhibition of the adhesiveness and proliferation of gingival fibroblasts induced by short-chain fatty acids produced by anaerobic bacteria] Eftimiadi C, et al. **Minerva Stomatol** 1989 Aug;38(8):819–22 (Eng. Abstr.) **(Ita)**

[Microbiologic characteristics of a trisectional horizontal biogas tank running on cow manure] Kuznetsov LE, et al. **Prikl Biokhim Mikrobiol** 1989 Jul-Aug;25(4):540–7 (Eng. Abstr.) **(Rus)**

PATHOGENICITY

The role of anaerobic bacteria in bovine mastitis: a review.

Du Preez JH. J S Afr Vet Assoc 1989 Sep;60(3):159–68 (83 ref.)
Virulence determinants in nonsporeforming anaerobic bacteria. Hofstad T. Scand J Infect Dis Suppl 1989;62:15–24 (105 ref.)

PHYSIOLOGY

Anaerobic bacteria in rheumatoid arthritis [letter] Andersen I, et al. Ann Rheum Dis 1990 Jul;49(7):568
Anaerobes: problems and controversies in bacteriology, infections, and susceptibility testing. Finegold SM. Rev Infect Dis 1990 Jan–Feb;12 Suppl 2:S223–30 (35 ref.)

BACTERIAL ADHESION

see related
PILI, BACTERIAL

Adherence of Acanthamoeba castellanii cysts and trophozoites to unworn soft contact lenses. John T, et al. Am J Ophthalmol 1989 Dec 15;108(6):658–64
Type I pili mediate gram-negative bacterial adherence to intact tracheal epithelium. Dal Nogare AR. Am J Respir Cell Mol Biol 1990 May;2(5):433–40
Interactions of respiratory pathogens with host cell surface and extracellular matrix components. Roberts DD. Am J Respir Cell Mol Biol 1990 Sep;3(3):181–6 (50 ref.)
Characterization of the attachment of Treponema hyodysenteriae to Henle intestinal epithelial cells in vitro. Bowden CA, et al. Am J Vet Res 1989 Sep;50(9):1481–5
Augmented bacterial adherence to tracheal epithelial cells is associated with gram-negative pneumonia in an intensive care unit population. Todd TR, et al. Am Rev Respir Dis 1989 Dec;140(6):1585–9
Sugar-coated semiconductors [news] Anal Chem 1989 Oct 1;61(19):1077A
In vitro adherence of bacteria to prosthetic grafting materials. Brewer AR, et al. Ann Plast Surg 1990 Feb;24(2):134–8
Role of alginate in the adherence of Pseudomonas aeruginosa. Baker NR, et al. Antibiot Chemother 1989;42:72–9 (23 ref.)
Increased adherence to vaginal epithelial cells and phagocytic killing of gonococci and urogenital meningococci associated with heat modifiable proteins. Hagman M, et al. APMIS 1989 Sep;97(9):839–44
Adherence, enterotoxigenicity, invasiveness and serogroups in Campylobacter jejuni and Campylobacter coli strains from adult humans with acute enterocolitis. Lindblom GB, et al. APMIS 1990 Feb;98(2):179–84
Demonstration of lipid A-binding proteins on murine lymphoma cells using R-mutant gram-negative bacteria as a detector. Nakashima I, et al. APMIS 1990 Jan; 98(1):87–94
Adhesion of Yersinia enterocolitica to human epithelial cell lines and to rabbit and human small intestinal tissue. Paerregaard A, et al. APMIS 1990 Jan;98(1):53–60
Hemagglutination and intestinal adherence properties of clinical and environmental isolates of non-O1 Vibrio cholerae. Datta-Roy K, et al. Appl Environ Microbiol 1989 Sep;55(9):2403–6
Factors affecting adhesion of Fibrobacter succinogenes subsp. succinogenes S85 and adherence-defective mutants to cellulose. Gong J, et al. Appl Environ Microbiol 1989 Dec;55(12):3039–44
Response of microbial adhesives and biofilm matrix polymers to chemical treatments as determined by interference reflection microscopy and light section microscopy. Marshall PA, et al. Appl Environ Microbiol 1989 Nov; 55(11):2827–31
Attachment of Vibrio cholerae serogroup O1 to zooplankton and phytoplankton of Bangladesh waters. Tamplin ML, et al. Appl Environ Microbiol 1990 Jun;56(6):1977–80
Kinetics of Pseudomonas aeruginosa adhesion to 304 and 316-L stainless steel: role of cell surface hydrophobicity. Vanhaecke E, et al. Appl Environ Microbiol 1990 Mar; 56(3):788–95
Adherence of a virulent strain of Listeria monocytogenes to the surface of a hepatocarcinoma cell line via lectin-substrate interaction. Cowart RE, et al. Arch Microbiol 1990;153(3):282–6
Hemophilus influenzae adherence to and absorption from the nasal mucosa of guinea pigs. Harada T, et al. Arch Otorhinolaryngol 1989;246(4):218–21
Interaction of Campylobacter jejuni with extracellular matrix components. Kuusela P, et al. Biochim Biophys Acta 1989 Dec 8;993(2–3):297–300
Zeta potential and the adhesion of oral streptococci to polymethylmethacrylate. Uyen HM, et al. Biomater Artif Cells Artif Organs 1989;17(4):385–91
Rapid analysis of bacterial adhesion in a microplate assay. Shea C, et al. Biotechniques 1990 Jun;8(6):610–1
Scanning and transmission electron microscopic observations of bacteria adhering to ileal epithelial cells in growing broiler and White Leghorn chickens. Yamauchi K, et al. Br Poult Sci 1990 Mar;31(1):129–37
Hydrophobic surface properties of Bordetella bronchiseptica X-mode cells and their possible role in adherence to porcine nasal mucosa. Ishikawa H, et al. Can J Vet Res 1990 Apr;54(2):296–8
Bacterial adhesion to mucosal surfaces with special reference to Pasteurella multocida isolates from atrophic rhinitis. Pijoan C, et al. Can J Vet Res 1990 Apr;54 Suppl:S16–21
Recognition of a bacterial adhesion by an integrin: macrophage CR3 (alpha M beta 2, CD11b/CD18) binds filamentous hemagglutinin of Bordetella pertussis. Relman D, et al. Cell 1990 Jun 29;61(7):1375–82
Bacterial adherence to soft contact lenses [letter] Barza M, et al. Cornea 1990 Jul;9(3):273
Contact lens wear enhances adherence of Pseudomonas aeruginosa and binding of lectins to the cornea. Klotz SA, et al. Cornea 1990 Jul;9(3):266–70
Electron microscopic evaluation of bacterial adherence to polyvinyl chloride endotracheal tubes used in neonates. Diaz-Blanco J, et al. Crit Care Med 1989 Dec; 17(12):1335–40
Surface recognition among oral bacteria: multigeneric coaggregations and their mediators. Kolenbrander PE. Crit Rev Microbiol 1989;17(2):137–59 (209 ref.)
Bacterial adhesins. Curr Top Microbiol Immunol 1990; 151:1–204
Adhesins as lectins: specificity and role in infection. Ofek I, et al. Curr Top Microbiol Immunol 1990;151:91–113 (128 ref.)
Inhibition of bacterial attachment: examples from the urinary and respiratory tracts. Svanborg Edén C, et al. Curr Top Microbiol Immunol 1990;151:167–84 (90 ref.)
Host-specificity of uropathogenic Escherichia coli depends on differences in binding specificity to Gal alpha 1–4Gal-containing isoreceptors. Strömberg N, et al. EMBO J 1990 Jun;9(6):2001–10
Cloning and expression in Escherichia coli of Haemophilus influenzae fimbrial genes establishes adherence to oropharyngeal epithelial cells. van Ham SM, et al. EMBO J 1989 Nov;8(11):3535–40
Lack of association of Escherichia coli exhibiting both mannose-resistant haemagglutination and diffuse adherence to HEp-2 cells with acute diarrhoea in children. Cobeljić M, et al. Epidemiol Infect 1990 Feb;104(1):127–33
Adherence of Haemophilus influenzae to nasal. nasopharyngeal and buccal epithelial cells from patients with otitis media. Harada T, et al. Eur Arch Otorhinolaryngol 1990;247(2):122–4
Adhesive properties of enteropathogenic Escherichia coli isolated from infants with acute diarrhea in Africa. Forestier C, et al. Eur J Clin Microbiol Infect Dis 1989 Nov;8(11):979–83
Physical methods for characterization of microbial surfaces. Krekeler C, et al. Experientia 1989 Dec 1; 45(11–12):1047–55 (88 ref.)
Amino acid sequence of pheromone-inducible surface protein in Enterococcus faecalis, that is encoded on the conjugative plasmid pPD1. Nakayama J, et al. FEBS Lett 1990 Jul 30; 268(1):245–8
Receptor-active glycolipids of epithelial cells of the small intestine of young and adult pigs in relation to susceptibility to infection with Escherichia coli K99. Teneberg S, et al. FEBS Lett 1990 Apr 9;263(1):10–4
Surface free energy and interaction of Staphylococcus epidermidis with biomaterials. Ferreirós CM, et al. FEMS Microbiol Lett 1989 Jul 1;51(1):89–94
HEp-2 cell adherence and Vero cell cytotoxin production by EPEC strains isolated from children with diarrhoea in New Zealand. Gunzburg ST, et al. FEMS Microbiol Lett 1990 May;57(1–2):181–5
Characterization of adhesion zones in E. coli cells. Leduc M, et al. FEMS Microbiol Lett 1990 Jan 15;55(1–2):39–43
Effect of age on adherence of Branhamella catarrhalis to buccal epithelial cells. Carr B, et al. Gerontology 1989; 35(2–3):127–9
Bacterial adhesion and disease activity in Helicobacter associated chronic gastritis. Hessey SJ, et al. Gut 1990 Feb; 31(2):134–8
Adherence of Streptococcus pneumoniae to buccal epithelial cells of smokers & non-smokers. Mahajan B, et al. Indian J Med Res 1989 Nov;89:381–3
Legionella pneumophila grows adherent to surfaces in vitro and in situ. Wright JB, et al. Infect Control Hosp Epidemiol 1989 Sep;10(9):408–15
Bacterial infection of wounds: fibronectin-mediated adherence group A and C streptococci to fibrin thrombi in vitro. Chhatwal GS, et al. Infect Immun 1990 Sep; 58(9):3015–9
Adherence of Staphylococcus epidermidis to fibrin-platelet clots in vitro mediated by lipoteichoic acid. Chugh TD, et al. Infect Immun 1990 Feb;58(2):315–9
Restriction fragment length polymorphism in the cytadhesin P1 gene of human clinical isolates of Mycoplasma pneumoniae. Dallo SF, et al. Infect Immun 1990 Jun; 58(6):2017–20
Adhesion of enterotoxigenic Escherichia coli to the human colon carcinoma cell line Caco-2 in culture. Darfeuille-Michaud A, et al. Infect Immun 1990 Apr; 58(4):893–902
Identification of Campylobacter jejuni surface proteins that bind to Eucaryotic cells in vitro. de Melo MA, et al. Infect Immun 1990 Jun;58(6):1749–56
Monoclonal antibodies to outer membrane protein PII block interactions of Neisseria gonorrhoeae with human neutrophils. Elkins C, et al. Infect Immun 1990 Apr; 58(4):1078–84
Up-regulation of human neutrophil receptors for Neisseria gonorrhoeae expressing PII outer membrane proteins. Farrell CF, et al. Infect Immun 1990 Sep;58(9):2777–84
Nucleotide sequence analysis of a type 1 fimbrial gene of Streptococcus sanguis FW213. Fenno JC, et al. Infect Immun 1989 Nov;57(11):3527–33
Attaching effacement of the rabbit enterocyte brush border is encoded on a single 96.5-kilobase-pair plasmid in an enteropathogenic Escherichia coli O111 strain. Fletcher JN, et al. Infect Immun 1990 May;58(5):1316–22
Characterization of the Pseudomonas aeruginosa pilus adhesin: confirmation that the pilin structural protein subunit contains a human epithelial cell-binding domain. Irvin RT, et al. Infect Immun 1989 Dec;57(12):3720–6
Purified P fimbriae from two cloned gene clusters of a single pyelonephritogenic strain adhere to unique structures in the human kidney. Karr JF, et al. Infect Immun 1989 Nov; 57(11):3594–600
Characterization of coaggregation between Bacteroides gingivalis T22 and Fusobacterium nucleatum T18. Kinder SA, et al. Infect Immun 1989 Nov;57(11):3425–33
A human salivary protein which promotes adhesion of Streptococcus mutans serotype c strains to hydroxyapatite. Kishimoto E, et al. Infect Immun 1989 Dec;57(12):3702–7
Adhesion and ultrastructural properties of human enterotoxigenic Escherichia coli producing colonization factor antigens III and IV. Knutton S, et al. Infect Immun 1989 Nov;57(11):3364–71
Surface hydrophobicity, adherence, and aggregation of cell surface protein antigen mutants of Streptococcus mutans serotype c. Koga T, et al. Infect Immun 1990 Feb; 58(2):289–96
Characterization of Streptococcus gordonii (S. sanguis) PK488 adhesin-mediated coaggregation with Actinomyces naeslundii PK606. Kolenbrander PE, et al. Infect Immun 1990 Sep;58(9):3064–72
Effect of enteroviruses on adherence to and invasion of HEp-2 cells by Campylobacter isolates. Konkel ME, et al. Infect Immun 1990 Apr;58(4):1101–5
Direct evidence that the FimH protein is the mannose-specific adhesin of Escherichia coli type 1 fimbriae. Krogfelt KA, et al. Infect Immun 1990 Jun; 58(6):1995–8
Adherence of mutans streptococci to other oral bacteria. Lamont RJ, et al. Infect Immun 1990 Jun;58(6):1738–43
Binding of colloidal gold-labeled salivary proline-rich proteins to Actinomyces viscosus type 1 fimbriae. Leung KP, et al. Infect Immun 1990 Jun;58(6):1986–91
Binding specificities of wild-type and cloned Escherichia coli strains that recognize globo-A. Lindstedt R, et al. Infect Immun 1989 Nov;57(11):3389–94
Bacteroides loeschei PK1295 cells express two distinct adhesins simultaneously. London J, et al. Infect Immun 1989 Dec;57(12):3940–4
Lectinlike interactions of Fusobacterium nucleatum with human neutrophils. Mangan DF, et al. Infect Immun 1989 Nov;57(11):3601–11
Binding of Yersinia enterocolitica to rabbit intestinal brush border membranes, mucus, and mucin. Mantle M, et al. Infect Immun 1989 Nov;57(11):3292–9
Genetically engineered S and F1C fimbriae differ in their contribution to adherence of Escherichia coli to cultured renal tubular cells. Marre R, et al. Infect Immun 1990 Oct; 58(10):3434–7
Adhesion of Escherichia coli strains isolated from diarrheic weaned rabbits to intestinal villi and HeLa cells. Milon A, et al. Infect Immun 1990 Aug;58(8):2690–5
Pili of a Vibrio parahaemolyticus strain as a possible colonization factor. Nakasone N, et al. Infect Immun 1990 Jan;58(1):61–9
Adhesion of colonization factor antigen II-positive enterotoxigenic Escherichia coli strains to human enterocytelike differentiated HT-29 cells: a basis for host-pathogen interactions in the gut. Neeser JR, et al. Infect Immun 1989 Dec;57(12):3727–34
Identification of plasmid-encoded mannose-resistant hemagglutinin and HEp-2 and HeLa cell adherence factors of two diarrheagenic Escherichia coli strains belonging to an enteropathogenic serogroup. Pal R, et al. Infect Immun 1990 Apr;58(4):1106–13
Binding of staphylococci to mucus in vivo and in vitro. Sanford BA, et al. Infect Immun 1989 Dec;57(12):3735–42
Altered hepatic clearance and killing of Candida albicans in the isolated perfused mouse liver model. Sawyer RT, et al. Infect Immun 1990 Sep;58(9):2869–74
Comparative study of attachment to and invasion of epithelial cell lines by Shigella dysenteriae. Sen A, et al. Infect Immun 1990 Jul;58(7):2401–3
Characterization of Pseudomonas aeruginosa adherence to mouse corneas in organ culture. Singh A, et al. Infect Immun 1990 May;58(5):1301–7
In vitro surface properties of the newly recognized gastric pathogen Helicobacter pylori. Smith JI, et al. Infect Immun 1990 Sep;58(9):3056–60
Disulfide-linked protein associated with Mycoplasma pneumoniae cytadherence phase variation. Stevens MK, et al. Infect Immun 1990 Oct;58(10):3430–3
Chlamydia trachomatis-host cell interactions: role of the chlamydial major outer membrane protein as an adhesin. Su H, et al. Infect Immun 1990 Apr;58(4):1017–25
Use of adhesin-specific monoclonal antibodies to identify and localize an adhesin on the surface of Capnocytophaga gingivalis DR2001. Tempro P, et al. Infect Immun 1989 Nov;57(11):3418–24
In vitro association of leptospires with host cells. Thomas DD, et al. Infect Immun 1990 Mar;58(3):581–5
Influence of the 60-megadalton plasmid on adherence of Escherichia coli O157:H7 and genetic derivatives. Toth

I, et al. **Infect Immun** 1990 May;58(5):1223–31

Effects of adhesins from mannose–resistant Escherichia coli on mediator release from human lymphocytes, monocytes, and basophils and from polymorphonuclear granulocytes. Ventur Y, et al. **Infect Immun** 1990 Jun;58(6):1500–8

Characterization of binding of Escherichia coli strains which are enteropathogens to small–bowel mucin. Wanke CA, et al. **Infect Immun** 1990 Mar;58(3):794–800

Interaction of Treponema denticola TD–4, GM–1, and MS25 with human gingival fibroblasts. Weinberg A, et al. **Infect Immun** 1990 Jun;58(6):1720–9

Adherence pili of avian strains of Escherichia coli O78. Yerushalmi Z, et al. **Infect Immun** 1990 Apr;58(4):1129–31

The role of bacterial adhesion in cystic fibrosis including the staphylococcal aspect. Ramphal R. **Infection** 1990 Jan–Feb;18(1):61–4 (25 ref.)

Bacterial adherence in urinary tract infections: preliminary studies in a primate model. Roberts JA, et al. **Infection** 1989 Nov–Dec;17(6):401–4

Factors influencing the detachment of a polymer–associated Acinetobacter sp. from stainless steel. Lewis SJ, et al. **Int J Food Microbiol** 1989 May;8(2):155–64

Evidence for lectin–mediated adherence of S. saprophyticus and P. aeruginosa to polymers. Jansen B, et al. **Int J Med Microbiol** 1990 Apr;272(4):437–42

Adherence of Mycoplasma mycoides subspecies mycoides to cultured endothelial cells. Valdivieso–Garcia A, et al. **Int J Med Microbiol** 1989 Dec;272(2):210–5

Differential binding of P. aeruginosa and S. aureus to corneal epithelium in culture. Panjwani N, et al. **Invest Ophthalmol Vis Sci** 1990 Apr;31(4):696–701

Surface proteins of the gliding bacterium Cytophaga sp. strain U67 and its mutants defective in adhesion and motility. Burchard RP, et al. **J Bacteriol** 1990 Jun;172(6):3379–87

Purification and characterization of a Bacteroides loeschei adhesin that interacts with procaryotic and eucaryotic cells. London J, et al. **J Bacteriol** 1990 May;172(5):2527–34

Identification of genes affecting production of the adhesion organelle of Caulobacter crescentus CB2. Mitchell D, et al. **J Bacteriol** 1990 Sep;172(9):5425–31

Attachment of the adhesive holdfast organelle to the cellular stalk of Caulobacter crescentus. Ong CJ, et al. **J Bacteriol** 1990 Mar;172(3):1448–56

Structure of a streptococcal adhesin carbohydrate receptor. Cassels FJ, et al. **J Biol Chem** 1990 Aug 25;265(24):14127–35

Lacto– and ganglio–series glycolipids are adhesion receptors for Neisseria gonorrhoeae. Deal CD, et al. **J Biol Chem** 1990 Aug 5;265(22):12774–7

In vitro adherence of bacteria to sutures in cardiac surgery. Shuhaiber H, et al. **J Cardiovasc Surg (Torino)** 1989 Sep–Oct;30(5):749–53

The role of fibronectin binding in the rat model of experimental endocarditis caused by Streptococcus sanguis. Lowrance JH, et al. **J Clin Invest** 1990 Jul;86(1):7–13

Interaction between Borrelia burgdorferi and endothelium in vitro. Szczepanski A, et al. **J Clin Invest** 1990 May;85(5):1637–47

A human endothelial cell membrane protein that binds Staphylococcus aureus in vitro. Tompkins DC, et al. **J Clin Invest** 1990 Apr;85(4):1248–54

Adherence of skin bacteria to human epithelial cells. Romero–Steiner S, et al. **J Clin Microbiol** 1990 Jan;28(1):27–31

Comparison of two assay methods for patterns of adherence to HEp–2 cells of Escherichia coli from patients with diarrhea. Vial PA, et al. **J Clin Microbiol** 1990 May;28(5):882–5

Barium sulphate radio–opacity agent and bacterial adhesion to silicone catheter material [letter] Barrett SP, et al. **J Clin Pathol** 1989 Nov;42(11):1226

The influence of surface free energy and surface roughness on early plaque formation. An in vivo study in man. Quirynen M, et al. **J Clin Periodontol** 1990 Mar;17(3):138–44

Adherence of oral streptococci to composite resin restorative materials. Yamamoto K, et al. **J Dent** 1989 Oct;17(5):225–9

Inhibitory effect of human plasma and saliva on co–aggregation between Bacteroides gingivalis and Streptococcus mitis. Nagata H, et al. **J Dent Res** 1990 Aug;69(8):1476–9

Protein–mediated adhesion of Lactobacillus fermentum strain 737 to mouse stomach squamous epithelium. Conway PL, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1175–86

Attaching and effacing lesions in vivo and adhesion to tissue culture cells of Vero–cytotoxin–producing Escherichia coli belonging to serogroups O5 and O103. Hall GA, et al. **J Gen Microbiol** 1990 Apr;136 (Pt 4):779–86

Ruthenium red staining reveals surface fibrils and a layer external to the cell wall in Streptococcus salivarius HB and adhesion deficient mutants. Handley PS, et al. **J Gen Microbiol** 1988 Dec;134 (Pt 12):3165–72

Properties of adherence factor plasmids of enteropathogenic Escherichia coli and the effect of host strain on expression of adherence to HEp–2 cells. McConnell MM, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1123–34

Production of the fimbrial adhesin 987P by enterotoxigenic Escherichia coli during growth under controlled conditions in a chemostat. van der Woude MW, et al. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3421–9

Adhesion to cells in culture and plasmid profiles of enteropathogenic Escherichia coli isolated from outbreaks and sporadic cases of infant diarrhoea. Scotland SM, et al. **J Infect** 1989 Nov;19(3):237–49

Adherence of peritonitis–causing staphylococci to human peritoneal mesothelial cell monolayers. Haagen IA, et al. **J Infect Dis** 1990 Feb;161(2):266–73

Characterization of a new putative colonization factor (CS17) from a human enterotoxigenic Escherichia coli of serotype O114:H21 which produces only heat–labile enterotoxin. McConnell MM, et al. **J Infect Dis** 1990 Feb;161(2):343–7

The effect of piliation and exoproduct expression on the adherence of Pseudomonas aeruginosa to respiratory epithelial monolayers. Saiman L, et al. **J Infect Dis** 1990 Mar;161(3):541–8

Challenge studies in volunteers using Escherichia coli strains with diffuse adherence to HEp–2 cells. Tacket CO, et al. **J Infect Dis** 1990 Aug;162(2):550–2

Host factors selectively increase staphylococcal adherence on inserted catheters: a role for fibronectin and fibrinogen or fibrin. Vaudaux P, et al. **J Infect Dis** 1989 Nov;160(5):865–75

Piliated Vibrio parahaemolyticus adherent to human ureteral mucosa [letter] Yamamoto T, et al. **J Infect Dis** 1990 Feb;161(2):361–2

Identification of Staphylococcus aureus binding proteins on isolated porcine cardiac valve cells. Campbell KM, et al. **J Lab Clin Med** 1990 Feb;115(2):217–23

Adherence and survival properties of an epidemic methicillin–resistant strain of Staphylococcus aureus compared with those of methicillin–sensitive strains. Duckworth GJ, et al. **J Med Microbiol** 1990 Jul;32(3):195–200

Adherence of Pseudomonas aeruginosa to respiratory epithelium and the effect of leucocyte elastase. Plotkowski MC, et al. **J Med Microbiol** 1989 Dec;30(4):285–93

Hydrophobic characterisation of Helicobacter (Campylobacter) pylori. Pruul H, et al. **J Med Microbiol** 1990 Jun;32(2):93–100

Surface–associated properties of Streptococcus milleri group strains and their potential relation to pathogenesis. Willcox MD, et al. **J Med Microbiol** 1990 Apr;31(4):259–70

The effect of protein–energy malnutrition and refeeding on the adherence of Salmonella typhimurium to small intestinal mucosa and isolated enterocytes in rats. Omoike I, et al. **J Nutr** 1990 Apr;120(4):404–11

Bacterial attachment as a predictor of renal abnormalities in boys with urinary tract infection. de Man P, et al. **J Pediatr** 1989 Dec;115(6):915–22

Binding specificity of Fusobacterium nucleatum to human erythrocytes, polymorphonuclear leukocytes, fibroblasts, and HeLa cells. Ozaki M, et al. **J Periodont Res** 1990 May;25(3):129–34

Adherence of uropathogenic E. coli to differentiated human uroepithelial cells grown in vitro. Hopkins WJ, et al. **J Urol** 1990 Jan;143(1):146–9

Bacterial and crystal adherence to the surfaces of indwelling urethral catheters. Ohkawa M, et al. **J Urol** 1990 Apr;143(4):717–21

Bacterial adherence to urethral catheters. Roberts JA, et al. **J Urol** 1990 Aug;144(2 Pt 1):264–9

Hemagglutinating activity of Mycoplasma salivarium and its attachment to sheep red blood cells. Watanabe T, et al. **Microbiol Immunol** 1990;34(5):439–46

Adherence of Pseudomonas aeruginosa elastase deficient mutant. Trancassini M, et al. **Microbiologica** 1990 Apr;13(2):97–100

An in vitro method to study the adherence of oral bacteria to HeLa cells. Sweet SP, et al. **Microbios** 1989;60(242):15–22

Cohesion between oral streptococci and Neisseria pharyngis on saliva–coated glass, in the presence and absence of sucrose. Willcox MD, et al. **Microbios** 1990;61(248–249):197–205

The major subunit of Escherichia coli type 1 fimbriae is not required for D–mannose–specific adhesion. Klemm P, et al. **Mol Microbiol** 1990 Apr;4(4):553–9

Mapping the surface regions of Pseudomonas aeruginosa PAK pilin: the importance of the C–terminal region for adherence to human buccal epithelial cells. Lee KK, et al. **Mol Microbiol** 1989 Nov;3(11):1493–9

Analysis of genes coding for the sialic acid–binding adhesin and two other minor fimbrial subunits of the S–fimbrial adhesin determinant of Escherichia coli. Schmoll T, et al. **Mol Microbiol** 1989 Dec;3(12):1735–44

Bacterial adherence to extended wear soft contact lenses. Aswad MI, et al. **Ophthalmology** 1990 Mar;97(3):296–302

Adherence kinetics of Haemophilus influenzae type b to eucaryotic cells. Patrick CC, et al. **Pediatr Res** 1989 Nov;26(5):500–3

The ability of Salmonella to enter mammalian cells is affected by bacterial growth state. Lee CA, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4304–8

Adhesion to HeLa cells of Campylobacter jejuni and C. coli outer membrane components. Fauchère JL, et al. **Res Microbiol** 1989 Jul–Aug;140(6):379–92

Attachment of Streptococcus pneumoniae to human pharyngeal epithelial cells. Andersson B, et al. **Respiration** 1989;55 Suppl 1:49–52 (8 ref.)

Bacterial adherence of group A streptococci to mucosal surfaces. Beachey EH, et al. **Respiration** 1989;55 Suppl 1:33–40 (30 ref.)

Current–induced effects on growth and adhesion properties of Streptococcus mutans in vitro. Söderling E, et al. **Scand J Dent Res** 1989 Aug;97(4):338–45

Adhesion of bacteria to the human small–intestinal mucosa. A scanning electron microscopic study. Hörstedt P, et al. **Scand J Gastroenterol** 1989 Sep;24(7):877–85

Adherence of mucin and non–mucin–producing staphylococci to preclotted and albumin–coated velour knitted vascular grafts. Siverhus DJ, et al. **Surgery** 1990 Jun;107(6):613–9

Infection of catheterised patients: bacterial colonisation of encrusted Foley catheters shown by scanning electron microscopy. Cox AJ, et al. **Urol Res** 1989;17(6):349–52

Silver coating of urinary catheters prevents adherence and growth of Pseudomonas aeruginosa. Liedberg H, et al. **Urol Res** 1989;17(6):357–8

Ultrastructural study of microbiologic colonization of urinary catheters. Nickel JC, et al. **Urology** 1989 Nov;34(5):284–91

In vitro adhesion of K88ac+ Escherichia coli to Peyer's patch and peripheral blood lymphocytes, buccal and rectal epithelial cells or intestinal epithelial brush borders of weaned pigs. Valpotić I, et al. **Vet Microbiol** 1989 Aug;20(4):357–68

[Relation of the adhesion of enteropathogenic Escherichia coli O127H6 and outer membrane protein and its related plasmids] Peng RQ, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Aug;69(8):462–5 **(Chi)**

[The importance of adhesion capacity in Candida to pathogenicity in mucosal and skin candidiasis] Tomšíková A, et al. **Cesk Epidemiol Mikrobiol Imunol** 1990 Jun;39(3):182–90 (Eng. Abstr.) **(Cze)**

[The occurrence of adherence factors in Enterobacteriaceae from bacteriological meat examination and from food hygiene research material] Lehmann W. **Arch Exp Veterinarmed** 1989 Nov;43(6):821–34 (Eng. Abstr.) **(Ger)**

[Topography and mechanisms of adhesion of uropathogenic Escherichia coli bacteria in the human kidney and renal pelvis] Vierbuchen M, et al. **Verh Dtsch Ges Pathol** 1989;73:264–7 (Eng. Abstr.) **(Ger)**

[Induction of a microbial colonization of the walls of copper pipes through which drinking water flows] Tuschewitzki GJ. **Zentralbl Hyg Umweltmed** 1990 May;190(1–2):62–71 (Eng. Abstr.) **(Ger)**

[Adherence of Pseudomonas aeruginosa to the rabbit corneal epithelium] Tazawa H. **Nippon Ganka Gakkai Zasshi** 1990 Mar;94(3):269–76 (Eng. Abstr.) **(Jpn)**

[Experimental study on bacterial adherence to cholecystic mucosa of the rabbit: preliminary report] Sewake H, et al. **Nippon Geka Gakkai Zasshi** 1989 Oct;90(10):1817 **(Jpn)**

[Study of the receptor for P. aeruginosa on tracheal cells and in tracheobronchial mucin] Kuroki H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jun;27(6):696–702 (Eng. Abstr.) **(Jpn)**

[Bacterial adhesion. An important pathogenetic factor] Andersen BM. **Tidsskr Nor Laegeforen** 1990 May 10;110(12):1534–8 (24 ref.) (Eng. Abstr.) **(Nor)**

[Reciprocal effect of Klebsiella pneumoniae and Lactobacillus on their cytadhesion] Lentsner AA, et al. **Antibiot Khimioter** 1989 Jun;34(6):430–2 (Eng. Abstr.) **(Rus)**

[A method of determining the effect of breast milk on the adhesive properties of microorganisms] Kushnareva MV, et al. **Lab Delo** 1990;(3):69–71 (Eng. Abstr.) **(Rus)**

[Morphological properties and adhesiveness of bacteria of the genus Proteus] Gabidullin ZG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jun;(6):83–6 (Eng. Abstr.) **(Rus)**

[The adhesive properties of a nonenteropathogenic strain of Escherichia coli in systems in vitro on isolated rat enterocytes and in vivo] Gorskaia EM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Nov;(11):3–8 (Eng. Abstr.) **(Rus)**

[Quantitative evaluation of the adhesive activity of Vibrio cholerae with various degrees of virulence] Korol' VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Sep;(9):18–22 (Eng. Abstr.) **(Rus)**

[The adhesive properties of salmonellae in the dynamics of the infectious process] Pak SG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Nov;(11):33–6 (Eng. Abstr.) **(Rus)**

[The adhesins of enterotoxigenic Escherichia coli: their role in the pathogenesis of diarrhea and their genetic control] Petrovskaia VG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 May;(5):110–7 (52 ref.) **(Rus)**

DRUG EFFECTS

Adhesiveness of Pseudomonas aeruginosa to rabbit vesical mucosa effect of glycosidases on cellular binding. Chiarini F, et al. **Ann Ig** 1989 Jan–Apr;1(1–2):399–408

Recovery of bacteria from reprocessed high flux dialyzers after bacterial contamination of the header spaces and O–rings. Bland LA, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):314–6

The use of concanavalin A to competitively inhibit Pseudomonas aeruginosa adherence to rabbit corneal epithelium. Blaylock WK, et al. **CLAO J** 1990 Jul–Sep;16(3):223–7

Phorbol myristate acetate inhibits HeLa 229 invasion by Bordetella pertussis and other invasive bacterial pathogens. Ewanowich CA, et al. **Infect Immun** 1990 Oct;

58(10):3187–93
Peptide analogs to a fibronectin receptor inhibit attachment of Staphylococcus aureus to fibronectin-containing substrates. Raja RH, et al. **Infect Immun** 1990 Aug; 58(8):2593–8
Effect of antifungal agents on the adherence of Candida albicans to murine gastrointestinal mucosal surfaces. Mehentee JF, et al. **J Antimicrob Chemother** 1990 Jan; 25(1):111–9
Inhibition of Candida adhesion to buccal epithelial cells by an aqueous extract of Allium sativum (garlic). Ghannoum MA. **J Appl Bacteriol** 1990 Feb;68(2):163–9
Fibronectin-mediated Calmette-Guerin bacillus attachment to murine bladder mucosa. Requirement for the expression of an antitumor response. Kavoussi LR, et al. **J Clin Invest** 1990 Jan;85(1):62–7
Effects of substance P on the spontaneous binding of Salmonella minnesota R345 (Rb) to human peripheral blood lymphocytes. De Simone C, et al. **J Clin Lab Anal** 1989; 3(6):345–9
Influence of carbon dioxide on the surface characteristics and adherence potential of coagulase-negative staphylococci. Denyer SP, et al. **J Clin Microbiol** 1990 Aug;28(8):1813–7
Inhibition of Streptococcus mutans adherence by means of surface hydrophilization. Olsson J, et al. **J Dent Res** 1990 Sep;69(9):1586–91
Role of erythrosine in the inhibition of adhesion of Lactobacillus fermentum strain 737 to mouse stomach tissue. Conway PL, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1167–73
Selective modulation of bacterial attachment to oral epithelial cells by enzyme activities associated with poor oral hygiene. Childs WC 3d, et al. **J Periodont Res** 1990 May; 25(3):172–8
Inhibition by mannose of in vitro colonization of chicken small intestine by Salmonella typhimurium. Oyofo BA, et al. **Poult Sci** 1989 Oct;68(10):1351–6
Effect of ampicillin, cefmetazole and minocycline on the adherence of Branhamella catarrhalis to pharyngeal epithelial cells. Ahmed K, et al. **Tohoku J Exp Med** 1990 May;161(1):1–7
Increased risk of urinary tract infection associated with the use of calcium supplements. Apicella LL, et al. **Urol Res** 1990;18(3):213–7
[Effect of antibiotics on bacterial adherence to foreign material] Besnier JM, et al. **Pathol Biol (Paris)** 1990 Apr; 38(4):243–8 (33 ref.) (Eng. Abstr.) (Fre)
[Relation of the chelating property of nitroxoline, the surface hydrophobicity and the inhibition of bacterial adherence] Bourlioux P, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):600–4 (Eng. Abstr.) (Fre)
[Inhibition by nifurzide of the adhesion capacity of enteropathogenic colibacillus to HEP-2 cells] Darfeuille-Michaud A, et al. **Pathol Biol (Paris)** 1989 Dec; 37(10):1090–3 (Eng. Abstr.) (Fre)
[Adherence properties and production of slime by staphylococci: relation to pathogenicity] Etesse-Carsenti H, et al. **Pathol Biol (Paris)** 1990 Apr;38(4):249–54 (Eng. Abstr.) (Fre)
[Direct effect of nitroxoline in the inhibition of bacterial adherence to urinary catheters] Oliviero L, et al. **Pathol Biol (Paris)** 1990 May;38(5):455–8 (Eng. Abstr.) (Fre)
[Effect of antibiotics on microbial adhesion] Grishina IA, et al. **Antibiot Khimioter** 1990 Mar;35(3):50–3 (70 ref.) (Rus)
[The effect of subinhibitory concentrations of antibiotics on the adhesion of enterobacteria] Parkhomenko LV, et al. **Mikrobiol Zh** 1990 Mar–Apr;52(2):78–81 (Eng. Abstr.) (Rus)
[The role of fibronectin in the streptococcal adhesion process] Lyzlova LV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jul;(7):7–12 (Eng. Abstr.) (Rus)

GENETICS

Genetics of adhesive fimbriae of intestinal Escherichia coli. de Graaf FK. **Curr Top Microbiol Immunol** 1990;151:29–53 (121 ref.)
Identification and characterization of a gene that controls colony morphology and auto-aggregation in Escherichia coli K12. Warne SR, et al. **J Gen Microbiol** 1990 Mar;136 (Pt 3):455–62
Examination of strains belonging to enteropathogenic Escherichia coli serogroups for genes encoding EPEC adherence factor and Vero cytotoxins. Smith HR, et al. **J Med Microbiol** 1990 Apr;31(4):235–40
Transcriptional silencing and thermoregulation of gene expression in Escherichia coli. Göransson M, et al. **Nature** 1990 Apr 12;344(6267):682–5
[Molecular mechanisms of adherence of enteropathogenic Escherichia coli] Benz I, et al. **Z Gastroenterol [Verh]** 1990 Apr;25:67–70 (35 ref.) (Ger)

IMMUNOLOGY

Relationship between secretion of the Anton blood group antigen in saliva and adherence of Haemophilus influenzae to oropharynx epithelial cells. van Alphen L, et al. **FEMS Microbiol Immunol** 1989 Jun;1(6–7):357–62
Human polymorphonuclear leukocyte response to Pseudomonas aeruginosa grown in biofilms. Jensen ET, et al. **Infect Immun** 1990 Jul;58(7):2383–5
Heterogeneity of human monocytes: differences in response to IFN-gamma. Levy R, et al. **J Biol Regul Homeost Agents** 1989 Oct–Dec;3(4):153–8
Blocking of Mycobacterium leprae adherence to dissociated Schwann cells by anti-mycobacterial antibodies. Choudhury A, et al. **Scand J Immunol** 1989 Oct;30(4):505–9
Vesical defense: further evidence for a charge-related mucosal anti-adherence mechanism. Shrom SH, et al. **Surg Forum** 1978;29:632–3

PHYSIOLOGY

Role of complement S protein (vitronectin) in adherence of Streptococcus dysgalactiae to bovine epithelial cells. Filippsen LF, et al. **Am J Vet Res** 1990 Jun;51(6):861–5
Adherence of Mycoplasma hyopneumoniae to cell monolayers. Zielinski GC, et al. **Am J Vet Res** 1990 Mar; 51(3):339–43
Nutrient transport and cellular morphology in immobilized cell aggregates. Fowler JD, et al. **Ann N Y Acad Sci** 1990; 589:333–49
Adherence of Bordetella bronchiseptica and Pasteurella multocida to swine nasal ciliated epithelial cells in vitro. Chung WB, et al. **APMIS** 1990 May;98(5):453–61
Attachment of staphylococci to silicone catheters in vitro. Espersen F, et al. **APMIS** 1990 May;98(5):471–8
Adhesion and motility of gliding bacteria on substrata with different surface free energies. Burchard RP, et al. **Appl Environ Microbiol** 1990 Aug;56(8):2529–34
A bacterial biofilm in a hemodialysis system. Assessment of disinfection and crossing of endotoxin. Vincent FC, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):310–3
Microrheological aspects of adhesion of Escherichia coli on glass. Xia Z, et al. **Biorheology** 1989;26(2):359–75
Aggregation of Actinomyces strains by extracellular vesicles produced by Bacteroides gingivalis. Bourgeau G, et al. **Can J Microbiol** 1990 May;36(5):362–5
Human buccal epithelial cell receptors of Pseudomonas aeruginosa: identification of glycoproteins with pilus binding activity. Doig P, et al. **Can J Microbiol** 1989 Dec; 35(12):1141–5
The outer membrane protein of enteropathogenic Escherichia coli, described as the 'localised adherence factor', is OmpF and probably not involved in adhesion to HEp-2 cells. Chart H, et al. **FEMS Microbiol Lett** 1989 Oct 15; 52(3):291–5
Glycosphingolipid receptors for Pseudomonas aeruginosa. Baker N, et al. **Infect Immun** 1990 Jul;58(7):2361–6
Functional analysis of the sialic acid-binding adhesin SfaS of pathogenic Escherichia coli by site-specific mutagenesis. Morschhäuser J, et al. **Infect Immun** 1990 Jul;58(7):2133–8
Pseudomonas cepacia adherence to respiratory epithelial cells is enhanced by Pseudomonas aeruginosa. Saiman L, et al. **Infect Immun** 1990 Aug;58(8):2578–84
Tissue-binding affinity of Proteus mirabilis fimbriae in the human urinary tract. Sareneva T, et al. **Infect Immun** 1990 Oct;58(10):3330–6
Exclusion of uropathogen adhesion to polymer surfaces by Lactobacillus acidophilus. Hawthorn LA, et al. **J Biomed Mater Res** 1990 Jan;24(1):39–46
Bacterial cell surface hydrophobicity properties in the mediation of in vitro adhesion by the rabbit enteric pathogen Escherichia coli strain RDEC-1. Drumm B, et al. **J Clin Invest** 1989 Nov;84(5):1588–94
The role of fibrinogen in staphylococcal adherence to catheters in vitro. Cheung AL, et al. **J Infect Dis** 1990 Jun;161(6):1177–86
Adherence of Staphylococcus aureus to cultured epidermal cells during differentiation. Miyake Y, et al. **J Med Microbiol** 1990 May;32(1):9–14
Quantitation and relative distribution of extracellular matrix in Staphylococcus epidermidis biofilm. Van Pett K, et al. **J Orthop Res** 1990 May;8(3):321–7
Identification of Mycoplasma binding proteins utilizing a 100 kilodalton lung fibroblast receptor. Geary SJ, et al. **J Recept Res** 1989–90;9(6):465–78
Preliminary study of breastfeeding and bacterial adhesion to uroepithelial cells. Coppa GV, et al. **Lancet** 1990 Mar 10; 335(8689):569–71
Influence of interfaces on microbial activity. van Loosdrecht MC, et al. **Microbiol Rev** 1990 Mar;54(1):75–87 (107 ref.)
Concanavalin A promotes adherence of Salmonella typhimurium to small intestinal mucosa of rats. Abud RL, et al. **Proc Soc Exp Biol Med** 1989 Oct;192(1):81–6
Factors influencing the adherence of strains of Streptococcus bovis and Escherichia coli isolated from ruminal epithelium. Semjén G, et al. **Vet Res Commun** 1990; 14(3):181–91
Fecal peritonitis: microbial adherence to serosal mesothelium and resistance to peritoneal lavage. Edmiston CE Jr, et al. **World J Surg** 1990 Mar–Apr;14(2):176–83
[Hemagglutinating properties of Proteus mirabilis strains isolated from clinical specimens] Samet A, et al. **Med Dosw Mikrobiol** 1989;41(2):121–9 (Eng. Abstr.) (Pol)
[Study of the adhesive properties of Klebsiella and their evaluation] Zemliankina LP, et al. **Lab Delo** 1989;(10):68–70 (Eng. Abstr.) (Rus)
[Comparative study of cell walls of group A Streptococcus and its non-adhesive phosphomycin-resistant mutant] Dmitrieva NF, et al. **Vestn Akad Med Nauk SSSR** 1989; (11):28–31 (Eng. Abstr.) (Rus)
[Comparative aspects of adhesion of group A and B streptococci to human epithelium] Grabovskaia KB, et al. **Vestn Akad Med Nauk SSSR** 1989;(11):4–12 (Eng. Abstr.) (Rus)
[The development of a quantitative method for the in vivo determination of the adhesive activity of Vibrio cholerae] Korol' VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Aug;(8):37–40 (Eng. Abstr.) (Rus)

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BACTERIAL ANTIGENS see **ANTIGENS, BACTERIAL**

BACTERIAL CONJUGATION see **CONJUGATION, GENETIC**

BACTERIAL CONJUNCTIVITIS see **CONJUNCTIVITIS, BACTERIAL**

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BACTERIAL GENE EXPRESSION REGULATION see **GENE EXPRESSION REGULATION, BACTERIAL**

BACTERIAL GENE PRODUCTS see **BACTERIAL PROTEINS**

BACTERIAL GENE PROTEINS see **BACTERIAL PROTEINS**

BACTERIAL INFECTIONS

Bacterial meningitis caused by Veillonella parvula. Nukina S, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Oct; 31(5):609–14
An etiological study of infectious diarrhea in infants and children in Taipei area. Chyou SC. et al. **Acta Paediatr Sin** 1988 Jul–Aug;29(4):213–20
Aeromonas hydrophila infections in children. Hong JY, et al. **Acta Paediatr Sin** 1988 Jul–Aug;29(4):235–41
Pneumonia in the elderly. Esposito AL. **Am Fam Physician** 1989 Nov;40(5 Suppl):23S–32S (27 ref.)
Branhamella catarrhalis infections [letter; comment] Kabongo ML. **Am Fam Physician** 1989 Nov;40(5):34, 39 Comment on: Am Fam Physician 1989 Feb;39(2):125–8.
Alkaligenes faecalis producing typhoid perforation-like picture [letter] Sharma AK, et al. **Am J Gastroenterol** 1990 Aug;85(8):1045–6
Branhamella catarrhalis: a microbiologic and clinical update. Proceedings of a symposium. Houston, Texas, September 15, 1989. **Am J Med** 1990 May 14;88(5A):1S–56S
Spectrum of disease due to Branhamella catarrhalis in children with particular reference to acute otitis media. Marchant CD. **Am J Med** 1990 May 14;88(5A):15S–19S (91 ref.)
Respiratory infections caused by Branhamella catarrhalis. Selected epidemiologic features. Sarubbi FA, et al. **Am J Med** 1990 May 14;88(5A):9S–14S
A descriptive study of 42 cases of Branhamella catarrhalis pneumonia. Wright PW, et al. **Am J Med** 1990 May 14; 88(5A):2S–8S
Fungal peritonitis caused by Curvularia lunata in a patient undergoing peritoneal dialysis. Guarner J, et al. **Am J Med Sci** 1989 Nov;298(5):320–3 (17 ref.)
Bacterial vaginosis and trichomoniasis vaginitis are risk factors for cuff cellulitis after abdominal hysterectomy. Soper DE, et al. **Am J Obstet Gynecol** 1990 Sep; 163(3):1016–21; discussion 1021–3
Statistical evaluation of diagnostic criteria for bacterial vaginosis. Thomason JL, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):155–60
Successful treatment of Bacillus alvei endophthalmitis. Antonello A, et al. **Am J Ophthalmol** 1989 Oct 15; 108(4):454–5
Bacterial meningitis: recent advances in pathophysiology and treatment. Tunkel AR, et al. **Ann Intern Med** 1990 Apr 15;112(8):610–23 (171 ref.)
Rejection and infection after pediatric cardiac transplantation. Braunlin EA, et al. **Ann Thorac Surg** 1990 Mar;49(3):385–90
Pyogenic meningitis in hospitalized children in Kelantan, Malaysia. Choo KE, et al. **Ann Trop Paediatr** 1990 Mar; 10(1):89–98
Postoperative Propionibacterium granulosum endophthalmitis [letter] Walker J, et al. **Arch Ophthalmol** 1990 Aug;108(8):1073–4
Papers read before the ninth annual meeting of the Surgical Infection Society. Denver, Colo, April 13 to April 14, 1989—Part II. **Arch Surg** 1990 Jan;125(1):17–96
Bacillus-induced endophthalmitis: new series of 10 cases and review of the literature. Hemady R, et al. **Br J Ophthalmol** 1990 Jan;74(1):26–9 (34 ref.)
Infection and rheumatic diseases: a review (2). Vaughan JH. **Bull Rheum Dis** 1990;39(2):1–8 (82 ref.)

Infection and rheumatic diseases: a review (Part 1 of 2). Vaughan JH. **Bull Rheum Dis** 1989;39(1):1–7 (65 ref.)
Infections in the lower extremity. **Clin Podiatr Med Surg** 1990 Jul;7(3):405–563
Is your office safe? No. Farris RL. **Cornea** 1990;9 Suppl 1:S44–6; discussion S47 (7 ref.)
CNS effects of sepsis. Bowton DL. **Crit Care Clin** 1989 Oct; 5(4):785–92 (42 ref.)
Infectious enteritis. A collective review. Fry RD. **Dis Colon Rectum** 1990 Jun;33(6):520–7 (73 ref.)
Chronic colitis after Aeromonas infection [letter; comment] Dickinson RJ, et al. **Gut** 1989 Oct;30(10):1436–7 Comment on: Gut 1989 May;30(5):686–90.
Hand infections. **Hand Clin** 1989 Nov;5(4):515–667
Ascitic fluid acidosis in bacterial peritonitis: a poor prognostic sign? Gitlin N. **Hepatology** 1990 May;11(5):896–8
Travel-related infections: prevention and treatment. Jong EC. **Hosp Pract [Off]** 1989 Nov 15;24(11):145–8, 151–4, 157–9 passim (9 ref.)
Bacillary angiomatosis presenting as a soft-tissue tumor without skin involvement. Schinella RA, et al. **Hum Pathol** 1990 May;21(5):567–9
The infected decubitus ulcer. Parish LC, et al. **Int J Dermatol** 1989 Dec;28(10):643–7 (35 ref.)
Annual meeting of the Israel Society for Microbiology. 12–13 February 1990, Jerusalem, Israel. Abstracts. **Isr J Med Sci** 1990 Jun;26(6):342–59
Annual meeting of the Israel Society for Microbiology. 30 January 1989, Haifa, Israel. Abstracts of papers. **Isr J Med Sci** 1989 Oct;25(10):592–606
Bacterial and viral causes of acute diarrhoea in children in Kuwait. Sethi SK, et al. **J Diarrhoeal Dis Res** 1989 Sep–Dec;7(3–4):85–8
Nonclostridial gas gangrene. Weisenfeld LS, et al. **J Foot Surg** 1990 Mar–Apr;29(2):141–6 (18 ref.)
Aeromonas associated diarrhoea in an otherwise healthy 70-year-old man [letter] Cryan B, et al. **J Infect** 1990 Mar; 20(2):169–70
Bacterial tracheitis. Rabie I, et al. **J Laryngol Otol** 1989 Nov; 103(11):1059–62 (13 ref.)
Dorsal midbrain encephalitis caused by Propionibacterium acnes. Report of two cases. Camarata PJ, et al. **J Neurosurg** 1990 Apr;72(4):654–9
Proceedings of the 9th symposium on Microbial Sciences. July 20, 21, 1989, Fukuoka. **J Pharmacobiodyn** 1990 Feb; 13(2):S27–43
Di-George's syndrome with multiple infections (an autopsy report). Sane SY. **J Postgrad Med** 1989 Apr;35(2):114–5
Bacterial aetiology of infantile diarrhoea in Papua New Guinea. Miwatani T, et al. **J Trop Pediatr** 1990 Jun; 36(3):101–3
A ten-year experience with bacterial aortitis. Oz MC, et al. **J Vasc Surg** 1989 Oct;10(4):439–49
Campylobacter pylori becomes Helicobacter pylori [editorial] **Lancet** 1989 Oct 28;2(8670):1019–20
Bowel-associated dermatosis-arthritis syndrome [published erratum appears in Med J Aust 1990 Apr 16;152(8):448] Kemp DR, et al. **Med J Aust** 1990 Jan 1;152(1):43–5
Spontaneous bacterial peritonitis and renal allograft recipients [letter] Pascual J, et al. **Nephron** 1989;53(2):178
Beware of the dog: meningitis in a splenectomised woman. Krol-van Straaten MJ, et al. **Neth J Med** 1990 Jun; 36(5–6):301–3
Bacterial tracheitis caused by Branhamella catarrhalis. Bass JL, et al. **Pediatr Emerg Care** 1989 Sep;5(3):171–2 (18 ref.)
Branhamella catarrhalis bronchopulmonary isolates in PICU patients. Kasian GF, et al. **Pediatr Pulmonol** 1989; 7(3):128–32
International Symposium on Anaerobic Bacteria and Bacterial Infections. Monte Carlo, Monaco, 25–28 September 1988. Proceedings. **Rev Infect Dis** 1990 Jan–Feb; 12 Suppl 2:S121–261
Acute bacterial sialadenitis: a study of 29 cases and review. Raad II, et al. **Rev Infect Dis** 1990 Jul–Aug;12(4):591–601
Acute invasive diarrhea in the pediatric patient. Guerrero R. **Scand J Gastroenterol Suppl** 1989;169:24–7 (19 ref.)
Current trends in anaerobic infections. Proceedings of the Third European Congress on Anaerobic Bacteria and Infections. Munich, March 8–10, 1989. **Scand J Infect Dis Suppl** 1989;62:1–51
Bacterial pneumonia in solid organ transplantation. Mermel LA, et al. **Semin Respir Infect** 1990 Mar;5(1):10–29 (136 ref.)
Clinical features of Aeromonas enteritis in Hawaii. Phillips DL, et al. **Trans R Soc Trop Med Hyg** 1990 Jan–Feb; 84(1):126–8
[Aeromonas-associated diarrhea] Fan JJ, et al. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Oct; 10(5):306–9 (19 ref.) **(Chi)**
[The Douglas abscess] van Houte A, et al. **Ned Tijdschr Geneeskd** 1990 Aug 4;134(31):1481–3 **(Dut)**
[Lung infections with atypical features] Neijens HJ, et al. **Tijdschr Kindergeneeskd** 1990 Feb;58(1):23–9 (Eng. Abstr.) **(Dut)**
[Cervical spondylodiscitis caused by Kingella kingae. Apropos of a case] Petrus M, et al. **Ann Pediatr (Paris)** 1990 Mar;37(3):170–2 (Eng. Abstr.) **(Fre)**
[Infectious manifestations of AIDS in the urogenital tract] Baron JC, et al. **Ann Urol (Paris)** 1990;24(3):241–4 (Eng. Abstr.) **(Fre)**
[Pathogenic bacteria encountered in nutritional disorders] Rasolofonirina RN. **Arch Inst Pasteur Madagascar** 1989; 56(1):81–8 **(Fre)**
[Postoperative bacterial endophthalmia. Prognostic factors] Retout A, et al. **Bull Soc Ophtalmol Fr** 1988 Dec; 88(12):1515–9 (Eng. Abstr.) **(Fre)**
[Aeromonas hydrophila in the drinking water in Djibouti: commensal germ or diarrhea-causing agent?] Fox E, et al. **Med Trop (Mars)** 1990 Apr;50(2):237–9 (Eng. Abstr.) **(Fre)**
[The understanding of sepsis in clinical medicine (letter)] von Wichert P. **Dtsch Med Wochenschr** 1990 Mar 2; 115(9):356–7 **(Ger)**
[Infectious enterocolitis. Clinical and endoscopic diagnosis] Kuntz HD. **Schweiz Rundsch Med Prax** 1990 Mar 27; 79(13):383–6 (28 ref.) (Eng. Abstr.) **(Ger)**
[Changing spectrum of the syndrome of spontaneous bacterial peritonitis (editorial)] Shaked Y, et al. **Harefuah** 1990 Jun 15;118(12):725–7 **(Heb)**
[Clinical study of norfloxacin in the treatment of acute epididymitis] Arakawa S, et al. **Hinyokika Kiyo** 1989 Jun; 35(6):1089–95 (Eng. Abstr.) **(Jpn)**
[Clinical evaluation of cefixime in the treatment of acute uncomplicated cystitis] Togashi M, et al. **Hinyokika Kiyo** 1989 Jun;35(6):1083–7 (Eng. Abstr.) **(Jpn)**
[Gene cloning of an Actinobacillus actinomycetemcomitans Y4 antigen that reacts to peripheral blood sera in advanced destructive periodontitis patients] Arakawa S. **Kokubyo Gakkai Zasshi** 1989 Dec;56(4):494–512 (Eng. Abstr.) **(Jpn)**
[Pharmacokinetics and antimicrobial effect of cefminox in serum and ascitic fluid for experimental purulent peritonitis in mice] Azuma Y, et al. **Nippon Geka Hokan** 1989 Sep 1;58(5):445–51 (Eng. Abstr.) **(Jpn)**
[Single-daily-dose treatment of ceftriaxone for biliary tract infections and bacterial counts in bile] Tanimura H, et al. **Nippon Geka Hokan** 1989 May 1;58(3):299–309 (Eng. Abstr.) **(Jpn)**
[63d symposia of the Japan Society of Bacteriology. Tokushima, 27–29 March 1990. Abstracts] **Nippon Saikingaku Zasshi** 1990 Jan;45(1):49–504 **(Jpn)**
[The protective effects of glucagon and insulin in an experimental massive hepatic cell necrosis model] Kuboi H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Feb; 87(2):211–7 (Eng. Abstr.) **(Jpn)**
[Infections of the breast] Sekulić S, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:317–9 (Eng. Abstr.) **(Scr)**
[Arthritis caused by Streptobacillus moniliformis: a case of fever induced by a rat bite] Anglada A, et al. **Med Clin (Barc)** 1990 Apr 14;94(14):535–7 (23 ref.) (Eng. Abstr.) **(Spa)**
[Endocarditis caused by Neisseria subflava (letter)] Baquero M, et al. **Rev Clin Esp** 1989 Nov;185(8):425–6 **(Spa)**

BLOOD

Kallikrein-kinin system in infectious diseases. Colman RW. **Adv Exp Med Biol** 1989;247A:153–7 (15 ref.)
Neutrophil activation in acute renal failure and sepsis. Hörl WH, et al. **Arch Surg** 1990 May;125(5):651–4
Activation and inhibition of fibrinolysis in septic patients in an internal intensive care unit. Voss R, et al. **Br J Haematol** 1990 May;75(1):99–105
Inhibitory and bactericidal activity of cefpirome and cefotaxime against blood culture isolates. Ansorg R, et al. **Chemotherapy** 1990;36(1):24–8
Changes of plasma amino acids in total parenteral nutrition-supported patients with intraabdominal infection. Li JS, et al. **Chin Med J [Engl]** 1989 Dec;102(12):920–5
Effect of alpha-tocopherol on red cell deformability and survival in sepsis. Powell RJ, et al. **Curr Surg** 1989 Sep–Oct; 46(5):380–2
Relationship between angiotensinogen, alpha 1-protease inhibitor elastase complex, antithrombin III and C-reactive protein in septic ARDS. Hilgenfeldt U, et al. **Eur J Clin Pharmacol** 1990;38(2):125–31
C-reactive protein and bacterial infection in preterm infants. Wasunna A, et al. **Eur J Pediatr** 1990 Mar;149(6):424–7
Blood group, secretor status and susceptibility to bacterial meningitis. Blackwell CC, et al. **FEMS Microbiol Immunol** 1989 Jun;1(6–7):351–6 (27 ref.)
Influence of P blood group phenotype on susceptibility to urinary tract infection. Lomberg H, et al. **FEMS Microbiol Immunol** 1989 Jun;1(6–7):363–70
Human leukocyte rheology after acute infection [letter] Ciuffetti G, et al. **Haematologica** 1990 Jan–Feb;75(1):94–5
Serum tumor necrosis factor levels in patients with infectious disease and septic shock. Offner F, et al. **J Lab Clin Med** 1990 Jul;116(1):100–5
Complement C3 deposition onto bacteria by neonatal serum is not enhanced after the infusion of intravenous immunoglobulin. Lassiter HA, et al. **J Perinatol** 1990 Mar; 10(1):27–31
Effect of sepsis and surgery on trace minerals. Shanbhogue LK, et al. **JPEN J Parenter Enteral Nutr** 1990 May–Jun; 14(3):287–9
[Serum level of 2 monocyte cytokines (TNF, IL 1 B) in septic states and septic shock: the relation of various biochemical parameters] Lepape A, et al. **Ann Fr Anesth Reanim** 1989; 8 Suppl:R239 **(Fre)**
[Importance of blood culture in septicemia, particularly bacterial endocarditis] Kezzal K, et al. **Arch Inst Pasteur Alger** 1986;55:41–60 (Eng. Abstr.) **(Fre)**
[Infection and tissue ischemia: what role does the rheologic behavior of blood cells play?] Ciuffetti G, et al. **Z Gesamte Inn Med** 1989 Sep 15;44(18):555–7 (Eng. Abstr.) **(Ger)**
[Infection and tissue ischemia: role of cellular rheology] Ciuffetti G, et al. **Medicina (Firenze)** 1989 Jul–Sep; 9(3):306–8 (Eng. Abstr.) **(Ita)**
[Acute phase proteins as markers of septic risk in surgical patients] Pompilio E, et al. **Minerva Chir** 1989 Oct 31; 44(20):2185–90 (Eng. Abstr.) **(Ita)**
[Usefulness of protein C in the early diagnosis of acute infection in newborn infants at risk] Ardissone P, et al. **Minerva Pediatr** 1989 Jun;41(6):301–4 (Eng. Abstr.) **(Ita)**
[Diagnostic and prognostic value of blood prealbumin in the course of neonatal infectious diseases of bacterial origin] Fabris C, et al. **Minerva Pediatr** 1989 Jun;41(6):297–300 (Eng. Abstr.) **(Ita)**
[Results of various biochemical studies in secondary bacterial pneumonia] Misiewicz A, et al. **Przegl Lek** 1989; 46(12):798–801 (Eng. Abstr.) **(Pol)**
[Changes in the blood coagulation and fibrinolysis systems in newborn infants with infections and normal and low birth weight] Grygalewicz J, et al. **Wiad Lek** 1989 Jan 15; 42(2):87–93 (Eng. Abstr.) **(Pol)**
[Age-related characteristics of the activity of phagocytes in the normal state and in infections] Bazhora IuI, et al. **Fiziol Zh** 1990 May–Jun;36(3):56–60 (Eng. Abstr.) **(Rus)**
[Substantiation, tactics and effectiveness of frozen plasma-enzyme inhibitor therapy in septicemia and infectious-destructive processes] Barkagan ZS, et al. **Gematol Transfuziol** 1989 Oct;34(10):8–12 (Eng. Abstr.) **(Rus)**
[Status of blood coagulation in acute intestinal infection in infants: effect of various combinations of infusion media] Kramarev SA. **Pediatriia** 1990;(1):73–7 **(Rus)**
[Intravascular laser irradiation of the blood in the treatment of patients with surgical infection] KarniushinaNL, et al. **Vestn Khir** 1989 Sep;143(9):48–51 (Eng. Abstr.) **(Rus)**
[Neutrophil values in neonatal sepsis] Lah N, et al. **Srp Arh Celok Lek** 1987 May–Jun;115(5–6):565–81 (Eng. Abstr.) **(Scc)**
[C3 and IgG Fc receptors of granulocytes in human pathology] Rivero IH, et al. **Medicina (B Aires)** 1989; 49(2):109–12 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

Cerebrospinal fluid prostaglandins, interleukin 1 beta, and tumor necrosis factor in bacterial meningitis. Clinical and laboratory correlations in placebo-treated and dexamethasone-treated patients. Mustafa MM, et al. **Am J Dis Child** 1990 Aug;144(8):883–7
Evaluation of co-agglutination (COA), counter immunoelectrophoresis (CIE), culture and direct microscopic (Dm) examination of cere-brospinal fluid (CSF) for detection of meningitis caused by common bacterial pathogens. Chowdhury ZU, et al. **Bangladesh Med Res Counc Bull** 1990 Jun;16(1):34–41
Prognostic significance of cerebrospinal fluid adenosine deaminase in acute bacterial meningitis. da Cunha JG, et al. **Infection** 1990 Mar–Apr;18(2):125
Differential diagnosis of acute meningitis. An analysis of the predictive value of initial observations. Spanos A, et al. **JAMA** 1989 Nov 17;262(19):2700–7
Bacterial meningitis with "normal" cerebrospinal fluid in adults: a report on five cases. Domingo P, et al. **Scand J Infect Dis** 1990;22(1):115–6
[Clinical significance of cerebrospinal cytology] Taskinen E, et al. **Duodecim** 1989;105(20):1644–59 **(Fin)**

COMPLICATIONS

The role of infection and vaccination in the genesis of optic neuritis and multiple sclerosis in children. Riikonen R. **Acta Neurol Scand** 1989 Nov;80(5):425–31
Bacterial infections in the acquired immune deficiency syndrome. Clinicopathologic correlations in a series of autopsy cases. Nichols L, et al. **Am J Clin Pathol** 1989 Dec;92(6):787–90
Precipitous hypotension in the emergency department caused by Capnocytophaga canimorsus sp nov sepsis. Howell JM, et al. **Am J Emerg Med** 1990 Jul;8(4):312–4
Poor prognosis in end-stage lupus nephritis due to nonautologous vascular access site associated septicemia and lupus flares. Sires RL, et al. **Am J Nephrol** 1989; 9(4):279–84
Awake fibreoptic intubation for a rare cause of upper airway obstruction—an infected laryngocoele. Rashid J, et al. **Anaesthesia** 1989 Oct;44(10):834–6
Cervical necrotizing fasciitis: an uncommon sequela to dental infection. Moss RM, et al. **Ann Otol Rhinol Laryngol** 1990 Aug;99(8):643–6
Hand infections in the diabetic and the diabetic renal transplant recipient. Francel TJ, et al. **Ann Plast Surg** 1990 Apr;24(4):304–9
Propionibacterium acnes in a spondylitis with palmoplantar pustulosis [letter; comment] Gerster JC, et al. **Ann Rheum Dis** 1990 May;49(5):337–8 Comment on: Ann Rheum Dis 1988 Oct;47(10):809–15.
The role of bacterial vaginosis as a cause of amniotic fluid infection, chorioamnionitis and prematurity—a review. Martius J, et al. **Arch Gynecol Obstet** 1990;247(1):1–13 (43 ref.)

Occult bacterial infection in adults with unexplained fever. Validation of a diagnostic index. Leibovici L, et al. **Arch Intern Med** 1990 Jun;150(6):1270–2

Septic encephalopathy. Evidence for altered phenylalanine metabolism and comparison with hepatic encephalopathy. Mizock BA, et al. **Arch Intern Med** 1990 Feb;150(2):443–9

Extensive skin ulceration due to EF-4 bacterial infection in a patient with AIDS. Grob JJ, et al. **Br J Dermatol** 1989 Oct;121(4):507–10

Bacterial and fungal infections in patients with the acquired immunodeficiency syndrome. Rolston KV, et al. **Cancer Detect Prev** 1990;14(3):377–81

Bacteria and cancer—antagonisms and benefits. Nauts HC. **Cancer Surv** 1989;8(4):713–23 (27 ref.)

The role of bacterial infection of the maxillary sinus in nasal polyps. Dawes P, et al. **Clin Otolaryngol** 1989 Oct; 14(5):447–50

Infectious agents and disease of peripheral nerve. Rubin M, et al. **Clin Podiatr Med Surg** 1990 Jan;7(1):51–70 (97 ref.)

Calcium: does it have a therapeutic role in sepsis? [editorial; comment] Chernow B. **Crit Care Med** 1990 Aug; 18(8):895–6 Comment on: Crit Care Med 1990 Aug;18(8):851–7.

Hypotension during slow phenytoin infusion in severe sepsis. Isenstein D, et al. **Crit Care Med** 1990 Sep;18(9):1036–8

Bacterial infections. Alarcón GS. **Curr Opin Rheumatol** 1989 Aug;1(2):167–71 (13 ref.)

Infection and rheumatoid arthritis. Venables PJ. **Curr Opin Rheumatol** 1989 Jun;1(1):15–20 (13 ref.)

Molecular mimicry. Cross-reactivity between microbes and host proteins as a cause of autoimmunity. **Curr Top Microbiol Immunol** 1989;145:1–135

Overview: infectious agents as etiologic triggers of autoimmune disease. Oldstone MB. **Curr Top Microbiol Immunol** 1989;145:1–3 (7 ref.)

Noma and noma neonatorum. Eisele DW, et al. **Ear Nose Throat J** 1990 Feb;69(2):119–20, 122–3

Factors predictive of seizures among intensive care unit patients with gram-negative infections. Guess HA, et al. **Epilepsia** 1990 Sep–Oct;31(5):567–73

Hepatic inflammation in rats with experimental small intestinal bacterial overgrowth. Lichtman SN, et al. **Gastroenterology** 1990 Feb;98(2):414–23

Epithelioid angiomatosis in the acquired immunodeficiency syndrome: morphology and differential diagnosis. Walford N, et al. **Histopathology** 1990 Jan;16(1):83–8

Anaerobic infection of the lung and pleural space in tuberculosis. Singh PP, et al. **Indian J Chest Dis Allied Sci** 1989 Apr–Jun;31(2):85–9

Ultrasonic evaluation of complicated meningitis. Kapoor R, et al. **Indian Pediatr** 1989 Aug;26(8):804–8

Critical control points for foods prepared in households whose members had either alleged typhoid fever or diarrhea. Michanie S, et al. **Int J Food Microbiol** 1988 Oct; 7(2):123–34

Hypoglycemia and sepsis in two elderly diabetics [letter] Scheetz A. **J Am Geriatr Soc** 1990 Apr;38(4):492

Acute septic cholecystitis in patients with burn injuries. Slater H, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):445–7

Diarrhea in hypothyroidism: bacterial overgrowth as a possible etiology. Goldin E, et al. **J Clin Gastroenterol** 1990 Feb;12(1):98–9

Lack of protection against bacterial infections in patients with advanced cancer treated by biologic response modifiers. Maoleekoonpairoj S, et al. **J Clin Microbiol** 1989 Oct; 27(10):2305–8

Oral infections in immunocompromised patients. Heimdahl A, et al. **J Clin Periodontol** 1990 Aug;17(7 (Pt 2)):501–3 (7 ref.)

Vascular diseases and oral infections. Syrjänen J. **J Clin Periodontol** 1990 Aug;17(7 (Pt 2)):497–500 (51 ref.)

Respiratory viruses interfere with bacteriologic response to antibiotic in children with acute otitis media. Chonnaitree T, et al. **J Infect Dis** 1990 Aug;162(2):546–9

Endophthalmitis due to Pasteurella multocida and CDC EF-4 [letter] Vartian CV, et al. **J Infect Dis** 1989 Oct; 160(4):733

Flow cytometric parameters of neutrophil function as early indicators of sepsis- or trauma-related pulmonary or cardiovascular organ failure. Rothe G, et al. **J Lab Clin Med** 1990 Jan;115(1):52–61

Bacterial infection and human fetal wastage. Lessing JB, et al. **J Reprod Med** 1989 Dec;34(12):975–6

Cholestasis associated with extrahepatic bacterial infection in five dogs. Taboada J, et al. **J Vet Intern Med** 1989 Oct–Dec;3(4):216–21

Respiratory infection caused by Flavobacterium meningosepticum [letter] Fujita J, et al. **Lancet** 1990 Mar 3;335(8688):544

Source of infection in Stomatococcus mucilaginosus septicaemia [letter] Lemozy J, et al. **Lancet** 1990 Feb 17; 335(8686):416

A possible role for bacteria in the pathogenesis of insulin dependent diabetes mellitus. Morris JA. **Med Hypotheses** 1989 Aug;29(4):231–5

Growing role of bacterial infections in AIDS-related morbidity and mortality [news] **N Y State J Med** 1990 Mar; 90(3):168–9

The role of serial angiography in the management of bacterial and fungal intracranial aneurysms—report of two cases and review of the literature. Kojima Y, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):202–16 (97 ref.)

Discitis caused by the Centers for Disease Control microorganism Group Ve-1. Levy DI, et al. **Neurosurgery** 1989 Oct;25(4):655–7

Bacterial vaginosis as a risk factor for post-cesarean endometritis. Watts DH, et al. **Obstet Gynecol** 1990 Jan; 75(1):52–8

Bacterial vaginosis: emphasis on upper genital tract complications. Eschenbach DA. **Obstet Gynecol Clin North Am** 1989 Sep;16(3):593–610 (53 ref.)

Bilateral ischemic optic neuropathy and retinal vascular occlusions associated with lymphoma and sepsis. Clinicopathologic correlation. Guyer DR, et al. **Ophthalmology** 1990 Jul;97(7):882–8

The oral cavity as a port of entry for early infections in patients treated with bone marrow transplantation. Heimdahl A, et al. **Oral Surg Oral Med Oral Pathol** 1989 Dec;68(6):711–6

Clinical characteristics of children with fever and transient neutropenia who experience serious bacterial infections. Bonadio WA, et al. **Pediatr Emerg Care** 1989 Sep;5(3):163–5

Case-control study of hyperpyrexia in children. Alpert G, et al. **Pediatr Infect Dis J** 1990 Mar;9(3):161–3

Bacterial tracheitis among children hospitalized for severe obstructive dyspnea. Dudin AA, et al. **Pediatr Infect Dis J** 1990 Apr;9(4):293–5

Mixed bacterial and viral infections are common in children. Hietala J, et al. **Pediatr Infect Dis J** 1989 Oct;8(10):683–6

Bacterial coinfection in children hospitalized with respiratory syncytial virus infections. Korppi M, et al. **Pediatr Infect Dis J** 1989 Oct;8(10):687–92

Lack of a role of the duodenal microflora in pathogenesis of persistent diarrhea and diarrhea-related malabsorption in Peruvian children. Penny ME, et al. **Pediatr Infect Dis J** 1990 Jul;9(7):479–87

The influence of small bowel contamination on the pathogenesis of bowel obstruction. Schwöbel M, et al. **Prog Pediatr Surg** 1989;24:165–72

Primary sepsis presenting as fulminant hepatic failure. Dirix LY, et al. **Q J Med** 1989 Nov;73(271):1037–43

The effect of sepsis and short-term exposure to nitrous oxide on the bone marrow and the metabolism of vitamin B12 and folate. van Achterbergh SM, et al. **S Afr Med J** 1990 Sep 1;78(5):260–3

Bacterial involvement in parainfluenza virus infection in children. Korppi M, et al. **Scand J Infect Dis** 1990; 22(3):307–12

Vulvovaginal candidiasis complicating recurrent bacterial vaginosis. Redondo-Lopez V, et al. **Sex Transm Dis** 1990 Jan–Mar;17(1):51–3

Aeromonas endocarditis in a patient with chronic hepatitis-B infection. Cheong TH, et al. **Singapore Med J** 1989 Oct; 30(5):490–2

Microbiological study of bladder tumors, their histology and infective complications. Badenoch DF, et al. **Urology** 1990 Jan;35(1):5–8

[A case of anaerobic emphysematous cholecystitis with a subhepatic abscess] Dvořák J, et al. **Rozhl Chir** 1990 Mar; 69(3):135–8 (Eng. Abstr.) (Cze)

[Has premature labor an infectious basis?] Kurki T, et al. **Duodecim** 1989;105(21):1693–5 (18 ref.) (Fin)

[Effect of alcohol and cirrhosis on the presence of Helicobacter pylori in the gastric mucosa] Pateron D, et al. **Gastroenterol Clin Biol** 1990;14(6-7):555–60 (Eng. Abstr.) (Fre)

[Advances in the medical treatment of bacterial endophthalmitis] Bron A, et al. **Ophtalmologie** 1989 Jan–Mar;3(1):73–6 (33 ref.) (Eng. Abstr.) (Fre)

[Gynecologic infections and sterility] Nahmanovici C, et al. **Rev Fr Gynecol Obstet** 1989 Mar 25;84(3 Pt 2):269–71; discussion 282–6 (0 ref.) (Eng. Abstr.) (Fre)

[Monomelic hypertrophic osteoarthropathy associated with infection of a vascular prosthesis] Fauquert P, et al. **Rev Rhum Mal Osteoartic** 1990 Jan;57(1):13–6 (18 ref.) (Fre)

[Infection as a cause of multiple organ failure. Definition, pathophysiology and diagnostic parameters] Schuster HP. **Anasth Intensivther Notfallmed** 1989 Aug;24(4):206–11 (22 ref.) (Eng. Abstr.) (Ger)

[Slow sepsis and supravalvular aortic stenosis. Study of a case] Pagnan A. **Minerva Cardioangiol** 1971 Mar; 19(3):178–82 (Ita)

[Acute diarrhea: recent etiopathogenetic findings] Zanchetta S, et al. **Pediatr Med Chir** 1989 Sep–Oct;11(5):501–5 (34 ref.) (Eng. Abstr.) (Ita)

[Infected solitary renal cyst extending to subphrenic abscess—a case study and review of the literature] Yoshida K, et al. **Hinyokika Kiyo** 1989 May;35(5):857–62 (9 ref.) (Eng. Abstr.) (Jpn)

[Spontaneous remission of four months' duration in hypoplastic leukemia with tetraploid chromosome after blood transfusions and infection] Maekawa T, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Aug;52(5):849–57 (Eng. Abstr.) (Jpn)

[A surgical case report of acute pyogenic pericarditis in a 9-month infant] Hamaguchi N, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Feb;38(2):289–93 (Eng. Abstr.) (Jpn)

[Urinary tract infections in relation to inflammatory conditions of the vagina in girls] Rzepka-Górska I, et al. **Ginekol Pol** 1989 Jan;60(1):27–32 (Eng. Abstr.) (Pol)

[Hearing loss in suppurative meningitis and encephalitis in our cases] Kępa L, et al. **Pol Tyg Lek** 1989 Jan 30; 44(5):112–5 (Eng. Abstr.) (Pol)

[Evaluation of the sequelae of suppurative meningitis and meningoencephalitis by computerized tomography] Michowicz A, et al. **Przegl Epidemiol** 1989;43(3):295–300 (Eng. Abstr.) (Pol)

[A case of subdural abscess as a complication of suppurative meningitis] Losy J. **Wiad Lek** 1989 Jan 15;42(2):125–7 (Eng. Abstr.) (Pol)

[Infection and immunity in sickle cell disease] Falcão RP, et al. **AMB Rev Assoc Med Bras** 1989 Mar–Apr;35(2):70–4 (99 ref.) (Eng. Abstr.) (Por)

[Bacterial involvement in oncogenesis] Buiuc D, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Apr–Jun;93(2):223–7 (41 ref.) (Rum)

[Occurrence of microorganisms in chronic salpingitis in infertile women] Danilov AIu, et al. **Akush Ginekol (Mosk)** 1989 Jul;(7):35–8 (Eng. Abstr.) (Rus)

[Tactics in the treatment of subdiaphragmatic abscesses] Malkova SK. **Vestn Khir** 1989 Jun;142(6):85–8 (Eng. Abstr.) (Rus)

[The role of non-clostridial anaerobic infections in the etiology, pathogenesis, clinical aspects and treatment of inflammatory diseases of the paranasal sinuses] Mirazizov KD, et al. **Vestn Otorinolaringol** 1990 May–Jun;(3):22–5 (Eng. Abstr.) (Rus)

[The infectious etiology of glomerulonephritis (a review of the literature)] Rudenko AV, et al. **Vrach Delo** 1989 Dec; (12):44–9 (68 ref.) (Rus)

[Pertussis syndrome: study of 74 cases] Galles Pacareu C, et al. **An Esp Pediatr** 1989 Dec;31(6):549–53 (33 ref.) (Eng. Abstr.) (Spa)

[Infections caused by gram positive bacteria: a new epidemics in patients with positive anti-HIV antibodies and drug addicts (editorial)] Gelabert Más A. **Arch Esp Urol** 1990 Mar;43(2):103–5 (Spa)

[Opportunistic infections of the central nervous system in patients with AIDS] Ricart C, et al. **Arch Neurobiol (Madr)** 1989;52 Suppl 1:108–20 (66 ref.) (Eng. Abstr.) (Spa)

[Impact of infections on mortality in children with cancer] Pacheco-Rios A, et al. **Bol Med Hosp Infant Mex** 1989 Dec;46(12):767–70 (Eng. Abstr.) (Spa)

CONGENITAL

[Effect of a bovine surfactant in very low birth weight premature infants with congenital pneumonia] Gortner L, et al. **Monatsschr Kinderheilkd** 1990 May;138(5):274–8 (Eng. Abstr.) (Ger)

DIAGNOSIS

Bacterial involvement in laryngeal infections in children. Korppi M, et al. **Acta Paediatr Scand** 1990 May;79(5):564–5

Detection of soft-tissue and skeletal infections with ultra low-field (0.02 T) MR imaging. Hovi I, et al. **Acta Radiol** 1989 Sep–Oct;30(5):495–9

Imaging of chronic renal infections. Kenney PJ. **AJR Am J Roentgenol** 1990 Sep;155(3):485–94 (40 ref.)

Unusual mitral annular vegetation diagnosed by transesophageal echocardiography. Tunick PA, et al. **Am Heart J** 1990 Aug;120(2):444–6

Amniotic fluid glucose concentration: a rapid and simple method for the detection of intraamniotic infection in preterm labor. Romero R, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):968–74

The leukocyte esterase test for detection of cerebrospinal fluid leukocytosis and bacterial meningitis. DeLozier JS, et al. **Ann Emerg Med** 1989 Nov;18(11):1191–8

Complement components in neonatal sepsis. Singh RP, et al. **Ann Trop Paediatr** 1990 Mar;10(1):35–7

When to do a lumbar puncture in a neonate [letter; comment] Isaacs D, et al. **Arch Dis Child** 1989 Oct;64(10):1513–4 Comment on: Arch Dis Child 1989 Mar;64(3):313–6.

The optimum use of needle aspiration in the bacteriologic diagnosis of cellulitis in adults. Sachs MK. **Arch Intern Med** 1990 Sep;150(9):1907–12

The limited value of symptoms and signs in the diagnosis of vaginal infections. Schaaf VM, et al. **Arch Intern Med** 1990 Sep;150(9):1929–33

Beta 2-microglobulin. A reliable parameter for differentiating between graft rejection and severe infection after cardiac transplantation. Teufelsbauer H, et al. **Circulation** 1989 Dec; 80(6):1681–8

Vaginitis/vaginosis. Spiegel CA. **Clin Lab Med** 1989 Sep; 9(3):525–33 (27 ref.)

Perineal necrotizing infection. Artigas V, et al. **Curr Surg** 1990 Jan–Feb;47(1):4–7

Perineal necrotizing infection [editorial] Sharifi R. **Curr Surg** 1990 Jan–Feb;47(1):1

Acute bacterial meningitis. I: Diagnosis. Robinson RO, et al. **Dev Med Child Neurol** 1990 Jan;32(1):83–6 (8 ref.)

Comparison of two commercial broth-culture systems for microbial detection in dialysates of patients on continuous ambulatory peritoneal dialysis. Saubolle MA, et al. **Diagn Microbiol Infect Dis** 1989 Nov–Dec;12(6):457–61

Oral manifestations of human immunodeficiency virus infection. Brahim JS, et al. **Ear Nose Throat J** 1990 Jul; 69(7):464, 467–9, 472–4 (30 ref.)

Bacterial pneumonia in the elderly. Sims RV. **Emerg Med Clin North Am** 1990 May;8(2):207–20 (86 ref.)

Prospects for monoclonal antibodies in the diagnosis and treatment of bacterial infections. Verhoef J, et al. **Eur J Clin Microbiol Infect Dis** 1990 Apr;9(4):247–50 (19 ref.)

Utility of an algorithm in differentiating spontaneous from secondary bacterial peritonitis [see comments] Akriviadis EA, et al. **Gastroenterology** 1990 Jan;98(1):127–33 Comment in: Gastroenterology 1990 Jan;98(1):230–6.

Ascitic fluid polymorphonuclear cell count and serum to ascites albumin gradient in the diagnosis of bacterial peritonitis [see comments] Albillos A, et al. **Gastroenterology** 1990 Jan;98(1):134 Comment in: Gastroenterology 1990 Jan;98(1):230

Glucose–H2 breath test for small intestine bacterial overgrowth [letter; comment] Corazza G, et al. **Gastroenterology** 1990 Jan;98(1):253–4 Comment on: Gastroenterology 1988 Oct;95(4):982–8.

The diagnosis of small bowel bacterial overgrowth. Reliability of jejunal culture and inadequacy of breath hydrogen testing. Corazza GR, et al. **Gastroenterology** 1990 Feb;98(2):302–9

Bacterial vaginosis: prevalence in outpatients, association with some micro–organisms and laboratory indices. Cristiano L, et al. **Genitourin Med** 1989 Dec;65(6):382–7

When 'something is wrong': a case for investigating vague health complaints. Fader AM, et al. **Geriatrics** 1990 Mar; 45(3):76–7, 80

Prospective study of bacterial infection in acute liver failure: an analysis of fifty patients. Rolando N, et al. **Hepatology** 1990 Jan;11(1):49–53

Is the test patch useful in determining safety against operative infection? Azad R, et al. **Indian J Ophthalmol** 1989 Jan–Mar;37(1):20–3

Coagglutination for diagnosis of bacterial infection. Lalitha MK, et al. **Indian J Pediatr** 1989 May–Jun;56(3):327–33

Bronchiolitis like presentation of Branhamella catarrhalis bronchopulmonary infection. Singh M, et al. **Indian Pediatr** 1989 Oct;26(10):1044–6

Ulnar artery aneurysms after injury mimicking acute infection in the hand. Kay PR, et al. **Injury** 1988 Nov;19(6):402–4

Granulocyte elastase levels do not correlate with anaerobic and aerobic bacterial growth in seminal plasma from infertile men. Cumming JA, et al. **Int J Androl** 1990 Aug; 13(4):273–7

Survey of genitourinary organisms in a population of sexually active adolescent males admitted to a chemical dependency unit. Jenkins SC, et al. **J Adolesc Health Care** 1990 May; 11(3):223–6

Clinical and laboratory diagnosis of lower extremity infections. Joseph WS. **J Am Podiatr Med Assoc** 1989 Oct; 79(10):505–10

Cerebrospinal fluid free N–acetyl neuraminic acid levels—a diagnostic and prognostic test in meningitis. Sharma JK, et al. **J Assoc Physicians India** 1989 Dec;37(12):757–9

Neurosonographic features of central nervous system infections in infancy and childhood. Frank LM, et al. **J Child Neurol** 1989;4 Suppl:S41–51 (31 ref.)

Improved method for bacteriological diagnosis of spontaneous bacterial peritonitis. Bobadilla M, et al. **J Clin Microbiol** 1989 Oct;27(10):2145–7

Diagnostic considerations and interpretation of microbiological findings for evaluation of chronic prostatitis. Krieger JN, et al. **J Clin Microbiol** 1989 Oct; 27(10):2240–4

Development of a diagnostic test for anaerobic periodontal infections based on plaque hydrolysis of benzoyl–DL–arginine–naphthylamide. Loesche WJ, et al. **J Clin Microbiol** 1990 Jul;28(7):1551–9

Reproducibility of interpretation of Gram–stained vaginal smears for the diagnosis of bacterial vaginosis. Mazzulli T, et al. **J Clin Microbiol** 1990 Jul;28(7):1506–8

Gadolinium–enhanced MR in spinal infection. Post MJ, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):721–9

Is C–reactive protein a reliable indicator of bacterial infection in the newborn? [letter] Gussetti N, et al. **J Infect Dis** 1989 Nov;160(5):909–10

Perioperative change of plasma endotoxin levels in early infants. Imura K, et al. **J Pediatr Surg** 1989 Dec; 24(12):1232–5

Evaluation of C. reactive protein values in neonatal sepsis. Shortland DB, et al. **J Perinat Med** 1990;18(3):157–63

The role of the lumbar puncture in the admission sepsis evaluation of the premature infant. Hendricks–Muñoz KD, et al. **J Perinatol** 1990 Mar;10(1):60–4

Comparison of two endometrial sampling devices. Cotton–tipped swab and double–lumen catheter with a brush. Martens MG, et al. **J Reprod Med** 1989 Nov; 34(11):875–9

Value of urinary neopterin in the differential diagnosis of bacterial and viral infections. Denz H, et al. **Klin Wochenschr** 1990 Feb 15;68(4):218–22

DNA technology and rapid diagnosis of infection. **Lancet** 1989 Oct 14;2(8668):897–8 (13 ref.)

Diagnosis of bacterial meningitis [letter] Stokes EJ. **Lancet** 1989 Nov 25;2(8674):1285

The role of tympanocentesis in the management of infants with sepsis. Arriaga MA, et al. **Laryngoscope** 1989 Oct; 99(10 Pt 1):1048–51

Infectious causes of diarrhea in the differential diagnosis of inflammatory bowel disease. Farmer RG. **Med Clin North Am** 1990 Jan;74(1):29–38 (28 ref.)

The diagnostic applications of molecular biology. Kefford RF, et al. **Med J Aust** 1989 Oct 16;151(8):467–72, 475, 478 passim (49 ref.)

Infected aortitis masquerading as bronchogenic carcinoma. Paradowski LJ, et al. **N Y State J Med** 1990 Aug; 90(8):415–6

Office diagnosis of sexually transmitted diseases. Martens MG. **Obstet Gynecol Clin North Am** 1989 Sep;16(3):659–77 (18 ref.)

Cerebrospinal fluid C–reactive protein in the diagnosis of meningitis in children. Soetiono S, et al. **Paediatr Indones** 1989 Jan–Feb;29(1–2):20–7

Correlating reported fever in young infants with subsequent temperature patterns and rate of serious bacterial infections. Bonadio WA, et al. **Pediatr Infect Dis J** 1990 Mar; 9(3):158–60

Evaluation and management of febrile infants younger than 60 days of age. Powell KR. **Pediatr Infect Dis J** 1990 Mar; 9(3):153–7 (23 ref.)

Prospective evaluation of the protected specimen brush for the diagnosis of pulmonary infections in ventilated newborns. Rigal E, et al. **Pediatr Pulmonol** 1990;8(4):268–72

Faecal level of urobilinogen: an indication for the risk of superinfection and of failure of oral anticonception? Vollaard EJ, et al. **Pharm Weekbl [Sci]** 1989 Oct 20; 11(5):165–8

Endovascular infections [editorial] Olsen EG. **Postgrad Med J** 1989 Mar;65(761):127–8

The diagnosis and management of the discharging ear. Burke P. **Practitioner** 1989 May 22;233(1469):742, 744, 746

DNA hybridization for the diagnosis of microbial disease. Hopkin JM, et al. **Q J Med** 1990 May;75(277):415–21 (37 ref.)

Granulomatous spinal infections: MR imaging. Sharif HS, et al. **Radiology** 1990 Oct;177(1):101–7

New methods for identification of obligate anaerobes. Phillips I. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S127–32 (45 ref.)

Bacterial contamination of the small bowel evaluated by breath tests, 75Se–labelled homocholic–tauro acid, and scanning electron microscopy. Suhr O, et al. **Scand J Gastroenterol** 1990 Aug;25(8):841–52

The etiology of bacterial cellulitis as determined by fine–needle aspiration. Sigurdsson AF, et al. **Scand J Infect Dis** 1989;21(5):537–42

Molecular biology and respiratory disease. 6. Modern molecular biology and respiratory bacterial infections: a revolution on the horizon. Murphy TF. **Thorax** 1990 Jul; 45(7):552–9 (38 ref.)

Infectious diseases of the brain. McGeachie RE, et al. **Top Magn Reson Imaging** 1989 Dec;2(1):25–40 (70 ref.)

Bacterial vaginosis. Levett PN. **West Indian Med J** 1989 Sep; 38(3):126–32 (42 ref.)

Detection and clinical relevance of human endotoxemia. Sturk A, et al. **Z Med Lab Diagn** 1990;31(3):147–58

[Anaerobic bacterial infections of the lungs] Strumeliev S. **Vutr Boles** 1990;29(1):1–5 (41 ref.) **(Bul)**

[Value of anti–contamination specimen brush in the etiologic diagnosis of bacterial pulmonary infections] Hu BJ. **Chung Hua I Hsueh Tsa Chih** 1989 Oct;69(10):560–2, 38 (Eng. Abstr.) **(Chi)**

[Clinical use of the latex agglutination test for rapid diagnosis of purulent meningitis] Macku M, et al. **Cesk Pediatr** 1989 Sep;44(9):556–7 **(Cze)**

[Genital infections in adolescents. Clinical and para–clinical studies] Bernard P, et al. **Ann Pediatr (Paris)** 1989 Nov; 36(9):591–3 **(Fre)**

[Acute infectious epiglottitis in children] Leclerc F, et al. **Arch Fr Pediatr** 1990 Jan;47(1):49–58 (114 ref.) **(Fre)**

[Perinatal infection by anaerobic germs. II. Fetal and neonatal infections. Diagnosis and treatment] Lejeune C, et al. **Arch Fr Pediatr** 1989 Nov;46(9):685–92 (134 ref.) **(Fre)**

[Contribution of kidney echography to upper urinary tract infection in pregnancy] Palaric JC, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(8):997–1001 (Eng. Abstr.) **(Fre)**

[Use of nucleic probes in bacteriology (1)] Freney J, et al. **Pediatrie** 1990;45(1):13–20 (Eng. Abstr.) **(Fre)**

[Use of nucleic probes in bacteriology (2)] Freney J, et al. **Pediatrie** 1990;45(2):89–97 **(Fre)**

[Acute pyelonephritis in adults: diagnosis criteria and new therapeutic aspects] Bouzouaia N, et al. **Tunis Med** 1990 Apr;68(4):281–6 (Eng. Abstr.) **(Fre)**

[Soft tissue infection—osteitis—osteomyelitis] Matter P, et al. **Helv Chir Acta** 1990 Apr;56(6):825–34 (6 ref.) (Eng. Abstr.) **(Ger)**

[Clinical aspects of infectious endocarditis] Maisch B. **Internist (Berlin)** 1989 Aug;30(8):483–91 (50 ref.) **(Ger)**

[What hides behind the diagnoses angina follicularis and lacunaris? A contribution to the differentiation of tonsillitis] Hofmann H. **Kinderarztl Prax** 1989 Dec;57(12):605–9 (Eng. Abstr.) **(Ger)**

[Bacterial heart diseases in childhood. An overview of diseases 1971–1987] Meister EM, et al. **Kinderarztl Prax** 1990 May;58(5):227–32 (Eng. Abstr.) **(Ger)**

[Diagnosis and treatment of acute otitis media in children. An analysis of the status in the Rostock district] Wiersbitzky S, et al. **Kinderarztl Prax** 1989 Dec; 57(12):597–603 (Eng. Abstr.) **(Ger)**

[Value of diagnostic procedures in fiberoptic bronchoscopy of pulmonary infections] Mainz D, et al. **Pneumologie** 1990 Feb;44 Suppl 1:471–2 (Eng. Abstr.) **(Ger)**

[Incidence, diagnosis and follow–up of bacterial pneumonia in AIDS] Worth H, et al. **Pneumologie** 1990 Feb;44 Suppl 1:672–3 (Eng. Abstr.) **(Ger)**

[Infection of the hand: a specific disease picture] Mark G. **Ther Umsch** 1990 Jul;47(7):586–92 (Eng. Abstr.) **(Ger)**

[Allergic alveolitis in agricultural workers, caused by thermophilic bacteria or fungi] Barzó P, et al. **Z Erkr Atmungsorgane** 1989;173(2):151–60 (Eng. Abstr.) **(Ger)**

[Microbiologic diagnosis of diseases of the lung, bronchi and pleura] Tauchnitz C, et al. **Z Erkr Atmungsorgane** 1989; 173(3):195–204 (34 ref.) (Eng. Abstr.) **(Ger)**

[Direct gas chromatography analysis of volatile fatty acids and lactic acids in microbiological diagnosis] Socolowsky S, et al. **Z Gesamte Hyg** 1989 Oct;35(10):596–8 (Eng. Abstr.) **(Ger)**

[New developments in bedside diagnosis] Spencker FB, et al. **Z Gesamte Hyg** 1989 Oct;35(10):593–5 (20 ref.) (Eng. Abstr.) **(Ger)**

[The use of impedance measurements in medical microbiology] Strassburger J, et al. **Z Gesamte Hyg** 1989 Jul;35(7):399–402 (Eng. Abstr.) **(Ger)**

[The clinico–diagnostic value of C–reactive protein, determined by simple radial immunodiffusion and compared with latex agglutination] Szugs C, et al. **Z Gesamte Hyg** 1989 Oct;35(10):620–2 (Eng. Abstr.) **(Ger)**

[Sore throat: an analysis of medical management in a community clinic] Furst A, et al. **Harefuah** 1990 Feb 15; 118(4):205–7 (Eng. Abstr.) **(Heb)**

[A case of acute focal bacterial nephritis] Noguchi Y, et al. **Hinyokika Kiyo** 1990 Jan;36(1):59–61 (Eng. Abstr.) **(Jpn)**

[Guidelines of initial diagnostic procedures for bacterial infectious disease] Arakawa M. **Rinsho Byori** 1990 May; 38(5):481–4 (Eng. Abstr.) **(Jpn)**

[Bacterial infection and rapid laboratory microbial methods] Furuta I. **Rinsho Byori** 1989 Oct;37(10):1096–102 (Eng. Abstr.) **(Jpn)**

[Gene technology in medical microbiology—a general review] Bøvre K, et al. **Tidsskr Nor Laegeforen** 1989 Nov 10;109(31):3216–8 **(Nor)**

[Suppurative meningitis in 210 cases] Jeżyna C, et al. **Pol Tyg Lek** 1989 Jan 30;44(5):116–9 (Eng. Abstr.) **(Pol)**

[Suppurative meningitis and meningoencephalitis in patients over 60 years of age] Kępa L, et al. **Przegl Epidemiol** 1989; 43(3):301–6 (Eng. Abstr.) **(Pol)**

[The diagnosis of neonatal bacterial infections with mother–fetus transmission recorded in 1983–1987 in the Newborn Ward of the Baia Mare County Maternity Hospital] Pohl A, et al. **Rev Pediatr Obstet Ginecol [Pediatr]** 1989 Jul–Sep; 38(3):255–60 (Eng. Abstr.) **(Rum)**

[Acute inflammatory diseases of the adnexa uteri. Methods of diagnosis, prevention and treatment] Savel'eva GM, et al. **Akush Ginekol (Mosk)** 1990 Jan;(1):67–75 (53 ref.) **(Rus)**

[Current problems of medical microbiology at a non–infectious disease clinic] Smolianskaia AZ, et al. **Antibiot Khimioter** 1990 Jan;35(1):52–4 **(Rus)**

[Clinical diagnosis of acute respiratory diseases and influenza] Bogomolov BP. **Klin Med (Mosk)** 1990 Apr;68(4):15–27 **(Rus)**

[A method of express solid–phase immunoenzyme analysis] Iakovlev AT, et al. **Lab Delo** 1989;(7):75–6 **(Rus)**

[Fecal contamination with nuclease–positive bacteria as one of the indices of intestinal dysbacteriosis] Polikarpov NA, et al. **Lab Delo** 1990;(1):46–8 (Eng. Abstr.) **(Rus)**

[Value of measuring the fibronectin level in the evaluation of the severity of the septic process in newborn infants] Estrin VV, et al. **Pediatriia** 1990;(3):108–9 **(Rus)**

[Bacterial meningitis in newborn infants and young children] Kuanova LB, et al. **Pediatriia** 1989;(9):101–5 (68 ref.) **(Rus)**

[Experience with the diagnosis and treatment of secondary odontogenic mediastinitis] Kruchinskiĭ GV, et al. **Stomatologiia (Mosk)** 1989 Nov–Dec;68(6):15–7 (Eng. Abstr.) **(Rus)**

[Errors in the diagnosis and treatment of infection] Bochorishvili VG, et al. **Vestn Khir** 1989 Aug;144(8):107–10 (Eng. Abstr.) **(Rus)**

[Tropical suppurative myositis] Kamkin NV, et al. **Vestn Khir** 1989 May;142(5):52–3 **(Rus)**

[Quantitative gas chromatographic determination of volatile fatty acids in express diagnosis of nonclostridial anaerobic infection] Maiakova TI, et al. **Vopr Med Khim** 1989 Sep–Oct;35(5):71–5 (Eng. Abstr.) **(Rus)**

[The immunological diagnosis of peptostreptococcal infection] Anisimova LA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Jan;(1):55–8 (Eng. Abstr.) **(Rus)**

[Importance of symptomatic balance in peripheral arterial surgery] Becade P, et al. **Angiologia** 1989 Jul–Aug; 41(4):137–9 (24 ref.) (Eng. Abstr.) **(Spa)**

[Approaches to the study of chronic bacterial prostatitis] Martinez Torres JL, et al. **Arch Esp Urol** 1989 Jul–Aug; 42(6):515–8 (Eng. Abstr.) **(Spa)**

[Treatment of bacterial vaginosis—an acid gel as an alternative to antibiotic treatment] Andersch B, et al. **Lakartidningen** 1990 Feb 14;87(7):465–8 **(Swe)**

DRUG THERAPY

A clinical evaluation of sulbactam/ampicillin in the treatment

of pediatric infections. Huang LM, et al. **Acta Paediatr Sin** 1989 Mar-Apr;30(2):87-93

Antibiotic therapy for newborn infants with suspected infection. Liao MF, et al. **Acta Paediatr Sin** 1988 Jul-Aug; 29(4):221-8

Clinical and economic effect of ciprofloxacin as an alternative to injectable antimicrobial therapy. Powers T, et al. **Am J Hosp Pharm** 1990 Aug;47(8):1781-4

Ciprofloxacin: major advances in intravenous and oral quinolone therapy. Proceedings of a symposium. April 28 to 29, 1989, Naples, Florida. **Am J Med** 1989 Nov 30; 87(5A):1S-287S

Third-generation cephalosporins: a decade of progress in the treatment of severe infections. June 13, 1989. Proceedings. **Am J Med** 1990 Apr 9;88(4A):1S-45S

Aztreonam's role in the treatment of gram-negative infections. Proceedings of a symposium. March 15, 1989, New York. New York. **Am J Med** 1990 Mar 23; 88(3C):1S-43S

Safety and efficacy of intravenous ciprofloxacin in the treatment of selected infections. Abadie-Kemmerly S, et al. **Am J Med** 1989 Nov 30;87(5A):213S-220S

An update on the efficacy of ciprofloxacin in animal models of infection. Andriole VT. **Am J Med** 1989 Nov 30; 87(5A):32S-34S

Comparison of parenteral ciprofloxacin with clindamycin-gentamicin in the treatment of pelvic infection. Apuzzio JJ, et al. **Am J Med** 1989 Nov 30; 87(5A):148S-151S

A prospective, randomized comparison of ceftazidime and ciprofloxacin as initial empiric therapy in neutropenic patients with fever. Bayston KF, et al. **Am J Med** 1989 Nov 30;87(5A):269S-273S

Comparative efficacy of ciprofloxacin versus josamycin in the treatment of acute, recurrent, or exacerbated bronchitis. Canton P, et al. **Am J Med** 1989 Nov 30;87(5A):121S-122S

Comparison of ciprofloxacin with ampicillin in acute infectious exacerbations of chronic bronchitis. A double-blind crossover study. Chodosh S, et al. **Am J Med** 1989 Nov 30;87(5A):107S-112S

Sequential intravenous/oral therapy with ciprofloxacin in severe infection. Chrysanthopoulos CJ, et al. **Am J Med** 1989 Nov 30;87(5A):225S-227S

Gram-negative bacillary pneumonia in the nosocomial setting. Role of aztreonam therapy. Cook JL. **Am J Med** 1990 Mar 23;88(3C):34S-37S; discussion 38S-42S

Ofloxacin in the management of complicated urinary tract infections, including prostatitis. Cox CE. **Am J Med** 1989 Dec 29;87(6C):61S-68S

Intravenous and sequential intravenous and oral ciprofloxacin in the treatment of severe infections. Daly JS, et al. **Am J Med** 1989 Nov 30;87(5A):232S-234S

Intravenous/oral ciprofloxacin versus ceftazidime in the treatment of serious infections. Fass RJ, et al. **Am J Med** 1989 Nov 30;87(5A):164S-168S

Third-generation cephalosporins in the treatment of rare infections. Finch RG. **Am J Med** 1990 Apr 9; 88(4A):25S-31S (40 ref.)

Multicenter, randomized trial of ciprofloxacin plus azlocillin versus ceftazidime plus amikacin for empiric treatment of febrile neutropenic patients. Flaherty JP, et al. **Am J Med** 1989 Nov 30;87(5A):278S-282S

Comparison of the safety and efficacy of intravenous ciprofloxacin and intravenous ceftazidime in the treatment of selected infections. Gallis HA, et al. **Am J Med** 1989 Nov 30;87(5A):176S-180S

Intravenous/oral ciprofloxacin therapy versus intravenous ceftazidime therapy for selected bacterial infections. Gaut PL, et al. **Am J Med** 1989 Nov 30;87(5A):169S-175S

Clinical study of intravenous and oral ciprofloxacin in complicated bacterial infections. Gelfand MS, et al. **Am J Med** 1989 Nov 30;87(5A):235S-237S

Intravenous and oral ciprofloxacin treatment of 52 infections. Greenberg RN, et al. **Am J Med** 1989 Nov 30; 87(5A):238S-239S

Intravenous ciprofloxacin therapy in severe infections. Gudiol F, et al. **Am J Med** 1989 Nov 30;87(5A):221S-224S

Infections in frail and vulnerable elderly patients. Jones SR. **Am J Med** 1990 Mar 23;88(3C):30S-33S; discussion 38S-42S

Serious pedirtric infections. Kaplan SL. **Am J Med** 1990 Apr 9;88(4A):18S-24S (84 ref.)

Intravenous ciprofloxacin as empirical treatment of febrile neutropenic patients. Kelsey SM, et al. **Am J Med** 1989 Nov 30;87(5A):274S-277S

Empiric antibiotic use—aztreonam as a model. Levin S. **Am J Med** 1990 Mar 23;88(3C):21S-23S; discussion 38S-42S

Randomized, double-blind comparative study of intravenous ciprofloxacin versus ceftazidime in the treatment of serious infections. Levine DP, et al. **Am J Med** 1989 Nov 30; 87(5A):160S-163S

Empiric therapy of severe infections in adults. Modai J. **Am J Med** 1990 Apr 9;88(4A):12S-17S (40 ref.)

Treatment of serious infections with intravenous ciprofloxacin. French Multicenter Study Group. Modai J. **Am J Med** 1989 Nov 30;87(5A):243S-247S

New oral and parenteral quinolones. A summary. Neu HC. **Am J Med** 1989 Nov 30;87(5A):283S-287S

Intravenous/oral ciprofloxacin therapy of infections caused by multiresistant bacteria. Neu HC, et al. **Am J Med** 1989 Nov 30;87(5A):209S-212S

Prospective, randomized comparison of sequential intravenous followed by oral ciprofloxacin with intravenous ceftazidime in the treatment of serious infections. Peacock JE Jr, et al. **Am J Med** 1989 Nov 30; 87(5A):185S-190S

Efficacy and safety of intravenous ciprofloxacin in the treatment of serious infections. A comparison with ceftazidime. Quintero-Perez NP, et al. **Am J Med** 1989 Nov 30;87(5A):198S-201S

Comparative, double-blind study of intravenous ciprofloxacin and intravenous ceftazidime in serious infection. Ramirez-Ronda CH, et al. **Am J Med** 1989 Nov 30;87(5A):195S-197S

Ciprofloxacin versus ceftazidime in serious infections. Reinhardt JF, et al. **Am J Med** 1989 Nov 30; 87(5A):181S-182S

Aztreonam in the prevention and treatment of infection in neutropenic cancer patients. Rolston KV, et al. **Am J Med** 1990 Mar 23;88(3C):24S-29S; discussion 38S-42S (28 ref.)

Intravenous ciprofloxacin for infections in cancer patients. Rolston KV, et al. **Am J Med** 1989 Nov 30; 87(5A):261S-265S

Ciprofloxacin in the treatment of gram-negative bacillary meningitis. Schönwald S, et al. **Am J Med** 1989 Nov 30; 87(5A):248S-249S

Intravenous ciprofloxacin and ceftazidime in serious infections. A prospective, controlled clinical trial with third-party blinding. Sifuentes-Osornio J, et al. **Am J Med** 1989 Nov 30;87(5A):202S-205S

Once-daily dosing regimen for aminoglycoside plus beta-lactam combination therapy of serious bacterial infections: comparative trial with netilmicin plus ceftriaxone. ter Braak EW, et al. **Am J Med** 1990 Jul; 89(1):58-66

Intravenous ciprofloxacin or ceftazidime in selected infections. A prospective, randomized, controlled study. Villavicencio J, et al. **Am J Med** 1989 Nov 30; 87(5A):191S-194S

Clindamycin dosage scheduling for acute pelvic infection [letter] Chatwani A, et al. **Am J Obstet Gynecol** 1990 Jul; 163(1 Pt 1):240

Bacterial vaginosis: diagnostic and pathogenetic findings during topical clindamycin therapy. Livengood CH 3d, et al. **Am J Obstet Gynecol** 1990 Aug;163(2):515-20

Clostridium difficile diarrhea and colonization after treatment with abdominal infection regimens containing clindamycin or metronidazole. Gerding DN, et al. **Am J Surg** 1990 Feb; 159(2):212-7

The evolution of fluorinated quinolones: pharmacology, microbiological activity, clinical uses, and toxicities. Siporin C. **Annu Rev Microbiol** 1989;43:601-27 (252 ref.)

Randomized clinical trial of aztreonam and aminoglycoside antibiotics in the treatment of serious infections caused by gram-negative bacilli. DeMaria A Jr, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1137-43

Significance of "extravascular" protein binding for antimicrobial pharmacodynamics in an in vitro capillary model of infection. Dudley MN, et al. **Antimicrob Agents Chemother** 1990 Jan;34(1):98-101

Pefloxacin versus ceftazidime in the treatment of a variety of gram-negative-bacterial infections. Giamarellou H, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1362-7

Staphylococcus aureus ventriculitis treated with single-dose intraventricular vancomycin or daptomycin (LY146032): bacterial and antibiotic kinetics in hydrocephalic rabbits. Haworth CS, et al. **Antimicrob Agents Chemother** 1990 Feb; 34(2):245-51

Ceftazidime versus imipenem-cilastatin as initial monotherapy for febrile neutropenic patients. Liang R, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1336-41

Ofloxacin versus co-trimoxazole for prevention of infection in neutropenic patients following cytotoxic chemotherapy. Liang RH, et al. **Antimicrob Agents Chemother** 1990 Feb; 34(2):215-8

Combination effect of recombinant human interleukin-1 alpha with antimicrobial agents. Nakamura S, et al. **Antimicrob Agents Chemother** 1989 Oct;33(10):1804-10

Postantibiotic effects of imipenem, norfloxacin, and amikacin in vitro and in vivo. Renneberg J, et al. **Antimicrob Agents Chemother** 1989 Oct;33(10):1714-20

In vitro and in vivo activities of a new quinolone, WIN 57273, possessing potent activity against gram-positive bacteria. Sedlock DM, et al. **Antimicrob Agents Chemother** 1990 Apr; 34(4):568-75

Randomized prospective study comparing vancomycin with teicoplanin in the treatment of infections associated with Hickman catheters. Smith SR, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1193-7

Antibiotic treatment of suspected neonatal meningitis. Gandy G, et al. **Arch Dis Child** 1990 Jan;65(1 Spec No):1-2 (11 ref.)

Oral ciprofloxacin vs parenteral cefotaxime in the treatment of difficult skin and skin structure infections. A multicenter trial. Gentry LO, et al. **Arch Intern Med** 1989 Nov; 149(11):2579-83

Empiric antimicrobial therapy of domestically acquired acute diarrhea in urban adults. Goodman LJ, et al. **Arch Intern Med** 1990 Mar;150(3):541-6

Outpatient management of uncomplicated lower-extremity infections in diabetic patients. Lipsky BA, et al. **Arch Intern Med** 1990 Apr;150(4):790-7

The efficacy of cefaclor vs amoxicillin on recovery after tonsillectomy in children. Jones J, et al. **Arch Otolaryngol Head Neck Surg** 1990 May;116(5):590-3

Comparative evaluation of cefuroxime axetil and cefaclor for treatment of acute bacterial maxillary sinusitis. Sydnor A Jr, et al. **Arch Otolaryngol Head Neck Surg** 1989 Dec; 115(12):1430-3

Ceftazidime in the treatment of acute severe infections in children and adults. Păun L, et al. **Arch Roum Pathol Exp Microbiol** 1989 Apr-Jun; 48(2):177-84

Cefuroxime sodium for injection in the treatment of acute severe infections in children and adults. Păun L, et al. **Arch Roum Pathol Exp Microbiol** 1989 Apr-Jun; 48(2):171-5

Potentiation by nonspecific immunostimulation of the efficacy of antibiotics in the treatment of experimental bacterial infections. Bizzini B, et al. **Biomed Pharmacother** 1989;43(10):753-61

Effectiveness of two therapeutic antibiotic regimens in the treatment of serious post-operative infections. Askew C, et al. **Br J Clin Pract** 1989 Dec;43(12):438-42

A double-blind controlled trial of norfloxacin versus cotrimoxazole in the treatment of urinary tract infections. Chan MK, et al. **Br J Clin Pract** 1989 Feb;43(2):61-3

Spiramycin versus penicillin V in the empiric treatment of bacterial tonsillitis. Manolopoulos L, et al. **Br J Clin Pract** 1989 Mar;43(3):94-6

Use of chloramphenicol in a hospice. Sykes NP. **Br J Clin Pract** 1989 Dec;43(12):443-6

Antimicrobial prophylaxis in neurosurgery. Brown E. **Br J Neurosurg** 1987;1(2):159-61

Initial therapy for bacterial meningitis. Infectious Diseases and Immunization Committee, Canadian Paediatric Society. **Can Med Assoc J** 1990 Feb 15;142(4):305-6

Dexamethasone therapy for bacterial meningitis: a time for caution. Infectious Diseases and Immunization Committee, Canadian Paediatric Society. **Can Med Assoc J** 1990 Feb 15;142(4):307-8

Ceftriaxone in the treatment of meningitis, gonococcal infections and other serious bacterial infections. Infectious Diseases and Immunization Committee, Canadian Paediatric Society. **Can Med Assoc J** 1990 Mar 1; 142(5):450-2

Beta-lactam regimens for the febrile neutropenic patient. Bodey GP, et al. **Cancer** 1990 Jan 1;65(1):9-16

Third generation cephalosporins in the treatment of severe infections. Workshop held during the 16th ICC. Jerusalem, June 11-16, 1989. Proceedings. **Chemotherapy** 1989;35 Suppl 2:1-42

Therapy of lower respiratory tract infections: a comparison of ceftriaxone and cefotaxime. Barradas P, et al. **Chemotherapy** 1989;35 Suppl 2:33-40

In vivo evaluation of a dual-action antibacterial, Ro 23-9424, compared to cefotaxime and fleroxacin. Beskid G, et al. **Chemotherapy** 1990;36(2):109-16

Ceftriaxone versus imipenem/cilastatin as empirical monotherapy for infections in cancer patients. Bucaneve G, et al. **Chemotherapy** 1989;35 Suppl 2:10-5

Ceftriaxone versus cefotaxime in the treatment of septicemia in adults. Ferencz A, et al. **Chemotherapy** 1989;35 Suppl 2:5-9

Treatment of various infections in an outpatient practice by intramuscular ceftriaxone: home parenteral therapy. Karachalios GN, et al. **Chemotherapy** 1989;35(5):389-92

Use of ceftriaxone in the treatment of bacterial infections in cirrhotic patients. Mercader J, et al. **Chemotherapy** 1989; 35 Suppl 2:23-6

Ceftriaxone monotherapy for severe bacteremic infections. Spanish Ceftriaxone Study Group. Soriano E, et al. **Chemotherapy** 1989;35 Suppl 2:27-32

Comparison of ceftriaxone with cefotaxime in serious chest infections. Reeves JH, et al. **Chest** 1989 Dec;96(6):1292-7

Topical antibacterials. Winkelman W, et al. **Clin Dermatol** 1989 Jul-Sep;7(3):156-62 (52 ref.)

Fluoroquinolone antimicrobial agents. Wolfson JS, et al. **Clin Microbiol Rev** 1989 Oct;2(4):378-424 (885 ref.)

Ticarcillin/clavulanic acid combination. Treatment of bacterial infections in hospitalized children. Kristjansson K, et al. **Clin Pediatr (Phila)** 1989 Nov;28(11):521-4

Use of antibiotic-loaded bone cement in the management of common infections of the foot and ankle. Jacobs AM, et al. **Clin Podiatr Med Surg** 1990 Jul;7(3):523-44 (271 ref.)

Microbiology and antimicrobial therapy of diabetic foot infections. Joseph WS, et al. **Clin Podiatr Med Surg** 1990 Jul;7(3):467-81 (76 ref.)

Antimicrobial management of postoperative infections in abdominal surgery: single or combination regimen? Geroulanos S, et al. **Clin Ther** 1990;12 Suppl B:34-42

Intra-abdominal sepsis: a medical-surgical dilemma. Hackford AW. **Clin Ther** 1990;12 Suppl B:43-53 (43 ref.)

Respiratory symptoms due to Branhamella catarrhalis and other Neisseria species infections—response to erythromycin therapy. Hamedani P, et al. **Clin Ther** 1989 Sep-Oct;11(5):633-9

Comparison of once-daily and thrice-daily netilmicin regimens in serious systemic infections: a multicenter study in six Asian countries. Mauracher EH, et al. **Clin Ther** 1989 Sep-Oct;11(5):604-13

Clindamycin and cloxacillin compared in the treatment of skin and soft-tissue infections. Pusponegoro EH, et al.

Clin Ther 1990 May-Jun;12(3):236-41

The treatment of sepsis and other complications in the trauma patient. Trunkey DD. **Clin Ther** 1990;12 Suppl B:21-33 (33 ref.)

Interchangeability of ceftizoxime and cefoxitin: a clinical perspective. Wikler MA. **Clin Ther** 1990;12 Suppl C:74-9

Norfloxacin, ciprofloxacin, and ofloxacin: current clinical roles. Hooper DC, et al. **Curr Clin Top Infect Dis** 1989; 10:194-240 (295 ref.)

Choices of new penicillins and cephalosporins in the DRG era. Rahal JJ. **Curr Clin Top Infect Dis** 1988;9:173-84 (39 ref.)

Imipenem and aztreonam: current role in antimicrobial therapy. Rice LB, et al. **Curr Clin Top Infect Dis** 1989; 10:109-39 (179 ref.)

An open, comparative evaluation of amoxycillin and amoxycillin plus clavulanic acid ('Augmentin') in the treatment of bacterial pneumonia in children. Jibril HB, et al. **Curr Med Res Opin** 1989;11(9):585-92

Topical and systemic antibiotics in the prevention of wound infection. Nichols RL. **Curr Surg** 1990 Jul-Aug;47(4):274-5

Acute bacterial meningitis. II: Treatment. Robinson RO, et al. **Dev Med Child Neurol** 1990 Feb;32(2):174-8

In vitro assessment of sulbactam plus cefoperazone in the treatment of bacteria isolated from cancer patients. Bodey GP, et al. **Diagn Microbiol Infect Dis** 1989 Jul-Aug;12(4 Suppl):209S-214S

Sulbactam/ampicillin followed by oral treatment with sultamicillin for medical and surgical infections. Chang ST, et al. **Diagn Microbiol Infect Dis** 1989 Jul-Aug;12(4 Suppl):175S-178S

Intravenous and oral ciprofloxacin in the therapy of serious infections. Gibert CL, et al. **Diagn Microbiol Infect Dis** 1990 Mar-Apr;13(2):173-6

Efficacy of sulbactam/cefoperazone for the treatment of infections in patients with hematologic diseases. Horiuchi A, et al. **Diagn Microbiol Infect Dis** 1989 Jul-Aug;12(4 Suppl):215S-219S

Sulbactam/ampicillin in the treatment of pediatric infections. Kanra G, et al. **Diagn Microbiol Infect Dis** 1989 Jul-Aug; 12(4 Suppl):185S-187S

Intravenous sulbactam/ampicillin in the treatment of pediatric infections. Lee CY, et al. **Diagn Microbiol Infect Dis** 1989 Jul-Aug;12(4 Suppl):179S-183S

Metabolic interactions of ciprofloxacin. Ludwig E, et al. **Diagn Microbiol Infect Dis** 1990 Mar-Apr;13(2):135-41

Prospective randomized study comparing the efficacy and safety of ciprofloxacin with cefaclor in the treatment of patients with purulent bronchitis. Quenzer RW, et al. **Diagn Microbiol Infect Dis** 1990 Mar-Apr;13(2):143-8

Clinical evaluation of sulbactam/ampicillin in Japan. Shimada K. **Diagn Microbiol Infect Dis** 1989 Jul-Aug;12(4 Suppl):171S-174S

Comparison of intravenous ciprofloxacin with ceftazidime in the treatment of serious soft tissue infections. Tice AD, et al. **Diagn Microbiol Infect Dis** 1990 Mar-Apr;13(2):165-7

Alternative dosing strategy for aminoglycosides: impact on efficacy, nephrotoxicity, and ototoxicity. Chan GL. **DICP** 1989 Oct;23(10):788-94 (38 ref.)

Oral fluoroquinolone versus mono- or combination parenteral therapy in the management of bacterial infections: a critical appraisal. Guay DR. **DICP** 1990 Jan; 24(1):11-8 (32 ref.)

Clinical pharmacokinetics of daptomycin. Pryka RD, et al. **DICP** 1990 Mar;24(3):255-6

Cefixime. A review of its antibacterial activity. Pharmacokinetic properties and therapeutic potential. Brogden RN, et al. **Drugs** 1989 Oct;38(4):524-50 (114 ref.)

Comparative antimicrobial activities of ribostamycin, gentamicin, ampicillin and lincomycin in vitro and in vivo. Inouye S, et al. **Drugs Exp Clin Res** 1989;15(10):465-76

A clinical comparison of hydrocortisone butyrate with oxytetracycline/hydrocortisone acetate-polymyxin B in the local treatment of acute external otitis. Ruth M, et al. **Eur Arch Otorhinolaryngol** 1990;247(2):77-80

Gram-positive bacteraemia in granulocytopenic cancer patients. EORTC International Antimicrobial Therapy Cooperative Group. **Eur J Cancer** 1990;26(5):569-74

Emergence of resistance in gram-negative bacilli during beta-lactam therapy: a challenge for the future. Pechère JC. **Eur J Cancer Clin Oncol** 1989;25 Suppl 2:S17-23 (51 ref.)

Dilemmas and choices in infection management of the cancer patient. Schimpff SC. **Eur J Cancer Clin Oncol** 1989 Sep; 25(9):1351-7 (23 ref.)

Clinical utility of new quinolones in treatment of osteomyclitis and lower respiratory tract infections. Bayer AS. **Eur J Clin Microbiol Infect Dis** 1989 Dec; 8(12):1102-10 (54 ref.)

Clinical efficacy of teicoplanin. Calain P, et al. **Eur J Clin Microbiol Infect Dis** 1990 Feb;9(2):127-9

Evaluation of pefloxacin, ofloxacin and ciprofloxacin in the treatment of thirty-nine cases of chronic osteomyelitis. Dellamonica P, et al. **Eur J Clin Microbiol Infect Dis** 1989 Dec;8(12):1024-30

Prospective randomized study of once-daily versus thrice-daily netilmicin regimens in patients with intraabdominal infections. de Vries PJ, et al. **Eur J Clin Microbiol Infect Dis** 1990 Mar;9(3):161-8

Quinolones and the gastrointestinal tract. Murray BE. **Eur J Clin Microbiol Infect Dis** 1989 Dec;8(12):1093-101 (91 ref.)

Single-dose ciprofloxacin in the treatment of uncomplicated urinary tract infection in women. Raz R, et al. **Eur J Clin Microbiol Infect Dis** 1989 Dec;8(12):1040-2

Clinical role of the quinolones today and in the future. Waldvogel FA. **Eur J Clin Microbiol Infect Dis** 1989 Dec; 8(12):1075-9

Quinolone antimicrobial agents: adverse effects and bacterial resistance. Wolfson JS. **Eur J Clin Microbiol Infect Dis** 1989 Dec;8(12):1080-92 (165 ref.)

New insights into the clinical profile of norfloxacin. Proceedings of a symposium held at the 6th Mediterranean Congress of Chemotherapy. Taormina, Italy, May 22-27, 1988. **Eur Urol** 1990;17 Suppl 1:1-51

Should male consorts of women with bacterial vaginosis be treated? Moi H, et al. **Genitourin Med** 1989 Aug;65(4):263-8

Bacterial resistance to trimethoprim in geriatric medical wards. Bendall MJ, et al. **Gerontology** 1989;35(2-3):121-6

Anaerobic vaginosis: treatment with tinidazole vaginal tablets. Heikkinen J, et al. **Gynecol Obstet Invest** 1989; 28(2):98-100

Treatment of bacterial vaginosis in women with vaginal bleeding complications or discharge and harboring Mobiluncus. Larsson PG, et al. **Gynecol Obstet Invest** 1990; 29(4):296-300

Ceftriaxone and amikacin as single daily dose in the empiric therapy for febrile episodes in neutropenic patients. Martino P, et al. **Haematologica** 1990 Jan-Feb;75(1):69-74

Pefloxacin in the treatment of gram-negative infections in patients with hematologic diseases. Micozzi A, et al. **Haematologica** 1989 Nov-Dec;74(6):583-5

The febrile neutropenic patient: newer options for empirical therapy. Rubin M, et al. **Hematol Bluttransfus** 1990; 33:531-8 (24 ref.)

Amoxicillin-clavulanic acid therapy of spontaneous bacterial peritonitis: a prospective study of twenty-seven cases in cirrhotic patients. Grange JD, et al. **Hepatology** 1990 Mar; 11(3):360-4

Antibacterial therapy: problems and promises, Part I. Neu HC. **Hosp Pract [Off]** 1990 May 15;25(5):63-74, 77-8 (8 ref.)

Efficacy of nalidixic acid in the treatment of acute bloody diarrhea. Khoshoo V, et al. **Indian Pediatr** 1989 Nov; 26(11):1135-8

Susceptibility of clinical isolates to cephalosporins [letter] Rattan A. **Indian Pediatr** 1989 Sep;26(9):965-6

Bacterial tracheitis. Singhi S, et al. **Indian Pediatr** 1989 Apr; 26(4):390-6 (17 ref.)

Clinical experience with ciprofloxacin: analysis of a multicenter study. Karimi K. **Indiana Med** 1990 Apr; 83(4):266-9

Immune response in patients with intraabdominal infections treated with imipenem. Swedish Study Group. **Infection** 1989 Nov-Dec;17(6):369-73

Cefoperazone therapy of bacterial meningitis: a clinical trial. Cristiano P, et al. **Infection** 1989 Nov-Dec;17(6):378-81

Efficacy of sulbactam in an in vitro model of mixed aerobic/anaerobic infections. Heizmann WR, et al. **Infection** 1990 Mar-Apr;18(2):117-21

Cefpodoxime proxetil in patients with endstage renal failure on hemodialysis. Höffler D, et al. **Infection** 1990 May-Jun; 18(3):157-62

Treatment of childhood bacterial meningitis. Lecour H, et al. **Infection** 1989 Sep-Oct;17(5):343-6

Short course single daily ceftriaxone monotherapy for acute bacterial meningitis in children: results of a Swiss multicenter study. Part I: Clinical results. Martin E, et al. **Infection** 1990 Mar-Apr;18(2):70-7

Ceftriaxone versus aztreonam plus cefazolin for infections in cancer patients with adequate neutrophil counts. Menichetti F, et al. **Infection** 1990 May-Jun;18(3):166-9

Current concepts of antimicrobial therapy. Fitzgerald RH Jr. **Instr Course Lect** 1990;39:465-70 (38 ref.)

Possibilities of extending the indications for application of single antibacterial doses in urological practice. Minkov N, et al. **Int Urol Nephrol** 1989;21(4):359-68

Use of mupirocin ointment in the treatment of secondarily infected dermatoses. Breneman DL. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):886-92

Antimicrobial therapy for cutaneous infections. Dobson RL. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):871-3

The antibacterial efficacy of econazole nitrate in interdigital toe web infections. Kates SG, et al. **J Am Acad Dermatol** 1990 Apr;22(4):583-6

Use of ciprofloxacin in podiatric medicine. LeFrock JL. **J Am Podiatr Med Assoc** 1989 Oct;79(10):497-9

Local antibiotic treatment of soft tissue and bone infections of the foot. Stabile DE, et al. **J Am Podiatr Med Assoc** 1990 Jul;80(7):345-53

Comparative chemotherapeutic activity of cefpirome and imipenem in experimental infections. Klesel N, et al. **J Antibiot (Tokyo)** 1990 Jan;43(1):100-6

A new aminothiazolylcephalosporin having 1-carboxyethoxyimino group, ME1228. Shibahara S, et al. **J Antibiot (Tokyo)** 1990 Jan;43(1):62-9

Beta-lactamase activity in bronchial sputum and treatment failure against penicillin-sensitive bacteria in pulmonary infections. Bingen E, et al. **J Antimicrob Chemother** 1989 Oct;24(4):622-4

The potential impact on clinical practice of differences in the in-vitro activity of vancomycin and teicoplanin [letter] Cheesbrough JS, et al. **J Antimicrob Chemother** 1990 Apr; 25(4):716-8

Ticarcillin/clavulanate in severe infections in patients with varying renal function. Dalet F, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:131-9

Treatment of Branhamella catarrhalis infections. Davies BI, et al. **J Antimicrob Chemother** 1990 Jan;25(1):1-4 (49 ref.)

Individualized pharmacokinetic versus standard dosing of amikacin: a comparison of therapeutic outcomes. Dillon KR, et al. **J Antimicrob Chemother** 1989 Oct;24(4):581-9

Therapeutic activity of meropenem in experimental infections. Edwards JR, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:279-85

Comparison of the safety and efficacy of parenteral ticarcillin/clavulanate and clindamycin/gentamicin in serious intra-abdominal infections. Fink MP, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:147-56

Ciprofloxacin in combined renal and hepatic impairment [letter] Fraise AP, et al. **J Antimicrob Chemother** 1990 Feb; 25(2):297-8

Correlation of the extravascular pharmacokinetics of azithromycin with in-vivo efficacy in models of localized infection. Girard AE, et al. **J Antimicrob Chemother** 1990 Jan;25 Suppl A:61-71

Oral ciprofloxacin therapy for infections in cancer patients. Haron E, et al. **J Antimicrob Chemother** 1989 Dec; 24(6):955-62

Where are we now with ciprofloxacin? Hawkey PM. **J Antimicrob Chemother** 1989 Oct;24(4):477-80 (27 ref.)

A randomized clinical study of cefoperazone and sulbactam versus gentamicin and clindamycin in the treatment of intra-abdominal infections. Jauregui LE, et al. **J Antimicrob Chemother** 1990 Mar;25(3):423-33

Predictive value of susceptibility tests for the outcome of antibacterial therapy. Lorian V, et al. **J Antimicrob Chemother** 1990 Jan;25(1):175-81

Treatment of bone and soft tissue infections with teicoplanin. Marone P, et al. **J Antimicrob Chemother** 1990 Mar; 25(3):435-9

Determinants of efficacy and toxicity of aminoglycosides. Mattie H, et al. **J Antimicrob Chemother** 1989 Sep; 24(3):281-93 (75 ref.)

Teicoplanin as modification of initial empirical therapy in febrile granulocytopenic patients. Nováková IR, et al. **J Antimicrob Chemother** 1990 Jun;25(6):985-93

Prospective comparative trial of short course (four day) and continuous tobramycin in combination with cefoperazone or mezlocillin in febrile, granulocytopenic patients. Pegram PS, et al. **J Antimicrob Chemother** 1989 Oct;24(4):591-604

Clinical experience with ciprofloxacin. Hann JR, et al. **J Arkansas Med Soc** 1989 Sep;86(4):156-8

Comparative evaluation of zinc sulfadiazine and silver sulfadiazine in burn wound infection. Fox CL Jr, et al. **J Burn Care Rehabil** 1990 Mar-Apr;11(2):112-7

Pefloxacin in the antibacterial treatment of immunodepressed patients. Cajozzo A, et al. **J Chemother** 1990 Jun;2(3):185-9

The efficacy and safety of imipenem/cilastatin in the treatment of severe bacterial infections. D'Amato C, et al. **J Chemother** 1990 Apr;2(2):100-7

Evaluation of azlocillin-amikacin combination for empirical therapy of infection in febrile neutropenic patients. D'Antonio D, et al. **J Chemother** 1989 Dec;1(6):407-12

Pathogen-host interaction. Fraschini F, et al. **J Chemother** 1990 Jun;2(3):190-8

Treatment with ciprofloxacin of Aeromonas hydrophila associated colitis in a male with antibodies to the human immunodeficiency virus. Liao WC, et al. **J Clin Gastroenterol** 1989 Oct;11(5):552-4

Future research ecosystems: consequences of disturbances and use of antimicrobial agents. Preus HR. **J Clin Periodontol** 1990 Aug;17(7 (Pt 2)):530-1

Third generation cephalosporins: safety profiles after 10 years of clinical use. Neu HC. **J Clin Pharmacol** 1990 May; 30(5):396-403 (59 ref.)

Patients receiving quinolones and cyclosporine after heart transplantation. Robinson JA, et al. **J Heart Transplant** 1990 Jan-Feb;9(1):30-1

Nosocomial gram-negative bloodstream isolates: a comparison of in vitro antibiotic potency. Stanley GL, et al. **J Hosp Infect** 1989 Oct;14(3):217-25

The efficacy, safety and tolerance of ceftazidime for the treatment of bacterial infections in the elderly. Vozza A, et al. **J Hosp Infect** 1990 Apr;15 Suppl A:87-9

Ceftriaxone vs. azlocillin and netilmicin in the treatment of febrile neutropenic children. Smith L, et al. **J Infect** 1990 May;20(3):201-6

From the Infectious Diseases Society of America. Guidelines for the use of antimicrobial agents in neutropenic patients with unexplained fever [published erratum appears in J Infect Dis 1990 Jun;161(6):1316] Hughes WT, et al. **J Infect Dis** 1990 Mar;161(3):381-96 (174 ref.)

Correlation between in vivo and in vitro efficacy of antimicrobial agents against foreign body infections. Widmer AF, et al. **J Infect Dis** 1990 Jul;162(1):96-102

Efficacy and safety of clarithromycin versus josamycin in the treatment of hospitalized patients with bacterial pneumonia. Straneo G, et al. **J Int Med Res** 1990 Mar-Apr; 18(2):164-70

Clinical experience with ciprofloxacin: analysis of a multicenter study. Hays DJ, et al. **J Ky Med Assoc** 1989 Oct;87(10):506-9

Clinical experience with ciprofloxacin: analysis of a multicenter study. Hines CH, et al.

J La State Med Soc 1989 Dec;141(12):39–42

Comparative efficacy of cefoperazone, cefoperazone plus sulbactam, ciprofloxacin, clindamycin, metronidazole, and penicillin G against anaerobic bacteria in an animal model. Moody JA, et al. **J Lab Clin Med** 1990 Feb;115(2):190–5

Chemical sterilization of bacterially contaminated bone without destruction of osteogenic potential. Dahners LE, et al. **J Orthop Trauma** 1989;3(3):241–4

Ceftriaxone versus cefuroxime for treatment of bacterial meningitis [letter; comment] Weiss D, et al. **J Pediatr** 1990 Mar;116(3):488–90, 492 Comment on: J Pediatr 1989 Jun;114(6):1049–54.

Resolution of an infected intracardiac thrombus. Teitelbaum DH, et al. **J Pediatr Surg** 1989 Nov;24(11):1118–20

Ticarcillin/clavulanate. An alternative to combination antibiotic therapy for treating soft tissue pelvic infections in women. Faro S. **J Reprod Med** 1990 Mar;35(3 Suppl):353–8 (31 ref.)

Infectious morbidity in gynecologic oncology. Graham JE Jr. **J Reprod Med** 1990 Mar;35(3 Suppl):348–52 (19 ref.)

Diagnosis and prompt therapy of infected post-traumatic cavitary lung lesions [letter; comment] Freysz M, et al. **J Trauma** 1990 Mar;30(3):366 Comment on: J Trauma 1989 Jan;29(1):109–12.

Antibiotic therapy of catheter infections in patients receiving home parenteral nutrition. Miller SJ, et al. **JPEN J Parenter Enteral Nutr** 1990 Mar–Apr;14(2):143–7

Quinolones in acute non-travellers' diarrhoea. **Lancet** 1990 Aug 4;336(8710):282 (21 ref.)

Steroids and meningitis [editorial] [see comments] **Lancet** 1989 Dec 2;2(8675):1307–8 (24 ref.) Comment in: Lancet 1990 Feb 3;335(8684):300.

Aminoglycoside antibiotic agents: a review. Spelman DW, et al. **Med J Aust** 1989 Sep 18;151(6):346–9 (19 ref.)

Cefmetazole sodium (Zefazone). **Med Lett Drugs Ther** 1990 Jul 13;32(822):65–6

Lack of cross-resistance between efrotomycin and antibacterial agents used in the therapy of human and animal infections. Jacks TM, et al. **Methods Find Exp Clin Pharmacol** 1989 Nov; 11(11):697–701

A comparison of ceftriaxone and cefuroxime for the treatment of bacterial meningitis in children. Schaad UB, et al. **N Engl J Med** 1990 Jan 18;322(3):141–7

Ceftriaxone versus cefuroxime for meningitis in children [letter] Wrenn K. N **Engl J Med** 1990 Jun 21;322(25):1821

Critical role of iron overload in the increased susceptibility of haemodialysis patients to bacterial infections. Beneficial effects of desferrioxamine. Tielemans CL, et al. **Nephrol Dial Transplant** 1989;4(10):883–7

Bacterial vaginosis: treatment with topical intravaginal clindamycin phosphate. Livengood CH 3d, et al. **Obstet Gynecol** 1990 Jul;76(1):118–23

Management of infectious complications of acute leukemia and antileukemia therapy. Karp JE, et al. **Oncology (Williston Park)** 1990 Jul;4(7):45–53; discussion 53–4 (82 ref.)

Aztreonam: new developments in the treatment of gram-negative infections in children. Chicago, Illinois, November 17, 1988. Proceedings. **Pediatr Infect Dis J** 1989 Sep;8(9 Suppl):S99–132

Imipenem-cilastatin in pediatric patients: an overview of safety and efficacy in studies conducted in the United States [see comments] Abonkhai VI, et al. **Pediatr Infect Dis J** 1989 Nov;8(11):740–4 Comment in: Pediatr Infect Dis J 1989 Nov;8(11):792–4.

Outpatient management of selected infants younger than two months of age evaluated for possible sepsis. McCarthy CA, et al. **Pediatr Infect Dis J** 1990 Jun;9(6):385–9

The use of aztreonam in the cystic fibrosis patient. Matsen JM, et al. **Pediatr Infect Dis J** 1989 Sep;8(9 Suppl):S117–9; discussion S128–32 (13 ref.)

Cefaclor treatment of upper and lower respiratory tract infections caused by Moraxella catarrhalis. Oberlin JA, et al. **Pediatr Infect Dis J** 1990 Jan;9(1):41–4

Empiric therapy with acyclovir for suspected neonatal herpes simplex infection. Overall JC Jr. **Pediatr Infect Dis J** 1989 Nov;8(11):808–9

Use of imipenem-cilastatin in pediatrics [comment] Overturf GD. **Pediatr Infect Dis J** 1989 Nov;8(11):792–4 (19 ref.) Comment on: Pediatr Infect Dis J 1989 Nov;8(11):740–4.

Aztreonam in the management of gram-negative infections in penicillin-allergic patients: a review. Saxon A. **Pediatr Infect Dis J** 1989 Sep;8(9 Suppl):S124–7; discussion S128–32 (8 ref.)

Clinical experience with aztreonam. Stutman HR. **Pediatr Infect Dis J** 1989 Sep;8(9 Suppl):S109–12; discussion S128–32 (28 ref.)

Dexamethasone in bacterial meningitis: increasing evidence for a beneficial effect. Täuber MG, et al. **Pediatr Infect Dis J** 1989 Dec;8(12):842–4 (22 ref.)

Evaluation of aztreonam and ampicillin vs. amikacin and ampicillin for treatment of neonatal bacterial infections. Umaña MA, et al. **Pediatr Infect Dis J** 1990 Mar; 9(3):175–80

Therapy of bacterial sepsis and meningitis in infants and children: 1989 poll of directors of programs in pediatric infectious diseases. Word BM, et al. **Pediatr Infect Dis J** 1989 Sep;8(9):635–7

Aminoglycoside therapy. Current use and future prospects. Janknegt R. **Pharm Weekbl [Sci]** 1990 Jun 22;12(3):81–90 (70 ref.)

Helicobacter pylori in gastroduodenal disease. Loffeld RJ. **Pharm Weekbl [Sci]** 1990 Apr 27;12(2):46–50 (47 ref.)

Oral clindamycin and ciprofloxacin therapy for diabetic foot infections [retracted by Scheife RT. In: Pharmacotherapy 1990;10(4):261] Sesin GP, et al. **Pharmacotherapy** 1990; 10(2):154–6

Ciprofloxacin. Best use of this new broad-spectrum antibiotic. Fass RJ. **Postgrad Med** 1990 Jun;87(8):117–22, 124, 127–31 (43 ref.)

New antibiotics. Hill S. **Practitioner** 1990 Mar 8; 234(1484):229–31

Ofloxacin compared with amoxycillin in treating infective exacerbations in bronchiectasis. Lam WK, et al. **Respir Med** 1989 Jul;83(4):299–303

Potential role of fluoroquinolones in pediatric infections. Douidar SM, et al. **Rev Infect Dis** 1989 Nov–Dec; 11(6):878–89 (65 ref.)

Report of a symposium on use and abuse of antibiotics worldwide. Kunin CM, et al. **Rev Infect Dis** 1990 Jan–Feb; 12(1):12–9 (15 ref.)

Treatment of sexually transmitted vaginosis/vaginitis. Lossick JG. **Rev Infect Dis** 1990 Jul–Aug;12 Suppl 6:S665–81 (167 ref.)

Antibiotic therapy for the febrile granulocytopenic cancer patient: combination therapy vs. monotherapy. Wade JC. **Rev Infect Dis** 1989 Nov–Dec;11 Suppl 7:S1572–81 (28 ref.)

Recent developments in the use of furazolidone and other antimicrobial agents in typhoid fever and infectious diarrheal disease. **Scand J Gastroenterol Suppl** 1989; 169:1–80

Progress in therapy for infectious diarrhea. DuPont HL. **Scand J Gastroenterol Suppl** 1989;169:1–3

Use of antibiotics in general practice in Denmark in 1987. Friis H, et al. **Scand J Infect Dis** 1989;21(5):551–6

A randomised comparison of ceftazidime and piperacillin, both in combination with flucloxacillin for treatment of febrile episodes in neutropenic children. Finnish Three-Centre Study. Perkkiö M, et al. **Scand J Infect Dis** 1990;22(2):209–18

Cefadroxil as an alternative to metronidazole in the treatment of bacterial vaginosis. Wathne B, et al. **Scand J Infect Dis** 1989;21(5):585–6

Antibiotic treatment of anaerobic infections. Panichi G. **Scand J Infect Dis Suppl** 1989;62:47–51 (12 ref.)

Clinical efficacy of sulbactam/ampicillin in the treatment of moderately severe bacterial infections. Fong KY, et al. **Singapore Med J** 1989 Apr;30(2):170–2

Comparative double-blinded study between mupirocin and tetracycline ointments for treating skin infections. Wong KS, et al. **Singapore Med J** 1989 Aug;30(4):380–3

Ampicillin/sulbactam versus clindamycin in the treatment of postpartum endomyometritis. Martens MG, et al. **South Med J** 1990 Apr;83(4):408–13

Sulbactam/ampicillin versus cefotetan in the treatment of obstetric and gynecologic infections. Scalambrino S, et al. **Suppl Int J Gynecol Obstet** 1989;2:21–7

Combination antibiotic treatment of chemotherapy-induced neutropenia in non-leukemic patients. Gasparini G, et al. **Tumori** 1989 Oct 31;75(5):443–8

Pharmacokinetics of mezlocillin after intraarterial or intravenous injection in patients with peripheral arterial occlusive disease (PAOD). Amendt K, et al. **Vasa** 1990; 19(2):161–6

[The treatment of bacterial colpitis with the preparation Palin] Papazova I, et al. **Akush Ginekol (Sofiia)** 1990; 29(2):76–8 **(Bul)**

[The treatment of urinary tract infections with nolitsin] Mladenov D, et al. **Khirurgiia (Sofiia)** 1989;42(6):62–3 **(Bul)**

[Ciprofloxacin in bacterial infections] Belovezhdov N, et al. **Vutr Boles** 1989;28(5):20–4 (Eng. Abstr.) **(Bul)**

[Prevention of bronchopulmonary infections with the Bulgarian immunomodulator respivaks] Dobrev P, et al. **Vutr Boles** 1989;28(4):40–2 **(Bul)**

[The use of antibiotics in burned patients] Xu WS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Jun;2(2):84–9 **(Chi)**

[Clinical evaluation of fosfomycin] Lan CK. **Chung Hua I Hsueh Tsa Chih** 1990 Mar;45(3):181–5 (Eng. Abstr.) **(Chi)**

[20 years' therapy with high doses of chloramphenicol in bacterial inflammations of the meninges] Duniewicz M, et al. **Cas Lek Cesk** 1989 Oct 6;128(41):1303–5 (Eng. Abstr.) **(Cze)**

[Duration of antibiotic treatment] Jalanko H. **Duodecim** 1989; 105(19):1576–8 (12 ref.) **(Fin)**

[Bacterial endophthalmitis: treatment with a combination of fosfomycin and pefloxacin apropos of 9 cases] Salvanet-Bouccara A, et al. **Bull Soc Ophtalmol Fr** 1989 Nov;89(11):1281–6 **(Fre)**

[The new quinolones] Lontie M. **J Pharm Belg** 1989 Jul–Aug; 44(4):292–301 (26 ref.) (Eng. Abstr.) **(Fre)**

[The use of teicoplanin in neutropenic patients: values and limits] Espinouse D, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):552–6 (Eng. Abstr.) **(Fre)**

[Efficacy of the combination of ceftazidime/vancomycin in the first line treatment of infection in neutropenic children] Schaison G, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):557–60 (Eng. Abstr.) **(Fre)**

[Imipenem-cilastatin in infections] Armengaud M. **Presse Med** 1990 Apr 4;19(13):629–33 (Eng. Abstr.) **(Fre)**

[Do immunoglobulins have a value and a future in the treatment of severe bacterial infections?] Baumgartner JD. **Presse Med** 1990 Feb 10;19(5):196–8 **(Fre)**

[Value of an imipenem-cilastatin combination in surgery and surgical care units] Bouletreau P. **Presse Med** 1990 Apr 4;19(13):616–9 (Eng. Abstr.) **(Fre)**

[Chronic bone infections after surgery. Treatment with the new quinolones] Brichler F, et al. **Presse Med** 1989 Sep 16;18(28):1383–6 (Eng. Abstr.) **(Fre)**

[An imipenem-cilastatin combination in the treatment of infection in hemato-oncology] Espinouse D. **Presse Med** 1990 Apr 4;19(13):625–8 (Eng. Abstr.) **(Fre)**

[An imipenem-cilastatin combination in the treatment of infection at general intensive care units] Gouin F. **Presse Med** 1990 Apr 4;19(13):620–4 (27 ref.) (Eng. Abstr.) **(Fre)**

[Study of imipenem-cilastatin at intensive care units] Leroy J. **Presse Med** 1990 Apr 4;19(13):613–5 (Eng. Abstr.) **(Fre)**

[Efficacy and tolerability of intravenous ofloxacin. A French multicenter study of 275 patients] Leroy O, et al. **Presse Med** 1989 Dec 16–23;18(42):2050–4 (Eng. Abstr.) **(Fre)**

[Clinical and bacteriologic course of wounds as a function of various protocols of local antisepsis] Blech MF, et al. **Rev Chir Orthop** 1990;76(1):55–61 (Eng. Abstr.) **(Fre)**

[Antibiotic administration by intra-arterial catheter. Observations on pharmacokinetics using Na24] Widmer LK, et al. **Angiologica** 1967;4(3–4):193–202 (Eng. Abstr.) **(Ger)**

[Cefuroxime axetil. An antibiotic advances] **Fortschr Med** 1990;108 Suppl 92:4–13 **(Ger)**

[Chemotherapy of opportunistic infections in AIDS] Freerksen E. **Fortschr Med** 1990 May 20;108(15):297–300 (0 ref.) (Eng. Abstr.) **(Ger)**

[One year of Zinnat: effective antibiosis and good tolerance] Knothe H. **Fortschr Med** 1990;108 Suppl 92:13–5 **(Ger)**

[Therapeutic study of the effect of selective decontamination on microbial overgrowth syndrome of the small intestine] Knoke M, et al. **Gastroenterol J** 1989;49(2):59–62 (Eng. Abstr.) **(Ger)**

[Local antibiotic therapy of bacterial ear infections] Ganz H. **HNO** 1989 Sep;37(9):386–8 (Eng. Abstr.) **(Ger)**

[Should the use of gyrase inhibitors be limited to hospitals?] Shah PM. **Immun Infekt** 1990 Jun;18(3):69–70 **(Ger)**

[A comment on the contribution by H. Rosin: "Beta-lactam antibiotics"] Cullmann W, et al. **Internist (Berl)** 1989 Sep; 30(9):628–9 **(Ger)**

[Relevance of rapid availability of microbiological data: the basis for calculating antibiotic therapy] Heizmann WR. **Internist (Berl)** 1990 Jul;31(7):438–47 (62 ref.) **(Ger)**

[Possibilities for errors in endocarditis therapy] Lode H, et al. **Internist (Berlin)** 1989 Aug;30(8):492–7 (24 ref.) **(Ger)**

[Serum concentration of gentamicin in newborn infants] Töpke B, et al. **Kinderarztl Prax** 1990 Apr;58(4):191–7 (Eng. Abstr.) **(Ger)**

[Acute renal failure with high-dose combination therapy with penicillin G and amoxicillin] Tegtmeyer FK, et al. **Monatsschr Kinderheilkd** 1990 Feb;138(2):77–80 (Eng. Abstr.) **(Ger)**

[Frequent errors in antibiotic therapy] Lode H. **Verh Dtsch Ges Inn Med** 1989;95:400–3 (6 ref.) **(Ger)**

[New specialty drugs registered in Austria. Unasyn] Ganzinger U. **Wien Klin Wochenschr** 1989 Nov 10; 101(21):754–60 (29 ref.) **(Ger)**

[In vitro sensitivity of Aeromonas spp. to antibiotics] Mascher F. **Wien Med Wochenschr** 1990 Feb 15;140(3):57–8 (Eng. Abstr.) **(Ger)**

[Responsible antibiotic therapy] Baumgarten R. **Z Arztl Fortbild (Jena)** 1990;84(9):411–2 **(Ger)**

[A clinical trial of pefloxacin (Abaktal) in the treatment of acute pyelonephritis] Gorski J, et al. **Z Urol Nephrol** 1990 Feb;83(2):55–60 (Eng. Abstr.) **(Ger)**

[Dexamethasone treatment in acute bacterial meningitis (editorial)] Ziv I, et al. **Harefuah** 1990 Mar 1;118(5):298–300 **(Heb)**

[Antimicrobial chemotherapy—its clinico-pharmacologic significance] Graber H. **Orv Hetil** 1989 Dec 10; 130(50):2671–5 (Eng. Abstr.) **(Hun)**

[Treatment of male genital infections with enoxacin] Giorgi PM, et al. **Arch Ital Urol Nefrol Androl** 1989 Sep; 61(3):235–41 (Eng. Abstr.) **(Ita)**

[Enoxacin in the treatment of bacterial prostato-cystitis] Mantovani F, et al. **Arch Ital Urol Nefrol Androl** 1989 Sep; 61(3):243–8 (Eng. Abstr.) **(Ita)**

[Bacterial infections in cancer patients without neutropenia. Comparison between 2 antibiotic combinations (aztreonam and oxacillin versus cefoxitin and tobramycin)] Apice G, et al. **Clin Ter** 1989 Nov 15;131(3):177–82 (Eng. Abstr.) **(Ita)**

[Piperacillin in the therapy of severe bacterial infections: comparison of its efficacy and tolerance vs. ceftazidime] D'Amato C, et al. **Clin Ter** 1989 Sep 15;130(5):271–6 (Eng. Abstr.) **(Ita)**

[Clinical experience with a new antibiotic: cefmetazole] De Lorenzi E, et al. **Clin Ter** 1990 Jan 31;132(2):105–8 (Eng. Abstr.) **(Ita)**

[Piperacillin and amikacin in the treatment of infections in neoplasm patients with granulocytopenia] Giaccone G, et al. **Clin Ter** 1989 Aug 15–31;130(3–4):191–5 (Eng. Abstr.) **(Ita)**

[Evaluation of the effectiveness of sodium piperacillin in the treatment of surgical infections in children] Inserra A, et al. **Clin Ter** 1990 Feb 28;132(4):229–33 (Eng. Abstr.) **(Ita)**

[Aztreonam and oxacillin in the treatment of febrile neutropenic patients with solid tumors] Natali M, et al. **Clin Ter** 1989 Sep 15;130(5):239–44 (Eng. Abstr.) **(Ita)**

[Therapy of bacterial pharyngo–tonsillitis in children with piperacillin–flucloxacillin combination] Romano A, et al. **Clin Ter** 1990 Jun 15;133(5):323–7 (Eng. Abstr.) **(Ita)**

[Clinical evaluation of the tolerability of imipenem in the treatment of postoperative infections in oncologic surgery] Gipponi M, et al. **Minerva Chir** 1990 Jan;45(1–2):91–4 (Eng. Abstr.) **(Ita)**

[Ciprofloxacin in urinary infections: analysis of the Italian data pool] Maggiolo F, et al. **Minerva Urol Nefrol** 1989 Jul–Sep;41(3):201–5 (Eng. Abstr.) **(Ita)**

[Treatment with aztreonam of gram-negative infections in patients seropositive for HIV] Catania S, et al. **Riv Eur Sci Med Farmacol** 1988 Aug;10(4):317–21 (Eng. Abstr.) **(Ita)**

[Effectiveness of ciprofloxacin in bacterial infections of the respiratory and gastrointestinal tract] Sforza E, et al. **Riv Eur Sci Med Farmacol** 1988 Dec;10(6):533–7 (Eng. Abstr.) **(Ita)**

[Evaluation of the therapeutic efficacy of aztreonam in the treatment of infection caused by sensitive microorganisms] Tirone F, et al. **Riv Eur Sci Med Farmacol** 1989 Feb; 11(1):85–8 (Eng. Abstr.) **(Ita)**

[Clinical studies on chronic prostatitis and prostatitis-like syndrome. (3). Clinical re-examination of chronic bacterial prostatitis using the criteria for clinical evaluation] Ikeuchi T. **Hinyokika Kiyo** 1990 May;36(5):561–8 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic, bacteriological and clinical studies on cefpodoxime proxetil in the field of pediatrics] Akita H, et al. **Jpn J Antibiot** 1989 Jul;42(7):1547–60 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetics and clinical studies on aztreonam in neonates] Arai S, et al. **Jpn J Antibiot** 1990 Mar; 43(3):479–86 (Eng. Abstr.) **(Jpn)**

[Clinical and pharmacokinetic study on cefodizime, a new cephalosporin antibiotic, in the pediatric infections] Arimasu O, et al. **Jpn J Antibiot** 1989 Jun;42(6):1293–305 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetics and clinical safety of aztreonam in neonates] Azagami S, et al. **Jpn J Antibiot** 1990 Mar; 43(3):405–12 (Eng. Abstr.) **(Jpn)**

[Clinical studies on aztreonam in perinatal use] Chimura T, et al. **Jpn J Antibiot** 1990 Apr;43(4):696–9 (Eng. Abstr.) **(Jpn)**

[Clinical effects of cefodizime against infectious diseases in obstetrics and gynecology] Chimura T, et al. **Jpn J Antibiot** 1989 Oct;42(10):2065–8 (Eng. Abstr.) **(Jpn)**

[Fundamental and clinical studies on cefmenoxime in perinatal period] Cho N, et al. **Jpn J Antibiot** 1989 Dec; 42(12):2692–708 (Eng. Abstr.) **(Jpn)**

[Studies on aztreonam in the perinatal period] Cho N, et al. **Jpn J Antibiot** 1990 Apr;43(4):706–18 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetics and clinical studies on aztreonam in neonates and premature infants (the second report). Study on effectiveness and safety in combination therapy using aztreonam and ampicillin. A study of aztreonam in the Perinatal Co-research Group] Fuji R, et al. **Jpn J Antibiot** 1990 Mar;43(3):563–78 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetics and clinical studies on aztreonam in neonates and premature infants (the first report). Study on effectiveness and safety in mono-therapy with aztreonam. A study of aztreonam in the Perinatal Co-research Group] Fuji R, et al. **Jpn J Antibiot** 1990 Mar;43(3):543–62 (Eng. Abstr.) **(Jpn)**

[Overall clinical evaluation of cefpodoxime proxetil against infections in pediatric fields] Fujii R, et al. **Jpn J Antibiot** 1989 Jul;42(7):1439–55 (Eng. Abstr.) **(Jpn)**

[Evaluation of norfloxacin in the pediatric field. Pediatric Study Group for Norfloxacin] Fujii R, et al. **Jpn J Antibiot** 1990 Jan;43(1):181–215 (Eng. Abstr.) **(Jpn)**

[Clinical study on cefteram pivoxil in pediatric field] Fujita M, et al. **Jpn J Antibiot** 1989 Aug;42(8):1845–8 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on cefodizime in gynecologic field] Hanada S, et al. **Jpn J Antibiot** 1989 Oct;42(10):2098–106 (Eng. Abstr.) **(Jpn)**

[Clinical experience with cefodizime on pediatric infections] Haruta T, et al. **Jpn J Antibiot** 1989 Jun;42(6):1381–4 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of cefmenoxime in infections of neonates] Haruta T, et al. **Jpn J Antibiot** 1989 Dec;42(12):2661–71 (Eng. Abstr.) **(Jpn)**

[Clinical studies on norfloxacin in the field of pediatrics] Haruta T, et al. **Jpn J Antibiot** 1990 May;43(5):872–6 (Eng. Abstr.) **(Jpn)**

[A clinical study on cefteram pivoxil granule in the field of pediatrics] Haruta T, et al. **Jpn J Antibiot** 1989 Sep; 42(9):2016–22 (Eng. Abstr.) **(Jpn)**

[Clinical studies on cefpodoxime proxetil dry syrup in the field of pediatrics] Haruta T, et al. **Jpn J Antibiot** 1989 Jul;42(7):1621–8 (Eng. Abstr.) **(Jpn)**

[Clinical and pharmacokinetic studies on aztreonam in neonates] Hashira S, et al. **Jpn J Antibiot** 1990 Mar; 43(3):396–404 (Eng. Abstr.) **(Jpn)**

[A preclinical and clinical study of cefmenoxime in newborns] Hashira S, et al. **Jpn J Antibiot** 1989 Dec; 42(12):2607–16 (Eng. Abstr.) **(Jpn)**

[Laboratory and clinical studies on cefteram pivoxil in the field of pediatrics] Hayakawa F, et al. **Jpn J Antibiot** 1989 Aug;42(8):1849–59 (Eng. Abstr.) **(Jpn)**

[Clinical and pharmacokinetic evaluation of cefodizime in children] Hirabayashi Y, et al. **Jpn J Antibiot** 1989 Jun; 42(6):1366–80 (Eng. Abstr.) **(Jpn)**

[Clinical studies of cefteram pivoxil in pediatric infection] Hirosawa H, et al. **Jpn J Antibiot** 1989 Aug;42(8):1828–36 (Eng. Abstr.) **(Jpn)**

[Study of efficacy, safety and dosage on cefpodoxime proxetil in pediatric infections] Hirosawa H, et al. **Jpn J Antibiot** 1989 Jul;42(7):1498–504 (Eng. Abstr.) **(Jpn)**

[Clinical study of imipenem/cilastatin sodium in children with severe infections] Inoue M, et al. **Jpn J Antibiot** 1990 Jan;43(1):31–9 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on aztreonam in the perinatal period] Ito K, et al. **Jpn J Antibiot** 1990 Apr; 43(4):719–26 (Eng. Abstr.) **(Jpn)**

[Fundamental and clinical evaluation of cefodizime in obstetrics and gynecology] Ito K, et al. **Jpn J Antibiot** 1989 Oct;42(10):2107–19 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic, bacteriological and clinical studies on aztreonam in neonates] Iwai N, et al. **Jpn J Antibiot** 1990 Mar;43(3):455–78 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on cefmenoxime in neonates and infants] Iwai N, et al. **Jpn J Antibiot** 1989 Dec;42(12):2641–60 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic, bacteriological and clinical evaluation of cefpodoxime proxetil in pediatrics] Iwai N, et al. **Jpn J Antibiot** 1989 Jul;42(7):1571–92 (Eng. Abstr.) **(Jpn)**

[Clinical studies of cefteram pivoxil in pediatrics] Iwai N, et al. **Jpn J Antibiot** 1989 Sep;42(9):1963–80 (Eng. Abstr.) **(Jpn)**

[Clinical experience with cefixime in urinary tract infections] Kameoka H, et al. **Jpn J Antibiot** 1989 Dec;42(12):2540–7 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic evaluations and analysis of aztreonam in children] Kawasaki H. **Jpn J Antibiot** 1989 Jun; 42(6):1271–8 (Eng. Abstr.) **(Jpn)**

[Bacteriological, pharmacokinetic and clinical studies on cefpodoxime proxetil in the pediatric field] Kimura H, et al. **Jpn J Antibiot** 1989 Jul;42(7):1593–606 (Eng. Abstr.) **(Jpn)**

[Clinical studies of cefpodoxime proxetil in pediatric field] Kimura S, et al. **Jpn J Antibiot** 1989 Jul;42(7):1477–87 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical study on cefodizime in obstetrics and gynecological field] Kinoshita Y, et al. **Jpn J Antibiot** 1989 Oct;42(10):2090–7 (Eng. Abstr.) **(Jpn)**

[Laboratory and clinical investigations of cefodizime in infectious diseases in childhood] Komada Y, et al. **Jpn J Antibiot** 1989 Jun;42(6):1346–57 (Eng. Abstr.) **(Jpn)**

[Basic and clinical studies on aztreonam in obstetric and gynecologic infections during the perinatal period] Makinoda S, et al. **Jpn J Antibiot** 1990 Apr;43(4):692–5 (Eng. Abstr.) **(Jpn)**

[Transplacental transfer and clinical application of aztreonam] Matsuda S, et al. **Jpn J Antibiot** 1990 Apr; 43(4):700–5 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetics and clinical evaluations on aztreonam in perinatal infections in obstetrics and gynecology. A study of aztreonam in the perinatal co-research group] Matsuda S, et al. **Jpn J Antibiot** 1990 Apr;43(4):736–53 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of a new oral cephem, cefpodoxime proxetil in children] Meguro H, et al. **Jpn J Antibiot** 1989 Jul;42(7):1561–70 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of norfloxacin in children] Meguro H, et al. **Jpn J Antibiot** 1990 May;43(5):790–8 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of cefteram pivoxil in the pediatric field] Meguro H, et al. **Jpn J Antibiot** 1989 Aug;42(8):1815–27 (Eng. Abstr.) **(Jpn)**

[Clinical studies on cefixime in pediatrics] Mikawa H, et al. **Jpn J Antibiot** 1989 Dec;42(12):2527–39 (Eng. Abstr.) **(Jpn)**

[A clinical study on cefteram pivoxil in the field of pediatrics] Minamitani M, et al. **Jpn J Antibiot** 1989 Sep;42(9):1938–47 (Eng. Abstr.) **(Jpn)**

[A clinical evaluation of cefpodoxime proxetil in pediatrics] Minamitani M, et al. **Jpn J Antibiot** 1989 Jul;42(7):1488–97 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of cefodizime in children] Mochizuki Y, et al. **Jpn J Antibiot** 1989 Jun;42(6):1358–65 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical evaluations of aztreonam monotherapy and aztreonam and ampicillin combination therapy in neonates and premature infants] Motohiro T, et al. **Jpn J Antibiot** 1990 Mar;43(3):503–23 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on cefmenoxime in neonates and premature infants] Motohiro T, et al. **Jpn J Antibiot** 1989 Dec;42(12):2672–91 (Eng. Abstr.) **(Jpn)**

[Experimental and clinical studies on cefodizime in pediatrics] Motohiro T, et al. **Jpn J Antibiot** 1990 Apr;43(4):603–22 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on cefpodoxime proxetil dry syrup in the field of pediatrics] Motohiro T, et al. **Jpn J Antibiot** 1989 Jul;42(7):1629–66 (Eng. Abstr.) **(Jpn)**

[Clinical study of cefpodoxime proxetil dry syrup for skin and soft tissue infections in the field of pediatrics] Motohiro T, et al. **Jpn J Antibiot** 1989 Jul;42(7):1685–704 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies of cefteram pivoxil granule in the pediatric field] Motohiro T, et al. **Jpn J Antibiot** 1989 Sep;42(9):2023–61 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of cefpiramide for infections in leukemia and related disorders] Nakagawa H, et al. **Jpn J Antibiot** 1989 Aug;42(8):1720–6 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on cefodizime in the field of obstetrics and gynecology] Nakagiri Y, et al. **Jpn J Antibiot** 1989 Oct;42(10):2128–34 (Eng. Abstr.) **(Jpn)**

[Experimental and clinical studies on cefodizime in pediatrics] Nakamura H, et al. **Jpn J Antibiot** 1989 Jun;42(6):1322–35 (Eng. Abstr.) **(Jpn)**

[Clinical observations with cefteram pivoxil granules in field of pediatrics] Nakazato A, et al. **Jpn J Antibiot** 1989 Aug; 42(8):1791–8 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on cefmenoxime in newborn infants] Nakazawa S, et al. **Jpn J Antibiot** 1989 Dec;42(12):2627–40 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic, bacteriological and clinical studies in the pediatric field on norfloxacin] Nakazawa S, et al. **Jpn J Antibiot** 1990 May;43(5):799–807 (Eng. Abstr.) **(Jpn)**

[Evaluation of cefpodoxime proxetil in the pediatric field] Niino K, et al. **Jpn J Antibiot** 1989 Jul;42(7):1505–18 (Eng. Abstr.) **(Jpn)**

[Clinical studies of cefodizime in the pediatric field] Niino M, et al. **Jpn J Antibiot** 1989 Jun;42(6):1400–13 (Eng. Abstr.) **(Jpn)**

[Laboratory and clinical studies of norfloxacin in pediatric field] Nishimura T, et al. **Jpn J Antibiot** 1990 May; 43(5):860–71 (Eng. Abstr.) **(Jpn)**

[Laboratory and clinical studies of cefpodoxime proxetil in pediatric field] Nishimura T, et al. **Jpn J Antibiot** 1989 Jul;42(7):1607–20 (Eng. Abstr.) **(Jpn)**

[Laboratory and clinical studies of cefteram pivoxil in pediatric field] Nishimura T, et al. **Jpn J Antibiot** 1989 Sep;42(9):2004–15 (Eng. Abstr.) **(Jpn)**

[Treatment with sulbactam/cefoperazone of severe infections in patients with hematological disorders] Ohno R, et al. **Jpn J Antibiot** 1989 Aug;42(8):1713–9 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of norfloxacin in pediatrics] Okada T, et al. **Jpn J Antibiot** 1990 May;43(5):895–900 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of aztreonam in neonatal infections] Okura K, et al. **Jpn J Antibiot** 1990 Mar;43(3):493–502 (Eng. Abstr.) **(Jpn)**

[Clinical and pharmacokinetic evaluation of cefteram pivoxil in children] Sakata H, et al. **Jpn J Antibiot** 1989 Aug; 42(8):1727–34 (Eng. Abstr.) **(Jpn)**

[Clinical and pharmacokinetic evaluation of aztreonam in neonates] Sakata H, et al. **Jpn J Antibiot** 1990 Mar; 43(3):388–95 (Eng. Abstr.) **(Jpn)**

[Clinical and pharmacokinetic evaluation of cefpodoxime proxetil in children] Sakata H, et al. **Jpn J Antibiot** 1989 Jul;42(7):1456–63 (Eng. Abstr.) **(Jpn)**

[Studies of aztreonam in neonates] Sato H, et al. **Jpn J Antibiot** 1990 Mar;43(3):445–54 (Eng. Abstr.) **(Jpn)**

[Clinical studies on cefteram pivoxil granules in pediatrics] Sato H, et al. **Jpn J Antibiot** 1989 Sep;42(9):1948–62 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on cefmenoxime in neonates and premature infants] Sato Y, et al. **Jpn J Antibiot** 1989 Dec;42(12):2582–92 (Eng. Abstr.) **(Jpn)**

[Laboratory and clinical studies on norfloxacin in pediatrics] Sato Y, et al. **Jpn J Antibiot** 1990 May;43(5):826–36 (Eng. Abstr.) **(Jpn)**

[A clinical study on cefteram pivoxil in pediatrics] Satoh Y, et al. **Jpn J Antibiot** 1989 Aug;42(8):1780–90 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on aztreonam in perinatal period] Sengoku K, et al. **Jpn J Antibiot** 1990 Apr;43(4):686–91 (Eng. Abstr.) **(Jpn)**

[Tosufloxacin tosilate] Shimada K. **Jpn J Antibiot** 1990 Apr; 43(4):583–602 (37 ref.) **(Jpn)**

[Clinical studies on cefteram pivoxil in the field of pediatrics] Shinozaki T, et al. **Jpn J Antibiot** 1989 Aug;42(8):1837–44 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on aztreonam in neonates and premature infants] Sunakawa K, et al. **Jpn J Antibiot** 1990 Mar;43(3):413–23 (Eng. Abstr.) **(Jpn)**

[Laboratory and clinical studies on cefteram pivoxil in

pediatric field] Suzuki G, et al. **Jpn J Antibiot** 1989 Aug; 42(8):1751–60 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of imipenem/cilastatin sodium against severe infections complicated with hematological disorders and solid tumors] Takemori H, et al. **Jpn J Antibiot** 1989 Dec;42(12):2566–73 (Eng. Abstr.) **(Jpn)**

[Usefulness of ceftazidime in intractable respiratory tract infections] Takenaka S, et al. **Jpn J Antibiot** 1989 Dec; 42(12):2555–65 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetics and clinical studies of aztreonam in neonates and premature infants] Tanaka H, et al. **Jpn J Antibiot** 1990 Mar;43(3):524–7 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of a combination treatment with cefbuperazone and amikacin in infections complicating with hematological disorders] Tanaka S, et al. **Jpn J Antibiot** 1989 Dec;42(12):2548–54 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical evaluation of aztreonam in neonates and premature infants] Toyonaga Y, et al. **Jpn J Antibiot** 1990 Mar;43(3):425–43 (Eng. Abstr.) **(Jpn)**

[Laboratory and clinical studies on norfloxacin in the pediatric field] Toyonaga Y, et al. **Jpn J Antibiot** 1990 May; 43(5):808–25 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies of cefmenoxime in neonates and premature infants] Toyonaga Y, et al. **Jpn J Antibiot** 1989 Dec;42(12):2593–606 (Eng. Abstr.) **(Jpn)**

[Bacteriological, pharmacokinetic and clinical studies on cefteram pivoxil in the pediatric field] Toyonaga Y, et al. **Jpn J Antibiot** 1989 Aug;42(8):1799–814 (Eng. Abstr.) **(Jpn)**

[Bacteriological, pharmacokinetic and clinical studies on cefpodoxime proxetil in the pediatric field] Toyonaga Y, et al. **Jpn J Antibiot** 1989 Jul;42(7):1519–46 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of a combination therapy with aztreonam and clindamycin for severe infections in leukemia and related disorders] Tsuda S, et al. **Jpn J Antibiot** 1989 Sep; 42(9):1926–37 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of cefteram pivoxil fine granules in pediatric infections] Wagatsuma Y, et al. **Jpn J Antibiot** 1989 Aug;42(8):1735–44 (Eng. Abstr.) **(Jpn)**

[A clinical study on cefpodoxime proxetil dry syrup in pediatric infections] Wagatsuma Y, et al. **Jpn J Antibiot** 1989 Jul;42(7):1464–70 (Eng. Abstr.) **(Jpn)**

[Therapeutic effects of cefodizime in the treatment of various infectious diseases in children] Wakiguchi H, et al. **Jpn J Antibiot** 1989 Jun;42(6):1414–23 (Eng. Abstr.) **(Jpn)**

[Clinical studies on cefpodoxime proxetil in the pediatric fields] Watanabe A, et al. **Jpn J Antibiot** 1989 Jul; 42(7):1471–6 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on aztreonam in the perinatal period in obstetrics and gynecology] Yamamoto T, et al. **Jpn J Antibiot** 1990 Apr;43(4):727–35 (Eng. Abstr.) **(Jpn)**

[Clinical studies on cefodizime in the field of obstetrics and gynecology] Yamamoto T, et al. **Jpn J Antibiot** 1989 Oct; 42(10):2121–7 (Eng. Abstr.) **(Jpn)**

[Clinical experience with cefodizime in bacterial infection of children] Yokota I, et al. **Jpn J Antibiot** 1989 Jun; 42(6):1385–90 (Eng. Abstr.) **(Jpn)**

[Clinical studies on cefteram pivoxil in pediatrics] Yokoyama M, et al. **Jpn J Antibiot** 1989 Aug;42(8):1745–50 (Eng. Abstr.) **(Jpn)**

[Clinical trial of T-3262 on acute enteritis. Japan Research Committee of T-3262, Research Group for Acute Infectious Enteritis] Aoki T, et al. **Kansenshogaku Zasshi** 1989 Jun;63(6):593–605 (Eng. Abstr.) **(Jpn)**

[Comparison of clinical efficacy of lomefloxacin (LFLX, NY-198) and pipemidic acid (PPA) in the treatment of infectious enteritis by a double-blind method. The Japan Research Committee of Lomefloxacin Research Group Enteritis] Aoki T, et al. **Kansenshogaku Zasshi** 1989 Jun; 63(6):606–22 (Eng. Abstr.) **(Jpn)**

[The effect of erythromycin treatment on natural killer (NK) cell activity in patients with chronic lower respiratory tract infections] Mikasa K, et al. **Kansenshogaku Zasshi** 1989 Aug;63(8):811–5 (Eng. Abstr.) **(Jpn)**

[Reduction in leukocyte elastase levels in patients with sepsis by administration of urinastatin] Hiraoka N, et al. **Masui** 1990 Mar;39(3):367–71 (Eng. Abstr.) **(Jpn)**

[Chemotherapy of refractory infections—selection and application of anti-microbial agents] **Nippon Rinsho** 1988 Jul;46 Suppl:345–89 **(Jpn)**

[Chemotherapy of specific infections] **Nippon Rinsho** 1988 Jul;46 Suppl:393–439 **(Jpn)**

[Chemotherapy in the treatment of infections—basis and proper use of antibiotics] Matsuda S. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Aug; 41(8):1045–51 (Eng. Abstr.) **(Jpn)**

[Synthesis and biological activity of isomeric 5- and 6-nitro-1-alkylbenzimidazoles] Domagalina E, et al. **Acta Pol Pharm** 1989;46(1):19–26 (Eng. Abstr.) **(Pol)**

[Severe bacterial infection in newborns – therapy with antibiotics] Sawa H. **Pediatr Pol** 1988 Dec;63(12):805–10 (21 ref.) **(Pol)**

[CEFOBID in the treatment of respiratory tract infection (preliminary report)] Filipecki S, et al. **Pneumonol Pol** 1989 Jul–Sep;57(7–9):403–8 (Eng. Abstr.) **(Pol)**

[Results of 2-week and 3-month antibacterial therapy of infections of the upper and lower segments of the urinary tract] Wielgosz A, et al. **Pol Arch Med Wewn** 1988 Nov; 80(5):267–74 (Eng. Abstr.) **(Pol)**

[New beta-lactam antibiotics: penems and monobactams] Swierzy H. **Pol Tyg Lek** 1988 Dec 19–26;43(51–52):1687–90 **(Pol)**

[Clinical results of the treatment of bacterial infections in children with ceftazidime] Zoch-Zwierz W, et al. **Pol Tyg Lek** 1989 Apr 24;44(17):390–3 (Eng. Abstr.) **(Pol)**

[Antibacterial action and clinical use of aminoglycoside antibiotics] Dyderski S. **Wiad Lek** 1989 Jun 1;42(11):769–75 (36 ref.) **(Pol)**

[Factors affecting the pharmacokinetics of aminoglycoside antibiotics] Dyderski S. **Wiad Lek** 1989 Jul 1–15; 42(13–15):919–23 **(Pol)**

[Antibiotics in the treatment of biliary tract infections] Perkowski H. **Wiad Lek** 1989 Jan 15;42(2):101–5 (67 ref.) (Eng. Abstr.) **(Pol)**

[Microbiological control of drug resistance of causative agents in suppurative-septic infections in newborn infants] Belokrysenko SS, et al. **Antibiot Khimioter** 1990 May; 35(5):21–4 (Eng. Abstr.) **(Rus)**

[Macrolide antibiotics and their use in combined pharmacotherapy] Berezhinskaia VV, et al. **Antibiot Khimioter** 1989 Aug;34(8):634–8 (54 ref.) **(Rus)**

[Pharmacokinetics of azlocillin in critical conditions: an individualized schedule of drug administration in relation to anatomo-physiologic and pathologic factors] Firsov AA, et al. **Antibiot Khimioter** 1989 Aug;34(8):620–4 (Eng. Abstr.) **(Rus)**

[Current principles of antibiotic therapy of acute bacterial meningitis] Kocherovets VI, et al. **Antibiot Khimioter** 1989 Oct;34(10):782–6 (58 ref.) **(Rus)**

[Fucidin: its value and place in current antibiotic therapy of bacterial infections (information from the All-Union Center for the study of Antibiotics and Chemotherapy)] Kuznetsova SM. **Antibiot Khimioter** 1989 Sep;34(9):711–5 **(Rus)**

[Current problems of production and rational use of antibiotics] Navashin SM. **Antibiot Khimioter** 1989 Nov; 34(11):803–7 **(Rus)**

[Cephalosporins of the 1980s. Aminothiazolylcephalosporins, non-glycine and phenylglycine cephalosporins, aminocephalosporins, cefamines, carbacephems and oxacephems] Nazarov AD, et al. **Antibiot Khimioter** 1990 Jan;35(1):48–52 (32 ref.) **(Rus)**

[Cephalosporins of the 1980s. New aminothiazolyloxyimino-cephalosporins and their sulfoxides] Nazarov AD, et al. **Antibiot Khimioter** 1990 Jan; 35(1):44–8 (33 ref.) **(Rus)**

[A new drug sulfaton in the combined treatment of infections with sulfanilamide derivatives and diaminopyrimidine] Padeĭskaia EN. **Antibiot Khimioter** 1989 Sep;34(9):657–62 (Eng. Abstr.) **(Rus)**

[Fluoroquinolones and their importance in modern chemotherapy of infectious diseases] Padeĭskaia EN. **Antibiot Khimioter** 1989 Jul;34(7):514–21 (Eng. Abstr.) **(Rus)**

[Characteristics of antibiotic use in children] Poliak MS. **Antibiot Khimioter** 1990 Mar;35(3):38–42 (Eng. Abstr.) **(Rus)**

[Combined antibacterial therapy of infectious complications in oncological patients] Smolianskaia AZ. **Antibiot Khimioter** 1989 Sep;34(9):696–9 (Eng. Abstr.) **(Rus)**

[Amikacin in the treatment of infectious-inflammatory diseases in patients at a therapeutic hospital] Sokolova VI, et al. **Antibiot Khimioter** 1990 May;35(5):36–9 (Eng. Abstr.) **(Rus)**

[An optimal schedule of antibacterial therapy as one of the factors determining its value (information materials)] Ukhin AV. **Antibiot Khimioter** 1989 Aug;34(8):624–9 **(Rus)**

[Lavage of the peridural space in suppurative periduritis in children] Oleinik VS, et al. **Khirurgiia (Mosk)** 1989 Nov; (11):124–5 **(Rus)**

[Use of silver preparations in surgery and traumatology (review of foreign literature)] Savadian ESh. **Khirurgiia (Mosk)** 1989 Aug;(8):135–9 (81 ref.) **(Rus)**

[A method of the treatment of suppurative wounds] Shraer TI, et al. **Khirurgiia (Mosk)** 1989 Aug;(8):114–7 **(Rus)**

[Use of decamethoxine in the complex treatment of chronic bronchitis] Iukhimets VA, et al. **Klin Med (Mosk)** 1990 Feb;68(2):91–4 (Eng. Abstr.) **(Rus)**

[Enterosorption as a method of total detoxication and nonspecific immune correction in acute surgical infection (a clinical-experimental study)] Novokreshchenov LB, et al. **Pediatriia** 1989;(12):62–6 **(Rus)**

[Analysis of the tactics in the management of patients with acute respiratory infections in an outpatient clinic] Safonova TIa, et al. **Pediatriia** 1990;(5):101–2 **(Rus)**

[Enterosorption in chronic enterocolitis] Shchedrunov VV, et al. **Sov Med** 1989;(11):24–6 (Eng. Abstr.) **(Rus)**

[Use of polyfepan in the treatment of suppurative wounds] Katsadze MA, et al. **Vestn Khir** 1989 Aug;144(8):42–5 (Eng. Abstr.) **(Rus)**

[Non-surgical sanitation in patients with obstetrical and gynecological infections] Lytkin MI, et al. **Vestn Khir** 1989 Jul;143(7):28–31 (Eng. Abstr.) **(Rus)**

[Use of pervomur solutions in the complex treatment of suppurative postoperative complications and local suppurative infection] Melekhov PA, et al. **Vestn Khir** 1989 Jul;143(7):45–7 (Eng. Abstr.) **(Rus)**

[Pefloxacin in the treatment of septicemia, purulent meningitis and salmonellosis] Dordević D, et al. **Med Arh** 1989;43(4–6):207–10 (Eng. Abstr.) **(Scr)**

[Evaluation of the effect of ofloxacin, a new chemotherapeutic agent] Kapidžić A, et al. **Med Arh** 1988; 42(1–2):41–4 (Eng. Abstr.) **(Scr)**

[New possibilities in the care of surgical infections (personal experience with pefloxacin)] Rakovec S, et al. **Acta Chir Iugosl** 1989;36 Suppl 2:748–50 **(Slv)**

[New antibiotics in pediatrics] Ruiz Contreras J. **An Esp Pediatr** 1989 Dec;31(6):515–8 (29 ref.) **(Spa)**

[Bacterial meningitis: reducing its long-term sequelae (editorial)] Campos J, et al. **Med Clin (Barc)** 1990 May 26;94(20):782–4 **(Spa)**

[Comparison of empirical treatment with antibiotics in community acquired lung diseases] Dolmann AL, et al. **Medicina (B Aires)** 1989;49(1):14–20 (Eng. Abstr.) **(Spa)**

ECONOMICS

Foodborne illnesses cost $4.8 billion in 1987 [news] **J Am Vet Med Assoc** 1990 Jan 1;196(1):21

Costs of prophylaxis against infection for joint replacement [letter] Henderson PJ, et al. **N Z Med J** 1989 Jul 26; 102(872):388

ENZYMOLOGY

Post-transcriptional modification of serum creatine kinase in infected intensive care patients. Delanghe JR, et al. **Clin Chim Acta** 1990 Feb 28;187(2):115–24

Incidence of strains producing extended spectrum beta-lactamases in Argentina. Casellas JM, et al. **Infection** 1989 Nov–Dec;17(6):434–6

Resistance to third generation cephalosporins: the current situation. Pechère JC. **Infection** 1989 Sep–Oct;17(5):333–7 (42 ref.)

Elastase as an indicator of silent genital tract infection in infertile men. Mićić S, et al. **Int J Androl** 1989 Dec; 12(6):423–9

Beta-lactamases, beta-lactamase inhibitors, and skin and skin-structure infections. Neu HC. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):896–904 (27 ref.)

EPIDEMIOLOGY

Incidence and impact of infection in a nursing home care unit. Jacobson C, et al. **Am J Infect Control** 1990 Jun; 18(3):151–9

The effect of the Y-set on catheter infection rates in continuous ambulatory peritoneal dialysis patients. Piraino B, et al. **Am J Kidney Dis** 1990 Jul;16(1):46–50

Survey of infection in babies at the Khoula Hospital, Oman. Rajab A, et al. **Ann Trop Paediatr** 1990 Mar;10(1):39–43

An epidemiological study on farmer's lung among hay grinders in Dafeng County. Tao BG, et al. **Biomed Environ Sci** 1988 Jun;1(1):13–8

Surveillance of gastrointestinal infections, 1980 to 1989—England, Wales and Ireland. PHLS Communicable Disease Report. **Can Dis Wkly Rep** 1990 Jun 2;16(22):106 **(Eng, Fre)**

A comparative study of cefamandole and ceftriaxone as prophylaxis in cardiac surgery. Neidhart P, et al. **Infection** 1990 Mar–Apr;18(2):101–4

Epidemiology of extended spectrum beta-lactamases. Philippon A, et al. **Infection** 1989 Sep–Oct;17(5):347–54

The incidence of gram-negative bacterial and fungal infections in liver transplant patients treated with selective decontamination. Wiesner RH. **Infection** 1990;18 Suppl 1:S19–21

Indwelling central venous catheter infections in patients with acquired immune deficiency syndrome. Skoutelis AT, et al. **J Acquir Immune Defic Syndr** 1990;3(4):335–42

Outpatient antimicrobial susceptibility: comparison with inpatient susceptibility patterns. Ellison MJ, et al. **J Am Board Fam Pract** 1989 Oct–Dec;2(4):223–6

Aeromonas hydrophila diarrhea in a long-term care setting. Bloom HG, et al. **J Am Geriatr Soc** 1990 Jul;38(7):804–6

Epidemiology of Aeromonas and Plesiomonas diarrhoea. Sack DA, et al. **J Diarrhoeal Dis Res** 1988 Jun;6(2):107–12 (19 ref.)

Trimethoprim resistance; epidemiology and molecular aspects. **J Med Microbiol** 1990 Jan;31(1):1–19 (82 ref.)

Septic arthritis in the geriatric population. Joseph ME, et al. **J Okla State Med Assoc** 1989 Dec;82(12):622–5

Postoperative wound infection in pediatric surgical patients: a study of 676 infants and children. Bhattacharyya N, et al. **J Pediatr Surg** 1990 Jan;25(1):125–9

Bacterial meningitis in the newborn: a Kuwaiti experience. Zaki M, et al. **J Trop Pediatr** 1990 Apr;36(2):63–5

Assessing the risks of releasing recombinant Streptomyces in soil. Rafii F, et al. **Microbiol Sci** 1988 Dec;5(12):358–62 (31 ref.)

Aeromonas wound infections associated with outdoor activities—California. MMWR 1990 May 25;39(20):334–5, 341

Evaluation of the necessity for hospitalization of the febrile infant less than three months of age. Wasserman GM, et al. **Pediatr Infect Dis J** 1990 Mar;9(3):163–9

Infections in immunocompromised patients in Mexico. Paredes-Espinoza M. **Rev Infect Dis** 1989 Nov–Dec;11 Suppl 7:S1644–7 (10 ref.)

Etiology of acute childhood diarrhoea in Calcutta. Chatterjee

BD, et al. **Trop Gastroenterol** 1989 Jul–Sep;10(3):158–66

Microbiological agents associated with childhood diarrhoea in the dry zone of Sri Lanka. Mertens TE, et al. **Trop Med Parasitol** 1990 Mar;41(1):115–20

[Infectious and hemorrhagic complications of cesarean section. Apropos of 2,220 procedures] Audra P. **Rev Fr Gynecol Obstet** 1990 Feb;85(2):111–3 **(Fre)**

[Infection 1979 to 1986. Epidemiology, etiology, clinical aspects and prognosis in 691 patients] Müller F, et al. **Med Klin** 1989 Jul 15;84(7):323–8 (Eng. Abstr.) **(Ger)**

[5 years' infection statistics of an orthopedic clinic—pathogen spectrum, resistance status, therapeutic consequences] Braun M. **Z Orthop** 1989 Jul–Aug;127(4):471–3 (Eng. Abstr.) **(Ger)**

[Incidence of Bacillus cereus infections in Hungary (letter)] Nikodemusz I. **Orv Hetil** 1989 Aug 27;130(35):1905 **(Hun)**

[Gene technology in medical microbiology—epidemiology and diagnosis] Kapperud G, et al. **Tidsskr Nor Laegeforen** 1989 Nov 10;109(31):3219–22 (Eng. Abstr.) **(Nor)**

[Bacterial diarrhea in small children treated in the clinic during the winter months 1986/1987] Torbicka E, et al. **Pol Tyg Lek** 1990 Jan 22–29;45(4–5):60–3 **(Pol)**

[Food-related diseases. Registration within the existing system of control of infectious diseases in Poland] Przybylska A. **Przegl Epidemiol** 1989;43(2):172–6 (Eng. Abstr.) **(Pol)**

[The effect of the water factor on the epidemic process in intestinal infections in regions where hydrotechnical installations are situated] Popova PP, et al. **Gig Sanit** 1990 Feb;(2):27–9 **(Rus)**

[Why do patients in intensive care get fever? Infection specialists should undertake studies] Arneborn P, et al. **Lakartidningen** 1990 Jul 11;87(28–29):2345–7 (Eng. Abstr.) **(Swe)**

ETIOLOGY

Imipenem/cilastatin versus piperacillin plus amikacin as empiric therapy in the treatment of febrile episodes in neutropenic patients with haematologic malignancies. Vandercam B, et al. **Acta Clin Belg** 1989;44(2):99–109

Hip arthroplasty infection. Current concepts. Antti-Poika I, et al. **Acta Orthop Scand** 1990 Apr;61(2):163–9 (89 ref.)

Endobronchial infection in cystic fibrosis. Smith AL, et al. **Acta Paediatr Scand Suppl** 1989;363:31–6 (8 ref.)

Bacterial infections in chronic hemodialysis patients: epidemiologic and pathophysiologic aspects. Goldman M, et al. **Adv Nephrol** 1990;19:315–32 (94 ref.)

Bacterial esophagitis: an often forgotten cause of odynophagia. Ezzell JH Jr, et al. **Am J Gastroenterol** 1990 Mar;85(3):296–8

Prosthetic joint infections in the elderly. Powers KA, et al. **Am J Med** 1990 May;88(5N):9N–13N

Infection associated with asplenia: risks, mechanisms, and prevention. Styrt B. **Am J Med** 1990 May;88(5N):33N–42N (143 ref.)

Obstructed intestine as a reservoir for systemic infection. Deitch EA, et al. **Am J Surg** 1990 Apr;159(4):394–401

Infection in the elderly. Chan KM, et al. **Ann Acad Med Singapore** 1990 May;19(3):364–9

Infection following breast reconstruction. Armstrong RW, et al. **Ann Plast Surg** 1989 Oct;23(4):284–8

Infection and Cell-Saver use [letter] Nessly ML. **Ann Thorac Surg** 1990 Sep;50(3):509–10

Intraluminal colonization as a source of catheter-related infection [letter; comment] Yagupsky P, et al. **Antimicrob Agents Chemother** 1989 Nov;33(11):2023 Comment on: Antimicrob Agents Chemother 1989 May;33(5):597–601.

Bacteriology of otorrhea from tympanostomy tubes. Schneider ML. **Arch Otolaryngol Head Neck Surg** 1989 Oct;115(10):1225–6

The role of intestinal barrier failure and bacterial translocation in the development of systemic infection and multiple organ failure. Deitch EA. **Arch Surg** 1990 Mar; 125(3):403–4 (3 ref.)

A discrete-time model of the acquisition of antibiotic-resistant infections in hospitalized patients. Garber AM. **Biometrics** 1989 Sep;45(3):797–816

Complications due to prolonged ventricular fluid pressure recording. Sundbärg G, et al. **Br J Neurosurg** 1988; 2(4):485–95

Infected hydrocele following acute appendicitis. Chrysostomou AA, et al. **Br J Urol** 1990 Feb;65(2):211

Management of an infected total knee arthroplasty. Meislin R, et al. **Bull Hosp Jt Dis Orthop Inst** 1989 Spring; 49(1):21–36

Sepsis following thermal injury. Mooney DP, et al. **Compr Ther** 1989 Sep;15(9):22–9 (15 ref.)

Achromobacter xylosoxidans corneal ulcer in a therapeutic soft contact lens wearer. Fiscella R, et al. **Cornea** 1989 Dec; 8(4):267–9

Infections of mechanical cerebrospinal fluid shunts. Gardner P, et al. **Curr Clin Top Infect Dis** 1988;9:185–214 (208 ref.)

Management of infection in total knee replacement. Paya CV, et al. **Curr Clin Top Infect Dis** 1988;9:222–40 (85 ref.)

Capnocytophaga infection involving a portal-systemic vascular shunt. Mello KA, et al. **Dig Dis Sci** 1990 Jul; 35(7):909–11

Sepsis following injection of obstructed pancreatic ducts [letter] Ayela P, et al. **Endoscopy** 1989 Sep;21(5):242

Total parenteral nutrition associated cholestasis: a predisposing factor for sepsis in surgical neonates? Bos AP, et al. **Eur J Pediatr** 1990 Feb;149(5):351–3

Bacterial translocation: is it of clinical significance? Deitch EA. **Gastroenterology** 1990 Jan;98(1):243–4

Bacterial peritonitis following esophageal injection sclerotherapy for variceal hemorrhage. Tam F, et al. **Gastrointest Endosc** 1990 Mar–Apr;36(2):131–3

Bacterial vaginosis is not a simple ecological disorder. Fredricsson B, et al. **Gynecol Obstet Invest** 1989; 28(3):156–60

Infections after auxiliary partial liver transplantation. Experiences in the first ten patients. van Zeijl JH, et al. **Infection** 1990 May–Jun;18(3):146–51

Molecular mechanisms in musculoskeletal sepsis: the race for the surface. Gristina AG, et al. **Instr Course Lect** 1990; 39:471–82 (87 ref.)

Gastric pH and colonisation in sucralfate treated patients [letter] Winter R, et al. **Intensive Care Med** 1989;15(7):479

Infectious complications and therapy of bite wounds. Goldstein EJ. **J Am Podiatr Med Assoc** 1989 Oct; 79(10):486–91 (46 ref.)

Foot infections in patients with diabetes mellitus. Sapico FL. **J Am Podiatr Med Assoc** 1989 Oct;79(10):482–5

Late infection after total hip replacement, caused by an oral organism after dental manipulation. A case report. Sullivan PM, et al. **J Bone Joint Surg [Am]** 1990 Jan;72(1):121–3

Frozen musculoskeletal allografts. A study of the clinical incidence and causes of infection associated with their use. Tomford WW, et al. **J Bone Joint Surg [Am]** 1990 Sep; 72(8):1137–43

Infection as a complication of total knee-replacement arthroplasty. Risk factors and treatment in sixty-seven cases. Wilson MG, et al. **J Bone Joint Surg [Am]** 1990 Jul; 72(6):878–83

A long-term study and correlation of lymphocyte and neutrophil function in the patient with burns. Ogle CK, et al. **J Burn Care Rehabil** 1990 Mar–Apr;11(2):105–11

Septicemia caused by vancomycin-resistant Pediococcus acidilactici. Golledge CL, et al. **J Clin Microbiol** 1990 Jul; 28(7):1678–9

Microbiologic and clinical evidence supporting the role of Aeromonas caviae as a pediatric enteric pathogen. Namdari H, et al. **J Clin Microbiol** 1990 May;28(5):837–40

The effect of right atrial catheters on infectious complications of chemotherapy in children. van Hoff J, et al. **J Clin Oncol** 1990 Jul;8(7):1255–62

Implants and infections with special reference to oral bacteria. Haanaes HR. **J Clin Periodontol** 1990 Aug;17(7 (Pt 2)):516–24 (38 ref.)

Oral infections related to radiation and immunosuppressive therapy. Nikoskelainen J. **J Clin Periodontol** 1990 Aug;17(7 (Pt 2)):504–7 (11 ref.)

Human extraintestinal infections caused by Aeromonas species. Rolston KV. **J Diarrhoeal Dis Res** 1988 Jun; 6(2):99–102 (24 ref.)

Nonclostridial gas gangrene. Markantone SS, et al. **J Foot Surg** 1989 May–Jun;28(3):213–6 (28 ref.)

Sinusitis and the acute orbit in children. Swift AC, et al. **J Laryngol Otol** 1990 Mar;104(3):213–6 (21 ref.)

Necrotizing perianal infection in children: report of two cases. Chuang JH, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr;10(3):409–12

Bacteriology of aortic aneurysm sac contents. Stonebridge PA, et al. **J R Coll Surg Edinb** 1990 Feb;35(1):42–3

The declining incidence of fatal sepsis following thermal injury. Merrell SW, et al. **J Trauma** 1989 Oct;29(10):1362–6

Aeromonas hydrophila water-associated traumatic wound infections: a review. Semel JD, et al. **J Trauma** 1990 Mar; 30(3):324–7 (31 ref.)

Predicting and preventing infection after abdominal vascular injuries. Wilson RF, et al. **J Trauma** 1989 Oct;29(10):1371–5

Systemic bacillus-Calmette Guerin infection after transurethral administration for superficial bladder carcinoma. Sakamoto GD, et al. **J Urol** 1989 Oct; 142(4):1073–4; discussion 1074–5

Catheter-related complications in 35 children and adolescents with gastrointestinal disease on home parenteral nutrition. Schmidt-Sommerfeld E, et al. **JPEN J Parenter Enteral Nutr** 1990 Mar–Apr;14(2):148–51

Complement activation and neutrophil dysfunction in burned patients with sepsis—a study of two cases. Utoh J, et al. **Jpn J Surg** 1989 Jul;19(4):462–7

Aeromonas, acclimation, and penicillin as complications when leeches are applied to skin flaps in rabbits. Richerson JT, et al. **Lab Anim** 1990 Apr;24(2):147–50

More in spider venom than venom? [letter] [see comments] Oppenheim BA, et al. **Lancet** 1990 Jan 27;335(8683):228 Comment in: Lancet 1990 Mar 24;335(8691):729.

Catheter-related infections [letter] Kaufman JL. **Mayo Clin Proc** 1990 Sep;65(9):1277

Infections from biomaterials and implants: a race for the surface. Gristina AG, et al. **Med Prog Technol** 1988–89; 14(3–4):205–24 (90 ref.)

Bacterial infections and AIDS. Fraser V. **Mo Med** 1990 Apr; 87(4):221–4 (6 ref.)

Late infection after cranioplasty—review of 14 cases. Tokoro K, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):196–201 (23 ref.)

Causes of infections in penetrating head wounds in the Iran-Iraq War. Aarabi B. **Neurosurgery** 1989 Dec; 25(6):923–6

Infection of the intervertebral disc space after placement of a percutaneous lumboperitoneal shunt for benign intracranial hypertension. Cabezudo JM, et al. **Neurosurgery** 1990 Jun;26(6):1005–8; discussion 1008–9

Munchausen syndrome by proxy: recurrent central catheter sepsis. Frederick V, et al. **Pediatr Infect Dis J** 1990 Jun; 9(6):440–2

Role of interleukin 1-beta in meningeal inflammation. Ramilo O, et al. **Pediatr Infect Dis J** 1989 Dec;8(12):909–10

Pathophysiology of bacterial meningitis: summary of the workshop. Sande MA, et al. **Pediatr Infect Dis J** 1989 Dec; 8(12):929–33

Microbial etiology of acute gastroenteritis in hospitalized children in Kuwait. Sethi SK, et al. **Pediatr Infect Dis J** 1989 Sep;8(9):593–7

Infection as a consequence of ear piercing. George J, et al. **Practitioner** 1989 Mar 22;233(1465):404–6

Gastrointestinal infection. Gray J. **Practitioner** 1989 May 22; 233(1469):784–6

Infections in a renal unit. Higgins RM. **Q J Med** 1989 Jan; 70(261):41–51

Infection and periodontal diseases. Hirsch RS, et al. **Rev Infect Dis** 1989 Sep–Oct;11(5):707–15 (66 ref.)

Aquatically acquired Aeromonas hydrophila wound infection. A report of 3 cases. Sacho H, et al. **S Afr Med J** 1990 Sep 15;78(6):339–40

The use of central venous catheters in paediatric oncology—a cautionary tale. Russell L, et al. **Scott Med J** 1990 Feb; 35(1):11–4

Infectious emergencies in oncology patients. Lazarus HM, et al. **Semin Oncol** 1989 Dec;16(6):543–60 (180 ref.)

In vivo and in vitro correlates of high and moderate potency anti-thymocyte globulin in humans. Millington GM, et al. **Surg Forum** 1978;29:369–71

Invasive bacterial infections during an efficacy trial of acellular pertussis vaccines—implications for future surveillance in pertussis vaccine programmes. Olin P, et al. **Tokai J Exp Clin Med** 1988;13 Suppl:143–4

Ultrastructural study of microbiologic colonization of urinary catheters. Nickel JC, et al. **Urology** 1989 Nov;34(5):284–91

[An experimental study on enterogenic infection after severe burns] Ma L. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):179–81, 238 (Eng. Abstr.) **(Chi)**

[Otorhinolaryngologic aspects of chronic inflammations of the masticatory muscles] Stárek I, et al. **Cesk Otolaryngol** 1989 Nov;38(6):356–9 (Eng. Abstr.) **(Cze)**

[The significance of cell surface carbohydrates in the pathogenesis of bacterial infection] Finne J. **Duodecim** 1989; 105(21):1695–9 (23 ref.) **(Fin)**

[Infections caused by central venous catheterization at intensive care units] Schmit JL, et al. **Agressologie** 1989 May;30(5):269–72 (Eng. Abstr.) **(Fre)**

[Aortic paraprosthetic infection. Diagnostic and therapeutic difficulties. Apropos of a case] Aknin P, et al. **Ann Chir** 1990;44(2):107–9 (Eng. Abstr.) **(Fre)**

[Perianal anaerobic germ infections. I. Epidemiology, circumstances favouring infection] Lejeune C. **Arch Fr Pediatr** 1989 Oct;46(8):607–15 (739 ref.) **(Fre)**

[Infectious complications after surgery of esophageal pathology. Apropos of 60 cases] Desport JC, et al. **Cah Anesthesiol** 1989 Sep;37(5):333–7 (Eng. Abstr.) **(Fre)**

[Bacterial infections and digestive hemorrhage in patients with liver cirrhosis] Bercoff E, et al. **Gastroenterol Clin Biol** 1990;14(1 (Pt 2)):34B–37B (36 ref.) **(Fre)**

[Surveillance of totally implanted catheters] Douard MC, et al. **Pathol Biol (Paris)** 1989 Nov;37(9):999–1001 **(Fre)**

[Infectious complications of the treatment of acute lymphoblastic leukemia in children] Rubie H, et al. **Pediatrie** 1990;45(5):333–8 (Eng. Abstr.) **(Fre)**

[Septic risk after fiberoptic bronchoscopy brush in lower respiratory tract infection (letter)] Quiot JJ, et al. **Presse Med** 1990 Jun 9;19(23):1103 **(Fre)**

[Infection of an open fracture caused by Aeromonas hydrophila. A case report] Charissoux JL, et al. **Rev Chir Orthop** 1990;76(2):141–3 (Eng. Abstr.) **(Fre)**

[Contraception and the risk of genital infections in women] Serfaty D. **Rev Fr Gynecol Obstet** 1989 Mar 25;84(3 Pt 2):233–6; discussion 240–4 (Eng. Abstr.) **(Fre)**

[Bacterial pneumonia in ventilated patients. The role of bronchoalveolar lavage in diagnosis and therapy] Konrad F, et al. **Anaesthesist** 1990 Jan;39(1):53–9 (Eng. Abstr.) **(Ger)**

[Routine throat swabs in artificially ventilated patients: meaningful bacteriologic monitoring or a needless procedure?] Konrad F, et al. **Anaesthesist** 1990 Jun; 39(6):323–9 (Eng. Abstr.) **(Ger)**

[Change in the understanding of sepsis in clinical medicine (letter)] Tauchnitz C, et al. **Dtsch Med Wochenschr** 1989 Nov 3;114(44):1722–3 **(Ger)**

[The occurrence of bacteria pathogenic for humans in freshwater fish] Bernoth EM. **DTW Dtsch Tierarztl Wochenschr** 1990 Jul;97(7):285–90 (86 ref.) (Eng. Abstr.) **(Ger)**

[Premature rupture of the fetal membranes and vaginal infections] Martius J. **Gynakol Rundsch** 1989;29 Suppl 2:112–4 **(Ger)**

[Pneumonia—clinical aspects and therapy] Castillo-Höfer C, et al. **Internist (Berl)** 1990 Apr;31(4):255–61 (64 ref.) **(Ger)**

[Infection–induced arthritis] Genth E. **Internist (Berl)** 1989 Oct;30(10):664–72 (52 ref.) **(Ger)**

[Nosocomial infections of the respiratory tract] Russi EW. **Ther Umsch** 1990 Jul;47(7):539–45 (18 ref.) (Eng. Abstr.) **(Ger)**

[An interesting case: Inflammatory cerebral complications after Crutchfield–extension] Prothmann KH, et al. **Zentralbl Chir** 1989;114(15):1025–30 **(Ger)**

[Clinical and epidemiological features of infections in the neutropenic patient] Viscoli C, et al. **Haematologica (Pavia)** 1989 Oct;74(5 Suppl):287–96 (20 ref.) **(Ita)**

[Pre–operative identification of patients at risk for septic complications after surgery for neoplasms of the digestive system. A multiphasic multicenter study] Cafiero F, et al. **Minerva Chir** 1989 Oct 31;44(20):2169–80 (Eng. Abstr.) **(Ita)**

[Actual conditions of bacterial infection associated with hematopoietic disorders—changes in 10 years. The Hanshin Study Group of Hematopoietic Disorders and Infections] Horiuchi A, et al. **Kansenshogaku Zasshi** 1990 Mar; 64(3):299–309 (Eng. Abstr.) **(Jpn)**

[Studies on respiratory infections in the field of primary care (I). Correlation between viral infection and secondary bacterial infection in patients visiting a doctor in private practice] Watanabe A, et al. **Kansenshogaku Zasshi** 1989 Sep;63(9):979–85 (Eng. Abstr.) **(Jpn)**

[Infection in acute pancreatitis] Shinagawa N. **Nippon Rinsho** 1990 Jan;48(1):148–55 **(Jpn)**

[Study of infective complications in elderly patients with leukemia] Kaneko H, et al. **Nippon Ronen Igakkai Zasshi** 1989 Sep;26(5):469–74 (Eng. Abstr.) **(Jpn)**

[Bacterial adhesion. An important pathogenetic factor] Andersen BM. **Tidsskr Nor Laegeforen** 1990 May 10; 110(12):1534–8 (24 ref.) (Eng. Abstr.) **(Nor)**

[Alcohol and infections] Mørland B, et al. **Tidsskr Nor Laegeforen** 1990 Feb 10;110(4):490–3 (15 ref.) (Eng. Abstr.) **(Nor)**

[Bacterial infections in pulmonary aspergilloma] Halweg H, et al. **Pneumonol Pol** 1989 Jan;57(1):29–37 (Eng. Abstr.) **(Pol)**

[Selected immunologic parameters and infections in children in over 1 year after completion of the treatment of acute lymphoblastic leukemia] Rytwiński K, et al. **Pol Tyg Lek** 1989 Apr 3;44(14):320–2 (Eng. Abstr.) **(Pol)**

[Intravenous catheters (venflons) in children as a possible cause of hospital infections] Rudkowski Z, et al. **Przegl Epidemiol** 1989;43(2):213–7 (Eng. Abstr.) **(Pol)**

[The NBT test in bacterial infections complicating prednisone–treated nephrotic syndrome] Zoch–Zwierz W, et al. **Wiad Lek** 1989 Mar 1;42(5):295–9 (Eng. Abstr.) **(Pol)**

[Bacteriologic study of abscesses caused by bites of snakes of the genus Bothrops] de Andrade JG, et al. **Rev Inst Med Trop Sao Paulo** 1989 Nov–Dec;31(6):363–7 (Eng. Abstr.) **(Por)**

[Premature rupture of membranes and its relation to infection in newborn infants] de Araújo MC, et al. **Rev Paul Med** 1989 Jul–Dec;107(4–6):198–202 (Eng. Abstr.) **(Por)**

[Immunity and infection after splenectomy] Donadi EA, et al. **Rev Paul Med** 1989 May–Jun;107(3):175–80 (99 ref.) **(Por)**

[Urinary infection in children—current developments in pathogenesis, diagnosis and therapy] Sabău I, et al. **Rev Pediatr Obstet Ginecol [Pediatr]** 1989 Jul–Sep; 38(3):217–29 (24 ref.) (Eng. Abstr.) **(Rum)**

[The pathogenesis of generalized suppurative–septic complications in patients with eclampsia and massive blood loss of obstetrical origin] Vrublevskil OP, et al. **Anesteziol Reanimatol** 1990 Jan–Feb;(1):51–4 (Eng. Abstr.) **(Rus)**

[Infectious complications and their antibacterial treatment at an oncology clinic] Smolianskaia AZ. **Antibiot Khimioter** 1990 Mar;35(3):42–7 (70 ref.) **(Rus)**

[Spondylitis of the cervical spine caused by non–sporogenic anaerobes] Burdygin VN, et al. **Khirurgiia (Mosk)** 1989 Aug;(8):126–7 **(Rus)**

[Postoperative infection in newborn infants (review of the literature)] Krasovskaia TV, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):142–9 (181 ref.) **(Rus)**

[Bone nail–induced anaerobic osteomyelitis] Makhson NE, et al. **Khirurgiia (Mosk)** 1989 Aug;(8):106–8 **(Rus)**

[The role of infection in the etiology and pathogenesis of appendicitis, its complications and mortality rates] Mamchich VI, et al. **Klin Khir** 1990;(4):55–8 (75 ref.) **(Rus)**

[Suppurative diseases of the lungs in alcoholics] Barkov VA, et al. **Klin Med (Mosk)** 1990 Feb;68(2):107–11 **(Rus)**

[The health of newborn infants as a microbiological problem] Belokrysenko SS. **Pediatriia** 1990;(1):8–13 (Eng. Abstr.) **(Rus)**

[Endogenous aerobic and anaerobic flora of the skin in healthy people and its role in the development of suppurative processes] Ivashkevich GA, et al. **Vestn Khir** 1990 Jan;144(1):142–5 (27 ref.) **(Rus)**

[Infection in abdominal surgery (review of reports of the VII All–Union Congress of Surgeons, Leningrad, October 18–20, 1989)] Lytkin MI. **Vestn Khir** 1990 Mar; 144(3):145–50 (0 ref.) **(Rus)**

[Characteristics of the course of peritonitis in relation to the degree of perforation of the gastrointestinal tract] Shurkalin BK, et al. **Vestn Khir** 1989 Aug;144(8):21–4 (Eng. Abstr.) **(Rus)**

[Immune complexes in the pathogenesis of bacterial infections (a review of the literature)] Bala MA. **Vrach Delo** 1989 Nov;(11):5–10 (62 ref.) **(Rus)**

[Complications of extracorporeal shockwave lithotripsy] Fuchs GJ, et al. **Arch Esp Urol** 1989;42 Suppl 1:83–9 (55 ref.) (Eng. Abstr.) **(Spa)**

[Fever and infection after heart surgery. A prospective study of 75 cases] Andrade CL, et al. **Arch Inst Cardiol Mex** 1989 Sep–Oct;59(5):487–91 (Eng. Abstr.) **(Spa)**

[Septic complications following splenectomy after abdominal trauma] Alvarez Pérez JA, et al. **Rev Esp Enferm Apar Dig** 1989 Oct;76(4):325–30 (28 ref.) (Eng. Abstr.) **(Spa)**

[Immunosuppression with cyclosporin after orthoptic liver transplant in pigs] Arias J, et al. **Rev Esp Enferm Apar Dig** 1989 Sep;76(3):203–9 (Eng. Abstr.) **(Spa)**

GENETICS

Recent advances in the study of associations between infection and genetic markers. Mourant AE. **FEMS Microbiol Immunol** 1989 Jun;1(6–7):317–9

IMMUNOLOGY

Human milk and neonatal infections. Narayanan I, et al. **Acta Paediatr Scand Suppl** 1989;351:126–30

Antibody response to P–protein in patients with Branhamella catarrhalis infections. Chi DS, et al. **Am J Med** 1990 May 14;88(5A):25S–27S

Increased levels of interleukin–1 in bronchoalveolar washings from children with bacterial pulmonary infections. Wilmott RW, et al. **Am Rev Respir Dis** 1990 Aug;142(2):365–8

Immunity in acute bacterial infections. Glynn AA. **Ann R Coll Surg Engl** 1975 Apr;56(4):212–7

Intestinal barriers to bacteria and their toxins. Walker RI, et al. **Annu Rev Med** 1990;41:393–400 (32 ref.)

Enhanced susceptibility to sepsis after simple hemorrhage. Depression of Fc and C3b receptor–mediated phagocytosis. Ayala A, et al. **Arch Surg** 1990 Jan;125(1):70–4; discussion 74–5

Kupffer cell blockade increases mortality during intra–abdominal sepsis despite improving systemic immunity. Callery MP, et al. **Arch Surg** 1990 Jan; 125(1):36–40; discussion 40–1

Enhanced resistance of bone marrow transplanted mice to bacterial infection induced by recombinant granulocyte–macrophage colony–stimulating factor. Bleiberg I, et al. **Blood** 1990 Mar 15;75(6):1262–6

Increased plasma levels of interleukin–6 in sepsis [see comments] Hack CE, et al. **Blood** 1989 Oct;74(5):1704–10 Comment in: Blood 1990 May 1;75(9):1897–8.

Interactions of Haemophilus–Actinobacillus–Pasteurella bacteria with phagocytic cells. Czuprynski CJ, et al. **Can J Vet Res** 1990 Apr;54 Suppl:S36–40 (50 ref.)

The neutrophil, a professional killer of bacteria, may be controlled by T cells. Campbell PA. **Clin Exp Immunol** 1990 Feb;79(2):141–3 (23 ref.)

Flow cytometric analysis of neutrophil subsets in thermally injured patients developing infection. Babcock GF, et al. **Clin Immunol Immunopathol** 1990 Jan;54(1):117–25

Phagocyte–pathogen in the infected host. Mege JL, et al. **Crit Care Med** 1989 Dec;17(12):1247–53

Immunity to bacteria. Kaufmann SH. **Curr Opin Immunol** 1989–90 Feb;2(3):353–9 (30 ref.)

T–cell paradigms in parasitic and bacterial infections. **Curr Top Microbiol Immunol** 1990;155:1–160

Role of serum complement, immunoglobulins, and cell–mediated immune system in the pathogenesis of spontaneous bacterial peritonitis (SBP). Rabinovitz M, et al. **Dig Dis Sci** 1989 Oct;34(10):1547–52

Immunity to infection. Kaufmann SH, et al. **Immunol Today** 1989 Aug;10(8):S37–9 (25 ref.)

Phagocytosis and bactericidal action of mouse peritoneal macrophages treated with leukotriene B4. Demitsu T, et al. **Int J Immunopharmacol** 1989;11(7):801–8

Abstracts of papers presented at the 42nd meeting of the Deutsche Gesellschaft für Hygiene und Mikrobiologie. Hannover, October 4–6, 1989. **Int J Med Microbiol** 1990 May;273(1):68–141

Tropical myositis. A clinical immunological and histopathological study. Singh SB, et al. **J Assoc Physicians India** 1989 Sep;37(9):561–3

Human serum antibody response to the presence of Aeromonas spp. in the intestinal tract. Kuijper EJ, et al. **J Clin Microbiol** 1990 Mar;28(3):584–90

Bacteria–infected fibroblasts have enhanced susceptibility to the cytotoxic action of tumor necrosis factor. Klimpel GR, et al. **J Immunol** 1990 Jul 15;145(2):711–7

Glutamine, the immune system, and the intestine [editorial; comment] Ardawi MS, et al. **J Lab Clin Med** 1990 Jun; 115(6):654–5 Comment on: J Lab Clin Med 1990 Jun;115(6):660–8.

Subnormal serum concentrations of IgG2 in children with frequent infections associated with varied patterns of immunologic dysfunction. Shackelford PG, et al. **J Pediatr** 1990 Apr;116(4):529–38

The effect of blood transfusions on immune function. V. The effect on the inflammatory response to bacterial infections. Waymack JP, et al. **J Surg Res** 1990 Feb;48(2):147–53

Radiation and surgical stress induce a significant impairment in cellular immunity in patients with esophageal cancer. Yokoyama Y, et al. **Jpn J Surg** 1989 Sep;19(5):535–43

Influence of a bacterial extract on antigen presentation and protection against experimental infections. Fontanges R, et al. **Lung** 1990;168 Suppl:716–9

Long–term persistence of intrathecal viral antibody responses in postinfectious diseases of the central nervous system and in Rett syndrome. Riikonen R, et al. **Neuropediatrics** 1989 Nov;20(4):215–9

Complement deficiency and neutrophil dysfunction as risk factors for bacterial infection in newborns and the role of granulocyte transfusion in therapy. Berger M. **Rev Infect Dis** 1990 May–Jun;12 Suppl 4:S401–9 (47 ref.)

Neonatal susceptibility and immunity to major bacterial pathogens. Ferrieri P. **Rev Infect Dis** 1990 May–Jun;12 Suppl 4:S394–400 (35 ref.)

Ciclosporin–dependent, nu–independent, mucosal interleukin 6 response to gram–negative bacteria. Hedges S, et al. **Scand J Immunol** 1990 Mar;31(3):335–43

Preliminary study on treatment of septic shock patients with antilipopolysaccharide IgG from blood donors. Fomsgaard A, et al. **Scand J Infect Dis** 1989;21(6):697–708

An experimental assessment of the effect of blood transfusion on susceptibility to bacterial infection. Galandiuk S, et al. **Surgery** 1990 Sep;108(3):567–71

Elevated serum PSA and acute bacterial prostatitis [letter; comment] Palou J, et al. **Urology** 1990 Apr;35(4):373 Comment on: Urology 1989 Jun;33(6):465.

[Immunologic indices in patients with sepsis of unknown etiologic cause] Karaivanova L, et al. **Vutr Boles** 1989; 28(4):131–3 **(Bul)**

[Local immunologic reactions induced by CAPD] Faller B, et al. **Nephrologie** 1989;10 Suppl:30–3 (42 ref.) (Eng. Abstr.) **(Fre)**

[Bacterial skin flora, host defense and skin infections] Haustein UF. **Dermatol Monatsschr** 1989;175(11):665–80 (88 ref.) (Eng. Abstr.) **(Ger)**

[The granulomatous inflammation in bacterial infections] Kaufmann SH. **Immun Infekt** 1989 Oct;17(5):169–74 (40 ref.) (Eng. Abstr.) **(Ger)**

[In–vivo activation of the 4th component of the complement system (C4) in premature and term infants with generalized bacterial infections] Nürnberger W, et al. **Klin Padiatr** 1990 May–Jun;202(3):141–6 (Eng. Abstr.) **(Ger)**

[Proteolytic activities in bronchoalveolar lavage fluid in pneumonia and chronic bronchitis] Schmidt M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:308–9 (Eng. Abstr.) **(Ger)**

[Immunological responses in the aged with bacterial infection] Fukayama M. **Kansenshogaku Zasshi** 1989 Sep; 63(9):1026–32 (Eng. Abstr.) **(Jpn)**

[Infection and immunity: an outline] Kumagai K, et al. **Tanpakushitsu Kakusan Koso** 1990 Jun;35(8):1487–94 **(Jpn)**

[Tumor necrosis factor (TNF)—its biochemical characteristics and biological properties] Skotnicki AB, et al. **Przegl Lek** 1989;46(10):736–43 **(Pol)**

[Cytokines—polyfunctional regulators of protective reactions in normal and pathological states] Viadro MM, et al. **Antibiot Khimioter** 1989 Nov;34(11):863–9 (45 ref.) **(Rus)**

[Immunocytologic structure of the lymphocyte pool in newborn infants receiving immunocorrective treatment] Samsygina GA, et al. **Gematol Transfuziol** 1990 Jan; 35(1):18–21 (Eng. Abstr.) **(Rus)**

[Characteristics of cellular immunity in newborn infants with intestinal bacterial infection after administration of lysozyme] Amirova TD, et al. **Pediatriia** 1990;(1):21–4 (Eng. Abstr.) **(Rus)**

[Clinico–bacteriologic and immunologic criteria in the formation of suppurative–inflammatory pathology in newborn infants] Pavlova EV, et al. **Pediatriia** 1990; (4):52–8 (Eng. Abstr.) **(Rus)**

[Early reaction to an agent causing pulmonary infections] Belotskil SM. **Probl Tuberk** 1990;(2):67–70 (33 ref.) **(Rus)**

[The reticuloendothelial system if the liver in patients with peritonitis] Zhadkevich MM, et al. **Vestn Khir** 1989 Sep; 143(9):138–43 (58 ref.) **(Rus)**

[The cause–effect interdependence in the pathogenesis of chronic tonsillitis as an infectious allergic process] Iakovenko VD, et al. **Vestn Otorinolaringol** 1990 Mar–Apr; (2):52–6 (Eng. Abstr.) **(Rus)**

[Immune response and allergy in suppurative infection] Snastina TI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Aug;(8):104–7 (46 ref.) **(Rus)**

[The gamma/delta T–cell: a first line help in bacterial infections or a dangerous autoimmune killer cell?] Kiessling R. **Lakartidningen** 1990 Mar 28;87(13):1047–53 (14 ref.) **(Swe)**

METABOLISM

Lipopolysaccharide, but not lethal infection, releases tumor necrosis factor in mice. Cornwell RD, et al. **Adv Exp Med Biol** 1990;256:585–8

Virus enhances IgE– and non–IgE–dependent histamine release induced by bacteria and other stimulators. Clementsen P, et al. **Agents Actions** 1990 Apr;30(1–2):61–3

Effect of endotoxin on placental metabolism. Experimental study on the influence of infections with gram–negative

bacteria during pregnancy. Czeizel E, et al. **Am J Obstet Gynecol** 1967 Aug 15;98(8):1129–34

Total and net muscle protein breakdown in infection determined by amino acid effluxes. Sjölin J, et al. **Am J Physiol** 1990 May;258(5 Pt 1):E856–63

Accelerated lung amino acid release in hyperdynamic septic surgical patients. Plumley DA, et al. **Arch Surg** 1990 Jan; 125(1):57–61

Pharmacokinetic study of cefodizime in experimentally infected animals. Arai S, et al. **Arzneimittelforschung** 1989 Aug;39(8):877–82

Where has all the amikacin gone? [letter] Ludik P, et al. **Crit Care Med** 1989 Nov;17(11):1235

Local cerebral glucose utilization in septic rats. Soejima Y, et al. **Crit Care Med** 1990 Apr;18(4):423–7

Pharmacokinetics of intravenous amoxycillin and potassium clavulanate in seriously ill children. Jones AE, et al. **J Antimicrob Chemother** 1990 Feb;25(2):269–74

Effect of slime production on the antibiotic susceptibility of isolates from prosthetic infections. Selan L, et al. **J Chemother** 1989 Dec;1(6):369–73

Glucose and glutamine metabolism in the small intestine of septic rats [see comments] Ardawi MS, et al. **J Lab Clin Med** 1990 Jun;115(6):660–8 Comment in: J Lab Clin Med 1990 Jun;115(6):652–3. Comment in: J Lab Clin Med 1990 Jun;115(6):654–5.

Metabolic control of hepatic gluconeogenesis in response to sepsis. Ardawi MS, et al. **J Lab Clin Med** 1989 Nov; 114(5):579–86

Lack of diurnal effect on vancomycin disposition in infected patients. Wang LS, et al. **J Pharm Sci** 1990 Jul;79(7):655–6

Bacterial sepsis–induced decrease in lung vascular reactivity to 9,11–dideoxy–11a9a–epoxymethano–prostaglandin F2 alpha (U46619) in the rat. Schneidkraut MJ, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):1171–6

Glutamine: an anabolic effector? Roth E, et al. **JPEN J Parenter Enteral Nutr** 1990 Jul–Aug;14(4 Suppl):130S–136S (43 ref.)

Interorgan glutamine flow following surgery and infection. Souba WW, et al. **JPEN J Parenter Enteral Nutr** 1990 Jul–Aug;14(4 Suppl):90S–93S (35 ref.)

The rate of lipid oxidation in septic rat models. Niwa H, et al. **Jpn J Surg** 1989 Jul;19(4):439–45

Platelet activating factor is produced during infectious peritonitis in CAPD patients. Montrucchio G, et al. **Kidney Int** 1989 Dec;36(6):1029–36

Effect of sepsis on amino acid transport system A and its response to insulin in incubated rat skeletal muscle. James JH, et al. **Metabolism** 1990 Apr;39(4):335–40

Alterations of the blood–brain barrier in bacterial meningitis: in vivo and in vitro models. Tunkel AR, et al. **Pediatr Infect Dis J** 1989 Dec;8(12):911–3

Altered gluconeogenesis in sepsis. Bocking KJ, et al. **Surg Forum** 1978;29:74–5

[Metabolism and septic shock] Lefèvre G, et al. **Pathol Biol (Paris)** 1990 Jun;38(6):650–5 (Eng. Abstr.) **(Fre)**

[Clinical and experimental studies on vitronectin in bacterial pneumonia] Kawahira M. **Kansenshogaku Zasshi** 1990 Jun; 64(6):741–51 (Eng. Abstr.) **(Jpn)**

[Various clinico–immunologic and biochemical indicators in infants with suppurative septic diseases] Kushch NL, et al. **Pediatriia** 1990;(1):49–52 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Biliary tract surgery: a bacteriologic and epidemiologic study. Hambraeus A, et al. **Acta Chir Scand** 1990 Feb; 156(2):155–62

Colonization of infants exposed to bacterially contaminated mists. Moffett HL, et al. **Am J Dis Child** 1967 Jul; 114(1):21–5

Nonclostridial anaerobic bacteria in septic abortion. Rotheram EB Jr, et al. **Am J Med** 1969 Jan;46(1):80–9

Public health implications of the microbial pesticide Bacillus thuringiensis: an epidemiological study, Oregon, 1985–86. Green M, et al. **Am J Public Health** 1990 Jul;80(7):848–52

Augmented bacterial adherence to tracheal epithelial cells is associated with gram–negative pneumonia in an intensive care unit population. Todd TR, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1585–9

Infectious arthritis caused by Propionibacterium acnes: a new case [letter] Bertin P, et al. **Ann Rheum Dis** 1990 Aug; 49(8):653

Infectious arthritis caused by Propionibacterium acnes: a report of two cases. Kooijmans–Coutinho MF, et al. **Ann Rheum Dis** 1989 Oct;48(10):851–2

The mounting interest in bacterial and viral pathogenicity. Smith H. **Annu Rev Microbiol** 1989;43:1–22 (71 ref.)

Predictive factors for bactibilia in acute cholecystitis. Thompson JE Jr, et al. **Arch Surg** 1990 Feb;125(2):261–4

Studies on fermented corn flour food poisoning in rural areas of China. II. Isolation and identification of causal microorganisms. Meng Z, et al. **Biomed Environ Sci** 1988 Jun;1(1):105–14

Current hypotheses on synergistic microbial gangrene. Kingston D, et al. **Br J Surg** 1990 Mar;77(3):260–4 (77 ref.)

Necrotising soft tissue infections of the perineum and genitalia. Bacteriology, treatment and risk assessment. Baskin LS, et al. **Br J Urol** 1990 May;65(5):524–9

A search for infectious agents in chronic abacterial prostatitis using ultrasound guided biopsy. Doble A, et al. **Br J Urol** 1989 Sep;64(3):297–301

Analysis of infection in a burn ward. Husain MT, et al. **Burns** 1989 Oct;15(5):299–302

Virulence attributes of the liposaccharides of the HAP group organisms. Fenwick BW. **Can J Vet Res** 1990 Apr;54 Suppl:S28–32 (67 ref.)

Capsules and virulence in the HAP group of bacteria. Inzana TJ. **Can J Vet Res** 1990 Apr;54 Suppl:S22–7 (44 ref.)

Anaerobic pleuropulmonary infection [editorial] Finegold SM. **Chest** 1990 Jan;97(1):1–2

Coryneform bacteria in infectious diseases: clinical and laboratory aspects. Coyle MB, et al. **Clin Microbiol Rev** 1990 Jul;3(3):227–46 (252 ref.)

Safety alert on homemade solutions for contact lens care. **Clin Pediatr (Phila)** 1990 Apr;29(4):233

Incidence and significance of intraperitoneal aerobic and anaerobic bacteria. Nord CE. **Clin Ther** 1990;12 Suppl B:9–20 (16 ref.)

Respiratory tract infections due to Branhamella catarrhalis and Neisseria species. McGowan JE Jr. **Curr Clin Top Infect Dis** 1987;8:181–203 (143 ref.)

Monitoring antimicrobial drug resistance in hospital microorganisms. Definition of problems and methods. Møller JK. **Dan Med Bull** 1990 Jun;37(3):263–74 (167 ref.)

Lomefloxacin (SC–47111 or NY–198). Comparative antimicrobial activity against 2002 clinical isolates from hospitals in Mexico City. Durazo F, et al. **Diagn Microbiol Infect Dis** 1990 Jan–Feb;13(1):71–5

Esterase electrophoresis: a molecular tool for studying the epidemiology of Branhamella catarrhalis nosocomial infection. Picard B, et al. **Epidemiol Infect** 1989 Dec; 103(3):547–54

Effect of transport medium on recovery of Aeromonas species in intestinal infections [letter] Siitonen A, et al. **Eur J Clin Microbiol Infect Dis** 1990 May;9(5):368–70

Bacteriological findings in patients with bone marrow transplantation (Karl Marx University Leipzig, 1985–1987). Wonitzki C, et al. **Folia Haematol (Leipz)** 1989; 116(3–4):569–76

Aeromonas species in human septicaemia & diarrhoea. Jesudason MV, et al. **Indian J Med Res** 1990 May;91:174–6

Bacteriology of pyoderma including anaerobes. Kishore J, et al. **Indian J Med Res** 1989 Jul;89:261–4

Flavobacterium meningosepticum meningitis in a neonate. Gokul BN, et al. **Indian J Pediatr** 1989 Jul–Aug;56(4):524–7

Nosocomial infection caused by Xanthomonas maltophilia: a case–control study of predisposing factors. Elting LS, et al. **Infect Control Hosp Epidemiol** 1990 Mar;11(3):134–8

Diarrhea and intestinal invasiveness of Aeromonas strains in the removable intestinal tie rabbit model. Pazzaglia G, et al. **Infect Immun** 1990 Jun;58(6):1924–31

Short course single daily ceftriaxone monotherapy for acute bacterial meningitis in children: results of a Swiss multicenter study. Part II: Bacteriological results. Hohl P, et al. **Infection** 1990 Mar–Apr;18(2):78–82

The role of bacterial adhesion in cystic fibrosis including the staphylococcal aspect. Ramphal R. **Infection** 1990 Jan–Feb;18(1):61–4 (25 ref.)

Cutaneous infections in Trinidad. Suite M. **Int J Dermatol** 1990 Jan–Feb;29(1):31–4

Effect of temperature on hemolysin production in Aeromonas spp. isolated from warm and cold environments. Knøchel S. **Int J Food Microbiol** 1989 Nov;9(3):225–35

Type I and IV collagen and fibrinogen binding to Aeromonas species isolated from various infections. Ascencio F, et al. **Int J Med Microbiol** 1990 Jun;273(2):186–94

In–vitro activity of meropenem imipenem, the penem HRE 664 and ceftazidine against clinical isolates from West Germany. Bauernfeind A, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:73–84

The concept of indirect pathogenicity by beta–lactamase production, especially in ear, nose and throat infection. Brook I. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:63–72 (52 ref.)

In–vitro activity of meropenem against clinical isolates obtained in Canada. Clarke AM, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:47–55

Bacteriostatic and bactericidal in–vitro activity of meropenem against clinical isolates, including Mycobacterium avium complex. Inderlied CB, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:85–99

Comparative in–vitro activity of meropenem on clinical isolates from the United Kingdom. King A, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:31–45

In–vitro activity of meropenem against clinical isolates in a multicentre study in Italy. Schito GC, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:57–72

The growth–inhibitory properties of meropenem against anaerobes of clinical importance. Watt B, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:119–24

The epidemiology of beta–lactamases. Wiedemann B, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:1–22 (108 ref.)

Spontaneous bacterial peritonitis in cirrhosis with ascites. Bichile LS, et al. **J Assoc Physicians India** 1990 Apr; 38(4):290–1

Microbes and muscles. Nath AR, et al. **J Assoc Physicians India** 1989 Sep;37(9):557–9 (36 ref.)

Aeromonas in adult diarrhea: an enteropathogen or an innocent bystander? Golik A, et al. **J Clin Gastroenterol** 1990 Apr;12(2):148–52

Recovery of an unusual Flavobacterium group IIb–like isolate from a hand infection following pig bite. Goldstein EJ, et al. **J Clin Microbiol** 1990 May;28(5):1079–81

Demonstration of heterogeneity among the antigenic proteins of Mobiluncus species. Schwebke JR, et al. **J Clin Microbiol** 1990 Mar;28(3):463–8

Microbiology of infected pilonidal sinuses. Brook I. **J Clin Pathol** 1989 Nov;42(11):1140–2

Antibiotic resistance among gram–negative bacilli in 19 Greek hospitals. **J Hosp Infect** 1989 Aug;14(2):177–81

Definition of amputation wound sepsis [letter; comment] Lewis R. **J Hosp Infect** 1989 Oct;14(3):263–4 Comment on: J Hosp Infect 1989 Feb;13(2):167–72.

False–positive gram–stained smears of sterile body fluids due to contamination of laboratory deionized water. Medcraft JW, et al. **J Hosp Infect** 1990 Jul;16(1):75–80

Enteral hyperalimentation as a source of nosocomial infection. Thurn J, et al. **J Hosp Infect** 1990 Apr; 15(3):203–17

Soft–tissue infection caused by Edwardsiella tarda and Aeromonas hydrophila [letter] Vartian CV, et al. **J Infect Dis** 1990 Apr;161(4):816

Reliability of conventional ear swabs in tubotympanic CSOM. Raju KG, et al. **J Laryngol Otol** 1990 Jun; 104(6):460–2

Occurrence of Aeromonas species and Plesiomonas shigelloides in patients with and without diarrhoea in Lagos, Nigeria. Alabi SA, et al. **J Med Microbiol** 1990 May;32(1):45–8

Microbiologic flora contaminating open fractures: its significance in the choice of primary antibiotic agents and the likelihood of deep wound infection. Robinson D, et al. **J Orthop Trauma** 1989;3(4):283–6

Annual report on findings of infectious agents in Japan 1987. **Jpn J Med Sci Biol** 1988;41 Suppl:1–117

Xanthomonas maltophilia: an emerging nosocomial pathogen. Marshall WF, et al. **Mayo Clin Proc** 1989 Sep; 64(9):1097–104 (55 ref.)

A statistical analysis on the relationship of organism and site of infection to antimicrobial susceptibilities. Flournoy DJ, et al. **Methods Find Exp Clin Pharmacol** 1989 Dec; 11(12):725–9

Characterization of an hospital disseminated plasmid encoding resistance to gentamicin and other antimicrobial agents. Rivera MJ, et al. **Microbiologia** 1988 Feb;4(1):55–9

Capnocytophaga canimorsus (formerly DF–2) infections: review of the literature. Krol–van Straaten MJ, et al. **Neth J Med** 1990 Jun;36(5–6):304–9 (52 ref.)

Aeromonas septicemia: relationship of species and clinical features. Dryden M, et al. **Pathology** 1989 Apr;21(2):111–4

Septic shock in children: bacterial etiologies and temporal relationships. Jacobs RF, et al. **Pediatr Infect Dis J** 1990 Mar;9(3):196–200

Anaerobes: problems and controversies in bacteriology, infections, and susceptibility testing. Finegold SM. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S223–30 (35 ref.)

Infections caused by Moraxella, Moraxella urethralis, Moraxella–like groups M–5 and M–6, and Kingella kingae in the United States, 1953–1980. Graham DR, et al. **Rev Infect Dis** 1990 May–Jun;12(3):423–31

Current taxonomy of medically important nonsporing anaerobes. Hofstad T. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S122–6 (44 ref.)

Clinical manifestations of Kingella kingae infections: case report and review. Morrison VA, et al. **Rev Infect Dis** 1989 Sep–Oct;11(5):776–82 (65 ref.)

Anaerobic bacteria and bacterial infections: perspectives on treatment and resistance in Italy. Panichi G, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S152–6

Type, frequency, and antimicrobial sensitivity pattern of bacteria in an Iranian hospital during the 1980s. Sadeghi E. **Rev Infect Dis** 1990 May–Jun;12(3):543–6

Gram–negative bacterial pyomyositis: unique case and review. Sarubbi FA, et al. **Rev Infect Dis** 1989 Sep–Oct; 11(5):789–92 (12 ref.)

Aeromonas–associated diarrhea in Filipino children. Santos Ocampo DP, et al. **Riv Eur Sci Med Farmacol** 1989 Feb; 11(1):7–15

Bad news bacteria [news] Wright K. **Science** 1990 Jul 6; 249(4964):22–4

A multicenter international study on the activity of sulbactam/ampicillin, ampicillin, and cefoxitin against anaerobic bacteria and introduction of a new model of susceptibility testing in mixed infections. Heizmann WR, et al. **Suppl Int J Gynecol Obstet** 1989;2:7–12; discussion 47–8

A 12 year study of aerobic and anaerobic bacteria in intra–abdominal and postsurgical abdominal wound infections. Brook I. **Surg Gynecol Obstet** 1989 Nov; 169(5):387–92

Causal bacteria of pyogenic liver abscess. Cheng DL, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Oct;88(10):1008–11

[Anaerobes in biliary tract infection] Fu HQ. **Chung Hua Wai Ko Tsa Chih** 1989 Aug;27(8):454–6, 507 (Eng. Abstr.) **(Chi)**

[Infections of soft tissues by bacterial synergism] Fichelle A, et al. **Ann Fr Anesth Reanim** 1990;9(3):269–74 (Eng. Abstr.) **(Fre)**

[Kingella kingae osteomyelitis] Benard JM, et al. **Arch Fr Pediatr** 1989 Aug–Sep;46(7):521–4 (13 ref.) (Eng. Abstr.) **(Fre)**

[Regional strategy of surveillance of pathogenic agents of infectious diarrhea having epidemic potential] Malatre X, et al. **Bull Soc Pathol Exot Filiales** 1989;82(4):566–71 (Eng.

Abstr.) (Fre)
[Bacteriological diagnosis and therapeutic approach in materno-fetal infections] Guediche MN, et al. **Tunis Med** 1989 May;67(5):321-7 (Eng. Abstr.) (Fre)
[Pathogen spectrum and pathways of infection at an intensive care burn unit] Kistler D, et al. **Anasth Intensivther Notfallmed** 1990 Jun;25(3):216-21 (Eng. Abstr.) (Ger)
[Infection caused by gram-positive and gram-negative bacteria. A comparative study] Ruhnke-Trautmann M, et al. **Fortschr Med** 1989 Jul 30;107(22):477-80 (Eng. Abstr.) (Ger)
[Significance of the occurrence of Aeromonas of various biotypes in the Third World] Sixl W, et al. **Geogr Med Suppl** 1989;3:129-34 (Eng. Abstr.) (Ger)
[Amnionic infection in premature rupture of the fetal membranes] Kosian K. **Gynakol Rundsch** 1989;29 Suppl 2:147-9 (Ger)
[Bacteriologic findings in premature rupture of the fetal membranes] Mayer HO, et al. **Gynakol Rundsch** 1989;29 Suppl 2:152-4 (Ger)
[The significance of multiple bacterial and viral infections in the origin of cervix dysplasia] Schön HJ, et al. **Gynakol Rundsch** 1989;29 Suppl 2:91-4 (Ger)
[The microbiological study of pus and other inflammatory exudates] **Int J Med Microbiol** 1989 Nov;272(1):71-86 (4 ref.) (Ger)
[Acute keratitis and contamination of contact lens care systems with Bacillus cereus] van Setten GB, et al. **Klin Monatsbl Augenheilkd** 1989 Jul;195(1):28-31 (Eng. Abstr.) (Ger)
[Bacterial colonization of the nasopharynx in a comparison of home reared and day care children] Grimmer I, et al. **Padiatr Grenzgeb** 1990;29(3):K1-3 (Eng. Abstr.) (Ger)
[DF-2, a "new" gram-negative bacterium] Malinverni R. **Schweiz Med Wochenschr** 1990 May 19;120(20):745-9 (37 ref.) (Eng. Abstr.) (Ger)
[Retrospective study of mycotic and other colpitis pathogens] Pupp C, et al. **Wien Med Wochenschr** 1989 Aug 31; 139(15-16):366-8 (Eng. Abstr.) (Ger)
[The German Society of Orthopedics and Traumatology study: pathogen spectrum and resistance status] Nowak ME, et al. **Z Orthop** 1989 Jul-Aug;127(4):484-7 (Eng. Abstr.) (Ger)
[Etiology, diagnosis and therapy of soft tissue infections] Hau T, et al. **Zentralbl Chir** 1990;115(9):521-41 (90 ref.) (Eng. Abstr.) (Ger)
[Postoperative wound infections in surgery of stomach cancer. A bacteriologic analysis] Widow VW, et al. **Zentralbl Chir** 1989;114(18):1224-30 (Eng. Abstr.) (Ger)
[Bacterial vaginosis] Hoyme UB. **Zentralbl Gynakol** 1989; 111(24):1589-98 (45 ref.) (Eng. Abstr.) (Ger)
[Contaminated small bowel syndrome in infants caused by gram-negative bacteria and yeasts] Bodánszky H, et al. **Orv Hetil** 1990 Aug 5;131(31):1687-90 (22 ref.) (Eng. Abstr.) (Hun)
[Immunohistochemical studies in contaminated small bowel syndrome] Kiss Z, et al. **Orv Hetil** 1990 May 6; 131(18):971-4 (38 ref.) (Eng. Abstr.) (Hun)
[Anaerobic infections] Giunchi G, et al. **Ann Ital Med Int** 1986 Mar;1(1):28-37 (43 ref.) (Eng. Abstr.) (Ita)
[Bacteriologic monitoring in a surgical department with emergency services. Epidemiologic analysis and study of sensitivity to antibiotic therapy] Risaliti A, et al. **Minerva Chir** 1989 Oct 31;44(20):2191-6 (Eng. Abstr.) (Ita)
[Studies on motile-Aeromonas infection: incidence of motile-Aeromonas in river mud, river water and fresh-water fish] Fukuyama M, et al. **Kansenshogaku Zasshi** 1989 Jun;63(6):565-74 (Eng. Abstr.) (Jpn)
[Studies on bacterial agents in acute diarrheal disease (1985-1987)] Taguchi M, et al. **Kansenshogaku Zasshi** 1989 Jun;63(6):633-40 (Eng. Abstr.) (Jpn)
[Aerobic and anaerobic bacterial flora of crural ulcers] Lawrynowicz R. **Przegl Dermatol** 1988 Nov-Dec; 75(6):439-43 (Eng. Abstr.) (Pol)
[Microflora of gastric juice and its sensitivity to antibiotics in post-gastrectomy gastritis] Veselov AIa, et al. **Antibiot Khimioter** 1989 Sep;34(9):677-82 (Eng. Abstr.) (Rus)
[Microflora of suppurative inflammatory foci in surgical patients and its sensitivity to antibiotics] Veselov AIa. **Antibiot Khimioter** 1990 Jan;35(1):40-3 (Eng. Abstr.) (Rus)
[Types of microflora in acute suppurative-destructive diseases of the lungs and pleura] Danilenko MV, et al. **Klin Khir** 1989;(10):5-7 (Eng. Abstr.) (Rus)
[Intestinal microflora in patients operated on for nonspecific inflammatory diseases of the colon] Korneva TK, et al. **Klin Med (Mosk)** 1990 Jan;68(1):92-5 (Rus)
[The sensitivity to antibiotics and chloramine B of opportunistic microorganisms isolated from patients] Balakliets NI, et al. **Mikrobiol Zh** 1989 Nov-Dec;51(6):83-6 (Eng. Abstr.) (Rus)
[Rapid methods of detection of bacteria in the bile] Buianov VM, et al. **Sov Med** 1989;(11):30-4 (Eng. Abstr.) (Rus)
[Microbiological characteristics of suppurative-necrotic foot diseases in diabetes mellitus] Daniliants EV, et al. **Sov Med** 1989;(11):80-1 (Rus)
[The detection of a choleriform thermolabile enterotoxin in clinical strains of Proteus isolated in different infections] Gabidullin ZG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Dec;(12):14-6 (Eng. Abstr.) (Rus)
[Universal media in research on pathologic material and environmental objects. Myth or reality?] Kalina GP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Sep;(9):110-7 (29 ref.) (Rus)
[The effect of enterococci on normalizing the intestinal microflora in experimental dysbacteriosis] Korshunov VM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Sep;(9):3-6 (Eng. Abstr.) (Rus)
[The initial stage of the infectious process--colonization and the means for its prevention] Kostiukova NN. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Sep;(9):103-10 (68 ref.) (Rus)
[Clinical evaluation of the stool culture in acute diarrhea] Navarro González J, et al. **An Esp Pediatr** 1989 Jun; 30(6):457-62 (Eng. Abstr.) (Spa)
[Hemodynamic factors in septic heart disease] Puerta Fonolla AJ. **An R Acad Nac Med (Madr)** 1989;106(3):375-85 (37 ref.) (Spa)
[Development of resistance to antibiotic therapy at a polyvalent intensive care unit during 3 years] Mesalles E, et al. **Rev Clin Esp** 1990 Apr;186(7):324-7 (Eng. Abstr.) (Spa)
[Musculoskeletal anaerobic infections] Johansson A, et al. **Lakartidningen** 1989 Dec 6;86(49):4339-40 (Swe)

MORTALITY

Acute bacterial meningitis in the elderly [letter; comment] Domingo P, et al. **Arch Intern Med** 1990 Jul;150(7):1546, 1548 Comment on: Arch Intern Med 1989 Jul;149(7):1596-9.
Effect of low dose recombinant interleukin 2 plus indomethacin on mortality after sepsis in a murine burn model. Horgan PG, et al. **Br J Surg** 1990 Apr;77(4):401-4
The impact of pulmonary infections on the survival of lung cancer patients. Perlin E, et al. **Cancer** 1990 Aug 1; 66(3):593-6
Bacteremia in the elderly medical patient: are we getting better? [comment] Putterman C. **Isr J Med Sci** 1990 Apr; 26(4):181-2 Comment on: Isr J Med Sci 1990 Apr;26(4):195-9.
[Follow-up of the transplantation of contaminated kidneys] Lucius K, et al. **Z Urol Nephrol** 1990 Jan;83(1):17-21 (Eng. Abstr.) (Ger)

PATHOLOGY

The colonic pathology of Escherichia coli 0157:H7 infection. Kelly J, et al. **Am J Surg Pathol** 1990 Jan;14(1):87-92
'Corkscrew-like' bacteria associated with gastritis. Waring PM, et al. **Histopathology** 1989 Dec;15(6):647-9
Peritoneal leucocyte response to bacterial peritonitis in patients receiving peritoneal dialysis. Shah GM, et al. **Int J Artif Organs** 1990 Jan;13(1):44-50
Culture-negative neutrocytic ascites: a less severe variant of spontaneous bacterial peritonitis. Pelletier G, et al. **J Hepatol** 1990 May;10(3):327-31
Enteric infections. Lewin KJ. **Monogr Pathol** 1990; (31):286-305 (23 ref.)
Histologic and ultrastructural changes in nonpulmonary organs during early hyperdynamic sepsis. Hersch M, et al. **Surgery** 1990 Apr;107(4):397-410
[The pathologic anatomy of important forms of bacterial pneumonia] Zinserling AV. **Zentralbl Allg Pathol** 1990; 136(1-2):3-13 (Eng. Abstr.) (Ger)
[Infection--clinico-pathological profile of diffuse aspiration bronchiolitis (DAB)] Fukuchi Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 May; 27(5):571-7 (Eng. Abstr.) (Jpn)
[Cytologic and microbiological examination of bronchial contents in chronic lung diseases in children] Lishke AA, et al. **Vestn Khir** 1990 Jan;144(1):146-8 (13 ref.) (Rus)

PHYSIOPATHOLOGY

Treatment of acute or chronic severe, intractable pain and other intractable medical problems associated with unrecognized viral or bacterial infection: Part I. Omura Y. **Acupunct Electrother Res** 1990;15(1):51-69
Oxygen uptake/supply dependency. Effects of short-term dobutamine infusion. Vincent JL, et al. **Am Rev Respir Dis** 1990 Jul;142(1):2-7
Microbial infection and the septic response in critical surgical illness. Sepsis, not infection, determines outcome. Marshall J, et al. **Arch Surg** 1990 Jan;125(1):17-22; discussion 22-3
PEEP increases non-pulmonary microvascular fluid flux in healthy and septic sheep. Hersch M, et al. **Chest** 1989 Nov; 96(5):1142-9
Oxygen delivery and oxygen uptake in postoperative and septic patients. Vermeij CG, et al. **Chest** 1990 Aug; 98(2):415-20
Tumor necrosis factor in the pathophysiology of infection and sepsis. Fong Y, et al. **Clin Immunol Immunopathol** 1990 May;55(2):157-70 (84 ref.)
Wound healing alterations caused by infection. Robson MC, et al. **Clin Plast Surg** 1990 Jul;17(3):485-92 (59 ref.)
Pharmacodynamic response to ionized calcium during acute sepsis [see comments] Steinhorn DM, et al. **Crit Care Med** 1990 Aug;18(8):851-7 Comment in: Crit Care Med 1990 Aug;18(8):895-6.
Disparate mechanisms of induction of procoagulant activity by live and inactivated bacteria and viruses. Sinclair SB, et al. **Infect Immun** 1990 Jun;58(6):1821-7
Relationship of fever magnitude to rate of serious bacterial infections in neonates. Bonadio WA, et al. **J Pediatr** 1990 May;116(5):733-5
Electrophysiologic studies, computed tomography, and neurologic outcome in acute bacterial meningitis. Pike MG, et al. **J Pediatr** 1990 May;116(5):702-6
Molecular pathophysiology of bacterial meningitis: current concepts and therapeutic implications. Sáez-Llorens X, et al. **J Pediatr** 1990 May;116(5):671-84 (119 ref.)
Hyponatraemia and intracellular water in sepsis: an experimental comparison of the effect of fluid replacement with either 0.9% saline or 5% dextrose. Hannon RJ, et al. **J Pediatr Surg** 1990 Apr;25(4):422-5
Fetal death from sepsis following a reassuring intrapartum fetal acoustic stimulation test [letter] Barford D. **Obstet Gynecol** 1990 Feb;75(2):307-8
Report of a second workshop: Pathophysiology of bacterial meningitis. **Pediatr Infect Dis J** 1989 Dec;8(12):899-933
Effects of suture selection and local and distant sepsis on colonic wound healing. Berman IR, et al. **Surg Forum** 1978; 29:18-9
[Physiopathologic mechanisms in bacterial infection and antibiotics (editorial)] Lagrange PH. **Pathol Biol (Paris)** 1990 Apr;38(4):239-41 (Eng. Abstr.) (Fre)
[Physiopathologic mechanisms of bacterial infection and antibiotics (editorial)] Lagrange PH. **Pathol Biol (Paris)** 1990 Apr;38(4):239-41 (Fre)
[Age-related characteristics of infectious diseases] Postovit VA. **Klin Med (Mosk)** 1989 Dec;67(12):34-40 (56 ref.) (Rus)
[Effect of viral and bacterial infections on the pituitary-thyroid activity in infants] Ageikin VA, et al. **Pediatriia** 1990;(1):108-9 (Rus)
[Liver function abnormalities in infection in children during the 1st year of life] Azimdzhanova MM, et al. **Pediatriia** 1990;(4):107-8 (Rus)

PREVENTION & CONTROL

Single-dose preoperative prophylaxis in transurethral surgery. Ciprofloxacin versus cefotaxime. Christensen MM, et al. **Am J Med** 1989 Nov 30;87(5A):258S-260S
Comparison of intravenous ciprofloxacin and intravenous cefotaxime for antimicrobial prophylaxis in transurethral surgery. Cox CE. **Am J Med** 1989 Nov 30; 87(5A):252S-254S
A prospective, randomized, double-blind study of trimethoprim-sulfamethoxazole for prophylaxis of infection in renal transplantation: clinical efficacy, absorption of trimethoprim-sulfamethoxazole, effects on the microflora, and the cost-benefit of prophylaxis. Fox BC, et al. **Am J Med** 1990 Sep;89(3):255-74
Cefotaxime and prophylaxis. New approaches with a proven agent. Gentry LO. **Am J Med** 1990 Apr 9;88(4A):32S-37S (53 ref.)
Intravenous ciprofloxacin versus cefotaxime prophylaxis during transurethral surgery. Gombert ME, et al. **Am J Med** 1989 Nov 30;87(5A):250S-251S
Antibiotic prophylaxis in biliary tract surgery. Ciprofloxacin versus ceftriaxone. Kujath P. **Am J Med** 1989 Nov 30; 87(5A):255S-257S
Infectious disease management of adult leukemic patients undergoing chemotherapy: 1982 to 1986 experience at Stanford University Hospital. O'Hanley P, et al. **Am J Med** 1989 Dec;87(6):605-13
Ofloxacin versus vancomycin/polymyxin for prevention of infections in granulocytopenic patients. Winston DJ, et al. **Am J Med** 1990 Jan;88(1):36-42
Hemodynamic effects of rapid vancomycin infusion in critically ill patients. Stier GR, et al. **Anesth Analg** 1990 Oct;71(4):394-9
Current issues in central venous catheter infection. Toltzis P, et al. **Annu Rev Med** 1990;41:169-76 (41 ref.)
Antibiotic prophylaxis for the prevention of late infections of prosthetic joints. Bell SM, et al. **Aust N Z J Surg** 1990 Mar;60(3):177-81 (14 ref.)
Design and trial of a metronidazole loading dose regimen for patients undergoing emergency surgery. Ioannides-Demos LL, et al. **Aust N Z J Surg** 1989 Dec; 59(12):953-7
Augmentation of resistance of mice to bacterial infection by a polysaccharide-peptidoglycan complex (PSPG) extracted from Lactobacillus casei. Nomoto K, et al. **Biotherapy** 1989; 1(3):169-77
Options and limitations of long-term oral ciprofloxacin as antibacterial prophylaxis in allogeneic bone marrow transplant recipients. De Pauw BE, et al. **Bone Marrow Transplant** 1990 Mar;5(3):179-82
Prevention of gram-negative bacterial infection in granulocytopenic patients: a randomized study comparing oral norfloxacin with gentamycin. Nemet D, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:105
Comparison of one dose versus three doses of prophylactic antibiotics, and the influence of blood transfusion, on infectious complications in acute and elective colorectal surgery. Jensen LS, et al. **Br J Surg** 1990 May;77(5):513-8
Prevention of fatal infections by recombinant human interleukin 1 alpha in normal and anticancer drug-treated mice. Morikage T, et al. **Cancer Res** 1990 Apr 1; 50(7):2099-104

Prophylactic immunoglobulin (IgG) infusions in infants [letter] Itami N, et al. **Clin Nephrol** 1990 Mar;33(3):153

ASHP therapeutic guidelines on nonsurgical antimicrobial prophylaxis. ASHP Commission on Therapeutics. **Clin Pharm** 1990 Jun;9(6):423–45 (158 ref.)

Preventing infectious diseases [editorial] Barriere SL. **Clin Pharm** 1990 Jun;9(6):462

Release of gentamicin from acrylic bone cement. Bunetel L, et al. **Clin Pharmacokinet** 1989 Oct;17(4):291–7

Postoperative infections: general principles and considerations. Downey MS, et al. **Clin Podiatr Med Surg** 1990 Jul;7(3):405–31 (22 ref.)

Soft-tissue infection in lower-extremity trauma. Feng LJ, et al. **Clin Podiatr Med Surg** 1990 Jul;7(3):449–65 (42 ref.)

Bite wound infections of the lower extremity. Myers RA, et al. **Clin Podiatr Med Surg** 1990 Jul;7(3):501–8 (23 ref.)

Antimicrobial prophylaxis for infection in neutropenic patients. Bodey GP. **Curr Clin Top Infect Dis** 1988;9:1–43 (111 ref.)

Antibiotic prophylaxis: non-abdominal surgery. Conte JE Jr. **Curr Clin Top Infect Dis** 1989;10:254–305 (296 ref.)

Ciprofloxacin prior to colon surgery. Dörner A, et al. **Diagn Microbiol Infect Dis** 1990 Mar–Apr;13(2):177–9

Ciprofloxacin as single-dose antibiotic prophylaxis in colorectal surgery. Results of a randomized, double-blind trial. Görtz G, et al. **Diagn Microbiol Infect Dis** 1990 Mar–Apr;13(2):181–5

A review of chemoprophylaxis and therapy of bacterial infections in neutropenic patients. Klastersky J. **Diagn Microbiol Infect Dis** 1989 Jul–Aug;12(4 Suppl):201S–207S (22 ref.)

Antibiotic prophylaxis in dental procedures. Ballard C, et al. **DICP** 1990 Jan;24(1):41–3

Inhaled aminoglycosides in cystic fibrosis. Jew LL, et al. **DICP** 1990 Jul–Aug;24(7–8):711–2 (7 ref.)

National study on the utilization of prophylactic antibiotics in surgery, Belgium, 1986. Mertens R, et al. **Epidemiol Infect** 1989 Oct;103(2):311–22

Prevention of bacterial and fungal infections in granulocytopenic patients. Verhoef J, et al. **Eur J Cancer Clin Oncol** 1989 Sep;25(9):1345–50 (54 ref.)

Prophylaxis of bacterial infections with netilmicin and spiramycin in granulocytopenic patients [letter] Meunier F, et al. **Eur J Clin Microbiol Infect Dis** 1989 Oct; 8(10):927–8

Chemoprophylaxis of gram-negative infections in neutropenic patients. Klastersky J. **Eur Urol** 1990;17 Suppl 1:40–5 (22 ref.)

Germ monitoring of patients, staff and environment in reverse isolation. Hoffmann FA, et al. **Folia Haematol (Leipz)** 1989; 116(3–4):577–80

Systemic broad-spectrum antimicrobial prophylaxis in hematological patients after intensive antineoplastic chemotherapy. Verlicchi F, et al. **Haematologica** 1990 Jan–Feb;75(1):91–3

Infection control in patients undergoing mechanical ventilation: traditional approach versus a new development—selective decontamination of the digestive tract. Meijer K, et al. **Heart Lung** 1990 Jan;19(1):11–20 (113 ref.)

Antimicrobial prophylaxis of cesarean section [editorial] Jones RN. **Infect Control Hosp Epidemiol** 1990 May; 11(5):233–4

Changing trends in infection control and hospital epidemiology. Decker MD, et al. **Infect Dis Clin North Am** 1989 Dec;3(4):671–82 (13 ref.)

Prevention of infection in intensive care. A satellite symposium of the 16th International Congress of Chemotherapy. 12 June 1989, Jerusalem. Proceedings. **Infection** 1990;18 Suppl 1:S1–30

The role of systemic antibiotic prophylaxis in infection prevention in intensive care by SDD. Stoutenbeek CP. **Infection** 1989 Nov–Dec;17(6):418–21

Antibiotic management of open fractures. Tsukayama DT, et al. **Instr Course Lect** 1990;39:487–90 (19 ref.)

A critical appraisal of antibiotic prophylaxis. Pallasch TJ. **Int Dent J** 1989 Sep;39(3):183–96 (112 ref.)

New concepts in the prevention of polymer-associated foreign body infections. Jansen B. **Int J Med Microbiol** 1990 Apr;272(4):401–10 (32 ref.)

Survey of antibiotic prophylaxis in European renal transplantation practice. Goodman CM, et al. **Int Urol Nephrol** 1990;22(2):173–9

Selective decontamination of the digestive tract with norfloxacin in the prevention of ICU-acquired infections: a prospective randomized study. Ulrich C, et al. **Intensive Care Med** 1989;15(7):424–31

Immunization [editorial] Alberts ME. **Iowa Med** 1989 Oct; 79(10):489

Immunization needs of adults. Olds J. **Iowa Med** 1989 Oct; 79(10):464–6

Intravenous immune globulin use in newborns. Hill HR, et al. **J Allergy Clin Immunol** 1989 Oct;84(4 Pt 2):617–23; discussion 623–4 (19 ref.)

The effect of new broad-spectrum antibiotics on faecal flora of cancer patients. Meijer-Severs GJ, et al. **J Antimicrob Chemother** 1989 Oct;24(4):605–13

A comparison of aztreonam/metronidazole and cefotaxime/metronidazole in elective colorectal surgery: antimicrobial prophylaxis must include gram-positive cover. Morris DL, et al. **J Antimicrob Chemother** 1990 Apr; 25(4):673–8

Preventing infection in orthopaedic implants. Sanderson PJ. **J Antimicrob Chemother** 1989 Sep;24(3):277–80 (32 ref.)

Ceftriaxone plus amikacin in a single daily dose as empiric antibiotic therapy in granulocytopenic patients. Cudillo L, et al. **J Chemother** 1989 Dec;1(6):413–6

Comparison of one dose cefazolin versus one dose cefotetan for cesarean section prophylaxis. Probst JR, et al. **J Fla Med Assoc** 1989 Dec;76(12):1027–9

Effects of heparin and chlorbutol on bacterial colonisation of intravascular cannulae in an in vitro model. Elliott TS, et al. **J Hosp Infect** 1989 Oct;14(3):193–200

Postoperative infection in cardiac surgery: the influence of a change in prophylactic antibiotic regimen. Mehta G, et al. **J Hosp Infect** 1990 May;15(4):353–62

Antibiotic prophylaxis during sclerotherapy for esophageal varices [letter; comment] Flick JA. **J Pediatr** 1990 Jan; 116(1):156–7 Comment on: J Pediatr 1989 Jul;115(1):69–74.

Improvement in catheter sepsis rate in burned children. Askew AA, et al. **J Pediatr Surg** 1990 Jan;25(1):117–9

Prolonged rupture of the fetal membranes and neonatal outcome. Verber IG, et al. **J Perinat Med** 1989;17(6):469–76

Prophylactic antibiotics in trauma: the hazards of underdosing. Ericsson CD, et al. **J Trauma** 1989 Oct; 29(10):1356–61

Efficacy of prophylactic antibiotics in vascular surgery: an arterial wall microbiologic and pharmacokinetic perspective. Lalka SG, et al. **J Vasc Surg** 1989 Nov; 10(5):501–9; discussion 509–10

Immunity targeting common core antigens of gram-negative bacteria. Tyler JW, et al. **J Vet Intern Med** 1990 Jan–Feb; 4(1):17–25 (112 ref.)

Prevention of peritonitis in continuous ambulatory peritoneal dialysis [letter] Ludlam H, et al. **Lancet** 1990 May 12; 335(8698):1161

Combination of pipemidic acid, colistin sodium methanesulfonate and nystatin may be less effective than nystatin alone for prevention of infection during chemotherapy-induced granulocytopenia in acute leukemia. Sampi K, et al. **Med Oncol Tumor Pharmacother** 1989;6(4):291–6

Risks involved in selective decontamination in immunocompromised patients. Boogaerts MA. **Mycoses** 1989;32 Suppl 2:52–8 (17 ref.)

Perioperative antibiotic prophylaxis for herniorrhaphy and breast surgery. Platt R, et al. **N Engl J Med** 1990 Jan 18; 322(3):153–60

Auckland ceftriaxone prophylaxis trial [letter] Smith JM. **N Z Med J** 1990 Apr 11;103(887):164

Dose and administration interval of intravenous gamma-globulin in neonates [letter] [published errratum appears in Pediatr Infect Dis J 1990 Jul;9(7):487] Caitabiano L, et al. **Pediatr Infect Dis J** 1990 Jun;9(6):456–7

Intravenous gammaglobulin in the prophylaxis of late sepsis in very-low-birth-weight infants: preliminary results of a randomized, double-blind, placebo-controlled trial. Bussel JB. **Rev Infect Dis** 1990 May–Jun;12 Suppl 4:S457–61; discussion S461–2

Vaccination against enteric bacterial diseases. Hone D, et al. **Rev Infect Dis** 1989 Nov–Dec;11(6):853–77 (315 ref.)

A 7-year survey of drug resistance in aerobic and anaerobic fecal bacteria of surgical inpatients: clinical relevance and relation to local antibiotic consumption. Kling PA, et al. **Scand J Infect Dis** 1989;21(6):589–96

Controlled comparison of cefmetazole with cefoxitin for prophylaxis in elective cholecystectomy. Berne TV, et al. **Surg Gynecol Obstet** 1990 Feb;170(2):137–40

New trends in antibiotic prophylaxis of infective endocarditis in patients undergoing surgery in the oral cavity. Hall G, et al. **Swed Dent J** 1989;13(5):193–200 (25 ref.)

Selective bowel decontamination effectively prevents gram-negative bacterial infections after liver transplantation. Raakow R, et al. **Transplant Proc** 1990 Aug;22(4):1556–7

The efficacy of selective bowel decontamination as infection prevention after liver transplantation. Rosman C, et al. **Transplant Proc** 1990 Aug;22(4):1554–5

Reactogenicity and immunogenicity of combined vaccines for bacteraemic diseases caused by Haemophilus influenzae type b, meningococci and pneumococci in 24-month-old children. Eskola J, et al. **Vaccine** 1990 Apr;8(2):107–10

Prophylactic intravenous immunoglobulin in pre-term infants: a controlled trial. Conway SP, et al. **Vox Sang** 1990; 59(1):6–11

Perioperative antibiotic prophylaxis in cardiovascular surgery: a prospective randomized comparative trial of cefazolin versus ceftriaxone [see comments] Soteriou M, et al. **World J Surg** 1989 Nov–Dec;13(6):798–801; discussion 801–2 Comment in: World J Surg 1990 Mar–Apr;14(2):277.

Abstracts of papers presented at the workshop of the Deutsche Gesellschaft für Hygiene und Mikrobiologie, Section Hygiene and Public Health. Kiel, 28–30 September 1988. **Zentralbl Hyg Umweltmed** 1989 Sep;188(6):487–525

[Effects of anti-bacterial immuno-ribonucleic acid (iRNA) on phagocytosis rate of macrophage and protective activity against bacterial infection—an experimental study] Zhang GD. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Mar;2(1):60–2 (Chi)

[Venoglobulins in pediatric surgical resuscitation] Berg A, et al. **Cah Anesthesiol** 1989 Nov;37(7):511–5 (Eng. Abstr.) (Fre)

[Prophylactic antibiotic therapy using oxacillin (Bristopen) in pediatric orthopedic surgery] Bernière J, et al. **Cah Anesthesiol** 1989 Nov;37(7):507–10 (Eng. Abstr.) (Fre)

[Disinfection of endoscopic equipment: the desirable and the possible] Bigard MA. **Gastroenterol Clin Biol** 1990; 14(2):131–3 (22 ref.) (Fre)

[A trial of preventing infection risk during treatment of hydrocephalus in children using cerebro-spinal fluid shunt] Derex MC, et al. **Minerva Anestesiol** 1989 Apr;55(4):169–71 (Fre)

[Antibiotic prophylaxis with cefotiam in percutaneous nephrolithotomy] Baude C, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):673–6 (Eng. Abstr.) (Fre)

[Preventive treatment of infection caused by gram-negative bacteria using anti-lipopolysaccharide antibodies. Evaluation in patients with aplasia] Lecomte F, et al. **Presse Med** 1989 Sep 23;18(29):1419–22 (Eng. Abstr.) (Fre)

[Prolonged controlled ventilation. The Pall-Ultripor filter or moisturizing-heating devices?] Martin C, et al. **Presse Med** 1990 Jan 20;19(2):84–5 (Fre)

[Use of Polygynax in pregnant women for preventing cervico-vaginal infections] Audebert AJ. **Rev Fr Gynecol Obstet** 1989 Mar 25;84(3 Pt 2):287–90 (Eng. Abstr.) (Fre)

[Antibiotic therapy in cystic fibrosis: uncertainty and reality] Bellon G, et al. **Rev Mal Respir** 1990;7(3):203–8 (24 ref.) (Eng. Abstr.) (Fre)

[Prevention of bacterial infections using ciprofloxacin in granulocytopenic patients with cancer] Snoeck R, et al. **Rev Med Brux** 1989 Dec;10(10):408–13 (Eng. Abstr.) (Fre)

[The spectrum of bacterial strains and problems of antibiotic prophylaxis in an intensive care unit] Jung A, et al. **Anaesthesiol Reanim** 1989;14(6):339–46 (Eng. Abstr.) (Ger)

[Selective flora suppression for control of infection in surgical intensive care medicine] Thülig B, et al. **Anasth Intensivther Notfallmed** 1989 Dec;24(6):345–54 (Eng. Abstr.) (Ger)

[Preventive immunoprevention of rhinitis and sinusitis. ENT director Dr. W. Elies, Bielefeld, elaborates on the indications (interview)] Elies W. **Fortschr Med** 1989 Sep 10;107(26):70–1 (Ger)

[Cerebrospinal fluid penetration of ofloxacin (Tarivid) in non-inflamed meninges] Staffensky RH, et al. **Neurochirurgia (Stuttg)** 1990 Jul;33(4):110–2 (Eng. Abstr.) (Ger)

[Odorless surface disinfection with peracetic acid] Mücke H, et al. **Z Arztl Fortbild (Jena)** 1989;83(22):1125–7 (Ger)

[Current problems of hospital health] Härle A. **Z Orthop** 1989 Jul–Aug;127(4):499–502 (Eng. Abstr.) (Ger)

[Basic aspects of the preventive use of antibiotics in general surgery] Simmen HP, et al. **Zentralbl Chir** 1989; 114(24):1533–9 (21 ref.) (Eng. Abstr.) (Ger)

[Prevention of postoperative complications following vaginal hysterectomy] Klug PW, et al. **Zentralbl Gynakol** 1989; 111(15):1042–8 (Eng. Abstr.) (Ger)

[Prophylaxis using quinolones in neutropenic patients. Preliminary results of a cooperative study by the Grupo Italiano Malattie Ematologiche maligne dell'adulto (GIMEMEA)] Del Favero A, et al. **Haematologica (Pavia)** 1989 Oct;74(5 Suppl):278–86 (Ita)

[Short-term antibiotic prophylaxis in surgery. Our experience with the use of piperacillin in 261 patients] Bonatti PL, et al. **Minerva Chir** 1990 Jan;45(1–2):87–90 (Eng. Abstr.) (Ita)

[Possible selective effects of thymopentin on polymorphonuclear activity in patients undergoing dialysis (letter)] Salvati F. **Recenti Prog Med** 1989 Sep;80(9):499 (Ita)

[Preclinical and clinical studies on aztreonam in pediatric surgery] Shimomura H, et al. **Jpn J Antibiot** 1990 Mar; 43(3):528–33 (Eng. Abstr.) (Jpn)

[Cefpiramide: antibacterial activity, pharmacokinetics, and clinical evaluation] Shindo K, et al. **Jpn J Antibiot** 1990 Jan;43(1):47–62 (Eng. Abstr.) (Jpn)

[Pharmacokinetics and clinical evaluation of aztreonam in pediatric surgery] Yura J, et al. **Jpn J Antibiot** 1990 Mar; 43(3):534–42 (Eng. Abstr.) (Jpn)

[Prophylactic use of cefpiramide (CPM) in open heart surgery] Koga M, et al. **Kyobu Geka** 1989 Nov;42(12):991–4 (Eng. Abstr.) (Jpn)

[Experimental and clinical studies on prevention of vascular prosthetic infection] Kurata H. **Nippon Geka Gakkai Zasshi** 1989 Aug;90(8):1251–7 (Eng. Abstr.) (Jpn)

[Preventive antibiotics in elective colorectal surgery] Danielsen S, et al. **Nord Med** 1989;104(10):247–9, 255 (Eng. Abstr.) (Nor)

[Substantiation of complex measures in the prevention of bacterial infections in newborn infants] Chernyshova Li, et al. **Akush Ginekol (Mosk)** 1989 Sep;(9):75–8 (Rus)

[Use of dropper retrograde hydrotubation in the rehabilitation of patients after plastic surgery of the fallopian tubes] Polishchuk LM. **Akush Ginekol (Mosk)** 1989 Sep;(9):71–3 (Rus)

[Intraoperative bacteriological examination of patients operated on under extracorporeal circulation] Bogomolova NS, et al. **Antibiot Khimioter** 1989 Sep;34(9):701–5 (Eng. Abstr.) (Rus)

[Current trends in using silver-containing antiseptics] Savadian ESh, et al. **Antibiot Khimioter** 1989 Nov; 34(11):874-8 (70 ref.) **(Rus)**

[Use of cephalosporins for the prevention of mixed infection during surgical treatment of rectal cancer] Spitsyna TA, et al. **Antibiot Khimioter** 1989 Sep;34(9):705-7 (Eng. Abstr.) **(Rus)**

[Sanitary and microbiological control of health facilities] Vlodavets VV. **Gig Sanit** 1989 Jun;(6):50-3 (18 ref.) **(Rus)**

[Hygienic characteristics of the air and air microflora in the weaving mill of the wool textile industry] Garas'ko EV, et al. **Gig Tr Prof Zabol** 1990;(2):45-7 (Eng. Abstr.) **(Rus)**

[Effect of controlled bacteria-free medium on the course of the wound process in patients with chronic venous insufficiency of the legs complicated by trophic ulcer] Kostiuchenok BM, et al. **Khirurgiia (Mosk)** 1989 Aug; (8):91-5 (Eng. Abstr.) **(Rus)**

[Pharmacological prevention of wound infection in children after appendectomy] Sleptsov VP, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):116-8 **(Rus)**

[Bacteriocholia and antibiotic prevention of postoperative suppurative-septic complications in patients with inflammatory diseases of the biliary tract] Buianov VM, et al. **Klin Khir** 1990;(1):55-60 (122 ref.) **(Rus)**

[Prevention of microbial contamination of surgical wounds] Buianov VM, et al. **Klin Khir** 1990;(1):1-3 (Eng. Abstr.) **(Rus)**

[Use of desoxone-5 for disinfection at a surgical department] Filippenko LI, et al. **Klin Khir** 1990;(1):69-70 **(Rus)**

[Experimental substantiation of the use of CO2 laser radiation for preventing suppuration of the surgical wound] Kurbanov IA. **Klin Khir** 1990;(1):29-30 (Eng. Abstr.) **(Rus)**

[Antimicrobial polymers in surgery of the lungs] Polous IuM, et al. **Klin Khir** 1989;(10):1-3 (Eng. Abstr.) **(Rus)**

[Use of the electrochemical set ELMA-1 for preparation of sodium hypochlorite solutions in therapeutic and preventive institutions] Iolrish AN, et al. **Med Tekh** 1990 Mar-Apr;(2):36-7 (Eng. Abstr.) **(Rus)**

[Open fractures in children, their treatment and outcome] Bondarenko NS. **Ortop Travmatol Protez** 1990 Jan; (1):49-56 **(Rus)**

[Complex prevention of suppurative complications of long surgical procedures using microsurgical technics] Me'nikova VM, et al. **Ortop Travmatol Protez** 1989 Jul; (7):1-4 (Eng. Abstr.) **(Rus)**

[Correction of metabolic changes in neutrophils with carnitine chloride in newborn infants at risk of developing bacterial infections] Gadzhiev AA, et al. **Pediatriia** 1990; (1):65-9 **(Rus)**

[The anti-infective action of immunoglobulins administered at delayed times after irradiation] Ulanova AM, et al. **Radiobiologiia** 1989 Nov-Dec;29(6):817-20 (Eng. Abstr.) **(Rus)**

[Autologous transplantation of the spleen] Tsybyrne KA, et al. **Sov Med** 1989;(11):41-5 (64 ref.) **(Rus)**

[The system of active surgical treatment of severely burned patients] Atiasov NI. **Vestn Khir** 1990 Feb;144(2):136-40 (Eng. Abstr.) **(Rus)**

[Antibacterial threads in surgery of the lungs] Polous IuM, et al. **Vestn Khir** 1989 May;142(5):10-2 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Chest X-ray appearances in pneumonia and bronchiolitis. Correlation to virological diagnosis and secretory bacterial findings. Friis B, et al. **Acta Paediatr Scand** 1990 Feb; 79(2):219-25

Diagnosis of synthetic vascular graft infection: comparison of CT and gallium scans. Johnson KK, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):405-9

Radiologic distinction of pyogenic pulmonary infection from Pneumocystis carinii pneumonia in AIDS patients. Amorosa JK, et al. **Radiology** 1990 Jun;175(3):721-4

Bacterial renal infection: role of CT [letter; comment] Gold RP, et al. **Radiology** 1990 Jan;174(1):283-4 Comment on: Radiology 1989 Jun;171(3):703-7.

Bacterial renal infection: role of CT [letter; comment] Jeffrey RB Jr. **Radiology** 1989 Nov;173(2):574-5 Comment on: Radiology 1989 Jun;171(3):703-7.

Pulmonary septic emboli: diagnosis with CT. Kuhlman JE, et al. **Radiology** 1990 Jan;174(1):211-3

Sequelae of acute renal infections: CT evaluation. Soulen MC, et al. **Radiology** 1989 Nov;173(2):423-6

Computed tomography in suspected bacterial meningitis. Allen DM. **Singapore Med J** 1990 Jun;31(3):196-7

RADIONUCLIDE IMAGING

Indium-111 white blood cell scans: sensitivity, specificity, accuracy, and normal patterns of distribution. Guze BH, et al. **Clin Nucl Med** 1990 Jan;15(1):8-10

Tc-99m white cell scintigraphy in suspected acute infection. Southee AE, et al. **Clin Nucl Med** 1990 Feb;15(2):71-5

99mTc-human immunoglobulin (HIG)--first results of a new agent for the localization of infection and inflammation. Buscombe JR, et al. **Eur J Nucl Med** 1990;16(8-10):649-55

Comparison of technetium-99m-HM-PAO leukocytes with indium-111-oxine leukocytes for localizing intraabdominal sepsis [see comments] Mountford PJ, et al. **J Nucl Med** 1990 Mar;31(3):311-5 Comment in: J Nucl Med 1990 Mar;31(3):316-8.

Scintigraphic detection of bone and joint infections with indium-111-labeled nonspecific polyclonal human immunoglobulin G [see comments] Oyen WJ, et al. **J Nucl Med** 1990 Apr;31(4):403-12 Comment in: J Nucl Med 1990 Apr;31(4):413-6.

Indium-111-labeled leukocyte scintigraphy in hemodialysis access-site infection. Palestro CJ, et al. **J Nucl Med** 1990 Mar;31(3):319-24

In search of the hot appendix--a clinician's view of inflammation imaging [editorial; comment] Rubin RH. **J Nucl Med** 1990 Mar;31(3):316-8 Comment on: J Nucl Med 1990 Mar;31(3):311-5.

[Indications for scintigraphy with gallium 67 and with indium 111 labelled leukocytes in the diagnosis of postoperative infections in osteo-articular surgery] Mokassa LB, et al. **Int Orthop** 1990;14(2):155-9 (Eng. Abstr.) **(Fre)**

RADIOTHERAPY

[The prospects of using helium-neon laser in postoperative suppurative complications in cancer patients] Mamontov AS, et al. **Sov Med** 1990;(3):37-42 (68 ref.) **(Rus)**

[Laser sanitation of pleural empyema in patients with cancer of the lungs] Zyrianov BN, et al. **Vestn Khir** 1989 Jul; 143(7):43-5 (Eng. Abstr.) **(Rus)**

SURGERY

Intensive treatment and prognosis of patients with sepsis of gynaecological origin. Zakó E, et al. **Acta Chir Hung** 1989; 30(4):311-7

Outcome of the infected hip arthroplasty. A retrospective study of 36 patients. Antti-Poika I, et al. **Acta Orthop Scand** 1989 Dec;60(6):670-5

Management of brain abscesses in children and adolescents. Wright RL, et al. **Am J Dis Child** 1967 Aug;114(2):113-22

Optimal operative treatment in acute septic complications of diverticular disease. Corder AP, et al. **Ann R Coll Surg Engl** 1990 Mar;72(2):82-6

Ankle arthrodesis in the presence of continuous sepsis. Indications, methods, and results. Cierny G 3d, et al. **Clin Podiatr Med Surg** 1990 Jul;7(3):545-63 (9 ref.)

Graft excision and extra-anatomic revascularization: the treatment of choice for the septic aortic prosthesis. Schmitt DD, et al. **J Cardiovasc Surg (Torino)** 1990 May-Jun; 31(3):327-32

Primary closure of lactational breast abscess. Khanna YK, et al. **J Indian Med Assoc** 1989 May;87(5):118-20

A radical approach to bacterial panniculitis of the abdominal wall in the morbidly obese. Nauta RJ. **Surgery** 1990 Feb; 107(2):134-9

Role of surgery in management of acute bacterial epididymitis. Vordermark JS, et al. **Urology** 1990 Apr; 35(4):283-7 (43 ref.)

[Treatment of peritonitis of appendicular etiology] Shurkalin BK, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):97-100 (Eng. Abstr.) **(Rus)**

[Reinfusion of contaminated blood in abdominal surgery (review of the literature)] Tsatsanidi KN, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):142-6 (66 ref.) **(Rus)**

[Effectiveness of endolymphatic administration of antibiotics in the complex treatment of suppurative and inflammatory processes of the soft tissues] Dudenko GI, et al. **Klin Khir** 1990;(1):33-5 (Eng. Abstr.) **(Rus)**

[Clinico-morphologic evaluation of the course of the wound process after treatment of suppurative wounds with the CO2 laser] Khodos VA, et al. **Klin Khir** 1990;(1):4-6 (Eng. Abstr.) **(Rus)**

[Comparative characteristics of the exudate elements of suppurative wounds in their treatment and stimulation of the reparative process with a powder-like composition with collagen base] Mamedov IM, et al. **Klin Khir** 1990; (1):8-10 (Eng. Abstr.) **(Rus)**

[Determining the volume of solution necessary for intraoperative disinfection lavage of the abdominal cavity in diffuse suppurative peritonitis] Nifant'ev OE, et al. **Klin Khir** 1990;(1):48-9 (Eng. Abstr.) **(Rus)**

[Experience with the treatment of suppurative wounds using silver nitrate stabilized in dimexide] Pul'niashenko PR, et al. **Klin Khir** 1990;(1):35-6 (Eng. Abstr.) **(Rus)**

[A method of treating osteomyelitis at the site of bone nails] Amiraslanov IuA, et al. **Ortop Travmatol Protez** 1989 Nov; (11):72 **(Rus)**

[Effectiveness of HBO in the complex treatment of patients with infectious destructive lung diseases] Buravtsov VI. **Vestn Khir** 1989 Jun;142(6):118-21 **(Rus)**

[Surgical treatment of suppurative infection] Dolidze NG, et al. **Vestn Khir** 1990 Jan;144(1):48-9 **(Rus)**

[Principles of active surgical treatment of anaerobic non-clostridial infection of soft tissues] Kostiuchenok BM, et al. **Vestn Khir** 1989 Jul;143(7):102-7 **(Rus)**

[Pulse jet administration of liquid in the treatment of suppurative wounds] Peregudov IG, et al. **Vestn Khir** 1989 May;142(5):58-60 (Eng. Abstr.) **(Rus)**

[Combined modality treatment of paronychia] Smekhov SIu. **Vestn Khir** 1989 Dec;144(12):79-81 **(Rus)**

THERAPY

Treatment failure in acute otitis media. A clinical study of children during their first three years of life. Harsten G, et al. **Acta Otolaryngol (Stockh)** 1989 Sep-Oct; 108(3-4):253-8

Thermic effect of parenteral nutrition in septic and nonseptic individuals. Arnold J, et al. **Am J Clin Nutr** 1989 Oct; 50(4):853-60

Use of intravenous immunoglobulin in the treatment of neonatal sepsis [letter] Kim KS. **Am J Dis Child** 1989 Nov; 143(11):1257-8

Fate of the exposed saphenous vein graft. Ouriel K, et al. **Am J Surg** 1990 Aug;160(2):148-50

Using acetaminophen in infants [letter] Wallander KA. **Am Pharm** 1990 Aug;30(8):8

Physiologic amputation for acute pedal sepsis. Bunt TJ. **Am Surg** 1990 Sep;56(9):530-2

Open management of the posttraumatic septic abdomen. Ivatury RR, et al. **Am Surg** 1990 Sep;56(9):548-52

Intraperitoneal therapy with interferon-alpha in CAPD patients with relapsing bacterial peritonitis. Carozzi S, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):421-3

Management of the ambulatory patient with a sore throat. Hayden GF, et al. **Curr Clin Top Infect Dis** 1988;9:62-75 (68 ref.)

Immunotherapy of gram-negative infections in oncological patients. Glauser MP. **Eur J Cancer Clin Oncol** 1989 Sep; 25(9):1359-64 (8 ref.)

Treatment of infected joint arthroplasty. Morscher E, et al. **Int Orthop** 1990;14(2):161-5 (28 ref.)

Honey--a remedy rediscovered [letter; comment] McInerney RJ. **J R Soc Med** 1990 Feb;83(2):127 Comment on: J R Soc Med 1989 Jul;82(7):384-5.

Evaluation and management of febrile infants younger than 60 days of age. Powell KR. **Pediatr Infect Dis J** 1990 Mar; 9(3):153-7 (23 ref.)

New antibodies as adjunctive therapies for Gram-positive bacterial meningitis. Tuomanen E, et al. **Pediatr Infect Dis J** 1989 Dec;8(12):923-8 (18 ref.)

Effect of trimethoprim/sulphamethoxazole and hyperbaric oxygen on experimental Spiroplasma mirum encephalitis. Bastian FO, et al. **Res Microbiol** 1989 Feb;140(2):151-8

Neonatal sepsis and the role of immunotherapy. Proceedings of a symposium. Huron, Ohio, 18-20 July 1988. **Rev Infect Dis** 1990 May-Jun;12 Suppl 4:S391-498

Immunotherapy and immunoprophylaxis in the newborn infant: the need for definitive clinical trials. Johnston RB Jr. **Rev Infect Dis** 1990 May-Jun;12 Suppl 4:S392-3

Monoclonal antibodies for treatment of gram-negative infections. Young LS, et al. **Rev Infect Dis** 1989 Nov-Dec; 11 Suppl 7:S1564-71 (25 ref.)

Pitfalls in the management of postoperative intra-abdominal infections. Schein M. **S Afr Med J** 1990 Jan 6;77(1):4-5

Pharmacokinetics of intravenous immunoglobulin in neonates. Weisman LE, et al. **Vox Sang** 1989;57(4):243-8

[Immunotherapy with Solco Urovac vaccine in chronic genitourinary infection] Donovski L. **Khirurgiia (Sofiia)** 1989;42(4):28-30 (Eng. Abstr.) **(Bul)**

[The use of anti-bacterial immuno-ribonucleic acid in the treatment of burns complicated with systemic infection] Zhang GD. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Sep;3(3):198-9 **(Chi)**

[Therapeutic evaluation of combination therapy using C-425 and antibiotics in severe bacterial infections--a double blind group comparative study. The C-425 Research Group for Infectious Comparative Study] Katayama N, et al. **Kansenshogaku Zasshi** 1990 Feb;64(2):149-61 (Eng. Abstr.) **(Jpn)**

[Therapeutic evaluation of combination therapy using C-425, human native immunoglobulin liquid preparation for i.v. administration, with antibiotics in severe infections in the field of internal medicine] Kitamura K, et al. **Kansenshogaku Zasshi** 1990 Jan;64(1):19-33 (Eng. Abstr.) **(Jpn)**

[Therapeutic evaluation of combination therapy using C-425, human native immunoglobulin liquid preparation for i.v. administration, with antibiotics in severe infections in the field of surgery] Mishima Y, et al. **Kansenshogaku Zasshi** 1990 Jan;64(1):54-64 (Eng. Abstr.) **(Jpn)**

[Therapeutic evaluation of combination therapy using C-425, human native immunoglobulin liquid preparation for i.v. administration, and antibiotics in severe and/or refractory infections in pediatrics] Nishimura T, et al. **Kansenshogaku Zasshi** 1990 Jan;64(1):34-53 (Eng. Abstr.) **(Jpn)**

[Treatment of the infected emphysematous bulla] Tanaka K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Aug; 37(8):1511-6 (Eng. Abstr.) **(Jpn)**

[Isoprinosine and climatotherapy at the Czerniawa-Zdrój health resort in the treatment of children with recurrent respiratory tract infections] Jankowski A, et al. **Pneumonol Pol** 1989 Mar;57(3):192-5 (Eng. Abstr.) **(Pol)**

[Use of bacteriophages in the treatment of chronic bacterial diseases] Kaczkowski H, et al. **Wiad Lek** 1990 Feb 1-15; 43(3-4):136-41 (Eng. Abstr.) **(Pol)**

[Treatment of obstetrical infection] Chiladze AZ. **Akush Ginekol (Mosk)** 1989 Oct;(10):58-60 (Eng. Abstr.) **(Rus)**

[Treatment of vulvovaginitis in girls] Dergacheva TI, et al. **Akush Ginekol (Mosk)** 1989 Jul;(7):31-5 (Eng. Abstr.) **(Rus)**

[Tactics in the management of pregnancy, labor and newborn infants in urogenital infections] Kosheleva NG, et al. **Akush Ginekol (Mosk)** 1989 Aug;(8):74-7 **(Rus)**

[Interferon preparations in the complex treatment of bacterial infections] Kuznetsov VP, et al. **Antibiot Khimioter** 1989 Sep;34(9):691- **(Rus)**

[Current status of the problem of interferon (theoretical and practical aspects)] Kuznetsov VP. **Antibiot Khimioter** 1989 Sep;34(9):646-52 (Eng. Abstr.) **(Rus)**

[Stage-by-stage lavage of the abdominal cavity in the treatment of diffuse suppurative peritonitis] Dadvani SA, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):101-4 (Eng. Abstr.) **(Rus)**

[Use of ultraviolet irradiation of the blood in the complex treatment of peritonitis] Mil'kov BO, et al. **Klin Khir** 1990; (1):45-6 (Eng. Abstr.) **(Rus)**

[The efficacy of the extracorporeal connection of a porcine spleen in early and late septic complications in patients with burns] Povstianoĭ NE, et al. **Klin Khir** 1990;(3):9-10 (Eng. Abstr.) **(Rus)**

[Ultrasonics and hyperbaric oxygenation in the treatment of suppurative wounds] Kopysova VA, et al. **Ortop Travmatol Protez** 1989 Jul;(7):55-6 **(Rus)**

[Diagnosis and treatment of complicated acute pneumonia in children] Egorova AI, et al. **Pediatriia** 1990;(5):94 **(Rus)**

[Heparin in the treatment of suppurative meningitis in newborn infants] Shilenok IG, et al. **Pediatriia** 1990; (1):69-72 **(Rus)**

[Computerized tomography in the evaluation of the outcome of of the treatment of lung abscess by long-term nasobronchial catheterization] Kabanov AN, et al. **Sov Med** 1989;(11):63-5 **(Rus)**

[Phagotherapy of postoperative suppurative-inflammatory complications in patients with neoplasms] Kochetkova VA, et al. **Sov Med** 1989;(6):23-6 (Eng. Abstr.) **(Rus)**

[Local hyperthermia in the combined treatment of patients with chronic bacterial urethroprostatitis] Israilov SR. **Vestn Dermatol Venerol** 1989;(7):47-9 (Eng. Abstr.) **(Rus)**

[Predicting the results of the treatment of acute hematogenic osteomyelitis in young children] Prokopova LV, et al. **Vestn Khir** 1990 Jan;144(1):79-81 **(Rus)**

[Endolymphatic administration of antibiotics in the complex treatment of postoperative abscesses in the abdominal cavity] Zubarev PN, et al. **Vestn Khir** 1989 Sep;143(9):40-4 (Eng. Abstr.) **(Rus)**

[The extracorporeal hook-up of a xenogeneic spleen in the intensive treatment of suppurative surgical diseases complicated by sepsis] Chizh IM, et al. **Voen Med Zh** 1989 Jul;(7):30-2 **(Rus)**

[Immunologic indicators in the treatment of recurrent respiratory diseases using peroral bacterial vaccines] Kapellerová A, et al. **Cesk Pediatr** 1989 Aug;44(8):454-8 (Eng. Abstr.) **(Slo)**

[Study of a biological response modifier in the treatment of infections of the ORL region] Hötzinger H. **Acta Otorrinolaringol Esp** 1988 Mar-Apr;39(2):135-8 (Eng. Abstr.) **(Spa)**

TRANSMISSION

Survival and dissemination of bacteria in nebulizers and incubators. Moffet HL, et al. **Am J Dis Child** 1967 Jul; 114(1):13-20

Use of potentially infected donor hearts for cardiac transplantation. Lammermeier DE, et al. **Ann Thorac Surg** 1990 Aug;50(2):222-5

ABC of transfusion. Infectious complications of blood transfusion: bacteria and parasites [see comments] Barbara JA, et al. **BMJ** 1990 Feb 10;300(6721):386-9 (0 ref.) Comment in: BMJ 1990 Mar 10;300(6725):678-9.

Cockroaches (Periplaneta americana) as carriers of agents of bacterial diarrhoea in Accra, Ghana. Agbodaze D, et al. **Cent Afr J Med** 1989 Sep;35(9):484-6

Cockroaches as vectors of pathogenic bacteria. Fotedar R, et al. **J Commun Dis** 1989 Dec;21(4):318-22

Contamination of currency notes with enteric bacterial pathogens. Khin Nwe Oo, et al. **J Diarrhoeal Dis Res** 1989 Sep-Dec;7(3-4):92-4

[Bacteriological diagnosis and therapeutic approach in materno-fetal infections] Guediche MN, et al. **Tunis Med** 1989 May;67(5):321-7 (Eng. Abstr.) **(Fre)**

VETERINARY

Effectiveness of two commercial infectious bovine keratoconjunctivitis vaccines. Smith PC, et al. **Am J Vet Res** 1990 Jul;51(7):1147-50

Rapid presumptive diagnosis of anaerobic infections in animals by gas-liquid chromatography. van den Bogaard AE, et al. **Am J Vet Res** 1989 Sep;50(9):1454-9

A concurrent increasing of natural antibodies and enhancement of resistance to furunculosis in rainbow trout. Michel C, et al. **Ann Rech Vet** 1990;21(3):211-8

Motile aeromonas infection of striped (grey) mullet Mugil cephalus. Soliman MK, et al. **Antonie Van Leeuwenhoek** 1989 Nov;56(4):323-35

A collapse syndrome associated with gram-negative infection in cows treated with dexamethasone to induce parturition [letter] Browning JW, et al. **Aust Vet J** 1990 Jan;67(1):28-9

A field evaluation of an indirect fluorescent antibody-based broodstock screening test used to control the vertical transmission of Renibacterium salmoninarium in Chinook salmon (Oncorhynchus tshawytscha). Armstrong RD, et al. **Can J Vet Res** 1989 Oct;53(4):385-9

Our understanding of the Pasteurellaceae. Biberstein EL. **Can J Vet Res** 1990 Apr;54 Suppl:S78-82 (75 ref.)

Positive and negative aspects of host immune response to Haemophilus, Actinobacillus and Pasteurella. Stephens LR. **Can J Vet Res** 1990 Apr;54 Suppl:S41-4 (52 ref.)

Haemophilus, Actinobacillus, Pasteurella: mechanisms of resistance and antibiotic therapy. Willson PJ. **Can J Vet Res** 1990 Apr;54 Suppl:S73-7 (39 ref.)

Debridement of septic physeal lesions in 3 foals. Baird AN, et al. **Cornell Vet** 1990 Jan;80(1):85-95

Primary cholangiohepatitis in a horse. Schulz KS, et al. **Cornell Vet** 1990 Jan;80(1):35-40

Lymphomyeloid cells, susceptibility to erythrodermatitis of carp and bacterial antigens. Sövényi JF, et al. **Dev Comp Immunol** 1990 Spring;14(2):185-200

Some observations on the faecal carriage of mesophilic Aeromonas species in cows and pigs. Gray SJ, et al. **Epidemiol Infect** 1989 Dec;103(3):523-37

A tracheoscopic technique for obtaining uncontaminated lower airway secretions for bacterial culture in the horse [see comments] Darien BJ, et al. **Equine Vet J** 1990 May; 22(3):170-3 Comment in: Equine Vet J 1990 May;22(3):147-8.

Immunoelectron microscopic demonstration that Renibacterium salmoninarum is encapsulated. Dubreuil D, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1-3):313-5

Evidence against dormancy in the bacterial fish pathogen Aeromonas salmonicida subsp. salmonicida. Rose AS, et al. **FEMS Microbiol Lett** 1990 Mar 1;56(1-2):105-7

Comparison of two sample collection methods for quantitative bacteriologic culture of canine prostatic fluid. Ling GV, et al. **J Am Vet Med Assoc** 1990 May 1; 196(9):1479-82

Bacterial growth associated with metallic implants in dogs. Smith MM, et al. **J Am Vet Med Assoc** 1989 Sep 15; 195(6):765-7

Isolation of Eubacterium suis from sows with cystitis. Walker RL, et al. **J Am Vet Med Assoc** 1989 Oct 15;195(8):1104-7

Characterization of some previously unclassified Pasteurellaceae isolated from hamsters. Krause T, et al. **J Appl Bacteriol** 1989 Aug;67(2):171-5

Argyrophilic, intracellular bacteria in some cats with idiopathic peripheral lymphadenopathy. Kirkpatrick CE, et al. **J Comp Pathol** 1989 Oct;101(3):341-9

Cilia-associated respiratory bacillus infection in rabbits. Kurisu K, et al. **Lab Anim Sci** 1990 Jul;40(4):413-5

Detection of endotoxin in affected milk from cows with coliform mastitis. Anri A. **Nippon Juigaku Zasshi** 1989 Aug; 51(4):847-8

Prevalence of antibodies in goats in north-eastern Brazil to selected viral and bacterial agents. Brown CC, et al. **Trop Anim Health Prod** 1989 Aug;21(3):167-9

Perioperative antimicrobial considerations for gastrointestinal surgery of cattle. Brumbaugh GW. **Vet Clin North Am Food Anim Pract** 1990 Jul;6(2):307-33 (95 ref.)

In vitro immunologic features of Weimaraner dogs with neutrophil abnormalities and recurrent infections. Couto CG, et al. **Vet Immunol Immunopathol** 1989 Nov 30; 23(1-2):103-12

Isolation of Neisseria cuniculi from a case of ovine pneumonia. Elad D. **Vet Microbiol** 1989 Dec;21(2):185-8

Summer mastitis in heifers: a bacteriological examination of secretions from clinical cases of summer mastitis in Denmark. Madsen M, et al. **Vet Microbiol** 1990 May; 22(4):319-28

Current views on the pathogenesis of bacterial endometritis in mares. Allen WE, et al. **Vet Rec** 1989 Sep 9; 125(11):298-301 (64 ref.)

Taylorella equigenitalis isolated from an aborted foal. Fontijne P, et al. **Vet Rec** 1989 Nov 4;125(19):485

Bacterial diseases of marine fish. Frerichs GN. **Vet Rec** 1989 Sep 16;125(12):315-8 (49 ref.)

Intramammary infections and risk factors for clinical mastitis in herds with low somatic cell counts in bulk milk [see comments] Schukken YH, et al. **Vet Rec** 1989 Oct 7; 125(15):393-6 Comment in: Vet Rec 1989 Nov 25;125(22):561. Comment in: Vet Rec 1989 Dec 16;125(25):628.

Bovine uterine defense mechanisms: a review. Hussain AM. **Zentralbl Veterinarmed [B]** 1989 Nov;36(9):641-51 (101 ref.)

[Epidemic deaths of wild birds after Aeromonas hydrophila infection] Korbel R, et al. **Tierarztl Prax** 1989;17(3):297-8 (Eng. Abstr.) **(Ger)**

[Disease of the laryngeal sacs (sacci laryngis) in a pygmy chimpanzee (Pan paniscus)] Rietschel W, et al. **Tierarztl Prax** 1989;17(3):323-6 (Eng. Abstr.) **(Ger)**

[The antagonistic activity of lactic acid bacteria in relation to the causative agents of intestinal diseases in domestic birds] Kvasnikov EI, et al. **Mikrobiol Zh** 1983 Sep-Oct; 45(5):27-32 (Eng. Abstr.) **(Rus)**

[Use of semisynthetic penicillin in the treatment of infectious mastitis in cows during the dry period] Vasil' M, et al. **Vet Med (Praha)** 1990 Mar;35(3):155-64 (Eng. Abstr.) **(Slo)**

BACTERIAL OUTER MEMBRANE PROTEINS

Solid-phase synthesis and applications of N-(S-acetylmercaptoacetyl) peptides. Drijfhout JW, et al. **Anal Biochem** 1990 Jun;187(2):349-54

Helix formation and stability in a signal sequence. Bruch MD, et al. **Biochemistry** 1989 Oct 17;28(21):8554-61

Mechanisms of attack and defence at the cell surface: the use of phospholipid bilayers as models for cell membrane. Pasternak CA, et al. **Biosci Rep** 1989 Aug;9(4):503-7 (27 ref.)

Nature and organization of adhesins. Jann K, et al. **Curr Top Microbiol Immunol** 1990;151:55-70 (62 ref.)

Colonization factor antigens of enterotoxigenic Escherichia coli in animals. Moon HW. **Curr Top Microbiol Immunol** 1990;151:147-65 (111 ref.)

The voltage-dependent activity of Escherichia coli porins in different planar bilayer reconstitutions. Lakey JH, et al. **Eur J Biochem** 1989 Dec 8;186(1-2):303-8

The three-dimensional structure of porin from Rhodobacter capsulatus at 3 A resolution. Weiss MS, et al. **FEBS Lett** 1990 Jul 16;267(2):268-72

Comment: Is there a direct functional link between porin and mitochondrial anion carriers? [letter; comment] Wojtczak L, et al. **FEBS Lett** 1990 Mar 12;262(1):149-51 Comment on: FEBS Lett 1989 Apr 24;247(2):330-2.

Densely packed beta-structure at the protein-lipid interface of porin is revealed by high-resolution cryo-electron microscopy. Sass HJ, et al. **J Mol Biol** 1989 Sep 5; 209(1):171-5

Crystallization and preliminary X-ray characterization of maltoporin from Escherichia coli. Stauffer KA, et al. **J Mol Biol** 1990 Jan 20;211(2):297-9

Structure of PhoE porin in projection at 3.5 A resolution. Jap BK, et al. **J Struct Biol** 1990 Mar;103(1):57-63

From the Centers for Disease Control. Change in administration schedule for Haemophilus b conjugate vaccines. **JAMA** 1990 May 9;263(18):2429

H influenzae vaccines gain favor [news] Marwick C. **JAMA** 1990 Sep 19;264(11):1375

Supplementary statement: change in administration schedule for haemophilus b conjugate vaccines. **MMWR** 1990 Apr 13;39(14):232-3

Expression of two gas vacuole protein genes in Halobacterium halobium and other related species. Horne M, et al. **Mol Gen Genet** 1989 Sep;218(3):437-44

Comparative immune responses to Haemophilus influenzae type b polysaccharide and a polysaccharide-protein conjugate vaccine. Kim KS, et al. **Pediatrics** 1990 Apr;85(4 Pt 2):648-50

Synporins—synthetic proteins that emulate the pore structure of biological ionic channels. Montal M, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):6929-33

[Identification of human porins. II. Characterization and primary structure of a 31-kDa porin from human B lymphocytes (Porin 31HL).] Kayser H, et al. **Biol Chem Hoppe Seyler** 1989 Dec;370(12):1265-78 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Protective immunization against experimental Bacteroides (Porphyromonas) gingivalis infection. Chen PB, et al. **Infect Immun** 1990 Oct;58(10):3394-400

Safety, tolerability, and immunogenicity of concurrent administration of Haemophilus influenzae type b conjugate vaccine (meningococcal protein conjugate) with either measles-mumps-rubella vaccine or diphtheria-tetanus-pertussis and oral poliovirus vaccines in 14- to 23-month-old infants. Dashefsky B, et al. **Pediatrics** 1990 Apr;85(4 Pt 2):682-9

Haemophilus influenzae type b conjugate vaccine (meningococcal protein conjugate): immunogenicity and safety at various doses. Yogev R, et al. **Pediatrics** 1990 Apr;85(4 Pt 2):690-3

ANALYSIS

Porin as a component of Yersinia pseudotuberculosis endotoxin. Ovodov YS, et al. **Adv Exp Med Biol** 1990; 256:185-7

Identification of Bordetella avium antigens recognized after experimental inoculation in turkeys. Hellwig DH, et al. **Am J Vet Res** 1990 Aug;51(8):1188-91

Outer membrane protein profiles of Edwardsiella ictaluri from fish. Newton JC, et al. **Am J Vet Res** 1990 Feb; 51(2):211-5

Diffusion of beta-lactam antibiotics through liposome membranes reconstituted from purified porins of the outer membrane of Pseudomonas aeruginosa. Satake S, et al. **Antimicrob Agents Chemother** 1990 May;34(5):685-90

Demonstration and characterization of human cardiac porin: a voltage-dependent channel involved in adenine nucleotide movement across the outer mitochondrial membrane. Towbin JA, et al. **Biochem Med Metab Biol** 1989 Oct;42(2):161-9

Identification of the K99 (F5) fimbrial adhesin in commercial vaccines used against calf enteritis. Thorns CJ, et al. **Biologicals** 1990 Apr;18(2):113-5

Role of the outer membrane for quinolone resistance in enterobacteria. Dechène M, et al. **Chemotherapy** 1990; 36(1):13-23

Lipopolysaccharide-protein interactions: determination of dissociation constants by affinity electrophoresis. Borneleit P, et al. **Electrophoresis** 1989 Dec;10(12):848-52

Electrophoretic characterisation of the outer membrane proteins of Yersinia pestis isolated in north-east Brazil.

Abath FG, et al. **Epidemiol Infect** 1989 Dec;103(3):595–602

Bacterial histone-like protein I' (HLP-I) is an outer membrane constituent? Hirvas L, et al. **FEBS Lett** 1990 Mar 12;262(1):123–6

Outer membrane proteins as major antigens of Fusobacterium nucleatum. Bakken V, et al. **FEMS Microbiol Immunol** 1989 Dec;1(8–9):473–83

An outer membrane protein characteristic of mucoid strains of Pseudomonas aeruginosa. Grabert E, et al. **FEMS Microbiol Lett** 1990 Mar 1;56(1–2):83–7

Outer membrane proteins of gentamicin induced small colony variants of Pseudomonas aeruginosa. Langford PR, et al. **FEMS Microbiol Lett** 1989 Oct 1;52(1–2):33–6

Surface characteristics of Wolinella recta ATCC 33238 and human clinical isolates: correlation of structure with function. Borinski R, et al. **Infect Immun** 1990 Sep; 58(9):2770–6

Pilins from the B serogroup of Bacteroides nodosus: characterization, expression, and cross-protection. Elleman TC, et al. **Infect Immun** 1990 Jun;58(6):1545–51

Chlamydia trachomatis-host cell interactions: role of the chlamydial major outer membrane protein as an adhesin. Su H, et al. **Infect Immun** 1990 Apr;58(4):1017–25

Variation in expression of class 1 and class 5 outer membrane proteins during nasopharyngeal carriage of Neisseria meningitidis. Woods JP, et al. **Infect Immun** 1990 Feb; 58(2):569–72

Antigenic relatedness between the spiralins of Spiroplasma citri and Spiroplasma melliferum. Zaaria A, et al. **J Bacteriol** 1990 Sep;172(9):5494–6

Measurements of lipopolysaccharide (endotoxin) in meningococcal protein and polysaccharide preparations for vaccine usage. Tsai CM, et al. **J Biol Stand** 1989 Jul; 17(3):249–58

Protein banding patterns of the outer membrane-enriched fraction of Bacteroides bivius. Dinsmoor MJ, et al. **J Clin Microbiol** 1990 Mar;28(3):405–8

Characterization of a tick isolate of Borrelia burgdorferi that possesses a major low-molecular-weight surface protein. Kurashige S, et al. **J Clin Microbiol** 1990 Jun;28(6):1362–6

Iron-repressible outer-membrane proteins of Pasteurella haemolytica. Deneer HG, et al. **J Gen Microbiol** 1989 Feb; 135 (Pt 2):435–43

Characterization of the outer-membrane proteins of Haemophilus parainfluenzae expressed under iron-sufficient and iron-restricted conditions. Morton DJ, et al. **J Gen Microbiol** 1989 Feb;135 (Pt 2):445–51

Outer membrane protein and lipopolysaccharide heterogeneity among Eikenella corrodens isolates. Chen CK, et al. **J Infect Dis** 1990 Sep;162(3):664–71

Enterotoxins and adhesins of enterotoxigenic Escherichia coli: are they risk factors for acute diarrhea in the community? López-Vidal Y, et al. **J Infect Dis** 1990 Aug; 162(2):442–7

A novel chromosomal TEM derivative and alterations in outer membrane proteins together mediate selective ceftazidime resistance in Escherichia coli. Weber DA, et al. **J Infect Dis** 1990 Aug;162(2):460–5

Outer membrane proteins of bovine strains of Pasteurella multocida type A and their doubtful role as protective antigens. Abdullahi MZ, et al. **J Med Microbiol** 1990 May; 32(1):55–61

The complete primary structure of pilin from Haemophilus influenzae type b strain Eagan. Armes LG, et al. **J Protein Chem** 1990 Feb;9(1):45–52

Serological and morphological observation on the outer membrane of Bacteroides succinogenes. Sato S, et al. **Nippon Juigaku Zasshi** 1990 Feb;52(1):163–4

The OmpC protein of Yersinia enterocolitica: purification and properties. Brzostek K, et al. **Res Microbiol** 1989 Nov–Dec;140(9):599–614

Growth conditions and outer membrane proteins of Fusobacterium nucleatum. Bakken V, et al. **Scand J Dent Res** 1990 Jun;98(3):215–24

Cell envelope proteins of environmental Vibrio cholerae non O1 isolates from Albufera Lake (Valencia, Spain) influence of some factors on OMP expression. Amaro C, et al. **Zentralbl Hyg Umweltmed** 1989 Nov;189(2):164–74

[Relation of the adhesion of enteropathogenic Escherichia coli O127H6 and outer membrane protein and its related plasmids] Peng RQ, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Aug;69(8):462–5 **(Chi)**

[Methods of isolation and polypeptide composition of membrane fractions of Rickettsia prowazekii] Emel'ianov VV, et al. **Mol Gen Mikrobiol Virusol** 1990 Apr;(4):28–32 (Eng. Abstr.) **(Rus)**

[Outer membranes of Francisella tularensis and their protein composition] Rodionov IV, et al. **Mol Gen Mikrobiol Virusol** 1989 Dec;(12):22–5 (Eng. Abstr.) **(Rus)**

[Secretion of pectate lyase and protein composition of the outer membrane of Erwinia chrysanthemi ENA49 cells] Shevchik VE, et al. **Mol Gen Mikrobiol Virusol** 1989 Aug; (8):23–7 (Eng. Abstr.) **(Rus)**

[Electrophoretic study of the outer membrane proteins of leptospirae] Khisamov GZ, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Sep;(9):26–8 (Eng. Abstr.) **(Rus)**

[Electrophoretic analysis of the exoproducts of bacteria in the genus Pseudomonas] Volchkevich ZhA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Aug;(8):24–8 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Cross-resistance to fluoroquinolones in multiple-antibiotic-resistant (Mar) Escherichia coli selected by tetracycline or chloramphenicol: decreased drug accumulation associated with membrane changes in addition to OmpF reduction. Cohen SP, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1318–25

Antimicrobial susceptibility of Salmonella typhimurium carrying the outer membrane permeability mutation SS-B. Vaara M. **Antimicrob Agents Chemother** 1990 May; 34(5):853–7

Iron-regulated outer membrane proteins in the periodontopathic bacterium, Bacteroides gingivalis. Bramanti TE, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1146–54

Cyclic AMP inhibits protein synthesis in Chlamydia trachomatis at a transcriptional level. Kaul R, et al. **Biochim Biophys Acta** 1990 Jun 12;1053(1):106–12

Role of the cell surface-exposed regions of outer membrane protein PhoE of Escherichia coli K12 in the biogenesis of the protein. Agterberg M, et al. **Eur J Biochem** 1989 Nov 6;185(2):365–70

Biogenesis of prokaryotic pores. Nikaido H, et al. **Experientia** 1990 Feb 15;46(2):174–80 (63 ref.)

Electron microscopic study of coexpression of adhesive protein capsules and polysaccharide capsules in Escherichia coli. Kröncke KD, et al. **Infect Immun** 1990 Aug; 58(8):2710–4

Persistence of Pseudomonas aeruginosa during ciprofloxacin therapy of a cystic fibrosis patient: transient resistance to quinolones and protein F-deficiency. Chamberland S, et al. **J Antimicrob Chemother** 1990 Jun;25(6):995–1010

Influence of nutrient-limited growth on pathogenesis-associated outer membrane proteins of Yersinia enterocolitica. Harakeh S, et al. **J Appl Bacteriol** 1989 Aug;67(2):209–12

Osmotic regulation of PhoE porin synthesis in Escherichia coli. Meyer SE, et al. **J Bacteriol** 1990 Sep;172(9):5501–2

Production of the fimbrial adhesin 987P by enterotoxigenic Escherichia coli during growth under controlled conditions in a chemostat. van der Woude MW, et al. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3421–9

Growth-rate-dependent synthesis of K99 fimbrial subunits is regulated at the level of transcription. van der Woude MW, et al. **J Gen Microbiol** 1990 May;136 (Pt 5):897–903

In vivo and in vitro expression of outer membrane components of Haemophilus influenzae. van Alphen L, et al. **Microb Pathog** 1990 Apr;8(4):279–88

Osmotic regulation of porin expression: a role for DNA supercoiling. Graeme-Cook KA, et al. **Mol Microbiol** 1989 Sep;3(9):1287–94

Effects of food preservatives and local anesthetics on synthesis of outer membrane proteins in Vibrio parahaemolyticus. Koga T, et al. **Tokushima J Exp Med** 1989 Jun;36(1–2):41–5

CHEMICAL SYNTHESIS

Synthesis of biologically active pentapeptide analogs of the N-terminal part of lipoprotein from the outer membrane of Escherichia coli. Kurimura M, et al. **Chem Pharm Bull (Tokyo)** 1990 Apr;38(4):1110–2

GENETICS

Prevalence of four enterotoxin (STaP, STaH, STb, and LT) and four adhesin subunit (K99, K88, 987P, and F41) genes among Escherichia coli isolates from cattle. Mainil JG, et al. **Am J Vet Res** 1990 Feb;51(2):187–90

Characterization of the 120-kDa surface protein gene of Rickettsia rickettsii (R strain). Gilmore RD Jr. **Ann N Y Acad Sci** 1990;590:459–67

Identification and cloning of a 27-kDa Coxiella burnetii immunoreactive protein. Hendrix LR, et al. **Ann N Y Acad Sci** 1990;590:534–40

Activity of KB-5246 against outer membrane mutants of Escherichia coli and Salmonella typhimurium. Kotera Y, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1323–5

Outer membrane barrier as a mechanism of antimicrobial resistance. Nikaido H. **Antimicrob Agents Chemother** 1989 Nov;33(11):1831–6 (60 ref.)

In vitro activity of amifloxacin against outer membrane mutants of the family Enterobacteriaceae and frequency of spontaneous resistance. Watanabe M, et al. **Antimicrob Agents Chemother** 1989 Nov;33(11):1837–40

Development of enterobacterium-specific oligonucleotide probes based on the surface-exposed regions of outer membrane proteins. Spierings G, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3250–2

Gas vesicle proteins. Walsby AE, et al. **Biochem J** 1989 Dec 1;264(2):313–22 (59 ref.)

Antibodies against synthetic peptides and the topology of LamB, an outer membrane protein from Escherichia coli K12. Molla A, et al. **Biochemistry** 1989 Oct 3; 28(20):8234–41

Structure and function of an OmpC deletion mutant porin from Escherichia coli K-12. Rocque WJ, et al. **Biochemistry** 1990 Jun 5;29(22):5344–51

Lipid and peptide specificities in signal peptide—lipid interactions in model membranes. Demel RA, et al. **Biochim Biophys Acta** 1990 Aug 24;1027(2):155–62

Cleavages in the 5' region of the ompA and bla mRNA control stability: studies with an E. coli mutant altering mRNA stability and a novel endoribonuclease. Lundberg U, et al. **EMBO J** 1990 Sep;9(9):2731–41

Phosphorylation of a bacterial activator protein, OmpR, by a protein kinase, EnvZ, stimulates the transcription of the ompF and ompC genes in Escherichia coli. Aiba H, et al. **FEBS Lett** 1990 Feb 12;261(1):19–22

Comparison of mitochondrial cationic channels in wild-type and porin-deficient mutant yeast. Fèvre F, et al. **FEBS Lett** 1990 Mar 26;262(2):201–4

Amino acid sequence of pheromone-inducible surface protein in Enterococcus faecalis, that is encoded on the conjugative plasmid pPD1. Nakayama J, et al. **FEBS Lett** 1990 Jul 2; 267(1):81–4

Cyclic AMP stimulates transcription of the structural gene of the outer-membrane protein OmpA of Escherichia coli. Gibert I, et al. **FEMS Microbiol Lett** 1990 Mar 15; 56(3):307–11

Sequence analysis of the major outer membrane protein gene of an ovine abortion strain of Chlamydia psittaci. Herring AJ, et al. **FEMS Microbiol Lett** 1989 Nov;53(1–2):153–8

Osmoregulatory expression of porin genes in Escherichia coli: a comparative study on strains B and K-12. Mizuno T, et al. **FEMS Microbiol Lett** 1990 Mar 15;56(3):289–93

Osmoregulatory expression of the ompC gene in Escherichia coli K-12; IS1 insertion in the upstream regulatory region results in constitutive activation of the promoter. Ozawa Y, et al. **FEMS Microbiol Lett** 1990 Mar 15;56(3):295–9

Analysis of OmpC-beta-lactamase hybrid proteins: OmpC appears not to contain discrete localization signals. Saarilahti HT, et al. **FEMS Microbiol Lett** 1990 May; 57(1–2):49–54

Chlamydia trachomatis 60 kDa cysteine rich outer membrane protein: sequence homology between trachoma and LGV biovars. Watson MW, et al. **FEMS Microbiol Lett** 1989 Dec;53(3):293–7

Outer-membrane PhoE protein of Escherichia coli K-12 as an exposure vector: possibilities and limitations. Agterberg M, et al. **Gene** 1990 Mar 30;88(1):37–45

Nucleotide sequence of the structural gene, tcpA, for a major pilin subunit of Vibrio cholerae. Faast R, et al. **Gene** 1989 Dec 21;85(1):227–31

Expression of the Chlamydia trachomatis major outer membrane protein-encoding gene in Escherichia coli: role of the 3' end in mRNA stability. Kaul R, et al. **Gene** 1990 Mar 1;87(1):97–103

Complete sequence of the ompH gene encoding the 16-kDa cationic outer membrane protein of Salmonella typhimurium. Koski P, et al. **Gene** 1990 Mar 30; 88(1):117–20

Sulfur-rich proteins of Chlamydia trachomatis: developmentally regulated transcription of polycistronic mRNA from tandem promoters. Lambden PR, et al. **Gene** 1990 Mar 1;87(1):105–12

The activity of the Pseudomonas aeruginosa pilin promoter is enhanced by an upstream regulatory site. Pasloske BL, et al. **Gene** 1989 Sep 1;81(1):25–34

Comparative analysis of the Salmonella typhi and Escherichia coli ompC genes. Puente JL, et al. **Gene** 1989 Nov 30; 83(2):197–206

Expression of Neisseria meningitidis iron-regulated outer membrane proteins, including a 70-kilodalton transferrin receptor, and their potential for use as vaccines. Banerjee-Bhatnagar N, et al. **Infect Immun** 1990 Sep; 58(9):2875–81

Impaired colonization by and full invasiveness of Escherichia coli K1 bearing a site-directed mutation in the type 1 pilin gene. Bloch CA, et al. **Infect Immun** 1990 Jan;58(1):275–8

Genetic evidence that the yopA gene-encoded Yersinia outer membrane protein YopI mediates inhibition of the anti-invasive effect of interferon. Bukholm G, et al. **Infect Immun** 1990 Jul;58(7):2245–51

A rns-like regulatory gene for colonization factor antigen I (CFA/I) that controls expression of CFA/I pilin. Caron J, et al. **Infect Immun** 1990 Apr;58(4):874–8

Characterization of a mutant of Haemophilus influenzae type b lacking the P2 major outer membrane protein. Cope LD, et al. **Infect Immun** 1990 Oct;58(10):3312–8

The 75-kilodalton protein of Chlamydia trachomatis: a member of the heat shock protein 70 family? Danilition SL, et al. **Infect Immun** 1990 Jan;58(1):189–96

Characterization of the pilin gene of Moraxella bovis Dalton 2d and expression of pili from M. bovis in Pseudomonas aeruginosa. Elleman TC, et al. **Infect Immun** 1990 Jun; 58(6):1678–84

DNA sequence and expression of the 36-kilodalton outer membrane protein gene of Brucella abortus. Ficht TA, et al. **Infect Immun** 1989 Nov;57(11):3281–91

Cloning, expression, and sequence analysis of the Haemophilus influenzae type b strain M43p+ pilin gene. Gilsdorf JR, et al. **Infect Immun** 1990 Apr;58(4):1065–72

Identification of an iron-regulated virulence determinant in Vibrio cholerae, using TnphoA mutagenesis. Goldberg MB, et al. **Infect Immun** 1990 Jan;58(1):55–60

Purified P fimbriae from two cloned gene clusters of a single pyelonephritogenic strain adhere to unique structures in the human kidney. Karr JF, et al. **Infect Immun** 1989 Nov; 57(11):3594–600

YopM inhibits platelet aggregation and is necessary for virulence of Yersinia pestis in mice. Leung KY, et al. **Infect Immun** 1990 Oct;58(10):3262–71

Secretion of Yop proteins by Yersiniae. Michiels T, et al. **Infect Immun** 1990 Sep;58(9):2840–9

Comparative analysis of the structures of the outer membrane protein P1 genes from major clones of Haemophilus influenzae type b. Munson R Jr, et al. **Infect Immun** 1989 Nov;57(11):3300–5

Fusion of genes encoding Escherichia coli heat–stable enterotoxin and outer membrane protein OmpC. Saarilahti HT, et al. **Infect Immun** 1989 Nov;57(11):3663–5

Vibrio cholerae O395 tcpA pilin gene sequence and comparison of predicted protein structural features to those of type 4 pilins. Shaw CE, et al. **Infect Immun** 1990 Sep; 58(9):3042–9

Isolation of Neisseria meningitidis mutants deficient in class 1 (porA) and class 3 (porB) outer membrane proteins. Tommassen J, et al. **Infect Immun** 1990 May;58(5):1355–9

Multiple tandem promoters of the major outer membrane protein gene (omp1) of Chlamydia psittaci. Yuan Y, et al. **Infect Immun** 1990 Sep;58(9):2850–5

Genetic suppression demonstrates interaction of TonB protein with outer membrane transport proteins in Escherichia coli. Bell PE, et al. **J Bacteriol** 1990 Jul; 172(7):3826–9

A membrane protein with similarity to N–methylphenylalanine pilins is essential for DNA binding by competent Bacillus subtilis. Breitling R, et al. **J Bacteriol** 1990 Mar;172(3):1499–508

Insertion mutagenesis of the gene encoding the ferrichrome–iron receptor of Escherichia coli K–12. Carmel G, et al. **J Bacteriol** 1990 Apr;172(4):1861–9

Organization and nucleotide sequences of the Spiroplasma citri genes for ribosomal protein S2, elongation factor Ts, spiralin, phosphofructokinase, pyruvate kinase, and an unidentified protein. Chevalier C, et al. **J Bacteriol** 1990 May;172(5):2693–703

micF RNA in ompB mutants of Escherichia coli: different pathways regulate micF RNA levels in response to osmolarity and temperature change. Coyer J, et al. **J Bacteriol** 1990 Aug;172(8):4143–50

Conserved structures of cell wall protein genes among protein–producing Bacillus brevis strains. Ebisu S, et al. **J Bacteriol** 1990 Mar;172(3):1312–20

Binding to collagen by Yersinia enterocolitica and Yersinia pseudotuberculosis: evidence for yopA–mediated and chromosomally encoded mechanisms. Emödy L, et al. **J Bacteriol** 1989 Dec;171(12):6674–9

The ompA 5′ untranslated RNA segment functions in Escherichia coli as a growth–rate–regulated mRNA stabilizer whose activity is unrelated to translational efficiency. Emory SA, et al. **J Bacteriol** 1990 Aug; 172(8):4472–81

Genetic analysis of the yopE region of Yersinia spp.: identification of a novel conserved locus, yerA, regulating yopE expression. Forsberg A, et al. **J Bacteriol** 1990 Mar; 172(3):1547–55

In vivo phosphorylation of OmpR, the transcription activator of the ompF and ompC genes in Escherichia coli. Forst S, et al. **J Bacteriol** 1990 Jun;172(6):3473–7

Characterization of ompF domains involved in Escherichia coli K–12 sensitivity to colicins A and N. Fourel D, et al. **J Bacteriol** 1990 Jul;172(7):3675–80

Sequence analysis of the inversion region containing the pilin genes of Moraxella bovis. Fulks KA, et al. **J Bacteriol** 1990 Jan;172(1):310–6

Enhancement of protein translocation across the membrane by specific mutations in the hydrophobic region of the signal peptide. Goldstein J, et al. **J Bacteriol** 1990 Mar; 172(3):1225–31

Structure and function of conjugative pili: monoclonal antibodies as probes for structural variants of F pili. Grossman TH, et al. **J Bacteriol** 1990 Mar;172(3):1174–9

Point mutations in a conserved region (TonB box) of Escherichia coli outer membrane protein BtuB affect vitamin B12 transport. Gudmundsdottir A, et al. **J Bacteriol** 1989 Dec;171(12):6526–33

Effects of alfalfa nod gene–inducing flavonoids on nodABC transcription in Rhizobium meliloti strains containing different nodD genes. Hartwig UA, et al. **J Bacteriol** 1990 May;172(5):2769–73

Integration host factor is a negative effector of in vivo and in vitro expression of ompC in Escherichia coli. Huang L, et al. **J Bacteriol** 1990 Sep;172(9):5293–8

Molecular characterization of an Enterobacter cloacae gene (romA) which pleiotropically inhibits the expression of Escherichia coli outer membrane proteins. Komatsu T, et al. **J Bacteriol** 1990 Jul;172(7):4082–9

PapD, a periplasmic transport protein in P–pilus biogenesis. Lindberg F, et al. **J Bacteriol** 1989 Nov;171(11):6052–8

Evidence for multiple OmpR–binding sites in the upstream activation sequence of the ompC promoter in Escherichia coli: a single OmpR–binding site is capable of activating the promoter. Maeda S, et al. **J Bacteriol** 1990 Jan; 172(1):501–3

Identification, cloning, and sequencing of piv, a new gene involved in inverting the pilin genes of Moraxella lacunata. Marrs CF, et al. **J Bacteriol** 1990 Aug;172(8):4370–7

Export of FepA::PhoA fusion proteins to the outer membrane of Escherichia coli K–12. Murphy CK, et al. **J Bacteriol** 1989 Nov;171(11):5894–900

Products of three accessory genes, pilB, pilC, and pilD, are required for biogenesis of Pseudomonas aeruginosa pili. Nunn D, et al. **J Bacteriol** 1990 Jun;172(6):2911–9

The Yersinia enterocolitica inv gene product is an outer membrane protein that shares epitopes with Yersinia pseudotuberculosis invasin. Pepe JC, et al. **J Bacteriol** 1990 Jul;172(7):3780–9

S–layer protein gene of Acetogenium kivui: cloning and expression in Escherichia coli and determination of the nucleotide sequence. Peters J, et al. **J Bacteriol** 1989 Nov; 171(11):6307–15

Use of a wild–type gene fusion to determine the influence of environmental conditions on expression of the S fimbrial adhesin in an Escherichia coli pathogen. Schmoll T, et al. **J Bacteriol** 1990 Sep;172(9):5103–11

Shuttle mutagenesis of Neisseria gonorrhoeae: pilin null mutations lower DNA transformation competence. Seifert HS, et al. **J Bacteriol** 1990 Jan;172(1):40–6

Transcriptional induction of purple membrane and gas vesicle synthesis in the archaebacterium Halobacterium halobium is blocked by a DNA gyrase inhibitor. Yang CF, et al. **J Bacteriol** 1990 Jul;172(7):4118–21

Sequence homology between the subunits of two immunologically and functionally distinct types of fimbriae of Actinomyces spp. Yeung MK, et al. **J Bacteriol** 1990 May;172(5):2462–8

The function of micF RNA. micF RNA is a major factor in the thermal regulation of OmpF protein in Escherichia coli. Andersen J, et al. **J Biol Chem** 1989 Oct 25; 264(30):17961–70

Molecular analysis of the Escherichia coli ferric enterobactin receptor FepA. Armstrong SK, et al. **J Biol Chem** 1990 Aug 25;265(24):14536–43

Surface array protein of Campylobacter fetus. Cloning and gene structure. Blaser MJ, et al. **J Biol Chem** 1990 Aug 25;265(24):14529–35

Transcription of osmB, a gene encoding an Escherichia coli lipoprotein, is regulated by dual signals. Osmotic stress and stationary phase. Jung JU, et al. **J Biol Chem** 1990 Jun 25;265(18):10574–81

Restoration of membrane incorporation of an Escherichia coli outer membrane protein (OmpA) defective in membrane insertion. Klose M, et al. **J Biol Chem** 1989 Dec 25;264(36):21842–7

Isolation, cloning, and primary structure of a cationic 16–kDa outer membrane protein of Salmonella typhimurium. Koski P, et al. **J Biol Chem** 1989 Nov 15;264(32):18973–80

SecB protein stabilizes a translocation–competent state of purified prePhoE protein. Kusters R, et al. **J Biol Chem** 1989 Dec 15;264(35):20827–30

Characterization of OmpR binding sequences in the upstream region of the ompF promoter essential for transcriptional activation. Rampersaud A, et al. **J Biol Chem** 1989 Nov 5;264(31):18693–700

Evidence for the direct interaction between tightly bound divalent metal ion and ATP on actin. Binding of the lambda isomers of beta gamma–bidentate cratp to actin. Valentin–Ranc C, et al. **J Biol Chem** 1989 Dec 15; 264(35):20871–80

Genotypic heterogeneity of strains of Citrobacter diversus expressing a 32–kilodalton outer membrane protein associated with neonatal meningitis. Li J, et al. **J Clin Microbiol** 1990 Aug;28(8):1760–5

Detection of Borrelia burgdorferi using the polymerase chain reaction. Malloy DC, et al. **J Clin Microbiol** 1990 Jun; 28(6):1089–93

Characterization of epidemic and nonepidemic Neisseria meningitidis serogroup A strains from Sudan and Sweden. Salih MA, et al. **J Clin Microbiol** 1990 Aug;28(8):1711–9

Use of a pilin gene probe to study molecular epidemiology of Pseudomonas aeruginosa. Speert DP, et al. **J Clin Microbiol** 1989 Nov;27(11):2589–93

Molecular cloning and characterization of the structural gene for the major iron–regulated protein expressed by Neisseria gonorrhoeae. Berish SA, et al. **J Exp Med** 1990 May 1; 171(5):1535–46

The pili of Aeromonas hydrophila: identification of an environmentally regulated "mini pilin". Ho AS, et al. **J Exp Med** 1990 Sep 1;172(3):795–806

Role of outer–membrane proteins and lipopolysaccharide in conjugation between Neisseria gonorrhoeae and Neisseria cinerea. Genco CA, et al. **J Gen Microbiol** 1988 Dec;134 (Pt 12):3285–94

Sequence of pilin from Bacteroides nodosus 351 (Serogroup H) and implications for serogroup classification. Hoyne PA, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1113–22

Detection and differentiation of Chlamydia trachomatis, Chlamydia psittaci, and Chlamydia pneumoniae by DNA amplification. Holland SM, et al. **J Infect Dis** 1990 Oct; 162(4):984–7

Frequency and organization of pap homologous DNA in relation to clinical origin of uropathogenic Escherichia coli. Plos K, et al. **J Infect Dis** 1990 Mar;161(3):518–24

Genetic analysis of the switch that controls porin gene expression in Escherichia coli K–12 [published erratum appears in J Mol Biol 1990 Mar 20;212(2):429] Slauch JM, et al. **J Mol Biol** 1989 Nov 20;210(2):281–92

Molecular biology of class 5 outer membrane proteins of Neisseria meningitidis. Aho EL. **Microb Pathog** 1989 Oct; 7(4):249–53 (30 ref.)

Deletions of chromosomal regions coding for fimbriae and hemolysins occur in vitro and in vivo in various extraintestinal Escherichia coli isolates. Hacker J, et al. **Microb Pathog** 1990 Mar;8(3):213–25

Characterization of Holliday structures in FLP protein–promoted site–specific recombination. Meyer–Leon L, et al. **Mol Cell Biol** 1990 Jan;10(1):235–42

Location and organization of the dimethylphenol catabolic genes of Pseudomonas CF600. Bartilson M, et al. **Mol Gen Genet** 1990 Jan;220(2):294–300

Cloning of the excC and excD genes involved in the release of periplasmic proteins by Escherichia coli K12. Lazzaroni JC, et al. **Mol Gen Genet** 1989 Sep;218(3):460–4

Analysis of a mutated phage T6 receptor protein of Escherichia coli K 12. Maier C, et al. **Mol Gen Genet** 1990 May;221(3):491–4

Subcellular localization of proteins encoded by the phenotypically cryptic plasmid of Neisseria gonorrhoeae: biological evidence for outer membrane association of the cppB gene product. Aalen RB, et al. **Mol Microbiol** 1989 Oct;3(10):1433–9

Characterization of the hlyB gene and its role in the production of the El Tor haemolysin of Vibrio cholerae O1. Alm RA, et al. **Mol Microbiol** 1990 Mar;4(3):413–25

Characterization of the repertoire of hypervariable regions in the Protein II (opa) gene family of Neisseria gonorrhoeae. Connell TD, et al. **Mol Microbiol** 1990 Mar; 4(3):439–49

Cloning, expression and sequence analysis of the gene encoding the 120 kD surface–exposed protein of Rickettsia rickettsii. Gilmore RD Jr, et al. **Mol Microbiol** 1989 Nov; 3(11):1579–86

Upstream activating sequences that are shared by two divergently transcribed operons mediate cAMP–CRP regulation of pilus–adhesin in Escherichia coli. Göransson M, et al. **Mol Microbiol** 1989 Nov;3(11):1557–65

Genes for biosynthesis and assembly of CS3 pili of CFA/II enterotoxigenic Escherichia coli: novel regulation of pilus production by bypassing an amber codon. Jalajakumari MB, et al. **Mol Microbiol** 1989 Dec;3(12):1685–95

Molecular analysis of the Haemophilus influenzae type b pilin gene. Langermann S, et al. **Mol Microbiol** 1990 Feb; 4(2):221–30

Diversity of the outer membrane protein P2 gene from major clones of Haemophilus influenzae type b. Munson R Jr, et al. **Mol Microbiol** 1989 Dec;3(12):1797–803

Sequence of the fhuE outer–membrane receptor gene of Escherichia coli K12 and properties of mutants. Sauer M, et al. **Mol Microbiol** 1990 Mar;4(3):427–37

Analysis of genes coding for the sialic acid–binding adhesin and two other minor fimbrial subunits of the S–fimbrial adhesin determinant of Escherichia coli. Schmoll T, et al. **Mol Microbiol** 1989 Dec;3(12):1735–44

The role of transformation in the variability of the Neisseria gonorrhoeae cell surface. Scocca JJ. **Mol Microbiol** 1990 Mar;4(3):321–7 (37 ref.)

Sequence and relatedness in other bacteria of the Pseudomonas aeruginosa oprP gene coding for the phosphate–specific porin P. Siehnel R, et al. **Mol Microbiol** 1990 May;4(5):831–8

Characterization of the traT gene and mutants that increase outer membrane permeability from the Salmonella typhimurium virulence plasmid. Sukupolvi S, et al. **Mol Microbiol** 1990 Jan;4(1):49–57

Integrity of Escherichia coli P pili during biogenesis: properties and role of PapJ. Tennent JM, et al. **Mol Microbiol** 1990 May;4(5):747–58

Stable expression of meningococcal class 1 protein in an antigenically reactive form in outer membranes of Escherichia coli. White DA, et al. **Mol Microbiol** 1990 May;4(5):769–76

A bacterial virulence determinant encoded by lysogenic coliphage lambda. Barondess JJ, et al. **Nature** 1990 Aug 30;346(6287):871–4

Isolation of a gene regulated by hydrostatic pressure in a deep–sea bacterium. Bartlett D, et al. **Nature** 1989 Nov 30;342(6249):572–4

Nucleotide sequence of the Fbp gene from Neisseria meningitidis. Berish SA, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4596

The nucleotide sequence of the por gene from Neisseria gonorrhoeae strain P9 encoding outer membrane protein PIB. Butt NJ, et al. **Nucleic Acids Res** 1990 Jul 25; 18(14):4258

Nucleotide sequence of the fim3 gene from Bordetella pertussis and homology to fim2 and fimX gene products. Cuzzoni A, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1640

Nucleotide sequence of the major outer membrane protein gene from Chlamydia trachomatis serovar H. Hamilton PT, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8366

Nucleotide sequence of the gene, ompW, encoding a 22kDa immunogenic outer membrane protein of Vibrio cholerae. Jalajakumari MB, et al. **Nucleic Acids Res** 1990 Apr 25; 18(8):2180

Analysis of insertion mutants reveals two new genes in the pNRC100 gas vesicle gene cluster of Halobacterium halobium. Jones JG, et al. **Nucleic Acids Res** 1989 Oct 11; 17(19):7785–93

A human gene related to the ribosomal protein L23 gene of Halobacterium marismortui. Mager DL, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5301

Nucleotide sequence of the cell–envelope murG gene of Escherichia coli. Mengin–Lecreulx D, et al. **Nucleic Acids Res** 1990 May 11;18(9):2810

The major outer membrane protein nucleotide sequence of Chlamydia trachomatis, serovar E. Peterson EM, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3414

Cloning and sequencing of the gene encoding the outer surface protein A (OspA) of a European Borrelia burgdorferi isolate. Wallich R, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8864

The nucleotide sequence of the 60 kDa cysteine rich outer membrane protein of Chlamydia pneumoniae strain IOL-207. Watson MW, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5299

The nucleotide sequence of the 60 kDa cysteine rich outer membrane protein of Chlamydia psittaci strain EAE/A22/M. Watson MW, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5300

The nucleotide sequence of major outer membrane protein gene of Chlamydia trachomatis serovar F. Zhang YX, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1061

Identification and characterization of a Neisseria gonorrhoeae gene encoding a glycolipid-binding adhesin. Paruchuri DK, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):333-7

TolC, an Escherichia coli outer membrane protein required for hemolysin secretion. Wandersman C, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4776-80

The molecular biology of Borrelia. Barbour AG. **Rev Infect Dis** 1989 Sep-Oct;11 Suppl 6:S1470-4 (20 ref.)

Bordetella pertussis pilin and pilin-like genes. de Ferra F, et al. **Tokai J Exp Clin Med** 1988;13 Suppl:235-8 (9 ref.)

[Escherichia coli phage receptors. Minor porins and proteins participating in the specific transport as phage receptors] Likhacheva NA, et al. **Mol Gen Mikrobiol Virusol** 1989 Dec;(12):3-12 (72 ref.) (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Polysaccharides and membrane vaccines. Poolman JT. **Adv Biotechnol Processes** 1990;13:57-86 (93 ref.)

Developing a gonococcal protein I vaccine. Blake MS, et al. **Adv Exp Med Biol** 1989;251:315-27 (36 ref.)

Antibody response to P-protein in patients with Branhamella catarrhalis infections. Chi DS, et al. **Am J Med** 1990 May 14;88(5A):25S-27S

Increased adherence to vaginal epithelial cells and phagocytic killing of gonococci and urogenital meningococci associated with heat modifiable proteins. Hagman M, et al. **APMIS** 1989 Sep;97(9):839-44

Antibody response to defined domains on enterobacterial outer membrane proteins in healthy persons and patients with bacteraemia. Henriksen AZ, et al. **APMIS** 1990 Feb; 98(2):163-72

Serum antibodies to cross-reactive Neisseria outer membrane antigens in healthy persons and patients with meningococcal disease. Maeland JA, et al. **APMIS** 1989 Sep;97(9):774-80

Immunological approach of assembly and topology of OmpF, an outer membrane protein of Escherichia coli. Pages JM, et al. **Biochimie** 1990 Feb-Mar;72(2-3):169-76 (72 ref.)

Antibodies to meningococcal H.8 (Lip) antigen fail to show bactericidal activity. Bhattacharjee AK, et al. **Can J Microbiol** 1990 Feb;36(2):117-22

Immune response of young children vaccinated with Haemophilus influenzae type b conjugate vaccines. Madore DV, et al. **Contrib Microbiol Immunol** 1989;10:125-50 (105 ref.)

Definition of meningococcal class 1 OMP subtyping antigens by monoclonal antibodies. Abdillahi H, et al. **FEMS Microbiol Immunol** 1988 Dec;1(3):139-44

Oral vaccination of rats with live avirulent Salmonella derivatives expressing adhesive fimbrial antigens of uropathogenic Escherichia coli. Schmidt G, et al. **FEMS Microbiol Immunol** 1989 Mar;1(4):229-35

Epitopes of serogroup B Neisseria meningitidis analysed in vitro and directly from cerebrospinal fluid. Wall RA, et al. **FEMS Microbiol Lett** 1989 Nov;53(1-2):129-35

Antibody response to epitopes of chlamydial major outer membrane proteins on infectious elementary bodies and of the reduced polyacrylamide gel electrophoresis-separated form. Baghian A, et al. **Infect Immun** 1990 May; 58(5):1379-83

Genetic evidence that the yopA gene-encoded Yersinia outer membrane protein Yop1 mediates inhibition of the anti-invasive effect of interferon. Bukholm G, et al. **Infect Immun** 1990 Jul;58(7):2245-51

Antigenic conservation of the 15,000-dalton outer membrane lipoprotein PCP of Haemophilus influenzae and biologic activity of anti-PCP antisera. Deich RA, et al. **Infect Immun** 1990 Oct;58(10):3388-93

Inhibition of pilus-mediated adhesion of Pseudomonas aeruginosa to human buccal epithelial cells by monoclonal antibodies directed against pili. Doig P, et al. **Infect Immun** 1990 Jan;58(1):124-30

Monoclonal antibodies to outer membrane protein PII block interactions of Neisseria gonorrhoeae with human neutrophils. Elkins C, et al. **Infect Immun** 1990 Apr; 58(4):1078-84

Inflammatory effects of Salmonella typhimurium porins. Galdiero F, et al. **Infect Immun** 1990 Oct;58(10):3183-6

A recombinant non-fatty acylated form of the Hi-PAL (P6) protein of Haemophilus influenzae elicits biologically active antibody against both nontypeable and type b H. influenzae. Green BA, et al. **Infect Immun** 1990 Oct;58(10):3272-8

Structural and antigenic conservation of the P2 porin protein among strains of Haemophilus influenzae type b. Hansen EJ, et al. **Infect Immun** 1989 Nov;57(11):3270-5

Identification of a 68-kilodalton outer membrane protein as the major protective antigen of Bordetella bronchiseptica by using specific-pathogen-free piglets. Kobisch M, et al. **Infect Immun** 1990 Feb;58(2):352-7

Polyclonal anti-idiotypic antibodies exhibit antigenic mimicry of limited type 1 fimbrial proteins of Escherichia coli. Paque RE, et al. **Infect Immun** 1990 Mar;58(3):680-6

Monoclonal antibodies against the 70-kilodalton iron-regulated protein of Neisseria meningitidis are bactericidal and strain specific. Pettersson A, et al. **Infect Immun** 1990 Sep;58(9):3036-41

A strong antibody response to the periplasmic C-terminal domain of the OmpA protein of Escherichia coli is produced by immunization with purified OmpA or with whole E. coli or Salmonella typhimurium bacteria. Puohiniemi R, et al. **Infect Immun** 1990 Jun;58(6):1691-6

Antibody response to Brucella ovis outer membrane proteins in ovine brucellosis. Riezu-Boj JI, et al. **Infect Immun** 1990 Feb;58(2):489-94

Protection of sheep against Chlamydia psittaci infection with a subcellular vaccine containing the major outer membrane protein. Tan TW, et al. **Infect Immun** 1990 Sep;58(9):3101-8

Use of adhesin-specific monoclonal antibodies to identify and localize an adhesin on the surface of Capnocytophaga gingivalis DR2001. Tempro P, et al. **Infect Immun** 1989 Nov;57(11):3418-24

Synthetic peptide segments from the Escherichia coli porin OmpF constitute leukocyte activators. Vordermeier HM, et al. **Infect Immun** 1990 Aug;58(8):2719-24

Mapping antigenic sites on the major outer membrane protein of Chlamydia trachomatis with synthetic peptides. Zhong GM, et al. **Infect Immun** 1990 May;58(5):1450-5

Immunoaccessible peptide sequences of the major outer membrane protein from Chlamydia trachomatis serovar C. Zhong GM, et al. **Infect Immun** 1990 Oct;58(10):3438-41

Interleukin-6 gene expression and production induced in human monocytes by membrane proteoglycans from Klebsiella pneumoniae. Sironi M, et al. **Int J Immunopharmacol** 1990;12(4):397-402

Determinants of OmpF porin antigenicity and structure. Klebba PE, et al. **J Biol Chem** 1990 Apr 25;265(12):6800-10

Antigenic relationships among the porin proteins of encapsulated Haemophilus influenzae clones. Martin D, et al. **J Clin Microbiol** 1990 Aug;28(8):1720-4

Deduced amino acid sequences of class 1 protein (PorA) from three strains of Neisseria meningitidis. Synthetic peptides define the epitopes responsible for serosubtype specificity. McGuinness B, et al. **J Exp Med** 1990 Jun 1;171(6):1871-82

Identification and characterization of T helper cell epitopes of the major outer membrane protein of Chlamydia trachomatis. Su H, et al. **J Exp Med** 1990 Jul 1; 172(1):203-12

Surface-exposed epitopes on the major outer-membrane protein of Chlamydia trachomatis defined with peptide antisera. Conlan JW, et al. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3219-28

The potential protective effect of immunization with outer-membrane protein I from Neisseria gonorrhoeae. Heckels JE, et al. **J Gen Microbiol** 1989 Aug;135 (Pt 8):2269-76

Role of antibodies against outer-membrane proteins in murine resistance to infection with encapsulated Klebsiella pneumoniae. Serushago BA, et al. **J Gen Microbiol** 1989 Aug;135 (Pt 8):2259-68

Location of a blocking epitope on outer-membrane protein III of Neisseria gonorrhoeae by synthetic peptide analysis. Virji M, et al. **J Gen Microbiol** 1989 Jul;135 (Pt 7):1895-9

Complement activation limits the rate of in vitro treponemicidal activity and correlates with antibody-mediated aggregation of Treponema pallidum rare outer membrane protein. Blanco DR, et al. **J Immunol** 1990 Mar 1;144(5):1914-21

Antibodies to major outer membrane proteins of Escherichia coli in urinary infection in the elderly. Nicolle LE, et al. **J Infect Dis** 1989 Oct;160(4):627-33

Distribution and excretion of capsular antigen after immunization with Haemophilus influenzae type b polysaccharide-Neisseria meningitidis outer membrane protein conjugate vaccine. Sood SK, et al. **J Infect Dis** 1990 Mar;161(3):574-7

Immunogenicity and cross-reactivity of the 70-Kda iron-regulated protein of Neisseria meningitidis in man and animals. Ala'Aldeen DA, et al. **J Med Microbiol** 1990 Aug; 32(4):275-81

Biological activity of bacterial surface components: bacterial extracts and defined bacterial cell wall components as immunomodulators. Bessler WG, et al. **Lung** 1990;168 Suppl:707-15

Membrane proteins of Francisella tularensis LVS differ in ability to induce proliferation of lymphocytes from tularemia-vaccinated individuals. Surcel HM, et al. **Microb Pathog** 1989 Dec;7(6):411-9

Protective immunity induced by porin in experimental mouse salmonellosis. Matsui K, et al. **Microbiol Immunol** 1989; 33(9):699-708

Specificity of Salmonella porin as an eliciting antigen for cell-mediated immunity (CMI) reaction in murine salmonellosis. Matsui K, et al. **Microbiol Immunol** 1989; 33(12):1063-7

A potential polyvalent Neisseria meningitidis vaccine based on a mixture of CaCl2 cell extracts from groups A, B and Y. Bisaillon JG, et al. **Microbios** 1989;60(244-245):193-208

Immunological analysis of porin polymorphism in Escherichia coli B and K-12. Lupi N, et al. **Mol Immunol** 1989 Nov;26(11):1027-36

A soluble 60 kiloDalton antigen of Chlamydia spp. is a homologue of Escherichia coli GroEL. Bavoil P, et al. **Mol Microbiol** 1990 Mar;4(3):461-9

A 59 kiloDalton outer membrane protein of Salmonella typhimurium protects against oxidative intraleukocytic killing due to human neutrophils. Stinavage PS, et al. **Mol Microbiol** 1990 Feb;4(2):283-93

Detection of bovine antibodies to the outer membrane of ruminal Bacteroides succinogenes by enzyme-linked immunosorbent assay (ELISA). Sato S, et al. **Nippon Juigaku Zasshi** 1990 Feb;52(1):29-34

Haemophilus influenzae type b conjugate vaccine (meningococcal protein conjugate) (PedvaxHIB): clinical evaluation. Ahonkhai VI, et al. **Pediatrics** 1990 Apr;85(4 Pt 2):676-81

Serologic responses to an Haemophilus influenzae type b polysaccharide-Neisseria meningitidis outer membrane protein conjugate vaccine in very young Gambian infants. Campbell H, et al. **Pediatrics** 1990 Jul;86(1):102-7

Opsonophagocidal activity in sera from infants and children immunized with Haemophilus influenzae type b conjugate vaccine (meningococcal protein conjugate). Gray BM. **Pediatrics** 1990 Apr;85(4 Pt 2):694-7

Immunogenicity of a new Haemophilus influenzae type b conjugate vaccine (meningococcal protein conjugate) (PedvaxHIB). Vella PP, et al. **Pediatrics** 1990 Apr;85(4 Pt 2):668-75

Monoclonal antibodies specific for the outer surface protein A (OspA) of Borrelia burgdorferi prevent Lyme borreliosis in severe combined immunodeficiency (scid) mice. Schaible UE, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(10):3768-72

Reactivity between monoclonal anti-HLA-B27 antibodies and bacterial components: is there a consensus of findings? Ren MN, et al. **Rheumatol Int** 1989;9(3-5):219-21 (16 ref.)

Immunoglobulin V regions of a bactericidal anti-Neisseria meningitidis outer membrane protein monoclonal antibody. Larrick JW, et al. **Scand J Immunol** 1990 Aug;32(2):121-8

Protein I (Por) of Neisseria gonorrhoeae as an immunogen: liposomes, proteosomes, and the lack of blocking antibodies. Wetzler LM, et al. **Trans Assoc Am Physicians** 1989;102:78-90

Outer membrane PhoE protein of Escherichia coli as a carrier for foreign antigenic determinants: immunogenicity of epitopes of foot-and-mouth disease virus. Agterberg M, et al. **Vaccine** 1990 Feb;8(1):85-91

Evaluation of monoclonal antibodies to K88, K99, F41 and 987P fimbrial adhesins for the detection of porcine enterotoxigenic Escherichia coli in paraffin-wax tissue sections. Thorns CJ, et al. **Vet Microbiol** 1989 Aug; 20(4):377-81

Reduced microbicidal activity of peripheral mononuclear phagocytic cells infected with Pasteurella multocida. Truscott WM, et al. **Vet Microbiol** 1990 Jan;21(3):283-90

[Production, identification of four McAbs against leptospiral outer membrane antigens, and analyses of outer membrane antigens of leptospires with McAbs] Qing GF, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Sep;20(3):257-61 (Eng. Abstr.) **(Chi)**

[Study on the characteristics of agglutination reaction of McAb with Leptospira interrogans outer envelope] Yan R, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Jun; 21(2):137-40 (Eng. Abstr.) **(Chi)**

[Development and preliminary characterization of monoclonal antibodies to 987P adhesin antigen of E. coli] Dong G, et al. **Wei Sheng Wu Hsueh Pao** 1990 Feb; 30(1):41-7 (Eng. Abstr.) **(Chi)**

[Membrane component of Shigella flexneri and their relationship to bacteria antigenicity and virulence] Jin L, et al. **Wei Sheng Wu Hsueh Pao** 1990 Feb;30(1):48-53 (Eng. Abstr.) **(Chi)**

[Phage receptors of Escherichia coli. Basic components of the outer membrane of E. coli as phage receptors] Likhacheva NA, et al. **Mol Gen Mikrobiol Virusol** 1989 Oct;(10):3-15 (93 ref.) (Eng. Abstr.) **(Rus)**

[The immunochemical properties of the proteins from the outer membrane of pathogenic Neisseria] Filatova TN. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Nov;(11):103-11 (46 ref.) **(Rus)**

[The outer membrane proteins of Neisseria meningitidis: the outlook for their use in developing preparations for immunoprophylaxis] Filatova TN. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Feb;(2):86-95 (34 ref.) **(Rus)**

ISOLATION & PURIFICATION

Studies of the outer membrane proteins of Branhamella catarrhalis. Murphy TF. **Am J Med** 1990 May 14; 88(5A):41S-45S (33 ref.)

Characterization of the mitochondrial porin from Drosophila melanogaster. De Pinto V, et al. **Biochim Biophys Acta** 1989 Dec 11;987(1):1-7

Chemiosmotic energy conversion and the membrane ATPase of Methanolobus tindarius. Scheel E, et al. **Eur J Biochem** 1990 Feb 14;187(3):727-35

Purification and partial characterization of an iron regulated outer membrane protein of B. fragilis under non-denaturing conditions. Otto BR, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1-3):285-90

Two distinct outer membrane serotype subcomplexes of Neisseria meningitidis serogroup A. Bläsius R, et al.

Infect Immun 1990 Jun;58(6):2008–10

Characterization of a 78–kilodalton outer membrane protein of Haemophilus somnus. Kania SA, et al. **Infect Immun** 1990 Jan;58(1):237–44

Purification and properties of a 75–kilodalton major protein, an immunodominant surface antigen, from the oral anaerobe Bacteroides gingivalis. Yoshimura F, et al. **Infect Immun** 1989 Nov;57(11):3646–52

Associations of Escherichia coli K–12 OmpF trimers with rough and smooth lipopolysaccharides. Diedrich DL, et al. **J Bacteriol** 1990 Sep;172(9):5307–11

Biochemical purification and crystallographic characterization of the fiber–forming protein pilin from Neisseria gonorrhoeae. Parge HE, et al. **J Biol Chem** 1990 Feb 5;265(4):2278–85

Purification and characterization of a pilin specific for Brazilian purpuric fever–associated Haemophilus influenzae biogroup aegyptius (H. aegyptius) strains. Weyant RS, et al. **J Clin Microbiol** 1990 Apr;28(4):756–63

Purification and partial characterization of a major outer–membrane protein of Fusobacterium nucleatum. Bakken V, et al. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3253–62

LamB (maltoporin) of Salmonella typhimurium: isolation, purification and comparison of sugar binding with LamB of Escherichia coli. Schülein K, et al. **Mol Microbiol** 1990 Apr;4(4):625–32

Structural and functional properties of a 69–kilodalton outer membrane protein of Bordetella pertussis. Brennan MJ, et al. **Tokai J Exp Clin Med** 1988;13 Suppl:211–5

Selective extraction of outer–membrane proteins from membrane complexes of Pseudomonas maltophila by chloroform–methanol. Chin J, et al. **Vet Microbiol** 1990 Mar;22(1):69–78

[Identification of human porins. I. Purification of a porin from human B–lymphocytes (Porin 31HL) and the topochemical proof of its expression on the plasmalemma of the progenitor cell.] Thinnes FP, et al. **Biol Chem Hoppe Seyler** 1989 Dec;370(12):1253–64 (Eng. Abstr.) **(Ger)**

[Isolation and primary characteristics of the common species–specific outer membrane protein of Rickettsia prowazekii] Rodionov AV, et al. **Bioorg Khim** 1990 Apr; 16(4):457–63 (Eng. Abstr.) **(Rus)**

[Isolation and partial characteristics of biopolymers in the outer membrane of Pseudomonas syringae] Mykhal's'kyi LO, et al. **Ukr Biokhim Zh** 1990 Mar–Apr;62(2):40–7 (Eng. Abstr.) **(Ukr)**

METABOLISM

Iron–regulated outer membrane proteins and virulence in Pseudomonas aeruginosa. Shand GH, et al. **Antibiot Chemother** 1989;42:15–26 (41 ref.)

Outer membrane permeability and beta–lactamase stability of dipolar ionic cephalosporins containing methoxyimino substituents. Nikaido H, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):337–42

Diffusion of beta–lactam antibiotics through liposome membranes reconstituted from purified porins of the outer membrane of Pseudomonas aeruginosa. Satake S, et al. **Antimicrob Agents Chemother** 1990 May;34(5):685–90

Outer membrane protein D2 catalyzes facilitated diffusion of carbapenems and penems through the outer membrane of Pseudomonas aeruginosa. Trias J, et al. **Antimicrob Agents Chemother** 1990 Jan;34(1):52–7

Iron–binding compounds and related outer membrane proteins in Vibrio cholerae non–O1 strains from aquatic environments. Amaro C, et al. **Appl Environ Microbiol** 1990 Aug;56(8):2410–6

The respiration of cells and mitochondria of porin deficient yeast mutants is coupled. Michejda J, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):354–61

Release of penicillinase by Escherichia coli HB101 (pEAP31) accompanying the simultaneous release of outer–membrane components by Kil peptide. Aono R. **Biochem J** 1989 Oct 1;263(1):65–71

Characterization of FadL–specific fatty acid binding in Escherichia coli. Black PN. **Biochim Biophys Acta** 1990 Aug 28;1046(1):97–105

Redistribution of the electric field within the pore contributes to the voltage–dependence of mitochondrial porin channel. Ermishkin LN, et al. **Biochim Biophys Acta** 1990 Jan 29; 1021(2):161–8

Polarity–dependent voltage–gated porin channels from Escherichia coli in lipid bilayer membranes. Morgan H, et al. **Biochim Biophys Acta** 1990 Jan 29;1021(2):175–81

In vitro trimerization of outer membrane protein PhoE. de Cock H, et al. **Biochimie** 1990 Feb–Mar;72(2–3):177–82

Creation of targets for proteolytic cleavage in the LamB protein of E coli K12 by genetic insertion of foreign sequences: implications for topological studies. Ronco J, et al. **Biochimie** 1990 Feb–Mar;72(2–3):183–9

Ferrioxamine transport mutants and the identification of the ferrioxamine receptor protein (FoxA) in Erwinia herbicola (Enterobacter agglomerans). Berner I, et al. **Biol Met** 1990; 2(4):197–202

Iron–regulated envelope proteins of mycobacteria grown in vitro and their occurrence in Mycobacterium avium and Mycobacterium leprae grown in vivo. Sritharan M, et al. **Biol Met** 1990;2(4):203–8

Heat–induced protein dephosphorylation in Chinese hamster ovary cells. Henle KJ, et al. **Biomed Biochim Acta** 1990; 49(1):35–44

The FLP recombinase of yeast catalyzes site–specific recombination in the Drosophila genome. Golic KG, et al. **Cell** 1989 Nov 3;59(3):499–509

Tissue tropism of Escherichia coli adhesins in human extraintestinal infections. Korhonen TK, et al. **Curr Top Microbiol Immunol** 1990;151:115–27 (54 ref.)

ProOmpA contains secondary and tertiary structure prior to translocation and is shielded from aggregation by association with SecB protein. Lecker SH, et al. **EMBO J** 1990 Jul;9(7):2309–14

Host–specificity of uropathogenic Escherichia coli depends on differences in binding specificity to Gal alpha 1–4Gal–containing isoreceptors. Strömberg N, et al. **EMBO J** 1990 Jun;9(6):2001–10

Pore–forming proteins of biological membranes. **Experientia** 1990 Feb 15;46(2):131–201

Structural and functional properties of porin channels in E. coli outer membranes. Rosenbusch JP. **Experientia** 1990 Feb 15;46(2):167–73 (53 ref.)

Phosphorylation of a bacterial activator protein, OmpR, by a protein kinase, EnvZ, stimulates the transcription of the ompF and ompC genes in Escherichia coli. Aiba H, et al. **FEBS Lett** 1990 Feb 12;261(1):19–22

Irreversible binding of bacteriophage T5 to its FhuA receptor protein is associated with covalent cross–linking of 3 copies of tail protein pb4. Feucht A, et al. **FEBS Lett** 1989 Sep 25;255(2):435–40

In vitro protein translocation into inverted membrane vesicles prepared from Vibrio alginolyticus is stimulated by the electrochemical potential of Na+ in the presence of Escherichia coli SecA. Tokuda H, et al. **FEBS Lett** 1990 May 7;264(1):10–2

The 70 kilodalton iron regulated protein of Neisseria meningitidis is not the human transferrin receptor. Ala'Aldeen DA, et al. **FEMS Microbiol Lett** 1990 May; 57(1–2):37–42

Diisopropylfluorophosphate–binding proteins in the outer membrane of Fusobacterium nucleatum: strain variations. Brokstad KA, et al. **FEMS Microbiol Lett** 1990 Jan 1; 54(1–3):235–8

The outer membrane protein of enteropathogenic Escherichia coli, described as the 'localised adherence factor', is OmpF and probably not involved in adhesion to HEp–2 cells. Chart H, et al. **FEMS Microbiol Lett** 1989 Oct 15; 52(3):291–5

A major outer membrane protein of Serratia marcescens which was easily solubilized and had a capacity to bind to calcium. Tada Y, et al. **FEMS Microbiol Lett** 1990 Jun 15;58(1):115–8

Porin from Thiobacillus versutus. Woitzik D, et al. **FEMS Microbiol Lett** 1989 Dec;53(3):319–22

Insertion of peptides into cell–surface–exposed areas of the Escherichia coli OmpA protein does not interfere with export and membrane assembly. Freudl R. **Gene** 1989 Oct 30;82(2):229–36

Phosphorylation and dephosphorylation of a bacterial transcriptional activator by a transmembrane receptor. Igo MM, et al. **Genes Dev** 1989 Nov;3(11):1725–34

Identification of Campylobacter jejuni surface proteins that bind to Eucaryotic cells in vitro. de Melo MA, et al. **Infect Immun** 1990 Jun;58(6):1749–56

Signal transduction in human platelets and inflammatory mediator release induced by genetically cloned hemolysin–positive and –negative Escherichia coli strains. König B, et al. **Infect Immun** 1990 Jun;58(6):1591–9

Direct evidence that the FimH protein is the mannose–specific adhesin of Escherichia coli type 1 fimbriae. Krogfelt KA, et al. **Infect Immun** 1990 Jun; 58(6):1995–8

Binding specificities of wild–type and cloned Escherichia coli strains that recognize globo–A. Lindstedt R, et al. **Infect Immun** 1989 Nov;57(11):3389–94

Outer membrane and porin characteristics of Serratia marcescens grown in vitro and in rat intraperitoneal diffusion chambers. Malouin F, et al. **Infect Immun** 1990 May;58(5):1247–53

The Dr hemagglutinin, afimbrial adhesins AFA–I and AFA–III, and F1845 fimbriae of uropathogenic and diarrhea–associated Escherichia coli belong to a family of hemagglutinins with Dr receptor recognition. Nowicki B, et al. **Infect Immun** 1990 Jan;58(1):279–81

Effects of adhesins from mannose–resistant Escherichia coli on mediator release from human lymphocytes, monocytes, and basophils and from polymorphonuclear granulocytes. Ventur Y, et al. **Infect Immun** 1990 Jun;58(6):1500–8

Decreases of the susceptibility to low molecular weight beta–lactam antibiotics in imipenem–resistant Pseudomonas aeruginosa mutants: role of outer membrane protein D2 in their diffusion. Gotoh N, et al. **J Antimicrob Chemother** 1990 Feb;25(2):191–8

Interdependence of calcium and cobalamin binding by wild–type and mutant BtuB protein in the outer membrane of Escherichia coli. Bradbeer C, et al. **J Bacteriol** 1990 Sep;172(9):4919–26

Release of outer membrane fragments from wild–type Escherichia coli and from several E. coli lipopolysaccharide mutants by EDTA and heat shock treatments. Marvin HJ, et al. **J Bacteriol** 1989 Oct; 171(10):5262–7

Cir and Fiu proteins in the outer membrane of Escherichia coli catalyze transport of monomeric catechols: study with beta–lactam antibiotics containing catechol and analogous groups. Nikaido H, et al. **J Bacteriol** 1990 Mar; 172(3):1361–7

Insertion of a signal peptide–derived hydrophobic segment into the mature domain of OmpC, an outer membrane protein, does not interfere with the export of the following polypeptide chain across the cytoplasmic membrane of E. coli. Shinkai A, et al. **J Biochem (Tokyo)** 1989 Aug; 106(2):323–30

SecA interacts with secretory proteins by recognizing the positive charge at the amino terminus of the signal peptide in Escherichia coli. Akita M, et al. **J Biol Chem** 1990 May 15;265(14):8164–9

Assembly of an in vitro synthesized Escherichia coli outer membrane porin into its stable trimeric configuration. de Cock H, et al. **J Biol Chem** 1990 Mar 15;265(8):4646–51

In vitro folding and oligomerization of a membrane protein. Transition of bacterial porin from random coil to native conformation. Eisele JL, et al. **J Biol Chem** 1990 Jun 25; 265(18):10217–20

Signal transduction and osmoregulation in Escherichia coli. A single amino acid change in the protein kinase, EnvZ, results in loss of its phosphorylation and dephosphorylation abilities with respect to the activator protein, OmpR. Kanamaru K, et al. **J Biol Chem** 1989 Dec 25; 264(36):21633–7

Functional analysis of Arg–308 mutants of Flp recombinase. Possible role of Arg–308 in coupling substrate binding to catalysis. Parsons RL, et al. **J Biol Chem** 1990 Mar 15; 265(8):4527–33

Characterization of OmpR binding sequences in the upstream region of the ompF promoter essential for transcriptional activation. Rampersaud A, et al. **J Biol Chem** 1989 Nov 5;264(31):18693–700

In vitro analysis of the process of translocation of OmpA across the Escherichia coli cytoplasmic membrane. A translocation intermediate accumulates transiently in the absence of the proton motive force. Tani K, et al. **J Biol Chem** 1989 Nov 5;264(31):18582–8

Protein D2 channel of the Pseudomonas aeruginosa outer membrane has a binding site for basic amino acids and peptides. Trias J, et al. **J Biol Chem** 1990 Sep 15; 265(26):15680–4

A high concentration of SecA allows proton motive force–independent translocation of a model secretory protein into Escherichia coli membrane vesicles. Yamada H, et al. **J Biol Chem** 1989 Nov 5;264(31):18577–81

Characterization of the protective capacity and immunogenicity of the 69–kD outer membrane protein of Bordetella pertussis. Shahin RD, et al. **J Exp Med** 1990 Jan 1;171(1):63–73

Putative role of a 70 kDa outer–surface protein in promoting cell–surface hydrophobicity of Serratia marcescens RZ. Bar–Ness R, et al. **J Gen Microbiol** 1989 Aug;135 (Pt 8):2277–81

Attaching and effacing lesions in vivo and adhesion to tissue culture cells of Vero–cytotoxin–producing Escherichia coli belonging to serogroups O5 and O103. Hall GA, et al. **J Gen Microbiol** 1990 Apr;136 (Pt 4):779–86

Properties of adherence factor plasmids of enteropathogenic Escherichia coli and the effect of host strain on expression of adherence to HEp–2 cells. McConnell MM, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1123–34

The bacterial outer membrane protein that reacts with anti–HLA–B27 antibodies is the OmpA protein. Zhang JJ, et al. **J Immunol** 1989 Nov 1;143(9):2955–60

Porphyrin ring source can alter the outer membrane protein profile of non–typable Haemophilus influenzae. MacIver I, et al. **J Med Microbiol** 1990 Mar;31(3):163–8

Voltage–sensitive ion channel of Escherichia coli. Delcour AH, et al. **J Membr Biol** 1989 Dec;112(3):267–75

Outer membrane proteins of E. coli in the host–pathogen interaction in urinary tract infection. Robledo JA, et al. **J Urol** 1990 Feb;143(2):386–91

Expression of two gas vacuole protein genes in Halobacterium halobium and other related species. Horne M, et al. **Mol Gen Genet** 1989 Sep;218(3):437–44

Mapping the surface regions of Pseudomonas aeruginosa PAK pilin: the importance of the C–terminal region for adherence to human buccal epithelial cells. Lee KK, et al. **Mol Microbiol** 1989 Nov;3(11):1493–9

Responses of Haemophilus pleuropneumoniae to iron restriction: changes in the outer membrane protein profile and the removal of iron from porcine transferrin. Niven DF, et al. **Mol Microbiol** 1989 Aug;3(8):1083–9

Specific recognition of the leader region of precursor proteins is required for the activation of translocation ATPase of Escherichia coli. Cunningham K, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8630–4

Detergent disruption of bacterial inner membranes and recovery of protein translocation activity. Cunningham K, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8673–7

In vitro assembly of relaxosomes at the transfer origin of plasmid RP4 Pansegrau W, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6555–9

In vitro trimerization of OmpF porin secreted by spheroplasts of Escherichia coli. Sen K, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):743–7

Enhancement of RNA polymerase binding to promoters by a transcriptional activator, OmpR, in Escherichia coli: its positive and negative effects on transcription. Tsung K, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5940–4

Adhesion to HeLa cells of Campylobacter jejuni and C. coli outer membrane components. Fauchère JL, et al. **Res Microbiol** 1989 Jul-Aug;140(6):379-92

Structural and functional characterization of the OmpF and OmpC porins of the Escherichia coli outer membrane: studies involving chimeric proteins. Hikita C, et al. **Res Microbiol** 1989 Mar-Apr;140(3):177-90

Porin of Rhodobacter capsulatus: biochemical and functional characterization. Woitzik D, et al. **Z Naturforsch [C]** 1990 Jun;45(6):576-82

[Proteins--channel formers. II. Porins and proteins of the external mitochondrial membranes] Krasil'nikov OV. **Biol Nauki** 1989;(7):13-24 (62 ref.) (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Effect of Salmonella typhimurium porins on biological activities of human polymorphonuclear leukocytes. Tufano MA, et al. **Microb Pathog** 1989 Nov;7(5):337-46

The cytotoxic protein YopE of Yersinia obstructs the primary host defence. Rosqvist R, et al. **Mol Microbiol** 1990 Apr; 4(4):657-67

Neutrophil activation: evidence for two sources of diacylglycerol distinguished by protein I of Neisseria gonorrhoeae. Haines KA, et al. **Trans Assoc Am Physicians** 1988;101:163-72

SECRETION

Export and sorting of the Escherichia coli outer membrane protein OmpA. Freudl R, et al. **J Bioenerg Biomembr** 1990 Jun;22(3):441-9 (53 ref.)

TOXICITY

[The adhesins of enterotoxigenic Escherichia coli: their role in the pathogenesis of diarrhea and their genetic control] Petrovskaia VG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 May;(5):110-7 (52 ref.) **(Rus)**

BACTERIAL PILI see **PILI, BACTERIAL**

BACTERIAL POLYSACCHARIDES see **POLYSACCHARIDES, BACTERIAL**

BACTERIAL PROTEINS

Refinement of the structure of pseudoazurin from Alcaligenes faecalis S-6 at 1.55 A resolution. Petratos K, et al. **Acta Crystallogr B** 1988 Dec 1;44 (Pt 6):628-36

Development of a sensitive enzyme immunoassay for LH determination in bovine plasma using the streptavidin-biotin technique. Mutayoba BM, et al. **Acta Endocrinol (Copenh)** 1990 Feb;122(2):227-32

Heightened sensitivity of quantitative ELISA for IgM rheumatoid factor with the use of the biotin-streptavidin system. Moxley G. **Am J Clin Pathol** 1989 Nov;92(5):630-6

Response of microbial adhesives and biofilm matrix polymers to chemical treatments as determined by interference reflection microscopy and light section microscopy. Marshall PA, et al. **Appl Environ Microbiol** 1989 Nov; 55(11):2827-31

Sequence and structural homology between a mouse T-complex protein TCP-1 and the 'chaperonin' family of bacterial (GroEL, 60-65 kDa heat shock antigen) and eukaryotic proteins. Gupta RS. **Biochem Int** 1990; 20(4):833-41

Characterization of the cysteine residues and disulphide linkages in the protein crystal of Bacillus thuringiensis. Bietlot HP, et al. **Biochem J** 1990 Apr 15;267(2):309-15

Lipid-peptide interactions: 31P-nuclear magnetic resonance and differential scanning calorimetric study of staphylococcal delta-lysin on liposomes. Bhakoo M, et al. **Biochem Soc Trans** 1989 Dec;17(6):1094-5

Spectroscopic characterization of the light-harvesting complex of Rhodospirillum rubrum and its structural subunit. Chang MC, et al. **Biochemistry** 1990 Jan 16; 29(2):421-9

Three-dimensional solution structure of the reduced form of Escherichia coli thioredoxin determined by nuclear magnetic resonance spectroscopy. Dyson HJ, et al. **Biochemistry** 1990 May 1;29(17):4129-36

A proton nuclear magnetic resonance assignment and secondary structure determination of recombinant human thioredoxin. Forman-Kay JD, et al. **Biochemistry** 1989 Aug 22;28(17):7088-97

Studies on the solution conformation of human thioredoxin using heteronuclear 15N-1H nuclear magnetic resonance spectroscopy. Forman-Kay JE, et al. **Biochemistry** 1990 Feb 13;29(6):1566-72

Chemical cross-linking study of complex formation between methylamine dehydrogenase and amicyanin from Paracoccus denitrificans. Kumar MA, et al. **Biochemistry** 1990 Jun 5;29(22):5299-304

On the nature of the structural change of the colicin E1 channel peptide necessary for its translocation-competent state. Merrill AR, et al. **Biochemistry** 1990 Jun 19; 29(24):5829-36

Spectroscopy and electron transfer dynamics of the bacterial photosynthetic reaction center. Friesner RA, et al. **Biochim Biophys Acta** 1989 Nov 23;977(2):99-122 (135 ref.)

Conformational study of the chromosomal protein MC1 from the archaebacterium Methanosarcina barkeri. Imbert M, et al. **Biochim Biophys Acta** 1990 May 8;1038(3):346-54

The photosynthetic reaction centre from the purple bacterium Rhodopseudomonas viridis [published erratum appears in Biosci Rep 1989 Dec;9(6):763] Deisenhofer J, et al. **Biosci Rep** 1989 Aug;9(4):383-419 (84 ref.)

Bacterial adhesins. **Curr Top Microbiol Immunol** 1990; 151:1-204

Inducible expression of an hsp68-lacZ hybrid gene in transgenic mice. Kothary R, et al. **Development** 1989 Apr; 105(4):707-14

Proteins under extreme physical conditions. Jaenicke R, et al. **FEBS Lett** 1990 Aug 1;268(2):344-9 (70 ref.)

Prediction of the conformation of D1/D2 heterodimer of photosynthetic reaction centre II using a modified Chou-Fasman method. Rawal RK, et al. **Indian J Biochem Biophys** 1990 Jun;27(3):155-8

Growth & toxicity of Bacillus thuringiensis var israelensis. Desai SY, et al. **Indian J Med Res** 1989 Sep;89:314-21

Yersinia pestis pH 6 antigen: genetic, biochemical, and virulence characterization of a protein involved in the pathogenesis of bubonic plague. Lindler LE, et al. **Infect Immun** 1990 Aug;58(8):2569-77

Comparisons between the three-dimensional structures of the chemotactic protein CheY and the normal Gly 12-p21 protein. Chen JM, et al. **Int J Pept Protein Res** 1990 Jul; 36(1):1-6

Influence of ions on cyclization of the amino terminal glutamine residues of tryptic peptides of streptococcal PepM49 protein. Resolution of cyclized peptides by HPLC and characterization by mass spectrometry. Khandke KM, et al. **Int J Pept Protein Res** 1989 Aug;34(2):118-23

Site-specific radiolabeling of monoclonal antibodies with biotin/streptavidin. del Rosario RB, et al. **Int J Rad Appl Instrum [B]** 1989;16(5):525-9

Role of threonine residue 154 in ligand recognition of the tar chemoreceptor in Escherichia coli. Lee L, et al. **J Bacteriol** 1990 Jan;172(1):377-82

The rpoN gene product of Pseudomonas aeruginosa is required for expression of diverse genes, including the flagellin gene. Totten PA, et al. **J Bacteriol** 1990 Jan; 172(1):389-96

Repellent response functions of the Trg and Tap chemoreceptors of Escherichia coli. Yamamoto K, et al. **J Bacteriol** 1990 Jan;172(1):383-8

Protein export in bacteria: structure, function, and molecular genetics. **J Bioenerg Biomembr** 1990 Jun;22(3):209-491

Primary structure of the chromosomal proteins MC1a, MC1b, and MC1c from the archaebacterium Methanothrix soehngenii. Chartier F, et al. **J Biol Chem** 1989 Oct 15; 264(29):17006-15

Crystallization and preliminary x-ray investigation of colicin E3 in complex with its immunity protein. Frolow F, et al. **J Biol Chem** 1990 Jun 25;265(18):10196-7

Chemiluminescent labelled streptavidin (STAV) as a universal marker in steroid and peptide immunoassays. Strasburger CJ, et al. **J Biolumin Chemilumin** 1989 Jul; 4(1):112-8

Distribution of charges in Bacillus intermedius 7P ribonuclease determines the number of cooperatively melting regions of the globule. Protasevich II, et al. **J Biomol Struct Dyn** 1987 Apr;4(5):885-93

An immunoprotective molecule, the major secretory protein of Legionella pneumophila, is not a virulence factor in a guinea pig model of Legionnaires' disease. Blander SJ, et al. **J Clin Invest** 1990 Sep;86(3):817-24

Observations concerning topology and locations of helix ends of membrane proteins of known structure. White SH, et al. **J Membr Biol** 1990 May;115(2):145-58

Termini of Salmonella flagellin are disordered and become organized upon polymerization into flagellar filament. Aizawa SI, et al. **J Mol Biol** 1990 Feb 20;211(4):673-7

Crystallization of the arginine-dependent repressor/activator AhrC from Bacillus subtilis. Boys CW, et al. **J Mol Biol** 1990 May 20;213(2):227-8

Superfamily of UvrA-related NTP-binding proteins. Implications for rational classification of recombination/repair systems. Gorbalenya AE, et al. **J Mol Biol** 1990 Jun 20;213(4):583-91

Crystallization of the Bacillus subtilis histidine-containing phosphocarrier protein HPr and of some of its site-directed mutants. Kapadia G, et al. **J Mol Biol** 1990 Mar 5; 212(1):1-2

Crystal structure of thioredoxin from Escherichia coli at 1.68 A resolution. Katti SK, et al. **J Mol Biol** 1990 Mar 5; 212(1):167-84

Structural organization of flagellin. Vondervisztt F, et al. **J Mol Biol** 1990 Jul 5;214(1):97-104

H influenzae vaccines gain favor [news] Marwick C. **JAMA** 1990 Sep 19;264(11):1375

Double fluorescence immunolabeling studies. Dutton AH, et al. **Methods Enzymol** 1990;184:343-53

Avidin-biotin system in enzyme immunoassays. Ternynck T, et al. **Methods Enzymol** 1990;184:469-81

Expression of two gas vacuole protein genes in Halobacterium halobium and other related species. Horne M, et al. **Mol Gen Genet** 1989 Sep;218(3):437-44

The identification of the Escherichia coli ftsY gene product: an unusual protein. Gill DR, et al. **Mol Microbiol** 1990 Apr;4(4):575-83

Crystal structure of chaperone protein PapD reveals an immunoglobulin fold [see comments] Holmgren A, et al. **Nature** 1989 Nov 16;342(6247):248-51 Comment in: Nature 1989 Nov 16;342(6247):224-5.

Cold shock and DNA binding [letter] Wistow G. **Nature** 1990 Apr 26;344(6269):823-4

Flagellin as an object for supramolecular engineering. Fedorov OV, et al. **Protein Eng** 1990 Apr;3(5):411-3

Examination of protein sequence homologies. VII. The complementary molecular coevolution of ribosomal proteins equivalent to Escherichia coli L7/L12 and L10. Otaka E, et al. **Protein Seq Data Anal** 1990 Mar;3(1):11-9

Beta-lactamase of Bacillus licheniformis 749/C at 2 A resolution. Moews PC, et al. **Proteins** 1990;7(2):156-71

Partial symmetrization of the photosynthetic reaction center. Robles SJ, et al. **Science** 1990 Jun 15;248(4961):1402-5

Mechanism of insect resistance to the microbial insecticide Bacillus thuringiensis. Van Rie J, et al. **Science** 1990 Jan 5;247(4938):72-4

[On the metallo-proteinase inhibitor, SMPI, from Streptomyces nigrescens TK-23] Murao S, et al. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(8):980-8 **(Jpn)**

ANALYSIS

A microtiter plate assay for aspartate transcarbamylase. Else AJ, et al. **Anal Biochem** 1990 May 1;186(2):219-21

Inhibition of the streptavidin-biotin interaction by milk. Hoffman WL, et al. **Anal Biochem** 1989 Sep;181(2):318-20

Specific assay of alpha-dextrin 6-glucanohydrolase using labeled pullulan. Serre L, et al. **Anal Biochem** 1990 May 1;186(2):312-5

Bioluminescent assays using glucose-6-phosphate dehydrogenase: application to biotin and streptavidin detection. Térouanne B, et al. **Anal Biochem** 1989 Jul; 180(1):43-9

Biological characterization of major polypeptides on the surface of spotted fever group rickettsiae. Li H, et al. **Ann N Y Acad Sci** 1990;590:389-94

Biological characterization of a new radioactive labeling reagent for bacterial penicillin-binding proteins. Preston DA, et al. **Antimicrob Agents Chemother** 1990 May; 34(5):718-21

Acidic ribosomal proteins of Dictyostelium discoideum that show electrophoretic similarity to Escherichia coli proteins L7 and L12. Ramagopal S. **Biochem Cell Biol** 1989 Oct; 67(10):712-8

Structural studies on transmembrane proteins. 2. Spin labeling of bacteriorhodopsin mutants at unique cysteines. Altenbach C, et al. **Biochemistry** 1989 Sep 19; 28(19):7806-12

Interaction between biotin lipids and streptavidin in monolayers: formation of oriented two-dimensional protein domains induced by surface recognition. Blankenburg R, et al. **Biochemistry** 1989 Oct 3;28(20):8214-21

Photosynthetic reaction center of green sulfur bacteria studied by EPR. Nitschke W, et al. **Biochemistry** 1990 Apr 24;29(16):3834-42

Collision-induced dissociation mass spectrum of polyamino alcohol derivative of a bacterial lipopeptide. Fujioka M, et al. **Biomed Environ Mass Spectrom** 1989 Dec; 18(12):1099-101

Photoactive yellow protein from the purple phototrophic bacterium, Ectothiorhodospira halophila. Quantum yield of photobleaching and effects of temperature, alcohols, glycerol, and sucrose on kinetics of photobleaching and recovery. Meyer TE, et al. **Biophys J** 1989 Sep;56(3):559-64

A robotics application for the measurement of total soluble protein from recombinant Escherichia coli by the Lowry method. Del Tito BJ Jr, et al. **Biotechniques** 1988 Mar; 6(3):230-4

Measurement of protein biomass by Fourier transform infrared-photoacoustic spectroscopy. Gordon SH, et al. **Biotechnol Appl Biochem** 1990 Feb;12(1):1-10

Immunoblot patterns of Giardia duodenalis isolates from different hosts and geographical locations. Forrest M, et al. **Can J Microbiol** 1990 Jan;36(1):42-6

Numerical analysis of sodium dodecyl sulphate-polyacrylamide gel electrophoretic protein patterns for the classification, identification and typing of medically important bacteria. Costas M. **Electrophoresis** 1990 May;11(5):382-91

Interlaboratory comparative study of the numerical analysis of one-dimensional sodium dodecyl sulphate-polyacrylamide gel electrophoretic protein patterns of Campylobacter strains. Costas M, et al. **Electrophoresis** 1990 Jun;11(6):467-74

A native, affinity-based protein blot for the analysis of streptavidin heterogeneity: consequences for the specificity of streptavidin mediated binding assays. Dittmer J, et al. **Electrophoresis** 1989 Nov;10(11):762-5

Abnormal protein spots revealed by two-dimensional electrophoresis in mycoplasma-infected human fibroblasts. Yang RC, et al. **Electrophoresis** 1990 Apr;11(4):344-6

Evaluation of numerical analysis of SDS-PAGE of protein patterns for typing Enterobacter cloacae. Costas M, et al. **Epidemiol Infect** 1989 Oct;103(2):265-74

Comparison of SDS-PAGE protein patterns with other typing methods for investigating the epidemiology of 'Klebsiella aerogenes'. Costas M, et al. **Epidemiol Infect** 1990 Jun;104(3):455-65

Investigation of a pseudo-outbreak of 'Pseudomonas thomasii' in a special-care baby unit by numerical analysis of SDS-PAGE protein patterns. Costas M, et al. **Epidemiol Infect** 1990 Aug;105(1):127-37

Numerical analysis of SDS-PAGE protein patterns of

Serratia marcescens: a comparison with other typing methods. Holmes B, et al. **Epidemiol Infect** 1990 Aug; 105(1):107–17

The blue oxidases, ascorbate oxidase, laccase and ceruloplasmin. Modelling and structural relationships. Messerschmidt A, et al. **Eur J Biochem** 1990 Jan 26; 187(2):341–52 (42 ref.)

The ribosomal domain of the bacterial release factors. The carboxyl-terminal domain of the dimer of Escherichia coli ribosomal protein L7/L12 located in the body of the ribosome is important for release factor interaction. Tate WP, et al. **Eur J Biochem** 1990 Feb 14;187(3):543–8

Immunochemical analysis of the extracellular slime substance of Staphylococcus epidermidis. Kotilainen P, et al. **Eur J Clin Microbiol Infect Dis** 1990 Apr;9(4):262–70

Expression of the E. coli Lac Z gene from a defective HSV-1 vector in various human normal, cancer-prone and tumor cells. Boothman DA, et al. **FEBS Lett** 1989 Nov 20; 258(1):159–62

Selective solubilization of chlorosome proteins in Chloroflexus aurantiacus. Eckhardt A, et al. **FEBS Lett** 1990 Jul 16;267(2):199–202

Bacterial 'histone-like protein I' (HLP-I) is an outer membrane constituent? Hirvas L, et al. **FEBS Lett** 1990 Mar 12;262(1):123–6

The structure of syringomycins A1, E and G. Segre A, et al. **FEBS Lett** 1989 Sep 11;255(1):27–31

Interaction of the LexA repressor and the uvrC regulatory region. Stark T, et al. **FEBS Lett** 1989 Nov 20;258(1):39–41

Effect of iron limitation on protein composition and ultrastructure of Haemophilus ducreyi. Abeck D, et al. **FEMS Microbiol Lett** 1990 Mar 1;56(1-2):41–4

Thioredoxin and related proteins in procaryotes. Gleason FK, et al. **FEMS Microbiol Rev** 1988 Dec;4(4):271–97 (164 ref.)

Immunogenic integral membrane proteins of Borrelia burgdorferi are lipoproteins. Brandt ME, et al. **Infect Immun** 1990 Apr;58(4):983–91

Identification and characterization of peptidoglycan-associated proteins in Neisseria gonorrhoeae. Hill SA, et al. **Infect Immun** 1989 Nov; 57(11):3612–8

Biochemical and immunological characterization of the surface proteins of Borrelia burgdorferi. Luft BJ, et al. **Infect Immun** 1989 Nov;57(11):3637–45

Protein and antigenic heterogeneity among isolates of Bacillus piliformis. Riley LK, et al. **Infect Immun** 1990 Apr; 58(4):1010–6

Disulfide-linked protein associated with Mycoplasma pneumoniae cytadherence phase variation. Stevens MK, et al. **Infect Immun** 1990 Oct;58(10):3430–3

Automated analysis of 35-S-methionine labeled proteins by SDS-PAGE as a typing method in a suspected cluster of Serratia marcescens. Altwegg M, et al. **Int J Med Microbiol** 1989 Sep;271(3):372–80

A comparative assay of epidemiological markers for Acinetobacter strains isolated in a hospital. Giammanco A, et al. **Int J Med Microbiol** 1989 Dec;272(2):231–41

Numerical analysis of electrophoretic protein patterns of Providencia rettgeri strains from human faeces, urine and other specimens. Costas M, et al. **J Appl Bacteriol** 1989 Oct;67(4):441–52

Numerical analysis of electrophoretic protein patterns of Providencia stuartii strains from urine, wound and other clinical sources. Costas M, et al. **J Appl Bacteriol** 1990 May; 68(5):505–18

Numerical analysis of electrophoretic protein patterns of Group EF-4 bacteria, predominantly from dog-bite wounds of humans. Holmes B, et al. **J Appl Bacteriol** 1990 Jan;68(1):81–91

Numerical analysis of electrophoretic protein patterns of 'Achromobacter' group B, E and F strains from human blood. Holmes B, et al. **J Appl Bacteriol** 1990 May; 68(5):495–504

Protein profiles of Capnocytophaga species. Khwaja KJ, et al. **J Appl Bacteriol** 1990 Apr;68(4):385–90

A rapid, semi-automated SDS-PAGE identification system for oral anaerobic bacteria. Slayne MA, et al. **J Appl Bacteriol** 1990 Apr;68(4):391–5

SecY, a multispanning integral membrane protein, contains a potential leader peptidase cleavage site. Akiyama Y, et al. **J Bacteriol** 1990 Jun;172(6):2888–93

Differentiation of Serratia marcescens 274 into swimmer and swarmer cells. Alberti L, et al. **J Bacteriol** 1990 Aug; 172(8):4322–8

Surface proteins of the gliding bacterium Cytophaga sp. strain U67 and its mutants defective in adhesion and motility. Burchard RP, et al. **J Bacteriol** 1990 Jun;172(6):3379–87

Membrane association of the Tnp and Inh proteins of IS50R. DeLong A, et al. **J Bacteriol** 1990 Sep;172(9):5516–9

Detection of the surface-exposed 18-kilodalton binding protein in Chlamydia trachomatis by immunogold staining. Gray GJ, et al. **J Bacteriol** 1990 Jun;172(6):3524–8

The kil-kor regulon of broad-host-range plasmid RK2: nucleotide sequence, polypeptide product, and expression of regulatory gene korC. Kornacki JA, et al. **J Bacteriol** 1990 Jun;172(6):3040–50

Use of nonmotile mutants to identify a set of membrane proteins related to gliding motility in Cytophaga johnsonae. Pate JL, et al. **J Bacteriol** 1990 Jun;172(6):3117–24

The native form of FtsA, a septal protein of Escherichia coli, is located in the cytoplasmic membrane. Pla J, et al. **J Bacteriol** 1990 Sep;172(9):5097–102

A new Escherichia coli heat shock gene, htrC, whose product is essential for viability only at high temperatures. Raina S, et al. **J Bacteriol** 1990 Jun;172(6):3417–26

Sequence and structural characteristics of the trypsin-resistant T6 surface protein of group A streptococci. Schneewind O, et al. **J Bacteriol** 1990 Jun; 172(6):3310–7

Glycerol facilitator of Escherichia coli: cloning of glpF and identification of the glpF product. Sweet G, et al. **J Bacteriol** 1990 Jan;172(1):424–30

Role of outer coat in resistance of Bacillus megaterium spore. Nishihara T, et al. **J Biochem (Tokyo)** 1989 Aug; 106(2):270–3

Positioning of gene products during Caulobacter cell differentiation. Shapiro L, et al. **J Cell Sci Suppl** 1989; 11:85–97 (36 ref.)

Numerical analysis of electrophoretic protein patterns of methicillin-resistant strains of Staphylococcus aureus. Costas M, et al. **J Clin Microbiol** 1989 Nov;27(11):2574–81

Whole-cell protein patterns of nonhemolytic group B, type Ib, streptococci isolated from humans, mice, cattle, frogs, and fish. Elliott JA, et al. **J Clin Microbiol** 1990 Mar; 28(3):628–30

DNA and protein analyses of tick-derived isolates of Borrelia burgdorferi from California. LeFebvre RB, et al. **J Clin Microbiol** 1990 Apr;28(4):700–7

Identification of coagulase-negative staphylococci by electrophoretic profile of total proteins and analysis of penicillin-binding proteins. Pierre J, et al. **J Clin Microbiol** 1990 Mar;28(3):443–6

Demonstration of heterogeneity among the antigenic proteins of Mobiluncus species. Schwebke JR, et al. **J Clin Microbiol** 1990 Mar;28(3):463–8

Protective effect of sera raised against different fractions of Streptococcus suis type 2. Holt ME, et al. **J Comp Pathol** 1990 Jul;103(1):85–94

Relationship between Mycoplasma mycoides subsp. mycoides ('large-colony' strains) and M. mycoides subsp. capri, as indicated by numerical analysis of one-dimensional SDS-PAGE protein patterns. Leach RH, et al. **J Gen Microbiol** 1989 Nov;135 (Pt 11):2993–3000

Characterization of T cell antigens associated with the cell wall protein-peptidoglycan complex of Mycobacterium tuberculosis. Barnes PF, et al. **J Immunol** 1989 Oct 15; 143(8):2656–62

Acute glomerulonephritis due to Shigella flexneri dysentery with demonstration of a virulence protein of Shigella in circulating immune complexes [letter] Musher DM, et al. **J Infect Dis** 1990 Feb;161(2):366–7

Aerobactin and alpha-hemolysin as virulence determinants in Escherichia coli isolated from human blood, urine, and stool. Opal SM, et al. **J Infect Dis** 1990 Apr;161(4):794–6

Localization of and immune response to the lipid-modified azurin of the pathogenic Neisseria. Trees DL, et al. **J Infect Dis** 1990 Feb;161(2):336–9

Stoichiometric analysis of the flagellar hook-(basal-body) complex of Salmonella typhimurium. Jones CJ, et al. **J Mol Biol** 1990 Mar 20;212(2):377–87

Crystallization and characterization of two crystal forms of the B800-850 light-harvesting complex from Rhodopseudomonas acidophila strain 10050. Papiz MZ, et al. **J Mol Biol** 1989 Oct 20;209(4):833–5

Enzymatic and radioactive assays for biotin, avidin, and streptavidin. Groman EV, et al. **Methods Enzymol** 1990; 184:208–17

HIV-reverse transcriptase and human DNA polymerase alpha share amino acid sequence homologies to bacterial penicillin-binding proteins. Hafkemeyer P, et al. **Methods Find Exp Clin Pharmacol** 1990 Jan-Feb;12(1):43–6

Characterization of lipid-modified immunogenic proteins of Treponema pallidum expressed in Escherichia coli. Schouls LM, et al. **Microb Pathog** 1989 Sep;7(3):175–88

Variation in the molecular weight of PspA (pneumococcal surface protein A) among Streptococcus pneumoniae. Waltman WD, et al. **Microb Pathog** 1990 Jan;8(1):61–9

Purification and characterization of the sopB gene product which is responsible for stable maintenance of mini-F plasmid. Watanabe E, et al. **Mol Gen Genet** 1989 Sep; 218(3):431–6

Regulation of the phosphate regulon of Escherichia coli: properties of phoR deletion mutants and subcellular localization of PhoR protein. Yamada M, et al. **Mol Gen Genet** 1990 Feb;220(3):366–72

Epidemiologic markers of Clostridium difficile. Tabaqchali S. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 2:S192–9 (43 ref.)

[Comparative study of outer envelope protein and LPS of five strains of leptospires by SDS-PAGE and 2D-PAGE] Xie L, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Dec;20(4):361–5 (Eng. Abstr.) **(Chi)**

[Proteins and proteinase-resistant polypeptides of delta-endotoxins from Bacillus thuringiensis and their insecticidal activity] Li RS, et al. **Wei Sheng Wu Hsueh Pao** 1989 Dec;29(6):397–404 (Eng. Abstr.) **(Chi)**

[Type specific protein antigen of group B streptococci [II]. Diversity of the c alpha protein antigen] Kobayashi S, et al. **Kansenshogaku Zasshi** 1989 Nov;63(11):1275–80 (Eng. Abstr.) **(Jpn)**

[The c protein fractions of group B streptococci: its distribution and relation to heat-labile antigens for the agglutination method] Yasuda T, et al. **Kansenshogaku Zasshi** 1989 Nov;63(11):1281–6 (Eng. Abstr.) **(Jpn)**

[Properties of phase I purified cellular antigen of Coxiella burnetii] Kruszewska D, et al. **Med Dosw Mikrobiol** 1989; 41(3-4):170–5 (Eng. Abstr.) **(Pol)**

[A comparative study of the biological value of proteins in products of hydrogen-oxidizing bacteria biomass processing] Radionov VN, et al. **Vopr Pitan** 1989 Nov-Dec; (6):32–5 (Eng. Abstr.) **(Rus)**

[The physicochemical and biochemical characteristics of the cell walls in M+ and M- variants of Streptococcus group A type 29] Bitko SA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Apr;(4):3–7 (Eng. Abstr.) **(Rus)**

[Investigation of food poisoning of staphylococcal etiology using a comparison of the extracellular proteins of the isolated causative agents] Degteva GK, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Mar;(3):31–4 (Eng. Abstr.) **(Rus)**

[Nitrogenase, hydrogenase and nitrate reductase activities, oxygen consumption, and ATP content in nodules formed by strains of Rhizobium leguminosarum 128C53 and 300 in symbiosis with pea plants] Bedmar EJ, et al. **Microbiologia** 1986 Oct;2(2):89–96 (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS

Vanadate dimer and tetramer both inhibit glucose-6-phosphate dehydrogenase from Leuconostoc mesenteroides. Crans DC, et al. **Biochemistry** 1990 Jul 17; 29(28):6698–706

Inactivation of thioredoxin by sulfite ions. Würfel M, et al. **FEBS Lett** 1990 Jul 30;268(1):146–8

BIOSYNTHESIS

Bacitracin-induced proteins in Bacillus subtilis and Bacillus thuringiensis and their relationship with resistance. García-Patrone M. **Antimicrob Agents Chemother** 1990 May;34(5):796–802

Low-pH-induced effects on patterns of protein synthesis and on internal pH in Escherichia coli and Salmonella typhimurium. Hickey EW, et al. **Appl Environ Microbiol** 1990 Apr;56(4):1038–45

Efficiency of bacterial protein synthesis during anaerobic degradation of cattle waste. Mackie RI, et al. **Appl Environ Microbiol** 1990 Jan;56(1):87–92

Thialysine utilization for protein synthesis by an exponentially growing E. coli culture. Di Girolamo M, et al. **Biochem Int** 1989 Dec;19(6):1195–203

Tightly controlled expression systems for the production and purification of Escherichia coli release factor 1. Donly BC, et al. **Biochem Int** 1990;20(3):437–43

The fidelity of protein synthesis: can mischarging by aspartyl-tRNA(Asp) synthetase lead to the formation of isoaspartyl residues in proteins? Momand JA, et al. **Biochim Biophys Acta** 1990 Sep 3;1040(2):153–8

Improved "ATG vector" series for bacterial synthesis of proteins and protein fragments. Bröker M. **Biotechniques** 1988 Sep;6(8):734

Coproduction of surfactin and iturin A, lipopeptides with surfactant and antifungal properties, by Bacillus subtilis. Sandrin C, et al. **Biotechnol Appl Biochem** 1990 Aug; 12(4):370–5

The patterns of extracellular protein formation by spontaneously-occurring rifampicin-resistant mutants of Staphylococcus aureus. al-Ani B, et al. **FEMS Microbiol Lett** 1990 Jun 15;58(1):91–4

Effects of tetracyclines on the production of extracellular proteins by members of the propionibacteriaceae. Chopra I, et al. **FEMS Microbiol Lett** 1989 Jul 1;51(1):21–4

Comparison of vancomycin-inducible proteins from four strains of Enterococci. al-Obeid S, et al. **FEMS Microbiol Lett** 1990 Jun 15;58(1):101–5

Regulation of extracellular proteins and alpha-amylase secretion by temperature in Bacillus subtilis. Hao J, et al. **Folia Microbiol (Praha)** 1989;34(3):179–84

Characterization of the heat shock response and identification of heat shock protein antigens of Borrelia burgdorferi. Carreiro MM, et al. **Infect Immun** 1990 Jul;58(7):2186–91

Thermoregulation of protein synthesis in Borrelia burgdorferi. Cluss RG, et al. **Infect Immun** 1990 Apr; 58(4):1038–42

Characterization and identification of early proteins in Chlamydia trachomatis serovar L2 by two-dimensional gel electrophoresis. Lundemose AG, et al. **Infect Immun** 1990 Aug;58(8):2478–86

Overproduction, affinity purification and characterization of 65-kDa protein of Mycobacterium leprae in Escherichia coli. Nomaguchi H, et al. **Int J Lepr Other Mycobact Dis** 1989 Dec;57(4):817–24

Expression of Serratia marcescens extracellular proteins requires recA. Ball TK, et al. **J Bacteriol** 1990 Jan; 172(1):342–9

Characterization of a major 31-kilodalton peptidoglycan-bound protein of Legionella pneumophila. Butler CA, et al. **J Bacteriol** 1990 May;172(5):2401–7

Use of natural mRNAs in the cell-free protein-synthesizing systems of the moderate halophile Vibrio costicola. Choquet CG, et al. **J Bacteriol** 1990 Jun;172(6):3462–8

Chromosome partition in Escherichia coli requires postreplication protein synthesis. Donachie WD, et al. **J Bacteriol** 1989 Oct;171(10):5405–9

Increased expression of the bifunctional protein PrlF

suppresses overproduction lethality associated with exported beta-galactosidase hybrid proteins in Escherichia coli. Kiino DR, et al. **J Bacteriol** 1990 Jan;172(1):185–92

Cloning and characterization of srfB, a regulatory gene involved in surfactin production and competence in Bacillus subtilis. Nakano MM, et al. **J Bacteriol** 1989 Oct; 171(10):5347–53

Escherichia coli ribosomal protein L10 is rapidly degraded when synthesized in excess of ribosomal protein L7/L12. Petersen C. **J Bacteriol** 1990 Jan;172(1):431–6

Co-overproduction and localization of the Escherichia coli motility proteins motA and motB. Wilson ML, et al. **J Bacteriol** 1990 Jul;172(7):3932–9

Oligomerization of the bacteriophage lambda S protein in the inner membrane of Escherichia coli. Zagotta MT, et al. **J Bacteriol** 1990 Feb;172(2):912–21

Comparison of nitrogen-15 and diaminopimelic acid for estimating bacterial protein synthesis of lactating cows fed diets of varying protein degradability. Sadik MS, et al. **J Dairy Sci** 1990 Mar;73(3):694–702

Overproduced beta-lactamase and the outer-membrane barrier as resistance factors in Serratia marcescens highly resistant to beta-lactamase-stable beta-lactam antibiotics. Hechler U, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1275–90

Relationship between the production of spirosomes and anaerobic glycolysis activity in Escherichia coli B. Matayoshi S, et al. **J Gen Microbiol** 1989 Mar;135 (Pt 3):525–9

Isolation of plasmid DNA sequences that complement Rhodobacter sphaeroides mutants deficient in the capacity for CO2-dependent growth. Rainey AM, et al. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1699–713

Influence of magnesium concentration on production of exoprotein and beta-lactamase by Staphylococcus aureus and Staphylococcus hemolyticus. Kiyota H, et al. **J Infect Dis** 1989 Dec;160(6):1061–3

A 15-kD interferon-induced protein and its 17-kD precursor: expression in Escherichia coli, purification, and characterization. Feltham N, et al. **J Interferon Res** 1989 Oct;9(5):493–507

Inverse relationship between the flagella formation and prodigiosin synthesis in Serratia marcescens. Kobayashi N, et al. **Microbiol Immunol** 1990;34(4):347–54

Inhibition of macromolecular synthesis in cultured macrophages by Pseudomonas pseudomallei exotoxin. Mohamed R, et al. **Microbiol Immunol** 1989;33(10):811–20

Metabolic growth rate control in Escherichia coli may be a consequence of subsaturation of the macromolecular biosynthetic apparatus with substrates and catalytic components. Jensen KF, et al. **Microbiol Rev** 1990 Jun; 54(2):89–100 (98 ref.)

Formation of two forms of nitrogenase and effects of its switch-off by ammonia in purple bacteria. Yakunin AF, et al. **Microbiol Sci** 1988 Mar;5(3):78–81 (45 ref.)

Escherichia coli cells resistant to the DNA gyrase inhibitor, ciprofloxacin, overproduce a 60 kD protein homologous to GroEL. Hallett P, et al. **Mol Microbiol** 1990 Mar; 4(3):345–53

The signal for the termination of protein synthesis in procaryotes. Brown CM, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):20 9–86

Phage shock protein, a stress protein of Escherichia coli. Brissette JL, et al. **Proc Natl Acad Sci U S A** 1990 Feb; 87(3):862–6

Major cold shock protein of Escherichia coli. Goldstein J, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):283–7

Relationship between protein synthesis and concentrations of charged and uncharged tRNATrp in Escherichia coli. Rojiani MV, et al. **Proc Natl Acad Sci U S A** 1990 Feb; 87(4):1511–5

Induction of Salmonella stress proteins upon infection of macrophages. Buchmeier NA, et al. **Science** 1990 May 11; 248(4956):730–2

[The effect of energy concentration and source on the use of feed protein and NPN in lambs. 3. Allantoin excretion and microbial protein synthesis] Ulbrich M, et al. **Arch Tierernahr** 1989 Jun;39(6):553–62 (Eng. Abstr.) **(Ger)**

[Evaluation of phagocytosis of alpha hemolytic strains of Escherichia coli using the fluorescence method] Siegfried L, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jul; 38(4):204–8 (Eng. Abstr.) **(Slo)**

BLOOD

Murine monoclonal antibodies to Klebsiella pneumoniae protect against lethal endotoxemia and experimental infection with capsulated K. pneumoniae. Mandine E, et al. **Infect Immun** 1990 Sep;58(9):2828–33

Antibodies against the human papillomavirus type 16 early proteins in human sera: correlation of anti-E7 reactivity with cervical cancer. Jochmus-Kudielka I, et al. **J Natl Cancer Inst** 1989 Nov 15;81(22):1698–704

DIAGNOSTIC USE

Application of a subtraction hybridization technique involving photoactivatable biotin and organic extraction to solution hybridization analysis of genomic DNA. Barr FG, et al. **Anal Biochem** 1990 May 1;186(2):369–73

Disulfide bond-targeted radiolabeling: tumor specificity of a streptavidin-biotinylated monoclonal antibody complex. del Rosario RB, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):804s–808s

Avidin- and streptavidin-containing probes. Bayer EA, et al. **Methods Enzymol** 1990;184:174–87

DRUG EFFECTS

[The 5S rRNA-protein complex of Escherichia coli studied by carbodiimide modification] Dontsova OA, et al. **Biol Nauki** 1990;(2):22–30 (Eng. Abstr.) **(Rus)**

[Effect of salvin and its active component on the incorporation of labelled protein precursors and nucleic acids into the cells of Staphylococcus aureus 209 P] Dodatko TA, et al. **Mikrobiol Zh** 1986 Mar-Apr;48(2):72–4 (Eng. Abstr.) **(Rus)**

[The partial recA-lexA dependence of the adaptive response of Escherichia coli to exposure to methylmethane sulfonate] Zhestianikov VD, et al. **Tsitologiia** 1989 Dec; 31(12):1478–84 (Eng. Abstr.) **(Rus)**

GENETICS

Gene probes for the detection of Listeria spp. Leimeister-Wächter M, et al. **Acta Microbiol Hung** 1989; 36(2–3):211–3

The use of the Listeria monocytogenes DTH gene for the detection of pathogenic biovars in food. Notermans S, et al. **Acta Microbiol Hung** 1989;36(2–3):215–8

Spectroscopic analysis of genetically modified photosynthetic reaction centers. Coleman WJ, et al. **Annu Rev Biophys Biophys Chem** 1990;19:333–67 (192 ref.)

Prokaryotic signal transduction mediated by sensor and regulator protein pairs. Albright LM, et al. **Annu Rev Genet** 1989;23:311–36 (132 ref.)

Mechanism of resistance to vancomycin in Enterococcus faecium D366 and Enterococcus faecalis A256. al-Obeid S, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):252–6

Cloning of a gene encoding a major secreted polypeptide of Listeria monocytogenes and its potential use as a species-specific probe. Flamm RK, et al. **Appl Environ Microbiol** 1989 Sep;55(9):2251–6

Expression of the insecticidal protein gene from Bacillus thuringiensis subsp. aizawai in Bacillus subtilis and in the thermophile Bacillus stearothermophilus by using the alpha-amylase promoter of the thermophile. Nakamura K, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3208–13

Cloning of an endo-1,4-beta-D-glucanase gene from Clostridium josui and its expression in Escherichia coli. Ohmiya K, et al. **Appl Environ Microbiol** 1989 Sep; 55(9):2399–402

Antimutagenic effect of umuD mutant plasmids: isolation and characterization of umuD mutants reduced in their ability to promote UV mutagenesis in Escherichia coli. Nohmi T, et al. **Basic Life Sci** 1990;52:417–21

Conserved N-terminal sequences in the flagellins of archaebacteria. Kalmokoff ML, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):154–60

Purification and characterization of Bacillus thuringiensis var. tenebrionis insecticidal proteins produced in E. coli. MacIntosh SC, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):665–72

Analysis of the Escherichia coli K-12 cysB gene and its product using the method of gene fusion. Tei H, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):962–9

Expression and purification of a truncated recombinant streptococcal protein G. Goward CR, et al. **Biochem J** 1990 Apr 1;267(1):171–7

Cloning and expression of the luxY gene from Vibrio fischeri strain Y-1 in Escherichia coli and complete amino acid sequence of the yellow fluorescent protein. Baldwin TO, et al. **Biochemistry** 1990 Jun 12;29(23):5509–15

Stark effect in wild-type and heterodimer-containing reaction centers from Rhodobacter capsulatus. DiMagno TJ, et al. **Biochemistry** 1990 Jan 30;29(4):899–907

Structural studies on transmembrane proteins. 1. Model study using bacteriorhodopsin mutants containing single cysteine residues. Flitsch SL, et al. **Biochemistry** 1989 Sep 19; 28(19):7800–5

DNA distortion accompanies transcriptional activation by the metal-responsive gene-regulatory protein MerR. Frantz B, et al. **Biochemistry** 1990 May 22;29(20):4747–51

Active-site mapping and site-specific mutagenesis of glycinamide ribonucleotide transformylase from Escherichia coli. Inglese J, et al. **Biochemistry** 1990 Jul 17;29(28):6678–87

Mutagenesis of the cysteines in the metalloregulatory protein MerR indicates that a metal-bridged dimer activates transcription. Shewchuk LM, et al. **Biochemistry** 1989 Jul 25;28(15):6140–5

Comparison of secretory expression in Escherichia coli and Streptomyces of Streptomyces subtilisin inhibitor (SSI) gene. Taguchi S, et al. **Biochim Biophys Acta** 1990 Jul 30; 1049(3):278–85

Characterization of HU-like protein from Bifidobacterium longum. Goshima N, et al. **Biochimie** 1990 Apr;72(4):207–12

A new oxygen-regulated promoter for the expression of proteins in Escherichia coli. Hughes DE, et al. **Biotechniques** 1989 Oct;7(9):1026–8

N-acetoxy-N-acetyl-2-aminofluorene-induced mutagenesis in the lacI gene of Escherichia coli. Schaaper RM, et al. **Carcinogenesis** 1990 Jul;11(7):1087–95

A common ancestor for bovine lens fiber major intrinsic protein, soybean nodulin-26 protein, and E. coli glycerol facilitator. Baker ME, et al. **Cell** 1990 Jan 26;60(2):185–6

PrlA (SecY) and PrlG (SecE) interact directly and function sequentially during protein translocation in E. coli. Bieker KL, et al. **Cell** 1990 Jun 1;61(5):833–42

The MotA protein of E. coli is a proton-conducting component of the flagellar motor. Blair DF, et al. **Cell** 1990 Feb 9;60(3):439–49

E. coli oriC and the dnaA gene promoter are sequestered from dam methyltransferase following the passage of the chromosomal replication fork. Campbell JL, et al. **Cell** 1990 Sep 7;62(5):967–79

The developmental fate of S. coelicolor hyphae depends upon a gene product homologous with the motility sigma factor of B. subtilis. Chater KF, et al. **Cell** 1989 Oct 6;59(1):133–43

Complex formed by complementary RNA stem-loops and its stabilization by a protein: function of ColE1 Rom protein. Eguchi Y, et al. **Cell** 1990 Jan 26;60(2):199–209

Transcriptional antitermination in the bgl operon of E. coli is modulated by a specific RNA binding protein. Houman F, et al. **Cell** 1990 Sep 21;62(6):1153–63

The replication terminator protein of E. coli is a DNA sequence-specific contra-helicase. Khatri GS, et al. **Cell** 1989 Nov 17;59(4):667–74

C-factor: a cell-cell signaling protein required for fruiting body morphogenesis of M. xanthus. Kim SK, et al. **Cell** 1990 Apr 6;61(1):19–26

Tus and the terminators: the arrest of replication in prokaryotes. Kuempel PL, et al. **Cell** 1989 Nov 17; 59(4):581–3 (18 ref.)

The Escherichia coli regulatory protein OxyR discriminates between methylated and unmethylated states of the phage Mu mom promoter. Bölker M, et al. **EMBO J** 1989 Aug; 8(8):2403–10

Intragenic recombination in a flagellin gene: characterization of the H1-j gene of Salmonella typhi. Frankel G, et al. **EMBO J** 1989 Oct;8(10):3149–52

Site-specific mutagenesis identifies amino acid residues critical in prohormone processing. Gomez S, et al. **EMBO J** 1989 Oct;8(10):2911–6

Initial characterization of site-directed mutants of tyrosine M210 in the reaction centre of Rhodobacter sphaeroides. Gray KA, et al. **EMBO J** 1990 Jul;9(7):2061–70

The role of the delta-lysin gene (hld) in the regulation of virulence genes by the accessory gene regulator (agr) in Staphylococcus aureus. Janzon L, et al. **EMBO J** 1990 May;9(5):1391–9

Effects of mutations in heat-shock genes groES and groEL on protein export in Escherichia coli. Kusukawa N, et al. **EMBO J** 1989 Nov;8(11):3517–21

Membrane topology and functional analysis of the sensory protein VirA of Agrobacterium tumefaciens. Melchers LS, et al. **EMBO J** 1989 Jul;8(7):1919–25

Transcriptional activation of bacteriophage lambda DNA replication in vitro: regulatory role of histone-like protein HU of Escherichia coli. Mensa-Wilmot K, et al. **EMBO J** 1989 Aug;8(8):2393–402

Isolation of a dnaA mutant of Bacillus subtilis defective in initiation of replication: amount of DnaA protein determines cells' initiation potential. Moriya S, et al. **EMBO J** 1990 Sep;9(9):2905–10

Molecular characterization of two proteins involved in the excision of the conjugative transposon Tn1545: homologies with other site-specific recombinases. Poyart-Salmeron C, et al. **EMBO J** 1989 Aug;8(8):2425–33

Analysis of the regulatory region of the Escherichia coli nupG gene, encoding a nucleoside-transport protein. Munch-Petersen A, et al. **Eur J Biochem** 1990 Jul 5; 190(3):547–51

Nucleotide sequence, organisation and structural analysis of the products of genes in the nirB-cysG region of the Escherichia coli K-12 chromosome. Peakman T, et al. **Eur J Biochem** 1990 Jul 31;191(2):315–23

Frameshifting in the synthesis of Escherichia coli polypeptide chain release factor two on eukaryotic ribosomes. Williams JM, et al. **Eur J Biochem** 1989 Dec 22;186(3):515–21

An ice nucleation active gene of Erwinia ananas. Sequence similarity to those of Pseudomonas species and regions required for ice nucleation activity. Abe K, et al. **FEBS Lett** 1989 Dec 4;258(2):297–300

A common mechanism of transcriptional activation by the three positive regulators, VirG, PhoB, and OmpR. Aoyama T, et al. **FEBS Lett** 1990 Apr 9;263(1):1–4 (17 ref.)

Critical spacing between two essential cysteine residues in the interdomain linker of the Bradyrhizobium japonicum NifA protein. Fischer HM, et al. **FEBS Lett** 1989 Sep 11; 255(1):167–71

Modification of a glnB-like gene product by photosynthetic electron transport in the cyanobacterium Synechococcus 6301. Harrison MA, et al. **FEBS Lett** 1990 May 7; 264(1):25–8

Sequence analysis of the cloned streptococcal cell surface antigen I/II. Kelly C, et al. **FEBS Lett** 1989 Nov 20; 258(1):127–32

The gene for human thioredoxin maps on the short arm of chromosome 3 at bands 3p11-p12. Lafage-Pochitaloff-Huvalé M, et al. **FEBS Lett** 1989 Sep 11;255(1):89–91

SecE-dependent overproduction of SecY in Escherichia coli. Evidence for interaction between two components of the secretory machinery. Matsuyama S, et al. **FEBS Lett** 1990 Aug 20;269(1):96–100

Amino acid sequence of pheromone-inducible surface protein

in Enterococcus faecalis, that is encoded on the conjugative plasmid pPD1. Nakayama J, et al. **FEBS Lett** 1990 Jul 2; 267(1):81–4

Amino acid sequence of pheromone-inducible surface protein in Enterococcus faecalis, that is encoded on the conjugative plasmid pPD1. Nakayama J, et al. **FEBS Lett** 1990 Jul 30; 268(1):245–8

Modification of the electron-transfer sites of Pseudomonas aeruginosa azurin by site-directed mutagenesis. Pascher T, et al. **FEBS Lett** 1989 Dec 4;258(2):266–8

Interaction of the LexA repressor and the uvrC regulatory region. Stark T, et al. **FEBS Lett** 1989 Nov 20;258(1):39–41

Molecular organization of genes constituting the virulence determinant on the Salmonella typhimurium 96 kilobase pair plasmid [published erratum appears in FEBS Lett 1990 Mar 26;262(2):369] Taira S, et al. **FEBS Lett** 1989 Nov 6;257(2):274–8

The effect of glucose on the expression of extracellular protein genes by Staphylococcus aureus strain V8. Coleman G, et al. **FEMS Microbiol Lett** 1989 Oct 15;52(3):247–50

N-terminal amino acid sequence of the Borrelia burgdorferi flagellin. Gassmann GS, et al. **FEMS Microbiol Lett** 1989 Jul 1;51(1):101–5

Complete nucleotide sequence of the sr gene from Streptococcus mutans OMZ 175. Ogier JA, et al. **FEMS Microbiol Lett** 1990 Mar 1;56(1-2):223–7

A single protein of 110 kDa is associated with the multinucleating and necrotizing activity coded by the Vir plasmid of Escherichia coli. Oswald E, et al. **FEMS Microbiol Lett** 1990 Mar 15;56(3):279–[illegible]

Heterologous expression of a mutated toxin gene from Bacillus thuringiensis subsp. tenebrionis. Rhim SL, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1-3):95–9

Studies on two major contaminating proteins of the cytoplasmic inclusion bodies in Escherichia coli. Veeraragavan K. **FEMS Microbiol Lett** 1989 Oct 1; 52(1-2):149–52

Identification of proteins encoded in Escherichia coli hydA, hydB and analysis of the hydA locus. Yamamoto T, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1-3):187–92

Nucleotide sequence of the fosB gene conferring fosfomycin resistance in Staphylococcus epidermidis. Zilhao R, et al. **FEMS Microbiol Lett** 1990 Mar 15;56(3):267–72

The nature of an intragenic suppressor of the Escherichia coli dnaA508 temperature-sensitive mutation. Eberle H, et al. **Gene** 1989 Dec 14;84(2):237–45

A regulatory gene, angR, of the iron uptake system of Vibrio anguillarum: similarity with phage P22 cro and regulation by iron. Farrell DH, et al. **Gene** 1990 Jan 31;86(1):45–51

The bacteriophage T4 gene mrh whose product inhibits late T4 gene expression in an Escherichia coli rpoH (sigma 32) mutant. Frazier MW, et al. **Gene** 1990 Mar 30;88(1):7–14

Isolation and sequencing of the Alcaligenes denitrificans azurin-encoding gene: comparison with the genes encoding blue copper proteins from Pseudomonas aeruginosa and Alcaligenes faecalis. Hoitink CW, et al. **Gene** 1990 May 31;90(1):15–20

Cloning and sequencing of the genes encoding acid-soluble spore proteins from Clostridium perfringens. Holck A, et al. **Gene** 1990 Jul 2;91(1):107–11

RepB' is required in trans for the two single-strand DNA initiation signals in oriV of plasmid RSF1010. Honda Y, et al. **Gene** 1989 Aug 1;80(1):155–9

Sequence analysis of operator mutants of the phase-1 flagellin-encoding gene, fliC, in Salmonella typhimurium. Inoue YH, et al. **Gene** 1989 Dec 21;85(1):221–6

Cloning, characterization and sequence of a novel 59-kDa protein of Chlamydia trachomatis. Kahane S, et al. **Gene** 1990 May 31;90(1):61–7

Requirement of integration host factor (IHF) for growth of Escherichia coli deficient in HU protein. Kano Y, et al. **Gene** 1990 Apr 30;89(1):133–7

Vectors permitting visual monitoring of simple transposition events. Kozlowski M, et al. **Gene** 1989 Aug 15;80(2):217–25

Physical and biological consequences of interactions between integration host factor (IHF) and coliphage lambda late p_R promoter and its mutants. Kur J, et al. **Gene** 1989 Sep 1;81(1):1–15

Cloning and structure of the hem A gene of Escherichia coli K-12. Li JM, et al. **Gene** 1989 Oct 30;82(2):209–17

The arc operon for anaerobic arginine catabolism in Pseudomonas aeruginosa contains an additional gene, arcD, encoding a membrane protein. Lüthi E, et al. **Gene** 1990 Mar 1;87(1):37–43

An Escherichia coli membrane protein with a unique signal sequence. Neuwald AF, et al. **Gene** 1989 Oct 30; 82(2):219–28

Phylogenetic comparative analysis and the secondary structure of ribonuclease P RNA—a review. Pace NR, et al. **Gene** 1989 Oct 15;82(1):65–75 (40 ref.)

The nifH promoter region of Rhizobium leguminosarum: nucleotide sequence and promoter elements controlling activation by NifA protein. Roelvink PW, et al. **Gene** 1990 Mar 1;87(1):31–6

Factors affecting expression of the recF gene of Escherichia coli K-12. Sandler SJ, et al. **Gene** 1990 Jan 31;86(1):35–43

Analysis of transcriptional control regions in the Streptomyces subtilisin-inhibitor-encoding gene. Taguchi S, et al. **Gene** 1989 Dec 14;84(2):279–86

Nucleotide sequences of genes encoding heat-stable and heat-labile glyceraldehyde-3-phosphate dehydrogenases; amino acid sequence and protein thermostability. Tesfay HS, et al. **Gene** 1989 Oct 30;82(2):237–48

Expression of Agrobacterium rhizogenes rolB gene fusions in Escherichia coli: production of antibodies against the RolB protein. Trovato M, et al. **Gene** 1990 Mar 1; 87(1):139–43

The consensus sequence of ice nucleation proteins from Erwinia herbicola, Pseudomonas fluorescens and Pseudomonas syringae. Warren G, et al. **Gene** 1989 Dec 21;85(1):239–42

A Bacillus subtilis regulatory gene product for genetic competence and sporulation resembles sensor protein members of the bacterial two-component signal-transduction systems. Weinrauch Y, et al. **Genes Dev** 1990 May;4(5):860–72

The 75-kilodalton cytoplasmic Chlamydia trachomatis L2 polypeptide is a DnaK-like protein. Birkelund S, et al. **Infect Immun** 1990 Jul;58(7):2098–104

Cloning, sequencing, and expression of two class B endoflagellar genes of Treponema pallidum subsp. pallidum encoding the 34.5- and 31.0-kilodalton proteins. Champion CI, et al. **Infect Immun** 1990 Jun;58(6):1697–704

Identification of mip-like genes in the genus Legionella. Cianciotto NP, et al. **Infect Immun** 1990 Sep;58(9):2912–8

Restriction fragment length polymorphism in the cytadhesin P1 gene of human clinical isolates of Mycoplasma pneumoniae. Dallo SF, et al. **Infect Immun** 1990 Jun; 58(6):2017–20

Nucleotide sequence analysis of a type 1 fimbrial gene of Streptococcus sanguis FW213. Fenno JC, et al. **Infect Immun** 1989 Nov;57(11):3527–33

Nonreciprocal complementation of the hlyC and lktC genes of the Escherichia coli hemolysin and Pasteurella haemolytica leukotoxin determinants. Forestier C, et al. **Infect Immun** 1990 Mar;58(3):828–32

Genetic and DNA sequence analysis of the Salmonella typhimurium virulence plasmid gene encoding the 28,000-molecular-weight protein. Gulig PA, et al. **Infect Immun** 1990 Aug;58(8):2651–8

Molecular cloning and DNA sequence analysis of the 37-kilodalton endoflagellar sheath protein gene of Treponema pallidum. Isaacs RD, et al. **Infect Immun** 1989 Nov;57(11):3403–11

Expression in Escherichia coli of the 37-kilodalton endoflagellar sheath protein of Treponema pallidum by use of the polymerase chain reaction and a T7 expression system. Isaacs RD, et al. **Infect Immun** 1990 Jul; 58(7):2025–34

The gene coding for protein p60 of Listeria monocytogenes and its use as a specific probe for Listeria monocytogenes. Köhler S, et al. **Infect Immun** 1990 Jun;58(6):1943–50

Nucleotide sequence of the leukotoxin gene from Actinobacillus actinomycetemcomitans: homology to the alpha-hemolysin/leukotoxin gene family. Kraig E, et al. **Infect Immun** 1990 Apr;58(4):920–9

Construction and characterization of isogenic mutants of Streptococcus mutans deficient in major surface protein antigen P1 (I/II). Lee SF, et al. **Infect Immun** 1989 Nov; 57(11):3306–13

The Chlamydia trachomatis hyp operon is homologous to the groE stress response operon of Escherichia coli. Morrison RP, et al. **Infect Immun** 1990 Aug;58(8):2701–5

Functional analysis of the sialic acid-binding adhesin SfaS of pathogenic Escherichia coli by site-specific mutagenesis. Morschhäuser J, et al. **Infect Immun** 1990 Jul;58(7):2133–8

A method for allelic replacement that uses the conjugative transposon Tn916: deletion of the emm6.1 allele in Streptococcus pyogenes JRS4. Norgren M, et al. **Infect Immun** 1989 Dec;57(12):3846–50

The 56-kilodalton major protein antigen of Rickettsia tsutsugamushi: molecular cloning and sequence analysis of the sta56 gene and precise identification of a strain-specific epitope. Stover CK, et al. **Infect Immun** 1990 Jul; 58(7):2076–84

Sequence divergency of the cytadhesin gene of Mycoplasma pneumoniae. Su CJ, et al. **Infect Immun** 1990 Aug; 58(8):2669–74

Molecular characterization of the pathogen-specific, 34-kilodalton membrane immunogen of Treponema pallidum. Swancutt MA, et al. **Infect Immun** 1989 Nov; 57(11):3314–23

The Legionella pneumophila major secretory protein, a protease, is not required for intracellular growth or cell killing. Szeto L, et al. **Infect Immun** 1990 Aug; 58(8):2585–92

Polynucleotide sequence relationships among flagellin genes of Campylobacter jejuni and Campylobacter coli. Thornton SA, et al. **Infect Immun** 1990 Aug;58(8):2686–9

The Borrelia burgdorferi flagellum-associated 41-kilodalton antigen (flagellin): molecular cloning, expression, and amplification of the gene. Wallich R, et al. **Infect Immun** 1990 Jun;58(6):1711–9

DNA homology of surface protein antigen A gene in mutans streptococci. Abiko Y, et al. **Int J Biochem** 1989; 21(9):1047–51

Genetic characterization of the spaA1 determinant of the surface protein antigen gene from Streptococcus sobrinus 6715. Saito S, et al. **Int J Biochem** 1989;21(11):1245–54

Resistance of Pseudomonas aeruginosa to cefsulodin: modification of penicillin-binding protein 3 and mapping of its chromosomal gene. Gotoh N, et al. **J Antimicrob Chemother** 1990 Apr;25(4):513–23

A single DnaA box is sufficient for initiation from the P1 plasmid origin. Abeles AL, et al. **J Bacteriol** 1990 Aug; 172(8):4386–91

Use of both translation initiation sites of the middle wall protein gene in Bacillus brevis 47. Adachi T, et al. **J Bacteriol** 1990 Jan;172(1):511–3

Molecular structure and immunity specificity of colicin E6, an evolutionary intermediate between E-group colicins and cloacin DF13. Akutsu A, et al. **J Bacteriol** 1989 Dec; 171(12):6430–6

Nucleotide sequences of the sfuA, sfuB, and sfuC genes of Serratia marcescens suggest a periplasmic-binding-protein-dependent iron transport mechanism. Angerer A, et al. **J Bacteriol** 1990 Feb; 172(2):572–8

Temporal regulation of the Bacillus subtilis early sporulation gene spo0F. Bai U, et al. **J Bacteriol** 1990 Sep;172(9):5432–9

DNA sequence and translational product of a new nodulation-regulatory locus: syrM has sequence similarity to NodD proteins. Barnett MJ, et al. **J Bacteriol** 1990 Jul; 172(7):3695–700

Genetic suppression demonstrates interaction of TonB protein with outer membrane transport proteins in Escherichia coli. Bell PE, et al. **J Bacteriol** 1990 Jul; 172(7):3826–9

The structurally related exbB and tolQ genes are interchangeable in conferring tonB-dependent colicin, bacteriophage, and albomycin sensitivity. Braun V. **J Bacteriol** 1989 Nov;171(11):6387–90

Construction by site-directed mutagenesis of a 39-kilodalton mosquitocidal protein similar to the larva-processed toxin of Bacillus sphaericus 2362. Broadwell AH, et al. **J Bacteriol** 1990 Jul;172(7):4032–6

Organization and nucleotide sequences of the Spiroplasma citri genes for ribosomal protein S2, elongation factor Ts, spiralin, phosphofructokinase, pyruvate kinase, and an unidentified protein. Chevalier C, et al. **J Bacteriol** 1990 May;172(5):2693–703

Characterization of malT mutants that constitutively activate the maltose regulon of Escherichia coli. Dardonville B, et al. **J Bacteriol** 1990 Apr;172(4):1846–52

nodO, a new nod gene of the Rhizobium leguminosarum biovar viciae sym plasmid pRL1JI, encodes a secreted protein. de Maagd RA, et al. **J Bacteriol** 1989 Dec; 171(12):6764–70

groE mutants of Escherichia coli are defective in umuDC-dependent UV mutagenesis. Donnelly CE, et al. **J Bacteriol** 1989 Nov;171(11):6117–25

Mutations in the trfA replication gene of the broad-host-range plasmid RK2 result in elevated plasmid copy numbers. Durland RH, et al. **J Bacteriol** 1990 Jul; 172(7):3859–67

Complementation of a reaction center-deficient Rhodobacter sphaeroides pufLMX deletion strain in trans with pufBALM does not restore the photosynthesis-positive phenotype. Farchaus JW, et al. **J Bacteriol** 1990 Feb; 172(2):977–85

vir genes influence conjugal transfer of the Ti plasmid of Agrobacterium tumefaciens. Gelvin SB, et al. **J Bacteriol** 1990 Mar;172(3):1600–8

Genomic organization and expression of Campylobacter flagellin genes. Guerry P, et al. **J Bacteriol** 1990 Apr; 172(4):1853–60

Cloning and characterization of the regulatory Bacillus subtilis competence genes comA and comB. Guillen N, et al. **J Bacteriol** 1989 Oct;171(10):5354–61

Identification of a divergent M protein gene and an M protein-related gene family in Streptococcus pyogenes serotype 49. Haanes EJ, et al. **J Bacteriol** 1989 Dec; 171(12):6397–408

Nucleotide sequence and transcriptional products of the csg locus of Myxococcus xanthus. Hagen TJ, et al. **J Bacteriol** 1990 Jan;172(1):15–23

Sequence and molecular characterization of a multicopy invasion plasmid antigen gene, ipaH, of Shigella flexneri. Hartman AB, et al. **J Bacteriol** 1990 Apr;172(4):1905–15

Effects of alfalfa nod gene-inducing flavonoids on nodABC transcription in Rhizobium meliloti strains containing different nodD genes. Hartwig UA, et al. **J Bacteriol** 1990 May;172(5):2769–73

Subunit-specific phenotypes of Salmonella typhimurium HU mutants. Hillyard DR, et al. **J Bacteriol** 1990 Sep; 172(9):5402–7

VirA, a coregulator of Ti-specified virulence genes, is phosphorylated in vitro. Huang Y, et al. **J Bacteriol** 1990 Feb;172(2):1142–4

Structural similarity among Escherichia coli FtsW and RodA proteins and Bacillus subtilis SpoVE protein, which function in cell division, cell elongation, and spore formation, respectively. Ikeda M, et al. **J Bacteriol** 1989 Nov;171(11):6375–8

Thiol-sensitive genes of Escherichia coli. Javor GT. **J Bacteriol** 1989 Oct;171(10):5607–13

The VirA protein of Agrobacterium tumefaciens is autophosphorylated and is essential for vir gene regulation. Jin S, et al. **J Bacteriol** 1990 Feb;172(2):525–30

Flagellar assembly in Salmonella typhimurium: analysis with temperature-sensitive mutants. Jones CJ, et al. **J Bacteriol** 1990 Mar;172(3):1327–39

Lactobacillus hilgardii plasmid pLAB1000 consists of two functional cassettes commonly found in other gram-positive organisms. Josson K, et al. **J Bacteriol** 1990 Jun;172(6):3089–99

Inhibition of growth of ftsQ, ftsA, and ftsZ mutant cells of Escherichia coli by amplification of a chromosomal region encompassing closely aligned cell division and cell growth genes. Jung HK, et al. J Bacteriol 1989 Nov; 171(11):6379–82

Identification and characterization of a new Escherichia coli gene that is a dosage–dependent suppressor of a dnaK deletion mutation. Kang PJ, et al. J Bacteriol 1990 Apr; 172(4):2055–64

Cloning and expression of Pseudomonas aeruginosa flagellin in Escherichia coli. Kelly–Wintenberg K, et al. J Bacteriol 1989 Nov;171(11):6357–62

Molecular characterization of an Enterobacter cloacae gene (romA) which pleiotropically inhibits the expression of Escherichia coli outer membrane proteins. Komatsu T, et al. J Bacteriol 1990 Jul;172(7):4082–9

Gramicidin S biosynthesis operon containing the structural genes grsA and grsB has an open reading frame encoding a protein homologous to fatty acid thioesterases. Krätzschmar J, et al. J Bacteriol 1989 Oct;171(10):5422–9

Purified Escherichia coli F–factor TraY protein binds oriT. Lahue EE, et al. J Bacteriol 1990 Mar;172(3):1385–91

Nucleotide sequences of the tolA and tolB genes and localization of their products, components of a multistep translocation system in Escherichia coli. Levengood SK, et al. J Bacteriol 1989 Dec;171(12):6600–9

Topology of the Escherichia coli uhpT sugar–phosphate transporter analyzed by using TuphoA fusions. Lloyd AD, et al. J Bacteriol 1990 Apr;172(4):1688–93

Specific A/G–to–C.G mismatch repair in Salmonella typhimurium LT2 requires the mutB gene product. Lu AL, et al. J Bacteriol 1990 Mar;172(3):1232–40

Developmental sensory transduction in Myxococcus xanthus involves methylation and demethylation of FrzCD. McCleary WR, et al. J Bacteriol 1990 Sep;172(9):4877–87

Integration host factor plays a role in IS50 and Tn5 transposition. Makris JC, et al. J Bacteriol 1990 Mar; 172(3):1368–73

Bradyrhizobium japonicum glnB, a putative nitrogen–regulatory gene, is regulated by NtrC at tandem promoters. Martin GB, et al. J Bacteriol 1989 Oct; 171(10):5638–45

Molecular cloning and characterization of comC, a late competence gene of Bacillus subtilis. Mohan S, et al. J Bacteriol 1989 Nov;171(11):6043–51

Characterization of the F–plasmid conjugative transfer gene traU. Moore D, et al. J Bacteriol 1990 Aug;172(8):4263–70

A cryptic fimbrial gene in Serratia marcescens. Moriya T, et al. J Bacteriol 1989 Dec;171(12):6629–36

Cloning and characterization of srfB, a regulatory gene involved in surfactin production and competence in Bacillus subtilis. Nakano MM, et al. J Bacteriol 1989 Oct; 171(10):5347–53

Products of three accessory genes, pilB, pilC, and pilD, are required for biogenesis of Pseudomonas aeruginosa pili. Nunn D, et al. J Bacteriol 1990 Jun;172(6):2911–9

DNA replication in Escherichia coli mutants that lack protein HU. Ogawa T, et al. J Bacteriol 1989 Oct;171(10):5672–9

Identification and characterization of gyrB mutants of Escherichia coli that are defective in partitioning of mini–F plasmids. Ogura T, et al. J Bacteriol 1990 Mar; 172(3):1562–8

In vitro interactions of CysB protein with the cysJIH promoter of Salmonella typhimurium: inhibitory effects of sulfide. Ostrowski J, et al. J Bacteriol 1990 Feb; 172(2):779–85

The Yersinia enterocolitica inv gene product is an outer membrane protein that shares epitopes with Yersinia pseudotuberculosis invasin. Pepe JC, et al. J Bacteriol 1990 Jul;172(7):3780–9

Cloning and characterization of the hemA region of the Bacillus subtilis chromosome. Petricek M, et al. J Bacteriol 1990 May;172(5):2250–8

Cloning, nucleotide sequence, and expression of the Rhodobacter sphaeroides Y thioredoxin gene. Pille S, et al. J Bacteriol 1990 Mar;172(3):1556–61

The Cpx proteins of Escherichia coli K–12: evidence that cpxA, ecfB, ssd, and eup mutations all identify the same gene. Rainwater S, et al. J Bacteriol 1990 May; 172(5):2456–61

F1C fimbriae of a uropathogenic Escherichia coli strain: genetic and functional organization of the foc gene cluster and identification of minor subunits. Riegman N, et al. J Bacteriol 1990 Feb;172(2):1114–20

Role of the CheW protein in bacterial chemotaxis: overexpression is equivalent to absence. Sanders DA, et al. J Bacteriol 1989 Nov;171(11):6271–8

The cisA cistron of Bacillus subtilis sporulation gene spoIVC encodes a protein homologous to a site–specific recombinase. Sato T, et al. J Bacteriol 1990 Feb; 172(2):1092–8

Subcellular localization of the Rhizobium leguminosarum nodI gene product. Schlaman HR, et al. J Bacteriol 1990 Sep;172(9):5486–9

Divergent transcription of pdxB and homology between the pdxB and serA gene products in Escherichia coli K–12. Schoenlein PV, et al. J Bacteriol 1989 Nov;171(11):6084–92

Isolation and characterization of dnaJ null mutants of Escherichia coli. Sell SM, et al. J Bacteriol 1990 Sep; 172(9):4827–35

Use of regulated cell lysis in a lethal genetic selection in Escherichia coli: identification of the autoinducer–binding region of the LuxR protein from Vibrio fischeri ATCC 7744. Shadel GS, et al. J Bacteriol 1990 Jul;172(7):3980–7

Posttranscriptional control of plasmid ColIb–P9 repZ gene expression by a small RNA. Shiba K, et al. J Bacteriol 1990 Apr;172(4):1992–7

The Myxococcus xanthus FprA protein causes increased flavin biosynthesis in Escherichia coli. Shimkets LJ. J Bacteriol 1990 Jan;172(1):24–30

CsgA, an extracellular protein essential for Myxococcus xanthus development. Shimkets LJ, et al. J Bacteriol 1990 Sep;172(9):5299–306

Coregulation of type 12 M protein and streptococcal C5a peptidase genes in group A streptococci: evidence for a virulence regulon controlled by the virR locus. Simpson WJ, et al. J Bacteriol 1990 Feb;172(2):696–700

Critical regions of the Vibrio fischeri luxR protein defined by mutational analysis. Slock J, et al. J Bacteriol 1990 Jul; 172(7):3974–9

Recombination of Salmonella phase 1 flagellin genes generates new serovars. Smith NH, et al. J Bacteriol 1990 May;172(5):2209–16

Sequence invariance of the antigen–coding central region of the phase 1 flagellar filament gene (fliC) among strains of Salmonella typhimurium. Smith NH, et al. J Bacteriol 1990 Feb;172(2):603–9

Structural alterations in the Bacillus subtilis Spc0A regulatory protein which suppress mutations at several spo0 loci. Spiegelman G, et al. J Bacteriol 1990 Sep; 172(9):5011–9

Cloning of the crystalline cell wall protein gene of Bacillus licheniformis NM 105. Tang M, et al. J Bacteriol 1989 Dec; 171(12):6637–48

Effects of mutations in the repA gene of plasmid Rts1 on plasmid replication and autorepressor function. Terawaki Y, et al. J Bacteriol 1990 Feb;172(2):786–92

The rpoN gene product of Pseudomonas aeruginosa is required for expression of diverse genes, including the flagellin gene. Totten PA, et al. J Bacteriol 1990 Jan; 172(1):389–96

In vitro reconstitution of a hexagonal array with a surface layer protein synthesized by Bacillus subtilis harboring the surface layer protein gene from Bacillus brevis 47. Tsuboi A, et al. J Bacteriol 1989 Dec;171(12):6747–52

envM genes of Salmonella typhimurium and Escherichia coli. Turnowsky F, et al. J Bacteriol 1989 Dec;171(12):6555–65

Characterization of the spoIVB and recN loci of Bacillus subtilis. Van Hoy BE, et al. J Bacteriol 1990 Mar; 172(3):1306–11

New mre genes mreC and mreD, responsible for formation of the rod shape of Escherichia coli cells. Wachi M, et al. J Bacteriol 1989 Dec;171(12):6511–6

High–level expression of the FtsA protein inhibits cell septation in Escherichia coli K–12. Wang HC, et al. J Bacteriol 1990 Aug;172(8):4736–40

Overexpression of virD1 and virD2 genes in Agrobacterium tumefaciens enhances T–complex formation and plant transformation. Wang K, et al. J Bacteriol 1990 Aug; 172(8):4432–40

Complex character of senS, a novel gene regulating expression of extracellular–protein genes of Bacillus subtilis. Wang LF, et al. J Bacteriol 1990 Apr; 172(4):1939–47

Complementation analysis of Agrobacterium tumefaciens Ti plasmid virB genes by use of a vir promoter expression vector: virB9, virB10, and virB11 are essential virulence genes. Ward JE Jr, et al. J Bacteriol 1990 Sep; 172(9):5187–99

Identification of a virB10 protein aggregate in the inner membrane of Agrobacterium tumefaciens. Ward JE Jr, et al. J Bacteriol 1990 Sep;172(9):5200–10

Sequence and transcription mapping of Bacillus subtilis competence genes comB and comA, one of which is related to a family of bacterial regulatory determinants. Weinrauch Y, et al. J Bacteriol 1989 Oct;171(10):5362–75

Structure and transcription of the genes encoding the B1015 light–harvesting complex beta and alpha subunits and the photosynthetic reaction center L, M, and cytochrome c subunits from Rhodopseudomonas viridis. Wiessner C, et al. J Bacteriol 1990 Jun;172(6):2877–87

Regulation of the phosphate regulon of Escherichia coli: analysis of mutant phoB and phoR genes causing different phenotypes. Yamada M, et al. J Bacteriol 1989 Oct; 171(10):5601–6

A mutation that enhances synthesis of sigma 32 and suppresses temperature–sensitive growth of the rpoH15 mutant of Escherichia coli. Yano R, et al. J Bacteriol 1990 Apr;172(4):2124–30

Site–directed mutations in the repA C–terminal region of plasmid Rts1: pleiotropic effects on the replication and autorepressor functions. Zeng H, et al. J Bacteriol 1990 May;172(5):2535–40

Mutations leading to constitutive expression from the TOL plasmid meta–cleavage pathway operon are located at the C–terminal end of the positive regulator protein XylS. Zhou LM, et al. J Bacteriol 1990 Jul;172(7):3707–10

Purification and characterization of an initiation protein for chromosomal replication, DnaA, in Bacillus subtilis. Fukuoka T, et al. J Biochem (Tokyo) 1990 May; 107(5):732–9

Cloning and nucleotide sequences of NADH–putidaredoxin reductase gene (camA) and putidaredoxin gene (camB) involved in cytochrome P–450cam hydroxylase of Pseudomonas putida. Koga H, et al. J Biochem (Tokyo) 1989 Nov;106(5):831–6

Cloning and characterization of a Bacillus subtilis gene homologous to E. coli secY. Nakamura K, et al. J Biochem (Tokyo) 1990 Apr;107(4):603–7

The sec and prl genes of Escherichia coli. Bieker KL, et al. J Bioenerg Biomembr 1990 Jun;22(3):291–310 (73 ref.)

Signal peptide mutants of Escherichia coli. Gennity J, et al. J Bioenerg Biomembr 1990 Jun;22(3):233–69 (74 ref.)

Functional domains of the Escherichia coli dnaK heat shock protein as revealed by mutational analysis. Cegielska A, et al. J Biol Chem 1989 Dec 15;264(35):21122–30

Expression and characterization of RNase III and Era proteins. Products of the rnc operon of Escherichia coli. Chen SM, et al. J Biol Chem 1990 Feb 15;265(5):2888–95

Plasmid pLS1–encoded RepA protein regulates transcription from repAB promoter by binding to a DNA sequence containing a 13–base pair symmetric element. del Solar GH, et al. J Biol Chem 1990 Jul 25;265(21):12569–75

Streptococcal–host interactions. Structural and functional analysis of a Streptococcus sanguis receptor for a human salivary glycoprotein. Demuth DR, et al. J Biol Chem 1990 May 5;265(13):7120–6

Protein secretion by gram–negative bacteria. Characterization of two membrane proteins required for pullulanase secretion by Escherichia coli K–12. d'Enfert C, et al. J Biol Chem 1989 Oct 15;264(29):17462–8

Glutaredoxin from rabbit bone marrow. Purification, characterization, and amino acid sequence determined by tandem mass spectrometry. Hopper S, et al. J Biol Chem 1989 Dec 5;264(34):20438–47

The ndvB locus of Rhizobium meliloti encodes a 319–kDa protein involved in the production of beta–(1——2)–glucan. Ielpi L, et al. J Biol Chem 1990 Feb 15;265(5):2843–51

Specific binding of the TraY protein to oriT and the promoter region for the traY gene of plasmid R100. Inamoto S, et al. J Biol Chem 1990 Apr 15;265(11):6461–6

Modifications of the active center of T4 thioredoxin by site–directed mutagenesis. Joelson T, et al. J Biol Chem 1990 Feb 25;265(6):3183–8

Complementation of two overlapping fragments of SecA, a protein translocation ATPase of Escherichia coli, allows ATP binding to its amino–terminal region. Matsuyama S, et al. J Biol Chem 1990 May 25;265(15):8760–5

Covalent association of the traI gene product of plasmid RP4 with the 5'–terminal nucleotide at the relaxation nick site. Pansegrau W, et al. J Biol Chem 1990 Jun 25; 265(18):10637–44

Use of saturation mutagenesis to localize probable functional domains in the NahR protein, a LysR–type transcription activator. Schell MA, et al. J Biol Chem 1990 Mar 5; 265(7):3844–50

Isolation of a gene that encodes a new retinal protein, archaerhodopsin, from Halobacterium sp. aus–1. Sugiyama Y, et al. J Biol Chem 1989 Dec 15;264(35):20859–62

In situ labeling of the adipocyte lipid binding protein with 3–[125I]iodo–4–azido–N–hexadecylsalicylamide. Evidence for a role of fatty acid binding proteins in lipid uptake. Waggoner DW, et al. J Biol Chem 1990 Jul 15; 265(20):11417–20

Correction: characterization of the virB operon from Agrobacterium tumefaciens Ti plasmid. Ward JE, et al. J Biol Chem 1990 Mar 15;265(8):4768

Deletion analysis of the mini–P1 plasmid origin of replication and the role of Escherichia coli DnaA protein. Wickner S, et al. J Biol Chem 1990 Jul 15;265(20):11622–7

Substitution of 2 base pairs (1 base pair per DNA half–site) within the Escherichia coli lac promoter DNA site for catabolite gene activator protein places the lac promoter in the FNR regulon. Zhang XP, et al. J Biol Chem 1990 Jul 25;265(21):12400–3

Development of a cell–free system to study the membrane assembly of photosynthetic proteins of Rhodobacter capsulatus. Troschel D, et al. J Cell Biol 1990 Jul; 111(1):87–94

The genetics of protein targeting in Escherichia coli K12. Trun NJ, et al. J Cell Sci Suppl 1989;11:13–28 (61 ref.)

Chlamydial disease pathogenesis. The 57–kD chlamydial hypersensitivity antigen is a stress response protein. Morrison RP, et al. J Exp Med 1989 Oct 1;170(4):1271–83

Molecular cloning and sequence determination of the lpd gene encoding lipoamide dehydrogenase from Pseudomonas fluorescens. Benen JA, et al. J Gen Microbiol 1989 Jul;135 (Pt 7):1787–97

Characterization and complementation of a mutant of Rhodobacter sphaeroides with a chromosomal deletion in the light–harvesting (LH2) genes. Burgess JG, et al. J Gen Microbiol 1989 Jul;135 (Pt 7):1809–16

Structure and expression of the Lactococcus lactis gene for phospho–beta–galactosidase (lacG) in Escherichia coli and L. lactis. De Vos WM, et al. J Gen Microbiol 1989 Jul; 135 (Pt 7):1833–46

Nucleotide sequence of the neopullulanase gene from Bacillus stearothermophilus. Kuriki T, et al. J Gen Microbiol 1989 Jun;135 (Pt 6):1521–8

Cloning and expression of the Clostridium thermohydrosulfuricum alpha–amylase–pullulanase gene in Escherichia coli. Melasniemi H, et al. J Gen Microbiol 1989 Jun;135 (Pt 6):1755–62

Characterization and expression of the cbbE' gene of Coxiella burnetii. Minnick MF, et al. J Gen Microbiol 1990 Jun;136

(Pt 6):1099–107
Regulation of gene expression and cellular localization of cloned Klebsiella aerogenes (K. pneumoniae) urease. Mulrooney SB, et al. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1769–76
Mutations affecting the cytochrome d-containing oxidase complex of Escherichia coli K12: identification and mapping of a fourth locus, cydD. Poole RK, et al. **J Gen Microbiol** 1989 Jul;135 (Pt 7):1865–74
Molecular analysis of a plasmid-encoded phenol hydroxylase from Pseudomonas CF600. Shingler V, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1083–92
Cloning and nucleotide sequence of senN, a novel 'Bacillus natto' (B. subtilis) gene that regulates expression of extracellular protein genes. Wong SL, et al. **J Gen Microbiol** 1988 Dec;134 (Pt 12):3269–76
The gene sequence and some properties of protein H. A novel IgG-binding protein. Gomi H, et al. **J Immunol** 1990 May 15;144(10):4046–52
A mutation in the mip gene results in an attenuation of Legionella pneumophila virulence. Cianciotto NP, et al. **J Infect Dis** 1990 Jul;162(1):121–6
Repression of the lambda pcin promoter by integrative host factor. Griffo G, et al. **J Mol Biol** 1989 Sep 5;209(1):55–64
FlgB, FlgC, FlgF and FlgG. A family of structurally related proteins in the flagellar basal body of Salmonella typhimurium. Homma M, et al. **J Mol Biol** 1990 Jan 20; 211(2):465–77
Flagellar hook and hook-associated proteins of Salmonella typhimurium and their relationship to other axial components of the flagellum. Homma M, et al. **J Mol Biol** 1990 Jun 20;213(4):819–32
Promoters and autogenous control of the Escherichia coli hupA and hupB genes. Kohno K, et al. **J Mol Biol** 1990 May 5;213(1):27–36
Translated translational operator in Escherichia coli. Auto-regulation in the infC-rpmI-rplT operon. Lesage P, et al. **J Mol Biol** 1990 Jun 5;213(3):465–75
Regulation of IS1 transposition by the insA gene product. Machida C, et al. **J Mol Biol** 1989 Aug 20;208(4):567–74
Terminal regions of flagellin are disordered in solution. Vondervisztt F, et al. **J Mol Biol** 1989 Sep 5;209(1):127–33
Nucleotide sequence of the promoter-distal region of the tra operon of plasmid R100, including traI (DNA helicase I) and traD genes. Yoshioka Y, et al. **J Mol Biol** 1990 Jul 5;214(1):39–53
Cascade regulation of spore coat gene expression in Bacillus subtilis. Zheng LB, et al. **J Mol Biol** 1990 Apr 20; 212(4):645–60
Evolution of a protein superfamily: relationships between vertebrate lens crystallins and microorganism dormancy proteins. Wistow G. **J Mol Evol** 1990 Feb;30(2):140–5
Avidin and streptavidin. Green NM. **Methods Enzymol** 1990; 184:51–67
Expression as trpE fusion. Yansura DG. **Methods Enzymol** 1990;185:161–6
Deletions of chromosomal regions coding for fimbriae and hemolysins occur in vitro and in vivo in various extraintestinal Escherichia coli isolates. Hacker J, et al. **Microb Pathog** 1990 Mar;8(3):213–25
Greasy proteins [news] Pugsley AP. **Microbiol Sci** 1988 May; 5(5):153–5
Expression of the SOS genes of Escherichia coli in Salmonella typhimurium. Barbé J, et al. **Microbiologia** 1985 Sep;1(1–2):77–87
Contrasting evolutionary histories of chloroplast thioredoxins f and m. Hartman H, et al. **Mol Biol Evol** 1990 May; 7(3):247–54
Splicing control of the L1 ribosomal protein gene of X.laevis: structural similarities between sequences present in the regulatory intron and in the 28S ribosomal RNA. Fragapane P, et al. **Mol Biol Rep** 1990;14(2–3):111–2
N-methyl-N-nitrosourea-induced mutations in a shuttle plasmid replicated in human cells. Sikpi MO, et al. **Mol Carcinog** 1990;3(1):30–6
The meta cleavage operon of TOL degradative plasmid pWW0 comprises 13 genes. Harayama S, et al. **Mol Gen Genet** 1990 Mar;221(1):113–20
Identification and nucleotide sequence of the delta-lysin gene, hld, adjacent to the accessory gene regulator (agr) of Staphylococcus aureus. Janzon L, et al. **Mol Gen Genet** 1989 Nov;219(3):480–5
The fimD gene required for cell surface localization of Escherichia coli type 1 fimbriae. Klemm P, et al. **Mol Gen Genet** 1990 Jan;220(2):334–8
The virB operon of Agrobacterium tumefaciens pTiC58 encodes 11 open reading frames. Kuldau GA, et al. **Mol Gen Genet** 1990 Apr;221(2):256–66
A possible role for the pcnB gene product of Escherichia coli in modulating RNA: RNA interactions. Masters M, et al. **Mol Gen Genet** 1990 Jan;220(2):341–4
Maintenance of plasmids in HU and IHF mutants of Escherichia coli. Ogura T, et al. **Mol Gen Genet** 1990 Jan; 220(2):197–203
Gene fliA encodes an alternative sigma factor specific for flagellar operons in Salmonella typhimurium. Ohnishi K, et al. **Mol Gen Genet** 1990 Apr;221(2):139–47
Molecular cloning and nucleotide sequencing of oxyR, the positive regulatory gene of a regulon for an adaptive response to oxidative stress in Escherichia coli: homologies between OxyR protein and a family of bacterial activator proteins. Tao K, et al. **Mol Gen Genet** 1989 Sep; 218(3):371–6
Analysis of the nag regulon from Escherichia coli K12 and Klebsiella pneumoniae and of its regulation. Vogler AP, et al. **Mol Gen Genet** 1989 Oct;219(1–2):97–105
The Yersinia yop regulon. Cornelis GR, et al. **Mol Microbiol** 1989 Oct;3(10):1455–9 (44 ref.)
The function of isolated domains and chimaeric proteins constructed from the transcriptional activators NifA and NtrC of Klebsiella pneumoniae. Drummond MH, et al. **Mol Microbiol** 1990 Jan;4(1):29–37
Molecular genetic analysis of FNR-dependent promoters. Eiglmeier K, et al. **Mol Microbiol** 1989 Jul;3(7):869–78
Unique sequences in region VI of the flagellin gene of Salmonella typhi. Frankel G, et al. **Mol Microbiol** 1989 Oct;3(10):1379–83
Extensive sequence homology between IgA receptor and M proteins in Streptococcus pyogenes. Frithz E, et al. **Mol Microbiol** 1989 Aug;3(8):1111–9
Isolation of the Actinobacillus pleuropneumoniae haemolysin gene and the activation and secretion of the prohaemolysin by the HlyC, HlyB and HlyD proteins of Escherichia coli. Gygi D, et al. **Mol Microbiol** 1990 Jan;4(1):123–8
Regulation of enterobacterial cephalosporinase production: the role of a membrane-bound sensory transducer. Honoré N, et al. **Mol Microbiol** 1989 Aug;3(8):1121–30
The nifA gene product from Rhizobium leguminosarum biovar trifolii lacks the N-terminal domain found in other NifA proteins. Iismaa SE, et al. **Mol Microbiol** 1989 Jul; 3(7):943–55
The arcB gene of Escherichia coli encodes a sensor-regulator protein for anaerobic repression of the arc modulon. Iuchi S, et al. **Mol Microbiol** 1990 May;4(5):715–27
The life-cycle proteins RodA of Escherichia coli and SpoVE of Bacillus subtilis have very similar primary structures. Joris B, et al. **Mol Microbiol** 1990 Mar;4(3):513–7
Signalling proteins in enterobacterial AmpC beta-lactamase regulation. Lindquist S, et al. **Mol Microbiol** 1989 Aug; 3(8):1091–102
Cloning and characterization of an Escherichia coli gene, pcnB, affecting plasmid copy number. March JB, et al. **Mol Microbiol** 1989 Jul;3(7):903–10
Specificity of insertion of IS91, an insertion sequence present in alpha-haemolysin plasmids of Escherichia coli. Mendiola MV, et al. **Mol Microbiol** 1989 Jul;3(7):979–84
Positive control of colanic acid synthesis in Escherichia coli by rmpA and rmpB, two virulence-plasmid genes of Klebsiella pneumoniae. Nassif X, et al. **Mol Microbiol** 1989 Oct;3(10):1349–59
Functional analysis of the fsoC gene product of the F7(1) (fso) fimbrial gene cluster. Riegman N, et al. **Mol Microbiol** 1990 Jan;4(1):101–6
The transition state transcription regulator AbrB of Bacillus subtilis is autoregulated during vegetative growth. Strauch MA, et al. **Mol Microbiol** 1989 Sep;3(9):1203–9
Engineering upstream transcriptional and translational signals of Bordetella pertussis serotype 2 fimbrial subunit protein for efficient expression in Escherichia coli: in vitro autoassembly of the expressed product into filamentous structures. Walker MJ, et al. **Mol Microbiol** 1990 Jan; 4(1):39–47
Excision-repair capacity in Streptococcus pneumoniae: cloning and expression of a uvr-like gene. Sicard N, et al. **Mutat Res** 1990 May;235(3):195–201
Identification of a novel translation factor necessary for the incorporation of selenocysteine into protein. Forchhammer K, et al. **Nature** 1989 Nov 23;342(6248):453–6
Bacterial zipper [letter] Giraldo R, et al. **Nature** 1989 Dec 21–28;342(6252):866
Demonstration by genetic suppression of interaction of GroE products with many proteins. Van Dyk TK, et al. **Nature** 1989 Nov 23;342(6248):451–3
Cloning and expression of a pili gene of Corynebacterium renale in Escherichia coli. Abe S, et al. **Nippon Juigaku Zasshi** 1990 Feb;52(1):11–8
Signal structure for transcriptional activation in the upstream regions of virulence genes on the hairy-root-inducing plasmid A4. Aoyama T, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8711–25
Nucleotide sequence of the genes encoding the L11, L1, L10 and L12 equivalent ribosomal proteins from the archaebacterium Halobacterium marismortui. Arndt E, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1285
Structure, organization and evolution of the L1 equivalent ribosomal protein gene of the archaebacterium Methanococcus vannielii. Baier G, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):719–24
Molecular analysis of the replication region of the conjugative Streptococcus agalactiae plasmid pIP501 in Bacillus subtilis. Comparison with plasmids pAM beta 1 and pSM19035. Brantl S, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4783–90
Activation of the Klebsiella pneumoniae nifU promoter: identification of multiple and overlapping upstream NifA binding sites. Cannon WV, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1693–701
Nucleotide sequence of the penicillin-binding protein 2B gene of Streptococcus pneumoniae strain R6. Dowson CG, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7518
Nucleotide and deduced amino acid sequence of a Mycobacterium leprae 12K protein. Hartskeerl RA, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1294
Nucleotide sequence of the aroP gene encoding the general aromatic amino acid transport protein of Escherichia coli K-12: homology with yeast transport proteins [published erratum appears in Nucleic Acids Res 1990 Mar 11;18(5):1332] Honoré N, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):653
DNA sequence analysis of the imp UV protection and mutation operon of the plasmid TP110: identification of a third gene. Lodwick D, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5045–50
Nucleotide sequence of hns encoding the DNA-binding protein H-NS of Salmonella typhimurium. Marsh M, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3397
Nucleotide sequence of the sporulation gene spoIIGA from Bacillus subtilis. Masuda ES, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):657
Molecular organization of sbcC, a gene that affects genetic recombination and the viability of DNA palindromes in Escherichia coli K-12. Naom IS, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8033–45
Striking changes in polyubiquitin genes of Tetrahymena pyriformis. Neves A, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):656
Nucleotide sequence of the bioH gene of Escherichia coli. O'Regan M, et al. **Nucleic Acids Res** 1989 Oct 11; 17(19):8004
Site-specific insertion and deletion mutants in the mer promoter-operator region of Tn501; the nineteen base-pair spacer is essential for normal induction of the promoter by MerR. Parkhill J, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5157–62
Ribosomal proteins S7 and L1 are located close to the decoding site of E. coli ribosome—affinity labeling studies with modified tRNAs carrying photoreactive probes attached adjacent to the 3'-end of the anticodon. Podkowiński J, et al. **Nucleic Acids Res** 1989 Nov 11; 17(21):8767–82
Regulation of phage Mu repressor transcription by IHF depends on the level of the early transcription. van Rijn PA, et al. **Nucleic Acids Res** 1989 Dec 25;17(24):10203–12
Dominant negative umuD mutations decreasing RecA-mediated cleavage suggest roles for intact UmuD in modulation of SOS mutagenesis. Battista JR, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7190–4
Lon-dependent regulation of the DNA binding protein HU in Escherichia coli. Bonnefoy E, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7691–5
Sugars induce the Agrobacterium virulence genes through a periplasmic binding protein and a transmembrane signal protein. Cangelosi GA, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6708–12
The unexpected antitermination of gyrA-directed transcripts is enhanced by DNA relaxation. Carty M, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8882–6
A gene required for transfer of T-DNA to plants encodes an ATPase with autophosphorylating activity. Christie PJ, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9677–81
An experimental approach to testing modular evolution: directed replacement of alpha-helices in a bacterial protein. DuBose RF, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(24):9966–70
Overreplication of the origin region in the dnaB37 mutant of Bacillus subtilis: postinitiation control of chromosomal replication. Henckes G, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8660–4
Extent of N-terminal methionine excision from Escherichia coli proteins is governed by the side-chain length of the penultimate amino acid. Hirel PH, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8247–51
AlgR3, a protein resembling eukaryotic histone H1, regulates alginate synthesis in Pseudomonas aeruginosa. Kato J, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):2887–91
The priA gene encoding the primosomal replicative n' protein of Escherichia coli. Lee EH, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4620–4
In vitro synthesis of selenocysteinyl-tRNA(UCA) from seryl-tRNA(UCA): involvement and characterization of the selD gene product. Leinfelder W, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):543–7
Peptidyl-prolyl cis-trans-isomerase from Escherichia coli: a periplasmic homolog of cyclophilin that is not inhibited by cyclosporin A. Liu J, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4028–32
Negative control of plasmid R6K replication: possible role of intermolecular coupling of replication origins. McEachern MJ, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7942–6
Structure-function studies on Escherichia coli MetR protein, a putative prokaryotic leucine zipper protein. Maxon ME, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7076–9
Molecular cloning and DNA sequence analysis of Escherichia coli priA, the gene encoding the primosomal protein replication factor Y. Nurse P, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4615–9
Ultrasensitivity and heavy-metal selectivity of the allosterically modulated MerR transcription complex. Ralston DM, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(10):3846–50
AbrB, a regulator of gene expression in Bacillus, interacts with the transcription initiation regions of a sporulation gene and an antibiotic biosynthesis gene. Robertson JB, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8457–61
Expression of a cloned streptavidin gene in Escherichia coli.

Sano T, et al. **Proc Natl Acad Sci U S A** 1990 Jan; 87(1):142–6

The SpoOA protein of Bacillus subtilis is a repressor of the abrB gene. Strauch M, et al.
Proc Natl Acad Sci U S A 1990 Mar;87(5):1801–5

DNA–looping and enhancer activity: association between DNA–bound NtrC activator and RNA polymerase at the bacterial glnA promoter. Su W, et al.
Proc Natl Acad Sci U S A 1990 Jul;87(14):5504–8

Reconstitution of protein translocation from detergent–solubilized Escherichia coli inverted vesicles: PrlA protein–deficient vesicles efficiently translocate precursor proteins. Watanabe M, et al.
Proc Natl Acad Sci U S A 1990 Mar;87(5):1960–4

Three Escherichia coli heat shock proteins are required for P1 plasmid DNA replication: formation of an active complex between E. coli DnaJ protein and the P1 initiator protein. Wickner SH. **Proc Natl Acad Sci U S A** 1990 Apr; 87(7):2690–4

Ribosomal protein L4 stimulates in vitro termination of transcription at a NusA–dependent terminator in the S10 operon leader. Zengel JM, et al.
Proc Natl Acad Sci U S A 1990 Apr;87(7):2675–9

Transgenic mice expressing the bacterial O6 alkylguanine–DNA alkyltransferase gene: an animal model to study the role of DNA repair in the carcinogenesis of N–nitroso compounds. Dumenco LL, et al.
Prog Clin Biol Res 1990;340A:369–78

Effect of inhibitory activity of mutation at reaction site P4 of the Streptomyces subtilisin inhibitor, SSI. Kojima S, et al. **Protein Eng** 1990 May;3(6):527–30

Nucleotide sequence of the plasmid–borne virulence gene mkfA encoding a 28 kDa polypeptide from Salmonella typhimurium. Norel F, et al. **Res Microbiol** 1989 Mar–Apr; 140(3):263–5

Nucleotide sequence of the gene encoding the 35–kDa protein of Mycobacterium tuberculosis. O'Connor SP, et al. **Res Microbiol** 1990 May;141(4):407–23

Transcriptional regulator of oxidative stress–inducible genes: direct activation by oxidation. Storz G, et al. **Science** 1990 Apr 13;248(4952):189–94

Molecular cloning and analysis of P. 69, a vir–controlled protein from Bordetella pertussis. Charles IG, et al.
Tokai J Exp Clin Med 1988;13 Suppl:227–34

The E. coli dnaA initiation protein: a protein for all seasons. Georgopoulos C. **Trends Genet** 1989 Oct;5(10):319–21 (20 ref.)

Identification and genetic mapping of proteins encoded in the fimbrial subunit gene region of Bacteroides nodosus. Billington SJ, et al. **Vet Microbiol** 1990 Mar;22(1):53–68

Sequence analysis of four atrazine–resistant mutants from Rhodopseudomonas viridis. Ewald G, et al.
Z Naturforsch [C] 1990 May;45(5):459–62

First glance on the three–dimensional structure of the photosynthetic reaction center from a herbicide–resistant Rhodopseudomonas viridis mutant. Sinning I, et al.
Z Naturforsch [C] 1990 May;45(5):455–8

[Demonstration of 3 functional domains responsible for a kinase activity in VirA, a transmembrane sensory protein encoded by the Ti plasmid of Agrobacterium tumefaciens] Morel P, et al. **C R Acad Sci [III]** 1990;310(2):21–6 (Eng. Abstr.) **(Fre)**

[The SecY protein of E. coli, an integral membrane protein involved in protein translocation] Akiyama Y.
Seikagaku 1989 Aug;61(8):681–92 (79 ref.) **(Jpn)**

[Protein engineering of Streptomyces subtilisin inhibitor (SSI)] Kojima S, et al. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(8):939–48 **(Jpn)**

[Regulation of initiation of chromosomal replication in bacteria; role of DnaA protein and the regulation of its expression in Bacillus subtilis] Ogasawara N, et al.
Tanpakushitsu Kakusan Koso 1989 Jul;34(9):1135–48 **(Jpn)**

[The effect of supercoiling of DNA from colicinogenic plasmids on the expression of col, imm and lys genes] Panchenko IuA, et al. **Mol Biol (Mosk)** 1989 Sep–Oct; 23(5):1340–9 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Synthetic peptide representing a T–cell epitope of CRM197 substitutes as carrier molecule in a Haemophilus influenzae type B (Hib) conjugate vaccine. Bixler GS Jr, et al.
Adv Exp Med Biol 1989;251:175–80 (14 ref.)

Haemophilus b oligosaccharide–CRM197 and other Haemophilus b conjugate vaccines: a status report. Smith DH, et al. **Adv Exp Med Biol** 1989;251:65–82 (43 ref.)

Immunogenicity of Brucella–extracted and recombinant protein vaccines in CD–1 and BALB/c mice. Pugh GW Jr, et al. **Am J Vet Res** 1990 Sep;51(9):1413–20

Avidity of antibodies against released proteins of Yersinia spp: comparison of patients with or without reactive arthritis. Lahesmaa–Rantala R, et al. **Ann Rheum Dis** 1989 Dec;48(12):1003–6

Immunization procedures for E. coli proteins. Anicetti VR, et al. **Appl Biochem Biotechnol** 1989 Nov;22(2):151–68

M protein deficient streptococcal cell walls can induce acute and chronic arthritis rats. DeJoy SQ, et al.
Cell Immunol 1990 Feb;125(2):526–34

Immune response of young children vaccinated with Haemophilus influenzae type b conjugate vaccines. Madore DV, et al. **Contrib Microbiol Immunol** 1989;10:125–50 (105 ref.)

Identification of the integrin binding domain of the Yersinia pseudotuberculosis invasin protein. Leong JM, et al.
EMBO J 1990 Jun;9(6):1979–89

Antibody production in vitamin A–depleted rats is impaired after immunization with bacterial polysaccharide or protein antigens. Pasatiempo AM, et al. **FASEB J** 1990 May; 4(8):2518–27

Antigenic homology within human enterotoxigenic Escherichia coli fimbrial colonization factor antigens: CFA/I, coli–surface–associated antigens (CS)1, CS2, CS4 and CS17. McConnell MM, et al. **FEMS Microbiol Lett** 1989 Oct 1;52(1–2):105–8

Protein heterogeneity of Francisella tularensis: detection of proteins with antigenic determinants. Stulik J, et al.
Folia Microbiol (Praha) 1989;34(4):316–23

Murine monoclonal antibodies which recognize active sites of Escherichia coli NusA protein and epitope mapping by gene fusion. Nakamura Y, et al. **Gene** 1989 Aug 1;80(1):13–9

The use of immunodeficient male (CBA/N x BALB/c) F1 mice to produce monoclonal antibodies directed to proteins of Leptospira interrogans rather than to immunodominant lipopolysaccharides. Segers RP, et al. **Hybridoma** 1990 Jun; 9(3):275–83

Epitopes of the mycobacterial heat shock protein 65 for human T cells comprise different structures. Munk ME, et al. **Immunobiology** 1990 Feb;180(2–3):272–7

Antibody response to epitopes of chlamydial major outer membrane proteins on infectious elementary bodies and of the reduced polyacrylamide gel electrophoresis–separated form. Baghian A, et al. **Infect Immun** 1990 May; 58(5):1379–83

Cloning and characterization of Treponema hyodysenteriae antigens and protection in a CF^{-}–1 mouse model by immunization with a cloned endoflagellar antigen. Boyden DA, et al. **Infect Immun** 1989 Dec;57(12):3808–15

Characterization of and human serologic response to proteins in Helicobacter pylori broth culture supernatants with vacuolizing cytotoxin activity. Cover TL, et al.
Infect Immun 1990 Mar;58(3):603–10

Pneumococcal surface protein A (PspA) is serologically highly variable and is expressed by all clinically important capsular serotypes of Streptococcus pneumoniae. Crain MJ, et al. **Infect Immun** 1990 Oct;58(10):3293–9

Phosphorylase–cross–reactive antibodies evoked by streptococcal M protein. Dale JB, et al. **Infect Immun** 1990 Mar;58(3):774–8

Protection against experimental Pseudomonas aeruginosa infection by recombinant P. aeruginosa lipoprotein I expressed in Escherichia coli. Finke M, et al.
Infect Immun 1990 Jul;58(7):2241–4

A B cell–, T cell–linked epitope located on the adhesin of Mycoplasma pneumoniae. Jacobs E, et al. **Infect Immun** 1990 Aug;58(8):2464–9

Epitopes of Escherichia coli alpha–hemolysin: identification of monoclonal antibodies that prevent hemolysis. Ji GE, et al. **Infect Immun** 1990 Sep;58(9):3029–35

Identification and mapping of an immunogenic region of Mycoplasma hyopneumoniae p65 surface lipoprotein expressed in Escherichia coli from a cloned genomic fragment. Kim MF, et al. **Infect Immun** 1990 Aug; 58(8):2637–43

Immunization of cattle with the MSP–1 surface protein complex induces protection against a structurally variant Anaplasma marginale isolate. Palmer GH, et al.
Infect Immun 1989 Nov;57(11):3666–9

Characterization of monoclonal antibodies against the Escherichia coli hemolysin. Pellett S, et al.
Infect Immun 1990 Mar;58(3):822–7

Mycoplasma fermentans–derived high–molecular–weight material induces interleukin–6 release in cultures of murine macrophages and human monocytes. Quentmeier H, et al.
Infect Immun 1990 May;58(5):1273–80

Production, characterization, and species specificity of monoclonal antibodies to Mycobacterium avium complex protein antigens. Rouse DA, et al. **Infect Immun** 1990 May; 58(5):1445–9

Immunogenicity testing of food proteins: in vitro and in vivo trials in rats. Steinmann J, et al.
Int Arch Allergy Appl Immunol 1990;91(1):62–5

Enhancement of protection against Salmonella infection in mice mediated by a synthetic lipopeptide analogue of bacterial lipoprotein in S. typhimurium vaccines. Schlecht S, et al. **Int J Med Microbiol** 1989 Oct;271(4):493–500

Treatment of adjuvant arthritis in rats: vaccination potential of a synthetic nonapeptide from the 65 kDa heat shock protein of mycobacteria. Yang XD, et al. **J Autoimmun** 1990 Feb;3(1):11–23

Antigenic differences among Campylobacter fetus S–layer proteins. Dubreuil JD, et al. **J Bacteriol** 1990 Sep; 172(9):5035–43

A 180–kilodalton protein from Mycobacterium tuberculosis defined by a human T cell clone. Wadee AA, et al.
J Clin Lab Immunol 1989 May;29(1):25–32

Immunodominant epitopes of the adhesin of Mycoplasma pneumoniae. Jacobs E, et al. **J Clin Microbiol** 1990 Jun; 28(6):1194–7

Human antibody response to Campylobacter jejuni flagellin protein and a synthetic N–terminal flagellin peptide. Nachamkin I, et al. **J Clin Microbiol** 1989 Oct; 27(10):2195–8

Serological response of patients with leprosy to a 28– to 30–kilodalton protein doublet from early cultures of Mycobacterium bovis BCG. Pessolani MC, et al.
J Clin Microbiol 1989 Oct;27(10):2184–9

Several membrane polypeptides of the live vaccine strain Francisella tularensis LVS stimulate T cells from naturally infected individuals. Sjöstedt A, et al. **J Clin Microbiol** 1990 Jan;28(1):43–8

Superantigenicity of streptococcal M protein. Tomai M, et al. **J Exp Med** 1990 Jul 1;172(1):359–62

Immunolabelling of SR protein and serotype polysaccharide in Streptococcus mutans. Cuisinier FJ, et al.
J Gen Microbiol 1990 May;136 (Pt 5):975–7

Identification of a common enterobacterial flagellin epitope with a monoclonal antibody. Feng P, et al.
J Gen Microbiol 1990 Feb;136 (Pt 2):337–42

Topological mapping of the P1–adhesin of Mycoplasma pneumoniae with adherence–inhibiting monoclonal antibodies. Gerstenecker B, et al. **J Gen Microbiol** 1990 Mar;136 (Pt 3):471–6

Epitope mapping of the Mycobacterium bovis secretory protein MPB70 using overlapping peptide analysis. Radford AJ, et al. **J Gen Microbiol** 1990 Feb;136 (Pt 2):265–72

Cloning and expression of an adhesin antigen of Streptococcus sanguis G9B in Escherichia coli. Rosan B, et al. **J Gen Microbiol** 1989 Mar;135 (Pt 3):531–8

The mapping of an antibody–binding region on the Mycobacterium tuberculosis 19 kilodalton antigen. Ashbridge KR, et al. **J Immunol** 1990 Apr 15; 144(8):3137–42

Synthetic peptide vaccine against mucosal colonization by group A streptococci. I. Protection against a heterologous M serotype with shared C repeat region epitopes. Bessen D, et al. **J Immunol** 1990 Aug 15;145(4):1251–6

Human and murine antibodies cross–reactive with streptococcal M protein and myosin recognize the sequence GLN–LYS–SER–LYS–GLN in M protein. Cunningham MW, et al. **J Immunol** 1989 Oct 15;143(8):2677–83

In vitro responses to a 65–kilodalton mycobacterial protein by synovial T cells from inflammatory arthritis patients. Gaston JS, et al. **J Immunol** 1989 Oct 15;143(8):2494–500

Cross–antigenicity between the major surface proteins (ospA and ospB) and other proteins of Borrelia burgdorferi. Jiang W, et al. **J Immunol** 1990 Jan 1;144(1):284–9

Accessory cell–independent stimulation of human T cells by streptococcal M protein superantigen. Kotb M, et al.
J Immunol 1990 Sep 1;145(5):1332–6

Human IgG and Streptococcus mutans SR protein contain cross–reactive epitopes. Wachsmann D, et al.
J Immunol 1989 Dec 15;143(12):4257–62

An enzyme immunoassay to detect specific antibodies to protein and lipopolysaccharide antigens of Chlamydia trachomatis. Ossewaarde JM, et al. **J Immunol Methods** 1989 Oct 24;123(2):293–8

A new heart–cross–reactive antigen in Streptococcus pyogenes is not M protein. Barnett LA, et al.
J Infect Dis 1990 Oct;162(4):875–82

Production of specific monoclonal antibodies to Salmonella typhi flagellin and possible application to immunodiagnosis of typhoid fever. Sadallah F, et al. **J Infect Dis** 1990 Jan; 161(1):59–64

Epitope mapping of monoclonal antibodies to Escherichia coli ribosomal protein S3. Syu WJ, et al.
J Protein Chem 1990 Apr;9(2):159–67

Successful preparations and characterizations of monoclonal antibodies to a 65,000 dalton protein of Mucobacterium leprae. Nomaguchi H, et al. **Nippon Rai Gakkai Zasshi** 1988 Oct–Dec;57(4):213–7

Immunoblot analysis of antibody binding to polypeptides of Borrelia burgdorferi in children with different clinical manifestations of Lyme disease. Nadal D, et al.
Pediatr Res 1989 Oct;26(4):377–82

Safety and immunologic response to Haemophilus influenzae type b oligosaccharide–CRM197 conjugate vaccine in 1– to 6–month–old infants. Madore DV, et al. **Pediatrics** 1990 Mar;85(3):331–7

Antibodies to Campylobacter flagellin recognize epitopes common to phase 1 and phase 2 flagella. Kirimat M, et al. **Res Microbiol** 1989 Nov–Dec;140(9):645–51

Low T– and B–cell reactivity is an apparently paradoxical request for murine immunoprotection against Streptococcus mutans. Murine protection can be achieved by immunization against a B–cell mitogen produced by these bacteria. Soares R, et al. **Scand J Immunol** 1990 Mar; 31(3):361–6

[Detection of cross–reacting protein antigen from urinary tract pathogens by using reversed passive gelatin agglutination test] Taguchi H, et al.
Kansenshogaku Zasshi 1990 Mar;64(3):289–94 (Eng. Abstr.) **(Jpn)**

[OF– and anti–OF test systems in microbiological and epidemiologic practice] Beliakova IV, et al.
Vestn Akad Med Nauk SSSR 1989;(11):54–9 (Eng. Abstr.) **(Rus)**

[A comparative study of delayed hypersensitivity due to mycobacteria and their isolated protein fractions] Badukshanova NM, et al.
Zh Mikrobiol Epidemiol Immunobiol 1989 Jul;(7):84–9 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Purification, characterization, and complete amino acid sequence of a thioredoxin from a green alga, Chlamydomonas reinhardtii. Decottignies P, et al.

Arch Biochem Biophys 1990 Jul;280(1):112–21

Double-stranded DNA binding protein HU. Wilson K, et al. **Basic Life Sci** 1989;51:133–40

Purification and characterization of two proteins with inorganic pyrophosphatase activity from Desulfovibrio vulgaris: rubrerythrin and a new, highly active, enzyme. Liu MY, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):313–8

Active-site and membrane topology of the DD-peptidase/penicillin-binding protein no. 6 of Enterococcus hirae (Streptococcus faecium) A.T.C.C. 9790. el Kharroubi A, et al. **Biochem J** 1989 Sep 1; 262(2):457–62

Recovery of therapeutic proteins from inclusion bodies: problems and process strategies. Thatcher DR. **Biochem Soc Trans** 1990 Apr;18(2):234–5

Isolation of a protein fraction from Bordetella pertussis that facilitates entry of the calmodulin-sensitive adenylate cyclase into animal cells. Donovan MG, et al. **Biochemistry** 1989 Oct 3;28(20):8124–9

Characterization of a photosystem I core containing P700 and intermediate electron acceptor A1. Warren PV, et al. **Biochemistry** 1990 Jul 17;29(28):6545–50

Soluble cytochromes and a photoactive yellow protein isolated from the moderately halophilic purple phototrophic bacterium, Rhodospirillum salexigens. Meyer TE, et al. **Biochim Biophys Acta** 1990 Apr 26; 1016(3):364–70

Soluble cytochromes and ferredoxins from the marine purple phototrophic bacterium, Rhodopseudomonas marina. Meyer TE, et al. **Biochim Biophys Acta** 1990 Jun 1; 1017(2):125–38

Simple method for the isolation of the antilepidopteran toxin from Bacillus thuringiensis subsp. kurstaki. Venkateswerlu G, et al. **Biotechnol Appl Biochem** 1990 Jun;12(3):245–51

Chemical characterization of the regularly arranged surface layer glycoprotein of Clostridium thermosaccharolyticum D120–70. Altman E, et al. **Eur J Biochem** 1990 Feb 22; 188(1):73–82

Purification and properties of phosphoribosyl-diphosphate synthetase from Bacillus subtilis. Arnvig K, et al. **Eur J Biochem** 1990 Aug 28;192(1):195–200

Delta-haemolysin from Staphylococcus aureus and model membranes. A solid-state 2H-NMR and 31P-NMR study. Dufourc EJ, et al. **Eur J Biochem** 1990 Feb 14;187(3):581–7

Structure of spheroidene in the photosynthetic reaction center from Y Rhodobacter sphaeroides. Arnoux B, et al. **FEBS Lett** 1989 Nov 20;258(1):47–50

Two-dimensional crystallization of reaction centers from Chloroflexus aurantiacus. Barnakov AN, et al. **FEBS Lett** 1990 Jun 4;265(1–2):126–8

Animal and plant mitochondria contain specific thioredoxins. Bodenstein-Lang J, et al. **FEBS Lett** 1989 Nov 20; 258(1):22–6

Immunogenic endotoxin associated protein from a rough strain of Salmonella. Phillips M, et al. **FEMS Microbiol Immunol** 1989 Dec;1(8–9):485–90

Purification and amino acid sequence of two small, acid-soluble proteins from Clostridium bifermentans spores. Cabrera-Martinez RM, et al. **FEMS Microbiol Lett** 1989 Oct 1;52(1–2):139–43

Identification of an immunostimulating protein from Mycobacterium leprae. Mohagheghpour N, et al. **Infect Immun** 1990 Mar;58(3):703–10

A procedure for urease and protein extraction from staphylococci. Sissons CH, et al. **J Appl Bacteriol** 1989 Oct; 67(4):433–40

Isolation and characterization of a beta-lactamase-inhibitory protein from Streptomyces clavuligerus and cloning and analysis of the corresponding gene. Doran JL, et al. **J Bacteriol** 1990 Sep;172(9):4909–18

Isolation and characterization of a Treponema pallidum major 60-kilodalton protein resembling the groEL protein of Escherichia coli. Houston LS, et al. **J Bacteriol** 1990 Jun;172(6):2862–70

Overproduction, purification, and ATPase activity of the Escherichia coli RuvB protein involved in DNA repair. Iwasaki H, et al. **J Bacteriol** 1989 Oct;171(10):5276–80

Protein content and enzyme activities in methanol- and acetate-grown Methanosarcina thermophila. Jablonski PE, et al. **J Bacteriol** 1990 Mar;172(3):1271–5

Phosphorylated tyrosine in the flagellum filament protein of Pseudomonas aeruginosa. Kelly-Wintenberg K, et al. **J Bacteriol** 1990 Sep;172(9):5135–9

Purification and characterization of a Bacteroides loeschei adhesin that interacts with procaryotic and eucaryotic cells. London J, et al. **J Bacteriol** 1990 May;172(5):2527–34

Purification and characterization of an active fragment of the LasA protein from Pseudomonas aeruginosa: enhancement of elastase activity. Peters JE, et al. **J Bacteriol** 1990 May;172(5):2236–40

Purification of receptor protein Trg by exploiting a property common to chemotactic transducers of Escherichia coli. Burrows GG, et al. **J Biol Chem** 1989 Oct 15; 264(29):17309–15

Purification and biochemical characterization of SELB, a translation factor involved in selenoprotein synthesis. Forchhammer K, et al. **J Biol Chem** 1990 Jun 5; 265(16):9346–50

The major native proteins of the leprosy bacillus. Hunter SW, et al. **J Biol Chem** 1990 Aug 25;265(24):14065–8

Purification and characterization of photosystem I and photosystem II core complexes from wild-type and phycocyanin-deficient strains of the cyanobacterium Synechocystis PCC 6803. Rögner M, et al. **J Biol Chem** 1990 Apr 15;265(11):6189–96

Purification of core salt-extracted E. coli 30S ribosomal proteins by high-performance liquid chromatography under non-denaturing conditions. Cachia C, et al. **J Chromatogr** 1990 Jan 12;498(2):417–22

Application of free flow electrophoresis to the preparative purification of basic proteins from an E. coli cell extract. Kuhn R, et al. **J Chromatogr** 1989 Nov 3;481:343–51

Numerical analysis of electrophoretic periplasmic protein patterns, a possible marker system for epidemiologic studies. Gargallo-Viola D, et al. **J Clin Microbiol** 1990 Jan;28(1):136–9

Protein-mediated adhesion of Lactobacillus fermentum strain 737 to mouse stomach squamous epithelium. Conway PL, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1175–86

Properties of a phosphocarrier protein (HPr) extracted from intact cells of Streptococcus sanguis. Jenkinson HF. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3183–97

Characterization of envelope proteins from Pasteurella haemolytica and Pasteurella multocida. Knights JM, et al. **J Gen Microbiol** 1990 Mar;136 (Pt 3):495–505

Adhesive proteins of haemagglutinating Staphylococcus aureus isolated from bovine mastitis. Lindahl M, et al. **J Gen Microbiol** 1990 May;136 (Pt 5):935–9

Characterization of a putative colonization factor (PCFO166) of enterotoxigenic Escherichia coli of serogroup O166. McConnell MM, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1135–44

Purification and characterization of cell-associated glucosyltransferase synthesizing insoluble glucan from Streptococcus mutans serotype c. Mukasa H, et al. **J Gen Microbiol** 1989 Jul;135 (Pt 7):2055–63

Coat and enterotoxin-related proteins in Clostridium perfringens spores. Ryu S, et al. **J Gen Microbiol** 1989 Nov; 135 (Pt 11):3109–18

Isolation of immunoglobulin G by affinity chromatography using an IgG Fc receptor protein from Streptococcus dysgalactiae coupled to a solid phase. Lämmler C, et al. **J Immunol Methods** 1989 Nov 13;124(1):131–5

Total reconstitution of Salmonella flagellar filaments from hook and purified flagellin and hook-associated proteins in vitro. Ikeda T, et al. **J Mol Biol** 1989 Sep 5;209(1):109–14

Isolation and properties of streptavidin. Bayer EA, et al. **Methods Enzymol** 1990;184:80–9

Preparation of extracts from prokaryotes. Cull M, et al. **Methods Enzymol** 1990;182:147–53

Solubilization of protein aggregates. Marston FA, et al. **Methods Enzymol** 1990;182:264–76

Heat stability of the extracellular lipase from a Pseudomonas strain isolated from refrigerated raw milk. García-Collía P, et al. **Microbiologia** 1988 Jun;4(2):125–8

Isolation of an inhibitor of cell-free protein synthesis from Salmonella enteritidis. Brigotti M, et al. **Microbiologica** 1990 Jan;13(1):55–60

A soluble 60 kiloDalton antigen of Chlamydia spp. is a homologue of Escherichia coli GroEL. Bavoil P, et al. **Mol Microbiol** 1990 Mar;4(3):461–9

Identification of a 180 kD protein in Escherichia coli related to a yeast heavy-chain myosin. Casaregola S, et al. **Mol Microbiol** 1990 Mar;4(3):505–11

Isolation of a secY homologue from Bacillus subtilis: evidence for a common protein export pathway in eubacteria. Suh JW, et al. **Mol Microbiol** 1990 Feb;4(2):305–14

Isolation of intact FNR protein (Mr 30,000) of Escherichia coli. Trageser M, et al. **Mol Microbiol** 1990 Jan;4(1):21–7

Isolation and characterization of a subunit form of the B875 light-harvesting complex from Rhodobacter capsulatus. Heller BA, et al. **Photochem Photobiol** 1990 May; 51(5):621–7

Solubilization and functional reconstitution of the protein-translocation enzymes of Escherichia coli. Driessen AJ, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3107–11

Purification and properties of Myxococcus xanthus C-factor, an intercellular signaling protein. Kim SK, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3635–9

UmuC mutagenesis protein of Escherichia coli: purification and interaction with UmuD and UmuD'. Woodgate R, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7301–5

Purification and characterization of Aeromonas hydrophila beta-hemolysin. Bloch S, et al. **Toxicon** 1989; 27(12):1279–87

[A specific protein inhibiting membrane permeation of chloramphenicol in Pseudomonas aeruginosa] O'Hara K, et al. **Jpn J Antibiot** 1990 Apr;43(4):754–6 (Eng. Abstr.) **(Jpn)**

[Isolation and identification of the products of Streptococcus faecalis inhibiting mycelial transformation of Candida albicans] Kaczmarski W, et al. **Med Dosw Mikrobiol** 1989; 41(3–4):192–201 (Eng. Abstr.) **(Pol)**

[Use of enzyme preparation from Streptomyces recifensis subsp. lyticus for isolation of membrane substances from staphylococcal cells] Oriabinskaia LB, et al. **Antibiot Khimioter** 1990 Jun;35(6):18–21 (Eng. Abstr.) **(Rus)**

METABOLISM

Regulation of gene expression by mercury. Helmann JD, et al. **Adv Inorg Biochem** 1990;8:33–61 (83 ref.)

Mechanisms of long-distance electron transfer in proteins: lessons from photosynthetic reaction centers. Boxer SG. **Annu Rev Biophys Biophys Chem** 1990;19:267–99 (128 ref.)

Different modes of vancomycin and D-alanyl-D-alanine peptidase binding to cell wall peptide and a possible role for the vancomycin resistance protein. Knox JR, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1342–7

Distribution in tissue sections of the human groEL stress-protein homologue. Evans DJ, et al. **APMIS** 1990 May;98(5):437–41

Protein phosphorylation in response to stress in Clostridium acetobutylicum. Balodimos IA, et al. **Appl Environ Microbiol** 1990 Jul;56(7):2170–3

Binding and aggregation of the 25-kilodalton toxin of Bacillus thuringiensis subsp. israelensis to cell membranes and alteration by monoclonal antibodies and amino acid modifiers. Chow E, et al. **Appl Environ Microbiol** 1989 Nov;55(11):2779–88

Accumulation of the insecticidal crystal protein of Bacillus thuringiensis subsp. kurstaki in post-exponential-phase Bacillus subtilis. Crissman JW, et al. **Appl Environ Microbiol** 1989 Sep;55(9):2302–7

Receptors on the brush border membrane of the insect midgut as determinants of the specificity of Bacillus thuringiensis delta-endotoxins. Van Rie J, et al. **Appl Environ Microbiol** 1990 May;56(5):1378–85

Genetic analyses of cellular functions required for UV mutagenesis in Escherichia coli. Battista JR, et al. **Basic Life Sci** 1990;52:269–75 (22 ref.)

Proteolytic activation of UmuD and MucA proteins for SOS mutagenesis. Shiba T, et al. **Basic Life Sci** 1990;52:351–4

SecY protein, a membrane-embedded secretion factor of E. coli, is cleaved by the ompT protease in vitro. Akiyama Y, et al. **Biochem Biophys Res Commun** 1990 Mar 16; 167(2):711–5

Streptavidin contains an RYD sequence which mimics the RGD receptor domain of fibronectin. Alon R, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1236–41

Interaction of DnaK with ATP: binding, hydrolysis and Ca+2-stimulated autophosphorylation. Dalie BL, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1284–92

Thioredoxin and glutaredoxin systems of rat liver cytosol are not influenced by thyroid dysfunction. Bhat GB, et al. **Biochem Cell Biol** 1989 Jul;67(7):384–7

Studies on the biotin-binding sites of avidin and streptavidin. Tyrosine residues are involved in the binding site. Gitlin G, et al. **Biochem J** 1990 Jul 15;269(2):527–30

Oxidation—reduction midpoint potentials of the flavin, haem and Mo-pterin centres in spinach (Spinacia oleracea L.) nitrate reductase. Kay CJ, et al. **Biochem J** 1989 Oct 1; 263(1):285–7

P+QA- and P+QB- charge recombinations in Rhodopseudomonas viridis chromatophores and in reaction centers reconstituted in phosphatidylcholine liposomes. Existence of two conformational states of the reaction centers and effects of pH and o-phenanthroline. Baciou L, et al. **Biochemistry** 1990 Mar 27;29(12):2966–76

Dehydroquinate synthase: the role of divalent metal cations and of nicotinamide adenine dinucleotide in catalysis. Bender SL, et al. **Biochemistry** 1989 Sep 19;28(19):7555–60

Folding kinetics of phage T4 thioredoxin. Borden KL, et al. **Biochemistry** 1990 Mar 27;29(12):3071–7

Single protein omission reconstitution studies of tetracycline binding to the 30S subunit of Escherichia coli ribosomes. Buck MA, et al. **Biochemistry** 1990 Jun 5;29(22):5374–9

Assignment of the proton NMR spectrum of reduced and oxidized thioredoxin: sequence-specific assignments, secondary structure, and global fold. Dyson HJ, et al. **Biochemistry** 1989 Aug 22;28(17):7074–87

Characterization of Escherichia coli thioredoxins with altered active site residues. Gleason FK, et al. **Biochemistry** 1990 Apr 17;29(15):3701–9

The LexA repressor and its isolated amino-terminal domain interact cooperatively with poly[d(A-T)], a contiguous pseudo-operator, but not with random DNA: a circular dichroism study. Hurstel S, et al. **Biochemistry** 1990 Feb 20;29(7):1961–70

Zinc interactions with regulatory dimers from Escherichia coli aspartate transcarbamoylase. Jefferson JR, et al. **Biochemistry** 1990 Jul 17;29(28):6687–98

Electron transfer between primary and secondary donors in Rhodospirillum rubrum: evidence for a dimeric association of reaction centers. Joliot P, et al. **Biochemistry** 1990 May 8;29(18):4355–61

Chemical cross-linking study of complex formation between methylamine dehydrogenase and amicyanin from Paracoccus denitrificans. Kumar MA, et al. **Biochemistry** 1990 Jun 5;29(22):5299–304

Role of specific lysine residues in binding cytochrome c2 to the Rhodobacter sphaeroides reaction center in optimal orientation for rapid electron transfer. Long JE, et al. **Biochemistry** 1989 Aug 22;28(17):6970–4

Orientation of the putative recognition helix in the DNA-binding domain of Hin recombinase complexed with the hix site. Mack DP, et al. **Biochemistry** 1990 Jul 17; 29(28):6561–7

Stabilization of recA protein-ssDNA complexes by the single-stranded DNA binding protein of Escherichia coli. Morrical SW, et al. **Biochemistry** 1990 Jan 23;29(3):837–43

Escherichia coli initiation factor 3 protein binding to 30S ribosomal subunits alters the accessibility of nucleotides within the conserved central region of 16S rRNA. Muralikrishna P, et al. **Biochemistry** 1989 Sep 19;

28(19):7505–10
Probing the bacteriochlorophyll binding site by reconstitution of the light-harvesting complex of Rhodospirillum rubrum with bacteriochlorophyll a analogues. Parkes-Loach PS, et al. **Biochemistry** 1990 Mar 27;29(12):2951–60
Temperature-dependent conformational changes in the bacteriopheophytins of Rhodobacter sphaeroides reaction centers. Peloquin JM, et al. **Biochemistry** 1990 May 22; 29(20):4892–8
Sequence determinants for H1 binding on Escherichia coli lac and gal promoters. Rimsky S, et al. **Biochemistry** 1990 Apr 17;29(15):3765–71
Phenylalanine-to-tyrosine singlet energy transfer in the archaebacterial histone-like protein HTa. Searcy DG, et al. **Biochemistry** 1989 Nov 14;28(23):9058–65
Importance of minor-groove contacts for recognition of DNA by the binding domain of Hin recombinase. Sluka JP, et al. **Biochemistry** 1990 Jul 17;29(28):6551–61
13C and 15N NMR studies on the interaction between 6,7-dimethyl-8-ribityllumazine and lumazine protein. Vervoort J, et al. **Biochemistry** 1990 Feb 20;29(7):1823–8
Chaperonin-facilitated refolding of ribulosebisphosphate carboxylase and ATP hydrolysis by chaperonin 60 (groEL) are K+ dependent. Viitanen PV, et al. **Biochemistry** 1990 Jun 19;29(24):5665–71
Monomeric bacteriochlorophyll is required for the triplet energy transfer between the primary donor and the carotenoid in photosynthetic bacterial reaction centers. Frank HA, et al. **Biochim Biophys Acta** 1989 Sep 28; 976(2–3):222–32
The lifetime of photosensory signals in Halobacterium halobium and its dependence on protein methylation. Hildebrand E, et al. **Biochim Biophys Acta** 1990 Apr 9; 1052(1):96–105
Investigations on the influence of headgroup substitution and isoprene side-chain length in the function of primary and secondary quinones of bacterial reaction centers. McComb JC, et al. **Biochim Biophys Acta** 1990 Jan 4;1015(1):156–71
Electrostatic control of charge separation in bacterial photosynthesis. Parson WW, et al.
Biochim Biophys Acta 1990 Jun 26;1017(3):251–72
Uptake across the cell envelope and insertion into the inner membrane of ion channel-forming colicins in E coli. Baty D, et al. **Biochimie** 1990 Feb-Mar;72(2–3):123–30 (60 ref.)
Metabolite-sensitive, ATP-dependent, protein kinase-catalyzed phosphorylation of HPr, a phosphocarrier protein of the phosphotransferase system in gram-positive bacteria. Reizer J, et al. **Biochimie** 1989 Sep-Oct; 71(9–10):989–96 (44 ref.)
Secretion processing and activation of Erwinia chrysanthemi proteases. Wandersman C, et al. **Biochimie** 1990 Feb-Mar; 72(2–3):143–6 (18 ref.)
Characterization of the recombinant Clostridium pasteurianum ferredoxin and comparison of its properties with those of the native protein. Baur JR, et al.
Biofactors 1990 Jul;2(3):197–203
Interaction of bacterial glucose-6-phosphate dehydrogenase with triazine dyes: a study by means of affinity partitioning and kinetic analysis. Reuter R, et al.
Biomed Biochim Acta 1990;49(4):151–60
DNA binding protein from Streptomyces hygroscopicus: detection of binding by gel retardation, sedimentation and effects on the transcriptional activity in vitro. Sarfert E, et al. **Biomed Biochim Acta** 1989;48(9):633–43
Electron paramagnetic resonance investigation of photosynthetic reaction centers from Rhodobacter sphaeroides R-26 in which Fe2+ was replaced by Cu2+. Determination of hyperfine interactions and exchange and dipole-dipole interactions between Cu2+ and QA-. Calvo R, et al. **Biophys J** 1990 Jul;58(1):149–65
Nobel lecture. A structural basis of light energy and electron transfer in biology. Huber R. **Biosci Rep** 1989 Dec; 9(6):635–73 (182 ref.)
Interactions of micromolar concentrations of fluoride with Streptococcus rattus FA-1. Psarros N, et al. **Caries Res** 1990;24(3):189–97
The purified E. coli integral membrane protein SecY/E is sufficient for reconstitution of SecA-dependent precursor protein translocation. Brundage L, et al. **Cell** 1990 Aug 24;62(4):649–57
Multiple beta 1 chain integrins are receptors for invasin, a protein that promotes bacterial penetration into mammalian cells. Isberg RR, et al. **Cell** 1990 Mar 9;60(5):861–71
The ATPase activity of SecA is regulated by acidic phospholipids, SecY, and the leader and mature domains of precursor proteins. Lill R, et al. **Cell** 1990 Jan 26; 60(2):271–80
Fluorescence labeled and cross-linked subtilisin: kinetic characteristics and binding to Streptomyces subtilisin inhibitor. Tanizawa K, et al. **Chem Pharm Bull (Tokyo)** 1990 Feb;38(2):467–9
Clustering of ice nucleation protein correlates with ice nucleation activity. Mueller GM, et al. **Cryobiology** 1990 Aug;27(4):416–22
Bacterial membranes. Higgins CF. **Curr Opin Cell Biol** 1989 Aug;1(4):701–5 (8 ref.)
Adhesins as lectins: specificity and role in infection. Ofek I, et al. **Curr Top Microbiol Immunol** 1990;151:91–113 (128 ref.)
Nobel lecture. The photosynthetic reaction centre from the purple bacterium Rhodopseudomonas viridis. Deisenhofer J, et al. **EMBO J** 1989 Aug;8(8):2149–70 (91 ref.)
The reaction specificities of the thylakoidal processing peptidase and Escherichia coli leader peptidase are identical. Halpin C, et al. **EMBO J** 1989 Dec 1; 8(12):3917–21
Nobel lecture. A structural basis of light energy and electron transfer in biology. Huber R. **EMBO J** 1989 Aug; 8(8):2125–47 (165 ref.)
Effects of mutations in heat-shock genes groES and groEL on protein export in Escherichia coli. Kusukawa N, et al. **EMBO J** 1989 Nov;8(11):3517–21
Three pure chaperone proteins of Escherichia coli—SecB, trigger factor and GroEL—form soluble complexes with precursor proteins in vitro. Lecker S, et al. **EMBO J** 1989 Sep;8(9):2703–9
ProOmpA contains secondary and tertiary structure prior to translocation and is shielded from aggregation by association with SecB protein. Lecker SH, et al.
EMBO J 1990 Jul;9(7):2309–14
Action at a distance in Mu DNA transposition: an enhancer-like element is the site of action of supercoiling relief activity by integration host factor (IHF). Surette MG, et al. **EMBO J** 1989 Nov;8(11):3483–9
Determinants of membrane-targeting and transmembrane translocation during bacterial protein export. Swidersky UE, et al. **EMBO J** 1990 Jun;9(6):1777–85
Unusual proteolysis of the protoxin and toxin from Bacillus thuringiensis. Structural implications. Choma CT, et al.
Eur J Biochem 1990 May 20;189(3):523–7
Membrane ionic currents in Rhodobacter capsulatus. Evidence for electrophoretic transport of K+, Rb+ and NH4+. Golby P, et al. **Eur J Biochem** 1990 Feb 14; 187(3):589–97
Concerted action of cosolvents, chaotropic anions and thioredoxin on chloroplast fructose-1,6-bisphosphatase. Reactivity to iodoacetamide. Stein M, et al.
Eur J Biochem 1989 Nov 6;185(2):425–31
Kinetics of photosynthetic electron transfer in artificial vesicles reconstituted with purified complexes from Rhodobacter capsulatus. II. Direct electron transfer between the reaction center and the bc1 complex and role of cytochrome c2. Venturoli G, et al. **Eur J Biochem** 1990 Apr 20;189(1):95–103
Kinetics of photosynthetic electron transfer in artificial vesicles reconstituted with purified complexes from Rhodobacter capsulatus. I. The interaction of cytochrome c2 with the reaction center. Venturoli G, et al.
Eur J Biochem 1990 Apr 20;189(1):105–12
In vivo processing of N-terminal methionine in E. coli. Dalbøge H, et al. **FEBS Lett** 1990 Jun 18;266(1–2):1–3
Processing of Ada protein by two serine endoproteases Do and So from Escherichia coli. Lee CS, et al.
FEBS Lett 1990 Mar 26;262(2):310–2
Participation of acid phospholipids in protein translocation across the bacterial cytoplasmic membrane. Nesmeyanova MA, et al. **FEBS Lett** 1989 Nov 6;257(2):203–7 (46 ref.)
A protein with sequence identity to Skp (FirA) supports protein translocation into plasma membrane vesicles of Escherichia coli. Thome BM, et al. **FEBS Lett** 1990 Aug 20;269(1):113–6
In vitro protein translocation into inverted membrane vesicles prepared from Vibrio alginolyticus is stimulated by the electrochemical potential of Na+ in the presence of Escherichia coli SecA. Tokuda H, et al. **FEBS Lett** 1990 May 7;264(1):10–2
Acid shock proteins of Escherichia coli. Heyde M, et al.
FEMS Microbiol Lett 1990 May;57(1–2):19–26
Interactions of membrane lipoproteins with the murein sacculus of Escherichia coli as shown by chemical crosslinking studies of intact cells. Leduc M, et al.
FEMS Microbiol Lett 1989 Jul 1;51(1):11–4
Regulation of breakdown of canavanyl proteins in Escherichia coli by growth conditions in lon+ and lon- cells. Rosenberger RF, et al. **FEMS Microbiol Lett** 1990 Mar 1;56(1–2):19–25
Regulation of sugar uptake and efflux in gram-positive bacteria. Reizer J. **FEMS Microbiol Rev** 1989 Jun; 5(1–2):149–56 (21 ref.)
The Escherichia coli MutH protein is not the repressor of the bacteriophage Mu mom operon. Hattman S. **Gene** 1989 Jul 15;79(2):381–3
Identification of the sigma E subunit of Escherichia coli RNA polymerase: a second alternate sigma factor involved in high-temperature gene expression. Erickson JW, et al.
Genes Dev 1989 Sep;3(9):1462–71
Cell motility is required for the transmission of C-factor, an intercellular signal that coordinates fruiting body morphogenesis of Myxococcus xanthus. Kim SK, et al.
Genes Dev 1990 Jun;4(6):896–904
Induction of a heat shock-like response by unfolded protein in Escherichia coli: dependence on protein level not protein degradation. Parsell DA, et al. **Genes Dev** 1989 Aug; 3(8):1226–32
Amino acid similarities to other proteins offer insights into roles of UmuD and UmuC in mutagenesis. Battista JR, et al. **Genome** 1989;31(2):594–6
Polymerases and UV mutagenesis in Escherichia coli. Bridges BA, et al. **Genome** 1989;31(2):572–7 (37 ref.)
Homologous recombination in prokaryotes: enzymes and controlling sites. Smith GR. **Genome** 1989;31(2):520–7 (41 ref.)
Calcium is required for binding of Escherichia coli hemolysin (HlyA) to erythrocyte membranes. Boehm DF, et al.
Infect Immun 1990 Jun;58(6):1951–8
Domains of Escherichia coli hemolysin (HlyA) involved in binding of calcium and erythrocyte membranes. Boehm DF, et al. **Infect Immun** 1990 Jun;58(6):1959–64
Purification of a Streptococcus mutans protein that binds to heart tissue and glycosaminoglycans. Choi SH, et al.
Infect Immun 1989 Dec;57(12):3834–40
Vibrio cholerae HlyA hemolysin is processed by proteolysis. Hall RH, et al. **Infect Immun** 1990 Oct;58(10):3375–9
Protein L, a bacterial immunoglobulin-binding protein and possible virulence determinant. Kastern W, et al.
Infect Immun 1990 May;58(5):1217–22
Characterization of Streptococcus gordonii (S. sanguis) PK488 adhesin-mediated coaggregation with Actinomyces naeslundii PK606. Kolenbrander PE, et al.
Infect Immun 1990 Sep;58(9):3064–72
Direct evidence that the FimH protein is the mannose-specific adhesin of Escherichia coli type 1 fimbriae. Krogfelt KA, et al. **Infect Immun** 1990 Jun; 58(6):1995–8
Occurrence of protein phosphorylation in various bacterial species. Dadssi M, et al. **Int J Biochem** 1990;22(5):493–9
Binding of immunoglobulin G and albumin to Streptococcus dysgalactiae. Lämmler C, et al. **Int J Med Microbiol** 1989 Sep;271(3):321–9
A secreted receptor related to M1 protein of Streptococcus pyogenes binds to fibrinogen, IgG, and albumin. Schmidt KH, et al. **Int J Med Microbiol** 1990 Jun;273(2):216–28
Penicillin-binding proteins and ampicillin resistance in Haemophilus influenzae. Mendelman PM, et al.
J Antimicrob Chemother 1990 Apr;25(4):525–34
In vivo degradation of secreted fusion proteins by the Escherichia coli outer membrane protease OmpT. Baneyx F, et al. **J Bacteriol** 1990 Jan;172(1):491–4
FtsZ regulates frequency of cell division in Escherichia coli. Bi E, et al. **J Bacteriol** 1990 May;172(5):2765–8
The acylated precursor form of the colicin A lysis protein is a natural substrate of the DegP protease. Cavard D, et al. **J Bacteriol** 1989 Nov;171(11):6316–22
Replication of the broad-host-range plasmid RK2: direct measurement of intracellular concentrations of the essential TrfA replication proteins and their effect on plasmid copy number. Durland RH, et al. **J Bacteriol** 1990 Jul; 172(7):3849–58
DNA footprint analysis of the transcriptional activator proteins NodD1 and NodD3 on inducible nod gene promoters. Fisher RF, et al. **J Bacteriol** 1989 Oct; 171(10):5492–502
Integration host factor is a negative effector of in vivo and in vitro expression of ompC in Escherichia coli. Huang L, et al. **J Bacteriol** 1990 Sep;172(9):5293–8
Interaction of integration host factor from Escherichia coli with the integration region of the Haemophilus influenzae bacteriophage HP1. Hwang ES, et al. **J Bacteriol** 1990 Sep; 172(9):4852–60
Overproduction, purification, and ATPase activity of the Escherichia coli RuvB protein involved in DNA repair. Iwasaki H, et al. **J Bacteriol** 1989 Oct;171(10):5276–80
Analysis of the Escherichia coli gene encoding L-asparaginase II, ansB, and its regulation by cyclic AMP receptor and FNR proteins. Jennings MP, et al.
J Bacteriol 1990 Mar;172(3):1491–8
Phosphorylation of the VirG protein of Agrobacterium tumefaciens by the autophosphorylated VirA protein: essential role in biological activity of VirG. Jin SG, et al.
J Bacteriol 1990 Sep;172(9):4945–50
The regulatory VirG protein specifically binds to a cis-acting regulatory sequence involved in transcriptional activation of Agrobacterium tumefaciens virulence genes. Jin SG, et al. **J Bacteriol** 1990 Feb;172(2):531–7
Effects of antibiotics on synthesis and persistence of sigma E in sporulating Bacillus subtilis. Jonas RM, et al.
J Bacteriol 1990 Aug;172(8):4616–23
Secretion of methanol-insoluble heat-stable enterotoxin (STB): energy- and secA-dependent conversion of pre-STB to an intermediate indistinguishable from the extracellular toxin. Kupersztoch YM, et al. **J Bacteriol** 1990 May;172(5):2427–32
Location of a P1 plasmid replication inhibitor determinant within the initiator gene. Muraiso K, et al. **J Bacteriol** 1990 Aug;172(8):4441–7
Energy and calcium ion dependence of proteolysis during sporulation of Bacillus subtilis cells. O'Hara MB, et al.
J Bacteriol 1990 Aug;172(8):4161–70
virG, an Agrobacterium tumefaciens transcriptional activator, initiates translation at a UUG codon and is a sequence-specific DNA-binding protein. Pazour GJ, et al.
J Bacteriol 1990 Mar;172(3):1241–9
Characterization of the gene for a protein kinase which phosphorylates the sporulation-regulatory proteins Spo0A and Spo0F of Bacillus subtilis. Perego M, et al.
J Bacteriol 1989 Nov;171(11):6187–96
A 57-kilodalton protein associated with Spiroplasma melliferum fibrils undergoes reversible phosphorylation. Platt MW, et al. **J Bacteriol** 1990 May;172(5):2808–11
Role of the promoter in activation of transcription by nitrogen regulator I phosphate in Escherichia coli. Ray L, et al. **J Bacteriol** 1990 Feb;172(2):818–23
Thioredoxin or glutaredoxin in Escherichia coli is essential for sulfate reduction but not for deoxyribonucleotide synthesis. Russel M, et al. **J Bacteriol** 1990 Apr;

172(4):1923–9
The Agrobacterium tumefaciens virC1 gene product binds to overdrive, a T-DNA transfer enhancer. Toro N, et al. **J Bacteriol** 1989 Dec;171(12):6845–9
Intrinsic bends and integration host factor binding at F plasmid oriT. Tsai MM, et al. **J Bacteriol** 1990 Aug; 172(8):4603–9
The folding properties of the Escherichia coli maltose-binding protein influence its interaction with SecB in vitro. Weiss JB, et al. **J Bacteriol** 1990 Jun;172(6):3023–9
Integration host factor increases the transpositional immunity conferred by gamma delta ends. Wiater LA, et al. **J Bacteriol** 1990 Sep;172(9):4951–8
DNA binding properties of purified replication initiator protein (Rep) encoded by plasmid pSC101. Sugiura S, et al. **J Biochem (Tokyo)** 1990 Mar;107(3):369–76
Signal peptidases and signal peptide hydrolases. Dev IK, et al. **J Bioenerg Biomembr** 1990 Jun;22(3):271–90 (133 ref.)
Protein translocation in vitro: biochemical characterization of genetically defined translocation components. Fandl J, et al. **J Bioenerg Biomembr** 1990 Jun;22(3):369–87 (90 ref.)
Lipoproteins in bacteria. Hayashi S, et al. **J Bioenerg Biomembr** 1990 Jun;22(3):451–71 (125 ref.)
Structure, function, and biogenesis of SecY, an integral membrane protein involved in protein export. Ito K. **J Bioenerg Biomembr** 1990 Jun;22(3):353–67 (66 ref.)
Orientation of reaction center complexes from Rhodobacter sphaeroides in proteoliposomes and the effect of o-phenanthroline on electrogenesis during primary photochemical reaction. Kondrashin AA, et al. **J Bioenerg Biomembr** 1989 Aug;21(4):519–26
SecB protein: a cytosolic export factor that associates with nascent exported proteins. Kumamoto CA. **J Bioenerg Biomembr** 1990 Jun;22(3):337–51 (43 ref.)
SecA protein: autoregulated initiator of secretory precursor protein translocation across the E. coli plasma membrane. Oliver DB, et al. **J Bioenerg Biomembr** 1990 Jun; 22(3):311–36 (74 ref.)
Protein L: an immunoglobulin light chain-binding bacterial protein. Characterization of binding and physicochemical properties. Akerström B, et al. **J Biol Chem** 1989 Nov 25; 264(33):19740–6
SecA interacts with secretory proteins by recognizing the positive charge at the amino terminus of the signal peptide in Escherichia coli. Akita M, et al. **J Biol Chem** 1990 May 15;265(14):8164–9
UhpT, the sugar phosphate antiporter of Escherichia coli, functions as a monomer. Ambudkar SV, et al. **J Biol Chem** 1990 Jul 25;265(21):12287–92
Homogeneous Escherichia coli FPG protein. A DNA glycosylase which excises imidazole ring-opened purines and nicks DNA at apurinic/apyrimidinic sites. Boiteux S, et al. **J Biol Chem** 1990 Mar 5;265(7):3916–22
"Macromolecular crowding": thermodynamic consequences for protein-protein interactions within the T4 DNA replication complex. Jarvis TC, et al. **J Biol Chem** 1990 Sep 5;265(25):15160–7
SecB protein stabilizes a translocation-competent state of purified prePhoE protein. Kusters R, et al. **J Biol Chem** 1989 Dec 15;264(35):20827–30
Physical interactions between bacteriophage and Escherichia coli proteins required for initiation of lambda DNA replication. Liberek K, et al. **J Biol Chem** 1990 Feb 25; 265(6):3022–9
pH-dependent redox activity and fluxionality of the copper site in amicyanin from Thiobacillus versutus as studied by 300- and 600- MHz 1H NMR. Lommen A, et al. **J Biol Chem** 1990 Feb 15;265(5):2768–74
Protein disulfide-isomerase is a substrate for thioredoxin reductase and has thioredoxin-like activity. Lundström J, et al. **J Biol Chem** 1990 Jun 5;265(16):9114–20
Host virus interactions in the initiation of bacteriophage lambda DNA replication. Recruitment of Escherichia coli DnaB helicase by lambda P replication protein. Mallory JB, et al. **J Biol Chem** 1990 Aug 5;265(22):13297–307
The ABC-primosome. A novel priming system employing dnaA, dnaB, dnaC, and primase on a hairpin containing a dnaA box sequence. Masai H, et al. **J Biol Chem** 1990 Sep 5;265(25):15134–44
Characterization of a tungsten-iron-sulfur protein exhibiting novel spectroscopic and redox properties from the hyperthermophilic archaebacterium Pyrococcus furiosus. Mukund S, et al. **J Biol Chem** 1990 Jul 15;265(20):11508–16
Formation and enzymatic properties of the UvrB.DNA complex. Orren DK, et al. **J Biol Chem** 1990 Sep 15; 265(26):15796–803
Induced bending of plasmid pLS1 DNA by the plasmid-encoded protein RepA. Pérez-Martín J, et al. **J Biol Chem** 1989 Dec 15;264(35):21334–9
RecA protein promoted homologous pairing in vitro. Pairing between linear duplex DNA bound to HU Protein (nucleosome cores) and nucleoprotein filaments of recA protein-single-stranded DNA. Ramdas J, et al. **J Biol Chem** 1989 Oct 15;264(29):17395–400
Reaction of LexA repressor with diisopropyl fluorophosphate. A test of the serine protease model. Roland KL, et al. **J Biol Chem** 1990 Aug 5; 265(22):12828–35
Cooperative biotin binding by streptavidin. Electrophoretic behavior and subunit association of streptavidin in the presence of 6 M urea. Sano T, et al. **J Biol Chem** 1990 Feb 25;265(6):3369–73
Stoichiometry of DNA binding by the bacteriophage SP01-encoded type II DNA-binding protein TF1. Schneider GJ, et al. **J Biol Chem** 1990 Jun 25; 265(18):10198–200
The role of Escherichia coli UvrB in nucleotide excision repair. Seeley TW, et al. **J Biol Chem** 1990 May 5; 265(13):7158–65
In vitro studies of the initiation of staphylococcal plasmid replication. Specificity of RepD for its origin (oriD) and characterization of the Rep-ori tyrosyl ester intermediate [published erratum appears in J Biol Chem 1990 Jul 25;265(21):12749] Thomas CD, et al. **J Biol Chem** 1990 Apr 5;265(10):5519–30
Characterization of the integration host factor binding site in the ilvPG1 promoter region of the ilvGMEDA operon of Escherichia coli. Winkelman JW, et al. **J Biol Chem** 1990 Jun 15;265(17):10055–60
Fate of the DnaA initiator protein in replication at the origin of the Escherichia coli chromosome in vitro. Yung BY, et al. **J Biol Chem** 1990 Jan 25;265(3):1282–5
Specificity of RepC protein in plasmid pT181 DNA replication. Zock JM, et al. **J Biol Chem** 1990 Feb 25; 265(6):3484–8
Genetic and biochemical analysis of protein export from Xanthomonas campestris. Dow JM, et al. **J Cell Sci Suppl** 1989;11:59–72 (38 ref.)
Biochemical investigation of protein export in Escherichia coli. Hardy SJ, et al. **J Cell Sci Suppl** 1989;11:29–43 (50 ref.)
Involvement of membrane lipids in protein export in Escherichia coli. Tommassen J, et al. **J Cell Sci Suppl** 1989; 11:73–83 (41 ref.)
Identification of an endogenous membrane anchor-cleaving enzyme for group A streptococcal M protein. Its implication for the attachment of surface proteins in gram-positive bacteria. Pancholi V, et al. **J Exp Med** 1989 Dec 1;170(6):2119–33
Functioning of the colicin A lysis protein is affected by Triton X-100, divalent cations and EDTA. Cavard D, et al. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1715–26
Role of guanosine kinase in the utilization of guanosine for nucleotide synthesis in Escherichia coli. Hove-Jensen B, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1263–73
Cell growth and abrupt doubling of membrane proteins in Escherichia coli during the division cycle. Kubitschek HE. **J Gen Microbiol** 1990 Apr;136 (Pt 4):599–606 (59 ref.)
Escherichia coli molybdoenzymes can be activated by protein FA from several gram-negative bacteria. Santini CL, et al. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3467–75
Ig-binding bacterial proteins also bind proteinase inhibitors. Sjöbring U, et al. **J Immunol** 1989 Nov 1;143(9):2948–54
Immunological applications of type III Fc binding proteins. Comparison of different sources of protein G. Faulmann EL, et al. **J Immunol Methods** 1989 Oct 24;123(2):269–81
Detection of IgM and IgA HIV antibodies after removal of IgG with recombinant protein G. Weiblen BJ, et al. **J Immunol Methods** 1990 Feb 9;126(2):199–204
Resistance to Bacillus thuringiensis by the Indian meal moth, Plodia interpunctella: comparison of midgut proteinases from susceptible and resistant larvae. Johnson DE, et al. **J Invertebr Pathol** 1990 Mar;55(2):235–44
Initiation of replication of plasmid pLS1. The initiator protein RepB acts on two distant DNA regions. de la Campa AG, et al. **J Mol Biol** 1990 May 20;213(2):247–62
Integration host factor stimulates the phage lambda pL promoter. Giladi H, et al. **J Mol Biol** 1990 May 5; 213(1):109–21
Evidence for partial export of Vitreoscilla hemoglobin into the periplasmic space in Escherichia coli. Implications for protein function. Khosla C, et al. **J Mol Biol** 1989 Nov 5;210(1):79–89
Autodigestion and RecA-dependent cleavage of Ind- mutant LexA proteins. Lin LL, et al. **J Mol Biol** 1989 Dec 5; 210(3):439–52
Signal transduction in the phosphate regulon of Escherichia coli involves phosphotransfer between PhoR and PhoB proteins. Makino K, et al. **J Mol Biol** 1989 Dec 5; 210(3):551–9
Genetic approach to the role of tryptophan residues in the activities and fluorescence of a bacterial periplasmic maltose-binding protein. Martineau P, et al. **J Mol Biol** 1990 Jul 5;214(1):337–52
Control of ColE1 plasmid replication. Interaction of Rom protein with an unstable complex formed by RNA I and RNA II. Tomizawa J. **J Mol Biol** 1990 Apr 20; 212(4):695–708
Analysis and use of the serum albumin binding domains of streptococcal protein G. Nygren PA, et al. **J Mol Recognit** 1988 Apr;1(2):69–74
Effect of replacing the primary quinone by different species on the ultrafast photosynthetic electron transfer in bacterial reaction centres. Logunov SL, et al. **J Photochem Photobiol B** 1990 Apr 1;5(1):41–7
Identification of Mycoplasma binding proteins utilizing a 100 kilodalton lung fibroblast receptor. Geary SJ, et al. **J Recept Res** 1989–90;9(6):465–78
Complex neoglycoproteins. Shao MC, et al. **Methods Enzymol** 1990;184:653–9
Insertion of proteins into bacterial membranes: mechanism, characteristics, and comparisons with the eucaryotic process. Saier MH Jr, et al. **Microbiol Rev** 1989 Sep; 53(3):333–66 (347 ref.)
Protein phosphorylation and regulation of adaptive responses in bacteria. Stock JB, et al. **Microbiol Rev** 1989 Dec; 53(4):450–90 (450 ref.)
Bacterial proteins which form membrane pores: a biophysical approach. Pattus F, et al. **Microbiol Sci** 1988 Jul;5(7):207–10 (34 ref.)
Role of membrane glycosphingolipids as Pseudomonas aeruginosa adhesin receptor in rabbit bladder mucosa. Chiarini F, et al. **Microbiologica** 1990 Apr;13(2):91–5
Structural basis of tRNA discrimination as derived from the high resolution crystal structure of glutaminyl-tRNA synthetase complexed with tRNA(Gln) and ATP. Steitz TA, et al. **Mol Biol Rep** 1990;14(2–3):213–4
Defects in the nutrient-dependent methylation of a membrane-associated protein in spo mutants of Bacillus subtilis. Golden KJ, et al. **Mol Gen Genet** 1989 Dec; 220(1):1–7
Replication of ColE2 and ColE3 plasmids: in vitro replication dependent on plasmid-coded proteins. Itoh T, et al. **Mol Gen Genet** 1989 Oct;219(1–2):249–55
Protein H—a novel IgG binding bacterial protein. Akesson P, et al. **Mol Immunol** 1990 Jun;27(6):523–31
Structure and dynamics of the colicin E1 channel. Cramer WA, et al. **Mol Microbiol** 1990 Apr;4(4):519–26 (34 ref.)
Lipid involvement in protein translocation in Escherichia coli. de Vrije GJ, et al. **Mol Microbiol** 1990 Jan;4(1):143–50 (37 ref.)
Translational repression of TEM beta-lactamase synthesis as a response of Escherichia coli to heat shock. Kuriki Y. **Mol Microbiol** 1989 Aug;3(8):1131–40
Integration host factor is necessary for lysogenization of Escherichia coli by bacteriophage P2. Saha S, et al. **Mol Microbiol** 1990 Jan;4(1):3–11
Effect of positive redox potentials (greater than +400 mV) on the expression of anaerobic respiratory enzymes in Escherichia coli. Unden G, et al. **Mol Microbiol** 1990 Feb; 4(2):315–9
The LexA protein does not bind specifically to the two SOS box-like sequences immediately 5' to the phr gene. Payne NS, et al. **Mutat Res** 1989 Nov;218(3):207–10
Protein structure. Chaperones, paperones [news; comment] Sambrook J, et al. **Nature** 1989 Nov 16;342(6247):224–5 Comment on: Nature 1989 Nov 16;342(6247):248–51.
Superhelical stress restrained in plasmid DNA during repair synthesis initiated by the UvrA, B and C proteins in vitro. Backendorf C, et al. **Nucleic Acids Res** 1989 Dec 25; 17(24):10337–51
The roles of indoleglycerol phosphate and the TrpI protein in the expression of trpBA from Pseudomonas aeruginosa. Chang M, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):979–88
DNA polymerase I and a protein complex bind specifically to E. coli palindromic unit highly repetitive DNA: implications for bacterial chromosome organization. Gilson E, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):3941–52
Searching for and predicting the activity of sites for DNA binding proteins: compilation and analysis of the binding sites for Escherichia coli integration host factor (IHF). Goodrich JA, et al. **Nucleic Acids Res** 1990 Sep 11; 18(17):4993–5000
Quantitative analysis of Tn10 Tet repressor binding to a complete set of tet operator mutants. Sizemore C, et al. **Nucleic Acids Res** 1990 May 25;18(10):2875–80
Signal structure of the cis-acting element recognized by VirG protein, a positive regulator in Agrobacterium. Aoyama T, et al. **Nucleic Acids Symp Ser** 1989;(21):17–8
Photochemical charge separation in photosynthetic reaction centers. Friesner RA, et al. **Photochem Photobiol** 1989 Dec; 50(6):831–9 (85 ref.)
Hsp70 proteins, similar to Escherichia coli DnaK, in chloroplasts and mitochondria of Euglena gracilis. Amir-Shapira D, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1749–52
Specific recognition of the leader region of precursor proteins is required for the activation of translocation ATPase of Escherichia coli. Cunningham K, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8630–4
Detergent disruption of bacterial inner membranes and recovery of protein translocation activity. Cunningham K, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8673–7
Covalently bound VirD2 protein of Agrobacterium tumefaciens protects the T-DNA from exonucleolytic degradation. Dürrenberger F, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9154–8
"Activated"-RecA protein affinity chromatography of LexA repressor and other SOS-regulated proteins. Freitag N, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8363–7
Stark spectroscopy of the Rhodobacter sphaeroides reaction center heterodimer mutant. Hammes SL, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5682–6
Differential protein expression by Shigella flexneri in intracellular and extracellular environments. Headley VL, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4179–83
Escherichia coli Tus protein acts to arrest the progression of DNA replication forks in vitro. Hill TM, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2481–5
Role of CheW protein in coupling membrane receptors to the intracellular signaling system of bacterial chemotaxis. Liu JD, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(22):8703–7
In vitro activity of the nitrogen fixation regulatory protein NIFA. Santero E, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7346–50

Beta-glucoside permease represses the bgl operon of Escherichia coli by phosphorylation of the antiterminator protein and also interacts with glucose-specific enzyme III, the key element in catabolite control. Schnetz K, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5074–8

Clostridial glycine reductase: protein C, the acetyl group acceptor, catalyzes the arsenate-dependent decomposition of acetyl phosphate. Stadtman TC. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7853–6

The SpoOA protein of Bacillus subtilis is a repressor of the abrB gene. Strauch M, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1801–5

DNA-looping and enhancer activity: association between DNA-bound NtrC activator and RNA polymerase at the bacterial glnA promoter. Su W, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5504–8

Functions of replication factor C and proliferating-cell nuclear antigen: functional similarity of DNA polymerase accessory proteins from human cells and bacteriophage T4. Tsurimoto T, et al. **Proc Natl Acad Sci U S A** 1990 Feb; 87(3):1023–7

UmuC mutagenesis protein of Escherichia coli: purification and interaction with UmuD and UmuD'. Woodgate R, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7301–5

The SOS response and induced mutagenesis. Battista JR, et al. **Prog Clin Biol Res** 1990;340A:169–78 (43 ref.)

Effect of umuC on EMS-induced mutagenesis in Escherichia coli deficient in mismatch repair. Janion C, et al. **Prog Clin Biol Res** 1990;340A:145–53

Substrate recognition by the EcoRI endonuclease. Heitman J, et al. **Proteins** 1990;7(2):185–97

A protein structural motif that bends DNA. White SW, et al. **Proteins** 1989;5(4):281–8

Structure and metabolism of the murein sacculus. Höltje JV, et al. **Res Microbiol** 1990 Jan;141(1):75–89 (46 ref.)

Machinery for cell growth and division: penicillin-binding proteins and other proteins. Matsuhashi M, et al. **Res Microbiol** 1990 Jan;141(1):89–103 (48 ref.)

Regulation of activity of a transcriptional anti-terminator in E. coli by phosphorylation in vivo. Amster-Choder O, et al. **Science** 1990 Aug 3;249(4968):540–2

Evidence for a novel thioredoxin-like catalytic property of gonadotropic hormones. Boniface JJ, et al. **Science** 1990 Jan 5;247(4938):61–4

The Hin invertasome: protein-mediated joining of distant recombination sites at the enhancer. Heichman KA, et al. **Science** 1990 Aug 3;249(4968):511–7

The MerR metalloregulatory protein binds mercuric ion as a tricoordinate, metal-bridged dimer. Helmann JD, et al. **Science** 1990 Feb 23;247(4945):946–8

No specific recognition of leader peptide by SecB, a chaperone involved in protein export. Randall LL, et al. **Science** 1990 May 18;248(4957):860–3

A bacterial enhancer functions to tether a transcriptional activator near a promoter. Wedel A, et al. **Science** 1990 Apr 27;248(4954):486–90

Barnase and barstar: two small proteins to fold and fit together. Hartley RW. **Trends Biochem Sci** 1989 Nov; 14(11):450–4 (19 ref.)

The regulatory role of thioredoxin in chloroplasts. Knaff DB. **Trends Biochem Sci** 1989 Nov;14(11):433–4 (22 ref.)

Protein kinase of bacteriophage T7 induces the phosphorylation of only a small number of proteins in the infected cell. Robertson ES, et al. **Virology** 1990 Apr; 175(2):525–34

[Modification of the envelope and the protein content of Escherichia coli surviving in sea water] Gauthier MJ, et al. **Can J Microbiol** 1989 Sep;35(9):843–9 (Eng. Abstr.) **(Fre)**

[Protein kinases and their structural and functional similarities and differences] Gąsior E. **Postepy Biochem** 1989; 35(3):211–7 (24 ref.) **(Pol)**

[Enzymatic hydrolysis of mycelial waste from the production of tetracycline] Ponomareva LV, et al. **Antibiot Khimioter** 1990 Apr;35(4):42–5 (Eng. Abstr.) **(Rus)**

[Study of the composition of cell wall of group A Streptococcus after hydrolysis using muramidase from Streptomyces levoris] Shmakova ZF, et al. **Antibiot Khimioter** 1989 Nov;34(11):827–30 (Eng. Abstr.) **(Rus)**

[Level of Hu protein binding with DNA and the Hu/DNA ratio in Escherichia coli cells with various generation periods] Kulyba NP, et al. **Biokhimiia** 1989 Jul; 54(7):1075–81 (Eng. Abstr.) **(Rus)**

[The study of binding of the virG gene product with the virD gene promotor region of the Agrobacterium tumefaciens Ti-plasmid C58] Li KG, et al. **Mol Gen Mikrobiol Virusol** 1989 Jun;(6):6–11 (Eng. Abstr.) **(Rus)**

[Protein phosphorylation in the causative agent of plague] Mishan'kin BN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Jan;(1):17–9 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Tissue distribution of avidin and streptavidin injected to mice. Effect of avidin carbohydrate, streptavidin truncation and exogenous biotin. Schechter B, et al. **Eur J Biochem** 1990 Apr 30;189(2):327–31

PHARMACOLOGY

Thioredoxin and glutaredoxin enhance the binding of L-triiodothyronine to its hepatic nuclear receptors. Takagi S, et al. **Biochem Cell Biol** 1989 Aug;67(8):477–80

Induction by different thioredoxins of ATPase activity in coupling factor 1 from spinach chloroplasts. Galmiche JM, et al. **Biochimie** 1990 Jan;72(1):25–32

A complex component modulating immune-deficient cells in leprosy patients leading to loss of viability of Mycobacterium leprae—a possible vaccine. Marolia J, et al. **Clin Exp Immunol** 1990 Jan;79(1):7–14

Characterisation of the Klebsiella pneumoniae nitrogen-fixation regulatory proteins NIFA and NIFL in vitro. Austin S, et al. **Eur J Biochem** 1990 Jan 26; 187(2):353–60

Comparison of the mitogenic activities of streptococcal protein-G and staphylococcal protein-A on human mononuclear cells. Lindhqvist V, et al. **Immunol Invest** 1989 Aug;18(7):919–30

Identification of an antigenic marker of slime production for Staphylococcus epidermidis. Christensen GD, et al. **Infect Immun** 1990 Sep;58(9):2906–11

Leukotriene and hydroxyeicosatetraenoic acid generation elicited by low doses of Escherichia coli hemolysin in rabbit lungs. Grimminger F, et al. **Infect Immun** 1990 Aug; 58(8):2659–63

Inhibition of the alternative C3 convertase and classical C5 convertase of complement by group A streptococcal M protein. Hong K, et al. **Infect Immun** 1990 Aug; 58(8):2535–41

Influence of RU 41.740 on human monocytes in vitro: release of soluble factors which retard multiplication of tumor cells in culture. Blomgren H. **Int J Immunopharmacol** 1990; 12(1):99–105

Purification and partial characterization of a 65-kDa platelet aggregation-associated protein antigen from the surface of Streptococcus sanguis. Erickson PR, et al. **J Biol Chem** 1990 Aug 25;265(24):14080–7

A high concentration of SecA allows proton motive force-independent translocation of a model secretory protein into Escherichia coli membrane vesicles. Yamada H, et al. **J Biol Chem** 1989 Nov 5;264(31):18577–81

Comparative effects of F1 and P1 fractions obtained from a Klebsiella pneumoniae glycoproteic extract (RU 41740) on polymorphonuclear leukocytes. el Abbouyi A, et al. **J Biol Response Mod** 1989 Dec;8(6):656–64

Metabolic and functional stimulation of lymphocytes and macrophages by an Escherichia coli extract (OM-89): in vitro studies. Van Pham T, et al. **J Biol Response Mod** 1990 Apr;9(2):231–40

A mycoplasmal protein influences tumour cell invasiveness and contact inhibition in vitro. Schmidhauser C, et al. **J Cell Sci** 1990 Mar;95 (Pt 3):499–506

Biostin (RU-41740) does not impair antipyrine metabolism in healthy volunteers. Perraudin L, et al. **Methods Find Exp Clin Pharmacol** 1989 Sep;11(9):533

Alterations in the p'R promoter of coliphage lambda modify both its activity and interaction with the integration host factor (IHF). Kur J, et al. **Mol Gen Genet** 1990 May; 221(3):411–20

The cytotoxic protein YopE of Yersinia obstructs the primary host defence. Rosqvist R, et al. **Mol Microbiol** 1990 Apr; 4(4):657–67

Induction of interleukin 1 and tumor necrosis factor by mycobacterial proteins: the monocyte western blot. Wallis RS, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(9):3348–52

At least one Bacillus thuringiensis toxin forms ion-selective pores in membranes. Prince RC. **Trends Biochem Sci** 1990 Jan;15(1):2–3 (15 ref.)

RADIATION EFFECTS

Direct effects of radiation on the avidin-biotin system. Absence of energy transfer. Kempner ES, et al. **J Biol Chem** 1990 Sep 15;265(26):15776–81

SECRETION

Haemolysin secretion from E coli. Holland IB, et al. **Biochimie** 1990 Feb-Mar;72(2-3):131–41 (57 ref.)

Secretion of extracellular proteins by Pseudomonas aeruginosa. Lazdunski A, et al. **Biochimie** 1990 Feb-Mar; 72(2-3):147–56 (65 ref.)

The role of the mature part of secretory proteins in translocation across the plasma membrane and in regulation of their synthesis in Escherichia coli. MacIntyre S, et al. **Biochimie** 1990 Feb-Mar;72(2-3):157–67 (148 ref.)

PrlA (SecY) and PrlG (SecE) interact directly and function sequentially during protein translocation in E. coli. Bieker KL, et al. **Cell** 1990 Jun 1;61(5):833–42

Prokaryotic secretion. Model P, et al. **Cell** 1990 Jun 1; 61(5):739–41 (23 ref.)

Protease secretion by Erwinia chrysanthemi: the specific secretion functions are analogous to those of Escherichia coli alpha-haemolysin. Létoffé S, et al. **EMBO J** 1990 May; 9(5):1375–82

Export of the periplasmic maltose-binding protein of Escherichia coli. Bassford PJ Jr. **J Bioenerg Biomembr** 1990 Jun;22(3):401–39 (95 ref.)

Protein translocation in vitro: biochemical characterization of genetically defined translocation components. Fandl J, et al. **J Bioenerg Biomembr** 1990 Jun;22(3):369–87 (90 ref.)

Export and sorting of the Escherichia coli outer membrane protein OmpA. Freudl R, et al. **J Bioenerg Biomembr** 1990 Jun;22(3):441–9 (53 ref.)

The mechanism of secretion of hemolysin and other polypeptides from gram-negative bacteria. Holland IB, et al. **J Bioenerg Biomembr** 1990 Jun;22(3):473–91 (73 ref.)

Structure, function, and biogenesis of SecY, an integral membrane protein involved in protein export. Ito K. **J Bioenerg Biomembr** 1990 Jun;22(3):353–67 (66 ref.)

Biophysical studies of signal peptides: implications for signal sequence functions and the involvement of lipid in protein export. Jones JD, et al. **J Bioenerg Biomembr** 1990 Jun; 22(3):213–32 (55 ref.)

SecB protein: a cytosolic export factor that associates with nascent exported proteins. Kumamoto CA. **J Bioenerg Biomembr** 1990 Jun;22(3):337–51 (43 ref.)

In vitro translocation of bacterial secretory proteins and energy requirements. Mizushima S, et al. **J Bioenerg Biomembr** 1990 Jun;22(3):389–99 (43 ref.)

Protein export in bacteria: an overview. Tai PC. **J Bioenerg Biomembr** 1990 Jun;22(3):209–12 (7 ref.)

In vitro kinetic analysis of the role of the positive charge at the amino-terminal region of signal peptides in translocation of secretory protein across the cytoplasmic membrane in Escherichia coli. Sasaki S, et al. **J Biol Chem** 1990 Mar 15;265(8):4358–63

Dissimilar effects of Na+ and K+ on the promotion of glucosyltransferase secretion in Streptococcus salivarius. Pitty LJ, et al. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1431–9

[Chemical-enzymatic synthesis and cloning of DNA, coding the signal for secretion of proteins in gram-negative bacteria] Dobrynin VN, et al. **Bioorg Khim** 1989 Sep; 15(9):1232–8 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Prevention of adjuvant arthritis in rats by a nonapeptide from the 65-kD mycobacterial heat-shock protein. Yang XD, et al. **Clin Exp Immunol** 1990 Aug;81(2):189–94

[Immunostimulants in chronic infection] Pichler WJ. **Schweiz Med Wochenschr** 1990 Jun 16;120(24):898–902 (Eng. Abstr.) **(Ger)**

TOXICITY

Acute toxicity of temephos, fenoxycarb, diflubenzuron, and methoprene and bacillus thuringiensis var. israelensis to the mummichog (Fundulus heteroclitus). Lee BM, et al. **Bull Environ Contam Toxicol** 1989 Dec;43(6):827–32

Location of the dipteran specificity region in a lepidopteran-dipteran crystal protein from Bacillus thuringiensis. Widner WR, et al. **J Bacteriol** 1990 Jun; 172(6):2826–32

Pathogenesis of Campylobacter fetus infections. Role of surface array proteins in virulence in a mouse model. Pei Z, et al. **J Clin Invest** 1990 Apr;85(4):1036–43

[Glycoproteins from Leptospira interrogans serogroup icterohaemorrhagiae: distribution in the liver and kidney of experimentally infected guinea pigs] Santos RT, et al. **Rev Inst Med Trop Sao Paulo** 1989 Jul-Aug;31(4):235–41 (Eng. Abstr.) **(Por)**

ULTRASTRUCTURE

EXAFS of the type-1 copper site of rusticyanin. Holt SD, et al. **FEBS Lett** 1990 Aug 20;269(1):117–21

Sequence and structure of Clp P, the proteolytic component of the ATP-dependent Clp protease of Escherichia coli. Maurizi MR, et al. **J Biol Chem** 1990 Jul 25; 265(21):12536–45

Small colloidal gold conjugated to Fab fragments or to immunoglobulin G as high-resolution labels for electron microscopy: a technical overview. Baschong W, et al. **J Electron Microsc Tech** 1990 Apr;14(4):313–23

Preliminary crystallographic analysis of 5-carboxymethyl-2-hydroxymuconate isomerase from Escherichia coli. Wigley DB, et al. **J Mol Biol** 1989 Dec 20;210(4):881–2

The application of cryo-ultramicrotomy and freeze-substitution in immuno-gold labelling of hybrid proteins in Escherichia coli. A comparison. Voorhout WF, et al. **Scanning Microsc Suppl** 1989;3:47–55; discussion 55–6

BACTERIAL SENSITIVITY TESTS see **MICROBIAL SENSITIVITY TESTS**

BACTERIAL SPORES see **SPORES, BACTERIAL**

BACTERIAL STRUCTURAL GENES see **GENES, STRUCTURAL, BACTERIAL**

BACTERIAL TOXINS

New insights into the haemolytic uraemic syndromes. Milford DV, et al. **Arch Dis Child** 1990 Jul;65(7):713–5 (29 ref.)

The reactive serine residue of epidermolytic toxin A. Bailey CJ, et al. **Biochem J** 1990 Jul 15;269(2):535–7

Characterization of the cysteine residues and disulphide linkages in the protein crystal of Bacillus thuringiensis. Bietlot HP, et al. **Biochem J** 1990 Apr 15;267(2):309–15

Leaky gut hypothesis: a historical perspective [editorial] Fink MP. **Crit Care Med** 1990 May;18(5):579–80

IUMS-ICFMH & FECS-WPFC 13th international

symposium on Toxins in Foodborne Disease and Microbiology of Drinking Water. 5-9 October, 1987, Halkidiki, Greece. Proceedings. **Int J Food Microbiol** 1990 Mar;10(2):91-176

Identification of toxigenic Clostridium difficile strains by using a toxin A gene-specific probe. Wren BW, et al. **J Clin Microbiol** 1990 Aug;28(8):1808-12

Enterohaemorrhagic E. coli 0157:H7 in central Australia [letter] Albert MJ, et al. **J Diarrhoeal Dis Res** 1989 Sep-Dec;7(3-4):96-7

Molecular characterization of bacterial virulence factors and the consequences for vaccine design. The 1988 Fleming lecture. Dougan G. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1397-406 (81 ref.)

Crystalline layers and three-dimensional structure of Staphylococcus aureus alpha-toxin. Olofsson A, et al. **J Mol Biol** 1990 Jul 5;214(1):299-306

Crystallization of a proform of aerolysin, a hole-forming toxin from Aeromonas hydrophila. Tucker AD, et al. **J Mol Biol** 1990 Apr 20;212(4):561-2

Secondary structure of the entomocidal toxin from Bacillus thuringiensis subsp. kurstaki HD-73. Choma CT, et al. **J Protein Chem** 1990 Feb;9(1):87-94

New facts and trends in bacteriological control of mosquitoes. de Barjac H. **Mem Inst Oswaldo Cruz** 1989; 84 Suppl 3:101-5 (16 ref.)

The development of Bacillus thuringiensis and Bacillus sphaericus as biocontrol agents: from research to industrial production. Fridlender B, et al. **Mem Inst Oswaldo Cruz** 1989;84 Suppl 3:123-7 (15 ref.)

[Use of bacterial insecticides for the control of Culicidae and Simuliidae in Rio Grande do Sul] Ruas Neto A, et al. **Mem Inst Oswaldo Cruz** 1989;84 Suppl 3:39-45 **(Por)**

ADVERSE EFFECTS

Role of bacterial toxins in neonatal necrotizing enterocolitis. Scheifele DW. **J Pediatr** 1990 Jul;117(1 Pt 2):S44-6 (27 ref.)

[Hemolytic-uremic syndrome in infants due to verotoxin-producing Escherichia coli] Karch H, et al. **Dtsch Med Wochenschr** 1990 Mar 30;115(13):489-95 (Eng. Abstr.) **(Ger)**

[Piglets as a model for studying the activity of staphylococcal shock syndrome toxin (TSST-1)] Zaleska M, et al. **Med Dosw Mikrobiol** 1989;41(2):81-5 (Eng. Abstr.) **(Pol)**

ANALYSIS

Vero cell assay for rapid detection of Clostridium perfringens enterotoxin. Mahony DE, et al. **Appl Environ Microbiol** 1989 Sep;55(9):2141-3

Inflammatory potential of grain dust [published erratum appears in Biomed Environ Sci 1989 Jun;2(2):174] Ye TT, et al. **Biomed Environ Sci** 1988 Jun;1(1):115-24

Prevalence of verocytotoxigenic Escherichia coli in ground beef, pork, and chicken in southwestern Ontario. Read SC, et al. **Epidemiol Infect** 1990 Aug;105(1):11-20

The structure of syringomycins A1, E and G. Segre A, et al. **FEBS Lett** 1989 Sep 11;255(1):27-31

Charge heterogeneity of heat-labile enterotoxins from human enterotoxigenic Escherichia coli. Tsuji T, et al. **FEMS Microbiol Lett** 1989 Oct 1;52(1-2):1-5

Sensitivity of the different tests of enterotoxigenicity of Escherichia coli and their correlation. Thawani G, et al. **Indian J Med Sci** 1990 Feb;44(2):29-32

Amino acid sequence of a deltalike toxin from Staphylococcus epidermidis. McKevitt AI, et al. **Infect Immun** 1990 May;58(5):1473-5

Analytical methods for Bacillus cereus and other Bacillus species. Shinagawa K. **Int J Food Microbiol** 1990 Mar; 10(2):125-41 (40 ref.)

Mutational analysis of the Shiga toxin and Shiga-like toxin II enzymatic subunits. Jackson MP, et al. **J Bacteriol** 1990 Jun;172(6):3346-50

Identification of beta-exotoxin production, plasmids encoding beta-exotoxin, and a new exotoxin in Bacillus thuringiensis by using high-performance liquid chromatography. Levinson BL, et al. **J Bacteriol** 1990 Jun; 172(6):3172-9

Comparison of three assay systems for detection of enterotoxigenic Escherichia coli heat-stable enterotoxin. Cryan B. **J Clin Microbiol** 1990 Apr;28(4):792-4

Prevention of Clostridium difficile-induced experimental pseudomembranous colitis by Saccharomyces boulardii: a scanning electron microscopic and microbiological study. Castex F, et al. **J Gen Microbiol** 1990 Jun;136 (Pt 6):1085-9

Enzyme-linked immunosorbent assay for Shiga toxin and Shiga-like toxin II using P1 glycoprotein from hydatid cysts. Acheson DW, et al. **J Infect Dis** 1990 Jan; 161(1):134-7

The association of Shiga toxin and other cytotoxins with the neurologic manifestations of shigellosis. Ashkenazi S, et al. **J Infect Dis** 1990 May;161(5):961-5

A method for detecting Shiga toxin and Shiga-like toxin-I in pure and mixed culture. Ashkenazi S, et al. **J Med Microbiol** 1990 Aug;32(4):255-61

Enzyme immunoassay (ELISA) for detection of Clostridium difficile toxin B in specimens of faeces. Nguyen VK, et al. **J Med Microbiol** 1990 Apr;31(4):251-7

Detection of cytotoxic necrotising factor (CNF) in extracts of Escherichia coli strains by enzyme-linked immunosorbent assay. Tabouret M, et al. **J Med Microbiol** 1990 Jun;32(2):73-81

Development of Vero cell miniculture assay for detection of heat-labile enterotoxin of Escherichia coli and its significance. Choudhry MA, et al. **J Trop Med Hyg** 1989 Dec;92(6):379-82

Comparison of the exotoxins of four strains of Corynebacterium pseudotuberculosis. Sutherland SS, et al. **Res Vet Sci** 1989 Sep;47(2):190-4

A colourimetric, microplate assay for the leucotoxin of Pasteurella haemolytica. Craig FF, et al. **Vet Microbiol** 1990 May;22(4):309-17

[Detection of heat-labile enterotoxin produced by E. coli with reversed passive latex agglutination] Wang FI, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1989 May;22(2):145-9 (Eng. Abstr.) **(Chi)**

[Clinical significance of bacterial protein toxin analysis in biochemical tests] Honda T. **Nippon Rinsho** 1989 Dec;48 Suppl:104-6 **(Jpn)**

[Detection of bacterial virulence factors] Honda T. **Rinsho Byori** 1990 May;38(5):477-80 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Detection of toxins of Clostridium perfringens type A in infected animals by using the ELISA test] Nowakowska M, et al. **Med Dosw Mikrobiol** 1989;41(3-4):166-9 (Eng. Abstr.) **(Pol)**

ANTAGONISTS & INHIBITORS

Inhibition of Clostridium difficile toxin A and B by 1,2-cyclohexanedione modification of an arginine residue. Balfanz J, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1364-70

The effect of Pasteurella haemolytica cytotoxin on bovine polymorphonuclear leukocytes can be attenuated by beta-adrenoceptor antagonists. Henricks PA, et al. **Vet Microbiol** 1990 Apr;22(2-3):259-66

BIOSYNTHESIS

Study of the toxin-producing ability of Pasteurella multocida in mice. Magyar T. **Acta Vet Hung** 1989;37(4):319-25

Characterization of an attenuated strain of Actinobacillus pleuropneumoniae, serotype 1. Rosendal S, et al. **Am J Vet Res** 1990 May;51(5):711-7

Toxin production by Bacillus cereus dairy isolates in milk at low temperatures. Christiansson A, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2595-600

Shiga-like-toxin-producing Escherichia coli in retail meats and cattle in Thailand. Suthienkul O, et al. **Appl Environ Microbiol** 1990 Apr;56(4):1135-9

Virulence and toxigenicity of capsular serogroup D Pasteurella multocida strains isolated from avian hosts. Rhoades KR, et al. **Avian Dis** 1990 Apr-Jun;34(2):384-8

Verotoxin-producing Escherichia coli in ground beef—Manitoba. Sekla L, et al. **Can Dis Wkly Rep** 1990 Jun 2;16(22):103-5 **(Eng, Fre)**

The prevalence of verocytotoxin-producing Escherichia coli and antimicrobial resistance patterns of nonverocytotoxin-producing Escherichia coli and Salmonella in Ontario broiler chickens. Irwin RJ, et al. **Can J Vet Res** 1989 Oct;53(4):411-8

Toxigenic clostridia. Hatheway CL. **Clin Microbiol Rev** 1990 Jan;3(1):66-98 (355 ref.)

Results of screening for verocytotoxin-producing Escherichia coli in faeces in Belgium. Piérard D, et al. **Eur J Clin Microbiol Infect Dis** 1990 Mar;9(3):198-201

HEp-2 cell adherence and Vero cell cytotoxin production by EPEC strains isolated from children with diarrhoea in New Zealand. Gunzburg ST, et al. **FEMS Microbiol Lett** 1990 May;57(1-2):181-5

Toxin production by strains of Aeromonas hydrophila grown in laboratory media and prawn purée. Todd LS, et al. **Int J Food Microbiol** 1989 Nov;9(3):145-56

Production of vero cytotoxin by Escherichia coli and Shiga toxin by Shigella dysenteriae 1 as related to the growth medium and availability of iron. Chart H, et al. **Int J Med Microbiol** 1989 Nov;272(1):1-10

Inhibition of bongkrek acid and toxoflavin production in tempe bongkrek containing Pseudomonas cocovenenans. Buckle KA, et al. **J Appl Bacteriol** 1990 Jun;68(6):571-6

Cloned aerolysin of Aeromonas hydrophila is exported by a wild-type marine Vibrio strain but remains periplasmic in pleiotropic export mutants. Wong KR, et al. **J Bacteriol** 1990 Jan;172(1):372-6

Close association of verotoxin (Shiga-like toxin) production with enterohemolysin production in strains of Escherichia coli. Beutin L, et al. **J Clin Microbiol** 1989 Nov; 27(11):2559-64

Characterization of a new putative colonization factor (CS17) from a human enterotoxigenic Escherichia coli of serotype O114:H21 which produces only heat-labile enterotoxin. McConnell MM, et al. **J Infect Dis** 1990 Feb;161(2):343-7

Virulence factors of bacteraemic Escherichia coli with particular reference to production of cytotoxic necrotising factor (CNF) by P-fimbriate strains. Blanco J, et al. **J Med Microbiol** 1990 Mar;31(3):175-83

Production of "virulence factors" by "epidemic" methicillin-resistant Staphylococcus aureus in vitro. Jordens JZ, et al. **J Med Microbiol** 1989 Dec;30(4):245-52

The influence of cultural conditions on the expression in Salmonella typhimurium of an antigen related to cholera toxin. Qi GM, et al. **J Med Microbiol** 1989 Nov;30(3):213-7

A study of the incidence of enterotoxigenic Escherichia coli (ETEC) secreting heat-labile toxin in two communities in south-western Nigeria. Ako-Nai AK, et al. **J Trop Med Hyg** 1990 Apr;93(2):116-8

Toxigenic Escherichia coli associated with sudden infant death syndrome [letter] Bettelheim KA, et al. **Med J Aust** 1989 Nov 6;151(9):538

Altered virulence of a pleiotropic Staphylococcus aureus mutant with a low producibility of coagulase and other factors in mice. Seki K, et al. **Microbiol Immunol** 1989; 33(12):981-90

The shiga-like toxin-producing Escherichia coli and hemolytic uremic syndrome. Cleary TG, et al. **Pediatr Infect Dis J** 1989 Oct;8(10):720-4 (56 ref.)

Neonatal necrotizing enterocolitis associated with delta toxin-producing methicillin-resistant Staphylococcus aureus. Overturf GD, et al. **Pediatr Infect Dis J** 1990 Feb; 9(2):88-91

Staphylococcal toxins in human disease. Arbuthnott JP, et al. **Soc Appl Bacteriol Symp Ser** 1990;19:101S-107S (35 ref.)

Production of paralytic shellfish toxins by a bacterium Moraxella sp. isolated from Protogonyaulax tamarensis. Kodama M, et al. **Toxicon** 1990;28(6):707-14

Atypical Pasteurella strains producing a toxin similar to the dermonecrotic toxin of Pasteurella multocida subspecies multocida. Kamp EM, et al. **Vet Rec** 1990 Apr 28; 126(17):434-7

Occurrence of 'attaching and effacing' lesions in the small intestine of calves experimentally infected with bovine isolates of verocytotoxic E coli. Wray C, et al. **Vet Rec** 1989 Sep 30;125(14):365-8

[Microbiological aspects of infection with verotoxin-producing E. coli strains in children with the hemolytic-uremic syndrome] Bielaszewská M, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jul;38(4):237-44 (Eng. Abstr.) **(Cze)**

[Diseases caused by verotoxigenic Escherichia coli] Ambrožová H, et al. **Cesk Pediatr** 1990 Jan;45(1):29-30 **(Cze)**

[Verotoxigenic (enterohemorrhagic) Escherichia coli] Srámková L. **Cesk Pediatr** 1990 Jan;45(1):26-9 (17 ref.) **(Cze)**

[Escherichia coli producing thermostable toxin ST. Detection in stools of children with and without diarrhea] Zoukh K. **Arch Inst Pasteur Alger** 1986;55:79-89 (Eng. Abstr.) **(Fre)**

[Infections by enterohemorrhagic Escherichia coli (EHEC): a clinical and microbiologic problem and a challenge for the public health service] Karch H, et al. **Immun Infekt** 1989 Dec;17(6):206-11 (32 ref.) (Eng. Abstr.) **(Ger)**

[Bacteriological investigation on an outbreak of acute enteritis associated with verotoxin-producing Escherichia coli O111:H-] Tanaka H, et al. **Kansenshogaku Zasshi** 1989 Oct;63(10):1187-94 (Eng. Abstr.) **(Jpn)**

[Production of toxic shock exotoxin by Staphylococcus aureus strains resistant and sensitive to antibiotics] Akatov AK, et al. **Antibiot Khimioter** 1989 Aug;34(8):569-72 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Evidence for two types of cytotoxic necrotizing factor in human and animal clinical isolates of Escherichia coli. De Rycke J, et al. **J Clin Microbiol** 1990 Apr;28(4):694-9

DIAGNOSTIC USE

[New probes for the analysis of membrane cholesterol—modified toxins which bind specifically to cholesterol molecules with no cytolytic effects] Iwashita Y. **Seikagaku** 1989 Oct;61(10):1253-9 **(Jpn)**

GENETICS

Prevalence of four enterotoxin (STaP, STaH, STb, and LT) and four adhesin subunit (K99, K88, 987P, and F41) genes among Escherichia coli isolates from cattle. Mainil JG, et al. **Am J Vet Res** 1990 Feb;51(2):187-90

Genetic analysis of extracellular toxins of Staphylococcus aureus. Iandolo JJ. **Annu Rev Microbiol** 1989;43:375-402 (139 ref.)

Transfer of the toxin protein genes of Bacillus sphaericus into Bacillus thuringiensis subsp. israelensis and their expression. Bourgouin C, et al. **Appl Environ Microbiol** 1990 Feb;56(2):340-4

Evaluation of DNA probes for detection of Shiga-like-toxin-producing Escherichia coli in food and calf fecal samples. Samadpour M, et al. **Appl Environ Microbiol** 1990 May;56(5):1212-5

Molecular cloning of the 130-kilodalton mosquitocidal delta-endotoxin gene of Bacillus thuringiensis subsp. israelensis in Bacillus sphaericus. Trisrisook M, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1710-6

The cytotoxin of Pseudomonas aeruginosa: cytotoxicity requires proteolytic activation. Orlik-Eisel G, et al. **Arch Microbiol** 1990;153(6):561-8

On the respective roles of the two proteins encoded by the Bacillus sphaericus 1593M toxin genes expressed in Escherichia coli and Bacillus subtilis. de la Torre F, et al. **Biochem Biophys Res Commun** 1989 Nov 15; 164(3):1417-22

Comparative analysis of the individual protoxin components in P1 crystals of Bacillus thuringiensis subsp. kurstaki

isolates NRD-12 and HD-1. Masson L, et al. **Biochem J** 1990 Jul 15;269(2):507-12

Pseudomonas aeruginosa exotoxin A: alterations of biological and biochemical properties resulting from mutation of glutamic acid 553 to aspartic acid. Douglas CM, et al. **Biochemistry** 1990 May 29;29(21):5043-9

Site-directed mutagenesis of the hole-forming toxin aerolysin: studies on the roles of histidines in receptor binding and oligomerization of the monomer. Green MJ, et al. **Biochemistry** 1990 Feb 27;29(8):2177-80

Molecular aspects of the virulence of Pasteurella multocida. Chanter N. **Can J Vet Res** 1990 Apr;54 Suppl:S45-7 (38 ref.)

Molecular characterization of cytotoxins produced by Haemophilus, Actinobacillus, Pasteurella. Lo RY. **Can J Vet Res** 1990 Apr;54 Suppl:S33-5 (27 ref.)

Directed mutagenesis of selected regions of a Bacillus thuringiensis entomocidal protein. Ahmad W, et al. **FEMS Microbiol Lett** 1990 Mar 1;56(1-2):97-104

Cloning and expression of the dermonecrotic toxin gene of Pasteurella multocida ssp. multocida in Escherichia coli. Kamps AM, et al. **FEMS Microbiol Lett** 1990 Jan 15; 55(1-2):187-90

A single protein of 110 kDa is associated with the multinucleating and necrotizing activity coded by the Vir plasmid of Escherichia coli. Oswald E, et al. **FEMS Microbiol Lett** 1990 Mar 15;56(3):279-84

Nucleotide sequence of Clostridium difficile toxin A gene fragment and detection of toxigenic strains by polymerase chain reaction. Wren BW, et al. **FEMS Microbiol Lett** 1990 Jun 15;58(1):1-6

Nucleotide sequence and analysis of the lethal factor gene (lef) from Bacillus anthracis. Bragg TS, et al. **Gene** 1989 Sep 1;81(1):45-54

Cloning and hyperexpression of a gene encoding the heat-stable toxin of Escherichia coli. Dwarakanath P, et al. **Gene** 1989 Sep 30;81(2):219-26

Deletions affecting hemolytic and toxin activities of Bordetella pertussis adenylate cyclase. Bellalou J, et al. **Infect Immun** 1990 Oct;58(10):3242-7

Molecular characterization of the Clostridium difficile toxin A gene. Dove CH, et al. **Infect Immun** 1990 Feb;58(2):480-8

Nonreciprocal complementation of the hlyC and lktC genes of the Escherichia coli hemolysin and Pasteurella haemolytica leukotoxin determinants. Forestier C, et al. **Infect Immun** 1990 Mar;58(3):828-32

Nucleotide sequence of the leukotoxin gene from Actinobacillus actinomycetemcomitans: homology to the alpha-hemolysin/leukotoxin gene family. Kraig E, et al. **Infect Immun** 1990 Apr;58(4):920-9

Expression of the cloned gene for enterotoxin STb of Escherichia coli. Lawrence RM, et al. **Infect Immun** 1990 Apr;58(4):970-7

Cloning and expression of the Pasteurella multocida toxin gene, toxA, in Escherichia coli. Petersen SK, et al. **Infect Immun** 1989 Dec;57(12):3907-13

Fusion of genes encoding Escherichia coli heat-stable enterotoxin and outer membrane protein OmpC. Saarilahti HT, et al. **Infect Immun** 1989 Nov;57(11):3663-5

Identification of a bacteriophage containing a silent staphylococcal variant enterotoxin gene (sezA+). Soltis MT, et al. **Infect Immun** 1990 Jun;58(6):1614-9

Construction by site-directed mutagenesis of a 39-kilodalton mosquitocidal protein similar to the larva-processed toxin of Bacillus sphaericus 2362. Broadwell AH, et al. **J Bacteriol** 1990 Jul;172(7):4032-6

The 42- and 51-kilodalton mosquitocidal proteins of Bacillus sphaericus 2362: construction of recombinants with enhanced expression and in vivo studies of processing and toxicity. Broadwell AH, et al. **J Bacteriol** 1990 May; 172(5):2217-23

The heat-stable toxin I gene from Escherichia coli 18D. Dallas WS. **J Bacteriol** 1990 Sep;172(9):5490-3

Secretion and expression of the Pasteurella haemolytica Leukotoxin. Highlander SK, et al. **J Bacteriol** 1990 May; 172(5):2343-50

Functional analysis of the Shiga toxin and Shiga-like toxin type II variant binding subunits by using site-directed mutagenesis. Jackson MP, et al. **J Bacteriol** 1990 Feb; 172(2):653-7

Synthesis of Escherichia coli heat-stable enterotoxin STp as a pre-pro form and role of the pro sequence in secretion. Okamoto K, et al. **J Bacteriol** 1990 Sep;172(9):5260-5

Regulation of expression of the Pasteurella haemolytica leukotoxin determinant. Strathdee CA, et al. **J Bacteriol** 1989 Nov;171(11):5955-62

Mutagenesis of Pseudomonas exotoxin in identification of sequences responsible for the animal toxicity. Chaudhary VK, et al. **J Biol Chem** 1990 Sep 25;265(27):16306-10

Minimal deletion of amino acids from the carboxyl terminus of the B subunit of heat-labile enterotoxin causes defects in its assembly and release from the cytoplasmic membrane of Escherichia coli. Sandkvist M, et al. **J Biol Chem** 1990 Sep 5;265(25):15239-44

A deleted variant of Bacillus anthracis protective antigen is non-toxic and blocks anthrax toxin action in vivo. Singh Y, et al. **J Biol Chem** 1989 Nov 15;264(32):19103-7

Specificity of DNA probes for the detection of toxigenic Pasteurella multocida subsp. multocida strains. Kamps AM, et al. **J Clin Microbiol** 1990 Aug;28(8):1858-61

Single primer pair for amplifying segments of distinct Shiga-like-toxin genes by polymerase chain reaction. Karch H, et al. **J Clin Microbiol** 1989 Dec;27(12):2751-7

Detection and characterization of fecal verotoxin-producing Escherichia coli from healthy cattle. Montenegro MA, et al. **J Clin Microbiol** 1990 Jun;28(6):1417-21

Detection with synthetic oligonucleotide probes of nucleotide sequence variations in the genes encoding enterotoxins of Escherichia coli. Nishibuchi M, et al. **J Clin Microbiol** 1989 Oct;27(10):2272-6

Rapid and specific detection of verotoxin genes in Escherichia coli by the polymerase chain reaction [published erratum appears in J Clin Microbiol 1990 Jun;28(6):1491] Pollard DR, et al. **J Clin Microbiol** 1990 Mar;28(3):540-5

Gene probes for the detection of aerolysin in Aeromonas spp. Husslein V, et al. **J Diarrhoeal Dis Res** 1988 Jun; 6(2):124-30

Molecular cloning and nucleotide sequence of another variant of the Escherichia coli Shiga-like toxin II family. Gannon VP, et al. **J Gen Microbiol** 1990 Jun;136 (Pt 6):1125-35

Cloning of the toxin gene from Pasteurella multocida and its role in atrophic rhinitis. Lax AJ, et al. **J Gen Microbiol** 1990 Jan;136 (Pt 1):81-7

Comparison of Vero-cytotoxin-encoding phages from Escherichia coli of human and bovine origin. Rietra PJ, et al. **J Gen Microbiol** 1989 Aug;135 (Pt 8):2307-18

Toxin genotypes and plasmid profiles as determinants of systemic sequelae in Escherichia coli O157:H7 infections. Ostroff SM, et al. **J Infect Dis** 1989 Dec;160(6):994-8

Examination of strains belonging to enteropathogenic Escherichia coli serogroups for genes encoding EPEC adherence factor and Vero cytotoxins. Smith HR, et al. **J Med Microbiol** 1990 Apr;31(4):235-40

Plasmid and chromosomal related toxin polymorphism of Escherichia coli serogroup O 138; plasmid transfer and co-integration with pRP4. Woodward MJ, et al. **J Med Microbiol** 1990 Apr;31(4):241-9

Deletions of chromosomal regions coding for fimbriae and hemolysins occur in vitro and in vivo in various extraintestinal Escherichia coli isolates. Hacker J, et al. **Microb Pathog** 1990 Mar;8(3):213-25

Cloning and nucleotide sequencing of Vero toxin 2 variant genes from Escherichia coli O91:H21 isolated from a patient with the hemolytic uremic syndrome. Ito H, et al. **Microb Pathog** 1990 Jan;8(1):47-60

Transcriptional control plays an important role for the production of heat-labile enterotoxin in enterotoxigenic Escherichia coli of human origin. Katayama S, et al. **Microbiol Immunol** 1990;34(1):11-24

Gene cloning shows the alpha-toxin of Clostridium perfringens to contain both sphingomyelinase and lecithinase activities. Saint-Joanis B, et al. **Mol Gen Genet** 1989 Nov;219(3):453-60

Specificity of Bacillus thuringiensis for lepidopteran larvae: factors involved in vivo and in the structure of a purified protoxin. Arvidson H, et al. **Mol Microbiol** 1989 Nov; 3(11):1533-43

The complete nucleotide sequence of the Pasteurella multocida toxin gene and evidence for a transcriptional repressor, TxaR. Petersen SK. **Mol Microbiol** 1990 May; 4(5):821-30

The nucleotide sequence of tabtoxin resistance gene (ttr) of Pseudomonas syringae pv. tabaci. Anzai H, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1890

Nucleotide sequence of Clostridium difficile toxin B gene. Barroso LA, et al. **Nucleic Acids Res** 1990 Jul 11; 18(13):4004

Nucleotide sequence of two toxin genes from Bacillus sphaericus IAB59: sequence comparisons between five highly toxinogenic strains. Berry C, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7516

Sequence of the dermonecrotic toxin of Pasteurella multocida ssp. multocida. Buys WE, et al. **Nucleic Acids Res** 1990 May 11;18(9):2815-6

Nucleotide sequence of Clostridium difficile toxin A. Sauerborn M, et al. **Nucleic Acids Res** 1990 Mar 25; 18(6):1629-30

Definition of a bacterial virulence factor: sialylation of the group B streptococcal capsule. Wessels MR, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8983-7

Characterization and cloning of enterotoxin genes of Salmonella typhimurium. Yang MK, et al. **Proc Natl Sci Counc Repub China** [B] 1989 Apr; 13(2):109-18

DNA probes for the detection of toxin genes in Escherichia coli isolated from diarrhoeal disease in cattle and pigs. Woodward MJ, et al. **Vet Microbiol** 1990 Apr; 22(2-3):277-90

Enterohaemolysin and Shiga-like toxin genes in E coli [letter] Pohl P, et al. **Vet Rec** 1990 Jun 9;126(23):585-6

[Clinical Aeromonas hydrophila contain the DNA fragments with nucleotide sequence similar to those of hemolysin and cholera-toxin gene] Lai HC, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1990 May;23(2):126-33 (Eng. Abstr.) **(Chi)**

[Cloning and sequencing of hemolysin gene from clinical Aeromonas hydrophila] Liou JJ, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1990 May;23(2):134-46 (Eng. Abstr.) **(Chi)**

[UV-inducibility of the LT-toxin operon] Tiganova IG, et al. **Mol Gen Mikrobiol Virusol** 1989 Jul;(7):29-35 (Eng. Abstr.) **(Rus)**

HISTORY

[The problem history of the toxin-antitoxin theory in medical microbiology] Opitz B. **Z Gesamte Hyg** 1990 Jul; 36(7):378-80 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Bacterial toxin vaccines. McDonel JL. **Adv Biotechnol Processes** 1990;13:1-33 (213 ref.)

Intestinal barriers to bacteria and their toxins. Walker RI, et al. **Annu Rev Med** 1990;41:393-400 (32 ref.)

Safety and immunogenicity of a polyvalent Pseudomonas aeruginosa O-polysaccharide-toxin A vaccine in humans. Cryz SJ Jr, et al. **Antibiot Chemother** 1989;42:177-83

Human monoclonal antibodies to Pseudomonas aeruginosa type-specific lipopolysaccharides, toxin A and Klebsiella capsular polysaccharides. Lang AB, et al. **Dev Biol Stand** 1990;71:121-6

Enhanced immunogenicity of recombinant peptide fusions containing multiple copies of a heterologous T helper epitope. Löwenadler B, et al. **Eur J Immunol** 1990 Jul; 20(7):1541-5

Construction of a nontoxic fusion peptide for immunization against Escherichia coli strains that produce heat-labile and heat-stable enterotoxins. Clements JD. **Infect Immun** 1990 May;58(5):1159-66

Reaction of staphylococcal alpha-toxin with peptide-induced antibodies. Harshman S, et al. **Infect Immun** 1989 Dec; 57(12):3856-62

Epitopes of Escherichia coli alpha-hemolysin: identification of monoclonal antibodies that prevent hemolysis. Ji GE, et al. **Infect Immun** 1990 Sep;58(9):3029-35

Synthesis and immunological properties of conjugates composed of group B streptococcus type III capsular polysaccharide covalently bound to tetanus toxoid. Lagergard T, et al. **Infect Immun** 1990 Mar;58(3):687-94

Production and characterization of monoclonal antibodies against the lethal factor component of Bacillus anthracis lethal toxin. Little SF, et al. **Infect Immun** 1990 Jun; 58(6):1606-13

Characterization of monoclonal antibodies against the Escherichia coli hemolysin. Pellett S, et al. **Infect Immun** 1990 Mar;58(3):822-7

Stimulation of B10.BR T cells with superantigenic staphylococcal toxins. Callahan JE, et al. **J Immunol** 1990 Apr 1;144(7):2473-9

Seroepidemiologic evaluation of anti-toxic and anti-colonization factor immunity against infections by LT-producing Escherichia coli in rural Bangladesh. Clemens JD, et al. **J Infect Dis** 1990 Aug;162(2):448-53

Production and characterisation of monoclonal antibodies to Verotoxins 1 and 2 from Escherichia coli of serotype O 157:H7. Padhye VV, et al. **J Med Microbiol** 1989 Nov; 30(3):219-26

Pseudomonas aeruginosa exotoxin A primes human monocyte oxidative burst response in vitro. Patzer J, et al. **Microb Pathog** 1989 Aug;7(2):147-52

Carboxy-terminal peptides from the B subunit of Shiga toxin induce a local and parenteral protective effect. Harari I, et al. **Mol Immunol** 1990 Jul;27(7):613-21

Residues of the variable region of the T-cell-receptor beta-chain that interact with S. aureus toxin superantigens. Choi YW, et al. **Nature** 1990 Aug 2;346(6283):471-3

Detection of serum antibody by the antimitogen assay against streptococcal erythrogenic toxins. Age distribution in children and the relation to Kawasaki disease. Abe Y, et al. **Pediatr Res** 1990 Jan;27(1):11-5

Interaction of Staphylococcus aureus toxin "superantigens" with human T cells. Choi YW, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8941-5

"Superantigens" may shed light on immune puzzle [news; comment] Hoffman M. **Science** 1990 May 11; 248(4956):685-6 Comment on: Science 1990 May 11;248(4956):705-11.

Protection by toxoid-induced antibody of gnotobiotic piglets challenged with the dermonecrotic toxin of Pasteurella multocida. Frymus T, et al. **Zentralbl Veterinarmed [B]** 1989 Nov;36(9):674-80

[Atrophic rhinitis of swine: neutralization of the toxin of Pasteurella multocida] Schimmelpfennig H. **DTW Dtsch Tierarztl Wochenschr** 1990 May;97(5):195-6 **(Ger)**

[Natural antistaphylococcal immunity in a potential donor population] Nazarchuk LV. **Fiziol Zh** 1990 Jan-Feb; 36(1):82-4 (Eng. Abstr.) **(Rus)**

[Immunosuppressive action of the lethal toxin of Bacillus anthracis in mice] Abalakin VA. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jun;(6):94-9 (Eng. Abstr.) **(Rus)**

[The humoral response to staphylococcal alpha-hemolysin in the serum of patients with superficial and deep pyoderma or pyodermia] Lučić N, et al. **Med Arh** 1984;38(2):65-72 (Eng. Abstr.) **(Scr)**

[Consequences of bacterial product interaction with the immune system in newborn mice] García-Tamayo F, et al. **Bol Med Hosp Infant Mex** 1990 Mar;47(3):173-7 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Haemolytic uraemic syndromes in the British Isles, 1985-8: association with verocytotoxin producing Escherichia coli. Part 2: Microbiological aspects. Kleanthous H, et al.

Arch Dis Child 1990 Jul;65(7):722–7

Haemolytic uraemic syndromes in the British Isles 1985–8: association with verocytotoxin producing Escherichia coli. Part 1: Clinical and epidemiological aspects. Milford DV, et al. Arch Dis Child 1990 Jul;65(7):716–21

Purification of cloned proaerolysin released by a low protease mutant of Aeromonas salmonicida. Buckley JT. Biochem Cell Biol 1990 Jan;68(1):221–4

Production, purification and characterization of Clostridium difficile toxic proteins different from toxin A and from toxin B. Torres JF, et al. Biochim Biophys Acta 1989 Oct 5; 998(2):151–7

Fermented corn flour poisoning in rural areas of China. III. Isolation and identification of main toxin produced by causal microorganisms. Hu WJ, et al. Biomed Environ Sci 1989 Mar;2(1):65–71

Simple method for the isolation of the antilepidopteran toxin from Bacillus thuringiensis subsp. kurstaki. Venkateswerlu G, et al. Biotechnol Appl Biochem 1990 Jun;12(3):245–51

Isolation in Italy of a verotoxin-producing strain of Escherichia coli 0157:H7 from a child with hemolytic–uraemic syndrome. Caprioli A, et al. Eur J Epidemiol 1990 Mar;6(1):102–4

Structure of syringotoxin, a bioactive metabolite of Pseudomonas syringae pv. syringae. Ballio A, et al. FEBS Lett 1990 Sep 3;269(2):377–80

Purification of Shiga toxin by alpha–D–galactose–(1——4)–beta–D–galactose–(1——4)–beta–D–glucose–(1– ——) receptor ligand–based chromatography. Ryd M, et al. FEBS Lett 1989 Dec 4; 258(2):320–2

Simplified procedure for purification of Bordetella bronchiseptica dermonecrotic toxin. Horiguchi Y, et al. FEMS Microbiol Lett 1990 Jan 1;54(1–3):39–43

Binding and hemagglutinating properties of the B subunit(s) of heat–labile enterotoxin isolated from human enterotoxigenic Escherichia coli. Sugii S, et al. FEMS Microbiol Lett 1990 Jan 1;54(1–3):45–50

A heat–labile enterotoxin (LT) purified from chicken enterotoxigenic Escherichia coli is identical to porcine LT. Tsuji T, et al. FEMS Microbiol Lett 1990 Feb;55(3):329–32

A system for production and rapid purification of large amounts of the Shiga toxin/Shiga–like toxin I B subunit. Calderwood SB, et al. Infect Immun 1990 Sep; 58(9):2977–82

Purification of Shiga toxin and Shiga–like toxins I and II by receptor analog affinity chromatography with immobilized P1 glycoprotein and production of cross–reactive monoclonal antibodies. Donohue–Rolfe A, et al. Infect Immun 1989 Dec;57(12):3888–93

Purification and characterization of an Escherichia coli Shiga–like toxin II variant. MacLeod DL, et al. Infect Immun 1990 May;58(5):1232–9

Proteolysis of Clostridium perfringens type A enterotoxin during purification. Park KB, et al. Infect Immun 1990 Jun; 58(6):1999–2001

Purification and characterization of two Listeria ivanovii cytolysins, a sphingomyelinase C and a thiol–activated toxin (ivanolysin O). Vazquez–Boland JA, et al. Infect Immun 1989 Dec;57(12):3928–35

Purification of staphylococcal exfoliative toxin by high pressure liquid chromatography. Sugai M, et al. Int J Med Microbiol 1990 May;273(1):5–11

Fast purification of Clostridium sordellii cytotoxin. Baldacini O, et al. J Chromatogr 1990 Jun 29;528(2):357–69

Detection of verotoxin in stool specimens. Maniar AC, et al. J Clin Microbiol 1990 Jan;28(1):134–5

Toxigenic Escherichia coli in haemolytic–uraemic syndrome [letter] Pryor W, et al. Med J Aust 1990 Feb 19; 152(4):221–2

Isolation and characterization of functional Shiga toxin subunits and renatured holotoxin. Donohue–Rolfe A, et al. Mol Microbiol 1989 Sep;3(9):1231–6

[Detection of two Shiga–like toxins from Escherichia coli O157:H7 isolates by the polymerase chain reaction method] Kobayashi K, et al. Nippon Saikingaku Zasshi 1990 May; 45(3):649–52 (Eng. Abstr.) (Jpn)

METABOLISM

Binding and aggregation of the 25–kilodalton toxin of Bacillus thuringiensis subsp. israelensis to cell membranes and alteration by monoclonal antibodies and amino acid modifiers. Chow E, et al. Appl Environ Microbiol 1989 Nov;55(11):2779–88

Receptors on the brush border membrane of the insect midgut as determinants of the specificity of Bacillus thuringiensis delta–endotoxins. Van Rie J, et al. Appl Environ Microbiol 1990 May;56(5):1378–85

Unusual proteolysis of the protoxin and toxin from Bacillus thuringiensis. Structural implications. Choma CT, et al. Eur J Biochem 1990 May 20;189(3):523–7

The epidermolytic toxins are serine proteases. Dancer SJ, et al. FEBS Lett 1990 Jul 30;268(1):129–32

Degradation of 2–phosphoglycerate by cytotoxin B of Clostridium difficile. Knoop F, et al. FEBS Lett 1990 Jul 2;267(1):9–12

The role of histidine residues in the alpha toxin of Clostridium perfringens. Titball RW, et al. FEMS Microbiol Lett 1990 Mar 15;56(3):261–5

Bacterial toxins as probes for the T–cell antigen receptor. Fleischer B. Immunol Today 1989 Aug;10(8):262–4

Interrelationships between digestive proteolytic activities and production and quantitation of toxins in pseudomembranous colitis induced by Clostridium difficile in gnotobiotic mice. Corthier G, et al. Infect Immun 1989 Dec;57(12):3922–7

Modification of the glycolipid–binding specificity of vero cytotoxin by polymyxin B and other cyclic amphipathic peptides. Head S, et al. Infect Immun 1990 Jun;58(6):1532–7

Heterogeneity of intestinal receptors for Escherichia coli heat–stable enterotoxin. Ivens K, et al. Infect Immun 1990 Jun;58(6):1817–20

Comparison of the glycolipid receptor specificities of Shiga–like toxin type II and Shiga–like toxin type II variants. Samuel JE, et al. Infect Immun 1990 Mar; 58(3):611–8

Secretion of methanol–insoluble heat–stable enterotoxin (STB): energy– and secA–dependent conversion of pre–STB to an intermediate indistinguishable from the extracellular toxin. Kupersztoch YM, et al. J Bacteriol 1990 May;172(5):2427–32

Production of Shiga–like toxin among Escherichia coli strains and other bacteria isolated from diarrhea in São Paulo, Brazil. Giraldi R, et al. J Clin Microbiol 1990 Jun; 28(6):1460–2

Aerolysin, a hemolysin from Aeromonas hydrophila, forms voltage–gated channels in planar lipid bilayers. Wilmsen HU, et al. J Membr Biol 1990 Apr;115(1):71–81

Clostridium difficile toxin A. Interactions with mucus and early sequential histopathologic effects in rabbit small intestine. Lima AA, et al. Lab Invest 1989 Oct;61(4):419–25

Structure–function analyses of Shiga toxin and the Shiga–like toxins. Jackson MP. Microb Pathog 1990 Apr;8(4):235–42 (57 ref.)

Demonstration of RNA N–glycosidase activity of a Vero toxin (VT2 variant) produced by Escherichia coli O91:H21 from a patient with the hemolytic uremic syndrome. Furutani M, et al. Microbiol Immunol 1990;34(4):387–92

Export and processing analysis of a fusion between the extracellular heat–stable enterotoxin and the periplasmic B subunit of the heat–labile enterotoxin in Escherichia coli. Guzmán–Verduzco LM, et al. Mol Microbiol 1990 Feb; 4(2):253–64

Two precursors of the heat–stable enterotoxin of Escherichia coli: evidence of extracellular processing. Rasheed JK, et al. Mol Microbiol 1990 Feb;4(2):265–73

Intestinal electrolyte transport and diarrheal disease [letter; comment] Cleary TG, et al. N Engl J Med 1990 May 3; 322(18):1321–2 Comment on: N Engl J Med 1989 Sep 28;321(13):879–83.

Proton motive force involved in protein transport across the outer membrane of Aeromonas salmonicida. Wong KR, et al. Science 1989 Nov 3;246(4930):654–6

[Cholestyramine adsorbs Escherichia coli and Vibrio cholerae toxins by way of ion exchange mechanism] Brouillard MY, et al. Ann Gastroenterol Hepatol (Paris) 1990 Jan–Feb;26(1):27–30 (Eng. Abstr.) (Fre)

[Metabolic effects of anaerobic gas infection toxins] Otdel'nova NN, et al. Vopr Med Khim 1990 May–Jun; 36(3):83–5 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Effect of E. coli STa enterotoxin on mucosal surface pH of pig proximal jejunum in vivo. McEwan GT, et al. Acta Vet Scand Suppl 1989;86:186–8

Effect of E. coli STa enterotoxin on intestinal drug absorption. McEwan GT, et al. Acta Vet Scand Suppl 1989; 86:189–91

Inhibition of cytochalasin D–stimulated G–actin ATPase by ADP–ribosylation with Clostridium perfringens iota toxin. Geipel U, et al. Biochem J 1990 Mar 1;266(2):335–9

Mechanisms of luteinizing–hormone exocytosis in Staphylococcus aureus–alpha–toxin–permeabilized sheep gonadotropes. van der Merwe PA, et al. Biochem J 1989 Dec 15;264(3):901–8

A modified theta–toxin produced by limited proteolysis and methylation: a probe for the functional study of membrane cholesterol. Ohno–Iwashita Y, et al. Biochim Biophys Acta 1990 Apr 30;1023(3):441–8

Granulocyte plasma membrane damage by leukotoxic supernatant from Pasteurella haemolytica A1 and protection by immune serum. Styrt B, et al. Can J Vet Res 1990 Jan;54(1):146–50

The effect of Pasteurella haemolytica and the leukotoxin of Pasteurella haemolytica on bovine lung explants. Wilkie IW, et al. Can J Vet Res 1990 Jan;54(1):151–6

Host response to Pasteurella multocida turbinate atrophy toxin in swine. Williams PP, et al. Can J Vet Res 1990 Jan;54(1):157–63

Selective elimination of breast cancer cells from human bone marrow using an antibody–Pseudomonas exotoxin A conjugate. Bjorn MJ, et al. Cancer Res 1990 Sep 15; 50(18):5992–6

Effects on growth and energy metabolism in untransformed and transformed BALB/c mouse fibroblasts by a novel cytotoxic compound. Keler T, et al. Cancer Res 1989 Dec 15;49(24 Pt 1):7093–7

Macrophage–dependent stimulation of T cell–depleted spleen cells by Clostridium difficile toxin A and calcium ionophore. Miller PD, et al. Cell Immunol 1990 Mar; 126(1):155–63

Staphylococcus aureus alpha–toxin activates phospholipases and induces a Ca2+ influx in PC12 cells. Fink D, et al. Cell Signal 1989;1(4):387–93

The effects of enterotoxins and short–chain fatty acids on water and electrolyte fluxes in ileal and colonic loops in vivo in the rat. Ramakrishna BS, et al. Digestion 1990; 45(2):93–101

Surface blebbing and cytoskeletal changes induced in vitro by toxin B from Clostridium difficile: an immunochemical and ultrastructural study. Malorni W, et al. Exp Mol Pathol 1990 Jun;52(3):340–56

ADP–ribosylation of cell membrane proteins by staphylococcal alpha–toxin and leukocidin in rabbit erythrocytes and polymorphonuclear leukocytes. Kato I, et al. FEBS Lett 1989 Sep 11;255(1):59–62

Lipopolysaccharide toxin can directly stimulate the intracellular accumulation of lipids and their secretion into medium in the primary culture of rabbit hepatocytes. Victorov AV, et al. FEBS Lett 1989 Oct 9;256(1–2):155–8

Differences between the mechanisms of action of heat–stable and heat–labile enterotoxins of Escherichia coli. Goyal J, et al. FEMS Microbiol Lett 1990 Jan 1;54(1–3):169–73

Activation of phospholipase A2 in rabbit erythrocyte membranes by a novel hemolytic toxin (H–toxin) of Clostridium septicum. Takano S, et al. FEMS Microbiol Lett 1990 Mar 15;56(3):319–22

Additive effects of ileal secretagogues in the rat. Charney AN, et al. Gastroenterology 1990 Apr;98(4):881–7

Comparative study of Clostridium difficile toxin A and cholera toxin in rabbit ileum. Triadafilopoulos G, et al. Gastroenterology 1989 Nov;97(5):1186–92

Studies of the antifungal compounds produced by Erwinia herbicola. Adetuyi FC. Indian J Pathol Microbiol 1990 Jan; 33(1):48–52

Effect of Staphylococcus aureus delta–toxin on human granulocyte functions and platelet–activating–factor metabolism. Kasimir S, et al. Infect Immun 1990 Jun; 58(6):1653–9

Induction of interleukin–1 from murine peritoneal macrophages by Pseudomonas acruginosa exotoxin A. Miafeldt ML, et al. Infect Immun 1990 Apr;58(4):978–82

Effect of staphylococcal delta–toxin and bee venom peptide melittin on leukotriene induction and metabolism of human polymorphonuclear granulocytes. Raulf M, et al. Infect Immun 1990 Aug;58(8):2678–82

Phorbol esters enhance the cyclic GMP response of T84 cells to the heat–stable enterotoxin of Escherichia coli (STa). Weikel CS, et al. Infect Immun 1990 May;58(5):1402–7

Regulation of particulate guanylate cyclase by Escherichia coli heat–stable enterotoxin: receptor binding and enzyme kinetics. Carr S, et al. Int J Biochem 1989;21(11):1211–5

Staphylococcus aureus alpha–toxin attack on human platelets promotes assembly of the prothrombinase complex. Arvand M, et al. J Biol Chem 1990 Aug 25;265(24):14377–81

Pasteurella multocida toxin, a potent mitogen, stimulates protein kinase C–dependent and –independent protein phosphorylation in Swiss 3T3 cells. Staddon JM, et al. J Biol Chem 1990 Jul 15;265(20):11841–8

Pathogenesis of Shigella diarrhea. XVI. Selective targetting of Shiga toxin to villus cells of rabbit jejunum explains the effect of the toxin on intestinal electrolyte transport. Kandel G, et al. J Clin Invest 1989 Nov;84(5):1509–17

Toxin A of Clostridium difficile is a potent cytotoxin. Tucker KD, et al. J Clin Microbiol 1990 May;28(5):869–71

Partial purification and some characteristics of proteinase(s) induced by staphylococcal exfoliative toxin. Suzuki K, et al. J Dermatol 1989 Aug;16(4):289–95

ADP–ribosylation of actin. Aktories K. J Muscle Res Cell Motil 1990 Apr;11(2):95–7 (19 ref.)

The effects of cholera toxin, pertussis toxin, sodium fluoride and alpha–interferon on prostaglandin production by the guinea–pig endometrium. Leckie CM, et al. J Reprod Fertil 1990 May;89(1):325–33

Effects of follicle stimulating hormone, cholera toxin, pertussis toxin and forskolin on adenosine cyclic 3',5'–monophosphate output by granulosa cells from Booroola ewes with or without the F gene. McNatty KP, et al. J Reprod Fertil 1990 Jul;89(2):553–63

Inhibition by the protein kinase inhibitors, isoquinolinesulfonamides, of fluid accumulation induced by Escherichia coli heat–stable enterotoxin, 8–bromo–cGMP and 8–bromo–cAMP in suckling mice. Hirayama T, et al. Microb Pathog 1989 Oct;7(4):255–61

Pseudomonas exotoxin A prevents beta–adrenoceptor–induced upregulation of Gi protein alpha–subunits and adenylyl cyclase desensitization in rat heart muscle cells. Reithmann C, et al. Mol Pharmacol 1990 May;37(5):631–8

Pasteurella multocida toxin: potent mitogen for cultured fibroblasts. Rozengurt E, et al. Proc Natl Acad Sci U S A 1990 Jan;87(1):123–7

Effects of cholera toxin, Escherichia coli heat stable toxin and sodium deoxycholate on neurotensin release from the ileum in vivo. Eklund S, et al. Regul Pept 1989 Dec; 26(3):241–52

Early burn excision attenuates the postburn lung and systemic response to endotoxin. Demling RH, et al. Surgery 1990 Jul;108(1):28–35

Effects of Clostridium difficile toxins A and B on cytoskeleton organization in HEp–2 cells: a comparative morphological study. Fiorentini C, et al. Toxicon 1989; 27(11):1209–18

Interaction of Clostridium perfringens delta toxin with erythrocyte and liposome membranes and relation with the specific binding to the ganglioside GM2. Jolivet–Reynaud

C, et al. **Toxicon** 1989;27(10):1113–26
Pore–forming toxins: experiments with S. aureus alpha–toxin, C. perfringens theta–toxin and E. coli haemolysin in lipid bilayers, liposomes and intact cells. Menestrina G, et al. **Toxicon** 1990;28(5):477–91
Contraction induced by Clostridium perfringens alpha toxin in the isolated rat ileum. Sakurai J, et al. **Toxicon** 1990; 28(4):411–8

PHYSIOLOGY

Aerolysin of Aeromonas sobria: evidence for formation of ion–permeable channels and comparison with alpha–toxin of Staphylococcus aureus. Chakraborty T, et al. **Infect Immun** 1990 Jul;58(7):2127–32

TOXICITY

Are bacterial toxins involved in arthritis induced in rats? Cuzzolin L, et al. **Acta Physiol Hung** 1990;75 Suppl:71–2
Invasive and toxin–mediated Staphylococcus aureus diseases in children. Hodes DS, et al. **Adv Pediatr Infect Dis** 1990; 5:35–68 (186 ref.)
Staphylococcal alpha toxin induced cardiac dysfunction. Adamo P, et al. **Can J Cardiol** 1989 Nov–Dec;5(8):395–400
Resistance to the Bacillus sphaericus toxin in cultured mosquito cells. Schroeder JM, et al. **In Vitro Cell Dev Biol** 1989 Oct;25(10):887–91
Bacterial endotoxin both enhances and inhibits the toxicity of Shiga–like toxin II in rabbits and mice. Barrett TJ, et al. **Infect Immun** 1989 Nov;57(11):3434–7
Release of interleukin–1 beta associated with potent cytocidal action of staphylococcal alpha–toxin on human monocytes. Bhakdi S, et al. **Infect Immun** 1989 Nov;57(11):3512–9
Bovine pulmonary endothelial cell damage mediated by Pasteurella haemolytica pathogenic factors. Breider MA, et al. **Infect Immun** 1990 Jun;58(6):1671–7
Effects of exogenous agents on the action of Bordetella parapertussis heat–labile toxin on guinea pig skin. Endoh M, et al. **Infect Immun** 1990 May;58(5):1456–60
Interaction of Clostridium difficile toxin A with cultured cells: cytoskeletal changes and nuclear polarization. Fiorentini C, et al. **Infect Immun** 1990 Jul;58(7):2329–36
Effect of Clostridium difficile enterotoxin A on ultrastructure of Chinese hamster ovary cells. Kushnaryov VM, et al. **Infect Immun** 1989 Dec;57(12):3914–21
In vivo formation of hybrid toxins comprising Shiga toxin and the Shiga–like toxins and role of the B subunit in localization and cytotoxic activity. Weinstein DL, et al. **Infect Immun** 1989 Dec;57(12):3743–50
Assay for enterotoxigenic Escherichia coli heat–stable toxin b in rats and mice. Whipp SC. **Infect Immun** 1990 Apr; 58(4):930–4
Location of the dipteran specificity region in a lepidopteran–dipteran crystal protein from Bacillus thuringiensis. Widner WR, et al. **J Bacteriol** 1990 Jun; 172(6):2826–32
Action of activated 27,000 Mr toxin from Bacillus thuringiensis var. israelensis on Malpighian tubules of the insect, Rhodnius prolixus. Maddrell SH, et al. **J Cell Sci** 1989 Nov;94 (Pt 3):601–8
Cancer–associated hemolytic uremic syndrome: a possible role of mitomycin in relation to Shiga–like toxins [letter; comment] Acheson DW, et al. **J Clin Oncol** 1989 Dec; 7(12):1943 Comment on: J Clin Oncol 1989 Jun;7(6):781–9.
Staphylococcal alpha–toxin–induced vascular leakage in isolated perfused rabbit lungs. Seeger W, et al. **Lab Invest** 1990 Sep;63(3):341–9
Non–thiol–activated cytolytic bacterial toxins: current status [published erratum appears in Microbiol Sci 1988 Jun;5(6):191] Kato I, et al. **Microbiol Sci** 1988 Feb;5(2):53–7 (29 ref.)
Clinical and pathological effects of the dermonecrotic toxin of Bordetella bronchiseptica and Pasteurella multocida in specific–pathogen–free piglets. Eliás B, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):677–88
Diphtheria toxin mutant selectively kills cerebellar Purkinje neurons. Riedel CJ, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5051–5
Pneumonia in mice produced by cell–free extract of cultures of Bordetella parapertussis. Chen W, et al. **Res Vet Sci** 1990 Jan;48(1):18–22
Virulence factors of Clostridium difficile. Borriello SP, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S185–91 (47 ref.)
Effects of heat–stable Escherichia coli enterotoxin on intestinal alkaline secretion and transepithelial potential difference in the rat intestines in vivo. Tantisira MH, et al. **Scand J Gastroenterol** 1990 Jan;25(1):19–28
Mechanism of action of Bordetella heat–labile toxin on vascular smooth muscle strips and cells. Endoh M, et al. **Tokai J Exp Clin Med** 1988;13 Suppl:193–202
Protein A protects mice from depletion of biotransformation enzymes and mortality induced by Salmonella typhimurium endotoxin. Dwivedi PD, et al. **Toxicol Lett** 1989 Oct; 49(1):1–13
Structure of a hepatotoxic pentapeptide from the cyanobacterium Nodularia spumigena. Sandström A, et al. **Toxicon** 1990;28(5):535–40
Activity requirements of epidermolytic toxin from Staphylococcus aureus studied by an in vitro assay. Smith TP, et al. **Toxicon** 1990;28(6):675–83
Serum complement activity and serum enzymes in rats after a subcutaneous injection of toxin prepared from Pasteurella multocida type D. Thurston JR, et al. **Vet Immunol Immunopathol** 1989 Dec;23(3–4):385–8
[A viewpoint of postburn toxemia—"postburn tissue toxolysin"] Zhang ML. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Dec;1(4):282–5 (Chi)
[The seasonal toxigenicity of different cultured plants for clostridia in relation to so–called wildlife mortality] Böhnel H, et al. **Berl Munch Tierarztl Wochenschr** 1989 Sep 1; 102(9):310–7 (Eng. Abstr.) (Ger)
[Structure and mode of action of the Shiga toxin and Shiga–like toxins] Yutsudo T. **Nippon Saikingaku Zasshi** 1989 Sep;44(5):705–15 (Jpn)
[The effect of lethal anthrax toxin on the functional activity of peritoneal mononuclear phagocytes and polymorphonuclear neutrophils in mice] Abalakin VA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Feb;(2):62–7 (Eng. Abstr.) (Rus)
[Specific intoxication in anthrax infection] Kolesnik VS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Sep;(9):14–1 (Eng. Abstr.) (Rus)

BACTERIAL TYPING TECHNICS

Typing of Listeria monocytogenes for epidemiological studies using DNA probes. Saunders NA, et al. **Acta Microbiol Hung** 1989;36(2–3):205–9
Comparison of DNA:DNA homology and enzymatic activity between Pasteurella haemolytica and related species. Bingham DP, et al. **Am J Vet Res** 1990 Aug;51(8):1161–6
Isoenzyme typing of Neisseria meningitidis serogroup C. Ashton FE, et al. **Can Dis Wkly Rep** 1989 Nov 15(46):231–2 (Eng, Fre)
A comparison of the rapid thermonuclease test and the lysostaphin susceptibility test in the presumptive identification of Staphylococcus aureus from positive Bactec blood cultures. Forward KR, et al. **Diagn Microbiol Infect Dis** 1989 May–Jun;12(3):205–9
Comparison of AMS–Vitek, MicroScan, and Autobac Series II for the identification of gram–negative bacilli. Truant AL, et al. **Diagn Microbiol Infect Dis** 1989 May–Jun; 12(3):211–5
Evaluation of five commercial systems for identification of coagulase–negative staphylococci to species level. Skinner M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Nov; 8(11):1001–3
Biotyping of bacterial isolates using the yeast killer system. Morace G, et al. **Eur J Epidemiol** 1989 Sep;5(3):305–10
Lack of precision in commercial identification systems: correction using Bayesian analysis. Berger SA. **J Appl Bacteriol** 1990 Mar;68(3):285–8
Species, biotype, and bacteriophage type determinations compared with cell envelope protein profiles for typing Acinetobacter strains. Bouvet PJ, et al. **J Clin Microbiol** 1990 Feb;28(2):170–6
Comparison of restriction endonuclease analysis and phenotypic typing methods for differentiation of Yersinia enterocolitica isolates. Kapperud G, et al. **J Clin Microbiol** 1990 Jun;28(6):1125–31
Molecular typing of nosocomial isolates of Legionella pneumophila serogroup 3. Tram C, et al. **J Clin Microbiol** 1990 Feb;28(2):242–5
Evaluation of two rapid methods for identifying and biotyping Haemophilus influenzae. Murphy PG, et al. **J Clin Pathol** 1990 Jul;43(7):581–3
Aeromonas and Plesiomonas in the environment: value of differential biotyping of aeromonads. Joseph SW, et al. **J Diarrhoeal Dis Res** 1988 Jun;6(2):80–7 (48 ref.)
Differentiation of staphylococcal species and strains by ribosomal RNA gene restriction patterns. Thomson–Carter FM, et al. **J Gen Microbiol** 1989 Jul;135 (Pt 7):2093–7
A study of the relationships between antibiotic resistance phenotypes, phage–typing and biotyping of 117 clinical isolates of Acinetobacter spp. Joly–Guillou ML, et al. **J Hosp Infect** 1990 Jul;16(1):49–58
Nosocomial Serratia marcescens individualized by five typing methods in a regional hospital. Larose P, et al. **J Hosp Infect** 1990 Feb;15(2):167–72
Biotypes, serogroups and antibiotic susceptibility of Campylobacter jejuni and Campylobacter coli in Chile. Figueroa G, et al. **J Infect** 1990 Mar;20(2):123–7
Pyrolysis–mass spectrometry (Py–MS) for the rapid epidemiological typing of clinically significant bacterial pathogens. Freeman R, et al. **J Med Microbiol** 1990 Aug; 32(4):283–6
A pyrolysis–mass spectrometry study of Corynebacterium spp. Hindmarch JM, et al. **J Med Microbiol** 1990 Feb; 31(2):137–49
The evaluation of a typing scheme for coagulase–negative staphylococci suitable for epidemiological studies. Ludlam HA, et al. **J Med Microbiol** 1989 Nov;30(3):161–5
Epidemiological typing of Streptococcus pyogenes by pyrolysis mass spectrometry. Magee JT, et al. **J Med Microbiol** 1989 Dec;30(4):273–8
Chemotaxonomic study of Vibrio cholerae bio–serogroup Hakata on the basis of the sugar composition of the polysaccharide portion of its lipopolysaccharides. Kondo S, et al. **Microbiol Immunol** 1989;33(12):1045–52
An application of monoclonal antibodies to identification of leptospires of serogroup icterohaemorrhagiae found in China. Zhang WH, et al. **Microbiol Immunol** 1989; 33(12):1039–43
The biochemical differentiation between Salmonella and Citrobacter. van der Walt ML, et al. **Onderstepoort J Vet Res** 1989 Dec;56(4):263–9
rRNA gene restriction patterns of Leptospira: a molecular typing system. Pérolat P, et al. **Res Microbiol** 1990 Feb; 141(2):159–71
[Pseudomonas aeruginosa. Application of serotyping and pyocin typing to strains isolated in Algeria] Kezzal K, et al. **Arch Inst Pasteur Alger** 1986;55:61–77 (31 ref.) (Eng. Abstr.) (Fre)
[Culture and biochemical differentiation of Legionella at the microbiologic laboratory] Lück PC, et al. **Z Gesamte Hyg** 1990 Feb;36(2):114–7 (Eng. Abstr.) (Ger)
[Glycolipid–patterns of Mycobacterium tuberculosis as an aid for sub–typing] Toida I, et al. **Kekkaku** 1989 Nov; 64(11):707–11 (Eng. Abstr.) (Jpn)

STANDARDS

Comparison of four typing methods for Aeromonas species. Altwegg M, et al. **J Diarrhoeal Dis Res** 1988 Jun;6(2):88–94

TRENDS

[The typing of the causative agents of infectious diseases today] Dzerkov VD, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Mar;(3):98–103 (50 ref.) (Rus)

BACTERIAL VACCINES

Fatal pneumococcal bacteremia with disseminated intravascular coagulation and Waterhouse–Friderichsen syndrome in a vaccinated splenectomized adult. Case report. Lindblad BE, et al. **Acta Chir Scand** 1990 Jun–Jul; 156(6–7):487–8
Immunization of calves with live and inactivated whole–cell vaccines against Salmonella typhimurium infection. Mikula I, et al. **Acta Vet Hung** 1989;37(3):219–26
Corynebacterium pseudotuberculosis infection in goats. VIII. The effect of vaccination against experimental infection. Holstad G, et al. **Acta Vet Scand** 1989;30(3):275–83
Corynebacterium pseudotuberculosis infection in goats. IX. The effect of vaccination against natural infection. Holstad G. **Acta Vet Scand** 1989;30(3):285–93
Bacterial vaccines. **Adv Biotechnol Processes** 1990;13:1–306
Escherichia polysaccharide vaccines. Cryz SJ Jr. **Adv Biotechnol Processes** 1990;13:87–103 (92 ref.)
Production and control of Neisseria meningitidis vaccines. Frasch CE. **Adv Biotechnol Processes** 1990;13:123–45 (67 ref.)
Anthrax vaccine development: a continuing story. Hambleton P, et al. **Adv Biotechnol Processes** 1990;13:105–22 (91 ref.)
Vaccination against the cholera/coli family of enterotoxins by synthetic peptides. Jacob CO. **Adv Biotechnol Processes** 1990;13:223–54 (84 ref.)
Bacterial toxin vaccines. McDonel JL. **Adv Biotechnol Processes** 1990;13:1–33 (213 ref.)
Polysaccharides and membrane vaccines. Poolman JT. **Adv Biotechnol Processes** 1990;13:57–86 (93 ref.)
Vaccines against leprosy. Stewart–Tull DE. **Adv Biotechnol Processes** 1990;13:201–22 (77 ref.)
ACIP updates recommendations for pneumococcal vaccine. **Am Fam Physician** 1989 May;39(5):386, 388
Prevention of influenza and pneumonia. Mostow SR, et al. **Am Rev Respir Dis** 1990 Aug;142(2):487–8
New strategies for leprosy and tuberculosis and for development of bacillus Calmette–Guérin into a multivaccine vehicle. Bloom BR, et al. **Ann N Y Acad Sci** 1989;569:155–73 (45 ref.)
Strategies for the development of vaccines for typhoid fever, shigellosis, and cholera. Miller SI, et al. **Ann N Y Acad Sci** 1989;569:145–54 (61 ref.)
Vaccinal properties of Salmonella abortusovis mutants for streptomycin: screening with an ovine model. Pardon P, et al. **Ann Rech Vet** 1990;21(1):57–67
Intraperitoneal inoculation of ewes with an autogenous vaccine to prevent mastitis due to Pasteurella haemolytica. Kabay MJ, et al. **Aust Vet J** 1989 Oct;66(10):342–3
Effect of levamisole on parenteral vaccines for swine dysentery. Jenkins EM, et al. **Br Vet J** 1989 Nov–Dec; 145(6):565–72
Clinical and immunological responses of ewes following vaccination with an experimental formalin–inactivated Chlamydia psittaci (ovis) vaccine and subsequent challenge with the live organism during pregnancy. Wilsmore AJ, et al. **Br Vet J** 1990 Jul–Aug;146(4):341–8
Protection of ewes vaccinated with A22 strain Chlamydia psittaci (ovis) against challenge in pregnancy with homologous and heterologous strains of the organism. Wilsmore AJ, et al. **Br Vet J** 1990 Jul–Aug;146(4):349–53
The protective effect of vaccination against experimental pneumonia in cattle with Haemophilus somnus outer membrane antigens and interference by lipopolysaccharide. Silva SV, et al. **Can J Vet Res** 1990 Jun;54(3):326–30
Preliminary assessment of a Haemophilus parasuis bacterin for use in specific pathogen free swine. Smart NL, et al. **Can J Vet Res** 1989 Oct;53(4):390–3
Positive and negative aspects of host immune response to Haemophilus, Actinobacillus and Pasteurella. Stephens LR. **Can J Vet Res** 1990 Apr;54 Suppl:S41–4 (52 ref.)

A complex component modulating immune-deficient cells in leprosy patients leading to loss of viability of Mycobacterium leprae--a possible vaccine. Marolia J, et al. **Clin Exp Immunol** 1990 Jan;79(1):7-14

Conjugate vaccines. **Contrib Microbiol Immunol** 1989; 10:1-196

Background and indications for Haemophilus influenzae type b vaccines consisting of capsular antigen coupled to protein carriers. Anderson PW Jr, et al. **Contrib Microbiol Immunol** 1989;10:115-24 (31 ref.)

Contemporary trends in conjugate vaccine development. Cruse JM, et al. **Contrib Microbiol Immunol** 1989;10:1-10 (43 ref.)

Glycoconjugates of bacterial carbohydrate antigens. A survey and consideration of design and preparation factors. Dick WE Jr, et al. **Contrib Microbiol Immunol** 1989; 10:48-114 (274 ref.)

Prevention of Haemophilus influenzae type b disease: vaccines and passive prophylaxis. Wenger JD, et al. **Curr Clin Top Infect Dis** 1989;10:306-39 (97 ref.)

Vaccine prophylaxis of abattoir-associated Q fever: eight years' experience in Australian abattoirs. Marmion BP, et al. **Epidemiol Infect** 1990 Apr;104(2):275-87

A randomized, controlled, double-blind, cross-over, clinical trial of Q fever vaccine in selected Queensland abattoirs. Shapiro RA, et al. **Epidemiol Infect** 1990 Apr;104(2):267-73

Escherichia coli and Klebsiella vaccines and immunotherapy. Cross AS, et al. **Infect Dis Clin North Am** 1990 Jun; 4(2):271-82 (53 ref.)

Future vaccines against enteric pathogens. Levine MM, et al. **Infect Dis Clin North Am** 1990 Mar;4(1):105-21 (55 ref.)

Pneumococcal vaccination. Controversies and opportunities. Spika JS, et al. **Infect Dis Clin North Am** 1990 Mar; 4(1):11-27 (83 ref.)

Leprosy vaccines [letter] Pfaltzgraff RE. **Int J Lepr Other Mycobact Dis** 1990 Sep;58(3):573

Further comments on leprosy vaccination [letter] Prabhavlkar AB, et al. **Int J Lepr Other Mycobact Dis** 1990 Sep;58(3):573-4

Enhancement of protection against Salmonella infection in mice mediated by a synthetic lipopeptide analogue of bacterial lipoprotein in S. typhimurium vaccines. Schlecht S, et al. **Int J Med Microbiol** 1989 Oct;271(4):493-500

Efficacy of a vaccine to prevent Chlamydia- or Campylobacter-induced abortions in ewes. Hansen DE, et al. **J Am Vet Med Assoc** 1990 Mar 1;196(5):731-4

Chlamydial vaccines. Schnorr KL. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1548-61 (179 ref.)

Effects of vaccination against systemic Serratia infection. Kumagai Y, et al. **J Clin Lab Immunol** 1989 Jul;29(3):125-32

Influenza and pneumococcal pneumonia immunization. Protecting our high risk population. Siegel BR, et al. **J Fla Med Assoc** 1990 Jun;77(6):593-5

Molecular characterization of bacterial virulence factors and the consequences for vaccine design. The 1988 Fleming lecture. Dougan G. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1397-406 (81 ref.)

Immunization to prevent group B streptococcal disease: victories and vexations. Baker CJ. **J Infect Dis** 1990 May; 161(5):917-21 (44 ref.)

Polysaccharide-protein conjugates: a new generation of vaccines. Robbins JB, et al. **J Infect Dis** 1990 May; 161(5):821-32 (125 ref.)

From the Centers for Disease Control. Change in administration schedule for Haemophilus b conjugate vaccines. **JAMA** 1990 May 9;263(18):2429

It's 'north to Alaska' for research on some vaccines by infectious diseases staff [news] Cotton P. **JAMA** 1990 May 16;263(19):2583

H influenzae vaccines gain favor [news] Marwick C. **JAMA** 1990 Sep 19;264(11):1375

Pneumococcal immunization: from policy to practice [editorial; comment] Schwartz B, et al. **JAMA** 1990 Sep 5;264(9):1154-5 Comment on: JAMA 1990 Sep 5;264(9):1117-22.

Supplementary statement: change in administration schedule for haemophilus b conjugate vaccines. **MMWR** 1990 Apr 13;39(14):232-3

New vaccines against Haemophilus influenzae type b. Shapiro ED. **Pediatr Clin North Am** 1990 Jun;37(3):567-83 (88 ref.)

Cost-benefit analysis of Haemophilus influenzae type b prevention: conjugate vaccination at eighteen months of age. Hay JW, et al. **Pediatr Infect Dis J** 1990 Apr; 9(4):246-52

Haemophilus vaccine efficacy in Dallas County [letter] Murphy TV. **Pediatr Infect Dis J** 1989 Nov;8(11):805-6

Antigenuria after receipt of Haemophilus b diphtheria toxoid conjugate vaccine. Scheifele D, et al. **Pediatr Infect Dis J** 1989 Dec;8(12):887-8

Current status of Haemophilus influenza type b vaccines. **Pediatrics** 1990 Apr;85(4 Pt 2):631-704

Opsonophagocidal activity in sera from infants and children immunized with Haemophilus influenzae type b conjugate vaccine (meningococcal protein conjugate). Gray BM. **Pediatrics** 1990 Apr;85(4 Pt 2):694-7

Comparative immune responses to Haemophilus influenzae type b polysaccharide and a polysaccharide-protein conjugate vaccine. Kim KS, et al. **Pediatrics** 1990 Apr;85(4 Pt 2):648-50

Clinical experience with Haemophilus influenzae type b conjugate vaccines. Mäkelä PH, et al. **Pediatrics** 1990 Apr; 85(4 Pt 2):651-3 (21 ref.)

Protective efficacy of Haemophilus influenzae type b polysaccharide vaccine. Shapiro ED, et al. **Pediatrics** 1990 Apr;85(4 Pt 2):643-7 (29 ref.)

Commentary: results of efficacy trials in Alaska and Finland of Haemophilus influenzae type b conjugate vaccine. Ward J. **Pediatrics** 1990 Apr;85(4 Pt 2):667

Immunogenicity of Haemophilus influenzae type b polysaccharide-protein conjugate vaccines in children with conditions associated with impaired antibody responses to type b polysaccharide vaccine. Weinberg GA, et al. **Pediatrics** 1990 Apr;85(4 Pt 2):654-61 (46 ref.)

Current status of leptospiral vaccines. Bey RF, et al. **Prog Vet Microbiol Immunol** 1986;2:175-97 (128 ref.)

Recombinant DNA technology and enterotoxigenic Escherichia coli vaccines. Gyles CL, et al. **Prog Vet Microbiol Immunol** 1987;3:139-58 (93 ref.)

Vaccine development against enterotoxigenic Escherichia coli. Myers LL. **Prog Vet Microbiol Immunol** 1986;2:145-57 (84 ref.)

Comparative efficacy of four vaccines against Salmonella virchow in chicks in India. Ghosh SS. **Res Vet Sci** 1989 Sep;47(2):280-2

Vaccination against enteric bacterial diseases. Hone D, et al. **Rev Infect Dis** 1989 Nov-Dec;11(6):853-77 (315 ref.)

Pathogenesis of group A streptococci in mice and efficacy of locally administered streptococcal vaccines. Bronze MS, et al. **Trans Assoc Am Physicians** 1988;101:88-92

Leprosy and tuberculosis vaccine design. Kaufmann SH. **Trop Med Parasitol** 1989 Sep;40(3):251-7 (64 ref.)

Urinary antibody response after immunisation with a vaccine against urinary tract infection. Kruze D, et al. **Urol Res** 1989;17(6):361-6

Salmonella-based vaccines. Hackett J. **Vaccine** 1990 Feb; 8(1):5-11 (82 ref.)

Live Shigella flexneri 2a and Shigella sonnei I vaccine candidate strains with two attenuating markers. I. Construction of vaccine candidate strains with retained invasiveness but reduced intracellular multiplication. Linde K, et al. **Vaccine** 1990 Feb;8(1):25-9

New approach to develop a vaccine design against shigellosis [letter] Sinha AK, et al. **Vaccine** 1990 Aug;8(4):410

Protection of weaned rabbits against experimental Escherichia coli O103 intestinal infection by oral formalin-killed vaccine. Camguilhem R, et al. **Vet Microbiol** 1990 Feb;21(4):353-62

Efficacy of a live Pasteurella multocida vaccine for the prevention of experimentally induced bovine pneumonic pasteurellosis. Chengappa MM, et al. **Vet Microbiol** 1989 Dec;21(2):147-54

Isolation and characterization of temperature-sensitive mutants of Streptococcus suis: efficacy trial of the mutant vaccine in mice. Kebede M, et al. **Vet Microbiol** 1990 Apr; 22(2-3):249-57

Estimation of the potential demand for a bovine babesiosis and anaplasmosis vaccine in Argentina. Späth EJ, et al. **Vet Parasitol** 1990 May;36(1-2):131-40

Immunisation of laying hens against Salmonella enteritidis with live attenuated vaccines. Barrow PA, et al. **Vet Rec** 1990 Mar 10;126(10):241-2

An experimental study with a Leptospira interrogans serovar bratislava vaccine. Ellis WA, et al. **Vet Rec** 1989 Sep 16; 125(12):319-21

Field use of live haemorrhagic septicaemia vaccine [letter] Myint A, et al. **Vet Rec** 1990 Jun 30;126(26):648

Protection by toxoid-induced antibody of gnotobiotic piglets challenged with the dermonecrotic toxin of Pasteurella multocida. Frymus T, et al. **Zentralbl Veterinarmed [B]** 1989 Nov;36(9):674-80

[The antibiotic effect of Pseudomonas jinanensis sp. nov.] He ZZ, et al. **Wei Sheng Wu Hsueh Pao** 1989 Dec; 29(6):452-9 (Eng. Abstr.) **(Chi)**

[Anticaries vaccine: myth or reality?] Ackermans F. **Rev Belge Med Dent** 1989;44(1):9-24 (73 ref.) (Eng. Abstr.) **(Fre)**

[The antipneumococcal vaccine and elderly persons: not a luxury, a necessity] Lamothe F, et al. **Union Med Can** 1990 Jan-Feb;119(1):39-40 **(Fre)**

[The effect of local and systemic immunization of suckling pigs on bronchoalveolar clearance and on intrabronchial infections with Pasteurella multocida] Müller G, et al. **Arch Exp Veterinarmed** 1990;44(2):301-10 (Eng. Abstr.) **(Ger)**

[Verification of the protective effect of a toxoid vaccine against edema disease of weaned piglets in an infection model] Awad-Masalmeh M, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Sep;96(8):419-21 (Eng. Abstr.) **(Ger)**

[Clinical experience with kennel-specific E. coli oral vaccines in dogs] Baljer G, et al. **Tierarztl Prax** 1990 Feb;18(1):65-8 (Eng. Abstr.) **(Ger)**

[Immunization for invasive Haemophilus influenzae type b infections: present and future] Dagan R, et al. **Harefuah** 1990 Apr 15;118(8):470-5 (47 ref.) **(Heb)**

[Conservative surgery and vaccino-prophylaxis in the prevention of post-splenectomy streptococcal sepsis: experimental study in the rat] Nardone A, et al. **Chir Patol Sper** 1988 Apr;36(2):57-68 (33 ref.) (Eng. Abstr.) **(Ita)**

[Protective effects of Mycoplasma pneumoniae live vaccine or its hyperimmune serum on the experimental infection in mice] Yayoshi M, et al. **Kansenshogaku Zasshi** 1989 Jul; 63(7):684-91 (Eng. Abstr.) **(Jpn)**

[Development of specific technics for the prevention of mycoplasma infections in swine] Sobko AI, et al. **Arch Exp Veterinarmed** 1989;43(5):645-55 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Pneumococcal vaccines and public health policy. Consequences of missed opportunities [comment] Filice GA. **Arch Intern Med** 1990 Jul;150(7):1373-5 Comment on: Arch Intern Med 1990 Jul;150(7):1401-5.

Alternative injection sites for a Pasteurella multocida bacterin. Glisson JR, et al. **Avian Dis** 1990 Jan-Mar; 34(1):214-7

Effectiveness of Haemophilus influenzae type b vaccines. Stieb DM, et al. **Can Med Assoc J** 1990 Apr 1;142(7):719-33 (85 ref.)

Trichomonal vaginitis refractory to conventional treatment [letter; comment] Pattman RS, et al. **Genitourin Med** 1989 Oct;65(5):349 Comment on: Genitourin Med 1989 Jun;65(3):200-1.

Pneumovax [editorial] Reppun JI. **Hawaii Med J** 1989 Dec; 48(12):508

Pseudomonas aeruginosa. Vaccines and immunotherapy. Pennington JE. **Infect Dis Clin North Am** 1990 Jun; 4(2):259-70 (65 ref.)

Liposomes containing anti-idiotypic antibodies: an oral vaccine to induce protective secretory immune responses specific for pathogens of mucosal surfaces. Jackson S, et al. **Infect Immun** 1990 Jun;58(6):1932-6

Immunization against chlamydial genital infection in guinea pigs with UV-inactivated and viable chlamydiae administered by different routes. Rank RG, et al. **Infect Immun** 1990 Aug;58(8):2599-605

Oral immunization of mice with a live recombinant Yersinia enterocolitica O:9 strain that produces the cholera toxin B subunit. Sory MP, et al. **Infect Immun** 1990 Aug; 58(8):2420-8

Increase in specific antibody-forming cells in human tonsils after oral stimulation with D-53, a ribosomal vaccine. Faure GC, et al. **Int J Immunopharmacol** 1990;12(3):315-20

Duration of serum antibodies elicited by Haemophilus influenzae type b capsular polysaccharide alone or conjugated to tetanus toxoid in 18- to 23-month-old children. Claesson BA, et al. **J Pediatr** 1990 Jun; 116(6):929-31

Pneumococcal vaccine [letter; comment] Bruyn GA. **Lancet** 1990 Jun 23;335(8704):1537 Comment on: Lancet 1990 Apr 14;335(8694):898-901.

Modern vaccines. Mycobacterial diseases [see comments] Fine PE, et al. **Lancet** 1990 Apr 28;335(8696):1016-20 (20 ref.) Comment in: Lancet 1990 Jun 23;335(8704):1536. Comment in: Lancet 1990 Jun 23;335(8704):1536-7.

Modern vaccines. Enteric infections. Levine MM. **Lancet** 1990 Apr 21;335(8695):958-61 (17 ref.)

Vaccination against Helicobacter pylori urease [letter] Pallen MJ, et al. **Lancet** 1990 Jul 21;336(8708):186-7

Modern vaccines. Pneumococcus and influenza [see comments] Shann F. **Lancet** 1990 Apr 14;335(8694):898-901 (19 ref.) Comment in: Lancet 1990 Jun 23;335(8704):1537.

The sociocultural dimension in leprosy vaccine trials. Kartikeyan S, et al. **Lepr Rev** 1990 Mar;61(1):50-9

Protection against recurrent acute bronchitis after oral immunization with killed Haemophilus influenzae. Clancy RL, et al. **Med J Aust** 1990 Apr 16;152(8):413-6

Studies on route of immunization with a mixture of killed parasites and adjuvants against Babesia rodhaini infection in mice. Saeki H, et al. **Nippon Juigaku Zasshi** 1989 Dec; 51(6):1173-8

Pneumococcal revaccination of splenectomized children. Konradsen HB, et al. **Pediatr Infect Dis J** 1990 Apr; 9(4):258-63

Safety, tolerability, and immunogenicity of concurrent administration of Haemophilus influenzae type b conjugate vaccine (meningococcal protein conjugate) with either measles-mumps-rubella vaccine or diphtheria-tetanus-pertussis and oral poliovirus vaccines in 14- to 23-month-old infants. Dashefsky B, et al. **Pediatrics** 1990 Apr;85(4 Pt 2):682-9

Haemophilus influenzae type b conjugate vaccine (meningococcal protein conjugate): immunogenicity and safety at various doses. Yogev R, et al. **Pediatrics** 1990 Apr;85(4 Pt 2):690-3

Construction and evaluation of a double mutant of Shigella flexneri as a candidate for oral vaccination against shigellosis. Sansonetti PJ, et al. **Vaccine** 1989 Oct; 7(5):443-50

Comparative evaluation of potential components for group B meningococcal vaccine by passive protection in the infant rat and in vitro bactericidal assay. Saukkonen K, et al. **Vaccine** 1989 Aug;7(4):325-8

[Haemophilus influenzae type b vaccines] Kristensen K. **Ugeskr Laeger** 1989 Nov 27;151(48):3216-8 (30 ref.) (Eng. Abstr.) **(Dan)**

[Preventive immunoprevention of rhinitis and sinusitis. ENT director Dr. W. Elies, Bielefeld, elaborates on the indications (interview)] Elies W. **Fortschr Med** 1989 Sep 10;107(26):70-1 **(Ger)**

[Special preventive immunization against early summer meningoencephalitis and tularemia for laborers of the Natural Gas Central Youth Project in the USSR] Gille H, et al. **Z Arztl Fortbild (Jena)** 1990;84(8):391-2 **(Ger)**

[Vaccinations for travelers in tropical and subtropical countries] Hölzer E, et al. **Z Ärztl Fortbild (Jena)** 1990; 84(8):387–90 **(Ger)**

[Udder immunization for the protection of calves against salmonella infections. 1. Detection of specific Ig classes in the mother, colostrum and calf and the course of infection] Staak C, et al. **Zentralbl Veterinarmed [B]** 1989 Dec;36(10):778–85 (Eng. Abstr.) **(Ger)**

[Combination of oral bacterial vaccines and antibiotics in acute recurrent respiratory infections] Lauriello G, et al. **Clin Ter** 1990 Apr 30;133(2):87–90 (Eng. Abstr.) **(Ita)**

[Clinical and immunologic test of the activity of a polymicrobial vaccine in patients with chronic bronchitis during a flare-up] Zanasi A, et al. **Clin Ter** 1990 Mar 15; 132(5):321–8 (Eng. Abstr.) **(Ita)**

[Clinical trials of the new Norwegian vaccine against diseases caused by Meningococcus B] Bjune G, et al. **Tidsskr Nor Laegeforen** 1990 Feb 20;110(5):614–7 (Eng. Abstr.) **(Nor)**

[The dynamics of antibody formation to a vaccinal strain of Francisella tularensis in different immunization regimens] Cherepakhina IIa, et al. **Mikrobiol Zh** 1990 Mar–Apr; 52(2):89–93 (Eng. Abstr.) **(Rus)**

[Field trials with an oral cell-free vaccine made from Shigella flexneri] Sergeev VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Oct;(10):54–9 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Safety of temperature sensitive mutant Mycoplasma gallisepticum vaccine. Whithear KG, et al. **Aust Vet J** 1990 May;67(5):159–65

Sweet's syndrome: a severe complication of pneumococcal vaccination following emergency splenectomy. Maddox PR, et al. **Br J Surg** 1990 Jul;77(7):809–10

Post-marketing surveillance of adverse events following ProHIBit vaccine—British Columbia. Meekison W, et al. **Can Dis Wkly Rep** 1989 Jul 15;15(28):143–5 **(Eng, Fre)**

Reactions to Haemophilus influenzae type B vaccine. Jacquest D, et al. **Can J Public Health** 1989 Jul–Aug; 80(4):304–5

Postmarketing surveillance of adverse reactions to ProHIBit vaccine in British Columbia. **Can Med Assoc J** 1989 Nov 1;141(9):927–9

Antibody production and tissue irritation in swine vaccinated with Actinobacillus bacterins containing various adjuvants. Straw BE, et al. **J Am Vet Med Assoc** 1990 Feb 15; 196(4):600–4

Acute inflammatory demyelinating polyradiculoneuropathy (Guillain–Barré syndrome) after immunization with Haemophilus influenzae type b conjugate vaccine. D'Cruz OF, et al. **J Pediatr** 1989 Nov;115(5 Pt 1):743–6

Stress involved in vaccine reactions [letter] Sterne M. **Vet Rec** 1989 Oct 7;125(15):405

[The reactogenicity and immunological efficacy of a Klebsiella vaccine in donors] Kurbatova EA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 May;(5):53–6 (Eng. Abstr.) **(Rus)**

[Difficulties in replacing mercury as a preservative in bacterial vaccines] Wigzell H. **Lakartidningen** 1990 Feb 28; 87(9):621 **(Swe)**

ANALYSIS

Identification of the K99 (F5) fimbrial adhesin in commercial vaccines used against calf enteritis. Thorns CJ, et al. **Biologicals** 1990 Apr;18(2):113–5

Isoenzyme analysis of typhoid–Shigella and Escherichia–Shigella hybrid vaccines and their parental strains. Schultz C. **J Clin Microbiol** 1989 Dec; 27(12):2838–41

Studies on E coli vaccines: effect of storage on endotoxin content. Hussaini SN. **Vet Rec** 1990 May 5;126(18):459–60

GENETICS

Differentiation of field isolates of Pasteurella multocida serotype 3,4 from live vaccine strain by genotypic characterization. Snipes KP, et al. **Avian Dis** 1990 Apr–Jun; 34(2):419–24

Expression of Neisseria meningitidis iron-regulated outer membrane proteins, including a 70-kilodalton transferrin receptor, and their potential for use as vaccines. Banerjee-Bhatnagar N, et al. **Infect Immun** 1990 Sep; 58(9):2875–81

Cholera toxin B-subunit gene fusion: structural and functional analysis of the chimeric protein. Dertzbaugh MT, et al. **Infect Immun** 1990 Jan;58(1):70–9

Expression of the Bacillus anthracis protective antigen gene by baculovirus and vaccinia virus recombinants. Iacono-Connors LC, et al. **Infect Immun** 1990 Feb; 58(2):366–72

Oral immunization with recombinant Streptococcus lactis carrying the Streptococcus mutans surface protein antigen gene. Iwaki M, et al. **Infect Immun** 1990 Sep;58(9):2929–34

The molecular basis of pathogenicity in Haemophilus influenzae: comparative virulence of genetically-related capsular transformants and correlation with changes at the capsulation locus cap. Zwahlen A, et al. **Microb Pathog** 1989 Sep;7(3):225–35

HISTORY

[On the 100th anniversary of L. S. Tsenkovskiĭ's development of the method of producing an attenuated vaccine against anthrax] Diachenko SS. **Mikrobiol Zh** 1984 Nov–Dec; 46(6):93–6 **(Rus)**

IMMUNOLOGY

Experimental listeriosis in immunized sheep. Menčíková E, et al. **Acta Microbiol Hung** 1989;36(2–3):331–4

Synthetic peptide representing a T-cell epitope of CRM197 substitutes as carrier molecule in a Haemophilus influenzae type B (Hib) conjugate vaccine. Bixler GS Jr, et al. **Adv Exp Med Biol** 1989;251:175–80 (14 ref.)

Developing a gonococcal protein I vaccine. Blake MS, et al. **Adv Exp Med Biol** 1989;251:315–27 (36 ref.)

Stable recombinant avirulent Salmonella vaccine strains. Curtiss R 3d, et al. **Adv Exp Med Biol** 1989;251:33–47 (40 ref.)

Haemophilus b oligosaccharide–CRM197 and other Haemophilus b conjugate vaccines: a status report. Smith DH, et al. **Adv Exp Med Biol** 1989;251:65–82 (43 ref.)

New concepts in vaccines for mucosal non-enteric human bacterial pathogens. Westerink MA, et al. **Adv Exp Med Biol** 1989;251:17–31 (43 ref.)

Effect of vaccination with a pentavalent leptospiral vaccine containing Leptospira interrogans serovar hardjo type hardjo-bovis on type hardjo-bovis infection of cattle. Bolin CA, et al. **Am J Vet Res** 1989 Dec;50(12):2004–8

Effect of muramyl dipeptide on immunogenicity of Corynebacterium pseudotuberculosis whole-cell vaccines in mice and lambs. Brogden KA, et al. **Am J Vet Res** 1990 Feb;51(2):200–2

DNA fingerprinting for differentiation of field isolates from reference vaccine strains of Pasteurella multocida in turkeys. Kim CJ, et al. **Am J Vet Res** 1990 Feb;51(2):207–10

Immunogenicity of Brucella-extracted and recombinant protein vaccines in CD-1 and BALB/c mice. Pugh GW Jr, et al. **Am J Vet Res** 1990 Sep;51(9):1413–20

Haemophilus influenzae diphtheria protein conjugate immunization after therapy in splenectomized patients with Hodgkin disease. Jakacki R, et al. **Ann Intern Med** 1990 Jan 15;112(2):143–4

Antigenic structure of Coxiella burnetii. A comparison of lipopolysaccharide and protein antigens as vaccines against Q fever. Williams JC, et al. **Ann N Y Acad Sci** 1990; 590:370–80

Serological and allergic reactions of ewes after simultaneous vaccinations with two living attenuated strains of Brucella and Salmonella. Pardon P, et al. **Ann Rech Vet** 1990; 21(2):153–60

Safety and immunogenicity of a polyvalent Pseudomonas aeruginosa O-polysaccharide-toxin A vaccine in humans. Cryz SJ Jr, et al. **Antibiot Chemother** 1989;42:177–83

Pseudomonas aeruginosa ribosomal vaccine. A comparison of the immunogenicity of vaccines from two different serotypes. Lieberman MM. **Antibiot Chemother** 1989; 42:193–202

Studies on a Pseudomonas aeruginosa flagella vaccine. Rotering H, et al. **Antibiot Chemother** 1989;42:218–28 (10 ref.)

Study of the immunogenicity of the Pseudomonas aeruginosa polyvalent corpuscular vaccine in human volunteers. Meitert E, et al. **Arch Roum Pathol Exp Microbiol** 1979 Jul–Dec;38(3–4):309–16

Haemophilus influenzae type b vaccines in Australia? Gilbert GL. **Aust Paediatr J** 1989 Aug;25(4):185–6

Immunogenicity of a temperature sensitive mutant Mycoplasma gallisepticum vaccine. Whithear KG, et al. **Aust Vet J** 1990 May;67(5):168–74

The development of an enzyme-linked immunosorbent assay for measuring the potency of vaccines containing Clostridium chauvoei antigens. Crichton R, et al. **Biologicals** 1990 Jan;18(1):49–54

Laboratory assessment of protection given by experimental Pasteurella anatipestifer vaccine. Timms LM, et al. **Br Vet J** 1989 Sep–Oct;145(5):483–93

Immune status and response to immunization with polysaccharide vaccines of a healthy, congenitally asplenic woman. McElroy PJ, et al. **Clin Exp Immunol** 1989 Dec; 78(3):402–5

The cellular basis of the immune response to conjugate vaccines. Bixler GS Jr, et al. **Contrib Microbiol Immunol** 1989;10:18–47 (192 ref.)

Conjugate vaccines against Pseudomonas aeruginosa and malaria. Cryz SJ Jr, et al. **Contrib Microbiol Immunol** 1989; 10:166–89 (54 ref.)

Immunologic considerations for the development of conjugate vaccines. Garner CV, et al. **Contrib Microbiol Immunol** 1989;10:11–7 (17 ref.)

The capsular polysaccharide of group B Neisseria meningitidis as a vehicle for vaccine development. Jennings HJ. **Contrib Microbiol Immunol** 1989;10:151–65 (42 ref.)

Immune response of young children vaccinated with Haemophilus influenzae type b conjugate vaccines. Madore DV, et al. **Contrib Microbiol Immunol** 1989;10:125–50 (105 ref.)

Capsular polysaccharides as vaccine candidates. Jennings HJ. **Curr Top Microbiol Immunol** 1990;150:97–127 (134 ref.)

Synthetic peptides: prospects for a pili (fimbriae)-based synthetic vaccine. Schmidt MA. **Curr Top Microbiol Immunol** 1990;151:185–204 (128 ref.)

Type-specific anti-pneumococcal antibody subclass response to vaccination after splenectomy with special reference to lymphoma patients. Grimfors G, et al. **Eur J Haematol** 1989 Nov;43(5):404–10

Immunoprotective oral whole cell vaccine for enterotoxigenic Escherichia coli diarrhea prepared by in situ destruction of chromosomal and plasmid DNA with colicin E2. Evans DJ Jr, et al. **FEMS Microbiol Immunol** 1988 Jan;1(1):9–18

Local and systemic antibody response in infants after oral administration of inactivated enteropathogenic E. coli serotype O111 and O55. Lodinová-Zádníková R, et al. **Folia Microbiol (Praha)** 1990;35(2):155–62

Vaccine development. On relating immunology to the Third World: some studies on leprosy. Bloom BR, et al. **Immunol Suppl** 1989;2:87–9; discussion 91–2 (19 ref.)

Immunity to experimental fowl typhoid in chickens induced by a virulence plasmid-cured derivative of Salmonella gallinarum. Barrow PA. **Infect Immun** 1990 Jul; 58(7):2283–8

Synthesis and characterization of Escherichia coli O18 O-polysaccharide conjugate vaccines. Cryz SJ Jr, et al. **Infect Immun** 1990 Feb;58(2):373–7

Construction and characterization of a Vi-positive variant of the Salmonella typhi live oral vaccine strain Ty21a. Cryz SJ Jr, et al. **Infect Immun** 1989 Dec;57(12):3863–8

Serum antibody response in adult volunteers elicited by injection of Streptococcus pneumoniae type 12F polysaccharide alone or conjugated to diphtheria toxoid. Fattom A, et al. **Infect Immun** 1990 Jul;58(7):2309–12

Synthesis and immunologic properties in mice of vaccines composed of Staphylococcus aureus type 5 and type 8 capsular polysaccharides conjugated to Pseudomonas aeruginosa exotoxin A. Fattom A, et al. **Infect Immun** 1990 Jul;58(7):2367–74

Efficacy of a cell extract from Actinobacillus (Haemophilus) pleuropneumoniae serotype 1 against disease in swine. Fedorka-Cray PJ, et al. **Infect Immun** 1990 Feb; 58(2):358–65

Protection against experimental Pseudomonas aeruginosa infection by recombinant P. aeruginosa lipoprotein I expressed in Escherichia coli. Finke M, et al. **Infect Immun** 1990 Jul;58(7):2241–4

Effective vaccination of mice against leprosy bacilli with subunits of Mycobacterium leprae. Gelber RH, et al. **Infect Immun** 1990 Mar;58(3):711–8

Immunization against anthrax with aromatic compound-dependent (Aro-) mutants of Bacillus anthracis and with recombinant strains of Bacillus subtilis that produce anthrax protective antigen. Ivins BE, et al. **Infect Immun** 1990 Feb;58(2):303–8

Moderate immunodeficiency does not increase susceptibility to Salmonella typhimurium aroA live vaccines in mice. Izhar M, et al. **Infect Immun** 1990 Jul;58(7):2258–61

Identification of a 68-kilodalton outer membrane protein as the major protective antigen of Bordetella bronchiseptica by using specific-pathogen-free piglets. Kobisch M, et al. **Infect Immun** 1990 Feb;58(2):352–7

Biological evaluation of Mycoplasma pulmonis temperature-sensitive mutants for use as possible rodent vaccines. Lai WC, et al. **Infect Immun** 1990 Jul; 58(7):2289–96

Murine antibody response to oral infection with live aroA recombinant Salmonella dublin vaccine strains expressing filamentous hemagglutinin antigen from Bordetella pertussis. Molina NC, et al. **Infect Immun** 1990 Aug; 58(8):2523–8

Construction and characterization in vivo of Bordetella pertussis aroA mutants. Roberts M, et al. **Infect Immun** 1990 Mar;58(3):732–9

Oral immunization of mice with attenuated Salmonella typhimurium containing a recombinant plasmid which codes for production of a 31-kilodalton protein of Brucella abortus. Stabel TJ, et al. **Infect Immun** 1990 Jul; 58(7):2048–55

Protection of sheep against Chlamydia psittaci infection with a subcellular vaccine containing the major outer membrane protein. Tan TW, et al. **Infect Immun** 1990 Sep;58(9):3101–8

Specific immunoglobulin A-secreting cells in peripheral blood of humans following oral immunization with a bivalent Salmonella typhi-Shigella sonnei vaccine or infection by pathogenic S. sonnei. Van de Verg L, et al. **Infect Immun** 1990 Jun;58(6):2002–4

Does vaccination of splenectomized patients against pneumococci induce dextran-reactive antibodies? Ljungström KG, et al. **Int Arch Allergy Appl Immunol** 1989; 90(1):8–10

The adjuvant effect of a muramyl dipeptide (MDP) analog on temperature-sensitive Salmonella mutant vaccine. Onozuka K, et al. **Int J Immunopharmacol** 1989;11(7):781–7

Prospects for new generation vaccines for leprosy: progress, barriers, and future strategies. Watson JD. **Int J Lepr Other Mycobact Dis** 1989 Dec;57(4):834–43

Response to a Haemophilus influenzae type b diphtheria CRM197 conjugate vaccine in children with a defect of antibody production to Haemophilus influenzae type b polysaccharide. Schneider LC, et al. **J Allergy Clin Immunol** 1990 May;85(5):948–53

Investigating cross-reactions between Leptospira and Borrelia [letter] Donoghue AR, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1460, 1462

Antibody response to pneumococcal polysaccharide vaccine

in myasthenia gravis: effect of therapeutic plasmapheresis. Nasca TJ, et al. **J Clin Apheresis** 1990;5(3):133–9

Selective antibody deficiency to Haemophilus influenzae type B capsular polysaccharide vaccination in children with recurrent respiratory tract infection. Herrod HG, et al. **J Clin Immunol** 1989 Sep;9(5):429–34

A major crossreactive idiotype associated with human antibodies to the Haemophilus influenzae b polysaccharide. Expression in relation to age and immunoglobulin G subclass. Lucas AH, et al. **J Clin Invest** 1990 Apr; 85(4):1158–66

Synthetic peptide vaccine against mucosal colonization by group A streptococci. I. Protection against a heterologous M serotype with shared C repeat region epitopes. Bessen D, et al. **J Immunol** 1990 Aug 15;145(4):1251–6

Immunization of humans with polysaccharide vaccines induces systemic, predominantly polymeric IgA2-subclass antibody responses. Tarkowski A, et al. **J Immunol** 1990 May 15;144(10):3770–8

Kappa and lambda light chain composition of antibody to the capsular polysaccharide of Haemophilus influenzae type b. Ambrosino DM, et al. **J Infect Dis** 1990 May; 161(5):922–5

IgG subclass response and opsonization of Streptococcus pneumoniae after vaccination of healthy adults. Bardardottir E, et al. **J Infect Dis** 1990 Aug;162(2):482–8

Risk of Haemophilus influenzae type b disease in children with cancer and response of immunocompromised leukemic children to a conjugate vaccine. Feldman S, et al. **J Infect Dis** 1990 May;161(5):926–31

Response to pneumococcal vaccine among asymptomatic heterosexual partners of persons with AIDS and intravenous drug users infected with human immunodeficiency virus. Klein RS, et al. **J Infect Dis** 1989 Nov;160(5):826–31

Pneumococcal polysaccharide vaccine in young adults and older bronchitics: determination of IgG responses by ELISA and the effect of adsorption of serum with non-type-specific cell wall polysaccharide. Musher DM, et al. **J Infect Dis** 1990 Apr;161(4):728–35

The immunogenicity of Hemophilus influenzae type B polysaccharide–Neisseria meningitidis group B outer membrane protein complex vaccine in infants and young children. Shapiro ED, et al. **J Infect Dis** 1989 Dec; 160(6):1064–7

Distribution and excretion of capsular antigen after immunization with Haemophilus influenzae type b polysaccharide–Neisseria meningitidis outer membrane protein conjugate vaccine. Sood SK, et al. **J Infect Dis** 1990 Mar;161(3):574–7

Outer membrane proteins of bovine strains of Pasteurella multocida type A and their doubtful role as protective antigens. Abdullahi MZ, et al. **J Med Microbiol** 1990 May; 32(1):55–61

Protective immunity induced in mice by detoxified salmonella lipopolysaccharide. Ding HF, et al. **J Med Microbiol** 1990 Feb;31(2):95–102

Mice vaccinated with a non-virulent, aromatic-dependent mutant of Salmonella choleraesuis die from challenge with its virulent parent but survive challenge with Salmonella typhimurium. Nnalue NA. **J Med Microbiol** 1990 Apr; 31(4):225–33

Antibody response of 18 month old children 1 month and 18 months following Haemophilus influenzae type b vaccine administered singly or with DTP vaccine. Clements DA, et al. **J Paediatr Child Health** 1990 Feb; 26(1):46–9

Immunogenicity of Haemophilus influenzae type B vaccines in children with hepatoportoenterostomies. Rosenthal P, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug;11(2):201–4

Effect of breast-feeding on antibody response to conjugate vaccine. Pabst HF, et al. **Lancet** 1990 Aug 4; 336(8710):269–70

Antigens that modern vaccines must contain [letter] Preston NW. **Lancet** 1990 Sep 22;336(8717):756–7

Augmentation of antimetastatic effect on Lewis lung carcinoma (3LL) in C57BL/6 mice by priming with Lactobacillus casei. Matsuzaki T, et al. **Med Microbiol Immunol (Berl)** 1990;179(3):161–8

A potential polyvalent Neisseria meningitidis vaccine based on a mixture of CaCl2 cell extracts from groups A, B and Y. Bisaillon JG, et al. **Microbios** 1989;60(244–245):193–208

Enzyme-linked immunosorbent assay for evaluation of immunity in mice vaccinated with blackleg vaccine. Hamaoka T, et al. **Nippon Juigaku Zasshi** 1990 Feb; 52(1):167–70

Immunization of leukemic children with Haemophilus conjugate vaccine. Lange B, et al. **Pediatr Infect Dis J** 1989 Dec;8(12):883–4

Studies on Pneumococcus vaccine alone or mixed with DTP and on Pneumococcus type 6B and Haemophilus influenzae type b capsular polysaccharide–tetanus toxoid conjugates in two- to five-year-old children with sickle cell anemia [published erratum appears in Pediatr Infect Dis J 1990 May;9(5):308] Sarnaik S, et al. **Pediatr Infect Dis J** 1990 Mar;9(3):181–6

P-fimbriae vaccines. I. Cross reactive antibodies to heterologous P-fimbriae. Kaack MB, et al. **Pediatr Nephrol** 1989 Oct;3(4):386–90

Variability in the functional activity of vaccine-induced antibody to Haemophilus influenzae type b. Amir J, et al. **Pediatr Res** 1990 Apr;27(4 Pt 1):358–64

Haemophilus influenzae type b conjugate vaccine (meningococcal protein conjugate) (PedvaxHIB): clinical evaluation. Ahonkhai VI, et al. **Pediatrics** 1990 Apr;85(4 Pt 2):676–81

Persistence of antibody and booster responses to reimmunization with Haemophilus influenzae type b polysaccharide and polysaccharide diphtheria toxoid conjugate vaccines in children initially immunized at 15 to 24 months of age. Berkowitz CD, et al. **Pediatrics** 1990 Mar;85(3):288–93

Serologic responses to an Haemophilus influenzae type b polysaccharide–Neisseria meningitidis outer membrane protein conjugate vaccine in very young Gambian infants. Campbell H, et al. **Pediatrics** 1990 Jul;86(1):102–7

Opsonophagocidal activity in sera from infants and children immunized with Haemophilus influenzae type b conjugate vaccine (meningococcal protein conjugate). Gray BM. **Pediatrics** 1990 Apr;85(4 Pt 2):694–7

Immunogenicity of Haemophilus influenzae oligosaccharide-protein and polysaccharide-protein conjugate vaccination of children at 4, 6, and 14 months of age. Käyhty H, et al. **Pediatrics** 1989 Dec;84(6):995–9

Safety and immunologic response to Haemophilus influenzae type b oligosaccharide–CRM197 conjugate vaccine in 1- to 6-month-old infants. Madore DV, et al. **Pediatrics** 1990 Mar;85(3):331–7

Disease caused by Haemophilus influenzae type b in the immediate period after homologous immunization: immunologic investigation. Sood SK, et al. **Pediatrics** 1990 Apr;85(4 Pt 2):698–704 (35 ref.)

Immunogenicity of a new Haemophilus influenzae type b conjugate vaccine (meningococcal protein conjugate) (PedvaxHIB). Vella PP, et al. **Pediatrics** 1990 Apr;85(4 Pt 2):668–75

Immunisation of pigs with killed cultures of Streptococcus suis type 2. Holt ME, et al. **Res Vet Sci** 1990 Jan;48(1):23–7

Evaluation of bovine antibody responses to haemorrhagic septicaemia vaccine. Johnson RB, et al. **Res Vet Sci** 1989 Sep;47(2):277–9

IgG subclass antibody responses to pneumococcal polysaccharide vaccine in splenectomized, otherwise normal, individuals. Aaberge IS, et al. **Scand J Immunol** 1990 Jun;31(6):711–6

Quantitation of antibody-secreting cells in the blood after vaccination with Haemophilus influenzae type b conjugate vaccine [published erratum appears in Scand J Immunol 1990 Jul;32(1):59] Barington T, et al. **Scand J Immunol** 1990 Apr;31(4):515–22

Immunosuppression in caprine trypanosomiasis: effects of acute Trypanosoma congolense infection on antibody response to anthrax spore vaccine. Mwangi DM, et al. **Trop Anim Health Prod** 1990 May;22(2):95–100

Protection of adult rabbits and monkeys from lethal shigellosis by oral immunization with a thymine-requiring and temperature-sensitive mutant of Shigella flexneri Y. Ahmed ZU, et al. **Vaccine** 1990 Apr;8(2):153–8

Live Salmonella as vaccines and carriers of foreign antigenic determinants. Chatfield SN, et al. **Vaccine** 1989 Dec; 7(6):495–8 (47 ref.)

Live Shigella flexneri 2a and Shigella sonnei I vaccine candidate strains with two attenuating markers. II. Preliminary results of vaccination of adult volunteers and children aged 2–17 years. Dentchev V, et al. **Vaccine** 1990 Feb;8(1):30–4

Reactogenicity and immunogenicity of combined vaccines for bacteraemic diseases caused by Haemophilus influenzae type b, meningococci and pneumococci in 24-month-old children. Eskola J, et al. **Vaccine** 1990 Apr;8(2):107–10

Vaccination against gonorrhoea: the potential protective effect of immunization with a synthetic peptide containing a conserved epitope of gonococcal outer membrane protein IB. Heckels JE, et al. **Vaccine** 1990 Jun;8(3):225–30

Protective effect of inactivated Pasteurella haemolytica bacterin challenged in bovine herpesvirus-1 experimentally infected calves. Jericho KW, et al. **Vaccine** 1990 Aug; 8(4):315–20

Cell wall structures which may be important for successful immunization with Salmonella-Shigella hybrid vaccines. Schultz CL, et al. **Vaccine** 1990 Apr;8(2):115–20

Experimental studies on the protective efficacy of a Pseudomonas aeruginosa vaccine. Stanislavsky ES, et al. **Vaccine** 1989 Dec;7(6):562–6

Protective effect of heterologous gram-positive vaccine against lethal upper respiratory tract infection with type M50 group A streptococci in mice. Stjernquist-Desatnik A, et al. **Vaccine** 1990 Apr;8(2):150–2

Comparison of Mycoplasma gallisepticum subunit and whole organism vaccines containing different adjuvants by western immunoblotting. Barbour EK, et al. **Vet Immunol Immunopathol** 1989 Sep;22(2):135–44

Comparison of protective immunity and inflammatory responses of pigs following immunization with different Actinobacillus pleuropneumoniae preparations with and without adjuvants. Hall W, et al. **Vet Immunol Immunopathol** 1989 Sep;22(2):175–86

The opsonic antibody response of female rats to type III group B streptococcal immunization: a model for maternal immunity. Heiman HS, et al. **Vet Immunol Immunopathol** 1990 Jan;24(1):79–89

The serological response of cattle immunized with Yersinia enterocolitica O:9 or O:16 to Yersinia and Brucella abortus antigens in enzyme immunoassays. Nielsen K. **Vet Immunol Immunopathol** 1990 Apr;24(4):373–82

[Immune response and post inoculation reactions of simultaneous administration of hepatitis B vaccine with routine vaccine in children, III. Immune response and post inoculation reactions of simultaneous administration of hepatitis B vaccine and BCG, meningococcus group A polysaccharide vaccine] Yuan C. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1990 Feb; 11(1):34–7 (Eng. Abstr.) **(Chi)**

[The significance of bacterial and host factors in corneal infections caused by Pseudomonas aeruginosa] Steuhl KP, et al. **Fortschr Ophthalmol** 1989;86(4):283–6 (Eng. Abstr.) **(Ger)**

[New knowledge of pathogenesis and immunity in listeria infection] Mielke ME, et al. **Z Gastroenterol [Verh]** 1990 Apr;25:79–81 **(Ger)**

[Induction of rheumatoid factor-like substance and synovial lining cell hyperplasia in rats immunized with heat-killed Escherichia coli 0:14] Hyodo A. **Nippon Seikeigeka Gakkai Zasshi** 1990 Apr;64(4):282–91 (Eng. Abstr.) **(Jpn)**

[Studies of the effects of BCG and Corynebacterium parvum vaccines in experimental infection of mice with influenza virus. Foot pad test, splenic indicator and histologic changes in the thymus gland, spleen and lymph nodes] Ciebiada I, et al. **Med Dosw Mikrobiol** 1989;41(2):92–9 (Eng. Abstr.) **(Pol)**

[Effect of immunization with Proteus vaccine on the donor organism] Zdanovskaia LK. **Gematol Transfuziol** 1990 Apr; 35(4):35–8 **(Rus)**

[Formation of specific antibodies in animals, immunized with a ribosomal proteus vaccine] Otvetchin PV, et al. **Mikrobiol Zh** 1984 Jul–Aug;46(4):68–71 (Eng. Abstr.) **(Rus)**

[The expression of Fc gamma receptors on the surface of macrophages activated by a vaccinal strain of Yersinia pestis] Vasil'eva GI, et al. **Mikrobiol Zh** 1990 Mar–Apr; 52(2):84–8 (Eng. Abstr.) **(Rus)**

[A vaccine against dental caries] Ovrutskiĭ GD. **Stomatologiia (Mosk)** 1989 Jul–Aug;68(4):86–8 (43 ref.) **(Rus)**

[The cytogenetic action of x-ray irradiation on the myelokaryocytes of rats immunized with a tularemia vaccine] Nersesian AK, et al. **Tsitol Genet** 1989 Nov–Dec; 23(6):15–8 (Eng. Abstr.) **(Rus)**

[The effect of the protective antigen of Bacillus anthracis on the formation of immunity under the action of live anthrax vaccines] Abalakin VA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 May;(5):72–5 (Eng. Abstr.) **(Rus)**

[The outer membrane proteins of Neisseria meningitidis: the outlook for their use in developing preparations for immunoprophylaxis] Filatova TN. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Feb;(2):86–95 (34 ref.) **(Rus)**

[The improvement of immunobiological preparations against leptospirosis. An experimental study of a new concentrated purified vaccine against icterohemorrhagic leptospirosis for human immunization] Iagovkin EA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Feb;(2):47–51 (Eng. Abstr.) **(Rus)**

[The isolation and characteristics of the biological and genetic properties of neamin-resistant mutants of Salmonella abortus-ovis that are promising for vaccine creation] Marakusha BI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Apr;(4):11–7 (Eng. Abstr.) **(Rus)**

[Phagocytic capacity of peritoneal exudate cells from rats immunized with a ribosomal preparation of Ty2 Salmonella typhi] Cabrera-Contreras R, et al. **Bol Med Hosp Infant Mex** 1990 Jan;47(1):14–9 (Eng. Abstr.) **(Spa)**

[Mercury-induced hypersensitivity rare after subcutaneous injection of vaccines] Taranger J. **Lakartidningen** 1990 Apr 18;87(16):1345 **(Swe)**

ISOLATION & PURIFICATION

Molecular size characterization of bacterial capsular polysaccharide vaccines by high performance liquid chromatography. Bussat B, et al. **Biologicals** 1990 Apr; 18(2):117–21

Development of vaccines against cholera and diarrhoea due to enterotoxigenic Escherichia coli: memorandum from a WHO meeting. **Bull World Health Organ** 1990;68(3):303–12

Protein I (Por) of Neisseria gonorrhoeae as an immunogen: liposomes, proteosomes, and the lack of blocking antibodies. Wetzler LM, et al. **Trans Assoc Am Physicians** 1989;102:78–90

Stable Salmonella live vaccine strains with two or more attenuating mutations and any desired level of attenuation. Linde K, et al. **Vaccine** 1990 Jun;8(3):278–82

[The isolation and immunologic study of ribosomal preparations from Shigella flexneri] Belkin ZP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Aug;(8):28–33 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Effect of Corynebacterium parvum bacterin on artificial immunity against Babesia rodhaini infection in mice. Saeki H, et al. **Nippon Juigaku Zasshi** 1989 Dec;51(6):1255–7

In vitro characterization of Salmonella typhi mutant strains

for live oral vaccines. Dragunsky EM, et al. **Vaccine** 1990 Jun;8(3):263–8
[Decrease in the cytogenetic effect of adriblastin and pharmorubicin with the experimental use of tularemia vaccine] Nersesian AK, et al. **Tsitol Genet** 1989 Jul–Aug; 23(4):63–5 (Eng. Abstr.) (Rus)

PHYSIOLOGY

The role of bacterial polysaccharide capsules as virulence factors. Moxon ER, et al. **Curr Top Microbiol Immunol** 1990;150:65–85 (69 ref.)

STANDARDS

A stability study of an opacity standard. Yi XB, et al. **Biologicals** 1990 Jan;18(1):35–7
Review of recent pneumococcal infections with attention to vaccine and nonvaccine serotypes. Hager HL, et al. **Rev Infect Dis** 1990 Mar–Apr;12(2):267–72 (29 ref.)

THERAPEUTIC USE

A ten year's experience with inactivated vaccine against listeriosis of sheep. Szemerédi G, et al. **Acta Microbiol Hung** 1989;36(2–3):327–30
Protective efficacy of Haemophilus influenzae type b polysaccharide–diphtheria toxoid–conjugate vaccine. Nelson WL, et al. **Am J Dis Child** 1990 Mar;144(3):292–5
Effectiveness of two commercial infectious bovine keratoconjunctivitis vaccines. Smith PC, et al. **Am J Vet Res** 1990 Jul;51(7):1147–50
The immunoprophylaxis and immunotherapy of Pseudomonas infections in burns with polyvalent Pseudomonas aeruginosa corpuscular vaccine. Ionescu A, et al. **Arch Roum Pathol Exp Microbiol** 1979 Jul–Dec; 38(3–4):317–30
Prophylaxis against postsplenectomy pneumococcal infection. Siddins M, et al. **Aust N Z J Surg** 1990 Mar; 60(3):183–7 (24 ref.)
Evaluation of the worth of corynebacterium parvum in conjunction with chemotherapy as adjuvant treatment for primary breast cancer. Eight–year results from the National Surgical Adjuvant Breast and Bowel Project B–10. Fisher B, et al. **Cancer** 1990 Jul 15;66(2):220–7
Test of immunopotentialization in colposcopy—a clinical evaluation. Balajewicz M, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Dec;33(3):253–7
Non–replicating oral whole cell vaccine protective against enterotoxigenic Escherichia coli (ETEC) diarrhea: stimulation of anti–CFA (CFA/I) and anti–enterotoxin (anti–LT) intestinal IgA and protection against challenge with ETEC belonging to heterologous serotypes. Evans DG, et al. **FEMS Microbiol Immunol** 1988 Dec;1(3):117–25
A double–blind, controlled trial of bioflorin (Streptococcus faecium SF68) in adults with acute diarrhea due to Vibrio cholerae and enterotoxigenic Escherichia coli. Mitra AK, et al. **Gastroenterology** 1990 Oct;99(4):1149–52
Immunization of elderly people with polyvalent pneumococcal vaccine. Fedson D, et al. **Infection** 1989 Nov–Dec;17(6):437–41
Enteric fever among Israeli travelers in Nepal: the need for typhoid vaccination. Schwartz E, et al. **Isr J Med Sci** 1990 Jun;26(6):325–7
Methods for control of lamb epididymitis in large purebred flocks. Bulgin MS, et al. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1110–5
The effect of a bacterial vaccine on tumors and the immune response of ICR/Ha mice. Havas HF, et al. **J Biol Response Mod** 1990 Apr;9(2):194–204
Double–blind report on the efficacy of lactic acid–producing Enterococcus SF68 in the prevention of antibiotic–associated diarrhoea and in the treatment of acute diarrhoea. Wunderlich PF, et al. **J Int Med Res** 1989 Jul–Aug;17(4):333–8
Intralesional immunotherapy of brain tumors with combined Corynebacterium parvum and recombinant interleukin–2 in mice. Conley FK, et al. **J Natl Cancer Inst** 1990 Aug 15;82(16):1340–4
Splenic hypofunction in systemic lupus erythematosus: response to pneumococcal vaccine. Poldre PA. **J Rheumatol** 1989 Aug;16(8):1130–1
Symptom–free intervals in sicklers: does pneumococcal vaccination and penicillin prophylaxis have a role? el–Hazmi MA, et al. **J Trop Pediatr** 1990 Apr;36(2):56–62
Bacteriotherapy for clostridium difficile colitis [letter; comment] Wilson KH. **Lancet** 1989 Nov 4;2(8671):1096 Comment on: Lancet 1989 May 27;1(8648):1156–60.
Microscopic changes of the urinary bladder in patients with primary tumors locally treated with Corynebacterium parvum. Raica M, et al. **Morphol Embryol (Bucur)** 1989 Oct–Dec;35(4):275–7
P–fimbriae vaccines. II. Cross reactive protection against pyelonephritis. Roberts JA, et al. **Pediatr Nephrol** 1989 Oct; 3(4):391–6
Pneumococcal vaccine. LaForce FM. **Semin Respir Infect** 1989 Dec;4(4):293–8 (22 ref.)
Immunotherapeutic effects of a vaccine based on a saprophytic cultivable mycobacterium, Mycobacterium w in multibacillary leprosy patients. Talwar GP, et al. **Vaccine** 1990 Apr;8(2):121–9
Breeding performance of sheep infected with Chlamydia psittaci (ovis) during their preceding pregnancy. Wilsmore AJ, et al. **Vet Rec** 1990 Jan 13;126(2):40–1
[Immunotherapy with Solco Urovac vaccine in chronic genitourinary infection] Donovski L. **Khirurgiia (Sofiia)** 1989;42(4):28–30 (Eng. Abstr.) (Bul)
[Prevention of bronchopulmonary infections with the Bulgarian immunomodulator respivaks] Dobrev P, et al. **Vutr Boles** 1989;28(4):40–2 (Bul)
[Radioimmunotherapy combined with chemotherapy and immunotherapy for nude mice bearing human hepatocellular carcinoma] Bao YM. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):245–7 (Eng. Abstr.) (Chi)
[Comparison of the effectiveness and adverse effects of a Corynebacterium parvum vaccine made in Czechoslovakia with Coparvax, a British preparation made by Wellcome, in the treatment of malignant pleural effusions] Marel M, et al. **Cas Lek Cesk** 1989 Aug 18;128(34):1071–4 (Eng. Abstr.) (Cze)
[Prevention of recurrent urinary infections using Solco Urovac, a polymicrobial vaccine] Prát V, et al. **Cas Lek Cesk** 1989 Aug 25;128(35):1106–9 (Eng. Abstr.) (Cze)
[Treatment with autovaccines and the immunologic profile of patients] Novotný Z, et al. **Cesk Otolaryngol** 1990 Feb; 39(1):40–7 (Eng. Abstr.) (Cze)
[Mycobacteriosis and inspection regulations] Venema Y. **Tijdschr Diergeneeskd** 1990 Feb 1;115(3):132–3 (Dut)
[Biological evaluation of the microbial respiratory vaccine MRV in children with recurrent bronchitis (letter)] Hanna KM, et al. **Therapie** 1989 Jul–Aug;44(4):305–6 (Fre)
[Results of 7 years of prophylactic immunotherapy using a bacterial vaccine in chronic bronchopneumopathies] Lauriello G, et al. **Clin Ter** 1990 Apr 15;133(1):25–9 (Eng. Abstr.) (Ita)
[Complement activation by killed polyvalent bacterial vaccine on the pleurodesis] Yoshio T, et al. **Arerugi** 1990 Apr;39(4):424–31 (Eng. Abstr.) (Jpn)
[Treatment of adult type atopic dermatitis (AD) with bacterial vaccine prepared from individual cases (I)—Clinical study] Mukai H, et al. **Nippon Hifuka Gakkai Zasshi** 1990 Mar;100(4):487–94 (Eng. Abstr.) (Jpn)
[Treatment of adult type atopic dermatitis (AD) with bacterial vaccine prepared from individual cases (II)—The mechanism] Mukai H, et al. **Nippon Hifuka Gakkai Zasshi** 1990 Mar;100(4):495–501 (Eng. Abstr.) (Jpn)
[The effect of Aerococcus viridans—the basis of the new therapeutic–prophylactic preparation M–bacterin—on the biological properties of Staphylococcus aureus] Gorbunova ML, et al. **Mikrobiol Zh** 1989 Sep–Oct;51(5):77–81 (Eng. Abstr.) (Rus)
[Assessment of the prophylactic activity of staphylococcal anatoxin and Proteus vaccine in the combined treatment of patients with trauma to the locomotor system] Zdanovskaia LK, et al. **Ortop Travmatol Protez** 1989 Sep; (9):37–41 (Rus)
[The results of a clinico–immunological examination of patients with infectious–allergic bronchial asthma undergoing treatment with the polybacterial immunostimulant Respivax] Petrovska Ia, et al. **Ter Arkh** 1990;62(3):72–5 (Eng. Abstr.) (Rus)
[The therapeutic efficacy of a gonococcal vaccine] Andreeva ZM, et al. **Vestn Dermatol Venerol** 1989;(11):53–5 (Eng. Abstr.) (Rus)
[Experimental vaccinal prophylaxis of Pseudomonas aeruginosa burn sepsis] Bandman OA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jul;(7):59–62 (Eng. Abstr.) (Rus)
[Immunity indices during the vaccinal therapy of protracted forms of dysentery in children] Elkina SI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jul;(7):74–8 (Eng. Abstr.) (Rus)
[Immunologic indicators in the treatment of recurrent respiratory diseases using peroral bacterial vaccines] Kapellerová A, et al. **Cesk Pediatr** 1989 Aug;44(8):454–8 (Eng. Abstr.) (Slo)
[Vaccination with SolcoTrichovac in vaginal trichomoniasis] Guerrero B, et al. **Rev Chil Obstet Ginecol** 1987;52(3):193–7 (Eng. Abstr.) (Spa)

TOXICITY

Salmonella typhi vaccine strain in vitro; low infectivity in human cell line U937. Dragunsky EM, et al. **J Biol Stand** 1989 Oct;17(4):353–60
Toxicity of IL–2 and Corynebacterium parvum following direct intracranial injection. Sutton RC 3d, et al. **J Neurooncol** 1989 Sep;7(3):261–7

BACTERIAL WARFARE see **BIOLOGICAL WARFARE**

BACTERIOCHLOROPHYLLS see under **CHLOROPHYLL**

BACTERIOCIN TYPING see **BACTERIAL TYPING TECHNICS**

BACTERIOCINS

Preliminary characterization of four bacteriocins from Streptococcus mutans. Parrot M, et al. **Can J Microbiol** 1990 Feb;36(2):123–30
Epidemiological application of a new bacteriocin typing scheme for Streptococcus mutans. Baca P, et al. **Community Dent Oral Epidemiol** 1990 Aug;18(4):194–6
Genetic analysis of the pAD1 hemolysin/bacteriocin determinant in Enterococcus faecalis: Tn917 insertional mutagenesis and cloning. Ike Y, et al. **J Bacteriol** 1990 Jan; 172(1):155–63

ANALYSIS

Listeriocins (monocins). Ortel S. **Int J Food Microbiol** 1989 Jun;8(3):249–50 (8 ref.)
[Pseudomonas aeruginosa. Application of serotyping and pyocin typing to strains isolated in Algeria] Kezzal K, et al. **Arch Inst Pasteur Alger** 1986;55:61–77 (31 ref.) (Eng. Abstr.) (Fre)

BIOSYNTHESIS

Preliminary studies on monocine typing of Listeria monocytogenes strains. Wilhelms D, et al. **Acta Microbiol Hung** 1989;36(2–3):235–8
Plasmid–associated bacteriocin production by a strain of Carnobacterium piscicola from meat. Ahn C, et al. **Appl Environ Microbiol** 1990 Aug;56(8):2503–10
Evidence for a chromosomally determined bacteriocin production by Klebsiella pneumoniae. Chhibber S, et al. **Folia Microbiol (Praha)** 1989;34(4):350–2
Induction of inhibitory agent produced by Enterococcus faecalis. Lara I, et al. **Folia Microbiol (Praha)** 1990; 35(2):124–9
Physical demonstration of a high molecular weight bacteriocin plasmid in Vibrio cholerae by genetic transformation process. Basu S, et al. **Indian J Med Res** 1990 Mar;91:120–3
Incidence of klebocinogeny using two indicator systems. Kapoor N, et al. **Indian J Med Res** 1989 Nov;89:384–8
Typing of Actinomyces pyogenes by its production and susceptibility to bacteriocin–like inhibitors. Lämmler C. **Int J Med Microbiol** 1990 Jun;273(2):173–8
mprA, an Escherichia coli gene that reduces growth–phase–dependent synthesis of microcins B17 and C7 and blocks osmoinduction of proU when cloned on a high–copy–number plasmid. del Castillo I, et al. **J Bacteriol** 1990 Jan;172(1):437–45
Growth rate and production of a microcin by Salmonella typhimurium LT2 (strain M799–0) in continuous culture. Salazar L, et al. **Microbios** 1990;61(246):17–22
[Bacteriocinogenic properties of Staphylococci isolated from the oral cavity] Raczyńska A. **Med Dosw Mikrobiol** 1989; 41(2):73–80 (Eng. Abstr.) (Pol)
[The biological activity and physicochemical properties of a new bacteriocin from a strain of Pseudomonas cepacia 5779] Dodatko TA, et al. **Mikrobiol Zh** 1989 Jul–Aug; 51(4):68–74 (Eng. Abstr.) (Rus)
[Microcin R51 and a plasmid determining its synthesis] Kurepina NE, et al. **Mol Gen Mikrobiol Virusol** 1990 May; (5):12–7 (Eng. Abstr.) (Rus)
[Transcription map of a recombinant plasmid carrying a gene for the synthesis of pesticine I and a protein for pesticine I immunity in the plague microbe] Sorokin VM, et al. **Mol Gen Mikrobiol Virusol** 1989 Jun;(6):39–42 (Eng. Abstr.) (Rus)

CLASSIFICATION

Incidence of common pyocin types of Pseudomonas aeruginosa from patients with cystic fibrosis and chronic airways diseases. Tredgett MW, et al. **J Med Microbiol** 1990 Jul;32(3):169–72

ISOLATION & PURIFICATION

Genetic stability of the antagonistic character of Enterococcus faecalis ssp. liquefaciens and the detection of a new inhibitory bacteriocin–like substance. Martínez–Bueno M, et al. **Folia Microbiol (Praha)** 1990; 35(2):113–23

METABOLISM

Haemocin, the bacteriocin produced by Haemophilus influenzae: species distribution and role in colonization. LiPuma JJ, et al. **Infect Immun** 1990 Jun;58(6):1600–5
[Pseudomonas aeruginosa strains: synergism and pyocinogenia induction] Garcia–Quintana HG, et al. **Rev Med Chil** 1988 Nov;116(11):1167–71 (Eng. Abstr.) (Spa)

PHARMACOLOGY

Use of a bacteriocin produced by Pediococcus acidilactici to inhibit Listeria monocytogenes associated with fresh meat. Nielsen JW, et al. **Appl Environ Microbiol** 1990 Jul; 56(7):2142–5
Inhibition of the growth of enteropathogenic bacilli by bacteriocins produced by micro–organisms from the sediment of wells. Padilla C, et al. **J Appl Bacteriol** 1990 Mar;68(3):289–95
Relationship of antibiotic resistance phenotype to the R–pyocin susceptibility pattern in clinical isolates of Pseudomonas aeruginosa. Tzouvelekis LS, et al. **J Chemother** 1989 Aug;1(4):226–30

BACTERIOLOGICAL TECHNICS

see related
CULTURE MEDIA

Direct isolation (without enrichment) of Listeria monocytogenes in milk. Dominguez L, et al. **Acta Microbiol Hung** 1989;36(2-3):297-301

Methods for purification of Rickettsia prowazekii separated from the host tissue: a step-by-step comparison. Aniskovich LP, et al. **Acta Virol (Praha)** 1989 Aug; 33(4):361-70

Continuous in-vitro cultivation of Plasmodium falciparum in Ibadan: solutions to scientific and logistical problems. Sodeinde O, et al. **Afr J Med Med Sci** 1990 Jun;19(2):71-6

Evaluation of methods for enumerating microorganisms in filter samples from highly contaminated occupational environments. Eduard W, et al. **Am Ind Hyg Assoc J** 1990 Aug;51(8):427-36

The recovery of Mycobacterium avium complex and Mycobacterium tuberculosis from blood specimens of AIDS patients using the nonradiometric BACTEC NR 660 medium. Motyl MR, et al. **Am J Clin Pathol** 1990 Jul; 94(1):84-6

The specificity of a rapid method of assay for the presence of Legionella species in water. Lim EW, et al. **Ann Acad Med Singapore** 1989 Jul;18(4):348-51

The hyperthermophilic archaebacterium, Pyrococcus furiosus. Development of culturing protocols, perspectives on scaleup, and potential applications. Blumentals II, et al. **Ann N Y Acad Sci** 1990;589:301-14

Replica plating of colonies from Listeria-selective agars to blood agar to improve the isolation of Listeria monocytogenes from foods. Cassiday PK, et al. **Appl Environ Microbiol** 1990 Jul;56(7):2274-5

Evaluation of the Mast ID and API 50CH systems for identification of Listeria spp. Kerr KG, et al. **Appl Environ Microbiol** 1990 Mar;56(3):657-60

Simplified Henry technique for initial recognition of Listeria colonies. Lachica RV. **Appl Environ Microbiol** 1990 Apr; 56(4):1164-5

Same-day identification scheme for colonies of Listeria monocytogenes. Lachica RV. **Appl Environ Microbiol** 1990 Apr;56(4):1166-8

Demonstration of Mycobacterium leprae in tissue. Demonstration by means of Khanolkar's concentration test followed by fluorescent staining. Akers WA, et al. **Arch Dermatol** 1966 Sep;94(3):361-2

Role of the microbiology laboratory in the diagnosis of opportunistic infections in persons infected with human immunodeficiency virus. Strand CL. **Arch Pathol Lab Med** 1990 Mar;114(3):277-83 (42 ref.)

Comparative evaluation of three in vacuo dessication procedures on bacterial cultures. Burlacu E, et al. **Arch Roum Pathol Exp Microbiol** 1989 Jan-Mar; 48(1):65-78

Protection of chicks against Salmonella infection with a mixture of pure cultures of intestinal bacteria. Gleeson TM, et al. **Avian Dis** 1989 Oct-Dec;33(4):636-42

A simple method to detect Helicobacter pylori in gastric specimens. Schneider RE, et al. **BMJ** 1990 Jun 16; 300(6739):1559

A search for infectious agents in chronic abacterial prostatitis using ultrasound guided biopsy. Doble A, et al. **Br J Urol** 1989 Sep;64(3):297-301

Comparison of different membranes for use in the colony-immunoblot technique. Rodrigue L, et al. **Can J Microbiol** 1990 Mar;36(3):231-5

Comparison of three techniques for concentrating positive BACTEC 13A bottles for mycobacterial DNA probe analysis. Conville PS, et al. **Diagn Microbiol Infect Dis** 1989 Jul-Aug;12(4):309-13

Age and sex correlation of Chlamydia trachomatis infections evaluated by the culture technique and by an enzyme immunosorbent assay, IDEIA. Ostergaard L, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Mar;34(3):273-81

Evaluation in rural practice of a rapid group B streptococcus screening test. Yawn BP, et al. **Fam Med** 1990 Mar-Apr; 22(2):122-4

Electroporation-mediated transformation of lysostaphin-treated Clostridium perfringens. Scott PT, et al. **Gene** 1989 Oct 30;82(2):327-33

Lectins agglutination test as an epidemiological marker for Neisseria gonorrhoeae [letter] Vázquez JA, et al. **Genitourin Med** 1990 Aug;66(4):302

Cultivation of Mycobacterium leprae in artificial culture medium. Biswas SK. **Indian J Med Sci** 1989 Jan;43(1):5-10

Methods and media for the isolation and cultivation of Listeria monocytogenes from various foods. Brackett RE, et al. **Int J Food Microbiol** 1989 Jun;8(3):219-23 (10 ref.)

Simplified identification of aerobic spore-formers in the investigation of foods. Deák T, et al. **Int J Food Microbiol** 1988 Mar;6(2):115-25

A comparison of two procedures for the isolation of Listeria monocytogenes from raw chickens and soft cheese. Pini PN, et al. **Int J Food Microbiol** 1988 Dec 31;7(4):331-7

A review of current methods used in the United States for isolating Listeria from food. Pusch DJ. **Int J Food Microbiol** 1989 Jun;8(3):197-204 (12 ref.)

Blood culture technique: current controversies. Shanson DC. **J Antimicrob Chemother** 1990 Apr;25 Suppl C:17-29 (40 ref.)

Rapid fluorescence method for screening Salmonella spp. from enteric differential agars. Aguirre PM, et al. **J Clin Microbiol** 1990 Jan;28(1):148-9

Methanogenic bacteria in human vaginal samples. Belay N, et al. **J Clin Microbiol** 1990 Jul;28(7):1666-8

Use of HL cells for improved isolation and passage of Chlamydia pneumoniae. Cles LD, et al. **J Clin Microbiol** 1990 May;28(5):938-40

Evaluation of two single-plate incubation systems and the anaerobic chamber for the cultivation of anaerobic bacteria. Downes J, et al. **J Clin Microbiol** 1990 Feb;28(2):246-8

Evaluation of the indoxyl acetate hydrolysis test for the differentiation of Campylobacters. Hodge DS, et al. **J Clin Microbiol** 1990 Jun;28(6):1482-3

Effect of endocervical specimen quality on detection of Chlamydia trachomatis and on the incidence of false-positive results with the Chlamydiazyme method. Kellogg JA, et al. **J Clin Microbiol** 1990 Jun;28(6):1108-13

Accuracy and reproducibility of the 4-hour ATB 32A method for anaerobe identification. Kitch TT, et al. **J Clin Microbiol** 1989 Nov;27(11):2509-13

Comparison of buffalo green monkey cells and McCoy cells for isolation of Chlamydia trachomatis in a microtiter system. Krech T, et al. **J Clin Microbiol** 1989 Oct; 27(10):2364-5

Comparison of IDEIA III and cell culture for the detection of Chlamydia trachomatis in endocervical specimens. Lebar WD, et al. **J Clin Microbiol** 1990 Jun;28(6):1447-8

Evaluation of the ATB 32 A system for identification of anaerobic bacteria isolated from clinical specimens. Looney WJ, et al. **J Clin Microbiol** 1990 Jul;28(7):1519-24

Evaluation of the Directigen 1,2,3 Group A Strep Test for diagnosis of streptococcal pharyngitis. Moyer NP, et al. **J Clin Microbiol** 1990 Jul;28(7):1661-3

Evaluation of the LOGIC system for the rapid identification of members of the family Enterobacteriaceae in the clinical microbiology laboratory. Pattyn SR, et al. **J Clin Microbiol** 1990 Jun;28(6):1449-50

Isolation by a sensitive centrifugation cell culture system of 52 strains of spotted fever group rickettsiae from ticks collected in France. Péter O, et al. **J Clin Microbiol** 1990 Jul;28(7):1597-9

Ortho enzyme immunoassay versus McCoy cell monolayers stained by iodine or fluorescent antibody for detection of Chlamydia trachomatis. Phillips LE, et al. **J Clin Microbiol** 1990 Jul;28(7):1647-8

Bacteremia detected by lysis direct plating in a neonatal intensive care unit. Phillips SE, et al. **J Clin Microbiol** 1990 Jan;28(1):1-4

Use of a novel phosphatase test for simplified identification of species of the tribe Proteeae. Pompei R, et al. **J Clin Microbiol** 1990 Jun;28(6):1214-8

Buffered charcoal-yeast extract medium for the isolation of brucellae. Raad I, et al. **J Clin Microbiol** 1990 Jul; 28(7):1671-2

Identification of enterotoxigenic Escherichia coli by colony hybridization with nonradioactive digoxigenin-labeled DNA probes. Riley LK, et al. **J Clin Microbiol** 1990 Jun; 28(6):1465-8

Rapid presumptive identification of gram-negative rods directly from blood cultures by simple enzymatic tests. Sepúlveda JL, et al. **J Clin Microbiol** 1990 Feb;28(2):177-81

Identification of Yersinia species by the API 20E. Sharma NK, et al. **J Clin Microbiol** 1990 Jun;28(6):1443-4

Use of the RapID-ANA system and sodium polyanetholesulfonate disk susceptibility testing in identifying Haemophilus ducreyi. Shawar R, et al. **J Clin Microbiol** 1990 Jan;28(1):108-11

Accuracy and reproducibility of the MicroScan rapid anaerobe identification system with an automated reader. Stoakes L, et al. **J Clin Microbiol** 1990 Jun;28(6):1135-8

Evaluation of autoSCAN-W/A automated microbiology system for the identification of non-glucose-fermenting gram-negative bacilli. Tenover FC, et al. **J Clin Microbiol** 1990 Jul;28(7):1628-34

Evaluation of MicroScan for identification of Enterococcus species. Tritz DM, et al. **J Clin Microbiol** 1990 Jun; 28(6):1477-8

Evaluation of Spectrum-10 system for identification of members of the family Enterobacteriaceae. Vuye A. **J Clin Microbiol** 1989 Oct;27(10):2366-8

Evaluation of Bacto TB hydrolysis reagent (Tween 80) for the identification of Branhamella catarrhalis. Weiner M, et al. **J Clin Microbiol** 1990 Jan;28(1):126-7

ACP Broadsheet no 125: July 1990. Bacteriological diagnosis of diphtheria. Brooks R, et al. **J Clin Pathol** 1990 Jul; 43(7):576-80

Evaluation of Cathra system for identifying gram negative aerobic bacteria. Ling JM, et al. **J Clin Pathol** 1990 Jul; 43(7):587-90

ACP Broadsheet 124: May 1990. Examination of faeces for bacterial pathogens. Pedler SJ, et al. **J Clin Pathol** 1990 May;43(5):410-5

Comparison of three assays to detect enterotoxigenicity of Aeromonas isolates from patients with diarrhoea in Vellore, south India. Jesudason MV, et al. **J Diarrhoeal Dis Res** 1989 Sep-Dec;7(3-4):77-80

Reliability of conventional ear swabs in tubotympanic CSOM. Raju KG, et al. **J Laryngol Otol** 1990 Jun; 104(6):460-2

Practical methods for the microbial validation of sterilizing-grade filters used in aseptic processing. MacDonald WD, et al. **J Parenter Sci Technol** 1989 Nov-Dec;43(6):266-70

Significance of crystal clear urine [letter] **Lancet** 1990 Aug 4;336(8710):320-1

Special precautions reduce oropharyngeal contamination in bronchoalveolar lavage for bacteriologic studies. Pang JA, et al. **Lung** 1989;167(5):261-7

Chemical pre-screening of urines submitted for bacteriological analysis. Brown H. **Med Lab Sci** 1988 Oct; 45(4):304-7

Rapid identification of organisms from blood cultures. Rink MJ. **Med Lab Sci** 1990 Jan;47(1):6-9

Enteric pathogen screening: a multipoint technique with a simple numerical profile. Wigmore JA, et al. **Med Lab Sci** 1990 Jan;47(1):46-8

Comparison of throat cultures and rapid strep tests for diagnosis of streptococcal pharyngitis. Gerber MA. **Pediatr Infect Dis J** 1989 Nov;8(11):820-4 (45 ref.)

Simplified diagnostic susceptibility testing of mycobacteria against thiacetazone, hydroxylamine, p-nitrobenzoic acid and picric acid. Burnens AP, et al. **Res Microbiol** 1989 Mar-Apr;140(3):235-41

Anaerobes: problems and controversies in bacteriology, infections, and susceptibility testing. Finegold SM. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 2:S223-30 (35 ref.)

Comparison of Oxoid Signal and biphasic blood culture systems in clinical practice. Malmborg AS, et al. **Scand J Infect Dis** 1990;22(1):117-8

[Method and result of oxygen addition in the culture process of Pseudomonas aeruginosa] Ji TP. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Dec;5(4):257-8, 316 (Eng. Abstr.) **(Chi)**

[Screening for bacteriuria in the laboratory: autotrak, test strips and microscopic examination compared with culture] Frimodt-Møller N, et al. **Ugeskr Laeger** 1989 Nov 13; 151(46):3062-4 (Eng. Abstr.) **(Dan)**

[Detection of Mycobacteria in tissue sections (published erratum appears in Ned Tijdschr Geneeskd 1989 Nov 25;133(47):2368)] Kwee WS, et al. **Ned Tijdschr Geneeskd** 1989 Nov 4;133(44):2170-3 (Eng. Abstr.) **(Dut)**

[The role of the bacteriology laboratory in the epidemiologic study of nosocomial infections] Eb F. **Agressologie** 1989 May;30(5):279-81 (Eng. Abstr.) **(Fre)**

[Effect of culture media on the production of cholera enterotoxin] Guechi Z. **Arch Inst Pasteur Alger** 1986; 55:25-31 (Eng. Abstr.) **(Fre)**

[Effect of various technics in the determination of sensitivity of Pseudomonas aeruginosa to imipenem] Maugein J, et al. **Pathol Biol (Paris)** 1990 May;38(5):362-5 (Eng. Abstr.) **(Fre)**

[Critical concentrations of cefixime and disc potency] Cluzel R. **Presse Med** 1989 Oct 11;18(32):1567-8 **(Fre)**

[Diagnosis of genital Chlamydia trachomatis infections using antigen detection and cell culture] Bernatchez H, et al. **Union Med Can** 1989 Mar-Apr;118(2):81-5 (Eng. Abstr.) **(Fre)**

[Problems with infection in pregnancy. Sensible serology and direct detection of pathogens in pregnancy] Petersen EE. **Arch Gynecol Obstet** 1989;246 Suppl:S12-22 **(Ger)**

[Borrelia burgdorferi-induced pseudolymphoma with pathogen cultivation in an HIV-1 positive patient] Bratzke B, et al. **Hautarzt** 1989 Aug;40(8):504-9 (Eng. Abstr.) **(Ger)**

[Relevance of rapid availability of microbiological data: the basis for calculating antibiotic therapy] Heizmann WR. **Internist (Berl)** 1990 Jul;31(7):438-47 (62 ref.) **(Ger)**

[Public health-microbiological evaluation of housekeeping combinations for cleaning and disinfecting bed pans in the hospital] Rehork B, et al. **Off Gesundheitswes** 1989 Nov; 51(11):705-10 (Eng. Abstr.) **(Ger)**

[Efficacy of fluid cultures in examination for mycobacteria] Naumann L. **Pneumologie** 1990 Apr;44(4):731-4 **(Ger)**

[Acute tonsillitis: clinical symptoms; bacteriologic culture and rapid test as deciding criteria for the use of antibiotics] Raich T, et al. **Wien Klin Wochenschr** 1990 Feb 16; 102(4):111-4 (Eng. Abstr.) **(Ger)**

[Identification of mycobacteria under routine clinical conditions] Käppler W, et al. **Z Erkr Atmungsorgane** 1990; 174(3):165-73 (Eng. Abstr.) **(Ger)**

[Microbiologic diagnosis of diseases of the lung, bronchi and pleura] Tauchnitz C, et al. **Z Erkr Atmungsorgane** 1989; 173(3):195-204 (34 ref.) (Eng. Abstr.) **(Ger)**

[Diagnosis of gonorrhea using a microfluorimetric Neisseria gonorrheae-specific enzyme detection test] Grabert E, et al. **Z Gesamte Hyg** 1989 Oct;35(10):610-2 (Eng. Abstr.) **(Ger)**

[Culture and biochemical differentiation of Legionella at the microbiologic laboratory] Lück PC, et al. **Z Gesamte Hyg** 1990 Feb;36(2):114-7 (Eng. Abstr.) **(Ger)**

[Detection of legionellas in clinical samples using FITC-marked antibodies] Lück PC, et al. **Z Gesamte Hyg** 1989 Oct;35(10):601-4 (Eng. Abstr.) **(Ger)**

[Rapid diagnosis in Clostridium perfringens wound infections] Schau HP. **Z Gesamte Hyg** 1989 Oct; 35(10):608-10 (Eng. Abstr.) **(Ger)**

[Differentiation of coagulase negative staphylococci from significant bacteriuria] Schmidt H, et al. **Z Gesamte Hyg** 1989 Oct;35(10):585-8 (Eng. Abstr.) **(Ger)**

[Direct gas chromatography analysis of volatile fatty acids

and lactic acids in microbiological diagnosis] Socolowsky S, et al. **Z Gesamte Hyg** 1989 Oct;35(10):596–8 (Eng. Abstr.) (Ger)

[New developments in bedside diagnosis] Spencker FB, et al. **Z Gesamte Hyg** 1989 Oct;35(10):593–5 (20 ref.) (Eng. Abstr.) (Ger)

[Microscopy procedures for direct pathogen detection in Lyme borreliosis] Thess G. **Z Gesamte Hyg** 1989 Oct; 35(10):604–6 (Eng. Abstr.) (Ger)

[Borrelia burgdorferi, clinical aspects, cultivation and identification of the pathogen in erythema migrans in Berlin] Ott A, et al. **Z Hautkr** 1989 Aug 15;64(8):644–8 (Eng. Abstr.) (Ger)

[Detection of Actinomyces on an IUD—consequences?] Goebe L, et al. **Zentralbl Gynakol** 1990;112(3):167–9 (Eng. Abstr.) (Ger)

[Cultivation trial of Mycobacterium leprae by transformation with deoxyribonucleic acid from cultivable acid-fast bacilli] Mori T. **Nippon Rai Gakkai Zasshi** 1988 Oct–Dec; 57(4):205–12 (Jpn)

[Murine leprosy] Mori T. **Nippon Rai Gakkai Zasshi** 1989 Jul–Sep;58(3):157–65 (76 ref.) (Jpn)

[Improvement of the membrane filter technique for enumeration of enterococci in water] Koujima I, et al. **Nippon Saikingaku Zasshi** 1989 Nov;44(6):813–6 (Eng. Abstr.) (Jpn)

[Bacterial infection and rapid laboratory microbial methods] Furuta I. **Rinsho Byori** 1989 Oct;37(10):1096–102 (Eng. Abstr.) (Jpn)

[Selection of methods of detecting lactose-fermenting Salmonella strains and evaluating their usefulness for diagnostic studies] Tyc Z, et al. **Med Dosw Mikrobiol** 1989; 41(2):106–14 (Eng. Abstr.) (Pol)

[Comparative study of various staining methods for mycobacteria] Costa HC, et al. **Hansenol Int** 1988 Dec; 13(2):37–41 (Eng. Abstr.) (Por)

[A method for the study of aerobic microorganisms] Gracheva MN, et al. **Gig Sanit** 1989 Jul;(7):35–8 (Rus)

[Approbation of biological tests for control of sterilization] Levi MI, et al. **Gig Sanit** 1990 Apr;(4):68–9 (Rus)

[Use of cell culture for the assessment of pathogenicity of destructive microorganisms] Zagornaia NB, et al. **Gig Sanit** 1990 Apr;(4):46–7 (Rus)

[An automated method of detecting bacteriuria] Antonov VS, et al. **Lab Delo** 1990;(4):21–4 (Eng. Abstr.) (Rus)

[Isolation and identification of Bacteroides of the group B. fragilis] Bazhenov LG. **Lab Delo** 1990;(4):9–13 (Eng. Abstr.) (Rus)

[Improvement of the microbiological diagnosis of tuberculosis with an account of the detection of L forms and ultrasmall mycobacteria] Golyshevskaia VI, et al. **Probl Tuberk** 1989;(10):38–40 (Eng. Abstr.) (Rus)

[Rapid methods of detection of bacteria in the bile] Buianov VM, et al. **Sov Med** 1989;(11):30–4 (Eng. Abstr.) (Rus)

[A rapid penicillinase paper strip test for the detection of beta-lactamase] Petreska-Sibinovska D. **Srp Arh Celok Lek** 1989 Jan–Feb;117(1–2):39–46 (Eng. Abstr.) (Sec)

ECONOMICS

Is CLOtest an unnecessary expense? [letter] Peterson WL. **Am J Gastroenterol** 1989 Dec;84(12):1587

HISTORY

[The discovery of bacterial agglutinins and origin of serodiagnosis—a priority battle from the history of medical microbiology. 2: Biographical sketches of the contenders Max v. Gruber (1853–1927), Richard Pfeiffer (1858–1945), Herbert Edward Durham (1869–1921) and Fernand Widal (1862–1929)] Mochmann H, et al. **Z Arztl Fortbild (Jena)** 1989;83(21):1085–90 (Ger)

INSTRUMENTATION

Positive-hole correction of multiple-jet impactors for collecting viable microorganisms. Macher JM. **Am Ind Hyg Assoc J** 1989 Nov;50(11):561–8

Large-scale growth of Bordetella pertussis for production of extracellular toxin. Andorn N, et al. **Ann N Y Acad Sci** 1990;589:363–71

Nutrient transport and cellular morphology in immobilized cell aggregates. Fowler JD, et al. **Ann N Y Acad Sci** 1990; 589:333–49

L-aspartic acid production using immobilized E. coli cells in a packed-bed reactor. Design of reactor and its optimal operation. Seko H, et al. **Ann N Y Acad Sci** 1990;589:540–52

Shocks from Steri-Loop Bacteriology Incinerators. **Health Devices** 1990 Mar;19(3):99–101

Slit-skin smear in leprosy. Sehgal VN, et al. **Int J Dermatol** 1990 Jan–Feb;29(1):9–16 (116 ref.)

Use of the Malthus Microbial Growth Analyser to study the post antibiotic effect of antibiotics [published erratum appears in J Antimicrob Chemother 1990 Apr;25(4):727] Gould IM, et al. **J Antimicrob Chemother** 1989 Oct; 24(4):523–31

Comparison of methods for the induction, propagation and recovery of L-phase variants of Aeromonas spp. McIntosh D, et al. **J Diarrhoeal Dis Res** 1988 Jun;6(2):131–6

Comparison of the inoculation of mycobacteria by spiral loop and by pipette [letter; comment] Tsukamura M. **Tubercle** 1989 Jun;70(2):151 Comment on: Tubercle 1988 Sep;69(3):232.

[Evaluation of the Mycoplasma Plus and the SIR Mycoplasma kits for quantitative detection and antibiotic susceptibility testing of genital mycoplasma] Renaudin H, et al. **Pathol Biol (Paris)** 1990 May;38(5):431–5 (Eng. Abstr.) (Fre)

[Typing of skin staphylococci using the commercial identification system Staphy-Test] Pospíšil L, et al. **Dermatol Monatsschr** 1989;175(7):450–3 (Eng. Abstr.) (Ger)

[Viewpoints on preparations for integrating data processing systems in routine microbiology diagnosis] Lorenz H, et al. **Z Gesamte Hyg** 1990 Apr;36(4):199–201 (Eng. Abstr.) (Ger)

[The use of impedance measurements in medical microbiology] Strassburger J, et al. **Z Gesamte Hyg** 1989 Jul;35(7):399–402 (Eng. Abstr.) (Ger)

[Hemoculture in patients with infective endocarditis. Current patterns and our experience] Mendes CM, et al. **Arq Bras Cardiol** 1989 Aug;53(2):75–9 (33 ref.) (Por)

[Study of the conditions for reproducing the processes of antibiotic biosynthesis. Calculating the process of sisomycin biosynthesis] Kuz'mina LM, et al. **Antibiot Khimioter** 1990 Mar;35(3):7–10 (Eng. Abstr.) (Rus)

[Study of the conditions for reproducing the processes of antibiotic biosynthesis. Determining the limiting stage of the process of mass transfer of oxygen] Kuz'mina LM, et al. **Antibiot Khimioter** 1990 Mar;35(3):3–6 (Eng. Abstr.) (Rus)

[Theoretical analysis of the continuous two-stage process of the biosynthesis of a metabolic product] Shnaider LE, et al. **Antibiot Khimioter** 1990 Mar;35(3):10–4 (Eng. Abstr.) (Rus)

[Improving the microanaerostat model MI-752 and manufacturing simple microanaerostatic devices for cultivation of anaerobes] Bazhenov LG, et al. **Lab Delo** 1989;(10):72–4 (Eng. Abstr.) (Rus)

[The use of a microcolorimeter in microbiological practice] Papanova EV, et al. **Med Tekh** 1989 Jul–Aug;(4):47–8 (Eng. Abstr.) (Rus)

STANDARDS

Bacteriological quality of broiler carcasses as affected by in-plant lactic acid decontamination. van der Marel GM, et al. **Int J Food Microbiol** 1988 Feb;6(1):31–42

To the problem of Campylobacter jejuni detectability in water. Pokorný J. **J Hyg Epidemiol Microbiol Immunol** 1990;34(1):57–61

Results of Salmonella typhi culture in patients with suspected typhoid fever, treated in the Department of Child Health Medical School, Padjadjaran University, Hasan Sadikin General Hospital Bandung. Sekarwana N, et al. **Paediatr Indones** 1989 May–Jun;29(5–6):105–11

[Ten years of quality control in the microscopic detection of acid-fast bacilli] Reinhardt A. **Z Erkr Atmungsorgane** 1989;173(1):75–80 (Eng. Abstr.) (Ger)

TRENDS

[Status and developmental trends in the use of fluorescence microscopy studies in microbiology] Storz H. **Z Gesamte Hyg** 1989 Oct;35(10):589–91 (23 ref.) (Eng. Abstr.) (Ger)

VETERINARY

Effect of growth in cell cultures and strain on virulence of Mycoplasma hyopneumoniae for swine. Zielinski GC, et al. **Am J Vet Res** 1990 Mar;51(3):344–8

Monitoring poultry farms for Salmonella by drag-swab sampling and antigen-capture immunoassay. Mallinson ET, et al. **Avian Dis** 1989 Oct–Dec;33(4):684–90

Comparison of Vitek Gram-Positive Identification system with API Staph-Trac system for species identification of staphylococci of bovine origin. Matthews KR, et al. **J Clin Microbiol** 1990 Jul;28(7):1649–51

BACTERIOLOGY

EDUCATION

[A bacterial training device for teaching microbiological methods of study] Batkov IuV, et al. **Lab Delo** 1990;(5):78 (Rus)

HISTORY

Lydia Rabinowitsch, PhD, and the emergence of clinical pathology in late 19th-century America. Walsh LR, et al. **Arch Pathol Lab Med** 1989 Nov;113(11):1303–8

[Shibasaburo Kitasato and Sahachiro Hata.] Köhler W. **Kitasato Arch Exp Med** 1989 Sep;62(2–3):85–106 (Ger)

ORGANIZATION & ADMINISTRATION

[Experience in the collaboration of a centralized bacteriological laboratory and a medical institute] Gorbunova ML, et al. **Lab Delo** 1989;(12):74–5 (Rus)

STANDARDS

[Providing and improving information services in the public health and bacteriologic laboratories of the urban sanitary and epidemiologic stations] Kutsenko GI, et al. **Gig Sanit** 1989 Aug;(8):26–9 (Rus)

BACTERIOLYSIS

see related
LYSOSTAPHIN

Phi X174 protein E-mediated lysis of Escherichia coli. Witte A, et al. **Biochimie** 1990 Feb–Mar;72(2–3):191–200

The biochemistry of bacteriolysis: paradoxes, facts and myths. Ginsburg I. **Microbiol Sci** 1988 May;5(5):137–42 (52 ref.)

[Effect of storage conditions on population variability and activity of Streptomyces recifensis var. lyticus] Babenko IuS, et al. **Antibiot Khimioter** 1989 Aug;34(8):563–6 (Eng. Abstr.) (Rus)

[Antibacterial spectrum of lisosubtilin G10X] Biziuliavichius GA, et al. **Antibiot Khimioter** 1989 Aug;34(8):579–81 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Bacteriolysis is inhibited by hydrogen peroxide and by proteases. Ginsburg I. **Agents Actions** 1989 Nov; 28(3–4):238–42

Penicillin-induced changes in the cell wall composition of Staphylococcus aureus before the onset of bacteriolysis. Sidow T, et al. **Arch Microbiol** 1990;154(1):73–81

Autolysins are direct involved in the bactericidal effect caused by penicillin in wild type and in tolerant pneumococci. López R, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1–3):317–22

The vir locus affects the response of Bordetella pertussis to antibiotics: phenotypic tolerance and control of autolysis. Tuomanen E, et al. **J Infect Dis** 1990 Aug;162(2):560–3

[Use of a lysoenzyme preparation from Streptomyces recifensis subsp. lyticus 2435 for isolating DNA from staphylococcal cells] Babenko IuS, et al. **Antibiot Khimioter** 1990 Mar;35(3):17–20 (Eng. Abstr.) (Rus)

[Enzymatic lysis of staphylococci in relation to their species and strain properties] Babenko IuS, et al. **Antibiot Khimioter** 1990 Mar;35(3):20–2 (Eng. Abstr.) (Rus)

GENETICS

Dual translational initiation sites control function of the lambda S gene. Bläsi U, et al. **EMBO J** 1989 Nov; 8(11):3501–10

IMMUNOLOGY

[The role of the antilysozyme activity of Shigella flexneri as a factor controlling the degree of its resistance to the lytic action of bacteriophages] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Nov;(11):16–9 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Age dependence of salivary bacteriolytic activity in adult mosquitoes. Pimentel GE, et al. **Comp Biochem Physiol [B]** 1990;96(3):549–51

Production of bacteriolytic activity in the oral cavity by nutritionally variant streptococci. Pompei R, et al. **J Clin Microbiol** 1990 Jul;28(7):1623–7

[Use of enzyme preparation from Streptomyces recifensis subsp. lyticus for isolation of membrane substances from staphylococcal cells] Oriabinskaia LB, et al. **Antibiot Khimioter** 1990 Jun;35(6):18–21 (Eng. Abstr.) (Rus)

BACTERIOPHAGE LAMBDA see **PHAGE LAMBDA**

BACTERIOPHAGE MU see **PHAGE MU**

BACTERIOPHAGE PHI X 174 see **PHAGE PHI X 174**

BACTERIOPHAGE TYPING

Phage-typing of coagulase-negative staphylococci. Factors influencing typability. Rosdahl VT, et al. **APMIS** 1990 Apr; 98(4):299–304

Bacteriophage typing of Listeria species. Loessner MJ, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1912–8

Morphology of bacteriophages of E. Hammarström's set for typing Shigella sonnei. Krzywy T, et al. **Arch Immunol Ther Exp (Warsz)** 1972;20(1):73–83

Morphology of bacteriophages of Klebsiella bacilli. Krzywy T, et al. **Arch Immunol Ther Exp (Warsz)** 1972;20(1):85–107

Phage typing of Shigella flexneri. Slopek S, et al. **Arch Immunol Ther Exp (Warsz)** 1972;20(1):1–60

Improved lysotyping scheme for group C streptococci with new phage preparations. Vereanu A, et al. **Arch Roum Pathol Exp Microbiol** 1979 Jul–Dec; 38(3–4):265–72

Bacteriophage 604: a marker phage for multi-resistant Staphylococcus aureus in Australia. Inglis B, et al. **Epidemiol Infect** 1990 Apr;104(2):211–8

Development of a new set of phages as an epidemiological marker in Staphylococcus epidermidis causing nosocomial infections. Martín-de-Nicolás MM, et al. **Epidemiol Infect** 1990 Feb;104(1):111–8

Application of a new phagetyping scheme to campylobacters isolated during outbreaks. Salama SM, et al. **Epidemiol Infect** 1990 Jun;104(3):405–11

Plasmid profile typing can be used to subdivide phage-type

49 of Salmonella typhimurium in outbreak investigations. Threlfall EJ, et al. **Epidemiol Infect** 1990 Apr;104(2):243–51

Observations on phage–typing of Clostridium difficile: preliminary evaluation of a phage panel. Dei R. **Eur J Epidemiol** 1989 Sep;5(3):351–4

Phage typing of Listeria monocytogenes. Audurier A, et al. **Int J Food Microbiol** 1989 Jun;8(3):251–7 (15 ref.)

Phage–typing of Listeria. Ortel S. **Int J Food Microbiol** 1989 Jun;8(3):241–3

A note on the isolation and propagation of lytic phages from Streptococcus uberis and their potential for strain typing. Hill AW, et al. **J Appl Bacteriol** 1989 Oct;67(4):425–31

Phage typing of Micobacterium tuberculosis in Cuba. Jimenez Misas CA, et al. **Mem Inst Oswaldo Cruz** 1989 Apr–Jun;84(2):271

METHODS

A subdivision of strains of Staphylococcus aureus in the 94,96 complex by means of experimental phages. Rosendal K, et al. **APMIS** 1990 Jun;98(6):543–8

Attempts to simplify the phage–typing methodology of staphylococci and to increase their typability. Popovici M, et al. **Arch Roum Pathol Exp Microbiol** 1979 Jul–Dec; 38(3–4):273–8

[Rapid typing of Escherichia coli K antigens using bacteriophages] Nimmich W, et al. **Z Gesamte Hyg** 1989 Oct;35(10):583–5 (Eng. Abstr.) **(Ger)**

BACTERIOPHAGES

see related

LYSOGENY

Low–dose–rate effect of tritium beta–rays on transfection activity of phage DNA related to an oxidative species different from .OH, HO2. O2–., and H2O2. Yamamoto O, et al. **Biochem Int** 1990;20(5):903–11

DNA "fingerprinting" with nonradioactive gene probes. Tilzer LL, et al. **Clin Chem** 1989 Oct;35(10):2147

Structure of the DNA binding wing of the gene–V encoded single– stranded DNA binding protein of the filamentous bacteriophage M13. van Duynhoven JP, et al. **FEBS Lett** 1990 Feb 12;261(1):1–4

Translational repression by bacteriophage MS2 coat protein expressed from a plasmid. A system for genetic analysis of a protein–RNA interaction. Peabody DS. **J Biol Chem** 1990 Apr 5;265(10):5684–9

[Use of bacteriophages in the treatment of chronic bacterial diseases] Kaczkowski H, et al. **Wiad Lek** 1990 Feb 1–15; 43(3–4):136–41 (Eng. Abstr.) **(Pol)**

[Phagotherapy of postoperative suppurative–inflammatory complications in patients with neoplasms] Kochetkova VA, et al. **Sov Med** 1989;(6):23–6 (Eng. Abstr.) **(Rus)**

ANALYSIS

A CD determination of the alpha–helix contents of the coat proteins of four filamentous bacteriophages: fd, IKe, Pf1, and Pf3. Clack BA, et al. **Biopolymers** 1989 Nov; 28(11):1861–73

A preliminary structure for the DNA binding protein from bacteriophage IKe. Brayer GD. **J Biomol Struct Dyn** 1987 Apr;4(5):859–68

Characterization of filamentous bacteriophage phi Lf from Xanthomonas campestris pv. campestris. Tseng YH, et al. **J Gen Virol** 1990 Aug;71 (Pt 8):1881–4

Temperate bacteriophages of Streptococcus pneumoniae that contain protein covalently linked to the 5' ends of their DNA. Romero A, et al. **J Virol** 1990 Oct;64(10):5149–55

CLASSIFICATION

Bacteriophage typing of Listeria species. Loessner MJ, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1912–8

Taxonomic differentiation of 101 lactococcal bacteriophages and characterization of bacteriophages with unusually large genomes. Prevots F, et al. **Appl Environ Microbiol** 1990 Jul;56(7):2180–5

Development and epidemiological applications of a bacteriophage typing system for typing Pasteurella multocida. Nielsen JP, et al. **J Clin Microbiol** 1990 Jan; 28(1):103–7

Use of host modified bacteriophages in development of a phage typing scheme for Clostridium perfringens. Yan WK. **Med Lab Sci** 1989 Jul;46(3):186–93

DRUG EFFECTS

[Structure and biological features of the temperate phage of Bacillus thuringiensis var. galleriae 69/9, sensitive to chloroform] Koretskaia NG, et al. **Mol Gen Mikrobiol Virusol** 1989 Aug;(8):27–34 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Site–directed transcription initiation with a mobile promoter. Loewy ZG, et al. **Gene** 1989 Nov 30;83(2):367–70

Primary structure of bacteriophage M2 DNA polymerase: conserved segments within protein–priming DNA polymerases and DNA polymerase I of Escherichia coli. Matsumoto K, et al. **Gene** 1989 Dec 14;84(2):247–55

[The role of the antilysozyme activity of Shigella flexneri as a factor controlling the degree of its resistance to the lytic action of bacteriophages] Bukharin OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Nov;(11):16–9 (Eng. Abstr.) **(Rus)**

[Phenotypical curing of Streptococcus pneumoniae treated with amidase induced by the Dp–1 bacteriophage] García P, et al. **Microbiologia** 1985 Sep;1(1–2):35–41 (Eng. Abstr.) **(Spa)**

GENETICS

Non–radioactive hybridization probes prepared using M13 phage vector and the universal sequencing primer. Ikeda S, et al. **Acta Med Okayama** 1989 Aug;43(4):197–202

Transduction in Bacillus subtilis. Csiszár K, et al. **Acta Microbiol Acad Sci Hung** 1965;12(1):73–89

New developments on the generation of mutations in Escherichia coli lysogens. Lieber M. **Acta Microbiol Hung** 1989;36(4):377–413

Selection and evolution of bacteriophages in cellstat. Husimi Y. **Adv Biophys** 1989;25:1–43 (92 ref.)

Generation of deletion subclones for sequencing by partial digestion with restriction endonucleases. Lamperti ED, et al. **Anal Biochem** 1990 Feb 15;185(1):187–93

Microbial sensor for preliminary screening of mutagens utilizing a phage induction test. Karube I, et al. **Anal Chem** 1989 Nov 1;61(21):2388–91

DNA packaging in dsDNA bacteriophages. Black LW. **Annu Rev Microbiol** 1989;43:267–92 (162 ref.)

Role of the DNA/membrane complex in prokaryotic DNA replication. Firshein W. **Annu Rev Microbiol** 1989; 43:89–120 (148 ref.)

The conjugative plasmid pTR2030 encodes two bacteriophage defense mechanisms in lactococci, restriction modification (R+/M+) and abortive infection (Hsp+). Hill C, et al. **Appl Environ Microbiol** 1989 Sep;55(9):2416–9

Molecular characterization of promoters of the Lactococcus lactis subsp. cremoris temperate bacteriophage BK5–T and identification of a phage gene implicated in the regulation of promoter activity. Lakshmidevi G, et al. **Appl Environ Microbiol** 1990 Apr;56(4):934–42

DNA–DNA homology among lactose– and sucrose–fermenting transconjugants from Lactococcus lactis strains exhibiting reduced bacteriophage sensitivity. Steele JL, et al. **Appl Environ Microbiol** 1989 Sep; 55(9):2410–3

Phi 80 transcription antitermination complex: a 15 kDa host–coded protein interacts with the gene N transcription antitermination protein of bacteriophage phi 80. Kanemoto K, et al. **Biochem Biophys Res Commun** 1990 May 16; 168(3):972–8

Template–primer activity of 5–(hydroxymethyl)uracil–containing DNA for prokaryotic and eukaryotic DNA and RNA polymerases. Herrala AM, et al. **Biochemistry** 1989 Oct 17;28(21):8274–7

Cloning vector artifacts in the DNA database. Hodgson CP. **Biotechniques** 1990 Jul;9(1):54–5

Automated methods for single–stranded DNA isolation and dideoxynucleotide DNA sequencing reactions on a robotic workstation. Mardis ER, et al. **Biotechniques** 1989 Sep; 7(8):840–50

Rapid identification of M13 phage deletions for sequence analysis. Oshima RG. **Biotechniques** 1988 Jun;6(6):510–1

Identification and nucleotide sequence of attachment site of the Cflt filamentous phage from Xanthomonas campestris pv. citri. Fann JH, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1989 Aug;22(3):151–62

Form determination of the heads of bacteriophages. Kellenberger E. **Eur J Biochem** 1990 Jun 20;190(2):233–48 (90 ref.)

Structural studies of the lysozyme coded by the pneumococcal phage Cp–1. Conformational changes induced by choline. Sanz JM, et al. **Eur J Biochem** 1990 Jan 26;187(2):409–16

Lambda plac10 transducing bacteriophage: DNA primary structure of the region of the abnormal excision. Shpakovski GV, et al. **FEBS Lett** 1989 Nov 20;258(1):171–4

Lysogenic phages of Clostridium perfringens: mapping of the chromosomal attachment sites. Canard B, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1–3):323–6

DNA sequence homology between attB–related sites of Corynebacterium diphtheriae, Corynebacterium ulcerans, Corynebacterium glutamicum, and the attP site of gamma–corynephage. Cianciotto N, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1–3):299–301

M13 Bioprints: non–isotopic detection of individual–specific human DNA fingerprints with biotinylated M13 bacteriophage. Medeiros AC, et al. **Forensic Sci Int** 1989 Dec;43(3):275–80

A new bacteriophage vector for cloning in Bacillus subtilis and the use of phi 105 for protein synthesis in maxicells. East AK, et al. **Gene** 1989 Sep 1;81(1):35–43

Modular organization of the lytic enzymes of Streptococcus pneumoniae and its bacteriophages. García P, et al. **Gene** 1990 Jan 31;86(1):81–8

Functional domain for priming activity in the phage phi 29 terminal protein. Garmendia C, et al. **Gene** 1990 Mar 30; 88(1):73–9

The organization of the right–end early region of bacteriophage PRD1 genome. Pakula TM, et al. **Gene** 1989 Dec 21;85(1):53–8

Bacteriophage PRD1 terminal protein: expression of gene VIII in Escherichia coli and purification of the functional P8 product. Savilahti H, et al. **Gene** 1989 Dec 21; 85(1):45–51

Transcriptional analysis of the repressor gene of the temperate Streptomyces phage phi C31. Sinclair RB, et al. **Gene** 1989 Dec 28;85(2):275–82

Control of prophage integration and excision in bacteriophage P2: nucleotide sequences of the int gene and att sites. Yu A, et al. **Gene** 1989 Aug 1;80(1):1–11

Effects of internal deletions on the priming activity of the phage phi 29 terminal protein. Zaballos A, et al. **Gene** 1989 Nov 30;83(2):187–95

Genetic analysis of bacteriophage P22 lysozyme structure. Rennell D, et al. **Genetics** 1989 Nov;123(3):431–40

Tripeptide, Arg–Gly–Asp, inhibits the transfection of protein–linked DNA of bacteriophage M2. Kobayashi H, et al. **Idengaku Zasshi** 1988 Dec;63(6):537–41

Detection of somatic mutations in tumours of diverse types by DNA fingerprinting with M13 phage DNA. Hayward N, et al. **Int J Cancer** 1990 Apr 15;45(4):687–90

Preliminary characterization of a group of actinophages of the thermophilic actinomycete genus Saccharomonospora. Schneider J, et al. **Intervirology** 1989;30(6):323–9

Determination of the packaging capacity of bacteriophage VWB. Anné J, et al. **J Bacteriol** 1990 Feb;172(2):1129–32

Nucleotide sequence and transcription of the right early region of bacteriophage PRD1. Gerendasy D, et al. **J Bacteriol** 1990 Apr;172(4):1889–98

Interaction of integration host factor from Escherichia coli with the integration region of the Haemophilus influenzae bacteriophage HP1. Hwang ES, et al. **J Bacteriol** 1990 Sep; 172(9):4852–60

Conservation of a dual–start motif in P22 lysis gene regulation. Nam K, et al. **J Bacteriol** 1990 Jan;172(1):204–11

Sequence of the Streptococcus pneumoniae bacteriophage HB–3 amidase reveals high homology with the major host autolysin. Romero A, et al. **J Bacteriol** 1990 Sep; 172(9):5064–70

Pseudomonas aeruginosa transposable bacteriophages D3112 and B3 require pili and surface growth for adsorption. Roncero C, et al. **J Bacteriol** 1990 Apr;172(4):1899–904

Construction and properties of a temperature–sensitive mutation in the gene for the bacteriophage SPO1 DNA–binding protein TF1. Sayre MH, et al. **J Bacteriol** 1990 Aug;172(8):4672–81

The bof gene of bacteriophage P1: DNA sequence and evidence for roles in regulation of phage c1 and ref genes. Schaefer TS, et al. **J Bacteriol** 1990 Jun;172(6):3269–77

Transduction of a plasmid containing the bacteriophage D3 cos site in Pseudomonas aeruginosa. Sharp R, et al. **J Bacteriol** 1990 Jun;172(6):3509–11

Characterization of PBSX, a defective prophage of Bacillus subtilis. Wood HE, et al. **J Bacteriol** 1990 May; 172(5):2667–74

Sequence analysis and comparison of int and xis genes from staphylococcal bacteriophages L54a and phi 11. Ye ZH, et al. **J Bacteriol** 1990 May;172(5):2568–75

Physical maps of the streptococcal bacteriophage A25 and C1 genomes. Pomrenke ME, et al. **J Basic Microbiol** 1989; 29(6):395–8

Stoichiometry of DNA binding by the bacteriophage SP01–encoded type II DNA–binding protein TF1. Schneider GJ, et al. **J Biol Chem** 1990 Jun 25; 265(18):10198–200

Flexibility difference between double–stranded RNA and DNA as revealed by gel electrophoresis. Livshits MA, et al. **J Biomol Struct Dyn** 1990 Jun;7(6):1237–49

Enhanced conditions for DNA fingerprinting with biotinylated M13 bacteriophage. Moreno RF, et al. **J Forensic Sci** 1990 Jul;35(4):831–7

A NosA–specific bacteriophage can be used to select denitrification–defective mutants of Pseudomonas stutzeri. Clark MA, et al. **J Gen Microbiol** 1989 Oct;135 (Pt 10):2569–75

A novel phage genome integrated into a plasmid in Bacillus thuringiensis strain AF101. Kanda K, et al. **J Gen Microbiol** 1989 Nov;135 (Pt 11):3035–41

Phi SC623, a temperate actinophage of Streptomyces coelicolor Müller, and its relatives phi SC347 and phi SC681. Schneider J, et al. **J Gen Microbiol** 1990 Apr;136 (Pt 4):767–72

Characterization of phi GA1, an inducible phage particle from Brevibacterium flavum. Sonnen H, et al. **J Gen Microbiol** 1990 Mar;136 (Pt 3):567–71

Corynephage Cog, a virulent bacteriophage of Corynebacterium glutamicum, and its relationship to phi GA1, an inducible phage particle from Brevibacterium flavum. Sonnen H, et al. **J Gen Virol** 1990 Aug;71 (Pt 8):1629–33

Analysis of the complete nucleotide sequence of Chp1, a phage which infects avian Chlamydia psittaci. Storey CC, et al. **J Gen Virol** 1989 Dec;70 (Pt 12):3381–90

Bend induced by the phage phi 29 transcriptional activator in the viral late promoter is required for activation. Rojo F, et al. **J Mol Biol** 1990 Feb 20;211(4):713–25

DNA polymerase from Sulfolobus acidocaldarius. Replication at high temperature of long stretches of single–stranded DNA. Salhi S, et al. **J Mol Biol** 1989 Oct 20;209(4):635–44

Characterization of the pneumococcal bacteriophage HB–3 amidase: cloning and expression in Escherichia coli. Romero A, et al. **J Virol** 1990 Jan;64(1):137–42

The gene for Klebsiella bacteriophage K11 RNA polymerase: sequence and comparison with the homologous genes of

phages T7, T3, and SP6. Dietz A, et al. **Mol Gen Genet** 1990 Apr;221(2):283–6

Organization of Methanobacterium thermoautotrophicum bacteriophage psi M1 DNA. Jordan M, et al. **Mol Gen Genet** 1989 Dec;220(1):161–4

An inhibitory effect of RGD peptide on protein–priming reaction of bacteriophages phi 29 and M2. Kobayashi H, et al. **Mol Gen Genet** 1989 Dec;220(1):8–11

Novel replication mutant of microvirid phage alpha 3 deleted in the complementary strand origin. Kodaira K, et al. **Mol Gen Genet** 1990 Jan;220(2):240–4

Genetic control of the UV–induced SOS mutator effect in single– and double–stranded DNA phages. Maenhaut–Michel G, et al. **Mutat Res** 1990 Jun; 230(2):241–54

Recombination between directly repeated origins of conjugative transfer cloned in M13 bacteriophage DNA models ligation of the transferred plasmid strand. Barlett MM, et al. **Nucleic Acids Res** 1990 Jun 25;18(12):3579–86

Structural and functional analysis of temperature–sensitive mutants of the phage phi 29 DNA polymerase. Blasco MA, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4763–70

Functional analysis of the Bacillus subtilis bacteriophage SPP1 pac site. Bravo A, et al. **Nucleic Acids Res** 1990 May 25;18(10):2881–6

The generation of concatemeric plasmid DNA in Bacillus subtilis as a consequence of bacteriophage SPP1 infection. Bravo A, et al. **Nucleic Acids Res** 1990 Aug 25; 18(16):4651–7

The complete sequence of the Bacillus amyloliquefaciens proviral H2, BamHI methylase gene. Connaughton JF, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):4002

Location of the host attachment site for phage HP1 within a cluster of Haemophilus influenzae tRNA genes. Hauser MA, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5305

Structural features of the priming signal recognized by primase: mutational analysis of the phage G4 origin of complementary DNA strand synthesis. Hiasa H, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4825–31

Nucleotide sequence of the viral protein TPX of the TTV1 variant VT3. Neumann H, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2171

Coat protein TP4 of the virus TTV1: primary structure of the gene and the protein. Neumann H, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9475

Some restriction endonucleases tolerate single mismatches of the pyrimidine.purine type. Petranović M, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2159–62

DNA sequence of exoenzyme C3, an ADP–ribosyltransferase encoded by Clostridium botulinum C and D phages. Popoff M, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1291

Complete nucleotide sequence of the genome of Spiroplasma citri virus SpV1–R8A2 B. Renaudin J, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1293

Subtractive hybridization system using single–stranded phagemids with directional inserts. Rubenstein JL, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4833–42

Biochemical and biophysical studies on the folding of the core region of the origin of replication of bacteriophage M13. van Belkum A, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4703–10

Interconvertible hairpin structure found in the replication origin of phage G4 single–stranded DNA. Hirao I, et al. **Nucleic Acids Symp Ser** 1989;(21):13–4

Initiation of DNA synthesis in the transfer origin region of RK2 by the plasmid–encoded primase: detection using defective M13 phage. Yakobson E, et al. **Plasmid** 1990 Jan; 23(1):80–4

A novel nucleoprotein complex at a replication origin. Serrano M, et al. **Science** 1990 May 25;248(4958):1012–6

Capsomer proteins of bacteriophage PRD1, a bacterial virus with a membrane. Bamford JK, et al. **Virology** 1990 Aug; 177(2):445–51

Aphidicolin–resistant DNA polymerase of bacteriophage phi 29 APHr71 mutant is hypersensitive to phosphonoacetic acid and butylphenyldeoxyguanosine 5'–triphosphate. Matsumoto K, et al. **Virology** 1990 Sep;178(1):337–9

Detection of bacteriophage phi 6 minus–strand RNA and novel mRNA isoconformers synthesized in vivo and in vitro, by strand–separating agarose gels. Pagratis N, et al. **Virology** 1990 Jul;177(1):273–80

Minus–strand RNA synthesis by the segmented double–stranded RNA bacteriophage phi 6 requires continuous protein synthesis. Pagratis N, et al. **Virology** 1990 Jul;177(1):281–8

Nonsense mutants defining seven new genes of the lipid–containing bacteriophage PR4. Vanden Boom T, et al. **Virology** 1990 Jul;177(1):11–22

A physical–genetic map of the lipid–containing bacteriophage PR4. Vanden Boom T, et al. **Virology** 1990 Jul;177(1):23–32

[Double–stranded RNA from phage F6: its interferon–inducing and antiviral properties] Nosik NN, et al. **Antibiot Khimioter** 1990 Mar;35(3):25–7 (Eng. Abstr.) **(Rus)**

[Genetic control of morphogenesis of Pseudomonas aeruginosa transposable phage D3112] Bidnenko EM, et al. **Genetika** 1989 Dec;25(12):2126–37 (Eng. Abstr.) **(Rus)**

[Transduction ability of mutants of phage CP51, virulent for bacteria of the Bacillus cereus group] Koretskaia NG, et al. **Genetika** 1989 Jun;25(6):1013–20 (Eng. Abstr.) **(Rus)**

[Study of morphology and genome structure of Pseudomonas putida bacteriophages for their classification] Krylov VN, et al. **Genetika** 1989 Sep;25(9):1559–70 (Eng. Abstr.) **(Rus)**

[Interactions of the phytopathogenic bacteria Erwinia with phage P1 CRL100 CML] Beliasova NA, et al. **Mol Gen Mikrobiol Virusol** 1990 Jan;(1):14–8 (Eng. Abstr.) **(Rus)**

[Mapping of the c–region of the temperate phage 59 of Erwinia carotovora 268] Didyk OA, et al. **Mol Gen Mikrobiol Virusol** 1990 Mar;(3):24–6 (Eng. Abstr.) **(Rus)**

[Genomic "dactyloscopy" with the use of bacteriophage M13 as a DNA probe (the expertise of material evidence and personal identification)] Ivanov PL, et al. **Sud Med Ekspert** 1989 Oct–Dec;32(4):39–42 (Eng. Abstr.) **(Rus)**

[Stable recombinants of bacteriophage M13 and plasmid pBR322] Dagert M. **Acta Cient Venez** 1989;40(2):124–6 (Eng. Abstr.) **(Spa)**

GROWTH & DEVELOPMENT

Characterization of the temperate bacteriophage phi adh and plasmid transduction in Lactobacillus acidophilus ADH. Raya RR, et al. **Appl Environ Microbiol** 1989 Sep; 55(9):2206–13

Release of mycoplasmavirus L1 upon transfection of Acholeplasma laidlawii with homologous and heterologous viral DNA. Just W, et al. **Arch Virol** 1989;107(1–2):1–13

Host–range modifications of bacteriophage epsilon 15. Sechter I, et al. **Arch Virol** 1990;110(3–4):255–7

The survival and recovery of Salmonella typhimurium phage type U285 in frozen meats and tryptone soya yeast extract broth. Barrell RA. **Int J Food Microbiol** 1988 Jun; 6(4):309–16

Saccharopolyspora hirsuta strain 367 releases JHJ–1, a bacteriophage capable of propagation on old mycelium. Haket J Jr, et al. **J Gen Microbiol** 1990 Mar;136 (Pt 3):573–9

Enumeration of Pseudomonas species and Pseudomonas aeruginosa bacteriophages in domestic sewage. Sallal AK, et al. **Microbios** 1989;60(242):35–43

[The role of Ca2+ ions in a phage infection of Corynebacterium glutamicum] Manukian RR, et al. **Biofizika** 1989 Sep–Oct;34(5):830–2 (Eng. Abstr.) **(Rus)**

[The effect of the IncP–2–group plasmid on the growth of Pseudomonas aeruginosa bacteriophages] Freizon EV, et al. **Genetika** 1989 Jul;25(7):1168–78 (Eng. Abstr.) **(Rus)**

[The structure of cyanobacterial phycobilisomes and its change in viral infection] Mendzhul MI, et al. **Mikrobiol Zh** 1986 Sep–Oct;48(5):89–101 (95 ref.) **(Rus)**

[Ultrastructure of the intracellular development of bacteriophage phi C 31] Rodríguez A, et al. **Microbiologia** 1989 Sep;5(2):89–94 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Filamentous fusion phage cloning vectors for the study of epitopes and design of vaccines. Parmley SF, et al. **Adv Exp Med Biol** 1989;251:215–8 (10 ref.)

ISOLATION & PURIFICATION

A new bacteriophage of Corynebacterium glutamicum isolated from swine waste. Bourque D, et al. **Am J Vet Res** 1989 Nov;50(11):1952–6

Purification and characterization of bacteriophage receptor on Veillonella rodentium cells. Phage–receptor on Veillonella. Totsuka M, et al. **Antonie Van Leeuwenhoek** 1989 Oct;56(3):263–71

Method of obtaining plaque–forming phage X of Shigella flexneri. Jankowski S. **Arch Immunol Ther Exp (Warsz)** 1972;20(1):109–17

Isolation and characterization of bacteriophage PM2 from Aeromonas hydrophila. Merino S, et al. **FEMS Microbiol Lett** 1990 Mar 15;56(3):239–44

A note on the isolation and propagation of lytic phages from Streptococcus uberis and their potential for strain typing. Hill AW, et al. **J Appl Bacteriol** 1989 Oct;67(4):425–31

Isolation and propagation of phages naturally associated with the aizawai variety of Bacillus thuringiensis. Inal JR, et al. **J Appl Bacteriol** 1990 Jan;68(1):17–21

Nontypeable bacteriophage patterns of methicillin–resistant Staphylococcus aureus involved in a hospital outbreak. Khalifa KI, et al. **J Clin Microbiol** 1989 Oct;27(10):2249–51

Bacteriophages in Helicobacter (Campylobacter) pylori. Schmid EN, et al. **J Med Microbiol** 1990 Jun;32(2):101–4

Host range and particle morphology of some bacteriophages affecting pathovars of Xanthomonas campestris. Alippi AM. **Microbiologia** 1989 Jun;5(1):35–43

Isolation and characterization of two rumen Streptococcus bovis bacteriophages. Styriak I, et al. **Microbiologica** 1989 Oct;12(4):317–22

[Properties of two Bacillus subtilis bacteriophages] Na SM, et al. **Wei Sheng Wu Hsueh Pao** 1990 Apr;30(2):117–21 (Eng. Abstr.) **(Chi)**

[Comparative study of cholera phages isolated from the water of open reservoirs and lysogenic strains of Vibrio El–Tor] Kudriakova TA, et al. **Gig Sanit** 1990 May;(5):7–9 (Eng. Abstr.) **(Rus)**

[Isolation of mutants of the Erwinia carotovora temperate phage 59 under the action of N–methyl–N'–nitro–N–nitrosoguanidine] Iagovdik MV, et al. **Mikrobiol Zh** 1983 Nov–Dec;45(6):93–5 (Eng. Abstr.) **(Rus)**

[Concentration and purification of D'Erell's phage] Marchenkov VI, et al. **Mikrobiol Zh** 1983 Nov–Dec; 45(6):96–9 (Eng. Abstr.) **(Rus)**

[Detection of the lysogenic state of the Pseudomonas phaseolicola 4012 R–form] Muras VA, et al. **Mikrobiol Zh** 1984 Jul–Aug;46(4):76–7 (Eng. Abstr.) **(Rus)**

METABOLISM

The bacteriophage kh receptor of Lactococcus lactis subsp. cremoris KH is the rhamnose of the extracellular wall polysaccharide. Valyasevi R, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1882–9

Conformational states of the bacteriophage P22 capsid subunit in relation to self–assembly. Prevelige PE Jr, et al. **Biochemistry** 1990 Jun 12;29(23):5626–33

Aggregation–related conformational change of the membrane–associated coat protein of bacteriophage M13. Spruijt RB, et al. **Biochemistry** 1989 Nov 14;28(23):9158–65

Spin–label ESR of bacteriophage M13 coat protein in mixed lipid bilayers. Characterization of molecular selectivity of charged phospholipids for the bacteriophage M13 coat protein in lipid bilayers. Wolfs JA, et al. **Biochemistry** 1989 Dec 26;28(26):9995–10001

Cell wall composition and surface properties in Bacillus subtilis: anomalous effect of incubation temperature on the phage–binding properties of bacteria containing varied amounts of teichoic acid. Archibald AR, et al. **J Gen Microbiol** 1989 Mar;135 (Pt 3):667–73

Conformational changes in bacteriophage phi 29 connector prevents DNA–binding activity. Herranz L, et al. **J Mol Biol** 1990 May 20;213(2):263–73

Functional domains in the bacteriophage phi 29 terminal protein for interaction with the phi 29 DNA polymerase and with DNA. Zaballos A, et al. **Nucleic Acids Res** 1989 Dec 25;17(24):10353–66

PATHOGENICITY

Nucleotide sequence and distribution of the pTR2030 resistance determinant (hsp) which aborts bacteriophage infection in lactococci. Hill C, et al. **Appl Environ Microbiol** 1990 Jul;56(7):2255–8

PHYSIOLOGY

Thermal inactivation and thermodynamic parameters of the cholera phage "kappa" [letter] Bhattacharya SC, et al. **Acta Virol (Praha)** 1990 Feb;34(1):110

Variations of sensitivity of Shigella flexneri bacilli to bacteriophages as a result of recombination. Slopek S, et al. **Arch Immunol Ther Exp (Warsz)** 1972;20(1):61–72

Further evidence for photoinduced genotoxicity of dictamnine as shown by prophage induction. Fujita H, et al. **Chem Biol Interact** 1989;72(1–2):105–11

Membrane morphogenesis from cloned fragments of bacteriophage PM2 DNA that contain the sp6.6 gene. Armour GA, et al. **FASEB J** 1990 Mar;4(5):1488–93

The influence of the O–antigen and the capsular polysaccharide on the establishment of PlCmts lysogeny in Klebsiella pneumoniae. Camprubi S, et al. **FEMS Microbiol Lett** 1989 Jul 1;51(1):67–9

Infection of Streptococcus oralis NCTC 11427 by pneumococcal phages. Ronda C, et al. **FEMS Microbiol Lett** 1989 Nov;53(1–2):187–92

Enhancement of Escherichia coli plasmid and chromosomal recombination by the Ref function of bacteriophage P1. Laufer CS, et al. **Genetics** 1989 Nov;123(3):465–76

Inability of a bacteriophage pool to control beef spoilage. Greer GG, et al. **Int J Food Microbiol** 1990 May; 10(3–4):331–42

Bacteriophage–enhanced sporulation: comparison of spore–converting bacteriophages PMB12 and SP10. Silver–Mysliwiec TH, et al. **J Bacteriol** 1990 Apr; 172(4):1948–53

Mutation induced by vibriophage PS166 infection changes biotype and phage type of Vibrio cholerae. Mitra SN. **J Med Microbiol** 1989 Oct;30(2):137–41

Studies on the replication of bacteriophage Cp–1 DNA in Streptococcus pneumoniae. García E, et al. **Microbiologia** 1986 Oct;2(2):115–20

The effect of rifampicin on the development of the Streptomyces bacteriophage phi C31. Rodríguez A, et al. **Microbiologia** 1988 Feb;4(1):47–53

Identification of the cell surface receptor for bacteriophage 18 from Aeromonas hydrophila. Merino S, et al. **Res Microbiol** 1990 Feb;141(2):173–80

[Sensitivity of cholera vibrions to specific phages] Alekseenko VV, et al. **Mikrobiol Zh** 1984 Sep–Oct; 46(5):65–9 (Eng. Abstr.) **(Rus)**

[The adsorption of specific phages on the cells and lipopolysaccharides of Pseudomonas phaseolicola] Samollenko VI, et al. **Mikrobiol Zh** 1985 May–Jun; 47(3):31–4 (Eng. Abstr.) **(Rus)**

[Lytic activity of Pseudomonas bacteriophages] Romashko AM, et al. **Mikrobiologiia** 1989 Sep–Oct;58(5):818–24 (Eng. Abstr.) **(Rus)**

[Phage receptors of Escherichia coli. Basic components of the outer membrane of E. coli as phage receptors] Likhacheva NA, et al. **Mol Gen Mikrobiol Virusol** 1989 Oct;(10):3–15 (93 ref.) (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Morphology of bacteriophages of E. Hammarström's set for typing Shigella sonnei. Krzywy T, et al. **Arch Immunol Ther Exp (Warsz)** 1972;20(1):73–83

Morphology of bacteriophages of Klebsiella bacilli. Krzywy T, et al. **Arch Immunol Ther Exp (Warsz)** 1972;20(1):85–107

Structural study of the lipid-containing bacteriophage PRD1 and its capsid and DNA components by laser Raman spectroscopy. Bamford DH, et al. **Biochemistry** 1990 Jun 26;29(25):5982–7

Direct observation of the phase behavior of the lipid bilayers of phage PM2 and the intact host cells by 1H–31P cross-polarization NMR. Odahara T, et al. **Biochemistry** 1990 Jun 26;29(25):5968–74

Ultraviolet resonance Raman spectroscopy as a probe of protein structure in the fd virus. Grygon CA, et al. **Biotechniques** 1988 Jan;6(1):50–5

Subunit secondary structure in filamentous viruses: predictions and observations. Finer-Moore J, et al. **J Biomol Struct Dyn** 1984 Aug;2(1):93–100

Electron microscope studies on the intracellular growth of PL-1 phage of Lactobacillus casei. Watanabe K, et al. **Microbiol Immunol** 1990;34(5):471–5

BACTERIOPHAGES, RNA see RNA PHAGES

BACTERIOPHAGES T see T-PHAGES

BACTERIORHODOPSIN

High-voltage electron diffraction from bacteriorhodopsin (purple membrane) is measurably dynamical. Glaeser RM, et al. **Acta Crystallogr A** 1989 Sep 1;45 (Pt 9):620–8

C(13)-substituted bacteriorhodopsin analogs. Danshina SV, et al. **Arch Biochem Biophys** 1990 Jun;279(2):225–31

Solid-state 13C and 15N NMR study of the low pH forms of bacteriorhodopsin. de Groot HJ, et al. **Biochemistry** 1990 Jul 24;29(29):6873–83

Photoaffinity labeling of bacteriorhodopsin. Ding WD, et al. **Biochemistry** 1990 May 22;29(20):4898–904

Transmembrane location of retinal in bacteriorhodopsin by neutron diffraction. Hauss T, et al. **Biochemistry** 1990 May 22;29(20):4904–13

The purple to blue transition of bacteriorhodopsin is accompanied by a loss of the hexagonal lattice and a conformational change. Heyn MP, et al. **Biochemistry** 1989 Nov 14;28(23):9166–72

The photoreaction of active-site-methylated bacteriorhodopsin: an investigation using static and time-resolved infrared difference spectroscopy. Kräutle R, et al. **Biochemistry** 1990 Apr 24;29(16):3915–23

Structure and protein environment of the retinal chromophore in light- and dark-adapted bacteriorhodopsin studied by solid-state NMR. Smith SO, et al. **Biochemistry** 1989 Oct 31;28(22):8897–904

Light- and dark-adapted bacteriorhodopsin, a time-resolved neutron diffraction study. Dencher NA, et al. **Biochim Biophys Acta** 1990 Jul 9;1026(1):51–6

Control of bacteriorhodopsin color by chloride at low pH. Significance for the proton pump mechanism. Renthal R, et al. **Biochim Biophys Acta** 1990 Apr 26;1016(3):378–84

Orientation of retinal in purple membrane determined by polarized Raman spectroscopy. Urabe H, et al. **Biophys J** 1989 Dec;56(6):1225–8

Structure of the retinal chromophore in sensory rhodopsin I from resonance Raman spectroscopy. Fodor SP, et al. **J Biol Chem** 1989 Nov 5;264(31):18280–3

The primary structure of a halorhodopsin from Natronobacterium pharaonis. Structural, functional and evolutionary implications for bacterial rhodopsins and halorhodopsins. Lanyi JK, et al. **J Biol Chem** 1990 Jan 25;265(3):1253–60

A hydrogen bonded chain in bacteriorhodopsin by computer modelling approach. Sankara-Ramakrishnan R, et al. **J Biomol Struct Dyn** 1989 Aug;7(1):187–205

Observations concerning topology and locations of helix ends of membrane proteins of known structure. White SH, et al. **J Membr Biol** 1990 May;115(2):145–58

Model for the structure of bacteriorhodopsin based on high-resolution electron cryo-microscopy. Henderson R, et al. **J Mol Biol** 1990 Jun 20;213(4):899–929

Water molecules and exchangeable hydrogen ions at the active centre of bacteriorhodopsin localized by neutron diffraction. Elements of the proton pathway? Papadopoulos G, et al. **J Mol Biol** 1990 Jul 5;214(1):15–9

Expression of two gas vacuole protein genes in Halobacterium halobium and other related species. Horne M, et al. **Mol Gen Genet** 1989 Sep;218(3):437–44

Protein microscopy. Bacteriorhodopsin—at last! [news] Caspar DL. **Nature** 1990 Jun 21;345(6277):666–7

Resonance Raman spectroscopy of the photoreceptor-like pigment of Halobacterium halobium. Mendelsohn R. **Nature** 1973 May 4;243(5401):22–4

The structure of bacteriorhodopsin and its relevance to the visual opsins and other seven-helix G-protein coupled receptors. Henderson R, et al. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):379–89 (39 ref.)

Vibrational spectra of rhodopsin and bacteriorhodopsin. Kitagawa T, et al. **Photochem Photobiol** 1989 Dec; 50(6):883–94 (53 ref.)

Transmembrane protein structure: spin labeling of bacteriorhodopsin mutants. Altenbach C, et al. **Science** 1990 Jun 1;248(4959):1088–92 (35 ref.)

ANALOGS & DERIVATIVES

14-Fluorobacteriorhodopsin and other fluorinated and 14-substituted analogues. An extra, unusually red-shifted pigment formed during dark adaptation. Tierno ME, et al. **Biochemistry** 1990 Jun 26;29(25):5948–53

ANALYSIS

Halorhodopsin: a light-driven active chloride transport system. Zimányi L, et al. **Ann N Y Acad Sci** 1989;574:11–9

Effect of partial delipidation of purple membrane on the photodynamics of bacteriorhodopsin. Fukuda K, et al. **Biochemistry** 1990 Feb 27;29(8):1997–2002

The interaction of Triton X-100 with purple membranes. Detergent binding, spectral changes and membrane solubilization. González-Mañas JM, et al. **Eur J Biochem** 1990 Mar 30;188(3):673–8

The transverse location of the retinal chromophore in the purple membrane by diffusion-enhanced energy transfer. Leder RO, et al. **J Mol Biol** 1989 Oct 20;209(4):683–701

Peptide building blocks from bacteriorhodopsin: isolation and physicochemical characterization of two individual transmembrane segments. Wuethrich M, et al. **J Protein Chem** 1990 Apr;9(2):201–7

BIOSYNTHESIS

An efficient system for the synthesis of bacteriorhodopsin in Halobacterium halobium. Ni BF, et al. **Gene** 1990 May 31;90(1):169–72

GENETICS

Vibrational spectroscopy of bacteriorhodopsin mutants: evidence for the interaction of proline-186 with the retinylidene chromophore. Rothschild KJ, et al. **Biochemistry** 1990 Jun 26;29(25):5954–60

Primary structure of sensory rhodopsin I, a prokaryotic photoreceptor. Blanck A, et al. **EMBO J** 1989 Dec 20; 8(13):3963–71

A defective proton pump, point-mutated bacteriorhodopsin Asp96——Asn is fully reactivated by azide. Tittor J, et al. **EMBO J** 1989 Nov;8(11):3477–82

Sensitivity of the retinal circular dichroism of bacteriorhodopsin to the mutagenetic single substitution of amino acids: tyrosine. Du JJ, et al. **FEBS Lett** 1990 Mar 26;262(2):155–8

Transcriptional induction of purple membrane and gas vesicle synthesis in the archaebacterium Halobacterium halobium is blocked by a DNA gyrase inhibitor. Yang CF, et al. **J Bacteriol** 1990 Jul;172(7):4118–21

Regeneration and functional incorporation of bacteriorhodopsin in membranes of fission yeast but not in E. coli. Hildebrandt V. **J Protein Chem** 1989 Jun; 8(3):345–6

Effect of genetic modification of tyrosine-185 on the proton pump and the blue-to-purple transition in bacteriorhodopsin. Jang DJ, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4103–7

ISOLATION & PURIFICATION

Large scale preparation of homogeneous bacteriorhodopsin. Lorber B, et al. **FEBS Lett** 1990 Feb 12;261(1):14–8

Preparative purification of functional bacteriorhodopsin by high-performance size-exclusion chromatography. Miercke LJ, et al. **J Chromatogr** 1989 Dec 8;483:331–40

METABOLISM

Structure and function of bacteriorhodopsin. Kouyama T, et al. **Adv Biophys** 1988;24:123–75 (174 ref.)

Proton translocation in proteins. Copeland RA, et al. **Annu Rev Phys Chem** 1989;40:671–98 (76 ref.)

The chromophore retinal hinders passive proton/hydroxide ion translocation through bacteriorhodopsin. Burghaus PA, et al. **Arch Biochem Biophys** 1989 Dec;275(2):395–409

Photoionization used as a tool for the study of biomembranes: fate of tetramethylbenzidine photocation in purple membrane. Rivière ME, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):130–6

Solubilization and functional reconstitution of the DCCD-sensitive Na+/H(+)-antiporter from Halobacterium halobium. Konishi T, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1339–45

Substitution of amino acids in helix F of bacteriorhodopsin: effects on the photochemical cycle. Ahl PL, et al. **Biochemistry** 1989 Dec 26;28(26):10028–34

Solid-state 13C NMR study of tyrosine protonation in dark-adapted bacteriorhodopsin. Herzfeld J, et al. **Biochemistry** 1990 Jun 12;29(23):5567–74

Vibrational spectroscopy of bacteriorhodopsin mutants: chromophore isomerization perturbs tryptophan-86. Rothschild KJ, et al. **Biochemistry** 1989 Aug 22; 28(17):7052–9

Activation parameters for the halorhodopsin photocycle: a phase lifetime spectroscopic study of the 520- and 640-nanometer intermediates. Spencer DB, et al. **Biochemistry** 1990 Mar 27;29(12):3140–5

Substitution of membrane-embedded aspartic acids in bacteriorhodopsin causes specific changes in different steps of the photochemical cycle. Stern LJ, et al. **Biochemistry** 1989 Dec 26;28(26):10035–42

Interconversions of the M, N, and O intermediates in the bacteriorhodopsin photocycle. Váró G, et al. **Biochemistry** 1990 Apr 17;29(15):3798–804

Pathways of the rise and decay of the M photointermediate(s) of bacteriorhodopsin. Váró G, et al. **Biochemistry** 1990 Mar 6;29(9):2241–50

Nature of the primary photochemical events in rhodopsin and bacteriorhodopsin. Birge RR. **Biochim Biophys Acta** 1990 Apr 26;1016(3):293–327 (331 ref.)

Factors affecting the absorption maxima of acidic forms of bacteriorhodopsin. A study with artificial pigments. Albeck A, et al. **Biophys J** 1989 Dec;56(6):1259–65

Photocycles of bacteriorhodopsin in light- and dark-adapted purple membrane studied by time-resolved absorption spectroscopy. Hofrichter J, et al. **Biophys J** 1989 Oct; 56(4):693–706

Orientation of the protonated retinal Schiff base group in bacteriorhodopsin from absorption linear dichroism. Lin SW, et al. **Biophys J** 1989 Oct;56(4):653–60

High sensitivity electron diffraction analysis. A study of divalent cation binding to purple membrane. Mitra AK, et al. **Biophys J** 1990 Feb;57(2):301–11

Decay of the tryptophan fluorescence anisotropy in bacteriorhodopsin and its modified forms. van den Berg R, et al. **Biophys J** 1990 Apr;57(4):759–64

Photoreactions of bacteriorhodopsin at acid pH. Váró G, et al. **Biophys J** 1989 Dec;56(6):1143–51

All-trans/13-cis isomerization of retinal is required for phototaxis signaling by sensory rhodopsins in Halobacterium halobium. Yan B, et al. **Biophys J** 1990 Apr; 57(4):807–14

Effects of modifications of the retinal beta-ionone ring on archaebacterial sensory rhodopsin I. Yan B, et al. **Biophys J** 1990 Mar;57(3):477–83

High resolution 13C-solid state NMR of bacteriorhodopsin: assignment of specific aspartic acids and structural implications of single site mutations. Engelhard M, et al. **Eur Biophys J** 1990;18(1):17–24

Electrooptical studies on proton-binding and -release of bacteriorhodopsin. Tsuji K, et al. **Eur Biophys J** 1990; 18(1):63–9

Anion binding to the chloride pump, halorhodopsin, and its implications for the transport mechanism. Lanyi JK, et al. **FEBS Lett** 1990 Jun 4;265(1-2):1–6 (35 ref.)

Properties and photochemistry of a halorhodopsin from the haloalkalophile, Natronobacterium pharaonis. Duschl A, et al. **J Biol Chem** 1990 Jan 25;265(3):1261–7

Release of dialkylglycerol from purple membrane phospholipids by phospholipase D. Muga A, et al. **J Biol Chem** 1990 Apr 15;265(11):5956–9

Absorption- and photocurrent-measurements of two aspartat mutants of bacteriorhodopsin. Butt HJ, et al. **J Protein Chem** 1989 Jun;8(3):347–9

Structure-function relationship of the light-driven proton pump bacteriorhodopsin. Dencher NA, et al. **J Protein Chem** 1989 Jun;8(3):340–3

Biogenesis of bacteriorhodopsin. Wrede P, et al. **J Protein Chem** 1989 Jun;8(3):343–4

Photoelectric measurements of purple membranes. Trissl HW. **Photochem Photobiol** 1990 Jun;51(6):793–818 (219 ref.)

Halorhodopsin, a light-driven electrogenic chloride-transport system. Lanyi JK. **Physiol Rev** 1990 Apr;70(2):319–30 (82 ref.)

Structural changes in bacteriorhodopsin during proton translocation revealed by neutron diffraction. Dencher NA, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7876–9

Aspartic acid-96 is the internal proton donor in the reprotonation of the Schiff base of bacteriorhodopsin. Otto H, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9228–32

Substitution of amino acids Asp-85, Asp-212, and Arg-82 in bacteriorhodopsin affects the proton release phase of the pump and the pK of the Schiff base. Otto H, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1018–22

Fourier transform infrared evidence for proline structural changes during the bacteriorhodopsin photocycle. Rothschild KJ, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(24):9832–5

Sensory rhodopsins I and II modulate a methylation/demethylation system in Halobacterium halobium phototaxis. Spudich EN, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7746–50

Protonation state of Asp (Glu)-85 regulates the purple-to-blue transition in bacteriorhodopsin mutants Arg-82——Ala and Asp-85——Glu: the blue form is inactive in proton translocation. Subramaniam S, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1013–7

PHARMACOLOGY

Bacteriorhodopsin drives the glutamate transporter of synaptic vesicles after co-reconstitution. Maycox PR, et al. **EMBO J** 1990 May;9(5):1465–9

RADIATION EFFECTS

Effect of a light-induced pH gradient on purple-to-blue and purple-to-red transitions of bacteriorhodopsin. Nasuda-Kouyama A, et al. **Biochemistry** 1990 Jul 24; 29(29):6778–88

Protonation and deprotonation of the M, N, and O intermediates during the bacteriorhodopsin photocycle. Váró G, et al. **Biochemistry** 1990 Jul 24;29(29):6858–65

ULTRASTRUCTURE

Measuring changes in membrane thickness by scanning tunneling microscopy. Fisher KA, et al. **Biochim Biophys Acta** 1990 Apr 30;1023(3):325–34

Analysis of high–resolution electron diffraction patterns from purple membrane labelled with heavy–atoms. Ceska TA, et al. **J Mol Biol** 1990 Jun 5;213(3):539–60

Tertiary structure of bacteriorhodopsin. Positions and orientations of helices A and B in the structural map determined by neutron diffraction. Popot JL, et al. **J Mol Biol** 1989 Dec 20;210(4):829–47

BACTERIURIA

Bacteriuria in the puerperium. Risk factors, screening procedures, and treatment programs. Stray–Pdersen B, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):792–7

Isolation of Neisseria gonorrheae and concomitant bacterial microflora from urine obtained by suprapubic bladder puncture in women with gonococcal urethritis. Péč J Jr, et al. **Int Urol Nephrol** 1990;22(2):167–71

BLOOD

[Pharmacokinetic studies of cefotiam in late pregnancy] Voigt R, et al. **Z Geburtshilfe Perinatol** 1989 Jul–Aug; 193(4):185–7 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Bacteriuria and nonobstructive renovascular disease. Dontas AS, et al. **Am Heart J** 1967 Aug;74(2):290–1 (26 ref.)

Urinary tract infection in the elderly [letter; comment] Fulton JD, et al. **Br J Hosp Med** 1990 Apr;43(4):254–5 Comment on: Br J Hosp Med 1989 Dec;42(6):441.

Asymptomatic bacteriuria in normal and high–risk pregnancy. Golan A, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Nov;33(2):101–8

Significant bacteriuria has prognostic significance in primary biliary cirrhosis. Morreale M, et al. **J Hepatol** 1989 Sep; 9(2):149–58

[Bacteriuria in primary biliary cirrhosis] Barrios Alonso V, et al. **Rev Clin Esp** 1989 Oct;185(6):295–7 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Spontaneous clearance of asymptomatic bacteriuria in infants. Wettergren B, et al. **Acta Paediatr Scand** 1990 Mar; 79(3):300–4

Screening for asymptomatic bacteriuria, hematuria and proteinuria. The U.S. Preventive Services Task Force. **Am Fam Physician** 1990 Aug;42(2):389–95 (70 ref.)

Comparison of urine dipstick, microscopy, and culture for the detection of bacteriuria in children. Goldsmith BM, et al. **Clin Pediatr (Phila)** 1990 Apr;29(4):214–8

Triphenyl tetrazolium chloride (TTC) dye test for quick diagnosis of urinary tract infection. Wagle N, et al. **Indian J Pediatr** 1989 Sep–Oct;56(5):635–8

Bacteriuria testing by the ATP method as an integral part in the diagnosis and therapy of urinary tract infection (UTI). Lundin A, et al. **J Biolumin Chemilumin** 1989 Jul; 4(1):381–9

Dipstick urinalysis for bacteriuria [letter; comment] Loker RG, et al. **J Clin Pathol** 1990 Jan;43(1):86 Comment on: J Clin Pathol 1989 Apr;42(4):444.

Screening for asymptomatic bacteriuria in pregnancy. A decision and cost analysis [see comments] Wadland WC, et al. **J Fam Pract** 1989 Oct;29(4):372–6 Comment in: J Fam Pract 1990 Feb;30(2):233, 236.

Significance of asymptomatic bacteriuria in spinal cord injury patients on condom catheter. Sotolongo JR Jr, et al. **J Urol** 1990 May;143(5):979–80

Urine screening for leucocytes and bacteria by dipstick and reflectance spectrophotometry. Barker BA, et al. **Med Lab Sci** 1989 Apr;46(2):97–100

Chemical pre–screening of urines submitted for bacteriological analysis. Brown H. **Med Lab Sci** 1988 Oct; 45(4):304–7

Evaluation of a bioluminescence assay for the detection of bacteriuria. Gästrin B, et al. **Scand J Infect Dis** 1989; 21(4):409–14

Uricult and Sensicult dipslides for diagnosis of bacteriuria and prediction of drug resistance in primary health care. Ferry S, et al. **Scand J Prim Health Care** 1989 Jun; 7(2):123–8

[Screening for bacteriuria in the laboratory: autotrak, test strips and microscopic examination compared with culture] Frimodt–Møller N, et al. **Ugeskr Laeger** 1989 Nov 13; 151(46):3062–4 (Eng. Abstr.) **(Dan)**

[Detection of asymptomatic bacteriuria in the puerperium using a test strip] Denison U, et al. **Gynakol Rundsch** 1989; 29 Suppl 2:331–2 **(Ger)**

[Excretion of antibody–coated bacteria in chronic pyelonephritis] Falkenhagen U, et al. **Z Gesamte Hyg** 1989 Oct;35(10):579–82 (Eng. Abstr.) **(Ger)**

[Asymptomatic bacteriuria] Lichodziejewska M, et al. **Pol Arch Med Wewn** 1987 Nov;78(5):279–84 (38 ref.) **(Pol)**

DRUG THERAPY

Comparative study of the efficacy and toxicity of nitrofurantoin and amoxycillin in the treatment of bacteriuria of pregnancy. Cefai C, et al. **Br J Clin Pract** 1989 Jun;43(6):215–6

Single–dose versus six–day therapy with sulfamethizole for asymptomatic bacteriuria during pregnancy. A prospective randomised study. Olsen L, et al. **Dan Med Bull** 1989 Oct; 36(5):486–7

Possibilities of extending the indications for application of single antibacterial doses in urological practice. Minkov N, et al. **Int Urol Nephrol** 1989;21(4):359–68

A comparison of the effect of chlorhexidine antisepsis, soap and antibiotics on bacteriuria, perineal colonization and environmental contamination in spinally injured patients. Sanderson PJ, et al. **J Hosp Infect** 1990 Apr;15(3):235–43

Norfloxacin versus trimethoprim–sulfamethoxazole. A study in patients with known bacteriuria undergoing transurethral resection of the prostate. Adolfsson J, et al. **Scand J Urol Nephrol** 1989;23(4):255–9

Observations in the course of the follow–up of Sumetrolim–treated patients. Szolnoki G, et al. **Ther Hung** 1989;37(3):154–9

[Urinary tract infections, antibiotics] Schollmeyer P. **Verh Dtsch Ges Inn Med** 1989;95:260–2 **(Ger)**

[Comparative studies of the effectiveness of 1–day treatment and 7–day treatment with sulfamerazine/trimethoprim (Berlocombin) of patients with urinary tract infection] Fünfstück R, et al. **Z Gesamte Inn Med** 1990 Jan 1;45(1):1–5 (Eng. Abstr.) **(Ger)**

[Disappearance of bacteriuria after transurethral prostatectomy with special reference to the sensitivity to the used antimicrobials] Fujita K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Nov;80(11):1605–8 (Eng. Abstr.) **(Jpn)**

[Results of 2–week and 3–month antibacterial therapy of infections of the upper and lower segments of the urinary tract] Wielgosz A, et al. **Pol Arch Med Wewn** 1988 Nov; 80(5):267–74 (Eng. Abstr.) **(Pol)**

EPIDEMIOLOGY

Bacteriuria in representative population samples of persons aged 72–79 years. Nordenstam G, et al. **Am J Epidemiol** 1989 Dec;130(6):1176–86

Asymptomatic bacteriuria in pregnant Nigerian patients. Nnatu S, et al. **Clin Exp Obstet Gynecol** 1989;16(4):126–9

Sickle trait and its association with birthweight and urinary tract infections in pregnancy. Baill IC, et al. **Int J Gynaecol Obstet** 1990 Sep;33(1):19–21

Asymptomatic bacteriuria in the elderly. Kaye D, et al. **Trans Am Clin Climatol Assoc** 1988;100:155–62 (29 ref.)

ETIOLOGY

Fever, bacteriuria, and pyuria in spinal cord injured patients with indwelling urethral catheters. Peterson JR, et al. **Arch Phys Med Rehabil** 1989 Nov;70(12):839–41

Urine–collection devices for use in adults with urinary incontinence. Warren JW. **J Am Geriatr Soc** 1990 Mar; 38(3):364–7

Post–operative urinary tract infection and wound infection in women undergoing caesarean section: a comparison of two study periods in 1985 and 1987. Leigh DA, et al. **J Hosp Infect** 1990 Feb;15(2):107–16

Outer membrane proteins of E. coli in the host–pathogen interaction in urinary tract infection. Robledo JA, et al. **J Urol** 1990 Feb;143(2):386–91

[Bacteriuria] Köhler H. **Internist (Berl)** 1990 Mar; 31(3):W33–9 **(Ger)**

[Pathogenic characteristics of Escherichia coli strains in cases of asymptomatic bacteriuria and symptomatic urinary tract infections] Misiewicz IA, et al. **Med Dosw Mikrobiol** 1989; 41(3–4):151–9 (Eng. Abstr.) **(Pol)**

[Bacterial urinary infections in acute leukemia] Nowicka J, et al. **Pol Tyg Lek** 1989 Jun 19–26;44(25–26):607–10 (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

Antibodies to major outer membrane proteins of Escherichia coli in urinary infection in the elderly. Nicolle LE, et al. **J Infect Dis** 1989 Oct;160(4):627–33

MICROBIOLOGY

Bacterial cultures for cystitis [letter; comment] Johnson JR, et al. **Ann Intern Med** 1990 Jun 15;112(12):966 Comment on: Ann Intern Med 1990 Mar 1;112(5):387–8.

Bacteriological state of the urine in symptom–free adult males. Sugarman ID, et al. **Br J Urol** 1990 Aug; 66(2):148–51

Activity of antiseptics against Escherichia coli growing as biofilms on silicone surfaces. Stickler D, et al. **Eur J Clin Microbiol Infect Dis** 1989 Nov;8(11):974–8

Evaluation of the Cobas–Bact system for direct and rapid identification and antimicrobial susceptibility testing of Enterobacteriaceae from positive urine specimens. Kamm W, et al. **Int J Med Microbiol** 1989 Sep;271(3):272–80

Phosphatase–novobiocin–mannose–inhibition test (PNMI–test) for routine identification of the coagulase–negative staphylococcal urinary tract pathogens S. epidermidis and S. saprophyticus. Schmidt H, et al. **Int J Med Microbiol** 1990 Apr;272(4):419–25

Numerical analysis of electrophoretic protein patterns of Providencia rettgeri strains from human faeces, urine and other specimens. Costas M, et al. **J Appl Bacteriol** 1989 Oct;67(4):441–52

Numerical analysis of electrophoretic protein patterns of Providencia stuartii strains from urine, wound and other clinical sources. Costas M, et al. **J Appl Bacteriol** 1990 May; 68(5):505–18

The relation of colonization of the perineum to bacteriuria and environmental contamination in spinally injured patients. Sanderson PJ, et al. **J Hosp Infect** 1990 Apr; 15(3):229–34

Gardnerella vaginalis as a urinary pathogen [letter; comment] Clarke RW, et al. **J Infect** 1989 Sep;19(2):191–3 Comment on: J Infect 1989 Jan;18(1):45–9.

The evaluation of urine pH in screening for asymptomatic bacteriuria in pregnancy. Harlass FF, et al. **Milit Med** 1990 Feb;155(2):49–51

E. coli and urease–induced crystallisation in urine. Hedelin H, et al. **Scand J Urol Nephrol** 1990;24(1):57–61

Formation of bobierrite (magnesium phosphate) crystal aggregates by bacteria from human urine and renal calculi. del Moral A, et al. **Urol Int** 1989;44(4):222–6

[Hemagglutinating ability and fimbrial antigens of Escherichia coli strains isolated from urine] Nimmich W, et al. **Int J Med Microbiol** 1990 Apr;272(4):411–8 (Eng. Abstr.) **(Ger)**

[Rapid typing of Escherichia coli K antigens using bacteriophages] Nimmich W, et al. **Z Gesamte Hyg** 1989 Oct;35(10):583–5 (Eng. Abstr.) **(Ger)**

[Differentiation of coagulase negative staphylococci from significant bacteriuria] Schmidt H, et al. **Z Gesamte Hyg** 1989 Oct;35(10):585–8 (Eng. Abstr.) **(Ger)**

[An automated method of detecting bacteriuria] Antonov VS, et al. **Lab Delo** 1990;(4):21–4 (Eng. Abstr.) **(Rus)**

[Urinary microflora and the status of local immunity in children with cystitis] Sentsova TB, et al. **Pediatriia** 1990; (2):19–23 (Eng. Abstr.) **(Rus)**

[Microbiologic indices of the urine in patients with various courses of pyelonephritis] Rudenko AV, et al. **Vrach Delo** 1989 Aug;(8):50–2 **(Rus)**

[Bacteria isolated from urine and renal tissue samples and their relation to renal histology] Gökalp A, et al. **Mikrobiyol Bul** 1988 Jan;22(1):1–7 (Eng. Abstr.) **(Tur)**

PATHOLOGY

Follicular cystitis in girls with untreated asymptomatic or covert bacteriuria. Hansson S, et al. **J Urol** 1990 Feb; 143(2):330–2

PHYSIOPATHOLOGY

Lower urinary tract dysfunction in girls with untreated asymptomatic or covert bacteriuria. Hansson S, et al. **J Urol** 1990 Feb;143(2):333–5

PREVENTION & CONTROL

Silver alloy coated catheters reduce catheter–associated bacteriuria. Liedberg H, et al. **Br J Urol** 1990 Apr; 65(4):379–81

Refinements in the coating of urethral catheters reduces the incidence of catheter–associated bacteriuria. An experimental and clinical study. Liedberg H, et al. **Eur Urol** 1990;17(3):236–40

Asymptomatic bacteriuria in school children. Joseph TP, et al. **Indian J Pediatr** 1989 Jan–Feb;56(1):121–3

[Antibiotic prophylaxis with enoxacin in extracorporeal shockwave lithotripsy] Knipper A, et al. **Infection** 1989;17 Suppl 1:S37–8 (Eng. Abstr.) **(Ger)**

[Antibiotic prophylaxis in endoscopic urologic surgery] Asuero Mantero M, et al. **Actas Urol Esp** 1989 Sep–Oct; 13(5):353–6 (Eng. Abstr.) **(Spa)**

SURGERY

[Purulent retention in the upper urinary tract and pregnancy. Apropos of 3 cases] Mosbah A, et al. **Ann Urol (Paris)** 1990;24(3):203–5 (Eng. Abstr.) **(Fre)**

[The dysuria syndrome. Significance of urethral diameter for recurrent bacterial cystitis in the female] Schilling A, et al. **Gynakol Rundsch** 1989;29(4):200–14 (Eng. Abstr.) **(Ger)**

THERAPY

Asymptomatic bacteriuria. Which patients should be treated? Zhanel GG, et al. **Arch Intern Med** 1990 Jul;150(7):1389–96 (93 ref.)

Untreated bacteriuria in asymptomatic girls with renal scarring. Hansson S, et al. **Pediatrics** 1989 Dec;84(6):964–8

URINE

Optimized urinary microscopy for assessment of bacteriuria in primary care. Ferry S, et al. **J Fam Pract** 1990 Aug; 31(2):153–9; discussion 159–61

Screening urines for bacteriuria. Stevens M. **Med Lab Sci** 1989 Jul;46(3):194–206 (104 ref.)

[The pertinence of microscopic analysis of the urine as a diagnostic test for asymptomatic bacteriuria in pregnancy] Boucher M, et al. **Union Med Can** 1989 Jul–Aug; 118(4):162–6 (Eng. Abstr.) **(Fre)**

BACTEROIDACEAE

ANALYSIS

Chemical and biological properties of lipopolysaccharide, lipid A and degraded polysaccharide from Wolinella recta ATCC 33238. Kumada H, et al. **J Gen Microbiol** 1989 Apr; 135 (Pt 4):1017–25

CLASSIFICATION

The problem of the taxonomy of the fusiform bacillus of acute necrotizing ulcerative gingivitis (Vincent's gingivitis). Holbrook WP, et al. **Antonie Van Leeuwenhoek** 1990; 57(1):55–8 (22 ref.)

Current taxonomy of medically important nonsporing anaerobes. Hofstad T. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S122–6 (44 ref.)

[Anaerobic gram-negative bacilli] Werner H. **Int J Med Microbiol** 1990 Jun;273(2):246–60 (15 ref.) **(Ger)**

ENZYMOLOGY

Spectroscopic studies of partially reduced forms of Wolinella succinogenes nitrite reductase. Blackmore RS, et al. **FEBS Lett** 1990 May 21;264(2):257–62

GENETICS

Cloning and sequencing of an endoglucanase (end1) gene from Butyrivibrio fibrisolvens H17c. Berger E, et al. **Mol Gen Genet** 1989 Oct;219(1–2):193–8

GROWTH & DEVELOPMENT

Use of antibiotic resistance mutations to track strains of obligately anaerobic bacteria introduced into the rumen of sheep. Flint HJ, et al. **J Appl Bacteriol** 1989 Aug; 67(2):177–83

ISOLATION & PURIFICATION

Bacteremias caused by Selenomonas artemidis and Selenomonas infelix. Bisiaux-Salauze B, et al. **J Clin Microbiol** 1990 Jan;28(1):140–2

Capnophilic and anaerobic bacteremia in neutropenic patients: an oral source. Baquero F, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S157–60

ULTRASTRUCTURE

Surface characteristics of Wolinella recta ATCC 33238 and human clinical isolates: correlation of structure with function. Borinski R, et al. **Infect Immun** 1990 Sep; 58(9):2770–6

BACTEROIDES

A technique for the photography of surface morphology of bacterial colonies. Campbell RJ. **Aust Vet J** 1989 Sep; 66(9):303–4

Effects of an enteric anaerobic bacterial culture supernatant and deoxycholate on intestinal calcium absorption and disaccharidase activity. Walshe K, et al. **Gut** 1990 Jul; 31(7):770–6

Bacteroides lipopolysaccharides (LPS) induce anaphylactoid and lethal reactions in LPS–responsive and –nonresponsive mice primed with muramyl dipeptide. Takada H, et al. **J Infect Dis** 1990 Aug;162(2):428–34

ANALYSIS

Pilins from the B serogroup of Bacteroides nodosus: characterization, expression, and cross–protection. Elleman TC, et al. **Infect Immun** 1990 Jun;58(6):1545–51

Purification and properties of a 75–kilodalton major protein, an immunodominant surface antigen, from the oral anaerobe Bacteroides gingivalis. Yoshimura F, et al. **Infect Immun** 1989 Nov;57(11):3646–52

Protein banding patterns of the outer membrane–enriched fraction of Bacteroides bivius. Dinsmoor MJ, et al. **J Clin Microbiol** 1990 Mar;28(3):405–8

Outer membrane protein and lipopolysaccharide heterogeneity among Eikenella corrodens isolates. Chen CK, et al. **J Infect Dis** 1990 Sep;162(3):664–71

CLASSIFICATION

Serological studies of Bacteroides vulgatus from normal gut flora. Meisel-Mikołajczyk F, et al. **Acta Microbiol Pol** 1989; 38(2):171–6

Fluorescent–oligonucleotide probing of whole cells for determinative, phylogenetic, and environmental studies in microbiology. Amann RI, et al. **J Bacteriol** 1990 Feb; 172(2):762–70

DRUG EFFECTS

Imipenem resistance in Bacteroides distasonis mediated by a novel beta–lactamase. Hurlbut S, et al. **Antimicrob Agents Chemother** 1990 Jan;34(1):117–20

Susceptibilities of Bacteroides and Fusobacterium spp. from foot rot in goats to 10 beta–lactam antibiotics. Piriz Duran S, et al. **Antimicrob Agents Chemother** 1990 Apr;34(4):657–9

Comparison of in vivo and in vitro efficacy of ceftizoxime. Delaney ML, et al. **Clin Ther** 1990;12 Suppl C:25–30

In vitro comparison of cefoperazone/sulbactam with selected antimicrobials against 300 bacteroides isolates. Inhibitory activity and time–kill kinetic studies. Gelfand MS, et al. **Diagn Microbiol Infect Dis** 1989 Sep–Oct;12(5):421–8

Susceptibility of Bacteroides non–fragilis and fusobacteria to amoxicillin, amoxicillin/clavulanate, ticarcillin, ticarcillin/clavulanate, cefoxitin, imipenem and metronidazole. Jacobs MR, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jun;9(6):417–21

In vitro activity of daptomycin–metronidazole combinations against mixed bacterial cultures: reduced activity of metronidazole against Bacteroides species in the presence of Enterococcus faecalis. Nagy E, et al. **Eur J Clin Microbiol Infect Dis** 1990 Apr;9(4):287–91

Trospectomycin enhances surface phagocytosis of Bacteroides and Staphylococcus by altering the bacterial glycocalyx. Veringa EM, et al. **Int J Med Microbiol** 1989 Sep;271(3):311–20

In–vitro activity of ten antibiotics against clinical isolates of Bacteroides ureolyticus [letter] Eley A, et al. **J Antimicrob Chemother** 1990 Apr;25(4):703–4

Efficacy of clavulanate–potentiated antibiotics against Bacteroides species and artificially associated cultures of aerobes and anaerobes. Werner H, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:55–61

The effects of chlorhexidine on the maximum specific growth rate, biomass and hydrolytic enzyme production of Bacteroides gingivalis grown in continuous culture. Minhas T, et al. **J Appl Bacteriol** 1989 Sep;67(3):309–16

Susceptibility of Eikenella corrodens to antimicrobial agents. Sofianou D, et al. **J Chemother** 1990 Jun;2(3):156–8

Bacteriostatic effect of tetracycline in a temporary cement. Cohen RB, et al. **J Prosthet Dent** 1989 Nov;62(5):607–9

Evolution of antimicrobial susceptibility in isolates of the Bacteroides fragilis group in Spain. García–Rodríguez JE, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S142–51

Tn5030: a conjugative transposon conferring clindamycin resistance in Bacteroides species. Halula M, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S235–42

[Susceptibility of clinically important Bacteroides species against enoxacin–metronidazole and enoxacin–clindamycin combinations] Heizmann WR, et al. **Infection** 1989;17 Suppl 1:S11–3 (Eng. Abstr.) **(Ger)**

[The in vitro sensitivity of Bacteroides gingivalis and Bacteroides intermedius to different classes of antibiotic chemical molecules] Paolantonio M, et al. **Minerva Stomatol** 1990 May;39(5):347–52 (Eng. Abstr.) **(Ita)**

[Gnotobiotic studies to determine the colonization resistance of the intestines] Gorskaia EM. **Antibiot Khimioter** 1989 Aug;34(8):601–6 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Antigenic nature of the chloride–stimulated cellobiosidase and other cellulases of Fibrobacter succinogenes subsp. succinogenes S85 and related fresh isolates. Huang L, et al. **Appl Environ Microbiol** 1990 May;56(5):1229–34

Regulation and distribution of Fibrobacter succinogenes subsp. succinogenes S85 endoglucanases. McGavin M, et al. **Appl Environ Microbiol** 1990 May;56(5):1235–44

Cleavage action of a trypsin–like protease from Bacteroides gingivalis 381 on reduced egg–white lysozyme. Endo J, et al. **Arch Oral Biol** 1989;34(11):911–6

Inhibition of protease activities of periodontopathic bacteria by extracts of plants used in Kenya as chewing sticks (mswaki). Homer KA, et al. **Arch Oral Biol** 1990; 35(6):421–4

Collagenolytic activity of the extracellular vesicles of Bacteroides gingivalis W50 and an avirulent variant W50/BE1. Smalley JW, et al. **Arch Oral Biol** 1989; 34(7):579–83

Evaluation of two methods for rapid testing for beta–lactamase production in Bacteroides and Fusobacterium. Appelbaum PC, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jan;9(1):47–50

Surface location of a Bacteroides gingivalis glycylprolyl protease. Grenier D, et al. **Infect Immun** 1989 Nov; 57(11):3265–9

Purification and characterization of alkaline phosphatase of Bacteroides gingivalis 381. Yamashita Y, et al. **Infect Immun** 1990 Sep;58(9):2882–7

The effect of sub–inhibitory concentrations of chlorhexidine on the proteolytic activity of Bacteroides gingivalis. Millward TA, et al. **J Antimicrob Chemother** 1990 Jan; 25(1):31–7

Characterization of superoxide dismutases purified from either anaerobically maintained or aerated Bacteroides gingivalis. Amano A, et al. **J Bacteriol** 1990 Mar; 172(3):1457–63

Sequencing the gene for an imipenem–cefoxitin–hydrolyzing enzyme (CfiA) from Bacteroides fragilis TAL2480 reveals strong similarity between CfiA and Bacillus cereus beta–lactamase II. Thompson JS, et al. **J Bacteriol** 1990 May;172(5):2584–93

Purification and characterization of a new hydrolase for conjugated bile acids, chenodeoxycholyltaurine hydrolase, from Bacteroides vulgatus. Kawamoto K, et al. **J Biochem (Tokyo)** 1989 Dec;106(6):1049–53

The RNA polymerases of Porphyromonas gingivalis and Fusobacterium nucleatum are unrelated to the RNA polymerase of Escherichia coli. Klimpel KW, et al. **J Dent Res** 1990 Sep;69(9):1567–72

Production of cell–bound and vesicle–associated trypsin–like protease, alkaline phosphatase and N–acetyl–beta–glucosaminidase by Bacteroides gingivalis strain W50. Minhas T, et al. **J Gen Microbiol** 1989 Mar; 135 (Pt 3):557–64

Measurement of protease thermostability, twitching motility and colony size of Bacteroides nodosus. Depiazzi LJ, et al. **Vet Microbiol** 1990 May;22(4):353–63

GENETICS

Electroporation induced transformation of Bacteroides ruminicola and Bacteroides uniformis by plasmid DNA. Thomson AM, et al. **FEMS Microbiol Lett** 1989 Oct 1; 52(1–2):101–4

Heterologous expression of the Bacteroides ruminicola xylanase gene in Bacteroides fragilis and Bacteroides uniformis. Whitehead TR, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1–3):61–5

Detection of conjugal transfer systems in oral, black–pigmented Bacteroides spp. Guiney DG, et al. **J Bacteriol** 1990 Jan;172(1):495–7

Structure of the cel–3 gene from Fibrobacter succinogenes S85 and characteristics of the encoded gene product, endoglucanase 3. McGavin MJ, et al. **J Bacteriol** 1989 Oct; 171(10):5587–95

Cloning and sequencing of a Bacteroides ruminicola B(1)4 endoglucanase gene. Matsushita O, et al. **J Bacteriol** 1990 Jul;172(7):3620–30

A cryptic 65–kilobase–pair transposonlike element isolated from Bacteroides uniformis has homology with Bacteroides conjugal tetracycline resistance elements. Shoemaker NB, et al. **J Bacteriol** 1990 Apr;172(4):1694–702

A tetracycline efflux gene on Bacteroides transposon Tn4400 does not contribute to tetracycline resistance. Speer BS, et al. **J Bacteriol** 1990 Jan;172(1):292–8

The region of a Bacteroides conjugal chromosomal tetracycline resistance element which is responsible for production of plasmidlike forms from unlinked chromosomal DNA might also be involved in transfer of the element. Stevens AM, et al. **J Bacteriol** 1990 Aug; 172(8):4271–9

DNA sequence of a Fibrobacter succinogenes mixed–linkage beta–glucanase (1,3–1,4–beta–D–glucan 4–glucanohydrolase) gene. Teather RM, et al. **J Bacteriol** 1990 Jul;172(7):3837–41

The genes for three xylan–degrading activities from Bacteroides ovatus are clustered in a 3.8–kilobase region. Whitehead TR, et al. **J Bacteriol** 1990 May;172(5):2408–12

Restriction endonuclease analysis of Eikenella corrodens. Chen CK, et al. **J Clin Microbiol** 1990 Jun;28(6):1265–70

Genetic heterogeneity of Porphyromonas (Bacteroides) gingivalis by genomic DNA fingerprinting [published erratum appears in J Dent Res 1990 Sep;69(9):following 1623] Loos BG, et al. **J Dent Res** 1990 Aug;69(8):1488–93

Sequence of pilin from Bacteroides nodosus 351 (Serogroup H) and implications for serogroup classification. Hoyne PA, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1113–22

Isolation of an endoglucanase gene from Bacteroides ruminicola subsp. brevis. Woods JR, et al. **J Gen Microbiol** 1989 Sep;135 (Pt 9):2543–9

DNA homologies shared among E. corrodens isolates and other corroding bacilli from the oral cavity. Chen CK, et al. **J Periodont Res** 1990 Mar;25(2):106–12

Genetic transfer systems in Bacteroides: cloning and mapping of the transferable tetracycline–resistance locus. Guiney DG, et al. **Mol Microbiol** 1989 Nov;3(11):1617–23

Identification and genetic mapping of proteins encoded in the fimbrial subunit gene region of Bacteroides nodosus. Billington SJ, et al. **Vet Microbiol** 1990 Mar;22(1):53–68

GROWTH & DEVELOPMENT

Iron–regulated outer membrane proteins in the periodontopathic bacterium, Bacteroides gingivalis. Bramanti TE, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1146–54

Use of antibiotic resistance mutations to track strains of obligately anaerobic bacteria introduced into the rumen of sheep. Flint HJ, et al. **J Appl Bacteriol** 1989 Aug; 67(2):177–83

Effect of different carbohydrates on growth, polysaccharidase and glycosidase production by Bacteroides ovatus, in batch and continuous culture. Macfarlane GT, et al. **J Appl Bacteriol** 1990 Feb; 68(2):179–87

Effect of pH on the growth and proteolytic activity of Porphyromonas gingivalis and Bacteroides intermedius. Takahashi N, et al. **J Dent Res** 1990 Jun;69(6):1266–9

IMMUNOLOGY

The effects of deoxycholate and sodium dodecyl sulphate on the serological reactivity of antigens isolated from six Bacteroides reference strains. Beckmann I, et al. **Antonie Van Leeuwenhoek** 1990 Feb;57(2):71–6

Interleukin–1 and interleukin–1 inhibitor production by human adherent cells stimulated with periodontopathic bacteria. Walsh LJ, et al. **Arch Oral Biol** 1989;34(9):679–83

Serum antibody responses in sheep after natural infection with Bacteroides nodosus. Whittington RJ, et al. **Aust Vet J** 1990 Mar;67(3):98–101

An anamnestic serological test for ovine footrot. Whittington RJ, et al. **Aust Vet J** 1990 May;67(5):157–9

Humoral immune response to Bacteroides gingivalis fimbrial

antigen in mice. Ogawa T, et al. **Immunology** 1990 Jan; 69(1):8–13

Monoclonal antibody against a serotype antigen of Porphyromonas (Bacteroides) endodontalis and characteristics of the antigen. Hanazawa S, et al. **Infect Immun** 1990 Aug;58(8):2542–6

Characterization of rat T helper cell clones specific for Bacteroides gingivalis antigen. Katz J, et al. **Infect Immun** 1990 Sep;58(9):2785–91

Mucosal and systemic immune responses in BALB/c mice to Bacteroides gingivalis fimbriae administered orally. Ogawa T, et al. **Infect Immun** 1989 Nov;57(11):3466–71

Chemical, immunobiological and antigenic characterizations of lipopolysaccharides from Bacteroides gingivalis strains. Fujiwara T, et al. **J Gen Microbiol** 1990 Feb;136 (Pt 2):319–26

Characterization of a polysaccharide antigen from Bacteroides gingivalis. Schifferle RE, et al. **J Immunol** 1989 Nov 1;143(9):3035–42

Immunoadjuvant effects of periodontitis-associated bacteria. Ochiai K, et al. **J Periodont Res** 1989 Sep;24(5):322–8

Detection of Bacteroides gingivalis antigenic proteins by immunoblotting analysis. Laosrisin N, et al. **J Periodontol** 1990 May;61(5):261–8

Stimulation of lymphocytes in vitro by Bacteroides intermedius and Bacteroides (Porphyromonas) gingivalis sonicates. Raber-Durlacher JE, et al. **J Periodontol** 1990 Apr;61(4):217–23

Serum and gingival tissue antibody levels to oral microbial antigens in human chronic adult periodontitis. Turner DW, et al. **Microbios** 1989;60(244–245):133–40

Effects of lipopolysaccharide from Bacteroides gingivalis in SUS rats. Isogai H, et al. **Nippon Juigaku Zasshi** 1989 Oct; 51(5):1095–7

Detection of serum antibodies of oral Porphyromonas (Bacteroides) asaccharolyticus in dogs: relationship to periodontal disease. Isogai H, et al. **Nippon Juigaku Zasshi** 1989 Dec;51(6):1239–41

Detection of bovine antibodies to the outer membrane of ruminal Bacteroides succinogenes by enzyme-linked immunosorbent assay (ELISA). Sato S, et al. **Nippon Juigaku Zasshi** 1990 Feb;52(1):29–34

Localization of bacterial antigens in calves inoculated orally with ruminal Bacteroides succinogenes and Selenomonas ruminantium. Sato S, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):711–7

Distribution of immunoglobulin-containing cells in calves inoculated orally with ruminal Bacteroides succinogenes and Selenomonas ruminantium. Sato S, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):719–25

Role of humoral factors in host resistance to the Bacteroides fragilis group. Bjornson AB. **Rev Infect Dis** 1990 Jan–Feb; 12 Suppl 2:S161–8 (30 ref.)

Generation, maintenance and reactivity of ovine T-lymphocyte clones derived from sheep immunized with pili from Bacteroides nodosus. Emery DL, et al. **Vet Immunol Immunopathol** 1989 Jul;21(3–4):339–49

ISOLATION & PURIFICATION

Assessing periodontal pathogens in children with varying levels of oral hygiene. Abraham J, et al. **ASDC J Dent Child** 1990 May–Jun;57(3):189–93

Comparison of transport media for Bacteroides ureolyticus [letter] Bennett KW, et al. **Eur J Clin Microbiol Infect Dis** 1990 Mar;9(3):237–8

Selective medium for isolation of Bacteroides gracilis. Lee K, et al. **J Clin Microbiol** 1990 Aug;28(8):1747–50

Use of synthetic oligonucleotide DNA probes for the identification of Bacteroides gingivalis. Moncla BJ, et al. **J Clin Microbiol** 1990 Feb;28(2):324–7

The microbiology of HIV-associated periodontal lesions. Murray PA, et al. **J Clin Periodontol** 1989 Nov; 16(10):636–42

Effect of root debridement on the elimination of Actinobacillus actinomycetemcomitans and Bacteroides gingivalis from periodontal pockets. Renvert S, et al. **J Clin Periodontol** 1990 Jul;17(6):345–50

Occurrence of Bacteroides gingivalis, Bacteroides intermedius and Actinobacillus actinomycetemcomitans in severe periodontitis in relation to age and treatment history. Rodenburg JP, et al. **J Clin Periodontol** 1990 Jul; 17(6):392–9

The incidence of anaerobes in the sputum of patients with cystic fibrosis. Jewes LA, et al. **J Med Microbiol** 1990 Apr; 31(4):271–4

A longitudinal study of the cultivable subgingival anaerobic bacteria isolated from sheep during the development of broken mouth periodontitis. McCourtie J, et al. **J Med Microbiol** 1990 Apr;31(4):275–83

Eikenella corrodens in the human oral cavity. Chen CK, et al. **J Periodontol** 1989 Nov;60(11):611–6

Clinical and microbiological characteristics of treated periodontitis patients on maintenance care. Listgarten MA, et al. **J Periodontol** 1989 Aug;60(8):452–9

[A latex agglutination test for the rapid identification of periodontally pathogenic microorganisms in subgingival plaque. The preliminary results] Tsalikis L, et al. **Zahn Mund Kieferheilkd** 1989;77(7):659–67 (Eng. Abstr.) **(Ger)**

METABOLISM

Factors affecting adhesion of Fibrobacter succinogenes subsp. succinogenes S85 and adherence-defective mutants to cellulose. Gong J, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3039–44

Cellulose digestion and cellulase regulation and distribution in Fibrobacter succinogenes subsp. succinogenes S85. Huang L, et al. **Appl Environ Microbiol** 1990 May; 56(5):1221–8

Competitiveness of different polysaccharide utilization mutants of Bacteroides thetaiotaomicron in the intestinal tracts of germfree mice. Salyers AA, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2572–8

Effects of Bacteroides gingivalis culture products on human polymorphonuclear leucocyte morphology. Scragg MA, et al. **Arch Oral Biol** 1990;35(3):167–73

Lysis of erythrocytes by the secreted cysteine proteinase of Porphyromonas gingivalis W83. Shah HN, et al. **FEMS Microbiol Lett** 1989 Oct 1;52(1–2):213–7

High-performance liquid chromatographic analysis of alpha-keto acids produced from amino acid metabolism in oral Bacteroides. Tsuchiya H, et al. **J Appl Bacteriol** 1990 Jul;69(1):125–33

Bacteroides gingivalis and Bacteroides intermedius recognize different sites on human fibrinogen. Lantz MS, et al. **J Bacteriol** 1990 Feb;172(2):716–26

PATHOGENICITY

Protection of mice against the lethal toxicity of a lipopolysaccharide (LPS) by immunization with anti-idiotype antibody to a monoclonal antibody to lipid A from Eikenella corrodens LPS. Kato T, et al. **Infect Immun** 1990 Feb;58(2):416–20

Bacteroides loeschei PK1295 cells express two distinct adhesins simultaneously. London J, et al. **Infect Immun** 1989 Dec;57(12):3940–4

Suppression of bactericidal activity of human polymorphonuclear leukocytes by Bacteroides gingivalis. Yoneda M, et al. **Infect Immun** 1990 Feb;58(2):406–11

Lung abscess caused by Eikenella corrodens: report of a case. Hsu CY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Aug; 88(8):828–31

[Nonsaccharolytic dark-pigmented Bacteroides in human pathology] Mironov AIu, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Apr;(4):102–11 (58 ref.) **(Rus)**

PHYSIOLOGY

Experimental models for studying the microbial ecology in the intestinal tract. Raibaud P. **Acta Gastroenterol Latinoam** 1989;19(4):219–26

Aggregation of Actinomyces strains by extracellular vesicles produced by Bacteroides gingivalis. Bourgeau G, et al. **Can J Microbiol** 1990 May;36(5):362–5

Characterization of coaggregation between Bacteroides gingivalis T22 and Fusobacterium nucleatum T18. Kinder SA, et al. **Infect Immun** 1989 Nov;57(11):3425–33

Purification and characterization of a Bacteroides loeschei adhesin that interacts with procaryotic and eucaryotic cells. London J, et al. **J Bacteriol** 1990 May;172(5):2527–34

Bacteroides gingivalis stimulates bone resorption via interleukin-1 production by mononuclear cells. The relative role for B. gingivalis endotoxin. Bom-van Noorloos AA, et al. **J Clin Periodontol** 1990 Aug;17(7 Pt 1):409–13

Inhibitory effect of human plasma and saliva on co-aggregation between Bacteroides gingivalis and Streptococcus mitis. Nagata H, et al. **J Dent Res** 1990 Aug; 69(8):1476–9

[Endogenous aerobic and anaerobic flora of the skin in healthy people and its role in the development of suppurative processes] Ivashkevich GA, et al. **Vestn Khir** 1990 Jan;144(1):142–5 (27 ref.) **(Rus)**

ULTRASTRUCTURE

Correlation between ultrastructural differentiation of bacteroids and nitrogen fixation in alfalfa nodules. Vasse J, et al. **J Bacteriol** 1990 Aug;172(8):4295–306

Ultrastructure, serogrouping and localization of surface antigens of Bacteroides intermedius. Devine DA, et al. **J Gen Microbiol** 1989 Apr;135 (Pt 4):967–79

Serological and morphological observation on the outer membrane of Bacteroides succinogenes. Sato S, et al. **Nippon Juigaku Zasshi** 1990 Feb;52(1):163–4

Surface properties and ultrastructure of Porphyromonas gingivalis W50 and pleiotropic mutants. Haapasalo M, et al. **Scand J Dent Res** 1989 Aug;97(4):355–60

[Electron microscopic observations on Bacteroides thetaiotaomicron] Xie NM, et al. **Wei Sheng Wu Hsueh Pao** 1989 Apr;29(2):152–4 (Eng. Abstr.) **(Chi)**

BACTEROIDES CORRODENS see under **BACTEROIDES**

BACTEROIDES FRAGILIS

Human origin of Bacteroides fragilis bacteriophages present in the environment. Tartera C, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2696–701

Structure-activity relationships in lipopolysaccharides of Bacteroides fragilis. Lindberg AA, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S133–41 (48 ref.)

ANALYSIS

Detection of 2-keto-3-deoxyoctonate in endotoxins isolated from six reference strains of the Bacteroides fragilis group. Beckmann I, et al. **Int J Biochem** 1989;21(6):661–6

DRUG EFFECTS

Comparison of in vitro antibiograms of Bacteroides fragilis group isolates: differences in resistance rates in two institutions because of differences in susceptibility testing methodology. Aldridge KE, et al. **Antimicrob Agents Chemother** 1990 Jan;34(1):179–81

Susceptibilities of species of the Bacteroides fragilis group to 10 antimicrobial agents. Betriu C, et al. **Antimicrob Agents Chemother** 1990 Apr;34(4):671–3

Comparative activities of newer beta-lactam agents against members of the Bacteroides fragilis group. Cuchural GJ Jr, et al. **Antimicrob Agents Chemother** 1990 Mar; 34(3):479–80

Turbidimetric and microscopic analysis of Bacteroides fragilis exposed to tazobactam and piperacillin alone and in combination. Yourassowsky E, et al. **Chemotherapy** 1990; 36(3):215–21

Media- and method-dependent variation in MIC values of ceftizoxime for clinical isolates of the Bacteroides fragilis group. Wexler HM, et al. **Clin Ther** 1990;12 Suppl C:13–24

Effect of inoculum size and medium on activity of seven antimicrobial agents against Bacteroides fragilis strains. Wexler HM, et al. **Clin Ther** 1989 Nov–Dec;11(6):828–33

In vitro activity of cefoperazone/sulbactam and other antimicrobials against anaerobic bacteria. D'Amato RF, et al. **Diagn Microbiol Infect Dis** 1990 Jan–Feb;13(1):51–5

Piperacillin/tazobactam (YTR 830) combination. Comparative antimicrobial activity against 5889 recent aerobic clinical isolates and 60 Bacteroides fragilis group strains. Jones RN, et al. **Diagn Microbiol Infect Dis** 1989 Nov–Dec;12(6):489–94

Enhanced antimicrobial activity of old and new beta-lactams against cefoxitin-resistant Bacteroides fragilis group isolates by beta-lactamase inhibitors [letter] Aldridge KE, et al. **J Antimicrob Chemother** 1990 May;25(5):873–5

Anaerobic susceptibility tests: differences between disc diffusion, agar dilution and broth microdilution test results [letter] Barry AL. **J Antimicrob Chemother** 1990 May; 25(5):875–7

The antimicrobial susceptibility patterns of the Bacteroides fragilis group in the United States, 1987. Cornick NA, et al. **J Antimicrob Chemother** 1990 Jun;25(6):1011–9

The changing pattern of antibiotic susceptibilities of Bacteroides fragilis in Kuwait. Elhag KM, et al. **J Antimicrob Chemother** 1989 Nov;24(5):699–707

In-vitro susceptibility of the Bacteroides fragilis group and the inoculum effect of newer beta-lactam antibiotics on this group of organisms. Jacobus NV, et al. **J Antimicrob Chemother** 1989 Nov;24(5):675–82

Kinetics of antimicrobial activity of amoxicillin/clavulanic acid and metronidazole against beta-lactamase-producing Bacteroides fragilis group. García-Rodríguez JA, et al. **J Chemother** 1990 Feb;2(1):11–6

Discordant results between the broth disk elution and broth microdilution susceptibility tests with Bacteroides fragilis group isolates. Aldridge KE, et al. **J Clin Microbiol** 1990 Feb;28(2):375–8

Metronidazole resistant Bacteroides fragilis infection of a prosthetic hip joint. Hickey MM, et al. **J Infect** 1990 Mar; 20(2):129–33

In vitro anaerobic data on ticarcillin/clavulanate. A review of an ongoing survey. Sanders CV Jr, et al. **J Reprod Med** 1990 Mar;35(3 Suppl):313–6

Increase in the activity of third-generation cephalosporins in combination with clavulanic acid and Sulbactam against Bacteroides fragilis. Martín MA, et al. **Med Lab Sci** 1990 Jul;47(3):163–7

Molecular and ecological aspects of antibiotic resistance in the Bacteroides fragilis group. Martínez-Suárez JV, et al. **Microbiologia** 1987 Oct;3(3):149–62 (88 ref.)

Evolution of antimicrobial susceptibility in isolates of the Bacteroides fragilis group in Spain. García-Rodríguez JE, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S142–51

Plasmid and non-plasmid mediated reduced sensitivity to metronidazole in the Bacteroides fragilis group [letter; comment] Breuil J, et al. **Scand J Infect Dis** 1990; 22(2):247–8 Comment on: Scand J Infect Dis Suppl 1989;62:25–8.

[Comparative effect of apalcillin and other beta-lactam antibiotics against the Bacteroides fragilis group] Dusart G, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):523–7 (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

Molecular analysis of a novel glutamine synthetase of the anaerobe Bacteroides fragilis [published erratum appears in J Gen Microbiol 1990 Apr;136(Pt 4):787] Hill RT, et al. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3271–9

[Detection of beta-lactamases in the Bacteroides fragilis group] Martin C, et al. **Pathol Biol (Paris)** 1990 May; 38(5):470–3 (Eng. Abstr.) **(Fre)**

GENETICS

Expression and regulation of a Bacteroides fragilis sucrose utilization system cloned in Escherichia coli. Scholle RR, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1944–8

Cloning and expression of the Bacteroides fragilis TAL2480 neuraminidase gene, nanH, in Escherichia coli. Russo TA, et al. **J Bacteriol** 1990 May;172(5):2594–600

Cloning of Bacteroides fragilis plasmid genes affecting metronidazole resistance and ultraviolet survival in Escherichia coli. Wehnert GU, et al. **Plasmid** 1990 Mar; 23(2):155–8

GROWTH & DEVELOPMENT

Influence of metronidazole, chloramphenicol, clindamycin and penicillin G on growth and neuraminidase activity of Bacteroides fragilis. Ferreira MC, et al. **J Antimicrob Chemother** 1989 Aug;24(2):157–64

IMMUNOLOGY

The effects of deoxycholate and sodium dodecyl sulphate on the serological reactivity of antigens isolated from six Bacteroides reference strains. Beckmann I, et al. **Antonie Van Leeuwenhoek** 1990 Feb;57(2):71–6

The cell-surface antigens of Bacteroides thetaiotaomicron. Meisel-Mikolajczyk F, et al. **Eur J Epidemiol** 1989 Dec; 5(4):486–96

T cell regulation of Bacteroides fragilis-induced intraabdominal abscesses. Crabb JH, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S178–84 (28 ref.)

ISOLATION & PURIFICATION

Enumeration of enterotoxigenic Bacteroides fragilis in municipal sewage. Shoop DS, et al. **Appl Environ Microbiol** 1990 Jul;56(7):2243–4

The clinical importance of all members of the Bacteroides fragilis group [letter; comment] Brook I. **J Antimicrob Chemother** 1990 Mar;25(3):473–4 Comment on: J Antimicrob Chemother 1989 Jan;23(1):99–106.

Isolation and identification of strains of Bacteroides fragilis group from the digestive tract of Callithrix penicillata marmosets. Avila-Campos MJ, et al. **Lab Anim** 1990 Jan; 24(1):68–70

[Isolation and identification of Bacteroides of the group B. fragilis] Bazhenov LG. **Lab Delo** 1990;(4):9–13 (Eng. Abstr.) **(Rus)**

METABOLISM

Influence of pH, nutrient availability, and growth rate on amine production by Bacteroides fragilis and Clostridium perfringens. Allison C, et al. **Appl Environ Microbiol** 1989 Nov;55(11):2894–8

Purification and partial characterization of an iron regulated outer membrane protein of B. fragilis under non-denaturing conditions. Otto BR, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1–3):285–90

PATHOGENICITY

Pathogenicity of the Bacteroides fragilis group. Brook I. **Ann Clin Lab Sci** 1989 Sep–Oct;19(5):360–76 (68 ref.)

Rabbit model to evaluate enterovirulence of Bacteroides fragilis. Myers LL, et al. **J Clin Microbiol** 1990 Jul; 28(7):1658–60

Animal model system for studying virulence of and host response to Bacteroides fragilis. Onderdonk AB, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S169–77 (45 ref.)

PHYSIOLOGY

[Non-clostridial anaerobic microorganisms in children in the normal state and in pathologic conditions] Urdabaev ZhK. **Pediatriia** 1989;(8):100–3 (53 ref.) **(Rus)**

ULTRASTRUCTURE

Surface structures, haemagglutination and cell surface hydrophobicity of Bacteroides fragilis strains. Oyston PC, et al. **J Gen Microbiol** 1990 May;136 (Pt 5):941–8

BACTEROIDES INFECTIONS

Bacteroides fragilis endophthalmitis: a case report. Kelly LD, et al. **Can J Ophthalmol** 1990 Jun;25(4):208–9 (6 ref.)

Eikenella corrodens infection of the oral cavity as a cause of bacterial endocarditis. Bígl P, et al. **Czech Med** 1990; 13(1):38–42

Necrotizing buccal and cervical fasciitis. Yamaoka M, et al. **J Craniomaxillofac Surg** 1990 Jul;18(5):223–4

Septic arthritis caused by Bacteroides fragilis. Rosenkranz P, et al. **Rev Infect Dis** 1990 Jan–Feb;12(1):20–30 (46 ref.)

[Knee arthritis caused by Eikenella corrodens. Apropos of a case] Beauvais P, et al. **Ann Pediatr (Paris)** 1990 Mar; 37(3):167–8 (Eng. Abstr.) **(Fre)**

[A case of recurrent acute purulent thyroiditis (letter)] Horhant P, et al. **Presse Med** 1989 Nov 4;18(36):1798 **(Fre)**

[Hand infection by Eikenella corodense] Nyska M, et al. **Harefuah** 1989 Aug;117(3–4):81–3 (32 ref.) **(Heb)**

[Meningitis caused by Bacteroides fragilis in children] Goyo-Rivas J, et al. **Bol Med Hosp Infant Mex** 1989 Nov; 46(11):724–7 (25 ref.) (Eng. Abstr.) **(Spa)**

COMPLICATIONS

Haematogenous clavicular osteomyelitis caused by Bacteroides fragilis [letter; comment] Studemeister AE, et al. **Ann Rheum Dis** 1990 Aug;49(8):653 Comment on: Ann Rheum Dis 1990 Aug;49(8):598–602.

Acute pleurisy in an intravenous drug abuser. Glatt AE. **Hosp Pract [Off]** 1990 Feb 15;25(2):155, 158, 160–2 (14 ref.)

Infection of an abdominal aortic aneurysm from an appendix abscess. Jewkes AJ, et al. **J Cardiovasc Surg (Torino)** 1989 Sep–Oct;30(5):870–2

[Acute thyroiditis caused by Eikenella corrodens and abnormality of the left pyriform sinus] Iniguez JL, et al. **Arch Fr Pediatr** 1989 Dec;46(10):745–7 (Eng. Abstr.) **(Fre)**

[Leukemoid reaction in a patient with anaerobic septicemia] Simonenko VB, et al. **Klin Med (Mosk)** 1990 Feb; 68(2):116–7 **(Rus)**

[Prolonged febrile syndrome caused by pelvic abscess in a patient with systemic lupus erythematosus (letter)] Paz MA, et al. **Rev Clin Esp** 1990 Mar;186(5):247–8 **(Spa)**

DIAGNOSIS

Ocular infections associated with Eikenella corrodens. Klein B, et al. **Am J Ophthalmol** 1990 Feb 15;109(2):127–31

[Rapid diagnosis of Bacteroides using immunofluorescence] Höhne C, et al. **Z Gesamte Hyg** 1989 Oct;35(10):618–9 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Comparison of in vivo and in vitro efficacy of ceftizoxime. Delaney ML, et al. **Clin Ther** 1990;12 Suppl C:25–30

Metronidazole resistant Bacteroides fragilis infection of a prosthetic hip joint. Hickey MM, et al. **J Infect** 1990 Mar; 20(2):129–33

In vitro susceptibility and in vivo efficacy of antimicrobials in the treatment of Bacteroides fragilis-Escherichia coli infection in mice. Brook I. **J Infect Dis** 1989 Oct; 160(4):651–6

[Empirical antibiotic therapy of wounds complicated by anaerobic non-clostridial infection] Borisova OK, et al. **Antibiot Khimioter** 1989 Sep;34(9):707–11 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Retroperitoneal dermoid presenting as an infected pancreatic cyst. Dewar G, et al. **Aust N Z J Surg** 1990 Jun;60(6):488–9

Eikenella corrodens cellulitis and arthritis of the knee. Flesher SA, et al. **J Clin Microbiol** 1989 Nov;27(11):2606–8

Rabbit model to evaluate enterovirulence of Bacteroides fragilis. Myers LL, et al. **J Clin Microbiol** 1990 Jul; 28(7):1658–60

Cervical abscess: a life-threatening complication of infectious mononucleosis. Westmore GA. **J Laryngol Otol** 1990 Apr; 104(4):358–9

Septic arthritis of the hip due to bacteroides-melanogenicus. Tibrewal SB, et al. **J R Soc Med** 1990 Feb;83(2):117–8

Eikenella corrodens: an unusual cause of endocarditis in a patient with silent mitral valve prolapse. Hansen LA, et al. **S D J Med** 1989 Nov;42(11):5–8

[Non-clostridial anaerobic microorganisms in children in the normal state and in pathologic conditions] Urdabaev ZhK. **Pediatriia** 1989;(8):100–3 (53 ref.) **(Rus)**

[Non-clostridial anaerobes as a cause of post-traumatic keratitis] Volkov VV, et al. **Vestn Oftalmol** 1990 Mar–Apr; 106(2):61–3 (Eng. Abstr.) **(Rus)**

[Nonsaccharolytic dark-pigmented Bacteroides in human pathology] Mironov AIu, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Apr;(4):102–11 (58 ref.) **(Rus)**

IMMUNOLOGY

Role of humoral factors in host resistance to the Bacteroides fragilis group. Bjornson AB. **Rev Infect Dis** 1990 Jan–Feb; 12 Suppl 2:S161–8 (30 ref.)

T cell regulation of Bacteroides fragilis-induced intraabdominal abscesses. Crabb JH, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S178–84 (28 ref.)

Immune mechanisms in the prevention of intra-abdominal abscess formation. Kasper DL, et al. **Scand J Infect Dis Suppl** 1989;62:29–34

METABOLISM

Alterations of responses to bacterial endotoxin by Bacteroides fragilis in vivo and in vitro. Rodloff AC, et al. **Adv Exp Med Biol** 1990;256:593–601

MICROBIOLOGY

Media- and method-dependent variation in MIC values of ceftizoxime for clinical isolates of the Bacteroides fragilis group. Wexler HM, et al. **Clin Ther** 1990;12 Suppl C:13–24

Animal model system for studying virulence of and host response to Bacteroides fragilis. Onderdonk AB, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 2:S169–77 (45 ref.)

Bacteroides fragilis meningitis: report of two cases [letter] Patey O, et al. **Rev Infect Dis** 1990 Mar–Apr;12(2):364–5

MORTALITY

The clinical importance of all members of the Bacteroides fragilis group [letter; comment] Brook I. **J Antimicrob Chemother** 1990 Mar;25(3):473–4 Comment on: J Antimicrob Chemother 1989 Jan;23(1):99–106.

PREVENTION & CONTROL

Protective immunization against experimental Bacteroides (Porphyromonas) gingivalis infection. Chen PB, et al. **Infect Immun** 1990 Oct;58(10):3394–400

[Ways of reducing postoperative mortality and the incidence of suppurative complications in tumors of the large intestine] Pomelov VS, et al. **Khirurgiia (Mosk)** 1990 Apr; (4):98–101 **(Rus)**

TRANSMISSION

Restriction endonuclease analysis of Eikenella corrodens. Chen CK, et al. **J Clin Microbiol** 1990 Jun;28(6):1265–70

VETERINARY

An anamnestic serological test for ovine footrot. Whittington RJ, et al. **Aust Vet J** 1990 May;67(5):157–9

Serum antibody responses in sheep after natural infection with Bacteroides nodosus. Whittington RJ, et al. **Aust Vet J** 1990 Mar;67(3):98–101

BACTEROIDES MELANINOGENICUS see under **BACTEROIDES**

BADMINTON see **RACQUET SPORTS**

BAGASSOSIS see **PNEUMOCONIOSIS**

BAKER'S YEAST see **SACCHAROMYCES CEREVISIAE**

BAL see **DIMERCAPROL**

BALANITIS

[Plasmocellular balanoposthitis of Zoon] Arango Toro O, et al. **Arch Esp Urol** 1990 May;43(4):337–9 (Eng. Abstr.) **(Spa)**

COMPLICATIONS

[Atrophicus sclerosis lichen and cancer of the glans] Dore B, et al. **J Urol (Paris)** 1989;95(7):415–8 (20 ref.) (Eng. Abstr.) **(Fre)**

[What is your diagnosis? Balanitis erosiva circinata in Reiter's disease] Flückiger R. **Schweiz Rundsch Med Prax** 1990 Jan 9;79(1–2):1–2 **(Ger)**

DIAGNOSIS

[Arthritis following sexual contact] Nüssler V, et al. **Internist (Berl)** 1990 Jan;31(1):75–7 **(Ger)**

[Idiopathic gangrene of the penis] Korotkevich GE, et al. **Vestn Khir** 1989 Dec;144(12):31–2 **(Rus)**

ETIOLOGY

Flat condylomata of the penis presenting as patchy balanoposthitis. Arumainayagam JT, et al. **Genitourin Med** 1990 Aug;66(4):251–3

Group A streptococcal proctitis and balanitis [letter] Guerrero-Vazquez J, et al. **Pediatr Infect Dis J** 1990 Mar; 9(3):223

[Is there a thrombophlebitis or subcutaneous lymphangitis of the penis?] Von Rütte B. **Helv Chir Acta** 1989 Aug; 56(3):365–7 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Pseudo-epitheliomatous hyperkeratotic and micaceous balanitis: evidence for regarding it as pre-malignant. Gray MR, et al. **Br J Urol** 1990 Jul;66(1):103–4

Balanitis of Zoon. Nishimura M, et al. **Int J Dermatol** 1990 Jul–Aug;29(6):421–3

Lichen aureus of the glans penis as an expression of Zoon's balanitis. Kossard S, et al. **J Am Acad Dermatol** 1989 Oct; 21(4 Pt 1):804–6

[The morphological changes in the skin of the prepuce in patients with xerotic balanoposthitis] Kalamkarian AA, et al. **Vestn Dermatol Venerol** 1990;(4):4–8 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

An argument for circumcision. Prevention of balanitis in the adult. Fakjian N, et al. **Arch Dermatol** 1990 Aug; 126(8):1046–7

BALANTIDIASIS

Human balantidiasis. A case report. Currie AR. **S Afr J Surg** 1990 Mar;28(1):23–5

COMPLICATIONS

Balantidiasis complicating a case of ulcerative colitis. Kamberoglou D, et al. **Am J Gastroenterol** 1990 Jun; 85(6):765–6

PHYSIOPATHOLOGY

Invasive balantidiasis presented as chronic colitis and lung involvement. Ladas SD, et al. **Dig Dis Sci** 1989 Oct;

34(10):1621–3

BALDNESS see ALOPECIA

BALINT PSYCHOANALYTIC THERAPY see PSYCHOANALYTIC THERAPY

BALKAN NEPHROPATHY see under NEPHRITIS, INTERSTITIAL

BALLISTICS, WOUND see WOUNDS, GUNSHOT

BALLISTOCARDIOGRAPHY

Monitoring of hemodynamic parameters by the BCG in conscious man. Smith NT, et al. **Bibl Cardiol** 1967;(19):36–42

The ballistocardiogram and left ventricular ejection in the dog. Winter PJ, et al. **Bibl Cardiol** 1967;(19):33–5

Noninvasive heart rate monitoring system for avian embryos based on the ballistocardiogram. Suzuki Y, et al. **Med Biol Eng Comput** 1989 Jul;27(4):399–404

INSTRUMENTATION

The completely isolated air ballistocardiograph. Cunningham DM, et al. **Bibl Cardiol** 1967;(19):1–6

Design of a three-dimensional high frequency ballistocardiograph. Franke EK, et al. **Bibl Cardiol** 1967;(19):7–12

Two new forms of ultra-low frequency ballistocardiograph. Harrison WK, et al. **Bibl Cardiol** 1967;(19):13–8

A ballistic method to determine the fraction of the tidal volume contributed by the diaphragm. Josenhans WT. **Bibl Cardiol** 1967;(19):68–71

A servo counterforce ballistocardiograph. An aperiodic air-bearing system. Nyboer J, et al. **Bibl Cardiol** 1967;(19):26–32

Magnetic tape recording of ballistocardiograms and other physiologic variables from subjects with and without cardiovascular "disease". Scarborough WR, et al. **Bibl Cardiol** 1967;(19):72–98

Further experience with simultaneous records of ULF force and carotid pulse derivative. Starr I. **Bibl Cardiol** 1967;(19):99–102

Computer search for ballistocardiographic indices of cardiovascular disease. Tolles WE. **Bibl Cardiol** 1967;(19):126–35

A quantitative ballistocardiograph. Trefny Z, et al. **Bibl Cardiol** 1967;(19):19–25

Some experiments on a delay line simulating the human systemic arterial tree, with special emphasis on the ballistocardiogram. Westerhof N, et al. **Bibl Cardiol** 1967;(19):141–50

METHODS

Ballistocardiographic waveform—some contributing factors. Jackson DH, et al. **Bibl Cardiol** 1967;(19):43–8

Breath holding effects on ULF displacement ballistocardiography. Josenhans WT. **Bibl Cardiol** 1967;(19):49–62

A mathematical model of the ballistocardiogram. Morse RL. **Bibl Cardiol** 1967;(19):136–40

Isolated ballistocardiographic abnormality with induced anoxemia in a patient with recent myocardial infarction. Penneys R. **Bibl Cardiol** 1967;(19):110–5

The cardiovascular thoracic air plethysmogram. Verdouw PD, et al. **Bibl Cardiol** 1967;(19):63–7

Observations on possible atrial contribution to ventricular dynamics as recorded by the direct body high-frequency ("acceleration") BCG. Winer NJ. **Bibl Cardiol** 1967;(19):116–25

The second derivative of the carotid pulse as an aid in high-frequency ("acceleration") direct body BCG segment notation. Winer NJ. **Bibl Cardiol** 1967;(19):103–9

BALLOON ANGIOPLASTY see ANGIOPLASTY, TRANSLUMINAL

BALLOON CATHETERIZATION see BALLOON DILATATION

BALLOON DILATATION

see related
DILATATION
GASTRIC BUBBLE

Assessment of risk of carotid occlusion with balloon Matas testing and dynamic computed tomography. Terada T, et al. **Acta Neurochir (Wien)** 1990;103(3–4):122–7

Valvuloplasty with large trefoil balloons for the treatment of congenital pulmonary stenosis. Thanopoulos BD, et al. **Acta Paediatr Scand** 1989 Sep;78(5):742–6

Echocardiographic changes following balloon valvuloplasty in valvular pulmonic and aortic stenosis. Hsu YH, et al. **Acta Paediatr Sin** 1989 Sep–Oct;30(5):290–8

Computed tomographic arteriography of the liver using balloon occlusion. Hosoki T, et al. **Acta Radiol** 1990 Mar;31(2):167–9

Balloon dilatation of the ampulla of Vater. An experimental study in the rabbit. Riesenfeld V, et al. **Acta Radiol** 1990 Mar;31(2):222–4

The importance of separation of prostatic lobes in relief of prostatic obstruction by balloon catheter urethroplasty: studies in dogs and humans. Castañeda F, et al. **AJR Am J Roentgenol** 1989 Dec;153(6):1301–4

Periurethral fibrosis on sonourethrography and balloon dilatation of urethral strictures [letter] Merchant SA, et al. **AJR Am J Roentgenol** 1990 Aug;155(2):423

Removal of intimal hyperplasia in vascular endoprostheses by atherectomy and balloon dilatation. Vorwerk D, et al. **AJR Am J Roentgenol** 1990 Mar;154(3):617–9

Percutaneous balloon mitral valvuloplasty in children and young adults with rheumatic mitral stenosis. Arora R, et al. **Am Heart J** 1989 Nov;118(5 Pt 1):883–7

Combined percutaneous balloon valvuloplasty of mitral and tricuspid valves. Bethencourt A, et al. **Am Heart J** 1990 Feb;119(2 Pt 1):416–8

Therapeutic balloon occlusion and pharmacologic therapy of a right-to-left atrial shunt produced by right ventricular infarction. Broderick TM, et al. **Am Heart J** 1989 Nov;118(5 Pt 1):1044–7

Percutaneous mitral valvuloplasty with a single rubber-nylon balloon (Inoue balloon): long-term results in 71 patients. Chen CR, et al. **Am Heart J** 1990 Sep;120(3):561–8

Successful percutaneous balloon valvuloplasty of a stenotic tricuspid bioprosthesis. Chow WH, et al. **Am Heart J** 1990 Mar;119(3 Pt 1):666–8

Improved quality of life after successful balloon valvuloplasty of a stenosed mitral bioprosthesis. Cox DA, et al. **Am Heart J** 1989 Oct;118(4):839–41

Serial evaluation of ventricular function after percutaneous aortic balloon valvuloplasty. Harpole DH, et al. **Am Heart J** 1990 Jan;119(1):130–5

Successive percutaneous double-balloon mitral, aortic, and tricuspid valvotomy in rheumatic trivalvular stenoses. Konugres GS, et al. **Am Heart J** 1990 Mar;119(3 Pt 1):663–6

Balloon valvuloplasty for mitral restenosis after previous surgery: a comparative study. Medina A, et al. **Am Heart J** 1990 Sep;120(3):568–71

Late hemodynamic changes in percutaneous mitral valvuloplasty. Pektas O, et al. **Am Heart J** 1990 Jan;119(1):112–20

Factors influencing the outcome of balloon aortic valvuloplasty in the elderly. Rodriguez AR, et al. **Am Heart J** 1990 Aug;120(2):373–80

Transarterial mitral valvuloplasty in conditions of acute pulmonary edema. Romero M, et al. **Am Heart J** 1990 Jun;119(6):1416–9

Pulmonic balloon valvuloplasty in adults. Sherman W, et al. **Am Heart J** 1990 Jan;119(1):186–90

Percutaneous transluminal balloon dilatation in supravalvular aortic stenosis. Tyagi S, et al. **Am Heart J** 1989 Nov;118(5 Pt 1):1041–4

Balloon valvuloplasty of a subpulmonic membrane. Vacek JL, et al. **Am Heart J** 1990 Jun;119(6):1419–21

Results of the Valvuloplasty and Angioplasty of Congenital Anomalies Registry. Allen HD, et al. **Am J Cardiol** 1990 Mar 15;65(11):772–4

Utility of transesophageal echocardiography in interatrial septal puncture during percutaneous mitral balloon commissurotomy. Ballal RS, et al. **Am J Cardiol** 1990 Jul 15;66(2):230–2

Failure of balloon aortic valvuloplasty to result in sustained clinical improvement in patients with depressed left ventricular function. Davidson CJ, et al. **Am J Cardiol** 1990 Jan 1;65(1):72–7

Transcatheter occlusion of high flow Blalock-Taussig shunts with a detachable balloon. Gewillig M, et al. **Am J Cardiol** 1990 Jun 15;65(22):1518–9

Changes in left ventricular systolic performance immediately after percutaneous aortic balloon valvuloplasty. Harpole DH, et al. **Am J Cardiol** 1990 May 15;65(18):1213–8

Successful palliation of primary pulmonary hypertension by atrial septostomy. Hausknecht MJ, et al. **Am J Cardiol** 1990 Apr 15;65(15):1045–6

Balloon angioplasty for aortic recoarctation: results of Valvuloplasty and Angioplasty of Congenital Anomalies Registry. Hellenbrand WE, et al. **Am J Cardiol** 1990 Mar 15;65(11):793–7

Balloon angioplasty—branch pulmonary artery stenosis: results from the Valvuloplasty and Angioplasty of Congenital Anomalies Registry. Kan JS, et al. **Am J Cardiol** 1990 Mar 15;65(11):798–801

Balloon occlusion of an internal mammary artery to anterior interventricular vein fistula. Miranda AA, et al. **Am J Cardiol** 1990 Jan 15;65(3):257–8

Balloon dilation of miscellaneous lesions: results of Valvuloplasty and Angioplasty of Congenital Anomalies Registry. Mullins CE, et al. **Am J Cardiol** 1990 Mar 15;65(11):802–3

Intermediate-term follow-up results of balloon aortic valvuloplasty in infants and children with special reference to causes of restenosis. Rao PS, et al. **Am J Cardiol** 1989 Dec 1;64(19):1356–60

Balloon dilatation of the stenosed aortic valve: how does it work? Why does it fail? Robicsek F, et al. **Am J Cardiol** 1990 Mar 15;65(11):761–6

Balloon aortic valvuloplasty: results of the Valvuloplasty and Angioplasty of Congenital Anomalies Registry. Rocchini AP, et al. **Am J Cardiol** 1990 Mar 15;65(11):784–9

Follow-up after percutaneous balloon valvoplasty for noncalcific aortic stenosis. Shrivastava S, et al. **Am J Cardiol** 1990 Jan 15;65(3):250–2

Balloon pulmonary valvuloplasty: results of the Valvuloplasty and Angioplasty of Congenital Anomalies Registry. Stanger P, et al. **Am J Cardiol** 1990 Mar 15;65(11):775–83

Atrial natriuretic peptide and vasopressin during percutaneous transvenous mitral valvuloplasty and relation to renin-angiotensin-aldosterone system and renal function. Tsai RC, et al. **Am J Cardiol** 1990 Apr 1;65(13):882–6

Balloon angioplasty for the treatment of native coarctation: results of Valvuloplasty and Angioplasty of Congenital Anomalies Registry. Tynan M, et al. **Am J Cardiol** 1990 Mar 15;65(11):790–2

Pulsed Doppler evaluation of right ventricular diastolic filling in children with pulmonary valve stenosis before and after balloon valvuloplasty. Vermilion RP, et al. **Am J Cardiol** 1990 Jul 1;66(1):79–84

Intraesophageal balloon distention versus drug provocation in the evaluation of noncardiac chest pain. Deschner WK, et al. **Am J Gastroenterol** 1990 Aug;85(8):938–43

Results of a temporary balloon buckle in the treatment of 500 retinal detachments and a comparison with pneumatic retinopexy [letter; comment] Hilton GF, et al. **Am J Ophthalmol** 1989 Nov 15;108(5):612–4 Comment on: Am J Ophthalmol 1989 Apr 15;107(4):381–9.

Transcranial Doppler monitoring during percutaneous transluminal aortic valvuloplasty. Karnik R, et al. **Angiology** 1990 Feb;41(2):106–11

Left ventricular performance and clinical outcome after repeat balloon aortic valvuloplasty. Davidson CJ, et al. **Ann Intern Med** 1990 Aug 1;113(3):250–2

Percutaneous cardiopulmonary bypass to support angioplasty and valvuloplasty. Technical considerations. Gundry SR, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):725–7

Early and late results of balloon valvuloplasty for severe aortic stenosis. Warren RJ, et al. **Aust N Z J Med** 1989 Oct;19(5):454–7

Gruntzig balloon catheter dilatation of a severe cervical oesophageal stricture. Yeung CK, et al. **Aust N Z J Surg** 1990 Apr;60(4):307–10

Balloon dilatation of the aortic valve in adults: a physician's view. Beatt KJ. **Br Heart J** 1990 Apr;63(4):207–8 (9 ref.)

Pulmonary venous atrial obstruction after the Senning procedure: relief by catheter balloon dilatation. Coulson JD, et al. **Br Heart J** 1990 Aug;64(2):160–2

Balloon dilatation of critical stenosis of the pulmonary valve in neonates. Ladusans EJ, et al. **Br Heart J** 1990 Jun;63(6):362–7

Variability of the Doppler gradient in pulmonary valve stenosis before and after balloon dilatation. Lim MK, et al. **Br Heart J** 1989 Sep;62(3):212–6

Balloon dilatation of tricuspid stenosis caused by carcinoid heart disease. Mullins PA, et al. **Br Heart J** 1990 Apr;63(4):249–50

Balloon dilatation of the aortic valve in a pulsatile flow model: assessment of the mechanisms and the magnitude and duration of changes in valve area and gradient. Rosenthal E, et al. **Br Heart J** 1990 Apr;63(4):238–45

Use of balloon dilation to treat supravalvar pulmonary stenosis developing after anatomical correction for complete transposition. Saxena A, et al. **Br Heart J** 1990 Aug;64(2):151–5

Follow up of patients treated with balloon dilatation of the aortic valve [letter] Teien D. **Br Heart J** 1990 Jul;64(1):107

Balloon dilatation of the aortic valve in adults: a surgeon's view. Treasure T. **Br Heart J** 1990 Apr;63(4):205–6 (25 ref.)

Carotid traumatic aneurysm treated by detachable balloon. Crandon IW, et al. **Br J Neurosurg** 1988;2(4):507–11

Peptic pyloric stenosis treated by endoscopic balloon dilatation. Griffin SM, et al. **Br J Surg** 1989 Nov;76(11):1147–8

Bladder outflow tract obstruction and urinary retention from benign prostatic hypertrophy treated by balloon dilatation. Gill KP, et al. **Br J Urol** 1989 Dec;64(6):618–22

Endoballoon rupture and stenting for pelviureteric junction obstruction: technique and early results. O'Flynn K, et al. **Br J Urol** 1989 Dec;64(6):572–4

Natural history and significance of esophageal squamous cell dysplasia. Jacob P, et al. **Cancer** 1990 Jun 15;65(12):2731–9

Balloon valvotomy of calcified pulmonary valve stenosis. Goudevenos J, et al. **Cardiology** 1990;77(1):55–7

Should patients with mitral stenosis who are acceptable surgical commissurotomy candidates now have balloon valvuloplasty treatment? McKay CR. **Cardiovasc Clin** 1990;21(1):175–95; discussion 196–7 (83 ref.)

Esophageal balloon dilatation: a follow-up study in 74 patients. Nóbrega J. **Cardiovasc Intervent Radiol** 1989 Sep–Oct;12(5):255–7

Percutaneous double-balloon valvuloplasty of porcine bioprosthetic valves in the tricuspid position. Attubato MJ, et al. **Cathet Cardiovasc Diagn** 1990 Jul;20(3):202–4

Percutaneous balloon valvuloplasty of pulmonary valve stenosis, dysplasia, and residual stenosis after surgical valvotomy for pulmonary atresia with intact ventricular septum: long-term results. Ballerini L, et al. **Cathet Cardiovasc Diagn** 1990 Mar;19(3):165–9

Effect of balloon aortic valvuloplasty on the dynamics of left ventricular ejection. Ferguson JJ 3d, et al. **Cathet Cardiovasc Diagn** 1989 Oct;18(2):73–8

Percutaneous balloon valvuloplasty of a stenosed mitral bioprosthesis. Fernandez JJ, et al. **Cathet Cardiovasc Diagn** 1990 Jan;19(1):39–41

Use of propranolol for severe dynamic infundibular obstruction prior to balloon pulmonary valvuloplasty (a brief communication). Thapar MK, et al. **Cathet Cardiovasc Diagn** 1990 Apr;19(4):240–1

Stretching the effect of the balloon. Mitral valvuloplasty and pulmonary function [editorial; comment] Bittl JA. **Chest** 1990 Aug;98(2):259–60 Comment on: Chest 1990 Aug;98(2):290–4.

Right-to-left shunting through a patent foramen ovale without pulmonary hypertension. Transient improvement after balloon catheter closure. Remy-Jardin M, et al. **Chest** 1990 May;97(5):1250–2

Improvement in pulmonary function in mitral stenosis after percutaneous transvenous mitral commissurotomy [see comments] Yoshioka T, et al. **Chest** 1990 Aug;98(2):290–4 Comment in: Chest 1990 Aug;98(2):259–60.

Prediction of successful outcome in 130 patients undergoing percutaneous balloon mitral valvotomy [see comments] Abascal VM, et al. **Circulation** 1990 Aug;82(2):448–56 Comment in: Circulation 1990 Aug;82(2):643–5.

Left-to-right atrial shunting after percutaneous mitral valvuloplasty. Incidence and long-term hemodynamic follow-up [see comments] Cequier A, et al. **Circulation** 1990 Apr;81(4):1190–7 Comment in: Circulation 1990 Apr;81(4):1422–4.

Severe aortic stenosis in the sick octogenarian. A clear indicator for balloon valvuloplasty as the initial procedure [comment] Cheitlin MD. **Circulation** 1989 Dec;80(6):1906–8 Comment on: Circulation 1989 Dec;80(6):1514–20.

Balloon therapy of critical aortic stenosis in the neonate. The therapeutic conundrum resolved? Freedom RM. **Circulation** 1989 Oct;80(4):1087–8

Measurement of end-systolic pressure-volume relations by intra-aortic balloon occlusion. Gupta KB, et al. **Circulation** 1989 Oct;80(4):1016–28

Aortic stenosis in elderly patients aged 80 or older. Treatment by percutaneous balloon valvuloplasty in a series of 92 cases [see comments] Letac B, et al. **Circulation** 1989 Dec; 80(6):1514–20 Comment in: Circulation 1989 Dec;80(6):1906–8.

Wide-range load shift of combined aortic valvuloplasty-arterial vasodilation slows isovolumic relaxation of the hypertrophied left ventricle. Paulus WJ, et al. **Circulation** 1990 Mar;81(3):886–98

Percutaneous mitral balloon valvulotomy or balloon valvuloplasty? It's not just semantics anymore [comment] Smucker ML. **Circulation** 1990 Aug;82(2):643–5 Comment on: Circulation 1990 Aug;82(2):448–56.

Assessment of left-to-right atrial shunting after percutaneous mitral valvuloplasty by transesophageal color Doppler flow-mapping. Yoshida K, et al. **Circulation** 1989 Dec; 80(6):1521–6

Neonatal critical valvar aortic stenosis. A comparison of surgical and balloon dilation therapy. Zeevi B, et al. **Circulation** 1989 Oct;80(4):831–9

Transesophageal echocardiography in percutaneous balloon valvuloplasty for mitral stenosis. Casale PN, et al. **Cleve Clin J Med** 1989 Sep;56(6):597–600

Doppler echocardiographic assessment of transmitral gradients and mitral valve area before and after mitral valve balloon dilatation. Dev V, et al. **Clin Cardiol** 1989 Nov; 12(11):629–33

Balloon aortic valvuloplasty in children. Rao PS. **Clin Cardiol** 1990 Jul;13(7):458–66 (78 ref.)

Esophageal stenosis following Stevens-Johnson syndrome. Treatment with balloon dilation. Rottermann EM, et al. **Clin Pediatr (Phila)** 1990 Jun;29(6):336–8

Technical problem: impacted retained distal common duct stone. Malone DE, et al. **Clin Radiol** 1990 Feb;41(2):130–3

Balloon angioplasty and valvuloplasty in infants, children, and adolescents. Rao PS. **Curr Probl Cardiol** 1989 Aug; 14(8):417–97 (225 ref.)

Assessment of benign esophageal stricture dilated by balloon using liquid scintigraphy. Kjellén G. **Dysphagia** 1989; 4(3):155–7

Aortic valve area evolution after percutaneous aortic valvuloplasty. A prospective trial using a combined Doppler echocardiographic and haemodynamic method [published erratum appears in Eur Heart J 1990 Jul;11(7):676] Bernard Y, et al. **Eur Heart J** 1990 Feb; 11(2):98–107

Probability of a return to work after either coronary balloon dilatation or coronary bypass surgery. Laird-Meeter K, et al. **Eur Heart J** 1989 Oct;10(10):917–22

Long-term results of percutaneous pulmonary valvuloplasty in adults. Sievert H, et al. **Eur Heart J** 1989 Aug; 10(8):712–7

Evaluation of in vivo morphological results of balloon mitral valvotomy. Benedetti M, et al. **Eur J Cardiothorac Surg** 1990;4(6):337–40; discussion 341

Immediate heparinisation and surgery in the management of saddle embolism. Ross SA, et al. **Eur J Vasc Surg** 1990 Apr;4(2):191–4

Cerebral electrical potentials evoked by balloon distention of the human esophagus. Castell DO, et al. **Gastroenterology** 1990 Mar;98(3):662–6

Manometric responses to balloon distention in patients with nonobstructive dysphagia. Deschner WK, et al. **Gastroenterology** 1989 Nov;97(5):1181–5

Biliary stricture: is dilatation an acceptable alternative to operation? Miller TA. **Gastroenterology** 1990 Apr; 98(4):1089–90

Endoscopic therapy for benign bile duct strictures. Geenen DJ, et al. **Gastrointest Endosc** 1989 Sep-Oct;35(5):367–71

Functional assessment of elderly patients after percutaneous aortic balloon valvuloplasty: New York Heart Association classification versus functional status questionnaire. Tedesco C, et al. **Heart Lung** 1990 Mar;19(2):118–25

A randomized trial of terlipressin plus nitroglycerin vs. balloon tamponade in the control of acute variceal hemorrhage. Fort E, et al. **Hepatology** 1990 Apr; 11(4):678–81

Balloon tamponade vs. endoscopic sclerotherapy: in the management of active variceal hemorrhage. Téres J. **Hepatology** 1990 May;11(5):898–9

Vasopressin/nitroglycerin infusion vs. esophageal tamponade in the treatment of acute variceal bleeding: a randomized controlled trial. Terés J, et al. **Hepatology** 1990 Jun; 11(6):964–8

Balloon valvuloplasty for aortic stenosis. Holmes DR Jr. **Hosp Pract [Off]** 1990 Jan 15;25(1):69–77 (8 ref.)

Balloon valvuloplasty for mitral stenosis. Powers ER. **Hosp Pract [Off]** 1990 May 30;25(5A):37–46

Follow-up of balloon aortic valvuloplasty in young adults—a combined hemodynamic and Doppler echocardiographic study. Arora R, et al. **Indian Heart J** 1989 Sep-Oct; 41(5):314–7

Intraoperative sonographic measurements of the internal mammary artery as a coronary bypass conduit. Likungu J, et al. **Int J Card Imaging** 1989;5(1):33–7

Use of data registries to evaluate medical procedures. Coronary Artery Surgery Study and the Balloon Valvuloplasty Registry. Davis K. **Int J Technol Assess Health Care** 1990;6(2):203–10

Value of two-dimensional echocardiography in selecting patients and balloon sizes for percutaneous balloon mitral valvuloplasty. Chen CG, et al. **J Am Coll Cardiol** 1989 Dec;14(7):1651–8

Balloon dilation of congenital valvular aortic stenosis [editorial; comment] Keane JF, et al. **J Am Coll Cardiol** 1990 Aug;16(2):457–8 Comment on: J Am Coll Cardiol 1990 Aug;16(2):451–6.

Percutaneous transluminal aortic valvuloplasty: acute outcome and follow-up of 125 patients. Lewin RF, et al. **J Am Coll Cardiol** 1989 Nov 1;14(5):1210–7

Gradient reduction, aortic valve regurgitation and prolapse after balloon aortic valvuloplasty in 32 consecutive patients with congenital aortic stenosis [see comments] Shaddy RE, et al. **J Am Coll Cardiol** 1990 Aug;16(2):451–6 Comment in: J Am Coll Cardiol 1990 Aug;16(2):457–8.

Immediate and short-term effects of aortic balloon valvuloplasty on left ventricular diastolic function and filling in humans. Stoddard MF, et al. **J Am Coll Cardiol** 1989 Nov 1;14(5):1218–28

Transesophageal echocardiography during percutaneous mitral valvuloplasty. Kronzon I, et al. **J Am Soc Echocardiogr** 1989 Nov-Dec;2(6):380–5

Medical myotomy for achalasia cardia. Long term results. Gupta JP, et al. **J Assoc Physicians India** 1989 Apr; 37(4):273–4

Balloon embolization of posterior circulation aneurysms [letter; comment] Fisher WS 3d. **J Neurosurg** 1990 Jun; 72(6):984–5 Comment on: J Neurosurg 1989 Oct;71(4):512–9.

Endovascular detachable balloon embolization therapy of cavernous carotid artery aneurysms: results in 87 cases. Higashida RT, et al. **J Neurosurg** 1990 Jun;72(6):857–63

Rupture of aneurysms following balloon embolization. Hodes JE, et al. **J Neurosurg** 1990 Apr;72(4):567–71

Percutaneous microcompression of the gasserian ganglion for trigeminal neuralgia. Lobato RD, et al. **J Neurosurg** 1990 Apr;72(4):546–53

Bile duct stricture in an infant with gastroschisis treated by percutaneous transhepatic drainage, biliary stenting, and balloon dilation. Hancock BJ, et al. **J Pediatr Surg** 1989 Oct;24(10):1071–3

Transfemoral balloon aortic occlusion during open cardiopulmonary resuscitation improves myocardial and cerebral blood flow. Spence PA, et al. **J Surg Res** 1990 Sep;49(3):217–21

Pulmonary artery balloon counterpulsation for right ventricular failure after right ventriculotomy in the swine. Gonzalez-Lavin L, et al. **J Thorac Cardiovasc Surg** 1990 Jan;99(1):153–60

Transatrial balloon technique for activation mapping during operations for recurrent ventricular tachycardia. Mickleborough LL, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):227–32; discussion 232–3

Percutaneous balloon dilation of ureteral strictures after failed surgical repair in children. Aliabadi H, et al. **J Urol** 1990 Aug;144(2 Pt 2):486–8; discussion 492–3

Endourological management of ureteral strictures. Netto Júnior NR, et al. **J Urol** 1990 Sep;144(3):631–4

Increased platelet deposition on polytetrafluoroethylene grafts after balloon catheter thrombectomy. Bech FR, et al. **J Vasc Surg** 1990 Jun;11(6):804–10; discussion 810–1

Combined thrombectomy and dilation for the treatment of acute lower extremity arterial thrombosis. Fogarty TJ, et al. **J Vasc Surg** 1989 Nov;10(5):530–3; discussion 533–4

Endothelial injury and vascular dysfunction associated with the Fogarty balloon catheter [comment] Harker CT, et al. **J Vasc Surg** 1989 Nov;10(5):596–8 Comment on: J Vasc Surg 1989 Mar;9(3):422–5.

Clinical observations on the effect of carotid artery occlusion on cerebral blood flow mapped by xenon computed tomography and its correlation with carotid artery back pressure. Steed DL, et al. **J Vasc Surg** 1990 Jan;11(1):38–43; discussion 43–4

Intragraft drug infusion as an adjunct to balloon catheter thrombectomy for salvage of thrombosed infragenicular vein grafts: a preliminary report. Walsh DB, et al. **J Vasc Surg** 1990 Jun;11(6):753–9; discussion 760

Usefulness of echocardiography in the prediction of early results of catheter balloon mitral valvuloplasty. Lin SL, et al. **Jpn Heart J** 1990 Mar;31(2):161–74

Hemodynamic evaluation and morphological changes of right ventricular out-flow tract and pulmonary valve after balloon pulmonary valvuloplasty. Suzuki K, et al. **Kurume Med J** 1989;36(3):123–36

Management of the internal carotid artery in surgery of the skull base. Andrews JC, et al. **Laryngoscope** 1989 Dec; 99(12):1224–9

A new method to predict safe resection of the internal carotid artery. de Vries EJ, et al. **Laryngoscope** 1990 Jan; 100(1):85–8

Percutaneous transcatheter laser balloon ablation from the canine coronary sinus: implications for the Wolff-Parkinson-White syndrome. Schuger CD, et al. **Lasers Surg Med** 1990;10(2):140–8

Percutaneous balloon valvuloplasty. Nishimura RA, et al. **Mayo Clin Proc** 1990 Feb;65(2):198–220 (117 ref.)

Non-surgical mitral valvotomy [letter] Lubicz S. **Med J Aust** 1990 Jun 18;152(12):673

Foley catheter removal of blunt oesophageal foreign bodies in children. Kooi GH, et al. **Med J Malaysia** 1989 Jun; 44(2):156–9

Can mechanical dilatation improve the function of calcified heart valves? Björk VO. **Monogr Atheroscler** 1990;15:20–1

Pneumatic dilatation for the treatment of achalasia: a follow-up study of 49 patients. Vreden SG, et al. **Neth J Med** 1990 Jun;36(5–6):228–33

Temporary balloon occlusion of a proximal vessel as an aid to clipping aneurysms of the basilar and paraclinoid internal carotid arteries: technical note. Shucart WA, et al. **Neurosurgery** 1990 Jul;27(1):116–9

Venous obstruction due to permanent transvenous pacemaker electrodes: treatment with percutaneous transluminal balloon venoplasty. Spittell PC, et al. **PACE** 1990 Mar; 13(3):271–4

Bilateral cingulumotomy in the treatment of reflex sympathetic dystrophy. Santo JL, et al. **Pain** 1990 Apr; 41(1):55–9

Emergency aortic balloon valvotomy in critical aortic stenosis of the neonate [letter] Austoni P, et al. **Pediatr Cardiol** 1990 Jan;11(1):59–60

Balloon dilation catheters. Radtke W, et al. **Pediatr Clin North Am** 1990 Feb;37(1):193–213 (165 ref.)

Balloon dilatation of post-surgical ano-rectal strictures in two infants. Wilder WM, et al. **Pediatr Radiol** 1989; 19(8):527–9

Treatment of achalasia by the endoscopic-pneumatic dilatation method. Dohrmann P, et al. **Prog Pediatr Surg** 1990;25:132–7

Relief of mesenteric ischemia in type III aortic dissection with percutaneous fenestration of the aortic septum. Williams DM, et al. **Radiology** 1990 Feb;174(2):450–2

Continuous electrocardiographic monitoring during balloon dilatation in achalasia. Sorohan A, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Jan-Mar;93(1):71–2

The value and extent of valve area increase by balloon dilatation of the stenosed bioprosthesis: in vitro studies. Ribeiro PA, et al. **Rev Port Cardiol** 1989 Jul-Aug; 8(7–8):515–8

Intra-arterial injection of papaverine in the decision of balloon dilatation of the iliac arteries. Peene PT, et al. **ROFO** 1989 Dec;151(6):678–80

Palliative percutaneous balloon valvuloplasty in a cyanotic child with tetralogy of Fallot. Mehta AV, et al. **South Med J** 1990 Mar;83(3):360–1

Bacterial cavernous sinus aneurysm treated by detachable balloon technique. Micheli F, et al. **Stroke** 1989 Dec; 20(12):1751–4

Endoscopic balloon dilation of the pylorus after esophagogastrostomy without a drainage procedure. Bemelman WA, et al. **Surg Gynecol Obstet** 1990 May; 170(5):424–6

Intraoperative angiography and temporary balloon occlusion facilitating surgical obliteration of a traumatic carotid cavernous fistula: a case report. LeRoux PD, et al. **Surg Neurol** 1990 Oct;34(4):260–5

Hemodynamic and clinical efficacies of catheter balloon percutaneous transvenous mitral commissurotomy: experience of 100 patients with rheumatic mitral stenosis. Hung JS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Mar; 89(3):182–9

New technique to anesthetize the prostate for transurethral balloon dilation. Reddy PK. **Urol Clin North Am** 1990 Feb; 17(1):55–6

Percutaneous suprapubic cystostomy using balloon dilation. Chin JL, et al. **Urology** 1990 Mar;35(3):261–2

Balloon dilation of prostatic urethra. Daughtry JD, et al. **Urology** 1990 Sep;36(3):203–9

Reappraisal of hydrostatic pressure treatment for intractable postradiotherapy vesical hemorrhage. Mufti GR, et al. **Urology** 1990 Jan;35(1):9–11

Comparison between Savary-Gilliard and balloon dilatation

of benign esophageal strictures. Shemesh E, et al. **World J Surg** 1990 Jul–Aug;14(4):518–21; discussion 521–2

[Balloon occlusion descending aorta angiography in patients with patent ductus arteriosus] Wu JR, et al. **Acta Paediatr Sin** 1989 Mar–Apr;30(2):105–10 (Eng. Abstr.) **(Chi)**

[4 years' experience in the treatment of upper gastrointestinal strictures with balloon dilatation (analysis of 164 cases)] Wang C. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Dec; 23(6):333–6 (Eng. Abstr.) **(Chi)**

[Hemodynamic changes before and after percutaneous balloon mitral valvuloplasty] Wang X. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Dec; 17(6):352–3 **(Chi)**

[Use of the balloon catheter in dilatation of corrosive stenosis of the esophagus] Pokorný M. **Cesk Otolaryngol** 1990 Feb; 39(1):26–32 (Eng. Abstr.) **(Cze)**

[Therapy of esophageal strictures in childhood using balloon dilatation catheters] Janík V, et al. **Cesk Pediatr** 1989 Dec; 44(12):708–11 (Eng. Abstr.) **(Cze)**

[Experience with dilatation of tight esophageal stenoses using a balloon catheter] Bohutová J, et al. **Cesk Radiol** 1989 Oct;43(5):300–8 (Eng. Abstr.) **(Cze)**

[Dilation of stenoses of the oral part of the esophagus in the Kelly–Paterson syndrome (Plummer–Vinson)] Bohutová J, et al. **Cesk Radiol** 1990 Jan;44(1):26–31 (Eng. Abstr.) **(Cze)**

[Dilatation of malignant esophageal stenoses using a balloon catheter] Pokorný M. **Cesk Radiol** 1989 Nov;43(6):361–5 (Eng. Abstr.) **(Cze)**

[Percutaneous pulmonary balloon valvuloplasty in Denmark] Thuesen L, et al. **Ugeskr Laeger** 1989 Oct 23; 151(43):2789–91 (Eng. Abstr.) **(Dan)**

[Percutaneous mitral balloon valvuloplasty in a patient with mitral stenosis] Thuesen L, et al. **Ugeskr Laeger** 1989 Oct 23;151(43):2811–2 (Eng. Abstr.) **(Dan)**

[Percutaneous transluminal recanalization of obstructed upper leg arteries using laser treatment (letter)] Buth J, et al. **Ned Tijdschr Geneeskd** 1989 Nov 4;133(44):2196–7 **(Dut)**

[Balloon valvuloplasty of the aortic valve: short–term and medium–term results in 50 patients] Hoedemaker G, et al. **Ned Tijdschr Geneeskd** 1990 Jan 13;134(2):76–80 (Eng. Abstr.) **(Dut)**

[Treatment of critical pulmonary valvular stenoses in newborn infants using percutaneous valvuloplasty. Study of 28 cases] Guarnera S, et al. **Arch Fr Pediatr** 1989 Aug–Sep;46(7):503–8 (Eng. Abstr.) **(Fre)**

[Percutaneous valvuloplasty of congenital pulmonary stenosis in adults over 50 years of age] Boutaud P, et al. **Arch Mal Coeur** 1990 Jun;83(7):969–75 (19 ref.) (Eng. Abstr.) **(Fre)**

[Percutaneous dilatation with a balloon catheter in subaortic stenoses] Chaara A, et al. **Arch Mal Coeur** 1989 Jul–Aug; 82(8):1427–31 (Eng. Abstr.) **(Fre)**

[Evolution of the primary successes of percutaneous aortic valvuloplasty] Fraysse JB, et al. **Arch Mal Coeur** 1989 Oct; 82(10):1671–6 (Eng. Abstr.) **(Fre)**

[Medium–term follow–up after percutaneous aortic valvuloplasty in the elderly. Clinical study apropos of 102 cases] Lancelin B, et al. **Arch Mal Coeur** 1989 Jul–Aug; 82(8):1397–404 (Eng. Abstr.) **(Fre)**

[Mid–term results of 50 percutaneous aortic valvuloplasties. Follow–up studies using Doppler echocardiography] Lesbre JP, et al. **Arch Mal Coeur** 1990 Feb;83(2):183–90 (20 ref.) (Eng. Abstr.) **(Fre)**

[Various aspects of the medical treatment of newborn infants with heart disease] Vliers A, et al. **Bull Mem Acad R Med Belg** 1989;144(12):621–9 (Eng. Abstr.) **(Fre)**

[Interventional catheterization in the treatment of congenital and acquired heart defects] Friedli B, et al. **Schweiz Med Wochenschr** 1990 Jun 9;120(23):870–3 (Eng. Abstr.) **(Fre)**

[Percutaneous transluminal valvuloplasty in pulmonary valve stenosis] Guirguis NM, et al. **Therapie** 1990 Mar–Apr; 45(2):125–30 (Eng. Abstr.) **(Fre)**

[Electrical impedance of the carotid artery in relation to arterial blood pressure and following balloon catheterization] Apfel H, et al. **Biomed Tech (Berlin)** 1989; 34 Suppl:225–6 **(Ger)**

[Treatment of coronary heart disease in the aged. When balloon dilatation, when surgery?] Schwarz F, et al. **Dtsch Med Wochenschr** 1990 Jul 27;115(30):1131–5 (Eng. Abstr.) **(Ger)**

[Treatment of hemorrhage of esophageal varices] Sauerbruch T. **Leber Magen Darm** 1990 Jan;20(1):11–2, 15–9 (24 ref.) (Eng. Abstr.) **(Ger)**

[Practical medicine. Balloon valvuloplasty in heart valve stenosis] Tebbe U. **Med Klin** 1990 Jul 15;85(7):435–9 (27 ref.) **(Ger)**

[Transesophageal and Doppler ultrasound studies before and following percutaneous balloon valvuloplasty of the aortic valve] Geibel A, et al. **Z Kardiol** 1990 Mar;79(3):176–82 (Eng. Abstr.) **(Ger)**

[Percutaneous balloon catheter dilatation in the therapy of mitral valve stenosis] Keltai M, et al. **Orv Hetil** 1990 Mar 18;131(11):589–92 **(Hun)**

[Percutaneous pulmonary valvuloplasty. Immediate results and a follow–up: clinical, Doppler and hemodynamic evaluation] Piovaccari G, et al. **Cardiologia** 1989 Jul; 34(7):623–7 (Eng. Abstr.) **(Ita)**

[Transluminal esophagoplasty. Personal experience in the treatment of esophageal stenosis] Angilello A. **Minerva Chir** 1990 Jan;45(1–2):41–4 (Eng. Abstr.) **(Ita)**

[Percutaneous treatment of benign biliary stenosis: bilioplasty and stenting] Rossi P, et al. **Radiol Med (Torino)** 1989 Nov; 78(5):505–13 (Eng. Abstr.) **(Ita)**

[Preoperative intraarterial infusion chemotherapy in combination with angiotensin II pressor by BOAI method in cervical cancer] Kondoh T, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1788–92 (Eng. Abstr.) **(Jpn)**

[Balloon–occluded arterial infusion as chemotherapy in bladder cancer—long–term results] Mitsuzane K, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1701–4 (Eng. Abstr.) **(Jpn)**

[Retrograde prostatic urethroplasty with balloon catheter] Ohkuma K, et al. **Gan To Kagaku Ryoho** 1989 Dec; 16(12):3813–7 (Eng. Abstr.) **(Jpn)**

[Arterial stasis chemotherapy] Yamada R, et al. **Gan To Kagaku Ryoho** 1990 Mar;17(3 Pt 2):440–4 (Eng. Abstr.) **(Jpn)**

[Endourological management of ureteral strictures] Yamamoto A, et al. **Hinyokika Kiyo** 1989 Oct; 35(10):1683–6 (Eng. Abstr.) **(Jpn)**

[Percutaneous transvenous mitral commisurotomy: my experience] Inoue K. **J Cardiol** 1989 Sep;19(3):955–60 **(Jpn)**

[Percutaneous transvenous mitral commissurotomy (PTMC) by using Inoue–balloon] Inoue K. **Kyobu Geka** 1989 Jul; 42(8 Suppl):596–602 (Eng. Abstr.) **(Jpn)**

[The clinical studies of intermittent hepatic artery occlusion with infusion chemotherapy—19 cases of unresectable hepatocellular carcinoma and 14 cases of metastatic liver cancer] Yano S, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Dec 20;24(11):2534–45 (Eng. Abstr.) **(Jpn)**

[Comparison of early clinical results of contact laser thermal angioplasty with a metal hot tip with balloon angioplasty] Ishimaru S, et al. **Nippon Geka Gakkai Zasshi** 1990 May; 91(5):639–44 (Eng. Abstr.) **(Jpn)**

[Retrograde balloon catheter dilatation of urethral stenosis—experience in benign prostatic hypertrophy and postoperative urethral stricture] Ishiguchi T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Jan 25; 50(1):61–7 (Eng. Abstr.) **(Jpn)**

[Percutaneous transfemoral arterial placement of 3 Fr. balloon infusion catheter for infusion chemotherapy of liver tumors] Sawada S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Mar 25; 50(3):240–8 (Eng. Abstr.) **(Jpn)**

[A successful treatment of spontaneous carotid cavernous fistula causing hemorrhagic infarction treated by detachable balloon] Kasama A, et al. **No Shinkei Geka** 1990 Jul;18(7):631–6 (Eng. Abstr.) **(Jpn)**

[Liquid embolization for arteriovenous malformation with temporary balloon occlusion of another feeders] Abe H, et al. **Rinsho Hoshasen** 1989 Jun;34(6):739–42 (Eng. Abstr.) **(Jpn)**

[Dysplastic pulmonary valve and pulmonary valvuloplasty. A case report] Cardoso CR, et al. **Arq Bras Cardiol** 1989 May;52(5):271–3 (Eng. Abstr.) **(Por)**

[Treatment using balloon catheterization of pulmonary valve stenosis] Gonçalves RC, et al. **Arq Bras Cardiol** 1989 Nov; 53(5):257–60 (Eng. Abstr.) **(Por)**

[Percutaneous balloon valvuloplasty in mitral stenosis. A change in the established therapeutic orientation?] Grinberg M, et al. **Arq Bras Cardiol** 1989 Jul;53(1):1–3 **(Por)**

[Mitral valvuloplasty with balloon catheterization in pregnant patients. Report of 3 cases] Mangione JA, et al. **Arq Bras Cardiol** 1989 Feb;52(2):99–101 (Eng. Abstr.) **(Por)**

[Aortic valve stenosis without apparent "gradient". Demonstration and treatment in heart catheterization] de Menezes IC, et al. **Rev Port Cardiol** 1989 Dec;8(12):863–5 (Eng. Abstr.) **(Por)**

[Mitral valvotomy: scalpel or balloon?] Ribeiro PA. **Rev Port Cardiol** 1989 Oct;8(10):679–81 (Eng. Abstr.) **(Por)**

[Treatment of mitral valve stenosis by balloon dilatation] Silin VA, et al. **Grud Serdechnososudistaia Khir** 1990;(4):8–12 **(Rus)**

[Balloon valvuloplasty in congenital aortic stenosis] Petrosian IuS, et al. **Grudn Khir** 1989 Sep–Oct;(5):8–11 (Eng. Abstr.) **(Rus)**

[Interventional cardiac catheterization] Finci L, et al. **Med Arh** 1987;41(6):305–11 (Eng. Abstr.) **(Scr)**

[Balloon dilatation in tuberculous ureteral stenosis] Vidal Moreno JF, et al. **Arch Esp Urol** 1990 Mar;43(2):175–8 (Eng. Abstr.) **(Spa)**

[Percutaneous valvulotomy for calcified aortic valve stenosis in the adult] Fernández Vázquez F, et al. **Arch Inst Cardiol Mex** 1989 Jul–Aug;59(4):389–92 (Eng. Abstr.) **(Spa)**

[Percutaneous aortic valvuloplasty prior to major abdominal surgery] Uriarte P, et al. **Rev Med Chil** 1989 Jan;117(1):42–5 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Iatrogenic Lutembacher's syndrome after percutaneous transluminal mitral valvotomy. Chen CH, et al. **Am Heart J** 1990 Jan;119(1):209–11

Percutaneous aortic balloon valvuloplasty [letter] Kern MJ. **Am Heart J** 1989 Dec;118(6):1360–1

Aortic rupture following percutaneous catheter balloon coarctoplasty in an adult. Kulick DL, et al. **Am Heart J** 1990 Jan;119(1):190–3

Acute myocardial infarction complicating percutaneous aortic valvuloplasty successfully treated by percutaneous coronary angioplasty. Romanello PP, et al. **Am Heart J** 1990 Apr;119(4):953–5

Radiological cases of the month. Obstruction of the trigone of the bladder by balloon of Foley catheter. Rathore MH, et al. **Am J Dis Child** 1990 Sep;144(9):1047–8

Obstruction of venous return by a pulmonary artery catheter during cardiopulmonary bypass [letter] Meluch AM, et al. **Anesth Analg** 1990 Jan;70(1):121

Operative findings after percutaneous mitral dilation. Acar C, et al. **Ann Thorac Surg** 1990 Jun;49(6):959–63

Aortic valve disruption after percutaneous aortic balloon valvoplasty. Brdlik O, et al. **Ann Thorac Surg** 1990 May; 49(5):822–3

Aortic valve operation after percutaneous aortic balloon valvuloplasty. Johnson RG, et al. **Ann Thorac Surg** 1990 May;49(5):740–4; discussion 744–5

Fatal left ventricular perforation during mitral balloon valvoplasty. Robertson JM, et al. **Ann Thorac Surg** 1990 May;49(5):819–21

Ischaemic necrosis of the glans penis: a complication of urethral catheterization in a diabetic man. Nacey JN, et al. **Aust N Z J Surg** 1990 Oct;60(10):819–21

Left ventricular function during balloon dilatation of the aortic valve in elderly patients: a blind study of echocardiograms. Egeblad H, et al. **Br Heart J** 1990 Jan; 63(1):32–6

Right sided endocarditis after balloon dilatation of the pulmonary valve. Kalra GS, et al. **Br Heart J** 1990 Jun; 63(6):368–9

Balloon–induced endothelial denudation promotes deep injury of the arterial wall. Uint L, et al. **Braz J Med Biol Res** 1989;22(7):913–5

Influence of applied stress on mitotic response of arteries to injury with a balloon catheter: quantitative study in rat thoracic aorta. Capron L, et al. **Cardiovasc Res** 1989 Nov; 23(11):941–8

The effect of atrial dilatation on the genesis of atrial arrhythmias. Solti F, et al. **Cardiovasc Res** 1989 Oct; 23(10):882–6

Detection and quantification of aortic regurgitation during aortic valvuloplasty. Lopez JF, et al. **Cathet Cardiovasc Diagn** 1990 May;20(1):5–9

Mitral valve rupture during percutaneous dilatation of aortic valve stenosis: an avoidable complication [letter; comment] Loya YS, et al. **Cathet Cardiovasc Diagn** 1990 Feb;19(2):149 Comment on: Cathet Cardiovasc Diagn 1989 Feb;16(2):115–8.

Coronary occlusion after failed closure of coronaro–pulmonary fistula with detachable balloon. Meier B. **Cathet Cardiovasc Diagn** 1989 Dec;18(4):237–9

Long–term follow–up of catheter–induced intimal injury from routine coronary angiography in moderately hypercholesterolemic minipigs. Pap JM. **Cathet Cardiovasc Diagn** 1990 Jun;20(2):139–49

Predictors of increased mitral regurgitation after percutaneous mitral balloon valvotomy. Roth RB, et al. **Cathet Cardiovasc Diagn** 1990 May;20(1):17–21

Complete heart block developing during aortic valvuloplasty. Plack RH, et al. **Chest** 1989 Nov;96(5):1201–3

Unusual cause of 'obstructed' appearance on diuretic Tc–99m DTPA renal scan. Juravsky M, et al. **Clin Nucl Med** 1990 Jan;15(1):41–2

The danger of high compliance balloons for esophageal dilatation in achalasia. Rabinovici R, et al. **Endoscopy** 1990 Mar;22(2):63–4

Pseudoaneurysm of the posterior tibial artery as an early complication after Fogarty catheter thrombectomy. van Schil P, et al. **Eur J Vasc Surg** 1990 Apr;4(2):197–9

Perforation of the heart in a newborn with critical valvar pulmonary stenosis during balloon valvoplasty. Robida A, et al. **Int J Cardiol** 1990 Jan;26(1):111–2

Atrial septal defect after percutaneous mitral balloon valvuloplasty: immediate results and follow–up. Casale P, et al. **J Am Coll Cardiol** 1990 May;15(6):1300–4

Echocardiographic and hemodynamic characteristics of atrial septal defects created by percutaneous valvuloplasty. Kronzon I, et al. **J Am Soc Echocardiogr** 1990 Jan–Feb; 3(1):64–71

Endoscopic management of impacted Sengstaken–Blakemore tube. Kochhar R, et al. **J Emerg Med** 1989 Sep–Oct; 7(5):469–70

Malfunction of a double–balloon carotid shunt as a result of herniation of the proximal balloon. Eidt JF, et al. **J Vasc Surg** 1990 Jul;12(1):62–4

Balloon dilatation of the prostate. **Med Lett Drugs Ther** 1990 Jun 29;32(821):64

Percutaneous transcolonic puncture of retained Foley balloon catheter. Lloyd SN, et al. **Postgrad Med J** 1989 Nov; 65(769):845–6

Perineal abscess after prostatic urethroplasty with balloon catheter: report of a case. Castaneda F, et al. **Radiology** 1990 Jan;174(1):49–50

Bladder fissure due to instrumentation during prostatic balloon dilatation. Lampmann LE, et al. **ROFO** 1989 Sep; 151(3):373–4

Focal headache during balloon inflation in the internal carotid and middle cerebral arteries. Nichols FT 3d, et al.

Stroke 1990 Apr;21(4):555–9

Bacteraemia following orotracheal intubation and oesophageal balloon dilatation. Hansen CP, et al. **Thorax** 1989 Aug;44(8):684–5

Aneurysm of the dilatation balloon catheter: an unusual complication of percutaneous nephrolithotomy. Gray RR, et al. **Urol Radiol** 1989;11(3):165–6

[Arteriocaliceal fistula after renal thrombectomy caused by a Fogarty catheter (letter)] Lacombe M. **Presse Med** 1990 Apr 14;19(15):719 **(Fre)**

[Esophageal perforation as a rare complication in the use of the Linton–Nachlas balloon catheter] Wrazidlo W, et al. **ROFO** 1989 Sep;151(3):371–2 **(Ger)**

[Aneurysm of the aortic isthmus as a complication following dilatation of coarctation] Amiri MA, et al. **Vasa** 1990; 19(1):75–8 (Eng. Abstr.) **(Ger)**

[Acute coronary occlusion in percutaneous coronary angioplasty. Treatment using thrombolysis and redilatation] Quininha J, et al. **Rev Port Cardiol** 1988 May–Jun; 7(3):287–91 (Eng. Abstr.) **(Por)**

[Atrioventricular block at the nodal level and block of an accessory pathway during percutaneous mitral valvuloplasty] Maté I, et al. **Rev Esp Cardiol** 1990 Jan; 43(1):56–8 (Eng. Abstr.) **(Spa)**

[Early complications of pneumatic dilatation in the treatment of primary motility disorders of the esophagus] Sala T, et al. **Rev Esp Enferm Dig** 1990 Apr;77(4):255–8 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

Balloon rupture during valvuloplasty [letter; comment] Rao PS. **Am Heart J** 1990 Jun;119(6):1441–2 Comment on: Am Heart J 1989 Jun;117(6):1397–8.

A modification of the Dotter–Lukas catheter. Sobol BJ, et al. **Am Heart J** 1966 Apr;71(4):501–2

A new technique for segmental jejunal perfusion in man. Knutson L, et al. **Am J Gastroenterol** 1989 Oct; 84(10):1278–84

A fiberoptic stylette for localizing the balloon buckle. Lincoff H, et al. **Arch Ophthalmol** 1990 Apr;108(4):607

Which balloon embolectomy catheter? Niblett PG, et al. **Br J Surg** 1990 Aug;77(8):930–3

Repeated dearterialization of hepatic tumors with an implantable occluder. Persson BG, et al. **Cancer** 1990 Sep 15;66(6):1139–46

Percutaneous balloon occlusion of surgical arteriovenous fistulae following venous thrombectomy. Endrys J, et al. **Cardiovasc Intervent Radiol** 1989 Jul–Aug;12(4):226–9

A new type of adjustable vascular introducer for balloon valvuloplasty: technical note. Medina A, et al. **Cardiovasc Intervent Radiol** 1989 May–Jun;12(3):169–71

Balloon-occluded arterial infusion therapy in the treatment of primary and recurrent gynecologic malignancies. Yamashita Y, et al. **Cardiovasc Intervent Radiol** 1989 Jul–Aug;12(4):188–95

Extendable probe [letter] den Heijer P. **Cathet Cardiovasc Diagn** 1990 Jul;20(3):218–9

Comparison of 5F and 7/8F catheters for left ventricular and coronary angiography. Hui WK, et al. **Cathet Cardiovasc Diagn** 1990 Feb;19(2):84–6

CO2 power-assisted hand-held syringe: better visualization during diagnostic and interventional angiography. Krieger RA, et al. **Cathet Cardiovasc Diagn** 1990 Feb;19(2):123–8

Balloon valvuloplasty of pulmonary stenosis in infants and children—co-operative study of the German Society of Pediatric Cardiology. Schmaltz AA, et al. **Eur Heart J** 1989 Nov;10(11):967–71

Use of a modified angioplasty balloon catheter in the dilatation of tight biliary strictures. Rao KJ, et al. **Gut** 1990 May;31(5):565–7

Use of a perforated balloon catheter to deliver concentrated heparin into the wall of the normal canine artery. Wolinsky H, et al. **J Am Coll Cardiol** 1990 Feb;15(2):475–81

Common duct exploration with the balloon-tipped biliary catheter: a review. Drumm J, et al. **J R Soc Med** 1989 Sep;82(9):542–4 (9 ref.)

Inferior vena cava interruption with the Hunter–Sessions balloon: eighteen years' experience in 191 cases. Hunter JA, et al. **J Vasc Surg** 1989 Oct;10(4):450–6

Balloon embolectomy catheter–induced arterial injury: a comparison of four catheters. Schwarcz TH, et al. **J Vasc Surg** 1990 Mar;11(3):382–8

Transvenous devices for inferior vena cava interruption [editorial] Zarins CK. **J Vasc Surg** 1989 Dec;10(6):702–3

Successful treatment of a nondeflatable balloon atrial septostomy catheter. Wilson NJ, et al. **Pediatr Cardiol** 1990 Jul;11(3):150–2

Endovascular treatment of intracranial aneurysms with a new silicone microballoon device: technical considerations and indications for therapy. Higashida RT, et al. **Radiology** 1990 Mar;174(3 Pt 1):687–91

Balloon needle for the atraumatic transcortical ventricular approach: technical note. Madrazo I, et al. **Surg Neurol** 1990 Mar;33(3):226–7

Low-profile balloon: superior retention device for catheter drainage of bladder and renal pelvis. Rutner AB. **Urol Clin North Am** 1990 Feb;17(1):111–3

New solution to undeflatable Foley balloon. Spaedy M, et al. **Urology** 1990 May;35(5):452–3

The possibility of retrogasserian thermocoagulation, glycerol radiculolysis and balloon compression in Meckel's cavity with a single surgical instrumentarium. Vladyka V, et al. **Zentralbl Neurochir** 1989;50(3–4):149–52

[A double balloon catheter for the procurement of abdominal organs] Benoit G, et al. **Ann Urol (Paris)** 1990;24(3):199–201 (Eng. Abstr.) **(Fre)**

[Percutaneous instrumental dilatation of heart valve stenoses and aortic isthmus stenosis] Erdmann E. **Internist (Berlin)** 1989 Aug;30(8):498–501 (48 ref.) **(Ger)**

[Use of the thermal laser effect of laser irradiation for cardiovascular applications exemplified by the Nd:YAG laser] Ischinger T, et al. **Z Kardiol** 1989 Nov;78(11):689–700 (73 ref.) (Eng. Abstr.) **(Ger)**

[Transfemoral, transatrial double-balloon valvuloplasty of rheumatic mitral stenosis] Kasper W, et al. **Z Kardiol** 1990 Jul;79(7):499–505 (Eng. Abstr.) **(Ger)**

[Hemodynamic and clinical results following percutaneous aortic valve valvuloplasty in adults] Scherer HE, et al. **Z Kardiol** 1990 Jul;79(7):489–98 (Eng. Abstr.) **(Ger)**

[Application of a large occlusion balloon catheter to re-do open heart surgery] Yamaguchi A, et al. **Kyobu Geka** 1989 Oct;42(11):961–4 (Eng. Abstr.) **(Jpn)**

[Development of and experience with 3-lumen double-balloon catheters for use in superselective angiography] Tamamura H, et al. **Rinsho Hoshasen** 1990 Jun;35(6):769–72 **(Jpn)**

[A power syringe for production of pressure in balloon catheters] Mararenko AI, et al. **Klin Khir** 1989;(7):75 **(Rus)**

[Dilatation of the esophagus using a low-profile balloon catheter in the treatment of esophageal stenosis in an infant] Roshal' LM, et al. **Pediatriia** 1990;(2):95–6 **(Rus)**

[Intraoperative dilatation of extensive stenoses of major arteries using a new balloon catheter] Volodos NL, et al. **Vestn Khir** 1989 Apr;142(4):104–5 **(Rus)**

[Modification of an inflatable balloon catheter for the treatment of retinal detachment] Movshovich AI, et al. **Vestn Oftalmol** 1990 Mar–Apr;106(2):9–11 (Eng. Abstr.) **(Rus)**

METHODS

Comparison of single rubber-nylon balloon and double polyethylene balloon valvuloplasty in 94 patients with rheumatic mitral stenosis. Chen CR, et al. **Am Heart J** 1990 Jan;119(1):102–11

Atrial septal defect resulting from mitral balloon valvuloplasty: relation of defect morphology to transseptal balloon catheter delivery. Fields CD, et al. **Am Heart J** 1990 Mar;119(3 Pt 1):568–76

Hemodynamics and coronary blood flow during experimental aortic valvuloplasty: comparison of the dual versus the single catheter methods. Moore JW, et al. **Am Heart J** 1990 Jan;119(1):136–42

Percutaneous valvuloplasty as a treatment for aortic and mitral valve disease. Strauss B, et al. **Am Heart J** 1990 May;119(5):1184–92 (44 ref.)

Early and late changes in left ventricular systolic performance after percutaneous aortic balloon valvuloplasty. Harpole DH, et al. **Am J Cardiol** 1990 Aug 1;66(3):327–32

Comparison of results of percutaneous balloon mitral valvotomy using consecutive single (25 mm) and double (25 mm and 12 mm) balloon techniques. Al Kasab S, et al. **Am J Cardiol** 1989 Dec 1;64(19):1385–7

Percutaneous double balloon valvotomy for severe rheumatic mitral stenosis. Ruiz CE, et al. **Am J Cardiol** 1990 Feb 15;65(7):473–7

Percutaneous balloon mitral valvotomy: single versus double balloon techniques [letter; comment] Shrivastava S. **Am J Cardiol** 1990 Apr 15;65(15):1048 Comment on: Am J Cardiol 1989 Jan 1;63(1):135–6.

Percutaneous balloon mitral valvuloplasty by retrograde left atrial catheterization. Stefanadis C, et al. **Am J Cardiol** 1990 Mar 1;65(9):650–4

Insertion of a retrohepatic vena cava balloon shunt through the saphenofemoral junction. McAnena OJ, et al. **Am J Surg** 1989 Nov;158(5):463–6

Strictures following gastric stapling for morbid obesity. Results of endoscopic dilatation. Sataloff DM, et al. **Am Surg** 1990 Mar;56(3):167–74

Percutaneous balloon pulmonary valvuloplasty—the Singapore General Hospital experience. Ng MP, et al. **Ann Acad Med Singapore** 1990 Jan;19(1):54–7

Balloon atrial septostomy under two dimensional echocardiographic visualisation. Wong KY, et al. **Ann Acad Med Singapore** 1990 Jan;19(1):51–3

Percutaneous transluminal balloon valvuloplasty: the treatment of choice for congenital valvar pulmonary stenosis. Yip WC, et al. **Ann Acad Med Singapore** 1990 Jan;19(1):58–63

Benign postoperative biliary strictures. Operate or dilate? Pitt HA, et al. **Ann Surg** 1989 Oct;210(4):417–25; discussion 426–7

Management of neonatal critical pulmonic stenosis in the balloon valvotomy era. Caspi J, et al. **Ann Thorac Surg** 1990 Feb;49(2):273–8

Venous cannulation for high-flow femorofemoral bypass. Smith CR, et al. **Ann Thorac Surg** 1990 Apr;49(4):674–5

Balloon dilatation of biliary strictures: experience and review of the literature. Gya D, et al. **Aust N Z J Surg** 1990 May; 60(5):361–4

Dilatation with progressively larger balloons for severe stenosis of the pulmonary valve presenting in the late neonatal period and early infancy. Qureshi SA, et al. **Br Heart J** 1989 Oct;62(4):311–4

Prostatic stents and balloon dilatation. McLoughlin J, et al. **Br J Hosp Med** 1990 Jun;43(6):422–6 (27 ref.)

Balloon dilatation of the prostate: technique and early results. Keane PF, et al. **Br J Urol** 1990 Apr;65(4):354–6

The mechanism of the obstruction in calcific aortic stenosis with bicuspid valve: a reason for failure of balloon aortic valvuloplasty in the elderly. Di Segni E, et al. **Cardiology** 1989;76(6):450–4

Intraoperative balloon valvuloplasty in pulmonary valve stenosis. Medina A, et al. **Cardiovasc Intervent Radiol** 1989 Jul–Aug;12(4):199–201

Antegrade catheter snare for retrograde catheterization of the left ventricle: a new technique to facilitate balloon aortic valvuloplasty. Latson LA. **Cathet Cardiovasc Diagn** 1990 Jan;19(1):56–7

Assessment of the "long sheath" technique for percutaneous aortic balloon valvuloplasty. Plante S, et al. **Cathet Cardiovasc Diagn** 1990 Feb;19(2):129–35

Balloon dilatation in infants and children with cardiac defects. Rao PS. **Cathet Cardiovasc Diagn** 1989 Nov; 18(3):136–49 (112 ref.)

Attempted balloon catheter obstruction of pulmonary arterial flow in ventricular septal rupture. Webb JG, et al. **Cathet Cardiovasc Diagn** 1990 Apr;19(4):246–7

Minimal requirement of effective dilation diameter of balloon(s) in percutaneous transluminal mitral valvotomy. Chen CY, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Nov; 44(5):287–92

Experimental balloon valvuloplasty of fibrotic and calcific mitral valves. Reifart N, et al. **Circulation** 1990 Mar; 81(3):1005–11

Aortic valvoplasty: comparison of the techniques and results of transeptal and retrograde methods. Crook R, et al. **Clin Radiol** 1990 Aug;42(2):110–3

Balloon catheter re-expansion of atelectatic lung. Maewal HK, et al. **Crit Care Med** 1976 Nov–Dec;4(6):301–3

Advances in interventional cardiology: endomyocardial biopsy, valvuloplasty, and pediatric interventional cardiology. Greenberg MA, et al. **Curr Opin Radiol** 1990 Aug;2(4):616–27 (46 ref.)

Biopsy, nonvascular balloon dilation, and percutaneous drainage. Kerlan R. **Curr Opin Radiol** 1990 Apr;2(2):300–8 (38 ref.)

Catheter balloon valvuloplasty in adults, Part I: Aortic stenosis. Kulick DL, et al. **Curr Probl Cardiol** 1990 Jul; 15(7):353–95 (152 ref.)

Catheter balloon commissurotomy in adults. Part II: Mitral and other stenoses. Kulick DL, et al. **Curr Probl Cardiol** 1990 Aug;15(8):397–470 (118 ref.)

Percutaneous transluminal aortic valvuloplasty—the acute outcome and follow-up of 149 patients who underwent the double balloon technique. Dorros G, et al. **Eur Heart J** 1990 May;11(5):429–40

A comparison of two methods to measure coronary flow reserve in the setting of coronary angioplasty: intracoronary blood flow velocity measurements with a Doppler catheter, and digital subtraction cineangiography. Serruys PW, et al. **Eur Heart J** 1989 Aug;10(8):725–36

A simple technique for thromboembolectomy of the upper limb. Beckingham IJ, et al. **Eur J Vasc Surg** 1990 Apr; 4(2):173–7

Percutaneous aortic valvuloplasty. Palacios IF. **G Ital Cardiol** 1989 Dec;19(12):1083–5 (15 ref.)

Sensory and motor responses to rectal distention vary according to rate and pattern of balloon inflation. Sun WM, et al. **Gastroenterology** 1990 Oct;99(4):1008–15

Forceful balloon dilation: an outpatient procedure for achalasia. Barkin JS, et al. **Gastrointest Endosc** 1990 Mar–Apr;36(2):123–6

Pneumatic dilation of achalasia without the aid of fluoroscopy [letter] Misra SP, et al. **Gastrointest Endosc** 1989 Sep–Oct;35(5):476

Balloon atrial septostomy in infants with transposition of the great arteries (d-TGA): PGIMER experience. Chandrashekhar YS, et al. **Indian Heart J** 1990 Jan–Feb; 42(1):51–4

Closed mitral valvotomy in pregnancy—a study of seven cases. Abid A, et al. **Int J Cardiol** 1990 Mar;26(3):319–21; discussion 323–4

Isolated transarterial percutaneous mitral valvoplasty: the double balloon technique. Büchler JR, et al. **Int J Cardiol** 1990 Aug;28(2):253–6

Assessment of bedside umbilical vein balloon septostomy using two-dimensional echocardiographic guidance in transposition of great arteries. D'Orsogna L, et al. **Int J Cardiol** 1989 Dec;25(3):271–7

Carotid artery approach for balloon dilation of aortic valve stenosis in the neonate: a preliminary report. Fischer DR, et al. **J Am Coll Cardiol** 1990 Jun;15(7):1633–6

The M-Heart percutaneous balloon mitral Valvuloplasty Registry: initial results and early follow-up. The M-Heart Group. Herrmann HC, et al. **J Am Coll Cardiol** 1990 May; 15(6):1221–6

Balloon dilatation of the external urethral sphincter: a case study. Werbrouck P, et al. **J Am Paraplegia Soc** 1990 Apr; 13(2):13–4

Balloon mitral valvotomy. A new technique. Loya YS, et al. **J Assoc Physicians India** 1989 Jun;37(6):399–401

Pneumatic dilatation for achalasia of the esophagus: report of three patients treated with self-constructed pneumatic bags using the endoscopic technique. Ovartlarnporn B.

J Med Assoc Thai 1990 Feb;73(2):115–8
Endoscopic balloon dilation of the prostate: early experience. Goldenberg SL, et al. J Urol 1990 Jul;144(1):83–7; discussion 87–8
A balloon-expandable intravascular stent for obliterating experimental aortic dissection. Trent MS, et al. J Vasc Surg 1990 May;11(5):707–17
Balloon dilatation of the prostate [editorial] Lancet 1989 Dec 16;2(8677):1432–3
Balloon valvuloplasty in pulmonary atresia and intact ventricular septum [letter] Ino T, et al. Lancet 1989 Dec 23–30;2(8678–8679):1531
Transurethral balloon dilatation of the prostate. Stewart D. Ohio Med 1990 Jun;86(6):469, 479
Role of balloon dilation in the treatment of benign prostatic hyperplasia. Reddy PK. Prostate Suppl 1990;3:39–48
Radiographic experiences with the double-balloon mitral valvotomy. Martin AH. Radiogr Today 1988 Oct; 54(617):29–31
Percutaneous double balloon mitral valvotomy for rheumatic mitral stenosis; immediate and short-term follow-up in 50 patients. Ribeiro PA, et al. Rev Port Cardiol 1988 May–Jun; 7(3):269–77
Double balloon dilatation for discrete sub-aortic stenosis: immediate results and short term follow-up. Ribeiro PA, et al. Rev Port Cardiol 1988 Nov–Dec;7(6):585–8
Preoperative control of splenic artery inflow in patients with splenic venous occlusion. Adams DB, et al. South Med J 1990 Sep;83(9):1021–4
Common duct stone push-through. Goco IR, et al. South Med J 1990 Sep;83(9):1033–5
Endoscopic dilation of colonic postoperative strictures. Pietropaolo V, et al. Surg Endosc 1990;4(1):26–30
A simple method to remove a defective urinary catheter. Di Saverio G, et al. Surg Gynecol Obstet 1990 Mar; 170(3):253
An easy and safe modified method of endoscopic balloon dilation for postgastrectomy anastomotic stricture. Kadota T, et al. Surg Gynecol Obstet 1990 May;170(5):445–7
Balloon dilatation of the prostate. Dowd JB, et al. Urol Clin North Am 1990 Aug;17(3):671–7
[Treatment of ureteral stricture using balloon dilatation] Lilov A, et al. Khirurgiia (Sofiia) 1989;42(5):104–7 (Eng. Abstr.) (Bul)
[Percutaneous transluminal mitral valvuloplasty using the double balloon technic] Slagboom T, et al. Ned Tijdschr Geneeskd 1989 Jul 29;133(30):1509–14 (Eng. Abstr.) (Dut)
[Percutaneous occlusion by a detachable balloon of a fistula between the left coronary and the pulmonary artery] Francoual M, et al. Arch Mal Coeur 1990 Jun;83(7):1003–5 (Eng. Abstr.) (Fre)
[Current treatment of simple retinal detachment. Advantages and inconveniences of permanent and temporary scleral buckling compared with gas expansion of the retina] Urrets-Zavalia A. Ophtalmologie 1989 Sep–Dec;3(4):292–6 (Eng. Abstr.) (Fre)
[The intrahepatic portosystemic shunt. Initial clinical experiences with patients with liver cirrhosis] Rössle M, et al. Dtsch Med Wochenschr 1989 Oct 6;114(40):1511–6 (Eng. Abstr.) (Ger)
[The value of hydrostatic balloon dilatation with adjuvant pentosan polysulfate medication in therapy of chronic interstitial cystitis] Beer M, et al. Helv Chir Acta 1989 Aug; 56(3):327–9 (Eng. Abstr.) (Ger)
[Interventional cardiology in children] Schmaltz AA, et al. Klin Padiatr 1990 Jan–Feb;202(1):12–7 (45 ref.) (Eng. Abstr.) (Ger)
[Percutaneous treatment of benign ureteral stenoses and fistulae] Neumayer K. ROFO 1990 Jun;152(6):708–12 (Eng. Abstr.) (Ger)
[Dilatation treatment of esophageal stenoses in young patients with recessive epidermolysis bullosa dystrophica] Seitz HK, et al. Z Gastroenterol 1990 Mar;28(3):157–9 (Eng. Abstr.) (Ger)
[Short- and long-term problems in dilatation of untreated aortic isthmus stenosis in children] Galal O, et al. Z Kardiol 1990 Jul;79(7):518–22 (Eng. Abstr.) (Ger)
[Percutaneous aortic valvuloplasty in the aged using the antegrade or retrograde method: a report of two cases] Ohtani K, et al. J Cardiol 1989 Jun;19(2):599–608 (Eng. Abstr.) (Jpn)
[Percutaneous transvenous mitral valvuloplasty: short-term effects and complications] Saito S, et al. J Cardiol 1989 Mar;19(1):207–17 (Eng. Abstr.) (Jpn)
[Dilatation of esophageal stenoses] Knutsen H, et al. Tidsskr Nor Laegeforen 1990 May 20;110(13):1711–3 (Eng. Abstr.) (Nor)
[Percutaneous mitral valvuloplasty using balloon catheterization. Immediate results in 80 cases] Rocha P, et al. Arq Bras Cardiol 1989 May;52(5):253–8 (Eng. Abstr.) (Por)
[Mitral and tricuspid valvuloplasty with balloon catheterization in the same procedure. A case report] Romão N, et al. Arq Bras Cardiol 1989 Dec;53(6):333–8 (Eng. Abstr.) (Por)
[Evolution of Rashkind's septotosomy method in the transposition of great arteries at the civil hospitals of Lisboa (1971–1987)] Kaku S, et al. Rev Port Cardiol 1988 Nov–Dec;7(6):557–61 (Eng. Abstr.) (Por)
[Percutaneous mitral valvotomy] Machado FP, et al. Rev Port Cardiol 1989 Mar;8(3):205–9 (Eng. Abstr.) (Por)
[Pulmonary valvotomy in adults. The double balloon technic—apropos of 2 cases] Machado FP, et al. Rev Port Cardiol 1989 Apr;8(4):295–9 (Eng. Abstr.) (Por)
[Treatment of stenosis of the aortic orifice by the method of balloon dilatation] Sukhov VK, et al. Grud Serdechnososudistain Khir 1990;(5):18–22 (Eng. Abstr.) (Rus)
[Endoscopy in cicatricial esophageal stenosis] Sotnikov VN, et al. Sov Med 1989;(11):101–4 (Rus)
[Pneumatic nasal tamponade in the treatment of epistaxis] Folch D, et al. An Otorrinolaringol Ibero Am 1989; 16(6):667–74 (Eng. Abstr.) (Spa)
[Endo-urologic treatment of the uretero-intestinal stenoses in patients subjected to diversion] Hidalgo Togores L, et al. Arch Esp Urol 1990 Jun;43(5):551–6 (Eng. Abstr.) (Spa)
[Percutaneous mitral valvuloplasty in 6 patients] Beyer R, et al. Rev Med Chil 1989 Jan;117(1):23–9 (Eng. Abstr.) (Spa)

NURSING

[Nursing care in percutaneous balloon arterioventricular valvoplasty] Chen LF, et al. Chung Hua Hu Li Tsa Chih 1989 Oct;24(10):581–2 (Chi)
[Monitoring after percutaneous balloon pulmonary valvoplasty] Zhang SJ, et al. Chung Hua Hu Li Tsa Chih 1989 Oct;24(10):583–4 (Chi)

TRENDS

State of the art and future directions of balloon valvotomy. Ribeiro PA. Rev Port Cardiol 1988 Nov–Dec;7(6):591–6 (57 ref.)
[Current situation and future perspectives of heart surgery in Portugal] Macedo MM. Rev Port Cardiol 1988 Jul–Aug; 7(4):373–6 (Por)

BALLOON DILATATION, CORONARY ARTERY see **ANGIOPLASTY, TRANSLUMINAL, PERCUTANEOUS CORONARY**

BALLOON TAMPONADE see **BALLOON DILATATION**

BALLOON VALVOTOMY see **BALLOON DILATATION**

BALLOON VALVULOPLASTY see **BALLOON DILATATION**

BALNEOLOGY

see related
HEALTH RESORTS
MINERAL WATERS

Dead Sea bath salts for the treatment of rheumatoid arthritis. Sukenik S, et al. Clin Exp Rheumatol 1990 Jul–Aug; 8(4):353–7
"Doctor fish" and psoriasis [letter] Undar L, et al. Lancet 1990 Feb 24;335(8687):470–1
How long is too long in a spa pool? [letter] Ridge BR, et al. N Engl J Med 1990 Sep 20;323(12):835–6
[Comparison of the effects of carbonated baths with those of carbon dioxide baths, "dry baths"] Lecomte J, et al. Acta Belg Med Phys 1990 Jan–Mar;13(1):11–4 (Eng. Abstr.) (Fre)
[Drug prescription and drug monitoring in crenotherapy (letter)] Belin J, et al. Therapie 1990 Jan–Feb;45(1):51–2 (Fre)
[Determining indications for gynecologic supplementary treatment procedures] Ehret-Wagener B. Arch Gynecol Obstet 1989;245(1–4):6–9 (Ger)
[CO2-induced increase in skin circulation and transcutaneous oxygen partial pressure of the top of the foot in patients with intermittent claudication] Hartmann B, et al. Vasa Suppl 1989;27:251–2 (Ger)
[131 I accumulation in the thyroid gland of the rat following balneotherapy iodine dose administration] Winkler R. Wien Klin Wochenschr 1989 Nov 24;101(22):785–7 (Eng. Abstr.) (Ger)
[The effect of carbon dioxide baths on blood pressure of borderline hypertensive patients] Hartmann B, et al. Z Kardiol 1989 Aug;78(8):526–31 (Eng. Abstr.) (Ger)
[Thermal sulfur compounds and esthetic dermatology] Grossi F. Clin Ter 1989 Dec 31;131(6):413–9 (22 ref.) (Eng. Abstr.) (Ita)
[Essential arterial hypertension in patients with non-insulin-dependent diabetes mellitus during and after balneotherapy followed-up for 6 years] Hurjui J, et al. Rev Med Chir Soc Med Nat Iasi 1989 Oct–Dec; 93(4):659–61 (Eng. Abstr.) (Rum)
[Possibility of using gamma irradiation for disinfection of mud and seawater in balneologic practice] Polishchuk RF, et al. Gig Sanit 1989 Jun;(6):65–6 (Rus)
[Rehabilitation in pseudarthrosis of crural bones complicated by chronic osteomyelitis] Rutskii VV, et al. Ortop Travmatol Protez 1989 Jul;(7):54 (Rus)
[Sanatorium treatment of children with peptic ulcer] Stepanenko VM, et al. Pediatriia 1989;(8):107–8 (Rus)
[The treatment of neurodermatitis and prurigo patients with the mineral springs of Andizhan Province] Khamidov ShA. Vestn Dermatol Venerol 1990;(1):66–9 (Eng. Abstr.) (Rus)
[Objective criteria of the efficacy of physio- and balneotherapy in patients with ischemic heart disease] Grebenshchikov AP, et al. Vopr Kurortol Fizioter Lech Fiz Kult 1990 Mar–Apr; (2):20–3 (Eng. Abstr.) (Rus)
[Tskhaltubo mineral baths in the treatment and rehabilitation of osteoarthrosis patients] Grigor'eva VD, et al. Vopr Kurortol Fizioter Lech Fiz Kult 1989 Nov–Dec; (6):24–6 (Rus)
[Apropos the article by S. V. Andreev and B. N. Semenov The importance of the skin in the mechanism of action of therapeutic media on the patient's body] Oranskiĭ IE. Vopr Kurortol Fizioter Lech Fiz Kult 1989 May–Jun; (3):68–9 (Rus)
[The combined treatment using manual therapy and balneotherapy of patients with neurological manifestations of lumbar osteochondrosis] Samorukov AE, et al. Vopr Kurortol Fizioter Lech Fiz Kult 1990 Jan–Feb;(1):27–9 (Rus)
[Balneotherapy at the early posthospital stage in the rehabilitative treatment of patients who have had an acute myocardial infarct] Zhukovskiĭ SP. Vopr Kurortol Fizioter Lech Fiz Kult 1989 Nov–Dec;(6):4–7 (Eng. Abstr.) (Rus)

HISTORY

[Bertina's Spa in Třebon] Sulc B. Cas Lek Cesk 1990 May 25;129(21):668–9 (Cze)
[Contribution of the Cracow medical school to the control of childhood tuberculosis in Poland] Rybakowa M. Folia Med Cracov 1988;29(3–4):113–9 (Eng. Abstr.) (Pol)

METHODS

Bath-photo-therapy with the thermal water of Comano: treatment of psoriasis. Zumiani G, et al. Acta Derm Venereol Suppl (Stockh) 1989;146:122–3; discussion 124
Sulphur bath and mud pack treatment for rheumatoid arthritis at the Dead Sea area. Sukenik S, et al. Ann Rheum Dis 1990 Feb;49(2):99–102
[Preservation, protection and control of medicinal springs with special reference to federally recognized medicinal springs] Artz J. Off Gesundheitswes 1989 Aug–Sep; 51(8–9):428–34 (Eng. Abstr.) (Ger)
[Physical and balneologic treatment of arthrosis] Schmidt KL. Verh Dtsch Ges Inn Med 1989;95:471–8 (16 ref.) (Ger)
[An improvement in the therapy of psoriasis at the Pyatigorsk health resort taking into account circadian biorhythms] Militenko SA, et al. Vopr Kurortol Fizioter Lech Fiz Kult 1989 Nov–Dec; (6):38–40 (Eng. Abstr.) (Rus)

TRENDS

[The status and developmental prospects of sanatorium-health resort care of children] Borovik EB. Vopr Kurortol Fizioter Lech Fiz Kult 1989 Jul–Aug;(4):1–5 (Rus)
[The problems of perestroika in health resort medicine] Krivobokov NG. Vopr Kurortol Fizioter Lech Fiz Kult 1989 Jul–Aug;(4):6–8 (Rus)

BALNEOTHERAPY see **BALNEOLOGY**

BALO'S DISEASE see **ENCEPHALITIS PERIAXIALIS**

BALSAMS

ADVERSE EFFECTS

Perfume dermatitis in children sensitized to balsam of Peru in topical agents. Fisher AA. Cutis 1990 Jan;45(1):21–3

THERAPEUTIC USE

Use of a trypsin, Peru balsam, and castor oil spray on the oral mucosa: case report and review of the literature. Noble TA, et al. Pharmacotherapy 1989;9(6):386–8 (13 ref.)
["Golden Star" balsam in the treatment of ear mycoses] Ibragimov GT, et al. Vestn Otorinolaringol 1989 Jul–Aug; (4):87–8 (Rus)

BAMBERMYCINS see under **ANTIBIOTICS, AMINOGLYCOSIDE**

BANANA see **FRUIT**

BAND 3 PROTEIN

ANALYSIS

The binding of a polyclonal antibody against human band 3 to in vitro aged erythrocytes. Klinger MH, et al. Acta Histochem (Jena) 1990;88(1):71–6
Characteristics of the binding site for extracellular substrate anions in human red blood cell band 3. Jennings ML. Ann N Y Acad Sci 1989;574:84–95
Structure and function of the band 3 Cl-/HCO3- transporter. Reithmeier RA, et al. Ann N Y Acad Sci 1989;574:75–83
Primary structure of the cytoplasmic domain of human

erythrocyte protein band 3. Comparison with its sequence in the mouse. Yannoukakos D, et al. **Biochim Biophys Acta** 1989 Sep 14;998(1):43–9

Frequencies of Band 3 variants of human red cell membranes in some different populations. Ranney HM, et al. **Br J Haematol** 1990 Jun;75(2):262–7 (6 ref.)

Red cell aging: senescent cell antigen, band 3, and band 3 mutations associated with cellular dysfunction. Kay MM. **Prog Clin Biol Res** 1989;319:199–217; discussion 218–23

BIOSYNTHESIS

Anion transport in oocytes of Xenopus laevis induced by expression of mouse erythroid band 3 protein—encoding cRNA and of a cRNA derivative obtained by site-directed mutagenesis at the stilbene disulfonate binding site. Bartel D, et al. **EMBO J** 1989 Dec 1;8(12):3601–9

GENETICS

Regulation of intracellular pH by a neuronal homolog of the erythrocyte anion exchanger. Kopito RR, et al. **Cell** 1989 Dec 1;59(5):927–37

Membrane protein band 3 alteration associated with neurologic disease and tissue-reactive antibodies. Kay MM, et al. **Exp Clin Immmunogenet** 1990;7(3):181–99

A PstI polymorphism for the human erythrocyte surface protein band 3 (EPB3) demonstrates close linkage of EPB3 to the nerve growth factor receptor. Stewart EA, et al. **Genomics** 1989 Oct;5(3):633–5

cDNA cloning and tissue distribution of mRNAs for two proteins that are related to the band 3 Cl–/HCO3– exchanger. Kudrycki KE, et al. **J Biol Chem** 1990 Jan 5; 265(1):462–71

Cloning and characterization of band 3, the human erythrocyte anion–exchange protein (AE1). Lux SE, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9089–93

Structure and tissue-specific expression of the mouse anion–exchanger gene in erythroid and renal cells. Kopito RR, et al. **Soc Gen Physiol Ser** 1988;43:151–61 (32 ref.)

IMMUNOLOGY

How naturally occurring anti-band 3 antibodies stimulate C3b deposition to senescent and oxidatively stressed red blood cells. Lutz HU, et al. **Biomed Biochim Acta** 1990; 49(2–3):S224–9

Binding of anti-band 3 autoantibody to oxidatively damaged erythrocytes. Formation of senescent antigen on erythrocyte surface by an oxidative mechanism. Beppu M, et al. **J Biol Chem** 1990 Feb 25;265(6):3226–33

Covalent binding of detergent-solubilized membrane glycoproteins to 'Chemobond' plates for ELISA. Lutz HU, et al. **J Immunol Methods** 1990 May 25;129(2):211–20

IgG red blood cell autoantibodies in autoimmune hemolytic anemia bind to epitopes on red blood cell membrane band 3 glycoprotein. Victoria EJ, et al. **J Lab Clin Med** 1990 Jan;115(1):74–88

Definition of a physiologic aging autoantigen by using synthetic peptides of membrane protein band 3: localization of the active antigenic sites. Kay MM, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5734–8

METABOLISM

Characterization of a reversible denaturational transition occurring in the case of an irreversibly denaturing membrane spanning protein. Maneri LR. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1365–71

Identification by site-directed mutagenesis of Lys-558 as the covalent attachment site of H2DIDS in the mouse erythroid band 3 protein. Bartel D, et al. **Biochim Biophys Acta** 1989 Nov 3;985(3):355–8

The temperature dependence of human erythrocyte transport of phosphate, phosphite and hypophosphite. Galanter WL, et al. **Biochim Biophys Acta** 1990 Aug 10;1027(1):65–71

Abnormalities in erythrocyte membrane band 3 in chronic myelogenous leukemia. Kundu M, et al. **Biochim Biophys Acta** 1989 Oct 2;985(1):97–100

Relationship of the human erythrocyte Wrb antigen to an interaction between glycophorin A and band 3. Telen MJ, et al. **Blood** 1990 Aug 15;76(4):842–8

Lysine 539 of human band 3 is not essential for ion transport or inhibition by stilbene disulfonates. Garcia AM, et al. **J Biol Chem** 1989 Nov 25;264(33):19607–13

Kinetics and regulation of the ankyrin–band 3 interaction of the human red blood cell membrane. Thevenin BJ, et al. **J Biol Chem** 1990 Sep 25;265(27):16166–72

Inhibition of chloride binding to the anion transport site by diethylpyrocarbonate modification of Band 3. Hamasaki N, et al. **J Membr Biol** 1990 Jun;116(1):87–91

PHYSIOLOGY

Anion transport systems in the mouse erythrocyte: kinetic studies in situ and after expression of mouse erythroid band 3 protein in oocytes of Xenopus laevis. Passow H, et al. **Biochem Soc Trans** 1989 Oct;17(5):812–5

Rotational dynamics of the integral membrane protein, band 3, as a probe of the membrane events associated with Plasmodium falciparum infections of human erythrocytes. Tilley L, et al. **Biochim Biophys Acta** 1990 Jun 27; 1025(2):135–42

Membrane biology. The shadow and the substance [news] Gratzer W. **Nature** 1990 Feb 8;343(6258):514

ULTRASTRUCTURE

Induced circular dichroism of eosin-5-maleimide bound to band 3 of human erythrocytes. Chiba T, et al. **Biochim Biophys Acta** 1990 Jun 27;1025(2):199–207

BANDAGES

Occlusive dressing versus petroleum gauze on drainage wounds. Alsbjörn BF, et al. **Acta Chir Scand** 1990 Mar; 156(3):211–3

Wound dressing after skin planing. Cramers M. **Acta Derm Venereol (Stockh)** 1989;69(5):453–4

Care of pressure sores: a controlled study of the use of a hydrocolloid dressing compared with wet saline gauze compresses. Alm A, et al. **Acta Derm Venereol Suppl (Stockh)** 1989;149:1–10

Thromboprophylaxis in hip arthroplasty. Dextran with graded compression or preoperative dextran compared in 150 patients. Fredin H, et al. **Acta Orthop Scand** 1989 Dec; 60(6):678–81

A randomized clinical trial of rib belts for simple fractures. Quick G. **Am J Emerg Med** 1990 Jul;8(4):277–81

Use of the Megasoft Bandage Lens for treatment of complications after trabeculectomy. Blok MD, et al. **Am J Ophthalmol** 1990 Sep 15;110(3):264–8

Cyclosporine-containing collagen shields suppress corneal allograft rejection. Chen YF, et al. **Am J Ophthalmol** 1990 Feb 15;109(2):132–7

The effect of collagen shields on epithelial wound healing in rabbits. Frantz JM, et al. **Am J Ophthalmol** 1989 Nov 15;108(5):524–8

Collagen shield delivery of amphotericin B. Schwartz SD, et al. **Am J Ophthalmol** 1990 Jun 15;109(6):701–4

Comparison of soft dressing and rigid dressing in the healing of amputated limbs of rabbits. Frogameni AD, et al. **Am J Phys Med Rehabil** 1989 Oct;68(5):234–9

Transparent dressings for nasogastric tubes [letter] Riley RH. **Anaesth Intensive Care** 1990 May;18(2):272

A dressing system providing fluid supply and suction drainage used for continuous or intermittent irrigation. Svedman P, et al. **Ann Plast Surg** 1986 Aug;17(2):125–33

Granuflex dressings for closed surgical wounds combined with suction drainage. Crisp WJ, et al. **Ann R Coll Surg Engl** 1990 Mar;72(2):76

Varicose veins: optimum compression after surgery and sclerotherapy [letter; comment] Scott HJ, et al. **Ann R Coll Surg Engl** 1990 Mar;72(2):148 Comment on: Ann R Coll Surg Engl 1989 Nov;71(6):402–4.

Micropore tape dressing: a cheap, effective alternative dressing with subcuticular sutures. Shanahan D, et al. **Ann R Coll Surg Engl** 1990 May;72(3):206

Varicose veins: optimum compression after surgery and sclerotherapy [see comments] Shouler PJ, et al. **Ann R Coll Surg Engl** 1989 Nov;71(6):402–4 Comment in: Ann R Coll Surg Engl 1990 Mar;72(2):148.

Acetobacter cellulose pellicle as a temporary skin substitute. Fontana JD, et al. **Appl Biochem Biotechnol** 1990 Spring-Summer;24–25:253–64

The Kasabach–Merritt syndrome: treatment with intermittent pneumatic compression. Aylett SE, et al. **Arch Dis Child** 1990 Jul;65(7):790–1

Collagen shield heparin delivery for prevention of postoperative fibrin. Murray TG, et al. **Arch Ophthalmol** 1990 Jan;108(1):104–6

Elastic bandages and intermittent pneumatic compression for treatment of acute ankle sprains. Airaksinen O, et al. **Arch Phys Med Rehabil** 1990 May;71(6):380–3

Compressive centripetal wrapping technic for reduction of edema. Cain HD, et al. **Arch Phys Med Rehabil** 1967 Aug; 48(8):420–3

Patient compliance with fitted compression hosiery monitored by photoplethysmography. Kiev J, et al. **Arch Phys Med Rehabil** 1990 May;71(6):376–9

Unna's boot vs polyurethane foam dressings for the treatment of venous ulceration. A randomized prospective study. Rubin JR, et al. **Arch Surg** 1990 Apr;125(4):489–90

Long-term results of a new antithrombogenic cardiac wall substitute. Okoshi T, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):391–5

The use of corium porcine graft for a malignant enterovaginal fistula. Jobling TW, et al. **Aust N Z J Obstet Gynaecol** 1990 May;30(2):185–6

Management of anorectal abscesses: comparison between traditional incision and packing and de Pezzer catheter drainage. Kyle S, et al. **Aust N Z J Surg** 1990 Feb; 60(2):129–31

Painless split skin donor sites: a controlled double-blind trial of Opsite, scarlet red and bupivacaine. Morris WT, et al. **Aust N Z J Surg** 1990 Aug;60(8):617–20

Fabrication and reorganization of dermal equivalents suitable for skin grafting after major cutaneous injury. Rowling PJ, et al. **Biomaterials** 1990 Apr;11(3):181–5

Is padding necessary after cataract extraction? Laws DE, et al. **Br J Ophthalmol** 1989 Sep;73(9):699–701

Postoperative eye padding [editorial] Smith R. **Br J Ophthalmol** 1989 Sep;73(9):691–2

The use of automatic blood pressure monitors in the burned patient. Bainbridge LC, et al. **Br J Plast Surg** 1990 May; 43(3):322–4

The value of head dressings in the postoperative management of the prominent ear. Powell BW. **Br J Plast Surg** 1989 Nov;42(6):692–4

Silicone gel including antimicrobial agent. Sawada Y, et al. **Br J Plast Surg** 1990 Jan;43(1):78–82

Ankle taping: support given by different materials. Capasso G, et al. **Br J Sports Med** 1989 Dec;23(4):239–40

Effectiveness of taping for the prevention of ankle ligament sprains. Firer P. **Br J Sports Med** 1990 Mar;24(1):47–50

Use of adhesive strapping in sport. McLean DA. **Br J Sports Med** 1989 Sep;23(3):147–9 (15 ref.)

Graduated compression stockings in the prevention of postoperative deep vein thrombosis. Jeffery PC, et al. **Br J Surg** 1990 Apr;77(4):380–3 (35 ref.)

Circumcision—which dressing? Gough DC, et al. **Br J Urol** 1990 Apr;65(4):418–9

Platelet activation following application of an Esmarch bandage and tourniquet in rabbits. Yoshida WB, et al. **Braz J Med Biol Res** 1989;22(9):1091–3

Application of freeze-dried amniotic membrane: a control trial at the donor site of split-thickness skin grafting. Waikakul S, et al. **Bull Hosp Jt Dis Orthop Inst** 1990 Spring;50(1):27–34

Multicentre experience in the treatment of burns with autologous and allogenic cultured epithelium, fresh or preserved in a frozen state. De Luca M, et al. **Burns** 1989 Oct;15(5):303–9

Water vapour permeance: a meaningful measure for water vapour permeability of wound coverings. Erasmus ME, et al. **Burns** 1989 Dec;15(6):371–5

Management of partial skin thickness burn wounds with Inadine dressings. Han KH, et al. **Burns** 1989 Dec; 15(6):399–402

Histological and bacteriological studies of burn wounds treated with boiled potato peel dressings. Keswani MH, et al. **Burns** 1990 Apr;16(2):137–43

Novel method of skin substitution in plastic surgery [see comments] Khalfan HA, et al. **Burns** 1989 Oct;15(5):335–7 Comment in: Burns 1990 Feb;16(1):71–2.

Amniotic membrane as a biological dressing in the management of burns. Sawhney CP. **Burns** 1989 Oct; 15(5):339–42

Porcine collagen corneal shield treatment of persistent epithelial defects following penetrating keratoplasty. Groden LR, et al. **CLAO J** 1990 Apr–Jun;16(2):95–7

Soluble collagen disks for the treatment of dry eye syndrome. Shaker GJ, et al. **CLAO J** 1989 Oct–Dec;15(4):298–304

Prevention of thromboembolism following elective hip surgery. The value of regional anesthesia and graded compression stockings. Wille-Jørgensen P, et al. **Clin Orthop** 1989 Oct;(247):163–7

Adhesive tape. Bradley ET. **Conn Med** 1990 May;54(5):296

Allergic contact dermatitis from chlorhexidine diacetate in a skin swab. Reynolds NJ, et al. **Contact Dermatitis** 1990 Feb;22(2):103–4

Back to basics with ProFlex. de Ruiter M. **Ergonomics** 1990 Mar;33(3):383–5

Skin substitutes in upper extremity burns. Hergrueter CA, et al. **Hand Clin** 1990 May;6(2):239–42 (7 ref.)

A simple shoulder restraint. Williamson JB. **Injury** 1989 Nov; 20(6):339–40

The effect of collagen shields on rabbit corneal reepithelialization after chemical debridement. Robin JB, et al. **Invest Ophthalmol Vis Sci** 1990 Jul;31(7):1294–300

Oxygen permeability of collagen shields. Weissman BA, et al. **Invest Ophthalmol Vis Sci** 1990 Feb;31(2):334–8

A new high water vapor permeable polyetherurethane film dressing. Jonkman MF, et al. **J Biomater Appl** 1990 Jul; 5(1):3–19

A new porous polyetherurethane wound covering. Bruin P, et al. **J Biomed Mater Res** 1990 Feb;24(2):217–26

Cytotoxicity testing of wound dressings using normal human keratinocytes in culture. Rosdy M, et al. **J Biomed Mater Res** 1990 Mar;24(3):363–77

Water-Jel in the treatment of burns. A bacteriologic study. Doleček R, et al. **J Burn Care Rehabil** 1990 Mar–Apr; 11(2):135–6

Sildimac: a new delivery system for silver sulfadiazine in the treatment of full-thickness burn injuries. Miller L, et al. **J Burn Care Rehabil** 1990 Jan–Feb;11(1):35–41

Collagen corneal shields enhance penetration of topical prednisolone acetate. Sawusch MR, et al. **J Cataract Refract Surg** 1989 Nov;15(6):625–8

Compression in the treatment of leg telangiectasia: a preliminary report. Goldman MP, et al. **J Dermatol Surg Oncol** 1990 Apr;16(4):322–5

Foam-rubber stents for skin grafts. Larson PO. **J Dermatol Surg Oncol** 1990 Sep;16(9):851–4

Resolution of pain associated with varicose and telangiectatic leg veins after compression sclerotherapy. Weiss RA, et al. **J Dermatol Surg Oncol** 1990 Apr;16(4):333–6

Interphalangeal dislocations of the fingers treated by an elastic double-finger bandage. Soelberg M, et al. **J Hand Surg [Br]** 1990 Feb;15(1):66–7

Inhibition of connective tissue formation in dermal wounds covered with synthetic, moisture vapor-permeable dressings and its reversal by transforming growth factor-beta. Ksander GA, et al. **J Invest Dermatol** 1990 Aug;95(2):195–201

Calcium alginate fibre (Kaltostat 2) for nasal packing after trimming of turbinates—a pilot study. Sirimanna KS. **J Laryngol Otol** 1989 Nov;103(11):1067–8

Fixing external nasal splint with Tegaderm i.v. dressing [letter] Wurtele P. **J Otolaryngol** 1990 Feb;19(1):79

Human freeze-dried dura mater allografts as a periodontal

biological bandage. Zaner DJ, et al. **J Periodontol** 1989 Nov;60(11):617–23

Efficacy of light support pantyhose. Derman RJ, et al. **J Reprod Med** 1989 Dec;34(12):946–9

In vitro effects of matrix peptides on a cultured dermal–epidermal skin substitute. Cooper ML, et al. **J Surg Res** 1990 Jun;48(6):528–33

Multiple graft harvestings from deep partial–thickness scald wounds healed under the influence of weak direct current. Chu CS, et al. **J Trauma** 1990 Aug;30(8):1044–9; discussion 1049–50

The role of sclerotherapy as an adjunct to Unna's boot for treating venous ulcers: a prospective study. Queral LA, et al. **J Vasc Surg** 1990 Apr;11(4):572–5

An easy and safe way to dress limb flaps in the dog. Dvir E, et al. **Microsurgery** 1989;10(4):317–8

Effects of extremity wraps to control drug–induced shivering: a pilot study. Holtzclaw BJ. **Nurs Res** 1990 Sep–Oct;39(5):280–3

Amniotic membranes in the treatment of necrotizing fasciitis complicating vulvar herpes virus infection. Rothman PA, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):534–6

Corneal spatula for sterile insertion of collagen corneal shield. Hawk TP, et al. **Ophthalmic Surg** 1990 Mar;21(3):162

Semipermeable dressing and transepidermal water loss in premature infants. Vernon HJ, et al. **Pediatrics** 1990 Sep; 86(3):357–62

Sterility in unsterilized surgical adhesive tape [letter; comment] Krupp S. **Plast Reconstr Surg** 1990 Feb;85(2):319 Comment on: Plast Reconstr Surg 1989 May;83(5):880–3.

Paper tape in the closure of abdominal wounds. Chao TC, et al. **Surg Gynecol Obstet** 1990 Jul;171(1):65–7

The three swab test using knots for urovaginal fistula. Gannon MJ. **Surg Gynecol Obstet** 1990 Feb;170(2):171

Use of experimental aneurysms to evaluate wrapping materials. Sadasivan B, et al. **Surg Neurol** 1990 Jul;34(1):3–7

Postoperative dressings: are they really necessary? Longombe A, et al. **Trop Doct** 1990 Jan;20(1):41–2

Treatment of acute superficial thrombosis and follow–up by computerized thermography. Belcaro G, et al. **Vasa** 1989; 18(3):227–34

[The coverage for burn wound] Ma YZ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Jun;2(2):137–9 **(Chi)**

[The use of glutaraldehyde–preserved bovine amniotic membranes on burn wounds] Mu XX.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Dec;3(4):265–7, 318–9 (Eng. Abstr.) **(Chi)**

[Chlorhexidine (hibitane)–alcohol refrigerated porcine skin—a simple and long–term stored xenograft] Zhu DA, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Sep;2(3):203–5, 235–6 (Eng. Abstr.) **(Chi)**

[Chlorhexidine–alcohol refrigerated porcine skin—a simple and long–term stored xenograft. 2. Preliminary experience with its use as a biological dressing for burn wounds] Zhu DA, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Mar;3(1):26–8, 78 (Eng. Abstr.) **(Chi)**

[Discontinuing postoperative wound dressings] Chrintz H, et al. **Ugeskr Laeger** 1989 Oct 9;151(41):2667–8 (Eng. Abstr.) **(Dan)**

[Compression therapy using elastic stockings] Korstanje MJ, et al. **Ned Tijdschr Geneeskd** 1990 Apr 21;134(16):799–802 (27 ref.) **(Dut)**

[Sclero–electro–compressive therapy. Medical treatment of varicose veins of the leg] Doneiger E. **Phlebologie** 1989 Nov–Dec;42(4):617–21 (Eng. Abstr.) **(Fre)**

[Effects of compression on venous pressure and limb volume. Paradoxal results] Kuiper JP, et al. **Phlebologie** 1990 Jan–Mar;43(1):157–66 (Eng. Abstr.) **(Fre)**

[Paradoxal effects of compression] Kuiper JP. **Phlebologie** 1990 Jan–Mar;43(1):71–2; discussion 72–6 **(Fre)**

[The effect on wound healing of venous leg ulcers of a two–layered polyurethane foam wound dressing] Pessenhofer H, et al. **Arzneimittelforschung** 1989 Sep; 39(9):1173–7 (Eng. Abstr.) **(Ger)**

[Bandage as a drug carrier—successful treatment of superficial thrombophlebitis with pentosan polysulfate] Hadlich J, et al. **Dermatol Monatsschr** 1990;176(4):233–4 **(Ger)**

[Do Varicosan bandages really rarely cause contact eczema? Case report of allergic contact dermatitis caused by propyl hydroxybenzoate following the use of Varicosan bandages] Lindner K, et al. **Dermatol Monatsschr** 1989;175(10):655–7 (Eng. Abstr.) **(Ger)**

[Temporary skin replacement with lyophilized swine skin and foam substances—comparative experimental studies] Kastner KH, et al. **Langenbecks Arch Chir** 1988; 373(5):287–97 (Eng. Abstr.) **(Ger)**

[Taping—a safe alternative in the early functional treatment of all ligament instabilities of the proximal ankle joint? Results of a prospective study] Cramer EA, et al. **Unfallchirurg** 1990 Jun;93(6):275–83 (Eng. Abstr.) **(Ger)**

[The effect of antithrombotic stockings on venous return in the human leg] Schmitt B, et al. **Vasa** 1990;19(1):35–9 (Eng. Abstr.) **(Ger)**

[Measuring skin circulation in patients with chronic venous insufficiency in various body positions and with compression therapy] Emter M, et al. **Vasa Suppl** 1989; 27:123–4 **(Ger)**

[Changes in the flow behavior of veins of the lower leg with the use of compression] Emter M, et al. **Vasa Suppl** 1989; 27:143–5 **(Ger)**

[Basic principles of compression therapy] Kuiper JP, et al. **Z Gesamte Inn Med** 1990 Feb 15;45(4):105–8 (Eng. Abstr.) **(Ger)**

[Local treatment of burn injuries and traumatic wounds with a hydrogel Geliperm dressing] Kuś H, et al. **Polim Med** 1988;18(4):211–9 (Eng. Abstr.) **(Pol)**

[Experimental testing of the hydrogel dressing Geliperm] Staniszewska–Kuś J, et al. **Polim Med** 1988;18(4):197–210 (Eng. Abstr.) **(Pol)**

[Treatment of external intestinal fistulas] Birecka A, et al. **Wiad Lek** 1990 Apr 15;43(8):324–9 (Eng. Abstr.) **(Pol)**

[Specific activity and toxicity of hemostatic feracryl–based plaster] Reznikov KM, et al. **Farmakol Toksikol** 1989 Jul–Aug;52(4):48–52 (Eng. Abstr.) **(Rus)**

[Irrigated bandages] Izmailov GA, et al. **Khirurgiia (Mosk)** 1989 Oct;(10):124 **(Rus)**

[Biomechanical substantiation of U–shaped plaster cast with elastic bandage in diaphyseal fractures of crural bones] Abdrakhmanov AZh, et al. **Ortop Travmatol Protez** 1990 Apr;(4):16–9 (Eng. Abstr.) **(Rus)**

[A method of hermetic sealing of the bronchial stump following resection of the lungs in patients with tuberculosis] Putilin AA, et al. **Probl Tuberk** 1990;(5):5–9 (Eng. Abstr.) **(Rus)**

[Hyperbaric oxygenation in the combined treatment of non–healing trophic ulcer in recurrent varicose veins of the leg] Stoĭko IuM, et al. **Vestn Khir** 1990 Jan;144(1):112–4 **(Rus)**

ADVERSE EFFECTS

Pressure necrosis of a bicoronal flap. Barnard NA. **Ann R Coll Surg Engl** 1989 Nov;71(6):353

Toxic shock syndrome: associated with nasal packing. Mansfield CJ, et al. **Clin Pediatr (Phila)** 1989 Oct; 28(10):443–5

Effects of skin sensitization test wrapping on guinea pigs. Cushman JR, et al. **Contact Dermatitis** 1989 Oct; 21(4):279–80

Allergic contact dermatitis to adhesive bandages. Norris P, et al. **Dermatol Clin** 1990 Jan;8(1):147–52

Clinically significant central venous catheter infections in a community hospital: association with type of dressing [letter; comment] Dickerson N, et al. **J Infect Dis** 1989 Oct;160(4):720–2 Comment on: J Infect Dis 1989 Feb;159(2):310–9.

Toxic shock syndrome. Jones J, et al. **J Otolaryngol** 1990 Jun;19(3):211–3

Cutaneous reactions in relation to the use of 'TED'–stockings [letter] Bak–Christensen A, et al. **Lancet** 1989 Dec 2; 2(8675):1346

STANDARDS

Graduated compression hosiery—new standard specifications. **Drug Ther Bull** 1989 Jan 23;27(2):7–8

The Pyridium pad test for diagnosing urinary incontinence. A comparative study of asymptomatic and incontinent women. Wall LL, et al. **J Reprod Med** 1990 Jul;35(7):682–4

Standardized assessment of blood loss. Luegenbiehl DL, et al. **MCN** 1990 Jul–Aug;15(4):241–4

[Compression therapy using elastic stockings (letter)] Vermeulen CT. **Ned Tijdschr Geneeskd** 1990 Aug 11; 134(32):1563–4 **(Dut)**

[A new type of compression stocking is more effective in deep venous insufficiency] Nybacka O, et al. **Lakartidningen** 1990 Mar 28;87(13):1043–4 **(Swe)**

VETERINARY

Evaluation of dressings to aid healing of mulesing wounds on sheep. Levot GW, et al. **Aust Vet J** 1989 Nov; 66(11):358–61

The effects of dressings and bandages on wound healing. Swaim SF. **Semin Vet Med Surg (Small Anim)** 1989 Nov; 4(4):274–80 (30 ref.)

Equine bandaging techniques. Lindsay WA. **Vet Clin North Am Equine Pract** 1989 Dec;5(3):513–38 (21 ref.)

Bandages and topical agents. Swaim SF. **Vet Clin North Am Small Anim Pract** 1990 Jan;20(1):47–65 (66 ref.)

BANDAGES, OCCLUSIVE see **OCCLUSIVE DRESSINGS**

BANDICOOT RATS see **MURIDAE**

BANDICOTA see **MURIDAE**

BANDING, CHROMOSOME see **CHROMOSOME BANDING**

BANG'S DISEASE see **BRUCELLOSIS, BOVINE**

BAR CODES see **AUTOMATIC DATA PROCESSING**

BARBAMYL see **AMOBARBITAL**

BARBERING

Barber's interdigital pilonidal sinus of the hand: a foreign body hair granuloma. Patel MR, et al. **J Hand Surg [Am]** 1990 Jul;15(4):652–5 (29 ref.)

Mortality of hematopoietic disorders and hair dye use among barbers. Shibata A, et al. **Nippon Ketsueki Gakkai Zasshi** 1990 Feb;53(1):116–8

BARBITAL see under **BARBITURATES**

BARBITURATES

Abuse liability of barbiturates and other sedative–hypnotics. Morgan WW. **Adv Alcohol Subst Abuse** 1990;9(1–2):67–82 (27 ref.)

Investigation of interference by nonsteroidal anti–inflammatory drugs in urine tests for abused drugs. Rollins DE, et al. **Clin Chem** 1990 Apr;36(4):602–6

The contemporary alcoholic. Miller NS, et al. **N J Med** 1990 Jan;87(1):35–9

Temperature–dependent ESR studies of radical pairs in single crystals of barbituric acid. Schupfner R, et al. **Z Naturforsch [C]** 1989 Sep–Oct;44(9–10):849–56

[Mechanisms of the effect of general anesthesia with barbiturates on immunity] Gadalov VP, et al. **Anesteziol Reanimatol** 1990 May–Jun;(3):26–30 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Exposure to barbiturates in utero and during childhood risk of intracranial and spinal cord tumors. Goldhaber MK, et al. **Cancer Res** 1990 Aug 1;50(15):4600–3

Increased response of cerebellar cGMP to kainate but not NMDA or quisqualate following barbital withdrawal from dependent rats. McCaslin PP, et al. **Eur J Pharmacol** 1989 Dec 7;173(2–3):127–32

Withdrawal fits in barbiturate addicts. Gardner AJ. **Lancet** 1967 Aug 12;2(7511):337–8

[A case of delirium tremens caused by barbiturate suppression] Gallese A, et al. **Minerva Psichiatr** 1989 Jul–Sep;30(3):165–9 (Eng. Abstr.) **(Ita)**

ANALYSIS

Concerted action of reduced glutathione and superoxide dismutase in preventing redox cycling of dihydroxypyrimidines, and their role in antioxidant defence. Winterbourn CC, et al. **Free Radic Res Commun** 1990;8(4–6):287–93

[UV–spectrophotometric analysis of the component of antondin injection by the Monte Carlo method of area fitting] Xu YL, et al. **Yao Hsueh Hsueh Pao** 1989; 24(10):774–7 (Eng. Abstr.) **(Chi)**

[Analysis of 5–pyrazolinone derivatives in pharmaceutical products. I. Spectrophotometric analysis of two–component drugs containing propyphenazone] Marciniec B, et al. **Acta Pol Pharm** 1989;46(3):248–57 (Eng. Abstr.) **(Pol)**

[Photometric determination of barbituric acid and its sodium salt in the air] Volynskaia EM, et al. **Gig Sanit** 1990 Apr; (4):86 **(Rus)**

ANTAGONISTS & INHIBITORS

[Effector modeling of the action of ligands of GABA–receptor complex. Functional interaction of the hypothetic alcohol receptor with other subunits of the complex] Zhuk OV, et al. **Biull Eksp Biol Med** 1989 Aug; 108(8):211–4 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Synthesis of N–beta–D–glucopyranosyl derivatives of barbital, phenobarbital, metharbital, and mephobarbital. Soine WH, et al. **Carbohydr Res** 1989 Oct 31;193:105–13

[Synthesis of potential metabolites of a barbiturate containing two branched side chains] Talab A, et al. **Ann Pharm Fr** 1989;47(5):304–13 (Eng. Abstr.) **(Fre)**

DIAGNOSTIC USE

Calcium signals recorded from two new purpurate indicators inside frog cut twitch fibers. Hirota A, et al. **J Gen Physiol** 1989 Oct;94(4):597–631

IMMUNOLOGY

[Immuno–allergic thrombopenia caused by proxibarbal (letter)] Grosbois B, et al. **Ann Med Interne (Paris)** 1990; 141(1):84–5 **(Fre)**

METABOLISM

Murexide bleaching: a new direct assay method for characterizing reactive oxygen species. Torreilles J, et al. **Biochimie** 1989 Nov–Dec;71(11–12):1231–4

[Benzonal metabolism in guinea pigs] Okudzhava VM, et al. **Farmakol Toksikol** 1989 May–Jun;52(3):71–3 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Post–mortem drug redistribution—a toxicological nightmare. Pounder DJ, et al. **Forensic Sci Int** 1990 Apr;45(3):253–63

Kinetics of drug action in disease states. XXXVI: Effect of cyclosporine on the pharmacodynamics and pharmacokinetics of a barbiturate (heptabarbital) in rats. Hoffman A, et al. **J Pharm Sci** 1990 Jan;79(1):19–22

PHARMACOLOGY

Distinct actions of alcohols, barbiturates and benzodiazepines on GABA-activated chloride channels. Harris RA. **Alcohol** 1990 May-Jun;7(3):273-5 (19 ref.)

Effects of acute barbiturate administration, tolerance and dependence on brain GABA system: comparison to alcohol and benzodiazepines. Yu S, et al. **Alcohol** 1990 May-Jun; 7(3):261-72 (157 ref.)

Analgesic effect of Fiorinal with codeine. Madore P, et al. **Anesth Analg** 1967 Jul-Aug;46(4):405-9

Transmembrane signalling and the holy grail of anesthesia [editorial; comment] Maze M. **Anesthesiology** 1990 Jun; 72(6):959-61 Comment on: Anesthesiology 1990 Jun;72(6):996-1004.

Evidence that barbiturates inhibit antigen-induced responses through interactions with a GTP-binding protein in rat basophilic leukemia (RBL-2H3) cells [see comments] Robinson-White AJ, et al. **Anesthesiology** 1990 Jun; 72(6):996-1004 Comment in: Anesthesiology 1990 Jun;72(6):959-61.

Comparison of the effects of althesin and barbiturates on the neocortex and hippocampus in cats. Kayama Y. **Br J Anaesth** 1974 Dec;46(12):912-7

Differential effects of renal carcinogens and tumor promoters on growth promotion and inhibition of gap junctional communication in two rat renal epithelial cell lines. Konishi N, et al. **Carcinogenesis** 1990 Jun;11(6):903-8

Dependence of hydrogen peroxide formation in rat liver microsomes on the molecular structure of cytochrome P-450 substrates: a study with barbiturates and beta-adrenoceptor antagonists. Bast A, et al. **Eur J Drug Metab Pharmacokinet** 1989 Apr-Jun; 14(2):93-100

Improved maintenance of adult rat hepatocytes in a new serum-free medium in the presence or absence of barbiturates. Miyazaki M, et al. **In Vitro Cell Dev Biol** 1989 Sep;25(9):839-48

Vertex indices of molecular graphs in structure-activity relationships: a study of the convulsant-anticonvulsant activity of barbiturates and the carcinogenicity of unsubstituted polycyclic aromatic hydrocarbons. Klopman G, et al. **J Chem Inf Comput Sci** 1990 Feb;30(1):12-9

Inhibitory effect of barbiturates and local anaesthetics on protein kinase C activation. Mikawa K, et al. **J Int Med Res** 1990 Mar-Apr;18(2):153-60

Modulation of the GABAA receptor by barbiturates and pregnane steroids: differential effects of the influence of assay temperature. Yau JL, et al. **J Pharm Pharmacol** 1990 Mar;42(3):175-80

Steroid and barbiturate modulation of the GABAa receptor. Possible mechanisms. Schumacher M, et al. **Mol Neurobiol** 1989 Winter;3(4):275-304 (186 ref.)

gamma-Aminobutyric acidA receptor regulation in culture: altered allosteric interactions following prolonged exposure to benzodiazepines, barbiturates, and methylxanthines. Roca DJ, et al. **Mol Pharmacol** 1990 May;37(5):710-9

Effect of barbiturates on polyphosphoinositide biosynthesis and protein kinase C activity in synaptosomes. Deshmukh DS, et al. **Neuropharmacology** 1989 Dec;28(12):1317-23

Gender differences in the pharmacodynamics of barbiturates in rats. Hoffman A, et al. **Pharm Res** 1989 Nov;6(11):976-81

Ketoconazole-induced hepatic lysosomal phospholipidosis: the effect of concurrent barbiturate treatment. Pakuts AP, et al. **Res Commun Chem Pathol Pharmacol** 1990 Jan; 67(1):55-62

[Study of three barbiturate compounds using the Porsolt test] Getova D. **Eksp Med Morfol** 1989;28(4):26-30 (Eng. Abstr.) **(Bul)**

[Research on the psychopharmacologic profile of new barbiturics] Guimbal C, et al. **Ann Pharm Fr** 1989; 47(3):142-8 (Eng. Abstr.) **(Fre)**

[Effect of alloxans on pancreatic B-cells with special regard to the alloxan-metal-complex theory. I. Effects of alloxan, alloxan-zinc chelates, dilauric acid and colchicine on blood sugar and rate of mitosis of B-cell Langerhans islets] Schmidt R, et al. **Acta Histochem (Jena)** 1990;88(1):29-46 (Eng. Abstr.) **(Ger)**

[Inhibition by local anesthetics and barbiturates of the active transport of H+ in the synaptic vesicle membranes of the brain] Shukalova TF, et al. **Biull Eksp Biol Med** 1989 Aug; 108(8):185-8 (Eng. Abstr.) **(Rus)**

[The effect of benzonal on the functional activity of liver monooxygenase system un thermal injury] Khakimov ZZ. **Vopr Med Khim** 1989 Sep-Oct;35(5):64-7 (Eng. Abstr.) **(Rus)**

[Metabolism of an antiepileptic drug halonal in experimental studies] Okudzhava VM, et al. **Zh Nevropatol Psikhiatr** 1989;89(10):69-70 (Eng. Abstr.) **(Rus)**

POISONING

Alpha coma and barbiturate poisoning [see comments] de Boer WB, et al. **Anaesth Intensive Care** 1989 Nov; 17(4):503-4 Comment in: Anaesth Intensive Care 1990 May;18(2):278-9.

Alpha coma--comment [letter; comment] Sutton D. **Anaesth Intensive Care** 1990 May;18(2):278-9 Comment on: Anaesth Intensive Care 1989 Nov;17(4):503-4.

Pulmonary embolism complicating barbiturate overdose. Toscano J, et al. **Crit Care Med** 1990 Jul;18(7):777-8

The respiratory response to CO2 and O2 in patients with coma due to voluntary intoxication with barbiturates and carbamates. Launois S, et al. **Eur Respir J** 1990 May; 3(5):566-72

The transition between apnoea and spontaneous ventilation in patients with coma due to voluntary intoxication with barbiturates and carbamates. Launois S, et al. **Eur Respir J** 1990 May;3(5):573-8

Barbiturate sales and their use for suicide. Lester D. **Percept Mot Skills** 1989 Oct;69(2):442

THERAPEUTIC USE

The influence of barbiturates on cerebral metabolism in patients with borderline cerebrovascular reserve during intraoperative transient carotid occlusion. Wassman H, et al. **Br J Neurosurg** 1989;3(4):429-34

Protection against cerebral ischemia: the role of barbiturates. Spetzler RF, et al. **Cerebrovasc Brain Metab Rev** 1989 Fall; 1(3):212-29 (108 ref.)

Fiorinal with codeine in the treatment of tension headache--the contribution of components to the combination drug. Friedman AP, et al. **Clin Ther** 1988; 10(3):303-15

Ornithine decarboxylase activity and putrescine levels in reversible cerebral ischemia of Mongolian gerbils: effect of barbiturate. Paschen W, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):236-42

Effect of barbiturate treatment on post-ischemic protein biosynthesis in gerbil brain. Xie Y, et al. **J Neurol Sci** 1989 Sep;92(2-3):317-28

Analysis of reruptured cerebral aneurysms and the prophylactic effects of barbiturate therapy on the early stage. Ando T, et al. **Neurol Res** 1989 Dec;11(4):245-8

[Structure of the liver after correction of experimental chronic hepatitis with benzonal and potassium orotate] Baĭbekova EM, et al. **Arkh Anat Gistol Embriol** 1990 Feb; 98(2):88-94 (Eng. Abstr.) **(Rus)**

[Structural characteristics of the liver in experimental chronic hepatitis and its treatment with benzonal] Baĭbekova EM, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):109-12 (Eng. Abstr.) **(Rus)**

[Effects of benzonal on intracardiac hemodynamics in experimental myocardial infarct] Igrashev ShB, et al. **Kardiologiia** 1990 May;30(5):67-9 (Eng. Abstr.) **(Rus)**

[Effectiveness of cytochrome P-450 inducer Benzonal in the treatment of acute hepatitis] Makhmudov OS, et al. **Klin Med (Mosk)** 1989 Nov;67(11):62-5 (Eng. Abstr.) **(Rus)**

[Pharmacological characteristics of an anti-convulsive drug Benzonal and the evaluation of its therapeutic effectiveness (review of the literature)] Okudzhava VM, et al. **Zh Nevropatol Psikhiatr** 1989;89(11):136-45 (81 ref.) **(Rus)**

[High-dose barbiturates in severe cranio-encephalic trauma] Net Castel A. **Neurologia** 1988 Nov-Dec;3(6):209-10 **(Spa)**

TOXICITY

Initiation by nickel acetate and promotion by sodium barbital of renal cortical epithelial tumors in male F344 rats. Kasprzak KS, et al. **Carcinogenesis** 1990 Apr;11(4):647-52

Barbital sodium, a tumor promoter for kidney tubules, urinary bladder, and liver of the F344 rat, induces persistent increases in levels of DNA synthesis in renal tubules but not in urinary bladder epithelium or hepatocytes. Hagiwara A, et al. **Fundam Appl Toxicol** 1989 Aug;13(2):332-40

Effects of postnatal administration of tumour-promoting barbiturates on the development of tumours initiated by prenatal exposure of fetal rats and mice to N-alkylnitrosoureas. Diwan BA, et al. **IARC Sci Publ** 1989; (96):75-80

Effect of GABAergic drugs on motor impairment from ethanol, barbital and lorazepam in rat lines selected for differential sensitivity to ethanol. Hellevuo K, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):399-404

URINE

Abbott phencyclidine and barbiturates abused drug assays: evaluation and comparison of ADx FPIA, TDx FPIA, EMIT, and GC/MS methods. Caplan YH, et al. **J Anal Toxicol** 1989 Sep-Oct;13(5):289-92

BAREFOOT DOCTORS see COMMUNITY HEALTH AIDES

BARIUM

Structure of barium perchlorate trihydrate. Gallucci JC, et al. **Acta Crystallogr C** 1988 Nov 15;44 (Pt 11):1873-6

Alkylation of cyclomalto-oligosaccharides (cyclodextrins) with dialkyl sulfate-barium hydroxide: heterogeneity of products and the marked effect of the size of the macrocycle. Irie T, et al. **Carbohydr Res** 1989 Oct 23; 192:167-72

ADMINISTRATION & DOSAGE

Effect of bolus volume and consistency on swallow-induced submental and infrahyoid electromyographic activity. Dantas RO, et al. **Braz J Med Biol Res** 1990;23(1):37-44

ADVERSE EFFECTS

Hypertension and associated cardiovascular abnormalities induced by chronic barium feeding. Perry HM Jr, et al. **J Toxicol Environ Health** 1989;28(3):373-88

ANALYSIS

Survey of barium in Italian drinking water supplies. Lanciotti E, et al. **Bull Environ Contam Toxicol** 1989 Dec;43(6):833-7

DIAGNOSTIC USE

Barium enema utilization within a defined geographic region: a survey. Rex DK, et al. **Gastrointest Radiol** 1990 Summer; 15(3):265-7

METABOLISM

Permeation in the dihydropyridine-sensitive calcium channel. Multi-ion occupancy but no anomalous mole-fraction effect between Ba2+ and Ca2+. Yue DT, et al. **J Gen Physiol** 1990 May;95(5):911-39

Are Ba2+ and Sr2+ ions transported by the Na+-Ca2+ exchanger in frog atrial cells? Richard S, et al. **J Mol Cell Cardiol** 1989 Sep;21(9):865-75

Multiple components of both transient and sustained barium currents in a rat dorsal root ganglion cell line. Boland LM, et al. **J Physiol (Lond)** 1990 Jan;420:223-45

The action of caffeine on inward barium current through voltage-dependent calcium channels in single rabbit ear artery cells. Hughes AD, et al. **Pflugers Arch** 1990 Jun; 416(4):462-6

PHARMACOKINETICS

The use of the Ca2(+)-sensitive intramitochondrial dehydrogenases and entrapped fura-2 to study Sr2+ and Ba2+ transport across the inner membrane of mammalian mitochondria. McCormack JG, et al. **Eur J Biochem** 1990 Aug 28;192(1):239-44

Modulation of sodium channel gating by external divalent cations: differential effects on opening and closing rates. Cukierman S, et al. **Pflugers Arch** 1990 Jun;416(4):360-7

PHARMACOLOGY

Ba2+, TEA+, and quinine effects on apical membrane K+ conductance and maxi K+ channels in gallbladder epithelium. Segal Y, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):C56-68

2-Chloroadenosine-sensitive calcium channels in synaptosomes: effects of Ba2+. Arvin B, et al. **Biochem Soc Trans** 1989 Dec;17(6):1064-5

Inhibition of mucin secretion in a colonic adenocarcinoma cell line by DIDS and potassium channel blockers. Marcon MA, et al. **Biochim Biophys Acta** 1990 Apr 9;1052(1):17-23

Potassium conductance block by barium in amphibian Müller cells. Newman EA. **Brain Res** 1989 Oct 2;498(2):308-14

On the mechanism of barium induced diastolic depolarisation in isolated ventricular myocytes. Valenzuela F, et al. **Cardiovasc Res** 1989 May;23(5):390-9

Changes of calcium channel inactivation during run-down. Markwardt F, et al. **Gen Physiol Biophys** 1990 Jun; 9(3):209-18

Effects of calcium, strontium, and barium salts on frog rectus abdominis. Premendran SJ, et al. **Indian J Exp Biol** 1990 Jun;28(6):590-1

Effects of barium on spontaneous mechanical and electrical oscillations in rat papillary muscle. Bogdanov KYu, et al. **J Mol Cell Cardiol** 1989 Dec;21(12):1253-9

Apical potassium channels in Amphiuma diluting segment: effect of barium. Giebisch G, et al. **J Physiol (Lond)** 1990 Jan;420:313-23

The effect of Ba ions on human muscle cultured in monolayer and innervated with fetal rat spinal cord. Kobayashi T, et al. **Neurosci Lett** 1990 Mar 26;111(1-2):157-63

Chemicals that interfere with glial function in the vertebrate retina. Karwoski CJ. **Neurosci Res Suppl** 1989;10:S163-72

[Mutagen activity of barium chloride in Salmonella typhimurium] Monaco M, et al. **Med Lav** 1990 Jan-Feb; 81(1):54-64 (Eng. Abstr.) **(Ita)**

[Pharmacological experiments in the aged rat urinary bladder. Responses to inorganic ions (Ca2+, K+, Ba2+, Mg2+)] Saito M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jun;81(6):862-7 (Eng. Abstr.) **(Jpn)**

[The action of strontium and barium ions on the calcium binding and transport systems of nerve cells] Usachev IuM, et al. **Neirofiziologiia** 1989;21(6):820-5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Sr and Ba transients in isolated snail neurones studied with fura-2. The recovery from depolarization induced load and modulation of Ca release from intracellular stores. Mironov SL, et al. **Neurosci Lett** 1990 May 4;112(2-3):184-9

L-type Ca-channels: similar Q10 of Ca-, Ba- and Na-conductance points to the importance of ion-channel interaction. Klöckner U, et al. **Pflugers Arch** 1990 Feb; 415(5):638-41

THERAPEUTIC USE

Intussusception: hydrostatic pressure equivalents for barium and meglumine sodium diatrizoate. Kuta AJ, et al. **Radiology** 1990 Apr;175(1):125-6

Weak calf syndrome and parenteral selenium

supplementation. Logan EF, et al. **Vet Rec** 1990 Feb 17; 126(7):163–4

TOXICITY

Lack of effect of drinking water barium on cardiovascular risk factors. Wones RG, et al. **Environ Health Perspect** 1990 Apr;85:355–9

BARIUM SULFATE

Results of routine preoperative sigmoidoscopy and barium enema on patients with inguinal hernia. Barbee CL, et al. **Am Surg** 1975 Jan;41(1):28–31

Barium sulphate radio-opacity agent and bacterial adhesion to silicone catheter material [letter] Barrett SP, et al. **J Clin Pathol** 1989 Nov;42(11):1226

ADMINISTRATION & DOSAGE

Double-contrast enema: a simplified method for filling the colon [see comments] Gelfand DW, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):279–80 Comment in: AJR Am J Roentgenol 1990 Jul;155(1):195.

ADVERSE EFFECTS

Hypersensitivity reaction during barium enema [letter; comment] Brenner JS, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):199 Comment on: AJR Am J Roentgenol 1989 Aug;153(2):275–6.

Anaphylactic reaction to barium enema [letter] al-Mudallal R, et al. **Am J Med** 1990 Aug;89(2):251

Perforation of the colon after barium meal examination. Walker AJ. **Clin Radiol** 1989 Sep;40(5):530

Spontaneous dissection of air into the transverse mesocolon during double-contrast barium enema. Cho KC, et al. **Gastrointest Radiol** 1990 Winter;15(1):76–7

Anaphylaxis as a rare complication of a barium enema examination. Wasser MN, et al. **Neth J Med** 1989 Oct; 35(3–4):147–50

Increased frequency of reactions to contrast materials during gastrointestinal studies. Feczko PJ. **Radiology** 1990 Feb; 174(2):367–8

Reactions to contrast materials during gastrointestinal studies [letter] Janower ML. **Radiology** 1990 Oct;177(1):287

Complications from extravasated retroperitoneal barium: case report and review of the literature. Walker CW, et al. **Radiology** 1989 Dec;173(3):618–20

Caution in upper gastrointestinal X-ray study in constipated parkinsonian patients [letter] Umeki S. **South Med J** 1989 Dec;82(12):1589

Barium granuloma involving urinary bladder. Yanagi S, et al. **Urol Int** 1989;44(4):249–51

[Barium peritonitis caused by perforation of the colon and rectum] Potić D, et al. **Srp Arh Celok Lek** 1989 Jul–Aug; 117(7–8):513–8 (Eng. Abstr.) (Scc)

DIAGNOSTIC USE

Small bowel barium examination in children. Diagnostic accuracy and clinical value as evaluated from 331 enteroclysis and follow-through examinations. Bååth L, et al. **Acta Radiol** 1989 Nov–Dec;30(6):621–6

The value of barium enema and colonoscopy in patients infected with HIV. Connolly GM, et al. **AIDS** 1990 Jul; 4(7):687–9

The effect of high- vs low-density barium preparations on the quantitative features of swallowing. Dantas RO, et al. **AJR Am J Roentgenol** 1989 Dec;153(6):1191–5

The lack of sonographic image degradation after barium upper gastrointestinal examination. Elam EA, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):993–4

Epigastric hernia and perforation during air-contrast barium examinations [letter] Rai AM, et al. **AJR Am J Roentgenol** 1990 Aug;155(2):420

The esophageal "jet" phenomenon revisited. Taylor AJ, et al. **AJR Am J Roentgenol** 1990 Aug;155(2):289–90

Enteroscopy and enteroclysis: the combined procedure. Cohen ME, et al. **Am J Gastroenterol** 1989 Nov; 84(11):1413–5

Diagnostic and therapeutic efficacy of barium meal examination: a prospective evaluation in general practice [see comments] Conry BG, et al. **BMJ** 1989 Dec 9; 299(6713):1443–5 Comment in: BMJ 1990 Jan 20;300(6718):193.

Late radiation injury of the rectum and sigmoid colon: barium enema findings in 92 patients. den Hartog Jager FC, et al. **Br J Radiol** 1989 Sep;62(741):807–12

A new positioning technique for barium enemas. Hughes T. **Br J Radiol** 1990 Sep;63(753):723

Diagnosis of colorectal carcinoma—is colonoscopy superior to barium enema? Co E, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Jan;45(1):60–3

Determining the minimal interval between cleansing water enema and double-contrast barium enema examination. Lee SH, et al. **Clin Radiol** 1990 May;41(5):331–2

Carbon dioxide methods of double contrast barium enemas [letter; comment] Pochaczevsky R. **Clin Radiol** 1989 Nov; 40(6):656–7 Comment on: Clin Radiol 1989 May;40(3):318.

Enteroclysis—a technique for examining the small bowel. Lappas JC, et al. **Crit Rev Diagn Imaging** 1990; 30(2):183–217 (66 ref.)

Radiographic examination of the stomach and duodenum: comparison of single-, double- and biphasic-contrast methods. de Lange EE, et al. **Eur J Radiol** 1990 May–Jun; 10(3):167–74

Double contrast barium meal and acetylcysteine. Kinnunen J, et al. **Eur J Radiol** 1989 Nov;9(4):258–9

Flexible sigmoidoscopy plus air contrast barium enema versus colonoscopy for suspected lower gastrointestinal bleeding. Rex DK, et al. **Gastroenterology** 1990 Apr;98(4):855–61

Same-day versus separate-day sigmoidoscopy and double contrast barium enema: a randomized controlled study. Eckardt VF, et al. **Gastrointest Endosc** 1989 Nov–Dec; 35(6):512–5

Technetium-99m-sucralfate scintigraphy: poor correlation with endoscopy and radiology in inflammatory bowel disease. Tretjak Z, et al. **Gastrointest Endosc** 1990 May–Jun; 36(3):319–21

The assessment of colonic water retention prior to double-contrast enema. Pietilä JA, et al. **Gastrointest Radiol** 1990 Spring;15(2):164–8

The diagnostic value of combining flexible sigmoidoscopy and double-contrast barium enema as a one-stage procedure. Saito Y, et al. **Gastrointest Radiol** 1989 Fall; 14(4):357–9

Loss prevention case study. A monument to failure. Avery JK. **J Arkansas Med Soc** 1990 Feb;86(9):357

Endoscopy compared with barium meal [letter] Mendelson RM. **Med J Aust** 1989 Dec 4–18;151(11–12):725

The barium enema: the role of the radiographer. **Radiogr Today** 1989 Mar;55(622):13

Sigmoid diverticulitis: diagnostic role of CT—comparison with barium enema studies. Cho KC, et al. **Radiology** 1990 Jul;176(1):111–5

Atypical hyperplastic polyps at double-contrast barium enema examination. Levine MS, et al. **Radiology** 1990 Jun; 175(3):691–4

Internal hemorrhoids: diagnosis with double-contrast barium enema examinations. Levine MS, et al. **Radiology** 1990 Oct; 177(1):141–4

Double-contrast barium enema studies: effect of multiple reading on perception error. Markus JB, et al. **Radiology** 1990 Apr;175(1):155–6

Air-contrast barium enema studies after flexible proctosigmoidoscopy: randomized controlled clinical trial. Marshall JB, et al. **Radiology** 1990 Aug;176(2):549–51

Use of barium in evaluation of disorders of the upper gastrointestinal tract: current status [published erratum appears in Radiology 1990 May;175(2):586] Op den Orth JO. **Radiology** 1989 Dec;173(3):601–8 (76 ref.)

Barium sulfate absorption and sensitivity [letter] Ramani SK, et al. **Radiology** 1990 Mar;174(3 Pt 1):895–6

Peptic ulcer perforation: a complication of double contrast barium meal examination. Shimi SM. **Scott Med J** 1989 Aug;34(4):500

The barium enema in the diagnosis of acute appendicitis. Garcia CJ, et al. **Semin Ultrasound CT MR** 1989 Aug; 10(4):314–20 (33 ref.)

Barium enema in the diagnosis of acute appendicitis. el Ferzli G, et al. **Surg Gynecol Obstet** 1990 Jul;171(1):40–2

[Comparative evaluation of a new colon preparation method prior to a double-contrast barium enema: toward discontinuation of the cleansing enema] Mahieu PH. **J Belge Radiol** 1989 Dec;72(6):475–9 (Eng. Abstr.) (Fre)

[A method of barium transit in the small intestine in children] Bret P, et al. **Pediatrie** 1990;45(1):39–42 (Eng. Abstr.) (Fre)

[Value of barium transit of the small intestine in research on Meckel's diverticulum] Roy P, et al. **Pediatrie** 1990; 45(1):65–8 (Eng. Abstr.) (Fre)

[Colonic contrast enema in digital luminescent radiography (DLR) and conventional x-ray technic] Krug B, et al. **ROFO** 1990 Feb;152(2):131–6 (Eng. Abstr.) (Ger)

[Barium sulfate-gelatin spheres for the diagnosis of special pharyngo-esophageal problems] Hannig C, et al. **Rontgenpraxis** 1990 Jan;43(1):15–9 (Ger)

[Effects of roentgen contrast media containing barium sulfate on enterocutaneous fistulas] Pelster FW, et al. **Zentralbl Chir** 1989;114(20):1355–62 (Eng. Abstr.) (Ger)

[X-ray contrast examination in surgery of adhesive intestinal obstruction] Shal'kov IuL, et al. **Khirurgiia (Mosk)** 1990 Mar;(3):54–7 (Eng. Abstr.) (Rus)

PHARMACOLOGY

[Chemiluminescence of leukocytes in the whole blood stimulated by barium sulfate crystals] Vladimirov IuA, et al. **Biofizika** 1989 Nov–Dec;34(6):1051–4 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Childhood intussusception. Skipper RP, et al. **Surg Gynecol Obstet** 1990 Aug;171(2):151–3

BARLEY see under **CEREALS**

BARNACLES

ANALYSIS

The amino-acid sequence of multiple lectins of the acorn barnacle Megabalanus rosa and its homology with animal lectins. Muramoto K, et al. **Biochim Biophys Acta** 1990 May 31;1039(1):42–51

The positions of the disulfide bonds and the glycosylation site in a lectin of the acorn barnacle Megabalanus rosa. Muramoto K, et al. **Biochim Biophys Acta** 1990 May 31; 1039(1):52–60

DRUG EFFECTS

Sensitivity of the sodium efflux in single barnacle muscle fibers to the microinjection of aluminum. Bittar EE, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):174–85

METABOLISM

Nicardipine as a Ca2+ channel blocker in single barnacle muscle fibers. Xie H, et al. **Biochim Biophys Acta** 1989 Nov 20;1014(2):207–9

Simultaneous bidirectional magnesium ion flux measurements in single barnacle muscle cells by mass spectrometry. Montes JG, et al. **Biophys J** 1989 Sep;56(3):437–46

Imaging spatial distribution of release in single muscle fibres from Balanus nubilus using image intensification. Timmerman MP, et al. **Cell Calcium** 1990 Feb–Mar; 11(2–3):211–20

PHYSIOLOGY

Characteristics of neurones projecting from the supraoesophageal ganglion in the shadow reflex pathway of the barnacle. Gwilliam GF, et al. **J Exp Biol** 1990 Jul; 151:83–107

Further observations on the behaviour of ouabain-insensitive sodium efflux towards proctolin in barnacle muscle fibres. Bittar EE, et al. **J Physiol (Lond)** 1989 Dec;419:435–53

Dimethyl sulfoxide elevates intracellular Ca2+ and mimics effects of increased light intensity in a photoreceptor. Brown HM, et al. **Pflugers Arch** 1990 Jan;415(4):395–8

Mechanical characteristics of skinned and intact muscle fibres from the giant barnacle, Balanus nubilus. Griffiths PJ, et al. **Pflugers Arch** 1990 Feb;415(5):554–65

BARORECEPTORS see **PRESSORECEPTORS**

BAROTRAUMA

The use of tympanometry in predicting otitic barotrauma. Ashton DH, et al. **Aviat Space Environ Med** 1990 Jan; 61(1):56–61

COMPLICATIONS

Alveolar hemorrhage as a manifestation of pulmonary barotrauma after scuba diving. Balk M, et al. **Ann Emerg Med** 1990 Aug;19(8):930–4

Inner ear decompression sickness combined with a fistula of the round window. Case report. Adkisson GH, et al. **Ann Otol Rhinol Laryngol** 1990 Sep;99(9 Pt 1):733–7

[Subpleural air cysts. A complication of barotrauma during mechanical ventilation] Philit F, et al. **Rev Mal Respir** 1990; 7(4):343–8 (Eng. Abstr.) (Fre)

[Catarrhal otitis media in children and air travel] Gaini RM, et al. **Pediatr Med Chir** 1989 Nov–Dec;11(6):699–701 (Eng. Abstr.) (Ita)

[Acute low tone sensorineural hearing loss caused by inner ear barotrauma] Abe T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Sep;92(9):1381–8 (Eng. Abstr.) (Jpn)

[Barotraumatic sensory hearing damage treated with hyperbaric oxygenation] Romić P, et al. **Vojnosanit Pregl** 1989 May–Jun;46(3):215–6 (Scr)

DIAGNOSIS

The use of tympanometry in predicting otic barotrauma [letter] **Aviat Space Environ Med** 1990 Aug;61(8):763

The use of tympanometry to detect aerotitis media in hypobaric chamber operations. Devine JA, et al. **Aviat Space Environ Med** 1990 Mar;61(3):251–5

ETIOLOGY

Acute frontal sinus barotrauma. Singletary EM, et al. **Am J Emerg Med** 1990 Jul;8(4):329–31

Barotrauma and air embolism in hyperbaric oxygen therapy. Wolf HK, et al. **Am J Forensic Med Pathol** 1990 Jun; 11(2):149–53

PEEP valve barotrauma [letter] Anagnostou JM, et al. **Anesth Analg** 1990 Jun;70(6):674–5

Scanning electron microscopic study of the middle ear mucosa after transtympanic infusion of fluids with different osmotic pressure. Hara M, et al. **Auris Nasus Larynx** 1989; 16 Suppl 1:S33–40

Pulmonary barotrauma and arterial gas embolism caused by an emphysematous bulla in a SCUBA diver. Mellem H, et al. **Aviat Space Environ Med** 1990 Jun;61(6):559–62

Fitness of civil aviation passengers to fly after ear surgery. Moser M. **Aviat Space Environ Med** 1990 Aug;61(8):735–7

Inner ear decompression sickness following a shallow scuba dive. Reissman P, et al. **Aviat Space Environ Med** 1990 Jun;61(6):563–6

Two cases of barotrauma associated with transtracheal jet ventilation. Craft TM, et al. **Br J Anaesth** 1990 Apr; 64(4):524–7

Barotrauma from anesthesia ventilators. **Health Devices** 1988 Nov;17(11):354–5

Potential for barotrauma or hypoventilation with the Dräger AV-E ventilator. Eisenkraft JB. **J Clin Anesth** 1989; 1(6):452–6

Barotrauma related to inhalational drug abuse. Seaman ME. **J Emerg Med** 1990 Mar–Apr;8(2):141–9

[Pulmonary barotrauma during anesthesia] Cheng YC, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Dec;27(4):363–6 (Eng. Abstr.) **(Chi)**

PATHOLOGY

Barodontalgia and barotrauma in the human teeth: findings in navy divers, frogmen, and submariners of the Federal Republic of Germany. Goethe WH, et al. **Milit Med** 1989 Oct;154(10):491–5

[Pressure wave-induced damage of the vestibular apparatus in guinea pigs. A transmission electron microscopic study] Wang EG. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1990; 25(2):69–71, 125 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

Barotrauma and microvascular injury in lungs of nonadult rabbits: effect of ventilation pattern. Peevy KJ, et al. **Crit Care Med** 1990 Jun;18(6):634–7

PREVENTION & CONTROL

Reduction of peak inspiratory pressure using high frequency jet ventilation and pressure control ventilation following pneumonectomy. Lain D, et al. **Chest** 1990 Jul;98(1):229–30

RADIOGRAPHY

Fatal arterial gas embolism: detection by chest radiography and imaging before autopsy [see comments] Williamson JA, et al. **Med J Aust** 1990 Jul 16;153(2):97–100 Comment in: Med J Aust 1990 Jul 16;153(2):65.

SURGERY

Functional endoscopic sinus surgery in aviators with recurrent sinus barotrauma. Bolger WE, et al. **Aviat Space Environ Med** 1990 Feb;61(2):148–56

Eustachian tubes and airplanes [letter] **Pediatr Infect Dis J** 1990 Apr;9(4):304

THERAPY

Hot oil in the ears [letter] Truitt CF. **Pediatr Infect Dis J** 1990 Mar;9(3):224

BARR BODIES see **SEX CHROMATIN**

BARRETT ESOPHAGUS

Controversies about Barrett's esophagus [editorial; comment] Skinner DB. **Ann Thorac Surg** 1990 Apr;49(4):523–4 Comment on: Ann Thorac Surg 1990 Apr;49(4):537–41; discussion 541–2.

Barrett's oesophagus. Bremner CG. **Br J Surg** 1989 Oct; 76(10):995–6 (11 ref.)

Approaches to oesophageal columnar metaplasia (Barrett's oesophagus). Dent J. **Scand J Gastroenterol Suppl** 1989; 168:60–6 (35 ref.)

[Barrett esophagus in children] Bókay J, et al. **Orv Hetil** 1990 Jun 17;131(24):1311–2 (Eng. Abstr.) **(Hun)**

[Barrett esophagus—diagnosis and therapeutic strategy] Lundell L, et al. **Lakartidningen** 1990 Mar 7;87(10):756–9 **(Swe)**

CHEMICALLY INDUCED

Barrett's esophagus after antineoplastic chemotherapy [letter] Sartori S, et al. **Endoscopy** 1990 May;22(3):152

COMPLICATIONS

Barrett's esophagus in patients with symptomatic reflux esophagitis [see comments] Mann NS, et al. **Am J Gastroenterol** 1989 Dec;84(12):1494–6 Comment in: Am J Gastroenterol 1990 Jun;85(6):761–2.

Duodenogastric reflux in patients with Barrett's esophagus. Waring JP, et al. **Dig Dis Sci** 1990 Jun;35(6):759–62

Barrett's esophagus and adenocarcinoma. Ribet M, et al. **Eur J Cardiothorac Surg** 1987;1(1):29–32

Superficial adenocarcinoma of the oesophagus arising in Barrett's mucosa with dysplasia: a clinico-pathological study of 12 patients. De Baecque C, et al. **Histopathology** 1990 Mar;16(3):213–20

The consumption of tobacco, alcohol and the risk of adenocarcinoma in Barrett's oesophagus. Levi F, et al. **Int J Cancer** 1990 May 15;45(5):852–4

Esophageal perforation at a Barrett's ulcer. Cappell MS, et al. **J Clin Gastroenterol** 1989 Dec;11(6):663–6

Severe complicated oesophagitis. **Scand J Gastroenterol Suppl** 1989;168:23–6; discussion 27–9

[Dna ploidy in adenocarcinoma of Barrett's esophagus] Flejou JF, et al. **Ann Pathol** 1990;10(3):161–5 (Eng. Abstr.) **(Fre)**

[Neoplasm of the colon and Barrett esophagus (editorial)] De Arzúa Zulaica E. **Rev Esp Enferm Apar Dig** 1989 Sep; 76(3):253–4 **(Spa)**

DIAGNOSIS

Reflux esophagitis and Barrett's esophagus: the diagnostic role of esophageal mucosal biopsies. Arvelo G, et al. **Bol Asoc Med P R** 1989 Sep;81(9):351–4 (30 ref.)

[Barrett's esophagus] Deredzhian S, et al. **Vutr Boles** 1989; 28(5):58–61 (Eng. Abstr.) **(Bul)**

[Barrett esophagus] Rasiński A, et al. **Pol Tyg Lek** 1989 Jan 23;44(4):92–4 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Does the columnar epithelium of Barrett's esophagus regress on medical therapy? [letter; comment] **Am J Gastroenterol** 1990 Jun;85(6):761–2 Comment on: Am J Gastroenterol 1989 Dec;84(12):1494–6.

Effect of omeprazole on gastroesophageal reflux in Barrett's esophagus. Fiorucci S, et al. **Am J Gastroenterol** 1989 Oct; 84(10):1263–7

Lack of impact of therapy on extent of Barrett's esophagus in 67 patients. Sampliner RE, et al. **Dig Dis Sci** 1990 Jan; 35(1):93–6

Esophageal ulceration associated with 13-cis-retinoic acid therapy in patients with Barrett's esophagus. Fennerty B, et al. **Gastrointest Endosc** 1989 Sep–Oct;35(5):442–3

High dose famotidine in ranitidine resistant severe oesophagitis: a pilot study. Edge DP. **N Z Med J** 1990 Apr 11;103(887):150–2

[Does Barrett's esophagus regress after effective treatment of gastro-esophageal reflux?] Ollyo JB, et al. **Schweiz Med Wochenschr** 1990 May 12;120(19):716–20 (23 ref.) (Eng. Abstr.) **(Fre)**

EPIDEMIOLOGY

Esophageal reflux and secondary malignant neoplasia at laryngoesophagectomy. Price JC, et al. **Arch Otolaryngol Head Neck Surg** 1990 Feb;116(2):163–4

Prevalence of columnar-lined (Barrett's) esophagus. Comparison of population-based clinical and autopsy findings. Cameron AJ, et al. **Gastroenterology** 1990 Oct; 99(4):918–22

[Barrett esophagus: epidemiologic data and risk of becoming malignant] García Marcilla JA, et al. **Rev Esp Enferm Apar Dig** 1989 Nov;76(5):419–23 (46 ref.) (Eng. Abstr.) **(Spa)**

ETIOLOGY

Barrett's esophagus: too much acid, alkali, or both? Richter JE. **Gastroenterology** 1990 Mar;98(3):798–9

Cervical Barrett's esophagus: a common complication of gastric tube reconstruction. Lindahl H, et al. **J Pediatr Surg** 1990 Apr;25(4):446–8

Alkaline gastroesophageal reflux: implications in the development of complications in Barrett's columnar-lined lower esophagus. Attwood SE, et al. **Surgery** 1989 Oct; 106(4):764–70

GENETICS

Chromosomal rearrangements in Barrett's esophagus. A premalignant lesion of esophageal adenocarcinoma. Garewal HS, et al. **Cancer Genet Cytogenet** 1989 Oct 15; 42(2):281–6

Epidermal growth factor receptor overexpression and trisomy 7 in a case of Barrett's esophagus. Garewal H, et al. **Dig Dis Sci** 1990 Sep;35(9):1115–20

Tissue-specific expression of c-Ha-ras in premalignant gastrointestinal mucosae. Meltzer SJ, et al. **Exp Mol Pathol** 1989 Dec;51(3):264–74

METABOLISM

Distinct immunohistochemical findings in columnar epithelium of esophageal inlet patch and of Barrett's esophagus. Feurle GE, et al. **Dig Dis Sci** 1990 Jan; 35(1):86–92

[Quantification of gastro-esophageal reflux in Barrett's esophagus] Ortiz Escandell A, et al. **Rev Esp Enferm Dig** 1990 Mar;77(3):171–5 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Incomplete intestinal metaplasia in the diagnosis of columnar lined esophagus (Barrett's esophagus). Gottfried MR, et al. **Am J Clin Pathol** 1989 Dec;92(6):741–6

Effect of antireflux operation on Barrett's mucosa [see comments] Williamson WA, et al. **Ann Thorac Surg** 1990 Apr;49(4):537–41; discussion 541–2 Comment in: Ann Thorac Surg 1990 Apr;49(4):523–4.

Barrett's oesophagus. Potet F, et al. **Curr Top Pathol** 1990; 81:43–60 (60 ref.)

Flow cytometry and dysplasia in Barrett's esophagus [letter; comment] Lev R. **Gastroenterology** 1990 Apr;98(4):1107 Comment on: Gastroenterology 1989 Oct;97(4):815–20.

A study to examine agreement between endoscopy and histology for the diagnosis of columnar lined (Barrett's) esophagus. Woolf GM, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):541–4

Correlation of nucleolar organizer regions and glandular dysplasia of the stomach and esophagus. Burke AP, et al. **Mod Pathol** 1990 May;3(3):357–60

Reflux esophagitis and Barrett esophagus. Hamilton SR. **Monogr Pathol** 1990;(31):11–68 (206 ref.)

Barrett's esophagus: a model premalignant lesion for adenocarcinoma. Garewal HS, et al. **Prev Med** 1989 Sep; 18(5):749–56

[Histology of the endobrachyesophagus: its value in the monitoring of patients] Fontolliet C, et al. **Schweiz Med Wochenschr** 1990 Apr 28;120(17):630–1 (Eng. Abstr.) **(Fre)**

[Regression of cylindrical epithelial metaplasia in Barrett esophagus (letter)] Ottenjann R, et al. **Dtsch Med Wochenschr** 1990 Jun 8;115(23):916–7 **(Ger)**

[Is there an endobrachy-esophagus cancer sequence?] Hameeteman W, et al. **Internist (Berl)** 1990 Feb; 31(2):119–23 (64 ref.) **(Ger)**

RADIOGRAPHY

[Barrett's esophagus: a report of 4 cases] Li FH. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Oct; 23(5):269–70 (Eng. Abstr.) **(Chi)**

SURGERY

Indications for esophagectomy in nonmalignant Barrett's esophagus: a 10-year experience. Altorki NK, et al. **Ann Thorac Surg** 1990 May;49(5):724–6; discussion 727

BARTHOLIN'S GLANDS

Frequent isolation of capnophilic bacteria in aspirate from Bartholin's gland abscesses and cysts. Quentin R, et al. **Eur J Clin Microbiol Infect Dis** 1990 Feb;9(2):138–41

Haemophilus influenzae bartholinitis [letter] van Bosterhaut B, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jun;9(6):442

Necrotizing fasciitis arising from Bartholin's abscess. Case report and review of the literature. Fröhlich EP, et al. **Isr J Med Sci** 1989 Nov;25(11):644–7 (21 ref.)

Bartholin's gland mixed carcinoma predominantly of the transitional cell type following radiotherapy for a cervical carcinoma. Sieiński W, et al. **Zentralbl Allg Pathol** 1990; 136(3):265–8

[Treatment for Bartholin's duct abscesses and cysts by marsupialization using the CO2 laser] Takizawa K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Apr;42(4):381–4 **(Jpn)**

MICROBIOLOGY

Bartholin's abscess: the role of Chlamydia trachomatis. Bleker OP, et al. **Genitourin Med** 1990 Feb;66(1):24–5

[Microbiologic studies of cysts and abscesses of Bartholin's gland] Quentin R, et al. **Rev Fr Gynecol Obstet** 1990 May; 85(5):328 **(Fre)**

SURGERY

The ambulatory surgical management of Bartholin duct cysts. Downs MC, et al. **J Emerg Med** 1989 Nov–Dec;7(6):623–6

[The best treatment of Bartholin cysts and abscesses?] Schwarz R. **Zentralbl Gynakol** 1990;112(9):521–2 **(Ger)**

BARTONELLA

PHYSIOLOGY

Bartonella bacilliformis stimulates endothelial cells in vitro and is angiogenic in vivo. Garcia FU, et al. **Am J Pathol** 1990 May;136(5):1125–35

BARTONELLA INFECTIONS

Bacillary (epithelioid) angiomatosis and concurrent Kaposi's sarcoma in acquired immunodeficiency syndrome. Berger TG, et al. **Arch Dermatol** 1989 Nov;125(11):1543–7

EPIDEMIOLOGY

An epidemic of Oroya fever in the Peruvian Andes. Gray GC, et al. **Am J Trop Med Hyg** 1990 Mar;42(3):215–21

BARTTER'S DISEASE see under **HYPERALDOSTERONISM**

BARYONS see **ELEMENTARY PARTICLES**

BASAL CELL NEVUS SYNDROME see under **CARCINOMA, BASAL CELL**

BASAL GANGLIA

Cerebral toxoplasmosis and lymphoma in patients with acquired immunodeficiency syndrome. Laviopierre AM, et al. **Australas Radiol** 1989 Aug;33(3):270–5

ANALYSIS

Sexually dimorphic level of CCK-8-like immunoreactive neuronal somata within several basal forebrain nuclei of the rat. Pfister C, et al. **Exp Clin Endocrinol** 1989 Sep; 94(1–2):121–6

The pattern of the GABA-like immunoreactivity in the claustrum. Narkiewicz O, et al. **Folia Morphol (Warsz)** 1988;47(1–4):21–30

Purification and cDNA cloning of ARPP-16, a cAMP-regulated phosphoprotein enriched in basal ganglia, and of a related phosphoprotein, ARPP-19. Horiuchi A, et al. **J Biol Chem** 1990 Jun 5;265(16):9476–84

Distribution of DARPP-32 in the basal ganglia: an electron microscopic study. Ouimet CC, et al. **J Neurocytol** 1990 Feb;19(1):39–52

Changes within the basal nucleus in Parkinson's disease. Ulfig N, et al. **Prog Clin Biol Res** 1989;317:493–500 (16 ref.)

Basal ganglia: significance of signal hypointensity on

T2-weighted MR images [editorial] Drayer BP. **Radiology** 1989 Nov;173(2):311-2

ANATOMY & HISTOLOGY

Neuropeptide content and connectivity of the rat claustrum. Eiden LE, et al. **Brain Res** 1990 Jul 23;523(2):245-50

[Projection of the mesencephalic raphe nuclei to the magnocellular nuclei of the basal forebrain of the rat: a horseradish peroxidase study] Schober W, et al. **J Hirnforsch** 1989;30(6):685-97 (Eng. Abstr.) **(Ger)**

BLOOD SUPPLY

Acute cocaine abuse associated with cerebral infarction. Seaman ME. **Ann Emerg Med** 1990 Jan;19(1):34-7

Radiological and clinical features of basal ganglia infarction in tuberculous meningitis. Tang PS, et al. **Aust Paediatr J** 1989 Dec;25(6):361-2

Parkinsonism due to a basal ganglia lacunar state: clinicopathologic correlation. Murrow RW, et al. **Neurology** 1990 Jun;40(6):897-900

[Three cases of cryptic arteriovenous malformation in basal ganglia manifested by putaminal hemorrhage] Niwa J, et al. **No Shinkei Geka** 1990 Jul;18(7):665-8 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Secondary degeneration of substantia nigra following massive basal ganglia infarction] Ohara S, et al. **Rinsho Shinkeigaku** 1989 Nov;29(11):1352-6 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Connections of the subthalamic nucleus with ventral striatopallidal parts of the basal ganglia in the rat. Groenewegen HJ, et al. **J Comp Neurol** 1990 Apr 22; 294(4):607-22

Efferent projections of the subthalamic nucleus in the squirrel monkey as studied by the PHA-L anterograde tracing method. Smith Y, et al. **J Comp Neurol** 1990 Apr 8; 294(2):306-23

Acetylcholine content and distribution in rat cortical synaptosomes after in vivo exposure to quinolinic acid. Metcalf RH, et al. **Neurosci Lett** 1990 Jan 1;108(1-2):219-24

DRUG EFFECTS

Nucleus basalis magnocellularis and memory: differential effects of two neurotoxins. Markowska AL, et al. **Behav Neural Biol** 1990 Jul;54(1):13-26

Induction of ornithine decarboxylase in cerebral cortex by excitotoxin lesion of nucleus basalis: association with postsynaptic responsiveness and N-methyl-D-aspartate receptor activation. Reed LJ, et al. **J Neurochem** 1990 Sep; 55(3):780-7

Enkephalinergic and GABAergic modulation of motor activity in the ventral pallidum. Austin MC, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1370-7

AMPA, kainic acid, and N-methyl-D-aspartic acid stimulate locomotor activity after injection into the substantia innominata/lateral preoptic area. Shreve PE, et al. **Pharmacol Biochem Behav** 1989 Sep;34(1):101-6

Effects of intracerebral estradiol on the dorsal immobility response in the rat. Van Hartesveidt C, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):321-4

Increase of muscarinic receptor following kainic acid lesions of the nucleus basalis magnocellularis in rat brain: an autoradiographic study. Katayama S, et al. **Res Commun Chem Pathol Pharmacol** 1990 Jun;68(3):391-4

EMBRYOLOGY

Neurogenesis of the magnocellular basal forebrain nuclei in the rhesus monkey. Kordower JH, et al. **J Comp Neurol** 1990 Jan 22;291(4):637-53

ENZYMOLOGY

Localization of cyclic GMP-dependent protein kinase in rat basal ganglia neurons. Walaas SI, et al. **J Mol Neurosci** 1989;1(4):243-50

GROWTH & DEVELOPMENT

The development of basal forebrain projections to the rat visual cortex. Dinopoulos A, et al. **Exp Brain Res** 1989; 76(3):563-71

Developing forebrain astrocytes are sensitive to thyroid hormone. Gould E, et al. **GLIA** 1990;3(4):283-92

INJURIES

Radiological case of the month. Basal ganglia injury after cardiopulmonary arrest: clinical and magnetic resonance imaging correlation. Jacobs MB, et al. **Am J Dis Child** 1990 Aug;144(8):937-8

METABOLISM

Hyperinnervation of surviving neurons of the human basal nucleus of meynert by galanin in dementias of Alzheimer's and Parkinson's disease. Chan-Palay V. **Adv Neurol** 1990; 51:253-5

D2 dopamine receptors in neuroleptic-naive schizophrenic patients. A positron emission tomography study with [11C]raclopride. Farde L, et al. **Arch Gen Psychiatry** 1990 Mar;47(3):213-9

No difference in basal ganglia mineralization between schizophrenic and nonschizophrenic patients: a quantitative computerized tomographic study. Casanova MF, et al. **Biol Psychiatry** 1990 Jan 15;27(2):138-42

Morphine-induced alterations of local cerebral glucose utilization in the basal ganglia of rats. Beck T, et al. **Brain Res** 1989 Sep 18;497(2):205-13

Adrenergic innervation of the substantia innominata: co-localization of phenylethanolamine N-methyltransferase and tyrosine hydroxylase immunoreactivities within the same axons. Chang HT, et al. **Brain Res** 1989 Dec 4;503(2):350-3

Calbindin-immunoreactive cholinergic neurones in the nucleus basalis of Meynert in Alzheimer-type dementia. Ichimiya Y, et al. **Brain Res** 1989 Oct 16;499(2):402-6

Effects of microencapsulated monosialoganglioside GM1 on cholinergic neurons. Maysinger D, et al. **Brain Res** 1989 Sep 4;496(1-2):165-72

Localization of DARPP-32 immunoreactive neurons in the bed nucleus of the stria terminalis and central nucleus of the amygdala: co-distribution with axons containing tyrosine hydroxylase, vasoactive intestinal polypeptide, and calcitonin gene-related peptide. Gustafson EL, et al. **Exp Brain Res** 1990;79(3):447-58

Visualizing manganese in the primate basal ganglia with magnetic resonance imaging. Newland MC, et al. **Exp Neurol** 1989 Dec;106(3):251-8

Localization of cells containing transforming growth factor-alpha precursor immunoreactivity in the basal ganglia of the adult rat brain. Fallon JH, et al. **Growth Factors** 1990;2(2-3):241-50

Neurons with neurokinin B mRNA in the rat magnocellular basal nucleus: distribution, projection and colocalization studies. Burgunder JM, et al. **J Chem Neuroanat** 1989 Sep-Oct;2(5):239-51

Distribution of beta-nerve growth factor receptors in the human basal forebrain. Allen SJ, et al. **J Comp Neurol** 1989 Nov 22;289(4):626-40

Extensive co-occurrence of substance P and dynorphin in striatal projection neurons: an evolutionarily conserved feature of basal ganglia organization. Anderson KD, et al. **J Comp Neurol** 1990 May 15;295(3):339-69

Dopaminergic innervation of the basal ganglia in the squirrel monkey as revealed by tyrosine hydroxylase immunohistochemistry. Lavoie B, et al. **J Comp Neurol** 1989 Nov 1;289(1):36-52

G-proteins (Gi, Go) in the basal ganglia of control and schizophrenic brain. Okada F, et al. **J Neural Transm Gen Sect** 1990;79(3):227-34

Met-enkephalin immunoreactivity in the basal ganglia in Parkinson's disease and striatonigral degeneration. Goto S, et al. **Neurology** 1990 Jul;40(7):1051-6

Neural mechanisms underlying parkinsonian symptoms based upon regional uptake of 2-deoxyglucose in monkeys exposed to 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine. Mitchell IJ, et al. **Neuroscience** 1989;32(1):213-26

Serotonin-1 receptor binding sites in the human basal ganglia are decreased in Huntington's chorea but not in Parkinson's disease: a quantitative in vitro autoradiography study. Waeber C, et al. **Neuroscience** 1989;32(2):337-47

Cortical second messengers after NBM damage: no change in responses to cholinergic agonists. Shoham S, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):507-13

Expression of muscarinic acetylcholine and dopamine receptor mRNAs in rat basal ganglia. Weiner DM, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7050-4

Pargyline-sensitive selective accumulation of a radiolabeled MPTP analog in the primate cerebral cortex and basal ganglia. Efange SM, et al. **Synapse** 1990;5(3):207-12

Substantia nigra 6-hydroxydopamine lesions alter dopaminergic synaptic markers in the nucleus basalis magnocellularis and striatum of rats. Geula C, et al. **Synapse** 1989;4(3):248-53

Excitatory amino acids and Parkinson's disease [letter; comment] Schmidt WJ, et al. **Trends Neurosci** 1990 Feb; 13(2):46-7 Comment on: Trends Neurosci 1989 Aug;12(8):285-6.

PET imaging of dopamine receptors in human basal ganglia: relevance to mental illness. Sedvall G. **Trends Neurosci** 1990 Jul;13(7):302-8 (38 ref.)

PATHOLOGY

High-intensity basal ganglia lesions on T1-weighted MR images in neurofibromatosis. Mirowitz SA, et al. **AJNR** 1989 Nov-Dec;10(6):1159-63

Correlative decrease of large neurons in the neostriatum and basal nucleus of Meynert in Alzheimer's disease. Oyanagi K, et al. **Brain Res** 1989 Dec 18;504(2):354-7

Idiopathic familial cerebrovascular ferrocalcinosis. Zhang XZ, et al. **Chin Med J [Engl]** 1989 Jun;102(6):453-6

Syringomyelia extending to the basal ganglia. Case report. Okada S, et al. **J Neurosurg** 1989 Oct;71(4):616-7

Subcortical lesions and aphasia. Robin DA, et al. **J Speech Hear Disord** 1990 Feb;55(1):90-100 (42 ref.)

Psychotic symptoms in basal ganglia sclerosis [letter; comment] Förstl H, et al. **Lancet** 1990 Jan 6;335(8680):55 Comment on: Lancet 1989 Nov 18;2(8673):1193-4.

Cell loss and shrinkage in the nucleus basalis Meynert complex in Alzheimer's disease. Vogels OJ, et al. **Neurobiol Aging** 1990 Jan-Feb;11(1):3-13 (56 ref.)

Atrophy of cholinergic neurons within the rat nucleus basalis magnocellularis following intracortical AF64A infusion. Mouton PR, et al. **Neurosci Lett** 1990 Mar 26;111(1-2):52-7

[A case of bilateral necrosis of the basal ganglia after hypotensive shocks] Inagaki T, et al. **No To Shinkei** 1989 May;41(5):471-5 (Eng. Abstr.) **(Jpn)**

[Morphometric study of the magnocellular basal forebrain system in patients with Alzheimer's disease] Kobayashi K, et al. **No To Shinkei** 1990 Apr;42(4):345-51 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Benzodiazepines facilitate the stimulatory action of gamma-aminobutyric acid (GABA) on basal and veratridine-evoked catecholamine release from cultured bovine adrenal chromaffin cells. Kitayama S, et al. **Arch Int Pharmacodyn Ther** 1989 Jul-Aug;300:254-64

Chronic infusion of GABA and saline into the nucleus basalis magnocellularis of rats: II. Cognitive impairments. Majchrzak M, et al. **Behav Brain Res** 1990 Feb 12; 37(1):45-56

Task-dependent memory loss and recovery following unilateral nucleus basalis lesion: behavioral and neurochemical correlation. Nakamura S, et al. **Behav Brain Res** 1990 Jul 9;39(2):113-22

Similar memory impairments found in medial septal-vertical diagonal band of Broca and nucleus basalis lesioned rats: are memory defects induced by nucleus basalis lesions related to the degree of non-specific subcortical cell loss? Riekkinen P Jr, et al. **Behav Brain Res** 1990 Feb 12; 37(1):1-8

Comparative effects of ibotenic acid- and quisqualic acid-induced lesions of the substantia innominata on attentional function in the rat: further implications for the role of the cholinergic neurons of the nucleus basalis in cognitive processes. Robbins TW, et al. **Behav Brain Res** 1989 Dec 1;35(3):221-40

The effects of ibotenic acid lesions of the nucleus basalis and cholinergic-rich neural transplants on win-stay/lose-shift and win-shift/lose-stay performance in the rat. Sinden JD, et al. **Behav Brain Res** 1990 Jan 22;36(3):229-49

Induction of ornithine decarboxylase mRNA in cerebral cortex in response to lesion of nucleus basalis. Wood H, et al. **Biochem Soc Trans** 1990 Jun;18(3):395-6

Stimulation of the nucleus basalis of Meynert and substantia innominata produces widespread increases in cerebral blood flow in the frontal, parietal and occipital cortices. Adachi T, et al. **Brain Res** 1990 Apr 23;514(1):163-6

Spontaneous neuronal unit activity in the primate basal ganglia and the effects of precentral cerebral cortical ablations. Aldridge JW, et al. **Brain Res** 1990 May 14; 516(1):46-56

The nucleus basalis is involved in brain modulation of the immune system in rats. Cherkaoui J, et al. **Brain Res** 1990 May 21;516(2):345-8

Neurotoxic lesions of the nucleus basalis induced by colchicine: effects on spatial navigation in the water maze. Mundy WR, et al. **Brain Res** 1990 Apr 2;512(2):221-8

Is glutamate a co-transmitter in cortical cholinergic terminals? Effects of nucleus basalis lesion and of presynaptic muscarinic agents. Szerb JC, et al. **Brain Res** 1990 May 7;515(1-2):214-8

Neuronal responses related to reinforcement in the primate basal forebrain. Wilson FA, et al. **Brain Res** 1990 Feb 19; 509(2):213-31

Effects of quisqualic acid nucleus basalis lesioning on cortical EEG, passive avoidance and water maze performance. Riekkinen P Jr, et al. **Brain Res Bull** 1990 Jun;24(6):839-42

Role of prefrontal cortex and striatal output systems in short-term memory deficits associated with ageing, basal forebrain lesions, and cholinergic-rich grafts. Dunnett SB. **Can J Psychol** 1990 Jun;44(2):210-32

Motor learning in monkeys (Macaca fascicularis) with lesions in motor thalamus. Canavan AG, et al. **Exp Brain Res** 1989; 77(1):113-26

Neuronal responses related to the novelty and familarity of visual stimuli in the substantia innominata, diagonal band of Broca and periventricular region of the primate basal forebrain. Wilson FA, et al. **Exp Brain Res** 1990; 80(1):104-20

NGF receptor gene expression is decreased in the nucleus basalis in Alzheimer's disease. Higgins GA, et al. **Exp Neurol** 1989 Dec;106(3):222-36

Tetrahydroaminoacridine improves the spatial acquisition deficit produced by nucleus basalis lesions in rats. Kwo-On-Yuen PF, et al. **Exp Neurol** 1990 Jun; 108(3):221-8

Secondary generalization of seizures from a cortical penicillin focus following stimulation of the basal forebrain. McLachlan RS, et al. **Exp Neurol** 1990 Aug;109(2):237-42

Nucleus basalis lesions fail to induce senile plaques in the rat. Thal LJ, et al. **Exp Neurol** 1990 Apr;108(1):88-90

Effects of unilateral lesion of the nucleus basalis of Meynert on brain glucose utilization in callosotomized baboons: a PET study. Yamaguchi T, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):618-23

Preparation for movement: neural representations of intended direction in three motor areas of the monkey. Alexander GE, et al. **J Neurophysiol** 1990 Jul;64(1):133-50

Neural representations of the target (goal) of visually guided arm movements in three motor areas of the monkey. Alexander GE, et al. **J Neurophysiol** 1990 Jul;64(1):164-78

Movement-related neuronal activity selectively coding either direction or muscle pattern in three motor areas of the

monkey. Crutcher MD, et al. **J Neurophysiol** 1990 Jul; 64(1):151–63

Context-dependent responses of primate nucleus basalis neurons in a go/no-go task. Richardson RT, et al. **J Neurosci** 1990 Aug;10(8):2528–40

Continuous physostigmine infusion in rats with excitotoxic lesions of the nucleus basalis magnocellularis: effects on performance in the water maze task and cortical cholinergic markers. Mandel RJ, et al. **J Pharmacol Exp Ther** 1989 Nov;251(2):612–9

Effects of lesions in the substantia innominata on active avoidance task and cerebral glucose metabolism. Mihara B. **Keio J Med** 1989 Dec;38(4):419–31

Different long-term effects of bilateral and unilateral nucleus basalis lesions on rat cerebral cortical neurotransmitter content. Arendash GW, et al. **Neurochem Res** 1989 Nov; 14(11):1113–8

Effect of claustrum stimulation on neurons of the contralateral medial oculomotor area, in the cat. Crescimanno G, et al. **Neurosci Lett** 1990 Jul 13; 114(3):289–94

Effect of unilateral nucleus basalis lesion on cortical and striatal acetylcholine and dopamine release monitored in vivo with microdialysis. Herrera-Marschitz M, et al. **Neurosci Lett** 1990 Mar 2;110(1–2):172–9

Effects of nucleus basalis lesions on cerebral cortical concentrations of corticotropin-releasing hormone (CRH)-like immunoreactivity in the rat. Millard WJ, et al. **Neurosci Lett** 1990 May 31;113(2):233–9

Involvement of the substantia innominata/ventral pallidum complex in transmitting forelimb muscular rigidity evoked from the nucleus accumbens in rats. van den Bos R, et al. **Neurosci Lett** 1989 Sep 11;103(3):303–8

Induction of ornithine decarboxylase mRNA in cerebral cortex in response to kainate lesion of nucleus basalis: involvement of NMDA receptors. Wood H, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):176–82

Relationship between the cortical choline acetyltransferase content and EEG delta-power. Riekkinen P Jr, et al. **Neurosci Res** 1990 Apr;8(1):12–20

Cholinergic and noradrenergic denervations decrease labelled purine release from electrically stimulated rat cortical slices. Pedata F, et al. **Neuroscience** 1989; 32(3):629–36

The effects of excitotoxic lesions of the basal forebrain on the acquisition, retention and serial reversal of visual discriminations in marmosets. Roberts AC, et al. **Neuroscience** 1990;34(2):311–29

Comparison of behavioral effects of nucleus basalis magnocellularis lesions and somatosensory cortex ablation in the rat. Wozniak DF, et al. **Neuroscience** 1989; 32(3):685–700

Frontal cortex as the site of action of physostigmine in nbM-lesioned rats. Haroutunian V, et al. **Physiol Behav** 1990 Jan;47(1):203–6

Basal ganglia and cerebellum receive different somatosensory information in rats. Mercier BE, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4388–92

Role of basal ganglia in saccades. Hikosaka O. **Rev Neurol (Paris)** 1989;145(8–9):580–6

Functional architecture of basal ganglia circuits: neural substrates of parallel processing. Alexander GE, et al. **Trends Neurosci** 1990 Jul;13(7):266–71 (67 ref.)

Interactions between glutamatergic and monoaminergic systems within the basal ganglia—implications for schizophrenia and Parkinson's disease. Carlsson M, et al. **Trends Neurosci** 1990 Jul;13(7):272–6 (61 ref.)

New frontiers in basal ganglia research. Introduction. Goldman-Rakic PS, et al. **Trends Neurosci** 1990 Jul; 13(7):241–4 (44 ref.)

Neurotransmitters and neuromodulators in the basal ganglia. Graybiel AM. **Trends Neurosci** 1990 Jul;13(7):244–54 (66 ref.)

Extrinsic connections of the basal ganglia. Parent A. **Trends Neurosci** 1990 Jul;13(7):254–8 (40 ref.)

The neural network of the basal ganglia as revealed by the study of synaptic connections of identified neurones. Smith AD, et al. **Trends Neurosci** 1990 Jul;13(7):259–65 (49 ref.)

[Eye movement is controlled by basal ganglia-induced GABAergic inhibition] Hikosaka O. **Rinsho Shinkeigaku** 1989 Dec;29(12):1515–8 (7 ref.) (Eng. Abstr.) **(Jpn)**

[Neuronal reactions of the substantia innominata in the cat during an instrumental conditioned reflex] Storozhuk VM, et al. **Neirofiziologiia** 1989;21(6):796–804 (Eng. Abstr.) **(Rus)**

[The role of the basal ganglia in the reproducibility of instrumental reactions acquired to electrostimulation of the hippocampus] Grigor'ian GA, et al. **Zh Vyssh Nerv Deiat** 1990 Mar-Apr;40(2):263–72 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Humming, auditory hallucinations, and dystonia [letter] [see comments] Lauterbach EC. **Biol Psychiatry** 1990 Apr 15; 27(8):934–5 Comment in: Biol Psychiatry 1990 Apr 15;27(8):811–2.

Ischaemic stroke in the basal ganglia and internal capsule in childhood. Kappelle LJ, et al. **Brain Dev** 1989; 11(5):283–92

Syringomyelia extending to basal ganglia [letter] Sharafuddin MJ. **J Neurosurg** 1990 Oct;73(4):645

Hypoxic-ischemic damage of the basal ganglia. Case reports and a review of the literature. Hawker K, et al. **Mov Disord** 1990;5(3):219–24

[Limbic seizure and ibotenic acid-induced lesions of substantia innominata in cats] Kunimoto M, et al. **No To Shinkei** 1989 Jul;41(7):667–71 (Eng. Abstr.) **(Jpn)**

[The physiopathology of the basal ganglia and the etiopathogenesis of Parkinson's diseases] Stefanache F, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Jan-Mar; 93(1):145–54 (0 ref.) **(Rum)**

RADIATION EFFECTS

Cerebral radiation necrosis complicating stereotactic radiosurgery for arteriovenous malformation. Statham P, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):476–9

RADIOGRAPHY

Postinfectious encephalomyelitis with localized basal ganglia involvement. Donovan MK, et al. **Pediatr Neurol** 1989 Sep-Oct;5(5):311–3

[Pathologic brain cavity after idiopathic intracerebral hematoma treated conservatively and surgically] Kojder I, et al. **Pol Przegl Radiol** 1988 Nov-Dec;52(6):253–5 (Eng. Abstr.) **(Pol)**

RADIONUCLIDE IMAGING

Asymmetric metabolism over basal ganglia in catatonia [letter] Early TS. **Biol Psychiatry** 1990 Jul 15;28(2):177

Basal ganglia regional glucose metabolism asymmetry during a catatonic episode. Luchins DJ, et al. **Biol Psychiatry** 1989 Nov;26(7):725–8

SURGERY

Microsurgical anatomy of the transcallosal approach to the ventricular system, pineal region and basal ganglia. Schijman E. **Childs Nerv Syst** 1989 Aug;5(4):212–9

ULTRASTRUCTURE

[Synaptology of the claustrum in the rat] Trevisi M, et al. **Arch Ital Anat Embriol** 1989 Jan-Mar;94(1):85–96 (Eng. Abstr.) **(Ita)**

BASAL GANGLIA DISEASES

[Hematomas located in the basal ganglia and thalamus (diagnostic, therapeutic and prognostic aspects)] Custović K, et al. **Med Arh** 1989;43(2–3):125–9 (Eng. Abstr.) **(Scr)**

BLOOD

Calcium techniques [letter; comment] Smyth MG. **Br J Psychiatry** 1989 Jul;155:127 Comment on: Br J Psychiatry 1988 Dec;153:849.

CHEMICALLY INDUCED

Extrapyramidal symptoms in neuroleptic recipients. Grohmann R, et al. **Agents Actions Suppl** 1990;29:71–82

Fluphenazine dose, clinical response, and extrapyramidal symptoms during acute treatment. Levinson DF, et al. **Arch Gen Psychiatry** 1990 Aug;47(8):761–8

Unilateral neuroleptic-induced akathisia. Hermesh H, et al. **Clin Neuropharmacol** 1990 Jun;13(3):253–8

Adverse reactions to cinnarizine [letter] Bhatia RS. **J Assoc Physicians India** 1989 Nov;37(11):733

The pharmacologic treatment of neuroleptic-induced akathisia. Fleischhacker WW, et al. **J Clin Psychopharmacol** 1990 Feb;10(1):12–21 (54 ref.)

Characterizing anticholinergic abuse in community mental health. Wells BG, et al. **J Clin Psychopharmacol** 1989 Dec; 9(6):431–5

Extrapyramidal symptoms with addition of lithium to neuroleptics [letter; comment] Murphy DJ, et al. **J Nerv Ment Dis** 1989 Nov;177(11):708 Comment on: J Nerv Ment Dis 1988 Nov;176(11):682–5.

Meige's syndrome during long-term neuroleptic treatment. Kurata K, et al. **Jpn J Psychiatry Neurol** 1989 Dec; 43(4):627–31

Neuroleptic-induced extrapyramidal symptoms and serum calcium levels. Results of a pilot study. Kuny S, et al. **Neuropsychobiology** 1989;21(2):67–70

Occult carbon monoxide poisoning in an infant. Piatt JP, et al. **Pediatr Emerg Care** 1990 Mar;6(1):21–3

EGYT-2509 a novel neuroleptic agent without extrapyramidal and endocrine side effects. Gacsályi I, et al. **Pol J Pharmacol Pharm** 1988 Nov-Dec;40(6):613–9

Clozapine: neuroleptic-induced EPS and tardive dyskinesia. Casey DE. **Psychopharmacology (Berl)** 1989;99 Suppl:S47–53 (51 ref.)

[Extrapyramidal syndromes caused by flunarizine. Apropos of 6 cases] Senard JM, et al. **Therapie** 1990 Mar-Apr; 45(2):157–9 (Eng. Abstr.) **(Fre)**

[Iatrogenic extrapyramidal disorders] Ludin HP. **Schweiz Med Wochenschr** 1990 Jun 9;120(23):855–8 (Eng. Abstr.) **(Ger)**

[Extrapyramidal type collateral effects of the administration of metoclopramide to children] Bruni L, et al. **Pediatr Med Chir** 1989 May-Jun;11(3):317–8 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Parkinsonian symptoms in a patient with AIDS and cerebral toxoplasmosis [letter] Carrazana EJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1445–7

Primate models of movement disorders of basal ganglia origin. DeLong MR. **Trends Neurosci** 1990 Jul;13(7):281–5 (42 ref.)

[Suspected germ cell tumor in bilateral basal ganglia with progressive dystonia] Nakamura M, et al. **No To Hattatsu** 1990 May;22(3):284–9 (Eng. Abstr.) **(Jpn)**

[Micrographia due to the lesions around basal ganglia and genu of internal capsule and dysarthria-clumsy hand syndrome (letter)] Yamamoto K, et al. **Rinsho Shinkeigaku** 1990 Jan;30(1):113–4 **(Jpn)**

[A 69-year-old female with extrapyramidal syndrome and pulmonary masses (clinical conference)] Picado C, et al. **Med Clin (Barc)** 1989 Oct 14;93(11):431–6 **(Spa)**

DIAGNOSIS

High-intensity basal ganglia lesions on T1-weighted MR images in neurofibromatosis. Mirowitz SA, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):369–73

Morning glory syndrome and basal encephalocele mimicking a pituitary adenoma. Storms M, et al. **Bull Soc Belge Ophtalmol** 1987;225 Pt 2:97–103

Nonmetabolic causes of triphasic waves: a reappraisal. Aguglia U, et al. **Clin Electroencephalogr** 1990 Jul; 21(3):120–5

Somatosensory evoked potentials in Hallervorden-Spatz-neuroaxonal-dystrophy complex with dorsal column involvement. Mutoh K, et al. **Clin Electroencephalogr** 1990 Apr;21(2):58–66

Adult onset Hallervorden-Spatz syndrome or Seitelberger's disease with late onset: variants of the same entity? A clinico-pathological study. Gaytan-Garcia S, et al. **Clin Neuropathol** 1990 May-Jun;9(3):136–42

Follow-up MR studies in Hallervorden-Spatz disease. Gallucci M, et al. **J Comput Assist Tomogr** 1990 Jan-Feb; 14(1):118–20

Germ cell tumor arising in the basal ganglia in a female—case report. Kobayashi H, et al. **Neurol Med Chir (Tokyo)** 1990 Feb;30(2):123–6 (23 ref.)

MRI in infantile neuroaxonal dystrophy. Ito M, et al. **Pediatr Neurol** 1989 Jul-Aug;5(4):245–8

Extrapyramidal reactions to metoclopramide and prochlorperazine. Bateman DN, et al. **Q J Med** 1989 Apr; 71(264):307–11

[Value of electroencephalographic examination in the diagnosis of chronic carbon dioxide poisoning] Langauer-Lewowicka H, et al. **Med Pr** 1989;40(5):310–4 (Eng. Abstr.) **(Pol)**

[Ganglio-thalamic encephalomalacia. Ultrasonic diagnosis] Castro Conde JR, et al. **An Esp Pediatr** 1989 Jul;31(1):43–8 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Glycine adjuvant therapy to conventional neuroleptic treatment in schizophrenia: an open-label, pilot study. Rosse RB, et al. **Clin Neuropharmacol** 1989 Oct; 12(5):416–24

Prediction of short term outcome in schizophrenia: depressive symptoms, negative symptoms, and extrapyramidal signs. Treatment Strategies in Schizophrenia Collaborative Study Group. Glick ID, et al. **Psychopharmacol Bull** 1989;25(3):344–7

ETIOLOGY

Post-traumatic extrapyramidal syndrome: case report. Della Sala S, et al. **Ital J Neurol Sci** 1990 Feb;11(1):65–9

Extrapyramidal syndrome in falciparum malaria. Arya TV, et al. **J Assoc Physicians India** 1989 Jun;37(6):393–4

Extrapyramidal symptoms in varicella zoster infection [letter] Saha P, et al. **J Assoc Physicians India** 1990 Apr;38(4):312–3

Extrapyramidal signs in dementia of Alzheimer type [letter] [see comments] Tyrrell PJ, et al. **Lancet** 1989 Oct 14; 2(8668):920 Comment in: Lancet 1989 Dec 9;2(8676):1392.

Betel nut-induced extrapyramidal syndrome: an unusual drug interaction. Deahl M. **Mov Disord** 1989;4(4):330–2

Traumatic basal ganglia hemorrhage [letter; comment] Jellinger K. **Neurology** 1990 May;40(5):862–3 Comment on: Neurology 1989 Jul;39(7):897–904.

[Primary hypoparathyroidism with basal ganglia calcification: report of a case] Chow KS, et al. **Acta Paediatr Sin** 1989 Mar-Apr;30(2):129–33 (Eng. Abstr.) **(Chi)**

[Basal ganglion bleeding after the surgical decompression of the craniovertebral junction] Jamjoom ZB. **Neurochirurgia (Stuttg)** 1990 Jan;33(1):22–5 (11 ref.) (Eng. Abstr.) **(Ger)**

[A case of neonatal herpes simplex virus encephalitis with calcifications of thalamus and basal ganglia] Takahashi H, et al. **No To Hattatsu** 1990 Mar;22(2):179–83 (Eng. Abstr.) **(Jpn)**

[Calcification of the basal ganglia and hypoparathyroidism: Fahr disease. Study of a family] Garcia Urra D, et al. **Arch Neurobiol (Madr)** 1990 Jan-Feb;53(1):18–22 (Eng. Abstr.) **(Spa)**

GENETICS

A familial syndrome of dystonia, blepharospasm, and pigmentary retinopathy. Coppeto JR, et al. **Neurology** 1990 Sep;40(9):1359–63

METABOLISM

Abnormal systemic metabolism of iron, porphyrin, and calcium in Fahr's syndrome. Beall SS, et al. **Ann Neurol** 1989 Oct;26(4):569–75

PATHOLOGY

Idiopathic familial cerebrovascular ferrocalcinosis. Zhang XZ, et al. **Chin Med J [Engl]** 1989 Jun;102(6):453–6

Liver and pituitary abnormalities in Hallervorden–Spatz disease. Williams DJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1410–4

PHYSIOPATHOLOGY

Effects of anticholinergic agents on the excitability of the blink reflex in Meige syndrome. Rossi B, et al. **Eur Neurol** 1989;29(5):281–3

Facial dystonia: clinical features, prognosis and pharmacology in 31 patients. Defazio G, et al. **Ital J Neurol Sci** 1989 Dec;10(6):553–60

Saccadic function in spasmodic torticollis. Stell R, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):496–501

Diurnal variability in cranial dystonia. Montagna P, et al. **Mov Disord** 1990;5(1):44–6

Extrapyramidal involvement in Rett's syndrome. FitzGerald PM, et al. **Neurology** 1990 Feb;40(2):293–5

Cortical–basal ganglionic degeneration. Riley DE, et al. **Neurology** 1990 Aug;40(8):1203–12

Biochemical and neurophysiological investigations in two forms of Segawa's disease. Görke W, et al. **Neuropediatrics** 1990 Feb;21(1):3–8

Disturbances of motor preparation in basal ganglia and cerebellar disorders. Diener HC, et al. **Prog Brain Res** 1989; 80:481–8; discussion 479–80

Serotonergic aspects of acute extrapyramidal syndromes in nonhuman primates. Casey DE. **Psychopharmacol Bull** 1989;25(3):457–9

The functional anatomy of basal ganglia disorders [see comments] Albin RL, et al. **Trends Neurosci** 1989 Oct; 12(10):366–75 (121 ref.) Comment in: Trends Neurosci 1990 Mar;13(3):93. Comment in: Trends Neurosci 1990 Mar;13(3):93–5.

Model for basal ganglia disorders [letter; comment] Barker R. **Trends Neurosci** 1990 Mar;13(3):93 Comment on: Trends Neurosci 1989 Oct;12(10):366–75.

[Somatosensory disorders in patients with extrapyramidal pathology: the effect of a stereotaxic intervention] Thomas D, et al. **Zh Vopr Neirokhir** 1990 Jan–Feb;(1):27–9 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Risk management for extrapyramidal symptoms. Blair DT. **QRB** 1990 Mar;16(3):116–24 (63 ref.)

RADIOGRAPHY

Basal ganglia calcification in schizophrenia [letter] Fernandez–Bouzas A, et al. **Biol Psychiatry** 1990 Mar 15; 27(6):682–5

The significance of haematomas of the basal ganglia in closed head injury. Colquhoun IR, et al. **Clin Radiol** 1989 Nov; 40(6):619–21

[Calcification of the basal ganglia. Study of 16 cases] Roquer J, et al. **Neurologia** 1987 Sep–Oct;2(5):221–6 (23 ref.) (Eng. Abstr.) **(Spa)**

SURGERY

[A case of embryonal carcinoma arising in the basal ganglia of the cerebrum] Maeda Y, et al. **No Shinkei Geka** 1990 Jul;18(7):675–80 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Massive traumatic hematoma localized in the basal ganglia: treatment by CT-guided stereotactic aspiration surgery] Yamamoto F, et al. **No Shinkei Geka** 1990 Jun;18(6):563–5 (Eng. Abstr.) **(Jpn)**

[Extrapyramidal dyskinesias and their neurosurgical treatment] Nesterov LN, et al. **Zh Vopr Neirokhir** 1990 Jan–Feb;(1):13–5 (Eng. Abstr.) **(Rus)**

BASAL LAMINA see **BASEMENT MEMBRANE**

BASAL METABOLISM

see related

CALORIMETRY

Resting metabolic rate in weight-cycling collegiate wrestlers compared with physically active, noncycling control subjects. Melby CL, et al. **Am J Clin Nutr** 1990 Sep; 52(3):409–14

Twenty-four-hour energy expenditure and basal metabolic rate measured in a whole-body indirect calorimeter in Gambian men. Minghelli G, et al. **Am J Clin Nutr** 1990 Apr;51(4):563–70

Basal and postprandial metabolic rates in lactating and nonlactating women. Motil KJ, et al. **Am J Clin Nutr** 1990 Oct;52(4):610–5

Estimating resting energy expenditure by simple lean-body-mass indicators in children on total parenteral nutrition. Salas JS, et al. **Am J Clin Nutr** 1990 Jun; 51(6):958–62

Avian basal metabolic rates: their association with body composition and energy expenditure in nature. Daan S, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R333–40

Effect of age on body composition and resting metabolic rate. Fukagawa NK, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):E233–8

Resting energy expenditure in interstitial lung disease. Fitting JW, et al. **Am Rev Respir Dis** 1990 Sep;142(3):631–5

Investigation of basal metabolic rates and whole body measures of oxidant damage in vivo. Moore GW, et al. **Biochem Soc Trans** 1990 Apr;18(2):355–6

Harris–Benedict approximation [letter] Fagan T. **Crit Care Med** 1990 Apr;18(4):462–3

Factors influencing sleeping metabolic rate in infants. Eccles MP, et al. **Eur J Clin Nutr** 1989 Jul;43(7):485–92

The constancy of basal metabolic rate in free-living male subjects. Henry CJ, et al. **Eur J Clin Nutr** 1989 Oct; 43(10):727–31

Body weight changes and basal metabolic rates of rural Beninese women during seasons with different energy intakes. Schultink WJ, et al. **Eur J Clin Nutr** 1990;44 Suppl 1:31–40

Day-to-day variations in basal metabolic rates and energy intakes of human subjects. Soares MJ, et al. **Eur J Clin Nutr** 1989 Jul;43(7):465–72

Energy expenditure/basal metabolic rate ratios in normal and marginally undernourished Colombian children 6–16 years of age. Spurr GB, et al. **Eur J Clin Nutr** 1989 Aug; 43(8):515–27

Are patients with chronic liver disease hypermetabolic? Heymsfield SB, et al. **Hepatology** 1990 Mar;11(3):502–5 (22 ref.)

Maintenance of weight loss with recovery of resting metabolic rate following 8 weeks of very low calorie dieting. Rattan S, et al. **Int J Obes** 1989;13 Suppl 2:189–92

Short and long term effects of a very low calorie diet on resting metabolic rate and body composition. Vansant G, et al. **Int J Obes** 1989;13 Suppl 2:87–9

The contribution of the leak of protons across the mitochondrial inner membrane to standard metabolic rate. Brand MD. **J Theor Biol** 1990 Jul 24;145(2):267–86

Long-term effects of dieting on resting metabolic rate in obese outpatients. Wadden TA, et al. **JAMA** 1990 Aug 8;264(6):707–11

A review: exercise and its influence on resting energy metabolism in man. Poehlman ET. **Med Sci Sports Exerc** 1989 Oct;21(5):515–25 (61 ref.)

Resting metabolic rate and body composition of achondroplastic dwarfs. Owen OE, et al. **Medicine (Baltimore)** 1990 Jan;69(1):56–67

Resting energy expenditure in Gaucher's disease type 1: effect of Gaucher's cell burden on energy requirements. Barton DJ, et al. **Metabolism** 1989 Dec;38(12):1238–43

Potential associations between resting energy expenditure, thermic effect of a meal, and VO2 max in young adult males [letter; comment] Soares MJ, et al. **Metabolism** 1989 Dec;38(12):1251–3 Comment on: Metabolism 1989 Jan;38(1):85–90.

Resting energy expenditure in women: impact of obesity and body-fat distribution. Weststrate JA, et al. **Metabolism** 1990 Jan;39(1):11–7

Physical fitness and basal metabolic rate. **Nutr Rev** 1989 Oct; 47(10):324–6

Effects of bopindolol on platelet function in hypertension at rest and during exercise. Virgolini I, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Jun; 40(2):125–30

DRUG EFFECTS

The effect of clenbuterol on basal protein turnover and endogenous nitrogen loss of sheep. Inkster JE, et al. **Br J Nutr** 1989 Sep;62(2):285–96

Short-term influence of 3,5,3'-triiodothyronine infusion on resting metabolic rate of the young pig. Dauncey MJ, et al. **Horm Metab Res** 1990 Jul;22(7):374–7

Effect of nicotine on norepinephrine turnover and thermogenesis in brown adipose tissue and metabolic rate in MSG obese mice. Yoshida T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Apr;36(2):123–30

Caffeine activates brown adipose tissue thermogenesis and metabolic rate in mice. Yoshioka K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Apr;36(2):173–8

Ephedrine-induced thermogenesis as an adjunct to cognitive restructuring and covert conditioning: a proposal for treatment of obese individuals. Zgourides GD, et al. **Percept Mot Skills** 1989 Oct;69(2):563–72

PHYSIOLOGY

Diurnal variation in postabsorptive resting metabolic rate and diet-induced thermogenesis. Weststrate JA, et al. **Am J Clin Nutr** 1989 Nov;50(5):908–14

Thermic effect of food in man: effect of meal composition, and energy content. Kinabo JL, et al. **Br J Nutr** 1990 Jul; 64(1):37–44

Metabolic rate and thermoregulation in two species of tuco-tuco, Ctenomys talarum and Ctenomys australis (Caviomorpha, Octodontidae). Busch C. **Comp Biochem Physiol [A]** 1989;93(2):345–7

The effects of norepinephrine and nutritional status on resting metabolic rates in the LA/N-cp rat. Young NL, et al. **Comp Biochem Physiol [A]** 1989;94(4):597–602

Influence of upper and lower thermoneutral room temperatures (20 degrees C and 25 degrees C) on fasting and post-prandial resting metabolism under different outdoor temperatures. Kashiwazaki H, et al. **Eur J Clin Nutr** 1990 May;44(5):405–13

Seasonal fluctuation of BMR in populations not exposed to limitations in food availability: reality or illusion? Kashiwazaki H. **Eur J Clin Nutr** 1990;44 Suppl 1:85–93 (37 ref.)

The effect of psychological stress on diet-induced thermogenesis and resting metabolic rate. Weststrate JA, et al. **Eur J Clin Nutr** 1990 Apr;44(4):269–75

Exercise training attenuates diet-induced reduction in metabolic rate. Ballor DL, et al. **J Appl Physiol** 1990 Jun; 68(6):2612–7

Changes in the basal metabolic rate of a normal woman induced by short-term and long-term alterations of energy intake. Yamashita J, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Aug;35(4):371–81

Metabolic rate and weight loss in chronic obstructive lung disease. Wilson DO, et al. **JPEN J Parenter Enteral Nutr** 1990 Jan–Feb;14(1):7–11

The effect of starvation on insulin-induced glucose disposal and thermogenesis in humans. Mansell PI, et al. **Metabolism** 1990 May;39(5):502–10

Impact of energy intake and exercise on resting metabolic rate. Molé PA. **Sports Med** 1990 Aug;10(2):72–87 (98 ref.)

BASAL NUCLEI see **BASAL GANGLIA**

BASAL NUCLEUS, OLIVARY see **OLIVARY NUCLEUS**

BASAL VEIN see **CEREBRAL VEINS**

BASE COMPOSITION

Characterization of the high pH wobble structure of the 2-aminopurine.cytosine mismatch by N-15 NMR spectroscopy. Sowers LC, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):89–92

Effect of base-pair sequence on the conformations and thermally induced transitions in oligodeoxyribonucleotides containing only AT base pairs. Zuo ET, et al. **Biochemistry** 1990 May 8;29(18):4446–56

Vibrational fluctuations of hydrogen bonds in a DNA double helix with nonuniform base pairs. Feng Y, et al. **Biophys J** 1990 Mar;57(3):547–53

A.U and G.C base pairs in synthetic RNAS have characteristic vacuum UV CD bands. Johnson KH, et al. **Biopolymers** 1990 Feb 5;29(2):325–33

The global average DNA base composition of coding regions may be determined by the electron-ion interaction potential. Lalović D, et al. **Biosystems** 1990;23(4):311–6

'SPKK' motifs prefer to bind to DNA at A/T-rich sites. Churchill ME, et al. **EMBO J** 1989 Dec 20;8(13):4189–95

A compositional map of human chromosome 21. Gardiner K, et al. **EMBO J** 1990 Jun;9(6):1853–8

The GC-selective ligand mithramycin alters the structure of (AT)n sequences flanking its binding sites. Cons BM, et al. **FEBS Lett** 1990 May 7;264(1):100–4

A simple method for estimating average number of nucleotide substitutions within and between populations from restriction data. Nei M, et al. **Genetics** 1990 Aug; 125(4):873–9

Specific A/G-to-C.G mismatch repair in Salmonella typhimurium LT2 requires the mutB gene product. Lu AL, et al. **J Bacteriol** 1990 Mar;172(3):1232–40

DNA base composition determines the specificity of UvrABC endonuclease incision of a psoralen cross-link. Jones BK, et al. **J Biol Chem** 1990 Feb 25;265(6):3489–96

Selective binding to DNA base pair mismatches by proteins from human cells. Stephenson C, et al. **J Biol Chem** 1989 Dec 15;264(35):21177–82

B-Z junctions in supercoiled pRW751 DNA contain unpaired bases or non-Watson–Crick base pairs. Paleček E, et al. **J Biomol Struct Dyn** 1987 Oct;5(2):297–306

The role of structural water in the formation of nucleotide mispairs. Poltev VI, et al. **J Biomol Struct Dyn** 1987 Oct; 5(2):307–12

A parallel stranded linear DNA duplex incorporating dG.dC base pairs. Rippe K, et al. **J Biomol Struct Dyn** 1990 Jun; 7(6):1199–209

Probes for double helical DNA sequence information: molecular mechanics study of a proposed model. Shea RG, et al. **J Biomol Struct Dyn** 1987 Oct;5(2):313–26

Base pair buckling can eliminate the interstrand purine clash at the CpG steps in B-DNA caused by the base pair propeller twisting. Sponer J, et al. **J Biomol Struct Dyn** 1990 Jun;7(6):1211–20

Flexibility of A.T pairs in left-handed DNA helices. Vlach J, et al. **J Biomol Struct Dyn** 1990 Apr;7(5):1083–93

Unusual protonated structure in the homopurine.homopyrimidine tract of supercoiled and linearized plasmids recognized by chemical probes. Vojtíšková M, et al. **J Biomol Struct Dyn** 1987 Oct; 5(2):283–96

The biological equilibrium of base pairs. Strazewski P. **J Mol Evol** 1990 Feb;30(2):116–24

A GC-box motif upstream of the B19 parvovirus unique

promoter is important for in vitro transcription. Blundell MC, et al. **J Virol** 1989 Nov;63(11):4814–23
Influence of base composition on quantitative estimates of gene evolution. Saccone C, et al. **Methods Enzymol** 1990; 183:570–83
CpG dinucleotides are "hotspots" for mutation in the antithrombin III gene. Twelve variants identified using the polymerase chain reaction. Perry DJ, et al. **Mol Biol Med** 1989 Jun;6(3):239–43
Dependence of the torsional rigidity of DNA on base composition. Fujimoto BS, et al. **Nature** 1990 Mar 8; 344(6262):175–7
Molecular structure of deoxycytidyl-3'-methylphosphonate (RP) 5'-deoxyguanidine, d[Cp(CH3)G]. A neutral dinucleotide with Watson–Crick base pairing and a right handed helical twist. Han F, et al. **Nucleic Acids Res** 1990 May 11;18(9):2759–67
Role of the extra G–C pair at the end of the acceptor stem of tRNA(His) in aminoacylation. Himeno H, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):7855–63
Effects of primer–template mismatches on the polymerase chain reaction: human immunodeficiency virus type 1 model studies. Kwok S, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):999–1005
The effect of replication errors on the mismatch analysis of PCR-amplified DNA. Reiss J, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):973–8
Functional analysis of GC element binding and transcription in the hamster dihydrofolate reductase gene promoter. Swick AG, et al. **Nucleic Acids Res** 1989 Nov 25; 17(22):9291–304
Thermodynamics of the interactions of m–AMSA and o–AMSA with nucleic acids: influence of ionic strength and DNA base composition. Wadkins RM, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):9933–46
Detecting base pair substitutions in DNA fragments by temperature-gradient gel electrophoresis. Wartell RM, et al. **Nucleic Acids Res** 1990 May 11;18(9):2699–705
Why do A.T base pairs inhibit Z–DNA formation? Dang LX, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4630–4
Higher order structural elements in ribosomal RNAs: pseudo–knots and the use of noncanonical pairs. Gutell RR, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):663–7
Echinomycin–induced hypersensitivity to osmium tetroxide of DNA fragments incapable of forming Hoogsteen base pairs. McLean MJ, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9687–91
Crystal structure and sequence–dependent conformation of the A.G mispaired oligonucleotide d(CGCAAGCTGGCG). Webster GD, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6693–7
Mismatch–specific thymine DNA glycosylase and DNA polymerase beta mediate the correction of G.T mispairs in nuclear extracts from human cells. Wiebauer K, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5842–5
Concordant evolution of coding and noncoding regions of DNA made possible by the universal rule of TA/CG deficiency–TG/CT excess. Yomo T, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8452–6
[Monte–Carlo simulation of hydration of nucleic acid fragments] Teplukhin AV, et al. **Mol Biol (Mosk)** 1990 May–Jun;24(3):832–46 (Eng. Abstr.) **(Rus)**

BASE PAIRS see **BASE COMPOSITION**

BASE RATIO see **BASE COMPOSITION**

BASE SEQUENCE

Sequence analysis of rat liver uricase–cDNA and the possible presence of the homologous cDNA sequences in chicken embryo. Ito M, et al. **Adv Exp Med Biol** 1989;253A:507–10
Comparison of DNA:DNA homology and enzymatic activity between Pasteurella haemolytica and related species. Bingham DP, et al. **Am J Vet Res** 1990 Aug;51(8):1161–6
A general method of site–specific mutagenesis using a modification of the Thermus aquaticus polymerase chain reaction. Nelson RM, et al. **Anal Biochem** 1989 Jul; 180(1):147–51
Improvements in the application of the 4,4–N,N–dimethylaminoazobenzene–4'-isothiocyanate micromethod to the sequence analysis of proteins. Salvà M, et al. **Anal Biochem** 1989 Aug 1;180(2):374–9
Comparison of Coxiella burnetii plasmids to homologous chromosomal sequences present in a plasmidless endocarditis–causing isolate. Savinelli EA, et al. **Ann N Y Acad Sci** 1990;590:523–33
Stability of the nucleotide sequence of the phosphoprotein gene of measles virus during lytic infections. Kalland KH, et al. **APMIS** 1990 Apr;98(4):327–35
Genes encoding mercuric reductases from selected gram–negative aquatic bacteria have a low degree of homology with merA of transposon Tn501. Barkay T, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1695–701
DNA-DNA homology among lactose- and sucrose–fermenting transconjugants from Lactococcus lactis strains exhibiting reduced bacteriophage sensitivity. Steele JL, et al. **Appl Environ Microbiol** 1989 Sep; 55(9):2410–3
Sequence homology of a canine brain calcium–binding protein with calregulin and the human Ro/SS–A antigen. Collins JH, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):575–9
The human genome project: approaches to the automation of sequence data input. Martin WJ. **Biochem Soc Trans** 1989 Oct;17(5):847–50
Homology and analogy in transmembrane channel design: lessons from synaptic membrane proteins. Betz H. **Biochemistry** 1990 Apr 17;29(15):3591–9 (118 ref.)
Discrimination between DNA sequences by the EcoRV restriction endonuclease. Taylor JD, et al. **Biochemistry** 1989 Jul 25;28(15):6198–207
Inverted repeat sequences can influence the melting transitions of linear DNAs. McCampbell CR, et al. **Biopolymers** 1989 Oct;28(10):1745–58
A simple sequencing gel–saving tip. Black ME, et al. **Biotechniques** 1989 Nov–Dec;7(10):1083
Point mutation analysis in a mammalian gene: rapid preparation of total RNA, PCR amplification of cDNA, and Taq sequencing by a novel method. Carothers AM, et al. **Biotechniques** 1989 May;7(5):494–6, 498–9
Simplified RNA sequencing using dideoxy chain termination. Carpenter CD, et al. **Biotechniques** 1990 Jan;8(1):26–7
Double–stranded sequencing, using mini–prep plasmids, in eleven hours. Gaterman KB, et al. **Biotechniques** 1988 Nov–Dec;6(10):951–2
PCR and DNA sequencing. Gyllensten UB. **Biotechniques** 1989 Jul–Aug;7(7):700–8 (43 ref.)
Graphic representation of long DNA sequences by the method of H curves—current results and future aspects. Hamori E. **Biotechniques** 1989 Jul–Aug;7(7):710–20 (34 ref.)
A simple method to increase the resilience of DNA sequencing gels. Hampsey DM. **Biotechniques** 1989 Feb; 7(2):150
Cloning vector artifacts in the DNA database. Hodgson CP. **Biotechniques** 1990 Jul;9(1):54–5
A chamber and method which simplify fixing ultrathin sequencing gels. Horseman ND, et al. **Biotechniques** 1989 Apr;7(4):340, 342, 344
The 4–6–8 method of sequence analysis. Isfort RJ, et al. **Biotechniques** 1988 Feb;6(2):138–41
Direct sequencing of lambda–gt11 recombinant clones. Kim BS, et al. **Biotechniques** 1990 Feb;8(2):156–60
Rapid generation of subclones for DNA sequencing using the reverse cloning procedure. Liu ZJ, et al. **Biotechniques** 1989 Jul–Aug;7(7):722–8
Sequence–dependent oligonucleotide–target duplex stabilities: rules from empirical studies with a set of twenty–mers. McGraw RA, et al. **Biotechniques** 1990 Jun; 8(6):674–8
An efficient method for sequencing PCR amplified DNA. Mihovilovic M, et al. **Biotechniques** 1989 Jan;7(1):14–6
A rapid droplet method for Sanger dideoxy sequencing. Ner SS, et al. **Biotechniques** 1988 May;6(5):408, 410, 412
DNA sequencing with direct blotting electrophoresis and colorimetric detection. Richterich P, et al. **Biotechniques** 1989 Jan;7(1):52–9
Electrolyte gradient gels for DNA sequencing. Sheen JY, et al. **Biotechniques** 1988 Nov–Dec;6(10):942–4
Direct DNA sequencing of PCR amplified genomic DNA by the Maxam–Gilbert method. Tahara T, et al. **Biotechniques** 1990 Apr;8(4):366–8
A simplified bicchemistry for DNA sequencing. Vizard D, et al. **Biotechniques** 1990 Apr;8(4):430–7
A rapid method for determining the relationship between cDNA clones. Walker JA, et al. **Biotechniques** 1990 Apr; 8(4):394–6
Optimization of asymmetric polymerase chain reaction for rapid fluorescent DNA sequencing. Wilson RK, et al. **Biotechniques** 1990 Feb;8(2):184–9
A sequence previously identified as metastasis–related encodes an acidic ribosomal phosphoprotein, P2. Sharp MG, et al. **Br J Cancer** 1990 Jan;61(1):83–8
tRNA–rRNA sequence matches from inter– and intraspecies comparisons suggest common origins for the two RNAs. Bloch DP, et al. **Braz J Med Biol Res** 1989;22(8):931–44 (22 ref.)
The cellular computer DNA: program or data. Atlan H, et al. **Bull Math Biol** 1990;52(3):335–48
Consistency of optimal sequence alignments. Gotoh O. **Bull Math Biol** 1990;52(4):509–25
Optimal sequence alignment allowing for long gaps. Gotoh O. **Bull Math Biol** 1990;52(3):359–73
Distribution of the number of matches between nucleotide sequences. Rinsma I, et al. **Bull Math Biol** 1990; 52(3):349–58
Half–att site substrates reveal the homology independence and minimal protein requirements for productive synapsis in lambda excisive recombination. Nunes–Düby SE, et al. **Cell** 1989 Oct 6;59(1):197–206
Extrachromosomal circular DNAs in Drosophila melanogaster: comparison between embryos and Kc0% cells. Degroote F, et al. **Chromosoma** 1989 Sep;98(3):201–6
Human satellite III DNA: genomic location and sequence homogeneity of the TaqI–deficient polymorphic sequences. Fowler JC, et al. **Chromosoma** 1989 Oct;98(4):266–72
The beta heterochromatic sequences flanking the I elements are themselves defective transposable elements. Vaury C, et al. **Chromosoma** 1989 Sep;98(3):215–24
Automated DNA sequencing methods involving polymerase chain reaction. McBride LJ, et al. **Clin Chem** 1989 Nov; 35(11):2196–201
Similarities in eukaryotic genomes. Loomis WF. **Comp Biochem Physiol [B]** 1990;95(1):21–7 (40 ref.)
Dot plot sequence comparisons on Macintosh computers. Gilbert DG. **Comput Appl Biosci** 1990 Apr;6(2):117
HYLAS: program for generating H curves (abstract three–dimensional representations of long DNA sequences). Hamori E, et al. **Comput Appl Biosci** 1989 Oct; 5(4):263–9
Identification of consensus patterns in unaligned DNA sequences known to be functionally related. Hertz GZ, et al. **Comput Appl Biosci** 1990 Apr;6(2):81–92
Methods for discovering novel motifs in nucleic acid sequences. Staden R. **Comput Appl Biosci** 1989 Oct; 5(4):293–8
Automatic updating of the EMBL database via EMBNet. Williams GW, et al. **Comput Appl Biosci** 1990 Apr; 6(2):122–3
The ordering of the nucleotides in DNA: computational problems in molecular biology. Nussinov R. **Comput Biol Med** 1989;19(4):269–81 (63 ref.)
Parallel computation of multiple biological sequence comparisons. Foulser DE, et al. **Comput Biomed Res** 1990 Aug;23(4):310–31
Mammalian sex–chromosome evolution: a conserved homoeologous segment on the X and Y chromosomes in primates. Schempp W, et al. **Cytogenet Cell Genet** 1989; 50(4):201–5
Non–homologous sequences of parathyroid hormone and the parathyroid hormone related peptide bind to a common receptor on ROS 17/2.8 cells. Abou–Samra AB, et al. **Endocrinology** 1989 Oct;125(4):2215–7
A note on sequence–dependence of DNA structure. Galat A. **Eur Biophys J** 1990;17(6):331–42
The synthesis and functional evaluation of RNA and DNA polymers having the sequence of Escherichia coli tRNA(fMet). Perreault JP, et al. **Eur J Biochem** 1989 Dec 8;186(1–2):87–93
S–antigen from the rat retina and pineal gland have identical sequences [letter] Abe T, et al. **Exp Eye Res** 1990 Jul; 51(1):111–2
A gene from pea (Pisum sativum L.) with homology to metallothionein genes. Evans IM, et al. **FEBS Lett** 1990 Mar 12;262(1):29–32
An oligonucleotide hybridization approach to DNA sequencing. Khrapko KR, et al. **FEBS Lett** 1989 Oct 9; 256(1–2):118–22
Prostaglandin endoperoxide synthase contains an EGF–like domain. Toh H. **FEBS Lett** 1989 Dec 4;258(2):317–9
Nucleolin gene organization in rodents: highly conserved sequences within three of the 13 introns. Bourbon HM, et al. **Gene** 1990 Apr 16;88(2):187–96
Construction of Escherichia coli vectors for expression and mutagenesis: synthesis of human c–Myc protein that is initiated at a non–AUG codon in exon 1. Date T, et al. **Gene** 1990 May 31;90(1):141–4
Direct sequencing of bacteriophage T4 DNA with a thermostable DNA polymerase. Kricker MC, et al. **Gene** 1989 Dec 21;85(1):199–204
Nucleotide sequence of a Bacillus subtilis arginine regulatory gene and homology of its product to the Escherichia coli arginine repressor. North AK, et al. **Gene** 1989 Aug 1; 80(1):29–38
Two genes specifically expressed in fruiting dikaryons of Schizophyllum commune: homologies with a gene not regulated by mating–type genes. Schuren FH, et al. **Gene** 1990 Jun 15;90(2):199–205
MamI, a novel class–II restriction endonuclease from Microbacterium ammoniaphilum recognizing 5'-GATNN decreases NNATC-3'. Striebel HM, et al. **Gene** 1990 Jul 2;91(1):95–100
Proposal for sequencing DNA using ligation of hexamers to generate sequential elongation primers (SPEL–6). Szybalski W. **Gene** 1990 May 31;90(1):177–8
Use of the polymerase chain reaction for the differential cross screening of libraries cloned into phage–lambda–based vectors. Wong P, et al. **Gene** 1989 Dec 21;85(1):59–65
Sequence EditingAligner: a multiple sequence editor and aligner. Barber AM, et al. **Genet Anal Tech Appl** 1990 Apr; 7(2):39–45
Selection of new biological activities from random nucleotide sequences: evolutionary and practical considerations. Horwitz MS, et al. **Genome** 1989;31(1):112–7 (16 ref.)
Direct measurement of mutational spectra in humans. Thilly WG, et al. **Genome** 1989;31(2):590–3
Mathematical analysis of DNA sequences. Weir BS. **Genome** 1989;31(2):1093–4
Sequences homologous to glutamic acid decarboxylase cDNA are present on mouse chromosomes 2 and 10 [published erratum appears in Genomics 1990 Apr;6(4):708] Brilliant MH, et al. **Genomics** 1990 Jan;6(1):115–22
The history of the genetic sequence databases. Smith TF. **Genomics** 1990 Apr;6(4):701–7
Genomic sequence databases. Waterman MS. **Genomics** 1990 Apr;6(4):700–1
Interspecies relationship of a repetitive chromosome–specific DNA. Scherthan H, et al. **Hereditas** 1989;111(2):183–8
Cloning, partial sequence, expression, and antigenic analysis of the filamentous hemagglutinin gene of Bordetella pertussis. Delisse–Gathoye AM, et al. **Infect Immun** 1990 Sep;58(9):2895–905
Nucleotide sequence of the leukotoxin gene from Actinobacillus actinomycetemcomitans: homology to the alpha–hemolysin/leukotoxin gene family. Kraig E, et al. **Infect Immun** 1990 Apr;58(4):920–9

Conservation of Salmonella typhimurium virulence plasmid maintenance regions among Salmonella serovars as a basis for plasmid curing. Tinge SA, et al. **Infect Immun** 1990 Sep;58(9):3084–92

A computer program to assist in the choice of restriction endonucleases for use in DNA analyses. Sands TW, et al. **Int J Biomed Comput** 1990 Jul;26(1–2):39–52

A phylogenetic analysis of the mycoplasmas: basis for their classification. Weisburg WG, et al. **J Bacteriol** 1989 Dec; 171(12):6455–67

Automated Sanger DNA sequencing with one label in less than four lanes on gel. Ansorge W, et al. **J Biochem Biophys Methods** 1989;20(1):47–52

cDNA cloning and characterization of Geotrichum candidum lipase II. Shimada Y, et al. **J Biochem (Tokyo)** 1990 May;107(5):703–7

Molecular history of gene conversions in the primate fetal gamma-globin genes. Nucleotide sequences from the common gibbon, Hylobates lar. Fitch DH, et al. **J Biol Chem** 1990 Jan 15;265(2):781–93

Duplication and divergence of the amino-terminal coding region of the complement receptor 1 (CR1) gene. An example of concerted (horizontal) evolution within a gene. Hourcade D, et al. **J Biol Chem** 1990 Jan 15;265(2):974–80

Comparisons of rbcL genes for the large subunit of ribulose-bisphosphate carboxylase from closely related C3 and C4 plant species. Hudson GS, et al. **J Biol Chem** 1990 Jan 15;265(2):808–14

Nuclease protection by Drosophila DNA topoisomerase II. Enzyme/DNA contacts at the strong topoisomerase II cleavage sites. Lee MP, et al. **J Biol Chem** 1989 Dec 25; 264(36):21779–87

DNase I cleavage of branched DNA molecules. Lu M, et al. **J Biol Chem** 1989 Dec 15;264(35):20851–4

Linguistics of nucleotide sequences: morphology and comparison of vocabularies. Brendel V, et al. **J Biomol Struct Dyn** 1986 Aug;4(1):11–21

High-speed DNA sequencing: an approach based upon fluorescence detection of single molecules. Jett JH, et al. **J Biomol Struct Dyn** 1989 Oct;7(2):301–9

Linguistics of nucleotide sequences. I: The significance of deviations from mean statistical characteristics and prediction of the frequencies of occurrence of words. Pevzner PA, et al. **J Biomol Struct Dyn** 1989 Apr; 6(5):1013–26

1-Tuple DNA sequencing: computer analysis. Pevzner PA. **J Biomol Struct Dyn** 1989 Aug;7(1):63–73 (12 ref.)

Linguistics of nucleotide sequences. II: Stationary words in genetic texts and the zonal structure of DNA. Pevzner PA, et al. **J Biomol Struct Dyn** 1989 Apr;6(5):1027–38

Linguistic measure of taxonomic and functional relatedness of nucleotide sequences. Pietrokovski S, et al. **J Biomol Struct Dyn** 1990 Jun;7(6):1251–68

An interactive dot matrix system for locating potentially significant features in nucleic acid molecules. Shapiro BA, et al. **J Biomol Struct Dyn** 1987 Apr;4(5):697–706

Probes for double helical DNA sequence information: molecular mechanics study of a proposed model. Shea RG, et al. **J Biomol Struct Dyn** 1987 Oct;5(2):313–26

Molecular identification by RNA.-RNA hybridization of a human rotavirus that is closely related to rotaviruses of feline and canine origin. Nakagomi O, et al. **J Clin Microbiol** 1990 Jun;28(6):1198–203

Submission of nucleotide sequence data to GenBank. Gilna P, et al. **J Gen Microbiol** 1989 Jul;135 (Pt 7):1779–86

Molecular cloning and expression of Pgp-1. The mouse homolog of the human H-CAM (Hermes) lymphocyte homing receptor. Zhou DF, et al. **J Immunol** 1989 Nov 15;143(10):3390–5

A method for multiple sequence alignment with gaps. Subbiah S, et al. **J Mol Biol** 1989 Oct 20;209(4):539–48

Molecular homology and DNA hybridization. Bledsoe AH, et al. **J Mol Evol** 1990 May;30(5):425–33 (84 ref.)

Evaluation of the maximum likelihood estimate of the evolutionary tree topologies from DNA sequence data, and the branching order in hominoidea. Kishino H, et al. **J Mol Evol** 1989 Aug;29(2):170–9

Vertebrate protamine gene evolution I. Sequence alignments and gene structure. Oliva R, et al. **J Mol Evol** 1990 Apr; 30(4):333–46

Rates of molecular evolution and the fraction of nucleotide positions free to vary. Palumbi SR. **J Mol Evol** 1989 Aug; 29(2):180–7

A method for molecular phylogeny construction by direct use of nucleotide sequence data. Tateno Y. **J Mol Evol** 1990 Jan;30(1):85–93

DNA homologies shared among E. corrodens isolates and other corroding bacilli from the oral cavity. Chen CK, et al. **J Periodont Res** 1990 Mar;25(2):106–12

Gap costs for multiple sequence alignment. Altschul SF. **J Theor Biol** 1989 Jun 8;138(3):297–309

The general stochastic model of nucleotide substitution. Rodriguez F, et al. **J Theor Biol** 1990 Feb 22;142(4):485–501

The study of DNA sequences by their sequences of twist angles. Zhang CT, et al. **J Theor Biol** 1989 Jun 22; 138(4):457–65

Molecular evolution: computer analysis of protein and nucleic acid sequences. **Methods Enzymol** 1990;183:1–690

Multiple sequence comparison. Bacon DJ, et al. **Methods Enzymol** 1990;183:438–47

Colorimetric-detected DNA sequencing. Beck S. **Methods Enzymol** 1990;184:612–7

Compilation of self-cleaving sequences from plant virus satellite RNAs and other sources. Bruening G. **Methods Enzymol** 1989;180:546–58

Sequences and classification of group I and group II introns. Burke JM. **Methods Enzymol** 1989;180:533–45

GenBank: current status and future directions. Burks C, et al. **Methods Enzymol** 1990;183:3–22

Significance of protein sequence similarities. Collins JF, et al. **Methods Enzymol** 1990;183:474–87

Maximum parsimony approach to construction of evolutionary trees from aligned homologous sequences. Czelusniak J, et al. **Methods Enzymol** 1990;183:601–15

Searching through sequence databases. Doolittle RF. **Methods Enzymol** 1990;183:99–110

Statistical geometry on sequence space. Eigen M, et al. **Methods Enzymol** 1990;183:505–30

Progressive alignment and phylogenetic tree construction of protein sequences. Feng DF, et al. **Methods Enzymol** 1990; 183:375–87

Statistical methods for estimating sequence divergence. Gojobori T, et al. **Methods Enzymol** 1990;183:531–50

Dideoxy sequencing of RNA using reverse transcriptase. Hahn CS, et al. **Methods Enzymol** 1989;180:121–30

Unified approach to alignment and phylogenies. Hein J. **Methods Enzymol** 1990;183:626–45

Finding protein similarities with nucleotide sequence databases. Henikoff S, et al. **Methods Enzymol** 1990; 183:111–32

Phylogenetic comparative analysis of RNA secondary structure. James BD, et al. **Methods Enzymol** 1989; 180:227–39

EMBL Data Library. Kahn P, et al. **Methods Enzymol** 1990; 183:23–31

Identification of significant sequence patterns in proteins. Karlin S, et al. **Methods Enzymol** 1990;183:388–402

Enzymatic approaches to probing of RNA secondary and tertiary structure. Knapp G. **Methods Enzymol** 1989; 180:192–212

Enzymatic RNA sequencing. Kuchino Y, et al. **Methods Enzymol** 1989;180:154–63

Fast alignment of DNA and protein sequences. Landau GM, et al. **Methods Enzymol** 1990;183:487–502

Use of homology domains in sequence similarity detection. Lawrence CB. **Methods Enzymol** 1990;183:133–46

Detecting pseudoknots and other local base-pairing structures in RNA sequences. Martinez HM. **Methods Enzymol** 1990;183:306–17

Three-way Needleman—Wunsch algorithm. Murata M. **Methods Enzymol** 1990;183:365–75

Rapid and sensitive sequence comparison with FASTP and FASTA. Pearson WR. **Methods Enzymol** 1990;183:63–98

RNA pseudoknots: structure, detection, and prediction. Pleij CW, et al. **Methods Enzymol** 1989;180:289–303

Compilation of small nuclear RNA sequences. Reddy R. **Methods Enzymol** 1989;180:521–32

Maximum likelihood methods. Saitou N. **Methods Enzymol** 1990;183:584–98

Genomic divergence through gene rearrangement. Sankoff D, et al. **Methods Enzymol** 1990;183:428–38

Splice junctions, branch point sites, and exons: sequence statistics, identification, and applications to genome project. Senapathy P, et al. **Methods Enzymol** 1990;183:252–78

Ancient patterns in nucleic acid sequences. Shepherd JC. **Methods Enzymol** 1990;183:180–92

Searching for patterns in protein and nucleic acid sequences. Staden R. **Methods Enzymol** 1990;183:193–211

Consensus patterns in DNA. Stormo GD. **Methods Enzymol** 1990;183:211–21

Hierarchical method to align large numbers of biological sequences. Taylor WR. **Methods Enzymol** 1990;183:456–74

Simultaneous comparison of several sequences. Vihinen M. **Methods Enzymol** 1990;183:447–56

Consensus methods for DNA and protein sequence alignment. Waterman MS, et al. **Methods Enzymol** 1990; 183:221–37

Phylogeny determination using dynamically weighted parsimony method. Williams PL, et al. **Methods Enzymol** 1990;183:615–26

Computer prediction of RNA structure. Zuker M. **Methods Enzymol** 1989;180:262–88

Computer analysis between nucleotide and amino acid sequences of bean golden mosaic virus and those of maize streak, wheat dwarf, chloris striate mosaic, and beet curly top viruses. Ikegami M. **Microbiol Immunol** 1989; 33(10):863–9

Amino acid sequence homology between cyclophilin and a cDNA-cloned antigen of Echinococcus granulosus. Lightowlers MW, et al. **Mol Biochem Parasitol** 1989 Oct; 36(3):287–9

Purification, cloning and nucleotide sequence determination of cynomolgus monkey apolipoprotein C-II: comparison to the human sequence. Whitted BE, et al. **Mol Cell Biochem** 1989 Oct 5;90(1):69–79

Strong homology between the small subunit of ribulose-1,5-bisphosphate carboxylase/oxygenase of two species of Acetabularia and the occurrence of unusual codon usage. Schneider SU, et al. **Mol Gen Genet** 1989 Sep;218(3):445–52

The nodL gene from Rhizobium leguminosarum is homologous to the acetyl transferases encoded by lacA and cysE. Downie JA. **Mol Microbiol** 1989 Nov; 3(11):1649–51

Families of bacterial signal-transducing proteins. Gross R, et al. **Mol Microbiol** 1989 Nov;3(11):1661–7 (76 ref.)

Analysis of spontaneous and psoralen-induced Salmonella typhimurium hisG46 revertants by oligodeoxyribonucleotide colony hybridization: use of psoralens to cross-link probes to target sequences. Cebula TA, et al. **Mutat Res** 1990 Mar;229(1):79–87

Mutation analysis in cystic fibrosis [letter; comment] **N Engl J Med** 1990 Jul 5;323(1):62–3 Comment on: N Engl J Med 1990 Feb 1;322(5):291–6.

Mutation analysis for heterozygote detection and the prenatal diagnosis of cystic fibrosis [see comments] Lemna WK, et al. **N Engl J Med** 1990 Feb 1;322(5):291–6 Comment in: N Engl J Med 1990 Feb 1;322(5):328–9. Comment in: N Engl J Med 1990 Jul 5;323(1):62–3.

Software for smart users. **Nature** 1990 Feb 15;343(6259):673–6

Cleaning up gene databases [letter] Brunak S, et al. **Nature** 1990 Jan 11;343(6254):123

Sequence homology shared by neurofibromatosis type-1 gene and IRA-1 and IRA-2 negative regulators of the RAS cyclic AMP pathway. Buchberg AM, et al. **Nature** 1990 Sep 20;347(6290):291–4

Advances in automated DNA sequencing. Cathcart R. **Nature** 1990 Sep 20;347(6290):310

Two rat homologues of Drosophila achaete-scute specifically expressed in neuronal precursors. Johnson JE, et al. **Nature** 1990 Aug 30;346(6287):858–61

Human genome project. Dealing with the data [news] McGourty C. **Nature** 1989 Nov 9;342(6246):108

Molecular cloning of the microtubule-associated mechanochemical enzyme dynamin reveals homology with a new family of GTP-binding proteins [see comments] Obar RA, et al. **Nature** 1990 Sep 20;347(6290):256–61 Comment in: Nature 1990 Sep 20;347(6290):229.

Database pollution [letter] Stanford DR, et al. **Nature** 1989 Nov 2;342(6245):24

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Mar 25;18(6):1667–73

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1989 Oct 25;17(20):8405–10

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1989 Nov 11;17(21):8905–12

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Apr 25;18(8):2205–12

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 May 11;18(9):2839–49

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Jul 25;18(14):4304–14

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Jan 11;18(1):211–8

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Jul 11;18(13):4041–8

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Mar 11;18(5):1321–30

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Jun 25;18(12):3675–86

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1989 Nov 25;17(22):9511–24

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Apr 11;18(7):1933–7

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Jan 25;18(2):389–97

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1989 Dec 25;17(24):10521–4

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Sep 11;18(17):5329–41

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Jun 11;18(11):3433–6

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Feb 25;18(4):1091–4

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 May 25;18(10):3115–30

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1989 Oct 11;17(19):8023–30

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Aug 25;18(16):4971–87

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Feb 11;18(3):695–700

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1989 Dec 11;17(23):10151–60

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1989 Sep 25;17(18):7553–78

New nucleotide sequence data on the EMBL File Server. **Nucleic Acids Res** 1990 Aug 11;18(15):4641–7

Application of a new method of pattern recognition in DNA sequence analysis: a study of E. coli promoters. Alexandrov NN, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1847–52

One label, one tube, Sanger DNA sequencing in one and two lanes on a gel. Ansorge W, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3419–20

RNA sequencing using fluorescent-labeled dideoxynucleotides and automated fluorescence detection. Bauer GJ. **Nucleic Acids Res** 1990 Feb 25;18(4):879–84

DNA sequencing with thermostable Tet DNA polymerase from Thermus thermophilus. Bechtereva TA, et al. **Nucleic Acids Res** 1989 Dec 25;17(24):10507

Digital signal processing methods for biosequence comparison. Benson DC. **Nucleic Acids Res** 1990 May 25; 18(10):3001–6

The basis of high resolution separation of small DNAs by asymmetric-voltage field inversion electrophoresis and its application to DNA sequencing gels. Birren BW, et al.

Nucleic Acids Res 1990 Mar 25;18(6):1481–7
EclXI, a novel isoschizomer of XmaIII from Enterobacter cloacae 590 recognizing 5'-C/GGCCG-3'. Bolton BJ, et al. Nucleic Acids Res 1990 Jan 25;18(2):381
A simple discontinuous buffer system for increased resolution and speed in gel electrophoretic analysis of DNA sequence. Carninci P, et al. Nucleic Acids Res 1990 Jan 11;18(1):204
Optimal conditions for directly sequencing double-stranded PCR products with sequenase. Casanova JL, et al. Nucleic Acids Res 1990 Jul 11;18(13):4028
A theoretical investigation of the base sequence preferences of monointercalating polymethylene carboxamide derivatives 9-aminoacridine. Coulombeau C, et al. Nucleic Acids Res 1990 Feb 25;18(4):711–7
Conserved DNA structures in origins of replication. Eckdahl TT, et al. Nucleic Acids Res 1990 Mar 25;18(6):1609–12
Information content of Caenorhabditis elegans splice site sequences varies with intron length. Fields C. Nucleic Acids Res 1990 Mar 25;18(6):1509–12
Direct sequencing of double-stranded DNA PCR products via removing the complementary strand with single-stranded DNA of an M13 clone. Gal S, et al. Nucleic Acids Res 1990 Feb 25;18(4):1076
Detection of single-base mutations by reaction of DNA heteroduplexes with a water-soluble carbodiimide followed by primer extension: application to products from the polymerase chain reaction. Ganguly A, et al. Nucleic Acids Res 1990 Jul 11;18(13):3933–9
A relational database of transcription factors. Ghosh D. Nucleic Acids Res 1990 Apr 11;18(7):1749–56 (77 ref.)
Site-directed mutagenesis using a double-stranded DNA fragment as a PCR primer. Giebel LB, et al. Nucleic Acids Res 1990 Aug 25;18(16):4947
A compilation of large subunit (23S-like) ribosomal RNA sequences presented in a secondary structure format. Gutell RR, et al. Nucleic Acids Res 1990 Apr 25;18 Suppl:2319–30
Distribution and consensus of branch point signals in eukaryotic genes: a computerized statistical analysis. Harris NL, et al. Nucleic Acids Res 1990 May 25;18(10):3015–9
Prediction of oligonucleotide frequencies based upon dinucleotide frequencies obtained from the nearest neighbor analysis. Hong J. Nucleic Acids Res 1990 Mar 25;18(6):1625–8
Sequence similarity of bacteriophage SP02 DNA polymerase with E. coli DNA polymerase I. Iwabe N, et al. Nucleic Acids Res 1989 Nov 11;17(21):8866
Chaos game representation of gene structure. Jeffrey HJ. Nucleic Acids Res 1990 Apr 25;18(8):2163–70
Plasmid DNA sequencing using highly degenerate oligonucleotides as primers. Konrad M. Nucleic Acids Res 1990 Sep 11;18(17):5320
Compilation of DNA sequences of Escherichia coli (update 1990). Kröger M, et al. Nucleic Acids Res 1990 Apr 25; 18 Suppl:2549–87
A computer program for selection of oligonucleotide primers for polymerase chain reactions. Lowe T, et al. Nucleic Acids Res 1990 Apr 11;18(7):1757–61
High speed DNA sequencing by capillary electrophoresis. Luckey JA, et al. Nucleic Acids Res 1990 Aug 11; 18(15):4417–21
Compilation of small ribosomal subunit RNA sequences. Neefs JM, et al. Nucleic Acids Res 1990 Apr 25;18 Suppl:2237–317
Incomplete primer extension during in vitro DNA amplification catalyzed by Taq polymerase; exploitation for DNA sequencing. Olsen DB, et al. Nucleic Acids Res 1989 Dec 11;17(23):9613–20
Cleavage at the twelve-base-pair sequence 5'-TCTAGATCTAGA-3' using M.XbaI (TCTAGm6A) methylation and DpnI (Gm6A/TC) cleavage. Patel Y, et al. Nucleic Acids Res 1990 Mar 25;18(6):1603–7
Compilation of small RNA sequences, 1990. Reddy R, et al. Nucleic Acids Res 1990 Apr 25;18 Suppl:2231–5
The effect of replication errors on the mismatch analysis of PCR-amplified DNA. Reiss J, et al. Nucleic Acids Res 1990 Feb 25;18(4):973–8
Restriction enzymes and their isoschizomers. Roberts RJ. Nucleic Acids Res 1990 Apr 25;18 Suppl:2331–65
A comprehensive list of cloned human DNA sequences. Schmidtke J, et al. Nucleic Acids Res 1990 Apr 25;18 Suppl:2413–547
A rapid semi-automated microtiter plate method for analysis and sequencing by PCR from bacterial stocks. Schofield JP, et al. Nucleic Acids Res 1989 Nov 25;17(22):9498
Human cDNA sequence homologous to the mouse LLRep3 gene family. Slynn G, et al. Nucleic Acids Res 1990 Feb 11;18(3):681
Compilation of 5S rRNA and 5S rRNA gene sequences. Specht T, et al. Nucleic Acids Res 1990 Apr 25;18 Suppl:2215–30
Capillary gel electrophoresis for rapid, high resolution DNA sequencing. Swerdlow H, et al. Nucleic Acids Res 1990 Mar 25;18(6):1415–9
A rapid and simple method for introducing specific mutations into any position of DNA leaving all other positions unaltered. Tomic M, et al. Nucleic Acids Res 1990 Mar 25;18(6):1656
Automated fluorescent sequencing of lambda DNA. Voss H, et al. Nucleic Acids Res 1990 Sep 11;18(17):5314
Automated fluorescent sequencing of cosmid DNA. Voss H, et al. Nucleic Acids Res 1990 Feb 25;18(4):1066
Codon usage tabulated from the GenBank genetic sequence data. Wada K, et al. Nucleic Acids Res 1990 Apr 25;18 Suppl:2367–411
Rapid procedure for chemical sequencing of small oligonucleotides without ethanol precipitation. Williamson JR, et al. Nucleic Acids Res 1990 Jan 25;18(2):379
A simplified protocol for fast plasmid DNA sequencing. Zimmermann J, et al. Nucleic Acids Res 1990 Feb 25; 18(4):1067
Mutational analysis of v-rel, the oncogene of reticuloendotheliosis virus strain T. Bhat GV, et al. Oncogene 1990 May;5(5):625–34
The human homologue of the putative proto-oncogene Spi-1: characterization and expression in tumors. Ray D, et al. Oncogene 1990 May;5(5):663–8
DNA fingerprinting by sampled sequencing. Brenner S, et al. Proc Natl Acad Sci U S A 1989 Nov;86(22):8902–6
Detection of specific DNA sequences by fluorescence amplification: a color complementation assay. Chehab FF, et al. Proc Natl Acad Sci U S A 1989 Dec;86(23):9178–82
Higher order structural elements in ribosomal RNAs: pseudo-knots and the use of noncanonical pairs. Gutell RR, et al. Proc Natl Acad Sci U S A 1990 Jan;87(2):663–7
Methods for assessing the statistical significance of molecular sequence features by using general scoring schemes. Karlin S, et al. Proc Natl Acad Sci U S A 1990 Mar;87(6):2264–8
Fidelity of DNA polymerases in DNA amplification. Keohavong P, et al. Proc Natl Acad Sci U S A 1989 Dec; 86(23):9253–7
Cloning by function: an alternative approach for identifying yeast homologs of genes from other organisms. Kranz JE, et al. Proc Natl Acad Sci U S A 1990 Sep;87(17):6629–33
Acetylaminofluorene bound to different guanines of the sequence -GGCGCC- is excised with different efficiencies by the UvrABC excision nuclease in a pattern not correlated to the potency of mutation induction. Seeberg E, et al. Proc Natl Acad Sci U S A 1990 Jan;87(1):191–4
Finding sequence motifs in groups of functionally related proteins. Smith HO, et al. Proc Natl Acad Sci U S A 1990 Jan;87(2):826–30
Automatic generation of primary sequence patterns from sets of related protein sequences. Smith RF, et al. Proc Natl Acad Sci U S A 1990 Jan;87(1):118–22
ExoMeth sequencing of DNA: eliminating the need for subcloning and oligonucleotide primers. Sorge JA, et al. Proc Natl Acad Sci U S A 1989 Dec;86(23):9208–12
Probe mapping to facilitate transposon-based DNA sequencing. Strausbaugh LD, et al. Proc Natl Acad Sci U S A 1990 Aug;87(16):6213–7
Imaging of DNA sequences with chemiluminescence. Tizard R, et al. Proc Natl Acad Sci U S A 1990 Jun;87(12):4514–8
Screening for base mutations in the PAH and HPRT loci using the polymerase chain reaction (PCR) in combination with denaturing gradient gel electrophoresis (DGGE). Børresen AL, et al. Prog Clin Biol Res 1990;340A:389–98
Site specific mutagenesis. Grollman AP. Prog Clin Biol Res 1990;340A:61–70 (15 ref.)
The SUP4-o system for analysis of mutational specificity in yeast. Kunz BA, et al. Prog Clin Biol Res 1990;340A:337–46
Amplification of mRNA of the hprt gene from lysates of mutant human cells and direct DNA sequencing to determine the spectrum of mutations induced by (+/-)-7 beta,8 alpha-dihydroxy-9 alpha,10 alpha, epoxy-7,8,9,10-tetrahydrobenzo[a]pyrene. Maher VM, et al. Prog Clin Biol Res 1990;340A:379–88
DNA homology and chromosome stability: a sensitive yeast genetic system for identifying double-stranded DNA damage. Resnick MA, et al. Prog Clin Biol Res 1990; 340B:363–9
Approaches to DNA methods for the detection of heritable mutations in humans. Satoh C, et al. Prog Clin Biol Res 1990;340C:197–206
Calculating percent identity between protein or DNA sequences with a word processor. Ladror US. Protein Seq Data Anal 1990 Jul;3(3):267–71
Nucleotide sequence of the gene encoding the 35-kDa protein of Mycobacterium tuberculosis. O'Connor SP, et al. Res Microbiol 1990 May;141(4):407–23
The worm project [news] Roberts L. Science 1990 Jun 15; 248(4961):1310–3
Sequence and evolutionary relationships of African swine fever virus thymidine kinase. Blasco R, et al. Virology 1990 Sep;178(1):301–4
Evolution of the NS genes of the influenza A viruses. I. The genetic relatedness of the NS genes of animal influenza viruses. Nakajima K, et al. Virus Genes 1990 Jun;4(1):5–13
Induction of an ATP-polymerizing enzyme in TMV-infected tobacco and its homology to the human 2'-5'A synthetase. Sher N, et al. Virus Genes 1990 Jun;4(1):27–39
Molecular biology of retroelements. Will H, et al. Virus Genes 1990 Jun;4(1):93–9
[Clinical Aeromonas hydrophila contain the DNA fragments with nucleotide sequence similar to those of hemolysin and cholera-toxin gene] Lai HC, et al. Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih 1990 May;23(2):126–33 (Eng. Abstr.) (Chi)
[Study on homology between two kinds of human thymidine kinase gene by Southern blot analysis] Zhao SY, et al. I Chuan Hsueh Pao 1988;15(1):61–7 (Eng. Abstr.) (Chi)
[Spectral analysis of nucleotide sequences] Deev AA, et al. Biofizika 1989 Jul-Aug;34(4):564–9 (Eng. Abstr.) (Rus)
[Regulation of proteolytic processes using antisense RNA genes htpR and lon of Escherichia coli in hetero- and homologous genetic systems] Kiselev VI, et al. Bioorg Khim 1989 Sep;15(9):1253–8 (Eng. Abstr.) (Rus)
[Rapid evaluation of nucleotide sequence homology by frequencies of oligonucleotides] Zharkikh AA, et al. Dokl Akad Nauk SSSR 1989;308(5):1232–5 (Rus)
[Intracellular distribution of nucleotide sequences, homologous to mobile dispersed genes] Semin BV. Genetika 1989 Jun;25(6):981–92 (Eng. Abstr.) (Rus)
[Characteristics of a frequently repetitive sequence family in the bull genome] Akopian KZh, et al. Mol Biol (Mosk) 1989 Jul-Aug;23(4):988–95 (Eng. Abstr.) (Rus)
[The structure of PstI-repeats adjacent to the growth hormone gene and transcription of the family of PstI-repeats in various bovine organs] Akopian KZh, et al. Mol Biol (Mosk) 1990 May-Jun;24(3):775–80 (Eng. Abstr.) (Rus)
[Pattern recognition in the computer analysis of nucleotide sequences] Aleksandrov NN, et al. Mol Biol (Mosk) 1989 Sep-Oct;23(5):1248–62 (Eng. Abstr.) (Rus)
[Sequences homologous to mouse mammary cancer virus are common in mammalian and avian genomes] Golovkina TV, et al. Mol Biol (Mosk) 1990 Jan-Feb;24(1):127–33 (Eng. Abstr.) (Rus)
[Several copies of angiogenin gene are present in the mammalian genome] Neznanov NS, et al. Mol Biol (Mosk) 1990 May-Jun;24(3):709–15 (Eng. Abstr.) (Rus)
[Intragenomic polymorphism of the primary structure of 5S rRNA gene variants of the loach (Misgurnus fossilis L.). Determination of the transcriptional activity] Sedman IuE, et al. Mol Biol (Mosk) 1989 Sep-Oct;23(5):1295–308 (Eng. Abstr.) (Rus)
[The computer program package "SAMSON" for analysis of primary structure of biopolymers] Vernoslov SE, et al. Mol Biol (Mosk) 1990 Mar-Apr;24(2):524–9 (Eng. Abstr.) (Rus)
[Mutational analysis of the starch utilization system in the yeast Saccharomyces cerevisiae] Kuchin SV, et al. Mol Gen Mikrobiol Virusol 1990 May;(5):27–9 (Eng. Abstr.) (Rus)
[Cloning and analysis of the primary structure of an element, related to the murine mammary cancer virus, from the genome of the Djungarian hamster] Vasetskil NS, et al. Mol Gen Mikrobiol Virusol 1989 Oct;(10):16–9 (Eng. Abstr.) (Rus)
[DNA diagnosis of mitochondrial diseases is now possible] Larsson NG, et al. Lakartidningen 1989 Nov 29; 86(48):4235–6 (Swe)

RADIATION EFFECTS

DNA base sequence changes induced by ultraviolet light mutagenesis of a gene on a chromosome in Chinese hamster ovary cells. Romac S, et al. J Mol Biol 1989 Sep 20; 209(2):195–204

BASEBALL

Use of smokeless tobacco in a group of professional baseball players. Cummings KM, et al. J Behav Med 1989 Dec; 12(6):559–67
Methylphenidate and baseball playing in ADHD children: who's on first? Pelham WE Jr, et al. J Consult Clin Psychol 1990 Feb;58(1):130–3
Comparative patterns of smokeless tobacco usage among major league baseball personnel. Wisniewski JF, et al. J Oral Pathol Med 1989 Jul;18(6):322–6
Smokeless tobacco use and health effects among baseball players. Ernster VL, et al. JAMA 1990 Jul 11;264(2):218–24
Sports-related spontaneous fractures of the humerus. Marymont JV, et al. Orthop Rev 1989 Sep;18(9):957–60
[A study on the effect of water intake of umpires during a baseball game in a summer-heat environment] Kurakake S, et al. Nippon Eiseigaku Zasshi 1990 Feb;44(6):1120–7 (Eng. Abstr.) (Jpn)

INJURIES

Suprascapular neuropathy in pitchers. Ringel SP, et al. Am J Sports Med 1990 Jan-Feb;18(1):80–6
Lipohemarthrosis of the knee: MR imaging. Kier R, et al. J Comput Assist Tomogr 1990 May-Jun;14(3):395–6
Intervertebral disc herniation in a teenager. Herring JA, et al. J Pediatr Orthop 1989 Sep-Oct;9(5):615–7
Axillary artery compression and thrombosis in throwing athletes. Rohrer MJ, et al. J Vasc Surg 1990 Jun; 11(6):761–8; discussion 768–9
The prevention of softball injuries: the experience at Yokota. Nadeau MT, et al. Milit Med 1990 Jan;155(1):3–5
Little League shoulder: case report. Albert MJ, et al. Orthopedics 1990 Jul;13(7):779–81
[Two cases of testicular rupture] Tsujino S, et al. Hinyokika Kiyo 1989 Jun;35(6):1079–82 (10 ref.) (Eng. Abstr.) (Jpn)

BASEDOW'S DISEASE see GRAVES' DISEASE

BASEMENT LAMINA see BASEMENT MEMBRANE

BASEMENT MEMBRANE

ANALYSIS

Identification of basement membrane components in eosinophilic globules in a case of Spitz's nevus. Schmoeckel C, et al. **Am J Dermatopathol** 1990 Jun;12(3):272–4

The basement membrane of arterial smooth muscle cells. Heickendorff L. **APMIS Suppl** 1989;9:1–32 (183 ref.)

Immunogold localization of basement membrane molecules in rat retinal capillaries. Lin WL, et al. **Cell Mol Biol** 1990; 36(1):13–21

Unusual dissociative behavior of the noncollagenous domain (hexamer) of basement membrane collagen during electrophoresis and chromatofocusing. Timoneda J, et al. **Connect Tissue Res** 1990;24(3–4):169–86

The two Caenorhabditis elegans basement membrane (type IV) collagen genes are located on separate chromosomes. Guo XD, et al. **J Biol Chem** 1989 Oct 15;264(29):17574–82

Characterization of type IV collagen NC1 monomers and Goodpasture antigen in human renal basement membranes. Butkowski RJ, et al. **J Lab Clin Med** 1990 Mar; 115(3):365–73

Immunolocalization of basement membrane molecules in the stroma of salivary gland pleomorphic adenoma. Saku T, et al. **J Oral Pathol Med** 1990 May;19(5):208–14

Immunohistochemical localization of laminin in the basement membranes of normal, hyperplastic, and neoplastic human prostate. Sinha AA, et al. **Prostate** 1989;15(4):299–313

[The identification and partial characterization of merosin—a new specific protein of the basement membranes of certain tissues] Leivo I, et al. **Ontogenez** 1989 Sep–Oct;20(5):461–70 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

The elastic tissue of Bruch's membrane. Connections to choroidal elastic tissue and the ciliary epithelium of the rabbit and human eyes. Korte GE, et al. **Arch Ophthalmol** 1989 Nov;107(11):1654–8

BLOOD SUPPLY

Microangiopathy, the vascular basement membrane and Alzheimer's disease: a review. Perlmutter LS, et al. **Brain Res Bull** 1990 May;24(5):677–86 (87 ref.)

CYTOLOGY

Tissue-specific distribution of a novel component of epithelial basement membranes. Kolega J, et al. **Exp Cell Res** 1990 Aug;189(2):213–21

A monoclonal antibody that defines basal cells of stratified epithelia in various human and rabbit tissues. Maeda K, et al. **Histochemistry** 1989;92(4):319–24

Distribution of basic fibroblast growth factor in the 18-day rat fetus: localization in the basement membranes of diverse tissues. Gonzalez AM, et al. **J Cell Biol** 1990 Mar; 110(3):753–65

Migration of myoblasts across basal lamina during skeletal muscle development. Hughes SM, et al. **Nature** 1990 May 24;345(6273):350–3

DRUG EFFECTS

Study of human epithelial cell detachment and damage: effects of proteases and oxidants. Mendis AH, et al. **Immunol Cell Biol** 1990 Apr;68 (Pt 2):95–105

Basement membrane biosynthesis as a target to tumor therapy. Maragoudakis ME, et al. **J Pharmacol Exp Ther** 1990 Feb;252(2):753–7

EMBRYOLOGY

beta-Xyloside effects on basal lamina structure and anionic site distribution the embryonic mouse submandibular salivary gland. Spooner BS, et al. **Arch Oral Biol** 1989; 34(7):541–9

Antisera to basal lamina and glial endfeet disturb the normal extension of axons on retina and pigment epithelium basal laminae. Halfter W. **Development** 1989 Oct;107(2):281–97

ENZYMOLOGY

Purification and properties of aldose reductase and aldehyde reductase from EHS tumor cells. Tanimoto T, et al. **Biochem Pharmacol** 1990 Feb 1;39(3):445–53

Isolation, characterization and immunological determination of basement membrane-associated heparan sulfate proteoglycan. Olgemöller B, et al. **Biol Chem Hoppe Seyler** 1989 Dec;370(12):1321–9

IMMUNOLOGY

Use of sodium-chloride separated human skin in detection of circulating anti-basement membrane zone antibodies. Rasmussen HB, et al. **Acta Derm Venereol (Stockh)** 1989; 69(6):515–9

Antigenicity of basement membrane fractions obtained from rat seminiferous tubules. Areces LB, et al. **Am J Reprod Immunol** 1989 Aug;20(4):117–22

Epidermolysis bullosa acquisita. Incidence in patients with basement membrane zone antibodies. Zhu XJ, et al. **Arch Dermatol** 1990 Feb;126(2):171–4

Ultrastructural localization of the binding sites of antibasement membrane zone antibodies in lichen planus pemphigoides on 1.0 M sodium chloride-separated skin. Ikeda S, et al. **Arch Dermatol Res** 1989;281(7):504–6

Abnormal expression of G71 antibody at the epidermal basement membrane in basal cell carcinoma. Tidman MJ, et al. **Cancer** 1990 May 1;65(9):1955–9

Specificity and cross-reactive idiotypes of anti-glomerular basement membrane autoantibodies in HgCl2-induced autoimmune glomerulonephritis. Guéry JC, et al. **Eur J Immunol** 1990 Jan;20(1):93–100

Distribution of basement membrane antigens in the uterine cervical adenocarcinomas: an immunohistochemical study. Toki N, et al. **Gynecol Oncol** 1990 Jul;38(1):17–21

Monoclonal antibodies to native basement membranes reveal heterogeneous immunoreactivity patterns. Cleutjens JP, et al. **Histochemistry** 1989;92(5):407–12

Antibasement membrane antibody-mediated experimental conjunctivitis. Roat MI, et al. **Invest Ophthalmol Vis Sci** 1990 Jan;31(1):168–75

Selective immunoreactivities of kidney basement membranes to monoclonal antibodies against laminin: localization of the end of the long arm and the short arms to discrete microdomains. Abrahamson DR, et al. **J Cell Biol** 1989 Dec;109(6 Pt 2):3477–91

Production of human monoclonal anti-basement membrane zone (BMZ) antibodies from a patient with bullous pemphigoid (BP) by Epstein-Barr virus transformation. Analyses of the heterogeneity of anti-BMZ antibodies in BP sera using them. Sugi T, et al. **J Clin Invest** 1989 Oct; 84(4):1050–5

Partial cDNA cloning of the 230-kD mouse bullous pemphigoid antigen by use of a human monoclonal anti-basement membrane zone antibody. Amagai M, et al. **J Invest Dermatol** 1990 Sep;95(3):252–9

A comparison of antibodies to type VII and type IV collagen laminin and amnion as epidermal basement membrane markers. Kirkham N, et al. **J Pathol** 1989 Sep;159(1):5–6

Pathogenesis of anti-basement membrane glomerulopathy and immune-complex glomerulonephritis: dichotomy dissolved. Bruijn JA, et al. **Lab Invest** 1989 Nov;61(5):480–8 (123 ref.)

Immunoreactivity in malignant mesotheliomas with antibodies to basement membrane components and their receptors. Kallianpur AR, et al. **Mod Pathol** 1990 Jan; 3(1):11–8

Isolation and partial characterization of antigens from basement membranes and streptococcal cell membrane (SCM) employing anti-SCM monoclonal antibody. Zelman ME, et al. **Mol Immunol** 1989 Sep;26(9):915–23

Distribution of Goodpasture antigens within various human basement membranes. Weber M, et al. **Nephrol Dial Transplant** 1990;5(2):87–93

Immunohistochemical study of a tubular basement membrane antigen in normal human urinary sediment by a monoclonal antibody. Orfila C, et al. **Nephron** 1989;53(4):343–8

[Glomerulonephritis by glomerular anti-basement membrane antibodies after renal transplantation] Noel LH, et al. **Nephrologie** 1989;10(3):113–5 (19 ref.) (Eng. Abstr.) **(Fre)**

[Structure and antigenicity of the glomerular basement membrane] Weber M. **Verh Dtsch Ges Pathol** 1989;73:6–12 (38 ref.) (Eng. Abstr.) **(Ger)**

[Lichen planus pemphigoides—report of a case and binding sites of circulating anti-basement membrane zone antibodies] Song Y, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Sep;99(10):1111–6 (Eng. Abstr.) **(Jpn)**

[Clinical significance of antiglomerular basement membrane antibody assay] Ohi H, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:557–9 **(Jpn)**

METABOLISM

Origin of basement membrane type IV collagen in xenografted human epithelial tumor cell lines. Cleutjens JP, et al. **Am J Pathol** 1990 May;136(5):1165–72

Entactin: ultrastructural localization of an ubiquitous basement membrane glycoprotein in mouse skin. Horiguchi Y, et al. **Arch Dermatol Res** 1989;281(6):427–32

Immunogold localization of basal laminar heparan sulfate proteoglycan in rat brain and retinal capillaries. Lin WL. **Brain Res Bull** 1990 Mar;24(3):533–6

Sequential appearance of anionic domains in the developing blood-brain barrier. Vorbrodt AW, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1–2):31–7

Gonadectomy induces laminin biosynthesis and basement membrane assembly in anterior pituitary glands of adult rats. Leardkamolkarn V, et al. **Cell Tissue Res** 1989 Sep; 257(3):587–96

Basement membrane-related and type III procollagen-related antigens in serum of patients with chronic viral liver disease. Misaki M, et al. **Clin Chem** 1990 Mar;36(3):522–4

Basement membrane invasion by first trimester human trophoblast: requirement for branched complex-type Asn-linked oligosaccharides. Yagel S, et al. **Clin Exp Metastasis** 1990 Jul–Aug;8(4):305–17

Basement membranes: molecular organization and function in development and disease. Schittny JC, et al. **Curr Opin Cell Biol** 1989 Oct;1(5):983–8 (17 ref.)

Molecules in basal lamina that direct the formation of synaptic specializations at neuromuscular junctions. McMahan UJ, et al. **Dev Neurosci** 1989;11(4–5):227–47 (35 ref.)

Degradation of extracellular matrix by neuronal proteases. Pittman RN, et al. **Dev Neurosci** 1989;11(4–5):361–75 (72 ref.)

A Mr 80K hepatocyte surface protein(s) interacts with basement membrane components. Clément B, et al. **Exp Cell Res** 1990 Apr;187(2):320–3

Basement membrane components are potent promoters of rat intestinal epithelial cell differentiation in vitro. Hahn U, et al. **Gastroenterology** 1990 Feb;98(2):322–35

Markers of fibrogenesis and basement membrane formation in alcoholic liver disease. Relation to severity, presence of hepatitis, and alcohol intake. Niemelä O, et al. **Gastroenterology** 1990 Jun;98(6):1612–9

Degradation of basement membranes by Pseudomonas aeruginosa elastase. Bejarano PA, et al. **Infect Immun** 1989 Dec;57(12):3783–7

The relationship of the biophysical and biochemical characteristics of type VII collagen to the function of anchoring fibrils. Bächinger HP, et al. **J Biol Chem** 1990 Jun 15;265(17):10095–101

Lipocytes from normal rat liver release a neutral metalloproteinase that degrades basement membrane (type IV) collagen. Arthur MJ, et al. **J Clin Invest** 1989 Oct; 84(4):1076–85

Epithelial basement membrane of mouse jejunum. Evidence for laminin turnover along the entire crypt–villus axis. Trier JS, et al. **J Clin Invest** 1990 Jul;86(1):87–95

Type VII collagen is a component of cylindroma basement membrane zone. Pfaltz M, et al. **J Cutan Pathol** 1989 Dec; 16(6):388–95

Affinity cytochemical labeling of glomerular basement membrane anionic sites using specific biotinylation and colloidal gold probes. Bertolatus JA. **J Histochem Cytochem** 1990 Mar;38(3):377–84

Heterogeneity of distribution pattern at the electron microscopic level of heparan sulfate in various basement membranes. Kogaya Y, et al. **J Histochem Cytochem** 1990 Oct;38(10):1459–67

Basement membrane chondroitin sulfate proteoglycans: localization in adult rat tissues. McCarthy KJ, et al. **J Histochem Cytochem** 1990 Oct;38(10):1479–86

Development of a novel substrate capture immunoassay for the detection of a neutral metalloproteinase capable of degrading basement membrane (type IV) collagen. Wacher MP, et al. **J Immunol Methods** 1990 Feb 9;126(2):239–45

Merosin, a tissue-specific basement membrane protein, is a laminin-like protein. Ehrig K, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3264–8

A study by immunofluorescence microscopy of the NC1 domain of collagen type IV in glomerular basement membranes of two patients with hereditary nephritis. Thorner PS, et al. **Virchows Arch [A]** 1990;416(3):205–12

MICROBIOLOGY

Membranous glomerulonephritis: virus-like inclusions in glomerular basement membrane [letter] Mandal AK, et al. **Ann Intern Med** 1974 Apr;80(4):554–5

Cellular location of a Treponema denticola chymotrypsinlike protease and importance of the protease in migration through the basement membrane. Grenier D, et al. **Infect Immun** 1990 Feb;58(2):347–51

PATHOLOGY

Regression of perineurial cell basement membrane in a human diabetic following isogenic pancreas transplant. Beggs JL, et al. **Acta Neuropathol (Berl)** 1989;79(1):108–12

Immunohistochemical evidence that lung carcinomas grow on alveolar basement membranes. Pääkkö P, et al. **Am J Surg Pathol** 1990 May;14(5):464–73

The prevention of diabetic retinal and renal basement membrane thickening in mice by islet cell allografts. Gillies MC, et al. **Aust N Z J Ophthalmol** 1990 Feb;18(1):27–32

Metastatic tumor cell interactions with endothelium, basement membrane and tissue. Nicolson GL. **Curr Opin Cell Biol** 1989 Oct;1(5):1009–19 (27 ref.)

Enalapril retards glomerular basement membrane thickening and albuminuria in the diabetic rat: are these effects specific for enalapril? [letter; comment] Baba T, et al. **Diabetologia** 1989 Nov;32(11):829 Comment on: Diabetologia 1989 May;32(5):326–8.

Subepithelial basement membrane deposition and intermediate filament expression in choroid plexus neoplasms and ependymomas. Furness PN, et al. **Histopathology** 1990 Mar;16(3):251–5

Basement membrane continuity in benign, premalignant and malignant epithelial conditions of the uterine cervix. Richards CJ, et al. **Histopathology** 1990 Jan;16(1):47–52

Immunoelectron microscopic study of the basement membrane in oral lichen planus. Jungell P. **J Cutan Pathol** 1990 Apr;17(2):72–6

Equine laminitis—another hypothesis for pathogenesis. Field JR, et al. **Med Hypotheses** 1989 Nov;30(3):203–10

Effect of pancreatic allografts on vascular basement membrane thickness in the diabetic rat. Scott MH, et al. **Microsurgery** 1990;11(2):162–8

[Use of reconstituted basal membranes for the study of invasion of human tumor cells: current status and future prospects] Visconti P, et al. **Boll Soc Ital Biol Sper** 1990 Apr;66(4):365–72 (12 ref.) (Eng. Abstr.) **(Ita)**

PHYSIOLOGY

The biology of the peritoneal membrane during chronic

peritoneal dialysis. Verbrugh HA. **Adv Exp Med Biol** 1989; 260:129–33

Improved maintenance of adult rat alveolar type II cell differentiation in vitro: effect of serum-free, hormonally defined medium and a reconstituted basement membrane. Kawada H, et al. **Am J Respir Cell Mol Biol** 1990 Jul; 3(1):33–43

The role of basement membranes in vascular development. Grant DS, et al. **Ann N Y Acad Sci** 1990;588:61–72 (50 ref.)

Culture of isolated bovine megakaryocytes on reconstituted basement membrane matrix leads to proplatelet process formation. Topp KS, et al. **Blood** 1990 Sep 1;76(5):912–24

Basal lamina enhances hippocampal neurite outgrowth in vitro. Nakayama T, et al. **Brain Res Dev Brain Res** 1989 Sep 1;49(1):145–9

Charge-dependent filtration properties of glomerular basement membrane. Feldt-Rasmussen B, et al. **Contrib Nephrol** 1989;73:45–9; discussion 50–1 (27 ref.)

Laminin and a basement membrane extract have different effects on axonal and dendritic outgrowth from embryonic rat sympathetic neurons in vitro. Lein PJ, et al. **Dev Biol** 1989 Dec;136(2):330–45

The phenotypic response of cultured quail trunk neural crest cells to a reconstituted basement membrane-like matrix is specific. Maxwell GD, et al. **Dev Biol** 1990 Sep; 141(1):233–7

Pioneer neurones use basal lamina as a substratum for outgrowth in the embryonic grasshopper limb. Anderson H, et al. **Development** 1988 Dec;104(4):601–8

Evidence that plasminogen activator is not involved in basement membrane penetration at avian gastrulation. Sanders EJ, et al. **Exp Cell Res** 1989 Dec;185(2):394–8

Molecular architecture of basement membranes. Yurchenco PD, et al. **FASEB J** 1990 Apr 1;4(6):1577–90 (73 ref.)

Study on changes in basal lamina width of mucosal epithelium and of capillary in the lamina propria of murine stomach in advance of age. Kurumado K, et al. **Gerontology** 1989; 35(5–6):283–8

Primary culture of normal rat mammary epithelial cells within a basement membrane matrix. I. Regulation of proliferation by hormones and growth factors. Hahm HA, et al. **In Vitro Cell Dev Biol** 1990 Aug;26(8):791–802

Culture on basement membrane does not reverse the phenotype of lens derived mesenchyme-like cells. Zuk A, et al. **Int J Dev Biol** 1989 Dec;33(4):487–90

Modulation of melanoma cell adhesion to basement membrane components by retinoic acid. Edward M, et al. **J Cell Sci** 1989 May;93 (Pt 1):155–61

Isolated Schwann cells can synthesize the basement membrane in vivo. Ikeda K, et al. **J Electron Microsc (Tokyo)** 1989;38(4):230–4

Rat intestinal basement membrane synthesis. Epithelial versus nonepithelial contributions. Weiser MM, et al. **Lab Invest** 1990 Mar;62(3):325–30

Fibroblast growth factor is stored in fiber extracellular matrix and plays a role in regulating muscle hypertrophy. Yamada S, et al. **Med Sci Sports Exerc** 1989 Oct;21(5 Suppl):S173–80

Membrane currents of rat satellite cells attached to intact skeletal muscle fibers. Bader CR, et al. **Neuron** 1988 May; 1(3):237–40

Pioneer neuron pathfinding from normal and ectopic locations in vivo after removal of the basal lamina. Condic ML, et al. **Neuron** 1989 Oct;3(4):427–39

Reconstituted basement membrane (matrigel) and laminin can enhance the tumorigenicity and the drug resistance of small cell lung cancer cell lines. Fridman R, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6698–702

PHYSIOPATHOLOGY

Role of the basement membrane in the regeneration of skeletal muscle. Caldwell CJ, et al. **Neuropathol Appl Neurobiol** 1990 Jun;16(3):225–38

ULTRASTRUCTURE

The skin basement membrane zone. Fine JD. **Adv Dermatol** 1987;2:283–303 (92 ref.)

The role of basal cells in attachment of columnar cells to the basal lamina of the trachea. Evans MJ, et al. **Am J Respir Cell Mol Biol** 1989 Dec;1(6):463–9

Intermediate site of development of Anaplasma marginale in feeding adult Dermacentor andersoni ticks that were infected as nymphs. Kocan KM, et al. **Am J Vet Res** 1990 Jan;51(1):128–32

SEM and TEM analyses of isolated human retinal microvessel basement membranes in diabetic retinopathy. Carlson EC, et al. **Anat Rec** 1990 Mar;226(3):295–306

Matrix macromolecules: spatial relationships in two dimensions. Trelstad RL. **Ann N Y Acad Sci** 1990; 580:391–420

Assembly of basement membranes. Yurchenco PD. **Ann N Y Acad Sci** 1990;580:195–213 (61 ref.)

A new computer method for the measurement of the thickness of basement membranes. Hayes BP, et al. **Comput Biol Med** 1989;19(6):435–41

The epithelial basement membrane zone of the limbus. Gipson IK. **Eye** 1989;3 (Pt 2):132–40

Basement membrane heterogeneity. Bosman FT, et al. **Histochem J** 1989 Nov;21(11):629–33 (42 ref.)

Study of human epithelial cell detachment and damage: development of a model. Venaille TJ, et al. **Immunol Cell Biol** 1989 Dec;67 (Pt 6):359–69

Ultrastructure of basement membranes. Inoue S. **Int Rev Cytol** 1989;117:57–98 (187 ref.)

Matrix-associated heparan sulfate proteoglycan: core protein-specific monoclonal antibodies decorate the pericellular matrix of connective tissue cells and the stromal side of basement membranes. Heremans A, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):3199–211

Immunological characterization of a basement membrane-specific chondroitin sulfate proteoglycan. McCarthy KJ, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):3187–98

Origin and deposition of basement membrane heparan sulfate proteoglycan in the developing intestine. Simon-Assmann P, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1837–48

The translaminal fibrils of the human amnion basement membrane. Campbell S, et al. **J Cell Sci** 1989 Oct;94 (Pt 2):307–18

Rat kidney glomerular basement membrane visualized in situ by embedment-free sectioning and subsequent platinum-carbon replication. Kondo H. **J Electron Microsc Tech** 1990 Jan;14(1):63–9

Comparison of osmium/sonication and EDTA/sonication microdissection techniques in exposing the adepithelial basal lamina surface of developing rat colon. McCarthy KJ, et al. **J Electron Microsc Tech** 1990 Apr;14(4):367–72

Changes in surface morphology and basal lamina of cultured muscle cells from Duchenne muscular dystrophy patients. Delaporte C, et al. **J Neurol Sci** 1990 Jan;95(1):77–88

Anti-glomerular basement membrane disease after lithotripsy [letter; comment] Lubec G. **Lancet** 1990 Jun 9; 335(8702):1405 Comment on: Lancet 1990 Apr 7;335(8693):856–7.

Age-related changes of the ciliary muscle in comparison with changes induced by treatment with prostaglandin F2 alpha. An ultrastructural study in rhesus and cynomolgus monkeys. Tamm E, et al. **Mech Ageing Dev** 1990 Feb 1; 51(2):101–20

Pericyte degeneration and thickening of basement membranes of cerebral microvessels in complex partial seizures: electron microscopic study of surgically removed tissue. Liwnicz BH, et al. **Neurosurgery** 1990 Mar;26(3):409–20

Thiosemicarbazide used after periodic acid makes methenamine silver staining of renal glomerular basement membranes faster and cleaner. Hayashi I, et al. **Stain Technol** 1989 Jul;64(4):185–90

Basement membranes in bronchogenic squamous cell carcinoma: an immunohistochemical and ultrastructural study. Havenith MG, et al. **Ultrastruct Pathol** 1990 Jan-Feb;14(1):51–63

Ultrastructural changes of tubular basement membranes in immunologic renal tubular lesions in humans. Orfila C, et al. **Ultrastruct Pathol** 1990 Mar-Apr;14(2):121–8

Heterogeneity of basement membranes in normal and pathologically altered tissues. Damjanov I. **Virchows Arch [A]** 1990;416(3):185–8

Basement membrane changes in atrophic tubules in the human kidney. Goovaerts G, et al. **Virchows Arch [A]** 1990; 416(4):295–303

[Hereditary nephropathies] Yoshikawa N, et al. **Pediatrie** 1990;45(1):5–11 (Eng. Abstr.) **(Fre)**

[Structure and antigenicity of the glomerular basement membrane] Weber M. **Verh Dtsch Ges Pathol** 1989;73:6–12 (38 ref.) (Eng. Abstr.) **(Ger)**

BASIC PANCREATIC TRYPSIN INHIBITOR see **APROTININ**

BASIDIOMYCETES

Hypersensitivity pneumonitis of a mushroom worker due to Aspergillus glaucus. Yoshida K, et al. **Arch Environ Health** 1990 Jul-Aug;45(4):245–7

Effects of Tremella polysaccharides on immune function in mice. Xia D, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Sep;10(5):453–7

A case of hand eczema due to mushrooms. Korstanje MJ, et al. **Contact Dermatitis** 1990 Feb;22(2):115–6

Contact allergy to the fungicide benomyl? Larsen AI, et al. **Contact Dermatitis** 1990 May;22(5):278–81

Plants and mushrooms of abuse. Spoerke DG, et al. **Emerg Med Clin North Am** 1990 Aug;8(3):579–93 (100 ref.)

The clinical effects of Ganoderma lucidum spore preparations in 10 cases of atrophic myotonia. Fu HD, et al. **J Tradit Chin Med** 1982 Mar;2(1):63–5

Studies on the pharmacology of Tremella fuciformis. Preliminary research on the fermented solution and polysaccharides of Tremella fuciformis spores. Lin ZB, et al. **J Tradit Chin Med** 1982 Jun;2(2):95–8

Antimutagenic effects of mushrooms. Grüter A, et al. **Mutat Res** 1990 Aug;231(2):243–9

[Studies on the immunoregulative action of polysaccharides isolated from hyphal bodies of Lentinnus edodes (PHL) on hypoimmunity in mice] Zeng XY, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Feb;14(2):46–7, 37, 64 (Eng. Abstr.) **(Chi)**

[The antiinflammatory and immunostimulating activities of S-4001—a polysaccharide isolated from Lei Wan (Polyporus mylitiae)] Wang WJ, et al. **Yao Hsueh Hsueh Pao** 1989;24(2):151–4 (Eng. Abstr.) **(Chi)**

[Respiratory tract diseases in oyster mushroom cultivators] Betz B. **Pneumologie** 1990 Feb;44 Suppl 1:339–40 (Eng. Abstr.) **(Ger)**

[Mushroom ileus without previous intestinal obstruction] Gerber P. **Schweiz Med Wochenschr** 1989 Oct 21; 119(42):1479–81 (Eng. Abstr.) **(Ger)**

[Study of the nutritional value of culture mycelium of higher edible basidiomyocetes] Bukhalo AS, et al. **Mikrobiol Zh** 1985 Jul-Aug;47(4):30–5 (Eng. Abstr.) **(Rus)**

ANALYSIS

Isolation and characterization of a lectin from Grifola frondosa fruiting bodies. Kawagishi H, et al. **Biochim Biophys Acta** 1990 Jun 20;1034(3):247–52

Secondary fungal metabolites and their biological activities. I. Isolation of antibiotic compounds from cultures of Heterobasidion annosum synthesized in the presence of antagonistic fungi or host plant cells. Sonnenbichler J, et al. **Biol Chem Hoppe Seyler** 1989 Dec;370(12):1295–303

Assays of the biological activities of guaiane sesquiterpenoids isolated from the fruit bodies of edible lactarius species. Anke H, et al. **Food Chem Toxicol** 1989 Jun;27(6):393–7

Fungi: a major source of radiocesium contamination of grazing ruminants in Norway. Hove K, et al. **Health Phys** 1990 Aug;59(2):189–92

Antibiotics from basidiomycetes. XXXII. Strobilurin E: a new cytostatic and antifungal (E)-beta-methoxyacrylate antibiotic from Crepidotus fulvotomentosus Peck. Weber W, et al. **J Antibiot (Tokyo)** 1990 Feb;43(2):207–12

Pharmacological study of certain extracts of Laurobasidium lauri. Martin ML, et al. **J Ethnopharmacol** 1989 Nov; 27(1–2):71–80

Antimicrobial tetraprenylphenols from Suillus granulatus. Tringali C, et al. **J Nat Prod** 1989 Sep-Oct;52(5):941–7

Characterization of siderophores from Ustilago maydis. Budde AD, et al. **Mycopathologia** 1989 Nov;108(2):125–33

[Radioactivity levels in mushrooms collected in the area of Karlsruhe during 1987 and 1988] Rückert G, et al. **Z Lebensm Unters Forsch** 1990 Jun;190(6):496–500 (Eng. Abstr.) **(Ger)**

[Trace elements in mushrooms from the Western Urals] Zelenin VM, et al. **Vopr Pitan** 1989 Jul-Aug;(4):70–1 **(Rus)**

CYTOLOGY

Preparation of protoplasts of Ustilago violacea for transformation and pulse-field electrophoresis. Bej AK, et al. **Biotechniques** 1989 Sep;7(8):824, 826, 828

ENZYMOLOGY

Characterization of reactions catalyzed by manganese peroxidase from Phanerochaete chrysosporium. Aitken MD, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):405–14

Intra- and extracellular forms of ethanol-modified O-underglycosylated galactose oxidase. Mendonça MH, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):130–9

Oxygenation of fluorinated tyrosines by mushroom tyrosinase releases fluoride ion. Phillips RS, et al. **Arch Biochem Biophys** 1990 Jan;276(1):65–9

Essential carboxy groups in xylanase A. Bray MR, et al. **Biochem J** 1990 Aug 15;270(1):91–6

Oxidation-reduction potentials and ionization states of extracellular peroxidases from the lignin-degrading fungus Phanerochaete chrysosporium. Millis CD, et al. **Biochemistry** 1989 Oct 17;28(21):8484–9

Chemical modification of a beta-glucosidase from Schizophyllum commune: evidence for essential carboxyl groups. Clarke AJ. **Biochim Biophys Acta** 1990 Sep 3; 1040(2):145–52

Effect of Mn(II) on reactions catalyzed by lignin peroxidase from Phanerochaete chrysosporium. Bono JJ, et al. **Eur J Biochem** 1990 Aug 28;192(1):189–93

Nucleases in the autolysis of filamentous fungi. Reyes F, et al. **FEMS Microbiol Lett** 1990 May;57(1–2):67–72

Lignin peroxidase-negative mutant of the white-rot basidiomycete Phanerochaete chrysosporium. Boominathan K, et al. **J Bacteriol** 1990 Jan;172(1):260–5

Manganese regulates expression of manganese peroxidase by Phanerochaete chrysosporium. Brown JA, et al. **J Bacteriol** 1990 Jun;172(6):3125–30

Purification of an exo-beta-(1——3)-D-galactanase of Irpex lacteus (Polyporus tulipiferae) and its action on arabinogalactan-proteins. Tsumuraya Y, et al. **J Biol Chem** 1990 May 5;265(13):7207–15

Lignin peroxidase compounds II and III. Spectral and kinetic characterization of reactions with peroxides. Wariishi H, et al. **J Biol Chem** 1990 Jul 5;265(19):11137–42

Production of some enzymes in the autolysis of the white-rot fungus Coriolus versicolor in fermenter. Gómez-Alarcón G, et al. **Microbiologia** 1986 Oct;2(2):97–103

GENETICS

The b alleles of U. maydis, whose combinations program pathogenic development, code for polypeptides containing a homeodomain-related motif [published erratum appears in Cell 1990 Feb 9;60(3):following 520] Schulz B, et al. **Cell** 1990 Jan 26;60(2):295–306

Mutation in a heat-regulated hsp70 gene of Ustilago maydis. Holden DW, et al. **EMBO J** 1989 Jul;8(7):1927–34

A high efficiency transformation system for the basidiomycete Ustilago violacea employing hygromycin resistance and lithium-acetate treatment [published erratum appears in Gene 1990 Jan 31;86(1):135] Bej AK, et al. **Gene** 1989 Aug 1;80(1):171-6

Characterization of an infection structure-specific gene from the rust fungus Uromyces appendiculatus. Bhairi SM, et al. **Gene** 1989 Sep 30;81(2):237-43

Sequence analysis of the URA1 gene encoding orotidine-5'-monophosphate decarboxylase of Schizophyllum commune. Froeliger EH, et al. **Gene** 1989 Nov 30;83(2):387-93

Characterization of lignin peroxidase-encoding genes from lignin-degrading basidiomycetes. Huoponen K, et al. **Gene** 1990 Apr 30;89(1):145-50

Two genes specifically expressed in fruiting dikaryons of Schizophyllum commune: homologies with a gene not regulated by mating-type genes. Schuren FH, et al. **Gene** 1990 Jun 15;90(2):199-205

The promoter of the glucoamylase-encoding gene of Aspergillus niger functions in Ustilago maydis. Smith TL, et al. **Gene** 1990 Apr 16;88(2):259-62

Isolation of the REC1 gene controlling recombination in Ustilago maydis. Tsukuda T, et al. **Gene** 1989 Dec 28; 85(2):335-41

Pathways of transformation in Ustilago maydis determined by DNA conformation. Fotheringham S, et al. **Genetics** 1990 Apr;124(4):833-43

Cloning, sequence analysis, and expression of ligninolytic phenoloxidase genes of the white-rot basidiomycete Coriolus hirsutus. Kojima Y, et al. **J Biol Chem** 1990 Sep 5;265(25):15224-30

Ustilago maydis KP6 killer toxin: structure, expression in Saccharomyces cerevisiae, and relationship to other cellular toxins. Tao J, et al. **Mol Cell Biol** 1990 Apr; 10(4):1373-81

RFLP-based genetic map of Phanerochaete chrysosporium ME446: lignin peroxidase genes occur in clusters. Raeder U, et al. **Mol Microbiol** 1989 Jul;3(7):911-8

Genetic factors influencing lignin peroxidase activity in Phanerochaete chrysosporium ME446. Raeder U, et al. **Mol Microbiol** 1989 Jul;3(7):919-24

Nucleotide sequence of the REC1 gene of Ustilago maydis. Holden DW, et al. **Nucleic Acids Res** 1989 Dec 25; 17(24):10489

The basidiomycete Lentinus edodes linear mitochondrial DNA plasmid contains a segment exhibiting a high autonomously replicating sequence activity in Saccharomyces cerevisiae. Katayose Y, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1395-400

IMMUNOLOGY

Respiratory and immunological reactions among Shiitake (Lentinus edodes) mushroom workers. Sastre J, et al. **Clin Exp Allergy** 1990 Jan;20(1):13-9

Stability studies of Calvatia cyathiformis basidiospore allergens. Horner WE, et al. **Int Arch Allergy Appl Immunol** 1989;90(2):174-81

Evidence for cross-reactive allergens among basidiomycetes: immunoprint-inhibition studies. De Zubiria A, et al. **J Allergy Clin Immunol** 1990 Jul;86(1):26-33

METABOLISM

Comparative biodegradation of alkyl halide insecticides by the white rot fungus, Phanerochaete chrysosporium (BKM-F-1767). Kennedy DW, et al. **Appl Environ Microbiol** 1990 Aug;56(8):2347-53

Selection and characterization of mutants of Phanerochaete chrysosporium exhibiting ligninolytic activity under nutrient-rich conditions. Tien M, et al. **Appl Environ Microbiol** 1990 Aug;56(8):2540-4

Nitrogen-deregulated mutants of Phanerochaete chrysosporium--a lignin-degrading basidiomycete. Boominathan K, et al. **Arch Microbiol** 1990;153(6):521-7

Formation of glyceryl 2-mononitrate by regioselective bioconversion of glyceryl trinitrate: efficiency of the filamentous fungus Phanerochaete chrysosporium. Ducrocq C, et al. **Biotechnol Appl Biochem** 1990 Jun; 12(3):325-30

Change of biological activities of (1——3)-beta-D-glucan from Grifola frondosa upon molecular weight reduction by heat treatment. Adachi Y, et al. **Chem Pharm Bull (Tokyo)** 1990 Feb;38(2):477-81

Cardiovascular effects of mycelium extract of Ganoderma lucidum: inhibition of sympathetic outflow as a mechanism of its hypotensive action. Lee SY, et al. **Chem Pharm Bull (Tokyo)** 1990 May;38(5):1359-64

Production, isolation and structure determination of a novel beta-glucosidase inhibitor, cyclophellitol, from Phellinus sp. Atsumi S, et al. **J Antibiot (Tokyo)** 1990 Jan;43(1):49-53

Ergosterol peroxide, an active compound from Inonotus radiatus. Kahlos K, et al. **Planta Med** 1989 Aug; 55(4):389-90

PATHOGENICITY

Basidiomycetous (mushroom) infection of the maxillary sinus. Catalano P, et al. **Otolaryngol Head Neck Surg** 1990 Feb; 102(2):183-5

ULTRASTRUCTURE

A convenient procedure for rapid release of protoplasts from Ustilago maydis. Waterfield WF, et al. **Biotechniques** 1988 Oct;6(9):832-4

BASILAR ARTERY

Balloon embolization of a basilar bifurcation aneurysm. Guglielmi G. **AJNR** 1990 Jul-Aug;11(4):653-5

Fibromuscular dysplasia of the basilar artery: a case with brain stem stroke. Saygi S, et al. **Angiology** 1990 Aug; 41(8):658-61 (12 ref.)

Pupil-sparing oculomotor palsy caused by fusiform arteriosclerotic aneurysm of the basilar artery--a case report. Soria E, et al. **Angiology** 1989 Oct;40(10):921-7

Basilar artery migraine stroke. Bernsen HJ, et al. **Headache** 1990 Feb;30(3):142-4

MRI studies in basilar artery migraine. Jacome DE, et al. **Headache** 1990 Jan;30(2):88-90

Two cases of sudden death by rupture of traumatic and bacterial aneurysms. Feldges A, et al. **Intensive Care Med** 1989;15(6):400-2

Basilar artery migraine. Case report. McDonald JV. **J Neurosurg** 1990 Feb;72(2):289-91

Fusiform aneurysm of the vertebrobasilar arterial system. Echiverri HC, et al. **Stroke** 1989 Dec;20(12):1741-7

Acute basilar artery occlusive disease [letter] Mitsias P, et al. **Stroke** 1990 Mar;21(3):503-4

Surgical approach to a large basilar artery bifurcation and upper basilar trunk aneurysm: case report. Lupret V, et al. **Surg Neurol** 1990 Jun;33(6):404-6

Thrombolytic therapy and posterior circulation extracranial-intracranial bypass for acute basilar artery thrombosis. Case report. Morgan JK, et al. **Surg Neurol** 1990 Jan;33(1):43-7

[Basilar artery migraine] Drábek P. **Cesk Neurol Neurochir** 1989 Oct;52(6):424-8 (Eng. Abstr.) **(Cze)**

[Long term survival after basilar artery occlusion. 4 cases] Labauge R, et al. **Rev Neurol (Paris)** 1989;145(11):789-94 (Eng. Abstr.) **(Fre)**

[Transoral transclival approach: anatomical and technical notes] Hayakawa T, et al. **No Shinkei Geka** 1989 Jul; 17(7):609-14 **(Jpn)**

[A case of a basilar bifurcation aneurysm associated with common carotid artery occlusion] Shirakawa N, et al. **No Shinkei Geka** 1990 Jun;18(6):581-5 (Eng. Abstr.) **(Jpn)**

[MR imaging of basilar artery aneurysms] Uchino A, et al. **Rinsho Hoshasen** 1990 Apr;35(4):433-7 (Eng. Abstr.) **(Jpn)**

[Bilateral internuclear ophthalmoplegia in association with basilar artery occlusive disease] Kataoka S, et al. **Rinsho Shinkeigaku** 1990 Feb;30(2):164-7 (Eng. Abstr.) **(Jpn)**

[Vertebro-basilar artery occlusion in an 8-year-old boy] Saito Y, et al. **Rinsho Shinkeigaku** 1989 Nov;29(11):1410-3 (Eng. Abstr.) **(Jpn)**

[Embolotherapy in aneurysm of the basilar artery] Campos JG, et al. **Acta Med Port** 1990 Mar-Apr;3(2):115-8 (Eng. Abstr.) **(Por)**

[Dolichoectasia of the basilar artery: magnetic resonance (letter)] De Toro FJ, et al. **Neurologia** 1987 Sep-Oct; 2(5):254-5 **(Spa)**

[Clinical and diagnostic aspects of dolichoectasia of the basilar artery. Apropos of 5 cases] López del Val LJ, et al. **Neurologia** 1987 Jan-Feb;2(1):30-3 (Eng. Abstr.) **(Spa)**

[Granulomatous angiitis of the basilar artery related to herpes zoster of the 7th cranial nerve] Romero López J, et al. **Neurologia** 1990 Mar;5(3):98-101 (Eng. Abstr.) **(Spa)**

ABNORMALITIES

Basilar arterio-venous pseudoparallelism due to persistence of embryonal venous pattern. de Caro R, et al. **Acta Neurochir (Wien)** 1990;104(1-2):73-6

Atypical facial pain, ectasia of the basilar artery, and baclofen: a case report. Martins IP, et al. **Headache** 1989 Oct;29(9):581-3

Congenital aneurysmal dilatation of the petrous-cavernous carotid artery and vertebral basilar junction in a child. Guha A, et al. **Neurosurgery** 1990 Feb;26(2):322-7

[Association of a triple artery and acute cerebrovascular attack with hemolytic anemia in a 4-year-old child] Khaldi F, et al. **Tunis Med** 1989 Nov;67(11):723-6 (Eng. Abstr.) **(Fre)**

[Causes of variations in the pathway of the basilar and vertebral arteries] von Eichhorn M. **Gegenbaurs Morphol Jahrb** 1990;136(1):127-34 (Eng. Abstr.) **(Ger)**

[Evoked acoustic responses in the brain stem of subjects with facial hemispasm and megabasilar anomaly] Sicurella L, et al. **Riv Neurol** 1989 Jul-Aug;59(4):142-5 (Eng. Abstr.) **(Ita)**

[Agenesis of left internal carotid artery associated with megadolichobasilar anomaly and olivopontocerebellar atrophy] Okabe S, et al. **Rinsho Shinkeigaku** 1989 Nov; 29(11):1395-400 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Perforating branches of the basilar bifurcation. Caruso G, et al. **J Neurosurg** 1990 Aug;73(2):259-65

[Variability of the course of the posterior cerebral artery in humans] Michalczyk K. **Ann Acad Med Stetin** 1989; 35:23-36 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

gamma-Aminobutyric acid-A receptor-mediated suppression of 5-hydroxytryptamine-induced guinea-pig basilar artery smooth muscle contractility. Shirakawa J, et al. **Blood Vessels** 1989;26(3):129-36

Effects of prostanoids on human and rabbit basilar arteries precontracted in vitro. Parsons AA, et al. **Cephalalgia** 1989 Sep;9(3):165-71

Neurogenically mediated contractions of dog basilar artery involve the release of a thromboxane-like substance. Connor HE, et al. **Eur J Pharmacol** 1989 Dec 19; 174(2-3):205-13

Influence of the endothelium and alpha-adrenoreceptor antagonists on responses to noradrenaline in the rabbit basilar artery. Garland CJ. **J Physiol (Lond)** 1989 Nov; 418:205-17

Pharmacological effect of endothelin, an endothelium-derived vasoconstrictive peptide, on canine basilar arteries. Nakagomi T, et al. **Neurol Med Chir (Tokyo)** 1989 Nov;29(11):967-74

[Inhibitory effect of silybin on the activity of 5-lipoxygenase of the porcine cerebral basilar artery] Lin AY, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Sep;10(5):414-8 (Eng. Abstr.) **(Chi)**

EMBRYOLOGY

Circle of Willis variant analogous to fetal type primitive trigeminal artery. Wismer GL. **Neuroradiology** 1989; 31(4):366-8

GROWTH & DEVELOPMENT

Effect of aging on endothelium-dependent vascular relaxation of isolated human basilar artery to thrombin and bradykinin. Hatake K, et al. **Stroke** 1990 Jul;21(7):1039-43

INJURIES

Fatal thrombosis of the basilar artery due to a minor head injury. Sprogøe-Jakobsen S, et al. **Forensic Sci Int** 1990 Apr;45(3):239-45

INNERVATION

Cholinergic prejunctional inhibition of vasodilator nerve function in bovine basilar arteries. Toda N, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H983-6

Erythrocytes suppress calcitonin gene-related peptide- and vasoactive intestinal polypeptide-like immunoreactivities in cerebrovascular nerve fibers after subarachnoid hemorrhage. Nozaki K, et al. **Neurosci Lett** 1990 Mar 2; 110(1-2):22-7

METABOLISM

Impairement of vascular reactivity and changes in intracellular calcium and calmodulin levels of smooth muscle cells in canine basilar arteries after subarachnoid hemorrhage. Sakaki S, et al. **Neurosurgery** 1989 Nov; 25(5):753-61

PATHOLOGY

Corrugation of cerebral vessels following subarachnoid hemorrhage: comparison of two experimental models of chronic cerebral vasospasm. Rickels E, et al. **Exp Neurol** 1990 Feb;107(2):178-86

MR imaging of basilar artery occlusion. Knepper L, et al. **J Comput Assist Tomogr** 1990 Jan-Feb;14(1):32-5

Morphological changes in normal canine basilar arteries after transluminal angioplasty. Chàvez L, et al. **Neurol Res** 1990 Mar;12(1):12-6

[Clinical and pathologic-anatomic findings in acute basilar thromboses. A study of 30 autopsy verified cases] Huber M, et al. **Nervenarzt** 1990 Feb;61(2):83-7 (Eng. Abstr.) **(Ger)**

[Megabasilaris (a description of 15 cases and a review of the literature)] Kandel' EI, et al. **Zh Vopr Neirokhir** 1989 May-Jun;(3):8-12 (34 ref.) (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Vasomotion of basilar arteries in vivo. Fujii K, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1829-34

Similar responsiveness of smooth muscle of the canine basilar artery to EDRF and nitric oxide. Katusic ZS, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1235-9

Protein kinase C potentiates stretch-induced cerebral artery tone by increasing intracellular sensitivity to Ca2+. Laher I, et al. **Biochem Biophys Res Commun** 1989 Nov 30; 165(1):312-8

Mathematical models of the flow in the basilar artery. Krijger JK, et al. **J Biomech** 1989;22(11-12):1193-202

The selective potentiation of noradrenaline-induced tone by Bay K 8644 in the rabbit basilar artery. Laher I, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):759-64

Relaxant effect of calcitonin gene-related peptide on cerebral arterial spasm induced by experimental subarachnoid hemorrhage in dogs. Nozaki K, et al. **J Neurosurg** 1989 Oct;71(4):558-64

Neuropeptide Y in cerebrovascular function: comparison of membrane potential changes and vasomotor responses evoked by NPY and other vasoconstrictors in the guinea pig basilar artery. Fallgren B, et al. **Neurosci Lett** 1990 Jun 22;114(1):117–22

Receptor–mediated changes in vessel tone of fresh and aged bovine cerebral arteries in vitro. Verheggen R, et al. **Prog Clin Biol Res** 1989;301:193–8

Characterization of dilatation induced by electrical field stimulation in mammalian cerebral and peripheral vessels. Hardebo JE, et al. **Q J Exp Physiol** 1989 Jul;74(4):475–91

Endothelin acts in feline and canine cerebral arteries from the adventitial side. Mima T, et al. **Stroke** 1989 Nov; 20(11):1553–6

PHYSIOPATHOLOGY

Multiple neurological lesions due to vertebrobasilar dolichoectasia. Jamjoom AB, et al. **Br J Neurosurg** 1990; 4(2):147–54

Differences in vascular responses to vasoactive agents of basilar artery and aorta from rabbits with alloxan–induced diabetes. Abiru T, et al. **Can J Physiol Pharmacol** 1990 Jul;68(7):882–8

Auditory evoked potentials in vertebrobasilar transient ischemic attacks. Drake ME Jr, et al. **Clin Electroencephalogr** 1990 Apr;21(2):96–100

Effects of subarachnoid hemorrhage on platelet–derived vasoconstriction of rabbit basilar artery. Tanaka Y, et al. **Surg Neurol** 1989 Dec;32(6):439–44

RADIOGRAPHY

Megadolichobasilar artery and acute cerebrovascular pathology. Maiuri F, et al. **Neurol Res** 1990 Mar;12(1):54–6

Enlarging thrombosed aneurysm of the distal basilar artery. Batjer HH, et al. **Neurosurgery** 1990 Apr;26(4):695–9; discussion 699–700

[The foramen of Monro—blockage caused by a giant aneurysm of the basilar artery. A case report and review of the literature] Goetz C, et al. **Neurochirurgia (Stuttg)** 1990 Jul;33(4):122–6 (51 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

MR imaging after surgery for vertebrobasilar aneurysm. Brothers MF, et al. **AJNR** 1990 Jan–Feb;11(1):149–61

The surgical anatomy and approaches to lesions of the lower basilar artery and vertebral artery union. Pensak ML, et al. **Am J Otol** 1989 Sep;10(5):351–7

Management of difficult intracranial aneurysms by deep hypothermia and elective cardiac arrest using cardiopulmonary bypass. Richards PG, et al. **Br J Neurosurg** 1987;1(2):261–9

Monitoring of brain stem function during posterior fossa surgery. Manninen PH, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S23

Causes of morbidity and mortality from surgery of aneurysms of the distal basilar artery. Batjer HH, et al. **Neurosurgery** 1989 Dec;25(6):904–15; discussion 915–6

The use of electroencephalography and brain protection during operation for basilar aneurysms. Muizelaar JP. **Neurosurgery** 1989 Dec;25(6):899–903

Zygomatic temporopolar approach for basilar artery aneurysms. Shiokawa Y, et al. **Neurosurgery** 1989 Nov; 25(5):793–6;discussion 796–7

Direct angioplasty of the basilar artery in baboons. de los Reyes RA, et al. **Surg Neurol** 1990 Mar;33(3):185–91

ULTRASTRUCTURE

Ultrastructural changes of the basilar artery following experimental subarachnoid haemorrhage. A morphological study on the pathogenesis of delayed cerebral vasospasm. Seifert V, et al. **Acta Neurochir (Wien)** 1989; 100(3–4):164–71

BASILAR ARTERY INSUFFICIENCY see **VERTEBROBASILAR INSUFFICIENCY**

BASILAR BONE see **OCCIPITAL BONE**

BASILAR IMPRESSION see **PLATYBASIA**

BASILAR MEMBRANE see under **COCHLEA**

BASKETBALL

Sports competition and its influence on self–esteem development. Hines S, et al. **Adolescence** 1989 Winter; 24(96):861–9

Left ventricular structure and function in professional basketball players. Van Decker W, et al. **Am J Cardiol** 1989 Nov 1;64(16):1072–4

Age of menarche in Indian female basketball and volleyball players at different competitive levels. Mokha R, et al. **Br J Sports Med** 1989 Dec;23(4):237–8

Kinematics of sport wheelchair propulsion. Coutts KD. **J Rehabil Res Dev** 1990 Winter;27(1):21–6

Ritual and free–throw shooting in basketball. Southard D, et al. **J Sports Sci** 1989 Summer;7(2):163–73

HISTORY

Pete Maravich's incredible heart. Choi JH, et al. **J Forensic Sci** 1990 Jul;35(4):981–6

INJURIES

Irreducible dislocation of the great toe following a sports injury. A case report. Wolfe J, et al. **Am J Sports Med** 1989 Sep–Oct;17(5):695–6

Which X–ray views are required in juvenile ankle trauma? Heim M, et al. **Arch Orthop Trauma Surg** 1990;109(3):175–6

Sports injuries in adolescents' ball games: soccer, handball and basketball. Yde J, et al. **Br J Sports Med** 1990 Mar; 24(1):51–4

[Two cases of testicular rupture] Tsujino S, et al. **Hinyokika Kiyo** 1989 Jun;35(6):1079–82 (10 ref.) (Eng. Abstr.) **(Jpn)**

BASOPHIL DEGRANULATION TEST see under **IMMUNOLOGIC TESTS**

BASOPHILIC LEUKEMIA, ACUTE see **LEUKEMIA, BASOPHILIC, ACUTE**

BASOPHILS

Cyclic neutropenia in a family with evidence of monocytes, lymphocytes, plasmocytes, eosinophils and basophils cycling [letter] Cáp J, et al. **Eur J Haematol** 1989 Aug; 43(2):188–9

Comparison between number of basophils, blood histamine, and histamine release in cancer and noncancer patients. Galoppin L, et al. **J Allergy Clin Immunol** 1989 Oct;84(4 Pt 1):501–6

Rat leucocyte response to the bites of rat fleas (Siphonaptera: Pulicidae). Vaughan JA, et al. **J Med Entomol** 1989 Sep; 26(5):449–53

[An acute undifferentiated leukemia accompanied by an increase in the content of basophilic granulocytes in the peripheral blood and bone marrow] Ronin VS, et al. **Lab Delo** 1989;(11):71–2 **(Rus)**

ANALYSIS

Interleukin–2 receptor expression in human mast cells and basophils. Maggiano N, et al. **Int Arch Allergy Appl Immunol** 1990;91(1):8–14

Human basophils selectively express the Fc gamma RII (CDw32) subtype of IgG receptor. Anselmino LM, et al. **J Allergy Clin Immunol** 1989 Dec;84(6 Pt 1):907–14

CYTOLOGY

Effects of human recombinant interleukin 5 and 3 on the differentiation of cord blood–derived eosinophils and basophils. Ebisawa M, et al. **Arerugi** 1989 May;38(5):442–5

Interleukin–4 has basophilic and eosinophilic cell growth–promoting activity on cord blood cells. Favre C, et al. **Blood** 1990 Jan 1;75(1):67–73

IL–3 augments adhesiveness for endothelium and CD11b expression in human basophils but not neutrophils. Bochner BS, et al. **J Immunol** 1990 Sep 15;145(6):1832–7

IL–3 promotes basophilic differentiation of KU812 cells through high affinity binding sites. Valent P, et al. **J Immunol** 1990 Sep 15;145(6):1885–9

[A decrease in the basophilic granulocyte count of the blood during exacerbation of the idiopathic nephrotic syndrome] Robeva R, et al. **Vutr Boles** 1989;28(4):110–3 **(Bul)**

[Studies on human basophil and eosinophil colonies in human blood mononuclear cell culture: presence of common basophil–eosinophil progenitors] Musashi M. **Hokkaido Igaku Zasshi** 1989 Sep;64(5):567–79 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Modulation of human basophil growth in vitro by xiao–qing–long–tang (syo–seiryu–to), chai–pu–tang (saiboku–to), qing–fei–tang (seihai–to), baicalein and ketotifen. Tanno Y, et al. **Am J Chin Med** 1989; 17(1–2):45–50

Modulation of mediator release from human basophils and pulmonary mast cells and macrophages by auranofin. Columbo M, et al. **Biochem Pharmacol** 1990 Jan 15; 39(2):285–91

Clonidine inhibits IgE–mediated and IgE–independent in vitro histamine release from human basophil leukocytes. Miadonna A, et al. **Int J Immunopharmacol** 1989; 11(5):473–7

Sensitivity of basophils to histamine releasing factor(s) of various origin: dependency on allergic phenotype of the donor and surface–bound IgE. Alam R, et al. **J Allergy Clin Immunol** 1990 Jul;86(1):73–81

Cyclosporin A rapidly inhibits mediator release from human basophils presumably by interacting with cyclophilin. Cirillo R, et al. **J Immunol** 1990 May 15;144(10):3891–7

Effect of flavonoids on tumor promoter–induced basophil histamine release and protein kinase C. Middleton E Jr, et al. **Trans Am Clin Climatol Assoc** 1988;100:47–56

ENZYMOLOGY

Differential mechanisms in the stimulus–secretion coupling in human basophils: evidence for a protein–kinase–C–dependent and a protein–kinase–C–independent route. Knol EF, et al. **Agents Actions** 1990 Apr;30(1–2):49–52

A calcium–independent 5–lipoxygenase system in mast/basophil PT–18 cells. Vonakis BM, et al. **Biochim Biophys Acta** 1990 Jul 16;1045(2):142–6

IMMUNOLOGY

Reactivity of human basophils to anti–IgE and protein A in atopic dermatitis. Sainte–Laudy J, et al. **Agents Actions** 1990 Apr;30(1–2):250–3

Eosinophil and basophil hypersensitivity to deuterium oxide in atopic asthmatic patients. Palczyński C, et al. **Allergol Immunopathol (Madr)** 1989 May–Jun;17(3):137–9

Enhancement of basophil histamine release by a human basophil–like cell promoting activity. Morita Y, et al. **Allergy** 1990 Apr;45(3):183–8

Interdigital skin test for evaluation of delayed hypersensitivity and cutaneous basophil hypersensitivity in young chickens. Corrier DE, et al. **Am J Vet Res** 1990 Jun;51(6):950–4

Human blood basophils synthesize interleukin–2 binding sites. Stockinger H, et al. **Blood** 1990 May 1;75(9):1820–6

Enhanced basophil releasability in subjects infected with human immunodeficiency virus. Miadonna A, et al. **Clin Immunol Immunopathol** 1990 Feb;54(2):237–46

Basophil releasability in human hydatidosis. Aceti A, et al. **Int Arch Allergy Appl Immunol** 1990;91(1):111–2

Further characterization of surface membrane structures expressed on human basophils and mast cells. Valent P, et al. **Int Arch Allergy Appl Immunol** 1990;91(2):198–203

Eosinophils, basophils, and mast cells. Gleich GJ. **J Allergy Clin Immunol** 1989 Dec;84(6 Pt 2):1024–7

Flow cytometric methods for the analysis of human basophil surface antigens and viability. Bochner BS, et al. **J Immunol Methods** 1989 Dec 20;125(1–2):265–71

A staphylococcal protein A rosetting assay for the demonstration of high affinity IgE receptors on rIL–3–dependent human basophil–like cells grown in mixed cell cultures. Kirshenbaum AS, et al. **J Immunol Methods** 1989 Sep 29;123(1):55–62

Evaluation of cell–mediated, cutaneous basophil hypersensitivity in young chickens by an interdigital skin test. Corrier DE, et al. **Poult Sci** 1990 Mar;69(3):403–8

Interleukin 3 and granulocyte/macrophage–colony–stimulating factor render human basophils responsive to low concentrations of complement component C3a. Bischoff SC, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6813–7

Blocking of passive sensitization of human mast cells and basophil granulocytes with IgE antibodies by a recombinant human epsilon–chain fragment of 76 amino acids. Helm B, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(23):9465–9

[Presence and functional role of an epitope of the second receptor for IgE (FcE RII) in mast cells and basophils in the rat] Tournoys A, et al. **C R Acad Sci [III]** 1990; 310(5):139–46 (Eng. Abstr.) **(Fre)**

METABOLISM

Histamine release from skin mast cells and basophils in patients with urticaria pigmentosa. Nolte H, et al. **Acta Derm Venereol (Stockh)** 1990;70(2):154–6

Virus enhances IgE– and non–IgE–dependent histamine release induced by bacteria and other stimulators. Clementsen P, et al. **Agents Actions** 1990 Apr;30(1–2):61–3

Histamine release from cord basophils. Nolte H, et al. **Agents Actions** 1990 Jan;29(1–2):37–8

Carbohydrates inhibit the potentiating effect of bacteria, endotoxin and virus on basophil histamine release. Norn S, et al. **Agents Actions** 1990 Apr;30(1–2):53–6

Haemophilus influenzae potentiates basophil histamine release possibly by its endotoxins. Norn S, et al. **Agents Actions** 1990 Apr;30(1–2):57–60

Cytokine–induced release of histamine from basophil leukocytes from AIDS patients. Pedersen M, et al. **Agents Actions** 1990 Apr;30(1–2):294–6

Comparison of intestinal mast cell and basophil histamine release in children with food allergic reactions. Nolte H, et al. **Allergy** 1989 Nov;44(8):554–65

Characteristics of two types of calcium channels in rat pituitary gonadotrophs. Stutzin A, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):C865–74

Disassociation of the release of histamine and arachidonic acid metabolites from osmotically activated basophils and human lung mast cells. Eggleston PA, et al. **Am Rev Respir Dis** 1990 Apr;141(4 Pt 1):960–4

The influence of the calcium channel antagonist verapamil on histamine release from target cells. Hofman J, et al. **Arch Immunol Ther Exp (Warsz)** 1989;37(1–2):55–9

Inhibitory effect of terfenadine on mediator release from human blood basophils and eosinophils. Nabe M, et al. **Clin Exp Allergy** 1989 Sep;19(5):515–20

Seasonal increase of spontaneous histamine release in washed leucocytes from rhinitis patients sensitive to grass pollen. Weyer A, et al. **Clin Exp Immunol** 1990 Mar;79(3):385–91

Gene expression and production of tumour necrosis factor by a rat basophilic leukaemia cell line (RBL–2H3) with IgE receptor triggering. Ohno I, et al. **Immunology** 1990 May;70(1):88–93

Specific binding of human interleukin–3 and granulocyte–macrophage colony–stimulating factor to human basophils. Lopez AF, et al. **J Allergy Clin Immunol** 1990 Jan;85(1 Pt 1):99–102

A comparative study of releasing and nonreleasing human basophils: nonreleasing basophils lack an early component of the signal transduction pathway that follows IgE cross-linking. Nguyen KL, et al. **J Allergy Clin Immunol** 1990 Jun;85(6):1020–9

Early expression of high-affinity receptor for immunoglobulin E (Fc epsilon RI) during differentiation of mouse mast cells and human basophils. Thompson HL, et al. **J Clin Invest** 1990 Apr;85(4):1227–33

The rise in concentration of free Ca2+ and of pH provides sequential, synergistic signals for secretion in antigen-stimulated rat basophilic leukemia (RBL-2H3) cells. Ali H, et al. **J Immunol** 1989 Oct 15;143(8):2626–33

Human basophil/mast cell releasability. VII. Heterogeneity of the effect of adenosine on mediator secretion. Marone G, et al. **Life Sci** 1989;45(19):1745–54

MICROBIOLOGY

Interaction of paramyxoviruses with human basophils and their effect on histamine release. Sanchez-Legrand F, et al. **J Allergy Clin Immunol** 1989 Oct;84(4 Pt 1):538–46

PATHOLOGY

Philadelphia chromosome-negative acute hematopoietic malignancy: ultrastructural, cytochemical and immunocytochemical evidence of mast cell and basophil differentiation. Mezger J, et al. **Leuk Res** 1990;14(2):169–75

[Acute myelomonocytic leukemia (M4) with CD19 antigen expression, eosinophilia and basophilia in bone marrow] Inaba T, et al. **Rinsho Ketsueki** 1989 May;30(5):726–30 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Microfilaments regulate the rate of exocytosis in rat basophilic leukemia cells. Narasimhan V, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):222–9

The role of mast cell and basophil activation in human allergic reactions. Marone G. **Eur Respir J Suppl** 1989 Jun; 6:446s–455s (132 ref.)

Effects of adhesins from mannose-resistant Escherichia coli on mediator release from human lymphocytes, monocytes, and basophils and from polymorphonuclear granulocytes. Ventur Y, et al. **Infect Immun** 1990 Jun;58(6):1500–8

Anti-IgE- and complement-induced histamine release from peripheral leukocytes in normals and atopics. Stephan V, et al. **Int Arch Allergy Appl Immunol** 1989;90(4):326–30

Receptor-operated, but not voltage-operated, calcium channels are involved in basophil leucocyte activation and histamine release. Tedeschi A, et al. **Int Arch Allergy Appl Immunol** 1989;90(1):109–11

A guanine nucleotide-binding protein participates in IgE receptor-mediated activation of endogenous and reconstituted phospholipase A2 in a permeabilized cell system. Narasimhan V, et al. **J Biol Chem** 1990 Jan 25; 265(3):1459–64

The neutrophil-activating peptide NAF/NAP-1 induces histamine and leukotriene release by interleukin 3-primed basophils. Dahinden CA, et al. **J Exp Med** 1989 Nov 1; 170(5):1787–92

Bimodal IgG4-mediated human basophil activation. Role of eosinophils. Beauvais F, et al. **J Immunol** 1990 May 15; 144(10):3881–90

Studies of protein kinase C in the rat basophilic leukemia (RBL-2H3) cell reveal that antigen-induced signals are not mimicked by the actions of phorbol myristate acetate and Ca2+ ionophore. Cunha-Melo JR, et al. **J Immunol** 1989 Oct 15;143(8):2617–25

Cyclosporin A inhibits degranulation of rat basophilic leukemia cells and human basophils. Inhibition of mediator release without affecting PI hydrolysis or Ca2+ fluxes. Hultsch T, et al. **J Immunol** 1990 Apr 1;144(7):2659–64

Signal transduction events in human basophils. A comparative study of the role of protein kinase C in basophils activated by anti-IgE antibody and formyl-methionyl-leucyl-phenylalanine. Warner JA, et al. **J Immunol** 1990 Sep 15;145(6):1897–905

Value of the cutaneous basophil hypersensitivity (CBH) response for distinguishing weak contact sensitization from irritation reactions in the guinea pig. Robinson MK, et al. **J Invest Dermatol** 1990 May;94(5):636–43

[The heterogeneity of mast cells and basophils] Dincă L, et al. **Rev Ig [Bacteriol]** 1989 Jul–Sep;34(3):263–8 (21 ref.) **(Rum)**

RADIATION EFFECTS

[Histophysiology of tissue basophils of the cerebral dura mater after laser irradiation] Chertok VM, et al. **Biull Eksp Biol Med** 1989 Oct;108(10):493–5 (Eng. Abstr.) **(Rus)**

SECRETION

Relevance of basophil histamine release changes during venom immunotherapy. Stephan V, et al. **Allergy** 1989 Sep; 44(7):453–9

Histamine, mast cells and basophils. West GB. **Chem Immunol** 1990;49:121–41

Histamine and sulfidoleukotriene release from human basophils: different effects of antigen, anti-IgE, C5a, f-Met-Leu-Phe and the novel neutrophil-activating peptide NAF. Dahinden CA, et al. **Int Arch Allergy Appl Immunol** 1989;90(2):113–8

ULTRASTRUCTURE

Basophiluria in acute renal failure: an electron microscopy study of urinary sediment [letter] Taylor CA, et al. **Am J Kidney Dis** 1990 Sep;16(3):266–7

Philadelphia chromosome-negative acute hematopoietic malignancy: ultrastructural, cytochemical and immunocytochemical evidence of mast cell and basophil differentiation. Mezger J, et al. **Eur J Haematol** 1990 Jan; 44(1):74–7

Ultrastructure of monkey peripheral blood basophils stimulated to develop in vivo by recombinant human interleukin 3. Dvorak AM, et al. **Lab Invest** 1989 Dec; 61(6):677–90

Ultrastructure of human basophil leukocytes studied after spray freezing and freeze-substitution. Hastie R. **Lab Invest** 1990 Jan;62(1):119–30

BASOPHILS, TISSUE see **MAST CELLS**

BASS see under **PERCIFORMES**

BASSEN-KORNZWEIG SYNDROME see **ABETALIPOPROTEINEMIA**

BATHING BEACHES

[Danger of electricity in the bathtub] Nowak R, et al. **Versicherungsmedizin** 1989 Nov 1;41(6):195–7 (Eng. Abstr.) **(Ger)**

[Microbiological contamination of the sand from the Barcelona city beaches] Roses Codinachs M, et al. **Rev Sanid Hig Publica (Madr)** 1988 May–Aug; 62(5–8):1537–44 (Eng. Abstr.) **(Spa)**

STANDARDS

[Evaluation of bathing facilities on natural bodies of water] Havemeister G. **Off Gesundheitswes** 1989 Aug–Sep; 51(8–9):423–5 (Eng. Abstr.) **(Ger)**

BATHS

Effects of oil and water baths on the hydration state of the epidermis. Stender IM, et al. **Clin Exp Dermatol** 1990 May; 15(3):206–9

Chlorhexidine baths [letter; comment] **Eur J Vasc Surg** 1990 Feb;4(1):107 Comment on: Eur J Vasc Surg 1989 Aug;3(4):323–6.

The efficacy of control measures for eradicating legionellae in showers. Makin T, et al. **J Hosp Infect** 1990 Jul;16(1):1–7

Kegel exercises after warm sitz bath recommended [letter; comment] Whalley J. **J Obstet Gynecol Neonatal Nurs** 1990 Jan–Feb;19(1):13 Comment on: J Obstet Gynecol Neonatal Nurs 1989 Sep–Oct;18(5):399–403.

Case studies on the effect of exercise and hot water submersion on intracardiac temperature and the performance of a pacemaker which varies pacing rate based on temperature. Fearnot NE, et al. **Jpn Heart J** 1989 May; 30(3):353–63

[Comparison of the effects of carbonated baths with those of carbon dioxide baths, "dry baths"] Lecomte J, et al. **Acta Belg Med Phys** 1990 Jan–Mar;13(1):11–4 (Eng. Abstr.) **(Fre)**

[Aquagenic pruritus] Lanz U. **Hautarzt** 1990 Jun;41(6):341 **(Ger)**

[The diuretic effect of a bath. Study in healthy pregnant females and patients with edema and gestosis] Schnizer W, et al. **Zentralbl Gynakol** 1989;111(13):864–70 (Eng. Abstr.) **(Ger)**

[Effects of bathing on cardiac function in patients with myocardial infarction: hemodynamic and Doppler echocardiographic studies] Ozawa M, et al. **J Cardiol** 1988 Dec;18(4):979–87 (Eng. Abstr.) **(Jpn)**

[Morphofunctional characteristics of the myocardium and regional lymph nodes of the heart in experimental myocardial ischemia under the effect of radon water on the body] Bikbulatov ZT, et al. **Arkh Anat Gistol Embriol** 1990 Mar;98(3):59–64 (Eng. Abstr.) **(Rus)**

[Morphology of mesenteric lymph nodes after balneologic procedures] Guseinov TS, et al. **Arkh Anat Gistol Embriol** 1990 Mar;98(3):65–71 (Eng. Abstr.) **(Rus)**

[Improvement of the washing system of the thermo-bath TB-110] Borsuk LV, et al. **Gig Sanit** 1990 Apr;(4):71 **(Rus)**

[Use of a "dry" immersion method in the treatment of hypertensive crisis] Ivanov SG, et al. **Kosm Biol Aviakosm Med** 1990 Jan–Feb;24(1):40–2 (Eng. Abstr.) **(Rus)**

[Decimetric waves and radon baths in the treatment of juvenile rheumatoid arthritis] Shliapak EA, et al. **Pediatriia** 1989;(8):98–9 **(Rus)**

[The effect of sanatorium-health resort treatment using carbonate baths on the physical work capacity and the coronary and myocardial reserves of the heart in patients with ischemic heart disease] Makushkin AK, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1990 Jan–Feb;(1):47–8 **(Rus)**

[The use of sodium chloride baths in the combined treatment of trophic ulcers of the lower extremities] Zhirov VP, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 May–Jun; (3):57–9 (Eng. Abstr.) **(Rus)**

[Use of oxygen baths in the early rehabilitation of patients with transient disorders of cerebrovascular circulation] Strelkova NI, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):40–8 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Young children who drown in hot tubs, spas, and whirlpools in California: a 26-year survey. Shinaberger CS, et al. **Am J Public Health** 1990 May;80(5):613–4

Aquagenic pruritus responds to propranolol [letter] Thomsen K. **J Am Acad Dermatol** 1990 Apr;22(4):697

Hot tub (Pseudomonas) folliculitis. Fowler JF Jr, et al. **J Ky Med Assoc** 1990 Feb;88(2):66–8

Association of shower use with Legionnaires' disease. Possible role of amoebae. Breiman RF, et al. **JAMA** 1990 Jun 6;263(21):2924–6

Epistaxis after prolonged water immersion in a hot Jacuzzi [letter] Backon J. **Postgrad Med J** 1989 Dec;65(770):958

[Status epilepticus induced by prolonged immersion in hot herb bath: report of one case] Juang KC, et al. **Acta Paediatr Sin** 1989 Sep–Oct;30(5):356–60 (Eng. Abstr.) **(Chi)**

[Transmission of "barber's itch" by bathing?] Hengesbach B, et al. **Zentralbl Hyg Umweltmed** 1990 May; 190(1–2):110–6 (Eng. Abstr.) **(Ger)**

[Splash rash dermatitis. A case] Schiazza L, et al. **G Ital Dermatol Venereol** 1989 Sep;124(9):415–7 (Eng. Abstr.) **(Ita)**

[Beware of bubble-pools] Wellander J. **Lakartidningen** 1990 Feb 14;87(7):455 **(Swe)**

METHODS

Postepisiotomy pain: warm versus cold sitz bath [see comments] LaFoy J, et al. **J Obstet Gynecol Neonatal Nurs** 1989 Sep–Oct; 18(5):399–403 Comment in: J Obstet Gynecol Neonatal Nurs 1990 Jan–Feb;19(1):13.

Prevention of contamination in waterbaths [letter] Stenhouse MA. **Transfusion** 1990 Sep;30(7):667

[The effect of contrasting baths on the autonomic regulation of cardiac activity in patients with ischemic heart disease (stable stenocardia and postinfarct cardiosclerosis)] Sorokina EI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1990 Mar–Apr; (2):32–6 **(Rus)**

[A comparative assessment of changes in cardiovascular function under the influence of sodium chloride baths and underwater douche-massage for optimizing programs for the sanatorium treatment of patients with ischemic heart disease] Turgenev VV, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Sep–Oct;(5):13–6 **(Rus)**

BATHS, FINNISH

Sauna to transiently improve pulmonary function in patients with obstructive lung disease. Cox NJ, et al. **Arch Phys Med Rehabil** 1989 Dec;70(13):911–3

Some endocrine responses to sauna, shower and ice water immersion. Kauppinen K, et al. **Arctic Med Res** 1989 Jul; 48(3):131–9

Sauna habits and related symptoms in Finnish children. Markkola L, et al. **Eur J Pediatr** 1989 Dec;149(3):221–2

Sauna—a hobby or for health? Ernst E. **J R Soc Med** 1989 Nov;82(11):639 (13 ref.)

Children in sauna: cardiovascular adjustment. Jokinen E, et al. **Pediatrics** 1990 Aug;86(2):282–8

Saunas can prevent the common cold. **Practitioner** 1989 Nov 22;233(1479):1520

[Sauna bathing of children] Kotulán J. **Cesk Pediatr** 1990 Jan;45(1):43–4 **(Cze)**

[A health cure for the body and soul?] Harlem OK, et al. **Tidsskr Nor Laegeforen** 1989 Dec 10;109(34–36):3543–6 **(Nor)**

[The effect of a sauna on the reactivity of the circulatory indices in an isometric load test] Kuz'menko VA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Sep–Oct;(5):10–3 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Impaired ACTH and beta-endorphin response to sauna-induced hyperthermia in heroin addicts. Vescovi PP, et al. **Acta Endocrinol (Copenh)** 1989 Oct;121(4):484–8

STANDARDS

[Health requirements of sauna facilities in East Germany] Scharf R. **Z Gesamte Hyg** 1989 Jul;35(7):434–8 (Eng. Abstr.) **(Ger)**

BATRACHOTOXINS

METABOLISM

Voltage-dependent sodium channels in synaptoneurosomes: studies with 22Na+ influx and [3H]saxitoxin and [3H]batrachotoxinin-A 20-alpha-benzoate binding. Effects of proparacaine isothiocyanate. Gusovsky F, et al. **Brain Res** 1990 Jun 4;518(1–2):101–6

Interaction of batrachotoxinin-A benzoate with

voltage-sensitive sodium channels: the effects of pH. Brown GB, et al. **Cell Mol Neurobiol** 1981 Dec;1(4):361-71

Binding of [3H]batrachotoxinin A-20-alpha-benzoate to a high affinity site associated with house fly head membranes. Soderlund DM, et al. **Comp Biochem Physiol [C]** 1989; 94(1):255-60

Procaine isothiocyanate: an irreversible inhibitor of the specific binding of [3H]batrachotoxinin-A benzoate to sodium channels. Creveling CR, et al. **Neurochem Res** 1990 Apr;15(4):441-8

PHARMACOLOGY

pH-dependent binding of local anesthetics in single batrachotoxin-activated Na+ channels. Cocaine vs. quaternary compounds. Nettleton J, et al. **Biophys J** 1990 Jul;58(1):95-106

Batrachotoxin and alpha-scorpion toxin stabilize the open state of single voltage-gated sodium channels. O'Leary ME, et al. **Mol Pharmacol** 1989 Nov;36(5):789-95

Regulation by batrachotoxin, veratridine, and monensin of basal and carbachol-induced phosphoinositide hydrolysis in neurohybrid NCB-20 cells. Chuang DM. **Neurochem Res** 1990 Jul;15(7):695-704

BATS see **CHIROPTERA**

BATTEN-SPIELMEYER-VOGT DISEASE see **NEURONAL CEROID-LIPOFUSCINOSIS**

BATTERED CHILD SYNDROME see under **CHILD ABUSE**

BATTEY BACILLUS see **MYCOBACTERIUM AVIUM COMPLEX**

BAY K 8644

ANTAGONISTS & INHIBITORS

Adenosine inhibits the positive chronotropic and inotropic responses to norepinephrine and Bay k 8644 in the isolated, blood-perfused dog atrium. Furukawa Y, et al. **Arch Int Pharmacodyn Ther** 1989 Nov-Dec;302:107-18

METABOLISM

Increase in number of myocardial [3H]BAY K 8644 binding sites during adult maturation of rat. Navaratnam S, et al. **Can J Physiol Pharmacol** 1990 Jul;68(7):877-81

PHARMACOKINETICS

Multiple actions of Bay K 8644 on high-threshold Ca channels in adult rat sensory neurons. Carbone E, et al. **Neurosci Lett** 1990 Apr 6;111(3):315-20

PHARMACOLOGY

Permeabilisation of the sarcolemma in mouse diaphragm exposed to Bay K 8644 in vitro: time course, dependence on Ca2+ and effects of enzyme inhibitors. Howl JD, et al. **Acta Neuropathol (Berl)** 1990;79(4):438-43

Chronic ethanol treatment alters omega-conotoxin and Bay K 8644 sensitive calcium channels in rat striatal synaptosomes. Woodward JJ, et al. **Alcohol** 1990 Jul-Aug; 7(4):279-84

Normal responsiveness to external Ca and to Ca-channel modifying agents in hypertrophied rat heart. Callens-el Amrani F, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1727-34

Modulation of Ca by agents affecting voltage-sensitive Ca channels in mesangial cells. Yu YM, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):F1094-9

Effect of nicardipine and BAY K-8644 on the pressor responses to afferent nervous stimulation in dogs. Estan L, et al. **Arch Int Pharmacodyn Ther** 1989 Sep-Oct; 301:246-53

Intracellular calcium in the control of osteoclast function. I. Voltage-insensitivity and lack of effects of nifedipine, BAYK8644 and diltiazem. Datta HK, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):183-8

Ca2(+)-channel agonist BAY K8644 mimics 1,25(OH)2-vitamin D3 rapid enhancement of Ca2+ transport in chick perfused duodenum. de Boland AR, et al. **Biochem Biophys Res Commun** 1990 Jan 15; 166(1):217-22

Effects of caffeine and ryanodine on depression of post-rest tension development produced by Bay K 8644 in canine ventricular muscle. Bouchard RA, et al. **Br J Pharmacol** 1989 Aug;97(4):1279-91

The role of dihydropyridine-sensitive voltage-gated calcium channels in potassium-mediated neuronal survival. Collins F, et al. **Brain Res** 1989 Nov 13;502(1):99-108

Inotropic and calcium kinetic effects of calcium channel agonist and antagonist in isolated cardiac myocytes from cardiomyopathic hamsters. Sen LY, et al. **Circ Res** 1990 Sep;67(3):599-608

Stimulating effect of calcium channel activator BAY-K 8644 on calcitonin secretion. Gozariu L, et al. **Endocrinologie** 1989 Oct-Dec;27(4):231-5

Effects of high potassium concentration and dihydropyridine Ca2(+)-channel agonists on cytoplasmic Ca2+ and aldosterone production in rat adrenal glomerulosa cells. Balla T, et al. **Endocrinology** 1990 Aug;127(2):815-22

Modulation of dihydropyridine-sensitive calcium channels: a role for G proteins. Bergamaschi S, et al. **Eur Neurol** 1990;30 Suppl 2:16-20; discussion 39-41

(-)-Bay K 8644 liberates a contractant factor from the endothelium of the rat aorta. Lawson K, et al. **Fundam Clin Pharmacol** 1989;3(6):687-93

Effects of the Ca agonists Bay K 8644 and CGP 28392 on vascular smooth muscle tone. Alonso MJ, et al. **Gen Pharmacol** 1989;20(6):827-31

Interactions between forskolin, calcium and Bay K 8644 in K+-depolarized rat uterine muscle. Calixto JB. **Gen Pharmacol** 1989;20(6):771-8

Potentiating effect of Bay K 8644 on the noradrenaline-induced contraction in rabbit renal and femoral arteries. Hashimoto M, et al. **Gen Pharmacol** 1989; 20(5):589-94

Influence of Bay K 8644 on vascular responses mediated by alpha 1- and alpha 2-adrenoceptors. Högestätt ED, et al. **Gen Pharmacol** 1989;20(6):799-804

Calcitonin secretion and cyclic AMP-efflux from C-cells, stimulated by glucagon and either calcium or Bay K 8644. Scherübl H, et al. **Horm Metab Res Suppl** 1989;21:18-21

The selective potentiation of noradrenaline-induced tone by Bay K 8644 in the rabbit basilar artery. Laher I, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):759-64

Actions and interactions of calcium modulators and ethanol on rat atrial membrane potentials. Salvatici RP, et al. **J Electrocardiol** 1990 Apr;23(2):157-63

Effects of calcium and Bay K-8644 on calcium currents in adrenal medullary chromaffin cells. Ceña V, et al. **J Membr Biol** 1989 Dec;112(3):255-65

Calcium antagonists inhibit met-enkephalin immunoreactive material release: in vitro and ex vivo experiments. Govoni S, et al. **J Neural Transm Gen Sect** 1990;80(1):1-8

Dihydropyridine actions on calcium currents of frog sympathetic neurons. Jones SW, et al. **J Neurosci** 1990 Jul; 10(7):2261-7

Dihydropyridine-sensitive and -insensitive components of acetylcholine release from rat motor nerve terminals. Atchison WD. **J Pharmacol Exp Ther** 1989 Nov; 251(2):672-8

Cellular mechanisms of somatostatin inhibition of calcium influx in the anterior pituitary cell line AtT-20. Reisine T. **J Pharmacol Exp Ther** 1990 Aug;254(2):646-51

Vascular contraction induced by activation of membrane calcium ion channels is enhanced in streptozotocin-diabetes. White RE, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):1057-62

Dihydropyridine inhibition of single calcium channels and contraction in rabbit mesenteric artery depends on voltage. Nelson MT, et al. **J Physiol (Lond)** 1989 May;412:65-91

Effect of calcium-channel blockers and salbutamol on the isolated mare uterus--interaction with the calcium agonist Bay K 8644. Coruzzi G, et al. **J Vet Pharmacol Ther** 1989 Dec;12(4):404-10

Influence of Bay k 8644 on aequorin-loaded human platelets. Ogawa N, et al. **Jpn J Pharmacol** 1989 Oct;51(2):306-8

Bicarbonate-dependent action of Bay K 8644 in the smooth muscle of the rat vas deferens. Suzuki N, et al. **Jpn J Pharmacol** 1990 Mar;52(3):413-20

Positive chronotropic effect of Bay K 8644: participation of endogenous norepinephrine. de Hurtado MC, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Oct; 340(4):452-5

The response of single cardiac sodium channels in neonatal rats to the dihydropyridines CGP 28392 and (-)-Bay K 8644. Kohlhardt M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Aug; 340(2):210-8

Opposite cardiac actions of the enantiomers of Bay K 8644 at different membrane potentials in guinea-pig papillary muscles. Ravens U, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Mar; 341(3):232-9

Pharmacological characterization of voltage-dependent calcium currents in rat hippocampal neurons. Toselli M, et al. **Neurosci Lett** 1990 Apr 20;112(1):70-5

The stimulus properties of cocaine: effects of BAY K 8644 and nimodipine. Cunningham KA, et al. **NIDA Res Monogr** 1989;95:500-1

Calcium dependence of BAY K 8644 effects on the rabbit gall-bladder. Hansen CP, et al. **Pflugers Arch** 1990 Jan; 415(4):444-8

Comparison of the effects of calcium and the calcium channel stimulant Bay k 8644 on neomycin-induced neuromuscular blockade. Baeyens JM, et al. **Pharmacol Toxicol** 1989 Nov; 65(5):398-401

Light-induced relaxation of smooth muscle after treatment with BAY K 8644 is related to release of nitric oxide. Golenhofen K, et al. **Prog Clin Biol Res** 1990;327:595-604

Effects of calcium channel activators on contractile behavior in vascular smooth muscle. Moreland S, et al. **Prog Clin Biol Res** 1990;327:525-34

[Effects of BAY K 8644, a slow calcium channel agonist, on muscle contraction induced by halothane in sensitive subjects with malignant hyperthermia] Adnet P, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R145 **(Fre)**

[Central modulation of the baroreflex response to phenylephrine in rats. Lack of interaction between calcium channel modulators and the renin-angiotensin system] Lacolley P, et al. **Arch Mal Coeur** 1989 Jul;82(7):1309-13 (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Effects of dihydropyridine calcium channel antagonists in ethanol withdrawal; doses required, stereospecificity and actions of Bay K 8644. Littleton JM, et al. **Psychopharmacology (Berl)** 1990;100(3):387-92

BAYES THEOREM see under **PROBABILITY**

BB-K8 see **AMIKACIN**

BCG see **MYCOBACTERIUM BOVIS**

BCG VACCINE

The effectiveness of bacillus Calmette-Guérin (BCG) vaccination against tuberculosis. A case-control study in Treaty Indians, Alberta, Canada [see comments] Houston S, et al. **Am J Epidemiol** 1990 Feb;131(2):340-8 Comment in: Am J Epidemiol 1990 Feb;131(2):205-7.

The influence of Calmette-Guérin bacillus immunization on the booster effect of tuberculin testing in healthy young adults. Sepulveda RL, et al. **Am Rev Respir Dis** 1990 Jul; 142(1):24-8

New strategies for leprosy and tuberculosis and for development of bacillus Calmette-Guérin into a multivaccine vehicle. Bloom BR, et al. **Ann N Y Acad Sci** 1989;569:155-73 (45 ref.)

BCG vaccination in leprosy: final results of the trial in Karimui, Papua New Guinea, 1963-79. Bagshawe A, et al. **Bull World Health Organ** 1989;67(4):389-99

Experimental research on utilization of bioluminescent technique to substitute the current viability count for BCG vaccine. Chen ZR, et al. **Chin Med J [Engl]** 1989 Dec; 102(12):906-10

Development of BCG as a recombinant vaccine vehicle. Jacobs WR Jr, et al. **Curr Top Microbiol Immunol** 1990; 155:153-60 (13 ref.)

Revaccination with BCG: its effects on skin tests in Kuwaiti senior school children. Shaaban MA, et al. **Eur Respir J** 1990 Feb;3(2):187-91

The effect of endotoxin on membrane fatty acid composition in BCG-sensitized mice. Stark JM, et al. **Experientia** 1990 May 15;46(5):472-4

Is booster dose of BCG vaccine necessary? Udani PM. **Indian J Pediatr** 1989 May-Jun;56(3):311-4

Assessment of efficacy of BCG vaccination among slum children of Agra City. Mehrotra AK, et al. **Indian J Public Health** 1988 Jul-Sep;32(3):164-5

The effects of the scheme for BCG vaccination of schoolchildren in England and Wales and the consequences of discontinuing the scheme at various dates. Sutherland I, et al. **J Epidemiol Community Health** 1989 Mar; 43(1):15-24

From the Food and Drug Administration. Nightingale SL. **JAMA** 1990 Aug 8;264(6):677

The effect of washing on the surface charge of Mycobacterium bovis BCG vaccine, Tice substrain. Shi M, et al. **Microbios** 1989;60(243):97-101

Immunization program among primary school pupils (experience in Paya Bakung village, North Aceh). Lubis CP, et al. **Paediatr Indones** 1987 Nov-Dec; 27(11-12):209-15

The booster effect with repeat tuberculin testing in children and its relationship to BCG vaccination. Friedland IR. **S Afr Med J** 1990 Apr 21;77(8):387-9

BCG vaccination of schoolchildren in England and Wales. Springett VH, et al. **Thorax** 1990 Feb;45(2):83-8 (29 ref.)

Leprosy and tuberculosis vaccine design. Kaufmann SH. **Trop Med Parasitol** 1989 Sep;40(3):251-7 (64 ref.)

A contact study to evaluate the BCG vaccination programme in Seoul. Jin BW, et al. **Tubercle** 1989 Dec;70(4):241-8

[A study on estimating the natural TB infection prevalence in BCG vaccinated regions] Wu ZR. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Apr; 12(2):93-5, 126-7 (Eng. Abstr.) **(Chi)**

[Surveillance and control of ARI among urban nurseries in Beijing] Zhang ZJ. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1990 Jun; 11(3):145-9 (Eng. Abstr.) **(Chi)**

[Tuberculin sensitivity and tolerance of "direct" BCG vaccination of youths leaving school] Scharkoff H, et al. **Z Erkr Atmungsorgane** 1989;173(1):50-9 (Eng. Abstr.) **(Ger)**

[BCG vaccination in low risk tuberculosis; first experiences after the suspension of BCG vaccination of newborns in Czechoslovakia] Trnka L, et al. **Z Erkr Atmungsorgane** 1989;173(1):60-2 (Eng. Abstr.) **(Ger)**

[Intravesical bacillus Calmette-Guerin instillation therapy in superficial bladder cancers--clinical study on prognostic factors] Shinka T, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Mar;81(3):425-32 (Eng. Abstr.) **(Jpn)**

[Comparative study on prophylactic intravesical instillation of bacillus Calmette-Guerin (BCG) and adriamycin for superficial bladder cancers] Tachibana M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Oct;80(10):1459-65 (Eng. Abstr.) **(Jpn)**

[Some properties of suppressor macrophages induced with Mycobacterium leprae vaccine in mice] Tomioka H, et al. **Nippon Rai Gakkai Zasshi** 1989 Jul-Sep;58(3):172-8 (Eng. Abstr.) **(Jpn)**

[Risk of tubercular infection among schoolchildren with high

BCG coverage] Camacho LA, et al.
Bol Of Sanit Panam 1990 Feb;108(2):100–12 (Eng. Abstr.) **(Por)**

[The problem of specific prevention of modern tuberculosis] Dikiĭ IL, et al. **Mikrobiol Zh** 1984 Sep–Oct;46(5):59–62 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Vaccine evaluation by case–control or prospective studies [comment] Comstock GW. **Am J Epidemiol** 1990 Feb; 131(2):205–7 Comment on: Am J Epidemiol 1990 Feb;131(2):340–8.

Prospective trial of timing of bacillus Calmette–Guérin vaccination in Canadian Cree infants. Pabst HF, et al. **Am Rev Respir Dis** 1989 Oct;140(4):1007–11

BCG and cancer [editorial] **Can Med Assoc J** 1975 Oct 18; 113(8):708, 710

"Withholding BCG—is it ethical?" [letter] Badrinath. **Indian J Public Health** 1989 Apr–Jun;33(2):86–8

Implementation of universal immunization programme in two districts. Kapil U, et al. **Indian Pediatr** 1989 Aug; 26(8):817–20

BCG, DPT & OPV immunization [letter] Ramachandran C. **Indian Pediatr** 1989 Dec;26(12):1268–9

Elevations of cytokines interleukin–1, interleukin–2 and tumor necrosis factor in the urine of patients after intravesical bacillus Calmette–Guerin immunotherapy. Böhle A, et al. **J Urol** 1990 Jul;144(1):59–64

The response of patients with superficial bladder cancer to a second course of intravesical bacillus Calmette–Guerin. Bretton PR, et al. **J Urol** 1990 Apr;143(4):710–2; discussion 712–3

Choice of an optimal diluent for intravesical bacillus Calmette–Guerin administration. Hudson MA, et al. **J Urol** 1989 Dec;142(6):1438–41

A randomized prospective comparison of oral versus intravesical and percutaneous bacillus Calmette–Guerin for superficial bladder cancer. Lamm DL, et al. **J Urol** 1990 Jul;144(1):65–7

Combination immunotherapy of murine transitional cell cancer using BCG and an interferon–inducing pyrimidinone. Sarosdy MF, et al. **J Urol** 1989 Nov; 142(5):1376–9

Percutaneous bacillus Calmette–Guerin perfusion of the upper urinary tract for carcinoma in situ. Studer UE, et al. **J Urol** 1989 Oct;142(4):975–7

Leprosy and BCG in southern Vietnam [letter; comment] Abel L, et al. **Lancet** 1990 Jun 23;335(8704):1536 Comment on: Lancet 1990 Apr 28;335(8696):1016–20.

BCG vaccination and nutrition [letter; comment] Epstein PR. **Lancet** 1990 Jun 23;335(8704):1536–7 Comment on: Lancet 1990 Apr 28;335(8696):1016–20.

Modern vaccines. Mycobacterial diseases [see comments] Fine PE, et al. **Lancet** 1990 Apr 28;335(8696):1016–20 (20 ref.) Comment in: Lancet 1990 Jun 23;335(8704):1536. Comment in: Lancet 1990 Jun 23;335(8704):1536–7.

The effects of systematic BCG vaccination of newborn on the incidence of post–primary tuberculous meningitis in childhood. Wasz–Höckert O, et al. **Padiatr Grenzgeb** 1989; 28(6):365–70

An assessment of the value of BCG vaccination in England and Wales. Sutherland I. **Pneumologie** 1990 Feb;44 Suppl 1:653–4

Percutaneous BCG perfusion of the upper urinary tract for carcinoma in situ. Studer UE, et al. **Prog Clin Biol Res** 1990;350:81–6

BCG vaccination and cancer. Grange JM, et al. **Tubercle** 1990 Mar;71(1):61–4 (27 ref.)

Intravesical Bacillus Calmette–Guérin prophylactic treatment for superficial bladder tumors: results of a controlled prospective study. Melekos MD. **Urol Int** 1990; 45(3):137–41

Use of intravesical bacillus Calmette–Guérin in the treatment of superficial transitional cell carcinoma of the bladder: an overview. Witjes JA, et al. **Urol Int** 1990;45(3):129–36 (67 ref.)

[An attempt to control the growth of syngeneic experimental tumors in inbred mice using Listeria factor Ei, BCG vaccine and a combination of both] Zák M, et al. **Sb Lek** 1989 Sep;91(8):230–7 (Eng. Abstr.) **(Cze)**

[A plea for early BCG vaccination (letter)] Berthier M, et al. **Arch Fr Pediatr** 1990 Mar;47(3):225 **(Fre)**

[Treatment of carcinoma in situ of the urinary bladder with BCG] Schnyder von Wartensee M, et al. **Helv Chir Acta** 1989 Aug;56(3):351–4 (Eng. Abstr.) **(Ger)**

[New vaccination strategies against tuberculosis] Kaufmann HE. **Pneumologie** 1990 Feb;44 Suppl 1:655–6 (Eng. Abstr.) **(Ger)**

[BCG vaccination and the incidence of tuberculosis in students of urban Kayseri, Turkey] Ozesmi M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:473–4 (Eng. Abstr.) **(Ger)**

[Status and perspectives of preventive tuberculosis vaccination in East Germany 1990] Schnorr R. **Z Arztl Fortbild (Jena)** 1990;84(8):351–4 **(Ger)**

[Results obtained by intravesical instillation of BCG in superficial bladder tumors] Romics I, et al. **Orv Hetil** 1990 Jan 7;131(1):25–8 (27 ref.) (Eng. Abstr.) **(Hun)**

[Intravesical BCG therapy in patients with recurrent superficial bladder tumors] Sugimoto M, et al. **Gan To Kagaku Ryoho** 1989 Dec;16(12):3725–8 (Eng. Abstr.) **(Jpn)**

[Preliminary results in treating superficial bladder tumors by the local instillation of Calmette–Guérin bacilli] Proca E, et al. **Rev Chir [Chir]** 1989 Nov–Dec;38(6):401–20 (Eng. Abstr.) **(Rum)**

[Degree of chromatin activity and the RNA level in lymphocytes of popliteal lymph nodes of dogs after administration of an antigen] Golovatskiĭ AS. **Arkh Anat Gistol Embriol** 1990 Apr;98(4):61–6 (Eng. Abstr.) **(Rus)**

[Distribution and morphologic characteristics of lymphoid cells in the canine popliteal lymph nodes in their normal state and under antigen effect] Golovatskiĭ AS, et al. **Arkh Anat Gistol Embriol** 1990 Mar;98(3):47–52 (Eng. Abstr.) **(Rus)**

[Experience with intracutaneous administration of BCG vaccine to children using a needleless injector BI–IM] Aleksandrova TM, et al. **Pediatriia** 1989;(10):83–5 **(Rus)**

[Instructions on the use of dry tuberculosis vaccine (BCG–M) for intracutaneous administration to premature newborn infants weighing 2000 g. and more and also to children not vaccinated at maternity wards due to medical counterindications and to be vaccinated in children's polyclinics] **Probl Tuberk** 1989;(8):64–6 **(Rus)**

[Instructions on the use of dry tuberculosis vaccine (BCG) for intracutaneous administration in mass vaccination and revaccination against tuberculosis] **Probl Tuberk** 1989; (8):66–71 **(Rus)**

[Reasons for postponing anti–tuberculosis BCG vaccination of newborn infants] Demeshko ND. **Probl Tuberk** 1990; (3):8–10 (Eng. Abstr.) **(Rus)**

[Organization of BCG revaccination of young adults] Rudol IM, et al. **Probl Tuberk** 1990;(3):3–6 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Bacille–Calmette–Guérin vaccine–induced granulomatous prostatitis: another hypoechoic nonneoplastic lesion [letter] Torres GM, et al. **AJR Am J Roentgenol** 1990 Jul; 155(1):195–6

Arthritis after Mycobacterium bovis immunotherapy for bladder cancer [letter; comment] Ochsenkühn T, et al. **Ann Intern Med** 1990 Jun 1;112(11):882 Comment on: Ann Intern Med 1989 Oct 1;111(7):581–91.

Lichen scrofulosorum following B.C.G. Evans RG, et al. **Arch Dis Child** 1967 Aug;42(224):448

Tuberculous epididymo–orchitis following intravesical BCG. George VK, et al. **Br J Urol** 1990 Jul;66(1):101–2

BCG pyelonephritis following intravesical BCG. Kondratowicz GM. **Br J Urol** 1989 Dec;64(6):649

BCG vaccination and development of a scar. Sivarajah N, et al. **Ceylon Med J** 1990 Jun;35(2):75–7

Vertebral osteitis following BCG vaccination in a previously healthy child [letter] Moreno L, et al. **Eur J Pediatr** 1990 Jun;149(9):668

Focus on complication of B.C.G. vaccination. Choudhuri N, et al. **Indian J Public Health** 1989 Apr–Jun;33(2):80–1

Tubercular meningitis after BCG vaccination [letter] Srinivasan S, et al. **Indian Pediatr** 1989 Aug;26(8):845

Pityriasis rosea–like eruption associated with BCG vaccination. Kaplan B, et al. **Isr J Med Sci** 1989 Oct; 25(10):570–2

Granulomatous eruption after BCG vaccine immunotherapy for malignant melanoma. Shea CR, et al. **J Am Acad Dermatol** 1989 Nov;21(5 Pt 2):1119–22 (17 ref.)

Bacille Calmette–Guérin adenitis 30 years after immunization in a patient with AIDS [letter] Reynes J, et al. **J Infect Dis** 1989 Oct;160(4):727

Miliary tuberculosis secondary to transurethral bacillus Calmette–Guérin administration for superficial transitional cell carcinoma of the bladder [letter] Skoutelis A, et al. **J Natl Cancer Inst** 1990 Jul 18;82(14):1219–20

Systemic bacillus–Calmette Guerin infection after transurethral administration for superficial bladder carcinoma. Sakamoto GD, et al. **J Urol** 1989 Oct; 142(4):1073–4; discussion 1074–5

Tuberculous aneurysm of the femoral artery: a complication of bacille Calmette–Guérin vaccine immunotherapy—a case report. Bornet P, et al. **J Vasc Surg** 1989 Dec; 10(6):688–92

Disseminated Mycobacterium bovis infection from BCG vaccination and HIV infection [letter; comment] Boudes P, et al. **JAMA** 1989 Nov 3;262(17):2386 Comment on: JAMA 1989 Jun 9;261(22):3246.

Sarcoidosis following B.C.G. vaccination in a lymphopaenic boy. Greally JF, et al. **Sarcoidosis** 1989 Sep;6(2):156–7

Expanded programme on immunization. Formulation of Pasteur BCG vaccine. **Wkly Epidemiol Rec** 1990 Mar 30; 65(13):99 **(Eng, Fre)**

[Management of cutaneous complications of BCG vaccine] Dangoisse C, et al. **Ann Dermatol Venereol** 1990; 117(1):45–51 **(Fre)**

[BCG and the monitoring of post–vaccinal allergy: a proven failure? (letter)] de Cornulier M, et al. **Arch Fr Pediatr** 1989 Oct;46(8):628 **(Fre)**

[Systemic B.C.G. infection after intravesical B.C.G. therapy of in situ carcinoma of the bladder (letter)] Gatfosse M, et al. **Rev Med Interne** 1990 Mar–Apr;11(2):181–2 **(Fre)**

[BCG osteitis. A case report] Friebel D, et al. **Kinderarztl Prax** 1990 Apr;58(4):199–204 (Eng. Abstr.) **(Ger)**

[BCG osteitis] Schulze W. **Pneumologie** 1990 Feb;44 Suppl 1:484–5 (Eng. Abstr.) **(Ger)**

[Tuberculous spondylitis following BCG vaccination] Müller–Miny H, et al. **Radiologe** 1990 Jul;30(7):328–30 (19 ref.) (Eng. Abstr.) **(Ger)**

[Recommendations for the therapy of atypical immunization courses and complications of BCG vaccination (Position: April, 1988)] Scharkoff H, et al. **Z Erkr Atmungsorgane** 1989;173(1):96–9 (Eng. Abstr.) **(Ger)**

[Complications after BCG–M vaccination] Kolomiets VM, et al. **Vrach Delo** 1990 Jun;(6):45–6 **(Rus)**

ANALYSIS

Cell mass of Mycobacterium bovis BCG estimated by gas chromatography. Olson WP, et al. **Biologicals** 1990 Apr; 18(2):83–8

HISTORY

[A.I. Togunova—a pioneer in antituberculosis BCG vaccination in the USSR] Mitinskaia La. **Probl Tuberk** 1990;(4):75–7 **(Rus)**

IMMUNOLOGY

Idiotype vaccine for tumor by anti–idiotypic antibody prepared against anti–(bacillus Calmette Guèrin)BCG monoclonal antibody. Sasaki J, et al. **Cancer Immunol Immunother** 1990;31(5):273–7

Immune response to BCG–Moreau (Rio de Janeiro) strain. Spectrum of delayed hypersensitivity in genetically defined mice. Mortatti RC, et al. **FEMS Microbiol Immunol** 1989 Dec;1(8–9):491–7

Development of BCG scar in relation to the age and nutritional status. Agarwal RK, et al. **Indian Pediatr** 1990 Mar;27(3):291–3

Use of a tuberculin purified protein derivative—Asn–Ala–Asn–Pro conjugate in bacillus Calmette–Guérin primed mice overcomes H–2 restriction of the antibody response and avoids the need for adjuvants. Lussow AR, et al. **Proc Natl Acad Sci U S A** 1990 Apr; 87(8):2960–4

Controlling tuberculosis: the pathologist's point of view. Dannenberg AM Jr. **Res Microbiol** 1990 Feb;141(2):192–6; discussion 262–3

Cell–mediated and humoral immune responses to BCG and rubella vaccinations and to recall antigens in onchocerciasis patients. Kilian HD, et al. **Trop Med Parasitol** 1989 Dec; 40(4):445–53

Any questions. What action should be taken if a young man applies for a post as a nurse and, although having a BCG scar, he is tuberculin negative? Festenstein F. **Tubercle** 1990 Mar;71(1):69–70

Analysis of variables of plasmid transformation of a bacterial vaccine: studies on recombinant BCG. Lugosi L. **Vaccine** 199[illegible] Apr;8(2):145–9

[The immunologic impact and adverse effects of simultaneous inoculation with DPT and BCG vaccines] Xu TQ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1990 Feb; 13(1):39–41, 63 (Eng. Abstr.) **(Chi)**

[Immune response and post inoculation reactions of simultaneous administration of hepatitis B vaccine with routine vaccine in children, III. Immune response and post inoculation reactions of simultaneous administration of hepatitis B vaccine and BCG, meningococcus group A polysaccharide vaccine] Yuan C. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1990 Feb; 11(1):34–7 (Eng. Abstr.) **(Chi)**

[Analysis of interferon–gamma production in killed BCG–pretreated mice after stimulation with staphylococcal enterotoxin A] Mizukoshi N, et al. **Kekkaku** 1989 Aug; 64(8):499–509 (Eng. Abstr.) **(Jpn)**

[Studies of the effects of BCG and Corynebacterium parvum vaccines in experimental infection of mice with influenza virus. Foot pad test, splenic indicator and histologic changes in the thymus gland, spleen and lymph nodes] Ciebiada I, et al. **Med Dosw Mikrobiol** 1989;41(2):92–9 (Eng. Abstr.) **(Pol)**

[Immunogenetic analysis of delayed hypersensitivity to tuberculin in mice by the method of local adoptive transfer] Mezhlumova MB. **Probl Tuberk** 1990;(4):55–8 (Eng. Abstr.) **(Rus)**

[The effect of immunization with Streptococcus group A on the development of delayed hypersensitivity to BCG antigens in mice of different strains] Bazanova EA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Jan;(1):80–4 (Eng. Abstr.) **(Rus)**

[The antigenic and immunogenic substances in mycobacteria and the problem of creating a molecular vaccine] Vorob'ev AA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Dec; (12):87–93 (49 ref.) **(Rus)**

[Tuberculin response in school children in Pacasmayo, Peru] Jaramillo A, et al. **Bol Of Sanit Panam** 1989 Nov; 107(5):388–95 (Eng. Abstr.) **(Spa)**

STANDARDS

Quality control of BCG vaccine by WHO: a review of factors that may influence vaccine effectiveness and safety. Milstien JB, et al. **Bull World Health Organ** 1990; 68(1):93–108

Epidemiological evaluation of BCG vaccine efficacy in Delhi—1989. Sharma RS, et al. **J Commun Dis** 1989 Sep; 21(3):200–6

THERAPEUTIC USE

The present and future role of BCG vaccine in tuberculosis control. Gheorghiu M. **Biologicals** 1990 Apr;18(2):135–41 (44 ref.)

Adjuvant immunotherapy with BCG of acute myeloid leukemia: a 15-year follow-up [letter] Reizenstein P. **Br J Haematol** 1990 Jun;75(2):288–9

Clinical study of prognostic factors of superficial bladder cancer treated with intravesical bacillus Calmette-Guerin. Shinka T, et al. **Br J Urol** 1990 Jul;66(1):35–9

Effectiveness of BCG vaccination against tuberculous meningitis: a case-control study in São Paulo, Brazil. Wünsch Filho V, et al. **Bull World Health Organ** 1990; 68(1):69–74

Presence of interleukin-2 in urine of superficial bladder cancer patients after intravesical treatment with bacillus Calmette-Guérin. De Jong WH, et al. **Cancer Immunol Immunother** 1990;31(3):182–6

Tumor-specific BCG therapy in colon cancer. Hoover HC Jr, et al. **Cancer Invest** 1990;8(2):281–2

Comparison of the fibronectin-binding ability and antitumor efficacy of various mycobacteria. Hudson MA, et al. **Cancer Res** 1990 Jul 1;50(13):3843–7

Prevention of overt diabetes and insulitis in NOD mice by a single BCG vaccination. Harada M, et al. **Diabetes Res Clin Pract** 1990 Jan;8(2):85–9

Bladder tumors invading the lamina propria (stage A/T1): influence of endovesical bacillus Calmette-Guérin therapy on recurrence and progression. Boccon-Gibod L, et al. **Eur Urol** 1989;16(6):401–4

Bacillus Calmette-Guérin treatment and vesicorenal reflux. Böhle A, et al. **Eur Urol** 1990;17(2):125–8

Immunohistochemical markers defined by monoclonal antibodies and response to bacillus Calmette-Guérin endovesical immunotherapy for superficial bladder tumors. Flam TA, et al. **Eur Urol** 1990;17(4):338–42

BCG vaccine therapy for treatment of superficial bladder cancer. Damianov C, et al. **Int Urol Nephrol** 1989; 21(3):305–12

Adjuvant bacillus Calmette-Guérin therapy in non-Hodgkin's malignant lymphomas: long-term results of a randomized trial in a single institution. Ravaud A, et al. **J Clin Oncol** 1990 Apr;8(4):608–14

Comparative study of adjuvant induced arthritis in susceptible and resistant strains of rats. II. Effect of oral administration of BCG and PPD. Bersani-Amado CA, et al. **J Rheumatol** 1990 Jun;17(6):738–42

Effects of local bacillus Calmette-Guerin therapy in patients with bladder carcinoma on immunocompetent cells of the bladder wall. Böhle A, et al. **J Urol** 1990 Jul;144(1):53–8

The preparation, handling and use of intravesical bacillus Calmette-Guerin for the management of stage Ta, T1, carcinoma in situ and transitional cell cancer. Brosman SA, et al. **J Urol** 1990 Aug;144(2 Pt 1):313–5

Long-term followup of patients treated with 1 or 2, 6-week courses of intravesical bacillus Calmette-Guerin: analysis of possible predictors of response free of tumor. Coplen DE, et al. **J Urol** 1990 Sep;144(3):652–7

Expression of blood group precursor T antigen as a prognostic marker for human bladder cancer treated by bacillus Calmette-Guerin and interleukin-2. Dow JA, et al. **J Urol** 1989 Oct;142(4):978–81; discussion 981–2

Bacillus Calmette-Guerin versus doxorubicin versus thiotepa: a randomized prospective study in 202 patients with superficial bladder cancer. Martínez-Piñeiro JA, et al. **J Urol** 1990 Mar;143(3):502–6

Instillation of bacillus Calmette-Guerin into the renal pelvis of a solitary kidney for the treatment of transitional cell carcinoma. Ramsey JC, et al. **J Urol** 1990 Jun;143(6):1220–2

Africa's tuberculosis burden and chemoprophylaxis [editorial] **Lancet** 1990 May 26;335(8700):1249–50

BCG product approved for CIS of the bladder [news] **Oncology (Williston Park)** 1990 Jul;4(7):106

Immune modifiers in the treatment of bladder cancer. Morales A. **Prog Clin Biol Res** 1990;350:25–33 (26 ref.)

Follow up of patients receiving treatment for superficial bladder cancer with mitomycin C and BCG. Soloway MS. **Prog Clin Biol Res** 1990;350:71–9

Active specific immunotherapy in malignant melanoma. Morton DL, et al. **Semin Surg Oncol** 1989;5(6):420–5 (52 ref.)

Bacillus Calmette-Guérin and superficial bladder cancer. Clinical experience and mechanism of action. Catalona WJ, et al. **Surg Annu** 1990;22:363–78 (63 ref.)

BCG vaccination of schoolchildren in England and Wales [letter] Nisar M, et al. **Thorax** 1990 Aug;45(8):646–7

Analysis of mucosal bladder leucocyte subpopulations in patients treated with intravesical Bacillus Calmette-Guerin. Peuchmaur M, et al. **Urol Res** 1989;17(5):299–303

Multicenter study of superficial bladder cancer treated with intravesical bacillus Calmette-Guérin or adriamycin. Khanna OP, et al. **Urology** 1990 Feb;35(2):101–8

Conservative treatment of superficial transitional cell carcinoma of prostatic urethra with intravesical BCG. Orihuela E, et al. **Urology** 1989 Nov;34(5):231–7

Maintenance intravesical bacillus calmette-guerin for superficial transitional cell carcinoma of bladder. A retrospective study. Schwalb DM, et al. **Urology** 1990 Sep; 36(3):222–5

BCG in management of transitional cell carcinoma invasive to prostate. Siami P, et al. **Urology** 1989 Dec;34(6):381–2

[Intravesical BCG as a treatment for superficial and in situ transitional cell carcinoma of the bladder] Schmidt AC, et al. **S Afr Med J** 1990 Apr 7;77(7):354–7 (Eng. Abstr.) **(Afr)**

[Nonspecific immunotherapy with BCG vaccine in bladder tumors] Damianov Kh, et al. **Khirurgiia (Sofiia)** 1990; 43(1):48–53 (Eng. Abstr.) **(Bul)**

[Short-term results of intratumor BCG injection for rectal carcinoma] Zhu HM. **Chung Hua Chung Liu Tsa Chih** 1990 Jan;12(1):40–2 (Eng. Abstr.) **(Chi)**

[Superficial bladder tumors. Results of preventive treatment of recurrence by intravesical instillation of BCG] Charbit L, et al. **Ann Med Interne (Paris)** 1989;140(8):695–7 (Eng. Abstr.) **(Fre)**

[Treatment of PT1 tumors of the bladder using transurethral resection and intravesical immunotherapy] Bertault D, et al. **Ann Urol (Paris)** 1990;24(2):97–101; discussion 102 (Eng. Abstr.) **(Fre)**

[Immunochemotherapy of advanced bladder tumors] Damionov C, et al. **J Urol (Paris)** 1989;95(7):406–11 (19 ref.) (Eng. Abstr.) **(Fre)**

[Results of BCG immunotherapy in the management of bladder tumors] Samodai L, et al. **Orv Hetil** 1990 Aug 5; 131(31):1697–702 (38 ref.) (Eng. Abstr.) **(Hun)**

[Intravesical bacillus Calmette-Guerin therapy for superficial bladder tumor: experience of 13 cases] Okuno H, et al. **Hinyokika Kiyo** 1989 Sep;35(9):1503–7 (Eng. Abstr.) **(Jpn)**

[Effect of modifiers of natural biological response on the functional activity of macrophages (oncological aspect)] Gromov SA, et al. **Antibiot Khimioter** 1990 Feb;35(2):29–33 (Eng. Abstr.) **(Rus)**

[The use of BCG vaccine in the treatment of surface tumors of the bladder] Kumanov Kh, et al. **Urol Nefrol (Mosk)** 1989 Sep-Oct;(5):41–4 (Eng. Abstr.) **(Rus)**

[BCG vaccine and prevention of recurrence of superficial cancer of the bladder. Have all the possibilities been exhausted?] Vera-Donoso CD, et al. **Actas Urol Esp** 1989 Jul-Aug;13(4):233–5 (20 ref.) **(Spa)**

[Low-dose BCG in the therapy of superficial neoplasms of the bladder] Francesco Bassi P, et al. **Arch Esp Urol** 1990 Jun;43(5):503–7 (Eng. Abstr.) **(Spa)**

TOXICITY

Theophylline inhibition of BCG-induced pulmonary inflammatory responses. Boner AL, et al. **Ann Allergy** 1990 Jun;54(6):530–5

BCNU see **CARMUSTINE**

BCR-ABL FUSION PROTEINS

see related
PHILADELPHIA CHROMOSOME

ANALYSIS

Residual bcr/abl transcripts in chronic myeloid leukaemia [letter; comment] Gabert J, et al. **Lancet** 1990 Feb 17; 335(8686):417–8 Comment on: Lancet 1990 Jan 6;335(8680):50.

Detection of residual bcr/abl translocation by polymerase chain reaction in chronic myeloid leukaemia patients after bone-marrow transplantation [see comments] Gabert J, et al. **Lancet** 1989 Nov 11;2(8672):1125–8 Comment in: Lancet 1990 Jan 6;335(8680):50. Comment in: Lancet 1990 Jan 13;335(8681):118.

P185BCR-ABL in two patients with late appearing Philadelphia chromosome-positive acute nonlymphocytic leukemia. Najfeld V, et al. **Leukemia** 1989 Dec;3(12):841–6

GENETICS

Molecular genetic advances in chronic myelogenous leukemia. Epner DE, et al. **Ann Intern Med** 1990 Jul 1; 113(1):3–6 (49 ref.)

Philadelphia chromosome-negative chronic myelogenous leukemia without breakpoint cluster region rearrangement: a chronic myeloid leukemia with a distinct clinical course. Kurzrock R, et al. **Blood** 1990 Jan 15;75(2):445–52

Chronic myeloid leukemia may be associated with several bcr-abl transcripts including the acute lymphoid leukemia-type 7 kb transcript. Selleri L, et al. **Blood** 1990 Mar 1;75(5):1146–53

Chronic myeloid leukemia with unusual variant Ph translocation (22;22)(q11;q13). Two cases with chimeric BCR-ABL transcripts. Laï JL, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):209–16

bcr-abl, the hallmark of chronic myeloid leukaemia in man, induces multiple haemopoietic neoplasms in mice. Elefanty AG, et al. **EMBO J** 1990 Apr;9(4):1069–78

Chronic myelogenous leukemia as a model for the genetic basis of cancer. Cannistra SA. **Hematol Oncol Clin North Am** 1990 Apr;4(2):337–57 (94 ref.)

Differential effects of tumor promoters on P210bcr-abl expression. Li WJ, et al. **Hematol Pathol** 1989;3(3):113–23

Chronic myelogenous leukemia with typical clinical and morphological features can be Philadelphia chromosome negative and "bcr negative". Selleri L, et al. **Hematol Pathol** 1990;4(2):67–77

Chronic myelogenous leukemia—the unfolding saga. Goldman JM, et al. **Leukemia** 1990 Mar;4(3):163–7

Expression of bcr-abl fusion transcripts following bone marrow transplantation for Philadelphia chromosome-positive leukemia. Kohler S, et al. **Leukemia** 1990 Aug;4(8):541–7

Nucleotide sequence analysis of human abl and bcr-abl cDNAs. Fainstein E, et al. **Oncogene** 1989 Dec; 4(12):1477–81

Molecular relapse in chronic myelogenous leukemia patients after bone marrow transplantation detected by polymerase chain reaction. Sawyers CL, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):563–7

Clonal lymphoid progenitor cell lines expressing the BCR/ABL oncogene retain full differentiative function. Scherle PA, et al. **Proc Natl Acad Sci U S A** 1990 Mar; 87(5):1908–12

Induction of chronic myelogenous leukemia in mice by the P210bcr/abl gene of the Philadelphia chromosome. Daley GQ, et al. **Science** 1990 Feb 16;247(4944):824–30

METABOLISM

A novel variant of the bcr-abl fusion product in Philadelphia chromosome-positive acute lymphoblastic leukemia. Soekarman D, et al. **Leukemia** 1990 Jun;4(6):397–403

P210 BCR-ABL is complexed to P160 BCR and ph-P53 proteins in K562 cells. Campbell ML, et al. **Oncogene** 1990 May;5(5):773–6

BDELLOVIBRIO

GROWTH & DEVELOPMENT

Unbalanced growth as a normal feature of development of Bdellovibrio bacteriovorus. Gray KM, et al. **Arch Microbiol** 1989;152(5):420–4

Prey-derived signals regulating duration of the developmental growth phase of Bdellovibrio bacteriovorus. Gray KM, et al. **J Bacteriol** 1990 Jul;172(7):4002–7

ISOLATION & PURIFICATION

The incidence of Bdellovibrio spp. in man-made water systems: coexistence with legionellas. Richardson IR. **J Appl Bacteriol** 1990 Jul;69(1):134–40

PHYSIOLOGY

A new model for the penetration of prey cells by bdellovibrios. Tudor JJ, et al. **J Bacteriol** 1990 May; 172(5):2421–6

Bdellovibrios: recycling, remodelling and relocalizing components from their prey. Diedrich DL. **Microbiol Sci** 1988 Apr;5(4):100–3 (25 ref.)

BEAK

EMBRYOLOGY

Epithelia are interchangeable between facial primordia of chick embryos and morphogenesis is controlled by the mesenchyme. Richman JM, et al. **Dev Biol** 1989 Nov; 136(1):201–10

INNERVATION

Trigeminal deafferentation and prehension in the pigeon. Bermejo R, et al. **Behav Brain Res** 1989 Oct 1;35(1):55–61

SURGERY

Behavioural consequences of partial beak amputation (beak trimming) in poultry. Duncan IJ, et al. **Br Poult Sci** 1989 Sep;30(3):479–88

BEANS see **LEGUMES**

BEARS see under **CARNIVORA**

BEAUTY see under **ESTHETICS**

BEAUTY CULTURE

Risk for cancer of the urinary bladder among hairdressers in the Nordic countries. Skov T, et al. **Am J Ind Med** 1990; 17(2):217–23

Permanent paresthesia to sculptured nails. A distressing problem. Baran RL, et al. **Dermatol Clin** 1990 Jan; 8(1):139–41

Dermatitis in hairdressers. Holness DL, et al. **Dermatol Clin** 1990 Jan;8(1):119–26

Salon care product labeling [editorial] Rietschel RL, et al. **J Am Acad Dermatol** 1990 Feb;22(2 Pt 1):309

[Bronchial asthma in a hairdresser caused by hair bleach] Schwaiblmair M, et al. **Dtsch Med Wochenschr** 1990 May 4;115(18):695–7 (Eng. Abstr.) **(Ger)**

EDUCATION

[Dermatologic work capacity evaluations in prevention of occupational diseases. A study of beginning hairdresser students] Längle U. **Wien Klin Wochenschr** 1990 Mar 16; 102(6):175–6 **(Ger)**

BEAVERS see **RODENTIA**

BECHTEREW'S DISEASE see **SPONDYLITIS, ANKYLOSING**

BECKWITH-WIEDEMANN SYNDROME

COMPLICATIONS

Hamartoma of the urinary bladder in an infant with Beckwith–Wiedemann syndrome. Williams MP, et al. **Br J Urol** 1990 Jan;65(1):106–7

Virilizing adrenal adenoma in an adult with the Beckwith–Wiedemann syndrome: paradoxical response to dexamethasone. Clouston WM, et al. **Clin Endocrinol (Oxf)** 1989 Oct;31(4):467–73

EMG–syndrome and hypothyroidism [letter] Leung AK, et al. **Clin Genet** 1989 Oct;36(4):269

Association of medullary sponge kidney and medullary dysplasia in Beckwith–Wiedemann syndrome. Chesney RW, et al. **J Pediatr** 1989 Nov;115(5 Pt 1):761–4

Wiedemann–Beckwith syndrome with congenital central hypothyroidism in one of monozygotic twins. Chien CH, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Feb;89(2):132–6

DIAGNOSIS

Apparent postnatal onset of some manifestations of the Wiedemann–Beckwith syndrome. Chitayat D, et al. **Am J Med Genet** 1990 Aug;36(4):434–9

Prenatal diagnosis and perinatal management of the Beckwith–Wiedeman syndrome: a case and review. Lodeiro JG, et al. **Am J Perinatol** 1989 Oct;6(4):446–9 (26 ref.)

In utero prenatal diagnosis of Beckwith–Wiedemann syndrome; a case report. Meizner I, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Sep;32(3):259–64

Prenatal diagnosis of Wiedemann–Beckwith syndrome. Wieacker P, et al. **J Perinat Med** 1989;17(5):351–5

Reversible obstructive hypertrophic cardiomyopathy in the Beckwith–Wiedemann syndrome. Ryan CA, et al. **Pediatr Cardiol** 1989 Fall;10(4):225–8

Beckwith–Wiedemann syndrome. Galea P, et al. **Scott Med J** 1989 Oct;34(5):536

GENETICS

Genomic imprinting and the Beckwith–Wiedemann syndrome [letter] Brown KW, et al. **Am J Hum Genet** 1990 May;46(5):1000–1

Neuroblastoma in a child with Wiedemann–Beckwith syndrome. Chitayat D, et al. **Am J Med Genet** 1990 Mar; 35(3):433–6

Balanced reciprocal translocation (X;20) limited to Wilms' tumor in a Wiedemann–Beckwith syndrome. Diaz de Bustamante A, et al. **Cancer Genet Cytogenet** 1990 Mar; 45(1):35–9

PATHOLOGY

Beckwith–Wiedemann syndrome. Renal pathology at 4 months of age. Ponte P, et al. **Clin Pediatr (Phila)** 1990 Jul;29(7):393–7

Beckwith–Wiedemann syndrome with unusual hepatic and pancreatic features: a case expanding the phenotype. Steigman CK, et al. **Pediatr Pathol** 1990;10(4):593–600

THERAPY

[Early orthodontic treatment measures in infants with the EMG syndrome] Müssig HD, et al. **Fortschr Kieferorthop** 1989 Oct;50(5):460–4 (Eng. Abstr.) **(Ger)**

BECLOMETHASONE

ADMINISTRATION & DOSAGE

The long-term effects of nedocromil sodium and beclomethasone dipropionate on bronchial responsiveness to methacholine in nonatopic asthmatic subjects. Bel EH, et al. **Am Rev Respir Dis** 1990 Jan;141(1):21–8

Acute topical steroid administration blocks mast cell increase and the late asthmatic response of the canine peripheral airways. Turner CR, et al. **Am Rev Respir Dis** 1990 Feb; 141(2):421–7

Treatment of acute, episodic asthma in preschool children using intermittent high dose inhaled steroids at home. Wilson NM, et al. **Arch Dis Child** 1990 Apr;65(4):407–10

Steroid dependent asthma [letter; comment] **BMJ** 1989 Sep 9;299(6700):682–3 Comment on: BMJ 1989 Jul 22;299(6693):216–7.

Beclomethasone dipropionate versus flunisolide as topical steroid treatment in patients with perennial rhinitis. Svendsen UG, et al. **Clin Otolaryngol** 1989 Oct;14(5):441–5

The effects of high dose inhaled beclomethasone dipropionate on glucose and lipid profiles in normal and diet controlled diabetic subjects. Ebden P, et al. **Respir Med** 1989 Jul; 83(4):289–91

Can the morbidity of asthma be reduced by high dose inhaled therapy? A prospective study. Horn CR, et al. **Respir Med** 1990 Jan;84(1):61–6

Compliance with inhaled therapy and morbidity from asthma. Horn CR, et al. **Respir Med** 1990 Jan;84(1):67–70

Particle size of beclomethasone dipropionate produced by two nebulisers and two spacing devices. O'Callaghan C. **Thorax** 1990 Feb;45(2):109–11

[Hormonal inhalation preparations in the treatment of bronchial asthma in children] Zychowicz C, et al. **Wiad Lek** 1989 Feb 15;42(4):229–33 (Eng. Abstr.) **(Pol)**

[Ketotifen and nasal steroids in the therapy of pollinosis] Cvitanović S, et al. **Placne Bolesti** 1989 Jul–Dec; 41(3–4):205–8 (Eng. Abstr.) **(Scr)**

ADVERSE EFFECTS

Posterior subcapsular cataracts associated with nasal or inhalation corticosteroids. Fraunfelder FT, et al. **Am J Ophthalmol** 1990 Apr 15;109(4):489–90

Steroid aerosols and cataract formation [see comments] Allen MB, et al. **BMJ** 1989 Aug 12;299(6696):432–3 Comment in: BMJ 1989 Oct 7;299(6704):918.

Purpura and dermal thinning associated with high dose inhaled corticosteroids. Capewell S, et al. **BMJ** 1990 Jun 16;300(6739):1548–51

Steroid aerosols and cataract formation [letter; comment] Karim AK, et al. **BMJ** 1989 Oct 7;299(6704):918 Comment on: BMJ 1989 Aug 12;299(6696):432–3.

Beclomethasone mania [letter; comment] Phelan MC. **Br J Psychiatry** 1989 Dec;155:871–2 Comment on: Br J Psychiatry 1989 Aug;155:220–4.

METABOLISM

The nonspecific esterases of human mononuclear leukocytes metabolize arylamine carcinogens and steroids esters. Lund-Pero M, et al. **Eur J Haematol** 1989 Aug; 43(2):158–66

PHARMACOLOGY

The effect of an inhaled steroid on the hypothalamic–pituitary–adrenal axis—which tests should be used? Holt PR, et al. **Clin Exp Allergy** 1990 Mar; 20(2):145–9

THERAPEUTIC USE

Chronic non–asthmatic cough is not affected by inhaled beclomethasone dipropionate. A controlled double blind clinical trial. Evald T, et al. **Allergy** 1989 Sep;44(7):510–4

Adrenal cortical function after long–term beclomethasone aerosol therapy in early childhood. Freigang B, et al. **Ann Allergy** 1990 Apr;64(4):342–4

Adrenal function in asthma. Priftis K, et al. **Arch Dis Child** 1990 Aug;65(8):838–40

Effect of beclomethasone dipropionate on the bronchial responsiveness to propranolol in asthmatics. Carpentiere G, et al. **Chest** 1990 Aug;98(2):263–5

Double–blind cross–over trial comparing beclomethasone dipropionate and terfenadine in perennial rhinitis. Robinson AC, et al. **Clin Exp Allergy** 1989 Sep;19(5):569–73

A placebo–controlled, blind comparison of nedocromil sodium and beclomethasone dipropionate in bronchial asthma. Bergmann KC, et al. **Curr Med Res Opin** 1989; 11(8):533–42

Isolated cough which responds to inhaled salbutamol and beclomethasone dipropionate [letter] Frans A, et al. **Eur Respir J** 1990 Feb;3(2):243

A placebo–controlled blinded comparison of nedocromil sodium and beclomethasone dipropionate in bronchial asthma. Bergmann KC, et al. **Lung** 1990;168 Suppl:230–9

Rhinomanometric evaluation of two nasal steroid sprays in rhinitis. Kohan D, et al. **Otolaryngol Head Neck Surg** 1989 Oct;101(4):429–33

Treatment of non–allergic nasal hypersecretion with ipratropium and beclomethasone. Jessen M, et al. **Rhinology** 1990 Jun;28(2):77–81

Minor aphthous oral ulceration: a double–blind cross–over study of beclomethasone dipropionate aerosol spray. Thompson AC, et al. **Scott Med J** 1989 Oct;34(5):531–2

Corticosteroid trials in non–asthmatic chronic airflow obstruction: a comparison of oral prednisolone and inhaled beclomethasone dipropionate. Weir DC, et al. **Thorax** 1990 Feb;45(2):112–7

Time course of response to oral and inhaled corticosteroids in non–asthmatic chronic airflow obstruction. Weir DC, et al. **Thorax** 1990 Feb;45(2):118–21

[Effects of long–term use of inhaled steroids (beclomethasone dipropionate) in patients with occupational asthma no longer exposed] Sulotto F, et al. **Med Lav** 1989 Nov–Dec; 80(6):498–505 (Eng. Abstr.) **(Ita)**

[Treatment of radiostomatitis with Salcoat] Ishii J, et al. **Gan No Rinsho** 1990 Jan;36(1):66–70 (Eng. Abstr.) **(Jpn)**

BECLOMETHASONE DIPROPIONATE see **BECLOMETHASONE**

BED CAPACITY, HOSPITAL see **HOSPITAL BED CAPACITY**

BED CONVERSION see under **HEALTH FACILITY PLANNING**

BED OCCUPANCY

Regional variation in patterns of inpatient psychiatric care. Rosenheck R, et al. **Am J Psychiatry** 1990 Sep; 147(9):1180–3

In-vitro fertilization: a neonatal paediatrician's perspective. Doyle LW. **Aust N Z J Obstet Gynaecol** 1990 Feb; 30(1):67–70

Estimation of hospital bed availability [letter; comment] Ramaiah RS. **Can J Public Health** 1990 Mar–Apr;81(2):170 Comment on: Can J Public Health 1989 Mar–Apr;80(2):105–9.

Medicare home health utilization as a function of nursing home market factors. Swan JH, et al. **Health Serv Res** 1990 Aug;25(3):479–500

['Wrong beds', a continuous misunderstanding?] Blok ML, et al. **Ned Tijdschr Geneeskd** 1990 Apr 28;134(17):858–60 (Eng. Abstr.) **(Dut)**

['Misused beds', a persistent misunderstanding? (letter)] Veerman A. **Ned Tijdschr Geneeskd** 1990 Jun 9; 134(23):1153 **(Dut)**

ECONOMICS

Early "step-down" transfer of low–risk patients with chest pain. A controlled interventional trial. Weingarten S, et al. **Ann Intern Med** 1990 Aug 15;113(4):283–9

Linking Medicare capital payments to hospital occupancy rates. Hemesath M, et al. **Health Aff (Millwood)** 1989 Fall; 8(3):104–16

[Analysis of economic management as an aid for directing and planning health care facilities] Przybill N, et al. **Z Gesamte Hyg** 1990 Jan;36(1):37–9 (Eng. Abstr.) **(Ger)**

STATISTICS & NUMERICAL DATA

[Evolution value of quantitative performance indicators of a large hospital (La Fe. 1974–1986)] Romar Mico A, et al. **Rev Sanid Hig Publica (Madr)** 1989 Mar–Apr; 63(3–4):25–39 (Eng. Abstr.) **(Spa)**

TRENDS

Hospital and emergency department overcrowding. **Ann Emerg Med** 1990 Mar;19(3):336

UTILIZATION

[The utilization of the bed resources and the management of the therapeutic–diagnostic process in the hospital] Chernous'ko VV. **Vrach Delo** 1989 Nov;(11):122–4 **(Rus)**

BED REST

Effect of dietary protein on bed–rest–related changes in whole–body–protein synthesis. Stuart CA, et al. **Am J Clin Nutr** 1990 Sep;52(3):509–14

Bed rest after lumbar puncture is obsolete [letter; comment] de Boer WA. **Anaesthesia** 1989 Nov;44(11):934 Comment on: Anaesthesia 1989 May;44(5):389–91.

Significance of exercise and bed rest in pregnancy—study on the lying postures of gravidas during sleep (2). Ogita S, et al. **Ann Physiol Anthropol** 1990 Apr;9(2):93–8

Energy absorption, lean body mass, and total body fat changes during 5 weeks of continuous bed rest. Krebs JM, et al. **Aviat Space Environ Med** 1990 Apr;61(4):314–8

Successful treatment of subdural haematoma during anticoagulant treatment [see comments] Anderson TJ, et al. **BMJ** 1989 Dec 23–30;299(6715):1566 Comment in: BMJ 1990 Feb 24;300(6723):537–8.

Work capacity during 30 days of bed rest with isotonic and isokinetic exercise training. Greenleaf JE, et al. **J Appl Physiol** 1989 Nov;67(5):1820–6

Energy and thermal regulation during bed rest and spaceflight. Greenleaf JE. **J Appl Physiol** 1989 Aug; 67(2):507–16 (71 ref.)

Nutritional status of men under hypokinesia. Zorbas YG, et al. **J Environ Pathol Toxicol Oncol** 1989 Jul–Aug; 9(4):333–42

Metabolic changes in man under hypokinesia and physical exercise. Zorbas YG, et al. **J Environ Pathol Toxicol Oncol** 1989 Jul–Aug;9(4):361–70

A comparison of bed rest and immersion for treating the edema of pregnancy. Katz VL, et al. **Obstet Gynecol** 1990 Feb;75(2):147–51

Catecholamines during short– and long–term head–down bedrest. Cottet–Emard JM, et al. **Physiologist** 1990 Feb;33(1 Suppl):S69–72 (15 ref.)

The effect of LBNP (lower body negative pressure) on lower limb capacitance vessels during a 30 day –6 degrees head–down bedrest. Louisy F, et al. **Physiologist** 1990 Feb; 33(1 Suppl):S63–4

Physical fitness before and after one month head–down bedrest, with and without lower body negative pressure. Riviere D, et al. **Physiologist** 1990 Feb;33(1 Suppl):S34–5

Effects of lower body negative pressure on cardiovascular adaptation to one month head–down bedrest. Riviere D, et al. **Physiologist** 1990 Feb;33(1 Suppl):S36–7

ADVERSE EFFECTS

Head–down bed rest impairs vagal baroreflex responses and provokes orthostatic hypotension. Convertino VA, et al. **J Appl Physiol** 1990 Apr;68(4):1458–64

Effects of twenty–four hours of bed rest with head–down tilt on cardiopulmonary baroreflex control: preliminary study. Pannier B, et al. **J Hypertens Suppl** 1989 Dec; 7(6):S38–9

Immobilization–related lead toxicity in previously lead–poisoned children. Markowitz ME, et al. **Pediatrics** 1990 Sep;86(3):455–7

[The toxicology of rest (editorial)] Besson F. **Schweiz Rundsch Med Prax** 1990 Jul 3;79(27–28):849 **(Fre)**

BEDBUGS

Collateral effects of bednets impregnated with permethrin against bedbugs (Cimicidae) in Papua New Guinea. Charlwood JD, et al. **Trans R Soc Trop Med Hyg** 1989 Mar–Apr;83(2):261

Changes in the relative frequency of occurrence of infestations of two sympatric species of bedbug in northern Natal and KwaZulu, South Africa. Newberry K, et al. **Trans R Soc Trop Med Hyg** 1989 Mar–Apr;83(2):262–4

MICROBIOLOGY

Potential for insect transmission of HIV: experimental exposure of Cimex hemipterus and Toxorhynchites amboinensis to human immunodeficiency virus. Webb PA, et al. **J Infect Dis** 1989 Dec;160(6):970–7

PATHOGENICITY

Induction of skin papillomas in the rabbit, Oryctologus cuniculus, by bites of a blood–sucking insect, Cimex lectularius, irradiated by gamma rays. el–Mofty MM, et al. **J Invest Dermatol** 1989 Nov;93(5):630–2

BEDDING AND LINENS

Use of electric blankets and risk of testicular cancer [see comments] Verreault R, et al. **Am J Epidemiol** 1990 May; 131(5):759–62 Comment in: Am J Epidemiol 1990 May;131(5):774–5.

Keeping just–born infants warm [news] Parker SC. **Am J Nurs** 1990 Mar;90(3):28L

The thermal environment in which 3–4 month old infants sleep at home [letter; comment] Bacon CJ. **Arch Dis Child** 1989 Oct;64(10):1515–6 Comment on: Arch Dis Child 1989 Apr;64(4):600–4.

Interaction between bedding and sleeping position in the sudden infant death syndrome: a population based case–control study. Fleming PJ, et al. **BMJ** 1990 Jul 14; 301(6743):85–9

Allergy to dyes in permanent–press bed linen. Brown R. **Contact Dermatitis** 1990 May;22(5):303–4

Power–frequency magnetic fields from electric blankets. Florig HK, et al. **Health Phys** 1990 Apr;58(4):493–502

Malaria among bednet users and non–users [letter] Dutta P, et al. **Indian J Malariol** 1989 Sep;26(3):171–2

Recent research on impregnated mosquito nets. Rozendaal JA, et al. **J Am Mosq Control Assoc** 1989 Dec;5(4):500–7 (36 ref.)

Control of house dust mite antigen in bedding [letter; comment] Denman AM, et al. **Lancet** 1990 Apr 28; 335(8696):1038 Comment on: Lancet 1990 Feb 17;335(8686):396–7.

Control of house dust mite antigen in bedding [see comments] Owen S, et al. **Lancet** 1990 Feb 17;335(8686):396–7 Comment in: Lancet 1990 Apr 14;335(8694):911–2. Comment in: Lancet 1990 Apr 28;335(8696):1038.

Cot mattress biodeterioration and SIDS [letter] Richardson BA. **Lancet** 1990 Mar 17;335(8690):670

Control of house dust mite antigen in bedding [letter; comment] Walshaw MJ, et al. **Lancet** 1990 Apr 14; 335(8694):911–2 Comment on: Lancet 1990 Feb 17;335(8686):396–7.

Giving bednets "fair" tests in field trials against malaria:a case from Sabah, East Malaysia. Leake DW Jr, et al. **Southeast Asian J Trop Med Public Health** 1989 Sep; 20(3):379–84

Collateral effects of bednets impregnated with permethrin against bedbugs (Cimicidae) in Papua New Guinea. Charlwood JD, et al. **Trans R Soc Trop Med Hyg** 1989 Mar–Apr;83(2):261

Mats instead of sheets on hospital beds [letter] Weisz F. **Trop Doct** 1990 Jan;20(1):34–5

[The use of disposable draping materials in the operating room and its effect on the postoperative wound infection rate] Müller W, et al. **Wien Klin Wochenschr** 1989 Dec 8;101(23):837–42 (Eng. Abstr.) **(Ger)**

STANDARDS

Bacterial surface contamination of patients' linen: isolation precautions versus standard care. Weinstein SA, et al. **Am J Infect Control** 1989 Oct;17(5):264–7

Hypo/hyperthermia blankets. **Health Devices** 1988 Nov; 17(11):334–46

Prevention of pressure sores [letter; comment] Livesley B. **Lancet** 1990 Jun 30;335(8705):1595 Comment on: Lancet 1990 Jun 2;335(8701):1311–2.

Pressure sores: do mattresses work? [letter] Young J, et al. **Lancet** 1990 Jul 21;336(8708):182–3

Control of febrile shivering during amphotericin B therapy. Holtzclaw BJ. **Oncol Nurs Forum** 1990 Jul–Aug; 17(4):521–4

[Methods of reducing the amount of pediculocide residues on bed linens to safe levels] Epshtein AE, et al. **Gig Sanit** 1989 Aug;(8):23–6 (Eng. Abstr.) **(Rus)**

UTILIZATION

Evaluation of a maternity cushion (Ozzlo pillow) for backache and insomnia in late pregnancy. Thomas IL, et al. **Aust N Z J Obstet Gynaecol** 1989 May;29(2):133–8

[Specialty specific reference values in linen use in public health and social service as a basis for determining laundry capacities] Rietdorf M, et al. **Z Gesamte Hyg** 1990 Jan; 36(1):35–7 (Eng. Abstr.) **(Ger)**

BEDS

Bunk bed injuries. Selbst SM, et al. **Am J Dis Child** 1990 Jun;144(6):721–3

Comfort for patients with advanced cancer. Walsh M, et al. **Am J Nurs** 1990 Jan;90(1):112

Diaphragmatic dysfunction after open heart surgery: treatment with a rocking bed. Abd AG, et al. **Ann Intern Med** 1989 Dec 1;111(11):881–6

Rewarming infants on a heated mattress [letter; comment] Weaver LT. **Arch Dis Child** 1989 Nov;64(11):1642 Comment on: Arch Dis Child 1989 May;64(5):687–92.

Nosocomial (water bed) fever [letter; comment] Gonzalez EB, et al. **Arch Intern Med** 1990 Mar;150(3):687 Comment on: Arch Intern Med 1989 Feb;149(2):319–24.

Bed aids for home nursing. Travers AF, et al. **BMJ** 1990 Apr 28;300(6732):1126–7

Waterbeds and low back pain? [letter; comment] Lantos G. **Can Med Assoc J** 1989 Dec 15;141(12):1222, 1224 Comment on: Can Med Assoc J 1989 Jun 1;140(11):1265, 1268.

The efficacy of an oscillating bed in the prevention of lower respiratory tract infection in critically ill victims of blunt trauma. A prospective study. Fink MP, et al. **Chest** 1990 Jan;97(1):132–7

A study of contact pressure points in specialised beds. Ryan DW, et al. **Clin Phys Physiol Meas** 1989 Nov;10(4):331–5

Effectiveness of the kinetic treatment table for preventing and treating pulmonary complications in severely head–injured patients. Clemmer TP, et al. **Crit Care Med** 1990 Jun;18(6):614–7

Does sleeping on a waterbed promote gastroesophageal reflux? Wang JC, et al. **Dig Dis Sci** 1989 Oct;34(10):1585–9

Articulated i.v. pole on Lada Optima III birthing beds. **Health Devices** 1990 Mar;19(3):101

Spontaneous activation of Liebel–Flarsheim Hydradjust III urological tables. **Health Devices** 1989 May;18(5):176–7

Bead leaks in air–fluidized beds. **Health Devices** 1990 Apr; 19(4):146–7

The role of alternating air and Silicore overlays in preventing decubitus ulcers. Conine TA, et al. **Int J Rehabil Res** 1990; 13(1):57–65

The "modified vertical mattress" [letter] Vidimos AT, et al. **J Dermatol Surg Oncol** 1989 Dec;15(12):1301

Decubitus ulcer treatment with the water flotation mattress. Spetalnick BM, et al. **J Tenn Med Assoc** 1989 Sep; 82(9):471–2

Effects of waterbed flotation on indicators of energy expenditure in preterm infants. Deiriggi PM. **Nurs Res** 1990 May–Jun;39(3):140–6

Re: Effects of waterbed flotation on indicators of energy expenditure in preterm infants' [letter] Schaefer KM, et al. **Nurs Res** 1990 Sep–Oct;39(5):293

Low dose Dextran 40 in reconstructive hip surgery patients [letter; comment] Aptekar RG. **Orthopedics** 1990 May; 13(5):508 Comment on: Orthopedics 1989 Jun;12(6):797–801.

Nocturnal rocking bed therapy: improvement in sleep fragmentation in patients with respiratory muscle weakness. Iber C, et al. **Sleep** 1989 Oct;12(5):405–12

Cost analysis of kinetic therapy in the prevention of complications of stroke. Kelley RE, et al. **South Med J** 1990 Apr;83(4):433–4

Urologic uses of the bed BUG. Heyman AM. **Urol Clin North Am** 1990 Feb;17(1):139–40

[The effect of air–fluidized bed on fluid therapy in early burned patients] Dong YL, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Sep;3(3):202–5, 238–9 (Eng. Abstr.) **(Chi)**

[An unusual cause of EEG artefact: waterbeds] Brunel MF, et al. **Ann Fr Anesth Reanim** 1989;8(4):362–4 (Eng. Abstr.) **(Fre)**

[Treatment of extensive burns in children using beds with air cushions] Astrozhnikova SP, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):100–3 (Eng. Abstr.) **(Rus)**

[House dust mold in Istanbul. I. Detection of mold flora in bed dust] Ozyaral O, et al. **Mikrobiyol Bul** 1988 Jan; 22(1):51–60 (Eng. Abstr.) **(Tur)**

STANDARDS

SCSB method compared to EEG–based polygraphy in sleep state scoring of newborn infants. Erkinjuntti M, et al. **Acta Paediatr Scand** 1990 Mar;79(3):274–9

Aids to prevent pressure sores. Young JB. **BMJ** 1990 Apr 14;300(6730):1002–4 (13 ref.)

Beds and side rails: how safe are they? Roy D. **Dimens Health Serv** 1990 May;67(4):10, 14

Grounding nonelectrical OR tables. **Health Devices** 1989 Oct; 18(10):367

Special care beds require special attention. **Health Devices** 1988 Mar;17(3):101–2

Guidelines for home air–fluidized bed therapy, 1989. Nimit K. **Health Technol Assess Rep** 1989;(5):1–11

SUPPLY & DISTRIBUTION

[Problem of the requirement of beds in somatopsychiatric departments] Bronin SIa. **Zh Nevropatol Psikhiatr** 1989; 89(10):108–11 (Eng. Abstr.) **(Rus)**

BEDSORES see DECUBITUS ULCER

BEE VENOMS

Role of lysine residue at 7th position of wasp chemotactic peptides. Nagashima K, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):844–9

A region–matched hydrophobic interaction between melittin and dimyristoylphosphatidylcholine in a ternary mixture of phosphatidylcholines. Ohki K. **Biochem Biophys Res Commun** 1989 Oct 31;164(2):850–6

Fluorescence and 13C NMR determination of side–chain and backbone dynamics of synthetic melittin and melittin analogues in isotropic solvents. Weaver AJ, et al. **Biochemistry** 1989 Oct 17;28(21):8624–39

Characterization of selectively 13C–labeled synthetic melittin and melittin analogues in isotropic solvents by circular dichroism, fluorescence, and NMR spectroscopy. Weaver AJ, et al. **Biochemistry** 1989 Oct 17;28(21):8614–23

Electrostatics of a peptide at a membrane/water interface. The pH dependence of melittin association with lipid vesicles. Stankowski S, et al. **Biochim Biophys Acta** 1990 Jun 27;1025(2):164–72

Conformation of spin–labeled melittin at membrane surfaces investigated by pulse saturation recovery and continuous wave power saturation electron paramagnetic resonance. Altenbach C, et al. **Biophys J** 1989 Dec;56(6):1183–91

Folding and activity of hybrid sequence, disulfide–stabilized peptides. Pease JH, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5643–7

Ion–channel properties of mastoparan, a 14–residue peptide from wasp venom, and of MP3, a 12–residue analogue. Mellor IR, et al. **Proc R Soc Lond [Biol]** 1990 Apr 23; 239(1296):383–400

[Arthropod toxins and ion channels] Kawai N, et al. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(4 Suppl):796–803 **(Jpn)**

[Water soluble protein components of preparations of bovine outer rod segments bound with melittin–sepharose in a Ca2+–dependent manner] Grishchenko VM, et al. **Dokl Akad Nauk SSSR** 1989;307(6):1498–502 **(Rus)**

ADVERSE EFFECTS

Occurrence of cold urticaria during venom desensitization [letter] Anfosso–Capra F, et al. **Dermatologica** 1990; 180(4):276

[Evolution of in vivo and in vitro tests during specific immunotherapy against hymenoptera venoms] Sabbah A, et al. **Allerg Immunol (Paris)** 1990 Jun;22(6):242–7 (Eng. Abstr.) **(Fre)**

[Allergy to insect venoms] Grzelewska–Rzymowska I, et al. **Pol Arch Med Wewn** 1987 Jul;78(1):35–42 (0 ref.) **(Pol)**

ANALYSIS

Vasoactive peptides from the Vespa Orientalis Hornet venom. L'vov VM, et al. **Adv Exp Med Biol** 1989; 247A:221–3

A new structural class of biologically active peptide in non–mammals. Nakajima T, et al. **Adv Exp Med Biol** 1989; 247A:215–20

Quantity, analysis, and lethality of European and Africanized honey bee venoms. Schumacher MJ, et al. **Am J Trop Med Hyg** 1990 Jul;43(1):79–86

Evidence for leukotrienes in animal venoms. Czarnetzki BM, et al. **J Allergy Clin Immunol** 1990 Feb;85(2):505–9

Biochemical and immunochemical comparison of Africanized and European honeybee venoms. Nelson DR, et al. **J Allergy Clin Immunol** 1990 Jan;85(1 Pt 1):80–5

Structural studies of a hornet venom allergen antigen 5, Dol m V and its sequence similarity with other proteins. King TP, et al. **Protein Seq Data Anal** 1990 Jul;3(3):263–6

Contribution of bee venom phospholipase A2 contamination in melittin fractions to presumed activation of tissue phospholipase A2. Fletcher JE, et al. **Toxicon** 1990; 28(6):647–56

[Structural–functional characteristics of vasoactive peptides from the Vespa orientalis venom] L'vov VM, et al. **Ukr Biokhim Zh** 1990 May–Jun;62(3):38–43 (Eng. Abstr.) **(Rus)**

[Preparation of highly–purified melittin from bee venom by an affinity chromatography method] Kostrzhevs'ka OG, et al. **Ukr Biokhim Zh** 1989 Sep–Oct;61(5):85–7 (Eng. Abstr.) **(Ukr)**

ANTAGONISTS & INHIBITORS

Microtubule inhibitors block the morphological changes induced in Drosophila blood cells by a parasitoid wasp factor. Rizki RM, et al. **Experientia** 1990 Mar 15; 46(3):311–5

Role of endogenous brain kinins in the cardiovascular response to intracerebroventricular melittin. Yang XP, et al. **Hypertension** 1989 Dec;14(6):629–35

Leiurotoxin I (scyllatoxin), a peptide ligand for Ca2(+)–activated K+ channels. Chemical synthesis, radiolabeling, and receptor characterization. Auguste P, et al. **J Biol Chem** 1990 Mar 15;265(8):4753–9

CHEMICAL SYNTHESIS

All–D amino acid–containing channel–forming antibiotic peptides. Wade D, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4761–5

GENETICS

Venom and viral expression products of the endoparasitic wasp Campoletis sonorensis share epitopes and related sequences. Webb BA, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):4961–5

IMMUNOLOGY

Predictive value of venom-specific IgE, IgG and IgG subclass antibodies in patients on immunotherapy with honey bee venom. Müller U, et al. **Allergy** 1989 Aug; 44(6):412–8

Stinging insect allergy: sensitization to vespids in Madrid and surroundings. Cross-reactivity study. Puyana J, et al. **Allergy** 1990 Feb;45(2):126–9

Relevance of basophil histamine release changes during venom immunotherapy. Stephan V, et al. **Allergy** 1989 Sep; 44(7):453–9

Clinical and immunologic studies of rapid venom immunotherapy in Hymenoptera-sensitive patients. Bernstein DI, et al. **J Allergy Clin Immunol** 1989 Dec;84(6 Pt 1):951–9

Evolution of sensitivity to Hymenoptera venom in 200 allergic patients followed for up to 3 years. Bousquet J, et al. **J Allergy Clin Immunol** 1989 Dec;84(6 Pt 1):944–50

An HLA-associated nonresponsiveness to mellitin: a component of bee venom. Lympany P, et al. **J Allergy Clin Immunol** 1990 Aug;86(2):160–70

Structural analysis of the interaction of apamin with Ia and its recognition by Ad- or Ab-restricted mouse T cells. Regnier-Vigouroux A, et al. **J Immunol** 1989 Nov 15; 143(10):3167–74

A method to generate antigen-specific suppressor T cells in vitro from peripheral blood T cells of honey bee venom-sensitive, allergic patients. Carini C, et al. **J Immunol Methods** 1990 Mar 9;127(2):221–33

Epitope analysis: biotinylated short peptides as inhibitors of anti-peptide antibody. Von Grünigen R, et al. **J Immunol Methods** 1989 Dec 20;125(1–2):143–6

Identification of antigenic residues on apamin recognized by polyclonal antibodies. Defendini ML, et al. **Mol Immunol** 1990 Jan;27(1):37–44

Epitope mapping of apamin by means of monoclonal antibodies raised against free or carrier-coupled peptide. Defendini ML, et al. **Mol Immunol** 1990 Jun;27(6):551–8

[The Pharmacia CAP system as a new measure of specific IgE. Application in the diagnosis of hypersensitivity to the venom of the Vespula wasp] Sabbah A, et al. **Allerg Immunol (Paris)** 1990 May;22(5):173–8 (Eng. Abstr.) **(Fre)**

ISOLATION & PURIFICATION

Isolation and characterization of the 32.5 kDa protein from the venom of an endoparasitic wasp. Taylor T, et al. **Biochim Biophys Acta** 1990 Jul 20;1035(1):37–43

[Preparation of highly-purified melittin from bee venom by an affinity chromatography method] Kostrzhevs'ka OG, et al. **Ukr Biokhim Zh** 1989 Sep-Oct;61(5):85–7 (Eng. Abstr.) **(Ukr)**

METABOLISM

Specific binding properties of 125I-apamin in various structures of the rat central nervous system. Janicki PK. **Acta Physiol Pol** 1989 Mar-Apr;40(2):235–9

Computer assisted quantitative densitometric analysis of 125I-apamin binding sites in the central nervous system. Janicki PK, et al. **Acta Physiol Pol** 1989 Mar-Apr; 40(2):240–9

[125I]azidosalicylyl melittin binding domains: evidence for a polypeptide receptor on the gastric (H+ + K+)ATPase. Cuppoletti J. **Arch Biochem Biophys** 1990 May 1; 278(2):409–15

Melittin inhibition of the gastric (H+ + K+) ATPase and photoaffinity labeling with [125I]azidosalicylyl melittin. Cuppoletti J, et al. **Arch Biochem Biophys** 1989 Nov 15; 275(1):263–70

Melittin binding to mixed phosphatidylglycerol/phosphatidylcholine membranes. Beschiaschvili G, et al. **Biochemistry** 1990 Jan 9;29(1):52–8

Mastoparan interacts with the carboxyl terminus of the alpha subunit of Gi. Weingarten R, et al. **J Biol Chem** 1990 Jul 5;265(19):11044–9

Calcium-induced shape change of calmodulin with mastoparan studied by solution X-ray scattering. Yoshino H, et al. **J Biol Chem** 1989 Nov 25;264(33):19706–9

Characterization of apamin-binding protein associated with a Ca2+ -activated K+ channel. Marquèze B, et al. **J Protein Chem** 1989 Jun;8(3):425–7

PHARMACOLOGY

Melittin inhibition of the gastric (H+ + K+) ATPase and photoaffinity labeling with [125I]azidosalicylyl melittin. Cuppoletti J, et al. **Arch Biochem Biophys** 1989 Nov 15; 275(1):263–70

Mastoparan, a wasp venom, activates platelets via pertussis toxin-sensitive GTP-binding proteins. Ozaki Y, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):779–85

Melittin stimulates liver glycogenolysis and the release of prostaglandin D2 and thromboxane B2. García-Sáinz JA, et al. **Biochem J** 1990 Jul 1;269(1):273–5

The actions of melittin on membranes. Dempsey CE. **Biochim Biophys Acta** 1990 May 7;1031(2):143–61 (93 ref.)

Electron microscopic observation of the aggregation of membrane proteins in human erythrocyte by melittin. Hui SW, et al. **Biochim Biophys Acta** 1990 Apr 30; 1023(3):335–40

Interaction of wasp venom mastoparan with biomembranes. Katsu T, et al. **Biochim Biophys Acta** 1990 Aug 24; 1027(2):185–90

Effects of the wasp venom peptide, mastoparan, on a phosphoinositide-specific phospholipase C purified from rabbit brain membranes. Wallace MA, et al. **Biochim Biophys Acta** 1989 Dec 18;1006(3):311–6

Anti-inflammatory activity of bee venom peptide 401 (mast cell degranulating peptide) and compound 48/80 results from mast cell degranulation in vivo. Banks BE, et al. **Br J Pharmacol** 1990 Feb;99(2):350–4

Glibenclamide and procaine, but not apamin, inhibit the relaxant responses to Ro 31-6930 in guinea-pig taenia caeci. Perkins RS, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:808P

In vitro cytotoxicity of Rhodnius prolixus hemolytic factor and mellitin towards different trypanosomatids. Azambuja P, et al. **Braz J Med Biol Res** 1989;22(5):597–9

Neomycin inhibits mastoparan-induced lactate dehydrogenase release, ethidium bromide accumulation, and intracellular fluorescein depletion in MDCK cells. Eng SP, et al. **Cell Biol Toxicol** 1990 Jan;6(1):95–104

Antibacterial and antimalarial properties of peptides that are cecropin-melittin hybrids. Boman HG, et al. **FEBS Lett** 1989 Dec 18;259(1):103–6

Mastoparan inhibits phosphoinositide hydrolysis via pertussis toxin-insensitive [corrected] G-protein in human astrocytoma cells [published erratum appears in FEBS Lett 1990 Apr 9;263(1):187] Nakahata N, et al. **FEBS Lett** 1990 Jan 15;260(1):91–4

Regional expression of a MCD-peptide and dendrotoxin I-sensitive voltage-dependent potassium channel in rat brain. Séquier JM, et al. **FEBS Lett** 1990 Apr 9;261(1):163–5

Dendrotoxin and charybdotoxin increase the cytosolic concentration of free Ca2+ in cerebrocortical synaptosomes: an effect not shared by apamin. Tibbs GR, et al. **FEBS Lett** 1989 Sep 11;255(1):159–62

Mastoparan, a peptide toxin from wasp venom, stimulates glycogenolysis mediated by an increase of the cytosolic free Ca2+ concentration but not by an increase of cAMP in rat hepatocytes. Tohkin M, et al. **FEBS Lett** 1990 Jan 29;260(2):179–82

Isolation, partial purification and pharmacodynamics of a slow contractile substance in the venom sac extract of the wasp Vespa cincta Fabr. Sarangi B, et al. **Indian J Exp Biol** 1990 Jun;28(6):557–61

Effect of staphylococcal delta-toxin and bee venom peptide melittin on leukotriene induction and metabolism of human polymorphonuclear granulocytes. Raulf M, et al. **Infect Immun** 1990 Aug;58(8):2678–82

Regulation of Gi and Go by mastoparan, related amphiphilic peptides, and hydrophobic amines. Mechanism and structural determinants of activity. Higashijima T, et al. **J Biol Chem** 1990 Aug 25;265(24):14176–86

Structure-activity relationships of philanthotoxin analogs and polyamines on N-methyl-D-aspartate and nicotinic acetylcholine receptors. Anis N, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):764–73

Inhibition of rat brain glutamate receptors by philanthotoxin. Ragsdale D, et al. **J Pharmacol Exp Ther** 1989 Oct; 251(1):156–63

Effect of microinjections of apamin into the A10 dopamine region of rats: a behavioral and neurochemical analysis. Steketee JD, et al. **J Pharmacol Exp Ther** 1990 Aug; 254(2):711–9

A K+ channel in Xenopus nerve fibres selectively blocked by bee and snake toxins: binding and voltage-clamp experiments. Bräu ME, et al. **J Physiol (Lond)** 1990 Jan; 420:365–85

Mastoparan increases membrane bound phosphatidylinositol kinase and phosphatidylinositol 4-monophosphate kinase activities in Madin-Darby canine kidney cells. Eng SP, et al. **Life Sci** 1990;46(4):273–9

Inhibition of alpha-aminoisobutyric acid uptake by mastoparan in Madin-Darby Canine Kidney cells. Eng SP, et al. **Life Sci** 1990;46(12):865–73

Spermine and philanthotoxin potentiate excitatory amino acid responses of Xenopus oocytes injected with rat and chick brain RNA. Brackley P, et al. **Neurosci Lett** 1990 Jun 22; 114(1):51–6

[Preliminary study of the comparison of histamine liberation performed using an antigen bound to a disc and a soluble antigen] Sabbah A, et al. **Allerg Immunol (Paris)** 1989 Nov; 21(9):352–3 (Eng. Abstr.) **(Fre)**

[Prolongation of distal (D.L.) and proximal (P.L.) latencies in the sciatic nerve of the rat after hymenoptera venom injection] Fabre F, et al. **J Toxicol Clin Exp** 1989 Nov-Dec; 9(6):423–5 **(Fre)**

[Effects of mellitic acid on matrix-induced, ectopic osteogenesis in the rat] Rüther W, et al. **Z Orthop** 1989 Nov-Dec;127(6):706–10 (Eng. Abstr.) **(Ger)**

[Interaction of melittin with model membranes: effect on the size and permeability of liposomes] Kostrzhevskaia EG, et al. **Ukr Biokhim Zh** 1989 Sep-Oct;61(5):77–84 (Eng. Abstr.) **(Rus)**

[The effect of anions on the hemolytic activity of melittin] Sabirov RZ, et al. **Ukr Biokhim Zh** 1990 Jan-Feb; 62(1):87–91 (Eng. Abstr.) **(Rus)**

[Ionic selectivity of melittin-modified flat lipid bilayers] Sabirov RZ, et al. **Ukr Biokhim Zh** 1990 Jan-Feb; 62(1):82–7 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

The conformational status of a protein influences the aerobic photolysis of its tryptophan residues: melittin, beta-lactoglobulin and the crystallins. Rao SC, et al. **Photochem Photobiol** 1990 Mar;51(3):357–62

THERAPEUTIC USE

The relationship between anti-IgE auto-antibodies and the IgE response to wasp venom during immunotherapy. Kemeny DM, et al. **Clin Exp Allergy** 1990 Jan;20(1):67–9

[The effect of dilutions of Apis mellifica and Apium virus on ultraviolet light-induced erythema in the guinea pig] Bildet J, et al. **Ann Pharm Fr** 1989;47(1):24–32 (Eng. Abstr.) **(Fre)**

TOXICITY

Quantity, analysis, and lethality of European and Africanized honey bee venoms. Schumacher MJ, et al. **Am J Trop Med Hyg** 1990 Jul;43(1):79–86

[Hepatotoxicity of oriental hornet venom] Neuman MG, et al. **Harefuah** 1990 Jan 15;118(2):78–80 (Eng. Abstr.) **(Heb)**

BEER

Identification of nonalcoholic and alcoholic beers: effects of consumption practices and beer brand. Martin CS, et al. **Addict Behav** 1990;15(1):89–93

Beer mitigates some effects of copper deficiency in rats. Kleway LM, et al. **Am J Clin Nutr** 1990 May;51(5):869–72

Thiamin in beer: a health promotion perspective. Binns CW, et al. **Community Health Stud** 1989;13(3):301–5

Cancer incidence among Swedish brewery workers. Carstensen JM, et al. **Int J Cancer** 1990 Mar 15;45(3):393–6 (35 ref.)

ADVERSE EFFECTS

Nutritional epidemiology of cancer of the esophagus. Graham S, et al. **Am J Epidemiol** 1990 Mar;131(3):454–67

Alcohol, beer and cancer of the pancreas. Bouchardy C, et al. **Int J Cancer** 1990 May 15;45(5):842–6

Maternal beer drinking: offspring growth and brain myelination. Lancaster FE, et al. **Neurotoxicology** 1989 Fall;10(3):407–15

ANALYSIS

Detection and estimation of the barley prolamin content of beer and malt to assess their suitability for patients with coeliac disease. Ellis HJ, et al. **Clin Chim Acta** 1990 Aug 15;189(2):123–30

Lead in alcoholic beverages: a second survey. Smart GA, et al. **Food Addit Contam** 1990 Jan-Feb;7(1):93–9

Determination of fungistatic quaternary ammonium compounds in beverages and water samples by high-performance liquid chromatography. Suortti T, et al. **J Chromatogr** 1990 May 16;507:421–5

Free radicals in stouts and ales [letter] Hunter C, et al. **Med J Aust** 1989 Oct 2;151(7):417–8

Some considerations with regard to the first results about volatile nitrosamine contents in some Cuban foods. García Roché MO, et al. **Nahrung** 1990;34(5):439–41

Some considerations about the tyramine content of some Cuban beers and wines. Vidaud Z, et al. **Nahrung** 1989; 33(8):793–4

TOXICITY

The effect of ethanol upon early development in mice and rats. XIV. The effect of acute intoxication with beer and wine upon preimplantation development in rats. Fazakas-Todea I. **Morphol Embryol (Bucur)** 1989 Oct-Dec; 35(4):241–3

BEES

see related HONEY

Prevalence of allergy to Hymenoptera stings. Charpin D, et al. **Allergy Proc** 1990 Jan-Feb;11(1):29–32

Local reactions to stinging insects (Hymenoptera). Wright DN, et al. **Allergy Proc** 1990 Jan-Feb;11(1):23–8 (42 ref.)

Bee venom allergy. Beard L. **Aust Fam Physician** 1990 Jan; 19(1):43, 45–6

Ant, bee, and wasp stings. Elgart GW. **Dermatol Clin** 1990 Apr;8(2):229–36 (37 ref.)

Relapsing anaphylaxis to bee sting in a patient treated with beta-blocker and Ca blocker [letter] Kivity S, et al. **J Allergy Clin Immunol** 1990 Mar;85(3):669–70

Stings and bites. Tips on coexisting comfortably with the insects. Holmes HS. **Postgrad Med** 1990 Jul;88(1):75–8

[Eye injury caused by bee sting] Surkova VK, et al. **Vestn Oftalmol** 1989 Nov-Dec;105(6):71–2 **(Rus)**

ANALYSIS

Apidaecins: antibacterial peptides from honeybees. Casteels P, et al. **EMBO J** 1989 Aug;8(8):2387–91

Z-band proteins in the flight muscle and leg muscle of the honeybee. Saide JD, et al. **J Muscle Res Cell Motil** 1990 Apr;11(2):125-36

Antibodies to the mammalian adhesion molecule J1/tenascin and its carbohydrate epitope L2/HNK-1 label the receptor lymph cavities of insect sensilla. Martini R. **Tissue Cell** 1989;21(5):639-45

DRUG EFFECTS

The formamidine amitraz as a hyperglycemic alpha-agonist in worker honeybees (Apis mellifera mellifera L.) in vivo. Cascino P, et al. **Biomed Environ Sci** 1989 Jun;2(2):106-14

The "survival hormones": azelaic and pimelic acids, suppress the stress elicited by isolation conditions on the steroids and phospholipids of adult worker honeybees. Jorand JP, et al. **Horm Metab Res** 1989 Oct;21(10):553-7

ENZYMOLOGY

Allosteric properties, substrate specificity, and subsite affinities of honeybee alpha-glucosidase I. Kimura A, et al. **J Biochem (Tokyo)** 1990 May;107(5):762-8

The kinetics and inhibition of p-nitrophenylacetate-hydrolysing esterases in a solitary bee, Megachile rotundata (Fab.). Frohlich DR, et al. **Xenobiotica** 1990 May;20(5):481-7

GENETICS

Glycerol-3-phosphate dehydrogenase (G-3-PDH; EC 1.1.1.8) variation in adult Plebeia droryana bees (Apidae, Hymenoptera). Machado MF, et al. **Biochem Genet** 1989 Aug;27(7-8):481-6

Heat stress induced enhancement of heat shock protein gene activity in the honey bee (Apis mellifera). Severson DW, et al. **Experientia** 1990 Jul 15;46(7):737-9

Apis mellifera cytoplasmic elongation factor 1 alpha (EF-1 alpha) is closely related to Drosophila melanogaster EF-1 alpha. Walldorf U, et al. **FEBS Lett** 1990 Jul 16; 267(2):245-9

Parental analysis of introgressive hybridization between African and European honeybees using nuclear DNA RFLPs. Hall HG. **Genetics** 1990 Jul;125(3):611-21

The CO-I and CO-II region of honeybee mitochondrial DNA: evidence for variation in insect mitochondrial evolutionary rates. Crozier RH, et al. **Mol Biol Evol** 1989 Jul;6(4):399-411

Comparison of homeobox-containing genes of the honeybee and Drosophila. Walldorf U, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9971-5

GROWTH & DEVELOPMENT

Caste and metamorphosis: hemolymph titers of juvenile hormone and ecdysteroids in last instar honeybee larvae. Rachinsky A, et al. **Gen Comp Endocrinol** 1990 Jul; 79(1):31-8

IMMUNOLOGY

Predictive value of venom-specific IgE, IgG and IgG subclass antibodies in patients on immunotherapy with honey bee venom. Müller U, et al. **Allergy** 1989 Aug; 44(6):412-8

Mass spectrometric identification of peptides present in immunized and parasitised hemolymph from honeybees without purification. Craig AG, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):637-43

Isolation and characterization of abaecin, a major antibacterial response peptide in the honeybee (Apis mellifera). Casteels P, et al. **Eur J Biochem** 1990 Jan 26; 187(2):381-6

METABOLISM

Juvenile hormone titer in capped worker brood of Apis mellifera and reproduction in the bee mite Varroa jacobsoni. Rosenkranz P, et al. **Gen Comp Endocrinol** 1990 May;78(2):189-93

A potent antibacterial protein in royal jelly. Purification and determination of the primary structure of royalisin. Fujiwara S, et al. **J Biol Chem** 1990 Jul 5;265(19):11333-7

PARASITOLOGY

Honey bee mortality due to tracheal mite parasitism. Royce LA, et al. **Parasitology** 1990 Feb;100 Pt 1:147-51

[Development of infestation with Varroa jacobsoni O. in bee colonies in Tunisia] Ritter W, et al. **Berl Munch Tierarztl Wochenschr** 1990 Apr 1;103(4):109-11 (Eng. Abstr.) **(Ger)**

[Experiences with varroatosis control (field cases)] Sabolic M, et al. **Tierarztl Prax** 1989;17(4):426-9 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Chloride enters glial cells and photoreceptors in response to light stimulation in the retina of the honey bee drone. Coles JA, et al. **GLIA** 1989;2(5):287-97

Amplification of small signals by voltage-gated sodium channels in drone photoreceptors. Coles JA, et al. **J Comp Physiol [A]** 1989 Apr;165(1):109-18

Evidence for light-induced release of Ca2+ from intracellular stores in bee photoreceptors. Ziegler A, et al. **Neurosci Lett** 1990 Mar 26;111(1-2):87-91

BEETLES

Oedemerid blister beetle dermatosis: a review. Nicholls DS, et al. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):815-9 (21 ref.)

Field bioassay to evaluate contact and residual toxicities of insecticides to carabid beetles (Coleoptera: Carabidae). Floate KD, et al. **J Econ Entomol** 1989 Dec;82(6):1543-7

[The dung beetle, Maladera matrida, as a new otologic nuisance] Roth Y. **Harefuah** 1989 May 1;116(9):468-9 (Eng. Abstr.) **(Heb)**

[Beetles as biological agents in fly control] Tagi-zade TA, et al. **Med Parazitol (Mosk)** 1989 Jul-Aug;(4):91 (Eng. Abstr.) **(Rus)**

ANALYSIS

The primary structure of the hypertrehalosemic neuropeptide from tenebrionid beetles: a novel member of the AKH/RPCH family. Gäde G, et al. **Peptides** 1990 May-Jun;11(3):455-9

ANATOMY & HISTOLOGY

Effects of pyrimidine-2-thiol on the ovarian histology of Epilachna vigintioctopunctata (Fabr.) (Coleoptera: Coccinellidae). Sood V, et al. **Folia Morphol (Praha)** 1989; 37(4):402-6

ENZYMOLOGY

Measurement of protein phosphorylation by covalent modification of firefly luciferase. Jenkins TM, et al. **Biochem Soc Trans** 1990 Jun;18(3):463-4

Production of translatable firefly luciferase mRNA in vitro from cloned cDNA. Sala-Newby G, et al. **Biochem Soc Trans** 1990 Jun;18(3):459-60

Targeting of cloned firefly luciferase to yeast mitochondria. Aflalo C. **Biochemistry** 1990 May 22;29(20):4758-66

New approaches to the preparation and application of firefly luciferase. Filippova NY, et al. **J Biolumin Chemilumin** 1989 Jul;4(1):419-22

Luciferase of Luciola mingrelica fireflies. Kinetics and regulation mechanism. Ugarova NN. **J Biolumin Chemilumin** 1989 Jul;4(1):406-18

Introduction to beetle luciferases and their applications. Wood KV, et al. **J Biolumin Chemilumin** 1989 Jul; 4(1):289-301 (31 ref.)

GENETICS

Expression of the gene encoding firefly luciferase in insect cells using a baculovirus vector. Hasnain SE, et al. **Gene** 1990 Jul 2;91(1):135-8

From Luc and Phot genes to the hospital bed. Campbell AK, et al. **J Biolumin Chemilumin** 1990 Apr-Jun;5(2):131-9

Boll weevil testis-specific cDNA. Trewitt PM, et al. **Nucleic Acids Res** 1990 Jun 25;18(12):3646

GROWTH & DEVELOPMENT

Structural homology of identified motoneurones in larval and adult stages of hemi- and holometabolous insects. Breidbach O, et al. **J Comp Neurol** 1990 Jul 15; 297(3):392-409

METABOLISM

The metabolic neuropeptides of the corpus cardiacum from the potato beetle and the American cockroach are identical. Gäde G, et al. **Peptides** 1989 Nov-Dec;10(6):1287-9

Cantharidin content of two species of Oklahoma blister beetles associated with toxicosis in horses [published erratum appears in Vet Hum Toxicol 1989 Dec;31(6):554] Edwards WC, et al. **Vet Hum Toxicol** 1989 Oct;31(5):442-4

MICROBIOLOGY

Evolution in Oryctes baculovirus: rate and types of genomic change. Crawford AM, et al. **Virology** 1990 Jan; 174(1):294-8

PARASITOLOGY

New canestriniid mites (Acari, Astigmata, Canestriniidae) associated with Scarabaeidae and Cerambycidae (Insecta, Coleoptera) from the Indo-Australian region. Haitlinger R. **Wiad Parazytol** 1989;35(6):585-601

New canestriniid mites (Acari, Astigmata, Canestriniidae) associated with beetles of the genera Oryctes, Trichogomphus and Pentodon (Insecta, Coleoptera, Scarabaeidae, Dynastinae). Haitlinger R. **Wiad Parazytol** 1989;35(4):337-55

PHYSIOLOGY

Firefly flashes and royal flushes: life in a full house. Hastings JW. **J Biolumin Chemilumin** 1989 Jul;4(1):29-30

Bioluminescent click beetles revisited. Wood KV, et al. **J Biolumin Chemilumin** 1989 Jul;4(1):31-9

Urethane as an inhibitor of the firefly light reaction. Nehls SM, et al. **Life Sci** 1989;45(23):2225-31

Defensive spray of the bombardier beetle: a biological pulse jet. Dean J, et al. **Science** 1990 Jun 8;248(4960):1219-21

[Free course of circadian rhythms in Trigonoscelis gigas beetles after space flight] Alpatov AM, et al. **Kosm Biol Aviakosm Med** 1989 Nov-Dec;23(6):31-3 (Eng. Abstr.) **(Rus)**

BEGGIATOACEAE

METABOLISM

Respiratory-driven Na+ electrical potential in the bacterium Vitreoscilla. Efiok BJ, et al. **Biochemistry** 1990 May 15; 29(19):4734-9

Oxygen inhibition of globin gene transcription and bacterial haemoglobin synthesis in Vitreoscilla. Dikshit KL, et al. **J Gen Microbiol** 1989 Oct;135 (Pt 10):2601-9

Evidence for partial export of Vitreoscilla hemoglobin into the periplasmic space in Escherichia coli. Implications for protein function. Khosla C, et al. **J Mol Biol** 1989 Nov 5;210(1):79-89

BEHAVIOR

see related
GENETICS, BEHAVIORAL

Intelligence and behaviour and motor vehicle accident mortality. O'Toole BI. **Accid Anal Prev** 1990 Jun; 22(3):211-21

Behavioural changes in intravenous drug users in Geneva: rise and fall of HIV infection, 1980-1989. Robert CF, et al. **AIDS** 1990 Jul;4(7):657-60

Monoamine metabolites in cerebrospinal fluid and behavioral ratings in patients with early and late onset of Alzheimer dementia. Bråne G, et al. **Alzheimer Dis Assoc Disord** 1989 Fall;3(3):148-56

Absence of behavioral differences in young normotensive adults as a function of parental history of hypertension. McCann BS, et al. **Am J Hypertens** 1990 Mar;3(3):225-9

Pain as a metaphor [editorial] Johnson EW. **Am J Phys Med Rehabil** 1990 Jun;69(3):111

Human behavior and the communicable diseases of childhood. Dunn FL. **Am J Public Health** 1990 Feb; 80(2):141-2 (21 ref.)

Neuropsychological impairments associated with lesions caused by tumor or stroke. Anderson SW, et al. **Arch Neurol** 1990 Apr;47(4):397-405

Subsequent behavior of users of an arthritis information telephone service. Maisiak R, et al. **Arthritis Rheum** 1990 Feb;33(2):212-8

Behavioral and physiological responses of stayers and quitters in underwater isolation. Forgays DG. **Aviat Space Environ Med** 1989 Oct;60(10 Pt 1):937-42

Relationships between happiness, behavioural status and dependency on others in elderly patients. Eddington C, et al. **Br J Clin Psychol** 1990 Feb;29 (Pt 1):43-50

Personality factors and the behaviour patterns in seamen suffering from ulcer disease. Jerzemowski J. **Bull Inst Marit Trop Med Gdynia** 1989;40(1-2):27-33

The prevalence of problem behaviour in elderly residents of long term care institutions. Rockwood K, et al. **Can J Public Health** 1989 Jul-Aug;80(4):302-3

Assessment and management of behavioral disturbances in Alzheimer's disease. Teri L, et al. **Compr Ther** 1990 May; 16(5):36-42 (14 ref.)

Behavioral changes in working chronic schizophrenic patients. Esser AH. **Dis Nerv Syst** 1967 Jul;28(7 Pt 1):441-7

Are the behavioural states of the newborn comparable to those of the fetus? Pillai M, et al. **Early Hum Dev** 1990 Apr;22(1):39-49

Whys and whats of wandering. Hirst ST, et al. **Geriatr Nurs (New York)** 1989 Sep-Oct;10(5):237-8

Fooling with mother nature. Gaylin W. **Hastings Cent Rep** 1990 Jan-Feb;20(1):17-21

Biobehavioral aspects of cardiovascular disease: progress and prospects. Schneiderman N, et al. **Health Psychol** 1989; 8(6):649-76 (150 ref.)

Brief report: the utilization of influencing tactics for the implementation of infection control policies. Seto WH, et al. **Infect Control Hosp Epidemiol** 1990 Mar;11(3):144-50

Behavioural mapping of patients on a stroke unit. Lincoln NB, et al. **Int Disabil Stud** 1989 Oct-Dec;11(4):149-54

People are not passive acceptors of threats to health: endogeneity and its consequences. Briscoe J, et al. **Int J Epidemiol** 1990 Mar;19(1):147-53

Validity and reliability of the dementia behavior disturbance scale. Baumgarten M, et al. **J Am Geriatr Soc** 1990 Mar; 38(3):221-6

Psychoanalytic observation. Spencer JH Jr, et al. **J Am Psychoanal Assoc** 1990;38(2):393-421 (36 ref.)

Establishing a quality improvement process for identification of psychosocial problems in a primary care practice. Bingham RL, et al. **J Gen Intern Med** 1990 Jul-Aug; 5(4):342-6

Empirical clusters of disordered behavior among older psychiatric inpatients. Ownby RL, et al. **J Gerontol** 1990 Jan;45(1):P28-32

Behavioural consequences of hypertension: effects of age and type of antihypertensive agent. Shapiro AP, et al. **J Hum Hypertens** 1989 Dec;3(6):435-42

Smoked marijuana effects on tobacco cigarette smoking behavior. Kelly TH, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):934-44

Comprehension of social-action games in prelinguistic children: levels of participation and effect of adult structure. Platt J, et al. **J Speech Hear Disord** 1990 May; 55(2):315-26

Ritual and free-throw shooting in basketball. Southard D, et al. **J Sports Sci** 1989 Summer;7(2):163–73

Neuroendocrine and behavioral effects of dietary tryptophan restriction in healthy subjects. Delgado PL, et al. **Life Sci** 1989;45(24):2323–32

Clinical assessment and interpretation of abnormal illness behaviour in low back pain. Waddell G, et al. **Pain** 1989 Oct;39(1):41–53

Design of the ICD–10 field trial in German-speaking countries. Dilling H, et al. **Pharmacopsychiatry** 1990 Jun; 23 Suppl 4:142–5

Chapter V (F) of ICD–10: mental, behavioural and developmental disorders—introduction and overview. Dittmann V, et al. **Pharmacopsychiatry** 1990 Jun;23 Suppl 4:137–41 (19 ref.)

Abnormalities of adult personality and behaviour (section F 6)—results of the ICD–10 field trial. Dittmann V, et al. **Pharmacopsychiatry** 1990 Jun;23 Suppl 4:170–2

Mental and behavioural disorders due to psychoactive substance use (section F1): results of the ICD–10 field trial. Winkler G, et al. **Pharmacopsychiatry** 1990 Jun;23 Suppl 4:151–4

Aggregate-level analysis and prediction of midterm senatorial elections in the United States, 1974–1986. Lichtman AJ, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(24):10176–80

Biochemical aspects of suicidal behavior. Traskman-Bendz L, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13 Suppl:S35–44

Diagnostic criteria and behavior patterns in infantile autism. Campbell M, et al. **Psychopharmacol Bull** 1989;25(2):194–7

Cognitive, behavioral and psychological issues in the rheumatological care of the elderly. Wegener ST. **Scand J Rheumatol Suppl** 1989;82:39–49 (50 ref.)

Behavioral and psychophysiological effects of the physical work environment. Stockholm, Sweden, April 1988. Proceedings. **Scand J Work Environ Health** 1990;16 Suppl 1:5–79

On being not completely human [editorial] Yassky D. **Sci Total Environ** 1990 Jun;95:1–5

Street-wise crack research [news] Holden C. **Science** 1989 Dec 15;246(4936):1376–81

The influence of two behavioral regimens on the distribution of sleep and wakefulness in narcoleptic patients. Volk S, et al. **Sleep** 1990 Apr;13(2):136–42

Correlation of chronic low-back pain behavior and muscle function examination of the flexion–relaxation response. Ahern DK, et al. **Spine** 1990 Feb;15(2):92–5

A new approach to the low-back physical examination. Behavioral assessment of mechanical signs. Spratt KF, et al. **Spine** 1990 Feb;15(2):96–102

[Social sciences in the face of AIDS: between silence and too much talk?] Moatti JP, et al. **Cah Sociol Demogr Med** 1989 Jul–Sep;29(3):231–61 (Eng. Abstr.) **(Fre)**

[Biological and behavioral rhythms of patients with schizophrenia. Preliminary study] Damba DB. **Encephale** 1990 Jan–Feb;16(1):3–12 (Eng. Abstr.) **(Fre)**

[Hunger strike in a prison environment] Stroun J. **Rev Med Suisse Romande** 1990 May;110(5):451–6 **(Fre)**

[Is pleasure a risk factor?] Bert G. **Epidemiol Prev** 1988 Dec; 10(37):15–7 **(Ita)**

[The effects of planning leadership behavior on the subordinates' person perception] Arima Y. **Shinrigaku Kenkyu** 1989 Oct;60(4):216–23 (Eng. Abstr.) **(Jpn)**

[Various elements of behavior patterns in obesity] Brodziak A, et al. **Pol Arch Med Wewn** 1987 Sep;78(3):121–9 (Eng. Abstr.) **(Pol)**

[Integrative model of the ontogeny and destruction of human behavior] Scripcaru G, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Apr–Jun;93(2):275–80 (18 ref.) (Eng. Abstr.) **(Rum)**

[The natural prerequisites of individual behavior as a factor in the formation of human individuality] Rusalov VM. **Zh Vyssh Nerv Deiat** 1989 May–Jun;39(3):403–14 (46 ref.) **(Rus)**

[Somatic diseases in suicides with a somatic appeal] Sakić S, et al. **Srp Arh Celok Lek** 1987 Aug–Sep;115(8–9):807–17 (Eng. Abstr.) **(See)**

DRUG EFFECTS

Hypnotics and behavior. Roth T, et al. **Am J Med** 1990 Mar 2;88(3A):43S–46S (28 ref.)

Differential effects of the new central adrenergic agonist modafinil and d-amphetamine on sleep and early morning behaviour in elderlies. Saletu B, et al. **Arzneimittelforschung** 1989 Oct;39(10):1268–73

Behavioral emergencies. Assessment and psychopharmacologic management. Goldberg RJ, et al. **Clin Neuropharmacol** 1989 Aug;12(4):233–48 (95 ref.)

Drugs acting on sigma and phencyclidine receptors: a review of their nature, function, and possible therapeutic importance. Junien JL, et al. **Clin Neuropharmacol** 1989 Oct;12(5):353–74 (131 ref.)

Use of buprenorphine in the treatment of opioid addiction. II. Physiologic and behavioral effects of daily and alternate-day administration and abrupt withdrawal. Fudala PJ, et al. **Clin Pharmacol Ther** 1990 Apr; 47(4):525–34

Neuropsychological effect of lead in occupationally exposed workers: a critical review. Ehle AL, et al. **Crit Rev Toxicol** 1990;20(4):237–55 (38 ref.)

An EEG–behavioral study of sodium hydroxybutyrate in humans. Metcalf DR, et al. **Electroencephalogr Clin Neurophysiol** 1966 May; 20(5):506–12

Neuropsychological profiles of calcium antagonists. Soubrie P. **Fundam Clin Pharmacol** 1989;3 Suppl:71s–78s (40 ref.)

Practical approach to managing behavioral problems in dementia patients. Knopman DS, et al. **Geriatrics** 1990 Apr; 45(4):27–30, 35

Treatment of hypertension in the elderly: II. Cognitive and behavioral function. Results of a Department of Veterans Affairs Cooperative Study. Goldstein G, et al. **Hypertension** 1990 Apr;15(4):361–9

Testing human hair for drugs of abuse. I. Individual dose and time profiles of morphine and codeine in plasma, saliva, urine, and beard compared to drug-induced effects on pupils and behavior. Cone EJ. **J Anal Toxicol** 1990 Jan–Feb;14(1):1–7

Response: behavioral teratology: what's not in a name [letter] Cattabeni F, et al. **Neurotoxicol Teratol** 1989 Jul–Aug; 11(4):329

Origins of behavioral teratology and distinctions between research on pharmaceutical agents and environmental/industrial chemicals. Nelson BK. **Neurotoxicol Teratol** 1990 Jul–Aug;12(4):301–5 (57 ref.)

Neurobehavioral effects of prenatal alcohol: Part II. Partial least squares analysis. Sampson PD, et al. **Neurotoxicol Teratol** 1989 Sep–Oct;11(5):477–91

Neurobehavioral toxicity of long-term exposure to tetrachloroethylene. Seeber A. **Neurotoxicol Teratol** 1989 Nov–Dec;11(6):579–83

Behavioral Teratology: What's Not in a Name: A reply to Cattabeni and Abbracchio. Vorhees CV. **Neurotoxicol Teratol** 1989 Jul–Aug;11(4):325–7

Modulation of lead-induced performance deficit in children by varying signal rate in a serial choice reaction task. Winneke G, et al. **Neurotoxicol Teratol** 1989 Nov–Dec; 11(6):587–92

Cigarettes and marijuana: are there measurable long-term neurobehavioral teratogenic effects? Fried PA. **Neurotoxicology** 1989 Fall;10(3):577–83

Methamphetamine and related drugs: toxicity and resulting behavioral changes in response to pharmacological probes. Seiden LS, et al. **NIDA Res Monogr** 1989;94:146–60 (53 ref.)

Pharmacological and behavioral profile of alpidem as an anxiolytic. Zivkovic B, et al. **Pharmacopsychiatry** 1990 May;23 Suppl 3:108–13 (29 ref.)

Behavioral and physiologic aspects of nicotine dependence: the role of nicotine dose. Henningfield JE, et al. **Prog Brain Res** 1989;79:303–12 (42 ref.)

Subjective and behavioural effects of nicotine in humans: some sources of individual variation. Russell MA. **Prog Brain Res** 1989;79:289–302 (44 ref.)

Psychological performance in anxious patients treated with diazepam. Zimmermann-Tansella C, et al. **Prog Neuropsychopharmacol** 1979;3(4):361–8

3rd meeting of the EBPS. European Behavioural Pharmacology Society. Noordwijkerhout, The Netherlands, June 27th–July 1st 1990. Abstracts. **Psychopharmacology (Berl)** 1990;101 Suppl:S3–64

Subjective and behavioral effects of marijuana the morning after smoking. Chait LD. **Psychopharmacology (Berl)** 1990; 100(3):328–33

Biochemical and behavioural properties of clozapine. Coward DM, et al. **Psychopharmacology (Berl)** 1989;99 Suppl:S6–12 (52 ref.)

Reply to J. R. Hughes, S. T. Higgins, and W. K. Bichel: behavioral "properties" of drugs [comment] Emmett-Oglesby MW. **Psychopharmacology (Berl)** 1989; 99(3):422 Comment on: Psychopharmacology (Berl) 1988;96(4):557.

Neurobehavioral Teratology Society, fourteenth annual meeting. June 7–10, 1990, Victoria, British Columbia, Canada. Program and abstracts. **Teratology** 1990 May; 41(5):603–27

Behavioral indices of neurotoxicity. Tilson HA. **Toxicol Pathol** 1990;18(1 Pt 2):96–104 (27 ref.)

[Ethologic study of the sequelae of prenatal exposure to psychotropic agents] Poshivalov VP, et al. **Farmakol Toksikol** 1989 Sep–Oct;52(5):99–107 (52 ref.) (Eng. Abstr.) **(Rus)**

[Neurobehavioral toxicology] Zbinden G. **Farmakol Toksikol** 1989 Jul–Aug;52(4):5–9 (Eng. Abstr.) **(Rus)**

[Haloperidol decanoate: results of a 6-month open trial in paranoid schizophrenia] Pérez C, et al. **Acta Psiquiatr Psicol Am Lat** 1989 Jul–Dec;35(3–4):111–5 (Eng. Abstr.) **(Spa)**

[The effect of neuroleptics given to the mentally retarded is not sufficiently proved] Beermann B, et al. **Lakartidningen** 1989 Dec 6;86(49):4320 **(Swe)**

PHYSIOLOGY

Primary hypertension, neural tone, and behavior. Role in pressor responses to stress. DeQuattro V. **Am J Hypertens** 1989 Dec;2(12 Pt 2):345S–352S (35 ref.)

Human fetal behavioral states after vibratory stimulation. Gagnon R, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1470–6

The origins of utilization behaviour. Shallice T, et al. **Brain** 1989 Dec;112 (Pt 6):1587–98

Topographic mapping of cerebral blood flow and behavior. Trivedi SS, et al. **Comput Biol Med** 1989;19(4):219–29

The influence of behavioural states on cerebral blood flow velocity patterns in stable preterm infants. Ramaekers VT, et al. **Early Hum Dev** 1989 Dec;20(3–4):229–46

Endocrine and behavioral responses to psychological stress in hyperandrogenic women. Modell E, et al. **Fertil Steril** 1990 Mar;53(3):454–9

Complementary functions of the two brain hemispheres: comparisons with earlier conceptions and implications for individual and society. Zeier H. **Int J Neurosci** 1989 Jul; 47(1–2):175–9

Serotonin and its effects on human behavior. **J Clin Psychiatry** 1990 Apr;51 Suppl:1–70

Amphibian model system for problems in behavioral neuroendocrinology. Moore FL. **J Exp Zool Suppl** 1990; 4:157–8 (14 ref.)

Iguana iguana: a model species for studying the ontogeny of behavior/hormone interactions. Phillips JA. **J Exp Zool Suppl** 1990;4:167–9 (27 ref.)

Neurobehavioral changes with caudate lesions [letter; comment] Krishnan KR, et al. **Neurology** 1989 Oct; 39(10):1410–1 Comment on: Neurology 1989 Mar;39(3):349–54.

Effects on behavior state of prone versus seated positioning for infants with gastroesophageal reflux. Orenstein SR. **Pediatrics** 1990 May;85(5):765–7

Strategies in behavioral research on affective disorders: principles, problems and pitfalls. Smith DF. **Pharmacol Toxicol** 1990;66 Suppl 3:139–43 (33 ref.)

Slow potentials of the cerebral cortex and behavior. Birbaumer N, et al. **Physiol Rev** 1990 Jan;70(1):1–41 (402 ref.)

Aspects concerning the integration and destructuring of human behaviour. Scripcaru GH, et al. **Physiologie** 1989 Jul–Sep;26(3):161–7

Psychiatric perspectives of brain, behavior, and the immune system. Stein M, et al. **Res Publ Assoc Res Nerv Ment Dis** 1990;68:161–9 (32 ref.)

Neural mechanisms involved in cardiovascular control during affective behaviour. Spyer KM. **Trends Neurosci** 1989 Dec;12(12):506–13 (32 ref.)

Behavioral effects of increased CO2 load in divers. Henning RA, et al. **Undersea Biomed Res** 1990 Mar;17(2):109–20

[Neurobehavioral evaluation of term and preterm neonates] Di Costanzo A, et al. **Riv Eur Sci Med Farmacol** 1989 Feb; 11(1):25–8 (Eng. Abstr.) **(Ita)**

BEHAVIOR, ADOLESCENT see **ADOLESCENT BEHAVIOR**

BEHAVIOR, ANIMAL

Diallel genetic analysis of the elements of paradise fish's (Macropodus opercularis L.) behavior in familiar and novel situations. Gerlai R, et al. **Acta Biol Hung** 1989; 40(1–2):67–106

Behavior, body types and the irreversibility of evolution. Aboitiz F. **Acta Biotheor (Leiden)** 1990 Jun;38(2):91–101

Different behavioral reactivity of 5-HT1 sites between killer and non-killer rats after midbrain raphe lesion. Cuadra GR, et al. **Acta Physiol Pharmacol Latinoam** 1989;39(2):91–100

Positional behavior in Saimiri boliviensis and Ateles geoffroyi. Fontaine R. **Am J Phys Anthropol** 1990 Aug; 82(4):485–508

Ambient temperature and food costs: effects on behavior patterns in rats. Collier GH, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):R1328–34

Influence of cage size on heart rate and behavior in rhesus monkeys. Line SW, et al. **Am J Vet Res** 1989 Sep; 50(9):1523–6

Social interactions of mice with congenital Toxoplasma infection. Arnott MA, et al. **Ann Trop Med Parasitol** 1990 Apr;84(2):149–56

Animal memory and learning. Spear NE, et al. **Annu Rev Psychol** 1990;41:169–211 (240 ref.)

The behavioral genetics of Caenorhabditis elegans. Wolinsky E, et al. **Behav Genet** 1990 Mar;20(2):169–89 (62 ref.)

Lesions of the caudal pontine reticular nucleus reduce spontaneous behavioural activity of rats differently in dorsal and ventral parts of the nucleus. Müller G, et al. **Biomed Biochim Acta** 1989;48(10):807–16

Heart rate fluctuations in rabbits during different behavioural states. Zwiener U, et al. **Biomed Biochim Acta** 1990; 49(1):59–68

Behaviour of laying hens in cages with nest sites. Appleby MC. **Br Poult Sci** 1990 Mar;31(1):71–80

Behaviour of laying hens in a deep litter house. Appleby MC, et al. **Br Poult Sci** 1989 Sep;30(3):545–53

Fear of humans by laying hens in different tiers of a battery: behavioural and physiological responses. Barnett JL, et al. **Br Poult Sci** 1989 Sep;30(3):497–504

Behavioural differences between laying hen populations selected for high and low efficiency of food utilisation. Braastad BO, et al. **Br Poult Sci** 1989 Sep;30(3):533–44

Behavioural consequences of partial beak amputation (beak trimming) in poultry. Duncan IJ, et al. **Br Poult Sci** 1989 Sep;30(3):479–88

Relationships between fear of humans, productivity and cage position of laying hens. Hemsworth PH, et al. **Br Poult Sci** 1989 Sep;30(3):505–18

Effects of both 6-hydroxydopamine-induced and electrolytic lesion of the substantia nigra on the rotational behavior and audiogenic seizures in the rat. Garcia-Cairasco N, et al. **Braz J Med Biol Res** 1989;22(5):617-29

Alleviation of hysteria in laying hens with dietary tryptophan. Laycock SR, et al. **Can J Vet Res** 1990 Apr; 54(2):291-5

Isolation distress and maternal comfort responses of two-week-old rat pups reared in social isolation. Hofer MA, et al. **Dev Psychobiol** 1989 Sep;22(6):553-66

A primate model of Huntington's disease: behavioral and anatomical studies of unilateral excitotoxic lesions of the caudate-putamen in the baboon. Hantraye P, et al. **Exp Neurol** 1990 May;108(2):91-104

Hypothalamic histamine modulates adaptive behavior of rats at high environmental temperature. Fujimoto K, et al. **Experientia** 1990 Mar 15;46(3):283-5

Adaptation and adaptability of capuchin monkeys. **Folia Primatol (Basel)** 1990;54(3-4):113-228

Use of objects as hammers to open nuts by capuchin monkeys (Cebus apella). Anderson JR. **Folia Primatol (Basel)** 1990; 54(3-4):138-45

Tool use and tool making in wild chimpanzees. Boesch C, et al. **Folia Primatol (Basel)** 1990;54(1-2):86-99

Chimpanzee use of a tool-set to get honey. Brewer SM, et al. **Folia Primatol (Basel)** 1990;54(1-2):100-4

Ecology of the capped langur (Presbytis pileatus) in Assam, India. Choudhury A. **Folia Primatol (Basel)** 1989; 52(1-2):88-92

Early behavioral development in capuchins (Cebus). Fragaszy DM. **Folia Primatol (Basel)** 1990;54(3-4):119-28

Social processes affecting the appearance of innovative behaviors in capuchin monkeys. Fragaszy DM, et al. **Folia Primatol (Basel)** 1990;54(3-4):155-65 (30 ref.)

Variability and adaptability in the genus Cebus. Fragaszy DM, et al. **Folia Primatol (Basel)** 1990;54(3-4):114-8 (29 ref.)

Birth of a Barbary macaque (Macaca sylvanus): acoustic and behavioural features. Hammerschmidt K, et al. **Folia Primatol (Basel)** 1989;52(1-2):78-87

Quantitative approaches to primate morphology. Preuschoft H. **Folia Primatol (Basel)** 1989;53(1-4):82-100 (173 ref.)

Structural convergence between silent bared-teeth display and relaxed open-mouth display in the Tonkean macaque (Macaca tonkeana). Thierry B, et al. **Folia Primatol (Basel)** 1989;52(3-4):178-84

Infanticide in wedge-capped capuchin monkeys, Cebus olivaceus. Valderrama X, et al. **Folia Primatol (Basel)** 1990; 54(3-4):171-6

Tool use in Cebus. Visalberghi E. **Folia Primatol (Basel)** 1990; 54(3-4):146-54 (50 ref.)

Social relations in groups of the black-capped capuchin (Cebus apella) in captivity. Interactions of group-born infants during their second half-year of life. Welker C, et al. **Folia Primatol (Basel)** 1990;54(1-2):16-33

Ecology and conservation of the crowned lemur, Lemur coronatus, at Ankarana, n. Madagascar. With notes on Sanford's lemur, other sympatrics and subfossil lemurs. Wilson JM, et al. **Folia Primatol (Basel)** 1989;52(1-2):1-26

The aye-ayes, Daubentonia madagascariensis, at the Paris Zoological Garden: maintenance and preliminary behavioural observations. Winn RM. **Folia Primatol (Basel)** 1989;52(3-4):109-23

Genetic localization of foraging (for): a major gene for larval behavior in Drosophila melanogaster. de Belle JS, et al. **Genetics** 1989 Sep;123(1):157-63

Variations in hoarding behavior following regional hippocampal lesions in rats. Borker AS, et al. **Indian J Exp Biol** 1990 Jan;28(1):91-2

Study of maternal behaviour in wild mice: avoidance to retrieve young and increase in cannibalic activity. Pandey SC, et al. **Indian J Exp Biol** 1989 Jan;27(1):87-8

Behavioral problems in old dogs: 26 cases (1984-1987). Chapman BL, et al. **J Am Vet Med Assoc** 1990 Mar 15; 196(6):944-6

Cat aggression redirected to people: 14 cases (1981-1987). Chapman BL, et al. **J Am Vet Med Assoc** 1990 Mar 15; 196(6):947-50

Evidence from and about animals. Hannah HW. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1038-9

Curbing vicious dogs: breeds hounded by proposed ordinances [news] Kahler S. **J Am Vet Med Assoc** 1990 May 1;196(9):1358-9, 1365

Prevention and amelioration of stress and consequences of interaction between children and dogs. Riegger MH, et al. **J Am Vet Med Assoc** 1990 Jun 1;196(11):1781-5

A microcomputer-photocell system to monitor periparturient activity of sows and transfer data to remote location. Erez B, et al. **J Anim Sci** 1990 Jan;68(1):88-94

Body temperature of dry cows on pasture: environmental and behavioral effects. Lefcourt AM, et al. **J Dairy Sci** 1989 Nov;72(11):3040-9

Local patterns in human operant behavior and a behaving model to interrelate animal and human performances [see comments] Shimp CP, et al. **J Exp Psychol [Anim Behav]** 1990 Apr;16(2):200-12 Comment in: J Exp Psychol [Anim Behav] 1990 Apr;16(2):213-6; discussion 217-21.

Enduring problems for molecular accounts of operant behavior [comment] Williams BA. **J Exp Psychol [Anim Behav]** 1990 Apr;16(2):213-6; discussion 217-21 Comment on: J Exp Psychol [Anim Behav] 1990 Apr;16(2):200-12.

Evolutionary optimization and neural network models of behavior. Mangel M. **J Math Biol** 1990;28(3):237-56

Opiate withdrawal and the rat locus coeruleus: behavioral, electrophysiological, and biochemical correlates. Rasmussen K, et al. **J Neurosci** 1990 Jul;10(7):2308-17

Behavioural perspectives on piglet survival. Fraser D. **J Reprod Fertil Suppl** 1990;40:355-70 (90 ref.)

Behavioural responses affecting gilt and sow reproduction. Hemsworth PH, et al. **J Reprod Fertil Suppl** 1990;40:343-54 (56 ref.)

Experimental avian PMV-2 infection in a domesticated wild host: daily behavior and effect on activity levels. Goodman BB, et al. **J Wildl Dis** 1990 Jan;26(1):22-7

Delayed postnatal behavioral development in spontaneously epileptic rats and tremor rats, and poor operant performance in spontaneously epileptic rats. Asano Y, et al. **Jikken Dobutsu** 1990 Jan;39(1):69-74

Responses of female rhesus macaques to an environmental enrichment apparatus. Line SW, et al. **Lab Anim** 1990 Jul; 24(3):213-20

Rigid plastic balls as enrichment devices for captive chimpanzees. Bloomsmith MA, et al. **Lab Anim Sci** 1990 May;40(3):319-22

Inexpensive outdoor enclosure for Japanese macaques used in biobehavioral research. Crowley TJ, et al. **Lab Anim Sci** 1989 Sep;39(5):420-4

Rheotaxis of Biomphalaria glabrata on vertical substrates and its role in the recolonization of habitats treated with molluscicides. Jurberg P, et al. **Mem Inst Oswaldo Cruz** 1989 Apr-Jun;83(2):165-74

Progeny of male rats treated with methadone: physiological and behavioural effects. Joffe JM, et al. **Mutat Res** 1990 Apr;229(2):201-11

A new dominant neurological mutant induced in the mouse by ethylene oxide. Lewis SE, et al. **Mutat Res** 1990 Apr; 229(2):135-9

Male-mediated behavioral abnormalities. Lowery MC, et al. **Mutat Res** 1990 Apr;229(2):213-29 (112 ref.)

Effects of lesions of nucleus raphe magnus on behavior of the cat. Wada N. **Nippon Juigaku Zasshi** 1990 Jun; 52(3):643-4

Midazolam induces amnesia in a simple, one-trial, maze-learning task in young chicks. Gilbert DB, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):439-42

Time structure analysis of behavioral acts using a computer pattern recognition system. Kernan WJ Jr, et al. **Pharmacol Biochem Behav** 1989 Dec;34(4):863-9

Measurement and control of pecking response location in the pigeon. Allan RW, et al. **Physiol Behav** 1989 Jun; 45(6):1215-21

Age-related alterations in cardiac response to emotional stress: relations to behavioral reactivity in the rat. Nyakas C, et al. **Physiol Behav** 1990 Feb;47(2):273-80

Population declines in North American birds that migrate to the neotropics. Robbins CS, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7658-62

Attack and defense in rodents as ethoexperimental models for the study of emotion. Blanchard RJ, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989;13 Suppl:S3-14 (36 ref.)

British rabbits: scholarship down [news] Cherfas J. **Science** 1989 Dec 15;246(4936):1384

Behavioural consultants [letter] **Vet Rec** 1989 Sep 9; 125(11):309-10

Behavioural consultants [letter] **Vet Rec** 1989 Aug 26; 125(9):244

Behavioural consultants [letter] Cheetham K. **Vet Rec** 1989 Sep 30;125(14):382

Behaviour of cows in cubicles and its possible relationship with laminitis in replacement dairy heifers. Colam-Ainsworth P, et al. **Vet Rec** 1989 Dec 2; 125(23):573-5

Behaviour of cows in cubicles [letter] David G. **Vet Rec** 1990 Jan 20;126(3):69

Training as an aid to welfare [letter] Hollands C. **Vet Rec** 1989 Dec 2;125(23):585

Behavioural consultants [letter] Hughes I. **Vet Rec** 1989 Oct 14;125(16):425

Behavioural consultants [letter] Keen P, et al. **Vet Rec** 1989 Aug 19;125(8):213

Behavioural consultants [letter] Milligan WA. **Vet Rec** 1989 Sep 23;125(13):357-8

Behavioural consultants [letter] Mugford RA. **Vet Rec** 1989 Sep 16;125(12):333

A simple timing device for use in behavioural studies with grazing animals [letter] O'Shea J. **Vet Rec** 1968 Aug 10; 83(6):154-5

Effect of preslaughter experience on behaviour, plasma cortisol and muscle pH in farmed red deer. Smith RF, et al. **Vet Rec** 1990 Feb 17;126(7):155-8

Dangerous dogs [letter] Walton I. **Vet Rec** 1990 Jun 16; 126(24):610

Bilateral ischiocavernosus myectomy for chronic urine spraying in castrated male cats. Komtebedde J, et al. **Vet Surg** 1990 Jul-Aug;19(4):293-6

Alternatives to single caging of rhesus monkeys (Macaca mulatta) used in research. Reinhardt V, et al. **Z Versuchstierkd** 1989;32(6):275-9

Effects of group size and gentling on behaviour, selected organ masses and blood constituents in female Rivm: TOX rats. van Bergeijk JP, et al. **Z Versuchstierkd** 1990; 33(2):85-90

[NRLO report on research domestic animals (National Council for Agricultural Research). Research relationship humanOanimal deserves hogh priority] Rutgers B. **Tijdschr Diergeneeskd** 1990 May 1;115(9):431-3 **(Dut)**

[Behavior of pet animals] Birmelin I. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun;97(6):243-7 (Eng. Abstr.) **(Ger)**

[Genetic behavioral aspects of agricultural animals] Buchenauer D. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun; 97(6):247-9 (Eng. Abstr.) **(Ger)**

[Behavior of dogs] Feddersen-Petersen D. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun;97(6):231-6 (Eng. Abstr.) **(Ger)**

[Fundamental ethological and ecological aspects for the husbandry of domestic animals, especially for hens] Fölsch DW. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun; 97(6):228-30 (Eng. Abstr.) **(Ger)**

[The behavior of fur animals with special regard to animal welfare efforts] Grauvogl A. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun;97(6):236-9 (Eng. Abstr.) **(Ger)**

[The behavior and the husbandry conditions of small laboratory animals--possibilities and limits of the evaluation of animal rights] Militzer K. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun;97(6):239-43 (Eng. Abstr.) **(Ger)**

[The role of behavioral science in animal welfare in teaching and practical application] Stephan E. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun;97(6):219-20 (Eng. Abstr.) **(Ger)**

[Teaching and advanced training in the field of animal welfare and behavioral science] Unshelm J. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun;97(6):250-3 (Eng. Abstr.) **(Ger)**

[The role of behavioral science in animal welfare, in teaching and practical application: behavior of swine] van Putten G. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun;97(6):225-8 (Eng. Abstr.) **(Ger)**

[Ethological foundations in relation to animal husbandry technics] Zeeb K. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun;97(6):220-5 (Eng. Abstr.) **(Ger)**

[Movement profile analysis--automatic registration and evaluation of the movement patterns of small animals] Wenzel U, et al. **Pharmazie** 1989 Sep;44(9):634-6 (Eng. Abstr.) **(Ger)**

[Methods for the analysis of the psychosocial behavior of the quality of life index in rats with different reconstructions after gastrectomy] Thiede A, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(5):272-5 (Eng. Abstr.) **(Ger)**

[Aging and changes in reproductive behavior in Japanese monkeys (Macaca fuscata)] Itoigawa N. **Jikken Dobutsu** 1990 Apr;39(2):179-83 **(Jpn)**

[Diurnal rhythms of body temperature, heart rate, and behaviour in the stanchioned adult Shiba goats] Matsui K. **Jikken Dobutsu** 1990 Apr;39(2):231-8 (Eng. Abstr.) **(Jpn)**

[The genetic architecture of emotionality in rats using Mendelian cross analysis] Masui S, et al. **Shinrigaku Kenkyu** 1989 Jun;60(2):90-7 (Eng. Abstr.) **(Jpn)**

[A comparison of win-shift and win-stay performance of rats in a radial arm maze] Tsuda Y, et al. **Shinrigaku Kenkyu** 1989 Jun;60(2):109-12 (Eng. Abstr.) **(Jpn)**

[Neural and ethological relations in the evaluation of motor control changes. I. Neural substrates of motricity] Garcia-Cairasco N. **Arq Neuropsiquiatr** 1989 Jun; 47(2):165-71 (32 ref.) (Eng. Abstr.) **(Por)**

[Infanticide in hamadryas baboons] Chalian VG, et al. **Biol Nauki** 1990;(3):99-106 (Eng. Abstr.) **(Rus)**

[Effects of destruction and activation of limbic structures on formation of convulsive and emotional disorders during picrotoxin kindling] Kryzhanovskiĭ GN, et al. **Biull Eksp Biol Med** 1990 Jun;109(6):531-4 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Open field activity in the marine fish Serranus scriba influenced by lindane. Kovačević A, et al. **Act Nerv Super (Praha)** 1990 Mar;32(1):64-5

The behavioural effects of benzodiazepine receptor ligands in mice are inhibited by adamantylamide dipeptide. Sulcová A, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):293-4

Effects of levamisole in three behavioural animal tests. Sulcová A, et al. **Act Nerv Super (Praha)** 1989 Jun; 31(2):109-11

Behavioural teratogenic risk of perinatal administration of dexamethasone in combinations with phenoterol. Tejkalová H, et al. **Act Nerv Super (Praha)** 1989 Oct;31(3):226-7

Correlation between the duration of perphenazine catalepsy and pressure maintained tonic immobility under the influence of beta-sympathotropic agents. Tikal K. **Act Nerv Super (Praha)** 1989 Oct;31(3):175-82

Effects of HR-592, a new derivative of indole, on conditioned behavior. Ichimaru Y, et al. **Acta Med Okayama** 1990 Feb;44(1):35-9

The role of body turn-brightness associations in the effect of scopolamine on response-to-change in the rat. Lukaszewska I, et al. **Acta Neurobiol Exp (Warsz)** 1989; 49(6):381-6

Is it advisable to use sorbitans in the investigation of the brain mechanisms? Romaniuk A, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(5):249–54

Serotonin depletion with P-chlorophenylalanine in the cat: effects on carbachol-induced defensive behavior and regional brain amine content. Romaniuk A, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(4):130–40

Dihydropyridino-sensitive calcium channels in opioid-induced thermic and behavioral effects. Cavicchini E, et al. **Acta Physiol Hung** 1990;75 Suppl:55–6

Neuroleptic profile in behavioral toxicological study. István G. **Acta Physiol Hung** 1990;75 Suppl:135–6

Beta-endorphin-induced behavioural effects: endorphin-catecholamines interactions. Samardžić R, et al. **Acta Physiol Hung** 1990;75 Suppl:253–4

Effects of neurohypophyseal hormones on cocaine-induced behavioral sensitisation. Sarnyai Z, et al. **Acta Physiol Hung** 1990;75 Suppl:255–6

Effect of angiotensin II on the Vogel conflict paradigm and on the content of dopamine and noradrenaline in rat brain. Georgiev V, et al. **Acta Physiol Pharmacol Bulg** 1990; 16(1):32–7

Ovariectomy- and sex hormone-induced changes in the excitability of the CNS: an assessment by EEG paroxysmal activity and behaviour. Nikiforova AS, et al. **Acta Physiol Pharmacol Bulg** 1989;15(4):48–52

Pharmacological data of the atypical neuroleptic compound melperone (Buronil). Christensson EG. **Acta Psychiatr Scand Suppl** 1989;352:7–15

Ethanol and chronic diazepam interactions on conflict behavior in rats. Dalterio SL, et al. **Alcohol** 1989 Sep–Oct; 6(5):409–14

Neurobehavioral studies of ethanol reward and activation. Lewis MJ, et al. **Alcohol** 1990 May–Jun;7(3):213–9 (50 ref.)

Neuronal mechanisms of ethanol sensitivity. Kiianmaa K. **Alcohol Alcohol** 1990;25(2–3):257–62 (35 ref.)

Interaction of ethanol and stress: research with experimental animals—an update. Pohorecky LA. **Alcohol Alcohol** 1990; 25(2–3):263–76 (95 ref.)

Hemodynamic and behavioral effects of angiotensin II in conscious sheep. Breuhaus BA, et al. **Am J Physiol** 1990 May;258(5 Pt 2):R1230–7

Effect of fourth ventricular neuropeptide Y and peptide YY on ingestive and other behaviors. Corp ES, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R317–23

Integrated autonomic and behavioral responses to L/N Ca2(+)-channel blocker omega-conotoxin in conscious rats. Shapira S, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):R427–38

Sedative and hypnotic midazolam–morphine interactions in rats. Kissin I, et al. **Anesth Analg** 1990 Aug;71(2):137–43

Behavioral indicators of sublethal toxicity in rainbow trout. Little EE, et al. **Arch Environ Contam Toxicol** 1990 May–Jun;19(3):380–5

The influence of sodium diethyldithiocarbamate on behavior and EEG in cats and rabbits. Trąbka J, et al. **Arch Immunol Ther Exp (Warsz)** 1971;19(5):567–76

Effects of pantethine, cysteamine and pantothenic acid on open-field behavior and brain catecholamines in rats. Vécsei L, et al. **Arch Int Pharmacodyn Ther** 1989 Jul–Aug; 300:14–21

Central aromatic amines and behavior. III. Correlative analysis of conditioned approach behavior and brain levels of serotonin and catecholamines in monkeys. Wada JA, et al. **Arch Neurol** 1966 Feb;14(2):129–42

Behavioural pharmacology of trans-5-chloro-2-methyl-2,3,3a,12b-tetrahydro-1H-dibenz[2,3:6,7]oxepino-[4,5-c]pyrrolidine maleate, a compound interacting with dopaminergic and serotonergic receptors. Broekkamp CL, et al. **Arzneimittelforschung** 1990 May;40(5):544–9

Study of the effects of oral administration of CDP-choline on open-field behaviour under conditions of chronic hypoxia. Hamdorf G, et al. **Arzneimittelforschung** 1990 May;40(5):519–22

A new psychoactive 5H-2,3-benzodiazepine with a unique spectrum of activity. Horváth K, et al. **Arzneimittelforschung** 1989 Aug;39(8):894–9

Neonatal 6-hydroxydopamine alters the behavior of enriched–impoverished rats in a novel test environment. Saari MJ, et al. **Behav Neurosci** 1990 Jun;104(3):430–7

Behavioral and neuroanatomical effects of prenatal, postnatal, or combined exposure to ethanol in weanling rats. Wigal T, et al. **Behav Neurosci** 1990 Feb;104(1):116–26

Genotype–treatment interaction in response of mice to early barbiturate administration. Yanai J, et al. **Biol Neonate** 1989; 56(2):109–16

Comparative study of the behavioral, neurophysiological, and motor effects of psychotropic drugs in the dog. Bruhwyler J, et al. **Biol Psychiatry** 1990 Jun 1;27(11):1264–78

Interactions of corticotropin-releasing factor with antidepressant and anxiolytic drugs: behavioral studies with pigeons. Zhang L, et al. **Biol Psychiatry** 1990 May 1; 27(9):953–67

The effects of dihydropyridine compounds in behavioural tests of dopaminergic activity. Bourson A, et al. **Br J Pharmacol** 1989 Dec;98(4):1312–8

Caffeine-induced behavioural stimulation is dose- and concentration-dependent. Kaplan GB, et al. **Br J Pharmacol** 1990 Jul;100(3):435–40

Behavioural indices of the interaction of clozapine with D1 and D2 dopamine receptors. Murray AM, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:814P

Effect of the nootropic drug oxiracetam on field potentials of rat hippocampal slices. Pugliese AM, et al. **Br J Pharmacol** 1990 Jan;99(1):189–93

Enhanced extracellular dopamine level may be the fundamental neuropharmacological basis of cross-behavioral sensitization between methamphetamine and cocaine—an in vivo dialysis study in freely moving rats. Akimoto K, et al. **Brain Res** 1990 Jan 22;507(2):344–6

Altered behaviour in adult mice exposed to a single low dose of DDT and its fatty acid conjugate as neonates. Eriksson P, et al. **Brain Res** 1990 Apr 23;514(1):141–2

Time courses of behavioral and regional cerebral metabolic responses to different doses of meta-chlorophenylpiperazine in awake rats. Freo U, et al. **Brain Res** 1990 Mar 19;511(2):209–16

Histological and ultrastructural evidence that D-amphetamine causes degeneration in neostriatum and frontal cortex of rats. Ryan LJ, et al. **Brain Res** 1990 Jun 4;518(1–2):67–77

Dynorphin A(1–13) modulates apomorphine-induced behaviors using multidimensional behavioral analyses in the mouse. Ukai M, et al. **Brain Res** 1989 Oct 16;499(2):299–304

A general role for serotonin in the control of behavior: studies with intracerebral 5,7-dihydroxytryptamine. Vanderwolf CH. **Brain Res** 1989 Dec 18;504(2):192–8

The functional significance of neonatal 5,7-dihydroxytryptamine lesions in the rat: response to selective 5-HT1A and 5-HT2,1C agonists. Pranzatelli MR, et al. **Brain Res Bull** 1990 Jun;24(6):747–53

Tyrosine pretreatment reverses hypothermia-induced behavioral depression. Rauch TM, et al. **Brain Res Bull** 1990 Jan;24(1):147–50

Brainstem serotonergic hyperinnervation modifies behavioral supersensitivity to 5-hydroxytryptophan in the rat. Pranzatelli MR, et al. **Brain Res Dev Brain Res** 1989 Nov 1;50(1):89–99

Effect of a specific stress (aldrin) on rat progeny behavior. Castro VL, et al. **Braz J Med Biol Res** 1989;22(8):979–82

Some behavioral effects of the pesticide amitraz. Flório JC, et al. **Braz J Med Biol Res** 1989;22(10):1291–3

Electrophysiology of the swimming system of hydromedusae and the effects of atropine-induced crumpling. Scemes E, et al. **Braz J Med Biol Res** 1989;22(2):189–98

Behavioral changes in Gammarus pulex and its significance in the toxicity assessment of very low levels of environamental pollutants. Borlakoglu JT, et al. **Bull Environ Contam Toxicol** 1990 Aug;45(2):258–65

Morphological and behavioral characters in mosquitofish as potential bioindication of exposure to kraft mill effluent. Bortone SA, et al. **Bull Environ Contam Toxicol** 1989 Sep; 43(3):370–7

Behavioral and neurochemical effects of fencamfamine on rats: a chronobiologic approach. Planeta C da S, et al. **Chronobiol Int** 1989;6(4):313–20

The effects of increased dietary cellulose on the anatomy, physiology and behaviour of captive water voles, Arvicola terrestris (L.) (Rodentia: Microtinae). Woodall PF. **Comp Biochem Physiol [A]** 1989;94(4):615–21

Behavioral effects in the mouse during and following withdrawal from ethanol ingestion and/or nicotine administration. Onaivi ES, et al. **Drug Alcohol Depend** 1989 Dec;24(3):205–11

Centrally induced feline emotional behavior and limbic kindling. Hiyoshi T, et al. **Epilepsia** 1990 May–Jun; 31(3):259–69

Cortical dihydropyridine binding sites and a behavioral syndrome in morphine-abstinent rats. Antkiewicz-Michaluk L, et al. **Eur J Pharmacol** 1990 May 3;180(1):129–35

Behavioural changes in the offspring of rats exposed to diazepam during gestation. Cagiano R, et al. **Eur J Pharmacol** 1990 Feb 20;177(1–2):67–74

Gi proteins and calcium in dynorphin-induced hypothermia and behaviour. Cavicchini E, et al. **Eur J Pharmacol** 1990 May 16;180(2–3):357–60

1-5-Hydroxytryptophan-induced flat body posture in the rat: antagonism by ritanserin and potentiation after 5,7-dihydroxytryptamine. Colpaert FC, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):175–8

Differential interactions of Ro 15-4513 with benzodiazepines, ethanol and pentobarbital. Deacon RM, et al. **Eur J Pharmacol** 1990 May 16;180(2–3):283–90

3-((+-)-2-carboxypiperazin-4-yl)propyl-1-phosphonic acid (CPP) and phencyclidine produce a deficit of passive avoidance retention in rats. DeNoble VJ, et al. **Eur J Pharmacol** 1990 Jan 10;175(2):197–202

Antidepressant-like activity of the melatonin receptor antagonist, luzindole (N-0774), in the mouse behavioral despair test. Dubocovich ML, et al. **Eur J Pharmacol** 1990 Jul 3;182(2):313–25

Effects of 5-HT1A receptor agonists and NMDA receptor antagonists in the social interaction test and the elevated plus maze. Dunn RW, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):1–10

Central alpha 1-adrenergic stimulation in relation to the behaviour stimulating effect of modafinil; studies with experimental animals. Duteil J, et al. **Eur J Pharmacol** 1990 May 3;180(1):49–58

Seizures and wet-dog shakes induced by 4-aminopyridine, and their potentiation by nifedipine. Fragoso-Veloz J, et al. **Eur J Pharmacol** 1990 Mar 27;178(3):275–84

5-HT1A, 5-HT1B and 5-HT2 receptor agonists induce differential behavioral responses in preweanling rat pups. Frambes NA, et al. **Eur J Pharmacol** 1990 Jun 21; 182(1):9–17

Behavioural and histological effects of low concentrations of intraventricular AF64A. Gower AJ, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):271–81

Comparison of the behavioral and biochemical effects of the NMDA receptor antagonists, MK-801 and phencyclidine. Hiramatsu M, et al. **Eur J Pharmacol** 1989 Aug 3; 166(3):359–66

Topography of dopamine D-1 and D-2 receptor-mediated rotation after intrastriatal injections of dopamine-related drugs in normosensitive rats. Konitsiotis S, et al. **Eur J Pharmacol** 1990 Apr 10;179(1–2):201–5

The effect of ipsapirone on behavioural and cardiac responses in the shock-probe/defensive burying test in male rats. Korte SM, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):307–10

Anxiolytics and stress-induced behavioural and cardiac responses: a study of diazepam and ipsapirone (TVX Q 7821). Korte SM, et al. **Eur J Pharmacol** 1990 Apr 25; 179(3):393–401

Effects of dopamine D1 and D2 agonists and antagonists injected into the nucleus accumbens and globus pallidus on jaw movements of rats. Koshikawa N, et al. **Eur J Pharmacol** 1990 Jul 3;182(2):375–80

Behavioural effects and supersensitivity in the rat following intranigral MPTP and MPP+ administration. Lange KW. **Eur J Pharmacol** 1990 Jan 3;175(1):57–61

Antidepressant-like effects of trazodone on a behavioral screen are mediated by trazodone, not the metabolite m-chlorophenylpiperazine. Li AA, et al. **Eur J Pharmacol** 1990 Feb 27;177(3):137–44

Behavioural effects of 8-hydroxy-2-(di-n-propylamino)tetralin (8-OH-DPAT) in monkeys. Mizuta E, et al. **Eur J Pharmacol** 1990 Mar 13;178(1):125–7

Correlation of brain levels of 9-amino-1,2,3,4-tetrahydroacridine (THA) with neurochemical and behavioral changes. Nielsen JA, et al. **Eur J Pharmacol** 1989 Nov 28;173(1):53–64

Effects of SCH 23390 on thyrotropin-releasing hormone-induced behaviour in rabbits. Popoli P, et al. **Eur J Pharmacol** 1989 Dec 7;173(2–3):211–3

Further studies on the neuroleptic profile of manassantin A. Rao KV, et al. **Eur J Pharmacol** 1990 Apr 25;179(3):367–76

Substance P analogues containing D-histidine antagonize the behavioural effects of intrathecally co-administered substance P in mice. Sakurada T, et al. **Eur J Pharmacol** 1989 Dec 19;174(2–3):153–60

Behavioral differentiation of benzodiazepine ligands after repeated administration in baboons. Sannerud CA, et al. **Eur J Pharmacol** 1989 Aug 29;167(3):333–43

Antipsychotic substances and dopamine in the rat brain; behavioral studies reveal distinct dopamine receptor systems. Van Ree JM, et al. **Eur J Pharmacol** 1989 Aug 3;166(3):441–52

Serotonergic agents restore appropriate decision-making in neonatal rats displaying dopamine D1 receptor-mediated vacillatory behavior. Whitaker-Azmitia PM, et al. **Eur J Pharmacol** 1990 May 16;180(2–3):305–9

Central dopaminergic actions of YM-14673, a new TRH analogue, in rodents. Yamamoto M, et al. **Eur J Pharmacol** 1990 May 16;180(2–3):319–24

Influence of early neonatal phenobarbital exposure on cerebral energy metabolism and behavior. Pereira de Vasconcelos A, et al. **Exp Neurol** 1990 May;108(2):176–87

The susceptibility to auditory stimuli of animals treated with methionine sulfoximine. Wada JA, et al. **Exp Neurol** 1966 Jun;15(2):157–65

Effects of a gonadotropin-releasing hormone agonist on sexual behavior in male rhesus monkeys (Macaca mulatta). Turner JJ, et al. **Fertil Steril** 1990 Mar;53(3):578–80

Teratological, neurochemical, and postnatal neurobehavioral assessment of METASYSTOX-R, an organophosphate pesticide in the rat. Clemens GR, et al. **Fundam Appl Toxicol** 1990 Jan;14(1):131–43

Modification by nickel of instrumental thermoregulatory behavior in rats. Watanabe C, et al. **Fundam Appl Toxicol** 1990 Apr;14(3):578–88

Is it possible to predict the activity of a new antidepressant in animals with simple psychopharmacological tests? Bourin M. **Fundam Clin Pharmacol** 1990;4(1):49–64 (70 ref.)

Effects of acute and chronic administration of two antibiotics, aztreonam and gentamicin, alone or in combination, on "open-field test" in mice. De Angelis L. **Fundam Clin Pharmacol** 1989;3(5):505–13

Effects induced by chronic treatment with selective D1 or D2 antagonists on open-field behavior and colonic temperature. Maldonado R, et al. **Fundam Clin Pharmacol** 1990;4(3):341–56

Neuropsychological profiles of calcium antagonists. Soubrie P. **Fundam Clin Pharmacol** 1989;3 Suppl:71s–78s (40 ref.)

Effects of dihydroergotoxine on some dopamine-related behaviors in rats. Flório JC, et al. **Gen Pharmacol** 1990; 21(4):411–5

Prenatal cocaine exposure fails to modify neurobehavioral responses and the striatal dopaminergic system in newborn rats. Fung YK, et al. **Gen Pharmacol** 1989;20(5):689–93

Influences of estrogen and/or progesterone on some dopamine related behavior in rats. Palermo-Neto J, et al. **Gen Pharmacol** 1990;21(1):83–7

Rubidium (Rb) treatment of rats: biological effects and implications for psychiatry. Sugihara J, et al. **Hiroshima J Med Sci** 1989 Dec;38(4):221–5

Behaviour and physiology of castrated rats with different episodic schedules of testosterone restoration. Taylor GT, et al. **Horm Metab Res** 1990 Jan;22(1):57–9

Physical and behavioral development in rats after late prenatal exposure to diazepam. Lall SB, et al. **Indian J Physiol Pharmacol** 1990 Jan;34(1):17–22

Dietary acetyl-L-carnitine improves spatial behaviour of old rats. Markowska AL, et al. **Int J Clin Pharmacol Res** 1990; 10(1–2):65–8

Polyamines induce precocious development in rats. Possible interaction with growth factors. Gilad GM, et al. **Int J Dev Neurosci** 1989;7(6):641–53

Hypothalamic lesioned rats given haloperidol mimic the behavior of intact rats given haloperidol plus morphine. de la Cruz F. **Int J Psychophysiol** 1990 Jul;9(1):97–103

Behavioral responses of periparturient sows and juvenile pigs to prostaglandin F2 alpha. Widowski TM, et al. **J Anim Sci** 1989 Dec;67(12):3266–76

Sensitization, kindling, and anticonvulsants in mania. Post RM, et al. **J Clin Psychiatry** 1989 Dec;50 Suppl:23–30; discussion 45–7 (44 ref.)

Behavioral effects of Euphorbia hirta L.: sedative and anxiolytic properties. Lanhers MC, et al. **J Ethnopharmacol** 1990 May;29(2):189–98

Effects of d-amphetamine, diazepam, and pentobarbital on the schedule-controlled pecking and locomotor activity of pigeons. Bordi F, et al. **J Exp Anal Behav** 1990 Jan; 53(1):87–102

Is the behavioural effect of diazepam in rats unique to negative secondary stimuli? Enquist M, et al. **J Neural Transm Gen Sect** 1990;81(2):147–52

Some central pharmacological effects of (+)- and (-)-oxaprotiline. Maj J, et al. **J Neural Transm Gen Sect** 1990;80(2):129–43

Intracarotid 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine administration: biochemical and behavioral observations in a primate model of hemiparkinsonism. Guttman M, et al. **J Neurochem** 1990 Apr;54(4):1329–34

Swimming in Aplysia brasiliana: behavioral and cellular effects of serotonin. Parsons DW, et al. **J Neurophysiol** 1989 Nov;62(5):1163–76

Corticotropin-releasing factor produces fear-enhancing and behavioral activating effects following infusion into the locus coeruleus. Butler PD, et al. **J Neurosci** 1990 Jan; 10(1):176–83

Evidence that L-dopa-induced rotational behavior is dependent on both striatal and nigral mechanisms. Robertson GS, et al. **J Neurosci** 1989 Sep;9(9):3326–31

Quantal vs. graded generalization in drug discrimination: measuring a graded response. Mathis DA, et al. **J Neurosci Methods** 1990 Jan;31(1):23–33 (51 ref.)

Behavioral effects of 8-OH-DPAT: studies using the Microtaxic ventricular injector. Wieland S, et al. **J Neurosci Methods** 1989 Nov;30(2):151–9

A comparison of the effects of nicotine and (+)-amphetamine on rat behaviour in an unsignalled Sidman avoidance schedule. Balfour DJ. **J Pharm Pharmacol** 1990 Apr;42(4):257–60

Effects of intra-accumbens administration of dopamine agonists on stress-induced behavioural deficit. Ploźnik A, et al. **J Pharm Pharmacol** 1990 Feb;42(2):79–84

Behavioral and electroencephalographic effects of a depot type neuroleptic fluphenazine decanoate, in rats. Yamamoto T, et al. **J Pharmacobiodyn** 1989 Nov;12(11):681–92

Ethanol self-administration in long sleep and short sleep mice indicates reinforcement is not inversely related to neurosensitivity. Elmer GI, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):1054–62

CI-943, a potential antipsychotic agent. I. Preclinical behavioral effects. Heffner TG, et al. **J Pharmacol Exp Ther** 1989 Oct;251(1):105–12

Behavioral changes induced by stressful situations: effects of enkephalins, dynorphin, and their interactions. Katoh A, et al. **J Pharmacol Exp Ther** 1990 May;253(2):600–7

Chronic benzodiazepine administration. VI. A partial agonist produces behavioral effects without tolerance or receptor alterations. Miller LG, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):33–8

Pharmacological characterization of cannabinoids in the elevated plus maze. Onaivi ES, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):1002–9

Effects of cocaine and related drugs in nonhuman primates. II. Stimulant effects on schedule-controlled behavior. Spealman RD, et al. **J Pharmacol Exp Ther** 1989 Oct; 251(1):142–9

Effects of prostaglandin and prolactin on luteolysis and parturient behaviour in the non-pregnant tammar, Macropus eugenii. Hinds LA, et al. **J Reprod Fertil** 1990 Jan;88(1):323–33

Control of parturient behaviour by prostaglandin F-2 alpha in the tammar wallaby (Macropus eugenii). Shaw G. **J Reprod Fertil** 1990 Jan;88(1):335–42

Behavioral and neurochemical changes associated with chronic exposure to low-level concentration of pesticide mixtures. Boyd CA, et al. **J Toxicol Environ Health** 1990 Jul;30(3):209–21

Effects of postnatal low-levels of exposure to styrene on behavior and development in rats. Shigeta S, et al. **J Toxicol Sci** 1989 Nov;14(4):279–86

Physiological and behavioral responses of gray wolves (Canis lupus) to immobilization with tiletamine and zolazepam. Kreeger TJ, et al. **J Wildl Dis** 1990 Jan;26(1):90–4

Behavioral effects of HR-592, a new derivative of indole. Gomita Y, et al. **Jpn J Pharmacol** 1990 Apr;52(4):609–19

The evidence for the involvement of the 5-HT1A receptor in 5-HT syndrome induced in mice by tryptamine. Yamada J, et al. **Jpn J Pharmacol** 1989 Nov;51(3):421–4

Behavioral analysis of zopiclone on the basis of their discriminative stimulus properties in the rat. Yamamoto T, et al. **Jpn J Pharmacol** 1989 Nov;51(3):337–45

A new alcohol antagonist: phaclofen. Allan AM, et al. **Life Sci** 1989;45(19):1771–9

Rotation in response to selective dopamine receptor agonists in rats with electrolytic substantia nigra lesions. Asin KE, et al. **Life Sci** 1990;46(25):1817–23

Nicotine dependence in rats. Carroll ME, et al. **Life Sci** 1989; 45(15):1381–8

Partial reversal of behavioral action of the agonist D-Trp-6-LH-RH by naloxone in mice. Kádár T, et al. **Life Sci** 1990;46(7):463–70

The effects of carbon dioxide inhalation on plasma MHPG, plasma hormones respiratory rate, and behavior in the rhesus monkey. Krystal JH, et al. **Life Sci** 1989; 45(18):1657–63

Circling behavior in old rats after unilateral intranigral injection of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP). Lange KW. **Life Sci** 1989;45(18):1709–14

The effects of striatal lesion on turning behavior and globus pallidus single unit response to dopamine agonist administration. Pan HS, et al. **Life Sci** 1990;46(1):73–80

Effects of GABA-ergic agents on spontaneous non-convulsive epilepsy, EEG and behaviour, in the WAG/RIJ inbred strain of rats. Peeters BW, et al. **Life Sci** 1989;45(13):1171–6

Effects of carbamazepine, valproate calcium, clonazepam and piracetam on behavioral test methods for evaluation of memory-enhancing drugs. Rostock A, et al. **Methods Find Exp Clin Pharmacol** 1989 Sep;11(9):547–53

Neurobehavioral toxicity with low doses of sarin and soman. Sirkka U, et al. **Methods Find Exp Clin Pharmacol** 1990 May;12(4):245–50

The development of a sedation model in dogs. Wilson ML, et al. **Methods Find Exp Clin Pharmacol** 1990 May; 12(4):251–6

The effect of ketotifen in rodent models of anxiety and on the behavioural consequences of withdrawing from treatment with drugs of abuse. Costall B, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jun; 341(6):547–51

Dopamine D-2 receptor agonist-induced behavioural depression: critical dependence upon postsynaptic dopamine D-1 function. A behavioural and biochemical study. Jackson DM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Oct; 340(4):355–65

The putatively antipsychotic agent amperozide produces behavioural stimulation in the rat. A behavioural and biochemical characterization. Waters N, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Aug; 340(2):161–9

Arginine vasopressin 4–9 retards spatial alternation learning. McDaniel WF, et al. **Neuropeptides** 1989 Nov–Dec; 14(4):219–24

Tolerance develops to the behavioural effects of ACTH-(1–24) during continuous i.c.v. infusion in rats, and is associated with increased hypothalamic levels of beta-endorphin. Vergoni AV, et al. **Neuropeptides** 1989 Aug–Sep;14(2):93–8

Comparison of isomers of ketamine on catalepsy in the rat and electrical activity of the brain and behavior in the cat. Benthuysen JL, et al. **Neuropharmacology** 1989 Oct; 28(10):1003–9

R(-) and S(+) stereoisomers of 11-hydroxy- and 11-methoxy-N-n-propylnoraporphine: central dopaminergic behavioral activity in the rat. Campbell A, et al. **Neuropharmacology** 1990 Jun;29(6):527–36

Behavioural effects in gerbils of the 5-HT3 receptor antagonists, BRL 43694 and ICS 205-930, under circumstances of high and low light intensity. Cutler MG. **Neuropharmacology** 1990 Jun;29(6):515–20

Behavioural and ECoG spectrum changes induced by intracerebral infusion of interferons and interleukin 2 in rats are antagonized by naloxone. De Sarro GB, et al. **Neuropharmacology** 1990 Feb;29(2):167–79

Behavioural and electrocortical effects after injection of two ornithine decarboxylase inhibitors into several areas of the brain in the rat. De Sarro GB, et al. **Neuropharmacology** 1989 Nov;28(11):1245–51

Chronic administration of benzodiazepines—V. Rapid onset of behavioral and neurochemical alterations after discontinuation of alprazolam. Lopez F, et al. **Neuropharmacology** 1990 Mar;29(3):237–41

Chronic blockade of D2 but not D1 dopamine receptors facilitates behavioural responses to endogenous enkephalins, protected by kelatorphan, administered in the accumbens in rats. Maldonado R, et al. **Neuropharmacology** 1990 Mar;29(3):215–23

The behavioural, but not the hypothermic or corticosterone, response to 8-hydroxy-2-(DI-n-propylamino)-tetralin, is antagonized by NAN-190 in the rat. Przegaliński E, et al. **Neuropharmacology** 1990 Jun;29(6):521–6

Behavioural and pharmacokinetic studies on nicotine, cytisine and lobeline. Reavill C, et al. **Neuropharmacology** 1990 Jul; 29(7):619–24

Conflict behavior and dynamics of monoamines of various brain nuclei in rats. Sakurai-Yamashita Y, et al. **Neuropharmacology** 1989 Oct;28(10):1067–73

Tacrine or arecoline mediates reversal of anoxia- or AF64A-induced behavioural disorders in the developing rat. Speiser Z, et al. **Neuropharmacology** 1989 Dec; 28(12):1325–32

Multi-dimensional analysis of behavior in mice treated with the delta opioid agonists DADL (D-Ala2-D-Leu5-enkephalin) and DPLPE (D-Pen2-L-Pen5-enkephalin). Ukai M, et al. **Neuropharmacology** 1989 Oct;28(10):1033–9

Postnatal function following prenatal reserpine exposure in rats: neurobehavioral toxicity. Buelke-Sam J, et al. **Neurotoxicol Teratol** 1989 Sep–Oct;11(5):515–22

Response: behavioral teratology: what's not in a name [letter] Cattabeni F, et al. **Neurotoxicol Teratol** 1989 Jul–Aug; 11(4):329

Prenatal cocaine exposure in the Long-Evans rat: II. Dose-dependent effects on offspring behavior. Church MW, et al. **Neurotoxicol Teratol** 1990 Jul–Aug;12(4):335–43

Neurobehavioral effects in offspring of mice given excess aluminum in diet during gestation and lactation. Donald JM, et al. **Neurotoxicol Teratol** 1989 Jul–Aug;11(4):345–51

Neurobehavioral effects of the pyridinium aldoxime cholinesterase reactivator HI-6. Liu WF, et al. **Neurotoxicol Teratol** 1990 Jan–Feb;12(1):73–8

Behavioral effects of chronic toluene exposure in the developing rat. Lorenzana-Jimenez M, et al. **Neurotoxicol Teratol** 1990 Jul–Aug;12(4):353–7

Uses of the coefficient of detection and sample size determination. Maurissen JP, et al. **Neurotoxicol Teratol** 1989 Jul–Aug;11(4):377–9

Acute exposure to maneb alters some behavioral functions in the mouse. Morato GS, et al. **Neurotoxicol Teratol** 1989 Sep–Oct;11(5):421–5

ZPT-related distal axonopathy: behavioral and electrophysiologic correlates in rats. Ross JF, et al. **Neurotoxicol Teratol** 1990 Mar–Apr;12(2):153–9

Prenatal exposure to antiadrenergic antihypertensive drugs: effects on neurobehavioral development and the behavioral consequences of enriched rearing. Ryan CL, et al. **Neurotoxicol Teratol** 1990 Jul–Aug;12(4):359–66

Behavioral effects of subchronic intoxication with parathion-methyl in male Wistar rats. Schulz H, et al. **Neurotoxicol Teratol** 1990 Mar–Apr;12(2):125–7

Behavioral and neuroanatomical sequelae of prenatal naloxone administration in the rat. Shepanek NA, et al. **Neurotoxicol Teratol** 1989 Sep–Oct;11(5):441–6

Preliminary indications that functional effects of fetal caffeine exposure can be expressed in a second generation. Sinton CM. **Neurotoxicol Teratol** 1989 Jul–Aug;11(4):357–62

Behavioral effects of prenatal exposure to lidocaine in the rat: effects of dosage and of gestational age at administration. Smith RF, et al. **Neurotoxicol Teratol** 1989 Jul–Aug;11(4):395–403

Sample size determinations using examples drawn from the NCTR Collaborative Behavioral Teratology Study data. Vorhees CV. **Neurotoxicol Teratol** 1989 Jul–Aug; 11(4):381–3

Behavioral Teratology: What's Not in a Name: A reply to Cattabeni and Abbracchio. Vorhees CV. **Neurotoxicol Teratol** 1989 Jul–Aug;11(4):325–7

Efficacy of the chelating agent CaEDTA in reversing lead-induced changes in behavior. Cory-Slechta DA, et al. **Neurotoxicology** 1990 Winter;10(4):685–97

Behavioral measures of neurotoxicity. Cory-Slechta DA. **Neurotoxicology** 1989 Summer;10(2):271–95

Benzodiazepine-like behavioral effects following withdrawal from chronic delta-9-tetrahydrocannabinol administration in rats. Holson RR, et al. **Neurotoxicology** 1989 Fall; 10(3):605–19

Stereospecificity of N-MDA-induced functional deficits. Rogers BC, et al. **Neurotoxicology** 1990 Spring;11(1):13–21

Behavioral and neurochemical effects of orally administered MDMA in the rodent and nonhuman primate. Slikker W Jr, et al. **Neurotoxicology** 1989 Fall;10(3):529–42

Nitrile-induced behavioral abnormalities in mice. Tanii H, et al. **Neurotoxicology** 1989 Summer;10(2):157–65

Neural and behavioral alterations after early exposure to phenobarbital. Yanai J, et al. **Neurotoxicology** 1989 Fall; 10(3):543–54 (44 ref.)

Behavioral pharmacology of PCP, NMDA and sigma receptors. Balster RL. **NIDA Res Monogr** 1989;95:270–4

Behavioral and electrophysiological effects of delta-9-THC in rats. Deadwyler S, et al. **NIDA Res Monogr** 1988; 90:223–33

Neurochemical mechanisms involved in behavioral effects of amphetamines and related designer drugs. Gold LH, et al. **NIDA Res Monogr** 1989;94:101–26 (75 ref.)

Comparison of the behavioral and neurochemical effects of 5,7-DHT, MDMA and D,L-fenfluramine. Lorens SA, et al. **NIDA Res Monogr** 1989;95:347

Methamphetamine and related drugs: toxicity and resulting behavioral changes in response to pharmacological probes. Seiden LS, et al. **NIDA Res Monogr** 1989;94:146–60 (53 ref.)

Effects of carbamate, BPMC, on the central cholinergic functions and behavior of mice. Kobayashi H, et al.

Nippon Juigaku Zasshi 1989 Aug;51(4):789–95
Intravenous beta-endorphin: behavioral and physiological effects in conscious monkeys. Cuthbert BN, et al. **Peptides** 1989 Jul–Aug;10(4):729–34
Comparative studies of somatostatin-14 and some of its fragments on passive avoidance behavior, open field activity and on barrel rotation phenomenon in rats. Vécsei L, et al. **Peptides** 1989 Nov–Dec;10(6):1153–7
Testosterone in a cyclodextrin-containing formulation: behavioral and physiological effects of episode-like pulses in rats. Taylor GT, et al. **Pharm Res** 1989 Jul;6(7):641–6
A spirohydantoin derivative of oxymorphone: an agonist with delayed antagonist activity. Alexander GJ, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):939–43
Neuroleptic modulation of oral dyskinesias induced in snakes by Xenopus skin mucus. Barthalmus GT. **Pharmacol Biochem Behav** 1989 Sep;34(1):95–9
Selective activation of 5HT1A receptors induces lower lip retraction in the rat. Berendsen HH, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):821–7
Blockage of substance P-induced scratching behavior in rats by the intrathecal administration of inhibitory amino acid agonists. Beyer C, et al. **Pharmacol Biochem Behav** 1989 Nov;34(3):491–5
Effects of corticotropin releasing factor, desipramine and haloperidol on a DRL schedule of reinforcement. Britton KT, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):967–70
Sensitization to and conditioning with apomorphine in pigeons. Burg B, et al. **Pharmacol Biochem Behav** 1989 Sep;34(1):59–64
Behavioral effects of early postnatal lead exposure in herring gull (Larus argentatus) chicks. Burger J. **Pharmacol Biochem Behav** 1990 Jan;35(1):7–13
Evidence for a behavioral deficit during withdrawal from chronic nicotine treatment. Corrigall WA, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):559–62
Effects of captopril and SQ29,852 on anxiety-related behaviours in rodent and marmoset. Costall B, et al. **Pharmacol Biochem Behav** 1990 May;36(1):13–20
Actions of ORG 5222 as a novel psychotropic agent. Costall B, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):607–15
The effects of ACE inhibitors captopril and SQ29,852 in rodent tests of cognition. Costall B, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):573–9
Heroin self-administration by rats: influence of dose and physical dependence. Dai S, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):1009–15
Behavioral effects of morphine in mice: role of experimental housing. D'Amato FR, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):361–5
Effects of amphetamine and beta-endorphin fragments on maze performance in rats. de Boer S, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):555–61
Effects of Ro 15-4513 on schedule-controlled responding of pigeons. Delaney D, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):777–80
Opioid agonists/antagonists in morphine-tolerant squirrel monkeys. Dykstra LA, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):639–44
Stimulus properties of a new designer drug: 4-methylaminorex ("U4Euh"). Glennon RA, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):517–21
Chlordiazepoxide alters intravenous cocaine self-administration in rats. Goeders NE, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):859–66
Effect of naltrexone on relaxation induced by flank pressure in pigs. Grandin T, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):839–42
Suppression of juvenile social behavior requires antagonism of central opioid systems. Jalowiec JE, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):697–700
The effects of Ro 15-4513 on ethanol-induced taste aversions. Jeffreys RD, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):803–6
Blockade of ACh receptors by PrBCM causes deficits in shuttle avoidance performance. Kato S, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):895–8
Opioid inhibition of kainic acid-induced scratching: mediation by mu and sigma but not delta and kappa receptors. Kellstein DE, et al. **Pharmacol Biochem Behav** 1990 Jan;35(1):1–5
The effects of amfonelic acid alone and in combination with naloxone on brain-stimulation reward. Knapp CM, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):977–82
Opiate effects on social behavior of juvenile dogs as a function of social deprivation. Knowles PA, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):533–7
Vasoactive intestinal peptide: behavioral effects in the rat and hamster. Kulkosky PJ, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):387–93
Behavioral effects induced by beta CCE in free or restrained rhesus monkeys (Macaca mulatta). Lagarde D, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):713–9
Long-term central 5-HT depletions resulting from repeated administration of MDMA enhances the effects of single administration of MDMA on schedule-controlled behavior of rats. Li AA, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):641–8
Haloperidol produces within-session increments in operant response duration in rats. Liao RM, et al. **Pharmacol Biochem Behav** 1990 May;36(1):191–201
Effects of exercise on behavioral sensitivity to carbamate cholinesterase inhibitors. McMaster SB, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):811–3
Behavioral and electroencephalographic effects of the adenosine1 agonist, L-PIA. Martin JV, et al. **Pharmacol Biochem Behav** 1989 Nov;34(3):507–10
Effects of nonsedating histamine H1-antagonists on EEG activity and behavior in the cat. Marzanatti M, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):861–6
Effects of terminating chronic phencyclidine on schedule-controlled behavior in rats. Massey BW, et al. **Pharmacol Biochem Behav** 1990 May;36(1):117–21
Reinforcing effects of a pentobarbital-ethanol combination relative to each drug alone. Meisch RA, et al. **Pharmacol Biochem Behav** 1990 Feb;35(2):443–50
Effect of chronic variable stress on monoamine receptors: influence of imipramine administration. Molina VA, et al. **Pharmacol Biochem Behav** 1990 Feb;35(2):335–40
Effect of proline administration on rat behavior in aversive and nonaversive tasks. Moreira JC, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):885–90
New putative selective agonists at the D-1 dopamine receptor: behavioural and neurochemical comparison of CY 208-243 with SK&F 101384 and SK&F 103243. Murray AM, et al. **Pharmacol Biochem Behav** 1990 Jan;35(1):105–10
Effect of chronic neonatal morphine and naloxone on sensorimotor and social development of young rats. Najam N, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):539–44
The effect of ethanol on behavioral temperature regulation in mice. O'Connor CS, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):315–9
Phencyclidine pharmacokinetics and concentration-response relationships in the pigeon. Owens SM, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):797–801
Butorphanol's efficacy at mu and kappa opioid receptors: inferences based on the schedule-controlled behavior of nontolerant and morphine-tolerant rats and on the responding of rats under a drug discrimination procedure. Picker MJ, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):563–8
Brain benzodiazepine receptors in fathead minnows and the behavioral response to alarm pheromone. Rehnberg BG, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):435–42
Measuring morphine's capacity to establish a place preference. Reid LD, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):765–75
Antagonism of ethanol-reinforced behavior by the benzodiazepine inverse agonists Ro15-4513 and FG 7142: relation to sucrose reinforcement. Samson HH, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):601–8
Behavioral effects of prenatal haloperidol exposure. Scalzo FM, et al. **Pharmacol Biochem Behav** 1989 Dec;34(4):727–31
Temporal differences in behavioral effect of fenfluramine and norfenfluramine. Schechter MD. **Pharmacol Biochem Behav** 1990 Mar;35(3):527–31
Multiple behavioral effects of diazepam in rhesus monkeys. Schulze GE, et al. **Pharmacol Biochem Behav** 1989 Sep;34(1):29–35
Acute effects of d-amphetamine in a monkey operant behavioral test battery. Schulze GE, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):759–65
L364,718 antagonizes the cholecystokinin-induced suppression of locomotor activity. Soar J, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):637–40
Acute and subchronic effects of methylenedioxymethamphetamine [(+/-)MDMA] on locomotion and serotonin syndrome behavior in the rat [published erratum appears in Pharmacol Biochem Behav 1989 Nov;34(3):679] Spanos LJ, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):835–40
Release of substance P by intrathecal KK-3, a newly synthesized Leu-enkephalin derivative. Takahashi M, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):843–6
Alprazolam but not diazepam protects hamsters with heart disease from the medical consequences of stress. Tapp WN, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):633–6
Therapeutic and hypothermic properties of diazepam altered by a diazepam-chlorpromazine association. Taukulis HK, et al. **Pharmacol Biochem Behav** 1989 Sep;34(1):1–6
A comparison of anxiolytic and nonanxiolytic agents in the shock-probe/burying test for anxiolytics. Treit D. **Pharmacol Biochem Behav** 1990 May;36(1):203–5
Plus-maze behavior and susceptibility to 3-mercaptopropionate-induced seizures in rat lines selected for high and low alcohol sensitivity. Tuominen K, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):721–5
Behavioral performance effects of nifedipine in normotensive baboons: single dosing. Turkkan JS, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):923–6
Effects of p-chlorophenylalanine and scopolamine on retention of habits in rats. Vanderwolf CH, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):847–53
On the development of behavioral tolerance to organophosphates. I: Behavioral and biochemical aspects. van Dongen CJ, et al. **Pharmacol Biochem Behav** 1989 Nov;34(3):473–81
Scopolamine and methylscopolamine differentially affect fixed-consecutive-number performance of male and female Wistar rats. van Haaren F, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):361–5
The effects of intrastriatal hormones on the dorsal immobility response in gonadectomized male and female rats. Van Hartesveldt C, et al. **Pharmacol Biochem Behav** 1989 Nov;34(3):459–63
Self-administration of the isomers of pentobarbital and secobarbital by rhesus monkeys. Vanover KE, et al. **Pharmacol Biochem Behav** 1989 Nov;34(3):669–71
Tripelennamine interactions with the psychotomimetic sigma agonist N-allylnormetazocine. Vaupel DB. **Pharmacol Biochem Behav** 1989 Jul;33(3):717–20
Effects of the NMDA antagonists CPP and MK-801 on radial arm maze performance in rats. Ward L, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):785–90
Decreases in behavioral and striatal neuronal responses to dexamphetamine with aging. Warenycia MW, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):489–91
Context-dependent cocaine sensitization: differential effect of haloperidol on development versus expression. Weiss SR, et al. **Pharmacol Biochem Behav** 1989 Nov;34(3):655–61
Behavioral effects of cocaine and its interaction with d-amphetamine and morphine in rats. Wenger GR, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):595–600
Intrastriatal infusions of ascorbate antagonize the behavioral response to amphetamine. White LK, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):485–9
Contingent suppression of tolerance to haloperidol: a dose-response analysis. Wolgin DL. **Pharmacol Biochem Behav** 1990 Feb;35(2):273–80
On the development of behavioral tolerance to organophosphates. III: Behavioral aspects. Wolthuis OL, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):561–5
Inhibition of mouse-killing behavior by S-adenosyl-L-methionine in midbrain raphe-lesioned and olfactory-bulbectomized rats. Yamamoto T, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):395–8
EEG and behavioural effects of polyamines (spermine and spermidine) on rabbits. Bo P, et al. **Pharmacol Res** 1990 Jul–Aug;22(4):481–91
Single and repeated treatment with chlordiazepoxide and sodium valproate and head-twitch responses induced in rats with rolipram, a potential antidepressant drug. Cannizzaro G, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:51–2
Evaluation of alprazolam-induced behavioural effects: differences with chlordiazepoxide after interaction with desipramine and rolipram, a cAMP phosphodiesterase inhibitor. Cannizzaro G, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:53–4
Behavioural changes in offspring of rats exposed to diazepam during gestation. De Salvia MA, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:27–8
Behavioural, ECoG and neuropathological effects after intracerebral injection of MPP+ and paraquat in rats. Iannone M, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:43–4
Fipexide improvement of cognitive functions in rat: behavioural and neurochemical studies. Marino A, et al. **Pharmacol Res** 1990 Mar–Apr;22(2):179–87
Behavioural, electrocortical power spectrum and body temperature effects of ribavirin in the rat. Naccari F, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:33–4
Behavioral and neurochemical alterations caused by chronic L-dopa treatment in the rat. Oggero L, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:99–100
Does chronic imipramine facilitate neurotransmission at dopamine-D1 receptor level? Serra G, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:55–6
Effects of psychotropic drugs on the behavior and neurochemistry of olfactory bulbectomized rats. van Riezen H, et al. **Pharmacol Ther** 1990;47(1):21–34 (112 ref.)
The mauve factor of porphyria, 3-ethyl-5-hydroxy-4,5-dimethyl-delta-3-pyrroline-2-one: effects on behaviour of rats and mice. Cutler MG, et al. **Pharmacol Toxicol** 1990 Jan;66(1):66–8
Amperozide and conditioned behaviour in rats: potentiation by classical neuroleptics and alpha-methylparatyrosine. Egbe P, et al. **Pharmacol Toxicol** 1990;66 Suppl 1:18–21
Antinociceptive effects and spinal distribution of two adenosine receptor agonists after intrathecal administration. Fastbom J, et al. **Pharmacol Toxicol** 1990 Jan;66(1):69–72
Amperozide—a new putatively antipsychotic drug with a limbic mode of action on dopamine mediated behaviour. Gustafsson B, et al. **Pharmacol Toxicol** 1990;66 Suppl 1:12–7
Amperozide and emotional behaviour. Gustafsson B, et al. **Pharmacol Toxicol** 1990;66 Suppl 1:34–9
Neurophysiological and behavioural effects of combined exposure to 2,5-hexanedione and acetone or ethanol in rats. Ladefoged O, et al. **Pharmacol Toxicol** 1989 Nov;65(5):372–5
Acute behavioural effects of the organophosphates sarin and soman in rats. Nieminen SA, et al. **Pharmacol Toxicol** 1990 Jul;67(1):36–40
Both single-dose and repeated administration of clomipramine reduces the behavioural response to intrathecal capsaicin in mice. Rosland JH, et al. **Pharmacol Toxicol** 1989 Sep;65(3):189–91
Pharmacological studies on perazine and its primary metabolites. Brand U, et al. **Pharmacopsychiatry** 1989 Nov;22(6):255–7
The development of behavioral tests to assess the effects of cognitive enhancers. Olton DS, et al. **Pharmacopsychiatry** 1990 Feb;23 Suppl 2:65–9 (13 ref.)
Behavioral models of memory and amnesia. Slangen JL, et al. **Pharmacopsychiatry** 1990 Feb;23 Suppl 2:81–3;

discussion 84 (10 ref.)
Genetic dissociation of multiple morphine effects among C57BL/6J, DBA/2J and C3H/HeJ inbred mouse strains. Belknap JK, et al. **Physiol Behav** 1989 Jul;46(1):69–74
Scopolamine treatment and fimbria–fornix lesions: mimetic effects on radial maze performance. Cassel JC, et al. **Physiol Behav** 1989 Sep;46(3):347–53
Learned immobility explains the behavior of rats in the forced swimming test. De Pablo JM, et al. **Physiol Behav** 1989 Aug;46(2):229–37
Central versus peripheral effects on temperature preference and body temperature following alteration of 5-HT in maturing mice. Goodrich C, et al. **Physiol Behav** 1989 Aug; 46(2):203–9
Day–night rhythms of shoaling behavior in goldfish: opioid and pineal involvement. Kavaliers M. **Physiol Behav** 1989 Aug;46(2):167–72
Behavioral and electrophysiological effects of crustacean neurohormone on freely moving cats. Martínez–Gómez M, et al. **Physiol Behav** 1989 Dec;46(6):983–92
The inhibitory effects of fluprazine on parental aggression in female mice are dependent upon intruder sex. Parmigiani S, et al. **Physiol Behav** 1989 Sep;46(3):455–9
Scopolamine impairs response–to–change based on distal cues in the rat. Poucet B, et al. **Physiol Behav** 1989 Sep; 46(3):355–9
Neuroleptic–induced emotional defecation: effects of pimozide and apomorphine. Sanberg PR. **Physiol Behav** 1989 Aug;46(2):199–202
Behavioral teratogenic insult of methylmercury assessed by using sets of measures: reanalysis of data from the Collaborative Behavioral Teratology Study of National Center for Toxicological Research. Tachibana T. **Physiol Behav** 1989 Jun;45(6):1243–7
Effects of mescaline and its derivative N–[3,4,5–trimethoxyphenylethyl]–aziridine on the spatial orientation of rats in a T–maze. Koupilová M, et al. **Physiol Bohemoslov** 1989;38(6):497–502
Effect of ethanol and diazepam given to pregnant rats on the behavior and catecholamine content in the brain of offspring. Felińska W, et al. **Pol J Pharmacol Pharm** 1989 May–Jun;41(3):223–5
Synthesis and pharmacological properties of new derivatives of 1–diphenylacetamide–2–butanol. Kolasa K, et al. **Pol J Pharmacol Pharm** 1989 Sep–Oct;41(5):475–81
Some central effects of repeated treatment with fluvoxamine. Maj J, et al. **Pol J Pharmacol Pharm** 1989 Jul–Aug; 41(4):305–12
Antidepressant activities of WEB 1881, a new nootropic agent. Maj J, et al. **Pol J Pharmacol Pharm** 1989 Sep–Oct; 41(5):439–52
The effect of (–) deprenyl (selegiline) on different behavioral changes induced by dopamine agonists in the rat. Timar J, et al. **Pol J Pharmacol Pharm** 1988 Nov–Dec; 40(6):659–66
Behavioral and physiologic aspects of nicotine dependence: the role of nicotine dose. Henningfield JE, et al. **Prog Brain Res** 1989;79:303–12 (42 ref.)
Primary cholinergic and indirect dopaminergic mediation of behavioural effects of nicotine. Stolerman IP, et al. **Prog Brain Res** 1989;79:227–37 (42 ref.)
Effect of nor–binaltorphimine on the behavior of mice and rats receiving multiple injections of U–50,488. Cowan A, et al. **Prog Clin Biol Res** 1990;328:303–6
AHR–6646: a new, long–acting neuroleptic. Johnson DN, et al. **Prog Neuropsychopharmacol** 1979;3(5–6):513–20
Enkephalin–dopamine interactions in behavioral arousal. Katz RJ, et al. **Prog Neuropsychopharmacol** 1979;3(4):395–8
Potentiation of apomorphine–induced climbing behaviour in mice by d–LSD. Sovilla JY, et al. **Prog Neuropsychopharmacol** 1979;3(5–6):503–11
A perspective on Tachibana's eta–squared analysis of the results of the NCTR collaborative behavioral teratology study. Vorhees CV. **Psychol Rep** 1989 Dec;65(3 Pt 1):819–23
Effects of somatostatin–28 and some of its fragments and analogs on open–field behavior, barrel rotation, and shuttle box learning in rats. Vécsei L, et al. **Psychoneuroendocrinology** 1990;15(2):139–45
3rd meeting of the EBPS. European Behavioural Pharmacology Society. Noordwijkerhout, The Netherlands, June 27th–July 1st 1990. Abstracts. **Psychopharmacology (Berl)** 1990;101 Suppl:S3–64
Paternal alcohol exposure: paradoxical effect in mice and rats. Abel EL, et al. **Psychopharmacology (Berl)** 1990; 100(2):159–64
Effects of acute or chronic carbamazepine on experimentally–induced conflict in the rat. Almeida RN, et al. **Psychopharmacology (Berl)** 1990;100(2):227–9
Reduced behavioral variability in extinction: effects of chronic treatment with the benzodiazepine, diazepam or with ethanol. Beck CH, et al. **Psychopharmacology (Berl)** 1990;100(3):323–7
Diazepam changes risk assessment in an anxiety/defense test battery. Blanchard DC, et al. **Psychopharmacology (Berl)** 1990;101(4):511–8
Effect of diazepam on behaviour and associated changes in ascorbate concentration in rat brain areas: striatum, n. accumbens and hippocampus. Boutelle MG, et al. **Psychopharmacology (Berl)** 1990;100(2):230–6
Effect of serotonergic lesion on "anxious" behaviour measured in the elevated plus–maze test in the rat. Briley M, et al. **Psychopharmacology (Berl)** 1990;101(2):187–9
Central effects of corticotropin releasing factor (CRF): evidence for similar interactions with environmental novelty and with caffeine. Britton DR, et al. **Psychopharmacology (Berl)** 1990;101(3):366–70
Contributions of hippocampus and neocortex to the expression of ethanol effects. Devenport LD, et al. **Psychopharmacology (Berl)** 1989;99(3):337–44
Distinctions among sedative, disinhibitory, and ataxic properties of ethanol in inbred and selectively bred mice. Dudek BC, et al. **Psychopharmacology (Berl)** 1990; 101(1):93–9
Behavioral effects of the inhibitors of phenylethanolamine–N–methyltransferase, LY 78335 and LY 134046, and their interactions with ethanol. Durcan MJ, et al. **Psychopharmacology (Berl)** 1990;101(2):196–202
Comparison of the effects of three indirect dopamine agonists, GK 13, GBR 12783 and dexamphetamine on behavioural tests involving central catecholaminergic transmissions. Duterte–Boucher D, et al. **Psychopharmacology (Berl)** 1990; 101(3):344–53
Effects of carbamazepine on 5–hydroxytryptamine function in rodents. Elphick M, et al. **Psychopharmacology (Berl)** 1990;100(1):49–53
Effects of benzodiazepine agonist, inverse agonist and antagonist drugs in the mouse staircase test. Emmanouil DE, et al. **Psychopharmacology (Berl)** 1990;102(1):95–7
Does anxiety underly imidazole–induced behavioural effects in the rat? Ferrari F, et al. **Psychopharmacology (Berl)** 1989; 99(3):345–51
Effect of imipramine in the "learned helplessness" model of depression in rats is not mimicked by combinations of specific reuptake inhibitors and scopolamine. Geoffroy M, et al. **Psychopharmacology (Berl)** 1990;101(3):371–5
Behavioral effects after intrathecal administration of cholinergic receptor agonists in the rat. Gillberg PG, et al. **Psychopharmacology (Berl)** 1990;100(4):464–9
Indomethacin does not antagonize the anxiolytic action of ethanol in the elevated plus–maze. Hale RL, et al. **Psychopharmacology (Berl)** 1990;101(2):203–7
Electroconvulsive treatment attenuates behavioral response to SKF 38393 in reserpine–treated mice. Hao XZ, et al. **Psychopharmacology (Berl)** 1990;100(1):135–7
ACTH–induced behaviors and their modulation by serotonergic agonists differ in neonatal and weanling rat pups. Kirstein CL, et al. **Psychopharmacology (Berl)** 1990; 100(2):151–8
Effects of bromocriptine and desipramine on behavior maintained by cocaine or food presentation in rhesus monkeys. Kleven MS, et al. **Psychopharmacology (Berl)** 1990;101(2):208–13
Behavioral evidence implicating dopamine in sensorimotor arousal and norepinephrine in the sedative effects of antidepressant drugs. Kokkinidis L, et al. **Psychopharmacology (Berl)** 1990;100(4):542–7
Ontogeny of the enhanced behavioral response to amphetamine in amphetamine–pretreated rats. Kolta MG, et al. **Psychopharmacology (Berl)** 1990;100(3):377–82
Differential effects of six structurally related benzodiazepines on some ethological measures of timidity, aggression and locomotion in mice. Krsiak M, et al. **Psychopharmacology (Berl)** 1990;101(3):396–402
Behavioral sensitization to beta–phenylethylamine (PEA): enduring modifications of specific dopaminergic neuron systems in the rat. Kuroki T, et al. **Psychopharmacology (Berl)** 1990;102(1):5–10
d–Amphetamine–induced "floating limb" syndrome in young rhesus monkeys. Levin ED, et al. **Psychopharmacology (Berl)** 1990;101(1):112–7
Blockade of hoarding in rats by diazepam: an analysis of the anxiety and object value hypotheses of hoarding. McNamara RK, et al. **Psychopharmacology (Berl)** 1990; 101(2):214–21
Reversal of helpless behavior by serotonin uptake blockers in rats. Martin P, et al. **Psychopharmacology (Berl)** 1990; 101(3):403–7
Naloxone disrupts the expression but not the acquisition by male rats of a conditioned place preference response for an oestrous female. Mehrara BJ, et al. **Psychopharmacology (Berl)** 1990;101(1):118–25
Nootropic effects of ACE inhibitors in mice. Mondadori C, et al. **Psychopharmacology (Berl)** 1990;100(3):301–7
Anti–conflict efficacy of buspirone following acute versus chronic treatment. Schefke DM, et al. **Psychopharmacology (Berl)** 1989;99(3):427–9
Close correlation between behavioural response and binding in vivo for inhibitors of the rolipram–sensitive phosphodiesterase. Schmiechen R, et al. **Psychopharmacology (Berl)** 1990;102(1):17–20
Atypical neuroleptics suppress dopaminergic behavioral supersensitivity. Schremmer C, et al. **Psychopharmacology (Berl)** 1990;100(3):399–403
Assessment of working memory in rats using spatial alternation behavior with variable retention intervals: effects of fixed–ratio size and scopolamine. Shannon HE, et al. **Psychopharmacology (Berl)** 1990;100(4):491–7
Repeated ECS enhances dopamine D–1 but not D–2 agonist–induced behavioural responses in rats. Sharp T, et al. **Psychopharmacology (Berl)** 1990;100(1):110–4
Effects of repeated injection of sublethal doses of soman on behavior and on brain acetylcholine and choline concentrations in the rat. Shih TM, et al. **Psychopharmacology (Berl)** 1990;101(4):489–96
Antagonism of behavioral effects of cocaine by selective dopamine receptor blockers. Spealman RD. **Psychopharmacology (Berl)** 1990;101(1):142–5
Behavioral performance effects of nifedipine in normotensive and renovascular hypertensive baboons. Turkkan JS, et al. **Psychopharmacology (Berl)** 1990;100(1):124–9
On the possible involvement of glutamate receptors in conditioning of behavioural effects of apomorphine. Welsch–Kunze S, et al. **Psychopharmacology (Berl)** 1990; 101(3):421–8
Anxiogenic–like effect of infusing 1–(3–chlorophenyl) piperazine (mCPP) into the hippocampus. Whitton P, et al. **Psychopharmacology (Berl)** 1990;100(1):138–40
5HT–2 mediation of acute behavioral effects of hallucinogens in rats. Wing LL, et al. **Psychopharmacology (Berl)** 1990; 100(3):417–25
Behavioral effects of MK–801 in the rat. Wozniak DF, et al. **Psychopharmacology (Berl)** 1990;101(1):47–56
Bromocriptine induces climbing behaviour: possible D–1 or D–2 dopamine receptor involvement. Zarrindast MR, et al. **Psychopharmacology (Berl)** 1990;100(2):275–80
Blockade of dopamine receptors reverses the behavioral effects of endogenous enkephalins in the Nucleus caudatus but not in the Nucleus accumbens: differential involvement of delta and mu opioid receptors. Daugé V, et al. **Psychopharmacology (Berlin)** 1989;99(2):168–75
Genetic differences in a tail suspension test for evaluating antidepressant activity. Trullas R, et al. **Psychopharmacology (Berlin)** 1989;99(2):287–8
The effects of separate or combined infusions of corticotrophin–releasing factor and vasopressin either intraventricularly or into the amygdala on aggressive and investigative behaviour in the rat. Elkabir DR, et al. **Regul Pept** 1990 Apr 24;28(2):199–214
Thymopentin antagonizes stress–induced changes of GABA/benzodiazepine receptor complex. Klusa V, et al. **Regul Pept** 1990 Mar 5;27(3):355–65
Endocrinological and behavioural effects of p–chlorophenylalanine (PCPA) oral administration to broody turkey hens (Meleagris gallopavo). Guémené D, et al. **Reprod Nutr Dev** 1989;29(4):469–76
Animal model of anxiety: effect of acute diazepam treatment in the older adult genetically hypertensive rats of Koletsky type and in the older adult rats of Wistar strain. Golda V, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1989;32(4):407–23
Behaviour of the genetically hypertensive rats of Koletsky type in holeboard and in elevated plus–maze: effect of scopolamine and nicergoline treatment. Golda V, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1989;32(1):121–34
Neurobehavioral Teratology Society, fourteenth annual meeting. June 7–10, 1990, Victoria, British Columbia, Canada. Program and abstracts. **Teratology** 1990 May; 41(5):603–27
Correlation between behavioral and pathological changes in the evaluation of neurotoxicity. Broxup B, et al. **Toxicol Appl Pharmacol** 1989 Dec;101(3):510–20
Sensitive periods for lead–induced behavioral impairment (nonspatial discrimination reversal) in monkeys. Rice DC, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):101–9
Placental and blood–brain barrier transfer following prenatal and postnatal exposures to neuroactive drugs: relationship with partition coefficient and behavioral teratogenesis. Watanabe T, et al. **Toxicol Appl Pharmacol** 1990 Aug; 105(1):66–77
Effects of non–psychotropic drugs on conditioned behavior of cats. Yen–Koo HC, et al. **Toxicol Ind Health** 1989 Dec; 5(6):949–52
The effects of chronic treatment and withdrawal of CNS depressants on aggressive behavior. Yen–Koo HC, et al. **Toxicol Ind Health** 1989 Dec;5(6):953–6
Long–term behavioral and learning abnormalities produced by the irreversible cholinesterase inhibitor soman: effect of a standard pretreatment regimen and clonidine. Buccafusco JJ, et al. **Toxicol Lett** 1990 Aug;52(3):319–29
Behavioral indices of neurotoxicity. Tilson HA. **Toxicol Pathol** 1990;18(1 Pt 2):96–104 (27 ref.)
The Digiscan Animal Activity Analyzer complies with the United States Environmental Protection Agency (USEPA) guideline for motor activity [letter; comment] Maurissen JP. **Toxicology** 1989 Sep;58(1):97–100 Comment on: Toxicology 1988 May;49(2–3):433–9.
Comments on the number of experimental rats needed to test for motor activity in accordance with recent guidelines of the EPA (1985) and (1988) [letter] Schaeppi U. **Toxicology** 1989 Sep;58(1):100–1
m–CPP: a tool for studying behavioural responses associated with 5–HT1c receptors. Curzon G, et al. **Trends Pharmacol Sci** 1990 May;11(5):181–2 (35 ref.)
Behavioral drug actions and brain lateralization. Izquierdo I. **Trends Pharmacol Sci** 1989 Sep;10(9):344–5 (11 ref.)
Effects of chloramphenicol, cimetidine and phenobarbital on and tolerance to xylazine–ketamine anesthesia in dogs. Nossaman BC, et al. **Vet Hum Toxicol** 1990 Jun;32(3):216–9
[Experimental study of behavior and cerebral morphology of rat pups generated by fluorotic female rat] Liu WX. **Chung–hua Ping Li Hsueh Tsa Chih** 1989 Dec;18(4):290–2 (Eng. Abstr.) **(Chi)**
[A study on the effects of alcoholic beverage on experimental

animal behaviors] Chen BQ.
Chung Hua Yu Fang I Hsueh Tsa Chih 1989 May; 23(3):163–5 (Eng. Abstr.) **(Chi)**

[The effects of inhalation of styrene on the neurobehavior in the offsprings] Chen BQ.
Chung Hua Yu Fang I Hsueh Tsa Chih 1989 Nov; 23(6):342–5 (Eng. Abstr.) **(Chi)**

[Cytostatic treatment of the male rat: effects on offspring and protection by initial hormonal treatment] Dulioust E, et al. **C R Acad Sci [III]** 1989;309(4):137–42 (Eng. Abstr.) **(Fre)**

[TRH dissociates the aggressivity of vegetative and motor phenomena induced by carbachol in the cat] Samardžić R, et al. **C R Soc Biol (Paris)** 1989;183(2):148–52 (Eng. Abstr.) **(Fre)**

[The effect of carbamazepine on the behavior of rats in a raised T- and 8-arm radial maze] Kittner H, et al. **Pharmazie** 1989 Nov;44(11):797–8 **(Ger)**

[General pharmacological studies on 5,8,11,14,17-eicosapentaenoic acid ethyl ester (EPA-E)] Sato M, et al. **Nippon Yakurigaku Zasshi** 1989 Jul; 94(1):35–47 (Eng. Abstr.) **(Jpn)**

[Modification of the behavioral effects of drugs after repeated administration—special reference to the reverse tolerance of amphetamines] Tadokoro S, et al.
Nippon Yakurigaku Zasshi 1990 May;95(5):229–38 (52 ref.) (Eng. Abstr.) **(Jpn)**

[Behavioral pharmacological properties of the novel antidepressant paroxetine, a selective 5-HT uptake inhibitor] Yamamoto T, et al.
Nippon Yakurigaku Zasshi 1989 Sep;94(3):189–206 (Eng. Abstr.) **(Jpn)**

[Sex difference in operant behavior following single exposure to carbon monoxide in adult rats] Aikawa H, et al.
Sangyo Igaku 1990 Jan;32(1):26–32 (Eng. Abstr.) **(Jpn)**

[beta-Phenylethylamine and amphetamine: similar aspects in their behaviorpharmacological and neurochemical characteristics] Hirano M, et al.
Yakubutsu Seishin Kodo 1989 Dec;9(4):335–48 (95 ref.) (Eng. Abstr.) **(Jpn)**

[Effects of muscimol on aggressive behaviors induced by clonidine in mice] Kaneyuki H. **Yakubutsu Seishin Kodo** 1989 Sep;9(3):281–7 (Eng. Abstr.) **(Jpn)**

[Effects of neuropeptide Y on behavior and noradrenaline level in the brain] Borisova EV, et al.
Biull Eksp Biol Med 1989 Aug;108(8):132–5 (Eng. Abstr.) **(Rus)**

[Effects of verapamil on behavioral and microcirculatory disorders in pain syndrome of spinal etiology] Kryzhanovskiĭ GI, et al. **Biull Eksp Biol Med** 1990 May; 109(5):425–8 (Eng. Abstr.) **(Rus)**

[The assessment of the action of pharmacological agents based on a new computer program for analysing animal operant behavior] Garibova TL, et al.
Farmakol Toksikol 1990 Jan–Feb;53(1):67–70 (Eng. Abstr.) **(Rus)**

[The effect of pyrazidol and inkazan on the rotation behavior of rats] Mashkovskiĭ MD, et al. **Farmakol Toksikol** 1989 Nov–Dec;52(6):29–32 (Eng. Abstr.) **(Rus)**

[Ethologic study of the sequelae of prenatal exposure to psychotropic agents] Poshivalov VP, et al.
Farmakol Toksikol 1989 Sep–Oct;52(5):99–107 (52 ref.) (Eng. Abstr.) **(Rus)**

[Neurobehavioral toxicology] Zbinden G.
Farmakol Toksikol 1989 Jul–Aug;52(4):5–9 (Eng. Abstr.) **(Rus)**

[A comparison of the hormonal and etholotropic activity of luliberin and its analogs] Makusheva VP, et al.
Probl Endokrinol (Mosk) 1990 Jan–Feb;36(1):72–4 (Eng. Abstr.) **(Rus)**

[Disorders in the behavioral development of rats in ontogeny after a single administration of quinolinic acid] Kozlovskiĭ VL, et al. **Zh Evol Biokhim Fiziol** 1990 Mar–Apr; 26(2):207–12 (Eng. Abstr.) **(Rus)**

[Factors determining the effect of acute ethanol administration on behavior realization] Aleksandrov IuI, et al. **Zh Vyssh Nerv Deiat** 1989 Nov–Dec;39(6):1149–51 **(Rus)**

[The effect of the acute administration of ethanol on the realization of behavior and its neuronal support] Aleksandrov IuI, et al. **Zh Vyssh Nerv Deiat** 1990 May–Jun; 40(3):456–66 (Eng. Abstr.) **(Rus)**

[Changes in the correlations of the different indices of the entire behavior of dogs under the influence of seduxen] D'iakova SD, et al. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr; 40(2):273–82 (Eng. Abstr.) **(Rus)**

[The possibilities of correcting some complex behavioral reactions in KM rats by using an antioxidant] Fedotova IB, et al. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr;40(2):318–25 (Eng. Abstr.) **(Rus)**

[The effect of 6-hydroxydopamine on the behavior of rats with differing resistance to stress exposure] Gromova EA, et al. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr;40(2):301–9 (Eng. Abstr.) **(Rus)**

[Ethologico-pharmacologic analysis of the psychotropic properties of phenylpiperazine derivatives in experimental models of aggressive behavior] Kosenkova NS, et al.
Zh Vyssh Nerv Deiat 1989 May–Jun;39(3):564–6 **(Rus)**

[Changes in the brain electrical activity under the influence of beta-adrenoreceptor agonists and antagonists in rats during free behavior] Kurova NS, et al.
Zh Vyssh Nerv Deiat 1989 Jul–Aug;39(4):761–3 **(Rus)**

[The effect of prolyl-leucyl-glycinamide on behavioral and visceral functions in dogs] Pastukhov VA, et al.
Zh Vyssh Nerv Deiat 1990 Mar–Apr;40(2):372–3 **(Rus)**

[The effect of the opioid peptide DADLE on the neuronal activity of the visual cortex and on the behavior of rabbits during learning] Shul'gina GI. **Zh Vyssh Nerv Deiat** 1990 May–Jun;40(3):590–3 **(Rus)**

[The effect of the ACTH(4–10) fragment on certain forms of adaptive behavior in mice of various genetic groups] Voznesenskaia VV, et al. **Zh Vyssh Nerv Deiat** 1989 Nov–Dec;39(6):1048–55 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Spontaneous behaviour, habituation, and sniffing responsiveness of aged female rats. Hliňák Z, et al.
Act Nerv Super (Praha) 1990 Jun;32(2):87–94

Determinants of threat-induced behaviour in the rat. Kukleta M. **Act Nerv Super (Praha)** 1989 Oct;31(3):218–9

Ethogram of Aplysia depilans and fasciata. Milošević I, et al. **Act Nerv Super (Praha)** 1990 Mar;32(1):78–9

Controversies on the subject of slave-raids in amazon ants (genus Polyergus). Dobrzańska J, et al.
Acta Neurobiol Exp (Warsz) 1989;49(6):367–79; discussion 379–80 (28 ref.)

Hippocampal rhythmical slow activity during instrumental responses with sexual reinforcement in male rats. Korczyński R, et al. **Acta Neurobiol Exp (Warsz)** 1989; 49(5):255–64

Stimulus modality effects on transformations of conditioned enhancement and conditioned suppression in rats. Walasek G, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(5):215–38

Role of the substantia nigra in the behavioural–cardiovascular integration in the cat. Angyán L. **Acta Physiol Hung** 1989; 74(2):175–87

Somatostatin and cognitive functions: behavioral, neurochemical and molecular biology studies. Florio T, et al. **Acta Physiol Hung** 1990;75 Suppl:107–8

The mesencephalic reticular formation as a link in the cortical control of exploratory and goal-directed behaviour. Klingberg F, et al. **Acta Physiol Hung** 1989;74(2):121–34

Spontaneous EEG paroxysmal activity, behavioural and endocrine changes in male rats subjected to different regimens of locomotion. Nikiforova AS, et al.
Acta Physiol Pharmacol Bulg 1989;15(2):58–62

Long-term locomotion regimens affect EEG paroxysmal activity, behaviour and sex hormone secretion in female rats. Nikiforova AS, et al. **Acta Physiol Pharmacol Bulg** 1989;15(3):31–7

Change in the pattern of behavioural specialization of neurons in the motor cortex of the rabbit following lesion of the visual cortex. Alexandrov YuI, et al.
Acta Physiol Scand 1990 Jun;139(2):371–85

Oral ethanol self-administration: a behavioral pharmacological approach to CNS control mechanisms. Samson HH, et al. **Alcohol** 1990 May–Jun;7(3):187–91 (18 ref.)

Behavior of alcohol-preferring AA and alcohol-avoiding ANA rat lines in tests of anxiety and aggression. Tuominen K, et al. **Alcohol** 1990 Jul–Aug;7(4):349–53

Association between cardiovascular reactivity to stress and hypertension or behavior. Knardahl S, et al.
Am J Physiol 1990 Jul;259(1 Pt 2):H248–57

Physiological correlates of schedule-induced activities in rats. Mittleman G, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):R485–91

Effects of temperature on nervous system: implications for behavioral performance. Montgomery JC, et al.
Am J Physiol 1990 Aug;259(2 Pt 2):R191–6 (64 ref.)

Effect of hematocrit on behavioral thermoregulation of the toad Bufo marinus. Wood SC. **Am J Physiol** 1990 Apr;258(4 Pt 2):R848–51

Stress-reducing effects of ingesting milk, sugars, and fats. A developmental perspective. Blass EM, et al.
Ann N Y Acad Sci 1989;575:292–305; discussion 305–6 (42 ref.)

The microstructure of ingestive behavior. Davis JD.
Ann N Y Acad Sci 1989;575:106–19; discussion 120–1 (30 ref.)

Antinociceptive properties of pyridoxine. Neurophysiological and behavioral findings. Zimmerman M, et al. **Ann N Y Acad Sci** 1990;585:219–30

Effects of seizures on learning, memory, and behavior in the genetically epilepsy-prone rat. Holmes GL, et al.
Ann Neurol 1990 Jan;27(1):24–32

Mechanisms of seasonal cycles of behavior. Nelson RJ, et al. **Annu Rev Psychol** 1990;41:81–108 (160 ref.)

Hippocampal nicotinic cholinergic mechanisms mediate spontaneous alternation and fear during ontogenesis but not later in the rat. Blozovski D, et al.
Behav Brain Res 1989 Dec 1;35(3):209–20

Septohippocampal system and the prelimbic sector of frontal cortex: a neuropsychological battery analysis in the rat. Brito GN, et al. **Behav Brain Res** 1990 Jan 1;36(1–2):127–46

Behavioural effects of neocortical and cingulate lesions in the Mongolian gerbil. Ellard CG, et al.
Behav Brain Res 1990 Jan 1;36(1–2):41–51

Quantitative analysis of recovery curves. Krauth J.
Behav Brain Res 1990 Jul 9;39(2):167–85

Seemingly paradoxical jumping in cataleptic haloperidol-treated rats is triggered by postural instability. Morrissey TK, et al. **Behav Brain Res** 1989 Dec 1; 35(3):195–207

Recovery from axial apraxia in the lateral hypothalamic labyrinthectomized rat reveals three elements of contact-righting: cephalocaudal dominance, axial rotation, and distal limb action. Pellis SM, et al.
Behav Brain Res 1989 Dec 1;35(3):241–51

Central catecholaminergic dysfunction and behavioural disorders following hypoxia in adult rats. Speiser Z, et al.
Behav Brain Res 1990 Feb 12;37(1):19–27

Behavioral characterization of intracranial self-stimulation from mesolimbic, mesocortical, nigrostriatal, hypothalamic and extra-hypothalamic sites in the non-inbred CD-1 mouse strain. Zacharko RM, et al. **Behav Brain Res** 1990 Jan 22;36(3):251–81

Influence of maternal proximity on behavioral and physiological responses to separation in infant rhesus monkeys (Macaca mulatta). Bayart F, et al.
Behav Neurosci 1990 Feb;104(1):98–107

Behavioral and physiological responses to maternal separation in squirrel monkeys (Saimiri sciureus). Wiener SG, et al. **Behav Neurosci** 1990 Feb;104(1):108–15

Adrenocortical and behavioral responses to repeated stressors: toward an animal model of chronic stress and stress-related mental illness. Ottenweller JE, et al.
Biol Psychiatry 1989 Dec;26(8):829–41

Immunomodulation by behavioural conditioning. Kusnecov A, et al. **Biol Psychol** 1989 Feb;28(1):25–39 (75 ref.)

Functional development of sensory systems and acquisition of behavior in fish larvae. Proceedings of a symposium in conjunction with the annual meeting of the American Society of Ichthyologists and Herpetologists. June 27–28, 1988, Ann Arbor, Michigan. **Brain Behav Evol** 1989; 34(1):1–72

Life history of roach, Rutilus rutilus (Cyprinidae, Teleostei). A qualitative and quantitative study on the development of sensory brain areas. Brandstätter R, et al.
Brain Behav Evol 1989;34(1):35–42

Correlation between histological and behavioral measures of visual acuity in a zooplanktivorous fish, the white crappie (Pomoxis annularis). Browman HI, et al.
Brain Behav Evol 1990;35(2):85–97

Embryology, ethology and ecology of ontogenetic critical periods in fish. Browman HI. **Brain Behav Evol** 1989; 34(1):5–12 (73 ref.)

An appraisal of some lesioning methods applied to the posterior hypothalamus in rats. Hinrichsen CF, et al.
Brain Behav Evol 1989;34(3):151–63

Sensory systems and behavior of premetamorphic and metamorphic leptocephalous larvae. Pfeiler E.
Brain Behav Evol 1989;34(1):25–34 (51 ref.)

Immune function in lines of mice selected for high or low degrees of behavioral asymmetry. Fride E, et al.
Brain Behav Immun 1990 Jun;4(2):129–38

Role of the cerebellum in the ontogenesis of the equilibrium behavior in the young rat: a behavioral study. Auvray N, et al. **Brain Res** 1989 Dec 29;505(2):291–301

Effect of medial bulboreticular and raphe nuclear lesions on the excitation and modulation of supraspinal nocifensive behaviors in the cat. Casey KL, et al. **Brain Res** 1989 Oct 30;501(1):150–61

Dopamine depletion in neonatal rats: effects on behavior and striatal dopamine release assessed by intracerebral microdialysis during adulthood. Castañeda E, et al.
Brain Res 1990 Jan 29;508(1):30–9

The ventral pallidum plays a role in mediating cocaine and heroin self-administration in the rat. Hubner CB, et al.
Brain Res 1990 Jan 29;508(1):20–9

Sensory-motor deficit and recovery from thrombotic infarction of the vibrissal barrel-field cortex. Hurwitz BE, et al. **Brain Res** 1990 Apr 2;512(2):210–20

Fear-motivated behavior induced by prior shock experience is mediated by corticotropin-releasing hormone systems. Kalin NH, et al. **Brain Res** 1990 Feb 12;509(1):80–4

Site-specific postural and locomotor changes evoked in awake, freely moving intact cats by stimulating the brainstem. Mori S, et al. **Brain Res** 1989 Dec 25; 505(1):66–74

Search after neurobiological profile of individual-specific features of Wistar rats. Cools AR, et al. **Brain Res Bull** 1990 Jan;24(1):49–69

Modified behavioral and olfactory bulb responses to maternal odors in preweanling rats. Sullivan RM, et al.
Brain Res Dev Brain Res 1990 May 1;53(2):243–7

Physiological color change in squid iridophores. II. Ultrastructural mechanisms in Lolliguncula brevis. Cooper KM, et al. **Cell Tissue Res** 1990 Jan;259(1):15–24

Physiological color change in squid iridophores. I. Behavior, morphology and pharmacology in Lolliguncula brevis. Hanlon RT, et al. **Cell Tissue Res** 1990 Jan;259(1):3–14

Meal scheduling modulation of circadian rhythm of phototactic behaviour in cave dwelling fish. Pradhan RK, et al. **Chronobiol Int** 1989;6(3):245–9

Early experience and cross-generational continuity of mother–infant contact in vervet monkeys. Fairbanks LA.
Dev Psychobiol 1989 Nov;22(7):669–81

Intersensory functioning in bobwhite quail chicks: early sensory dominance. Lickliter R, et al. **Dev Psychobiol** 1989 Nov;22(7):651–67

Some sensory determinants of home orientation in kittens. Luschekin VS, et al. **Dev Psychobiol** 1989 Sep;22(6):601–16

Pubertal-related changes influence the development of environment-related social interaction in the male rat. Primus RJ, et al. **Dev Psychobiol** 1989 Sep;22(6):633–43

Effect of maternal presence on the cardiac and behavioral responses to shock in rats as a function of age. Richardson R, et al. **Dev Psychobiol** 1989 Sep;22(6):567–83

Kindling in the posterior cingulate cortex: electrographic and behavioral characteristics. Leung LS, et al. **Electroencephalogr Clin Neurophysiol** 1990 Aug; 76(2):177–86

Behavioural and ecomorphological responses of the neotropical pacu Piaractus mesopotamicus (Teleostei, Serrasalmidae) to oxygen-deficient waters. Saint-Paul U, et al. **Exp Biol** 1988;48(1):19–26

Hippocampal granule cells are necessary for normal spatial learning but not for spatially-selective pyramidal cell discharge. McNaughton BL, et al. **Exp Brain Res** 1989; 76(3):485–96

Behavioral correlates of theta-on and theta-off cells recorded from hippocampal formation of mature young and aged rats. Mizumori SJ, et al. **Exp Brain Res** 1990;80(2):365–73

Behavioural thermosensitivity after unilateral, partial lesions of the lateral funiculus in the cervical spinal cord of the cat. Norrsell U. **Exp Brain Res** 1989;78(2):369–73

Behavioural thermosensitivity after bilateral lesions of the lateral funiculi in the cervical spinal cord of the cat. Norrsell U. **Exp Brain Res** 1989;78(2):374–9

Morphology of the brain of Sarotherodon mossambicus (Peters) and correlation with its habits. Kumari N, et al. **Folia Morphol (Praha)** 1989;37(3):253–6

Behavioral development and socialization of infants in a free-ranging group of howling monkeys (Alouatta palliata). Clarke MR. **Folia Primatol (Basel)** 1990;54(1-2):1–15

Endocrine and behavioral responses to aggression and social dominance in the green anole lizard, Anolis carolinensis. Greenberg N, et al. **Gen Comp Endocrinol** 1990 Feb; 77(2):246–55

Aromatization mediates aggressive behavior in quail. Schlinger BA, et al. **Gen Comp Endocrinol** 1990 Jul; 79(1):39–53

Behavioral and genetic interrelationships between locomotor activity and brain biogenic amines. Messiha FS, et al. **Gen Pharmacol** 1990;21(4):459–64

Gonadal influences on behavioral deterioration with aging of male rats. Perez J, et al. **Horm Behav** 1989 Dec; 23(4):457–65

The use of the Morris Water Maze in the study of memory and learning. Brandeis R, et al. **Int J Neurosci** 1989 Sep; 48(1-2):29–69 (72 ref.)

Evidence for a functional and anatomical relationship between the lateral septum and the hypothalamus in the control of flank marking behavior in Golden hamsters. Ferris CF, et al. **J Comp Neurol** 1990 Mar 15;293(3):476–85

The code for stimulus direction in a cell assembly in the cockroach. Camhi JM, et al. **J Comp Physiol [A]** 1989 Apr; 165(1):83–97

Eye movements in Daphnia magna. Regions of the eye are specialized for different behaviors. Consi TR, et al. **J Comp Physiol [A]** 1990 Feb;166(3):411–20

Rapid stereoselective hydrolysis of (+)-cocaine in baboon plasma prevents its uptake in the brain: implications for behavioral studies. Gatley SJ, et al. **J Neurochem** 1990 Feb; 54(2):720–3

Functional reorganization of primary somatosensory cortex in adult owl monkeys after behaviorally controlled tactile stimulation. Jenkins WM, et al. **J Neurophysiol** 1990 Jan; 63(1):82–104

Kinematic analysis of the defense response in crayfish. Kelly TM, et al. **J Neurophysiol** 1990 Jul;64(1):64–76

Behaviorally contingent property of movement-related activity of the primate putamen. Kimura M. **J Neurophysiol** 1990 Jun;63(6):1277–96

Catecholaminergic effects on neuronal activity related to a delayed response task in monkey prefrontal cortex. Sawaguchi T, et al. **J Neurophysiol** 1990 Jun;63(6):1385–400

Effects of dopamine antagonists on neuronal activity related to a delayed response task in monkey prefrontal cortex. Sawaguchi T, et al. **J Neurophysiol** 1990 Jun;63(6):1401–12

Operant conditioning of head-waving in Aplysia. I. Identified muscles involved in the operant response. Cook DG, et al. **J Neurosci** 1989 Sep;9(9):3097–106

Operant conditioning of head-waving in Aplysia. II. Contingent modification of electromyographic activity in identified muscles. Cook DG, et al. **J Neurosci** 1989 Sep; 9(9):3107–14

Operant conditioning of head-waving in Aplysia. III. Cellular analysis of possible reinforcement pathways. Cook DG, et al. **J Neurosci** 1989 Sep;9(9):3115–22

Depletion of serotonin in the nervous system of Aplysia reduces the behavioral enhancement of gill withdrawal as well as the heterosynaptic facilitation produced by tail shock. Glanzman DL, et al. **J Neurosci** 1989 Dec; 9(12):4200–13

Learning and behavioral-long-term potentiation: importance of controlling for motor activity. Hargreaves EL, et al. **J Neurosci** 1990 May;10(5):1472–8

Enhanced behavioral conditioning to context and impaired behavioral and neuroendocrine responses to conditioned stimuli following ceruleocortical noradrenergic lesions: support for an attentional hypothesis of central noradrenergic function. Selden NR, et al. **J Neurosci** 1990 Feb;10(2):531–9

Molecular approaches to the study of long-term sensitization in Aplysia californica. Knapp MR. **J Physiol (Paris)** 1988–89;83(3):181–6

Long-term change of viability of neuron functioning and its possible behavioral consequences in the adult Aplysia. Peretz B. **J Physiol (Paris)** 1988–89;83(3):217–23

Urinary androgen concentrations and social status in two species of free ranging zebra (Equus burchelli and E. grevyi). Chaudhuri M, et al. **J Reprod Fertil** 1990 Jan; 88(1):127–33

The dynamics of cohort selection. Boyer JF, et al. **J Theor Biol** 1990 Feb 9;142(3):393–414

Energetics and geometry of huddling in small mammals. Canals M, et al. **J Theor Biol** 1989 Nov 21;141(2):181–9

Should a parasite expose itself? (some theoretical aspects of begging and vigilance behavior). Motro U. **J Theor Biol** 1989 Sep 22;140(2):279–87

The bag cell neurons of Aplysia. A model for the study of the molecular mechanisms involved in the control of prolonged animal behaviors. Conn PJ, et al. **Mol Neurobiol** 1989 Winter;3(4):237–73 (174 ref.)

Neuroethology. Deceptively simple behaviour [news] Altman J. **Nature** 1989 Nov 30;342(6249):481–2

Genetic correlations between morphology and antipredator behaviour in natural populations of the garter snake Thamnophis ordinoides. Brodie ED 3d. **Nature** 1989 Nov 30;342(6249):542–3

Relationship of age-related decline across several behavioral domains. Gallagher M, et al. **Neurobiol Aging** 1989 Nov-Dec;10(6):691–708

Passive avoidance behavior, vasopressin and the immune system. A link between avoidance latency and immune response. Croiset G, et al. **Neuroendocrinology** 1990 Feb; 51(2):156–61

Functional organization of striatum as studied with neural grafts. Iversen SD, et al. **Neuropsychologia** 1990; 28(6):601–26 (109 ref.)

Functional recovery following transplants of embryonic brain tissue in rats with lesions of visual, frontal and motor cortex: problems and prospects for future research. Lescaudron L, et al. **Neuropsychologia** 1990;28(6):585–99 (64 ref.)

Behavioral plasticity of Myrmica rubra ants during learning in a multi-alternative symmetrical labyrinth. Dashevskii BA, et al. **Neurosci Behav Physiol** 1990 Jan-Feb;20(1):18–26

Indices of free-radical oxidation of lipids and antiradical protection of the brain--neurochemical correlates of development of the general adaptation syndrome. Gulyaeva NV, et al. **Neurosci Behav Physiol** 1989 Sep-Oct; 19(5):376–82

Changes in behavioral responses of nereids to vibration after unconditioned stimulation. Inozemtsev AN. **Neurosci Behav Physiol** 1990 Mar-Apr;20(2):185–7

Arterial hypertension in dogs with experimental informational pathology of their higher nervous activity. Khananashvili MM, et al. **Neurosci Behav Physiol** 1989 Sep-Oct;19(5):393–8

Factor analysis of rat behavior in an open field test. Markel AL, et al. **Neurosci Behav Physiol** 1989 Jul-Aug; 19(4):279–86

Compensation for behavioral disorders due to administration of 6-hydroxy-dopamine in transplantation of embryonic locus coeruleus tissue in rats. Semenova TP, et al. **Neurosci Behav Physiol** 1989 Sep-Oct;19(5):359–66

Dopamine, neuroleptics and reinforced behavior. Ettenberg A. **Neurosci Biobehav Rev** 1989 Summer-Fall; 13(2-3):105–11 (98 ref.)

Serotonin receptors: clinical implications. Glennon RA. **Neurosci Biobehav Rev** 1990 Spring;14(1):35–47 (183 ref.)

Comparison of behavioral effects of nucleus basalis magnocellularis lesions and somatosensory cortex ablation in the rat. Wozniak DF, et al. **Neuroscience** 1989; 32(3):685–700

Opioid delta receptor involvement in behavioral and neural plasticity. Martinez JL Jr, et al. **NIDA Res Monogr** 1989; 95:174–9 (14 ref.)

Further evidence for 'pain-related' behaviours in a model of unilateral peripheral mononeuropathy. Attal N, et al. **Pain** 1990 May;41(2):235–51

Brain neuron gene expression in the organization of innate and acquired behaviors. Sudakov KV. **Pavlov J Biol Sci** 1989 Oct-Dec;24(4):127–32

Influence of housing conditions on the acquisition of intravenous heroin and cocaine self-administration in rats. Bozarth MA, et al. **Pharmacol Biochem Behav** 1989 Aug; 33(4):903–7

A pretest procedure reliably predicts performance in two animal models of inescapable stress. Drugan RC, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):649–54

Alcohol intake is inversely related to plasma renin activity in the genetically selected alcohol-preferring and -nonpreferring lines of rats. Grupp LA, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):1061–3

Effect of isolation on brain monoamines and the behavior of mice in tests of exploration, locomotion, anxiety and behavioral 'despair'. Hilakivi LA, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):371–4

Individual behavioral and neuroendocrine differences in responsiveness to audiogenic stress. Irwin MR, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):913–7

Analysis of serotonin, dopamine and their metabolites in the caudate putamen, the suprachiasmatic nucleus and the median raphe nucleus of euthermic and torpid deermice, Peromyscus maniculatus. Lin LH, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):309–14

Stress adaptation and hypersensitivity in 5-HT neuronal systems after repeated foot shock. Ohi K, et al. **Pharmacol Biochem Behav** 1989 Nov;34(3):603–8

Effects of hemivibrissotomy in the rat: time-dependent asymmetries in turning and biogenic amines induced by apomorphine. Schwarting RK, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):989–94

Multiple neurochemical and behavioral consequences of stressors: implications for depression. Anisman H, et al. **Pharmacol Ther** 1990;46(1):119–36 (132 ref.)

Sleep patterns in the parakeet Melopsittacus undulatus. Ayala-Guerrero F. **Physiol Behav** 1989 Nov;46(5):787–91

Controllability of prestimulation of the medial prefrontal cortex determines the facilitation of self-stimulation and kindled seizures. Balleine BW, et al. **Physiol Behav** 1989 Aug;46(2):239–45

Adrenal and behavioral responses of swine restricted to varying degrees of mobility. Becker BA, et al. **Physiol Behav** 1989 Jun;45(6):1171–6

Selective olfactory pathway lesions differentially affect runway behavior of the rat. Cattarelli M. **Physiol Behav** 1989 Sep;46(3):393–6

Behavioral determination of critical flicker fusion in dogs. Coile DC, et al. **Physiol Behav** 1989 Jun;45(6):1087–92

Sleep changes in fasting rats. Dewasmes G, et al. **Physiol Behav** 1989 Aug;46(2):179–84

Intertrial interval dependent effect of lateral hypothalamic stimulation on spontaneous alternation behavior in a T-maze. Durantou F, et al. **Physiol Behav** 1989 Aug; 46(2):253–8

Reduced serum antibodies associated with social defeat in rats. Fleshner M, et al. **Physiol Behav** 1989 Jun;45(6):1183–7

Genotype-environment interaction and the correlation structure of behavioral elements in paradise fish (Macropodus opercularis). Gerlai R, et al. **Physiol Behav** 1990 Feb;47(2):343–56

Effects of blindness on play fighting in golden hamster infants. Guerra RF, et al. **Physiol Behav** 1989 Nov; 46(5):775–7

Development of sex differences in the response of spiny mouse pups to adult male odors. Janus C, et al. **Physiol Behav** 1989 Nov;46(5):895–9

Mu 1 opioid receptor involvement in maternal behavior. Mann PE, et al. **Physiol Behav** 1990 Jan;47(1):133–8

"Behavioral despair" test predicts stress ulcer in WKY rats. Paré WP. **Physiol Behav** 1989 Sep;46(3):483–7

Fetal, hormonal and experiential factors influencing the mating-induced regulation of infanticide in male house mice. Perrigo G, et al. **Physiol Behav** 1989 Aug;46(2):121–8

Hypothermia impairs performance in the Morris water maze. Rauch TM, et al. **Physiol Behav** 1989 Aug;46(2):315–20

Effects of time of feeding on recovery of food-entrained rhythms during subsequent fasting in SCN-lesioned rats. Ruis JF, et al. **Physiol Behav** 1989 Nov;46(5):857–66

Effects of early life undernutrition in artificially-reared rats: 3. Further studies of growth and behaviour. Smart JL, et al. **Physiol Behav** 1989 Jun;45(6):1153–60

The role of the Flehmen response in the behavioral repertoire of the stallion. Stahlbaum CC, et al. **Physiol Behav** 1989 Jun;45(6):1207–14

Entrainment of activity to multiple feeding times in rats with suprachiasmatic lesions. Stephan FK. **Physiol Behav** 1989 Sep;46(3):489–97

Mediodorsal thalamic lesions impair "reference" and "working" memory in rats. Stokes KA, et al. **Physiol Behav** 1990 Mar;47(3):471–6

Ontogeny of behavioral and hormonal responses to stress in prenatally stressed male rat pups. Takahashi LK, et al. **Physiol Behav** 1990 Feb;47(2):357–64

An adaptable microcomputer program for recording behavior durations. Tarapacki JA, et al. **Physiol Behav** 1990 Feb;47(2):381–4

Failure to transfer a digging response to a detour problem in young rats with lesions to the "general learning system". Thompson R, et al. **Physiol Behav** 1989 Jun;45(6):1235–41

Effects of behavior and social condition on cardiovascular response to footshock stress. Viken RJ, et al. **Physiol Behav** 1989 Dec;46(6):961–6

Dam strain affects cardiovascular reactivity to acute stress in BHR. Woodworth CH, et al. **Physiol Behav** 1990 Jan; 47(1):139–44

Slow potentials of the cerebral cortex and behavior. Birbaumer N, et al. **Physiol Rev** 1990 Jan;70(1):1–41 (402 ref.)

Serotonin-mediated behavior in rats chronically treated with (-) deprenyl. Gyarmati S, et al. **Pol J Pharmacol Pharm** 1988 Nov-Dec;40(6):667–71

Somatosensory input to dopamine neurones of the monkey midbrain: responses to pain pinch under anaesthesia and to active touch in behavioural context. Romo R, et al. **Prog Brain Res** 1989;80:473–8; discussion 465–6

Growth hormone and thyroid hormone levels during smolting in different populations of Atlantic salmon. Boeuf G, et al. **Prog Clin Biol Res** 1990;342:193–7 (32 ref.)

Current status of behavioural endocrinology in tropical marine teleosts. Cardwell JR, et al. **Prog Clin Biol Res** 1990; 342:673–7 (11 ref.)

Adaptiveness of tunnel system features in subterranean mammal burrows. Hickman GC. **Prog Clin Biol Res** 1990; 335:185–210 (119 ref.)

Dopamine D-1 and D-2 receptors in relation to reward and performance: a case for the D-1 receptor as a primary site

of therapeutic action of neuroleptic drugs. Miller R, et al. **Prog Neurobiol** 1990;34(2):143–83 (214 ref.)

Behavioral modifications in relation to hypothyroidism and hyperthyroidism in adult rats. Fundaro A. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(6):927–40

Behavior of freely diving animals. Castellini MA, et al. **Undersea Biomed Res** 1989 Sep;16(5):355–62 (40 ref.)

Exposure to high pressure may produce the 5-HT behavioral syndrome in rats. Wardley-Smith B, et al. **Undersea Biomed Res** 1990 Jul;17(4):275–86

The role of image size and retinal motion in the computation of absolute distance by the Mongolian gerbil (Meriones unguiculatus). Goodale MA, et al. **Vision Res** 1990; 30(3):399–413

Neurobehavioral analysis of high-rate Sidman avoidance rat strain. Shigeta S, et al. **Yakubutsu Seishin Kodo** 1989 Jun; 9(2):217–24

Neurobehavioral development of in utero treated hydrocephalic monkeys. Michejda M. **Z Kinderchir** 1989 Dec;44 Suppl 1:52

[Regulation pathways of expectancy behavior in the cat: histologic study] Bouyer JJ, et al. **C R Acad Sci [III]** 1989; 309(16):637–46 (Eng. Abstr.) (Fre)

[Intrahippocampal injection of NGF accelerates spontaneous alteration ontogenesis and the maturation of septohippocampal cholinergic innervation in rats] **Hess C, et al. C R Acad Sci [III]** 1990;310(11):533–8 (Eng. Abstr.) (Fre)

[EEG and behavioral effects of deprivation of paradoxical sleep in cats] Vimont-Vicary P, et al. **Electroencephalogr Clin Neurophysiol** 1966 May; 20(5):439–49 (Eng. Abstr.) (Fre)

[Changes in the behavior of dogs after castration] Heidenberger E, et al. **Tierarztl Prax** 1990 Feb;18(1):69–75 (Eng. Abstr.) (Ger)

[A genetic correlational analysis of the behavioral and physiological characteristics of spontaneously hypertensive rats (SHR)] Dmitriev IuS, et al. **Fiziol Zh SSSR** 1990 Mar; 76(3):357–61 (Eng. Abstr.) (Rus)

[The perception of complex signals by cats under free behavioral conditions] Kalmykova IV. **Fiziol Zh SSSR** 1989 Sep;75(9):1194–9 (Eng. Abstr.) (Rus)

[The effect of neostriatal stimulation on diuresis under conditions of unrestrained behavior in cats] Val'damirova EP. **Fiziol Zh SSSR** 1989 Oct;75(10):1374–80 (Eng. Abstr.) (Rus)

[The role of typological differences in animal behavior during the process of adaptation to extreme situations] Shlyk GG, et al. **Kosm Biol Aviakosm Med** 1990 Mar–Apr;24(2):38–41 (Eng. Abstr.) (Rus)

[The restructuring of the efferent activity of the generator of scratching during the electrical activation of the descending systems] Degtiarenko AM, et al. **Neirofiziologiia** 1990;22(3):300–9 (Eng. Abstr.) (Rus)

[Changes in the quantitative characteristics of the efferent activity of the scratching generator when the influence of the descending systems is removed] Degtiarenko AM. **Neirofiziologiia** 1990;22(1):123–31 (Eng. Abstr.) (Rus)

[The behavioral and neuromorphological characteristics of rats with spontaneous hypertension] Dmitrieva NI, et al. **Zh Evol Biokhim Fiziol** 1990 Jan–Feb;26(1):78–84 (Eng. Abstr.) (Rus)

[The behavior of tamarin monkeys during the learning and realization of instrumental food habits in a competitive situation] Maliukova IV, et al. **Zh Evol Biokhim Fiziol** 1990 Mar–Apr;26(2):221–9 (Eng. Abstr.) (Rus)

[The genetic determination of functions: oligopeptides in the systemogenesis of behavioral acts] Sudakov KV. **Zh Evol Biokhim Fiziol** 1990 Jan–Feb;26(1):120–9 (Rus)

[The spectral characteristics of the electroencephalogram of the toad Bufo bufo L. during the active and passive behavior of the animal in its circadian cycle] Vataev SI. **Zh Evol Biokhim Fiziol** 1989 Jul–Aug;25(4):555–8 (Eng. Abstr.) (Rus)

[Behavioral "despair" in female rats and gonadal function] Arushanian EB, et al. **Zh Vyssh Nerv Deiat** 1989 Nov–Dec; 39(6):1129–33 (Eng. Abstr.) (Rus)

[Behavioral changes during the acquisition of long-term sensitization of the defensive reflex in the edible snail] Beregovol NA, et al. **Zh Vyssh Nerv Deiat** 1990 May–Jun; 40(3):594–6 (Eng. Abstr.) (Rus)

[Characteristics of the behavior and adaptive reactions of amygdalectomized rats] Gilinskii MA. **Zh Vyssh Nerv Deiat** 1990 Jan–Feb;40(1):143–50 (Eng. Abstr.) (Rus)

[The stability of the behavioral specialization of the neurons] Gorkin AG, et al. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr; 40(2):291–300 (Eng. Abstr.) (Rus)

[The prediction of resistance to emotional stress based on the individual testing of behavior] Iumatov EA, et al. **Zh Vyssh Nerv Deiat** 1990 May–Jun;40(3):575–80 (Eng. Abstr.) (Rus)

[The discrimination of frequency-modulated signals under free behavior conditions in cats] Kalmykova IV. **Zh Vyssh Nerv Deiat** 1990 May–Jun;40(3):451–5 (Eng. Abstr.) (Rus)

[Characteristics of biochemical processes of the liver in rats with various types of open-field behavior] Krakovskii ME, et al. **Zh Vyssh Nerv Deiat** 1989 May–Jun;39(3):506–12 (Eng. Abstr.) (Rus)

[The development of pathological forms of behavior in submissive male C57BL/6J mice during agonistic zoosocial interactions. A possible model of depression?] Kudriavtseva NN, et al. **Zh Vyssh Nerv Deiat** 1989 Nov–Dec; 39(6):1134–41 (Eng. Abstr.) (Rus)

[A multiparameter movie-television method for research on the behavior of small laboratory animals] Levkovich IuI, et al. **Zh Vyssh Nerv Deiat** 1990 Jan–Feb;40(1):197–200 (Rus)

[Serotonin receptors in the brain of animals selected for their domesticated type of behavior] Maslova GB, et al. **Zh Vyssh Nerv Deiat** 1989 Jul–Aug;39(4):627–32 (Eng. Abstr.) (Rus)

[The characteristics of a change in the congenital and acquired forms of behavior in rats with genetic catalepsy] Petrova EV. **Zh Vyssh Nerv Deiat** 1990 May–Jun; 40(3):475–80 (Eng. Abstr.) (Rus)

[Compensation in behavioral disorders in rats receiving 5,7-DHT neonatally and by transplantation of embryonic raphe nucleus tissue] Semenova TP, et al. **Zh Vyssh Nerv Deiat** 1990 Jan–Feb;40(1):156–64 (Eng. Abstr.) (Rus)

[Neuromediator mechanisms of wakefulness and the voluntary behavior of cats] Shugalev NP, et al. **Zh Vyssh Nerv Deiat** 1989 Sep–Oct;39(5):861–8 (Eng. Abstr.) (Rus)

[Correlation of the behavioral characteristics of animals with varying levels of alcohol motivation: motor activity, taste and electrical pain sensitivities] Surmak VV, et al. **Zh Vyssh Nerv Deiat** 1990 Jan–Feb;40(1):79–84 (Eng. Abstr.) (Rus)

[Behavioral instrumental reactions and the heart rhythm in chimpanzees with different rates of approach to a natural food stimulus] Syrenskii VI, et al. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr;40(2):369–71 (Rus)

[Analysis of sexual differences in emotional reactions in rats] Martínez-Pereda JA, et al. **Rev Esp Fisiol** 1989 Sep; 45(3):239–43 (Eng. Abstr.) (Spa)

RADIATION EFFECTS

Effect of light sources and light intensity on growth performance and behavior of male turkeys. Leighton AT, et al. **Br Poult Sci** 1989 Sep;30(3):563–74

Progressive behavioral changes during the maturation of rats with early radiation-induced hypoplasia of fascia dentata granule cells. Mickley GA, et al. **Neurotoxicol Teratol** 1989 Jul–Aug;11(4):385–93

Characteristics of radiation-induced performance changes in bar-press avoidance with and without a preshock warning cue. Burghardt WF Jr, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):549–54

[The effect of an SHF field on the dopamine-dependent behavior of rats] Andreeva LA, et al. **Radiobiologiia** 1990 May–Jun;30(3):395–9 (Eng. Abstr.) (Rus)

[Cumulated biological effects of microwaves and their reflection in behavior, work capacity, growth of body mass and state of brain neurons] Suvorov NB, et al. **Radiobiologiia** 1989 Sep–Oct;29(5):660–6 (Eng. Abstr.) (Rus)

BEHAVIOR MODIFICATION see BEHAVIOR THERAPY

BEHAVIOR THERAPY

Evoked and psychogenic epileptic seizures: II. Inhibition. Brown SW, et al. **Acta Neurol Scand** 1989 Dec;80(6):541–7

Personality traits in young adults with a history of conditioning-treated childhood enuresis. Strömgren A, et al. **Acta Psychiatr Scand** 1990 Jun;81(6):538–41

Behavioral self-control strategies for deliberately limiting drinking among college students. Werch CE. **Addict Behav** 1990;15(2):119–28

The effects of marital status and partner support on rape trauma. Moss M, et al. **Am J Orthopsychiatry** 1990 Jul; 60(3):379–91

A double-blind, placebo-controlled trial of fluoxetine plus behavior modification in the treatment of obese binge-eaters and non-binge-eaters. Marcus MD, et al. **Am J Psychiatry** 1990 Jul;147(7):876–81

Use of medication and in vivo exposure in volunteers for panic disorder research. Taylor CB, et al. **Am J Psychiatry** 1989 Nov;146(11):1423–6

Behavior modification for physicians' practices [letter; comment] Schapiro A, et al. **Ann Intern Med** 1990 Jan 1;112(1):77 Comment on: Ann Intern Med 1989 Aug 15;111(4):318–26.

Behavior modification obtained by sun protection education coupled with removal of a skin cancer. Robinson JK. **Arch Dermatol** 1990 Apr;126(4):477–81

Paradoxical approach to the management of faecal incontinence in normal children. Knights B, et al. **Arch Dis Child** 1990 Jun;65(6):598–600; discussion 600–1

Clinical and medication outcome after short-term alprazolam and behavioral group treatment in panic disorder. 2.5 year naturalistic follow-up study. Nagy LM, et al. **Arch Gen Psychiatry** 1989 Nov;46(11):993–9

A study of behavior modification for developmentally disabled children. Boj JR, et al. **ASDC J Dent Child** 1989 Nov–Dec;56(6):452–7

Etiological models of child maltreatment. A behavioral perspective. Ammerman RT. **Behav Modif** 1990 Jul; 14(3):230–54 (85 ref.)

Behavioral assessment of child-abusive and neglectful families. Recent developments and current issues. Hansen DJ, et al. **Behav Modif** 1990 Jul;14(3):255–78 (75 ref.)

Re-establishing conversational skills in overtly psychotic, chronic schizophrenic patients. Discrete trials training on the psychiatric ward. Wong SE, et al. **Behav Modif** 1989 Oct;13(4):415–31

Is the match/mismatch model based on a statistical artefact? Arntz A, et al. **Behav Res Ther** 1990;28(3):249–53

Extinction of a conditioned emotional response: massed and distributed exposures. Baum M, et al. **Behav Res Ther** 1990; 28(1):63–8

The effect of an aversive event on the return of fear. Rachman S, et al. **Behav Res Ther** 1989;27(5):513–20

Clinical observations on behavioral treatment of a patient with insulin-dependent diabetes mellitus. Bailey BK, et al. **Biofeedback Self Regul** 1990 Mar;15(1):7–13

Stress management and Gilles de la Tourette's syndrome. Michultka DM, et al. **Biofeedback Self Regul** 1989 Jun; 14(2):115–23

The effectiveness of two smoking cessation programmes for use in general practice: a randomised clinical trial. Slama K, et al. **BMJ** 1990 Jun 30;300(6741):1707–9

Evaluation of a self-help manual for young offenders who drink: a pilot study. McMurran M, et al. **Br J Clin Psychol** 1990 Feb;29 (Pt 1):117–9

Obsessive-compulsive disorder: case study and discussion of treatment. Turk J, et al. **Br J Gen Pract** 1990 May; 40(334):210–2

Paedophilia: a cognitive/behavioural treatment approach in a single case. Enright SJ. **Br J Psychiatry** 1989 Sep; 155:399–401

Behaviour therapy and benzodiazepines: allies or antagonists? Wardle J. **Br J Psychiatry** 1990 Feb;156:163–8 (30 ref.)

Challenges and dilemmas in behaviour guidance of the pediatric dental patient. Harrison RL, et al. **Can Dent Assoc J** 1989 Oct;55(10):793–5

An overview of non-pharmacological pedodontic behaviour management techniques for the general practitioner. Piedalue RJ, et al. **Can Dent Assoc J** 1990 Feb;56(2):137–44 (50 ref.)

Can reminders curb incontinence? Kaltreider DL, et al. **Geriatr Nurs (New York)** 1990 Jan–Feb;11(1):17–9

Trans-situational consistency in smoking relapse. Shiffman S. **Health Psychol** 1989;8(4):471–81

Cost effectiveness of training incontinent elderly in nursing homes: a randomized clinical trial. Hu TW, et al. **Health Serv Res** 1990 Aug;25(3):455–77

Prognosis in a smoking cessation program. Bowers TG, et al. **Int J Addict** 1989 Oct;24(10):929–39

The long term effectiveness of combined therapy by behavior modification and very low calorie diet: 2 years follow-up. Miura J, et al. **Int J Obes** 1989;13 Suppl 2:73–7

Treatment of obesity by very low calorie diet, behavior therapy, and their combination: a five-year perspective. Wadden TA, et al. **Int J Obes** 1989;13 Suppl 2:39–46

Variables associated with weight loss and improvements in glycemic control in type II diabetic patients in behavioral weight control programs. Wing RR, et al. **Int J Obes** 1990; 14(6):495–503

A positive approach to the treatment of aggressive brain injured clients. Burke WH, et al. **Int J Rehabil Res** 1988; 11(3):235–41

Sequences of staff-child interactions on a psychiatric inpatient unit. Natta MB, et al. **J Abnorm Child Psychol** 1990 Feb;18(1):1–14

Social cognitive skills and behavioural adjustment of delinquent adolescents in treatment. Hains AA, et al. **J Adolesc** 1989 Sep;12(3):323–8

Management of neurotic scratching with behavioral therapy. Welkowitz LA, et al. **J Am Acad Dermatol** 1989 Oct;21(4 Pt 1):802–4

Treatment of urinary incontinence in nursing home patients by prompted voiding. Schnelle JF. **J Am Geriatr Soc** 1990 Mar;38(3):356–60

Prompted voiding treatment of urinary incontinence in nursing home patients. A behavior management approach for nursing home staff. Schnelle JF, et al. **J Am Geriatr Soc** 1989 Nov;37(11):1051–7

Acquisition and maintenance of health-care routines as a function of feedback density. Alavosius MP, et al. **J Appl Behav Anal** 1990 Summer;23(2):151–62

Effects of a behavioral treatment program on children with asthma. Dahl J, et al. **J Asthma** 1990;27(1):41–6

Relationship of client participation to psychotherapy. Nelson RA, et al. **J Behav Ther Exp Psychiatry** 1989 Jun; 20(2):155–62

Reducing sleep disruptions in young children: evaluation of therapist-guided and written information approaches: a brief report. Seymour FW, et al. **J Child Psychol Psychiatry** 1989 Nov;30(6):913–8

Treatment of obsessive compulsive disorder: psychotherapies, drugs, and other somatic treatment. Greist JH. **J Clin Psychiatry** 1990 Aug;51 Suppl:44–50; discussion 55–8 (44 ref.)

Sequential combination of imipramine and self-directed exposure in the treatment of panic disorder with agoraphobia. Mavissakalian M. **J Clin Psychiatry** 1990 May; 51(5):184–8

Improvement after evaluation in psychotherapy of depression: evidence of a placebo effect? Beckham EE. **J Clin Psychol** 1989 Nov;45(6):945–50

Brief psychotherapy for posttraumatic stress disorders. Brom

D, et al. **J Consult Clin Psychol** 1989 Oct;57(5):607–12

A comparison of alprazolam and behavior therapy in treatment of panic disorder. Klosko JS, et al. **J Consult Clin Psychol** 1990 Feb;58(1):77–84

Outcome of parent–mediated treatment of preschoolers with attention deficit disorder with hyperactivity. Pisterman S, et al. **J Consult Clin Psychol** 1989 Oct;57(5):628–35

A test of the therapeutic mechanism in social skills training with avoidant personality disorder. Stravynski A, et al. **J Nerv Ment Dis** 1989 Dec;177(12):739–44

Reducing distress during invasive medical procedures: relating behavioral interventions to preferred coping style in pediatric cancer patients. Smith KE, et al. **J Pediatr Psychol** 1989 Sep;14(3):405–19

Neurobehavioral treatment for cocaine dependency. Rawson RA, et al. **J Psychoactive Drugs** 1990 Apr–Jun;22(2):159–71 (25 ref.)

Post–prostatectomy urinary incontinence: response to behavioral training. Meaglia JP, et al. **J Urol** 1990 Sep; 144(3):674–6

Behavioral therapy for urinary incontinence [letter; comment] **JAMA** 1989 Nov 10;262(18):2538–9 Comment on: JAMA 1989 May 12;261(18):2656–62.

Role of Human Rights Committees in the review of restrictive/aversive behavior modification procedures: a national survey. Spreat S, et al. **Ment Retard** 1989 Dec; 27(6):375–82

Stress and silent myocardial ischemia. A new research study at Duke University Medical Center. Blumenthal JA, et al. **N C Med J** 1990 Apr;51(4):135–8

Non–institutional treatment of chronic pain by field management: an outcome study with comparison group. Cott A, et al. **Pain** 1990 Feb;40(2):183–94

Obesity in black adolescent girls: a controlled clinical trial of treatment by diet, behavior modification, and parental support. Wadden TA, et al. **Pediatrics** 1990 Mar; 85(3):345–52

Assessment of students' behavioral interactions during on–task classroom activities. Morgan H. **Percept Mot Skills** 1990 Apr;70(2):563–9

Pupil response: a psychophysiological measure of fear during analogue desensitization. Sturgeon RS, et al. **Percept Mot Skills** 1989 Dec;69(3 Pt 2):1351–67

Ephedrine–induced thermogenesis as an adjunct to cognitive restructuring and covert conditioning: a proposal for treatment of obese individuals. Zgourides GD, et al. **Percept Mot Skills** 1989 Oct;69(2):563–72

Pediatric behavioral dentistry. Allen KD, et al. **Prog Behav Modif** 1989;24:60–90 (117 ref.)

Acceptability of behavioral interventions: child and caregiver perceptions. Gullone E, et al. **Prog Behav Modif** 1989; 24:132–51 (70 ref.)

The status of expectancy–arousal theory: comparative credibility of systematic desensitization and rational–emotive therapy in the treatment of anxiety about study. Dryden W, et al. **Psychol Rep** 1990 Jun;66(3 Pt 1):803–9

Decreasing speech anxiety of female prisoners. Nickell EB, et al. **Psychol Rep** 1989 Dec;65(3 Pt 2):1351–7

Effects of behaviour therapy on migraine and plasma beta–endorphin in young migraine patients. v.d. Helm–Hylkema H, et al. **Psychoneuroendocrinology** 1990; 15(1):39–45

Cigarette smoking and cessation behaviors among urban blacks and whites. Hahn LP, et al. **Public Health Rep** 1990 May–Jun;105(3):290–5

A 10–year follow–up of patients treated for dental fear. Hakeberg M, et al. **Scand J Dent Res** 1990 Feb;98(1):53–9

Training as an aid to welfare [letter] Hollands C. **Vet Rec** 1989 Dec 2;125(23):585

Behavioural consultants [letter] Hughes I. **Vet Rec** 1989 Oct 14;125(16):425

Behavioural consultants [letter] Mugford RA. **Vet Rec** 1989 Sep 16;125(12):333

[Diabetes education: striving for behavior change] Jager KJ, et al. **Ned Tijdschr Geneeskd** 1989 Nov 25;133(47):2322–6 **(Dut)**

[Health promotion or pills?] Aro A. **Duodecim** 1989; 105(22):1826–31 **(Fin)**

[A new therapeutic approach: the behavioral prescription of anxiolytics] Marboutin JP, et al. **Encephale** 1990 May–Jun;16(3):189–96 (Eng. Abstr.) **(Fre)**

[A behavioral scientific model of the drunk driver] Ehret J. **Blutalkohol** 1989 Nov;26(6):381–95 (Eng. Abstr.) **(Ger)**

[Basic social competence of retarded children: problems of education and evaluation] Sarimski K, et al. **Prax Kinderpsychol Kinderpsychiatr** 1989 Oct;38(8):293–8 (Eng. Abstr.) **(Ger)**

[Behavioral psychological problems in dietary counseling] Pudel V. **Verh Dtsch Ges Inn Med** 1989;95:639–42 (10 ref.) **(Ger)**

[Behavior analysis of eating disorders] Gerlinghoff M. **Z Ernahrungswiss** 1990 Mar;29(1):13–20 (5 ref.) (Eng. Abstr.) **(Ger)**

[Physical and social comparisons at admission to therapy: a contribution to the differential diagnosis in obesity] Haisch J. **Z Klin Psychol Psychopathol Psychother** 1990; 38(1):4–14 (Eng. Abstr.) **(Ger)**

[Obese individuals can achieve permanent weight reduction by means of a behavior modification program] Björvell H, et al. **Lakartidningen** 1990 Aug 8;87(32–33):2504–7 **(Swe)**

ECONOMICS

Are drinkers interested in inexpensive approaches to reduce their alcohol use? Werch CE. **J Drug Educ** 1990;20(1):67–75

[Large–scale economic benefits of behavioral therapy of persons needing assistance in travelling because of phobia] Brandberg M, et al. **Lakartidningen** 1990 Jan 31; 87(5):309–13 **(Swe)**

EDUCATION

A program for health behavior change in a preventive cardiology center. Sallis JF, et al. **Am J Prev Med** 1990; 6(2 Suppl):43–50

Dissemination of skills training modules to psychiatric facilities. Overcoming obstacles to the utilisation of a rehabilitation innovation. Liberman RP, et al. **Br J Psychiatry Suppl** 1989 Jul;(5):117–22

Teaching parents to conduct behavioral relaxation training with their hyperactive children. Donney VK, et al. **J Behav Ther Exp Psychiatry** 1989 Dec;20(4):319–25

Health locus of control changes during a workshop in behavioral medicine. Flowers JV, et al. **Psychol Rep** 1989 Dec;65(3 Pt 2):1282

HISTORY

The historical roots of behavior therapy. Pichot P. **J Behav Ther Exp Psychiatry** 1989 Jun;20(2):107–14

INSTRUMENTATION

Reducing risk of pressure sores: effects of watch prompts and alarm avoidance on wheelchair push–ups. White GW, et al. **J Appl Behav Anal** 1989 Fall;22(3):287–95

METHODS

Accident simulation as a new therapy technique for post–traumatic stress disorder. A case study. Hytten K, et al. **Acta Psychiatr Scand Suppl** 1989;355:79–83

Postcessation cigarette use: the process of relapse. Brandon TH, et al. **Addict Behav** 1990;15(2):105–14

Efficacy of a minimal contact version of a multimodal smoking cessation program. Decker BD, et al. **Addict Behav** 1989;14(5):487–91

Effects of in vivo behavioral rehearsal on the learning of assertive behaviors with a substance abusing population. Ingram JA, et al. **Addict Behav** 1990;15(2):189–94

Behavioral weight–loss for multiply–handicapped adults: assessing caretaker involvement and measures of behavior change. McCarran MS, et al. **Addict Behav** 1990; 15(1):13–20

A study of factors associated with weight change in women who attempt smoking cessation. Streater JA Jr, et al. **Addict Behav** 1989;14(5):523–30

Self–injurious behavior as a habit and its treatment. Orian C. **Am J Clin Hypn** 1989 Oct;32(2):84–9

Effects of part versus whole instructional strategies on skill acquisition and excess behavior. Weld EM, et al. **Am J Ment Retard** 1990 Jan;94(4):377–86

The use of tactile and vestibular stimulation to reduce stereotypic behaviors in two adults with mental retardation. Brocklehurst–Woods J. **Am J Occup Ther** 1990 Jun; 44(6):536–41

Behavior therapy in the management of chronic schizophrenia. Agras WS. **Am J Psychiatry** 1967 Aug; 124(2):240–3

Physiatric therapeutics. 6. The rehabilitation team/behavioral management. Dean BZ, et al. **Arch Phys Med Rehabil** 1990 Mar;71(4–S):S275–7

Behavioral treatment of child abuse. A developmental perspective. Azar ST, et al. **Behav Modif** 1990 Jul; 14(3):279–300 (70 ref.)

Anger control training for adolescents in residential treatment. Dangel RF, et al. **Behav Modif** 1989 Oct; 13(4):447–58

The effect of differential reinforcement of incompatible behaviors (DRI) on pica for cigarettes in persons with intellectual disability. Donnelly DR, et al. **Behav Modif** 1990 Jan;14(1):81–96

Behavioral treatment of multiple childhood sleep disorders. Effects on child and family. Durand VM, et al. **Behav Modif** 1990 Jan;14(1):37–49

Behavioral treatment of the victims of child abuse and neglect. Fantuzzo JW. **Behav Modif** 1990 Jul;14(3):316–39 (60 ref.)

A recruitment–of–praise package to increase productivity levels of developmentally handicapped workers. Hildebrand RG, et al. **Behav Modif** 1990 Jan;14(1):97–113

Experiential aspects of bulimia nervosa. Implications for cognitive behavioral therapy. Hsu LK. **Behav Modif** 1990 Jan;14(1):50–65

A preliminary analysis of a functional model of assessment and treatment for school refusal behavior. Kearney CA, et al. **Behav Modif** 1990 Jul;14(3):340–66

Behavioral treatment of child neglect. Lutzker JR. **Behav Modif** 1990 Jul;14(3):301–15 (23 ref.)

A context analysis of contingent teacher attention. Martens BK. **Behav Modif** 1990 Apr;14(2):138–56

Effects of two error–correction procedures on oral reading errors. Word supply versus sentence repeat. Singh NN. **Behav Modif** 1990 Apr;14(2):188–99

Behavioral social work treatment of childhood nocturnal enuresis. Sluckin A. **Behav Modif** 1989 Oct;13(4):482–97

New evidence for the effectiveness of stress management training in groups. Tallant S, et al. **Behav Modif** 1989 Oct; 13(4):431–46

Teaching adolescents with severe disabilities to use the public telephone. Test DW, et al. **Behav Modif** 1990 Apr; 14(2):157–71

Interruption and DRI in the treatment of self–injurious behavior among mentally retarded and autistic self–restrainers. Underwood LA, et al. **Behav Modif** 1989 Oct;13(4):471–81

Resistance during psychotherapy and behavior therapy. Verhulst JC, et al. **Behav Modif** 1990 Apr;14(2):172–87

The maintenance of weight loss after behavioral treatment. A review. Westover SA, et al. **Behav Modif** 1990 Apr; 14(2):123–37 (37 ref.)

The nature of worry in generalized anxiety disorder: a predominance of thought activity. Borkovec TD, et al. **Behav Res Ther** 1990;28(2):153–8

A controlled trial of cognitive–behavioural and behavioural treatment of anorexia nervosa. Channon S, et al. **Behav Res Ther** 1989;27(5):529–35

Instructions to focus upon or distract from internal cues during exposure treatment of agoraphobic avoidance. Craske MG, et al. **Behav Res Ther** 1989;27(6):663–72

Breathing retraining, exposure and a combination of both, in the treatment of panic disorder with agoraphobia. de Ruiter C, et al. **Behav Res Ther** 1989;27(6):637–55

Predicting outcome of chronic pain treatment via a modified self–efficacy scale. Kores RC, et al. **Behav Res Ther** 1990; 28(2):165–9

The effects of contingent music and differential reinforcement on infantile colic. Larson K, et al. **Behav Res Ther** 1990; 28(2):119–25

The psychological treatment of tinnitus: an experimental evaluation. Lindberg P, et al. **Behav Res Ther** 1989; 27(6):593–603

Psychophysiological outcome of cognitive, behavioral and psychophysiologically–based treatments of agoraphobia. Michelson L, et al. **Behav Res Ther** 1990;28(2):127–39

Fast, slow and sudden reductions in fear. Rachman S, et al. **Behav Res Ther** 1989;27(6):613–20

Hypochondriasis. Warwick HM, et al. **Behav Res Ther** 1990; 28(2):105–17 (73 ref.)

Exposure in vivo vs social skills training for social phobia: long–term outcome and differential effects. Wlazlo Z, et al. **Behav Res Ther** 1990;28(3):181–93

Treatment of persistent pain. Pither CE. **BMJ** 1989 Nov 18; 299(6710):1239–40 (25 ref.)

Maintained controlled drinking following severe alcohol dependence—a case study. Booth PG. **Br J Addict** 1990 Mar;85(3):315–22; discussion 323–8

Conditioned learning in alcohol dependence: implications for cue exposure treatment. Drummond DC, et al. **Br J Addict** 1990 Jun;85(6):725–43 (110 ref.)

Group anxiety management: effectiveness, perceived helpfulness and follow–up. Cadbury S, et al. **Br J Clin Psychol** 1990 May;29 (Pt 2):245–7

Benzodiazepine withdrawal: a pilot comparison of three methods. Fraser D, et al. **Br J Clin Psychol** 1990 May;29 (Pt 2):231–3

Reducing stereotyped behavior: a component analysis of the DRI schedule. Jones RS. **Br J Clin Psychol** 1989 Sep;28 (Pt 3):255–66

Cognitive therapy vs. self–management training in the treatment of chronic headaches. Martin PR, et al. **Br J Clin Psychol** 1989 Nov;28 (Pt 4):347–61

Observing client–therapist interaction in behaviour therapy: development and first application of an observational system. Schindler L, et al. **Br J Clin Psychol** 1989 Sep;28 (Pt 3):213–26

The effect of combined topical steroids and habit–reversal treatment in patients with atopic dermatitis. Norén P, et al. **Br J Dermatol** 1989 Sep;121(3):359–66

Hysterical conversion and dissociation arising as a complication of behavioural psychotherapy treatment of obsessive–compulsive neurosis. Bartlett AE, et al. **Br J Med Psychol** 1990 Jun;63 (Pt 2):109–15

Combining pharmacological antagonists and behavioural psychotherapy in treating addictions. Why it is effective but unpopular. Brewer C. **Br J Psychiatry** 1990 Jul; 157:34–40 (56 ref.)

Marital adjustment and obsessive–compulsive disorder. Emmelkamp PM, et al. **Br J Psychiatry** 1990 Jan;156:55–60

Paradoxical intervention [letter; comment] Fan TW. **Br J Psychiatry** 1989 Oct;155:567–8 Comment on: Br J Psychiatry 1988 Dec;153:821–3.

Paradoxical intervention [letter; comment] Macdonald AJ. **Br J Psychiatry** 1989 Jun;154:883 Comment on: Br J Psychiatry 1988 Dec;153:821–3.

A comparative study of family–based and patient–based behavioural management in obsessive–compulsive disorder. Mehta M. **Br J Psychiatry** 1990 Jul;157:133–5

The question of therapists' differential effectiveness. A Sheffield Psychotherapy Project addendum. Shapiro DA, et al. **Br J Psychiatry** 1989 Mar;154:383–5

Community management of schizophrenia. A two–year follow–up of a behavioural intervention with families [see comments] Tarrier N, et al. **Br J Psychiatry** 1989 May; 154:625–8 Comment in: Br J Psychiatry 1989 Sep;155:419–20.

Psychological treatments for negative symptoms. Slade P, et al. **Br J Psychiatry Suppl** 1989 Nov;(7):133–5 (19 ref.)

Treating urinary incontinence in a head-injured adult. Garcia JG, et al. **Brain Inj** 1990 Apr-Jun;4(2):203-7
Managing hypersexual disorders in brain-injured clients. Zencius A, et al. **Brain Inj** 1990 Apr-Jun;4(2):175-81
Self-regulation of anxiety. Fahrion SL, et al. **Bull Menninger Clin** 1990 Spring;54(2):217-31 (33 ref.)
Combined medical and psychological treatment of hospitalized children with encopresis. Dawson PM, et al. **Child Psychiatry Hum Dev** 1990 Spring;20(3):181-90
Use of the timeout procedure in a child psychiatry inpatient milieu: combining dynamic and behavioral approaches. Kennedy P, et al. **Child Psychiatry Hum Dev** 1990 Spring; 20(3):207-16
Encopresis: behavioral parameters associated with children who fail medical management. Stark LJ, et al. **Child Psychiatry Hum Dev** 1990 Spring;20(3):169-79
Effects of self-evaluation on the independent work skills of preschool children with disabilities. Sainato DM, et al. **Except Child** 1990 Apr;56(6):540-9
Compliance training in a child with attention deficit-hyperactivity disorder: a case study. Johnson CM, et al. **Fam Pract Res J** 1989 Fall-Winter;9(1):73-80
A meta-analytic evaluation of couples weight-loss programs. Black DR, et al. **Health Psychol** 1990;9(3):330-47
Efficacy of behavioral management and patient education on vascular access cleansing compliance in hemodialysis patients. Brantley PJ, et al. **Health Psychol** 1990;9(1):103-13
Effects of a waking schedule on primary enuretic children treated with full-spectrum home training. Whelan JP, et al. **Health Psychol** 1990;9(2):164-76
Teaching chronic psychiatric inpatients to use differential attention to change each other's behaviors. Baenninger LP, et al. **Hosp Community Psychiatry** 1990 Apr;41(4):425-9
Behavior therapy: a clinical update. Black JL, et al. **Hosp Community Psychiatry** 1989 Nov;40(11):1152-8 (72 ref.)
Application of behavioral principles in the management of suffocation phobia: a case study of chronic respiratory failure. Malatesta VJ, et al. **Int J Psychiatry Med** 1989; 19(3):281-9
Paradoxical interventions embedded in a focal approach to family therapy. Afek E. **Isr J Psychiatry Relat Sci** 1988; 25(3-4):212-23
Treatment of ADDH in mentally retarded children: a preliminary study. Payton JB, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Sep;28(5):761-7
Reduction of attention deficit and internalizing symptoms in preschoolers through parent-child interaction training [published erratum appears in J Am Acad Child Adolesc Psychiatry 1990 Mar;29(2):314] Strayhorn JM, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Nov; 28(6):888-96
The importance of family support in a behavior modification weight loss program. Hart J, et al. **J Am Diet Assoc** 1990 Sep;90(9):1270-1
Behavioral treatment of incontinence in the long-term care setting. Engel BT, et al. **J Am Geriatr Soc** 1990 Mar; 38(3):361-3
A staff management system for maintaining improvements in continence with elderly nursing home residents. Burgio LD, et al. **J Appl Behav Anal** 1990 Spring;23(1):111-8
Using aberrant behaviors as reinforcers for autistic children. Charlop MH, et al. **J Appl Behav Anal** 1990 Summer; 23(2):163-81
A self-monitoring package for teaching subtraction with regrouping to students with learning disabilities. Dunlap LK, et al. **J Appl Behav Anal** 1989 Fall;22(3):309-14
Behavior management of infant sleep disturbance. France KG, et al. **J Appl Behav Anal** 1990 Spring;23(1):91-8
Contextual control of problem behavior in students with severe disabilities. Haring TG, et al. **J Appl Behav Anal** 1990 Summer;23(2):235-43
Extended reductions in stereotypic behavior of students with autism through a self-management treatment package. Koegel RL, et al. **J Appl Behav Anal** 1990 Spring; 23(1):119-27
Self-recording of attention versus productivity. Lloyd JW, et al. **J Appl Behav Anal** 1989 Fall;22(3):315-23
A collateral effect of reward predicted by matching theory. Mace FC, et al. **J Appl Behav Anal** 1990 Summer; 23(2):197-205
Teaching self-catheterization skills to children with neurogenic bladder complications. Neef NA, et al. **J Appl Behav Anal** 1989 Fall;22(3):237-43
Distraction: its utilization and efficacy with children undergoing dental treatment. Stark LJ, et al. **J Appl Behav Anal** 1989 Fall;22(3):297-307
The role of subject verbalization in generalized correspondence. Ward WD, et al. **J Appl Behav Anal** 1990 Spring;23(1):129-36
A skills training approach to smoking prevention among Hispanic youth. Botvin GJ, et al. **J Behav Med** 1989 Jun; 12(3):279-96
Smoking cessation and cardiovascular reactivity to stress. Emmons KM, et al. **J Behav Med** 1989 Dec;12(6):587-98
Management of disruptive behaviour in the brain-damaged patient using selective reinforcement. Andrewes D. **J Behav Ther Exp Psychiatry** 1989 Sep;20(3):261-4
Increasing group attendance on a psychiatric unit: an alternating treatments design comparison. Blake DD, et al. **J Behav Ther Exp Psychiatry** 1990 Mar;21(1):15-20
Successful behavioral treatment of polydipsia in a schizophrenic patient. Bowen L, et al. **J Behav Ther Exp Psychiatry** 1990 Mar;21(1):53-61
The treatment of persistent vomiting through shaping and contingency management. Dahlquist LM. **J Behav Ther Exp Psychiatry** 1990 Mar;21(1):77-80
An evaluation of tailored psychological treatment of insomnia. Espie CA, et al. **J Behav Ther Exp Psychiatry** 1989 Jun;20(2):143-53
Assessing independent and interactive effects of behavioral and pharmacologic interventions for a client with dual diagnoses. Fisher W, et al. **J Behav Ther Exp Psychiatry** 1989 Sep;20(3):241-50
Treatment programs for severe night-time fears: a methodological note. Friedman AG, et al. **J Behav Ther Exp Psychiatry** 1989 Jun;20(2):171-8
A guide for conducting a comprehensive behavioral analysis of a target behavior. Groden G. **J Behav Ther Exp Psychiatry** 1989 Jun;20(2):163-70
A case of bulimia successfully treated by cue exposure. Jansen A, et al. **J Behav Ther Exp Psychiatry** 1989 Dec; 20(4):327-32
Managing noncompliance in a schizophrenic patient with chronic skin disorders. Katzenberg A, et al. **J Behav Ther Exp Psychiatry** 1989 Sep;20(3):257-60
Treatment of an adolescent with obsessive-compulsive disorder by alternating response prevention and cognitive therapy: an empirical analysis. Kearney CA, et al. **J Behav Ther Exp Psychiatry** 1990 Mar;21(1):39-47
Acceptability of fear reduction procedures with children. King NJ, et al. **J Behav Ther Exp Psychiatry** 1990 Mar; 21(1):1-8
Multi-component behavioral treatment of premenstrual syndrome: a case report. Kuczmierczyk AR. **J Behav Ther Exp Psychiatry** 1989 Sep;20(3):235-40
Theoretical weaknesses lead to practical problems: the example of self-efficacy theory. Lee C. **J Behav Ther Exp Psychiatry** 1989 Jun;20(2):115-23 (65 ref.)
Invited case transcript. Obsessive-compulsive disorder: a behavioral case formulation. McAndrew JF. **J Behav Ther Exp Psychiatry** 1989 Dec;20(4):311-8
Behavioral management of sleep disturbances secondary to chronic pain. Morin CM, et al. **J Behav Ther Exp Psychiatry** 1989 Dec;20(4):295-302
Effectiveness of matched, mismatched, and package treatments of depression. Nelson-Gray RO, et al. **J Behav Ther Exp Psychiatry** 1989 Dec;20(4):281-94
Treatment of recurrent nightmares by the dream reorganization approach. Palace EM, et al. **J Behav Ther Exp Psychiatry** 1989 Sep;20(3):219-26
Management of a hyperactive-conduct disordered child through correspondence training: a preliminary study. Paniagua FA, et al. **J Behav Ther Exp Psychiatry** 1990 Mar;21(1):63-8
The behavioural treatment of nocturnal enuresis in a severely brain-damaged client. Papworth MA. **J Behav Ther Exp Psychiatry** 1989 Sep;20(3):265-8
Eye movement desensitization: a new treatment for post-traumatic stress disorder. Shapiro F. **J Behav Ther Exp Psychiatry** 1989 Sep;20(3):211-7
Enhancing the management of secondary encopresis by assessing acceptability of treatment: a case study. Steege MW, et al. **J Behav Ther Exp Psychiatry** 1989 Dec; 20(4):333-41
Training use of compensatory memory books: a three stage behavioral approach. Sohlberg MM, et al. **J Clin Exp Neuropsychol** 1989 Dec;11(6):871-91
An obsessive-compulsive view of obesity and its treatment. Mount R, et al. **J Clin Psychol** 1990 Jan;46(1):68-78
Cognitive-behavioral treatment with and without exposure plus response prevention in the treatment of bulimia nervosa: a reply to Leitenberg and Rosen. Agras WS, et al. **J Consult Clin Psychol** 1989 Dec;57(6):778-9
Reducing alcohol consumption through television advertising. Barber JG, et al. **J Consult Clin Psychol** 1989 Oct;57(5):613-8
Measurement and modification of delusional beliefs. Chadwick PD, et al. **J Consult Clin Psychol** 1990 Apr; 58(2):225-32
Relationship between behavioral marital therapy outcome and process variables. Holtzworth-Munroe A, et al. **J Consult Clin Psychol** 1989 Oct;57(5):658-62
Evaluation of a treatment approach combining nicotine gum with self-guided behavioral treatments for smoking relapse prevention. Killen JD, et al. **J Consult Clin Psychol** 1990 Feb;58(1):85-92
Cognitive-behavioral therapy with and without exposure plus response prevention in treatment of bulimia nervosa: comment on Agras, Schneider, Arnow, Raeburn, and Telch. Leitenberg H, et al. **J Consult Clin Psychol** 1989 Dec;57(6):776-7
An effective and acceptable treatment alternative for chronic thumb- and finger-sucking. Friman PC, et al. **J Pediatr Psychol** 1990 Feb;15(1):57-65
A primary preventive approach to children's drug refusal behavior: the impact of rehearsal-plus. Jones RT, et al. **J Pediatr Psychol** 1990 Apr;15(2):211-23
A behavioral approach to increasing calorie consumption in children with cystic fibrosis. Stark LJ, et al. **J Pediatr Psychol** 1990 Jun;15(3):309-26
Scouting in adolescent treatment programs: building a foundation. Austin BD. **J Psychosoc Nurs Ment Health Serv** 1990 Jul;28(7):24-5
Unique interventions for child inpatient psychiatry. Jones RN, et al. **J Psychosoc Nurs Ment Health Serv** 1990 Jul; 28(7):29-31
Using self-monitoring to reduce disfluencies in speakers with mild aphasia. Whitney JL, et al. **J Speech Hear Disord** 1989 Nov;54(4):576-86
Communication skills training, communication skills training with family and cognitive behavioral mood management training for alcoholics. Monti PM, et al. **J Stud Alcohol** 1990 May;51(3):263-70
Community-referenced activities: implications for establishing stimulus control. Browder DM, et al. **Ment Retard** 1989 Oct;27(5):331-8
Counter-habilitative contingencies in institutions for people with mental retardation: ecological and regulatory influences. Meinhold PM, et al. **Ment Retard** 1990 Apr; 28(2):67-75
Effect of self-monitoring on maintenance and generalization of conversational skills of persons with mental retardation. Schloss PJ, et al. **Ment Retard** 1990 Apr;28(2):105-13
Update on behavioral treatments for substance abuse. Childress A, et al. **NIDA Res Monogr** 1988;90:183-92 (0 ref.)
Treatment of night wakings in early childhood: maintenance of effects. Schaefer CE. **Percept Mot Skills** 1990 Apr; 70(2):561-2
Panic disorder and agoraphobia. Nondrug treatment options for primary care physicians. Ferentz KS. **Postgrad Med** 1990 Aug;88(2):185-92
The behavioral treatment of unipolar depression in adult outpatients. Antonuccio DO, et al. **Prog Behav Modif** 1989; 24:152-91 (167 ref.)
Etiology and treatment of panic disorders. Clum GA, et al. **Prog Behav Modif** 1989;24:192-222 (113 ref.)
Behavioral assessment and treatment of pediatric feeding disorders in developmental disabilities. Luiselli JK. **Prog Behav Modif** 1989;24:91-131 (86 ref.)
The use of contracts in the inpatient treatment of the borderline personality disorder. Bloom H, et al. **Psychiatr Q** 1989 Winter;60(4):317-27
Countercontrol treatment of sleep-maintenance insomnia in relation to age. Davies R, et al. **Psychol Aging** 1986 Sep; 1(3):233-8
Treatment of sleep-maintenance insomnia in older adults: sleep period reduction, sleep education, and modified stimulus control. Hoelscher TJ, et al. **Psychol Aging** 1988 Sep;3(3):258-63
Application of operant procedures in a group of institutionalized aggressive geriatric patients. Vaccaro FJ. **Psychol Aging** 1988 Mar;3(1):22-8
Effect of neurolinguistic programming training on self-actualization as measured by the Personal Orientation Inventory. Duncan RC, et al. **Psychol Rep** 1990 Jun;66(3 Pt 2):1323-30
Bulimia nervosa: group behavior therapy with exposure plus response prevention. Gray JJ, et al. **Psychol Rep** 1990 Apr; 66(2):667-74
Smoking reduction based on a situational model of craving. O'Connor K, et al. **Psychol Rep** 1989 Dec;65(3 Pt 1):963-6
Cigarette-smoking reduction in university students. Rutter S. **Psychol Rep** 1990 Feb;66(1):186
Behavioral treatment of alcohol and drug abuse. What do we know and where shall we go? Hester RK, et al. **Recent Dev Alcohol** 1990;8:305-27 (138 ref.)
Direct and generalized effects of food satiation in reducing rumination. Clauser B, et al. **Res Dev Disabil** 1990; 11(1):23-36
Comparison of constant time delay and the system of least prompts in teaching preschoolers with developmental delays. Doyle PM, et al. **Res Dev Disabil** 1990;11(1):1-22
"Harry": a ten year follow-up of the successful treatment of a self-injurious man. Foxx RM. **Res Dev Disabil** 1990; 11(1):67-76
Parent use of DRI on high rate disruptive behavior: direct and collateral benefits. Friman PC, et al. **Res Dev Disabil** 1990;11(2):249-54
Establishing sound blending in moderately mentally retarded children: implications of verbal instruction and pictorial prompting. Hoogeveen FR, et al. **Res Dev Disabil** 1989; 10(4):333-48
The use of behavior therapy and physical therapy to promote independent ambulation in a preschooler with mental retardation and cerebral palsy. Horton SV, et al. **Res Dev Disabil** 1989;10(4):363-75
A comparison of DRO to movement suppression time-out and DRO with two self-injurious and aggressive mentally retarded adults. Matson JL, et al. **Res Dev Disabil** 1990; 11(1):111-20
Teaching money skills through stimulus class formation, exclusion, and component matching methods: three case studies. Stoddard LT, et al. **Res Dev Disabil** 1989; 10(4):413-39
[Development of a psychologically founded program for smoking cessation with adjuvant use of nicotine-containing chewing gum] Meier-Lämmermann E, et al. **Pneumologie** 1990 Feb;44 Suppl 1:116-7 (Eng. Abstr.) **(Ger)**
[The technic of inquiry in inpatient treatment of aggressive children with behavioral disorders] Hobrücker B. **Prax Kinderpsychol Kinderpsychiatr** 1990 Feb;39(2):38-44 (Eng. Abstr.) **(Ger)**

[Behavior therapy] Kallinke D.
Z Psychosom Med Psychoanal 1990;36(2):119–26 (15 ref.) **(Ger)**

[Evaluation of operant methods in the treatment of chronic pain] Berntzen D, et al. **Tidsskr Nor Laegeforen** 1990 Mar 20;110(8):966–9 (Eng. Abstr.) **(Nor)**

TRENDS

Behavior modification in education and in the clinic. Facets, origins and probable future. Snelbecker GE.
Clin Pediatr (Phila) 1970 Oct;9(10):617–21

BEHAVIOR THERAPY, COGNITIVE see **COGNITIVE THERAPY**

BEHAVIORAL MEDICINE

Behavioural consultants [letter] Keen P, et al. **Vet Rec** 1989 Aug 19;125(8):213

EDUCATION

Validating audiovisual reviews as a strategy for teaching behavioral medicine to primary care residents. Skinner B, et al. **Fam Pract Res J** 1990 Spring–Summer;9(2):157–65

TRENDS

[New trends in using psychology in medicine] Heszen-Niejodek I. **Pol Tyg Lek** 1989 May 15;44(20):465–8 **(Pol)**

BEHAVIORAL SCIENCES

Medicalization as professional process: postwar trends in pediatrics. Halpern SA. **J Health Soc Behav** 1990 Mar; 31(1):28–42

Relations between levels of complexity in the behavioral sciences. Hinde RA. **J Nerv Ment Dis** 1989 Nov; 177(11):655–67 (83 ref.)

ECONOMICS

Misplaced priorities: a cure for the biomedical funding blues [letter; comment] Belsky JK. **Gerontologist** 1990 Jun; 30(3):418–9 Comment on: Gerontologist 1989 Oct;29(5):606–14.

EDUCATION

A suitable case for Technik: behavioural science in the postgraduate medical curriculum. Kelly MP. **Med Educ** 1990 May;24(3):271–9

Residents' evaluation of behavioural paediatrics instruction. Mullan PB, et al. **Med Educ** 1989 Sep;23(5):447–52

Behavioural science at the Auckland Medical School: introduction and evaluation of a revised programme. Raeburn JM, et al. **N Z Med J** 1989 Dec 13;102(881):642–4

INSTRUMENTATION

Lick sensors as tools in behavioral and neuroscience research. Weijnen JA. **Physiol Behav** 1989 Dec;46(6):923–8

TRENDS

Emphasis on behavioral sciences increasing at the World Health Organization. Jenkins CD. **Behav Med** 1990 Spring; 16(1):45–6

BEHCET'S SYNDROME

[Viral hypothesis in Behçet's disease] Schattner A.
Harefuah 1990 Jan 15;118(2):103–5 (48 ref.) **(Heb)**

BLOOD

Concentrations of sialic acid in serum in Behçet disease. Onat T, et al. **Clin Chem** 1990 Feb;36(2):393

COMPLICATIONS

Pyloric stenosis with esophageal involvement in Behçet's syndrome. Ozenç A, et al. **Am J Gastroenterol** 1990 Jun; 85(6):727–8

Audiologic pathology in Behçet syndrome. Andreoli C, et al. **Am J Otol** 1989 Nov;10(6):466–7

Acute interstitial pneumonia in a patient with Behçet's syndrome and common variable immunodeficiency [clinical conference] Corren J. **Ann Allergy** 1990 Jan;64(1):15–20

Recurrent papilloedema and early onset optic atrophy in Behçet's syndrome. Teh LS, et al. **Ann Rheum Dis** 1990 Jun;49(6):410–1

Behçet's syndrome: severe proctitis with rectovaginal fistula formation. Teh LS, et al. **Ann Rheum Dis** 1989 Sep; 48(9):779–80

Pediatric onset of Behçet's syndrome with myositis: case report and literature review illustrating unusual features. Lang BA, et al. **Arthritis Rheum** 1990 Mar;33(3):418–25 (49 ref.)

Arthropathy of Behçet's disease: a case with "pencil-in-cup" deformities [letter] Takeuchi A, et al. **Arthritis Rheum** 1989 Dec;32(12):1629–30

Pulmonary involvement in Behçet's syndrome. Fairley C, et al. **Chest** 1989 Dec;96(6):1428–9

Behcet's disease with half and half nail and pulmonary artery aneurysm [letter] Sahin AA, et al. **Chest** 1990 May; 97(5):1277

Behçet's disease, palmoplantar pustulosis and HLA-B27 treatment with thalidomide [letter] Hamza M.
Clin Exp Rheumatol 1990 Jul–Aug;8(4):427

Mononeuritis multiplex in incomplete Behçet's disease: a case report and the review of the literature. Takeuchi A, et al. **Clin Rheumatol** 1989 Sep;8(3):375–80 (25 ref.)

CPC: uveitis and genital ulcerations in a young female [clinical conference] Collier VU, et al. **Del Med J** 1989 Aug;61(8):389–91, 394–8

Aortic regurgitation secondary to Behçet's disease. A case report and review of the literature. Chikamori T, et al. **Eur Heart J** 1990 Jun;11(6):572–6 (25 ref.)

Hepatic vein thrombosis in Behçet's disease. Bismuth E, et al. **Hepatology** 1990 Jun;11(6):969–74 (40 ref.)

Optic neuropathy in Behçet's disease. Kansu T, et al.
J Clin Neuro Ophthalmol 1989 Dec;9(4):277–80

Erythema nodosum-like lesions in Behçet's syndrome: a histopathologic study of 30 cases. Chun SI, et al.
J Cutan Pathol 1989 Oct;16(5):259–65

Spontaneous remission of meningoencephalitis in Behçet's disease [letter] Hirohata S, et al. **J Rheumatol** 1989 Sep; 16(9):1283–4

Hepatic arteritis in Behçet's disease [letter] Mathur AK, et al. **J Rheumatol** 1989 Nov;16(11):1516–8

Behçet disease and priapism [letter] Moalla M, et al.
J Rheumatol 1990 Apr;17(4):570–1

Pheochromocytoma associated with Behçet's disease. Oishi S, et al. **Jpn J Clin Oncol** 1989 Sep;19(3):283–6

Neuro-Behçet's disease: report of three cases with a review of the literature. Su SL, et al.
Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1990 Mar; 6(3):155–62 (16 ref.)

Prognostic comparison of Behçet's disease with or without HLA-Bw 51 antigen. Kim MS, et al.
Korean J Ophthalmol 1989 Dec;3(2):85–9

Treatment of rapidly progressive glomerulonephritis due to Behçet's syndrome with intravenous cyclophosphamide. Tietjen DP, et al. **Nephron** 1990;55(1):69–73 (18 ref.)

[Sudden deafness and Behçet's disease] Berrettini S, et al.
Acta Otorhinolaryngol Belg 1989;43(3):221–9 (Eng. Abstr.) **(Fre)**

[The macula in Adamantiades-Behçet disease] Palimeris G, et al. **J Fr Ophtalmol** 1989;12(12):887–90 (Eng. Abstr.) **(Fre)**

[Diabetes insipidus in a case of Behçet's disease with neurologic manifestations (letter)] Hamza M, et al.
Presse Med 1989 Oct 28;18(35):1755 **(Fre)**

[Arterial manifestations of Behçet's disease. 12 cases] Wechsler B, et al. **Rev Med Interne** 1989 Jul–Aug; 10(4):303–11 (Eng. Abstr.) **(Fre)**

[Aseptic cervical spondylodiscitis in Behçet's disease (letter)] Rozadilla A, et al. **Rev Rhum Mal Osteoartic** 1990 May; 57(5):444 **(Fre)**

[Arterial manifestation of Behçet's disease] Hamza MO, et al. **Tunis Med** 1990 May;68(5):339–43 (Eng. Abstr.) **(Fre)**

[Rare vascular complications of Behçet's disease (so-called angiobehçet)] Stricker H, et al.
Schweiz Med Wochenschr 1989 Sep 23;119(38):1290–5 (Eng. Abstr.) **(Ger)**

[Therapeutical problems of aortic regurgitation associated with Behçet disease] Omori F, et al. **J Cardiol Suppl** 1989; 22:40–1 **(Jpn)**

[A case of Hughes-Stovin syndrome associated with Behçet's disease] Takaori H, et al. **Nippon Naika Gakkai Zasshi** 1989 Sep;78(9):1333–8 (20 ref.) **(Jpn)**

[Diffuse ulcerative lesions in the colon with intestinal Behçet's disease] Mori S, et al. **Ryumachi** 1989 Jun; 29(3):172–7 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Pulmonary arterial occlusions and aneurysms: a forme fruste of Behçet's or Hughes-Stovin syndrome. Bowman S, et al. **Br Heart J** 1990 Jan;63(1):66–8

Behçet's disease with Sweet's syndrome-like presentation—a report of six cases. Cho KH, et al. **Clin Exp Dermatol** 1989 Jan;14(1):20–4

Sensitivity and specificity of pathergy test results in Israeli patients with Behçet's disease. Friedman-Birnbaum R, et al. **Cutis** 1990 Apr;45(4):261–4

CPC: uveitis and genital ulcerations in a young female [clinical conference] Collier VU, et al. **Del Med J** 1989 Aug;61(8):389–91, 394–8

C9 and factor B as acute phase proteins and their diagnostic and prognostic value in disease. Adinolfi M, et al.
Exp Clin Immunogenet 1988;5(2–3):123–32 (19 ref.)

Intestinal Behçet's disease in a child—a case report. Suh YL, et al. **J Korean Med Sci** 1987 Jun;2(2):129–32

Sequential PET studies in neuro-Behçet's syndrome. Mineura K, et al. **J Neurol** 1989 Sep;236(6):367–70

MRI in Behçet's disease [letter; comment] Kermode AG. **J Neurol Neurosurg Psychiatry** 1989 Oct;52(10):1212 Comment on: J Neurol Neurosurg Psychiatry 1989 Jun;52(6):749–54.

Magnetic resonance imaging in Behçet's disease [letter; comment] Montalban J, et al.
J Neurol Neurosurg Psychiatry 1990 May;53(5):442 Comment on: J Neurol Neurosurg Psychiatry 1989 Jun;52(6):749–54.

Criteria for diagnosis of Behçet's disease. International Study Group for Behçet's Disease. **Lancet** 1990 May 5; 335(8697):1078–80 (16 ref.)

[Behçet's disease of the eyes] de Vries J, et al.
Ned Tijdschr Geneeskd 1990 Jan 20;134(3):124–6 (Eng. Abstr.) **(Dut)**

[Recurring oral aphthae, genital ulcers, erythema nodosum, arthralgias (clinical conference)] von Kempski CR, et al. **Schweiz Rundsch Med Prax** 1990 Apr 10;79(15):468–71 (Eng. Abstr.) **(Ger)**

[A case from general practice (146). Patient: Mr. L. D. V., born 1964] Waldmann C. **Schweiz Rundsch Med Prax** 1989 Aug 15;78(33):883–4 **(Ger)**

[A case of Behçet's disease] Balaban SIa.
Revmatologiia (Mosk) 1990 Jan–Mar;(1):67–9 **(Rus)**

[Behçet's syndrome] Ivanov KS, et al. **Vrach Delo** 1990 Feb; (2):88–9 **(Rus)**

DRUG THERAPY

The effect of 'MaxEPA' in the treatment of patients with Behçet's disease [letter] Kürkçüoğlu N, et al.
Br J Dermatol 1989 Nov;121(5):667–8

High-dose short-term chlorambucil for intractable sympathetic ophthalmia and Behçet's disease. Tessler HH, et al. **Br J Ophthalmol** 1990 Jun;74(6):353–7

Colchicine therapy in Behçet's syndrome—a report of five cases. Muzulu SI, et al. **Clin Exp Dermatol** 1989 Jul; 14(4):298–9

Cyclosporin A treatment of Behçet's disease: a long-term study. Díaz-Llopis M, et al. **Curr Eye Res** 1990;9 Suppl:17–23

Azathioprine in Behcet's disease [letter] **N Engl J Med** 1990 Jul 19;323(3):195–7

Behçet's syndrome [editorial; comment] O'Duffy JD.
N Engl J Med 1990 Feb 1;322(5):326–8 Comment on: N Engl J Med 1990 Feb 1;322(5):281–5.

A controlled trial of azathioprine in Behçet's syndrome [see comments] Yazici H, et al. **N Engl J Med** 1990 Feb 1; 322(5):281–5 Comment in: N Engl J Med 1990 Feb 1;322(5):326–8.

Cyclosporin treatment in rapidly progressive pulmonary thromboembolic Behçet's disease. Vansteenkiste JF, et al. **Thorax** 1990 Apr;45(4):295–6

[Current use of thalidomide] Revuz J.
Ann Dermatol Venereol 1990;117(4):313–21 (103 ref.) **(Fre)**

[Treatment of Behçet's syndrome with azathioprine] Kirch W, et al. **Dtsch Med Wochenschr** 1990 Jul 13; 115(28–29):1126–7 **(Ger)**

[Cyclosporin A treatment of Behçet's disease] Büsch R, et al. **Hautarzt** 1990 Apr;41(4):229–31 (Eng. Abstr.) **(Ger)**

[Therapy of the ocular form of Behçet disease with cyclosporin A] Pahlitzsch T, et al.
Klin Monatsbl Augenheilkd 1990 Jun;196(6):466–9 (Eng. Abstr.) **(Ger)**

[Cytostatic and immunosuppressive treatment of ocular Behçet syndrome] Schilling H, et al.
Klin Monatsbl Augenheilkd 1990 Feb;196(2):62–9 (Eng. Abstr.) **(Ger)**

[Immunosuppressors in Behçet's disease] Pivetti Pezzi P, et al. **Ann Ital Med Int** 1986 Dec;1(4):324–8 (Eng. Abstr.) **(Ita)**

[Treatment of Behçet's syndrome with colchicine] Pacor ML, et al. **Riv Eur Sci Med Farmacol** 1989 Jun;11(3):257–61 (Eng. Abstr.) **(Ita)**

[Treatment of skin symptoms of Behçet's disease with low dose cyclosporin A] Iiyoshi E, et al.
Nippon Hifuka Gakkai Zasshi 1989 Jul;99(8):877–81 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Lymphocyte gamma-glutamyl transferase activity in Behçet's disease. Pabuçcuoğlu A, et al.
Arch Immunol Ther Exp (Warsz) 1989;37(1–2):121–5

Increased serum alkaline phosphatase activity in Behçet's disease. Takeuchi A, et al. **Clin Exp Rheumatol** 1989 Nov–Dec;7(6):619–21

EPIDEMIOLOGY

Behçet's syndrome: ocular features in an Australian population. Wakefield D, et al. **Aust N Z J Ophthalmol** 1990 May;18(2):129–35

ETIOLOGY

Genitorectal trichomonas invasion as (co)-factor in pathogenesis of Behcet's syndrome [letter] Krvavac S.
Ann Rheum Dis 1990 Jun;49(6):423

Behçet's disease and dental treatment [letter] Hamza M.
J Rheumatol 1989 Dec;16(12):1612–3

[A rare cause of arthritis, Behçet's disease in a HIV-positive subject, 69 years of age (letter)] Routy JP, et al.
Presse Med 1989 Nov 4;18(36):1799 **(Fre)**

[Etiopathogenesis of Behçet's disease] Bergaoui N, et al.
Rev Med Interne 1989 Jul–Aug;10(4):338–40 (42 ref.) **(Fre)**

[Behçet's disease] Hamza M. **Rev Med Interne** 1989 Jul–Aug; 10(4):299–301 **(Fre)**

GENETICS

Behçet's syndrome in HLA-identical siblings. Woodrow JC, et al. **Br J Rheumatol** 1990 Jun;29(3):225–7

[Behçet's disease and class II and III antigens of the major

histocompatibility complex] Hamza M, et al. **Rev Rhum Mal Osteoartic** 1990 Jan;57(1):59–61 **(Fre)**

IMMUNOLOGY

Natural killer cell activity, interferon-gamma and antibodies to herpes viruses in patients with Behçet's disease. Hamzaoui K, et al. **Clin Exp Immunol** 1990 Jan;79(1):28–34

Cytotoxic T cells against herpes simplex virus in Behçet's disease. Hamzaoui K, et al. **Clin Exp Immunol** 1990 Sep; 81(3):390–5

Neutrophil-potentiating factors released from stimulated lymphocytes; special reference to the increase in neutrophil-potentiating factors from streptococcus-stimulated lymphocytes of patients with Behçet's disease. Niwa Y, et al. **Clin Exp Immunol** 1990 Mar;79(3):353–60

High affinity interleukin-2 receptors on peripheral blood lymphocytes are decreased during active Behçet's disease [letter] Hamzaoui K, et al. **Clin Exp Rheumatol** 1990 Jan–Feb;8(1):100–1

Antibodies against ocular and oral antigens in Behçet's disease associated with uveitis. Klok AM, et al. **Curr Eye Res** 1989 Sep;8(9):957–62

Serum IgE concentrations in complete Behçet's disease [letter] Cengiz K. **J Clin Pathol** 1990 Mar;43(3):262

Anticardiolipin antibodies in Behçet's disease. Bergman R, et al. **J Dermatol** 1990 Mar;17(3):164–7

Serum secretory IgA levels in patients with Behçet disease. Sunakawa M, et al. **Metab Pediatr Syst Ophthalmol** 1989; 12(4):110–2

Longitudinal study of serum antibody response to bovine corneal protein (BCP 54) in Behçet's disease. Kong AS, et al. **Ophthalmic Res** 1989;21(6):401–5

[Prognostic value of HLA B5 antigen in isolated anterior uveitis in Behçet's disease] Oguz V, et al. **J Fr Ophtalmol** 1989;12(6–7):431–2 (Eng. Abstr.) **(Fre)**

[Immunology of Behçet's disease] Hamzaoui K, et al. **Tunis Med** 1990 Feb;68(2):73–6 (33 ref.) **(Fre)**

[The antibody titer to streptococcal and staphylococcal L-form in Behçet's disease] Ogawa T, et al. **Nippon Ganka Gakkai Zasshi** 1990 Apr;94(4):408–12 (Eng. Abstr.) **(Jpn)**

[Studies on delayed skin reactivity to streptococci in Behçet's disease] Yoshikawa K, et al. **Nippon Ganka Gakkai Zasshi** 1990 Feb;94(2):181–5 (Eng. Abstr.) **(Jpn)**

[The relationship of the HLA antigen system to Behçet's disease] Golosenko IIu. **Vestn Dermatol Venerol** 1990; (5):55–7 (Eng. Abstr.) **(Rus)**

METABOLISM

Cutaneous fibrinolytic potential, tPA dependent, is reduced in Behçet's disease. Lotti T, et al. **Br J Dermatol** 1989 Dec; 121(6):713–6

[Measurement of gamma-interferon in sera and CSF in patients with multiple sclerosis and inflammatory neurological diseases] Hirayama M, et al. **Rinsho Shinkeigaku** 1990 May;30(5):557–9 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Anti-Yersinia antibodies in patients with Behçet's disease [letter] Lahesmaa-Rantala R, et al. **Arthritis Rheum** 1989 Nov;32(11):1494–5

Herpes simplex virus and the rheumatic diseases. Denman AM, et al. **Rheumatol Int** 1989;9(3–5):143–6 (20 ref.)

MORTALITY

Fatal progression of Behçet's disease after cardiac surgery. Paccagnella A, et al. **Thorac Cardiovasc Surg** 1989 Oct; 37(5):320–1

PATHOLOGY

Chemiluminescence of neutrophils from patients with Behçet's disease and its correlation with an increased proportion of uncommon serotypes of Streptococcus sanguis in the oral flora. Isogai E, et al. **Arch Oral Biol** 1990;35(1):43–8

Epidermal Langerhans cells in patients with Behçet's syndrome [letter] Kürkçüoğlu N, et al. **Australas J Dermatol** 1988;29(3):185

Computed tomography of the sacroiliac joints in four patients with Behçet's syndrome—confirmation of sacroiliitis. Olivieri I, et al. **Br J Rheumatol** 1990 Aug;29(4):264–7

Behçet's syndrome with gastro-intestinal tract involvement mimicking carcinoma of the caecum—a case report. Abdullah AN, et al. **Clin Exp Dermatol** 1989 Nov; 14(6):459–61

Central nervous system magnetic resonance imaging findings in neuro-Behçet syndrome. Iwasaki Y, et al. **Comput Med Imaging Graph** 1990 Jan–Feb;14(1):85–7

Histopathologic study of cutaneous lesions in Behçet's syndrome. Chun SI, et al. **J Dermatol** 1990 Jun;17(6):333–41

Assessment of apoptosis of infiltrating lymphocytes in erythema nodosum-like lesions of corticosteroid-treated patients with Behçet's syndrome. Honma T, et al. **J Submicrosc Cytol Pathol** 1989 Oct;21(4):691–701

Vasculitis in Behçet's disease. O'Duffy JD. **Rheum Dis Clin North Am** 1990 May;16(2):423–31 (34 ref.)

PHYSIOPATHOLOGY

Ocular involvement in Behçet's disease. Peplinski LS. **J Am Optom Assoc** 1989 Nov;60(11):854–7

Brainstem auditory and somatosensory evoked potentials in neuro-Behçet's syndrome. Nakamura Y, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):191–200

[Electro-ophthalmological analysis of Behçet's disease] Asai H, et al. **Nippon Ganka Gakkai Zasshi** 1989 Nov; 93(11):1038–43 (Eng. Abstr.) **(Jpn)**

[Measurement of retinal circulation in uveitis of Behçet's and Harada's disease] Sugihara I. **Nippon Ganka Gakkai Zasshi** 1989 Jun;93(6):705–13 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Pulmonary manifestation of Behçet's disease. Case report. Peene PT, et al. **ROFO** 1990 Apr;152(4):475–7

[A case of Behçet's disease with hemoptysis and chest X-ray abnormality] Chino M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb; 28(2):356–61 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

PET and MR imaging in a neuro-Behçet syndrome. Wildhagen K, et al. **Eur J Nucl Med** 1989;15(11):764–6

THERAPY

Topical alpha interferon in the treatment of oral ulcers in Behçet's syndrome: a preliminary report. Hamuryudan V, et al. **Clin Exp Rheumatol** 1990 Jan–Feb;8(1):51–4

Plasma exchange in patients with Behçet's disease [letter] Lambert D, et al. **J Am Acad Dermatol** 1990 Jun;22(6 Pt 1):1123

Treatment of severe Behçet's disease by plasma exchange with or without immunosuppressive drugs. Long term follow-up. Rifle G, et al. **Prog Clin Biol Res** 1990;337:331–5

[Behçet's disease: therapy with recombinant interferon gamma (letter)] Fierlbeck G. **Dtsch Med Wochenschr** 1989 Nov 10;114(45):1769 **(Ger)**

[Behçet's syndrome: treatment with recombinant interferon gamma (letter)] Kirch W, et al. **Dtsch Med Wochenschr** 1990 Mar 2;115(9):357 **(Ger)**

[Behçet's disease in clinical practice] Mazneva LM, et al. **Ter Arkh** 1989;61(6):150–4 **(Rus)**

BEJEL see under **TREPONEMAL INFECTIONS**

BELCHING see **ERUCTATION**

BELGIAN HARE see **RABBITS**

BELLADONNA see under **PLANTS, TOXIC**

BELLADONNA ALKALOIDS

ADVERSE EFFECTS

[Prolonged mydriasis caused by Lamaline] Maizoub S, et al. **Bull Soc Ophtalmol Fr** 1989 Mar;89(3):421–2 (Eng. Abstr.) **(Fre)**

BELL'S PALSY see **FACIAL PARALYSIS**

BEMEGRIDE

Protective effect of nifedipine on convulsive NEFA increase in CNS. Sklenovský A, et al. **Act Nerv Super (Praha)** 1990 Mar;32(1):51–3

PHARMACOLOGY

Actions of steroids and bemegride on the GABAA receptor of mouse spinal neurones in culture. Mistry DK, et al. **Exp Physiol** 1990 Mar;75(2):199–209

BENACTYZINE

THERAPEUTIC USE

[Experience with amysil treatment of patients with vascular parkinsonism] Kamenetskiĭ VK. **Zh Nevropatol Psikhiatr** 1989;89(9):56–9 (Eng. Abstr.) **(Rus)**

BENCE JONES PROTEIN

Frequency of light chain deposition nephropathy relative to renal amyloidosis and Bence Jones cast nephropathy in a necropsy study of patients with myeloma. Iványi B. **Arch Pathol Lab Med** 1990 Sep;114(9):986–7

ANALYSIS

[Clinical significance of Bence Jones protein analysis in biochemical laboratory tests] Arakawa M. **Nippon Rinsho** 1989 Dec;48 Suppl:158–60 **(Jpn)**

IMMUNOLOGY

Double Bence Jones proteinuria. Kanoh T, et al. **Arch Pathol Lab Med** 1990 Sep;114(9):991–4

Three-dimensional structure of a hybrid light chain dimer: protein engineering of a binding cavity. Ely KR, et al. **Mol Immunol** 1990 Feb;27(2):101–14

[The distribution of 125I-monoclonal antibodies to Bence Jones proteins in the body of animals] Miroliubova OIu, et al. **Med Radiol (Mosk)** 1990 Jun;35(6):25–7 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Three-dimensional structure of a light chain dimer crystallized in water. Conformational flexibility of a molecule in two crystal forms. Ely KR, et al. **J Mol Biol** 1989 Dec 5;210(3):601–15

URINE

The optimum urine collections for the detection and monitoring of Bence Jones proteinuria. Brigden ML, et al. **Am J Clin Pathol** 1990 May;93(5):689–93

Relevance of class, molecular weight and isoelectric point in predicting human light chain amyloidogenicity. Bellotti V, et al. **Br J Haematol** 1990 Jan;74(1):65–9

Identification and quantification of Bence-Jones proteinuria by automated nephelometric screening. Boege F, et al. **J Clin Chem Clin Biochem** 1990 Jan;28(1):37–42

[The significance of analysis and detection of Bence Jones protein in the urine in clinical laboratory diagnosis] Végh Z, et al. **Orv Hetil** 1989 Aug 27;130(35):1871–5 (38 ref.) (Eng. Abstr.) **(Hun)**

[A case of idiopathic Bence-Jones proteinuria] Salvati F, et al. **Minerva Med** 1989 Oct;80(10):1133–4 (Eng. Abstr.) **(Ita)**

[Clinical significance of urine protein and its fraction analysis in biochemical tests] Kagimoto T, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:138–40 **(Jpn)**

[Multiple myeloma causing obstructive jaundice by extramedullary plasmacytoma after Bence Jones protein loss—an autopsy case report] Hamamoto K, et al. **Rinsho Ketsueki** 1990 Jan;31(1):57–61 (13 ref.) (Eng. Abstr.) **(Jpn)**

[The diagnostic importance of determining minimal amounts of the Bence-Jones protein in the urine of patients with morphologically nondemonstrable lymphatic tumors] Sinitsina TV, et al. **Ter Arkh** 1989;61(7):75–8 (Eng. Abstr.) **(Rus)**

BENCYCLANE see under **CYCLOHEPTANES**

BENDER-GESTALT TEST

Interrater reliability of the Koppitz Developmental Scoring method in the clinical evaluation of the single case. Svensson PW, et al. **Percept Mot Skills** 1990 Apr; 70(2):615–23

STANDARDS

Concurrent validation of Hutt's Bender Gestalt screening method for schizophrenia, depression, and brain damage. Lownsdale WS, et al. **J Pers Assess** 1989 Winter; 53(4):832–6

BENDROFLUAZIDE see **BENDROFLUMETHIAZIDE**

BENDROFLUMETHIAZIDE

Interaction of some benzothiadiazine diuretics with beta-cyclodextrin. Abdel-Rahman SI, et al. **Acta Pharm Hung** 1990 May;60(2–3):69–75

ADMINISTRATION & DOSAGE

Relation between dose of bendrofluazide, antihypertensive effect, and adverse biochemical effects. Carlsen JE, et al. **BMJ** 1990 Apr 14;300(6730):975–8

Thiazides with loop diuretics for severe congestive heart failure [letter; comment] Channer KS, et al. **Lancet** 1990 Apr 14;335(8694):922–3 Comment on: Lancet 1990 Jan 6;335(8680):29–31.

ADVERSE EFFECTS

Phototoxic potential of thiazide diuretics in normal subjects. Diffey BL, et al. **Arch Dermatol** 1989 Oct;125(10):1355–8

Antihypertensive and adverse biochemical effects of bendrofluazide [letter] Ramsay LE, et al. **BMJ** 1990 Jul 28;301(6745):240–1

PHARMACOLOGY

Electrocardiographic changes induced by inhaled salbutamol after treatment with bendrofluazide: effects of replacement therapy with potassium, magnesium and triamterene. Lipworth BJ, et al. **Clin Sci** 1990 Mar;78(3):255–9

Effects of the thiazide diuretic bendroflumethiazide on salivary flow rate and composition. Nederfors T, et al. **Scand J Dent Res** 1989 Dec;97(6):520–7

THERAPEUTIC USE

Antihypertensive and adverse biochemical effects of bendrofluazide [letter] **BMJ** 1990 Jun 2;300(6737):1465–6

Antihypertensive and adverse biochemical effects of bendrofluazide [letter] Johnston GD. **BMJ** 1990 Jul 7; 301(6742):42–3

Treatment of hypertension with a fixed ratio combination of long-acting propranolol and bendrofluazide, and influence of age of the subject. Herrick AL, et al.

Br J Clin Pract 1989 Jun;43(6):196–200

Effect of antihypertensive treatment on blood–retinal barrier permeability to fluorescein in hypertensive type 1 (insulin–dependent) diabetic patients with background retinopathy. Parving HH, et al. **Diabetologia** 1989 Jul; 32(7):440–4

Comparison of slow–release piretanide and bendroflumethiazide in the treatment of mild to moderate hypertension. Hegbrant J, et al. **J Int Med Res** 1989 Sep–Oct;17(5):426–34

The effect of captopril and metoprolol as monotherapy or combined with bendroflumethiazide on blood lipids. Foss OP, et al. **J Intern Med** 1990 Feb;227(2):119–23

BENDS see **DECOMPRESSION SICKNESS**

BENECKEA see **VIBRIO**

BENHYDRAMIN see **DIPHENHYDRAMINE**

BENIGN INTRACRANIAL HYPERTENSION see **PSEUDOTUMOR CEREBRI**

BENOMYL see under **CARBAMATES**

BENORILATE see under **SALICYLATES**

BENSERAZIDE see under **HYDRAZINES**

BENSOKAIN see **BENZOCAINE**

BENTONITE

Effect of montmorillonite on drug release from polymeric matrices. Forni F, et al. **Arch Pharm (Weinheim)** 1989 Nov; 322(11):789–93

[The isolation of a concentrated and purified rotavirus preparation by using bentonite] Girin VN, et al. **Mikrobiol Zh** 1989 Sep–Oct;51(5):56–60 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

A study of tuberculosis antibodies by bentonite flocculation. Wallace R, et al. **Can Med Assoc J** 1966 Apr 30; 94(18):947–50

PHARMACOLOGY

Sodium bentonite as a component in layer diets. Olver MD. **Br Poult Sci** 1989 Dec;30(4):841–6

Investigations of the use of clay minerals and prussian blue in reducing the transfer of dietary radiocaesium to milk. Unsworth EF, et al. **Sci Total Environ** 1989 Sep;85:339–47

BENZALDEHYDES

Generation of triplet carbonyl compounds during peroxidase catalysed reactions. Cilento G. **J Biolumin Chemilumin** 1989 Jul;4(1):193–9 (29 ref.)

ADMINISTRATION & DOSAGE

Manipulation of oxygenation in a human tumour xenograft with BW12C or hydralazine: effects on responses to radiation and to the bioreductive cytotoxicity of misonidazole or RSU–1069. Cole S, et al. **Radiother Oncol** 1989 Nov;16(3):235–43

ANALYSIS

A chemical model of catechol–O–methyltransferase. Methylation of 3,4–dihydroxybenzaldehyde in aqueous solution. Sugata S, et al. **Chem Pharm Bull (Tokyo)** 1989 May;37(5):1143–6

[Determination of 3–bromobenzaldehyde, 3–phenoxybenzaldehyde and 3–phenoxybenzyl alcohol in the air of the work place] Smoliar NIa. **Gig Sanit** 1990 Feb;(2):69 **(Rus)**

[Gas chromatographic determination of butyl alcohols in the atmospheric air] Ushakova VA, et al. **Gig Sanit** 1990 Feb; (2):68–9 **(Rus)**

METABOLISM

Oxidation of benzaldehydes to benzoic acid derivatives by three Desulfovibrio strains. Zellner G, et al. **Appl Environ Microbiol** 1990 Jul;56(7):2228–33

PHARMACOLOGY

Requirement of a reactive aldehyde moiety for aldehyde–mediated protection against cis–dichlorodiammineplatinum–induced cell inactivation. Dornish JM, et al. **Biochem Pharmacol** 1990 Jan 15; 39(2):309–18

Suppression of 6–TG–resistant mutations in V79 cells and recessive spot formations in mice by vanillin. Imanishi H, et al. **Mutat Res** 1990 Feb;243(2):151–8

Suppressing effects of vanillin, cinnamaldehyde, and anisaldehyde on chromosome aberrations induced by X–rays in mice. Sasaki YF, et al. **Mutat Res** 1990 Apr; 243(4):299–302

Effects of vanillin and o–vanillin on induction of DNA–repair networks: modulation of mutagenesis in Escherichia coli. Takahashi K, et al. **Mutat Res** 1990 Jun;230(2):127–34

Inhibition of induction of adaptive response by o–vanillin in Escherichia coli B. Watanabe K, et al. **Mutat Res** 1990 Apr;243(4):273–80

[The effect of vanillin on the fully amygdala–kindled seizures in the rat] Wu HQ, et al. **Yao Hsueh Hsueh Pao** 1989; 24(7):482–6 (Eng. Abstr.) **(Chi)**

TOXICITY

Comparison of mutagenicity and theoretical reactivity of 2,4–dinitrobenzaldehyde and 2,6–dinitrobenzaldehyde in bacterial mutation assay and molecular orbital method. Sayama M, et al. **Mutat Res** 1990 Jan;243(1):47–52

BENZALKONIUM see **BENZALKONIUM COMPOUNDS**

BENZALKONIUM COMPOUNDS

Interactions of benzalkonium chloride with soft and hard contact lenses. Chapman JM, et al. **Arch Ophthalmol** 1990 Feb;108(2):244–6

Benzalkonium interference with test methods for potassium and sodium. Koch TR, et al. **Clin Chem** 1990 May; 36(5):807–8

The drug treatment of asthma [letter; comment] Brophy CJ. **Postgrad Med J** 1989 Jul;65(765):506–7 Comment on: Postgrad Med J 1988;64 Suppl 4:74–81.

[Effect of subgingival plaque control by direct irrigation technique—2. Clinical and microbiological changes after irrigation with acrinol or benzalkonium chloride solution] Hagiwara S, et al. **Kokubyo Gakkai Zasshi** 1989 Sep; 56(3):435–43 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Topical pharyngeal anesthesia for easing endoscopy: a double–blind, randomized, placebo–controlled study. Lachter J, et al. **Gastrointest Endosc** 1990 Jan–Feb; 36(1):19–21

[Vistagan–Liquifilm in the treatment of simple glaucoma] Szymankiewiczowa S. **Klin Oczna** 1989 Jun;91(6):163–4 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Corneal toxic changes after cataract extraction. Zabel RW, et al. **Can J Ophthalmol** 1989 Dec;24(7):311–6

[Benzalkonium chloride for vaginal contraception—the vaginal sponge] Meyer U, et al. **Geburtshilfe Frauenheilkd** 1990 Jul;50(7):542–7 (Eng. Abstr.) **(Ger)**

ANALYSIS

[Kalman filtering–titrimetry: potentiometric titration of benzalkonium bromide] Li ZL, et al. **Yao Hsueh Hsueh Pao** 1990;25(1):35–43 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

Gastric pH after cetacaine spray [letter] Agarwal VP. **Am J Gastroenterol** 1990 Sep;85(9):1199

Inactivation of human immunodeficiency virus type 1 in tissue culture fluid and in genital secretions by the spermicide benzalkonium chloride. Wainberg MA, et al. **J Clin Microbiol** 1990 Jan;28(1):156–8

[Determination of bactericidal minimum concentrations of 3 antiseptics and 1 disinfectant on 580 hospital gram–negative bacilli] Girardo P, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):605–11 (Eng. Abstr.) **(Fre)**

[Prevention of adenovirus infection and antiviral activity of a hand disinfectant, Welpas] Ueno T, et al. **Nippon Ganka Gakkai Zasshi** 1990 Jan;94(1):44–8 (Eng. Abstr.) **(Jpn)**

[Effect of antimicrobial surface–active agents on the immune response to thymus–dependent antigen in mice] Krivoshein IuS, et al. **Antibiot Khimioter** 1990 Jan;35(1):35–7 (Eng. Abstr.) **(Rus)**

[The effect of miramistin on the phagocytic activity of urethral neutrophil granulocytes] Shatrov VA, et al. **Lab Delo** 1990;(4):55–6 (Eng. Abstr.) **(Rus)**

POISONING

[A case of acute benzalkonium chloride intoxication] Akutsu I, et al. **Nippon Naika Gakkai Zasshi** 1989 Nov; 78(11):1613–4 **(Jpn)**

THERAPEUTIC USE

[Quaternary ammonium compounds in local vaginal therapy] Bourbon P, et al. **Rev Fr Gynecol Obstet** 1989 Nov; 84(11):775–7 **(Fre)**

TOXICITY

Effect of inhaled preservatives on asthmatic subjects. II. Benzalkonium chloride. Zhang YG, et al. **Am Rev Respir Dis** 1990 Jun;141(6):1405–8

Corneal toxicity studies in rabbits and dogs with hydroxyethyl cellulose and benzalkonium chloride. Durand–Cavagna G, et al. **Fundam Appl Toxicol** 1989 Oct; 13(3):500–8

Enteric neuronal ablation: structure–activity relationship in a series of alkyldimethylbenzylammonium chlorides. Herman JR, et al. **Fundam Appl Toxicol** 1989 Oct; 13(3):576–84

[The effect of selected irritants on suspended keratinocytes using double vital staining] Heise P, et al. **Dermatol Monatsschr** 1989;175(10):647–54 (Eng. Abstr.) **(Ger)**

BENZALOLIN see **TOLAZOLINE**

BENZAMIDES

Efficacy of diethyl methylbenzamide (deet) against Aedes dorsalis and a comparison of two end points for protection time. Rutledge LC, et al. **J Am Mosq Control Assoc** 1989 Sep;5(3):363–8

Photodecomposition of moclobemide on a silica gel thin–layer chromatographic plate. Nakai S, et al. **J Chromatogr** 1989 Oct 6;479(2):459–63

[A tiapride and ketamine combination in short duration anesthesia] Alvarez Gómez JA, et al. **Rev Esp Anestesiol Reanim** 1989 Jul–Aug;36(4):207–12 (Eng. Abstr.) **(Spa)**

ADMINISTRATION & DOSAGE

[Moclobemide in the long–term treatment of depressed patients] Carl G, et al. **Psychiatr Prax** 1989 Aug;16 Suppl 1:48–50 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

[Neuroleptic malignant syndrome and tiapride] Faitg R, et al. **J Toxicol Clin Exp** 1989 Sep–Oct;9(5):333–5 **(Fre)**

[Treatment of depression using MAO–A inhibitors: an open study of a direct switch from moclobemide to tri–/tetracyclic antidepressants] Becker T, et al. **Psychiatr Prax** 1989 Aug;16 Suppl 1:44–7 (Eng. Abstr.) **(Ger)**

[Mosquito repellents containing DEET can affect the central nervous system] Oredsson B, et al. **Lakartidningen** 1990 Aug 8;87(32–33):2495–6 **(Swe)**

ANALYSIS

Nitrosamines in formulations of deet and EPTC. Wigfield YY, et al. **Bull Environ Contam Toxicol** 1990 Jan;44(1):13–8

ANTAGONISTS & INHIBITORS

R 50 595, a selective non–competitive antagonist of cisapride, BRL 24924 and 5–hydroxytryptamine on the guinea–pig ileum. Van den Brink HW, et al. **Eur J Pharmacol** 1990 May 31;181(1–2):119–25

BLOOD

High–performance liquid chromatographic measurement of (R)–4–[3–[(2–hydroxy–2–phenethyl)amino]–3–methylbutyl]benzamide monohydrochloride (LY195448) and its p–hydroxy metabolite in human plasma and urine. Engineer MS, et al. **J Chromatogr** 1990 May 18; 527(2):473–80

High–performance liquid chromatographic determination of cis–N–(1–benzyl–2–methylpyrrolidin–3–yl)–5–chloro–2–methoxy–4– methylaminobenzamide in rat blood and brain using electrochemical detection. Imamura Y, et al. **J Chromatogr** 1990 Mar 16;526(1):282–8

Determination of remoxipride in plasma and urine by reversed–phase column liquid chromatography. Nilsson LB. **J Chromatogr** 1990 Mar 16;526(1):139–50

Sequential metabolism of salicylamide exclusively to gentisamide 5–glucuronide and not gentisamide sulfate conjugates in single–pass in situ perfused rat liver. Xu X, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):965–73

CHEMICAL SYNTHESIS

Synthesis of omega–[18F]fluoroalkyl analogs of YM–09151–2 for the measurement of D2–dopamine receptors with PET. Hatano K, et al. **Int J Rad Appl Instrum [A]** 1990; 41(6):551–5

Preparation and biological evaluation of 18F–labeled benzamide analogs as potential dopamine D2 receptor ligands. Kiesewetter DO, et al. **Int J Rad Appl Instrum [B]** 1990;17(4):347–56

Potential antipsychotic agents. 7. Synthesis and antidopaminergic properties of the atypical highly potent (S)–5–bromo–2,3–dimethoxy–N–[(1–ethyl–2–pyrrolidinyl) methyl]benzamide and related compounds. A comparative study. Högberg T, et al. **J Med Chem** 1990 Aug; 33(8):2305–9

Novel benzamides as selective and potent gastric prokinetic agents. 1. Synthesis and structure–activity relationships of N–[(2–morpholinyl)alkyl]benzamides. Kato S, et al. **J Med Chem** 1990 May;33(5):1406–13

Synthesis and cardiac electrophysiological activity of N–substituted–4–(1H–imidazol–1–yl)benzamides—new selective class III agents. Morgan TK Jr, et al. **J Med Chem** 1990 Apr;33(4):1091–7

DIAGNOSTIC USE

In vivo SPECT imaging of CNS D–2 dopamine receptors: initial studies with iodine–123–IBZM in humans. Kung HF, et al. **J Nucl Med** 1990 May;31(5):573–9

IMMUNOLOGY

Antibodies with high affinity for spiroperidol—II. Cross reactivity with iodobenzamide and domperidone. Luedtke RR, et al. **Mol Immunol** 1990 Jul;27(7):667–77

METABOLISM

Characterization of [3H]Ro 16–6491 binding to digitonin solubilized monoamine oxidase–B and purification of the enzyme from human platelets by affinity chromatography. Cesura AM, et al. **Biochem Pharmacol** 1990 Jan 1; 39(1):216–20

Metabolism, disposition, and pharmacokinetics of a potent anticonvulsant, 4–amino–N–(2,6–dimethylphenyl)benzamide (LY201116), in rats. Potts BD, et al. **Drug Metab Dispos** 1989 Nov–Dec; 17(6):656–61

Association of [3H]zacopride with 5–HT3 binding sites. Pinkus LM, et al. **Eur J Pharmacol** 1989 Sep 22; 168(3):355–62

Antagonism of [3H]zacopride binding to 5–HT3 recognition sites by its (R) and (S) enantiomers. Pinkus LM, et al. **Eur J Pharmacol** 1990 Apr 10;179(1–2):231–5

Binding of [3H]brofaromine to monoamine oxidase A in vivo: displacement by clorgyline and moclobemide. Waldmeier PC, et al. **Eur J Pharmacol** 1990 May 16;180(2–3):297–304

[3H]zacopride binding to 5–hydroxytryptamine3 sites on partially purified rabbit enteric neuronal membranes. Gordon JC, et al. **J Pharmacol Exp Ther** 1989 Dec; 251(3):962–8

Sodium–dependent isomerization of dopamine D–2 receptors characterized using [125I]epidepride, a high–affinity substituted benzamide ligand. Neve KA, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1108–16

Nerve growth factor induces 5–HT3 recognition sites in rat pheochromocytoma (PC12) cells. Gordon JC, et al. **Life Sci** 1990;46(20):1435–42

Characterization of sulpiride–displaceable 3H–YM–09151–2 binding sites in rat frontal cortex and the effects of subchronic treatment with haloperidol on cortical D–2 dopamine receptors. Kazawa T, et al. **Life Sci** 1990; 47(6):531–7

[125I–spectramide: a novel benzamide displaying potent and selective effects at the D2 dopamine receptor. Sánchez–Roa PM, et al. **Life Sci** 1989;45(19):1821–9

Beta–adrenoceptor binding studies with LY195448 and metabolites. Ho BT, et al. **Res Commun Chem Pathol Pharmacol** 1990 Jan;67(1):143–6

Metabolism and disposition of (R)–4–[3–(2–hydroxy–2–phenyl)ethylamino–3–methylbutyl]benzamide Hcl (LY 195448) in rodents. Ho DH, et al. **Res Commun Chem Pathol Pharmacol** 1989 Nov; 66(2):255–67

PHARMACOKINETICS

Moclobemide excretion in human breast milk. Pons G, et al. **Br J Clin Pharmacol** 1990 Jan;29(1):27–31

Effect of urinary pH on the plasma and urinary kinetics of remoxipride in man. Widerlöv E, et al. **Eur J Clin Pharmacol** 1989;37(4):359–63

Pharmacokinetics of remoxipride controlled release and immediate release capsules in schizophrenic patients. Widerlöv E, et al. **Int Clin Psychopharmacol** 1990 Apr; 5(2):125–34

Disposition kinetics of moclobemide, a new MAO–A inhibitor, in subjects with impaired renal function. Schoerlin MP, et al. **J Clin Pharmacol** 1990 Mar; 30(3):272–84

Plasma concentrations of remoxipride and the gastrointestinal transit of 111In–marked extended–release coated spheres. Graffner C, et al. **Pharm Res** 1990 Jan;7(1):54–8

Steady–state pharmacokinetics of controlled release and immediate release formulations of remoxipride in patients with chronic schizophrenia. Tench D, et al. **Psychopharmacology (Berl)** 1990;101(1):132–6

[A comparative study of befol pharmacokinetics in experimental animals and man] Rodionov AP, et al. **Farmakol Toksikol** 1990 Mar–Apr;53(2):62–3 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Pharmacological studies on new gastrokinetic drugs. Coppi G, et al. **Acta Physiol Hung** 1990;75 Suppl:65–6

Artefacts due to radiation–induced cell damage in pulse–labeling experiments using tritiated nucleic acid precursors. Salonen J, et al. **Adv Exp Med Biol** 1989; 253B:235–41

AS–4370, a novel gastrokinetic agent free of dopamine D2 receptor antagonist properties. Yoshida N, et al. **Arch Int Pharmacodyn Ther** 1989 Jul–Aug;300:51–67

Antiulcer effects of 3–[[[2–(3,4–dimethoxyphenyl)ethyl] carbamoyl]methyl]–amino–N–methylbenzamide in experimental gastric and duodenal ulcers. Asano M, et al. **Arzneimittelforschung** 1990 Mar;40(3):276–81

Effect of the new anti–allergic compound ethyl 2–(4'–carboxybenzamido)–4–propionamidobenzoate sodium salt on human neutrophil superoxide production. Kaneko M, et al. **Arzneimittelforschung** 1990 Jan;40(1):91–4

Interaction between terbutaline and ethyl 2–(4'–carboxybenzamido)–4–propionamidobenzoate sodium salt in tracheal smooth muscle relaxation of guinea pig. Yin K, et al. **Arzneimittelforschung** 1990 Apr; 40(4):446–9

Reversion of transformed NIH 3T3 cells to flat cells by inhibitors of poly(ADP–ribose) polymerase. Nagao M, et al. **Basic Life Sci** 1990;52:401–5

A double–blind dose ranging study of BRL 24924 and metoclopramide on lower oesophageal sphincter pressure in healthy volunteers. Robertson CS, et al. **Br J Clin Pharmacol** 1989 Sep;28(3):323–7

Pre–clinical pharmacology of moclobemide. A review of published studies. Burkard WP, et al. **Br J Psychiatry Suppl** 1989 Oct;(6):84–8 (25 ref.)

Biochemical aspects of the pharmacology of moclobemide. The implications of animal studies. Callingham BA. **Br J Psychiatry Suppl** 1989 Oct;(6):53–60

Correlation of enhanced 6–mercaptopurine cytotoxicity with increased phosphoribosylpyrophosphate levels in Chinese hamster ovary cells treated with 3–aminobenzamide. Moses K, et al. **Cancer Res** 1990 Apr 1;50(7):1992–6

Flow cytometric recognition of clastogen induced chromatin damage in G0/G1 lymphocytes by non–stoichiometric Hoechst fluorochrome binding. Kubbies M. **Cytometry** 1990;11(3):386–94

Inhibition of cytokine–induced MHC class II but not class I molecule expression on mouse islet cells by niacinamide and 3–aminobenzamide. Yamada K, et al. **Diabetes** 1990 Sep;39(9):1125–30

Human pharmacology of renzapride: a new gastrokinetic benzamide without dopamine antagonist properties. Staniforth DH, et al. **Eur J Clin Pharmacol** 1990; 38(2):161–4

Emetic activity of zacopride in ferrets and its antagonism by pharmacological agents. Sancilio LF, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):303–6

Comparison of [3H]YM–09151–2 with [3H]spiperone and [3H]raclopride for dopamine d–2 receptor binding to rat striatum. Terai M, et al. **Eur J Pharmacol** 1989 Dec 7; 173(2–3):177–82

The (S)–isomer of [3H]zacopride labels 5–HT3 receptors with high affinity in rat brain. Waeber C, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):283–7

Effects of 3–aminobenzamide on cellular ribosomal RNA content and cell cycle progression in inhibitor resistant and sensitive L1210 cells. Smith PJ, et al. **Exp Cell Res** 1989 Dec;185(2):353–62

A novel water–soluble dopamine–2 antagonist with anticholinesterase activity in gastrointestinal motor activity. Comparison with domperidone and neostigmine. Iwanaga Y, et al. **Gastroenterology** 1990 Aug;99(2):401–8

The potentiation of the antitumor activity but not toxicity of bleomycin by 3–aminobenzamide. Pan QC, et al. **J Antibiot (Tokyo)** 1989 Dec;42(12):1860–8

N–[(arylmethoxy)phenyl] carboxylic acids, hydroxamic acids, tetrazoles, and sulfonyl carboxamides. Potent orally active leukotriene D4 antagonists of novel structure. Musser JH, et al. **J Med Chem** 1990 Jan;33(1):240–5

Dopamine D–2 agonists with high and low efficacies: differentiation by behavioural techniques. Arnt J, et al. **J Neural Transm Gen Sect** 1990;80(1):33–50

Tyramine potentiation during treatment with MAO inhibitors: brofaromine and moclobemide vs irreversible inhibitors. Bieck PR, et al. **J Neural Transm Suppl** 1989; 28:21–31

From moclobemide to Ro 19–6327 and Ro 41–1049: the development of a new class of reversible, selective MAO–A and MAO–B inhibitors. Da Prada M, et al. **J Neural Transm Suppl** 1990;29:279–92 (29 ref.)

Preclinical profiles of the novel reversible MAO–A inhibitors, moclobemide and brofaromine, in comparison with irreversible MAO inhibitors. Da Prada M, et al. **J Neural Transm Suppl** 1989;28:5–20 (68 ref.)

The effects of moclobemide on cognition. Wesnes KA, et al. **J Neural Transm Suppl** 1989;28:91–102 (38 ref.)

Decrease in sensitivity to ethidium bromide by caffeine, dimethylsulfoxide or 3–aminobenzamide due to reduced permeability. Kimura H, et al. **J Pharmacobiodyn** 1989 Oct; 12(10):589–95

Effects of zacopride and BMY25801 (batanopride) on radiation–induced emesis and locomotor behavior in the ferret. King GL, et al. **J Pharmacol Exp Ther** 1990 Jun; 253(3):1026–33

Differential response of excision proficient and deficient L5178Y cells to UVC irradiation and benzamide. Szumiel I, et al. **J Photochem Photobiol B** 1989 Aug;3(4):483–96

Effects of YM–09151–2, a potent and selective dopamine D2 antagonist, on the ambulation–increasing effect of methamphetamine in mice. Kuribara H, et al. **Jpn J Pharmacol** 1990 Mar;52(3):489–92

The effect of two novel analogues of antimycin A on oxygen consumption and survival of filarial nematodes in vitro. Hayes DJ, et al. **Mol Biochem Parasitol** 1990 Jan 15; 38(2):159–68

Pharmacological characterization of 5–hydroxytryptamine4(5–HT4) receptors positively coupled to adenylate cyclase in adult guinea pig hippocampal membranes: effect of substituted benzamide derivatives. Bockaert J, et al. **Mol Pharmacol** 1990 Mar; 37(3):408–11

Novel type of ornithine–glutathione double conjugate excreted as a major metabolite into the bile of rats administered cleboprid. Ishizuka T, et al. **Mol Pharmacol** 1990 Jun;37(6):983–9

The gastrointestinal prokinetic benzamide derivatives are agonists at the non–classical 5–HT receptor (5–HT4) positively coupled to adenylate cyclase in neurons. Dumuis A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Oct; 340(4):403–10

Morphological study on striatum and cerebellum cultures exposed to kainic acid and kainic acid and tiapride treatment. Renkawek K, et al. **Neuropatol Pol** 1989; 27(2):217–27

The effect of repeated treatment with brofaromine, moclobemide and deprenyl on alpha 1–adrenergic and dopaminergic receptors in the rat brain. Klimek V, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):189–94

Effect of YM–09151–2, a putative D2 dopamine receptor antagonist, on dopamine metabolism in the striatum of rats. Shibanoki S, et al. **Pharmacol Biochem Behav** 1989 Oct; 34(2):355–60

Substituted benzamides as poly(ADP–ribose) transferase inhibitors: development of new derivatives by using computer graphics techniques. Sestili P, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:123–4

Comparison of the effects of the novel antipsychotic agent remoxipride on dopamine and noradrenaline turnover in the rat brain. Magnusson O, et al. **Pharmacol Toxicol** 1989 Oct;65(4):295–8

Influence of long–term treatment of the rat with clebopride on the morphology of the mammary gland. de Lima TC, et al. **Pharmacology** 1990;40(1):54–9

Remoxipride, a new selective D2 antagonist, and haloperidol in cebus monkeys. Gerlach J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(1):103–12

Moclobemide, an inhibitor of MAO–A, does not increase daytime plasma melatonin levels in normal humans. Scheinin M, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(1):73–82

Evaluation and comparison of the interaction between alcohol and moclobemide or clomipramine in healthy subjects. Berlin I, et al. **Psychopharmacology (Berl)** 1990; 100(1):40–5

The effect of DQ–2511, a newly synthesized anti–ulcer drug, on the gastric mucosal hemodynamics and ulceration in rats. Tanimura H, et al. **Scand J Gastroenterol Suppl** 1989; 162:190–3

[The inhibiting action of alsystin on various developmental phases of the housefly] Kostina MN. **Med Parazitol (Mosk)** 1989 Jul–Aug;(4):45–50 (Eng. Abstr.) **(Rus)**

[Recovery from potentially lethal damage of irradiated L5178Y–R and L5178Y–S cells: the effect of temperature and benzamide] Afanas'ev GG, et al. **Radiobiologiia** 1989 Nov–Dec;29(6):776–81 (Eng. Abstr.) **(Rus)**

[Gastric emptying in reflux esophagitis. Effect of metoclopramide and cinitapride] Monés J, et al. **Med Clin (Barc)** 1989 Sep 30;93(9):331–4 (Eng. Abstr.) **(Spa)**

POISONING

Fenvalerate/N,N–diethyl–m–toluamide (Deet) toxicosis in two cats. Dorman DC, et al. **J Am Vet Med Assoc** 1990 Jan 1;196(1):100–2

Diethyltoluamide (DEET) insect repellent toxicosis. Dorman DC. **Vet Clin North Am Small Anim Pract** 1990 Mar; 20(2):387–91 (19 ref.)

THERAPEUTIC USE

Cognition–enhancing effects of moclobemide, a reversible MAO inhibitor, in humans. Anand R, et al. **Adv Neurol** 1990;51:261–8

Comparison of ethamivan and doxapram in the management of postanesthetic respiratory depression. Dobkin AB, et al. **Anesth Analg** 1967 Jul–Aug;46(4):449–66

Is diazepam an antidepressant? [see comments] Tiller JW, et al. **Br J Psychiatry** 1989 Oct;155:483–9 Comment in: Br J Psychiatry 1990 Feb;156:279.

Efficacy and tolerability of moclobemide compared with imipramine in depressive disorder (DSM–III): an Austrian double–blind, multicentre study. Baumhackl U, et al. **Br J Psychiatry Suppl** 1989 Oct;(6):78–83

Effect of a reversible monoamine oxidase–A inhibitor (moclobemide) on sleep of depressed patients. Monti JM. **Br J Psychiatry Suppl** 1989 Oct;(6):61–5

A double–blind comparative trial of moclobemide v. imipramine and placebo in major depressive episodes. Versiani M, et al. **Br J Psychiatry Suppl** 1989 Oct;(6):72–7

Enhancement of cisplatin (DDP) antitumor activity by 3–aminobenzamide in rat ovarian tumors sensitive and resistant to DDP in vivo. Chen G, et al. **Cancer Chemother Pharmacol** 1990;26(1):37–41

Phase I–trial of clebopride, a new antiemetic, in chemotherapy—induced nausea and vomiting [letter] Lenz HJ, et al. **Eur J Clin Pharmacol** 1990;38(5):525

Moclobemide and maprotiline in the treatment of inpatients with major depressive disorder. Laux G, et al. **J Neural Transm Suppl** 1989;28:45–52

Review of comparative clinical trials. Moclobemide vs tricyclic antidepressants and vs placebo in depressive states. Stabl M, et al. **J Neural Transm Suppl** 1989;28:77–89 (45 ref.)

Moclobemide, imipramine, and placebo in the treatment of

major depression (DSM III). Versiani M, et al. **J Neural Transm Suppl** 1989;28:65–75

Comparison of sensorimotor and cognitive performance of acute schizophrenic inpatients treated with remoxipride or haloperidol. Classen W, et al. **Neuropsychobiology** 1989; 21(3):131–40

Atypical neuroleptics in acute schizophrenia: a double-blind comparative study of remoxipride and haloperidol. den Boer JA, et al. **Psychopharmacol Bull** 1990;26(1):99–107

Double blind comparative study of remoxipride and haloperidol in acute schizophrenic patients. Den Boer JA, et al. **Psychopharmacology (Berl)** 1990;102(1):76–84

Plasma moclobemide and metabolites: lack of correlation with clinical response and biogenic amines. Fritze J, et al. **Psychopharmacology (Berlin)** 1989;99(2):252–6

The effect of 3-aminobenzamide in the radiation response of three human cervix carcinoma xenografts. Kelland LR, et al. **Radiother Oncol** 1989 Aug;15(4):363–9

[Remoxipride, a selective antagonist of dopamine D2 receptors, in the treatment of delusional psychoses] Lewander T, et al. **Encephale** 1990 Mar-Apr;16(2):153–7 (21 ref.) (Eng. Abstr.) **(Fre)**

[Psychometric findings in treatment using the selective MAO-A inhibitors moclobemide and maprotiline] Classen W. **Psychiatr Prax** 1989 Aug;16 Suppl 1:41–3 (Eng. Abstr.) **(Ger)**

[Moclobemide in the treatment of depression—an overview] Laux G. **Psychiatr Prax** 1989 Aug;16 Suppl 1:37–40 (13 ref.) (Eng. Abstr.) **(Ger)**

[Fractionated opiate withdrawal with tiapride and naloxone, a new treatment approach] Presslich O, et al. **Psychiatr Prax** 1989 Sep;16(5):179–81 (Eng. Abstr.) **(Ger)**

[Effect of clebopride on gastric emptying studied using a physiologic meal marked with Tc 99m colloid in subjects with non-ulcer dyspepsia] Costa R, et al. **Clin Ter** 1990 Jan 31;132(2):101–4 (Eng. Abstr.) **(Ita)**

[Treatment of vomiting caused by cytostatic agents (letter)] Moreno I, et al. **Med Clin (Barc)** 1989 Dec 9;93(19):756–7 **(Spa)**

[Value of substituted benzamides in controlling acute post-cisplatin emesis (letter)] Rosell R, et al. **Med Clin (Barc)** 1989 Dec 9;93(19):756 **(Spa)**

[Hasty decisions made by the government concerning moclobemide] Håkansson J. **Lakartidningen** 1990 Jun 13; 87(24):2099 **(Swe)**

TOXICITY

Computer-based image analysis of cartilage differentiation in embryonic limb bud micromass cultures. Garrison JC, et al. **J Microsc** 1989 Dec;156 (Pt 3):353–61

Emesis and defecations induced by the 5-hydroxytryptamine (5-HT3) receptor antagonist zacopride in the ferret. King GL. **J Pharmacol Exp Ther** 1990 Jun;253(3):1034–41

BENZAMIDINES see under **AMIDINES**

BENZANTHRACENES

Structure of elsinochrome A: a perylenequinone metabolite. Meille SV, et al. **Acta Crystallogr C** 1989 Apr 15;45 (Pt 4):628–32

A charge-transfer complex of benzene with a highly twisted perylene derivative. Sadrai M, et al. **Acta Crystallogr C** 1990 Apr 15;46 (Pt 4):637–40

Shapes of benz[a]anthracenes: the crystal and molecular structure of 6-methylbenz[a]anthracene. Jones DW, et al. **Cancer Biochem Biophys** 1990 Jan;11(1):1–6

Inhibition by lipoxygenase inhibitors of 7-bromomethylbenz[a]anthracene-caused epidermal ornithine decarboxylase induction and skin tumor promotion in mice. Nakadate T, et al. **Carcinogenesis** 1989 Nov;10(11):2053–7

DNA polymerase action on bulky deoxyguanosine and deoxyadenosine adducts. Reardon DB, et al. **Carcinogenesis** 1990 Jan;11(1):165–8

Intercalative DNA binding of model compounds derived from metabolites of 7,12-dimethylbenz[a]anthracene. Zegar IS, et al. **J Biomol Struct Dyn** 1984 Dec;2(3):531–41

ADVERSE EFFECTS

3-nitroperylene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:313–9 (22 ref.)

7-nitrobenz[a]anthracene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:247–53

ANALYSIS

Derivatization of benz[a]anthracene metabolites for detection by laser excited Shpol'skii spectrometry. Weeks S, et al. **Anal Chem** 1990 Jul 15;62(14):1472–7

Electronic spectra of hypocrellin A, B and their derivatives. Diwu ZJ, et al. **Sci China [B]** 1990 Jan;33(1):18–26

The crystallographic structure of the photooxidized product of hypocrellin A and the study of the photodynamic action mechanism. Liang L, et al. **Sci China [B]** 1990 Jun; 33(6):649–55

METABOLISM

Bioalkylation of benz[a]anthracene as a biochemical probe for carcinogenic activity. Lack of bioalkylation in a series of six noncarcinogenic polynuclear aromatic hydrocarbons. Flesher JW, et al. **Drug Metab Dispos** 1990 Mar-Apr; 18(2):163–7

Reactivity and adduct formation of a polyaromatic hydrocarbon, 7-bromomethylbenz[a]anthracene, with chromatin histone proteins. Stacks PC, et al. **J Chromatogr** 1990 Jun 8;528(1):25–34

PHARMACOLOGY

Hypericin and pseudohypericin specifically inhibit protein kinase C: possible relation to their antiretroviral activity. Takahashi I, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1207–12

Acquisition of aryl hydrocarbon hydroxylase inducibility by aromatic hydrocarbons in monolayer-cultured hepatocytes from nonresponsive mouse strains. Nemoto N, et al. **Cancer Res** 1990 Jun 1;50(11):3226–30

Splicing mutations in the CHO DHFR gene preferentially induced by (+/-)-3 alpha,4 beta-dihydroxy-1 alpha,2 alpha-epoxy-1,2,3,4- tetrahydrobenzo[c]phenanthrene. Carothers AM, et al. **Proc Natl Acad Sci U S A** 1990 Jul; 87(14):5464–8

[Hypocrellin A-sensitized photodamage on erythrocyte membrane protein and phospholipid] Du JA, et al. **Shih Yen Sheng Wu Hsueh Pao** 1990 Mar;23(1):41–9 (Eng. Abstr.) **(Chi)**

[Benz(a)anthracene and 2,3,7,8-tetrachloro dibenzo(p)dioxin modulate mitogen-stimulated proliferation of lymphocytes] Lozovatskiĭ AL, et al. **Biull Eksp Biol Med** 1990 Jun; 109(6):569–71 (Eng. Abstr.) **(Rus)**

TOXICITY

Induction of anchorage-independent growth in human diploid fibroblasts by the cyclopenta-polycyclic aromatic hydrocarbon, benz[l]aceanthrylene. Nesnow S, et al. **Mutat Res** 1990 Jul;244(3):221–5

BENZAZEPINES

The ontogeny of SCH 23390-induced catalepsy in male and female rats exposed to ethanol in utero. Hannigan JH. **Alcohol** 1990 Jan-Feb;7(1):11–6

Conformational analysis and structure-activity relationships of selective dopamine D-1 receptor agonists and antagonists of the benzazepine series. Pettersson I, et al. **J Med Chem** 1990 Aug;33(8):2197–204

ADMINISTRATION & DOSAGE

Diurnal blood pressure in patients with mild-to-moderate hypertension treated with once-daily benazepril hydrochloride. Weinberger MH, et al. **Clin Pharmacol Ther** 1990 May;47(5):608–17

Crossover design for the dose determination of an angiotensin converting enzyme inhibitor in hypertension. Guyene TT, et al. **J Hypertens** 1989 Dec;7(12):1005–12

ANALYSIS

A sensitive method for assay of a novel tricyclic compound using coulometric electrochemical detection. Fisher AL, et al. **J Pharm Sci** 1989 Nov;78(11):971–4

Nigrostriatal dopamine neurons, D1 transmission in basal and ischemic states and protective effects of gangliosides. Agnati LF, et al. **Lab Invest** 1990 Sep;63(3):283–97 (64 ref.)

ANTAGONISTS & INHIBITORS

GBR 12909 reverses the SCH 23390 inhibition of rewarding effects of brain stimulation. Rompré PP, et al. **Eur J Pharmacol** 1990 Jun 21;182(1):181–4

CHEMICAL SYNTHESIS

Research on psychotropic agents. III. Antidepressant activity and neuropsychobehavioural effects of new 5H-Pyrrolo[1,2-b][1,2,5]benzotriazepine derivatives. Stefancich G, et al. **Farmaco** 1990 Jan;45(1):7–27

1,9-Alkano-bridged 2,3,4,5-tetrahydro-1H-3-benzazepines with affinity for the alpha 2-adrenoceptor and the 5-HT1A receptor. Clark RD, et al. **J Med Chem** 1990 Feb; 33(2):633–41

Specific bradycardic agents. 1. Chemistry, pharmacology, and structure-activity relationships of substituted benzazepinones, a-new class of compounds exerting antiischemic properties. Reiffen M, et al. **J Med Chem** 1990 May;33(5):1496–504

METABOLISM

Regional distribution of dopamine D1 and D2 receptors in the nucleus accumbens of the rat. Allin R, et al. **Brain Res** 1989 Nov 6;501(2):389–91

Autoradiographic studies in animal models of hemi-parkinsonism reveal dopamine D2 but not D1 receptor supersensitivity. II. Unilateral intra-carotid infusion of MPTP in the monkey (Macaca fascicularis). Graham WC, et al. **Brain Res** 1990 Apr 23;514(1):103–10

Autoradiographic studies in animal models of hemi-parkinsonism reveal dopamine D2 but not D1 receptor supersensitivity. I. 6-OHDA lesions of ascending mesencephalic dopaminergic pathways in the rat. Graham WC, et al. **Brain Res** 1990 Apr 23;514(1):93–102

Chronic imipramine reduces [3H]SCH 23390 binding and DA-sensitive adenylate cyclase in the limbic system. De Montis GM, et al. **Eur J Pharmacol** 1989 Aug 22; 167(2):299–303

Paraxanthine displaces the binding of [3H]SCH 23390 from rat striatal membranes. Ferré S, et al. **Eur J Pharmacol** 1990 Apr 25;179(3):295–9

The alpha 2-adrenoceptor antagonist SK&F 104078 has high affinity for 5-HT1A and 5-HT2 receptors. Kilpatrick AT, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):315–8

Development of a high affinity and stereoselective photoaffinity label for the D-1 dopamine receptor: synthesis and resolution of 7-[125I]iodo-8-hydroxy-3-methyl-1-(4'-azidophenyl)-2,3,4,5-tetrahydro- 1H-3-benzazepine. Neumeyer JL, et al. **J Med Chem** 1990 Feb;33(2):521–6

Absence of [3H]SCH 23390 binding sites in the rat adrenal gland. Zdilar D, et al. **J Pharm Pharmacol** 1989 Sep; 41(9):646–8

Modification of brain and spinal cord dopamine D1 receptors labeled with [3H]SCH 23390 after morphine withdrawal from tolerant and physically dependent rats. Bhargava HN, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):901–7

Ascorbic acid inhibits [3H]SCH-23390 binding to striatal dopamine D1 receptors. Wiener HL, et al. **J Recept Res** 1989;9(4-5):331–9

Dopamine D1 receptors labelled with [3H]SCH23390 in rabbit cerebral cortex and neostriatum. Equilibrium binding, kinetics and selectivity. Reader TA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Dec; 340(6):617–25

Interactions of 7-[3-(4-[2,3-dimethylphenyl]piperazinyl)-propoxy]-2 (1H)-quinolinone binding in rat striatum: effects of lesions. Zhang X, et al. **Pharm Res** 1990 Mar;7(3):280–2

PHARMACOKINETICS

Physiological disposition of CGS 16617 in rat, dog, and man. Egger H, et al. **Drug Metab Dispos** 1989 Nov-Dec; 17(6):669–72

Pharmacokinetics and pharmacodynamics of the ace inhibitor benazepril hydrochloride in the elderly. Kaiser G, et al. **Eur J Clin Pharmacol** 1990;38(4):379–85

PHARMACOLOGY

Net production of cerebrospinal fluid is decreased by SCH-23390. Boyson SJ, et al. **Ann Neurol** 1990 Jun; 27(6):631–5

Chronic administration of SCH 23390 enhances spontaneous searching and locomotor activity of rats. An open field study. Smiałowski A. **Behav Brain Res** 1989 Oct 1; 35(1):41–4

Evaluation of the interaction between D1 and D2 receptors in a drug discrimination paradigm. Williams JE, et al. **Behav Neural Biol** 1990 May;53(3):378–92

Modulation of acetylcholine release by D1, D2 dopamine receptors in rat striatum under freely moving conditions. Ajima A, et al. **Brain Res** 1990 Jun 4;518(1-2):193–8

Blockade of dopamine D1 receptors by SCH 23390 antagonizes discriminative stimulus effects of pentazocine. Ukai M, et al. **Brain Res** 1989 Sep 4;496(1-2):377–9

The effect of dopamine receptor blockade on the development of sensitization to the locomotor activating effects of amphetamine and morphine. Vezina P, et al. **Brain Res** 1989 Oct 9;499(1):108–20

SCH 23390-induced hypophagia is blocked by the selective CCK-A receptor antagonist devazepide, but not by the CCK-B/gastrin receptor antagonist L-365,260. Cooper SJ, et al. **Brain Res Bull** 1990 Apr;24(4):631–3

Effects of benazeprilat on left ventricular systolic and diastolic function and neurohumoral status in patients with ischemic heart disease. Rousseau MF, et al. **Circulation** 1990 Feb;81(2 Suppl):III123–9

Topography of dopamine D-1 and D-2 receptor-mediated rotation after intrastriatal injections of dopamine-related drugs in normosensitive rats. Konitsiotis S, et al. **Eur J Pharmacol** 1990 Apr 10;179(1-2):201–5

Effects of chronic SCH 23390 treatment on dopamine autoreceptor function in rat brain. Lappalainen J, et al. **Eur J Pharmacol** 1990 Apr 25;179(3):315–21

Effects of SCH 23390 on thyrotropin-releasing hormone-induced behaviour in rabbits. Popoli P, et al. **Eur J Pharmacol** 1989 Dec 7;173(2-3):211–3

Effects induced by chronic treatment with selective D1 or D2 antagonists on open-field behavior and colonic temperature. Maldonado R, et al. **Fundam Clin Pharmacol** 1990;4(3):341–56

Cardiovascular effects of SK&F 104078, a novel alpha-adrenoceptor antagonist, in normotensive and hypertensive rats. Hieble JP, et al. **J Cardiovasc Pharmacol** 1990 May;15(5):845–52

Pharmacodynamic dependent disposition of the angiotensin converting enzyme inhibitor, libenzapril. Kochak GM, et al. **J Clin Pharmacol** 1990 Feb;30(2):138–43

Effect of salt balance on the renal and hemodynamic actions of benazepril in normal men. Noormohamed FH, et al. **J Clin Pharmacol** 1989 Oct;29(10):928–37

Chronic treatment of rats with SCH-23390 or raclopride does not affect the concentrations of DARPP-32 or its mRNA in dopamine-innervated brain regions. Grebb JA, et al. **J Neurochem** 1990 Jul;55(1):204–7

Resistance to extrapyramidal effects of opiates in rats chronically treated with SCH 23390. De Montis GM, et

al. J Neurosci Res 1989 Oct;24(2):286–92
Anti-ischemic and vasorelaxant effects of the new benzazepine calcium channel blocker SQ 31,765. Grover GJ, et al. J Pharmacol Exp Ther 1989 Dec;251(3):1020–5
Chronic treatment with SCH 23390 and haloperidol: effects on dopaminergic and serotonergic mechanisms in rat brain. Lappalainen J, et al. J Pharmacol Exp Ther 1990 Feb; 252(2):845–52
Characterization of D1 dopamine receptors in the bovine pineal gland with [3H]SCH 23390. Simonneaux V, et al. J Pharmacol Exp Ther 1990 Apr;253(1):214–20
On the mechanism of the "specific bradycardic action" of the verapamil derivative UL-FS 49. Doerr T, et al. Naunyn Schmiedebergs Arch Pharmacol 1990 Apr; 341(4):331–40
Are antagonists of dopamine D1 receptors drugs that attenuate both positive and negative symptoms of schizophrenia? A pilot study in Java monkeys. Ellenbroek BA, et al. Neuropsychopharmacology 1989 Sep;2(3):191–9
Sleep during acute dopamine D1 agonist SKF 38393 or D1 antagonist SCH 23390 administration in rats. Monti JM, et al. Neuropsychopharmacology 1990 Jun;3(3):153–62
Effects of D1 and D2 dopamine antagonists on heroin-trained drug discrimination. Corrigall WA, et al. NIDA Res Monogr 1989;95:499
Studies on D1 and D2 dopamine receptor involvement in conditioned taste aversions. Asin KE, et al. Pharmacol Biochem Behav 1989 Apr;32(4):1033–41
Differential behavioural interactions between the dopamine D-1 antagonist SCH 23390 and the dopamine D-2 antagonists metoclopramide and sulpiride in nonhabituated mice. Chandler CJ, et al. Pharmacol Biochem Behav 1990 Feb;35(2):285–9
Selective D1 and D2 dopamine antagonists decrease response rates of food-maintained behavior and reduce the discriminative stimulus produced by heroin. Corrigall WA, et al. Pharmacol Biochem Behav 1990 Feb;35(2):351–5
Opposite effects of SK&F 38393, a dopamine D-1 agonist, and SCH 23390, a dopamine D-1 antagonist, in tests of salt preference/aversion in the rehydrating rat. Gilbert DB, et al. Pharmacol Biochem Behav 1989 Apr;32(4):945–8
The effects of selective dopamine D1 or D2 receptor antagonists on the establishment of agonist-induced place conditioning in rats. Hoffman DC, et al. Pharmacol Biochem Behav 1989 Jun;33(2):273–9
Failure of SCH 23390 to function as a discriminative stimulus in rats. Kamien JB, et al. Pharmacol Biochem Behav 1989 Oct;34(2):337–40
Effects of dopamine D1 and D2 receptor antagonists on oral activity in rats. Levin ED, et al. Pharmacol Biochem Behav 1989 Sep;34(1):43–8
Differential attenuation of water intake and water-rewarded operant responding by repeated administration of haloperidol and SCH 23390 in the rat. Ljungberg T. Pharmacol Biochem Behav 1990 Jan;35(1):111–5
Effects of the dopamine D-1 antagonist SCH 23390 on water intake, water-rewarded operant responding and apomorphine-induced decrease of water intake in rats. Ljungberg T. Pharmacol Biochem Behav 1989 Jul; 33(3):709–12
New putative selective agonists at the D-1 dopamine receptor: behavioural and neurochemical comparison of CY 208–243 with SK&F 101384 and SK&F 103243. Murray AM, et al. Pharmacol Biochem Behav 1990 Jan;35(1):105–10
Repeated treatment with (-)-sulpiride plus a low dose of SCH 23390 displays wider neuroleptic activity without inducing dopaminergic supersensitivity. Dall'Olio R, et al. Psychopharmacology (Berl) 1990;100(4):560–2
Behavioral effects of the inhibitors of phenylethanolamine-N-methyltransferase, LY 78335 and LY 134046, and their interactions with ethanol. Durcan MJ, et al. Psychopharmacology (Berl) 1990;101(2):196–202
A matching law analysis of the effects of dopamine receptor antagonists. Willner P, et al. Psychopharmacology (Berl) 1990;101(4):560–7
SCH 23390 blocks drug-conditioned place-preference and place-aversion: anhedonia (lack of reward) or apathy (lack of motivation) after dopamine-receptor blockade? Acquas E, et al. Psychopharmacology (Berlin) 1989;99(2):151–5
[Interactions of GABAergic and catecholaminergic neurotransmissions. Effects of dopaminergic and noradrenergic agonists and antagonists on GABA turnover] Bernasconi R, et al. Encephale 1989 Jul-Aug;15(4):377–85 (Eng. Abstr.) (Fre)

THERAPEUTIC USE

Mechanisms of improved ischemic regional dysfunction by bradycardia. Studies on UL-FS 49 in swine. Indolfi C, et al. Circulation 1989 Oct;80(4):983–93
Renal functional reserve in patients with essential hypertension: effect of inhibition of the renin–angiotensin system. Valvo E, et al. Clin Sci 1990 Jun;78(6):585–90
Benazepril at incremental doses in essential hypertension. Fogari R, et al. Int J Clin Pharmacol Ther Toxicol 1990 Feb;28(2):63–6
Anti-ischemic activity of the novel benzazepine calcium antagonist SQ 31,486. Grover GJ, et al. J Cardiovasc Pharmacol 1990 Aug;16(2):219–27
Blunting of atrial natriuretic factor response to volume expansion by benazepril in hypertensive patients. Dessi-Fulgheri P, et al. J Hypertens Suppl 1989 Dec; 7(6):S300–1
Effects of ACE inhibition in normotensive patients with chronic glomerular disease and normal renal function. Bedogna V, et al. Kidney Int 1990 Jul;38(1):101–7
D1 antagonist in clinical trial [letter; comment] Chipkin RE. Trends Pharmacol Sci 1990 May;11(5):185 Comment on: Trends Pharmacol Sci 1990 Feb;11(2):49–51.

BENZBROMARONE see under BENZOFURANS

BENZENE

A charge-transfer complex of benzene with a highly twisted perylene derivative. Sadrai M, et al. Acta Crystallogr C 1990 Apr 15;46 (Pt 4):637–40
Symposium on Benzene Metabolism, Toxicity and Carcinogenesis. March 14–16, 1988, Research Triangle Park, North Carolina. Proceedings. Environ Health Perspect 1989 Jul;82:1–344

ADMINISTRATION & DOSAGE

Increased risk of urothelial cancer in Stockholm during 1985–87 after exposure to benzene and exhausts. Steineck G, et al. Int J Cancer 1990 Jun 15;45(6):1012–7

ADVERSE EFFECTS

Risk assessment of leukaemia and occupational exposure to benzene. Swaen GM, et al. Br J Ind Med 1989 Dec; 46(12):826–30
Analysis of chromosomal aberrations in workers exposed to low level benzene. Yardley-Jones A, et al. Br J Ind Med 1990 Jan;47(1):48–51
Hematotoxicity and carcinogenicity of benzene. Aksoy M. Environ Health Perspect 1989 Jul;82:193–7 (35 ref.)
Review and update of leukemia risk potentially associated with occupational exposure to benzene. Brett SM, et al. Environ Health Perspect 1989 Jul;82:267–81 (58 ref.)
Uncertainty in the estimation of benzene risks: application of an uncertainty taxonomy to risk assessments based on an epidemiology study of rubber hydrochloride workers. Byrd DM, et al. Environ Health Perspect 1989 Jul;82:283–7
Use of longitudinal analysis of peripheral blood counts to validate historical reconstructions of benzene exposure. Kipen HM, et al. Environ Health Perspect 1989 Jul; 82:199–206
Consistencies and inconsistencies underlying the quantitative assessment of leukemia risk from benzene exposure. Lamm SH, et al. Environ Health Perspect 1989 Jul;82:289–97 (22 ref.)
Quantitative assessment of lives lost due to delay in the regulation of occupational exposure to benzene. Nicholson WJ, et al. Environ Health Perspect 1989 Jul;82:185–8
Benzene and leukemia: an epidemiologic risk assessment. Rinsky RA. Environ Health Perspect 1989 Jul;82:189–91
A retrospective cohort study of leukemia and other cancers in benzene workers. Yin SN, et al. Environ Health Perspect 1989 Jul;82:207–13
Sister chromatid exchanges in peripheral lymphocytes of workers exposed to benzene, trichloroethylene, or tetrachloroethylene, with reference to smoking habits. Seiji K, et al. Int Arch Occup Environ Health 1990;62(2):171–6
Benzene in petrol: a continuing hazard [letter] Infante PF, et al. Lancet 1990 Sep 29;336(8718):814–5
Histochemical evaluation of lysosomes in lymphocytes of workers having contact with organic solvents containing benzene and its homologues. Moszczyński P, et al. Med Interne 1989 Apr-Jun;27(2):137–41
Aplastic anemia, leukemia and other cancer mortality in a cohort of shoe workers exposed to benzene. Paci E, et al. Scand J Work Environ Health 1989 Oct;15(5):313–8
[Current state of knowledge regarding prenatal effects of benzene] Bittersohl G, et al. Z Gesamte Hyg 1990 Jun; 36(6):305–7 (0 ref.) (Eng. Abstr.) (Ger)
[A follow-up study of 304 cases of suspected pathology caused by benzene seen in 1950–71] Vai T, et al. Med Lav 1989 Sep-Oct;80(5):397–404 (Eng. Abstr.) (Ita)
[Changes in the blood composition in workers exposed to solvents containing benzene] Kraljić J, et al. Arh Hig Rada Toksikol 1989 Dec;40(4):367–71 (Eng. Abstr.) (Scr)

ANALYSIS

Benzene in the blood and breath of normal people and occupationally exposed workers. Brugnone F, et al. Am J Ind Med 1989;16(4):385–99
Benzene, benzo(a)pyrene, and lead in smoke from tobacco products other than cigarettes. Appel BR, et al. Am J Public Health 1990 May;80(5):560–4
Major sources of benzene exposure. Wallace LA. Environ Health Perspect 1989 Jul;82:165–9
Determination of benzene, toluene and 1,3-butadiene in cigarette smoke by GC-MDS. Brunnemann KD, et al. Exp Pathol 1989;37(1-4):108–13
Headspace analysis of benzene in food contact materials and its migration into foods from plastics cookware. Jickells SM, et al. Food Addit Contam 1990 Mar-Apr;7(2):197–205
Isotope dilution gas chromatography-mass spectrometry in the determination of benzene, toluene, styrene and acrylonitrile in mainstream cigarette smoke. Byrd GD, et al. J Chromatogr 1990 Mar 23;503(2):359–68
Simultaneous determination of benzene and toluene in the blood using head-space gas chromatography. Pekari K, et al. J Chromatogr 1989 Jul 21;491(2):309–20
Cigarettes exceed Perrier's benzene level, but are not regulated [news] Broder K, et al. J Natl Cancer Inst 1990 May 2;82(9):735–6
Benzene exposure in a Japanese petroleum refinery. Kawai T, et al. Toxicol Lett 1990 Jul;52(2):135–9
[Exposure of children to benzene and other motor vehicle emissions] Jermann E, et al. Zentralbl Hyg Umweltmed 1989 Oct;189(1):50–61 (Eng. Abstr.) (Ger)
[The process of developing and improving the analytical method of benzene in organic solvents for household use: interlaboratory collaborative study] Ikarashi Y, et al. Eisei Shikenjo Hokoku 1989;(107):124–7 (Eng. Abstr.) (Jpn)

ANTAGONISTS & INHIBITORS

Antimutagenic effects of dimethyl sulfoxide on metabolism and genotoxicity of benzene in vivo. Au WW, et al. Basic Life Sci 1990;52:389–93

METABOLISM

Substrate interactions during aerobic biodegradation of benzene. Arvin E, et al. Appl Environ Microbiol 1989 Dec; 55(12):3221–5
Monoclonal antibody-directed characterization of benzene, ethoxyresorufin and pentoxyresorufin metabolism in rat liver microsomes. Nakajima T, et al. Biochem Pharmacol 1990 Sep 15;40(6):1255–61
Comparative metabolism of benzene and trans,trans-muconaldehyde to trans,trans-muconic acid in DBA/2N and C57BL/6 mice. Witz G, et al. Biochem Pharmacol 1990 Sep 15;40(6):1275–80
Microbial degradation of benzene and toluene in groundwater. Karlson U, et al. Bull Environ Contam Toxicol 1989 Oct;43(4):505–10
Metabolism of benzene and phenol in macrophages in vitro and the inhibition of RNA synthesis by benzene metabolites. Post G, et al. Cell Biol Toxicol 1986 Jun; 2(2):231–46
Comparative studies of the in vitro metabolism and covalent binding of 14C-benzene by liver slices and microsomal fraction of mouse, rat, and human. Brodfuehrer JI, et al. Drug Metab Dispos 1990 Jan-Feb;18(1):20–7
The effect of dose, dose rate, route of administration, and species on tissue and blood levels of benzene metabolites. Henderson RF, et al. Environ Health Perspect 1989 Jul; 82:9–17
Mechanisms of free radical chemistry and biochemistry of benzene. Karam LR, et al. Environ Health Perspect 1989 Jul;82:37–41
Pharmacokinetics and metabolism of benzene in Zymbal gland and other key target tissues after oral administration in rats. Low LK, et al. Environ Health Perspect 1989 Jul; 82:215–22
Benzene adducts with rat nucleic acids and proteins: dose-response relationship after treatment in vivo. Mazzullo M, et al. Environ Health Perspect 1989 Jul; 82:259–66
Differences in the pathways for metabolism of benzene in rats and mice simulated by a physiological model. Medinsky MA, et al. Environ Health Perspect 1989 Jul; 82:43–9
32P analysis of DNA adducts in tissues of benzene-treated rats. Reddy MV, et al. Environ Health Perspect 1989 Jul; 82:253–7
A method for in vitro culture of rat Zymbal gland: use in mechanistic studies of benzene carcinogenesis in combination with 32P-postlabeling. Reddy MV, et al. Environ Health Perspect 1989 Jul;82:239–47
A toxikinetic model for simulation of benzene metabolism. Medinsky MA, et al. Exp Pathol 1989;37(1-4):150–4
Effect of repeated benzene inhalation exposures on subsequent metabolism of benzene. Sabourin PJ, et al. Exp Pathol 1989;37(1-4):155–7
Activation and deactivation of quinones catalyzed by DT-diaphorase. Evidence for bioreductive activation of diaziquone (AZQ) in human tumor cells and detoxification of benzene metabolites in bone marrow stroma. Ross D, et al. Free Radic Res Commun 1990;8(4-6):373–81
Role of metabolism in benzene-induced myelotoxicity and leukemogenesis. Smith MT, et al. Prog Clin Biol Res 1990; 340B:125–36 (49 ref.)
Effect of repeated benzene inhalation exposures on benzene metabolism, binding to hemoglobin, and induction of micronuclei. Sabourin PJ, et al. Toxicol Appl Pharmacol 1990 May;103(3):452–62
Protein binding of benzene under ambient exposure conditions. Travis CC, et al. Toxicol Ind Health 1989 Dec; 5(6):1017–24

PHARMACOKINETICS

Altered pharmacokinetics of soil-adsorbed benzene administered orally in the rat. Travis C, et al. Bull Environ Contam Toxicol 1990 Aug;45(2):197–207
Pharmacokinetics of benzene. Travis CC, et al. Toxicol Appl Pharmacol 1990 Mar 1;102(3):400–20
In vivo metabolic interactions of benzene and toluene. Purcell KJ, et al. Toxicol Lett 1990 Jul;52(2):141–52

PHARMACOLOGY

Ferrokinetics and erythropoiesis in mice after long-term inhalation of benzene. Vácha J, et al. **Blut** 1990 Jan; 60(1):41-7

Interactive inhibition of erythroid 59Fe utilization by benzene metabolites in female mice. Guy RL, et al. **Chem Biol Interact** 1990;74(1-2):55-62

Benzene-mediated protein kinase C activation. Da Silva C, et al. **Environ Health Perspect** 1989 Jul;82:91-5 (19 ref.)

[Current status of the knowledge about benzene effect—metabolism] Bittersohl G. **Z Gesamte Hyg** 1990 Mar;36(3):135-6 (15 ref.) (Eng. Abstr.) **(Ger)**

[The effect of benzene on the activity of the hepatic mono-oxygenase system of female rats as a function of age] Plewka D, et al. **Med Pr** 1990;41(1):10-7 (Eng. Abstr.) **(Pol)**

POISONING

Analysis of OSHA's short-term-exposure limit for benzene. Paxman D, et al. **Regul Toxicol Pharmacol** 1990 Jun; 11(3):275-87 (41 ref.)

[The experimental research of acupuncture and moxibustion in preventing mice benzene poisoning] Yin ZF. **Chen Tzu Yen Chiu** 1989;14(3):383-8 (Eng. Abstr.) **(Chi)**

[Current views on the pathological changes in the nervous system of persons chronically exposed to organic solvents] Polakowska B. **Wiad Lek** 1989 Aug 15-Sep 15; 42(16-18):970-4 (41 ref.) (Eng. Abstr.) **(Pol)**

STANDARDS

Law and regulation of benzene. Feitshans IL. **Environ Health Perspect** 1989 Jul;82:299-307

TOXICITY

Accumulation of low molecular weight (bleomycin detectable) iron in bone marrow cells of rats after benzene exposure. Pandya KP, et al. **Arch Toxicol** 1990;64(4):339-42

Generation of hydroxyl radicals during benzene toxicity. Khan S, et al. **Biochem Pharmacol** 1990 Apr 15;39(8):1393-5

Physiological responses of juvenile white mullet, Mugil curema, exposed to benzene. Correa M, et al. **Bull Environ Contam Toxicol** 1990 Mar;44(3):428-34

Acute lymphoblastic leukemia with t(4;11) in a patient previously exposed to a carcinogen. Solé F, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):133-6

Genetic effects of benzene and radiation in ICR and X/Gf mice. Harper BL, et al. **Cancer Lett** 1989 Nov 15; 48(1):59-65

Characterization of micronuclei induced in human lymphocytes by benzene metabolites. Yager JW, et al. **Cancer Res** 1990 Jan 15;50(2):393-9

Benzene risk assessments: review and update. Bailer AJ, et al. **Cell Biol Toxicol** 1989 Nov;5(3):287-95 (16 ref.)

The exposure of the general population to benzene. Wallace LA. **Cell Biol Toxicol** 1989 Nov;5(3):297-314

Metabolite-based internal doses used in a risk assessment of benzene. Bailer AJ, et al. **Environ Health Perspect** 1989 Jul;82:177-84

Hematotoxicity and carcinogenicity of inhaled benzene. Cronkite EP, et al. **Environ Health Perspect** 1989 Jul; 82:97-108

Multiple activation pathways of benzene leading to products with varying genotoxic characteristics. Glatt H, et al. **Environ Health Perspect** 1989 Jul;82:81-9 (33 ref.)

Multiple-site carcinogenicity of benzene in Fischer 344 rats and B6C3F1 mice. Huff JE, et al. **Environ Health Perspect** 1989 Jul;82:125-63 (219 ref.)

Prevention of benzene-induced myelotoxicity by nonsteroidal anti-inflammatory drugs. Kalf GF, et al. **Environ Health Perspect** 1989 Jul;82:57-64

Activation of bone marrow phagocytes following benzene treatment of mice. Laskin DL, et al. **Environ Health Perspect** 1989 Jul;82:75-9

Benzene, an experimental multipotential carcinogen: results of the long-term bioassays performed at the Bologna Institute of Oncology. Maltoni C, et al. **Environ Health Perspect** 1989 Jul;82:109-24

Results of animal studies suggest a nonlinear dose-response relationship for benzene effects. Parodi S, et al. **Environ Health Perspect** 1989 Jul;82:171-6 (33 ref.)

Peroxidase-dependent metabolism of benzene's phenolic metabolites and its potential role in benzene toxicity and carcinogenicity. Smith MT, et al. **Environ Health Perspect** 1989 Jul;82:23-9 (40 ref.)

Studies on the mechanism of benzene toxicity. Snyder R, et al. **Environ Health Perspect** 1989 Jul;82:31-5

Effect of exposure route, regimen, and duration on benzene-induced genotoxic and cytotoxic bone marrow damage in mice. Tice RR, et al. **Environ Health Perspect** 1989 Jul;82:65-74

Studies on the induction of gene mutations in bacterial and mammalian cells by the ring-opened benzene metabolites trans,trans-muconaldehyde and trans,trans-muconic acid. Glatt H, et al. **Mutagenesis** 1990 May;5(3):263-6

Localization of breakpoints in the karyotype of workers professionally exposed to benzene. Sąsiadek M, et al. **Mutat Res** 1989 Oct;224(2):235-40

Toluene and benzene inhalation influences on ventricular arrhythmias in the rat. Magos GA, et al. **Neurotoxicol Teratol** 1990 Mar-Apr;12(2):119-24

Effect of benzene and its metabolites on natural killer activity of mouse spleen cells in vitro. Fan XH, et al. **Sangyo Igaku** 1989 Sep;31(5):330-4

Cytogenetic assays in genotoxic studies: somatic cell effects of benzene and germinal cell effects of dibromochloropropane. Au WW, et al. **Teratogenesis Carcinog Mutagen** 1990;10(2):125-34 (32 ref.)

Effects of exposure to benzene in vivo on the murine mononuclear phagocyte system. Klan MJ, et al. **Toxicol Appl Pharmacol** 1990 Apr;103(2):198-205

The influence of ethanol on the stem cell toxicity of benzene in mice. Seidel HJ, et al. **Toxicol Appl Pharmacol** 1990 Aug; 105(1):13-8

Hematologic effects of benzene: a thirty-five year longitudinal study of rubber workers [letter; comment] Hornung RW, et al. **Toxicol Ind Health** 1989 Dec; 5(6):1153-8 Comment on: Toxicol Ind Health 1988 Dec;4(4):411-30.

Phenol-induced stimulation of hydroquinone bioactivation in mouse bone marrow in vivo: possible implications in benzene myelotoxicity. Subrahmanyam VV, et al. **Toxicology** 1990 May 14;62(1):107-16

[In vitro transformation of Syrian hamster embryo cells by four chemicals] Zhang ZZ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Mar;20(1):96-8 (Eng. Abstr.) **(Chi)**

[Current status of knowledge of the effect of benzene. Impairment of blood and hemopoiesis] Bittersohl G. **Z Gesamte Hyg** 1990 Mar;36(3):136-8 (18 ref.) (Eng. Abstr.) **(Ger)**

[The micronucleus test: characteristics of the micronuclei count and the method of statistical data processing] Zhurkov VS, et al. **Gig Sanit** 1990 Mar;(3):73-4 **(Rus)**

BENZENE DERIVATIVES

Aqueous solubilities and transformations of tetrahalogenated benzenes and effects of aquatic fulvic acids. Kim IY, et al. **Bull Environ Contam Toxicol** 1990 Jun;44(6):813-8

ADVERSE EFFECTS

Histochemical evaluation of lysosomes in lymphocytes of workers having contact with organic solvents containing benzene and its homologues. Moszczyński P, et al. **Med Interne** 1989 Apr-Jun;27(2):137-41

ANALYSIS

Spectrophotometric determination of some benzene sulfonamides with 7,7,8,8-tetracyanoquinodimethane. Mohamed AM. **J Assoc Off Anal Chem** 1989 Nov-Dec; 72(6):885-9

BLOOD

Levels of benzene and other volatile aromatic compounds in the blood of non-smokers and smokers. Hajimiragha H, et al. **Int Arch Occup Environ Health** 1989;61(8):513-8

CHEMICAL SYNTHESIS

A facile synthesis of 1,5-diphenyl-3-(substituted oxy)-1H-1,2,4-triazoles. Czollner L, et al. **Arch Pharm (Weinheim)** 1990 Apr;323(4):221-3

METABOLISM

Are free radicals and not quinones the haptenic species derived from urushiols and other contact allergenic mono- and dihydric alkylbenzenes? The significance of NADH, glutathione, and redox cycling in the skin. Schmidt RJ, et al. **Arch Dermatol Res** 1990;282(1):56-64

Comparison of lignin peroxidase, horseradish peroxidase and laccase in the oxidation of methoxybenzenes. Kersten PJ, et al. **Biochem J** 1990 Jun 1;268(2):475-80

Cumene hydroperoxide-dependent oxidation of NNN'N'-tetramethyl-p-phenylenediamine and 7-ethoxycoumarin by cytochrome P-450. Comparison between the haemoproteins from liver and olfactory tissue. Reed CJ, et al. **Biochem J** 1989 Aug 1;261(3):793-800

Transport of benzenoid amino acids by system T and four broad scope systems in preimplantation mouse conceptuses. Van Winkle LJ, et al. **Biochim Biophys Acta** 1990 Sep 7; 1027(3):268-77

Metabolites of three structural isomers of butylbenzene in the bile of rainbow trout. Hellou J, et al. **Bull Environ Contam Toxicol** 1990 Mar;44(3):487-93

PHARMACOKINETICS

In vivo percutaneous absorption studies of volatile organic solvents in hairless mice. II. Toluene, ethylbenzene and aniline. Susten AS, et al. **J Appl Toxicol** 1990 Jun; 10(3):217-25

PHARMACOLOGY

Enhancement of hydroperoxide-dependent lipid peroxidation in rat liver microsomes by ascorbic acid. Laudicina DC, et al. **Arch Biochem Biophys** 1990 Apr;278(1):73-80

Selective induction of cytochrome P450 isozymes in rat liver by 4-n-alkyl-methylenedioxybenzenes. Marcus CB, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):8-16

Selective expression of cytochrome P450 isozymes by 4-n-alkyl-methylenedioxybenzenes in rat lung cells. Marcus CB, et al. **Arch Biochem Biophys** 1990 Feb 15; 277(1):17-25

Effect of cumene hydroperoxide or hypoxia-reoxygenation on glutathione status in guinea-pig heart. Baccaro C, et al. **Biochem Pharmacol** 1990 May 15;39(10):1617-20

Cumene hydroperoxide, an agent inducing lipid peroxidation, and 4-hydroxy-2,3-nonenal, a peroxidation product, cause coronary vasodilatation in perfused rat hearts by a cyclic nucleotide independent mechanism. van der Kraaij AM, et al. **Cardiovasc Res** 1990 Feb;24(2):144-50

POISONING

[Study of hyperchromatism caused by benzene derivatives] Cabrera HN, et al. **Med Cutan Ibero Lat Am** 1989; 17(4):261-4 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Tumorigenesis and carcinogenesis studies of a number of insulation oils and fluids on hairless and SENCAR mice with special reference to skin tumours and malignant lymphomas. Iversen OH. **APMIS Suppl** 1990;13:1-60

Studies of the carcinogenesis and tumorigenesis of skin applications of dodecylbenzene on hairless mice [see comments] Iversen OH. **Br J Ind Med** 1989 Sep; 46(9):608-16 Comment in: Br J Ind Med 1990 May;47(5):356-8.

TOXICITY

Menadione and cumene hydroperoxide induced cytotoxicity in biliary epithelial cells isolated from rat liver. Parola M, et al. **Biochem Pharmacol** 1990 Jun 1;39(11):1727-34

Studies of the carcinogenesis and tumorigenesis of skin applications of dodecylbenzene on hairless mice [letter; comment] Assogne CB. **Br J Ind Med** 1990 May; 47(5):356-8 Comment on: Br J Ind Med 1989 Sep;46(9):608-16.

Lung tumorigenicity of benzene oxide, benzene dihydrodiols and benzene diolepoxides in the BLU:Ha newborn mouse assay. Busby WF Jr, et al. **Carcinogenesis** 1990 Sep; 11(9):1473-8

Subchronic inhalation toxicity of ethylbenzene in mice, rats, and rabbits. Cragg ST, et al. **Fundam Appl Toxicol** 1989 Oct;13(3):399-408

Diethylbenzene-induced sensorimotor neuropathy in rats. Gagnaire F, et al. **J Appl Toxicol** 1990 Apr;10(2):105-12

[Effect of small doses of toxic substances and noise on the reproductive function of young animals] Demchenko VG. **Gig Sanit** 1989 Oct;(10):21-4 (Eng. Abstr.) **(Rus)**

BENZENE HEXACHLORIDE

Organic pesticides modify lipid-lipid and lipid-protein domains in model membranes. A laser Raman study. Verma SP, et al. **Biochim Biophys Acta** 1990 Aug 10;1027(1):59-64

ADVERSE EFFECTS

Lindane [letter] Solomon LM, et al. **Arch Dermatol** 1990 Feb; 126(2):248

Worker exposure and protective clothing performance during manual seed treatment with lindane. Fenske RA, et al. **Arch Environ Contam Toxicol** 1990 Mar-Apr;19(2):190-6

Lindane and hematologic reactions. West I. **Arch Environ Health** 1967 Jul;15(1):97-101

Kinetics and thresholds of several indices of lindane-induced toxicity. Woolley DE, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):787-92

ANALYSIS

Studies on hexachlorocyclohexane and DDT contents in human cerumen and their relationships to cancer mortality. Wang XQ, et al. **Biomed Environ Sci** 1988 Aug;1(2):138-51

Organochlorine compounds in human adipose tissue from north Texas. Adeshina F, et al. **J Toxicol Environ Health** 1990;29(2):147-56

Contamination of bovine (buffalo, Bubalus bubalis (L.)) milk from indoor use of DDT and HCH in malaria control programmes. Battu RS, et al. **Sci Total Environ** 1989 Oct 15;86(3):281-7

[Residues of lindane and DDT in drugs from wild medicinal plants in a cultivated forest. 2.] Benecke R, et al. **Pharmazie** 1989 Aug;44(8):562-4 (Eng. Abstr.) **(Ger)**

METABOLISM

Comparison of lindane, bicyclophosphate and picrotoxin binding to the putative chloride channel sites in rat brain and Torpedo electric organ. Thompson RG, et al. **Neurotoxicol Teratol** 1990 Jan-Feb;12(1):57-63

PHARMACOKINETICS

Evaluation of the rat tail model for estimating dermal absorption of lindane. Moody RP, et al. **J Toxicol Environ Health** 1989;28(3):317-26

Dermal absorption of the insecticide lindane (1 delta, 2 delta, 3 beta, 4 delta, 5 delta, 6 beta-hexachlorocyclohexane) in rats and rhesus monkeys: effect of anatomical site. Moody RP, et al. **J Toxicol Environ Health** 1989;28(2):161-9

[Therapy-induced lindane concentration in breast milk] Senger E, et al. **Derm Beruf Umwelt** 1989 Sep-Oct; 37(5):167-70 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Open field activity in the marine fish Serranus scriba influenced by lindane. Kovačević A, et al. **Act Nerv Super (Praha)** 1990 Mar;32(1):64–5

Effects of lindane on membrane fluidity: intramolecular excimerization of a pyrene derivative and polarization of diphenylhexatriene. Antunes-Madeira MC, et al. **Biochim Biophys Acta** 1990 Feb 16;1022(1):110–4

Similarities between the effects of lindane (gamma-HCH) and picrotoxin on ligand-gated chloride channels in crayfish muscle membrane. Zufall F, et al. **Brain Res** 1989 Dec 4;503(2):342–5

Lindane mediated induction of cytochrome P-450 mRNA in rat liver: studies with a nonradioactive cDNA probe. Dwivedi PP, et al. **Indian J Exp Biol** 1989 Aug; 27(8):729–31

The organochlorine insecticide 1,2,3,4,5,6-hexachlorocyclohexane (lindane) but not 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane (DDT) augments the nocturnal increase in pineal N-acetyltransferase activity and pineal and serum melatonin levels. Attia AM, et al. **Neurochem Res** 1990 Jul;15(7):673–80

Microcomputer adaptation of the wheel-shaped activity monitor: effects of lindane. Llorens J, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):1003–6

Effects of hexachlorocyclohexane (HCH) on the contractile response induced by norepinephrine in the rat isolated vas deferens. Gandhi DN, et al. **Pharmacol Toxicol** 1989 Nov; 65(5):376–80

Effects of midazolam, DMCM and lindane on potentiated startle in the rat. Hijzen TH, et al. **Psychopharmacology (Berl)** 1989;99(3):362–5

Effects of the beta-isomer of hexachlorocyclohexane on estrogen-sensitive human mammary tumor cells. Coosen R, et al. **Toxicol Appl Pharmacol** 1989 Nov;101(2):310–8

Effect of lindane on nitroreductase and dechlorinase enzyme activity in the gastrointestinal tract. Chadwick RW, et al. **Toxicol Lett** 1990 Feb;50(2-3):299–308

POISONING

Lest we become smug. Kassirer JP, et al. **Hosp Pract [Off]** 1990 Jul 15;25(7):33–5, 39, 47

Aplastic anaemia associated with organochlorine pesticide: case reports and review of evidence. Rugman FP, et al. **J Clin Pathol** 1990 Feb;43(2):98–101

[Self-poisoning by ingestion of Lindane. Apropos of a case] Vercel M, et al. **Cah Anesthesiol** 1989 Nov;37(7):543–4 (Fre)

THERAPEUTIC USE

Comparative study of 5% permethrin cream and 1% lindane lotion for the treatment of scabies [see comments] Schultz MW, et al. **Arch Dermatol** 1990 Feb;126(2):167–70 Comment in: Arch Dermatol 1990 Jul;126(7):966–7.

The hatching of nits as a predictor of treatment failure with lindane and pyrethrin shampoos. Mathias RG, et al. **Can J Public Health** 1990 May-Jun;81(3):237–9

[Cordylobia anthropophaga furuncular myiasis. Efficacy of a lindane-amyleine-chlorhydrate combination (letter)] Marty P, et al. **Presse Med** 1990 Jun 23;19(25):1196 (Fre)

TOXICITY

In vivo modification of lipid metabolism in response to phosphamidon, methylparathion and lindane exposure in the penaeid prawn, Metapenaeus monoceros. Reddy MS, et al. **Bull Environ Contam Toxicol** 1989 Oct;43(4):603–10

Lindane-induced liver oxidative stress: respiratory alterations and the effect of desferrioxamine in the isolated perfused rat liver. Videla LA, et al. **Cell Biochem Funct** 1989 Jul; 7(3):179–83

Hepatic steatosis in zebra fish (Brachydanio rerio) induced by long-term exposure to gamma-hexachlorocyclohexane. Braunbeck T, et al. **Ecotoxicol Environ Safety** 1990 Jun; 19(3):355–74

Genotoxic effect of benzene hexachloride in cultured human lymphocytes. Rupa DS, et al. **Hum Genet** 1989 Oct; 83(3):271–3

Dermal toxicity of hexachlorocyclohexane (HCH) in rabbit. Dikshith TS, et al. **Indian J Exp Biol** 1989 Mar;27(3):252–7

Dietary hexachlorocyclohexane induced changes in blood and liver lipids in albino mice. Ravinder P, et al. **Indian J Exp Biol** 1990 Feb;28(2):155–7

Biochemical toxicity of hexachlorocyclohexane and its gamma-isomer in albino mice. Ravinder P, et al. **Indian J Exp Biol** 1989 Mar;27(3):248–51

Regional changes in brain 2-14C-deoxyglucose uptake induced by convulsant and non-convulsant doses of lindane. Sanfeliu C, et al. **Neurotoxicology** 1990 Winter; 10(4):727–42

The effects of lindane and linuron on calcium metabolism, bone morphometry and the kidney in rats. Andrews JE, et al. **Toxicology** 1990 Jan-Feb;60(1-2):99–107

Lindane (gamma-HCH) causes reproductive failure and fetotoxicity in mice. Sircar S, et al. **Toxicology** 1989 Dec 1;59(2):171–7

Effect of lindane on mitochondrial side-chain cleavage of cholesterol in mice. Sircar S, et al. **Toxicology** 1990 Mar 30;61(1):41–6

[HCH soil pollution (hexachlorocyclohexane) in Twente, public health aspects] Bruins Jzn B, et al. **Tijdschr Diergeneeskd** 1990 Feb 1;115(3):105–14 (Eng. Abstr.) (Dut)

[Various indicators of immunity and nonspecific body resistance after repeated administration of lindane] Larionov VG, et al. **Gig Sanit** 1990 May;(5):44–6 (Rus)

[Changes in various indicators of cellular immunity in rats in chronic radio-chemical exposure] Shvedov VL, et al. **Gig Sanit** 1989 Jul;(7):16–9 (Eng. Abstr.) (Rus)

BENZENESULFONATES

Rapid detection of Acanthamoeba cysts in corneal scrapings by lactophenol cotton blue staining [letter] Thomas PA, et al. **Arch Ophthalmol** 1990 Feb;108(2):168

Does 3,5,dibromo-4-nitrosobenzene sulphonate spin trap superoxide radicals? Nazhat NB, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):807–12

Two mechanisms by which fluorescent oxonols indicate membrane potential in human red blood cells. Pratap PR, et al. **Biophys J** 1990 Apr;57(4):835–49

ADVERSE EFFECTS

Asthmagenic properties of a newly developed detergent ingredient: sodium iso-nonanoyl oxybenzene sulphonate. Stenton SC, et al. **Br J Ind Med** 1990 Jun;47(6):405–10

Pseudomonas aeruginosa septicemia related to structural damage to hemodialyzer membranes following disinfection with monoxychlorosene—Quebec. Ishak M, et al. **Can Dis Wkly Rep** 1990 Feb 10;16(6):27–8 (Eng, Fre)

Intestinal complications associated with use of the Dexon mesh sling in gynecologic oncology patients. Patsner B, et al. **Gynecol Oncol** 1990 Jul;38(1):146–8

Bronchial provocation testing of sodium iso-nonanoyl oxybenzene sulphonate. Ferguson H, et al. **Hum Exp Toxicol** 1990 Mar;9(2):83–9

DIAGNOSTIC USE

[Fluorescence microscopy detection of mycopathogens using Rylux BSU] Hejtmánek M, et al. **Cesk Patol** 1989 Nov; 25(4):244–50 (Eng. Abstr.) (Cze)

METABOLISM

Cell size specific binding of the fluorescent dye calcofluor to budding yeast. Moore SA. **Biochim Biophys Acta** 1990 Aug 17;1035(2):206–13

Degradation of p-toluenesulphonic acid via sidechain oxidation, desulphonation and meta ring cleavage in Pseudomonas (Comamonas) testosteroni T-2. Locher HH, et al. **J Gen Microbiol** 1989 Jul;135 (Pt 7):1969–78

PHARMACOKINETICS

Effect of medium-chain glycerides on the membrane transport of D-glucose and sulfanilic acid in the intestinal brush-border membrane vesicles. Sagara K, et al. **J Pharmacobiodyn** 1990 Jan;13(1):57–63

Intestinal transport of sulfanilic acid in rats immunized with protein-sulfanilic acid conjugate. Yamamoto A, et al. **Pharm Res** 1990 Jul;7(7):767–71

PHARMACOLOGY

Assessment of the anti-inflammatory action of calcium dobesilate. Effect on macrophages attaching to subcutaneously implanted coverslips in guinea pigs. Piller NB. **Arzneimittelforschung** 1990 Jun;40(6):698–700

Effect of calcium dobesilate on the inhibition of collagen fibrillogenesis by glucose in vitro. Schmut O. **Arzneimittelforschung** 1989 Dec;39(12):1555–7

Reversible drug effects on the metabolic activation of polymorphonuclear leukocytes. Takanaka K, et al. **Chem Biol Interact** 1990;73(2-3):309–21

Effect of calcium dobesilate on the blood-retinal barrier in early diabetic retinopathy. Leite EB, et al. **Int Ophthalmol** 1990 Mar;14(2):81–8

Chemical modification and characterization of the alpha cysteine 106 at the Vibrio harveyi luciferase active center. Paquatte O, et al. **Photochem Photobiol** 1989 Dec; 50(6):817–25

[The effect of oxytocin and sigetin on Ca2+ transport in the fraction of plasma membranes of myometrial cells] Stepankovskaia GK, et al. **Ukr Biokhim Zh** 1989 Sep-Oct; 61(5):109–12 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Myocardial infarction treated with two lymphagogues, calcium dobesilate (CLS 2210) and hyaluronidase: a coded, placebo-controlled animal study. Repa I, et al. **J Cardiovasc Pharmacol** 1990 Aug;16(2):286–91

Calcium dobesilate (CLS 2210) protects the myocardium in early acute myocardial infarction: a preliminary randomized, double-blind, placebo-controlled study of its effects on biochemical markers. Szlavy L, et al. **J Cardiovasc Pharmacol** 1990 Jan;15(1):89–95

[Calcium dobesilate in the treatment of primary venous insufficiency of the lower limbs. A controlled clinical study] Pecchi S, et al. **Clin Ter** 1990 Mar 31;132(6):409–17 (Eng. Abstr.) (Ita)

TOXICITY

Toxic effects of an anionic detergent on the lipid constituents of various cell types of the gill epithelium of Rita rita: a histochemical investigation. Roy D. **Biomed Environ Sci** 1989 Dec;2(4):312–7

Lifetime toxicity/carcinogenicity studies of FD & C Blue No. 1 (brilliant blue FCF) in rats and mice. Borzelleca JF, et al. **Food Chem Toxicol** 1990 Apr;28(4):221–34

BENZETHONIUM see under **AMMONIUM COMPOUNDS**

BENZHEXOL see **TRIHEXYPHENIDYL**

BENZHYDRYL COMPOUNDS

ADMINISTRATION & DOSAGE

Terfenadine once daily in chronic urticaria. A multi-centre double-blind comparison of terfenadine once daily versus twice daily. **Allergy** 1989 Sep;44(7):447–52

Comparison of efficacy and tolerability of terfenadine administered once daily versus twice daily in patients with chronic idiopathic urticaria. Paul E, et al. **Ann Allergy** 1989 Oct;63(4):340–2

Terfenadine with or without phenylpropanolamine in the treatment of seasonal allergic rhinitis. Nuutinen J, et al. **Clin Exp Allergy** 1989 Nov;19(6):603–8

Efficacy and safety of loratadine (10 mg once daily), terfenadine (60 mg twice daily), and placebo in the treatment of seasonal allergic rhinitis. Del Carpio J, et al. **J Allergy Clin Immunol** 1989 Nov;84(5 Pt 1):741–6

[Treatment of arrhythmia in patients with chronic ischemic heart disease using kinilentin combined with an inhibitor or inductor of microsomal oxidation] Kharlamova IV, et al. **Sov Med** 1989;(12):41–4 (Rus)

ADVERSE EFFECTS

Beclobrate and liver disease [letter] Aebi U, et al. **Ann Intern Med** 1990 Sep 15;113(6):483

The effects of terfenadine with and without alcohol on an aspect of car driving performance. Bhatti JZ, et al. **Clin Exp Allergy** 1989 Nov;19(6):609–11

Terfenadine-induced exacerbation of psoriasis [letter] Navaratnam AE, et al. **Clin Exp Dermatol** 1990 Jan;15(1):78

Nervous reactions to terfenadine [letter; comment] Masheter HC. **Lancet** 1989 Oct 28;2(8670):1034 Comment on: Lancet 1989 Sep 9;2(8663):615–6.

ANALYSIS

Biological monitoring for workers exposed to 4,4'-methylenebis(2-chloroaniline). Ichikawa Y, et al. **Am Ind Hyg Assoc J** 1990 Jan;51(1):5–7

Evidence that a beta-N-glucuronide of 4,4'-methylenebis (2-chloroaniline) (MbOCA) is a major urinary metabolite in man: implications for biological monitoring. Cocker J, et al. **Br J Ind Med** 1990 Mar;47(3):154–61

CHEMICAL SYNTHESIS

Synthesis and Ca-antagonist activity of some benzhydryl derivatives. Corsano S, et al. **Arch Pharm (Weinheim)** 1989 Dec;322(12):873–8

METABOLISM

Evidence that a beta-N-glucuronide of 4,4'-methylenebis (2-chloroaniline) (MbOCA) is a major urinary metabolite in man: implications for biological monitoring. Cocker J, et al. **Br J Ind Med** 1990 Mar;47(3):154–61

Hydroxylation of 4,4'-methylenebis(2-chloroaniline) by canine, guinea pig, and rat liver microsomes. Chen TH, et al. **Drug Metab Dispos** 1989 Jul-Aug;17(4):406–13

4,4'-Methylene-bis(2-chloroaniline) (MOCA): comparison of macromolecular adduct formation after oral or dermal administration in the rat. Cheever KL, et al. **Fundam Appl Toxicol** 1990 Feb;14(2):273–83

PHARMACOKINETICS

Pharmacokinetics and pharmacodynamics of terfenadine and chlorpheniramine in the elderly. Simons KJ, et al. **J Allergy Clin Immunol** 1990 Mar;85(3):540–7

PHARMACOLOGY

Contribution of histamine and prostanoids to bronchoconstriction provoked by inhaled bradykinin in atopic asthma. Polosa R, et al. **Allergy** 1990 Apr; 45(3):174–82

Terfenadine modifies airway narrowing induced by the inhalation of nonisotonic aerosols in subjects with asthma. Finney MJ, et al. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1151–7

Terfenadine, an H1 antihistamine, inhibits histamine release in vivo in the human. Naclerio RM, et al. **Am Rev Respir Dis** 1990 Jul;142(1):167–71

Terfenadine blockade of exercise-induced bronchospasm. Pierson WE, et al. **Ann Allergy** 1989 Nov;63(5):461–4

Effects of azatadine, terfenadine, and astemizole on allergen-induced nasal provocation. Small P, et al. **Ann Allergy** 1990 Feb;64(2 Pt 1):129–31

Effect of terfenadine on pulmonary function, histamine

release, and bronchial challenges with nebulized water and cold-air hyperventilation. Townley RG, et al. **Ann Allergy** 1989 Nov;63(5):455–60

Differential effects of the new central adrenergic agonist modafinil and d-amphetamine on sleep and early morning behaviour in elderlies. Saletu B, et al. **Arzneimittelforschung** 1989 Oct;39(10):1268–73

The effect of beclobric acid and clofibric acid on peroxisomal beta-oxidation and peroxisome proliferation in primary cultures of rat, monkey and human hepatocytes. Blaauboer BJ, et al. **Biochem Pharmacol** 1990 Aug 1;40(3):521–8

Bifemelane induces translocation of protein kinase C in the CA3, but not the CA1, region of guinea-pig hippocampus. Fujii T, et al. **Can J Physiol Pharmacol** 1990 Mar; 68(3):413–8

Genotoxicity and effects on rat liver drug-metabolizing enzymes by possible substitutes for 4,4'-methylene bis(2-chloroaniline). Wu K, et al. **Carcinogenesis** 1989 Nov; 10(11):2119–22

The inhibitory effect of terfenadine and flurbiprofen on early and late-phase bronchoconstriction following allergen challenge in atopic asthma. Hamid M, et al. **Clin Exp Allergy** 1990 May;20(3):261–7

Inhibitory effect of terfenadine on mediator release from human blood basophils and eosinophils. Nabe M, et al. **Clin Exp Allergy** 1989 Sep;19(5):515–20

Quantitative time course study of the skin response to histamine and the effect of H1 blockers. A 3-week crossover double-blind comparative trial of cetirizine and terfenadine. Rihoux JP, et al. **Dermatologica** 1989; 179(3):129–34

Terfenadine. An updated review of its pharmacological properties and therapeutic efficacy. McTavish D, et al. **Drugs** 1990 Apr;39(4):552–74 (135 ref.)

Effect of acute and chronic terfenadine on free and total serum phenytoin concentrations in epileptic patients. Coniglio AA, et al. **Epilepsia** 1989 Sep-Oct;30(5):611–6

Central alpha 1-adrenergic stimulation in relation to the behaviour stimulating effect of modafinil; studies with experimental animals. Duteil J, et al. **Eur J Pharmacol** 1990 May 3;180(1):49–58

Selective inhibition of peripheral histamine responses by loratadine and terfenadine. Mauser PJ, et al. **Eur J Pharmacol** 1990 Jun 21;182(1):125–9

Effects of SK&F 104353, a leukotriene receptor antagonist, on the bronchial responses to histamine in subjects with asthma: a comparative study with terfenadine. Dinh Xuan AT, et al. **J Allergy Clin Immunol** 1990 May;85(5):865–71

Effect of terfenadine and ipratropium bromide on ultrasonically nebulized distilled water-induced asthma. Azevedo M, et al. **J Int Med Res** 1990 Jan-Feb;18(1):37–49

Estrogen synthetase inhibitors. 2. Comparison of the in vitro aromatase inhibitory activity for a variety of nitrogen heterocycles substituted with diarylmethane or diarylmethanol groups [published erratum appears in J Med Chem 1990 Sep;33(9):2679] Jones CD, et al. **J Med Chem** 1990 Jan;33(1):416–29

Suppressive effect of bifemelane on lipid peroxidation in rat liver. Nagai T, et al. **J Toxicol Sci** 1990 Feb;15(1):47–60

Effects of bifemelane hydrochloride on various cholinergic markers in cortical and subcortical regions of aged rats. Egashira T, et al. **Jpn J Pharmacol** 1989 Oct;51(2):211–8

Inhibition of the cutaneous response to histamine by H1-blocking agents. Quantitative evaluation of microvascular changes in the skin after histamine challenge and a comparison of the effects of a single intake of cetirizine and terfenadine. Van Neste D, et al. **Skin Pharmacol** 1988;1(3):192–9

Investigations on benzyltoluenes. I. Induction of microsomal cytochrome P-450 and UDP-glucuronosyltransferase by tetrachlorobenzyltoluenes and by the condensate. von Meyerinck L, et al. **Toxicol Lett** 1990 Apr;51(2):163–74

Effects of mutagenic and non-mutagenic aniline derivatives on rat liver drug-metabolizing enzymes. Wu K, et al. **Xenobiotica** 1989 Nov;19(11):1275–83

[Anticonvulsant effects of bifemelane hydrochloride on kindled seizures from the amygdala and hippocampus in rats] Nakamura Y, et al. **Yakubutsu Seishin Kodo** 1989 Jun; 9(2):241–4 (Eng. Abstr.) **(Jpn)**

POISONING

[Severe antihistamine poisoning complicated by ventricular tachycardia] Baštecký J, et al. **Vnitr Lek** 1990 Mar; 36(3):266–9 (Eng. Abstr.) **(Cze)**

THERAPEUTIC USE

A double-blind comparative trial of astemizole and terfenadine for the treatment of hay fever. Troise C, et al. **Allerg Immunol (Paris)** 1989 Dec;21(10):396–8, 400

Nimodipine versus terfenadine in the treatment of physical stimulus-induced urticaria. Pigatto PD, et al. **Allergy** 1990 Jan;45(1):71–4

Comparative effects of loratadine and terfenadine in the treatment of chronic idiopathic urticaria. Belaich S, et al. **Ann Allergy** 1990 Feb;64(2 Pt 2):191–4

Double-blind, placebo-controlled study of terfenadine and hydroxyzine in patients with chronic idiopathic urticaria. Boggs PB, et al. **Ann Allergy** 1989 Dec;63(6 Pt 2):616–20

Once versus twice daily dosing of terfenadine in the treatment of seasonal allergic rhinitis: US and European studies. Chu TJ, et al. **Ann Allergy** 1989 Dec;63(6 Pt 2):612–5

Evaluation of inhibition of wheal response to histamine by multiple doses of terfenadine. Ryan WM. **Ann Allergy** 1989 Dec;63(6 Pt 2):609–11

A placebo-controlled comparison of the efficacy and tolerability of picumast dihydrochloride and terfenadine in patients with seasonal allergic rhinitis. Boerner D, et al. **Arzneimittelforschung** 1989 Oct;39(10A):1356–9

Multicentre, double-blind comparison of terfenadine and cetirizine in patients with seasonal allergic rhinitis. Backhouse CI, et al. **Br J Clin Pract** 1990 Mar;44(3):88–91

Mequitazine in the treatment of hayfever. Beaumont G, et al. **Br J Clin Pract** 1990 May;44(5):183–8

Failure of terfenadine in relieving the pruritus of atopic dermatitis. Berth-Jones J, et al. **Br J Dermatol** 1989 Nov; 121(5):635–7

Inhibition of photosensitivity in erythropoietic protoporphyria with terfenadine. Farr PM, et al. **Br J Dermatol** 1990 Jun;122(6):809–15

The antipruritic effect of a sedative and a non-sedative antihistamine in atopic dermatitis. Wahlgren CF, et al. **Br J Dermatol** 1990 Apr;122(4):545–51

Profile of ragweed hay fever symptom control with terfenadine started before or after symptoms are established. Brooks CD, et al. **Clin Exp Allergy** 1990 Jan; 20(1):21–6 (25 ref.)

Double-blind cross-over trial comparing beclomethasone dipropionate and terfenadine in perennial rhinitis. Robinson AC, et al. **Clin Exp Allergy** 1989 Sep;19(5):569–73

Bifemelane in the treatment of central retinal artery or vein obstruction. Hirayama Y, et al. **Clin Ther** 1990 May-Jun; 12(3):230–5

A cross-over controlled study on beclobrate versus bezafibrate in the treatment of type IIb hyperlipoproteinaemia. Avogaro P, et al. **Drugs Exp Clin Res** 1989;15(6-7):325–33

Evidence for the roles of histamine and prostaglandins as mediators in exercise-induced asthma: the inhibitory effect of terfenadine and flurbiprofen alone and in combination. Finnerty JP, et al. **Eur Respir J** 1990 May;3(5):540–7

Effect of bifemelane hydrochloride on an injury of the liver caused by ischemia-reperfusion in rats. Nagai T, et al. **Jpn J Pharmacol** 1990 Feb;52(2):383–5

On the treatment of the alcoholic organic brain syndrome with an alpha-adrenergic agonist modafinil: double-blind, placebo-controlled clinical, psychometric and neurophysiological studies. Saletu B, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(2):195–214

Selective histamine blockade in childhood asthma; the effect of terfenadine on resting bronchial tone and exercise induced bronchoconstriction. MacFarlane PI, et al. **Respir Med** 1989 Jan;83(1):19–24

Role of histamine released in hypertonic saline induced bronchoconstriction [letter] Keaney NP. **Thorax** 1990 Jul; 45(7):571

[Evaluation of cetirizine and of terfenadine in the treatment of perennial allergic rhinitis] Boniver R, et al. **Acta Otorhinolaryngol Belg** 1989;43(1):75–81 (Eng. Abstr.) **(Fre)**

[Treatment of histamine-dependent allergic dermatoses with a 120-mg terfenadine tablet once a day] Rigoni C, et al. **G Ital Dermatol Venereol** 1989 Sep;124(9):XXXIX–XLI (Eng. Abstr.) **(Ita)**

[Phencarol in the treatment of allergic dermatoses of various pathological mechanisms] Rubisz-Brzezińska J, et al. **Przegl Dermatol** 1989 Jan-Mar;76(1):39–44 (Eng. Abstr.) **(Pol)**

[Ziksorin in the combined treatment of psoriasis] Kipnis VM. **Vestn Dermatol Venerol** 1990;(4):73 (Eng. Abstr.) **(Rus)**

[The effectiveness of using the enzyme inducer zixorin in the complex treatment of patients with viral hepatitis A] Gnoevol VB, et al. **Voen Med Zh** 1989 Jun;(6):38–9 **(Rus)**

TOXICITY

Review of the genotoxicity and carcinogenicity of 4,4'-methylene-dianiline and 4,4'-methylene-bis-2-chloroaniline. McQueen CA, et al. **Mutat Res** 1990 Sep;239(2):133–42 (90 ref.)

BENZIDINES

A rapid sporozoite ELISA using 3,3',5,5'-tetramethylbenzidine as the substrate chromogen. Lee M, et al. **Am J Trop Med Hyg** 1990 Apr;42(4):314–9

A novel approach to reduce background colour development by diaminobenzidine in peroxidase-based assays. Inzani VA. **Biochem Soc Trans** 1990 Jun;18(3):445

Comparison of particulate 3,3',5,5'-tetramethylbenzidine and 3,3'-diaminobenzidine as chromogenic substrates for immunoblot. Brand JA, et al. **Biotechniques** 1990 Jan; 8(1):58–60

A triple-labeling method: HRP anterograde tract tracing combined with double immunofluorescent cell staining in developing neural tissue of the rat. Dederen PJ, et al. **J Neurosci Methods** 1989 Oct;30(1):71–6

[Study of the immunogenicity of conjugates, obtained by means of chemical interaction of benzidine with synthetic polyelectrolytes] Korosteleva TA, et al. **Eksp Onkol** 1989; 11(5):17–9 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Natural killer cell activity in workers exposed to benzidine and beta-naphthylamine. Tanigawa T, et al. **Br J Ind Med** 1990 May;47(5):338–41

Studies on the relation between bladder cancer and benzidine or its derived dyes in Shanghai. You XY, et al. **Br J Ind Med** 1990 Aug;47(8):544–52

[Occupation and urothelial cancer: the background and the clinical figure] Itatani H. **Hinyokika Kiyo** 1989 Dec; 35(12):2011–4 (Eng. Abstr.) **(Jpn)**

[Occupational cancer of the urinary bladder: the diagnostic value of urinary cytology in dyestuff workers exposed to aromatic amines] Matsushima M. **Hinyokika Kiyo** 1989 Dec;35(12):2033–40 (Eng. Abstr.) **(Jpn)**

[Benzidine dyes and risk of bladder cancer] Miyakawa M, et al. **Hinyokika Kiyo** 1989 Dec;35(12):2049–56 (Eng. Abstr.) **(Jpn)**

[Occupational uroepithelial cancer: current status in Wakayama city and clinical study] Morimoto S, et al. **Hinyokika Kiyo** 1989 Dec;35(12):2015–22 (Eng. Abstr.) **(Jpn)**

[Urothelial carcinoma related to exposure to aromatic amines] Naito S, et al. **Hinyokika Kiyo** 1989 Dec;35(12):2023–31 (Eng. Abstr.) **(Jpn)**

[Present status and background of occupational uroepithelial tumors] Tachibana M, et al. **Hinyokika Kiyo** 1989 Dec; 35(12):2003–9 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Activated charcoal as a adsorbent of oxidized 3,3'-diaminobenzidine in peroxidase cytochemistry. Ros Barceló A, et al. **Stain Technol** 1989 Mar;64(2):97–8

[Benzidine and its derivatives in the immunohistochemical analysis of peroxidase] Mátyás G, et al. **Morphol Igazsagugyi Orv Sz** 1989 Jul;29(3):190–4 (Eng. Abstr.) **(Hun)**

DIAGNOSTIC USE

Highly sensitive microplate-ELISA for angiotensin I using 3,3', 5,5'-tetramethylbenzidine. Suzuki F, et al. **Clin Exp Hypertens [A]** 1990;12(1):83–95

Use of benzidine for histological demonstration of haemoglobin in human bite marks. Allison RT, et al. **J Clin Pathol** 1990 Jul;43(7):600–3

METABOLISM

Polymorphic N-acetylation of sulfamethazine and benzidine by human liver: implication for cancer risk? Peters JH, et al. **Anticancer Res** 1990 Jan-Feb;10(1):225–9

Photoionization used as a tool for the study of biomembranes: fate of tetramethylbenzidine photocation in purple membrane. Rivière ME, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):130–6

Biomonitoring of aromatic amines. III: Hemoglobin binding of benzidine and some benzidine congeners. Birner G, et al. **Arch Toxicol** 1990;64(2):97–102

Covalent interaction of 3,3'-dichlorobenzidine with hepatic lipids. Enzymic basis and stability of the adducts. Iba MM, et al. **Biochem Pharmacol** 1990 Aug 1;40(3):581–7

Binding of chlorinated benzidines to the rat hepatic aromatic hydrocarbon receptor. Cikryt P, et al. **Chem Biol Interact** 1989;72(1-2):57–64

Activation of 3,3'-dichlorobenzidine: enzymic basis and toxicological consequences. Iba MM. **Drug Metab Rev** 1989-90;21(3):377–400 (78 ref.)

Determination of benzidine--DNA adduct formation in CHO, HeLa, L5178Y, TK6 and V79 cells. Phillips DH, et al. **Mutagenesis** 1990;5 Suppl:67–9

PHARMACOKINETICS

The biotransformation of O-tolidine. A qualitative investigation. Dieteren HM. **Arch Environ Health** 1966 Jan; 12(1):30–2

Metabolism and disposition of benzidine in the dog. Lakshmi VM, et al. **Carcinogenesis** 1990 Jan;11(1):139–44

PHARMACOLOGY

Induction of sister chromatid exchanges by benzidine in rat and human hepatoma cell lines and inhibition by indomethacin. Grady MK, et al. **Cell Biol Toxicol** 1986 Jun;2(2):223–30

Some aspects of the chromogen 3,3',5,5'-tetramethylbenzidine as hydrogen donor in a horseradish peroxidase assay. Bally RW, et al. **J Clin Chem Clin Biochem** 1989 Oct;27(10):791–6

Activity of the human carcinogens benzidine and 2-naphthylamine in triple- and single-dose mouse bone marrow micronucleus assays: results for a combined test protocol. Mirkova E. **Mutat Res** 1990 Jun-Aug; 234(3-4):161–3

The evaluation of a multiple dosing protocol for the mouse bone-marrow micronucleus assay using benzidine and 2,6-xylidine. Parton JW, et al. **Mutat Res** 1990 Jun-Aug; 234(3-4):165–8

TOXICITY

ras gene activation in rat tumors induced by benzidine congeners and derived dyes. Reynolds SH, et al. **Cancer Res** 1990 Jan 15;50(2):266–72

Production of urothelial tumors in the heterotopic bladder of rat by benzidine derivatives. Wang CY, et al. **Cancer Res** 1990 May 15;50(10):2868–71

Activation of 3,3'-dichlorobenzidine: enzymic basis and toxicological consequences. Iba MM. **Drug Metab Rev** 1989–90;21(3):377–400 (78 ref.)

Carcinogenicity study of 3,3'-dimethylbenzidine dihydrochloride in BALB/c mice. Schieferstein GJ, et al. **Food Chem Toxicol** 1989 Dec;27(12):801–6

The third United Kingdom Environmental Mutagen Society collaborative trial: overview, a summary and assessment. Arlett CF, et al. **Mutagenesis** 1990;5 Suppl:85–8

Microwell mutation assays: evaluation of ethylmethanesulphonate, benzo[a]pyrene and benzidine using the tk locus in L5178Y mouse lymphoma cells. Clay P, et al. **Mutagenesis** 1990;5 Suppl:45–54

Induction of mutations in mouse lymphoma L5178Y cells by ethylmethanesulphonate, benzidine and benzo[a]pyrene. Henderson L, et al. **Mutagenesis** 1990;5 Suppl:27–34

The mutagenic activity of ethylmethanesulphonate, benzidine and benzo[a]pyrene at the hprt locus of wild-type L5178Y mouse lymphoma cells. Kennelly JC, et al. **Mutagenesis** 1990;5 Suppl:21–6

Induction of mutations in TK6 human lymphoblastoid cells by ethyl methanesulphonate, benzo[a]pyrene and benzidine. O'Brien KA, et al. **Mutagenesis** 1990;5 Suppl:55–60

Mutation assays of ethyl methanesulphonate, benzidine and benzo[a]pyrene using Chinese hamster V79 cells. O'Donovan MR. **Mutagenesis** 1990;5 Suppl:9–13

Chinese hamster ovary (CHO/HPRT) cell mutation assays with EMS, benzo[a]pyrene and benzidine. Phillips BJ, et al. **Mutagenesis** 1990;5 Suppl:15–20

Studies on the activities of benzo[a]pyrene, benzidine and ethyl methanesulphonate in the L5178Y TK +/- mouse lymphoma mutagenicity assay using standardized and non-standardized protocols. Riach CG, et al. **Mutagenesis** 1990;5 Suppl:35–44

Effect of treatment protocol and sample time on the frequencies of micronucleated polychromatic erythrocytes in mouse bone marrow and peripheral blood. Tice RR, et al. **Mutagenesis** 1990 Jul;5(4):313–21

The genetic toxicity of the human carcinogens benzidine and benzidine-based dyes: chromosomal analysis in exposed workers. Mirkova ET, et al. **Prog Clin Biol Res** 1990; 340C:397–405

Thirteen-week toxicity studies of 3,3'-dimethoxybenzidene and C.I. Direct Blue 15 in the Fischer 344 rat. Morgan DL, et al. **Toxicology** 1989 Dec 15;59(3):297–309

BENZILATES

PHARMACOLOGY

Anticholinergic properties of propiverine and its metabolites. Siegmund W, et al. **Pharmazie** 1990 Jan;45(1):67–8

[Calcium antagonism of enpiperate on isolated rabbit aorta strips and guinea pig ileum] Du YL, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar;10(2):114–7 (Eng. Abstr.) **(Chi)**

[Effects of propiverine hydrochloride and its metabolites on isolated guinea pig urinary bladder] Haruno A, et al. **Nippon Yakurigaku Zasshi** 1989 Aug;94(2):145–50 (Eng. Abstr.) **(Jpn)**

[Effect of propiverine hydrochloride on the function of the bladder in decerebrated dogs] Kaneko S, et al. **Nippon Yakurigaku Zasshi** 1990 Feb;95(2):55–61 (Eng. Abstr.) **(Jpn)**

[Mode of inhibitory action of propiverine hydrochloride on the micturition movements of the bladder in dogs] Kaneko S, et al. **Nippon Yakurigaku Zasshi** 1989 Aug;94(2):151–7 (Eng. Abstr.) **(Jpn)**

[Effects of propiverine hydrochloride (P-4) and its metabolites on urinary bladder function in anesthetized rats] Nomura N, et al. **Nippon Yakurigaku Zasshi** 1989 Sep; 94(3):173–80 (Eng. Abstr.) **(Jpn)**

[Behavioral pharmacological properties of propiverine hydrochloride (P-4) in mice and rats] Toide K, et al. **Yakubutsu Seishin Kodo** 1989 Jun;9(2):233–40 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

[Experience in the use of propiverine hydrochloride (P-4) for patients suffering from urinary frequency and/or incontinence] Yokoyama O, et al. **Hinyokika Kiyo** 1990 Apr;36(4):517–23 (Eng. Abstr.) **(Jpn)**

TOXICITY

[One-year chronic oral toxicity study of propiverine hydrochloride in dogs followed by one-month recovery] Kohda S, et al. **J Toxicol Sci** 1989 Oct;14 Suppl 2:111–60 (Eng. Abstr.) **(Jpn)**

[Thirteen-week oral toxicity study of propiverine hydrochloride in rats] Nakano S, et al. **J Toxicol Sci** 1989 Oct;14 Suppl 2:13–59 (Eng. Abstr.) **(Jpn)**

[Reproduction study of propiverine hydrochloride (1)—fertility study in rats by oral administration] Saito M, et al. **J Toxicol Sci** 1989 Oct;14 Suppl 2:161–77 (Eng. Abstr.) **(Jpn)**

[Reproduction study of propiverine hydrochloride (2)—teratological study in rats by oral administration] Saito M, et al. **J Toxicol Sci** 1989 Oct;14 Suppl 2:179–205 (Eng. Abstr.) **(Jpn)**

[Reproduction study of propiverine hydrochloride (3)—teratological study in rabbits by oral administration] Saito M, et al. **J Toxicol Sci** 1989 Oct;14 Suppl 2:207–19 (Eng. Abstr.) **(Jpn)**

[Reproduction study of propiverine hydrochloride (4)—perinatal and postnatal study in rats by oral administration] Saito M, et al. **J Toxicol Sci** 1989 Oct;14 Suppl 2:221–47 (Eng. Abstr.) **(Jpn)**

[Fifty-two-week oral chronic toxicity study of propiverine hydrochloride in rats] Yamashita K, et al. **J Toxicol Sci** 1990 May;15(2):107–44 (Eng. Abstr.) **(Jpn)**

[Thirteen-week oral toxicity study of propiverine hydrochloride in dogs] Yamashita K, et al. **J Toxicol Sci** 1989 Oct;14 Suppl 2:61–109 (Eng. Abstr.) **(Jpn)**

[Acute toxicity studies of propiverine hydrochloride] Yamashita K, et al. **J Toxicol Sci** 1989 Oct;14 Suppl 2:1–11 (Eng. Abstr.) **(Jpn)**

BENZIMIDAZOLES

Intermittent blood flow in the KHT sarcoma—flow cytometry studies using Hoechst 33342. Minchinton AI, et al. **Br J Cancer** 1990 Aug;62(2):195–200

Flow cytometric analysis of Hoechst 33342 uptake as an indicator of multi-drug resistance in human lung cancer. Morgan SA, et al. **Br J Cancer** 1989 Sep;60(3):282–7

Vitality measurement using spectrum shift in Hoechst 33342 stained cells. Ellwart JW, et al. **Cytometry** 1990; 11(2):239–43

ADMINISTRATION & DOSAGE

Duration of effective benefit from administration of graded oral doses of cobalt to sheep. MacPherson A. **Vet Rec** 1989 Dec 9;125(24):594–6

[Hygienic evaluation of supplementary administration of trace elements, vitamin C and dibasol to the nutrition rations of sportsmen] Nasolodin VV, et al. **Gig Sanit** 1989 Jul;(7):83–4 **(Rus)**

ADVERSE EFFECTS

The effect of periparturient treatment with fenbendazole on the milk production of cows. Tharaldsen J, et al. **Acta Vet Scand** 1989;30(3):247–52

Lack of weight gain associated with short-term astemizole treatment. Ellison MJ, et al. **DICP** 1990 Jul–Aug; 24(7–8):682–4

Astemizole-induced paresthesia [letter] Kaufman HS, et al. **N Engl J Med** 1990 Sep 6;323(10):684

ANALYSIS

Stability of pibenzimol hydrochloride in commonly used infusion solutions and after filtration. Toledo MM, et al. **Am J Hosp Pharm** 1989 Oct;46(10):2043–6

Rapid structural analysis of the in vitro and in vivo metabolism of SK & F 95448 by the combined use of thermospray liquid chromatography/mass spectrometry and liquid chromatography/tandem mass spectrometry. Blake TJ, et al. **Biomed Environ Mass Spectrom** 1989 Aug; 18(8):637–44

Nodular organization and differential intrametastatic distribution of the fluorescent dye Hoechst 33342 in B16 melanoma liver metastasis. Aliño SF, et al. **Exp Cell Biol** 1989;57(5):246–56

Methodology for the analysis of benzimidazole anthelmintics as drug residues in animal tissues. Barker SA, et al. **J Assoc Off Anal Chem** 1990 Jan–Feb;73(1):22–5

Multiresidue method for isolation and liquid chromatographic determination of seven benzimidazole anthelmintics in milk. Long AR, et al. **J Assoc Off Anal Chem** 1989 Sep–Oct;72(5):739–41

Determination of thiabendazole, 5-hydroxythiabendazole, fenbendazole, and oxfendazole in milk. Tai SS, et al. **J Assoc Off Anal Chem** 1990 May–Jun;73(3):368–73

Determination of benzimidazole anthelmintics in meat samples. Marti AM, et al. **J Chromatogr** 1990 Jan 5; 498(1):145–57

[Ethyl benzimidazole carbamate: teratogenic effect and presence in the milk of cows after administration of thiophanate] Delatour P, et al. **Ann Rech Vet** 1990; 21(1):87–92 (Eng. Abstr.) **(Fre)**

BLOOD

Quenching of Hoechst 33258 fluorescence in erythroid precursors. Stokke T, et al. **Cytometry** 1990;11(6):686–90

Two systems for the automated analysis of drugs in biological fluids using high-performance liquid chromatography. Doyle E, et al. **J Chromatogr** 1990 Apr 27;527(1):67–77

[Selective and sensitive determination of an antiallergic agent, emedastine difumarate (KG-2413), in human plasma by the radioreceptor assay combined with a high-performance liquid chromatography] Hamada T, et al. **Yakugaku Zasshi** 1989 Oct;109(10):749–54 (Eng. Abstr.) **(Jpn)**

CHEMICAL SYNTHESIS

Structural studies on bio-active compounds. Part 16. Synthesis and properties of sterically-constrained analogues of methylbenzoprim, a new dihydrofolate reductase inhibitor. Griffin RJ, et al. **Anticancer Drug Des** 1990 May;5(2):201–11

Bioisosteric transformation of H1-antihistaminic benzimidazole derivatives. Iemura R, et al. **Chem Pharm Bull (Tokyo)** 1989 Oct;37(10):2723–6

Studies on proton pump inhibitors. II. Synthesis and antiulcer activity of 8-[(2-benzimidazolyl)sulfinylmethyl]-1,2,3,4-tetrahydroquinolines and related compounds. Uchida M, et al. **Chem Pharm Bull (Tokyo)** 1989 Aug;37(8):2109–16

Chemometric approach in a QSAR study: the antibacterial and antimicotic activities of benzofused heteroaromatic derivatives. De Meo G, et al. **Farmaco** 1990 Mar; 45(3):313–30

Synthesis of benzimidazole derivatives as potential antimicrobial agents. Habib NS, et al. **Farmaco** 1989 Dec; 44(12):1225–32

New heterocyclic derivatives of benzimidazole with germicidal activity—VII—2-(5'-nitro-2'-furyl or 2'-thienyl) benzimidazoles with different substituents in the 5-position. Pedini M, et al. **Farmaco** 1990 Mar;45(3):303–12

Potential antitumor agents. 59. Structure-activity relationships for 2-phenylbenzimidazole-4-carboxamides, a new class of "minimal" DNA-intercalating agents which may not act via topoisomerase II. Denny WA, et al. **J Med Chem** 1990 Feb;33(2):814–9

Synthesis and in vitro LTD4 antagonist activity of bicyclic and monocyclic cyclopentylurethane and cyclopentylacetamide N-arylsulfonyl amides. Matassa VG, et al. **J Med Chem** 1990 Sep;33(9):2621–9

In vitro tuberculostatic activities of some 2-benzylbenzimidazole and 2-phenoxymethylbenzimidazole derivatives. Gümüs F, et al. **J Pharm Belg** 1989 Nov–Dec;44(6):398–402

Piperazine derivatives of benzimidazole as potential anthelmintics. Part 1: Synthesis and activity of methyl-5-(4-substituted piperazin-1-yl)benzimidazole-2-carbamates. Sánchez-Alonso RM, et al. **Pharmazie** 1989 Sep; 44(9):606–7

Synthesis of 2,5-disubstituted benzimidazoles, 1,3,4-thiadiazoles and 3,5-diiodosalicylanilides as structural congeners of rafoxanide and closantel. Srivastava RP, et al. **Pharmazie** 1990 Jan;45(1):34–7

Potential antihypertensive benzimidazole derivatives. Serafin B, et al. **Pol J Pharmacol Pharm** 1989 Jan–Feb;41(1):89–96

DIAGNOSTIC USE

In vivo staining of mouse preimplantation embryos with Hoechst 33342. Sawicki W, et al. **Anat Rec** 1990 Jul; 227(3):359–62

Flow cytometric recognition of clastogen induced chromatin damage in G0/G1 lymphocytes by non-stoichiometric Hoechst fluorochrome binding. Kubbies M. **Cytometry** 1990;11(3):386–94

Combined use of fluorescent peanut agglutinin lectin and Hoechst 33258 to monitor the acrosomal status and vitality of human spermatozoa. Mortimer D, et al. **Hum Reprod** 1990 Jan;5(1):99–103

METABOLISM

Involvement of fungi and bacteria in enhanced and nonenhanced biodegradation of carbendazim and other benzimidazole compounds in soil. Yarden O, et al. **Can J Microbiol** 1990 Jan;36(1):15–23

In vivo metabolism of the anti-inflammatory agent 2-(5-ethylpyridin-2-yl)benzimidazole. Caputo O, et al. **Eur J Drug Metab Pharmacokinet** 1989 Oct–Dec; 14(4):263–8

Sequence-specific interaction of Hoechst 33258 with the minor groove of an adenine-tract DNA duplex studied in solution by 1H NMR spectroscopy. Searle MS, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):3753–62

A fluorescence study of the binding of Hoechst 33258 and DAPI to halogenated DNAs. Härd T, et al. **Photochem Photobiol** 1990 Jan;51(1):77–86

PHARMACOKINETICS

Binding of a Hoechst dye to d(CGCGATATCGCG) and its influence on the conformation of the DNA fragment. Carrondo MA, et al. **Biochemistry** 1989 Sep 19; 28(19):7849–59

Hepatic transport of an antiallergic agent, emedastine difumarate: interspecies difference in rats and guinea pigs. Sakai T, et al. **Chem Pharm Bull (Tokyo)** 1990 May; 38(5):1349–52

Pharmacokinetics of an antiallergic agent, 1-(2-ethoxyethyl)-2-(hexahydro-4-methyl-1H-1, 4-diazepin-1-yl)-1H-benzimidazole difumarate (KG-2413) after oral administration: interspecies differences in rats, guinea pigs and dogs. Sakai T, et al. **J Pharmacobiodyn** 1989 Sep;12(9):530–6

High-performance liquid chromatographic determination and pharmacokinetics of methyl N-[5[[4-(2-pyridinyl)-1-piperazinyl]carbonyl]-1H-benzimidazol-2-yl] carbamate (CDRI Compound 81-470), a new anthelmintic agent in rats. Paliwal JK, et al. **Pharm Res** 1989 Nov;6(11):991–3

Hoechst 33342 staining coupled with conventional histological technique. Sawicki W, et al. **Stain Technol** 1989 Jul;64(4):191–6

Pharmacokinetics and metabolism of fenbendazole in channel

catfish. Kitzman JV, et al. **Vet Res Commun** 1990; 14(3):217-26

[Identification of the metabolites of an antiallergic agent, 1-(2-ethoxyethyl)-2-(hexahydro-4-methyl-1H-1,4-diazepine-1-yl)-1H- benzimidazole difumarate (KG-2413), in rats] Awata N, et al. **Yakugaku Zasshi** 1989 May; 109(5):318-28 (Eng. Abstr.) **(Jpn)**

[Cross-reactivities of active metabolites in the radioreceptor assay of an antiallergic agent, 1-(2-ethoxyethyl)-2-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)- 1H-benzimidazole difumarate (KG-2413)] Hamada T, et al. **Yakugaku Zasshi** 1989 Jul;109(7):474-9 (Eng. Abstr.) **(Jpn)**

[In vitro metabolism of an antiallergic agent, emedastine difumarate, in rats and guinea pigs] Wada Y, et al. **Yakugaku Zasshi** 1990 Jan;110(1):40-8 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Sequential events in the pathogenesis of streptococcal cell wall-induced arthritis and their modulation by bis(5-amidino-2-benzimidazolyl)methane (BABIM). Geratz JD, et al. **Am J Pathol** 1990 Apr;136(4):909-21

Effect of cambendazole and haloxon on the carbohydrate metabolism of Ascaridia galli and Heterakis gallinae (Nematoda). Sharma RK, et al. **Angew Parasitol** 1990 May; 31(2):101-5

Effects of azatadine, terfenadine, and astemizole on allergen-induced nasal provocation. Small P, et al. **Ann Allergy** 1990 Feb;64(2 Pt 1):129-31

Antihypertensive properties of the novel calcium antagonist (1S,2S)-2-[2-[[3-(2-benzimidazolyl)propyl]methylamino] ethyl]-6-fluoro-1,2,3,4-tetrahydro-1-isopropyl-2-naphthyl methoxyacetate dihydrochloride in rat models of hypertension. Comparison with verapamil. Hefti F, et al. **Arzneimittelforschung** 1990 Apr;40(4):417-21

Detecting benzimidazole resistance with faecal egg count reduction tests and in vitro assays. Martin PJ, et al. **Aust Vet J** 1989 Aug;66(8):236-40

Effects of minor groove binding drugs on camptothecin-induced DNA lesions in L1210 nuclei. McHugh MM, et al. **Biochem Pharmacol** 1990 Feb 15; 39(4):707-14

The potency of substituted benzimidazoles such as E3810, omeprazole, Ro 18-5364 to inhibit gastric H+, K(+)-ATPase is correlatedwith the rate of acid-activation of the inhibitor. Morii M, et al. **Biochem Pharmacol** 1990 Feb 15;39(4):661-7

By 1023/SK&F 96022: biochemistry of a novel (H+ + K+)-ATPase inhibitor. Simon WA, et al. **Biochem Pharmacol** 1990 Jun 1;39(11):1799-806

Uncoupler resistance in E. coli Tuv and Cuv is due to the exclusion of uncoupler by the outer membrane. Haworth RS, et al. **Biochim Biophys Acta** 1990 Aug 9;1019(1):67-72

Involvement of DNA topoisomerase II in the selective resistance of a mammalian cell mutant to DNA minor groove ligands: ligand-induced DNA-protein crosslinking and responses to topoisomerase poisons. Smith PJ, et al. **Carcinogenesis** 1990 Apr;11(4):659-65

Lysis of egg phosphatidylcholine vesicles by tricyclic carboxamide antitumor agents. O'Connor CJ, et al. **Chem Biol Interact** 1990;75(1):93-104

Different effects of cytoprotective drugs on ethanol- and aspirin-induced gastric mucosal injury in pylorus-ligated rats. Takeuchi K, et al. **Dig Dis Sci** 1990 Feb;35(2):178-85

Ribofuranosyl-benzimidazole derivatives as inhibitors of casein kinase-2 and casein kinase-1. Meggio F, et al. **Eur J Biochem** 1990 Jan 12;187(1):89-94

Potentiation by phenylbisbenzimidazoles of cytotoxicity of anticancer drugs directed against topoisomerase II. Finlay GJ, et al. **Eur J Cancer** 1990;26(5):586-9

Uricosuric effect of different doses of irtemazole in normouricaemic subjects. Gresser U, et al. **Eur J Clin Pharmacol** 1990;38(5):489-91

Protective effects of KW-3635, a novel thromboxane A2 antagonist, in murine traumatic shock. Karasawa A, et al. **Eur J Pharmacol** 1990 Jun 21;182(1):1-8

Differentiation of EC cells in vitro by the fluorescent dye Hoechst 33342. Steuer B, et al. **Exp Cell Res** 1990 Jan; 186(1):149-57

Kinetochore formation in experimentally undercondensed chromosomes. Haaf T, et al. **Hum Genet** 1990 May; 84(6):535-8

Anthelmintic profile of methyl 5(6)-(4-methylpiperidin-1-yl) carbonylbenzimidazole-2-carbamate in experimental helminthiases. Gupta S, et al. **Indian J Exp Biol** 1990 May; 28(5):475-9

Effects of methyl [5 [[4-(2-pyridinyl)-1-piperazinyl]carbonyl]-1H-benzimidazol-2-yl] carbamate on energy metabolism of Ancylostoma ceylanicum and Nippostrongylus brasiliensis. Srivastava JK, et al. **Indian J Exp Biol** 1989 Aug; 27(8):735-8

Effect of benzimidazole drugs on tubulin in benzimidazole resistant and susceptible strains of Caenorhabditis elegans. Enos A, et al. **Int J Parasitol** 1990 Apr;20(2):161-7

Radiation sensitization by an iodine-labelled DNA ligand. Martin RF, et al. **Int J Radiat Biol** 1990 May;57(5):939-46

Duration of the effect of astemizole on histamine-inhalation tests. Malo JL, et al. **J Allergy Clin Immunol** 1990 Apr; 85(4):729-36

Interaction of Hoechst 33258 with repeating synthetic DNA polymers and natural DNA. Jorgenson KF, et al. **J Biomol Struct Dyn** 1988 Apr;5(5):1005-23

Genetic and molecular analysis of a Caenorhabditis elegans beta-tubulin that conveys benzimidazole sensitivity. Driscoll M, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):2993-3003

Effect of some drugs on some histopathological and immunological aspects of experimental trichinosis in albino rats. el-Ridi AM, et al. **J Egypt Soc Parasitol** 1990 Jun; 20(1):99-104

Synthesis of a new class of 2,3-dihydro-2-oxo-1H-benzimidazole-1-carboxylic acid derivatives as highly potent 5-HT3 receptor antagonists. Turconi M, et al. **J Med Chem** 1990 Aug;33(8):2101-8

In vitro effect of benzimidazole drugs on the enzymes of lipid metabolism in Trichuris globulosa. Sarwal S, et al. **J Parasitol** 1989 Oct;75(5):808-10

Laboratory selection of a benzimidazole-resistant isolate of Trichostrongylus colubriformis for ivermectin resistance. Shoop WL, et al. **J Parasitol** 1990 Apr;76(2):186-9

In vivo morphological damage induced by a new benzimidazole prodrug in Echinococcus multilocularis metacestodes. Walchshofer N, et al. **J Pharm Sci** 1990 Jul; 79(7):606-8

BY 1023/SK&F 96022 INN pantoprazole, a novel gastric proton pump inhibitor, potently inhibits acid secretion but lacks relevant cytochrome P450 interactions. Kromer W, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):129-35

Novel calmodulin antagonist CGS 9343B inhibits secretory diarrhea. Shook JE, et al. **J Pharmacol Exp Ther** 1989 Oct; 251(1):247-52

Uricosuric effect of irtemazole in healthy subjects. Gresser U, et al. **Klin Wochenschr** 1989 Oct 2;67(19):971-5

Rapid onset of uricosuria after oral administration of irtemazole, an uricosuric substance. Gresser U, et al. **Klin Wochenschr** 1989 Oct 17;67(20):1058-60

Specific interaction of benzimidazole anthelmintics with tubulin: high-affinity binding and benzimidazole resistance in Haemonchus contortus. Lubega GW, et al. **Mol Biochem Parasitol** 1990 Jan 15;38(2):221-32

Biochemical effects of luxabendazole on Trichinella spiralis. Criado-Fornelio A, et al. **Parasitol Res** 1990;76(6):518-20

Lack of reversion of a benzimidazole resistant strain of Haemonchus contortus after six years of levamisole usage. Borgsteede FH, et al. **Res Vet Sci** 1989 Sep;47(2):270-2

Effects of ALE-36 on gastric secretion, and gastric and duodenal ulcers induced in rats. Kyoi T, et al. **Scand J Gastroenterol Suppl** 1989;162:182-5

Effect of the proton pump inhibitor, NC-1300, on gastric mucus secretion in rats. Ohara S, et al. **Scand J Gastroenterol Suppl** 1989;162:187-9

Inhibition of H+,K+-ATPase by methyl(E)-2-(3,4-dimethoxystyryl)-benzimidazole-4-carboxylate (ALE-36). Yamamoto O, et al. **Scand J Gastroenterol Suppl** 1989;162:178-81

Phenothiazine in the origin of benzimidazole resistance in population-B equine strongyles. Drudge JH, et al. **Vet Parasitol** 1990 Feb;35(1-2):117-30

Effect of thiabendazole and fenbendazole on glucose uptake and carbohydrate metabolism in Trichuris globulosa. Jasra N, et al. **Vet Parasitol** 1990 Mar;35(3):201-9

Comparison of three in vitro techniques to estimate benzimidazole resistance in Haemonchus contortus of sheep. Johansen MV, et al. **Vet Parasitol** 1989 Dec; 34(3):213-21

Cellular distribution, purification and electrophoretic properties of malate dehydrogenase in Trichuris ovis and inhibition by benzimidazoles and pyrimidine derivatives. Sanchez-Moreno M, et al. **Vet Parasitol** 1989 Dec; 34(3):203-11

A novel approach to the control of anthelmintic-resistant Haemonchus contortus in sheep. van Wyk JA, et al. **Vet Parasitol** 1990 Feb;35(1-2):61-9

Delay in timing of the oxfendazole pulse release bolus in calves in The Netherlands. Eysker M, et al. **Vet Q** 1989 Oct;11(4):210-5

How widespread are benzimidazole-resistant nematodes of sheep? [letter] Coles GC. **Vet Rec** 1990 Jun 23;126(25):629

Use of the egg hatch assay on sheep faecal samples for the detection of benzimidazole resistant nematodes. Hunt KR, et al. **Vet Rec** 1989 Aug 12;125(7):153-4

Efficacy of nitroxynil against ivermectin, benzimidazole and salicylanilide resistant H contortus [published erratum appears in Vet Rec 1990 Jul 7;127(1):17] Jeannin PC, et al. **Vet Rec** 1990 Jun 23;126(25):624-5

The efficacy of triclabendazole and other anthelmintics against Fasciola hepatica in controlled studies in cattle. Richards RJ, et al. **Vet Rec** 1990 Mar 3;126(9):213-6

[Astemizole: its pharmacokinetics and pharmacologic properties] Levron JC, et al. **Allerg Immunol (Paris)** 1990 Jun;22(6):233-41 (22 ref.) (Eng. Abstr.) **(Fre)**

[Aminomethylamides of N-benzazoleacetic acids] Domagalina E, et al. **Acta Pol Pharm** 1989;46(2):114-8 (Eng. Abstr.) **(Pol)**

[Sensitivity of aerobic bacteria and Candida species to chlormidazole hydrochloride in vitro] Krasiejko I, et al. **Pol Tyg Lek** 1990 Jan 22-29;45(4-5):91-2 (Eng. Abstr.) **(Pol)**

[Mechanism of the effect of dibasol on the contractile and electric activities of the smooth muscle of the portal vein] Gurkovskaia AN, et al. **Fiziol Zh** 1989 Nov-Dec;35(6):50-3 (Eng. Abstr.) **(Rus)**

[Changes in the nature of the time concordance of the functional brain structures under the influence of bemitil] Bobkov IuG, et al. **Patol Fiziol Eksp Ter** 1990 Mar-Apr; (2):39-41 **(Rus)**

POISONING

[Severe antihistamine poisoning complicated by ventricular tachycardia] Bašteckỳ J, et al. **Vnitr Lek** 1990 Mar; 36(3):266-9 (Eng. Abstr.) **(Cze)**

THERAPEUTIC USE

2,2'-Dicarbomethoxyamino-5,5'-dibenzimidazolyl ketone--a new antifilarial agent. Fatma N, et al. **Acta Trop (Basel)** 1989 Oct;46(5-6):311-21

A double-blind comparative trial of astemizole and terfenadine for the treatment of hay fever. Troise C, et al. **Allerg Immunol (Paris)** 1989 Dec;21(10):396-8, 400

Controlled test and clinical evaluation of dienbendazole against naturally acquired gastrointestinal parasites in ponies. Bello TR. **Am J Vet Res** 1989 Nov;50(11):1976-80

Efficacy of concomitant early summer treatment with fenbendazole and clorsulon against Fasciola hepatica and gastrointestinal nematodes in calves in Louisiana. Malone JB, et al. **Am J Vet Res** 1990 Jan;51(1):133-6

Influence of antihistamine (astemizole) and anticholinergic drugs (ipratropium bromide) on bronchoconstriction induced by substance P. Crimi N, et al. **Ann Allergy** 1990 Aug;65(2):115-20

Prolonged benefit in the treatment of chronic idiopathic urticaria with astemizole. Honsinger RW Jr, et al. **Ann Allergy** 1990 Sep;65(3):194-200

Astemizole in perennial allergic rhinitis with seasonal exacerbations: a placebo-controlled double-blind study. Tanay A, et al. **Ann Allergy** 1989 Dec;63(6 Pt 1):493-4

Double-blind multicenter controlled clinical study comparing the efficacy of picumast dihydrochloride versus astemizole and placebo in patients with seasonal allergic rhinitis. Franke W, et al. **Arzneimittelforschung** 1989 Oct; 39(10A):1360-3

Comparative efficacy of crystalline and amorphous oxfendazole in sheep. Carrigan MJ, et al. **Aust Vet J** 1990 May;67(5):195-6

Anticestodal action of oxfendazole on Raillietina tetragona in experimentally infected chickens. Nurelhuda IE, et al. **Br Vet J** 1989 Sep-Oct;145(5):458-61

Multicentre clinical trials of benzimidazole-carbamates in human cystic echinococcosis (phase 2). Davis A, et al. **Bull World Health Organ** 1989;67(5):503-8

Solar urticaria in the visible spectrum successfully treated with astemizole. Monfrecola G, et al. **Dermatologica** 1990; 180(3):154-6

Methyl 5(6)-(alpha-hydroxyphenyl methyl) benzimidazole-2-carbamate and cysticercosis: chemotherapeutic and electron microscopic studies. Jain MK, et al. **Indian J Exp Biol** 1989 May;27(5):454-9

Astemizole and cetirizine in the treatment of seasonal allergic rhinitis: a comparative double-blind, multicentre study. Rijntjes E, et al. **J Int Med Res** 1990 May-Jun;18(3):219-24

Experimental and theoretical studies of albendazole, oxibendazole, and tioxidazole. McCracken RO, et al. **J Parasitol** 1990 Apr;76(2):180-5

Chemoprophylaxis and immunity to parasitic bronchitis in cattle--a field experiment comparing topical ivermectin and an oxfendazole intraruminal device. Jacobs DE, et al. **J Vet Pharmacol Ther** 1989 Dec;12(4):444-50

Chemotherapy of experimental Echinococcus multilocularis in jirds. Vanparijs O. **Parasitol Res** 1990;76(3):238-40

Immunity of calves treated with an oxfendazole pulse release bolus to challenge with Dictyocaulus viviparus. Eysker M, et al. **Res Vet Sci** 1990 May;48(3):301-5

Emergence from inhibited development of cyathostome larvae in ponies following failure to remove them by repeated treatments with benzimidazole compounds. Eysker M, et al. **Vet Parasitol** 1989 Nov;34(1-2):87-93

The efficacy of triclabendazole (Fasinex) against immature and adult Fasciola hepatica in experimentally infected cattle. Shi FH, et al. **Vet Parasitol** 1989 Sep;33(2):117-24

Effect of a single strategically timed dose of fenbendazole on cow and calf performance. Stuedemann JA, et al. **Vet Parasitol** 1989 Nov;34(1-2):77-86

Field efficacy of ivermectin, fenbendazole and pyrantel embonate paste anthelmintics in horses [see comments] Lumsden GG, et al. **Vet Rec** 1989 Nov 11;125(20):497-9 Comment in: Vet Rec 1989 Dec 2;125(23):584-5.

Benzimidazole resistance of nematodes in sheep in Belgium. Vercruysse J, et al. **Vet Rec** 1989 Dec 9;125(24):602-3

Fenbendazole resistance in Haemonchus contortus of sheep [letter] Yadav CL. **Vet Rec** 1990 Jun 9;126(23):586

Uricosuric effect of irtemazole in hyperuricemic patients without and with renal insufficiency. Kamilli I, et al. **Z Rheumatol** 1989 Nov-Dec;48(6):307-12

[Benzimidazole resistant Ostertagia circumcincta in Angora goats] van Schalkwyk PC, et al. **J S Afr Vet Assoc** 1989 Jun;60(2):76-8 (Eng. Abstr.) **(Afr)**

[Synthesis and biological activity of isomeric 5- and 6-nitro-1-alkylbenzimidazoles] Domagalina E, et al. **Acta Pol Pharm** 1989;46(1):19-26 (Eng. Abstr.) **(Pol)**

[Clinico-parasitological research in a focus of intestinal nematodiasis in Habak Province (the Socialist Republic of Vietnam) and the efficacy of medamine treatment in these

infestations] Khoang TK, et al. **Med Parazitol (Mosk)** 1990 Mar-Apr;(2):27-9 (Eng. Abstr.) **(Rus)**

[The use of dibasol for preventing acute intestinal diseases and viral hepatitis A] Rakhmanov RS, et al. **Voen Med Zh** 1989 Jul;(7):50-1 **(Rus)**

TOXICITY

Influence of different factors on the induction of chromosome malsegregation in Saccharomyces cerevisiae D61.M by bavistan and assessment of its genotoxic property in the Ames test and in Saccharomyces cerevisiae D7. Albertini S. **Mutat Res** 1989 Dec;216(6):327-40

Offspring from inseminations with mammalian sperm stained with Hoechst 33342, either with or without flow cytometry. Morrell JM, et al. **Mutat Res** 1989 Oct; 224(2):177-83

Serum and testicular testosterone and androgen binding protein profiles following subchronic treatment with carbendazim. Rehnberg GL, et al. **Toxicol Appl Pharmacol** 1989 Oct;101(1):55-61

Inhibitory effects of benomyl and carbendazim on the [3H]thymidine incorporation in various organs of the mouse--evidence for a more pronounced action of benomyl. Hellman B, et al. **Toxicology** 1990 Apr 17; 61(2):161-9

[Toxic action of carbendazim on aquatic animals] Przybylski Z, et al. **Rocz Panstw Zakl Hig** 1989;40(4-6):326-32 (Eng. Abstr.) **(Pol)**

BENZOATES

Methylsuccinate and mesaconate in urine of patients treated with sodium benzoate. Maeda E, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Dec;31(6):721-6

Enhanced tumor localization and in vivo stability of a monoclonal antibody radioiodinated using N-succinimidyl 3-(tri-n-butylstannyl)benzoate. Zalutsky MR, et al. **Cancer Res** 1989 Oct 15;49(20):5543-9

Assessment and control of house dust mite infestation. Bischoff E, et al. **Clin Ther** 1990 May-Jun;12(3):216-20

Thin-layer and high-performance liquid chromatographic separation of glycerolipid subclasses as benzoates. Derivatives of ether and ester analogues of phosphatidylcholine, phosphatidylethanolamine and platelet activating factor. Blank ML, et al. **J Chromatogr** 1990 Jun 1;508(2):382-5

Analysis of platelet-activating factor by GC-MS after direct derivatization with pentafluorobenzoyl chloride and heptafluorobutyric anhydride. Weintraub ST, et al. **J Lipid Res** 1990 Apr;31(4):719-25

Staining of bone for aluminum: use of acid solochrome azurine. Kaye M, et al. **Kidney Int** 1990 Apr;37(4):1142-7

[Spinal anesthesia using a strychnine-stovaine combination in Spain] Vaca Miguel JM. **Rev Esp Anestesiol Reanim** 1990 May-Jun;37(3):149-52 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

On combination therapy with benzoate and piridoxilate [letter] Cyr DM, et al. **Am J Dis Child** 1989 Dec; 143(12):1392

Ocular complications of a topical methylene blue-vasoconstrictor-anesthetic preparation. Brownstein S, et al. **Can J Ophthalmol** 1989 Dec;24(7):317-24

Clinical evidence of cross-sensitivity between thiosalicylic acid, a contact allergen, and piroxicam, a photoallergen. de la Cuadra J, et al. **Contact Dermatitis** 1989 Nov; 21(5):349-51

Photocontact dermatitis due to isopropyl and butyl methoxy dibenzoylmethanes (Eusolex 8020 and Parsol 1789). Motley RJ, et al. **Contact Dermatitis** 1989 Aug;21(2):109-10

Immediate and delayed photocontact dermatitis from isopropyl dibenzoylmethane. Murphy GM, et al. **Contact Dermatitis** 1990 Mar;22(3):129-31

ANTAGONISTS & INHIBITORS

PUVA treatment inhibits nonimmunologic immediate contact reactions to benzoic acid and methyl nicotinate. Larmi E. **Int J Dermatol** 1989 Nov;28(9):609-11

CHEMICAL SYNTHESIS

Studies on hypolipidemic agents. IV. 3-[4-(Phenylthio)benzoyl]propionic acid derivatives. Kameo K, et al. **Chem Pharm Bull (Tokyo)** 1989 May; 37(5):1260-7

Synthesis and biological testing of certain 2-(5-substituted-2-thienylthio)benzoic acid derivatives. Tantawy AS, et al. **Farmaco** 1989 Dec;44(12):1217-24

Retinobenzoic acids. 4. Conformation of aromatic amides with retinoidal activity. Importance of trans-amide structure for the activity. Kagechika H, et al. **J Med Chem** 1989 Oct;32(10):2292-6

Retinobenzoic acids. 5. Retinoidal activities of compounds having a trimethylsilyl or trimethylgermyl group(s) in human promyelocytic leukemia cells HL-60. Yamakawa T, et al. **J Med Chem** 1990 May;33(5):1430-7

METABOLISM

Catabolism of benzoate and monohydroxylated benzoates by Amycolatopsis and Streptomyces spp. Grund E, et al. **Appl Environ Microbiol** 1990 May;56(5):1459-64

Evidence for a new pathway in the bacterial degradation of 4-fluorobenzoate. Oltmanns RH, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2499-504

Biotransformation of substituted benzoates to the corresponding cis-diols by an engineered strain of Pseudomonas oleovorans producing the TOL plasmid-specified enzyme toluate-1,2-dioxygenase. Wubbolts MG, et al. **Appl Environ Microbiol** 1990 Feb; 56(2):569-71

The incorporation of 3-phenoxybenzoic acid and other xenobiotic acids into xenobiotic lipids by enzymes of the monoacylglycerol pathway in microsomes from adult and neonatal tissues. Moorhouse KG, et al. **Biochem Pharmacol** 1990 May 15;39(10):1529-36

The importance of glyoxylate and other glycine precursors in the hepatic and renal conjugation of benzoate in normal and hyperammonemic mice. Qureshi IA, et al. **Can J Physiol Pharmacol** 1989 Nov;67(11):1426-30

Studies of metabolic pathways of trimebutine by simultaneous administration of trimebutine and its deuterium-labeled metabolite. Miura Y, et al. **Drug Metab Dispos** 1989 Jul-Aug;17(4):455-62

Benzoic acid metabolism in presence of Schistosoma mansoni infection in mice. Emundianughe TS. **Indian J Exp Biol** 1989 Feb;27(2):160-2

Nucleotide sequencing and characterization of Pseudomonas putida catR: a positive regulator of the catBC operon is a member of the LysR family. Rothmel RK, et al. **J Bacteriol** 1990 Feb;172(2):922-31

Different types of dienelactone hydrolase in 4-fluorobenzoate-utilizing bacteria. Schlömann M, et al. **J Bacteriol** 1990 Sep;172(9):5112-8

Enzymatic formation, stability, and spontaneous reactions of 4-fluoromuconolactone, a metabolite of the bacterial degradation of 4-fluorobenzoate. Schlömann M, et al. **J Bacteriol** 1990 Sep;172(9):5119-29

Molecular cloning and expression of a novel catechol 2,3-dioxygenase gene from the benzoate meta-cleavage pathway in Azotobacter vinelandii. Keil H. **J Gen Microbiol** 1990 Apr;136 (Pt 4):607-13

Physical map of the aromatic amine and m-toluate catabolic plasmid pTDN1 in Pseudomonas putida: location of a unique meta-cleavage pathway. Saint CP, et al. **J Gen Microbiol** 1990 Apr;136 (Pt 4):615-25

Loss of Tdn catabolic genes by deletion from and curing of plasmid pTDN1 in Pseudomonas putida: rate and mode of loss are substrate and pH dependent. Saint CP, et al. **J Gen Microbiol** 1990 Apr;136 (Pt 4):627-36

PHARMACOKINETICS

Characterization of the acclimation period before anaerobic dehalogenation of halobenzoates. Linkfield TG, et al. **Appl Environ Microbiol** 1989 Nov;55(11):2773-8

Diseased skin models in the hairless guinea pig: in vivo percutaneous absorption. Moon KC, et al. **Dermatologica** 1990;180(1):8-12

Pharmacokinetics, tissue distribution and placental permeability of tetrahydro-tetramethyl-naphthalenyl-propenyl benzoic acid (a retinoidal benzoic acid derivative) in hamsters. Howard WB, et al. **Eur J Drug Metab Pharmacokinet** 1989 Apr-Jun;14(2):153-9

The influence of pH on rectal absorption of sodium benzoate studied in man by rectal lumen perfusion. Böttger WM, et al. **J Pharmacokinet Biopharm** 1990 Feb;18(1):1-15

Percutaneous absorption of benzoic acid across human skin. I. In vitro experiments and mathematical modeling. Parry GE, et al. **Pharm Res** 1990 Mar;7(3):230-6

Percutaneous absorption of benzoic acid across human skin. II. Prediction of an in vivo, skin-flap system using in vitro parameters. Silcox GD, et al. **Pharm Res** 1990 Apr; 7(4):352-8

[Transport of drugs through human erythrocyte membranes. Change of transport by introduction of amino group or amino acids in benzoic acid] Matsumoto Y, et al. **Yakugaku Zasshi** 1990 Feb;110(2):120-6 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Retinoidal benzoic acids (arotenoids) and other retinoids inhibit in vitro transformation of epithelial cells. Mass MJ. **Anticancer Res** 1990 Jan-Feb;10(1):241-5

Benzoic acid inhibition of the alpha, beta, and gamma isozymes of Agaricus bisporus tyrosinase. Menon S, et al. **Arch Biochem Biophys** 1990 Jul;280(1):27-32

Topical ultraviolet light-absorbing chromophore protects against experimental photokeratitis. Oldenburg JB, et al. **Arch Ophthalmol** 1990 Aug;108(8):1142-4

Benzoate stimulates glutamate release from perfused rat liver. Häussinger D, et al. **Biochem J** 1989 Dec 15;264(3):837-43

Plasma and urinary levels of carnitine in different experimental models of hyperammonemia and the effect of sodium benzoate treatment. Michalak A, et al. **Biochem Med Metab Biol** 1990 Apr;43(2):163-74

Interface-mediated inactivation of pancreatic lipase by a water-reactive compound: 2-sulfobenzoic cyclic anhydride. Moulin A, et al. **Biochemistry** 1989 Jul 25; 28(15):6340-6

Retinoids, sex steroids and glucocorticoids regulate ectocervical cell envelope formation but not the level of the envelope precursor, involucrin. Gorodeski GI, et al. **Differentiation** 1989 Dec;42(2):75-80

Evaluation of genotoxic effects of the herbicide dicamba using in vivo and in vitro test systems. Perocco P, et al. **Environ Mol Mutagen** 1990;15(3):131-5

Retinoids enhance the number of EGF receptors in corneal endothelial cells. Junquéro D, et al. **Exp Eye Res** 1990 Jul; 51(1):49-53

Activation of protein kinase C by an aromatic xenobiotic diacylglycerol analogue. Moorhouse KG, et al. **FEBS Lett** 1989 Oct 9;256(1-2):43-6

Trimebutine maleate has inhibitory effects on the voltage-dependent Ca2+ inward current and other membrane currents in intestinal smooth muscle cells. Shimada T, et al. **Gastroenterol Jpn** 1990 Apr;25(2):175-9

The response of Gluconobacter oxydans to sorbic and benzoic acids. Eyles MJ, et al. **Int J Food Microbiol** 1989 Jul;8(4):335-42

Interactions between inhibition factors on microbial stability of fruit-based systems. Guerzoni ME, et al. **Int J Food Microbiol** 1990 Jan;10(1):1-18

Effect of Zanthoxylum xanthoxyloides and some substituted benzoic acids on glucose-6-phosphate and 6-phosphogluconate dehydrogenases in Hbss red blood cells. Osoba OA, et al. **J Ethnopharmacol** 1989 Nov; 27(1-2):177-83

Signal-regulator interactions. Genetic analysis of the effector binding site of xylS, the benzoate-activated positive regulator of Pseudomonas TOL plasmid meta-cleavage pathway operon. Ramos JL, et al. **J Mol Biol** 1990 Jan 20;211(2):373-82

Inhibition by diacylmethane derivatives of mutagenicity and nucleic acid binding of 2-aminofluorene derivatives. Wang CY, et al. **J Natl Cancer Inst** 1989 Nov 15;81(22):1743-7

Contribution of peripheral opioid receptors to the trimebutine-induced contractions of the proximal colon in anesthetized rats. Nagasaki M, et al. **Nippon Heikatsukin Gakkai Zasshi** 1989 Feb;25(1):27-30

THERAPEUTIC USE

New fabrics to offer increased protection from the sun [news] **Oncology (Williston Park)** 1990 Mar;4(3):72

Identification of benzoylcarnitine in the urine of a patient of hyperammonemia. Sakuma T, et al. **Tohoku J Exp Med** 1989 Oct;159(2):147-51

[Cordylobia anthropophaga furuncular myiasis. Efficacy of a lindane-amyleine-chlorhydrate combination (letter)] Marty P, et al. **Presse Med** 1990 Jun 23;19(25):1196 **(Fre)**

[An autopsied case of type II citrullinemia--transient effectiveness with either citrate or benzoate to the consciousness disturbance] Ujihira N, et al. **Rinsho Shinkeigaku** 1989 Apr;29(4):436-41 (26 ref.) (Eng. Abstr.) **(Jpn)**

TOXICITY

Comparative teratogenicity of three retinoids: the arotinoids Ro 13-7410, Ro 13-6298 and Ro 15-1570. Kistler A, et al. **Arch Toxicol** 1990;64(1):43-8

Effect of herbicide banvel on rabbit vaginal mucus membrane. Agnihotri PK, et al. **Indian J Exp Biol** 1989 Dec;27(12):1090-1

Hepatic studies of intraperitoneally administered tris(2-ethyl hexyl)trimellitate (TOTM) and di(2-ethyl hexyl)phthalate in rats. Rathinam K, et al. **J Appl Toxicol** 1990 Feb; 10(1):39-41

[The toxicologic characteristics of a new SAKAP-based benzyl benzoate ointment] Sokolova TV, et al. **Vestn Dermatol Venerol** 1989;(9):21-6 (Eng. Abstr.) **(Rus)**

BENZOCAINE

ADMINISTRATION & DOSAGE

Topical pharyngeal anesthesia for easing endoscopy: a double-blind, randomized, placebo-controlled study. Lachter J, et al. **Gastrointest Endosc** 1990 Jan-Feb; 36(1):19-21

[A method of increasing the effectiveness of anti-ulcer therapy] Mysh VG, et al. **Klin Med (Mosk)** 1989 Oct; 67(10):66-8 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Methemoglobinemia from topical benzocaine. Grum DF, et al. **Cleve Clin J Med** 1990 Jun;57(4):357-9

Chemical, pharmaceutical and clinical standardization of the TRUE Test caine mix. Kreilgård B, et al. **Contact Dermatitis** 1989 Jul;21(1):23-7

Methemoglobinemia as a complication of 20% benzocaine spray for endoscopy. Collins JF. **Gastroenterology** 1990 Jan; 98(1):211-3

Methemoglobinemia in a neonate due to topical benzocaine cream [letter] Thomas SG, et al. **J Perinatol** 1989 Sep; 9(3):361-2

Toxic methemoglobinemia [published erratum appears in J Tenn Med Assoc 1990 Feb;83(2):100] Wilson G, et al. **J Tenn Med Assoc** 1989 Nov;82(11):581-3

[Methemoglobinemia in newborn infants after using almagel] Samsygina GA, et al. **Gematol Transfuziol** 1989 Nov; 34(11):57-9 **(Rus)**

ANALOGS & DERIVATIVES

Long-lasting epidural sensory blockade by n-butyl p-aminobenzoate in the dog: neurotoxic or local anesthetic effect? Korsten HH, et al. **Anesthesiology** 1990 Sep; 73(3):491–8

PHARMACOKINETICS

Solvent interaction with polydimethylsiloxane membranes and its effects on benzocaine solubility and diffusion. Gelotte KM, et al. **Pharm Res** 1990 May;7(5):523–9

PHARMACOLOGY

Gastric pH after cetacaine spray [letter] Agarwal VP. **Am J Gastroenterol** 1990 Sep;85(9):1199

The efficacy of ceruminolytics [letter; comment] Freedman A. **J Otolaryngol** 1990 Apr;19(2):150–1 Comment on: J Otolaryngol 1989 Oct;18(6):263–7.

THERAPEUTIC USE

Hot oil in the ears [letter] Truitt CF. **Pediatr Infect Dis J** 1990 Mar;9(3):224

[The effect of almagel on euphylline absorption in children with bronchial asthma] Smirnov DP, et al. **Farmakol Toksikol** 1989 Nov–Dec;52(6):82–3 (Eng. Abstr.) **(Rus)**

[The effect of almagel, gastrotsepin and food on the acidity and protease activity of the stomach and duodenum in peptic ulcer] Mysh VG, et al. **Ter Arkh** 1989;61(8):62–5 (Eng. Abstr.) **(Rus)**

BENZOCYCLOHEPTENES

CHEMICAL SYNTHESIS

(R)- and (S)-5,6,7,8-tetrahydro-1-hydroxy-N,N-dipropyl-9H-benzocyclohepten- 8-ylamine. Stereoselective interactions with 5-HT1A receptors in the brain. Liu Y, et al. **J Med Chem** 1989 Oct;32(10):2311–8

BENZODIAZEPINE TRANQUILIZERS

Are there differences in the dependence potential of benzodiazepines? [letter] Müller WE. **Acta Psychiatr Scand** 1989 Nov;80(5):526

Does routine screening for benzodiazepines help to diagnose dependence in psychiatric inpatients? Priebe S, et al. **Acta Psychiatr Scand** 1989 Nov;80(5):514–7

Benzodiazepines: reconsidered. Miller NS, et al. **Adv Alcohol Subst Abuse** 1990;8(3–4):67–84 (55 ref.)

Addiction potential of benzodiazepines and non-benzodiazepine anxiolytics. Roache JD. **Adv Alcohol Subst Abuse** 1990;9(1–2):103–28 (30 ref.)

Premedication with temazepam in minor surgery. The relationship between plasma concentration and clinical effect after a dose of 40 mg. Ratcliff A, et al. **Anaesthesia** 1989 Oct;44(10):812–5

Benzodiazepine use [letter] England P. **Aust Fam Physician** 1990 May;19(5):782

Detection of intravenous drug use [letter; comment] Farrell M, et al. **BMJ** 1990 Mar 3;300(6724):612–3 Comment on: BMJ 1990 Jan 27;300(6719):219–23.

Buprenorphine and temazepam—abuse. Hammersley R, et al. **Br J Addict** 1990 Feb;85(2):301–3

Benzodiazepine addiction in heroin addicts [letter; comment] Huws R. **Br J Psychiatry** 1989 Jun;154:886 Comment on: Br J Psychiatry 1989 Mar;154:360–3.

Prevalence of benzodiazepine abuse and dependence in psychiatric in-patients with different nosology. An assessment of hospital-based drug surveillance data. Schmidt LG, et al. **Br J Psychiatry** 1989 Jun;154:839–43

The damnation of benzodiazepines [see comments] Taylor FK. **Br J Psychiatry** 1989 May;154:697–704 (45 ref.) Comment in: Br J Psychiatry 1989 Aug;155:268. Comment in: Br J Psychiatry 1989 Sep;155:421–2. Comment in: Br J Psychiatry 1989 Nov;155:717. Comment in: Br J Psychiatry 1990 Feb;156:278–9.

Opiate dependence—the role of benzodiazepines. Navaratnam V, et al. **Curr Med Res Opin** 1990; 11(10):620–30

Abuse liability and the regulatory control of therapeutic drugs: untested assumptions. Woods JH. **Drug Alcohol Depend** 1990 Apr;25(2):229–33

Kuwait drug addiction scene: a changing pattern? Bilal AM. **Int J Addict** 1989 Dec;24(12):1137–44

A double-blind comparison of buspirone, clobazam, and placebo in patients with anxiety treated in a general practice setting. Böhm C, et al. **J Clin Psychopharmacol** 1990 Jun; 10(3 Suppl):38S–42S

Cognitive cues for use in a case of amphetamine sulfate abuse. O'Connor KP, et al. **J Nerv Ment Dis** 1990 Apr; 178(4):271–2

The contemporary alcoholic. Miller NS, et al. **N J Med** 1990 Jan;87(1):35–9

Benzodiazepines: additional effects of the triplicate program. **N Y State J Med** 1990 May;90(5):273–5

The association between non-recreational benzodiazepine use and other substance abuse. Cottler LB. **NIDA Res Monogr** 1989;95:370–1

Relative abuse liability of benzodiazepines in methadone maintained populations in three cities. Iguchi MY, et al. **NIDA Res Monogr** 1989;95:364–5

Substitution of temazepam and midazolam in pentobarbital-dependent rats. Yutrzenka GJ, et al. **Physiol Behav** 1989 Jul;46(1):55–60

Benzodiazepine dependence. Holden J. **Practitioner** 1989 Nov 8;233(1478):1479–80, 1483

The natural history of tolerance to the benzodiazepines. Higgitt A, et al. **Psychol Med Monogr Suppl** 1988;13:1–55

Interactions between alcohol and benzodiazepines. Hollister LE. **Recent Dev Alcohol** 1990;8:233–9 (22 ref.)

A physician's guide to discontinuing benzodiazepine therapy. DuPont RL. **West J Med** 1990 May;152(5):600–3

[Long-term benzodiazepine medication] Wendland KL, et al. **Psychiatr Prax** 1989 Sep;16(5):182–8 (Eng. Abstr.) **(Ger)**

[Benzodiazepines: patterns of use, tolerance and dependence] Bernik MA, et al. **Arq Neuropsiquiatr** 1990 Mar;48(1):131–7 (52 ref.) (Eng. Abstr.) **(Por)**

ADMINISTRATION & DOSAGE

Advising patients on their benzodiazepine use [letter] Morrice A, et al. **Br J Gen Pract** 1990 Feb;40(331):83

Depressive stupor treated with intramuscular chlordesmethyldiazepam [letter] Benazzi F. **Can J Psychiatry** 1990 Apr;35(3):282

Benzodiazepine prescriptions and therapist non-compliance. Geiselmann B, et al. **Eur Arch Psychiatry Neurol Sci** 1989; 239(3):180–7

Triplicate prescription forms: regulatory considerations. Blum RS. **Hosp Pract [Off]** 1990 Sep;25 Suppl 3:35–44; discussion 45–6

Effectiveness of bromazepam in children with complex partial seizures. Nakamigawa T, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):495–7

Benzodiazepine withdrawal [letter; comment] Elcock P. **Lancet** 1989 Dec 9;2(8676):1402 Comment on: Lancet 1989 Oct 21;2(8669):986–7.

Patients' attitudes to benzodiazepine dependence. Hamilton I. **Practitioner** 1989 May 22;233(1469):722, 725

[Patient information might reduce the use of benzodiazepines in general practice] Andreasen CM, et al. **Ugeskr Laeger** 1989 Nov 6;151(45):2968–70 (Eng. Abstr.) **(Dan)**

[Prescription of benzodiazepine sedatives in general practice] Holm M. **Ugeskr Laeger** 1990 Jul 9;152(28):2026–8 (Eng. Abstr.) **(Dan)**

[Premedication in children—a clinical trial of bromazepam and chloral hydrate suppositories] Shimoyama M, et al. **Masui** 1990 Jan;39(1):64–9 (Eng. Abstr.) **(Jpn)**

[Tolerance of classic 1,4-benzodiazepines] Nowakowska E, et al. **Pol Tyg Lek** 1988 Dec 19–26;43(51–52):1650–2 **(Pol)**

ADVERSE EFFECTS

Benzodiazepine withdrawal and rebound insomnia [letter; comment] Morgan K, et al. **Acta Psychiatr Scand** 1989 Sep; 80(3):297–8 Comment on: Acta Psychiatr Scand 1988 Dec;78(6):706–11.

Impact of media on drug consumption. Toutoungi M. **Agressologie** 1989 Oct–Nov;30(9–10):545–6

Rebound insomnia: its determinants and significance. Roehrs T, et al. **Am J Med** 1990 Mar 2;88(3A):39S–42S (30 ref.)

Benzodiazepine withdrawal: a pilot comparison of three methods. Fraser D, et al. **Br J Clin Psychol** 1990 May;29 (Pt 2):231–3

Chronic benzodiazepine dependence. A comparative study of abrupt withdrawal under propranolol cover versus gradual withdrawal. Cantopher T, et al. **Br J Psychiatry** 1990 Mar;156:406–11

The damnation of benzodiazepines [letter; comment] Elliot-Baker SJ, et al. **Br J Psychiatry** 1990 Feb;156:278–9 Comment on: Br J Psychiatry 1989 May;154:697–704.

Congenital malformations and maternal consumption of benzodiazepines: a case-control study. Laegreid L, et al. **Dev Med Child Neurol** 1990 May;32(5):432–41

Motor phenomena in benzodiazepine withdrawal. Rapport DJ, et al. **Hosp Community Psychiatry** 1989 Dec; 40(12):1277–9

Temazepam withdrawal in elderly hospitalized patients: a double blind randomised trial comparing abrupt versus gradual withdrawal. Tham TC, et al. **Br J Med Sci** 1989 Dec;158(12):294–9

The Benzodiazepine Withdrawal Symptom Questionnaire. Tyrer P, et al. **J Affective Disord** 1990 May;19(1):53–61

Photo-onycholysis caused by clorazepate dipotassium. Torras H, et al. **J Am Acad Dermatol** 1989 Dec;21(6):1304–5

A clinical scale to assess benzodiazepine withdrawal. Busto UE, et al. **J Clin Psychopharmacol** 1989 Dec;9(6):412–6

Teratogenic effects of benzodiazepine use during pregnancy [letter] Bergman U, et al. **J Pediatr** 1990 Mar;116(3):490–2

Benzodiazepines: tolerance, dependence, abuse, and addiction. Miller NS, et al. **J Psychoactive Drugs** 1990 Jan–Mar;22(1):23–33 (85 ref.)

Management of benzodiazepine withdrawal [letter; comment] Hamilton I. **J R Coll Gen Pract** 1989 Jul;39(324):304–5 Comment on: J R Coll Gen Pract 1989 Apr;39(321):160–3.

The benzodiazepine withdrawal syndrome and its management [see comments] Onyett SR. **J R Coll Gen Pract** 1989 Apr;39(321):160–3 (44 ref.) Comment in: J R Coll Gen Pract 1989 Jul;39(324):304–5.

Preference for alprazolam as opposed to diazepam in benzodiazepine-dependent psychiatric inpatients. Apelt S, et al. **Pharmacopsychiatry** 1990 Mar;23(2):70–5

Long-term use of benzodiazepines [letter; comment] **Postgrad Med** 1990 Jun;87(8):31, 34 Comment on: Postgrad Med 1990 Jan;87(1):187–203.

Benzodiazepine dependence and the problems of withdrawal. Edwards JG, et al. **Postgrad Med J** 1990;66 Suppl 2:S27–35 (94 ref.)

Benzodiazepine dependence: management of discontinuation. Rickels K, et al. **Psychopharmacol Bull** 1990;26(1):63–8 (18 ref.)

[Confusion induced by the combination cimetidine-benzodiazepine; apropos of a case report] Bouden A, et al. **Tunis Med** 1990 Jan;68(1):63–4 (Eng. Abstr.) **(Fre)**

[Side effects caused by benzodiazepines and sedating neuroleptics—results of comprehensive hospital drug monitoring] Blatter M, et al. **Verh Dtsch Ges Inn Med** 1989; 95:699–704 **(Ger)**

ANALYSIS

Fly larvae and their relevance in forensic toxicology. Kintz P, et al. **Am J Forensic Med Pathol** 1990 Mar;11(1):63–5

ANTAGONISTS & INHIBITORS

Antagonism of benzodiazepine-fentanyl anaesthesia with flumazenil. Kaukinen S, et al. **Can J Anaesth** 1990 Jan; 37(1):40–5

Reversal of benzodiazepine side effects with flumazenil [letter] [published erratum appears in Clin Radiol 1990 Apr;41(4):294] Nicholson AA. **Clin Radiol** 1989 Nov; 40(6):653

[Benzodiazepine antagonists in the treatment of heptic encephalopathy] Ferenci P, et al. **Leber Magen Darm** 1989 Dec;19(6):322–5 (11 ref.) (Eng. Abstr.) **(Ger)**

BLOOD

Analysis of benzodiazepines and tricyclic antidepressants in serum using a common solid-phase clean-up and a common mobile phase. Mazhar M, et al. **J Chromatogr** 1989 Dec 29;497:201–12

Determination of an oxadiazole-substituted 1,4-benzodiazepine in plasma by high-performance liquid chromatography with ultraviolet detection and by a radioreceptor assay. Nordholm L, et al. **J Chromatogr** 1989 Sep 29;494:257–65

[Determination of unchanged clobazam in plasma by gas-liquid chromatography] Marliac Y, et al. **Ann Pharm Fr** 1989;47(4):213–20 (Eng. Abstr.) **(Fre)**

METABOLISM

Transfer of metaclazepam and its metabolites into breast milk. Schotter A, et al. **Arzneimittelforschung** 1989 Nov; 39(11):1468–70

Cytochrome P450IIIA enzymes in rat liver microsomes: involvement in C3-hydroxylation of diazepam and nordazepam but not N-dealkylation of diazepam and temazepam. Reilly PE, et al. **Mol Pharmacol** 1990 May; 37(5):767–74

Brain concentrations of benzodiazepines are elevated in an animal model of hepatic encephalopathy. Basile AS, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5263–7

[Benzodiazepine receptor in the central nervous system and its natural and synthetic agonists and antagonists. Clinical uses] Feldman R. **Pol Arch Med Wewn** 1988 May; 79(5):283–7 (26 ref.) **(Pol)**

PHARMACOKINETICS

The clinical pharmacokinetics of single doses of estazolam. Gustavson LE, et al. **Am J Med** 1990 Mar 2;88(3A):2S–5S

Pharmacokinetic modeling of ethyl loflazepate (Victan) and its main active metabolites. Ba BB, et al. **Ann Biomed Eng** 1989;17(6):633–46

Urine analysis for benzodiazepines among opiate consumers. Ladewig D, et al. **Drug Alcohol Depend** 1990 Apr; 25(2):145–8

Plasma and cerebrospinal fluid concentration of temazepam following oral drug administration. Badcock NR, et al. **Eur J Clin Pharmacol** 1990;38(2):153–5

Plasma levels and urinary excretion of lormetazepam in patients with liver cirrhosis and in healthy volunteers. Hildebrand M, et al. **Eur J Drug Metab Pharmacokinet** 1990 Jan–Mar;15(1):19–26

Generics in benzodiazepine therapy. Mann RJ. **Hosp Pract [Off]** 1990 Sep;25 Suppl 3:24–31; discussion 32–4 (15 ref.)

Minimal biliary excretion and enterohepatic recirculation of lormetazepam in man as investigated by a new nasobiliary drainage technique. Heilstern A, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 Jun;28(6):256–61

Implications of altered drug disposition in the elderly: studies of benzodiazepines. Greenblatt DJ, et al. **J Clin Pharmacol** 1989 Oct;29(10):866–72 (88 ref.)

Quazepam: hypnotic efficacy and side effects. Kales A. **Pharmacotherapy** 1990;10(1):1–10; discussion 10–2 (137 ref.)

[Benzodiazepines and liver diseases. Pharmacokinetics and pharmacodynamic effects] Antoni M, et al. **Gastroenterol Clin Biol** 1990;14(5):492–500 (77 ref.) **(Fre)**

PHARMACOLOGY

Distinct actions of alcohols, barbiturates and benzodiazepines on GABA-activated chloride channels. Harris RA. **Alcohol** 1990 May-Jun;7(3):273-5 (19 ref.)

Effects of acute barbiturate administration, tolerance and dependence on brain GABA system: comparison to alcohol and benzodiazepines. Yu S, et al. **Alcohol** 1990 May-Jun; 7(3):261-72 (157 ref.)

Neurochemical and pharmacokinetic correlates of the clinical action of benzodiazepine hypnotic drugs. Greenblatt DJ, et al. **Am J Med** 1990 Mar 2;88(3A):18S-24S (71 ref.)

Benzodiazepines, breathing, and sleep. Guilleminault C. **Am J Med** 1990 Mar 2;88(3A):25S-28S (17 ref.)

Hypnotics and behavior. Roth T, et al. **Am J Med** 1990 Mar 2;88(3A):43S-46S (28 ref.)

Benzodiazepines and human memory: a review. Ghoneim MM, et al. **Anesthesiology** 1990 May;72(5):926-38 (113 ref.)

Pharmacogenetic analysis of mechanisms of emotional stress: effects of benzodiazepines. Seredenin SB, et al. **Ann Ist Super Sanita** 1990;26(1):81-7

Benzodiazepines facilitate the stimulatory action of gamma-aminobutyric acid (GABA) on basal and veratridine-evoked catecholamine release from cultured bovine adrenal chromaffin cells. Kitayama S, et al. **Arch Int Pharmacodyn Ther** 1989 Jul-Aug;300:254-64

A new psychoactive 5H-2,3-benzodiazepine with a unique spectrum of activity. Horváth K, et al. **Arzneimittelforschung** 1989 Aug;39(8):894-9

Effect of flutoprazepam on skills essential for driving motor vehicles. Moser L, et al. **Arzneimittelforschung** 1990 May; 40(5):533-5

Benzodiazepine receptor ligand influences on acquisition: suggestion of an endogenous modulatory mechanism mediated by benzodiazepine receptors. Izquierdo I, et al. **Behav Neural Biol** 1990 Jul;54(1):27-41

Effect of temazepam on blood pressure regulation in healthy elderly subjects. Ford GA, et al. **Br J Clin Pharmacol** 1990 Jan;29(1):61-7

Convulsions induced by centrally administered NMDA in mice: effects of NMDA antagonists, benzodiazepines, minor tranquilizers and anticonvulsants. Moreau JL, et al. **Br J Pharmacol** 1989 Nov;98(3):1050-4

Lorazepam discontinuation promotes 'inverse agonist' effects of benzodiazepines. Schatzki A, et al. **Br J Pharmacol** 1989 Oct;98(2):451-4

Effects of benzodiazepines and non-benzodiazepine compounds on the GABA-induced response in frog isolated sensory neurones. Yakushiji T, et al. **Br J Pharmacol** 1989 Nov;98(3):735-40

Benzodiazepines and synaptic processing in the spatial domain within the cat's primary somatosensory cortex. Oka JI, et al. **Can J Physiol Pharmacol** 1990 Aug;68(8):1025-40

Halothane-sparing effect of benzodiazepines in ponies. Matthews NS, et al. **Cornell Vet** 1990 Jul;80(3):259-65

Patient experiences during respirator treatment [letter; comment] Willatts S, et al. **Crit Care Med** 1990 Feb; 18(2):249 Comment on: Crit Care Med 1989 Jan;17(1):22-5.

Differential interactions of Ro 15-4513 with benzodiazepines, ethanol and pentobarbital. Deacon RM, et al. **Eur J Pharmacol** 1990 May 16;180(2-3):283-90

Effects of seganserin, a 5-HT2 antagonist, and temazepam on human sleep stages and EEG power spectra. Dijk DJ, et al. **Eur J Pharmacol** 1989 Nov 21;171(2-3):207-18

Behavioral differentiation of benzodiazepine ligands after repeated administration in baboons. Sannerud CA, et al. **Eur J Pharmacol** 1989 Aug 29;167(3):333-43

Electrophysiological studies with a 2,3-benzodiazepine muscle relaxant: GYKI 52466. Tarnawa I, et al. **Eur J Pharmacol** 1989 Aug 22;167(2):193-9

The effects of clozapine on rat mast cells are different from those of benzodiazepines. Sano T, et al. **Gen Pharmacol** 1990;21(4):559-61

Ventilatory response to single, high dose estazolam in healthy humans. Skatrud JB, et al. **J Clin Pharmacol** 1990 Jun; 30(6):543-8

Use of auditory evoked responses as a measure of recovery from benzodiazepine sedation. Milligan KR, et al. **J R Soc Med** 1989 Oct;82(10):595-7

Two kinds of spatiotemporal EEG changes after discontinuation of benzodiazepine, medazepam. Manmaru S, et al. **Jpn J Psychiatry Neurol** 1990 Mar;44(1):85-90

Cerebral-activating (EEG) properties of two inverse agonists and of an antagonist at the benzodiazepine receptor in the rat. Santucci V, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jul; 340(1):93-100

Short-term effects of temazepam in the EEGs of healthy volunteers. Janssen FH, et al. **Neuropsychobiology** 1989; 22(2):72-6

Benzodiazepine-like behavioral effects following withdrawal from chronic delta-9-tetrahydrocannabinol administration in rats. Holson RR, et al. **Neurotoxicology** 1989 Fall; 10(3):605-19

Benzodiazepines impair a behavioral effect induced by stimulation of 5-HT1B receptors. Francès H, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):841-5

A new sensitive method which unlike the Vogel test detects the anxiolytic effect of tofisopam. Miklya I, et al. **Pol J Pharmacol Pharm** 1988 Nov-Dec;40(6):561-72

Mitochondrial benzodiazepine receptors regulate steroid biosynthesis. Mukhin AG, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9813-6

Benzodiazepine anti-conflict effects in Maudsley reactive (MR/Har) and non-reactive (MNRA/Har) rats. Commissaris RL, et al. **Psychopharmacology (Berl)** 1990; 100(3):287-92

A theory of benzodiazepine dependence that can explain whether flumazenil will enhance or reverse the phenomena. File SE, et al. **Psychopharmacology (Berl)** 1990; 101(4):525-32

Benzodiazepines and caffeine: effect on daytime sleepiness, performance, and mood. Johnson LC, et al. **Psychopharmacology (Berl)** 1990;101(2):160-7

Differential effects of six structurally related benzodiazepines on some ethological measures of timidity, aggression and locomotion in mice. Krsiak M, et al. **Psychopharmacology (Berl)** 1990;101(3):396-402

Age-related increase in CNS sensitivity to benzodiazepines as assessed by task difficulty. Nikaido AM, et al. **Psychopharmacology (Berl)** 1990;100(1):90-7

Tolerance to the anticonvulsant effect of benzodiazepines. Haigh JR, et al. **Trends Pharmacol Sci** 1988 Oct;9(10):361-6 (38 ref.)

[Beta activation following the intravenous administration of benzodiazepines and the specific antagonist flumazenil (Ro 15-1788)] Suttmann H, et al. **EEG EMG** 1990 Mar; 21(1):20-8 (Eng. Abstr.) **(Ger)**

[Comparative evaluation of anticonvulsant and anti-arrhythmic effects of phenazepam, a benzodiazepine receptor agonist] Voronina TA, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):158-61 (Eng. Abstr.) **(Rus)**

[A pharmacological analysis of the anxiolytic action of derivations of benzodiazepine, GABA and beta-carboline in various tests of tension reaction] Talalaenko AN. **Farmakol Toksikol** 1989 Nov-Dec;52(6):26-9 (Eng. Abstr.) **(Rus)**

POISONING

Differential diagnostic value and influence on EEG of Anexate (Flumazenil, Ro 15-1788) in benzodiazepine-intoxication. A case report. Gijsenbergh FP, et al. **Acta Anaesthesiol Belg** 1989;40(2):127-9

[A drowsy child: benzodiazepine poisoning?] van Gelderen CE, et al. **Ned Tijdschr Geneeskd** 1989 Sep 2; 133(35):1749-51 (Eng. Abstr.) **(Dut)**

[Flumazepil (Anexate) in the treatment of acute benzodiazepine poisoning. Preliminary report] Feldman R, et al. **Pol Arch Med Wewn** 1988 May;79(5):233-7 (Eng. Abstr.) **(Pol)**

[Significance of flumazenil in acute benzodiazepine poisoning] del Busto Prado F, et al. **Med Clin (Barc)** 1990 Apr 28;94(16):616-8 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Critical issues in the management of insomnia: investigators report on estazolam. Proceedings of a symposium. June 3, 1989, Dallas, Texas. **Am J Med** 1990 Mar 2; 88(3A):1S-48S

Sleep disorders and their management. Special considerations in the elderly. Gottlieb GL. **Am J Med** 1990 Mar 2; 88(3A):29S-33S (50 ref.)

Efficacy of estazolam. The United States clinical experience. Pierce MW, et al. **Am J Med** 1990 Mar 2;88(3A):6S-11S

Safety of estazolam. The United States clinical experience. Pierce MW, et al. **Am J Med** 1990 Mar 2;88(3A):12S-17S

Role of hypnotic drugs in general practice. Walsh JK, et al. **Am J Med** 1990 Mar 2;88(3A):34S-38S (15 ref.)

Use of benzodiazepines by alcoholics [letter; comment] Lydiard RB. **Am J Psychiatry** 1990 Jan;147(1):128-9 Comment on: Am J Psychiatry 1989 May;146(5):683-4.

Catatonia: a new indication for benzodiazepines? [comment] Fricchione G. **Biol Psychiatry** 1989 Dec;26(8):761-5 (31 ref.) Comment on: Biol Psychiatry 1989 Dec;26(8):842-6.

Benzodiazepines and catatonia: an overview [see comments] Menza MA, et al. **Biol Psychiatry** 1989 Dec;26(8):842-6 (37 ref.) Comment in: Biol Psychiatry 1989 Dec;26(8):761-5.

Benzodiazepines and catatonia [letter] Panzer M, et al. **Biol Psychiatry** 1990 Jul 15;28(2):178-9

Benzodiazepine research: current findings and practical consequences. Hayward P, et al. **Br J Clin Psychol** 1989 Nov;28 (Pt 4):307-27 (110 ref.)

Long term use of benzodiazepines: the views of patients. King MB, et al. **Br J Gen Pract** 1990 May;40(334):194-6

Characteristics of long-term benzodiazepine users [letter] McColl AJ. **Br J Gen Pract** 1990 Mar;40(332):124-5

Controlled comparison of the characteristics of long-term benzodiazepine users in general practice. Simpson RJ, et al. **Br J Gen Pract** 1990 Jan;40(330):22-6

Patterns of benzodiazepine use in Great Britain as measured by a general population survey. Dunbar GC, et al. **Br J Psychiatry** 1989 Dec;155:836-41

Behaviour therapy and benzodiazepines: allies or antagonists? Wardle J. **Br J Psychiatry** 1990 Feb;156:163-8 (30 ref.)

A psychopharmacologist's perspective on panic disorder. Rosenbaum JF. **Bull Menninger Clin** 1990 Spring; 54(2):184-98 (45 ref.)

Utilization of benzodiazepines in Chile during 1982-1986. Ruiz I, et al. **Eur J Clin Pharmacol** 1989;37(2):139-43

Benzodiazepine hypnotics and insomnia. Kales A. **Hosp Pract [Off]** 1990 Sep;25 Suppl 3:7-21; discussion 22-3 (103 ref.)

A short term open clinical trial of clobazam in the treatment of patients with panic attacks. Judd FK, et al. **Int Clin Psychopharmacol** 1989 Oct;4(4):285-93

Estazolam and flurazepam: a multicenter, placebo-controlled comparative study in outpatients with insomnia. Scharf MB, et al. **J Clin Pharmacol** 1990 May;30(5):461-7

High-potency benzodiazepines: emerging uses in psychiatry. Educational symposium. January 20, 1900, Boston. Proceedings. **J Clin Psychiatry** 1990 May;51 Suppl:1-53

Emerging uses for high-potency benzodiazepines in psychotic disorders. Bodkin JA. **J Clin Psychiatry** 1990 May;51 Suppl:41-6; discussion 50-3 (66 ref.)

Long-term management of panic disorder. Pollack MH. **J Clin Psychiatry** 1990 May;51 Suppl:11-3; discussion 50-3 (12 ref.)

High-potency benzodiazepines for short-term management of panic disorder: the U.S. experience. Tesar GE. **J Clin Psychiatry** 1990 May;51 Suppl:4-10; discussion 50-3 (59 ref.)

Newly marketed medications: ABCs and mind your Qs [editorial] Shader RI, et al. **J Clin Psychopharmacol** 1990 Apr;10(2):81-2

Etizolam in the treatment of generalized anxiety disorder: a controlled clinical trial. Bertolino A, et al. **J Int Med Res** 1989 Sep-Oct;17(5):455-60

Prescription of benzodiazepines in a London teaching hospital. Shan K, et al. **J R Soc Med** 1990 May;83(5):306-7

Quazepam: a new hypnotic. **Med Lett Drugs Ther** 1990 Apr 20;32(816):39-40

Two responses to Dr. Nemeroff's article [letter] **N C Med J** 1990 Aug;51(8):423-4, 426

Can buspirone substitute for benzodiazepines in all anxious patients? Wang RI, et al. **NIDA Res Monogr** 1989;95:433-4

Use and misuse of benzodiazepines in the elderly. Burch EA Jr. **Psychiatr Med** 1990;8(2):97-105 (26 ref.)

Benzodiazepine augmentation of neuroleptic treatment in patients with schizophrenia. Pato CN, et al. **Psychopharmacol Bull** 1989;25(2):263-6

Benzodiazepine receptor subtypes and their possible clinical significance. Sieghart W. **Psychopharmacol Ser** 1989; 7:131-7 (33 ref.)

Bromazepam in generalized anxiety. Randomized, multi-practice comparisons with both chlorprothixene and placebo. Kragh-Sørensen P, et al. **Psychopharmacology (Berl)** 1990;100(3):383-6

[General practitioners' training in psychiatry and prescription of psychotropic drugs. 2. Attitudes of physicians to training in psychotherapy and the extent of their prescriptions] Holm M. **Ugeskr Laeger** 1990 Aug 6;152(32):2288-90 (Eng. Abstr.) **(Dan)**

[The use of flumazenil at a pediatric surgical resuscitation unit] Sfez M, et al. **Can Anesthesiol** 1989 Oct;37(6):439-41 **(Fre)**

[Potassium chlorazepate administered orally in alcoholic detoxification] Roussaux JP, et al. **J Pharm Belg** 1989 May-Jun;44(3):192-6 (Eng. Abstr.) **(Fre)**

[The influence of premedication with dipotassium chlorazepate on preoperative stress and postoperative pain] Tolksdorf W, et al. **Anaesthesist** 1990 Jan;39(1):1-5 (Eng. Abstr.) **(Ger)**

[What is social pharmacology, what are its goals?] von Ferber L. **Off Gesundheitswes** 1989 Oct;51(10):585-91 (Eng. Abstr.) **(Ger)**

[A new group of anxiolytic drugs with a mechanism of action different from that of benzodiazepine derivatives] Kostowski W, et al. **Pol Tyg Lek** 1988 Dec 19-26; 43(51-52):1647-9, 1683 **(Pol)**

[The serotoninergic mechanisms of anxiety and the action of tranquilizers (a review)] Komissarova RA, et al. **Zh Nevropatol Psikhiatr** 1990;90(5):140-4 (78 ref.) **(Rus)**

[Remission of benzodiazepine-resistant delirium tremens after treatment with Laborit's lytic cocktail (letter)] Iruela LM, et al. **Med Clin (Barc)** 1989 Dec 2;93(18):717 **(Spa)**

TOXICITY

Carcinogenicity study of doxefazepam administered in the diet to Sprague-Dawley rats. Borelli G, et al. **Fundam Appl Toxicol** 1990 Jul;15(1):82-92

Effects of buspirone in the benzodiazepine dependent rat. Boisse NR, et al. **NIDA Res Monogr** 1989;95:494

BENZODIAZEPINES

Identification and treatment of benzodiazepine abuse. Miller NS, et al. **Am Fam Physician** 1989 Oct;40(4):175-83 (50 ref.)

Benzodiazepine use and abuse in Canada. Busto U, et al. **Can Med Assoc J** 1989 Nov 1;141(9):917-21

Investigation of interference by nonsteroidal anti-inflammatory drugs in urine tests for abused drugs. Rollins DE, et al. **Clin Chem** 1990 Apr;36(4):602-6

Traffic accidents and drivers suspected for drug influence. Christensen LQ, et al. **Forensic Sci Int** 1990 Apr; 45(3):273-80

Benzodiazepines: a 1990 update. Proceedings of a symposium. January 5, 1990, New York City. **Hosp Pract [Off]** 1990 Sep;25 Suppl 3:1-56

Benzodiazepines: a 1990 update. Proceedings of a symposium. January 5, 1990, New York City. **Hosp Pract [Off]** 1990 Jun;25 Suppl 2:1-52

Education--not legislation--resolves benzodiazepine abuse [editorial] Rodos JJ. **J Am Osteopath Assoc** 1990 Jan;

90(1):26, 30
Anxiety disorders and the use and abuse of drugs. Roth SM. **J Clin Psychiatry** 1989 Nov;50 Suppl:30–5 (11 ref.)
The effect of minimal interventions by general practitioners on long-term benzodiazepine use. Cormack MA, et al. **J R Coll Gen Pract** 1989 Oct;39(327):408–11
The history of benzodiazepine dependence: a review of animal studies. File SE. **Neurosci Biobehav Rev** 1990 Summer;14(2):135–46 (159 ref.)
Quazepam: hypnotic efficacy and side effects. Kales A. **Pharmacotherapy** 1990;10(1):1–10; discussion 10–2 (137 ref.)
But what if a patient gets hooked? Fallacies about long-term use of benzodiazepines [see comments] Talley JH. **Postgrad Med** 1990 Jan;87(1):187–203 (38 ref.) Comment in: Postgrad Med 1990 Jun;87(8):31, 34.
A request for benzodiazepines. Broughton D, et al. **Practitioner** 1989 Sep 22;233(1475):1199–200, 1202

ADMINISTRATION & DOSAGE

Chronic benzodiazepine administration. IV. Rapid development of tolerance and receptor downregulation associated with alprazolam administration. Miller LG, et al. **Biochem Pharmacol** 1989 Nov 1;38(21):3773–7
Benzodiazepine prescribing [letter; comment] **Lancet** 1989 Nov 4;2(8671):1103 Comment on: Lancet 1989 Oct 14;2(8668):917.
Benzodiazepine withdrawal [letter] Jones RS. **Lancet** 1990 Jan 6;335(8680):61
The rational use of narcotic analgesics, benzodiazepines and psychostimulants in medical practice. A response to the paper "Prescribing addictive medication" [comment] Nemeroff CB. **N C Med J** 1990 May;51(5):240–3 (23 ref.) Comment on: N C Med J 1989 Feb;50(2):105.
Early developmental exposure to benzodiazepine ligands alters brain levels of thiobarbituric acid-reactive products in young adult rats. Miranda RC, et al. **Neurochem Res** 1989 Nov;14(11):1119–27
Effects of cannabis smoked together with a substance sold as Mandrax [letter] Wilson D, et al. **S Afr Med J** 1989 Dec 2;76(11):636
Sublingual benzodiazepines can relieve panic rapidly [letter] Grove VE Jr. **Tex Med** 1990 Jan;86(1):10

ADVERSE EFFECTS

Drug development optimization—benzodiazepines. Lader M. **Agents Actions Suppl** 1990;29:59–69 (38 ref.)
Sodium valproate in benzodiazepine withdrawal [letter] Apelt S, et al. **Am J Psychiatry** 1990 Jul;147(7):950–1
Evidence for less improvement in depression in patients taking benzodiazepines during unilateral ECT. Pettinati HM, et al. **Am J Psychiatry** 1990 Aug;147(8):1029–35
Patients withdrawn from benzodiazepines [letter] Livingston MG. **BMJ** 1990 Jun 16;300(6739):1588
The prevention of convulsions during benzodiazepine withdrawals [letter] Scott RT. **Br J Gen Pract** 1990 Jun; 40(335):261
Benzodiazepines and hip fracture [letter; comment] Jacobs J, et al. **JAMA** 1990 Jun 27;263(24):3260–1 Comment on: JAMA 1989 Dec 15;262(23):3303–7.
Benzodiazepines of long and short elimination half-life and the risk of hip fracture [see comments] Ray WA, et al. **JAMA** 1989 Dec 15;262(23):3303–7 Comment in: JAMA 1990 Jun 27;263(24):3260–1.
Benzodiazepines and sexual fantasies. Brahams D. **Lancet** 1990 Jan 20;335(8682):157
Benzodiazepine sex fantasies: acquittal of dentist [news] Brahams D. **Lancet** 1990 Feb 17;335(8686):403–4
Benzodiazepine withdrawal [letter] [see comments] Clark WI. **Lancet** 1989 Oct 21;2(8669):986–7 Comment in: Lancet 1989 Dec 9;2(8676):1402.
Benzodiazepine prescribing [letter] [see comments] Farid BT, et al. **Lancet** 1989 Oct 14;2(8668):917 Comment in: Lancet 1989 Nov 4;2(8671):1103.
[Clinical and therapeutic problems during prolonged treatment with benzodiazepine] Bogetto F, et al. **Minerva Psichiatr** 1990 Jan-Mar;31(1):47–50 (Eng. Abstr.) **(Ita)**
[Use of benzodiazepines. Abstinence phenomena and seponation strategy] Gadeholt G. **Tidsskr Nor Laegeforen** 1990 Mar 10;110(7):857 **(Nor)**

ANALYSIS

On 1,4-benzodiazepines and 1,5-benzodiazocines, XII: Solution-state conformation of KC-2846 and its interaction with hypothetical benzodiazepine receptor groups. Finner E, et al. **Arch Pharm (Weinheim)** 1989 Aug;322(8):507–9
Benzodiazepine-like molecules, as well as other ligands for the brain benzodiazepine receptors, are relatively common constituents of plants. Medina JH, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):547–53
Properties of benzodiazepine binding sites in peripheral blood lymphocytes. Garau L, et al. **J Clin Lab Anal** 1989; 3(6):332–6
Fly larvae: a new toxicological method of investigation in forensic medicine. Kintz P, et al. **J Forensic Sci** 1990 Jan; 35(1):204–7
Benzodiazepine-like substances in mother's milk [letter] [see comments] Dencker SJ, et al. **Lancet** 1990 Feb 17; 335(8686):413 Comment in: Lancet 1990 Apr 14;335(8694):922.
"Natural" benzodiazepines in man [letter; comment] Klotz U. **Lancet** 1990 Apr 14;335(8694):922 Comment on: Lancet 1990 Feb 17;335(8686):413.
Immunocytochemical localization of the endogenous benzodiazepine ligand octadecaneuropeptide (ODN) in the rat brain. Tonon MC, et al. **Neuropeptides** 1990 Jan; 15(1):17–24
[UV-spectrophotometry in drug control. 47. Drug substances with chromophores and auxochromes in cyclic and tricyclic systems (benzodiazepine, dibenzoazepine and dibenzodiazepine)] Kráčmar J, et al. **Pharmazie** 1990 Jun; 45(6):411–3 (Eng. Abstr.) **(Ger)**

ANTAGONISTS & INHIBITORS

Rapid determination of the benzodiazepine antagonist flumazenil, Ro 15-1788, by high performance liquid chromatography. Bun H, et al. **Biomed Chromatogr** 1989 Nov;3(6):269–71
Quantitation of the benzodiazepine antagonist flumazenil in human plasma by gas chromatography-mass spectrometry. Fukuda EK, et al. **J Chromatogr** 1989 Jun 30;491(1):97–106
Benzodiazepine agonist and inverse agonist actions on GABAA receptor-operated chloride channels. I. Acute effects of ethanol. Buck KJ, et al. **J Pharmacol Exp Ther** 1990 May;253(2):706–12
Stress-related changes of benzodiazepine binding inhibitory activity (B.B.I.A.) in humans. Marazziti D, et al. **Life Sci** 1990;46(25):1833–6
Motor performance decrement by midazolam: antagonism by Ro 15-1788 and CGS 8216. Lau CE, et al. **Pharmacol Biochem Behav** 1990 May;36(1):139–43
Methyl beta-carboline-3-carboxylate enhances performance in a multiple-trial learning task in mice. Raffalli-Sebille MJ, et al. **Pharmacol Biochem Behav** 1990 Feb;35(2):281–4
Acute reversal of flunitrazepam effects by Ro 15-1788 and Ro 15-3505: inverse agonism, tolerance, and rebound. Gentil V, et al. **Psychopharmacology (Berl)** 1990;100(1):54–9
Flumazenil—a novel benzodiazepine antagonist [editorial] Mets B. **S Afr Med J** 1990 Jan 20;77(2):59–60
[Clinical pharmacology and therapeutic uses of the specific benzodiazepine antagonist flumazenil] Klotz U. **Anaesthesiol Reanim** 1989;14(6):355–61 (41 ref.) (Eng. Abstr.) **(Ger)**
[Clinical pharmacology of flumazenil—a benzodiazepine receptor antagonist] Janicki P, et al. **Pol Tyg Lek** 1988 Dec 19–26;43(51–52):1653–6 **(Pol)**

BLOOD

Direct automated EMIT d.a.u. analysis of N,N-dimethylformamide-modified serum, plasma, and postmortem blood for benzodiazepines, benzoylecgonine, cannabinoids, and opiates. Blum LM, et al. **J Anal Toxicol** 1989 Sep-Oct;13(5):285–8
Determination of an oxadiazole-substituted 1,4-benzodiazepine in plasma by high-performance liquid chromatography with ultraviolet detection and by a radioreceptor assay. Nordholm L, et al. **J Chromatogr** 1989 Sep 29;494:257–65
High-performance liquid chromatographic procedure for the determination of clozapine, haloperidol, droperidol and several benzodiazepines in plasma. Wilhelm D, et al. **J Chromatogr** 1990 Jan 26;525(1):218–24
[Benzodiazepines in blood samples with 0 alcohol content sent to the Institute of Forensic Chemistry] Worm K, et al. **Ugeskr Laeger** 1990 Sep 3;152(36):2556–8 (Eng. Abstr.) **(Dan)**

CHEMICAL SYNTHESIS

A novel synthesis of pyrimidobenzodiazepines. Długosz A. **Arch Pharm (Weinheim)** 1990 Jan;323(1):59–60
Characterization of benzodiazepine receptors with fluorescent ligands. McCabe RT, et al. **FASEB J** 1990 Aug; 4(11):2934–40
Synthesis and pharmacological evaluation of CNS activities of [1,2,3]triazolo[4,5-b][1,5]-, imidazolo[4,5-b][1,5]-, and pyrido[2,3-b][1,5]benzodiazepines. 10-Piperazinyl-4H-1,2,3-triazolo[4,5-b][1,5]benzodiazepines with neuroleptic activity. Chakrabarti JK, et al. **J Med Chem** 1989 Oct;32(10):2375–81
Development of a high affinity and stereoselective photoaffinity label for the D-1 dopamine receptor: synthesis and resolution of 7-[125I]iodo-8-hydroxy-3-methyl-1-(4'-azidophenyl)-2,3,4,5-tetrahydro-1H-3-benzazepine. Neumeyer JL, et al. **J Med Chem** 1990 Feb;33(2):521–6
Novel benzodiazepine receptor partial agonists: oxadiazolylimidazobenzodiazepines. Watjen F, et al. **J Med Chem** 1989 Oct;32(10):2282–91

DIAGNOSTIC USE

Possible extension of spect cerebral imaging in the investigation of epilepsy using radioiodinated benzodiazepines. Maddalena DJ, et al. **Clin Exp Neurol** 1989;26:151–9

METABOLISM

Transfer of metaclazepam and its metabolites into breast milk. Schotter A, et al. **Arzneimittelforschung** 1989 Nov; 39(11):1468–70
Mapping the benzodiazepine photoaffinity-labelling site with sequence-specific gamma-aminobutyric acidA-receptor antibodies. Stephenson FA, et al. **Biochem J** 1989 Nov 15; 264(1):199–206
Autoradiographic analysis of benzodiazepine binding in entorhinal-kindled rat brains. Nobrega JN, et al. **Brain Res** 1989 Oct 2;498(2):315–22
The role of configuration and conformation in the binding of 2,3-benzodiazepines to human serum albumin. Visy J, et al. **Chirality** 1989;1(4):271–5
Increased density of peripheral benzodiazepine-binding sites in ovarian carcinomas as compared with benign ovarian tumours and normal ovaries. Katz Y, et al. **Clin Sci** 1990 Feb;78(2):155–8
Flunitrazepam photoaffinity labeling of the GABA(A) receptor reduces inhibition of [3H]Ro15-4513 binding by GABA. Borden LA, et al. **Eur J Pharmacol** 1990 Jun 12; 188(6):391–7
Diazepam-insensitive [3H]Ro 15-4513 binding in intact cultured cerebellar granule cells. Malminiemi O, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):53–60
GABAA receptor subtypes: autoradiographic comparison of GABA, benzodiazepine, and convulsant binding sites in the rat central nervous system. Olsen RW, et al. **J Chem Neuroanat** 1990 Jan-Feb;3(1):59–76
In vivo binding to peripheral benzodiazepine binding sites in lesioned rat brain: comparison between [3H]PK11195 and [18F]PK14105 as markers for neuronal damage. Price GW, et al. **J Neurochem** 1990 Jul;55(1):175–85
Diazepam sensitivity of the binding of an imidazobenzodiazepine, [3H]Ro 15-4513, in cerebellar membranes from two rat lines developed for high and low alcohol sensitivity. Uusi-Oukari M, et al. **J Neurochem** 1990 Jun;54(6):1980–7
"Endogenous" benzodiazepine activity in body fluids of patients with hepatic encephalopathy. Mullen KD, et al. **Lancet** 1990 Jul 14;336(8707):81–3
Photoaffinity labeling of [3H]flunitrazepam- and [3H]Ro15-4513-bound pellets in rat cerebral cortex and cerebellum. Chiu TH, et al. **Life Sci** 1989;45(11):1021–8
Stress-related changes of benzodiazepine binding inhibitory activity (B.B.I.A.) in humans. Marazziti D, et al. **Life Sci** 1990;46(25):1833–6
Modeling the benzodiazepine receptor binding site by the general three-dimensional structure-directed quantitative structure-activity relationship method REMOTEDISC. Ghose AK, et al. **Mol Pharmacol** 1990 May;37(5):725–34
Cerebellar GABAA receptor selective for a behavioural alcohol antagonist. Lüddens H, et al. **Nature** 1990 Aug 16; 346(6285):648–51
Endogenous GABAergic modulators in the pathogenesis of hepatic encephalopathy. Rothstein JD, et al. **Neurochem Res** 1990 Feb;15(2):193–7 (49 ref.)

PHARMACOKINETICS

Pharmacokinetics and pharmacodynamics. Greenblatt DJ. **Hosp Pract [Off]** 1990 Jun;25 Suppl 2:9–15; discussion 16–8
[Pharmacokinetics and metabolic investigations of a new, atypical analeptic (GYKI-52322)] Pátfalusi M, et al. **Acta Pharm Hung** 1989;59 Suppl 1:12–20 **(Hun)**

PHARMACOLOGY

Immunomodulator adamantylamide dipeptide antagonizes benzodiazepine-induced rota-rod deficit in mice. Celedová L, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):291–3
Resedation. Whitwam JG. **Acta Anaesthesiol Scand Suppl** 1990;92:70–4 (42 ref.)
Reflex inhibitory action of a non-NMDA type excitatory amino acid antagonist, GYKI 52466. Tarnawa I, et al. **Acta Physiol Hung** 1990;75 Suppl:277–8
The effects of ethanol and Ro 15-4513 on elevated plus-maze and rotarod performance in long-sleep and short-sleep mice. Stinchcomb A, et al. **Alcohol** 1989 Sep-Oct; 6(5):369–76
Mechanistic and functional divergence between thyrotropin-releasing hormone and RO 15-4513 interactions with ethanol. McCown TJ, et al. **Alcoholism (N Y)** 1989 Oct;13(5):660–3
A new psychoactive 5H-2,3-benzodiazepine with a unique spectrum of activity. Horváth K, et al. **Arzneimittelforschung** 1989 Aug;39(8):894–9
Effects of benzodiazepines and non-benzodiazepine compounds on the GABA-induced response in frog isolated sensory neurones. Yakushiji T, et al. **Br J Pharmacol** 1989 Nov;98(3):735–40
Interactions between benzodiazepine antagonists, inverse agonists, and acute behavioral effects of ethanol in mice. Syapin PJ, et al. **Brain Res Bull** 1990 May;24(5):705–9
Stimulation of cell growth and DNA synthesis by peripheral benzodiazepine. Ikezaki K, et al. **Cancer Lett** 1990 Feb; 49(2):115–20
PAF-acether-induced mortality in mice: protection by benzodiazepines. Tannière-Zeller M, et al. **Drugs Exp Clin Res** 1989;15(11–12):553–8
Differential interactions of Ro 15-4513 with benzodiazepines, ethanol and pentobarbital. Deacon RM, et al. **Eur J Pharmacol** 1990 May 16;180(2–3):283–90
The selective CCK-B receptor antagonist L-365,260 enhances morphine analgesia and prevents morphine tolerance in the rat. Dourish CT, et al. **Eur J Pharmacol** 1990 Jan 25;176(1):35–44
The influence of tifluadom on cholecystokinin-induced antinociception. Gericke M, et al. **Eur J Pharmacol** 1990

May 3;180(1):187–90
Relationship of agonist efficacy to changes in GABA sensitivity and anticonvulsant tolerance following chronic benzodiazepine ligand exposure. Hernandez TD, et al. **Eur J Pharmacol** 1989 Nov 7;170(3):145–55
Modulation of GABA-stimulated Cl- flux by a benzodiazepine agonist and an 'inverse agonist' after chronic flurazepam treatment. Ngur DO, et al. **Eur J Pharmacol** 1990 Feb 13;176(3):351–6
Electrophysiological studies with a 2,3-benzodiazepine muscle relaxant: GYKI 52466. Tarnawa I, et al. **Eur J Pharmacol** 1989 Aug 22;167(2):193–9
Reversal of the behavioral and electrophysiological abnormalities of an animal model of hepatic encephalopathy by benzodiazepine receptor ligands. Gammal SH, et al. **Hepatology** 1990 Mar;11(3):371–8
In vitro screening for anticonvulsant-induced teratogenesis in neural primary cultures and cell lines. Regan CM, et al. **Int J Dev Neurosci** 1990;8(2):143–50
Peripheral-acting benzodiazepines inhibit the growth of human melanoma cells and potentiate the antiproliferative activity of recombinant human interferons. Solowey WE, et al. **J Interferon Res** 1990 Jun;10(3):269–80
Neural networks applied to quantitative structure-activity relationship analysis. Aoyama T, et al. **J Med Chem** 1990 Sep;33(9):2583–90 (34 ref.)
Cholecystokinin-A receptor ligands based on the kappa-opioid agonist tifluadom [published erratum appears in J Med Chem 1990 Sep;33(9):2679] Bock MG, et al. **J Med Chem** 1990 Jan;33(1):450–5
Novel GABAA receptor alpha subunit is expressed only in cerebellar granule cells. Kato K. **J Mol Biol** 1990 Aug 5;214(3):619–24
Benzodiazepine agonist and inverse agonist actions on GABAA receptor-operated chloride channels. II. Chronic effects of ethanol. Buck KJ, et al. **J Pharmacol Exp Ther** 1990 May;253(2):713–9
Electrophysiologic effects of ethanol in human brain xenografts in oculo: antagonism by Ro15-4513. Palmer MR, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):1100–6
Different motor actions of dynorphins and nonpeptide kappa opioid receptor agonists in the isolated rat colon. Scheurer U, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1324–30
Tolerance to diazepam and methyl-beta-carboline-3-carboxylate measured in substantia nigra of benzodiazepine tolerant rats. Rosenberg HC, et al. **Life Sci** 1990;46(7):519–25
The intrinsic and interactive effects of RO 15-4513 and ethanol on locomotor activity, body temperature, and blood glucose concentration. Wood AL, et al. **Life Sci** 1989; 45(16):1467–73
Modulatory action of benzodiazepines on human term placental steroidogenesis in vitro. Barnea ER, et al. **Mol Cell Endocrinol** 1989 Jul;64(2):155–9
Molecular determinants of benzodiazepine receptor affinities and anticonvulsant activities. Villar HO, et al. **Mol Pharmacol** 1989 Oct;36(4):589–600
Potent and selective inhibition of HIV-1 replication in vitro by a novel series of TIBO derivatives. Pauwels R, et al. **Nature** 1990 Feb 1;343(6257):470–4
Both systemic and local administration of benzodiazepine agonists inhibit the in vivo release of 5-HT from ventral hippocampus. Pei Q, et al. **Neuropharmacology** 1989 Oct; 28(10):1061–6
Effects of chronic antidepressant and benzodiazepine treatment on corticotropin-releasing-factor receptors in rat brain and pituitary. Grigoriadis DE, et al. **Neuropsychopharmacology** 1989 Mar;2(1):53–60
Effects of ethanol and Ro 15-4513 in an electrophysiological model of anxiolytic action. Coop CF, et al. **Neuroscience** 1990;35(3):669–74
Central-type benzodiazepines and the octadecaneuropeptide modulate the effects of GABA on the release of alpha-melanocyte-stimulating hormone from frog neurointermediate lobe in vitro. Tonon MC, et al. **Neuroscience** 1989;31(2):485–93
Effects of Ro 15-4513 on schedule-controlled responding of pigeons. Delaney D, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):777–80
EEG effects of Ro 15-4513 and FG 7142 alone and in combination with ethanol. Ehlers CL, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):607–11
Attenuation of the biphasic effects of ethanol on avoidance extinction by RO 15-4513 in rats. Galizio M. **Pharmacol Biochem Behav** 1989 Nov;34(3):585–9
The effects of Ro 15-4513 on ethanol-induced taste aversions. Jeffreys RD, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):803–6
Benzodiazepines and their antagonists interfere with opioid-dependent stress-induced analgesia. Rovati LC, et al. **Pharmacol Biochem Behav** 1990 May;36(1):123–6
Antagonism of ethanol-reinforced behavior by the benzodiazepine inverse agonists Ro15-4513 and FG 7142: relation to sucrose reinforcement. Samson HH, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):601–8
Interactions between RO 15-4513 and ethanol on brain self-stimulation and locomotor activity in rats. Schaefer GJ, et al. **Pharmacol Biochem Behav** 1989 Dec;34(4):785–90
Interactions of diazepam and pentobarbital with RO 15-4513 on intracranial self-stimulation discrimination behavior in rats. Schaefer GJ, et al. **Pharmacol Biochem Behav** 1989 Sep;34(1):23–7
Effects of two benzodiazepine inverse agonists, RO 15-4513 and FG 7142, on recovery from pentobarbital and halothane anesthesia in the rat. Weinger MB, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):889–95
Novel benzodiazepine receptor ligands: palatable food intake following zolpidem, CGS 17867A, or Ro23-0364, in the rat. Yerbury RE, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):303–7
A new sensitive method which unlike the Vogel test detects the anxiolytic effect of tofisopam. Miklya I, et al. **Pol J Pharmacol Pharm** 1988 Nov-Dec;40(6):561–72
Ethanol-induced locomotor stimulation in C57BL/6 mice following RO15-4513 administration. Becker HC, et al. **Psychopharmacology (Berl)** 1989;99(3):333–6
Daytime sleepiness, performance, mood, nocturnal sleep: the effect of benzodiazepine and caffeine on their relationship. Johnson LC, et al. **Sleep** 1990 Apr;13(2):121–35
Acute effects of alprazolam and adinazolam on the concentrations of corticotropin-releasing factor in the rat brain. Owens MJ, et al. **Synapse** 1989;4(3):196–202
Ethanol-induced limb defects in mice: effect of strain and Ro15-4513. Zimmerman EF, et al. **Teratology** 1990 Apr; 41(4):453–62
[Flumazenil. A specific benzodiazepine antagonist] Knudsen L, et al. **Ugeskr Laeger** 1989 Sep 4;151(36):2247–50 (Eng. Abstr.) **(Dan)**
[Stress induced change in ACTH plasma levels in rats treated with benzodiazepine derivatives] Dereszlay I, et al. **Acta Pharm Hung** 1989;59 Suppl 1:21–5 **(Hun)**

POISONING

[Value of charcoal by oral route in patients admitted to emergency department for voluntary absorption of benzodiazepines] Bouget J, et al. **J Toxicol Clin Exp** 1989 Jul-Aug;9(4):287–9 **(Fre)**
[Limitations of flumazenil in prehospital practice (letter)] Choux C, et al. **Presse Med** 1990 Apr 14;19(15):719 **(Fre)**
[Benzodiazepine poisoning treated with flumazenil] Crespo Rupérez E, et al. **An Esp Pediatr** 1990 May;32(5):464–5 **(Spa)**

THERAPEUTIC USE

Age-band prevalence rates of long-term benzodiazepine users [letter] Simpson RJ, et al. **Br J Gen Pract** 1990 Apr; 40(333):168–9
Benzodiazepines unabashed [letter; comment] Fernando L. **Br J Psychiatry** 1989 Nov;155:717 Comment on: Br J Psychiatry 1989 May;154:697–704.
The damnation of benzodiazepines [letter; comment] Kerry RJ. **Br J Psychiatry** 1989 Sep;155:421–2 Comment on: Br J Psychiatry 1989 May;154:697–704.
One year follow-up of users of benzodiazepines in general practice. Holm M. **Dan Med Bull** 1990 Apr;37(2):188–91
Pentobarbital and EEG burst suppression in treatment of status epilepticus refractory to benzodiazepines and phenytoin. Van Ness PC. **Epilepsia** 1990 Jan-Feb; 31(1):61–7
Clinical management of anxiety. Bowden CL. **Hosp Pract [Off]** 1990 Jun;25 Suppl 2:19–27; discussion 28–30
Benzodiazepines: a 1990 update. Introduction. Marks J. **Hosp Pract [Off]** 1990 Jun;25 Suppl 2:5–7
Drug treatment of panic disorder. Rosenbaum JF. **Hosp Pract [Off]** 1990 Jun;25 Suppl 2:31–9; discussion 40–2 (33 ref.)
A comparison of two adjunctive treatment strategies in acute mania. Busch FN, et al. **J Clin Psychiatry** 1989 Dec; 50(12):453–5
Two more attacks on HIV [news] **Lancet** 1990 Feb 10; 335(8685):345
Status epilepticus in adults. Brodie MJ. **Lancet** 1990 Sep 1; 336(8714):551–2
Quazepam: a new hypnotic. **Med Lett Drugs Ther** 1990 Apr 20;32(816):39–40
Treatment of hyperkinetic movement disorders. Bressman SB, et al. **Neurol Clin** 1990 Feb;8(1):51–75 (117 ref.)
The role of benzodiazepines in the management of status epilepticus. Treiman DM. **Neurology** 1990 May;40(5 Suppl 2):32–42 (29 ref.)
Benzodiazepines and chronic pain. King SA, et al. **Pain** 1990 Apr;41(1):3–4
Benzodiazepines for anxiety disorders. Are the concerns justified? Rifkin A. **Postgrad Med** 1990 Jan;87(1):209–11, 215–6, 219 (1 ref.)
Reduction in urinary free cortisol during benzodiazepine treatment of panic disorder. Lopez AL, et al. **Psychoneuroendocrinology** 1990;15(1):23–8
[Controlled clinical study on the effect of quazepam versus triazolam in patients with sleep disorders] Altamura AC, et al. **Minerva Psichiatr** 1989 Jul-Sep;30(3):159–64 (Eng. Abstr.) **(Ita)**
[New perspectives in the pharmacologic treatment of anxiety] Rodríguez N. **Rev Clin Esp** 1990 Apr;186(7):SUPPL 3 P. **(Spa)**

URINE

Benzodiazepines in a health-catalog product [letter] DuPont RL, et al. **JAMA** 1990 Aug 8;264(6):695
Immunological screening of benzodiazepines in urine: improved detection of oxazepam intake. Beck O, et al. **Toxicol Lett** 1990 Jun;52(1):7–14

BENZODIAZEPINONES

Does anthramycin bind to Z-DNA as well as to B-DNA? A molecular mechanics study. Rao SN. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):477–83
Two-dimensional NMR studies on the anthramycin-d(ATGCAT)2 adduct. Krugh TR, et al. **Biochemistry** 1989 Dec 26;28(26):9988–94
A theoretical investigation of the sequence specificity in the binding of the antitumor drug anthramycin to DNA. Zakrzewska K, et al. **J Biomol Struct Dyn** 1986 Aug; 4(1):127–36

ADMINISTRATION & DOSAGE

A double-blind comparison of buspirone, clobazam, and placebo in patients with anxiety treated in a general practice setting. Böhm C, et al. **J Clin Psychopharmacol** 1990 Jun; 10(3 Suppl):38S–42S

ADVERSE EFFECTS

Tetrazepam allergy detected by patch test. Camarasa JG, et al. **Contact Dermatitis** 1990 Apr;22(4):246

ANALYSIS

Structure of 9-chloro-7-(2-chlorophenyl)-3,5-dihydro-[1,2,4] triazino[4,3-a][1,4]benzodiazepin-2(1H)-one. Kemmish HJ, et al. **Acta Crystallogr C** 1990 Mar 15;46 (Pt 3):450–3
Pinazepam: analytical study of synthesis, degradation, potential impurities. Oradi E. **Boll Chim Farm** 1989 Sep; 128(9):271–80
Study of the interaction of clobazam with cyclodextrins in solution and in the solid state. Nakai Y, et al. **Chem Pharm Bull (Tokyo)** 1990 Mar;38(3):728–32

BLOOD

Determination of the partial benzodiazepine receptor agonist Ro 16-6028 in plasma by capillary gas chromatography with nitrogen-selective detection after conversion into the ethyl ester derivative. Timm U, et al. **J Chromatogr** 1989 Sep 29;494:119–34
[Determination of unchanged clobazam in plasma by gas-liquid chromatography] Marliac Y, et al. **Ann Pharm Fr** 1989;47(4):213–20 (Eng. Abstr.) **(Fre)**

CHEMICAL SYNTHESIS

A novel synthesis of pyrimidobenzodiazepines. Długosz A. **Arch Pharm (Weinheim)** 1990 Jan;323(1):59–60

DIAGNOSTIC USE

Autoradiographical detection of cholecystokinin-A receptors in primate brain using 125I-Bolton Hunter CCK-8 and 3H-MK-329. Hill DR, et al. **J Neurosci** 1990 Apr; 10(4):1070–81

METABOLISM

PET imaging of human gliomas with ligands for the peripheral benzodiazepine binding site. Junck L, et al. **Ann Neurol** 1989 Dec;26(6):752–8
The non-covalent interaction of pyrrolo[2, 1-c] [1, 4]benzodiazepine-5, 11-diones with DNA. Jones GB, et al. **Anticancer Drug Des** 1990 Aug;5(3):249–64
Cofractionation of the 17-kD PK 14105 binding site protein with solubilized peripheral-type benzodiazepine binding sites. Mukhin AG, et al. **Biochem Pharmacol** 1990 Sep 1; 40(5):983–9
Effect of phenol and sodium octanoate on the astrocyte benzodiazepine receptor. Ducis I, et al. **Brain Res** 1990 Apr 30;514(2):349–51
Metabolism of halazepam by rat liver microsomes: stereoselective formation and N-dealkylation of 3-hydroxyhalazepam. Lu XL, et al. **Chirality** 1990;2(1):1–9
Interactions between nitrogen oxide-containing compounds and peripheral benzodiazepine receptors. Weissman BA, et al. **FEBS Lett** 1990 Jan 29;260(2):169–72
All atom molecular mechanics simulations on covalent complexes of anthramycin and neothramycin with deoxydecanucleotides. Rao SN, et al. **J Med Chem** 1990 Jun;33(6):1701–7
[Reduction of nitro-substituted 1,2-dihydro-3H-1,4-benzodiazepine- 2-ones by E. coli cells immobilized in carrageenan] Davidenko TI, et al. **Prikl Biokhim Mikrobiol** 1990 May-Jun;26(3):349–54 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Pharmacokinetic modeling of ethyl loflazepate (Victan) and its main active metabolites. Ba BB, et al. **Ann Biomed Eng** 1989;17(6):633–46
Pharmacokinetics of flutoprazepam, a novel benzodiazepine drug, in normal subjects. Barzaghi N, et al. **Eur J Drug Metab Pharmacokinet** 1989 Oct-Dec; 14(4):293–8
Effects of protein binding and experimental disease states on brain uptake of benzodiazepines in rats. Lin TH, et al. **J Pharmacol Exp Ther** 1990 Apr;253(1):45–50

PHARMACOLOGY

Effect of CCK antagonist L 364718 on meal-induced pancreatic secretion in rats. O'Rourke MF, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):G179–84

Potent cholecystokinin antagonist L 364718 stimulates food intake in rats. Reidelberger RD, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1512–8

Effects of the CCK receptor antagonist L364,718 on pancreatic growth in adult and developing animals. Zucker KA, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):G511–6

Effect of flutoprazepam on skills essential for driving motor vehicles. Moser L, et al. **Arzneimittelforschung** 1990 May; 40(5):533–5

Hunger in humans induced by MK-329, a specific peripheral-type cholecystokinin receptor antagonist. Wolkowitz OM, et al. **Biol Psychiatry** 1990 Jul 15; 28(2):169–73

The effect of clobazam on steady state plasma concentrations of carbamazepine and its metabolites. Muñoz JJ, et al. **Br J Clin Pharmacol** 1990 Jun;29(6):763–5

Respiratory and sedative effects of clobazam and clonazepam in volunteers. Wildin JD, et al. **Br J Clin Pharmacol** 1990 Feb;29(2):169–77

Reversal of the anorectic effect of (+)-fenfluramine in the rat by the selective cholecystokinin receptor antagonist MK-329. Cooper SJ, et al. **Br J Pharmacol** 1990 Jan; 99(1):65–70

CCK8 neurons of the ventromedial (VMH) hypothalamus mediate the upper gut motor changes associated with feeding in rats. Liberge M, et al. **Brain Res** 1990 Jan 29; 508(1):118–23

SCH 23390-induced hypophagia is blocked by the selective CCK-A receptor antagonist devazepide, but not by the CCK-B/gastrin receptor antagonist L-365,260. Cooper SJ, et al. **Brain Res Bull** 1990 Apr;24(4):631–3

Involvement of DNA topoisomerase II in the selective resistance of a mammalian cell mutant to DNA minor groove ligands: ligand-induced DNA-protein crosslinking and responses to topoisomerase poisons. Smith PJ, et al. **Carcinogenesis** 1990 Apr;11(4):659–65

Relationship between the dose-response effects of diazepam and clobazam on electroencephalographic parameters and on kindled amygdaloid seizure activity in rats. Harris QL, et al. **Clin Exp Pharmacol Physiol** 1988 Oct;15(10):753–64

Effects of a high-fat diet and L364,718 on growth of human pancreas cancer. Smith JP, et al. **Dig Dis Sci** 1990 Jun; 35(6):726–32

Influence of CCK antagonist L-364,718, pancreastatin (33–49) and a somatostatin analogue on camostate-induced rat pancreatic hypertrophy. Schmidt WE, et al. **Digestion** 1989;44(2):105–16

Effects of clobazam and clonazepam on saccadic eye movements and other parameters of psychomotor performance. van der Meyden CH, et al. **Eur J Clin Pharmacol** 1989;37(4):365–9

Effects of two new pirenzepine analogs on the contractile response of the guinea-pig oesophageal muscularis mucosae to acetylcholine, bethanechol, histamine and high potassium. Barocelli E, et al. **Eur J Pharmacol** 1990 Apr 10;179(1–2):89–96

Development of tolerance to clobazam in fully kindled rats: effects of intermittent flumazenil administration. Löscher W, et al. **Eur J Pharmacol** 1990 May 16;180(2–3):255–71

Enhancement of pharmacologically induced bronchoconstriction by Ro 5-4864. Marano G, et al. **Eur J Pharmacol** 1990 Apr 10;179(1–2):237–40

Characterization of neuronal cholecystokinin receptor by L-364,718 in Auerbach's plexus. Zelles T, et al. **Eur J Pharmacol** 1990 Mar 13;178(1):101–4

Effects of an antral mucosectomy, L-364,718 and atropine on cephalic phase of gastric and pancreatic secretion in dogs. Konturek SJ, et al. **Gastroenterology** 1990 Jan; 98(1):47–55

Regulation of pancreatic endocrine function by cholecystokinin: studies with MK-329, a nonpeptide cholecystokinin receptor antagonist. Liddle RA, et al. **J Clin Endocrinol Metab** 1990 May;70(5):1312–8

Effects of a novel cholecystokinin (CCK) receptor antagonist, MK-329, on gallbladder contraction and gastric emptying in humans. Implications for the physiology of CCK. Liddle RA, et al. **J Clin Invest** 1989 Oct;84(4):1220–5

Heterotropic cooperativity between putative recognition sites for progesterone metabolites and the atypical benzodiazepine Ro 5-4864. Belelli D, et al. **J Neurochem** 1990 Jul;55(1):83–7

A model of gastric emptying in cats shows solid emptying is promoted by MK-329: a CCK antagonist [see comments] Gould RJ, et al. **J Nucl Med** 1990 Sep;31(9):1494–9 Comment in: J Nucl Med 1990 Sep;31(9):1499–500.

Effects of peripheral benzodiazepine receptor ligands on hypothalamic-pituitary-adrenal axis function in the rat. Calogero AE, et al. **J Pharmacol Exp Ther** 1990 May; 253(2):729–37

Chronic benzodiazepine administration. VI. A partial agonist produces behavioral effects without tolerance or receptor alterations. Miller LG, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):33–8

Cholecystokinin receptor antagonism by peptidergic and non-peptidergic agents in rat pancreas. Dembinski A, et al. **J Physiol (Lond)** 1989 Apr;411:419–35

The protective effect of adenosinergic agents, Ro 5-4864 and carbamazepine against hypoxic stress-induced neurotoxicity in mice. Thorat SN, et al. **Methods Find Exp Clin Pharmacol** 1990 Jan-Feb; 12(1):17–22

Dependence on gamma-aminobutyric acid of pyrethroid and 4'-chlorodiazepam modulation of the binding of t-[35S]butylbicyclophosphorothionate in piscine brain. Eshleman AJ, et al. **Neuropharmacology** 1990 Jul; 29(7):641–8

Differential effects of the CCK antagonist, MK-329, on analgesia induced by morphine, social conflict (opioid) and defeat experience (non-opioid) in male mice. Hendrie CA, et al. **Neuropharmacology** 1989 Oct;28(10):1025–32

[3H]AHN 086 acylates peripheral benzodiazepine receptors in the rat pineal gland. Newman AH, et al. **NIDA Res Monogr** 1989;95:285–6

Effect of L-364,718 on GRP-stimulated pancreatic and gastric secretions and GI peptides in conscious dogs. Hosotani R, et al. **Pancreas** 1989;4(5):550–5

Cholecystokinin antagonist prevents hyperamylasemia and improves pancreatic exocrine function in cerulein-induced acute pancreatitis. Murayama KM, et al. **Pancreas** 1990 Jul; 5(4):439–44

Effects of L-364,718 on pancreatic exocrine and endocrine secretion in the rat. Nakamura T, et al. **Pancreas** 1990 Mar; 5(2):216–21

Failure of a potent cholecystokinin antagonist to protect against diet-induced pancreatitis in mice. Ohshio G, et al. **Pancreas** 1989;4(6):739–43

Chronic administration of a potent cholecystokinin receptor antagonist, L-364,718, fails to inhibit pancreas growth in preweanling rats. Wisner JR Jr, et al. **Pancreas** 1990 Jul; 5(4):434–8

Involvement of the "peripheral" benzodiazepine receptor type (omega 3) in the tolerance to the electroencephalographic effects of benzodiazepines in rats: comparison of diazepam and clonazepam. Massotti M, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):933–6

L364,718 antagonizes the cholecystokinin-induced suppression of locomotor activity. Soar J, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):637–40

Inhibitory effects of DF 594, a new antispasmodic agent, on intestinal motility in the dog. De Ponti F, et al. **Pharmacology** 1989;38(6):374–80

Effects of the CCK receptor antagonist MK-329 on food intake in pigs. Ebenezer IS, et al. **Physiol Behav** 1990 Jan; 47(1):145–8

Acute reversal of flunitrazepam effects by Ro 15-1788 and Ro 15-3505: inverse agonism, tolerance, and rebound. Gentil V, et al. **Psychopharmacology (Berl)** 1990;100(1):54–9

Effect of intracerebroventricular and systemic injections of caerulein, a CCK analogue, on electrical self-stimulation and its interaction with the CCKA receptor antagonist, L-364,718 (MK-329). Hamilton MH, et al. **Psychopharmacology (Berl)** 1990;101(3):384–9

Effects of endogenous and exogenous cholecystokinin and of infusion with the cholecystokinin antagonist L-364,718 on pancreatic and gastrointestinal growth. Axelson J, et al. **Scand J Gastroenterol** 1990 May;25(5):471–80

[Comparative evaluation of anticonvulsant and anti-arrhythmic effects of phenazepam, a benzodiazepine receptor agonist] Voronina TA, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):158–61 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

A short term open clinical trial of clobazam in the treatment of patients with panic attacks. Judd FK, et al. **Int Clin Psychopharmacol** 1989 Oct;4(4):285–93

BENZOFLAVONES see under **FLAVONES**

BENZOFURANS

Quin-2 and fura-2 measure calcium differently. Mazorow DL, et al. **Anal Biochem** 1990 Apr;186(1):28–30

ADP evokes biphasic Ca2+ influx in fura-2-loaded human platelets. Evidence for Ca2+ entry regulated by the intracellular Ca2+ store. Sage SO, et al. **Biochem J** 1990 Feb 1;265(3):675–80

Rapid kinetics of agonist-evoked changes in cytosolic free Ca2+ concentration in fura-2-loaded human neutrophils. Sage SO, et al. **Biochem J** 1990 Feb 1;265(3):915–8

Measurement of intracellular Ca2+ in cultured arterial smooth muscle cells using Fura-2 and digital imaging microscopy. Goldman WF, et al. **Cell Calcium** 1990 Feb-Mar;11(2-3):221–31

Ca2+ imaging in single living cells: theoretical and practical issues. Moore ED, et al. **Cell Calcium** 1990 Feb-Mar; 11(2-3):157–79 (46 ref.)

Alteration of intracellular Fura-2 fluorescence by viscosity: a simple correction. Poenie M. **Cell Calcium** 1990 Feb-Mar; 11(2-3):85–91

Intracellular calibration of the fluorescent calcium indicator Fura-2. Williams DA, et al. **Cell Calcium** 1990 Feb-Mar; 11(2-3):75–83

Effect of buffer systems and pHi on the measurement of [Ca2+]i with fura 2. Ganz MB, et al. **FASEB J** 1990 Apr 1;4(6):1638–44

Video enhanced imaging of the fluorescent Na+ probe SBFI indicates that colonic crypts absorb fluid by generating a hypertonic interstitial fluid. Naftalin RJ, et al. **FEBS Lett** 1990 Jan 29;260(2):187–94

Sr and Ba transients in isolated snail neurones studied with fura-2. The recovery from depolarization induced load and modulation of Ca release from intracellular stores. Mironov SL, et al. **Neurosci Lett** 1990 May 4;112(2-3):184–9

[Measurement of cytosolic free calcium using a fluorescent indicator] Karaki H. **Nippon Yakurigaku Zasshi** 1990 Jan; 95(1):Suppl 1–2 **(Jpn)**

ADVERSE EFFECTS

Chlorinated dioxins and dibenzofurans in the environment—a hazard to public health? Vainio H, et al. **Scand J Work Environ Health** 1989 Dec;15(6):377–82

ANALYSIS

Specific congener profiles of polychlorinated dibenzo-p-dioxins and dibenzofurans in blue mussel in Osaka Bay in Japan: aqueous solubilities of PCDDs and PCDFs. Miyata H, et al. **Bull Environ Contam Toxicol** 1989 Sep;43(3):342–9

Assessment of Fura-2 for measurements of cytosolic free calcium. Roe MW, et al. **Cell Calcium** 1990 Feb-Mar; 11(2-3):63–73 (44 ref.)

Anti-plasmin inhibitor. VI. Structure of phlorofucofuroeckol A, a novel phlorotannin with both dibenzo-1,4-dioxin and dibenzofuran elements, from Ecklonia kurome Okamura. Fukuyama Y, et al. **Chem Pharm Bull (Tokyo)** 1990 Jan; 38(1):133–5

Multiresidue procedures for the determination of chlorinated dibenzodioxins and dibenzofurans in a variety of foods using capillary gas chromatography-electron-capture detection. Jasinski JS. **J Chromatogr** 1989 Sep 15; 478(2):349–67

Indoor air contamination with polychlorinated dibenzo-p-dioxins and dibenzofurans. Mukerjee D, et al. **Toxicol Ind Health** 1989 Oct;5(5):731–45

[Analytical methods for the determination of polychlorinated dibenzodioxins and dibenzofurans in human milk] Fürst P, et al. **Z Lebensm Unters Forsch** 1989 Oct;189(4):338–45 (Eng. Abstr.) **(Ger)**

BLOOD

Determination of underivatised efaroxan and idazoxan in blood plasma by capillary gas chromatography with mass-selective detection. Nichols JD, et al. **Analyst** 1989 Oct;114(10):1215–8

CHEMICAL SYNTHESIS

Synthesis and aldose reductase-inhibitory activity of benzo[b]furan derivatives possessing a carboxymethylsulfamoyl group. Ohishi Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Sep;37(9):2398–405

Antioxidant-based inhibitors of leukotriene biosynthesis. The discovery of 6-[1-[2-(hydroxymethyl)phenyl]-1-propen-3-yl]-2,3-dihydro-5-benzofuranol, a potent topical antiinflammatory agent. Hammond ML, et al. **J Med Chem** 1990 Mar; 33(3):908–18

Cannabimimetic activity of novel enantiomeric, benzofuran cannabinoids. Mechoulam R, et al. **J Med Chem** 1990 Mar; 33(3):1037–43

[Studies on the synthesis of antiulcer agents. VI. Synthesis and antiulcer activity of dihydrobenzofuranone derivatives] Kitazawa M, et al. **Yakugaku Zasshi** 1989 Oct; 109(10):718–36 (Eng. Abstr.) **(Jpn)**

[Studies on the synthesis of antiulcer agents. VII. Synthesis and antiulcer activity of dihydrobenzofuranone derivatives] Kitazawa M, et al. **Yakugaku Zasshi** 1989 Oct; 109(10):737–48 (Eng. Abstr.) **(Jpn)**

DIAGNOSTIC USE

Measurement of intracellular Ca2+ in BC3H-1 muscle cells with Fura-2: relationship to acetylcholine receptor synthesis. Berlin JR, et al. **Cell Calcium** 1990 May; 11(5):371–84

Analysis of uric acid transport in renal tubules using benzbromarone and pyrazinamide. Moriwaki Y, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 Feb;28(2):84–8

The characterization of IBF as a new selective dopamine D-2 receptor imaging agent. Kung MP, et al. **J Nucl Med** 1990 May;31(5):648–54

ISOLATION & PURIFICATION

Identification and isolation of medicarpin and a substituted benzofuran as potent leukotriene inhibitors in an anti-inflammatory Chinese herb. Miller DK, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Nov; 38(2):137–43

METABOLISM

In situ calibration of fura-2 and BCECF fluorescence in adult rat ventricular myocytes. Borzak S, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H973–81

Inhibition of Fura-2 sequestration and secretion with organic anion transport blockers. Di Virgilio F, et al. **Cell Calcium** 1990 Feb-Mar;11(2-3):57–62 (16 ref.)

The use of the Ca2(+)-sensitive intramitochondrial dehydrogenases and entrapped fura-2 to study Sr2+ and Ba2+ transport across the inner membrane of mammalian mitochondria. McCormack JG, et al. **Eur J Biochem** 1990

Aug 28;192(1):239–44

Dioxygenolytic cleavage of aryl ether bonds: 1,10-dihydro-1,10-dihydroxyfluoren-9-one, a novel arene dihydrodiol as evidence for angular dioxygenation of dibenzofuran. Engesser KH, et al. **FEMS Microbiol Lett** 1989 Nov;53(1-2):205-9

Synthesis and characterization of iodobenzamide analogues: potential D-2 dopamine receptor imaging agents. Murphy RA, et al. **J Med Chem** 1990 Jan;33(1):171-8

Effects of pluronic F-127 on loading of fura 2/AM into single smooth muscle cells isolated from guinea pig taenia coli. Maruyama I, et al. **J Toxicol Sci** 1989 Aug;14(3):153-63

Identification of essential residues in the F1-ATPases by chemical modification. Allison WS, et al. **Methods Enzymol** 1986;126:741-61

The isolation, identification and structure of a new hydroxylated metabolite of benzbromarone in man. De Vries JX, et al. **Xenobiotica** 1989 Dec;19(12):1461-70

PHARMACOKINETICS

Age-related changes in dermal absorption of 2,3,7,8-tetrachlorodibenzo-p-dioxin and 2,3,4,7,8-pentachlorodibenzofuran. Banks YB, et al. **Fundam Appl Toxicol** 1990 Jul;15(1):163-73

Deficient benzbromarone elimination: a familial disorder? Zöllner N, et al. **Klin Wochenschr** 1990 Jan 19;68(2):101

Intracellular compartmentalization of fura-2 dye demonstrated by laser-excitation fluorescence microscopy: a problem in measuring cytosolic free calcium concentration using fura-2 fluorescence in vascular smooth muscle cells. Takeuchi K, et al. **Tohoku J Exp Med** 1989 Sep;159(1):23-35

PHARMACOLOGY

Attenuated coronary relaxation after reperfusion: effects of superoxide dismutase and TxA2 inhibitor U 63557A. Mehta JL, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1240-6

Some pharmacological actions of the beta-adrenolytic agent Ro 3-3528 (6,7-dimethyl-alpha-[(isopropylamino) methyl]-2-benzofuranmethanol Hydrochloride). Haefely W, et al. **Angiologica** 1967;4(3-4):203-15

Induction of cytochrome P450IA1 in rat hepatoma cell by polycyclic hydrocarbons and a dioxin. Xu LC, et al. **Biochem Pharmacol** 1990 Sep 15;40(6):1399-403

Effect of furegrelate on renal plasma flow after angiotensin II infusion. Kaushal RD, et al. **Can J Physiol Pharmacol** 1990 Apr;68(4):500-4

(+)-Alpha-viniferin, an anti-inflammatory compound from Caragana chamlagu root. Kitanaka S, et al. **Chem Pharm Bull (Tokyo)** 1990 Feb;38(2):432-5

Comparison of the effect of amiodarone and benziodarone on thyroxine metabolism and surface ECG. Moulopoulos SD, et al. **Endocrinol Exp** 1989 Dec;23(4):269-78

Multiple dose trial of the thromboxane synthase inhibitor furegrelate in normal subjects. Mohrland JS, et al. **Eur J Clin Pharmacol** 1990;38(5):485-8

Stimulation of insulin secretion by efaroxan may involve interaction with potassium channels. Chan SL, et al. **Eur J Pharmacol** 1990 Jan 25;176(1):97-101

Purification and characterization of two forms of 2,3,4,7,8-pentachlorodibenzofuran-inducible cytochrome P-450 in hamster liver. Koga N, et al. **J Biochem (Tokyo)** 1990 Jun;107(6):826-33

Active site labeling of dopamine beta-hydroxylase by two mechanism-based inhibitors: 6-hydroxybenzofuran and phenylhydrazine. Farrington GK, et al. **J Biol Chem** 1990 Jan 15;265(2):1036-40

The ATPase activity of the alpha 3 beta 3 complex of the F1-ATPase of the thermophilic bacterium PS3 is inactivated on modification of tyrosine 307 in a single beta subunit by 7-chloro-4-nitrobenzofurazan. Yoshida M, et al. **J Biol Chem** 1990 Feb 15;265(5):2483-7

1,4-Dihydronaphthoquinones, hydroindoloquinones, benzofurans, and benzothiophenes as inhibitors of 5-lipoxygenase. Synthesis and structure-activity studies. Yamashita A, et al. **J Med Chem** 1990 Feb;33(2):775-81

Inhibition of monoamine oxidase by 7-chloro-4-nitrobenzofurazan. Fu RC, et al. **J Neurochem** 1990 Sep;55(3):813-8

LY277359 maleate: a potent and selective 5-HT3 receptor antagonist without gastroprokinetic activity. Cohen ML, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):350-5

Effect of probenecid and benzbromarone on gluconeogenesis in isolated rat liver cells. Rodilla F, et al. **Rev Esp Fisiol** 1989 Dec;45(4):391-4

Inhibition of thrombin- and collagen-induced phosphoinositides breakdown in rabbit platelets by a PAF antagonist—denudatin B, an isomer of kadsurenone. Teng CM, et al. **Thromb Res** 1990 Jul 1;59(1):121-30

6-substituted-1,3,8-trichlorodibenzofurans as 2,3,7,8-tetrachlorodibenzo-p-dioxin antagonists in the rat: structure activity relationships. Astroff B, et al. **Toxicology** 1989 Dec 15;59(3):285-96

[Neuroleptic properties of Y-20024, a new benzofurancarboxamide derivative] Fukuda T, et al. **Nippon Yakurigaku Zasshi** 1989 Nov;94(5):269-80 (Eng. Abstr.) **(Jpn)**

[Centrally acting muscle relaxant effect of phthalides (ligustilide, cnidilide and senkyunolide) obtained from Cnidium officinale Makino] Ozaki Y, et al. **Yakugaku Zasshi** 1989 Jun;109(6):402-6 (Eng. Abstr.) **(Jpn)**

[Antioxidant properties of benzofurocaine, phenycaberan and orthophen] Lebedev AV, et al. **Farmakol Toksikol** 1989 May-Jun;52(3):59-62 (Eng. Abstr.) **(Rus)**

[Effect of fenicoberan on parameters of carbohydrate metabolism and electrolyte levels in blood vessel tissue] Puchkova VA, et al. **Farmakol Toksikol** 1989 Jul-Aug; 52(4):30-3 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

RG 12915: a potent 5-hydroxytryptamine-3 antagonist that is an orally effective inhibitor of cytotoxic drug-induced emesis in the ferret and dog. Fitzpatrick LR, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):450-5

[Synthesis of new aminoalkanol derivatives of benzofuran with potential beta-adrenolytic activity] Zawadowski T, et al. **Acta Pol Pharm** 1989;46(3):201-8 (Eng. Abstr.) **(Pol)**

TOXICITY

Polyhalogenated dibenzo-p-dioxins and dibenzofurans and the immune system. 1. Effects on peripheral lymphocyte subpopulations of a non-human primate (Callithrix jacchus) after treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Neubert R, et al. **Arch Toxicol** 1990;64(5):345-59

Guidelines for the definition of environmental action alert thresholds for polychlorodibenzodioxins and polychlorodibenzofurans. di Domenico A. **Regul Toxicol Pharmacol** 1990 Feb;11(1):8-23

Relative toxicity and tumor-promoting ability of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD), 2,3,4,7,8-pentachlorodibenzofuran (PCDF), and 1,2,3,4,7,8-hexachlorodibenzofuran (HCDF) in hairless mice. Hébert CD, et al. **Toxicol Appl Pharmacol** 1990 Feb; 102(2):362-77

Quantitative risk assessment of polychlorodibenzofurans (PCDFs) released in PCB fires: use of high-resolution gas chromatography. Olafsson PG, et al. **Toxicol Lett** 1990 Jan; 50(1):69-74

Biological activity of 2,4,8-trichlorodibenzofuran: promotion of rat liver foci and induction of cytochrome P-450-dependent monooxygenases. Deml E, et al. **Toxicology** 1989 Dec 15;59(3):229-38

URINE

Urinary metabolites of benzbromarone in man. Maurer H, et al. **Arzneimittelforschung** 1990 Apr;40(4):460-2

BENZOIN

TOXICITY

Overview of the genetic toxicity of caprolactam and benzoin. Ashby J, et al. **Mutat Res** 1989 Nov;224(3):321-4 (3 ref.)

The induction of DNA-strand breaks and unscheduled DNA synthesis in F-344 rat hepatocytes following in vivo administration of caprolactam or benzoin. Bermudez E, et al. **Mutat Res** 1989 Nov;224(3):361-4

The genetic toxicology of benzoin and caprolactam. Brady AL, et al. **Mutat Res** 1989 Nov;224(3):391-403 (67 ref.)

Negative micronucleus tests on caprolactam and benzoin in ICR/JCL male mice. Ishidate M Jr, et al. **Mutat Res** 1989 Nov;224(3):357-9

Caprolactam and benzoin: tests for induction of chromosome aberrations and SCEs in mouse bone marrow. McFee AF, et al. **Mutat Res** 1989 Nov;224(3):347-50

DNA damage in mouse and rat liver by caprolactam and benzoin, evaluated with three different methods. Parodi S, et al. **Mutat Res** 1989 Nov;224(3):379-84

Abnormal sperm assay tests on benzoin and caprolactam. Salamone MF. **Mutat Res** 1989 Nov;224(3):385-9

An evaluation of caprolactam and benzoin in the mouse micronucleus test. Sheldon T. **Mutat Res** 1989 Nov; 224(3):351-5

Assessment of unscheduled DNA synthesis in Fischer 344 rat pachytene spermatocytes exposed to caprolactam or benzoin in vivo. Working PK. **Mutat Res** 1989 Nov; 224(3):365-8

BENZOL see **BENZENE**

BENZOLAMIDE see under **THIADIAZOLES**

BENZOMORPHANS see under **MORPHINANS**

BENZOPHENONEIDUM see under **ANILINE COMPOUNDS**

BENZOPHENONES

Chemical investigations of ultraviolet-absorbing hydrogel material for soft intraocular lenses. Chirila TV, et al. **J Cataract Refract Surg** 1989 Sep;15(5):504-9

Hydrogen abstraction from lipids by triplet states of derivatized benzophenone photosensitizers. Marković DZ, et al. **Photochem Photobiol** 1990 Apr;51(4):389-94

ADMINISTRATION & DOSAGE

Bromfenac, acetaminophen, and placebo in orthopedic postoperative pain. McQuay HJ, et al. **Clin Pharmacol Ther** 1990 Jun;47(6):760-6

ADVERSE EFFECTS

[Fatal hepatitis probably caused by exifone (Adlone) [letter] Pateron D, et al. **Gastroenterol Clin Biol** 1990;14(3):294-5 **(Fre)**

[Acute hepatitis associated with the ingestion of exifone (Adlone) (letter)] Barbare JC, et al. **Therapie** 1990 Jan-Feb; 45(1):47 **(Fre)**

ANALYSIS

Structure of 5-chloro-2-(3-[(diethylamino)methyl]-5-methyl-4H-1,2,4- triazol-4-yl)benzophenone (I) and of its methylamino analogue (II). Kemmish HJ, et al. **Acta Crystallogr C** 1990 Mar 15;46 (Pt 3):459-62

[Determination of seven ultraviolet absorbent in cosmetics by high speed liquid chromatography] Saito E, et al. **Eisei Shikenjo Hokoku** 1989;(107):99-102 (Eng. Abstr.) **(Jpn)**

METABOLISM

Determination of exifone in human plasma and urine by high-performance liquid chromatography with electrochemical detection. Descombe JJ, et al. **J Chromatogr** 1989 Nov 24;496(2):345-53

PHARMACOLOGY

Comparative evaluation of scavenger properties of exifone, piracetam and vinburnine. Bentue-Ferrer D, et al. **Fundam Clin Pharmacol** 1989;3(4):323-8

The effect of prostaglandin synthetase inhibitors on human preovulatory follicular fluid prostaglandin, thromboxane, and leukotriene concentrations. Priddy AR, et al. **J Clin Endocrinol Metab** 1990 Jul;71(1):235-42

Bromfenac, a new nonsteroidal anti-inflammatory drug: relationship between the anti-inflammatory and analgesic activity and plasma drug levels in rodents. Nolan JC, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):104-8

THERAPEUTIC USE

Intramuscular diclofenac sodium versus intravenous Baralgin in the treatment of renal colic. Sanahuja J, et al. **DICP** 1990 Apr;24(4):361-4

BENZOPYRANS

Structure and absolute configuration of two stereoisomers of alpha,alpha'-[iminobis-(methylene)]bis(3,4-dihydro-2H-1-benzopyran-2- methanol) hydrobromide. Peeters OM, et al. **Acta Crystallogr C** 1989 Dec 15;45 (Pt 12):1930-3

3-(2-Methoxyphenyl)-1H-2-benzopyran-1-one. Prince P, et al. **Acta Crystallogr C** 1989 Jul 15;45 (Pt 7):1086-7

Aqueous solubilities and transformations of tetrahalogenated benzenes and effects of aquatic fulvic acids. Kim IY, et al. **Bull Environ Contam Toxicol** 1990 Jun;44(6):813-8

Rapid diagnosis of Pneumocystis carinii infection in AIDS by cytocentrifugation and rapid hematoxylin-eosin staining. Strigle SM, et al. **Diagn Cytopathol** 1990;6(3):164-8

The three-dimensional structure of the seed storage protein phaseolin at 3 A resolution. Lawrence MC, et al. **EMBO J** 1990 Jan;9(1):9-15

Haematoxylin stain [letter] Narayanrao B. **Indian J Pathol Microbiol** 1989 Oct;32(4):324

Spiro hydantoin aldose reductase inhibitors derived from 8-aza-4-chromanones. Sarges R, et al. **J Med Chem** 1990 Jul;33(7):1859-65

Nucleotide sequence of an alpha-phaseolin gene from Phaseolus vulgaris. Anthony JL, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3396

[Unification of the staining of histological preparations and histoautoradiograms with Harris hematoxylin] Levdik TI. **Arkh Patol** 1989;51(7):81-2 (Eng. Abstr.) **(Rus)**

[Method of total staining of monolayer cell cultures using vanadium hematoxylin] Viktorov IV. **Biull Eksp Biol Med** 1990 Jun;109(6):612-3 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Glibenclamide and procaine, but not apamin, inhibit the relaxant responses to Ro 31-6930 in guinea-pig taenia caeci. Perkins RS, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:808P

Specific but differential antagonism by glibenclamide of the vasodepressor effects of cromakalim and nicorandil in spinally-anaesthetized dogs. Yamada H, et al. **Br J Pharmacol** 1990 Jul;100(3):413-6

Glibenclamide blocks the relaxant action of pinacidil and cromakalim in airway smooth muscle. Nielsen-Kudsk JE, et al. **Eur J Pharmacol** 1990 May 16;180(2-3):291-6

BLOOD

High performance liquid chromatographic (HPLC) determination of centchroman in human serum and application to single-dose pharmacokinetics. Paliwal JK, et al. **Pharm Res** 1989 Dec;6(12):1048-51

CHEMICAL SYNTHESIS

Synthesis of C-glycosylarenes by way of internal reactions of benzylated and benzoylated carbohydrate derivatives. Martin OR, et al. **Carbohydr Res** 1990 Feb 25;196:41-58

Synthesis and analgesic activity of novel heterocycles, [1]benzothiopyrano[3,4-b]pyrrole derivatives. Hori M, et al. **Chem Pharm Bull (Tokyo)** 1989 May;37(5):1282–6

Synthesis and antihypertensive activity of 4-(substituted-carbonylamino)-2H-1-benzopyrans. Ashwood VA, et al. **J Med Chem** 1990 Sep;33(9):2667–72

Synthesis and antihypertensive activity of 4-(1,2-dihydro-2-oxo-1-pyridyl)-2H-1-benzopyrans and related compounds, new potassium channel activators. Bergmann R, et al. **J Med Chem** 1990 Feb;33(2):492–504

Tricyclic heteroaromatic systems. [1]benzopyranopyrrol-4-ones and [1]benzopyrano-1,2,3-triazol-4-ones as benzodiazepine receptor ligands. Synthesis and structure-activity relationships. Colotta V, et al. **J Med Chem** 1990 Sep; 33(9):2646–51

Preparation of alum haematoxylin. Slidders W. **Med Lab Sci** 1988 Oct;45(4):405–6

DIAGNOSTIC USE

Renal biopsy frozen section: a fluorescent study of hematoxylin and eosin-stained sections. Bonsib SM, et al. **Mod Pathol** 1990 Mar;3(2):204–10

[An osmium-hematoxylin method of detecting myelin membranes of nerve fibers] Grabovoi AN. **Arkh Anat Gistol Embriol** 1989 Oct;97(10):93 **(Rus)**

ISOLATION & PURIFICATION

[Studies on the chemical constituents of Ardisia crenata Sims] Han L, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Dec; 14(12):737–9, 762–3 (Eng. Abstr.) **(Chi)**

[Studies on lactone constituents from Boennighausenia sessilicarpa Lévl] Chen YS. **Yao Hsueh Hsueh Pao** 1989; 24(4):260–3 (Eng. Abstr.) **(Chi)**

METABOLISM

Temperature influence on Penicillium citrinum thom growth and citrinin accumulation kinetics. Montani M, et al. **Int J Food Microbiol** 1988 Oct;7(2):115–22

PHARMACOKINETICS

Effect of gastric acidity on bioavailability of N,N-dimethylcarbamoylmethylalpha, 2-dimethyl-5H-[1]benzopyrano[2,3-b]pyridine-7-acetate, a new prodrug-type anti-inflammatory agent. Yamada I, et al. **Chem Pharm Bull (Tokyo)** 1989 Dec;37(12):3372–5

Chronopharmacokinetic studies of pranoprofen and procainamide. Fujimura A, et al. **J Clin Pharmacol** 1989 Sep;29(9):786–90

[Dissolution properties and bioavailability of ground mixture of N,N-dimethylcarbamoylmethyl alpha, 2-dimethyl-5H-[1]benzopyrano[2,3-b]-pyridine-7-acetate with various pharmaceutical ingredients] Yamada I, et al. **Yakugaku Zasshi** 1989 Dec;109(12):932–7 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

The antiallatal effects on locusts and lethal effects on nematodes of synthetic precocene-1 derivatives differing at the carbon 7 position. Fodor A, et al. **Acta Biol Hung** 1989;40(3):255–69

Some cardiovascular and hematological changes induced in the rat by activation of Hageman factor with ellagic acid. Damas J, et al. **Adv Exp Med Biol** 1989;247A:461–5

The effect of leukotriene-B4 receptor antagonist, SC-41930, on acetic acid-induced colonic inflammation. Fretland DJ, et al. **Agents Actions** 1989 Jun;27(3–4):395–7

FCE20696, a new synthetic immunomodulator: immunopharmacological profile. Isetta AM, et al. **Agents Actions** 1989 Nov;28(3–4):283–9

A68930: a potent and specific agonist for the D-1 dopamine receptor. Kebabian JW, et al. **Am J Hypertens** 1990 Jun; 3(6 Pt 2):40S–42S (14 ref.)

Comparison of the subacute hemodynamic effects of atenolol, propranolol, pindolol, and nebivolol. De Crée J, et al. **Angiology** 1990 Feb;41(2):95–105

Comparison of effects of a potassium channel opener BRL34915, a specific potassium ionophore valinomycin and calcium channel blockers on endothelin-induced vascular contraction. Kim S, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1003–8

Novel 6-hydroxychroman-2-carbonitrile inhibitors of membrane peroxidative injury. Janero DA, et al. **Biochem Pharmacol** 1990 Aug 1;40(3):551–8

Acute haemodynamic effects of cromakalim in patients with angina pectoris. Thomas P, et al. **Br J Clin Pharmacol** 1990 Mar;29(3):325–31

Endothelium-dependent and BRL 34915-induced vasodilatation in rat isolated perfused mesenteric arteries: role of G-proteins, K+ and calcium channels. Adeagbo AS, et al. **Br J Pharmacol** 1990 Jul;100(3):427–34

Properties of the cromakalim-induced potassium conductance in smooth muscle cells isolated from the rabbit portal vein. Beech DJ, et al. **Br J Pharmacol** 1989 Nov; 98(3):851–64

Evaluation of inhaled cromakalim and its active enantiomer BRL 38277 as bronchodilators in the guinea-pig. Bowring NE, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:805P

Effects of glibenclamide on cromakalim-induced responses in rabbit isolated aorta. Bray KM, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:806P

The effects of cromakalim on ATP-sensitive potassium channels in insulin-secreting cells. Dunne MJ, et al. **Br J Pharmacol** 1990 Jan;99(1):169–75

Potassium channel blockers and the effects of cromakalim on the smooth muscle of the guinea-pig bladder. Fujii K, et al. **Br J Pharmacol** 1990 Apr;99(4):779–85

The effect of cromakalim on kidney function in the anaesthetised rat. Johns EJ, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:821P

Effects of cromakalim and glibenclamide on isolated strips of bovine tracheal smooth muscle. Smooth Muscle Research Group. Longmore J, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:804P

Effect of cromakalim on bronchoconstriction evoked by cholinergic nerve stimulation in guinea-pig isolated trachea. McCaig DJ, et al. **Br J Pharmacol** 1989 Oct; 98(2):662–8

Characterization of responses to cromakalim and pinacidil in smooth and cardiac muscle by use of selective antagonists. McPherson GA, et al. **Br J Pharmacol** 1990 Jun;100(2):201–6

Cromakalim-induced relaxation of guinea-pig isolated trachealis: antagonism by glibenclamide and by phentolamine. Murray MA, et al. **Br J Pharmacol** 1989 Nov;98(3):865–74

The action of diazoxide and minoxidil sulphate on rat blood vessels: a comparison with cromakalim. Newgreen DT, et al. **Br J Pharmacol** 1990 Jul;100(3):605–13

Evaluation of the bronchodilator properties of Ro 31-6930, a novel potassium channel opener, in the guinea-pig. Paciorek PM, et al. **Br J Pharmacol** 1990 Jun;100(2):289–94

Action of cromakalim on potassium membrane conductance in isolated heart myocytes of frog. Pilsudski R, et al. **Br J Pharmacol** 1990 Jul;100(3):581–7

Cromakalim, RP49356, pinacidil and minoxidil sulphate in the rat uterus and their antagonism by glibenclamide. Smooth Muscle Research Group. Piper I, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:807P

Effects of potassium channel toxins from Leiurus quinquestriatus hebraeus venom on responses to cromakalim in rabbit blood vessels. Strong PN, et al. **Br J Pharmacol** 1989 Nov;98(3):817–26

Effect of cromakalim on contractions in rabbit isolated renal artery in the presence and absence of extracellular Ca2+. Wilson C, et al. **Br J Pharmacol** 1989 Dec;98(4):1303–11

Suppression of repolarization-related arrhythmias in vitro and in vivo by low-dose potassium channel activators. Fish FA, et al. **Circulation** 1990 Oct;82(4):1362–9

Humoral and cellular effects of the K(+)-channel activator cromakalim in man. Lijnen P, et al. **Eur J Clin Pharmacol** 1989;37(6):609–11

Haemodynamic differences between cromakalim and pinacidil: comparison with nifedipine. Clapham JC, et al. **Eur J Pharmacol** 1989 Nov 14;171(1):109–17

Effect of cromakalim on smooth muscle cells of guinea-pig taenia caeci. den Hertog A, et al. **Eur J Pharmacol** 1989 Dec 19;174(2-3):287–91

Hyperpolarizing action of cromakalim on the rat aorta. Doggrell SA, et al. **Eur J Pharmacol** 1989 Dec 12; 174(1):131–3

A Ca2+-activated K+ channel from rabbit aorta: modulation by cromakalim. Gelband CH, et al. **Eur J Pharmacol** 1989 Aug 22;167(2):201–10

Differential effects of nebivolol on adrenoceptors in the heart and in resistance arterioles in the rat. Quantitative intravital microscopic analysis. Loots W, et al. **Eur J Pharmacol** 1990 Apr 10;179(1-2):177–86

Beta-adrenoceptor-mediated cAMP accumulation in cardiac cells: effects of nebivolol. Pauwels PJ, et al. **Eur J Pharmacol** 1989 Dec 5;172(6):471–9

Effects of an alpha-tocopherol analogue on myocardial ischaemia and reperfusion injury in rats. Petty M, et al. **Eur J Pharmacol** 1990 Apr 10;179(1-2):241–2

BRL 34915 (cromakalim) enhances voltage-dependent K+ current in cultured rat hippocampal neurons. Politi DM, et al. **Eur J Pharmacol** 1989 Sep 1;168(1):7–14

Effects of cromakalim, pinacidil and nicorandil on cardiac refractoriness and arterial pressure in open-chest dogs. Spinelli W, et al. **Eur J Pharmacol** 1990 Apr 25; 179(3):243–52

The l-enantiomer of nebivolol potentiates the blood pressure lowering effect of the d-enantiomer. Xhonneux R, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):261–5

Cromakalim, a vasodilator, differentially inhibits Ca2+ currents in NG108-15 neuroblastoma x glioma hybrid cells. Ito Y, et al. **FEBS Lett** 1990 Mar 26;262(2):313–6

An evaluation of the antioxidant and potential pro-oxidant properties of food additives and of trolox C, vitamin E and probucol. Aruoma OI, et al. **Free Radic Res Commun** 1990;10(3):143–57

Preclinical pharmacology of Ro 31-6930, a new potassium channel opener. Paciorek PM, et al. **J Cardiovasc Pharmacol** 1990 Feb;15(2):188–97

BRL 34915 ameliorates oxygen supply in ischemic myocardium by a simultaneous enhancement of coronary blood flow and a reduction of myocardial function. Rademacher C, et al. **J Cardiovasc Pharmacol** 1990 May; 15(5):808–15

Synthesis and dopamine agonist properties of (+-)-trans-3,4,4a,10b-tetrahydro-4-propyl-2H,5H-[1]benzopyrano [4,3-b]-1,4-oxazin-9-ol and its enantiomers. DeWald HA, et al. **J Med Chem** 1990 Jan; 33(1):445–50

Comparative study of the effects of cromakalim (BRL 34915) and diazoxide on membrane potential, [Ca2+]i and ATP-sensitive potassium currents in insulin-secreting cells. Dunne MJ, et al. **J Membr Biol** 1990 Mar;114(1):53–60

Plant antimutagenic agents, 7. Structure and antimutagenic properties of cymobarbatol and 4-isocymobarbatol, new cymopols from green alga (Cymopolia barbata). Wall ME, et al. **J Nat Prod** 1989 Sep-Oct;52(5):1092–9

Free radicals mediate peroxidative damage in guinea pig hippocampus in vitro. Pellmar TC, et al. **J Neurosci Res** 1989 Nov;24(3):437–44

Decreased 5-hydroxytryptamine turnover in striatum and other brain regions after administration of 5-methoxy-3-(di-n-propylamino)chroman to rats. Fuller RW, et al. **J Pharm Pharmacol** 1989 Nov;41(11):805–6

Effects of nebivolol, atenolol and propranolol on in vivo cardiovascular and metabolic responses to isoproterenol in dogs. Bowden CR, et al. **J Pharmacol Exp Ther** 1989 Nov; 251(2):599–605

Effects of the potassium channel activator, BRL 34915, on the action potential characteristics of canine cardiac Purkinje fibers. Bril A, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):1090–6

Effects of putative K+ channel activator BRL-34915 on arterial contraction and 86Rb efflux. Cox RH. **J Pharmacol Exp Ther** 1990 Jan;252(1):51–9

Anti-ischemic effects of the potassium channel activators pinacidil and cromakalim and the reversal of these effects with the potassium channel blocker glyburide. Grover GJ, et al. **J Pharmacol Exp Ther** 1989 Oct;251(1):98–104

Effects of BRL 34915 (cromakalim) on renal hemodynamics and function in anesthetized dogs. Hayashi K, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1240–6

Alterations by glyburide of effects of BRL 34915 and P 1060 on contraction, 86Rb efflux and the maxi-K+ channel in rat portal vein. Hu SL, et al. **J Pharmacol Exp Ther** 1990 May;253(2):771–7

A potassium channel activator modulates both excitatory noncholinergic and cholinergic neurotransmission in guinea pig airways. Ichinose M, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1207–12

Comparison of effects of cromakalim and pinacidil on mechanical activity and 86Rb efflux in dog coronary arteries. Masuzawa K, et al. **J Pharmacol Exp Ther** 1990 May;253(2):586–93

Actions of cromakalim on ionic currents recorded from single smooth muscle cells of the rat portal vein. Okabe K, et al. **J Pharmacol Exp Ther** 1990 Feb;252(2):832–9

K(+)-channel openers for relaxation of isolated penile erectile tissue from rabbit. Holmquist F, et al. **J Urol** 1990 Jul;144(1):146–51

Effects of pinacidil and cromakalim (BRL 34915) on bladder function in rats with detrusor instability. Malmgren A, et al. **J Urol** 1989 Oct;142(4):1134–8

Effects of cromakalim (BRL 34915) and pinacidil on normal and hypertrophied rat detrusor in vitro. Malmgren A, et al. **J Urol** 1990 Apr;143(4):828–34

Enhancement of K+ conductance improves in vitro the contraction force of skeletal muscle in hypokalemic periodic paralysis. Grafe P, et al. **Muscle Nerve** 1990 May; 13(5):451–7

Re-evaluation of the effect of ellagic acid on dimethylnitrosamine mutagenicity. Lord HL, et al. **Mutagenesis** 1989 Nov;4(6):453–5

Effects of cromakalim (BRL 34915) on potassium conductances in CA3 neurons of the guinea-pig hippocampus in vitro. Alzheimer C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Oct; 340(4):465–71

Comparison of the effects of cromakalim, a potassium conductance enhancer, and nimodipine, a calcium antagonist, on 5-hydroxytryptamine responses in a variety of vascular smooth muscle preparations. Cain CR, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Sep; 340(3):293–9

Effects of the selective beta 1-adrenoceptor antagonist, nebivolol, on cardiovascular parameters in the pithed normotensive rat. Schneider J, et al. **Pharmacology** 1990; 40(1):33–41

K(+)-channel activators in vascular smooth muscle. Cox RH. **Prog Clin Biol Res** 1990;334:171–85

SC-41930: an inhibitor of leukotriene B4-stimulated human neutrophil functions. Tsai BS, et al. **Prostaglandins** 1989 Dec;38(6):655–74

SC-41930 inhibits neutrophil infiltration of the cavine dermis induced by 12(R)-hydroxyeicosatetraenoic acid. Fretland DJ, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Dec;38(3):169–72

Induction and immunohistochemical localization of cytochrome P-450 PCN by non-steroidal compound, in rat liver microsomes. Sagami F, et al. **Res Commun Chem Pathol Pharmacol** 1990 Jan;67(1):79–86

Induction of cytochrome P-450 isozymes by chromanamine derivatives in rat liver. Tsukidate K, et al. **Xenobiotica** 1989 Aug;19(8):901–12

[Potassium agonists: regional vasodilator profile in rats] Richer C, et al. **Arch Mal Coeur** 1989 Jul;82(7):1333–7 (Eng. Abstr.) **(Fre)**

[Decrease of the contraction force of skeletal muscle in mammals by the potassium channel activator, SR 44866]

Findlay I, et al. **C R Acad Sci [III]** 1990;310(11):489–94 (Eng. Abstr.) **(Fre)**

[Synthesis, pharmacological activity and biopharmaceutical characteristics of alpha,2–dimethyl–5H–[1]benzopyrano[2,3–b]pyridine–7–acetates] Kawasaki K, et al. **Yakugaku Zasshi** 1989 Nov; 109(11):827–34 (Eng. Abstr.) **(Jpn)**

[The effect of khellin and timefurone on secretion and catabolism of lipoproteins by cultured human and rabbit hepatocytes] Volgushev SA, et al. **Biokhimiia** 1990 Feb; 55(2):346–51 (Eng. Abstr.) **(Rus)**

[Effects of juvenile hormone and precocene II on the metabolic rate of the digestive system, fat body and ovaries of the insect Oncopeltus fasciatus] Garcerá MD, et al. **Rev Esp Fisiol** 1989 Dec;45(4):357–62 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Inhibition of N–nitrosobenzylmethylamine–induced esophageal tumorigenesis in rats by ellagic acid. Mandal S, et al. **Carcinogenesis** 1990 Jan;11(1):55–61

Potassium channel stimulation in normal subjects and in patients with essential hypertension: an acute study with cromakalim (BRL 34915). Singer DR, et al. **J Hypertens Suppl** 1989 Dec;7(6):S294–5

Verapamil and nebivolol improve carotid artery distensibility in hypertensive patients. van Merode T, et al. **J Hypertens Suppl** 1989 Dec;7(6):S262–3

Attenuation of nocturnal asthma by cromakalim. Williams AJ, et al. **Lancet** 1990 Aug 11;336(8711):334–6

[Edema inhibiting effect of indenochromene derivatives from natural sources] Rázga Z, et al. **Acta Pharm Hung** 1990 Jan;60(1):1–6 (Eng. Abstr.) **(Hun)**

[Synthesis of derivative of 2–[4–hydroxy–7–methyl–5–oxo–5H–furo–[3,2g] [1]benzopyran–9–yloxy] acetic and propionic acids with potential effect on the circulatory system] Zawadowski T, et al. **Acta Pol Pharm** 1989;46(4):305–12 (Eng. Abstr.) **(Pol)**

[Synthesis of new derivatives of 5H–furo[3,2–g][1]benzopyran–5–one with potential beta–adrenolytic activity] Zawadowski T, et al. **Acta Pol Pharm** 1989;46(4):313–9 (Eng. Abstr.) **(Pol)**

TOXICITY

Ellagic acid toxicity and interaction with benzo[a]pyrene and benzo[a]pyrene 7,8–dihydrodiol in human bronchial epithelial cells. Teel RW, et al. **Cell Biol Toxicol** 1986 Mar; 2(1):53–62

Alteration of precocene II–induced hepatotoxicity by modulation of hepatic glutathione levels. Duddy SK, et al. **Chem Biol Interact** 1989;71(2–3):187–99

Effects of chronic ochratoxin A and citrinin toxicosis on kidney function of single comb White Leghorn pullets. Glahn RP, et al. **Poult Sci** 1989 Sep;68(9):1205–12

Renal and hepatic toxicity of a benzopyran–4–one in the Cynomolgus monkey. Macallum GE, et al. **Toxicology** 1989 Nov;59(1):97–108

BENZO(A)PYRENE

Linear dichroism properties and orientations of different ultraviolet transition moments of benzo[a]pyrene derivatives bound noncovalently and covalently to DNA. Roche CJ, et al. **Biophys Chem** 1989 Jul;33(3):277–88

ADVERSE EFFECTS

[Modifying effect of the chemical components of dust on the induction of lung tumors by physical and chemical carcinogens (experimental study)] Knizhnikov VA, et al. **Gig Sanit** 1989 Sep;(9):18–21 (Eng. Abstr.) **(Rus)**

ANALYSIS

Benzene, benzo(a)pyrene, and lead in smoke from tobacco products other than cigarettes. Appel BR, et al. **Am J Public Health** 1990 May;80(5):560–4

Mutagenicity and PAH content of airborn particulates and of fallen dusts from two Hungarian towns and emission samples from aluminum reduction and power plants. Török G, et al. **Ann Ist Super Sanita** 1989;25(4):595–9

Biological monitoring of foundry workers exposed to polycyclic aromatic hydrocarbons. Sherson D, et al. **Br J Ind Med** 1990 Jul;47(7):448–53

Synchronous fluorescence spectroscopic, immunoaffinity chromatographic and 32P–postlabeling analysis of human placental DNA known to contain benzo[a]pyrene diol epoxide adducts. Manchester DK, et al. **Carcinogenesis** 1990 Apr;11(4):553–9

[Determination of the benzo(a)pyrene content of microbial biomasses and protein feed] Schädlich G, et al. **Arch Tierernahr** 1989 Nov;39(11):963–70 (Eng. Abstr.) **(Ger)**

[Levels of metabolites of selected chemical compounds in the urine of workers in pitch coke plant] Bieniek G, et al. **Med Pr** 1989;40(3):183–91 (Eng. Abstr.) **(Pol)**

[Study of benzo(a)pyrene level in various by–products of the cellulose and paper industry] Dikun PP, et al. **Gig Sanit** 1989 Jul;(7):72–3 **(Rus)**

[Problem of temporary concentration of benzo(a)pyrene in atmospheric air of large cities] Ianysheva NIa, et al. **Gig Sanit** 1989 Jun;(6):4–8 **(Rus)**

[Benzo(a)pyrene level in waste water from petroleum–processing plants used for irrigation of fields] Sarsebekov EK, et al. **Gig Sanit** 1989 Sep;(9):88–9 **(Rus)**

[Carcinogenic and toxic hydrocarbon levels in bitumen oxidized with added coal tar during high temperature carbonization] Serkovskaia GS, et al. **Gig Sanit** 1990 Mar; (3):60–1 **(Rus)**

[Air pollution by 3,4–benzo(a)pyrene in mines using self–propelled equipment with diesel motors] Chebotarev AG, et al. **Gig Tr Prof Zabol** 1989;(10):34–6 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

[Antimutagenic activity of vegetable and fruit extracts against in–vitro benzo(a)pyrene] Edenharder R, et al. **Z Gesamte Hyg** 1990 Mar;36(3):144–7 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Chiral stationary phase high–performance liquid chromatographic resolution and absolute configuration of enantiomeric benzo[a]pyrene diol–epoxides and tetrols. Weems HB, et al. **Chirality** 1989;1(4):276–83

METABOLISM

Reduced benzo–a–pyrene activation potential in lymphocytes from chronic alcoholics. Schmitt M, et al. **Alcohol** 1990 Mar–Apr;7(2):137–43

Evidence for nonintercalative complexes formed from the reversible binding of benzo[a]pyrene metabolites to closed–circular, single–stranded M13mp19 DNA. Price HL, et al. **Biochem Biophys Res Commun** 1990 May 16; 168(3):1095–102

Binding of benzo[a]pyrene to DNA by cytochrome P–450 catalyzed one–electron oxidation in rat liver microsomes and nuclei. Cavalieri EL, et al. **Biochemistry** 1990 May 22;29(20):4820–7

Activation of chemical promutagens by Selenastrum capricornutum in the plant cell/microbe coincubation assay. Gentile JM, et al. **Bull Environ Contam Toxicol** 1990 May;44(5):729–36

Bioavailability of benzo(a)pyrene and dehydroabietic acid from a few lake waters containing varying dissolved organic carbon concentrations to Daphnia magna. Oikari A, et al. **Bull Environ Contam Toxicol** 1990 Jul;45(1):54–61

Effect of glucose administration on hamster liver S9–mediated mutagenesis, metabolism and DNA–binding of benzo[a]pyrene and aflatoxin B1. Rubano DC, et al. **Cancer Lett** 1990 Jul 16;52(2):123–31

32P–postlabelling analysis of DNA adducts of benzo[a]pyrene formed in complex metabolic activation systems in vitro. Schoket B, et al. **Cancer Lett** 1989 Nov 15;48(1):67–75

Formation and persistence of DNA adducts in the liver of brown bullheads exposed to benzo[a]pyrene. Sikka HC, et al. **Cancer Lett** 1990 Jan;49(1):81–7

Inhibition of liver microsome–mediated mutagenesis, metabolism and DNA–binding of benzo[a]pyrene and benzo[a]pyrene 7,8–dihydrodiol in the rat following glucose administration. Vance RE, et al. **Cancer Lett** 1990 Apr 20;50(2):149–56

Effect of tannic acid on rat liver S9 mediated mutagenesis, metabolism and DNA binding of benzo[a]pyrene. Vance RE, et al. **Cancer Lett** 1989 Sep 15;47(1–2):37–44

Effect of dietary tannic acid on epidermal, lung, and forestomach polycyclic aromatic hydrocarbon metabolism and tumorigenicity in Sencar mice. Athar M, et al. **Cancer Res** 1989 Nov 1;49(21):5784–8

Distribution of covalent DNA adducts in mouse epidermal subpopulations after topical application of benzo(a)pyrene and 7,12–dimethylbenz(a)anthracene. Baer–Dubowska W, et al. **Cancer Res** 1990 May 15;50(10):3048–54

Effect of extracellular calcium concentration on the metabolism of polycyclic aromatic hydrocarbons by cultured mouse keratinocytes. DiGiovanni J, et al. **Cancer Res** 1989 Oct 15;49(20):5567–74

DNA adduct formation in mouse tissues in relation to serum levels of benzo(a)pyrene–diol–epoxide after injection of benzo(a)pyrene or the diol–epoxide. Ginsberg GL, et al. **Cancer Res** 1990 Feb 15;50(4):1189–94

Benzo(a)pyrene metabolism by murine spleen microsomes. Kawabata TT, et al. **Cancer Res** 1989 Nov 1;49(21):5816–22

Metabolism of 2–acetylaminofluorene and benzo(a)pyrene and activation of food–derived heterocyclic amine mutagens by human cytochromes P–450. McManus ME, et al. **Cancer Res** 1990 Jun 1;50(11):3367–76

Formation and persistence of novel benzo(a)pyrene adducts in rat lung, liver, and peripheral blood lymphocyte DNA. Ross J, et al. **Cancer Res** 1990 Aug 15;50(16):5088–94

Roles of individual human cytochrome P–450 enzymes in the bioactivation of benzo(a)pyrene, 7,8–dihydroxy–7,8–dihydrobenzo(a)pyrene, and other dihydrodiol derivatives of polycyclic aromatic hydrocarbons. Shimada T, et al. **Cancer Res** 1989 Nov 15; 49(22):6304–12

Relationships among benzo(a)pyrene metabolism, benzo(a)pyrene–diol–epoxide:DNA adduct formation, and sister chromatid exchanges in human lymphocytes from smokers and nonsmokers. Thompson CL, et al. **Cancer Res** 1989 Dec 1;49(23):6503–11

The site of substitution of the methyl group in the bioalkylation of benzo[a]pyrene. Flesher JW, et al. **Carcinogenesis** 1990 Mar;11(3):493–6

Relative contribution of various forms of cytochrome P450 to the metabolism of benzo[a]pyrene by human liver microsomes. Hall M, et al. **Carcinogenesis** 1989 Oct; 10(10):1815–21

Glutathione conjugation protects some, but not all, cell lines against DNA binding of benzo[alpha]pyrene metabolites. Hesse S, et al. **Carcinogenesis** 1990 Mar;11(3):485–7

Evaluation of the 4S polycyclic aromatic hydrocarbon binding protein in the Harlan Sprague–Dawley rat. Houser WH, et al. **Carcinogenesis** 1990 Jul;11(7):1165–9

Covalent binding of dibenzpyrenes and benzo[a]pyrene to DNA: evidence for synergistic and inhibitory interactions when applied in combination to mouse skin. Hughes NC, et al. **Carcinogenesis** 1990 Sep;11(9):1611–9

Modulation of benzo[a]pyrene–induced covalent DNA modifications in adult and fetal mouse tissues by gestation stage. Lu LJ, et al. **Carcinogenesis** 1990 Aug;11(8):1367–72

Modulating effects in human diets of dietary fibre and beef, and of time and dose on the reactive microcapsule trapping of benzo[a]pyrene metabolites in the rat gastrointestinal tract. O'Neill IK, et al. **Carcinogenesis** 1990 Apr; 11(4):599–607

Systematic modulation by human diet levels of dietary fibre and beef on metabolism and disposition of benzo[a]pyrene in the gastrointestinal tract of Fischer F344 rats. O'Neill IK, et al. **Carcinogenesis** 1990 Apr;11(4):609–16

Inhibition of the binding of 7,12–dimethylbenz[a]anthracene and benzo[a]pyrene to DNA in mouse skin epidermis by 1–ethynylpyrene. Viaje A, et al. **Carcinogenesis** 1990 Jul; 11(7):1139–43

Metabolism of benzo[a]pyrene and (–)–trans–benzo[a]pyrene–7,8–dihydrodiol by freshly isolated hepatocytes of brown bullheads. Steward AR, et al. **Chem Biol Interact** 1990;74(1–2):119–38

Conjugation of benzo[a]pyrene metabolites by freshwater green alga Selenastrum capricornutum. Warshawsky D, et al. **Chem Biol Interact** 1990;74(1–2):93–105

In vivo and in vitro metabolism of benzo(a)pyrene by the larva of the newt, Pleurodeles waltl. Marty J, et al. **Comp Biochem Physiol [C]** 1989;93(2):213–9

Sequence selectivity, a test of the nature of the covalent adduct formed between benzo[a]pyrene and DNA. Zakrzewska K, et al. **J Biomol Struct Dyn** 1987 Apr; 4(5):845–58

Disposition of phenacetin in rabbits pretreated orally and intraperitoneally with 3,4–benzpyrene. Podder SK, et al. **J Pharmacobiodyn** 1989 Jul;12(7):392–7

In vivo effect of molybdenum on benzo(a)pyrene metabolism in liver and lung rat microsomes. Bompart G. **J Toxicol Clin Exp** 1990 Mar–Apr;10(2):95–104

In vitro and in vivo benzo(a)pyrene metabolism in rat liver and lung microsomes: effect of sodium selenite. Bompart G, et al. **J Toxicol Clin Exp** 1990 Jan–Feb;10(1):3–14

Molecular dosimetry of DNA adducts in Chinese hamster ovary cells and C3H10T1/2 mouse embryo fibroblast cells treated with benzo[a]pyrene. Watson WP, et al. **Mutagenesis** 1990 Jul;5(4):381–5

Lipid peroxidation–coupled co–oxygenation of benzo(a)pyrene and benzo(a)pyrene–7,8–dihydrodiol in human term placental microsomes. Byczkowski JZ, et al. **Placenta** 1990 Jan–Feb;11(1):17–26

Deposition of low dose benzo(a)pyrene into fetal tissue: influence of protein binding. McCabe DP, et al. **Teratology** 1990 Jan;41(1):85–95

Altered benzo[a]pyrene metabolism in C3H/10T1/2 cells transformed by aflatoxin B1 or 3–methylcholanthrene. Faletto MB, et al. **Toxicol Appl Pharmacol** 1990 Jun 15; 104(2):351–66

The effect of m–xylene on rat lung benzo[a]pyrene metabolism and microsomal membrane lipids: comparison with p–xylene. Stickney JA, et al. **Toxicology** 1989 Oct 2;58(2):155–65

PHARMACOKINETICS

Comparative uptake, vascular transport, and cellular internalization of aflatoxin–B1 and benzo(a)pyrene. Busbee DL, et al. **Arch Toxicol** 1990;64(4):285–90

The role of glutathione S–transferases in the hepatic metabolism of benzo[a]pyrene in white suckers (Catostomus commersoni) from polluted and reference sites in the Great Lakes. Kirby GM, et al. **Comp Biochem Physiol [C]** 1990; 95(1):25–30

Microspectrofluorimetric study of the kinetics of cellular uptake and metabolization of benzo(a)pyrene in human T 47D mammary tumor cells: evidence for cytochrome P1450 induction. Sureau F, et al. **Eur Biophys J** 1990;18(5):301–7

A comparative study on the metabolic activation of 3,4–benzo[a]pyrene to mutagens by aorta smooth muscle cells of rat and rabbit. Zwijsen RM, et al. **Mutat Res** 1990 May;230(1):111–7

PHARMACOLOGY

Consistent oncogene methylation changes in epithelial cells chemically transformed in vitro. Mass MJ, et al. **Biochem Biophys Res Commun** 1989 Oct 31;164(2):693–9

Effects of dietary benzo(a) pyrene on intestinal phase I and phase II drug metabolizing systems in normal and vitamin A–deficient rats. Gupta PH, et al. **Biochem Int** 1989 Oct; 19(4):709–22

Induction of cytochrome P450IA1 in rat hepatoma cell by polycyclic hydrocarbons and a dioxin. Xu LC, et al. **Biochem Pharmacol** 1990 Sep 15;40(6):1399–403

Metabolism of and DNA adduct formation by benzo[alpha]pyrene in human skin epithelial cells in vitro pretreated with cytochrome P450 modulators. Lehman TA, et al. **Cancer Biochem Biophys** 1989 Oct;10(4):345–52

Long term effects of benzo(a)pyrene on the activity of NAD(P)H:quinone reductase in the forestomach and glandular stomach of ICR/Ha mice. Jassim AD, et al. **Cancer Res** 1990 Apr 1;50(7):2064–7

Molecular dosimetry of DNA adducts and sister chromatid exchanges in human lymphocytes treated with benzo[a]pyrene. Wiencke JK, et al. **Carcinogenesis** 1990 Sep;11(9):1497–502

Inhibition of stage-specific DNA synthesis in rat spermatogenic cells by polycyclic aromatic hydrocarbons. Georgellis A, et al. **Chem Biol Interact** 1989;72(1–2):79–92

2,[3]tert-butyl-4-hydroxyanisole does not reduce SCE induction by benzo(a) pyrene in bone marrow cells of C57BL/6 mice. Van Horn R, et al. **Environ Mol Mutagen** 1990;16(1):26–31

Benzo(a)pyrene induces nuclear-DNA adducts in plant cell suspension culture. Detection by [32P] postlabelling. Rether B, et al. **FEBS Lett** 1990 Apr 9;263(1):172–4

Spontaneous and luminol-dependent chemiluminescences from tissue preparations of benzo[a]pyrene-injected mice. Yoshida LS, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Dec; 35(6):569–78

Stable expression of rat cytochrome P-450IA1 cDNA in V79 Chinese hamster cells and their use in mutagenicity testing. Dogra S, et al. **Mol Pharmacol** 1990 May;37(5):608–13

Benzo(a)pyrene inhibits epidermal growth factor binding and receptor autophosphorylation in human placental cell cultures. Guyda HJ, et al. **Mol Pharmacol** 1990 Feb; 37(2):137–43

The role of excision repair in the removal of transient benzo[a]pyrene-induced DNA lesions in Chinese hamster ovary cells. Blakey DH, et al. **Mutat Res** 1990 Jul; 236(1):35–41

Mechanism of antimutagenicity of aquatic plant extracts against benzo[a]pyrene in the Salmonella assay. Sato T, et al. **Mutat Res** 1990 Jul;241(3):283–90

Multiple-dosing effects of benzo[a]pyrene in the mouse bone marrow micronucleus test. Shimada H, et al. **Mutat Res** 1990 Jun-Aug;234(3–4):179–81

Singlet oxygen induced mutagenesis of benzo[a]pyrene derivatives. Seed JL, et al. **Photochem Photobiol** 1989 Nov; 50(5):625–32

Cytogenetic and biochemical studies in homo- and heterozygotes of ataxia-telangiectasia. Interaction between in vivo and in vitro exposure. Pawlak AL, et al. **Prog Clin Biol Res** 1990;340B:407–14

Clastogenic effects of benzo[a]pyrene in postimplantation embryos with different genetic background. Adler ID, et al. **Teratogenesis Carcinog Mutagen** 1989;9(6):383–92

TOXICITY

Quantitative DNA alterations during 5-azacytidine-induced differential modulation of benzo(a)pyrene carcinogenesis in hamster bronchi. Hammond WG, et al. **Cancer Commun** 1990;2(4):135–44

Differential effect of gestation stage on benzo(a)pyrene-induced micronucleus formation and/or covalent DNA modifications in mice. Wang MY, et al. **Cancer Res** 1990 Apr 1;50(7):2146–51

Ellagic acid toxicity and interaction with benzo[a]pyrene and benzo[a]pyrene 7,8-dihydrodiol in human bronchial epithelial cells. Teel RW, et al. **Cell Biol Toxicol** 1986 Mar; 2(1):53–62

Influence of the carcinogenic pollutant benzo[a]pyrene on plant development: fern gametophytes. Forrest V, et al. **Chem Biol Interact** 1989;72(3):295–307

Coinhibition of viral interferon induction by benzo[a]pyrene in association with occupation-related particles. Hahon N, et al. **Environ Res** 1990 Jun;52(1):83–98

Benzo[a]pyrene-induced immunotoxicity: comparison to DNA adduct formation in vivo, in cultured splenocytes, and in microsomal systems. Ginsberg GL, et al. **J Toxicol Environ Health** 1989;28(2):205–20

The third United Kingdom Environmental Mutagen Society collaborative trial: overview, a summary and assessment. Arlett CF, et al. **Mutagenesis** 1990;5 Suppl:85–8

Microwell mutation assays: evaluation of ethylmethanesulphonate, benzo[a]pyrene and benzidine using the tk locus in L5178Y mouse lymphoma cells. Clay P, et al. **Mutagenesis** 1990;5 Suppl:45–54

Induction of mutations in mouse lymphoma L5178Y cells by ethylmethanesulphonate, benzidine and benzo[a]pyrene. Henderson L, et al. **Mutagenesis** 1990;5 Suppl:27–34

The mutagenic activity of ethylmethanesulphonate, benzidine and benzo[a]pyrene at the hprt locus of wild-type L5178Y mouse lymphoma cells. Kennelly JC, et al. **Mutagenesis** 1990;5 Suppl:21–6

Induction of mutations in TK6 human lymphoblastoid cells by ethyl methanesulphonate, benzo[a]pyrene and benzidine. O'Brien KA, et al. **Mutagenesis** 1990;5 Suppl:55–60

Mutation assays of ethyl methanesulphonate, benzidine and benzo[a]pyrene using Chinese hamster V79 cells. O'Donovan MR. **Mutagenesis** 1990;5 Suppl:9–13

Chinese hamster ovary (CHO/HPRT) cell mutation assays with EMS, benzo[a]pyrene and benzidine. Phillips BJ, et al. **Mutagenesis** 1990;5 Suppl:15–20

Studies on the activities of benzo[a]pyrene, benzidine and ethyl methanesulphonate in the L5178Y TK +/- mouse lymphoma mutagenicity assay using standardized and non-standardized protocols. Riach CG, et al. **Mutagenesis** 1990;5 Suppl:35–44

Molecular dosimetry of DNA adducts in Chinese hamster ovary cells and C3H10T1/2 mouse embryo fibroblast cells treated with benzo[a]pyrene. Watson WP, et al. **Mutagenesis** 1990 Jul;5(4):381–5

Inhibition of meiotic divisions of rat spermatocytes in vitro by polycyclic aromatic hydrocarbons. Georgellis A, et al. **Mutat Res** 1990 Aug;231(2):125–35

Genotoxicity of benzo[a]pyrene, 2-nitrofluorene and airborne particulates in the DNA-repair host-mediated assay. Heussen GA, et al. **Mutat Res** 1990 May;241(1):83–93

The light-dependent cytotoxicity of benzo[a]pyrene: effect on human erythrocytes, Escherichia coli cells, and Haemophilus influenzae transforming DNA. Kagan J, et al. **Mutat Res** 1989 Oct;216(5):231–42

Induction of chromosome damage by benzo[a]pyrene, 2-aminofluorene and cyclophosphamide in the root cells of Vicia faba. Kanaya N. **Mutat Res** 1990 Feb;228(2):187–92

A comparison of DNA adduct formation in white blood cells and internal organs of mice exposed to benzo[a]pyrene, dibenzo[c,g]carbazole, safrole and cigarette smoke condensate. Reddy MV, et al. **Mutat Res** 1990 May; 241(1):37–48

Inhibitory action of peony root extract on the mutagenicity of benzo[a]pyrene. Sakai Y, et al. **Mutat Res** 1990 Jun; 244(2):129–34

Induction of cytotoxicity and mutagenesis is facilitated by fatty acid hydroperoxidase activity in Chinese hamster lung fibroblasts (V79 cells). Sevanian A, et al. **Mutat Res** 1989 Oct;224(2):185–96

Prostaglandins can modify gamma-radiation and chemical induced cytotoxicity and genetic damage in vitro and in vivo. Das UN, et al. **Prostaglandins** 1989 Dec;38(6):689–716

Induction of sister-chromatid exchanges by polycyclic aromatic hydrocarbons following metabolic activation with phorbol ester-stimulated human polymorphonuclear leukocytes. Seed JL, et al. **Res Commun Chem Pathol Pharmacol** 1990 Mar; 67(3):349–60

Respiratory carcinogenesis of nitroaromatics. Moon RC, et al. **Res Rep Health Eff Inst** 1990 Apr;(32):1–29

[Immune response to benzo(a)pyrene in rabbits immunized with a conjugate of benzo(a)pyrene-albumin, synthesized in the microsomal monooxygenase system of the liver] Shipulina NV, et al. **Biokhimiia** 1989 Aug;54(8):1254–7 (Eng. Abstr.) **(Rus)**

[Characteristics of the carcinogenic effect of benzo(a)pyrene after its combined intake and the problems of its standardization in the environment] Chernichenko IA. **Gig Sanit** 1989 Dec;(12):6–9 (Eng. Abstr.) **(Rus)**

[Hygienic characteristics and ways of sanitizing working conditions of persons exposed to the lubricants-coolants MP IV and MP 8] Kuzina VF, et al. **Gig Sanit** 1989 Jun; (6):74–5 **(Rus)**

[Value of the sanitary control of technological processes in the normalization of the environment] Malevanyĭ VN. **Gig Tr Prof Zabol** 1989;(8):37–8 (Eng. Abstr.) **(Rus)**

[Modification of the carcinogenic effect of 3,4-benzpyrene by thymosin and cyclophosphane] Volegov AI, et al. **Vopr Onkol** 1989;35(11):1381–2 **(Rus)**

BENZOPYRENE DIHYDRODIOLS see **DIHYDROXYDIHYDROBENZOPYRENES**

BENZOPYRENE HYDROXYLASE see under **ARYL HYDROCARBON HYDROXYLASES**

3,4-BENZOPYRENE see **BENZO(A)PYRENE**

BENZOPYRENES

ADVERSE EFFECTS

6-nitrobenzo[a]pyrene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:255–66 (54 ref.)

ANALYSIS

Synchronous fluorescence spectroscopic, immunoaffinity chromatographic and 32P-postlabeling analysis of human placental DNA known to contain benzo[a]pyrene diol epoxide adducts. Manchester DK, et al. **Carcinogenesis** 1990 Apr;11(4):553–9

CHEMICAL SYNTHESIS

Study on some biologically active coordination compounds of metal ions (I)--Synthesis, characterization, structure and antitumor activity of complex of 3,6-di-(dimethylamino)-dibenzopyriodonium lanthanum EDTA. Chen SY, et al. **Sci China [B]** 1989 Aug; 32(8):918–26

METABOLISM

The formation of covalent adducts between benzo[a]pyrenediol epoxide and RNA: structural analysis by mass spectrometry. Yamamoto J, et al. **Biochemistry** 1990 Apr 24;29(16):3966–72

Covalent binding of dibenzpyrenes and benzo[a]pyrene to DNA: evidence for synergistic and inhibitory interactions when applied in combination to mouse skin. Hughes NC, et al. **Carcinogenesis** 1990 Sep;11(9):1611–9

Influence of D-galactosamine on the kinetics of metabolic processes for two intermediate metabolites, 9-hydroxybenzo(a)pyrene and 3-hydroxybenzo(a)pyrene, in 3T3 and RTG2 cells. Lautier D, et al. **J Histochem Cytochem** 1990 Oct;38(10):1451–7

PHARMACOLOGY

The effects of benzo(a)pyrene, nicotine, and tobacco-specific N-nitrosamines on the generation of human lymphokine-activated killer cells. Lindemann RA, et al. **Arch Oral Biol** 1989;34(4):283–7

The induction of aneuploidy by 3-nitrobenzo[a]pyrene in Chinese hamster ovary cells. Neft RE, et al. **Mutagenesis** 1990 May;5(3):221–7

[Effects of complex of 3,6-di-(dimethylamino)-dibenzopyriodonium with praseodymium dicitrate on the syntheses of DNA, RNA, protein, nucleoprotein and ATP of leukemia L 7712 cells in mice] Liu LS, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar;10(2):188–91 (Eng. Abstr.) **(Chi)**

TOXICITY

Vat Yellow 4. **IARC Monogr Eval Carcinog Risks Hum** 1990; 48:161–8 (18 ref.)

1,2-BENZOPYRONES see **COUMARINS**

1,4-BENZOPYRONES see **CHROMONES**

BENZOTHIADIAZINE DIURETICS see **DIURETICS, THIAZIDE**

BENZOTHIADIAZINES

ADMINISTRATION & DOSAGE

[Long-term efficacy and side effect profile of a low-dose bemetizid-triamterene combination in patients with essential hypertension] Fritschka E, et al. **Med Klin** 1989 Nov 15;84(11):526–33 (Eng. Abstr.) **(Ger)**

CHEMICAL SYNTHESIS

Heteroarylalkanoic acids with possible antiinflammatoric activities. Part 6: 3-(4H-1,2,4-benzothiadiazine-1,1-dioxide-3-yl-thio)-propanoic acid derivatives. Gamberini G, et al. **Pharmazie** 1989 Sep;44(9):601–4

METABOLISM

In vitro hydroxylation of bentazon by microsomes from naphthalic anhydride-treated corn shoots. McFadden JJ, et al. **Biochem Biophys Res Commun** 1990 Apr 16; 168(1):206–13

BENZOTHIEPINS

CHEMICAL SYNTHESIS

2H,5H-[1]benzothiopyrano [4,3-b]pyran derivatives with platelet antiaggregating activity. Bargagna A, et al. **Farmaco** 1990 Apr;45(4):405–13

2H-[1]benzothiepino [5,4-b]pyran derivatives with local anesthetic and antiarrhythmic activities. Longobardi M, et al. **Farmaco** 1990 Apr;45(4):399–404

PHARMACOLOGY

[Effects of CN-100 (2-(10,11-dihydro-10-oxodibenzo [b,f] thiepin-2-yl) propionic acid) on cardiovascular and autonomic nervous function in the dog and guinea pig] Kushiku K, et al. **Nippon Yakurigaku Zasshi** 1989 Nov; 94(5):299–307 (Eng. Abstr.) **(Jpn)**

BENZOXAZOLES

Fluorescence assay for small peptides and amino acids: high-performance liquid chromatographic determination of selected substrates using activated S-flunoxaprofen as a chiral derivatizing agent. Langguth P, et al. **J Chromatogr** 1990 Jun 8;528(1):55–64

ANTAGONISTS & INHIBITORS

Influence of alpha-chloralose on muscle relaxant effect of chlorzoxazone in rats and pharmacodynamic analysis. Kaneko I, et al. **J Pharmacobiodyn** 1989 Aug;12(8):441–7

BLOOD

Estimation of the analgesic muscle relaxants chlorzoxazone and diazepam in human plasma by reversed-phase liquid chromatography. Gaitonde CD, et al. **J Chromatogr** 1990 Jun 29;528(2):407–14

CHEMICAL SYNTHESIS

Synthesis of some new Mannich bases derived from 6-acyl-3-(3,5-dimethylpiperidinomethyl)-2(3H)-

benzoxazolones+ ++ and their biological activities. Erol DD, et al. **Arzneimittelforschung** 1989 Aug;39(8):851–3
Synthesis and screening of analgesic and anti-inflammatory activity of 6-acyl-3-(4-substituted benzoylmethyl)-2(3H)-benzoxazolones. Erol DD, et al. **Arzneimittelforschung** 1990 Apr;40(4):478–80
Toxicities of dicyanobenzofurazans with formation of superoxide in Escherichia coli. Takabatake T, et al. **Chem Pharm Bull (Tokyo)** 1990 Jan;38(1):128–32
Chemometric approach in a QSAR study: the antibacterial and antimicotic activities of benzofused heteroaromatic derivatives. De Meo G, et al. **Farmaco** 1990 Mar; 45(3):313–30
Studies on hindered phenols and analogues. 2. 1,3-Benzoxathioles having SRS-A inhibiting activity. Aizawa Y, et al. **J Med Chem** 1990 May;33(5):1491–6
Synthesis and biological activity of 6-acyl-3-substituted-2(3H)-benzoxazolones. Erol DD, et al. **J Pharm Belg** 1989 Sep–Oct;44(5):334–8
[3-substituted 1,2-benzisoxazole and their neuroleptic activity] Del Corona L, et al. **Boll Chim Farm** 1989 May; 128(5):177–81 (Eng. Abstr.) **(Ita)**
[New heterocyclic derivatives with germicidal activity. VI. Synthesis and activity of new 2-benzoxazoyl-2'-furanes and -thiophenes variously substituted in 5 and 5' positions] De Meo G, et al. **Farmaco** 1989 May;44(5):475–82 (Eng. Abstr.) **(Ita)**

DIAGNOSTIC USE

(-)-(S)-flunoxaprofen and (-)-(S)-naproxen isocyanate: two new fluorescent chiral derivatizing agents for an enantiospecific determination of primary and secondary amines. Martin E, et al. **Chirality** 1989;1(3):223–34

PHARMACOLOGY

Effect of 6-methoxy-2-benzoxazolinone on the activities of rat pineal N-acetyltransferase and hydroxyindole-O-methyltransferase and on melatonin production. Daya S, et al. **J Pineal Res** 1990;8(1):57–66
Reproductive responses of male Microtus montanus to photoperiod, melatonin, and 6-MBOA. Gower BA, et al. **J Pineal Res** 1990;8(4):297–312
[Aminomethylamides of N-benzazoleacetic acids] Domagalina E, et al. **Acta Pol Pharm** 1989;46(2):114–8 (Eng. Abstr.) **(Pol)**

THERAPEUTIC USE

[Efficacy and tolerability of flunoxaprofen in the treatment of rheumatoid arthritis. A cross-over clinical study using naproxen] Fioravanti A, et al. **Clin Ter** 1989 Oct 31; 131(2):83–91 (Eng. Abstr.) **(Ita)**
[Activity of topical flunoxaprofen in nonspecific vaginitis. Comparison with meclocycline sulfosalicylate] Facchini V, et al. **Minerva Ginecol** 1989 Dec;41(12):609–14 (Eng. Abstr.) **(Ita)**

BENZOXEPINS

PHARMACOLOGY

Protective effects of KW-3635, a novel thromboxane A2 antagonist, in murine traumatic shock. Karasawa A, et al. **Eur J Pharmacol** 1990 Jun 21;182(1):1–8
Centrally mediated inhibitory effect of 5-[2-(diethylamino)ethyl]amino-5,11-dihydro[1]benzoxepino[3,4-b]pyridine trihydrochloride (KW-5805) on gastric acid secretion in rats. Yano S, et al. **Jpn J Pharmacol** 1990 Feb;52(2):287–93
Augmentation of the gastric mucosal defense mechanism induced by KW-5805, a novel antiulcer agent. Tanaka H, et al. **Scand J Gastroenterol Suppl** 1989;162:170–3

POISONING

Severe self-poisoning with oxetorone: report of one case. Galerneau V, et al. **J Toxicol Clin Toxicol** 1990;28(1):111–6

BENZOYL PEROXIDE see under **PEROXIDES**

BENZOYLARGININE-2-NAPHTHYLAMIDE see under **ARGININE**

BENZOYLARGININE NITROANILIDE see under **ARGININE**

BENZOYLCHOLINE see under **CHOLINE**

BENZOYLHYDRATROPIC ACID see **KETOPROFEN**

BENZPHETAMINE see under **PHENETHYLAMINES**

BENZTROPINE see under **TROPANES**

BENZYDAMINE see under **PYRAZOLES**

BENZYL ALCOHOLS see under **BENZYL COMPOUNDS**

BENZYL COMPOUNDS

Deuterium-labeled 3-nitrobenzyl alcohol as a matrix for fast atom bombardment mass spectrometry. Reddy AM, et al. **Biomed Environ Mass Spectrom** 1989 Dec;18(12):1087–95
Synthesis of C-glycosylarenes by way of internal reactions of benzylated and benzoylated carbohydrate derivatives. Martin OR, et al. **Carbohydr Res** 1990 Feb 25;196:41–58

ADMINISTRATION & DOSAGE

Inadvertent benzyl alcohol administration in neonates: do we contribute? [letter] [see comments] Reynolds P, et al. **Anesth Analg** 1989 Dec;69(6):855–6 Comment in: Anesth Analg 1990 Jun;70(6):673–4.

ADVERSE EFFECTS

Benzyl alcohol administration in neonates [letter; comment] Weissman DB, et al. **Anesth Analg** 1990 Jun;70(6):673–4 Comment on: Anesth Analg 1989 Dec;69(6):855–6.
Nebulizer bronchitis induced by bacteriostatic saline [letter] Reynolds RD. **JAMA** 1990 Jul 4;264(1):35
[Anaphylactic shock after sucking on a throat lozenge] Hesselbach C, et al. **Dtsch Med Wochenschr** 1990 Sep 14; 115(37):1397–9 (Eng. Abstr.) **(Ger)**

ANALYSIS

3-Amino-2-piperidinone-6-carboxylic acid. Molecular structures of cis and trans benzoyl derivatives. Li JP, et al. **Int J Pept Protein Res** 1989 Oct;34(4):311–8
Gas chromatography-based method for assigning the configurations of allylic and benzylic alcohols and for determining their optical purities. Hu YL, et al. **J Chromatogr** 1989 Nov 17;482(1):227–33
[Gas chromatographic determination of butyl alcohols in the atmospheric air] Ushakova VA, et al. **Gig Sanit** 1990 Feb; (2):68–9 **(Rus)**

CHEMICAL SYNTHESIS

Synthesis and anticonvulsant activity of 2-benzylglutarimides. Goehring RR, et al. **J Med Chem** 1990 Mar;33(3):926–31

METABOLISM

Salicin-fermenting variant of Shigella flexneri serotype 2a. Kerekes L. **Acta Microbiol Acad Sci Hung** 1965;12(1):7–13
bis(benzyl)polyamine analogues are substrates for a mammalian cell-transport system which is distinct from the polyamine-transport system. Byers TL, et al. **Biochem J** 1990 Jul 1;269(1):35–40
Patulin biosynthesis: epoxidation of toluquinol and gentisyl alcohol by particulate preparations from Penicillium patulum. Priest JW, et al. **Biochemistry** 1989 Nov 14; 28(23):9192–200
[The biotransformation of leiocarposide and salicin phenol glycosides—examples for special consideration of the absorption and metabolism of glycosidic compounds] Fötsch G, et al. **Pharmazie** 1989 Oct;44(10):710–2 (Eng. Abstr.) **(Ger)**
[Biotransformation of phenolglycosides leiocarposide and salicin] Fötsch G, et al. **Pharmazie** 1989 Aug;44(8):555–8 (Eng. Abstr.) **(Ger)**

PHARMACOKINETICS

Pharmacodynamics of benzyl chloride in rats. Saxena S, et al. **Arch Environ Contam Toxicol** 1989 Sep;18(5):669–77
Uptake of antimalarial bis(benzyl)polyamine analogs by human erythrocytes. Bitonti AJ, et al. **Biochem Pharmacol** 1989 Oct 15;38(20):3638–42
Age-related changes in the disposition of benzyl acetate. A model compound for glycine conjugation. McMahon TF, et al. **Drug Metab Dispos** 1989 Sep–Oct;17(5):506–12
In vivo percutaneous absorption of fragrance ingredients in rhesus monkeys and humans. Bronaugh RL, et al. **Food Chem Toxicol** 1990 May;28(5):369–73
[The pharmacokinetic study of 3H-alpha-2-butylhydroxybenzyl alcohol in rabbits] Tan TZ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Jun; 20(2):141–3 (Eng. Abstr.) **(Chi)**
[The distribution of 3H-alpha-sec-butyl-p hydroxybenzyl alcohol in mice] Tan TZ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Mar;20(1):58–61 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

The inhibition of 5-lipoxygenase by RG 6866. Carnathan GW, et al. **Agents Actions** 1989 Nov;28(3–4):204–11
Relaxation of canine airway smooth muscle by the heparin preservative benzyl alcohol. Tamaoki J, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):L355–60
Effects of 2,3-dibenzylbutane-1,4-diol on vascular smooth muscle of rabbit aorta. Abe M, et al. **Arch Int Pharmacodyn Ther** 1989 Sep–Oct;301:40–50
Priming effect of 2,3-dibenzylbutane-1,4-diol (mammalian lignan) on superoxide production in human neutrophils. Morikawa M, et al. **Biochem Biophys Res Commun** 1990 Apr 16;168(1):194–9
The local anaesthetic benzyl alcohol attenuates the alpha 2-adrenoceptor-mediated inhibition of human platelet adenylate cyclase activity when stimulated by prostaglandin E1, but not that stimulated by forskolin. Spence S, et al. **Biochem J** 1989 Dec 1;264(2):483–8
Morphological transformation of Syrian hamster embryo cells by aminobenzyl alcohols and nitrobenzyl alcohols is correlated with intercellular communication. Mikalsen SO. **Cancer Lett** 1990 Jul 31;52(3):203–8
The effect of phenyramidol on the metabolism of diphenylhydantoin. Solomon HM, et al. **Clin Pharmacol Ther** 1967 Jul–Aug;8(4):554–6
Effects of benzyl alcohol on transferrin and low density lipoprotein receptor mediated endocytosis in leukemic guinea pig B lymphocytes. Sainte-Marie J, et al. **FEBS Lett** 1990 Mar 12;262(1):13–6
A novel water-soluble dopamine-2 antagonist with anticholinesterase activity in gastrointestinal motor activity. Comparison with domperidone and neostigmine. Iwanaga Y, et al. **Gastroenterology** 1990 Aug;99(2):401–8
Benzyl alcohol alters the hemoglobin phenotype of mouse erythroleukemia cells. Scher W, et al. **J Biol Regul Homeost Agents** 1989 Jul–Sep;3(3):91–7
1-(substituted-benzyl)imidazole-2(3H)-thione inhibitors of dopamine beta-hydroxylase. Burke BJ, et al. **J Med Chem** 1990 Jan;33(1):274–81
Enkephalinase inhibitors. 1. 2,4-Dibenzylglutaric acid derivatives. Ksander GM, et al. **J Med Chem** 1989 Dec; 32(12):2519–26
Effect of some 4-alkyl-5-dimethylamino-1-phenyl-1-penten-3-one hydrochlorides and related compounds on respiration in mouse liver mitochondria. Dimmock JR, et al. **Pharmazie** 1989 Aug;44(8):560–2
Antibacterial activity of phenolic compounds and aromatic alcohols. Lucchini JJ, et al. **Res Microbiol** 1990 May; 141(4):499–510
[The pharmacology of the lipoxygenase inhibitors oxphaman (1-(2,5-dihydroxybenzylidene)aminoadamantane) and oxphalin (1-(3,4-dihydroxybenzylidene)-2,4,6-trimethylaniline] Bekemeier H, et al. **Pharmazie** 1989 Aug;44(8):550–5 (Eng. Abstr.) **(Ger)**
[Inhibition of neutrophil function by solvent of injectable sedatives—effects of propylene glycol, ethanol and benzyl alcohol] Morisaki H. **Masui** 1989 Dec;38(12):1588–96 (Eng. Abstr.) **(Jpn)**

STANDARDS

[Hygienic standardization of p-chlorobenzylchloride in reservoir water] Pis'ko GT, et al. **Gig Sanit** 1990 May; (5):13–4 **(Rus)**

BENZYL VIOLOGEN see under **PYRIDINIUM COMPOUNDS**

BENZYLAMINE OXIDASE see under **MONOAMINE OXIDASE**

BENZYLAMINES

The effect of selective noradrenergic denervation on thyrotropin secretion in the rat. Jaffer A, et al. **Neurochem Res** 1990 Jan;15(1):13–6

CHEMICAL SYNTHESIS

[Synthesis and antimalarial as well as antitumor activities of 1-methyl-2,4-diamino-6-(N-methyl-substituted benzylamion) quinazolinium iodides] Zhou WC, et al. **Yao Hsueh Hsueh Pao** 1989;24(12):953–6 (Eng. Abstr.) **(Chi)**

METABOLISM

Reductive trapping of substrate to methylamine oxidase from Arthrobacter P1. Hartmann C, et al. **FEBS Lett** 1990 Feb 26;261(2):441–4
Affinity and hydrophobic interactions of penicillin amidase. Mali RS, et al. **Hindustan Antibiot Bull** 1989 Feb–May; 31(1-2):25–8

PHARMACOLOGY

The interaction of the beta-haloethyl benzylamines, xylamine, and DSP-4 with catecholaminergic neurons. Dudley MW, et al. **Annu Rev Pharmacol Toxicol** 1990; 30:387–403 (64 ref.)
Region-specific noradrenaline depletion by neonatal DSP-4: functional consequences and effect on a coexisting neurotransmitter. Donnerer J, et al. **Eur J Pharmacol** 1990 May 31;181(1-2):147–50
The response of noradrenergic axons to systemically administered DSP-4 in the rat: an immunohistochemical study using antibodies to noradrenaline and dopamine-beta-hydroxylase. Fritschy JM, et al. **J Chem Neuroanat** 1990 Jul–Aug;3(4):309–21
Quantitative structure-antimicrobial activity relationship in 5 beta-cholanyl-24-benzylamine derivatives. Fini A, et al. **J Pharm Sci** 1990 Jul;79(7):603–5
The partial opiate receptor agonists, dezocine and ciramadol act as mu receptor antagonists at the feline ileocecal sphincter. Ouyang A. **Life Sci** 1989;45(16):1491–7
The effect of partial noradrenergic denervation on corticosterone secretion in the rat. Daniels WM, et al. **Neurochem Res** 1989 Dec;14(12):1187–90
Noradrenergic system: effect of DSP4 and FLA-57 on ethanol intake in ethanol preferring rats. Daoust M, et al. **Pharmacol Biochem Behav** 1990 May;36(1):133–7
Impairment of active avoidance by the noradrenergic neurotoxin, DSP4: attenuation by post-training epinephrine. Bennett MC, et al.

Psychopharmacology (Berl) 1990;101(4):505–10

DSP-4–induced depletion of brain norepinephrine produces opposite effects on exploratory behavior 3 and 14 days after treatment. Berridge CW, et al.
Psychopharmacology (Berl) 1990;100(4):504–8

Behavioral effects of the inhibitors of phenylethanolamine-N-methyltransferase, LY 78335 and LY 134046, and their interactions with ethanol. Durcan MJ, et al. **Psychopharmacology (Berl)** 1990;101(2):196–202

THERAPEUTIC USE

Paradoxical DSP-4 effects: protection against gastric erosions and depletion of mucosal glycoproteins. Bakke HK, et al. **Brain Res** 1990 May 28;517(1–2):301–7

BENZYLIDENE COMPOUNDS

N-p-methoxybenzylidene derivatives of 2-amino-2-deoxy-D-glucose as glycosyl donors: a reinvestigation. Marra A, et al. **Carbohydr Res** 1990 Apr 25;200:319–37

PHARMACOLOGY

[Pharmacologic properties of new 5-benzylidene derivatives of 3-m-nitrophenyl-2-thiohydantoin] Kleinrok Z, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:169–76 (Eng. Abstr.) **(Pol)**

BENZYLPENICILLIN see **PENICILLIN G**

BEPHENIUM COMPOUNDS

THERAPEUTIC USE

Evaluation of albendazole, pyrantel, bephenium, pyrantel–praziquantel and pyrantel–bephenium for single-dose mass treatment of necatoriasis. Nahmias J, et al. **Ann Trop Med Parasitol** 1989 Dec;83(6):625–9

BEPRIDIL

ANALOGS & DERIVATIVES

Electrophysiological effects of bepridil and its quaternary derivative CERM 11888 in closed chest anaesthetized dogs: a comparison with verapamil and diltiazem. Leboeuf J, et al. **Br J Pharmacol** 1989 Dec;98(4):1351–9

Comparative effects of bepridil, its quaternary derivative CERM 11888 and verapamil on caffeine-induced contracture in ferret hearts. Leboeuf J, et al.
Br J Pharmacol 1989 Sep;98(1):119–26

METABOLISM

Binding of bepridil to isolated rat heart mitochondria. Schneider JM, et al. **Basic Res Cardiol** 1989 Nov–Dec; 84(6):623–30

Binding of a calcium sensitizer, bepridil, to cardiac troponin C. A fluorescence stopped-flow kinetic, circular dichroism, and proton nuclear magnetic resonance study. MacLachlan LK, et al. **J Biol Chem** 1990 Jun 15;265(17):9764–70

PHARMACOLOGY

Effects of bepridil and CERM 4205 (ORG 30701) on the relation between cardiac cycle length and QT duration in healthy volunteers. Lecocq B, et al. **Am J Cardiol** 1990 Sep 1;66(5):636–41

Bepridil protects sickle cells against the adverse rheological effects of cyclical deoxygenation. Johnston MN, et al.
Br J Haematol 1989 Dec;73(4):522–6

Comparative effects of bepridil, its quaternary derivative CERM 11888 and verapamil on caffeine-induced contracture in ferret hearts. Leboeuf J, et al.
Br J Pharmacol 1989 Sep;98(1):119–26

Electrophysiological effects of bepridil and its quaternary derivative CERM 11888 in closed chest anaesthetized dogs: a comparison with verapamil and diltiazem. Leboeuf J, et al. **Br J Pharmacol** 1989 Dec;98(4):1351–9

Comparative effects of the isomers of bepridil on isolated coronary and aortic arteries. Winslow E, et al.
Eur J Pharmacol 1989 Jul 18;166(2):241–9

Antiarrhythmic effects of a benzothiazine derivative (SD-3211) and its stereoisomer (SA3212) in anaesthetized rats and isolated perfused rat hearts compared with bepridil. Fukuchi M, et al.
Naunyn Schmiedebergs Arch Pharmacol 1990 Jun; 341(6):557–64

Lack of triggered automaticity despite repolarization abnormalities due to bepridil and lidoflazine. Campbell RM, et al. **PACE** 1990 Jan;13(1):30–6

THERAPEUTIC USE

Controlled clinical trial of bepridil, propranolol and placebo in the treatment of exercise induced angina pectoris. B.I.S. Research Group. Destors JM, et al.
Fundam Clin Pharmacol 1989;3(6):597–611

BERBERINE see under **BERBINES**

BERBINES

Interaction of berberine chloride with deoxyribonucleic acids: evidence for base and sequence specificity. Debnath D, et al. **Indian J Biochem Biophys** 1989 Aug;26(4):201–8

ANALYSIS

[Determination of berberine in Angong Niuhuang Wan by HPLC] Lin SL, et al. **Yao Hsueh Hsueh Pao** 1989 Jan; 24(1):48–52 (Eng. Abstr.) **(Chi)**

[Determination of berberine and palmatine in cortex phellodendron and Chinese patent medicines by HPLC] Wang YM, et al. **Yao Hsueh Hsueh Pao** 1989;24(4):275–9 (Eng. Abstr.) **(Chi)**

METABOLISM

Interactions of berberine with poly(A) and tRNA. Nandi R, et al. **Biochim Biophys Acta** 1990 Jul 30;1049(3):339–42

PHARMACOLOGY

The effect of CH-38083 on the motility and passive avoidance behavior of male Sprague-Dawley rats. Bence J, et al. **Acta Physiol Hung** 1990;75 Suppl:29–30

Characterization of the alpha-2-adrenoceptor labelling specificity of [3H]CH-38083. Botos K, et al.
Acta Physiol Hung 1990;75 Suppl:41–2

Idazoxan and CH-38083 affect gastric secretion by inhibiting alpha-2 adrenoceptors at vagal and sympathetic pathways. Del Tacca M, et al. **Acta Physiol Hung** 1990;75 Suppl:81–2

The behavior of CH-38083 on putative alpha-2 adrenoreceptor subtypes. Fejér E, et al.
Acta Physiol Hung 1990;75 Suppl:101–2

Effects of tetrahydroprotoberberines on dopamine receptor subtypes in brain. Xu SX, et al.
Chung Kuo Yao Li Hsueh Pao 1989 Mar;10(2):104–10

Study of the effects and mechanisms of berberine on slow-response action potentials. Huang WM, et al.
J Electrocardiol 1990 Jul;23(3):231–4

A new kalium channel blocker of Chinese medicinal origin—benzyltetrahydropalmatine hydrochloride. Yao WX, et al. **J Tongji Med Univ** 1990;10(1):1–4

Blocking action of berberine on various receptors in rat anococcygeus muscle. Yao WX, et al.
J Tongji Med Univ 1989;9(2):86–90

Berbanes: search for novel alpha-2 adrenoceptor antagonists. Harsing LG Jr, et al. **Pol J Pharmacol Pharm** 1988 Nov–Dec;40(6):697–708 (20 ref.)

[Antiarrhythmic effect and electrophysiologic study of berberine] Zhao XZ, et al.
Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1989 Jun; 17(3):159–61 **(Chi)**

[The blocking and partial agonistic actions of jatrorrhizine on alpha-adrenoceptors] Han H, et al.
Chung Kuo Yao Li Hsueh Pao 1989 Sep;10(5):385–9 (Eng. Abstr.) **(Chi)**

[Effects of l-tetrahydropalmatine on isolated rabbit arterial strips] Sun F, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Jan;10(1):30–3 (Eng. Abstr.) **(Chi)**

[Effect of berberine on slow inward ionic current in guinea pig ventricular papillary muscle] Sun XD, et al.
Chung Kuo Yao Li Hsueh Pao 1989 Mar;10(2):130–4 (Eng. Abstr.) **(Chi)**

[Antidiarrheal and anti-inflammatory effects of berberine] Zhang MF, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar; 10(2):174–6 (Eng. Abstr.) **(Chi)**

[Effects of 7-bromoethoxybenzene-tetrahydro-palmatine on isolated working guinea pig heart] Yang BF, et al.
Yao Hsueh Hsueh Pao 1989;24(2):81–4 (Eng. Abstr.) **(Chi)**

THERAPEUTIC USE

Berberine derivatives as antileishmanial drugs. Vennerstrom JL, et al. **Antimicrob Agents Chemother** 1990 May; 34(5):918–21

[Effects of berberine on ischemic ventricular arrhythmia] Huang WM, et al.
Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1989 Oct; 17(5):300–1, 319 (Eng. Abstr.) **(Chi)**

[Clinical study on the treatment of dyskinesia by L-stepholidine] Le W.
Chung Hua Shen Ching Ching Shen Ko Tsa Chih 1989 Dec; 22(6):335–7, 381–2 (Eng. Abstr.) **(Chi)**

[Protective effects of berberine on spontaneous ventricular fibrillation in dogs after myocardial infarction] Xu Z, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Jul;10(4):320–4 (Eng. Abstr.) **(Chi)**

BEREAVEMENT

Supporting the bereaved. Gifford BJ, et al. **Am J Nurs** 1990 Feb;90(2):48–53

Sequelae of bereavement resulting from suicide. Ness DE, et al. **Am J Psychiatry** 1990 Mar;147(3):279–85 (63 ref.)

Coming to terms with the death of a loved one. Eccles R.
BMJ 1989 Dec 23–30;299(6715):1598–9

Terminal care in general practice [letter] Gunnell DJ.
BMJ 1990 May 26;300(6736):1400–1

Care of the suddenly bereaved. Yates DW, et al. **BMJ** 1990 Jul 7;301(6742):29–31

'Dental sensitivity and bereavement' [letter] Dean R.
Br Dent J 1990 Jan 20;168(2):54

Dental sensitivity and bereavement [letter] [see comments] Edlin I. **Br Dent J** 1989 Dec 9–23;167(11):371 Comment in: Br Dent J 1990 Feb 10;168(3):92–3.

'Dental sensitivity and bereavement' [letter; comment] Owen JG. **Br Dent J** 1990 Feb 10;168(3):92–3 Comment on: Br Dent J 1989 Dec 9–23;167(11):371.

Evaluation of bereavement intervention. Scruby LS, et al.
Can J Public Health 1989 Nov–Dec;80(6):394–8

Bereavement: a review for oncology health professionals. Chochinov HM. **Cancer Invest** 1989;7(6):593–600

Parental adjustment to intrapartum and delivery room loss. The role of a hospital-based support program. Weiss L, et al. **Clin Perinatol** 1989 Dec;16(4):1009–19 (10 ref.)

The transition from caregiving to bereavement: the relationship of care-related strain and adjustment to death. Bass DM, et al. **Gerontologist** 1990 Feb;30(1):35–42

Counselor humanizes hospital for dying patients' families. Weisman E. **Hospitals** 1990 Jun 20;64(12):54–5

The veterinarian as counselor. Antelyes J.
J Am Vet Med Assoc 1989 Sep 15;195(6):732–4

Bereavement and depression. Clayton PJ.
J Clin Psychiatry 1990 Jul;51 Suppl:34–8; discussion 39–40 (23 ref.)

Anxiety disorders during acute bereavement: risk and risk factors. Jacobs S, et al. **J Clin Psychiatry** 1990 Jul; 51(7):269–74

Art therapy with bereaved youth. McIntyre BB.
J Palliat Care 1990 Spring;6(1):16–25

Perinatal bereavement support service: three-year review. Moscarello R. **J Palliat Care** 1989 Dec;5(4):12–8

Fathers grieve, too. Bryant CM. **J Perinatol** 1989 Dec; 9(4):437–41

The consequences of bereavement. Preston J. **Practitioner** 1989 Feb 8;233(1462):137–9

Retrospective assessment of marital adjustment and depression during the first 2 years of spousal bereavement. Futterman A, et al. **Psychol Aging** 1990 Jun;5(2):277–83

The owner of the pet with cancer. Hetts S, et al.
Vet Clin North Am Small Anim Pract 1990 Jul;20(4):879–96 (30 ref.)

[The child as a substitute] Sabbadini A. **Psychiatr Enfant** 1989;32(2):519–41 (Eng. Abstr.) **(Fre)**

[Guidelines for helping families after the death of a child] Dyregrov A. **Tidsskr Nor Laegeforen** 1989 Nov 30; 109(33):3408–11 (Eng. Abstr.) **(Nor)**

[Bereavement, depression and immunity] Reichborn-Kjennerud T. **Tidsskr Nor Laegeforen** 1990 Jun 10;110(15):1965–7 (17 ref.) (Eng. Abstr.) **(Nor)**

BERGER'S DISEASE see **GLOMERULONEPHRITIS, IGA**

BERIBERI

COMPLICATIONS

[A case of wet beriberi] Borghi E, et al.
Recenti Prog Med 1989 Nov;80(11):588–90 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Electrophysiologic evaluation of beri-beri polyneuropathy. Djoenaidi W, et al. **Electromyogr Clin Neurophysiol** 1990 Feb–Mar;30(2):97–103

Cardiac beri-beri. Report of a case with an echocardiographic study. Khowsathit P, et al.
Jpn Heart J 1990 Mar;31(2):265–9

Cardiomyopathy or cardiac beriberi in sugarcane fieldworkers [letter; comment] Lamont NM.
S Afr Med J 1990 May 19;77(10):542 Comment on: S Afr Med J 1990 Feb 3;77(3):125–7.

Clinical diagnosis of cardiac beriberi [see comments] Naidoo DP, et al. **S Afr Med J** 1990 Feb 3;77(3):125–7 Comment in: S Afr Med J 1990 May 19;77(10):542.

DRUG THERAPY

[Specific emergency treatment of shoshin beriberi and its metabolic complications (letter)] Monchamps G, et al.
Presse Med 1989 Oct 21;18(34):1711–2 **(Fre)**

HISTORY

Thiamine deficiency and sudden deaths: lessons from the past [letter] Phua KH, et al. **Lancet** 1990 Jun 16; 335(8703):1471–2

The prevention and conquest of scurvy, beri-beri, and pellagra. Jukes TH. **Prev Med** 1989 Nov;18(6):877–83

BERNARD-SOULIER SYNDROME see under **BLOOD PLATELET DISORDERS**

BERNARD'S SYNDROME see **HORNER'S SYNDROME**

BERNOULLI DISTRIBUTION see **BINOMIAL DISTRIBUTION**

BERRIES see **FRUIT**

BERRY ANEURYSM see **CEREBRAL ANEURYSM**

BERTIELLIASIS see **CESTODE INFECTIONS**

BERYLLIOSIS

DIAGNOSIS

On the differential diagnosis of chronic beryllium disease and sarcoidosis [letter] Jones-Williams W. **Am Rev Respir Dis** 1990 Sep;142(3):739-40

A study of immunological indices for diagnosis of chronic berylliosis. Yao JJ, et al. **Biomed Environ Sci** 1989 Dec; 2(4):318-24

Beryllium workers--sarcoidosis or chronic beryllium disease. Williams WJ. **Sarcoidosis** 1989 Oct;6 Suppl 1:34-5

[Clinical aspects and diagnosis of chronic berylliosis--a case report] Bargon J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:320-1 (Eng. Abstr.) **(Ger)**

METABOLISM

Laser microprobe mass spectrometry (LAMMS) analysis of beryllium, sarcoidosis and other granulomatous diseases. Williams WJ, et al. **Sarcoidosis** 1989 Sep;6(2):111-7

PATHOLOGY

Berylliosis. Burnett JW. **Cutis** 1990 Mar;45(3):151, 154

[Chronic berylliosis of the lungs] Blokhin AV. **Arkh Patol** 1989;51(12):52-5 (Eng. Abstr.) **(Rus)**

[Pulmonary berylliosis] Dmitruk IM, et al. **Arkh Patol** 1989; 51(8):71-4 (Eng. Abstr.) **(Rus)**

BERYLLIUM

Dermatologic radiation therapy: Pyrex versus beryllium window units [letter] Edwards EK Jr, et al. **Int J Dermatol** 1990 Mar;29(2):156

ADVERSE EFFECTS

Pathologic and immunologic alterations in early stages of beryllium disease: re-examination of disease definition and natural history [letter; comment] Israel HL, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1834-5 Comment on: Am Rev Respir Dis 1989 Jun;139(6):1479-86.

Beryllium workers--sarcoidosis or chronic beryllium disease. Williams WJ. **Sarcoidosis** 1989 Oct;6 Suppl 1:34-5

ANALYSIS

Determination of the oxide layer thickness on beryllium metal particles. Hoover MD, et al. **Am Ind Hyg Assoc J** 1989 Oct;50(10):550-3

Laser microprobe mass spectrometry (LAMMS) analysis of beryllium, sarcoidosis and other granulomatous diseases. Williams WJ, et al. **Sarcoidosis** 1989 Sep;6(2):111-7

BLOOD

Behaviour of urinary beryllium in general population and in subjects with low-level occupational exposure. Apostoli P, et al. **Med Lav** 1989 Sep-Oct;80(5):390-6 (19 ref.)

PHARMACOLOGY

Inhibitory effects of beryllium chloride on rat liver microsomal enzymes. Teixeira CF, et al. **Toxicology** 1990 Apr 30;61(3):293-301

Aluminofluoride and berylliofluoride complexes: a new phosphate analogs in enzymology. Chabre M. **Trends Biochem Sci** 1990 Jan;15(1):6-10 (32 ref.)

POISONING

Cytochemical study of abnormal intranuclear structures rich in beryllium [published erratum appears in Biol Cell 1990;68(2):176] Berry JP, et al. **Biol Cell** 1989;67(2):147-57

TOXICITY

Inhibition of epidermal growth factor-stimulated hepatocyte proliferation by the metallocarcinogen beryllium. Skilleter DN, et al. **Biochem Soc Trans** 1989 Dec;17(6):1040-1

Studies on the genotoxicity of beryllium sulphate in vitro and in vivo. Ashby J, et al. **Mutat Res** 1990 Mar; 240(3):217-25

The induction of chromosome damage in CHO cells by beryllium and radiation given alone and in combination. Brooks AL, et al. **Radiat Res** 1989 Dec;120(3):494-507

[Data for revising the MPEL of beryllium in drinking water] Voronin SA, et al. **Gig Sanit** 1989 Aug;(8):73-4 **(Rus)**

[An evaluation of the DNA-damaging action of the metal carcinogen beryllium using a bacterial repair test] Dylevol MV. **Mikrobiol Zh** 1990 Jan-Feb;52(1):34-8 (Eng. Abstr.) **(Rus)**

[The mutagenic effect of beryllium on animals] Nikiforova VIa, et al. **Tsitol Genet** 1989 Jul-Aug;23(4):27-30 (Eng. Abstr.) **(Rus)**

BERYLLIUM DISEASE see **BERYLLIOSIS**

BESNIER-BOECK DISEASE see **SARCOIDOSIS**

BESNOITIA see **SPOROZOA**

BESNOITIASIS see **PROTOZOAN INFECTIONS**

BETA-N-ACETYLHEXOSAMINIDASE

ANALYSIS

Enzyme immunoassay of beta-hexosaminidase isoenzymes using monoclonal antibodies. Isaksson A, et al. **Scand J Clin Lab Invest** 1989 Nov;49(7):597-603

BIOSYNTHESIS

Expression of human lysosomal beta-hexosaminidase in yeast vacuoles. Prezant TR. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):383-90

[Screening of beta-N-acetylhexosaminidase forming strains and conditions for enzyme production] Yan ZZ, et al. **Wei Sheng Wu Hsueh Pao** 1990 Apr;30(2):122-8 (Eng. Abstr.) **(Chi)**

BLOOD

Serum beta-hexosaminidase as a marker of heavy drinking. Kärkkäinen P, et al. **Alcoholism** 1990 Apr;14(2):187-90

Immunoassay of beta-hexosaminidase isoenzymes in serum in patients with raised total activities. Isaksson A, et al. **Clin Chim Acta** 1989 Aug 15;183(2):155-62

CLASSIFICATION

Some comments on the type references of the official nomenclature (IUB) for beta-N-acetylglucosaminidase, beta-N-acetylhexosaminidase and beta-N-acetylgalactosaminidase [letter] Cabezas JA. **Biochem J** 1989 Aug 1;261(3):1059-60

DEFICIENCY

GM2-gangliosidosis. Clinical and biochemical aspects of four cases. Praamstra P, et al. **Clin Neurol Neurosurg** 1990; 92(2):143-8

Thermolabile hexosaminidase (Hex) B: diverse frequencies among Jewish communities and implication for screening of sera for Hex A deficiencies. Navon R, et al. **Hum Hered** 1990;40(2):99-104

Juvenile GM2 gangliosidosis variant B1: clinical and biochemical study in seven patients. Maia M, et al. **Neuropediatrics** 1990 Feb;21(1):18-23 (24 ref.)

GENETICS

GM2-gangliosidosis B1 variant: analysis of beta-hexosaminidase alpha gene abnormalities in seven patients. Tanaka A, et al. **Am J Hum Genet** 1990 Feb; 46(2):329-39

A new point mutation in the beta-hexosaminidase alpha subunit gene responsible for infantile Tay-Sachs disease in a non-Jewish Caucasian patient (a Kpn mutant). Tanaka A, et al. **Am J Hum Genet** 1990 Sep;47(3):568-74

A new point mutation within exon 5 of beta-hexosaminidase alpha gene in a Japanese infant with Tay-Sachs disease. Nakano T, et al. **Ann Neurol** 1990 May;27(5):465-73

Distribution and characterization of a Sandhoff disease-associated 50-kb deletion in the gene encoding the human beta-hexosaminidase beta-chain. Bikker H, et al. **Hum Genet** 1990 Aug;85(3):327-9

Thermolabile hexosaminidase (Hex) B: diverse frequencies among Jewish communities and implication for screening of sera for Hex A deficiencies. Navon R, et al. **Hum Hered** 1990;40(2):99-104

Introduction of the alpha subunit mutation associated with the B1 variant of Tay-Sachs disease into the beta subunit produces a beta-hexosaminidase B without catalytic activity. Brown CA, et al. **J Biol Chem** 1989 Dec 25; 264(36):21705-10

A frameshift mutation in a patient with Tay-Sachs disease causes premature termination and defective intracellular transport of the alpha-subunit of beta-hexosaminidase. Lau MM, et al. **J Biol Chem** 1989 Dec 15;264(35):21376-80

Characterization of human placental beta-hexosaminidase I2. Proteolytic processing intermediates of hexosaminidase A. Mahuran DJ. **J Biol Chem** 1990 Apr 25;265(12):6794-9

Juvenile GM2 gangliosidosis caused by substitution of histidine for arginine at position 499 or 504 of the alpha-subunit of beta-hexosaminidase. Paw BH, et al. **J Biol Chem** 1990 Jun 5;265(16):9452-7

Fine assignment of beta-hexosaminidase A alpha-subunit on 15q23-q24 by high resolution in situ hybridization. Takeda K, et al. **Tohoku J Exp Med** 1990 Mar;160(3):203-11

[Genetic deficiencies of beta-N-acetylhexosaminidase A and B: Tay-Sachs and Sandhoff diseases (GM2-gangliosidosis)] Suzuki K. **Tanpakushitsu Kakusan Koso** 1988 Apr; 33(5):721-7 **(Jpn)**

ISOLATION & PURIFICATION

An enzyme with properties similar to those of beta-N-acetylhexosaminidase S is expressed in the promyelocytic cell line HL-60. Emiliani C, et al. **Biochem J** 1990 Apr 1;267(1):111-7

beta-N-acetylhexosaminidases in the spleen of a patient with hairy-cell leukaemia. Emiliani C, et al. **Biochim Biophys Acta** 1990 Mar 1;1037(3):265-73

Studies on the N-acetyl-beta-D-hexosaminidase B from germinating Lupinus luteus L. seeds. I. Purification and characterization. Pócsi I, et al. **Biochim Biophys Acta** 1990 May 31;1039(1):110-8

Identification of an intermediate form of beta-N-acetylhexosaminidase in chorionic villi. Pieretti M, et al. **Clin Chim Acta** 1990 Apr 30;188(2):109-17

Purification and properties of beta-N-acetylhexosaminidase A from pig brain. Garcia-Alonso J, et al. **Int J Biochem** 1990;22(6):645-51

[Isolation and characteristics of hexosaminidase A and activator protein from human kidney] Aronovich EL, et al. **Biokhimiia** 1990 Jan;55(1):43-51 (Eng. Abstr.) **(Rus)**

METABOLISM

3,4-Dinitrophenyl N-acetyl-beta-D-glucosaminide, a synthetic substrate for direct spectrophotometric assay of N-acetyl-beta-D-glucosaminidase or N-acetyl-beta-D-hexosaminidase. Yagi T, et al. **Anal Biochem** 1989 Dec;183(2):245-9

Studies on the N-acetyl-beta-D-hexosaminidase B from germinating Lupinus luteus L. seeds. II. Mechanism and inhibition with some 2-acetamido-2-deoxyaldono(1----4)lactones. Pócsi I, et al. **Biochim Biophys Acta** 1990 May 31;1039(1):119-22

Pineal lysosomal enzyme circadian rhythms in male hamsters exposed to natural decreasing photoperiod and temperature conditions. Vaughan MK, et al. **Brain Res Bull** 1990 Apr; 24(4):561-4

Enzyme-altered foci in colons of carcinogen-treated rats. Barrow BJ, et al. **Cancer Res** 1990 Mar 15;50(6):1911-6

The effects of moderate drinking and abstinence on serum and urinary beta-hexosaminidase levels. Kärkkäinen P, et al. **Drug Alcohol Depend** 1990 Feb;25(1):35-8

Beta-hexosaminidase activity in alcoholic fatty liver and in CCl4-induced liver fibrosis of the rat. Antoniello S, et al. **Enzyme** 1989;42(2):68-72

[Beta-N-acetyl hexosaminidase and liver Kupffer cells] Scapa E, et al. **Harefuah** 1990 Jan 15;118(2):98-9 (19 ref.) **(Heb)**

BETA ADRENERGIC BLOCKING AGENTS see **ADRENERGIC BETA RECEPTOR BLOCKADERS**

BETA ADRENERGIC RECEPTOR AGONISTS see **ADRENERGIC BETA RECEPTOR AGONISTS**

BETA ADRENERGIC RECEPTOR BLOCKADERS see **ADRENERGIC BETA RECEPTOR BLOCKADERS**

BETA ADRENERGIC RECEPTORS see **RECEPTORS, ADRENERGIC, BETA**

BETA-ALANINE KETOGLUTARATE AMINOTRANSFERASE see **AMINOBUTYRATE AMINOTRANSFERASE**

BETA-AMYLASE see under **AMYLASES**

BETA BLOCKERS, ADRENERGIC see **ADRENERGIC BETA RECEPTOR BLOCKADERS**

BETA CELL, ARTIFICIAL see **INSULIN INFUSION SYSTEMS**

BETA-ENDORPHIN

ADMINISTRATION & DOSAGE

Beta-endorphin alters a viral induced central nervous system disease in normal mice but not in nude mice. Doll SC, et al. **J Neuroimmunol** 1989 Sep;24(1-2):47-53

Tolerance to delta- but not mu-opioid receptors in the spinal cord attenuates inhibition of the tail-flick response induced by beta-endorphin administered intracerebroventricularly in mice. Suh HH, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):807-13

ANALOGS & DERIVATIVES

Beta-endorphin chimeric peptides: transport through the blood-brain barrier in vivo and cleavage of disulfide linkage by brain. Pardridge WM, et al. **Endocrinology** 1990 Feb;126(2):977-84

Opioids modulate interleukin-1 production and secretion by bone-marrow macrophages. Apte RN, et al. **Immunol Lett** 1990 May;24(2):141-8

Opioid receptor selectivity of peptide models of beta-endorphin. Taylor JW, et al. **Int J Pept Protein Res** 1989 Jul;34(1):75-80

ANALYSIS

Effect of psychoactive drugs on lymphocyte neuropeptides. Sacerdote P, et al. **Ann N Y Acad Sci** 1990;594:270-9

beta-Endorphin-like and adrenocorticotropin-like hormones in the pituitary of the snake Ptyas mucosa. Ng TB, et al. **Biochem Int** 1990;20(6):1111-8

Beta-endorphin-like and adrenocorticotropin-like materials in heart tissues of the rat, gerbil, hamster and guinea pig. Ng TB, et al. **Comp Biochem Physiol [C]** 1990;95(1):45-53

Immunohistochemical localization of beta-endorphin-like material in the urodele and anuran amphibian tissues. Vethamany-Globus S. **Gen Comp Endocrinol** 1989 Aug; 75(2):271-9

Characterization of beta-endorphin in human pituitary by fast atom bombardment mass spectrometry of trypsin-generated fragments. Dass C, et al.

Int J Pept Protein Res 1989 Aug;34(2):81–7
Pro–opiomelanocortin–derived peptides in transected and contralateral motor nerves of the rat. Hughes S, et al. **J Chem Neuroanat** 1989 Jul–Aug;2(4):227–37
Beta–endorphin–like and alpha–MSH–like immunoreactivities in human milk. Ferrando T, et al. **Life Sci** 1990;47(7):633–5
Effect of restraint stress on gonadal proopiomelanocortin peptides and the pituitary–testicular axis in rats. Mann DR, et al. **Life Sci** 1990;46(22):1601–9
Immunoreactive evidence of beta–endorphin and methionine–enkephalin–Arg–Gly–Leu in human tooth pulp. Robinson QC, et al. **Life Sci** 1989;45(11):987–92
Developmental patterns for pancreatic opioids in the rat. Powell AM, et al. **Pancreas** 1989;4(6):694–701
Characterization of beta–endorphin peptides in the spinal cord of the rat. Gianoulakis C, et al. **Peptides** 1989 Sep–Oct; 10(5):1049–54
Proopiomelanocortin (POMC)–related peptides in the brain of the rainbow trout, Salmo gairdneri. Vallarino M, et al. **Peptides** 1989 Nov–Dec;10(6):1223–30
Opioids from immunocytes interact with receptors on sensory nerves to inhibit nociception in inflammation. Stein C, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5935–9
The immunostaining for the hypothalamic vasoactive intestinal peptide, but not for beta–endorphin, dynorphin–A or methionine–enkephalin, is affected by the glucocorticoid milieu in the rat: correlation with the prolactin secretion. Watanobe H. **Regul Pept** 1990 May 21;28(3):301–11
[The beta–endorphinergic innervation of the pancreas of humans and rats] Hahn von Dorsche H, et al. **Anat Anz** 1990;170(5):373–5 **(Ger)**
[Structural organization of [met]enkephalin and endorphin molecules. III. Theoretical conformation analysis of beta–endorphin] Akhmedov NA, et al. **Bioorg Khim** 1990 May;16(5):661–7 (Eng. Abstr.) **(Rus)**
[Alpha–tocopherol induced activation of the endogenous opioid system] Kryzhanovskiĭ GN, et al. **Biull Eksp Biol Med** 1989 Nov;108(11):566–7 (Eng. Abstr.) **(Rus)**
[The ratio of the contents of beta–endorphin, adrenaline and noradrenaline in the hypothalamus of rats with an experimental stomach ulcer and during acupuncture] Bragin EO, et al. **Fiziol Zh SSSR** 1989 Jul;75(7):917–22 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Differential effects of sulfated cholecystokinin octapeptide and proglumide injected intrathecally on antinociception induced by beta–endorphin and morphine administered intracerebroventricularly in mice. Suh HH, et al. **Eur J Pharmacol** 1990 Apr 25;179(3):329–38
Intrathecal [Met5]enkephalin antibody blocks analgesia induced by intracerebroventricular beta–endorphin but not morphine in mice. Tseng LL, et al. **Eur J Pharmacol** 1989 Dec 7;173(2–3):171–6
Delta but not mu–opioid receptors in the spinal cord are involved in antinociception induced by beta–endorphin given intracerebroventricularly in mice. Suh HH, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):981–6
[Cholecystokinin octopeptide (CCk–8): opioid or antiopioid activity] Zhou Y, et al. **Sheng Li Ko Hsueh Chin Chan** 1989 Jul;20(3):255–7 (29 ref.) **(Chi)**

BIOSYNTHESIS

Change of Leu–enkephalin– and B–endorphin–like immunoreactivity in the hippocampus after electroconvulsive shock and electroacupuncture. He XP, et al. **Acupunct Electrother Res** 1989;14(2):131–9
Immunocytochemical location of pituitary cells containing ACTH, alpha–MSH, and beta–endorphin in Acipenser transmontanus, Lepisosteus spatula, and Amia calva. Joss JM, et al. **Gen Comp Endocrinol** 1990 Jun;78(3):459–68
Interleukin 1 induces early protein phosphorylation and requires only a short exposure for late induced secretion of beta–endorphin in a mouse pituitary cell line. Făgărăşan MO, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2555–9

BLOOD

Plasma beta–endorphin and beta–lipotropin in congestive heart failure in man. Vitolo E, et al. **Acta Cardiol** 1990; 45(1):65–74
Prenatal exposure to ethanol alters the ontogeny of the beta–endorphin response to stress. Angelogianni P, et al. **Alcoholism (N Y)** 1989 Aug;13(4):564–71
Increase of plasma beta endorphins in vasodepressor syncope. Perna GP, et al. **Am J Cardiol** 1990 Apr 1;65(13):929–30
Plasma B–endorphin levels in patients with self–injurious behavior and stereotypy. Sandman CA, et al. **Am J Ment Retard** 1990 Jul;95(1):84–92
Effects of intramuscular clonidine on hemodynamic and plasma beta–endorphin responses to gynecologic laparoscopy. Aho M, et al. **Anesthesiology** 1990 May; 72(5):797–802
Beta–lipotropin–beta–endorphin response to low–dose ovine corticotropin releasing factor in endogenous depression. Preliminary studies. Young EA, et al. **Arch Gen Psychiatry** 1990 May;47(5):449–57
Effect of myiasis and acute restraint stress on plasma levels of immunoreactive beta–endorphin, adrenocorticotrophin (ACTH) and cortisol in the sheep. Shutt DA, et al. **Aust J Biol Sci** 1988;41(3):297–301
Characterization of a dose–response curve for nicotine–induced conditioned taste aversion in rats: relationship to elevation of plasma beta–endorphin concentration. Jensen RA, et al. **Behav Neural Biol** 1990 May;53(3):428–40
Plasma beta–endorphin levels in the umbilical cord blood of preterm human neonates. Ramanathan S, et al. **Biol Neonate** 1989;56(2):117–20
Cortisol, ACTH, and beta–endorphin after dexamethasone administration in Parkinson's dementia. Rabey JM, et al. **Biol Psychiatry** 1990 Mar 15;27(6):581–91
Treatment of migraine with salmon calcitonin: effects on plasma beta–endorphin, ACTH and cortisol levels. Ustdal M, et al. **Biomed Pharmacother** 1989;43(9):687–91
Plasma beta–endorphin concentrations during suckling in lactating women. Franceschini R, et al. **Br J Obstet Gynaecol** 1989 Jun;96(6):711–3
Relation between plasma beta–endorphin and the ventilatory response to hypercapnia in humans. Levick MP, et al. **Clin Sci** 1989 Sep;77(3):323–7
Schistosomiasis: role of endogenous opioids in suppression of gonadal steroid secretion. Isseroff H, et al. **Comp Biochem Physiol [A]** 1989;94(1):41–5
Cortisol and beta–endorphin response in alcoholics and alcohol abusers following a high naloxone dosage. Kemper A, et al. **Drug Alcohol Depend** 1990 Jun;25(3):319–26
Changes of beta–endorphin level in blood during prolonged exercise. Viru A, et al. **Endocrinol Exp** 1990 Mar; 24(1–2):63–8
Mutual correlation between levels of plasma beta–endorphin, bombesin and pancreatic polypeptide in healthy subjects and ulcer patients. Zižkovský V, et al. **Endocrinol Exp** 1990 Mar;24(1–2):205–9
Plasma beta–endorphin, ACTH and cortisol secretion in man after nasal spray administration of calcitonin. Franceschini R, et al. **Eur J Clin Pharmacol** 1989;37(4):341–3
Response of plasma immunoreactive beta–endorphin and corticotropin to isometric exercise in uncomplicated pregnancy and in pregnancy–induced hypertension. Räisänen I, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 May–Jun;35(2–3):119–24
Plasma beta–endorphin and cortisol levels in morphine–tolerant rats and in naloxone–induced withdrawal. Antonio Martínez J, et al. **Eur J Pharmacol** 1990 Jun 21;182(1):117–23
Degradation of [3H]beta–endorphin in rat plasma is increased with chronic stress. Young EA, et al. **Eur J Pharmacol** 1989 Aug 22;167(2):229–36
Paradoxical response of plasma beta–endorphin to combined administration of TRH and GnRH in adrenal disorders. Knappe G, et al. **Exp Clin Endocrinol** 1989 Sep; 94(1–2):157–62
Response of plasma beta–endorphin and insulin to oral glucose tolerance test in non–obese women with polycystic ovaries. Laatikainen TJ, et al. **Gynecol Endocrinol** 1989 Sep; 3(3):241–7
Neuropeptide and cardiovascular responses to intravenous catheterization in normotensive and hypertensive blacks and whites. McNeilly M, et al. **Health Psychol** 1989; 8(5):487–501
Beta–endorphin, insulin, ACTH and cortisol plasma levels during oral glucose tolerance test in obesity after weight loss. Giovannini C, et al. **Horm Metab Res** 1990 Feb; 22(2):96–100
Central effects of atrial natriuretic peptide on plasma catecholamines, vasopressin, renin and beta–endorphin and on renal excretory functions in the dog. Szeczepańska–Sadowswka E, et al. **Horm Metab Res** 1990 Jun;22(6):323–8
Circulating opioid peptides during thermal stress. Vescovi PP, et al. **Horm Metab Res** 1990 Jan;22(1):44–6
Increased plasma beta–endorphin levels in hereditary angioedema. Perricone R, et al. **Immunopharmacology** 1989 Sep–Oct;18(2):89–96
Beta–endorphin, catecholamines, and cortisol during exhaustive endurance exercise. Schwarz L, et al. **Int J Sports Med** 1989 Oct;10(5):324–8
Asymptomatic or mildly symptomatic effort–induced myocardial ischemia: plasma beta–endorphin and effect of naloxone. Cantor A, et al. **Isr J Med Sci** 1990 Feb; 26(2):67–71
An augmented escape of beta–endorphins to suppression by dexamethasone in severely depressed patients. Maes M, et al. **J Affective Disord** 1990 Mar;18(3):149–56
Regulation of the seasonal cycle of beta–endorphin and ACTH secretion into the peripheral blood of rams. Ssewannyana E, et al. **J Endocrinol** 1990 Mar;124(3):443–54
Plasma beta–endorphin and beta–lipotropin levels increase in well trained athletes after competition and non competitive exercise. Petraglia F, et al. **J Endocrinol Invest** 1990 Jan;13(1):19–23
Restraint stress–induced elevations in plasma corticosterone and beta–endorphin are not accompanied by alterations in immune function. Flores CM, et al. **J Neuroimmunol** 1990 Aug;28(3):219–25
Beta–endorphin and components of depression as powerful discriminators between joggers and sedentary middle–aged men. Lobstein DD, et al. **J Psychosom Res** 1989; 33(3):293–305
Mood changes, obstetric experience and alterations in plasma cortisol, beta–endorphin and corticotrophin releasing hormone during pregnancy and the puerperium. Smith R, et al. **J Psychosom Res** 1990;34(1):53–69
Beta–endorphin and met–enkephalin in plasma of cattle during pregnancy, parturition and the neonatal period. Aurich JE, et al. **J Reprod Fertil** 1990 Jul;89(2):605–12
The plasma endorphin, prostaglandin and catecholamine profile of patients with fibrositis treated with cyclobenzaprine and placebo: a 5–month study. Hamaty D, et al. **J Rheumatol Suppl** 1989 Nov;19:164–8
Different pituitary beta–endorphin and adrenal cortisol response to ethanol in individuals with high and low risk for future development of alcoholism. Gianoulakis C, et al. **Life Sci** 1989;45(12):1097–109
Plasma beta–endorphin concentration: response to intensity and duration of exercise. Goldfarb AH, et al. **Med Sci Sports Exerc** 1990 Apr;22(2):241–4
The beta–endorphin responses of pregnant women during aerobic exercise in the water. McMurray RG, et al. **Med Sci Sports Exerc** 1990 Jun;22(3):298–303 (29 ref.)
Effects of a low–phosphorus, low–nitrogen diet supplemented with essential amino acids and ketoanalogues on serum beta–endorphin in chronic renal failure. Ciardella F, et al. **Nephron** 1989;53(2):129–32
Cortisol, ACTH, prolactin and beta–endorphin responses to fenfluramine administration in major–depressed patients. Maes M, et al. **Neuropsychobiology** 1989;21(4):192–6
Negative allesthesia and decreased endogenous opiate system activity in anorexia nervosa. Melchior JC, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):885–8
Effects of social conflict on POMC–derived peptides and glucocorticoids in male golden hamsters. Huhman KL, et al. **Physiol Behav** 1990 May;47(5):949–56
Neuroendocrine evidence of deranged noradrenergic activity in chronic migraine. Martignoni E, et al. **Psychoneuroendocrinology** 1989;14(5):357–63
Effects of behaviour therapy on migraine and plasma beta–endorphin in young migraine patients. v.d. Helm–Hylkema H, et al. **Psychoneuroendocrinology** 1990; 15(1):39–45
Presence of ACTH and beta–endorphin immunoreactive molecules in the freshwater snail Planorbarius corneus (L.) (Gastropoda, Pulmonata) and their possible role in phagocytosis. Ottaviani E, et al. **Regul Pept** 1990 Jan; 27(1):1–9
Beta–endorphin levels after experimental blood loss in human subjects. Correlations with cortisol, ACTH, plasma renin activity, plasma catecholamines and blood pressure variations. Casiglia E, et al. **Resuscitation** 1989 Dec; 18(2–3):141–3
Exploring the effect of a spinal manipulation on plasma beta–endorphin levels in normal men [letter] Vernon H. **Spine** 1989 Nov;14(11):1272–3
Serum endorphin levels in uremic patients under maintenance hemodialysis. Hwang JC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Apr;88(4):360–5
[Effect of dexamethasone on the levels of plasma beta–endorphin–like–immunoreactivity in intestinal ischemia shock in the dog] Chen T. **Chung Hua Wai Ko Tsa Chih** 1989 Jul;27(7):413–6, 445 (Eng. Abstr.) **(Chi)**
[The quality of analgesia in relation to the plasma concentration of beta–endorphin during neuroleptanalgesia and epidural analgesia] Krug G, et al. **Anaesthesiol Reanim** 1990;15(3):131–6 (Eng. Abstr.) **(Ger)**
[The dynamics of beta–endorphins in plasma in the peri– and intraoperative phase of radical gynecologic surgery] Krug G, et al. **Anaesthesiol Reanim** 1990;15(2):101–6 (Eng. Abstr.) **(Ger)**
[Neurophysiologic processes in the production of climacteric hot flushes] Schurz B, et al. **Gynakol Rundsch** 1989; 29(4):241–3 **(Ger)**
[Increase of plasma levels of beta–endorphin during maximum bicycle ergometry effort in sedentary and trained subjects] Perna GP, et al. **G Ital Cardiol** 1990 Jan;20(1):24–8 (Eng. Abstr.) **(Ita)**
[Plasma levels of beta–endorphin and ACTH and serum levels of cortisol in different stages of arterial hypertension before and after clonidine therapy] Barletta C, et al. **Minerva Med** 1990 May;81(5):363–70 (Eng. Abstr.) **(Ita)**
[Neuroendocrine changes and affective disorders in patients with hyperphagic obesity] Giovannini C, et al. **Recenti Prog Med** 1990 Feb;81(2):124–7 (Eng. Abstr.) **(Ita)**
[Plasma levels of beta–endorphin , ACTH and cortisol in obese patients subjected to several weight–loss treatments] Giovannini C, et al. **Recenti Prog Med** 1990 May; 81(5):301–5 (Eng. Abstr.) **(Ita)**
[Modification of the pain threshold and beta–endorphin level in heroin addicts undergoing withdrawal] Matera M, et al. **Riv Eur Sci Med Farmacol** 1988 Feb;10(1):73–7 (Eng. Abstr.) **(Ita)**
[Plasma beta–endorphin in patients on maintenance hemodialysis] Yamakado M, et al. **Nippon Jinzo Gakkai Shi** 1989 Sep;31(9):963–7 (Eng. Abstr.) **(Jpn)**
[Clinical significance blood beta–endorphin analysis in endocrine tests of the pituitary system] Kato Y. **Nippon Rinsho** 1989 Dec;48 Suppl:1047–51 **(Jpn)**
[Effect of treatment with enalapril maleate on the levels of circulating catecholamines, beta endorphins, prostaglandins, and concentration of sodium in

erythrocytes in patients with essential hypertension] Chodakowska J, et al. **Pol Tyg Lek** 1989 Mar 20–27; 44(12–13):297–300 (Eng. Abstr.) **(Pol)**

[Beta-endorphin blood levels of women with various forms of amenorrhea] Rulev VV. **Akush Ginekol (Mosk)** 1989 Jul;(7):62–3 **(Rus)**

[Effect of electroanesthesia and neuroleptanalgesia on blood plasma beta-endorphin level during surgical intervention in cancer patients] Goloskov NP, et al. **Anesteziol Reanimatol** 1989 May–Jun;(3):49–51 (Eng. Abstr.) **(Rus)**

[Blood levels of opioid peptides and alpha interferon under the action of dipyridamole] Balashov AM, et al. **Biull Eksp Biol Med** 1990 May;109(5):462–4 (Eng. Abstr.) **(Rus)**

[Effects of piracetam on pain sensitivity and levels of beta-endorphin in blood and cAMP in the cerebral cortex of rats] Vakulina OP, et al. **Biull Eksp Biol Med** 1990 Feb; 109(2):163–5 (Eng. Abstr.) **(Rus)**

[The met-enkephalin and beta-endorphin content of the blood in the early period after acute blood loss in rats] Zoloev GK. **Biull Eksp Biol Med** 1990 Mar;109(3):231–4 (Eng. Abstr.) **(Rus)**

[Plasma levels of endogenous opioid peptides in patients with chronic colitis] Shafer NP. **Klin Med (Mosk)** 1989 Oct; 67(10):101–3 (Eng. Abstr.) **(Rus)**

[Beta-endorphins and bronchial asthma in children] Koretskaia LR, et al. **Ter Arkh** 1989;61(12):62–7 (Eng. Abstr.) **(Rus)**

[Study of cellular immunity and the opioid peptide system in patients with multiple sclerosis] Demina TL, et al. **Zh Nevropatol Psikhiatr** 1990;90(2):19–24 (Eng. Abstr.) **(Rus)**

[Beta-endorphin levels in patients with pain syndromes in the areas of the face and head] Puzin MN, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):69–72 (Eng. Abstr.) **(Rus)**

[Beta-endorphin in acute focal cerebral infarct] Marín Gámez N, et al. **Med Clin (Barc)** 1989 Sep 16;93(7):252–5 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

Vasopressin enhances the clearance of beta-endorphin immunoreactivity from rat cerebrospinal fluid. Sweep CG, et al. **Acta Endocrinol (Copenh)** 1990 Feb;122(2):191–200

Naltrexone therapy of apnea in children with elevated cerebrospinal fluid beta-endorphin. Myer EC, et al. **Ann Neurol** 1990 Jan;27(1):75–80

A study on opioid peptides in CSF of patients with epilepsy. Cheng JG, et al. **Epilepsy Res** 1990 Jul;6(2):141–5

Immunoreactive beta-endorphin levels in cerebrospinal fluid of children with acute lymphoblastic leukemia: relationship with glucocorticoid therapy and neurological complications. Iannetti P, et al. **J Endocrinol Invest** 1989 Oct;12(9):623–9

Relationship between cerebrospinal fluid beta-endorphin and plasma pituitary-gonadal hormone levels in women. Nappi C, et al. **J Endocrinol Invest** 1990 Feb;13(2):149–53

CSF beta-endorphin, HVA and 5-HIAA of dementia of the Alzheimer type and Binswanger's disease in the elderly. Lee S, et al. **J Neural Transm Suppl** 1990;30:45–55

Effects of pituitary beta-endorphin secretagogues on the concentration of beta-endorphin in rat cerebrospinal fluid: evidence for a role of vasopressin in the regulation of brain beta-endorphin release. Barna I, et al. **Neuroendocrinology** 1990 Jan;51(1):104–10

Long-term effects of alprazolam and imipramine on cerebrospinal fluid monoamine metabolites and neuropeptides in panic disorder. Lepola U, et al. **Neuropsychobiology** 1989;21(4):182–6

Beta-endorphin, human caseomorphin and bovine caseomorphin immunoreactivity in CSF in sudden infant death syndrome and controls. Storm H, et al. **Prog Clin Biol Res** 1990;328:327–30

Peak B endorphin concentration in cerebrospinal fluid: reduced in chronic pain patients and increased during the placebo response. Lipman JJ, et al. **Psychopharmacology (Berl)** 1990;102(1):112–6

Cerebrospinal fluid immunoreactive beta-endorphin concentration is increased by voluntary exercise in the spontaneously hypertensive rat. Hoffmann P, et al. **Regul Pept** 1990 Apr 24;28(2):233–9

[Cerebrospinal fluid beta-endorphin in chronic pain in man] Dehen H, et al. **Rev Neurol (Paris)** 1990;146(2):155–7 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

[The prolonged analgesic effect of an antiserum to beta-endorphin in rats] Litvinov SV, et al. **Patol Fiziol Eksp Ter** 1989 Sep–Oct;(5):50–2 (Eng. Abstr.) **(Rus)**

METABOLISM

Circular dichroism and proteolysis of human beta-endorphin in surfactant and lipid solutions. Pasta P, et al. **Biochim Biophys Acta** 1990 May 31;1039(1):1–4

Effects of ACTH, epinephrine and Met-enkephalin on brain beta-endorphin-like immunoreactivity, and of ACTH, epinephrine, Met-enkephalin and naloxone on retention, in normal and in protein-malnourished rats. Perry ML, et al. **Braz J Med Biol Res** 1990;23(1):65–72

Changes and significance of immunoreactive beta-endorphin in gastric mucosa of patients with benign and malignant gastric diseases. Tang J, et al. **Chin Med J [Engl]** 1990 Apr; 103(4):308–11

Norgestimate increases pituitary and hypothalamic concentrations of immunoreactive beta-endorphin. Genazzani AR, et al. **Contraception** 1989 Nov;40(5):605–13

Beta-endorphin chimeric peptides: transport through the blood–brain barrier in vivo and cleavage of disulfide linkage by brain. Pardridge WM, et al. **Endocrinology** 1990 Feb;126(2):977–84

Characterization of the neurosecretory activity of hypothalamic beta-endorphin-containing neurons in primary culture. Sarkar DK, et al. **Endocrinology** 1990 Jan; 126(1):349–56

Beta-endorphin binding to naloxone-insensitive sites on a human mononuclear cell line (U937): effects of cations and guanosine triphosphate. Shahabi NA, et al. **Endocrinology** 1990 Jun;126(6):3006–15

Murine splenocytes express a naloxone-insensitive binding site for beta-endorphin. Shahabi NA, et al. **Endocrinology** 1990 Mar;126(3):1442–8

Characterization of the effects of acute ethanol administration on the release of beta-endorphin peptides by the rat hypothalamus. Gianoulakis C. **Eur J Pharmacol** 1990 May 3;180(1):21–9

Cross-linking of human 125I-beta-endorphin to a mu-delta opioid receptor complex in rat striatum. Schoffelmeer AN, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):357–8

Localisation of acetylcholinesterase in rat myotubes in the presence of beta-endorphin and beta-endorphin-(1–27). Haynes LW, et al. **Experientia** 1990 Feb 15;46(2):211–3

Possible involvement of endogenous opioids in beta-cell hyperresponsiveness in human obesity. Vettor R, et al. **Int J Obes** 1989;13(4):425–32 (34 ref.)

Pharmacological modulation of beta-endorphin in rat peritoneal macrophages. Sacerdote P, et al. **J Clin Lab Anal** 1989;3(6):337–9

Oocyte fertilization in vitro is associated with high follicular immunoreactive beta-endorphin levels. Facchinetti F, et al. **J Endocrinol Invest** 1989 Nov;12(10):693–8

Effect of steroid hormones and antihormones on hypothalamic beta-endorphin concentrations in intact and castrated female rats. Genazzani AR, et al. **J Endocrinol Invest** 1990 Feb;13(2):91–6

Effects of glipizide on beta-endorphin concentration in the brain of genetically diabetic (db/db) mice. Belon JP, et al. **J Int Med Res** 1989 Sep–Oct;17(5):467–72

Down-regulation of proopiomelanocortin synthesis and beta-endorphin utilization in hypothalamus of morphine-tolerant rats. Mocchetti I, et al. **J Mol Neurosci** 1989;1(1):33–8

Human erythrocytes have binding sites for beta-endorphin. Simpkins CO, et al. **J Natl Med Assoc** 1989 Nov; 81(11):1149–53

Immunocytochemical colocalization of progestin receptors and beta-endorphin or enkephalin in the hypothalamus of female guinea pigs. Olster DH, et al. **J Neurobiol** 1990 Jul; 21(5):768–80

Alterations in Na(+)-K(+)-ATPase activity and beta-endorphin content in acute ischemic brain with and without naloxone treatment. Furui T, et al. **J Neurosurg** 1990 Mar;72(3):458–62

Neuropeptide processing in regional brain slices: effect of conformation and sequence. Li ZW, et al. **J Pharmacol Exp Ther** 1990 May;253(2):851–7

Cross-linking of human [125I]beta-endorphin to opioid receptors in rat striatal membranes: biochemical evidence for the existence of a mu/delta opioid receptor complex. Schoffelmeer AN, et al. **J Pharmacol Exp Ther** 1990 Apr; 253(1):419–26

Methionine-enkephalin and beta-endorphin levels in spleen and thymus gland of morphine tolerant-dependent and abstinent rats. Bhargava HN, et al. **Life Sci** 1989; 45(26):2529–37

Tolerance develops to the behavioural effects of ACTH-(1–24) during continuous i.c.v. infusion in rats, and is associated with increased hypothalamic levels of beta-endorphin. Vergoni AV, et al. **Neuropeptides** 1989 Aug–Sep;14(2):93–8

Effects of chronic treatment with haloperidol and bromocriptine on the processing of beta-endorphin to gamma- and alpha-endorphin in discrete regions of the rat pituitary gland and brain. Sweep CG, et al. **Neuropharmacology** 1990 Jan;29(1):61–8

Cation requirement for GTP regulation of [125I]b-endorphin binding to Mu and sigma opioid receptors. Selley DE, et al. **NIDA Res Monogr** 1989;95:537–8

Effect of arachidonic acid on pituitary immunoreactive beta-endorphin levels in the rat. Parenti C, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:31–2

Beta-endorphin in the brainstem and the cerebellum of the human infant: regional levels' profile assessed with immunoaffinity chromatography and solid phase radioimmunoassay. Pasi A, et al. **Physiol Behav** 1989 Jul; 46(1):13–6

Cerebral beta-endorphin levels in a woman with Prader-Labhart-Willi syndrome. Pasi A, et al. **Physiol Behav** 1989 Jul;46(1):17–8

Effects of ethanol on the brain beta-endorphin system in inbred strains of mice with variable preference for ethanol solutions: in vitro study. De Waele JP, et al. **Prog Clin Biol Res** 1990;328:315–8

Cross-linking of 125I-beta-endorphin to rat striatal mu- and delta-opioid receptors under physiological conditions: evidence for an opioid receptor complex. Schoffelmeer AN, et al. **Prog Clin Biol Res** 1990;328:105–8

Asymmetrical distribution of beta-endorphin in cerebral hemispheres of suicides: preliminary data. Scarone S, et al. **Psychiatry Res** 1990 May;32(2):159–66

[Study of the effect of analgeton on the release of beta-endorphin and its effect on chronic hyperalgesia] Vlaskovska M, et al. **Eksp Med Morfol** 1989;28(3):14–21 (Eng. Abstr.) **(Bul)**

[Effect of acupuncture of zusanli (St. 36) on the content of beta-endorphin of the gastrointestinal tract in rats] Yang J, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Nov; 9(11):677–8, 646 (Eng. Abstr.) **(Chi)**

[Changes of releases of beta-endorphin-like immunoreactive substances and noradrenaline in rabbit's preoptic area during acupuncture analgesia] Zhu JM, et al. **Sheng Li Hsueh Pao** 1990 Apr;42(2):188–93 (Eng. Abstr.) **(Chi)**

PHARMACOKINETICS

Des-enkephalin-gamma-endorphin (DE gamma E): pharmacokinetics in dogs after intravenous and subcutaneous administration. Verhoef J, et al. **Eur J Drug Metab Pharmacokinet** 1989 Jul–Sep; 14(3):229–34

PHARMACOLOGY

Opiate peptidergic neurotransmission and cardiovascular and respiratory apparatus: experimental research with beta-endorphin and dermorphin on normotensive and hypertensive rats. Filippelli A, et al. **Acta Physiol Hung** 1990;75 Suppl:105–6

Beta-endorphin-induced behavioural effects: endorphin-catecholamines interactions. Samardžić R, et al. **Acta Physiol Hung** 1990;75 Suppl:253–4

A selective role for brain histamine in prolactin release induced by opiates. Netti C, et al. **Agents Actions** 1990 Apr; 30(1–2):223–5

Beta-endorphin modulates anaphylactic contractions of tracheae isolated from actively sensitized guinea pigs. van Oosterhout AJ, et al. **Agents Actions** 1990 Apr; 30(1–2):89–91

Endorphin suppresses FSH-stimulated proliferation of isolated neonatal Sertoli cells by a pertussis toxin-sensitive mechanism. Orth JM, et al. **Anat Rec** 1990 Mar; 226(3):320–7

Contrasting actions of vasopressin and beta-endorphin on rat hippocampal field potentials. Smock T, et al. **Ann N Y Acad Sci** 1990;579:204–14 (51 ref.)

Absence of direct effect of beta-endorphin and calcitonin on human sperm motility. Graczykowski JW, et al. **Arch Androl** 1990;24(2):121–4

Beta-endorphin enhancement of retrieval in a three-session paradigm. Netto CA, et al. **Behav Neural Biol** 1990 Jul; 54(1):97–104

Involvement of multiple opiate receptors in opioid kindling. Cain DP, et al. **Brain Res** 1990 May 28;517(1–2):236–44

The enhancement of polyclonal T cell proliferation by beta-endorphin. Gilmore W, et al. **Brain Res Bull** 1990 May;24(5):687–92

Acetylation alters the feeding response to MSH and beta-endorphin. Tsujii S, et al. **Brain Res Bull** 1989 Sep; 23(3):165–9

Effect of atropine and propranolol on retrieval enhancement by a novel experience or by injection of beta-endorphin prior to testing in rats. Netto CA, et al. **Braz J Med Biol Res** 1990;23(1):59–63

Beta-endorphin and electroconvulsive shock alter the retrieval of two avoidance tasks when given after the first, but not the second, training session. Netto CA, et al. **Braz J Med Biol Res** 1989;22(2):199–204

Preliminary study on the antinociceptive effect of elephant beta-endorphin. Wong CL, et al. **Clin Exp Pharmacol Physiol** 1990 Jan;17(1):33–7

The phosphorylation of the CD3 gamma chain of T lymphocytes is modulated by beta-endorphin. Kavelaars A, et al. **Eur J Immunol** 1990 Apr;20(4):943–5

Involvement of central mu and delta opioid receptors in mediating the reinforcing effects of beta-endorphin in the rat. Bals-Kubik R, et al. **Eur J Pharmacol** 1990 Jan 3; 175(1):63–9

The neuropeptide, Org 5878 (desenkephalin-gamma-endorphin, DE gamma E), affects local cerebral glucose utilization in freely moving rats. Room P, et al. **Eur J Pharmacol** 1989 Nov 14;171(1):69–78

Differential mechanisms mediating beta-endorphin- and morphine-induced analgesia in mice. Suh HH, et al. **Eur J Pharmacol** 1989 Sep 1;168(1):61–70

Suppressive effect of beta-endorphin and naloxone on the secretion of cortisol under stress conditions in sheep. Przekop F, et al. **Exp Clin Endocrinol** 1990 Apr;95(2):210–6

Effects of beta-endorphin, met-enkephalin, and dynorphin A on basal and stimulated insulin secretion in the mouse. Ahrén B. **Int J Pancreatol** 1989 Sep;5(2):165–78

Effect of centrally and peripherally administered beta-endorphin on food intake in rats. Triscari J, et al. **Int J Pept Protein Res** 1989 Nov;34(5):358–62

Migration assay for endothelial cells in multiwells.

Application to studies on the effect of opioids. Fischer EG, et al. **J Immunol Methods** 1990 Apr 17;128(2):235–9

Beta-endorphin modulates T-cell intracellular calcium flux and c-myc expression via a potassium channel. Hough CJ, et al. **J Neuroimmunol** 1990 May;27(2–3):163–71

Suppression of human B lymphocyte activation by beta-endorphin. Morgan EL, et al. **J Neuroimmunol** 1990 Aug;28(3):209–17

Brainstem sites differentially sensitive to beta-endorphin and morphine for analgesia and release of met-enkephalin in anesthetized rats. Tseng LL, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):930–7

The effect of mycoplasma on the autocrine stimulation of human small cell lung cancer in vitro by bombesin and beta-endorphin. Crowell SL, et al. **Life Sci** 1989; 45(25):2471–6

Beta-endorphin and related peptides suppress phorbol myristate acetate-induced respiratory burst in human polymorphonuclear leukocytes. Diamant M, et al. **Life Sci** 1989;45(17):1537–45

Structural specificity of beta-endorphin C-terminal tetrapeptide (MPF) in promoting urodele limb regeneration. Morley JS, et al. **Life Sci** 1989;45(15):1341–7

Lack of antinociceptive cross-tolerance between intracerebroventricularly administered beta-endorphin and morphine or DPDPE in mice. Suh HH, et al. **Life Sci** 1990; 46(11):759–65

The effect of beta-endorphin on rat oocyte maturation in vitro. O WS. **Mol Cell Endocrinol** 1990 Jan 22; 68(2–3):181–5

Desenkephalin-gamma-endorphin is an antagonist of the hyperactivity response induced by infusion of dopamine into the nucleus accumbens of rat and ventral striatum of marmoset. Costall B, et al. **Neuropharmacology** 1989 Nov; 28(11):1223–9

Intrathecal administration of thiorphan, bestatin, desipramine and fluoxetine differentially potentiate the antinociceptive effects induced by beta-endorphin and morphine, administered intracerebroventricularly. Suh HH, et al. **Neuropharmacology** 1990 Mar;29(3):207–14

Intracerebroventricular administration of beta-endorphin releases immunoreactive met-enkephalin from the spinal cord in cats, guinea pigs and mice. Tseng LL. **Neuropharmacology** 1989 Dec;28(12):1333–9

Intravenous beta-endorphin: behavioral and physiological effects in conscious monkeys. Cuthbert BN, et al. **Peptides** 1989 Jul–Aug;10(4):729–34

Effect of posttraining and pretest beta-endorphin and ACTH administration in normal and protein malnourished rats. Perry ML, et al. **Peptides** 1989 Nov–Dec;10(6):1117–20

Effects of amphetamine and beta-endorphin fragments on maze performance in rats. de Boer S, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):555–61

Pretest beta-endorphin and epinephrine, but not oxotremorine, reverse retrograde interference of a conditioned emotional response in mice. Izquierdo I, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):545–8

Day-night rhythms of shoaling behavior in goldfish: opioid and pineal involvement. Kavaliers M. **Physiol Behav** 1989 Aug;46(2):167–72

Actions of beta-endorphin and related peptide fragments on a pressor response induced by cholinergic stimulation. Hong M, et al. **Prog Clin Biol Res** 1990;328:371–4

Gamma-type endorphins and brain dopaminergic systems. van Ree JM, et al. **Prog Clin Biol Res** 1990;328:287–90

[The effect of adenosine and beta-endorphin on the contractions of the vas deferens in rats with various durations of ethanol narcosis] Iukhananov RIu, et al. **Biull Eksp Biol Med** 1989 Dec;108(12):700–2 (Eng. Abstr.) **(Rus)**

[The effect of a beta-endorphin conjugate on conditioned reflex activity in cats (letter)] Protsenko AL. **Zh Evol Biokhim Fiziol** 1989 Sep–Oct;25(5):684–6 **(Rus)**

[Serotonin excess in the brain modifies the effect of beta-endorphin and dalargin on the processes of learning and memory] Kruglikov RI, et al. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr;40(2):310–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effect of stress on the course of oestrous cycle and the release of luteinizing hormone; the role of endorphin in these processes. Domański E, et al. **Acta Physiol Pol** 1989 Jan–Feb;40(1):64–73

The role of pituitary beta-endorphin in mediating corticotropin-releasing factor-induced antinociception. Hargreaves KM, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E235–42

Opioid peptides and perinatal development: is beta-endorphin a natural teratogen? Clinical implications. Sandman CA, et al. **Ann N Y Acad Sci** 1990;579:91–108

The involvement of beta-endorphin in swim-induced antinociception in female mice. Wong CL. **Arch Int Pharmacodyn Ther** 1989 Jul–Aug;300:22–8

Disturbed hypothalamic blood flow autoregulation in the rat following hypophysectomy: a role of pituitary beta-endorphin? Sandor P, et al. **Brain Res** 1990 Mar 26; 512(1):102–6

Interaction between beta-endorphin and alpha-melanocyte-stimulating hormone in the control of prolactin and luteinizing hormone secretion in the primate. Wardlaw SL, et al. **Endocrinology** 1990 Apr;126(4):2035–40

Beta-endorphin modulation of IL-1-induced IL-2 production. Bessler H, et al. **Immunopharmacology** 1990 Jan–Feb;19(1):5–14

A study of the effect of B-EP and naloxone on the function of the hypothalamo-pituitary-testicular axis of the rat. Zhou ZF, et al. **J Androl** 1990 May–Jun;11(3):233–9

Beta-endorphin alters the course of central nervous system disease induced by a temperature-sensitive vesicular stomatitis virus in reconstituted nude mice. Hummer HJ, et al. **J Neuroimmunol** 1990 Jun;28(1):73–82

Intrinsic mechanisms of antinociception in inflammation: local opioid receptors and beta-endorphin. Stein C, et al. **J Neurosci** 1990 Apr;10(4):1292–8

Time-course of opioid and pituitary-adrenal hormone modifications during the immobility reaction in rabbits. Farabollini F, et al. **Physiol Behav** 1990 Feb;47(2):337–41

Beta-endorphin-like immunoreactivity levels in the hypothalamus, the periaqueductal grey and the pituitary of the DBA mouse: determination by ELISA and relationship to nociception. Külling P, et al. **Physiol Behav** 1989 Jul;46(1):25–8

Beta-endorphin and central control of arterial blood pressure during challenge of circulatory homeostasis. de Jong W, et al. **Resuscitation** 1989 Dec;18(2–3):173–82

[Dependence of the degree of cardiac stress damages on the change in the endogenous beta-endorphin level during preliminary adaptation] Maslova LV, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):662–5 (Eng. Abstr.) **(Rus)**

[Effects of beta endorphin and delta-sleep inducing peptide on resistance to emotional stress] Salieva RM, et al. **Biull Eksp Biol Med** 1989 Oct;108(10):464–6 (Eng. Abstr.) **(Rus)**

[Anesthesiologic procedures based on the use of transcranial electric stimulation of the antinociceptive system in surgery of the lungs] Katsnel'son IaS, et al. **Vestn Khir** 1989 Nov; 143(11):106–7 **(Rus)**

[The participation of the octapeptide cholecystokinin and beta-endorphin in the neurochemical support of the interspecific and intraspecific aggressivity of rats] Pletnikov MV. **Zh Vyssh Nerv Deiat** 1989 Jul–Aug;39(4):770–3 **(Rus)**

[A microiontophoretic analysis of the participation of cholecystokinin-octapeptide and beta-endorphin in the central mechanisms of interspecific aggressiveness in rats] Pletnikov MV. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr; 40(2):380–2 **(Rus)**

SECRETION

Impaired ACTH and beta-endorphin response to sauna-induced hyperthermia in heroin addicts. Vescovi PP, et al. **Acta Endocrinol (Copenh)** 1989 Oct;121(4):484–8

Intracellular calcium and hormone secretion in clonal AtT-20/D16-16 anterior pituitary cells. Adler M, et al. **Cell Calcium** 1989 Oct;10(7):467–76

Effect of atrial natriuretic peptide on the release of beta-endorphin from rat hypothalamo-neurohypophysial complex. Ikeda Y, et al. **Endocrinol Jpn** 1989 Oct; 36(5):647–53

Effect of sodium valproate on the secretion of proopiomelanocortin derived peptides from cultured rat anterior pituitary cells. Tominaga T, et al. **Endocrinol Jpn** 1989 Dec;36(6):809–15

Rate-sensitive glucocorticoid feedback inhibition of adrenocorticotropin and beta-endorphin/beta-lipotropin secretion in rats. De Souza EB, et al. **Endocrinology** 1989 Dec;125(6):2927–34

Induction of beta-endorphin secretion by lymphocytes after subcutaneous administration of corticotropin-releasing factor [published erratum appears in Endocrinology 1990 May;126(5):2520] Kavelaars A, et al. **Endocrinology** 1990 Feb;126(2):759–64

In vitro beta-adrenergic stimulation of lymphocytes induces the release of immunoreactive beta-endorphin. Kavelaars A, et al. **Endocrinology** 1990 Jun;126(6):3028–32

Characterization of a temperature-sensitive beta-endorphin-secreting transformed endometrial cell line. Li WI, et al. **Endocrinology** 1989 Dec;125(6):2862–7

Effects of glipizide on beta-endorphin secretions in response to hyperglycaemia in obese cafeteria rats. Belon JP, et al. **J Int Med Res** 1989 Nov–Dec;17(6):539–46

Beta-endorphin secretion by human peripheral blood mononuclear cells: regulation by glucocorticoids. Kavelaars A, et al. **Life Sci** 1990;46(17):1233–40

Inhibition of pituitary beta-endorphin by ACTH and glucocorticoids. Boscaro M, et al. **Neuroendocrinology** 1990 May;51(5):561–4

Intracerebroventricular injection of platelet-activating factor induces secretion of adrenocorticotropin, beta-endorphin and corticosterone in conscious rats: a possible link between the immune and nervous systems. Rougeot C, et al. **Neuroendocrinology** 1990 Mar;51(3):267–75

Relationship between beta-endorphin/beta-lipotropin, hyperglycemia, and hyperinsulinemia in obese male Zucker rats. Elias AN, et al. **Proc Soc Exp Biol Med** 1989 Nov; 192(2):157–60

Differential contribution of the anterior and intermediate pituitary to the beta-endorphin response to stress in the neonatal rat. Angelogianni P, et al. **Prog Clin Biol Res** 1990; 328:319–22

[Endocrinological analysis of climacteric symptoms and gonadal dysfunction by CRF test] Yakubo K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jun;42(6):553–60 (Eng. Abstr.) **(Jpn)**

17 BETA-ESTRADIOL see **ESTRADIOL**

BETA-GALACTOSIDASES see under **GALACTOSIDASES**

BETA-GLOBIN see **GLOBIN**

BETA GLOBULINS

ANALYSIS

[Immuno-chemical and physico-chemical properties of human prostatic beta-globulin] Nikolaev AA, et al. **Vopr Med Khim** 1989 Sep–Oct;35(5):11–6 (Eng. Abstr.) **(Rus)**

GENETICS

A new hereditary persistence of fetal hemoglobin deletion has the breakpoint within the 3'beta-globin gene enhancer. Camaschella C, et al. **Blood** 1990 Feb 15;75(4):1000–5

Observations on the levels of Hb A2 in patients with different beta-thalassemia mutations and a delta chain variant. Codrington JF, et al. **Blood** 1990 Sep 15;76(6):1246–9

Amplification of a beta-haemoglobin sequence in individual human oocytes and polar bodies. Monk M, et al. **Lancet** 1990 Apr 28;335(8696):985–8

BETA-GLUCOSIDASES see under **GLUCOSIDASES**

BETA-HEXOSAMINIDASE see **BETA-N-ACETYLHEXOSAMINIDASE**

BETA-HYDROXYACYL DEHYDROGENASES see **3-HYDROXYACYL COA DEHYDROGENASES**

3-BETA-HYDROXYSTEROID DEHYDROGENASE see **3-HYDROXYSTEROID DEHYDROGENASES**

BETA-HYPOPHAMINE see **VASOPRESSINS**

BETA-LACTAM ANTIBIOTICS see **ANTIBIOTICS, LACTAM**

BETA-LACTAMASE I see **PENICILLINASE**

BETA-LACTAMASES

Antimicrobial activity and stability to beta-lactamase of BMY-28271, a new oral cephalosporin ester. Matsui H, et al. **Antimicrob Agents Chemother** 1990 Apr;34(4):555–61

Use of beta-lactamase to hydrolyse interfering antibiotics in vitamin B12 microbiological assay using Lactobacillus leichmannii. Kelleher BP, et al. **Clin Lab Haematol** 1990; 12(1):87–95

Chemical modification of the RTEM-1 thiol beta-lactamase by thiol-selective reagents: evidence for activation of the primary nucleophile of the beta-lactamase active site by adjacent functional groups. Knap AK, et al. **Proteins** 1989; 6(3):316–23

[Broad spectrum beta-lactamases and the API ATB 244 system: the need for detection] Ronco E, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):549–52 (Eng. Abstr.) **(Fre)**

[Comparative antibacterial activity of ceftibuten (SH 39 720) against 150 K. pneumoniae strains producing different beta-lactamases] Thabaut A, et al. **Pathol Biol (Paris)** 1990 May;38(5):347–51 (Eng. Abstr.) **(Fre)**

ANALYSIS

Evaluation of two methods for rapid testing for beta-lactamase production in Bacteroides and Fusobacterium. Appelbaum PC, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jan;9(1):47–50

Extended broad spectrum beta-lactamase in Klebsiella pneumoniae including resistance to cephamycins. Bauernfeind A, et al. **Infection** 1989 Sep–Oct;17(5):316–21

Comparison of TEM-E3 and TEM-5 beta-lactamases. Payne DJ, et al. **J Antimicrob Chemother** 1989 Oct;24(4):615–7

A novel method for the identification and distinction of the beta-lactamases of the genus Acinetobacter. Hood J, et al. **J Appl Bacteriol** 1989 Aug;67(2):157–63

Comparison of the efficiency of three methods for the determination of staphylococcal beta-lactamase. Banič S, et al. **J Chemother** 1990 Feb;2(1):17–9

Emergence of resistance to multiple beta-lactams in Enterobacter cloacae during treatment for neonatal meningitis with cefotaxime. Heusser MF, et al. **Pediatr Infect Dis J** 1990 Jul;9(7):509–12

Relationships between beta-lactamase production and beta-lactam susceptibility of environmental strains of Yersinia kristensenii. Ahmedy AM, et al. **Res Microbiol** 1989 Nov–Dec;140(9):667–77

The analysis of five carbenicillin-hydrolysing enzymes by electrophoretic methods. Vedel G, et al. **Res Microbiol** 1989 Oct;140(8):579–90

[Enzymatic resistance to cefotaxime in 56 strains of Klebsiella spp., Escherichia coli and Salmonella spp. at a Tunisian hospital (1984–1988)] Ben Hassen A, et al. **Pathol Biol (Paris)** 1990 May;38(5):464–9 (Eng. Abstr.) **(Fre)**

[Detection of beta-lactamases in the Bacteroides fragilis group] Martin C, et al. **Pathol Biol (Paris)** 1990 May; 38(5):470–3 (Eng. Abstr.) (Fre)

[Frequency and distribution of beta-lactamases in 1792 strains of Klebsiella pneumoniae in France between 1985 and 1988] Thabaut A, et al. **Pathol Biol (Paris)** 1990 May;38(5):459–63 (Eng. Abstr.) (Fre)

[A rapid penicillinase paper strip test for the detection of beta-lactamase] Petreska-Sibinovska D. **Srp Ark Celok Lek** 1989 Jan-Feb;117(1-2):39–46 (Eng. Abstr.) (Scc)

ANTAGONISTS & INHIBITORS

Beta-lactamase inhibitors. Lambert PA, et al. **Antibiot Chemother** 1989;42:264–74

In vitro susceptibilities of Plesiomonas shigelloides to 24 antibiotics and antibiotic-beta-lactamase-inhibitor combinations. Clark RB, et al. **Antimicrob Agents Chemother** 1990 Jan;34(1):159–60

In vitro evaluation of BRL 42715, a novel beta-lactamase inhibitor. Coleman K, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1580–7

Activity of sulbactam in combination with ceftriaxone in vitro and in experimental endocarditis caused by Escherichia coli producing SHV-2-like beta-lactamase. Fantin B, et al. **Antimicrob Agents Chemother** 1990 Apr; 34(4):581–6

Comparative in vitro activities of piperacillin-tazobactam and ticarcillin-clavulanate. Fass RJ, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1268–74

Comparative in vitro and in vivo activities of piperacillin combined with the beta-lactamase inhibitors tazobactam, clavulanic acid, and sulbactam. Kuck NA, et al. **Antimicrob Agents Chemother** 1989 Nov;33(11):1964–9

Beta-lactamase production in members of the family Enterobacteriaceae and resistance to beta-lactam-enzyme inhibitor combinations. Thomson KS, et al. **Antimicrob Agents Chemother** 1990 Apr;34(4):622–7

Diverse potential of beta-lactamase inhibitors to induce class I enzymes. Weber DA, et al. **Antimicrob Agents Chemother** 1990 Jan;34(1):156–8

Interaction of beta-lactamase inhibitors with various beta-lactamases. Cullmann W. **Chemotherapy** 1990; 36(3):200–8

Comparative in vitro activity of piperacillin combined with the beta-lactamase inhibitor tazobactam (YTR 830). Eliopoulos GM, et al. **Diagn Microbiol Infect Dis** 1989 Nov-Dec;12(6):481–8

Piperacillin/tazobactam (YTR 830) combination. Comparative antimicrobial activity against 5889 recent aerobic clinical isolates and 60 Bacteroides fragilis group strains. Jones RN, et al. **Diagn Microbiol Infect Dis** 1989 Nov-Dec;12(6):489–94

Studies to optimize the in vitro testing of piperacillin combined with tazobactam (YTR 830). Jones RN, et al. **Diagn Microbiol Infect Dis** 1989 Nov-Dec;12(6):495–510

Activity of ticarcillin/clavulanate and piperacillin/tazobactam (YTR 830; CL-298,741) against clinical isolates and against mutants derepressed for class I beta-lactamase. Knapp CC, et al. **Diagn Microbiol Infect Dis** 1989 Nov-Dec;12(6):511–5

Resistance of Xanthomonas maltophilia to antibiotics and the effect of beta-lactamase inhibitors. Neu HC, et al. **Diagn Microbiol Infect Dis** 1989 May-Jun;12(3):283–5

Tazobactam prevention of emergence of resistance. Neu HC, et al. **Diagn Microbiol Infect Dis** 1989 Nov-Dec; 12(6):477–80

Mechanism of beta-lactamase inhibition: differences between sulbactam and other inhibitors. Sawai T, et al. **Diagn Microbiol Infect Dis** 1989 Jul-Aug;12(4 Suppl):121S–129S

In vitro activity of combinations of beta-lactam antibiotics with beta-lactamase inhibitors against cephalosporinase-producing bacteria. Kitzis MD, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):783–8

Perspectives of beta-lactamases inhibitors in therapy of infections caused by Escherichia coli or Klebsiella with plasmidic resistance to third generation cephalosporins. Bauernfeind A. **Infection** 1990 Jan-Feb;18(1):48–52

Infectious complications after 809 biliary tract operations and results of a prospective randomized single-blind study comparing cefoxitin versus ampicillin plus an inhibitor of beta-lactamases. Wittmann DH, et al. **Infection** 1990 Jan-Feb;18(1):41–7

6-(substituted methylene)penems, potent broad spectrum inhibitors of bacterial beta-lactamase. I. Racemic 6-ethylidenepenems. Basker MJ, et al. **J Antibiot (Tokyo)** 1990 Jan;43(1):70–5

6-(substituted methylene)penems, potent broad spectrum inhibitors of bacterial beta-lactamase. II. Racemic furyl and thienyl derivatives. Broom NJ, et al. **J Antibiot (Tokyo)** 1990 Jan;43(1):76–82

Synthesis and beta-lactamase inhibitory activity of 7 alpha-hydroxyethyl cephem sulfone and sulfoxide derivatives. Nishimura S, et al. **J Antibiot (Tokyo)** 1990 Jan;43(1):114–7

Characteristics of aztreonam as a substrate, inhibitor and inducer for beta-lactamases. Sakurai Y, et al. **J Antibiot (Tokyo)** 1990 Apr;43(4):403–10

Enhanced antimicrobial activity of old and new beta-lactams against cefoxitin-resistant Bacteroides fragilis group isolates by beta-lactamase inhibitors [letter] Aldridge KE, et al. **J Antimicrob Chemother** 1990 May;25(5):873–5

Inhibition of beta-lactamases by tazobactam and in-vitro antibacterial activity of tazobactam combined with piperacillin. Higashitani F, et al. **J Antimicrob Chemother** 1990 Apr;25(4):567–74

Interactions of meropenem, with beta-lactamases, including enzymes with extended-spectrum activity against third-generation cephalosporins. Labia R, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:219–23

Interactions of meropenem with class I chromosomal beta-lactamases. Yang YJ, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:207–17

Isolation and characterization of a beta-lactamase-inhibitory protein from Streptomyces clavuligerus and cloning and analysis of the corresponding gene. Doran JL, et al. **J Bacteriol** 1990 Sep;172(9):4909–18

Inhibitors and inactivators of beta-lactamase from Mycobacterium fortuitum. Fattorini L, et al. **J Chemother** 1989 Oct;1(5):293–7

In vitro activity of YTR 830. Jacobs MR, et al. **J Chemother** 1989 Jun;1(3):151–4

Orally effective acid prodrugs of the beta-lactamase inhibitor sulbactam. English AR, et al. **J Med Chem** 1990 Jan; 33(1):344–7

Beta-lactamase inhibition: therapeutic advances in obstetrics and gynecology. A symposium. **J Reprod Med** 1990 Mar; 35(3 Suppl):305–58

Implications of beta-lactamase-inhibitor combinations. Fuchs PC, et al. **J Reprod Med** 1990 Mar;35(3 Suppl):317–21

Infectious morbidity in gynecologic oncology. Graham JE Jr. **J Reprod Med** 1990 Mar;35(3 Suppl):348–52 (19 ref.)

Development of beta-lactamase inhibitors. Sutherland R. **J Reprod Med** 1990 Mar;35(3 Suppl):307–12

Inhibition of a class C beta-lactamase by a specific phosphonate monoester. Pratt RF. **Science** 1989 Nov 17; 246(4932):917–9

BIOSYNTHESIS

Emergence and persistence of beta-lactamase-producing bacteria in the upper respiratory tract in children treated with beta-lactam antibiotics. Eliasson I, et al. **Am J Med** 1990 May 14;88(5A):51S–55S

Expression, purification, and immobilization of a protein A-beta-lactamase hybrid protein. Georgiou G, et al. **Ann N Y Acad Sci** 1990;589:139–47

Effects of culture conditions on plasmid stability and production of a plasmid-encoded protein in batch and continuous cultures of Escherichia coli JM103[pUC8] Ryan W, et al. **Ann N Y Acad Sci** 1990;589:91–110

Chemoprophylactic efficacy against experimental endocarditis caused by beta-lactamase-producing, aminoglycoside-resistant enterococci is associated with prolonged serum inhibitory activity. Bayer AS, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1068–74

Molecular epidemiology of beta-lactamase-producing enterococci. Patterson JE, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):302–5

Effects of temperature on Escherichia coli overproducing beta-lactamase or human epidermal growth factor. Chalmers JJ, et al. **Appl Environ Microbiol** 1990 Jan; 56(1):104–11

Cloning and amplified expression in Streptomyces lividans of the gene encoding the extracellular beta-lactamase of Actinomadura R39. Piron-Fraipont C, et al. **Biochem J** 1989 Sep 15;262(3):849–54

Prospective study about the incidence of B lactamase producing bacteriae in otitis media in the population of the emergency room of the University Pediatric Hospital. Colón I, et al. **Bol Asoc Med P R** 1990 May;82(5):234–6

Novel plasmid-mediated resistance to ceftazidime of a clinical isolate of Klebsiella pneumoniae. Walmsley SL, et al. **Can Med Assoc J** 1990 Mar 15;142(6):597–8

Heterogeneity of beta-lactamase production in Pseudomonas maltophilia, a nosocomial pathogen. Cullmann W, et al. **Chemotherapy** 1990;36(2):117–26

In vitro effect of YTR (tazobactam) on plasmid and chromosomally mediated beta-lactamases. Stobberingh EE. **Chemotherapy** 1990;36(3):209–14

Induction of beta-lactamase in Gram-negative bacteria. Wiedemann B, et al. **Diagn Microbiol Infect Dis** 1989 Jul-Aug;12(4 Suppl):131S–137S (23 ref.)

Mechanisms of resistance of enterococci to beta-lactam antibiotics. Fontana R, et al. **Eur J Clin Microbiol Infect Dis** 1990 Feb;9(2):103–5 (21 ref.)

In vitro activity of combinations of beta-lactam antibiotics with beta-lactamase inhibitors against cephalosporinase-producing bacteria. Kitzis MD, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):783–8

Isolation of three strains of beta-lactamase-producing Enterococcus faecalis in Argentina. Lopardo H, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jun;9(6):402–5

Evaluation of four qualitative methods for detection of beta-lactamase production in Staphylococcus and Micrococcus species. Petersson AC, et al. **Eur J Clin Microbiol Infect Dis** 1989 Nov;8(11):962–7

Incidence of strains producing extended spectrum beta-lactamases in Argentina. Casellas JM, et al. **Infection** 1989 Nov-Dec;17(6):434–6

Epidemiology of extended spectrum beta-lactamases. Philippon A, et al. **Infection** 1989 Sep-Oct;17(5):347–54

Interactions of tazobactam and clavulanate with inducibly- and constitutively-expressed Class I beta-lactamases. Akova M, et al. **J Antimicrob Chemother** 1990 Feb; 25(2):199–208

The concept of indirect pathogenicity by beta-lactamase production, especially in ear, nose and throat infection. Brook I. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:63–72 (52 ref.)

Poor induction of beta-lactamases by tazobactam [letter] Corkill JE, et al. **J Antimicrob Chemother** 1990 Mar; 25(3):477–9

Clavulanate and beta-lactamase induction. Livermore DM, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:23–33

Broad spectrum beta-lactamases of Citrobacter diversus. Oliva B, et al. **J Antimicrob Chemother** 1990 Mar; 25(3):335–41

Activity of amoxycillin/clavulanate against beta-lactamase-producing Escherichia coli and Klebsiella spp. Roy C, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:41–7

Importance of organisms producing broad-spectrum SHV-group beta-lactamases into the United Kingdom. Shannon KP, et al. **J Antimicrob Chemother** 1990 Mar; 25(3):343–51

Antibacterial properties of meropenem towards clinical isolates, beta-lactamase producers and laboratory mutants. Wiedemann B, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:197–205

Identification of BlaR, the signal transducer for beta-lactamase production in Bacillus licheniformis, as a penicillin-binding protein with strong homology to the OXA-2 beta-lactamase (class D) of Salmonella typhimurium. Zhu YF, et al. **J Bacteriol** 1990 Feb; 172(2):1137–41

The beta-lactamases of Citrobacter diversus and their hydrolysis kinetics for some structurally-related cephalosporins. Amicosante G, et al. **J Chemother** 1989 Dec;1(6):399–402

Do inert beta-lactamase inhibitors act as synergizers of beta-lactam antibiotics? Utility of boric and boronic acids. Amicosante G, et al. **J Chemother** 1989 Dec;1(6):394–8

Prospective survey of colonization and infection caused by expanded-spectrum-beta-lactamase-producing members of the family Enterobacteriaceae in an intensive care unit. De Champs C, et al. **J Clin Microbiol** 1989 Dec; 27(12):2887–90

Overproduced beta-lactamase and the outer-membrane barrier as resistance factors in Serratia marcescens highly resistant to beta-lactamase-stable beta-lactam antibiotics. Hechler U, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1275–90

Influence of magnesium concentration on production of exoprotein and beta-lactamase by Staphylococcus aureus and Staphylococcus hemolyticus. Kiyota H, et al. **J Infect Dis** 1989 Dec;160(6):1061–3

Regulation of enterobacterial cephalosporinase production: the role of a membrane-bound sensory transducer. Honoré N, et al. **Mol Microbiol** 1989 Aug;3(8):1121–30

Translational repression of TEM beta-lactamase synthesis as a response of Escherichia coli to heat shock. Kuriki Y. **Mol Microbiol** 1989 Aug;3(8):1131–40

[Antibacterial effect of cefixime in the presence of the type of beta-lactamases produced by Enterobacteriaceae] Philippon A, et al. **Presse Med** 1989 Oct 11;18(32):1560–6 (Eng. Abstr.) (Fre)

[Detection of beta-lactamase-producing strains isolated from urinary tract and their drug susceptibility] Fukatsu H, et al. **Hinyokika Kiyo** 1990 May;36(5):569–75 (Eng. Abstr.) (Jpn)

[Chronic pyoderma caused by beta-lactamase-producing strains of Staphylococcus] Masiukova SA, et al. **Vestn Dermatol Venerol** 1990;(5):48–53 (Eng. Abstr.) (Rus)

[beta-Lactamase-producing strains of the gonococcus] Soina KK, et al. **Vestn Dermatol Venerol** 1989;(6):57–8 (Eng. Abstr.) (Rus)

[The in vitro effect of a combination of sulbactam with cephalothin and cefazolin on strains of Escherichia coli and Proteus mirabilis which produce beta lactamase] Múčková M, et al. **Bratisl Lek Listy** 1990 Apr;91(4):303–8 (Eng. Abstr.) (Slo)

[Acute gonorrhea. Treatment schedules. Evaluation] Belli L, et al. **Med Cutan Ibero Lat Am** 1989;17(5):299–302 (Eng. Abstr.) (Spa)

CHEMICAL SYNTHESIS

Synthesis and structure-activity relations in the class of 2-(pyridyl)penems. Bedeschi A, et al. **J Antibiot (Tokyo)** 1990 Mar;43(3):306–13

CLASSIFICATION

Substrate specificities in class A beta-lactamases: preference for penams vs. cephems. The role of residue 237. Healey WJ, et al. **Proteins** 1989;6(3):275–83

DIAGNOSTIC USE

[An immunoenzyme method of isolation of foot-and-mouth disease virus by using beta-lactamase conjugate with virus-specific antibodies] Mishchenko VA, et al. **Antibiot Khimioter** 1989 Oct;34(10):739–41 (Eng. Abstr.) (Rus)

GENETICS

Nucleotide sequence of SHV-2 beta-lactamase gene. Garbarg-Chenon A, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1444-6

Sequence analysis and evolutionary perspectives of ROB-1 beta-lactamase. Juteau JM, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1354-9

ampG is essential for high-level expression of AmpC beta-lactamase in Enterobacter cloacae. Korfmann G, et al. **Antimicrob Agents Chemother** 1989 Nov;33(11):1946-51

Molecular characterization of the gene encoding SHV-3 beta-lactamase responsible for transferable cefotaxime resistance in clinical isolates of Klebsiella pneumoniae. Nicolas MH, et al. **Antimicrob Agents Chemother** 1989 Dec; 33(12):2096-100

Molecular epidemiology of TEM-3 (CTX-1) beta-lactamase. Petit A, et al. **Antimicrob Agents Chemother** 1990 Feb; 34(2):219-24

The role of lysine-234 in beta-lactamase catalysis probed by site-directed mutagenesis. Ellerby LM, et al. **Biochemistry** 1990 Jun 19;29(24):5797-806

Cleavages in the 5' region of the ompA and bla mRNA control stability: studies with an E. coli mutant altering mRNA stability and a novel endoribonuclease. Lundberg U, et al. **EMBO J** 1990 Sep;9(9):2731-41

Characterization of the staphylococcal beta-lactamase transposon Tn552. Rowland SJ, et al. **EMBO J** 1989 Sep; 8(9):2761-73

Beta-lactamase types and beta-lactam resistance of Escherichia coli strains with chromosomally mediated ampicillin resistance. Marre R, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jan;9(1):44-6

Substitution of aspartic acid-217 of Citrobacter freundii cephalosporinase and properties of the mutant enzymes. Tsukamoto K, et al. **FEBS Lett** 1990 May 21;264(2):211-4

Nucleotide sequence of the gene encoding the active-site serine beta-lactamase from Actinomadura R39. Houba S, et al. **FEMS Microbiol Lett** 1989 Dec;53(3):241-6

Hyperproduction of TEM-1 beta-lactamase in clinical isolates of Escherichia coli serotype O15. Shannon K, et al. **FEMS Microbiol Lett** 1990 Feb;55(3):319-23

Biotinylated oligonucleotide probes for the detection and the characterization of TEM-type extended broad spectrum beta-lactamases in Enterobacteriaceae. Tham TN, et al. **FEMS Microbiol Lett** 1990 May;57(1-2):109-15

Conjugal transfer of gonococcal beta-lactamase and conjugative plasmids to Neisseria meningitidis. Brett MS. **J Antimicrob Chemother** 1989 Dec;24(6):875-9

Mutants of the TEM-1 beta-lactamase conferring resistance to ceftazidime. Payne DJ, et al. **J Antimicrob Chemother** 1989 Aug;24(2):103-10

The epidemiology of beta-lactamases. Wiedemann B, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:1-22 (108 ref.)

Identification and characterization of a new replication region in the Neisseria gonorrhoeae beta-lactamase plasmid pFA3. Gilbride KA, et al. **J Bacteriol** 1990 May; 172(5):2439-46

The translation start signal region of TEM beta-lactamase mRNA is responsible for heat shock-induced repression of amp gene expression in Escherichia coli. Kuriki Y. **J Bacteriol** 1989 Oct;171(10):5452-7

Evolutionary perspectives on multiresistance beta-lactamase transposons. Lafond M, et al. **J Bacteriol** 1989 Dec; 171(12):6423-9

Structural and functional characterization of tnpI, a recombinase locus in Tn21 and related beta-lactamase transposons. Mercier J, et al. **J Bacteriol** 1990 Jul; 172(7):3745-57

Sequencing the gene for an imipenem-cefoxitin-hydrolyzing enzyme (CfiA) from Bacteroides fragilis TAL2480 reveals strong similarity between CfiA and Bacillus cereus beta-lactamase II. Thompson JS, et al. **J Bacteriol** 1990 May;172(5):2584-93

Extension of the substrate spectrum by an amino acid substitution at residue 219 in the Citrobacter freundii cephalosporinase. Tsukamoto K, et al. **J Bacteriol** 1990 Aug;172(8):4348-51

Identification of BlaR, the signal transducer for beta-lactamase production in Bacillus licheniformis, as a penicillin-binding protein with strong homology to the OXA-2 beta-lactamase (class D) of Salmonella typhimurium. Zhu YF, et al. **J Bacteriol** 1990 Feb; 172(2):1137-41

Nucleotide sequence of the PSE-4 carbenicillinase gene and correlations with the Staphylococcus aureus PC1 beta-lactamase crystal structure. Boissinot M, et al. **J Biol Chem** 1990 Jan 15;265(2):1225-30

Illicit secretion of a cytoplasmic protein into the periplasm of Escherichia coli requires a signal peptide plus a portion of the cognate secreted protein. Demarcation of the critical region of the mature protein. Summers RG, et al. **J Biol Chem** 1989 Nov 25;264(33):20074-81

A conservative amino acid substitution, arginine for lysine, abolishes export of a hybrid protein in Escherichia coli. Implications for the mechanism of protein secretion. Summers RG, et al. **J Biol Chem** 1989 Nov 25; 264(33):20082-8

Cloning and sequence determination of six Staphylococcus aureus beta-lactamases and their expression in Escherichia coli and Staphylococcus aureus. East AK, et al. **J Gen Microbiol** 1989 Apr;135 (Pt 4):1001-15

Molecular analysis of beta-lactamases from four species of Streptomyces: comparison of amino acid sequences with those of other beta-lactamases. Forsman M, et al. **J Gen Microbiol** 1990 Mar;136 (Pt 3):589-98

Transfer of a gonococcal beta-lactamase plasmid to conjugation-deficient Neisseria cinerea strains by transformation. Genco CA, et al. **J Gen Microbiol** 1988 Dec;134 (Pt 12):3277-83

Nucleotide sequence of an OXA-2 beta-lactamase gene from the R-plasmid R1767 derived plasmid pBP11 and comparison to closely related resistance determinants found in R46 and Tn2603. Nücken EJ, et al. **J Gen Microbiol** 1989 Apr;135 (Pt 4):761-5

Comparison of enterococcal and staphylococcal beta-lactamase plasmids. Wanger AR, et al. **J Infect Dis** 1990 Jan;161(1):54-8

Transferable cephalosporin resistance not inhibited by clavulanate in Escherichia coli [letter] Woodford N, et al. **Lancet** 1990 Jul 28;336(8709):253

A simple method for maximizing the yields of membrane and exported proteins expressed in Escherichia coli. Broome-Smith JK, et al. **Mol Microbiol** 1989 Dec; 3(12):1813-7

Transcriptional induction of Streptomyces cacaoi beta-lactamase by a beta-lactam compound. Forsman M, et al. **Mol Microbiol** 1989 Oct;3(10):1425-32

Signalling proteins in enterobacterial AmpC beta-lactamase regulation. Lindquist S, et al. **Mol Microbiol** 1989 Aug; 3(8):1091-102

Identification of amino acid sequences that can function as translocators of beta-lactamase in Escherichia coli. Zhang Y, et al. **Mol Microbiol** 1989 Oct;3(10):1361-9

Nucleotide sequence of the blaZ gene of the Staphylococcus aureus beta-lactamase transposon Tn4002. Gillespie MT, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8854

Nucleotide sequence of the gene encoding the SHV-2 beta-lactamase (blaSHV-2) of Klebsiella ozaenae. Podbielski A, et al. **Nucleic Acids Res** 1990 Aug 25; 18(16):4916

Lack of expression of RP4-specified beta-lactamase in Azospirillum brasilense. Dutta SH, et al. **Plasmid** 1989 Nov; 22(3):268-70

Direct sequencing of the amplified structural gene and promoter for the extended-broad-spectrum beta-lactamase TEM-9 (RHH-1) of Klebsiella pneumoniae. Mabilat C, et al. **Plasmid** 1990 Jan;23(1):27-34

An efficient method for generating proteins with altered enzymatic properties: application to beta-lactamase. Oliphant AR, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(23):9094-8

Acquisition of beta-lactamase and TetM-containing conjugative plasmids by phenotypically different strains of Neisseria gonorrhoeae. Sarafian SK, et al. **Sex Transm Dis** 1990 Apr-Jun;17(2):67-71

[Effect of cotransformation on the growth rate of yeasts and the expression of the beta-lactamase gene of Escherichia coli] Kirillova VS, et al. **Mikrobiol Zh** 1985 Mar-Apr; 47(2):37-42 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Selection and application of antibodies modifying the function of beta-lactamase. Bibi E, et al. **Biochim Biophys Acta** 1990 Aug 17;1035(2):237-41

ISOLATION & PURIFICATION

Purification and characterization of inducible beta-lactamases in Aeromonas spp. Iaconis JP, et al. **Antimicrob Agents Chemother** 1990 Jan;34(1):44-51

Purification and characterization of a new beta-lactamase from Clostridium butyricum. Kesado T, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1302-7

Purification of TEM-1 beta-lactamase by immunoaffinity chromatography. Bibi E. **Biochem J** 1989 Oct 1; 263(1):309-11

Role of lysine-67 in the active site of class C beta-lactamase from Citrobacter freundii GN346. Tsukamoto K, et al. **Eur J Biochem** 1990 Feb 22;188(1):15-22

Beta-lactamase of Lysobacter enzymogenes: induction, purification and characterization. von Tigerstrom RG, et al. **J Gen Microbiol** 1990 Mar;136 (Pt 3):521-7

Extended broad-spectrum beta-lactamases in Australia [letter] **Med J Aust** 1990 Apr 16;152(8):444-5

METABOLISM

Role of beta-lactamase and impermeability in the resistance of Pseudomonas aeruginosa. Livermore DM. **Antibiot Chemother** 1989;42:257-63 (16 ref.)

Multiplicity of TEM-derived beta-lactamases from Klebsiella pneumoniae strains isolated at the same hospital and relationships between the responsible plasmids. Chanal CM, et al. **Antimicrob Agents Chemother** 1989 Nov; 33(11):1915-20

Interaction of E1040 with cephalosporinase from Citrobacter freundii GN7391. Inoue E, et al. **Antimicrob Agents Chemother** 1989 Dec;33(12):2157-9

Activities of beta-lactam antibiotics against Escherichia coli strains producing extended-spectrum beta-lactamases. Jacoby GA, et al. **Antimicrob Agents Chemother** 1990 May; 34(5):858-62

Use of extracts versus whole-cell bacterial suspensions in the identification of Staphylococcus aureus beta-lactamase variants. Kernodle DS, et al. **Antimicrob Agents Chemother** 1990 Mar;34(3):420-5

Comparative in vitro activity and beta-lactamase stability of FK482, a new oral cephalosporin. Neu HC, et al. **Antimicrob Agents Chemother** 1989 Oct;33(10):1795-800

Outer membrane permeability and beta-lactamase stability of dipolar ionic cephalosporins containing methoxyimino substituents. Nikaido H, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):337-42

TEM-4, a new plasmid-mediated beta-lactamase that hydrolyzes broad-spectrum cephalosporins in a clinical isolate of Escherichia coli. Paul GC, et al. **Antimicrob Agents Chemother** 1989 Nov;33(11):1958-63

Structural features related to hydrolytic activity against ceftazidime of plasmid-mediated SHV-type CAZ-5 beta-lactamase. Péduzzi J, et al. **Antimicrob Agents Chemother** 1989 Dec;33(12):2160-3

Extended-spectrum beta-lactamases. Philippon A, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1131-6 (35 ref.)

Novel plasmid-mediated beta-lactamase (TEM-10) conferring selective resistance to ceftazidime and aztreonam in clinical isolates of Klebsiella pneumoniae. Quinn JP, et al. **Antimicrob Agents Chemother** 1989 Sep; 33(9):1451-6

beta-Lactamase stability and in vitro activity of oral cephalosporins against strains possessing well-characterized mechanisms of resistance. Sanders CC. **Antimicrob Agents Chemother** 1989 Aug;33(8):1313-7

In vitro activity of LJC10,627, a new carbapenem antibiotic with high stability to dehydropeptidase I. Ubukata K, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):994-1000

BRO beta-lactamases of Branhamella catarrhalis and Moraxella subgenus Moraxella, including evidence for chromosomal beta-lactamase transfer by conjugation in B. catarrhalis, M. nonliquefaciens, and M. lacunata. Wallace RJ Jr, et al. **Antimicrob Agents Chemother** 1989 Nov; 33(11):1845-54

Biochemical characterization of a beta-lactamase that hydrolyzes penems and carbapenems from two Serratia marcescens isolates. Yang YJ, et al. **Antimicrob Agents Chemother** 1990 May;34(5):755-8

Efficacy of teicoplanin in two dosage regimens for experimental endocarditis caused by a beta-lactamase-producing strain of Enterococcus faecalis with high-level resistance to gentamicin. Yao JD, et al. **Antimicrob Agents Chemother** 1990 May;34(5):827-30

In vitro antibacterial activity and interactions with beta-lactamases and penicillin-binding proteins of the new monocarbam antibiotic U-78608. Zurenko GE, et al. **Antimicrob Agents Chemother** 1990 May;34(5):884-8

Antibiotic susceptibility and beta-lactamase production in clinical isolates of Enterobacter spp. Lindh E, et al. **APMIS** 1990 May;98(5):462-70

Studies on beta-lactamases from Escherichia coli isolated from urinary tract infections. Togsverd E, et al. **APMIS** 1990 Apr;98(4):345-52

Chromogenic depsipeptide substrates for beta-lactamases and penicillin-sensitive DD-peptidases. Adam M, et al. **Biochem J** 1990 Sep 1;270(2):525-9

Trapping the acyl-enzyme intermediate in beta-lactamase I catalysis. Cartwright SJ, et al. **Biochem J** 1989 Nov 1; 263(3):905-12

Beta-lactamases as fully efficient enzymes. Determination of all the rate constants in the acyl-enzyme mechanism [published erratum appears in Biochem J 1990 Jun 15;268(3):808] Christensen H, et al. **Biochem J** 1990 Mar 15;266(3):853-61

The diversity of the catalytic properties of class A beta-lactamases. Matagne A, et al. **Biochem J** 1990 Jan 1;265(1):131-46

Beta-lactamase-catalyzed aminolysis of depsipeptides: proof of the nonexistence of a specific D-phenylalanine/enzyme complex by double-label isotope trapping. Pazhanisamy S, et al. **Biochemistry** 1989 Aug 22;28(17):6870-5

Beta-lactamase-catalyzed aminolysis of depsipeptides: peptide inhibition and a new kinetic mechanism. Pazhanisamy S, et al. **Biochemistry** 1989 Aug 22; 28(17):6875-82

Beta-lactamase-catalyzed aminolysis of depsipeptides: amine specificity and steady-state kinetics. Pazhanisamy S, et al. **Biochemistry** 1989 Aug 22;28(17):6863-70

Cryoenzymology of staphylococcal beta-lactamase: trapping a serine-70-linked acyl-enzyme. Virden R, et al. **Biochemistry** 1990 Jan 9;29(1):145-53

Penicillin-binding proteins and beta-lactamases: their effects on the use of cephalosporins and other new beta-lactams. Neu HC. **Curr Clin Top Infect Dis** 1987;8:37-61 (103 ref.)

Antibacterial activity and beta-lactamase stability of MDL 19,592, an oral cephalosporin. Yu KW, et al. **Diagn Microbiol Infect Dis** 1989 Sep-Oct;12(5):441-3

Beta-lactamase stability and antibacterial activity of cefpirome alone and in combination with other antibiotics. Bakhtiar M, et al. **Drugs Exp Clin Res** 1989;15(10):477-82

The kinetics of CAZ-5, a novel SHV-related plasmid-mediated beta-lactamase with enhanced hydrolytic activity against ceftazidime. Labia R, et al. **Drugs Exp Clin Res** 1989;15(11-12):535-40

The Escherichia coli heat shock proteins GroEL and GroES modulate the folding of the beta-lactamase precursor. Laminet AA, et al. **EMBO J** 1990 Jul;9(7):2315-9

The enterococci: an enigma and a continuing therapeutic

challenge. Moellering RC Jr.
Eur J Clin Microbiol Infect Dis 1990 Feb;9(2):73–4
Two novel transferable extended-spectrum beta-lactamases from Klebsiella pneumoniae in Tunisia. Ben Redjeb S, et al. **FEMS Microbiol Lett** 1990 Jan 15;55(1–2):33–8
Biochemical, immunological and physicochemical comparisons between OHIO–1 and four SHV–type beta–lactamases. Vedel G, et al. **FEMS Microbiol Lett** 1989 Nov;53(1–2):5–9
Beta–lactamases, beta–lactamase inhibitors, and skin and skin–structure infections. Neu HC.
J Am Acad Dermatol 1990 May;22(5 Pt 1):896–904 (27 ref.)
Beta–lactamase activity in bronchial sputum and treatment failure against penicillin–sensitive bacteria in pulmonary infections. Bingen E, et al. **J Antimicrob Chemother** 1989 Oct;24(4):622–4
Induction of beta–lactamase and methicillin resistance in unusual strains of methicillin–resistant Staphylococcus aureus. Boyce JM, et al. **J Antimicrob Chemother** 1990 Jan; 25(1):73–81
Excitement in the beta–lactamase arena. Bush K.
J Antimicrob Chemother 1989 Dec;24(6):831–6 (42 ref.)
Comparative in–vitro activity of meropenem against clinical isolates including Enterobacteriaceae with expanded–spectrum beta–lactamases. Chanal C, et al.
J Antimicrob Chemother 1989 Sep;24 Suppl A:133–41
Trapping and hydrolysis of latamoxef by beta–lactamase in Pseudomonas aeruginosa [letter] Livermore DM.
J Antimicrob Chemother 1989 Nov;24(5):819–21
Two resistance phenotypes to beta–lactams of Alcaligenes denitrificans subsp. xylosoxydans in relation to beta–lactamase types [letter] Philippon A, et al.
J Antimicrob Chemother 1990 Apr;25(4):698–700
Meropenem: activity against resistant gram–negative bacteria and interactions with beta–lactamases. Sanders CC, et al.
J Antimicrob Chemother 1989 Sep;24 Suppl A:187–96
Comparative study of five plasmid–mediated ceftazidimases isolated in Klebsiella pneumoniae. Sirot D, et al.
J Antimicrob Chemother 1989 Oct;24(4):509–21
Role of beta–lactamases in the response of pulmonary infections to amoxycillin/clavulanate. Stockley RA, et al.
J Antimicrob Chemother 1989 Nov;24 Suppl B:73–81
Inactivation of aztreonam by faecal supernatants of healthy volunteers as determined by HPLC. Welling GW, et al.
J Antimicrob Chemother 1989 Nov;24(5):805–9
The effect of 2,4–dichlorophenol on growth and plasmidic beta–lactamase activity in Escherichia coli. Espigares M, et al. **J Appl Toxicol** 1989 Dec;9(6):427–31
In vivo degradation of secreted fusion proteins by the Escherichia coli outer membrane protease OmpT. Baneyx F, et al. **J Bacteriol** 1990 Jan;172(1):491–4
In–vitro sensitivity of amoxicillin/clavulanic acid (Augmentin) to isolated beta–lactamases and in–vitro antibacterial activity. Esposito S, et al. **J Chemother** 1990 Jun;2(3):167–70
In vitro and in vivo efficacy of YTR–830H and piperacillin combinations versus beta–lactamase–producing bacteria. Kuck NA, et al. **J Chemother** 1989 Jun;1(3):155–61
Clindamycin in the treatment of an outbreak of streptococcal pharyngitis in a kibbutz due to beta–lactamase producing organisms. Raz R, et al. **J Chemother** 1990 Jun;2(3):182–4
Enhanced secretion of Escherichia coli beta–lactamase by a spontaneous erythromycin–resistant mutant of Bacillus subtilis. Nagami Y, et al. **J Gen Microbiol** 1989 Apr;135 (Pt 4):777–85
A novel chromosomal TEM derivative and alterations in outer membrane proteins together mediate selective ceftazidime resistance in Escherichia coli. Weber DA, et al. **J Infect Dis** 1990 Aug;162(2):460–5
Characterisation of a unique ceftazidime–hydrolysing beta–lactamase, TEM–E2. Payne DJ, et al.
J Med Microbiol 1990 Jun;32(2):131–4
Refined crystal structure of beta–lactamase from Citrobacter freundii indicates a mechanism for beta–lactam hydrolysis. Oefner C, et al. **Nature** 1990 Jan 18;343(6255):284–8
Altering enzymatic activity: recruitment of carboxypeptidase activity into an RTEM beta–lactamase/penicillin–binding protein 5 chimera. Chang YH, et al.
Proc Natl Acad Sci U S A 1990 Apr;87(7):2823–7
[Comparative study of the antibacterial activity of cefpodoxime against enterobacteria producing beta lactamases] Siebor E, et al. **Pathol Biol (Paris)** 1990 May; 38(5):331–5 (Eng. Abstr.) **(Fre)**
[Presence of beta–lactamase with a broad spectrum in Acinetobacter baumanii (letter)] Joly–Guillou ML, et al. **Presse Med** 1990 Apr 7;19(14):672–3 **(Fre)**
[Human pulmonary infection by a strain of Pasteurella multocida producing beta–lactamase (letter)] Nguyen Phuong T, et al. **Presse Med** 1989 Nov 18;18(38):1886 **(Fre)**
[Antimicrobial sensitivity profile of Staphylococcus aureus at a pediatric hospital: prevalence of resistance to methicillin (see comments)] Alpuche–Aranda C, et al.
Bol Med Hosp Infant Mex 1989 Nov;46(11):700–4 (Eng. Abstr.) Comment in: Bol Med Hosp Infant Mex 1989 Nov;46(11):697–9. **(Spa)**

PHARMACOLOGY

Biochemical characteristics of extended broad spectrum beta–lactamases. Bush K, et al. **Infection** 1989 Nov–Dec; 17(6):429–33
Resistance to third generation cephalosporins: the current situation. Pechère JC. **Infection** 1989 Sep–Oct;17(5):333–7 (42 ref.)
Antibacterial activity of tigemonam dicholate (SQ 30836) and interaction with beta–lactamases of gram–negative bacteria. Raimondi A, et al. **J Chemother** 1989 May;1 Suppl 2:13–21

PHYSIOLOGY

Imipenem resistance in Bacteroides distasonis mediated by a novel beta–lactamase. Hurlbut S, et al.
Antimicrob Agents Chemother 1990 Jan;34(1):117–20

BETA-LACTAMS, MONOCYCLIC see **MONOBACTAMS**

BETA LIPOPROTEINS see **LIPOPROTEINS, LDL**

BETA-LIPOTROPIN see **LIPOTROPIN**

BETA-LIPOTROPIN C FRAGMENT see **BETA-ENDORPHIN**

BETA 2 MICROGLOBULIN

[Hemofiltration and hemoperfusion performed in series for the purpose of removing beta 2 microglobulin] Marangoni R, et al. **Cas Lek Cesk** 1989 Sep 22;128(39):1217–20 (Eng. Abstr.) **(Cze)**
[Beta 2 microglobulin amyloidosis: a new complication of periodical hemodialysis treatment] Paganelli E, et al.
G Clin Med 1990 Feb;71(2):105–9 **(Ita)**

ANALYSIS

Multiple myeloma: beta–2–microglobulin is not a useful follow–up parameter. Boccadoro M, et al.
Acta Haematol (Basel) 1989;82(3):122–5
Temporary increase in serum beta 2–microglobulin during treatment with interferon–alpha for AIDS–associated Kaposi's sarcoma. de Wit R, et al. **AIDS** 1990 May; 4(5):459–62
A study of beta 2–microglobulin skin deposits in dialyzed patients and healthy controls. Assounga AG, et al.
Am J Kidney Dis 1990 Jun;15(6):556–61
Beta 2–microglobulin amyloidosis in a patient treated exclusively by continuous ambulatory peritoneal dialysis. Jadoul M, et al. **Am J Kidney Dis** 1990 Jan;15(1):86–8
Impressive reduction of serum beta 2–microglobulin in a patient treated with a new polyamide hemofilter [letter; comment] Schaefer K, et al. **Am J Nephrol** 1990;10(2):173–4 Comment on: Am J Nephrol 1989;9(3):177–83.
Beta 2–microglobulin: its significance and clinical usefulness. Bethea M, et al. **Ann Clin Lab Sci** 1990 May–Jun; 20(3):163–8 (30 ref.)
Comparison of serum and synovial fluid concentrations of beta 2–microglobulin and C reactive protein in relation to clinical disease activity and synovial inflammation in rheumatoid arthritis. Walters MT, et al.
Ann Rheum Dis 1989 Nov;48(11):905–11
Use of beta 2–microglobulin level and CD4 lymphocyte count to predict development of acquired immunodeficiency syndrome in persons with human immunodeficiency virus infection. Anderson RE, et al.
Arch Intern Med 1990 Jan;150(1):73–7
Hemodialysis–associated amyloidosis of bone of beta–2 microglobulin origin. Mikawa Y, et al.
Arch Orthop Trauma Surg 1990;109(2):109–12
Destructive beta 2–microglobulin amyloid arthropathy of the cervico–occipital hinge in a hemodialyzed patient [letter] Kessler M, et al. **Arthritis Rheum** 1990 Apr;33(4):602–4
Beta 2–microglobulin expression in human embryonal neuroblastoma reflects its developmental regulation. Cooper MJ, et al. **Cancer Res** 1990 Jun 15;50(12):3694–700
Beta–2–microglobulin as an index of renal function after cardiopulmonary bypass surgery in children. Fernandez F, et al. **Child Nephrol Urol** 1988–89;9(6):326–30
Beta 2–microglobulin. A reliable parameter for differentiating between graft rejection and severe infection after cardiac transplantation. Teufelsbauer H, et al. **Circulation** 1989 Dec; 80(6):1681–8
More on "alpha–electrophoretic form of beta 2–microglobulin" [letter] Ferreira A, et al. **Clin Chem** 1990 Jun;36(6):1254–5
Beta 2–microglobulin and immune activation [letter] Fuchs D, et al. **Clin Chem** 1989 Oct;35(10):2158–9
Serum beta 2–microglobulin levels in haemophiliacs [letter] Smith GM, et al. **Clin Lab Haematol** 1989;11(4):409–10
Serum beta 2–microglobulin before and after renal and heart allotransplantation and in infection. Korčáková L, et al.
Czech Med 1989;12(3):158–61
Bone marrow histology and serum beta 2 microglobulin in multiple myeloma—a new prognostic strategy. Bartl R, et al. **Eur J Haematol Suppl** 1989;51:88–98
Factors affecting beta 2–microglobulin plasma concentration during hemodialysis. Martin–Malo A, et al.
Int J Artif Organs 1989 Aug;12(8):509–14
Beta 2–microglobulin serum levels during dialysis: effect of cuprophan and serum osmolality changes. Šulková S, et al. **Int J Artif Organs** 1990 Jan;13(1):22–5
Altered expression of major histocompatibility complex (MHC) antigens by epidermal tumours. Markey AC, et al.
J Cutan Pathol 1990 Apr;17(2):65–71
Activated human T lymphocytes express MHC class I heavy chains not associated with beta 2–microglobulin. Schnabl E, et al. **J Exp Med** 1990 May 1;171(5):1431–42
A rapid and robust particle–enhanced turbidimetric immunoassay for serum beta 2 microglobulin. Medcalf EA, et al. **J Immunol Methods** 1990 May 8;129(1):97–103
Serum beta 2–microglobulin levels in thyroid diseases. Lervang HH, et al. **J Intern Med** 1989 Oct;226(4):261–4
Beta–2–microglobulin in the assessment of renal function in full term newborns following perinatal asphyxia. Fernandez F, et al. **J Perinat Med** 1989;17(6):453–9
Serum beta 2 microglobulin in ankylosing spondylitis [letter] Wendling D, et al. **J Rheumatol** 1989 Oct;16(10):1399
Lysine–specific cleavage of beta 2–microglobulin in amyloid deposits associated with hemodialysis. Linke RP, et al.
Kidney Int 1989 Oct;36(4):675–81
Markers of risk in HIV–1 [letter; comment] Krämer A, et al. **N Engl J Med** 1990 Jun 28;322(26):1886 Comment on: N Engl J Med 1990 Jan 18;322(3):166–72.
Beta–2–microglobulin in hemodiafiltered children: long–term efficiency follow–up. Fischbach M, et al. **Nephron** 1989; 53(2):110–4
Short–term administration of colchicine to haemodialysis patients: plasma beta–2–microglobulin and phagocyte oxidative response. Ureña P, et al. **Nephron** 1990; 55(3):348–50
Prognostic factors and clinical trials. Dixon DO.
Oncology (Williston Park) 1990 Apr;4(4):116–22; discussion 122, 125–6 (38 ref.)
beta 2–Microglobulin amyloidosis. A systemic amyloid disease affecting primarily synovium and bone in long–term dialysis patients. Maury CP. **Rheumatol Int** 1990;10(1):1–8 (117 ref.)
Diagnostic and prognostic significance of beta 2–microglobulin during HIV infection. Cavalli G, et al.
Ric Clin Lab 1990 Apr–Jun;20(2):105–11
Gingival fluid, beta 2–microglobulin and protein levels as indicators of periodontal disease. Syrjänen SM, et al.
Scand J Dent Res 1989 Dec;97(6):500–4
Monitoring low molecular weight serum proteins in cyclosporine A–treated bone marrow transplant recipients. Duraj FF, et al. **Transplant Proc** 1990 Feb;22(1):203–4
Serum beta 2 microglobulin levels are relatively depressed in cyclosporine A–treated patients who undergo kidney graft rejection. Kootte AM, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1681–2
[Significance of serum beta 2–microglobulin in the differential diagnosis of benign and malignant M–globulinemia] Wu YF, et al. **Chung Hua Nei Ko Tsa Chih** 1989 May; 28(5):265–6, 313 (Eng. Abstr.) **(Chi)**
[Renal function in chronic cor pulmonale monitored with beta 2–microglobulin] Liu LR, et al.
Hua Hsi I Ko Ta Hsueh Hsueh Pao 1989 Sep;20(3):342–5 (Eng. Abstr.) **(Chi)**
[Determination of beta 2 microglobulin in malignant tumors of the ovaries] Kudela M, et al. **Cesk Gynekol** 1989 Jun; 54(5):341–4 (Eng. Abstr.) **(Cze)**
[Beta 2–microglobulin and tumors of the central nervous system] Hrazdirová V, et al. **Cesk Neurol Neurochir** 1990 Jan;53(1):17–21 (Eng. Abstr.) **(Cze)**
[Destructive spondylodiskopathy in beta 2 microglobulin–induced amyloidosis] Schober R, et al.
Pathologe 1990 May;11(3):154–7 **(Ger)**
[Serum levels of beta 2–microglobulin in monoclonal gammopathies] Pasqualetti P. **Ann Ital Med Int** 1987 Jan–Mar;2(1):31–6 (Eng. Abstr.) **(Ita)**
[The serum beta–2–microglobulin values in drug addicts with persistent generalized lymphadenopathy] De Mercato R, et al. **Minerva Med** 1990 Apr;81(4):271–3 (Eng. Abstr.) **(Ita)**
[Isoantigens ABH in bladder tumors as an indicator of malignant potential: a combined study with CEA, BMG, Leu–M1 and H–Ag] Saegusa M. **Hinyokika Kiyo** 1989 Aug; 35(8):1311–21 (Eng. Abstr.) **(Jpn)**
[Serum beta 2–microglobulin concentration and its removal in patients treated with continuous ambulatory peritoneal dialysis] Kubo H, et al. **Nippon Jinzo Gakkai Shi** 1990 Apr; 32(4):419–26 (Eng. Abstr.) **(Jpn)**
[Clinical significance of beta 2–microglobulin assay as a tumor marker] Ito Y. **Nippon Rinsho** 1990 Feb;48 Suppl:957–9 **(Jpn)**
[Clinical significance of beta 2–microglobulin analysis in biochemical laboratory tests] Mori M. **Nippon Rinsho** 1989 Dec;48 Suppl:179–82 **(Jpn)**
[Analysis of pathological state of benign monoclonal gammopathy by beta 2–microglobulin and CEA] Michibayashi T, et al. **Rinsho Byori** 1989 Sep;37(9):1033–7 (Eng. Abstr.) **(Jpn)**
[Clinical usefulness of serum beta2–microglobulin determination in patients with multiple myeloma] Kraj M, et al. **Acta Haematol Pol** 1989 Jul–Dec;20(2):140–51 (Eng. Abstr.) **(Pol)**
[Beta 2 microglobulin in the blood pf patients with chronic renal failure treated by hemodialysis and kidney transplantation] Więcek A, et al. **Pol Arch Med Wewn** 1989 Feb;81(2):100–6 (Eng. Abstr.) **(Pol)**
[Relation between serum levels of C–terminal fragment, beta 2 microglobulin and creatinine in patients with chronic nephropathies at different stages of the disease] Kowalski D, et al. **Wiad Lek** 1989 Oct 1–Nov 1;42(19–21):1038–43 (Eng. Abstr.) **(Pol)**
[Change in the level of beta 2 microglobulin in the blood of rats in the early period following gamma irradiation] Petrova TV, et al. **Radiobiologia** 1989 Sep–Oct;29(5):704–5

(Eng. Abstr.) (Rus)
[Beta 2-microglobulin as an index of blood purification during the treatment of acute kidney failure by hemofiltration] Timokhov VS, et al. **Ter Arkh** 1989; 61(7):101–7 (65 ref.) (Rus)
[Beta-2-microglobulin and ankylosing spondylitis] Mateička F, et al. **Cas Lek Cesk** 1990 Apr 13;129(15):457–61 (Eng. Abstr.) (Slo)

BIOSYNTHESIS

Hemodialysis-related induction of beta 2-microglobulin synthesis and release by mononuclear phagocytes. Knudsen PJ, et al. **Int J Artif Organs** 1990 Feb;13(2):73–6
Biological activities of interleukin-2 and gamma-interferon in bovine T lymphocyte conditioned media. Amadori M, et al. **J Biol Regul Homeost Agents** 1989 Oct–Dec; 3(4):139–45
Hemodialysis-related induction of beta-2-microglobulin and interleukin-1 synthesis and release by mononuclear phagocytes. Knudsen PJ, et al. **Nephron** 1989;53(3):188–93
[Amyloidosis associated with dialysis] Fernández E, et al. **Med Clin (Barc)** 1990 Mar 31;94(12):451–3 (Spa)

CEREBROSPINAL FLUID

Beta-2-microglobulin in the cerebrospinal fluid of patients with infections of the central nervous system. Petersłund NA, et al. **Acta Neurol Scand** 1989 Dec;80(6):579–83
Intrathecal synthesis of beta-2-microglobulin in multiple sclerosis and aseptic meningo-encephalitis. Us O, et al. **Acta Neurol Scand** 1989 Dec;80(6):598–602
Beta 2-microglobulin decrease in cerebrospinal fluid from parkinsonian patients. Mogi M, et al. **Neurosci Lett** 1989 Sep 25;104(1-2):241–6
Cerebrospinal fluid B2-microglobulin levels in meningeal involvement by malignancy. Jeffery GM, et al. **Pathology** 1990 Jan;22(1):20–3
[Clinical significance of cerebrospinal fluid beta 2-microglobulin determination in central nervous system leukemia] Zhang HZ, et al. **Chung Hua Nei Ko Tsa Chih** 1989 May;28(5):262–4, 313 (Eng. Abstr.) (Chi)

CLASSIFICATION

Charge heterogeneity of beta 2-microglobulin in lymphoid cells. Vincent C, et al. **Mol Immunol** 1989 Aug;26(8):727–33

DEFICIENCY

Beta 2-microglobulin deficient mice lack CD4-8+ cytolytic T cells [see comments] Zijlstra M, et al. **Nature** 1990 Apr 19;344(6268):742–6 Comment in: Nature 1990 Apr 19;344(6268):709–11.
Normal development of mice deficient in beta 2M, MHC class I proteins, and CD8+ T cells. Koller BH, et al. **Science** 1990 Jun 8;248(4960):1227–30

GENETICS

Functional and morphological stasis during molecular evolution. Williams RC. **Am J Phys Anthropol** 1990 Jan; 81(1):101–12
The cDNA structure and expression analysis of the genes for the cysteine proteinase inhibitor cystatin C and for beta 2-microglobulin in rat brain. Cole T, et al. **Eur J Biochem** 1989 Dec 8;186(1-2):35–42
The ancestor of the adaptive immune system was the CAM system for organogenesis. Ohno S. **Exp Clin Immmunogenet** 1987;4(4):181–92 (9 ref.)
Dog MHC class I antigens contain beta 2-microglobulin. van der Feltz MJ, et al. **Exp Clin Immmunogenet** 1984;1(1):56–9
Overexpression of native human beta 2-microglobulin in Escherichia coli and its purification. Parker KC, et al. **Gene** 1989 Nov 15;83(1):117–24
Rate and mechanism of generation of beta 2-microglobulin mutants from a heterozygous murine cell line. Rajan TV, et al. **J Immunol** 1990 Sep 1;145(5):1598–602
Immunology. Some savage cuts in defence [news; comment] Parham P. **Nature** 1990 Apr 19;344(6268):709–11 Comment on: Nature 1990 Apr 19;344(6268):742–6.
Germ-line transmission of a disrupted beta 2-microglobulin gene produced by homologous recombination in embryonic stem cells. Zijlstra M, et al. **Nature** 1989 Nov 23; 342(6248):435–8
RFLPs for beta 2-microglobulin. Nicholls RD, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10141
Inactivating the beta 2-microglobulin locus in mouse embryonic stem cells by homologous recombination. Koller BH, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(22):8932–5
Rab 12 kD [letter; comment] Parham P. **Science** 1989 Nov 24;246(4933):1050–1 Comment on: Science 1989 Feb 3;243(4891):655–7.

IMMUNOLOGY

Antibodies raised against bovine beta-lactoglobulin react with beta 2-microglobulin. A possible antigenic region at beta-LG positions 124–140. Conti A, et al. **Biol Chem Hoppe Seyler** 1990 Mar;371(3):261–3
Lacking prognostic significance of beta 2-microglobulin, MHC class I and class II antigen expression in breast carcinomas. Wintzer HO, et al. **Br J Cancer** 1990 Aug; 62(2):289–95
A 12 kDa protein in chicken serum antigenically cross-reactive with, but unrelated to, beta 2-microglobulin. Warr GW. **Dev Comp Immunol** 1990 Spring;14(2):247–53
Analysis of the HLA-Cw3-specific cytotoxic T lymphocyte response of HLA-B7 X human beta 2m double transgenic mice. Barra C, et al. **J Immunol** 1989 Nov 15; 143(10):3117–24
An early postinfection signal mediated by monoclonal anti-beta 2 microglobulin antibody is responsible for delayed production of human immunodeficiency virus type 1 in peripheral blood mononuclear cells. Corbeau P, et al. **J Virol** 1990 Apr;64(4):1459–64
The conformational flexibility of class I H-2 molecules as revealed by anti-peptide antibodies specific for intracytoplasmic determinants: differential reactivity of beta 2-microglobulin "bound" and "free" H-2Kb heavy chains. Smith MH, et al. **Mol Immunol** 1990 Feb; 27(2):169–80
Beta 2-microglobulin restriction of antigen presentation. Pérarnau B, et al. **Nature** 1990 Aug 23;346(6286):751–4

ISOLATION & PURIFICATION

Purification and complete amino acid sequence of novel beta 2-microglobulin. Odani H, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):1223–9
Selective removal of beta 2-microglobulin from human plasma by high-performance immunoaffinity chromatography. Mogi M, et al. **J Chromatogr** 1989 Nov 10;496(1):194–200
Preparative isolation of human beta 2-microglobulin from urine. Nelson SR, et al. **J Immunol Methods** 1990 Apr 17; 128(2):277–80
[The removal of beta 2-microglobulin during continuous and intermittent hemofiltration] Timokhov VS, et al. **Urol Nefrol (Mosk)** 1989 Sep-Oct;(5):47–51 (Eng. Abstr.) (Rus)

METABOLISM

Study of beta-2 microglobulin and neopterin in serum and cerebrospinal fluid of HIV-infected patients. Imberciadori G, et al. **Acta Neurol (Napoli)** 1990 Feb;12(1):58–61
Serum beta-2 microglobulin level in sympathetic ophthalmitis. Sen DK, et al. **Acta Ophthalmol (Copenh)** 1990 Apr;68(2):200–4
Beta 2 microglobulin-derived amyloid in dialysis patients. Ritz E, et al. **Adv Exp Med Biol** 1989;260:11–8 (40 ref.)
Serum beta 2-microglobulin level increases in HIV infection: relation to seroconversion, CD4 T-cell fall and prognosis. Hofmann B, et al. **AIDS** 1990 Mar;4(3):207–14
Generalized beta 2-microglobulin deposition [letter; comment] Hamilton-Dutoit S. **Arch Pathol Lab Med** 1990 Jan;114(1):8 Comment on: Arch Pathol Lab Med 1989 Jan;113(1):31–5.
Beta 2-microglobulin kinetics in an ovine model. Odell RA, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):625–9
Evaluation of dialyzers used in shortened dialysis. Petersen J, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):338–40
Extracorporeal hybridization of proximal renal tubular cells and an artificial membrane for the purpose of beta 2 microglobulin removal. Sanaka T, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):527–30
Evaluation of a new polyamide membrane (Polyflux 130) in high-flux dialysis. Schaefer RM, et al. **Blood Purif** 1990; 8(1):23–31
Intradialytic body weight changes and dialyzer pore size as main contributing factors to the evolution of beta-2-microglobulin in dialysis. Vanholder RC, et al. **Blood Purif** 1990;8(1):32–44
Assembly of MHC class I molecules analyzed in vitro [published erratum appears in Cell 1990 Sep 21;62(6):following 1233] Townsend A, et al. **Cell** 1990 Jul 27;62(2):285–95
Beta 2-microglobulin amyloidosis: a sternoclavicular joint biopsy study in hemodialysis patients. Zingraff J, et al. **Clin Nephrol** 1990 Feb;33(2):94–7
Urine- and serum beta 2-microglobulin in patients with rheumatoid arthritis: a study of 101 patients without signs of kidney disease. Viergever PP, et al. **Clin Rheumatol** 1989 Sep;8(3):368–74
Beta-2-microglobulin amyloidosis and osteo-articular pathology of the uremic patient on regular dialysis. Brancaccio D, et al. **Contrib Nephrol** 1990;77:177–86 (46 ref.)
Beta-2-microglobulin release in mixed lymphocyte cultures. Korčáková L, et al. **Czech Med** 1990;13(1):25–8
Limited proteolysis of beta 2-microglobulin at Lys-58 by complement component C1s. Nissen MH, et al. **Eur J Biochem** 1990 Apr 30;189(2):423–9
Beta-2-microglobulin expression in relation to amplification of oncogenes and prognosis in breast carcinoma. Tsuda H, et al. **Histopathology** 1990 May;16(5):500–2
An avian B-lymphocyte protein associated with beta 2-microglobulin. Pickel JM, et al. **Immunogenetics** 1990; 32(1):1–7
Beta 2-microglobulin elimination characteristics during hemofiltration with acrylonitrile and polysulfone membrane hemofilters. Kandus A, et al. **Int J Artif Organs** 1990 Apr;13(4):200–4
Red blood cell function and beta 2 microglobulin kinetics during cuprophan hemodialysis: a hypothesis. Lins RL, et al. **Int J Artif Organs** 1989 Oct;12(10):638–41
Influence of membranes on generation of beta 2 M and release of leukocyte lysosomal enzymes. Stein G, et al. **Int J Artif Organs** 1990 Jun;13(6):359–64
MHC regulation in neural cells. Distribution of peripheral and internal beta 2-microglobulin and class I molecules in human neuroblastoma cell lines. Lampson LA. **J Immunol** 1990 Jan 15;144(2):512–20
Beta-2-microglobulin as the main component of primary amyloidosis located in the larynx. Galván-Ogazón G, et al. **Laryngoscope** 1989 Oct;99(10 Pt 1):1072–4
Protein instruction. Claverie JM. **Nature** 1990 May 10; 345(6271):121–2
Interrelations of blood pressure, glomerular filtration rate, protein clearances and sodium excretion in patients with glomerulonephritis and diabetic nephropathy. Ala-Houhala I, et al. **Nephrol Dial Transplant** 1990;5(5):337–41
Serum beta 2 microglobulin and extracellular fluid volume during haemodialysis. Chanard J, et al. **Nephrol Dial Transplant** 1989;4(6):549–54
High-flux synthetic versus cellulosic membranes for beta 2-microglobulin removal during hemodialysis, hemodiafiltration and hemofiltration. Floege J, et al. **Nephrol Dial Transplant** 1989;4(7):653–7
Renal elimination of beta-2-microglobulin and myoglobin in patients with normal and impaired renal function. Floege J, et al. **Nephron** 1990;55(4):361–7
Macroglossia and amyloidoma of the buttock: evidence of systemic involvement in dialysis amyloid. Sethi D, et al. **Nephron** 1990;55(3):312–5
[Beta 2-microglobulin in medical disease] Hansen PB, et al. **Ugeskr Laeger** 1989 Nov 6;151(45):2960–2 (30 ref.) (Eng. Abstr.) (Dan)
[Pathologic femoral neck fractures and para-articular beta 2 microglobulin amyloidosis in long-term dialysis patients: an increasingly frequent disease picture] Holch M, et al. **Helv Chir Acta** 1989 Dec;56(4):573–6 (Eng. Abstr.) (Ger)
[Beta 2 microglobulin in serum—a "tumor marker" in malignant lymphomas?] Aulbert E, et al. **Med Klin** 1990 Jan 15;85(1):13–7 (Eng. Abstr.) (Ger)
[Correlation of complement activation, cytokine liberation and beta 2 microglobulin in the use of various dialysis and hemofiltration membranes] Falkenhagen D, et al. **Z Urol Nephrol** 1989 Oct;82(10):541–50 (Eng. Abstr.) (Ger)
[Studies on renal dysfunction after intra-arterial hypertensive chemotherapy (CDDP, PEP) for advanced cancer of the uterine cervix—serum.urinary alpha 1-microglobulin, beta 2-microglobulin and urinary lysozyme, albumin] Iwanari O, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Feb; 42(2):115–20 (Eng. Abstr.) (Jpn)
[Effect of hemodialysis on the concentration of beta 2-microglobulin and acute phase proteins in the serum of patients with chronic renal failure] Starzyk J, et al. **Wiad Lek** 1990 Feb 1-15;43(3-4):114–7 (Eng. Abstr.) (Pol)
[The effect of emotional stress on the hormonal status indices, the level of cyclic nucleotides and the content of beta 2-microglobulin in the blood and thymic tissue during the use of a synthetic analog of thyroliberin] Petrova TV, et al. **Patol Fiziol Eksp Ter** 1990 May-Jun;(3):21–4 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Transmembranous transport and adsorption of beta-2-microglobulin during hemodialysis using polysulfone, polyacrylonitrile, polymethylmethacrylate and cuprammonium rayon membranes. Klinke B, et al. **Int J Artif Organs** 1989 Nov;12(11):697–702

PHARMACOLOGY

Beta 2-microglobulin enhances insulin-like growth factor I receptor levels and synthesis in bone cell cultures. Centrella M, et al. **J Biol Chem** 1989 Nov 5;264(31):18268–71
Thymotaxin, a chemotactic protein, is identical to beta 2-microglobulin. Dargemont C, et al. **Science** 1989 Nov 10;246(4931):803–6

PHYSIOLOGY

Transfection of beta 2-microglobulin restores IFN-mediated protection from natural killer cell lysis in YAC-1 lymphoma variants. Ljunggren HG, et al. **J Immunol** 1990 Jul 1;145(1):380–6
Neutrophil beta-2 microglobulin: an inflammatory mediator. Bjerrum OW, et al. **Scand J Immunol** 1990 Sep;32(3):233–42

SECRETION

In vitro beta 2-microglobulin (beta 2m) secretion by normal and leukaemic B-cells: effects of recombinant cytokines and evidence for a differential response to the combined stimulus of phorbol ester and calcium ionophore. Jones RA, et al. **Br J Cancer** 1990 May;61(5):675–80

THERAPEUTIC USE

Prognostic value of pretreatment serum beta 2 microglobulin in myeloma: a Southwest Oncology Group Study. Durie BG, et al. **Blood** 1990 Feb 15;75(4):823–30

ULTRASTRUCTURE

The association of H-2Ld with human beta-2 microglobulin

induces localized conformational changes in the alpha-1 and -2 superdomain. Nieto MC, et al. **Immunogenetics** 1989; 30(5):361-9

URINE

Cadmium, NAG activity, and beta 2-microglobulin in the urine of cadmium pigment workers [letter; comment] Bernard A, et al. **Br J Ind Med** 1989 Sep;46(9):679-80 Comment on: Br J Ind Med 1989 Jan;46(1):52-5.

More on geriatric therapeutic drug monitoring [letter; comment] Schinella M, et al. **Clin Chem** 1990 Mar; 36(3):584-5 Comment on: Clin Chem 1989 Jul;35(7):1337-41.

Dipyridamole reduces urinary albumin excretion in diabetic patients with normo- or microalbuminuria. Aizawa T, et al. **Clin Nephrol** 1990 Mar;33(3):130-5

Low-molecular-weight proteinuria in insulin-dependent diabetes mellitus: a study of the urinary excretion of beta 2-microglobulin and retinol-binding protein in alkalinized patients with and without microalbuminuria. Watts GF, et al. **Diabetes Res** 1989 Sep;12(1):31-6

Renal handling of beta 2-microglobulin in patients with cystic fibrosis. Kearns GL, et al. **DICP** 1989 Dec; 23(12):1013-7

Urinary total protein and beta-2-microglobulin in workers exposed to trichloroethylene. Nagaya T, et al. **Environ Res** 1989 Oct;50(1):86-92

Significance of the excretion of urinary indicator proteins for a low level of occupational exposure to cadmium. Kawada T, et al. **Int Arch Occup Environ Health** 1990; 62(1):95-100

Urinary excretion of beta-2-microglobulin in patients with active metabolic stone disease. Musialik D. **Int Urol Nephrol** 1989;21(4):381-7

Correlation of urinary albumin and beta-2-microglobulin and growth hormone excretion in patients with diabetes mellitus and short stature. Pan FP, et al. **J Clin Endocrinol Metab** 1990 Sep;71(3):611-7

Beta-2-microglobulin excretion in neonates treated with gentamicin [letter; comment] Arellano F. **Nephron** 1989; 53(4):392-3 Comment on: Nephron 1988;49(2):114-8.

Assessment of urinary rat beta 2-microglobulin by enzyme immunoassay. Morel G, et al. **Toxicol Lett** 1990 Aug; 52(3):301-9

Dose-response relationship between urinary cadmium and beta 2-microglobulin in a Japanese environmentally cadmium exposed population. Ishizaki M, et al. **Toxicology** 1989 Oct 2;58(2):121-31

[beta 2 microglobulin and the proximal tubules (letter)] Bragt PC, et al. **Ned Tijdschr Geneeskd** 1989 Sep 16; 133(37):1850-1 **(Dut)**

[Beta 2 microglobulinuria and lysozyme in the urine: significance as a diagnostic and therapeutic control parameter in dilatation of the upper urinary tract in pregnancy] Hümpfner A, et al. **Gynakol Rundsch** 1989;29 Suppl 2:169-71 **(Ger)**

[Beta 2-microglobulinuria and lysozyme-uria. Their role as diagnostic and therapeutic indicators in dilatation of the upper urinary tract during pregnancy] Heidegger H, et al. **Minerva Ginecol** 1990 Jun;42(6):243-50 (Eng. Abstr.) **(Ita)**

[Studies of enzymuria and proteinuria: Report 2; Relationship between glomerular filtration rate and urinary enzymuria and proteinuria] Yasumoto R, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1125-8 (Eng. Abstr.) **(Jpn)**

[Study on urinary low molecular protein and enzyme in primary vesico-ureteral reflux patients] Takeda M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Mar;81(3):454-60 (Eng. Abstr.) **(Jpn)**

[Individual fluctuation in urinary excretion of low molecular weight proteins in inhabitants of a cadmium-polluted area] Iwata K, et al. **Sangyo Igaku** 1989 Nov;31(6):436-7 **(Jpn)**

[Usefulness of beta-2-microglobulin determination in the differential diagnosis of infections in the upper and lower parts of the urinary tract] Pupek-Musialik D. **Wiad Lek** 1990 Mar 1-15;43(5-6):183-7 (Eng. Abstr.) **(Pol)**

[Graded physical exercise and urinary excretion of albumin and beta 2 microglobulin in patients with hypertension] Shkhvatsabaia IK, et al. **Kardiologiia** 1990 Jan;30(1):81-3 **(Rus)**

[Proteinuria and beta 2-microglobulinuria in patients with tumors of the renal pelvis and ureter and in healthy persons from areas of endemic nephropathy] Janković, et al. **Urol Nefrol (Mosk)** 1989 Nov-Dec;(6):13-4 (Eng. Abstr.) **(Rus)**

[The importance of beta-2 microglobulin determination in the urine in the detection of tubular proteinuria] Stošić Z, et al. **Med Pregl** 1989;42(9-10):318-21 (Eng. Abstr.) **(Ser)**

BETA PARTICLES see **BETA RAYS**

BETA RAYS

Simulation of angular and energy distributions of the PTB beta secondary standard. Faw RE, et al. **Health Phys** 1990 Sep;59(3):311-24

On limitations of applicability of the one-group theory [letter] Radzievsky GB, et al. **Health Phys** 1990 Apr; 58(4):534-7

The dependence of skin lesions on the depth-dose distribution from beta-irradiation of people in the Chernobyl nuclear power plant accident. Barabanova A, et al. **Int J Radiat Biol** 1990 Apr;57(4):775-82

EGS4 Monte Carlo determination of the beta dose kernel in water. Simpkin DJ, et al. **Med Phys** 1990 Mar-Apr; 17(2):179-86

Dose-response relationship for the induction of structural chromosome aberrations in human spermatozoa after in vitro exposure to tritium beta-rays. Kamiguchi Y, et al. **Mutat Res** 1990 Feb;228(2):125-31

The effect of topical dexamethasone and preoperative beta irradiation on a model of glaucoma fistulizing surgery in the rabbit. Miller MH, et al. **Ophthalmic Surg** 1990 Jan; 21(1):44-54

[Measurement of radiation energy and its application. IV. Measurement of beta-ray energy and its application (2). Beta-ray detectors using solids and gasses] Kawakami H. **Radioisotopes** 1990 May;39(5):237-47 **(Jpn)**

[Measurement of radiation energy and its application. IV. Measurement of beta-ray energy and its application. (1) Beta-ray spectrometer] Kawakami H. **Radioisotopes** 1990 Apr;39(4):188-98 **(Jpn)**

[Measurement of radiation energy and its application. IV. Measurement of beta-ray energy and its application (2). Beta-ray detectors using solids and gases (continued) (3). Preparation of beta-ray sources for high resolution measurement and (4). Applications] Kawakami H. **Radioisotopes** 1990 Jun;39(6):281-90 **(Jpn)**

THERAPEUTIC USE

[Beta therapy of vulvar leukoplakia] Vlakhov N, et al. **Med Radiol (Mosk)** 1990 Feb;35(2):53 **(Rus)**

BETA RHYTHM see under **ELECTROENCEPHALOGRAPHY**

BETA-THALASSEMIA see **THALASSEMIA**

BETA-THROMBOGLOBULIN

A possible receptor-binding function for the N-terminus of connective tissue activating peptide III. Erickson J, et al. **Biochemistry** 1990 May 1;29(17):4077-80

ANALYSIS

Filtration of platelet-poor plasma specimens yields platelet-free plasma. Application for batch analysis of beta-thromboglobulin and platelet factor 4. Schiebout-Clark RC, et al. **Am J Clin Pathol** 1990 Aug; 94(2):206-10

Platelet-specific alpha-granule proteins and thrombospondin in bronchoalveolar lavage in the adult respiratory distress syndrome. Idell S, et al. **Chest** 1989 Nov;96(5):1125-32

[Lack of effect of low dose acetylsalicylic acid (100 mg/die) on thrombocyte survival and beta-thromboglobulin (beta-TG) and platelet factor 4 (PF 4) in patients with peripheral arterial occlusive disease] Minar E, et al. **Vasa Suppl** 1989;27:244-6 **(Ger)**

[beta-Thromboglobulin concentration, thrombocyte count and thrombocyte volume from four selected sample collections] Ruby C, et al. **Z Med Lab Diagn** 1989; 30(6):336-40 (Eng. Abstr.) **(Ger)**

[Clinical significance of beta-thromboglobulin analysis in blood coagulo-fibrinolytic tests] Takada M, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:930-3 **(Jpn)**

[Platelet function in tension headache] Leira R, et al. **Neurologia** 1990 Mar;5(3):78-81 (Eng. Abstr.) **(Spa)**

BIOSYNTHESIS

The effect of dermatan sulfate on in vitro human plasma coagulation, platelet aggregation and beta TG/PF4 release. Cofrancesco E, et al. **Thromb Res** 1990 Feb 1;57(3):405-14

METABOLISM

Effects of glibenclamide on serum lipids, lipoproteins, thromboxane, beta-thromboglobulin, and prostacyclin in non-insulin-dependent diabetes mellitus. Waysbort J, et al. **Clin Ther** 1988;10(4):358-71

Selenium supplementation does not alter platelet activation in subjects with normal selenium status. Mutanen M, et al. **Int J Vitam Nutr Res** 1989;59(3):309-13

Increased plasma beta-thromboglobulin in patients with coronary artery vein graft occlusion: response to low dose aspirin [see comments] Gavaghan TP, et al. **J Am Coll Cardiol** 1990 May;15(6):1250-8 Comment in: J Am Coll Cardiol 1990 May;15(6):1259-60.

Beta-TG and plasma catecholamines levels after sympathetic stimuli in hypertensives and patients with peripheral vascular disease. Catalano M, et al. **Thromb Haemost** 1990 Jun 28;63(3):383-5

The effect of various a `icoagulant/antiplatelet mixtures on determination of plasminogen activator inhibitor, platelet proteins and hemostasis parameters. Eriksson E, et al. **Thromb Haemost** 1989 Jun 30;61(3):511-6

PHARMACOLOGY

Negative regulation of human megakaryocytopoiesis by human platelet factor 4 and beta thromboglobulin: comparative analysis in bone marrow cultures from normal individuals and patients with essential thrombocythaemia and immune thrombocytopenic purpura. Han ZC, et al. **Br J Haematol** 1990 Apr;74(4):395-401

PHYSIOLOGY

Effects of exercise and exercise conditioning on blood platelet function. Davis RB, et al. **Med Sci Sports Exerc** 1990 Feb; 22(1):49-53

BETA TRACE PROTEIN see under **BETA GLOBULINS**

BETA TRANSDUCIN see **TRANSDUCIN**

BETADEXAMETHASONE see **BETAMETHASONE**

BETAHISTINE see under **PYRIDINES**

BETAINE

ANALOGS & DERIVATIVES

Amidosulfobetaines, a family of detergents with improved solubilization properties: application for isoelectric focusing under denaturing conditions. Rabilloud T, et al. **Anal Biochem** 1990 Feb 15;185(1):94-102

Effect of L-carnitine and L-aminocarnitine on calcium transport, motility, and enzyme release from ejaculated bovine spermatozoa. Deana R, et al. **Biol Reprod** 1989 Nov; 41(5):949-55

Activity of methylated forms of selenium in cancer prevention. Ip C, et al. **Cancer Res** 1990 Feb 15; 50(4):1206-11

Butyrobetaine availability in liver is a regulatory factor for carnitine biosynthesis in rat. Flux through butyrobetaine hydroxylase in fasting state. Sandor A, et al. **Eur J Biochem** 1989 Nov 20;185(3):671-5

Potential of the sulfobetaine detergent Zwittergent 3-12 as a desorbing agent in biospecific and bioselective affinity chromatography. Nollstadt KH, et al. **J Chromatogr** 1989 Dec 29;497:87-100

[Allergy to Tégobétaïne: apropos of a case] Bonneau JC. **Allerg Immunol (Paris)** 1990 May;22(5):195 **(Fre)**

[Synthesis of phosphobetaine--a derivative of long-chain tertiary aliphatic amine with epichlorohydrin] Marcoin W. **Acta Pol Pharm** 1989;46(4):337-42 (Eng. Abstr.) **(Pol)**

ANALYSIS

Detection of the osmoregulator betaine in methanogens. Robertson DE, et al. **Appl Environ Microbiol** 1990 Feb; 56(2):563-5

METABOLISM

Osmoregulatory fluxes of myo-inositol and betaine in renal cells. Nakanishi T, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):C964-70

Evidence that Escherichia coli accumulates glycine betaine from marine sediments. Ghoul M, et al. **Appl Environ Microbiol** 1990 Feb;56(2):551-4

Conversion of choline to betaine in young rats: a 1H n.m.r. spectroscopic study. Rafter JE, et al. **Biochem Soc Trans** 1989 Dec;17(6):1130-1

Uptake of glycine betaine and its analogues by bacteroids of Rhizobium meliloti. Fougère F, et al. **J Gen Microbiol** 1990 Jan;136 (Pt 1):157-63

Effect of dimethylaminoethanol, an inhibitor of betaine production, on the disposition of choline in the rat kidney. Lohr J, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):154-8

Molecular characterization of the proU loci of Salmonella typhimurium and Escherichia coli encoding osmoregulated glycine betaine transport systems. Stirling DA, et al. **Mol Microbiol** 1989 Aug;3(8):1025-38

PHARMACOKINETICS

Osmoregulation of betaine transport in mammalian renal medullary cells. Nakanishi T, et al. **Am J Physiol** 1990 Apr; 258(4 Pt 2):F1061-7

Absorption of water and solute from glucose-electrolyte solutions in the human jejunum: effect of citrate or betaine. Leiper JB, et al. **Scand J Gastroenterol** 1989 Nov; 24(9):1089-94

PHARMACOLOGY

Counteracting effects of urea and betaine in mammalian cells in culture. Yancey PH, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R198-204

Effects of betaine on enumeration of airborne bacteria. Marthi B, et al. **Appl Environ Microbiol** 1990 May;56(5):1286-9

THERAPEUTIC USE

Betaine for treatment of homocystinuria caused by methylenetetrahydrofolate reductase deficiency. Holme E, et al. **Arch Dis Child** 1989 Jul;64(7):1061-4

BETAMETHASONE

ADMINISTRATION & DOSAGE

Antenatal betamethasone dose effects in preterm rabbits studied at 27 days gestation. Rider ED, et al. **J Appl Physiol** 1990 Mar;68(3):1134-41

[Premature rupture of the fetal membranes and fetal lung

maturity] Salzer H. **Gynakol Rundsch** 1989;29 Suppl 2:132–6 (Ger)

ADVERSE EFFECTS

Linear subcutaneous fat atrophy after a single corticosteroid injection for ocular adnexal hemangioma. Townshend LM, et al. **Am J Ophthalmol** 1990 Jan 15;109(1):102–3

Discordant radioaerosol/radioperfusion in drug-induced maternal pulmonary edema. Sylvester J, et al. **Clin Nucl Med** 1989 Sep;14(9):686–8

Steroid induced glaucoma and cataract. Mohan R, et al. **Indian J Ophthalmol** 1989 Jan–Mar;37(1):13–6

Reduction or cessation of fetal movements after steroid administration for enhancement of lung maturation. II: Analysis of blood flow velocimetry. Meizner I, et al. **Isr J Med Sci** 1989 Oct;25(10):556–9

Psychological development of children who were treated antenatally with corticosteroids to prevent respiratory distress syndrome. Schmand B, et al. **Pediatrics** 1990 Jul; 86(1):58–64

Physical development and medical history of children who were treated antenatally with corticosteroids to prevent respiratory distress syndrome: a 10- to 12-year follow-up. Smolders-de Haas H, et al. **Pediatrics** 1990 Jul;86(1):65–70

[Severe steroid-induced myopathy] Araszkiewicz Z, et al. **Pneumonol Pol** 1989 Jul–Sep;57(7–9):426–8 (Eng. Abstr.) (Pol)

ANALOGS & DERIVATIVES

The use of a corticosteroid cream for immediate reduction in the clinical signs of acne vulgaris. Hull SM, et al. **Acta Derm Venereol (Stockh)** 1989;69(5):452–3

Blood flow in histamine- and allergen-induced weal and flare responses, effects of an H1 antagonist, alpha-adrenoceptor agonist and a topical glucocorticoid. Hammarlund A, et al. **Allergy** 1990 Jan;45(1):64–70

Treatment of actinic prurigo with intermittent short-course topical 0.05% clobetasol 17-propionate. A preliminary report. Lane PR, et al. **Arch Dermatol** 1990 Sep; 126(9):1211–3

Intrinsic potencies of novel thiol ester corticosteroids RS-85095 and RS-21314 as compared with clobetasol 17-propionate and fluocinonide. Ong JT, et al. **Arch Dermatol** 1989 Dec;125(12):1662–5

Penile verrucous carcinoma. Yeager JK, et al. **Arch Dermatol** 1990 Sep;126(9):1208–10

Symptomatic dermographism: wealing, mast cells and histamine are decreased in the skin following long-term application of a potent topical corticosteroid. Lawlor F, et al. **Br J Dermatol** 1989 Nov;121(5):629–34

The effect of topical steroid application on natural killer cell activity. Lesko MJ, et al. **Clin Exp Allergy** 1989 Nov; 19(6):633–6

Antipsoriatic effect of local corticosteroids—O2-consumption and blood flow measurements compared to clinical parameters. Broby-Johansen U, et al. **Clin Exp Dermatol** 1989 Mar; 14(2):137–40

Objective assessment of topical corticosteroids and non-steroidal anti-inflammatory drugs in methyl-nicotinate-induced skin inflammation. Duteil L, et al. **Clin Exp Dermatol** 1990 May;15(3):195–9

A double-blind comparison of the efficacy of betamethasone dipropionate cream twice daily versus once daily in the treatment of steroid responsive dermatoses. English JS, et al. **Clin Exp Dermatol** 1989 Jan;14(1):32–4

A controlled clinical trial of a new formulation of betamethasone dipropionate cream in once-daily treatment of psoriasis. Ellis CN, et al. **Clin Ther** 1989 Nov–Dec; 11(6):768–74

Therapeutic response to a dermatologic patch and betamethasone valerate 0.1 percent cream in the management of chronic plaques in psoriasis. Wilkinson RD, et al. **Cutis** 1990 Jun;45(6):468–70

Corticosteroid action on choroid plexus: reduction in Na+-K+-ATPase activity, choline transport capacity, and rate of CSF formation. Lindvall-Axelsson M, et al. **Exp Brain Res** 1989;77(3):605–10

Treatment of localized vitiligo with ulobetasol cream. Liu XQ, et al. **Int J Dermatol** 1990 May;29(4):295–7

Resolution of necrobiosis lipoidica with exclusive clobetasol propionate treatment. Goette DK. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):855–6

Relation of application time to bioactivity of a potent topical glucocorticoid formulation. Stoughton RB, et al. **J Am Acad Dermatol** 1990 Jun;22(6 Pt 1):1038–41

A study of systemic and topical effects of topical steroid application through the comparison of two application schedules. Fukaya Y, et al. **J Dermatol** 1990 Jan;17(1):28–33

Synthesis and antiinflammatory activity of novel 12 beta-substituted analogues of betamethasone. Avery MA, et al. **J Med Chem** 1990 Jul;33(7):1852–8

The safety of halobetasol 0.05% ointment in the treatment of psoriasis. Watson WA, et al. **Pharmacotherapy** 1990; 10(2):107–11

Local sympathetic reflex control of blood flow in human skin following topical corticosteroid treatment. Petersen LJ, et al. **Scand J Clin Lab Invest** 1990 Apr;50(2):199–201

[Evaluation of the histopathologic effects following subconjunctival injection of corticoids in immediate- and retard-action forms] Noye JF, et al. **J Fr Ophtalmol** 1989; 12(8–9):587–94 (Eng. Abstr.) (Fre)

[The effect of initial external glucocorticoid administration on cignolin treatment of psoriasis] Mahrle G, et al. **Z Hautkr** 1990 Mar;65(3):282, 285–7 (Eng. Abstr.) (Ger)

[Effects of intravitreal steroid injection on rabbit eye] Shimada H, et al. **Nippon Ganka Gakkai Zasshi** 1989 Apr; 93(4):501–10 (Eng. Abstr.) (Jpn)

CHEMICAL SYNTHESIS

Studies on topical antiinflammatory agents. III. Synthesis of 17 alpha-acyloxy-9 alpha-fluoro-11 beta-hydroxy-16 beta-methyl-1,4-pregnadiene-3,20-dione 21-thio derivatives and related compounds. Mitsukuchi M, et al. **Chem Pharm Bull (Tokyo)** 1989 Dec;37(12):3286–93

Synthesis and antiinflammatory activity of novel 12 beta-substituted analogues of betamethasone. Avery MA, et al. **J Med Chem** 1990 Jul;33(7):1852–8

PHARMACOKINETICS

Blanching activities of betamethasone formulations. The effect of dosage form on topical drug availability. Smith EW, et al. **Arzneimittelforschung** 1990 May;40(5):618–21

PHARMACOLOGY

Single-fiber electromyography for studying the effect of betamethasone on normal neuromuscular junctions in man. Girlanda P, et al. **Eur Neurol** 1990;30(3):142–4

Comparison of effects of verapamil, low calcium diet and betamethasone on duodenal calcium absorption efficiency in the chick. Blahos J, et al. **Horm Metab Res** 1989 Nov; 21(11):612–5

Failure of betamethasone to alter the radiation response of two cultured human glioma cell-lines. Benediktsson G, et al. **J Neurooncol** 1990 Feb;8(1):47–53

Depletion of hypothalamic growth hormone-releasing hormone by neonatal monosodium glutamate treatment reveals an inhibitory effect of betamethasone on growth hormone secretion in adult rats. Corder R, et al. **Neuroendocrinology** 1990 Jan;51(1):85–92

Betamethasone and the human fetal ductus arteriosus. Wasserstrum N, et al. **Obstet Gynecol** 1989 Dec; 74(6):897–900

Cholinomimetic drugs modify betamethasone suppression in the rat. Saija A, et al. **Pharmacol Res** 1989 Sep–Oct; 21(5):609–16

[The effect of betamethasone (celeston) on fetal lung development in rats] Georgiev G, et al. **Akush Ginekol (Sofiia)** 1989;28(6):6–9 (Eng. Abstr.) (Bul)

[Influence of betamethasone on the vascular resistance in human placenta perfused in vitro] Kraczkowski J, et al. **Ginekol Pol** 1989 Mar;60(3):160–5 (Eng. Abstr.) (Pol)

[Influence of betamethasone on glucose consumption in the human placenta perfused in vitro] Kraczkowski J, et al. **Ginekol Pol** 1989 Apr;60(4):207–11 (Eng. Abstr.) (Pol)

THERAPEUTIC USE

Dose response of thyrotropin-releasing hormone on pulmonary maturation in corticosteroid-treated preterm rabbits. Tabor BL, et al. **Am J Obstet Gynecol** 1990 Aug; 163(2):669–76

Respiratory distress syndrome: differential effects of prenatal steroid therapy and prolonged rupture of the membranes. Suidan JS, et al. **Int J Gynaecol Obstet** 1990 Jul; 32(3):237–42

Prenatal and postnatal corticosteroid therapy to prevent neonatal necrotizing enterocolitis: a controlled trial. Halac E, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):132–8

Subconjunctival steroid in the management of uveal juvenile xanthogranuloma: a case report. Treacy KW, et al. **J Pediatr Ophthalmol Strabismus** 1990 May–Jun; 27(3):126–8

[Ambroxol versus betamethasone for the promotion of antepartum lung maturity in pathological pregnancies] Heytmanek G, et al. **Wien Klin Wochenschr** 1990 Aug 3; 102(15):443–8 (Eng. Abstr.) (Ger)

[The antiemetic effect and clinical evaluation of metoclopramide alone and combined with betamethasone in children with malignant tumor] Hatae Y, et al. **Gan To Kagaku Ryoho** 1989 Nov;16(11):3639–42 (Jpn)

[Tolosa-Hunt syndrome. Report of a surgical case] Matsumoto T, et al. **Neurol Med Chir (Tokyo)** 1989 Oct; 29(10):944–7 (Eng. Abstr.) (Jpn)

BETAMETHASONE 17-VALERATE see under **BETAMETHASONE**

BETATRONS see **PARTICLE ACCELERATORS**

BETAXOLOL

ADMINISTRATION & DOSAGE

Double-blind comparison of once daily betaxolol versus propranolol four times daily in stable angina pectoris. Betaxolol Investigators Group. Narahara KA. **Am J Cardiol** 1990 Mar 1;65(9):577–82

A double-masked three-month comparison between 0.25% betaxolol suspension and 0.5% betaxolol ophthalmic solution. Weinreb RN, et al. **Am J Ophthalmol** 1990 Aug 15;110(2):189–92

Efficacy of betaxolol in the treatment of stable exertional angina pectoris: a dose-ranging study. Alpert MA, et al. **Angiology** 1990 May;41(5):365–76

Comparison of the antihypertensive effects of betaxolol and chlorthalidone as monotherapy and in combination. Burris JF, et al. **Arch Intern Med** 1989 Nov;149(11):2437–41

[Use of Betaxolol in patients with glaucoma and chronic nonspecific diseases of the respiratory system] Swietliczko I, et al. **Klin Oczna** 1989 Jun;91(6):160–2 (Eng. Abstr.) (Pol)

ADVERSE EFFECTS

The significance of reactions to betaxolol reported by patients. Brooks AM, et al. **Aust N Z J Ophthalmol** 1989 Nov;17(4):353–5

Effects of topical timolol (0.5%) and betaxolol (0.5%) on corneal sensitivity. Weissman SS, et al. **Br J Ophthalmol** 1990 Jul;74(7):409–12

Myocardial infarction after ophthalmic betaxolol [letter] Chamberlain TJ. **N Engl J Med** 1989 Nov 9;321(19):1342

Complications arising from the use of ophthalmologic medications in an intensive care unit patient [letter] Herschman Z, et al. **N Y State J Med** 1989 Sep;89(9):537–8

PHARMACOKINETICS

Placental transfer and perinatal pharmacokinetics of betaxolol. Morselli PL, et al. **Eur J Clin Pharmacol** 1990; 38(5):477–83

Steady-state fluctuation and variability of betaxolol and atenolol plasma levels. Kunka RL, et al. **Ther Drug Monit** 1989 Sep;11(5):523–7

PHARMACOLOGY

Effects and interactions of epinephrine, norepinephrine, timolol, and betaxolol on outflow facility in the cynomolgus monkey [published erratum appears in Am J Ophthalmol 1990 Apr 15;109(4):499] Robinson JC, et al. **Am J Ophthalmol** 1990 Feb 15;109(2):189–94

A dose-ranging study to evaluate the beta-adrenoceptor selectivity of single doses of betaxolol. Irvine NA, et al. **Br J Clin Pharmacol** 1990 Jul;30(1):119–26

Ocular betaxolol. A review of its pharmacological properties, and therapeutic efficacy in glaucoma and ocular hypertension. Buckley MM, et al. **Drugs** 1990 Jul; 40(1):75–90 (87 ref.)

Beta adrenoceptors and regenerating corneal epithelium. Liu GS, et al. **J Ocul Pharmacol** 1990 Summer;6(2):101–12

The effect of timolol, betaxolol, and placebo on corneal sensitivity in healthy volunteers. Vogel R, et al. **J Ocul Pharmacol** 1990 Summer;6(2):85–90

Betaxolol, a cardioselective beta-adrenoceptor antagonist, attenuates ischemic myocardial acidosis in dogs. Abe Y, et al. **Jpn J Pharmacol** 1990 Jun;53(2):185–94

[Effects of betaxolol, a cardioselective beta-adrenoceptor antagonist, on ischemic myocardial energy and carbohydrate metabolism in dogs] Abe Y, et al. **Nippon Yakurigaku Zasshi** 1990 Jun;95(6):319–25 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Oral betaxolol approved for once-daily therapy of hypertension [news] **Clin Pharm** 1990 Feb;9(2):87–8

Betaxolol: a pilot study of its pharmacological and therapeutic properties in pregnancy. Boutroy MJ, et al. **Eur J Clin Pharmacol** 1990;38(6):535–9

Betaxolol: a new long-acting beta 1-selective adrenergic blocker. Frishman WH, et al. **J Clin Pharmacol** 1990 Aug; 30(8):686–92

Betaxolol and stuttering [letter] Burris JF, et al. **Lancet** 1990 Jan 27;335(8683):223

Betaxolol for hypertension. **Med Lett Drugs Ther** 1990 Jun 29;32(821):61–2

[Open trial of betaxolol in the treatment of arterial hypertension in pregnancy, pilot study] Boutroy MJ, et al. **Arch Mal Coeur** 1989 Jul;82(7):1069–72 (Eng. Abstr.) (Fre)

[Effect of a beta 1-receptor blocker on the plasma level of atrial natriuretic peptide in patients with essential hypertension in the exercise test] Plum J, et al. **Klin Wochenschr** 1990 May 4;68(9):476–84 (Eng. Abstr.) (Ger)

[Effect of betaxolol on atrial natriuretic peptide regulation in patients with essential hypertension] Heering P, et al. **Z Kardiol** 1990 Feb;79(2):134–8 (Eng. Abstr.) (Ger)

[Antihypertensive effect of betaxolol, a cardioselective beta-adrenoceptor antagonist, in experimental hypertensive rats] Bessho H, et al. **Nippon Yakurigaku Zasshi** 1990 Jun; 95(6):347–54 (Eng. Abstr.) (Jpn)

[Antihypertensive effect of betaxolol, a cardioselective beta-adrenoceptor antagonist, in renal hypertensive dogs] Bessho H, et al. **Nippon Yakurigaku Zasshi** 1990 Jun; 95(6):355–60 (Eng. Abstr.) (Jpn)

TOXICITY

Ultrastructural effects of topical betoptic, betagan, and timoptic on the rabbit corneal endothelium. Liu GS, et al. **J Ocul Pharmacol** 1989 Winter;5(4):329–42

BETAZOLE see under **PYRAZOLES**

BETHANECHOL COMPOUNDS

ADMINISTRATION & DOSAGE

Intracerebroventricular bethanechol chloride infusion in Alzheimer's disease. Results of a collaborative double-blind study. Harbaugh RE, et al. **J Neurosurg** 1989 Oct; 71(4):481–6

Novel CNS-directed drug delivery systems in Alzheimer's disease and other neurological disorders. Harbaugh RE. **Neurobiol Aging** 1989 Sep–Oct;10(5):623–9 (68 ref.)

The necessity of human trials of putative therapies for Alzheimer's disease. Knopman D. **Neurobiol Aging** 1989 Sep–Oct;10(5):633–4; discussion 648–50

Methodological considerations in cognitive disorders or: "the baby needs enough bath water". Read S. **Neurobiol Aging** 1989 Sep–Oct;10(5):634–5; discussion 648–50

ADVERSE EFFECTS

Bethanechol-induced cholinergic toxicity in diabetic neuropathy [letter] Caraco Y, et al. **DICP** 1990 Mar; 24(3):327–8

DIAGNOSTIC USE

Intraesophageal balloon distention versus drug provocation in the evaluation of noncardiac chest pain. Deschner WK, et al. **Am J Gastroenterol** 1990 Aug;85(8):938–43

PHARMACOLOGY

Muscarinic stimulation and antagonism and glucoregulation in nondiabetic and obese hyperglycemic mice. Fukudo S, et al. **Diabetes** 1989 Nov;38(11):1433–8

Characterization of alkaline response induced by cholinergic agents in the rat duodenum: involvement of M2 receptors and the calcium-dependent process. Takeuchi K, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):465–70

Central actions of bethanechol on the urinary bladder in dogs. O'Donnell PD. **J Urol** 1990 Mar;143(3):634–7

Injection of a cholinergic agonist in the dorsolateral pontine tegmentum of cats affects the posturokinetic responses to cortical stimulation. Luccarini P, et al. **Neurosci Lett** 1990 Jun 22;114(1):75–81

Interaction of noradrenergic and cholinergic systems in regulation of ocular dominance plasticity. Imamura K, et al. **Neurosci Res** 1989 Aug;6(6):519–36

[Prokinetic drugs in gastrointestinal motility. Their application in pediatrics] Ramirez-Mayans JA, et al. **Bol Med Hosp Infant Mex** 1989 Dec;46(12):816–24 (34 ref.) (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Intracerebroventricular bethanechol for Alzheimer's disease. Variable dose-related responses. Read SL, et al. **Arch Neurol** 1990 Sep;47(9):1025–30

The use of anxiolytic and parasympathomimetic agents in the treatment of postoperative urinary retention following anorectal surgery. A prospective, randomized, double-blind study. Gottesman L, et al. **Dis Colon Rectum** 1989 Oct;32(10):867–70

BETHANIDINE see under **GUANIDINES**

BEVERAGES

Studies on the spermiostatic actions of some local mineral water drinks. Oyelola OO, et al. **Adv Contracept** 1990 Mar; 6(1):47–51

Through the centuries with food and drink, for better or worse. V. Cohen SG, et al. **Allergy Proc** 1990 Mar–Apr; 11(2):89–96

Effect of drinking soda sweetened with aspartame or high-fructose corn syrup on food intake and body weight. Tordoff MG, et al. **Am J Clin Nutr** 1990 Jun;51(6):963–9

End-tidal CO2 detection [letter; comment] Heller MB, et al. **Ann Emerg Med** 1989 Dec;18(12):1375 Comment on: Ann Emerg Med 1989 Apr;18(4):387–90.

The effect of auditory stimulation on the consumption of soft drinks. McCarron A, et al. **Appetite** 1989 Oct; 13(2):155–9

Choosing a beverage: comparison of preferences and beliefs related to the reported consumption of regular vs. diet sodas. Tuorila H, et al. **Appetite** 1990 Feb;14(1):1–8

Herbal teas [letter; comment] Evans S. **Aust Fam Physician** 1989 Dec;18(12):1565–6 Comment on: Aust Fam Physician 1989 Aug;18(8):1017, 1019.

Effect of carbonated water on arterial pH, PCO2 and plasma lactate in heat-stressed broilers. Raup TJ, et al. **Br Poult Sci** 1990 Jun;31(2):377–84

Large volumes of apple juice preoperatively do not affect gastric pH and volume in children. Splinter WM, et al. **Can J Anaesth** 1990 Jan;37(1):36–9

Contamination of a soft-drink manufacturing plant by 210Po. Wallace JD, et al. **Health Phys** 1990 Apr;58(4):469–75

Food temperature and gastric cancer. La Vecchia C, et al. **Int J Cancer** 1990 Sep 15;46(3):432–4

Bicarbonate inhibition of Saccharomyces cerevisiae and Hansenula wingei growth in apple juice. Curran DM, et al. **Int J Food Microbiol** 1989 Feb;8(1):1–9

A simple nutrient-tolerance (NT) test for the characterization of the different types of oligocarbotolerant and oligocarbophile water bacteria from non-carbonated mineral water. Schmidt-Lorenz W, et al. **Int J Food Microbiol** 1990 Mar;10(2):157–76

Comparative acceptance of an isotonic and a hypotonic rehydrating beverage by athletes during their habitual training. Décombaz J, et al. **Int J Vitam Nutr Res** 1989; 59(4):424

The importance of providing minerals to long distance runners during a 30 km course. Kunz P, et al. **Int J Vitam Nutr Res** 1989;59(4):426

Similarity assessment and attribute scaling of sucrose and aspartame in grape drink. Christensen L, et al. **J Am Coll Nutr** 1990 Feb;9(1):44–7

Nutrient content and nutrition labeling of several processed Florida citrus juice products. Fellers PJ, et al. **J Am Diet Assoc** 1990 Aug;90(8):1079–84

Some environmental and nutritional factors affecting growth of associated microorganisms of agadagidi. Sanni AI. **J Basic Microbiol** 1989;29(9):617–22

Killer pop machines. Spitz DJ, et al. **J Forensic Sci** 1990 Mar;35(2):490–2

The effects of actinidia sinensis planch (kiwi) drink supplementation on athletes training in hot environments. Chen JD, et al. **J Sports Med Phys Fitness** 1990 Jun; 30(2):181–4

Drinking coffee and carbonated beverages blocks absorption of nicotine from nicotine polacrilex gum. Henningfield JE, et al. **JAMA** 1990 Sep 26;264(12):1560–4

Are caffeinated beverages risk factors for delayed conception? Joesoef MR, et al. **Lancet** 1990 Jan 20; 335(8682):136–7

Exercise and training effects on gastric emptying of carbohydrate beverages. Rehrer NJ, et al. **Med Sci Sports Exerc** 1989 Oct;21(5):540–9

A new species of Trichosporonoides isolated from sweetened orange/mango drink in Australia. Ramirez C. **Mycopathologia** 1989 Oct;108(1):25–30

Kool-Aid colitis [letter] Sack J. **N Engl J Med** 1990 Apr 5;322(14):1012

Bioavailability of riboflavin from fortified palm juice. Ajayi OA. **Plant Foods Hum Nutr** 1989 Dec;39(4):375–80

Experimental sports drinks with minimal dental erosion effect. Meurman JH, et al. **Scand J Dent Res** 1990 Apr; 98(2):120–8

Oral electrochemical action after soft drink rinsing and consumption of sweets. Vassilakos N, et al. **Scand J Dent Res** 1990 Aug;98(4):336–40

Sodium cyanide and its rapid detoxification by grape juice. Smith RA. **Vet Hum Toxicol** 1989 Dec;31(6):538–9

[Factors enhancing the stability of ascorbic acid in alcohol-free carbonated drinks] Golubkina NA, et al. **Vopr Pitan** 1990 Jan–Feb;(1):71–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Hepatotoxicity due to comfrey herb tea [letter; comment] Ridker PN, et al. **Am J Med** 1989 Dec;87(6):701 Comment on: Am J Med 1989 Jul;87(1):97–9.

Hepatic veno-occlusive disease and herbal remedies [letter; comment] Jones JG, et al. **Ann Rheum Dis** 1989 Sep; 48(9):791 Comment on: Ann Rheum Dis 1989 Apr;48(4):342–6.

Monoamine oxidase inhibitors and low alcohol or alcohol free drinks [letter] Beswick DT, et al. **BMJ** 1990 Jul 21; 301(6744):179–80

Potential dental effects of infants' fruit drinks studied in vitro. Grenby TH, et al. **Br J Nutr** 1990 Jul;64(1):273–83

Laboratory studies of the dental properties of soft drinks. Grenby TH, et al. **Br J Nutr** 1989 Sep;62(2):451–64

Consumption of methylxanthine-containing beverages and risk of pancreatic cancer. Gordis L. **Cancer Lett** 1990 Jun 30;52(1):1–12 (30 ref.)

Mate drinking, alcohol, tobacco, diet, and esophageal cancer in Uruguay. De Stefani E, et al. **Cancer Res** 1990 Jan 15; 50(2):426–31

Acute effects of herbal tea dust extracts on lung function. Zuskin E, et al. **Chest** 1989 Dec;96(6):1327–31

Tobacco smoking, coffee, cocoa and tea consumption in relation to mortality from urinary bladder cancer in Italy. Pannelli F, et al. **Eur J Epidemiol** 1989 Sep;5(3):392–7

Preference for hot drinks is associated with peptic disease. Pearson RC, et al. **Gut** 1989 Sep;30(9):1201–5

Organic apple juice no antidote for alar. Jukes TH. **J Am Diet Assoc** 1990 Mar;90(3):371

Hepatic veno-occlusive disease and drinking of herbal teas [letter; comment] Sommer M. **J Pediatr** 1989 Oct; 115(4):659–60 Comment on: J Pediatr 1988 Mar;112(3):433–6.

Hot drinks and peptic ulcers [editorial] **Lancet** 1990 Jan 20; 335(8682):143

Caffeine and infertility [letter] **Lancet** 1990 Mar 31; 335(8692):792–3

Toxicity of quinine [letter; comment] Berglund F. **Toxicology** 1989 Oct 16;58(3):237–8 Comment on: Toxicology 1989 Feb;54(2):219–26.

[Carotene jaundice in infants with "sugar nursing bottle syndrome"] Wetzel WE, et al. **Monatsschr Kinderheilkd** 1989 Oct;137(10):659–61 (11 ref.) (Eng. Abstr.) **(Ger)**

[A case from practice (169). Liquorice-induced pseudohyperaldosteronism in a previously alcoholic woman caused by the drinking of an alcohol-free Pastis substitute beverage] Ferrari P, et al. **Schweiz Rundsch Med Prax** 1990 Mar 20;79(12):377–8 **(Ger)**

ANALYSIS

Fluid availability of sports drinks differing in carbohydrate type and concentration. Davis JM, et al. **Am J Clin Nutr** 1990 Jun;51(6):1054–7

Caffeine-containing beverages, total fluid consumption, and premenstrual syndrome. Rossignol AM, et al. **Am J Public Health** 1990 Sep;80(9):1106–10

Enzymic method for the spectrophotometric determination of aspartame in beverages. Hamano T, et al. **Analyst** 1990 Apr;115(4):435–8

Preformed N-nitroso compounds in foods and beverages. Hotchkiss JH. **Cancer Surv** 1989;8(2):295–321 (160 ref.)

Carbohydrate feeding and exercise: effect of beverage carbohydrate content. Murray R, et al. **Eur J Appl Physiol** 1989;59(1–2):152–8

Analysis of hydrogen peroxide in freshly prepared coffees. Rinkus SJ, et al. **Food Chem Toxicol** 1990 May;28(5):323–31

Radium-226 content of beverages. Kiefer J. **Health Phys** 1989 Nov;57(5):761–3

Ethyl carbamate levels in selected fermented foods and beverages. Canas BJ, et al. **J Assoc Off Anal Chem** 1989 Nov–Dec;72(6):873–6

Determination of sulfite in foods and beverages by ion exclusion chromatography with electrochemical detection: collaborative study. Kim HJ. **J Assoc Off Anal Chem** 1990 Mar–Apr;73(2):216–22

The effect of storage of canned juices on content of the metals Fe, Cu, Zn, Pb, Sn, Al, Cd, Sb and Ni. Arvanitoyannis I. **Nahrung** 1990;34(2):141–5

[Use of solid phase extraction for rapid sample preparation in the determination of food constituents. I. Quinine in beverages] Wörner M, et al. **Z Lebensm Unters Forsch** 1989 Nov;189(5):422–5 (Eng. Abstr.) **(Ger)**

HISTORY

Through the centuries with food and drink, for better or worse. VI. Cohen SG, et al. **Allergy Proc** 1990 May–Jun; 11(3):139–46

POISONING

Gastroenteritis from an orange juice preparation. II. Field and laboratory investigation. Schmelzer LL, et al. **Arch Environ Health** 1967 Jul;15(1):78–82

Gastroenteritis from an orange juice preparation. I. Clinical and epidemiological aspects. Tabershaw IR, et al. **Arch Environ Health** 1967 Jul;15(1):72–7

Cobalt poisoning in a 6-year-old [letter] Mucklow ES, et al. **Lancet** 1990 Apr 21;335(8695):981

TOXICITY

Mutagenic activity in regional foods and beverages from the Venezuelan Andean region. Brito MT, et al. **Mutat Res** 1990 Feb;243(2):115–20

BEZAFIBRATE

ADMINISTRATION & DOSAGE

Interruption of long-term lipid-lowering treatment with bezafibrate in hypertriglyceridaemic patients. Effects on lipoprotein composition, lipase activities and the plasma lipid fatty acid spectrum. Vessby B, et al. **Atherosclerosis** 1990 May;82(1–2):137–43

Bezafibrate and simvastatin (MK-733) in the treatment of primary hypercholesterolaemia. Smith DH, et al. **S Afr Med J** 1990 May 19;77(10):500–3

PHARMACOKINETICS

The comparative pharmacokinetics and gastric toxicity of bezafibrate and ciprofibrate in the rat. Eason CT, et al. **Xenobiotica** 1989 Aug;19(8):913–25

PHARMACOLOGY

Inhibition of cholesterol biosynthesis in freshly isolated blood mononuclear cells from normolipidemic subjects and hypercholesterolemic patients treated with bezafibrate. Cosentini R, et al. **Atherosclerosis** 1989 Oct;79(2–3):253–5

Modification of low density lipoproteins from hypertriglyceridemic patients by macrophages in vitro and the effect of bezafibrate treatment. Naruszewicz M, et al. **Atherosclerosis** 1989 Oct;79(2–3):261–5

Stabilization of the T-state of hemoglobin. Gill SJ, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):226–33

Induction of fatty acid binding protein by peroxisome proliferators in primary hepatocyte cultures and its relationship to the induction of peroxisomal beta-oxidation. Brandes R, et al. **Biochim Biophys Acta** 1990 Apr 23; 1034(1):53–61

The induction of adipose conversion by bezafibrate in 3T3-L1 cells. Synergism with dibutyryl-cAMP. Brandes R, et al. **Biochim Biophys Acta** 1990 Sep 1;1054(2):219–24

Long-term effects of bezafibrate on in vivo VLDL-triglyceride production in the rat. Kazumi T, et al. **Diabetes Res Clin Pract** 1990 May–Jun;9(2):163–8

Proliferation of peroxisomes without simultaneous induction of the peroxisomal fatty acid beta-oxidation. Baumgart E, et al. **FEBS Lett** 1990 May 7;264(1):5–9

Effect of bezafibrate on the sequelae of acute experimental focal cerebral ischaemia. Aspey BS, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1432–4

Reduction of BM 15.766-induced 7-dehydrocholesterol accumulation by bezafibrate and mevinolin in rats. A non-isotopic in vivo test system for compounds reducing cholesterol synthesis. Pill J, et al.
Naunyn Schmiedebergs Arch Pharmacol 1990 Jun; 341(6):552–6

Effect of bezafibrate on plasma lipid in a strain of genetically hypercholesterolemic RICO rats. Fantappiè S, et al.
Pharmacol Res 1989 Nov–Dec;21 Suppl 1:109–10

Effect of ciprofibrate, bezafibrate, and LY171883 on peroxisomal beta-oxidation in cultured rat, dog, and rhesus monkey hepatocytes. Foxworthy PS, et al.
Toxicol Appl Pharmacol 1990 Jul;104(3):386–94

THERAPEUTIC USE

Efficacy of a combined bezafibrate retard-colestyramine treatment in patients with hypercholesterolemia. Fischer S, et al. **Arzneimittelforschung** 1990 Apr;40(4):469–72

Comparative study of bezafibrate and probucol in hyperlipidaemia. Páez Moreno JP, et al.
Curr Med Res Opin 1989;11(8):523–32

A cross-over controlled study on beclobrate versus bezafibrate in the treatment of type IIb hyperlipoproteinaemia. Avogaro P, et al.
Drugs Exp Clin Res 1989;15(6–7):325–33

[Bezalip in the treatment of hyperlipoproteinemia] Ceška R, et al. **Cas Lek Cesk** 1990 Jan 5;129(1):20–2 (Eng. Abstr.) (Cze)

[Efficacy of blood lipid normalization and tolerance in dyslipidemic patients treated for 18 months with fibric acid derivatives] Arsenio L, et al. **Clin Ter** 1989 Dec 31; 131(6):403–12 (Eng. Abstr.) (Ita)

TOXICITY

Long-term effects of peroxisome proliferators on the balance between hydrogen peroxide-generating and scavenging capacities in the liver of Fischer-344 rats. Tamura H, et al. **Toxicology** 1990 Aug;63(2):199–213

BEZOARS

Phytobezoar extending from stomach to cecum. Sharma V, et al. **Indian J Gastroenterol** 1990 Jul;9(3):237

Fungal bezoars of the upper urinary tract. Irby PB, et al. **J Urol** 1990 Mar;143(3):447–51

COMPLICATIONS

Ileal phytobezoar. Sharma V, et al. **Clin Pediatr (Phila)** 1990 Feb;29(2):125–6

Trichobezoar: a rare cause of gastric perforation [letter] Sandhu NP, et al. **Indian J Gastroenterol** 1989 Oct; 8(4):302–3

Unusual presentation of trichobezoar. Sharma V, et al.
Indian Pediatr 1990 Feb;27(2):187–9

Intestinal obstruction due to phytobezoars. Chittmittrapap S, et al. **J Med Assoc Thai** 1990 Apr;73(4):212–6

Colonic intussusception secondary to a calcium phosphate bezoar in a child receiving calcium carbonate for hyperphosphatemia. Fildes RD, et al. **J Pediatr Surg** 1989 Nov;24(11):1195–7

Gastric haemorrhage and perforation caused by a trichobezoar in a baboon (Papio hamadryas). Gillin AG, et al. **Lab Anim** 1990 Apr;24(2):180–2

[The physician at wit's end; a bezoar] van Arkel ER, et al. **Ned Tijdschr Geneeskd** 1990 May 5;134(18):916–8 (Eng. Abstr.) (Dut)

[Cholestasis caused by an intradiverticular bezoar. Endoscopic treatment] Seyrig JA, et al.
Gastroenterol Clin Biol 1989 Aug–Sep;13(8–9):741–3 (Eng. Abstr.) (Fre)

[Unusual duodenal obstruction: association of a bezoar with a duodenal diaphragm (apropos of a case)] Daghfous MS, et al. **Tunis Med** 1989 Jun–Jul;67(6–7):457–61 (Eng. Abstr.) (Fre)

[A case of high intestinal obstruction caused by mycotic bezoar of the duodenum] Goszcz A, et al. **Pol Tyg Lek** 1989 Apr 10–17;44(15–16):367–9 (Eng. Abstr.) (Pol)

[A foreign body causing acute appendicitis] Komarnitskiĭ ES, et al. **Klin Khir** 1990;(4):72 (Rus)

[Complicated bezoars of the stomach and intestines] Volobuev NN, et al. **Klin Khir** 1989;(10):69 (Rus)

DIAGNOSIS

[A rare case of a giant trichobezoar of the stomach] Atanasiu D, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Jul–Sep; 93(3):605–6 (Eng. Abstr.) (Rum)

[Intestinal trichobezoar: differential diagnosis in children with an abdominal mass] Azuara-Fernández HM, et al.
Bol Med Hosp Infant Mex 1989 Nov;46(11):732–5 (14 ref.) (Eng. Abstr.) (Spa)

ETIOLOGY

Gastric bezoar complicating gastric stapling [letter] Reeves-Darby V, et al. **Am J Gastroenterol** 1990 Mar; 85(3):326–7

Dentureless distention: oat bran bezoars cause obstruction [letter] Rosario PG, et al. **J Am Geriatr Soc** 1990 May; 38(5):608

The diet pill that worked [letter] Gebhard RL, et al.
N Engl J Med 1990 Mar 8;322(10):702

Gastric bezoar: another side effect of endoscopic variceal sclerotherapy. Davion T, et al. **Scand J Gastroenterol** 1989 Sep;24(7):818–20

Perdiem causes esophageal impaction and bezoars. Schneider RP. **South Med J** 1989 Nov;82(11):1449–50

[A case from practice (156). Phytobezoar following proximal selective vagotomy and anterior pylorectomy for perforated duodenal ulcer] Koechlin P.
Schweiz Rundsch Med Prax 1989 Dec 19;78(51):1445–6 (Ger)

[Pica and gastric bezoar] Campo C, et al. **Sangre (Barc)** 1990 Jun;35(3):235–6 (7 ref.) (Spa)

RADIOGRAPHY

Case of the month. A Chinese puzzle. Williams JW, et al. **Br J Radiol** 1990 May;63(749):367–8

SURGERY

Small bowel obstruction due to phytobezoars in the intact gastrointestinal tract. Swift RI, et al.
J R Coll Surg Edinb 1989 Oct;34(5):267–9

[Trichobezoar. Etiology and therapy in the case of a 15-year-old patient] Brachvogel S, et al. **Zentralbl Chir** 1989;114(16):1085–7 (Ger)

THERAPY

Endoscopic lithotripsy of gastric bezoars using a laser-ignited mini-explosive device. Huang YC, et al.
Chin Med J [Engl] 1990 Feb;103(2):152–5

Polyethylene glycol-electrolyte solution for rectal sunflower seed bezoar. Shah M, et al. **Pediatr Emerg Care** 1990 Jun; 6(2):127–8

VETERINARY

Hairballs in feedlot-raised calves. Herd RM, et al.
Aust Vet J 1989 Nov;66(11):372–3

Trichobezoars in two saddleback tamarins (Saguinus fuscicollis). Gozalo AS, et al. **J Med Primatol** 1990; 19(2):151–3

BHANG see **CANNABIS**

BIANILINES see **BENZIDINES**

BIAS, AGGREGATION see **BIAS (EPIDEMIOLOGY)**

BIAS, ECOLOGICAL see **BIAS (EPIDEMIOLOGY)**

BIAS (EPIDEMIOLOGY)

Re: "Reporting Accuracy among Mothers of Malformed and Nonmalformed Infants" [letter; comment]
Am J Epidemiol 1990 May;131(5):935–8 Comment on: Am J Epidemiol 1989 Feb;129(2):415–21.

Does nondifferential misclassification of exposure always bias a true effect toward the null value? Dosemeci M, et al. **Am J Epidemiol** 1990 Oct;132(4):746–8

Random digit dialing for control selection. A review and a caution on its use in studies of childhood cancer. Greenberg ER. **Am J Epidemiol** 1990 Jan;131(1):1–5 (17 ref.)

Correction of logistic regression relative risk estimates and confidence intervals for measurement error: the case of multiple covariates measured with error. Rosner B, et al. **Am J Epidemiol** 1990 Oct;132(4):734–45

Effects of selection bias on outcomes at referral centers [comment] Sepkowitz S. **Am J Obstet Gynecol** 1990 Jun; 162(6):1629–31 Comment on: Am J Obstet Gynecol 1989 Mar;160(3):539–45.

Statistical conclusion validity of rehabilitation research. A quantitative analysis. Ottenbacher KJ, et al.
Am J Phys Med Rehabil 1990 Apr;69(2):102–7

Potential and pitfalls of randomized clinical trials in cancer research. Buyse ME. **Cancer Surv** 1989;8(1):91–105

Metastases to and from the upper aerodigestive tract in the population of Rochester, Minnesota, 1935–1984 [letter; comment] Myssiorek D. **Head Neck** 1990 May–Jun; 12(3):272–3 Comment on: Head Neck 1989 May–Jun;11(3):212–8.

Bias arising in case-control studies from selection of controls from overlapping groups. Austin H, et al.
Int J Epidemiol 1989 Sep;18(3):713–6

Selection bias in case-control studies using relatives as the controls. Goldstein AM, et al. **Int J Epidemiol** 1989 Dec; 18(4):985–9

Potential bias due to prevalent diseases in prospective studies. Joffres MR, et al. **Int J Epidemiol** 1990 Jun;19(2):459–65

Recall bias in epidemiologic studies. Coughlin SS.
J Clin Epidemiol 1990;43(1):87–91

The sick person effect. Sterling TD, et al.
J Clin Epidemiol 1990;43(2):141–51

The wish bias. Wynder EL, et al. **J Clin Epidemiol** 1990; 43(6):619–21

Do volunteer subjects bias clinical trials? Amori G, et al.
J Clin Psychopharmacol 1989 Oct;9(5):321–7

Randomisation by cluster and the problem of social class bias. Alexander F, et al. **J Epidemiol Community Health** 1989 Mar;43(1):29–36

Bias against the null hypothesis: the reproductive hazards of cocaine [see comments] Koren G, et al. **Lancet** 1989 Dec 16;2(8677):1440–2 Comment in: Lancet 1990 Feb 17;335(8686):415.

Referral bias in elderly patients [editorial] Schneider AJ, et al. **Mayo Clin Proc** 1990 Sep;65(9):1272–3

Effects of referral bias on surgical outcomes: a population-based study of surgical patients 90 years of age or older. Warner MA, et al. **Mayo Clin Proc** 1990 Sep; 65(9):1185–91

Choice of controls [editorial] **Paediatr Perinat Epidemiol** 1990 Jan;4(1):1–3

Correcting for the bias caused by dropouts in hypertension trials [letter; comment] Lewis JA. **Stat Med** 1989 Oct; 8(10):1302–4 Comment on: Stat Med 1988 Sep;7(9):941–6.

Selection of patients for randomized controlled trials: implications of wide or narrow eligibility criteria. Yusuf S, et al. **Stat Med** 1990 Jan–Feb;9(1–2):73–83; discussion 83–6

Numbers of observations and variables in multivariate analyses. Knapp TR, et al. **West J Nurs Res** 1989 Oct; 11(5):634–41

[Prevalence and socio-demographic factors] Chevallier P. **Psychiatr Enfant** 1989;32(2):543–91 (70 ref.) (Eng. Abstr.) (Fre)

[Example of a bias linked to the misunderstanding of the forms of a variable] Nisand G, et al.
Rev Epidemiol Sante Publique 1989;37(4):397–8 (Fre)

[The role of migration in assessing age-specific event probabilities exemplified by the probability of death] Scholz RD, et al. **Z Gesamte Hyg** 1989 Dec;35(12):728–9 (Eng. Abstr.) (Ger)

[Response level of controls selected from the municipal registry] Mur Pastor P, et al. **Gac Sanit** 1989 Nov–Dec; 3(15):547–50 (Eng. Abstr.) (Spa)

[Clinical investigation methods: errors, fallacies and challenges] Porta Serra M. **Med Clin (Barc)** 1990 Jan 27; 94(3):107–15 (55 ref.) (Spa)

BIAS, OBSERVER see **OBSERVER VARIATION**

BIAS, STATISTICAL see **BIAS (EPIDEMIOLOGY)**

BIAS, SYSTEMATIC see **BIAS (EPIDEMIOLOGY)**

BIBENZYLS

PHARMACOLOGY

Antimitotic natural products combretastatin A-4 and combretastatin A-2: studies on the mechanism of their inhibition of the binding of colchicine to tubulin. Lin CM, et al. **Biochemistry** 1989 Aug 22;28(17):6984–91

BIBLE

A critique of creationist homophobia. Edwards GR.
J Homosex 1989–90;18(3–4):95–118 (43 ref.)

Biblical leprosy: a comedy of errors [see comments] Davies ML, et al. **J R Soc Med** 1989 Oct;82(10):622–3 Comment in: J R Soc Med 1990 Feb;83(2):127–8.

Biblical leprosy—a comedy of errors [letter; comment] Verbov JL. **J R Soc Med** 1990 Feb;83(2):127–8 Comment on: J R Soc Med 1989 Oct;82(10):622–3.

Head injuries in the Old Testament [see comments] Shapiro R, et al. **Radiology** 1990 Jan;174(1):84 Comment in: Radiology 1990 Jul;176(1):288.

David and Goliath [letter; comment] Sprecher S.
Radiology 1990 Jul;176(1):288 Comment on: Radiology 1990 Jan;174(1):84.

Talmudic and other ancient concepts of the number of vertebrae in the human spine. Shapiro R. **Spine** 1990 Mar; 15(3):246–7

[Gynecology and obstetrics in the Bible. I. From procreation to pregnancy] Dumont M.
J Gynecol Obstet Biol Reprod (Paris) 1990;19(1):9–17 (Eng. Abstr.) (Fre)

[Gynecology and obstetrics in the Bible. II. Labor and the puerperium] Dumont M.
J Gynecol Obstet Biol Reprod (Paris) 1990;19(2):145–53 (Eng. Abstr.) (Fre)

[King Solomon was wise after all. Defensive comment for saving the reputation of a deceased person and summons for the education of descendents] Bode HJ. **Blutalkohol** 1989 Nov;26(6):405–13 (Eng. Abstr.) (Ger)

[The inception for the prevention of alcohol embryopathy since 3000 years ago?] Paditz E. **Kinderarztl Prax** 1989 Nov; 57(11):565–70 (Eng. Abstr.) (Ger)

[Freud's Moses study as day dream] Grubrich-Simitis I.
Psyche (Stuttg) 1990 Jun;44(6):479–515 (Eng. Abstr.) (Ger)

[3000 years of therapy for hirsutism. On W. Daum's "Die Königin von Saba"] Labhart A.
Schweiz Med Wochenschr 1990 Jan 27;120(4):83–4 (Ger)

[Comments on the article "Genetics" in the Horus section of this journal] Szabó A. **Orv Hetil** 1989 Aug 27; 130(35):1905 (Hun)

BIBLIOGRAPHY

see related
DOCUMENTATION

Physician supply in the United States 1980–1988. A select bibliography commissioned for the task force on physician supply of the Association of American Medical Colleges.

Acad Med 1990 Jun;65(6 Suppl):S1–62
Acta Ophthalmologica supplements.
Acta Ophthalmol (Copenh) 1990 Apr;68(2):113–7
Bibliography of the current world literature. **AIDS** 1990 Jan; 4(1):A1–5
Bibliography of the current world literature. **AIDS** 1990 Mar; 4(3):A11–A20
Bibliography of the current world literature. **AIDS** 1989 Oct; 3(10):A115–21
Bibliography of the current world literature. **Aids** 1989 Sep; 3(9):A107–14
Bibliography of the current world literature. **AIDS** 1990 Feb; 4(2):A7–9
Bibliography of the current world literature. **AIDS** 1989 Nov; 3(11):A123–30
Bibliography of the current world literature. **AIDS** 1989 Dec; 3(12):A131–6
Bibliography of the current world literature. **AIDS** 1990 May; 4(5):A27–30
Bibliography of the current world literature. **AIDS** 1990 Jul; 4(7):A39–44
Environmental medicine: an annotated bibliography of the literature, 1987–1989. Charles J, et al.
Am J Emerg Med 1990 May;8(3):251–62
Trauma: an annotated bibliography of the recent literature, Part 2. McCabe CJ. **Am J Emerg Med** 1989 Nov; 7(6):642–55
Bibliography on Rubinstein–Taybi syndrome. Hennekam RC. **Am J Med Genet Suppl** 1990;6:77–83
Books of the year [published erratum appears in Am J Nurs 1990 Apr;90(4):36] Cushman MJ. **Am J Nurs** 1990 Jan; 90(1):70–9
Payment for cognitive services: the future of the profession. **Am Pharm** 1989 Dec;NS29(12):34–8
Lung transplantation. Egan TM, et al. **Ann Thorac Surg** 1989 Nov;48(5):741–2
Cardiac transplantation. Griffith BP. **Ann Thorac Surg** 1990 Jul;50(1):161–2
The trachea. Grillo HC, et al. **Ann Thorac Surg** 1990 May; 49(5):845–6
Surgical techniques for chest wall reconstruction. Mathisen DJ. **Ann Thorac Surg** 1990 Jan;49(1):164–5
Tuberculosis. Pomerantz M. **Ann Thorac Surg** 1990 Sep; 50(3):498–9
Mediastinitis after cardiac operations. Spencer FC, et al.
Ann Thorac Surg 1990 Mar;49(3):506–7
Selective biotransformations. Patents and literature. Dordick JS. **Appl Biochem Biotechnol** 1989 Dec;22(3):361–73
Cardiovascular, pulmonary, and cancer rehabilitation. 3. Pulmonary rehabilitation. Bach JR, et al.
Arch Phys Med Rehabil 1990 Mar;71(4–S):S238–43
Physiatric therapeutics. 5. Pain. Dean BZ, et al.
Arch Phys Med Rehabil 1990 Mar;71(4–S):S271–4
Physiatric therapeutics. 6. The rehabilitation team/behavioral management. Dean BZ, et al. **Arch Phys Med Rehabil** 1990 Mar;71(4–S):S275–7
Cardiovascular, pulmonary, and cancer rehabilitation. 1. General principles of cardiovascular rehabilitation. Flores AM, et al. **Arch Phys Med Rehabil** 1990 Mar; 71(4–S):S230–3
Cardiovascular, pulmonary, and cancer rehabilitation. 4. Cancer rehabilitation: principles and psychosocial aspects. Gamble GL, et al. **Arch Phys Med Rehabil** 1990 Mar; 71(4–S):S244–7
Cardiovascular, pulmonary, and cancer rehabilitation. 5. Cancer rehabilitation: management of pain, neurologic and other clinical problems. Gamble GL, et al.
Arch Phys Med Rehabil 1990 Mar;71(4–S):S248–51
Physiatric therapeutics. 4. Transfers and mobility/community reentry. Hinderer SR, et al. **Arch Phys Med Rehabil** 1990 Mar;71(4–S):S267–70
Cardiovascular, pulmonary, and cancer rehabilitation. 2. Cardiovascular considerations in the rehabilitation of the disabled. Moldover JR, et al. **Arch Phys Med Rehabil** 1990 Mar;71(4–S):S234–7
Physiatric therapeutics. 7. Geriatric rehabilitation. Steinberg FU, et al. **Arch Phys Med Rehabil** 1990 Mar; 71(4–S):S278–80
Physiatric therapeutics. 8. Management of the immobilized patient. Steinberg FU, et al. **Arch Phys Med Rehabil** 1990 Mar;71(4–S):S281–2
Aural rehabilitation: an annotated bibliography. Committee on Aural Rehabilitation. American Speech–Language–Hearing–Association. **ASHA** 1990 Feb; 32(2 Suppl 1):1–12
Audiological assessment of central auditory of central auditory processing: an annotated bibliography. Committee on Disorders of Central Auditory Processing. American Speech–Language–Hearing Association. **ASHA** 1990 Feb; 32(2 Suppl 1):13–30
REFERENCE UPDATE and REFERENCE MANAGER: personal computer programs for locating and managing references. Matus N, et al. **Biotechniques** 1989 Jun; 7(6):636–9
Anaesthesia and medical disorders: selected references. Thornton JA. **Br J Anaesth** 1974 Aug;46(8):623–6
The Rett syndrome bibliography III, 1989. Holt MC, et al. **Brain Dev** 1990;12(1):184–91
WHO/tuberculosis information systems. Computerized selective tuberculosis bibliography [news] Aronson B, et al. **Bull Int Union Tuberc Lung Dis** 1990 Mar;65(1):60–1
Paul Kallós (1902–1988): an almost complete bibliography. Kallós D, et al. **Chem Immunol** 1990;49:7–20
Children's literature and child abuse. Pardeck JT.
Child Welfare 1990 Jan–Feb;69(1):83–8
Management of personal bibliographic reference using a simple database program. Correia JH.
Comput Appl Biosci 1990 Apr;6(2):126–7
Cytoplasm and cell motility. **Curr Opin Cell Biol** 1989 Feb; 1(1):123–52
Cell multiplication. **Curr Opin Cell Biol** 1990 Apr; 2(2):367–427
Nucleus and gene expression. **Curr Opin Cell Biol** 1990 Jun; 2(3):539–97
Cell regulation. **Curr Opin Cell Biol** 1990 Apr;2(2):307–65
Bibliography of the current world literature. Cytoplasm and cell motility. **Curr Opin Cell Biol** 1990 Feb;2(1):131–57
Bibliography of the current world literature. Cell differentiation. **Curr Opin Cell Biol** 1989 Dec;1(6):1219–48
Bibliography of the current world literature.
Curr Opin Cell Biol 1989 Apr;1(2):291–427
Bibliography of the current world literature. Cell–to–cell contact. **Curr Opin Cell Biol** 1989 Oct;1(5):1029–37
Bibliography of the current world literature.
Post–transcriptional processes. **Curr Opin Cell Biol** 1989 Dec;1(6):1249–66
Bibliography of the current world literature. Extracellular matrix. **Curr Opin Cell Biol** 1989 Oct;1(5):1039–54
Bibliography of the current world literature. Nucleus and gene expression. **Curr Opin Cell Biol** 1989 Jun;1(3):549–609
Bibliography of the current world literature. Membranes.
Curr Opin Cell Biol 1989 Aug;1(4):775–843
Bibliography of the current world literature. Membrane permeability. **Curr Opin Cell Biol** 1989 Aug;1(4):845–73
Immunity to infection. **Curr Opin Immunol** 1989–90 Feb; 2(3):451–80
Immune response. **Curr Opin Immunol** 1989 Dec;2(2):283–323
Innate immunity. **Curr Opin Immunol** 1989 Oct;2(1):129–62
Atopic allergy and other hypersensitivities.
Curr Opin Immunol 1989–90 Apr;2(4):633–48
Immunodeficiency. **Curr Opin Immunol** 1989–90 Feb; 2(3):481–91
Immunomodulation. **Curr Opin Immunol** 1989 Dec; 2(2):325–40
Innate immunity. **Curr Opin Immunol** 1988 Sep–Oct; 1(1):113–68
Autoimmunity. **Curr Opin Immunol** 1989–90 Apr;2(4):649–76
Antigen recognition. **Curr Opin Immunol** 1989 Oct; 2(1):163–80
Antigen recognition. **Curr Opin Immunol** 1988 Sep–Oct; 1(1):169–96
Immunodeficiency. **Curr Opin Immunol** 1989 Feb; 1(3):587–618
Atopic allergy and other hypersensitivities.
Curr Opin Immunol 1989 Apr;1(4):765–806
Autoimmunity. **Curr Opin Immunol** 1989 Apr;1(4):807–56
Immunological techniques. **Curr Opin Immunol** 1989 Jun; 1(5):1053–112
Immune response. **Curr Opin Immunol** 1988 Dec;1(2):283–391
Immunomodulation. **Curr Opin Immunol** 1988 Dec; 1(2):393–421
Immunity to infection. **Curr Opin Immunol** 1989 Feb; 1(3):521–85
Immunology of reproduction. **Curr Opin Immunol** 1989 Aug; 1(6):1241–56
Transplantation. **Curr Opin Immunol** 1989 Aug;1(6):1257–95
Cancer and immunology. **Curr Opin Immunol** 1989 Jun; 1(5):971–1051
Liver transplantation: annotated references. Brayman KL, et al. **Curr Opin Immunol** 1989 Aug;1(6):1236–40 (33 ref.)
Nuclear medicine. **Curr Opin Radiol** 1989 Dec;1(4):583–606
Technologic advances. **Curr Opin Radiol** 1990 Aug; 2(4):629–45
Pediatrics. **Curr Opin Radiol** 1989 Dec;1(4):607–19
Diagnostic sonography. **Curr Opin Radiol** 1990 Apr; 2(2):309–18
Neuroradiology. **Curr Opin Radiol** 1990 Feb;2(1):145–64
Cardiac imaging. **Curr Opin Radiol** 1990 Aug;2(4):647–63
Head and neck. **Curr Opin Radiol** 1990 Feb;2(1):165–70
Angiography and interventional radiology.
Curr Opin Radiol 1990 Apr;2(2):319–31
Chest. **Curr Opin Radiol** 1990 Jun;2(3):477–84
Cardiac imaging. **Curr Opin Radiol** 1989 Aug;1(2):213–32
Gastrointestinal tract. **Curr Opin Radiol** 1990 Jun; 2(3):485–506
Breast. **Curr Opin Radiol** 1989 Aug;1(2):233–6
Genitourinary system. **Curr Opin Radiol** 1989 Oct;1(3):373–86
Musculoskeletal radiology. **Curr Opin Radiol** 1989 Oct; 1(3):387–408
Chest. **Curr Opin Radiol** 1989 Jun;1(1):107–15
Gastrointestinal tract. **Curr Opin Radiol** 1989 Jun;1(1):117–37
Renovascular hypertension: miscellaneous papers of interest. Ekelund L. **Curr Opin Radiol** 1989 Oct;1(3):306–7
Miscellaneous reports of interest. Stoker DJ, et al.
Curr Opin Radiol 1989 Oct;1(3):369–71
Clinical therapeutics. **Curr Opin Rheumatol** 1989 Jun; 1(1):123–31
The seronegative spondyloarthropathies.
Curr Opin Rheumatol 1989 Aug;1(2):227–9
Pediatric and heritable disorders. **Curr Opin Rheumatol** 1989 Oct;1(3):383–90
Infectious arthritis and immune dysfunction.
Curr Opin Rheumatol 1989 Aug;1(2):231–9
Crystal deposition diseases and osteoarthritis.
Curr Opin Rheumatol 1989 Oct;1(3):391–5
Systemic lupus erythematosus and Sjögren's syndrome.
Curr Opin Rheumatol 1989 Oct;1(3):397–407
Miscellaneous rheumatic conditions. **Curr Opin Rheumatol** 1990 Apr;2(2):385–95
Epidemiology and health services research.
Curr Opin Rheumatol 1990 Apr;2(2):397–404
Imaging in rheumatology. **Curr Opin Rheumatol** 1990 Apr; 2(2):405–16
Rheumatoid arthritis. **Curr Opin Rheumatol** 1990 Jun; 2(3):517–40
Clinical therapeutics. **Curr Opin Rheumatol** 1990 Jun; 2(3):541–58
Rheumatoid arthritis. **Curr Opin Rheumatol** 1989 Jun; 1(1):113–21
Bibliography of developmental medicine and child neurology: selected books and articles received in 1989. **Dev Med Child Neurol Suppl** 1990 Apr;60:1–165
A bibliography of the neurobehavioral aspects of diabetes mellitus. L'Hommedieu A, et al. **Exp Aging Res** 1989 Autumn–Winter;15(3–4):203–5
Bibliography of food consumption surveys.
FAO Food Nutr Pap 1990;18(3):1–57
Studies of aging using genetically defined rodents: a bibliography. Hazzard DG, et al. **Growth Dev Aging** 1989 Spring–Summer;53(1–2):59–81
Beta–thalassemia repository. Huisman TH. **Hemoglobin** 1989; 13(7–8):775–87
Antibiotics literature index—a select bibliography. Kamble SL, et al. **Hindustan Antibiot Bull** 1989 Feb–May; 31(1–2):43–64
Recent advances in dermatology and medicine (1989). Fine RM. **Int J Dermatol** 1990 May;29(4):304–8
Syndromology: an updated conceptual overview. X. References. Cohen MM Jr. **Int J Oral Maxillofac Surg** 1990 Apr;19(2):89–96
Isis current bibliography of the history of science and its cultural influences. 1989. **Isis** 1989;80(305):1–256
References to contemporary papers on acoustics. Stern R.
J Acoust Soc Am 1990 Summer;87 Suppl 2:R1–403
Lichenoid dermatoses and related disorders. I. Lichen planus and lichenoid drug–induced eruptions. Bleicher PA, et al.
J Am Acad Dermatol 1990 Feb;22(2 Pt 1):288–92
Lichenoid dermatoses and related disorders. II. Lichen nitidus, lichen sclerosus et atrophicus, benign lichenoid keratoses, lichen aureus, pityriasis lichenoides, and keratosis lichenoides chronica. Bleicher PA, et al.
J Am Acad Dermatol 1990 Apr;22(4):671–5
Literature references for mosquitoes and mosquito–borne diseases. 1989—Part 3. Barr AR.
J Am Mosq Control Assoc 1989 Sep;5(3):471–84
Check your references or rediscovering the wheel. Hansell P. **J Biol Photogr** 1990 Apr;58(2):53–7
Bioluminescence and chemiluminescence literature—Lux, Luc and Phot genes. **J Biolumin Chemilumin** 1990 Apr–Jun; 5(2):141–52
Screening for colorectal cancer: an annotated bibliography for clinicians and educators—Part I. McPhee SJ, et al.
J Cancer Educ 1987;2(1):35–49
Screening for colorectal cancer: an annotated bibliography for clinicians and educators—Part II. McPhee SJ, et al.
J Cancer Educ 1987;2(2):113–27
The literature of dermatologic surgery and oncology 1970–present. Hanke CW. **J Dermatol Surg Oncol** 1990 Sep; 16(9):872–5
The literature of dermatologic surgery and oncology: 1970–present. Hanke CW. **J Dermatol Surg Oncol** 1990 Feb; 16(2):202–6
The literature of dermatologic surgery and oncology: 1970–present. Hanke CW. **J Dermatol Surg Oncol** 1990 Jun; 16(6):574–7
The literature of dermatologic surgery and oncology: 1970—present. Hanke CW. **J Dermatol Surg Oncol** 1990 Aug;16(8):757–67
The literature of dermatologic surgery and oncology: 1970–present. Hanke CW. **J Dermatol Surg Oncol** 1990 Jul; 16(7):677–80
Bibliography on diarrhoeal diseases. Khan MS, et al.
J Diarrhoeal Dis Res 1988 Sep–Dec;6(3–4):232–75
Nutritional support. Kelly KG, et al. **J Gen Intern Med** 1990 May–Jun;5(3):258–63
A selection of recommended readings on patient education, with annotations. Grueninger UJ. **J Hum Hypertens** 1990 Feb;4 Suppl 1:119–21
Bibliography of the current world literature in hypertension.
J Hypertens 1989 Oct;7(10):H99–106
Bibliography of the current world literature in hypertension.
J Hypertens 1989 Sep;7(9):H89–97
Bibliography of the current world literature in hypertension.
J Hypertens 1990 Mar;8(3):H47–50
Cumulative bibliography of the current world literature in hypertension. **J Hypertens** 1990 Jan;8(1):H1–40
Bibliography of the current world literature in hypertension.
J Hypertens 1989 Aug;7(8):H81–8
Bibliography of the current world literature in hypertension.
J Hypertens 1989 Nov;7(11):H107–12
Bibliography of the current world literature in hypertension.
J Hypertens 1990 May;8(5):H55–7
Bibliography of the current world literature in hypertension.
J Hypertens 1989 Dec;7(12):H113–9
Bibliography of the current world literature in hypertension.
J Hypertens 1990 Feb;8(2):H41–6

Bibliography of the current world literature in hypertension. **J Hypertens** 1990 Jul;8(7):H59–62
Bibliography of the current world literature in hypertension. **J Hypertens** 1990 Jun;8(6):H51–8
Addressing the issue of cataloging and making accessible chiropractic literature: Part II. Pilot software development program. Curl DD, et al. **J Manipulative Physiol Ther** 1990 Jul–Aug;13(6):309–15
A review of data reports published in the Journal of Manipulative and Physiological Therapeutics from 1986 to 1988. Leboeuf C. **J Manipulative Physiol Ther** 1990 Feb; 13(2):89–95
The ethical approach to AIDS: a bibliographical review. Manuel C, et al. **J Med Ethics** 1990 Mar;16(1):14–27
Opioids and the developing organism: a comprehensive bibliography, 1984–1988. Zagon IS, et al. **Neurosci Biobehav Rev** 1989 Winter;13(4):207–35
Creative thought in neurosurgical research: the value of citation analysis. Davis RA, et al. **Neurosurgery** 1990 Feb; 26(2):345–53
Reference sources for nursing. **Nurs Outlook** 1990 Sep–Oct; 38(5):243–5
Resources in cancer pain management. Paice JA. **Oncol Nurs Forum** 1990 Jul–Aug;17(4):587–90
Checking citations [editorial] Lichter PR. **Ophthalmology** 1989 Aug;96(8):1131–2
Chemical evolution and the origin of life. Bibliography supplement 1986. Powers JV, et al. **Orig Life Evol Biosph** 1990;20(1):55–81
Medlars bibliography. Publications of relevance to Papua New Guinea and Melanesia. **P N G Med J** 1989 Jun; 32(2):159–64
Bibliography of research utilizing the vividness of visual imagery questionnaire. Marks DF. **Percept Mot Skills** 1989 Dec;69(3 Pt 1):707–18
Recent books on photochemistry and photobiology. **Photochem Photobiol** 1989 Dec;50(6):907–12
Assessment of trace element status in humans. Gibson RS. **Prog Food Nutr Sci** 1989;13(2):67–111 (333 ref.)
Review of Papyrus bibliographic database software. Wysocki T. **Res Dev Disabil** 1989;10(4):451–7
Computer readable data from NIOSH. Murthy LI. **Semin Dermatol** 1989 Jun;8(2):70–1
Bibliography of recent literature in sleep research. **Sleep** 1989 Oct;12(5):477–86
Bibliography of biomedical ultrasound. 1986. **Ultrasound Med Biol** 1989;15(9):795–958
FDA poisoning surveillance notes. **Vet Hum Toxicol** 1990 Jun;32(3):292–5
[List of scientific publications by Heinz Röhrer] **Arch Exp Veterinarmed** 1990;44(2):166–9 **(Ger)**
[The publications of Prof. Dr. med. Ernst Marquardt] **Rehabilitation (Stuttg)** 1990 Feb;29(1):42–8 **(Ger)**
[Articles on hematology, transfusion science and biotechnology published in Soviet medical journals in 1988] Kaveshnikova BF. **Gematol Transfuziol** 1989 Dec; 34(12):55–8 **(Rus)**
[Scientific-metric analysis of structure and age of references in the Soviet and foreign journals on neuropathology, neurosurgery and psychiatry] Nakhapetov BA. **Zh Nevropatol Psikhiatr** 1989;89(12):82–6 (Eng. Abstr.) **(Rus)**

BIBLIOGRAPHY OF MEDICINE

References: needed and unneeded [letter] Windsor DA. **Ann Intern Med** 1974 Apr;80(4):562–3
Automated bibliographic retrieval based on current topics in hepatology: hepatopix. Powsner SM, et al. **Comput Biomed Res** 1989 Dec;22(6):552–64
Reference list of biomedical and clinical publications. Uppsala 1988. **Ups J Med Sci Suppl** 1989;Suppl 47:1–114

BIBLIOGRAPHY, STATISTICAL see BIBLIOMETRICS

BIBLIOMETRICS

Bibliometrics and evaluation of research performance. Luukkonen T. **Ann Med** 1990 Jun;22(3):145–50
The research that radiologists do: perspective based on a survey of the literature. Holman BL. **Radiology** 1990 Aug; 176(2):329–32
Maternal–newborn nursing research published from 1977 to 1986. Beck CT. **West J Nurs Res** 1989 Oct;11(5):621–6
[Citation analysis of Acta Pharmacologica Sinica 1984–1989] Li CJ, et al. **Chung Kuo Yao Li Hsueh Pao** 1990 Jan; 11(1):93–6 (Eng. Abstr.) **(Chi)**
[Bibliometry, research evaluation with pitfalls—Danish research is behind the times] Axelsen NH. **Ugeskr Laeger** 1990 Jun 18;152(25):1801–2 **(Dan)**
[Evaluation of scientific quality using citation analysis and other bibliometric methods] Seglen PO. **Nord Med** 1989; 104(12):331–5, 341 (Eng. Abstr.) **(Nor)**

BIBLIOTHERAPY

Children's literature and child abuse. Pardeck JT. **Child Welfare** 1990 Jan–Feb;69(1):83–8
Screening procedure for use with a self-help book to overcome dating anxiety. Grossman KS, et al. **Psychol Rep** 1989 Oct;65(2):385–6

BICARBONATES

Influence of HCO3- on the postsynaptic actions of GABA at the crayfish neuromuscular synapse. Kaila K, et al. **Acta Physiol Scand Suppl** 1989;582:18
Sterile and pyrogen-free bicarbonate dialysate: a necessity for hemodialysis today. Mion CM, et al. **Adv Nephrol** 1990; 19:275–314 (152 ref.)
p-aminohippurate transport in the airways: role of Na+ and HCO3-. Cloutier MM. **Am J Physiol** 1989 Dec;257(6 Pt 1):C1108–12
Kinetic modeling of intradialytic and interdialytic pH shifts during and after acetate and bicarbonate hemodialysis. Monti JP, et al. **Artif Organs** 1990 Jun;14(3):191–5
L-lactate for high-efficiency hemodialysis: feasibility studies and a randomized comparison with acetate and bicarbonate. Dalal SP, et al. **Int J Artif Organs** 1989 Oct;12(10):611–7
Increased plasma levels of human atrial natriuretic factor in patients treated with acetate or bicarbonate hemodialysis [letter] Manno C, et al. **Nephron** 1989;53(3):290
Manganese(II) catalyzes the bicarbonate-dependent oxidation of amino acids by hydrogen peroxide and the amino acid–facilitated dismutation of hydrogen peroxide. Berlett BS, et al. **Proc Natl Acad Sci U S A** 1990 Jan; 87(1):389–93
Manganese-dependent disproportionation of hydrogen peroxide in bicarbonate buffer. Stadtman ER, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):384–8
Manganese(II)-bicarbonate-mediated catalytic activity for hydrogen peroxide dismutation and amino acid oxidation: detection of free radical intermediates. Yim MB, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):394–8
[Use of bicarbonate dialysis in patients with terminal renal failure] Kutsenko AI, et al. **Ter Arkh** 1989;61(6):97–9 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Intravenous bicarbonate and sodium chloride both prolong endurance during intense cycle ergometer exercise. Mitchell TH, et al. **Am J Med Sci** 1990 Aug;300(2):88–97
Dietary bicarbonate reduces rat distal nephron acidification evaluated in situ. Wesson DE. **Am J Physiol** 1990 Apr;258(4 Pt 2):F870–6
Blood biochemical response to sodium bicarbonate infusion during sublethal endotoxemia in ponies. Gossett KA, et al. **Am J Vet Res** 1990 Sep;51(9):1370–4
The role of bicarbonate and fluid loading in improving resuscitation from prolonged cardiac arrest with rapid manual chest compression CPR. Sanders AB, et al. **Ann Emerg Med** 1990 Jan;19(1):1–7
Effect of varying dialysate bicarbonate concentration on serum phosphate. Kobrin SM, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):423–5
Acetate-free biofiltration: hemodiafiltration with base-free dialysate. Zucchelli P, et al. **Blood Purif** 1990;8(1):14–22
Oxalate is overestimated in alkaline urines collected during administration of bicarbonate with no specimen pH adjustment. Lemann J Jr, et al. **Clin Chem** 1989 Oct; 35(10):2107–10
Feasibility of intracardiac injection of drugs during cardiac arrest. Jespersen HF, et al. **Eur Heart J** 1990 Mar; 11(3):269–74
Improvement of cervical mucus viscoelasticity and sperm penetration with sodium bicarbonate douching. Everhardt E, et al. **Hum Reprod** 1990 Feb;5(2):133–7
Effect of time of dosing relative to a meal on the raft formation of an anti-reflux agent. Washington N, et al. **J Pharm Pharmacol** 1990 Jan;42(1):50–3
Optimal correction of acidosis changes progression of dialysis osteodystrophy. Lefebvre A, et al. **Kidney Int** 1989 Dec; 36(6):1112–8
[Bicarbonate instead of lactate buffered substitution solution for continuous hemofiltration in intensive care] Olbricht CJ, et al. **Anasth Intensivther Notfallmed** 1990 Apr; 25(2):164–7 (Eng. Abstr.) **(Ger)**
[Development of a system for model-based decision support for determining the bicarbonate concentration needed for acute dialysis] Thews O, et al. **Biomed Tech (Berlin)** 1989; 34 Suppl:89–90 **(Ger)**
[Experience with the treatment of diabetic coma] Khazipova LG, et al. **Klin Med (Mosk)** 1990 Jan;68(1):106–8 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Inhalation of Carbex [letter] Mills JO. **Clin Radiol** 1990 Jan; 41(1):69–70
Mistaken injection of sodium bicarbonate [letter] Sheard C. **J Dermatol Surg Oncol** 1989 Dec;15(12):1301
Anginal attack following a sodium bicarbonate and hydrocortisone injection. Wu DJ, et al. **Jpn Heart J** 1990 Jan;31(1):109–13
Raised plasma aluminium in an infant on antacid [letter] Puntis JW, et al. **Lancet** 1989 Oct 14;2(8668):923
Apparent proteinuria as a consequence of sodium bicarbonate ingestion. Wechsler D, et al. **Pediatrics** 1990 Aug; 86(2):318–9
Gastric rupture due to excessive sodium bicarbonate ingestion. Downs NM, et al. **Scott Med J** 1989 Oct; 34(5):534–5

ANALYSIS

Effect of sodium bicarbonate and sodium starch glycolate on the in vivo disintegration of hard gelatin capsules—a radiological study in the dog. Marvola M, et al. **Acta Pharm Nord** 1989;1(6):355–62
Partial pressures of oxygen and carbon dioxide, pH, and concentrations of bicarbonate, lactate, and glucose in pleural fluid from horses. Brumbaugh GW, et al. **Am J Vet Res** 1990 Jul;51(7):1032–7
Effects of erythrocytes, bicarbonate, temperature and albumin on in vitro ionized calcium variations with pH. Kancir CB, et al. **Scand J Clin Lab Invest** 1989 Sep; 49(5):475–82
Simultaneous measurement of gastric acid and bicarbonate secretion in man. Sjövall H, et al. **Scand J Gastroenterol** 1989 Dec;24(10):1163–71

BLOOD

The pK'1 of the carbonic acid–bicarbonate buffer system in hemodialyzed patients. Kirschbaum B, et al. **Am J Med Sci** 1989 Oct;298(4):237–42
Umbilical cord blood gases for term healthy newborns. Miller JM Jr, et al. **Am J Perinatol** 1990 Apr;7(2):157–9
Criteria for measurement of dehydration [letter; comment] Poole SR. **Ann Emerg Med** 1990 Jun;19(6):730–1 Comment on: Ann Emerg Med 1989 Jul;18(7):755–7.
The anion gap of patients receiving bicarbonate maintenance hemodialysis. Oster JR, et al. **ASAIO Trans** 1989 Oct–Dec; 35(4):800–4
Effect of ammonium chloride on the bicarbonate buffer system in heat-stressed broilers. Bottje WG, et al. **Br Poult Sci** 1989 Dec;30(4):899–905
Pseudohypernatremia and increased HCO3- in serum preserved with sodium azide [letter] Iqbal SJ, et al. **Clin Chem** 1990 Mar;36(3):579–80
Ammonium and bicarbonate homeostasis in chronic liver disease. Häussinger D, et al. **Klin Wochenschr** 1990 Feb 1;68(3):175–82
[Significance of bicarbonate kinetics for 13CO2 respiratory gas analysis] Keles T, et al. **Beitr Infusionther** 1990; 25:374–88 (25 ref.) **(Ger)**
[Correlation between hemorheological and blood gas analytical indices in hypoxic-hypercapnic respiratory insufficiency] Porro F, et al. **Ric Clin Lab** 1989;19 Suppl 1:99–102 **(Ita)**
[Significance of plasma bicarbonate analysis in clinical tests] Kawashiro T. **Nippon Rinsho** 1989 Dec;48 Suppl:664–7 **(Jpn)**

DIAGNOSTIC USE

No effect of bicarbonate-induced alkalosis on urea synthesis in normal man. Bjerrum K, et al. **Scand J Clin Lab Invest** 1990 Apr;50(2):137–41

METABOLISM

Role of passive HCO3(-)-diffusion in duodenal acid-stimulated alkaline secretion. Vattay P, et al. **Acta Physiol Hung** 1989;73(2–3):251–5
Filtered load of buffer and renal H-ion secretion: mechanism of proximal tubule load dependence. Malnic G, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(4):455–65 (25 ref.)
Alkaline secretion by Necturus proximal duodenal mucosa. Bridén S, et al. **Acta Physiol Scand** 1989 Dec;137(4):481–7
Effects of acute administration of omeprazole or ranitidine on basal and vagally stimulated gastric acid secretion and alkalinization of the duodenum in anaesthetized cats. Fändriks L, et al. **Acta Physiol Scand** 1990 Feb;138(2):181–6
Hypothalamic inhibition of duodenal alkaline secretion via a sympatho-adrenergic mechanism in the rat. Fändriks L, et al. **Acta Physiol Scand** 1989 Nov;137(3):357–63
Duodenal alkaline secretion in rabbits: influence of artificial ventilation. Holm L, et al. **Acta Physiol Scand** 1990 Apr; 138(4):471–8
Studies of cholera toxin-induced changes of alkaline secretion and transepithelial potential difference in the rat intestine in vivo. Tantisira MH, et al. **Acta Physiol Scand** 1990 Jan;138(1):75–84
Intestinal fluid transport in the small intestine of normotensive and spontaneously hypertensive rats: the importance of enteric nerves, chloride and bicarbonate secretion. Tantisira MH, et al. **Acta Physiol Scand** 1990 Feb;138(2):213–9
Colchicine inhibits the effects of secretin on pancreatic duct cell tubulovesicles and HCO3- secretion in the pig. Veel T, et al. **Acta Physiol Scand** 1990 Apr;138(4):487–95
Amiloride and taurine inhibit cholate-induced HCO3(-)-rich choleresis in perfused rat livers. Anwer MS, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):G453–61
Effect of acid–base balance on biliary bicarbonate secretion in the isolated perfused guinea pig liver. Blot-Chabaud M, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):G863–72
Cl–HCO3 exchange and anion conductance in rat duodenal apical membrane vesicles. Brown CD, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):G661–7
Forskolin-induced HCO3- current across apical membrane of the frog corneal epithelium. Candia OA. **Am J Physiol** 1990 Aug;259(2 Pt 1):C215–23
H+ and HCO3- flux across apical surface of rat distal colon. Feldman GM, et al. **Am J Physiol** 1990 Jul;259(1 Pt

1):C35–40
Base secretion in rat distal colon: ionic requirements. Feldman GM, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):G825–32
Determinants of the transmembrane distribution of chloride in rat lymphocytes: role of Cl(–)–HCO3– exchange. Garcia–Soto JJ, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1108–16
Adaptation of HCO–3 and NH+4 transport in rat MTAL: effects of chronic metabolic acidosis and Na+ intake. Good DW. **Am J Physiol** 1990 May;258(5 Pt 2):F1345–53
Intrahypothalamic corticotropin–releasing factor elevates gastric bicarbonate and inhibits stress ulcers in rats. Gunion MW, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):G152–7
Role of HCO3– in regulation of cytoplasmic pH in ciliary epithelial cells. Helbig H, et al. **Am J Physiol** 1989 Oct; 257(4 Pt 1):C696–705
Effects of hypovolemia on blood flow, arterial [HCO3–], and HCO3– output in the rat duodenum. Jönson C, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):G179–83
Na(+)–H+ and Na(+)–dependent Cl(–)–HCO3– exchange control pHi in vascular smooth muscle. Kahn AM, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):C134–43
Role of endogenous cholecystokinin on vagally stimulated pancreatic secretion in dogs. Kim CK, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):G944–9
Characteristics of apical Cl–HCO3 exchanger of bicarbonate–secreting cells in turtle bladder. Kohn OF, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):F9–14
TRH–induced vagal stimulation of duodenal HCO–3 mediated by VIP and muscarinic pathways. Lenz HJ, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):G677–82
Effects of glucagon on H(+)–HCO3– transport in Henle's loop, distal tubule, and collecting ducts in the rat. Mercier O, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):F1003–14
Regulation of bicarbonate transport in rabbit ileum: pH stat studies. Sellin JH, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):G607–15
HCO3– transport in the toad lens epithelium is mediated by an electronegative Na(+)–dependent symport. Wolosin JM, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C855–61
Bicarbonate, chloride, and proton transport systems. **Ann N Y Acad Sci** 1989;574:1–505
H and HCO3 transport across the basolateral membrane of the parietal cell. Machen TE, et al. **Ann N Y Acad Sci** 1989;574:447–62
Structure and function of the band 3 Cl–/HCO3– transporter. Reithmeier RA, et al. **Ann N Y Acad Sci** 1989;574:75–83
Effects of aging on duodenal bicarbonate secretion. Kim SW, et al. **Ann Surg** 1990 Sep;212(3):332–7; discussion 337–8
Inhibition of chloride/bicarbonate antiports in monkey kidney cells (Vero) by non–steroidal anti–inflammatory drugs. Tønnessen TI, et al. **Biochem Pharmacol** 1989 Oct 15;38(20):3583–91
Effect of Li+ on the secretion of HCO3– in rat fundic tissue. Casciano C, et al. **Biochem Soc Trans** 1989 Dec; 17(6):1111–2
Water handling in the human distal colon in vitro: role of Na+, Cl– and HCO3–. Escobar E, et al. **Biochim Biophys Acta** 1990 Sep 7;1027(3):257–63
Extracellular alkaline–acid–alkaline transients in the rat spinal cord evoked by peripheral stimulation. Syková E, et al. **Brain Res** 1990 Apr 2;512(2):181–9
Optimal bone resorption by isolated rat osteoclasts requires chloride/bicarbonate exchange. Hall TJ, et al. **Calcif Tissue Int** 1989 Dec;45(6):378–80
Handling of tracer bicarbonate by the liver. The relative impermeability of hepatocyte cell membranes to the ionic species. Schwab AJ, et al. **Circ Res** 1989 Dec;65(6):1646–56
Modulation of the frequency of glucose–dependent bursts of electrical activity by HCO3/CO2 in rodent pancreatic B–cells: experimental and theoretical results. Carroll PB, et al. **Eur Biophys J** 1990;18(2):71–7
Recovery of [13C]–bicarbonate as respiratory 13CO2 in parenterally fed infants. Bresson JL, et al. **Eur J Clin Nutr** 1990 Jan;44(1):3–9
Proximal duodenal prostaglandin E2 release and mucosal bicarbonate secretion are altered in patients with duodenal ulcer. Bukhave K, et al. **Gastroenterology** 1990 Oct; 99(4):951–5
Central regulation of duodenal bicarbonate secretion. Dharmsathaphorn K, et al. **Gastroenterology** 1990 Jul; 99(1):278
Brain peptides and duodenal bicarbonate [letter; comment] Lenz HJ. **Gastroenterology** 1990 Jun;98(6):1728–30 Comment on: Gastroenterology 1989 Aug;97(2):412–20.
Stimulation of duodenal bicarbonate secretion in conscious rats by cerebral somatostatin–28. Role of neurohumoral pathways. Lenz HJ, et al. **Gastroenterology** 1990 Aug; 99(2):340–4
Human duodenal mucosal bicarbonate secretion. Evidence suggesting active transport under basal and stimulated conditions. Odes HS, et al. **Gastroenterology** 1990 Apr; 98(4):867–72
Sucralfate, bismuth subcitrate, and gastric HCO3 in humans [letter] **Gut** 1990 Aug;31(8):958–9
Duodenal mucosal bicarbonate secretion in man. Stimulation by acid and inhibition by the alpha 2–adrenoceptor agonist clonidine. Knutson L, et al. **Gut** 1989 Dec;30(12):1708–15
Effect of bismuth subcitrate and sucralfate on rat duodenal and human gastric bicarbonate secretion in vivo. Shorrock CJ, et al. **Gut** 1990 Jan;31(1):26–31
Extracorporeal bicarbonate space after bicarbonate or a bicarbonate–carbonate mixture in acidotic dogs. Kindig NB, et al. **J Appl Physiol** 1989 Dec;67(6):2331–4
Intracellular pH–regulatory mechanisms in pancreatic acinar cells. II. Regulation of H+ and HCO3– transporters by Ca2(+)–mobilizing agonists. Muallem S, et al. **J Biol Chem** 1990 Aug 5;265(22):12813–9
Intracellular pH–regulatory mechanisms in pancreatic acinar cells. I. Characterization of H+ and HCO3– transporters. Muallem S, et al. **J Biol Chem** 1990 Aug 5;265(22):12806–12
Ionic mechanism of Na+–HCO3– cotransport in rabbit renal basolateral membrane vesicles. Soleimani M, et al. **J Biol Chem** 1989 Nov 5;264(31):18302–8
Regulation of Na+/H+ and Cl–/HCO3– antiports in Vero cells. Tønnessen TI, et al. **J Cell Physiol** 1990 Apr; 143(1):178–87
Inhibition of bicarbonate absorption by peptide hormones and cyclic adenosine monophosphate in rat medullary thick ascending limb. Good DW. **J Clin Invest** 1990 Apr; 85(4):1006–13
Cerebroventricular calcitonin gene–related peptide inhibits rat duodenal bicarbonate secretion by release of norepinephrine and vasopressin. Lenz HJ, et al. **J Clin Invest** 1990 Jan;85(1):25–32
Luminal chloride modulates rat distal tubule bidirectional bicarbonate flux in vivo. Levine DZ, et al. **J Clin Invest** 1990 Jun;85(6):1793–8
Basolateral membrane sodium–independent Cl–/HCO3– exchanger in rat inner medullary collecting duct cell. Star RA. **J Clin Invest** 1990 Jun;85(6):1959–66
Augmented bicarbonate reabsorption by both the proximal and distal nephron maintains chloride–deplete metabolic alkalosis in rats. Wesson DE. **J Clin Invest** 1989 Nov; 84(5):1460–9
Basolateral membrane Na(+)–independent Cl–/HCO3– exchange in the inner stripe of the rabbit outer medullary collecting tubule. Hays SR, et al. **J Gen Physiol** 1990 Feb; 95(2):347–67
Apical electrogenic NaHCO3 cotransport. A mechanism for HCO3 absorption across the retinal pigment epithelium. Hughes BA, et al. **J Gen Physiol** 1989 Jul;94(1):125–50
Vagal and sympathetic control of gastric and duodenal bicarbonate secretion. Fändriks L, et al. **J Intern Med Suppl** 1990;732:103–7 (33 ref.)
Secretin–dependent HCO3– secretion from pancreas and liver. Grotmol T, et al. **J Intern Med Suppl** 1990;732:47–51 (30 ref.)
Human duodenal mucosal bicarbonate secretion—physiological and clinical aspects. Isenberg JI, et al. **J Intern Med Suppl** 1990;732:113–7
Leakage of HCO3– and mucosal restitution. Silen W. **J Intern Med Suppl** 1990;732:59–62 (26 ref.)
Role of alkaline secretion and cell restitution in duodenal mucosal protection. Starlinger M. **J Intern Med Suppl** 1990; 732:109–12
Changes in membrane conductances and areas associated with bicarbonate secretion in turtle bladder. Rich A, et al. **J Membr Biol** 1990 Feb;113(3):211–9
Bicarbonate permeability of the outwardly rectifying anion channel. Tabcharani JA, et al. **J Membr Biol** 1989 Dec; 112(2):109–22
Gabexate and camostat, synthetic proteinase inhibitors, as direct inducing factors of water and bicarbonate secretion in the isolated and blood–perfused dog pancreas. Horiuchi A, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):320–6
Characterization of alkaline response induced by cholinergic agents in the rat duodenum: involvement of M2 receptors and the calcium–dependent process. Takeuchi K, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):465–70
An inwardly directed electrogenic sodium–bicarbonate co–transport in leech glial cells. Deitmer JW, et al. **J Physiol (Lond)** 1989 Apr;411:179–94
Influence of GABA–gated bicarbonate conductance on potential, current and intracellular chloride in crayfish muscle fibres. Kaila K, et al. **J Physiol (Lond)** 1989 Sep; 416:161–81
Determination of bicarbonate output using pH deflection in the rat duodenum: influences of prostaglandins and cholinergic agents. Takeuchi K, et al. **Jpn J Pharmacol** 1990 Feb;52(2):225–32
The electrogenic Na/HCO3 cotransporter. Boron WF, et al. **Kidney Int** 1989 Sep;36(3):392–402 (59 ref.)
Effects of euvolemic and hypervolemic hyperbicarbonemia on segmental nephron HCO3 reabsorption in the newborn dog. Lorenz JM, et al. **Pediatr Res** 1990 Jun;27(6):604–11
Thrombin–induced cytosolic alkalinization in human platelets occurs without an apparent involvement of HCO3–/Cl– exchange. Clemens N, et al. **Pflugers Arch** 1990 Apr; 416(1–2):68–73
Stimulation of Cl/HCO3 exchange in rat duodenal brush border membrane vesicles by cAMP. Dunk CR, et al. **Pflugers Arch** 1989 Sep;414(6):701–5
Evidence of chloride/bicarbonate exchange mediating bicarbonate efflux from S3 segments of rabbit renal proximal tubule. Kondo Y, et al. **Pflugers Arch** 1990 Mar; 415(6):726–33
Influence of bicarbonate on the sensitivity of renin release to sodium chloride. Skøtt O, et al. **Pflugers Arch** 1989 Sep; 414(6):651–5
The effect of taste on gastric and pancreatic responses in dogs. Powers MA, et al. **Physiol Behav** 1990 Jun; 47(6):1295–7
Cholinergic–induced HCO3– loss from rat parotid acini. Nauntofte B, et al. **Proc Finn Dent Soc** 1989;85(4–5):307–17
Prostaglandins and transepithelial ionic transport. Candia OA, et al. **Prog Clin Biol Res** 1989;312:149–54 (26 ref.)
Deranged gastric mucus secretion in erosive prepyloric changes. Guslandi M, et al. **Scand J Gastroenterol** 1989 Oct;24(8):904–6
Rioprostil and the gastric mucus–bicarbonate barrier. Guslandi M, et al. **Scand J Gastroenterol Suppl** 1989; 164:92–5; discussion 95–6
Effect of rioprostil on the gastric acid and bicarbonate secretion in patients with gastric ulcer. Krastev Z, et al. **Scand J Gastroenterol Suppl** 1989;164:141–5
Effects of rioprostil on bicarbonate secretion by guinea–pig gastric mucosa in vitro. Petersen KU, et al. **Scand J Gastroenterol Suppl** 1989;164:26–33; discussion 33–4
Regulation and control of bicarbonate reabsorption in the proximal tubule. Cogan MG. **Semin Nephrol** 1990 Mar; 10(2):115–21 (33 ref.)
Bicarbonate absorption by the thick ascending limb of Henle's loop. Good DW. **Semin Nephrol** 1990 Mar;10(2):132–8 (42 ref.)
H+/base transport in the proximal straight tubule and thin descending limb of Henle. Mackovic–Basic M, et al. **Semin Nephrol** 1990 Mar;10(2):122–31 (75 ref.)
Basolateral membrane H/OH/HCO3 transport mechanisms along the nephron: role in control of pHi and transepithelial bicarbonate transport. Preisig PA, et al. **Semin Nephrol** 1990 Mar;10(2):104–14 (76 ref.)
Bicarbonate reabsorption and secretion in the cortical and outer medullary collecting tubule. Schuster VL. **Semin Nephrol** 1990 Mar;10(2):139–47 (110 ref.)
Influence of metiamide on "alkaline tide". Cherry KJ Jr, et al. **Surg Forum** 1978;29:421–2
[Defense mechanisms of the gastroduodenal mucosa: the role of mucus and bicarbonate in the development of peptic ulcer] Ainsworth MA, et al. **Ugeskr Laeger** 1989 Oct 16; 151(42):2708–13 (30 ref.) (Eng. Abstr.) **(Dan)**
[Determination of gastric bicarbonate secretion in the human without acid suppression] von Kleist D, et al. **Z Gastroenterol** 1989 Aug;27(8):412–7 (Eng. Abstr.) **(Ger)**
[Cl–, HCO3–, and H+ transport in collecting duct] Matsuzaki K, et al. **Nippon Rinsho** 1989 Jul;47(7):1561–72 (81 ref.) **(Jpn)**
[Bicarbonate secretion in the mucosal defensive mechanism of the duodenum. Acid neutralization with HCO3– in the lumen and mucus gel] Takeuchi K. **Yakugaku Zasshi** 1990 Feb;110(2):85–104 (74 ref.) (Eng. Abstr.) **(Jpn)**

PHARMACOKINETICS

CAPD with bicarbonate solution. Feriani M, et al. **Adv Exp Med Biol** 1989;260:139–47
Influence of increased metabolic rate on [13C]bicarbonate washout kinetics. Barstow TJ, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):R163–71
Effects of intracellular calcium on proximal bicarbonate absorption. Liu FY, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):F451–7
Role of protein kinase C in proximal bicarbonate absorption and angiotensin signaling. Liu FY, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):F927–33
Effect of glucose on the kinetics of bicarbonate reabsorption in the early and middle proximal tubule. Nascimento–Gomes G, et al. **Braz J Med Biol Res** 1990; 23(1):79–85
Calcium and phosphate uptake of human dental enamel treated with sodium bicarbonate. Goldberg M, et al. **J Biol Buccale** 1990 Mar;18(1):55–8
Cytosolic pH regulation in osteoblasts. Regulation of anion exchange by intracellular pH and Ca2+ ions. Green J, et al. **J Gen Physiol** 1990 Jan;95(1):121–45
Chloride and bicarbonate transport in fetal red cells. Brahm J, et al. **J Physiol (Lond)** 1989 Dec;419:141–56
Rheogenic sodium–bicarbonate co–transport across the retinal membrane of the frog retinal pigment epithelium. La Cour M. **J Physiol (Lond)** 1989 Dec;419:539–53
The concept of bicarbonate distribution space: the crucial role of body buffers. Fernandez PC, et al. **Kidney Int** 1989 Nov;36(5):747–52 (15 ref.)
Transcellular bicarbonate transport in rabbit gallbladder epithelium: mechanisms and effects of cyclic AMP. Petersen KU, et al. **Pflugers Arch** 1990 May;416(3):312–21
[Transport of chloride, bicarbonate, and proton in the proximal tubules] Sasaki S. **Nippon Rinsho** 1989 Jul; 47(7):1513–8 **(Jpn)**

PHARMACOLOGY

Difference between hypertonic NaCl and NaHCO3 as osmotic diuretics in dog kidneys. Ostensen J, et al. **Acta Physiol Scand** 1989 Oct;137(2):177–87
pH regulation and response to AVP in A10 cells differ markedly in the presence vs. absence of CO2–HCO3–. Kikeri D, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):C471–83
Functional and metabolic responses of isolated hearts to acidosis: effects of sodium bicarbonate and Carbicarb. Shapiro JI. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1835–9
Activation of mammalian folylpolyglutamate synthetase by sodium bicarbonate. Bolanowska WE, et al. **Arch Biochem Biophys** 1990 Sep;281(2):198–203

Effects of bicarbonate-containing versus lactate-containing peritoneal dialysis solutions on superoxide production by human neutrophils. Manahan FJ, et al. **Artif Organs** 1989 Dec;13(6):495-7

Epithelial electrolyte transport: interrelationships between H+, HCO3- and Cl-. Case RM, et al. **Biochem Soc Trans** 1989 Oct;17(5):803-5

Effects of a membrane-bound trypsin-like proteinase and seminal proteinase inhibitors on the bicarbonate-sensitive adenylate cyclase in porcine sperm plasma membranes. Okamura N, et al. **Biochim Biophys Acta** 1990 Jul 20; 1035(1):83-9

The enhancing effects of anion channel blockers on sperm activation by bicarbonate. Tajima Y, et al. **Biochim Biophys Acta** 1990 Jun 20;1034(3):326-32

Bicarbonate dependence of cAMP accumulation induced by phorbol esters in hamster spermatozoa. Visconti PE, et al. **Biochim Biophys Acta** 1990 Sep 1;1054(2):231-6

Gastric pH and endoscopic appearance after Algicon administration. Lambert JR, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:25-8; discussion 35-6

Comparative intragastric pH profile of Algicon versus Gaviscon. Stoddard CJ, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:29-34; discussion 35-6

Brain pH effects of NaHCO3 and Carbicarb in lactic acidosis. Kucera RR, et al. **Crit Care Med** 1989 Dec;17(12):1320-3

Effects of bicarbonate therapy on tissue oxygenation during resuscitation of hemorrhagic shock. Mäkisalo HJ, et al. **Crit Care Med** 1989 Nov;17(11):1170-4

Bicarbonate and DIDS effects on intracellular potential difference in rabbit ciliary epithelium. Chu TC, et al. **Curr Eye Res** 1990 Mar;9(3):233-9

Effects of ambient bicarbonate, phosphate and carbonic anhydrase inhibitors on fluid transport across rabbit corneal endothelium. Kuang KY, et al. **Exp Eye Res** 1990 May; 50(5):487-93

Differential sensitivity of bicarbonate-reversible formate effects on herbicide-resistant mutants of Synechocystis 6714. Govindjee, et al. **FEBS Lett** 1990 Jul 16;267(2):273-6

Intracellular pH shifts capable of uncoupling cultured oligodendrocytes are seen only in low HCO3- solution. Kettenmann H, et al. **GLIA** 1990;3(2):110-7

Bicarbonate inhibition of Saccharomyces cerevisiae and Hansenula wingei growth in apple juice. Curran DM, et al. **Int J Food Microbiol** 1989 Feb;8(1):1-9

Cardiac effects of carbon dioxide-consuming and carbon dioxide-generating buffers during cardiopulmonary resuscitation. Gazmuri RJ, et al. **J Am Coll Cardiol** 1990 Feb;15(2):482-90

Effect of sodium bicarbonate on racing Standardbreds. Lawrence L, et al. **J Anim Sci** 1990 Mar;68(3):673-7

Extracorporeal bicarbonate space after bicarbonate or a bicarbonate-carbonate mixture in acidotic dogs. Kindig NB, et al. **J Appl Physiol** 1989 Dec;67(6):2331-4

Effects of sodium bicarbonate and sodium sesquicarbonate on animal performance, ruminal metabolism, and systemic acid-base status. Ghorbani GR, et al. **J Dairy Sci** 1989 Aug;72(8):2039-45

Effect of bicarbonate on the growth of Actinobacillus actinomycetemcomitans in anaerobic fructose-limited chemostat culture. Ohta H, et al. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3485-95

Sodium bicarbonate and sodium chloride: effects on blood pressure and electrolyte homeostasis in normal and hypertensive man. Luft FC, et al. **J Hypertens** 1990 Jul; 8(7):663-70

Effects of high protein diet and sodium bicarbonate supplementation on calcium metabolism in rats. Funaba M, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Oct;35(5):495-503

The efficacy of ceruminolytics [letter; comment] Freedman A. **J Otolaryngol** 1990 Apr;19(2):150-1 Comment on: J Otolaryngol 1989 Oct;18(6):263-7.

The effect of air abrasive polishing on blood pH and electrolyte concentrations in healthy mongrel dogs. Snyder JA, et al. **J Periodontol** 1990 Feb;61(2):81-6

Electrophysiological properties of rat CA1 pyramidal neurones in vitro modified by changes in extracellular bicarbonate. Church J, et al. **J Physiol (Lond)** 1989 Aug; 415:85-108

Bicarbonate-dependent action of Bay K 8644 in the smooth muscle of the rat vas deferens. Suzuki N, et al. **Jpn J Pharmacol** 1990 Mar;52(3):413-20

Bicarbonate and cytoplasmic pH [letter; comment] **Lancet** 1990 Jun 30;335(8705):1586-8 Comment on: Lancet 1990 May 26;335(8700):1243-6.

Bicarbonate and cytoplasmic pH [letter] Ritter JM, et al. **Lancet** 1990 Aug 11;336(8711):372-3

Paradoxical effect of bicarbonate on cytoplasmic pH [see comments] Ritter JM, et al. **Lancet** 1990 May 26; 335(8700):1243-6 Comment in: Lancet 1990 Jun 30;335(8705):1586-8.

Hypertonic sodium bicarbonate partially reverses QRS prolongation due to flecainide in rats. Keyler DE, et al. **Life Sci** 1989;45(17):1575-80

Effects of sodium bicarbonate on nitrogen metabolism and ketone bodies during very low energy protein diets in obese subjects. Gougeon-Reyburn R, et al. **Metabolism** 1989 Dec; 38(12):1222-30

Bicarbonate dependence of glutamate receptor activation by beta-N-methylamino-L-alanine: channel recording and study with related compounds. Weiss JH, et al. **Neuron** 1989 Sep;3(3):321-6

The presence of HCO3- does not inhibit alpha-adrenergic increases in proximal tubular intracellular pH. Gesek FA, et al. **Renal Physiol Biochem** 1989 Sep-Dec;12(5-6):365-70

The biological activity of adrenaline after injection through an intravenous cannula containing alkaline buffer. Gedeborg R, et al. **Resuscitation** 1989 Oct;18(1):49-58

L-cysteine, a bicarbonate-sensitive endogenous excitotoxin. Olney JW, et al. **Science** 1990 May 4;248(4955):596-9

Enhancement of gastric mucosal tolerance to hydrogen ions (H+) by intraarterial infusion of sodium bicarbonate. Cheung LY. **Surg Forum** 1978;29:408-9

[Study on the effects of Dobells' solution] Song JH, et al. **Ciung Hua Hu Li Tsa Chih** 1989 Aug;24(8):470-2 **(Chi)**

[Pharmacology of cardiopulmonary resuscitation] Hoffmann AC, et al. **Ann Fr Anesth Reanim** 1990;9(3):204-7 (17 ref.) (Eng. Abstr.) **(Fre)**

[pH gradient support and antacid action of gastroesophageal coating agents. In vitro pharmacologic study using a model of "the artificial stomach"] Vatier J, et al. **Gastroenterol Clin Biol** 1990;14(5):414-22 (Eng. Abstr.) **(Fre)**

[Differential effect of sodium bicarbonate on disposition of sulfadimethoxine and sulfisoxazole in rabbits] Imamura Y, et al. **Yakugaku Zasshi** 1989 Jun;109(6):432-6 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Treatment of acute esophageal food impaction with a combination of glucagon, effervescent agent, and water. Kaszar-Seibert DJ, et al. **AJR Am J Roentgenol** 1990 Mar; 154(3):533-4

Sodium bicarbonate in the treatment of subtypes of acute lactic acidosis: physiologic considerations. Hindman BJ. **Anesthesiology** 1990 Jun;72(6):1064-76 (129 ref.)

Lactic acidosis [letter] **Ann Intern Med** 1990 Aug 1; 113(3):254-6

Bicarbonate does not improve hemodynamics in critically ill patients who have lactic acidosis. A prospective, controlled clinical study. Cooper DJ, et al. **Ann Intern Med** 1990 Apr 1;112(7):492-8

Management of gastro-oesophageal reflux disorders. Focus on algicon. Proceedings of a symposium. Sheffield, UK, 17th September 1988. **Br J Clin Pract Symp Suppl** 1989 Feb;66:1-64

Gastro-oesophageal pH measurements during reflux induced by provocative tests. Baldi F, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:10-4; discussion 35-6

Twenty-four-hour oesophageal pH monitoring of reflux episodes: effect of Algicon. Devis G, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:15-7; discussion 35-6

Management of gastro-oesophageal reflux disorders. Algicon: a product overview. Gimbol MJ. **Br J Clin Pract Symp Suppl** 1989 Feb;66:2-4; discussion 35-6

Algicon in the management of gastro-oesophageal reflux. Lambert JR, et al. **Br J Clin Pract Symp Suppl** 1989 Feb; 66:56-8; discussion 61-4

Efficacy and tolerance of Algicon in patients with reflux oesophagitis. Lancaster Smith MJ, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:38-42; discussion 61-4

Comparative study of Algicon suspension and magnesium trisilicate mixture in the treatment of reflux dyspepsia of pregnancy. Lang GD, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:48-51; discussion 61-4

The alginate raft: a scintigraphic evaluation. McKay AP, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:20-4; discussion 35-6

Comparison of Algicon and ranitidine in the therapy of reflux oesophagitis: preliminary results. Pace F, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:59-60; discussion 61-4

Effects of Algicon on the ultrastructure of the mucosa of subjects with reflux oesophagitis. Trabucchi E, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:43-7; discussion 61-4

Comparative study of Algicon versus Gaviscon in symptomatic gastro-oesophageal reflux. Ward AE. **Br J Clin Pract Symp Suppl** 1989 Feb;66:52-5; discussion 61-4

Face-mask CPAP and sodium bicarbonate infusion in acute, severe asthma and metabolic acidosis. Mansel JK, et al. **Chest** 1989 Oct;96(4):943-4

Alkali therapy of diabetic ketoacidosis: biochemical, physiologic, and clinical perspectives. Riley LJ Jr, et al. **Diabetes Metab Rev** 1989 Dec;5(8):627-36 (51 ref.)

Controlled trial of pyrogastrone and cimetidine in the treatment of reflux oesophagitis. Maxton DG, et al. **Gut** 1990 Mar;31(3):351-4

Intradialytic variations in hemoglobin affinity for oxygen during bicarbonate dialysis and hemodiafiltration [letter] Soliani F, et al. **Int J Artif Organs** 1990 May;13(5):321-2

Aquagenic pruritus: treatment with sodium bicarbonate and evidence for a seasonal form [letter; comment] Bircher AJ. **J Am Acad Dermatol** 1989 Oct;21(4 Pt 1):817 Comment on: J Am Acad Dermatol 1988 May;18(5 Pt 1):1081-3.

Treatment of acute chlorine gas inhalation with nebulized sodium bicarbonate. Vinsel PJ. **J Emerg Med** 1990 May-Jun;8(3):327-9

Alkaline diuresis for acute poisoning with chlorophenoxy herbicides and ioxynil. Flanagan RJ, et al. **Lancet** 1990 Feb 24;335(8687):454-8

Effect of alkalinization and fluids on survival in acute, non-hypoxic respiratory acidosis. Carroll GC. **Resuscitation** 1990 Jun;19(3):253-70

[Clinical evaluation of 2 years of hemodiafiltration using bicarbonate] Petracca EG, et al. **Clin Ter** 1990 May 15; 133(3):165-71 (Eng. Abstr.) **(Ita)**

[Distal tubular acidosis. Description of a classic case and of a type 4 case in neonatal single kidney] Demi M, et al. **Pediatr Med Chir** 1989 Nov-Dec;11(6):713-5 (Eng. Abstr.) **(Ita)**

URINE

Physiologic studies of urinary drained pancreaticoduodenal grafts in humans. Nghiem DD, et al. **J Surg Res** 1990 Jan; 48(1):72-7

BICUCULLINE

Laminar analysis of bicuculline-induced epileptiform activity in area 17 of the awake macaque. Schroeder CE, et al. **Brain Res** 1990 May 7;515(1-2):326-30

Excitatory amino acid antagonists protect mice against seizures induced by bicuculline. Turski WA, et al. **Brain Res** 1990 Apr 23;514(1):131-4

Alterations in cytosolic free calcium in the cat cortex during bicuculline-induced epilepsy. Uematsu D, et al. **Brain Res Bull** 1990 Feb;24(2):285-8

Electroencephalographic evidence for a dose-related biphasic effect of morphine on bicuculline-induced seizures in the rat. Massotti M, et al. **Epilepsy Res** 1989 Sep-Oct; 4(2):81-9

Dual species dependent effect of dihydroergosine on the convulsions induced by GABA antagonists. Peričić D, et al. **J Neural Transm Gen Sect** 1990;79(1-2):125-9

Paroxysmal depolarization shifts induced by bicuculline in CA3 neurons of hippocampal slices: suppression by the organic calcium antagonist verapamil. Straub H, et al. **Neurosci Lett** 1990 Mar 26;111(1-2):99-101

Lesions of the deep prepiriform cortex ('area tempestas') in rats do not affect the convulsant action of systemically administered bicuculline. Wahnschaffe U, et al. **Neurosci Lett** 1990 Jan 1;108(1-2):161-6

ANALOGS & DERIVATIVES

Hypothalamic GABA and sympathetic regulation in spontaneously hypertensive rats. Wible JH Jr, et al. **Hypertension** 1989 Dec;14(6):623-8

Adenosine A1 receptor activation mediates suppression of (-) bicuculline methiodide-induced seizures in rat prepiriform cortex. Franklin PH, et al. **J Pharmacol Exp Ther** 1989 Dec;251(3):1229-36

METABOLISM

Regionally specific alterations in the low-affinity GABAA receptor following perinatal exposure to diazepam. Gruen RJ, et al. **Brain Res** 1990 Apr 23;514(1):151-4

PHARMACOLOGY

Gastric effects of TRH analogue and bicuculline injected into dorsal motor vagal nucleus in cats. Feng HS, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):G321-6

Effects of bicuculline and strychnine on synaptic inputs to edge cells during fictive locomotion. Alford S, et al. **Brain Res** 1990 Feb 12;509(1):137-40

Spinal mediation of the increases in arterial pressure and heart rate in response to intrathecal administration of bicuculline. Hong Y, et al. **Brain Res** 1990 Apr 9;513(1):86-93

Lateral hypothalamus-zona incerta region as an output station for the catalepsy induced by the blockade of striatal D1 and D2 dopamine receptors. Ossowska K, et al. **Brain Res** 1990 Jan 8;506(2):311-5

GABA-mediated regulation of feline aggression elicited from midbrain periaqueductal gray. Shaikh MB, et al. **Brain Res** 1990 Jan 15;507(1):51-6

Blockade of inhibition in a pathway with dual excitatory and inhibitory action unmasks a capability for LTP that is otherwise not expressed. Steward O, et al. **Brain Res** 1990 May 21;516(2):292-300

Behavioral effects of neurotensin applied to periventricular structures of rats. Da-Silva SL, et al. **Braz J Med Biol Res** 1989;22(6):711-5

Suppression of spontaneous generalized non-convulsive seizures in the rat by microinjection of GABA antagonists into the superior colliculus. Depaulis A, et al. **Epilepsy Res** 1990 Apr;5(3):192-8

Antagonism between intracerebroventricularly administered N-methyl-D-aspartate and bicuculline methiodide in induction of clonic seizures in mice. Kapetanovic IM, et al. **Epilepsy Res** 1990 Mar;5(2):112-6

The role of bicuculline, aminooxyacetic acid and gabaculine in the modulation of ethanol-induced motor impairment. Hinko CN, et al. **Eur J Pharmacol** 1990 Jul 3;182(2):261-71

Bicuculline actions on isolated rat atria, mouse vas-deferens and guinea-pig ileum are unrelated to GABA A receptor blockade. Bartolini A, et al. **Gen Pharmacol** 1990; 21(3):277-84

Effects of excitatory amino acid antagonists on synaptic responses of supraoptic neurons in slices of rat hypothalamus. Gribkoff VK, et al. **J Neurophysiol** 1990 Jan;63(1):60–71

Bicuculline- and phaclofen-sensitive components of N-methyl-D-aspartate-induced hyperpolarizations in rat dorsolateral septal nucleus neurones. Gallagher JP, et al. **J Physiol (Lond)** 1989 Nov;418:367–77

Effect of chronic ivermectin treatment on GABA receptor function in ethanol withdrawal-seizure prone and resistant mice. Diggs HE, et al. **Lab Anim Sci** 1990 Jan;40(1):68–71

Effects of GABA-ergic agents on spontaneous non-convulsive epilepsy, EEG and behaviour, in the WAG/RIJ inbred strain of rats. Peeters BW, et al. **Life Sci** 1989;45(13):1171–6

Biophysical and pharmacological properties of cloned GABAA receptor subunits expressed in Xenopus oocytes. Levitan ES, et al. **Neuron** 1988 Nov;1(9):773–81

Peripheral administration of picrotoxin and bicuculline stimulates in vivo somatostatin release from rat median eminence. Arancibia S, et al. **Neurosci Lett** 1990 Mar 26; 111(1-2):211–6

Diazepam enhances bicuculline-induced increase of t-[35S]butylbicyclophosphorothionate binding in unwashed membrane preparations from rat cerebral cortex. Concas A, et al. **Neurosci Lett** 1990 Apr 20;112(1):87–91

On the properties and origin of the GABAB inhibitory postsynaptic potential recorded in morphologically identified projection cells of the cat dorsal lateral geniculate nucleus. Soltesz I, et al. **Neuroscience** 1989;33(1):23–33

Chlordiazepoxide and valproate enhancement of saline drinking by nondeprived rats: effects of bicuculline, picrotoxin and Ro15-1788. Shephard RA, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):285–90

Intranigral GABAergic drug effects on striatal dopamine activity. Sperber EF, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):1067–70

[Effect of electroacupuncture on nociceptive responses after topical application of bicuculline in the rat] Xu W, et al. **Chen Tzu Yen Chiu** 1989;14(3):315–8 (Eng. Abstr.) **(Chi)**

[Effects of an endogenous GABA receptor binding inhibitor on rat blood pressure] Cai NS, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar;10(2):101–3 (Eng. Abstr.) **(Chi)**

[Influence of microinjection of bicuculline into ventrolateral medulla on the suppression of cardiac function induced by diazepam in rabbits] Fang ZB, et al. **Sheng Li Hsueh Pao** 1989 Aug;41(4):319–27 (Eng. Abstr.) **(Chi)**

[The action of bicuculline and picrotoxin on the fast and slow IPSPs of the pyramidal neurons in isolated slices of rat hippocampus] Gerasimov VD, et al. **Neirofiziologiia** 1990;22(1):44–54 (Eng. Abstr.) **(Rus)**

BICUSPID

Resorption of premolar roots by ectopic canines. Postlethwaite KM. **Br Dent J** 1989 Dec 9-23;167(11):397–8

Double supernumerary impacted premolar teeth: case report. Lesan WR, et al. **East Afr Med J** 1989 Jul;66(7):489–90

Severe vertical overlap: a modified method of treatment. Yaffe A, et al. **J Prosthet Dent** 1989 Dec;62(6):638–41

Extreme distal migration of premolar in association with an unusual fracture of the mandible. Clark S, et al. **Oral Surg Oral Med Oral Pathol** 1989 Nov;68(5):563–4 (7 ref.)

Multiple idiopathic external root resorption. Postlethwaite KR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Nov; 68(5):640–3

[Dental caries in the support area and the therapeutic problem of the positioning of the canines and premolars in the dental arches] Legović M. **Fortschr Kieferorthop** 1989 Dec; 50(6):577–83 (Eng. Abstr.) **(Ger)**

[The use of fluorine-containing coatings for isolating fissures of the molars and premolars to prevent caries] Maksimovskiĭ IuM, et al. **Stomatologiia (Mosk)** 1989 Jul-Aug;68(4):14–5 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Supplemental and congenitally absent premolar teeth [letter] Pearson MH, et al. **Br Dent J** 1990 Jul 7;169(1):8

Gemination of a maxillary premolar. Chen RJ, et al. **Oral Surg Oral Med Oral Pathol** 1990 May;69(5):656

[Superior fourth with supernumerary root] Zoccola GC, et al. **Minerva Stomatol** 1989 Nov;38(11):1179–81 (Eng. Abstr.) **(Ita)**

ANATOMY & HISTOLOGY

Comparative examination for the determination of the individual contour-curve from the incisors and from the premolar region. Nägeri H, et al. **Anat Anz** 1990; 170(3-4):163–70

Anatomy of cusps of posterior teeth and their fracture potential. Khers SC, et al. **J Prosthet Dent** 1990 Aug; 64(2):139–47

Number and location of occlusal contacts in intercuspal position. Korioth TW. **J Prosthet Dent** 1990 Aug; 64(2):206–10

[Crown wall thickness, external dimensions and solid pulp substance relationships of swine teeth] Klinke G, et al. **Anat Anz** 1990;170(2):137–40 (Eng. Abstr.) **(Ger)**

[The dimensions of the roots and root canals of human premolars and molars] Pavliuk VM, et al. **Stomatologiia (Mosk)** 1990 Mar-Apr;69(2):12–3 (Eng. Abstr.) **(Rus)**

CYTOLOGY

[Scanning electron microscopic studies of the para-odontoblast region of juvenile permanent teeth] Wegner H, et al. **Zahn Mund Kieferheilkd** 1989;77(5):446–51 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Simulation of natural enamel caries in vitro with methylcellulose acid gels: effect of addition of calcium and phosphate ions. Kotsanos N, et al. **J Biol Buccale** 1989 Sep;17(3):159–65

GROWTH & DEVELOPMENT

[The effects of a premature deciduous molar loss on the following premolars] Tränkmann J. **Fortschr Kieferorthop** 1990 Apr;51(2):129–31 **(Ger)**

PATHOLOGY

Interproximal grooving and task activity in Australia. Brown T, et al. **Am J Phys Anthropol** 1990 Apr;81(4):545–53

Root morphology of mandibular premolars in human 45,X females. Varrela J. **Arch Oral Biol** 1990;35(2):109–12

Investigation of premolar rotation in a group of 15-year-old Norwegian children. McMullan RE, et al. **Eur J Orthod** 1990 Aug;12(3):311–5

PHYSIOLOGY

[The finite element analysis of the bicuspid and molar of mandible] Zhao YF, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Sep;20(3):311–4 (Eng. Abstr.) **(Chi)**

[Dental adhesive and sealing products submitted to biological in vivo control] Virgillito A, et al. **J Biol Buccale** 1989 Sep;17(3):209–24 (65 ref.) (Eng. Abstr.) **(Fre)**

[A biomechanical test of the rigidity of pin fixation in the root canals of human premolars and molars] Pavliuk VM, et al. **Stomatologiia (Mosk)** 1990 May-Jun;69(3):56–7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Premature eruption of the premolars. Camm JH, et al. **ASDC J Dent Child** 1990 Mar-Apr;57(2):128–33

Orientation and eruptive patterns of the mandibular second premolar. Spyropoulos ND. **Oral Surg Oral Med Oral Pathol** 1990 May;69(5):642–6

RADIOGRAPHY

Inverse tooth eruption. Arpak MN. **Oral Surg Oral Med Oral Pathol** 1990 Jul;70(1):127

SURGERY

The effect of mandibular first premolar extraction on third molar space. Richardson ME. **Angle Orthod** 1989 Winter; 59(4):291–4

Long-term spontaneous changes following removal of all first premolars in Class I cases with crowding. Persson M, et al. **Eur J Orthod** 1989 Aug;11(3):271–82

TRANSPLANTATION

Case report: A.J. Premolar autotransplantation—eight years later. Righellis SE. **Angle Orthod** 1990 Fall;60(3):235–9

Autotransplantation of premolar teeth to replace missing maxillary central incisors. Bowden DE, et al. **Br J Orthod** 1990 Feb;17(1):21–8

A long-term study of 370 autotransplanted premolars. Part II. Tooth survival and pulp healing subsequent to transplantation. Andreasen JO, et al. **Eur J Orthod** 1990 Feb;12(1):14–24

A long-term study of 370 autotransplanted premolars. Part III. Periodontal healing subsequent to transplantation. Andreasen JO, et al. **Eur J Orthod** 1990 Feb;12(1):25–37

A long-term study of 370 autotransplanted premolars. Part I. Surgical procedures and standardized techniques for monitoring healing. Andreasen JO, et al. **Eur J Orthod** 1990 Feb;12(1):3–13

A long-term study of 370 autotransplanted premolars. Part IV. Root development subsequent to transplantation. Andreasen JO, et al. **Eur J Orthod** 1990 Feb;12(1):38–50

BICUSPID VALVE see **MITRAL VALVE**

BICYCLE ERGOMETRY TEST see **EXERCISE TEST**

BICYCLING

An analysis of fatal bicycle accidents in Victoria (Australia) with a special reference to nighttime accidents. Hoque MM. **Accid Anal Prev** 1990 Feb;22(1):1–11

Bicycle accidents and injuries: a pilot study comparing hospital- and police-reported data. Stutts JC, et al. **Accid Anal Prev** 1990 Feb;22(1):67–78

Attitudes toward bicycle helmet ownership and use by school-age children. DiGuiseppi CG, et al. **Am J Dis Child** 1990 Jan;144(1):83–6

A guide to GMT (Green Medical Transport). Head S. **BMJ** 1989 Dec 23-30;299(6715):1621–2

The bicycle path to Rome. Lockwood D, et al. **BMJ** 1989 Dec 23-30;299(6715):1588–9

Bicycle accidents among children in the urban environment. Joly MF, et al. **Can J Public Health** 1989 Sep-Oct; 80(5):351–4

Use of augmented feedback for the modification of the pedaling mechanics of cyclists [see comments] Sanderson DJ, et al. **Can J Sport Sci** 1990 Mar;15(1):38–42 Comment in: Can J Sport Sci 1990 Mar;15(1):4–6.

Perceptual and physiological responses to cycling and running in groups of trained and untrained subjects. Hassmén P. **Eur J Appl Physiol** 1990;60(6):445–51

Stenotic intimal thickening of the external iliac artery in competition cyclists. Rousselet MC, et al. **Hum Pathol** 1990 May;21(5):524–9

Specificity of test duration when assessing the anaerobic lactacid capacity of high-performance track cyclists. Craig NP, et al. **Int J Sports Med** 1989 Aug;10(4):237–42

Caffeine ingestion prior to incremental cycling to exhaustion in recreational cyclists. Flinn S, et al. **Int J Sports Med** 1990 Jun;11(3):188–93

Reduction of Hb levels during the racing season in nonsideropenic professional cyclists. Guglielmini C, et al. **Int J Sports Med** 1989 Oct;10(5):352–6

Lactate, oxygen uptake, and cycling performance in triathletes. O'Toole ML, et al. **Int J Sports Med** 1989 Dec; 10(6):413–8

Gastric emptying with repeated drinking during running and bicycling. Rehrer NJ, et al. **Int J Sports Med** 1990 Jun; 11(3):238–43

Adequacy of vitamin supply under maximal sustained workloads: the Tour de France. Saris WH, et al. **Int J Vitam Nutr Res Suppl** 1989;30:205–12 (25 ref.)

An evaluation of dietary intakes of triathletes: are RDAs being met? Green DR, et al. **J Am Diet Assoc** 1989 Nov; 89(11):1653–4

Dietary status of trained female cyclists. Keith RE, et al. **J Am Diet Assoc** 1989 Nov;89(11):1620–3

Effects of orthoses on selected physiologic parameters in cycling. Anderson JC, et al. **J Am Podiatr Med Assoc** 1990 Mar;80(3):161–6

Energy expenditure during bicycling. McCole SD, et al. **J Appl Physiol** 1990 Feb;68(2):748–53

Multivariable optimization of cycling biomechanics. Gonzalez H, et al. **J Biomech** 1989;22(11-12):1151–61

Goniometric measurement of hip motion in cycling while standing. Hull ML, et al. **J Biomech** 1990;23(7):687–703

Core temperature response to immersed bicycle ergometer exercise at water temperatures of 21 degrees, 25 degrees, and 29 degrees C. Israel DJ, et al. **J Burn Care Rehabil** 1989 Jul-Aug;10(4):336–45

Bicycle safety knowledge and behavior in school age children. Kimmel SR, et al. **J Fam Pract** 1990 Jun; 30(6):677–80

Body constitution and muscle strength of becak drivers in Bandung City, Indonesia. Hyodo K. **J Hum Ergol (Tokyo)** 1988 Dec;17(2):193–200

Systemic and forearm vascular resistance changes after upright bicycle exercise in man. Coats AJ, et al. **J Physiol (Lond)** 1989 Jun;413:289–98

Anaerobic threshold in runners and cyclists. Brettoni M, et al. **J Sports Med Phys Fitness** 1989 Sep;29(3):230–3

The validity of a portable accelerometer for estimating energy expenditure in bicycle riding. Hunter GR, et al. **J Sports Med Phys Fitness** 1989 Sep;29(3):218–22

Biochemical changes in blood during the long and short triathlon competition. Jürimäe T, et al. **J Sports Med Phys Fitness** 1989 Dec;29(4):305–9

M-mode echocardiography study of twenty-two top class racing cyclists. Sepúlveda F, et al. **J Sports Med Phys Fitness** 1989 Jun;29(2):136–40

Increased dietary carbohydrate and endurance during single-leg cycling using a limb with normal muscle glycogen concentration. Hardman AE, et al. **J Sports Sci** 1989 Summer;7(2):127–38 (33 ref.)

An anthropometric analysis of elite Australian track cyclists. McLean BD, et al. **J Sports Sci** 1989 Winter;7(3):247–55

Intermittent leg ischaemia during competition cycling [letter] Mosimann F, et al. **Lancet** 1990 Sep 22;336(8717):746

Intermittent leg ischaemia during competition cycling [letter] Pils K, et al. **Lancet** 1990 Jul 21;336(8708):189

Nutritional concerns of the ultraendurance triathlete. Applegate E. **Med Sci Sports Exerc** 1989 Oct;21(5 Suppl):S205–8 (33 ref.)

Cardiac considerations in the triathlete. Douglas PS. **Med Sci Sports Exerc** 1989 Oct;21(5 Suppl):S214–8

Dehydration and hyponatremia during triathlons. Hiller WD. **Med Sci Sports Exerc** 1989 Oct;21(5 Suppl):S219–21 (18 ref.)

Longitudinal assessment of responses by triathletes to swimming, cycling, and running. Kohrt WM, et al. **Med Sci Sports Exerc** 1989 Oct;21(5):569–75

Medical care at ultraendurance triathlons. Laird RH. **Med Sci Sports Exerc** 1989 Oct;21(5 Suppl):S222–5

Training for ultraendurance triathlons. O'Toole ML. **Med Sci Sports Exerc** 1989 Oct;21(5 Suppl):S209–13

Physiologic testing of the ultraendurance triathlete. Roalstad MS. **Med Sci Sports Exerc** 1989 Oct;21(5 Suppl):S200–4 (33 ref.)

Ventilatory threshold and maximal oxygen uptake during cycling and running in triathletes. Schneider DA, et al. **Med Sci Sports Exerc** 1990 Apr;22(2):257–64

Effects of 4 h preexercise carbohydrate feedings on cycling performance. Sherman WM, et al. **Med Sci Sports Exerc** 1989 Oct;21(5):598–604

Ventilatory responses during varied stride and pedal frequencies. Berry MJ, et al. **Respir Physiol** 1989 Nov; 78(2):219–28

Applied physiology of a triathlon. O'Toole ML, et al. **Sports Med** 1989 Oct;8(4):201–25 (117 ref.)

[Influence of the Scandinavian dissociated diet regime on the structure of sleep in athletes] Francart AL, et al. **C R Soc Biol (Paris)** 1989;183(5):467–73 (Eng. Abstr.) (Fre)

[Diseases of the knee due to technology in cyclists. Computerized examination of the material] de Mondenard JP. **Schweiz Z Sportmed** 1989 Dec;37(4):219–31 (Fre)

[Cutting of clothing while bicycling—artistic performance of a communication-disordered deaf patient suffering from fetishism] Lange E. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Sep;41(9):550–2 (Ger)

[Study of lipid ligands in serum albumin in sportsmen using thin layer chromatography] Tolkacheva NV, et al. **Kosm Biol Aviakosm Med** 1989 Nov–Dec;23(6):85–8 (Eng. Abstr.) (Rus)

INJURIES

The role of alcohol in nonfatal bicycle injuries. Olkkonen S, et al. **Accid Anal Prev** 1990 Feb;22(1):89–96

Incidence and characteristics of bicycle injuries by source of information. Olkkonen S, et al. **Acta Chir Scand** 1990 Feb;156(2):131–6

The Seattle children's bicycle helmet campaign. Bergman AB, et al. **Am J Dis Child** 1990 Jun;144(6):727–31

How bicycle-related injuries change bicycling practices in children. Nakayama DK, et al. **Am J Dis Child** 1990 Aug; 144(8):928–9

Overuse injuries in triathletes. A study of the 1986 Seafair Triathlon. Collins K, et al. **Am J Sports Med** 1989 Sep–Oct; 17(5):675–80

Helmet protection from head injuries among recreational bicyclists. Wasserman RC, et al. **Am J Sports Med** 1990 Jan–Feb;18(1):96–7

Handlebar hernia: diagnosis by abdominal computed tomography. Mitchiner JC. **Ann Emerg Med** 1990 Jul; 19(7):812–3

The documentor. US study shows bike helmets effective. **Aust Fam Physician** 1989 Nov;18(11):1327

Bicycle safety in Australia. Connor BH. **Aust Fam Physician** 1989 Nov;18(11):1429–31

Protective capability of bicycle helmets. Mills NJ. **Br J Sports Med** 1990 Mar;24(1):55–60

Bicycle-related injuries: a survey in a pediatric emergency department. Cushman R, et al. **Can Med Assoc J** 1990 Jul 15;143(2):108–12

Bilateral intra-articular loose bodies of the elbow in an adolescent BMX rider. Fixsen JA, et al. **Injury** 1989 Nov; 20(6):363–4

Problems in training the young cyclist. Bloom J, et al. **J R Soc Health** 1989 Oct;109(5):172–4

Helmets for child bicyclists [letter; comment] Bader M. **JAMA** 1990 Apr 11;263(14):1914–5 Comment on: JAMA 1989 Oct 27;262(16):2256–61.

Bicycle helmet use by children. Evaluation of a community-wide helmet campaign [see comments] DiGuiseppi CG, et al. **JAMA** 1989 Oct 27;262(16):2256–61 Comment in: JAMA 1990 Apr 11;263(14):1914–5.

Bicycle safety helmets [letter] **N Engl J Med** 1989 Oct 26; 321(17):1194–6

Bicycle injuries. **N Y State J Med** 1990 Aug;90(8):426–7

Promoting bicycle helmet use in children [news] Glaser V. **N Y State J Med** 1990 Jan;90(1):47

Injuries to child cyclists in the Bay of Plenty. Moyes CD, et al. **N Z Med J** 1990 Jul 25;103(894):343–5

American Academy of Pediatrics Committee on Accident and Poison Prevention: Bicycle helmets. **Pediatrics** 1990 Feb;85(2):229–30

[Injured cyclists and bicycle passengers. A prospective study of the causes of accidents, accident patterns and consequences] Bødtker S, et al. **Ugeskr Laeger** 1990 Aug 20;152(34):2412–5 (Eng. Abstr.) (Dan)

[Bicycling injuries] Juhl M. **Ugeskr Laeger** 1990 Aug 20; 152(34):2403 (Dan)

[Sports injuries as a challenge for modern imaging technics] Wenz W, et al. **Radiologe** 1989 Nov;29(11):537–40 (Ger)

[Sport-induced compression symptoms of the ulnar nerve] Petračić B. **Sportverletz Sportschaden** 1989 Sep;3(3):133–4 (Ger)

[Bicycle accidents—causes and sequelae. An evaluation of the 1986 calendar year] Kuner EH, et al. **Unfallchirurgie** 1990 Feb;16(1):25–34 (Eng. Abstr.) (Ger)

[Injuries caused by bicycle spokes in children] Keim L. **Zentralbl Chir** 1989;114(17):1167–70 (Ger)

[Head and brain injuries in bicyclists] Levi L, et al. **Harefuah** 1990 May 15;118(10):575–6 (Eng. Abstr.) (Heb)

[Bicycle injuries. Hospital based registration of injuries during 1985–89] Wasmuth HH, et al. **Tidsskr Nor Laegeforen** 1990 Jun 30;110(17):2218–21 (Eng. Abstr.) (Nor)

[Spontaneous panniculitis (Rothmann-Makai syndrome) in athletes] Grelda BP. **Klin Med (Mosk)** 1989 Sep;67(9):115–6 (Rus)

[Pediatric injuries in the lower extremities caused by insertion of the foot into the spokes of a bicycle] Kitka M, et al. **Acta Chir Orthop Traumatol Cech** 1989 Jul;56(4):338–42 (Eng. Abstr.) (Slo)

[Prevention of bicycle accidents in children] González Landa G, et al. **An Esp Pediatr** 1990 Feb;32(2):131–5 (61 ref.) (Eng. Abstr.) (Spa)

PSYCHOLOGY

Age dependence of attitudes and knowledge in cyclists. Maring W, et al. **Accid Anal Prev** 1990 Apr;22(2):127–36

STANDARDS

Bicycle helmet subsidy program [letter] Morris BA. **Can Med Assoc J** 1989 Oct 15;141(8):765

BICYCLO COMPOUNDS see under **BRIDGED COMPOUNDS**

BIFIDOBACTERIUM

[Oral bacteriotherapy with Bifidobacterium bifidum and Lactobacillus acidophilus in cirrhotic patients] Colle R, et al. **Clin Ter** 1989 Dec 31;131(6):397–402 (Eng. Abstr.) (Ita)

[Substantiation of complex measures in the prevention of bacterial infections in newborn infants] Chernyshova Li, et al. **Akush Ginekol (Mosk)** 1989 Sep;(9):75–8 (Rus)

ANALYSIS

Structure of macroamphiphiles from several Bifidobacterium strains. Iwasaki H, et al. **J Bacteriol** 1990 Feb;172(2):845–52

ENZYMOLOGY

Crystallization of and preliminary crystallographic data for allosteric L-lactate dehydrogenase from Bifidobacterium longum. Iwata S, et al. **J Biochem (Tokyo)** 1989 Oct; 106(4):558–9

GENETICS

Characterization of HU-like protein from Bifidobacterium longum. Goshima N, et al. **Biochimie** 1990 Apr;72(4):207–12

Sequence and characteristics of the Bifidobacterium longum gene encoding L-lactate dehydrogenase and the primary structure of the enzyme: a new feature of the allosteric site. Minowa T, et al. **Gene** 1989 Dec 21;85(1):161–8

A unique tRNA intron in the variable loop of the extreme thermophile Thermofilum pendens and its possible evolutionary implications. Kjems J, et al. **J Biol Chem** 1989 Oct 25;264(30):17834–7

GROWTH & DEVELOPMENT

Electron microscopic, biochemical and physiological studies of Bifidobacterium pseudolongum SS-24 and Bifidobacterium thermophilum SS-19. Kudo H, et al. **Int J Med Microbiol** 1989 Sep;271(3):263–71

Growth promotion of Bifidobacterium species by whey and casein fractions from human and bovine milk. Petschow BW, et al. **J Clin Microbiol** 1990 Feb;28(2):287–92

Uncoupling of growth and acids production in Bifidobacterium ssp. Desjardins ML, et al. **J Dairy Sci** 1990 Jun;73(6):1478–84

[Host-Bifidobacterium interactions in the axenic mouse: partial characterization of bifidogenic factors in the intestinal contents] Romond MB, et al. **Can J Microbiol** 1990 Apr;36(4):286–91 (Eng. Abstr.) (Fre)

ISOLATION & PURIFICATION

Detection of Bifidobacterium species by enzymatic methods. Chevalier P, et al. **J Appl Bacteriol** 1990 Jun;68(6):619–24

Plasmid profiling of members of the family Enterobacteriaceae, lactobacilli, and bifidobacteria to study the transmission of bacteria from mother to infant. Tannock GW, et al. **J Clin Microbiol** 1990 Jun;28(6):1225–8

METABOLISM

Transport of ferrous iron and lactate production in Bifidobacterium bifidum var. pennsylvanicus. Bezkorovainy A, et al. **Biol Trace Elem Res** 1988 Sep–Dec; 17:123–37

PHYSIOLOGY

Effect of chronic ingestion of a fermented dairy product containing Lactobacillus acidophilus and Bifidobacterium bifidum on metabolic activities of the colonic flora in humans. Marteau P, et al. **Am J Clin Nutr** 1990 Oct; 52(4):685–8

BIFUNCTIONAL REAGENTS see **CROSS-LINKING REAGENTS**

BIGUANIDES

ADVERSE EFFECTS

[Lactic acidosis as a complication of treatment with biguanides] Vambera M, et al. **Cas Lek Cesk** 1990 May 4;129(18):562–6 (Eng. Abstr.) (Cze)

[Lactic acidosis in diabetic patients associated with buformin] Huidobro F, et al. **Rev Med Chil** 1989 Jan;117(1):46–8 (Eng. Abstr.) (Spa)

METABOLISM

Arcaine is a competitive antagonist of the polyamine site on the NMDA receptor. Reynolds IJ. **Eur J Pharmacol** 1990 Feb 27;177(3):215–6

PHARMACOLOGY

Effects of insulin, biguanide antihyperglycaemic agents and beta-adrenergic agonists on pathways of myocardial proteolysis. Thorne DP, et al. **Biochem J** 1990 Mar 15; 266(3):713–8

Evidence that the reflex vagal bradycardia caused by i.v. phenyl biguanide is mediated by central 5-HT1A receptors. Bogle RG, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:811P

1-(m-chlorophenyl)-biguanide, a potent high affinity 5-HT3 receptor agonist. Kilpatrick GJ, et al. **Eur J Pharmacol** 1990 Jun 21;182(1):193–7

The putative 5-HT3 agonist phenylbiguanide induces carrier-mediated release of [3H]dopamine. Schmidt CJ, et al. **Eur J Pharmacol** 1989 Aug 22;167(2):309–10

Phenylbiguanide not phenyldiguanide is used to evoke the pulmonary chemoreflex in anaesthetized rabbits. Kay IS, et al. **Exp Physiol** 1990 May;75(3):383–9

Excitatory effects of 5-hydroxytryptamine, veratridine and phenyl diguanide on sensory ganglion cells of the nodose ganglion of the cat. Sampson SR, et al. **Life Sci** 1974 Dec 15;15(12):2157–65

THERAPEUTIC USE

[Biguanides in the treatment of diabetes mellitus] Saraiva AM. **Acta Med Port** 1989 Sep;Suppl 1:15S–18S (20 ref.) (Eng. Abstr.) (Por)

[Correction of dyslipoproteinemia in middle-aged and elderly patients with atherosclerosis using Essentiale in combination with adebit] Korkushko OV, et al. **Vrach Delo** 1989 Aug;(8):19–22 (Eng. Abstr.) (Rus)

BILAYER FLUIDITY see **MEMBRANE FLUIDITY**

BILAYERS, LIPID see **LIPID BILAYERS**

BILE

Biloma secondary to hepatocellular carcinoma in an HIV-seropositive patient. Fritz HP, et al. **Am J Gastroenterol** 1989 Dec;84(12):1560–3 (27 ref.)

Roles of bile and bacteria in biliary peritonitis. Andersson R, et al. **Br J Surg** 1990 Jan;77(1):36–9

Bile leaks after simple cholecystectomy [see comments] Rayter Z, et al. **Br J Surg** 1989 Oct;76(10):1046–8 Comment in: Br J Surg 1990 May;77(5):593–4.

A study on the influence of bile acid chemical structure on dissolution of insoluble calcium salts: an in vitro study of the use of bile acid–phosphatidylcholine–cholesterol model bile solution. Yoneda M, et al. **Gastroenterol Jpn** 1990 Jun; 25(3):383–7

Addition of N-acetylcysteine to aqueous model bile systems accelerates dissolution of cholesterol gallstones. Niu N, et al. **Gastroenterology** 1990 Feb;98(2):454–63

The biliogastric shunt: a method for simultaneous internal diversion of bile and enteric feeding in patients with cancer. Foutch PG, et al. **Gastrointest Endosc** 1989 Sep–Oct; 35(5):440–2

Computed tomography evaluation of high-density bile in the gallbladder. Ueda J, et al. **Gastrointest Radiol** 1990 Winter; 15(1):22–6

Bile ascites following percentaneous trucut needle liver biopsy [letter] Sahni A, et al. **Indian J Gastroenterol** 1990 Jan;9(1):98–9

Closure of cystic duct stump leak by nasobiliary tube drainage. Barthel JS, et al. **J Clin Gastroenterol** 1989 Oct; 11(5):574–7

Scintigraphic and culdoscopic diagnosis of bile peritonitis complicating liver biopsy. Veneri RJ, et al. **J Clin Gastroenterol** 1989 Oct;11(5):571–3

Critical self-association of bile lipids studied by infrared spectroscopy and viscometry. Antonian L, et al. **J Lipid Res** 1990 May;31(5):947–51

Bilothorax—an unusual problem [see comments] Rowe PH. **J R Soc Med** 1989 Nov;82(11):687–8 Comment in: J R Soc Med 1990 Mar;83(3):198.

Hepatic bilomas due to hepatic artery thrombosis in liver transplant recipients: percutaneous drainage and clinical outcome. Kaplan SB, et al. **Radiology** 1990 Mar;174(3 Pt 2):1031–5

Effect of bile on peritoneal morphology in Escherichia coli peritonitis. Andersson R, et al. **Scand J Gastroenterol** 1990 Apr;25(4):405–11

Effect of intraduodenal bile and Na- taurodeoxycholate on exocrine pancreatic secretion and on plasma levels of secretin, pancreatic polypeptide, and gastrin in man. Riepl RL, et al. **Scand J Gastroenterol** 1990 Jan;25(1):45–53

A modified technique of ultrasonically guided percutaneous transhepatic biliary drainage. Das K, et al. **Surg Endosc** 1989;3(4):191–4

Cholecystokinin prevents parenteral nutrition induced biliary sludge in humans. Sitzmann JV, et al.

Surg Gynecol Obstet 1990 Jan;170(1):25–31

Changes in production of interleukin–1 and interleukin–2 associated with obstructive jaundice and biliary drainage in patients with gastrointestinal cancer. Haga Y, et al. Surgery 1989 Nov;106(5):842–8

Bile refeeding after liver transplantation and avoidance of intravenous cyclosporine. Merion RM, et al. Surgery 1989 Oct;106(4):604–9; discussion 609–10

Plasma electrolyte changes after ingestion of bile extract of the grass carp (Ctenopharyngodon idellus) in rats. Chen CF, et al. Toxicol Lett 1990 Feb;50(2–3):221–8

["Lost" bile duct drain—nevertheless not lost (letter)] von Sanden H, et al. Dtsch Med Wochenschr 1990 Apr 20; 115(16):638 (Ger)

[Studies on rat infectious pancreatitis models by subcapsular injection of dog's bile and appendix contents] Kenmochi T, et al. Nippon Shokakibyo Gakkai Zasshi 1989 Dec; 86(12):2840 (Jpn)

[Extrahepatic bile–filled cyst (biloma)] Nishinaka T, et al. Nippon Shokakibyo Gakkai Zasshi 1989 Sep;86(9):2250–4 (10 ref.) (Jpn)

[The usefulness of 99mTc–PMT cholescintigraphy in the diagnosis of bile leakage or biloma] Nakanishi Y, et al. Rinsho Hoshasen 1989 Aug;34(8):887–92 (Eng. Abstr.) (Jpn)

["Biloma": its diagnosis and treatment by percutaneous echo–guided evacuation] Stanciu C, et al. Rev Med Chir Soc Med Nat Iasi 1989 Oct–Dec;93(4):783–5 (Eng. Abstr.) (Rum)

[Endoscopic papillosphincterotomy and nasobiliary drainage in the surgery of the organs of the hepato–pancreato–duodenal zone] Lutsevich EV, et al. Sov Med 1990;(4):87–90 (Rus)

[Nasobiliary drainage in choledocholithiasis and benign strictures of the common bile duct] Reviakin VI, et al. Sov Med 1989;(8):103–6 (Rus)

[Extrahepatic biloma secondary to choledocholithiasis] Fernández Fernández L, et al. Rev Esp Enferm Apar Dig 1989 Oct;76(4):385–8 (Eng. Abstr.) (Spa)

ANALYSIS

Bile peritonitis in the newborn. Rivilla F, et al. Acta Paediatr Scand 1989 Sep;78(5):782–3

Comparison of bile porphyrin concentrations in cattle and human beings with protoporphyria. Bloomer JR, et al. Am J Vet Res 1990 Jul;51(7):1144–6

Kinetics of intravenously administered vitamin E in sheep and its biliary excretion. Hidiroglou M, et al. Ann Rech Vet 1990;21(3):219–27

Relationship between colorectal liver metastases and CEA levels in gallbladder bile. Yeatman TJ, et al. Ann Surg 1989 Oct;210(4):505–12

The influence of barley fibre on bile composition, gallstone formation, serum cholesterol and intestinal morphology in hamsters. Zhang JX, et al. APMIS 1990 Jun;98(6):568–74

Evidence for the synthesis and secretion of APF—a bile lipid associated protein—by isolated rat hepatocytes. Domingo N, et al. Biochim Biophys Acta 1990 May 22;1044(2):243–8

Occurrence of bilirubin–IX beta in the gallbladder bile of eel, Anguilla japonica. Sakai T, et al. Biochim Biophys Acta 1989 Oct 13;993(1):128–30

Application of reversed phase high performance liquid chromatography to the analysis of sulphidopeptide leukotrienes in pig bile. Tagari P, et al. Biomed Chromatogr 1990 Jan;4(1):39–42

Mutagenicity of bile and duodenal adenomas in familial adenomatous polyposis. Spigelman AD, et al. Br J Surg 1990 Aug;77(8):878–81

Effect of hepatic artery ligation on liver metabolism in rats. Gonçalves RH, et al. Braz J Med Biol Res 1989; 22(6):799–802

Studies on medicinal resources from livestock. II. Anti–allergic effects of pig bile. (2). Nakagami T, et al. Chem Pharm Bull (Tokyo) 1990 Mar;38(3):706–8

Synthesis of 5 beta–cholestane–3 alpha,6 beta,7 alpha,25,26–pentol and identification of a novel bile alcohol, alpha–trichechol, present in the West Indian manatee bile. Yoshii M, et al. Chem Pharm Bull (Tokyo) 1989 Jul;37(7):1852–4

Proportion of conjugated bilirubin in bile in relation to hepatic bilirubin UDP–glucuronyltransferase activity. Adachi Y, et al. Clin Biochem 1990 Apr;23(2):131–4

Simultaneous determination of conjugated bile acids in human bile. Pang CP, et al. Clin Biochem 1990 Feb; 23(1):85–90

Simple enzymatic assay for determining cholesterol concentrations in bile. Luhman CM, et al. Clin Chem 1990 Feb;36(2):331–3

Sensitive and rapid colorimetric immunoenzymometric assay of ferritin in biological samples. Ramm GA, et al. Clin Chem 1990 Jun;36(6):837–40

Lectin binding characteristics of a cholesterol nucleation promoting protein. Harvey PR, et al. Clin Chim Acta 1989 Nov;185(2):185–9

Fluorometric assay of protein in native human bile. Harvey PR, et al. Clin Chim Acta 1989 Aug 15;183(2):147–54

Identification of carcinogenic tryptophan pyrolysis products in human bile by high–performance liquid chromatography. Manabe S, et al. Environ Mol Mutagen 1990;15(4):229–35

Factors affecting ionized calcium concentration in human bile. Usui R, et al. Gastroenterol Jpn 1990 Jun;25(3):403

Lovastatin added to ursodeoxycholic acid further reduces biliary cholesterol saturation. Logan GM, et al. Gastroenterology 1990 Jun;98(6):1572–6

High protein and total lipid concentration are associated with reduced metastability of bile in an early stage of cholesterol gallstone formation. Strasberg SM, et al. Gastroenterology 1990 Mar;98(3):739–46

Biliary lipid composition in monozygotic and dizygotic pairs of twins. Antero Kesäniemi Y, et al. Gut 1989 Dec; 30(12):1750–6

Bile concentration is a key factor for nucleation of cholesterol crystals and cholesterol saturation index in gallbladder bile of gallstone patients. van Erpecum KJ, et al. Hepatology 1990 Jan;11(1):1–6

Lipid metabolism in the development of cholesterol gallstones in hamsters. IV. The effect of essential phospholipids and plant sterols on the biliary lipids. Kubota S, et al. Hiroshima J Med Sci 1981 Dec;30(4):301–9

Magnetic resonance spectroscopy of bile. In vitro stability over time and component identity. Halvorsen RA Jr, et al. Invest Radiol 1989 Nov;24(11):903–8

High–performance liquid chromatographic determination of ibuprofen, its metabolites and enantiomers in biological fluids. Geisslinger G, et al. J Chromatogr 1989 Jun 30; 491(1):139–49

High–performance liquid chromatographic separation of bilirubin conjugates: the effects of change in molarity and pH. Goresky CA, et al. J Chromatogr 1990 Jun 8; 528(1):123–41

Determination of tazobactam and piperacillin in human plasma, serum, bile and urine by gradient elution reversed–phase high–performance liquid chromatography. Ocampo AP, et al. J Chromatogr 1989 Nov 10; 496(1):167–79

Enzymatic determination of lipids in human bile without bilirubin interference: reliable assessment of the cholesterol saturation index (CSI). Aufenanger J, et al. J Clin Chem Clin Biochem 1989 Sep;27(9):605–11

Rapid isolation of vesicular and micellar carriers of biliary lipids by ultracentrifugation. Amigo L, et al. J Lipid Res 1990 Feb;31(2):341–7

Identification of 3 alpha,4 beta,7 alpha–trihydroxy–5 beta–cholanoic acid in human bile: reflection of a new pathway in bile acid metabolism in humans. Dumaswala R, et al. J Lipid Res 1989 Jun;30(6):847–56

Identification of bile alcohols in rat bile. Hiraoka T, et al. J Lipid Res 1989 Dec;30(12):1889–93

Pathophysiology of tumor progression in human gallbladder: flow cytometry, CEA, and CA 19–9 levels in bile and serum in different stages of gallbladder disease. Strom BL, et al. J Natl Cancer Inst 1989 Oct 18;81(20):1575–80

The effects of enteral stimulation on gallbladder bile during total parenteral nutrition in the neonatal piglet. Cohen IT, et al. J Pediatr Surg 1990 Jan;25(1):163–7

Altered bile composition during cholesterol gallstone formation: cause or effect? Magnuson TH, et al. J Surg Res 1990 Jun;48(6):584–9

Differences in gallstone structure in primary common bile duct lithiasis and gallbladder lithiasis. García Ontiveros A, et al. Klin Wochenschr 1990 May 17;68(10):496–502

Comparative sequential changes in serum and biliary levels of bile acid components after a single dose of D–galactosamine or partial hepatectomy in the rat. Tsuda H, et al. Liver 1990 Feb;10(1):28–34

Bile acid composition of dog and cat gall–bladder bile. Washizu T, et al. Nippon Juigaku Zasshi 1990 Apr; 52(2):423–5

Effect of ursodeoxycholic acid administration on bile acid composition in hamster bile. Matejka M, et al. Pharmacol Res 1990 May–Jun;22(3):297–305

Effects of various metals on hepatic bile calcium excretion in rats: the stimulatory effect of zinc is mediated through acetylcholine action. Yamaguchi M, et al. Res Exp Med (Berl) 1990;190(2):145–51

A surgical technique for the long term collection of bile in the pig and measurement of the biliary excretion of copper and zinc. Symonds HW, et al. Res Vet Sci 1990 Jan; 48(1):28–32

Isolation and identification of a pyrrolic glutathione conjugate metabolite of the pyrrolizidine alkaloid monocrotaline. Lamé MW, et al. Toxicol Lett 1990 May; 51(3):321–9

Polarized light microscopic examination of human bile in the diagnosis of microlithiasis of the gallbladder. Gogna A, et al. Trop Gastroenterol 1989 Jul–Sep;10(3):167–72

[Analysis of bile and gallstones in 116 patients with symptomatic cholelithiasis (letter)] Edgar PA. Ned Tijdschr Geneeskd 1990 May 5;134(18):926 (Dut)

[Analysis of bile and gallstones in 116 patients with symptomatic cholelithiasis] van Erpecum KJ, et al. Ned Tijdschr Geneeskd 1990 Jan 20;134(3):116–20 (Eng. Abstr.) (Dut)

[Determination of the biliary excretion of reduced and oxidized glutathione] Kretzschmar M, et al. Z Med Lab Diagn 1989;30(8):440–4 (Eng. Abstr.) (Ger)

[Pharmacokinetics of the biliary excretion of some chemotherapeutic agents in patients with biliary disease] Basoli A, et al. Ann Ital Chir 1989;60(2):129–32; discussion 133 (Eng. Abstr.) (Ita)

[Cancer of the colon and cholelithiasis: bile bacteria, composition of the stones and the bile] Gafà M, et al. Ann Ital Chir 1989 Jul–Aug;60(4):283–90 (Eng. Abstr.) (Ita)

[Polyunsaturated phosphatidylcholine and bile lipid composition] Salvioli G, et al. Clin Ter 1989 Nov 30; 131(4):219–24 (Eng. Abstr.) (Ita)

[Lithogenic bile: from supersaturation to cholesterol nucleation] Sipahi AM, et al. Rev Hosp Clin Fac Med Sao Paulo 1989 Sep–Oct; 44(5):175–7 (Por)

[Ultrasonic examination of bile density and gallbladder walls in various forms of acute cholecystitis] Vasil'ev Ve, et al. Khirurgiia (Mosk) 1989 Jul;(7):66–9 (Rus)

[Diagnostic possibilities of mathematical analysis in the evaluation of lithogenicity of the bile] Ivanchenkova RA. Klin Med (Mosk) 1990 Apr;68(4):86–8 (Eng. Abstr.) (Rus)

[The calcium content in the bile of patients with cholelithiasis, chronic hepatitis, liver cirrhosis and in healthy subjects] Dzhuraev KhSh, et al. Lab Delo 1990; (1):23–4 (Eng. Abstr.) (Rus)

[Methods of determining the concentration of total lipids and phosphorus in the bile] Tilichenko IuA, et al. Lab Delo 1990;(2):8–10 (Eng. Abstr.) (Rus)

[Value of CEA determination in the bile of cancer patients] Kuznetsov VV, et al. Vopr Onkol 1990;36(3):365–6 (Rus)

[Bile acids and bile cholesterol in patients with viral hepatitis A and B] Gromashevskaia LL, et al. Vrach Delo 1989 Aug; (8):114–6 (Rus)

[Correction of disorders of bile lipid–mineral composition as a method of preventing cholelithiasis] Lukash NV, et al. Vrach Delo 1989 Aug;(8):79–81 (Eng. Abstr.) (Rus)

[The bile cholate–cholesterol coefficient for assessing the causes of a protracted convalescence in patients with viral hepatitis] Miroshnichenko VP, et al. Vrach Delo 1989 Dec; (12):95–8 (Eng. Abstr.) (Rus)

CYTOLOGY

Diagnosis of liver transplant rejection by bile cytology. Kubota K, et al. Transplant Proc 1990 Aug;22(4):1521–3

Experience with bile cytology after liver transplantation. Oldhafer KJ, et al. Transplant Proc 1990 Aug;22(4):1524

Bile cytology in orthotopic liver transplantation. Kubota K, et al. Transplantation 1989 Dec;48(6):998–1003

[Diagnosis of the nature of biliary stenoses: role of exfoliative cytology by external biliary drainage] Raule M, et al. Ann Chir 1989;43(6):425–8 (Eng. Abstr.) (Fre)

[Microstructure of vesicular agglomerates of the lithogenic bile] Loginov AS, et al. Biull Eksp Biol Med 1989 Aug; 108(8):251–4 (Eng. Abstr.) (Rus)

[Neoplasms of the pancreas and biliary tract: use of cytology in diagnosis] Kozuka M, et al. Rev Med Chil 1988 Oct; 116(10):1019–27 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Choleretic mechanism and effects of cyclobutyrol in the rat: dose–response relationship. Monte MJ, et al. Biomed Biochim Acta 1990;49(1):83–90

Biliary lipids in familial combined hyperlipidaemia: effects of acipimox therapy. Ericsson S, et al. Eur J Clin Invest 1990 Jun;20(3):261–5

Estrogen enhances dietary cholesterol induction of saturated bile in the hamster. Coyne MJ, et al. Gastroenterology 1978 Jul;75(1):76–9

Effect of secretin on bile formation [letter; comment] Dumont AE. Gastroenterology 1990 May;98(5 Pt 1):1393–4 Comment on: Gastroenterology 1989 Oct;97(4):950–7.

Effects of short–term and long–term administration of amiodarone on hepatobiliary function in male rats. Young RA, et al. J Appl Toxicol 1989 Dec;9(6):407–12

Biliary response to glucagon and insulin following hepatic transplantation in humans. Branum GD, et al. J Surg Res 1990 Aug;49(2):121–5

Effect of verapamil on insulin–stimulated choleresis. Sack J, et al. J Surg Res 1990 Jul;49(1):88–91

Cholestasis, altered junctional permeability, and inverse changes in sinusoidal and biliary glutathione release by vasopressin and epinephrine. Ballatori N, et al. Mol Pharmacol 1990 Jul;38(1):64–71

The influence of severity of bile flow reduction, cycloheximide, and methyl isobutyl ketone pretreatment on the kinetics of taurolithocholic acid disposition in the rat. Dahlström–King L, et al. Toxicol Appl Pharmacol 1990 Jun 15;104(2):312–21

Effect of chelating agents on biliary excretion of arsenic in perfused livers of guinea pigs pretreated with As2O3. Reichl FX, et al. Vet Hum Toxicol 1990 Jun;32(3):223–6

[Effect of proglumide (PGM) on bile flow and contents in humans and animals] Fang XC. Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1989 Aug; 11(4):278–82 (Eng. Abstr.) (Chi)

[Synthesis of derivatives of 2,4–bis(arylmethino)–8–butyl–8–azabicyclo[3.2.1]octan–3–one] Gutkowska B, et al. Acta Pol Pharm 1989;46(3):212–8 (Eng. Abstr.) (Pol)

[Use of cholagogic agents in the therapy of patients with dysfunction of the bile–secreting system] Nogaller AM, et al. Klin Med (Mosk) 1989 Sep;67(9):129–35 (4 ref.) (Rus)

[Laboratory study of the bile in assessing the efficacy of treating cholecystitis with the preparation mitrogil] Bekchanov N, et al. Lab Delo 1990;(1):68–9 (Rus)

[The effect of sodium–magnesium–calcium sulfate water on bile secretion and bile formation in patients with chronic

cholecystitis] Poshtar' TIa, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1990 Jan-Feb;(1):54–6 **(Rus)**

[The correction of disorders of lipid–mineral composition of the bile as a method for preventing cholelithiasis] Lukash NV, et al. **Vrach Delo** 1990 Jan;(1):14–7 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

An appraisal of the role of biliary phospholipases in the pathogenesis of gallstone disease. Groen AK, et al. **Biochim Biophys Acta** 1989 Nov 28;1006(2):179–82

Glutathione S-transferase in human bile. Howie AF, et al. **Clin Chim Acta** 1989 Oct 16;184(3):269–78

[Analysis of pancreatic enzymes in the bile of congenital choledochal cyst with anomalous pancreaticobiliary ductal union] Shibata T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jul;86(7):1513–8 (Eng. Abstr.) **(Jpn)**

[Determination of disaccharidase activity in rat serum, bile, urine and various tissues by high-performance liquid chromatography with differential refractometric detection] Iizuka Y, et al. **Yakugaku Zasshi** 1989 Nov;109(11):882–6 (Eng. Abstr.) **(Jpn)**

[Acute enzymatic cholecystitis: difficulties in diagnosis and surgical treatment] Girlia VI. **Klin Khir** 1990;(4):10–1 (Eng. Abstr.) **(Rus)**

[Lysozyme-forming function of the liver in complicated acute cholecystitis] Lokhvitskil SV, et al. **Vestn Khir** 1989 May;142(5):29–30 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Soluble class I antigen in human bile. Pollard SG, et al. **Transplantation** 1989 Oct;48(4):712–4

[Changes in biliary secretory immunoglobulins A in mice fed whey proteins] Costantino AM, et al. **Minerva Dietol Gastroenterol** 1989 Oct–Dec;35(4):241–5 (Eng. Abstr.) **(Ita)**

[The bile immunoglobulins and electrolytes of patients with acute and protracted courses of viral hepatitis] Miroshnichenko VP, et al. **Vrach Delo** 1990 May;(5):113–6 (Eng. Abstr.) **(Rus)**

METABOLISM

Low vs high dietary fiber and serum, biliary, and fecal lipids in middle-aged men. Kesäniemi YA, et al. **Am J Clin Nutr** 1990 Jun;51(6):1007–12

Delivery of high-density lipoprotein free and esterified cholesterol to bile by the perfused monkey liver. Scobey MW, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):G644–52

Biliary excretion and choleretic effect of cefmetazole in rats. Gonzalez J, et al. **Antimicrob Agents Chemother** 1989 Nov; 33(11):1970–4

Reduction in biliary excretion of ceftriaxone by diclofenac in rabbits. Merle-Melet M, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1506–10

High performance liquid chromatographic separation of fish biliary polynuclear aromatic hydrocarbon metabolites. Deshpande AD. **Arch Environ Contam Toxicol** 1989 Nov; 18(6):900–7

Sex-related differences in the hepatobiliary transport of phenolsulfonphthalein in the rat. Collado PS, et al. **Arch Int Physiol Biochim** 1989 Jun;97(3):285–91

Biliary excretion of mercury and cadmium. Cikrt M. **Arh Hig Rada Toksikol** 1989 Jun;40(2):165–81

Biliary elimination of low-dose methotrexate in humans. Nuernberg B, et al. **Arthritis Rheum** 1990 Jun;33(6):898–902

S-(N-methylcarbamoyl)glutathione: a reactive S-linked metabolite of methyl isocyanate. Pearson PG, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):245–50

Evidence for reverse cholesterol transport in vivo from liver endothelial cells to parenchymal cells and bile by high-density lipoprotein. Bakkeren HF, et al. **Biochem J** 1990 Jun 15;268(3):685–91

Urobilinogen-i is a major derivative of bilirubin in bile of homozygous Gunn rats. Kotal P, et al. **Biochem J** 1990 May 15;268(1):181–5

Compartmentation of acetyl CoA studied by analysis of tricarboxylic acid cycle acids and 3-hydroxybutyrate in bile of rats given [2,2,2-2H3]ethanol. Norsten C, et al. **Biochem J** 1990 Jan 15;265(2):569–74

Two pathways for biliary copper excretion in the rat. The role of glutathione. Houwen R, et al. **Biochem Pharmacol** 1990 Mar 15;39(6):1039–44

Hepatic transport mechanisms for bivalent organic cations. Subcellular distribution and hepato-biliary concentration gradients of some steroidal muscle relaxants. Mol WE, et al. **Biochem Pharmacol** 1990 Jan 15;39(2):383–90

Effect of the glutathione-depleting agents diethylmaleate, phorone and buthionine sulfoximine on biliary copper excretion in rats. Nederbragt H. **Biochem Pharmacol** 1989 Oct 15;38(20):3399–406

Glutathione conjugation of the alpha-bromoisovaleric acid enantiomers in the rat in vivo and its stereoselectivity. Pharmacokinetics of biliary and urinary excretion of the glutathione conjugate and the mercapturate. Polhuijs M, et al. **Biochem Pharmacol** 1989 Nov 15;38(22):3957–62

Hepatobiliary transport of the anionic organomercury compound (mersalyl) is carrier mediated. Thalhammer T, et al. **Biochem Pharmacol** 1989 Oct 1;38(19):3223–31

Glycerophospholipids and cholesterol composition of bile in bile-fistula rats treated with monensin. Casu A, et al. **Biochim Biophys Acta** 1990 Mar 12;1043(1):113–5

Effects of salmon oil and corn oil on plasma lipid level and hepato-biliary cholesterol metabolism in rats. Chautan M, et al. **Biochim Biophys Acta** 1990 Aug 28;1046(1):40–5

Phospholipid lamellae are cholesterol carriers in human bile. Sömjen GJ, et al. **Biochim Biophys Acta** 1990 Jan 16; 1042(1):28–35

Biliary elimination of non-steroidal anti-inflammatory drugs in patients. Schneider HT, et al. **Br J Clin Pharmacol** 1990 Jan;29(1):127–31

Preferential biliary elimination of FPL 63547, a novel inhibitor of angiotensin-converting enzyme, in the rat. Carr RD, et al. **Br J Pharmacol** 1990 May;100(1):90–4

99mTc-labelled HIDA scintigraphy in assessment of bile leakage after removal of T tube from the common bile duct. Ryttov N, et al. **Br J Surg** 1989 Dec;76(12):1319

Metabolites of three structural isomers of butylbenzene in the bile of rainbow trout. Hellou J, et al. **Bull Environ Contam Toxicol** 1990 Mar;44(3):487–93

Biliary excretion of glutathione conjugates of 4,5-epoxy-4,5-dihydro-1- nitropyrene and 9,10-epoxy-9,10-dihydro-1-nitropyrene in rats administered 1-nitropyrene orally and their further metabolism in the intestinal tract. Kinouchi T, et al. **Carcinogenesis** 1990 Aug;11(8):1381–7

Biliary excretion of metabolites of baicalin and baicalein in rats. Abe K, et al. **Chem Pharm Bull (Tokyo)** 1990 Jan; 38(1):209–11

Potential bile acid metabolites. XV. Synthesis of 4 beta-hydroxylated bile acids; unique bile acids in human fetal bile. Iida T, et al. **Chem Pharm Bull (Tokyo)** 1989 Dec;37(12):3323–9

Studies on the metabolism of gomisin A (TJN-101). II. Structure determination of biliary and urinary metabolites in rat. Ikeya Y, et al. **Chem Pharm Bull (Tokyo)** 1990 Jan; 38(1):136–41

Correlations between concentrations of lipids in serum and bile of patients with gallstones [letter] Abu-Farsakh FA, et al. **Clin Chem** 1990 Jan;36(1):170–1

Elimination of diflunisal as its acyl glucuronide, phenolic glucuronide and sulfate conjugates in bile–exteriorized and intact rats. Dickinson RG, et al. **Clin Exp Pharmacol Physiol** 1989 Dec;16(12):913–24

Interactions in the renal and biliary elimination of digoxin: stereoselective difference between quinine and quinidine. Hedman A, et al. **Clin Pharmacol Ther** 1990 Jan;47(1):20–6

Postnatal development of the hepatobiliary transport of phenolsulfonphthalein in rats. Collado PS, et al. **Comp Biochem Physiol [A]** 1989;93(2):403–6

Effect of microsomal enzyme inducers on biliary and urinary excretion of acetaminophen metabolites in rats. Decreased hepatobiliary and increased hepatovascular transport of acetaminophen–glucuronide after microsomal enzyme induction. Gregus Z, et al. **Drug Metab Dispos** 1990 Jan–Feb;18(1):10–9

Metabolism and disposition of the 5-hydroxytryptamine uptake blocker sertraline in the rat and dog. Tremaine LM, et al. **Drug Metab Dispos** 1989 Sep–Oct;17(5):542–50

Effects of propylthiouracil on the biliary clearance of thyroxine (T4) in rats: decreased excretion of 3,5,3'-triiodothyronine glucuronide and increased excretion of 3,3',5'-triiodothyronine glucuronide and T4 sulfate. Rutgers M, et al. **Endocrinology** 1989 Oct;125(4):2175–86

Enterohepatic circulation of triiodothyronine (T3) in rats: importance of the microflora for the liberation and reabsorption of T3 from biliary T3 conjugates. Rutgers M, et al. **Endocrinology** 1989 Dec;125(6):2822–30

Effect of thiazide treatment on biliary lipid composition in healthy volunteers. Angelin B. **Eur J Clin Pharmacol** 1989; 37(1):95–6

Biliary secretion of felodipine metabolites in man after intravenous [14C]felodipine. Sutfin TA, et al. **Eur J Clin Pharmacol** 1990;38(5):421–4

Pharmacokinetics of biliary excretion of N-nitrosodiphenylamine (NDPA) in animals of different species. Atawodi SE, et al. **Eur J Drug Metab Pharmacokinet** 1990 Jan–Mar;15(1):27–9

Pharmacokinetics, hepatic biotransformation and biliary and urinary excretion of bromosulfophthalein (BSP) in an experimental liver disease mimicking biliary cirrhosis. Esteller A, et al. **Eur J Drug Metab Pharmacokinet** 1990 Jan–Mar;15(1):7–14

Bile rifaximin concentration after oral administration in patients undergoing cholecystectomy. Verardi S, et al. **Farmaco** 1990 Jan;45(1):131–5

Experimental study of the cholagogic and choleretic actions of some of the basic ingredients of essential oils on laboratory animals. Rangelov A, et al. **Folia Med (Plovdiv)** 1988;30(4):30–8

Determination and metabolism of dithiol chelating agents. VII. Biliary excretion of dithiols and their interactions with cadmium and metallothionein. Zheng W, et al. **Fundam Appl Toxicol** 1990 Apr;14(3):598–607

Effects of a concanavalin A–binding biliary glycoprotein on nucleation time of gallbladder bile. Nakano A, et al. **Gastroenterol Jpn** 1990 Feb;25(1):88–92

Spontaneous formation of pigmentary precipitates in bile salt–depleted rat bile and its prevention by micelle–forming bile salts. Angelico M, et al. **Gastroenterology** 1990 Feb; 98(2):444–53

Effect of dietary cholesterol on phosphatidylcholines and phosphatidylethanolamines in bile and gallbladder mucosa in the prairie dog. Booker ML, et al. **Gastroenterology** 1989 Nov;97(5):1261–7

Demonstration of vesicular-dependent bile flow in the sucrose-loaded rat. LeSage GD, et al. **Gastroenterology** 1990 Aug;99(2):478–87

Concentrative biliary secretion of ceftriaxone. Inhibition of lipid secretion and precipitation of calcium ceftriaxone in bile. Xia Y, et al. **Gastroenterology** 1990 Aug;99(2):454–65

Effect of pravastatin on biliary lipid composition and bile acid synthesis in familial hypercholesterolaemia. Hoogerbrugge-vd Linden N, et al. **Gut** 1990 Mar; 31(3):348–50

Somatostatin inhibits the effect of secretin on bile flow and on hepatic bilirubin transport in the rat. Ricci GL, et al. **Gut** 1989 Sep;30(9):1266–9

Isolation of a potent cholesterol nucleation-promoting activity from human gallbladder bile: role in the pathogenesis of gallstone disease. Groen AK, et al. **Hepatology** 1990 Apr;11(4):525–33

pH regulation in human gallbladder bile: study in patients with and without gallstones. Marteau C, et al. **Hepatology** 1990 Jun;11(6):997–1002

Minimal biliary excretion and enterohepatic recirculation of lormetazepam in man as investigated by a new nasobiliary drainage technique. Hellstern A, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 Jun;28(6):256–61

The effect of obstruction on the biliary excretion of cefoperazone and ceftazidime. Leung JW, et al. **J Antimicrob Chemother** 1990 Mar;25(3):399–406

Formation of C21 bile acids from plant sterols in the rat. Boberg KM, et al. **J Biol Chem** 1990 May 15; 265(14):7967–75

Biliary lipid secretion during the prereplicative phase of rat liver regeneration. Perez-Barriocanal F, et al. **J Exp Pathol (Oxford)** 1990 Feb;71(1):63–8

Effect of acute insulin administration on biliary lipid secretion by the diabetic rat. Villanueva GR, et al. **J Exp Pathol (Oxford)** 1990 Feb;71(1):89–94

Physico-chemical factors predisposing to pigment gallstone formation in liver cirrhosis. Alvaro D, et al. **J Hepatol** 1990 Mar;10(2):228–34

Difference in the effects of ursodeoxycholate and its taurine conjugate on the biliary excretion of sulfobromophthalein in the rat. Kanai S, et al. **J Hepatol** 1990 Mar;10(2):174–9

Increase in the relative amount of bilirubin diconjugates in rat bile and serum under infusion of phthaleins and indocyanine green. Mesa VA, et al. **J Hepatol** 1990 Jan; 10(1):35–40

The effects of hypertonic glucose solutions on hepatic bile formation. Rutishauser SC, et al. **J Hepatol** 1990 Jul; 11(1):22–8

Pancreaticobiliary secretion of zinc and copper in normal persons and patients with Wilson's disease. Lee HH, et al. **J Lab Clin Med** 1990 Sep;116(3):283–8

Biliary calcium secretion in the dog occurs primarily by passive convection and diffusion and is linked to bile flow. Rege RV, et al. **J Lab Clin Med** 1990 May;115(5):593–602

Structural alterations in lecithin–cholesterol vesicles following interactions with monomeric and micellar bile salts: physical-chemical basis for subselection of biliary lecithin species and aggregative states of biliary lipids during bile formation. Cohen DE, et al. **J Lipid Res** 1990 Jan;31(1):55–70

Use of 1H-NMR to determine the distribution of lecithin between the micellar and vesicular phases in model bile. Groen AK, et al. **J Lipid Res** 1990 Jul;31(7):1315–21

Effect of bean intake on biliary lipid secretion and on hepatic cholesterol metabolism in the rat. Rigotti A, et al. **J Lipid Res** 1989 Jul;30(7):1041–8

Biliary excretion and conjugation of diacid angiotensin-converting enzyme inhibitors. Drummer OH, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1202–6

Early effects of colectomy and endorectal pullthrough operation on biliary lipid composition. Kelly RE Jr, et al. **J Surg Res** 1990 Aug;49(2):111–5

Influence of "shuganjieyu" herbs on choleretic function in anesthetized rats. Tian ZS, et al. **J Tradit Chin Med** 1982 Mar;2(1):39–44

The pathophysiological characteristics of bile from patients with gallstones: the role of prostaglandins and mucin in gallstone formation. Inoue T, et al. **Jpn J Surg** 1990 Jan; 20(1):10–8

Epidermal growth factor concentrations in submandibular salivary gland, plasma, liver, bile, kidneys and urine of male mice: dynamics after phenylephrine injection. Tuomela T. **Life Sci** 1990;46(17):1197–206

Effects of dietary fish oil on biliary phospholipids and prostaglandin synthesis in the cholesterol-fed prairie dog. Booker ML, et al. **Lipids** 1990 Jan;25(1):27–32

Inhibition and induction of bile acid synthesis by ketoconazole. Effects on bile formation in the rat. Kuipers F, et al. **Lipids** 1989 Sep;24(9):759–64

Polyamines—potential nucleating factors in bile. Konikoff F, et al. **Liver** 1990 Jun;10(3):173–6

Concentration of cefixime in bile, gallbladder wall and serum after preoperative administration in patients undergoing cholecystectomy. Moorthi K, et al. **Methods Find Exp Clin Pharmacol** 1990 May;12(4):287–90

Novel type of ornithine–glutathione double conjugate excreted as a major metabolite into the bile of rats administered clebopride. Ishizuka T, et al.

Mol Pharmacol 1990 Jun;37(6):983–9

The biliary elimination and enterohepatic circulation of ibuprofen in rats. Dietzel K, et al. **Pharm Res** 1990 Jan; 7(1):87–90

Disposition of bismuth in the rat. II. Pharmacokinetics and biliary excretion. Rao N, et al. **Pharm Res** 1990 Mar; 7(3):237–41

Biliary excretion of reduced haloperidol glucuronide. Eddington ND, et al. **Psychopharmacology (Berl)** 1990; 100(1):46–8

Biliary albumin excretion induced by bile salts in rats is a pathological phenomenon. Ohta M, et al. **Res Commun Chem Pathol Pharmacol** 1989 Sep; 65(3):373–88

Biliary D-glucaric acid: its quantitation and preventive role in gallstone formation. Ho YD, et al. **Scand J Gastroenterol** 1990 Jun;25(6):631–40

Dissociation of changes in plasma cholesterol and hepatic cholesterol synthesis, assessed by precursors in bile, after jejunoileal bypass with 3:1 and 1:3 jejunoileal ratio. Sørensen TI, et al. **Scand J Gastroenterol** 1989 Nov; 24(9):1049–54

Effect of taurine administration on serum lipid and biliary lipid composition in man. Tanno N, et al. **Tohoku J Exp Med** 1989 Oct;159(2):91–9

In vitro accumulation of thyroid hormones by cultured rat hepatocytes and the biliary excretion of iodothyronines in rats treated with a novel histamine H2-receptor antagonist. Poole A, et al. **Toxicology** 1989 Nov;59(1):23–36

Effect of hepatic dysfunction and T tube clamping on FK 506 pharmacokinetics and trough concentrations. Jain AB, et al. **Transplant Proc** 1990 Feb;22(1):57–9

The metabolism of 2,4-dibromo-17 alpha-ethynyl[6,7-3H]oestradiol in the rat. Maggs JL, et al. **Xenobiotica** 1990 Jan;20(1):45–54

Human biliary metabolites of isotretinoin: identification, quantification, synthesis, and biological activity. Vane FM, et al. **Xenobiotica** 1990 Feb;20(2):193–207

[Pro-and anti-nucleation activity of biliary proteins in gallbladder bile with and without gallstones] Zhao YT. **Chung Hua I Hsueh Tsa Chih** 1989 Dec;69(12):671–3, 46 (Eng. Abstr.) **(Chi)**

[Changes in bile composition in rabbits infected with Clonorchis sinensis] Guo R, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1990;8(1):29–31 (Eng. Abstr.) **(Chi)**

[The liver first pass effects and bile concentrations of (–)-, (+)- and (+/–)-praziquantel in rabbits] Qian MX, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Jan;10(1):92–6 (Eng. Abstr.) **(Chi)**

[Hepatobiliary transport of bile acids] Buscher HP. **Z Gastroenterol [Verh]** 1990 Apr;25:35–8 (88 ref.) **(Ger)**

[Biliary and pancreatic excretion of methotrexate (MTX) and 5-FU on the MTX/5-FU sequential therapy] Suda Y, et al. **Gan To Kagaku Ryoho** 1990 Jul;17(7):1357–63 (Eng. Abstr.) **(Jpn)**

[Study on the concentrations of 5-fluorouracil (5-FU), tegafur (ET) and uracil in bile: comparison of UFT or FT] Tomita T, et al. **Gan To Kagaku Ryoho** 1989 Dec; 16(12):3755–62 (Eng. Abstr.) **(Jpn)**

[Biliary excretion and clinical efficacy of T-3262 (tosufloxacin tosilate) administered in the treatment of cholecystitis] Sugata F, et al. **Jpn J Antibiot** 1989 Sep; 42(9):1873–81 (Eng. Abstr.) **(Jpn)**

[The study on factors affecting cholesterol solubility in bile: relation to biliary proteins including apolipoprotein A-1] Tazuma S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Aug;86(8):1666–72 (Eng. Abstr.) **(Jpn)**

[Characterization of rouleau formation of disc-like particle in bile by transmission electron microscopy: relation to cholesterol crystal nucleation] Tazuma S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 May;86(5):1168 **(Jpn)**

[Bile sorption in hepatic insufficiency in patients with mechanical jaundice] Zhidovinov GI. **Khirurgiia (Mosk)** 1989 Jul;(7):88–92 (Eng. Abstr.) **(Rus)**

[Lithogenic properties of bile in cholelithiasis] Ivanchenkova RA, et al. **Klin Med (Mosk)** 1989 Oct;67(10):92–8 (Eng. Abstr.) **(Rus)**

[Correlations of the indicators of biochemical composition and physico-chemical properties of the bile in chronic cholecystitis] Tadziev IIa, et al. **Klin Med (Mosk)** 1989 Nov;67(11):52–8 (Eng. Abstr.) **(Rus)**

[Lipid metabolism in cholelithiasis] Grebenev AL, et al. **Sov Med** 1990;(1):18–22 (Eng. Abstr.) **(Rus)**

[Gas-chromatographic analysis of hypercholestanol in the bile and its role in the pathogenesis of cholelithiasis] Krikshtopaitis MI, et al. **Sov Med** 1989;(9):19–24 (Eng. Abstr.) **(Rus)**

[Crystallization of cholesterol in the gallbladder bile] Antezana C, et al. **Rev Med Chil** 1988 Sep;116(9):858–62 (Eng. Abstr.) **(Spa)**

[Biliary composition and bile acid metabolism in young men and women] Covarrubias C, et al. **Rev Med Chil** 1988 Nov; 116(11):1111–4 **(Spa)**

MICROBIOLOGY

Predictive factors for bactibilia in acute cholecystitis. Thompson JE Jr, et al. **Arch Surg** 1990 Feb;125(2):261–4

Effect of bile drainage from the choledochus on bacterial concentration. Chaimoff C, et al. **Isr J Med Sci** 1989 Dec; 25(12):723–5

Occurrence and character of a putative causative virus of enterically-transmitted non-A, non-B hepatitis in bile. Uchida T, et al. **Jpn J Exp Med** 1990 Feb;60(1):23–9

High-performance liquid chromatography of bilirubin conjugates in bile: effect of beta-glucuronidase on the bile pigments. Skar V, et al. **Scand J Gastroenterol** 1989 Aug; 24(6):657–65

Sterility of bile in multiple-organ donors. Ikeda T, et al. **Transplantation** 1990 Mar;49(3):653

[Initial results of bacterial contamination of the gallbladder in forensic medicine examination] Paelke A, et al. **Beitr Gerichtl Med** 1989;47:497–502 (Eng. Abstr.) **(Ger)**

[Single-daily-dose treatment of ceftriaxone for biliary tract infections and bacterial counts in bile] Tanimura H, et al. **Nippon Geka Hokan** 1989 May 1;58(3):299–309 (Eng. Abstr.) **(Jpn)**

[Effect od external drainage of the biliary tract on bile infection] Kubiak J, et al. **Wiad Lek** 1990 Apr 15; 43(8):318–23 (Eng. Abstr.) **(Pol)**

[Results of intraoperative bacteriological studies of bile from patients operated on for cholelithiasis] Sowier J, et al. **Wiad Lek** 1989 Apr 30;42(8):514–6 (Eng. Abstr.) **(Pol)**

[Bacteriocholia and cholic acid level in the bile in cholelithiasis] Bekbergenov BM, et al. **Antibiot Khimioter** 1990 Jan;35(1):37–40 (Eng. Abstr.) **(Rus)**

[Bacteriocholia and antibiotic prevention of postoperative suppurative-septic complications in patients with inflammatory diseases of the biliary tract] Buianov VM, et al. **Klin Khir** 1990;(1):55–60 (122 ref.) **(Rus)**

[Rapid methods of detection of bacteria in the bile] Buianov VM, et al. **Sov Med** 1989;(11):30–4 (Eng. Abstr.) **(Rus)**

[Bacteriologic findings as a prognostic factor in the course of acute cholecystitis] Calpena Rico R, et al. **Rev Esp Enferm Apar Dig** 1989 Nov;76(5):465–70 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

The effect of enterectomy on gastric secretion in dogs with biliary fistulas. Landor JH, et al. **Am J Dig Dis** 1970 Jul; 15(7):633–6

Effects of percutaneous transhepatic biliary drainage on blood-bile permeability and selective IgA transport in patients with biliary obstructions. Ohshio G, et al. **Ann Surg** 1990 Apr;211(4):428–32

A simple method for the correction of biliary excretion curves distorted by the biliary dead space. Roma MG, et al. **Biochem Pharmacol** 1989 Nov 15;38(22):4021–5

Studies on medicinal resources from livestock. I. Anti-allergic effects of pig bile. (1). Kubo M, et al. **Chem Pharm Bull (Tokyo)** 1989 Dec;37(12):3409–11

Luminal bile regulates cholecystokinin release in conscious rats. Nakamura R, et al. **Dig Dis Sci** 1990 Jan;35(1):55–60

Release of pancreatic polypeptide and its mechanism in luminal feedback regulation in the conscious rat. Miyasaka K, et al. **Digestion** 1989;43(1–2):73–80

60 min normothermic liver ischemia in rats: allopurinol improves energy status and bile flow during reperfusion. Karwinski W, et al. **Eur Surg Res** 1990;22(1):27–33

Regulation of plasma cholecystokinin levels by bile and bile acids in the rat. Ohta H, et al. **Gastroenterology** 1990 Sep; 99(3):819–25

Biliary motility. Grace PA, et al. **Gut** 1990 May;31(5):571–82 (196 ref.)

Interactions between gall bladder bile and mucosa; relevance to gall stone formation. Jacyna MR. **Gut** 1990 May; 31(5):568–70 (48 ref.)

Cholera toxin-induced fluid secretion in rat gut ligated loops: influence of bile from normal or cholera toxin-immunized rats. Pierre PG, et al. **Immunology** 1989 Nov;68(3):319–24

Different effects of bile and sodium taurocholate on mucosal calcium accumulation and calcium absorption in rats. Limlomwongse L, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Aug;35(4):267–77

The effect of bile on the gastric mucosal barrier in the presence and after blockade of normal gastric acidity. Kostakoglu N, et al. **JPMA** 1989 Sep;39(9):231–4

Bile flow and colon cancer. Hill MJ. **Mutat Res** 1990 May; 238(3):313–20 (47 ref.)

Effects of pancreatic polypeptide on biliary flow and bile acid secretion stimulated by secretin and cholecystokinin in the conscious pig. Langlois A, et al. **Regul Pept** 1990 Jan;27(1):139–47

Effects of rat bile infusion on renal function in rats. Shen YS, et al. **Renal Physiol Biochem** 1990 Jul–Aug; 13(4):213–22

Canine duodenal mucosal protection. Lawson HH, et al. **S Afr J Surg** 1989 Sep;27(4):129–31

The inhibitory effect of bile on the binding of vitamin B12 to intrinsic factor. An in vivo study in rats. Bergesen O, et al. **Scand J Gastroenterol** 1990 Aug;25(8):819–24

Postprandial gallbladder filling: relation to gastrointestinal motility. Qvist N, et al. **Scand J Gastroenterol** 1989 Oct; 24(8):969–74

Proximal jejunal and biliary effects on the enteroinsular axis. Rudnicki M, et al. **Surgery** 1990 Apr;107(4):455–60

Role of bile and bile salts on cyclosporine absorption in dogs. Ericzon BG, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1248–9

Bilirubin excretion and bile flow in fed and fasted Brazilian squirrel monkeys (Saimiri sciureus). Cornelius CE, et al. **Vet Res Commun** 1989;13(5):395–401

[Functional relation of bile and the pancreas] Senninger N. **Z Gastroenterol** 1989 Dec;27 Suppl 3:17–8 **(Ger)**

[The role of bile in the development of colon cancer induced by 1,2-dimethyl hydrazine in rats] Morvay K, et al. **Orv Hetil** 1989 Sep 17;130(38):2033–5 (Eng. Abstr.) **(Hun)**

[The ornithine decarboxylase activity of the gastric remnant mucosa: the effect of the duodenal juice with bile on the gastric mucosa] Murakami S, et al. **Gan No Rinsho** 1990 Mar;36(4):485–7 (Eng. Abstr.) **(Jpn)**

[The influence of reflux of bile and pancreatic juice on gastric carcinogenesis in rats] Kojima H, et al. **Nippon Geka Gakkai Zasshi** 1990 Jul;91(7):818–26 (Eng. Abstr.) **(Jpn)**

[Effect of liver bile on interdigestive electric activity of the stomach and small intestine in dogs] Romański K. **Pol Arch Weter** 1988;28(3–4):57–69 (Eng. Abstr.) **(Pol)**

RADIONUCLIDE IMAGING

Scintigraphic detection of bile leakage after cholecystectomy. Chak SP, et al. **Clin Nucl Med** 1990 Feb;15(2):116

SECRETION

Amiloride and taurine inhibit cholate-induced HCO3(–)-rich choleresis in perfused rat livers. Anwer MS, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):G453–61

Effect of acid-base balance on biliary bicarbonate secretion in the isolated perfused guinea pig liver. Blot-Chabaud M, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):G863–72

Circadian rhythms of biliary protein and lipid excretion in rats. Nakano A, et al. **Am J Physiol** 1990 May;258(5 Pt 1):G653–9

Effect of cyclosporin A on bile flow in experimental animals using technetium-99m EHIDA. Owunwanne A, et al. **Am J Physiol Imaging** 1990;5(1):30–5

Inhibitory action of cyclobutyrol on the secretion of biliary cholesterol and phospholipids. Monte MJ, et al. **Biochem J** 1990 Feb 15;266(1):165–71

Inhibition of biliary cholesterol and phospholipid secretion during cyclobutyrol-induced hydrocholeresis. Monte MJ, et al. **Biochem J** 1989 Oct 15;263(2):513–8

Effect of streptozotocin-induced diabetes on sex differences in biliary lipid secretion in the rat. Marin JJ, et al. **Biochim Biophys Acta** 1990 Mar 12;1043(1):106–12

The effect of cyclosporine A on bile secretion in dogs. Sutherland FR, et al. **Can J Physiol Pharmacol** 1990 Jan; 68(1):136–8

Current concepts of biliary secretion. Hofmann AF. **Dig Dis Sci** 1989 Dec;34(12 Suppl):16S–20S (32 ref.)

Effect of ursodeoxycholic acid administration on biliary lipid secretion in primary biliary cirrhosis. Roda E, et al. **Dig Dis Sci** 1989 Dec;34(12 Suppl):52S–58S

Hepatocellular bile acid transport and ursodeoxycholic acid hypercholeresis. Scharschmidt BF, et al. **Dig Dis Sci** 1989 Dec;34(12 Suppl):5S–15S (60 ref.)

Influence of dehydrocholic acid on the secretion of bile acids and biliary lipids in rats. Yousef IM, et al. **Digestion** 1990; 45(1):40–51

Inhibition of hepatocytary vesicular transport by cyclosporin A in the rat: relationship with cholestasis and hyperbilirubinemia. Román ID, et al. **Hepatology** 1990 Jul; 12(1):83–91

Fourier analysis of biliary and pancreatic excretion in man based on data obtained by a duodenal perfusion/aspiration technique. Björnsson OG, et al. **Int J Biomed Comput** 1990 Jul;26(1–2):109–23

Enhancement of bile acid-induced biliary lipid secretion by streptozotocin in rats: role of insulin deficiency. Villanueva GR, et al. **J Lab Clin Med** 1990 Apr;115(4):441–8

The nature of choleresis induced by deoxycholate and its conjugates in the rabbit. Kanai S, et al. **Jpn J Physiol** 1989; 39(6):907–18

Effects of bile acid depletion and of ursodeoxycholic and chenodeoxycholic acids on biliary protein secretion in the hamster. Malavolti M, et al. **Life Sci** 1990;46(23):1727–37

The role of acinar zone 3 hepatocytes in bile formation: influence of bromobenzene treatment on bile formation in the rat. Dionne S, et al. **Liver** 1990 Apr;10(2):85–93

Pancreatic and biliary secretion in the anesthetized Syrian golden hamster in response to secretin, cholecystokinin-octapeptide, bombesin, and carbachol. Ali AE, et al. **Pancreas** 1990 May;5(3):314–22

Defective ATP-dependent bile canalicular transport of organic anions in mutant (TR-) rats with conjugated hyperbilirubinemia. Kitamura T, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3557–61

Interactions between bile and pancreatic juice diversions on cholecystokinin release and pancreas in conscious rats. Nakamura R, et al. **Proc Soc Exp Biol Med** 1989 Nov; 192(2):182–6

Physiology of bile secretion and cholestasis. Sellinger M, et al. **Prog Liver Dis** 1990;9:237–59 (186 ref.)

Hepatobiliary compensation for the loss of gallbladder function after cholecystectomy. An experimental study in the cat. Friman S, et al. **Scand J Gastroenterol** 1990 Mar; 25(3):307–14

Biliary lipid secretion early after liver transplantation. Ericzon BG, et al. **Transplant Proc** 1990 Aug;22(4):1537–8

New method of pancreatic transplantation with gallbladder-bile passages: exocrine drainage into recipient's duodenum. Wolff H, et al. **Transplant Proc** 1990 Apr;

22(2):638

[Effect of proglumide on choleresis in rats] Zhang J, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar;10(2):170–3 (Eng. Abstr.) **(Chi)**

[Effects of cholecystokinin, gastrin and proglumide on bile secretion in rats] Zhang J, et al. **Sheng Li Hsueh Pao** 1990 Apr;42(2):175–80 (Eng. Abstr.) **(Chi)**

[Effect of chronic administration of cyclosporin A on choleresis in rats] Cadranel JF, et al. **Gastroenterol Clin Biol** 1989 Oct;13(10):779–82 (Eng. Abstr.) **(Fre)**

[An increase of choleresis in secondary biliary cirrhosis in rats is caused by bile duct secretion] Taillandier J, et al. **Gastroenterol Clin Biol** 1990;14(4):313–8 (Eng. Abstr.) **(Fre)**

[Relation of interdigestive gastrointestinal motility and pancreas–bile secretion] Malfertheiner P. **Z Gastroenterol** 1989 Dec;27 Suppl 3:10–2 (32 ref.) **(Ger)**

[Effects of carbachol and atropine on bile secretion in sheep] Garwacki S, et al. **Pol Arch Weter** 1988;28(3–4):71–7 (Eng. Abstr.) **(Pol)**

[Evaluation of the absorptive and excretory functions of the liver in middle-aged and elderly patients with peritonitis] Karimov ShI, et al. **Khirurgiia (Mosk)** 1990 Mar;(3):92–5 **(Rus)**

[Secretory pressure of the liver and bile hydrodynamics in prolonged obstruction of the bile ducts] Kurlat NG. **Klin Khir** 1989;(9):21–2 (Eng. Abstr.) **(Rus)**

[Simultaneous study of bile excretion and secretory ability of the stomach using pentagastrin] Kotovoi OL. **Lab Delo** 1989;(7):43–5 (Eng. Abstr.) **(Rus)**

[The molecular and cellular mechanisms of the bile–secreting function of the liver] Masiuk AI. **Usp Fiziol Nauk** 1990 Apr–Jun;21(2):18–35 (150 ref.) **(Rus)**

[Biliary secretion. Significance of hypercholeresis from the surgical point of view] Díez Cascón A, et al. **Rev Esp Enferm Apar Dig** 1989 Oct;76(4):349–55 (Eng. Abstr.) **(Spa)**

BILE ACIDS AND SALTS

Sizing of lecithin–bile salt mixed micelles by size–exclusion high–performance liquid chromatography. Nichols JW, et al. **Biochemistry** 1990 May 15;29(19):4600–6

Hydrophobic interaction of lysophospholipids and bile salts at submicellar concentrations. Shoemaker DG, et al. **Biochemistry** 1990 Jun 19;29(24):5837–42

Bile salt–induced disintegration of egg phosphatidylcholine liposomes: a kinetic study based on turbidity changes. Nagata M, et al. **Chem Pharm Bull (Tokyo)** 1990 May; 38(5):1341–4

Bilirubin and bile acids removal by haemoperfusion through synthetic resin "Persorb". Filip K, et al. **Czech Med** 1990; 13(1):34–7

Structure–activity relationship studies on natural and synthetic bile acid analogs. Roda A, et al. **Dig Dis Sci** 1989 Dec;34(12 Suppl):24S–35S

A study on the influence of bile acid chemical structure on dissolution of insoluble calcium salts: an in vitro study of the use of bile acid–phosphatidylcholine–cholesterol model bile solution. Yoneda M, et al. **Gastroenterol Jpn** 1990 Jun; 25(3):383–7

Synthesis of new bile salt analogues, sodium 3 alpha, 7 alpha–dihydroxy–5 beta–cholane–24–sulfonate and sodium 3 alpha, 7 beta–dihydroxy–5 beta–cholane–24–sulfonate. Kihira K, et al. **J Lipid Res** 1990 Jul;31(7):1323–6

Lithium hydroxide/aqueous methanol: mild reagent for the hydrolysis of bile acid methyl esters. Dayal B, et al. **Steroids** 1990 May;55(5):233–7

ADMINISTRATION & DOSAGE

[Lung water changes after the intratracheal infusion of bile acid in dogs—a new method for its measurement by the double indicator dilution method using heat and sodium ions] Kaneko T. **Masui** 1990 Feb;39(2):148–53 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

DNA damage induced by some bile acids, evaluated with alkaline elution technique. Peluso M, et al. **Boll Soc Ital Biol Sper** 1989 Jul;65(7):671–7

Influence of the H2 antagonist, metiamide, on bile acid–induced acute gastric mucosal ulcerogenesis. McRae DB Jr, et al. **Surg Forum** 1978;29:425–7

ANALYSIS

Duodenogastric reflux of bile acids, gastrin and parietal cells, and gastric acid secretion before and 6 months after cholecystectomy. Lorusso D, et al. **Am J Surg** 1990 Jun; 159(6):575–8

Changes in intragastric bile acid composition in patients receiving cimetidine postoperatively. Vitale GC, et al. **Am J Surg** 1990 Jan;159(1):153–8; discussion 158–60

Capillary gas chromatography/negative ion chemical ionization mass spectrometry for the quantification of bile acids including 1 beta–hydroxylated and unsaturated bile acids in serum and urine. Miyara T, et al. **Biomed Chromatogr** 1990 Mar;4(2):56–60

Simultaneous determination of conjugated bile acids in human bile. Pang CP, et al. **Clin Biochem** 1990 Feb; 23(1):85–90

Unusual 1 beta–hydroxylated bile acids in children with a paucity in interlobular bile ducts [letter] Kimura A, et al. **Clin Chim Acta** 1989 Nov;185(2):215–7

Biliary bile acid profiles of domestic fowl as determined by high performance liquid chromatography and fast atom bombardment mass spectrometry. Elkin RG, et al. **Comp Biochem Physiol [B]** 1990;96(1):157–61

Bile acid composition in brown pigment stones. Akiyoshi T, et al. **Dig Dis Sci** 1990 Jan;35(1):27–32

Qualitative and quantitative comparison of gallbladder proteins from patients with and without cholesterol gallstones. Yu L, et al. **Dig Dis Sci** 1990 Jan;35(1):47–9

Bile concentration is a key factor for nucleation of cholesterol crystals and cholesterol saturation index in gallbladder bile of gallstone patients. van Erpecum KJ, et al. **Hepatology** 1990 Jan;11(1):1–6

New and versatile method for the determination of faecal bile acids by thin–layer chromatography with direct scanning fluorimetry. Kindel M, et al. **J Chromatogr** 1989 Dec 29;497:139–46

Carrier gas flow–rate and injection system in capillary gas chromatography of unconjugated and glycine–conjugated bile acids. Street JM, et al. **J Chromatogr** 1989 Oct 27; 495:31–40

Bile acids in human breast cyst fluid: the identification of lithocholic acid. Raju U, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):1030–4

Bile acid profiles in peroxisomal 3–oxoacyl–coenzyme A thiolase deficiency. Clayton PT, et al. **J Clin Invest** 1990 Apr;85(4):1267–73

Thermospray ionization liquid chromatography–mass spectrometry: a new and highly specific technique for the analysis of bile acids. Setchell KD, et al. **J Lipid Res** 1989 Sep;30(9):1459–69

Ursodeoxycholic acid, chenodeoxycholic acid, and 7–ketolithocholic acid are primary bile acids of the guinea pig. Tint GS, et al. **J Lipid Res** 1990 Jul;31(7):1301–6

Fermentation of vegetable fiber in the intestinal tract of rats and effects on fecal bulking and bile acid excretion. Nyman M, et al. **J Nutr** 1990 May;120(5):459–66

A study of the relationship between bile salts, bile salt–stimulated lipase, and free fatty acids in breast milk: normal infants and those with breast milk jaundice [see comments] Forsyth JS, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug;11(2):205–10 Comment in: J Pediatr Gastroenterol Nutr 1990 Aug;11(2):145–7.

A method for the simultaneous analysis of unconjugated and glycine–conjugated bile acids by capillary gas–liquid chromatography. Iida T, et al. **Lipids** 1989 Dec; 24(12):1053–5

Comparative sequential changes in serum and biliary levels of bile acid components after a single dose of D–galactosamine or partial hepatectomy in the rat. Tsuda H, et al. **Liver** 1990 Feb;10(1):28–34

Bile acid composition of dog and cat gall–bladder bile. Washizu T, et al. **Nippon Juigaku Zasshi** 1990 Apr; 52(2):423–5

Effect of anions on adsorption of bile salts by colestipol hydrochloride. Bilicki CV, et al. **Pharm Res** 1989 Sep; 6(9):794–7

In vitro adsorption of bile salts by colestipol hydrochloride. Konechnik TJ, et al. **Pharm Res** 1989 Jul;6(7):619–23

Effect of ursodeoxycholic acid administration on bile acid composition in hamster bile. Matejka M, et al. **Pharmacol Res** 1990 May–Jun;22(3):297–305

Effect of chronic ursocholic acid administration on bile lipid composition and bile acid pool size in gallstone patients. Lanzini A, et al. **Scand J Gastroenterol** 1990 Jul;25(7):711–9

By–products in the analysis of beta–muricholic acid in biological samples as methyl ester triacetate. Janssen G, et al. **Steroids** 1989 Jun;53(6):677–93

[Clinical research on the relation of chronic gastritis and intragastric bile acids] Su WW, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Mar;28(3):160–2, 187 (Eng. Abstr.) **(Chi)**

[Influence of subtotal gastrectomy on bile acid concentration, total bacterial counts in the gastric juice, and histologic changes in the gastric mucosa] Zhang C. **Chung Hua Wai Ko Tsa Chih** 1989 Dec;27(12):760–4, 782–3 (Eng. Abstr.) **(Chi)**

[Determination of bile acids in bear gall drainage by thin layer chromatographic scanning] Wang FS, et al. **Yao Hsueh Hsueh Pao** 1989;24(5):397–400 (Eng. Abstr.) **(Chi)**

[A case report of true enterolith (bile acid) with gastrointestinal bleeding, hypoproteinemia and subacute ileus—reference to reported 13 cases in Japan] Takahashi M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Apr; 87(4):1067–73 (25 ref.) **(Jpn)**

[The content of bile acids in the feces of patients with cancer of the large intestine] Nemsadze GG, et al. **Lab Delo** 1990; (4):52–4 **(Rus)**

[The characteristics of bile acid excretion in patients with cancer of the large intestine] Nemsadze GG, et al. **Vopr Onkol** 1990;36(5):549–52 (Eng. Abstr.) **(Rus)**

[Bile acids and bile cholesterol in patients with viral hepatitis A and B] Gromashevskaia LL, et al. **Vrach Delo** 1989 Aug; (8):114–6 **(Rus)**

BIOSYNTHESIS

Cholesterol and bile acid synthesis in Hep G2 cells. Metabolic effects of 26– and 7 alpha–hydroxycholesterol. Javitt NB, et al. **Biochem J** 1989 Sep 15;262(3):989–92

Dexamethasone regulates bile acid synthesis in monolayer cultures of rat hepatocytes by induction of cholesterol 7 alpha–hydroxylase. Princen HM, et al. **Biochem J** 1989 Aug 15;262(1):341–8

Effect of diabetes, starvation, ethanol and isoniazid on rat liver microsomal 12 alpha–hydroxylase activity involved in bile acid biosynthesis. Hansson R. **Biochem Pharmacol** 1989 Oct 1;38(19):3386–9

The effect of chylomicron remnants on bile acid synthesis in cultured rat hepatocytes. Fry RP, et al. **Biochim Biophys Acta** 1990 Feb 23;1042(3):413–6

Cholesterol 7 alpha–hydroxylase activity and bile acid synthesis in hepatocytes of unweaned and weaned pigs in monolayer culture. Kwekkeboom J, et al. **Biochim Biophys Acta** 1990 Feb 23;1042(3):386–94

Effect of pravastatin on biliary lipid composition and bile acid synthesis in familial hypercholesterolaemia. Hoogerbrugge–vd Linden N, et al. **Gut** 1990 Mar; 31(3):348–50

Cloning and regulation of cholesterol 7 alpha–hydroxylase, the rate–limiting enzyme in bile acid biosynthesis. Jelinek DF, et al. **J Biol Chem** 1990 May 15;265(14):8190–7

Feedback regulation of bile–acid synthesis in the rat. Differing effects of taurocholate and tauroursocholate. Shefer S, et al. **J Clin Invest** 1990 Apr;85(4):1191–8

Receptor–mediated uptake of low density lipoprotein stimulates bile acid synthesis by cultured rat hepatocytes. Junker LH, et al. **J Lipid Res** 1989 Dec;30(12):1933–41

Regulation of bile acid synthesis. IV. Interrelationship between cholesterol and bile acid biosynthesis pathways. Pandak WM, et al. **J Lipid Res** 1990 Jan;31(1):79–90

Inhibition and induction of bile acid synthesis by ketoconazole. Effects on bile formation in the rat. Kuipers F, et al. **Lipids** 1989 Sep;24(9):759–64

BLOOD

Diurnal and individual variations in bile acids in the plasma of normal dairy cows. Abdelkader SV, et al. **Acta Vet Scand** 1989;30(2):221–8

Bile acid profile as early indicator of allograft function during orthotopic liver transplantation. Herrera FJ, et al. **Eur Surg Res** 1990;22(1):19–26

Changes in serum bile acid composition in relation to histological findings after liver transplantation in piglets. Okanoue T, et al. **Eur Surg Res** 1989;21(3–4):145–55

Determination of serum bile acids in hepatobiliary diseases by gas liquid chromatography (fasting serum bile acid levels and endogenous bile acid tolerance test). Kajiyama G, et al. **Hiroshima J Med Sci** 1981 Dec;30(4):263–71

Simultaneous determination of keto and non–keto bile acids in human serum by gas chromatography with selected ion monitoring. Eguchi T, et al. **J Chromatogr** 1990 Jan 26; 525(1):25–42

Concentrations of cholestenoic acids in plasma from patients with liver disease. Axelson M, et al. **J Lipid Res** 1989 Dec; 30(12):1877–82

Determination of plasma bile acids by capillary gas–liquid chromatography–electron capture negative chemical ionization mass fragmentography. Stellaard F, et al. **J Lipid Res** 1989 Oct;30(10):1647–52

Serum unconjugated primary and secondary bile acids in patients with cholangiocarcinoma and hepatocellular carcinoma. Changbumrung S, et al. **J Med Assoc Thai** 1990 Feb;73(2):81–90

Endotoxin concentrations in the blood following intravenous injection and effect on prostaglandin F2 alpha release, calcium and bile acids in goats. Aiumlamai S, et al. **Res Vet Sci** 1990 Mar;48(2):190–5

Long–term prognostic value of serum bile acids in liver cirrhosis: a prospective study. Siciliano M, et al. **Z Gastroenterol** 1989 Nov;27(11):653–6

[The importance of the determination of primary bile acids in diseases of the digestive tract] Fučíková E, et al. **Vnitr Lek** 1989 Sep;35(9):885–9 (Eng. Abstr.) **(Cze)**

[Modification of serum bile acid levels and clearance in liver disorders] Pirotte J. **Acta Gastroenterol Belg** 1988 Nov–Dec;51(6):503–8 (26 ref.) (Eng. Abstr.) **(Fre)**

[Hepatobiliary transport of bile acids] Buscher HP. **Z Gastroenterol [Verh]** 1990 Apr;25:35–8 (88 ref.) **(Ger)**

[Application of high resolution liquid chromatography to the test of bile acid tolerance] Marotta F, et al. **G Clin Med** 1990 Jan;71(1):31–6 (Eng. Abstr.) **(Ita)**

[Determination of blood bile acids using high pressure liquid chromatography: comparison of chromatographic, enzymatic and immunoenzymatic methods] Buratti M, et al. **Med Lav** 1990 Jan–Feb;81(1):65–74 (Eng. Abstr.) **(Ita)**

[Evaluation of a colorimetric enzymatic procedure for determining the total bile acids in the blood] Agape V, et al. **Minerva Dietol Gastroenterol** 1989 Jul–Sep; 35(3):159–64 (Eng. Abstr.) **(Ita)**

[Serum concentration of bile acids and portal hypertension in cirrhotic patients. Possible correlations] Tarantino G, et al. **Riv Eur Sci Med Farmacol** 1989 Jun;11(3):195–205 (Eng. Abstr.) **(Ita)**

[Clinico–pathological studies of alcoholic liver disease, especially on the diagnostic significance of endogenous bile

acid tolerance test] Shibata M, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1989 Dec;24(6):511–21 (Eng. Abstr.) **(Jpn)**

[Experimental study on the changes of bile acids and their fractions after liver ischemia] Tamasawa Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Aug;90(8):1230–7 (Eng. Abstr.) **(Jpn)**

[Experimental studies on bile acid metabolism after extended hepatectomy, with special reference to mechanism of an early increase of bile acids in the serum] Taya K. **Nippon Geka Hokan** 1989 Jul 1;58(4):347–59 (Eng. Abstr.) **(Jpn)**

[Significance of serum bile acid and the fraction analysis in clinical tests] Tanaka N, et al. **Nippon Rinsho** 1989 Dec; 48 Suppl:521–4 **(Jpn)**

[Experimental study of changes in total bile acid concentrations in the peripheral and portal blood after partial hepatectomy] Furui J. **Nippon Shokakibyo Gakkai Zasshi** 1990 Mar;87(3):799–810 (Eng. Abstr.) **(Jpn)**

[The 8 years observation in a case of essential hyperbileacidemia] Shibata M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Jan;87(1):126–30 **(Jpn)**

[Changes in portal blood flow by intravenous administration of glucagon—the relationship between those changes and the total serum bile acid values in UDCA.GLUCAGON tolerance test] Yamashita Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jul;86(7):1460–4 (Eng. Abstr.) **(Jpn)**

[Clinical examination of serum bile acids for the diagnosis of hepatobiliary diseases] Fujiwara K. **Rinsho Byori** 1989 Oct;37(10):1114–21 (Eng. Abstr.) **(Jpn)**

[Fractional determination of bile acids bound with protein in serum by high-performance liquid chromatography using dual-column switching system] Yoshida S, et al. **Yakugaku Zasshi** 1989 Nov;109(11):847–52 (Eng. Abstr.) **(Jpn)**

CHEMICAL SYNTHESIS

Synthesis and applicability of photolabile 7,7-azo analogues of natural bile salt precursors. Gengenbacher T, et al. **J Lipid Res** 1990 Feb;31(2):315–27

Bile acids, LXXIX. Synthesis and reduction of 1,4-dien-3-ones of various bile acids. Iqbal MN, et al. **Steroids** 1989 Mar–May;53(3–5):413–25

DEFICIENCY

Cholecystocolonic fistula: malabsorptive consequences of lost bile acids. Benage D, et al. **J Clin Gastroenterol** 1990 Apr; 12(2):192–4

Nancy Slater's saga. Bile salt depletion from a scarred ileum causes steatorrhea. Tyor MP. **N C Med J** 1990 Jul; 51(7):331–3

DIAGNOSTIC USE

Separation and determination of the ingredients of a cold medicine by micellar electrokinetic chromatography with bile salts. Nishi H, et al. **J Chromatogr** 1990 Jan 12; 498(2):313–23

ISOLATION & PURIFICATION

An improved purification procedure for conjugated bile acids using octadecyl-bonded silica cartridges. Scalia S, et al. **Farmaco** 1990 Jun;45(6 Suppl):797–805

METABOLISM

Isolation and characterization of the canalicular membrane bile acid transport protein of rat liver. Sippel CJ, et al. **Am J Physiol** 1990 May;258(5 Pt 1):G728–37

Lipid metabolism in bile acid malabsorption. Färkkilä M, et al. **Ann Med** 1990 Feb;22(1):5–13 (112 ref.)

Effects of stigmasterol-supplemented diets on fecal neutral sterols and bile acid excretion in rats. Andriamiarina R, et al. **Ann Nutr Metab** 1989;33(5):297–303

The role of peroxisomal fatty acyl-CoA beta-oxidation in bile acid biosynthesis. Hayashi H, et al. **Arch Biochem Biophys** 1989 Nov 1;274(2):582–9

2-Fluoro-beta-alanine, a previously unrecognized substrate for bile acid coenzyme A:amino acid:N-acyltransferase from human liver. Johnson MR, et al. **Biochem Pharmacol** 1990 Sep 15;40(6):1241–6

Characterization of phospholipid transfer between mixed phospholipid–bile salt micelles. Fullington DA, et al. **Biochemistry** 1990 Jan 30;29(4):879–86

Transport of bile acids in a human intestinal epithelial cell line, Caco-2. Hidalgo IJ, et al. **Biochim Biophys Acta** 1990 Jul 20;1035(1):97–103

Bile salts–bovine serum albumin binding: spectroscopic and thermodynamic studies. Pico GA, et al. **Biochim Biophys Acta** 1989 Nov 30;999(2):128–34

Oxidation and reduction of bile acid precursors by rat hepatic 3 alpha-hydroxysteroid dehydrogenase and inhibition by bile acids and indomethacin. Takikawa H, et al. **Biochim Biophys Acta** 1990 Apr 2;1043(2):153–6

Cholesterol and bile acid synthesis: utilization of D2O for metabolic studies. Javitt NB, et al. **Biomed Environ Mass Spectrom** 1989 Aug;18(8):624–8

Effects of some poorly digestible carbohydrates on bile acid bacterial transformations in the rat [published erratum appears in Br J Nutr 1989 Sep;62(2):following 525] Andrieux C, et al. **Br J Nutr** 1989 Jul;62(1):103–19

Bile acid conjugation and hepatic taurine concentration in rats fed on pectin. Ide T, et al. **Br J Nutr** 1989 Nov; 62(3):539–50

Bile acid malabsorption: a complication of conduit surgery. Durrans D, et al. **Br J Urol** 1989 Nov;64(5):485–8

Kinetic properties of 7 alpha-hydroxysteroid dehydrogenase from Escherichia coli 080. Prabha V, et al. **Can J Microbiol** 1989 Dec;35(12):1076–80

Reductive biotransformation of 3-oxo bile acids in human blood. Goto J, et al. **Chem Pharm Bull (Tokyo)** 1989 Jul; 37(7):1960–2

Potential bile acid metabolites. XV. Synthesis of 4 beta-hydroxylated bile acids; unique bile acids in human fetal bile. Iida T, et al. **Chem Pharm Bull (Tokyo)** 1989 Dec;37(12):3323–9

Solubilization of multilamellar liposomes of egg yolk lecithin by the bile salt sodiumtaurodeoxycholate and the effect of cholesterol—a rapid-ultrafiltration study. Müller K, et al. **Chem Phys Lipids** 1990 Jan;52(2):111–27

Metabolic derangement of glucose, bile acid and amino acids after portasystemic shunts in cirrhotic rats. Kuang YL, et al. **Chin Med J [Engl]** 1989 Jun;102(6):434–40

Current concepts of biliary secretion. Hofmann AF. **Dig Dis Sci** 1989 Dec;34(12 Suppl):16S–20S (32 ref.)

Effect of ursodeoxycholic acid administration on biliary lipid secretion in primary biliary cirrhosis. Roda E, et al. **Dig Dis Sci** 1989 Dec;34(12 Suppl):52S–58S

Hepatocellular bile acid transport and ursodeoxycholic acid hypercholeresis. Scharschmidt BF, et al. **Dig Dis Sci** 1989 Dec;34(12 Suppl):5S–15S (60 ref.)

Effect of change of fecal bile acid excretion achieved by operative procedures on 1,2-dimethylhydrazine-induced colon cancer in rats. Morvay K, et al. **Dis Colon Rectum** 1989 Oct;32(10):860–3

Bile acid metabolism in familial dysbetalipoproteinaemia: studies in subjects with the apolipoprotein E-2/2 phenotype. Angelin B, et al. **Eur J Clin Invest** 1990 Apr; 20(2):143–9

Evaluation of the ileal absorption capacity for bile acids in the rabbit. Aldini R, et al. **Eur Surg Res** 1990;22(2):93–100

Hep G2 cells as a resource for metabolic studies: lipoprotein, cholesterol, and bile acids. Javitt NB. **FASEB J** 1990 Feb 1;4(2):161–8 (46 ref.)

Hepatic taurine concentration and dietary taurine as regulators of bile acid conjugation with taurine. Hardison WG. **Gastroenterology** 1978 Jul;75(1):71–5

Bile salt deconjugation breath tests [letter] King CE, et al. **Gastroenterology** 1978 Jul;75(1):166

Increased secondary bile acids in a choledochal cyst. Possible role in biliary metaplasia and carcinoma. Reveille RM, et al. **Gastroenterology** 1990 Aug;99(2):525–7

Comparison of endogenous and radiolabeled bile acid excretion in patients with idiopathic chronic diarrhea. Schiller LR, et al. **Gastroenterology** 1990 Apr;98(4):1036–43

Acute effects of ursodeoxycholic and chenodeoxycholic acid on the small intestinal absorption of bile acids. Stiehl A, et al. **Gastroenterology** 1990 Feb;98(2):424–8

Effect of cholecystectomy on bile acid kinetics. Sweeting J. **Gastroenterology** 1989 Dec;97(6):1593–4

Na+-dependent bile acid transport in the ileum: the balance between diarrhea and constipation. van Tilburg AJ, et al. **Gastroenterology** 1990 Jan;98(1):25–32

Effect of bile salts on proton binding to human serum albumin. Picó G, et al. **Gen Physiol Biophys** 1989 Oct; 8(5):515–9

Cholesterol and bile acid metabolism in cultures of primary rat bile ductular epithelial cells. Hylemon PB, et al. **Hepatology** 1990 Jun;11(6):982–8

The pruritus of cholestasis: from bile acids to opiate agonists. Jones EA, et al. **Hepatology** 1990 May;11(5):884–7 (68 ref.)

Comprehensive study of the biliary bile acid composition of patients with cystic fibrosis and associated liver disease before and after UDCA administration. Nakagawa M, et al. **Hepatology** 1990 Aug;12(2):322–34

Ursodeoxycholic acid-induced changes of plasma and urinary bile acids in patients with primary biliary cirrhosis. Stiehl A, et al. **Hepatology** 1990 Sep;12(3 Pt 1):492–7

Modern approaches to bile acid transport proteins. Wilson FA. **Hosp Pract [Off]** 1990 Apr 15;25(4):95–9, 104–8, 110

Side chain conjugation prevents bacterial 7-dehydroxylation of bile acids. Batta AK, et al. **J Biol Chem** 1990 Jul 5; 265(19):10925–8

Formation of C21 bile acids from plant sterols in the rat. Boberg KM, et al. **J Biol Chem** 1990 May 15; 265(14):7967–75

Identification of cytosolic and microsomal bile acid-binding proteins in rat ileal enterocytes. Lin MC, et al. **J Biol Chem** 1990 Sep 5;265(25):14986–95

Relationship between the newly identified bile acid binder and bile acid oxidoreductases in human liver. Takikawa H, et al. **J Biol Chem** 1990 Feb 5;265(4):2132–6

Inappropriate hepatic cholesterol synthesis expands the cellular pool of sterol available for recruitment by bile acids in the rat. Bilhartz LE, et al. **J Clin Invest** 1989 Oct; 84(4):1181–7

Steroid catechol degradation: disecoandrostane intermediates accumulated by Pseudomonas transposon mutant strains. Leppik RA. **J Gen Microbiol** 1989 Jul;135 (Pt 7):1979–88

The genetics of bile acid degradation in Pseudomonas spp.: location and cloning of catabolic genes. Leppik RA. **J Gen Microbiol** 1989 Jul;135 (Pt 7):1989–96

Premicellar taurocholate avidly binds ferrous (Fe++) iron: a potential physiologic role for bile salts in iron absorption. Sanyal AJ, et al. **J Lab Clin Med** 1990 Jul;116(1):76–86

Concentrations of cholestenoic acids in plasma from patients with reduced intestinal reabsorption of bile acids. Axelson M, et al. **J Lipid Res** 1989 Dec;30(12):1883–7

Characterization of serum and urinary bile acids in patients with primary biliary cirrhosis by gas–liquid chromatography–mass spectrometry: effect of ursodeoxycholic acid treatment. Batta AK, et al. **J Lipid Res** 1989 Dec;30(12):1953–62

Apparent lack of conversion of sitosterol into C24-bile acids in humans. Boberg KM, et al. **J Lipid Res** 1990 Jun; 31(6):1083–8

Identification of 3 alpha,4 beta,7 alpha-trihydroxy-5 beta-cholanoic acid in human bile: reflection of a new pathway in bile acid metabolism in humans. Dumaswala R, et al. **J Lipid Res** 1989 Jun;30(6):847–56

Calcium binding by bile acids: in vitro studies using a calcium ion electrode. Gleeson D, et al. **J Lipid Res** 1990 May; 31(5):781–91

Bile acid metabolism in early life: studies of amniotic fluid. Nakagawa M, et al. **J Lipid Res** 1990 Jun;31(6):1089–98

Altered bile acid metabolism in liver disease: concurrent occurrence of C-1 and C-6 hydroxylated bile acid metabolites and their preferential excretion into urine. Shoda J, et al. **J Lipid Res** 1990 Feb;31(2):249–59

Bile acid malabsorption and inflammatory bowel disease: nuclear medicine studies. Furno A, et al. **J Nucl Med Allied Sci** 1989 Oct–Dec;33(4):344–8

Effect of dietary fat, starch and cellulose on fecal bile acids in mice. Bianchini F, et al. **J Nutr** 1989 Nov; 119(11):1617–24

Effect of cholestyramine in early weaning on later response to serum and fecal steroid levels and cholesterol 7 alpha-hydroxylase activity to high-cholesterol diet in ExHC rats. Lu YF, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Apr;36(2):131–40

Active bile salt transport in the ileum: characteristics and ontogeny. Acra SA, et al. **J Pediatr Gastroenterol Nutr** 1990 May;10(4):421–5 (55 ref.)

Altered glycine and taurine conjugation of bile acids following aluminum administration to rats. Klein GL, et al. **J Pediatr Gastroenterol Nutr** 1989 Oct;9(3):361–4

Phenobarbital can aggravate a cholestatic bile acid pattern in infants with obstructive cholangiopathy. Nemeth A, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr;10(3):290–7

Enhanced fecal excretion of bile acids by a new anion-exchange resin possessing a spacer arm in rats. Honda Y, et al. **J Pharmacobiodyn** 1990 Feb;13(2):130–5

Altered hepatic junctional permeability, bile acid excretion and glutathione efflux during oxidant challenge. Ballatori N, et al. **J Pharmacol Exp Ther** 1989 Dec;251(3):1069–75

Bile salt binding by maalox, sucralfate, and meciadanol: in vitro and clinical comparisons. Lipsett P, et al. **J Surg Res** 1989 Nov;47(5):403–6

Effect of simvastatin (MK-733) on sterol and bile acid excretion in rabbits. Ishida F, et al. **Jpn J Pharmacol** 1990 May;53(1):35–45

Cholesterol and bile acids via acetate from the insect juvenile hormone analog methoprene. Quistad GB, et al. **Life Sci** 1974 Nov 15;15(10):1797–804

Effect of aging and dietary restriction on bile acid metabolism in rats. Ferland G, et al. **Lipids** 1989 Oct;24(10):842–8

Contrasting effects of water-soluble and water-insoluble dietary fibers on bile acid conjugation and taurine metabolism in the rat. Ide T, et al. **Lipids** 1990 Jun; 25(6):335–40

Measurement of the proliferative status of colonic epithelium as a risk marker for colon carcinogenesis: effect of bile acid and dietary fiber. Robblee NM, et al. **Nutr Cancer** 1989;12(4):301–10

The effect of etofibrate on cholesterol and bile acid metabolism in the hamster. De Fabiani E, et al. **Pharmacol Res** 1989 Sep–Oct;21(5):567–76

Inverse relationship between total glutathione S-transferase content and bile acid release in isolated hepatocytes from untreated, phenobarbital pretreated and hypothyroid rats. Wilson RA, et al. **Pharmacol Toxicol** 1990 Feb;66(2):121–7

Hepatic passage of bile acids increases oxygen uptake by perfused rat liver. Schölmerich J, et al. **Res Exp Med (Berl)** 1990;190(1):69–75

Bile acid retention after Roux-en-Y biliary reconstruction demonstrated by tauro-23-(75Se)selena-25-homocholic acid. An experimental animal study. Bolder U, et al. **Scand J Gastroenterol** 1990 Jul;25(7):681–8

Bile acid pool size and gallbladder storage capacity in gallstone disease. Nilsell K. **Scand J Gastroenterol** 1990 Apr;25(4):389–94

Determination of 3 beta-hydroxylated bile acids in human serum and liver tissue. Nagakura T, et al. **Tohoku J Exp Med** 1989 Oct;159(2):165–6

[Bile salts. Physiology of the enterohepatic circulation, its disorders and functional studies] Fiasse R. **Acta Gastroenterol Belg** 1988 Nov–Dec;51(6):491–500 (29 ref.) (Eng. Abstr.) **(Fre)**

[Cholesterol and bile acid dynamics: comparative aspects] Lutton C. **Reprod Nutr Dev** 1990;30(2):145–60 (53 ref.) (Eng. Abstr.) **(Fre)**

[Transport proteins for drugs and bile acids in the liver cytosol and plasma membrane—its multiplicity and

functions] Sugiyama Y, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(6):941–56 (113 ref.) **(Jpn)**

[Lithogenesis from the aspect of biliary acid metabolism] Trenčanský A, et al. **Vnitr Lek** 1990 Feb;36(2):180–5 (Eng. Abstr.) **(Slo)**

[Biliary composition and bile acid metabolism in young men and women] Covarrubias C, et al. **Rev Med Chil** 1988 Nov; 116(11):1111–4 **(Spa)**

PHARMACOKINETICS

Formation of delta 2– and delta 3–cholenoic acids from bile acid 3–sulfates by a human intestinal Fusobacterium strain. Robben J, et al. **Appl Environ Microbiol** 1989 Nov; 55(11):2954–9

Effect of oral gold salt therapy on bile acid absorption in rheumatoid arthritis patients. Magaró M, et al. **Clin Rheumatol** 1990 Mar;9(1):42–7

Bile salt–induced increases in duodenal brush–border membrane proton permeability, fluidity, and fragility. Zhao DL, et al. **Dig Dis Sci** 1990 May;35(5):589–95

Uptake of bile acids by perfused rat liver: evidence of a structure–activity relationship. Aldini R, et al. **Hepatology** 1989 Nov;10(5):840–5

Bile acid malabsorption after intestinal bypass surgery for obesity. A comparison between jejunoileal shunt and biliointestinal bypass. Nyhlin H, et al. **Int J Obes** 1990 Jan; 14(1):47–55

PHARMACOLOGY

Sulfated bile acids inhibit Na(+)–H+ antiport in human kidney brush–border membrane vesicles. Sellinger M, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):F986–91

Bile acids: antioxidants or enhancers of peroxidation depending on lipid concentration. DeLange RJ, et al. **Arch Biochem Biophys** 1990 Jan;276(1):19–25

The pH dependence of the hemolytic potency of bile salts. Iiani A, et al. **Biochim Biophys Acta** 1990 Aug 24; 1027(2):199–204

The effect of food and bile acid administration on the relative bioavailability of cyclosporin. Lindholm A, et al. **Br J Clin Pharmacol** 1990 May;29(5):541–8

Effect of bile acid on electrophysiological properties of rabbit sino–atrial node in vitro. Kotake H, et al. **Br J Pharmacol** 1989 Oct;98(2):357–60

Effect of natural and structurally modified bile acids on cholesterol metabolizing enzymes in rat liver microsomes. Crestani M, et al. **Chem Phys Lipids** 1989 Oct;51(2):119–26

Modulation of human colonic lamina propria lymphocyte proliferation. Effect of bile acids and oxidized fatty acids. Elitsur Y, et al. **Dig Dis Sci** 1990 Feb;35(2):212–20

Bile acid–lipoprotein interactions: effects of ursodeoxycholic acid (ursodiol). Fromm H. **Dig Dis Sci** 1989 Dec;34(12 Suppl):21S–23S

Thermodynamic effects of bile acids in the stomach. Spychal RT, et al. **Gastroenterology** 1990 Aug;99(2):305–10

Hypercholeretic bile acids: a clue to the mechanism? [comment] Erlinger S. **Hepatology** 1990 May;11(5):888–90 Comment on: Hepatology 1990 May;11(5):743–9.

Estradiol–17 beta–D–glucuronide (E–17G) cholestasis in perfused rat liver: fate of E–17G and choleretic responses to bile salts. Utili R, et al. **Hepatology** 1990 May; 11(5):735–42

Hydrolysis of retinyl palmitate by enzymes of rat pancreas and liver. Differentiation of bile salt–dependent and bile salt–independent, neutral retinyl ester hydrolases in rat liver. Harrison EH, et al. **J Biol Chem** 1989 Oct 15; 264(29):17142–7

Hepatic P–450 cholesterol 7 alpha–hydroxylase. Regulation in vivo at the protein and mRNA level in response to mevalonate, diurnal rhythm, and bile acid feedback. Sundseth SS, et al. **J Biol Chem** 1990 Sep 5;265(25):15090–5

The complete digestion of human milk triacylglycerol in vitro requires gastric lipase, pancreatic colipase–dependent lipase, and bile salt–stimulated lipase. Bernbäck S, et al. **J Clin Invest** 1990 Apr;85(4):1221–6

Intestinal morphometry and bile acid–induced mucosal injury in chronic experimental renal failure. Pahl MV, et al. **J Lab Clin Med** 1990 May;115(5):572–8

Physicochemical and biological properties of natural and synthetic C–22 and C–23 hydroxylated bile acids. Roda A, et al. **J Lipid Res** 1990 Feb;31(2):289–98

Effect of bile salts on the interfacial inactivation of pancreatic carboxylester lipase. Tsujita T, et al. **J Lipid Res** 1990 May; 31(5):831–8

Bile salts in submicellar concentrations promote bidirectional cholesterol transfer (exchange) as a function of their hydrophobicity. Vlahcevic ZR, et al. **J Lipid Res** 1990 Jun; 31(6):1063–71

Effects of incorporating ampicillin, bile salts and carbohydrates in media on the recognition and selection of Aeromonas spp. from faeces. Want SV, et al. **J Med Microbiol** 1990 May;32(1):49–54

The effect of bile salts on the oral mucosal absorption of human calcitonin in rats. Nakada Y, et al. **J Pharmacobiodyn** 1989 Dec;12(12):736–43

Bile salt potentiates the action of capsaicin on sensory neurones of guinea–pig ileum. Jin JG, et al. **Neurosci Lett** 1990 Feb 5;109(1–2):88–91

Effects of rat bile infusion on renal function in rats. Shen YS, et al. **Renal Physiol Biochem** 1990 Jul–Aug; 13(4):213–22

Biliary albumin excretion induced by bile salts in rats is a pathological phenomenon. Ohta M, et al. **Res Commun Chem Pathol Pharmacol** 1989 Sep; 65(3):373–88

PHYSIOLOGY

Bile acids and small intestinal motility during fasting. Peeters TL. **Acta Gastroenterol Belg** 1988 Nov–Dec;51(6):509–15 (43 ref.)

Bile acids do not mediate the hyperdynamic circulation in portal hypertensive rats. Genecin P, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):G21–5

Unexpected failure of bile acid malabsorption to stimulate cholesterol synthesis in sitosterolemia with xanthomatosis. Comparison with lovastatin. Nguyen L, et al. **Arteriosclerosis** 1990 Mar–Apr;10(2):289–97

Human liver aminopeptidase M and its regulation by bile acids. Sasaki M, et al. **Biol Chem Hoppe Seyler** 1990 May; 371 Suppl:321–6

Modification of DNA by bile acids: a possible factor in the etiology of colon cancer. Cheah PY, et al. **Cancer Lett** 1990 Mar;49(3):207–10

Effect of portal hypertension on in vivo bile acid–mediated small intestinal mucosal injury in the rat. Jonas G, et al. **Dig Dis Sci** 1990 Jun;35(6):743–8

Bile acids do not regulate the intestinal mucosal cholesterol synthesis: studies in the chronic bile duct–ureter fistula rat model. Castilho LN, et al. **Digestion** 1990;45(3):147–52

Spontaneous formation of pigmentary precipitates in bile salt–depleted rat bile and its prevention by micelle–forming bile salts. Angelico M, et al. **Gastroenterology** 1990 Feb; 98(2):444–53

Regulation of plasma cholecystokinin levels by bile and bile acids in the rat. Ohta H, et al. **Gastroenterology** 1990 Sep; 99(3):819–25

Aminopeptidase M from human liver. I. Solubilization, purification, and some properties of the enzyme. Nakanishi M, et al. **J Biochem (Tokyo)** 1989 Nov;106(5):818–25

Aminopeptidase M from human liver. II. Kinetic analysis of inhibition of the enzyme by bile acids. Nakanishi M, et al. **J Biochem (Tokyo)** 1989 Nov;106(5):826–30

Protective action of luminal bile salts in necrotizing acute pancreatitis in mice. Gomez G, et al. **J Clin Invest** 1990 Jul;86(1):323–31

The role of bile acids in the development of endotoxemia during obstructive jaundice in the rat. Van Bossuyt H, et al. **J Hepatol** 1990 May;10(3):274–9

The effect of bile on the gastric mucosal barrier in the presence and after blockade of normal gastric acidity. Kostakoglu N, et al. **JPMA** 1989 Sep;39(9):231–4

Alkaline phosphatase activity in hepatic tissue and serum correlates with amount and type of bile acid load. Ogawa H, et al. **Lab Invest** 1990 Jan;62(1):87–95

Adaptive cytoprotection of gastric surface epithelial cells against injury by physiologic concentrations of bile acid. Dempsey DT, et al. **Surgery** 1990 Aug;108(2):348–54; discussion 354–5

[Enterohepatic circulation of bile acids and abnormalities] Oosuga T. **Nippon Naika Gakkai Zasshi** 1990 Mar 10; 79(3):346–9 **(Jpn)**

[The role of bile acids with physiological concentration in colon carcinogenesis] Ugajin H. **Nippon Shokakibyo Gakkai Zasshi** 1989 Aug;86(8):1617–26 (Eng. Abstr.) **(Jpn)**

[The influences of endogenous bile acids on maltase and alkaline phosphatase activities in intrahepatic cholestasis rats] Iizuka Y, et al. **Yakugaku Zasshi** 1989 Sep;109(9):680–4 (Eng. Abstr.) **(Jpn)**

SECRETION

Amiloride and taurine inhibit cholate–induced HCO3(–)–rich choleresis in perfused rat livers. Anwer MS, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):G453–61

Influence of dehydrocholic acid on the secretion of bile acids and biliary lipids in rats. Yousef IM, et al. **Digestion** 1990; 45(1):40–51

Pancreatobiliary responses to an intragastric amino acid meal: comparison to albumin, dextrose, and a maximal cholecystokinin stimulus. Fried M, et al. **Gastroenterology** 1989 Dec;97(6):1544–9

Inhibition of hepatocytary vesicular transport by cyclosporin A in the rat: relationship with cholestasis and hyperbilirubinemia. Román ID, et al. **Hepatology** 1990 Jul; 12(1):83–91

Effects of a cholecystokinin receptor antagonist on intestinal phase of pancreatic and biliary responses in man. Hildebrand P, et al. **J Clin Invest** 1990 Mar;85(3):640–6

Enhancement of bile acid–induced biliary lipid secretion by streptozotocin in rats: role of insulin deficiency. Villanueva GR, et al. **J Lab Clin Med** 1990 Apr;115(4):441–8

Defective biliary secretion of bile acid 3–O–glucuronides in rats with hereditary conjugated hyperbilirubinemia. Kuipers F, et al. **J Lipid Res** 1989 Dec;30(12):1835–45

Effects of bile acid depletion and of ursodeoxycholic and chenodeoxycholic acids on biliary protein secretion in the hamster. Malavolti M, et al. **Life Sci** 1990;46(23):1727–37

Effects of pancreatic polypeptide on biliary flow and bile acid secretion stimulated by secretin and cholecystokinin in the conscious pig. Langlois A, et al. **Regul Pept** 1990 Jan;27(1):139–47

Biliary lipid secretion early after liver transplantation. Ericzon BG, et al. **Transplant Proc** 1990 Aug;22(4):1537–8

[Effect of chronic administration of cyclosporin A on choleresis in rats] Cadranel JF, et al. **Gastroenterol Clin Biol** 1989 Oct;13(10):779–82 (Eng. Abstr.) **(Fre)**

[The role of disorders of secretion of pancreatic enzymes and bile and bacterial contamination of the small intestine in the pathogenesis of diarrhea in patients with celiac disease] Loginov AS, et al. **Klin Med (Mosk)** 1989 Nov; 67(11):81–5 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Nonsurgical treatment of gallstone disease. Hofmann AF. **Annu Rev Med** 1990;41:401–15 (83 ref.)

Studies on medicinal resources from livestock. I. Anti–allergic effects of pig bile. (1). Kubo M, et al. **Chem Pharm Bull (Tokyo)** 1989 Dec;37(12):3409–11

Gallstone recurrence after oral bile acid dissolution treatment [letter; comment] Borum M, et al. **Gastroenterology** 1990 Jun;98(6):1723–4 Comment on: Gastroenterology 1989 Sep;97(3):726–31.

The efficacy and safety of pravastatin, compared to and in combination with bile acid binding resins, in familial hypercholesterolaemia [see comments] Hoogerbrugge N, et al. **J Intern Med** 1990 Sep;228(3):261–6 Comment in: J Intern Med 1990 Sep;228(3):201–5.

Taurohyocholate, taurocholate, and tauroursodeoxycholate but not tauroursocholate and taurodehydrocholate counteract effects of taurolithocholate in rat liver. Schölmerich J, et al. **Res Exp Med (Berl)** 1990;190(2):121–9

TOXICITY

Pathogenesis of bile–induced acute pancreatitis in the dog. Experiments with detergents. Sum PT, et al. **Am J Dig Dis** 1970 Jul;15(7):637–46

Ursodeoxycholate reduces hepatotoxicity of bile salts in primary human hepatocytes. Galle PR, et al. **Hepatology** 1990 Sep;12(3 Pt 1):486–91

Release of Ca2+ from the endoplasmic reticulum is not the mechanism for bile acid–induced cholestasis and hepatotoxicity in the intact rat liver. Farrell GC, et al. **J Clin Invest** 1990 Apr;85(4):1255–9

The order of hepatic cytotoxicity of bile salts in vitro does not agree with that examined in vivo in rats. Ohta M, et al. **Life Sci** 1990;46(21):1503–8

[Respiratory and circulatory changes after the intratracheal infusion of bile acids in dogs] Kaneko T. **Masui** 1989 Nov; 38(11):1411–20 (Eng. Abstr.) **(Jpn)**

URINE

Unusual trihydroxy bile acids in the urine of patients treated with chenodeoxycholate, ursodeoxycholate or rifampicin and those with cirrhosis. Nakashima T, et al. **Hepatology** 1990 Feb;11(2):255–60

Ketonic bile acids in urine of infants during the neonatal period. Wahlén E, et al. **J Lipid Res** 1989 Dec; 30(12):1847–57

BILE ALCOHOLS see **CHOLESTANOLS**

BILE CANALICULI see under **BILE DUCTS, INTRAHEPATIC**

BILE DUCT DISEASES

Mechanisms and management of pediatric hepatobiliary disease. **J Pediatr Gastroenterol Nutr** 1990 Jan;10(1):138–47 (24 ref.)

CHEMICALLY INDUCED

Chronic cholestasis, paucity of bile ducts, red cell aplasia, and the Stevens–Johnson syndrome. An ampicillin–associated case. Cavanzo FJ, et al. **Gastroenterology** 1990 Sep;99(3):854–6

COMPLICATIONS

Liver disease and bileduct stenosis in cystic fibrosis [letter; comment] Gaskin KJ, et al. **Lancet** 1990 May 5; 335(8697):1098 Comment on: Lancet 1989 Dec 16;2(8677):1422–5.

[Adenocarcinoma of the duodenum associated with skin neurofibromatosis and Caroli's disease] Del Vecchio R, et al. **Minerva Chir** 1989 Dec 31;44(23–24):2421–6 (Eng. Abstr.) **(Ita)**

[A case of carcinoma of the papilla Vater associated with multiple intramural bile duct cysts and polycystic disease] Kamiya Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Aug;86(8):1705–9 **(Jpn)**

CONGENITAL

Caroli disease: central dot sign in CT. Choi BI, et al. **Radiology** 1990 Jan;174(1):161–3

[Ultrasound image of an unusual intrahepatic site of a bile duct cyst] Mileder P, et al. **Ultraschall Med** 1990 Jun; 11(3):139–41 (Eng. Abstr.) **(Ger)**

[Caroli's disease: congenital cystic and segmentary dilatation of the intrahepatic bile ducts] Serra CA, et al. **Rev Fac Cien Med Univ Nac Cordoba** 1987;45(2):28–30 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Biliary endoscopy. Proceedings of a symposium. Munich, 23–24 June 1989. **Endoscopy** 1989 Dec;21 Suppl 1:299–383

Cholangioscopic differentiation of biliary strictures and polyps. Nimura Y, et al. **Endoscopy** 1989 Dec;21 Suppl 1:351–6

Comparison of peroral and percutaneous cholangioscopy. Yasuda K, et al. **Endoscopy** 1989 Dec;21 Suppl 1:347–50

Spontaneous perforation of bile duct [letter] Jha MP, et al. **J Indian Med Assoc** 1989 Jul;87(7):169

Use of positive ion fast atom bombardment mass spectrometry for rapid identification of a bile alcohol glucuronide isolated from cerebrotendinous xanthomatosis patients. Dayal B, et al. **Steroids** 1990 Feb;55(2):74–8

[Infiltrating hematoma of the hepatic pedicle and gallbladder wall. Ultrasonographic and x-ray computed tomographic aspects] Dao TH, et al. **J Radiol** 1989 Jun–Jul;70(6–7):431–3 (Eng. Abstr.) (Fre)

[Echography in the diagnosis of pathology of the gallbladder and bile ducts. Personal experience] Sala Blanco J, et al. **Rev Esp Enferm Apar Dig** 1989 Oct;76(4):357–66 (Eng. Abstr.) (Spa)

ETIOLOGY

A case of biliary calculi of parasitic origin. Robinson KP. **Br J Surg** 1966 May;53(5):430–3 (16 ref.)

Xanthoma disseminatum with progressive involvement of the central nervous and hepatobiliary systems. Knobler RM, et al. **J Am Acad Dermatol** 1990 Aug;23(2 Pt 2):341–6

METABOLISM

Cytokeratin expression in cells of the rodent bile duct developing under normal and pathological conditions. Carthew P, et al. **Br J Exp Pathol** 1989 Dec;70(6):717–25

PARASITOLOGY

Hepatobiliary fascioliasis: noninvasive imaging findings. Van Beers B, et al. **Radiology** 1990 Mar;174(3 Pt 1):809–10

PATHOLOGY

Endoscopic transpapillary biopsy (ETPB) of human extrahepatic bile ducts—light and electron microscopic findings, clinical significance. Dancygier H. **Endoscopy** 1989 Dec;21 Suppl 1:312–20

Diverticular bile duct lesion in chronic active hepatitis. Vyberg M. **Hepatology** 1989 Nov;10(5):774–80

[Pathology of the intrahepatic bile ducts] Desmet VJ. **Z Gastroenterol** 1989 Oct;27(10):638–48 (87 ref.) (Ger)

RADIOGRAPHY

The value of radiomanometry in bile duct surgery. Daniel O. **Ann R Coll Surg Engl** 1972 Dec;51(6):357–72

Biliary ascariasis. Verhaeghe L, et al. **J Belge Radiol** 1989 Aug;72(4):293–6

[Interventional radiology of benign bile duct diseases] Nakajima Y, et al. **Gan To Kagaku Ryoho** 1989 Oct; 16(10):3507–15 (46 ref.) (Eng. Abstr.) (Jpn)

RADIONUCLIDE IMAGING

99mTc-DISIDA vs. endoscopic biliary manometry in assessing sphincter of Oddi function. Bar-Meir S, et al. **Hepatology** 1989 Nov;10(5):895–6

[The validity of selected nuclear medicine imaging procedures (brain, skeletal, and hepatobiliary diagnosis)] Deckart H, et al. **Radiol Diagn (Berl)** 1990;31(2):153–61 (Eng. Abstr.) (Ger)

SURGERY

Thirty years' experience with biliary tract reconstruction by hepaticoenterostomy and transhepatic T tube. Muñoz R, et al. **Am J Surg** 1990 Apr;159(4):405–10

Common bile duct strictures. Diagnosis, management, follow-up. Front ME, et al. **AORN J** 1990 Jul;52(1):57–62, 64, 66–7

Recurrent benign biliary strictures: management with self-expanding metallic stents. Rossi P, et al. **Radiology** 1990 Jun;175(3):661–5

[Follow-up after surgery of the bile ducts] Huber A, et al. **Ther Umsch** 1989 Jul;46(7):472–7 (10 ref.) (Eng. Abstr.) (Ger)

[Endoscopic sphincterotomy in acute biliary pancreatitis] Familiari L, et al. **Minerva Dietol Gastroenterol** 1989 Jul–Sep;35(3):171–4 (Eng. Abstr.) (Ita)

[Use of the CO2 laser in the surgical treatment of complicated echinococcosis of the liver] Aliev MA, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):46–8 (Eng. Abstr.) (Rus)

THERAPY

Secondary biliary cirrhosis. A limiting factor in the treatment of hepatolithiasis. Jeng KS, et al. **Arch Surg** 1989 Nov; 124(11):1301–5

Balloon dilatation of biliary strictures: experience and review of the literature. Gya D, et al. **Aust N Z J Surg** 1990 May; 60(5):361–4

Indications for cholangioscopy. Liguory CL, et al. **Endoscopy** 1989 Dec;21 Suppl 1:341–3

Comparison of peroral and percutaneous cholangioscopy. Yasuda K, et al. **Endoscopy** 1989 Dec;21 Suppl 1:347–50

Biliary stricture: is dilatation an acceptable alternative to operation? Miller TA. **Gastroenterology** 1990 Apr; 98(4):1089–90

Electromagnetically generated extracorporeal shockwaves for fragmentation of extra-and intrahepatic bile duct stones: indications, success and problems during a 15 months clinical experience. Staritz M, et al. **Gut** 1990 Feb; 31(2):222–5

Endoscopic sphincterotomy [letter; comment] Neoptolemos J. **Lancet** 1989 Oct 21;2(8669):978 Comment on: Lancet 1989 Aug 19;2(8660):431–4.

The role of interventional radiology for complications of cholecystectomy. vanSonnenberg E, et al. **Surgery** 1990 Jun;107(6):632–8

[Interventional radiology in bile duct diseases] Brambs HJ, et al. **Chirurg** 1989 Dec;60(12):840–5 (15 ref.) (Ger)

[Percutaneous treatment of benign biliary stenosis: bilioplasty and stenting] Rossi P, et al. **Radiol Med (Torino)** 1989 Nov; 78(5):505–13 (Eng. Abstr.) (Ita)

BILE DUCT NEOPLASMS

Hilar cholangiocarcinoma. Czerniak A, et al. **Aust N Z J Surg** 1989 Nov;59(11):837–44 (96 ref.)

Bile duct cancer. Norton RA, et al. **CA** 1990 Jul–Aug; 40(4):225–33 (40 ref.)

Simultaneous development of gallbladder and bile duct carcinomas with atypical epithelium intervention: a case report. Kimura W, et al. **Jpn J Clin Oncol** 1989 Sep; 19(3):287–93

[A case of carcinoid tumor of the common hepatic duct] Yoshida N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Nov;86(11):2617–21 (25 ref.) (Jpn)

ANALYSIS

Expression of laminin in benign and malignant sclerosing lesions of extrahepatic bile ducts. Haglund C, et al. **J Clin Pathol** 1989 Sep;42(9):927–30

[Immunohistochemical study of cancer-associated carbohydrate antigens in carcinoma of the biliary tract] Sasaki R. **Nippon Geka Gakkai Zasshi** 1989 Dec; 90(12):1976–88 (Eng. Abstr.) (Jpn)

BLOOD

Serum unconjugated primary and secondary bile acids in patients with cholangiocarcinoma and hepatocellular carcinoma. Changbumrung S, et al. **J Med Assoc Thai** 1990 Feb;73(2):81–90

Detection of a biliary cell membrane glycoprotein in the serum of cholangiocarcinoma-bearing rats. Possible relevance to the membrane proteins used as serum tumor markers in humans. Scoazec JY, et al. **Lab Invest** 1990 Apr; 62(4):459–66

CLASSIFICATION

[A clinicopathological study of mucus producing bile duct carcinoma] Nagino M, et al. **Nippon Geka Gakkai Zasshi** 1990 Jun;91(6):695–704 (39 ref.) (Eng. Abstr.) (Jpn)

COMPLICATIONS

Cholangiocarcinoma in an immunosuppressed kidney transplant patient. A case report and review of literature. Storms P, et al. **Acta Chir Belg** 1990 Jan–Feb;90(1):24–6 (26 ref.)

Biliary endoprosthesis dysfunction in patients with malignant hilar tumors: successful treatment by percutaneous replacement of the stent. Jackson JE, et al. **AJR Am J Roentgenol** 1990 Aug;155(2):391–5

Papillary cystadenocarcinoma of the bile ducts resulting in hemobilia. Alapati R, et al. **Am J Gastroenterol** 1989 Dec; 84(12):1564–6 (16 ref.)

A comparison of right versus left hepatic duct endoprosthesis insertion in malignant hilar biliary obstruction. Polydorou AA, et al. **Endoscopy** 1989 Nov;21(6):266–71

Interventional radiological treatment of malignant biliary obstruction. Kauffmann GW, et al. **Eur J Surg Oncol** 1990 Aug;16(4):397–403 (13 ref.)

Gastric heterotopy of the biliary tract. Martinez-Urrutia MJ, et al. **J Pediatr Surg** 1990 Mar;25(3):356–7

The effect of selective therapy on malignant obstructive jaundice. Fletcher DR, et al. **Med J Aust** 1989 Nov 20; 151(10):560–4

Biliary malignancies occurring in choledochal cysts. Yoshida H, et al. **Radiology** 1989 Nov;173(2):389–92

Early changes in cholestatic livers as a consequence of hepatic duct carcinoma: a histological and histochemical exploration. James J, et al. **Semin Liver Dis** 1990 May; 10(2):91–101

The use of lasers in the treatment of cholangiocarcinoma. Birkett DH, et al. **Surg Endosc** 1989;3(3):121–3

Palliation for nonpancreatic malignant obstruction of the biliary tract. Finch MD, et al. **Surg Gynecol Obstet** 1990 May;170(5):437–40

Metastatic melanoma: an unusual cause of obstructive jaundice. England MD, et al. **Surgery** 1990 May; 107(5):595–6

[Familial colonic cancer (Lynch's syndrome) and bile duct cancer. Study of 2 cases] Vilotte J, et al. **Gastroenterol Clin Biol** 1989 Dec;13(12):1072–4 (Eng. Abstr.) (Fre)

[Choledocho-gastric fistula. A rare complication of a cholangiocarcinoma] Beck A, et al. **Radiologe** 1989 Aug; 29(8):391–3 (Eng. Abstr.) (Ger)

[A case of obstructive jaundice due to inflammatory pseudotumor-like granuloma] Imafuku K, et al. **Nippon Naika Gakkai Zasshi** 1990 Apr 10;79(4):533–4 (Jpn)

[Malignant strictures of the bile ducts] Blagovidov DF, et al. **Klin Med (Mosk)** 1989 Oct;67(10):23–8 (31 ref.) (Rus)

[Primary cholangiocellular cancer of the liver with an eosinophilic leukemoid reaction] Traianova TG, et al. **Ter Arkh** 1989;61(10):44–6 (Rus)

DIAGNOSIS

Alteration of aliphatic lipid proton NMR linewidths by malignant tumors in guinea pigs. Fossel ET, et al. **Eur J Cancer** 1990 Jan;26(1):29–32

Mucoid biliary obstruction: direct endoscopic visualization of a mucin-hypersecreting bile duct tumor. Heit P, et al. **Gastrointest Endosc** 1990 Mar–Apr;36(2):164–6

Intrahepatic bile duct cystadenocarcinoma: case report and imaging diagnosis. Boillot O, et al. **J Surg Oncol** 1990 Mar; 43(3):193–5

Sonogram of multiple bile duct hamartomas. Tan A, et al. **JCU** 1989 Nov–Dec;17(9):667–9

Ultrasound-guided percutaneous transhepatic cholangiography and drainage in patients with hilar cholangiocarcinoma. Laméris JS, et al. **Semin Liver Dis** 1990 May;10(2):121–5

[A pseudometastatic form of cholangiocarcinoma (letter)] Barthet M, et al. **Gastroenterol Clin Biol** 1990;14(5):515 (Fre)

[Arterial angio-CT and magnetic resonance tomography of Klatskin tumors] Rieber A, et al. **Digitale Bilddiagn** 1989 Sep;9(3):97–101 (Eng. Abstr.) (Ger)

[A comparison of the efficacy of sonography, computed tomography, ERCP and angiography in the diagnosis of primary bile duct carcinoma] Crone-Münzebrock W, et al. **ROFO** 1989 Nov;151(5):523–6 (Eng. Abstr.) (Ger)

[A comparison of imaging procedures in the diagnosis of gallbladder and bile duct carcinomas] Kersjes W, et al. **ROFO** 1990 Aug;153(2):174–80 (Eng. Abstr.) (Ger)

[Malignant tumors of the gallbladder and bile ducts. Diagnostic possibilities from the radiologic viewpoint] Teller P, et al. **Rontgenpraxis** 1990 Feb;43(2):57–64 (Ger)

[Primary malignant neoplasms of the liver. Contribution of echography to the preoperative diagnosis] Lovotti D, et al. **Minerva Chir** 1989 Oct 15;44(19):2059–64 (Eng. Abstr.) (Ita)

[A case of cholangiocarcinoma who showed mimicking appearance of primary sclerosing cholangitis on the cholangiography] Ishizaki Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Nov; 86(11):2606–10 (Jpn)

[Hepatocellular carcinoma with intraductal tumor thrombus diagnosed by ultrasonography; report of two resected cases] Komatsu R, et al. **Rinsho Hoshasen** 1989 Aug; 34(8):941–4 (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

A case-control study of biliary tract cancer in Niigata Prefecture, Japan. Kato K, et al. **Jpn J Cancer Res** 1989 Oct;80(10):932–8

Cholangiocarcinoma in north-east Thailand [letter] Vatanasapt V, et al. **Lancet** 1990 Jan 13;335(8681):116–7

ETIOLOGY

Influence of incomplete bile duct obstruction on the occurrence of cholangiocarcinoma induced by diisopropanolnitrosamine in hamsters. Kinami Y, et al. **Oncology** 1990;47(2):170–6

[Carcinoma in situ in localized Caroli's disease] Joly I, et al. **Gastroenterol Clin Biol** 1990;14(1):90–2 (Eng. Abstr.) (Fre)

GENETICS

Analysis of ras gene mutations in biliary and pancreatic tumors by polymerase chain reaction and direct sequencing. Tada M, et al. **Cancer** 1990 Sep 1;66(5):930–5

METABOLISM

Production of basic fibroblast growth factor-like factor by cultured human cholangiocellular carcinoma cells. Matsuzaki K, et al. **Jpn J Cancer Res** 1990 Apr;81(4):345–54

PATHOLOGY

Cytologic diagnosis of liver fluke infestation in a patient with subsequently documented cholangiocarcinoma. Papillo JL, et al. **Acta Cytol** 1989 Nov–Dec;33(6):865–9

A case of inflammatory pseudotumor of the gallbladder and bile duct. Ikeda H, et al. **Am J Gastroenterol** 1990 Feb; 85(2):203–6 (14 ref.)

Villous adenoma of the common hepatic duct: the role of ultrasound in management. Jennings PE, et al. **Gut** 1990 May;31(5):558–60

Pathological observations of intrahepatic peribiliary glands in 1,000 consecutive autopsy livers. II. A possible source of cholangiocarcinoma. Terada T, et al. **Hepatology** 1990

Jul;12(1):92–7
Ovarian metastases from carcinoma of the gallbladder and extrahepatic bile ducts simulating primary tumors of the ovary. A report of six cases. Young RH, et al. **Int J Gynecol Pathol** 1990;9(1):60–72
Early carcinoma of the extrahepatic bile duct. Tsunoda T, et al. **Jpn J Surg** 1989 Nov;19(6):691–8
Klatskin tumors. **Semin Liver Dis** 1990 May;10(2):85–148
Surgical pathology of cholangiocarcinoma of the liver hilus (Klatskin tumor). Bosma A. **Semin Liver Dis** 1990 May; 10(2):85–90
Preoperative TNM classification of proximal extrahepatic bile duct carcinoma by endosonography. Tio TL, et al. **Semin Liver Dis** 1990 May;10(2):114–20
Carcinoma of the hepatic confluence 25 years after Klatskin's description: diagnosis and endoscopic management. Van Leeuwen DJ, et al. **Semin Liver Dis** 1990 May;10(2):102–13 (60 ref.)
Atrophy of left lobe of the liver associated with hepatolithiasis and cholangiocarcinoma. Mohd TH, et al. **Singapore Med J** 1989 Dec;30(6):607–8
Expression of glycoconjugates in intrahepatic cholangiocellular carcinoma. Zhang SM, et al. **Virchows Arch [A]** 1989;415(5):395–401

RADIOGRAPHY

CT of hilar cholangiocarcinoma: late contrast enhancement in six patients. Takayasu K, et al. **AJR Am J Roentgenol** 1990 Jun;154(6):1203–6
Carcinoma of the cystic duct. Radin DR, et al. **Gastrointest Radiol** 1990 Winter;15(1):49–52
Lymphoma in the wall of the bile ducts: radiologic imaging. Tartar VM, et al. **Gastrointest Radiol** 1990 Winter; 15(1):53–7
Bile duct carcinoma simulating choledocholithiasis. Dytoc JN, et al. **N Y State J Med** 1990 Feb;90(2):69–73
Bile duct carcinoma. Rossi RL. **N Y State J Med** 1990 Feb; 90(2):53
Roentgenologic appearance of a thorotrast-induced small cholangiocarcinoma in a case of thorotrastosis. An autopsy case of massive gastrointestinal bleeding of esophageal varices. Sasaki F, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 May 25; 49(5):568–73
Diagnosis of coexistent hepatic tumors of different kinds: a challenge from CT and MR imaging. Itai Y, et al. **Radiat Med** 1989 May–Jun;7(3):143–9
[Angiography and intervention in tumors of the pancreas, liver and bile ducts] Triller J, et al. **Rontgenblatter** 1989 Sep;42(9):392–9 (31 ref.) (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

The role of radiotherapy in the treatment of bile duct carcinoma. Veeze-Kuijpers B, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan;18(1):63–7
Results of radiation therapy in carcinoma of the proximal bile duct (Klatskin tumor). González González D, et al. **Semin Liver Dis** 1990 May;10(2):131–41

SECONDARY

Metastatic prostatic carcinoma presenting as cholangiocarcinoma ("Klatskin tumor") [letter] Chen MC, et al. **Ann Intern Med** 1990 Jun 1;112(11):881
Small hepatocellular carcinoma presenting as intrabiliary pedunculated polyp and obstructive jaundice. Terada T, et al. **J Clin Gastroenterol** 1989 Oct;11(5):578–83
[Injection treatment with polidocanol for tumor shrinkage of a metastatic tumor of the bile ducts] Brambs HJ. **ROFO** 1990 Jan;152(1):109 **(Ger)**

SURGERY

Proximal bile duct cancer. Gallinger S, et al. **Adv Surg** 1990; 23:89–118 (91 ref.)
A case of hilar cholangiocarcinoma treated by microwave tissue coagulation therapy via percutaneous transhepatic choledochoscopy [letter] Seki T, et al. **Am J Gastroenterol** 1990 May;85(5):623–5
Management of proximal cholangiocarcinomas by surgical resection and radiotherapy. Cameron JL, et al. **Am J Surg** 1990 Jan;159(1):91–7; discussion 97–8
Carcinoid tumor of the bile duct. A case report and literature review. Brown WM 3d, et al. **Am Surg** 1990 Jun;56(6):343–6 (18 ref.)
A palliative procedure for high bile duct carcinoma. Ritchie HD, et al. **Ann R Coll Surg Engl** 1972 Dec;51(6):389–95
Hepatobiliary cystadenoma with mesenchymal stroma. Akwari OE, et al. **Ann Surg** 1990 Jan;211(1):18–27 (42 ref.)
Changing patterns in diagnosis and management of bile duct cancer. Tompkins RK, et al. **Ann Surg** 1990 May; 211(5):614–20; discussion 620–1
Proximal extrahepatic bile duct tumors. Analysis of a series of 52 consecutive patients treated over a period of 13 years. Fortner JG, et al. **Arch Surg** 1989 Nov;124(11):1275–9
Total excision of mucinous biliary cystadenoma. Lau WY, et al. **Aust N Z J Surg** 1990 Mar;60(3):226–8
Liver transplantation for malignant tumours. Ringe B, et al. **Baillieres Clin Gastroenterol** 1989 Oct;3(4):787–97
Truncoumbilical bypass of the portal vein in radical resection of biliary tract tumour involving the hepatic duct confluence. Kumada K, et al. **Br J Surg** 1990 Jul; 77(7):749–51
Clinical experience in 20 hepatic resections for peripheral cholangiocarcinoma. Chen MF, et al. **Cancer** 1989 Dec 1; 64(11):2226–32
Extrahepatic biliary cystadenoma: report of a case and review of the literature. Byrne DJ, et al. **J R Coll Surg Edinb** 1989 Aug;34(4):223–4 (21 ref.)
Adenofibromyomatous hyperplasia of the extrahepatic bile duct—a report of two cases. Ikei S, et al. **Jpn J Surg** 1989 Sep;19(5):576–82
Resection of proximal bile duct cancer. Involving hepatic artery with five-year survival. Gardner B. **N J Med** 1989 Oct;86(10):797–9
Technical considerations for the management of primary cholangiocarcinoma of the porta hepatis. Lygidakis NJ, et al. **Semin Liver Dis** 1990 May;10(2):126–30
Decision-making in the treatment of patients with malignant proximal bile duct obstruction. Van der Heyde MN, et al. **Semin Liver Dis** 1990 May;10(2):145–8
Clinical significance of implantation metastases after surgical treatment of cholangiocarcinoma. Verbeek PC, et al. **Semin Liver Dis** 1990 May;10(2):142–4
Research into the results of resection of hilar bile duct cancer. Boerma EJ. **Surgery** 1990 Sep;108(3):572–80 (91 ref.)
Outcome of radical surgery in hilar cholangiocarcinoma. Hadjis NS, et al. **Surgery** 1990 Jun;107(6):597–604
Percutaneous-endoscopic placement of endoprostheses for relief of jaundice caused by inoperable bile duct strictures. Hall RI, et al. **Surgery** 1990 Feb;107(2):224–7
Preoperative portal embolization to increase safety of major hepatectomy for hilar bile duct carcinoma: a preliminary report. Makuuchi M, et al. **Surgery** 1990 May;107(5):521–7
Carcinoma of the main hepatic duct junction: indications, operative morbidity and mortality, and long-term survival. Tsuzuki T, et al. **Surgery** 1990 Sep;108(3):495–501
Hepatic segmentectomy with caudate lobe resection for bile duct carcinoma of the hepatic hilus. Nimura Y, et al. **World J Surg** 1990 Jul–Aug;14(4):535–43; discussion 544
[Surgical curative treatment of cancer of the bile ducts and the pancreas] Launois B. **G Chir** 1989 Oct;10(10):537–43 (14 ref.) **(Fre)**
[Bilio-duodenal jejunum interposition as a technical alternative to Roux-Y reconstruction following reconstruction of cancer of the fork of the hepatic duct] Kremer B, et al. **Chirurg** 1989 Sep;60(9):599–602 (Eng. Abstr.) **(Ger)**
[A combination surgical-radiological approach for the treatment of carcinoma of the hepatic duct bifurcation with involvement of both hepatic duct trunks] Wilker DK, et al. **Chirurg** 1990 Jun;61(6):444–8 (Eng. Abstr.) **(Ger)**
[Principles of the surgical treatment of proximal gall bladder carcinoma] Kremer B, et al. **Dtsch Med Wochenschr** 1990 Jun 1;115(22):863–7 (15 ref.) **(Ger)**
[The diagnostic and therapeutic status of cancer of the bile ducts and liver] Rauchfuss E, et al. **Gastroenterol J** 1989; 49(2):82–4 (Eng. Abstr.) **(Ger)**
[Surgical, endoscopic or radiologic interventional therapy in bile duct cancer] Böttger T, et al. **Langenbecks Arch Chir** 1990;375(1):39–45 (Eng. Abstr.) **(Ger)**
[Follow-up after surgery of the bile ducts] Huber A, et al. **Ther Umsch** 1989 Jul;46(7):472–7 (10 ref.) (Eng. Abstr.) **(Ger)**
[Treatment of primary liver tumors] Müller R, et al. **Z Gastroenterol [Verh]** 1990 Apr;25:110–2 (43 ref.) **(Ger)**
[Surgical treatment of malignant tumor of the hepatic duct junction] Wolff H, et al. **Zentralbl Chir** 1990;115(1):1–14 (Eng. Abstr.) **(Ger)**
[Role of operative endoscopy in biliary neoplasia] Garbarini A, et al. **Minerva Chir** 1990 Apr 30;45(8):565–9 (Eng. Abstr.) **(Ita)**

THERAPY

Current management of cholangiocarcinoma. Vogt DP. **Oncology (Williston Park)** 1988 Jun;2(6):37–44, 54 (30 ref.)
Imaging and interventional radiology of malignant biliary obstruction. II. Interventional radiology. **Rays** 1989 Apr–Jun;14(2):107–61
Endoscopic internal biliary drainage. Costamagna G, et al. **Rays** 1989 Apr–Jun;14(2):115–21
Transhepatic interventional palliation. Gandini G, et al. **Rays** 1989 Apr–Jun;14(2):123–42 (46 ref.)
Treatment of inoperable bile duct carcinoma [letter] Neuhaus H, et al. **Surg Endosc** 1989;3(4):220–1
[Interventional percutaneous diagnosis and therapy of the bile ducts] Hauenstein KH, et al. **Chirurg** 1989 Dec; 60(12):831–9 **(Ger)**
[Treatment of bile duct tumors (internal medicine viewpoint)] Stiehl A. **Z Gastroenterol [Verh]** 1990 Apr;25:113–4 (15 ref.) **(Ger)**
[Intraarterial and intraportal chemotherapy combined with decollateralization for cholangiocellular carcinoma and metastatic liver cancer] Nagano H, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1758–62 (Eng. Abstr.) **(Jpn)**
[2,450MHz hyperthermia for malignant stenosis of the bile duct—development of a new biliary drainage tube united with a thermocouple] Yanagidaira H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Feb 25; 50(2):195–7 (Eng. Abstr.) **(Jpn)**

BILE DUCT OBSTRUCTION see **CHOLESTASIS**

BILE DUCT OBSTRUCTION, EXTRAHEPATIC

BLOOD

Hemostatic alterations in non-cirrhotic portal fibrosis, extrahepatic portal venous obstruction and Budd-Chiari syndrome. Prasad CV, et al. **Indian J Gastroenterol** 1990 Jan;9(1):57–60
Thromboxane as a possible hepatotoxic factor increased by endotoxemia in obstructive jaundice. Hanai T, et al. **Jpn J Surg** 1989 Sep;19(5):556–62

COMPLICATIONS

Hypercholeresis after release of protracted extrahepatic cholestasis. Case report. Friman S, et al. **Acta Chir Scand** 1989 Jun–Jul;155(6–7):355–6
Spontaneous perforation of the extrahepatic biliary tree in infancy. A case report. Saltzman DA, et al. **Clin Pediatr (Phila)** 1990 Jun;29(6):322–4
Biliary obstruction and cholestasis in AIDS: case report. Markowitz SM, et al. **Va Med** 1990 Mar;117(3):114–6
[Spontaneous reversible anuria in occlusive jaundice with infection: hepatorenal syndrome or acute renal failure?] Neumann H, et al. **Internist (Berl)** 1990 Mar;31(3):243–5 **(Ger)**

DIAGNOSIS

Diagnosis and non-surgical treatment of extrahepatic biliary obstruction. Wills JS, et al. **Del Med J** 1990 Jun; 62(6):1043–51 (11 ref.)
The serum activities of AP, gamma-GT, GlDH and GPT after bile duct obstruction and ethionine in the rat. Putzki H, et al. **Gastroenterol J** 1990;50(1):50–2
Peroral cholangioscopy—an improved method in the diagnosis of common bile duct diseases. Riemann JF, et al. **Gastrointest Endosc** 1989 Sep–Oct;35(5):435–7
Percutaneous transhepatic cholangiography using Chiba needle by blind method. Kumar L, et al. **J Indian Med Assoc** 1989 Oct;87(10):235–7
Endosonography: promising method for diagnosis of extrahepatic cholestasis. Amouyal P, et al. **Lancet** 1989 Nov 18;2(8673):1195–8
[Endoscopic ultrasonography of the bile ducts] Palazzo L, et al. **Ann Chir** 1990;44(4):265–8 (28 ref.) **(Fre)**
[Arterial angio-CT and magnetic resonance tomography of Klatskin tumors] Rieber A, et al. **Digitale Bilddiagn** 1989 Sep;9(3):97–101 (Eng. Abstr.) **(Ger)**
[Diagnosis and treatment of mechanical jaundice in non-neoplastic diseases in middle-aged and elderly patients] Gilenko IA. **Khirurgiia (Mosk)** 1989 Aug; (8):98–101 **(Rus)**
[Mechanical jaundice: laparotomy or endoscopy?] Kochnev OS, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):26–32 (Eng. Abstr.) **(Rus)**
[Stenosis of the major duodenal papilla] Sinev IuV, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):22–4 (Eng. Abstr.) **(Rus)**
[The complex diagnosis of high obstruction of the bile ducts] Shalimov SA, et al. **Klin Khir** 1989;(9):41–3 (Eng. Abstr.) **(Rus)**
[Echosonography and retrograde cholangiopancreatography in selecting surgical tactics in mechanical jaundice] Kanorskiĭ ID, et al. **Sov Med** 1989;(10):35–7 (Eng. Abstr.) **(Rus)**
[Possibilities of ultrasonic examination in mechanical jaundice] Gadiev SI, et al. **Vestn Khir** 1989 Jul;143(7):9–11 (Eng. Abstr.) **(Rus)**
[The problem of diagnosing jaundice in patients with active liver cirrhosis] Borodina TS. **Voen Med Zh** 1989 Jun;(6):60 **(Rus)**
[Comparative study of various methods in the diagnosis of cholestasis in infants] Römer H, et al. **GEN** 1988 Jan–Mar; 42(1):1–6 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Mechanism of gamma-glutamyl transpeptidase release in serum during intrahepatic and extrahepatic cholestasis in the rat: a histochemical, biochemical and molecular approach. Bulle F, et al. **Hepatology** 1990 Apr;11(4):545–50

ETIOLOGY

Eosinophilic gastroenteritis presenting with biliary and partial duodenal obstruction. Farahvash MJ, et al. **Am J Gastroenterol** 1990 Aug;85(8):1022–4
Eosinophilic cholangitis: a self-limited cause of extrahepatic biliary obstruction. Rosengart TK, et al. **Am J Gastroenterol** 1990 May;85(5):582–5
Mirizzi's syndrome. An uncommon cause of biliary obstruction. Didlake R, et al. **Am Surg** 1990 Apr; 56(4):268–9
Parasitic causes of obstructive jaundice. Dennis MJ, et al. **Ann Trop Med Parasitol** 1989 Apr;83(2):159–61
Intermittent biliary obstruction secondary to a mobile ampullary adenoma. Goldberg RI, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):574–6
Distal common bile duct stenosis secondary to benign duodenal ulceration: report of a case. Van Steenbergen W, et al. **Gastrointest Radiol** 1990 Summer;15(3):215–7
Thermal laser-induced stenosis of the common bile duct. An alternative model for experimental research. Vorwerk D,

et al. **Invest Radiol** 1989 Oct;24(10):758–61
Obstructive jaundice caused by hepatoma fragments in the common hepatic duct. Kiev J, et al.
J Clin Gastroenterol 1990 Apr;12(2):207–13 (36 ref.)
Extrahepatic biliary obstruction caused by cancer of non–liver origin in children: report of 5 cases. Chen BW, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Aug;88(8):819–23
Hepatoma presenting as extrahepatic biliary obstruction due to hemobilia. Rhoe BS, et al. **Yonsei Med J** 1989 Dec; 30(4):383–6
[Cholestasis caused by an intradiverticular bezoar. Endoscopic treatment] Seyrig JA, et al.
Gastroenterol Clin Biol 1989 Aug–Sep;13(8–9):741–3 (Eng. Abstr.) (Fre)
[Spontaneous termination of iatrogenic icterus caused by complete ligation of the choledochus (letter)] el Fares F, et al. **J Chir (Paris)** 1990 Feb;127(2):118–9 (Fre)
[Obstructive jaundice caused by metastasis to the head of the pancreas by a malignant melanoma] Stauch S, et al. **Bildgebung** 1987–89;56(3):115–7 (Eng. Abstr.) (Ger)
[Malignant transformation of ectopic pancreas. An unusual cause of acquired duodenal stenosis with cholestasis in a 26–year–old patient] Franke U, et al. **Internist (Berlin)** 1989 Aug;30(8):525–7 (Ger)
[ERCP in bile duct dilatation with jaundice due to spontaneous hydatid cyst rupture. Diagnosis, differential diagnosis, therapy and result] Meier R, et al.
Schweiz Rundsch Med Prax 1990 Apr 10;79(15):443–7 (Eng. Abstr.) (Ger)
[A case report of small cell lung cancer with extrahepatic biliary obstruction and intramedullary spinal cord metastasis] Murate T, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 Apr;27(4):513–7 (Eng. Abstr.) (Jpn)
[Chronic duodenal compression by the mesenteric artery complicated by mechanical jaundice] Gushcha AL, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):82–3 (Rus)
[Malignant strictures of the bile ducts] Blagovidov DF, et al. **Klin Med (Mosk)** 1989 Oct;67(10):23–8 (31 ref.) (Rus)
[Mechanical jaundice in cholangitis] Khachatrian RG, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):87–90 (Eng. Abstr.) (Rus)
[The role of opisthorchiasis in the development of mechanical jaundice and its treatment] Egizarian VT, et al.
Vestn Khir 1989 Apr;142(4):110–3 (Rus)
[Fascioliasis hepatica causing bile duct obstruction] Miranda M, et al. **Rev Med Chil** 1988 Nov;116(11):1186–90 (Eng. Abstr.) (Spa)

IMMUNOLOGY

[Immunologic reactivity of patients with obstructive jaundice of non–neoplastic etiology] Agaev BA, et al.
Khirurgiia (Mosk) 1989 Jul;(7):69–72 (Eng. Abstr.) (Rus)

METABOLISM

Prostaglandin and fatty acid metabolism in patients with extrahepatic biliary atresia. Shimizu T, et al.
J Pediatr Gastroenterol Nutr 1990 Apr;10(3):298–302
Bronze baby syndrome: an animal model. Jori G, et al.
Pediatr Res 1990 Jan;27(1):22–5
[Chylomicron metabolism in experimental cholestasis] Damião AO, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Sep–Oct;44(5):207–10 (Eng. Abstr.) (Por)
[Effect of hemosorption on the status of mitochondria and lysosomes of the liver in extrahepatic cholestasis] Grin'ko IV, et al. **Vestn Khir** 1990 Mar;144(3):111–2 (Rus)

PATHOLOGY

Benign non–traumatic inflammatory strictures of the extrahepatic biliary system [letter; comment] Krukowski ZH, et al. **Br J Surg** 1989 Dec;76(12):1354 Comment on: Br J Surg 1989 Aug;76(8):849–52.
Structural and functional biliary tree changes secondary to extrahepatic biliary obstruction. Lygidakis NJ, et al.
Endoscopy 1989 Dec;21 Suppl 1:321–3
Factors producing bile infarction and bile duct proliferation in biliary obstruction. Shibayama Y. **J Pathol** 1990 Jan; 160(1):57–62
Early changes in cholestatic livers as a consequence of hepatic duct carcinoma: a histological and histochemical exploration. James J, et al. **Semin Liver Dis** 1990 May; 10(2):91–101
[The significance of papillary biopsy in obstruction of Vater's papilla] Schulz JE, et al. **Leber Magen Darm** 1990 Mar; 2(2):71–5 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Bioconstruction of the extrahepatic biliary duct system in minipigs. Comparing normal condition with experimental obstruction. Steiner D, et al. **Acta Anat (Basel)** 1989; 136(2):159–64
Effect of chlorpromazine and biliary drainage on portal blood flow and mitochondrial function during extrahepatic cholestasis. Roselino JE, et al. **Braz J Med Biol Res** 1989; 22(7):889–93
Systemic hypotension and pressor responsiveness in cholestasis. A study in conscious 3–day bile duct ligated rats. Bomzon A, et al. **J Hepatol** 1990 Jul;11(1):70–6
Innervation of intrahepatic bile ducts and peribiliary glands in normal human livers, extrahepatic biliary obstruction and hepatolithiasis. An immunohistochemical study. Terada T, et al. **J Hepatol** 1989 Sep;9(2):141–8
[Functional relation of bile and the pancreas] Senninger N.
Z Gastroenterol 1989 Dec;27 Suppl 3:17–8 (Ger)

PREVENTION & CONTROL

The clogged biliary endoprosthesis: help on the way. Levine JG, et al. **Gastroenterology** 1990 Jul;99(1):281–2

RADIOGRAPHY

Left hepatic atrophy in Mirizzi syndrome: CT appearance. Pombo F, et al. **Eur J Radiol** 1990 May–Jun;10(3):181–2
Value of ERCP in the diagnosis and management of pre– and postoperative biliary complications in hydatid disease of the liver. Magistrelli P, et al. **Gastrointest Radiol** 1989 Fall;14(4):315–20
Carcinoma of the cystic duct. Radin DR, et al.
Gastrointest Radiol 1990 Winter;15(1):49–52
Lymphoma in the wall of the bile ducts: radiologic imaging. Tartar VM, et al. **Gastrointest Radiol** 1990 Winter; 15(1):53–7
[Mirizzi syndrome and its variants] Meyer GJ, et al.
Z Gastroenterol 1990 Apr;28(4):202–5 (Eng. Abstr.) (Ger)
[Intraoperative cholangiography] Kuzin MI, et al.
Khirurgiia (Mosk) 1990 Feb;(2):10–4 (Eng. Abstr.) (Rus)
[A new method of diagnosing the extent of stenosis of the terminal common bile duct and a major duodenal papilla] Iangibaev Z. **Vestn Khir** 1990 Jan;144(1):121–2 (Rus)
[Obstruction of the bile ducts] Ramón Poleo J, et al.
GEN 1989 Jan–Mar;43(1):80–1 (Spa)

RADIONUCLIDE IMAGING

[The usefulness of 99mTc–PMT cholescintigraphy in the diagnosis of bile leakage or biloma] Nakanishi Y, et al.
Rinsho Hoshasen 1989 Aug;34(8):887–92 (Eng. Abstr.) (Jpn)

SURGERY

Preoperative biliary drainage [letter] Søreide O, et al.
Acta Chir Scand 1990 Mar;156(3):251–2
The perioperative changes in glomerular filtration and renal blood flow in patients with obstructive jaundice. Thompson JN, et al. **Acta Chir Scand** 1989 Sep;155(9):465–70
A comparison of cholecysto– and choledochoenterostomy for obstructing pancreatic cancer. Rappaport MD, et al.
Am Surg 1990 Jul;56(7):433–5
Management of the Mirizzi syndrome and the surgical implications of cholecystcholedochal fistula. Baer HU, et al. **Br J Surg** 1990 Jul;77(7):743–5
Truncoumbilical bypass of the portal vein in radical resection of biliary tract tumour involving the hepatic duct confluence. Kumada K, et al. **Br J Surg** 1990 Jul; 77(7):749–51
Immunologic recovery after biliary drainage in obstructive jaundice. Megison SM, et al. **Curr Surg** 1989 Sep–Oct; 46(5):383–5
Endoscopic placement of expandable metal stents for biliary strictures—a preliminary report on experience with 33 patients. Huibregtse K, et al. **Endoscopy** 1989 Nov; 21(6):280–2
Intraoperative fiberoptic choledochoscopy for malignant biliary tract obstruction. Chen MF, et al.
Gastrointest Endosc 1989 Nov–Dec;35(6):545–7
Endoscopic biliary drainage in chronic pancreatitis. Devière J, et al. **Gastrointest Endosc** 1990 Mar–Apr;36(2):96–100
Endoscopic implantation of large–bore self–expanding biliary mesh stent. Domschke W, et al. **Gastrointest Endosc** 1990 Jan–Feb;36(1):55–7
The biliogastric shunt: a method for simultaneous internal diversion of bile and enteric feeding in patients with cancer. Foutch PG, et al. **Gastrointest Endosc** 1989 Sep–Oct; 35(5):440–2
The needle knife: a valuable tool in diagnostic and therapeutic ERCP [see comments] Siegel JH, et al.
Gastrointest Endosc 1989 Nov–Dec;35(6):499–503
Comment in: Gastrointest Endosc 1989 Nov–Dec;35(6):578–9.
A placebo–controlled study on the efficacy of aspirin and doxycycline in preventing clogging of biliary endoprostheses. Smit JM, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):485–9
Extrahepatic biliary cystadenoma: report of a case and review of the literature. Byrne DJ, et al. **J R Coll Surg Edinb** 1989 Aug;34(4):223–4 (21 ref.)
Adenofibromyomatous hyperplasia of the extrahepatic bile duct—a report of two cases. Ikei S, et al. **Jpn J Surg** 1989 Sep;19(5):576–82
Decision–making in the treatment of patients with malignant proximal bile duct obstruction. Van der Heyde MN, et al. **Semin Liver Dis** 1990 May;10(2):145–8
[Cavernous transformation of the portal vein. A rare cause of mechanical obstructive jaundice] Henne–Bruns D, et al. **Chirurg** 1989 Oct;60(10):704–6 (Ger)
[Hepaticojejunostomy with a subcutaneous blind jejunum segment. An alternative in the treatment of stenosing bile duct diseases] Sachse RE, et al. **Chirurg** 1990 May; 61(5):402–6 (Eng. Abstr.) (Ger)
[Surgical treatment of malignant tumor of the hepatic duct junction] Wolff H, et al. **Zentralbl Chir** 1990;115(1):1–14 (Eng. Abstr.) (Ger)
[Surgery of a cicatricial stenosis of the common bile duct] Possati L. **Chir Patol Sper** 1985 Dec;33(6):183–90 (20 ref.) (Ita)
[Indications for choledochotomy and methods for its performance] Baskakov VA, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):54–7 (Eng. Abstr.) (Rus)
[Endoscopic methods in the diagnosis and treatment of mechanical jaundice of non–neoplastic etiology] Ermolov AS, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):58–61 (Eng. Abstr.) (Rus)
[Treatment of acute cholecystitis complicated by mechanical jaundice] Gilenko IA. **Khirurgiia (Mosk)** 1989 Jul;(7):36–9 (Eng. Abstr.) (Rus)
[Use of mechanical devices in biliary tract surgery] Gusarev VF, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):114–9 (Rus)
[Endoscopic papillosphincterotomy in patients with acute cholecystitis and lesions of the common bile duct] Krendal' AP, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):62–6 (Eng. Abstr.) (Rus)
[Diagnosis and treatment of mechanical jaundice] Lukichev OD, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):10–4 (Eng. Abstr.) (Rus)
[Surgical tactics in mechanical jaundice] Nesterenko IuA, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):14–7 (Eng. Abstr.) (Rus)
[Choledochoduodenostomy in choledocholithiasis and benign strictures of the common bile duct] Nikolaev No, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):11–4 (Eng. Abstr.) (Rus)
[Repeated operations on the extrahepatic bile ducts] Potashov LV, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):42–5 (Eng. Abstr.) (Rus)
[Transhepatic endoprosthesis of the bile ducts] Prokubovskiĭ VI, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):18–23 (Eng. Abstr.) (Rus)
[Transumbilical cholangiostomy] Pugaev AV, et al.
Khirurgiia (Mosk) 1989 Jul;(7):51–3 (Eng. Abstr.) (Rus)
[Electrosurgical endoscopic interventions using low–energy laser irradiation] Sinev IuV, et al. **Khirurgiia (Mosk)** 1990 May;(5):141–3 (Rus)
[Comparative evaluation of the results of traditional and laser papillosphincterotomy] Skobelkin OK, et al.
Khirurgiia (Mosk) 1990 Feb;(2):24–6 (Eng. Abstr.) (Rus)
[Diagnosis and treatment of cicatricial strictures of the extrahepatic bile ducts] Shalimov SA, et al. **Klin Khir** 1989; (11):17–9 (Eng. Abstr.) (Rus)
[Decompression surgery in mechanical jaundice of tumoral origin] Kochegarov AA, et al. **Sov Med** 1990;(2):57–60 (Rus)
[Methods of surgical treatment of common bile duct obstruction] Nurmukhamedov RM, et al. **Vestn Khir** 1989 Dec;144(12):19–21 (Rus)
[Late results of endoscopic papillosphincterotomy in patients with non–neoplastic diseases of the common bile duct] Rodionov VV, et al. **Vestn Khir** 1989 Jul;143(7):11–3 (Eng. Abstr.) (Rus)
[Changes in homeostasis after elimination of the cause of mechanical jaundice of non–neoplastic etiology by endoscopic methods] Shulutko AM, et al. **Vestn Khir** 1990 Jan;144(1):45–8 (Eng. Abstr.) (Rus)
[Increasing the effectiveness of lymphosorption in patients with mechanical jaundice] Veronskiĭ GI, et al.
Vestn Khir 1989 Aug;144(8):29–33 (Eng. Abstr.) (Rus)

THERAPY

Bile duct perforation: a complication of large caliber endoprosthesis. Cohen ME, et al. **Gastrointest Endosc** 1989 Sep–Oct;35(5):456–8
Endoscopic therapy for benign bile duct strictures. Geenen DJ, et al. **Gastrointest Endosc** 1989 Sep–Oct;35(5):367–71
Bile duct stricture in an infant with gastroschisis treated by percutaneous transhepatic drainage, biliary stenting, and balloon dilation. Hancock BJ, et al. **J Pediatr Surg** 1989 Oct;24(10):1071–3
Palliation for nonpancreatic malignant obstruction of the biliary tract. Finch MD, et al. **Surg Gynecol Obstet** 1990 May;170(5):437–40
[Percutaneous transhepatic bile duct drainage, 10 years after its introduction] Gouma DJ, et al.
Ned Tijdschr Geneeskd 1989 Dec 16;133(50):2494–9 (71 ref.) (Dut)
[Endoscopic and percutaneous implantation of self–expanding endoprostheses in biliary stenosis] Neuhaus H, et al. **Dtsch Med Wochenschr** 1990 Aug 31; 115(35):1299–306 (Eng. Abstr.) (Ger)
[Clinical aspects, diagnosis and therapy of cancer of Vater's ampulla] Erdmann K, et al. **Z Gesamte Inn Med** 1989 Oct 15;44(20):617–21 (20 ref.) (Eng. Abstr.) (Ger)
[Transpapillary endoprostheses in malignant and benign bile duct diseases] Liebe S, et al. **Z Gesamte Inn Med** 1989 Oct 15;44(20):612–7 (Eng. Abstr.) (Ger)
[Endoscopic papillotomy in the treatment of choledocholithiasis—technic, indications, results] Schulz HJ. **Z Gesamte Inn Med** 1989 Oct 15;44(20):609–12 (Eng. Abstr.) (Ger)
[Endoscopic endoprosthesis in the palliative treatment of carcinoma of the pancreas] Catanzano C, et al.
Minerva Chir 1989 Nov 15;44(21):2217–21 (14 ref.) (Eng. Abstr.) (Ita)
[Recanalization of the bile ducts by roentgeno–endobiliary dilatation and prosthesis (review of the literature)] Rabkin

IKh, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):92–6 (53 ref.) **(Rus)**

VETERINARY

Fibrosing cholehepatitis in broiler chickens induced by bile duct ligations or inoculation of Clostridium perfringens. Onderka DK, et al. **Can J Vet Res** 1990 Apr;54(2):285–90

BILE DUCT OBSTRUCTION, INTRAHEPATIC see **CHOLESTASIS, INTRAHEPATIC**

BILE DUCTS

Technical potential and limitations of cholangioscopes. Komiya O. **Endoscopy** 1989 Dec;21 Suppl 1:338–40

Occlusion of biliary endoprostheses: presentation and management. Lee MJ, et al. **Radiology** 1990 Aug; 176(2):531–4

Gastric pneumatosis: sign of biliary stent-related perforation. Lowe GM, et al. **Radiology** 1990 Mar;174(3 Pt 2):1037–8

Endoscopic stent configuration and bile flow rates in a variable diameter bile duct model. Scheeres D, et al. **Surg Endosc** 1990;4(2):91–3

[Percutaneous transhepatic drainage of the bile ducts] Cernoch J. **Cas Lek Cesk** 1990 Jun 22;129(25):782–6 (Eng. Abstr.) **(Cze)**

[Percutaneous transhepatic bile duct drainage, 10 years following its introduction (letter)] Miranda SI. **Ned Tijdschr Geneeskd** 1990 Feb 10;134(6):306 **(Dut)**

[Hydatid cysts of the liver ruptured into the bile ducts. Remarks on 2 cases] La Seta F, et al. **Radiol Med (Torino)** 1989 Nov;78(5):534–7 **(Ita)**

[Biliary endoprosthesis using an expandable metallic stent] Morita S, et al. **Rinsho Hoshasen** 1990 Apr;35(4):459–63 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

The bile duct system and its anatomical variations. Charels K, et al. **Endoscopy** 1989 Dec;21 Suppl 1:300–8 (32 ref.)

Biliary bypass for an "accessory" biliary duct. A case report. Belli G, et al. **Ital J Surg Sci** 1989;19(3):281–3

Cholesterol and prostaglandin synthesis by cultured human skin fibroblasts in the Alagille syndrome involving paucity of interlobular bile ducts. Dupont J, et al. **J Inherited Metab Dis** 1989;12(4):436–44

Interstitial deletion of the short arm of chromosome 20 in arteriohepatic dysplasia (Alagille syndrome). Zhang F, et al. **J Pediatr** 1990 Jan;116(1):73–7

Exocrine pancreatic insufficiency in syndromic paucity of interlobular bile ducts. Chong SK, et al. **J Pediatr Gastroenterol Nutr** 1989 Nov;9(4):445–9

Surgical treatment of congenital dilatation of the bile duct with special reference to late complications after total excisional operation. Ohi R, et al. **J Pediatr Surg** 1990 Jun; 25(6):613–7

Congenital cystic biliary disease (a case report). Tantry BV, et al. **J Postgrad Med** 1989 Jul;35(3):186–8

Clinical experience of biliary tract carcinoma associated with anomalous union of the pancreaticobiliary ductal system. Ohta T, et al. **Jpn J Surg** 1990 Jan;20(1):36–43

Liver disease and bile duct abnormalities in adults with cystic fibrosis [see comments] Nagel RA, et al. **Lancet** 1989 Dec 16;2(8677):1422–5 Comment in: Lancet 1990 Feb 10;335(8685):357. Comment in: Lancet 1990 May 5;335(8697):1098.

[Rare malformation of the bile ducts of surgical interest] Picardi N, et al. **Ann Ital Chir** 1989 Sep–Oct;60(5):399–403; discussion 404 (Eng. Abstr.) **(Ita)**

[A case of a collision tumor of hepatocellular carcinoma and gallbladder carcinoma, accompanied by anomalous pancreaticobiliary ductal union and congenital intrahepatic bile duct dilation] Makino Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Dec;86(12):2816–21 **(Jpn)**

[Analysis of pancreatic enzymes in the bile of congenital choledochal cyst with anomalous pancreaticobiliary ductal union] Shibata T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jul;86(7):1513–8 (Eng. Abstr.) **(Jpn)**

[Biliary atresia in children] Famulski W, et al. **Wiad Lek** 1989 May 1;42(9):572–4 (Eng. Abstr.) **(Pol)**

[Diagnostic and therapeutic tactics in various forms of cholangiopathies in children] Stepanov EA, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):50–4 (Eng. Abstr.) **(Rus)**

[A rare anomaly of the extrahepatic bile ducts] Muntian SA, et al. **Klin Khir** 1989;(9):56–7 **(Rus)**

ANALYSIS

Expression of laminin in benign and malignant sclerosing lesions of extrahepatic bile ducts. Haglund C, et al. **J Clin Pathol** 1989 Sep;42(9):927–30

Histochemical study on the bile duct system of normal rats. Itagaki S, et al. **Jikken Dobutsu** 1990 Jul;39(3):421–4

[Electron histochemical alteration on the plasma membrane of biliary epithelial cells in obstructive jaundice] Hara T. **Nippon Geka Gakkai Zasshi** 1989 May;90(5):726–35 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Biliary anatomy [letter; comment] Benson EA. **Br J Surg** 1989 Dec;76(12):1354 Comment on: Br J Surg 1989 Jul;76(7):696–8.

The bile duct system and its anatomical variations. Charels K, et al. **Endoscopy** 1989 Dec;21 Suppl 1:300–8 (32 ref.)

Endoscopic transpapillary biopsy (ETPB) of human extrahepatic bile ducts—light and electron microscopic findings, clinical significance. Dancygier H. **Endoscopy** 1989 Dec;21 Suppl 1:312–20

Endoscopic appearance of the normal biliary system. Lennert KA. **Endoscopy** 1989 Dec;21 Suppl 1:309–11

BLOOD SUPPLY

Scanning electron microscopic examinations of microvascular casts of the rat liver and bile duct. Haratake J, et al. **Sangyo Ika Daigaku Zasshi** 1990 Mar 1;12(1):19–28

Surgical anatomy and blood supply of the left biliary tree pertaining to partial liver grafts from living donors. Nery JR, et al. **Transplant Proc** 1990 Aug;22(4):1492–6

CYTOLOGY

Biochemical studies on bile duct epithelial cells isolated from rat liver. Parola M, et al. **J Hepatol** 1990 May;10(3):341–5

DRUG EFFECTS

Cholestasis, altered junctional permeability, and inverse changes in sinusoidal and biliary glutathione release by vasopressin and epinephrine. Ballatori N, et al. **Mol Pharmacol** 1990 Jul;38(1):64–71

INJURIES

Common bile duct strictures. Diagnosis, management, follow-up. Front ME, et al. **AORN J** 1990 Jul;52(1):57–62, 64, 66–7

Iatrogenic injury to the bile duct. Who, how, where? Moossa AR, et al. **Arch Surg** 1990 Aug;125(8):1028–30; discussion 1030–1

Penetrating bile duct trauma. Thomson SR, et al. **Injury** 1989 Jul;20(4):215–6

[Closed traumatic lesions of the bile ducts] Dimitrov D. **Khirurgiia (Sofiia)** 1989;42(3):20–5 (Eng. Abstr.) **(Bul)**

[Reconstruction of the bile ducts after complex injury of the gallbladder and the bile ducts after blunt abdominal trauma in a dog] Berther M, et al. **Schweiz Arch Tierheilkd** 1989; 131(8):479–84 (Eng. Abstr.) **(Ger)**

[Iatrogenic injuries to the bile ducts] Mukhametrakhimov FF, et al. **Klin Khir** 1989;(9):52 **(Rus)**

[Surgical treatment of intraoperative injuries of the bile ducts] Nikhinson RA, et al. **Klin Khir** 1989;(9):53–4 **(Rus)**

METABOLISM

Hepatic biliary lipid secretion and gall bladder biliary lipid mass in gall stone patients: effect of ursodeoxycholic acid. Lanzini A, et al. **Gut** 1990 Feb;31(2):226–30

Cholesterol and bile acid metabolism in cultures of primary rat bile ductular epithelial cells. Hylemon PB, et al. **Hepatology** 1990 Jun;11(6):982–8

Altered hepatobiliary disposition of acetaminophen metabolites after phenobarbital pretreatment and renal ligation: evidence for impaired biliary excretion and a diffusional barrier. Brouwer KL, et al. **J Pharmacol Exp Ther** 1990 Feb;252(2):657–64

Detection of a biliary cell membrane glycoprotein in the serum of cholangiocarcinoma-bearing rats. Possible relevance to the membrane proteins used as serum tumor markers in humans. Scoazec JY, et al. **Lab Invest** 1990 Apr; 62(4):459–66

Effects of gastrointestinal hormones on the opossum biliary sphincter. Becker JM, et al. **Surg Forum** 1978;29:400–2

PATHOLOGY

Bile duct necrosis after partial hepatectomy and transcatheter hepatic arterial embolization [letter] Gotoh M, et al. **AJR Am J Roentgenol** 1990 May;154(5):1124

Extracorporeal lithotripsy of bile duct stones using ultrasonography for stone localization. Ponchon T, et al. **Gastroenterology** 1990 Mar;98(3):726–32

Factors producing bile infarction and bile duct proliferation in biliary obstruction. Shibayama Y. **J Pathol** 1990 Jan; 160(1):57–62

Unifocal stricture of the common bile duct in two children: a localized form of primary sclerosing cholangitis. Sokal EM, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug; 11(2):268–74

Bile duct patterns in the hilar region of the liver in two cases of biliary atresia. Deguchi E, et al. **J Pediatr Surg** 1990 Mar;25(3):307–10

Surgical pathology of cholangiocarcinoma of the liver hilus (Klatskin tumor). Bosma A. **Semin Liver Dis** 1990 May; 10(2):85–90

Preoperative TNM classification of proximal extrahepatic bile duct carcinoma by endosonography. Tio TL, et al. **Semin Liver Dis** 1990 May;10(2):114–20

Modifications of biliary and vascular basement membrane laminin in serial hepatic biopsies after hepatic transplantation in man. Reynès M, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2478–9

[A case report: transcatheter arterial embolization was effective for hepatocellular carcinoma with bile duct invasion] Kiso S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 May;87(5):1248–52 **(Jpn)**

[Changes in the architectonics of the bile ducts in inflammatory processes] Tsal GE, et al. **Klin Khir** 1989; (9):19–20 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Bioconstruction of the extrahepatic biliary duct system in minipigs. Comparing normal condition with experimental obstruction. Steiner D, et al. **Acta Anat (Basel)** 1989; 136(2):159–64

Regulation of bile duct motility by vagus and sympathetic nerves in the pigeon. Neya T, et al. **Acta Med Okayama** 1990 Apr;44(2):113–5

Glycerophospholipids and cholesterol composition of bile in bile–fistula rats treated with monensin. Casu A, et al. **Biochim Biophys Acta** 1990 Mar 12;1043(1):113–5

Effect of biliary diversion on the ability of cefamandole to inhibit vitamin K metabolism. Tibbitts JS, et al. **Drug Metabol Drug Interact** 1989;7(2–3):149–60

Functional similarities of hepatic cystic and biliary epithelium: studies of fluid constituents and in vivo secretion in response to secretin. Everson GT, et al. **Hepatology** 1990 Apr;11(4):557–65

The use of isolated rat hepatocyte couplets in hepatobiliary physiology. Graf J, et al. **J Hepatol** 1990 May;10(3):387–94 (39 ref.)

Pancreatic and biliary pressure changes during ERCP. Sunderland GT, et al. **Surg Endosc** 1990;4(1):23

Effect of liver dysfunction on cyclosporine pharmacokinetics. Takaya S, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1246–7

PHYSIOPATHOLOGY

Clinical significance of manometric assessment of both pancreatic duct and bile duct sphincter in the same patient. Rolny P, et al. **Scand J Gastroenterol** 1989 Aug;24(6):751–4

RADIONUCLIDE IMAGING

Ultrasonography and 99mTc-DISIDA cholescintigraphy in the diagnosis of choledochal cyst in children. Jaw TS, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Dec; 5(12):688–96

[Dissociation of radiocolloid accumulation and hepatobiliary tracer in a patient with liver adenoma] Salvatori M, et al. **Radiol Med (Torino)** 1990 Jan–Feb;79(1–2):108–11 **(Ita)**

SECRETION

Secretin-dependent HCO3- secretion from pancreas and liver. Grotmol T, et al. **J Intern Med Suppl** 1990;732:47–51 (30 ref.)

[An increase of choleresis in secondary biliary cirrhosis in rats is caused by bile duct secretion] Taillandier J, et al. **Gastroenterol Clin Biol** 1990;14(4):313–8 (Eng. Abstr.) **(Fre)**

SURGERY

Gallstones in bili-digestive shunts diagnosed by ultrasound. An unusual cause of obstruction. Hederström E, et al. **Acta Radiol** 1989 Sep–Oct;30(5):549–50

Biliary leakage and peritonitis following removal of T tubes after bile duct exploration. Horgan PG, et al. **Br J Surg** 1989 Dec;76(12):1296–7

Management of severe acute cholangitis. Lai EC. **Br J Surg** 1990 Jun;77(6):604–5 (7 ref.)

Effect of chlorpromazine and biliary drainage on portal blood flow and mitochondrial function during extrahepatic cholestasis. Roselino JE, et al. **Braz J Med Biol Res** 1989; 22(7):889–93

Effect of bile duct ligation-induced liver damage on the blood–brain barrier. Stewart PA, et al. **Can J Neurol Sci** 1989 Nov;16(4):451–2

Clogging of biliary endoprostheses: a new perspective. Coene PP, et al. **Gut** 1990 Aug;31(8):913–7

Anesthesia and pressor responsiveness in chronic bile-duct-ligated dogs. Bomzon A, et al. **Hepatology** 1990 Apr;11(4):551–6

Combined colonic and biliary surgery: assessment of risk in elderly patients. Michel LA, et al. **Int Surg** 1989 Oct–Dec; 74(4):244–6

Endoprosthetic insertion for malignant obstructive jaundice: a retrospective review. Tarr KP, et al. **J Am Osteopath Assoc** 1989 Dec;89(12):1525–37

Portasystemic shunt fraction quantification using transrectal administration of iodine-123 iodoamphetamine in dogs with chronic bile duct ligation and after propranolol administration. Yen CK, et al. **J Nucl Med** 1989 Oct; 30(10):1702–7

Animal model for fluoroscopically guided laser application in the biliary tree. Dachman AH, et al. **Radiology** 1990 Mar;174(3 Pt 2):1021–5

Use of new transhepatic biliary stent tube in the treatment of biliary disease. Katoh H, et al. **Surg Gynecol Obstet** 1990 Apr;170(4):358–60

Side-to-side anastomosis of the common bile duct is the method of choice for biliary tract reconstruction after liver transplantation. Neuhaus P, et al. **Transplant Proc** 1990 Aug;22(4):1571

The management of T tube leaks in orthotopic liver transplant recipients with endoscopically placed nasobiliary catheters. Ostroff JW, et al. **Transplantation** 1990 May; 49(5):922–4

[Implantation of a bile duct prosthesis through the skin and liver] Cernoch J. **Cas Lek Cesk** 1990 May 18;129(20):628–31 (Eng. Abstr.) **(Cze)**

[Hepatic hydatic cysts rupturing into the bile ducts. Treatment by cysto–biliary disconnection] Settaf A, et al. **Presse Med** 1989 Sep 30;18(30):1476–8 (Eng. Abstr.) **(Fre)**

[Hemorrhage from bile duct drainage] Hofmann E, et al. **Radiologe** 1989 Sep;29(9):457–8 **(Ger)**

[On the article by G. Ranner et al: "Functional diagnosis of bile duct endoprostheses using hepatobiliary sequential scintigraphy" (letter)] Schoenemann J. **Radiologe** 1989 Sep; 29(9):461–2 **(Ger)**

[Status of immune reactivity in patients after surgery on the bile ducts using various methods of combined general anesthesia] Gashilova NS, et al. **Anesteziol Reanimatol** 1989 May–Jun;(3):44–6 (Eng. Abstr.) **(Rus)**

[Roentgeno–endobiliary prosthetics] Rabkin IKh, et al. **Khirurgiia (Mosk)** 1989 Oct;(10):111–5 **(Rus)**

[External drainage of the bile ducts via the stump of the cystic duct to prevent postoperative complications in elderly patients] Ashrafov AA. **Klin Khir** 1989;(9):37–8 (Eng. Abstr.) **(Rus)**

[External drainage of the bile ducts] Mazurik SM. **Klin Khir** 1989;(9):45–9 (60 ref.) **(Rus)**

[Decompression surgery in mechanical jaundice of tumoral origin] Kochegarov AA, et al. **Sov Med** 1990;(2):57–60 **(Rus)**

ULTRASTRUCTURE

[Ultrastructural study of interlobular bile ductal disorganization in autoimmune liver diseases] Yonekura T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Aug; 86(8):1638–44 (Eng. Abstr.) **(Jpn)**

BILE DUCTS, INTRAHEPATIC

Caroli's disease in two sisters. Diagnosis by ultrasonography and computed tomography. Höglund M, et al. **Acta Radiol** 1989 Sep–Oct;30(5):459–62

Nonoperative removal of bilateral intrahepatic biliary stones by endoscopic electrohydraulic lithotripsy. Wakayama T, et al. **Am J Gastroenterol** 1990 Sep;85(9):1168–71 (27 ref.)

Carcinoid tumor of the bile duct. A case report and literature review. Brown WM 3d, et al. **Am Surg** 1990 Jun;56(6):343–6 (18 ref.)

Choledochoscopic electrohydraulic lithotripsy and lithotomy for stones in the common bile duct, intrahepatic ducts, and gallbladder. Yoshimoto H, et al. **Ann Surg** 1989 Nov; 210(5):576–82

Percutaneous transhepatic cholangioscopic lithotripsy. Chen MF, et al. **Br J Surg** 1990 May;77(5):530–2

Partial liver resection in the treatment of intra–hepatic duct calculi. Chau GY, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Aug;44(2):115–20

Bilateral intrahepatic lithiasis without extrahepatic bile duct stones. Tsuchiya R, et al. **Gastroenterol Jpn** 1990 Feb; 25(1):122–9

Diagnosis of coexistent hepatic tumors of different kinds: a challenge from CT and MR imaging. Itai Y, et al. **Radiat Med** 1989 May–Jun;7(3):143–9

Pancreatic and biliary calculi: percutaneous treatment with tunable dye laser lithotripsy. Feldman RK, et al. **Radiology** 1990 Mar;174(3 Pt 1):793–5

Percutaneous endoscopic laser lithotripsy of retained stones in the left hepatic duct. The role of the surgeon. Berci G, et al. **Surg Endosc** 1990;4(1):36–8

Carcinoma of the main hepatic duct junction: indications, operative morbidity and mortality, and long–term survival. Tsuzuki T, et al. **Surgery** 1990 Sep;108(3):495–501

Current management of intrahepatic stones. Choi TK, et al. **World J Surg** 1990 Jul–Aug;14(4):487–91 (39 ref.)

Hepatic segmentectomy with caudate lobe resection for bile duct carcinoma of the hepatic hilus. Nimura Y, et al. **World J Surg** 1990 Jul–Aug;14(4):535–43; discussion 544

[Choledochoscopy management of residual intrahepatic stones and recurrent lesions] Chao ZN. **Chung Hua I Hsueh Tsa Chih** 1989 Jun;69(6):327–8 **(Chi)**

[Experience in mid–operative detection of intrahepatic biliary calculus] Hu ZZ. **Chung Hua I Hsueh Tsa Chih** 1989 Sep; 69(9):529–30 **(Chi)**

[Enlarged choledocho–duodenostomy] Zhao FK. **Chung Hua Wai Ko Tsa Chih** 1990 Apr;28(4):209–10, 252 (Eng. Abstr.) **(Chi)**

[Hepatic malacoplakia as a complication of polycystosis (letter)] De Saint–Maur P, et al. **Ann Pathol** 1990;10(1):50–1 **(Fre)**

[Biliary diseases in acquired immunodeficiency syndrome. Apropos of 2 cases] Gallot–Lavallée–Villars S, et al. **Schweiz Med Wochenschr** 1990 Jun 2;120(22):833–5 (Eng. Abstr.) **(Fre)**

[Adenocarcinoma of the duodenum associated with skin neurofibromatosis and Caroli's disease] Del Vecchio R, et al. **Minerva Chir** 1989 Dec 31;44(23–24):2421–6 (Eng. Abstr.) **(Ita)**

[Intrahepatic biliary lithiasis: endoscopic transpapillary treatment] De Sanctis G, et al. **Minerva Chir** 1990 Mar 31;45(6):377–81 (Eng. Abstr.) **(Ita)**

[Intraarterial and intraportal chemotherapy combined with decollateralization for cholangiocellular carcinoma and metastatic liver cancer] Nagano H, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1758–62 (Eng. Abstr.) **(Jpn)**

[A clinicopathological study of mucus producing bile duct carcinoma] Nagino M, et al. **Nippon Geka Gakkai Zasshi** 1990 Jun;91(6):695–704 (39 ref.) (Eng. Abstr.) **(Jpn)**

[Two cases in siblings of congenital multiple cystic dilatation of peripheral intrahepatic bile ducts (so called Caroli's disease)] Haruta I, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jun;86(6):1335–9 (11 ref.) **(Jpn)**

[Studies on cholangiographic and endoscopic findings of primary intrahepatic cholesterol stones] Kondo S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Dec;86(12):2779–86 (Eng. Abstr.) **(Jpn)**

[A case of a collision tumor of hepatocellular carcinoma and gallbladder carcinoma, accompanied by anomalous pancreaticobiliary ductal union and congenital intrahepatic bile duct dilation] Makino Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Dec;86(12):2816–21 **(Jpn)**

[A case of severe emphysematous cholecystitis with extension to the intrahepatic bile duct—trial of percutaneous transhepatic cholecystodrainage] Ohno H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Sep;86(9):2255–9 (8 ref.) **(Jpn)**

[Long–term follow–up results in nonoperated patients with intrahepatic and predominant intrahepatic type of hepatolithiasis] Okada S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Feb;87(2):218–24 (Eng. Abstr.) **(Jpn)**

[Peroral cholangiscopic lithotomy for intrahepatic stones] Yugi H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Mar; 87(3):872–7 **(Jpn)**

[Biliary lithiasis] González L, et al. **Rev Esp Enferm Apar Dig** 1989 Dec;76(6 Pt 2):622–6 (50 ref.) (Eng. Abstr.) **(Spa)**

ABNORMALITIES

Caroli's syndrome: a heterogeneous entity. Tandon RK, et al. **Am J Gastroenterol** 1990 Feb;85(2):170–3

Distinct hepatic retention of Tc–99m IDA in arteriohepatic dysplasia (Alagille syndrome). Aburano T, et al. **Clin Nucl Med** 1989 Dec;14(12):874–6

Molecular and cytogenetic analysis of an interstitial 20p deletion associated with syndromic intrahepatic ductular hypoplasia (Alagille syndrome). Schnittger S, et al. **Hum Genet** 1989 Oct;83(3):239–44

Liver disease and biliary tract abnormalities in cystic fibrosis [letter; comment] Bilton D, et al. **Lancet** 1990 Feb 10; 335(8685):357 Comment on: Lancet 1989 Dec 16;2(8677):1422–5.

[Congenital cystic dilatation of the intrahepatic bile ducts (Caroli disease)] Chlumská A. **Cas Lek Cesk** 1990 Feb 9; 129(6):184–7 (Eng. Abstr.) **(Cze)**

[2 cases of the diffuse form of Caroli disease] Ouadfel J, et al. **Acta Chir Belg** 1989 Jul–Aug;89(4):233–6 (Eng. Abstr.) **(Fre)**

[Asphyxiating thoracic dysplasia associated with hepatic ductal hypoplasia, agenesis of the corpus callosum and Dandy–Walker syndrome] Trabelsi M, et al. **Pediatrie** 1990; 45(1):35–8 (24 ref.) (Eng. Abstr.) **(Fre)**

[The Alagille syndrome in an adult] Schulte–Bockholt A, et al. **Dtsch Med Wochenschr** 1990 Aug 24;115(34):1276–9 (Eng. Abstr.) **(Ger)**

[Ultrasound image of an unusual intrahepatic site of a bile duct cyst] Mileder P, et al. **Ultraschall Med** 1990 Jun; 11(3):139–41 (Eng. Abstr.) **(Ger)**

[Hypoplasia of the intrahepatic biliary tract in premature infants] Hurgoiu V, et al. **Rev Pediatr Obstet Ginecol [Pediatr]** 1989 Jul–Sep; 38(3):273–6 (Eng. Abstr.) **(Rum)**

[Hypoplasia of the intrahepatic bile ducts. A clinicopathologic study] Valencia–Mayoral P, et al. **Gac Med Mex** 1989 May–Jun;125(5–6):145–9; discussion 150 (Eng. Abstr.) **(Spa)**

[Caroli's disease: congenital cystic and segmentary dilatation of the intrahepatic bile ducts] Serra CA, et al. **Rev Fac Cien Med Univ Nac Cordoba** 1987;45(2):28–30 (Eng. Abstr.) **(Spa)**

ANALYSIS

Cytokeratin expression in cells of the rodent bile duct developing under normal and pathological conditions. Carthew P, et al. **Br J Exp Pathol** 1989 Dec;70(6):717–25

Bursin localization in mammalian bone marrow and epithelial cells of intrahepatic bile ducts. Audhya T, et al. **Scand J Immunol** 1990 Feb;31(2):199–204

ANATOMY & HISTOLOGY

Anatomic relationship of intrahepatic bile ducts to portal veins. Lim JH, et al. **J Ultrasound Med** 1990 Mar; 9(3):137–43

Left hepatic duct anatomy: implications. Russell E, et al. **Radiology** 1990 Feb;174(2):353–6

BLOOD SUPPLY

Endotoxaemia and hepatic injury in obstructive jaundice. Shibayama Y. **J Pathol** 1989 Dec;159(4):335–9

CYTOLOGY

Isolation of a nonparenchymal liver cell fraction enriched in cells with biliary epithelial phenotypes. Alpini G, et al. **Gastroenterology** 1989 Nov;97(5):1248–60

Isolation and morphologic characterization of bile duct epithelial cells from normal rat liver. Ishii M, et al. **Gastroenterology** 1989 Nov;97(5):1236–47

Isolation of intrahepatic bile duct epithelial cells: clues for function. Jones AL, et al. **Gastroenterology** 1989 Nov; 97(5):1337–9

Immuno–isolation and culture of biliary epithelial cells from normal human liver. Joplin R, et al. **In Vitro Cell Dev Biol** 1989 Dec;25(12):1189–92

Effects of medium and substratum conditions on the rates of DNA synthesis in primary cultures of bile ductular epithelial cells. Mathis GA, et al. **In Vitro Cell Dev Biol** 1990 Feb;26(2):113–8

Fluid–phase endocytosis by intrahepatic bile duct epithelial cells isolated from normal rat liver. Ishii M, et al. **J Histochem Cytochem** 1990 Apr;38(4):515–24

Isolation, culture, and transplantation of intrahepatic biliary epithelial cells and oval cells. Sirica AE, et al. **Pathobiology** 1990;58(1):44–64 (159 ref.)

DRUG EFFECTS

Bile canalicular alterations in hepatocyte nodules induced by 3'–methyl–4–dimethylaminoazobenzene in the rat: morphological clues on their pathogenesis and relevance to the neoplastic process. Scoazec JY, et al. **Carcinogenesis** 1990 Jul;11(7):1119–25

EMBRYOLOGY

Development of intrahepatic bile ducts in humans. Immunohistochemical study using monoclonal cytokeratin antibodies. Shah KD, et al. **Arch Pathol Lab Med** 1989 Oct;113(10):1135–8

Development of intrahepatic bile ducts in rat foetal liver explants in vitro. Gall JA, et al. **J Exp Pathol (Oxford)** 1990 Feb;71(1):41–50

ENZYMOLOGY

Identification of the bile canalicular cell surface molecule GP110 as the ectopeptidase dipeptidyl peptidase IV: an analysis by tissue distribution, purification and N–terminal amino acid sequence. McCaughan GW, et al. **Hepatology** 1990 Apr;11(4):534–44

GROWTH & DEVELOPMENT

Development of intrahepatic bile ducts in humans. Possible role of laminin. Shah KD, et al. **Arch Pathol Lab Med** 1990 Jun;114(6):597–600

IMMUNOLOGY

The pathogenesis of graft–versus–host reaction in the intrahepatic bile duct. An immunohistochemical study. Tanaka M, et al. **Acta Pathol Jpn** 1989 Oct;39(10):648–55

Bile duct antibodies crossreacting with blood group antigens in primary sclerosing cholangitis. Jeffrey GP, et al. **Gut** 1990 Jun;31(6):698–701

The antigen of bile canaliculi of the mouse hepatocyte: identification and ultrastructural localization. Kuprina NI, et al. **Histochemistry** 1990;94(2):179–86

Disappearing bile ducts: immunologic mechanisms. Vierling JM, et al. **Hosp Pract [Off]** 1990 Jul 15;25(7):141–50

Localisation of CD10 to biliary canaliculi by immunoelectron microscopical examination. Loke SL, et al. **J Clin Pathol** 1990 Aug;43(8):654–6

INJURIES

Management of blunt hepatic duct transection by ligation. Howdieshell TR, et al. **South Med J** 1990 May;83(5):579–83 (26 ref.)

[Surgical treatment of injuries of the intrahepatic bile ducts] Driazhenkov GI, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):30–4 (Eng. Abstr.) **(Rus)**

INNERVATION

Innervation of intrahepatic bile ducts and peribiliary glands in normal human livers, extrahepatic biliary obstruction and hepatolithiasis. An immunohistochemical study. Terada T, et al. **J Hepatol** 1989 Sep;9(2):141–8

METABOLISM

Ciliated hepatic foregut cyst. A mucus histochemical, immunohistochemical, and ultrastructural study in three cases in comparison with normal bronchi and intrahepatic bile ducts. Terada T, et al. **Am J Surg Pathol** 1990 Apr; 14(4):356–63

Mechanism of glutathione S–conjugate transport in canalicular and basolateral rat liver plasma membranes. Kobayashi K, et al. **J Biol Chem** 1990 May 15; 265(14):7737–41

Membrane potential–dependent and carrier–mediated transport of cefpiramide, a cephalosporin antibiotic, in canalicular rat liver plasma membrane vesicles. Tamai I, et al. **J Pharmacol Exp Ther** 1990 May;253(2):537–44

Lectin binding of intrahepatic bile ducts and peribiliary glands in normal livers and hepatolithiasis. Saito K, et al.

Tohoku J Exp Med 1990 Jan;160(1):81–92

PATHOLOGY

Monolobar Caroli's disease. Boyle MJ, et al. Am J Gastroenterol 1989 Nov;84(11):1437–44 (29 ref.)
Origin, pattern, and mechanism of bile duct proliferation following biliary obstruction in the rat. Slott PA, et al. Gastroenterology 1990 Aug;99(2):466–77
Pathologic observations of intrahepatic peribiliary glands in 1000 consecutive autopsy livers. Heterotopic pancreas in the liver. Terada T, et al. Gastroenterology 1990 May;98(5 Pt 1):1333–7
Epithelial dysplasia in Caroli's disease [letter; comment] Walker NI, et al. Gut 1990 May;31(5):584–5 Comment on: Gut 1989 Aug;30(8):1150–3.
Diverticular bile duct lesion in chronic active hepatitis. Vyberg M. Hepatology 1989 Nov;10(5):774–80
Adult polycystic liver and the Meyenburg complexes biliary ectasia. Naim M, et al. Indian J Pathol Microbiol 1987 Apr; 30(2):151–5
Ultrasonographic findings in horses with cholelithiasis: eight cases (1985–1987). Reef VB, et al. J Am Vet Med Assoc 1990 Jun 1;196(11):1836–40
Diffuse biliary tract involvement mimicking primary sclerosing cholangitis after bone marrow transplantation. Geubel AP, et al. J Hepatol 1990 Jan;10(1):23–8
Intrahepatic bile duct cystadenocarcinoma: case report and imaging diagnosis. Boillot O, et al. J Surg Oncol 1990 Mar; 43(3):193–5
The utility of image-directed Doppler ultrasound in the evaluation of the "parallel channel" sign. Levy HM, et al. JCU 1988 Jul–Aug;16(6):424–5
Origin and involution of hyperplastic bile ductules following total biliary obstruction. Gall JA, et al. Liver 1990 Apr; 10(2):106–15
Klatskin tumors. Semin Liver Dis 1990 May;10(2):85–148
Surgical pathology of cholangiocarcinoma of the liver hilus (Klatskin tumor). Bosma A. Semin Liver Dis 1990 May; 10(2):85–90
Early changes in cholestatic livers as a consequence of hepatic duct carcinoma: a histological and histochemical exploration. James J, et al. Semin Liver Dis 1990 May; 10(2):91–101
Ultrasound-guided percutaneous transhepatic cholangiography and drainage in patients with hilar cholangiocarcinoma. Laméris JS, et al. Semin Liver Dis 1990 May;10(2):121–5
Carcinoma of the hepatic confluence 25 years after Klatskin's description: diagnosis and endoscopic management. Van Leeuwen DJ, et al. Semin Liver Dis 1990 May;10(2):102–13 (60 ref.)
[Caroli's disease associated with hepatocarcinoma. A case report and review of the literature] Kchir N, et al. Arch Anat Cytol Pathol 1990;38(3):95–9 (19 ref.) (Eng. Abstr.) (Fre)
[Carcinoma in situ in localized Caroli's disease] Joly I, et al. Gastroenterol Clin Biol 1990;14(1):90–2 (Eng. Abstr.) (Fre)
[Paucity of intrahepatic biliary ducts in adults] Zafrani ES. Rev Med Suisse Romande 1990 Jun;110(6):517–20 (26 ref.) (Fre)
[Pathology of the intrahepatic bile ducts] Desmet VJ. Z Gastroenterol 1989 Oct;27(10):638–48 (87 ref.) (Ger)
[Three-dimensional morphology of intrahepatic bile ducts in patients with intrahepatic gallstones] Takahashi Y, et al. Nippon Geka Gakkai Zasshi 1990 Jan;91(1):86–94 (Eng. Abstr.) (Jpn)

PHYSIOLOGY

Role of cytoskeleton in canalicular contraction in cultured differentiated hepatocytes. Kawahara H, et al. Am J Pathol 1990 Mar;136(3):521–32
The formation of bile canaliculi in human hepatoma cell lines. Chiu JH, et al. Hepatology 1990 May;11(5):834–42

PHYSIOPATHOLOGY

Defective ATP-dependent bile canalicular transport of organic anions in mutant (TR-) rats with conjugated hyperbilirubinemia. Kitamura T, et al. Proc Natl Acad Sci U S A 1990 May;87(9):3557–61

RADIOGRAPHY

Detection of large intrahepatic cholangiectases in patients with primary sclerosing cholangitis by endoscopic retrograde cholangiography. Theilmann L, et al. Endoscopy 1990 Jan;22(1):49–50
Caroli disease: central dot sign in CT. Choi BI, et al. Radiology 1990 Jan;174(1):161–3
Normal intrahepatic bile ducts: CT depiction. Liddell RM, et al. Radiology 1990 Sep;176(3):633–5
[An unclear process in CT of the liver. Caroli syndrome] Eising EG, et al. Radiologe 1989 Nov;29(11):577–9 (Ger)
[Pulmonary arteriovenous fistula associated with Caroli's disease. Case report] Oneglia C, et al. Minerva Cardioangiol 1989 Sep;37(9):411–4 (Eng. Abstr.) (Ita)
[A case of idiopathic portal hypertension with "weeping willow" like appearance of intrahepatic bile ducts] Nishimori I, et al. Nippon Shokakibyo Gakkai Zasshi 1990 Feb;87(2):263–7 (Jpn)

SECRETION

Protoporphyrin IX-induced impairment of biliary lipid secretion in the rat. Perez-Barriocanal F, et al. Clin Sci 1989 Nov;77(5):473–8
Role of cytokeratin intermediate filaments in transhepatic transport and canalicular secretion. Kawahara H, et al. Hepatology 1990 Mar;11(3):435–48

SURGERY

Left intercostal approach for percutaneous biliary drainage after right trisegmentectomy [letter] Walter RM, et al. AJR Am J Roentgenol 1990 Mar;154(3):656
Secondary biliary cirrhosis. A limiting factor in the treatment of hepatolithiasis. Jeng KS, et al. Arch Surg 1989 Nov; 124(11):1301–5
Total excision of mucinous biliary cystadenoma. Lau WY, et al. Aust N Z J Surg 1990 Mar;60(3):226–8
Clinical experience in 20 hepatic resections for peripheral cholangiocarcinoma. Chen MF, et al. Cancer 1989 Dec 1; 64(11):2226–32
Percutaneous choledochoscopic choledocholithotomy in Caroli's disease. King J, et al. Gastrointest Radiol 1990 Spring;15(2):137–8
Surgical treatment of congenital dilatation of the bile duct with special reference to late complications after total excisional operation. Ohi R, et al. J Pediatr Surg 1990 Jun; 25(6):613–7
Technical considerations for the management of primary cholangiocarcinoma of the porta hepatis. Lygidakis NJ, et al. Semin Liver Dis 1990 May;10(2):126–30
[Tumors of the hilum of the liver: apropos of 8 cases] Bahi S, et al. Tunis Med 1990 Feb;68(2):83–6 (19 ref.) (Eng. Abstr.) (Fre)
[Transhepatic endoprosthesis of the bile ducts] Prokubovskiĭ VI, et al. Khirurgiia (Mosk) 1990 Jan;(1):18–23 (Eng. Abstr.) (Rus)
[Methods of separation of liver tissues in hepatic resection] Zhuravlev VA. Vestn Khir 1990 Jan;144(1):140–2 (34 ref.) (Rus)

ULTRASTRUCTURE

Morphologic demonstration of receptor-mediated endocytosis of epidermal growth factor by isolated bile duct epithelial cells. Ishii M, et al. Gastroenterology 1990 May;98(5 Pt 1):1284–91
The microanatomy of the intrahepatic bile duct in polycystic disease: comparison of the cpk mouse and human. Grimm PC, et al. J Exp Pathol (Oxford) 1990 Feb;71(1):119–31
[Structure of the excretory ducts, intraorganic lymphatic vessels, tissue canals and intercellular space of various organs (data of scanning electron microscopy injection replicas)] Kordzaia DD. Arkh Anat Gistol Embriol 1989 Aug;97(8):26–31 (Eng. Abstr.) (Rus)

BILE PIGMENTS

Spectrophotometric correction for bile pigments in the thiobarbituric acid test for malondialdehyde-like substances in plasma. Hendriks T, et al. Med Lab Sci 1990 Jan; 47(1):10–6

ANALYSIS

Bile acid composition in brown pigment stones. Akiyoshi T, et al. Dig Dis Sci 1990 Jan;35(1):27–32
Visual stool examination—a screening test for infants with prolonged neonatal cholestasis. Brown SC, et al. S Afr Med J 1990 Apr 7;77(7):358–9
High-performance liquid chromatography of bilirubin conjugates in bile: effect of beta-glucuronidase on the bile pigments. Skar V, et al. Scand J Gastroenterol 1989 Aug; 24(6):657–65

BIOSYNTHESIS

Gallbladder mucin and cholesterol and pigment gallstone formation in hamsters. Malet PF, et al. Scand J Gastroenterol 1989 Nov;24(9):1055–60

BLOOD

[Significance of dipyrrole bile pigment analysis in clinical tests] Kondo T. Nippon Rinsho 1989 Dec;48 Suppl:701–4 (Jpn)

METABOLISM

Proton-induced dismutation of superoxide in aprotic media by bile pigments. Ribó JM, et al. Experientia 1990 Jan 15; 46(1):63–7
Spontaneous formation of pigmentary precipitates in bile salt-depleted rat bile and its prevention by micelle-forming bile salts. Angelico M, et al. Gastroenterology 1990 Feb; 98(2):444–53
Posttranslational modifications of the beta subunit of a cryptomonad phycoerythrin. Sites of bilin attachment and asparagine methylation. Wilbanks SM, et al. J Biol Chem 1989 Oct 25;264(30):17860–7
[Metabolism of bile pigments in the intestine] Corongiu B, et al. Ann Biol Clin (Paris) 1990;48(1):9–15 (Eng. Abstr.) (Fre)

BILE REFLUX see under BILIARY TRACT DISEASES

BILE SALTS see BILE ACIDS AND SALTS

BILHARZIA see SCHISTOSOMA

BILHARZIASIS see SCHISTOSOMIASIS

BILIARY ATRESIA

COMPLICATIONS

Biliary atresia and its complications. Knisely AS. Ann Clin Lab Sci 1990 Mar–Apr;20(2):113–8 (49 ref.)
Intrahepatic biliary cysts in congenital biliary atresia. Fain JS, et al. Arch Pathol Lab Med 1989 Dec;113(12):1383–6
Alpha 1-antitrypsin deficiency (Pi SZ) and biliary atresia. Tolaymat N, et al. J Pediatr Gastroenterol Nutr 1989 Aug; 9(2):256–60 (35 ref.)
Delayed puberty in girls having biliary atresia. Nakano M, et al. J Pediatr Surg 1990 Jul;25(7):808–11
Bone disease in chronic childhood cholestasis. II. Better absorption of 25-OH vitamin D than vitamin D in extrahepatic biliary atresia. Heubi JE, et al. Pediatr Res 1990 Jan;27(1):26–31
[Hypoplasia of the intrahepatic biliary tract in premature infants] Hurgoiu V, et al. Rev Pediatr Obstet Ginecol [Pediatr] 1989 Jul–Sep; 38(3):273–6 (Eng. Abstr.) (Rum)
[Cystic anomalies of the external bile ducts in children] Ergashev NSh. Vestn Khir 1989 Dec;144(12):33–6 (Eng. Abstr.) (Rus)

DIAGNOSIS

Immotile cilia syndrome including polysplenia, situs inversus, and extrahepatic biliary atresia. Gershoni-Baruch R, et al. Am J Med Genet 1989 Jul;33(3):390–3
Use of serum gamma glutamyl transpeptidase to differentiate between extrahepatic biliary atresia and neonatal hepatitis. Vajaradul C, et al. J Med Assoc Thai 1989 Jul;72(7):395–9
Fall and rise variations of serum GGTP in preoperative infants with biliary atresia. Tazawa Y, et al. J Pediatr Gastroenterol Nutr 1990 May;10(4):555–7
Visual stool examination—a screening test for infants with prolonged neonatal cholestasis. Brown SC, et al. S Afr Med J 1990 Apr 7;77(7):358–9
Experience with laparoscopy for the evaluation of cholestasis in newborns. Schier F, et al. Surg Endosc 1990;4(1):13–4
Validity of endoscopy in the diagnostics of biliary atresia. Waldschmidt J, et al. Z Kinderchir 1988 Sep;43 Suppl 1:57–9
[Serum lipoprotein profiles in infantile cholestasis: the role of lipoprotein-X (LP-X) in the diagnosis of biliary atresia] Chiou SS, et al. Acta Paediatr Sin 1988 May–Jun; 29(3):174–9 (Eng. Abstr.) (Chi)
[The portal system and hepatic artery in children with biliary atresia. 1: Ultrasound and simple duplex ultrasound parameters] Grunert D, et al. Klin Padiatr 1990 Jan–Feb; 202(1):24–30 (Eng. Abstr.) (Ger)
[The portal system and the hepatic artery in children with extrahepatic bile duct atresia. 2: Further duplex sonography parameters and flowmetry] Grunert D, et al. Klin Padiatr 1990 Mar–Apr;202(2):87–93 (Eng. Abstr.) (Ger)
[Endocardial fibroelastosis of the left ventricle in a patient with Alagille syndrome] Kotthoff S, et al. Klin Padiatr 1990 Jan–Feb;202(1):50–2 (Eng. Abstr.) (Ger)
[Incidence of anomalies of the gallbladder] Fisenko NG, et al. Klin Med (Mosk) 1989 Oct;67(10):90–2 (Rus)

EPIDEMIOLOGY

[Biliary atresia in children] Famulski W, et al. Wiad Lek 1989 May 1;42(9):572–4 (Eng. Abstr.) (Pol)

GENETICS

Branchial dysplasia, mental deficiency, club feet, and inguinal herniae: a report of two further cases associated with paucity of interlobular bile ducts. Lambert JC, et al. J Med Genet 1990 May;27(5):330–2

METABOLISM

Regulation of metabolism of retinol-binding protein by vitamin A status in children with biliary atresia. Mourey MS, et al. Am J Clin Nutr 1990 Apr;51(4):638–43
Prostaglandin and fatty acid metabolism in patients with extrahepatic biliary atresia. Shimizu T, et al. J Pediatr Gastroenterol Nutr 1990 Apr;10(3):298–302

MICROBIOLOGY

Isolation of respiratory syncytial virus from liver tissue and extrahepatic biliary atresia material. Nadal D, et al. Scand J Infect Dis 1990;22(1):91–3

MORTALITY

Long-term follow-up after surgery for patients with biliary atresia. Ohi R, et al. J Pediatr Surg 1990 Apr;25(4):442–5

PATHOLOGY

Dental findings of children with biliary atresia: report of

seven cases. Morisaki I, et al. **ASDC J Dent Child** 1990 May-Jun;57(3):220-3
Phenotypic characterization of mononuclear infiltrate present in liver of biliary atresia. Chen K, et al. **Dig Dis Sci** 1989 Oct;34(10):1564-70
Bile duct patterns in the hilar region of the liver in two cases of biliary atresia. Deguchi E, et al. **J Pediatr Surg** 1990 Mar;25(3):307-10
Agenesis of the extrahepatic bile ducts: report of five cases. Schwartz MZ, et al. **J Pediatr Surg** 1990 Jul;25(7):805-7
Orthotopic liver transplantation and pathology of the inferior vena cava. Boillot O, et al. **Transplant Proc** 1990 Aug; 22(4):1567-8

PHYSIOPATHOLOGY

Portal venous velocity in biliary atresia. Wanek EA, et al. **J Pediatr Surg** 1990 Jan;25(1):146-8
Assessment of the nutritional status of infants and children with biliary atresia. Cywes C, et al. **S Afr Med J** 1990 Feb 3;77(3):131-5
[Duodenoscopic measurement of Oddi's sphincter pressure in congenital biliary atresia] Akiyama T, et al. **Nippon Heikatsukin Gakkai Zasshi** 1989 Oct;25(5):204-7 **(Jpn)**

RADIOGRAPHY

Cholangiographic study of the pancreaticobiliary ductal junction in biliary atresia. Chiba T, et al. **J Pediatr Surg** 1990 Jun;25(6):609-12
Transhepatic protal venography in potential pediatric liver transplant recipients. Rollins NK, et al. **Radiology** 1990 Jan; 174(1):262-3

RADIONUCLIDE IMAGING

Diagnosis of atretic prolonged obstructive jaundice; technetium 99m hepatolite excretion study. Hung WT, et al. **J Pediatr Surg** 1990 Jul;25(7):797-800

SURGERY

Size reduction of the donor liver is a safe way to alleviate the shortage of size-matched organs in pediatric liver transplantation. Otte JB, et al. **Ann Surg** 1990 Feb; 211(2):146-57
Outcome of surgery for biliary atresia. Dorney SF, et al. **Aust N Z J Surg** 1989 Nov;59(11):855-8
Use of appendix in biliary atresia. Gupta DK, et al. **Indian J Pediatr** 1989 Jul-Aug;56(4):479-82
Intractable cholangitis due to conduit obstruction. Golladay ES, et al. **J Arkansas Med Soc** 1990 Aug;87(3):116-8
Liver transplantation in children less than 1 year of age. Sokal EM, et al. **J Pediatr** 1990 Aug;117(2 Pt 1):205-10
Is there still a place for the Kasai procedure in the treatment of extrahepatic biliary atresia? [comment] Alagille D, et al. **J Pediatr Gastroenterol Nutr** 1989 Nov;9(4):405-6 Comment on: J Pediatr Gastroenterol Nutr 1989 Nov;9(4):416-20.
Long-term follow-up study of patients with cholangitis after successful Kasai operation in biliary atresia: selection of recipients for liver transplantation [see comments] Ohkohchi N, et al. **J Pediatr Gastroenterol Nutr** 1989 Nov; 9(4):416-20 Comment in: J Pediatr Gastroenterol Nutr 1989 Nov;9(4):405-6.
Immunogenicity of Haemophilus influenzae type B vaccines in children with hepatoportoenterostomies. Rosenthal P, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug;11(2):201-4
Orthotopic transplantation of the liver in children with biliary atresia and polysplenia syndrome: report of two cases. Hoffman MA, et al. **J Pediatr Surg** 1989 Oct;24(10):1020-2
Intussusception-type antireflux valve in the Roux-en-Y loop to prevent ascending cholangitis after hepatic portojejunostomy. Nakajo T, et al. **J Pediatr Surg** 1990 Mar;25(3):311-4
Indication for portoenterostomy based on 103 patients with Suruga II modification. Ohya T, et al. **J Pediatr Surg** 1990 Jul;25(7):801-4
Cholangitis after the Kasai operation for biliary atresia [letter] Rathore MH. **J Pediatr Surg** 1990 Mar;25(3):376
The therapy of biliary atresia combining the Kasai portoenterostomy with liver transplantation: a single center experience. Vacanti JP, et al. **J Pediatr Surg** 1990 Jan; 25(1):149-52
Optimal therapy for patients with biliary atresia: portoenterostomy ("Kasai" procedures) versus primary transplantation. Wood RP, et al. **J Pediatr Surg** 1990 Jan; 25(1):153-60; discussion 160-2
Surgery for biliary atresia [letter; comment] Lilly JR, et al. **Lancet** 1990 Jan 13;335(8681):110 Comment on: Lancet 1989 Sep 9;2(8663):597-8.
The efficacy of hepatoportoenterostomy in biliary atresia. Grosfeld JL, et al. **Surgery** 1989 Oct;106(4):692-700; discussion 700-1
[Orthotopic liver transplantation in children] Bijleveld CM, et al. **Ned Tijdschr Geneeskd** 1989 Jul 15;133(28):1401-6 (Eng. Abstr.) **(Dut)**
[Liver transplantation in children: its place in the treatment of atresia of the extrahepatic bile ducts, its indications and results] Samoud A, et al. **Tunis Med** 1989 Dec; 67(12):809-16 **(Fre)**
[Control of surgical portosystemic shunt in children using computerized duplex sonography] Grunert D, et al. **Ultraschall Med** 1989 Dec;10(6):295-302 (Eng. Abstr.) **(Ger)**
[Liver transplantation for biliary atresia with special reference to the Japanese children who received liver transplantation in foreign countries] Koyanagi Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep;90(9):1357-61 (Eng. Abstr.) **(Jpn)**
[Current state of the treatment of congenital biliary atresia] Miyano T, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep; 90(9):1343-7 (Eng. Abstr.) **(Jpn)**
[The present status and problems in the treatment of biliary atresia with special reference to surgical and long-term results] Ohi R, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep; 90(9):1339-42 (Eng. Abstr.) **(Jpn)**
[Early complications after hepatic porto-jejunostomy in biliary atresia] Saeki M, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep;90(9):1353-6 (Eng. Abstr.) **(Jpn)**
[Late complications after successful Kasai's operation for biliary atresia] Toyosaka A, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep;90(9):1348-52 (Eng. Abstr.) **(Jpn)**
[Bone changes in congenital biliary atresia--review of 42 cases after surgery] Hirano A, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Jan 25; 50(1):29-39 (Eng. Abstr.) **(Jpn)**
[Long term results of surgical treatment of biliary atresia] Kansy J, et al. **Pediatr Pol** 1989 Mar;64(3):173-6 **(Pol)**
[Surgical treatment of developmental anomalies of the gallbladder and chronic cholecystitis in children] Bairov GA, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):47-50 (Eng. Abstr.) **(Rus)**
[Diagnostic and therapeutic tactics in various forms of cholangiopathies in children] Stepanov EA, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):50-4 (Eng. Abstr.) **(Rus)**
[Surgical treatment of the patient with atresia of the bile ducts] Villegas-Alvarez F, et al. **Bol Med Hosp Infant Mex** 1989 Dec;46(12):796-802 (Eng. Abstr.) **(Spa)**

VETERINARY

Congenital biliary atresia and jaundice in lambs and calves [published erratum appears in Aust Vet J 1990 May;67(5):167] Harper P, et al. **Aust Vet J** 1990 Jan; 67(1):18-22

BILIARY CALCULI see **CHOLELITHIASIS**

BILIARY CALCULI, COMMON BILE DUCT see **COMMON BILE DUCT CALCULI**

BILIARY CIRRHOSIS see **LIVER CIRRHOSIS, BILIARY**

BILIARY DYSKINESIA

CHEMICALLY INDUCED

[Status of the digestive organs at late periods after poisoning by corrosive substances] Sedov KR, et al. **Sov Med** 1990; (1):74-7 **(Rus)**

COMPLICATIONS

[Status of the hepatobiliary system in children with cutaneous and cutaneo-respiratory manifestations of allergy] Balabolkin II, et al. **Pediatriia** 1990;(5):22-5 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Decision-making in postcholecystectomy pain and biliary dyskinesia. Lasson A, et al. **Dig Dis** 1989;7(6):288-300 (72 ref.)
[Ultrasound evaluation of gallbladder function using planimetry] Janowitz P, et al. **Ultraschall Med** 1990 Jun; 11(3):135-8 (Eng. Abstr.) **(Ger)**
[Endoscopic perfusion manometry: diagnosis of functional biliary disorders] Liebe S, et al. **Z Gesamte Inn Med** 1989 Oct 15;44(20):626-31 (Eng. Abstr.) **(Ger)**
[Diagnosis of diseases of the liver and biliary tract by thermography] Andreev NG, et al. **Klin Med (Mosk)** 1989 Oct;67(10):84-7 **(Rus)**
[Clinical interpretation of the results of the studies of gallbladder contractility] Pimanov SI. **Klin Med (Mosk)** 1990 May;68(5):106-10 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[Treatment with antidepressants in biliary dyskinesia and irritable colon] Birt M, et al. **Rev Med Interna [Med Interna]** 1989 May-Jun;41(3):277-82 **(Rum)**

ETIOLOGY

[A clinical survey: what are bile duct dyskinesias?] **Z Arztl Fortbild (Jena)** 1990;84(11):535-41 **(Ger)**

PHYSIOPATHOLOGY

Biliary tract motility and its relationship to clinical disorders. Dodds WJ. **AJR Am J Roentgenol** 1990 Aug;155(2):247-58 (37 ref.)
[The postcholecystectomy syndrome caused by biliary and pyloroduodenal dyskinesia] Granelli P. **Ann Ital Chir** 1989; 60(3):137-41 (30 ref.) **(Ita)**

RADIONUCLIDE IMAGING

Scintigraphic evaluation of gastric emptying, duodenogastric reflux and biliary dyskinesias. Ugolotti G, et al. **J Nucl Med Allied Sci** 1989 Oct-Dec;33(4):335-43

RADIOTHERAPY

[Possibilities of the treatment of biliary dyskinesia by laser irradiation] Vorob'ev LP, et al. **Klin Med (Mosk)** 1990 May; 68(5):110-5 (Eng. Abstr.) **(Rus)**

THERAPY

[Diagnosis and therapy of functional disorders of the bile ducts] Döbrönte Z. **Z Gesamte Inn Med** 1989 Oct 15; 44(20):621-6 (25 ref.) (Eng. Abstr.) **(Ger)**

BILIARY FISTULA

[Undryable postoperative external biliary fistula: apropos of a case] Kehila M, et al. **Tunis Med** 1989 Dec;67(12):829-34 **(Fre)**

CHEMICALLY INDUCED

The role of calcium precipitation in the sulfoglycolithocholate-induced cholestasis of the bile fistula hamster. Bellentani S, et al. **J Hepatol** 1990 May; 10(3):356-63

CLASSIFICATION

Mirizzi syndrome and cholecystobiliary fistula: a unifying classification. Csendes A, et al. **Br J Surg** 1989 Nov; 76(11):1139-43

COMPLICATIONS

Cholecystopleural fistula with cholelithiasis presenting as a right pleural effusion. Cunningham LW, et al. **Chest** 1990 Mar;97(3):751-2
Gallbladder perforation with intrahepatic abscess formation. Chen JJ, et al. **JCU** 1990 Jan;18(1):43-5
[Massive hemobilia caused by erosion of the hepatic artery by cholelithiasis with cholecysto-duodenal fistula] Bloch P, et al. **Ann Chir** 1989;43(10):840-2 (Eng. Abstr.) **(Fre)**
[Gastrointestinal hemorrhage as a complication of a spontaneous internal biliary fistula] Greiasov VI, et al. **Klin Khir** 1989;(9):57-8 **(Rus)**
[Conservative treatment of Bouveret's syndrome] Karpov IB, et al. **Vestn Khir** 1989 Jul;143(7):62-3 **(Rus)**

CONGENITAL

Congenital bronchobiliary fistula in adults. Yamaguchi M, et al. **South Med J** 1990 Jul;83(7):851-2

DIAGNOSIS

Acute cholecystocolic fistula detected by colonoscopy [letter] Sakurai Y, et al. **Gastrointest Endosc** 1990 Mar-Apr; 36(2):163-4
[Preoperative diagnosis of a case of biliobiliary fistula] Horibe T, et al. **Nippon Naika Gakkai Zasshi** 1989 Oct; 78(10):1466-9 **(Jpn)**
[Principles of the diagnosis and surgical treatment of internal biliary fistulae] Shalimov SA, et al. **Klin Khir** 1989;(9):10-3 (Eng. Abstr.) **(Rus)**
[Mirizzi's syndrome] Shapova'liants SG, et al. **Sov Med** 1989; (6):97-100 **(Rus)**

ETIOLOGY

Choledochoduodenal fistula: a rare complication of duodenal ulcer. Case report. Ayyash K, et al. **Acta Chir Scand** 1989 Aug;155(8):423-5
Cholecysto-duodenocolic fistula--a case report [letter] Leong S. **Ann Acad Med Singapore** 1990 May;19(3):421
Endoscopic sphincterotomy in hepatic hydatid disease open to the biliary tree. Vignote ML, et al. **Br J Surg** 1990 Jan; 77(1):30-1
Choledocho-duodenal fistula due to tuberculosis. Chaudhary A, et al. **Indian J Gastroenterol** 1989 Oct;8(4):293-4
Spontaneous cutaneous biliary fistula: a rare complication of cholangiocarcinoma. Kuo YC, et al. **J Clin Gastroenterol** 1990 Aug;12(4):451-3
[Choledocho-gastric fistula. A rare complication of a cholangiocarcinoma] Beck A, et al. **Radiologe** 1989 Aug; 29(8):391-3 (Eng. Abstr.) **(Ger)**
[Spontaneous external biliary fistula] Nobel M, et al. **Harefuah** 1989 May 1;116(9):469-70 (Eng. Abstr.) **(Heb)**
[Spontaneous cholecysto-cutaneous fistula. Observation of a case and review of the literature] Gatti L, et al. **Minerva Chir** 1989 Nov 15;44(21):2263-5 (14 ref.) (Eng. Abstr.) **(Ita)**
[Perforation of malignant tumor of the gallbladder] Gorin BIa. **Khirurgiia (Mosk)** 1990 Jan;(1):24-6 (Eng. Abstr.) **(Rus)**
[Large calculus of the gallbladder penetrating into the common bile duct through the cystic duct] Kogan AS, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):131-2 **(Rus)**
[Diagnosis and treatment of biliary-pleural fistula] Postrelov NA, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):130-1 **(Rus)**

[Cholecysto-colonic fistula as a complication of cholelithiasis] Chalkovskiĭ Iula, et al. **Vestn Khir** 1989 Apr; 142(4):46 **(Rus)**

[Cholelithiasis complicated by cholecysto-colonic fistula] Kadyrov ZL. **Vestn Khir** 1989 Apr;142(4):47 **(Rus)**

[Complications of mechanical injuries of the liver in children] Saklapov ES. **Vestn Khir** 1989 May;142(5):73–4 **(Rus)**

[Bronchobiliary fistula (letter)] Fernández de la Puebla RA, et al. **Med Clin (Barc)** 1990 May 5;94(17):678–9 **(Spa)**

[Duodenal ulcer and duodenocholedochal fistula] Manuel Palazuelos C, et al. **Rev Esp Enferm Dig** 1990 Jan;77(1):53–4 (Eng. Abstr.) **(Spa)**

[Cholelithiasis and cholecysto-colonic fistula: a rare form of biliary ileus] Serrano R, et al. **Rev Esp Enferm Dig** 1990 Jan;77(1):55–7 (Eng. Abstr.) **(Spa)**

METABOLISM

Bile acids do not regulate the intestinal mucosal cholesterol synthesis: studies in the chronic bile duct-ureter fistula rat model. Castilho LN, et al. **Digestion** 1990;45(3):147–52

Use of bile fistulas to solve problems of drug metabolism. Cooper DY, et al. **Drug Metab Rev** 1989;20(2–4):601–13 (17 ref.)

Cholecystocolonic fistula: malabsorptive consequences of lost bile acids. Benage D, et al. **J Clin Gastroenterol** 1990 Apr; 12(2):192–4

PATHOLOGY

Cholecystoduodenal fistula with impending gallstone ileus [clinical conference] Braver JM, et al. **Invest Radiol** 1990 Jun;25(6):757–8

[Multiple biliodigestive fistulae] Khatsko VV. **Klin Khir** 1989; (9):58 **(Rus)**

PREVENTION & CONTROL

[Biliary peritonitis following bile duct revision with T-drainage implantation—problems of choosing the right material] Walz M, et al. **Chirurg** 1990 May;61(5):409–10 **(Ger)**

RADIOGRAPHY

Cholecystocolic fistula: an unusual presentation and diagnosis by endoscopic retrograde cholangiopancreatography. Sing RF, et al. **Surg Endosc** 1990;4(1):39–40

SURGERY

Combined internal and external biliary fistulae treated by percutaneous cholecystlithotomy. Davies MG, et al. **Br J Surg** 1989 Dec;76(12):1258

Treatment of fistulas of the biliary tract by endoscopic insertion of endoprostheses. Goldin E, et al. **Surg Gynecol Obstet** 1990 May;170(5):418–23

[Cholangiothoracic fistulae] Song ZL. **Chung Hua Wai Ko Tsa Chih** 1989 May;27(5):269–71, 316 (Eng. Abstr.) **(Chi)**

[Bronchobiliary fistula] Fabian W. **Chirurg** 1990 Feb; 61(2):137–9 **(Ger)**

[Spontaneous bilio-digestive fistula of lithiasic origin] Marzocca G, et al. **Minerva Chir** 1990 Feb;45(3–4):177–81 (20 ref.) (Eng. Abstr.) **(Ita)**

[Use of the CO_2 laser in the surgical treatment of complicated echinococcosis of the liver] Aliev MA, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):46–8 (Eng. Abstr.) **(Rus)**

[Surgical treatment of complex external biliary fistula] Masalin MM, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):132 **(Rus)**

[Surgical treatment procedures in patients with external and internal hepatobiliary fistulae] Danilov MV, et al. **Klin Khir** 1989;(9):8–10 (Eng. Abstr.) **(Rus)**

[A method for the preoperative preparation of patients with complete external biliary fistulae] Sharak AV, et al. **Klin Khir** 1989;(9):67–8 **(Rus)**

[Spontaneous biliodigestive fistula] Palomar de Luis M, et al. **Rev Esp Enferm Dig** 1990 Jan;77(1):33–8 (30 ref.) (Eng. Abstr.) **(Spa)**

THERAPY

Endoscopic management of biliary fistulas with small caliber stents. Hoffman BJ, et al. **Am J Gastroenterol** 1990 Jun; 85(6):705–7

Cutaneous bile fistula treated with ERCP-placed large diameter stent. Musher DR, et al. **Am Surg** 1989 Nov; 55(11):653–5

Endoscopic treatment of biliary enteric fistula. Marshall T, et al. **BMJ** 1990 May 5;300(6733):1176

Endoscopic embolization of external biliary fistulae. Krige JE, et al. **Br J Surg** 1990 May;77(5):581–3

The use of endoscopy to treat bronchobiliary fistula caused by choledocholithiasis. Brem H, et al. **Gastroenterology** 1990 Feb;98(2):490–2

Endoscopic treatment of biliary tract fistulas. Ponchon T, et al. **Gastrointest Endosc** 1989 Nov-Dec;35(6):490–8

Percutaneous transcatheter occlusion of cystic duct stump in postcholecystectomy bile leakage. Berger H, et al. **Gastrointest Radiol** 1989 Fall;14(4):334–6

BILIARY STASIS see **CHOLESTASIS**

BILIARY STASIS, EXTRAHEPATIC see **BILE DUCT OBSTRUCTION, EXTRAHEPATIC**

BILIARY STASIS, INTRAHEPATIC see **CHOLESTASIS, INTRAHEPATIC**

BILIARY SURGERY see **BILIARY TRACT SURGERY**

BILIARY TRACT

see related
CHOLAGOGUES AND CHOLERETICS
CHOLANGIOGRAPHY
CHOLECYSTOGRAPHY

Pitfalls of percutaneous-endoscopic biliary stent placement. Tam PC, et al. **Am J Gastroenterol** 1990 Feb;85(2):207–9

Tube tamponade: potential pitfall in angiography of arterial hemorrhage associated with percutaneous drainage catheters. Routh WD, et al. **Radiology** 1990 Mar;174(3 Pt 2):945–9

Experience with new retrieval forceps for foreign body removal in the vascular, urinary, and biliary systems. Selby JB, et al. **Radiology** 1990 Aug;176(2):535–8

Endoscopic retrograde cholangiopancreatography, endoscopic sphincterotomy, and biliary drainage. Ghazi A, et al. **Surg Clin North Am** 1989 Dec;69(6):1249–74

[Endoscopic treatment of cholangitis via an external nasobiliary drain] Vladimirov B, et al. **Vutr Boles** 1989; 28(5):75–7 (Eng. Abstr.) **(Bul)**

[The results and complications of 616 percutaneous transhepatic biliary drainages] Schild H, et al. **ROFO** 1989 Sep;151(3):289–93 (Eng. Abstr.) **(Ger)**

[The technical requirements for percutaneous fine-caliber cholangioscopy. Experimental experiences with an animal model] Vorwerk D, et al. **ROFO** 1990 Jun;152(6):702–7 (Eng. Abstr.) **(Ger)**

ABNORMALITIES

[ERCP in children] Rösch W. **Z Kinderchir** 1988 Sep;43 Suppl 1:52–3 **(Ger)**

ANALYSIS

Physical-chemical behavior of dietary and biliary lipids during intestinal digestion and absorption. 2. Phase analysis and aggregation states of luminal lipids during duodenal fat digestion in healthy adult human beings. Hernell O, et al. **Biochemistry** 1990 Feb 27;29(8):2041–56

Physical-chemical behavior of dietary and biliary lipids during intestinal digestion and absorption. 1. Phase behavior and aggregation states of model lipid systems patterned after aqueous duodenal contents of healthy adult human beings. Staggers JE, et al. **Biochemistry** 1990 Feb 27;29(8):2028–40

Immunohistochemical localization of proteoglycans in interstitial elements of human pancreas and biliary system. Fukata S, et al. **Histochem J** 1989 Dec;21(12):707–14

[Cultured biliary tract epithelial cells/alkaline and neutral elution as a model for the detection of carcinogens to the biliary tract epithelium] Miyazaki K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Nov;86(11):2540–4 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Imaging of the biliary system. Goldberg HI. **Curr Opin Radiol** 1989 Jun;1(1):76–80 (24 ref.)

ERCP in a nonhuman primate. Siegel JH, et al. **Gastrointest Endosc** 1989 Nov-Dec;35(6):557–9

[Magnetic resonance imaging of the biliary tract] Sagoh T, et al. **Rinsho Hoshasen** 1989 Sep;34(10):1153–9 (7 ref.) **(Jpn)**

[Ultrasonography of the biliary tract] Yamane T, et al. **Rinsho Hoshasen** 1989 Sep;34(10):1127–37 **(Jpn)**

DRUG EFFECTS

The influence of pregnancy and contraceptive steroids on the biliary tract and its reference to cholesterol gallstone formation. Rådberg G, et al. **Scand J Gastroenterol** 1990 Feb;25(2):97–102 (75 ref.)

IMMUNOLOGY

A shared and unique epitope(s) on human colon, skin, and biliary epithelium detected by a monoclonal antibody. Das KM, et al. **Gastroenterology** 1990 Feb;98(2):464–9

INJURIES

Extrahepatic biliary tract rupture: evaluation of the relationship between the site of rupture and the cause of rupture in 15 dogs. Parchman MB, et al. **Cornell Vet** 1990 Jul;80(3):267–72

Erosion of portal vein catheter into the biliary system. Schuster JA, et al. **Gastrointest Radiol** 1990 Winter; 15(1):47–8

Scintigraphy with 99mTc-HIDA in assessment of the postoperative course after traumatic lesions of the liver and biliary tract. Rasmussen L, et al. **Z Kinderchir** 1990 Jun; 45(3):140–3

[ERCP and associated methods in children—cases from a personal patient sample] Kautz G, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:54–6 **(Ger)**

METABOLISM

Catabolism of streptokinase and polyethylene glycol-streptokinase: evidence for transport of intact forms through the biliary system in the mouse. Brucato FH, et al. **Blood** 1990 Jul 1;76(1):73–9

Characteristics of sinusoidal uptake and biliary excretion of cysteinyl leukotrienes in perfused rat liver. Wettstein M, et al. **Eur J Biochem** 1990 Jul 20;191(1):251–5

Biliary excretion of butylated hydroxyanisole in the rat [letter] Verhagen H, et al. **Food Chem Toxicol** 1989 Jun; 27(6):421

Effects of ATP depletion with DL-ethionine on biliary excretion of indocyanine green in the rat. Shiba Y, et al. **Hiroshima J Med Sci** 1990 Mar;39(1):11–4

Biliary calcium secretion in the dog occurs primarily by passive convection and diffusion and is linked to bile flow. Rege RV, et al. **J Lab Clin Med** 1990 May;115(5):593–602

Bile acid retention after Roux-en-Y biliary reconstruction demonstrated by tauro-23-(75Se)selena-25-homocholic acid. An experimental animal study. Bolder U, et al. **Scand J Gastroenterol** 1990 Jul;25(7):681–8

[Biliary elimination and hepatic disposition of piperacillin: experimental evaluation] Brogard JM, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):495–9 (Eng. Abstr.) **(Fre)**

[Influence of surgical biliary pathology on the diffusion of ceftriaxone in the biliary tract] Guyot L, et al. **Therapie** 1989 Jul-Aug;44(4):285–9 (Eng. Abstr.) **(Fre)**

PATHOLOGY

The biliary system. Kane RA. **Clin Diagn Ultrasound** 1988; 23:75–137 (94 ref.)

Biliary tract. Goldberg HI. **Curr Opin Radiol** 1990 Jun; 2(3):434–40 (19 ref.)

Structural and functional biliary tree changes secondary to extrahepatic biliary obstruction. Lygidakis NJ, et al. **Endoscopy** 1989 Dec;21 Suppl 1:321–3

Clinical significance of biliary sludge. Ohara N, et al. **J Clin Gastroenterol** 1990 Jun;12(3):291–4

[The use of echo- and scintigraphic study of the biliary system in chronic cholecystitis] Dynnik OB, et al. **Vrach Delo** 1990 Feb;(2):53–5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Biliary tract motility and its relationship to clinical disorders. Dodds WJ. **AJR Am J Roentgenol** 1990 Aug;155(2):247–58 (37 ref.)

Short- and long-term effects of biliary drainage on hepatic cholesterol metabolism in the rat. Smit MJ, et al. **Biochem J** 1990 Aug 1;269(3):781–8

Current concepts of biliary secretion. Hofmann AF. **Dig Dis Sci** 1989 Dec;34(12 Suppl):16S–20S (32 ref.)

Pharmacokinetics of ketoprofen enantiomers in cholecystectomy patients: influence of probenecid. Foster RT, et al. **Eur J Clin Pharmacol** 1989;37(6):589–94

Biliary motility. Grace PA, et al. **Gut** 1990 May;31(5):571–82 (196 ref.)

Hepatobiliary compensation for the loss of gallbladder function after cholecystectomy. An experimental study in the cat. Friman S, et al. **Scand J Gastroenterol** 1990 Mar; 25(3):307–14

PHYSIOPATHOLOGY

Papillary adenoma of the gallbladder associated with regurgitation of pancreatic juice through abnormally shaped union. Case report. Yamaguchi K, et al. **Acta Chir Scand** 1989 Oct;155(10):549–52

Biochemical evaluation of the hepatobiliary system in dogs and cats. Sutherland RJ. **Vet Clin North Am Small Anim Pract** 1989 Sep; 19(5):899–927 (105 ref.)

[The effect of health resort treatment on biliary tract function in the early period of convalescence from viral hepatitis] Dragomiretskaia NV. **Vrach Delo** 1989 Nov;(11):10–2 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Contrast enhancement of liver parenchyma and biliary tract related to liver function at delayed computed tomography. Tidebrant G, et al. **Acta Radiol** 1990 May;31(3):265–8

Percutaneous transjejunal access to the biliary system [letter; comment] Gibson RN, et al. **Radiology** 1990 Apr;175(1):286 Comment on: Radiology 1989 Sep;172(3 Pt 2):1031–4.

[X-ray computed tomography of the biliary tract—the diagnostic images and application of dynamic CT, cholangiography CT, and 3D CT] Ryu M, et al. **Rinsho Hoshasen** 1989 Sep;34(10):1139–52 (10 ref.) **(Jpn)**

RADIONUCLIDE IMAGING

Preparation and biokinetic evaluation of various halogenated iminodiacetic acid-type compounds labeled with technetium-99m for hepatobiliary scintigraphy in the baboon (Papio ursinus) model. Dormehl IC, et al. **Am J Physiol Imaging** 1990;5(1):3–7

Gallbladder perforation during liver biopsy diagnosed using hepatobiliary scintigraphy: a case report. Dennison KG, et al. **Clin Nucl Med** 1990 Feb;15(2):95–6

Cholescintigraphy for assessing the separation potential of thoracoomphalopagus twins. Oddo SM, et al. **Clin Nucl Med** 1990 Apr;15(4):243–5

Liver cysts associated with polycystic kidney disease: role of Tc-99m hepatobiliary imaging. Salam M, et al.

Clin Nucl Med 1989 Nov;14(11):803–7

Observation of hepatobiliary systems in joined twins by Tc–99m EHIDA. Urgancioğlu I, et al. **Clin Nucl Med** 1990 Apr;15(4):273–4

The diagnosis of acute complicated cholecystitis by Tc–99m sulfur colloid liver imaging. Weisgrau RA, et al. **Clin Nucl Med** 1990 Apr;15(4):240–2

Radionuclide studies of the liver and hepatobiliary system. Hawkins RA. **Curr Opin Radiol** 1989 Dec;1(4):499–507 (27 ref.)

99mTc–labelled trimethylmonoiodo–IDA: a new radiopharmaceutical for hepatobiliary imaging. Chauhan UP, et al. **Int J Rad Appl Instrum [B]** 1990;17(4):401–8

Radiopharmaceutical evaluation of the hepatobiliary pathway. Freeman LM, et al. **Int J Rad Appl Instrum [B]** 1990;17(1):129–39 (56 ref.)

Cholescintigraphic observation of the sphincter of Oddi motor activity in patients with gallstone. Aoki Y, et al. **Nippon Geka Hokan** 1989 May 1;58(3):289–98

Morphine–augmented hepatobiliary scintigraphy in the severely ill: caution is in order. Fig LM, et al. **Radiology** 1990 May;175(2):467–73

Pharmacokinetics and clinical application of technetium 99m–labeled hepatobiliary agents. Krishnamurthy GT, et al. **Semin Nucl Med** 1990 Apr;20(2):130–49 (103 ref.)

[Hepatobiliary scintigraphy in the study of neonatal hepatic cholestasis] Salvatori M, et al. **Radiol Med (Torino)** 1989 Dec;78(6):638–44 (Eng. Abstr.) **(Ita)**

[Usefulness of 99mTc–PMT cholescintigraphy in diagnosis a case of bone metastasis in hepatocellular carcinoma] Inoue A, et al. **Rinsho Hoshasen** 1989 Aug;34(8):901–2 **(Jpn)**

[The usefulness of 99mTc–PMT cholescintigraphy in the diagnosis of bile leakage or biloma] Nakanishi Y, et al. **Rinsho Hoshasen** 1989 Aug;34(8):887–92 (Eng. Abstr.) **(Jpn)**

[Radionuclide and sonographic diagnosis of lesions of the hepatobiliary system in opisthorchiasis] Bronshtein AM, et al. **Med Parazitol (Mosk)** 1989 Sep–Oct;(5):13–7 (Eng. Abstr.) **(Rus)**

[The function of the hepatobiliary system in patients with cholelithiasis based on hepatocholescintigraphic data] Berdov BA, et al. **Med Radiol (Mosk)** 1990 Feb;35(2):22–5 (Eng. Abstr.) **(Rus)**

[The use of echo– and scintigraphic study of the biliary system in chronic cholecystitis] Dynnik OB, et al. **Vrach Delo** 1990 Feb;(2):53–5 (Eng. Abstr.) **(Rus)**

[Radionuclide study of the hepatobiliary system in patients with nonspecific ulcerative colitis] Topchii TV. **Vrach Delo** 1990 Mar;(3):89–91 **(Rus)**

[Dynamic bilisicintigraphy—a diagnostic radionuclide method using computers] Kocić D, et al. **Med Arh** 1985; 39(2–3):89–94 **(Ser)**

SURGERY

Sonography accurately detects biliary obstruction in patients with surgically created biliary–enteric anastomosis. Wilson SR, et al. **AJR Am J Roentgenol** 1990 Oct;155(4):789–94

Antibiotic prophylaxis in biliary tract surgery. Ciprofloxacin versus ceftriaxone. Kujath P. **Am J Med** 1989 Nov 30; 87(5A):255S–257S

Meta–analysis of randomized, controlled clinical trials of antibiotic prophylaxis in biliary tract surgery [see comments] Meijer WS, et al. **Br J Surg** 1990 Mar; 77(3):283–90 Comment in: Br J Surg 1990 Mar;77(3):243–4.

Hepatic abscess after biliary tract procedures. Matthews JB, et al. **Surg Gynecol Obstet** 1990 Jun;170(6):469–75

Single–dose antibiotic prophylaxis in patients at high risk for infection in biliary surgery: a prospective and randomized study comparing cefonicid with mezlocillin. Targarona EM, et al. **Surgery** 1990 Mar;107(3):327–34

Roux–en–Y hepaticojejunostomy: a safe procedure for biliary anastomosis in liver transplantation. Bismuth H, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2413–5

Side–to–side anastomosis of the common bile duct is the method of choice for biliary tract reconstruction after liver transplantation. Neuhaus P, et al. **Transplant Proc** 1990 Aug;22(4):1571

[Effect of prophylactic cefoperazone in the perioperative period for infections in patients following biliary tract and stomach surgery] Chmura A, et al. **Pol Tyg Lek** 1990 Jan 22–29;45(4–5):56–9 **(Pol)**

ULTRASTRUCTURE

Three–dimensional fine structure of the biliary tract: scanning electron microscopy of biliary casts. Yamamoto K, et al. **J Electron Microsc Tech** 1990 Mar;14(3):208–17

BILIARY TRACT DISEASES

see related
CHOLANGIOGRAPHY

Cystic disease of the biliary tract. Cuschieri A, et al. **Ann Chir Gynaecol** 1989;78(4):259–66 (67 ref.)

Biliary ascariasis. Hangloo VK, et al. **Indian J Gastroenterol** 1989 Oct;8(4):265–6

Gallbladder and biliary tract candidiasis: nine cases and review. Morris AB, et al. **Rev Infect Dis** 1990 May–Jun; 12(3):483–9 (29 ref.)

[Papillomatosis of the biliary tract] Rambaud S, et al. **Presse Med** 1989 Sep 2–9;18(27):1329–32 (37 ref.) (Eng. Abstr.) **(Fre)**

BLOOD

Prospective study of the effect of gastrectomy with and without bile reflux on serum pepsinogens. Biemond I, et al. **Digestion** 1989;44(3):124–30

CHEMICALLY INDUCED

Scintigraphic cholecystokinin–induced bile reflux named as Krishnamurthy–Bobba sign [letter; comment] Brar HS. **J Nucl Med** 1990 Feb;31(2):248–9 Comment on: J Nucl Med 1989 Jul;30(7):1192–7.

Familial occurrence of opioid–induced biliary colic [letter] Orstavik KH. **Lancet** 1989 Oct 7;2(8667):874–5

[Anatomo–pathological changes in the biliary system caused by povidone iodide. Experimental study] Reyes M, et al. **Rev Esp Enferm Apar Dig** 1989 Oct;76(4):339–47 (Eng. Abstr.) **(Spa)**

COMPLICATIONS

Bile peritonitis in the newborn. Rivilla F, et al. **Acta Paediatr Scand** 1989 Sep;78(5):782–3

Platelet abnormalities in hepatobiliary diseases. Glassman AB. **Ann Clin Lab Sci** 1990 Mar–Apr;20(2):119–22 (7 ref.)

Intrahepatic biliary cysts in congenital biliary atresia. Fain JS, et al. **Arch Pathol Lab Med** 1989 Dec;113(12):1383–6

Hepatobiliary candidiasis in chronic lymphatic leukaemia. Hacking CN, et al. **BMJ** 1989 Dec 23–30;299(6715):1568

Idiopathic recurrent pancreatitis from bile reflux? [letter; comment] Blackstone MO. **Dig Dis Sci** 1989 Dec; 34(12):1943–5 Comment on: Dig Dis Sci 1989 Jan;34(1):56–60.

Significance of asymptomatic biliary tract disease in heart transplant recipients. Girardet RE, et al. **J Heart Transplant** 1989 Sep–Oct;8(5):391–9

[General situation of the study of traditional Chinese medicine and Western medicine in bile reflux gastritis] Tian YZ. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Dec;9(12):757–9 (25 ref.) **(Chi)**

[Hepatobiliary manifestations in AIDS] Drèze C, et al. **Rev Med Liege** 1990 Apr;45(4):164–71 (35 ref.) **(Fre)**

[Correlation between post–cholecystectomy syndrome and biliary reflux gastritis. Endoscopic study] Nudo R, et al. **Ann Ital Chir** 1989 Jul–Aug;60(4):291–300; discussion 300–2 (31 ref.) (Eng. Abstr.) **(Ita)**

DIAGNOSIS

The pancreatic enzymes value in the diagnosis of acute pancreatitis and acute biliary tract diseases. Parodi HC, et al. **Acta Gastroenterol Latinoam** 1989;19(3):123–9

Biliary perestroika [editorial] Liguory C, et al. **Am J Surg** 1990 Sep;160(3):237–8

Hepatobiliary imaging: imaging modalities. Glassman AB. **Ann Clin Lab Sci** 1990 Jan–Feb;20(1):56–9

Cholecystokinin provocation test [letter] Lennon GM, et al. **Br J Surg** 1990 Feb;77(2):234

The biliary system. Kane RA. **Clin Diagn Ultrasound** 1988; 23:75–137 (94 ref.)

Imaging of the biliary system. Goldberg HI. **Curr Opin Radiol** 1989 Jun;1(1):76–80 (24 ref.)

The role of endoscopy in diseases of the biliary tract and pancreas. Guidelines for clinical application. **Gastrointest Endosc** 1989 Nov–Dec;35(6):598–9

Percutaneous fibercholangioscopies. Gazzaniga GM, et al. **Hepatogastroenterology** 1989 Oct;36(5):367–75

Biliary tract disease in AIDS: AIDS vs. nonAIDS. Simon D, et al. **Hepatology** 1990 Sep;12(3 Pt 1):618–9

HEPAR: an expert system for the diagnosis of disorders of the liver and biliary tract. Lucas PJ, et al. **Liver** 1989 Oct; 9(5):266–75

Pitfalls and differential diagnosis in biliary sonography. Rosenthal SJ, et al. **Radiographics** 1990 Mar;10(2):285–311 (19 ref.)

Diagnosis and treatment of biliary tract complications after orthotopic liver transplantation. Stratta RJ, et al. **Surgery** 1989 Oct;106(4):675–83; discussion 683–4

[Transpapillary cholangioscopy. A new diagnostic and therapeutic dimension] Riemann JF, et al. **Dtsch Med Wochenschr** 1989 Nov 17;114(46):1775–9 (Eng. Abstr.) **(Ger)**

[Significance of unexpected findings during ultrasonography of the abdomen] Zulik R, et al. **Orv Hetil** 1989 Oct 22; 130(43):2309–10 (Eng. Abstr.) **(Hun)**

[Diagnostic and treatment problems of benign stenosis of the main biliary tract] Purri P, et al. **Minerva Med** 1989 Aug; 80(8):883–4 **(Ita)**

[Clinical examination of serum bile acids for the diagnosis of hepatobiliary diseases] Fujiwara K. **Rinsho Byori** 1989 Oct;37(10):1114–21 (Eng. Abstr.) **(Jpn)**

[Rotated, exceedingly movable kidney vascularized by four atypically branched arteries as a cause of periodic urinary retention in the pyelo–caliceal system and masked by biliary colic] Bujak M. **Pol Tyg Lek** 1989 May 1–8;44(18–19):433–5 (Eng. Abstr.) **(Pol)**

[Radionuclide and sonographic diagnosis of lesions of the hepatobiliary system in opisthorchiasis] Bronshtein AM, et al. **Med Parazitol (Mosk)** 1989 Sep–Oct;(5):13–7 (Eng. Abstr.) **(Rus)**

[Transillumination of abdominal organs during laparoscopy] Dalgat DM, et al. **Vestn Khir** 1990 Feb;144(2):120–2 **(Rus)**

[The importance of the complement consumption reaction for the differential diagnosis of diseases of the hepatobiliary system] Chernous ES, et al. **Vrach Delo** 1990 May;(5):16–8 (Eng. Abstr.) **(Rus)**

[Clinical and ultrasonic diagnosis of diseases of the hepatobiliary system in chronic alcoholics] Fedishin PS, et al. **Vrach Delo** 1989 Sep;(9):65–7 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Treatment of biliary colic and acute cholecystitis with prostaglandin synthetase inhibitors [letter; comment] Svanvik J, et al. **Dig Dis Sci** 1990 Feb;35(2):284 Comment on: Dig Dis Sci 1989 Jun;34(6):809–11.

[Polyunsaturated phosphatidylcholine combined with vitamin B complex in the treatment of patients with disorders of the hepatobiliary function caused by unbalanced nutrition] Cairella M, et al. **Clin Ter** 1989 Nov 30;131(4):237–46 (Eng. Abstr.) **(Ita)**

[Use of cholagogic agents in the therapy of patients with dysfunction of the bile–secreting system] Nogaller AM, et al. **Klin Med (Mosk)** 1989 Sep;67(9):129–35 (4 ref.) **(Rus)**

ENZYMOLOGY

The nature and origin of alkaline phosphatase in hepatobiliary disease. Moss DW. **Z Med Lab Diagn** 1989;30(7):355–63 (51 ref.)

ETIOLOGY

Acute hemolytic anemia and biliary colic as presenting manifestations of Wilson's disease. Jain S, et al. **Am J Gastroenterol** 1990 Apr;85(4):476–8

Carcinoma of the appendix presenting as biliary colic. Straughn JC, et al. **Am J Gastroenterol** 1989 Oct; 84(10):1334–5

Biliary complications following orthotopic liver transplantation. Evans RA, et al. **Clin Radiol** 1990 Mar; 41(3):190–4

Hepatobiliary abnormalities associated with total parenteral nutrition. Fisher RL. **Gastroenterol Clin North Am** 1989 Sep;18(3):645–66 (161 ref.)

Villous adenoma of the ampulla of Vater. An unusual cause of biliary colic and obstructive jaundice. Sobol S, et al. **Gastroenterology** 1978 Jul;75(1):107–9 (38 ref.)

The influence of cholecystectomy on the duodenogastric reflux of bile. Hubens A, et al. **Hepatogastroenterology** 1989 Oct;36(5):384–6

Formation of biliary thrombi in protoporphyrin–induced cholestasis in perfused rat liver. Berenson MM, et al. **Hepatology** 1990 May;11(5):757–63

A subacute rabbit model for hepatobiliary dysfunction during total parenteral nutrition. Gleghorn EE, et al. **J Pediatr Gastroenterol Nutr** 1989 Aug;9(2):246–55 (53 ref.)

Hepatobiliary and pancreatic ascariasis in India. Khuroo MS, et al. **Lancet** 1990 Jun 23;335(8704):1503–6

Hepatobiliary consequences of parenteral alimentation. Balistreri WF, et al. **Prog Liver Dis** 1990;9:567–601 (193 ref.)

Evidence that the vanishing bile duct syndrome is vanishing. Pirsch JD, et al. **Transplantation** 1990 May;49(5):1015–8

[Deep duodenobiliary reflux after supraduodenal choledochoduodenostomy] Skiba VV, et al. **Klin Khir** 1989; (9):59–60 **(Rus)**

[Status of the hepatobiliary system in patients with rheumatoid arthritis] Svintsitskii AS, et al. **Klin Med (Mosk)** 1990 Jan;68(1):22–6 (45 ref.) **(Rus)**

IMMUNOLOGY

Disappearing bile ducts: immunologic mechanisms. Vierling JM, et al. **Hosp Pract [Off]** 1990 Jul 15;25(7):141–50

[Clinical study of human pancreatic cancer–associated antigen (SPan–1 antigen) in hepatobiliary and pancreatic diseases] Nakata B, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Apr;87(4):1050–5 (Eng. Abstr.) **(Jpn)**

METABOLISM

Gastric nitrite processing in the surgically altered maximal and minimal bile reflux ferret model. Ryden EB, et al. **Carcinogenesis** 1990 Mar;11(3):405–9

[Changes in the phospholipid and prostaglandin levels in chronic diseases of the biliary tract] Garnik TP, et al. **Vrach Delo** 1989 Dec;(12):66–8 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Aerobic and anaerobic microbiology of biliary tract disease. Brook I. **J Clin Microbiol** 1989 Oct;27(10):2373–5

[Bacteria detected in the duodenal aspirate of patients with biliary tract disorders] Burcoveanu C, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Jan–Mar;93(1):139–43 (Eng. Abstr.) **(Rum)**

PATHOLOGY

Prospective comparative study of the influence of postoperative bile reflux on gastric mucosal histology and Campylobacter pylori infection. Offerhaus GJ, et al. **Gut** 1989 Nov;30(11):1552–7

Clinical significance of biliary sludge. Ohara N, et al. **J Clin Gastroenterol** 1990 Jun;12(3):291–4

Reflux gastritis in the intact stomach. Sobala GM, et al. **J Clin Pathol** 1990 Apr;43(4):303–6

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 33–1990. A 72–year–old Chinese woman with recent abdominal pain and a right–sided abdominal mass. **N Engl J Med** 1990 Aug 16; 323(7):467–75

Exophytic spread of hepatobiliary disease via perihepatic ligaments [letter; comment] Oliphant M, et al. **Radiology** 1989 Dec;173(3):879–80 Comment on: Radiology 1989 Jul;172(1):41–6.

PHYSIOPATHOLOGY

The pathogenesis of acute biliary pancreatitis: a controversial issue. Part II: The concepts of duodenopancreatic reflux and of obstruction of pancreatic exocrine secretion. Arendt T. **Gastroenterol J** 1989;49(3):98–101 (44 ref.)

The pathogenesis of acute biliary pancreatitis: a controversial issue. Part I. The concept of biliopancreatic reflux. Arendt T. **Gastroenterol J** 1989;49(2):50–3 (40 ref.)

Motor pattern of the sphincter of Oddi in patients with juxtapapillary diverticula. Ponce J, et al. **J Clin Gastroenterol** 1990 Apr;12(2):162–5

The circadian rhythm of biliary colic. Rigas B, et al. **J Clin Gastroenterol** 1990 Aug;12(4):409–14

[Influence of surgical biliary pathology on the diffusion of ceftriaxone in the biliary tract] Guyot L, et al. **Therapie** 1989 Jul–Aug;44(4):285–9 (Eng. Abstr.) **(Fre)**

[Pharmacokinetics of the biliary excretion of some chemotherapeutic agents in patients with biliary disease] Basoli A, et al. **Ann Ital Chir** 1989;60(2):129–32; discussion 133 (Eng. Abstr.) **(Ita)**

PREVENTION & CONTROL

Intussusception–type antireflux valve in the Roux–en–Y loop to prevent ascending cholangitis after hepatic portojejunostomy. Nakajo T, et al. **J Pediatr Surg** 1990 Mar;25(3):311–4

Subtotal cystectomy and antirefluxing hepaticoduodenostomy for choledochus cyst in children. Sarkar PK, et al. **Z Kinderchir** 1989 Dec;44(6):340–2

[A mass study of hepatobiliary system function in workers and collective farmers in southern Tadzhikistan] Mansurov KhKh, et al. **Ter Arkh** 1990;62(2):90–3 (Eng. Abstr.) **(Rus)**

[Bilio–enteric convergent diversion with an antireflux mechanism. An experimental study] Villegas–Alvarez F, et al. **Bol Med Hosp Infant Mex** 1990 May;47(5):342–8 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Pictorial essay. Imaging of and intervention for biliary complications after hepatic transplantation. Letourneau JG, et al. **AJR Am J Roentgenol** 1990 Apr;154(4):729–33

Endoscopic retrograde choledocho–pancreatography. A review with a report of a collaborative series. Burwood RJ, et al. **Clin Radiol** 1973 Oct;24(4):397–415 (74 ref.)

Efficacy of plain abdominal radiography in patients with biliary tract disease. Rothrock SG, et al. **J Emerg Med** 1990 May–Jun;8(3):271–5

[Endoscopic retrograde cholangiopancreatography in the diagnosis of diseases of the biliary system and pancreas] Nikolov S, et al. **Vutr Boles** 1989;28(4):84–6 **(Bul)**

[Comparison of traditional methods and digital technics in the study of the biliary and pancreatic systems using endoscopic retrograde cholangiopancreatography (ERCP)] Bonetti MG, et al. **Radiol Med (Torino)** 1990 Jun; 79(6):610–3 (Eng. Abstr.) **(Ita)**

RADIONUCLIDE IMAGING

Persistent splenic visualization on technetium–99m DISIDA hepatobiliary studies. Balseiro J, et al. **Clin Nucl Med** 1990 Apr;15(4):237–9

Standing views to differentiate gallbladder or bile leak from duodenal activity on cholescintigrams. Lette J, et al. **Clin Nucl Med** 1990 Apr;15(4):231–6

Variations in normal hepatobiliary scintigraphy in Indian population. Bhatt CB, et al. **J Postgrad Med** 1989 Apr; 35(2):63–5

[Cholescintigraphy in clinical practice] Khodarev NN, et al. **Med Radiol (Mosk)** 1990 Mar;35(3):55–60 (57 ref.) **(Rus)**

SURGERY

Cholecystectomy provides long–term symptom relief in patients with acalculous gallbladders. Gilliland TM, et al. **Am J Surg** 1990 May;159(5):489–92

Gallstone pancreatitis. The question of time. Burch JM, et al. **Arch Surg** 1990 Jul;125(7):853–9; discussion 859–60

Endoscopic treatment of biliary tract fistulas. Ponchon T, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):490–8

Traumatic neuroma giving rise to biliary obstruction after reconstructive surgery for iatrogenic lesions of the biliary tract—a report of three cases. van Gulik TM, et al. **Hepatogastroenterology** 1989 Aug;36(4):255–7 (18 ref.)

Primary choledochoduodenostomy for benign obstructive biliary tract disease. Berlatzky Y, et al. **J Clin Gastroenterol** 1990 Aug;12(4):420–2

Results of cholecystectomy in a community general hospital. Hoffman E, et al. **Md Med J** 1990 Jul;39(7):679–81

Percutaneous treatments for biliary diseases. Akiyama H, et al. **Radiology** 1990 Jul;176(1):25–30

Experience with endoscopic biliary drainage in Singapore. Guan R, et al. **Singapore Med J** 1990 Jun;31(3):221–4

Placement of intra–aortic balloon pump allows definitive biliary surgery in patients with severe cardiac disease. Georgen RF, et al. **Surgery** 1989 Oct;106(4):808–12; discussion 812–4

Endoscopic sphincterotomy in the treatment of biliary tract diseases. Mo LR, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Aug;88(8):785–90

[Prognostic nutritional index in hepatobiliary surgery] Chen MJ, et al. **Chang Keng I Hsueh** 1989 Dec 20;12(4):200–7 (Eng. Abstr.) **(Chi)**

[Biliary ascariasis. A case of massive infestation; the importance of the peroperative choledoscopy] Eymeri JC, et al. **Chir Pediatr** 1989;30(3):178–80 (Eng. Abstr.) **(Fre)**

[Postoperative complications following biliodigestive anastomoses] Genoni M, et al. **Helv Chir Acta** 1990 Apr; 56(6):903–6 (Eng. Abstr.) **(Ger)**

[Treatment of alkaline gastritis and recurrent ulcer following Roux–en–Y gastrectomy and construction of a Rumpf antireflux valve] Koussidis A, et al. **Zentralbl Chir** 1990; 115(2):95–102 (Eng. Abstr.) **(Ger)**

[Iatrogenic stenosis of the biliary tract. The surgical procedure and technic] Mingazzini P, et al. **Minerva Med** 1989 Aug;80(8):869–78 **(Ita)**

[Low–energy laser irradiation in surgery of the liver and biliary tract] Il'khamov FA, et al. **Sov Med** 1990;(3):34–7 (66 ref.) **(Rus)**

[Use of high–energy lasers in surgery of the liver and biliary tract] Postolov AM, et al. **Vestn Khir** 1989 Nov; 143(11):136–40 (60 ref.) **(Rus)**

[Value of the endoscopic sphincterо–papillotomy by surgical radiocholangiodebitometry] Castilla C, et al. **Acta Gastroenterol Latinoam** 1988;18(3):173–85 (Eng. Abstr.) **(Spa)**

[Endoscopic management in biliary problems. 4 years' experience] Orillac J, et al. **Rev Med Panama** 1990 Jan; 15(1):50–8 (Eng. Abstr.) **(Spa)**

THERAPY

Successful short–term medical management of an elderly man with Caroli's disease. Samitas E, et al. **Am J Gastroenterol** 1990 Aug;85(8):1019–21 (10 ref.)

Critical appraisal of therapeutic endoscopy in biliary tract diseases. Cotton PB. **Annu Rev Med** 1990;41:211–22 (15 ref.)

Percutaneous transhepatic cholangioscopy in biliary complications after liver transplantation. Wiechel KL. **Transplant Proc** 1990 Feb;22(1):175

[A rationale for the use of Carlsbad salt–enriched water in treating patients with biliary tract diseases at a sanatorium] Ignatova NZ, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Nov–Dec; (6):50–1 **(Rus)**

VETERINARY

Comparison of bile porphyrin concentrations in cattle and human beings with protoporphyria. Bloomer JR, et al. **Am J Vet Res** 1990 Jul;51(7):1144–6

Experimental biliary cryptosporidiosis in broiler chickens. Hatkin JM, et al. **Avian Dis** 1990 Apr–Jun;34(2):454–7

Congenital extra–hepatic biliary cyst in a Congo African Grey Parrot (Psittacus erithacus erithacus). Opengart KN, et al. **Avian Dis** 1990 Apr–Jun;34(2):497–500

BILIARY TRACT HEMORRHAGE see **HEMOBILIA**

BILIARY TRACT NEOPLASMS

COMPLICATIONS

Hepatolithiasis and clogged endoprosthesis after endoscopic retrograde biliary drainage [letter] Takahashi T, et al. **Am J Gastroenterol** 1990 Sep;85(9):1204–5

Percutaneous biliary drainage for malignancy—an expanding field. Adam A. **Clin Radiol** 1990 Apr;41(4):225–7 (19 ref.)

Traumatic neuroma giving rise to biliary obstruction after reconstructive surgery for iatrogenic lesions of the biliary tract—a report of three cases. van Gulik TM, et al. **Hepatogastroenterology** 1989 Aug;36(4):255–7 (18 ref.)

Hemangioendothelioma of the hepatobiliary system: the classic and the unusual. Maksimak M, et al. **J Pediatr Gastroenterol Nutr** 1990 Jan;10(1):131–7 (17 ref.)

Clinical experience of biliary tract carcinoma associated with anomalous union of the pancreaticobiliary ductal system. Ohta T, et al. **Jpn J Surg** 1990 Jan;20(1):36–43

A new technique for decompression of the biliary tract. Silk YN, et al. **Surg Gynecol Obstet** 1989 Dec;169(6):546–8

[Icterus caused by non–resectable neoplastic obstacle: to drain or not to drain?] Delcenserie R. **Gastroenterol Clin Biol** 1990;14(2):113–4 **(Fre)**

[Decompression surgery in mechanical jaundice of tumoral origin] Kochegarov AA, et al. **Sov Med** 1990;(2):57–60 **(Rus)**

DIAGNOSIS

Diagnosis of peripapillary carcinoma: endoscopic findings. Takeda Y, et al. **Biomed Pharmacother** 1989;43(6):439–46 (18 ref.)

Cholangioscopic differentiation of biliary strictures and polyps. Nimura Y, et al. **Endoscopy** 1989 Dec;21 Suppl 1:351–6

[Basic and clinical studies on SPan–1 RIABEAD kit: usefulness in patients with pancreatic and biliary tract cancer] Watanabe Y, et al. **Kaku Igaku** 1989 Dec; 26(12):1559–65 **(Jpn)**

[Clinical significance of CA 50 assay as a tumor marker] Hara K, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:971–3 **(Jpn)**

[Clinical evaluation of serum sialyl SSEA–1 (SLX) in diagnosis of cancers] Kawakami H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 May;86(5):1141–8 (Eng. Abstr.) **(Jpn)**

[Peroral endoscopical diagnosis for the early stage of cancer in bilio–pancreatic system] Murashima Y, et al. **Rinsho Byori** 1990 Mar;38(3):231–9 (3 ref.) (Eng. Abstr.) **(Jpn)**

[Neoplasms of the pancreas and biliary tract: use of cytology in diagnosis] Kozuka M, et al. **Rev Med Chil** 1988 Oct; 116(10):1019–27 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Response to doxorubicin/methotrexate/fluorouracil in advanced adenocarcinoma of pancreas or biliary tract [letter] Pyrhönen S, et al. **Lancet** 1990 Jul 14;336(8707):127

[Preliminary results of cytotoxic monoclonal antibody treatment in pancreatic adenocarcinomas and biliary tract carcinomas] Leborgne J, et al. **Ann Chir** 1990;44(5):338–41 (Eng. Abstr.) **(Fre)**

EPIDEMIOLOGY

Geographical distribution of biliary tract cancer in Niigata prefecture. Kato K, et al. **Jpn J Clin Oncol** 1990 Mar; 20(1):67–71

ETIOLOGY

Liver and biliary tract cancer among chemical workers. Bond GG, et al. **Am J Ind Med** 1990;18(1):19–24

A case–control study of gallstones: a major risk factor for biliary tract cancer. Kato I, et al. **Jpn J Cancer Res** 1990 Jun–Jul;81(6–7):578–83

Trousseau's syndrome caused by malignant degeneration of a choledochal cyst. Poole GV. **South Med J** 1989 Oct; 82(10):1283–4

METABOLISM

Cellular influx of sulfobromophthalein by the biliary epithelium carcinoma cell line Sk–Cha–1 reveals kinetic criteria of a carrier–mediated uptake mechanism. Stremmel W, et al. **Biochim Biophys Acta** 1989 Nov 20;1014(2):108–11

PATHOLOGY

Endoscopic retrograde wire–guided brush cytology for diagnosis of patients with malignant obstruction of the bile duct. Foutch PG, et al. **Am J Gastroenterol** 1990 Jul; 85(7):791–5

RADIOGRAPHY

Suture granuloma masquerading as malignancy of the biliary tract. Murphy JR, et al. **Dig Dis Sci** 1990 Sep;35(9):1176–9

RADIOTHERAPY

Treatment of malignant biliary obstruction with a high–dose rate remote afterloading device using a 10 F nasobiliary tube. Urban MS, et al. **Gastrointest Endosc** 1990 May–Jun; 36(3):292–6

Combined modality therapy of extrahepatic biliary system cancer. Minsky BD, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1157–63

Radiotherapy. Sannazzari GL, et al. **Rays** 1989 Apr–Jun; 14(2):155–61 (35 ref.)

[Intra–operative radiotherapy in the treatment of cancer] Dubois JB. **Ann Chir** 1989;43(10):785–89 **(Fre)**

[Endoluminal radiotherapy of high biliary tract carcinomas] Fromme M, et al. **Dtsch Med Wochenschr** 1990 Jun 29; 115(26):1026–30 (36 ref.) **(Ger)**

[Results of percutaneous transluminal irradiation of biliary tract carcinoma with 192Iridium] Hendrickx P, et al. **Strahlenther Onkol** 1990 Jun;166(6):392–6 (Eng. Abstr.) **(Ger)**

[Radiotherapy of carcinoma of the biliary system] Nakama M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Apr 25;50(4):398–403 (Eng. Abstr.) **(Jpn)**

SURGERY

Multiple tumors of the biliary tract. Gertsch P, et al. **Am J Surg** 1990 Apr;159(4):386–8 (18 ref.)

Intraoperative fiberoptic choledochoscopy for malignant biliary tract obstruction. Chen MF, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):545–7

Combined resection of the inferior vena cava for hepato–biliary and pancreatic malignancies. Moriura S, et al. **Hepatogastroenterology** 1990 Apr;37(2):253–5

"Radical" abdominal cancer surgery: current state and future course. Fortner JG. **Jpn J Surg** 1989 Sep;19(5):503–9

Radical and palliative surgery. Nuzzo G, et al. **Rays** 1989 Apr–Jun;14(2):143–53 (17 ref.)

[Results of surgical treatment of cancer of the common bile duct as a function of age] Cubertafond P, et al. **Chirurgie** 1989;115(4–5):292–6 (Eng. Abstr.) **(Fre)**

[Postoperative complications following biliodigestive anastomoses] Genoni M, et al. **Helv Chir Acta** 1990 Apr; 56(6):903–6 (Eng. Abstr.) **(Ger)**

THERAPY

Cancers of the large bowel and hepatobiliary system. Treat J, et al. **Cancer Chemother Biol Response Modif** 1987; 9:264–70 (40 ref.)

Endoscopic tumor therapy. Neuhaus H. **Endoscopy** 1989 Dec; 21 Suppl 1:357–60 (11 ref.)

[Preoperative enterosorption as a method for preventing postoperative complications in mechanical jaundice in cancer patients] Kaban AP, et al. **Vopr Onkol** 1990; 36(7):850–4 (Eng. Abstr.) **(Rus)**

BILIARY TRACT SURGERY

Antibiotic prophylaxis with cefotaxime in gastroduodenal and biliary surgery [published erratum appears in Am J Surg 1990 Feb;159(2):A12] Garcia-Rodriguez JA, et al. **Am J Surg** 1989 Nov;158(5):428–33; discussion 433–4

Biliary diversion for pancreatic carcinoma: matching the methods and the patient. Proctor HJ, et al. **Am J Surg** 1990 Jan;159(1):67–70; discussion 70–1

Bilio-enteric anastomosis as a risk factor for postembolic hepatic abscesses. Okajima K, et al.
Cardiovasc Intervent Radiol 1989 May-Jun;12(3):128–30

[Ofloxacin and metronidazole in short-term prophylaxis of septic complications after hepatocholedochal surgery] Brousil L, et al. **Rozhl Chir** 1989 Jul;68(7):488–94 (Eng. Abstr.) **(Cze)**

ADVERSE EFFECTS

Preoperative cell-mediated immunity and duration of antibiotic prophylaxis in relation to postoperative infectious complications. A controlled trial in biliary, gastroduodenal and colorectal surgery. Moesgaard F, et al.
Acta Chir Scand 1989 Apr-May;155(4–5):281–6

Iatrogenic injury to the bile duct. Who, how, where? Moossa AR, et al. **Arch Surg** 1990 Aug;125(8):1028–30; discussion 1030–1

Infectious complications after 809 biliary tract operations and results of a prospective randomized single-blind study comparing cefoxitin versus ampicillin plus an inhibitor of beta-lactamases. Wittmann DH, et al. **Infection** 1990 Jan-Feb;18(1):41–7

INSTRUMENTATION

[A device for fixation of ligatures on the cystic duct] Nechaĭ AI, et al. **Vestn Khir** 1989 May;142(5):122 **(Rus)**

METHODS

Biliary perestroika [editorial] Liguory C, et al.
Am J Surg 1990 Sep;160(3):237–8

Transplantation of two patients with one liver. Analysis of a preliminary experience with 'split-liver' grafting. Emond JC, et al. **Ann Surg** 1990 Jul;212(1):14–22

[The current role of Kehr drainage] Rumi A, et al.
Minerva Med 1989 Aug;80(8):889–92 **(Ita)**

[Diagnostic and therapeutic tactics in various forms of cholangiopathies in children] Stepanov EA, et al.
Khirurgiia (Mosk) 1989 Nov;(11):50–4 (Eng. Abstr.) **(Rus)**

[The choice of suture material in forming bile-diverting anastomoses] Pozdniakov BV, et al. **Klin Khir** 1989;(9):23–4 (Eng. Abstr.) **(Rus)**

[The importance of endoscopic papillosphincterotomy in biliary tract surgery] Artem'eva NN, et al. **Vestn Khir** 1989 Oct;143(10):29–33 (Eng. Abstr.) **(Rus)**

[Current status of surgical treatment of mechanical jaundice of non-neoplastic etiology (VII All-Union Congress of Surgeons, Leningrad, October 18–20, 1989)] Artem'eva NN, et al. **Vestn Khir** 1990 Mar;144(3):150–3 **(Rus)**

[Use of high-energy lasers in surgery of the liver and biliary tract] Postolov AM, et al. **Vestn Khir** 1989 Nov; 143(11):136–40 (60 ref.) **(Rus)**

TRENDS

Advances in therapeutic biliary endoscopy. Ponsky JL.
Ohio Med 1990 Mar;86(3):189–90

BILIOPANCREATIC BYPASS see **BILIOPANCREATIC DIVERSION**

BILIOPANCREATIC DIVERSION

Surgical palliation for pancreatic cancer: will biliary bypass alone suffice? Holbrook AG, et al. **J R Soc Med** 1990 Jan; 83(1):12–4

[Effect of pancreatico-biliary diversion on endogenous CCK secretion, pancreatic enzyme synthesis, and amylase release] Ishizuka Y, et al.
Nippon Shokakibyo Gakkai Zasshi 1990 Mar;87(3):830–9 (Eng. Abstr.) **(Jpn)**

BILIRUBIN

see related
HYPERBILIRUBINEMIA

Interference by haemolysis, icterus and lipaemia in assays on the Beckman Synchron CX5 and methods for correction. Randall AG, et al. **Ann Clin Biochem** 1990 Jul; 27 (Pt 4):345–52

Plasma adsorption using bilirubin-adsorbent materials as a treatment for patients with hepatic failure. Morimoto T, et al. **Artif Organs** 1989 Oct;13(5):447–52

Bilirubin and bile acids removal by haemoperfusion through synthetic resin "Persorb". Filip K, et al. **Czech Med** 1990; 13(1):34–7

Influence of hyperbaric oxygenation on bilirubin and ditaurobilirubin auto-oxidation and porphyrin-sensitized photo-oxidation. Jirsa M Jr, et al.
J Photochem Photobiol B 1990 May;5(3–4):295–302

Liver growth factor purified from human plasma is an albumin-bilirubin complex. Díaz-Gil JJ, et al.
Mol Biol Med 1989 Jun;6(3):197–207

Solubilization of unconjugated bilirubin and its calcium salts by ionic, amphoteric, and nonionic detergents. Wosiewitz U, et al. **Naturwissenschaften** 1990 May;77(5):232–4

ANALOGS & DERIVATIVES

Influence of uridine diphosphoglucuronic acid on bilirubin glucuronidation in liver microsomes from normal and spironolactone-treated rats. Mottino AD, et al.
Acta Physiol Pharmacol Latinoam 1987;37(4):479–84

The enzymatic and chemical reduction of extended biliverdins. Frydman RB, et al.
Biochem Biophys Res Commun 1990 Aug 31;171(1):465–73

Modifications of microfilaments and microtubules induced by two hepatic tumor promoters, phenobarbital and biliverdin in non-transformed and transformed hepatic cell lines. Decloitre F, et al. **Cell Biol Toxicol** 1990 Jan; 6(1):23–34

Hepatic uptake of bilirubin diglucuronide: analysis by using sinusoidal plasma membrane vesicles. Adachi Y, et al.
J Biochem (Tokyo) 1990 May;107(5):749–54

High-performance liquid chromatographic separation of bilirubin conjugates: the effects of change in molarity and pH. Goresky CA, et al. **J Chromatogr** 1990 Jun 8; 528(1):123–41

Chromatographic analysis and structure determination of biliverdins and bilirubins. Heirwegh KP, et al.
J Chromatogr 1989 Nov 10;496(1):1–26 (148 ref.)

Influence of hyperbaric oxygenation on bilirubin and ditaurobilirubin auto-oxidation and porphyrin-sensitized photo-oxidation. Jirsa M Jr, et al.
J Photochem Photobiol B 1990 May;5(3–4):295–302

Development of bioartificial liver: bilirubin conjugation in Gunn rats. Arnaout WS, et al. **J Surg Res** 1990 Apr; 48(4):379–82

Bromobenzene-mediated alteration in activity and electrophoretic pattern of biliverdin reductase variants in rat kidney. Huang TJ, et al. **Mol Pharmacol** 1990 Jan; 37(1):25–9

[Oncogenes and tumor promotion] Lafarge-Frayssinet C, et al. **Bull Cancer (Paris)** 1990;77(5):475–8 (Eng. Abstr.) **(Fre)**

[Significance of biliverdin analysis in clinical tests] Nakajima H, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:705–6 **(Jpn)**

ANALYSIS

Occurrence of bilirubin-IX beta in the gallbladder bile of eel, Anguilla japonica. Sakai T, et al.
Biochim Biophys Acta 1989 Oct 13;993(1):128–30

Transcutaneous bilirubinometry: bilirubin kinetics of the skin and serum during and after phototherapy. Yamauchi Y, et al. **Biol Neonate** 1989;56(5):263–9

Pleural fluid to serum bilirubin concentration ratio for the separation of transudates from exudates. Meisel S, et al.
Chest 1990 Jul;98(1):141–4

Proportion of conjugated bilirubin in bile in relation to hepatic bilirubin UDP-glucuronyltransferase activity. Adachi Y, et al. **Clin Biochem** 1990 Apr;23(2):131–4

Light has a greater effect on direct bilirubin measured by the bilirubin oxidase method than by the diazo method. Ihara H, et al. **Clin Chem** 1990 Jun;36(6):895–7

Noninvasive measurements of bilirubin in the newborn. Schumacher RE. **Clin Perinatol** 1990 Jun;17(2):417–35 (43 ref.)

Laboratory measurement of bilirubin. Sykes E, et al.
Clin Perinatol 1990 Jun;17(2):397–416 (46 ref.)

Dissolution of calcium bilirubinate and calcium carbonate debris remaining after methyl tert-butyl ether dissolution of cholesterol gallstones. Nelson PE, et al.
Gastroenterology 1990 May;98(5 Pt 1):1345–50

Chromatographic analysis and structure determination of biliverdins and bilirubins. Heirwegh KP, et al.
J Chromatogr 1989 Nov 10;496(1):1–26 (148 ref.)

Liver growth factor purified from human plasma is an albumin-bilirubin complex. Díaz-Gil JJ, et al.
Mol Biol Med 1989 Jun;6(3):197–207

Transcutaneous bilirubinometer: an instrument for clinical research. Brown L, et al. **Nurs Res** 1990 Jul-Aug; 39(4):241–3

Corneal icterus resulting from stromal bilirubin deposition [see comments] Phinney RB, et al. **Ophthalmology** 1989 Aug;96(8):1212–4 Comment in: Ophthalmology 1990 Jan;97(1):5.

High-performance liquid chromatography of bilirubin conjugates in bile: effect of beta-glucuronidase on the bile pigments. Skar V, et al. **Scand J Gastroenterol** 1989 Aug; 24(6):657–65

Bilirubin excretion and bile flow in fed and fasted Brazilian squirrel monkeys (Saimiri sciureus). Cornelius CE, et al.
Vet Res Commun 1989;13(5):395–401

[Mucus histochemical study of bilirubin cholangiolithiasis in rabbit model] Li N, et al.
Hua Hsi I Ko Ta Hsueh Hsueh Pao 1989 Dec;20(4):417–20 (Eng. Abstr.) **(Chi)**

[A study of the effect of pathologic factors on the TcBM readings] Peng DJ, et al.
Hua Hsi I Ko Ta Hsueh Hsueh Pao 1989 Mar;20(1):70–3 (Eng. Abstr.) **(Chi)**

[Spectrophotometric determination of bilirubin in the amniotic fluid of Rh isoimmunized pregnant women based on corrected hemoglobin levels] Knobloch E, et al.
Cesk Gynekol 1990 May;55(4):256–61 **(Cze)**

[Apropos of the effect of bilirubin on the "Validation of Technics" protocol of the SFBC (letter)] Farré J, et al.
Ann Biol Clin (Paris) 1990;48(5):335 **(Fre)**

[Spectrophotometric study of synovial exudate in differential diagnosis of pigmented villonodular synovitis] Beloenko ED, et al. **Ortop Travmatol Protez** 1990 May;(5):32–4 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Continuous parenteral infusion of vitamin E pharmacokinetics and bilirubin production in premature neonates. Stevenson DK, et al. **Ann N Y Acad Sci** 1989; 570:352–7

Zinc protoporphyrin administration for suppression of increased bilirubin production by iatrogenic hemolysis in rhesus neonates. Vreman HJ, et al. **J Pediatr** 1990 Aug; 117(2 Pt 1):292–7

Targeting of heme oxygenase inhibitors to the spleen markedly increases their ability to diminish bilirubin production. Landaw SA, et al. **Pediatrics** 1989 Dec; 84(6):1091–6

BLOOD

Maternal bilirubin, cord bilirubin, and placenta function at delivery and the development of jaundice in mature newborns. Knudsen A, et al.
Acta Obstet Gynecol Scand 1989;68(8):719–24

Deposition of bilirubin acid in the central nervous system—a hypothesis for the development of kernicterus. Brodersen R, et al. **Acta Paediatr Scand** 1990 Jan;79(1):12–9 (16 ref.)

Difference in TcB readings between full term newborn infants born vaginally and by cesarean section. Yamauchi Y, et al. **Acta Paediatr Scand** 1989 Nov;78(6):824–8

Clinical application of transcutaneous bilirubin measurement. Early prediction of hyperbilirubinemia. Yamauchi Y, et al.
Acta Paediatr Scand 1990 Apr;79(4):385–90

Transcutaneous bilirubinometry. Interinstrumental variability of TcB instruments. Yamauchi Y, et al.
Acta Paediatr Scand 1989 Nov;78(6):844–7

Capillary vs venous bilirubin values [letter] Maisels MJ.
Am J Dis Child 1990 May;144(5):521–2

Icteric serum as an indicator of fetal vascular access during intravascular transfusion for hemolytic disease. Moise KJ Jr, et al. **Am J Perinatol** 1990 Jul;7(3):279–80

Serum biochemical indicators of liver function in neonatal foals. Bauer JE, et al. **Am J Vet Res** 1989 Dec; 50(12):2037–41

Effect of indomethacin on binding of bilirubin to albumin. Lam BC, et al. **Arch Dis Child** 1990 Jul;65(7 Spec No):690–1

Temperature and albumin effects on adsorption of bilirubin from standard solution using anion-exchange resin. Davies CR, et al. **Artif Organs** 1990 Feb;14(1):14–9

Unconjugated and conjugated bilirubin pigments during perinatal development. II. Studies on serum of healthy newborns and of neonates with erythroblastosis fetalis. Muraca M, et al. **Biol Neonate** 1990;57(1):1–9

Transcutaneous bilirubinometry: serum bilirubin measurement using transcutaneous bilirubinometer (TcB). A preliminary study. Yamauchi Y, et al. **Biol Neonate** 1989; 56(5):257–62

Serum bilirubin fractions in healthy subjects and patients with unconjugated hyperbilirubinemia. Adachi Y, et al.
Clin Biochem 1990 Jun;23(3):247–51

Total and direct-reacting bilirubin values by automated methods compared with liquid chromatography and with manual methods for determining delta bilirubin. Rosenthal P, et al. **Clin Chem** 1990 May;36(5):788–91

Delta and conjugated bilirubin as complementary markers of early rejection in liver-transplant recipients. Wu TW, et al. **Clin Chem** 1990 Jan;36(1):9–14

Removal of bilirubin from jaundiced serum by immunoaffinity chromatography. Izumi Y, et al.
Clin Chim Acta 1989 Sep 15;184(1):99–105

Dissociation between vascular and metabolic effects of nicotinic acid in Gilbert's syndrome. Gentile S, et al.
Clin Physiol 1990 Mar;10(2):171–8

Metabolism of bilirubin and riboflavin in the course of phototherapy for hyperbilirubinaemia in the newborns. Knobloch E, et al. **Czech Med** 1989;12(3):134–44

Bilirubin displaces furosemide from serum protein: the effect is greater in newborn infants than adult subjects. Viani A, et al. **Dev Pharmacol Ther** 1989;14(2):90–5

Serum bilirubin levels with antiepileptic drugs. Gough H, et al. **Epilepsia** 1989 Sep-Oct;30(5):597–602

Assessment of bilirubin clearance capacity of a newly

developed ion-exchange adsorption column and its possible use as a supportive therapy in hepatorenal syndrome. Sone J, et al. **J Clin Apheresis** 1990;5(3):123-7

Calibration of direct reading photometers for the determination of neonatal bilirubin. Brügmann G. **J Clin Chem Clin Biochem** 1990 Feb;28(2):83-9

Comparison of direct spectrophotometric determinations of bilirubin with candidate reference method in sera of newborns [see comments] Hajzer S. **J Clin Chem Clin Biochem** 1989 Jul;27(7):445-9 Comment in: J Clin Chem Clin Biochem 1990 Feb;28(2):121-2.

Ektachem and unconjugated bilirubin measurements [letter] Rosenthal P, et al. **J Clin Chem Clin Biochem** 1989 Oct; 27(10):829

Spectrophotometric determination of neonatal bilirubin [letter; comment] Schlebusch H. **J Clin Chem Clin Biochem** 1990 Feb;28(2):121-2 Comment on: J Clin Chem Clin Biochem 1989 Jul;27(7):445-9.

Comparison of five routine methods with the candidate reference method for the determination of bilirubin in neonatal serum. Schlebusch H, et al. **J Clin Chem Clin Biochem** 1990 Apr;28(4):203-10

Carbon monoxide excretion as an index of bilirubin production in rhesus monkeys. Vreman HJ, et al. **J Med Primatol** 1989;18(6):449-60

Low fractions of mono- and diconjugated bilirubin in patients with beta-thalassemia: an approach to characterize hepatic conjugation capacity. Ullrich D, et al. **J Pediatr Gastroenterol Nutr** 1990 Jul;11(1):21-6

Transcutaneous bilirubinometer: intermeter reliability. Brown LP, et al. **J Perinatol** 1990 Jun;10(2):167-9

Simulation of bilirubin detoxification in the newborn using an extracorporeal bilirubin oxidase reactor [published erratum appears in Pediatr Res 1990 Feb;27(2):117] Mullon CJ, et al. **Pediatr Res** 1989 Nov;26(5):452-7

Ascites and serum bilirubin value predict survival in acute variceal bleeding. Spence RA, et al. **S Afr Med J** 1990 Apr 7;77(7):334-8

[A fast determination of serum bilirubin with the interference from hemolysis and turbidity by three wavelength spectrophotometry] Chai H, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Jun;20(2):223-5 (Eng. Abstr.) **(Chi)**

[Is hyperbilirubinemia a risk factor in biliary surgery?] Conti A, et al. **G Chir** 1989 Oct;10(10):553-6 (Eng. Abstr.) **(Ita)**

[Gilbert's syndrome: consideration of several diagnostic aspects] Randazzo G, et al. **Medicina (Firenze)** 1989 Oct-Dec;9(4):415-7 (Eng. Abstr.) **(Ita)**

[Determination of serum bilirubin fractions using gel-filtration] Franzini C, et al. **Quad Sclavo Diagn** 1988 Jan-Dec;24(1-4):1-8 (Eng. Abstr.) **(Ita)**

[Delta bilirubin] Yamamoto T. **Nippon Naika Gakkai Zasshi** 1989 Nov;78(11):1570-5 **(Jpn)**

[Significance of bilirubin analysis in clinical tests] Kawasaki H. **Nippon Rinsho** 1989 Dec;48 Suppl:707-10 **(Jpn)**

[A colorimetric method for determination of delta-bilirubin in serum using bilirubin oxidase (Trachyderma tsunodae)] Umaji K, et al. **Rinsho Byori** 1989 Aug;37(8):905-10 (Eng. Abstr.) **(Jpn)**

[Gamma-glutamyltranspeptidase in newborn infants] Casanueva V, et al. **Rev Chil Pediatr** 1988 Sep-Oct; 59(5):299-302 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

[Contribution of spectrophotometry of the cerebrospinal fluid in the rational treatment of subarachnoid hemorrhage] Krajíčková D, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1989;32(5):517-24 (Eng. Abstr.) **(Cze)**

ISOLATION & PURIFICATION

High-performance liquid chromatographic separation of bilirubin conjugates. Goresky CA, et al. **Anal Biochem** 1989 Dec;183(2):269-74

High-performance liquid chromatographic separation of bilirubin conjugates: the effects of change in molarity and pH. Goresky CA, et al. **J Chromatogr** 1990 Jun 8; 528(1):123-41

METABOLISM

Pseudohypophosphataemia as a result of bilirubin interference. Duncanson GO, et al. **Ann Clin Biochem** 1990 May;27 (Pt 3):253-7

Abnormalities in bilirubin and liver enzyme levels in adult patients with bacteremia. A prospective study. Sikuler E, et al. **Arch Intern Med** 1989 Oct;149(10):2246-8

Urobilinogen-i is a major derivative of bilirubin in bile of homozygous Gunn rats. Kotal P, et al. **Biochem J** 1990 May 15;268(1):181-5

The fatty acid analogue 11-(dansylamino)undecanoic acid is a fluorescent probe for the bilirubin-binding sites of albumin and not for the high-affinity fatty acid-binding sites. Wilton DC. **Biochem J** 1990 Aug 15;270(1):163-6

Effects of ursodeoxycholate on maximal biliary secretion of bilirubin in the rat. Galan AI, et al. **Biochem Pharmacol** 1990 Apr 1;39(7):1175-80

A high-pressure, infrared spectroscopic study of the solvation of bilirubin in lipid bilayers. Zakim D, et al. **Biochemistry** 1990 Feb 27;29(8):2003-7

Arginine residues are involved in the transport function of bilitranslocase. Passamonti S, et al. **Biochim Biophys Acta** 1990 Jun 27;1025(2):122-6

Binding of inhibitors to the major glutathione S-transferase from bovine brain. Competitive binding between bilirubin and glutathione. Young PR, et al. **Biochim Biophys Acta** 1990 Mar 29;1038(1):114-8

Bilirubin removal by the pseudoperoxidase activity of free and immobilized hemoglobin and hemoglobin co-immobilized with glucose oxidase. Daka JN, et al. **Biomater Artif Cells Artif Organs** 1989;17(5):553-62

Auditory brainstem responses in patients with neonatal hyperbilirubinemia and bilirubin encephalopathy. Hung KL. **Brain Dev** 1989;11(5):297-301

Interaction of beta-lactam antibiotics on bilirubin-albumin complex: comparison by three methods, total bilirubin, unbound bilirubin and erythrocyte-bound bilirubin. Gulian JM, et al. **Chemotherapy** 1990;36(2):91-7

Experimental studies on unconjugated bilirubin binding by human erythrocytes. Hayer M, et al. **Clin Chim Acta** 1990 Jan 31;186(3):345-50

How bilirubin gets into the brain. Bratlid D. **Clin Perinatol** 1990 Jun;17(2):449-65 (91 ref.)

The neurotoxicity of bilirubin. Cashore WJ. **Clin Perinatol** 1990 Jun;17(2):437-47 (57 ref.)

Purification and characterization of bilirubin UDP-glucuronyltransferase from the liver of eel, Anguilla japonica. Fang LS, et al. **Comp Biochem Physiol [B]** 1990; 95(2):219-23

The cephalocaudal progression of jaundice in newborns in relation to the transfer of bilirubin from plasma to skin. Knudsen A. **Early Hum Dev** 1990 Apr;22(1):23-8

Delta bilirubin. Fukunaga FH. **Hawaii Med J** 1989 Aug; 48(8):302

New concepts in bilirubin chemistry, transport and metabolism: report of the International Bilirubin Workshop, April 6-8, 1989, Trieste, Italy. Tiribelli C, et al. **Hepatology** 1990 Feb;11(2):303-13 (106 ref.)

Clinical significance of serum and cerebro spinal fluid bilirubin indices in neonatal jaundice. Kulkarni SV, et al. **Indian Pediatr** 1989 Dec;26(12):1202-8

Temperature effect on bilirubin adsorption with the anion exchange resin BR-601. Tang DH, et al. **Int J Artif Organs** 1989 Oct;12(10):659-63

Hepatic bilirubin and UDP-glucuronate levels in Bolivian squirrel monkeys exhibiting fasting hyperbilirubinemia. Myers BA, et al. **Int J Biochem** 1990;22(1):61-5

Study of bilirubin binding in human serum by high-performance liquid chromatography. Soltés L, et al. **J Clin Chem Clin Biochem** 1989 Dec;27(12):935-9

Increase in the relative amount of bilirubin diconjugates in rat bile and serum under infusion of phthaleins and indocyanine green. Mesa VA, et al. **J Hepatol** 1990 Jan; 10(1):35-40

Cellular uptake of conjugated bilirubin and sulfobromophthalein (BSP) by the human hepatoma cell line Hep G2 is mediated by a membrane BSP/bilirubin binding protein. Stremmel W, et al. **J Hepatol** 1990 Jan; 10(1):99-104

Influence of aspirin and iron(III) tetrasulfonated phthalocyanine on bilirubin binding by human serum albumin. Trynda L, et al. **J Inorg Biochem** 1990 Feb; 38(2):153-67

Effect of UDP-glucuronic acid depletion by salicylamide on biliary bilirubin excretion in the rat. Kamisako T, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):380-2

Rapid transesterification of bilirubin glucuronides in methanol. Salmon M, et al. **Life Sci** 1974 Dec 15; 15(12):2069-78

Clearing of bilirubin from donor corneas [letter; comment] Wesley RE. **Ophthalmology** 1990 Jan;97(1):5 Comment on: Ophthalmology 1989 Aug;96(8):1212-4.

Bronze baby syndrome: an animal model. Jori G, et al. **Pediatr Res** 1990 Jan;27(1):22-5

The effect of tazobactam on bilirubin-albumin binding. Karp WB. **Pharmacol Toxicol** 1990 Jan;66(1):73-4

Mechanistic and molecular aspects of hepatic bilirubin glucuronidation. Hauser SC, et al. **Prog Liver Dis** 1990; 9:225-35 (82 ref.)

[Metabolism of bile pigments in the intestine] Corongiu B, et al. **Ann Biol Clin (Paris)** 1990;48(1):9-15 (Eng. Abstr.) **(Fre)**

[Molecular mechanisms of the uptake of fatty acids and bilirubin by the liver cells] Stremmel W, et al. **Z Gastroenterol [Verh]** 1990 Apr;25:30-4 (19 ref.) **(Ger)**

[Biochemical examinations of amniotic fluid in arterial hypertension and delayed intrauterine fetal growth. II. Glucose, bilirubin, ammonia, hydrogen ions, estrogens and lactogenic hormone] Kuczyńska-Sicińska J, et al. **Ginekol Pol** 1989 Apr;60(4):193-6 (Eng. Abstr.) **(Pol)**

[The effect of bilirubin and serum albumin on hydrolase activity in the synaptosomal membrane] Tkachenko AV. **Biokhimiia** 1989 Jul;54(7):1082-9 **(Rus)**

[Functional changes in the synaptic membrane during in vitro interaction with bilirubin and serum albumin] Tkachenko AV. **Vopr Med Khim** 1989 Nov-Dec;35(6):39-44 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Adsorption of bilirubin with polypeptide-coated resins. Zhu XX, et al. **Biomater Artif Cells Artif Organs** 1990; 18(1):75-93

Somatostatin inhibits the effect of secretin on bile flow and on hepatic bilirubin transport in the rat. Ricci GL, et al. **Gut** 1989 Sep;30(9):1266-9

Blood-brain barrier permeability to bilirubin in the rat studied using intracarotid bolus injection and in situ brain perfusion techniques. Ives NK, et al. **Pediatr Res** 1990 May; 27(5):436-41

PHARMACOLOGY

The sulfhydryl groups responsible for bilitranslocase transport activity respond to the interaction of the carrier with bilirubin and functional analogues. Passamonti S, et al. **Biochim Biophys Acta** 1990 Jan 15;1021(1):9-12

Inhibition of UDP-glucuronosyltransferase activity by possible transition-state analogues in rat-liver microsomes. Noort D, et al. **Eur J Biochem** 1990 Mar 10;188(2):309-12

The effects of bilirubin on brain energy metabolism during hyperosmolar opening of the blood-brain barrier: an in vivo study using 31P nuclear magnetic resonance spectroscopy. Ives NK, et al. **Pediatr Res** 1989 Oct;26(4):356-61

Bilirubin and heme as growth inhibitors of chicken embryos in ovo. Vassilopoulou-Sellin R, et al. **Pediatr Res** 1990 Jun; 27(6):617-21

PHYSIOLOGY

Is bilirubin good for you? McDonagh AF. **Clin Perinatol** 1990 Jun;17(2):359-69 (90 ref.)

Bilirubin as an inhibitor of cartilage metabolism: effect on avian chondrocyte proliferation in cell culture. Vassilopoulou-Sellin R, et al. **J Bone Miner Res** 1990 Jul; 5(7):769-74

Could hypobilirubinemia be bad? [letter; comment] Garbagnati E. **Pediatrics** 1990 Mar;85(3):379-80 Comment on: Pediatrics 1989 Jun;83(6):915-20.

[Is MAC effected by liver dysfunction?—Bilirubin and MAC] Yasuda N, et al. **Masui** 1990 Jan;39(1):51-5 (Eng. Abstr.) **(Jpn)**

RADIATION EFFECTS

Metalloporphyrin-enhanced photodegradation of bilirubin in vitro. Vreman HJ, et al. **Am J Dis Child** 1990 May; 144(5):590-4

Hypocrellin-A sensitized photooxidation of bilirubin. Ma JS, et al. **Photochem Photobiol** 1989 Dec;50(6):827-30

SECRETION

Effects of uridine diphosphate glucuronosyltransferase activity on the maximal secretion rate of bilirubin conjugates in the rat. Van Steenbergen W, et al. **Gastroenterology** 1990 Aug;99(2):488-99

TOXICITY

Enzymatic removal of bilirubin toxicity by bilirubin oxidase in vitro and excretion of degradation products in vivo. Kimura M, et al. **Proc Soc Exp Biol Med** 1990 Oct; 195(1):64-9

URINE

Sodium arsenite induced alterations in bilirubin excretion and heme metabolism. Albores A, et al. **J Biochem Toxicol** 1989 Summer;4(2):73-8

BILIRUBINEMIA see **HYPERBILIRUBINEMIA**

BILIVERDINE see under **BILIRUBIN**

BINDING, COMPETITIVE

Potential misinterpretation of the competitive binding assays [letter] Presecan E, et al. **Trends Biochem Sci** 1989 Nov; 14(11):443-4

DRUG EFFECTS

Effect of exogenous apo E on the cellular binding of lipoproteins. Mokuno H, et al. **Gerontology** 1990;36 Suppl 1:42-8

BINDING PROTEINS see **CARRIER PROTEINS**

BINDING SITES

Demonstration of specific binding sites for pituitary adenylate cyclase activating polypeptide (PACAP) in rat astrocytes. Tatsuno I, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):1027-33

Quantitative footprinting analysis. Binding to a single site. Rehfuss R, et al. **Biochemistry** 1990 Jan 23;29(3):777-81

Autoradiographic distribution of forskolin and phorbol ester binding sites in the retina. Zarbin MA, et al. **Brain Res** 1989 Sep 18;497(2):334-43

Identification and characterization of human endothelial cell membrane binding sites for tissue plasminogen activator and urokinase. Hajjar KA, et al. **J Biol Chem** 1990 Feb 15;265(5):2908-16

The structure of protein-protein recognition sites. Janin J, et al. **J Biol Chem** 1990 Sep 25;265(27):16027-30 (67 ref.)

The gamma-carboxyglutamic acid domain of human factor VIIa is essential for its interaction with cell surface tissue factor. Sakai T, et al. **J Biol Chem** 1990 Feb 5;265(4):1890-4

Solubilization and partial purification of alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid binding sites from rat brain. Hunter C, et al. **J Neurochem** 1990 Jan;54(1):118-25

Identification of omega-conotoxin binding sites on adrenal medullary membranes: possibility of multiple calcium channels in chromaffin cells. Jan CR, et al. **J Neurochem** 1990 Jan;54(1):355-8

Linkage thermodynamics of individual site binding phenomena. Di Cera E. **J Theor Biol** 1989 Feb 22; 136(4):467-74

Specific binding sites for inositolhexakisphosphate in brain and anterior pituitary. Nicoletti F, et al. **Mol Pharmacol** 1990 May;37(5):689-93

Misuse of nonlinear Scatchard plots [see comments] Zierler K. **Trends Biochem Sci** 1989 Aug;14(8):314-7 Comment in: Trends Biochem Sci 1990 Jan;15(1):12-3.

DRUG EFFECTS

Evidence of the receptor nature of the binding sites induced in Tetrahymena by insulin treatment. A quantitative cytofluorimetric technique for the study of binding kinetics. Kovács P, et al. **Cell Biochem Funct** 1990 Jan;8(1):49-56

Alpha 1-adrenoceptors: the ability of various agonists and antagonists to discriminate between two distinct [3H]prazosin binding sites. Hanft G, et al. **J Pharm Pharmacol** 1989 Oct;41(10):714-6

PHYSIOLOGY

Absence of abundant binding sites for anesthetics in rabbit brain: an in vivo NMR study. Lockhart SH, et al. **Anesthesiology** 1990 Sep;73(3):455-60

Active site-specific immunoassays. Mann KG, et al. **Blood** 1990 Aug 15;76(4):755-66

High-affinity binding and lack of growth-promoting activity of 12(S)-hydroxyeicosatetraenoic acid (12(S)-HETE) in a human epidermal cell line. Gross E, et al. **J Invest Dermatol** 1990 Apr;94(4):446-51

BINDING SITES, ANTIBODY

Two binding sites for Ki67 related to quiescent and cycling cells in human epidermis. Rijzewijk JJ, et al. **Acta Derm Venereol (Stockh)** 1989;69(6):512-5

Probing the role of proline as a recognition element in peptide antigens. Richards NG, et al. **Biochem Pharmacol** 1990 Jul 1;40(1):119-23

Antigen-antibody interactions: an NMR approach. Wright PE, et al. **Biochem Pharmacol** 1990 Jul 1;40(1):83-8

Homogeneous penetration but heterogeneous binding of antibodies to carcinoembryonic antigen in human colon carcinoma HT-29 spheroids. Carlsson J, et al. **Cancer Immunol Immunother** 1989;30(5):269-76

Monoclonal antibody BA-1 to the human B lymphocyte marker CD24 recognizes a sialic acid (N-acetylneuraminic acid) dependent epitope in multi-valent display on peptide. Mehmet H, et al. **Clin Exp Immunol** 1990 Sep;81(3):489-95

Regulated expression of Mg2+ binding epitope on leukocyte integrin alpha subunits. Dransfield I, et al. **EMBO J** 1989 Dec 1;8(12):3759-65

Murine monoclonal antibodies which recognize active sites of Escherichia coli NusA protein and epitope mapping by gene fusion. Nakamura Y, et al. **Gene** 1989 Aug 1;80(1):13-9

Enhancing effect of C1q on IgG monoclonal antibody binding to hapten. Hamada A, et al. **Int Arch Allergy Appl Immunol** 1990;91(1):103-7

Mouse autoantibodies bind to a phospholipase-C-sensitive structure on red blood cells. Hardy SJ, et al. **Int Arch Allergy Appl Immunol** 1990;91(1):108-10

Production of murine monoclonal antibodies against Francisella tularensis antigens and characterization of antibody-reactive epitopes. Lilliehöök B, et al. **Int Arch Allergy Appl Immunol** 1989;90(1):71-7

Identification of a mouse anti-rat IgE monoclonal antibody, 44.7b, which inhibits IgE binding to RBL cells. Rup BJ, et al. **Int Arch Allergy Appl Immunol** 1989;89(4):387-93

I-Ad restricted T cell recognition of influenza hemagglutinin. Synthetic peptides identify multiple epitopes corresponding to antibody-binding regions of the HA1 subunit. Barnett BC, et al. **J Immunol** 1989 Oct 15;143(8):2663-9

The main immunogenic region of the nicotinic acetylcholine receptor. Identification of amino acid residues interacting with different antibodies. Bellone M, et al. **J Immunol** 1989 Dec 1;143(11):3568-79

Binding characteristics and cross-reactivity of three different antilipid A monoclonal antibodies. Erich T, et al. **J Immunol** 1989 Dec 15;143(12):4053-60

Polyspecific binding of Escherichia coli beta-galactosidase by murine antibodies to DNA. Pisetsky DS, et al. **J Immunol** 1989 Dec 1;143(11):3609-13

My 43, a monoclonal antibody that reacts with human myeloid cells inhibits monocyte IgA binding and triggers function. Shen L, et al. **J Immunol** 1989 Dec 15; 143(12):4117-22

Nuclear magnetic resonance studies of flexible opiate conformations at monoclonal antibody binding sites. Quantitative interproton distances obtained from comparing theoretical and experimental transferred nuclear Overhauser enhancement: correlation with antibody sequence. Glasel JA. **J Mol Biol** 1989 Oct 20;209(4):747-61

A modeling analysis of monoclonal antibody percolation through tumors: a binding-site barrier. Fujimori K, et al. **J Nucl Med** 1990 Jul;31(7):1191-8

Single domain antibodies [editorial] **Lancet** 1989 Dec 9; 2(8676):1370-1

Three-dimensional structure of a hybrid light chain dimer: protein engineering of a binding cavity. Ely KR, et al. **Mol Immunol** 1990 Feb;27(2):101-14

Localization of VP4 neutralization sites in rotavirus by three-dimensional cryo-electron microscopy. Prasad BV, et al. **Nature** 1990 Feb 1;343(6257):476-9

Antibody modelling. Tackling a loopy problem [news] [comment] Thornton JM. **Nature** 1990 Feb 1; 343(6257):411-2 Comment on: Nature 1989 Dec 21-28;342(6252):877-83.

On the nature of antibody combining sites: unusual structural features that may confer on these sites an enhanced capacity for binding ligands. Padlan EA. **Proteins** 1990;7(2):112-24

Use of deuterium labelling in NMR studies of antibody combining site structure. Anglister J. **Q Rev Biophys** 1990 May;23(2):175-203 (81 ref.)

Metalloantibodies. Iverson BL, et al. **Science** 1990 Aug 10; 249(4969):659-62

An antibody binding site on cytochrome c defined by hydrogen exchange and two-dimensional NMR. Paterson Y, et al. **Science** 1990 Aug 17;249(4970):755-9

Analysis of the heterogeneity of the binding site specificities of hyperimmune human anti-A and -A, B sera: the application of competition assays using murine monoclonal antibodies. Lubenko A, et al. **Vox Sang** 1989;57(4):254-60

GENETICS

Antibody domain mutants demonstrate autonomy of the antigen binding site. Simon T, et al. **EMBO J** 1990 Apr; 9(4):1051-6

IMMUNOLOGY

Cytotoxic and helper T-lymphocyte responses to antibody recognition regions on influenza virus hemagglutinin. Atassi MZ, et al. **Adv Exp Med Biol** 1989;251:49-63 (51 ref.)

Ultrastructural localization of the binding sites of antibasement membrane zone antibodies in lichen planus pemphigoides on 1.0 M sodium chloride-separated skin. Ikeda S, et al. **Arch Dermatol Res** 1989;281(7):504-6

Anticardiolipin co-inhibitor in normal human serum [letter] Cheng HM. **Lancet** 1990 Sep 29;336(8718):822

Development of antibodies to unprotected glycosylation sites on recombinant human GM-CSF [see comments] Gribben JG, et al. **Lancet** 1990 Feb 24;335(8687):434-7 Comment in: Lancet 1990 May 19;335(8699):1217.

Carbodiimide crosslinking of human C1q and rabbit IgG. Wines BD, et al. **Mol Immunol** 1990 Mar;27(3):221-6

The canyon hypothesis. Rossmann MG. **Viral Immunol** 1989 Fall;2(3):143-61 (64 ref.)

[A comparative study of the IgG-binding components of the membrane in different strains of Staphylococcus aureus using the indirect hemagglutination reaction and an immunofluorescence method] Ovcharova EN, et al. **Mikrobiol Zh** 1990 Jan-Feb;52(1):48-52 (Eng. Abstr.) **(Rus)**

BINOCULAR DISPARITY see **VISION DISPARITY**

BINOCULAR VISION see **VISION, BINOCULAR**

BINOMIAL DISTRIBUTION

Accuracy of the simplified Bernoulli relationship in measuring pressure gradients across stenosis. Rieu R, et al. **Int Angiol** 1989 Oct-Dec;8(4):210-5

BIOASSAY see **BIOLOGICAL ASSAY**

BIOAVAILABILITY see **BIOLOGICAL AVAILABILITY**

BIOCHEMICAL MARKERS see **BIOLOGICAL MARKERS**

BIOCHEMISTRY

Biochemical engineering VI. **Ann N Y Acad Sci** 1990; 589:1-715

Biochemical aspects. McCormick DB. **Ann N Y Acad Sci** 1990;585:466-7

Société Belge de Biochimie. 141st meeting. Liège, 26-27 May 1989. Abstracts. **Arch Int Physiol Biochim** 1989 Dec; 97(6):B121-95

Issue dedicated to Dr. Morris Kates in honour of his valuable contributions to biochemistry in Canada. **Biochem Cell Biol** 1990 Jan;68(1):1-399

Of men, molecules, and (ir)reducibility. Welch GR. **Bioessays** 1989 Dec;11(6):187-90

Autumn meeting of the Gesellschaft für Biologische Chemie. 13-15 September 1989, Osnarück. Abstracts. **Biol Chem Hoppe Seyler** 1989 Sep;370(9):869-978

Biophysical Journal: program and abstracts, thirty-fourth annual meeting. February 18-22, 1990, Baltimore, Maryland. **Biophys J** 1990 Feb;57(2 Pt 2):1a-577a

Selected papers from the 4th Asian Pacific Congress of Clinical Biochemistry. Hong Kong, August 28-September 2, 1988. **Clin Biochem** 1990 Feb;23(1):1-84

SIMFIT: a microcomputer software-toolkit for modelistic studies in biochemistry. Holzhütter HG, et al. **Comput Appl Biosci** 1990 Jan;6(1):23-8

This is FASEB. The American Society for Biochemistry and Molecular Biology. Hancock CC Jr. **FASEB J** 1989 Oct; 3(12):2439-41

The national laboratories of China. Tsou CL. **FASEB J** 1989 Oct;3(12):2443-4

A selection of articles to be presented at the 20th FEBS meeting. Budapest, 19-24 August 1990. **FEBS Lett** 1990 Aug 1;268(2):325-430

Index of Biochemical Reviews 1988. **FEBS Lett** 1989 Nov; 256 Suppl:1-230

Index of Biochemical Reviews 1989. **FEBS Lett** 1990 Aug; 268 Suppl:1-188

Abstracts presented at the meeting of the Liguria-Lombardia- Piemonte Group of the Italian Biochemical Society. June 14, 1988, Pavia. **Ital J Biochem** 1989 Jul-Aug;38(4):285A-310A

Objectives, assumptions and results of Metabolic Control Theory and Biochemical Systems Theory [letter; comment] Irvine DH. **J Theor Biol** 1990 Mar 8;143(1):139-43 Comment on: J Theor Biol 1989 Feb 22;136(4):365-77.

Biochemistry in Hungary. Friedrich P. **Trends Biochem Sci** 1990 Jul;15(7):251-2

[The system of comparative biochemistry] Schoffeniels E. **Arch Int Physiol Biochim** 1989 Aug;97(4):A203-12 (26 ref.) **(Fre)**

[Abstracts of papers presented at the 63d annual meeting of the Japanese Biochemical Society] **Seikagaku** 1990 Jul; 62(7):507-987 **(Jpn)**

[62d meeting of the Japanese Biochemical Society. 3-6 November 1989, Kyoto. Abstracts] **Seikagaku** 1989 Sep; 61(9):765-1197 **(Jpn)**

EDUCATION

Is small beautiful? Evans EM. **Biochem Soc Trans** 1990 Feb; 18(1):37-9

Is biochemistry a biological science? Martin SJ. **Biochem Soc Trans** 1990 Apr;18(2):159-60

The singer not the song? Orsi BA. **Biochem Soc Trans** 1990 Apr;18(2):157-8

Keller Plan teaching in first year biochemistry. Stace BC. **Biochem Soc Trans** 1990 Feb;18(1):41-3

Small-group teaching of biochemistry in the medical student laboratory. Thomas JH. **Biochem Soc Trans** 1990 Feb; 18(1):43-4

Biochemistry in the Oxford tutorial system: better teaching or wasted effort? Wild DG. **Biochem Soc Trans** 1990 Feb; 18(1):39-40

The microcomputer in biomedical education. Booth AG, et al. **Prog Med Chem** 1989;26:323-54 (31 ref.)

HISTORY

The first 30 volumes of Advances in Enzyme Regulation. Weber G. **Adv Enzyme Regul** 1990;30:v-xxiv

Clinical biochemistry in Singapore. Tan IK, et al. **Ann Acad Med Singapore** 1989 Jul;18(4):477-89

Biochemistry and neurochemistry in the 1800s: their origins in comparative animal chemistry. McIlwain H. **Essays Biochem** 1990;25:197-224

Stereochemistry and the nature of life. Mechanist, vitalist, and evolutionary perspectives. Palladino P. **Isis** 1990 Mar; 81(306):44-67

Haem biosynthesis and porphyrias: 50 years in retrospect. Rimington C. **J Clin Chem Clin Biochem** 1989 Aug; 27(8):473-86 (113 ref.)

On the tracks of our scientific forbears. Schlenk F. **Trends Biochem Sci** 1989 Sep;14(9):386-9

[Biochemistry and Kant's philosophy the "Thing-in-itself] Makino K. **Seikagaku** 1990 Mar;62(3):169-79 **(Jpn)**

[Prof. Bronisław Filipowicz] **Postepy Biochem** 1989; 35(3):205-7 **(Pol)**

[Seventy historical years of activity at the Marceli Nencki Experimental Biology Institute] Niemierko S. **Postepy Biochem** 1989;35(1-2):3-14 **(Pol)**

[The Axel Hirsch prize to Viktor Mutt. The man of the silent hormones and the master of the peptides (interviewed by Axel Hirsch)] Mutt V. **Lakartidningen** 1990 Jun 27; 87(26-27):2265-8 **(Swe)**

INSTRUMENTATION

A mixing chamber to enucleate avian and fish erythrocytes: preparation of their plasma membrane. Cassoly R, et al. **Anal Biochem** 1989 Oct;182(1):71-6

New developments in biochemical mass spectrometry: electrospray ionization. Smith RD, et al. **Anal Chem** 1990 May 1;62(9):882-99 (143 ref.)

METHODS

Quantitative benedict test using bicinchoninic acid. Chen Q, et al. **Anal Biochem** 1989 Oct;182(1):54-7

Quantification of proteins in the subnanogram and nanogram range: comparison of the AuroDye, FerriDye, and India ink staining methods. Li KW, et al. **Anal Biochem** 1989 Oct;182(1):44-7

A one-step, low background coomassie staining procedure for polyacrylamide gels. Zehr BD, et al. **Anal Biochem** 1989 Oct;182(1):157-9

Selected biochemical techniques as applied to immunology. Sullivan AK. **Curr Opin Immunol** 1989 Jun;1(5):966-70 (17

ref.)
[The methodological problems of the correlation of biochemistry and physiology in current research] Gomazkov OA. **Biol Nauki** 1990;(3):5–20 (23 ref.) (Eng. Abstr.) **(Rus)**

BIOCOMPATIBLE MATERIALS

Hydroxyapatite coating enhances fixation of porous coated implants. A comparison in dogs between press fit and noninterference fit. Søballe K, et al. **Acta Orthop Scand** 1990 Aug;61(4):299–306

Fixation of cancellous bone and physeal fractures in dogs and cats. A comparison of the use of self-reinforced biodegradable devices to the use of metallic devices and external fixations. Axelson PB. **Acta Vet Scand** 1989; 30(3):259–65

Biocompatibility—a system approach. Klinkmann H, et al. **Adv Exp Med Biol** 1989;260:39–52 (31 ref.)

What is the etiology of "reactions" to vascular graft material? [letter; comment] Kaufman JL. **Anesthesiology** 1990 Jan; 72(1):217–8 Comment on: Anesthesiology 1989 Sep;71(3):331–8.

Outpatient management of partial-thickness burns: Biobrane versus 1% silver sulfadiazine. Gerding RL, et al. **Ann Emerg Med** 1990 Feb;19(2):121–4

Ceravital versus plastipore in tympanoplasty: a randomized prospective trial. Mangham CA, et al. **Ann Otol Rhinol Laryngol** 1990 Feb;99(2 Pt 1):112–6

Reconstruction of the middle ear with hydroxylapatite implants: long-term results. Grote JJ. **Ann Otol Rhinol Laryngol Suppl** 1990 Feb;144:12–6

New outlook on pericardial substitution after open heart operations. Gabbay S, et al. **Ann Thorac Surg** 1989 Dec; 48(6):803–12

Variation in human salivary pellicle formation on biomaterials during the day. Morge S, et al. **Arch Oral Biol** 1989;34(8):669–74

Artificial heart valves: improved blood compatibility by PECVD a-SiC:H coating. Bolz A, et al. **Artif Organs** 1990 Aug;14(4):260–9

Proteins adsorbed on hemodialysis membranes modulate neutrophil activation. Kuwahara T, et al. **Artif Organs** 1989 Oct;13(5):427–31

Improved biocompatibility by modified cellulosic membranes: the case of hemophan. Lucchi L, et al. **Artif Organs** 1989 Oct;13(5):417–21

Clinical application of a self-sealing poly(ether-urethane) graft applicable to blood access for hemodialysis. Ota K, et al. **Artif Organs** 1989 Dec;13(6):498–503

Efficiency and biocompatibility of a polyethylene glycol grafted cellulosic membrane during hemodialysis. Akizawa T, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):333–5

A biolized implantable ventricular assist device compatible with IABP console. Chen JF, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):398–401

Comparative in vitro encrustation studies of biomaterials in human urine. Gleeson MJ, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):495–8

Dynamics of platelet adhesion to artificial materials and cultured endothelial cells under shear flow. Ohshima N, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):379–81

The possibility of improving biocompatibility by removing anaphylatoxins from the circuit of blood-perfused artificial organs. Oka T. **ASAIO Trans** 1989 Oct–Dec;35(4):778–83

Long-term results of a new antithrombogenic cardiac wall substitute. Okoshi T, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):391–5

Total pericardial replacement. Design and preliminary evaluation in greyhounds. Rhodes JE, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):388–91

Effects of surface integrity on the fatigue life of thin flexing membranes. Sinnott MM, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):687–90

Development of a novel biocompatibility test method based on intracellular calcium ion mobilization. Takemoto Y, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):325–7

Biomaterials, scar tissue and ophthalmic microsurgery. Constable IJ. **Aust N Z J Surg** 1989 Oct;59(10):755–9 (18 ref.)

The influence of vaccines and hyper immune serums on protein/platelet interaction towards an artificial surface. Chandy T, et al. **Biomater Artif Cells Artif Organs** 1990; 18(3):403–21

New method to quantitate platelets adhered on biomaterials using monoclonal antibodies to human platelet membrane glycoprotein SZ-21. Xi TF, et al. **Biomater Artif Cells Artif Organs** 1990;18(3):423–35

Workshop on the characterization of biomaterials in contact with blood. Siena, Italy, 18–19 January 1988. Abstracts. **Biomaterials** 1990 Mar;11(2):138–51

BIOMAT 89. Calcified tissues and biomaterials. December 13–15, 1989, Bordeaux, France. Proceedings. **Biomaterials** 1990 Jul;11:1–94

Preliminary studies on the phenomenological behaviour of osteoblasts cultured on hydroxyapatite ceramics. Bagambisa FB, et al. **Biomaterials** 1990 Jan;11(1):50–6

Biocompatibility of carbon-carbon materials: blood tolerability. Baquey C, et al. **Biomaterials** 1989 Sep; 10(7):435–40

Some factors affecting properties of elastin-fibrin biomaterial. Barbié C, et al. **Biomaterials** 1989 Sep;10(7):445–8

Accelerated ageing of metallic biomaterials: principle and results. Bellier JP, et al. **Biomaterials** 1990 Jul;11:55–6

Influence of surface charge on adsorption of fibrinogen and/or albumin on a rotating disc electrode of platinum and carbon. Bernabeu P, et al. **Biomaterials** 1990 May; 11(4):258–64

Platelet deposition studies on copolyether urethanes modified with poly(ethylene oxide). Brinkman E, et al. **Biomaterials** 1990 Apr;11(3):200–5

Biodegradable lysine diisocyanate-based poly(glycolide-co-epsilon-caprolactone)-urethane network in artificial skin. Bruin P, et al. **Biomaterials** 1990 May;11(4):291–5

In vitro observations of iron-doped bioactive glasses. Cannas M, et al. **Biomaterials** 1990 May;11(4):281–5

Stem cell delivery vehicle. Caplan AI. **Biomaterials** 1990 Jul; 11:44–6 (6 ref.)

Effect of the macroporosity for osseous substitution of calcium phosphate ceramics. Daculsi G, et al. **Biomaterials** 1990 Jul;11:86–7

XPS and SSIMS analysis of the surface chemical structure of poly(caprolactone) and poly(beta-hydroxybutyrate-beta-hydroxyvalerate) copolymers. Davies MC, et al. **Biomaterials** 1990 May; 11(4):228–34

Calcium phosphate ceramic coatings on porous titanium: effect of structure and composition on electrophoretic deposition, vacuum sintering and in vitro dissolution. Ducheyne P, et al. **Biomaterials** 1990 May;11(4):244–54

Adhesion and aggregation of thrombin prestimulated human platelets: evaluation of a series of biomaterials characterized by ESCA. Feuerstein IA, et al. **Biomaterials** 1990 Mar; 11(2):127–32

Characterization of hydrophobicity gradients prepared by means of radio frequency plasma discharge. Gölander CG, et al. **Biomaterials** 1990 Jan;11(1):32–5

The interface of calcium-phosphate and glass-ceramic in bone, a structural analysis. Gross UM, et al. **Biomaterials** 1990 Jul;11:83–5

Oxidation of four palladium-rich ceramic fusing alloys. Hautaniemi JA, et al. **Biomaterials** 1990 Jan;11(1):62–72

Polymers for biodegradable medical devices. VII. Hydroxybutyrate-hydroxyvalerate copolymers: degradation of copolymers and their blends with polysaccharides under in vitro physiological conditions. Holland SJ, et al. **Biomaterials** 1990 Apr;11(3):206–15

Application of an empirically derived growth curve model to characterize Staphylococcus epidermidis biofilm development on silicone elastomer. Holmes CJ, et al. **Biomaterials** 1989 Nov;10(9):625–9

Microstructure and mechanical properties of hydroxyapatite ceramics with zirconia dispersion prepared by post-sintering. Ioku K, et al. **Biomaterials** 1990 Jan; 11(1):57–61

Quantitative study of the coral transformations 'in vivo' by several physical analytical methods. Irigaray JL, et al. **Biomaterials** 1990 Jul;11:73–4

Osteocompatibility of platinum-plated titanium assessed in vitro. Itakura Y, et al. **Biomaterials** 1989 Sep;10(7):489–93

In vivo biocompatibility of collagen-poly(hydroxyethyl methacrylate) hydrogels. Jeyanthi R, et al. **Biomaterials** 1990 May;11(4):238–43

Qualitative interfacial study between bone and tantalum, niobium or commercially pure titanium. Johansson CB, et al. **Biomaterials** 1990 May;11(4):277–80

Formation of continuous collagen fibres: evaluation of biocompatibility and mechanical properties. Kato YP, et al. **Biomaterials** 1990 Apr;11(3):169–75

Platelet adhesion on to polyamide microcapsules coated with lipid bilayer membrane. Kono K, et al. **Biomaterials** 1989 Sep;10(7):455–61

Intraocular PMMA lenses modified with surface-immobilized heparin: evaluation of biocompatibility in vitro and in vivo. Larsson R, et al. **Biomaterials** 1989 Oct;10(8):511–6

Comparative study of the thromboresistance of Dacron combined with various polyurethanes. Leake DL, et al. **Biomaterials** 1989 Sep;10(7):441–4

Aluminas with dispersoids. Tribologic properties and in vivo aging. Mandrino A, et al. **Biomaterials** 1990 Jul;11:88–91

In vivo evaluation of hydrophobic and fibrillar microporous polyetherurethane urea graft. Marois Y, et al. **Biomaterials** 1989 Oct;10(8):521–31

Effects of bone ingrowth on the strength and non-invasive assessment of a coralline hydroxyapatite material. Martin RB, et al. **Biomaterials** 1989 Sep;10(7):481–8

Influence of glycosaminoglycans on the collagen sponge component of a bilayer artificial skin. Matsuda K, et al. **Biomaterials** 1990 Jul;11(5):351–5

Immunogenicity of collagenous implants. Meade KR, et al. **Biomaterials** 1990 Apr;11(3):176–80

In vivo and in vitro degradation of monofilament absorbable sutures, PDS and Maxon. Metz SA, et al. **Biomaterials** 1990 Jan;11(1):41–5

Stress relaxation of organic suture materials. Metz SA, et al. **Biomaterials** 1990 Apr;11(3):197–9

Calcium phosphate cements: study of the beta-tricalcium phosphate—dicalcium phosphate—calcite cements. Mirtchi AA, et al. **Biomaterials** 1990 Mar;11(2):83–8

Calcium phosphate cements: study of the beta-tricalcium phosphate—monocalcium phosphate system. Mirtchi AA, et al. **Biomaterials** 1989 Sep;10(7):475–80

Hemashield vascular graft [letter; comment] Munjal D. **Biomaterials** 1989 Nov;10(9):642 Comment on: Biomaterials 1989 Apr;10(3):156–65.

Surface physics methods and in vitro bone-biomaterial interface control. Muster D, et al. **Biomaterials** 1990 Jul; 11:57–62

Reconstruction of parodontal tissue with chitosan. Muzzarelli R, et al. **Biomaterials** 1989 Nov;10(9):598–603

Clinical application of antithrombogenic hydrogel with long poly(ethylene oxide) chains. Nagaoka S, et al. **Biomaterials** 1990 Mar;11(2):119–21

Correlations among chemical constituents, cytotoxicities and tissue responses: in the case of natural rubber latex materials. Nakamura A, et al. **Biomaterials** 1990 Jul;11:92–4

Contributions of negatively charged chemical groups to the surface-dependent activation of human plasma by soluble dextran derivatives. Nigretto JM, et al. **Biomaterials** 1989 Sep;10(7):449–54

Quantitative study on osteoconduction of apatite-wollastonite containing glass ceramic granules, hydroxyapatite granules, and alumina granules. Ono K, et al. **Biomaterials** 1990 May;11(4):265–71

Morphological characterization of surface-induced platelet activation. Park K, et al. **Biomaterials** 1990 Jan;11(1):24–31

Calcium phosphate biomaterials and bone mineral. Differences in composition, structures and properties. Rey C. **Biomaterials** 1990 Jul;11:13–5

Albumin adsorption on to aluminium oxide and polyurethane surfaces. Sharma CP, et al. **Biomaterials** 1990 May; 11(4):255–7

A new canine model to evaluate the biological effects of implant materials and surface coatings on intramedullary bone ingrowth. Spivak JM, et al. **Biomaterials** 1990 Jul; 11:79–82

In vivo evaluation and comparison of collagen, acetylated collagen and collagen/glycosaminoglycan composite films and sponges as candidate biomaterials. Srivastava S, et al. **Biomaterials** 1990 Apr;11(3):155–61

Experimental study of a newly developed bilayer artificial skin. Suzuki S, et al. **Biomaterials** 1990 Jul;11(5):356–60

Hydrophobic and fibrillar microporous polyetherurethane urea prosthesis: an ESCA study on the internal and external surfaces of explanted grafts. Therrien M, et al. **Biomaterials** 1989 Oct;10(8):517–20

Modification of synthesis and investigation of properties for 2-cyanoacrylates. Tseng YC, et al. **Biomaterials** 1990 Jan; 11(1):73–9

Comparative analysis of four types of synthetic anterior cruciate ligament replacement in the goat: in vivo histological and mechanical findings. Turner IG, et al. **Biomaterials** 1990 Jul;11(5):321–9

Implantation of porous acrylic cement in soft tissues: an animal and human biopsy histological study. van Mullem PJ, et al. **Biomaterials** 1990 Jul;11(5):299–304

Needs and opportunities for the biomaterials industry. **Biomed Instrum Technol** 1989 Sep–Oct;23(5):376–81

Proceedings of the twenty-seventh annual Rocky Mountain Bioengineering Symposium and the twenty-seventh International ISA Biomedical Sciences Instrumentation Symposium. April 6–7, 1990, Denver, Colorado. **Biomed Sci Instrum** 1990;26:1–248

Development of a biocompatible hermetically sealed electrical feedthrough. Diegel PD, et al. **Biomed Sci Instrum** 1990;26:157–9

Polymorphonuclear oxygen free radical production and complement activation induced by dialysis membranes as assayed in an experimental model. Cappelli G, et al. **Blood Purif** 1989;7(6):293–300

Clinical testing of a new, low-flux polysulfone membrane. Results of a 26-week study. Honkanen E, et al. **Blood Purif** 1989;7(5):240–6

Intradialytic body weight changes and dialyzer pore size as main contributing factors to the evolution of beta-2-microglobulin in dialysis. Vanholder RC, et al. **Blood Purif** 1990;8(1):32–44

Using Lamicel to expose high cervical lesions during colposcopic examinations. Johnson N, et al. **Br J Obstet Gynaecol** 1990 Jan;97(1):46–52

Marlex mesh in the reconstruction of blow-out fractures of the orbit. De Sutter E, et al. **Bull Soc Belge Ophtalmol** 1988;228:47–50

Influence of whole body irradiation and local shielding on matrix-induced endochondral bone differentiation. Wientroub S, et al. **Calcif Tissue Int** 1990 Jan;46(1):38–45

The biocompatibility of compressed collagen foam plugs. Robinson JD, et al. **Cardiovasc Intervent Radiol** 1990 Feb–Mar;13(1):36–9

Biocompatibility criteria in hemodialysis. Cordonnier DJ, et al. **Contrib Nephrol** 1989;71:30–5 (36 ref.)

Are there long-term clinical consequences related to membrane biocompatibility? van Ypersele de Strihou C, et al. **Contrib Nephrol** 1989;71:36–9 (16 ref.)

Biocompatibility of human collagen type IV intracorneal implants. Dupont D, et al. **Cornea** 1989 Dec;8(4):251–8

Neo-intimal development on textured biomaterial surfaces during clinical use of an implantable left ventricular assist device. Graham TR, et al. **Eur J Cardiothorac Surg** 1990; 4(4):182–90

Immune response to collagen impregnated Dacron double velour grafts for aortic and aorto-femoral reconstructions. Norgren L, et al. **Eur J Vasc Surg** 1990 Aug;4(4):379–84

Surface free energy and interaction of Staphylococcus

epidermidis with biomaterials. Ferreirós CM, et al. **FEMS Microbiol Lett** 1989 Jul 1;51(1):89–94

Clinical biocompatibility of an experimental dentine–enamel adhesive for composites. Bowen RL, et al. **Int Dent J** 1989 Dec;39(4):247–52

Protein adsorption and cellular adhesion and activation on biomedical polymers. Anderson JM, et al. **Int J Artif Organs** 1990 Jun;13(6):375–82

Are changes in intracranial pressure during intermittent machine haemofiltration dependent upon membrane biocompatibility? Davenport A, et al. **Int J Artif Organs** 1989 Nov;12(11):703–7

Influence of haemodialysis membranes on the release of granulocyte elastase. Irvine L, et al. **Int J Artif Organs** 1989 Aug;12(8):502–4

Bioartificial pancreas: status and bottlenecks. Reach G. **Int J Artif Organs** 1990 Jun;13(6):329–36 (52 ref.)

A comparative experimental investigation in monkeys between three different implant materials. Nordlund A, et al. **Int J Oral Maxillofac Surg** 1989 Dec;18(6):373–7

A staged laryngotracheal reconstruction using alloplast (Proplast) in the canine model. Chan KH, et al. **Int J Pediatr Otorhinolaryngol** 1990 Jan;18(3):227–39

Analysis of removed autophor ceramic–on–ceramic components. Kummer FJ, et al. **J Arthroplasty** 1990 Mar; 5(1):28–33

A porous polyethylene–coated femoral component of a total hip arthroplasty. Ritter MA, et al. **J Arthroplasty** 1990 Mar; 5(1):83–8

Platelet interaction to prosthetic materials—role of von Willebrand factor in platelet interaction to PTFE. Badimon L, et al. **J Biomater Appl** 1990 Jul;5(1):27–48

Grafting of synthetic polyelectrolyte onto polymer surfaces—comparison of glow discharge and 60Co–gamma–irradiation method. Hari PR, et al. **J Biomater Appl** 1990 Jul;5(1):20–6

Surface modification of polystyrene—platelet adhesion. Sharma CP, et al. **J Biomater Appl** 1990 Jul;5(1):49–55

Applied biomaterials. Proceedings of a symposium on retrieval and analysis of surgical implants and biomaterials. August, 1988. Snowbird, Utah. **J Biomed Mater Res** 1989 Dec;23(A3 Suppl):269–380

Hard tissue replacement (HTR) polymer as an implant material. Amler MH, et al. **J Biomed Mater Res** 1990 Aug; 24(8):1079–89

Tissue reaction to subcutaneous implantation of a collagen sponge. A histological, ultrastructural, and immunological study. Anselme K, et al. **J Biomed Mater Res** 1990 Jun; 24(6):689–703

Tissue/biomaterial interface characteristics of four elastomers. A transmission electron microscopical study. Bakker D, et al. **J Biomed Mater Res** 1990 Mar;24(3):277–93

Biocompatibility of a polyether urethane, polypropylene oxide, and a polyether polyester copolymer. A qualitative and quantitative study of three alloplastic tympanic membrane materials in the rat middle ear. Bakker D, et al. **J Biomed Mater Res** 1990 Apr;24(4):489–515

Small–caliber polyurethane and polytetrafluoroethylene grafts: a comparative study in a canine aortoiliac model. Brothers TE, et al. **J Biomed Mater Res** 1990 Jun; 24(6):761–71

A new porous polyetherurethane wound covering. Bruin P, et al. **J Biomed Mater Res** 1990 Feb;24(2):217–26

Acrylated phosphonate esters containing 1,3–dioxane and 1,3–dioxolane moieties as adhesion–promoting agents for dentin and hard tissues, I. Cabasso I, et al. **J Biomed Mater Res** 1990 Jun;24(6):705–20

Amphiphilic networks: II. Biocompatibility and controlled drug release of poly[isobutylene–co–2–(dimethylamino)ethyl methacrylate]. Chen D, et al. **J Biomed Mater Res** 1989 Nov;23(11):1327–42

Investigation of a hydroxyapatite and calcium sulfate composite supplemented with an osteoinductive factor. Damien CJ, et al. **J Biomed Mater Res** 1990 Jun; 24(6):639–54

Implant retrieval and analysis [editorial] Daniels AU. **J Biomed Mater Res** 1989 Dec;23(A3 Suppl):269–71

Alteration of retrieved implants in vitro by processing and infiltrating fluids. Emmanual J, et al. **J Biomed Mater Res** 1989 Dec;23(A3 Suppl):337–47

The histological effects of the implantation of different sizes of polyethylene particles in the rabbit tibia. Goodman SB, et al. **J Biomed Mater Res** 1990 Apr;24(4):517–24

Poly(dimethylsiloxane)–poly(ethylene oxide)–heparin block copolymers. III: Surface and bulk compositional differences. Grainger DW, et al. **J Biomed Mater Res** 1990 May;24(5):547–71

Poly(dimethylsiloxane)–poly(ethylene oxide)–heparin block copolymers. II: Surface characterization and in vitro assessments. Grainger DW, et al. **J Biomed Mater Res** 1990 Apr;24(4):403–31

Characterization of alkyl grafted polyurethane block copolymers by variable takeoff angle x–ray photoelectron spectroscopy. Grasel TG, et al. **J Biomed Mater Res** 1990 May;24(5):605–20

Evaluation of metal implants coated with several types of ceramics as biomaterials. Hayashi K, et al. **J Biomed Mater Res** 1989 Nov;23(11):1247–59

Breakdown corrosion potential of ceramic coated metal implants. Hayashi K, et al. **J Biomed Mater Res** 1990 Aug; 24(8):1111–3

In vitro degradation of glycine/DL–lactic acid copolymers. Helder J, et al. **J Biomed Mater Res** 1990 Aug; 24(8):1005–20

Surface reactions of calcium phosphate ceramics to various solutions. Hyakuna K, et al. **J Biomed Mater Res** 1990 Apr; 24(4):471–88

Thermodynamic study of phase transfer of precipitates on SiC whisker reinforced glass ceramics. Imai K, et al. **J Biomed Mater Res** 1990 Jan;24(1):1–10

Adsorption of plasma proteins and adhesion of platelets onto novel polyetherurethaneureas—relationship between denaturation of adsorbed proteins and platelet adhesion. Ito Y, et al. **J Biomed Mater Res** 1990 Feb;24(2):227–42

Interaction of human serum lipoproteins with biomaterials. Jayakumari N, et al. **J Biomed Mater Res** 1989 Nov; 23(11):1261–70

Analysis of A.W glass–ceramic surface by micro–beam x–ray diffraction. Kitsugi T, et al. **J Biomed Mater Res** 1990 Feb; 24(2):259–73

X–ray diffraction studies on plasma–sprayed calcium phosphate–coated implants. Koch B, et al. **J Biomed Mater Res** 1990 Jun;24(6):655–67

Solutions able to reproduce in vivo surface–structure changes in bioactive glass–ceramic A–W. Kokubo T, et al. **J Biomed Mater Res** 1990 Jun;24(6):721–34

Repair of experimental arteriotomy in rabbit aorta using a new resorbable elastin–fibrin biomaterial. Lefebvre F, et al. **J Biomed Mater Res** 1989 Dec;23(12):1423–32

Establishment of a neovascular bed in a collagen–impregnated polyurethane sponge. Lipsky MH, et al. **J Biomed Mater Res** 1989 Dec;23(12):1441–52

Series shunt evaluation of polyurethane vascular graft materials in chronically AV–shunted canines. McCoy TJ, et al. **J Biomed Mater Res** 1990 Jan;24(1):107–29

In vitro properties of crosslinked, reconstituted collagen sheets. Morykwas MJ. **J Biomed Mater Res** 1990 Aug; 24(8):1105–10

Apatite—wollastonite containing glass ceramic granule–fibrin mixture as a bone graft filler: use with low granular density. Ono K, et al. **J Biomed Mater Res** 1990 Jan;24(1):11–20

Dynamic mechanical properties of multiphase acrylic systems. Oysaed H. **J Biomed Mater Res** 1990 Aug; 24(8):1037–48

Use of the acyl azide method for cross–linking collagen–rich tissues such as pericardium. Petite H, et al. **J Biomed Mater Res** 1990 Feb;24(2):179–87

Detection of surface–adsorbed (lipo)proteins by means of a two–step enzyme–immunoassay: a study on the Vroman effect. Poot A, et al. **J Biomed Mater Res** 1990 Aug; 24(8):1021–36

Development and testing of a human collagen graft material. Quteish D, et al. **J Biomed Mater Res** 1990 Jun;24(6):749–60

Cyclic fatigue–crack propagation, stress–corrosion, and fracture–toughness behavior in pyrolytic carbon–coated graphite for prosthetic heart valve applications. Ritchie RO, et al. **J Biomed Mater Res** 1990 Feb;24(2):189–206

Nondestructive investigations on ninety–seven surgically excised mammary prostheses. Rolland C, et al. **J Biomed Mater Res** 1989 Dec;23(A3 Suppl):285–98

The influence of hydrogel functional groups on cell behavior. Smetana K Jr, et al. **J Biomed Mater Res** 1990 Apr; 24(4):463–70

Fibrinogen–aluminum interaction: changes with oxide layer thickness onto metal surface. Sunny MC, et al. **J Biomed Mater Res** 1990 Apr;24(4):455–62

A fractographic analysis of in vivo poly(methyl methacrylate) bone cement failure mechanisms. Topoleski LD, et al. **J Biomed Mater Res** 1990 Feb;24(2):135–54

The biocompatibility of hydroxyapatite ceramic: a study of retrieved human middle ear implants. van Blitterswijk CA, et al. **J Biomed Mater Res** 1990 Apr;24(4):433–53

In vitro biocompatibility of polyetheretherketone and polysulfone composites. Wenz LM, et al. **J Biomed Mater Res** 1990 Feb;24(2):207–15

Development of monoclonal antibodies to collagens for assessing host–implant interactions. Werkmeister JA, et al. **J Biomed Mater Res** 1989 Dec;23(A3 Suppl):273–83

Healing characteristics of expanded autografts on wounds covered with homograft and Biobrane temporary wound dressing. Hartford CE, et al. **J Burn Care Rehabil** 1989 Nov–Dec;10(6):476–80

Meshed Biobrane: a dressing for difficult topography. Phillips LG, et al. **J Burn Care Rehabil** 1990 Jul–Aug;11(4):347–51

Biobrane wound dressing used in the treatment of toxic epidermal necrolysis: a case report. Sowder LL. **J Burn Care Rehabil** 1990 May–Jun;11(3):237–9

Evaluation of the biocompatibility and fixation of a new silicone intraocular lens in the feline model. Buchen SY, et al. **J Cataract Refract Surg** 1989 Sep;15(5):545–53

Heparin surface modified intraocular lenses implanted in the monkey eye. Fagerholm P, et al. **J Cataract Refract Surg** 1989 Sep;15(5):485–90

Surface modification: on the path toward greater biocompatibility. Obstbaum SA. **J Cataract Refract Surg** 1989 Sep;15(5):483

Connective tissue repair in circumferential periodontal defects in dogs following use of a biodegradable membrane. Magnusson I, et al. **J Clin Periodontol** 1990 Apr;17(4):243–8

Epithelial regeneration in collagen–coated and uncoated patch grafts implanted into dog tracheas. Hirai K, et al. **J Exp Pathol (Oxford)** 1990 Feb;71(1):51–62

Migration of epithelial cells on materials used in guided tissue regeneration. Salonen JI, et al. **J Periodont Res** 1990 Jul; 25(4):215–21

Effect of various graft materials with tetracycline in localized juvenile periodontitis. Evans GH, et al. **J Periodontol** 1989 Sep;60(9):491–7

Bone formation in tricalcium phosphate–filled periodontal intrabony lesions. Histological observations in humans. Saffar JL, et al. **J Periodontol** 1990 Apr;61(4):209–16

Human clinical and histologic responses to the placement of HTR polymer particles in 11 intrabony lesions. Stahl SS, et al. **J Periodontol** 1990 May;61(5):269–74

Biocompatibility of wound management products: the effect of various monosaccharides on L929 and 2002 fibroblast cells in culture. Schmidt RJ, et al. **J Pharm Pharmacol** 1989 Nov;41(11):781–4

Biocompatibility of wound management products: standardization of and determination of cell growth rate in L929 fibroblast cultures. Turner TD, et al. **J Pharm Pharmacol** 1989 Nov;41(11):775–80

An evaluation of the surface characteristics of a facial prosthetic elastomer. Part III: Wettability and hardness. Veres EM, et al. **J Prosthet Dent** 1990 Apr;63(4):466–71

Patency and healing of 10–cm long microarterial polytetrafluoroethylene prostheses in the rat abdominal aorta. Robinson PH, et al. **J Reconstr Microsurg** 1989 Oct; 5(4):331–6

Evacuation of microscopic air bubbles from Dacron reduces complement activation and platelet aggregation. Kalman PG, et al. **J Vasc Surg** 1990 Apr;11(4):591–8

Morphologic characteristics of adsorbed human plasma proteins on vascular grafts and biomaterials. Pankowsky DA, et al. **J Vasc Surg** 1990 Apr;11(4):599–606

Fluid phase generation of terminal complement complex as a novel index of bioincompatibility. Deppisch R, et al. **Kidney Int** 1990 Feb;37(2):696–706 (51 ref.)

A modified technique for the production of an arterio–venous shunt in sheep, allowing a comparison of biocompatibility of synthetic materials. Stertmann WA, et al. **Lab Anim** 1990 Jan;24(1):44–7

Hydroxylapatite ossicular replacement prostheses: preliminary results. Goldenberg RA. **Laryngoscope** 1990 Jul;100(7):693–700

The design of cellulosic based membranes that do not activate complement. Johnson RJ. **Med Prog Technol** 1989; 15(1–2):77–81

Complement activation mediates cellular adhesion to synthetic biomaterials. Ward CA, et al. **Med Prog Technol** 1989;15(1–2):63–75 (38 ref.)

Assembly of terminal SC5b–9 complement complexes: a new index of blood–membrane interaction. Schaefer RM, et al. **Miner Electrolyte Metab** 1990;16(1):73–6

Fixation of fractures of the lower cervical spine using methylmethacrylate and wire: technique and results in 99 patients. Branch CL Jr, et al. **Neurosurgery** 1989 Oct; 25(4):503–12; discussion 512–3

Biocompatibility of zirconia dispersed hydroxyapatite ceramics. Suzuki O, et al. **Nippon Seikeigeka Gakkai Zasshi** 1990 Apr;64(4):249–59

Clinical application of dental implant with root of coated bioglass: short–term results. Kudo K, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jul;70(1):18–23

Natural–Y Même polyurethane versus smooth silicone: analysis of the soft–tissue interaction from 3 days to 1 year in the rat animal model. Picha GJ, et al. **Plast Reconstr Surg** 1990 Jun;85(6):903–16

The biologic behavior of hydroxyapatite implanted into the maxillofacial skeleton. Rosen HM, et al. **Plast Reconstr Surg** 1990 May;85(5):718–23

Effect of irradiation on collagen solutions in relation to biomedical applications. Pietrucha K. **Polim Med** 1989; 19(1–2):3–18

Modulation of deferoxamine toxicity and clearance by covalent attachment to biocompatible polymers. Hallaway PE, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(24):10108–12

Ultrasound–enhanced polymer degradation and release of incorporated substances. Kost J, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7663–6

Recent studies on biomembrane structure and biomaterials. Haris PI, et al. **Prog Clin Biol Res** 1990;343:1–13 (29 ref.)

Nerve regeneration through artificial tubular implants. Fields RD, et al. **Prog Neurobiol** 1989;33(2):87–134 (506 ref.)

Inflammatory system activation during cardiopulmonary bypass as an indicator of biocompatibility: a randomized comparison of bubble and membrane oxygenators. Nilsson L, et al. **Scand J Thorac Cardiovasc Surg** 1990;24(1):53–8

Scanning electron microscopy analysis of polyethylene oxide hydrogels for blood contact. Verdon SL, et al. **Scanning Microsc** 1990 Jun;4(2):341–9; discussion 349–50

Polyurethane support films: structure and cellular adhesion. Goodman SL, et al. **Scanning Microsc Suppl** 1989;3:285–94; discussion 294–5

Gore Tex organoids and genetic drugs [news] [published erratum appears in Science 1990 Mar 30;247(4950):1531] Culliton BJ. **Science** 1989 Nov 10;246(4931):747–9

Making new materials with nature's help [news] Pool R. **Science** 1989 Dec 15;246(4936):1389

The quest for thromboresistant materials. Didisheim P. **Semin Thromb Hemost** 1989 Jul;15(3):240–3 (20 ref.)

Osseous wound healing with xenogeneic bone implants with a biodegradable carrier. Hollinger JO, et al. **Surgery** 1990 Jan;107(1):50–4

Viscoelastic substances in ophthalmology. Liesegang TJ. **Surv Ophthalmol** 1990 Jan-Feb;34(4):268-93 (118 ref.)

Histocompatibility of semipermeable membranes for implantable diffusion devices (bioartificial pancreas). Siebers U, et al. **Transplant Proc** 1990 Apr;22(2):834-5

[Collagen as a biomaterial] Adam M, et al. **Cas Lek Cesk** 1989 Oct 13;128(42):1313-7 (Eng. Abstr.) (Cze)

[Artificial implants] de Groot K. **Ned Tijdschr Geneeskd** 1990 Apr 21;134(16):803-5 (Dut)

[Critical points remain to be solved for routine clinical use of the artificial heart] Lapeyre D. **Ann Chir** 1990; 44(2):168-81 (Fre)

[Dental adhesive and sealing products submitted to biological in vivo control] Virgillito A, et al. **J Biol Buccale** 1989 Sep;17(3):209-24 (65 ref.) (Eng. Abstr.) (Fre)

[Materials for osteo-dural reconstruction in the cranium. An update] George B, et al. **Neurochirurgie** 1989;35(3):145-51 (35 ref.) (Eng. Abstr.) (Fre)

[Contribution to the experimental study of endosseous sintered ceramic implants] Dubruille JH, et al. **Rev Stomatol Chir Maxillofac** 1990;91(1):70-2 (Eng. Abstr.) (Fre)

[Bone replacement-plasty with tricalcium phosphate ceramics in children] Pochon JP. **Aktuel Probl Chir Orthop** 1990;36:1-51 (Ger)

[Stimulated osteogenesis in bone cysts] Löwicke G, et al. **Beitr Orthop Traumatol** 1989 Jul;36(7):297-302 (Eng. Abstr.) (Ger)

[Cardiovascular device coatings of silicon carbide as a new material for artificial heart valves] Bolz A, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:93-4 (Ger)

[Carbon fiber reinforced polysulfone--a new implant material] Claes L. **Biomed Tech (Berlin)** 1989 Dec; 34(12):315-9 (Eng. Abstr.) (Ger)

[Possibilities for optimizing gliding combinations against ultra-high molecular polyethylene for artificial joints] Streicher RM, et al. **Biomed Tech (Berlin)** 1990 Apr; 35(4):78-83 (Ger)

[Hip joint replacement with flexible physiologic components] Thull R, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:169-70 (Ger)

[Biliary peritonitis following bile duct revision with T-drainage implantation--problems of choosing the right material] Walz M, et al. **Chirurg** 1990 May;61(5):409-10 (Ger)

[An animal experiment study using the Gore-Tex soft tissue patch as a replacement for lyophilized dura mater] Schadel A. **HNO** 1990 Mar;38(3):95-8 (Eng. Abstr.) (Ger)

[Biocompatibility and pharmacokinetics of hydroxypropyl methylcellulose (HPMC) in the anterior chamber of the rabbit eye] Ehrich W, et al. **Klin Monatsbl Augenheilkd** 1990 Jun;196(6):470-4 (Eng. Abstr.) (Ger)

[A new material for closure of traumatic perforation of the tympanic membrane] Hamann KF. **Laryngorhinootologie** 1990 Mar;69(3):173 (Ger)

[Ivory as a nose implant performed by Jacques Joseph. Late results after more than 40 years] Staindl O, et al. **Laryngorhinootologie** 1989 Oct;68(10):576-80 (Eng. Abstr.) (Ger)

[The wear behavior of capsules and heads of CoCrMo casts in long-term implanted all-metal hip prostheses] Semlitsch M, et al. **Orthopade** 1989 Sep;18(5):377-81 (Eng. Abstr.) (Ger)

[Polyethylene wear and late loosening of a total prosthesis of the hip joint. New perspectives for metal/metal pairing of the capsule and head] Weber BG, et al. **Orthopade** 1989 Sep;18(5):370-6 (Eng. Abstr.) (Ger)

[The use of tantalum wire as a suture material] Brumme S, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989; 22(5):308-13 (Eng. Abstr.) (Ger)

[Correlation of complement activation, cytokine liberation and beta 2 microglobulin in the use of various dialysis and hemofiltration membranes] Falkenhagen D, et al. **Z Urol Nephrol** 1989 Oct;82(10):541-50 (Eng. Abstr.) (Ger)

[Optic, scanning and transmission electron microscopic observations of synthetic fibers implanted in rabbit skin] Pagliarini A, et al. **G Ital Dermatol Venereol** 1989 May; 124(5):XXV-XXXI (Eng. Abstr.) (Ita)

[The use of Mersilene mesh in the treatment of giant laparoceles] Liguori G, et al. **Minerva Chir** 1990 Apr 30; 45(8):571-6 (Eng. Abstr.) (Ita)

[Study on biocompatibility of titanium alloys] Kodama T. **Kokubyo Gakkai Zasshi** 1989 Jun;56(2):263-88 (Eng. Abstr.) (Jpn)

[An experimental study of reconstruction--differences of the healing process by materials] Inoue M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jan;38(1):42-50 (Eng. Abstr.) (Jpn)

[Experimental study of materials used for intra-atrial baffle for the Mustard operation] Togo T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep;37(9):1937-44 (Eng. Abstr.) (Jpn)

[An experimental study on the osteoconductive properties of porous calcium phosphate glass ceramics] Wada M. **Nippon Seikeigeka Gakkai Zasshi** 1989 Nov;63(11):1368-78 (Eng. Abstr.) (Jpn)

[Polymeric sorbents for hemoperfusion. Preparation, structure and adsorption properties of chemically modified polymer sorbents for hemoperfusion] Kolarz BN, et al. **Polim Med** 1989;19(1-2):29-35 (Eng. Abstr.) (Pol)

[Polysorbates for hemoperfusion. The effect of polysorbate surface modification on morphology, coagulation, fibrinolysis, and kallikrein formation] Kotschy M, et al. **Polim Med** 1989;19(1-2):37-47 (Eng. Abstr.) (Pol)

[Polymeric sorbents for hemoperfusion] Trochimczuk A, et al. **Polim Med** 1989;19(1-2):19-27 (37 ref.) (Eng. Abstr.) (Pol)

[Materials for the production of external fixators] Panić M, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:386-7 (Scr)

ADMINISTRATION & DOSAGE

[Isolation of the bronchi with intraoperative packing in children with bronchiectasis] Stepanov EA, et al. **Grud Serdechnososudistaia Khir** 1990;(1):52-5 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Giant cell myocarditis associated with silicone. An unusual case of biomaterials pathology discovered at autopsy using X-ray energy spectroscopic techniques. Kossovsky N, et al. **Am J Clin Pathol** 1990 Jan;93(1):148-52

Biocompatibility of polyacrylamide microcapsules implanted in peritoneal cavity or spleen of the rat. Effect on various inflammatory reactions in vitro. Gin H, et al. **Biomater Artif Cells Artif Organs** 1990;18(1):25-42

Screening of in vitro cytotoxicity by the adhesive film test. Srivastava S, et al. **Biomaterials** 1990 Mar;11(2):133-7

Molecular mechanisms in musculoskeletal sepsis: the race for the surface. Gristina AG, et al. **Instr Course Lect** 1990; 39:471-82 (87 ref.)

The role of biomaterials as occupational hazards in dentistry. Hensten-Pettersen A, et al. **Int Dent J** 1990 Jun; 40(3):159-66 (44 ref.)

Reduced thrombogenicity of polymers having phospholipid polar groups. Ishihara K, et al. **J Biomed Mater Res** 1990 Aug;24(8):1069-77

An immunological study of tricalcium phosphate supplied by three different manufacturers. Sasaoka K, et al. **J Clin Lab Immunol** 1989 Dec;30(4):197-202

Infections from biomaterials and implants: a race for the surface. Gristina AG, et al. **Med Prog Technol** 1988-89; 14(3-4):205-24 (90 ref.)

Complement activation by biomaterials. Johnson RJ. **Prog Clin Biol Res** 1990;337:507-12

Clinical aspects of biocompatibility issues on apheresis. Schmitt E, et al. **Prog Clin Biol Res** 1990;337:513-9

[Local complications following implantation of Biorod] Poigenfürst J, et al. **Aktuel Traumatol** 1990 Jun;20(3):157-9 (Eng. Abstr.) (Ger)

ANALYSIS

Physiochemical characterization and coating of polyurethane with a new heparin-adsorbing material. Barbucci R, et al. **Biomaterials** 1989 Aug;10(6):429-31

Endothelial cell response to polyvinyl chloride-packaged GORETEX: effect of surface contamination. Hodgkin JH, et al. **Biomaterials** 1990 Jan;11(1):9-12

Nuclear magnetic relaxation of water in hydrogels. Roorda WE, et al. **Biomaterials** 1990 Jan;11(1):17-23

Spectrometric and chromatographic methods for the analysis of polymeric explant materials. Richards JM, et al. **J Biomed Mater Res** 1989 Dec;23(A3 Suppl):321-35

CHEMICAL SYNTHESIS

Stiffness and strength tailoring of a hip prosthesis made of advanced composite materials. Chang FK, et al. **J Biomed Mater Res** 1990 Jul;24(7):873-99

CLASSIFICATION

[Classification of implants with reference to safety considerations] Irnich W, et al. **Biomed Tech (Berlin)** 1989 Dec;34(12):294-300 (Eng. Abstr.) (Ger)

DIAGNOSTIC USE

Chitosan--as a biomaterial. Chandy T, et al. **Biomater Artif Cells Artif Organs** 1990;18(1):1-24 (37 ref.)

HISTORY

Vascular grafts in the 1990s: lessons from the past. Greenhalgh RM. **Acta Chir Scand Suppl** 1990;555:249-53

History of Teflon. Becmeur F, et al. **Eur Urol** 1990; 17(4):299-300

Medical history of Teflon. Laustriat S, et al. **Eur Urol** 1990; 17(4):301-3

METABOLISM

Blood plasma proteins on polyurethane and alkylsiloxane plasma-treated polyurethane surfaces. Dynamic approach by stimulus-response technique. Part 2. Evaluation of adsorption data by moment technique. Mutlu M, et al. **Med Biol Eng Comput** 1990 May;28(3):232-6

A bone-bonding bioactive material implant in the head and neck: bioglass. Karlan MS, et al. **Surg Forum** 1978;29:575-7

PHARMACOLOGY

Biocompatibility of the central electroauditory prosthesis and the human cochlear nuclei. Terr LI, et al. **Am J Otol** 1989 Sep;10(5):339-42

Ectopic bone induction by partially purified bone extract alone or attached to biomaterials. Swoboda HF, et al. **Biomater Artif Cells Artif Organs** 1990;18(3):383-401

The influence of calcium phosphate biomaterials on human bone cell activities. An in vitro approach. Grégoire M, et al. **J Biomed Mater Res** 1990 Feb;24(2):165-77

Study of the osteoconductive properties of bioactive glass fibers. Pazzaglia UE, et al. **J Biomed Mater Res** 1989 Nov; 23(11):1289-97

Cytotoxicity testing of wound dressings using normal human keratinocytes in culture. Rosdy M, et al. **J Biomed Mater Res** 1990 Mar;24(3):363-77

Accelerated epithelization under a highly vapor-permeable wound dressing is associated with increased precipitation of fibrin(ogen) and fibronectin. Jonkman MF, et al. **J Invest Dermatol** 1990 Apr;94(4):477-84

[Substitute model of an in-vitro biological trials. I. Standardized method using human pulp cells] Christen O, et al. **J Biol Buccale** 1989 Dec;17(4):275-84 (Eng. Abstr.) (Fre)

[Substitute model for in-vitro biological testing. II. Quantitative evaluation of the biocompatibility of dental products] Regad C, et al. **J Biol Buccale** 1989 Dec; 17(4):285-95 (Eng. Abstr.) (Fre)

STANDARDS

Serum angiotensin-converting enzyme as a marker of dialyzer membrane biocompatibility? Krämer BK, et al. **Nephron** 1989;53(2):162-3

THERAPEUTIC USE

Wound dressing after skin planing. Cramers M. **Acta Derm Venereol (Stockh)** 1989;69(5):453-4

Possibilities of the use of biocompatible polymer rods for internal fixation and filling of the defects of bone tissue. Prantskyavichus S, et al. **Acta Orthop Belg** 1989;55(1):31-4

Biological osteosynthesis in osteochondral lesions of the talus. Giannini S, et al. **Ital J Orthop Traumatol** 1989 Dec; 15(4):425-32

[Use of madreporic material in ear surgery. An initial study] Schmoll L, et al. **Ann Otolaryngol Chir Cervicofac** 1990; 107(1):67-70 (Eng. Abstr.) (Fre)

[Coral substituted for bone grafting in posterior vertebral arthrodesis in children. Initial results] Pouliquen JC, et al. **Rev Chir Orthop** 1989;75(6):360-9 (Eng. Abstr.) (Fre)

TOXICITY

Comparison of biomaterials for facial bone augmentation. Maas CS, et al. **Arch Otolaryngol Head Neck Surg** 1990 May;116(5):551-6

Use of cell culture to predict toxicity of solid materials in blood contact. Wieslander A, et al. **Biomater Artif Cells Artif Organs** 1990;18(3):367-74

Evaluation of connective tissue cell responses to orthopaedic implant materials. Goldring SR, et al. **Connect Tissue Res** 1990;24(1):77-81

Toxicology of medical device material. Goering PL, et al. **Fundam Appl Toxicol** 1989 Aug;13(2):193-5

The cage implant system for determining in vivo biocompatibility of medical device materials. Marchant RE. **Fundam Appl Toxicol** 1989 Aug;13(2):217-27

Current problems associated with toxicity evaluation of medical device materials and future research needs. Northup SJ. **Fundam Appl Toxicol** 1989 Aug;13(2):196-204 (68 ref.)

Reactions to dural substitutes [letter; comment] Guthkelch AN, et al. **J Neurosurg** 1989 Oct;71(4):629 Comment on: J Neurosurg 1989 Apr;70(4):633-5.

[Initial results of the biocompatibility, cytotoxicity and genotoxicity of Aramid] Wening JV, et al. **Unfallchirurgie** 1989 Oct;15(5):215-20 (Eng. Abstr.) (Ger)

BIOCOMPATIBLE MATERIALS TESTING see **MATERIALS TESTING**

BIODEGRADATION

Inoculum size as a factor limiting success of inoculation for biodegradation. Ramadan MA, et al. **Appl Environ Microbiol** 1990 May;56(5):1392-6

Expert systems survey on biodegradation of xenobiotic chemicals. Boethling RS, et al. **Ecotoxicol Environ Safety** 1989 Dec;18(3):252-67

Quantitative structure-activity relationships for biodegradation. Parsons JR, et al. **Ecotoxicol Environ Safety** 1990 Apr;19(2):212-27 (51 ref.)

Headspace determination of evolved carbon dioxide in a biodegradability screening test. Struijs J, et al. **Ecotoxicol Environ Safety** 1990 Apr;19(2):204-11

Evaluation of alkali treatment for biodegradation of corn cobs by Aspergillus niger. Singh A, et al. **Folia Microbiol (Praha)** 1989;34(6):479-84

Biotechnological treatment of industrial waste water. Wyatt JM. **Microbiol Sci** 1988 Jun;5(6):186-90 (20 ref.)

[Biological methods of air purification (review of the literature)] Utkin IB, et al. **Prikl Biokhim Mikrobiol** 1989 Nov-Dec;25(6):723-33 (61 ref.) (Eng. Abstr.) (Rus)

BIOELECTRIC ENERGY SOURCES

A single case study: myoelectrically controlled exoskeletal

mobilizer for amyotrophic lateral sclerosis (ALS) patients. Sauter WF, et al. **Prosthet Orthot Int** 1989 Dec;13(3):145–8

BIOENERGETICS see **ENERGY METABOLISM**

BIOEQUIVALENCE see **THERAPEUTIC EQUIVALENCY**

BIOETHICS

Towards a national bioethics committee [editorial] Lock S. **BMJ** 1990 May 5;300(6733):1149–50

Randomized clinical trials and the problem of suboptimal care: an overview of the controversy. Shatz D. **Cancer Invest** 1990;8(2):191–205 (65 ref.)

A protocol for satisfying the ethical issues raised by oocyte donation: the free, anonymous, and fertile donors. Frydman R, et al. **Fertil Steril** 1990 Apr;53(4):666–72

Organ transplantation: a paradigm of medical progress. Bailey LL. **Hastings Cent Rep** 1990 Jan–Feb;20(1):24–8

Science as an ethical vocation [news] Campbell CS. **Hastings Cent Rep** 1990 Mar–Apr;20(2):4

The report: many voices in conversation. Campbell CS, et al. **Hastings Cent Rep** 1990 Jan–Feb;20(1):4

The burden of decision. Capron AM. **Hastings Cent Rep** 1990 May–Jun;20(3):36–41

The place of autonomy in bioethics. Childress JF. **Hastings Cent Rep** 1990 Jan–Feb;20(1):12–7 (14 ref.)

Militant morality: civil disobedience and bioethics. Cohen C. **Hastings Cent Rep** 1989 Nov–Dec;19(6):23–5

The Philippines: a public awakening. de Castro LD. **Hastings Cent Rep** 1990 Mar–Apr;20(2):27–8

The fiery fight for animal rights. Jackson CM. **Hastings Cent Rep** 1989 Nov–Dec;19(6):37–9

Bioethics as civic discourse. Jennings B. **Hastings Cent Rep** 1989 Sep–Oct;19(5):34–5

Practicing ethics: where's the action? Kass LR. **Hastings Cent Rep** 1990 Jan–Feb;20(1):5–12

Abortion: the right to an argument. Meilaender G. **Hastings Cent Rep** 1989 Nov–Dec;19(6):13–6

China: moral puzzles. Xu TM. **Hastings Cent Rep** 1990 Mar–Apr;20(2):24–5

Bioethics research in nursing and medicine. Fowler MD. **Heart Lung** 1990 Mar;19(2):206–7

'Workup' for a bioethical problem. Hildreth EA. **Hosp Pract [Off]** 1990 Jan 15;25(1):86–91, 95–6, 99–100

Philosophical critique of bioethics. **J Med Philos** 1990 Apr; 15(2):121–236

The zygote: to be or not be a person. Bedate CA, et al. **J Med Philos** 1989 Dec;14(6):641–5

Quality of scholarship in bioethics. Brody BA. **J Med Philos** 1990 Apr;15(2):161–78

A critique of principlism. Clouser KD, et al. **J Med Philos** 1990 Apr;15(2):219–36

Method in bioethics: a troubled assessment. Green RM. **J Med Philos** 1990 Apr;15(2):179–97

The limited relevance of analytical ethics to the problems of bioethics. Holmes RL. **J Med Philos** 1990 Apr; 15(2):143–59

Genetic counseling and termination of pregnancy in Hungary. Papp Z. **J Med Philos** 1989 Jun;14(3):323–33

NIH expects conflict–of–interest rule revisions to take at least 6 months [news] Marwick C. **JAMA** 1990 Mar 2; 263(9):1183

Bitterfruit. The legacy of Nazi medical experiments [see comments] Byman B. **Minn Med** 1989 Oct;72(10):580–6 Comment in: Minn Med 1990 Feb;73(2):15.

Lest we forget humanity [editorial] Reece RL. **Minn Med** 1989 Oct;72(10):563

Bioethicists' statement on the U.S. Supreme Court's Cruzan decision. Annas GJ, et al. **N Engl J Med** 1990 Sep 6; 323(10):686–7

National bioethics committees: developments and prospects. Jones DG, et al. **N Z Med J** 1990 Feb 28;103(884):66–8

Research ethics: no conflict–of–interest rules [news] Anderson GC. **Nature** 1990 Jan 11;343(6254):104

Fetus research [letter; comment] McEvoy AJ. **Nature** 1990 Mar 8;344(6262):99 Comment on: Nature 1989 Nov 30;342(6249):469–70.

Interpretive bioethics: the way of discernment. Carson RA. **Theor Med** 1990 Mar;11(1):51–9

The relation of the holocaust to bioethics [editorial] Edwards RW. **Wis Med J** 1989 Nov;88(11):12–3

[Ethics and biotechnology (letter)] Rutgers B. **Tijdschr Diergeneeskd** 1990 Jul 15;115(14):696–8 **(Dut)**

[Bioethics. Implications for medical practice and deontologic and legal standards, in Brazil] Dias HP. **Bol Of Sanit Panam** 1990 May–Jun;108(5–6):512–23 (16 ref.) (Eng. Abstr.) **(Por)**

[Bioethics and psychosomatic medicine (editorial)] Poveda JM. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1990 Mar–Apr;18(2):77–9 **(Spa)**

[Dynamics of the dialogue on bioethics in a Spain in transition] Abel F. **Bol Of Sanit Panam** 1990 May–Jun; 108(5–6):542–9 (5 ref.) (Eng. Abstr.) **(Spa)**

[Current trends in biomedical ethics in the United States of America] Callahan D. **Bol Of Sanit Panam** 1990 May–Jun; 108(5–6):550–5 (0 ref.) (Eng. Abstr.) **(Spa)**

[The moral significance of religion for bioethics] Campbell CS. **Bol Of Sanit Panam** 1990 May–Jun;108(5–6):406–14 (0 ref.) (Eng. Abstr.) **(Spa)**

[Current trends in bioethics in Canada] Dickens BM. **Bol Of Sanit Panam** 1990 May–Jun;108(5–6):524–30 (0 ref.) (Eng. Abstr.) **(Spa)**

[Human dying has changed] Llano Escobar A. **Bol Of Sanit Panam** 1990 May–Jun;108(5–6):465–72 (11 ref.) (Eng. Abstr.) **(Spa)**

[Bioethics in Chile. Current situation and perspectives] Lolas F. **Bol Of Sanit Panam** 1990 May–Jun;108(5–6):536–41 (33 ref.) (Eng. Abstr.) **(Spa)**

[Bioethics: a new philosophy of health (comment)] Mainetti JA. **Bol Of Sanit Panam** 1990 May–Jun;108(5–6):599–601 Comment on: Bol Of Sanit Panam 1990 May–Jun;108(5–6):570–85. **(Spa)**

[Bioethics panorama in Mexico] Porter JK, et al. **Bol Of Sanit Panam** 1990 May–Jun;108(5–6):556–64 (14 ref.) (Eng. Abstr.) **(Spa)**

[Background and current status of bioethics in Colombia] Sánchez–Torres F. **Bol Of Sanit Panam** 1990 May–Jun; 108(5–6):531–5 (12 ref.) (Eng. Abstr.) **(Spa)**

[Bioethics: philosophic bases and application] Sass HM. **Bol Of Sanit Panam** 1990 May–Jun;108(5–6):391–8 (15 ref.) (Eng. Abstr.) **(Spa)**

[Current status and perspectives of bioethics in Argentina] Zanier J, et al. **Bol Of Sanit Panam** 1990 May–Jun; 108(5–6):500–11 (3 ref.) (Eng. Abstr.) **(Spa)**

[Bioethics in Peru] Zuloaga RL. **Bol Of Sanit Panam** 1990 May–Jun;108(5–6):565–9 (0 ref.) (Eng. Abstr.) **(Spa)**

BIOFEEDBACK (PSYCHOLOGY)

The reduction of weaning time from mechanical ventilation using tidal volume and relaxation biofeedback. Holliday JE, et al. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1214–20

Electromyographic versus rhythmic positional biofeedback in computerized gait retraining with stroke patients. Mandel AR, et al. **Arch Phys Med Rehabil** 1990 Aug; 71(9):649–54

Faecal incontinence in childhood: a multidisciplinary approach including biofeedback. Shepherd K, et al. **Aust Paediatr J** 1989 Dec;25(6):351–5

Biofeedback to enhance psychophysiological effects of imagery. Lichstein KL, et al. **Behav Res Ther** 1989; 27(5):569–72

Abstracts of papers presented at the 21st annual meeting of the Association for Applied Psychophysiology and Biofeedback. Washington, D.C., March 23–28, 1990. **Biofeedback Self Regul** 1990 Mar;15(1):47–93

Behavioral strategies for the reduction of pain and anxiety associated with orthopedic trauma. Achterberg J, et al. **Biofeedback Self Regul** 1989 Jun;14(2):101–14

Subjective experiences associated with thermal biofeedback treatment of hypertension. Blanchard EB, et al. **Biofeedback Self Regul** 1990 Jun;15(2):145–59

EMG biofeedback and discriminative muscle control. Glaros AG, et al. **Biofeedback Self Regul** 1990 Jun;15(2):135–43

A therapeutic alternative for tension headache in children: treatment and 1–year follow–up results. Grazzi L, et al. **Biofeedback Self Regul** 1990 Mar;15(1):1–6

Evaluation of home–based thermal biofeedback treatment of pediatric migraine headache. Guarnieri P, et al. **Biofeedback Self Regul** 1990 Jun;15(2):179–84

Growth and development of biofeedback: a bibliographic update. Hatch JP, et al. **Biofeedback Self Regul** 1990 Mar; 15(1):37–46

Long–term maintenance of improvements achieved with (abortive) pharmacological and nonpharmacological treatments for migraine: preliminary findings. Holroyd KA, et al. **Biofeedback Self Regul** 1989 Dec;14(4):301–8

Self–regulatory treatment of headache in the elderly. Kabela E, et al. **Biofeedback Self Regul** 1989 Sep;14(3):219–28

Yawning: a possible confounding variable in EMG biofeedback studies. Oman RE, et al. **Biofeedback Self Regul** 1989 Dec;14(4):339–46

Behavioral treatment of isolated systolic hypertension in the elderly. Pearce LK, et al. **Biofeedback Self Regul** 1989 Sep; 14(3):207–17

The use and utility of EMG biofeedback with chronic schizophrenic patients. Pharr OM, et al. **Biofeedback Self Regul** 1989 Sep;14(3):229–45

A 1– and 2–year follow–up study of bowel sound biofeedback as a treatment for irritable bowel syndrome. Radnitz CL, et al. **Biofeedback Self Regul** 1989 Dec;14(4):333–8

Applied psychophysiology and biofeedback of event–related potentials (brain waves): historical perspective, review, future directions. Rosenfeld JP. **Biofeedback Self Regul** 1990 Jun;15(2):99–119 (36 ref.)

The efficacy of biobehavioral and compliance interventions in the adjunctive treatment of mild pregnancy–induced hypertension. Somers PJ, et al. **Biofeedback Self Regul** 1989 Dec;14(4):309–18

Future perspectives for applied psychophysiology and biofeedback. Sterman MB. **Biofeedback Self Regul** 1989 Jun;14(2):83–8

Constructive integration of learning theory and phenomenological approaches to biofeedback training. Zolten AJ. **Biofeedback Self Regul** 1989 Jun;14(2):89–99 (26 ref.)

Changes in waveform of congenital nystagmus associated with biofeedback treatment. Mezawa M, et al. **Br J Ophthalmol** 1990 Aug;74(8):472–6

Self–regulation of anxiety. Fahrion SL, et al. **Bull Menninger Clin** 1990 Spring;54(2):217–31 (33 ref.)

Voluntary blood pressure control using continuous systolic blood pressure biofeedback. Cejnar M, et al. **Clin Exp Pharmacol Physiol** 1988 Apr;15(4):265–9

Reducing spasticity to control muscle contracture of children with cerebral palsy. Nash J, et al. **Dev Med Child Neurol** 1989 Aug;31(4):471–80

Biofeedback therapy for fecal incontinence. Loening–Baucke V. **Dig Dis** 1990;8(2):112–24 (45 ref.)

Myobiofeedback in motor reeducation of wrist and fingers after hemispherial stroke. Rathkolb O, et al. **Electromyogr Clin Neurophysiol** 1990 Feb–Mar;30(2):89–92

A controlled evaluation of the addition of cognitive therapy to a home–based biofeedback and relaxation treatment of vascular headache. Blanchard EB, et al. **Headache** 1990 May;30(6):371–6

A non–pharmacological treatment of vascular headache during pregnancy. Hickling EJ, et al. **Headache** 1990 Jun; 30(7):407–10

The effectiveness of EMG biofeedback in the treatment of arm function after stroke. Crow JL, et al. **Int Disabil Stud** 1989 Oct–Dec;11(4):155–60

Biofeedback and diagnostic techniques. **Int J Psychosom** 1989;36(1–4):1–92

Differential treatment responses on somatic pain indicators after EMG biofeedback training in back pain patients. Biedermann HJ, et al. **Int J Psychosom** 1989;36(1–4):53–7

The effects of electrode placement upon EEG biofeedback training: the monopolar–bipolar controversy. Fehmi LG, et al. **Int J Psychosom** 1989;36(1–4):23–33

Biofeedback–assisted behavioral training for elderly men and women. Burgio KL, et al. **J Am Geriatr Soc** 1990 Mar; 38(3):338–40

Treatment of stress incontinence with pelvic floor exercises and biofeedback. Burns PA, et al. **J Am Geriatr Soc** 1990 Mar;38(3):341–4

Biofeedback training versus simple instructions to reduce heart rate reactivity to a psychological stressor. Sharpley CF. **J Behav Med** 1989 Oct;12(5):435–47

A controlled evaluation of thermal biofeedback and thermal biofeedback combined with cognitive therapy in the treatment of vascular headache. Blanchard EB, et al. **J Consult Clin Psychol** 1990 Apr;58(2):216–24

Electromyographic biofeedback with mental imagery and home practice in the treatment of children with muscle–contraction headache. Labbé EE, et al. **J Dev Behav Pediatr** 1990 Apr;11(2):65–8

Modulation of abnormal defecation dynamics by biofeedback treatment in chronically constipated children with encopresis. Loening–Baucke V. **J Pediatr** 1990 Feb; 116(2):214–22

Electromyographic biofeedback and rest position training of masticatory muscles in myofascial pain–dysfunction patients. Erlandson PM Jr, et al. **J Prosthet Dent** 1989 Sep; 62(3):335–8

Devices for the diagnosis and treatment of temporomandibular disorders. Part III: Thermography, ultrasound, electrical stimulation, and electromyographic biofeedback [published erratum appears in J Prosthet Dent 1990 May;63(5):13A] Mohl ND, et al. **J Prosthet Dent** 1990 Apr;63(4):472–7 (64 ref.)

Temperature biofeedback for Raynaud's syndrome [letter] Freedman RR. **JAMA** 1989 Nov 17;262(19):2681

Relearning to swallow after stroke—application of maneuvers and indirect biofeedback: a case study. Logemann JA, et al. **Neurology** 1990 Jul;40(7):1136–8

Modification of human spinal stretch reflexes: preliminary studies. Evatt ML, et al. **Neurosci Lett** 1989 Nov 6; 105(3):350–5

Responses of myopes to volitional control training of accommodation. Randle RJ. **Ophthalmic Physiol Opt** 1988; 8(3):333–40

The 'problem' with automation: inappropriate feedback and interaction, not 'over–automation'. Norman DA. **Philos Trans R Soc Lond [Biol]** 1990 Apr 12; 327(1241):585–93

Electromyographic biofeedback and recovery of quadriceps femoris muscle function following anterior cruciate ligament reconstruction. Draper V. **Phys Ther** 1990 Jan; 70(1):11–7

Quantitative measurements of finger blood flow during behavioral treatments for Raynaud's disease. Freedman RR. **Psychophysiology** 1989 Jul;26(4):437–41

Biofeedback in back muscle strengthening. Asfour SS, et al. **Spine** 1990 Jun;15(6):510–3

Use of biofeedback in the treatment of stroke patients. Wolf SL. **Stroke** 1990 Sep;21(9 Suppl):II22–3 (19 ref.)

[Experience of problems caused by biofeedback among the hospital staff] Denis P, et al. **Gastroenterol Clin Biol** 1990; 14(1):5–7 **(Fre)**

[Does retraining by biofeedback have a role in the treatment of solitary ulcer syndrome of the rectum? (letter)] Vilotte J, et al. **Gastroenterol Clin Biol** 1990;14(4):405–6 **(Fre)**

[Treatment of Raynaud's phenomenon by thermal biofeedback] Guilmot JL, et al. **Vasa Suppl** 1989;27:29–30 **(Fre)**

[Autogenic training and thermal feedback in health resorts] Winkler G, et al. **Z Arztl Fortbild (Jena)** 1989;83(23):1187–8 **(Ger)**

[Frontal electromyography–biofeedback therapy in spasmodic torticollis in children] Priolo C, et al. **Minerva Pediatr** 1989 Jun;41(6):335–9 (Eng. Abstr.) **(Ita)**

[Biofeedback as a complementary treatment in surgery for anal incontinence] Rosado R, et al.

Rev Esp Enferm Dig 1990 Mar;77(3):193–6 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Blood glucose discrimination training in patients with type II diabetes. Lamparski DM, et al. Biofeedback Self Regul 1989 Sep;14(3):195–206

INSTRUMENTATION

Feedback in myoelectric prostheses. Scott RN. Clin Orthop 1990 Jul;(256):58–63 (29 ref.)

The reduction of bruxism using contingent EMG audible biofeedback: a case study. Feehan M, et al. J Behav Ther Exp Psychiatry 1989 Jun;20(2):179–83

Surface electromyographic electrode pair with built-in buffer-amplifiers. Fujisawa M, et al. J Prosthet Dent 1990 Mar;63(3):350–2

Biofeedback therapy for female incontinence due to low urethral resistance. Susset JG, et al. J Urol 1990 Jun; 143(6):1205–8

Biofeedback treatment of genu-recurvatum using an electrogoniometric device with an acoustic signal. One-year follow-up. Basaglia N, et al. Scand J Rehabil Med 1989;21(3):125–30

[Value assessment of the MIRA (multichannel infant reflex audiometry) hearing evaluation with and without biofeedback. 3. Diagnosis from curves or behavioral observation?] Kauffmann G, et al. Laryngorhinootologie 1990 Feb;69(2):111–3 (Eng. Abstr.) (Ger)

[Biofeedback treatment of fecal incontinence] Enck P. Z Gastroenterol [Verh] 1990 Apr;25:123–6 (Ger)

[A device for the acquisition of stable relaxation habits] Mukhin DN, et al. Voen Med Zh 1990 Mar;(3):64 (Rus)

[Treatment of Bell's palsy by using portable biofeedback devices] Lobzin VS, et al. Zh Nevropatol Psikhiatr 1989; 89(10):57–62 (Eng. Abstr.) (Rus)

[Use of functional biofeedback in the treatment of children with locomotor disorders] Shchupak EV, et al. Zh Nevropatol Psikhiatr 1989;89(8):37–41 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Some relations between successfulness of biological feedback and psychological variables. Hrachovinová T, et al. Act Nerv Super (Praha) 1989 Oct;31(3):220–1

BVP-biofeedback in the treatment of migraine. The effects of constriction and dilatation during different phases of the migraine attack. Lisspers J, et al. Behav Modif 1990 Apr; 14(2):200–21

Extracranial and digital vascular events: an analysis of methods in BVP amplitude and biofeedback research. Harrison DW, et al. Biol Psychol 1989 Aug;29(1):1–9

Effect of biofeedback assisted relaxation training on blood glucose levels in a type I insulin dependent diabetic. A case report. McGrady A, et al. J Behav Ther Exp Psychiatry 1990 Mar;21(1):69–75

Dynamics of reactions of nonspecific and somatic activation during biofeedback training. Smirnov SA, et al. Neurosci Behav Physiol 1990 Jan–Feb;20(1):5–11

Voluntary control of agonist premotor silence preceding limb movements of maximal effort. Walter CB. Percept Mot Skills 1989 Dec;69(3 Pt 1):819–26

Self-report during feedback regulation of slow cortical potentials. Roberts LE, et al. Psychophysiology 1989 Jul; 26(4):392–403

[The efficiency of different forms of feedback signals during therapeutic sessions of functional biocontrol] Bogdanov OV, et al. Fiziol Cheloveka 1990 Jan–Feb;16(1):13–8 (Rus)

[Voluntary regulation of the heart contraction rate as a method for correcting the functional status of neurosis patients] Chernigovskaia NV, et al. Fiziol Cheloveka 1990 Mar–Apr;16(2):58–64 (Rus)

[The role of feedback stimuli in discriminating micro time intervals in emotionally excitable subjects] Vazhnova TN, et al. Zh Vyssh Nerv Deiat 1990 May–Jun;40(3):581–4 (Rus)

BIOFLAVONOIDS

ANALYSIS

Constituents of plants growing in Qatar. Part XIX. Flavonoids of Glossonema edule N. E. Br. Rizk AM, et al. Plant Foods Hum Nutr 1990 Jan;40(1):1–3

ISOLATION & PURIFICATION

Isolation of flavonoids from Populus nigra as delta 4-3-ketosteroid (5 alpha) reductase inhibitors. Komoda Y. Chem Pharm Bull (Tokyo) 1989 Nov;37(11):3128–30

Flavonoids from Orthosiphon spicatus. Malterud KE, et al. Planta Med 1989 Dec;55(6):569–70

[Polyphenolic glycosides from Cistus creticus L. leaves] Demetzos C, et al. Ann Pharm Fr 1989;47(5):314–8 (Eng. Abstr.) (Fre)

METABOLISM

Biliary excretion of metabolites of baicalin and baicalein in rats. Abe K, et al. Chem Pharm Bull (Tokyo) 1990 Jan; 38(1):209–11

PHARMACOLOGY

Influence of flavonoids on combined experimental infections with EMC virus and Staphylococcus aureus in mice. Panasiak W, et al. Acta Microbiol Pol 1989;38(2):185–8

Protective effect of a purified flavonoid fraction against reactive oxygen radicals. In vivo and in vitro study. Lonchampt M, et al. Arzneimittelforschung 1989 Aug; 39(8):882–5

Structure-activity correlation of flavonoids for inhibition of bovine lens aldose reductase. Iinuma M, et al. Chem Pharm Bull (Tokyo) 1989 Jul;37(7):1813–5

Inhibition of influenza virus sialidase and anti-influenza virus activity by plant flavonoids. Nagai T, et al. Chem Pharm Bull (Tokyo) 1990 May;38(5):1329–32

Inhibition of adenosine 3',5'-cyclic monophosphate phosphodiesterase by flavonoids. III. Nikaido T, et al. Chem Pharm Bull (Tokyo) 1989 May;37(5):1392–5

Lymphatic system and microcirculation. Proceedings of the Third International Symposium on Daflon 500 held during the First Mediterranean Congress of Angiology. Corfu, Greece, May 31, 1988. Int Angiol 1989 Oct–Dec;8(4 Suppl):1–75

Capillary filtration and lymphatic resorption in diabetes. Application to the pharmacodynamic activity of Daflon 500 mg. Behar A, et al. Int Angiol 1989 Oct–Dec;8(4 Suppl):27–9

Lymphagogue and pulsatile activities of Daflon 500 mg on canine thoracic lymph duct. Cotonat A, et al. Int Angiol 1989 Oct–Dec;8(4 Suppl):15–8

Effects of Daflon 500 mg on bovine vessels contractility. Gargouil YM, et al. Int Angiol 1989 Oct–Dec;8(4 Suppl):19–22

Activity of Daflon 500 mg on the hemorheological disorders in diabetes. Lacombe C, et al. Int Angiol 1989 Oct–Dec; 8(4 Suppl):45–8

Daflon 500 mg depresses bradykinin-ischemia-induced microvascular leakage of FITC dextran in rat cremaster muscle. Stucker O, et al. Int Angiol 1989 Oct–Dec;8(4 Suppl):39–43

Antiandrogenic effects of a flavonoid-rich fraction of Vitex negundo seeds: a histological and biochemical study in dogs. Bhargava SK. J Ethnopharmacol 1989 Dec; 27(3):327–39

Inhibition of protein-tyrosine kinase activity by flavanoids and related compounds. Geahlen RL, et al. J Nat Prod 1989 Sep–Oct;52(5):982–6

Antidiabetic and aldose reductase activities of biflavanones of Garcinia kola. Iwu MM, et al. J Pharm Pharmacol 1990 Apr;42(4):290–2

Effects of synthetic and naturally occurring flavonoids on Na+,K+-ATPase: aspects of the structure-activity relationship and action mechanism. Hirano T, et al. Life Sci 1989;45(12):1111–7

Effects of synthetic and naturally occurring flavonoids on mitogen-induced proliferation of human peripheral-blood lymphocytes. Hirano T, et al. Life Sci 1989;45(15):1407–11

Inhibition of rat liver NAD(P)H:quinone acceptor oxidoreductase (DT-diaphorase) by flavonoids isolated from the Chinese herb scutellariae radix (Huang Qin). Liu XF, et al. Mol Pharmacol 1990 Jun;37(6):911–5

Modification of in vivo heterocyclic amine genotoxicity by dietary flavonoids. Alldrick AJ, et al. Mutagenesis 1989 Sep;4(5):365–70

Inhibition of neutrophil adherence to vascular endothelial cells by a new acylated flavonoid. Tubaro A, et al. Pharmacol Res 1989 Nov–Dec;21 Suppl 1:121–2

Effect of flavonoids from Spanish and Indian medicinal herbs on arachidonate metabolism in rat peritoneal leukocytes. Ferrándiz ML, et al. Pharmazie 1990 Jun;45(6):444–5

Inhibition of sheep platelet arachidonate metabolism by flavonoids from Spanish and Indian medicinal herbs. Ferrándiz ML, et al. Pharmazie 1990 Mar;45(3):206–8

The influence of sulfonated bioflavonoids on enzymatic oxidation of arachidonic acid and on non-enzymatic lipid oxidation. Robak J, et al. Pol J Pharmacol Pharm 1989 Sep–Oct;41(5):469–73

Induction of monooxygenase and transferase activities in rat by dietary administration of flavonoids. Siess MH, et al. Xenobiotica 1989 Dec;19(12):1379–86

[Anti-inflammatory properties of flavonoids] Brasseur T. J Pharm Belg 1989 May–Jun;44(3):235–41 (38 ref.) (Eng. Abstr.) (Fre)

THERAPEUTIC USE

Vital capillaroscopy on microcirculation: pharmacodynamic activity of Daflon 500 mg in venous insufficiency. Balas P, et al. Int Angiol 1989 Oct–Dec;8(4 Suppl):51–2

Double blind study of the pharmacodynamic and clinical activities of 5682 SE in venous insufficiency. Advantages of the new micronized form. Cospite M, et al. Int Angiol 1989 Oct–Dec;8(4 Suppl):61–5

A long term treatment with a venotropic drug. Results on efficacy and safety of Daflon 500 mg in chronic venous insufficiency. Guillot B, et al. Int Angiol 1989 Oct–Dec; 8(4 Suppl):67–71

Venous reflux [editorial] Nicolaides AN. Int Angiol 1989 Oct–Dec;8(4 Suppl):5–6

Are the phlebotonic properties shown in clinical pharmacology predictive of a therapeutic benefit in chronic venous insufficiency? Our experience with Daflon 500 mg. Tsouderos Y. Int Angiol 1989 Oct–Dec;8(4 Suppl):53–9

[Flavonoids as medicines] Brasseur T. J Pharm Belg 1989 Nov–Dec;44(6):403–10 (35 ref.) (Eng. Abstr.) (Fre)

[Clinico-experimental basis of phytotherapy of acute dysentery] Pogorel'skaia LV, et al. Sov Med 1990;(2):106–9 (Rus)

TOXICITY

Histological alterations by a diet containing seeds of Garcinia kola: effect on liver, kidney, and intestine in the rat. Braide VB, et al. Gegenbaurs Morphol Jahrb 1990;136(1):95–101

Isolation and studies of the mutagenic activity in the Ames test of flavonoids naturally occurring in medical herbs. Czeczot H, et al. Mutat Res 1990 Mar;240(3):209–16

BIOGENESIS

Evolutionary implication of genetic code deviations. Chela-Flores J. Acta Biotheor (Leiden) 1988;37(3–4):267–79

Clay minerals—blueprints of early life. Degens ET. Hamatol Bluttransfus 1989;32:500–11

Structural requirements for a primitive adaptor molecule. Raghunathan G, et al. J Biomol Struct Dyn 1987 Jun; 4(6):1041–50

Metabolic complexity in the RNA world and implications for the origin of protein synthesis. Gibson TJ, et al. J Mol Evol 1990 Jan;30(1):7–15

An electromagnetic theory of life. Bulkley DH. Med Hypotheses 1989 Dec;30(4):281–5

Microbodies in yeasts: structure, function and biogenesis. Veenhuis M, et al. Microbiol Sci 1988 Nov;5(11):347–51 (25 ref.)

Integrity of Escherichia coli P pili during biogenesis: properties and role of PapJ. Tennent JM, et al. Mol Microbiol 1990 May;4(5):747–58

Biomineralization: iron and the origin of life [news] Williams RJ. Nature 1990 Jan 18;343(6255):213–4

Abstracts issue. 1989 ISSOL meeting. Prague, Czechoslovakia. Orig Life Evol Biosph 1989; 19(3–5):223–546

Mineral catalysis of the formation of dimers of 5'-AMP in aqueous solution: the possible role of montmorillonite clays in the prebiotic synthesis of RNA. Ferris JP, et al. Orig Life Evol Biosph 1989;19(2):165–78

Sulfur, ultraviolet radiation, and the early evolution of life. Kasting JF, et al. Orig Life Evol Biosph 1989;19(2):95–108 (50 ref.)

Chemical evolution and the origin of life. Bibliography supplement 1986. Powers JV, et al. Orig Life Evol Biosph 1990;20(1):55–81

Theory for protein mutability and biogenesis. Lau KF, et al. Proc Natl Acad Sci U S A 1990 Jan;87(2):638–42

Evolution of the first metabolic cycles. Wächtershäuser G. Proc Natl Acad Sci U S A 1990 Jan;87(1):200–4

Closing the gap between proteins and DNA [news] Pool R. Science 1990 Jun 29;248(4963):1609

How do you read from the palimpsest of life? [news] [see comments] Waldrop MM. Science 1989 Nov 3; 246(4930):578–9 Comment in: Science 1990 Feb 16;247(4944):789.

Spontaneous order, evolution, and life [news] Waldrop MM. Science 1990 Mar 30;247(4950):1543–5

Did life really start out in an RNA world? [news] Waldrop MM. Science 1989 Dec 8;246(4935):1248–9

BIOGENIC AMINES

Comparison of bromo- and iodoalkyl triflates for 18F-radiolabeling of amines. Chesis PL, et al. Int J Rad Appl Instrum [A] 1990;41(3):259–65

Biogenic amines, neuropeptides and substance abuse. Grand Forks, ND, October 17, 1987. Proceedings. Physiol Behav 1989 Jul;46(1):1–104

ANALYSIS

Determination of dopamine, norepinephrine, and related trace amines by prechromatographic derivatization with naphthalene-2,3-dicarboxaldehyde. Kawasaki T, et al. Anal Biochem 1989 Aug 1;180(2):279–85

Biogenic amines and active peptides in extracts of the skin of thirty-two European amphibian species. Roseghini M, et al. Comp Biochem Physiol [C] 1989;94(2):455–60

Determination of monoamines and indoles in amniotic fluid by high-performance liquid chromatography-electrochemical detection. Afonso D, et al. J Chromatogr 1990 Jun 8;528(1):101–9

Simultaneous determination of biogenic amines, their precursors and metabolites in a single brain of the cricket using high-performance liquid chromatography with amperometric detection. Nagao T, et al. J Chromatogr 1989 Nov 10;496(1):39–53

Simultaneous determination of biogenic amines by reversed-phase high-performance liquid chromatography. Suzuki S, et al. J Chromatogr 1990 May 25;508(1):225–8

Analysis of biogenic amines in bovine retina by gas chromatography-negative ion chemical ionisation mass spectrometry. Macfarlane RG, et al. J Neurochem 1989 Dec;53(6):1731–6

Analysis of acidic metabolites of biogenic amines in bovine retina and vitreous and aqueous humour by gas chromatography-negative ion chemical ionisation mass spectrometry. Midgley JM, et al. J Neurochem 1990 Sep; 55(3):842–8

Physical and chemical considerations in the in vitro calibration of microdialysis probes for biogenic amine neurotransmitters and metabolites. Parry TJ, et al. **J Neurosci Methods** 1990 Jun;32(3):175–83

Simultaneous measurement of tetrahydrobiopterin (THBP) and biogenic amines by liquid chromatography with electrochemical detection. Tani Y, et al. **Life Sci** 1990; 46(5):373–8

Biogenic amines distribution in the brain of nervous and normal pointer dogs. A genetic animal model of anxiety. Gurguis GN, et al. **Neuropsychopharmacology** 1990 Aug; 3(4):297–303

Effects of hemivibrissotomy in the rat: time-dependent asymmetries in turning and biogenic amines induced by apomorphine. Schwarting RK, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):989–94

Bioamines and proteins in the saliva and salivary glands of Palaearctic blackflies (Diptera: Simuliidae). Wirtz HP. **Trop Med Parasitol** 1990 Mar;41(1):59–64

[Biogenic amines in the digesta of swine] Schneider R, et al. **Arch Tierernahr** 1989 Dec;39(12):1021–9 (Eng. Abstr.) **(Ger)**

BLOOD

Blood bioamines, cortisol and aminoacid levels in leukemic patients. Singh JN, et al. **Indian J Cancer** 1989 Dec; 26(4):222–6

CEREBROSPINAL FLUID

Cerebrospinal fluid studies in the Rett syndrome: biogenic amines and beta-endorphins. Budden SS, et al. **Brain Dev** 1990;12(1):81–4

Analysis of monoamines in the cerebrospinal fluid of Chinese patients with neurological diseases. Liu HC, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jul;44(1):1–6

Ventricular cerebrospinal fluid monoamine transmitter and metabolite concentrations reflect human brain neurochemistry in autopsy cases. Wester P, et al. **J Neurochem** 1990 Apr;54(4):1148–56

A longitudinal study of the effect of different social rearing conditions on cerebrospinal fluid norepinephrine and biogenic amine metabolites in rhesus monkeys. Kraemer GW, et al. **Neuropsychopharmacology** 1989 Sep;2(3):175–89

METABOLISM

Stress-induced changes in brain level of biogenic amines modified by an indigenous drug. Upadhyay L, et al. **Act Nerv Super (Praha)** 1990 Jun;32(2):128–9

The activity of amitriptyline as a differential inhibitor of amine secretion from rat peritoneal mast cells: the contribution of amine uptake. Purcell WM, et al. **Agents Actions** 1990 Apr;30(1–2):41–3

Differential release of histamine and 5-hydroxytryptamine from rat mast cells: the contribution of amine uptake to the apparent pattern of secretion. Purcell WM, et al. **Agents Actions** 1990 Apr;30(1–2):38–40

Methanol-induced monoamine changes in hypothalamus and striatum of albino rats. Jeganathan PS, et al. **Alcohol** 1989 Nov–Dec;6(6):451–4

Intracellular metabolism of biogenic amines in paraneurons. Hasegawa H, et al. **Arch Histol Cytol** 1989;52 Suppl:69–74

Mouse strain-dependent effect of amantadine on motility and brain biogenic amines. Messiha FS. **Arch Int Pharmacodyn Ther** 1989 Nov–Dec;302:74–85

Regional alterations of brain biogenic amines and GABA/glutamate levels in rats following chronic lead exposure during neonatal development. Shailesh Kumar MV, et al. **Arch Toxicol** 1990;64(4):305–14

Energetics of reserpine binding and occlusion by the chromaffin granule biogenic amine transporter. Rudnick G, et al. **Biochemistry** 1990 Jan 23;29(3):603–8

Metabolism of amines in the isolated perfused mesenteric arterial bed of the rat. Elliott J, et al. **Br J Pharmacol** 1989 Oct;98(2):507–14

Differential modulation of monoamine levels and turnover rates by estrogen and/or androgen in hypothalamic and vocal control nuclei of male zebra finches. Barclay SR, et al. **Brain Res** 1990 Jul 23;523(2):251–62

Cerebral cortical concentrations of bioamines and their metabolites during arousal and after feeding in the little brown bat (Myotis lucifugus). Bauman WA, et al. **Brain Res** 1989 Oct 23;500(1–2):156–60

Binding sites for brain trace amines. Nguyen TV, et al. **Cell Mol Neurobiol** 1989 Sep;9(3):297–311 (59 ref.)

Behavioral and genetic interrelationships between locomotor activity and brain biogenic amines. Messiha FS, et al. **Gen Pharmacol** 1990;21(4):459–64

Pulmonary extraction and metabolism of leukocytes, amines and labeled colloids. Atkins HL. **Int J Rad Appl Instrum [B]** 1990;17(1):3–11 (57 ref.)

Identification and purification of a functional amine transporter from bovine chromaffin granules. Stern-Bach Y, et al. **J Biol Chem** 1990 Mar 5;265(7):3961–6

Aminergic cellular organization in the gills of Aplysia species. Kurokawa M, et al. **J Neurobiol** 1989 Dec;20(8):731–45

Pharmacological evidence for the modulation of monoamine release by adenosine in the invertebrate nervous system. Barraco RA, et al. **J Neurochem** 1990 Jun;54(6):2002–6

Neurotransmitter changes in guinea-pig brain regions following soman intoxication. Fosbraey P, et al. **J Neurochem** 1990 Jan;54(1):72–9

Monoamine receptors in an animal model of affective disorder. Martin JV, et al. **J Neurochem** 1990 Oct; 55(4):1142–8

Marked amine and amine metabolite changes in Norrie disease patients with an X-chromosomal deletion affecting monoamine oxidase. Murphy DL, et al. **J Neurochem** 1990 Jan;54(1):242–7

Evidence of a monoaminergic-cholinergic imbalance related to visual hallucinations in Lewy body dementia. Perry EK, et al. **J Neurochem** 1990 Oct;55(4):1454–6

Intracerebroventricular administration of L-buthionine sulfoximine: a method for depleting brain glutathione. Pileblad E, et al. **J Neurochem** 1989 Dec;53(6):1878–82

Increased biogenic amine release in mouse hypothalamus following immunological challenge: antagonism by indomethacin. Mefford IN, et al. **J Neuroimmunol** 1990 Apr;27(1):55–61

Relationships between the effects of peripherally administered salmon calcitonin on calcaemia and brain biogenic amines. Gaggi R, et al. **Jpn J Pharmacol** 1989 Nov;51(3):309–20

Alcohol withdrawal-induced changes in brain biogenic amines in mice: influence of the genotype. Kempf E, et al. **Neurochem Res** 1990 Jan;15(1):69–75

Influence of active immunization of rats with conjugated serotonin-protein antigen on the content of biogenic amines in the brain and on behavioral responses. Basharova LA, et al. **Neurosci Behav Physiol** 1990 Mar–Apr;20(2):109–13

MPTP toxicity in the mouse brain and vitamin E. Odunze IN, et al. **Neurosci Lett** 1990 Jan 22;108(3):346–9

Rett syndrome: biogenic amines and metabolites in postmortem brain. Lekman A, et al. **Pediatr Neurol** 1989 Nov–Dec;5(6):357–62

MDMA transiently alters biogenic amines and metabolites in mouse brain and heart. Steele TD, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):223–7

Effect of trimipramine, an atypical tricyclic antidepressant, on the activities of various enzymes involved in the metabolism of biogenic amines. Yu PH, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(3):409–16

[Effects of the anti-ulcer agents on the amine contents and regulating enzyme activity of gastric mucosa during the healing process of acetic acid induced gastric ulcer in rats] Omata T, et al. **Nippon Yakurigaku Zasshi** 1990 Jan; 95(1):15–20 (Eng. Abstr.) **(Jpn)**

[Biogenic amines in the ganglia of the autonomic nervous system in emotional stress] Gorbunova AV, et al. **Fiziol Zh SSSR** 1990 Feb;76(2):176–83 (Eng. Abstr.) **(Rus)**

[Catalytic properties of monoamine oxidases during adaptation to altitude chamber hypoxia] Shatemirova KK, et al. **Kosm Biol Aviakosm Med** 1990 Mar–Apr;24(2):54–6 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Effect of platelet factors on migration of cultured bovine aortic endothelial and smooth muscle cells. Bell L, et al. **Circ Res** 1989 Oct;65(4):1057–65

Monoamines alter in vitro migration of chicken leukocytes. McCorkle FM, et al. **Dev Comp Immunol** 1990 Winter; 14(1):85–93

Effects of biogenic amines and adrenergic drugs on oviposition in the cattle tick Boophilus: evidence for octopaminergic innervation of the oviduct. Booth TF. **Exp Appl Acarol** 1989 Sep;7(4):259–66

PHYSIOLOGY

Monoaminergic innervation of the rat kidney: a quantitative study. Barajas L, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):F503–11

Polyamine regulation of heat-shock-induced spermidine N1-acetyltransferase activity. Fuller DJ, et al. **Biochem J** 1990 May 1;267(3):601–5

Involvement of alpha 1-adrenoceptors in chronotropic responses to endogenously released amines in the pithed rat. De Luca A, et al. **Clin Exp Pharmacol Physiol** 1988 Jan;15(1):33–41

The role of ornithine decarboxylase and polyamines in regeneration of the frog sciatic nerve. Edbladh M, et al. **Exp Neurol** 1990 Jan;107(1):63–8

Afferent connections of the forebrain cholinergic projection neurons, with special reference to monoaminergic and peptidergic fibers. Zaborszky L. **Experientia Suppl** 1989; 57:12–32 (115 ref.)

Myoclonus: analysis of monoamine, GABA, and other systems. Snodgrass SR. **FASEB J** 1990 Jul;4(10):2775–88 (81 ref.)

Interactions between glutamatergic and monoaminergic systems within the basal ganglia—implications for schizophrenia and Parkinson's disease. Carlsson M, et al. **Trends Neurosci** 1990 Jul;13(7):272–6 (61 ref.)

[Biochemicals and their functions in the brain—glucose, and amino acid and amine neurotransmitters] Kashiwamata S, et al. **No To Shinkei** 1989 Sep;41(9):851–61 (67 ref.) **(Jpn)**

[The role of biogenic amines in the neurohumoral mechanisms of postradiation gastrostasis in rats] Legeza VI, et al. **Radiobiologiia** 1989 Nov–Dec;29(6):821–3 (Eng. Abstr.) **(Rus)**

[The morphofunctional organization of aminergic systems and their role in cerebral motor activity] Limanskiĭ IuP. **Usp Fiziol Nauk** 1990 Apr–Jun;21(2):3–17 (97 ref.) **(Rus)**

RADIATION EFFECTS

[Status of the monoaminergic systems and enzymes of energy metabolism in rats exposed to electrostatic fields of 120 kV/m in a chronic experiment] Portnov FG, et al. **Gig Sanit** 1989 Oct;(10):89–90 **(Rus)**

[The effect on an impulse electromagnetic field on the bioamine allowance of the spinal ganglion in rats under whole-body exposure] Merkulova LM. **Radiobiologiia** 1990 Mar–Apr;30(2):252–5 (Eng. Abstr.) **(Rus)**

URINE

Urinary amines in Tourette's syndrome patients with and without phenylethylamine abnormality. Bornstein RA, et al. **Psychiatry Res** 1990 Mar;31(3):279–86

BIOGENIC MONOAMINES

ANALYSIS

Neurochemical measurements in the brains of mice infected with Trypanosoma brucei brucei (TREU 667). Amole B, et al. **Ann Trop Med Parasitol** 1989 Jun;83(3):225–32

Distribution of monoamines and metabolites in rabbit neostriatum, hippocampus and cortex. Reader TA, et al. **Brain Res Bull** 1989 Sep;23(3):237–47

The concentration of dopamine and related monoamines in arteries and some other tissues of the sheep. Juorio AV, et al. **Comp Biochem Physiol [C]** 1990;95(1):35–7

Plasma and brain kinetics of large neutral amino acids and of striatum monoamines in rats given aspartame. Romano M, et al. **Food Chem Toxicol** 1990 May;28(5):317–21

Effect of piracetam, a nootropic agent, on rat brain monoamines and prostaglandins. Bhattacharya SK, et al. **Indian J Exp Biol** 1989 Mar;27(3):261–4

Coupling of mono- and polyamino ligands to solid phases by nucleophilic attack on coupling groups that may be spontaneously hydrolysed [letter] Sewell RF, et al. **J Chromatogr** 1990 Jan 26;525(1):246–8

Monoamines: biochemical markers of suicide? Ricci LC, et al. **J Clin Psychol** 1990 Jan;46(1):106–16 (52 ref.)

Effect of isolation on brain monoamines and the behavior of mice in tests of exploration, locomotion, anxiety and behavioral 'despair'. Hilakivi LA, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):371–4

Hypothalamic monoamines measured by microdialysis in rats treated with 2-deoxy-glucose or d-fenfluramine. Shimizu H, et al. **Physiol Behav** 1989 Nov;46(5):799–807

[Biogenic monoamines in ovum cells and preimplantation embryos of mice] Sadykova KA, et al. **Biull Eksp Biol Med** 1990 Jun;109(6):577–8 (Eng. Abstr.) **(Rus)**

[Biogenic monoamines of the brain and spinal cord pia mater in vertebrates] Motavkin PA, et al. **Zh Evol Biokhim Fiziol** 1989 Sep–Oct;25(5):572–7 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Streptozotocin and alloxan produce alterations in rat brain monoamines independently of pancreatic beta cells destruction. Lacković Z, et al. **Life Sci** 1990;46(1):49–54

BLOOD

Monoamine uptake inhibition by plasma from healthy volunteers after single oral doses of the antidepressant milnacipran. Palmier C, et al. **Eur J Clin Pharmacol** 1989; 37(3):235–8

Relationships between clinical effects and monoamine metabolites and amino acids in sulpiride-treated schizophrenic patients. Alfredsson G, et al. **Psychopharmacology (Berl)** 1990;101(3):324–31

Monoamine metabolites and amino acids in serum from schizophrenic patients before and during sulpiride treatment. Alfredsson G, et al. **Psychopharmacology (Berl)** 1989;99(3):322–7

CEREBROSPINAL FLUID

Cerebrospinal fluid monoamine metabolites in alcoholic patients who attempt suicide. Roy A, et al. **Acta Psychiatr Scand** 1990 Jan;81(1):58–61

CSF monoamine levels in normal-weight bulimia: evidence for abnormal noradrenergic activity. Kaye WH, et al. **Am J Psychiatry** 1990 Feb;147(2):225–9

Neuroleptic malignant syndrome: a study of CSF monoamine metabolism. Nisijima K, et al. **Biol Psychiatry** 1990 Feb 1;27(3):280–8

Monoamines, glucose metabolism, and impulse control. Linnoila M, et al. **Psychopharmacol Bull** 1989;25(3):404–6

METABOLISM

Monoamines and the pituitary gland. Dahlström A, et al. **Acta Endocrinol (Copenh)** 1966 Feb;51(2):301–14

Serotonin depletion with P-chlorophenylalanine in the cat: effects on carbachol-induced defensive behavior and regional brain amine content. Romaniuk A, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(4):130–40

Physical exercise and brain monoamines: a review. Chaouloff F. **Acta Physiol Scand** 1989 Sep;137(1):1–13 (99 ref.)

Some effects of enflurane anaesthesia on biogenic monoamines in the brain and plasma of rats. Rosenberg PH, et al. **Br J Anaesth** 1974 Oct;46(10):708–13

Monoamine deficiency in a transgenic (Hprt–) mouse model of Lesch–Nyhan syndrome. Dunnett SB, et al. **Brain Res** 1989 Nov 6;501(2):401–6

The amine–depleting effects of 5,7–dihydroxytryptamine (5,7–DHT) in C57BL/6 mice do not increase with age. Finnegan KT, et al. **Brain Res** 1989 Sep 4;496(1–2):251–6

Behavioral, hormonal and neurochemical characteristics of aggressive alpha–mice. Hilakivi LA, et al. **Brain Res** 1989 Nov 13;502(1):158–66

Monoaminergic activity at the level of the hypothalamus and striatum: relationship to anticipated feeding and pancreatic insulin responses. Holmes LJ, et al. **Brain Res** 1989 Sep 4;496(1–2):204–10

Changes in brain monoamine levels and monoamine oxidase activity in the catfish, Clarias batrachus, during chronic treatments with mercurials. Kirubagaran R, et al. **Bull Environ Contam Toxicol** 1990 Jul;45(1):88–93

Modification of the indolamine content in neuroblastoma x glioma hybrid NG108–15 cells upon induced differentiation. Ghahary A, et al. **Cell Mol Neurobiol** 1989 Sep;9(3):343–55

High–performance liquid chromatographic analysis of monoamines and some of their gamma–glutamyl conjugates produced by the brain and other tissues of Helix aspersa (Gastropoda). Sloley BD, et al. **Cell Mol Neurobiol** 1990 Jun;10(2):175–92

Effects of ginseng root saponins on brain monoamines and serum corticosterone in heat–stressed mice. Yuan WX, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Nov;10(6):492–6

Anticonvulsant activity of di–n–propylacetate and brain monoamine metabolism in the rat. Abed WT. **Clin Exp Pharmacol Physiol** 1990 Jan;17(1):11–6

Measurement of monoamines and monoamine metabolites in various brain regions of six shark species. Howard SB, et al. **Comp Biochem Physiol [C]** 1989;94(2):493–8

Effects of calcium antagonists on biogenic amines in discrete brain areas. Gaggi R, et al. **Eur J Pharmacol** 1990 Jun 8; 181(3):187–97

Effects of lithium on alterations of pharmacokinetics of imipramine and on the related changes of monoamines in rat brain. Yoshida T, et al. **Eur J Pharmacol** 1989 Dec 7;173(2–3):143–9

Alterations in brain monoamine neurotransmitter release at high pressure. Gilman SC, et al. **Exp Brain Res** 1989; 78(1):179–84

Interaction of cholecystokinin and diazepam: effects on brain monoamines. Rybarczyk MC, et al. **Fundam Clin Pharmacol** 1990;4(2):245–53

Changes in brain biogenic monoamines induced by the nootropic drugs adafenoxate and meclofenoxate and by citicholine (experiments on rats). Petkov VD, et al. **Gen Pharmacol** 1990;21(1):71–5

Brain biogenic amine levels after methanol administration: possible mechanism of action on central monoaminergic neurons in discrete areas of brain in Wistar rat. Jeganathan PS, et al. **Indian J Physiol Pharmacol** 1989 Jul–Sep; 33(3):151–6

Structural and neurochemical effects in mouse cerebellum following neonatal methylazoxymethanol and 6–hydroxydopamine treatment. Luthman J, et al. **Int J Dev Neurosci** 1990;8(1):107–18

Psychological stress and oxytocin treatment during pregnancy affect central norepinephrine, dopamine and serotonin in lactating rats. Muir JL, et al. **Int J Neurosci** 1989 Oct;48(3–4):191–203

Event–related potentials and monoamines in autistic children on a clinical trial of fenfluramine. Oades RD, et al. **Int J Psychophysiol** 1990 Apr;8(3):197–212

Disulfiram administration affects substance P–like immunoreactive and monoaminergic neural systems in rodent brain. Marchand JE, et al. **J Biol Chem** 1990 Jan 5;265(1):264–73

Plant–derived neurotoxic amino acids (beta–N–oxalylamino–L–alanine and beta–N–methylamino–L–alanine): effects on central monoamine neurons. Lindström H, et al. **J Neurochem** 1990 Sep;55(3):941–9

Denervation and hyperinnervation in the nervous system of diabetic animals. I. The autonomic neuronal dystrophy of the gut. Di Giulio AM, et al. **J Neurosci Res** 1989 Nov; 24(3):355–61

Denervation and hyperinnervation in the nervous system of diabetic animals. II. Monoaminergic and peptidergic alterations in the diabetic encephalopathy. Di Giulio AM, et al. **J Neurosci Res** 1989 Nov;24(3):362–8

The effect of monoamine depletors on metrazol induced convulsions and brain gamma–aminobutyric acid (GABA) contents in rats. Abed WT. **J Pharm Pharmacol** 1989 Nov; 41(11):807–8

Ischemia–induced changes in brain levels of monoamines and their metabolites of mice and rats: some protective effects of naftidrofuryl. Nakamuta H, et al. **J Pharmacobiodyn** 1989 Jul;12(7):429–36

Effects of season, pinealectomy, and blinding, alone and in combination, on hypothalamic monoaminergic activity in the teleost Channa punctatus (Bloch). Khan IA, et al. **J Pineal Res** 1990;8(3):277–87

Effects of a major androgen–dependent urinary protein, alpha 2u–globulin on the pituitary–gonadal axis and hypothalamic monoamines in adult male mice. Ghosh PK, et al. **Life Sci** 1990;47(8):721–8

Caffeine and regional brain monoamine utilization in mice. Hadfield MG, et al. **Life Sci** 1989;45(26):2637–44

Regional brain monoamine levels and utilization in middle–aged rats. Hadfield MG, et al. **Life Sci** 1990; 46(4):295–9

Determination of monoamines and both forms of monoamine oxidase in the rat's substantia nigra during postnatal development. Venero JL, et al. **Life Sci** 1989; 45(14):1277–83

Changes in monoamines and their metabolite levels in substantia nigra of aged rats. Venero JL, et al. **Mech Ageing Dev** 1989 Sep;49(3):227–33

Different long–term effects of bilateral and unilateral nucleus basalis lesions on rat cerebral cortical neurotransmitter content. Arendash GW, et al. **Neurochem Res** 1989 Nov; 14(11):1113–8

Monoamines and metabolites in autopsied brain tissue from cirrhotic patients with hepatic encephalopathy. Bergeron M, et al. **Neurochem Res** 1989 Sep;14(9):853–9

Determination of monoamines in rat brain regions after chronic administration of lithium. Casado M, et al. **Neurochem Res** 1989 Sep;14(9):905–8

Monoamine and amino acid content in brain regions of Brattleboro rats. Dawson R Jr, et al. **Neurochem Res** 1990 Jul;15(7):755–61

The effects of sho–saiko–to–go–keishi–ka–shakuyaku–to (TJ–960) on ischemia–induced changes of brain acetylcholine and monoamine levels in gerbils. Haba K, et al. **Neurochem Res** 1990 May;15(5):487–93

Effects of a new cholecystokinin analogue (JMV 236) on food intake and brain monoamines in the rat. Gourch A, et al. **Neuropeptides** 1990 Jan;15(1):37–41

Enantiomeric differences in the effects of 3,4–methylenedioxymethamphetamine on extracellular monoamines and metabolites in the striatum of freely–moving rats: an in vivo microdialysis study. Hiramatsu M, et al. **Neuropharmacology** 1990 Mar; 29(3):269–75

Effect of chronic caffeine administration on monoamine and monoamine metabolite concentrations in rat brain. Kirch DG, et al. **Neuropharmacology** 1990 Jun;29(6):599–602

Conflict behavior and dynamics of monoamines of various brain nuclei in rats. Sakurai–Yamashita Y, et al. **Neuropharmacology** 1989 Oct;28(10):1067–73

Quantitative autoradiography of the rat brain vesicular monoamine transporter using the binding of [3H]dihydrotetrabenazine and 7–amino–8–[125I]iodoketanserin. Darchen F, et al. **Neuroscience** 1989;33(2):341–9

Neurophysiological consequences of amphetamine administration. Groves P, et al. **NIDA Res Monogr** 1988; 90:213–22 (33 ref.)

Effects of 24–hr fasting on methamphetamine– and apomorphine–induced locomotor activities, and on monoamine metabolism in mouse corpus striatum and nucleus accumbens. Itoh T, et al. **Pharmacol Biochem Behav** 1990 Feb;35(2):391–6

Effects of opiate agonists and an antagonist on food intake and brain neurotransmitters in normophagic and obese "cafeteria" rats. Robert JJ, et al. **Pharmacol Biochem Behav** 1989 Nov;34(3):577–83

Effect of isopropanol on rat brain monoamine levels. Gorkal AR, et al. **Pharmacol Toxicol** 1989 Nov;65(5):390–2

Effect of amperozide on the synthesis and turnover of monoamines in rat brain. Pettersson G, et al. **Pharmacol Toxicol** 1990;66 Suppl 1:40–4

Biochemical substrates in normal aging and Alzheimer's disease. Wallin A, et al. **Pharmacopsychiatry** 1990 Feb;23 Suppl 2:37–43 (37 ref.)

Effects of chronic administration of ondansetron (GR38032F), a selective 5–HT3 receptor antagonist, on monoamine metabolism in mesolimbic and nigrostriatal dopaminergic neurons and on striatal D2–receptor binding. Koulu M, et al. **Psychopharmacology (Berl)** 1990; 101(2):168–71

Effect on radiolabelled–monoamine uptake in vitro of plasma taken from healthy volunteers administered the antidepressant sibutramine HCl. Luscombe GP, et al. **Psychopharmacology (Berl)** 1990;100(3):345–9

Plasma moclobemide and metabolites: lack of correlation with clinical response and biogenic amines. Fritze J, et al. **Psychopharmacology (Berlin)** 1989;99(2):252–6

Effects of chronic haloperidol on vitamin E levels and monoamine metabolism in rats fed normal and vitamin E deficient diets. VonVoigtlander PF, et al. **Res Commun Chem Pathol Pharmacol** 1990 Jun; 68(3):343–52

Effect of MCI–186 on ischemia–induced changes in monoamine metabolism in rat brain. Oishi R, et al. **Stroke** 1989 Nov;20(11):1557–64

Effects of high–dose fenfluramine treatment on monoamine uptake sites in rat brain: assessment using quantitative autoradiography. Appel NM, et al. **Synapse** 1990;6(1):33–44

Levels of biogenic amines, their metabolites, and tyrosine hydroxylase activity in the human epileptic temporal cortex. Pintor M, et al. **Synapse** 1990;5(2):152–6

[Effect of monoamine neurotransmitters in the hypothalamus in a cortisol–induced rat model of yang–deficiency] Chen M, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1990 May; 10(5):292–4, 262 (Eng. Abstr.) **(Chi)**

[Monoamine metabolism after transient global ischemia. Mechanism of delayed postischemic hypoperfusion] Maruki C. **Neurol Med Chir (Tokyo)** 1989 Dec;29(12):1093–100 (Eng. Abstr.) **(Jpn)**

[Studies on monoamine metabolism in the rat brain with overdosage of manganese] Kawata F. **Nippon Hoigaku Zasshi** 1990 Apr;44(2):137–46 (Eng. Abstr.) **(Jpn)**

[Behavioral characteristics associated with acoustic stimulation and the neurochemical alterations of monoaminergic systems in rat brain at the steady state of repeated methamphetamine administration] Akita H, et al. **Nippon Yakurigaku Zasshi** 1990 Jun;95(6):327–33 (Eng. Abstr.) **(Jpn)**

[Changes in cerebral level of monoamines by Japanese encephalitis virus infection] Yamashita Y, et al. **Uirusu** 1989 Jun;39(1):47–54 (Eng. Abstr.) **(Jpn)**

[Interaction of opioid peptides and monoamines in the mechanism of respiratory behavior regulation of Helix pomatia: analysis of isolated neurons] D'iakonova TL. **Dokl Akad Nauk SSSR** 1989;308(5):1264–9 **(Rus)**

[A pharmacological analysis of the central monoaminergic mechanisms of the development of neurogenic stomach damage] Bul'on VV, et al. **Farmakol Toksikol** 1990 Mar–Apr;53(2):36–8 (Eng. Abstr.) **(Rus)**

[Hypothalamic monoamines in the postnatal ontogeny of rats] Gun'kov SV. **Probl Endokrinol (Mosk)** 1990 Mar–Apr; 36(2):63–6 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Induction–of the vesicular monoamine transporter by elevated potassium concentration in cultures of rat sympathetic neurons. Desnos C, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1–2):161–6

Monoamine–accumulating ganglion cell type of the cat's retina. Dacey DM. **J Comp Neurol** 1989 Oct 1;288(1):59–80

PHARMACOLOGY

Effect of putative neuromodulators on rhythmic buccal motor output in Lymnaea stagnalis. Kyriakides MA, et al. **J Neurobiol** 1989 Oct;20(7):635–50

Hypoxia increases endothelin release in bovine endothelial cells in culture, but epinephrine, norepinephrine, serotonin, histamine and angiotensin II do not. Hieda HS, et al. **Life Sci** 1990;47(3):247–51

[Analysis of the effects of oxytocin, vasopressin, angiotensin, serotonin and histamine on the blood flow in the reproductive organs of swine the during estrous cycle] Dynarowicz I, et al. **Pol Arch Weter** 1988;28(1–2):99–111 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Monoamines and extracellular potassium concentration in the amphibian spinal cord. Davidoff RA, et al. **Acta Physiol Scand Suppl** 1989;582:52

Hypothalamic neuropeptide Y, galanin, and amines. Concepts of coexistence in relation to feeding behavior. Leibowitz SF. **Ann N Y Acad Sci** 1989;575:221–33; discussion 233–5 (93 ref.)

Effect of amantadine on motility of reserpinized mice as a function of brain biogenic amines and mouse strains. Messiha FS. **Brain Res Bull** 1989 Oct–Nov;23(4–5):267–71

Impaired thyroid function provoked by neonatal treatment with drugs affecting the maturation of monoaminergic and opioidergic neurons. Mess B, et al. **Exp Clin Endocrinol** 1989 Sep;94(1–2):73–81

Anatomical relationships of monoaminergic and neuropeptide Y–containing fibres with luteinizing hormone–releasing hormone systems in the preoptic area of the sheep brain: immunohistochemical studies. Tillet Y, et al. **J Chem Neuroanat** 1989 Nov–Dec;2(6):319–26

Marked locomotor stimulation in monoamine–depleted mice following treatment with atropine in combination with clonidine. Carlsson M, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(4):317–22

Some correlations between procaine–induced convulsions and monoamines in the spinal cord of rats. Sawaki K, et al. **Jpn J Pharmacol** 1989 Nov;51(3):369–76

A comparative analysis of monoaminergic involvement in the spinal antinociceptive action of DAMPGO and DPDPE. Spanos LJ, et al. **Pain** 1989 Dec;39(3):329–35

The effects of drugs on the processes regulating the functional activity of brain monoamines. Grahame–Smith DG. **Prog Neuropsychopharmacol** 1979;3(1–3):15–23 (22 ref.)

The monoaminergic innervation of the cerebral cortex is not diffuse and nonspecific. Parnavelas JG, et al. **Trends Neurosci** 1989 Sep;12(9):315–9 (27 ref.)

[Central monoaminergic neurons] Maeda T. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(4 Suppl):638–45 **(Jpn)**

[The role of central monoamine neurons in regulating voluntary ethanol consumption] Kiiianmaa K. **Farmakol Toksikol** 1989 Sep–Oct;52(5):4–10 (41 ref.) (Eng. Abstr.) **(Rus)**

[Basic patterns in the morphofunctional evolution of the monoaminergic structures of the hypothalamus] Konstantinova MS. **Zh Evol Biokhim Fiziol** 1989 Sep–Oct; 25(5):663–71 (35 ref.) **(Rus)**

[Electrical activity of the visual cortex under conditions of altered monoamine levels in the brain of animals] Vorob'ev

VV, et al. **Zh Vyssh Nerv Deiat** 1990 Jan–Feb;40(1):119–24 (Eng. Abstr.) **(Rus)**

BIOGENIC POLYAMINES

Hyperthermia, polyamine depletion, and inhibition of X-ray-induced DNA strand break repair. Snyder RD, et al. **Radiat Res** 1989 Oct;120(1):121–8

ANALYSIS

[Ornithine decarboxylase activity and polyamine levels in human thyroid tumor tissue] Yamamoto O. **Nippon Geka Gakkai Zasshi** 1989 Jul;90(7):1049–56 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Effect of ethanol on polyamine synthesis during liver regeneration in rats. Diehl AM, et al. **J Clin Invest** 1990 Feb;85(2):385–90

Endocrinology and polyamines. Aslam M, et al. **JPMA** 1989 Sep;39(9):247–9 (26 ref.)

The effects of graded doses of a cholecystokinin-like peptide with and without secretin on pancreatic growth and synthesis of RNA and polyamines in rats. Haarstad H, et al. **Scand J Gastroenterol** 1989 Oct;24(8):907–15

Hexadecane-induced skin hyperplasia in the hairless rat: time course of histological and biochemical events related to the synthesis of polyamines and DNA. Bouclier M, et al. **Skin Pharmacol** 1988;1(1):24–9

Molecular genetics of polyamine synthesis in eukaryotic cells. Heby O, et al. **Trends Biochem Sci** 1990 Apr;15(4):153–8 (30 ref.)

[Relation between the energy parameters and the free pool of polyamines in Escherichia coli during synchronous growth] Tkachenko AG, et al. **Mikrobiologiia** 1990 Jan–Feb;59(1):12–8 (Eng. Abstr.) **(Rus)**

[Changes in the pool of polyamines [correction of polyvitamins] during transition from anaerobic to aerobic conditions and localization of enzymes for their synthesis in Escherichia coli cells] Tkachenko AG, et al. **Mikrobiologiia** 1989 Nov–Dec;58(6):885–91 (Eng. Abstr.) **(Rus)**

METABOLISM

Trophic control of the ornithine decarboxylase/polyamine system in neonatal rat brain regions: lesions caused by 6-hydroxydopamine produce effects selective for cerebellum. Lau C, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1–2):167–73

Arcaine is a competitive antagonist of the polyamine site on the NMDA receptor. Reynolds IJ. **Eur J Pharmacol** 1990 Feb 27;177(3):215–6

A study on the vital reaction in wounded skin: simultaneous determination of histamine and polyamines in injured rat skin by high-performance liquid chromatography. Maeno Y, et al. **Forensic Sci Int** 1990 Jul;46(3):255–68

Polyamine transport in mammalian cells. Seiler N, et al. **Int J Biochem** 1990;22(3):211–8 (79 ref.)

Mononuclear cell polyamine content associated with myeloid maturation in patients with leukemia during administration of polyamine inhibitors. Maddox AM, et al. **Invest New Drugs** 1989 Jul;7(2–3):119–29

Inhibition of bone resorption by alpha-difluoromethylornithine may not be mediated by polyamine depletion. Lucas RC, et al. **J Bone Miner Res** 1989 Dec;4(6):901–9

Putrescine N-acetyltransferase in Onchocerca volvulus and Ascaris suum, an enzyme which is involved in polyamine degradation and release of N-acetylputrescine. Wittich RM, et al. **Mol Biochem Parasitol** 1990 Jan 1;38(1):13–7

Polyamine concentrations in pancreatic tissue, serum, and urine of patients with pancreatic cancer. Löser C, et al. **Pancreas** 1990 Mar;5(2):119–27

Experience affects cortical but not subcortical polyamines. Ferchmin PA, et al. **Pharmacol Biochem Behav** 1990 Jan; 35(1):255–8

Effect of dietary putrescine on whole body growth and polyamine metabolism. Smith TK. **Proc Soc Exp Biol Med** 1990 Sep;194(4):332–6

[Antitumor effect of alpha-difluoromethylornithine (DFMO) changes in ornithine decarboxylase (ODC) activity and polyamine (PA) levels in human tumor transplanted into nude mice] Umemoto S. **Nippon Geka Gakkai Zasshi** 1989 May;90(5):650–60 (Eng. Abstr.) **(Jpn)**

[The influence of theophylline on polyamine metabolism and colonic carcinogenesis induced by 1.2-dimethylhydrazine in mice] Umemoto S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Oct;86(10):2379–86 (Eng. Abstr.) **(Jpn)**

[The role of intracellular pool of polyamines in the regulation of metabolism in Escherichia coli during aerobic–anaerobic transitions] Tkachenko AG, et al. **Mikrobiologiia** 1989 Sep–Oct;58(5):709–15 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Effects of dietary polyamine precursors on the metabolism and tissue concentrations of amino acids in the rat. Smith TK, et al. **Ann Nutr Metab** 1989;33(3):143–52

Binding of [3H]ifenprodil, a novel NMDA antagonist, to a polyamine-sensitive site in the rat cerebral cortex. Schoemaker H, et al. **Eur J Pharmacol** 1990 Feb 6; 176(2):249–50

Polyamines induce precocious development in rats. Possible interaction with growth factors. Gilad GM, et al. **Int J Dev Neurosci** 1989;7(6):641–53

Effect of polyamines on mitochondrial F1-ATPase catalyzed reactions. Igarashi K, et al. **J Biochem (Tokyo)** 1989 Aug; 106(2):294–8

Transcriptional effects of polyamines on ribosomal proteins and on polyamine-synthesizing enzymes in Escherichia coli. Huang SC, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3464–8

[The effect of Cu2+, Zn2+ cations and biogenic amines on the nuclear poly(ADP-ribose) polymerase activity in the rat brain] Zaalishvili TM, et al. **Biokhimiia** 1990 Apr; 55(4):659–64 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Specific regulation by endogenous polyamines of translational initiation of S-adenosylmethionine decarboxylase mRNA in Swiss 3T3 fibroblasts. White MW, et al. **Biochem J** 1990 Jun 15;268(3):657–60

In vitro regulation of mammary glucose-6-phosphate dehydrogenase activity by palmitoyl coenzyme A, acetate, and polyamines. Young AJ, et al. **Proc Soc Exp Biol Med** 1990 Apr;193(4):274–9

TOXICITY

Acetylated polyamines in lungs from rats with monocrotaline-induced pneumotoxicity. Orlinska U, et al. **Fundam Appl Toxicol** 1989 Aug;13(2):277–84

BIOGRAPHY

Life and work of Samuel Dodd Clippingdale, medical antiquarian. Furdell EL. **J R Soc Med** 1989 Dec; 82(12):758–60

[Biography and history of medicine] Saudan G. **Rev Med Suisse Romande** 1989 Dec;109(12):1033–9 **(Fre)**

BIOHAZARDS CONTAINMENT see **CONTAINMENT OF BIOHAZARDS**

BIOLOGICAL ASSAY

Cyclic AMP response to recombinant human relaxin by cultured human endometrial cells—a specific and high throughput in vitro bioassay. Fei DT, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):214–22

Simple biological assay for the error rate upon cloning of synthetic oligodeoxyribonucleotides. Mandecki W, et al. **Biotechniques** 1990 Jul;9(1):56–9

Importance of bioassay volume in toxicity tests using algae and aquatic invertebrates. Stratton GW, et al. **Bull Environ Contam Toxicol** 1990 Mar;44(3):420–7

In vitro cytotoxicity assays. Potential alternatives to the Draize ocular allergy test. Borenfreund E, et al. **Cell Biol Toxicol** 1984 Oct;1(1):55–65

The quantification of steroidogenesis-stimulating activity in testicular interstitial fluid by an in vitro bioassay employing adult rat Leydig cells. Hedger MP, et al. **Endocrinology** 1990 Oct;127(4):1967–77

Establishment of TEST-yolk buffer enhanced sperm penetration assay limits for fertile males. Falk RM, et al. **Fertil Steril** 1990 Jul;54(1):121–6

Detection of endotoxin in human in vitro fertilization by the zona-free mouse embryo assay. Montoro L, et al. **Fertil Steril** 1990 Jul;54(1):109–12

Measurement of human embryo-derived platelet-activating factor (PAF) using a quantitative bioassay of platelet aggregation. Collier M, et al. **Hum Reprod** 1990 Apr; 5(3):323–8

Synthesis and biological activities of oxytocin and lysine vasopressin analogs containing glutamic acid gamma-hydrazide in position 4. Gazis D, et al. **Int J Pept Protein Res** 1989 Nov;34(5):353–7

High-performance liquid chromatographic determination of teicoplanin in plasma: comparison with a microbiological assay. Georgopoulos A, et al. **J Chromatogr** 1989 Sep 29; 494:340–6

Abnormal induction of aromatase activity by dexamethasone in fibroblasts from a patient with cortisol resistance. Berkovitz GD, et al. **J Clin Endocrinol Metab** 1990 Jun; 70(6):1608–11

Biological to immunological ratios: reevaluation of a concept [editorial] Chappel S. **J Clin Endocrinol Metab** 1990 Jun; 70(6):1494–5

A new approach for calcitonin determination based on target cell responsiveness. Zaidi M, et al. **J Endocrinol Invest** 1990 Feb;13(2):119–26

Biological parameter of environmental pollution. Köck M. **J Hyg Epidemiol Microbiol Immunol** 1989;33(4 Suppl):557–60

Anti-interferon antibodies to interferon-alpha 2b: results of comparative assays and clinical perspective. Spiegel RJ, et al. **J Interferon Res** 1989 Sep;9 Suppl 1:S17–24

Cryo-preservation of Lactobacillus leichmannii for vitamin B12 microbiological assay. Kelleher BP, et al. **Med Lab Sci** 1990 Apr;47(2):90–6

A comparison of alkaline phosphatase and radiolabelled gene probes with bioassays for enterotoxigenic Escherichia coli. Bopp CA, et al. **Mol Cell Probes** 1990 Jun;4(3):193–203

Platelet activating factor and sheep platelets: a sensitive new bioassay. Moon DG, et al. **Thromb Res** 1990 Feb 15; 57(4):551–64

[Interpretation of gonadotropin determinations; biological versus immunological activity] Fauser BC, et al. **Ned Tijdschr Geneeskd** 1990 May 19;134(20):992–5 (22 ref.) **(Dut)**

[A well-tolerated hypokalemia ... or the justification for preoperative biological tests (letter)] Lévy G, et al. **Presse Med** 1989 Dec 16–23;18(42):2068 **(Fre)**

[Introduction to biological assay] Giorgi G. **Riv Eur Sci Med Farmacol** 1988 Nov;10(5):431–57 (14 ref.) (Eng. Abstr.) **(Ita)**

INSTRUMENTATION

Clara cell cultures from the mouse and their reaction to bronchiolar toxins. Richards RJ, et al. **Environ Health Perspect** 1990 Apr;85:119–27

Bioassays with a microphysiometer. Owicki JC, et al. **Nature** 1990 Mar 15;344(6263):271

METHODS

Evaluation of a microbiological method for zidovudine blood level determination [letter] Etesse-Carsenti H, et al. **AIDS** 1990 Mar;4(3):265

Bioassay for determination of human serum luteinizing hormone (LH): a routine clinical method. Stadler U, et al. **Andrologia** 1989 Nov–Dec;21(6):580–3

A new sensitive bioassay for precise quantification of interferon activity as measured via the mitochondrial dehydrogenase function in cells (MTT-method). Berg K, et al. **APMIS** 1990 Feb;98(2):156–62

A rapid, sensitive and reliable assay for inhibin bioactivity. Lee VW, et al. **Aust J Biol Sci** 1987;40(1):105–13

Culture of fungi on cyanoacrylate skin surface strippings—a quantitative bioassay for evaluating antifungal drugs. Rurangirwa A, et al. **Clin Exp Dermatol** 1989 Nov; 14(6):425–8

Bioassay of chondrocyte differentiation by bone morphogenetic protein. Nogami H, et al. **Clin Orthop** 1990 Sep;(258):295–9

Effect of LH-RH on the release of sulfated lutropin: a potential in vitro bioassay for LH-RH. Kohli R, et al. **Endocrinol Jpn** 1990 Feb;37(1):27–37

Comparison of the synthetic oligonucleotide gene probe and infant mouse bioassay for detection of enterotoxigenic Escherichia coli. Cryan B. **Eur J Clin Microbiol Infect Dis** 1990 Mar;9(3):229–32

A sensitive chemiluminescence assay for pertussis toxin and for evaluation of cell-free pertussis toxoids. Craig FF, et al. **FEMS Microbiol Immunol** 1988 Jul;1(2):75–9

WEHI 164 subclone 13 assay for TNF: sensitivity, specificity, and reliability. Eskandari MK, et al. **Immunol Invest** 1990 Feb;19(1):69–79

A simple assay for tumor necrosis factor using HEp-2 target cells. Müzes G, et al. **J Clin Lab Immunol** 1989 Sep; 30(1):41–4

A sensitive antiviral neutralization bioassay for measuring antibodies to interferons. Hansen MB, et al. **J Immunol Methods** 1990 Mar 9;127(2):241–8

Bacillus thuringiensis potency bioassays against Heliothis armigera, Earias insulana, and Spodoptera littoralis larvae based on standardized diets. Navon A, et al. **J Invertebr Pathol** 1990 May;55(3):387–93

[Plasma and urinary kinin assay and the clinical significance] Omata K, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:117–21 **(Jpn)**

[Bioassay using spermatozoa suspensions] E'skov AP, et al. **Gig Tr Prof Zabol** 1989;(8):55–7 **(Rus)**

BIOLOGICAL AVAILABILITY

Bioavailability of minerals. A symposium on In Vitro Measurements of Mineral Bioavailability. New Orleans, LA, August 31, 1987. Proceedings. **Biol Trace Elem Res** 1989 Jan–Feb;19(1–2):1–127

The effects of food on drug bioavailability. Winstanley PA, et al. **Br J Clin Pharmacol** 1989 Dec;28(6):621–8 (69 ref.)

Use of metabolite AUC data in bioavailability studies to discriminate between absorption and first-pass extraction. Weiss M. **Clin Pharmacokinet** 1990 May;18(5):419–22

Center of gravity of drug level curves: a model-independent parameter useful in bioavailability studies. Veng-Pedersen P, et al. **J Pharm Sci** 1989 Oct;78(10):848–54

Application of NONMEM to routine bioavailability data. Graves DA, et al. **J Pharmacokinet Biopharm** 1990 Apr; 18(2):145–60

Bioavailability estimation by semisimultaneous drug administration: a Monte Carlo simulation study. Karlsson MO, et al. **J Pharmacokinet Biopharm** 1990 Apr; 18(2):103–20

Estimation of bioavailability on a single occasion after semisimultaneous drug administration. Karlsson MO, et al. **Pharm Res** 1989 Sep;6(9):817–21

Relation between in vitro and in vivo assessment of amino acid availability. Galibois I, et al. **Reprod Nutr Dev** 1989; 29(4):495–507

Outlier detection in bioavailability/bioequivalence studies. Chow SC, et al. **Stat Med** 1990 May;9(5):549–58

BIOLOGICAL AVAILABILITY, NUTRITIONAL see **NUTRITIVE VALUE**

BIOLOGICAL CLOCKS

Biological rhythms: fundamental aspects. Odeblad E. **Arctic Med Res** 1988;47 Suppl 1:199–200

Seasonal rhythm of platelet 3H–imipramine binding in normal controls. DeMet EM, et al. **Biol Psychiatry** 1989 Sep; 26(5):489–95

Quantized cell cycle times: interaction between a relaxation oscillator and ultradian clock pulses. Lloyd D, et al. **Biosystems** 1990;23(4):305–10

Cryothermal mapping of the sinus node in dogs: a simple method of localising dominant and latent pacemakers. Hariman RJ, et al. **Cardiovasc Res** 1989 Mar;23(3):231–8

Clock mutations alter developmental timing in Drosophila. Kyriacou CP, et al. **Heredity (Edinburgh)** 1990 Jun;64 (Pt 3):395–401

Ultradian rhythms of right and left hemisphere function. Gordon HW, et al. **Int J Neurosci** 1989 Jul;47(1–2):57–65

Ultradian laterality cycle in stereotyped behavior of a severely mentally retarded patient. Meier–Koll A. **Int J Neurosci** 1989 Jul;47(1–2):103–13

Ultradian rhythms in cerebral laterality tested by a verbal dichotic listening paradigm. Meier–Koll A. **Int J Neurosci** 1989 Jul;47(1–2):115–24

How hamsters keep time: the 6 pm to 6 am light–sensitive period. Alleva JJ. **J Pineal Res** 1989;7(3):265–80

Mechanisms of current activation by intracellular Ca2+ ions in two types of pacemaker neurons. Müller TH, et al. **J Protein Chem** 1989 Jun;8(3):430–2

Theoretical computation of phase locking in embryonic atrial heart cell aggregates. Zeng WZ, et al. **J Theor Biol** 1990 Jul 24;145(2):225–44

Effect of different light–dark schedules on survival from heart failure. Tapp WN, et al. **Life Sci** 1990;46(24):1739–46

An antibody to the Drosophila period protein recognizes circadian pacemaker neurons in Aplysia and Bulla. Siwicki KK, et al. **Neuron** 1989 Jul;3(1):51–8

Shiftwork: effects on sleep and health with recommendations for medical surveillance and screening. Scott AJ, et al. **Occup Med** 1990 Apr–Jun;5(2):273–99 (174 ref.)

Vigilance ratios implicate biological rhythms. Richardson N. **Percept Mot Skills** 1990 Feb;70(1):143–54

[Correlation of the date of recurrence in patients with heart disease and biorhythms] Zhao Z. **Chung Hsi I Chieh Ho Tsa Chih** 1990 Mar;10(3):178–9 **(Chi)**

[Jet lag and biological rhythm] Fujishiro K. **Kokyu To Junkan** 1990 Jul;38(7):649–54 **(Jpn)**

[Biological rhythm in cardiovascular system with special reference to the effect of climate change] Yanaga T, et al. **Kokyu To Junkan** 1990 Jul;38(7):613–20 **(Jpn)**

[Discrete macroscopic fluctuations in processes of various nature] Shnol' SE, et al. **Biofizika** 1989 Jul–Aug; 34(4):711–22 (76 ref.) (Eng. Abstr.) **(Rus)**

[Interaction of mitotic oscillators as a source of variability of cell cycle duration] Volkov EI. **Biofizika** 1989 Jul–Aug; 34(4):647–50 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Inhibitors of protein kinase C prolong the falling phase of each free–calcium transient in a hormone–stimulated hepatocyte. Sanchez–Bueno A, et al. **Biochem J** 1990 Jun 15;268(3):627–32

Prolactin counteracts effects of short day lengths on pelage growth in the meadow vole, Microtus pennsylvanicus. Smale L, et al. **J Exp Zool** 1990 Feb;253(2):186–8

Activation of three types of membrane currents by various divalent cations in identified molluscan pacemaker neurons. Müller TH, et al. **J Gen Physiol** 1989 Dec;94(6):997–1014

PHYSIOLOGY

Flight attendants' desynchronosis after rapid time zone changes. Suvanto S, et al. **Aviat Space Environ Med** 1990 Jun;61(6):543–7

The timer. Miller JL. **Behav Sci** 1990 Jul;35(3):164–96 (48 ref.)

Distinct mechanisms of modulation in a neuronal oscillator generate different social signals in the electric fish Hypopomus. Kawasaki M, et al. **J Comp Physiol [A]** 1989 Oct;165(6):731–41

Circadian pacemaker neurons: membranes and molecules. Jacklet JW. **J Physiol (Paris)** 1988–89;83(3):164–71

Basis for the naturally occurring activity of rostral ventrolateral medullary sympathoexcitatory neurons. Barman SM, et al. **Prog Brain Res** 1989;81:117–29

Sympathoexcitatory neurons of the rostroventrolateral medulla and the origin of the sympathetic vasomotor tone. Guyenet PG, et al. **Prog Brain Res** 1989;81:105–16

[Food and health. Can fasting with water or glucose influence the biological clock?] Röjdmark S, et al. **Lakartidningen** 1989 Dec 20;86(51):4520–2 **(Swe)**

BIOLOGICAL DRESSINGS see under **BANDAGES**

BIOLOGICAL ENERGY SOURCES see **BIOELECTRIC ENERGY SOURCES**

BIOLOGICAL FACTORS

Third International Workshop on Cells and Cytokines in Bone and Cartilage. 8–11 April 1990, Davos, Switzerland. Abstracts. **Calcif Tissue Int** 1990;46 Suppl 2:A1–61

Lymphokines, monokines, cytokines. Sorg C. **Chem Immunol** 1990;49:82–9

Bioactive factors in bone development and repair. A conference held in honor of Dr. Marshall R. Urist. Proceedings. **Connect Tissue Res** 1990;24(1):1–81

Hilton head revisited—cytokine explosion of the 80s takes shape for the 90s [news] Durum SK, et al. **Immunol Today** 1990 Apr;11(4):103–6

T cells and neutrophils exhibit differential adhesion to cytokine–stimulated endothelial cells. Thornhill MH, et al. **Immunology** 1990 Feb;69(2):287–92

Abstracts. First international symposium: Cytokines in hemopoiesis, oncology, and AIDS. June 14–17, 1989, Hannover, Federal Republic of Germany. **Mol Biother** 1989;1 Suppl:157 abstracts

Cytokines in cancer therapy. Parkinson DR. **Urology** 1989 Oct;34(4 Suppl):69–74; discussion 87–96 (76 ref.)

[Cytokines and their receptors networks: biology and therapeutic possibilities] Favrot M, et al. **Pediatrie** 1989; 44(7):531–8 (Eng. Abstr.) **(Fre)**

[Mechanisms of reproduction by exogenous RNA of specific effects of biologically active substances] Smirnov AV. **Farmakol Toksikol** 1989 Jul–Aug;52(4):111–9 (71 ref.) (Eng. Abstr.) **(Rus)**

[Clinico–pharmacological aspects of endogenous physiologically active compounds] Mashkovskiĭ MD. **Klin Med (Mosk)** 1990 Apr;68(4):3–15 **(Rus)**

ADMINISTRATION & DOSAGE

The therapeutic activity in cancer of IL–2 in combination with other cytokines. Truitt GA, et al. **Cancer Surv** 1989; 8(4):875–89 (35 ref.)

Cytokines and intraocular inflammation. Hoekzema R, et al. **Curr Eye Res** 1990;9 Suppl:207–11 (15 ref.)

[An attempt to control the growth of syngeneic experimental tumors in inbred mice using Listeria factor Ei, BCG vaccine and a combination of both] Zák M, et al. **Sb Lek** 1989 Sep;91(8):230–7 (Eng. Abstr.) **(Cze)**

ADVERSE EFFECTS

Metabolics and biologicals in the workplace. Greaves WW. **J Occup Med** 1990 Apr;32(4):350–4

ANALYSIS

Simultaneous assay for megakaryocyte colony–stimulating factor and megakaryocyte potentiator and its application. Satoh K, et al. **J Lab Clin Med** 1990 Aug;116(2):162–71

Initial characterization of a cytokine which induces differentiation and cytolytic activity in HL–60 promyelocytic leukemia cells: evidence that the cytokine is distinct from other known differentiation–active cytokines. Leftwich JA, et al. **J Leukoc Biol** 1990 Jan; 47(1):87–96

Study of cardiac hypertrophy—humoral factors that stimulate protein metabolism of cultured rat heart cells. Honda M, et al. **Jpn Circ J** 1989 Jul;53(7):795–806

Biologically active peptides in milk proteins. Meisel H, et al. **Z Ernahrungswiss** 1989 Dec;28(4):267–78 (44 ref.)

[Quantitative analysis of cytokines and its problems] Kashara T, et al. **Rinsho Byori** 1990 Apr;38(4):380–5 (8 ref.) (Eng. Abstr.) **(Jpn)**

[Determination of fluorine in biological materials with ion–selective electrodes] Szewielow A. **Rocz Panstw Zakl Hig** 1989;40(1):65–8 (Eng. Abstr.) **(Pol)**

[The differentiation factor in the bone marrow and blood serum of healthy subjects and in acute leukemia] Khoperskaia OA, et al. **Biull Eksp Biol Med** 1989 Dec; 108(12):732–4 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Proteolytic inactivation of cytokines by Pseudomonas aeruginosa. Parmely M, et al. **Infect Immun** 1990 Sep; 58(9):3009–14

BIOSYNTHESIS

Effect of SK&F 86002 on cytokine production by human monocytes. Lee JC, et al. **Agents Actions** 1989 Jun; 27(3–4):277–9

Cellular and molecular aspects of granulomatous inflammation. Kunkel SL, et al. **Am J Respir Cell Mol Biol** 1989 Dec;1(6):439–47 (34 ref.)

Cytokines, acute phase proteins, and tissue injury. C–reactive protein opsonizes dead cells for debridement and stimulates cytokine production. Yamada Y, et al. **Ann N Y Acad Sci** 1990;587:351–61

Cytokine production in the rheumatoid joint: implications for treatment. Feldmann M, et al. **Ann Rheum Dis** 1990 Jun;49(1):480–6 (31 ref.)

Characterization of wound cytokines in the sponge matrix model. Ford HR, et al. **Arch Surg** 1989 Dec;124(12):1422–8

Mechanism for the generation of active smooth muscle inhibitory factor (IF) from bovine retractor penis muscle (BRP). Yui Y, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):544–9

Effects of periodic administration of Nocardia rubra cell–wall skeleton on immunoglobulin production and B–cell–stimulatory factor activity in vitro in workers at a poison gas factory. Hozawa S, et al. **Cancer Immunol Immunother** 1989;30(3):190–4

The effects of methylnitrosourea (MNU) on natural killer (NK) cell cytotoxicity and cytokine production in rats. Talcott PA, et al. **Carcinogenesis** 1990 May;11(5):829–34

Protective immunity induced by low–virulence Candida albicans: cytokine production in the development of the anti–infectious state. Vecchiarelli A, et al. **Cell Immunol** 1989 Dec;124(2):334–44

Detection of transforming growth factor–beta in rheumatoid arthritis synovial tissue: lack of effect on spontaneous cytokine production in joint cell cultures. Brennan FM, et al. **Clin Exp Immunol** 1990 Aug;81(2):278–85

Fibroblast–alveolar cell interactions in sarcoidosis and idiopathic pulmonary fibrosis: evidence for stimulatory and inhibitory cytokine production by alveolar cells. de Rochemonteix–Galve B, et al. **Eur Respir J** 1990 Jun; 3(6):653–64

Cytokine secretion effected by synergism of the immunomodulator AS101 and the protein kinase C inducer bryostatin. Sredni B, et al. **Immunology** 1990 Aug; 70(4):473–7

Cytokine response by monocytes and macrophages to free and lipoprotein–bound lipopolysaccharide. Cavaillon JM, et al. **Infect Immun** 1990 Jul;58(7):2375–82

Differential cytokine induction by doses of lipopolysaccharide and monophosphoryl lipid A that result in equivalent early endotoxin tolerance. Henricson BE, et al. **Infect Immun** 1990 Aug;58(8):2429–37

Evidence of T–cell activation and potential cytokine action in human endometrium. Tabibzadeh S. **J Clin Endocrinol Metab** 1990 Sep;71(3):645–9

Synthesis of a novel cytokine and its gene (LD78) expressions in hematopoietic fresh tumor cells and cell lines. Yamamura Y, et al. **J Clin Invest** 1989 Dec;84(6):1707–12

A distinct wave of human T cell receptor gamma/delta lymphocytes in the early fetal thymus: evidence for controlled gene rearrangement and cytokine production. Krangel MS, et al. **J Exp Med** 1990 Sep 1;172(3):847–59

Production of cytokines by peripheral blood monocytes/macrophages infected with human immunodeficiency virus type 1 (HIV–1). Molina JM, et al. **J Infect Dis** 1990 May;161(5):888–93

The activated keratinocyte: a model for inducible cytokine production by non–bone marrow–derived cells in cutaneous inflammatory and immune responses. Kupper TS. **J Invest Dermatol** 1990 Jun;94(6 Suppl):146S–150S (36 ref.)

An endotoxin–induced factor distinct from interleukin–1 and tumour necrosis factor alpha produced by the THP–1 human macrophage line stimulates polymorphonuclear leukocyte infiltration in vivo. Megyeri P, et al. **J Leukoc Biol** 1990 Jan;47(1):70–8

Neuroendocrine regulation of in vivo cytokine production and effects: I. In vivo regulatory networks involving the neuroendocrine system, interleukin–1 and tumor necrosis factor–alpha. Butler LD, et al. **J Neuroimmunol** 1989 Sep; 24(1–2):143–53

Effect of UV irradiation on epidermal cell cytokine production. Schwarz T, et al. **J Photochem Photobiol B** 1989 Oct;4(1):1–13 (79 ref.)

Activation of natural killer cells and cytokine production in humans by bacterial extracts (OM–85 BV). Wybran J, et al. **Lung** 1990;168 Suppl:720–5

Tolerance to endotoxin in vitro: independent regulation of interleukin–1, tumor necrosis factor and interferon alpha production during in vitro differentiation of human monocytes. Lepe–Zuniga JL, et al. **Lymphokine Res** 1990 Fall;9(3):309–19

Proinflammatory cytokines interleukin 1 and tumor necrosis factor induce cytokines that are chemotactic for neutrophils, T cells and monocytes. Larsen C, et al. **Prog Clin Biol Res** 1990;349:419–31

Sex–dependent, early cytokine production by NK–like spleen cells following infection with the D variant of encephalomyocarditis virus (EMCV–D). McFarland HI, et al. **Viral Immunol** 1989 Fall;2(3):205–14

[Capillary permeability factor produced by C 6 glioma cells: role in peritumoral brain edema and possible mechanism of glucocorticoid action] Ohnishi T, et al. **No To Shinkei** 1989 Nov;41(11):1141–7 (Eng. Abstr.) **(Jpn)**

BLOOD

Parathyroid origin of a new circulating hypertensive factor in spontaneously hypertensive rats. Pang PK, et al. **Am J Hypertens** 1989 Dec;2(12 Pt 1):898–902

Specific inhibitory substance to the husband's HLA allotype in sera from patients with gestational trophoblastic disease detected by lymphocytotoxicity testing. Kato S, et al. **Am J Reprod Immunol** 1989 Aug;20(4):126–34

Effect of physical exercise on cytokines and lymphocyte subpopulations in human peripheral blood. Espersen GT, et al. **APMIS** 1990 May;98(5):395–400

Circulating regulatory factors and neuroendocrine function. Papers presented at the satellite symposium of the XXXI IUPS Congress. Smolenice Castle, Czechoslovakia, June 26–July 1, 1989. **Endocrinol Exp** 1990 Mar;24(1–2):1–273

Acute phase responses after acute liver injury by partial hepatectomy in rats as indicators of cytokine release. Cornell RP. **Hepatology** 1990 Jun;11(6):923–31

Heat–labile serum inhibitor of anti–phospholipid antibody binding in ELISA. Cheng HM, et al. **Immunol Lett** 1989 Oct;22(4):263–6

Interactions between cytokines and alpha 2-macroglobulin. James K. **Immunol Today** 1990 May;11(5):163–6 (35 ref.)
Evidence for a factor in normal human serum that induces human neutrophilic granulocyte end-stage maturation in vitro. Evans WH, et al. **Leuk Res** 1989;13(8):673–82
Influence of an uremia-associated serum factor on CNS alpha 2-adrenoceptors. Lübbecke F, et al. **Ren Fail** 1989; 11(2–3):111–5
Cytokine production after liver transplantation. Vogel W, et al. **Transplant Proc** 1990 Aug;22(4):1854
Evaluation of cytokines and cytokine-induced secondary messages in sera of patients after liver transplantation. Tilg H, et al. **Transplantation** 1990 Jun;49(6):1074–80
[Movement of plasma leu-enkephalin-like substance concentrations during pregnancy] Nishimura K, et al. **Masui** 1989 Jul;38(7):888–90 (Eng. Abstr.) **(Jpn)**

DEFICIENCY

[Deficiency of prostacyclin stimulating factor in type 1 diabetes mellitus. Correlation with the duration of the disease] Vergara M, et al. **Med Clin (Barc)** 1990 Apr 7; 94(13):490–3 (Eng. Abstr.) **(Spa)**

GENETICS

A macrophage LPS-inducible early gene encodes the murine homologue of IP-10. Ohmori Y, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):1261–7
Thrombin-induced expression of the KC gene in cultured aortic endothelial cells. Involvement of proteolytic activity and protein kinase C. Shen XY, et al. **Biochim Biophys Acta** 1990 Jun 21;1049(2):145–50
Invertebrate cytokines: the phylogenetic emergence of interleukin-1. Beck G, et al. **Bioessays** 1989 Aug-Sep; 11(2–3):62–7 (28 ref.)
Regulation of cytokine and growth factor gene expression in human bone marrow stromal cells transformed with simian virus 40. Slack JL, et al. **Blood** 1990 Jun 15; 75(12):2319–27
Expression cloning of cDNA encoding a novel human hematopoietic growth factor: human homologue of murine T-cell growth factor P40. Yang YC, et al. **Blood** 1989 Nov 1;74(6):1880–4
Correlation between in vivo induction of cytokine gene expression by flavone acetic acid and strict dose dependency and therapeutic efficacy against murine renal cancer. Mace KF, et al. **Cancer Res** 1990 Mar 15; 50(6):1742–7
Investigation of cytokine gene expression in human colorectal cancer. Naylor MS, et al. **Cancer Res** 1990 Jul 15; 50(14):4436–40
Cytokines and oncogene activity. Black RJ, et al. **Cancer Surv** 1989;8(4):725–39 (98 ref.)
Regulatory effect of recombinant interleukin (IL)3 and IL4 on cytokine gene expression of bone marrow and peripheral blood mononuclear cells. Brantschen S, et al. **Eur J Immunol** 1989 Nov;19(11):2017–23
Lipopolysaccharide induces competence genes JE and KC in Balb/C 3T3 cells. Tannenbaum CS, et al. **J Cell Physiol** 1990 Jul;144(1):77–83
Clustering of cytokine genes on mouse chromosome 11. Wilson SD, et al. **J Exp Med** 1990 Apr 1;171(4):1301–14
Quantitative analysis of cytokine gene expression in rheumatoid arthritis [published erratum appears in J Immunol 1990 Aug 1;145(3):1037] Firestein GS, et al. **J Immunol** 1990 May 1;144(9):3347–53
Anti-CD3 antibody induces rapid expression of cytokine genes in vivo. Scott DE, et al. **J Immunol** 1990 Oct 1; 145(7):2183–8
Immunosuppressive function of hepatitis B antigens in vitro: role of endoribonuclease V as one potential trans inactivator for cytokines in macrophages and human hepatoma cells. Jochum C, et al. **J Virol** 1990 May; 64(5):1956–63
Detection of cytokine mRNA in astrocyte cultures using the polymerase chain reaction. Wesselingh SL, et al. **Lymphokine Res** 1990 Summer;9(2):177–85
Cytokine gene expression by human gliomas. Lichtor T, et al. **Neurosurgery** 1990 May;26(5):788–92; discussion 792–3
Expression of cytokine genes in hematological malignancies. Okamura S, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec; 52(8):1423–32
A macrophage mRNA selectively induced by gamma-interferon encodes a member of the platelet factor 4 family of cytokines. Farber JM. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5238–42
Mechanisms regulating transient expression of mammalian cytokine genes and cellular oncogenes. Reeves R, et al. **Prog Nucleic Acid Res Mol Biol** 1990;38:241–82 (227 ref.)

IMMUNOLOGY

Epidermal cytokines. Luger TA. **Acta Derm Venereol Suppl (Stockh)** 1989;151:61–76; discussion 106–10 (102 ref.)
A T suppressor cell cytokine regulates murine arthritis and T lymphocyte stimulation. Spannaus-Martin DJ, et al. **Agents Actions** 1989 Jun;27(3–4):239–41
Conjunctival allergenicity-supporting factor (CASF) in DIIIa as the sea squirt antigen capable of inducing asthmatic attack and conjunctival reaction in sea squirt asthma. Shigeta S, et al. **Arerugi** 1990 Jan;39(1):28–35
Mast cells: immunologically specific effectors and potential sources of multiple cytokines during IgE-dependent responses. Galli SJ, et al. **Ciba Found Symp** 1989;147:53–65; discussion 65–73 (30 ref.)
Cytokines in disease. Whicher JT, et al. **Clin Chem** 1990 Jul; 36(7):1269–81 (147 ref.)
Cytokine regulation of human monocyte interleukin-1 (IL-1) production in vitro. Enhancement of IL-1 production by interferon (IFN) gamma, tumour necrosis factor-alpha, IL-2 and IL-1, and inhibition by IFN-alpha. Danis VA, et al. **Clin Exp Immunol** 1990 Jun;80(3):435–43
Cytokines and the skin. Luger TA, et al. **Curr Probl Dermatol** 1990;19:35–49 (51 ref.)
Monocyte- and cytokine-mediated effects on T immunoregulatory activity in the elderly. Antonaci S, et al. **Cytobios** 1989;58(234–35):155–64
Role of cytokines and CD4+ T-cell subsets in the regulation of parasite immunity and disease. Scott P, et al. **Immunol Rev** 1989 Dec;112:161–82 (46 ref.)
Molecular mechanisms involved in human autoimmune diseases: relevance of chronic antigen presentation. Class II expression and cytokine production. Feldmann M. **Immunol Suppl** 1989;2:66–71; discussion 72–3 (33 ref.)
Autoantibodies to cytokines—friends or foes? Bendtzen K, et al. **Immunol Today** 1990 May;11(5):167–9 (31 ref.)
What is the function of autoantibodies to cytokines? [letter] Bocci V. **Immunol Today** 1990 Jul;11(7):230–1
Cytokines and Ig switching: evolutionary divergence between mice and humans. Callard RE, et al. **Immunol Today** 1990 Jun;11(6):200–3 (37 ref.)
Differential effects of various cytokines on the generation of rat LAK cells from their purified precursors. Maghazachi AA. **Immunology** 1990 Aug;70(4):465–72
Leishmania major: inhibition of the chemiluminescent response of human polymorphonuclear leukocytes by promastigotes and their excreted factors. el-On J, et al. **Parasite Immunol** 1990 May;12(3):285–95
Suppression of macrophage-mediated antibody-dependent killing of Schistosoma mansoni larvae by concanavalin A stimulated spleen cell-derived factor(s). Watanabe T, et al. **Parasite Immunol** 1990 May;12(3):309–19
Humoral factors in the induction of prostaglandin E2-producing macrophages in vitro. Shibata Y. **Reg Immunol** 1989 May-Jun;2(3):158–68
Influence of antibodies neutralizing cytokines on murine fetal thymic organ cultures. Plum J, et al. **Thymus** 1989; 13(1–2):83–93

ISOLATION & PURIFICATION

Semipurified human leukocyte ultrafiltrate in herpes zoster. I. Large-scale preparation and biochemical analysis. Borvák J, et al. **Acta Virol (Praha)** 1989 Sep;33(5):417–27
Receptor interconversion model of hormone action. 1. Purification of a factor involved in conferring estradiol binding properties to the estrogen receptor. McNaught RW, et al. **Biochemistry** 1990 Mar 20;29(11):2685–90
Ultrafiltration to remove endotoxins and other cytokine-inducing materials from tissue culture media and parenteral fluids. Schindler R, et al. **Biotechniques** 1990 Apr;8(4):408–13
Purification and characterisation of soluble tumour haemolytic factor isolated from oncogene transformed fibroblasts. Zucker S, et al. **Br J Cancer** 1990 Jul; 62(1):28–32
Identification of a novel thymocyte growth-promoting factor derived from B cell lymphomas. Suda T, et al. **Cell Immunol** 1990 Aug;129(1):228–40
Identification and purification of arginine deiminase that originated from Mycoplasma arginini. Sugimura K, et al. **Infect Immun** 1990 Aug;58(8):2510–5
Purification of macrophage deactivating factor. Srimal S, et al. **J Exp Med** 1990 Apr 1;171(4):1347–61
Non-prostanoid endothelium-derived vasoactive factors. Dinh Xuan AT, et al. **J Int Med Res** 1989 Jul-Aug; 17(4):305–15 (128 ref.)
Partial characterization of the PAF-induced soluble factors which mimic the activity of 'early pregnancy factor'. Clarke FM, et al. **J Reprod Fertil** 1990 Mar;88(2):459–66
Removal of immunosuppressive substance in cancer patients' serum. Ishiko O, et al. **Jpn J Cancer Res** 1990 Jun-Jul; 81(6-7):564–6
Purification to homogeneity and partial characterization of cytotoxic lymphocyte maturation factor from human B-lymphoblastoid cells. Stern AS, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6808–12
Purification and characterization of a plasma factor which cleaves single-chain form of t-PA and u-PA. Okada K, et al. **Thromb Res Suppl** 1990;10:27–43

METABOLISM

Cytoferrin, maternofetal iron transport, and neonatal hemochromatosis. Knisely AS, et al. **Am J Clin Pathol** 1989 Dec;92(6):755–9
Detection of histamine release inhibitory factor- and histamine releasing factor-like activities in bronchoalveolar lavage fluids. Alam R, et al. **Am Rev Respir Dis** 1990 Mar; 141(3):666–71
Cytokines of the lung. Kelley J. **Am Rev Respir Dis** 1990 Mar;141(3):765–88 (293 ref.)
Nerve stimulation releases mucosa-derived inhibitory factors, both prostanoids and nonprostanoids, in isolated ferret trachea. Ullman A, et al. **Am Rev Respir Dis** 1990 Mar; 141(3):748–51
Cytokines and metabolism. **Ann N Y Acad Sci** 1990; 587:323–75
Cytokines and eicosanoids in rheumatic diseases. Hopkins SJ. **Ann Rheum Dis** 1990 Apr;49(4):207–10 (32 ref.)
Activation of the cytokine network by muroctasin as a remedy for leukopenia and thrombopenia. Furuse K, et al. **Arzneimittelforschung** 1989 Aug;39(8):915–7
Identification of an endogenous activator of calpain in rat skeletal muscle. Pontremoli S, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):569–74
A protein factor, ASF, controls cell-specific alternative splicing of SV40 early pre-mRNA in vitro. Ge H, et al. **Cell** 1990 Jul 13;62(1):25–34
Interaction of macrophages and cytokines. Lohmann-Matthes ML. **Curr Opin Immunol** 1989 Oct; 2(1):33–8 (43 ref.)
Localization of leukocytes and cytokines in chorionic villi of normal placentas and complete hydatidiform moles. Berkowitz RS, et al. **Gynecol Oncol** 1990 Jun;37(3):396–400
Cytokines as communication signals between leukocytes and endothelial cells. Mantovani A, et al. **Immunol Today** 1989 Nov;10(11):370–5 (89 ref.)
Release of cytokines during generation of lymphokine-activated killer (LAK) cells by IL-2. Limb GA, et al. **Immunology** 1989 Dec;68(4):514–9
Factor released from human lymphocytes stimulated cholinergically in vitro: an E-rosetting inhibitor. Bortkiewicz H, et al. **Int J Tissue React** 1989;11(3):101–6
Polymethylmethacrylate-induced release of bone-resorbing factors. Herman JH, et al. **J Bone Joint Surg [Am]** 1989 Dec;71(10):1530–41
Cycling of intracellular pH during cell division of Xenopus embryos is a cytoplasmic activity depending on protein synthesis and phosphorylation. Grandin N, et al. **J Cell Biol** 1990 Aug;111(2):523–32
Identification of cell surface receptors for the Act-2 cytokine. Napolitano M, et al. **J Exp Med** 1990 Jul 1;172(1):285–9
Characterization of the neutral aminopeptidase activity associated to the mouse thymocyte-activating molecule. Gorvel JP, et al. **J Immunol** 1990 Apr 15;144(8):2899–907
Neurotoxic activity in HTLV-I carrier lymphocyte culture. Terunuma H, et al. **J Neurol Sci** 1989 Sep;92(2–3):169–80
Endogenous "ryanodine agonist" and hyperthermia [letter] Bianchi CP. **Life Sci** 1990;47(8):PL23–4
Structural design and molecular evolution of a cytokine receptor superfamily. Bazan JF. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):6934–8
Platelet-activating factor and cytokine interactions in shock. Hosford D, et al. **Resuscitation** 1989 Dec;18(2–3):207–18 (64 ref.)
The role of cytokines in the pathogenesis of rheumatoid arthritis. Lipsky PE, et al. **Springer Semin Immunopathol** 1989;11(2):123–62 (191 ref.)
A new cytokine receptor superfamily. Cosman D, et al. **Trends Biochem Sci** 1990 Jul;15(7):265–70 (31 ref.)
[Conditioned medium of human nasopharyngeal carcinoma epithelioid cell line CNE 1 contained the activities of transformed growth-inhibiting factor(s)] Lu YL, et al. **Shih Yen Sheng Wu Hsueh Pao** 1990 Mar;23(1):95–103 (Eng. Abstr.) **(Chi)**
[Successful treatment of cheilitis granulomatosis with potent inhibitors of mediator release—possible involvement of mast cells in the pathogenesis] Chiba M, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Jul;99(8):883–9 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

The dose-related hypotensive effect of highly purified bovine liver angiohypotensin in narcotized normotensive rats. Faragó I, et al. **Acta Physiol Hung** 1990;75 Suppl:95–6
The selectivity of highly purified bovine liver angiohypotensin towards resistance vessels. Kovács I, et al. **Acta Physiol Hung** 1990;75 Suppl:179–80
Elaboration of highly purified angiohypotensin preparations from mammalian liver. Rácz D, et al. **Acta Physiol Hung** 1990;75 Suppl:241–2
In vivo and in vitro effects of cytokines on the generation of NK cell-mediated antitumor activity. Riccardi C, et al. **Acta Physiol Hung** 1990;75 Suppl:245–6
Cytokine-induced release of histamine from basophil leukocytes from AIDS patients. Pedersen M, et al. **Agents Actions** 1990 Apr;30(1–2):294–6
Cytokine-activated human endothelial cells synthesize and secrete a monocyte chemoattractant, MCP-1/JE. Rollins BJ, et al. **Am J Pathol** 1990 Jun;136(6):1229–33
Lipocortin 1 fragment modifies pyrogenic actions of cytokines in rats. Carey F, et al. **Am J Physiol** 1990 Aug; 259(2 Pt 2):R266–9
Lymphocyte-derived progesterone-induced blocking factor corrects resorption in a murine abortion system. Szekeres-Bartho J, et al. **Am J Reprod Immunol** 1990 May; 23(1):26–8
Specificity in metabolic effects of cachectin/TNF and other related cytokines. Kawakami M, et al. **Ann N Y Acad Sci** 1990;587:339–50 (47 ref.)
Interactions between hematopoietic growth factors in normal and leukemic stem cell differentiation. Moore MA. **Ann N Y Acad Sci** 1989;567:171–81
Cytokine modulation of pituitary hormone secretion. Scarborough DE. **Ann N Y Acad Sci** 1990;594:169–87 (169 ref.)

Cytokine stimulation of antibody-dependent cellular cytotoxicity (ADCC) enhances cytolytic but not binding capacity of peritoneal macrophages. Fehr HG, et al. **Anticancer Res** 1990 May-Jun;10(3):821-5

Thymic non-lymphoid cells cultured for transplantation purposes. Immunostimulatory effect on ataxia telangiectasia peripheral blood mononuclear cells. Kaczmarek L, et al. **Arch Immunol Ther Exp (Warsz)** 1989;37(3-4):471-80

Effects of cytokines on prostaglandin E and cAMP levels in human periodontal ligament fibroblasts in vitro. Saito S, et al. **Arch Oral Biol** 1990;35(5):387-95

Enhanced prostaglandin E2 secretion by cytokine-stimulated human synoviocytes in the presence of subtherapeutic concentrations of nonsteroidal antiinflammatory drugs. Lindsley HB, et al. **Arthritis Rheum** 1990 Aug;33(8):1162-9

Involvement of prostaglandin E2 in the inhibition of osteocalcin synthesis by human osteoblast-like cells in response to cytokines and systemic hormones. Evans DB, et al. **Biochem Biophys Res Commun** 1990 Feb 28; 167(1):194-202

Effect of interleukin-1 on the augmentation of human immunodeficiency virus gene expression. Kobayashi N, et al. **Biochem Biophys Res Commun** 1989 Dec 15; 165(2):715-21

Cytokine-induced release of endothelin-1 from porcine renal epithelial cell line. Ohta K, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):578-84

Contrasting effects of the protein kinase C inhibitor, staurosporine, on cytokine and phorbol ester stimulation of fructose 2,6-bisphosphate and prostaglandin E production by fibroblasts in vitro. Comparative studies using interleukin-1 alpha, tumour necrosis factor alpha, transforming growth factor beta, interferon-gamma and 12-O-tetradecanoylphorbol 13-acetate. Taylor DJ, et al. **Biochem J** 1990 Aug 1;269(3):573-7

Synergistic effects of TGIF and interferon gamma (IFN-gamma) on tumor cell growth. TGIF and IFN-gamma. Katano M, et al. **Biotherapy** 1990;2(1):33-40

Cytokine regulation of the human burst-forming unit-megakaryocyte. Briddell RA, et al. **Blood** 1990 Aug 1;76(3):516-22

Regulation of human eosinophil precursor production by cytokines: a comparison of recombinant human interleukin-1 (rhIL-1), rhIL-3, rhIL-5, rhIL-6, and rh granulocyte-macrophage colony-stimulating factor. Clutterbuck EJ, et al. **Blood** 1990 May 1;75(9):1774-9

Effects of recombinant cytokines on the growth of purified peripheral blood progenitors (PBSC). Kawano Y, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:19

In vitro beta 2-microglobulin (beta 2m) secretion by normal and leukaemic B-cells: effects of recombinant cytokines and evidence for a differential response to the combined stimulus of phorbol ester and calcium ionophore. Jones RA, et al. **Br J Cancer** 1990 May;61(5):675-80

Pharmacological evaluation of a guinea-pig tracheal epithelium-derived inhibitory factor (EpDIF). Fernandes LB, et al. **Br J Pharmacol** 1990 Jul;100(3):614-8

The cytotoxicity of Pseudomonas exotoxin A, inactivated by modification of the cell-binding domain I, is restored when conjugated to an erythroid cell-specific targeting agent. Bourdenet S, et al. **Cancer Lett** 1990 Apr 20; 50(2):121-7

Cytokine regulation of tumor necrosis factor-alpha and -beta (lymphotoxin)-messenger RNA expression in human peripheral blood mononuclear cells. Kasid A, et al. **Cancer Res** 1990 Aug 15;50(16):5072-6

Switch circular DNA formed in cytokine-treated mouse splenocytes: evidence for intramolecular DNA deletion in immunoglobulin class switching. Matsuoka M, et al. **Cell** 1990 Jul 13;62(1):135-42

Direct expression cloning of vascular cell adhesion molecule 1, a cytokine-induced endothelial protein that binds to lymphocytes. Osborn L, et al. **Cell** 1989 Dec 22; 59(6):1203-11

Acute phase response to recombinant interleukin-6 and macrophage- and fibroblast-derived crude cytokine preparations in primary cultures of mouse hepatocytes. Rokita H, et al. **Cell Biochem Funct** 1989 Oct;7(4):257-62

Expression of human immunodeficiency virus long terminal repeat in the human promonocyte cell line U937: effect of endotoxin and cytokines. Latham PS, et al. **Cell Immunol** 1990 Sep;129(2):513-8

Induction of differentiation of human leukemia cells by various combinations of cytokines and low-molecular-weight inducers. Nakaya K, et al. **Chem Pharm Bull (Tokyo)** 1990 Apr;38(4):966-70

Mechanism of cytokine inhibition of beta-adrenergic agonist stimulation of cyclic AMP in rat cardiac myocytes. Impairment of signal transduction. Chung MK, et al. **Circ Res** 1990 Sep;67(3):753-63

Cytokines, thyroid autoantibody synthesis and thyroid cell survival in culture. McLachlan SM, et al. **Clin Exp Immunol** 1990 Feb;79(2):175-81

New cytokines with potential for in vitro manipulation of cells. Gearing AJ. **Curr Opin Immunol** 1989 Jun;1(5):937-9 (11 ref.)

Comparison of cytokine effects on mouse pancreatic alpha-cell and beta-cell lines. Viability, secretory function, and MHC antigen expression. Hamaguchi K, et al. **Diabetes** 1990 Apr;39(4):415-25

Oxygen free radical scavengers protect rat islet cells from damage by cytokines. Sumoski W, et al. **Diabetologia** 1989 Nov;32(11):792-6

Endogenous substances as drugs. Issues related to the application of cytokines in cancer therapy. Parkinson DR. **Drug Saf** 1990;5 Suppl 1:75-83 (18 ref.)

Cytotoxic effects of cytokines on islet beta-cells: evidence for involvement of eicosanoids. Rabinovitch A, et al. **Endocrinology** 1990 Jan;126(1):67-71

Leukemia inhibitory factor: a novel bone-active cytokine. Reid LR, et al. **Endocrinology** 1990 Mar;126(3):1416-20

Cytokines act within the brain to inhibit luteinizing hormone secretion and ovulation in the rat. Rivier C, et al. **Endocrinology** 1990 Aug;127(2):849-56

Quantitation of cytokine-stimulated migration of endothelium and epithelium by a new assay using microcarrier beads. Rosen EM, et al. **Exp Cell Res** 1990 Jan;186(1):22-31

Effect of interleukin 6 on in vitro human megakaryocytopoiesis: its interaction with other cytokines. Bruno E, et al. **Exp Hematol** 1989 Nov;17(10):1038-43

Inhibition of lung damage caused by paraquat with lymphokines or cytokines. Barabás K, et al. **Exp Pathol** 1990;38(3):189-95

Altered patterns of protein phosphorylation in articular chondrocytes treated with interleukin-1 or synovial cytokines [published erratum appears in FEBS Lett 1990 Feb 12;261(1):218] Hulkower KI, et al. **FEBS Lett** 1989 Nov 6;257(2):228-32

Cytokines and growth regulation of synoviocytes from patients with rheumatoid arthritis and rats with streptococcal cell wall arthritis. Remmers EF, et al. **Growth Factors** 1990;2(2-3):179-88

Lymphokine-activated killer (LAK) cells against human leukemia: augmentation of LAK-cell cytotoxicity by combinations of lymphokines or cytokines. Teichmann JV, et al. **Hamatol Bluttransfus** 1990;33:103-9

Effect of cytokines on proliferation of Epstein Barr virus-transformed B lymphocytes. Richter W, et al. **Hybridoma** 1990 Feb;9(1):1-8

In vivo administration of cytokine in allogeneic bone marrow chimeras. Imamura M, et al. **Immunobiology** 1990 Jun; 180(4-5):441-57

Immunoglobulin isotype production by cycling human B lymphocytes in response to recombinant cytokines and anti-IgM. Flores-Romo L, et al. **Immunology** 1990 Mar; 69(3):342-7

Effect of cytokines on spontaneous and allergen-induced CD23 expression, sCD23 release and Ig(E,G) synthesis from peripheral blood lymphocytes. Pfeil T, et al. **Immunology** 1989 Sep;68(1):37-44

In vivo activation of macrophage oxidative burst activity by cytokines and amphotericin B. Wolf JE, et al. **Infect Immun** 1990 May;58(5):1296-300

Studies of chemotactic, chemotactic movement-inhibiting and random movement-inhibiting effects of interleukin-1 alpha and beta, tumour necrosis factors alpha and beta and interferon gamma on human neutrophils in assays using 'sparse-pore' polycarbonate (Nuclepore) membranes in the Boyden chamber. Bignold LP, et al. **Int Arch Allergy Appl Immunol** 1990;91(1):1-7

The effect of cytokines on the ploidy of megakaryocytes. Teramura M, et al. **Int J Cell Cloning** 1990 Jul;8(4):245-52

Effects of associated cytokines (IL-1, TNF-alpha, IFN-gamma and TGF-beta) on collagen and glycosaminoglycan production by cultured human synovial cells. Daireaux M, et al. **Int J Tissue React** 1990;12(1):21-31

Antiinflammatory effects of polypeptide growth factors. Platelet-derived growth factor, epidermal growth factor, and fibroblast growth factor inhibit the cytokine-induced expression of the alternative complement pathway activator factor B in human fibroblasts. Circolo A, et al. **J Biol Chem** 1990 Mar 25;265(9):5066-71

Endotoxin induction of murine metallothionein gene expression. De SK, et al. **J Biol Chem** 1990 Sep 5; 265(25):15267-74

Cytokine augmentation of human immunodeficiency virus type 1 (HIV-1) gp120-specific cellular cytotoxicity. Stine KC, et al. **J Biol Response Mod** 1989 Oct;8(5):501-10

Cytotoxic effects of cytokines on human pancreatic islet cells in monolayer culture. Rabinovitch A, et al. **J Clin Endocrinol Metab** 1990 Jul;71(1):152-6

Shedding of tumor necrosis factor receptors by activated human neutrophils. Porteu F, et al. **J Exp Med** 1990 Aug 1;172(2):599-607

Evaluation of the antibody-dependent cytotoxic capabilities of individual human monocytes. Role of Fc gamma RI and Fc gamma RII and the effects of cytokines at the single cell level. Connor RI, et al. **J Immunol** 1990 Sep 1; 145(5):1483-9

Macrophage deactivating factor and transforming growth factors-beta 1 -beta 2 and -beta 3 inhibit induction of macrophage nitrogen oxide synthesis by IFN-gamma. Ding A, et al. **J Immunol** 1990 Aug 1;145(3):940-4

The regulatory effects of cytokines on the induction of a peripheral immunologic tolerance in mice. Gahring LC, et al. **J Immunol** 1990 Sep 1;145(5):1318-23

Cytokine regulation of C3 and C5 production by the human type II pneumocyte cell line, A549. Rothman BL, et al. **J Immunol** 1990 Jul 15;145(2):592-8

Proliferation of astrocytes in vitro in response to cytokines. A primary role for tumor necrosis factor. Selmaj KW, et al. **J Immunol** 1990 Jan 1;144(1):129-35

Tumor necrosis factor-alpha and P40 induce day 15 murine fetal thymocyte proliferation in combination with IL-2. Suda T, et al. **J Immunol** 1990 Mar 1;144(5):1783-7

Cytokine-induced gene expression of a neutrophil chemotactic factor/IL-8 in human hepatocytes. Thornton AJ, et al. **J Immunol** 1990 Apr 1;144(7):2609-13

Recombinant human cytokines stimulate neutrophil adherence to IgG autoantibody-treated epithelial basement membranes. Gammon WR, et al. **J Invest Dermatol** 1990 Aug;95(2):164-71

Tumor necrosis factor beta and ultraviolet radiation are potent regulators of human keratinocyte ICAM-1 expression. Krutmann J, et al. **J Invest Dermatol** 1990 Aug; 95(2):127-31

Modulation of melanocyte intercellular adhesion molecule-1 by immune cytokines. Yohn JJ, et al. **J Invest Dermatol** 1990 Aug;95(2):233-7

Evidence for cytokine regulation of cholesterol metabolism in herpesvirus-infected arterial cells by the lipoxygenase pathway. Etingin OR, et al. **J Lipid Res** 1990 Feb; 31(2):299-305

Does endothelium-derived nitric oxide have a role in cytokine-induced hypotension? [comment] Nathan CF, et al. **J Natl Cancer Inst** 1990 May 2;82(9):726-8 (37 ref.) Comment on: J Natl Cancer Inst 1990 May 2;82(9):772-6.

Preliminary studies of cytokine-induced functional effects on the visual pathways in the rabbit. Brosnan CF, et al. **J Neuroimmunol** 1989 Dec;25(2-3):227-39

Direct and cytokine-mediated activation of protein kinase C induces human immunodeficiency virus expression in chronically infected promonocytic cells. Kinter AL, et al. **J Virol** 1990 Sep;64(9):4306-12

Differential responses of B-CLL clones to in vitro stimulation with cytokines [letter; comment] Drexler HG. **Leukemia** 1990 Mar;4(3):238-9 Comment on: Leukemia 1989 Aug;3(8):593-601.

The effect of cytokines, including IL-1, IL-4, and IL-6, in hairy cell proliferation/differentiation. Griffiths SD, et al. **Leukemia** 1990 May;4(5):337-40

Evidence for the presence of a new plasma factor which acts synergistically to ADP induced platelet aggregation. Dikshit M, et al. **Life Sci** 1990;47(2):117-26

Effect of cytokines on Japanese encephalitis virus production by human monocytes. Hasegawa H, et al. **Microbiol Immunol** 1990;34(5):459-66

The cytokine response element of the rat alpha 1-acid glycoprotein gene is a complex of several interacting regulatory sequences. Won KA, et al. **Mol Cell Biol** 1990 Aug;10(8):3965-78

The effect of cytokines on the expression and function of Fc receptors for IgG on human myeloid cells. Erbe DV, et al. **Mol Immunol** 1990 Jan;27(1):57-67

Cytokines enhance the production of a chemotactic factor for polymorphonuclear leukocytes by rat renal glomerular epithelioid cells. Watanabe K, et al. **Nephron** 1990; 54(2):169-75

Induction of the transcription factor IRF-1 and interferon-beta mRNAs by cytokines and activators of second-messenger pathways. Fujita T, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9936-40

Killing of Mycobacterium avium: insights provided by the use of recombinant cytokines. Bermudez LE, et al. **Res Microbiol** 1990 Feb;141(2):241-3

Comparative and combined effects of transforming growth factors alpha and beta, interleukin-1 and interferon-gamma on rheumatoid synovial cell proliferation, glycolysis and prostaglandin E production. Taylor DJ, et al. **Rheumatol Int** 1989;9(2):65-70

Effect of bacterial products on neutrophil migration in vitro. Ras G, et al. **Thorax** 1990 Apr;45(4):276-80

Cytokine regulation of the balance between alloindifferent and allospecific suppressor induction in mixed lymphocyte cultures. Pawelec G, et al. **Transplantation** 1990 Mar; 49(3):615-9

In vitro interactions of cytokines and bovine viral diarrhea virus in phytohemagglutinin-stimulated bovine mononuclear cells. Atluru D, et al. **Vet Immunol Immunopathol** 1990 May;25(1):47-59

Bovine natural cell mediated cytotoxicity (NCMC): activation by cytokines. Jensen J, et al. **Vet Immunol Immunopathol** 1990 Feb;24(2):113-24

Induction of monocytic differentiation and modulation of the expression of c-fos, c-fms and c-myc protooncogenes in human monoblasts by cytokines and phorbolester. Brach MA, et al. **Virchows Arch [B]** 1990;59(1):54-8

Role of soluble cytokines on the restricted replication of poliovirus in the monocytic U937 cell line. López-Guerrero JA, et al. **Virus Res** 1990 Jun;16(2):225-30

[Sensitivity of leukemic blasts in acute lymphoblastic leukemia to biological response modifiers (cytokines)] Wörrmann B, et al. **Verh Dtsch Ges Inn Med** 1989;95:12-5 (Ger)

PHYSIOLOGY

Alternative cytokines in the immunoregulation of the human B cell cycle. Kehrl JH, et al. **Adv Exp Med Biol** 1989; 254:145-54 (46 ref.)

Endothelium-derived relaxing and contracting factors. Vanhoutte PM. **Adv Nephrol** 1990;19:3-16 (76 ref.)

Interactions of eicosanoids and cytokines in immune regulation. Lewis RA. **Adv Prostaglandin Thromboxane Leukotriene Res** 1990; 20:170-8 (43 ref.)

The role of cytokine mediators in septic shock. Tracey KJ, et al. **Adv Surg** 1990;23:21–56 (180 ref.)
The effects of dietary calcium on blood pressure in spontaneously hypertensive rats may be mediated by parathyroid hypertensive factor. Lewanczuk RZ, et al. **Am J Hypertens** 1990 May;3(5 Pt 1):349–53
Cytokine–mediated regulation of ovarian function: tumor necrosis factor alpha inhibits gonadotropin–supported progesterone accumulation by differentiating and luteinized murine granulosa cells. Adashi EY, et al. **Am J Obstet Gynecol** 1990 Apr;162(4):889–96; discussion 896–9
G proteins and the mechanism of action of hormones, neurotransmitters, and autocrine and paracrine regulatory factors. Birnbaumer L, et al. **Am Rev Respir Dis** 1990 Mar; 141(3 Pt 2):S106–14 (63 ref.)
Cytokines as modulators of cell proliferation in fibrotic diseases. Libby P, et al. **Am Rev Respir Dis** 1989 Oct; 140(4):1114–7 (31 ref.)
Cytokines and osteoporosis. Fujita T, et al. **Ann N Y Acad Sci** 1990;587:371–5 (14 ref.)
Substance P, cytokines, and arthritis. Kimball ES. **Ann N Y Acad Sci** 1990;594:293–308 (88 ref.)
Mechanisms of cutaneous inflammation. Interactions between epidermal cytokines, adhesion molecules, and leukocytes [published erratum appears in Arch Dermatol 1989 Dec;125(12):1643] Kupper TS. **Arch Dermatol** 1989 Oct; 125(10):1406–12 (40 ref.)
Sepsis, signals, and surgical sequelae (a hypothesis). Michie HR, et al. **Arch Surg** 1990 Apr;125(4):531–6 (45 ref.)
Cytokines and cytokine inhibitors or antagonists in rheumatoid arthritis. Arend WP, et al. **Arthritis Rheum** 1990 Mar;33(3):305–15 (75 ref.)
The control of antibody production by immunomodulatory molecules. Lipsky PE. **Arthritis Rheum** 1989 Nov; 32(11):1345–55 (74 ref.)
Cytokines and immune regulation in patients with fibrositis [letter] [published erratum appears in Arthritis Rheum 1989 Dec;32(12):1607] Wallace DJ, et al. **Arthritis Rheum** 1989 Oct;32(10):1334–5
Soluble factors including proteinases released from damaged cells may trigger the wound healing process. Tsuboi K, et al. **Biochem Biophys Res Commun** 1990 May 16; 168(3):1163–70
A novel plasma factor that potentiates prophenoloxidase activation in the immune response of Blaberus discoidalis. Javed Q, et al. **Biochem Soc Trans** 1990 Jun;18(3):457
Multifunctional cytokines in haemopoiesis. Haworth C. **Blood Rev** 1989 Dec;3(4):263–8 (34 ref.)
Regulation of hemopoiesis by cytokines that restrict options for growth and differentiation. Zipori D. **Cancer Cells** 1990 Jul;2(7):205–11 (50 ref.)
A contra–IL–2 cytokine derived from mice suppressed for collagen–induced arthritis. Kresina TF. **Cell Immunol** 1990 Jan;125(1):171–82
Analysis of the mechanisms involved in NK resistance induced by a new tumor factor NK–RIF. Solana R, et al. **Cell Immunol** 1990 Oct 1;130(1):244–51
Cytokine networks involved in the regulation of haemopoietic stem cell proliferation and differentiation. Moore MA, et al. **Ciba Found Symp** 1990;148:43–58; discussion 58–61 (24 ref.)
B cell–cytokine interactions: lessons from clinical immunology. Farrant J, et al. **Clin Exp Immunol** 1989 Dec; 78(3):321–2 (17 ref.)
Cells and mediators which participate in immunoglobulin synthesis by human mononuclear cells. III. Null cells secrete a factor(s) (human immunoglobulin synthesis/secretion–facilitating factor) that can replace the null cells in the synthesis of immunoglobulin by cultured B cells. Taylor S, et al. **Clin Exp Immunol** 1990 Apr; 80(1):130–5
T cell inhibitor secreted by macrophages and endothelial cells. Kashiwado T, et al. **Clin Immunol Immunopathol** 1989 Nov;53(2 Pt 1):137–50
Skeletal tissue response to cytokines. Goldring MB, et al. **Clin Orthop** 1990 Sep;(258):245–78 (418 ref.)
Immune aspects of wound repair. Barbul A. **Clin Plast Surg** 1990 Jul;17(3):433–42 (101 ref.)
The effects of retina–derived factors on the electrical and ultrastructural properties of the bovine pigment epithelium. Pautler EL, et al. **Curr Eye Res** 1990 Jun;9(6):617–25
Immune and hematopoietic cell regulation: cytokines and their receptors. Taga T, et al. **Curr Opin Cell Biol** 1990 Apr;2(2):174–80 (52 ref.)
Cytokines—soluble factors in immune responses. Balkwill F. **Curr Opin Immunol** 1988 Dec;1(2):241–9 (32 ref.)
Cytokines and pregnancy. Clark DA. **Curr Opin Immunol** 1989 Aug;1(6):1148–52 (21 ref.)
Cytokines and infection. Heath AW. **Curr Opin Immunol** 1989–90 Feb;2(3):380–4 (14 ref.)
Cytokines and anti–cytokines. Jacob CO. **Curr Opin Immunol** 1989 Dec;2(2):249–57 (34 ref.)
Cellular and chemical mediators—their roles in allergic diseases. Johnston SL, et al. **Curr Opin Immunol** 1989–90 Apr;2(4):513–24 (46 ref.)
Cytokines: structure, function and synthesis. Kelso A. **Curr Opin Immunol** 1989 Dec;2(2):215–25 (36 ref.)
Colony–stimulating factors, cytokines and hematopoiesis. Nakayama N, et al. **Curr Opin Immunol** 1989 Oct;2(1):68–77 (46 ref.)
Developmental pattern of the secretion of cumulus expansion–enabling factor by mouse oocytes and the role of oocytes in promoting granulosa cell differentiation. Vanderhyden BC, et al. **Dev Biol** 1990 Aug;140(2):307–17
Control of cell type proportions by a secreted factor in Dictyostelium discoideum. Inouye K. **Development** 1989 Nov;107(3):605–9
An extracellular matrix molecule of newt and axolotl regenerating limb blastemas and embryonic limb buds: immunological relationship of MT1 antigen with tenascin. Onda H, et al. **Development** 1990 Apr;108(4):657–68
Co–circulating sleep substances interactingly modulate sleep and wakefulness in rats. Inoué S, et al. **Endocrinol Exp** 1990 Mar;24(1–2):69–76
The inhibitory influence of tracheal mucosa mounted in close proximity to canine trachealis. Manning PJ, et al. **Eur J Pharmacol** 1990 Mar 13;178(1):85–9
Regulation of germinal vesicle breakdown in starfish oocytes. Schuetz AW, et al. **Exp Cell Res** 1967 Jun;46(3):624–8
The possibility that pancreatic beta cell destruction leading to type 1 diabetes is initiated by the release of cytokines by polyclonal activation of the immune system. Ziegler M, et al. **Exp Clin Endocrinol** 1990 Feb;95(1):110–8
Photoreceptor survival–promoting activity in interphotoreceptor matrix preparations: characterization and partial purification. Hewitt AT, et al. **Exp Eye Res** 1990 Jan;50(1):79–88
Role of cytokines and major histocompatibility complex antigens in graft–versus–host disease: in vitro studies using T–cell lines and keratinocytes or hemopoietic targets. Huber C, et al. **Hamatol Bluttransfus** 1990;33:652–4
Hemopoietins and leukemia. Demetri GD, et al. **Hematol Oncol Clin North Am** 1989 Sep;3(3):535–53 (92 ref.)
Hemopoietins for eosinophils. Glycoprotein hormones that regulate the development of inflammation in eosinophilia–associated disease. Silberstein DS, et al. **Hematol Oncol Clin North Am** 1989 Sep;3(3):511–33 (145 ref.)
A novel autoregulatory cytokine is required for the regulation of autoaggressive responses. Rosenkrantz K, et al. **Hum Immunol** 1990 Mar;27(3):254–64
Early induction of anti–double–stranded DNA antibodies in lupus–prone MRL mice inoculated with Ly–24+ cells cloned from lymph node cells of an MRL/Mp–lpr/lpr mouse: possible effect of putative cytokines produced by cloned Ly–24+ cells. Kanai Y, et al. **Immunol Lett** 1990 Mar–Apr;24(1):49–55
The cytokine network [see comments] Balkwill FR, et al. **Immunol Today** 1989 Sep;10(9):299–304 (132 ref.) Comment in: Immunol Today 1990 Mar;11(3):74.
Immunopathogenic mechanisms of HIV infection: cytokine induction of HIV expression. Rosenberg ZF, et al. **Immunol Today** 1990 May;11(5):176–80 (71 ref.)
Cytokine update [letter; comment] Southern SO. **Immunol Today** 1990 Mar;11(3):74 Comment on: Immunol Today 1989 Sep;10(9):299–304.
Smooth muscle–derived factor stimulates mobility of human tumor cells. Rosen EM, et al. **Invasion Metastasis** 1990; 10(1):49–64
Interferon–gamma sensitizes rat pancreatic islet cells to lysis by cytokines and cytotoxic cells. Baquerizo H, et al. **J Autoimmun** 1990 Apr;3 Suppl 1:123–30
Cytokine–mediated beta–cell destruction—the molecular effector mechanism causing IDDM? Mandrup–Poulsen T. **J Autoimmun** 1990 Apr;3 Suppl 1:121–2
19th annual UCLA symposium: Molecular pathways of cytokine action. Abstracts. **J Cell Biochem Suppl** 1990; 14B:1–48
Collagenase secretion accompanying changes in cell shape occurs only in the presence of a biologically active cytokine. Kuter I, et al. **J Cell Sci** 1989 Mar;92 (Pt 3):473–85
Cytokine–dependent long–term culture of highly enriched precursors of hematopoietic progenitor cells from human bone marrow. Brandt J, et al. **J Clin Invest** 1990 Sep; 86(3):932–41
Cytokine regulation of antigen–driven immunoglobulin production in filarial parasite infections in humans. King CL, et al. **J Clin Invest** 1990 Jun;85(6):1810–5
Paracrine and autocrine functions of glomerular mesangial cells. Menè P, et al. **J Endocrinol Invest** 1989 Jul–Aug; 12(7):497–509 (58 ref.)
New aspects of placental endocrinology. Petraglia F, et al. **J Endocrinol Invest** 1990 Apr;13(4):353–71 (166 ref.)
Two types of mouse T helper cell. IV. Th2 clones secrete a factor that inhibits cytokine production by Th1 clones. Fiorentino DF, et al. **J Exp Med** 1989 Dec 1;170(6):2081–95
The role of cytokines in the generation of inflammation and tissue damage in experimental gram–positive meningitis. Saukkonen K, et al. **J Exp Med** 1990 Feb 1;171(2):439–48
Analysis of thymic stromal cell subpopulations grown in vitro on extracellular matrix in defined medium. II. Cytokine activities in murine thymic epithelial and mesenchymal cell culture supernatants. Eshel I, et al. **J Immunol** 1990 Mar 1;144(5):1563–70
HLA expression in hemopoietic development. Class I and II antigens are induced in the definitive erythroid lineage and differentially modulated by fetal liver cytokines. Gabbianelli M, et al. **J Immunol** 1990 May 1;144(9):3354–60
Human P40/IL–9. Expression in activated CD4+ T cells, genomic organization, and comparison with the mouse gene. Renauld JC, et al. **J Immunol** 1990 Jun 1; 144(11):4235–41
Monocyte chemotactic and activating factor gene expression induced in endothelial cells by IL–1 and tumor necrosis factor. Sica A, et al. **J Immunol** 1990 Apr 15;144(8):3034–8
Cytokine network in analogy to language—a general view of interferon research from a distance. Kawade Y. **J Interferon Res** 1990 Apr;10(2):101–7 (30 ref.)
Cytokine modulation of keratinocyte cytokines. Ansel J, et al. **J Invest Dermatol** 1990 Jun;94(6 Suppl):101S–107S (65 ref.)
Role of growth factors, cytokines, and their receptors in the pathogenesis of psoriasis. Krueger JG, et al. **J Invest Dermatol** 1990 Jun;94(6 Suppl):135S–140S (28 ref.)
The role of adhesion molecules, chemotactic factors, and cytokines in inflammatory and neoplastic skin disease—1990 update. Nickoloff BJ, et al. **J Invest Dermatol** 1990 Jun;94(6 Suppl):151S–157S (63 ref.)
Deficient activity of prostacyclin stimulating plasma factor (PSPF) in newborns. Vergara M, et al. **J Perinat Med** 1990; 18(1):59–65
Cytokine–related immunomodulating activities of an anti–tumor glucan, sizofiran (SPG). Tsuchiya Y, et al. **J Pharmacobiodyn** 1989 Oct;12(10):616–25
Cytokine networks in the uteroplacental unit: macrophages as pivotal regulatory cells. Hunt JS. **J Reprod Immunol** 1989 Sep;16(1):1–17 (85 ref.)
Bacterial products, cytokines and sleep. Krueger JM, et al. **J Rheumatol Suppl** 1989 Nov;19:52–7 (74 ref.)
Properties of the pupillary dilation produced by the humoral factor in the pupillary reflex dilation: an experimental study in the cat. Shoumura K, et al. **Jpn J Ophthalmol** 1989; 33(4):490–500
Pathophysiology of cytokines. Fridman WH, et al. **Leuk Res** 1990;14(8):675–7 (8 ref.)
Cytokines in antibacterial resistance: possible applications for immunomodulation. Kaufmann SH, et al. **Lung** 1990;168 Suppl:1025–32
Somatostatin regulation by cytokines. Scarborough DE. **Metabolism** 1990 Sep;39(9 Suppl 2):108–11 (37 ref.)
A multiple cytokine– and second messenger–responsive element in the enhancer of the human interleukin–6 gene: similarities with c–fos gene regulation. Ray A, et al. **Mol Cell Biol** 1989 Dec;9(12):5537–47
Non–steroidal follicular factors attenuate the self–priming action of gonadotropin–releasing hormone on the pituitary gonadotroph. Busbridge NJ, et al. **Neuroendocrinology** 1990 Apr;51(4):493–9
Cytokines and inflammation: modified "Miles–Wilhelm" criteria for assessing the likely roles of these substances in vivo. Bignold LP. **Pathology** 1989 Jul;21(3):200–6 (79 ref.)
Cytokines and endothelial cell biology. Pober JS, et al. **Physiol Rev** 1990 Apr;70(2):427–51 (304 ref.)
Immature human thymocytes can be driven to differentiate into nonlymphoid lineages by cytokines from thymic epithelial cells. Kurtzberg J, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7575–9
Cytokines and lipocortins in inflammation and differentiation. Proceedings of the International Conference on Molecular and Cellular Biology of IL–1, TNF, and Lipocortins in Inflammation and Differentiation. Siena, Italy, October 22–25, 1989. Proceedings. **Prog Clin Biol Res** 1990; 349:1–444
Cytokine control of human megakaryocytopoiesis. Hoffman R, et al. **Prog Clin Biol Res** 1990;338:75–103 (113 ref.)
Endogenous sleep factors: relationships to physiological variables. Krueger JM, et al. **Prog Clin Biol Res** 1990; 345:1–6; discussion 7–8 (18 ref.)
The role of cytokines as communication signals between leukocytes and endothelial cells. Mantovani A, et al. **Prog Clin Biol Res** 1990;349:343–53 (41 ref.)
Role of stromal cell factors (restrictins) in microorganization of hemopoietic tissues. Zipori D. **Prog Clin Biol Res** 1990; 352:115–22 (14 ref.)
Progesterone–mediated immunosuppression and the maintenance of pregnancy. Szekeres–Bartho J, et al. **Res Immunol** 1990 Feb;141(2):175–81
The role of cytokine cross–talk in preventing abortion. Wegmann T. **Res Immunol** 1990 Feb;141(2):185–8 (12 ref.)
The role of cytokines in the development of osteoarthritis. Loyau G, et al. **Scand J Rheumatol Suppl** 1990;81:8–12 (29 ref.)
The biologic characteristics of cytokines and their implication in surgical injury. Fong Y, et al. **Surg Gynecol Obstet** 1990 Apr;170(4):363–78 (228 ref.)
The cascade of inflammatory cytokines regulating synthesis of acute phase proteins. Koj A, et al. **Tokai J Exp Clin Med** 1988 Dec;13(6):255–64 (85 ref.)
Airway epithelium–derived inhibitory factor. Goldie RG, et al. **Trends Pharmacol Sci** 1990 Feb;11(2):67–70 (39 ref.)
Neuromodulative actions of cytokines. Blatteis CM. **Yale J Biol Med** 1990 Mar–Apr;63(2):133–46 (138 ref.)
Somnogenic cytokines and models concerning their effects on sleep. Krueger JM, et al. **Yale J Biol Med** 1990 Mar–Apr;63(2):157–72 (107 ref.)
Hypothalamic neuronal responses to cytokines. Shibata M. **Yale J Biol Med** 1990 Mar–Apr;63(2):147–56 (87 ref.)
[Epidermal cytokines, interleukins and the skin] Delaporte E, et al. **Ann Dermatol Venereol** 1989;116(6–7):511–7 (Fre)
[Cytokines and rheumatoid polyarthritis] Sany J. **Rev Rhum Mal Osteoartic** 1990 Apr 10;57(3 (Pt 2)):275–9

(30 ref.) (Eng. Abstr.) (Fre)
[The effect of bronchial epithelium on bronchial contractility] Wilkens JH, et al. **Pneumologie** 1990 Feb;44 Suppl 1:373–4 (Eng. Abstr.) (Ger)
[Coordinate regulation of immune and inflammatory responses by cytokines] Arai K, et al. **Rinsho Byori** 1990 Apr;38(4):347–53 (Eng. Abstr.) (Jpn)
[Cytokines and their receptors] Uchiyama T. **Rinsho Byori** 1990 Apr;38(4):370–4 (7 ref.) (Eng. Abstr.) (Jpn)
[Cytokines and rheumatoid arthritis] Shimizu S. **Ryumachi** 1989 Aug;29(4):297–302 (52 ref.) (Jpn)

SECRETION

The parathyroid hormone–related protein stimulates human osteoblast–like cells to secrete a 9,000 dalton bone–resorbing protein. Morris CA, et al. **Endocrinology** 1990 Mar;126(3):1783–5
Biologic and clinical significance of cytokine production in B–cell malignancies. Torcia M, et al. **Eur J Haematol Suppl** 1989;51:35–42 (62 ref.)
Enumeration of cytokine–secreting cells at the single–cell level. Skidmore BJ, et al. **Eur J Immunol** 1989 Sep; 19(9):1591–7
The effect of a single whole–blood transfusion on cytokine secretion. Kalechman Y, et al. **J Clin Immunol** 1990 Mar; 10(2):99–105
Measurement of cytokine release by human cells. A quantitative analysis at the single cell level using the reverse haemolytic plaque assay. Lewis CE, et al. **J Immunol Methods** 1990 Feb 20;127(1):51–9

STANDARDS

[ELISA diagnosis for Mycoplasma pneumoniae infection with human normal immunoglobulin products as control sera] Sasaki Y, et al. **Kansenshogaku Zasshi** 1990 Apr; 64(4):487–91 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Increased migration inhibition factor production by leukocytes of patients with herpes zoster given the leukocyte ultrafiltrate. Lackovičová M, et al. **Acta Virol (Praha)** 1989 Sep;33(5):428–34
Immunotherapy of collagen–induced arthritis by a T–cell antiproliferative molecule. Spannaus–Martin DJ, et al. **Am J Pathol** 1990 Aug;137(2):331–9
Biotherapy of AIDS. **Biotherapy** 1990;2(2):103–81
Cytokines in radioprotection and therapy of radiation injury. Neta R. **Biotherapy** 1988;1(1):41–5 (30 ref.)
Lymphokines and cytokines as cancer treatment. Immunotherapy realized. Borden EC, et al. **Cancer** 1990 Feb 1;65(3 Suppl):800–14 (221 ref.)
Lymphokines and cytokines. Wagstaff J, et al. **Cancer Chemother Biol Response Modif** 1988;10:416–33 (140 ref.)
Lymphokines and cytokines. Wagstaff J, et al. **Cancer Chemother Biol Response Modif** 1987;9:432–53 (154 ref.)
The relevance of animal tumour models to the preclinical screening of cytokines. Kelly SA, et al. **Cancer Surv** 1989; 8(4):741–54 (58 ref.)
New immunotherapeutic approaches: the use of cytokines to stimulate the immune system or to control the growth of malignant lymphoid cells [comment] Fridman WH. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1525–8 (16 ref.) Comment on: Eur J Cancer Clin Oncol 1989 Jun;25(6):965–72.
In vivo effects of cytokines on development of natural killer cells and antitumor activity in lethally irradiated bone marrow transplanted recipients. Riccardi C, et al. **J Biol Response Mod** 1990 Feb;9(1):15–23
Biological agents in cancer therapy: cytokines, monoclonal antibodies and vaccines. Oettgen HF. **J Cancer Res Clin Oncol** 1990;116(1):116–9
Cancer, cytokines, and cytotoxic cells: interleukin–2 in the immunotherapy of human neoplasms. Atzpodien J, et al. **Klin Wochenschr** 1990 Jan 4;68(1):1–11 (81 ref.)
Marine natural products and biomedicine. Scheuer PJ. **Med Res Rev** 1989 Oct–Dec;9(4):535–45 (45 ref.)
Action of a thymic cytokine TsIF in reversing the autoimmune disease state of the MRL/1pr mouse. Miller HC, et al. **Mol Biother** 1989;1(4):213–7
Renal allograft rejection: protection of renal tubular epithelial cells from lymphokine activated killer cell mediated lysis by pretreatment with cytokines. Kirby JA, et al. **Nephrol Dial Transplant** 1989;4(9):824–8
New directions in hematologic biotherapy. Proceedings of a symposium. December 2, 1988, San Antonio, Texas, in conjunction with the 30th annual meeting of the American Society of Hematology. **Semin Hematol** 1989 Jul;26(3 Suppl 3):1–45
[Cytokines in the clinic] Obrist R. **Helv Chir Acta** 1990 Jan; 56(5):683–8 (0 ref.) (Eng. Abstr.) (Ger)
[Update oncology '89. II] Pfreundschuh M. **Med Klin** 1989 Dec 15;84(12):584–9 (0 ref.) (Ger)

TOXICITY

[Problem of hygienic terminology of harmful biological factors] Tsapko VG, et al. **Gig Sanit** 1989 Jun;(6):59–60 (Rus)
[Comparative pathomorphologic study of the toxic properties of a corpuscular pertussis vaccine and of a cell–free pertussis preparation] Grigor'eva LV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Aug;(8):52–7 (Eng. Abstr.) (Rus)

URINE

Mononuclear cells in glomeruli and cytokines in urine reflect the severity of experimental proliferative immune complex glomerulonephritis. Noble B, et al. **Clin Exp Immunol** 1990 May;80(2):281–7
Elevations of cytokines interleukin–1, interleukin–2 and tumor necrosis factor in the urine of patients after intravesical bacillus Calmette–Guerin immunotherapy. Böhle A, et al. **J Urol** 1990 Jul;144(1):59–64
Urinary cytokines following photodynamic therapy for bladder cancer. A preliminary report. Nseyo UO, et al. **Urology** 1990 Aug;36(2):167–71

BIOLOGICAL MARKERS

see related

MOLECULAR PROBES

Biomarkers of aging. Tréton JA, et al. **Ann Biol Clin (Paris)** 1990;48(5):319–22
The value of biomarkers in detecting alterations in bone metabolism [letter] Moro L, et al. **Calcif Tissue Int** 1990 May;46(5):351
Rapid, simple enzymatic assay of free L–fucose in serum and urine, and its use as a marker for cancer, cirrhosis, and gastric ulcers. Sakai T, et al. **Clin Chem** 1990 Mar; 36(3):474–6
Combined diagnostic value of biochemical markers in acute pancreatitis. Viel JF, et al. **Clin Chim Acta** 1990 Aug 15; 189(2):191–8
HLA antigens associated with sarcoidosis. Lenhart K, et al. **Dis Markers** 1990 Jan–Feb;8(1):23–9
HLA and celiac disease in Argentina: involvement of the DQ subregion. Palavecino EA, et al. **Dis Markers** 1990 Jan–Feb;8(1):5–10
Histocompatibility antigens (A, B, C, and DR) in Arabs with rheumatoid arthritis. Sattar MA, et al. **Dis Markers** 1990 Jan–Feb;8(1):11–5
Biochemical markers of bone turnover for the clinical assessment of metabolic bone disease. Delmas PD. **Endocrinol Metab Clin North Am** 1990 Mar;19(1):1–18 (90 ref.)
The role of clinical investigations in biological markers research. Cullen MR. **Environ Res** 1989 Oct;50(1):1–10 (18 ref.)
Crohn's disease in the Japanese is associated with the HLA–DRw53. Kobayashi K, et al. **Exp Clin Immmunogenet** 1990;7(2):101–8
Biochemical predictors for osteoporotic fractures in elderly Chinese—a longitudinal study. Woo J, et al. **Gerontology** 1990;36(1):55–8
Immunohistochemical characterization of epithelial cells in human lacrimal glands. I. Normal major and accessory lacrimal glands. Vigneswaran N, et al. **Graefes Arch Clin Exp Ophthalmol** 1990;228(1):58–64
Immunohistochemical characterization of epithelial cells in human lacrimal glands. II. Inflammatory and neoplastic lesions of lacrimal glands. Wilk CM, et al. **Graefes Arch Clin Exp Ophthalmol** 1990;228(1):65–72
Hepatic drug clearance in chronic liver disease: can we expect to find a universal, quantitative marker of hepatic function? Morgan DV, et al. **Hepatology** 1989 Nov; 10(5):893–5
Skin tags—a marker for colon polyps? Varma JR. **J Am Board Fam Pract** 1990 Jul–Sep;3(3):175–80
Utility of free alpha–subunit as an alternative neuroendocrine marker of gonadotropin–releasing hormone (GnRH) stimulation of the gonadotroph in the human: evidence from normal and GnRH–deficient men. Whitcomb RW, et al. **J Clin Endocrinol Metab** 1990 Jun;70(6):1654–61
Biological markers: broadening or narrowing the scope of epidemiology. Yach D. **J Clin Epidemiol** 1990;43(3):309–10
Potential clinical applications of C–reactive protein. Okamura JM, et al. **J Clin Lab Anal** 1990;4(3):231–5 (68 ref.)
Development of micrometastases: earliest events detected with bacterial lacZ gene–tagged tumor cells. Lin WC, et al. **J Natl Cancer Inst** 1990 Sep 19;82(18):1497–503
The use of c–fos as a metabolic marker in neuronal pathway tracing. Dragunow M, et al. **J Neurosci Methods** 1989 Sep; 29(3):261–5 (21 ref.)
On using a double–exponential model for describing faecal marker concentration curves. Dhanoa MS, et al. **J Theor Biol** 1989 Nov 21;141(2):247–57
Development and application of biomarkers exploitable for human exposure monitoring. De Flora S. **Teratogenesis Carcinog Mutagen** 1990;10(3):211–4 (29 ref.)
Biochemical epidemiology: uses in the study of human carcinogenesis. Vineis P, et al. **Teratogenesis Carcinog Mutagen** 1990;10(3):231–7 (15 ref.)
[Biological markers of tobacco abuse] Bellenger P. **Pathol Biol (Paris)** 1989 Nov;37(9):1050 (Fre)

ANALYSIS

Correlation between microscopical changes and Tau 64 and 69 biochemical detection in senile dementia of the Alzheimer type. Tau 64 and 69 are reliable markers of the neurofibrillary degeneration. Flament S, et al. **Acta Neuropathol (Berl)** 1990;80(2):212–5
Significance of tissue kallikrein in chronic atrophic gastritis. Sakai T, et al. **Adv Exp Med Biol** 1989;247B:657–61
Markers for progression in HIV infection. Lange JM, et al. **AIDS** 1989;3 Suppl 1:S153–60 (173 ref.)
Low holotranscobalamin II is the earliest serum marker for subnormal vitamin B12 (cobalamin) absorption in patients with AIDS. Herbert V, et al. **Am J Hematol** 1990 Jun; 34(2):132–9
Immunotargeting: a contemporary approach to the study of lung development. Funkhouser JD, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):L311–7 (58 ref.)
Glutathione disulfide as index of oxidant stress in rat liver during hypoxia. Jaeschke H. **Am J Physiol** 1990 Apr;258(4 Pt 1):G499–505
Dihydroxyphenylglycol as an index of neuronal uptake in dog saphenous vein. Rorie DK, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):H1945–51
Epidermal growth factor levels in human breast cyst fluid. Battaglia F, et al. **Anticancer Res** 1989 Nov–Dec; 9(6):1661–3
c–myc oncoprotein in bronchial carcinoma: expression in all major morphological types. Gosney JR, et al. **Anticancer Res** 1990 May–Jun;10(3):623–8
Oestradiol and epidermal growth factor in breast cyst fluid. Lai LC, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1853–6
Antibody 624H12, which detects lung cancer at early stages, recognizes a sugar sequence in the glycosphingolipid difucosylneolactonorhexaosylceramide (V3FucIII3FunLc6Cer). Kyogashima M, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):309–14
Identification of dystrophin in cardiac sarcolemmal vesicles. Michalak M, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):565–70
Application of automated image analysis to demonstrate the correlation between ras p21 expression and severity of gliomas. Salgaller M, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):482–91
Markers for proliferation and keratinization in the margin of the active psoriatic lesion. de Mare S, et al. **Br J Dermatol** 1990 Apr;122(4):469–75
Differential staining of normal and neoplastic mouse lung epithelia by succinate dehydrogenase histochemistry. Thaete LG, et al. **Cancer Lett** 1990 Jul 31;52(3):219–27
STB1, a mouse lymphocyte marker found on T cell and B cell subpopulations. Andrew D, et al. **Cell Immunol** 1990 Mar;126(1):16–30
New cell markers for routine diagnostic dermatopathology. Cerio R, et al. **Clin Exp Dermatol** 1989 May;14(3):177–80 (38 ref.)
Neuropathological and neuropsychological changes in Alzheimer's disease. Relationship of biologic markers to behavioral markers. Pirozzolo FJ, et al. **Clin Geriatr Med** 1989 Aug;5(3):425–40 (63 ref.)
The use of biological markers in toxicology. Henderson RF, et al. **Crit Rev Toxicol** 1989;20(2):65–82 (97 ref.)
Cell lineage and lineage markers. Price J. **Curr Opin Cell Biol** 1989 Dec;1(6):1071–4 (18 ref.)
Islet cell antibodies as predictive markers for IDDM in children with high background incidence of disease. Karjalainen JK. **Diabetes** 1990 Sep;39(9):1144–50
Rapid detection of IDDM susceptibility with HLA–DQ beta–alleles as markers. Trucco G, et al. **Diabetes** 1989 Dec; 38(12):1617–22
Analysis of metabolic progression to type I diabetes in ICA+ relatives of patients with type I diabetes. Bleich D, et al. **Diabetes Care** 1990 Feb;13(2):111–8
Incidence and significance of islet cell antibodies in women with previous gestational diabetes. Catalano PM, et al. **Diabetes Care** 1990 May;13(5):478–82
Psychological impact of islet cell–antibody screening. Preliminary results. Johnson SB, et al. **Diabetes Care** 1990 Feb;13(2):93–7
Usefulness of biochemical screening of diabetic patients for hemochromatosis. O'Brien T, et al. **Diabetes Care** 1990 May;13(5):532–4
HLA antigens in Greek patients with cholelithiasis. Papasteriades C, et al. **Dis Markers** 1990 Jan–Feb; 8(1):17–21
Prenatal diagnosis of cystic fibrosis. Analytical evaluation of microvillar enzyme determinations in amniotic fluid. Dechecchi MC, et al. **Enzyme** 1989;42(4):209–18
Expression of markers of differentiation in a transformed human keratinocyte line induced by coculture with a fibroblast line. Kamalati T, et al. **Exp Cell Res** 1989 Dec; 185(2):453–63
Immunoglobulin allotypes and the immune response to wheat gliadin in a Finnish population with celiac disease. Fedrick JA, et al. **Exp Clin Immmunogenet** 1985;2(4):185–90
Value of immunohistochemical demonstration of several epithelial markers in hyperplastic and neoplastic endometrium. Nakopoulou L, et al. **Gynecol Oncol** 1990 Jun;37(3):346–53
Class II HLA antigen expression in familial polyposis coli is related to the degree of dysplasia. Gutierrez J, et al. **Immunobiology** 1990 Feb;180(2–3):138–48
Glutathione in bronchoalveolar lavage fluid from smokers is related to humoral markers of inflammatory cell activity. Linden M, et al. **Inflammation** 1989 Dec;13(6):651–8
C–reactive protein is a marker for the diagnosis of adnexitis. Schmidt–Rhode P, et al. **Int J Gynaecol Obstet** 1990 Jun;

32(2):133–9
Expression of the C3d/EBV receptor and of other cell membrane surface markers is altered upon HIV–1 infection of myeloid, T, and B cells. Larcher C, et al. **J Acquir Immune Defic Syndr** 1990;3(2):103–8
Clinical review 3: The clinical use of thyrotropin receptor antibody measurements. McKenzie JM, et al. **J Clin Endocrinol Metab** 1989 Dec;69(6):1093–6 (7 ref.)
Constructing an instrument to measure the rate of aging in female pigtailed macaques (Macaca nemestrina). Bowden DM, et al. **J Gerontol** 1990 Mar;45(2):B59–66
P-element–mediated enhancer detection allows rapid identification of developmentally regulated genes and cell specific markers in Drosophila. Bellen HJ, et al. **J Physiol (Paris)** 1990;84(1):33–41
A pessimistic view of serologic markers for diagnosis and management of osteoarthritis. Biochemical, immunologic and clinicopathologic barriers. Brandt KD. **J Rheumatol Suppl** 1989 Aug;18:39–42 (36 ref.)
17 beta–Hydroxysteroid oxidoreductase activity in the endometrium of normal women and patients with pelvic pain and polycystic ovaries. Bonney RC, et al. **J Steroid Biochem** 1989;34(1–6):535–9
Polycystic disease of the kidney. Evaluation and classification based on nephron segment and cell–type specific markers. Holthöfer H, et al. **Lab Invest** 1990 Mar;62(3):363–9
Behaviour of biological indicators of internal dose and some neuro–endocrine tests in aluminium workers. Alessio L, et al. **Med Lav** 1989 Jul–Aug;80(4):290–300
The prognostic value of cellular and serologic markers in infection with human immunodeficiency virus type 1 [see comments] Fahey JL, et al. **N Engl J Med** 1990 Jan 18; 322(3):166–72 Comment in: N Engl J Med 1990 Jun 28;322(26):1886.
Antiphospholipid antibodies: risk factors or only markers for thrombosis, fetal loss and thrombocytopenia? Out HJ, et al. **Neth J Med** 1990 Apr;36(3–4):177–81
Antiphospholipid antibodies and cerebral ischemia in young people. Brey RL, et al. **Neurology** 1990 Aug;40(8):1190–6
A neuron–specific antigen in C. elegans allows visualization of the entire nervous system. Hekimi S. **Neuron** 1990 Jun; 4(6):855–65
Lineage, migration, and morphogenesis of longitudinal glia in the Drosophila CNS as revealed by a molecular lineage marker. Jacobs JR, et al. **Neuron** 1989 Jun;2(6):1625–31
Biochemical assessment and prediction of gestational well–being. Martin JN Jr, et al. **Obstet Gynecol Clin North Am** 1990 Mar;17(1):81–93 (61 ref.)
Immunocytochemical localization of estrogen and progesterone receptors in human thyroid. Money SR, et al. **Surgery** 1989 Dec;106(6):975–8; discussion 979
Effect of matching for the endothelial antigen EAG–1 on kidney graft survival in the rat. Blankert JJ, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):256–7
The Leu–2+7+ cell subset as a marker of immune activation in renal transplant recipients. Brando B, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1611–2
Class II major histocompatibility complex antigens on cardiac endothelium: an early biopsy marker of rejection in the transplanted human heart. Caforio AL, et al. **Transplant Proc** 1990 Aug;22(4):1830–3
Decreased detection of class II major histocompatibility complex antigens on blood mononuclear cells from transplant recipients receiving immunosuppressive drugs: influence of cycloheximide and monensin. Dupont E, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):233–4
Pancreatic juice neopterin excretion—reliable marker for detection of pancreatic allograft rejection. Königsrainer A, et al. **Transplant Proc** 1990 Apr;22(2):671–2
Intravenously injected anti–cardiac myosin monoclonal antibody specifically demarcates cardiac rejection. Morris RE, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1053–5
Pancreatic juice immunoreactive thromboxane B2 in pancreas allograft rejection. Nakache R, et al. **Transplant Proc** 1990 Apr;22(2):669
Expression of class II antigen: marker for rejection? O'Brien J, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):211–2
Early postoperative monitoring of natural anti–A and anti–B isoantibodies in ABO–incompatible living donor renal allografts. Reding R, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):1989–90
Double staining analysis of mononuclear cells infiltrating rejected kidneys: immunohistochemical investigation of rejection mechanisms. Takeda I, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):372–3
Effect of cyclosporine A on the distal nephron: the use of kallikrein as a specific morphological marker. Vio CP, et al. **Transplant Proc** 1990 Aug;22(4):1730–2
Effects of HLA matching and panel reactive antibodies in the development of rejection after conversion of cyclosporine to azathioprine. Zemel SM, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2029–31
Serum immunoreactive anodal trypsinogen and urinary amylase as biochemical markers for rejection of clinical whole–organ pancreas allografts having exocrine drainage into the urinary bladder. Marks WH, et al. **Transplantation** 1990 Jan;49(1):112–5
[Oncofetal proteins of the exocrine pancreas] Escribano M, et al. **Bull Cancer (Paris)** 1990;77(1):75–81 (Eng. Abstr.) (Fre)
[Biological markers of allograft rejection] Rondeau E. **Nephrologie** 1990;11(1):23–8 (64 ref.) (Eng. Abstr.) (Fre)
[Biological markers of alcoholism] Schmidt LG, et al. **Nervenarzt** 1990 Mar;61(3):140–7 (88 ref.) (Ger)
[Psoriasis vulgaris—unchanged endothelial reactivity with histochemical markers] Wollina U, et al. **Z Hautkr** 1989 Oct 15;64(10):925–7 (Eng. Abstr.) (Ger)
[The discordance between the presence of identifiable p24 antigen in the blood and the isolation of HIV from the blood is not influenced by methodological factors] Fiore JR, et al. **Boll Soc Ital Biol Sper** 1989 Aug;65(8):783–9 (Eng. Abstr.) (Ita)
[Simultaneous analysis of lymphocyte markers using triple color markers] Mancini R, et al. **Boll Soc Ital Biol Sper** 1989 Aug;65(8):751–7 (Eng. Abstr.) (Ita)
[Immunohistochemical localization of nerve terminals in the human gingiva. Use of a new neuronal marker] Ramieri G. **Minerva Stomatol** 1989 Jul;38(7):815–8 (Eng. Abstr.) (Ita)
[Cotinine: a biological marker for tobacco in children] Garciá Calzado MC, et al. **An Esp Pediatr** 1989 Jun;30(6):503–6 (21 ref.) (Spa)
[DNA polymorphisms as implant markers in allogeneic bone marrow transplantation. Preliminary evaluation] Brunet S, et al. **Med Clin (Barc)** 1989 Dec 16;93(20):765–71 (Eng. Abstr.) (Spa)
[Biological markers of tobacco] García Calzado MC, et al. **Med Clin (Barc)** 1989 Jul 1;93(5):186–8 (28 ref.) (Spa)
[Susceptibility to chronic HLA–system–associated lymphocytic thyroiditis. Its relationship with insulin–dependent diabetes mellitus] Plensa I, et al. **Med Clin (Barc)** 1989 Dec 16;93(20):761–4 (Eng. Abstr.) (Spa)
[Obvious markers for alcohol dependency do not yet exist] Sternebring B. **Lakartidningen** 1989 Sep 27;86(39):3271–3 (Swe)

BLOOD

Level of serum fructosamine in Saudi diabetic patients. Ajabnoor MA, et al. **Acta Diabetol Lat** 1990 Apr–Jun; 27(2):105–12
Plasma alpha–2 glycomicroglobulin in monitoring allograft function and in predicting rejection episodes in kidney transplantation (preliminary results). Ayatse JO. **Acta Med Hung** 1989;46(4):315–22
Progression to AIDS in the majority of asymptomatic HIV–infected people. Lefrère JJ, et al. **Aids** 1989 Sep; 3(9):603–4
Hyperphosphatemia in infantile hypophosphatasia: implications for carrier diagnosis and screening. Chodirker BN, et al. **Am J Hum Genet** 1990 Feb;46(2):280–5
Esterase D assay in Brazilian retinoblastoma families. Costanzi E, et al. **Am J Med Genet** 1989 Nov;34(3):391–6
Platelet catecholamine contents are cumulative indexes of sympathoadrenal activity. Chamberlain KG, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):E141–7
The soluble interleukin–2 receptor: biology, function, and clinical application. Rubin LA, et al. **Ann Intern Med** 1990 Oct 15;113(8):619–27 (107 ref.)
Clinical importance of erythrocyte polyamine level determination during bone marrow transplantation in children. Bergeron C, et al. **Anticancer Res** 1989 Nov–Dec; 9(6):1757–60
Studies on factors influencing human plasma alpha–MSH. Ghanem G, et al. **Anticancer Res** 1989 Nov–Dec; 9(6):1691–6
Tumor necrosis factor–alpha and interferon–gamma in serum of multiple myeloma patients. Pisa P, et al. **Anticancer Res** 1990 May–Jun;10(3):817–20
Detection of transforming growth factor alpha in human urine and plasma. Katoh M, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):1065–72
Detection of soluble forms of the beta–amyloid precursor protein in human plasma. Podlisny MB, et al. **Biochem Biophys Res Commun** 1990 Mar 30; 167(3):1094–101
Plasma trehalase activity and diabetes mellitus. Eze LC. **Biochem Genet** 1989 Oct;27(9–10):487–95
Correlation between erythrocyte CR1 reduction and other blood proteinase markers in patients with malignant and inflammatory disorders. Currie MS, et al. **Blood** 1990 Apr 15;75(8):1699–704
Platelet immunoglobulin G: its significance for the evaluation of thrombocytopenia and for understanding the origin of alpha–granule proteins. George JN. **Blood** 1990 Sep 1; 76(5):859–70 (174 ref.)
Neutrophil myeloperoxidase measurement uncovers masked megaloblastic anemia. Gulley ML, et al. **Blood** 1990 Sep 1;76(5):1004–7
Interleukin–6 and phospholipase A2 in sepsis [letter; comment] Pruzanski W, et al. **Blood** 1990 May 1; 75(9):1897–8 Comment on: Blood 1989 Oct;74(5):1704–10.
Serum transferrin receptor: a quantitative measure of tissue iron deficiency. Skikne BS, et al. **Blood** 1990 May 1; 75(9):1870–6
Partial purification and properties of nicotinamide adenine dinucleotide synthetase from human erythrocytes: evidence that enzyme activity is a sensitive indicator of lead exposure. Zerez CR, et al. **Blood** 1990 Apr 1;75(7):1576–82
A comparative evaluation of assays for markers of activated coagulation and/or fibrinolysis: thrombin–antithrombin complex, D–dimer and fibrinogen/fibrin fragment E antigen. Boisclair MD, et al. **Br J Haematol** 1990 Apr; 74(4):471–9
Decline of the hemoglobin adduct of 4–aminobiphenyl during withdrawal from smoking. Maclure M, et al. **Cancer Res** 1990 Jan 1;50(1):181–4
Significance of C1q–binding macromolecules within the head and neck cancer patient. Schantz SP, et al. **Cancer Res** 1990 Jul 15;50(14):4349–54
The importance of patient monitoring in clinical cytokine trials: use of serum markers to define biologically active doses. Huber C, et al. **Cancer Surv** 1989;8(4):809–15
Effect of transport conditions on the stability of biochemical markers in blood. Hankinson SE, et al. **Clin Chem** 1989 Dec;35(12):2313–6
Serum beta 2–microglobulin levels in haemophiliacs [letter] Smith GM, et al. **Clin Lab Haematol** 1989;11(4):409–10
Serum bone–gla protein after fracture. Obrant KJ, et al. **Clin Orthop** 1990 Sep;(258):300–3
Home blood glucose monitoring, glycosylated hemoglobin and fructosamine: their relationships in diabetic patients with and without residual C–peptide secretion. Brichard SM, et al. **Diabete Metab** 1989 Nov–Dec;15(6):388–93
Serum fructosamine in diabetic pregnancy. Pasi KJ, et al. **Diabete Metab** 1989 Jul–Aug;15(4):151–5
Plasma C–peptide levels and clinical remissions in recent–onset type I diabetic patients treated with cyclosporin A and insulin. Assan R, et al. **Diabetes** 1990 Jul;39(7):768–74
Clinical significance of erythrocyte sorbitol–blood glucose ratios in type II diabetes mellitus. Aida K, et al. **Diabetes Care** 1990 May;13(5):461–7
Diabetes complications and glycemic control. The Pittsburgh Prospective Insulin–Dependent Diabetes Cohort Study Status Report after 5 yr of IDDM. D'Antonio JA, et al. **Diabetes Care** 1989 Nov–Dec;12(10):694–70
Proinsulin levels and insulinomas [letter; comment] Service FJ. **Diabetes Care** 1989 Oct;12(9):661–3 Comment on: Diabetes Care 1988 Jun;11(6):506–8.
Relative clinical usefulness of glycosylated serum albumin and fructosamine during short–term changes in glycemic control in IDDM. Winocour PH, et al. **Diabetes Care** 1989 Nov–Dec;12(10):665–72
Neutrophil activation detected by increased neutrophil elastase activity in type 1 (insulin–dependent) diabetes mellitus. Collier A, et al. **Diabetes Res** 1989 Mar; 10(3):135–8
The utility of glycated hemoglobin in identification of impaired glucose tolerance. Larsen ML. **Diabetes Res** 1989 Oct;12(2):67–70
Islet–cell antibodies: markers of a more severe insulin–dependent diabetes mellitus? Montaña E, et al. **Diabetes Res** 1989 Aug;11(4):167–71
C–peptide but not insulin concentrations are related to the serum lipoprotein levels during insulin treatment of non–insulin–dependent diabetes mellitus (NIDDM) patients. Vessby B, et al. **Diabetes Res** 1989 Nov; 12(3):109–16
A comparison of fructosamine and glycosylated haemoglobin measurements at a diabetic clinic. Cockram CS, et al. **Diabetes Res Clin Pract** 1990 Apr;9(1):43–8
Erythrocytes from diabetics with neuropathy have fewer sodium pumps. Noda K, et al. **Diabetes Res Clin Pract** 1990 Mar;8(3):177–81
Clinical application of measurement of glucose transport in human polymorphonuclear leukocytes. Okuno Y, et al. **Diabetes Res Clin Pract** 1989;7 Suppl 1:S5–9
Is examination of fructosamine levels valuable as a diagnostic test for diabetes mellitus? Sekikawa A, et al. **Diabetes Res Clin Pract** 1990 Mar;8(3):187–92
The relative value of glycated albumin, hemoglobin A1c and fructosamine when screening for diabetes mellitus. Shima K, et al. **Diabetes Res Clin Pract** 1989 Nov 6;7(4):243–50
The relevance of persistent C–peptide secretion in type 1 (insulin–dependent) diabetes mellitus to glycaemic control and diabetic complications. Winocour PH, et al. **Diabetes Res Clin Pract** 1990 Apr;9(1):23–35
Glycosylated haemoglobin revisited [editorial] Home P. **Diabetic Med** 1990 Jun;7(5):385–6
Clinical utility of assays of glycosylated haemoglobin and serum fructosamine compared: use of data on biological variation. Howey JE, et al. **Diabetic Med** 1989 Dec; 6(9):793–6
Antibodies to proinsulin and insulin as predictive markers of type 1 diabetes. Kuglin B, et al. **Diabetic Med** 1990 May; 7(4):310–4
Blood glycogen and metabolic control in diabetes mellitus. Segers O, et al. **Diabetic Med** 1990 Mar–Apr;7(3):207–10
Circulating insulin–like growth factor I in type 1 (insulin–dependent) diabetic patients with retinopathy. Arner P, et al. **Diabetologia** 1989 Oct;32(10):753–8
Relationship between haemoglobin A1C in early type 1 (insulin–dependent) diabetic pregnancy and the occurrence of spontaneous abortion and fetal malformation in Sweden. Hanson U, et al. **Diabetologia** 1990 Feb;33(2):100–4
Proinsulin and C–peptide at onset and during 12 months cyclosporin treatment of type 1 (insulin–dependent) diabetes mellitus. Snorgaard O, et al. **Diabetologia** 1990 Jan; 33(1):36–42
HbA1 in assessment of metabolic control in diabetic BB/E rats. Tames FJ, et al. **Diabetologia** 1990 May;33(5):257–61
Direct relationship of antepartum glucose control and fetal erythropoietin in human type 1 (insulin–dependent) diabetic

pregnancy. Widness JA, et al. **Diabetologia** 1990 Jun; 33(6):378–83

Cerebrospinal fluid/serum lactic acid in febrile convulsions. Imuekemhe SO, et al. **East Afr Med J** 1989 Sep; 66(9):589–93

Platelet calmodulin correlates with platelet turnover. Endoh N, et al. **Eur J Haematol** 1990 Jan;44(1):45–50

Evaluation of microcytosis using serum ferritin and red blood cell distribution width. van Zeben D, et al. **Eur J Haematol** 1990 Feb;44(2):106–9

Serum tumour necrosis factor in newborns at risk for infections. Girardin EP, et al. **Eur J Pediatr** 1990 Jun; 149(9):645–7

Prognostic value of the early serum estradiol response to leuprolide acetate in in vitro fertilization. Padilla SL, et al. **Fertil Steril** 1990 Feb;53(2):288–94

Serum ferritin in patients with various haemolytic disorders. Brabec V, et al. **Folia Haematol (Leipz)** 1990;117(2):219–27

Fatty acid composition of phospholipids in erythrocyte membranes and risk of breast cancer. Zaridze DG, et al. **Int J Cancer** 1990 May 15;45(5):807–10

A 70-kDa apolipoprotein designated ApoJ is a marker for subclasses of human plasma high density lipoproteins. de Silva HV, et al. **J Biol Chem** 1990 Aug 5;265(22):13240–7

Plasma pancreastatin-like immunoreactivity in various diseases. Tateishi K, et al. **J Clin Endocrinol Metab** 1989 Dec;69(6):1305–8

Hepatitis B virus (HBV) markers and HBV-DNA in serum and liver tissue of patients with acute exacerbation of chronic type B hepatitis. Raimondo G, et al. **J Hepatol** 1990 May;10(3):271–3

Plasma amino acids during the first 24 hours of life: feasibility of early diagnosis in the newborn at risk of amino acid disorders. Caruso U, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:311–4

A 'blood spot' androstenedione radioimmunoassay able to detect congenital adrenal hyperplasia. Thomson S, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:318–20

Prognostic indicators in tibial shaft fractures: serum creatinine kinase activity. Oni OO, et al. **J Orthop Trauma** 1989; 3(4):345–7

Fall and rise variations of serum GGTP in preoperative infants with biliary atresia. Tazawa Y, et al. **J Pediatr Gastroenterol Nutr** 1990 May;10(4):555–7

Effect of combined substance use on laboratory markers of alcoholism. Chang MM, et al. **J Stud Alcohol** 1990 Jul; 51(4):361–5

Diagnostic value of ferritin measurements in patients with pleural effusions. Chong IW, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Oct; 5(10):556–63

Postprandial plasma vitamin A metabolism in humans: a reassessment of the use of plasma retinyl esters as markers for intestinally derived chylomicrons and their remnants. Krasinski SD, et al. **Metabolism** 1990 Apr;39(4):357–65

Altered platelet calcium metabolism as an early predictor of increased peripheral vascular resistance and preeclampsia in urban black women [see comments] Zemel MB, et al. **N Engl J Med** 1990 Aug 16;323(7):434–8 Comment in: N Engl J Med 1990 Aug 16;323(7):478–80.

A combination of raised serum AST:ALT ratio and erythrocyte mean cell volume level detects excessive alcohol consumption. Kawachi I, et al. **N Z Med J** 1990 Apr 11;103(887):145–8

Assessment of dry body-weight in haemodialysis patients by the biochemical marker cGMP. Lauster F, et al. **Nephrol Dial Transplant** 1990;5(5):356–61

Erythrocyte metallothionein as an index of zinc status in humans. Grider A, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1259–62

Measurement of plasma homovanillic acid concentrations in schizophrenic patients. Kaminski R, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(3):271–87 (29 ref.)

Symptom profiles of biological markers in depression: a multivariate study. Maes M, et al. **Psychoneuroendocrinology** 1990;15(1):29–37

C-reactive protein as a diagnostic tool. Woo KT. **Singapore Med J** 1989 Feb;30(1):10–1

Correlation between smoking, fibrinogen, and vascular disease [letter; comment] Mercuri MF, et al. **Stroke** 1990 Jul;21(7):1092 Comment on: Stroke 1989 Nov;20(11):1466–71.

Patterns of serum alkaline phosphatase activity in unilateral hepatic duct obstruction: a clinical and experimental study. Hadjis NS, et al. **Surgery** 1990 Feb;107(2):193–200

New rapid assay for factor XIa-alpha 1 antitrypsin complex—application to DIC. Komiyama Y, et al. **Thromb Res** 1989 Sep 1;55(5):527–36

Interleukin-2 measurements in peripheral blood after kidney transplantation. Albert FW, et al. **Transplant Proc** 1990 Aug;22(4):1852–3

Plasma amino acid clearance predicts hepatic recovery after normothermic anoxia and cold preservation. Becker WK, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1331

Interleukin 2 receptor in rat allograft rejection. Bouchot O, et al. **Transplant Proc** 1990 Aug;22(4):1995–7

Correlation of amino acid metabolism and liver biopsies in preoperative and postoperative patients receiving hepatic transplants. Clowes GH Jr, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 3):2462–3

Appearance of cells bearing the interleukin-2 receptor in peripheral blood of cardiac transplant patients and their correlation with rejection episodes. Coles M, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2546–7

Interleukin-2 receptor levels in end-stage renal disease and transplant patients. Di Stefano R, et al. **Transplant Proc** 1990 Aug;22(4):1863–4

Monitoring of the serum neopterin/creatinine ratio in renal transplantation. Hacini D, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 3):2185–6

Plasma lecithin/cholesterol acyltransferase (LCAT) activity in multiple-organ donors: a predictor of allograft viability in clinical liver transplantation. Higashi H, et al. **Transplant Proc** 1990 Apr;22(2):433–4

Serum type III procollagen as a marker in liver transplantation. Höckerstedt K, et al. **Transplant Proc** 1990 Aug;22(4):1574–5

Increase in transferrin receptors as a marker for rejection and infection in human cardiac transplantation. Hoshinaga K, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2534–6

Plasma IL-2 levels and diagnosis of renal transplant rejection. Johnson CP, et al. **Transplant Proc** 1990 Aug;22(4):1849–51

Monitoring of renal allograft rejection with fine needle aspiration biopsy and serum C-reactive protein determinations. Kaden J, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 2):1657

Thyroid hormones and their impact on the hemodynamic and metabolic stability of organ donors and on kidney graft function after transplantation. Koller J, et al. **Transplant Proc** 1990 Apr;22(2):355–7

Serum beta 2 microglobulin levels are relatively depressed in cyclosporine A-treated patients who undergo kidney graft rejection. Kootte AM, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1681–2

Adrenal function as an index of the immunosuppressive activity of glucocorticoids (prednisolone) in renal allograft recipients. Kozaki M, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2237–9

Elevation of serum C-reactive protein levels during graft rejection. Lempert N, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1683–5

Plasma soluble interleukin-2 receptor (IL-2RS) level and activation markers in blood in the follow-up of renal allograft patients. Malcus C, et al. **Transplant Proc** 1990 Aug;22(4):1865–6

Serum anodal trypsinogen is a predictive biochemical marker for pancreas allograft rejection. Marks WH, et al. **Transplant Proc** 1990 Apr;22(2):673–4

Serial glycosylated hemoglobin levels in diabetic recipients of pancreatic transplants. Morel P, et al. **Transplant Proc** 1990 Apr;22(2):649–50

Differential diagnosis of hyperamylasemia in pancreas allograft recipients. Stratta RJ, et al. **Transplant Proc** 1990 Apr;22(2):675–7

Serum pancreatic secretory trypsin inhibitor monitoring for early diagnosis of pancreas allograft rejection in dogs. Suzuki Y, et al. **Transplant Proc** 1990 Apr;22(2):704–6

Plasma insulin, C-peptide, HBA1c, and plasma glucose levels in organ donors. van Houten H, et al. **Transplant Proc** 1990 Apr;22(2):435–6

X antigen polypeptides in the sera of hepatitis B virus-infected patients. Feitelson MA, et al. **Virology** 1990 Jul;177(1):367–71

[The pre-S/anti-pre-S system in viral hepatitis B] Belabbes EH, et al. **Arch Inst Pasteur Alger** 1986;55:275–83 (Eng. Abstr.) **(Fre)**

[Should the assay of fructosamine be part of the elements of diabetic monitoring?] Maugendre D, et al. **Diabete Metab** 1990 Jan-Feb;16(1):55–8 (24 ref.) **(Fre)**

[Biological changes caused by ethanol: their sequelae and importance in the diagnosis of alcoholism] Cap L, et al. **Ther Umsch** 1990 May;47(5):350–7 (19 ref.) (Eng. Abstr.) **(Ger)**

[Clinical usefulness of bone Gla protein as an indicator of operative indication in patients with renal hyperparathyroidism: preliminary report] Takami H, et al. **Nippon Geka Gakkai Zasshi** 1989 Aug;90(8):1287 **(Jpn)**

[Anti-endomysium antibodies: new serological markers for the diagnosis and follow-up of patients with gluten-sensitive enteropathy. Preliminary study] Calabuig Sánchez M, et al. **An Esp Pediatr** 1989 Jun;30(6):432–4 (Eng. Abstr.) **(Spa)**

[Evaluation of the inflammatory and nutritional status in children with cystic fibrosis] Sarriá Chueca A, et al. **An Esp Pediatr** 1989 Jun;30(6):447–50 (Eng. Abstr.) **(Spa)**

[Incidence of anti-HCV and ALT in blood donors] Martín Y, et al. **Sangre (Barc)** 1990 Jun;35(3):197–200 (Eng. Abstr.) **(Spa)**

[Anti-HCV antibodies among blood donors in Cantabria. Incidence and relation to transaminase levels] Pastor JM, et al. **Sangre (Barc)** 1990 Jun;35(3):205–7 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

Elevated levels of the alpha subunit of GTP-binding protein Go in cerebrospinal fluid of patients with neurological disorders. Murayama T, et al. **J Mol Neurosci** 1989; 1(1):27–32

URINE

Microalbuminuria is associated with long term poor glycemic control in adolescent insulin dependent diabetics. Bangstad HJ, et al. **Diabetes Res** 1989 Oct;12(2):71–4

Urinary IgG4: an additional parameter in characterizing patients with incipient diabetic nephropathy. Gambardella S, et al. **Diabetes Res** 1989 Apr;10(4):153–7

Microalbuminuria and diabetic complications in Chinese non-insulin-dependent diabetic patients: a prospective study. Tai TY, et al. **Diabetes Res Clin Pract** 1990 Apr; 9(1):59–63

Microalbuminuria predicts the development of serum lipoprotein abnormalities favouring atherogenesis in newly diagnosed type 2 (non-insulin-dependent) diabetic patients. Niskanen L, et al. **Diabetologia** 1990 Apr;33(4):237–43

Urinary elastase 1 in chronic pancreatic disease. Fabris C, et al. **Enzyme** 1989;42(2):80–6

Isolation of an additional inhibitor of glucose utilization in renal insufficiency: pseudouridine. Lajdová I, et al. **J Chromatogr** 1990 Jun 8;528(1):178–83

Primapterinuria: a new variant of atypical phenylketonuria. Blau N, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:335–8

Comparison of urinary acylglycines and acylcarnitines as diagnostic markers of medium-chain acyl-CoA dehydrogenase deficiency. Rinaldo P, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:325–8

Competitive idiotype-anti-idiotype enzyme immunoassay for adenosine deaminase binding protein. Nelles MJ. **Methods Enzymol** 1989;178:171–9

Urinary 8-hydroxy-2'-deoxyguanosine as a biological marker of in vivo oxidative DNA damage. Shigenaga MK, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9697–701

Early markers of lung injury. Evans JN, et al. **Res Rep Health Eff Inst** 1989 Sep;(29):1–17

Increase in N-acetyl-beta-glucosaminidase excretion as a marker of kidney damage in cyclosporine-treated renal allografts. Avolio AW, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2086–7

Glycosuria: an index of cyclosporine nephrotoxicity. Chan P, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1780

Possibility of recognizing immunologic and cyclosporine A damage by urinary neopterin excretion in kidney transplant recipients. Magalini SC, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 2):1686–8

Fractional excretion of sodium is an early predictor of cyclosporine nephrotoxicity after renal transplantation. Morales JM, et al. **Transplant Proc** 1990 Aug;22(4):1728–9

Neopterin excretion for kidney transplant monitoring: relationship with antilymphocyte globulin treatment. Noel C, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1689–90

Urinary amylase, urinary insulin, or urinary thromboxane: which is the best predictor of pancreatic allograft rejection in the dog? Odor-Morales A, et al. **Transplant Proc** 1990 Apr;22(2):709–11

Urinary amylase as a marker of rejection in duct to ureter drained pancreas grafts. Powell CS, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1023–5

PGE2 elevation occurs in the urine in both bladder and duodenally drained pancreas allograft rejection. Zheng T, et al. **Transplant Proc** 1990 Apr;22(2):732–3

Urinary insulin as a marker of rejection in the bladder-drained pancreas allograft. Zheng T, et al. **Transplant Proc** 1990 Apr;22(2):667–8

[Neopterin in thyroid pathology. Preliminary results (letter)] Turpin G, et al. **Presse Med** 1989 Sep 16;18(28):1390 **(Fre)**

BIOLOGICAL MONITORING see **ENVIRONMENTAL MONITORING**

BIOLOGICAL OSCILLATORS see **BIOLOGICAL CLOCKS**

BIOLOGICAL PEST CONTROL see **PEST CONTROL, BIOLOGICAL**

BIOLOGICAL PRODUCTS

Significant FDA approvals in 1989. Nightingale SL. **Am Fam Physician** 1990 Jun;41(6):1851–2

Nonclinical pharmacologic and toxicologic considerations for evaluating biologic products. Weissinger J. **Regul Toxicol Pharmacol** 1989 Dec;10(3):255–63

[The enzyme activity of bacilli showing promise for incorporation into biopreparations] Slabospitskaia AT, et al. **Mikrobiol Zh** 1990 Mar-Apr;52(2):9–14 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Mechanism of action of a streptococcal preparation (OK-432) in prevention of autoimmune diabetes in NOD mice. Suppression of generation of effector cells for pancreatic B cell destruction. Shintani S, et al. **J Immunol** 1990 Jan 1;144(1):136–41

Combination therapy for renal cell carcinoma using IFN-gamma and OK-432: in vitro study. Muraki J. **Keio J Med** 1990 Mar;39(1):21–5

[Prevention of peritoneal recurrence by combined intra-peritoneal and intra-tumoral injections of OK-432] Baba H, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1596–9 (Eng. Abstr.) **(Jpn)**

[Intraarterial combination immunotherapy in hepatocellular carcinoma] Hazama S, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1638–42 (Eng. Abstr.) **(Jpn)**

[Intraoperative intraperitoneal administration of mitomycin C and OK-432 for peritoneal dissemination of gastric cancer] Sugiyama Y, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1592-5 (Eng. Abstr.) **(Jpn)**

[Chemoembolization combined with hepatic arterial induction of endogenous TNF and anticancer agents for hepatocellular carcinoma--a case report] Takekoshi H. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1744-7 (Eng. Abstr.) **(Jpn)**

[A double blind study to evaluate the optimal dose and its frequency for oral administration of OK-432 (picibanil) by immunological parameters (the 2nd report)] Shiraishi T, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 May 20; 25(5):997-1012 (Eng. Abstr.) **(Jpn)**

[A double blind study of the evaluation of the optimal dose and its frequency in oral administration of OK-432 (Picibanil) by immunological parameters (the 1st report)] Shiraishi T, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Apr 20;25(4):799-811 (Eng. Abstr.) **(Jpn)**

[The effect of endoscopical intratumoral injection of OK-432 in gastric carcinoma] Gochi A, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep;90(9):1439-42 (Eng. Abstr.) **(Jpn)**

[Augmentation of cytotoxicity of regional lymph node lymphocytes of gastric cancer after intratumoral injection of OK-432] Kobayashi G. **Nippon Geka Gakkai Zasshi** 1990 Jan;91(1):68-76 (Eng. Abstr.) **(Jpn)**

[Treatment of lymphangiomas arising around cervico-facial region: surgery, bleomycin therapy and OK-432 therapy] Ogita S, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep; 90(9):1389-91 (Eng. Abstr.) **(Jpn)**

[Preventive use of immunostimulants in patients with infectious endocarditis] Kostiuchenko AL, et al. **Vestn Khir** 1989 Jul;143(7):39-43 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Electrocardiogram studies on cancer patients treated with OK-432, a streptococcal preparation with potent biological response modifier activities. Torisu M, et al. **J Biol Response Mod** 1989 Dec;8(6):665-75

[Occupational hygiene problems in a plant for biological gas production] Schlegel ER, et al. **Z Gesamte Hyg** 1989; 35(8):483-5 (Eng. Abstr.) **(Ger)**

ANALYSIS

[Measurement of endotoxin in blood products using an endotoxin-specific Limulus test reagent and its relation to pyrogenic activities in rabbit] Fujiwara H, et al. **Yakugaku Zasshi** 1990 May;110(5):332-40 (Eng. Abstr.) **(Jpn)**

[Study of biologically active admixtures in protein preparations by the methods of medical microanalysis] Migunov VN, et al. **Gematol Transfuziol** 1990 May; 35(5):34-5 **(Rus)**

BIOSYNTHESIS

[Vaccines, cells and nucleic acids] Zuckerman AJ, et al. **Bull World Health Organ** 1990;68(3):293-5 **(Fre)**

HISTORY

[Carl Vogt's "Road to Damascus" and the success of Brown-Séquard's liquid in Geneva] Grmek MD. **Rev Med Suisse Romande** 1989 Dec;109(12):1013-21 **(Fre)**

IMMUNOLOGY

Antigenic relationship between streptococcal preparation OK-432 and tumors and its effect on immunotherapy with OK-432 in patients with superficial bladder tumor. Fujioka T, et al. **Urol Int** 1989;44(4):198-204

ISOLATION & PURIFICATION

[Immobilization of myocardial tropomyosin] Gontar' IP, et al. **Biull Eksp Biol Med** 1990 Apr;109(4):330-2 (Eng. Abstr.) **(Rus)**

[Cryamine--a new factor VIII preparation] Tarasova LN, et al. **Gematol Transfuziol** 1989 Aug;34(8):53-6 **(Rus)**

PHARMACOLOGY

Augmentation of cytotoxicity of lymphokine activated killer cells on ovarian tumor cells by various biological response modifiers. Nio Y, et al. **Anticancer Res** 1990 Mar-Apr; 10(2A):441-6

Proliferative responses of peripheral blood mononuclear cells from psoriatic patients to T lymphocyte-stimulating cytokines (IL-2, IL-3, IL-4, and granulocyte-macrophage colony-stimulating factor) and OK-432. Aiba S, et al. **Arch Dermatol Res** 1989;281(5):310-5

Induction of endogenous cytokines in ascites of patients with ovarian cancer by OK-432, a streptococcal preparation. Mori H, et al. **Asia Oceania J Obstet Gynaecol** 1989 Sep; 15(3):281-9

Synergistic effects of TGIF and interferon gamma (IFN-gamma) on tumor cell growth. TGIF and IFN-gamma. Katano M, et al. **Biotherapy** 1990;2(1):33-40

Induction of endogenous tumor necrosis factor by OK-432 in ovarian cancer patients with ascites. Mori H, et al. **Biotherapy** 1989;1(3):123-31

Immunohistochemical analysis of inflammatory infiltrates around the injection site of a streptococcal preparation, OK-432, in rat tongue. Niimi A, et al. **Biotherapy** 1990; 2(1):13-20

Mechanism of tumoricidal activity of OK-432-specific L3T4+ Lyt2- T-cells. Ozaki S, et al. **Cancer Res** 1990 Aug 1;50(15):4630-4

Activation of human peripheral blood-derived monocytes by OK-432 (Streptococcus pyogenes): augmented cytotoxicity and secretion of TNF and synergy with rIFN-gamma. Bonavida B, et al. **Cell Immunol** 1989 Oct 15;123(2):373-83

Lack of favorable effect of immunomodulators on outbred syngeneic rodent islet transplantation. Shin SJ, et al. **Diabetes Res Clin Pract** 1990 Jan;8(2):79-83

Effect of OK-432 on large-bowel carcinogenesis in rats. Morodomi T, et al. **Dis Colon Rectum** 1989 Oct; 32(10):871-7

OK-432 and IL-2-augmented cytotoxicity of human natural killer cells and cytotoxic T lymphocytes at the clonal level. Gravekamp C, et al. **FEMS Microbiol Immunol** 1988 Jan; 1(1):31-9

Killing of tumor cells with pleiotropic drug resistance by OK432-activated effector cells. Allavena P, et al. **Immunopharmacol Immunotoxicol** 1989;11(2-3):257-68

The biological response modifier OK-432 (a streptococcal preparation) inhibits the development of autoimmune kidney disease in NZB/W F1 hybrid mice: possible involvement of tumor necrosis factor. Mihara M, et al. **Int Arch Allergy Appl Immunol** 1989;90(1):37-42

Effects of varying the injection routes of PSK or OK-432 on development of immune responses against a superimposed antigen. Ryoyama K, et al. **Int J Immunopharmacol** 1990;12(1):37-48

Interference of the induction of suppressor cells by a streptococcal preparation, OK-432 through the blocking of suppressor inducer T-cells. Toge T, et al. **Int J Immunopharmacol** 1990;12(1):107-12

Synergistic actions of picibanil (OK-432) on recombinant interleukin-2 induction of tumor-infiltrating lymphocyte expansion, cytotoxicity, and phenotypic differentiation. Lafreniere R, et al. **J Biol Response Mod** 1990 Feb; 9(1):53-60

In vivo administration of picibanil (OK-432) prior to tumor harvest leads to an enhancement of tumor-infiltrating lymphocyte (TIL) cytotoxicity. Lafreniere R, et al. **J Surg Oncol** 1990 Feb;43(2):117-22

Mechanism of polymorphonuclear leukocytes accumulation examined using inhibitors of complement and arachidonic acid cascade in rats treated with OK-432. Kato H, et al. **Nat Immun Cell Growth Regul** 1989;8(5):290-300

Effects of OK-432 (Picibanil) on estrogen receptor levels and tamoxifen treatment in 7,12-dimethylbenz[a]anthracene-induced rat mammary cancers. Iino Y, et al. **Oncology** 1990;47(2):185-90

Effects of OK-432 activation on the sialidase activities of rat peritoneal macrophages. Sagawa J, et al. **Tohoku J Exp Med** 1990 Feb;160(2):149-56

[Oral administration of OK-432 (picibanil). (8th report) clinical application: its immunomodulatory effects on the patients with gastrointestinal cancers] Nio Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Aug 20;24(8):1607-15 (Eng. Abstr.) **(Jpn)**

[Role of interleukin 2 and interferon gamma in induction of activated natural killer cells by the streptococcal preparation OK432] Yamaue H, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Dec 20;24(11):2504-12 (Eng. Abstr.) **(Jpn)**

[Induction of activated natural killer cells by the streptococcal preparation OK432 (I). Induction from spleen cells of normal or tumor-bearing mouse primed in vivo and subsequently challenged in vitro with OK432] Yamaue H, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jul 20; 24(7):1370-8 (Eng. Abstr.) **(Jpn)**

[Successful adoptive immunotherapy with OK432-inducible activated natural killer cells on tumor-bearing mice] Yamaue H, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Dec 20;24(11):2546-55 (Eng. Abstr.) **(Jpn)**

[Study of in vitro OK432-induced IFN-gamma production in patients with gastric and esophageal cancers: comparison with in vitro skin tests] Matsumoto H, et al. **Nippon Geka Gakkai Zasshi** 1989 Jun;90(6):819-25 (Eng. Abstr.) **(Jpn)**

[Influence of pregnancy and steroid hormones on interferon production of lymphocytes] Onodera M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Nov; 41(11):1736-42 (Eng. Abstr.) **(Jpn)**

STANDARDS

Use of biologics by food animal practitioners. Herrick JB. **J Am Vet Med Assoc** 1990 Jun 15;196(12):1937

Notes to applicants for marketing authorizations on the production and quality control of medicinal products derived by recombinant DNA technology. Committee for Proprietary Medicinal Products: Ad Hoc Working Party on Biotechnology/Pharmacy. **J Biol Stand** 1989 Jul; 17(3):223-31

EEC guidelines on medicinal products derived from modern biotechnological processes. Sauer F. **J Biol Stand** 1989 Jul; 17(3):201-2

Long-term analysis of sterility testing of immunobiological preparations. Winkler D, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(3):317-22

Strategies for the validation of viral inactivation in biologic products. Aronson DL. **Prog Clin Biol Res** 1990;324:137-49 (19 ref.)

A review of clinical studies evaluating the efficacy of HIV inactivation methods. Lawrence DN. **Prog Clin Biol Res** 1990;324:151-60

Biologicals, standards and heparin. Thomas DP. **Thromb Haemost** 1989 Sep 29;62(2):648-50 (12 ref.)

WHO Expert Committee on Biological Standardization. **WHO Tech Rep Ser** 1989;786:1-184

[Confidential donor self-exclusion for raising the safety of blood preparations] Koerner K, et al. **Dtsch Med Wochenschr** 1990 Jan 5;115(1):8-11 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

Biological approaches to cancer therapy. Oettgen HF. **Arzneimittelforschung** 1989 Aug;39(8A):973-8; discussion 978-9 (12 ref.)

Biological agents in treatment of cancer. Hersey P. **Aust N Z J Med** 1990 Feb;20(1):85-98 (187 ref.)

Therapeutic efficacy of sequential therapy with OK-432, cyclophosphamide, IL2-cultured lymphocytes and in vivo IL2 against advanced murine plasmacytoma. Kan N, et al. **Biotherapy** 1989;1(3):197-206

Successful adoptive immunotherapy with OK432-inducible activated natural killer cells in tumor-bearing mice. Yamaue H, et al. **Biotherapy** 1990;2(1):51-61

Recent results of cancer biotherapy. Oldham RK. **Cancer Invest** 1990;8(2):285

A double-blind, placebo-controlled study of the efficacy of Lactinex in the prophylaxis of amoxicillin-induced diarrhea. Tankanow RM, et al. **DICP** 1990 Apr;24(4):382-4

Immunotherapy using the streptococcal preparation OK-432 for the treatment of uterine cervical cancer. Cervical Cancer Immunotherapy Study Group. Noda K, et al. **Gynecol Oncol** 1989 Dec;35(3):367-72

Effect of OK-432 on the lymphnode metastasis of MCA-sarcoma cell lines: a new therapeutic approach. Inoh A, et al. **Hiroshima J Med Sci** 1989 Dec;38(4):213-9

Suppressive effects of the bacterial immunostimulant OK-432 on the incidence of spontaneous thymic lymphoma in AKR mice. Watanabe T, et al. **Int J Med Microbiol** 1989 Sep; 271(3):330-8

Monoclonal antibody to a human salivary gland adenocarcinoma cell line: augmentation of antibody-dependent cell-mediated cytotoxicity activity by streptococcal preparation OK-432 in human salivary gland adenocarcinoma-bearing nude mice given the antibody. Kaji R, et al. **J Biol Response Mod** 1989 Oct;8(5):488-500

The therapeutic effect of OK-432-combined adoptive immunotherapy against liver metastases from breast cancer. Okino T, et al. **J Cancer Res Clin Oncol** 1990; 116(2):197-202

The antitumor effects of locally injecting human peripheral blood mononuclear cells treated with OK-432 into the tumor site: the possible role of a tumor growth inhibitory factor (TGIF). Katano M, et al. **Jpn J Surg** 1990 Jan; 20(1):76-82

Anti-tumor effects of the oral administration of the streptococcal preparation OK-432 (PICIBANIL)--the inhibition of carcinogenesis and growth in rats with ENNG-induced gastrointestinal tumors. Takeshita M, et al. **Jpn J Surg** 1990 May;20(3):316-26

New approach to management of malignant ascites with streptococcal preparation OK-432. III. OK-432 attracts natural killer cells through a chemotactic factor released from activated neutrophils. Hayashi Y, et al. **Surgery** 1990 Jan;107(1):74-84

Antigenic relationship between streptococcal preparation OK-432 and tumors and its effect on immunotherapy with OK-432 in patients with superficial bladder tumor. Fujioka T, et al. **Urol Int** 1989;44(4):198-204

[Prevention of bronchopulmonary infections with the Bulgarian immunomodulator respivaks] Dobrev P, et al. **Vutr Boles** 1989;28(4):40-2 **(Bul)**

[Experiences with paramunization in birds] Schneeganss D. **Tierarztl Prax** 1989;17(3):293-5 (Eng. Abstr.) **(Ger)**

[The effectiveness of the paramunity inducer Baypamun (PIND-ORF) for the prevention and metaphylaxis of an experimental infection with the infectious bovine rhinotracheitis virus in cattle] Strube W, et al. **Tierarztl Prax** 1989;17(3):267-72 (Eng. Abstr.) **(Ger)**

[The effect of OK-432 on modifying a spontaneous lung metastasis from murine fibrosarcomas] Ito H, et al. **Gan No Rinsho** 1990 Aug;36(9):993-7 (Eng. Abstr.) **(Jpn)**

[An autopsied case of an aged patient with advanced gastric cancer that showed a complete response to immunochemotherapy] Mizumoto S, et al. **Gan No Rinsho** 1989 Dec;35(15):1791-4 (Eng. Abstr.) **(Jpn)**

[Clinical significance of Su-polysaccharide (Su-PS) skin test in patients with primary lung cancer treated with chemotherapy and administration of OK-432, with special reference to the therapeutic effect and prognosis] Horiuchi M, et al. **Gan To Kagaku Ryoho** 1990 Mar;17(3 Pt 2):468-74 (Eng. Abstr.) **(Jpn)**

[A case of advanced gastric cancer with Virchow's node metastasis, responding to concomitant plasma exchange and immunochemotherapy] Sakuramoto K, et al. **Gan To Kagaku Ryoho** 1989 Dec;16(12):3795-9 (Eng.

Abstr.) (Jpn)
[Intraperitoneal administration of OK-432 and rIL-2 in a case of peritonitis carcinomatosa with chronic renal failure] Kanaoka Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 May 20;25(5):1027-31 (Eng. Abstr.) (Jpn)
[Prophylactic therapy for liver metastasis of gastrointestinal carcinomas using biological response modifiers (BRM): fundamental studies on the inhibition of experimental liver metastasis by intraportal administration of OK-432] Kasagi T, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Jan 20; 25(1):112-20 (Eng. Abstr.) (Jpn)
[New combined therapy of radiation and local administration of OK-432 for esophageal cancer—local control rate and two-year survival rate] Mukai M, et al.
Nippon Gan Chiryo Gakkai Shi 1990 Jan 20;25(1):94-7 (Eng. Abstr.) (Jpn)
[Immunity of gut-associated lymphoid tissue and the role of the oral immunotherapy in multi-disciplinary treatment of the digestive organ cancer] Nio Y, et al.
Nippon Geka Gakkai Zasshi 1989 Sep;90(9):1436-8 (Eng. Abstr.) (Jpn)
[Immunotherapy for lung cancer by streptococcal preparation OK-432] Watanabe Y, et al.
Nippon Geka Gakkai Zasshi 1989 Sep;90(9):1432-5 (Eng. Abstr.) (Jpn)
[Recent progress in the treatment of hematological malignancies. I. Biological response modifier] Hoshino T.
Nippon Naika Gakkai Zasshi 1989 Jun;78(6):759-64 (Jpn)
[Clinical studies of long-term administration of OK-432 in patients with gynecologic cancer] Mano T, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1989 Sep; 41(9):1439-45 (Eng. Abstr.) (Jpn)
[Effect of peri-operatively administrated OK-432 on immunopotency in primary liver cancer—immunological and histological study in cases receiving intrahepatic arterial administration] Taniwaki S.
Nippon Shokakibyo Gakkai Zasshi 1990 Apr;87(4):1020-7 (Eng. Abstr.) (Jpn)
[The use of bacterial preparations in the treatment of asthma in children] Negut E, et al. **Rev Ig [Bacteriol]** 1989 Jul-Sep; 34(3):277-83 (15 ref.) (Rum)
[Selection of the models for screening of natural substances with antineoplastic activity] Treshchalina EM, et al.
Antibiot Khimioter 1990 Feb;35(2):26-9 (Rus)
[The effect of Aerococcus viridans—the basis of the new therapeutic-prophylactic preparation M-bacterin—on the biological properties of Staphylococcus aureus] Gorbunova ML, et al. **Mikrobiol Zh** 1989 Sep-Oct;51(5):77-81 (Eng. Abstr.) (Rus)
[Effectiveness of biopreparations from Propionibacterium shermanii in preventing dysbacteriosis during treatment of Salmonella and Shigella infections] Sidorchuk II, et al.
Mikrobiol Zh 1984 Mar-Apr;46(2):43-7 (Eng. Abstr.) (Rus)
[Phagotherapy of postoperative suppurative-inflammatory complications in patients with neoplasms] Kochetkova VA, et al. **Sov Med** 1989;(6):23-6 (Eng. Abstr.) (Rus)
[Changes in the immunological reactivity of patients with disseminated sclerosis treated by prednisolone and the preparation Proper-Myl] Iarosh AA, et al. **Vrach Delo** 1990 Feb;(2):83-6 (Eng. Abstr.) (Rus)
[The use of bifidumbacterin in the prevention of mastitis] Sytnik SI, et al. **Vrach Delo** 1990 Mar;(3):98-100 (Eng. Abstr.) (Rus)
[A method for assessing the efficacy of using bifidumbacterin for the prevention of suppurative-inflammatory diseases in the newborn] Cherniatina LF, et al.
Zh Mikrobiol Epidemiol Immunobiol 1990 Apr;(4):36-40 (Eng. Abstr.) (Rus)

TOXICITY

Notes to applicants for marketing authorizations on the pre-clinical biological safety testing of medicinal products derived from biotechnology (and comparable products derived from chemical synthesis). Committee for Proprietary Medicinal Products: Ad Hoc Working Party on Biotechnology/Pharmacy and Working Party on Safety of Medicines. **J Biol Stand** 1989 Jul;17(3):203-12

BIOLOGICAL PSYCHIATRY

Proceedings of the 11th annual meeting of the Japanese Society of Biological Psychiatry. March 24-25, 1989, Tokyo. Abstracts. **Jpn J Psychiatry Neurol** 1989 Dec; 43(4):713-51
[A critical view on biological psychiatry] Kringlen E.
Tidsskr Nor Laegeforen 1989 Dec 10;109(34-36):3551-6 (Nor)
[Biologic psychiatry and the evolution of psychiatry in the past years (editorial)] Ferreira AG. **Acta Med Port** 1990 Mar-Apr;3(2):69 (Por)

EDUCATION

One way mirror on the wall, who is freudiest of us all? Mellsop GW. **Aust N Z J Psychiatry** 1990 Jun;24(2):214-6
The need for specialists in biologically-based brain diseases. Peschel R, et al. **Percept Mot Skills** 1990 Apr;70(2):624-6

TRENDS

A future perspective on psychiatric mental health nursing. McKeon KL. **Arch Psychiatr Nurs** 1990 Feb;4(1):19-20
The undeveloped countries: biological psychiatry in India [editorial] Sethi BB. **Biol Psychiatry** 1990 Apr 1;27(7):687-8
Knowing, valuing, acting: clues to revising the biopsychosocial model. Sadler JZ, et al.
Compr Psychiatry 1990 May-Jun;31(3):185-95 (26 ref.)
Towards a rationalization of biological psychiatry: a study in psychobiological epistemology. Rudnick A.
J Med Philos 1990 Feb;15(1):75-96 (42 ref.)
A critique of biological psychiatry. Charlton BG.
Psychol Med 1990 Feb;20(1):3-6

BIOLOGICAL RESPONSE MODIFIERS

see related
ANTINEOPLASTIC AGENTS
IMMUNOSUPPRESSIVE AGENTS
Immunohistochemical analysis of inflammatory infiltrates around the injection site of a streptococcal preparation, OK-432, in rat tongue. Niimi A, et al. **Biotherapy** 1990; 2(1):13-20
Immune modulation by aspirin during experimental rhinovirus colds. Hsia J, et al. **Bull N Y Acad Med** 1989 Jan;65(1):45-56
Practical advances in biodiagnosis and biomodulation for the medical oncologist. Abstracts from the conference of the Chemotherapy Foundation. November 9-10, 1989, New York City, USA. **Cancer Invest** 1990;8(2):237-318
The plateau in cytotoxic cancer drug discovery. Hollander S, et al. **J Med** 1990;21(3-4):143-63 (54 ref.)
New uses for biological response modifiers? [news] Marwick C. **JAMA** 1990 Sep 12;264(10):1233
Therapeutic activities of PHA-L4, the mitogenic isolectin of phytohemagglutinin. Wimer BM. **Mol Biother** 1990 Jun; 2(2):74-90 (146 ref.)
Biologic response modifiers: understanding biologic systems [editorial; comment] Brown TD. **Tex Med** 1989 Nov; 85(11):4-5 Comment on: Tex Med 1989 Nov;85(11):42-7.
[Antigenic phenotype of the lymphocytic component of regional lymph nodes in patients with cervical cancer and its modulation by lentinan] Shimizu Y, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1990 Jan;42(1):37-44 (Eng. Abstr.) (Jpn)
[Modifiers of biological reactions: preparations with immunomodulating and antineoplastic activity] Ivanitskaia LP, et al. **Antibiot Khimioter** 1989 Jul;34(7):530-4 (19 ref.) (Rus)
[Recombinant tumor necrosis factor modifies the metastatic potential of tumor cells] Kudriavets IuI.
Doki Akad Nauk SSSR 1989;309(6):1486-91 (Rus)

ADMINISTRATION & DOSAGE

Concomitant administration of recombinant human interleukin-2 and recombinant interferon alpha-2A in cancer patients: a phase I study. Lee KH, et al.
J Clin Oncol 1989 Nov;7(11):1726-32
Cyclic interferon gamma application in patients with renal cell carcinoma. Grups JW, et al. **Prog Clin Biol Res** 1990; 350:257-62
[Experimental study on the optimal treatment schedule for combination of BRM (immunostimulators, cultured killer cells or interleukin-2) and chemotherapy] Kan N, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 1):1421-7 (Eng. Abstr.) (Jpn)

ADVERSE EFFECTS

Drug interactions involving immunologic agents. Part II. Immunodiagnostic and other immunologic drug interactions. Grabenstein JD. **DICP** 1990 Feb;24(2):186-93 (80 ref.)
Biological-response modifier—induced emergencies. Crum E. **Semin Oncol** 1989 Dec;16(6):579-87 (101 ref.)

ANALYSIS

Biologically active peptides in milk proteins. Meisel H, et al. **Z Ernahrungswiss** 1989 Dec;28(4):267-78 (44 ref.)

BIOSYNTHESIS

A soluble immunosuppressive activity induced by murine cytomegalovirus infection of mouse embryo fibroblasts. Hatfield P, et al. **Arch Virol** 1989;108(1-2):39-47

CHEMICAL SYNTHESIS

Synthetic biological response modifiers; Part 1. Synthesis and immunomodulatory properties of some N2-(omega-(hypoxanthin-9-yl)alkoxycarbonyl)-L-arginines. Stradi R, et al. **Farmaco** 1990 Jan;45(1):39-47

GENETICS

Biologic response modifiers: the interferon alfa experience. Koeller JM. **Am J Hosp Pharm** 1989 Nov;46(11 Suppl 2):S11-5 (14 ref.)

IMMUNOLOGY

Lymphokine-activated tumor inhibition: combinatory activity of a synthetic nonapeptide from interleukin-1, interleukin-2, interleukin-4, and interferon-gamma injected around tumor-draining lymph nodes. Forni G, et al.
Int J Cancer Suppl 1989;4:62-5

PHARMACOLOGY

The "double grafted tumor system", proposed to find effector cells in the analyses of antitumor effect of BRMs. Kohya H, et al. **Biotherapy** 1989;1(3):139-51
The biological response modifier OK-432 (a streptococcal preparation) inhibits the development of autoimmune kidney disease in NZB/W F1 hybrid mice: possible involvement of tumor necrosis factor. Mihara M, et al.
Int Arch Allergy Appl Immunol 1989;90(1):37-42
Effects of varying the injection routes of PSK or OK-432 on development of immune responses against a superimposed antigen. Ryoyama K, et al.
Int J Immunopharmacol 1990;12(1):37-48
Evaluation of a biological response modifier: effects on starter pig performance. Thaler RC, et al. **J Anim Sci** 1989 Sep; 67(9):2341-6
Treatment with Imuvert aborts development of chloroleukemia in newborn rats. Jimenez JJ, et al.
J Biol Response Mod 1990 Jun;9(3):300-4
Biological response modifier enhances the activity of natural killer cell against human cytomegalovirus-infected cells. Murayama T, et al. **J Med Virol** 1989 Oct;29(2):102-8
Augmentation of anti-tumor immunity in low-responder mice by various biological response modifiers: analysis of effector mechanism. Toko T, et al. **Jpn J Cancer Res** 1989 Dec;80(12):1212-9
Modulation of secretion of human chorionic gonadotropin by biologic response modifiers on term placenta and choriocarcinoma cells. Marth C, et al. **Mol Biother** 1989; 1(3):140-4
Augmentation of ADCC and cytotoxic T-cell activity with ImuVert. Warren RP, et al. **Mol Biother** 1989;1(6):323-7
Augmentation of natural killer cell activity by ImuVert: a biological response modifier derived from Serratia marcescens. Warren RP, et al. **Mol Biother** 1989; 1(3):145-51
Characteristics of PHA-L4, the mitogenic isolectin of phytohemagglutinin, as an ideal biologic response modifier. Wimer BM. **Mol Biother** 1990 Mar;2(1):4-17 (85 ref.)
Biological effects of recombinant human GM-CSF. Shadduck RK, et al. **Prog Clin Biol Res** 1990;352:365-74
[The effect of depletion depletion macrophages on tumor-suppressive activity of polyactin A] Chen GP.
Chung-hua Ping Li Hsueh Tsa Chih 1989 Sep;18(3):217-20 (Eng. Abstr.) (Chi)
[Tumoricidal biological response modifiers (BRM)] Niitsu Y, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 1):1407-13 (27 ref.) (Eng. Abstr.) (Jpn)

PHYSIOLOGY

Hormonal regulation of soluble immune response suppressor (SIRS): a possible role of SIRS in the maintenance of pregnancy. Kita E, et al. **Cell Immunol** 1990 Oct 1; 130(1):92-105
Response of microvascular endothelial cells to biological response modifiers. Hicks C, et al. **Immunol Cell Biol** 1989 Oct;67 (Pt 5):271-7
Overview of biological response modifiers. Staren ED, et al. **Semin Surg Oncol** 1989;5(6):379-84 (42 ref.)

THERAPEUTIC USE

The effect and distribution of a protein-bound polysaccharide preparation, PSK (Krestin), intratumorally injected prior to surgery into gastric cancer patients. Tomochika H, et al. **Acta Med Okayama** 1989 Oct;43(5):289-97
The role of immunomodulators in the treatment of patients with AIDS. Lane HC. **AIDS** 1989;3 Suppl 1:S181-5 (34 ref.)
Biological modifiers and their role in cancer therapy. Nethersell AB. **Ann Acad Med Singapore** 1990 Mar; 19(2):223-34 (50 ref.)
Biological agents in treatment of cancer. Hersey P.
Aust N Z J Med 1990 Feb;20(1):85-98 (187 ref.)
Between clones and clinic [editorial] Schellekens H.
Biotherapy 1988;1(1):3-5
Combination therapies: new and emerging uses for cyclooxygenase inhibitors and biological response modifiers on immunity. **Bull N Y Acad Med** 1989 Jan; 65(1):5-160
Enhanced immune response and antitumor immunity with combinations of biological response modifiers. Garaci E, et al. **Bull N Y Acad Med** 1989 Jan;65(1):111-9 (17 ref.)
Cancer therapy with combinations of biological response modifiers and cytotoxics: an update. Borden EC, et al.
Cancer Cells 1990 Jul;2(7):217-20
Biological response modifiers. Clark JW.
Cancer Chemother Biol Response Modif 1988;10:434-59 (147 ref.)
Biological response modifiers: preclinical and clinical results. Talmadge JE, et al.
Cancer Chemother Biol Response Modif 1987;9:454-72 (83 ref.)
Immunological monitoring and clinical trials of biological response modifiers. Urba WJ, et al.
Cancer Chemother Biol Response Modif 1988;10:473-91 (56 ref.)
The use of biomodulators to potentiate chemotherapy in the treatment of cancer. Mitchell MS. **Cancer Invest** 1990; 8(2):279-80
Prevention of fatal infections by recombinant human interleukin 1 alpha in normal and anticancer drug-treated

mice. Morikage T, et al. **Cancer Res** 1990 Apr 1; 50(7):2099–104

Interferon therapy for lymphoproliferative disorders. Roth MS, et al. **Cancer Treat Res** 1988;38:231–52 (136 ref.)

Clinical use of biologic response modifiers in cancer treatment: an overview. Part I. The interferons. Balmer CM. **DICP** 1990 Jul–Aug;24(7–8):761–8 (98 ref.)

Malignant melanoma—prognosis and actual treatment strategies with chemotherapy and biological response modifiers. Bergmann L. **Eur J Cancer Clin Oncol** 1989;25 Suppl 3:S31–6 (50 ref.)

Clinical parameters for evaluating biological response modifier therapy. Hamblin TJ. **Eur J Cancer Clin Oncol** 1989;25 Suppl 3:S7–9 (8 ref.)

Biological response modifier—immunotherapeutic approaches in pancreatic cancer. Schmiegel W. **Hepatogastroenterology** 1989 Dec;36(6):456–8 (34 ref.)

Combination therapy of pions and SPG (Sonifilan, Schizophyllan), a biological response modifier for mouse tumor systems. Ogawa Y, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1415–20

Phase II trial of a new biological response modifier (ImuVert) in advanced prostate cancer. Osborne CK, et al. **Invest New Drugs** 1989 Jul;7(2–3):243–5

Lack of protection against bacterial infections in patients with advanced cancer treated by biologic response modifiers. Maoleekoonpairoj S, et al. **J Clin Microbiol** 1989 Oct; 27(10):2305–8

Phase II trial of Serratia marcescens extract in recurrent malignant astrocytoma. Jaeckle KA, et al. **J Clin Oncol** 1990 Aug;8(8):1408–18

Relapse in the central nervous system in melanoma patients successfully treated with biomodulators. Mitchell MS. **J Clin Oncol** 1989 Nov;7(11):1701–9

The ideal biological response modifier. Wimer BM. **Mol Biother** 1989;1(6):311–7 (44 ref.)

Biotherapy: recent advances and nursing implications. Mayer DK. **Nurs Clin North Am** 1990 Jun;25(2):291–308 (45 ref.)

Development of immunotherapeutic strategies for the treatment of malignant neoplasia. Talmadge JE. **Pathol Immunopathol Res** 1989;8(5–6):250–75 (168 ref.)

Recombinant alpha-interferon plus vinblastine in metastatic renal-cell cancer: analysis of response and survival in 58 evaluable patients. Bergerat JP, et al. **Prog Clin Biol Res** 1990;348:137–50

New prospects in the management of metastatic renal cell carcinoma. Experimental and clinical data. Debruyne FM, et al. **Prog Clin Biol Res** 1990;350:243–55 (17 ref.)

Interferons in renal-cell carcinoma: status and prospects. De Mulder PH, et al. **Prog Clin Biol Res** 1990;348:49–59 (25 ref.)

Interferon-alpha and interleukin-2 in the treatment of renal cell cancer. Holdener EE, et al. **Prog Clin Biol Res** 1990; 348:61–9 (19 ref.)

Anti-tumor effects of interleukin 2 against renal cell carcinoma. In vitro study and clinical application. Marumo K, et al. **Prog Clin Biol Res** 1990;350:263–73

Immune modifiers in the treatment of bladder cancer. Morales A. **Prog Clin Biol Res** 1990;350:25–33 (26 ref.)

Radioprotection and therapy of radiation injury with cytokines. Neta R. **Prog Clin Biol Res** 1990;352:471–8

New directions in combination biotherapy. Proceedings of a symposium. May 19, 1989, San Francisco. **Semin Oncol** 1990 Feb;17(1 Suppl 1):1–41

Biologic response modifiers in non-Hodgkin's lymphomas. Gilewski TA, et al. **Semin Oncol** 1990 Feb;17(1):74–87 (125 ref.)

Design of combination biotherapy studies: future goals and challenges. Gilewski TA, et al. **Semin Oncol** 1990 Feb;17(1 Suppl 1):3–10; discussion 38–41 (83 ref.)

Biologic response modifiers in cancer therapy: a review [see comments] Quesada JR. **Tex Med** 1989 Nov;85(11):42–7 (27 ref.) Comment in: Tex Med 1989 Nov;85(11):4–5.

Biological response modifiers: their possibilities for cancer treatment. Franz G. **Verh K Acad Geneeskd Belg** 1989; 51(2):177–85; discussion 186–7

Biologic response modifiers: the future of cancer therapy? MacEwen EG. **Vet Clin North Am Small Anim Pract** 1990 Jul;20(4):1055–73 (78 ref.)

[Augmentation of antitumor immunity in cancer chemotherapy] Hosokawa M, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 1):1402–6 (16 ref.) (Eng. Abstr.) **(Jpn)**

[Bases on timing of combined modality of chemotherapy and immunotherapy] Ogura T. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 1):1414–20 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Combination of chemotherapy and immunotherapy in man—review] Ohnuma T. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 1):1428–36 (67 ref.) (Eng. Abstr.) **(Jpn)**

[2biology of sepsis occurring in the immunocompromised host and its prevention. 2. Preventive effect of BRM to experimental Pseudomonas endogenous septicemia and analysis of its immunological etiology] Tomono K. **Kansenshogaku Zasshi** 1989 Jun;63(6):557–64 (Eng. Abstr.) **(Jpn)**

[The effect of activated pulmonary natural killer (NK) cells by poly I:C on the established pulmonary metastasis] Murata A. **Nippon Ika Daigaku Zasshi** 1989 Aug; 56(4):383–91 (Eng. Abstr.) **(Jpn)**

[Recent progress in the treatment of hematological malignancies. I. Biological response modifier] Hoshino T. **Nippon Naika Gakkai Zasshi** 1989 Jun;78(6):759–64 **(Jpn)**

[Therapy by biological response modifiers] Urushizaki I. **Rinsho Ketsueki** 1989 Aug;30(8):1230–2 (8 ref.) (Eng. Abstr.) **(Jpn)**

BIOLOGICAL SCIENCES see **BIOLOGY**

BIOLOGICAL TRANSPORT

see related
DIFFUSION
PERMEASES

pH regulatory transport systems in a smooth muscle-like cell line. Putnam RW. **Am J Physiol** 1990 Mar;258(3 Pt 1):C470–9

Use of cultured airway epithelial cells in studies of ion transport. Widdicombe JH. **Am J Physiol** 1990 Feb;258(2 Pt 1):L13–8 (60 ref.)

Macromolecular transport across arterial and venous endothelium in rats. Studies with Evans blue-albumin and horseradish peroxidase. Chuang PT, et al. **Arteriosclerosis** 1990 Mar–Apr;10(2):188–97

Continuous monitoring of transport by fluorescence on cells and vesicles. Eidelman O, et al. **Biochim Biophys Acta** 1989 Dec 6;988(3):319–34 (119 ref.)

The diagram methods for the evaluation of exchange fluxes in membrane transport systems. Chen YD. **Biophys Chem** 1990 Jan;35(1):55–63

Kinetic model for membrane transport. 1. Effects of membrane volume and partitioning kinetics. Makino K, et al. **Biophys Chem** 1990 Jan;35(1):85–95

Membrane transport equations with a time delay. A model for overshoot and oscillatory permeation. Ohshima H, et al. **Biophys Chem** 1989 Jul;33(3):303–10

Irreversible thermodynamic model equations of the transport across a horizontally mounted membrane. Slęzak A. **Biophys Chem** 1989 Oct;34(2):91–102

The cotransport systems. Stein WD. **Curr Opin Cell Biol** 1989 Aug;1(4):739–45 (21 ref.)

A network thermodynamic method for numerical solution of the Nernst-Planck and Poisson equation system with application to ionic transport through membranes. Horno J, et al. **Eur Biophys J** 1990;17(6):307–13

Presteady-state kinetics and carrier-mediated transport: a theoretical analysis. Wierzbicki W, et al. **J Membr Biol** 1990 Jul;117(1):11–27

Preferential uptake of benzoporphyrin derivative by leukemic versus normal cells. Jamieson CH, et al. **Leuk Res** 1990; 14(3):209–19

Biomembranes. Part R. Transport theory: cells and model membranes. **Methods Enzymol** 1989;171:1–926

Kinetics of ion movement mediated by carriers and channels. Andersen OS. **Methods Enzymol** 1989;171:62–112

Impedance analysis in tight epithelia. Clausen C. **Methods Enzymol** 1989;171:628–42

Inhibition kinetics of carrier systems. Devés R, et al. **Methods Enzymol** 1989;171:113–32

Scanning electrode localization of transport pathways in epithelial tissues. Foskett JK, et al. **Methods Enzymol** 1989; 171:792–813

Cultures as epithelial models: porous-bottom culture dishes for studying transport and differentiation. Handler JS, et al. **Methods Enzymol** 1989;171:736–44

Survey of carrier methodology: strategy for identification, isolation, and characterization of transport systems. Klingenberg M. **Methods Enzymol** 1989;171:12–23 (29 ref.)

Use of nonequilibrium thermodynamics in the analysis of transport: general flow-force relationships and the linear domain. Pietrobon D, et al. **Methods Enzymol** 1989; 171:397–444

Transport machinery: an overview. Sachs G, et al. **Methods Enzymol** 1989;171:3–12 (29 ref.)

Planar lipid-protein membranes: strategies of formation and of detecting dependencies of ion transport functions on membrane conditions. Schindler H. **Methods Enzymol** 1989; 171:225–53

Kinetics of transport: analyzing, testing, and characterizing models using kinetic approaches. Stein WD. **Methods Enzymol** 1989;171:23–62

Design of simple devices to measure solute fluxes and binding in monolayer cell cultures. Vadgama JV. **Methods Enzymol** 1989;171:133–44

Spin-exchange NMR spectroscopy in studies of the kinetics of enzymes and membrane transport. Kuchel PW. **NMR Biomed** 1990 Jun;3(3):102–19 (126 ref.)

Protein translocation into reconstituted vesicles. Hurtley SM. **Trends Biochem Sci** 1990 Jun;15(6):211–2 (20 ref.)

DRUG EFFECTS

Alteration of intracellular traffic by monensin; mechanism, specificity and relationship to toxicity. Mollenhauer HH, et al. **Biochim Biophys Acta** 1990 May 7;1031(2):225–46 (252 ref.)

GENETICS

Distinct sets of SEC genes govern transport vesicle formation and fusion early in the secretory pathway. Kaiser CA, et al. **Cell** 1990 May 18;61(4):723–33

PHYSIOLOGY

Transport through deformable matrices. Silberberg A. **Biorheology** 1989;26(2):291–313

Blood-tissue transport of substrates in the heart: studies by single circulation tracer dilution. Yudilevich DL. **Int J Microcirc Clin Exp** 1989 Nov;8(4):397–409 (24 ref.)

NMR methods for measuring membrane transport rates. Kirk K. **NMR Biomed** 1990 Feb;3(1):1–16 (145 ref.)

RADIATION EFFECTS

Enhancement of monoclonal antibody uptake in human colon tumor xenografts following irradiation. Kalofonos H, et al. **Cancer Res** 1990 Jan 1;50(1):159–63

BIOLOGICAL TRANSPORT, ACTIVE

Utilization of binding energy and coupling rules for active transport and other coupled vectorial processes. Jencks WP. **Methods Enzymol** 1989;171:145–64

Preparation of microcapsules from human erythrocytes: use in transport experiments of glutathione and its S-conjugate. Kondo T. **Methods Enzymol** 1989;171:217–25

Generation of steady-state rate equations for enzyme and carrier-transport mechanisms: a microcomputer program. Runyan KR, et al. **Methods Enzymol** 1989;171:164–90

Atomic structures of periplasmic binding proteins and the high-affinity active transport systems in bacteria. Quiocho FA. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):341–51; discussion 351–2

Substrate specificity and the mdr pump [letter] De Bruijn MH. **Trends Biochem Sci** 1990 Jun;15(6):218–9

DRUG EFFECTS

Sodium-dependent and inhibitor-insensitive uptake of adenosine by mouse peritoneal exudate cells. Baer HP, et al. **Biochim Biophys Acta** 1990 Jul 24;1026(2):241–7

PHYSICLOGY

19th annual UCLA symposium: Receptor-modulated transport systems. Abstracts. **J Cell Biochem Suppl** 1990; 14E:1–30

BIOLOGICAL WARFARE

Ethics and biological warfare research. Cole LA. **Ann N Y Acad Sci** 1989;577:154–63

The offensive-defensive distinction in military biological research. Frisina ME. **Hastings Cent Rep** 1990 May–Jun; 20(3):19–22

Psychophysiology and the threat and longlasting consequences of the total disaster. Radil T. **Int J Psychophysiol** 1989 Aug;7(2–4):449–51

Nuclear, biological and chemical warfare. Part II: Medical aspects of biological warfare. Kasthuri AS, et al. **J Assoc Physicians India** 1990 May;38(5):356–7

Behavioral and psychological responses to chemical and biological warfare. Fullerton CS, et al. **Milit Med** 1990 Feb;155(2):54–9

Biological warfare. Gruinard Island handed back [news] Aldhous P. **Nature** 1990 Apr 26;344(6269):801

Biological weapons: international treaty made domestic law [news] Shulman S. **Nature** 1990 May 17;345(6272):192

HISTORY

[Biological weapons—conventions and history] Berdal BP, et al. **Tidsskr Nor Laegeforen** 1990 Feb 28;110(6):736–40 (Eng. Abstr.) **(Nor)**

BIOLOGICS see **BIOLOGICAL PRODUCTS**

BIOLOGY

Catastrophe modelling in the biological sciences. Deakin MA. **Acta Biotheor (Leiden)** 1990 Mar;38(1):3–22 (135 ref.)

Proceedings of the Society for the Study of Human Biology. Abstracts of papers. 15 November 1989. **Ann Hum Biol** 1990 Jul–Aug;17(4):337–40

Toward a bio/psycho/social synthesis [editorial] Pothier PC. **Arch Psychiatr Nurs** 1990 Apr;4(2):77

Provision of biosciences information in the academic environment: compact disc-read only memory. Kimber N. **Biochem Soc Trans** 1989 Oct;17(5):835–7

Provision of biosciences information in the academic environment: experience of a large academic library in accessing bibliographic databases. Leitch DM. **Biochem Soc Trans** 1989 Oct;17(5):833–5

An object oriented user interface for analysis of biological data. Dietz MA, et al. **Comput Biomed Res** 1990 Feb; 23(1):82–96

E. Antonini Plenary lecture. A structural basis of light energy and electron transfer in biology. Huber R. **Eur J Biochem** 1990 Jan 26;187(2):283–305 (173 ref.)

22nd annual meeting of the Swiss Societies for Experimental Biology (USGEB/USSBE). March 15/16, 1990, Zürich, ETH-Hönggerberg. **Experientia** 1990;46 Spec No:A1–94

Federation of American Societies for Experimental Biology. 74th annual meeting. Washington, D.C., April 1–5, 1990. Part I. Abstracts 1–3340. **FASEB J** 1990 Feb 26; 4(3):A267–842

Federation of American Societies for Experimental Biology. 74th annual meeting. Washington, D.C., April 1–5, 1990. Part II. Abstracts 3341–5632, C1–C11, TU1–TU33, M1–M206. **FASEB J** 1990 Feb 28;4(4):A843–1421

This is FASEB. The American Society for Cell Biology.

Wilson DC. **FASEB J** 1989 Nov;3(13):2547–50
Royal Academy of Medicine in Ireland, Section of Biological Sciences. Summer meeting. 23rd & 24th June 1989. Abstracts. **Ir J Med Sci** 1990 Jan;159(1):23–37
Medicine and the biological sciences: new vistas for verse. Daniel HJ 3d. **N C Med J** 1990 Aug;51(8):406–9
Missed opportunity in biology [news] Maddox J. **Nature** 1989 Nov 30;342(6249):475
Missing formula [letter; comment] Othmer M. **Nature** 1989 Oct 5;341(6241):380 Comment on: Nature 1989 Mar 9;338(6211):109.
The pictographic molecular paradigm. Pictorial communication in the chemical and biological sciences. Luisi PL, et al. **Naturwissenschaften** 1990 Feb;77(2):67–74
How to define life: a hierarchical approach. Orstan A. **Perspect Biol Med** 1990 Spring;33(3):391–401 (23 ref.)
Uncertainties, artifacts, uncontrolled experiments and incomplete evidence in modern biology. Hillman H. **Physiol Chem Phys Med NMR** 1989;21(2):145–60; discussion 160–3
Golden opportunities seen in biology [news]. Barinaga M. **Science** 1989 Dec 1;246(4934):1115
RDA for science. Grinell S. **World Rev Nutr Diet** 1990; 63:287–94
[Epistemiological reflections on biological theories] Delsol M. **Cellule** 1987;74:21–39 **(Fre)**
[The synthesis of physics and biology] Fischer G. **Gegenbaurs Morphol Jahrb** 1989;135(3):427–38 (Eng. Abstr.) **(Ger)**
[Analogies between physics and biology] Fischer G. **Gegenbaurs Morphol Jahrb** 1989;135(4):545–55 (33 ref.) (Eng. Abstr.) **(Ger)**
[What are the existential bases of living systems? A new paradigm] Bleecken S. **Naturwissenschaften** 1990 Jun; 77(6):277–82 (Eng. Abstr.) **(Ger)**
[The dialectic of the biological and the social in man: the medical aspect of the problem] Petlenko VP. **Vestn Khir** 1989 Oct;143(10):3–6 **(Rus)**

EDUCATION

G'day to motivation? Moore GW, et al. **Biochem Soc Trans** 1990 Apr;18(2):251–2
Reading illustrated science texts: a micro–computer based investigation of children's strategies. Reid DJ, et al. **Br J Educ Psychol** 1990 Feb;60 (Pt 1):76–87
An introduction to interactive hypermedia. Lynch PJ, et al. **J Biocommun** 1990;17(1):2–8
Oral biology development at Stony Brook and its implications. Kleinberg I. **N Y State Dent J** 1990 May; 56(5):21–3
Genetic variation and nutrition: obstacles and opportunities in science education. McInerney JD. **World Rev Nutr Diet** 1990;63:277–86 (28 ref.)
[The relation of basic sciences and medicine: institutional, professional and pedagogic implications (see comments)] Ferreira HG. **Acta Med Port** 1990 Jan–Feb;3(1):39–42 (Eng. Abstr.) Comment in: Acta Med Port 1990 Jan–Feb;3(1):V–VI. **(Por)**

HISTORY

The natural history of the chromaffin cell—twenty–five years on the beginning. Coupland RE. **Arch Histol Cytol** 1989; 52 Suppl:331–41 (116 ref.)
The Max Delbrück lecture. Light and life: Niels Bohr's legacy to contemporary biology. Stent GS. **Genome** 1989; 31(1):11–5
The graduate school of biological sciences: the first 25 years [interview by Sherman Kupfer] Krulwich TA. **Mt Sinai J Med** 1989 Oct;56(5):383–91
The slow diffusion of the DNA paradigm into biology textbooks. Gaster B. **Trends Biochem Sci** 1990 Aug; 15(8):325–7
[Borelli: De Motu Animalium. A first treatise on biomechanics] Maquet P. **Acta Orthop Belg** 1989; 55(4):541–6 (Eng. Abstr.) **(Fre)**
[Development of the modern biological analogy concept in the 19th century] Bäumer A. **Sudhoffs Arch** 1989; 73(2):156–75 (Eng. Abstr.) **(Ger)**
[The sociobiological ideas of Arthur Schopenhauer] Schmidt HD, et al. **Z Psychol** 1989;197(4):341–50 (Eng. Abstr.) **(Ger)**
[The history of the systematic approach to biology] Mirzoian EN. **Arkh Anat Gistol Embriol** 1989 Aug;97(8):90–7 **(Rus)**
[The first period in the history of the Institute for General Biology] Tichý M, et al. **Bratisl Lek Listy** 1990 Feb; 91(2):142–5 (Eng. Abstr.) **(Slo)**

METHODS

Integrating biological and social scientific research on menopause. Parlee MB. **Ann N Y Acad Sci** 1990;592:379–89 (33 ref.)
The biological approach to psychiatry: history and prospects. Barondes SH. **J Neurosci** 1990 Jun;10(6):1707–10
Contributions of bird studies to biology. Konishi M, et al. **Science** 1989 Oct 27;246(4929):465–72 (144 ref.)

ORGANIZATION & ADMINISTRATION

Taking the high road [editorial] Bishop VS. **Physiologist** 1990 Feb;33(1):1–2, 13

TRENDS

Unifying biology. Dixon B. **BMJ** 1990 Jan 27;300(6719):253
[Will biology be the leading science at the end of the 20th century? Observations on the transferability of scientific models] Bammé A. **Naturwissenschaften** 1989 Oct; 76(10):441–6 (37 ref.) (Eng. Abstr.) **(Ger)**
[New philosophical thinking and methodologic problems in biology] Boltenkov EM. **Vestn Akad Med Nauk SSSR** 1990; (4):29–32 **(Rus)**

BIOLUMINESCENT PROTEINS see **LUMINESCENT PROTEINS**

BIOMASS see **ECOLOGY**

BIOMATERIALS see **BIOCOMPATIBLE MATERIALS**

BIOMECHANICS

Fluid mechanics and biorheology. Copley AL. **Biorheology** 1990;27(1):3–19 (39 ref.)
Abstracts of the XII congress, International Society of Biomechanics. Los Angeles, California, 26–30 June 1989. **J Biomech** 1989;22(10):979–1111
Abstracts of the sixth biannual meeting of the European Society of Biomechanics. Bristol, U.K., 11–15 September 1988. **J Biomech** 1990;23(4):363–95
Padding point extrapolation techniques for the Butterworth digital filter. Smith G. **J Biomech** 1989;22(8–9):967–71
From Da Vinci to Harvey: the development of mechanical analogy in medicine from 1500 to 1650. Novell JR. **J R Soc Med** 1990 Jun;83(6):396–8
Fracture mechanics principles applied to implant medical devices—a review. Chwirut DJ, et al. **Med Prog Technol** 1988–89;14(3–4):193–203 (72 ref.)
Optimum take–off techniques for high and long jumps. Alexander RM. **Philos Trans R Soc Lond [Biol]** 1990 Jul 30;329(1252):3–10
Biomechanics and shape of the above–knee socket considered in light of the ischial containment concept. Pritham CH. **Prosthet Orthot Int** 1990 Apr;14(1):9–21 (20 ref.)
Bioengineering—the bond between basic scientists, clinicians, and engineers. Pope MH. **Spine** 1990 Mar;15(3):214–7
[Biomechanical analysis of movement using stroboscopy] Müller–Kölbl S, et al. **Beitr Gerichtl Med** 1989;47:287–94 (Eng. Abstr.) **(Ger)**

BIOMEDICAL ENGINEERING

see related
ELECTRONICS, MEDICAL
MEDICAL INFORMATICS APPLICATIONS

Fractals in biomedical research. **Ann Biomed Eng** 1990; 18(2):109–98
Introduction to fractals in biomedical research. McNamee JE. **Ann Biomed Eng** 1990;18(2):109–10
Crosstalk resistant adaptive noise cancellation. Madhavan G, et al. **Ann Biomed Eng** 1990;18(1):57–67
Eighth Southern Biomedical Engineering Conference. Richmond, Virginia, October 15–16, 1989. Abstracts. **Biomater Artif Cells Artif Organs** 1989;17(4):447–527
Clinical equipment replacement planning. Clark JT, et al. **Biomed Instrum Technol** 1990 Jul–Aug;24(4):271–6
Personality characteristics of biomedical equipment technicians. Garascia SH. **Biomed Instrum Technol** 1990 Jan–Feb;24(1):25–9
The clinical engineering budget. Mahachek AR. **Biomed Instrum Technol** 1989 Jul–Aug;23(4):276–82
The professionalization of clinical engineering. Shaffer MJ, et al. **Biomed Instrum Technol** 1989 Sep–Oct;23(5):370–4
In–house service contracts. Staewen WS. **Biomed Instrum Technol** 1990 Jul–Aug;24(4):266–9
The clinical engineering budget: how to tell the boss where the dollars went [interview by Michael J Miller] Stiefel R, et al. **Biomed Instrum Technol** 1989 Jul–Aug;23(4):270–4
Proceedings of the twenty–seventh annual Rocky Mountain Bioengineering Symposium and the twenty–seventh International ISA Biomedical Sciences Instrumentation Symposium. April 6–7, 1990, Denver, Colorado. **Biomed Sci Instrum** 1990;26:1–248
Engineering for health. 29th annual scientific meeting of the Biological Engineering Society. Bristol, 4–6 September 1989. Proceedings. **J Biomed Eng** 1990 May;12(3):177–270
Rehabilitation R&D progress reports 1989. **J Rehabil Res Dev** 1990 Feb;26 Suppl:1–509
Development of bioartificial liver: bilirubin conjugation in Gunn rats. Arnaout WS, et al. **J Surg Res** 1990 Apr; 48(4):379–82
Cross–sectional area measurement in collapsed tubes using the transformer principle. Bertram CD, et al. **Med Biol Eng Comput** 1989 Jul;27(4):357–64
Can biomedical engineering support preventive medicine? [editorial] Hutten H. **Med Prog Technol** 1988–89;14(2):61–2
[Proceedings of the 23d annual meeting of the German Society of Biomedical Technology. 31 August–2 September 1989, Kiel] **Biomed Tech (Berlin)** 1989;34 Suppl:1–276 **(Ger)**
[Urology and medical engineering] Okada K. **Nippon Hinyokika Gakkai Zasshi** 1990 Jun;81(6):819–28 (73 ref.) **(Jpn)**
[Fuzzy inference and its application in the biomedical field] Saito T, et al. **Nippon Rinsho** 1989 Aug;47(8):1880–6 (6 ref.) **(Jpn)**

ECONOMICS

Results of an international survey of clinical engineering departments. Part 2. Budgets, staffing, resources and financial strategies. Frize M. **Med Biol Eng Comput** 1990 Mar;28(2):160–5

EDUCATION

NDSU undergraduate design projects for the disabled. Baczkowski LS, et al. **Biomed Sci Instrum** 1990;26:95–9
Teaching medical informatics to biomedical engineering students: experiences over 15 years. Wigertz O, et al. **Methods Inf Med** 1989 Nov;28(4):309–12

HISTORY

The inductorium: the stimulator associated with discovery. Geddes LA, et al. **Biomed Instrum Technol** 1989 Jul–Aug; 23(4):308–13

INSTRUMENTATION

High–frequency chest compression system to aid in clearance of mucus from the lung. Hansen LG, et al. **Biomed Instrum Technol** 1990 Jul–Aug;24(4):289–94
Anatomy, physiology, chemistry, and image processing. Eden M. **Boll Soc Ital Biol Sper** 1988 Dec;64(12 Suppl):5–26 (11 ref.)
[Hip abduction force measured by a new method and its relation to EMG activity] Murakami K. **Nippon Seikeigeka Gakkai Zasshi** 1989 Nov;63(11):1358–67 (Eng. Abstr.) **(Jpn)**

LEGISLATION & JURISPRUDENCE

Product liability aspects of bioengineering. Grant LJ. **J Biomed Eng** 1990 May;12(3):262–6

METHODS

The artificial substitution of missing hands with myoelectrical prostheses. Näder M. **Clin Orthop** 1990 Sep;(258):9–17 (7 ref.)
Design methodology for aids for the disabled. Orpwood RD. **J Med Eng Technol** 1990 Jan–Feb;14(1):2–10

ORGANIZATION & ADMINISTRATION

General planning of an artificial organ center. Vanholder R, et al. **Artif Organs** 1989 Dec;13(6):557–60
The biomedical engineering technician as a member of the clinical research team. Elwood J, et al. **Biomed Instrum Technol** 1989 Nov–Dec;23(6):440–3
Results of an international survey of clinical engineering departments. Part 1. Role, functional involvement and recognition. Frize M. **Med Biol Eng Comput** 1990 Mar; 28(2):153–9

STANDARDS

Enhancing clinical engineering credibility and visibility in a medical center. Greenstein AS, et al. **Biomed Instrum Technol** 1989 Jul–Aug;23(4):283–5
Quality assurance from the clinical engineering perspective [interview by Ethan Hertz] Keil O, et al. **Biomed Instrum Technol** 1989 Sep–Oct;23(5):348–9, 351–2
The challenge of building quality into clinical engineering programs. Keil OR. **Biomed Instrum Technol** 1989 Sep–Oct; 23(5):354–7
Current issues in clinical engineering and biomedical technology certification [interview] Painter F, et al. **Biomed Instrum Technol** 1989 Nov–Dec;23(6):434–9

TRENDS

Biomedical/clinical engineering. Henderson JD. **Australas Phys Eng Sci Med** 1989 Dec;12(4):228–32
Should there be a formal mechanical–optic–electronic biomedical–engineering program? Goldman L. **Lasers Surg Med** 1989;9(5):437–9
Myoelectric control systems research at the Bio–Engineering Institute, University of New Brunswick. Scott RN. **Med Prog Technol** 1990 May;16(1–2):5–10
[Some recent proposals in bioengineering and medical informatics for cardiology] Mutinelli M. **G Ital Cardiol** 1989 Jul;19(7):645–7 **(Ita)**

BIOMEDICAL RESEARCH see **RESEARCH**

BIOMETRY

Histograms: multimodal or poorly constructed? [letter] Schork NJ, et al. **Am J Hum Genet** 1990 Feb;46(2):396–7
The meaning of n [letter] Magee DF. **Am J Physiol** 1989 Dec;257(6 Pt 1):G990–1
Introduction to biostatistics: Part 3, Sensitivity, specificity, predictive value, and hypothesis testing. Gaddis GM, et al. **Ann Emerg Med** 1990 May;19(5):591–7
Introduction to biostatistics: Part 1, Basic concepts. Gaddis ML, et al. **Ann Emerg Med** 1990 Jan;19(1):86–9
Sample size determination for confidence intervals on the population mean and on the difference between two population means. Beal SL. **Biometrics** 1989 Sep; 45(3):969–77

Interval estimation of the LD50 based on an up-and-down experiment. Choi SC. **Biometrics** 1990 Jun;46(2):485–92
Testing the Hardy–Weinberg equilibrium in the HLA system. Eguchi S, et al. **Biometrics** 1990 Jun;46(2):415–26
Comparison of recent estimators of interclass correlation from familial data. Eliasziw M, et al. **Biometrics** 1990 Jun; 46(2):391–8
Biostatistical collaboration in medical research. Ellenberg JH. **Biometrics** 1990 Mar;46(1):1–18; discussion 19–32 (78 ref.)
Testing whether an identified treatment is best. Laska EM, et al. **Biometrics** 1989 Dec;45(4):1139–51
Detection of associations between diseases in animal carcinogenicity experiments. Mitchell TJ, et al. **Biometrics** 1990 Jun;46(2):359–74
Pedigree analysis for quantitative traits: variance components without matrix inversion. Thompson EA, et al. **Biometrics** 1990 Jun;46(2):399–413
The emperor (or, rather, his statistician) has new clothes... [editorial] Wheeler JM. **Fertil Steril** 1990 Feb;53(2):220–2
Biostatistics, common terms in usage. Ramachandran K, et al. **J Assoc Physicians India** 1989 May;37(5):329–33
Clinical rounds for non-clinicians: some impressions. Walter SD, et al. **J Clin Epidemiol** 1990;43(6):613–8
The surface area of an ellipsoid revisited [letter] Kwok LS. **J Theor Biol** 1989 Aug 22;139(4):573–4
Some comments on teaching biostatistics in medical and health sciences. Sahai H. **Methods Inf Med** 1990 Jan; 29(1):41–3
The role of biometry in the training of medical informaticians. Victor N. **Methods Inf Med** 1989 Nov;28(4):304–8
Errors-in-variables workshop. Byar DP, et al. **Stat Med** 1989 Sep;8(9):1027–9
The use of dual or multiple reports in epidemiologic studies. Marshall JR. **Stat Med** 1989 Sep;8(9):1041–9; discussion 1071–3
Correction of logistic regression relative risk estimates and confidence intervals for systematic within-person measurement error. Rosner B, et al. **Stat Med** 1989 Sep; 8(9):1051–69; discussion 1071–3
An overview of issues related to the correction of non-differential exposure measurement error in epidemiologic studies. Willett W. **Stat Med** 1989 Sep; 8(9):1031–40; discussion 1071–3 (23 ref.)
[Progress in biostatistics correlated with the development of computer technics] Adam J, et al. **Z Gesamte Hyg** 1990 Apr;36(4):194–6 (Eng. Abstr.) **(Ger)**
[Biometric modeling in the optimization of the treatment of patients with gastric cancer] Kshivets OM, et al. **Klin Khir** 1990;(5):9–10 (Eng. Abstr.) **(Rus)**

INSTRUMENTATION

Clinical evaluation of the Bio-Pen for axial length measurement. Shammas HJ, et al. **J Cataract Refract Surg** 1990 Jan;16(1):120–2

METHODS

A note on case-control sampling to estimate kappa coefficients. Kraemer HC, et al. **Biometrics** 1990 Mar; 46(1):49–59
A modified Bonferroni method for discrete data. Tarone RE. **Biometrics** 1990 Jun;46(2):515–22
A computational procedure for assessing the significance of RNA secondary structure. Chen JH, et al. **Comput Appl Biosci** 1990 Jan;6(1):7–18
Basic program to assess the extent and pattern of agreement between two procedures. Fung KP, et al. **Comput Appl Biosci** 1990 Jan;6(1):54
Update on the statistical analysis of bioequivalence studies. Steinijans VW, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 Mar;28(3):105–10
Statistical methods in evaluating endometriosis studies. Wheeler JM. **Prog Clin Biol Res** 1990;323:443–8 (1 ref.)

BIOMODULATORS see **BIOLOGICAL RESPONSE MODIFIERS**

BIOMPHALARIA

On the effects of ivermectin on freshwater snails of medical and veterinary importance. Okafor FC. **Angew Parasitol** 1990 May;31(2):65–8
Predation of Pomacea canaliculata (Ampullariidae) on adult Biomphalaria peregrina (Planorbidae). Cazzaniga NJ. **Ann Trop Med Parasitol** 1990 Feb;84(1):97–100
Rheotaxis of Biomphalaria glabrata on vertical substrates and its role in the recolonization of habitats treated with molluscicides. Jurberg P, et al. **Mem Inst Oswaldo Cruz** 1989 Apr–Jun;83(2):165–74
[Predatory activity of Astronotus ocellatus (Cichlidae) on Biomphalaria glabrata (Planorbidae)] Feitosa VR, et al. **Rev Bras Malariol Doencas Trop** 1986;38:19–27 (Eng. Abstr.) **(Por)**
[Distribution of Biomphalaria tenagophila and B. occidentalis in the State of São Paulo (Brazil)] Teles HM. **Rev Saude Publica** 1989 Jun;23(3):244–53 (Eng. Abstr.) **(Por)**

DRUG EFFECTS

[Ambrosia maritima L.: study of molluscicidal properties of several generations originating in Egypt and cultivated in Senegal] Belot J, et al. **Ann Pharm Fr** 1989;47(2):62–7 (Eng. Abstr.) **(Fre)**

GENETICS

[Genetic aspects of Biomphalarias] Simões LC. **Mem Inst Oswaldo Cruz** 1989 Oct;84 Suppl 1:149–55 (18 ref.) **(Por)**

GROWTH & DEVELOPMENT

Biological control of Biomphalaria glabrata and B. straminea by the competitor snail Thiara tuberculata in a transmission site of schistosomiasis in Martinique, French West Indies. Pointier JP, et al. **Ann Trop Med Parasitol** 1989 Jun; 83(3):263–9
Biological control of Biomphalaria glabrata by Thiara granifera under laboratory conditions. Gomez JD, et al. **Trop Med Parasitol** 1990 Mar;41(1):43–5

IMMUNOLOGY

Studies on fresh water snails, specific intermediate hosts for schistosomiasis—IV. Isolation of haemolymph from native and chemically pretreated snails. Nabih I, et al. **Cell Mol Biol** 1989;35(6):597–602

METABOLISM

Comparative glucose tolerance studies in the freshwater snail Biomphalaria glabrata: influence of starvation and infection with the trematode Schistosoma mansoni. Liebsch M, et al. **J Comp Physiol [B]** 1990;160(1):41–50

PARASITOLOGY

The effect of schistosome infection on the mortality rates of Bulinus globosus and Biomphalaria pfeifferi. Woolhouse ME. **Ann Trop Med Parasitol** 1989 Apr;83(2):137–41
Fertile flukes and mediating molluscs. Marsden PD. **BMJ** 1990 Feb 3;300(6720):311–2
Schistosoma mansoni: influence of Biomphalaria glabrata size on susceptibility to infection and resultant cercarial production. Niemann GM, et al. **Exp Parasitol** 1990 Apr; 70(3):286–92
Effect of infection with Trichobilharzia ocellata and Schistosoma mansoni on the ultrastructure of the albumen gland of their respective hosts, Lymnaea stagnalis and Biomphalaria glabrata. el-Saadany MM, et al. **Folia Morphol (Praha)** 1989;37(3):264–73
Humoral response of the snail Biomphalaria glabrata to trematode infection: observations on a circulating hemagglutinin. Couch L, et al. **J Exp Zool** 1990 Sep; 255(3):340–9
Influence of intramolluscan larval stages of Echinostoma liei on the infectivity of Schistosoma mansoni cercariae. Jourdane J, et al. **J Helminthol** 1990 Mar;64(1):71–4
Lectin binding to cells of Schistosoma mansoni sporocysts and surrounding Biomphalaria glabrata tissue. Zelck U, et al. **J Invertebr Pathol** 1990 Jan;55(1):93–9
Ultrastructural evidence for the destruction of Schistosoma mansoni sporocysts associated with elevated lysosomal enzyme levels in Biomphalaria glabrata. Cheng TC, et al. **J Parasitol** 1989 Dec;75(6):928–41
Schistosoma mansoni modulation of phagocytosis in Biomphalaria glabrata. Fryer SE, et al. **J Parasitol** 1990 Feb;76(1):45–52
Differential binding of hemolymph proteins from schistosome-resistant and -susceptible Biomphalaria glabrata to Schistosoma mansoni sporocysts. Spray FJ, et al. **J Parasitol** 1990 Apr;76(2):225–9
A parasitological and malacological survey of schistosomiasis mansoni in the Beles Valley, northwestern Ethiopia. Teklehaimanot A, et al. **J Trop Med Hyg** 1990 Feb; 93(1):12–21
[Resistance of Biomphalaria peregrina of Santa Rita do Sapucaí, Minas Gerais, Brazil to infection with 3 strains of Schistosoma mansoni] de Souza CP, et al. **Mem Inst Oswaldo Cruz** 1988 Oct–Dec;83(4):447–50 (Eng. Abstr.) **(Por)**

PHYSIOLOGY

Human schistosomiasis in Cameroon. II. Distribution of the snail hosts. Greer GJ, et al. **Am J Trop Med Hyg** 1990 Jun;42(6):573–80
[Resistance to desiccation of Biomphalaria glabrata adults infested by various miracidia of Schistosoma mansoni] Lancastre F, et al. **Mem Inst Oswaldo Cruz** 1989 Apr–Jun; 84(2):205–12 (Eng. Abstr.) **(Fre)**
[Competitive behavior of Biomphalaria glabrata and Biomphalaria tenagophila—laboratory studies] dos Santos MB, et al. **Mem Inst Oswaldo Cruz** 1989 Oct;84 Suppl 1:156–78 (Eng. Abstr.) **(Por)**
[Estivation of Biomphalaria tenagophila (Pulmonata, Planorbidae)] Teles HM, et al. **Rev Saude Publica** 1989 Feb; 23(1):76–8 (Eng. Abstr.) **(Por)**

BIONICS

see related
CYBERNETICS

[Bionics: limits and perspectives] Grassmann P. **Naturwissenschaften** 1990 Jul;77(7):305–9 (18 ref.) (Eng. Abstr.) **(Ger)**

BIONOMICS see **ECOLOGY**

BIOPERIODICITY see **PERIODICITY**

BIOPHARMACEUTICS

Fourth European Congress of Biopharmaceutics and Pharmacokinetics. Geneva, Switzerland, April 17–19, 1990. Proceedings. **Eur J Drug Metab Pharmacokinet** 1990 Apr–Jun;15(2):83–181
Abstracts of oral and poster presentations. Fourth European Congress of Biopharmaceutics and Pharmacokinetics. Geneva, Switzerland, April 17–19, 1990. **Eur J Drug Metab Pharmacokinet** 1990;15(2 Suppl):1–50
Developmental pharmacology: ontogenic basis of drug disposition. Reed MD, et al. **Pediatr Clin North Am** 1989 Oct;36(5):1053–74 (62 ref.)
Abstracts of papers. Biopharmaceutical meeting. Groningen (The Netherlands), 8 December 1989. **Pharm Weekbl [Sci]** 1989 Dec 15;11(6 Suppl L):L1–4
Abstracts of papers. Biopharmaceutical meeting. Weesp (The Netherlands), 8 June 1990. **Pharm Weekbl [Sci]** 1990 Jun 22;12(3 Suppl D):D1–6

BIOPHYSICS

Biophysical Journal: program and abstracts, thirty-fourth annual meeting. February 18–22, 1990, Baltimore, Maryland. **Biophys J** 1990 Feb;57(2 Pt 2):1a–577a
[Determination of the constant b—foundations and assumptions] Fischer G. **Gegenbaurs Morphol Jahrb** 1990; 136(3):253–67 (Eng. Abstr.) **(Ger)**
[Biostimulation with low-intensity lasers—physics or metaphysics?] Svaasand LO. **Nord Med** 1990;105(3):72–5 (Eng. Abstr.) **(Nor)**

EDUCATION

The Masters Degree in Medical Physics at Queensland University of Technology—14 years on. Thomas BW, et al. **Australas Phys Eng Sci Med** 1990 Mar;13(1):36–41

HISTORY

Whither biophysics? Weber G. **Annu Rev Biophys Biophys Chem** 1990;19:1–6

INSTRUMENTATION

Facilities available for biophysics research at the Stanford Synchrotron Radiation Laboratory. Phizackerley RP. **Basic Life Sci** 1989;51:19–33

MANPOWER

A survey of therapy physics workload in Australasia. Fox RA. **Australas Phys Eng Sci Med** 1990 Mar;13(1):42–4

METHODS

The fetal biophysical profile score: current status. Manning FA. **Obstet Gynecol Clin North Am** 1990 Mar;17(1):147–62 (37 ref.)
Distribution of molecular aggregation by analysis of fluctuation moments. Qian H, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5479–83

BIOPOLYMERS see under **MACROMOLECULAR SYSTEMS**

BIOPROBES see **BIOSENSORS**

BIOPROSTHESIS

Spectral analysis of the first heart sound in patients with biological mitral valve prosthesis. Preliminary results. Longhini C, et al. **Acta Cardiol** 1990;45(3):231–6
Successful percutaneous balloon valvuloplasty of a stenotic tricuspid bioprosthesis. Chow WH, et al. **Am Heart J** 1990 Mar;119(3 Pt 1):666–8
Improved quality of life after successful balloon valvuloplasty of a stenosed mitral bioprosthesis. Cox DA, et al. **Am Heart J** 1989 Oct;118(4):839–41
Actinobacillus prosthetic valve endocarditis. Hamori PJ, et al. **Am Heart J** 1989 Oct;118(4):853–4
Validation and applications of mitral prosthetic valvular areas calculated by Doppler echocardiography. Dumesnil JG, et al. **Am J Cardiol** 1990 Jun 15;65(22):1443–8
Clinical, echocardiographic, continuous wave and color Doppler evaluation of bioprosthetic cardiac valves in place for more than ten years. Weintraub WS, et al. **Am J Cardiol** 1990 Apr 1;65(13):935–6
Fifteen-year experience with 1678 Hancock porcine bioprosthetic heart valve replacements. Cohn LH, et al. **Ann Surg** 1989 Oct;210(4):435–42; discussion 442–3
Modified Cabrol shunt for control of hemorrhage in repair of type A dissection of the aorta. Blum M, et al. **Ann Thorac Surg** 1989 Nov;48(5):709–11
Reoperation after pericardial closure with bovine pericardium. Eng J, et al. **Ann Thorac Surg** 1989 Dec; 48(6):813–5
New outlook on pericardial substitution after open heart operations. Gabbay S, et al. **Ann Thorac Surg** 1989 Dec; 48(6):803–12
Valvular xenograft to bioprosthesis [letter; comment] Hancock WD. **Ann Thorac Surg** 1990 Jan;49(1):170 Comment on: Ann Thorac Surg 1989 Sep;48(3

Suppl):S73–4.
Porcine versus pericardial bioprostheses [letter] Stassano P, et al. **Ann Thorac Surg** 1990 May;49(5):849–51
Performance of a new vascular xeno prosthesis. Burns P, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):214–8
Imaging analysis of platelet deposition on the extracardiac valved conduit in humans. Kawata H, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):190–2
The Mitroflow pericardial valve. First five years of follow–up evaluation. Loisance D, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):304–7
Collagen sealed Dacron. Implantation for congenital and acquired cardiac defects. McGrath LB, et al. **ASAIO Trans** 1989 Oct–Dec;35(4):816–9
Development of hybrid compliant graft: rapid preparative method for reconstruction of a vascular wall. Matsuda T, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):553–5
Laser vascular welding in biologic grafts. Ninomiya J, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):208–11
Long–term evaluation of a growable graft. Noishiki Y, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):267–70
An autologous connective tissue tube with high healing ability as a small diameter vascular substitute with temporary antithrombogenicity. Satoh S, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):185–7
Aortocoronary bypass grafting with hydrophilic small caliber vascular grafts. Tomizawa Y, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):199–202
Al3 binding studies and metallic cation effects on bioprosthetic heart valve calcification in the rat subdermal model. Webb CL, et al. **ASAIO Trans** 1990 Apr–Jun; 36(2):56–9
The tearing strength of glutaraldehyde fixed bovine pericardium. Trowbridge EA, et al. **Biomater Artif Cells Artif Organs** 1989;17(3):315–28
The relationship between stress and relaxation in calf pericardium used in the construction of cardiac bioprostheses. García Páez JM, et al. **Biomaterials** 1990 Apr;11(3):186–90
Effects of dynamic fixation on shear behaviour of porcine xenograft valves. Song T, et al. **Biomaterials** 1990 Apr; 11(3):191–6
A technique for replacing a prosthetic aortic valve after total aortic root replacement. Shawkat S, et al. **Br Heart J** 1990 Apr;63(4):260–1
Porcine skin inguinal hernioplasty. Muzafer MH. **Br J Clin Pract** 1989 Mar;43(3):116–8
Human umbilical vein grafts [letter; comment] Dardik H. **Can J Surg** 1990 Jun;33(3):173–4 Comment on: Can J Surg 1990 Feb;33(1):61–5.
The effect of flow on Doppler estimates of bioprosthetic mitral valve function in vitro. Chambers JB, et al. **Cardiovasc Res** 1989 Dec;23(12):1007–14
Uneven host tissue ongrowth and tissue detachment in stent mounted heart valve allografts and xenografts. Maxwell L, et al. **Cardiovasc Res** 1989 Aug;23(8):709–14
Percutaneous double–balloon valvuloplasty of porcine bioprosthetic valves in the tricuspid position. Attubato MJ, et al. **Cathet Cardiovasc Diagn** 1990 Jul;20(3):202–4
Percutaneous balloon valvuloplasty of a stenosed mitral bioprosthesis. Fernandez JJ, et al. **Cathet Cardiovasc Diagn** 1990 Jan;19(1):39–41
Extended survival with a porcine mitral valve bioprosthesis [letter] Bortolotti U, et al. **Chest** 1990 Sep;98(3):784
Flow characteristics of bioprosthetic heart valves. Rashtian MY, et al. **Chest** 1990 Aug;98(2):365–75
Indium–111 leukocyte localization in infected prosthetic graft. Purnell GL, et al. **Clin Nucl Med** 1990 Aug; 15(8):585–6
Studies of velocity fields and turbulence downstream of aortic valve prostheses in vitro and in vivo. Hasenkam JM. **Dan Med Bull** 1990 Jun;37(3):235–49 (109 ref.)
Pharmacokinetic behavior of ciprofloxacin both in native cardiac and porcine valves treated in glutaraldehyde. Kalmár P, et al. **Diagn Microbiol Infect Dis** 1990 Mar–Apr; 13(2):115–26
The Hancock pericardial xenograft: incidence of early mechanical failures at a medium–term follow–up. Bortolotti U, et al. **Eur J Cardiothorac Surg** 1988;2(6):458–64
Long–term performance of porcine heart valve bioprostheses. Gallo I, et al. **Eur J Cardiothorac Surg** 1988;2(4):273–81
Eleven years' experience with Carpentier–Edwards biological valves in relation to survival and complications. al–Khaja N, et al. **Eur J Cardiothorac Surg** 1989;3(4):305–11
Mechanical versus biological heart valves: a ten–year comparison in a single centre. MacArthur KJ, et al. **Eur J Cardiothorac Surg** 1988;2(3):143–50
Mitral valve replacement with the Hancock, Björk–Shiley and Lillehei–Kaster prostheses. A comparison based on a 15–year follow–up. Milano A, et al. **Eur J Cardiothorac Surg** 1989;3(4):312–9; discussion 319–20
Morphological survey of a new pericardial valve prosthesis (Pericarbon): long–term animal experimental model [published erratum appears in Eur J Cardiothorac Surg 1989;3(3):281] Thiene G, et al. **Eur J Cardiothorac Surg** 1989;3(1):65–74
Post bending of the polypropylene flexible stent in mitral Hancock bioprostheses. Valente M, et al. **Eur J Cardiothorac Surg** 1987;1(3):134–8
Implications of prosthetic valve implantation: an 8–year follow–up of patients with porcine bioprostheses. Finkelmeier BA, et al. **Heart Lung** 1989 Nov;18(6):565–72
Reactions to a bovine collagen implant. Clinical and immunologic study in 705 patients. Charriere G, et al. **J Am Acad Dermatol** 1989 Dec;21(6):1203–8
Validation and applications of indexed aortic prosthetic valve areas calculated by Doppler echocardiography. Dumesnil JG, et al. **J Am Coll Cardiol** 1990 Sep;16(3):637–43
Doppler echocardiographic evaluation of stenotic bioprosthetic aortic valves [editorial; comment] Otto CM, et al. **J Am Coll Cardiol** 1990 Mar 15;15(4):825–6 Comment on: J Am Coll Cardiol 1990 Mar 15;15(4):817–24.
Determination of aortic valve area by two–dimensional and Doppler echocardiography in patients with normal and stenotic bioprosthetic valves [see comments] Rothbart RM, et al. **J Am Coll Cardiol** 1990 Mar 15;15(4):817–24 Comment in: J Am Coll Cardiol 1990 Mar 15;15(4):825–6.
The effects of a glycerin–based blood analog on the testing of bioprosthetic heart valves. Carey RF, et al. **J Biomech** 1989;22(11–12):1185–92
A two–dimensional finite element analysis of a bioprosthetic heart valve. Huang X, et al. **J Biomech** 1990;23(8):753–62
Analysis of the bending behaviour of porcine xenograft leaflets and of neutral aortic valve material: bending stiffness, neutral axis and shear measurements. Vesely I, et al. **J Biomech** 1989;22(6–7):655–71
The effect of gamma–irradiation on collagen molecules, isolated alpha–chains, and crosslinked native fibers. Cheung DT, et al. **J Biomed Mater Res** 1990 May;24(5):581–9
Porcine aortic valve bioprostheses: a morphologic comparison of the effects of fixation pressure. Hilbert SL, et al. **J Biomed Mater Res** 1990 Jun;24(6):773–87
Effect of alternative crosslinking methods on the low strain rate viscoelastic properties of bovine pericardial bioprosthetic material. Pereira CA, et al. **J Biomed Mater Res** 1990 Mar;24(3):345–61
In vitro and in vivo studies of heparinized–collageno–elastic tubes. Senatore F, et al. **J Biomed Mater Res** 1990 Jul; 24(7):939–57
Compression of an anomalous left circumflex coronary artery by a bioprosthetic valve ring. de Marchena EJ, et al. **J Cardiovasc Surg (Torino)** 1990 Jan–Feb;31(1):52–4
The use of an artificial pericardium with a total artificial heart. De Paulis R, et al. **J Cardiovasc Surg (Torino)** 1990 Mar–Apr;31(2):202–8
Glutaraldehyde–fixed bovine pericardium for right ventricular outflow enlargement. Mack JW Jr, et al. **J Cardiovasc Surg (Torino)** 1989 Sep–Oct;30(5):774–8
The effect of potassium phosphate, magnesium chloride and T6 as blocking agents on tissue valve calcification [letter; comment] Myers DJ. **J Cardiovasc Surg (Torino)** 1990 Jan–Feb;31(1):130 Comment on: J Cardiovasc Surg (Torino) 1989 May–Jun;30(3):317–21.
Lipid extraction attenuates the calcific degeneration of bovine pericardium used in cardiac valve bioprostheses. Rossi MA, et al. **J Exp Pathol (Oxford)** 1990 Apr; 71(2):187–96
Lateral ankle stabilization using bovine collagen material: xenograft bioprosthesis, model GR. Dockery GL, et al. **J Foot Surg** 1990 Jan–Feb;29(1):13–24
Heart transplantation for intractable prosthetic valve endocarditis. DiSesa VJ, et al. **J Heart Transplant** 1990 Mar–Apr;9(2):142–3
Histological appearances of the long saphenous vein. Milroy CM, et al. **J Pathol** 1989 Dec;159(4):311–6
Pericardium as a thoracic aortic patch: glutaraldehyde–fixed and fresh autologous pericardium. Haluck RS, et al. **J Surg Res** 1990 Jun;48(6):611–4
Invited letter concerning: stentless porcine aortic bioprosthesis [letter] Angell WW. **J Thorac Cardiovasc Surg** 1990 Aug;100(2):317
Immunogenicity of glutaraldehyde–tanned bovine pericardium. Dahm M, et al. **J Thorac Cardiovasc Surg** 1990 Jun;99(6):1082–90
Aortic valve replacement with stentless porcine aortic bioprosthesis. David TE, et al. **J Thorac Cardiovasc Surg** 1990 Jan;99(1):113–8
Long–term performance of the Hancock porcine bioprosthesis in the tricuspid position. A review of forty–five patients with fourteen–year follow–up. Guerra F, et al. **J Thorac Cardiovasc Surg** 1990 May;99(5):838–45
Rest and exercise hemodynamics of 20 to 23 mm allograft, Medtronic Intact (porcine), and St. Jude Medical valves in the aortic position. Jaffe WM, et al. **J Thorac Cardiovasc Surg** 1990 Aug;100(2):167–74
Persistent mitral stenosis after mitral valve replacement with a Carpentier–Edwards bioprosthesis [letter; comment] Lundy EF, et al. **J Thorac Cardiovasc Surg** 1990 Jun; 99(6):1114 Comment on: J Thorac Cardiovasc Surg 1989 Aug;98(2):170–80.
A clinicopathologic study of aneurysm formation of glutaraldehyde–tanned human umbilical vein grafts. Miyata T, et al. **J Vasc Surg** 1989 Dec;10(6):605–11
Preferability of bioprostheses for isolated aortic valve replacement—a comparative study between mechanical and bioprosthetic valves. Kawachi Y, et al. **Jpn Circ J** 1990 Feb;54(2):137–45
Doppler measurement of cardiac output across prosthetic mitral valves. Dittmann H, et al. **Klin Wochenschr** 1990 Mar 5;68(5):263–8
Automatic detection of sounds and murmurs in patients with Ionescu–Shiley aortic bioprostheses. Baranek HL, et al. **Med Biol Eng Comput** 1989 Sep;27(5):449–55
Tissue–derived biomaterials and their use in cardiovascular prosthetic devices. Hilbert SL, et al. **Med Prog Technol** 1988–89;14(3–4):115–63 (246 ref.)
Morphological studies of cellular responses to experimental arterial grafts. Kischer CW, et al. **Microsurgery** 1990; 11(1):34–9
Surgical considerations of re–do valve replacement. Zhu X, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1990;5(1):1–3
Failure and hydrodynamic function testing of explanted pericardial and porcine bioprosthetic valves. Fisher J, et al. **Proc Inst Mech Eng [H]** 1989;203(H2):65–70
The value and extent of valve area increase by balloon dilatation of the stenosed bioprosthesis: in vitro studies. Ribeiro PA, et al. **Rev Port Cardiol** 1989 Jul–Aug; 8(7–8):515–8
A "semi–supported" porcine xenograft—description and first clinical use. Bernhard A, et al. **Thorac Cardiovasc Surg** 1989 Oct;37(5):313–5
Postoperative subphrenic abscess after heart–valve replacement. Mansur AJ, et al. **Thorac Cardiovasc Surg** 1989 Oct;37(5):327–8
Early alteration of bioprosthetic cardiac valves in sheep: influence of the immunological status. Noera G, et al. **Thorac Cardiovasc Surg** 1989 Aug;37(4):207–12
Xenotracheal graft as biological material for replacement of the affected vessels. Shvetsov IM, et al. **Vasa Suppl** 1989; 27:309
[Plasticity of glutaraldehyde–treated heterogeneous cartilage (porcine ear) and its clinical application] Chen B. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Sep;3(3):171–2 **(Chi)**
[Experimental study of glutaraldehyde treated heterogeneous cartilage (porcine ear) and its antigenic property] Qiu JQ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Sep;3(3):216–9 **(Chi)**
[Experimental study of heterogeneous cartilage transplantation] Su L. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Sep;3(3):220–2, 239 (Eng. Abstr.) **(Chi)**
[Further studies on softening of the glutaraldehyde–preserved skin] Wang SD. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):204–5, 208 **(Chi)**
[Preparation, experimental study and clinical application of glutaraldehyde skin] Xiu FX, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Mar;2(1):35–7, 75 (Eng. Abstr.) **(Chi)**
[An experimental study on delayed calcification of bovine pericardial valve using Triton X–100] Gu CX. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Aug; 17(4):236–7 **(Chi)**
[Evaluation of prosthetic valvular regurgitation by color Doppler echocardiography] Su H. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1990 Feb; 18(1):15–6, 61 (Eng. Abstr.) **(Chi)**
[Course of the first one hundred bioprostheses implanted between 1975 and 1977. A 10–year follow–up study] Menu P, et al. **Ann Chir** 1990;44(2):102–5 (Eng. Abstr.) **(Fre)**
[Durability of the Carpentier–Edwards porcine bioprosthesis in aortic or mitral positions. 10 years' results on 458 surgically treated cases] Soots G, et al. **Ann Chir** 1989; 43(8):616–23 (Eng. Abstr.) **(Fre)**
[Leiomyosarcoma of the pulmonary artery. Apropos of a case] Le Breton H, et al. **Arch Mal Coeur** 1989 Nov; 82(11):1907–10 (Eng. Abstr.) **(Fre)**
[Apico–aortic shunts. Indications, results] Ninet J, et al. **Arch Mal Coeur** 1990 May;83(5):707–10 (11 ref.) (Eng. Abstr.) **(Fre)**
[Morphology and volume behavior of allogeneic vascular implants. An animal experiment study of the carotid artery of the rat] Fleiner B, et al. **Fortschr Kiefer Gesichtschir** 1990;35:19–21 **(Ger)**
[Artificial vascular replacement in microsurgery. Results of a comprehensive experimental study] Voy ED, et al. **Fortschr Kiefer Gesichtschir** 1990;35:17–9 **(Ger)**
[Are cialit–preserved ossicles as middle ear implants still bacteriologically defensible? Their replacement by pre–formed implants fashioned from teeth] Hüttenbrink KB, et al. **Laryngorhinootologie** 1990 Jun;69(6):327–32 (Eng. Abstr.) **(Ger)**
[Long–term performance of mitral valve bioprosthesis] von Segesser LK, et al. **Schweiz Med Wochenschr** 1990 Jul 28; 120(30):1098–101 (Eng. Abstr.) **(Ger)**
[Use of color–coded Duplex sonography for morphologic and hemodynamic assessment of postoperative aneurysms in bioprostheses] Ellinghaus L, et al. **Vasa Suppl** 1989; 27:356–7 **(Ger)**
[Echocardiographic evaluation of mechanical and biological heart valve prostheses] Kirchner K. **Z Gesamte Inn Med** 1990 May 1;45(9):256–60 (24 ref.) (Eng. Abstr.) **(Ger)**
[Perioperative complications in at–risk patients undergoing heart valve surgery] Kothe K, et al. **Z Gesamte Inn Med** 1990 Jun 15;45(11):312–4 (Eng. Abstr.) **(Ger)**
[The biosynthetic Omniflow prosthesis: preliminary experience] Battisti G, et al. **Ann Ital Chir** 1989 Sep–Oct; 60(5):431–3 (Eng. Abstr.) **(Ita)**
[A Doppler echocardiographic study of normal and dysfunctioning Carpentier–Edwards bioprostheses] Bonaduce D, et al. **G Ital Cardiol** 1990 Jan;20(1):50–7 (Eng. Abstr.) **(Ita)**

[Mitral valve replacement in young children: a long-term follow-up] Grillo R, et al. **G Ital Cardiol** 1990 Jan; 20(1):38–42 (Eng. Abstr.) **(Ita)**

[Evaluation of biological prostheses using the Doppler method] Jacovella G, et al. **G Ital Cardiol** 1990 Jan; 20(1):58–65 (30 ref.) **(Ita)**

[Intermediate echocardiographic follow-up of a new model of pericardial prosthesis (Pericarbon)] Micheletti E, et al. **Minerva Cardioangiol** 1990 Apr;38(4):151–5 (Eng. Abstr.) **(Ita)**

[Quadricuspid aortic valve: case reports] Mathison M, et al. **Kyobu Geka** 1990 May;43(5):383–8 (Eng. Abstr.) **(Jpn)**

[Biological versus mechanical valves in the mitral position] Shimoyama Y, et al. **Kyobu Geka** 1989 Sep;42(10):806–10; discussion 811–3 (Eng. Abstr.) **(Jpn)**

[Middle term follow-up and comparative study of valve replacement with four kinds of new model bovine pericardial xenografts] Tajima K, et al. **Kyobu Geka** 1990 Jun;43(6):438–43 (Eng. Abstr.) **(Jpn)**

[A case of bioprosthetic mitral valvular dysfunction due to pannus-formation] Takagi H, et al. **Kyobu Geka** 1990 Jul; 43(7):569–72 (Eng. Abstr.) **(Jpn)**

[Studies on making a vital graft in culture system: preliminary report] Fukushima H, et al. **Nippon Geka Gakkai Zasshi** 1989 Jul;90(7):1123 **(Jpn)**

[Comparative analysis of long-term results with porcine-aortic, bovine pericardial and tilting disc valves] Kawazoe K, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep; 90(9):1534–7 (Eng. Abstr.) **(Jpn)**

[Long-term results of mechanical valves in aortic position and biological valves in mitral and tricuspid positions] Shimoyama Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep; 90(9):1529–33 (Eng. Abstr.) **(Jpn)**

[The clinical criteria for Carpentier-Edwards bioprosthesis in the mitral position] Shomura T, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep;90(9):1525–8 (Eng. Abstr.) **(Jpn)**

[Long-term results of mitral valve replacement using glutaraldehyde-treated porcine bioprostheses—comparison of the Hancock and the Liotta valves] Kazui T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jun;38(6):1023–9 (Eng. Abstr.) **(Jpn)**

[2-dimensional and Doppler echocardiographic follow-up on degenerative changes in Ionescu-Shiley pericardial xenograft] Miyazawa S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jul;37(7):1281–6 (Eng. Abstr.) **(Jpn)**

[Valve prostheses of mitral position in children] Shimoyama Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jan; 38(1):101–5 (Eng. Abstr.) **(Jpn)**

[Investigation of primary tissue failure in mitral bioprostheses] Shimoyama Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Apr;38(4):590–5 (Eng. Abstr.) **(Jpn)**

[Clinical experience of bovine internal mammary artery graft (BIOFLOW) for coronary artery bypass surgery] Suma H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep; 37(9):1965–8 (Eng. Abstr.) **(Jpn)**

[Function of the left cardiac ventricle in "pure" aortic insufficiency prior to and following valve replacement with a biological prosthesis] Kornacewicz-Jach Z, et al. **Pol Tyg Lek** 1989 Jun 5;44(23):521–7 (Eng. Abstr.) **(Pol)**

[The porcine valve prosthesis and pregnancy] Kadri T, et al. **Arq Bras Cardiol** 1989 Jun;52(6):327–31 (Eng. Abstr.) **(Por)**

[Dental procedures during anticoagulant administration] Mansur AJ, et al. **Arq Bras Cardiol** 1989 Jan;52(1):35–7 (Eng. Abstr.) **(Por)**

[Results of mitral substitution surgery using the Ionescu-Shilley bioprosthesis (1979–1986)] Sá J, et al. **Rev Port Cardiol** 1988 May-Jun;7(3):321–5 (Eng. Abstr.) **(Por)**

[Erythrocytes and the assessment of the physical work capacity of patients with heart valve prostheses] Barbarash NA, et al. **Fiziol Cheloveka** 1989 Sep-Oct;15(5):118–22 **(Rus)**

[Calcification of heart valve xenograft bioprostheses and the means for its prevention] Barbarash LS, et al. **Grudn Khir** 1989 Sep-Oct;(5):83–8 (50 ref.) **(Rus)**

[A new approach to the creation of heart valve xenograft bioprostheses resistant to calcification] Zhuravleva IIu, et al. **Grudn Khir** 1989 Sep-Oct;(5):25–30 (Eng. Abstr.) **(Rus)**

[Evaluation of the function of mitral valve prosthesis by non-invasive methods] Barbarash NA, et al. **Kardiologiia** 1990 Mar;30(3):36–9 (Eng. Abstr.) **(Rus)**

[Study of hemodynamics after creation of a new experimental outflow tract for the left heart ventricle] Chekanov VS, et al. **Kardiologiia** 1989 Jul;29(7):95–8 (Eng. Abstr.) **(Rus)**

[Use of an autovenous transplant, polytetrafluoroethylene prosthesis and human umbilical vein bioprosthesis for creating an arteriovenous fistula for programmed hemodialysis] Filiptsev PIa, et al. **Vestn Khir** 1989 Nov; 143(11):36–8 (Eng. Abstr.) **(Rus)**

[Resistance of heart valve bioprosthesis to the proteolytic effect of collagenase and elastase] Kraaovakaia SM, et al. **Vopr Med Khim** 1989 Nov-Dec;35(6):31–6 (Eng. Abstr.) **(Rus)**

[Hemodynamic and anatomic characteristics of the normal Mitroflow biological valve—in vivo determination using 2-dimensional echocardiography] Nadaždin A. **Med Arh** 1989;43(4–6):219–22 (Eng. Abstr.) **(Scr)**

[Reconstructive septal surgery: review of various implants in the nasal area] Montserrat JR, et al. **An Otorrinolaringol Ibero Am** 1989;16(5):475–83 (46 ref.) (Eng. Abstr.) **(Spa)**

[Endocarditis with Ionescu-Shiley's bioprosthesis. Long-term results] González-Juanatey JR, et al. **Rev Esp Cardiol** 1989 Dec;42(10):638–44 (Eng. Abstr.) **(Spa)**

[The Ionescu-Shiley bioprosthesis in the aortic position. Medium to long-term evaluation] Revuelta JM, et al. **Rev Esp Cardiol** 1989 Nov;42(9):581–6 (Eng. Abstr.) **(Spa)**

[The Mitroflow bioprosthesis. Results after 6 years] Revuelta JM, et al. **Rev Esp Cardiol** 1989 Nov;42(9):614–9 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Occlusion of aortocoronary vein grafts in association with bovine pericardium. Shapira N, et al. **Am J Cardiovasc Pathol** 1989;3(1):87–90

Early manifestation of noncalcific aortic stenosis after porcine valve replacement. Amidi M, et al. **Ann Thorac Surg** 1990 Mar;49(3):471–2

Bovine pericardium: another cautionary note [letter] Bullaboy CA. **Ann Thorac Surg** 1989 Nov;48(5):743

In vivo evaluation of four chemically processed biological grafts implanted as infrarenal arterial substitutes in dogs. Marois Y, et al. **Biomaterials** 1989 Aug;10(6):369–79

Acute renal failure due to profound haemolysis—an unusual complication of cusp rupture in cardiac bioprostheses. Rajesh PB, et al. **Eur J Cardiothorac Surg** 1988;2(3):197–8

Doppler diagnosis of left ventricle to coronary sinus fistula: an unusual complication of mitral valve replacement. Yee GW, et al. **J Am Soc Echocardiogr** 1988 Nov-Dec; 1(6):458–62

An histo-morphological evaluation of ninety surgically excised human umbilical vein grafts. Gill F, et al. **J Biomed Mater Res** 1989 Dec;23(A3 Suppl):363–80

Correlation between in vivo and in vitro efficacy of antimicrobial agents against foreign body infections. Widmer AF, et al. **J Infect Dis** 1990 Jul;162(1):96–102

A clinicopathologic study of aneurysm formation of glutaraldehyde-tanned human umbilical vein grafts [letter] Dardik H, et al. **J Vasc Surg** 1990 Aug;12(2):221–2

The necessity of reoperation for patients with Bjork-Shiley, St Jude Medical, Hancock and Carpentier-Edwards prostheses. Morishita Y, et al. **Jpn J Surg** 1990 Jul; 20(4):384–91

Microangiopathic hemolytic anemia as the initial manifestation of porcine valve failure. Enzenauer RJ, et al. **South Med J** 1990 Aug;83(8):912–7 (31 ref.)

[Endocarditis caused by Nocardia asteroides on an aortic bioprosthesis complicated by a mycotic hepatic aneurysm (letter)] Ayral X, et al. **Ann Med Interne (Paris)** 1989; 140(7):652–4 **(Fre)**

[Acute dysfunction of mitral bioprosthesis: Doppler expression of a musical holosystolic murmur. Apropos of 2 cases] Metz D, et al. **Arch Mal Coeur** 1989 Sep; 82(9):1617–21 (Eng. Abstr.) **(Fre)**

[Correction of posterior hypospadias by a transverse vascular preputial graft, evolution of technics and results. Apropos of 42 cases] Dodat H, et al. **J Urol (Paris)** 1989;95(8):489–93 (Eng. Abstr.) **(Fre)**

[Suspended ileo-ureteroplasty following appendiculoplasty] Heritier P, et al. **J Urol (Paris)** 1989;95(8):509–10 (Eng. Abstr.) **(Fre)**

[Left ventricle-right atrium intracardiac shunt following replacement of mitral valve prosthesis] Santé P, et al. **Arch Monaldi Mal Torace** 1988 May-Jun;43(3):257–64 (Eng. Abstr.) **(Ita)**

[A case of myonephropathic-metabolic syndrome after urgent aortic valve re-replacement due to prosthetic valve thrombosis] Fukumura Y, et al. **Kyobu Geka** 1990 Jul; 43(7):565–8 (Eng. Abstr.) **(Jpn)**

[Thromboembolism with the Ionescu-Shiley bovine pericardial bioprosthesis. Long-term results (11 years)] González-Juanatey JR, et al. **Rev Esp Cardiol** 1990 Jan; 43(1):6–12 (Eng. Abstr.) **(Spa)**

[Dysfunction caused by thrombosis in a Hancock mitral bioprosthesis and resolution with heparin (letter)] Picó-Aracil F. **Rev Esp Cardiol** 1990 Jan;43(1):61 **(Spa)**

STANDARDS

Color flow Doppler evaluation of cardiac bioprosthetic valves. Alam M, et al. **Am J Cardiol** 1989 Dec 1; 64(19):1389–92

STATISTICS & NUMERICAL DATA

Ten-year experience with the porcine bioprosthetic valve: interrelationship of valve survival and patient survival in 1,050 valve replacements. Jones EL, et al. **Ann Thorac Surg** 1990 Mar;49(3):370–83; discussion 383–4

Cardiac valve replacement with glutaraldehyde preserved aortic allografts. Salles CA, et al. **Eur J Cardiothorac Surg** 1990;4(3):147–53; discussion 154–5

The Carpentier-Edwards standard porcine bioprosthesis. A first-generation tissue valve with excellent long-term clinical performance. Jamieson WR, et al. **J Thorac Cardiovasc Surg** 1990 Mar;99(3):543–61

[Selection of a prosthetic valve for mitral valve replacement] Aoyagi S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Mar;38(3):383–8 (Eng. Abstr.) **(Jpn)**

BIOPSY

Vacuum injection—a new indirect fixing method for the demonstration of initial lymphatics in biopsy specimens of human organs. Berens von Rautenfeld D, et al. **Acta Anat (Basel)** 1989;136(2):172–6

Prediction of 'high-risk' cervical papillomavirus infection by biopsy morphology [see comments] Franquemont DW, et al. **Am J Clin Pathol** 1989 Nov;92(5):577–82 Comment in: Am J Clin Pathol 1990 May;93(5):722.

Availability of immunostaining methods for identification of mixed-up tissue specimens. Ota M, et al. **Am J Clin Pathol** 1989 Nov;92(5):665–9

The need to biopsy [letter] Spector JI, et al. **Am J Hematol** 1989 Dec;32(4):316

Clinical utility of kidney biopsies in the diagnosis and management of renal disease. Cohen AH, et al. **Am J Nephrol** 1989;9(4):309–15

Problems in the interpretation of liver biopsies after liver transplantation. Snover DC. **Am J Surg Pathol** 1989;13 Suppl 1:31–8 (21 ref.)

Bronchial biopsies in asthma. An ultrastructural, quantitative study and correlation with hyperreactivity. Jeffery PK, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1745–53

Breast biopsy. Changing patterns during a five-year period. Lay SF, et al. **Am Surg** 1990 Feb;56(2):79–85

Liver enzymes and liver biopsy [letter; comment] Whitney JP. **Ann Intern Med** 1990 Feb 15;112(4):311 Comment on: Ann Intern Med 1989 Sep 15;111(6):473–8.

Retrospective analysis of the efficacy of open lung biopsy in acquired immunodeficiency syndrome. Bonfils-Roberts EA, et al. **Ann Thorac Surg** 1990 Jan;49(1):115–7

Takayasu's disease: diagnostic and therapeutic value of subclavian artery biopsy. Long A, et al. **Ann Vasc Surg** 1990 Mar;4(2):151–5

The recognition of mycobacterial infections by intraoperative cytology in patients with acquired immunodeficiency syndrome. Jannotta FS, et al. **Arch Pathol Lab Med** 1989 Oct;113(10):1120–3

The diagnosis of impalpable breast carcinomas [editorial; comment] Bennett RC. **Aust N Z J Surg** 1990 May; 60(5):323–4 Comment on: Aust N Z J Surg 1990 May;60(5):337–40.

Early experience with needle localization and biopsy of mammographic lesions [see comments] Bird D, et al. **Aust N Z J Surg** 1990 May;60(5):337–40 Comment in: Aust N Z J Surg 1990 May;60(5):323–4.

Is it time for a reconsideration of the criteria for cone biopsy? Lopes A, et al. **Br J Obstet Gynaecol** 1989 Nov; 96(11):1345–7

The breast biopsy. Scanlon EF. **Cancer** 1989 Dec 15;64(12 Suppl):2671–3

Role of diagnostic lymphnode biopsies in 56 anti-HIV positive patients. Moresco L, et al. **Cancer Detect Prev** 1990;14(3):353–7

Is there a role for biopsy in the treatment of supratentorial high-grade glioma? Neuwelt EA, et al. **Clin Neurosurg** 1990;36:384–407 (70 ref.)

Referral policy and positive predictive value of call for surgical biopsy in the Florence Breast Cancer Screening Program. Ciatto S, et al. **J Clin Epidemiol** 1990;43(5):419–23

Laparoscopy and liver biopsy: further evidence that the two procedures improve the diagnosis of liver cirrhosis. A retrospective study of 1,003 consecutive examinations. Orlando R, et al. **J Clin Gastroenterol** 1990 Feb;12(1):47–52

Changing breast biopsy concepts. Leis HP Jr. **J S C Med Assoc** 1990 May;86(5):281–2

Correlation between mammography and the pathology of nonpalpable breast lesions. Albert MP, et al. **J Surg Oncol** 1990 May;44(1):44–6

A case of eosinophilic heart disease diagnosed by endomyocardial biopsy findings. Kawagoshi H, et al. **Jpn Heart J** 1990 Mar;31(2):259–64

Second-trimester placental biopsy versus amniocentesis for prenatal diagnosis of beta-thalassemia [letter] Monni G, et al. **N Engl J Med** 1990 Jan 4;322(1):60–1

Corneal biopsy. Indications, techniques, and a report of a series of 87 cases. Lee P, et al. **Ophthalmology** 1990 Jun; 97(6):718–21

Endomyocardial biopsy in infants and children: experience in 60 patients. Schmaltz AA, et al. **Pediatr Cardiol** 1990 Jan;11(1):15–21

Acceptability of periodic follow-up as an alternative to biopsy for mammographically detected lesions interpreted as probably benign [letter] Jackson FI. **Radiology** 1989 Nov; 173(2):580–1

Paraffin tissue block radiography: adjunct to breast specimen radiography. Rebner M, et al. **Radiology** 1989 Dec; 173(3):695–6

Colposcopic biopsy in pregnant teenagers [letter] Bloch B. **S Afr Med J** 1990 Sep 1;78(5):285–6

Colonoscopy, mucosal biopsy and brush cytology in the assessment of patients with colorectal inflammatory bowel disease. Isbister WH, et al. **Surg Endosc** 1989;3(3):159–63

[A database for registration of biopsy findings] Feit J, et al. **Cesk Patol** 1990 May;26(2):119–24 (Eng. Abstr.) **(Cze)**

[A program for semi-automated histomorphologic examination of bone biopsies] Prokop M, et al.

Cesk Patol 1989 Aug;25(3):173–8 (Eng. Abstr.) (Cze)

[Contribution of the duodenal biopsy in the diagnosis of kala-azar] Benhassine ML, et al. **Arch Inst Pasteur Alger** 1986;55:125–30 (Eng. Abstr.) (Fre)

[Endomyocardial biopsy: clinical, diagnostic and morphological aspects] Bardosi A. **Dtsch Med Wochenschr** 1989 Oct 27;114(43):1665–72 (63 ref.) (Ger)

[Localization of nonpalpable breast lesions in intraoperative rapid-section diagnosis using a new procedure] Bollmann R, et al. **ROFO** 1990 Jul;153(1):73–5 (Eng. Abstr.) (Ger)

[Biopsy monitoring of the transplant patient] Angelini A, et al. **G Ital Cardiol** 1989 Dec;19(12):1144–9 (Ita)

[Controversies in medicine: the role of biopsy in the diagnosis of hepatic cirrhosis] Tarantino G, et al. **Riv Eur Sci Med Farmacol** 1988 Jun;10(3):219–23 (12 ref.) (Eng. Abstr.) (Ita)

[Biopsy of the external ear in diabetology] Papić Z, et al. **Med Pregl** 1989;42(3–4):102–8 (Eng. Abstr.) (Ser)

[Diagnostic role of the biopsy in angiofibroma of the cavum] Vallés Varela H, et al. **An Otorrinolaringol Ibero Am** 1989; 16(5):543–52 (Eng. Abstr.) (Spa)

[Usefulness of endomyocardial biopsy in myocarditis and dilated cardiomyopathy] Almazán A, et al. **Arch Inst Cardiol Mex** 1989 Nov–Dec;59(6):573–7 (Eng. Abstr.) (Spa)

[More on abdominal subcutaneous fat biopsy (letter)] Roselló Pardo R, et al. **Med Clin (Barc)** 1990 Jan 13;94(1):36–7 (Spa)

ADVERSE EFFECTS

How "fine" is incisional biopsy of melanoma [letter] Rampen FH, et al. **Ann Plast Surg** 1986 Feb;16(2):173–5

Three cases of fatal cardiac tamponade following ventricular endocardial biopsy. Craven CM, et al. **Arch Pathol Lab Med** 1990 Aug;114(8):836–9

Prevention of post-cone biopsy cervical stenosis using a temporary cervical stent. Luesley DM, et al. **Br J Obstet Gynaecol** 1990 Apr;97(4):334–7

Peripheral limb gangrene following rectal biopsy. Treatment with prostacyclin and exchange transfusion. Jani BR, et al. **Clin Pediatr (Phila)** 1989 Dec;28(12):585–8

Haematocervix after conization diagnosed by ultrasonography. Pschera H, et al. **Gynecol Obstet Invest** 1990;29(4):309–10

Delayed abdominal pain after outpatient endometrial biopsy in the luteal phase. Li TC, et al. **Int J Gynaecol Obstet** 1990 Jul;32(3):267–8

Severe hemorrhage from a 4 mm punch biopsy site in a hemophilia patient with acquired immunodeficiency syndrome. Maytin EV, et al. **J Am Acad Dermatol** 1989 Nov;21(5 Pt 1):1033–4

Significant postoperative hemorrhage following biopsy of a prostate tumor metastatic to the mandibular condyle: report of a case. Catrambone RJ, et al. **J Oral Maxillofac Surg** 1990 Aug;48(8):858–61

Diagnostic open-lung biopsy after bone marrow transplantation. Snyder CL, et al. **J Pediatr Surg** 1990 Aug; 25(8):871–6; discussion 876–7

Implications of sampling the implantation site in the endometrial biopsy for infertility. Kaminski PF, et al. **J Reprod Med** 1990 Mar;35(3):208–10

Ureteral obstruction due to blood clot following percutaneous renal biopsy: resolution with intraureteral streptokinase. Bergman SM, et al. **J Urol** 1990 Jan; 143(1):113–5

INSTRUMENTATION

Conjunctival brush cytology. Tsubota K, et al. **Acta Cytol** 1990 Mar–Apr;34(2):233–5

Common bile duct biopsy with the Simpson atherectomy catheter. Kim D, et al. **AJR Am J Roentgenol** 1990 Jun; 154(6):1213–5

A new device for evaluation of biopsy specimens of occult breast-lesions. Lindfors KK, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):261–3

A low cost system for performing CT stereotaxic brain biopsy. Bell BA, et al. **Br J Neurosurg** 1989;3(5):561–8

A simple system for image directed stereotaxis. Dervin JE, et al. **Br J Neurosurg** 1989;3(5):569–74

The 'Cambridge' stereotactic biopsy instrument. Marks PV, et al. **Br J Neurosurg** 1990;4(2):127–8

Use of Gynocheck endometrial tissue sampler in infertility. Smith RN. **Br J Obstet Gynaecol** 1990 May;97(5):454–5

Endoscopic localization of the squamocolumnar junction before cervical cone biopsy in 284 patients. Saunders N, et al. **Cancer** 1990 Mar 15;65(6):1312–7

Delayed, massive hemorrhage following electrocoagulating biopsy ("hot biopsy") of a diminutive colonic polyp. Quigley EM, et al. **Gastrointest Endosc** 1989 Nov–Dec; 35(6):559–63

Endomyocardial biopsy. Olsen EG. **Invest Cell Pathol** 1978 Apr–Jun;1(2):139–57 (100 ref.)

A randomized clinical trial comparing Pipelle and Tis-u-trap for endometrial biopsy [letter] Frishman G, et al. **Obstet Gynecol** 1990 Aug;76(2):315–6

A randomized clinical trial comparing Pipelle and Tis-u-trap for endometrial biopsy. Koonings PP, et al. **Obstet Gynecol** 1990 Feb;75(2):293–5

[Use of endomyocardial biopsy forceps to remove a catheter knot during mapping of the left heart (letter)] Baudouy M, et al. **Presse Med** 1990 Jul 7–14;19(27):1282 (Fre)

[Ultrasound-controlled cutting biopsy for collecting histologic specimens] Letterer H, et al. **Gastroenterol J** 1990;49(4):156–9 (Eng. Abstr.) (Ger)

[Cytologic endometrium diagnosis with a new combination instrument, the Endoshave] Caniels B, et al. **Geburtshilfe Frauenheilkd** 1990 Jun;50(6):477–82 (Eng. Abstr.) (Ger)

[Electron microscopy characterization of percutaneous biopsy of vascular plaque] Bauriedel G, et al. **Vasa Suppl** 1989;27:220–3 (Ger)

METHODS

Minimal-volume excision of nonpalpable breast lesions. Gallagher WJ, et al. **AJR Am J Roentgenol** 1989 Nov; 153(5):957–61

Percutaneous ventricular endomyocardial biopsy with angioscopic guidance. Uchida Y, et al. **Am Heart J** 1989 Nov;118(5 Pt 1):1039–41

Modified open renal biopsy. An experience with fifty consecutive cases. Finan BF, et al. **Am J Nephrol** 1989; 9(4):300–2

Preventing cervical conization by achieving satisfactory colposcopy with hygroscopic cervical dilators. Stern JL, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):176–7

Breast blocks [letter; comment] Frankel K. **Am J Surg Pathol** 1990 Apr;14(4):399–400 Comment on: Am J Surg Pathol 1989 Jun;13(6):505–12.

Alternate technique for biopsy in lung transplantation patients [letter] Madoff IM. **Ann Thorac Surg** 1990 Feb; 49(2):342–3

Should the excisional biopsy of clinically probable melanomas include a margin that might also serve as adequate for treatment? Ledwig PA, et al. **Arch Dermatol** 1990 Jul; 126(7):877–8

A new method of obtaining cells from the cornea and conjunctiva for cytologic study [letter] Mader TH, et al. **Arch Ophthalmol** 1990 May;108(5):639

Punch biopsy technique for the ophthalmologist [letter] Warren RC, et al. **Arch Ophthalmol** 1990 Jun;108(6):778–9

Small biopsy orientation [letter; comment] Brinker JE. **Arch Pathol Lab Med** 1989 Dec;113(12):1323–4 Comment on: Arch Pathol Lab Med 1989 Feb;113(2):111.

Oral cancer and precancer: establishing a diagnosis. Bramley PA, et al. **Br Dent J** 1990 Feb 10;168(3):103–7

How to perform a muscle biopsy. Heckmatt JZ. **Br J Hosp Med** 1990 Feb;43(2):128, 130–1

Computer-directed stereotactic biopsy of intrinsic brain stem lesions. Thomas DG, et al. **Br J Neurosurg** 1988;2(2):235–40

Evaluation of the role of endoscopic biopsies and cytology in the detection of gastric malignancy. Waldron R, et al. **Br J Surg** 1990 Jan;77(1):62–3

Correlation of CT and MR with impedance monitoring and histopathology in stereotactic biopsies. Gorecki J, et al. **Can J Neurol Sci** 1990 May;17(2):184–9

Excisional biopsy as the first therapeutic procedure versus primary wide excision of malignant melanoma. Landthaler M, et al. **Cancer** 1989 Oct 15;64(8):1612–6

Pneumothorax following transbronchial biopsy. Low diagnostic yield with routine chest roentgenograms. Frazier WD, et al. **Chest** 1990 Mar;97(3):539–40

Biopsy, nonvascular balloon dilation, and percutaneous drainage. Kerlan R. **Curr Opin Radiol** 1990 Apr;2(2):300–8 (38 ref.)

Intraoperative and interventional ultrasound. McGahan JP, et al. **Curr Opin Radiol** 1990 Apr;2(2):213–22 (38 ref.)

Endomyocardial biopsy. Technical aspects and indications. Mortensen SA. **Dan Med Bull** 1989 Dec;36(6):507–32 (168 ref.)

Bronchial brushing and biopsy: a comparative evaluation in diagnosing visible bronchial lesions. Saita S, et al. **Eur J Cardiothorac Surg** 1990;4(5):270–2

Chorionic villus sampling (CVS). Randomized study of efficacy of two transcervical biopsy methods: aspiration canulas and small forceps. Pons JC, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Sep;32(3):187–94

Sampling of prostatic tissue [letter] Delahunt B, et al. **Hum Pathol** 1990 Mar;21(3):352–3

Cytogenetic analysis of biopsied preimplantation mouse embryos: implications for prenatal diagnosis. Roberts C, et al. **Hum Reprod** 1990 Feb;5(2):197–202

Transbronchial lung biopsy in diffuse lung disease—a study of 28 cases. Kalra S, et al. **Indian J Chest Dis Allied Sci** 1989 Oct–Dec;31(4):265–70

Internal retinal biopsy: surgical technique and results. Peyman GA. **Int Ophthalmol** 1990 Mar;14(2):101–4

The oral mucosal punch biopsy: indications and technique. Lynch DP, et al. **J Am Dent Assoc** 1990 Jul;121(1):145–9

Ultrasonographic localization for renal biopsy. Sakhuja V, et al. **J Assoc Physicians India** 1990 Jun;38(6):393–5

A randomized trial of open lung biopsy versus empiric antimicrobial therapy in cancer patients with diffuse pulmonary infiltrates. Browne MJ, et al. **J Clin Oncol** 1990 Feb;8(2):222–9

Differential marking of excision planes in screened breast lesions by organically coloured gelatins. Armstrong JS, et al. **J Clin Pathol** 1990 Jul;43(7):604–7

Alcian blue: reliable rapid method for marking resection margins [letter] Birch PJ, et al. **J Clin Pathol** 1990 Jul; 43(7):608–9

How to biopsy oral lesions. Harahap M. **J Dermatol Surg Oncol** 1989 Oct;15(10):1077–80

Endoscopic small intestinal biopsy in infants and children: its usefulness in the diagnosis of celiac disease and other enteropathies. Kirberg A, et al. **J Pediatr Gastroenterol Nutr** 1989 Aug;9(2):178–81

Subcuticular skin closure following minor breast biopsy: Prolene is superior to polydioxanone (PDS) [letter; comment] **J R Coll Surg Edinb** 1990 Apr;35(2):131–2 Comment on: J R Coll Surg Edinb 1989 Jun;34(3):128–9.

Evaluation of the Pipelle curette for endometrial biopsy. Henig I, et al. **J Reprod Med** 1989 Oct;34(10):786–9

Nuclear scan-guided rib biopsy. Moores DW, et al. **J Thorac Cardiovasc Surg** 1990 Apr;99(4):620–1

Imaging-guided biopsy. Welch TJ, et al. **Mayo Clin Proc** 1989 Oct;64(10):1295–302 (27 ref.)

Renal biopsy frozen section: a fluorescent study of hematoxylin and eosin-stained sections. Bonsib SM, et al. **Mod Pathol** 1990 Mar;3(2):204–10

Use of freeze-drying technology for the study of renal biopsies. Muda AO, et al. **Mod Pathol** 1990 Mar;3(2):211–5

Percutaneous automated biopsy in the diagnosis of primary infectious spondylitis. Onik G, et al. **Neurosurgery** 1990 Feb;26(2):234–7

Hemostasis and cold knife cone biopsy: a prospective randomized trial comparing a suture versus non-suture technique. Gilbert L, et al. **Obstet Gynecol** 1989 Oct; 74(4):640–3

Microcolpohysteroscopic tailoring of cervical conization. Gilbert L, et al. **Obstet Gynecol** 1990 Jul;76(1):101–5

Loop diathermy cone biopsy. Mor-Yosef S, et al. **Obstet Gynecol** 1990 May;75(5):884–6

Using a curette to collect ciliated nasal epithelium for evaluation in patients with suspected primary ciliary dyskinesia [letter] Green CG. **Pediatr Pulmonol** 1990; 9(2):131

The cause of superior vena cava syndrome: diagnosis with percutaneous atherectomy. Dake MD, et al. **Radiology** 1990 Mar;174(3 Pt 2):957–9

Techniques for obtaining the diagnosis of malignant breast lesions. Ellis LM, et al. **Surg Clin North Am** 1990 Aug; 70(4):815–30

Transbronchial biopsy without fluoroscopy: a five year experience in outpatients. de Fenoyl O, et al. **Thorax** 1989 Nov;44(11):956–9

Fine-needle aspiration cytology and conventional histology in 200 renal allografts. Reinholt FP, et al. **Transplantation** 1990 May;49(5):910–2

Diagnosis of primary cerebral lymphoma with particular reference to CT-guided stereotactic biopsy. Feiden W, et al. **Virchows Arch [A]** 1990;417(1):21–8

[Methodology of diagnostic bone biopsy and its complications] Zák J, et al. **Sb Lek** 1989 Sep;91(8):253–8 (Eng. Abstr.) (Cze)

[Retrospective analysis of 1,064 rapid biopsy studies for quality control] Dold P, et al. **Pathologe** 1990 Jul; 11(4):215–9 (Ger)

[Muscle biopsy—sampling and preparation of muscle fiber bundles] Cieslok CJ. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Oct; 41(10):605–8 (Eng. Abstr.) (Ger)

[Ultrasound-guided prostatic biopsy using biplanar transrectal probe. Our experience] Bock E, et al. **Radiol Med (Torino)** 1989 Nov;78(5):514–5 (Eng. Abstr.) (Ita)

[Ultrasonography-guided biopsy in cancer] Heilo A. **Tidsskr Nor Laegeforen** 1990 Apr 30;110(11):1378–9 (Nor)

[Practical use of ultrasonic examination conducted before and after percutaneous biopsy of the kidney] Billip-Tomecka Z, et al. **Pol Arch Med Wewn** 1987 Jun;77(6):257–63 (Eng. Abstr.) (Pol)

[Dermatologic drill biopsy (punch): diagnostic procedures in advanced carcinoma of the breast] Petti DA, et al. **Rev Paul Med** 1989 Jan–Feb;107(1):53–6 (Eng. Abstr.) (Por)

[Several technical details on the laparoscopic biopsy of the ovary] Rodríguez Hidalgo N, et al. **Ginecol Obstet Mex** 1977 Oct;42(252):251–6 (Eng. Abstr.) (Spa)

NURSING

Right ventricular endomyocardial biopsy. Obtaining specimens via the internal jugular vein. McCulloch BK. **AORN J** 1989 Dec;50(6):1241, 1244–7

STANDARDS

The safety and utility of endomyocardial biopsy in infants, children and adolescents [comment] Billingham ME. **J Am Coll Cardiol** 1990 Feb;15(2):443–5 Comment on: J Am Coll Cardiol 1990 Feb;15(2):436–42.

Safety and utility of endomyocardial biopsy in infants, children and adolescents: a review of 66 procedures in 53 patients [see comments] Yoshizato T, et al. **J Am Coll Cardiol** 1990 Feb;15(2):436–42 (50 ref.) Comment in: J Am Coll Cardiol 1990 Feb;15(2):443–5.

An evaluation of frozen section biopsy in 4434 cases. Hwang TS, et al. **J Korean Med Sci** 1987 Dec;2(4):239–45

Evaluation of postmortem endomyocardial biopsy specimens from 38 patients with lymphocytic myocarditis: implications for role of sampling error. Hauck AJ, et al. **Mayo Clin Proc** 1989 Oct;64(10):1235–45

UTILIZATION

[Is biopsy necessary in cytologically proven breast cancer?] Rydén S. **Lakartidningen** 1990 Mar 28;87(13):1040 **(Swe)**

VETERINARY

Shot biopsy in view of muscular disorders in pigs. Lahučký R. **Acta Vet Hung** 1989;37(1–2):123–9 (28 ref.)

Skeletal muscle biopsy. Braund KG. **Semin Vet Med Surg (Small Anim)** 1989 May;4(2):108–15 (8 ref.)

Clinical management of the cancer patient. Taking a biopsy. Carter RF, et al. **Vet Clin North Am Small Anim Pract** 1990 Jul;20(4):939–68 (5 ref.)

BIOPSY, CHORIONIC VILLI see **CHORIONIC VILLI SAMPLING**

BIOPSY, NEEDLE

Fine-needle aspiration biopsy of pancreatic masses. Athlin L, et al. **Acta Chir Scand** 1990 Jan;156(1):91–4

Amyloidosis of the liver diagnosed by fine needle aspiration cytology [letter] Bose S, et al. **Acta Cytol** 1989 Nov–Dec; 33(6):935–6

The application of fine needle aspiration cytology in the diagnosis of multiple primary malignant tumors. Donat EE, et al. **Acta Cytol** 1989 Nov–Dec;33(6):800–4

Curschmann's spirals and actinomycosis in a fine needle aspirate of the parotid. Mair S. **Acta Cytol** 1989 Nov–Dec; 33(6):903–6

Fine needle aspiration biopsy of a hepatic mass. An example of a near error. Mathew T, et al. **Acta Cytol** 1989 Nov–Dec; 33(6):861–4

Fine needle aspiration cytology of focal nodular hyperplasia of the liver. Ruschenburg I, et al. **Acta Cytol** 1989 Nov–Dec;33(6):857–60

Microfilariae in a thyroid aspirate smear: an incidental finding [letter] Sodhani P, et al. **Acta Cytol** 1989 Nov–Dec; 33(6):942–3

Value of the cytologic analysis of fine needle aspiration biopsy specimens in the diagnosis of pancreatic carcinomas. Soudah B, et al. **Acta Cytol** 1989 Nov–Dec;33(6):875–80

Fine needle aspiration cytology of inflammatory pseudotumor of the lung (plasma cell granuloma). Report of four cases. Thunnissen FB, et al. **Acta Cytol** 1989 Nov–Dec;33(6):917–21

Non-Hodgkin's lymphoma involving the brain. Diagnostic usefulness of stereotactic needle biopsy in combination with paraffin-section immunohistochemistry. Nakamine H, et al. **Acta Neuropathol (Berl)** 1989;78(5):462–71

Fine-needle aspiration biopsy of liver hemangioma. Taavitsainen M, et al. **Acta Radiol** 1990 Jan;31(1):69–71

Ultrasonography of primary liver carcinoma (PLC) and targetted cytologic examination. Fryšák Z, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;122:223–9

Aspiration cytology of papillary cystic neoplasm of the pancreas. Katz LB, et al. **Am J Clin Pathol** 1990 Sep; 94(3):328–33

Method already in use [letter; comment] Stay EJ, et al. **Am J Clin Pathol** 1990 May;93(5):721 Comment on: Am J Clin Pathol 1989 Jul;92(1):86–8.

Comparative features of ductal carcinoma in situ and infiltrating ductal carcinoma of the breast on fine-needle aspiration biopsy. Wang HH, et al. **Am J Clin Pathol** 1989 Dec;92(6):736–40

Fine-needle cytology of 292 palpable orbital and eyelid tumors. Zajdela A, et al. **Am J Clin Pathol** 1990 Jan; 93(1):100–4

Further correlation of renal function with kidney biopsy in chronic renal disease. Rosenbaum JL, et al. **Am J Med Sci** 1967 Aug;254(2):156–60

Fine-needle aspiration biopsy in the diagnosis of recurrent and metastatic intraabdominal malignancies. Butler JA, et al. **Am J Surg** 1989 Dec;158(6):589–92

Fine needle aspiration cytology in the evaluation of head and neck masses. Schwarz R, et al. **Am J Surg** 1990 May; 159(5):482–5

How thoroughly should needle localization breast biopsies be sampled for microscopic examination? A prospective mammographic/pathologic correlative study. Owings DV, et al. **Am J Surg Pathol** 1990 Jun;14(6):578–83

False-positive transcarinal needle aspirate in the evaluation of bronchogenic carcinoma. Carlin BW, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1800–2

Prospective evaluation of the role of fine-needle aspiration biopsy in the diagnosis and management of patients with palpable solid breast lesions. Gelabert HA, et al. **Am Surg** 1990 Apr;56(4):263–7 (23 ref.)

Solitary thyroid nodule: audit shows improved care requires cytological diagnosis. Wetzig NR, et al. **Ann R Coll Surg Engl** 1989 Sep;71(5):316–9

Salivary gland masses: the diagnostic value of fine-needle aspiration cytology. Cardillo MR. **Arch Anat Cytol Pathol** 1990;38(1–2):26–32 (25 ref.)

The value of fine-needle aspiration biopsy in patients with nodular thyroid disease divided into groups of suspicion of malignant neoplasms on clinical grounds [published erratum appears in Arch Intern Med 1990 May;150(5):1088] Hamming JF, et al. **Arch Intern Med** 1990 Jan;150(1):113–6

Interpretation of diagnostic cytology with likelihood ratios. Giard RW, et al. **Arch Pathol Lab Med** 1990 Aug; 114(8):852–4

The impact of fine-needle aspiration biopsy on a diagnostic electron microscopy laboratory. Strausbauch P, et al. **Arch Pathol Lab Med** 1989 Dec;113(12):1354–6

The use of fine-needle aspirates of breast cancers to evaluate hormone-receptor status. Lundy J, et al. **Arch Surg** 1990 Feb;125(2):174–6

Role of fine needle aspiration cytology in the management of thoracic lesions. Nachiappan M, et al. **Aust N Z J Surg** 1990 Jan;60(1):31–3

Impact of fine needle aspiration cytology on the management of solitary thyroid nodules. Ng EH, et al. **Aust N Z J Surg** 1990 Jun;60(6):463–6

Management of isolated thyroid swellings: a prospective six year study of fine needle aspiration cytology in diagnosis. Cusick EL, et al. **BMJ** 1990 Aug 11;301(6747):318–21

The role of needle biopsy in the management of malignant spinal compression. Findlay GF, et al. **Br J Neurosurg** 1988; 2(4):479–84

Role of fine needle aspiration cytology and computed tomography in the diagnosis of parotid swellings. Owen ER, et al. **Br J Surg** 1989 Dec;76(12):1273–4

Preoperative localisation of impalpable breast lesions. Reidy JF. **Bristol Med Chir J** 1989 May;104(2):43–5

Results of fine-wire localization breast biopsies at the Cancer Control Agency of British Columbia. Clay MG. **Can J Surg** 1990 Feb;33(1):17–9

Fine needle aspiration biopsy of metastatic melanoma. Johnston WW, et al. **Cancer Treat Res** 1988;43:103–22 (36 ref.)

The value of fine needle aspiration cytology in the diagnosis of neuroblastoma. Ulasi TO, et al. **Cent Afr J Med** 1990 Jan;36(1):5–7

Transbronchial needle aspiration in clinical practice. A five-year experience. Harrow EM, et al. **Chest** 1989 Dec; 96(6):1268–72

Yield of percutaneous needle lung aspiration in lung abscess. Peña Griñan N, et al. **Chest** 1990 Jan;97(1):69–74

Ultrasound guided fine needle aspiration of ovarian cysts: diagnosis and treatment in pregnant and non-pregnant women. Khaw KT, et al. **Clin Radiol** 1990 Feb;41(2):105–8

Hydatid cyst: primary diagnosis by fine-needle aspiration biopsy. Ascoli V, et al. **Diagn Cytopathol** 1990;6(1):44–8

Efficacy of fine-needle aspiration and sampling of lymph nodes in 1,484 Chinese patients. Hsu C, et al. **Diagn Cytopathol** 1990;6(3):154–9

Metaplastic carcinoma of the breast—diagnosis by aspiration biopsy cytology: report of two cases and literature review. Kline TS, et al. **Diagn Cytopathol** 1990;6(1):63–7 (16 ref.)

Neuroendocrine (Merkel-cell) carcinoma of the skin: immunocytochemical and cytomorphologic analysis on fine-needle aspirates. Skoog L, et al. **Diagn Cytopathol** 1990;6(1):53–7

Diagnosis of lymphoma and reactive lymphoid hyperplasia by immunocytochemical analysis of fine-needle aspiration biopsy. Sneige N. **Diagn Cytopathol** 1990;6(1):39–43

Light and electron microscopic examination of fine-needle aspirates in the preoperative diagnosis of osteogenic tumors: a study of 21 osteosarcomas and two osteoblastomas. Walaas L, et al. **Diagn Cytopathol** 1990;6(1):27–38

Histology and immunohistology of bone marrow biopsy in multiple myeloma. Pileri S, et al. **Eur J Haematol Suppl** 1989;51:52–9

Diagnosis of hepatic cavernous hemangioma by fine needle aspiration biopsy under ultrasonic guidance. Nakaizumi A, et al. **Gastrointest Radiol** 1990 Winter;15(1):39–42

The importance of confirmation of positive fine needle aspiration biopsies [letter] Kern WH. **Hum Pathol** 1989 Nov;20(11):1133

Fine needle aspiration of thyroid nodules [letter] Kung IT. **J Clin Pathol** 1989 Sep;42(9):1007–8

Rapid reporting on fine needle aspiration of breast lumps in outpatients. Zuk JA, et al. **J Clin Pathol** 1989 Sep; 42(9):906–11

A preliminary report of thyroglobulin release after fine needle aspiration biopsy of thyroid nodules. Bayraktar M, et al. **J Int Med Res** 1990 May–Jun;18(3):253–5

Efficacy of fine needle aspiration cytology in the diagnosis of tuberculous cervical lymphadenopathy. Lau SK, et al. **J Laryngol Otol** 1990 Jan;104(1):24–7

Directed breast biopsies. Vanhooser R, et al. **J Okla State Med Assoc** 1989 Sep;82(9):459–62

Microcolposcopy vs. cone histology in evaluation of the endocervix in women with inadequate colposcopy or positive endocervical curettage. Hunter V, et al. **J Reprod Med** 1989 Sep;34(9):625–8

Fine-needle aspiration cytology of abdominal masses. Khanna AK, et al. **J Surg Oncol** 1990 May;44(1):15–9

A simple phantom for training in ultrasound-guided needle biopsy using the freehand technique. Fornage BD. **J Ultrasound Med** 1989 Dec;8(12):701–3

The limited (needle biopsy) autopsy: a prospect for revival [letter] Baumgart KW, et al. **Med J Aust** 1990 Sep 3; 153(5):301

Aspiration cytology in the diagnosis of head and neck masses: the early Christchurch experience. Stevenson DS, et al. **N Z Med J** 1989 Dec 13;102(881):639–41

Percutaneous transfacial needle biopsy of a middle cranial fossa mass: case report and technical note. Stechison MT, et al. **Neurosurgery** 1989 Dec;25(6):996–9

Controversies in nuclear medicine. Investigation of the solitary thyroid nodule. Fogelman I, et al. **Nucl Med Commun** 1989 Oct;10(10):765–67

Controversies in nuclear medicine. Solitary thyroid nodule: fine needle aspiration, the first investigation. Hayes AA, et al. **Nucl Med Commun** 1989 Oct;10(10):768–71

Needle aspiration biopsy of the thyroid and parathyroid. Shapiro MJ, et al. **Otolaryngol Clin North Am** 1990 Apr; 23(2):217–29 (8 ref.)

Sacrococcygeal chordoma: a case report. Fine needle aspiration cytologic and histopathologic findings. Angelopulos N, et al. **Pathologica** 1990 Mar–Apr; 82(1078):167–71

Transthoracic percutaneous lung biopsy. Weisbrod GL. **Radiol Clin North Am** 1990 May;28(3):647–55 (60 ref.)

Value of random US-guided transrectal prostate biopsy. Dyke CH, et al. **Radiology** 1990 Aug;176(2):345–9

Pelvic masses: aspiration biopsy with transrectal US guidance. Savader BL, et al. **Radiology** 1990 Aug; 176(2):351–3

Transbronchial aspiration of subcarinal lymph nodes [letter] Callol L, et al. **Respir Med** 1990 Mar;84(2):177

Fine percutaneous needle biopsy vs. fibreoptic bronchoscopy as a means of achieving a histological diagnosis in peripheral pulmonary opacity [letter] Seaton D. **Respir Med** 1990 Mar;84(2):178

Transthoracic fine-needle aspiration cytology. An analysis of 500 cases. Leiman G. **S Afr Med J** 1989 Oct 7; 76(7):350–4 (15 ref.)

Non-suppurative bacterial arthritis diagnosed by fine-needle aspiration biopsy. Christensen TH, et al. **Scand J Rheumatol** 1989;18(4):235–7

Fine needle aspiration cytology of lesions of the head and neck and factors affecting outcome. Morton KD. **Scott Med J** 1989 Oct;34(5):523–5

Fine-needle aspiration biopsy in prostate cancer. Koizumi JH. **Semin Urol** 1990 Feb;8(1):19–30 (69 ref.)

Cytomorphometry of uveal melanomas: fine needle aspiration biopsy versus standard histology. Char DH, et al. **Trans Am Ophthalmol Soc** 1990;87:197–210; discussion 210–2

Percutaneous pancreas transplant fine needle aspiration and needle core biopsies are useful and safe. Allen PD, et al. **Transplant Proc** 1990 Apr;22(2):663–4

Prostatic intraepithelial neoplasia: detection and correlation with invasive cancer in fine-needle biopsy. Markham CW. **Urology** 1989 Dec;34(6 Suppl):57–61

Fine needle aspiration biopsy in the diagnosis of breast cancer. McDonald AH, et al. **West Indian Med J** 1990 Jun;39(2):71–3

Thyroid needle aspiration in a community hospital. Findling JW, et al. **Wis Med J** 1989 Oct;88(10):19–22

[Comparison of the results of transbronchial puncture of the lymph nodes with surgical findings in patients with lung cancer] Marel M, et al. **Cas Lek Cesk** 1990 Jun 8; 129(23):727–9 (Eng. Abstr.) **(Cze)**

[Percutaneous transthoracic aspiration biopsy: the reliability of cytological diagnosis of intrathoracic tumors] Polák J, et al. **Cas Lek Cesk** 1989 Dec 1;128(49):1545–9 (Eng. Abstr.) **(Cze)**

[Thin-needle aspiration cytology of the thyroid gland] Fukal J, et al. **Cesk Patol** 1989 Nov;25(4):193–9 (Eng. Abstr.) **(Cze)**

[Endomyocardial biopsy and acute rejection in heart transplantation] Urbanová D, et al. **Cesk Patol** 1990 May; 26(2):102–8 (Eng. Abstr.) **(Cze)**

[Diagnosis of a possibly malignant neck lymph node (letter)] Giard RW. **Ned Tijdschr Geneeskd** 1989 Oct 14; 133(41):2041–2 **(Dut)**

[Liver biopsy: an obsolete diagnostic aid?] Jansen PL, et al. **Ned Tijdschr Geneeskd** 1989 Jul 8;133(27):1352–6 (14 ref.) **(Dut)**

[Transthoracic punctures in pulmonary foci] Vints AM, et al. **Ned Tijdschr Geneeskd** 1990 Mar 31;134(13):657–60 (Eng. Abstr.) **(Dut)**

[Cytopuncture of lymph nodes opacified by lymphography in the pretreatment evaluation of prostatic cancer] Dubayle P, et al. **Ann Radiol (Paris)** 1989;32(5):410–4 (28 ref.) (Eng. Abstr.) **(Fre)**

[Comparative study of the data of fine-needle aspiration biopsy and echographic aspects of hepatic tumors as a function of the circumstances of discovery. Apropos of 206 patients] Dumas O, et al. **Gastroenterol Clin Biol** 1990; 14(1):67–73 (Eng. Abstr.) **(Fre)**

[The isolated pulmonary nodule. Biopsy guided by x-ray computed tomography] Bruneton JN, et al. **J Radiol** 1989; 70(4):249–51 (Eng. Abstr.) **(Fre)**

[Emergency stereotaxic cerebral punctures] Cordoliani YS, et al. **J Radiol** 1989 Aug–Sep;70(8–9):465–70 (14 ref.) (Eng. Abstr.) **(Fre)**

[Ultrasonographic course of hepatic amebic abscess. Current role of needle aspiration] Duquesne J, et al. **J Radiol** 1990 Apr;71(4):279–85 (Eng. Abstr.) **(Fre)**

[Impalpable breast abnormalities. Contribution of cytologic puncture under stereotaxic guidance. Apropos of 159 cases] Travade A, et al. **J Radiol** 1989 Aug–Sep;70(8–9):443–6 (7 ref.) (Eng. Abstr.) **(Fre)**

[The value of fine needle biopsy in the diagnosis of tumors of the salivary glands] Fière A, et al. **Rev Stomatol Chir Maxillofac** 1990;91(4):291–4 (Eng. Abstr.) **(Fre)**

[Adaptability of fine-needle biopsy for preoperative and postoperative studies in femoro-crural vascular reconstruction] Hofmann-Preiss K, et al. **ROFO** 1990 Jul;

153(1):56–60 (Eng. Abstr.) (Ger)
[Morphological breast diagnosis in daily practice] Hollinger A. **Schweiz Rundsch Med Prax** 1990 Apr 17;79(16):495–7 (Eng. Abstr.) (Ger)
[Diagnostic value of thyroid needle aspiration biopsy] Gobetti F, et al. **Minerva Chir** 1990 Apr 15;45(7):481–4 (Eng. Abstr.) (Ita)
[Correlations between laboratory and ultrasonic diagnosis and needle biopsy in chronic hepatitis and alcoholic cirrhosis] Pace M, et al. **Minerva Med** 1990 Jan–Feb; 81(1–2):27–44 (Eng. Abstr.) (Ita)
[Lymph node metastases of a Merkel-cell tumor of unknown origin: possibilities and limitations of fine-needle aspiration cytology] Briani G, et al. **Pathologica** 1990 Mar–Apr; 82(1078):161–5 (Eng. Abstr.) (Ita)
[Sensitivity of mammography and fine-needle aspiration cytology in the diagnosis of breast cancer] Ciarmiello G, et al. **Pathologica** 1990 Mar–Apr;82(1078):155–60 (Eng. Abstr.) (Ita)
[Immunohistochemistry in cytologic diagnosis using fine needle aspiration] Rabitti C, et al. **Pathologica** 1990 Jan–Feb;82(1077):71–81 (Eng. Abstr.) (Ita)
[Comparison of cytology and microhistology in ultrasonic—guided fine-needle biopsy of the prostate] Antico E, et al. **Radiol Med (Torino)** 1990 Jan–Feb; 79(1–2):83–6 (Eng. Abstr.) (Ita)
[Pathohistological comparison of biopsy specimens with all-layer cystectomy specimens in bladder cancer] Miyamoto K, et al. **Hinyokika Kiyo** 1989 Oct; 35(10):1687–91 (Eng. Abstr.) (Jpn)
[Percutaneous lung puncture] Mørkve O. **Tidsskr Nor Laegeforen** 1990 Feb 20;110(5):613 (Nor)
[A needle for bone perforation and intraosseous infusions] Komarov NV, et al. **Khirurgiia (Mosk)** 1989 Dec;(12):105–6 (Rus)
[Role of the cytologic study during ultrasonic diagnosis of diseases of various organs] Ufimtseva AG, et al. **Lab Delo** 1990;(2):28–31 (Rus)
[The significance of puncture biopsy and cytological diagnosis in the early detection and treatment of carcinoma of the breast] Nikolov J, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:325–8 (Eng. Abstr.) (Scr)
[Evaluation of severe dysplasia and carcinoma in situ detected by directed biopsy] Milojković M, et al. **Jugosl Ginekol Perinatol** 1989 Sep–Dec;29(5–6):198–200 (Eng. Abstr.) (Scr)
[Aspiration puncture in the diagnosis of hyperactive goiter] Jovanović D. **Med Arh** 1983;37(3):143–6 (Eng. Abstr.) (Scr)
[The role of pleural effusion cytology in the diagnosis of malignancies] Mermolja M, et al. **Plucne Bolesti** 1989 Jul–Dec;41(3–4):146–9 (Eng. Abstr.) (Scr)
[Pleural effusion: diagnostic usefulness of pleural puncture biopsy] Ferreyra RA, et al. **Medicina (B Aires)** 1989; 49(1):48–52 (Eng. Abstr.) (Spa)
[Cytodiagnosis of solid abdominal masses: cytologic study by percutaneous puncture with a fine-needle guided by echography, computed tomography or radioscopy] Fernández M, et al. **Rev Med Chil** 1988 Dec;116(12):1283–7 (Eng. Abstr.) (Spa)
[Retroperitoneal tumors: cytologic diagnosis by fine-needle puncture] Roa I, et al. **Rev Med Chil** 1988 Sep; 116(9):909–12 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Infarction of thyroid nodule: a rare complication following fine needle aspiration [letter] Jayaram G, et al. **Acta Cytol** 1989 Nov–Dec;33(6):940–1
The risk of tumoral seeding in needle biopsies [letter] Roussel F, et al. **Acta Cytol** 1989 Nov–Dec;33(6):936–9 (32 ref.)
Sternal-manubrial separation as a complication of marrow aspiration in a patient with protein-calorie malnutrition and osteoporosis. Eastlund DT. **Acta Haematol (Basel)** 1990; 83(1):42–4
Life-threatening hemorrhage due to percutaneous transthoracic intervention: importance of the internal mammary artery. Glassberg RM, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):47–9
A one-piece unit for treatment of pneumothorax complicating needle biopsy: evaluation in 10 patients. Molina PL, et al. **AJR Am J Roentgenol** 1990 Jul; 155(1):31–3
Ruptured chordae tendineae of the tricuspid valve as a complication of endomyocardial biopsy in heart transplant patients. Braverman AC, et al. **Am J Cardiol** 1990 Jul 1; 66(1):111–3
Hemorrhage from the diaphragm: an unusual cause of hemothorax after percutaneous liver biopsy [letter] Majid AA. **Am J Gastroenterol** 1990 Jan;85(1):104–5
Successful treatment of massive hemorrhage after percutaneous renal biopsy with transcatheter arterial embolization. Makita Y, et al. **Am J Nephrol** 1989; 9(6):513–5
Left atrial air embolism during intraoperative needle biopsy of a deep pulmonary lesion. Worth ER, et al. **Anesthesiology** 1990 Aug;73(2):342–5
Fine-needle aspiration biopsy of the pancreas complicated by pancreatic ascites. Rosenbaum DA, et al. **Cancer** 1990 Jun 1;65(11):2537–8
Needle aspiration in lung cancer. Risk of tumor implantation is not negligible [editorial] Hix WR, et al. **Chest** 1990 Mar; 97(3):516–7
An unusual cause of pneumothorax during percutaneous pleural biopsy [letter] Schwartz M, et al. **Chest** 1990 Sep; 98(3):783
Complication with a transbronchial histology needle [letter] Sherling BE. **Chest** 1990 Sep;98(3):783–4
Gallbladder perforation during liver biopsy diagnosed using hepatobiliary scintigraphy: a case report. Dennison KG, et al. **Clin Nucl Med** 1990 Feb;15(2):95–6
Fibrin sealant as a plug for the post liver biopsy needle track. Chisholm RA, et al. **Clin Radiol** 1989 Nov;40(6):627–8
Septic shock and bacteremia associated with laparoscopic guided liver biopsy, report on two cases. Domingo M, et al. **Endoscopy** 1989 Sep;21(5):240–1
Cerebral air embolism after transthoracic aspiration with a 0.6 mm (23 gauge) needle. Omenaas E, et al. **Eur Respir J** 1989 Oct;2(9):908–10
Perineal prostatic tumour seedling after 'Tru-Cut' needle biopsy: case report and review of the literature. Ryan PG, et al. **Eur Urol** 1990;17(2):189–92 (19 ref.)
Massive bleeding after fine needle aspiration of liver angiosarcoma. Hertzanu Y, et al. **Gastrointest Radiol** 1990 Winter;15(1):43–6
Tumor implantation from needle biopsy of hepatic metastases. Scheele J, et al. **Hepatogastroenterology** 1990 Jun; 37(3):335–7
Bile ascites following percentaneous trucut needle liver biopsy [letter] Sahni A, et al. **Indian J Gastroenterol** 1990 Jan;9(1):98–9
Intraglomerular embolization by tubular cells. Tóth T, et al. **Int Urol Nephrol** 1989;21(6):643–7
Scintigraphic and culdoscopic diagnosis of bile peritonitis complicating liver biopsy. Veneri RJ, et al. **J Clin Gastroenterol** 1989 Oct;11(5):571–3
Secondary tumour deposits in needle biopsy tracks: an underestimated risk? [letter] Denton KJ, et al. **J Clin Pathol** 1990 Jan;43(1):83
Implantation metastasis of pineoblastoma after stereotactic biopsy. Case report. Rosenfeld JV, et al. **J Neurosurg** 1990 Aug;73(2):287–90
Evaluation of arteriovenous fistulas and pseudoaneurysms in renal allografts following percutaneous needle biopsy. Color-coded Doppler sonography versus duplex Doppler sonography. Hübsch PJ, et al. **J Ultrasound Med** 1990 Feb; 9(2):95–100
Re: Risk factors for perineal seeding of prostate cancer after needle biopsy [letter; comment] Haddad FS. **J Urol** 1990 Mar;143(3):587–8 Comment on: J Urol 1989 Jul;142(1):86–8.
Major complications and deaths due to interventional ultrasonography: a review of 8000 cases. Nolsøe C, et al. **JCU** 1990 Mar–Apr;18(3):179–84
Fatal carcinoid crisis after percutaneous fine-needle biopsy of hepatic metastasis: case report and literature review. Bissonnette RT, et al. **Radiology** 1990 Mar;174(3 Pt 1):751–2 (14 ref.)
Preventing pneumothorax after lung biopsy: the roll-over technique [letter] Cassel DM, et al. **Radiology** 1990 Jan; 174(1):282
Complications of ultrasonically guided fine-needle abdominal biopsy. Results of a multicenter Italian study and review of the literature. The Cooperative Italian Study Group. Fornari F, et al. **Scand J Gastroenterol** 1989 Oct; 24(8):949–55
Dissemination of tumour cells from fine needle biopsy. Redwood N, et al. **Thorax** 1989 Oct;44(10):826–7
Prospective study of the incidence of ultrasound-detected hepatic hematomas 2 and 24 hours after percutaneous liver biopsy. Lankisch PG, et al. **Z Gastroenterol** 1990 May; 28(5):247–50
[Pulmonary hemorrhage complicating transthoracic puncture] Febvre M, et al. **Rev Pneumol Clin** 1989; 45(6):274–6 (Eng. Abstr.) (Fre)
[Puncture track metastasis after ultrasound-guided fine-needle puncture biopsy. A rare complication?] Habscheid W, et al. **Dtsch Med Wochenschr** 1990 Feb 9; 115(6):212–5 (Eng. Abstr.) (Ger)
[The use of homologous coagulated blood for prevention of pneumothorax following percutaneous lung biopsy (experimental study)] Petsas T, et al. **ROFO** 1990 May; 152(5):565–8 (Eng. Abstr.) (Ger)
[A case report of cutaneous seeding of hepatocellular carcinoma following ultrasound guided fine needle aspiration biopsy] Tabata T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 May;87(5):1253–7 (Jpn)
[Implantation metastasis after trans-thoracic diagnostic puncture in peripheral cancer of the lung] Gudovskiĭ LM, et al. **Grud Serdechnososudistaia Khir** 1990;(5):78 (Rus)
[Detection using abdominal ultrasound of intrahepatic and/or subcapsular hematoma after hepatic biopsy] Piñero R, et al. **GEN** 1988 Apr–Jun;42(2):60–2 (Eng. Abstr.) (Spa)

ECONOMICS

Fine needle aspiration cytology in the management of solitary thyroid nodules—a comparison with other diagnostic modalities in cost-effectiveness. Ng EH, et al. **Singapore Med J** 1989 Dec;30(6):557–60

HISTORY

Classics in cytology: III. On the puncture of the liver with diagnostic purpose [letter] Theise N, et al. **Acta Cytol** 1989 Nov–Dec;33(6):934–5
Transthoracic needle biopsy of small peripheral malignant lung lesions 1973 [classical article] Sinner WN. **Invest Radiol** 1990 Apr;25(4):402–11
Vignette. Duchenne de Boulogne and the muscle biopsy. Nelson KR, et al. **J Child Neurol** 1989 Oct;4(4):315

INSTRUMENTATION

Adjunct to CT and sonographically guided percutaneous biopsy procedures [letter; comment] Conrad MR. **AJR Am J Roentgenol** 1990 Jul;155(1):198 Comment on: AJR Am J Roentgenol 1990 Jan;154(1):1–10.
Marrow aspiration from small infants [letter] Carr R. **Arch Dis Child** 1990 Jul;65(7):813
Percutaneous intravascular biopsy using a Simpson atherectomy catheter: technical note. Castaneda F, et al. **Cardiovasc Intervent Radiol** 1989 Nov–1990 Dec; 12(6):342–3
A new motor-driven percutaneous bone biopsy system: technical note. Vorwerk D, et al. **Cardiovasc Intervent Radiol** 1989 Jul–Aug;12(4):232–5
Transbronchial needle aspiration for histology specimens. Mehta AC, et al. **Chest** 1989 Dec;96(6):1228–32
Powered cutting needle biopsy of the pleura and chest wall. Gleeson F, et al. **Clin Radiol** 1990 Mar;41(3):199–200
Safety of fine needle aspiration cytology [letter] Dey SK, et al. **Indian Pediatr** 1990 Jan;27(1):91–2
Percutaneous biopsies with the Stille-Eriksson needle [letter] Biedermann HJ, et al. **Int J Sports Med** 1990 Apr;11(2):168
Coaxial needle system of MR- and CT-guided aspiration cytology. Lufkin R, et al. **J Comput Assist Tomogr** 1989 Nov–Dec;13(6):1105–7
Minicore needle biopsy of kidney transplants: a safer sampling method. Belitsky P, et al. **J Urol** 1990 Aug;144(2 Pt 1):310–1
Use of biopty gun for transcutaneous testicular biopsies. Rajfer J, et al. **J Urol** 1989 Oct;142(4):1021–2
Percutaneous renal biopsy utilizing real time, ultrasonic guidance and a semiautomated biopsy device. Wiseman DA, et al. **Kidney Int** 1990 Aug;38(2):347–9
A new percutaneous renal biopsy device for pediatric patients. Komaiko MS, et al. **Pediatr Nephrol** 1989 Apr; 3(2):191–3
New brush-needle for percutaneous biopsy. Kadir S, et al. **Radiologe** 1990 May;30(5):221–2
Automated biopsy devices: significance and safety [editorial; comment] Bernardino ME. **Radiology** 1990 Sep; 176(3):615–6 Comment on: Radiology 1990 Sep;176(3):671–6. Comment on: Radiology 1990 Sep;176(3):677–9. Comment on: Radiology 1990 Sep;176(3):725–7. Comment on: Radiology 1990 Sep;176(3):741–7.
Biopsy of the pancreas with a biopsy gun [see comments] Elvin A, et al. **Radiology** 1990 Sep;176(3):677–9 Comment in: Radiology 1990 Sep;176(3):615–6.
Hemostatic protein-polymer sheath: new method to enhance hemostasis at percutaneous biopsy. Gazelle GS, et al. **Radiology** 1990 Jun;175(3):671–4
Efficacy of automated biopsy guns versus conventional biopsy needles in the pygmy pig [see comments] Hopper KD, et al. **Radiology** 1990 Sep;176(3):671–6 Comment in: Radiology 1990 Sep;176(3):615–6.
Comparison of 22-gauge Chiba and screw-tipped needles for cytologic diagnosis of malignancy in in vitro tumor specimens. Mindell HJ, et al. **Radiology** 1990 Sep; 176(3):681–2
Optimal needle size for renal biopsy: in vitro and in vivo evaluation. Mostbeck GH, et al. **Radiology** 1989 Dec; 173(3):819–22
Stereotactic breast biopsy with a biopsy gun [see comments] Parker SH, et al. **Radiology** 1990 Sep;176(3):741–7 Comment in: Radiology 1990 Sep;176(3):615–6.
Percutaneous pediatric renal biopsy: use of the biopsy gun [see comments] Poster RB, et al. **Radiology** 1990 Sep; 176(3):725–7 Comment in: Radiology 1990 Sep;176(3):615–6.
A guidance device for CT-guided procedures. Reyes GD. **Radiology** 1990 Sep;176(3):863–4
Automated, percutaneous biopsy device. Wholey MH, et al. **Radiology** 1990 Feb;174(2):567–8
Comparison of the Tru-cut biopsy needle with the Abrams punch for pleural biopsy. McLeod DT, et al. **Thorax** 1989 Oct;44(10):794–6
[Our modification of the Record syringe for puncture biopsy] Steinhart L, et al. **Cesk Radiol** 1989 Oct;43(5):355–8 (Cze)
[Is the Tru-Cut needle more efficient than the fine needle in the diagnosis of hepatic lesions? Comparative study of 45 echography-guided punctures] Bedenne L, et al. **Gastroenterol Clin Biol** 1990;14(1):62–6 (34 ref.) (Eng. Abstr.) (Fre)
[Comparative study of fine needle aspiration and large caliber needle biopsy under echographic control for the diagnosis of abdominal tumors] Seitz JF, et al. **Gastroenterol Clin Biol** 1990;14(6–7):529–33 (Eng. Abstr.) (Fre)
[The value of ultrasound-controlled fine-needle biopsy in the diagnosis of possible neck tumors] Knapp I, et al. **Laryngorhinootologie** 1989 Dec;68(12):683–9 (Eng. Abstr.) (Ger)
[Is percutaneous liver biopsy using the Trucut (Travenol) needle superior to Menghini puncture?] Judmaier G, et al.

Z Gastroenterol 1989 Nov;27(11):657–61 (Eng. Abstr.) (Ger)

[Ultrasound-controlled fine-needle puncture with a specially prepared puncture needle] Jäger H, et al. Z Gesamte Inn Med 1989 Aug 1;44(15):461–3 (Eng. Abstr.) (Ger)

[Fine-needle puncture and aspiration of pathologic lesions in the abdomen using ultrasound guidance] Outchikov P, et al. Zentralbl Chir 1990;115(6):347–51 (Eng. Abstr.) (Ger)

[A comparative evaluation of the centering precision performed with 2 different stereotaxic instruments in nonpalpable breast lesions] Minonzio G, et al. Radiol Med (Torino) 1990 Mar;79(3):189–90 (Eng. Abstr.) (Ita)

[A needle for puncture biopsy of the liver] Ponomerav VG, et al. Khirurgiia (Mosk) 1990 Jan;(1):76 (Rus)

METHODS

Fine needle aspiration biopsy of the thyroid using the Chinese brush-holding technique [letter] Chang TC. Acta Cytol 1989 Nov-Dec;33(6):939–40

Nonaspiration fine needle cytology of thyroid tumors [letter; comment] Ciatto S, et al. Acta Cytol 1989 Nov-Dec; 33(6):939 Comment on: Acta Cytol 1988 May-Jun;32(3):353–6.

Fine needle aspiration cytodiagnosis of Hodgkin's disease and its subtypes. I. Scope and limitations. Das DK, et al. Acta Cytol 1990 May-Jun;34(3):329–36

Fine needle aspiration cytodiagnosis of Hodgkin's disease and its subtypes. II. Subtyping by differential cell counts. Das DK, et al. Acta Cytol 1990 May-Jun;34(3):337–41

Immunocytochemistry on fine needle aspirates in paraffin miniblocks. Domagala WM, et al. Acta Cytol 1990 May-Jun;34(3):291–6

A triage system for processing fine needle aspiration cytology specimens. Ducatman BS, et al. Acta Cytol 1989 Nov-Dec; 33(6):797–9

Application of the immunoperoxidase technique to cell block preparations from fine needle aspirates. Kung IT, et al. Acta Cytol 1990 May-Jun;34(3):297–303

Fine needle cytology—is aspiration suction necessary? A study of 100 masses in various sites. Mair S, et al. Acta Cytol 1989 Nov-Dec;33(6):809–13

Cytologic diagnosis by transthoracic fine needle sampling without aspiration. Yue XH, et al. Acta Cytol 1989 Nov-Dec;33(6):805–8

Automated percutaneous biopsy in postoperative diskitis: a new method. Onik G, et al. AJNR 1990 Mar-Apr; 11(2):391–3

CT and sonographically guided needle biopsy: current techniques and new innovations [see comments] Charboneau JW, et al. AJR Am J Roentgenol 1990 Jan; 154(1):1–10 Comment in: AJR Am J Roentgenol 1990 Jul;155(1):198.

Guided percutaneous biopsy of intraabdominal lesions. Gazelle GS, et al. AJR Am J Roentgenol 1989 Nov; 153(5):929–35 (89 ref.)

Percutaneous biopsy of thoracic lesions: value of sonography for needle guidance. Ikezoe J, et al. AJR Am J Roentgenol 1990 Jun;154(6):1181–5

Stereotactic fine-needle aspiration biopsy for nonpalpable breast lesions [comment] Jackson VP, et al. AJR Am J Roentgenol 1990 Jun;154(6):1196–7 Comment on: AJR Am J Roentgenol 1990 Jun;154(6):1191–5.

Stereotactic fine-needle aspiration for cytologic diagnosis of nonpalpable breast lesions [see comments] Löfgren M, et al. AJR Am J Roentgenol 1990 Jun;154(6):1191–5 Comment in: AJR Am J Roentgenol 1990 Jun;154(6):1196–7.

A simple phantom for learning needle placement for sonographically guided biopsy. Silver B, et al. AJR Am J Roentgenol 1990 Apr;154(4):847–8

Bone marrow sampling. Paulman PM. Am Fam Physician 1989 Dec;40(6):85–9

Mammographic and gross pathologic analysis of breast needle localization specimens. Use of a tissue analysis device. Alberhasky MT. Am J Clin Pathol 1989 Oct;92(4):452–7

Ultrasonically guided fine-needle aspiration biopsy: a highly diagnostic procedure for hepatic tumors. Fornari F, et al. Am J Gastroenterol 1990 Aug;85(8):1009–13

Double endometrial aspirative biopsy [letter] Quilez M, et al. Am J Obstet Gynecol 1989 Nov;161(5):1426–7

Fine-needle aspiration of parotid tumors. Rodriguez HP, et al. Am J Surg 1989 Oct;158(4):342–4

Histologic diagnosis of rejection by using cystoscopically directed needle biopsy specimens from dysfunctional pancreatoduodenal allografts with exocrine drainage into the bladder. Carpenter HA, et al. Am J Surg Pathol 1990 Sep;14(9):837–46

Needle aspiration of nonfunctioning parathyroid cysts. Prinz RA, et al. Am Surg 1990 Jul;56(7):420–2

Cytologic and bacteriologic analysis of fluid and pleural biopsy specimens with Cope's needle. Study of 414 patients. Escudero Bueno C, et al. Arch Intern Med 1990 Jun; 150(6):1190–4

Image-guided needle biopsy of inaccessible head and neck lesions. Robbins KT, et al. Arch Otolaryngol Head Neck Surg 1990 Aug;116(8):957–61

Fine-needle aspiration of the thyroid gland. Miranda ML, et al. Bol Asoc Med P R 1990 Feb;82(2):74–6 (9 ref.)

How to perform a percutaneous liver biopsy. Valori R, et al. Br J Hosp Med 1989 Nov;42(5):408–10

Ultrasound-guided, histological, fine-needle biopsy from suspect parathyroid tumours: success-rate and reliability of histological diagnosis. Karstrup S, et al. Br J Radiol 1989 Nov;62(743):981–5

Diagnosis of soft tissue tumours by Tru-Cut biopsy. Ball AB, et al. Br J Surg 1990 Jul;77(7):756–8

Sample size in fine needle aspiration biopsy. Kreula J, et al. Br J Surg 1989 Dec;76(12):1270–2

Fine-wire localization and biopsy of non-palpable breast lesions. Tresadern JC, et al. Br J Surg 1990 Mar;77(3):320–2

Experience with ultrasound guided transperineal prostatic needle biopsy 1985–1988. Clements R, et al. Br J Urol 1990 Apr;65(4):362–7

Renal transplant biopsy using real time ultrasound guidance. Nicholson ML, et al. Br J Urol 1990 Jun;65(6):564–5

Transrectal prostatic biopsy in genucubital position. Yachia D, et al. Br J Urol 1989 Oct;64(4):436

Practical aspects of mammographic-pathological correlation: experience with needle localization. Samuels T, et al. Can Assoc Radiol J 1990 Jun;41(3):127–9

Percutaneous biopsy of thoracic lesions in children. Hoffer FA, et al. Cardiovasc Intervent Radiol 1990 Feb-Mar; 13(1):32–5

Aspiring to aspirate—the pericardiocentesis correspondence. Bloomfield DA. Cathet Cardiovasc Diagn 1989 Oct; 18(2):129–30

Rapid on-site evaluation of transbronchial aspirates. Davenport RD. Chest 1990 Jul;98(1):59–61

Breast biopsy techniques. Herbst AL. Clin Obstet Gynecol 1989 Dec;32(4):800–6 (9 ref.)

Technique and interpretation of breast aspiration cytology. Walloch J. Clin Obstet Gynecol 1989 Dec;32(4):786–99 (27 ref.)

Transbronchial needle aspiration biopsy in the diagnosis of pulmonary neoplasms. Bhat N, et al. Diagn Cytopathol 1990; 6(1):14–7

Rapid microwave-stimulated fixation of fine-needle aspiration biopsies for transmission electron microscopy. Gove DW, et al. Diagn Cytopathol 1990;6(1):68–71

Communication and aspiration biopsy cytology: clear, concise, and to the point [editorial] Kline TS. Diagn Cytopathol 1990;6(3):153

Use of midazolam for percutaneous liver biopsy. Brouillette DE, et al. Dig Dis Sci 1989 Oct;34(10):1553–8

Diagnostic accuracy of fine-needle aspiration biopsy in patients with hepatocellular carcinoma. Bru C, et al. Dig Dis Sci 1989 Nov;34(11):1765–9

Nonpulmonary thoracic biopsy. Garbagnati F, et al. Eur J Radiol 1989 Nov;9(4):214–6

Ultrasound directed follicle aspiration for oocyte collection using the perurethral technique. Parsons J, et al. Fertil Steril 1990 Jan;53(1):97–102

Ultrasonically guided histological and cytological fine needle biopsies of the pancreas. Reliability and reproducibility of diagnoses. Glenthøj A, et al. Gut 1990 Aug;31(8):930–3

Diagnostic reliability of histological and cytological fine needle biopsies from focal liver lesions [see comments] Glenthøj A, et al. Histopathology 1989 Oct;15(4):375–83 Comment in: Histopathology 1989 Oct;15(4):435–9.

Fine needle cytology versus histology [comment] Rode J. Histopathology 1989 Oct;15(4):435–9 Comment on: Histopathology 1989 Oct;15(4):375–83.

A new method for investigating the sampling technique of fine needle aspiration biopsy. Kreula J. Invest Radiol 1990 Mar;25(3):245–9

Estimation of marrow iron stores, biopsy vs. aspirate. Singh T, et al. J Assoc Physicians India 1989 Nov;37(11):705–6

Fine needle aspiration with Menghini needle biopsy. Kahn S, et al. J Clin Gastroenterol 1989 Oct;11(5):599–601

Percutaneous biopsies of the thoracic spine under CT guidance: transcostovertebral approach. Brugieres P, et al. J Comput Assist Tomogr 1990 May-Jun;14(3):446–8

Needle localization and biopsy of mammographic abnormalities. Flynn MB, et al. J Ky Med Assoc 1990 Feb; 88(2):71–5

Detection of proliferative breast disease by four-quadrant, fine-needle aspiration. Ward JH, et al. J Natl Cancer Inst 1990 Jun 6;82(11):964–6

Fine-needle aspiration biopsy: an analysis of 89 head and neck cases. Platt JC, et al. J Oral Maxillofac Surg 1990 Jul;48(7):702–6; discussion 706–7

Ultrasound-guided transvaginal biopsy of malignant cystic pelvic mass. Fornage BD, et al. J Ultrasound Med 1990 Jan;9(1):53–5

Prostatic needle biopsy: a simple technique for increasing accuracy. Marshall S. J Urol 1989 Oct;142(4):1023

Liver biopsy embolization track: ultrasonic appearance. Carvalho P, et al. JCU 1988 Jul-Aug;16(6):426–8

Use of modified fine needle aspiration for study of glomerular pathology in human kidneys. Yussim A, et al. Kidney Int 1990 Feb;37(2):812–7

Transjugular renal biopsy. Mal F, et al. Lancet 1990 Jun 23; 335(8704):1512–3

CT-guided needle localization for intraoperative biopsy of the head and neck. Keidan RD, et al. Laryngoscope 1990 Jan;100(1):97–8

Needle-biopsy of paraffin blocks to obtain tissue for electron microscopy [letter] Cassella FP, et al. Med Lab Sci 1989 Oct;46(4):378–9

A new filter technique permitting traditional histopathological assessment of fine needle aspiration specimens. Cobb N, et al. Med Lab Sci 1990 Jul; 47(3):172–81

Evaluation of a new fine needle technique in routine percutaneous liver biopsy. Ali G, et al. N Z Med J 1990 Apr 25;103(888):184–6

Transoral stereotactic biopsy of the second cervical vertebral body: case report with technical note. Patil AA. Neurosurgery 1989 Dec;25(6):999–1001; discussion 1001–2

CT-guided biopsy of metastatic sacral tumors. Settle WJ, et al. Orthopedics 1990 Jul;13(7):753–8

Fine needle aspiration cytology in advanced pediatric tumors. Shakoor KA. Pediatr Pathol 1989;9(6):713–8

Fine-needle aspiration biopsy. When is it most beneficial? Peterson IM, et al. Postgrad Med 1990 Sep 1;88(3):119–22, 124, 126

Fine needle aspiration biopsy in lymphoma. Carrasco CH, et al. Radiol Clin North Am 1990 Jul;28(4):879–83

The pump maneuver: an atraumatic adjunct to enhance US needle tip localization. Bisceglia M, et al. Radiology 1990 Sep;176(3):867–8

Needle biopsy of renal allografts: comparison of two techniques. Bogan ML, et al. Radiology 1990 Jan; 174(1):273–5

Imaging-directed percutaneous biopsies with a biopsy gun [letter; comment] Burbank F. Radiology 1990 Jul; 176(1):286–7 Comment on: Radiology 1989 Jun;171(3):663–9.

Transosseous approach for thoracic needle biopsy. Glynn TP Jr. Radiology 1990 Oct;177(1):278–9

Radiographically guided fine-needle aspiration of nonpalpable breast lesions. Helvie MA, et al. Radiology 1990 Mar;174(3 Pt 1):657–61

Usefulness of the blood patch technique after transthoracic needle aspiration biopsy. Herman SJ, et al. Radiology 1990 Aug;176(2):395–7

Positional precautions in needle aspiration lung biopsy. Moore EH, et al. Radiology 1990 Jun;175(3):733–5

Percutaneous intrathoracic aspiration biopsy. Rubini C, et al. Semin Surg Oncol 1990;6(4):226–30

Interventional breast ultrasonography. D'Orsi CJ, et al. Semin Ultrasound CT MR 1989 Apr;10(2):132–8 (19 ref.)

Techniques and results of aspiration cytology for diagnosis of benign and malignant diseases of the breast. Wilkinson EJ, et al. Surg Clin North Am 1990 Aug;70(4):801–13

The role of Tru-Cut needle biopsy in the diagnosis of carcinoma of the breast. Cusick JD, et al. Surg Gynecol Obstet 1990 May;170(5):407–10 (26 ref.)

Ultrasonically guided biopsy of nonpalpable lesions of the breast by the spot method. Ueno E, et al. Surg Gynecol Obstet 1990 Feb;170(2):153–5

A cystoscopically directed biopsy technique developed in canine pancreaticoduodenal transplantation. Marsh CL, et al. Surgery 1990 Feb;107(2):177–81

Transthoracic needle aspiration of the lung in respiratory infections. Kohno S, et al. Tohoku J Exp Med 1989 Jul; 158(3):227–35

Transvenous lung biopsy: a new technique. Hakim M, et al. Transplant Proc 1987 Feb;19(1 Pt 3):2573

The components of the leucocyte infiltration of human renal allografts are not equally sampled by fine needle aspiration and needle core biopsy. Hughes DA, et al. Transplant Proc 1987 Feb;19(1 Pt 2):1652

Safety and utility of a simple technique of liver biopsy following liver transplantation. Jenkins RL, et al. Transplant Proc 1987 Feb;19(1 Pt 3):2480–2

Correlation between histopathology and aspiration cytology of kidney grafts in 43 cases. Lopez Blanco OA, et al. Transplant Proc 1987 Feb;19(1 Pt 2):1655–6

Transrectal biopsy of the prostate guided by transrectal ultrasound. Torp-Pedersen ST, et al. Urol Clin North Am 1989 Nov;16(4):703–12

Comparison of transrectal fine-needle aspiration cytology and core needle biopsy in diagnosis of prostate cancer. Brenner DW, et al. Urology 1990 May;35(5):381–4

Reducing rectal injury from sonographically-guided transrectal needle biopsy of prostate. The "rule of finger". Cooner WH. Urology 1990 Aug;36(2):191–2

[Analysis of 117 cases of percutaneous fine-needle pneumocentesis with ultrasonic guiding] Luo FC. Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1990 Apr; 13(2):82–4, 126 (Eng. Abstr.) (Chi)

[CT-guided fine needle aspiration biopsy of abdominal masses] Zhang L. Chung Hua Fang She Hsueh Tsa Chih 1989 Oct;23(5):264–6 (Eng. Abstr.) (Chi)

[Transperineal prostatic biopsy guided by ultrasound] Xu YM. Chung Hua Wai Ko Tsa Chih 1989 Apr;27(4):231–2, 254 (Eng. Abstr.) (Chi)

[Thin-needle aspiration biopsy under ultrasonic control. The examination technic] Hořejšová M, et al. Cas Lek Cesk 1989 Dec 1;128(49):1542–4 (Eng. Abstr.) (Cze)

[Sternal puncture with a short lumbar needle] Brems-Dalgaard E. Ugeskr Laeger 1990 Jun 4; 152(23):1681–2 (Dan)

[Thoracic puncture-biopsy. Technic and indications. Critical study of more than 1,200 procedures] Giron J, et al. Ann Radiol (Paris) 1989;32(7–8):531–46 (Eng. Abstr.) (Fre)

[Hepatic puncture-biopsy with embolization of the tract] Hamza KR, et al. Ann Radiol (Paris) 1989;32(7–8):590–2 (Eng. Abstr.) (Fre)

[Renal needle biopsy: a comparative study of fluoroscopic and echographic guidance] Monsallier M, et al.

Ann Urol (Paris) 1990;24(3):181–4 (Eng. Abstr.) (Fre)
[Optical assistance in guiding punctures under x-ray computed tomographic control] Kaemmerlen P, et al. **J Radiol** 1989;70(4):317–20 (Eng. Abstr.) (Fre)
[Value of blind fine-needle aspiration biopsy in the diagnosis of some tumors of the liver (letter)] Bourhis F, et al. **Presse Med** 1989 Nov 11;18(37):1847 (Fre)
[Value of liver biopsy in internal medicine. Apropos of a series of 300 puncture biopsies] Bergère A, et al. **Rev Med Interne** 1990 Mar–Apr;11(2):109–20 (Eng. Abstr.) (Fre)
[Ultrasonically guided fine-needle puncture. The limits of the method in the abdomen and retroperitoneal space] Holtkamp W, et al. **Dtsch Med Wochenschr** 1990 May 25; 115(21):809–12 (Eng. Abstr.) (Ger)
[CT-guided puncture biopsies of cystic processes in the cerebral and spinal areas] Molsen HP, et al. **Radiol Diagn (Berl)** 1989;30(3):300–6 (Eng. Abstr.) (Ger)
[Sonographically guided fine-needle biopsy of peripheral lung tumors] Mathis G, et al. **Radiologe** 1990 May; 30(5):214–6 (Eng. Abstr.) (Ger)
[Localization technic for percutaneous punctures under CT control] Reuther G, et al. **Radiologe** 1990 May;30(5):217–20 (Ger)
[CT-guided percutaneous biopsy in orthopedics. Indications—planning—technic—personal experiences, with special reference to the spine] Schratter M. **Radiologe** 1990 May;30(5):201–13 (35 ref.) (Eng. Abstr.) (Ger)
[CT-guided puncture biopsy] Feuerbach S. **Rontgenpraxis** 1989 Sep;42(9):311–4 (Ger)
[Transparietal needle biopsy in the diagnosis of isolated lesions of the lung] Marzo C, et al. **Arch Monaldi Mal Torace** 1988 Sep–Oct;43(5):391–407 (Eng. Abstr.) (Ita)
[The use of echography and echo-guided fine needle biopsy in the preclinical diagnosis of renal neoplasms] Matricardi L, et al. **Minerva Med** 1990 Jun;81(6):451–4 (Eng. Abstr.) (Ita)
[Transcutaneous pulmonary fine-needle aspiration biopsy under fluoroscopic guidance. Our experience] Esposito S, et al. **Radiol Med (Torino)** 1990 May;79(5):507–12 (Eng. Abstr.) (Ita)
[Percutaneous biopsy of paracardiac masses] Garbagnati F, et al. **Radiol Med (Torino)** 1989 Dec;78(6):616–9 (Eng. Abstr.) (Ita)
[The clinical utility of stereotaxic x-ray guided cytological biopsy in nonpalpable neoplastic pathology of the breast] Giuseppetti GM, et al. **Radiol Med (Torino)** 1990 Mar; 79(3):185–8 (Eng. Abstr.) (Ita)
[Non-vascular interventional radiology: percutaneous needle biopsy under imaging] Endo T, et al. **Gan To Kagaku Ryoho** 1990 Jan;17(1):161–6 (Eng. Abstr.) (Jpn)
[The development of ultrasonically guided fine needle aspiration biopsy in the diagnosis of nonpalpable minimal thyroid tumors] Michigishi T. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Apr 25; 49(4):431–8 (Eng. Abstr.) (Jpn)
[Percutaneous renal biopsy using Biopty biopsy instrument and Biopty biopsy needle] Hayashi Y, et al. **Nippon Jinzo Gakkai Shi** 1990 Apr;32(4):415–8 (Eng. Abstr.) (Jpn)
[A new automated renal biopsy technique under ultrasound guidance] Ohmori H, et al. **Nippon Jinzo Gakkai Shi** 1990 Apr;32(4):409–14 (Eng. Abstr.) (Jpn)
[Diagnosis of paraaortic and pelvic lymph node metastasis by ultrasound guided percutaneous fine needle aspiration biopsy (FNAB)] Nagano T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Dec; 41(12):1979–82 (Eng. Abstr.) (Jpn)
[A method of fine-needle aspiration biopsy of head and neck tumors] Makowska W. **Otolaryngol Pol** 1989;42(6):421–3 (Pol)
[Percutaneous puncture of the pancreas (review of the literature)] Gorbachev VN. **Khirurgiia (Mosk)** 1990 Jan; (1):96–8 (56 ref.) (Rus)

STANDARDS

Positive predictive value of fine needle aspiration cytology of breast lesions. Ciatto S, et al. **Acta Cytol** 1989 Nov–Dec; 33(6):894–8
The value and limitations of aspiration cytology in the diagnosis of primary tumors. A symposium. Hajdu SI, et al. **Acta Cytol** 1989 Nov–Dec;33(6):741–90 (106 ref.)
Cystic thyroid nodules harboring malignancy: a problem in fine needle aspiration cytodiagnosis [letter] Jayaram G, et al. **Acta Cytol** 1989 Nov–Dec;33(6):941–2
Fine needle aspiration of cystic liver lesions. Cytologic examination and carcinoembryonic antigen assay of cyst contents. Pinto MM, et al. **Acta Cytol** 1989 Nov–Dec; 33(6):852–6
Diagnostic accuracy and role of immediate interpretation of fine needle aspiration biopsy specimens from various sites. Silverman JF, et al. **Acta Cytol** 1989 Nov–Dec;33(6):791–6
Problems and limitations with fine needle aspiration cytology of solitary thyroid nodules. Ananthakrishnan N, et al. **Aust N Z J Surg** 1990 Jan;60(1):35–9
Who should perform fine-needle aspiration biopsies? Stanley MW. **Diagn Cytopathol** 1990;6(3):215–7
[The gold standard and optimalization of diagnostic choice: the pulmonary nodule and transthoracic pulmonary puncture-biopsy] Brohee D, et al. **Rev Med Brux** 1989 Nov; 10(9):378–84 (26 ref.) (Eng. Abstr.) (Fre)

UTILIZATION

Has mammography led to too many breast biopsies? Moffat FL, et al. **J Surg Oncol** 1990 Sep;45(1):1–3

VETERINARY

Comparison of renal biopsy techniques in dogs. Wise LA, et al. **J Am Vet Med Assoc** 1989 Oct 1;195(7):935–9
[The technic of fine-needle aspiration cytology] van den Ingh TS, et al. **Tijdschr Diergeneeskd** 1989 Jul 1;114(13):713–9 (Eng. Abstr.) (Dut)

BIOPTERIN

ANALOGS & DERIVATIVES

Cytokine release from cultured peripheral blood mononuclear cells of patients with severe atopic dermatitis. Reinhold U, et al. **Acta Derm Venereol (Stockh)** 1989; 69(6):497–502
Study of beta-2 microglobulin and neopterin in serum and cerebrospinal fluid of HIV-infected patients. Imberciadori G, et al. **Acta Neurol (Napoli)** 1990 Feb;12(1):58–61
Sarcoidosis and neopterin [letter; comment] Blaschke E, et al. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1379 Comment on: Am Rev Respir Dis 1989 Jun;139(6):1474–8.
Monitoring of tumor necrosis factor therapy with neopterin. Peters KM, et al. **Arzneimittelforschung** 1990 Apr; 40(4):508–10
Immunological studies on the participation of 6-pyruvoyl tetrahydropterin (2'-oxo) reductase, an aldose reductase, in tetrahydrobiopterin biosynthesis. Milstien S, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):845–50
Parallel induction of tetrahydrobiopterin biosynthesis and indoleamine 2,3-dioxygenase activity in human cells and cell lines by interferon-gamma. Werner ER, et al. **Biochem J** 1989 Sep 15;262(3):861–6
Dissociation constants for dihydrofolic acid and dihydrobiopterin and implications for mechanistic models for dihydrofolate reductase. Maharaj G, et al. **Biochemistry** 1990 May 15;29(19):4554–60
Tumour necrosis factor-alpha and lipopolysaccharide enhance interferon-induced tryptophan degradation and pteridine synthesis in human cells. Werner-Felmayer G, et al. **Biol Chem Hoppe Seyler** 1989 Sep;370(9):1063–9
Neopterin and viral infections: diagnostic potential in virally induced liver disease. Reibnegger G, et al. **Biomed Pharmacother** 1989;43(4):287–93 (29 ref.)
Serum neopterin in patients receiving bone marrow transplant. Pavletić Z, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:97–8
Urinary neopterin excretion in patients with uterine sarcomas. Fuith LC, et al. **Cancer** 1990 Mar 1;65(5):1228–31
Unconjugated pteridines and the activation of macrophages by interferon gamma [letter; comment] Reibnegger G, et al. **Cancer Chemother Pharmacol** 1990;25(4):308–9 Comment on: Cancer Chemother Pharmacol 1989;23(5):283–90.
Neopterin formation and tryptophan degradation by a human myelomonocytic cell line (THP-1) upon cytokine treatment. Werner-Felmayer G, et al. **Cancer Res** 1990 May 15;50(10):2863–7
Urinary neopterin concentrations vs total neopterins for clinical utility. Fuchs D, et al. **Clin Chem** 1989 Dec; 35(12):2305–7
Concentrations of neopterin and biopterin in serum from patients with rheumatoid arthritis or systemic lupus erythematosus and in synovial fluid from patients with rheumatoid or osteoarthritis [letter] Hagihara M, et al. **Clin Chem** 1990 Apr;36(4):705–6
Increased neopterin concentration in saliva of patients with HIV-1 infection. Reibnegger G, et al. **Clin Chem** 1990 Jul; 36(7):1379–80
Concentrations of neopterin in serum of recipients of renal allografts [letter; comment] Reibnegger G, et al. **Clin Chem** 1989 Oct;35(10):2157 Comment on: Clin Chem 1989 Jun;35(6):1258–9.
Neopterin radioimmunoassay results are unaffected by beta-propiolactone: safer monitoring of HIV-positive serum samples [letter; comment] Sheldon J, et al. **Clin Chem** 1990 Jan;36(1):175 Comment on: Clin Chem 1989 Aug;35(8):1746–9.
Liquid-chromatographic measurement of biopterin and neopterin in serum and urine. Slazyk WE, et al. **Clin Chem** 1990 Jul;36(7):1364–8
Comparison of serum and urine neopterin concentrations in patients with HIV-1 infection. Fuchs D, et al. **Clin Chim Acta** 1990 Feb 28;187(2):125–30
Increased serum neopterin in patients with HIV-1 infection is correlated with reduced in vitro interleukin-2 production. Fuchs D, et al. **Clin Exp Immunol** 1990 Apr; 80(1):44–8
1H-NMR and mass spectrometric studies of tetrahydropterins. Evidence for the structure of 6-pyruvoyl tetrahydropterin, an intermediate in the biosynthesis of tetrahydrobiopterin. Ghisla S, et al. **Eur J Biochem** 1990 Feb 14;187(3):651–6
Correlation between neopterin, interferon-gamma and haemoglobin in patients with haematological disorders. Denz H, et al. **Eur J Haematol** 1990 Mar;44(3):186–9
Synthesis of tetrahydrobiopterin in Friend erythroleukemia cells and its modulator effect on cell proliferation. Kerler F, et al. **Exp Cell Res** 1990 Aug;189(2):151–6
Production and characterization of a monoclonal antibody against neopterin. Weyrer W, et al. **Hybridoma** 1990 Feb; 9(1):71–9
Plasma elastase-alpha 1-antitrypsin, neopterin, tumor necrosis factor, and soluble interleukin-2 receptor after prolonged exercise. Dufaux B, et al. **Int J Sports Med** 1989 Dec;10(6):434–8
Decreased serum tryptophan in patients with HIV-1 infection correlates with increased serum neopterin and with neurologic/psychiatric symptoms. Fuchs D, et al. **J Acquir Immune Defic Syndr** 1990;3(9):873–6
Macrophage oxidation of L-arginine to nitric oxide, nitrite, and nitrate. Tetrahydrobiopterin is required as a cofactor. Tayeh MA, et al. **J Biol Chem** 1989 Nov 25;264(33):19654–8
Tetrahydrobiopterin biosynthetic activities in human macrophages, fibroblasts, THP-1, and T 24 cells. GTP-cyclohydrolase I is stimulated by interferon-gamma, and 6-pyruvoyl tetrahydropterin synthase and sepiapterin reductase are constitutively present. Werner ER, et al. **J Biol Chem** 1990 Feb 25;265(6):3189–92
Serum neopterin levels in liver cirrhosis. Antoniello S, et al. **J Biol Regul Homeost Agents** 1989 Oct–Dec;3(4):159–62
Modulation of interleukin 2 high-affinity binding by lymphocyte-derived tetrahydrobiopterin: pterins as potential participants in the control of interleukin 2 receptor assembly. Ziegler I, et al. **J Cell Biochem** 1989 Oct;41(2):103–12
Analysis of the tetrahydrobiopterin synthesizing system during maturation of murine reticulocytes. Kerler F, et al. **J Cell Physiol** 1990 Feb;142(2):268–71
Determination of quinonoid dihydrobiopterin by high-performance liquid chromatography and electrochemical detection. Heales S, et al. **J Chromatogr** 1989 Sep 29;494:77–85
Association between serum neopterin concentrations and in vitro replicative capacity of HIV-1 isolates [letter] Fuchs D, et al. **J Infect Dis** 1989 Oct;160(4):724–5
Immune activation during measles: interferon-gamma and neopterin in plasma and cerebrospinal fluid in complicated and uncomplicated disease. Griffin DE, et al. **J Infect Dis** 1990 Mar;161(3):449–53
Primapteriuria: a new variant of atypical phenylketonuria. Blau N, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:335–8
Tyrosine hydroxylase, tryptophan hydroxylase, biopterin, and neopterin in the brain of anorexia nervosa. Hirata Y, et al. **J Neural Transm Gen Sect** 1990;80(2):145–50
Tetrahydrobiopterin synthesis rate and turnover time in neuronal cultures from embryonic rat mesencephalon and hypothalamus. Kapatos G. **J Neurochem** 1990 Jul; 55(1):129–36
Enhancement of dopamine release in vivo from the rat striatum by dialytic perfusion of 6R-L-erythro-5,6,7,8-tetrahydrobiopterin. Koshimura K, et al. **J Neurochem** 1990 Apr;54(4):1391–7
Immunological evidence for the requirement of sepiapterin reductase for tetrahydrobiopterin biosynthesis in brain. Levine RA, et al. **J Neurochem** 1990 Apr;54(4):1218–24
Neopterin: biopterin ratios in Down's syndrome [letter] Cattell RJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug; 52(8):1015–6
L-3,4-dihydroxyphenylalanine (levodopa) lowers central nervous system S-adenosylmethionine concentrations in humans. Surtees R, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):569–72
Effect of chronic lead exposure on biopterin metabolism in the rat neostriatum. Martínez-Fong D, et al. **J Neurosci Res** 1990 May;26(1):112–4
Increased CSF neopterin levels in subarachnoid hemorrhage. Mathiesen T, et al. **J Neurosurg** 1990 Jul;73(1):69–71
Hyperphenylalaninemia caused by dihydropteridine reductase deficiency in children receiving chemotherapy for acute lymphoblastic leukemia [letter] Blau N, et al. **J Pediatr** 1989 Oct;115(4):661–3
Value of urinary neopterin in the differential diagnosis of bacterial and viral infections. Denz H, et al. **Klin Wochenschr** 1990 Feb 15;68(4):218–22
Urinary neopterin concentrations and T-cell subset data in HIV-1 infection. Reibnegger G, et al. **Klin Wochenschr** 1990 Jan 4;68(1):43–8
Central-nervous-system methyl-group metabolism in children with neurological complications of HIV infection [see comments] Surtees R, et al. **Lancet** 1990 Mar 17; 335(8690):619–21 Comment in: Lancet 1990 May 12;335(8698):1167.
Biopterin and neopterin in human saliva. Katoh S, et al. **Life Sci** 1989;45(26):2561–8
Simultaneous measurement of tetrahydrobiopterin (THBP) and biogenic amines by liquid chromatography with electrochemical detection. Tani Y, et al. **Life Sci** 1990; 46(5):373–8
Interferon-gamma, neopterin and host defense. Rabinoff M. **Med Hypotheses** 1990 Apr;31(4):275
Possible uses of urinary neopterin and biopterin measurement. Rabinoff M. **Med Hypotheses** 1989 Aug;29(4):241–3
Markers of risk in HIV-1 [letter; comment] Krämer A, et al. **N Engl J Med** 1990 Jun 28;322(26):1886 Comment on: N Engl J Med 1990 Jan 18;322(3):166–72.
The neopterin/creatinine ratio cannot be used to diagnose

rejection episodes in renal transplant recipients [letter; comment] Bäckman L, et al. **Nephron** 1989;53(3):287 Comment on: Nephron 1988;49(3):259–60.

Urinary neopterin as a new biochemical marker for the monitoring of disease activity and prognosis in membranous nephropathy associated with hepatitis B surface antigenemia. Lin CY. **Nephron** 1989;53(2):115–20

Tetrahydrobiopterin administration in biopterin–deficient progressive dystonia with diurnal variation. Fink JK, et al. **Neurology** 1989 Oct;39(10):1393–5

Tetrahydrobiopterin–dependent production of L–dopa in NRK fibroblasts transfected with tyrosine hydroxylase cDNA: future use for intracerebral grafting. Uchida K, et al. **Neurosci Lett** 1990 Feb 16;109(3):282–6

Central nervous system involvement in the erythrophagocytic disorders of infancy: the role of cerebrospinal fluid neopterins in their differential diagnosis and clinical management. Howells DW, et al. **Pediatr Res** 1990 Aug;28(2):116–9

Monapterin in blood of patients with retinitis pigmentosa (RP). Cremer–Bartels G, et al. **Prog Clin Biol Res** 1989; 314:77–82

Idiopathic pulmonary fibrosis: can cell mediated immunity markers predict clinical outcome? Meliconi R, et al. **Thorax** 1990 Jul;45(7):536–40

Praziquantel in the treatment of hepatosplenic schistosomiasis: biochemical disease markers indicate deceleration of fibrogenesis and diminution of portal flow obstruction. Zwingenberger K, et al. **Trans R Soc Trop Med Hyg** 1990 Mar–Apr;84(2):252–6

Monitoring of the serum neopterin/creatinine ratio in renal transplantation. Hacini D, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 3):2185–6

Pancreatic juice neopterin excretion—reliable marker for detection of pancreatic allograft rejection. Königsrainer A, et al. **Transplant Proc** 1990 Apr;22(2):671–2

Possibility of recognizing immunologic and cyclosporine A damage by urinary neopterin excretion in kidney transplant recipients. Magalini SC, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 2):1686–8

Neopterin excretion for kidney transplant monitoring: relationship with antilymphocyte globulin treatment. Noel C, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1689–90

Interferon–gamma, neopterin, and interleukin–2 receptor levels in the serum of kidney transplant recipients. Steiner G, et al. **Transplant Proc** 1990 Aug;22(4):1857–8

Neopterin excretion after liver transplantation and its value in differential diagnosis of complications. Tilg H, et al. **Transplantation** 1989 Oct;48(4):594–9

[Increased urinary excretion of neopterin in patients with Graves–Basedow disease] Schreiber V, et al. **Cas Lek Cesk** 1989 Jul 7;128(28):883–4 (Eng. Abstr.) **(Cze)**

[Mononuclear cell activation in Crohn's disease. Evaluation using serum assay of neopterin and interleukin–2 soluble receptors] Duclos B, et al. **Gastroenterol Clin Biol** 1990; 14(1):22–7 (Eng. Abstr.) **(Fre)**

[Monitoring of renal grafts. Value of the determination of serum neopterin and neopterin versus creatinine ratio] Hacini J, et al. **Presse Med** 1989 Nov 25;18(39):1913–6 (Eng. Abstr.) **(Fre)**

[Neopterin in thyroid pathology. Preliminary results (letter)] Turpin G, et al. **Presse Med** 1989 Sep 16;18(28):1390 **(Fre)**

[Malaria tropica with activation of blood coagulation and detection of tumor necrosis factor (NF–alpha) in serum] Hemmer CJ, et al. **Klin Wochenschr** 1990 Mar 5;68(5):281–5 (Eng. Abstr.) **(Ger)**

[Neopterin as a marker of aspecific immunostimulation with Propionibacterium avidum KP–40 in patients with gastrointestinal tumors. A prospective randomized study] Peters KM, et al. **Med Klin** 1990 Jul 15;85(7):421–4 (Eng. Abstr.) **(Ger)**

[Neopterin in phases of exacerbation of bronchial asthma and in experimental asthma conditions] Menz G, et al. **Pneumologie** 1990 Feb;44 Suppl 1:232–3 (Eng. Abstr.) **(Ger)**

[Studies of the relevance of the tumor marker neopterin for therapeutic decisions and follow–up of breast cancer] Hacker I, et al. **Radiobiol Radiother (Berl)** 1989;30(6):521–6 (Eng. Abstr.) **(Ger)**

[Value of neopterin as an oncologic laboratory parameter—observations in gynecologic tumors] von Broen B, et al. **Z Gesamte Inn Med** 1990 Apr 15;45(8):223–5 (Eng. Abstr.) **(Ger)**

[Urinary excretion of neopterin in Sjögren's syndrome. Preliminary evaluation and comparison with salivary beta–2–microglobulin] Mathieu A, et al. **Ann Ital Med Int** 1986 Sep;1(3):221–4 (Eng. Abstr.) **(Ita)**

[Clinical significance of neopterin assay as a tumor marker] Uchiyama Y. **Nippon Rinsho** 1990 Feb;48 Suppl:937–41 **(Jpn)**

[Malignant hyperphenylalaninemia—tetrahydrobiopterin (BH4) deficiency] Shintaku H. **Taspakushitsu Kakusan Koso** 1988 Apr;33(5):493–6 **(Jpn)**

[Serum neopterin in dilated cardiomyopathy] Nasonov EL, et al. **Ter Arkh** 1990;62(4):72–5 (Eng. Abstr.) **(Rus)**

[Predictive value of neopterin in boutonneuse fever] Soriano V, et al. **Rev Clin Esp** 1989 Nov;185(8):396–8 (Eng. Abstr.) **(Spa)**

ANALYSIS

Concentrations of neopterin and biopterin in serum from patients with rheumatoid arthritis or systemic lupus erythematosus and in synovial fluid from patients with rheumatoid or osteoarthritis [letter] Hagihara M, et al. **Clin Chem** 1990 Apr;36(4):705–6

Liquid–chromatographic measurement of biopterin and neopterin in serum and urine. Slazyk WE, et al. **Clin Chem** 1990 Jul;36(7):1364–8

Biopterin and neopterin in human saliva. Katoh S, et al. **Life Sci** 1989;45(26):2561–8

ISOLATION & PURIFICATION

Dictyopterin, 6–(D–threo–1,2–dihydroxypropyl)–pterin, a new natural isomer of L–biopterin. Isolation from vegetative cells of Dictyostelium discoideum and identification. Klein R, et al. **Eur J Biochem** 1990 Feb 14; 187(3):665–9

METABOLISM

Tyrosine hydroxylase, tryptophan hydroxylase, biopterin, and neopterin in the brain of anorexia nervosa. Hirata Y, et al. **J Neural Transm Gen Sect** 1990;80(2):145–50

Effects of cold exposure on rat adrenal tyrosine hydroxylase: an analysis of RNA, protein, enzyme activity, and cofactor levels. Baruchin A, et al. **J Neurochem** 1990 May; 54(5):1769–75

Tetrahydrobiopterin administration in biopterin–deficient progressive dystonia with diurnal variation. Fink JK, et al. **Neurology** 1989 Oct;39(10):1393–5

PHARMACOLOGY

Reduced biopterin as a cofactor in the generation of nitrogen oxides by murine macrophages. Kwon NS, et al. **J Biol Chem** 1989 Dec 5;264(34):20496–501

URINE

Neopterin: biopterin ratios in Down's syndrome [letter] Cattell RJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug; 52(8):1015–6

Possible uses of urinary neopterin and biopterin measurement. Rabinoff M. **Med Hypotheses** 1989 Aug;29(4):241–3

BIORHYTHMS see **PERIODICITY**

BIOSENSORS

A fiberoptic cholesterol biosensor with an oxygen optrode as the transducer. Trettnak W, et al. **Anal Biochem** 1990 Jan;184(1):124–7

Flow system for direct determination of enzyme substrate in undiluted whole blood. Buch–Rasmussen T. **Anal Chem** 1990 May 1;62(9):932–6

Potentiometric combination ion/carbon dioxide sensors for in vitro and in vivo blood measurements. Collison ME, et al. **Anal Chem** 1989 Nov 1;61(21):2365–72

Chemical sensors for bedside monitoring of critically ill patients. Collison ME, et al. **Anal Chem** 1990 Apr 1; 62(7):425A–437A

Cross–linked redox gels containing glucose oxidase for amperometric biosensor applications. Gregg BA, et al. **Anal Chem** 1990 Feb 1;62(3):258–63

Microbial sensor for preliminary screening of mutagens utilizing a phage induction test. Karube I, et al. **Anal Chem** 1989 Nov 1;61(21):2388–91

Hybrid biosensor for the determination of lactose. Svorc J, et al. **Anal Chem** 1990 Aug 1;62(15):1628–31

Suitable potentiometric enzyme sensors for urea and creatinine. Campanella L, et al. **Analyst** 1990 Jun; 115(6):827–30

Ferrocene modified polypyrrole with immobilised glucose oxidase and its application in amperometric glucose microbiosensors. Dicks JM, et al. **Ann Biol Clin (Paris)** 1989;47(10):607–19

Novel applications of fluorescence sensors. Reardon KF, et al. **Appl Biochem Biotechnol** 1990 Spring–Summer; 24–25:363–74

Wick technique: reference method for implanted glucose sensors. Fischer U, et al. **Artif Organs** 1989 Oct;13(5):453–7

International Workshop on Intracorporal Glucose Sensors. September 27–30, 1988. Gohren–Lebbin, GDR. Proceedings. **Biomed Biochim Acta** 1989;48(11–12):857–971

Glucose sensors in a control circuit: a modeling study. Biermann E. **Biomed Biochim Acta** 1989;48(11–12):857–66

Implications of an intracorporeal glucose sensor in the management of diabetic patients. Bruns W. **Biomed Biochim Acta** 1989;48(11–12):925–33

In vivo response of microfabricated glucose sensors to glycemia changes in normal rats. Koudelka M, et al. **Biomed Biochim Acta** 1989;48(11–12):953–6

Flow–through and catheter biosensors with an extended concentration range. Laurinavicius VA, et al. **Biomed Biochim Acta** 1989;48(11–12):905–9

Mathematical simulation of an enzyme–based glucose sensor with pO2–basic sensor. Lemke K. **Biomed Biochim Acta** 1989;48(11–12):867–77

In vitro measurements with electrocatalytic glucose sensor in blood. Preidel W, et al. **Biomed Biochim Acta** 1989; 48(11–12):897–903

Glucose measurement in diluted blood. Scheller FW, et al. **Biomed Biochim Acta** 1989;48(11–12):891–6

Glucose determination by differential pulse voltammetry with a platinum electrode. Temme J, et al. **Biomed Biochim Acta** 1989;48(11–12):883–9

The needle glucose electrode: in vitro performance and optimisation for implantation. Vadgama P, et al. **Biomed Biochim Acta** 1989;48(11–12):935–42

Strategies for calibrating a subcutaneous glucose sensor. Velho G, et al. **Biomed Biochim Acta** 1989;48(11–12):957–64

In situ calibration of implanted electrochemical glucose sensors. von Woedtke T, et al. **Biomed Biochim Acta** 1989; 48(11–12):943–52

Electrochemical glucose sensing at low potentials. Wolfson SK Jr, et al. **Biomed Biochim Acta** 1989;48(11–12):919–24

A novel approach to electrode signal analysis for glucose determination. Zawicki I, et al. **Biomed Biochim Acta** 1989; 48(11–12):879–82

Thermoelectric enzyme sensor for measuring blood glucose. Muehlbauer MJ, et al. **Biosens Bioelectron** 1990;5(1):1–12

Piezoelectric crystal biosensors. Ngeh–Ngwainbi J, et al. **Biosens Bioelectron** 1990;5(1):13–26 (26 ref.)

Determination of serum cholinesterase activity and dibucaine numbers by an amperometric choline sensor. Palleschi G, et al. **Biosens Bioelectron** 1990;5(1):27–35

A fast responding fibre optic glucose biosensor based on an oxygen optrode. Schaffar BP, et al. **Biosens Bioelectron** 1990;5(2):137–48

A new approach to immunoFET operation. Schasfoort RB, et al. **Biosens Bioelectron** 1990;5(2):103–24

Development of a potentially wearable glucose sensor for patients with diabetes mellitus: design and in–vitro evaluation. Schoonen AJ, et al. **Biosens Bioelectron** 1990; 5(1):37–46

Enzyme entrapped polypyrrole modified electrode for flow–injection determination of glucose. Trojanowicz M, et al. **Biosens Bioelectron** 1990;5(2):149–56

Enzyme immunosensors based on electropolymerized polytyramine modified electrodes. Tsuji I, et al. **Biosens Bioelectron** 1990;5(2):87–101

Histamine selective microelectrode based on a synthetic organic liquid ion exchanger. Bi Y. **Biosensors** 1989; 4(6):373–80

Gene probe coated piezoelectric biosensors for biochemical analysis. Wu TZ, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1990 May;23(2):147–54

Luminescence biosensors. Aizawa M, et al. **J Biolumin Chemilumin** 1989 Jul;4(1):535–42

Design of luminescence photobiosensors. Blum LJ, et al. **J Biolumin Chemilumin** 1989 Jul;4(1):543–50 (51 ref.)

Fibre–optic biosensor based on luminescence and immobilized enzymes: microdetermination of sorbitol, ethanol and oxaloacetate. Gautier SM, et al. **J Biolumin Chemilumin** 1990 Jan–Mar;5(1):57–63

Stable–light–emitting Escherichia coli as a biosensor. Korpela M, et al. **J Biolumin Chemilumin** 1989 Jul;4(1):551–4

Physiological preparation for studying the response of subcutaneously implanted glucose and oxygen sensors. Ertefai S, et al. **J Biomed Eng** 1989 Sep;11(5):362–8

Towards implantable glucose sensors: a review. Wilkins ES. **J Biomed Eng** 1989 Sep;11(5):354–61 (79 ref.)

19th annual UCLA symposium: Biochemistry and molecular biology of biosensors and bioprobes. Abstracts. **J Cell Biochem Suppl** 1990;14B:349–70

Biosensors. Lowe CR, et al. **J Chromatogr** 1990 Jun 27; 510:347–54 (47 ref.)

Regeneration of immunosorbent surfaces used in clinical, industrial and environmental biosensors. Role of covalent and non–covalent interactions. Blanchard GC, et al. **J Immunol Methods** 1990 Jul 3;130(2):263–75

Modified electrode surface in amperometric biosensors. Bartlett PN. **Med Biol Eng Comput** 1990 May;28(3):B10–7 (72 ref.)

Lactate and glucose electrochemical biosensors for the evaluation of the aerobic and anaerobic threshold in runners. Palleschi G, et al. **Med Biol Eng Comput** 1990 May;28(3):B25–8

In vivo chemical sensors for intensive–care monitoring. Rolfe P. **Med Biol Eng Comput** 1990 May;28(3):B34–47 (104 ref.)

Optimisation of enzyme electrodes. Tang LX, et al. **Med Biol Eng Comput** 1990 May;28(3):B18–24 (27 ref.)

Performance evaluation of ISFETs and other ISE sensors for whole blood ion assay. Thompson JM. **Med Biol Eng Comput** 1990 May;28(3):B29–33

Sampling: a critical problem in biosensing. Weaver JC. **Med Biol Eng Comput** 1990 May;28(3):B3–9 (28 ref.)

Bioelectrical conversion in sensors with living cells. Vais H, et al. **Physiologie** 1989 Oct–Dec;26(4):349–53 (11 ref.)

Detection of cell–affecting agents with a silicon biosensor. Parce JW, et al. **Science** 1989 Oct 13;246(4927):243–7

[The use of surface electromagnetic waves of IR range for recording the protein sorption on the phase boundary and optic biosensors on this basis] Silin VI, et al. **Biofizika** 1990 Jan–Feb;35(1):58–61 (Eng. Abstr.) **(Rus)**

[Liquid crystalline dispersion of superhelical circular DNA as a base for biosensors] Evdokimov IuM, et al. **Dokl Akad Nauk SSSR** 1989;307(5):1262–5 **(Rus)**

[Nucleic acids as a basis for creating biosensors] Evdokimov IuM, et al. **Mol Biol (Mosk)** 1989 Nov–Dec;23(6):1581–8 (Eng. Abstr.) **(Rus)**

[Biosensors and their applications (review of the literature)] Efremenko VI, et al. **Prikl Biokhim Mikrobiol** 1990

Jan-Feb;26(1):11-8 (58 ref.) (Eng. Abstr.) (Rus)

METHODS

Biosensors. Lowe CR. **Philos Trans R Soc Lond [Biol]** 1989 Aug 31;324(1224):487-96 (44 ref.)
[Biosensor] Aizawa M. **Seikagaku** 1990 Jun;62(6):434-8 (Jpn)

STANDARDS

A differential paramagnetic sensor for breath-by-breath oximetry. Meriläinen PT. **J Clin Monit** 1990 Jan;6(1):65-73

BIOSTATISTICS see **BIOMETRY**

BIOSYNTHETIC PROTEINS see **RECOMBINANT PROTEINS**

BIOTECHNOLOGY

see related
GENETIC ENGINEERING
RECOMBINANT PROTEINS

Recent developments in enzyme and microbial biotechnology--strategies in bioprocess design. Hardman N. **Adv Biochem Eng Biotechnol** 1989;40:1-18 (66 ref.)
Protein purification. Lillehoj EP, et al. **Adv Biochem Eng Biotechnol** 1989;40:19-71 (295 ref.)
Microbeads and anchorage-dependent eukaryotic cells: the beginning of a new era in biotechnology. Miller AO, et al. **Adv Biochem Eng Biotechnol** 1989;39:73-95 (151 ref.)
Effect of total and partial pressure (oxygen and carbon dioxide) on aerobic microbial processes. Onken U, et al. **Adv Biochem Eng Biotechnol** 1989;40:137-69 (120 ref.)
The pharmacist as educator in biotechnology. **Am J Hosp Pharm** 1989 Nov;46(11 Suppl 2):S1-29
Formulary management of biotechnological drugs. Herfindal ET. **Am J Hosp Pharm** 1989 Dec;46(12):2516-20
Biotechnology products: new opportunities and responsibilities for the pharmacist. Stewart CF, et al. **Am J Hosp Pharm** 1989 Nov;46(11 Suppl 2):S4-8
Biotechnology and the Third World: development strategies in Cuba. Limonta M. **Ann N Y Acad Sci** 1989;569:325-34 (17 ref.)
Proceedings of the Eleventh Symposium on Biotechnology for Fuels and Chemicals. May 8-12, 1989, Colorado Springs, Colorado. **Appl Biochem Biotechnol** 1990 Spring-Summer;24-25:1-928
Human insulin--guidelines for change from porcine insulin. **Aust Fam Physician** 1989 Sep;18(9):1053, 1055
Biotechnology of plasma proteins. Fractionation and applications. Stoltz JF, et al. **Beitr Infusionther** 1989; 24:74-82 (1 ref.)
Biotechnology aspects of lipids. 19-21 December 1988, London. Proceedings. **Biochem Soc Trans** 1989 Dec; 17(6):1137-48
Chemical reactions of oils and fats. Gunstone FD. **Biochem Soc Trans** 1989 Dec;17(6):1141-2 (0 ref.)
Lipase-catalysed reactions in low-water organic media: effects of water activity and chemical modification. Halling PJ. **Biochem Soc Trans** 1989 Dec;17(6):1142-5
Large-scale manufacture of monoclonal antibodies for use in humans. Hill CR. **Biochem Soc Trans** 1990 Apr; 18(2):245-7
Biotechnology--an overview of the opportunities for the chemical industry. Jeffcoat R. **Biochem Soc Trans** 1989 Dec;17(6):1137-8
Tailored triacylglycerols and esters. Macrae AR. **Biochem Soc Trans** 1989 Dec;17(6):1146-8
Microbial routes to lipids. Ratledge C. **Biochem Soc Trans** 1989 Dec;17(6):1139-41 (24 ref.)
Enzymes in organic solvents. Russell AJ, et al. **Biochem Soc Trans** 1989 Dec;17(6):1145
Patents and patent office resources in biotechnology. Koniarek JP, et al. **Biotechniques** 1988 Feb;6(2):148-53
Enzymatic hydrolysis of plant polysaccharides: substrates for fermentation. Dekker RF. **Braz J Med Biol Res** 1989; 22(12):1441-56 (59 ref.)
A health sciences library liaison project to support biotechnology research. Pratt GF. **Bull Med Libr Assoc** 1990 Jul;78(3):302-3
Commercial exploitation of the human genome: what are the problems? Carey NH, et al. **Ciba Found Symp** 1990; 149:133-43; discussion 143-7
Increasing number of biotechnology products near marketing, PMA survey shows [news] **Clin Pharm** 1990 Jun;9(6):408
Development of new cell lines for animal cell biotechnology. MacDonald C. **Crit Rev Biotechnol** 1990;10(2):155-78 (261 ref.)
Safety evaluation of biotechnology products. Zbinden G. **Drug Saf** 1990;5 Suppl 1:58-64 (30 ref.)
Developments in biotechnology. Dedicated to Professor Armin Fiechter. **Experientia** 1989 Dec 1;45(11-12):1013-78
Molecular and genetic immunoprobes for biotechnology. Conway de Macario E. **FASEB J** 1989 Dec;3(14):2607-14 (40 ref.)
COBIOTECH's role in biotechnology worldwide. Gerhardt P. **FASEB J** 1990 Mar;4(5):1540-1
Interfacing biotech in industry and universities. Smith DA. **Genome** 1989;31(2):1123-4
Potential from biotechnology immeasurable [news] **J Am Vet Med Assoc** 1990 Jan 1;196(1):20
Notes to applicants for marketing authorizations on the pre-clinical biological safety testing of medicinal products derived from biotechnology (and comparable products derived from chemical synthesis). Committee for Proprietary Medicinal Products: Ad Hoc Working Party on Biotechnology/Pharmacy and Working Party on Safety of Medicines. **J Biol Stand** 1989 Jul;17(3):203-12
Uses of biotechnology and technology transfer to keep food safe. Hardy RW. **J Dairy Sci** 1990 Jun;73(6):1665-9 (15 ref.)
An integration of cultivation and purification in membrane bioreactors: production of monoclonal antibodies and lymphokines by microencapsulated hybridomas. Prokop A. **Mol Biother** 1988;1(2):61-73 (112 ref.)
Biotechnology eclipsed? [editorial] [see comments] **Nature** 1990 Feb 8;343(6258):494 Comment in: Nature 1990 Apr 19;344(6268):698. Comment in: Nature 1990 Jun 21;345(6277):658.
Biotechnology. Little apparent interest in Celltech sell-off. Aldhous P. **Nature** 1990 May 10;345(6271):102
Privatized grief for Italian biotechnology [news] Aldhous P. **Nature** 1990 Aug 9;346(6284):497
Japanese/US joint venture announced [news] Gershon D. **Nature** 1990 May 24;345(6273):281
Swiss company takes a 60 per cent stake in Genentech [news] Gershon D. **Nature** 1990 Feb 8;343(6258):495
Genentech shares. Allegation of insider dealing [news] Gershon D. **Nature** 1990 May 10;345(6271):102
Biotechnology patents. Genentech wins round two [news] Gershon D. **Nature** 1990 Apr 19;344(6268):692
Biotech patent dispute. EPO licensing talks break down [news] Gershon D. **Nature** 1990 Feb 8;343(6258):500
Cetus battles with Du Pont [news] Gershon D. **Nature** 1990 Jan 25;343(6256):301
The biotechnologies in the pharmacological research. Proceedings of a symposium held during the XXIV national congress of the Italian Society of Pharmacology. Brescia, Italy, September 28, 1988. **Pharmacol Res** 1989 Nov-Dec;21 Suppl 2:1-95
Biotechnology: Spinks eight years on. **Philos Trans R Soc Lond [Biol]** 1989 Aug 31; 324(1224):437-616
Horizons in membrane biotechnology. Proceedings of the Third International Meeting on Membrane Biotechnology. College Station, Texas, September 17-20, 1989. **Prog Clin Biol Res** 1990;343:1-304
Biotechnology and comparative medicine. **Prog Vet Microbiol Immunol** 1987;3:1-260
Likely litigation. Companies wield lawsuits as a market-development tool. Corcoran E. **Sci Am** 1990 Mar; 262(3):76-7
Patent power. The oil-eating bacterium that spawned an industry. Erickson D. **Sci Am** 1990 Jun;262(6):88, 93
Antibody bonanza. Rennie J. **Sci Am** 1990 Feb;262(2):62, 64-5
Dingell: AIDS researcher in conflict [news] Culliton BJ. **Science** 1990 May 11;248(4956):676
Biotechnology takes root in the Third World [news] Gibbons A. **Science** 1990 May 25;248(4958):962-3
Venture capitalists push designer drug start-ups [news] Gibbons A. **Science** 1990 Aug 17;249(4970):733-4
Science and PR north of the border [news] Powell D. **Science** 1989 Dec 22;246(4937):1555-6
Impact of biotechnology on the diagnostics of thrombotic disorders. Carroll JJ. **Semin Thromb Hemost** 1989 Jul; 15(3):334-40 (16 ref.)
The impact of genetics and biotechnology on medicine. Fifth President's Symposium of the 83rd annual scientific assembly of the Southern Medical Association. Washington, D.C., Nov 5-8, 1989. Proceedings. **South Med J** 1990 Aug;83(8):867-82
Improving food quality through new technology [letter] Fox MW. **Vet Rec** 1990 Jul 7;127(1):23
[Biotechnology or the revelation of reproduction in farm animals] Kruip TA. **Tijdschr Diergeneeskd** 1990 Jun 15; 115(12):558-62 (Eng. Abstr.) (Dut)
[Ethics and biotechnology (letter)] Rutgers B. **Tijdschr Diergeneeskd** 1990 Jul 15;115(14):696-8 (Dut)
[National commission advocates a 'no, unless' policy for biotechnology in animals] Rutgers B. **Tijdschr Diergeneeskd** 1990 Jun 15;115(12):594-7 (Dut)
[Genetic manipulation in farm animals: how and why?] van der Zijpp AJ. **Tijdschr Diergeneeskd** 1990 Jun 15; 115(12):554-7 (Eng. Abstr.) (Dut)
[Limits of biotechnology] Wiepkema PR. **Tijdschr Diergeneeskd** 1990 Jun 15;115(12):586-92 (Eng. Abstr.) (Dut)
[Health risks in the biotechnological industry] Colombi A, et al. **Z Gesamte Hyg** 1989;35(8):451-4 (Eng. Abstr.) (Ger)
[Molecular assembly of proteins for creating higher functions--a strategy and tactics for developing next-generation materials] Miyake J, et al. **Tanpakushitsu Kakusan Koso** 1990 Jan;35(1):47-53 (Jpn)
[Articles on hematology, transfusion science and biotechnology published in Soviet medical journals in 1988] Kaveshnikova BF. **Gematol Transfuziol** 1989 Dec; 34(12):55-8 (Rus)
[Prospects for using thermoacidophilic bacteria in biotechnology] Podgorskiĭ VS, et al. **Mikrobiol Zh** 1986 Nov-Dec;48(6):91-4 (26 ref.) (Eng. Abstr.) (Rus)
[Hybridoma technology: review of patent information] Serova MA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jun;(6):114-24 (5 ref.) (Rus)
[The development of medical ethics in light of the progress in medical science] Lepeš T. **Med Pregl** 1989; 42(9-10):305-11 (Scr)
[Abstracts of papers presented at the Conference of Cell Culture Researchers on the theme: "Present status and perspectives in the use of cell cultures in biotechnology". 25-28 May 1988, Zemplínská Šírava] **Cesk Fysiol** 1990; 39(1):63-78 (Slo, Cze)

ECONOMICS

Strategic considerations for the biotechnology business to the year 2000. Cometta S. **Arzneimittelforschung** 1989 Aug; 39(8):929-34
1992. Is there the will for there to be a way? Currie WJ. **J Clin Pharmacol** 1989 Sep;29(9):770-4
Biotechnology. Mixed reactions to merger [news] Gershon D. **Nature** 1990 Feb 22;343(6260):681
Industry and academics: losses no worry to Boston [news] Shulman S. **Nature** 1990 Jan 18;343(6255):201
Biotechnology on the auction block [news] Barinaga M. **Science** 1990 Feb 23;247(4945):906-8

INSTRUMENTATION

A dual streaming potential device used as an affinity sensor for monitoring hybridoma cell cultivations. Miyabayashi A, et al. **Anal Biochem** 1990 Jan;184(1):165-71
1990 guide to biotechnology products and instruments. **Science** 1990 Mar 23;247 Suppl:G1-217
[A sterile, regulated, pulsation-dampened precision dosing system for biomedical technics] Merz H, et al. **Biomed Tech (Berlin)** 1990 Jan-Feb;35(1-2):5-9 (Eng. Abstr.) (Ger)

LEGISLATION & JURISPRUDENCE

Disclosure requirements for biological materials in patent law. Jong SC, et al. **Adv Appl Microbiol** 1990;35:255-93 (19 ref.)
Regulatory affairs and biotechnology in Europe. I. Introduction into good regulatory practice. Tryzelaar B. **Biotherapy** 1988;1(1):59-69 (9 ref.)
Regulatory affairs and biotechnology in Europe. II. The CPMP, "High Tech" and Multi-State procedures. Tryzelaar B. **Biotherapy** 1989;1(3):179-96 (8 ref.)
Patients in biotechnology. I. Interleukin patent applications. van Kasteren J. **Biotherapy** 1989;1(2):85-8
Europe falling behind [news] Aldhous P. **Nature** 1990 Feb 8;343(6258):501
Biotechnology patent disputes. Market machinations [news] Gershon D. **Nature** 1990 Apr 26;344(6269):800
Genetic engineering. New advisory board approved [news] McGourty C. **Nature** 1989 Oct 26;341(6244):681
Britain regulates organism release. [news] Webb B. **Nature** 1989 Oct 26;341(6244):681
A muted victory for the biotech industry [news] Barinaga M. **Science** 1990 Jul 20;249(4966):239
Biotech companies lobby for Federal regulation [news] Crawford M. **Science** 1990 May 4;248(4955):546-7

METHODS

Molecular targeting and delivery: applications of recombinant DNA technology. Soria M. **Biotechnol Appl Biochem** 1989 Dec;11(6):527-51 (157 ref.)
Biocare: biotechnology in the clinical practice of medicine. Osband ME, et al. **Clin Res** 1990 Jan;38(1):5-9
Application of living microbial cells entrapped with synthetic resin prepolymers. Fukui S, et al. **Experientia** 1989 Dec 1;45(11-12):1055-61 (32 ref.)
Immunotoxins, ligand-toxin conjugates and molecular targeting. Soria M. **Pharmacol Res** 1989 Nov-Dec;21 Suppl 2:35-46 (71 ref.)
Animal biotechnology. Cross BA. **Philos Trans R Soc Lond [Biol]** 1989 Aug 31; 324(1224):563-74; discussion 575 (67 ref.)
Biochemical engineering challenges of purifying useful proteins. Hoare M, et al. **Philos Trans R Soc Lond [Biol]** 1989 Aug 31; 324(1224):497-507 (19 ref.)
[Monoclonal antibodies] Bulycheva TI, et al. **Gematol Transfuziol** 1990 Apr;35(4):3-4 (Rus)
[Isolation of blood coagulation factors (VII, VIII and IX)] Dzegilenko NB. **Gematol Transfuziol** 1990 May;35(5):38-40 (Rus)
[Monoclonal antibodies: immunobiotechnologic principles of production and prospects of use] Man'ko VM. **Gematol Transfuziol** 1990 Apr;35(4):4-10 (53 ref.) (Rus)
[Hygienic problems of disinfection and utilization of manure at poultry-breeding farms] Polovtsev OP, et al. **Gig Sanit** 1990 Mar;(3):25-8 (Rus)
[Biotechnological approaches to the creation of antimalarial vaccines] Lalaiants IE, et al. **Med Parazitol (Mosk)** 1990 Jan-Feb;(1):53-7 (31 ref.) (Eng. Abstr.) (Rus)

ORGANIZATION & ADMINISTRATION

Leading biotechnology companies quit the IBA [news] Gershon D. **Nature** 1990 Apr 5;344(6266):481
Biotechnology: Celltech to change hands? [news] Newark P. **Nature** 1989 Nov 23;342(6248):334
Exploitation of biotechnology in a large company. Dart EC.

Philos Trans R Soc Lond [Biol] 1989 Aug 31; 324(1224):599–611

Exploitation of biotechnology in a smaller company. Fairtlough GH. **Philos Trans R Soc Lond [Biol]** 1989 Aug 31;324(1224):589–97

The management and coordination of biotechnology in the U.K. 1980–88. Sharp M.
Philos Trans R Soc Lond [Biol] 1989 Aug 31; 324(1224):509–20; discussion 520–3

STANDARDS

Notes to applicants for marketing authorizations on the production and quality control of medicinal products derived by recombinant DNA technology. Committee for Proprietary Medicinal Products: Ad Hoc Working Party on Biotechnology/Pharmacy. **J Biol Stand** 1989 Jul; 17(3):223–31

EEC guidelines on medicinal products derived from modern biotechnological processes. Sauer F. **J Biol Stand** 1989 Jul; 17(3):201–2

Review of biosafety guidelines. Biosafety Task Force, Parenteral Drug Association. **J Parenter Sci Technol** 1989 Nov–Dec;43(6):252–8

Current practices in endotoxin and pyrogen testing in biotechnology. The Quality Assurance/Quality Control Task Group. Parenteral Drug Association.
J Parenter Sci Technol 1990 Jan–Feb;44(1):39–45

Data sharing: a declining ethic? [news] Marshall E.
Science 1990 May 25;248(4958):952–7

TRENDS

Recent advances in gastrointestinal malignancy. Cuschieri A. **Ann Chir Gynaecol** 1989;78(3):228–37 (58 ref.)

Present status of genetic engineering and biotechnology in South Korea. Cho MJ. **Crit Rev Biotechnol** 1990; 10(1):47–67 (293 ref.)

Future growth in biotechnology in the developing countries. Riazuddin S, et al. **Genome** 1989;31(2):1042–5

Biotechnology and the Third World: the missing link between research and applications. Zilinskas RA. **Genome** 1989; 31(2):1046–54 (11 ref.)

'90s technology will cure many health care ills. Kiplinger AH, et al. **Hospitals** 1990 Jan 5;64(1):80

Biotechnology, cost concerns dominate in 1989. Souhrada L. **Hospitals** 1989 Dec 20;63(24):32

The next decade of biotechnology—where are we going? Sterling J. **J Parenter Sci Technol** 1990 Mar–Apr; 44(2):66–73

Biotechnology policy and achievement 1980–88. Coleman RF. **Philos Trans R Soc Lond [Biol]** 1989 Aug 31; 324(1224):439–45; discussion 445–6 (2 ref.)

[Biotechnology in perspective] Brand A.
Tijdschr Diergeneeskd 1990 Jun 15;115(12):563–9 (Eng. Abstr.) **(Dut)**

[Animals in biotechnology: chip or resource] Rozemond H. **Tijdschr Diergeneeskd** 1990 Jun 15;115(12):575–85 (Eng. Abstr.) **(Dut)**

[World trends in the development of biotechnology] Galiama DV. **Mikrobiol Zh** 1989 Nov–Dec;51(6):94–9 (Eng. Abstr.) **(Rus)**

BIOTIN

Development of a sensitive enzyme immunoassay for LH determination in bovine plasma using the streptavidin–biotin technique. Mutayoba BM, et al.
Acta Endocrinol (Copenh) 1990 Feb;122(2):227–32

Detection and typing of human papillomavirus in histologic specimens by in situ hybridization with biotinylated DNA probes. Garuti G, et al. **Am J Clin Pathol** 1989 Nov; 92(5):604–12

Heightened sensitivity of quantitative ELISA for IgM rheumatoid factor with the use of the biotin–streptavidin system. Moxley G. **Am J Clin Pathol** 1989 Nov;92(5):630–6

Detection of DNA targets with biotinylated and fluoresceinated RNA probes. Effects of the extent of derivitization on detection sensitivity. Folsom V, et al.
Anal Biochem 1989 Nov 1;182(2):309–14

Biotinylation of double stranded DNA after transamination. Avignolo C, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):243–50

Synthesis in vitro and application of biotinylated DNA probes for human papilloma virus type 16 by utilizing the polymerase chain reaction. Day PJ, et al. **Biochem J** 1990 Apr 1;267(1):119–23

Activation of immobilized, biotinylated choleragen AI protein by a 19-kilodalton guanine nucleotide–binding protein. Noda M, et al. **Biochemistry** 1989 Sep 19; 28(19):7936–40

Improved purification of human lactate dehydrogenase isoenzyme-3 and studies with its fluorescein isothiocyanate and biotin conjugates. Weijers RN, et al. **Clin Chem** 1990 Jan;36(1):59–64

Estimation of biotinylated lectin by isoelectric focusing. Harada H, et al. **Electrophoresis** 1990 Jun;11(6):505–6

Use of the biotin–avidin system for labelling, isolation and characterization of neural cell–surface proteins. von Boxberg Y, et al. **Eur J Biochem** 1990 Jun 20;190(2):249–56

Selective isolation of individual cell surface proteins from tissue culture cells by a cleavable biotin label. Busch G, et al. **Eur J Cell Biol** 1989 Dec;50(2):257–62

Site-specific radiolabeling of monoclonal antibodies with biotin/streptavidin. del Rosario RB, et al.
Int J Rad Appl Instrum [B] 1989;16(5):525–9

Characterization of fully active biotinylated parathyroid hormone analogs. Application to fluorescence-activated cell sorting of parathyroid hormone receptor bearing cells. Abou-Samra AB, et al. **J Biol Chem** 1990 Jan 5; 265(1):58–62

Biotin–tubulin incorporates into kinetochore fiber microtubules during early but not late anaphase. Wadsworth P, et al. **J Cell Biol** 1989 Nov;109(5):2257–65

Simultaneous anterograde labelling of two afferent pathways to the same target area with Phaseolus vulgaris leucoagglutinin and Phaseolus vulgaris leucoagglutinin conjugated to biotin or dinitrophenol. Antal M, et al.
J Chem Neuroanat 1990 Jan–Feb;3(1):1–9

Affinity cytochemical labeling of glomerular basement membrane anionic sites using specific biotinylation and colloidal gold probes. Bertolatus JA.
J Histochem Cytochem 1990 Mar;38(3):377–84

Epitope analysis: biotinylated short peptides as inhibitors of anti–peptide antibody. Von Grünigen R, et al.
J Immunol Methods 1989 Dec 20;125(1–2):143–6

Improved sensitivity of detection by avidin–biotin complex (ABC) immunocytochemistry in Epstein–Barr virus serology. Thoe SY, et al. **J Med Virol** 1989 Dec;29(4):311–4

Isolation and characterization of hormone receptors. Finn FM, et al. **Methods Enzymol** 1990;184:244–74

Z–DNA affinity chromatography. Fishel R, et al.
Methods Enzymol 1990;184:328–40

Biotinylation of peptide hormones: structural analysis and application to flow cytometry. Newman W, et al.
Methods Enzymol 1990;184:275–85

Antibodies biotinylated via sugar moieties. O'Shannessy DJ.
Methods Enzymol 1990;184:162–6

Avidin–biotin system in enzyme immunoassays. Ternynck T, et al. **Methods Enzymol** 1990;184:469–81

Selective precipitation of biotin–labeled antigens or monoclonal antibodies by avidin for determining epitope specificities and affinities in solution–phase assays. Wagener C, et al. **Methods Enzymol** 1990;184:518–29

Avidin–biotin mediated immunoassays: overview. Wilchek M, et al. **Methods Enzymol** 1990;184:467–9 (9 ref.)

Preparation of affinity–purified, biotinylated tetanus toxin, and characterization and localization of cell surface binding sites on nerve growth factor–treated PC12 cells. Fujita K, et al. **Neurochem Res** 1990 Apr;15(4):373–83

The preparation of polyamide–oligonucleotide probes containing multiple non–radioactive labels. Haralambidis J, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):501–5

An easy method to check the efficiency of biotin end–labelling of DNA–fragments. Holmstrøm K, et al.
Nucleic Acids Res 1990 Aug 11;18(15):4632

A protected biotin containing deoxycytidine building block for solid phase synthesis of biotinylated oligonucleotides. Pieles U, et al. **Nucleic Acids Res** 1990 Aug 11; 18(15):4355–60

Synthesis and use of labelled nucleoside phosphoramidite building blocks bearing a reporter group: biotinyl, dinitrophenyl, pyrenyl and dansyl. Roget A, et al.
Nucleic Acids Res 1989 Oct 11;17(19):7643–51

The use of biotin–labelled, synthetic DNA oligomers for the detection and identification of Plasmodium falciparum. Hughes MA, et al. **Parasitology** 1990 Jun;100 Pt 3:383–7

Avidin–biotin technology ten years on: has it lived up to its expectations? Wilchek M, et al. **Trends Biochem Sci** 1989 Oct;14(10):408–12 (29 ref.)

Direct hybridization of biotin–labeled probes in dried agarose gels. Gontijo NF, et al. **Trends Genet** 1990 Jan;6(1):3

[Human papillomavirus typing by molecular hybridization in situ with biotinylated probes. Optimization of sample preparation and hybridization time] Guérin–Reverchon I, et al. **Ann Pathol** 1990;10(3):201–5 (Eng. Abstr.) **(Fre)**

[Evaluation of a biotinylated probe for identification of Neisseria gonorrhoeae] Bollet C, et al.
Pathol Biol (Paris) 1989 Oct;37(8):897–900 (Eng. Abstr.) **(Fre)**

[Evaluation of the relative effectiveness of hybridization probes prepared by action of hydrazides of biotin derivatives on DNA] Karpyshev NN, et al.
Bioorg Khim 1990 May;16(5):605–9 (Eng. Abstr.) **(Rus)**

[Use of avidin for speedy clearance of biotinylated immunoglobulins from the blood flow] Sinitsyn VV, et al.
Biull Eksp Biol Med 1990 Jun;109(6):567–9 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Requirement of high biotin doses in a case of biotinidase deficiency. Riudor E, et al. **J Inherited Metab Dis** 1989; 12(3):338–9

[Biotinidase deficiency: a congenital metabolic disease which can be successfully treatment with vitamin H] Nothjunge J, et al. **Monatsschr Kinderheilkd** 1989 Nov;137(11):737–40 (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES

Application of a subtraction hybridization technique involving photoactivatable biotin and organic extraction to solution hybridization analysis of genomic DNA. Barr FG, et al. **Anal Biochem** 1990 May 1;186(2):369–73

Dissociative binding of alpha– and beta–sulphoxides of biotinylamidoethyl–3–(4–hydroxy–3–[125I]iodophenyl) propionamide to avidin. Garlick RK, et al. **Biochem J** 1990 Jun 15;268(3):611–3

Synthesis and activity of a novel, irreversible inhibitor of cathepsin B. Cullen BM, et al. **Biochem Soc Trans** 1990 Apr;18(2):315–6

Nonisotopic labelling of a variable number of tandem repeat probe by nick translation with biotinylated nucleotides. Rose M, et al. **Exp Clin Immunogenet** 1990;7(3):200–2

Cloning and characterization of the Bacillus sphaericus genes controlling the bioconversion of pimelate into dethiobiotin. Gloeckler R, et al. **Gene** 1990 Mar 1;87(1):63–70

Non–isotopic RNA probes. Comparison between different labels and detection systems. Giaid A, et al.
Histochemistry 1989;93(2):191–6

Synthesis of a biotinylated, iodinatable, and photoactivatable probe for angiotensin receptors. Seyer R, et al.
Int J Pept Protein Res 1989 Sep;34(3):235–45

Biotinylation of reactive amino groups in native recombinant human interleukin–1 beta. Yem AW, et al. **J Biol Chem** 1989 Oct 25;264(30):17691–7

Biotinyl–estradiol derivatives in enzyme immunoassays: structural requirements for optimal antibody binding. Tiefenauer LX, et al. **J Steroid Biochem** 1990 May; 35(6):633–9

Localization of ganglioside GM1 with biotinylated choleragen. Asou H. **Methods Enzymol** 1990;184:405–8

Double fluorescence immunolabeling studies. Dutton AH, et al. **Methods Enzymol** 1990;184:343–53

2–Iminobiotin–containing reagent and affinity columns. Fudem–Goldin B, et al. **Methods Enzymol** 1990;184:167–73

Chemically cleavable biotin–labeled nucleotide analogs. Herman TM, et al. **Methods Enzymol** 1990;184:584–8

Probing adenosine receptors using biotinylated purine derivatives. Jacobson KA. **Methods Enzymol** 1990; 184:668–71

Biotinylated nucleotides for labeling and detecting DNA. Klevan L, et al. **Methods Enzymol** 1990;184:561–77

Biotinylated psoralen derivative for labeling nucleic acid hybridization probes. Levenson C, et al.
Methods Enzymol 1990;184:577–83

Preparation and uses of photobiotin. McInnes JL, et al.
Methods Enzymol 1990;184:588–600

Probing beta–adrenergic receptors. Meier KE, et al.
Methods Enzymol 1990;184:660–8

Biotinylation of peptide hormones: structural analysis and application to flow cytometry. Newman W, et al.
Methods Enzymol 1990;184:275–85

Biotinylestradiol for purification of estrogen receptor. Redeuilh G, et al. **Methods Enzymol** 1990;184:292–300

Visualization of adenosinetriphosphatase site of myosin using photoreactive adenosine 5'-diphosphate analog. Sutoh K.
Methods Enzymol 1990;184:409–15

Biotinylated protein A in immunoassay. Takashima I, et al.
Methods Enzymol 1990;184:497–500

Direct incorporation of biotin into DNA. Wilchek M, et al.
Methods Enzymol 1990;184:608–12

Biotin–containing reagents. Wilchek M, et al.
Methods Enzymol 1990;184:123–38

Biotin as a probe of the surface of Ascaris suum developmental stages. Hill DE, et al.
Mol Biochem Parasitol 1990 Jun;41(1):45–52

Rapid detection of herpes simplex virus DNA by in situ hybridization with photobiotin–labelled double–stranded DNA probes. Chantratita W, et al. **Mol Cell Probes** 1989 Dec;3(4):363–73

Biotinyl and phosphotyrosinyl phosphoramidite derivatives useful in the incorporation of multiple reporter groups on synthetic oligonucleotides. Misiura K, et al.
Nucleic Acids Res 1990 Aug 11;18(15):4345–54

Detection of single base mutation in beta–thalassemia using a biotinylated oligonucleotide probe. Yamane A, et al.
Nucleic Acids Symp Ser 1989;(21):9–10

ANALYSIS

Detection of chromogranins A and B in endocrine tissues with radioactive and biotinylated oligonucleotide probes. Lloyd RV, et al. **Am J Surg Pathol** 1990 Jan;14(1):35–43

Inhibition of the streptavidin–biotin interaction by milk. Hoffman WL, et al. **Anal Biochem** 1989 Sep;181(2):318–20

Bioluminescent assays using glucose–6–phosphate dehydrogenase: application to biotin and streptavidin detection. Térouanne B, et al. **Anal Biochem** 1989 Jul; 180(1):43–9

Continuous on–line monitoring of biomolecules based on automated homogeneous enzyme–linked competitive binding assays. Daunert S, et al. **Anal Chem** 1990 Feb 1; 62(3):314–8

Interaction between biotin lipids and streptavidin in monolayers: formation of oriented two–dimensional protein domains induced by surface recognition. Blankenburg R, et al. **Biochemistry** 1989 Oct 3;28(20):8214–21

Studies of the reversible binding of biotin to human plasma. Mock DM, et al. **J Nutr** 1990 Apr;120(4):375–81

Biotin analysis of commercial vitamin and other nutritional supplements. Tolaymat N, et al. **J Nutr** 1989 Oct; 119(10):1357–60

Colorimetric enzyme assays for avidin and biotin. Bayer EA, et al. **Methods Enzymol** 1990;184:217–23

Monoclonal antibody to biotin. Dakshinamurti K, et al.
Methods Enzymol 1990;184:111–9

Enzymatic and radioactive assays for biotin, avidin, and

streptavidin. Groman EV, et al. **Methods Enzymol** 1990; 184:208–17

Sequential solid–phase assay for biotin based on 125I–labeled avidin. Mock DM. **Methods Enzymol** 1990;184:224–33

BIOSYNTHESIS

Nucleotide sequence of the bioH gene of Escherichia coli. O'Regan M, et al. **Nucleic Acids Res** 1989 Oct 11; 17(19):8004

BLOOD

Indicators of biotin status: a study of patients on prolonged total parenteral nutrition. Velázquez A, et al. **Eur J Clin Nutr** 1990 Jan;44(1):11–6

[Significance of biotin analysis in clinical tests] Sasaki M, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:620–3 **(Jpn)**

[Clinical evaluation of serum biotin levels and biotinidase activities in patients with various liver diseases] Nagamine T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 May; 87(5):1168–74 (Eng. Abstr.) **(Jpn)**

[Dynamics of absorption of C–14–biotin by blood cells and plasma protein binding in ontogenesis] El'kina VA, et al. **Fiziol Zh** 1990 May–Jun;36(3):86–90 (Eng. Abstr.) **(Rus)**

DEFICIENCY

Fatty acid alterations and carboxylase deficiencies in the skin of biotin–deficient rats. Proud VK, et al. **Am J Clin Nutr** 1990 May;51(5):853–8

Effect of dietary palm kernel oil and biotin on the fatty liver and kidney syndrome in broiler chicken. Oloyo RA, et al. **Beitr Trop Landwirtsch Veterinarmed** 1989;27(3):347–55

Biotin studies in pigs. 1. Biotin deficiency in the young pig. Kopinski JS, et al. **Br J Nutr** 1989 Nov;62(3):751–9

Testicular function in biotin–deficient adult rats. Paulose CS, et al. **Horm Metab Res** 1989 Dec;21(12):661–5

Is biotin deficiency teratogenic in mice? [letter; comment] Heard GS, et al. **J Nutr** 1989 Sep;119(9):1348–50 Comment on: J Nutr 1989 Feb;119(2):255–61.

Evidence for a pathogenic role of omega 6 polyunsaturated fatty acid in the cutaneous manifestations of biotin deficiency. Mock DM. **J Pediatr Gastroenterol Nutr** 1990 Feb;10(2):222–9

DIAGNOSTIC USE

Application of the avidin–biotin–peroxidase complex (ABC–peroxidase) technique to the identification of human papillomavirus antigens on semithin sections by electron microscopy. De Aloysio G, et al. **Am J Dermatopathol** 1989 Dec;11(6):541–3

In situ hybridization using biotin–labeled oligonucleotides: probe labeling and procedures for mRNA detection. Larsson LI. **Arch Histol Cytol** 1989;52 Suppl:55–62 (45 ref.)

Biotinylated erythropoietin [letter; comment] Newman W. **Blood** 1989 Dec;74(8):2772–3 Comment on: Blood 1989 Aug 15;74(3):952–8.

Disulfide bond–targeted radiolabeling: tumor specificity of a streptavidin–biotinylated monoclonal antibody complex. del Rosario RB, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):804s–808s

Highly sensitive biotin–labelled hybridization probe. Arakawa H, et al. **Chem Pharm Bull (Tokyo)** 1989 Jul; 37(7):1831–3

Intraperitoneal radio–localization of tumors pre–targeted by biotinylated monoclonal antibodies. Paganelli G, et al. **Int J Cancer** 1990 Jun 15;45(6):1184–9

Application of avidin–biotin technology to affinity–based separations. Bayer EA, et al. **J Chromatogr** 1990 Jun 27; 510:3–11 (37 ref.)

Purification of gonadotropin releasing hormone receptors using the avidin–biotin technique. Hazum E. **J Chromatogr** 1990 Jun 27;510:233–8

Stability and localization of biotin–labeled murine monoclonal antibody to human gastric cancer in normal mice and nude mice–human tumor models. Yokota T, et al. **J Histochem Cytochem** 1990 Apr;38(4):585–8

Photoaffinity, biotinyl, and iodo analogues as probes for vasotocin receptors. Buku A, et al. **J Med Chem** 1989 Nov; 32(11):2432–5

Highly sensitive and specific non–radioactive biotinylated probes for dot–blot, Southern and colony hybridizations. Eweida M, et al. **J Virol Methods** 1989 Oct;26(1):35–43

A comparison of biotin– and 35S–based in situ hybridization methodologies for detection of human papillomavirus DNA [published erratum appears in Lab Invest 1989 Nov;61(5):538] Nuovo GJ, et al. **Lab Invest** 1989 Oct; 61(4):471–6

Avidin–biotin technology. **Methods Enzymol** 1990;184:1–671

Biotin–binding proteins: overview and prospects. Bayer EA, et al. **Methods Enzymol** 1990;184:49–51 (10 ref.)

Phycobiliprotein–avidin and phycobiliprotein–biotin conjugates. Glazer AN, et al. **Methods Enzymol** 1990; 184:188–94

Avidin–biotin technology. Reflections. Richards FM. **Methods Enzymol** 1990;184:3–5 (13 ref.)

Applications of avidin–biotin technology: literature survey. Wilchek M, et al. **Methods Enzymol** 1990;184:14–45 (387 ref.)

Introduction to avidin–biotin technology. Wilchek M, et al. **Methods Enzymol** 1990;184:5–13 (55 ref.)

Species identification of blood stains using a biotin–labeled DNA probe. Tajima N, et al. **Nippon Hoigaku Zasshi** 1989 Apr;43(2):117–21

Biotin and phosphorus–isotopic labelled DNA/RNA probes for the detection of human papilloma virus sequences. Schön HJ, et al. **Wien Klin Wochenschr** 1990 Aug 3; 102(15):449–54

[The chemical modification of immunoglobulins for accelerating their elimination from the blood flow during radioimmunodiagnosis] Mukhamedova NM, et al. **Biull Eksp Biol Med** 1989 Dec;108(12):705–7 (Eng. Abstr.) **(Rus)**

[Biotinylated oligonucleotides as probes in the method of molecular hybridization] Badashkeeva AG, et al. **Mol Biol (Mosk)** 1989 Sep–Oct;23(5):1221–6 (16 ref.) (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Characterization of model antigens composed of biotinylated haptens bound to avidin. Kane P, et al. **Immunol Invest** 1990 Feb;19(1):1–25

Probing the structure of processed antigen by using biotin and avidin. MHC–dependent inhibition of responses to selected biotinyl–insulin derivatives. Jensen PE, et al. **J Immunol** 1989 Dec 1;143(11):3423–9

Antigen– versus antibody–immobilized ELISA procedures based on a biotinyl–estradiol conjugate. Bodmer DM, et al. **J Steroid Biochem** 1989 Dec;33(6):1161–6

METABOLISM

In vivo aging of red cell enzymes: study of biotinylated red blood cells in rabbits. Zimran A, et al. **Am J Hematol** 1990 Apr;33(4):249–54

Na(+)–dependent biotin transport into brush–border membrane vesicles from rat kidney. Baur B, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):F840–7

Uptake of biotin by native Xenopus laevis oocytes. Said HM, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):C397–401

A method for the quantitation of hyaluronan (hyaluronic acid) in biological fluids using a labeled avidin–biotin technique. Kongtawelert P, et al. **Anal Biochem** 1990 Mar; 185(2):313–8

Plants contain multiple biotin enzymes: discovery of 3–methylcrotonyl–CoA carboxylase, propionyl–CoA carboxylase and pyruvate carboxylase in the plant kingdom. Wurtele ES, et al. **Arch Biochem Biophys** 1990 Apr; 278(1):179–86

Dissociative binding of alpha– and beta–sulphoxides of biotinylamidoethyl–3–(4–hydroxy–3–[125I]iodophenyl) propionamide to avidin. Garlick RK, et al. **Biochem J** 1990 Jun 15;268(3):611–3

Studies on the biotin–binding sites of avidin and streptavidin. Tyrosine residues are involved in the binding site. Gitlin G, et al. **Biochem J** 1990 Jul 15;269(2):527–30

Binding and internalization of biotinylated interleukin–2 in human lymphocytes. Peters DK, et al. **Blood** 1990 Jul 1; 76(1):97–104

Intestinal distribution and absorption of biotin in the chicken. Bryden WL. **Br J Nutr** 1989 Sep;62(2):389–98

Biotin studies in pigs. 2. The biotin requirement of the growing pig. Kopinski JS, et al. **Br J Nutr** 1989 Nov; 62(3):761–6

Biotin studies in pigs. 3. Biotin absorption and synthesis. Kopinski JS, et al. **Br J Nutr** 1989 Nov;62(3):767–72

Biotin studies in pigs. 4. Biotin availability in feedstuffs for pigs and chickens. Kopinski JS, et al. **Br J Nutr** 1989 Nov; 62(3):773–80

Biotin studies in pigs. 5. The post–ileal absorption of biotin. Kopinski JS, et al. **Br J Nutr** 1989 Nov;62(3):781–9

Effect of aging on intestinal biotin transport in the rat. Said HM, et al. **Exp Gerontol** 1990;25(1):67–73

Synthesis of a biotinylated, iodinatable, and photoactivatable probe for angiotensin receptors. Seyer R, et al. **Int J Pept Protein Res** 1989 Sep;34(3):235–45

Uptake and clearance rates of biotin in pig plasma following biotin injections. Bryant KL, et al. **Int J Vitam Nutr Res** 1990;60(1):52–7

Biotination of proteins in vivo. A post–translational modification to label, purify, and study proteins. Cronan JE Jr. **J Biol Chem** 1990 Jun 25;265(18):10327–33

Cooperative biotin binding by streptavidin. Electrophoretic behavior and subunit association of streptavidin in the presence of 6 M urea. Sano T, et al. **J Biol Chem** 1990 Feb 25;265(6):3369–73

Incorporation and turnover of biotin–labeled actin microinjected into fibroblastic cells: an immunoelectron microscopic study. Okabe S, et al. **J Cell Biol** 1989 Oct; 109(4 Pt 1):1581–95

Preparation, application and biological characterization of interleukin–1 beta mutant protein biotinylated at a single site. Chollet A, et al. **J Immunol Methods** 1990 Mar 9; 127(2):179–85

A fluorometric method for determining the degree of biotinylation of proteins. Der–Balin GP, et al. **J Immunol Methods** 1990 Feb 9;126(2):281–5

Protein biotinylation. Bayer EA, et al. **Methods Enzymol** 1990;184:138–60

Nonavidin biotin–binding proteins. Dakshinamurti K, et al. **Methods Enzymol** 1990;184:93–102

Prevention of nonspecific binding of avidin. Duhamel RC, et al. **Methods Enzymol** 1990;184:201–7

Fluorometric assay for avidin–biotin interaction. Mock DM, et al. **Methods Enzymol** 1990;184:234–40

Enzymatic C–terminal biotinylation of proteins. Schwarz A, et al. **Methods Enzymol** 1990;184:160–2

Complex neoglycoproteins. Shao MC, et al. **Methods Enzymol** 1990;184:653–9

Biotin. Dakshinamurti K, et al. **Vitam Horm** 1989;45:337–84 (225 ref.)

PHARMACOKINETICS

Biotin transport is regulated. Urban E. **Gastroenterology** 1990 Jan;98(1):242–3

PHARMACOLOGY

Tissue distribution of avidin and streptavidin injected to mice. Effect of avidin carbohydrate, streptavidin truncation and exogenous biotin. Schechter B, et al. **Eur J Biochem** 1990 Apr 30;189(2):327–31

Disulfide linkage of biotin identifies a 106–kDa Ca2+ release channel in sarcoplasmic reticulum. Zaidi NF, et al. **J Biol Chem** 1989 Dec 25;264(36):21737–47

Relationships between biotin and thymus morphology, and thymic and plasma peptides controlling DNA transcription. Moretti P, et al. **Thymus** 1990 Mar;15(2):79–92

[The effects of biotin on the metabolism of ammonia and amino acids in urease–induced hyperammonemic rats] Nagamine T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jul;86(7):1519–24 (Eng. Abstr.) **(Jpn)**

RADIATION EFFECTS

Direct effects of radiation on the avidin–biotin system. Absence of energy transfer. Kempner ES, et al. **J Biol Chem** 1990 Sep 15;265(26):15776–81

THERAPEUTIC USE

Biotin–responsive infantile encephalopathy: EEG–polygraphic study of a case. Colamaria V, et al. **Epilepsia** 1989 Sep–Oct;30(5):573–8

Holocarboxylase synthetase deficiency: 9–year follow–up of a patient on chronic biotin therapy and a review of the literature. Michalski AJ, et al. **J Inherited Metab Dis** 1989; 12(3):312–6 (19 ref.)

Clinical study on the effect of biotin on skin conditions in dogs. Frigg M, et al. **Schweiz Arch Tierheilkd** 1989; 131(10):621–5

TOXICITY

Teratogen susceptibility of XO mothers and XO embryos in mice. Endo A, et al. **Teratology** 1989 Nov;40(5):525–9

BIOTRANSFORMATION

Selective biotransformations. Patents and literature. Dordick JS. **Appl Biochem Biotechnol** 1989 Dec;22(3):361–73

Activation of promutagenic chemicals by Streptomyces griseus containing cytochrome P–450soy. Sariaslani FS, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):743–9

Biotransformation enzymes in the rodent nasal mucosa: the value of a histochemical approach. Bogdanffy MS. **Environ Health Perspect** 1990 Apr;85:177–86 (54 ref.)

Dietary factors in mammalian toxicity of chemicals. Iyaniwura TT. **Vet Hum Toxicol** 1990 Apr;32(2):106–10

The use of porcine hepatocytes for biotransformation studies of veterinary drugs. Hoogenboom LA, et al. **Xenobiotica** 1989 Nov;19(11):1207–19

Effects of mutagenic and non–mutagenic aniline derivatives on rat liver drug–metabolizing enzymes. Wu K, et al. **Xenobiotica** 1989 Nov;19(11):1275–83

DRUG EFFECTS

The influence of acute phenytoin administration on biotransformation and lipid peroxidation in the liver of rats of different ages. Jahn F, et al. **Biochem Pharmacol** 1989 Nov 15;38(22):4148–51

PHYSIOLOGY

Studies on the in–vitro biotransformation in patients with liver diseases. Truckenbrodt J, et al. **Gastroenterol J** 1989; 49(3):126–8

[Resorption and biotransformation of model substances in primary idiopathic hemochromatosis (siderophilia)] Hoffmann A, et al. **Gastroenterol J** 1989;49(3):113–7 (Eng. Abstr.) **(Ger)**

[Biotransformation in liver damage] Jorke D, et al. **Gastroenterol J** 1990;50(1):16–23 (13 ref.) (Eng. Abstr.) **(Ger)**

[The main pathogenetic mechanisms of disorders of the detoxication function of the liver in endogenous toxemia of various etiologies] Krakovskiĭ ME, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):70–6 (Eng. Abstr.) **(Rus)**

BIOTYPING see **BACTERIAL TYPING TECHNICS**

BIPERIDEN see under **PIPERIDINES**

BIPHENYL COMPOUNDS

ADMINISTRATION & DOSAGE

Proliferative response of renal pelvic epithelium in rats to oral administration of ortho-phenylphenol, sodium ortho-phenylphenate and diphenyl. Shibata MA, et al. **Cancer Lett** 1989 Nov 15;48(1):19-28

ADVERSE EFFECTS

Phase I and pharmacokinetic study of brequinar sodium (NSC 368390). Noe DA, et al. **Cancer Res** 1990 Aug 1; 50(15):4595-9

ANALYSIS

[A study of the quality of Fujian native Magnolia officinalis Rehd. et Wils. var. biloba Rehd. et Wils.] Li Z, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Jul;14(7):399-401, 446 (Eng. Abstr.) **(Chi)**

CHEMICAL SYNTHESIS

[Lactones. 22. Synthesis and reduction of alpha-aminomethylene-delta,delta-diphenyl-delta-valerolactones] Lehmann J, et al. **Arch Pharm (Weinheim)** 1990 Feb;323(2):117-20 (Eng. Abstr.) **(Ger)**

METABOLISM

Characteristics of [3H]-GR 32191 binding to the thromboxane (TP) receptor of human platelets. Armstrong RA, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:843P

Cloning and expression of genes involved in 4-chlorobiphenyl transformation by Pseudomonas testosteroni: homology to polychlorobiphenyl-degrading genes in other bacteria. Ahmad D, et al. **Gene** 1990 Jan 31;86(1):53-61

Molecular relationship of chromosomal genes encoding biphenyl/polychlorinated biphenyl catabolism: some soil bacteria possess a highly conserved bph operon. Furukawa K, et al. **J Bacteriol** 1989 Oct;171(10):5467-72

Pseudomonas putida KF715 bphABCD operon encoding biphenyl and polychlorinated biphenyl degradation: cloning, analysis, and expression in soil bacteria. Hayase N, et al. **J Bacteriol** 1990 Feb;172(2):1160-4

Effects of plasma protein binding displacement on the pharmacokinetics, tissue and tumor concentrations and efficacy of brequinar, a highly protein-bound antitumor agent. Aungst BJ, et al. **J Pharmacol Exp Ther** 1990 Apr; 253(1):230-6

PHARMACOKINETICS

Human and dog, but not rat, isolated hepatocytes have decreased foreign compound-metabolizing activity compared to liver slices. Powis G, et al. **Drug Metab Dispos** 1989 Sep-Oct;17(5):526-31

Pharmacokinetics of Brequinar sodium (NSC 368390) in patients with solid tumors during a phase I study. Schwartsmann G, et al. **Eur J Cancer Clin Oncol** 1989 Dec; 25(12):1675-81

[Plasmids for biphenyl, chlorobiphenyl and metatoluylate degradation from Pseudomonas putida] Andreeva AL, et al. **Mol Gen Mikrobiol Virusol** 1989 Nov;(11):32-7 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

The relationship between dihydroorotic acid dehydrogenase and in vitro and in vivo cytostatic effects of brequinar sodium (DUP-785; NSC 368390). Peters GJ, et al. **Adv Exp Med Biol** 1989;253B:375-82

Electrophysiologic, haemodynamic and antiarrhythmic effects of the new class Ic agent 1-(2'-biphenyloxy)-2-tert.-butylamino-propanol-2-hydrochloride. Chiladakis I, et al. **Arzneimittelforschung** 1989 Sep;39(9):1130-2

Structure-activity relationship of quinoline carboxylic acids. A new class of inhibitors of dihydroorotate dehydrogenase. Chen SF, et al. **Biochem Pharmacol** 1990 Aug 15; 40(4):709-14

Retention of in vivo antipyrimidine effects of Brequinar sodium (DUP-785; NSC 368390) in murine liver, bone marrow and colon cancer. Peters GJ, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):135-44

Effects of a selective thromboxane receptor antagonist (GR32191B) and of glyceryl trinitrate on bleeding time in man. Ritter JM, et al. **Br J Clin Pharmacol** 1990 Apr; 29(4):431-6

Comparison of GR32191, R68070 and CV-4151 upon U-46619- and collagen-induced platelet aggregation in vitro and ex vivo. Watts IS, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:842P

The effect of acetylcholine depletion on behavior following traumatic brain injury. Robinson SE, et al. **Brain Res** 1990 Feb 12;509(1):41-6

Biphenyls, a new class of compound that inhibits platelet-activating factors. Takeya T, et al. **Chem Pharm Bull (Tokyo)** 1990 Feb;38(2):559-61

Pathophysiological actions of thromboxane A2 and their pharmacological antagonism by thromboxane receptor blockade with GR32191. Humphrey PP, et al. **Circulation** 1990 Jan;81(1 Suppl):I42-52; discussion I59-60

Preliminary assessment of a novel thromboxane A2 receptor-blocking drug, GR32191, in healthy subjects. Thomas M, et al. **Circulation** 1990 Jan;81(1 Suppl):I53-8; discussion I59-60

The actions of GR32191B, a thromboxane receptor antagonist, on the effects of inhaled PAF on human airways. Stenton SC, et al. **Clin Exp Allergy** 1990 May; 20(3):311-7

Central and peripheral actions of a nonpeptidic angiotensin II receptor antagonist. Koepke JP, et al. **Hypertension** 1990 Jun;15(6 Pt 2):841-7

Nonpeptide angiotensin II receptor antagonists. Studies with EXP9270 and DuP 753. Wong PC, et al. **Hypertension** 1990 Jun;15(6 Pt 2):823-34

Synergistic effect of fungicides on resistant strains of Penicillium italicum and Penicillium digitatum. Díaz Borrás A, et al. **Int J Food Microbiol** 1988 Aug;7(1):79-85

Neuromodulatory role of serotonin in the anticonvulsant activity of 2-phenylbenzoate of 3-diethylamino-1-propanol.HCl (JAW-669). Leadbetter LM, et al. **Physiol Behav** 1989 Jul;46(1):35-7

Multiple effects of honokiol on catecholamine secretion from adrenal chromaffin cells. Liu PS, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Oct;13(4):307-13

The inhibitory effect of GR32191, a thromboxane receptor blocking drug, on human platelet aggregation, adhesion and secretion. Hornby EJ, et al. **Thromb Haemost** 1989 Jun 30;61(3):429-36

[Inhibition of aromatic amino acid decarboxylases by the anti-inflammatory agent flobufen and 2',4'-difluorbiphenyl-4-acetic acid] Dršata J, et al. **Cesk Farm** 1989 Nov;38(9):407-10 (Eng. Abstr.) **(Cze)**

THERAPEUTIC USE

Phase I study of Brequinar sodium (NSC 368390) in patients with solid malignancies. Schwartsmann G, et al. **Cancer Chemother Pharmacol** 1990;25(5):345-51

Antitumor activity of brequinar sodium (Dup-785) against human head and neck squamous cell carcinoma xenografts. Braakhuis BJ, et al. **Cancer Lett** 1990 Feb;49(2):133-7

In vivo inhibition of the pyrimidine de novo enzyme dihydroorotic acid dehydrogenase by brequinar sodium (DUP-785; NSC 368390) in mice and patients. Peters GJ, et al. **Cancer Res** 1990 Aug 1;50(15):4644-9

Thromboxane receptor blockade attenuates the toxic effect of cyclosporine in experimental renal transplantation. Rossini M, et al. **Circulation** 1990 Jan;81(1 Suppl):I61-7; discussion I68

A phase I clinical and pharmacokinetic study of Brequinar sodium, DUP 785 (NSC 368390), using a weekly and a biweekly schedule. Bork E, et al. **Eur J Cancer Clin Oncol** 1989 Oct;25(10):1403-11

Antihypertensive effect of thromboxane A2 receptor blockade in genetically hypertensive rats of the Lyon strain. Geoffroy J, et al. **J Hypertens Suppl** 1989 Dec;7(6):S272-3

Thromboxane-receptor antagonist in renal transplantation. Ahonen J, et al. **Transplant Proc** 1990 Aug;22(4):1370

[Clinical effect of LM-001, prostaglandin synthetic inhibitor, on pain from urinary tract stone and vesical urgency after operation of the bladder or prostate] Nakano E, et al. **Hinyokika Kiyo** 1990 May;36(5):635-42 (Eng. Abstr.) **(Jpn)**

TOXICITY

Mono-ortho-chlorinated chlorobiphenyls: toxicity and induction of 7-ethoxyresorufin O-deethylase (EROD) activity in chick embryos. Brunström B. **Arch Toxicol** 1990; 64(3):188-92

32P-postlabelling method as a sensitive indicator for analysis of genotoxicity of biphenyl derivatives. Grether T, et al. **Arch Toxicol** 1989;63(5):423-4

Retinotoxicity of 1,4,-bis(4-aminophenoxy)-2-phenylbenzene (2-phenyl-APB-144) in albino and pigmented rats. Lee KP, et al. **Arch Toxicol** 1990;64(2):135-42

Chronic toxicity of biphenyl to Daphnia magna Straus. Gersich FM, et al. **Bull Environ Contam Toxicol** 1989 Sep; 43(3):355-62

Species differences in sodium o-phenylphenate induction of urinary bladder lesions. Hasegawa R, et al. **Cancer Lett** 1990 Apr 20;50(2):87-91

Correlation between the DNA damage in urinary bladder epithelium and the urinary 2-phenyl-1,4-benzoquinone levels from F344 rats fed sodium o-phenylphenate in the diet. Morimoto K, et al. **Carcinogenesis** 1989 Oct; 10(10):1823-7

On the etiology of subcapsular lenticular opacities produced in dogs receiving HMG-CoA reductase inhibitors. Gerson RJ, et al. **Exp Eye Res** 1990 Jan;50(1):65-78

Acute toxicity and anti acetylcholinesterase potential of some biphenyl derivatives to non target species. Rahman MF, et al. **Indian J Exp Biol** 1989 Feb;27(2):138-40

Urothelial damage and tumor initiation by urinary metabolites of sodium o-phenylphenate in the urinary bladder of female rats. Hasegawa R, et al. **Jpn J Cancer Res** 1990 May; 81(5):483-8

Metabolic activation of 2,4-dinitrobiphenyl derivatives for their mutagenicity in Salmonella typhimurium TA98. Hirayama T, et al. **Mutat Res** 1990 Mar;243(3):201-6

A comparative study of mutagenic and SOS-inducing activity of biphenyls, phenanthrenequinones and fluorenones. Vasilieva S, et al. **Mutat Res** 1990 Aug; 244(4):321-9

[A comparative analysis of mutagenic and SOS-induced activity in three classes of chemical compounds] Vasil'eva SV, et al. **Genetika** 1989 Oct;25(10):1740-6 (Eng. Abstr.) **(Rus)**

[Studies of the dependence of alkoxycyanodiphenyl toxicity on structure with the aim of health-related group standardization] Kurliandskiĭ BA, et al. **Gig Tr Prof Zabol** 1990;(4):23-6 (Eng. Abstr.) **(Rus)**

BIPHENYLAMINES see **AMINOBIPHENYL COMPOUNDS**

BIPHENYLDIAMINES see **BENZIDINES**

BIPOLAR DISORDER

Mania: important new findings. Proceedings of an educational symposium. May 7, 1989, San Francisco. **J Clin Psychiatry** 1989 Dec;50 Suppl:3-47

Recent advances in bipolar and obsessive compulsive disorders: nature and treatment. A symposium. San Francisco, California, September 21-22, 1989. Proceedings. **J Clin Psychiatry** 1990 Aug;51 Suppl:1-58

[Manic-depressive psychoses] **Seishin Shinkeigaku Zasshi** 1989;91(12):1127-37 **(Jpn)**

BLOOD

Serotonin receptor sensitivity in major depression. Kahn RS, et al. **Biol Psychiatry** 1990 Aug 15;28(4):358-62

Reduced cell membrane affinity for lithium ion during maintenance treatment of bipolar affective disorder. Mallinger AG, et al. **Biol Psychiatry** 1990 Apr 1;27(7):795-8

Neuroendocrine aspects of primary endogenous depression. X: Serum growth hormone measures in patients and matched control subjects. Rubin RT, et al. **Biol Psychiatry** 1990 May 15;27(10):1065-82

Characteristics of the in vivo RBC: plasma lithium ratio in a clinical setting. Ryan WG, et al. **Biol Psychiatry** 1989 Sep;26(5):537-40

Consistent reduction of ACTH responses to stimulation with CRH, vasopressin and hypoglycaemia in patients with major depression. Kathol RG, et al. **Br J Psychiatry** 1989 Oct;155:468-78

Lewis and ABO-Rh blood group systems in patients with bipolar affective disorder. Ertas M, et al. **Encephale** 1990 May-Jun;16(3):203-4 (11 ref.)

Osmotic behavior of erythrocytes from patients with a major affective disorder. A freeze-fracture electron microscopic study. Goekoop JG, et al. **J Affective Disord** 1990 Jun; 19(2):139-47

[3H]yohimbine binding to platelet alpha 2-adrenoceptors in depression. Katona CL, et al. **J Affective Disord** 1989 Nov-Dec;17(3):219-28

Plasma tranylcypromine: relationship to pharmacokinetic variables and clinical antidepressant actions. Mallinger AG, et al. **J Clin Psychopharmacol** 1990 Jun;10(3):176-83

Deficiency of erythrocyte sodium pump activity in bipolar manic-depressive psychosis. Hokin-Neaverson M, et al. **Life Sci** 1974 Nov 15;15(10):1739-48

Effects of lithium on platelet ionic intracellular calcium concentration in patients with bipolar (manic-depressive) disorder and healthy controls. Tan CH, et al. **Life Sci** 1990; 46(16):1175-80

Lithium distribution in mania: single-dose pharmacokinetics and sympathoadrenal function. Swann AC, et al. **Psychiatry Res** 1990 Apr;32(1):71-84

Increased plasma free serotonin but unchanged platelet serotonin in bipolar patients treated chronically with lithium. Artigas F, et al. **Psychopharmacology (Berl)** 1989; 99(3):328-32

[A study of clinical safety of lithium levels in the serum and erythrocytes] Wang W. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1990 Feb; 23(1):17-8, 61 (Eng. Abstr.) **(Chi)**

[Do Lewis and MNSS erythrocyte phenotypes predict response to lithium in manic-depressive psychosis?] Perceau A, et al. **Ann Med Psychol (Paris)** 1989 Aug; 147(6):668-72 (Eng. Abstr.) **(Fre)**

[Seasonal rhythm of melatonin in manic depressive patients] Fanget F, et al. **Encephale** 1990 May-Jun;16(3):197-202 (Eng. Abstr.) **(Fre)**

[Status-dependent neurochemical parameters in schizophrenic and affective diseases] Gross G, et al. **Fortschr Neurol Psychiatr** 1990 Apr;58(4):154-60 (Eng. Abstr.) **(Ger)**

[Determination of lithium in serum and saliva of patients with manic-depressive disorder] Koch U, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Apr;42(4):201-5 (Eng. Abstr.) **(Ger)**

[Plasma anticholinergic activity and cognitive function in geriatric patients] Thiennaus OJ, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 May; 42(5):275-81 (Eng. Abstr.) **(Ger)**

CEREBROSPINAL FLUID

[The effect of the cerebrospinal fluid from patients with manic and depressive syndromes on the social hierarchical relationships in a group of rats] Zhdanova IV, et al. **Zh Vyssh Nerv Deiat** 1990 May-Jun;40(3):558-64 (Eng.

Abstr.) (Rus)

CHEMICALLY INDUCED

Manic depression induced by dapsone in patient with dermatitis herpetiformis. Gawkrodger D. **BMJ** 1989 Sep 30;299(6703):860

Mixed bipolar disorder precipitated by pseudoephedrine hydrochloride. Dalton R. **South Med J** 1990 Jan;83(1):64–5

CLASSIFICATION

The unipolar–bipolar distinction in the characterological mood disorders. Klein DN, et al. **J Nerv Ment Dis** 1990 May;178(5):318–23

COMPLICATIONS

Rapid cycling bipolar affective disorder. I. Association with grade I hypothyroidism. Bauer MS, et al. **Arch Gen Psychiatry** 1990 May;47(5):427–32

[Clinical features of mixed affective states and their place in the dynamics of endogenous affective and schizoaffective psychoses] Sosiukalo OO. **Zh Nevropatol Psikhiatr** 1989; 89(12):59–64 (Eng. Abstr.) (Rus)

DIAGNOSIS

The heterogeneity of 3-methoxy-4-hydroxyphenylglycol levels among depressed patients. Karege F, et al. **Acta Psychiatr Scand** 1989 Nov;80(5):499–504

Serum dopamine-beta-hydroxylase activity in clinical subtypes of depression. Sapru MK, et al. **Acta Psychiatr Scand** 1989 Nov;80(5):474–8

Diagnostic and therapeutic value of testing stimulation of thyroid-stimulating hormone by thyrotropin-releasing hormone in 100 depressed patients. Vanelle JM, et al. **Acta Psychiatr Scand** 1990 Feb;81(2):156–61

Life events and the course of bipolar disorder. Ellicott A, et al. **Am J Psychiatry** 1990 Sep;147(9):1194–8

Seasonal independence of low prolactin concentration and high spontaneous eye blink rates in unipolar and bipolar II seasonal affective disorder. Depue RA, et al. **Arch Gen Psychiatry** 1990 Apr;47(4):356–64

Subcortical abnormalities detected in bipolar affective disorder using magnetic resonance imaging. Clinical and neuropsychological significance. Dupont RM, et al. **Arch Gen Psychiatry** 1990 Jan;47(1):55–9

Cognitive impairment and cerebral structure by MRI in bipolar disorder. Coffman JA, et al. **Biol Psychiatry** 1990 Jun 1;27(11):1188–96

Corpus callosum dimensions measured by magnetic resonance imaging in bipolar affective disorder and schizophrenia. Hauser P, et al. **Biol Psychiatry** 1989 Nov; 26(7):659–68

Serial dexamethasone suppression test in psychiatric inpatients. Hwu HG, et al. **Biol Psychiatry** 1990 Mar 15; 27(6):609–16

Dexamethasone suppression test in Brazil. Kerr F, et al. **Biol Psychiatry** 1990 Mar 15;27(6):678–80

Relationships between brain CT scan findings and cortisol in psychotic and nonpsychotic depressed patients. Rothschild AJ, et al. **Biol Psychiatry** 1989 Oct;26(6):565–75

Mania in the elderly [see comments] Stone K. **Br J Psychiatry** 1989 Aug;155:220–4 Comment in: Br J Psychiatry 1989 Dec;155:871–2.

The development of the concept of reactive psychoses. Strömgren E. **Br J Psychiatry Suppl** 1989 May;(4):47–50 (23 ref.)

Effect of concurrent medical illness on dexamethasone suppression test results in depressed inpatients. Cooke RG, et al. **Can J Psychiatry** 1990 Feb;35(1):31–5

Is winter depression a bipolar disorder? White DM, et al. **Compr Psychiatry** 1990 May–Jun;31(3):196–204

In search of psychological markers of bipolar manic-depressive illness (BMDI): commonalities in psychological functioning between adult euthymic BMDI patients and offspring of BMDI-affected parents. Last U, et al. **Isr J Psychiatry Relat Sci** 1989;26(1–2):75–84

Sleep patterns in borderline personality disorder. Benson KL, et al. **J Affective Disord** 1990 Apr;18(4):267–73

The factor structure of manic rating scales. Double DB. **J Affective Disord** 1990 Feb;18(2):113–9

Hormonal responses to fenfluramine in depressed and control subjects. Mitchell P, et al. **J Affective Disord** 1990 May; 19(1):43–51

Four-year follow-up of twenty-four first-episode manic patients. Tohen M, et al. **J Affective Disord** 1990 Jun; 19(2):79–86

Adolescent bipolar illness and personality disorder. Kutcher SP, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May; 29(3):355–8

Atypical outcome in attention deficit hyperactivity disorder. Schmidt K, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jul;29(4):566–70

Bipolar disorder in a prepubescent child. Tomasson K, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Mar; 29(2):308–10

Problems in diagnosing bipolar disorder in catatonic patients. Fein S, et al. **J Clin Psychiatry** 1990 May;51(5):203–5

The Brief Psychiatric Rating Scale (BPRS) and the Nurses' Observation Scale for Inpatient Evaluation (NOSIE) in the evaluation of positive and negative symptoms. Dingemans PM. **J Clin Psychol** 1990 Mar;46(2):168–74

The effect of age of onset on depression in the elderly. Herrmann N, et al. **J Geriatr Psychiatry Neurol** 1989 Oct–Dec;2(4):182–7

Voluntary control of saccadic eye movements in patients with schizophrenic and affective disorders. Fukushima J, et al. **J Psychiatr Res** 1990;24(1):9–24

Specificity of plasma HVA response to dexamethasone in psychotic depression. Wolkowitz OM, et al. **Psychiatry Res** 1989 Aug;29(2):177–86

Psychopathology, temperament, and past course in primary major depressions. 1. Review of evidence for a bipolar spectrum. Akiskal HS, et al. **Psychopathology** 1989; 22(5):268–77 (71 ref.)

Psychopathology, temperament, and past course in primary major depressions. 2. Toward a redefinition of bipolarity with a new semistructured interview for depression. Cassano GB, et al. **Psychopathology** 1989;22(5):278–88

[Percentile distribution of depression scales of the AMDP system] Reischies FM, et al. **Nervenarzt** 1990 Mar; 61(3):183–5 (Eng. Abstr.) (Ger)

DRUG THERAPY

Lithium toxicity: when is hemodialysis necessary? Hauger RL, et al. **Acta Psychiatr Scand** 1990 Jun;81(6):515–7

Lithium-induced changes in the body mass index. Mathew B, et al. **Acta Psychiatr Scand** 1989 Dec;80(6):538–40

Two regimens of lithium prophylaxis and renal function. Muir A, et al. **Acta Psychiatr Scand** 1989 Dec;80(6):579–83

Factors associated with discontinuation of long-term lithium treatment. Nilsson A, et al. **Acta Psychiatr Scand** 1989 Sep; 80(3):221–30

Psychopathology during long-term lithium treatment of patients with major affective disorders. A prospective study. Nilsson A, et al. **Acta Psychiatr Scand** 1989 Oct; 80(4):375–88

Neuroleptic-induced supersensitivity psychosis in patients with bipolar affective disorder. Steiner W, et al. **Acta Psychiatr Scand** 1990 May;81(5):437–40

A double-blind, multicentre study of paroxetine and mianserin in depression. Mertens C, et al. **Acta Psychiatr Scand Suppl** 1989;350:140

Spectrum of efficacy of valproate in 55 patients with rapid-cycling bipolar disorder. Calabrese JR, et al. **Am J Psychiatry** 1990 Apr;147(4):431–4

Clonazepam in treatment of bipolar psychotic patients after discontinuation of neuroleptics [letter] Chouinard G. **Am J Psychiatry** 1989 Dec;146(12):1642

Lithium treatment for cocaine abusers with bipolar spectrum disorders. Nunes EV, et al. **Am J Psychiatry** 1990 May; 147(5):655–7

Rapid cycling bipolar affective disorder. II. Treatment of refractory rapid cycling with high-dose levothyroxine: a preliminary study. Bauer MS, et al. **Arch Gen Psychiatry** 1990 May;47(5):435–40

Idazoxan: a selective alpha 2-antagonist and effective sustained antidepressant in two bipolar depressed patients [letter] Osman OT, et al. **Arch Gen Psychiatry** 1989 Oct; 46(10):958–9

Unnecessary confusion about opposite findings in two studies of tricyclic treatment of bipolar illness [letter] Wehr TA. **Arch Gen Psychiatry** 1990 Aug;47(8):787–8

Prior neurologic illness and the syndrome of irreversible lithium-effectuated neurotoxicity (SILENT). Adityanjee, et al. **Aust N Z J Psychiatry** 1989 Sep;23(3):422–4

Haloperidol decanoate [letter] Nasser J, et al. **Aust N Z J Psychiatry** 1989 Sep;23(3):311–2

Lithium research: state of the art [editorial] Belmaker RH, et al. **Biol Psychiatry** 1990 Jun 15;27(12):1279–81

Rapid cycling following antidepressant in an adolescent [letter] Ghadirian AM, et al. **Biol Psychiatry** 1990 May 15;27(10):1184

Paradoxical mood changes during pharmacotherapy of bipolar patients [letter] Kusalic M, et al. **Biol Psychiatry** 1990 May 15;27(10):1183–4

Inositol-1-phosphatase in red blood cells of manic-depressive patients before and during treatment with lithium. Moscovich DG, et al. **Biol Psychiatry** 1990 Mar 1;27(5):552–5

Who benefits from lithium [letter; comment] Anderson DN. **Br J Psychiatry** 1990 Mar;156:446–7 Comment on: Br J Psychiatry 1989 Oct;155:496–500.

A comparison of in-patient and out-patient prescribing. Anderson DN. **Br J Psychiatry** 1989 May;154:644–9

Tardive dyskinesia in bipolar affective disorder: relationship to lithium therapy [see comments] Dinan TG, et al. **Br J Psychiatry** 1989 Jul;155:55–7 Comment in: Br J Psychiatry 1990 Jan;156:128–9.

Comments on the Northwick Park 'Functional' Psychosis Study. Goodwin GM, et al. **Br J Psychiatry** 1989 Mar; 154:406–9

Lithium prophylaxis and expressed emotion. Priebe S, et al. **Br J Psychiatry** 1989 Mar;154:396–9

Resistant bipolar disorder [clinical conference] Thomas IG, et al. **Br J Psychiatry** 1990 Apr;156:560–4

The effect of lithium on cation transport measured in vivo in patients suffering from bipolar affective illness. Wood AJ, et al. **Br J Psychiatry** 1989 Oct;155:504–10

Lofepramine-induced hyponatraemia [letter] Wylie KR, et al. **Br J Psychiatry** 1989 Mar;154:419–20

Efficacy and tolerability of moclobemide compared with imipramine in depressive disorder (DSM-III): an Austrian double-blind, multicentre study. Baumhackl U, et al. **Br J Psychiatry Suppl** 1989 Oct;(6):78–83

Effect of a reversible monoamine oxidase-A inhibitor (moclobemide) on sleep of depressed patients. Monti JM. **Br J Psychiatry Suppl** 1989 Oct;(6):61–5

A double-blind comparative trial of moclobemide v. imipramine and placebo in major depressive episodes. Versiani M, et al. **Br J Psychiatry Suppl** 1989 Oct;(6):72–7

Intermittent lithium therapy in a bipolar patient. Ananth J, et al. **Can J Psychiatry** 1990 May;35(4):344–5

Anticonvulsants for treatment of manic depression. Delucchi GA, et al. **Cleve Clin J Med** 1989 Nov–Dec;56(8):756–61 (53 ref.)

Sex differences in bipolar affective disorder: neuroleptic dosage variance. D'Mello DA, et al. **Compr Psychiatry** 1990 Jan–Feb;31(1):80–3

The combination of lithium and carbamazepine in treatment and prevention of manic-depressive disorder: a review and a case report. Strömgren LS. **Compr Psychiatry** 1990 May–Jun;31(3):261–5 (19 ref.)

Valproic acid in bipolar disorder. Ramoran N, et al. **DICP** 1990 Mar;24(3):257–8

The use of lithium in the medically ill. DasGupta K, et al. **Gen Hosp Psychiatry** 1990 Mar;12(2):83–97 (144 ref.)

Schizophrenia and bipolar affective disorders: likenesses and differences. Klein DF. **Hillside J Clin Psychiatry** 1989; 11(1):3–15

Use of benzodiazepines [letter; comment] Salzman C, et al. **Hosp Community Psychiatry** 1990 Mar;41(3):334 Comment on: Hosp Community Psychiatry 1989 Oct;40(10):1069–71.

Lithium as an adjunct in the treatment of major depression. Browne M, et al. **Int Clin Psychopharmacol** 1990 Apr; 5(2):103–10

A comparison of fluoxetine imipramine and placebo in patients with bipolar depressive disorder. Cohn JB, et al. **Int Clin Psychopharmacol** 1989 Oct;4(4):313–22

Clonazepam and lithium—a toxic combination in the treatment of mania? Koczerginski D, et al. **Int Clin Psychopharmacol** 1989 Jul;4(3):195–9

Factors associated with relapse during maintenance treatment of affective disorders. Leverich GS, et al. **Int Clin Psychopharmacol** 1990 Apr;5(2):135–56

Characterization of abnormal respiratory movements in schizophrenic, bipolar and mentally handicapped patients with typical tardive dyskinesia. Youssef HA, et al. **Int Clin Psychopharmacol** 1989 Jan;4(1):55–9

Previous pattern of course of the illness as a predictor of response to lithium prophylaxis in bipolar patients. Maj M, et al. **J Affective Disord** 1989 Nov–Dec;17(3):237–41

Antidepressant treatment and the occurrence of mania in bipolar patients admitted for depression. Solomon RL, et al. **J Affective Disord** 1990 Apr;18(4):253–7

Lithium side effect [letter] Picker W, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May;29(3):489

Lithium-induced worsening of wintertime depression in a bipolar patient [letter] Dilsaver SC, et al. **J Clin Psychiatry** 1990 Aug;51(8):347–8

The meaning of serum lithium levels in maintenance therapy of mood disorders: a review of the literature. Gelenberg AJ, et al. **J Clin Psychiatry** 1989 Dec;50 Suppl:17–22; discussion 45–7 (69 ref.)

The biology of recurrence: new directions for the pharmacologic bridge. Goodwin FK. **J Clin Psychiatry** 1989 Dec;50 Suppl:40–4; discussion 45–7 (31 ref.)

Lithium: the present and the future. Jefferson JW. **J Clin Psychiatry** 1990 Aug;51 Suppl:4–8; discussion 17–9 (23 ref.)

Pseudotumor cerebri associated with lithium therapy in two patients. Levine SH, et al. **J Clin Psychiatry** 1990 Jun; 51(6):251–3

Non-lithium treatment for bipolar disorder. Post RM. **J Clin Psychiatry** 1990 Aug;51 Suppl:9–16; discussion 17–9 (70 ref.)

Use of clonazepam for bipolar affective disorder. Sachs GS. **J Clin Psychiatry** 1990 May;51 Suppl:31–4; discussion 50–3

Adjuncts and alternatives to lithium therapy for bipolar affective disorder. Sachs GS. **J Clin Psychiatry** 1989 Dec; 50 Suppl:31–9; discussion 45–7 (103 ref.)

Fluoxetine added to non-MAOI antidepressants converts nonresponders to responders: a preliminary report [see comments] Weilburg JB, et al. **J Clin Psychiatry** 1989 Dec; 50(12):447–9 Comment in: J Clin Psychiatry 1990 Jun;51(6):257.

Verapamil treatment of bipolar depression [letter] Deicken RF. **J Clin Psychopharmacol** 1990 Apr;10(2):148–9

Choreoathetosis induced by verapamil and lithium treatment [letter] Helmuth D, et al. **J Clin Psychopharmacol** 1989 Dec;9(6):454–5

Lithium intoxication with coadministration of a loop-diuretic [letter] Huang LG. **J Clin Psychopharmacol** 1990 Jun; 10(3):228

Successful clonazepam treatment of neuroleptic-induced akathisia in older adolescents and young adults: a double-blind, placebo-controlled study. Kutcher S, et al. **J Clin Psychopharmacol** 1989 Dec;9(6):403–6

Calcium channel blockers in affective illness: role of sodium-calcium exchange. el-Mallakh RS, et al. **J Clin Psychopharmacol** 1990 Jun;10(3):203–6 (70 ref.)

Refractoriness to lithium treatment in bipolar mania [letter] Miller F, et al. **J Clin Psychopharmacol** 1990 Jun;10(3):227

Carbamazepine auto- and hetero-induction complicating clinical care [letter] Onady AA, et al. **J Clin Psychopharmacol** 1989 Oct;9(5):387–8

The interaction of lithium with phenylbutazone in bipolar affective patients [letter] Ragheb M. **J Clin Psychopharmacol** 1990 Apr;10(2):149–50

Clinical effects of the 5-HT1A partial agonists in depression: a composite analysis of buspirone in the treatment of depression. Robinson DS, et al. **J Clin Psychopharmacol** 1990 Jun;10(3 Suppl):67S–76S

Adjunctive clonazepam for maintenance treatment of bipolar affective disorder. Sachs GS, et al. **J Clin Psychopharmacol** 1990 Feb;10(1):42–7

Valproic acid in the treatment of refractory bipolar disorder [letter] Shliselberg N, et al. **J Clin Psychopharmacol** 1990 Apr;10(2):151–2

Valproate in the treatment of rapid-cycling bipolar disorder [letter; comment] Steingard S. **J Clin Psychopharmacol** 1989 Oct;9(5):382–4 Comment on: J Clin Psychopharmacol 1988 Aug;8(4):275–9.

Carbamazepine in the prophylaxis of mood disorders. Stuppaeck C, et al. **J Clin Psychopharmacol** 1990 Feb; 10(1):39–42

Hepatotoxicity following treatment with bromperidol [letter] Van Bellinghen M, et al. **J Clin Psychopharmacol** 1989 Oct; 9(5):389–90

The efficacy of low-dose lithium: clinical, psychological and biological correlates. Abou-Saleh MT, et al. **J Psychiatr Res** 1989;23(2):157–62

Long-term effects of lithium on the kidney: functional-morphological correlations. Hetmar O, et al. **J Psychiatr Res** 1989;23(3–4):285–97

New applications of lithium therapy. Murray JB. **J Psychol** 1990 Jan;124(1):55–73 (160 ref.)

Lithium treatment reduces the renal kallikrein excretion rate. Gross P, et al. **Kidney Int** 1990 Jul;38(1):124–8

Carbamazepine in bipolar affective disorder [letter; comment] Murphy DJ, et al. **Lancet** 1989 Nov 11;2(8672):1151–2 Comment on: Lancet 1989 Sep 9;2(8663):595–7.

Long term lithium therapy in Malaysia. Ngen CC, et al. **Med J Malaysia** 1989 Sep;44(3):199–203

Lithium treatment and bipolar disorders in childhood. DeLong R. **N C Med J** 1990 Apr;51(4):152–4

Comparison of standard and low serum levels of lithium for maintenance treatment of bipolar disorder. Gelenberg AJ, et al. **N Engl J Med** 1989 Nov 30;321(22):1489–93

Serum lithium during treatment of bipolar disorder [letter] Swartz CM. **N Engl J Med** 1990 Apr 19;322(16):1159–60

Maternal lithium therapy and polyhydramnios. Ang MS, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):517–9

Maintaining remission in mood disorders. Livingston M. **Practitioner** 1989 Apr 8;233(1466):497–9

Effects of lithium on an amphetamine animal model of bipolar disorder. Cappeliez P, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(3):347–58

Pharmacotherapy of affective disorders in children and adolescents. Lapierre YD, et al. **Psychiatr Clin North Am** 1989 Dec;12(4):951–61 (48 ref.)

Cognitive impairment, clinical course and treatment history in out-patients with bipolar affective disorder: relationship to tardive dyskinesia. Waddington JL, et al. **Psychol Med** 1989 Nov;19(4):897–902

Treatment of rapid cycling bipolar illness. Post RM, et al. **Psychopharmacol Bull** 1990;26(1):37–47 (72 ref.)

Use of anticonvulsants for manic depression during pregnancy [letter] Markovitz PJ, et al. **Psychosomatics** 1990 Winter;31(1):118

Interactions between carbamazepine and birth control pills [letter] Rapport DJ, et al. **Psychosomatics** 1989 Fall; 30(4):462–4

[Confusion induced by the combination cimetidine-benzodiazepine; apropos of a case report] Bouden A, et al. **Tunis Med** 1990 Jan;68(1):63–4 (Eng. Abstr.) **(Fre)**

[Long-term catamnesis on the topic of uses and side effects of lithium prevention of phasic psychoses] Koufen H, et al. **Fortschr Neurol Psychiatr** 1989 Sep;57(9):374–82 (Eng. Abstr.) **(Ger)**

[Preventive use of lithium in affective psychoses from the internal medicine viewpoint] Müller-Oerlinghausen B. **Internist (Berl)** 1990 Jul;31(7):456–67 (84 ref.) **(Ger)**

[Acute symptoms of withdrawal lithium in bipolar affective disease (editorial)] Munitz H, et al. **Harefuah** 1990 Jan 1; 118(1):50–1 **(Heb)**

[Diagnostic and therapeutic considerations on agitated depression understood as a mixed affective state] Koukopoulos A, et al. **Minerva Psichiatr** 1989 Oct–Dec; 30(4):283–6 (Eng. Abstr.) **(Ita)**

[Benign cranial hypertension secondary to treatment with lithium] Moral Iglesias L, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Jul–Aug;17(4):251–3 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Serum dopamine-beta-hydroxylase activity in psychotic and nonpsychotic major depression: the importance of distinguishing between unipolar and bipolar disorder [letter] Rihmer Z, et al. **Acta Psychiatr Scand** 1990 Jul; 82(1):93–4

Erythrocyte membrane Na-K ATPase activity in affective disorder. Reddy PL, et al. **Biol Psychiatry** 1989 Sep; 26(5):533–7

The measurement of transmembrane cation transport in vivo in acute manic illness. Wood AJ, et al. **Br J Psychiatry** 1989 Oct;155:501–4

Erythrocyte sodium pump activity in bipolar affective disorder and other psychiatric disorders. Hokin-Neaverson M, et al. **Neuropsychobiology** 1989;22(1):1–7

Deficient erythrocyte NaK-ATPase activity in different affective states in bipolar affective disorder and normalization by lithium therapy. Hokin-Neaverson M, et al. **Neuropsychobiology** 1989;22(1):18–25

EPIDEMIOLOGY

Diagnosis change, lithium use and admissions for mania in Edinburgh. Mander AJ. **Acta Psychiatr Scand** 1989 Nov; 80(5):434–6

The contribution of childbearing to the sex difference in first admission rates for affective psychosis. Gater RA, et al. **Psychol Med** 1989 Aug;19(3):719–24

If women are more often depressed, why don't more of them kill themselves? Lester D. **Psychol Rep** 1990 Feb;66(1):258

[10 years' comparison of inpatient treated affective diseases] Wenzel R, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Feb;42(2):113–9 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Bipolar affective disorder: causes and prevention of relapse. Silverstone T, et al. **Br J Psychiatry** 1989 Mar;154:321–35 (185 ref.)

Neurodevelopmental models of mental illness [letter] Feinberg I. **Clin Genet** 1990 Jun;37(6):491–2

Cerebrovascular disease and secondary mania [clinical conference] Wilson D, et al. **Gen Hosp Psychiatry** 1990 Jul;12(4):271–5

Abnormal signal transduction: a hypothetical model for bipolar affective disorder. Lachman HM, et al. **Life Sci** 1989;45(16):1413–26

The naturally occurring rhythm of blues: winter depression. Dilsaver SC, et al. **Ohio Med** 1990 Jan;86(1):58–61

[Mood disorders and right hemisphere infarction] Danel T, et al. **Encephale** 1989 Nov–Dec;15(6):549–53 (32 ref.) (Eng. Abstr.) **(Fre)**

[Organically-induced depression] Tölle R. **Nervenarzt** 1990 Mar;61(3):176–82 (44 ref.) **(Ger)**

[Risk factors of developing a continual course of manic-depressive psychosis] Vertogradova OP, et al. **Zh Nevropatol Psikhiatr** 1990;90(4):57–61 (Eng. Abstr.) **(Rus)**

GENETICS

Nature of the genetic contribution to psychotic illness—a continuum viewpoint. Crow TJ. **Acta Psychiatr Scand** 1990 May;81(5):401–8 (64 ref.)

Bipolar affective disorder and heterozygous beta-thalassemia [letter] Bocchetta A, et al. **Am J Psychiatry** 1990 Aug; 147(8):1094

Confirmation of the relationship of HLA (chromosome 6) genes to depression and manic depression. II. The Ontario follow-up and analysis of 117 kindreds. Stancer HC, et al. **Ann Hum Genet** 1988 Oct;52 (Pt 4):279–98

X-chromosome markers and manic-depressive illness. Rejection of linkage to Xq28 in nine bipolar pedigrees. Berrettini WH, et al. **Arch Gen Psychiatry** 1990 Apr; 47(4):366–73

Linkage studies of bipolar disorder: methodologic and analytic issues. Report of MacArthur Foundation Workshop on Linkage and Clinical Features in Affective Disorders. Merikangas KR, et al. **Arch Gen Psychiatry** 1989 Dec;46(12):1137–41 (38 ref.)

Evidence against close linkage of unipolar affective illness to human chromosome 11p markers HRAS1 and INS and chromosome Xq marker DXS52. Neiswanger K, et al. **Biol Psychiatry** 1990 Jul 1;28(1):63–72

The effect of co-morbidity and penetrance estimation on the outcome of linkage analysis in a bipolar family. Wesner RB, et al. **Biol Psychiatry** 1990 Jan 15;27(2):241–4

Familial manic-depressive illness with deleted short arm of chromosome 21: coincidental or causal? el-Badramany MH, et al. **Br J Psychiatry** 1989 Dec;155:856–7

The genetics of depression and manic-depressive disorder. McGuffin P, et al. **Br J Psychiatry** 1989 Sep;155:294–304 (73 ref.)

A family study of two subgroups of schizoaffective patients. Maj M. **Br J Psychiatry** 1989 May;154:640–3

The genetics of depression: current approaches. McGuffin P, et al. **Br J Psychiatry Suppl** 1989 Oct;(6):18–26 (44 ref.)

Anhedonia and perceptual aberration in first-episode psychotic patients and their relatives. Katsanis J, et al. **J Abnorm Psychol** 1990 May;99(2):202–6

Recent developments in genetics of manic-depressive illness. Gershon ES. **J Clin Psychiatry** 1989 Dec;50 Suppl:4–7; discussion 45–7 (32 ref.)

Schizophrenic individuals with bipolar first-degree relatives: analysis of two pedigrees. Pope HG Jr, et al. **J Clin Psychiatry** 1990 Mar;51(3):97–101

Autism, profound mental retardation and atypical bipolar disorder in a 33-year-old female with a deletion of 15q12. Kerbeshian J, et al. **J Ment Defic Res** 1990 Apr;34 (Pt 2):205–10

Segregation and linkage analyses of bipolar and major depressive illnesses in multigenerational pedigrees. Cox N, et al. **J Psychiatr Res** 1989;23(2):109–23

Tyrosine hydroxylase polymorphisms associated with manic-depressive illness [letter] Leboyer M, et al. **Lancet** 1990 May 19;335(8699):1219

Tyrosine hydroxylase polymorphisms and manic-depressive illness [letter] Nöthen M, et al. **Lancet** 1990 Sep 1; 336(8714):575

Genetic linkage studies of bipolar affective disorder. Simpson SG, et al. **Md Med J** 1990 Apr;39(4):347–50

Molecular genetics and heterogeneity in manic depression. Gurling HM, et al. **Mol Neurobiol** 1988 Summer; 2(2):125–32 (20 ref.)

Re-evaluation of the linkage relationship between chromosome 11p loci and the gene for bipolar affective disorder in the Old Order Amish [see comments] Kelsoe JR, et al. **Nature** 1989 Nov 16;342(6247):238–43 Comment in: Nature 1989 Nov 16;342(6247):222.

False start on manic depression [news; comment] [see comments] Robertson M. **Nature** 1989 Nov 16; 342(6247):222 Comment on: Nature 1989 Nov 16;342(6247):238–43. Comment in: Nature 1990 Mar 22;344(6264):298–9.

REM sleep latency and morbidity risk of affective disorders in depressive illness. Mendlewicz J, et al. **Neuropsychobiology** 1989;22(1):14–7

Alpha-2-adrenoreceptor binding as a possible vulnerability marker for affective disorders. Mendlewicz J, et al. **Neuropsychobiology** 1989;22(2):61–7

Genetic linkage studies in bipolar disorder: a review. Mellon CD. **Psychiatr Dev** 1989 Summer;7(2):143–58 (54 ref.)

RFLP alleles at the tyrosine hydroxylase locus: no association found to affective disorders. Körner J, et al. **Psychiatry Res** 1990 Jun;32(3):275–80

Genetic transmission of major affective disorders: quantitative models and linkage analyses. Faraone SV, et al. **Psychol Bull** 1990 Jul;108(1):109–27 (160 ref.)

Is puerperal psychosis the same as bipolar manic-depressive disorder? A family study. Dean C, et al. **Psychol Med** 1989 Aug;19(3):637–47

Manic depression gene put in limbo [news] Barinaga M. **Science** 1989 Nov 17;246(4932):886–7

Molecular genetic studies of manic-depression and schizophrenia. Owen MJ, et al. **Trends Neurosci** 1990 Jan; 13(1):29–31 (24 ref.)

[Contribution of genetics to research in the etiology of depressive diseases] Maier W. **Z Klin Psychol Psychopathol Psychother** 1990;38(1):37–45 (26 ref.) (Eng. Abstr.) **(Ger)**

HISTORY

Historical melancholia [letter; comment] Frosch WA. **Br J Psychiatry** 1989 Nov;155:713 Comment on: Br J Psychiatry 1988 Sep;153:298–304.

IMMUNOLOGY

Lymphocyte function in major depression. Altshuler LL, et al. **Acta Psychiatr Scand** 1989 Aug;80(2):132–6

A study of the complement system in psychiatric patients. Spivak B, et al. **Biol Psychiatry** 1989 Oct;26(6):640–2

Reduced cellular immune function in major depression and mania [letter] Barsi J, et al. **Psychiatry Res** 1989 Aug; 29(2):235–7

METABOLISM

The value of TSH in affective disorders. Clower CG. **Indiana Med** 1989 Aug;82(8):608–10

Incorporation of inositol into the phosphoinositides of lymphoblastoid cell lines established from bipolar manic-depressive patients. Banks RE, et al. **J Affective Disord** 1990 May;19(1):1–8

[Manic-depressive psychosis] Nakajima T, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1370–9 **(Jpn)**

NURSING

Psychobiological indices of bipolar mood disorder: future trends in nursing care. McEnany GW. **Arch Psychiatr Nurs** 1990 Feb;4(1):29–38

PATHOLOGY

5HT2 receptor changes in major depression. Yates M, et al. **Biol Psychiatry** 1990 Mar 1;27(5):489–96

PHYSIOPATHOLOGY

Influence of stimulation parameters on auditory stimulus processing in schizophrenia and major depression: an auditory evoked potential study. Adler G, et al. **Acta Psychiatr Scand** 1990 May;81(5):453–8

Sensory gating deficits in psychiatric inpatients: relation to catecholamine metabolites in different diagnostic groups. Baker NJ, et al. **Biol Psychiatry** 1990 Mar 1;27(5):519–28

Disorders of decision in affective disease: an effect of beta-adrenergic dysfunction? Corwin J, et al. **Biol Psychiatry** 1990 Apr 15;27(8):813–33

Cognitive inflexibility and pre-frontal dysfunction in schizophrenia and mania. Morice R. **Br J Psychiatry** 1990 Jul;157:50–4

Age at puberty and mental illness. Towards a neurodevelopmental aetiology of Kraepelin's endogenous psychoses. Saugstad LF. **Br J Psychiatry** 1989 Oct; 155:536–44 (90 ref.)

Mental illness and cognition in relation to age at puberty: a hypothesis. Saugstad LF. **Clin Genet** 1989 Sep;

36(3):156–67 (93 ref.)
Mood disorders following stroke: new findings and future directions. Robinson RG, et al. **J Geriatr Psychiatry** 1989; 22(1):1–15
Blunted ACTH and cortisol response to afternoon tryptophan infusion in euthymic bipolar patients. Nurnberger JI Jr, et al. **Psychiatry Res** 1990 Jan;31(1):57–67

PREVENTION & CONTROL

ECT as prophylactic treatment for bipolar disorder [letter; comment] Abrams R. **Am J Psychiatry** 1990 Mar; 147(3):373–4 Comment on: Am J Psychiatry 1989 Jul;146(7):840–8.
ECT as an alternative to lithium for preventive treatment of bipolar disorder [letter; comment] Kellner C, et al. **Am J Psychiatry** 1990 Jul;147(7):953 Comment on: Am J Psychiatry 1989 Jul;146(7):840–8.
Relapse following discontinuation of lithium maintenance therapy in adolescents with bipolar I illness: a naturalistic study. Strober M, et al. **Am J Psychiatry** 1990 Apr; 147(4):457–61
Efficacy of lithium prophylaxis in clinical practice [see comments] Markar HR, et al. **Br J Psychiatry** 1989 Oct; 155:496–500 Comment in: Br J Psychiatry 1990 Mar;156:446–7.
Clinical prediction of response to lithium prophylaxis in bipolar patients: the importance of the previous pattern of course of the illness. Maj M. **Clin Neuropharmacol** 1990; 13 Suppl 1:S66–70
Alternative prophylactic treatments to lithium in bipolar disorders. Mauri MC, et al. **Clin Neuropharmacol** 1990;13 Suppl 1:S90–6 (37 ref.)
Predictors of outcome in prophylactic lithium treatment: a 2-year prospective study. Aagaard J, et al. **J Affective Disord** 1990 Apr;18(4):259–66
Clonazepam vs. neuroleptics as adjuncts to lithium maintenance. Sachs GS, et al. **Psychopharmacol Bull** 1990; 26(1):137–43
[Results of the use of lithium to prevent recurrence of affective psychosis] Lange E, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Aug; 41(8):476–84 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

The development of affective psychosis. Social aspects. Christozov C, et al. **Acta Paedopsychiatr** 1989;52(1):71–4
Stress, depression, and mania: relationship between perceived role of stressful events and clinical and biochemical characteristics. Swann AC, et al. **Acta Psychiatr Scand** 1990 Apr;81(4):389–97
The power of religion [letter] Lazarus A. **Am J Psychiatry** 1990 Oct;147(10):1390
Rapid cycling in unipolar and bipolar affective disorders. Wolpert EA, et al. **Am J Psychiatry** 1990 Jun;147(6):725–8
Psychiatric phenomena in Alzheimer's disease. III: Disorders of mood. Burns A, et al. **Br J Psychiatry** 1990 Jul;157:81–6, 92–4
The occurrence of depression following mania. A method of predicting vulnerable cases. Lucas CP, et al. **Br J Psychiatry** 1989 May;154:705–8
Pre-pubertal depressive stupor [letter] Warneke LB. **Br J Psychiatry** 1989 Mar;154:418–9
Premenstrual depression in women with a history of affective disorder: mood and attentional processes. McMillan MJ, et al. **Can J Psychiatry** 1989 Nov;34(8):791–5
Unipolar and bipolar schizoaffective disorders: a comparative study. I. Premorbid and sociodemographic features. Marneros A, et al. **Eur Arch Psychiatry Neurol Sci** 1989; 239(3):158–63
Unipolar and bipolar schizoaffective disorders: a comparative study. II. Long-term course. Marneros A, et al. **Eur Arch Psychiatry Neurol Sci** 1989;239(3):164–70
Unipolar and bipolar schizoaffective disorders: a comparative study. III. Long-term outcome. Marneros A, et al. **Eur Arch Psychiatry Neurol Sci** 1989;239(3):171–6
A case history analysis of the "manic type" and the "melancholic type" of premorbid personality in affectively ill patients. Pössl J, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(6):347–55
Diurnal variations of mood in depressed patients in relation to severity of depression. Haug HJ, et al. **J Affective Disord** 1990 May;19(1):37–41
Suicide in subtypes of primary major depression. Rihmer Z, et al. **J Affective Disord** 1990 Mar;18(3):221–5
The premorbid personality of patients with different subtypes of an affective illness. Statistical analysis of blind assignment of case history data to clinical diagnoses. von Zerssen D, et al. **J Affective Disord** 1990 Jan;18(1):39–50
The assets of the mentally handicapped: the interplay of mental illness and creativity. Fromm-Reichmann F. **J Am Acad Psychoanal** 1990 Spring;18(1):47–72
Marijuana (cannabis) use is anecdotally said to precipitate anxiety symptoms in patients with panic disorder. Is there any research evidence to support this? Also, can marijuana use precipitate or expose paranoia in patients with an underlying bipolar disorder? Seibyl JP, et al. **J Clin Psychopharmacol** 1990 Feb;10(1):78
Role of maternal depression in perceptions of child maladjustment. Conrad M, et al. **J Consult Clin Psychol** 1989 Oct;57(5):663–7
Improving relationships. Groups for inpatients with bipolar disorder. Pollack LE. **J Psychosoc Nurs Ment Health Serv** 1990 May;28(5):17–22
The child's predicament in families with a mood disorder. Research findings and family interventions. DiNicola VF. **Psychiatr Clin North Am** 1989 Dec;12(4):933–49 (48 ref.)
Children of parents with major affective disorders. A review of the past 5 years. LaRoche C. **Psychiatr Clin North Am** 1989 Dec;12(4):919–32 (48 ref.)
Expressed emotion and auditory evoked potentials. Hegerl U, et al. **Psychiatry** 1990 May;53(2):108–14
Life events and mania: a case-controlled study. Joffe RT, et al. **Psychiatry Res** 1989 Nov;30(2):213–6
The issue of the core syndrome of endogenous depression. Bron B, et al. **Psychopathology** 1990;23(1):1–8
Cognitive deficits and thought disorder: II. An 8-month followup study. Harvey PD, et al. **Schizophr Bull** 1990; 16(1):147–56
[Minkowski's concept of lived time] Fouks L, et al. **Ann Med Psychol (Paris)** 1989 Oct;147(8):801–9 (3 ref.) (Eng. Abstr.) **(Fre)**
[Endogenous control and personal self-determination in suicide during manic-depressive psychoses] Supprian U. **Fortschr Neurol Psychiatr** 1990 Jul;58(7):270–81 (Eng. Abstr.) **(Ger)**
[Depression and anxiety. Psychopathologic studies of anxiety experience of melancholic and neurotic patients] Kuhs H. **Monogr Gesamtgeb Psychiatr (Berlin)** 1990;59:1–210 **(Ger)**
[Prognostic criteria of depression] Voĭtsekh VF. **Zh Nevropatol Psikhiatr** 1990;90(4):71–5 (Eng. Abstr.) **(Rus)**
[Personality and triggering life events in the affective psychoses] Chinchilla A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Jul–Aug;17(4):237–44 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Progressive ventricular enlargement in schizophrenia: comparison to bipolar affective disorder and correlation with clinical course. Woods BT, et al. **Biol Psychiatry** 1990 Feb 1;27(3):341–52
[The course of bipolar disorder, effectiveness of drug therapy and the status of the central nervous system studied by computerized tomography] Pużyński S, et al. **Psychiatr Pol** 1988 Nov–Dec;22(6):413–9 (Eng. Abstr.) **(Pol)**
[Computerized tomography in the evaluation of the central nervous system of patients with bipolar disorder] Pużyński S, et al. **Psychiatr Pol** 1988 Nov–Dec;22(6):420–5 (Eng. Abstr.) **(Pol)**

RADIONUCLIDE IMAGING

Clinical correlates of cerebral blood flow in depression. Reischies FM, et al. **Psychiatry Res** 1989 Sep;29(3):323–6

REHABILITATION

[Occupational problems of patients with manic-depressive disease] Jänicke U, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 May; 42(5):257–63 (Eng. Abstr.) **(Ger)**

SURGERY

Is psychosurgery antimanic? Sachdev P, et al. **Biol Psychiatry** 1990 Feb 1;27(3):363–71

THERAPY

Group therapy in addition to lithium therapy in patients with bipolar disorders. van Gent EM, et al. **Acta Psychiatr Belg** 1988;88(5–6):405–18
Electroconvulsive therapy and cerebral computed tomography. A prospective study. Bergsholm P, et al. **Acta Psychiatr Scand** 1989 Dec;80(6):566–72
Role of psychotherapy in bipolar disorder [letter; comment] Hamilton JW. **Am J Psychiatry** 1990 Apr;147(4):539–40 Comment on: Am J Psychiatry 1989 Jul;146(7):840–8.
Waking in a lighted room [letter] Jacobsen FM. **Biol Psychiatry** 1990 Feb 1;27(3):372–4
Mania complicating ECT [letter] Sanders RD, et al. **Br J Psychiatry** 1990 Jul;157:153–4
The brain and the mind [letter; comment] Owen JE. **Can J Psychiatry** 1990 Feb;35(1):104 Comment on: Can J Psychiatry 1989 Apr;34(3):249–54.
The effect of ECT on plasma cyclic nucleotides: a simulated ECT controlled study in melancholic patients. Lykouras L, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(6):343–6
Electroconvulsive therapy: an update. Coffey CE, et al. **Hosp Community Psychiatry** 1990 May;41(5):515–21 (63 ref.)
A randomized clinical trial of inpatient family intervention. V. Results for affective disorders. Clarkin JF, et al. **J Affective Disord** 1990 Jan;18(1):17–28
Clinical experience with phototherapy. Stinson D, et al. **J Affective Disord** 1990 Feb;18(2):129–35
A review of ECT for children and adolescents. Bertagnoli MW, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Mar; 29(2):302–7 (48 ref.)
The psychotherapy of mania. Kahn D. **Psychiatr Clin North Am** 1990 Jun;13(2):229–40 (27 ref.)
Medication resistance and clinical response to electroconvulsive therapy. Prudic J, et al. **Psychiatry Res** 1990 Mar;31(3):287–96
[Combined treatment with lithium salts and socioenvironmental therapy in patients with manic depressive psychosis. Considerations on the results obtained in 1984–88 at the Mental Health Service of Local Health Unit No. 32 in Moncalieri] Paternò G. **Minerva Psichiatr** 1989 Jul–Sep;30(3):155–8 (Eng. Abstr.) **(Ita)**
[Use of electroconvulsive therapy for breaking the continual course of drug-resistant affective and schizoaffective psychoses] Mosolov SN, et al. **Zh Nevropatol Psikhiatr** 1990;90(4):121–5 (Eng. Abstr.) **(Rus)**

BIRD DISEASES

Reports from the Symposium on Avian Chlamydiosis. 125th annual AVMA meeting. Portland, Oregon, 1988. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1501–76
Legal aspects of chlamydiosis in birds. Garbe JL. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1574–6 (28 ref.)
Chlamydial infections—past, present, future. Schachter J. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1501–6 (54 ref.)
Polyostotic hyperostosis associated with oviductal tumor in a cockatiel. Stauber E, et al. **J Am Vet Med Assoc** 1990 Mar 15;196(6):939–40
Veterinary treatment for pigeons [letter] Frith H. **Vet Rec** 1989 Sep 23;125(13):358
[Amazon pox at an import station] Jakoby JR, et al. **Tierarztl Prax** 1990 Jun;18(3):255–8 (Eng. Abstr.) **(Ger)**

CHEMICALLY INDUCED

Suspected ethanol toxicosis in two wild cedar waxwings. Fitzgerald SD, et al. **Avian Dis** 1990 Apr–Jun;34(2):488–90
A method for the treatment of lead poisoning in the mute swan (Cygnus olor) and its long-term success. Sears J, et al. **Br Vet J** 1989 Nov–Dec;145(6):586–95
Toxicology of selected pesticides, drugs, and chemicals. Zinc. Robinette CL. **Vet Clin North Am Small Anim Pract** 1990 Mar;20(2):539–44 (13 ref.)
Observations on PCBs and mercury in common loons (Gavia immer) collected from southwestern Lake Michigan. Coppock RW, et al. **Vet Hum Toxicol** 1990 Jun;32(3):257–8

CONGENITAL

Congenital extra-hepatic biliary cyst in a Congo African Grey Parrot (Psittacus erithacus erithacus). Opengart KN, et al. **Avian Dis** 1990 Apr–Jun;34(2):497–500

DIAGNOSIS

Methods of chlamydial antigen detection. Brown PA, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1567–70 (17 ref.)
Serodiagnosis of avian Chlamydia infections. Grimes JE. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1561–4 (24 ref.)
A practitioner's view of the problem of avian chlamydiosis. Harrison GJ. **J Am Vet Med Assoc** 1989 Dec 1; 195(11):1525–8
Isolation and identification of Chlamydia psittaci from pet birds. Pearson JE, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1564–7 (10 ref.)
Diagnostic exercise: wasting syndrome in a flock of Japanese quail. Feldman SH, et al. **Lab Anim Sci** 1990 Jul; 40(4):409–10
Nucleic acid probes in the diagnosis and study of avian nononcogenic viral disease. Cavanagh D. **Prog Vet Microbiol Immunol** 1989;5:1–15 (40 ref.)
[Clinical diagnosis and differential diagnosis in ornamental birds] Kummerfeld N, et al. **Tierarztl Prax** 1990 Jun; 18(3):259–66 (17 ref.) (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Potential use of long-acting injectable oxytetracycline for treatment of chlamydiosis in Goffin's cockatoos. Flammer K, et al. **Avian Dis** 1990 Jan–Mar;34(1):228–34
Efficacy of toltrazuril and clazuril against experimental infections with Eimeria labbeana and E. columbarum in racing pigeons. Vercruysse J. **Avian Dis** 1990 Jan–Mar; 34(1):73–9
Treatment of chlamydiosis in exotic birds in the United States. Flammer K. **J Am Vet Med Assoc** 1989 Dec 1; 195(11):1537–40 (30 ref.)
Drugs for pigeons [letter; comment] [see comments] Hines G. **Vet Rec** 1989 Oct 28;125(18):465 Comment on: Vet Rec 1989 Sep 30;125(14):381. Comment in: Vet Rec 1989 Nov 25;125(22):560.
Anticoccidial efficacy of diclazuril in pheasants. Vanparijs O, et al. **Vet Rec** 1990 Apr 7;126(14):332–3

ECONOMICS

Feathers fly in grouse population dispute. Cherfas J. **Science** 1990 Jan 5;247(4938):32

EPIDEMIOLOGY

Ecologic studies of mosquitoes and birds as hosts of Ockelbo virus in Sweden and isolation of Inkoo and Batai viruses from mosquitoes. Francy DB, et al. **Am J Trop Med Hyg** 1989 Sep;41(3):355–63
Incidence of Toxoplasma infection in a population of European starlings Sturnus vulgaris from central England. Peach W, et al. **Ann Trop Med Parasitol** 1989 Apr; 83(2):173–7

Chlamydial infections in free-living birds. Brand CJ. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1531-5 (35 ref.)
Hematozoa of wild turkeys from the midwestern United States: translocation of wild turkeys and its potential role in the introduction of Plasmodium kempi. Castle MD, et al. **J Wildl Dis** 1990 Apr;26(2):180-5
Sarcocystis in American black ducks wintering in New Jersey. Costanzo GR. **J Wildl Dis** 1990 Jul;26(3):387-9
Hematozoa from the spotted owl. Gutiérrez RJ. **J Wildl Dis** 1989 Oct;25(4):614-8
Western equine encephalitis in avian populations in North Dakota, 1975. McLean RG, et al. **J Wildl Dis** 1989 Oct; 25(4):481-9
Ectoparasites of ring-necked pheasants in Nebraska. Payne WR, et al. **J Wildl Dis** 1990 Jul;26(3):407-9
A retrospective study of disease and mortality in zebra finches. Prattis SM, et al. **Lab Anim Sci** 1990 Jul;40(4):402-5
Identification and prevalence of two plagiorchiid trematodes from Hirundinidae in their intermediate and definitive hosts in the surroundings of Ulm, FRG. Janssen O, et al. **Parasitol Res** 1990;76(5):451-3
Toxoplasma gondii antibodies in common barn-owls (Tyto alba) and pigeons (Columba livia) in New Jersey. Kirkpatrick CE, et al. **Vet Parasitol** 1990 May; 36(1-2):177-80
Chlamydia infections in racing pigeons in Great Britain: a retrospective serological survey. Alexander DJ, et al. **Vet Rec** 1989 Aug 26;125(9):239
Aspergillosis in gentoo penguins (Pygoscelis papua) at Edinburgh Zoo, 1964 to 1988. Flach EJ, et al. **Vet Rec** 1990 Jan 27;126(4):81-5
Duck virus enteritis in Great Britain, 1980 to 1989. Gough RE, et al. **Vet Rec** 1990 Jun 16;126(24):595-7
[Endemic poxvirus infection in white storks (Ciconia ciconia) and black storks (Ciconia nigra) in Switzerland] Zangger N, et al. **Schweiz Arch Tierheilkd** 1990;132(3):135-8 (Eng. Abstr.) **(Ger)**
[Epidemic deaths of wild birds after Aeromonas hydrophila infection] Korbel R, et al. **Tierarztl Prax** 1989;17(3):297-8 (Eng. Abstr.) **(Ger)**
[Characteristics of the distribution of birds infected with hemosporidians (Sporozoa, Haemosporidia) during the fall migration in flight waves] Val'kiunas GA. **Parazitologiia** 1989 Sep-Oct;23(5):377-82 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Considering hyperestrogenism as a cause of anemia [letter] Jolie PE. **J Am Vet Med Assoc** 1990 Jul 1;197(1):12
Raptors rehabilitated in Iowa during 1986 and 1987: a retrospective study. Fix AS, et al. **J Wildl Dis** 1990 Jan; 26(1):18-21
[Sublingual salivary gland granuloma as a husbandry-induced disease in a Timor gray parrot] Hollmann P. **Tierarztl Prax** 1990 Jun;18(3):267-72 (Eng. Abstr.) **(Ger)**
[Cardinal symptoms of polydipsia/polyuria in birds] Korbel R. **Tierarztl Prax** 1990 Feb;18(1):33-40 (17 ref.) (Eng. Abstr.) **(Ger)**

GENETICS

A new chondrodystrophy mutation in Japanese quail (Coturnix japonica). Hermes JC, et al. **J Hered** 1990 May-Jun;81(3):222-4

IMMUNOLOGY

The immune response of the definitive hosts to diphyllobothriid antigens. Sergeeva EG, et al. **Angew Parasitol** 1990 Feb;31(1):43-6
Mortality from duck plague virus in immunosuppressed adult mallard ducks. Goldberg DR, et al. **J Wildl Dis** 1990 Jul; 26(3):299-306
Effects of ingested lead on antibody production in mallards (Anas platyrhynchos). Trust KA, et al. **J Wildl Dis** 1990 Jul;26(3):316-22
Factors affecting the establishment of the caecal threadworm Trichostrongylus tenuis in red grouse (Lagopus lagopus scoticus). Shaw JL, et al. **Parasitology** 1989 Oct;99 Pt 2:259-64
[The determination of the interdependence of the infectivity of different groups of birds with the influenza virus by using mathematical modelling] Ignatenko TA, et al. **Mikrobiol Zh** 1989 Nov-Dec;51(6):67-72 (Eng. Abstr.) **(Rus)**

METABOLISM

Melatonin reduction by lithium and albinism in quail and hamsters. Lauber JK, et al. **Gen Comp Endocrinol** 1989 Dec; 76(3):414-20

MICROBIOLOGY

Investigations of an enteric infection of cockatoos caused by an enterovirus-like agen:. Wylie SL, et al. **Aust Vet J** 1989 Oct;66(10):321-4
Somatic serotypes of Pasteurella multocida strains isolated from avian hosts (1976-1988). Rhoades KR, et al. **Avian Dis** 1990 Jan-Mar;34(1):193-5
Genetic, immunologic, and pathologic characterization of avian chlamydial strains. Andersen AA, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1512-6 (22 ref.)
Coagulase-negative Staphylococcus sp septicemia in a lovebird. Bounous DI, et al. **J Am Vet Med Assoc** 1989 Oct 15;195(8):1120-2
Biology of chlamydiae. Wyrick PB, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1507-12 (45 ref.)
Production of avian antibodies to three potyviruses in coturnix quail. Somowiyarjo S, et al. **J Virol Methods** 1990 May;28(2):125-32
Characteristics of Pasteurella multocida isolated from waterfowl and associated avian species in California. Hirsh DC, et al. **J Wildl Dis** 1990 Apr;26(2):204-9
Ultrastructural, protein composition, and antigenic comparison of psittacine beak and feather disease virus purified from four genera of psittacine birds. Ritchie BW, et al. **J Wildl Dis** 1990 Apr;26(2):196-203
Avian Paramyxoviridae--recent developments. Alexander DJ. **Vet Microbiol** 1990 Jun;23(1-4):103-14 (50 ref.)
Crane hepatitis herpesviruses. Foerster S, et al. **Zentralbl Veterinarmed [B]** 1989 Aug;36(6):433-41
Isolation of a poxvirus from a sparrow (Passer domesticus). Herbst W, et al. **Zentralbl Veterinarmed [B]** 1989 Aug; 36(6):477-9
Polyomavirus infection in budgerigars (Melopsittacus undulatus): clinical and aetiological studies. Krautwald ME, et al. **Zentralbl Veterinarmed [B]** 1989 Aug;36(6):459-67

MORTALITY

Pasteurella multocida infection in Japanese quail (Coturnix coturnix japonica). Glisson JR, et al. **Avian Dis** 1989 Oct-Dec;33(4):820-2
Pasteurella multocida infections in rockhopper penguins (Eudyptes chrysocome) from Campbell Island, New Zealand. de Lisle GW, et al. **J Wildl Dis** 1990 Apr; 26(2):283-5
Causes of mortality of albatross chicks at Midway Atoll. Sileo L, et al. **J Wildl Dis** 1990 Jul;26(3):329-38
Chlamydia psittaci infection in robins [letter] Simpson VR, et al. **Vet Rec** 1989 Nov 18;125(21):537
Caecal cores and mortality in French partridges (Alectoris rufa). Swarbrick O. **Vet Rec** 1990 Jan 13;126(2):41
Mortality of unknown cause in pheasant poults [letter] Swarbrick O. **Vet Rec** 1990 Jun 30;126(26):648

PARASITOLOGY

Diarrhea associated with small-intestinal cryptosporidiosis in a budgerigar and in a cockatiel. Goodwin MA, et al. **Avian Dis** 1989 Oct-Dec;33(4):829-33
A new genus of capillariids from birds, Tridentocapillaria gen. n. (Nematoda: Capillariidae). Baruš V, et al. **Folia Parasitol (Praha)** 1990;37(1):67-75
Occurrence and localization of Cryptosporidium sp. in spontaneously infected pheasants (Phasianus colchicus L.). Pavlásek I, et al. **Folia Parasitol (Praha)** 1989;36(3):287-8
Experimental infection of mice with Toxocara canis larvae obtained from Japanese quails. Fahari TK, et al. **Int J Parasitol** 1990 Apr;20(2):263-4
The life cycle of Pygidiopsis ardeae Køie, 1990 (Digenea, Heterophyidae). Køie M. **J Parasitol** 1990 Aug; 76(4):537-41
Description of the oocysts of Eimeria paludosa (Apicomplexa: Eimeriidae) from Fulica americana (Aves: Gruiformes), with comments on synonyms of eimerian species from related birds. McAllister CT, et al. **J Parasitol** 1990 Feb;76(1):27-9
Isospora daphnensis n. sp. (Apicomplexa: Eimeriidae) from the medium ground finch (Geospiza fortis) from the Galapagos Islands. McQuistion TE. **J Parasitol** 1990 Feb; 76(1):30-2
Mallard ducklings (Anas platyrhynchos) experimentally infected with Echinostoma trivolvis (Digenea). Mucha KH, et al. **J Parasitol** 1990 Aug;76(4):590-2
Naturally occurring apicomplexan acute interstitial pneumonitis in thick-billed parrots (Rhynchopsitta pachyrhyncha). Smith JH, et al. **J Parasitol** 1990 Apr; 76(2):285-8
The role of parasite fecundity and longevity in the success of Trichostrongylus tenuis in low density red grouse populations. Shaw JL, et al. **Parasitology** 1989 Oct;99 Pt 2:253-8
Hexamitiasis and an emaciation syndrome in pheasant poults: clinical aspects and differential diagnosis. Swarbrick O. **Vet Rec** 1990 Mar 17;126(11):265-7
[A redescription of Capillaria carbonis (Rudolphi, 1819), (Capillariidae), based on material collected from the black cormorant (Phalacrocorax carbo)] Okulewicz A. **Wiad Parazytol** 1989;35(6):577-83 (Eng. Abstr.) **(Pol)**

PATHOLOGY

Primary glossal squamous-cell carcinoma in a Spanish Cochin hen. Anderson WI, et al. **Avian Dis** 1989 Oct-Dec; 33(4):827-8
Pathology of experimentally induced quail bronchitis. Jack SW, et al. **Avian Dis** 1990 Jan-Mar;34(1):44-51
Myocardial sarcocystosis in a grand eclectus parrot (Eclectus roratus) and a Moluccan cockatoo (Cacatua moluccensis). Latimer KS, et al. **Avian Dis** 1990 Apr-Jun;34(2):501-5
Aeromonas hydrophila as cause of hemorrhagic septicemia in a ground-hornbill (Bucorvus abyssinicus). Ocholi RA, et al. **Avian Dis** 1990 Apr-Jun;34(2):495-6
Histopathologic lesions associated with chlamydiosis in psittacine birds. Graham DL. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1571-3 (6 ref.)
Pathology of experimental Sarcocystis falcatula infections of canaries (Serinus canarius) and pigeons (Columba livia). Smith JH, et al. **J Parasitol** 1990 Feb;76(1):59-68
Multiple feather follicle cysts in a wild turkey. Couvillion CE, et al. **J Wildl Dis** 1990 Jan;26(1):122-4
Feather damage due to mycotic infections in wild turkeys. Davidson WR, et al. **J Wildl Dis** 1989 Oct;25(4):534-9
A review of marble spleen disease of ring-necked pheasants. Fitzgerald SD, et al. **J Wildl Dis** 1989 Oct;25(4):455-61 (27 ref.)
Pulmonary lesions in disseminated visceral coccidiosis of sandhill and whooping cranes. Novilla MN, et al. **J Wildl Dis** 1989 Oct;25(4):527-33
Interaction between Eimeria uzura infection and aflatoxicosis in Japanese quail (Coturnix coturnix japonica). Rao JR, et al. **Vet Parasitol** 1990 Mar;35(3):259-67
Adenoviral hepatitis in a merlin (Falco columbarius). Schelling SH, et al. **Vet Pathol** 1989 Nov;26(6):529-30
Cutaneous mast cell tumor in a great horned owl (Bubo virginianus). Swayne DE, et al. **Vet Pathol** 1990 Mar; 27(2):124-6

PHYSIOPATHOLOGY

A preliminary study of liver functions in heterophiasis. Mahmoud LH, et al. **J Egypt Soc Parasitol** 1990 Jun; 20(1):83-6
Experimental avian PMV-2 infection in a domesticated wild host: daily behavior and effect on activity levels. Goodman BB, et al. **J Wildl Dis** 1990 Jan;26(1):22-7
Effects of the caecal nematode Trichostrongylus tenuis on egg-laying by captive red grouse. Shaw JL, et al. **Res Vet Sci** 1990 Jan;48(1):59-63

PREVENTION & CONTROL

Chlamydiosis--an enigma for the pet bird industry. Clubb SL. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1521-4 (11 ref.)
Current situation and alternatives for diagnosis and control of chlamydiosis in the Federal Republic of Germany. Gerbermann H. **J Am Vet Med Assoc** 1989 Dec 1; 195(11):1542-7
Potential of a voluntary caged pet bird improvement program. Mallinson ET. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1535-7
The USDA requirements for control of chlamydiosis in imported birds. Ritchie WH. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1541-2
Chlamydiosis research and control runs regulatory obstacle course [news] Spencer LM. **J Am Vet Med Assoc** 1989 Oct 1;195(7):853-9, 862
Drugs for pigeons [letter] [see comments] Hunter BW. **Vet Rec** 1989 Sep 16;125(12):334 Comment in: Vet Rec 1989 Sep 30;125(14):381.
[The Veterinary Chief Inspection for Public Health. Plan of campaign against parrot fever] **Tijdschr Diergeneeskd** 1990 Mar 1;115(5):232-4 **(Dut)**
[Experiences with paramunization in birds] Schneeganss D. **Tierarztl Prax** 1989;17(3):293-5 (Eng. Abstr.) **(Ger)**

TRANSMISSION

Review of the epidemiology of chlamydiosis in the United States. Williams LP Jr. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1518-21 (13 ref.)
Intermediate host of Mediorhynchus orientalis (Acanthocephala: Gigantorhynchidae). Bolette DP. **J Parasitol** 1990 Aug;76(4):575-7
Infection of Japanese quail with Toxocara canis larvae and establishment of patent infection in pups. Pahari TK, et al. **Vet Parasitol** 1990 Apr;35(4):357-64

BIRD FANCIER'S LUNG see under **ALVEOLITIS, EXTRINSIC ALLERGIC**

BIRD POX see **FOWL POX**

BIRD POX VIRUS see **FOWL POX VIRUS**

BIRDS

Why birds kill: cross-sectional analysis of U.S. Air Force bird strike data. Neubauer JC. **Aviat Space Environ Med** 1990 Apr;61(4):343-8
Identification of epsilon-crystallin from swan lens as lactate dehydrogenase. Chiou SH, et al. **Curr Eye Res** 1989 Oct; 8(10):1055-61
The ontogeny of antiphonal calling in European starlings. Chaiken M. **Dev Psychobiol** 1990 Apr;23(3):233-46
Avian companions and the human-animal bond. Harris JM. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1517-18
Gas-liquid chromatographic analysis of ethyl fenthion in tissues of native birds. Allender WJ. **J Chromatogr** 1990 May 25;508(1):199-202
Timbre control in zebra finch (Taeniopygia guttata) song syllables. Williams H, et al. **J Comp Psychol** 1989 Dec; 103(4):366-80
Phylogeny of the major tetrapod groups: morphological data and divergence dates. Benton MJ. **J Mol Evol** 1990 May; 30(5):409-24 (82 ref.)
Tissue levels of lead in experimentally exposed herring gull (Larus argentatus) chicks. Burger J, et al. **J Toxicol Environ Health** 1990;29(2):219-33
Jackdaws as potential source of milk-borne Campylobacter

jejuni infection [letter] Hudson SJ, et al. **Lancet** 1990 May 12;335(8698):1160

The present, past and future of human-caused extinctions. Diamond JM. **Philos Trans R Soc Lond [Biol]** 1989 Nov 6;325(1228):469-76; discussion 476-7

Natural extinction on islands. Williamson M. **Philos Trans R Soc Lond [Biol]** 1989 Nov 6; 325(1228):457-66; discussion 466-7

Time of exposure as a prognostic factor in avian hypersensitivity pneumonitis. de Gracia J, et al. **Respir Med** 1989 Mar;83(2):139-43

Geographical distribution of contaminants and productivity measures of herring gulls in the Great Lakes: Lake Erie and connecting channels 1978/79. Weseloh DV, et al. **Sci Total Environ** 1990 Feb;91:141-59

The phoenix: symbol of rebirth and the eternal return. Kahan BD. **Transplant Proc** 1990 Jun;22(3):1097-103

S enteritidis infection in pheasants [letter; comment] Lister SA. **Vet Rec** 1990 Feb 10;126(6):148 Comment on: Vet Rec 1990 Jan 13;126(2):39-40.

[Abuse of pesticides: effects on farm animals and birds] Baars AJ. **Tijdschr Diergeneeskd** 1990 Aug 15;115(15-16):720-6 (Eng. Abstr.) **(Dut)**

ANATOMY & HISTOLOGY

Shape and structure of the avian brain an old problem revisited. Dubbeldam JL. **Acta Morphol Neerl Scand** 1989; 27(1-2):33-43 (23 ref.)

A novel perspective: the occluding zonule encircles the apex of the Sertoli cell as observed in birds. Pelletier RM. **Am J Anat** 1990 May;188(1):87-108

Scanning electron microscope study of neuromuscular junctions in different muscle fiber types in the zebra finch and rat. Oki S, et al. **Arch Histol Cytol** 1990 Jul; 53(3):327-32

The inner ear of the common rhea (Rhea americana L.). Jørgensen JM, et al. **Brain Behav Evol** 1989;34(5):273-80

Retinohypothalamic projections and the suprachiasmatic nucleus in birds. Norgren RB Jr, et al. **Brain Behav Evol** 1989;34(2):73-83

The hippocampal complex of food-storing birds. Sherry DF, et al. **Brain Behav Evol** 1989;34(5):308-17

Localization of different releasing hormone immunoreactive (LH-IR) neurons and their projections in central nervous system of birds. A mini-review. Mess B, et al. **Endocrinol Exp** 1989 Dec;23(4):305-20 (27 ref.)

The organization of tip links and stereocilia on hair cells of bird and lizard basilar papillae. Pickles JO, et al. **Hear Res** 1989 Aug;41(1):31-41

The lung of the emu, Dromaius novaehollandiae: a microscopic and morphometric study. Maina JN, et al. **J Anat** 1989 Apr;163:67-73

Light microscopic morphometry of the kidneys of fourteen avian species. Warui CN. **J Anat** 1989 Feb;162:19-31

Delineation of a brain nucleus: comparisons of cytochemical, hodological, and cytoarchitectural views of the song control nucleus HVc of the adult canary. Gahr M. **J Comp Neurol** 1990 Apr 1;294(1):30-6

Ultrastructural analysis of the development and maturation of synapses and subsynaptic structures in the ectostriatum of the zebra finch. Nixdorf BE. **J Comp Neurol** 1989 Dec 22;290(4):472-86

Reptilian and avian follicular hierarchies: models for the study of ovarian development. Etches RJ, et al. **J Exp Zool Suppl** 1990;4:112-22 (44 ref.)

Anatomy of the avian cecum. McLelland J. **J Exp Zool Suppl** 1989;3:2-9 (53 ref.)

Parabrachial nuclear complex. A comparative study of its cytoarchitectonics in birds and some mammals including man. Petrovický P, et al. **J Hirnforsch** 1989;30(5):539-50

Proliferation "hot spots" in adult avian ventricular zone reveal radial cell division. Alvarez-Buylla A, et al. **Neuron** 1990 Jul;5(1):101-9

Myelinated perikarya of the ganglion cells in the avian retina. Yamada E. **Okajimas Folia Anat Jpn** 1989 Oct;66(4):211-21

A light microscopic and immunocytochemical study of the gastrointestinal tract of the ostrich (Struthio camelus L.). Bezuidenhout AJ, et al. **Onderstepoort J Vet Res** 1990 Mar; 57(1):37-48

An allometric study of pulmonary morphometric parameters in birds, with mammalian comparisons. Maina JN, et al. **Philos Trans R Soc Lond [Biol]** 1989 Nov 30;326(1231):1-57 (137 ref.)

[Organization of the bony nasal septum and its homologues I. Os alare et systema integratum fronto-alare in birds] Pędziwiatr ZF. **Otolaryngol Pol** 1989;43(4):289-97 (Eng. Abstr.) **(Pol)**

[Histologic study of the pineal organ in tinamid birds] Redins CA, et al. **Rev Bras Biol** 1989 May;49(2):429-34 (Eng. Abstr.) **(Por)**

BLOOD

Host feeding profiles of Triatoma dimidiata in peridomestic habitats of western Panama. Christensen HA, et al. **Am J Trop Med Hyg** 1988 May;38(3):477-9

Reference blood chemical values in ostriches (Struthio camelus). Levy A, et al. **Am J Vet Res** 1989 Sep; 50(9):1548-50

Amino-acid sequences and functional differentiation of hemoglobins A and D from swift (Apus apus, Apodiformes). Nothum R, et al. **Biol Chem Hoppe Seyler** 1989 Nov;370(11):1197-207

Hematology and blood chemistry of chicks of white and black storks (Ciconia ciconia and Ciconia nigra). Puerta ML, et al. **Comp Biochem Physiol [A]** 1989;94(2):201-4

Sex steroid levels in developing and adult male and female zebra finches (Poephila guttata). Adkins-Regan E, et al. **Gen Comp Endocrinol** 1990 Apr;78(1):93-109

Sexual differentiation of behavior in the zebra finch: effect of early gonadectomy or androgen treatment. Adkins-Regan E, et al. **Horm Behav** 1990 Mar;24(1):114-27

Plasma prolactin concentrations in breeding pied flycatchers (Ficedula hypoleuca) with an experimentally prolonged brooding period. Silverin B, et al. **Horm Behav** 1990 Mar; 24(1):104-13

Plasma levels of prolactin and gonadal steroids in relation to multiple-brooding and renesting in free-living populations of the song sparrow, Melospiza melodia. Wingfield JC, et al. **Horm Behav** 1990 Mar;24(1):89-103

Primary structure of hemoglobin from gray partridge (Francolinus pondacerianus, Galliformes). Abbasi A, et al. **J Protein Chem** 1989 Oct;8(5):647-52

[Hematologic and hematochemical characteristics of the herring gull (Larus argentatus) and the buzzard (Buteo buteo)] Bini PP, et al. **Boll Soc Ital Biol Sper** 1989 Sep; 65(9):831-7 (Eng. Abstr.) **(Ita)**

EMBRYOLOGY

Peripheral development of avian trigeminal nerves. Kuratani S, et al. **Am J Anat** 1990 Jan;187(1):65-80

A hierarchy of determining factors controls motoneuron innervation. Experimental studies on the development of the plantaris muscle (PL) in avian chimeras. Grim M, et al. **Anat Embryol (Berl)** 1989;180(2):179-89

Origins and assembly of avian embryonic blood vessels. Noden DM. **Ann N Y Acad Sci** 1990;588:236-49 (72 ref.)

In situ study of c-myc protein expression during avian development. Jaffredo T, et al. **Development** 1989 Apr; 105(4):679-95

The avian neural crest as a model system for the study of cell lineages. Smith J. **Int J Dev Biol** 1990 Mar;34(1):157-62 (48 ref.)

Antibody against avian müllerian inhibiting substance (MIS) recognizes MIS on rat müllerian duct and human tumor cells. Wang JJ, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Oct;13(4):267-75

GENETICS

A highly repeated retropseudogene-like sequence in DNA of the redbreasted merganser (Mergus serrator). McHugh KP, et al. **Gene** 1990 Mar 15;87(2):193-7

Cloning and characterization of a tandemly repeated DNA sequence in the crane family (Gruidae). Chen ZQ, et al. **Genome** 1989 Aug;32(4):646-54

Ancestral lysozymes reconstructed, neutrality tested, and thermostability linked to hydrocarbon packing. Malcolm BA, et al. **Nature** 1990 May 3;345(6270):86-9

Genetics of long-spurred pheasants [letter; comment] Weatherhead PJ, et al. **Nature** 1990 Feb 15; 343(6259):599-600 Comment on: Nature 1989 Jan 12;337(6203):166-9.

Evidence for neutral and selective processes in the recruitment of enzyme-crystallins in avian lenses. Wistow G, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6277-80

Cytochromes P-450 of sea birds: cross-reactivity studies with purified rat cytochromes. Ronis MJ, et al. **Xenobiotica** 1989 Oct;19(10):1167-73

[Sequences homologous to mouse mammary cancer virus are common in mammalian and avian genomes] Golovkina TV, et al. **Mol Biol (Mosk)** 1990 Jan-Feb;24(1):127-33 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

The avian embryo as a model for early developmental endocrinology. Murphy MJ, et al. **J Exp Zool Suppl** 1990; 4:177-80 (19 ref.)

Sensitive and critical periods for visual calibration of sound localization by barn owls. Knudsen EI, et al. **J Neurosci** 1990 Jan;10(1):222-32

Behavioral effects of early postnatal lead exposure in herring gull (Larus argentatus) chicks. Burger J. **Pharmacol Biochem Behav** 1990 Jan;35(1):7-13

Growth and atrophy of neurons labeled at their birth in a song nucleus of the zebra finch. Konishi M, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3538-41

Monocular deprivation alters the development of synaptic structure in the ectostriatum of the zebra finch. Nixdorf BE. **Synapse** 1990;5(3):224-32

Neurogenesis and sensitive periods in avian song learning. Nordeen EJ, et al. **Trends Neurosci** 1990 Jan;13(1):31-6 (42 ref.)

IMMUNOLOGY

T-cell development in birds. Cooper MD, et al. **Cold Spring Harb Symp Quant Biol** 1989;54 Pt 1:69-73

Development of the compartments of the immune system in the avian embryo. Dieterlen-Lievre F. **Dev Comp Immunol** 1989 Fall;13(4):303-11 (23 ref.)

[Use of precipitins in the diagnosis of bird fancier's lung: apropos of 2 cases] Reynaud C, et al. **Schweiz Med Wochenschr** 1989 Jul 22;119(29):1005-9 (Eng. Abstr.) **(Fre)**

INJURIES

[Bone injuries and skeletal abnormalities in the woodcock (Scolopax rusticola, L. 1758)] Berlich HD. **Tierarztl Prax** 1989;17(3):285-92 (Eng. Abstr.) **(Ger)**

METABOLISM

Food utilization in relation to gut structure and function in wild and domestic birds and mammals. Dawson TJ. **Acta Vet Scand Suppl** 1989;86:20-7 (17 ref.)

Avian basal metabolic rates: their association with body composition and energy expenditure in nature. Daan S, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R333-40

Deuterium and oxygen-18 abundance in birds: implications for DLW energetics studies. Tatner P. **Am J Physiol** 1990 Mar;258(3 Pt 2):R804-12

Bioaccumulation of selenium in birds at Kesterson Reservoir, California. Ohlendorf HM, et al. **Arch Environ Contam Toxicol** 1990 Jul-Aug;19(4):495-507

Investigation of central auditory nuclei in the budgerigar with cytochrome oxidase histochemistry. Brauth SE. **Brain Res** 1990 Jan 29;508(1):142-6

Sex- and age-related differences in the activity of testosterone-metabolizing enzymes in microdissected nuclei of the zebra finch brain. Vockel A, et al. **Brain Res** 1990 Mar 19;511(2):291-302

Distribution of choline acetyltransferase and acetylcholinesterase in the vocal motor system of zebra finches. Zuschratter W, et al. **Brain Res** 1990 Apr 16; 513(2):193-201

Forebrain-enriched RNAs of the canary: a population analysis using hybridization kinetics. Clayton DF, et al. **Brain Res Mol Brain Res** 1990 Jan;7(1):23-30

Effects of PCBs on plasma enzymes, testosterone level, and hepatic xenobiotic metabolism in the grey partridge, Perdix perdix. Abiola F, et al. **Bull Environ Contam Toxicol** 1989 Sep;43(3):473-80

Organochlorine residues in bird species collected dead in Ontario 1972-1988. Frank R, et al. **Bull Environ Contam Toxicol** 1990 Jun;44(6):932-9

Total PCBs and PCB congeners in Spanish imperial eagle eggs. Hernández LM, et al. **Bull Environ Contam Toxicol** 1989 Nov;43(5):725-32

Bioaccumulation of heavy metals in pre-fledgling tree swallows, Tachycineta bicolor. Kraus ML. **Bull Environ Contam Toxicol** 1989 Sep;43(3):407-14

Distribution and residue level of mercury, cadmium and lead in Korean birds. Lee DP, et al. **Bull Environ Contam Toxicol** 1989 Oct;43(4):550-5

Distribution of vasoactive intestinal peptide-like and neurophysin-like immunoreactive neurons and acetylcholinesterase staining in the ring dove hypothalamus with emphasis on the question of an avian suprachiasmatic nucleus. Norgren RB Jr, et al. **Cell Tissue Res** 1990 Feb; 259(2):331-9

Expression of GIN1-immunoreactive glycoproteins during development and regeneration in avian peripheral nerve. Snyder DS, et al. **Dev Neurosci** 1990;12(3):172-95

Tissue distribution of lead in young common terns: influence of time since exposure. Gochfeld M, et al. **Environ Res** 1989 Dec;50(2):262-8

Comparative aspects of congener specific PCB metabolism. Borlakoglu JT, et al. **Eur J Drug Metab Pharmacokinet** 1989 Apr-Jun;14(2):127-31

Metabolism of carotenoid pigments in birds. Brush AH. **FASEB J** 1990 Sep;4(12):2969-77

The drive on luteinizing hormone secretion in castrated tree sparrows (Spizella arborea) exposed to short days is daylength independent. Wilson FE. **Gen Comp Endocrinol** 1990 Mar;77(3):484-8

Ostrich fructose 1,6-bisphosphatase: distribution of activity and purification of the liver isoenzyme. van Tonder A, et al. **Int J Biochem** 1989;21(6):695-700

Determination of sodium fluoroacetate (Compound 1080) in biological tissues. Allender WJ. **J Anal Toxicol** 1990 Jan-Feb;14(1):45-9

Distribution of GABAergic neurons and terminals in the auditory system of the barn owl. Carr CE, et al. **J Comp Neurol** 1989 Aug 8;286(2):190-207

Energy requirements of Adélie penguin (Pygoscelis adeliae) chicks. Culik B, et al. **J Comp Physiol [B]** 1990;160(1):61-70

An improved method to study the impact of pesticide sprays on small song birds. Mineau P, et al. **J Environ Sci Health [B]** 1990 Feb;25(1):105-35

Transport of water and food particles through the avian ceca and colon. Björnhag G. **J Exp Zool Suppl** 1989;3:32-7 (24 ref.)

Uric acid decomposition in the lower gastrointestinal tract. Braun EJ, et al. **J Exp Zool Suppl** 1989;3:70-4

Effect of cecectomy on water and nutrient absorption of birds. Chaplin SB. **J Exp Zool Suppl** 1989;3:81-6 (33 ref.)

Relationship of cecal and colonic motility to diet, habitat, and cecal anatomy in several avian species. Duke GE. **J Exp Zool Suppl** 1989;3:38-47

Absorption by the cecum of wild birds: is there interspecific variation. Goldstein DL. **J Exp Zool Suppl** 1989;3:103-10 (44 ref.)

Gut size and the digestion of fibrous diets by tetraonid birds. Moss R. **J Exp Zool Suppl** 1989;3:61-5 (15 ref.)

Interspecific variation in sugar and amino acid transport by

the avian cecum. Obst BS, et al. **J Exp Zool Suppl** 1989; 3:117–26

The avian ceca: obligate combustion chambers or facultative afterburners? The conditioning influence of diet. Redig PT. **J Exp Zool Suppl** 1989;3:66–9 (12 ref.)

Why do grouse have ceca? A test of the fiber digestion theory. Remington TE. **J Exp Zool Suppl** 1989;3:87–94

Water and electrolyte transport by the avian ceca. Thomas DH, et al. **J Exp Zool Suppl** 1989;3:95–102

Dermal extracellular lipid in birds. Stromberg MW, et al. **J Morphol** 1990 Jan;203(1):55–68

Formation of new quasi-crystalline ordered aggregates by gizzard myosin. Margossian SS, et al. **J Muscle Res Cell Motil** 1989 Dec;10(6):413–26

Comparison of polychlorinated dibenzodioxin levels with hepatic mixed-function oxidase induction in great blue herons. Bellward GD, et al. **J Toxicol Environ Health** 1990 May;30(1):33–52

Brain cholinesterase inhibition in songbirds from pecan groves sprayed with phosalone and disulfoton. White DH, et al. **J Wildl Dis** 1990 Jan;26(1):103–6

Probes for rare mRNAs reveal distributed cell subsets in canary brain. Clayton DF, et al. **Neuron** 1988 May; 1(3):249–61

The ostrich pituitary contains a major peptide homologous to mammalian chromogranin A(1–76). Lazure C, et al. **Peptides** 1990 Jan–Feb;11(1):79–87

Standard errors of nitrogen-corrected true metabolizable energy estimates: effects of pooling excreta samples and ignoring among-control bird variation. Wolynetz MS, et al. **Poult Sci** 1989 Oct;68(10):1361–7

Sustained metabolic scope. Peterson CC, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2324–8

Brain aromatization of testosterone regulates male reproductive behavior in birds. Balthazart J. **Prog Clin Biol Res** 1990;342:92–8 (26 ref.)

Calcium homeostasis in avian species. Hurwitz S. **Prog Clin Biol Res** 1990;342:586–91 (24 ref.)

Comparative studies of thyroid hormone deiodinase systems. McNabb FM, et al. **Prog Clin Biol Res** 1990;342:433–8 (26 ref.)

Calcium-binding proteins in avian and mammalian central nervous system: localization, development and possible functions. Braun K. **Prog Histochem Cytochem** 1990; 21(1):1–64 (267 ref.)

Interspecies variation in the plasma halflife of oxytetracycline in relation to bodyweight. Kirkwood JK, et al. **Res Vet Sci** 1990 Mar;48(2):180–3

Organic mercury in Greenland birds and mammals. Dietz R, et al. **Sci Total Environ** 1990 Jun;95:41–51

The monooxygenases of birds, reptiles and amphibians. Walker CH, et al. **Xenobiotica** 1989 Oct;19(10):1111–21 (31 ref.)

[The activity of lipase (triacylglycerine acylhydrolase, EC.3.1.1.3) in mammalian and avian organs] Keller P. **Schweiz Arch Tierheilkd** 1989;131(10):605–6, 611–5 (Eng. Abstr.) **(Ger)**

[The detection of sorbitol dehydrogenase in the cytoplasm of liver cells in birds and its relation to alcohol dehydrogenase and glucose-6-phosphate dehydrogenase] Sudovtsov VE, et al. **Zh Evol Biokhim Fiziol** 1990 Mar–Apr;26(2):277–9 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Isolation of Soldado virus from a seabird (Rissa tridactyla L.) in France [letter] Chastel C, et al. **Acta Virol (Praha)** 1990 Feb;34(1):109

Further evidence of the circulation of PMV-4 and influenza viruses with N2–1957 enzyme in the migratory waterfowls. Tumová B, et al. **Acta Virol (Praha)** 1989 Dec;33(6):573–6

The source of avian paramyxoviruses isolated during an outbreak of influenza among children. Yakhno MA, et al. **Acta Virol (Praha)** 1990 Apr;34(2):184–7

Isolation of Candida albicans and halophilic Vibrio spp. from aquatic birds in Connecticut and Florida. Buck JD. **Appl Environ Microbiol** 1990 Mar;56(3):826–8

Characterization of paramyxoviruses isolated from penguins in Antarctica and sub-Antarctica during 1976–1979. Alexander DJ, et al. **Arch Virol** 1989;109(1–2):135–43

Isolation of serotype 2 Marek's disease virus from birds belonging to genus Gallus in Japan. Lin JA, et al. **Avian Dis** 1990 Apr–Jun;34(2):336–44

Prevalence of Campylobacter jejuni in selected domestic and wild birds in Louisiana. Yogasundram K, et al. **Avian Dis** 1989 Oct–Dec;33(4):664–7

Microbes of the avian cecum: types present and substrates utilized. Mead GC. **J Exp Zool Suppl** 1989;3:48–54 (52 ref.)

Phylogenetic distribution of the novel avian endogenous provirus family EAV-0. Resnick RM, et al. **J Virol** 1990 Oct;64(10):4640–53

Identification and characterization of an avian reovirus isolated from black-tailed gull (Larus crassirostris). Takehara K, et al. **Kitasato Arch Exp Med** 1989 Dec; 62(4):187–98

Clinical and environmental isolates of Cryptococcus neoformans in Bangkok (Thailand). Imwidthaya P, et al. **Mycopathologia** 1989 Oct;108(1):65–7

Occurrence of Yersinia spp. in migratory birds, ducks, seagulls, and swallows in Japan. Kaneuchi C, et al. **Nippon Juigaku Zasshi** 1989 Aug;51(4):805–8

[Stationary and migratory avifauna as reservoirs of Salmonella, Yersinia and Campylobacter] Levrè E, et al. **Ann Ig** 1989 May–Aug;1(3–4):729–40 (Eng. Abstr.) **(Ita)**

[A case of chronic bronchitis with Pasteurella multocida possibly resulting from infection from a bird] Nakajima M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jun; 27(6):742–6 (13 ref.) (Eng. Abstr.) **(Jpa)**

[Antibiotic resistance of Campylobacter and its epidemiologic significance] Aleksandrova NZ, et al. **Antibiot Khimioter** 1990 Mar;35(3):34–6 (Eng. Abstr.) **(Rus)**

[Circulation of the influenza A virus of H13 serosubtype among seagulls in the Northern Caspian (1979–1985)] Iamnikova SS, et al. **Vopr Virusol** 1989 Jul–Aug; 34(4):426–30 (Eng. Abstr.) **(Rus)**

[Spread of influenza viruses among synanthropic and semisynanthropic birds of the middle Dnieper from the data of serologic studies] Ignatenko TA, et al. **Vopr Virusol** 1989 Jul–Aug;34(4):480–2 **(Rus)**

PARASITOLOGY

Host specificity of Strigiphilus owl lice (Ischnocera: Philopteridae), with the description of new species and host associations. Clayton DH. **J Med Entomol** 1990 May; 27(3):257–65

A new genus of Dilepididae (Cestoda) of the yellowbill Ceuthmochares aereus (Cuculidae) from the Ivory Coast. Mariaux J, et al. **J Parasitol** 1990 Feb;76(1):22–6

[Nematode parasites of birds of the fauna in Tunisia] Bernard J. **Arch Inst Pasteur Tunis** 1989 Jan–Apr;66(1–2):33–51 (Eng. Abstr.) **(Fre)**

[Variability of the metric characteristics of lice (Mallophaga) from pheasants (Phasianus colchicus L.)] Modrzejewska M. **Wiad Parazytol** 1989;35(4):323–36 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

The role of gonadotropin releasing hormone (Gn-RH) in the regulation of gonadal functions of birds. Review article. Péczely P. **Acta Biol Hung** 1989;40(3):161–93 (74 ref.)

Influence of environmental temperature and photoperiod on temporal structure of sleep in corvids. Szymczak JT. **Acta Neurobiol Exp (Warsz)** 1989;49(6):359–66

Photoperiodic ovarian response in yellow-throated sparrow, Gymnorhis xanthocollis: involvement of circadian rhythm. Dixit AS, et al. **Acta Physiol Hung** 1989;73(4):455–60

Homeostatic actions of osmoregulatory hormones: clues derived from studies on avian osmoregulation. Simon E, et al. **Acta Physiol Pol** 1989 May–Jun;40(3):338–46 (21 ref.)

Functions of the flow of urine and digesta in the avian lower intestine. Thomas DH, et al. **Acta Vet Scand Suppl** 1989; 86:212–8 (30 ref.)

Nonshivering thermogenesis and adaptation to fasting in king penguin chicks. Duchamp C, et al. **Am J Physiol** 1989 Oct; 257(4 Pt 2):R744–51

Regulation of glycolysis in the pectoralis muscles of seasonally acclimatized American goldfinches exposed to cold. Marsh RL, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):R711–7

Micropuncture study of the avian kidney: infusion of mannitol or sodium chloride. Roberts JR, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):R869–75

Fluoride accumulation and bone strength in wild black-crowned night-herons [published erratum appears in Arch Environ Contam Toxicol 1990 May–Jun;19(3):470] Henny CJ, et al. **Arch Environ Contam Toxicol** 1990 Jan–Feb;19(1):132–7

Selective impairment of song learning following lesions of a forebrain nucleus in the juvenile zebra finch. Sohrabji F, et al. **Behav Neural Biol** 1990 Jan;53(1):51–63

Extraocular control of photorefractoriness in American tree sparrows (Spizella arborea). Wilson FE. **Biol Reprod** 1989 Jul;41(1):111–6

Binocularity in the little owl, Athene noctua. I. Anatomical investigation of the thalamo-Wulst pathway. Bagnoli P, et al. **Brain Behav Evol** 1990;35(1):31–9

Binocularity in the little owl, Athene noctua. II. Properties of visually evoked potentials from the Wulst in response to monocular and binocular stimulation with sine wave gratings. Porciatti V, et al. **Brain Behav Evol** 1990; 35(1):40–8

Ipsilaterally evoked responses of the zebra finch visual wulst are reduced during ontogeny. Bredenkötter M, et al. **Brain Res** 1990 May 7;515(1–2):343–6

Estrogen stimulates the incorporation of new neurons into avian song nuclei during adolescence. Nordeen EJ, et al. **Brain Res Dev Brain Res** 1989 Sep 1;49(1):27–32

Sodium-activated potassium channel in avian sensory neurons. Haimann C, et al. **Cell Biol Int Rep** 1989 Dec; 13(12):1133–9 (19 ref.)

Advancing schedules and constant light produce faster resynchronization of circadian rhythms. Binkley S, et al. **Chronobiol Int** 1989;6(4):305–11

Panting and acid-base regulation in heat stressed birds. Marder J, et al. **Comp Biochem Physiol [A]** 1989; 94(3):395–400 (56 ref.)

Sharing food in the stomachs of seabirds between adults and chicks—a case for delayed gastric emptying. Wilson RP, et al. **Comp Biochem Physiol [A]** 1989;94(3):461–6

Orientation in birds. **Experientia** 1990 Apr 15;46(4):335–428

Sensory basis of bird orientation. Semm P, et al. **Experientia** 1990 Apr 15;46(4):372–8

Energy dissipation in the elastic recoil of leg tendons of Larus ridibundus. Olmos M, et al. **Gegenbaurs Morphol Jahrb** 1989;135(5):775–8

Pineal activity during the seasonal gonadal cycle in a wild avian species, the tree pie (Dendrocitta vagabunda). Chaudhuri S, et al. **Gen Comp Endocrinol** 1989 Dec; 76(3):346–9

On the recovery of photosensitivity in two passerine species, American tree sparrows (Spizella arborea) and Harris' sparrows (Zonotrichia querula). Wilson FE. **Gen Comp Endocrinol** 1990 Aug;79(2):283–90

Extraocular control of seasonal reproduction in female tree sparrows (Spizella arborea). Wilson FE. **Gen Comp Endocrinol** 1990 Mar;77(3):397–402

Radionuclide uptake and growth of barn swallows nesting by radioactive leaching ponds. Millard JB, et al. **Health Phys** 1990 Apr;58(4):429–39

Testosterone induction of song in photosensitive and photorefractory male sparrows. Nowicki S, et al. **Horm Behav** 1989 Dec;23(4):514–25

Testosterone-induced inhibition of incubation in the spotted sandpiper (Actitis mecularia). Oring LW, et al. **Horm Behav** 1989 Sep;23(3):412–23

Effect of testosterone on testes, body weight and plumage regeneration in photorefractory male redheaded bunting Emberiza bruniceps. Kumar V, et al. **Indian J Exp Biol** 1990 May;28(5):417–20

Temporal integration in zebra finches (Poephila guttata). Okanoya K, et al. **J Acoust Soc Am** 1990 Jun;87(6):2782–4

Autoradiographic localization of progestin-concentrating cells in the brain of the zebra finch. Lubischer JL, et al. **J Comp Neurol** 1990 Jan 15;291(3):450–6

Experimental determination of a unit of song production in the zebra finch (Taeniopygia guttata). Cynx J. **J Comp Psychol** 1990 Mar;104(1):3–10

Sexual maturation in starlings raised on long or short days: changes in hypothalamic gonadotrophin-releasing hormone and plasma LH concentrations. Dawson A, et al. **J Endocrinol** 1989 Nov;123(2):189–96

The neural coding of auditory space. Takahashi TT. **J Exp Biol** 1989 Sep;146:307–22 (33 ref.)

Seasonal shifts in odor acuity by starlings. Clark L, et al. **J Exp Zool** 1990 Jul;255(1):22–9

Function of the avian cecum. Proceedings of the First International Avian Cecal Symposium. Grand Marais, Minnesota, August 21–26, 1988. **J Exp Zool Suppl** 1989; 3:1–128

The passerine bird song system as a model in neuroendocrine research. Arnold AP. **J Exp Zool Suppl** 1990;4:22–30 (92 ref.)

Recent findings on the development of dimorphic anatomy in the avian song system. DeVoogd TJ. **J Exp Zool Suppl** 1990;4:183–6

Central axonal regeneration and autoimmunity in adult birds. Margotta V, et al. **J Hirnforsch** 1989;30(5):595–602

Cell death during development of a forebrain nucleus involved with vocal learning in zebra finches. Bottjer SW, et al. **J Neurobiol** 1989 Oct;20(7):609–18

Addition of song-related neurons in swamp sparrows coincides with memorization, not production, of learned songs. Nordeen KW, et al. **J Neurobiol** 1989 Oct; 20(7):651–61

Is androgen-dependent aromatase activity sexually differentiated in the rat and dove preoptic area? Steimer T, et al. **J Neurobiol** 1990 Jul;21(5):787–95

Effects of castration and testosterone treatment on the activity of testosterone-metabolizing enzymes in the brain of male and female zebra finches. Vockel A, et al. **J Neurobiol** 1990 Jul;21(5):808–25

Neural maps of head movement vector and speed in the optic tectum of the barn owl. du Lac S, et al. **J Neurophysiol** 1990 Jan;63(1):131–46

Genesis and death of vocal control neurons during sexual differentiation in the zebra finch. Kirn JR, et al. **J Neurosci** 1989 Sep;9(9):3176–87

Visuomotor adaptation to displacing prisms by adult and baby barn owls. Knudsen EI, et al. **J Neurosci** 1989 Sep; 9(9):3297–305

Vision calibrates sound localization in developing barn owls. Knudsen EI, et al. **J Neurosci** 1989 Sep;9(9):3306–13

Brain pathways for learned and unlearned vocalizations differ in zebra finches. Simpson HB, et al. **J Neurosci** 1990 May; 10(5):1541–56

Spatial selectivity and binaural responses in the inferior colliculus of the great horned owl. Volman SF, et al. **J Neurosci** 1989 Sep;9(9):3083–96

Should a parasite expose itself? (some theoretical aspects of begging and vigilance behavior). Motro U. **J Theor Biol** 1989 Sep 22;140(2):279–87

Parasites and sexual selection [letter] Cox FE. **Nature** 1989 Sep 28;341(6240):289–90

No evidence for illegitimate young in monogamous and polygynous warblers. Gyllensten UB, et al. **Nature** 1990 Jan 11;343(6254):168–70

Horizontal and vertical components of head movement are controlled by distinct neural circuits in the barn owl. Masino T, et al. **Nature** 1990 May 31;345(6274):434–7

Neurophysiological and behavioral development in birds: song learning as a model system. Clayton N, et al. **Naturwissenschaften** 1990 Mar;77(3):123–7 (42 ref.)

Optic flow-field variables trigger landing in hawk but not in pigeons. Davies MN, et al. **Naturwissenschaften** 1990 Mar;77(3):142–4

Context memorization in the song-learning of birds. Hultsch H, et al. **Naturwissenschaften** 1989 Dec;76(12):584–6

Birdsong for neurobiologists. Konishi M. **Neuron** 1989 Nov; 3(5):541–9 (100 ref.)
Familiar neighbors enhance breeding success in birds. Beletsky LD, et al. **Proc Natl Acad Sci U S A** 1989 Oct; 86(20):7933–6
Population declines in North American birds that migrate to the neotropics. Robbins CS, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7658–62
The role of antidiuretic hormone in the regulation of glomerular filtration rate in birds. Braun EJ. **Prog Clin Biol Res** 1990;342:522–7 (24 ref.)
Hormonal control of avian adrenocortical function: cellular and molecular aspects. Carsia RV. **Prog Clin Biol Res** 1990; 342:439–44 (21 ref.)
Endogenous–exogenous interactions in circannual rhythms. Gwinner E. **Prog Clin Biol Res** 1990;342:632–8 (12 ref.)
Neuroendocrine control of prolactin and incubation behavior in gallinaceous birds. el Halawani ME, et al. **Prog Clin Biol Res** 1990;342:678–84 (23 ref.)
Hormones and stress in birds: activation of the hypothalamo–pituitary–adrenal axis. Harvey S, et al. **Prog Clin Biol Res** 1990;342:453–60 (25 ref.)
Hormonal control of territorial behavior in birds—field and laboratory investigations. Wingfield JC. **Prog Clin Biol Res** 1990;342:697–703
Contributions of bird studies to biology. Konishi M, et al. **Science** 1989 Oct 27;246(4929):465–72 (144 ref.)
Lower–field myopia in birds: an adaptation that keeps the ground in focus. Hodos W, et al. **Vision Res** 1990; 30(5):653–7
The electroretinogram of the little owl (Athene noctua). Porciatti V, et al. **Vision Res** 1989;29(12):1693–8
Calcium homeostasis in birds. Hurwitz S. **Vitam Horm** 1989; 45:173–221 (228 ref.)
[Structural–functional organization of the cerebral circulatory system in birds] Krivchenko AI, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1616–23 (30 ref.) (Eng. Absir.) **(Rus)**
[The cholin– and adrenergic mechanisms of the adaptation of the cardiac activity of diving animals during hypoxia] Kovalenko SG, et al. **Nerv Sist** 1989;28:21–8 **(Rus)**
[Current concepts of the heart conduction system in birds] Prosheva VI. **Usp Fiziol Nauk** 1990 Apr–Jun;21(2):83–93 (45 ref.) **(Rus)**
[The learning capacity of crows and pigeons: the formation of a system of color stimulus discrimination with an increasing number of reinforcements] Zorina ZA, et al. **Zh Vyssh Nerv Deiat** 1989 Jul–Aug;39(4):660–6 **(Rus)**
[Evaluation of the ability to solve the Revecz–Krushinskiĭ test in corvine birds] Zorina ZA, et al. **Zh Vyssh Nerv Deiat** 1989 Nov–Dec;39(6):1056–60 (Eng. Abstr.) **(Rus)**

SURGERY

Vasectomy in small passerine birds. Birkhead TR, et al. **Vet Rec** 1989 Dec 23–30;125(26–27):646
[Several surgical operations in animal husbandry for healthy birds required or implemented by animal welfare regulations] Korbel R, et al. **Tierarztl Prax** 1989;17(4):380–7 (35 ref.) (Eng. Abstr.) **(Ger)**

BIREFRACTION see **BIREFRINGENCE**

BIREFRINGENCE

Changes in birefringence as markers of thermal damage in tissues. Thomsen S, et al. **IEEE Trans Biomed Eng** 1989 Dec;36(12):1174–9

BIRTH CERTIFICATES

The Minnesota Twin Family Registry: some initial findings. Lykken DT, et al. **Acta Genet Med Gemellol (Roma)** 1990; 39(1):35–70
An assessment of error in parental occupation from the birth certificate. Shaw GM, et al. **Am J Epidemiol** 1990 Jun; 131(6):1072–9
Are preterm black infants larger than preterm white infants, or are they more misclassified? Suthutvoravut S, et al. **J Biosoc Sci** 1989 Oct;21(4):443–51
Barons bred and born [editorial] **Lancet** 1990 Feb 3; 335(8684):266
Gestational age reporting and preterm delivery. Alexander GR, et al. **Public Health Rep** 1990 May–Jun;105(3):267–75
Evaluation of the hospital discharge diagnoses index and the birth certificate as sources of information on birth defects. Hexter AC, et al. **Public Health Rep** 1990 May–Jun; 105(3):296–307
A quality study of a medical birth registry. Cnattingius S, et al. **Scand J Soc Med** 1990 Jun;18(2):143–8
[Underregistration of live births in a city of the State of Piauí, Brazil] Portela MH. **Rev Saude Publica** 1989 Dec; 23(6):493–501 (Eng. Abstr.) **(Por)**

LEGISLATION & JURISPRUDENCE

Use your ball–point pen to give every child two real parents [editorial] Mattox J. **Tex Med** 1990 Apr;86(4):5–6

BIRTH CONTROL see **FAMILY PLANNING**

BIRTH DEFECTS see **ABNORMALITIES**

BIRTH INJURIES

Fracture of the femur at cesarean section: case report and review of literature. Vasa R, et al. **Am J Perinatol** 1990 Jan;7(1):46–8 (9 ref.)
Reforming the tort. Injured Infant Act changes; Bulala case and the cap. **Va Med** 1990 Jun;117(6):233–4

BLOOD

[The effect of pH values and the method of delivery on intrapartum injuries in the neonate] Aleksić S, et al. **Med Pregl** 1989;42(3–4):163–5 (Eng. Abstr.) **(Ser)**

CLASSIFICATION

Cerebral birth injuries: their orthopaedic classification and subsequent treatment. 1932 [classical article] Phelps WM. **Clin Orthop** 1990 Apr;(253):4–11

COMPLICATIONS

Sever–L'Episcopo transfers in obstetrical palsy: a retrospective review of twenty cases. Strecker WB, et al. **J Pediatr Orthop** 1990 Jul–Aug;10(4):442–4
Stern–Tanner disease: a radical cure [letter] Lipson AH. **Med J Aust** 1990 Apr 16;152(8):444
[Dystocia and intracranial hemorrhage in perinatal autopsy] Shi SZ. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Jul; 24(4):209–11, 252 (Eng. Abstr.) **(Chi)**
[X–ray symptomatology and differential diagnosis of functional obstruction of the digestive tract in children induced by birth injuries of the spine and spinal cord] Michailov MK, et al. **Radiol Diagn (Berl)** 1989;30(6):669–74 (Eng. Abstr.) **(Ger)**
[Posterior fossa subdural hematoma in the newborn caused by birth injury] Kanno M, et al. **No Shinkei Geka** 1989 Dec;17(12):1159–64 (Eng. Abstr.) **(Jpn)**
[Surgical treatment of functional disorders of the hand in sequelae of birth injuries of the brachial plexus in children] Merkulov VN. **Ortop Travmatol Protez** 1989 Jul;(7):45–7 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Surgical management of brachial plexus birth injuries [letter; comment] Buck BC. **Dev Med Child Neurol** 1989 Oct; 31(5):691–2 Comment on: Dev Med Child Neurol 1988 Dec;30(6):824–8.
Septal deviation in neonates. Chintapatla S, et al. **Indian Pediatr** 1989 Jul;26(7):678–82
Ultrasonic diagnosis of separation of the proximal humeral epiphysis in the newborn. Broker FH, et al. **J Bone Joint Surg [Am]** 1990 Feb;72(2):187–91
Neonatal rib fracture: birth trauma or child abuse? Rizzolo PJ, et al. **J Fam Pract** 1989 Nov;29(5):561–3
Neonatal skull depression: review of four cases. Tavarez LA, et al. **J Perinatol** 1989 Dec;9(4):423–6
Ultrasound diagnosis of neonatal spinal epidural hemorrhage. Leadman M, et al. **JCU** 1988 Jul–Aug;16(6):440–2
Magnetic resonance imaging in cervical cord birth injury. Lanska MJ, et al. **Pediatrics** 1990 May;85(5):760–4
[Ultrasonics in the study of periencephalic post–traumatic effusions in the newborn and suckling infants] Magnano GM, et al. **Radiol Med (Torino)** 1989 Nov;78(5):492–5 (Eng. Abstr.) **(Ita)**
[The interrelations of ophthalmologic and neurologic changes in newborns with birth injuries] Dubileĭ OV, et al. **Oftalmol Zh** 1989;(3):169–71 (Eng. Abstr.) **(Rus)**
[Neuro–ultrasonography in the assessment of perinatal lesions of the brain in high–risk children at birth and at 3 months of age] Nikulin LA, et al. **Pediatriia** 1989;(10):46–50 (Eng. Abstr.) **(Rus)**

ECONOMICS

No–fault cerebral palsy insurance: an alternative to the obstetrical malpractice lottery. Freeman AD, et al. **J Health Polit Policy Law** 1989 Winter;14(4):707–18
Can no–fault compensation of impaired infants alleviate the malpractice crisis in obstetrics? Gallup CL. **J Health Polit Policy Law** 1989 Winter;14(4):691–705

EPIDEMIOLOGY

Clavicle fractures in the newborn. Oppenheim WL, et al. **Clin Orthop** 1990 Jan;(250):176–80
Congenital brachial palsy in the eastern province of Saudi Arabia. al–Rajeh S, et al. **J Child Neurol** 1990 Jan;5(1):35–8
Birth–injured infants: legal definitions, claims frequency in Virginia. Brown BS. **Va Med** 1989 Nov;116(11):473–6
Birth injuries: incidence and predisposing factors. Salonen IS, et al. **Z Kinderchir** 1990 Jun;45(3):133–5
[Routine examination of the mature newborn infant. Incidence of frequent "minor findings"] Rosegger H, et al. **Wien Klin Wochenschr** 1990 May 11;102(10):294–9 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Nerve injuries in neonates. Goel SP, et al. **J Indian Med Assoc** 1989 Jun;87(6):132–4
Tentorial hemorrhage associated with vacuum extraction. Hanigan WC, et al. **Pediatrics** 1990 Apr;85(4):534–9
Testicular injury in breech delivery: possible implications. Tiwary CM. **Urology** 1989 Oct;34(4):210–2
[Birth injuries and lesions of the spinal cord in the perinatal period] Serov VN, et al. **Akush Ginekol (Mosk)** 1990 May; (5):52–5 (Eng. Abstr.) **(Rus)**

MORTALITY

Obstetric accidents: a review of 64 cases. Ennis M, et al. **BMJ** 1990 May 26;300(6736):1365–7

PATHOLOGY

Neuropathologic observations in congenital phrenic nerve palsy. Alvord EC Jr, et al. **J Child Neurol** 1990 Jul; 5(3):205–9
[Injuries of the nose in neonates] Bednaříková L, et al. **Cas Lek Cesk** 1990 Jun 29;129(26):815–9 (Eng. Abstr.) **(Cze)**
[Craniocerebral trauma in a newborn infant—precipitous labor or a fall after birth] Albrecht U, et al. **Beitr Gerichtl Med** 1989;47:441–6 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

[Parameters of cellular adaptation in newborn infants in health and in perinatal injuries of the CNS] Bankova VV, et al. **Pediatriia** 1989;(10):14–8 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Can shoulder dystocia be predicted? [letter] Gimbel GL. **Am J Obstet Gynecol** 1990 Aug;163(2):680

RADIOGRAPHY

[X–ray diagnosis of birth injuries of the skull and spine in children (lecture)] Mikhallov MK. **Vestn Rentgenol Radiol** 1989 Sep–Oct;(5):68–73 (12 ref.) **(Rus)**

SURGERY

Pediatric microsurgery. Replantation, revascularization, and obstetric brachial plexus palsy. Shenaq SM, et al. **Clin Plast Surg** 1990 Jan;17(1):77–83 (41 ref.)
Transepiphyseal femoral neck fracture at birth. Fairhurst MJ, et al. **J Bone Joint Surg [Br]** 1990 Jan;72(1):155–6
Twenty–six early operations in brachial birth palsy. Alanen M, et al. **Z Kinderchir** 1990 Jun;45(3):136–9
[Labor trauma–induced epiphysiolysis of the proximal femur. 4 cases] Prévot J, et al. **Z Kinderchir** 1989 Oct;44(5):289–92 (Eng. Abstr.) **(Ger)**
[Microsurgical reconstruction of obstetric plexus injuries] Carlstedt T, et al. **Lakartidningen** 1990 May 9; 87(19):1669–73 **(Swe)**

THERAPY

[Birth injuries of the spine] Saniukas KA, et al. **Vestn Khir** 1989 Nov;143(11):78–81 (Eng. Abstr.) **(Rus)**

BIRTH INTERVALS

Interpregnancy interval and risk of preterm labor. Lang JM, et al. **Am J Epidemiol** 1990 Aug;132(2):304–9
Sources of variation in interbirth intervals among captive bonnet macaques (Macaca radiata). Silk JB. **Am J Phys Anthropol** 1990 Jun;82(2):213–30
Comment on Knodel's "Starting, Stopping, and Spacing During the Early Stages of Fertility Transition". Anderton DL. **Demography** 1989 Aug;26(3):467–70
Estimating birth stopping and spacing behavior. Ewbank DC. **Demography** 1989 Aug;26(3):473–83
Birth–interval dynamics in rural Bangladesh and maternal weight. Ford K, et al. **Demography** 1989 Aug;26(3):425–37
Birth intervals and childhood mortality in rural Bangladesh. Koenig MA, et al. **Demography** 1990 May;27(2):251–65
The impact of changes in birth spacing on age at last birth: a response to Anderton. McDonald P, et al. **Demography** 1989 Aug;26(3):471–2
To what extent does breastfeeding explain birth–interval effects on early childhood mortality? Retherford RD, et al. **Demography** 1989 Aug;26(3):439–50
Gender of children and birth timing. Teachman JD, et al. **Demography** 1989 Aug;26(3):411–23
Conceptive delays of twin–prone mothers: a demographic epidemiologic approach. Philippe P, et al. **Hum Biol** 1989 Aug;61(4):599–614
Childbirth spacing in a rural community of Delhi: profile in various marriage cohorts by decades. Sethi NK, et al. **Indian Pediatr** 1989 Sep;26(9):894–9
Effect of delivery season on subsequent birth interval in early 20th century in Japan. Nonaka K. **Int J Biometeorol** 1989 Dec;33(4):238–45
Time to pregnancy—a model and its application. Boldsen JL, et al. **J Biosoc Sci** 1990 Apr;22(2):255–62
Changes in timing of fertility—a Canadian experience. Rajulton F, et al. **J Biosoc Sci** 1990 Jan;22(1):33–42
Birth–spacing in rural Yangoru, 1970–1987. Roscoe PB. **P N G Med J** 1989 Jun;32(2):123–7
Maternal age, gravidity, and pregnancy spacing effects on spontaneous fetal mortality. Casterline JB. **Soc Biol** 1989 Fall–Winter;36(3–4):186–212
The effects of breastfeeding and birth spacing on child survival in China. Tu P. **Stud Fam Plann** 1989 Nov–Dec; 20(6 Pt 1):332–42
The value of pregnancy spacing—observations of a medical

student on elective in Vanuatu [letter] McClure DN. **Trop Doct** 1989 Oct;19(4):192

BIRTH ORDER

More on birth order in multiple sclerosis [letter] James W. **Acta Neurol Scand** 1990 May;81(5):476–7

Birth order in multiple sclerosis [letter; comment] James WH. **Acta Neurol Scand** 1989 Oct;80(4):354–5 Comment on: Acta Neurol Scand 1988 Oct;78(4):313–7.

Suicide in a middle–born child. Lester D. **Adolescence** 1989 Winter;24(96):909–14

Evaluations of family by youth: do they vary as a function of family structure, gender, and birth order? Parish TS. **Adolescence** 1990 Summer;25(98):353–6

Psychological risk factors for sleep disturbances in a northern Finnish cohort of first and second born children. Seitamo L. **Arctic Med Res** 1988;47 Suppl 1:542–4

Hay fever, hygiene, and household size. Strachan DP. **BMJ** 1989 Nov 18;299(6710):1259–60

The effect of birth order on the occurrence of developmental language impairment. Tomblin JB. **Br J Disord Commun** 1990 Apr;25(1):77–84

A formal theory for male–preferring stopping rules of childbearing: sex differences in birth order and in the number of siblings. Yamaguchi K. **Demography** 1989 Aug; 26(3):451–65

Birth order and birth weight of Saudi newborns. Wong SS. **J R Soc Health** 1990 Jun;110(3):96–7, 100

Birth order and intellectual development among Zimbabwean children. Wilson D, et al. **J Soc Psychol** 1990 Jun; 130(3):409–11

Perceptions of family learning environments: the influence of sibling background. Marjoribanks K. **Percept Mot Skills** 1989 Dec;69(3 Pt 1):955–61

Birth order and academic achievement of children in Transkei. Cherian VI. **Psychol Rep** 1990 Feb;66(1):19–24

Birth order and fear of success among midadolescents. Ishiyama FI, et al. **Psychol Rep** 1990 Feb;66(1):17–8

Relationship of liking of first names to birth order and loneliness. Joubert CE. **Psychol Rep** 1990 Jun;66(3 Pt 2):1177–8

Reexamination of the relationship between birth order and obsessive–compulsive disorder. Pollard CA, et al. **Psychopathology** 1990;23(1):52–6

[An analysis of effects of fetal order and parental age on retinoblastoma] Shen FM. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jul;23(4):226–9 (Eng. Abstr.) **(Chi)**

[Effect of the paragenetic factors on selected body measurements of newborn infants in Wroclaw] Laskowska B. **Wiad Lek** 1989 Apr 30;42(8):503–9 (Eng. Abstr.) **(Pol)**

[Socio–ecological concept of health] Lupandin VM. **Vestn Akad Med Nauk SSSR** 1989;(8):42–8 (Eng. Abstr.) **(Rus)**

BIRTH RATE

Stillbirth rate and weight at birth of quintuplets in Japan. Imaizumi Y. **Acta Genet Med Gemellol (Roma)** 1989; 38(1–2):65–9

The link between infant mortality and birth rates—the importance of breastfeeding as a common factor. Hanson LA, et al. **Acta Paediatr Scand** 1990 May;79(5):481–9 (45 ref.)

The impact of legalized abortion on adolescent childbearing in New York City. Joyce TJ, et al. **Am J Public Health** 1990 Mar;80(3):273–8

Seasonality of births: stability and change in a developing country. Holland B. **Hum Biol** 1989 Aug;61(4):591–8

The solar wind and human birth rate: a possible relationship due to magnetic disturbances. Randall W. **Int J Biometeorol** 1990 May;34(1):42–8

Seasonal variation in human births. James WH. **J Biosoc Sci** 1990 Jan;22(1):113–9

School–based clinics' birth, fertility, and abortion rates [letter; comment] Cullen TF. **JAMA** 1989 Dec 15;262(23):3271 Comment on: JAMA 1989 Apr 7;261(13):1939–42.

Health is a sustainable state. King M. **Lancet** 1990 Sep 15; 336(8716):664–7

Reproductive performance on the Maltese Islands during the Second World War. Savona–Ventura C. **Med Hist** 1990 Apr;34(2):164–77

Reduction of births in Italy after the Chernobyl accident. Bertollini R, et al. **Scand J Work Environ Health** 1990 Apr; 16(2):96–101

[Consolidation and expansion of the Medical Birth Registry] Bergsjø P. **Tidsskr Nor Laegeforen** 1989 Nov 10; 109(31):3189–90 **(Nor)**

ETHNOLOGY

Seasonality of births among Bedouin Arabs residing in the Negev Desert of Israel. Guptill K, et al. **J Biosoc Sci** 1990 Apr;22(2):213–23

TRENDS

Maternal age and birth statistics [letter] Harrison H Jr. **Alaska Med** 1990 Jan–Mar;32(1):56–7

Demographic conditions responsible for population aging. Preston SH, et al. **Demography** 1989 Nov;26(4):691–704

Simplified birth rate estimates under nonstable conditions. Venkatacharya K. **Demography** 1990 Feb;27(1):131–47

Recent evidence on trends and differentials in Bangladesh fertility. Amin R, et al. **J Biosoc Sci** 1990 Apr;22(2):225–30

Seasonality of births and family characteristics in a Spanish population. Fuster V. **J Biosoc Sci** 1989 Oct;21(4):465–74

Fertility of older women [letter; comment] Brock DJ, et al. **Lancet** 1990 Jun 16;335(8703):1470 Comment on: Lancet 1990 Apr 14;335(8694):888–9.

BIRTH SPACING see **BIRTH INTERVALS**

BIRTH WEIGHT

see related
FETAL MACROSOMIA
INFANT, LOW BIRTH WEIGHT

Stillbirth rate and weight at birth of quintuplets in Japan. Imaizumi Y. **Acta Genet Med Gemellol (Roma)** 1989; 38(1–2):65–9

International Collaborative Effort (ICE) on birthweight; plurality; and perinatal and infant mortality. I: Methods of data collection and analysis. Alberman E, et al. **Acta Obstet Gynecol Scand** 1989;68(1):5–10

International Collaborative Effort (ICE) on birthweight; plurality; and perinatal and infant mortality. II: Comparisons between birthweight distributions of births in member countries from 1970 to 1984. Evans S, et al. **Acta Obstet Gynecol Scand** 1989;68(1):11–7

Maternal height, birthweight, obstetric conjugate and their influence on the management of parturients with a previous cesarean scar. Mahmood TA. **Acta Obstet Gynecol Scand** 1989;68(7):595–8

Insulin cord levels in large for gestational age infants born to non–obese, non–diabetic mothers. Procianoy RS, et al. **Acta Paediatr Scand** 1990 Mar;79(3):366–7

Intestinal absorption of D(+) xylose in newborns of different gestational ages and sizes. Tanzer F, et al. **Acta Paediatr Scand** 1990 Mar;79(3):364–5

Birthweight specific perinatal mortality in Greece. Tzoumaka–Bakoula C, et al. **Acta Paediatr Scand** 1990 Jan; 79(1):47–51

Socio–economic variables and pregnancy outcome. Birthweight in singletons. Ericson A, et al. **Acta Paediatr Scand Suppl** 1989;360:48–55

Modelling of reference values for size at birth. Lawrence C, et al. **Acta Paediatr Scand Suppl** 1989;350:55–69

A positive association between maternal serum zinc concentration and birth weight. Neggers YH, et al. **Am J Clin Nutr** 1990 Apr;51(4):678–84

Maternal growth during pregnancy and decreased infant birth weight. Scholl TO, et al. **Am J Clin Nutr** 1990 May; 51(5):790–3

Dietary intake of methylmercury as a correlate of gestational length and birth weight among newborns in Greenland. Foldspang A, et al. **Am J Epidemiol** 1990 Aug;132(2):310–7

Maternal activity and birth weight: a prospective, population–based study. Rabkin CS, et al. **Am J Epidemiol** 1990 Mar;131(3):522–31

Intrauterine growth and spastic cerebral palsy. I. Association with birth weight for gestational age. Blair E, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):229–37

Birth weight discordancy in male–first and female–first pairs of unlike–sexed twins. Blickstein I, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):661–3

Proteinuria and outcome of 444 pregnancies complicated by hypertension. Ferrazzani S, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):366–71

Mathematic form corrected [letter; comment] Habekovic D. **Am J Obstet Gynecol** 1990 May;162(5):1351 Comment on: Am J Obstet Gynecol 1989 Apr;160(4):854–60; discussion 860–2.

Effects of birth weight and sociodemographic variables on mental development of neonatal intensive care unit survivors. Resnick MB, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):374–8

Comparison of umbilical artery pH and 5–minute Apgar score in the low–birth–weight and very–low–birth–weight infant. Stark CF, et al. **Am J Obstet Gynecol** 1990 Sep; 163(3):818–23

Accuracy of ultrasonic fetal weight estimation and detection of small for gestational age fetuses. Palo P, et al. **Am J Perinatol** 1989 Oct;6(4):400–4

What is twin birthweight discordance? Patterson RM, et al. **Am J Perinatol** 1990 Jul;7(3):217–9

Some sources of error in the coding of birth weight. Brunskill AJ. **Am J Public Health** 1990 Jan;80(1):72–3

Secular change in birthweight among southeast Asian immigrants to the United States. Li DK, et al. **Am J Public Health** 1990 Jun;80(6):685–8

Ten–year changes in birthweight distributions of black and white infants, South Carolina. Mayberry RM, et al. **Am J Public Health** 1990 Jun;80(6):724–6

Birthweights of preterm Nigerian infants of 26–36 weeks' gestation. Ibe BC, et al. **Ann Trop Paediatr** 1990 Mar; 10(1):27–9

Secular trend in birthweight in an industrial hospital in India. Satpathy R, et al. **Ann Trop Paediatr** 1990 Mar;10(1):21–5

Birthweight ratio and outcome in preterm infants. Morley R, et al. **Arch Dis Child** 1990 Jan;65(1 Spec No):30–4

Birthweight specific trends in cerebral palsy. Pharoah PO, et al. **Arch Dis Child** 1990 Jun;65(6):602–6

Birthweight of infants born to Hispanic women employed in agriculture. Fenster L, et al. **Arch Environ Health** 1990 Jan–Feb;45(1):46–52

Excessive physical work during pregnancy and birth weight. Hassan TJ, et al. **Asia Oceania J Obstet Gynaecol** 1990 Mar;16(1):17–20

Changes in the coefficient variations of live birth weight in Japan, 1969–1985. Makino S, et al. **Asia Pac J Public Health** 1989;3(4):285–90

Maternal weight gain, smoking and other factors in pregnancy as predictors of infant birth–weight in Sydney women. Ash S, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 Pt 1):212–9

Philippino and Vietnamese women—a study of intrapartum differences. Howell R. **Aust N Z J Obstet Gynaecol** 1989 Nov;29(4):399–402

The influence of maternal height, obstetrical conjugate and fetal birth–weight in the management of patients with breech presentation. Mahmood TA. **Aust N Z J Obstet Gynaecol** 1990 Feb;30(1):10–4

Maternal smoking, urinary cotinine levels and birth–weight. Mathai M, et al. **Aust N Z J Obstet Gynaecol** 1990 Feb; 30(1):33–6

Shoulder dystocia—a clinical study of 56 cases. al–Najashi S, et al. **Aust N Z J Obstet Gynaecol** 1989 May;29(2):129–32

Correlation of commonly used measures of intrauterine growth with estimated neonatal body fat. Wolfe HM, et al. **Biol Neonate** 1990;57(3–4):167–71

Fetal and placental size and risk of hypertension in adult life. Barker DJ, et al. **BMJ** 1990 Aug 4;301(6746):259–62

Intrauterine growth is related to gestational pulmonary function in pregnant asthmatic women. Kaiser–Permanente Asthma and Pregnancy Study Group. Schatz M, et al. **Chest** 1990 Aug;98(2):389–92

Cord serum thyrotropin and birth weight in a normal Japanese population [letter; comment] Mitsuda N, et al. **Clin Chem** 1990 Jan;36(1):168–9 Comment on: Clin Chem 1988 Nov;34(11):2371.

The relative contribution of birth weight and gestational age to physical traits of newborn infants. Ben–Amitai D, et al. **Early Hum Dev** 1990 Jun;22(3):131–44

Early post–natal growth of large–for–dates babies of non–diabetic mothers is influenced by maternal glucose metabolism. Ng WK, et al. **Early Hum Dev** 1989 Sep; 20(1):37–44

Renal function in the newborn. Newborn creatinine related to birth weight, maturity and maternal creatinine. Lao TT, et al. **Gynecol Obstet Invest** 1989;28(2):70–2

Socio–biological determinants of birth weight. Makhija K, et al. **Indian J Pediatr** 1989 Sep–Oct;56(5):639–43

Influence of maternal, foetal and socio–economic factors on neonatal morbidity: a study on hospital born babies. Choudhury G, et al. **Indian J Public Health** 1989 Apr–Jun; 33(2):66–70

Pregnancy at teenage—risk factor for lower birth weight. Aras R, et al. **Indian Pediatr** 1989 Aug;26(8):823–5

Comparative evaluation of two maternal weight–height indices during pregnancy. Bhatia BD, et al. **Indian Pediatr** 1989 Apr;26(4):353–7

Seasonal variation in birth weight patterns [letter] Murthy GV, et al. **Indian Pediatr** 1989 Jun;26(6):612

Birthweight patterns in Harare, Zimbabwe. Dole N, et al. **Int J Epidemiol** 1990 Mar;19(1):98–100

Development and evaluation of a colour–coded scale for birthweight surveillance in rural Egypt. Ritenbaugh CK, et al. **Int J Epidemiol** 1989;18(4 Suppl 2):S54–9

Sickle trait and its association with birthweight and urinary tract infections in pregnancy. Baill IC, et al. **Int J Gynaecol Obstet** 1990 Sep;33(1):19–21

The value of symphysio–fundal height/abdominal girth measurements in predicting fetal weight. Dare FO, et al. **Int J Gynaecol Obstet** 1990 Mar;31(3):243–8

Breech delivery of infants weighing more than 2000 grams: a case controlled retrospective analysis of 751 patients. Mahomed K, et al. **Int J Gynaecol Obstet** 1990 Jun; 32(2):111–5

Birth weight outcomes for repeat teenage pregnancy. Santelli JS, et al. **J Adolesc Health Care** 1990 May;11(3):240–7

"Size" and "shape" variables in the presence of covariates: an application to the sudden infant death syndrome. Fujisaki JM, et al. **J Clin Epidemiol** 1990;43(2):173–80

Factors associated with smoking in low–income pregnant women: relationship to birth weight, stressful life events, social support, health behaviors and mental distress. McCormick MC, et al. **J Clin Epidemiol** 1990;43(5):441–8

Effects of body measurements and weight on calf size and calving difficulty of Holsteins. Sieber M, et al. **J Dairy Sci** 1989 Sep;72(9):2402–10

Prognosis for twins discordant in birth weight of 1.0 kg or more: the impact of cesarean section. Rydhström H. **J Perinat Med** 1990;18(1):31–7

Birth order and birth weight of Saudi newborns. Wong SS. **J R Soc Health** 1990 Jun;110(3):96–7, 100

A comparison of two different ultrasound methods for estimating fetal weight in preterm gestations. Campbell WA, et al. **JCU** 1988 Sep;16(7):463–70

Evaluation methods for intrauterine growth using neonatal fat stores instead of birth weight as outcome measures: fetal and neonatal measurements correlated with neonatal skinfold thicknesses. Sumners JE, et al. **JCU** 1990 Jan; 18(1):9–14

Weight in infancy and death from ischaemic heart disease [letter; comment] **Lancet** 1989 Oct 21;2(8669):984–5

Comment on: Lancet 1989 Sep 9;2(8663):577–80.
Weight in infancy and death from ischaemic heart disease [letter] **Lancet** 1989 Dec 2;2(8675):1335
ECMO and outcome of mechanical ventilation in infants of birthweight over 2 kg [letter] Greenough A, et al. **Lancet** 1990 Sep 22;336(8717):760
Predicting trends in operative delivery for cephalopelvic disproportion in Africa [letter] Harrison KA. **Lancet** 1990 Apr 7;335(8693):861–2
Aboriginal and white births in Western Australia, 1980–1986. Part I: Birthweight and gestational age [see comments] Kliewer EV, et al. **Med J Aust** 1989 Nov 6;151(9):493–502 Comment in: Med J Aust 1990 Mar 19;152(6):334.
Birthweight percentiles for aborigines? Lancaster PA. **Med J Aust** 1989 Nov 6;151(9):489–90
Birthweight percentiles for aborigines? [letter; comment] Walker A, et al. **Med J Aust** 1990 Mar 19;152(6):334 Comment on: Med J Aust 1989 Nov 6;151(9):493–502.
Effects of maternal cigarette smoking on birth weight and preterm birth—Ohio, 1989. **MMWR** 1990 Sep 28; 39(38):662–5
Somatosensory evoked potentials in term and preterm infants in relation to postconceptional age and birth weight. Bongers-Schokking JJ, et al. **Neuropediatrics** 1990 Feb; 21(1):32–6
Maternal and cord serum glycosylated protein in neonatal macrosomia and correlation with birth weight. Ghosh G, et al. **Obstet Gynecol** 1990 Jan;75(1):79–83
Quality of prenatal care; selected social, behavioral, and biomedical factors; and birth weight. Poland ML, et al. **Obstet Gynecol** 1990 Apr;75(4):607–12
Weight gain during pregnancy in adolescence: predictive ability of early weight gain. Scholl TO, et al. **Obstet Gynecol** 1990 Jun;75(6):948–53
The influence of birth weight on labor in nulliparas. Turner MJ, et al. **Obstet Gynecol** 1990 Aug;76(2):159–63
Accuracy of ultrasonic weight prediction in the fetus with preterm premature rupture of membranes. Valea FA, et al. **Obstet Gynecol** 1990 Feb;75(2):183–5
Classification of small-for-gestational age births: weight-by-gestation standards of second birth conditional on the size of the first. Skjaerven R, et al. **Paediatr Perinat Epidemiol** 1989 Oct;3(4):432–47
Retinopathy of prematurity-induced blindness: birth weight-specific survival and the new epidemic. Gibson DL, et al. **Pediatrics** 1990 Sep;86(3):405–12
Need for and impact on neonatal mortality of extracorporeal membrane oxygenation in infants of greater than 2500-gram birth weight. Southgate WM, et al. **Pediatrics** 1990 Jul;86(1):71–4
Report of a special panel on desired prenatal weight gains for underweight and normal weight women. **Public Health Rep** 1990 Jan–Feb;105(1):24–8
The impact of universal screening for gestational glucose intolerance on outcome of pregnancy. Santini DL, et al. **Surg Gynecol Obstet** 1990 May;170(5):427–36
The effects of malaria chemoprophylaxis given by traditional birth attendants on the course and outcome of pregnancy. Greenwood BM, et al. **Trans R Soc Trop Med Hyg** 1989 Sep–Oct;83(5):589–94
Neonatal mid-upper-arm circumference is a valid proxy for birth-weight. Sauerborn R, et al. **Trop Med Parasitol** 1990 Mar;41(1):65–7
Outsize calf [letter] Mee JF, et al. **Vet Rec** 1989 Sep 23; 125(13):358
Dystocia in nine British breeds of cattle and its relationship to the dimensions of the dam and calf [see comments] Schwabe AE, et al. **Vet Rec** 1989 Dec 23–30; 125(26–27):636–9 Comment in: Vet Rec 1990 Feb 17;126(7):176.
[The structure and function of an automated system for predicting neonatal body weight (the Sinodeta P/1)] Dimitrov I, et al. **Akush Ginekol (Sofiia)** 1989;28(5):38–42 (Eng. Abstr.) (Bul)
[Frequency distribution of birth weight and gestational age in Taiwan] Yen YY, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 Apr; 6(4):186–93 (Eng. Abstr.) (Chi)
[The status of the neonate with a birthweight over 4000g and his development in the first year of life] Dort J, et al. **Cesk Pediatr** 1989 Dec;44(12):737–8 (Cze)
[The relation of birth weight and gestational age in a group of infants in Jutland with special reference to diagnosing infants with intrauterine growth retardation] Krag-Olsen B, et al. **Ugeskr Laeger** 1989 Oct 16;151(42):2721–4 (Eng. Abstr.) (Dan)
[Birth weight charts—straight lines (letter)] Secher NJ, et al. **Ugeskr Laeger** 1989 Sep 11;151(37):2382–3 (Dan)
[Early neonatal mortality in Belgium 1981. Analysis according to birth weight, mother's health status and father's social occupational group] Honggokoesoemo S. **Arch Belg** 1988;46(7–8):359–78 (Eng. Abstr.) (Dut)
[Is there a difference between birth weights in former days and today? (letter)] van Enk A. **Ned Tijdschr Geneeskd** 1990 Jul 21;134(29):1420–1 (Dut)
[Are earlier birth weights different from current ones?] Voorhorst FJ, et al. **Ned Tijdschr Geneeskd** 1990 May 19; 134(20):998–1002 (Eng. Abstr.) (Dut)
[Birth weight of full-term newborn infants in Douala (Cameroon)] Bulu BG. **Ann Pediatr (Paris)** 1990 Apr; 37(4):243–6 (Eng. Abstr.) (Fre)
[New limitations on birth weight for the diagnosis of intrauterine growth retardation] Mamelle N, et al. **Rev Fr Gynecol Obstet** 1989 Jul–Sep;84(7–9):589–91; discussion 600–2 (Eng. Abstr.) (Fre)
[Does the month of birth affect human biological development processes?] Richter J. **Arztl Jugendkd** 1990; 81(1):55–8 (Eng. Abstr.) (Ger)
[Special weight percentile curves for twins] Zihlmann R, et al. **Geburtshilfe Frauenheilkd** 1989 Aug;49(8):711–4 (Eng. Abstr.) (Ger)
[The value of prenatal weight estimation in multiple pregnancy] Knitza R, et al. **Gynakol Rundsch** 1989;29 Suppl 2:275–7 (Ger)
[Multi-parity in Saudi Arabia] Krüger N, et al. **Zentralbl Gynakol** 1990;112(10):617–21 (Eng. Abstr.) (Ger)
[Neonatal percentile values for East Germany—1985. 3. On the correlation of body height and weight of the mother in a two-dimensional classification of newborn infants according to birth weight and gestational age] Voigt M, et al. **Zentralbl Gynakol** 1989;111(13):904–20 (Eng. Abstr.) (Ger)
[Evaluation of arterial pressure in the first 3 days of life in a group of healthy newborn infants weighing between 2000 and 4600 g at birth] Paolino GP, et al. **Minerva Pediatr** 1989 Jun;41(6):291–5 (Eng. Abstr.) (Ita)
[Evaluation of the clinical status of newborn infants born to elderly primiparae and multiparae] Rzempołuch J, et al. **Pediatr Pol** 1989 Apr;64(4):216–22 (Eng. Abstr.) (Pol)
[Obstetric factors associated with low birth weight] Lippi UG, et al. **Rev Saude Publica** 1989 Oct;23(5):382–7 (Eng. Abstr.) (Por)
[The determination of fetal body weight by ultrasonic fetometry] Demidov VN, et al. **Akush Ginekol (Mosk)** 1989 Nov;(11):60–1 (Rus)
[Evaluation of statistical significance of the indicators of infant mortality] Komarov IuM, et al. **Pediatriia** 1990; (3):57–61 (Rus)
[Health status of children born to young mothers] Leonov IT, et al. **Pediatriia** 1990;(3):65–7 (Rus)
[Height, weight and head circumference according to gestational age in newborn infants born before 35 weeks] Beca JP, et al. **Rev Chil Pediatr** 1989 Jan–Feb;60(1):1–5 (Eng. Abstr.) (Spa)
[Relation of the brachial perimeter and some indicators of intrauterine growth] Sánchez I, et al. **Rev Chil Pediatr** 1988 Sep–Oct;59(5):295–8 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Superoxide dismutase in polymorphonuclear leukocytes of term newborn infants and very low birth weight infants. Kugo M, et al. **Pediatr Res** 1989 Sep;26(3):227–31
Low birthweight in rats induced by prenatal exposure to testosterone combined with alcohol, pair-feeding, or stress. McGivern RF. **Teratology** 1989 Oct;40(4):335–8
[Effect of volatile toxic substances emanating from rubber on the bodies of fetuses and newborn animals in experimental studies] Sadigov IF. **Gig Sanit** 1989 Jun; (6):82–4 (Rus)

GENETICS

Ethnic and other factors affecting birthweight in Singapore. Viegas OA, et al. **Int J Gynaecol Obstet** 1989 Aug; 29(4):289–95
[The joint variability of the growth-weight characteristics and biochemical gene markers in newborn infants] Dubrova IuE, et al. **Tsitol Genet** 1990 Mar–Apr;24(2):46–52 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Maternal somatostatin levels and their correlation with infant birth weight. Widström AM, et al. **Early Hum Dev** 1989 Dec;20(3–4):165–74
Newborns vitamin A in relation to sex and birth weight. Yassai MB, et al. **J Trop Pediatr** 1989 Oct;35(5):247–9
Development of individual growth curve standards for estimated fetal weight: I. Weight estimation procedure. Deter RL, et al. **JCU** 1988 May;16(4):215–25
Blood pressure increases, birth weight-dependent stability boundary, and intraventricular hemorrhage. Perry EH, et al. **Pediatrics** 1990 May;85(5):727–32
Low birthweight in rats induced by prenatal exposure to testosterone combined with alcohol, pair-feeding, or stress. McGivern RF. **Teratology** 1989 Oct;40(4):335–8
[Effect of weight gain during pregnancy on the birth weight of the newborn infant (letter)] Darmoni SJ, et al. **Presse Med** 1990 Jan 6–13;19(1):35 (Fre)

RADIATION EFFECTS

[Evaluation of the effect of decimeter waves on the state of newborn rats with disorders of uteroplacental circulation] Lysaia TN, et al. **Akush Ginekol (Mosk)** 1990 Mar;(3):71–2 (Rus)

BIS(CHLOROMETHYL) ETHER see under **METHYL ETHERS**

BISACODYL see under **CRESOLS**

BISEXUALITY

Factors related to seroconversion among homo- and bisexual men after attending a risk-reduction educational session. Silvestre AJ, et al. **AIDS** 1989 Oct;3(10):647–50
Preventing HIV infection in gay and bisexual men: experimental evaluation of attitude change from two risk reduction interventions. Leviton LC, et al. **AIDS Educ Prev** 1990 Summer;2(2):95–108
AIDS-related illness and AIDS risk in male homo/bisexual substance abusers: case reports and clinical issues. Westermeyer J, et al. **Am J Drug Alcohol Abuse** 1989; 15(4):443–61
Prevalence, incidence, and progression of human immunodeficiency virus infection in homosexual and bisexual men in hepatitis B vaccine trials, 1978–1988. Hessol NA, et al. **Am J Epidemiol** 1989 Dec;130(6):1167–75
Kaposi's sarcoma in a cohort of homosexual and bisexual men. Epidemiology and analysis for cofactors. Lifson AR, et al. **Am J Epidemiol** 1990 Feb;131(2):221–31
Projections of the HIV/AIDS epidemic for homosexual/bisexual men in France, the Federal Republic of Germany and the United Kingdom. Artzrouni M. **Eur J Epidemiol** 1990 Jun;6(2):124–35
Heterosexual sexual behaviour in a sample of homosexually active men. Fitzpatrick R, et al. **Genitourin Med** 1989 Aug; 65(4):259–62
High-risk sexual behavior and knowledge of HIV antibody status in the San Francisco City Clinic Cohort. Doll LS, et al. **Health Psychol** 1990;9(3):253–65
Factors associated with AIDS and AIDS-like syndrome among homosexual and bisexual men in Minas Gerais, Brazil. de Lima e Costa MF, et al. **Int J Epidemiol** 1990 Jun;19(2):429–34
A probability sample of gay males. Harry J. **J Homosex** 1990; 19(1):89–104
Heterosexual women's perceptions of their marriages to bisexual or homosexual men. Hays D, et al. **J Homosex** 1989;18(1–2):81–100
AIDS and chemical dependency: special issues and treatment barriers for gay and bisexual men. Cabaj RP. **J Psychoactive Drugs** 1989 Oct–Dec;21(4):387–93
Sexual practices and "beats": AIDS-related sexual practices in a sample of homosexual and bisexual men in the western area of Sydney. Bennett G, et al. **Med J Aust** 1989 Sep 18;151(6):309–14
Sexual practices and condom usage in a cohort of homosexual men in relation to human immunodeficiency virus status. Tindall B, et al. **Med J Aust** 1989 Sep 18;151(6):318–22
Prevalence of sexual assault victimization among heterosexual and gay/lesbian university students. Duncan DF. **Psychol Rep** 1990 Feb;66(1):65–6
Homosexual and bisexual men's coping with the AIDS epidemic: qualitative interviews with 10 non-HIV-tested homosexual and bisexual men. Brendstrup E, et al. **Soc Sci Med** 1990;30(6):713–20
[AIDS: Local activism is public health. Principles and strategies for providing information on AIDS to gays and bisexual men in Denmark 1981–1989] Fouchard J. **Ugeskr Laeger** 1989 Oct 2;151(40):2613–4 (Dan)
[Sexual behavior in HIV antibody positive homosexual and bisexual men] Schmidt KW, et al. **Ugeskr Laeger** 1989 Nov 13;151(46):3059–62 (Eng. Abstr.) (Dan)
[AIDS and social strata in Mexico: the importance of bisexuality] González Block MA, et al. **Salud Publica Mex** 1990 Jan–Feb;32(1):26–37 (Eng. Abstr.) (Spa)

BISHYDROXYCOUMARIN

PHARMACOLOGY

Dicoumarol-induced prothrombins containing 6, 7, and 8 gamma-carboxyglutamic acid residues: isolation and characterization. Malhotra OP. **Biochem Cell Biol** 1989 Aug;67(8):411–21
Modulation of the antineoplastic efficacy of mitomycin C by dicoumarol in vivo. Rockwell S, et al. **Cancer Chemother Pharmacol** 1989;24(6):349–53
Inhibition of estrogen-induced kidney carcinogenesis in Syrian hamsters by modulators of estrogen metabolism. Roy D, et al. **Carcinogenesis** 1990 Apr;11(4):567–70

THERAPEUTIC USE

Modulation of the cytotoxicity of porfiromycin by dicoumarol in vitro and in vivo. Rockwell S, et al. **Anticancer Res** 1989 Jul–Aug;9(4):817–20

BISMUTH

Pitfall-to-avoid pharyngeal opacities caused by bismuth subgallate. Tannous WN, et al. **Can Assoc Radiol J** 1989 Dec;40(6):312
Some observations on the electrical characteristics of radioactive (222Rn progeny) and nonradioactive aerosols. Bigu J. **Health Phys** 1990 Jan;58(1):21–36
Optimization of filtration for reduction of lung dose from Rn decay products: Part I—Theoretical. Curling CA, et al. **Health Phys** 1990 Sep;59(3):267–75
Optimization of filtration for the reduction of lung dose from Rn decay products: Part II—Experimental. Curling CA, et al. **Health Phys** 1990 Sep;59(3):277–85

Preparation, 252Cf-plasma-desorption mass spectrometry and radiometal exchange of the Pb2+ and Bi3+ complexes of a hexalactam macrocycle. Magerstadt M, et al. **Int J Rad Appl Instrum [B]** 1990;17(4):409–12

ADMINISTRATION & DOSAGE

Effect of repeated colloidal bismuth subcitrate treatment on the response of the rat gastric mucosa to the presence of luminal ethanol. Hinsull SM, et al. **Gut** 1990 Apr; 31(4):389–96

Selective elimination in vitro of alloresponsive T cells to human transplantation antigens by toxin or radionuclide conjugated anti-IL-2 receptor (Tac) monoclonal antibody. Kozak RW, et al. **J Immunol** 1990 May 1;144(9):3417–23

ADVERSE EFFECTS

Bismuth. Burnett JW. **Cutis** 1990 Apr;45(4):220

Bismuth induced encephalopathy caused by tri potassium dicitrato bismuthate in a patient with chronic renal failure. Playford RJ, et al. **Gut** 1990 Mar;31(3):359–60

Bismuth toxicity—a reassessment. Bradley B, et al. **J Clin Pharm Ther** 1989 Dec;14(6):423–41 (136 ref.)

Bipp: a case of toxicity? Jones JA. **Oral Surg Oral Med Oral Pathol** 1990 Jun;69(6):668–71

[Bismuth—an environmental pollutant of the future] Mueller RL. **Zentralbl Hyg Umweltmed** 1989 Nov;189(2):117–24 (Eng. Abstr.) **(Ger)**

[Problems of toxicology and occupational health during production of bismuth and its compounds] Roshchin AV, et al. **Gig Tr Prof Zabol** 1990;(6):41–5 **(Rus)**

[Myoclonic encephalopathy caused by bismuth (letter)] Nogué Xarau S, et al. **Rev Clin Esp** 1990 Feb;186(3):145 **(Spa)**

ANALYSIS

Radon-222, 222Rn progeny, and 220Rn progeny levels in 70 houses. Dudney CS, et al. **Health Phys** 1990 Mar; 58(3):297–311

A measurement system for Rn decay product lung deposition based on respiratory models. Hopke PK, et al. **Health Phys** 1990 Mar;58(3):291–5

Addendum to "On improving the validity of wire screen 'unattached' fraction Rn daughter measurements" [letter] Ramamurthi M, et al. **Health Phys** 1990 Sep;59(3):355–6

"Unattached" fraction of short-lived Rn decay products in indoor and outdoor environments: an improved single-screen method and results. Reineking A, et al. **Health Phys** 1990 Jun;58(6):715–27

High-resolution electron microscopy study on crystal structures of high-Tc superconductors. Hiraga K, et al. **J Electron Microsc Tech** 1989 Jul;12(3):228–43

Dynamic spectrum of airborne gamma-rays. Minato S. **Radioisotopes** 1990 Apr;39(4):170–3

BLOOD

[Significance of bismuth analysis in clinical tests] Sakai T, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:786–8 **(Jpn)**

DIAGNOSTIC USE

Improved in vivo stability and tumor targeting of bismuth-labeled antibody. Ruegg CL, et al. **Cancer Res** 1990 Jul 15;50(14):4221–6

METABOLISM

Long-term tissue distribution and steady state activity ratios of 232Th and its daughters in rats after intravascular injection of Thorotrast. Norimura T, et al. **Sangyo Ika Daigaku Zasshi** 1989 Sep 1;11(3):287–97

PHARMACOKINETICS

Localization of bismuth radiotracer in rat kidney following exposure to bismuth. Zidenberg-Cherr S, et al. **Biol Trace Elem Res** 1989 Mar;19(3):185–94

Absorption and elimination of bismuth from oral doses of tripotassium dicitrato bismuthate. Froomes PR, et al. **Eur J Clin Pharmacol** 1989;37(5):533–6

Pharmacokinetics and toxicity of bismuth compounds. Slikkerveer A, et al. **Med Toxicol Adverse Drug Exp** 1989 Sep-Oct;4(5):303–23 (193 ref.)

Disposition of bismuth in the rat. II. Pharmacokinetics and biliary excretion. Rao N, et al. **Pharm Res** 1990 Mar; 7(3):237–41

Disposition of bismuth in the rat. I. Red blood cell and plasma protein binding. Rao N, et al. **Pharm Res** 1990 Feb; 7(2):188–91

[Pharmacokinetics of bismuth preparations in patients with gastritis and ulcer disease] Raedsch R, et al. **Klin Wochenschr** 1990 May 4;68(9):488 **(Ger)**

PHARMACOLOGY

Biological activity of organometallic bismuth compounds. Klapötke T. **Biol Met** 1988;1(2):69–76 (49 ref.)

BIPP—how does it work? Nigam A, et al. **Clin Otolaryngol** 1990 Apr;15(2):173–5

Prevention of adverse effects of gamma-ray irradiation after metallothionein induction by bismuth subnitrate in mice. Satoh M, et al. **Eur J Cancer Clin Oncol** 1989 Dec; 25(12):1727–31

Effect of bismuth subcarbonate against Campylobacter pylori: do citrate ions improve antibacterial activity? Vogt K, et al. **Int J Med Microbiol** 1990 May;273(1):33–5

The minimum inhibitory concentrations of various bismuth salts against Campylobacter pylori. Vogt K, et al. **Int J Med Microbiol** 1989 Sep;271(3):304–10

In vitro antibacterial activity of bismuth subsalicylate. Cornick NA, et al. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S9–10

In vitro and in vivo effects of three bismuth compounds on fermentation by colonic bacteria. León-Barúa R, et al. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S24–9

In vitro antimicrobial activity of bismuth subsalicylate and other bismuth salts. Manhart MD. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S11–5

Amelioration of the teratogenicity of cadmium by the metallothionein induced by bismuth nitrate. Naruse I, et al. **Teratology** 1989 Nov;40(5):459–65

POISONING

Bismuth absorption and myoclonic encephalopathy during bismuth subsalicylate therapy. Mendelowitz PC, et al. **Ann Intern Med** 1990 Jan 15;112(2):140–1

THERAPEUTIC USE

Helicobacter pylori and bismuth subnitrate [letter] Sodeman WA Jr. **Am J Gastroenterol** 1990 Sep;85(9):1200–1

Comparative efficacy of loperamide hydrochloride and bismuth subsalicylate in the management of acute diarrhea. DuPont HL, et al. **Am J Med** 1990 Jun 20;88(6A):15S–19S

Comparison of qid and bd administration of De-Nol in the short term treatment of duodenal ulcer. Lazzaroni M, et al. **Br J Clin Pract** 1989 Apr;43(4):151–5

Radioimmunotherapy of peritoneal human colon cancer xenografts with site-specifically modified 212Bi-labeled antibody. Simonson RB, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):985s–988s

Bismuth subsalicylate in the prevention of colonization of infant mice with Campylobacter jejuni. Hänninen ML. **Epidemiol Infect** 1990 Jun;104(3):397–404

Can bismuth decrease the kidney toxic effect of cis-platinum? Sommer S, et al. **Eur J Cancer Clin Oncol** 1989 Dec; 25(12):1903–4

Bismuth therapy in gastrointestinal diseases. Gorbach SL. **Gastroenterology** 1990 Sep;99(3):863–75 (138 ref.)

Effect of colloidal bismuth subcitrate on symptoms and gastric histology in non-ulcer dyspepsia. A double blind placebo controlled study. Kang JY, et al. **Gut** 1990 Apr; 31(4):476–80

Campylobacter associated gastritis in patients with non-ulcer dyspepsia: a double blind placebo controlled trial with colloidal bismuth subcitrate [see comments] Loffeld RJ, et al. **Gut** 1989 Sep;30(9):1206–12 Comment in: Gut 1990 Apr;31(4):481–2.

Bismuth subsalicylate reduces peptic injury of the oesophagus in rabbits. Tay HP, et al. **Gut** 1990 Jan;31(1):11–6

Comparison of short-lived high-LET alpha-emitting radionuclides lead-212 and bismuth-212 to low-LET X-rays on ovarian carcinoma. Rotmensch J, et al. **Gynecol Oncol** 1989 Dec;35(3):297–300

Iodine-125-NRLU-10 kinetic studies and bismuth-212-NRLU-10 toxicity in LS174T multicell spheroids. Langmuir VK, et al. **J Nucl Med** 1990 Sep; 31(9):1527–33

Campylobacter pylori infection in uremic dialyzed patients. Eradication of the infection by colloidal bismuth subcitrate [letter] Conz P, et al. **Nephron** 1990;55(4):442–3

Pathophysiology of gastrointestinal infections: the role of bismuth subsalicylate. Scottsdale, Arizona, 11–14 February 1988. Proceedings. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S1–119

Effect of bismuth subsalicylate on Clostridium difficile colitis in hamsters. Chang TW, et al. **Rev Infect Dis** 1990 Jan-Feb; 12 Suppl 1:S57–8

Use of bismuth subsalicylate for the prevention of travelers' diarrhea. DuPont HL, et al. **Rev Infect Dis** 1990 Jan-Feb; 12 Suppl 1:S64–7

Effect of oral bismuth subsalicylate on Campylobacter pylori and on healing and relapse rate of peptic ulcer. Eberhardt R, et al. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S115–9

Prevention of diarrhea caused by enterotoxigenic Escherichia coli: lessons learned with volunteers. Graham DY, et al. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S68–72

Effect of bismuth subsalicylate on chronic diarrhea in childhood: a preliminary report. Gryboski JD, et al. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S36–40

Bismuth subsalicylate in the treatment of gastritis due to Campylobacter pylori. McNulty CA. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S94–8

Use of bismuth subsalicylate in acute diarrhea in children. Soriano-Brücher HE, et al. **Rev Infect Dis** 1990 Jan-Feb; 12 Suppl 1:S51–6

Worldwide efficacy of bismuth subsalicylate in the treatment of travelers' diarrhea. Steffen R. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S80–6

De-Nol in the treatment of reflux esophagitis. Balan G, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Jan-Mar; 93(1):67–70

Treatment of simple renal cysts by percutaneous puncture and instillation of bismuth-phosphate. Holmberg G, et al. **Scand J Urol Nephrol** 1989;23(3):207–12

Specific destruction of allogeneic tumor cells in vivo by a bismuth-212 immunotoxin. Stuart FP, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):605–6

[Efficacy of a bismuth combination preparation. Efficacy in the treatment of chronic active gastritis and non-ulcerous dyspepsia] Malfertheiner P, et al. **Fortschr Med** 1990 Jul 10;108(20):402–6 (Eng. Abstr.) **(Ger)**

[Bismuth aluminate in gastroenterology. Therapeutic effects in chronic erosive Campylobacter pylori-associated gastritis] Stanescu A, et al. **Fortschr Med** 1989 Oct 10; 107(29):623–6 (Eng. Abstr.) **(Ger)**

[Ulcer—campylobacter pylori—bismuth therapy] **Internist (Berl)** 1989 Feb;30(2 Suppl [ULKUS]):1–11 **(Ger)**

[Campylobacter pylori associated gastritis] **Internist (Berl)** 1989 Dec;30(12):830–2 **(Ger)**

[De-nol in NSAID-induced gastroduodenal lesions] Cataldo MG, et al. **Minerva Dietol Gastroenterol** 1990 Jan-Mar; 36(1):27–30 (Eng. Abstr.) **(Ita)**

[Prevention of renal toxicity of cisplatin by administration of bismuth subnitrate] Hamada T, et al. **Gan To Kagaku Ryoho** 1989 Nov;16(11):3587–93 (Eng. Abstr.) **(Jpn)**

[Alleviation of cisplatin toxicity by high-dose bismuth subnitrate and pharmacokinetics of bismuth subnitrate and cisplatin] Morikawa T, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Jun 20;25(6):1138–45 (Eng. Abstr.) **(Jpn)**

BIS(5'-NUCLEOSIDYL)OLIGOPHOSPHATES see **DINUCLEOSIDE PHOSPHATES**

BIS(5'-NUCLEOSIDYL)PHOSPHATES see **DINUCLEOSIDE PHOSPHATES**

BISPHOSPHOGLYCERATES see **DIPHOSPHOGLYCERIC ACIDS**

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BISPHOSPHONATES see **DIPHOSPHONATES**

BITE FORCE see under **DENTAL OCCLUSION**

BITE REGISTRATION see **JAW RELATION RECORD**

BITES AND STINGS

Marinefish stings [letter; comment] Brown AF. **Arch Emerg Med** 1989 Dec;6(4):290–1 Comment on: Arch Emerg Med 1989 Mar;6(1):59–62.

Stone fish bite [letter] **BMJ** 1990 Feb 17;300(6722):463–4

Human bite wounds. Faciszewski T, et al. **Hand Clin** 1989 Nov;5(4):561–9 (39 ref.)

Dog-bite statutes. Hannah HW. **J Am Vet Med Assoc** 1989 Oct 1;195(7):908–9

Further discussion on discussions of "Bite mark impressions: a review of techniques and materials"[letter] Sperber ND. **J Forensic Sci** 1990 Jul;35(4):777–8

Human and animal bites. Demetriades D. **S Afr J Surg** 1989 Dec;27(5):185–7 (21 ref.)

Dangerous dogs [letter] Knott CD. **Vet Rec** 1990 Jun 2; 126(22):562

COMPLICATIONS

A comparative double blind study of amoxycillin/clavulanate vs placebo in the prevention of infection after animal bites. Brakenbury PH, et al. **Arch Emerg Med** 1989 Dec; 6(4):251–6

Rat bites and leprosy [letter] Crawford CL. **BMJ** 1990 Feb 10;300(6721):400

Treatment of a pigmented lesion induced by a Pelagia noctiluca sting. Kokelj F, et al. **Cutis** 1990 Jul;46(1):62–4

A case of delayed hypersensitivity reaction following a sea urchin sting. Asada M, et al. **Dermatologica** 1990; 180(2):99–101

Blunt injury to the spinal accessory nerve. Aziz NH, et al. **Injury** 1989 Nov;20(6):381–2

Histologic study of delayed reactions to coelenterates. Piérard GE, et al. **J Am Acad Dermatol** 1990 Apr; 22(4):599–601

Infectious complications and therapy of bite wounds. Goldstein EJ. **J Am Podiatr Med Assoc** 1989 Oct; 79(10):486–91 (46 ref.)

Disseminated intravascular coagulation. Chugh SN, et al. **J Assoc Physicians India** 1989 Oct;37(10):654–7

Live dogs and dead men [letter; comment] Somayajulu MV, et al. **J Assoc Physicians India** 1989 Sep;37(9):617 Comment on: J Assoc Physicians India 1987 May;35(5):393–4.

Clinical aspects of centipede bite in the Andamans. Uppal SS, et al. **J Assoc Physicians India** 1990 Feb;38(2):163–4

Cutaneous reactions caused by experimental exposure to jellyfish, Carybdea rastonii. Ohtaki N, et al. **J Dermatol** 1990 Feb;17(2):108–14

Perforating eye injuries caused by dog bites. Jones NP. **J R Soc Med** 1990 May;83(5):332–3

Hymenoptera stings and beta-blockers [letter; comment] **Lancet** 1989 Oct 14;2(8668):916 Comment on: Lancet 1989 Sep 9;2(8663):619.

Postexposure prophylaxis for rabies with antiserum and intradermal vaccination [see comments] Chutivongse S, et al. **Lancet** 1990 Apr 14;335(8694):896–8 Comment in:

Lancet 1990 Jun 16;335(8703):1462.
Cardiac failure following Irukandji envenomation. Martin JC, et al. **Med J Aust** 1990 Aug 6;153(3):164–6
Beware of the dog: meningitis in a splenectomised woman. Krol-van Straaten MJ, et al. **Neth J Med** 1990 Jun; 36(5–6):301–3
Subacute Pasteurella osteomyelitis of the hand following dog bite. Desai SS, et al. **Orthopedics** 1990 Jun;13(6):653–6
Camel bites: report of severe osteolysis as late bone complications. al-Boukai AA, et al. **Postgrad Med J** 1989 Dec;65(770):900–4
Pasteurella pneumotropica: meningitis following a dog bite. Minton EJ. **Postgrad Med J** 1990 Feb;66(772):125–6
A bite of AIDS? Institutional line staff and the fear of HIV contagion. Geller JL. **Psychiatr Q** 1989 Fall;60(3):243–51
Pasteurella multocida meningitis in an adult: case report and review. Kumar A, et al. **Rev Infect Dis** 1990 May–Jun; 12(3):440–8 (79 ref.)
Allergy to imported fire ants. Stafford CT, et al. **South Med J** 1989 Dec;82(12):1520–7 (53 ref.)
Sustained bleeding after a leech bite in the apparent absence of hirudin. Munro R, et al. **Thromb Haemost** 1989 Jun 30; 61(3):366–9
[Yersinia infection from a horse bite] Räisänen S, et al. **Duodecim** 1989;105(17):1496–7 **(Fin)**
[Arthritis caused by a sea urchin spine. A new case (letter)] Haddad A, et al. **Ann Med Interne (Paris)** 1989;140(6):532–4 (15 ref.) **(Fre)**
[Eosinophilic cellulitis (Wells' syndrome) and stings or bites by arthropods] Leclercq M. **Rev Med Liege** 1990 Feb 1; 45(2):75–7 **(Fre)**
[Rocky Mountain spotted fever] Reinauer KM, et al. **Dtsch Med Wochenschr** 1990 Jan 12;115(2):53–6 (Eng. Abstr.) **(Ger)**
[Poisoning caused by maritime poisonous animals] Markwalder K. **Internist (Berl)** 1990 Jun;31(6):411–6 (35 ref.) **(Ger)**
[Morphea—a tick transmitted borreliosis of the skin? A contribution to the pathogenesis of circumscript scleroderma] Büchner SA. **Z Hautkr** 1989 Aug 15; 64(8):661–4, 667–9 (Eng. Abstr.) **(Ger)**
[Ixodes ricinus bites] Lilie HM, et al. **Z Hautkr** 1990 Apr; 65(4):400, 403 (Eng. Abstr.) **(Ger)**
[Borrelia burgdorferi, clinical aspects, cultivation and identification of the pathogen in erythema migrans in Berlin] Ott A, et al. **Z Hautkr** 1989 Aug 15;64(8):644–8 (Eng. Abstr.) **(Ger)**
[Atrioventricular block caused by tick bite—Lyme's carditis] Lörincz I, et al. **Orv Hetil** 1989 Oct 22;130(43):2311–4 (22 ref.) (Eng. Abstr.) **(Hun)**
[Borrelia infection—Spirochaetales infection of the nervous system] Bugusławski S, et al. **Neurol Neurochir Pol** 1989 Jan;23(1):41–5 (23 ref.) (Eng. Abstr.) **(Pol)**
[The efficacy of antirabies treatment in human bites by a rabid wolf in Chernigov Province] Misenko LI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Aug;(8):107–9 **(Rus)**
[Arthritis caused by Streptobacillus moniliformis: a case of fever induced by a rat bite] Anglada A, et al. **Med Clin (Barc)** 1990 Apr 14;94(14):535–7 (23 ref.) (Eng. Abstr.) **(Spa)**
[Paralysis caused by tick bite (letter)] Oteo JA, et al. **Med Clin (Barc)** 1990 Feb 24;94(7):275–6 **(Spa)**

DIAGNOSIS

Use of benzidine for histological demonstration of haemoglobin in human bite marks. Allison RT, et al. **J Clin Pathol** 1990 Jul;43(7):600–3

DRUG THERAPY

The 'tooth' of the dog that bit him. Conlan DP. **J Bone Joint Surg [Br]** 1989 Nov;71(5):858
[Verification of antibiotic treatment after animal bites among patients at the antirabies center in Rome] Guasticchi G. **Ann Ig** 1989 May–Aug;1(3–4):621–7 (Eng. Abstr.) **(Ita)**

EPIDEMIOLOGY

Public health aspects of stray dogs in Barrow, Alaska. Dalton LM, et al. **Arctic Med Res** 1988;47 Suppl 1:83–9
Animal bites and infection [letter] Thomas P. **Aust Fam Physician** 1990 Apr;19(4):596
The incidence of dog attacks on children, treated at a city hospital. Podberscek AL, et al. **Aust Vet J** 1990 Feb; 67(2):79–80
A venomous Christmas tour [editorial] Sutherland SK. **Med J Aust** 1989 Dec 4–18;151(11–12):610–1
Underrecognition of morbidity from stings of the red imported fire ant in the southeastern United States. Owens VJ, et al. **Public Health Nurs** 1990 Jun;7(2):88–95
Reported cat bites in Dallas: characteristics of the cats, the victims, and the attack events. Wright JC. **Public Health Rep** 1990 Jul–Aug;105(4):420–4
Incidence of tick-bite in man in Åland Islands: reference to the spread of Lyme borreliosis. Wahlberg P. **Scand J Infect Dis** 1990;22(1):59–62
Imported fire ant as a health hazard. Stafford CT, et al. **South Med J** 1989 Dec;82(12):1515–9
[Child aggression by dogs: a preliminary study of risk factors] Filiatre JC, et al. **Ann Pediatr (Paris)** 1990 Mar;37(3):162–6 (Eng. Abstr.) **(Fre)**
[The location of the infecting tick bite and the severity of the course of tick-borne encephalitis] Okulova NM, et al. **Med Parazitol (Mosk)** 1989 Sep–Oct;(5):78–85 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Stingray injuries of the foot. Two case reports. Burk MP, et al. **J Am Podiatr Med Assoc** 1990 May;80(5):260–2
Bite marks, oral and facial injuries—harbingers of severe child abuse? Sperber ND. **Pediatrician** 1989;16(3–4):207–11 (8 ref.)
[Injuries caused by garfish in New Caledonia and its dependencies] Paux P, et al. **Med Trop (Mars)** 1989 Jul–Sep; 49(3):289–92 (Eng. Abstr.) **(Fre)**

HISTORY

The case of Ohio v. Robinson. An 1870 bite mark case. Pierce LJ, et al. **Am J Forensic Med Pathol** 1990 Jun;11(2):171–7

MICROBIOLOGY

Numerical analysis of electrophoretic protein patterns of Group EF-4 bacteria, predominantly from dog-bite wounds of humans. Holmes B, et al. **J Appl Bacteriol** 1990 Jan;68(1):81–91
Recovery of an unusual Flavobacterium group IIb-like isolate from a hand infection following pig bite. Goldstein EJ, et al. **J Clin Microbiol** 1990 May;28(5):1079–81
Hepatitis C virus transmitted by human bite [letter] Dusheiko GM, et al. **Lancet** 1990 Aug 25;336(8713):503–4

PATHOLOGY

A case of tick bite with Ixodes turdus Nakatsuji—a report from Japan. Woo IC, et al. **J Dermatol** 1990 Jan;17(1):56–8 (9 ref.)
Lingual markings of anterior teeth as seen in human bite marks. Sperber ND. **J Forensic Sci** 1990 Jul;35(4):838–44
Catfish spine envenomation of the hand [letter] Grenga TE. **J Hand Surg [Am]** 1989 Nov;14(6):1035–6
Histological reactions to bites of Amblyomma variagatum and Rhipicephalus appendiculatus (Acari: Ixodidae) fed simultaneously on naive or sensitized rabbits. Latif AA, et al. **J Med Entomol** 1990 May;27(3):316–23
[Fatal dog bite injuries] Pollak S, et al. **Beitr Gerichtl Med** 1989;47:487–95 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Prevention and amelioration of stress and consequences of interaction between children and dogs. Riegger MH, et al. **J Am Vet Med Assoc** 1990 Jun 1;196(11):1781–5
Shark repellent: not yet, maybe never. Baldridge HD Jr. **Milit Med** 1990 Aug;155(8):358–61 (19 ref.)

RADIOGRAPHY

Clinical and angiographic findings in extremity arterial injuries secondary to dog bites. Snyder KB, et al. **Ann Emerg Med** 1990 Sep;19(9):983–6

SURGERY

Reconstruction of middle-third auricular defect based on aesthetic perception theory. Chang YL, et al. **Aesthetic Plast Surg** 1990 Summer;14(3):223–5
Successful treatment of acute head and neck dog bite wounds without antibiotics. Guy RJ, et al. **Ann Plast Surg** 1986 Jul;17(1):45–8
Reconstruction of traumatic loss of vermilion and mucocutaneous junction of the lips. Srivastava S. **Br J Plast Surg** 1989 Sep;42(5):526–9
[Late results following avulsion injury of the shaft of the penis] Piza-Katzer H, et al. **Unfallchirurgie** 1989 Aug; 15(4):208–11 (Eng. Abstr.) **(Ger)**
[A case of reconstruction of the external nose] Vitiello F, et al. **Minerva Chir** 1990 Mar 31;45(6):433–6 (Eng. Abstr.) **(Ita)**

THERAPY

Management of animal and human bites in the head and neck. Stucker FJ, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jul;116(7):789–93
Stone fish bite [letter] Sutherland SK. **BMJ** 1990 Mar 10; 300(6725):679–80
Traumatic love bites. Fallouji MA. **Br J Surg** 1990 Jan; 77(1):100–1
Mammalian bites. Review of evaluation and management. Wiley JF 2d. **Clin Pediatr (Phila)** 1990 May;29(5):283–7
Bite wound infections of the lower extremity. Myers RA, et al. **Clin Podiatr Med Surg** 1990 Jul;7(3):501–8 (23 ref.)
Management of animal and human bites and resulting human infections. McDonough JJ, et al. **Curr Clin Top Infect Dis** 1987;8:11–36 (33 ref.)
Bite wounds. Burnett JW. **Cutis** 1990 May;45(5):287
Animal bite wounds. Snyder CC. **Hand Clin** 1989 Nov; 5(4):571–90
Strychnine poisoning due to therapeutic medicine [letter] Kulkarni ML, et al. **Indian Pediatr** 1989 Sep;26(9):963–4
Management of human and animal bite wounds. Goldstein EJ. **J Am Acad Dermatol** 1989 Dec;21(6):1275–9 (42 ref.)
Nonhuman primate bites. Janda DH, et al. **J Orthop Res** 1990 Jan;8(1):146–50
Cold packs: effective topical analgesia in the treatment of painful stings by Physalia and other jellyfish. Exton DR, et al. **Med J Aust** 1989 Dec 4–18;151(11–12):625–6
Successful use of Chironex antivenom by members of the Queensland Ambulance Transport Brigade. Fenner PJ, et al. **Med J Aust** 1989 Dec 4–18;151(11–12):708–10
Fatal and non-fatal stingray envenomation. Fenner PJ, et al. **Med J Aust** 1989 Dec 4–18;151(11–12):621–5
Primate bites in Gibraltar—minor casualty quirk? Campbell AC. **Scott Med J** 1989 Oct;34(5):519–20
[The treatment of dog and cat bites (letter)] Houtman PM. **Ned Tijdschr Geneeskd** 1990 Jun 30;134(26):1273–4 **(Dut)**
[The treatment of dog and cat bites] Patka P, et al. **Ned Tijdschr Geneeskd** 1990 May 19;134(20):995–8 (20 ref.) **(Dut)**
[Proposal for changing the ministerial instructions for antirabies prophylaxis in the light of the experience of the Centro Antirabbico di Roma] Fara GM, et al. **Parassitologia** 1988 Jan–Apr;30(1):71–9 (Eng. Abstr.) **(Ita)**
[The importance of the dispensary observation of bite victims and of those receiving antirabies treatment] Rakhimova FI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Dec; (12):115–7 **(Rus)**

BITES, HUMAN see under **BITES AND STINGS**

BITHIONOL see under **PHENOLS**

BITTNER VIRUS see **MAMMARY CANCER VIRUS**

BIUREAS

ANALYSIS

Azodicarbonamide: methods for the analysis in tissues of rats and inhalation disposition. Bechtold WE, et al. **Xenobiotica** 1989 Sep;19(9):1003–12

BIURET see under **UREA**

BIURET REACTION see under **CHEMISTRY, ANALYTICAL**

BK VIRUS see under **POLYOMAVIRUSES**

BLACK FLIES see **SIMULIIDAE**

BLACK WIDOW SPIDER see under **SPIDERS**

BLACKS

see related
NEGROID RACE

Recruiting black medical students: a decade of effort. Taylor RE Jr, et al. **Acad Med** 1990 May;65(5):279–88
How black and Latino community organizations respond to the AIDS epidemic: a case study in one New York City neighborhood. Freudenberg N, et al. **AIDS Educ Prev** 1989 Spring;1(1):12–21
Preparticipation echocardiographic screening for cardiovascular disease in a large, predominantly black population of collegiate athletes. Lewis JF, et al. **Am J Cardiol** 1989 Nov 1;64(16):1029–33
The adolescent heterosexual relationship and its association with the sexual and contraceptive behavior of black females. DuRant RH, et al. **Am J Dis Child** 1989 Dec; 143(12):1467–72
Assigning race to occupational cohorts using census block statistics. Andjelkovich DA, et al. **Am J Epidemiol** 1990 May;131(5):928–34
Social class and the black/white crossover in the age-specific incidence of breast cancer: a study linking census-derived data to population-based registry records. Krieger N. **Am J Epidemiol** 1990 May;131(5):804–14
Influence of race, tobacco use, and caffeine use on the relation between blood pressure and blood lead concentration. Sharp DS, et al. **Am J Epidemiol** 1990 May;131(5):845–54
Low incidence of hospitalization with gallbladder disease among blacks in the United States. Sichieri R, et al. **Am J Epidemiol** 1990 May;131(5):826–35
Prevalence of gallstones in elderly black women in Soweto, Johannesburg, as assessed by ultrasound. Walker AR, et al. **Am J Gastroenterol** 1989 Nov;84(11):1383–5
Hypertension treatment results in minority patients. Moser M. **Am J Med** 1990 Mar 12;88(3B):24S–31S (37 ref.)
Tailoring treatment to minority patients. Saunders E. **Am J Med** 1990 Mar 12;88(3B):21S–23S (17 ref.)
Foreign-born and US-born black women: differences in health behaviors and birth outcomes. Cabral H, et al. **Am J Public Health** 1990 Jan;80(1):70–2
The differential effect of traditional risk factors on infant birthweight among blacks and whites in Chicago. Collins JW Jr, et al. **Am J Public Health** 1990 Jun;80(6):679–81
Is health care racist? Funkhouser SW, et al. **ANS** 1990 Jan; 12(2):47–55
Hypertensive black men and women. Quality of life and effects of antihypertensive medications. Black Hypertension Quality of Life Multicenter Trial Group. Croog SH, et al. **Arch Intern Med** 1990 Aug;150(8):1733–41
Captopril and hypertension in black diabetics [letter; comment] Burr AJ, et al. **BMJ** 1989 Aug 12; 299(6696):456–7 Comment on: BMJ 1989 Jul 22;299(6693):230–3.

Police admissions to a psychiatric hospital. Demographic and clinical differences between ethnic groups. Dunn J, et al. **Br J Psychiatry** 1990 Mar;156:373–8
Results of treatment of stage I–III breast cancer in black Americans. The Cook County Hospital experience, 1973–1987. Briele HA Jr, et al. **Cancer** 1990 Mar 1; 65(5):1062–71
Cultural considerations in the treatment of craniofacial malformations in African Americans. Toliver-Weddington G. **Cleft Palate J** 1990 Jul;27(3):289–93 (28 ref.)
The dental health of black and ethnic minority communities [editorial] Beal JF. **Community Dent Health** 1990 Jun; 7(2):121–2
Schizophrenia and social network patterns: a survey of black inner-city outpatients. Cohen CI, et al. **Community Ment Health J** 1989 Fall;25(3):197–207
Black/white differences in health status and mortality among the elderly. Berkman L, et al. **Demography** 1989 Nov; 26(4):661–78
After the starting line: blacks and women in an uphill race. Farley R. **Demography** 1988 Nov;25(4):477–95 (117 ref.)
The current differential in black and white life expectancy. Keith VM, et al. **Demography** 1988 Nov;25(4):625–32
Hypersegregation in U.S. metropolitan areas: black and Hispanic segregation along five dimensions. Massey DS, et al. **Demography** 1989 Aug;26(3):373–91
A new look at the effect of venereal disease on black fertility: the Deep South in 1940. Tolnay SE. **Demography** 1989 Nov;26(4):679–90
Teenage welfare receipt and subsequent dependence among black adolescent mothers. Duncan GJ, et al. **Fam Plann Perspect** 1990 Jan–Feb;22(1):16–20, 35
A community-based seroprevalence survey of syphilis in black children [letter] Coovadia YM, et al. **Genitourin Med** 1990 Apr;66(2):124
On being ethical in unethical places: the dilemmas of South African clinical psychologists. Steere J, et al. **Hastings Cent Rep** 1990 Mar–Apr;20(2):11–5
A center-based program for exercise change among black-American families. Baranowski T, et al. **Health Educ Q** 1990 Summer;17(2):179–96
Perspectives on depression among black Americans. Fellin P. **Health Soc Work** 1989 Nov;14(4):245–52
Alcoholism among blacks. Franklin JE Jr. **Hosp Community Psychiatry** 1989 Nov;40(11):1120–2, 1127
Harlem, Bangladesh, and physician responsibility [editorial] Konner M. **Hosp Pract [Off]** 1990 Apr 15;25(4):13, 16
Patterns of alcohol abuse among black and white alcoholics. Robyak JE, et al. **Int J Addict** 1989 Jul;24(7):715–24
Consequences of gender differentials in life expectancy for black and Hispanic Americans. Markides KS. **Int J Aging Hum Dev** 1989;29(2):95–102
Plantar melanoma: is the incidence of melanoma of the sole of the foot really higher in blacks than whites? Stevens NG, et al. **Int J Cancer** 1990 Apr 15;45(4):691–3
Rethinking homicide: violence, race, and the politics of gender. Stark E. **Int J Health Serv** 1990;20(1):3–26 (64 ref.)
Obesity, obesity-related behaviors and coronary heart disease risk factors in black and white premenopausal women. Wing RR, et al. **Int J Obes** 1989;13(4):511–9
Frequency of use, knowledge, and attitudes toward the contraceptive sponge among inner-city black and Hispanic adolescent females. Diaz A, et al. **J Adolesc Health Care** 1990 Mar;11(2):125–7
Contraceptive and sexual behavior of black female adolescents. A test of a social-psychological theoretical model. Durant RH, et al. **J Adolesc Health Care** 1990 Jul; 11(4):326–34
Do health care needs of indigent Mexican-American, black, and white adolescents differ? Fitzpatrick SB, et al. **J Adolesc Health Care** 1990 Mar;11(2):128–32
Menarche: the black American experience. Scott CS, et al. **J Adolesc Health Care** 1989 Sep;10(5):363–8 (20 ref.)
The very low prevalence of polymyalgia rheumatica in blacks may be an artifact. Goodwin JS. **J Am Geriatr Soc** 1990 Jul;38(7):824–6
Are preterm black infants larger than preterm white infants, or are they more misclassified? Suthutvoravut S, et al. **J Biosoc Sci** 1989 Oct;21(4):443–51
Influence of certain clinical variables on black preschoolers' nonstandard phonological and grammatical performance. Ratusnik DL, et al. **J Commun Disord** 1975 Dec;8(4):281–97
Unmarried mothers as a high-risk group for adverse pregnancy outcomes. Ahmed F. **J Community Health** 1990 Feb;15(1):35–44
Identification of community leadership in the development of public health education programs. Michielutte R, et al. **J Community Health** 1990 Feb;15(1):59–68
Pietermaritzburg: a city of violence [see comments] Perrott CA. **J Emerg Med** 1989 Sep–Oct;7(5):485–9 Comment in: J Emerg Med 1989 Sep–Oct;7(5):527.
Determinants of cigarette smoking in the black township population of Cape Town. Strebel P, et al. **J Epidemiol Community Health** 1989 Sep;43(3):209–13
Racial bias in presentation of cases. Finucane TE, et al. **J Gen Intern Med** 1990 Mar–Apr;5(2):120–1
Fourth International Interdisciplinary Conference on Hypertension in Blacks. Nairobi, Kenya, 28th June–2nd July, 1989. Proceedings. **J Hum Hypertens** 1990 Apr; 4(2):67–212
Gender differences in health practices of black couples with a hypertensive spouse. Bomar PJ, et al. **J Hum Hypertens** 1990 Apr;4(2):100–2
Factors related to blood pressure among urban Nigerian workers. Bunker CH, et al. **J Hum Hypertens** 1990 Apr; 4(2):82–4
Self-care agency and blood pressure control. Felder E. **J Hum Hypertens** 1990 Apr;4(2):124–6
Excessive cancer rates among blacks in Louisiana: an opportunity for physician intervention. Chen VW, et al. **J La State Med Soc** 1990 Apr;142(4):18–26 (28 ref.)
Tobacco, alcohol, and marijuana use among black adolescents: a comparison across gender, grade, and school environment. Thomas SM, et al. **J La State Med Soc** 1990 Apr;142(4):37–42
Black Leadership Initiative expands local efforts [news] Baute L. **J Natl Cancer Inst** 1990 Jan 17;82(2):93
Black youth suicide: literature review with a focus on prevention. Baker FM. **J Natl Med Assoc** 1990 Jul; 82(7):495–507 (46 ref.)
Victimization of black psychiatric patients [letter; comment] Henry DA. **J Natl Med Assoc** 1990 Feb;82(2):80, 88 Comment on: J Natl Med Assoc 1989 Mar;81(3):246–52.
Health reforms and the black community. Hester RD, et al. **J Natl Med Assoc** 1990 Apr;82(4):291–3
Psychiatric morbidity and health problems among black Americans: a national survey. Johnson EH. **J Natl Med Assoc** 1989 Dec;81(12):1217–23 (41 ref.)
Disproportionate health risks in minorities: does medical education need to change? [editorial] Jones B. **J Natl Med Assoc** 1990 Jun;82(6):395–6
The privatization of treatment services for alcohol abusers: effect on the black community. Jones W Jr, et al. **J Natl Med Assoc** 1990 May;82(5):337–42
AIDS among blacks in the 1990s. Nickens H. **J Natl Med Assoc** 1990 Apr;82(4):239–42
Nondrug treatment of hypertension: a survey of black physicians in New York State. Paul EA, et al. **J Natl Med Assoc** 1989 Dec;81(12):1233–9
Further reflections on a racial view of medical education [editorial] Peniston RL. **J Natl Med Assoc** 1990 May; 82(5):325–7
Testimony to the Pepper Commission: the United States Bipartisan Commission on Comprehensive Health Care. Pinn-Wiggins VW. **J Natl Med Assoc** 1990 Mar; 82(3):169–72
Comments from the National Medical Association concerning a "white paper" on proposed strategies for fulfilling primary care manpower needs. Pinn-Wiggins VW. **J Natl Med Assoc** 1990 Apr;82(4):245–8
The future of medical practice and its impact on minority physicians. Pinn-Wiggins VW. **J Natl Med Assoc** 1990 Jun; 82(6):397–401
Diversity in medical education and health care access: after the '80s, what? Pinn-Wiggins VW. **J Natl Med Assoc** 1990 Feb;82(2):89–92
Recognition of the plight of minorities in the educational process and health care system. Pinn-Wiggins VW. **J Natl Med Assoc** 1990 May;82(5):333–5
The National Medical Association and our challenges as we enter the next decade. Pinn-Wiggins VW. **J Natl Med Assoc** 1989 Dec;81(12):1213–6
Comparisons of black and white smoking-attributable mortality, morbidity, and economic costs in the District of Columbia. Rivo ML, et al. **J Natl Med Assoc** 1989 Nov; 81(11):1125–30
Health care for blacks in the United States [letter] Smith EB. **J Natl Med Assoc** 1989 Dec;81(12):1204
Race, sex, economics, and tobacco advertising. Tuckson RV. **J Natl Med Assoc** 1989 Nov;81(11):1119–24
Emergency room use by patients from the family practice of a black physician. Yarboro TL. **J Natl Med Assoc** 1990 Feb;82(2):93–7
Baccalaureate and associate degree student nurses' cultural knowledge of and attitudes toward black American clients. Felder E. **J Nurs Educ** 1990 Jun;29(6):276–82
Stressful events related to childbearing in African-American women. A pilot study. Green NL. **J Nurse Midwifery** 1990 Jul–Aug;35(4):231–6
Race, birth weight, and mortality rates [editorial; comment] David R. **J Pediatr** 1990 Jan;116(1):101–2 Comment on: J Pediatr 1990 Jan;116(1):7–10.
Why small black infants have a lower mortality rate than small white infants: the case for population-specific standards for birth weight [see comments] Wilcox A, et al. **J Pediatr** 1990 Jan;116(1):7–10 Comment in: J Pediatr 1990 Jan;116(1):101–2.
Dietary practices and pregnancy discomforts among urban blacks. Gulick EE, et al. **J Perinatol** 1989 Sep;9(3):271–80
Prevalence and risk indicators for periodontal attachment loss in a population of older community-dwelling blacks and whites. Beck JD, et al. **J Periodontol** 1990 Aug; 61(8):521–8
Poor birth outcomes of American black women: an alternative explanation. Emanuel I, et al. **J Public Health Policy** 1989 Autumn;10(3):299–308
Urban black and white adolescents' physical fitness status and perceptions of exercise. Desmond SM, et al. **J Sch Health** 1990 May;60(5):220–6
Black English in a Mississippi prison population. Walton JH, et al. **J Speech Hear Disord** 1990 May;55(2):206–16
Poisoning admissions of black South Africans. Joubert PH. **J Toxicol Clin Toxicol** 1990;28(1):85–94
Race as a risk factor in the severity of infragenicular occlusive disease: study of an urban hospital patient population. Sidawy AN, et al. **J Vasc Surg** 1990 Apr; 11(4):536–43
The excess mortality of black adults in the United States [letter; comment] **JAMA** 1990 Aug 1;264(5):571–3 Comment on: JAMA 1990 Feb 9;263(6):845–50.
Black-white disparities in health care. **JAMA** 1990 May 2; 263(17):2344–6 (20 ref.)
Risk of sexually transmitted disease among black adolescent crack users in Oakland and San Francisco, Calif [see comments] Fullilove RE, et al. **JAMA** 1990 Feb 9; 263(6):851–5 Comment in: JAMA 1990 Jul 18;264(3):337.
Recent trends in suicide and homicide among blacks. Griffith EE, et al. **JAMA** 1989 Oct 27;262(16):2265–9 (40 ref.)
Black adolescent crack users in Oakland: no quick fix [letter; comment] Silverman BG. **JAMA** 1990 Jul 18;264(3):337 Comment on: JAMA 1990 Feb 9;263(6):851–5.
Treatment modality and quality differences for black and white breast-cancer patients treated in community hospitals. Diehr P, et al. **Med Care** 1989 Oct;27(10):942–58
Community attitudes to alcohol and drug abuse in a black urban township. Gatley SM. **Med Law** 1989;8(1):73–81
Nonemergency visits to hospital emergency rooms: a comparison of blacks and whites. White-Means SI, et al. **Milbank Q** 1989;67(1):35–57
Racial differences in cancer mortality in Missouri. Brownson RC, et al. **Mo Med** 1990 May;87(5):291–4
Racial differences and Mycobacterium tuberculosis infection [letter; comment] **N Engl J Med** 1990 Jun 7;322(23):1670–3 Comment on: N Engl J Med 1990 Feb 15;322(7):422–7.
Excess mortality in Harlem [see comments] McCord C, et al. **N Engl J Med** 1990 Jan 18;322(3):173–7 Comment in: N Engl J Med 1990 May 31;322(22):1606–7.
Mortality among black men [letter] Murray CJ. **N Engl J Med** 1990 Jan 18;322(3):205–6
Separate culture [letter] Osthoff G. **Nature** 1990 Jan 11; 343(6254):110
Black intravenous drug users: prospects for intervening in the transmission of human immunodeficiency virus infection. Brown LS Jr. **NIDA Res Monogr** 1990;93:53–67
Precarious dilemmas: mobilizing blacks against AIDS. Quimby E. **NIDA Res Monogr** 1989;95:473–4
Are race and length of gestation related to age at death in the sudden infant death syndrome? Adams MM, et al. **Paediatr Perinat Epidemiol** 1990 Jul;4(3):325–39
Nosocomial infections in black South African children. Cotton MF, et al. **Pediatr Infect Dis J** 1989 Oct; 8(10):676–83
Black Americans' challenges for medicine [editorial] Organ CH Jr. **Pharos** 1989 Fall;52(4):29
Obesity and overweight in young adults: the CARDIA study. Burke GL, et al. **Prev Med** 1990 Jul;19(4):476–88
The role of black churches in supporting compliance with antihypertension regimens. Smith ED. **Public Health Nurs** 1989 Dec;6(4):212–7
An urban community-based cancer prevention screening and health education intervention in Chicago. Lacey LP, et al. **Public Health Rep** 1989 Nov–Dec;104(6):536–41
Black-on-black homicide: Kansas City's response. Mitchell MA, et al. **Public Health Rep** 1989 Nov–Dec;104(6):605–8
Idiopathic hypoparathyroidism in black South Africans. Huddle KR, et al. **Q J Med** 1989 Jan;70(261):53–60
Black and Latina womens' AIDS related knowledge, attitudes, and practices. Flaskerud JH, et al. **Res Nurs Health** 1989 Dec;12(6):339–46
Language intervention at schools: changing orientations within the South African context. Alant E. **S Afr J Commun Disord** 1989;36:9–13
The cost and fate of abandoned black children [letter] Coovadia HM, et al. **S Afr Med J** 1990 May 5;77(9):484–5
Causes and treatment of sexually acquired genital ulceration in southern Africa. Dangor Y, et al. **S Afr Med J** 1989 Oct 7;76(7):339–41
Dietary iron overload in southern African rural blacks. Friedman BM, et al. **S Afr Med J** 1990 Sep 15;78(6):301–5
Permanent disability in black mineworkers [letter] Kahn RS. **S Afr Med J** 1990 May 5;77(9):484
Permanent disability in black mineworkers. A critical analysis. Leger JP, et al. **S Afr Med J** 1989 Nov 18; 76(10):557–61
Short-term predictions of the prevalence of human immunodeficiency virus infection among the black population in South Africa. Padayachee GN, et al. **S Afr Med J** 1990 Apr 7;77(7):329–33
Colorectal cancer in young blacks. An epidemic in Gazankulu? Skalsky J, et al. **S Afr Med J** 1989 Dec 2; 76(11):602–4
The relationship between dietary factors and serum cholesterol values in the coloured population of the Cape Peninsula. Steyn K, et al. **S Afr Med J** 1990 Jul 21; 78(2):63–7
Health actions and disease patterns related to coronary heart disease in the coloured population of the Cape Peninsula. Steyn K, et al. **S Afr Med J** 1990 Jul 21;78(2):73–7
Requirements of a coronary heart disease risk factor intervention programme for the coloured population of the Cape Peninsula. Steyn K, et al. **S Afr Med J** 1990 Jul 21; 78(2):78–81
Ten-year observation of peptic ulceration at Ga-Rankuwa Hospital, Pretoria—1979–1988. van der Merwe CF, et al. **S Afr Med J** 1990 Aug 18;78(4):196–9 (13 ref.)
Common health problems and health care utilisation [letter]

Westaway MS, et al. **S Afr Med J** 1990 Jul 7;78(1):49
Health complaints, remedies and medical assistance in a peri-urban area. Westaway MS. **S Afr Med J** 1990 Jan 6;77(1):34-6
Perinatal mortality in the black homelands [letter] Wilkinson D. **S Afr Med J** 1990 Feb 3;77(3):165
Race and imprisonment decisions in California. Klein S, et al. **Science** 1990 Feb 16;247(4944):812-6
An examination of factors influencing black fertility decline in the Mississippi Delta, 1880-1930. Wright P. **Soc Biol** 1989 Fall-Winter;36(3-4):213-39
Hidden consequences of state violence: spinal cord injuries in Soweto, South Africa. Cock J. **Soc Sci Med** 1989; 29(10):1147-55
Racial and gender discrimination: risk factors for high blood pressure? Krieger N. **Soc Sci Med** 1990;30(12):1273-81
Human immunodeficiency virus seroprevalence in female intravenous drug users: the puzzle of black women's risk. Lewis DK, et al. **Soc Sci Med** 1989;29(9):1071-6
Factors associated with not receiving adequate prenatal care in an urban black population: program planning implications. Ahmed F, et al. **Soc Work Health Care** 1990; 14(3):107-23
Cancer mortality in the South, 1950 to 1980. Lee JY, et al. **South Med J** 1990 Feb;83(2):185-90
The role of blacks in blood donation and the organ and tissue transplantation process. Bayton JA, et al. **Transplant Proc** 1989 Dec;21(6):3971-2
Bridging the gap between black food preferences and the renal diet. Jones WO. **Transplant Proc** 1989 Dec; 21(6):3990-2
The black diet versus the renal diet: bridging the gap. Smith SA. **Transplant Proc** 1989 Dec;21(6):3989
Organ donation in blacks and minorities in Houston: strategies for educating potential donor families. Taylor S, et al. **Transplant Proc** 1989 Dec;21(6):3973-4
Cysticercosis in an urban black South African community: prevalence and risk factors. Sacks LV, et al. **Trop Gastroenterol** 1990 Jan-Mar;11(1):30-3
Risk factors and survival from colorectal cancer in black patients in Soweto, South Africa. Walker AR, et al. **Trop Gastroenterol** 1989 Oct-Dec;10(4):220-4
Knowledge and attitudes about tuberculosis of black hospitalised TB patients. Westaway MS. **Tubercle** 1990 Mar;71(1):55-9
Health of black and white Americans, 1985-87. Ries P. **Vital Health Stat [10]** 1990 Jan;(171):1-114
Social support and life satisfaction of black climacteric women. Jackson BB. **West J Nurs Res** 1990 Feb;12(1):9-23; discussion 23-7
[Risk of myocardial infarction is higher among the poor black than the rich white population] Werkö L. **Lakartidningen** 1990 May 2;87(18):1553-4 **(Swe)**

EDUCATION

Ethnocultural factors in resident supervision: black supervisor and white supervises. Remington G, et al. **Am J Psychother** 1989 Jul;43(3):398-404
Female graduates of a predominantly black college of medicine: their characteristics and challenges. Titus-Dillon PY, et al. **J Am Med Wom Assoc** 1989 Nov-Dec; 44(6):175-82
A program model for nurses involved with cancer education of black Americans. Frank-Stromborg M, et al. **J Cancer Educ** 1987;2(3):145-51
Operation Sunday School--educating caring hearts to be healthy hearts. Jackson AL. **Public Health Rep** 1990 Jan-Feb;105(1):85-8
A church-based cholesterol education program. Wiist WH, et al. **Public Health Rep** 1990 Jul-Aug;105(4):381-8
Value of discussion groups in educating blacks about organ donation and transplantation. Townsend ME, et al. **Transplant Proc** 1990 Apr;22(2):324-5

HISTORY

Martin Robison Delany (1812-1885): physician, black separatist, explorer, soldier. Rosenfeld L. **Bull N Y Acad Med** 1989 Sep;65(7):801-18
Have we sighted Beulah Land? Cobb WM. **J Natl Med Assoc** 1990 May;82(5):359-65, 369
Racial integration in the North Carolina Medical Society. Shaffner LD. **N C Med J** 1990 Jan;51(1):43-6

PSYCHOLOGY

A psychometric study of restraint: the impact of race, gender, weight and marital status. Klem ML, et al. **Addict Behav** 1990;15(2):147-52
Personality, family relationships, and moral development in Chicano and black adolescent gang members. Espinoza RL, et al. **Adolesc Psychiatry** 1989;16:216-27
Sexual decision making in young black adolescent females. Pete JM, et al. **Adolescence** 1990 Spring;25(97):145-54
Fertility, menstrual characteristics, and contraceptive practices among white, black, and Southeast Asian refugee adolescents. Swenson I, et al. **Adolescence** 1989 Fall; 24(95):647-54
The relationship of alcohol, tobacco, marijuana, and other illegal drug use to delinquency among Mexican-American, black, and white adolescent males. Watts WD, et al. **Adolescence** 1990 Spring;25(97):171-81
Minority AIDS prevention: moving beyond cultural perspectives towards sociopolitical empowerment. De La Cancela V. **AIDS Educ Prev** 1989 Summer;1(2):141-53 (53 ref.)
A multisystems approach to the treatment of a black, inner-city family with a schizophrenic mother. Boyd-Franklin N, et al. **Am J Orthopsychiatry** 1990 Apr; 60(2):186-95
Informal adoption among black adolescent mothers. Sandven K, et al. **Am J Orthopsychiatry** 1990 Apr;60(2):210-24
Racial congruity as a contextual correlate of mental disorder. Tweed DL, et al. **Am J Orthopsychiatry** 1990 Jul; 60(3):392-403
Factors influencing black women's breast self-examination practice. Nemcek MA. **Cancer Nurs** 1989 Dec;12(6):339-43
Ethnicity and psychosocial factors in alcohol and tobacco use in adolescence. Bettes BA, et al. **Child Dev** 1990 Apr; 61(2):557-65
School and neighborhood friendship patterns of blacks and whites in early adolescence. DuBois DL, et al. **Child Dev** 1990 Apr;61(2):524-36
Are Head Start effects sustained? A longitudinal follow-up comparison of disadvantaged children attending Head Start, no preschool, and other preschool programs. Lee VE, et al. **Child Dev** 1990 Apr;61(2):495-507
The impact of economic hardship on black families and children: psychological distress, parenting, and socioemotional development. McLoyd VC. **Child Dev** 1990 Apr;61(2):311-46 (230 ref.)
Cognitive-motivational influences on the task-related help-seeking behavior of black children. Nelson-Le Gall S, et al. **Child Dev** 1990 Apr;61(2):581-9
Income level, gender, ethnicity, and household composition as predictors of children's school-based competence. Patterson CJ, et al. **Child Dev** 1990 Apr;61(2):485-94
Black grandmothers in multigenerational households: diversity in family structure and parenting involvement in the Woodlawn community. Pearson JL, et al. **Child Dev** 1990 Apr;61(2):434-42
Patterns of social expectations among black and Mexican-American children. Rotheram-Borus MJ, et al. **Child Dev** 1990 Apr;61(2):542-56
Toward cultural/ecological perspectives on schooling and achievement in African- and Asian-American children. Slaughter-Defoe DT, et al. **Child Dev** 1990 Apr; 61(2):363-83 (140 ref.)
Beliefs and achievement: a study of black, white, and Hispanic children. Stevenson HW, et al. **Child Dev** 1990 Apr;61(2):508-23
Sociodemographic and environmental correlates of racial socialization by black parents. Thornton MC, et al. **Child Dev** 1990 Apr;61(2):401-9
The prevention of psychopathology in African Americans: an epidemiologic perspective. Neighbors HW. **Community Ment Health J** 1990 Apr;26(2):167-79 (53 ref.)
The influence of racial factors on psychiatric diagnosis: a review and suggestions for research. Neighbors HW, et al. **Community Ment Health J** 1989 Winter;25(4):301-11 (45 ref.)
Early sexual activity among adolescents in small towns and rural areas: race and gender patterns. Alexander CS, et al. **Fam Plann Perspect** 1989 Nov-Dec;21(6):261-6
The children of teenage mothers: patterns of early childbearing in two generations. Furstenberg FF Jr, et al. **Fam Plann Perspect** 1990 Mar-Apr;22(2):54-61
When urban adolescents choose abortion: effects on education, psychological status and subsequent pregnancy [published erratum appears in Fam Plann Perspect 1990 Jan-Feb;22(1):48] Zabin LS, et al. **Fam Plann Perspect** 1989 Nov-Dec;21(6):248-55
The consequences of marijuana use on intrapersonal and interpersonal functioning in black and white adolescents. Brook JS, et al. **Genet Soc Gen Psychol Monogr** 1989 Aug; 115(3):349-69
Relationship of racial stressors to blood pressure responses and anger expression in black college students. Armstead CA, et al. **Health Psychol** 1989;8(5):541-56
Associations of blood pressure with self-report measures of anger and hostility among black and white men and women. Durel LA, et al. **Health Psychol** 1989;8(5):557-75
Race differences in stress-induced reactivity in young adults. Falkner B, et al. **Health Psychol** 1989;8(5):613-27
Impact of caffeine and psychological stress on blood pressure in black and white men. Myers HF, et al. **Health Psychol** 1989;8(5):597-612
Initial drinking experiences among black and white male and female student drinkers. Connors GJ, et al. **Int J Addict** 1989 Dec;24(12):1173-82
Determinants of maternal child-rearing attitudes. Rauh VA, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May; 29(3):375-81
Type A behavior and its association with cardiovascular disease prevalence in blacks and whites: the Minnesota Heart Survey. Sprafka JM, et al. **J Behav Med** 1990 Feb; 13(1):1-13
Test of MCMI black norms for five scales. Davis WE, et al. **J Clin Psychol** 1990 Mar;46(2):175-8
Ethnicity: post-traumatic stress disorder (PTSD) differences among black, white, and Hispanic veterans who differ in degrees of exposure to combat in Vietnam. Penk WE, et al. **J Clin Psychol** 1989 Sep;45(5):729-35
Exercise as a treatment for hypertension in low-socioeconomic-status black children. Danforth JS, et al. **J Consult Clin Psychol** 1990 Apr;58(2):237-9
The relationship of daily hassles, social support, and coping to depression in black and white students. Jung J, et al. **J Gen Psychol** 1989 Oct;116(4):407-17
The relative salience of sex, race, age, and glasses in children's social perception. McGraw KO, et al. **J Genet Psychol** 1989 Sep;150(3):251-67
Racism, sexism, and erotophobia: attitudes of heterosexuals toward homosexuals. Ficarrotto TJ. **J Homosex** 1990; 19(1):111-6
Locus of control in the black elderly. Tabb SL. **J Hum Hypertens** 1990 Apr;4(2):108-9
Attempted suicide by black men and women: an 11 year study. Frierson RL, et al. **J Ky Med Assoc** 1990 Jun; 88(6):287-92
Racial differences in prevalence of phobic disorders. Brown DR, et al. **J Nerv Ment Dis** 1990 Jul;178(7):434-41
Racial bias and the MCMI. Choca JP, et al. **J Pers Assess** 1990 Summer;54(3-4):479-90
Toward explaining the higher incidence of cigarette smoking among black Americans. Feigelman W, et al. **J Psychoactive Drugs** 1989 Jul-Sep;21(3):299-305
Black and white adolescents' perceptions of their weight. Desmond SM, et al. **J Sch Health** 1989 Oct;59(8):353-8
Re-examining the link between job characteristics and job satisfaction. Beaty D. **J Soc Psychol** 1990 Feb;130(1):131-2
Academic achievement of children from monogamous and polygynous families. Cherian VI. **J Soc Psychol** 1990 Feb; 130(1):117-9
Influence of self-concept on school adjustment among middle-school students. Haynes NM. **J Soc Psychol** 1990 Apr;130(2):199-207
Interracial friendship in a Zimbabwean primary school. Wilson D, et al. **J Soc Psychol** 1990 Feb;130(1):111-3
Personality concomitants of loneliness among black and white male Zimbabwean adolescents. Wilson D, et al. **J Soc Psychol** 1989 Aug;129(4):577-8
Concepts of alcoholism among whites, blacks and Hispanics in the United States. Caetano R. **J Stud Alcohol** 1989 Nov; 50(6):580-2
Subgroup differences in drinking patterns among black and white men: results from a national survey. Herd D. **J Stud Alcohol** 1990 May;51(3):221-32
The relation of alcohol expectancies to drinking patterns among alcoholics: generalization across gender and race. Kline RB. **J Stud Alcohol** 1990 Mar;51(2):175-82
Coping with words and song: the New Orleans jazz funeral. Secundy MG. **Lit Med** 1989;8:100-5
Seven caring functions of black grandmothers in adolescent mothering. Flaherty MJ. **Matern Child Nurs J** 1988 Fall; 17(3):191-207
Reactions of black, Hispanic, and white mothers to having a child with handicaps. Mary NL. **Ment Retard** 1990 Feb; 28(1):1-5
The Larry P. decision a decade later: problems and future directions [editorial] Taylor RL. **Ment Retard** 1990 Feb; 28(1):iii-vi
The adolescent-to-adult transition: discouragement among jobless black youth. Bowman PJ. **New Dir Child Dev** 1990 Winter;(46):87-105
Re: 'AIDS and traditional health beliefs and practices of black women' [letter; comment] Jackson EM, et al. **Nurs Res** 1990 Mar-Apr;39(2):96, 107 Comment on: Nurs Res 1989 Jul-Aug;38(4):210-5.
Obesity in black adolescent girls: a controlled clinical trial of treatment by diet, behavior modification, and parental support. Wadden TA, et al. **Pediatrics** 1990 Mar; 85(3):345-52
Assessment of students' behavioral interactions during on-task classroom activities. Morgan H. **Percept Mot Skills** 1990 Apr;70(2):563-9
Involuntary commitments to public mental institutions: issues involving the overrepresentation of blacks and assessment of relevant functioning. Lindsey KP, et al. **Psychol Bull** 1989 Sep;106(2):171-83 (160 ref.)
Criterion-related validity of the British Ability Scales short-form for black and white children. Buckhalt JA. **Psychol Rep** 1990 Jun;66(3 Pt 2):1059-66
Race and brain weight: a note on J.P. Rushton's conclusions [see comments] Cernovsky ZZ. **Psychol Rep** 1990 Feb; 66(1):337-8 Comment in: Psychol Rep 1990 Apr;66(2):659-66.
Effects of sex, race and year in college on self-reported drinking-related problem behaviors. Curtis K, et al. **Psychol Rep** 1990 Jun;66(3 Pt 1):871-4
Preliminary investigation of the relationship between religion and psychological distress in black women. Handal PJ, et al. **Psychol Rep** 1989 Dec;65(3 Pt 1):971-5
MMPIs of Hispanic, black, and white DSM-III schizophrenics. Velasquez RJ, et al. **Psychol Rep** 1990 Jun; 66(3 Pt 1):819-22
Lifestyle, stress, and blood pressure in a southern black community. Dressler WW. **Psychosom Med** 1990 Mar-Apr; 52(2):182-98
A psychosocial approach to smoking prevention for urban black youth. Botvin GJ, et al. **Public Health Rep** 1989 Nov-Dec;104(6):573-82
Cigarette smoking and cessation behaviors among urban blacks and whites. Hahn LP, et al. **Public Health Rep** 1990 May-Jun;105(3):290-5
Observations on early school failure in Zulu children. Frets-Van Buuren JJ, et al. **S Afr Med J** 1990 Feb 3;

77(3):144–6
[Long-term psychological stress as a traumatic syndrome—possibilities of a single therapeutic consultation. Sanctuaries Counseling Team] Straker G. **Psyche (Stuttg)** 1990 Feb;44(2):144–63 (Eng. Abstr.) **(Ger)**

STATISTICS & NUMERICAL DATA

Neonatal mortality among blacks: why is it higher? [editorial] Haggerty RJ. **Am J Perinatol** 1990 Jul;7(3):293
Does limited access to NICU services account for higher neonatal mortality rates among blacks? Langkamp DL, et al. **Am J Perinatol** 1990 Jul;7(3):227–31
The mortality profile of black Seventh-Day Adventists residing in metropolitan Atlanta: a pilot study. Murphy FG, et al. **Am J Public Health** 1990 Aug;80(8):984–5
Black/white differences in women's reproductive-related health status: evidence from vital statistics. Geronimus AT, et al. **Demography** 1990 Aug;27(3):457–66
Remarriage patterns of black and white women: reassessing the role of educational attainment. Smock PJ. **Demography** 1990 Aug;27(3):467–73
Tuberculosis and social stratification in South Africa. Andersson N. **Int J Health Serv** 1990;20(1):141–65
Lack of difference in neonatal mortality between blacks and whites served by the same medical care system. Kugler JP, et al. **J Fam Pract** 1990 Mar;30(3):281–7; discussion 287–8
Pap tests of rural black women. Sawyer JA, et al. **J Gen Intern Med** 1990 Mar–Apr;5(2):115–9
Black health care in America: a political perspective. Rice MF, et al. **J Natl Med Assoc** 1990 Jun;82(6):429–37
Underreporting of minority AIDS deaths in San Francisco Bay area, 1985–86. Lindan CP, et al. **Public Health Rep** 1990 Jul–Aug;105(4):400–4
Mortality from diabetes mellitus, ischemic heart disease, and cerebrovascular disease among blacks in a higher income area. Poledmak AP. **Public Health Rep** 1990 Jul–Aug; 105(4):393–9

BLACKWATER FEVER see under **MALARIA**

BLADDER

see related
CYSTOSCOPY
URINARY CATHETERIZATION

A vesicovaginal fistula and intravesical foreign body. A rare case of the neglected pessary. Goldstein I, et al. **Am J Obstet Gynecol** 1990 Aug;163(2):589–91
Electromyographic evaluation of human detrusor muscle activity in relation to abdominal muscle activity. La Joie WJ, et al. **Arch Phys Med Rehabil** 1976 Aug;57(8):382–6
Foreign body in the bladder. Abdulla MM. **Br J Urol** 1990 Apr;65(4):420
Staff safety and bladder irrigation. Isgar B, et al. **Br J Urol** 1989 Dec;64(6):657
An unusual bladder calculus. Saravanapavananthan T. **Br J Urol** 1990 Jun;65(6):659
Changes in birefringence as markers of thermal damage in tissues. Thomsen S, et al. **IEEE Trans Biomed Eng** 1989 Dec;36(12):1174–9
Encapsulated paravesical foreign body. Fujita K, et al. **J Urol** 1990 May;143(5):1004–5
Bladder mucosa in urethral reconstructions. Keating MA, et al. **J Urol** 1990 Oct;144(4):827–34 (23 ref.)
Submucosal injection of polyvinyl alcohol foam in rabbit bladder. Mergueran PA, et al. **J Urol** 1990 Aug;144(2 Pt 2):531–3; discussion 545
Recurrent cystitis due to retained Jacques catheter—a case report. Tharmaseelan NK. **Med J Malaysia** 1989 Sep; 44(3):252–4
Unusual cause of dysuria: migration of a pacemaker generator into the urinary bladder. Baumgartner G, et al. **PACE** 1990 Jun;13(6):703–4
[A rare case of a metal foreign body in the bladder] Todorov S, et al. **Khirurgiia (Sofiia)** 1990;43(2):62–3 **(Bul)**
[Acute non-inflammatory renal failure after transurethral electroresection of the prostate combined with irrigation of the bladder with distilled water] Orlowska-Kowalik G, et al. **Wiad Lek** 1989 May 1;42(9):608–11 (Eng. Abstr.) **(Pol)**
[Foreign body in the bladder] Zhdanov MA. **Klin Khir** 1989; (12):48–9 **(Rus)**

ABNORMALITIES

Misleading appearances of the bladder on pediatric genitourinary imaging. Orzel JA, et al. **Clin Nucl Med** 1989 Sep;14(9):671–4
Complete duplication of the hindgut and lower urinary tract with diphallus. Azmy AF. **J Pediatr Surg** 1990 Jun; 25(6):647–9
Duplicate bladder exstrophy: a new variant of clinical and embryological significance. Sheldon CA, et al. **J Urol** 1990 Aug;144(2 Pt 1):334–6
[Spontaneous regression of fetal megacystis in the 3d trimester] Rempen A. **Z Geburtshilfe Perinatol** 1990 Jul–Aug;194(4):179–81 (Eng. Abstr.) **(Ger)**
[Ectopic ureterocele] Derevianko IM, et al. **Vestn Khir** 1989 Apr;142(4):57–60 (Eng. Abstr.) **(Rus)**

ANALYSIS

Neurotensin is localized to paracrine cells in the urinary bladder of the turtle, Chrysemys picta. Gapp DA, et al. **Gen Comp Endocrinol** 1990 Aug;79(2):185–92
Uroplakin I: a 27-kD protein associated with the asymmetric unit membrane of mammalian urothelium. Yu J, et al. **J Cell Biol** 1990 Sep;111(3):1207–16
Insulin cells are found in the main and accessory urinary bladders of the painted turtle, Chrysemys picta. Gapp DA, et al. **J Exp Zool** 1990 Jun;254(3):332–7
Changes in lipid composition and isoproterenol- and ethanol-stimulated adenylate cyclase activity in aging Fischer rat bladders. Wheeler MA, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):277–83
Sequential flow cytometry and single gene analysis by enzymatic amplification and allele specific oligonucleotide hybridization of urothelial cells. Meyers FJ, et al. **J Urol** 1989 Dec;142(6):1599–601
Possible presence of V1 vasopressin receptor in toad urinary bladder. Nara Y, et al. **Nippon Jinzo Gakkai Shi** 1990 Mar; 32(3):327–9
Pathology and pathophysiology of painful bladder diseases. Holm-Bentzen M. **Urol Int** 1989;44(6):327–31

ANATOMY & HISTOLOGY

Alterations in bladder volume and the ultrasound appearance of the cervix. Mason GC, et al. **Br J Obstet Gynaecol** 1990 May;97(5):457–8
Residual urine volumes in a normal female population: application of transvaginal ultrasound. Haylen BT. **Br J Urol** 1989 Oct;64(4):347–9
Verification of the accuracy and range of transvaginal ultrasound in measuring bladder volumes in women. Haylen BT. **Br J Urol** 1989 Oct;64(4):350–2
The anatomy and function of the bladder neck. Tanagho EA, et al. **Br J Urol** 1966 Feb;38(1):54–71
Anatomy and physiology of urinary continence. DeLancey JO. **Clin Obstet Gynecol** 1990 Jun;33(2):298–307 (26 ref.)
Ultrasound assessment of the bladder volume after anterior colporrhaphy. Paltieli Y, et al. **Gynecol Obstet Invest** 1989; 28(4):209–11
Mini-pig urinary bladder function: comparisons of in vitro anticholinergic responses and in vivo cystometry with drugs indicated for urinary incontinence. Peterson JS, et al. **J Auton Pharmacol** 1990 Apr;10(2):65–73
Effect of bladder filling on embryo transfer. Mitchell JD, et al. **J In Vitro Fert Embryo Transf** 1989 Aug;6(4):263–5
Bladder volume determination using a dedicated, portable ultrasound scanner. Ireton RC, et al. **J Urol** 1990 May; 143(5):909–11
Accuracy of ultrasonic bladder volume measurement in children. Bis KG, et al. **Pediatr Radiol** 1990;20(6):457–60
[Measurement of topographic values during extraperitoneal cesarean section] Zhao CZ. **Chung Hua Fu Chan Ko Tsa Chih** 1990 Mar;25(2):105–7, 125 (Eng. Abstr.) **(Chi)**
[Anatomo-surgical study of hemorrhagic risks in urethro-vesical Burch-type suspension] Negură A, et al. **Rev Fr Gynecol Obstet** 1989 Dec;84(12):941–3 (Eng. Abstr.) **(Fre)**
[The muscle compressing the ureter and its role in the closure mechanism of the ureteral-bladder segment] Pytel' IuA, et al. **Urol Nefrol (Mosk)** 1990 May–Jun;(3):59–62 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Acquired venous disease of the lower urinary tract. Pleass H, et al. **Br J Urol** 1990 Feb;65(2):148–51
Ultrastructural distribution of terbium across capillary endothelium: detection by electron spectroscopic imaging and electron energy loss spectroscopy. Wagner RC, et al. **J Histochem Cytochem** 1990 Feb;38(2):275–82
Effect of chronic ischemia on glucose metabolism of rabbit urinary bladder. Lin AT, et al. **J Urol** 1989 Oct; 142(4):1127–33
Urinary bladder blood flow. I. Comparison of clearance of locally injected 99mtechnetium pertechnate and radioactive microsphere technique in dogs. Krøyer K, et al. **Urol Res** 1990;18(3):223–6

CYTOLOGY

Freeze-fracture study of the pavement cell in the lamprey gill epithelium. Analogy of membrane structure with the granular cell in the amphibian urinary bladder. Bartels H. **Biol Cell** 1989;66(1–2):165–71
Immunolocalization of secretory protein-I or chromogranin A in amphibian urinary bladder granular cell granules. Davis WL, et al. **Cell Biol Int Rep** 1990 Jul;14(7):601–12
Long term growth and maintenance of stratified rat urothelium in vitro. Chlapowski FJ. **Cell Tissue Kinet** 1989 May;22(3):245–57
Cell lineages and differentiation programs in epidermal, urothelial and hepatic tissues and their neoplasms. Marceau N. **Lab Invest** 1990 Jul;63(1):4–20 (163 ref.)
Stimulation of stromal cell growth by normal rat urothelial cell-derived epidermal growth factor. Noguchi S, et al. **Lab Invest** 1990 May;62(5):538–44
Localization of muscarinic receptors on somatostatin-like immunoreactive neurones of the newborn guinea pig urinary bladder in culture. James S, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):13–8
Comparative analysis of the proliferative response of the rat urinary bladder to sodium saccharin by light and scanning electron microscopy and autoradiography. Cohen SM, et al. **Scanning Microsc** 1990 Mar;4(1):135–42
Establishment and characterization of long-term primary mouse urothelial cell cultures. van der Kwast TH, et al. **Urol Res** 1989;17(5):289–93
Nerve fibre proliferation in interstitial cystitis. Christmas TJ, et al. **Virchows Arch [A]** 1990;416(5):447–51

DRUG EFFECTS

The effect of radiation and cytotoxic platinum compounds on the growth of normal and tumour bladder explant cultures. Mothersill C, et al. **Acta Oncol** 1990;29(2):179–84
Oestrogen-induced changes in muscarinic receptor density and contractile responses in the female rabbit urinary bladder. Batra S, et al. **Acta Physiol Scand** 1989 Sep; 137(1):135–41
Muscarinic supersensitivity in the rat urinary bladder after capsaicin pretreatment. Malmgren A, et al. **Acta Physiol Scand** 1990 Mar;138(3):377–87
The activity of AA-193, a new uricosuric agent, in animals. Dan T, et al. **Adv Exp Med Biol** 1989;253A:301–8
Dynamics of apical membrane responses to ADH in amphibian bladder. Wade JB. **Am J Physiol** 1989 Nov;257(5 Pt 2):R998–1003 (46 ref.)
Permeability properties of the Bufo bufo bladder as affected by isoprenaline and vasopressin. Lippe C, et al. **Arch Int Physiol Biochim** 1989 Dec;97(6):537–43
Norepinephrine stimulation of sodium transport in Necturus urinary bladder. Thurman CL, et al. **Biochim Biophys Acta** 1990 Feb 16;1022(1):79–86
Wheat germ agglutinin (WGA) reduces ADH-induced water flow and induces cell surface changes in epithelial cells of frog urinary bladder. Favard P, et al. **Biol Cell** 1989; 67(2):103–14
Multiple sources of calcium for contraction of the human urinary bladder muscle. Maggi CA, et al. **Br J Pharmacol** 1989 Nov;98(3):1021–31
Bladder irrigation or irritation? Elliott TS, et al. **Br J Urol** 1989 Oct;64(4):391–4
Species differences in sodium o-phenylphenate induction of urinary bladder lesions. Hasegawa R, et al. **Cancer Lett** 1990 Apr 20;50(2):87–91
Bladder epithelial hyperplasia in F344 rats after intravesical instillation of the antitumor chemotherapeutic agents Adriamycin and mitomycin C. Shibata MA, et al. **Cancer Lett** 1990 Jan;49(1):41–9
Detection and characterization of carcinogen-DNA adducts in exfoliated urothelial cells from 4-aminobiphenyl-treated dogs by 32P-postlabelling and subsequent thin-layer and high-pressure liquid chromatography. Talaska G, et al. **Carcinogenesis** 1990 Apr;11(4):639–46
Comparison of the bladder response to indole and sodium saccharin ingestion by male rats. Anderson RL, et al. **Food Chem Toxicol** 1989 Dec;27(12):777–9
Participation of urinary Na+, K+, pH, and L-ascorbic acid in the proliferative response of the bladder epithelium after the oral administration of various salts and/or ascorbic acid to rats. Shibata MA, et al. **Food Chem Toxicol** 1989 Jun; 27(6):403–13
Further studies on the motor response of the human isolated urinary bladder to tachykinins, capsaicin and electrical field stimulation. Maggi CA, et al. **Gen Pharmacol** 1989; 20(5):663–9
Effects of selective cholinergic antagonists and alpha,beta-methylene ATP on guinea-pig urinary bladder contractions in vivo following pelvic nerve stimulation. Peterson JS, et al. **J Auton Pharmacol** 1989 Oct;9(5):303–13
The anticholinergic activity of agents indicated for urinary incontinence is an important property for effective control of bladder dysfunction. Noronha-Blob L, et al. **J Pharmacol Exp Ther** 1989 Nov;251(2):586–93
Prostaglandins for enhancing detrusor function after surgery for stress incontinence in women. Koonings PP, et al. **J Reprod Med** 1990 Jan;35(1):1–5
Canine, but not rat bladder contracts to serotonin via activation of 5HT2 receptors. Cohen ML. **J Urol** 1990 May; 143(5):1037–40
Urothelial injury from ethylenediaminetetraacetic acid used as an irrigant in the urinary tract. Kane MH, et al. **J Urol** 1989 Nov;142(5):1359–60
Effects of cromakalim (BRL 34915) and pinacidil on normal and hypertrophied rat detrusor in vitro. Malmgren A, et al. **J Urol** 1990 Apr;143(4):828–34
Central actions of bethanechol on the urinary bladder in dogs. O'Donnell PD. **J Urol** 1990 Mar;143(3):634–7
Bradykinin-induced contractions of canine prostate and bladder: effect of angiotensin-converting enzyme inhibition. Steidle CP, et al. **J Urol** 1990 Aug;144(2 Pt 1):390–2
Effect of nifedipine on the contractile responses of the isolated rat bladder. Zar MA, et al. **J Urol** 1990 Apr; 143(4):835–9
Urothelial damage and tumor initiation by urinary metabolites of sodium o-phenylphenate in the urinary bladder of female rats. Hasegawa R, et al. **Jpn J Cancer Res** 1990 May; 81(5):483–8
Effects of apomorphine on urinary bladder motility in anesthetized rats. Kontani H, et al. **Jpn J Pharmacol** 1990 Jan;52(1):59–67

Detrusor hyperreflexia induced by intravesical instillation of xylene in conscious rats. Morikawa K, et al. **Jpn J Pharmacol** 1990 Apr;52(4):587–95

Effects of various drugs on bladder function in conscious restrained–denervated rats placed in a restraining cage and produced by transection of the hypogastric nerve. Morikawa K, et al. **Jpn J Pharmacol** 1990 Mar;52(3):405–11

Cystometric evaluation of vesical endometriosis before and after hormonal or surgical treatment. Goldstein MS, et al. **Mt Sinai J Med** 1990 Mar;57(2):109–11

Reversible inactivation of water and sodium transport systems in frog urinary bladder and skin in the presence of detergents. Natochin YuV, et al. **Physiol Bohemoslov** 1990;39(2):157–70

Toxic and nontoxic changes induced in the urothelium by xenobiotics. Cohen SM. **Toxicol Appl Pharmacol** 1989 Dec; 101(3):484–98

Effects of papaverine on human isolated bladder muscle. Hertle L, et al. **Urol Res** 1990;18(3):227–31

Effect of extract of Hirudo Medicinalis L. against adherence of calcium oxalate crystals to acid–injured bladder mucosa. Liu GD, et al. **Urol Res** 1989;17(6):381–4

Effect of drugs on crystal adhesion to injured urothelium. Pantazopoulos D, et al. **Urology** 1990 Sep;36(3):255–9

[Experimental studies for urinary incontinence. Effect of beta 2–agonists on the vesicourethral function] Morita T. **Nippon Hinyokika Gakkai Zasshi** 1989 Nov; 80(11):1597–604 (Eng. Abstr.) **(Jpn)**

[Pharmacological experiments in the aged rat urinary bladder. Responses to inorganic ions (Ca2+, K+, Ba2+, Mg2+)] Saito M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jun;81(6):862–7 (Eng. Abstr.) **(Jpn)**

[Pharmacological experiments in aged rat urinary bladder. I. The responses to acetylcholine, norepinephrine and isoproterenol] Saito M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):25–30 (Eng. Abstr.) **(Jpn)**

[Pharmacological experiments in aged rat urinary bladder. II. Responses to ATP, prostaglandin F2 alpha, serotonin, angiotensin II and VIP] Saito M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):31–6 (Eng. Abstr.) **(Jpn)**

[Effects of propiverine hydrochloride and its metabolites on isolated guinea pig urinary bladder] Haruno A, et al. **Nippon Yakurigaku Zasshi** 1989 Aug;94(2):145–50 (Eng. Abstr.) **(Jpn)**

[Effect of propiverine hydrochloride on the function of the bladder in decerebrated dogs] Kaneko S, et al. **Nippon Yakurigaku Zasshi** 1990 Feb;95(2):55–61 (Eng. Abstr.) **(Jpn)**

[Mode of inhibitory action of propiverine hydrochloride on the micturition movements of the bladder in dogs] Kaneko S, et al. **Nippon Yakurigaku Zasshi** 1989 Aug;94(2):151–7 (Eng. Abstr.) **(Jpn)**

[Effects of propiverine hydrochloride (P–4) and its metabolites on urinary bladder function in anesthetized rats] Nomura N, et al. **Nippon Yakurigaku Zasshi** 1989 Sep; 94(3):173–80 (Eng. Abstr.) **(Jpn)**

[The use of the M–cholinomimetic test in predicting treatment efficacy in neurogenic bladder dysfunctions] Dzhavad–Zade MD, et al. **Urol Nefrol (Mosk)** 1990 Mar–Apr;(2):7–11 (Eng. Abstr.) **(Rus)**

[Incoercible hemorrhagic cystitis induced by pelvic radiotherapy and simultaneous treatment with cyclophosphamide] González Enguita C, et al. **Actas Urol Esp** 1990 Mar–Apr;14(2):128–31 (Eng. Abstr.) **(Spa)**

EMBRYOLOGY

Bladder contractions and micturition in fetal sheep: their relation to behavioral states. Wlodek ME, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1526–32

The fine structure of the human fetal urinary bladder. Development and maturation. A light, transmission and scanning electron microscopic study. Newman J, et al. **J Anat** 1989 Oct;166:135–50

ENZYMOLOGY

Urinary elastase: the contribution of the lower urinary tract [letter] Cumming JA, et al. **Nephron** 1989;53(4):376

GROWTH & DEVELOPMENT

Ontogeny of bladder function in the rabbit. Keating MA, et al. **J Urol** 1990 Sep;144(3):766–9

IMMUNOLOGY

Reduced HLA–A,B,C expression in tumourigenic v–raf transfected human urothelial cells. Ottesen SS, et al. **Eur J Cancer** 1990 Mar;26(3):305–10

The sialosyl Lewis a ganglioside is present in tumorigenic human urothelial cell lines. Ugorski M, et al. **Int J Cancer** 1990 Jun 15;45(6):1204–9

Effects of local bacillus Calmette–Guerin therapy in patients with bladder carcinoma on immunocompetent cells of the bladder wall. Böhle A, et al. **J Urol** 1990 Jul;144(1):53–8

Antisera to a rabbit urinary tract antigen also react with human bladder and kidney tissue. Stefanelli J, et al. **J Urol** 1990 Feb;143(2):414–7

Vesical defense: further evidence for a charge–related mucosal anti–adherence mechanism. Shrom SH, et al. **Surg Forum** 1978;29:632–3

[Urinary microflora and the status of local immunity in children with cystitis] Sentsova TB, et al. **Pediatriia** 1990; (2):19–23 (Eng. Abstr.) **(Rus)**

INJURIES

The value of CT in the detection of bladder and posterior urethral injuries. Kane NM, et al. **AJR Am J Roentgenol** 1989 Dec;153(6):1243–6

Inadvertent transvaginal cystotomy during laparoscopy. Sherer DM. **Int J Gynaecol Obstet** 1990 May;32(1):77–9

What is your diagnosis? Bilateral femoral fractures and avulsion of the urinary bladder. Love NE, et al. **J Am Vet Med Assoc** 1990 Jan 1;196(1):137–8

Urethral obstruction in a male llama. McLaughlin BG, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1601–2

ECG of the month. Urinary bladder rupture in a dog causing hyperkalemia. Syvrud KP. **J Am Vet Med Assoc** 1989 Oct 1;195(7):932–3

CT cystography in the evaluation of bladder trauma. Lis LE, et al. **J Comput Assist Tomogr** 1990 May–Jun;14(3):386–9

Neonatal bladder rupture: a complication of umbilical artery catheterization. Diamond DA, et al. **J Urol** 1989 Dec; 142(6):1543–4

Blunt trauma of uterovaginal and vesical prolapse with associated bladder rupture. Miller CG, et al. **J Urol** 1990 Aug;144(2 Pt 1):348–50

Bladder perforation secondary to clean intermittent catheterization. Reisman EM, et al. **J Urol** 1989 Nov; 142(5):1316–7

Neurochemical evidence for the activation of the 'efferent' function of capsaicin–sensitive nerves by lowering of the pH in the guinea–pig urinary bladder. Geppetti P, et al. **Neurosci Lett** 1990 Jun 22;114(1):101–6

Rupture of the urinary bladder, a potentially serious condition. Renvall S, et al. **Scand J Urol Nephrol** 1989; 23(3):185–8

[The diagnosis and treatment of closed bladder injuries] Kaloianov D, et al. **Khirurgiia (Sofiia)** 1989;42(6):69–74 (Eng. Abstr.) **(Bul)**

[Fundamentals of care of urinary tract injuries after gynecologic surgery] Carda A. **Cesk Gynekol** 1989 Jun; 54(5):363–4 **(Cze)**

[Traumatic rupture of the bladder. Apropos of 11 cases] Le Neel JC, et al. **Ann Chir** 1990;44(3):217–25 (Eng. Abstr.) **(Fre)**

[Post–traumatic urethral obstruction with bladder rupture in a calf] Bettinelli L, et al. **Tierarztl Prax** 1990 Jun; 18(3):237–8 (Eng. Abstr.) **(Ger)**

[Vesico–urethral traumatic lesions caused by labor] Quarta A, et al. **Minerva Ginecol** 1989 Jul;41(7):371–3 (Eng. Abstr.) **(Ita)**

[Utero–vesical perforation caused by an IUD] Fasolis F, et al. **Minerva Urol Nefrol** 1990 Apr–Jun;42(2):103–4 (Eng. Abstr.) **(Ita)**

[Ultrasonic diagnosis of rupture of the bladder] Stasi G, et al. **Radiol Med (Torino)** 1989 Sep;78(3):255–7 **(Ita)**

[Gunshot wounds of the pelvic organs] Kukharchuk VP, et al. **Klin Khir** 1990;(4):63 **(Rus)**

[Rational extent of therapeutic measures in the early period after urethral trauma] Krasulin VV, et al. **Vestn Khir** 1989 Apr;142(4):121–5 (Eng. Abstr.) **(Rus)**

[Injuries of the urinary bladder and urinary tract] Ećim Z, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:116–20 **(Scr)**

[Injuries of the urinary bladder] Matijević M, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:120–3 (Eng. Abstr.) **(Scr)**

[Urologic complication during total hip replacement. Apropos of a case and review of the literature] Resines C, et al. **Actas Urol Esp** 1990 Jan–Feb;14(1):63–4 (13 ref.) (Eng. Abstr.) **(Spa)**

INNERVATION

Degeneration of adrenergic nerves in the urinary bladder during pregnancy. Qayyum MA, et al. **Acta Anat (Basel)** 1989;136(4):303–5

Urinary bladder and hindlimb stimuli inhibit T1–T6 spinal and spinoreticular cells. Hobbs SF, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R10–20

Excitatory effect of substance P in parasympathetic ganglia of cat urinary bladder. Kawatani M, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1450–6

Sympathetic modulation of cholinergic transmission in cat vesical ganglia is mediated by alpha 1– and alpha 2–adrenoceptors. Keast JR, et al. **Am J Physiol** 1990 Jan; 258(1 Pt 2):R44–50

Somatic and autonomic responses to bladder filling in patients with complete transverse myelopathy. Roussan MS, et al. **Arch Phys Med Rehabil** 1966 Jul;47(7):450–6

Effect of capsaicin on the rabbit urinary bladder. What is the function of sensory nerves that contain substance P? Harrison SC, et al. **Br J Urol** 1990 Aug;66(2):155–61

The role of spinal and brainstem adenosine receptors in the modulation of the volume–evoked micturition reflex in the unanesthetized rat. Sosnowski M, et al. **Brain Res** 1990 May 7;515(1–2):207–13

Intramural neurons in the urinary bladder of the guinea–pig. Gabella G. **Cell Tissue Res** 1990 Aug;261(2):231–7

Effects of stimulation of vesical afferents on colonic motility in cats. Bouvier M, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1148–54

Atropine–resistant transmission in partially depolarized rat urinary bladder. Carpenter F. **J Auton Pharmacol** 1990 Apr; 10(2):97–107

Ultrastructural analysis of enkephalinergic terminals in parasympathetic ganglia innervating the urinary bladder of the cat. Kawatani M, et al. **J Comp Neurol** 1989 Oct 1;288(1):81–91

Immunohistochemical characterization of pelvic neurons which project to the bladder, colon, or penis in rats. Keast JR, et al. **J Comp Neurol** 1989 Oct 15;288(3):387–400

Morphological plasticity in efferent pathways to the urinary bladder of the rat following urethral obstruction. Steers WD, et al. **J Neurosci** 1990 Jun;10(6):1943–51

Presence of non–cholinergic motor transmission in human isolated bladder. Luheshi GN, et al. **J Pharm Pharmacol** 1990 Mar;42(3):223–4

Enkephalinergic inhibition in parasympathetic ganglia of the urinary bladder of the cat. de Groat WC, et al. **J Physiol (Lond)** 1989 Jun;413:13–29

Reorganization of sympathetic preganglionic connections in cat bladder ganglia following parasympathetic denervation. de Groat WC, et al. **J Physiol (Lond)** 1989 Feb;409:431–49

An animal model of non–obstructive bladder instability. Sethia KK, et al. **J Urol** 1990 Jun;143(6):1243–6

Effect of ruthenium red on responses mediated by activation of capsaicin–sensitive nerves of the rat urinary bladder. Maggi CA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Nov; 340(5):541–6

Morphological changes of electrically inactive afferent myelinated nerve fibers of the living bushlike interoceptor. Podol'skaya LA, et al. **Neurosci Behav Physiol** 1989 Jul–Aug;19(4):318–24

Ultrastructural changes in receptor terminals on prolonged action by local anesthetics. Vshivtseva VV, et al. **Neurosci Behav Physiol** 1989 Sep–Oct;19(5):429–32

Bradykinin facilitates the purinergic motor component of the rat bladder neurotransmission. Acevedo CG, et al. **Neurosci Lett** 1990 May 31;113(2):227–32

Changes of activity in lumbar preganglionic neurones during slow urinary bladder filling in the cat. Boczek–Funcke A, et al. **Neurosci Lett** 1990 Mar 2;110(1–2):97–101

Which mechanisms account for the sensory neuron blocking action of capsaicin on primary afferents in the rat urinary bladder? Maggi CA, et al. **Neurosci Lett** 1990 Mar 14; 110(3):267–72

Topical versus systemic capsaicin desensitization: specific and unspecific effects as indicated by modification or reflex micturition in rats. Maggi CA, et al. **Neuroscience** 1989; 31(3):745–56

Effect of omega conotoxin on reflex responses mediated by activation of capsaicin–sensitive nerves of the rat urinary bladder and peptide release from the rat spinal cord. Maggi CA, et al. **Neuroscience** 1990;34(1):243–50

Slow inward and late slow outward currents induced by hyperpolarizing pre–pulses in cat bladder parasympathetic neurones. Kumamoto E, et al. **Pflugers Arch** 1990 May; 416(3):322–34

Colocalization of peptides and a catecholamine–synthesizing enzyme in intramural neurones of the newborn guinea–pig urinary bladder in culture. James S, et al. **Regul Pept** 1990 Apr 24;28(2):177–88

Sacral epidural electrodes for voiding in the chronic spinal dog. Walter JS, et al. **Stereotact Funct Neurosurg** 1989; 53(2):113–24

Alpha 2–adrenoceptors mediate the inhibition of cholinergic transmission in parasympathetic ganglia of the rabbit urinary bladder. Tsurusaki M, et al. **Synapse** 1990; 5(3):233–40

Neuropathological examination of the alterations of the intrinsic innervation in multiple sclerosis cystopathy. Van Poppel H, et al. **Urol Int** 1989;44(6):321–6

Long–term follow–up of percutaneous radiofrequency sacral rhizotomy. Mulcahy JJ, et al. **Urology** 1990 Jan;35(1):76–7

[Innervation density in the stroma and the muscular tunica in biopsies of the normal and pathologic bladder] Van Poppel H, et al. **Ann Urol (Paris)** 1989;23(5):398–401 (Eng. Abstr.) **(Fre)**

[Surgical treatment of spastic bladder paralysis in paraplegic patients. Sacral deafferentation with implantation of a sacral anterior root stimulator] Sauerwein D. **Urologe [A]** 1990 Jul;29(4):196–203 (Eng. Abstr.) **(Ger)**

[Clinical use of neurostimulation] Schmidt RA, et al. **Urologe [A]** 1990 Jul;29(4):191–5 (Eng. Abstr.) **(Ger)**

[The role of immunoreactive nerves in the human bladder neck] Takimoto Y, et al. **Hinyokika Kiyo** 1989 Aug; 35(8):1329–33 (Eng. Abstr.) **(Jpn)**

[Myoneural contacts in the frog bladder wall] Vshivtseva VV, et al. **Arkh Anat Gistol Embriol** 1990 Apr;98(4):35–40 (Eng. Abstr.) **(Rus)**

METABOLISM

In vivo metabolism and UTP–depleting action of 2–deoxy–2–fluoro–D–galactose. Grün BR, et al. **Adv Enzyme Regul** 1990;30:231–42

High proton flux through membranes containing antidiuretic hormone water channels. Harris HW Jr, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):F366–71

Apical membrane vesicles of ADH–stimulated toad bladder are highly water permeable. Harris HW Jr, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):F237–43

Characteristics of apical Cl–HCO3 exchanger of bicarbonate-secreting cells in turtle bladder. Kohn OF, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):F9–14

NBD–taurine uptake by alpha–type carbonic anhydrase cells of turtle bladder. Palmisano J, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):F1015–20

Inhibitory effect of phorbol ester on sodium transport in frog urinary bladder. Satoh T, et al. **Am J Physiol** 1990 Sep; 259(3 Pt 2):F425–31

Urea transport across urinary bladder and salt acclimation in toad (Bufo viridis). Shpun S, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):R883–8

Sodium–coupled organic anion transport by Cancer borealis urinary bladder. Smith PM, et al. **Am J Physiol** 1990 Jul; 259(1 Pt 2):R147–56

Turtle urinary bladder: regulation of ion transport by dynamic changes in plasma membrane area. Stetson DL. **Am J Physiol** 1989 Nov;257(5 Pt 2):R973–81 (41 ref.)

Cell swelling increases intracellular free [Ca] in cultured toad bladder cells. Wong SM, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):F292–6

Acid and alkali secretion by the turtle urinary bladder. A model system for neurohormonal regulation of acid–base homeostasis. Brodsky WA. **Ann N Y Acad Sci** 1989; 574:463–79

Localization of the anti–allergic agent tranilast in the urinary bladder of rats as demonstrated by light microscopic radioautography. Nishigaki T, et al. **Arzneimittelforschung** 1990 Mar;40(3):272–5

76 and 14 kDa polypeptides, two major components released from amphibian urinary bladder epithelium. Localization and potential role. Dassouli A, et al. **Biol Cell** 1989; 66(1–2):131–43

Effects of chronic nicotine treatment on nicotinic receptors in the rabbit urinary bladder. Kizawa Y, et al. **Can J Physiol Pharmacol** 1990 Jan;68(1):99–103

Clinical implications of the expression of epidermal growth factor receptors in human transitional cell carcinoma. Messing EM. **Cancer Res** 1990 Apr 15;50(8):2530–7

Mechanism of 12–O–tetradecanoylphorbol–13–acetate enhanced metabolism of arachidonic acid in dog urothelial cells. Zenser TV, et al. **Cancer Res** 1990 Aug 1; 50(15):4650–5

Alpha–oxidative metabolism of the bladder carcinogens N–nitrosobutyl(4–hydroxybutyl)amine and N–nitrosobutyl(3–carboxypropyl)amine within the rat isolated bladder. Airoldi L, et al. **Carcinogenesis** 1990 Aug; 11(8):1437–40

Receptors for neurokinins in human bronchus and urinary bladder are of the NK–2 type. Dion S, et al. **Eur J Pharmacol** 1990 Mar 20;178(2):215–9

Immunohistochemical study of the ras oncogene expression in human bladder endoscopy specimens. Agnantis NJ, et al. **Eur J Surg Oncol** 1990 Apr;16(2):153–60

Nephrogenic adenoma of the bladder in a child—immunohistochemical and lectinhistochemical investigations. Steffens J, et al. **Eur Urol** 1990;18(1):64–7

Electrokinetic energy conversion by aqueous oxalic acid, citric acid, ascorbic acid, hippuric acid, and acetyl salicylic acid across urinary bladder membranes. Shukla PC, et al. **Indian J Biochem Biophys** 1990 Jun;27(3):179–82

Electrokinetic energy conversion studies of aqueous solution of urea, glucose and their mixtures across urinary bladder membranes. Shukla PC, et al. **Indian J Exp Biol** 1990 Mar; 28(3):221–7

Water, proton, and urea transport in toad bladder endosomes that contain the vasopressin–sensitive water channel. Shi LB, et al. **J Gen Physiol** 1990 May;95(5):941–60

Effects of PCMBS on the water and small solute permeabilities in frog urinary bladder. Ibarra C, et al. **J Membr Biol** 1990 Jun;116(1):57–64

Effect of mercurial compounds on net water transport and intramembrane particle aggregates in ADH–treated frog urinary bladder. Ibarra C, et al. **J Membr Biol** 1989 Sep; 110(2):115–26

Changes in membrane conductances and areas associated with bicarbonate secretion in turtle bladder. Rich A, et al. **J Membr Biol** 1990 Feb;113(3):211–9

Active uptake of amino acids by the urinary bladder epithelium of rat, rabbit, and dog. Mirkovitch V, et al. **J Surg Res** 1989 Dec;47(6):502–6

Effects of outlet obstruction on glucose metabolism of the rabbit urinary bladder. Kato K, et al. **J Urol** 1990 Apr; 143(4):844–7

Bladder purinergic receptors. Ruggieri MR, et al. **J Urol** 1990 Jul;144(1):176–81

Role of membrane glycosphingolipids as Pseudomonas aeruginosa adhesin receptor in rabbit bladder mucosa. Chiarini F, et al. **Microbiologica** 1990 Apr;13(2):91–5

Prejunctional effects of muscarinic agonists on 3H–acetylcholine release in the rat urinary bladder strip. D'Agostino G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jul; 340(1):76–81

Effects of muscarinic stimulation on intracellular calcium in the rabbit bladder: comparison with metabolic response. Levin RM, et al. **Pharmacology** 1989;39(2):69–77

Prostaglandins as mediators of acidification in the urinary bladder of Bufo marinus. Frazier LW, et al. **Proc Soc Exp Biol Med** 1990 May;194(1):10–5

Adaptation to respiratory acidosis in the turtle bladder. Kniaz D, et al. **Proc Soc Exp Biol Med** 1990 Oct;195(1):84–94

Ion channels in urinary bladder. Frings SM, et al. **Renal Physiol Biochem** 1990 Jan–Apr;13(1–2):112–28 (99 ref.)

Methylamines and polyols in kidney, urinary bladder, urine, liver, brain, and plasma. An analysis using 1H nuclear magnetic resonance spectroscopy. Gullans SR, et al. **Renal Physiol Biochem** 1989 May–Jun;12(3):191–201

Xenon tissue/blood partition coefficient for pig urinary bladder. Nielsen KK, et al. **Scand J Clin Lab Invest** 1990 Jun;50(4):451–3

Investigations on organ–specific metabolism and genotoxic effects of the urinary bladder carcinogen N–nitrosobutyl–3–carboxypropylamine (BCPN) and its analogs N–nitrosodibutylamine (NDBA) and N–nitrosobutyl–4–hydroxybutylamine (4–OH–NDBA). Janzowski C, et al. **Toxicology** 1989 Dec 1;59(2):195–209

[Accumulation of cyclic AMP in frog urinary bladder tissue determines the gradual character of increase in osmotic permeability stimulated by vasopressin] Natochin IuV, et al. **Dokl Akad Nauk SSSR** 1989;307(3):759–61 **(Rus)**

MICROBIOLOGY

Adhesiveness of Pseudomonas aeruginosa to rabbit vesical mucosa effect of glycosidases on cellular binding. Chiarini F, et al. **Ann Ig** 1989 Jan–Apr;1(1–2):399–408

Effect of 1% mandelic acid as a bladder irrigation fluid in patients with in–dwelling catheters. Robertson MH, et al. **Br J Clin Pract** 1990 Apr;44(4):142–4 (11 ref.)

Isolation of Eubacterium suis from sows with cystitis. Walker RL, et al. **J Am Vet Med Assoc** 1989 Oct 15;195(8):1104–7

Fibronectin–mediated Calmette–Guerin bacillus attachment to murine bladder mucosa. Requirement for the expression of an antitumor response. Kavoussi LR, et al. **J Clin Invest** 1990 Jan;85(1):62–7

A new look at the diagnosis of infection of the urinary tract and its adjacent structures [see comments] Maskell R. **J Infect** 1989 Nov;19(3):207–17 (58 ref.) Comment in: J Infect 1990 Mar;20(2):183–4.

PARASITOLOGY

Polystoma cuvieri n. sp. (Monogenea: Polystomatidae), a parasite of the urinary bladder of the leptodactylid frog Physalaemus cuvieri in Paraguay. Vaucher C. **J Parasitol** 1990 Aug;76(4):501–4

Urinary bladders of freshwater turtles as a renal physiology model potentially biased by monogenean infections. Henke SE, et al. **Lab Anim Sci** 1990 Mar;40(2):172–7

PATHOLOGY

Cytohistologic correlation of urothelial lesions secondary to photodynamic therapy. Broghamer WL Jr, et al. **Acta Cytol** 1989 Nov–Dec;33(6):881–6

Radiological cases of the month. Obstruction of the trigone of the bladder by balloon of Foley catheter. Rathore MH, et al. **Am J Dis Child** 1990 Sep;144(9):1047–8

Bladder distention as a cause of inferior vena caval obstruction in the newborn: demonstration with ultrasonography. Gallaher KJ, et al. **Am J Perinatol** 1989 Oct;6(4):424–6

The histology of interstitial cystitis. Lynes WL, et al. **Am J Surg Pathol** 1990 Oct;14(10):969–76

Differences in adhesion of urothelial cells to a panel of substrates are characteristic for established human urothelial cell lines differing in their transformation grade. Ostrowski K, et al. **Anticancer Res** 1990 Mar–Apr; 10(2A):359–67

Urothelial metaplasia of the bladder mucosa. Nephroid–colonic– and signet–ring cell metaplasia. Kvist E, et al. **APMIS** 1990 Apr;98(4):287–93

The ultrasound cystodynamogram—a new radiological technique. Boothroyd AE, et al. **Br J Radiol** 1990 May; 63(749):331–2

Bilharzial polypi of the urinary bladder. el–Badawi AA. **Br J Urol** 1966 Feb;38(1):24–35

Sequential morphological changes in the pig detrusor in response to chronic partial urethral obstruction. Dixon JS, et al. **Br J Urol** 1989 Oct;64(4):385–90

Ultrasound cystography in the diagnosis of vesicoureteric reflux. Hanbury DC, et al. **Br J Urol** 1990 Mar;65(3):250–3

Wegener's granulomatosis in the bladder. Hansen BJ, et al. **Br J Urol** 1990 Jan;65(1):108–9

Assessing the effectiveness of different urinary catheters in emptying the bladder: an application of transvaginal ultrasound. Haylen BT, et al. **Br J Urol** 1989 Oct; 64(4):353–6

Diagnosis of clinically occult bladder cancer by in vivo staining with methylene blue. Mufti GR, et al. **Br J Urol** 1990 Feb;65(2):173–5

Squamous metaplasia complicating a müllerian duct remnant. Youngson GG. **Br J Urol** 1990 Feb;65(2):211–2

The usefulness of the level of the muscularis mucosae in the staging of invasive transitional cell carcinoma of the urinary bladder. Younes M, et al. **Cancer** 1990 Aug 1;66(3):543–8

Correlation between the DNA damage in urinary bladder epithelium and the urinary 2–phenyl–1,4–benzoquinone levels from F344 rats fed sodium o–phenylphenate in the diet. Morimoto K, et al. **Carcinogenesis** 1989 Oct; 10(10):1823–7

False–positive radionuclide venography caused by distended urinary bladder. LaRoy L, et al. **Clin Nucl Med** 1990 Jan; 15(1):16–8

Multiple mucosal biopsies and postoperative urinary cytology in patients with bladder cancer. Gil–Salom M, et al. **Eur Urol** 1990;17(4):281–5

Primary lymphoma of the bladder: a clinicopathological study of 3 cases. Kashi SH, et al. **Eur Urol** 1990;17(2):186–8

Cystometric changes in alloxan diabetic rats: evidence for functional and structural correlates of diabetic autonomic neuropathy. Paro M, et al. **J Auton Nerv Syst** 1990 Apr; 30(1):1–11

Observer variability in histopathological reporting of transitional cell carcinoma and epithelial dysplasia in bladders. Robertson AJ, et al. **J Clin Pathol** 1990 Jan; 43(1):17–21

Paraganglial cells of urinary bladder and prostate: potential diagnostic problem. Rode J, et al. **J Clin Pathol** 1990 Jan; 43(1):13–6

Pseudomembranous trigonitis of the bladder: hormonal aetiology. Stephenson TJ, et al. **J Clin Pathol** 1989 Sep; 42(9):922–6

Intraepithelial malakoplakia [letter] Young FI. **J Clin Pathol** 1990 Aug;43(8):696

Effects of shielded or unshielded laser and electrohydraulic lithotripsy on rabbit bladder. Bhatta KM, et al. **J Urol** 1990 Apr;143(4):857–60

Diagnosis of interstitial cystitis. Hanno P, et al. **J Urol** 1990 Feb;143(2):278–81

Follicular cystitis in girls with untreated asymptomatic or covert bacteriuria. Hansson S, et al. **J Urol** 1990 Feb; 143(2):330–2

Interstitial cystitis: bladder mucosa lymphocyte immunophenotyping and peripheral blood flow cytometry analysis. Harrington DS, et al. **J Urol** 1990 Oct; 144(4):868–71

Eosinophilic cystitis in a renal allograft recipient. Horner SA, et al. **J Urol** 1990 Aug;144(2 Pt 1):342–3

Postoperative spindle cell nodule of the prostate and bladder. Huang WL, et al. **J Urol** 1990 Apr;143(4):824–6

Neurofibromatosis: bladder involvement with malignant degeneration. Hulse CA. **J Urol** 1990 Sep;144(3):742–3

Clinical features and spectrum of light microscopic changes in interstitial cystitis. Johansson SL, et al. **J Urol** 1990 Jun; 143(6):1118–24

The anatomy of stress incontinence: magnetic resonance imaging of the female bladder neck and urethra. Klutke C, et al. **J Urol** 1990 Mar;143(3):563–6

Experience with portable ultrasound equipment and measurement of urine volumes: inter–user reliability and factors of patient position. Massagli TL, et al. **J Urol** 1989 Oct;142(4):969–71

Failure of combined supratrigonal cystectomy and Mainz ileocecocystoplasty in intractable interstitial cystitis: is histology and mast cell count a reliable predictor for the outcome of surgery? Nielsen KK, et al. **J Urol** 1990 Aug; 144(2 Pt 1):255–8; discussion 258–9

Stimulation of epithelial hyperplasia in rat urinary bladder by Escherichia coli cystitis. Uchida K, et al. **J Urol** 1989 Oct;142(4):1122–6

Fetal bladder histology in posterior urethral valves and the prune belly syndrome. Workman SJ, et al. **J Urol** 1990 Aug;144(2 Pt 1):337–9

Ultrasonic evaluation of urethrovesical junction in women with stress urinary incontinence. Bergman A, et al. **JCU** 1988 Jun;16(5):295–300

In situ freezing of the rat urinary bladder: DNA adduct formation in the bladder epithelium demonstrated by 32P–postlabeling assay. Hasegawa R, et al. **Jpn J Cancer Res** 1989 Sep;80(9):826–32

Correlation of cytokeratin patterns with histopathology during neoplastic progression in the rat urinary bladder. Reedy EA, et al. **Pathobiology** 1990;58(1):15–27

Pseudolayering of Gd–DTPA in the urinary bladder. Elster AD, et al. **Radiology** 1990 Feb;174(2):379–81

Does pancreatic juice have a detrimental effect on the bladder mucosa? Königsrainer A, et al. **Transplant Proc** 1990 Aug;22(4):1600–1

Ultrasonographic assessment of urinary tract lesions due to Schistosoma haematobium in Niger after four consecutive years of treatment with praziquantel. Laurent C, et al. **Trop Med Parasitol** 1990 Jun;41(2):139–42

Morphological lesions of the rat urinary tract induced by inoculation of mycoplasmas and other urinary tract pathogens. Larsson PA, et al. **Urol Int** 1989;44(4):210–7

Analysis of mucosal bladder leucocyte subpopulations in patients treated with intravesical Bacillus Calmette–Guerin. Peuchmaur M, et al. **Urol Res** 1989;17(5):299–303

Leiomyoma of bladder. Report of 2 cases and demonstration of ultrasonic appearance. Kabalin JN, et al. **Urology** 1990 Mar;35(3):210–2

[A comparison between clinical and echographic staging in bladder tumors] Chakürov S, et al. **Khirurgiia (Sofiia)** 1989; 42(6):33–6 (Eng. Abstr.) **(Bul)**

[Sclerosis of the bladder neck] Neĭkov K, et al. **Khirurgiia (Sofiia)** 1989;42(5):69–74 (34 ref.) **(Bul)**

[Retrograde ejaculation following transurethral surgery for bladder neck sclerosis] Neĭkov K, et al. **Khirurgiia (Sofiia)** 1989;42(6):53–6 (31 ref.) (Eng. Abstr.) **(Bul)**

[Sclerosis of the bladder neck in women] Neĭkov K, et al. **Khirurgiia (Sofiia)** 1989;42(4):53–7 (52 ref.) **(Bul)**

[Clinical significance of random mucosal biopsies in patients with bladder cancer: analysis of 117 cases] Gu FL. **Chung Hua Wai Ko Tsa Chih** 1990 Mar;28(3):181–3, 191

(Eng. Abstr.) (Chi)
[Bilharziasis in a biopsy sample] Nikorowitsch R, et al. **Pathologe** 1990 May;11(3):188–91 (Ger)
[Systematic histologic urinary bladder mapping in primary urinary bladder cancers] Theuring F, et al. **Pathologe** 1990 May;11(3):148–53 (Ger)
[Suprapubic–transvesical vesiculography in seminal vesicle malformations] Fichte A, et al. **ROFO** 1990 Feb; 152(2):229–30 (Ger)
[Endoscopic studies of the bladder in breeding sows—diagnosis of cystitis] Wendt M, et al. **Tierarztl Prax** 1989;17(3):273–9 (Eng. Abstr.) (Ger)
[Ultrasound cystometry with reference to urinary bladder form and bladder filling] Knorr H, et al. **Ultraschall Med** 1990 Jun;11(3):150–4 (Eng. Abstr.) (Ger)
[Transabdominal prostatic sonography and bladder neck–colliculus distance measurement for preoperative determination of prostatic weight: 2 methods in comparison] Wiedemann A, et al. **Z Urol Nephrol** 1990 Mar;83(3):101–3 (Eng. Abstr.) (Ger)
[Pathohistological comparison of biopsy specimens with all–layer cystectomy specimens in bladder cancer] Miyamoto K, et al. **Hinyokika Kiyo** 1989 Oct; 35(10):1687–91 (Eng. Abstr.) (Jpn)
[A comparative study of the sensitivity of bladder washing flow cytometry, voided urine cytology and bladder washing cytology in the detection of bladder carcinoma] Tachibana M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jul;80(7):1025–30 (Eng. Abstr.) (Jpn)
[Pathological studies of the bladder wall after contact Nd:YAG laser irradiation in the treatment of bladder cancer] Washida H, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Mar;81(3):380–5 (Eng. Abstr.) (Jpn)
[X–ray computed tomography and magnetic resonance imaging of the urinary bladder] Kadota T. **Rinsho Hoshasen** 1989 Sep;34(10):1223–9 (Jpn)
[Ultrasonography of the urinary bladder] Nakamura S. **Rinsho Hoshasen** 1989 Sep;34(10):1219–21 (4 ref.) (Jpn)
[Bladder neck sclerosis in children] Pugachev AG, et al. **Urol Nefrol (Mosk)** 1990 May–Jun;(3):38–42 (Eng. Abstr.) (Rus)
[Brunn's nests as a cause of benign tumor of the bladder in children] Rodó Salas J, et al. **Arch Esp Urol** 1990 Jun; 43(5):559–60 (Eng. Abstr.) (Spa)

PHYSIOLOGY

Single channel recordings from basolateral membranes of frog urinary bladders. Parisi M, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(4):485–90
Channels for water flow in epithelia: characteristics and regulation. Whittembury G, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(4):555–63
Urinary bladder and urethral responses to pelvic and hypogastric nerve stimulation and their relation to vasoactive intestinal polypeptide in the anaesthetized dog. Andersson PO, et al. **Acta Physiol Scand** 1990 Mar; 138(3):409–16
Insulin and IGF I receptor–mediated Na+ transport in toad urinary bladders. Blazer–Yost BL, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):C612–20
Effect of carbenoxolone on glucocorticoid metabolism and Na transport in toad bladder. Brem AS, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):F700–4
Effect of hyperosmotic challenge on basolateral membrane potential in rabbit urinary bladder. Donaldson PJ, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C248–57
Internalization of fluorescent vasotocin–receptor agonist and antagonist in the toad bladder. Eggena P, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):C462–70
Steroid metabolism determines mineralocorticoid specificity in the toad bladder. Gaeggeler HP, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):F690–5
Phorbol myristate acetate inhibits acidification by turtle urinary bladder. Graber M, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):F1124–31
Effects of serosal hypertonicity on water permeability in toad urinary bladder. Kachadorian WA, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C871–8
Frequency of spontaneous contractions in longitudinal and transverse bladder strips. Potjer RM, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R781–7
Effects of m–chlorophenylpiperazine on penile and bladder function in rats. Steers WD, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):R1441–9
Electromyographic evaluation of the external urethral sphincter during cystometry in male cats. Sackman JE, et al. **Am J Vet Res** 1990 Aug;51(8):1237–41
Inhibition of the hydrosmotic response to antidiuretic hormone by 3,3'–diallyldiethylstilbestrol (DADES). Calamita G, et al. **Biol Cell** 1989;66(1–2):29–36
Water flow in the toad urinary bladder in response to vasopressin: role of potassium. Carvounis CP, et al. **Biol Cell** 1989;66(1–2):43–51
Vasopressin–induced transfer via light vesicles of receptors and water channels from basolateral to apical membrane of toad bladder. Eggena P, et al. **Biol Cell** 1989;66(1–2):13–7
Synthesis and characterization of a long–acting fluorescent analog of vasotocin. Eggena P, et al. **Biol Cell** 1989; 66(1–2):1–6
Exocytotic events unrelated to regulation of water permeability in amphibian tight epithelia: effects of oxytocin, PMA and insulin on membrane capacitance, water and Na+ transport. Erlij D, et al. **Biol Cell** 1989; 66(1–2):53–8
Evidence that monensin inhibits vasopressin–stimulated water flow at an early step in the receptor–adenylate cyclase sequence. Franki N, et al. **Biol Cell** 1989; 66(1–2):19–22
Localization of barriers to water flow in toad urinary bladder. Levine SD, et al. **Biol Cell** 1989;66(1–2):23–7
Saturable urea transport pathway across the urinary bladder of Bufo viridis and salt acclimation. Shpun S, et al. **Biol Cell** 1989;66(1–2):179–81
Fluorescence labeling of proteins related to ADH–induced change in frog bladder luminal membrane. Valenti G, et al. **Biol Cell** 1989;67(2):115–21
Role of an apical cation–selective channel in function of tight epithelia. van Driessche W, et al. **Biol Cell** 1989; 66(1–2):37–41
Contribution of the vasopressin V1 receptor to its hydrosmotic response. Yorio T, et al. **Biol Cell** 1989; 66(1–2):7–12
The standardization of terminology of lower urinary tract function. **Br J Obstet Gynaecol** 1990 Mar;97 Suppl 6:1–16
Observations on the dynamics of the bladder neck. Tanagho EA, et al. **Br J Urol** 1966 Feb;38(1):72–84
The anatomy and function of the bladder neck. Tanagho EA, et al. **Br J Urol** 1966 Feb;38(1):54–71
Characteristics of toad bladder urinary acidification. Silveira JE, et al. **Braz J Med Biol Res** 1989;22(9):1163–70
Rapid degradation of extracellular matrix proteins by normal human uroepithelial cells. Allen LE, et al. **Cancer Res** 1990 Mar 15;50(6):1897–904
The effect of thioglycolate on intermediate filaments and membrane translocation in rat urothelium during the expansion–contraction cycle. Sarikas SN, et al. **Cell Tissue Res** 1989 Nov;258(2):393–401
Epidemiologic aspects of toilet training. Berk LB, et al. **Clin Pediatr (Phila)** 1990 May;29(5):278–82 (26 ref.)
Comparative length–tension relationship of urinary bladder strips from hamsters, rats, guinea–pigs, rabbits and cats. Longhurst PA, et al. **Comp Biochem Physiol [A]** 1990; 96(1):221–5
Some observations on the regeneration of smooth muscle in the repaired urinary bladder of the rabbit. Gorham SD, et al. **Eur Urol** 1989;16(6):440–3
Further studies on mechanisms regulating the voiding cycle of the rat urinary bladder. Maggi CA, et al. **Gen Pharmacol** 1989;20(6):833–8
Sympathetic activity and blood pressure increases with bladder distension in humans. Fagius J, et al. **Hypertension** 1989 Nov;14(5):511–7
Ultrasound detection of differences in density. Explanation of the ureteric jet phenomenon and implications for new ultrasound applications [published erratum appears in Invest Radiol 1990 May;25(5):621] Price CI, et al. **Invest Radiol** 1989 Nov;24(11):876–83
Very high water permeability in vasopressin–induced endocytic vesicles from toad urinary bladder. Shi LB, et al. **J Gen Physiol** 1989 Dec;94(6):1101–15
The effect of distension of the urinary bladder on activity in efferent renal fibres in anaesthetized dogs. Drinkhill MJ, et al. **J Physiol (Lond)** 1989 Feb;409:357–69
Transient electrical phenomenon of the voltage–clamped toad urinary bladder. Gordon LG. **J Physiol (Lond)** 1990 Feb;421:425–40
Comparison of urinary bladder function in sexually mature and immature male and female rats. Chun AL, et al. **J Urol** 1990 Jun;143(6):1267–71
Transrectal ultrasound to measure bladder volumes in men. Haylen BT, et al. **J Urol** 1990 Apr;143(4):687–9
Agonist–induced contraction and accumulation of inositol phosphates in the guinea–pig detrusor: evidence that muscarinic and purinergic receptors raise intracellular calcium by different mechanisms. Iacovou JW, et al. **J Urol** 1990 Sep;144(3):775–9
Comparative physiology and pharmacology of the cat and rabbit urinary bladder. Levin RM, et al. **J Urol** 1990 Apr; 143(4):848–52
This month in Investigative Urology: bladder physiology. McGuire EJ. **J Urol** 1990 Jun;143(6):1242
Bladder surface glycosaminoglycans: an epithelial permeability barrier. Parsons CL, et al. **J Urol** 1990 Jan; 143(1):139–42
A possible role for calcitonin–gene–related peptide in the regulation of the smooth muscle tone of the bladder and penis. Stief CG, et al. **J Urol** 1990 Feb;143(2):392–7
Intracellular potentials of toad urinary bladder. Nagel W, et al. **Pflugers Arch** 1989 Oct;415(1):121–3
The effect of distension of the urinary bladder on activity in efferent vagal fibres in anaesthetized dogs. Ramadan MR, et al. **Q J Exp Physiol** 1989 Jul;74(4):493–501
Effects of variations in extracellular pH on spontaneous contractile activity and response to nerve stimulation in smooth muscle from rat urinary bladder. Uvelius B, et al. **Scand J Urol Nephrol** 1990;24(1):47–51
Acute changes in the bladder reservoir function after irradiation alone or in combination with chemotherapy: a matter of mouse strain. Lundbeck F, et al. **Scand J Urol Nephrol Suppl** 1989;125:141–7
Urethral pressures during bladder filling. Sørensen S. **Scand J Urol Nephrol Suppl** 1989;125:45–51
Cyclic adenosine monophosphate production and contractile response induced by beta–adrenoceptor subtypes in rabbit urinary bladder smooth muscle. Morita T, et al. **Urol Int** 1990;45(1):10–5
Estimation of the maximum contraction velocity of the urinary bladder from pressure and flow throughout micturition. van Mastrigt R. **Urol Res** 1990;18(2):149–54
Responses of detrusor smooth muscle to stretch and relaxation: in vitro study. Finkbeiner AE, et al. **Urology** 1990 Aug;36(2):193–8
[Study of the intracellular contractile mechanism of the urinary bladder smooth muscle using skinned fiber technique] Kanaya S. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):538–45 (Eng. Abstr.) (Jpn)
[The relationship between the intracellular content of 1–methyl–3–isobutylxanthine and the permeability for water of the bladder wall in the frog] Natochin IuV, et al. **Fiziol Zh SSSR** 1989 Dec;75(12):1766–71 (Eng. Abstr.) (Rus)
[Urodynamics in normal pediatric patients] Rodríguez Silva E, et al. **Rev Chil Pediatr** 1988 Sep–Oct;59(5):303–5 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Non–radical hysterectomy and the function of the lower urinary tract. II: Urodynamic quantification of changes in evacuation function. Vervest HA, et al. **Acta Obstet Gynecol Scand** 1989;68(3):231–5
Radical hysterectomy and the function of the lower urinary tract. Urodynamic quantification of changes in storage and evacuation function. Vervest HA, et al. **Acta Obstet Gynecol Scand** 1989;68(4):331–40
Metabolism and force in hypertrophic smooth muscle from rat urinary bladder. Arner A, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C923–32
Urodynamic evaluation of lower urinary tract function in relation to total hysterectomy. Parys BT, et al. **Aust N Z J Obstet Gynaecol** 1990 May;30(2):161–5
Prognosis for recovery of bladder function following lumbar central disc prolapse. Gleave JR, et al. **Br J Neurosurg** 1990;4(3):205–9
Detrusor instability associated with menstruation. Case report. Wall LL, et al. **Br J Obstet Gynaecol** 1989 Jun; 96(6):737–8
Asymptomatic bladder neck incompetence in nulliparous females. Chapple CR, et al. **Br J Urol** 1989 Oct;64(4):357–9
Detrusor failure in myasthenia gravis. Christmas TJ, et al. **Br J Urol** 1990 Apr;65(4):422
Urinary bladder cortical evoked potentials in man: suitable stimulation techniques. Deltenre PF, et al. **Br J Urol** 1989 Oct;64(4):381–4
Extravascular absorption of irrigating fluid during TURP. The role of transmural bladder pressure as the driving pressure gradient. Hultén JO, et al. **Br J Urol** 1990 Jan; 65(1):39–42
Acute retention followed by unexplained intractable contraction of the bladder. Kernohan RM, et al. **Br J Urol** 1990 Jun;65(6):656–7
Stop–flow measurement of detrusor contractility in bladder outflow obstruction. Kinn AC. **Br J Urol** 1989 Oct; 64(4):363–7
Assessment of the poorly contractile or acontractile bladder in the older male in the absence of neuropathy. McInerney PD, et al. **Br J Urol** 1990 Feb;65(2):161–3
Visual analogue scales distinguish between low urinary flow rates due to impaired detrusor contractility and those due to bladder outflow obstruction. McLoughlin J, et al. **Br J Urol** 1990 Jul;66(1):16–8
Relationship between detrusor pressure and urinary flow rate in males with an intraurethral prostatic spiral. Nielsen KK, et al. **Br J Urol** 1989 Sep;64(3):275–9
Measurement of voiding pressures on ambulatory monitoring: comparison with conventional cystometry. Webb RJ, et al. **Br J Urol** 1990 Feb;65(2):152–4
Kinetics of transitional tumor cell line 4909 adherence to injured urothelial surfaces in F–344 rats. See WA, et al. **Cancer Res** 1990 Apr 15;50(8):2499–504
Cystometry, urethrocystometry, and videocystourethrography. Brubaker L, et al. **Clin Obstet Gynecol** 1990 Jun;33(2):315–24 (17 ref.)
The management of detrusor instability. Wall LL. **Clin Obstet Gynecol** 1990 Jun;33(2):367–77 (57 ref.)
Measurement techniques for urodynamic investigations. Ask P. **Crit Rev Biomed Eng** 1989;17(5):413–49 (192 ref.)
Cerebral palsy and the bladder. Borzyskowski M. **Dev Med Child Neurol** 1989 Oct;31(5):687–9
Detrusor and compliance changes of the bladder after radical hysterectomy. Stolz W, et al. **Eur J Gynaecol Oncol** 1989; 10(6):378–83
Urine production and bladder function in fetuses with open spina bifida. Nicolaides KH, et al. **Fetal Ther** 1988; 3(3):135–40
Lower limb movements and urologic function in fetuses with neural tube and other central nervous system defects. Warsof SL, et al. **Fetal Ther** 1988;3(3):129–34
Retrograde ejaculation—pregnancy following artificial insemination. Heasley RN, et al. **Ir Med J** 1989 Sep; 82(3):128–9
Bladder training in the management of lower urinary tract dysfunction in women. A review. Fantl JA, et al. **J Am Geriatr Soc** 1990 Mar;38(3):329–32 (14 ref.)
Urethral dilation improves bladder compliance in children

with myelomeningocele and high leak point pressures. Bloom DA, et al. **J Urol** 1990 Aug;144(2 Pt 2):430–3; discussion 443–4

Urologic changes after cauda equina compression in dogs. Bodner DR, et al. **J Urol** 1990 Jan;143(1):186–90

Bladder function in patients with lipomyelomeningocele. Foster LS, et al. **J Urol** 1990 May;143(5):984–6

The functional effects of long–term outlet obstruction on the rabbit urinary bladder. Kato K, et al. **J Urol** 1990 Mar; 143(3):600–6

The effect of back closure on detrusor function in neonates with myelomeningocele. Kroovand RL, et al. **J Urol** 1990 Aug;144(2 Pt 2):423–5; discussion 443–4

Effects of pinacidil and cromakalim (BRL 34915) on bladder function in rats with detrusor instability. Malmgren A, et al. **J Urol** 1989 Oct;142(4):1134–8

Bladder function in rats with short– and long–term diabetes; effects of age and muscarinic blockade. Malmgren A, et al. **J Urol** 1989 Dec;142(6):1608–14

On the reversibility of functional bladder changes induced by infravesical outflow obstruction in the rat. Malmgren A, et al. **J Urol** 1990 May;143(5):1026–31

The urodynamic consequences of posterior urethral valves. Peters CA, et al. **J Urol** 1990 Jul;144(1):122–6

Reduction in human bladder wall compliance following decentralization. Sislow JG, et al. **J Urol** 1990 Oct; 144(4):945–7

Effects of streptozotocin–induced diabetes on bladder function in the rat. Steers WD, et al. **J Urol** 1990 May; 143(5):1032–6

Is micturition disorder a pathogenic factor in acute epididymitis? An evaluation of simultaneous bladder pressure and urine flow in men with previous acute epididymitis. Thind P, et al. **J Urol** 1990 Feb;143(2):323–5

Spine function score for assessment of arm, leg, and sphincter function [letter] Harsh GR 4th. **Neurosurgery** 1990 Jun; 26(6):1087

Length–tension relationship of urinary bladder strips from streptozotocin–diabetic rats. Longhurst PA, et al. **Pharmacology** 1990;40(2):110–21

The clinical significance of the reflux producing intrinsic bladder pressure and bladder volume in reflux and reflux nephropathy. Nielsen JB. **Scand J Urol Nephrol Suppl** 1989; 125:9–13

Nocturnal studies in enuretics. A polygraphic study of sleep–EEG and bladder activity. Nørgaard JP, et al. **Scand J Urol Nephrol Suppl** 1989;125:73–8

Opening contraction energy in prostatic (compressive) obstruction. Cucchi A, et al. **Urol Int** 1990;45(1):16–9

[Vesico–sphincter disorders in neurosyphilis] Amarenco G, et al. **J Urol (Paris)** 1989;95(6):343–5 (Eng. Abstr.) **(Fre)**

[Changes in bladder contractility in spinal cord diseases] Couteau E, et al. **J Urol (Paris)** 1989;95(6):347–50 (Eng. Abstr.) **(Fre)**

[Introital sonography—a new method in the diagnosis of bladder function] Kölbl H, et al. **Geburtshilfe Frauenheilkd** 1990 Apr;50(4):295–8 (Eng. Abstr.) **(Ger)**

[Vesico–ureteral reflux and vesico–sphincteral dysfunction in children] Savanelli A, et al. **Pediatr Med Chir** 1989 May–Jun;11(3):333–6 (Eng. Abstr.) **(Ita)**

[Lower urinary tract function in myelomeningocele. Long–term follow–up data] Saito M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):75–81 (Eng. Abstr.) **(Jpn)**

[An electromyographic study of detrusor sphincter dyssynergia in the neurogenic vesical dysfunction. Part 1. Its type and further sub–typing based on the analysis of motor units] Shinno Y. **Nippon Hinyokika Gakkai Zasshi** 1989 Oct;80(10):1436–42 (Eng. Abstr.) **(Jpn)**

[An electromyographic study of detrusor sphincter dyssynergia in neurogenic vesical dysfunction. Part 2. Changes after radical transurethral resection of prostate and response to alpha–adrenergic stimulation] Shinno Y. **Nippon Hinyokika Gakkai Zasshi** 1989 Oct;80(10):1443–50 (Eng. Abstr.) **(Jpn)**

[A case of autonomic hyperreflexia successfully treated with alpha–adrenergic blocking agent] Nagai T, et al. **Nippon Naika Gakkai Zasshi** 1989 Aug;78(8):1205–6 **(Jpn)**

[The role of estrogens in the pathogenesis of bladder dysfunction of the hyperreflexia type and vesico–ureteral reflux in children] Derzhavin VM, et al. **Pediatriia** 1990; (2):10–4 (Eng. Abstr.) **(Rus)**

[The function of the closure apparatus of the bladder in retrograde ejaculation in diabetics] Ibragimov AZ, et al. **Urol Nefrol (Mosk)** 1990 May–Jun;(3):65–8 (Eng. Abstr.) **(Rus)**

[A method for the electrical impulse profilometry of the vesicoureteral segment] Salov PP, et al. **Urol Nefrol (Mosk)** 1990 Mar–Apr;(2):35–8 (Eng. Abstr.) **(Rus)**

[Dysfunction of the contractile capacity of the detrusor muscle in post–prostatectomy urinary retention] Salinas J, et al. **Arch Esp Urol** 1989 Oct;42(8):768–72 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Bladder, testicle, and prostate irradiation injury. Kagan AR. **Front Radiat Ther Oncol** 1989;23:323–37; discussion 338–40 (39 ref.)

Long–term recovery and reirradiation tolerance of mouse bladder. Stewart FA, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1399–406

Fatal hemorrhagic cystitis induced by pelvic irradiation and cyclophosphamide therapy. Case reports and review. Price WE, et al. **Minn Med** 1990 May;73(5):39–41, 44

Cystometric evaluation of early and late irradiation damage to the mouse urinary bladder. Lundbeck F, et al. **Radiother Oncol** 1989 Aug;15(4):383–92

[Therapy of interstitial and radiogenic cystitis with D–glucosamine] Strohmaier WL, et al. **Helv Chir Acta** 1989 Aug;56(3):323–5 (Eng. Abstr.) **(Ger)**

[Incoercible hemorrhagic cystitis induced by pelvic radiotherapy and simultaneous treatment with cyclophosphamide] González Enguita C, et al. **Actas Urol Esp** 1990 Mar–Apr;14(2):128–31 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Crohn's disease mimicking primary bladder tumour. Evans RH. **Br J Urol** 1990 Mar;65(3):299–300

Is urethrocystography necessary? Göthlin JH. **Curr Opin Radiol** 1989 Oct;1(3):293–6 (9 ref.)

Cough urethrocystography: the best radiological evaluation of female stress urinary incontinence? Varpula M, et al. **Eur J Radiol** 1989 Aug;9(3):191–4

Single vaginal ectopic ureter via Gartner's duct cyst spontaneously perforating into the bladder. Watanabe K, et al. **J Urol** 1989 Oct;142(4):1044–6

Children making water in the X–ray department. Sherwood T. **Postgrad Med J** 1990;66 Suppl 1:S31–6

Identifying types of female incontinence with retrograde urethrocystography. Donovan JM, et al. **Urology** 1990 May;35(5):458–63

[Computed tomographic staging of bladder tumors] Nedelkov G, et al. **Khirurgiia (Sofiia)** 1989;42(5):37–42 (Eng. Abstr.) **(Bul)**

[Outlook for the use of the colpocystoproctogram in the pre– and postoperative diagnosis of patients with urinary stress incontinence] Ferrari A, et al. **Minerva Ginecol** 1989 Aug; 41(8):385–92 (Eng. Abstr.) **(Ita)**

[Transrectal echography and cystography in the assessment of female stress urinary incontinence] Bandi G, et al. **Radiol Med (Torino)** 1990 Mar;79(3):228–32 (Eng. Abstr.) **(Ita)**

[Ectopic opening of the ureter into the ejaculatory duct. Use of ultrasound–directed vesiculography in the diagnosis of this type of malformation] Negrín Díaz A, et al. **Arch Esp Urol** 1989 Nov–Dec;42(9):925–7 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

Misleading appearances of the bladder on pediatric genitourinary imaging. Orzel JA, et al. **Clin Nucl Med** 1989 Sep;14(9):671–4

Indirect radionuclide cystography demonstrates reflux under physiological conditions. Peters AM, et al. **Clin Radiol** 1990 Jan;41(1):44–7

Detection of vesico–ureteric reflux by indirect radionuclide cystography [letter] [see comments] Gordon I, et al. **Lancet** 1989 Nov 4;2(8671):1108 Comment in: Lancet 1989 Dec 23–30;2(8678–8679):1521.

Indirect radionuclide cystography—the coming of age [editorial] Gordon I. **Nucl Med Commun** 1989 Jul; 10(7):457–8

["Indirect" radioisotope cystography after the furosemide test: its diagnostic efficacy compared to "direct" study] Corso A, et al. **Radiol Med (Torino)** 1989 Dec;78(6):645–8 (Eng. Abstr.) **(Ita)**

[Value of isotopic cystography in the diagnosis of vesicoureteral reflux in childhood] Gil Salom M, et al. **Actas Urol Esp** 1989 Sep–Oct;13(5):339–42 (Eng. Abstr.) **(Spa)**

SECRETION

Stimulation of H+ secretion by CO2 in turtle bladder: role of intracellular pH, exocytosis, and calcium. Arruda JA, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R222–31

Mechanism of active K+ secretion by flounder urinary bladder. Dawson DC, et al. **Pflugers Arch** 1989 Aug; 414(4):393–400

SURGERY

Stress urinary incontinence and posterior bladder suspension defects. Results of vaginal repair versus Burch colposuspension. Thunedborg P, et al. **Acta Obstet Gynecol Scand** 1990;69(1):55–9

Recurrent urinary tract infections in the presence of intravesical suture material after vaginal hysterectomy and anterior colporrhaphy. Neuman M, et al. **Aust N Z J Obstet Gynaecol** 1990 May;30(2):184–5

Vesicovaginal fistulae caused by wedge–resection of the bladder neck. Moir JC. **Br J Surg** 1966 Feb;53(2):102–4

A simple method of urethrovesical anastomosis in radical prostatectomy. Ampe J, et al. **Br J Urol** 1990 Mar;65(3):307

Follow–up results with the Stamey operation for stress incontinence of urine. Ashken MH. **Br J Urol** 1990 Feb; 65(2):168–9

Cystoplasty: tubularisation or detubularisation? Cheng C, et al. **Br J Urol** 1990 Jul;66(1):30–4

Bladder calculus formation as a complication of the Stamey procedure. Evans JW, et al. **Br J Urol** 1990 Jun;65(6):580–2

Early experience of the gittes "no–incision" pubovaginal suspension for stress urinary incontinence. Foster MC, et al. **Br J Urol** 1989 Dec;64(6):590–3

The Stamey endoscopic bladder neck suspension in the elderly. Griffith–Jones MD, et al. **Br J Urol** 1990 Feb; 65(2):170–2

The "clam": indications and complications. Lewis DK, et al. **Br J Urol** 1990 May;65(5):488–91

Assessment of the malignant potential of cystoplasty. Nurse DE, et al. **Br J Urol** 1989 Nov;64(5):489–92

Surgical management of the congenital neuropathic bladder. Parry JR, et al. **Br J Urol** 1990 Feb;65(2):164–7

Burch colposuspension or sling for stress incontinence? A prospective study using transrectal ultrasound. Richmond DH, et al. **Br J Urol** 1989 Dec;64(6):600–3

Comparison of Stamey and Pereyra–Raz bladder neck suspensions. Shah PJ, et al. **Br J Urol** 1989 Nov;64(5):481–4

Long–term assessment of 107 patients undergoing bladder neck incision. Waymont B, et al. **Br J Urol** 1989 Sep; 64(3):280–2

Prophylactic bladder neck incision in the treatment of small benign prostatic hyperplasia. Chiu AW, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Jan;45(1):22–5

High–stage bladder cancer: bladder preservation or reconstruction? Montie JE. **Cleve Clin J Med** 1990 May; 57(3):280–4

Experience with pancreas transplantation using bladder anastomosis. Mooy J. **Contrib Nephrol** 1989;73:209–15; discussion 215–6 (16 ref.)

Ureterovesical reimplantation after failure of endoscopic treatment of reflux by submucosal injection of polytef paste. Lacombe A. **Eur Urol** 1990;17(4):318–20

Colposuspension and transvaginal bladder neck suspension in the treatment of stress incontinence. Penttinen J, et al. **Gynecol Obstet Invest** 1989;28(2):101–5

Reconstruction of bladder neck–posterior urethral region in patients with complete epispadias. Ibrahim ME. **Int Urol Nephrol** 1990;22(1):61–5

Endoscopic suspension of the bladder neck by the Stamey method for urinary incontinence. Andersen J, et al. **Ital J Surg Sci** 1989;19(4):387–90

Augmentation cystoplasty in patients with exstrophy–epispadias. Kramer SA. **J Pediatr Surg** 1989 Dec;24(12):1293–6

Cystotomy, temporary urinary diversion and bladder packing in the management of severe cyclophosphamide–induced hemorrhagic cystitis. Andriole GL, et al. **J Urol** 1990 May; 143(5):1006–7

Bladder neck suspension material investigated in a rabbit model. Bruskewitz RC, et al. **J Urol** 1989 Nov; 142(5):1361–3

Bladder autoaugmentation: partial detrusor excision to augment the bladder without use of bowel. Cartwright PC, et al. **J Urol** 1989 Oct;142(4):1050–3

Malignancies in bladder augmentations and intestinal conduits. Filmer RB, et al. **J Urol** 1990 Apr;143(4):671–8 (98 ref.)

Augmentation cystoplasty in rats: development of an animal model. Guan ZC, et al. **J Urol** 1990 Aug;144(2 Pt 2):461–5; discussion 474

Bladder augmentation: experience with 129 children and young adults. Hendren WH, et al. **J Urol** 1990 Aug;144(2 Pt 2):445–53; discussion 460

Management of pregnancy after augmentation cystoplasty. Hill DE, et al. **J Urol** 1990 Aug;144(2 Pt 2):457–9; discussion 460

Transurethral incision of the bladder neck and prostate. Katz PG, et al. **J Urol** 1990 Sep;144(3):694–6

Use of 5F bipolar electrosurgical probe in endoscopic urological procedures. Kramolowsky EV, et al. **J Urol** 1990 Feb;143(2):275–7

Augmentation cystoplasty complicated by postoperative ventriculoperitoneal shunt infection. Kreder KJ, et al. **J Urol** 1990 Oct;144(4):955–6

Recurrent interstitial cystitis following cystoplasty: fact or fiction? MacDermott JP, et al. **J Urol** 1990 Jul;144(1):37–40

Augmentation cystoplasty utilizing de–epithelialized sigmoid colon: a preliminary study. Motley RC, et al. **J Urol** 1990 Jun;143(6):1257–60

Management of urinary incontinence by bladder tube urethral lengthening and submucosal reimplantation. Nill TG, et al. **J Urol** 1990 Aug;144(2 Pt 2):559–61; discussion 562–3

Inhibition of implantation of murine bladder tumor by thiotepa in cauterized bladder. Pan JS, et al. **J Urol** 1989 Dec;142(6):1589–93

The outcome of transvaginal cystourethropexy in patients with anatomical stress urinary incontinence and outlet weakness. Ramon J, et al. **J Urol** 1990 Jul;144(1):106–8; discussion 108–9

Seromuscular enterocystoplasty in dogs. Salle JL, et al. **J Urol** 1990 Aug;144(2 Pt 2):454–6; discussion 460

Urethral remnant tumors following simultaneous partial urethrectomy and cystectomy for bladder carcinoma. Shinka T, et al. **J Urol** 1989 Oct;142(4):983–7

Augmentation enterocystoplasty for the management of voiding dysfunction in spinal cord injury patients. Sidi AA, et al. **J Urol** 1990 Jan;143(1):83–5

Suture material in bladder surgery: a comparison of polydioxanone, polyglactin, and chromic catgut. Stewart

DW, et al. **J Urol** 1990 Jun;143(6):1261–3

Computerized tomography: an unreliable method for accurate staging of bladder tumors in patients who are candidates for radical cystectomy. Voges GE, et al. **J Urol** 1989 Oct;142(4):972–4

Augmentation myoperitoneocystoplasty. Weingarten JL, et al. **J Urol** 1990 Jul;144(1):156–8

Management of pregnancy after major urinary reconstruction. Vordermark JS, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 2):564–7 (31 ref.)

Evolving themes in the continent reconstruction of the lower urinary tract. Snyder HM 3d. **Postgrad Med J** 1990;66 Suppl 1:S54–61 (52 ref.)

Pregnancy after augmentation cystoplasty. Hill DE, et al. **Surg Gynecol Obstet** 1990 Jun;170(6):485–7

Application of the AS-800 artificial sphincter for intractable urinary incontinence in females. Parulkar BG, et al. **Surg Gynecol Obstet** 1990 Aug;171(2):131–8

Augmentation of the bladder in preparation for renal transplantation. Thomalla JV. **Surg Gynecol Obstet** 1990 Apr;170(4):349–52

Pancreatitis necessitating urinary undiversion in a bladder-drained pancreas transplant. Boudreaux JP, et al. **Transplant Proc** 1990 Apr;22(2):641–2

Conversion of whole pancreaticoduodenal transplants from bladder to enteric drainage for metabolic acidosis or dysuria. Burke GW, et al. **Transplant Proc** 1990 Apr; 22(2):651–2

Diagnosis of rejection in simultaneous renal/pancreas (urinary bladder drained) transplantation. Dafoe DC, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2345–7

The first Munich experience with the bladder technique in pancreatic transplantation. Illner WD, et al. **Transplant Proc** 1990 Apr;22(2):594

A new technique of extravesical ureteroneocystostomy for renal transplantation. Starzl TE, et al. **Transplant Proc** 1989 Oct;21(5):3856–8

Urinary insulin as a marker of rejection in the bladder-drained pancreas allograft. Zheng T, et al. **Transplant Proc** 1990 Apr;22(2):667–8

PGE2 elevation occurs in the urine in both bladder and duodenally drained pancreas allograft rejection. Zheng T, et al. **Transplant Proc** 1990 Apr;22(2):732–3

Vesicoureteral reflection for ureteral replacement: new operation. Abbassian A. **Urol Clin North Am** 1990 Feb; 17(1):121–3

Percutaneous bladder procedures. Badlani GH, et al. **Urol Clin North Am** 1990 Feb;17(1):67–73

Complications of retropubic bladder neck suspension. Bihrle W 3d, et al. **Urology** 1990 Mar;35(3):213–4

Transvaginal bladder neck suspension: a safer method. Cervigni M, et al. **Urology** 1990 Sep;36(3):219–21

Complications of bladder substitution and continent urinary diversion. Golomb J, et al. **Urology** 1989 Dec;34(6):329–38 (53 ref.)

Artificial urinary sphincter cuff erosion. Experience with reimplantation in 38 patients. Motley RC, et al. **Urology** 1990 Mar;35(3):215–8

Transurethral removal of eroding permanent suture after endoscopic bladder neck suspension. St. Clair S, et al. **Urology** 1990 Feb;35(2):185–6

Neodymium:YAG laser treatment of postoperative bladder neck contractures. Salant RL, et al. **Urology** 1990 May; 35(5):385–7

Cystotomy closure. A comparison of the strength of appositional and inverting suture patterns. Radasch RM, et al. **Vet Surg** 1990 Jul–Aug;19(4):283–8

The use of the preperitoneal approach for the simultaneous repair of inguinal hernia during surgery on the bladder and prostate. Schlegel PN, et al. **World J Surg** 1989 Sep–Oct;13(5):555–9

[Suprapubic uterovesical suspension via a hammock made from a flap formed from the vaginal wall—a new surgical method in stress incontinence] Atanasov A, et al. **Akush Ginekol (Sofiia)** 1989;28(4):44–9 (Eng. Abstr.) **(Bul)**

[The modified Parent urethrovesicopexy and the results from 1977 to 1988 at the gynecology-obstetrical department in Teplice, Czechoslovakia] Puchmeltr P, et al. **Cesk Gynekol** 1990 Apr;55(3):196–9 **(Cze)**

[Reconstruction of the bladder neck in exstrophy of the bladder or epispadias using Young-Dee's method] Mortensen T, et al. **Ugeskr Laeger** 1990 Jan 15;152(3):165–7 (Eng. Abstr.) **(Dan)**

[Reconstruction of the urinary bladder following cystectomy] Langemeyer TN, et al. **Ned Tijdschr Geneeskd** 1989 Aug 12;133(32):1602–5 (Eng. Abstr.) **(Dut)**

[Enlargement cystoplasty using ileum following an AMS 800 sphincter] Assenmacher C, et al. **Acta Urol Belg** 1989; 57(3):769–75 (Eng. Abstr.) **(Fre)**

[Treatment of PT1 tumors of the bladder using transurethral resection and intravesical immunotherapy] Bertault D, et al. **Ann Urol (Paris)** 1990;24(2):97–101; discussion 102 (Eng. Abstr.) **(Fre)**

[Low-pressure enterocystoplasty after prostato-cystectomy for cancer. Apropos of 13 cases] Fiatte P, et al. **Ann Urol (Paris)** 1990;24(3):193–7 (Eng. Abstr.) **(Fre)**

[Recurrent bladder calculi after colpocystopexy] Héritier P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(3):307–8 (Eng. Abstr.) **(Fre)**

[Comparative study of two protocols of antibiotic prophylaxis in endoscopic urologic surgery] Lepage JY, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):564–7 (Eng. Abstr.) **(Fre)**

[Transvesical cesarean section] Manenti A, et al. **Rev Fr Gynecol Obstet** 1989 Dec;84(12):955–6 (Eng. Abstr.) **(Fre)**

[Bridging a subtotal ureter necrosis following burn injury by autotransplantation of the kidney and pyelo-cystostomy] Niebel W, et al. **Chirurg** 1989 Oct;60(10):707–10 **(Ger)**

[Changes in urodynamic parameters following cystourethropexy] Wight E, et al. **Gynakol Rundsch** 1989; 29 Suppl 1:60–2 **(Ger)**

[The urethral protractor. A new instrument for facilitating the anastomosis between urethra and bladder in radical prostatectomy and urethro-intestinal anastomoses following cystectomy] Fröhlich G, et al. **Urologe [A]** 1990 May;29(3):155–7 (Eng. Abstr.) **(Ger)**

[Continent urinary diversion in children: enterocystoplasty + appendiceo-cutaneostomy] Pintér A, et al. **Orv Hetil** 1990 Apr 29;131(17):913–7 (Eng. Abstr.) **(Hun)**

[Suspension of the bladder neck for urinary stress incontinence under local anesthesia] Bolayir K. **Minerva Urol Nefrol** 1990 Apr-Jun;42(2):95–8 (Eng. Abstr.) **(Ita)**

[Renal function of ectopic ureteral opening repaired by ureterocystoneostomy] Adachi T, et al. **Hinyokika Kiyo** 1990 Apr;36(4):451–5 (Eng. Abstr.) **(Jpn)**

[Endoscopic needle bladder neck suspension for female stress incontinence] Hara M, et al. **Hinyokika Kiyo** 1989 Nov; 35(11):1859–63 (Eng. Abstr.) **(Jpn)**

[Clinical effect of LM-001, prostaglandin synthetic inhibitor, on pain from urinary tract stone and vesical urgency after operation of the bladder or prostate] Nakano E, et al. **Hinyokika Kiyo** 1990 May;36(5):635–42 (Eng. Abstr.) **(Jpn)**

[Bladder augmentation in three patients with contracted bladder caused by neurogenic bladder] Suemori T, et al. **Hinyokika Kiyo** 1990 Jan;36(1):77–82 (Eng. Abstr.) **(Jpn)**

[Review of a 14-year experience of augmentation enterocystoplasty. Observations on bowel dynamics] Esa A, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 May; 81(5):713–8 (Eng. Abstr.) **(Jpn)**

[Reconstruction of urinary bladder] Kakizoe T. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):501–17 (90 ref.) (Eng. Abstr.) **(Jpn)**

[Results of a modified Stamey technique in the management of female urinary stress incontinence] Mizuo T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Aug;80(8):1203–6 (Eng. Abstr.) **(Jpn)**

[Clinical study of a modified Stamey's endoscopic bladder neck suspension procedure for one hundred female patients with stress incontinence] Takaba H, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Aug;80(8):1148–53 (Eng. Abstr.) **(Jpn)**

[Insertion of suprapubic bladder catheter] Wahlqvist R. **Tidsskr Nor Laegeforen** 1990 Jan 10;110(1):58 **(Nor)**

[Total cystectomy in the treatment of infiltrative bladder tumors. The conclusions of an analysis of postoperative results in a series of 269 nonselected patients at late follow-up] Proca E, et al. **Rev Chir [Chir]** 1989 May-Jun; 38(3):189–206 (Eng. Abstr.) **(Rum)**

[Combined resection of the bladder and restoration of continuity of the large intestine after Hartmann's operation] Basheev VKh, et al. **Klin Khir** 1990;(2):63 **(Rus)**

[Plastic repair of the isolated bladder in exstrophy in children] Derzhavin VM, et al. **Urol Nefrol (Mosk)** 1989 Sep-Oct; (5):24–7 (Eng. Abstr.) **(Rus)**

[Antireflux ureterocystoneostomy with emphasis on a single simultaneous bilateral operation] Guzina T, et al. **Med Arh** 1988;42(3):119–24 (Eng. Abstr.) **(Scr)**

[Urethroplasties with bladder mucosa in hypospadias] Garat JM. **Actas Urol Esp** 1990 Jan-Feb;14(1):28–30 (Eng. Abstr.) **(Spa)**

[Evaluation of extravesical ureteroneocystostomy in kidney transplantation] Cózar JM, et al. **Arch Esp Urol** 1990 Jan-Feb;43(1):32–6 (Eng. Abstr.) **(Spa)**

[Modification of Stamey's endoscopic cervicopexy for stress urinary incontinence] Orozco Fariñas R, et al. **Arch Esp Urol** 1990 Mar;43(2):117–20 (Eng. Abstr.) **(Spa)**

[Anatomic effects of Stamey's urethrocystopexy as modified by Orozco and Perez Poo] Orozco Fariñas R, et al. **Arch Esp Urol** 1990 Mar;43(2):121–4 (Eng. Abstr.) **(Spa)**

[Technics of bladder endosuturing] Valdivia Uría JG, et al. **Arch Esp Urol** 1990 Jan-Feb;43(1):42–9 (Eng. Abstr.) **(Spa)**

TRANSPLANTATION

Influence of male genital tract mesenchymes on differentiation of Dunning prostatic adenocarcinoma. Hayashi N, et al. **Cancer Res** 1990 Aug 1;50(15):4747–54

Repair of hypospadias using a bladder mucosal graft in 76 cases. Mollard P, et al. **J Urol** 1989 Dec;142(6):1548–50

ras induced lesions in a heterotopic mouse bladder. Wagner HE, et al. **Oncogene** 1990 Apr;5(4):557–63

ULTRASTRUCTURE

Scanning electron microscopy of 'normal' urothelium in patients with infiltrating bladder carcinoma. Parenti A, et al. **Appl Pathol** 1989;7(6):338–43

Distribution of intermediate filaments in epithelial cells of the amphibian urinary bladder: an immunofluorescence study. Dabiké M, et al. **Arch Biol Med Exp (Santiago)** 1989 Jul;22(2):83–8

A method of isolation of apical membranous sheets from frog urinary bladder epithelium by stripping with gelatin. Favard P, et al. **Biol Cell** 1989;66(1–2):99–106

Microtubules and actin microfilaments in the amphibian bladder granular cells. Hugon JS, et al. **Biol Cell** 1989; 66(1–2):77–84

Subcellular fractionation of epithelial cells from toad urinary bladder. 1. Assay of marker enzymes and differential centrifugation. Ripoche V, et al. **Biol Cell** 1989; 66(1–2):107–13

Subcellular fractionation of epithelial cells from toad urinary bladder. 2. Isopycnic centrifugation and effect of density perturbants. Ripoche V, et al. **Biol Cell** 1989;66(1–2):115–20

Intramembrane particle structures in epithelial cells of the toad urinary bladder: a quantitative freeze-fracture study. Shinowara NL, et al. **Biol Cell** 1989;66(1–2):65–76

Neutral aminopeptidase: a potential marker enzyme of the amphibian urinary bladder epithelial cell apical membrane. Tacnet F, et al. **Biol Cell** 1989;66(1–2):121–9

Isolation of frog urinary bladder plasma membranes with polycation coated beads. Valenti G, et al. **Biol Cell** 1989; 66(1–2):85–9

Isolation of large sheets of apical material from frog urinary bladder epithelial cells by freeze-fracture. Verbavatz JM, et al. **Biol Cell** 1989;66(1–2):91–7

The fine structure of human pseudomembranous trigonitis. Jost SP, et al. **Br J Urol** 1989 Nov;64(5):472–7

Morphometry in human transitional cell bladder cancer. Nuclear area and standard deviation of nuclear area—relation to tumor grade (WHO) and prognosis. Lipponen PK, et al. **Eur Urol** 1990;17(2):155–60

Potential of nuclear morphometry and volume-corrected mitotic index in grading transitional cell carcinoma of the urinary bladder. Lipponen PK, et al. **Eur Urol** 1990; 17(4):333–7

The morphology of normal human bladder urothelium. Jost SP, et al. **J Anat** 1989 Dec;167:103–15

Composite replicas: methodologies for direct evaluation of the relationship between intramembrane and extramembrane structures. Coleman RA, et al. **J Electron Microsc Tech** 1989 Nov;13(3):216–27

The fine structure of Brunn's nests in human bladder urothelium. Jost SP, et al. **J Submicrosc Cytol Pathol** 1990 Apr;22(2):203–10

Structural changes in the aging submucosa: new morphologic criteria for the evaluation of the unstable human bladder. Levy BJ, et al. **J Urol** 1990 Oct;144(4):1044–55

Scanning electron microscopy of immuno-gold labeled antigens associated with bladder cancer. de Harven E, et al. **Scanning Microsc** 1990 Jun;4(2):467–76; discussion 476–7

Surface topography of deeper cells exposed by ultrasonic wave forces in neoplastic and non-neoplastic epithelium of human urinary bladder. Suzuki T, et al. **Urol Int** 1990; 45(4):264–8

[Ultrastructure of cultured normal bladder transitional epithelial cell and BBN induced rat bladder tumor cell lines] Nagata Y. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb;81(2):188–95 (Eng. Abstr.) **(Jpn)**

[Electron microscopic research on the mitochondria-rich bladder cells of the frog] Snigirevskaia ES, et al. **Tsitologiia** 1989 Sep;31(9):1020–8 (Eng. Abstr.) **(Rus)**

BLADDER CALCULI

COMPLICATIONS

Constipation with a surprising cause. Lukkarinen OA, et al. **Geriatrics** 1990 Jun;45(6):85–6

[Induction of urinary bladder urothelial cancers in the rabbit by dibutylnitrosamine with an artificial bladder calculus as cocarcinogen] Bornhof C, et al. **Urologe [A]** 1989 Nov; 28(6):339–43 (Eng. Abstr.) **(Ger)**

[Adenocarcinoma of the urinary bladder with a bladder stone: report of a case] Tanaka S, et al. **Hinyokika Kiyo** 1989 May;35(5):881–3 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

Re: Reduction of infection stones in rats by combined antibiotic and phosphocitrate therapy [letter; comment] Roberts JA. **J Urol** 1990 Jan;143(1):135 Comment on: J Urol 1988 Nov;140(5):1063–6.

ETIOLOGY

Bladder calculus formation as a complication of the Stamey procedure. Evans JW, et al. **Br J Urol** 1990 Jun;65(6):580–2

An unusual bladder calculus. Saravanapavananthan T. **Br J Urol** 1990 Jun;65(6):659

A rare case of idiopathic lithiasis in the urinary bladder in an Ethiopian female child. Falaschi CF, et al. **Ital J Surg Sci** 1989;19(3):285–7

Outflow obstruction and bladder stones in Kelantan. McAll G, et al. **Med J Malaysia** 1989 Mar;44(1):52–7

Bladder stone in a human female: the case of an abnormally located intrauterine contraceptive device. Khan SR, et al. **Scanning Microsc** 1990 Jun;4(2):395–8

[Urinary bladder calculus—of unusual origin] Jørgensen EH. **Ugeskr Laeger** 1989 Sep 11;151(37):2376–7 (Eng. Abstr.) **(Dan)**

[Recurrent bladder calculi after colpocystopexy] Héritier P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(3):307–8 (Eng. Abstr.) **(Fre)**

[Antireflux plasty according to Gil Vernet (letter)] Dore B. **J Urol (Paris)** 1989;95(8):515 **(Fre)**

METABOLISM

Lincomycin treatment of guinea pigs causes formation of pigmented phosphate containing gallbladder sludge and stones. Snowball S, et al. **J Hepatol** 1989 Sep;9(2):159–66

PATHOLOGY

Rat kidney transplantation update with special reference to vesical calculi. D'Silva M, et al. **Microsurgery** 1990; 11(2):169–76

Detection by light microscopy of Candida in thin sections of bladder stone. Takeuchi H, et al. **Urology** 1989 Dec; 34(6):385–7

SURGERY

Percutaneous bladder procedures. Badlani GH, et al. **Urol Clin North Am** 1990 Feb;17(1):67–73

THERAPY

Extracorporeal shock wave lithotripsy monotherapy for bladder stones with the second generation lithotriptors. Vandeursen H, et al. **J Urol** 1990 Jan;143(1):18–9

Preliminary experience with extracorporeal shock-wave lithotripsy monotherapy and bladder calculi. Ahmed AF, et al. **JPMA** 1990 May;40(5):104–5

[A fundamental study on expansive splitter lithotripsy] Kawauchi A. **Hinyokika Kiyo** 1989 Jul;35(7):1105–11 (Eng. Abstr.) **(Jpn)**

[Vesico-prostatic calculi treated by microexplosion lithotripsy: a case report] Yoneda K, et al. **Hinyokika Kiyo** 1990 Feb;36(2):161–3 (Eng. Abstr.) **(Jpn)**

[Stone location and successful disintegration rate, stone free rate after extracorporeal shockwave lithotripsy] Machida T, et al. **Nippon Rinsho** 1989 Dec;47(12):2699–703 **(Jpn)**

BLADDER DISEASES

Blunt trauma of uterovaginal and vesical prolapse with associated bladder rupture. Miller CG, et al. **J Urol** 1990 Aug;144(2 Pt 1):348–50

[Bladder diverticula] Abid I, et al. **Tunis Med** 1990 Mar; 68(3):181–6 (15 ref.) (Eng. Abstr.) **(Fre)**

[Actinomycosis of the bladder] Mickley V, et al. **Dtsch Med Wochenschr** 1989 Sep 29;114(39):1488–91 (Eng. Abstr.) **(Ger)**

CHEMICALLY INDUCED

Bladder contracture following intravesical doxorubicin therapy: case report and a review of the literature. Dmochowski R, et al. **J Urol** 1990 Apr;143(4):816–8 (16 ref.)

Bladder wall calcification after intravesical mitomycin C treatment of superficial bladder cancer. Drago PC, et al. **J Urol** 1989 Oct;142(4):1071–2

Modification of cyclophosphamide-induced urotoxicity by buthionine sulfoximine and disulfiram in mice. Ishikawa M, et al. **Res Commun Chem Pathol Pharmacol** 1989 Aug; 65(2):265–8

[Experimental study of submucous vesical injections in rats. Teflon versus silicone] Valla JS, et al. **J Urol (Paris)** 1989; 95(8):471–5 (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Bladder distention as a cause of inferior vena caval obstruction in the newborn: demonstration with ultrasonography. Gallaher KJ, et al. **Am J Perinatol** 1989 Oct;6(4):424–6

Bacillus Calmette–Guérin treatment and vesicorenal reflux. Böhle A, et al. **Eur Urol** 1990;17(2):125–8

Urinary bladder diverticula and the Ehlers–Danlos syndrome in children. Levard G, et al. **J Pediatr Surg** 1989 Nov; 24(11):1184–6 (14 ref.)

Spontaneous rupture of a bladder diverticulum. Keeler LL, et al. **J Urol** 1990 Feb;143(2):349–51 (11 ref.)

Placenta previa percreta with bladder involvement. Meehan FP, et al. **Obstet Gynecol Surv** 1989 Dec;44(12):835–40 (26 ref.)

[A case of localized amyloidosis of the bladder manifesting post-renal failure] Ehara H, et al. **Hinyokika Kiyo** 1989 Sep;35(9):1601–5 (9 ref.) (Eng. Abstr.) **(Jpn)**

[Case report: an unstable bladder with bilateral epididymitis, urge incontinence and unilateral reflux] Saito M, et al. **Hinyokika Kiyo** 1989 May;35(5):891–5 (Eng. Abstr.) **(Jpn)**

[Complicated sliding inguino-scrotal hernia] Pustil'nik MI, et al. **Klin Khir** 1990;(2):51 **(Rus)**

[Secondary bladder amyloidosis. A rare cause of hematuria] Bielsa O, et al. **Actas Urol Esp** 1990 Jan–Feb;14(1):76–7 (Eng. Abstr.) **(Spa)**

[Urinary amebiasis: a parasitosis of exceptional presentation] Castiñeiras Fernández J, et al. **Arch Esp Urol** 1990 Mar; 43(2):190–2 (Eng. Abstr.) **(Spa)**

CONGENITAL

Congenital urethral and vesical diverticula allied to blind-ending ureters. Orikasa S, et al. **Urology** 1990 Feb; 35(2):137–41

[Congenital bladder diverticulum as a cause of acute urinary retention] Porras V, et al. **Arch Esp Urol** 1990 Mar; 43(2):182–4 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Acceleration of flow rate as a screening test for detrusor instability in women with stress incontinence. Cucchi A. **Br J Urol** 1990 Jan;65(1):17–9

The Nd:YAG laser and methylene blue staining in the diagnosis and treatment of premalignant vesical lesions and carcinoma in situ (CIS). Gaboardi F, et al. **Int Urol Nephrol** 1989;21(3):289–97

Paravesical granulomas masquerading as bladder neoplasms: late complications of inguinal hernia repair. Zilberman M, et al. **J Urol** 1990 Mar;143(3):489–91

Accuracy of ultrasonic bladder volume measurement in children. Bis KG, et al. **Pediatr Radiol** 1990;20(6):457–60

The male pelvis. Fritzsche PJ, et al. **Semin Ultrasound CT MR** 1989 Feb;10(1):11–28 (46 ref.)

Ultrasound examination of bladder and prostate. Walz PH, et al. **Urol Int** 1990;45(4):217–30 (32 ref.)

[Megabladder. Microcolon. Prenatal ultrasonic diagnosis and a review of the literature. Apropos of a case] de Vaux-Boitouzet V, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(3):327–32 (22 ref.) (Eng. Abstr.) **(Fre)**

[Study of the urinary bladder, prostate and testis] Schewe S. **Bildgebung** 1987–89;56 Suppl 2:37–47 **(Ger)**

[Ultrasound cystometry with reference to urinary bladder form and bladder filling] Knorr H, et al. **Ultraschall Med** 1990 Jun;11(3):150–4 (Eng. Abstr.) **(Ger)**

[A case of primary localized amyloidosis of the urinary bladder] Mizutani Y, et al. **Hinyokika Kiyo** 1990 Apr; 36(4):461–4 (11 ref.) (Eng. Abstr.) **(Jpn)**

[Spontaneous rupture of the urinary bladder] Yasunaga Y, et al. **Hinyokika Kiyo** 1989 Nov;35(11):1939–42 (Eng. Abstr.) **(Jpn)**

[Nuclear magnetic resonance in the diagnosis of diseases of the bladder, prostate and scrotal organs] Portnoi AS. **Urol Nefrol (Mosk)** 1989 Jul–Aug;(4):74–9 (51 ref.) **(Rus)**

DRUG THERAPY

The treatment of detrusor instability in post-menopausal women with oxybutynin chloride: a double blind placebo controlled study. Tapp AJ, et al. **Br J Obstet Gynaecol** 1990 Jun;97(6):521–6

Trans-trigonal phenol failed the test of time. Rosenbaum TP, et al. **Br J Urol** 1990 Aug;66(2):164–9

Therapeutic progress—Review XXXVI. Are we making progress in the drug treatment of disorders of the bladder, prostate, and penis? Ryan PG, et al. **J Clin Pharm Ther** 1990 Feb;15(1):1–12 (63 ref.)

Colchicine therapy in primary amyloidosis of the bladder: a case report. Livingstone RR, et al. **J Urol** 1989 Dec; 142(6):1570–1

Doxepin in the treatment of female detrusor overactivity: a randomized double-blind crossover study. Lose G, et al. **J Urol** 1989 Oct;142(4):1024–6

Intravesical dimethyl sulfoxide instillations in the treatment of secondary amyloidosis of the bladder. Nurmi MJ, et al. **J Urol** 1990 Apr;143(4):808–10

RE: Urological complications of cyclophosphamide [letter; comment] Schootstra R. **J Urol** 1990 Jun;143(6):1237 Comment on: J Urol 1989 May;141(5):1063–9.

Terodiline: a dose titrated, multicenter study of the treatment of idiopathic detrusor instability in women. Tapp A, et al. **J Urol** 1989 Oct;142(4):1027–31

ETIOLOGY

Spontaneous rupture of the bladder. Altman B, et al. **Br J Urol** 1966 Feb;38(1):85–8

Ruptured bladder following circumcision using the Plastibell device. Jee LD, et al. **Br J Urol** 1990 Feb;65(2):216–7

Placenta percreta invading the urinary bladder. Litwin MS, et al. **Br J Urol** 1989 Sep;64(3):283–6 (18 ref.)

Autonomic hyperreflexia [letter; comment] Kubota Y, et al. **Can J Anaesth** 1990 May;37(4 Pt 1):488 Comment on: Can J Anaesth 1989 Sep;36(5):604–5.

Detrusor and compliance changes of the bladder after radical hysterectomy. Stolz W, et al. **Eur J Gynaecol Oncol** 1989; 10(6):378–83

Mucinous metaplasia in endometriosis of the bladder. New NE, et al. **Histopathology** 1990 Mar;16(3):307–8

Bilaterally dilated upper urinary tract and bladder induced by diabetes insipidus. Himeno Y, et al. **Int Urol Nephrol** 1990;22(2):129–32

The fate of the remaining bladder following supravesical diversion. Eigner EB, et al. **J Urol** 1990 Jul;144(1):31–3

Urethral dilation in the management of urological complications of myelodysplasia. Wang SC, et al. **J Urol** 1989 Oct;142(4):1054–5

Spontaneous rupture of the urinary bladder—a late complication to radiotherapy. Case report. Hansen HJ, et al. **Scand J Urol Nephrol** 1989;23(4):309–10

Barium granuloma involving urinary bladder. Yanagi S, et al. **Urol Int** 1989;44(4):249–51

Post-surgical necrobiotic granulomas of urinary bladder. Eble JN, et al. **Urology** 1990 May;35(5):454–7

[Importance of unrecognized bladder lesions in the long-term results of antireflux reimplantation in "primary" supposed vesico-ureteral reflux] Viville C. **J Urol (Paris)** 1990; 96(1):9–13 (Eng. Abstr.) **(Fre)**

[Bladder distorsion: know to suspect hypokalaemia (letter)] Fabre D. **Presse Med** 1990 May 5;19(18):869 **(Fre)**

[Secondary amyloidosis of the bladder associated with Sjögren's syndrome: a case report] Okuno T, et al. **Hinyokika Kiyo** 1989 Sep;35(9):1597–600 (Eng. Abstr.) **(Jpn)**

[The role of uninhibited bladder in antireflux surgery. Special reference to reflux recurrence and diverticulum formation] Gotoh T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Oct; 80(10):1451–8 (Eng. Abstr.) **(Jpn)**

[State of the urinary tract in patients with endometriosis] Baskakov VP, et al. **Akush Ginekol (Mosk)** 1990 Apr; (4):69–72 **(Rus)**

[Spontaneous rupture of the bladder] Shor NA, et al. **Vestn Khir** 1989 Dec;144(12):78–9 **(Rus)**

[Extraperitoneal bladder rupture caused by diverticular pathology] Castiñeiras Fernández J, et al. **Actas Urol Esp** 1989 Jul–Aug;13(4):276–80 (23 ref.) (Eng. Abstr.) **(Spa)**

[Intra-diverticular neoplasms of the bladder. Apropos of a squamous carcinoma] Pellice C Jr, et al. **Actas Urol Esp** 1990 Mar–Apr;14(2):161–2 (Eng. Abstr.) **(Spa)**

[Calcification and contamination as complications in the use of double-J catheters: incidence and correlation] Picurelli L, et al. **Actas Urol Esp** 1989 Sep–Oct;13(5):375–7 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

An autopsy case of disseminated trichosporonosis with candidiasis of the urinary bladder. Kimura M, et al. **Virchows Arch [A]** 1989;416(2):159–62

[Vesical actinomycosis: rare tumor of the urachus] Jiménez de León J, et al. **Arch Esp Urol** 1989 Nov–Dec;42(9):913–5 (Eng. Abstr.) **(Spa)**

PARASITOLOGY

[An echographic study of the urologic lesions of urinary bilharziasis in children in Barombi Kotto (Cameroon)] Gonsu-Fotsin J, et al. **Ann Radiol (Paris)** 1989;32(4):288–92 (Eng. Abstr.) **(Fre)**

[Bladder bilharziasis. Presentation of a clinical case [illegible]ual JI, et al. **Actas Urol Esp** 1989 Jul–Aug;13(4):271 [illegible]ng. Abstr.) **(Spa)**

PATHOLOGY

Urothelial metaplasia of the bladder mucosa. Nephroid-colonic- and signet-ring cell metaplasia. Kvist E, et al. **APMIS** 1990 Apr;98(4):287–93

Urachal cysts in the bladder wall. Habuchi T, et al. **Br J Urol** 1990 Jun;65(6):658–9

Wegener's granulomatosis in the bladder. Hansen BJ, et al. **Br J Urol** 1990 Jan;65(1):108–9

False-positive radionuclide venography caused by distended urinary bladder. LaRoy L, et al. **Clin Nucl Med** 1990 Jan; 15(1):16–8

Urothelial grade I atypia [letter] Mincione GP. **Diagn Cytopathol** 1990;6(1):76

Magnetic resonance imaging of the prostate and bladder. Piccoli CW, et al. **Top Magn Reson Imaging** 1990 Jun; 2(3):51–66 (67 ref.)

[Innervation density in the stroma and the muscular tunica in biopsies of the normal and pathologic bladder] Van Poppel H, et al. **Ann Urol (Paris)** 1989;23(5):398–401 (Eng. Abstr.) **(Fre)**

[Bilharziasis in a biopsy sample] Nikorowitsch R, et al. **Pathologe** 1990 May;11(3):188–91 **(Ger)**

[Report of 2 cases of isolated, primary amyloidosis of the male urethra and urinary bladder of a female] Zimmer G, et al. **Urologe [A]** 1989 Nov;28(6):363–6 (Eng. Abstr.) **(Ger)**

[Primary amyloidosis of the bladder: a case report] Fuse H, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1217–22 (29 ref.) (Eng. Abstr.) **(Jpn)**

[Actinomycosis of the bladder in a girl] Gómez-Barreto D, et al. **Bol Med Hosp Infant Mex** 1989 Oct;46(10):676–80 (Eng. Abstr.) **(Spa)**

[The use of the plasma-thrombin method for diagnosing parasitic diseases] De Girolami E, et al. **Rev Biol Trop** 1988 Nov;36(2B):485–98 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Ejaculation and its disorders. Yeates WK. **Arch Ital Urol Nefrol Androl** 1990 Mar;62(1):137–48 (22 ref.)

Detrusor instability. Is the bladder the cause or the effect? Bergman A, et al. **J Reprod Med** 1989 Oct;34(10):834–8

Effects of pinacidil and cromakalim (BRL 34915) on bladder function in rats with detrusor instability. Malmgren A, et al. **J Urol** 1989 Oct;142(4):1134–8

[Functional forms of prolapse] Behr J, et al. **Geburtshilfe Frauenheilkd** 1989 Oct;49(10):852–6 (Eng.

Abstr.) (Ger)

PSYCHOLOGY

Psychosexual study of women with detrusor instability. Walters MD, et al. **Obstet Gynecol** 1990 Jan;75(1):22–6

Psychological and sexual aspects in different types of bladder dysfunction. Vereecken RL. **Psychother Psychosom** 1989; 51(3):128–34 (38 ref.)

RADIOGRAPHY

Features of computed tomography in hydatid cysts of the urinary tract. Karabekios S, et al. **Br J Urol** 1989 Dec; 64(6):575–8

[A mullerian cyst as a space-occupying lesion of the bladder neck] Will CH, et al. **ROFO** 1990 Mar;152(3):350–1 (Ger)

[Bladder calcinosis caused by schistosomiasis] von Wechmar M, et al. **Rontgenblatter** 1989 Oct;42(10):435–6 (Eng. Abstr.) (Ger)

SURGERY

Bladder autoaugmentation: partial detrusor excision to augment the bladder without use of bowel. Cartwright PC, et al. **J Urol** 1989 Oct;142(4):1050–3

[Bladder diverticula combined with bladder carcinoma] Petrov P, et al. **Khirurgiia (Sofiia)** 1989;42(5):85–6 (Bul)

[Traumatic rupture of the bladder. Apropos of 11 cases] Le Neel JC, et al. **Ann Chir** 1990;44(3):217–25 (Eng. Abstr.) (Fre)

[Substitute bladders] Lobel B, et al. **Presse Med** 1990 Jun 9;19(23):1094–9 (Eng. Abstr.) (Fre)

[Vaginal sacrospinal fixation of the vagina in eliminating a true vaginal hernia prolapse] Albrich W. **Gynakol Rundsch** 1989;29 Suppl 2:40–3 (Ger)

[The significance of diaphragm-plasty in the treatment of stress incontinence] Ralph G, et al. **Gynakol Rundsch** 1989; 29 Suppl 2:25–9 (Ger)

[Vaginal sacrospinal fixation of the vagina as treatment of prolapsed vaginal hernia] Winter R, et al. **Gynakol Rundsch** 1989;29 Suppl 2:34–6 (Ger)

[Experiences with ureterosigmoidostomy] Wandschneider G, et al. **Z Urol Nephrol** 1990 Feb;83(2):45–53 (Eng. Abstr.) (Ger)

[Massive inguinoscrotal hernia of the bladder] Rustichelli G, et al. **Minerva Chir** 1989 Aug 31;44(15–16):1835–7 (Eng. Abstr.) (Ita)

[Tuberculous microbladder. Ileocystoplasty for enlargement] Zuluaga Gómez A, et al. **Actas Urol Esp** 1990 Jan–Feb; 14(1):14–7 (12 ref.) (Eng. Abstr.) (Spa)

[Ureterovesical reimplantation. Our results] Puebla Ceverino M, et al. **Arch Esp Urol** 1989 Jun;42(5):404–12 (Eng. Abstr.) (Spa)

THERAPY

Detrusor instability—current management. Cardozo L. **Br J Obstet Gynaecol** 1990 Jun;97(6):463–6 (15 ref.)

Vaginal dilators for intermittent pelvic support. A case report. Muram D, et al. **J Reprod Med** 1990 Mar; 35(3):303–4

Etiology and management of detrusor instability and mixed incontinence. Bent AE. **Obstet Gynecol Clin North Am** 1989 Dec;16(4):853–68 (58 ref.)

The use of an alum irrigation in the treatment of massive bladder haemorrhage. Schootstra R, et al. **Pharm Weekbl [Sci]** 1989 Oct 20;11(5):175–8

Complicated stress urinary incontinence. Blaivas JG, et al. **Semin Urol** 1989 May;7(2):103–16 (27 ref.)

Reappraisal of hydrostatic pressure treatment for intractable postradiotherapy vesical hemorrhage. Mufti GR, et al. **Urology** 1990 Jan;35(1):9–11

[Internal iliac artery embolization for the control of severe bladder and prostate haemorrhage] Li BC. **Chung Hua Wai Ko Tsa Chih** 1990 Apr;28(4):220–1, 253 (Eng. Abstr.) (Chi)

[Treatment of bladder instability using intravaginal electric stimulation (intrarectal)] Salinas J, et al. **Arch Esp Urol** 1990 Jun;43(5):523–6 (Eng. Abstr.) (Spa)

URINE

Clastogenic activity in urine of individuals with urinary bladder infections. Rosin MP, et al. **Cancer Lett** 1989 Sep 15;47(1–2):99–103

VETERINARY

Macrohematuria and life-threatening anemia attributable to subepithelial vascular ectasia of the urinary bladder in a dog. Littman MP, et al. **J Am Vet Med Assoc** 1990 May 1;196(9):1487–9

Urinary bladders of freshwater turtles as a renal physiology model potentially biased by monogenean infections. Henke SE, et al. **Lab Anim Sci** 1990 Mar;40(2):172–7

Treatment of bladder retroversion with rectal prolapse in a sow [letter] Greenwood J. **Vet Rec** 1989 Oct 7; 125(15):405–6

Fixation of the deferent ducts for retrodisplacement of the urinary bladder and prostate in canine perineal hernia. Bilbrey SA, et al. **Vet Surg** 1990 Jan–Feb;19(1):24–7

BLADDER EXSTROPHY

COMPLICATIONS

Inguinal pathology and its association with classical bladder exstrophy. Husmann DA, et al. **J Pediatr Surg** 1990 Mar; 25(3):332–4

DIAGNOSIS

Sonographic findings in the prenatal diagnosis of bladder exstrophy. Jaffe R, et al. **Am J Obstet Gynecol** 1990 Mar; 162(3):675–8

Prenatal sonographic findings in bladder exstrophy. Barth RA, et al. **J Ultrasound Med** 1990 Jun;9(6):359–61

PATHOLOGY

Duplicate bladder exstrophy: a new variant of clinical and embryological significance. Sheldon CA, et al. **J Urol** 1990 Aug;144(2 Pt 1):334–6

Genital outflow tract obstruction in an adolescent with cloacal exstrophy. Visnesky PM, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):548–51

RADIOGRAPHY

Association of congenital vertebral malformations with bladder and cloacal exstrophy. Loder RT, et al. **J Pediatr Orthop** 1990 May–Jun;10(3):389–93

RADIONUCLIDE IMAGING

Pelvic bone imaging in bladder exstrophy. Lette J, et al. **Clin Nucl Med** 1990 Mar;15(3):200

SURGERY

State-of-the-art reconstructive surgery for bladder exstrophy at the Johns Hopkins Hospital. Gearhart JP, et al. **Am J Dis Child** 1989 Dec;143(12):1475–8 (51 ref.)

Anterior pelvic osteotomy. A new operative technique facilitating primary bladder exstrophy closure. Frey P, et al. **Br J Urol** 1989 Dec;64(6):641–3

Ureterosigmoidostomy for exstrophy of the bladder. Results in a personal series of thirty-one cases. Spence HM. **Br J Urol** 1966 Feb;38(1):36–43

Factors predisposing to renal scarring: following staged reconstruction of classical bladder exstrophy. Husmann DA, et al. **J Pediatr Surg** 1990 May;25(5):500–4

Augmentation cystoplasty in patients with exstrophy-epispadias. Kramer SA. **J Pediatr Surg** 1989 Dec;24(12):1293–6

A technique for bladder neck reconstruction in exstrophy: the cinch. Koff SA. **J Urol** 1990 Aug;144(2 Pt 2):546–9; discussion 562–3

Continent urinary reservoirs in pediatric urological practice. Leonard MP, et al. **J Urol** 1990 Aug;144(2 Pt 1):330–3

Adenocarcinoma development in the trigone 34 years after trigonocolonic urinary diversion for exstrophy of the bladder. Mortensen PB, et al. **J Urol** 1990 Oct;144(4):980–2

Fascia lata and early spica casting as adjuncts in closure of bladder exstrophy. Scherz HC, et al. **J Urol** 1990 Aug;144(2 Pt 2):550–3; discussion 562–3

Ureterosigmoidostomy: an outdated approach to bladder exstrophy? Stöckle M, et al. **J Urol** 1990 Apr;143(4):770–4; discussion 774–5

[Reconstruction of the bladder neck in exstrophy of the bladder or epispadias using Young-Dee's method] Mortensen T, et al. **Ugeskr Laeger** 1990 Jan 15;152(3):165–7 (Eng. Abstr.) (Dan)

[The treatment of bladder exstrophy] Chepurnoĭ GI, et al. **Urol Nefrol (Mosk)** 1990 May–Jun;(3):56–9 (Eng. Abstr.) (Rus)

[Plastic repair of the isolated bladder in exstrophy in children] Derzhavin VM, et al. **Urol Nefrol (Mosk)** 1989 Sep–Oct; (5):24–7 (Eng. Abstr.) (Rus)

BLADDER FISTULA

COMPLICATIONS

Fetal vesicorectal fistula causing oligohydramnios in the second trimester. Case report. Arulkumaran S, et al. **Br J Obstet Gynaecol** 1990 May;97(5):449–51

Lochiauria: a new entity—(a case report). Parulekar SV. **J Postgrad Med** 1989 Oct;35(4):228–9

DIAGNOSIS

Diagnosis and treatment of inflammatory intestinovesical fistulas. Szentgyörgyi E, et al. **Acta Chir Hung** 1989; 30(3):179–85

Intraluminal bladder calcifications: an antenatal sign of an enterovesical fistula. Hill LM, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):500–2

ETIOLOGY

Rectovesical fistula due to indwelling catheter. O'Gorman S, et al. **Br J Urol** 1990 Apr;65(4):424

Caecovesical fistula secondary to diverticulitis. Stephenson BM, et al. **Br J Urol** 1990 Jul;66(1):102–3

Relapsing urinary ascites. Lachaux A, et al. **Child Nephrol Urol** 1990;10(1):56–7

Enterovesical fistula in a patient with cryptosporidiosis and AIDS. CT demonstration. Meyers SA, et al. **Clin Imaging** 1990 May;14(2):143–5

Enterovesical fistula from Meckel's diverticulum in a patient with Crohn's ileitis. Petros JG, et al. **Dig Dis Sci** 1990 Jan; 35(1):133–6

Vesico-ovarian fistula in suppurative ovarian inflammation and salpingitis. Carl P. **J Urol** 1990 Feb;143(2):352–3

Bladder fissure due to instrumentation during prostatic balloon dilatation. Lampmann LE, et al. **ROFO** 1989 Sep; 151(3):373–4

Stress incontinence secondary to a vesicourethral fistula: case report. Katlowitz NM, et al. **Urol Radiol** 1990;12(1):37–8

Salpingo-vesical fistula. Rare and unusual complication of vaginal hysterectomy. Stewart DW, et al. **Urology** 1990 Jul;36(1):66–7

[Ileovesical fistula complicating Crohn's disease: a case report] Mizunaga M, et al. **Hinyokika Kiyo** 1989 Jul; 35(7):1223–7 (13 ref.) (Eng. Abstr.) (Jpn)

[Vesicorectal fistula associated with Crohn's disease: a case report] Sekihara T, et al. **Hinyokika Kiyo** 1990 May; 36(5):613–6 (Eng. Abstr.) (Jpn)

[Ileovesical fistula due to Crohn's disease: a case report] Shrestha GR, et al. **Hinyokika Kiyo** 1989 Nov; 35(11):1935–7 (Eng. Abstr.) (Jpn)

[Endometriosis of the bladder and vesico-uterine fistula as complications of cesarean section] Zięba Z, et al. **Ginekol Pol** 1989 May;60(5):297–9 (Eng. Abstr.) (Pol)

[Bladder-uterine fistulas] Romaszewski W, et al. **Pol Tyg Lek** 1989 Feb 27;44(9):229–31 (Eng. Abstr.) (Pol)

[An infrequent etiologic agent of vesicointestinal fistula] García López F, et al. **Actas Urol Esp** 1989 Nov–Dec; 13(6):454–6 (Eng. Abstr.) (Spa)

SURGERY

Management of enterovesical fistulas. Moss RL, et al. **Am J Surg** 1990 May;159(5):514–7

Repair of vesical fistulae using lyophilised human dura. Simsek U, et al. **Br J Urol** 1990 May;65(5):550

Surgical treatment of enterovesical fistulas in Crohn's disease. McNamara MJ, et al. **Dis Colon Rectum** 1990 Apr; 33(4):271–6

Rectus muscle flap for repair of refractory bladder fistula following renal transplantation: a case report. Shabtai M, et al. **J Urol** 1990 Feb;143(2):354–5

Vesicovaginal fistulae. Little NA, et al. **Semin Urol** 1989 May; 7(2):78–85 (20 ref.)

[Simultaneous closure of sigmoid, rectal and vesical fistulas] Vasi'lev SV, et al. **Vestn Khir** 1989 Sep;143(9):56 (Rus)

THERAPY

Successful fibrin seal closure of a contaminated fistula. Case report. Moesgaard F, et al. **Acta Chir Scand** 1989 Aug; 155(8):427–8

BLADDER NECK OBSTRUCTION

Pediatric urinary tract obstruction. **Urol Clin North Am** 1990 May;17(2):247–447

[Obstructive lesions of the urologic tract, their characteristics and complications] Alagić A, et al. **Med Arh** 1986; 40(5):237–40 (Eng. Abstr.) (Scr)

COMPLICATIONS

Effects of prazosin HCl on micturition disturbance associated with benign prostatic hypertrophy and bladder neck contracture. Kohama Y, et al. **Urol Int** 1990;45 Suppl 1:26–9

CONGENITAL

Posterior urethral valve [letter] Bachman R. **Am J Dis Child** 1967 Aug;114(2):216

Experimental congenital obstructive uropathy. Peters CA, et al. **Urol Clin North Am** 1990 May;17(2):437–47 (43 ref.)

DIAGNOSIS

First trimester diagnosis and early in utero treatment of obstructive uropathy. Drugan A, et al. **Acta Obstet Gynecol Scand** 1989;68(7):645–9

Interpretation of urinary flow rates. Siroky MB. **Urol Clin North Am** 1990 Aug;17(3):537–42 (16 ref.)

[Transabdominal prostatic sonography and bladder neck-colliculus distance measurement for preoperative determination of prostatic weight: 2 methods in comparison] Wiedemann A, et al. **Z Urol Nephrol** 1990 Mar;83(3):101–3 (Eng. Abstr.) (Ger)

DRUG THERAPY

Effects of prazosin in men with symptoms of bladder neck obstruction and a non-hyperplastic prostate. Hedlund H, et al. **Scand J Urol Nephrol** 1989;23(4):251–4

ETIOLOGY

Bladder outflow obstruction secondary to intravenous amphetamine abuse. Worsey J, et al. **Br J Urol** 1989 Sep; 64(3):320–1

Contractile properties of human prostate adenomas and the development of infravesical obstruction. Gup DI, et al. **Prostate** 1989;15(2):105–14

Opening contraction energy in prostatic (compressive) obstruction. Cucchi A, et al. **Urol Int** 1990;45(1):16–9

[Congenital bladder diverticulum as a cause of acute urinary retention] Porras V, et al. **Arch Esp Urol** 1990 Mar; 43(2):182–4 (Eng. Abstr.) **(Spa)**

HISTORY

[Sclerosis of the bladder neck] Nelkov K, et al. **Khirurgiia (Sofiia)** 1989;42(5):69–74 (34 ref.) **(Bul)**

METABOLISM

Effects of outlet obstruction on glucose metabolism of the rabbit urinary bladder. Kato K, et al. **J Urol** 1990 Apr; 143(4):844–7

PATHOLOGY

Advanced pediatric genitourinary soft tissue sarcoma. Narang R, et al. **Indian Pediatr** 1989 Sep;26(9):944–7

An outlet obstruction caused by V-shaped bar at the bladder neck in a woman. Takeuchi N, et al. **J Urol** 1990 Apr; 143(4):811–2

PHYSIOPATHOLOGY

Acceleration of flow rate in obstructive detrusor instability. Cucchi A. **Br J Urol** 1990 Jul;66(1):26–9

Stop-flow measurement of detrusor contractility in bladder outflow obstruction. Kinn AC. **Br J Urol** 1989 Oct; 64(4):363–7

Visual analogue scales distinguish between low urinary flow rates due to impaired detrusor contractility and those due to bladder outflow obstruction. McLoughlin J, et al. **Br J Urol** 1990 Jul;66(1):16–8

Efficacy of orchiectomy versus high dose polyoestradiol phosphate (160 mg) in relieving infravesical obstruction in patients with prostatic cancer. Aro J, et al. **Int Urol Nephrol** 1990;22(1):57–60

Short term functional effects of bladder outlet obstruction in the cat. Kato K, et al. **J Urol** 1990 May;143(5):1020–5

The functional effects of long-term outlet obstruction on the rabbit urinary bladder. Kato K, et al. **J Urol** 1990 Mar; 143(3):600–6

Effect of bladder outlet obstruction on the morphology, physiology, and pharmacology of the bladder. Levin RM, et al. **Prostate Suppl** 1990;3:9–26 (52 ref.)

Symptomatology and urodynamic findings in younger males with bladder neck dysfunction. Poulsen EU, et al. **Scand J Urol Nephrol Suppl** 1989;125:59–63

Multichannel urodynamic studies in men with benign prostatic hyperplasia. Indications and interpretation. Blaivas JG. **Urol Clin North Am** 1990 Aug;17(3):543–52 (34 ref.)

Physiology of lower urinary tract obstruction. Rink RC, et al. **Urol Clin North Am** 1990 May;17(2):329–34 (42 ref.)

Principles and clinical application of advanced urodynamic analysis of voiding function. Schäfer W. **Urol Clin North Am** 1990 Aug;17(3):553–66 (24 ref.)

[Retrograde ejaculation following transurethral surgery for bladder neck sclerosis] Nelkov K, et al. **Khirurgiia (Sofiia)** 1989;42(6):53–6 (31 ref.) (Eng. Abstr.) **(Bul)**

PREVENTION & CONTROL

Prophylactic bladder neck incision in the treatment of small benign prostatic hyperplasia. Chiu AW, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Jan;45(1):22–5

SURGERY

Surgical treatment of the bladder neck benign obstruction. Simon V. **Acta Univ Carol [Med] (Praha)** 1988; 34(1–2):67–109

Transurethral incision of the bladder neck and prostate. Katz PG, et al. **J Urol** 1990 Sep;144(3):694–6

Transurethral resection versus transurethral incision of the prostate. Orandi A. **Urol Clin North Am** 1990 Aug; 17(3):601–12

Female bladder neck incision. Fenster HN. **Urology** 1990 Feb; 35(2):109–10

[The results of urethro-cervicolysis after surgical over-correction of stress urinary incontinence. Apropos of 10 cases] Rossi D, et al. **Ann Urol (Paris)** 1990; 24(1):27–31; discussion 31–2 (Eng. Abstr.) **(Fre)**

[Trigono-cervico-prostatomy. Technic, clinical and urodynamic results] Soler Roselló A, et al. **Arch Esp Urol** 1990 May;43(4):397–401 (Eng. Abstr.) **(Spa)**

THERAPY

Bladder outflow tract obstruction and urinary retention from benign prostatic hypertrophy treated by balloon dilatation. Gill KP, et al. **Br J Urol** 1989 Dec;64(6):618–22

The use of prostatic stents in patients with urinary retention who are unfit for surgery. An interim report. McLoughlin J, et al. **Br J Urol** 1990 Jul;66(1):66–70

Anastomotic strictures following radical prostatectomy: risk factors and management. Surya BV, et al. **J Urol** 1990 Apr; 143(4):755–8

[Usefulness of transurethral resection in cancer of the prostate] Rodríguez JV, et al. **Arch Esp Urol** 1989;42 Suppl 2:165–77 (Eng. Abstr.) **(Spa)**

BLADDER NEOPLASMS

Bladder cancer. Advances in laboratory innovations and clinical management, with emphasis on innovations allowing bladder-sparing approaches for patients with invasive tumors. Shipley WU, et al. **Cancer** 1990 Feb 1;65(3 Suppl):675–83 (79 ref.)

Re: Primary signet ring cell adenocarcinoma of the bladder [letter; comment] Sagalowsky AI. **J Urol** 1990 Jan; 143(1):135 Comment on: J Urol 1989 Jan;141(1):17–21.

Brain metastasis from transitional cell carcinoma of the bladder--case report. Wakisaka S, et al. **Neurol Med Chir (Tokyo)** 1990 Mar;30(3):188–90

Exuberant periosteal reaction in solitary skeletal metastases: a mimic of primary skeletal neoplasm. Pope TL Jr, et al. **Orthopedics** 1990 Feb;13(2):261–4

Arcuate line integrity: an important sign in sacral metastatic disease. Whitford L, et al. **Radiogr Today** 1988 Dec; 54(619):50

Primary non-Hodgkins lymphoma of the bladder. Case report and review of the literature. Davidson NG. **Scand J Urol Nephrol** 1990;24(2):155–6

Papers dedicated to Benni Nerström on the occasion of his sixtieth birthday. December 16th 1989. **Scand J Urol Nephrol Suppl** 1989;125:1–153

Dietary habits in Spain: an approximation. González CA, et al. **Tumori** 1990 Aug 31;76(4):311–4

Urethral fistula and history of bladder neoplasms [clinical conference] Kavoussi LR, et al. **Urol Radiol** 1989; 11(3):194–7

Clonal growth of bladder cancer cells in a double layer soft agar assay: needles addition of multiple culture supplements. Lee K, et al. **Urol Res** 1990;18(3):197–200

[Intra-diverticular tumors of the bladder. Natural history and management perspectives] Daher N, et al. **Ann Urol (Paris)** 1989;23(4):275–80 (36 ref.) (Eng. Abstr.) **(Fre)**

[Leukoplakia of the urinary tract] Coppi F. **Arch Ital Urol Nefrol Androl** 1989 Sep;61(3):205–9 (20 ref.) (Eng. Abstr.) **(Ita)**

[Bladder leiomyoma. Presentation of a case] Boltar A, et al. **Minerva Urol Nefrol** 1989 Jul–Sep;41(3):211–3 (18 ref.) (Eng. Abstr.) **(Ita)**

[Triple malignancy including bladder carcinoma, prostate carcinoma and malignant lymphoma: a case report] Kobayashi Y, et al. **Hinyokika Kiyo** 1989 Nov; 35(11):1925–8 (Eng. Abstr.) **(Jpn)**

[Skin metastasis as the first manifestation of dissemination of bladder cancer] Jara J, et al. **Actas Urol Esp** 1989 Nov-Dec;13(6):480–1 (Eng. Abstr.) **(Spa)**

[Primary bladder adenocarcinoma of the signet-ring cell type] Fernández Fernández A, et al. **Arch Esp Urol** 1990 May;43(4):355–8 (20 ref.) (Eng. Abstr.) **(Spa)**

[Epidermoid carcinoma of the bladder. An uncommon tumor] Ricos Torrent JV, et al. **Arch Esp Urol** 1989 Apr; 42(3):205–8 (Eng. Abstr.) **(Spa)**

[Bladder endometriosis: review and presentation of 2 new cases] Silmi Moyano A, et al. **Rev Clin Esp** 1990 Feb; 186(2):74–81 (38 ref.) (Eng. Abstr.) **(Spa)**

ANALYSIS

Immunohistochemical analysis of c-erbB-2 oncogene product and epidermal growth factor receptor expression in human urinary bladder carcinomas. Asamoto M, et al. **Acta Pathol Jpn** 1990 May;40(5):322–6

Flow cytometric analysis of DNA content of deparaffinized nuclei in urinary bladder carcinomas. Comparison of different isolation methods and relation to histological grade and stage. Malmström PU, et al. **APMIS** 1989 Sep; 97(9):811–9

Transferrin receptor expression in primary superficial human bladder tumours identifies patients who develop recurrences. Smith NW, et al. **Br J Urol** 1990 Apr; 65(4):339–44

The epidermal growth factor receptor and the prognosis of bladder cancer. Neal DE, et al. **Cancer** 1990 Apr 1; 65(7):1619–25

Clinical cancer progression in urinary bladder tumors evaluated by multiparameter flow cytometry with monoclonal antibodies. Laval University Urology Group. Fradet Y, et al. **Cancer Res** 1990 Jan 15;50(2):432–7

Characterization and quantitation of the epidermal growth factor receptor in invasive and superficial bladder tumors. Smith K, et al. **Cancer Res** 1989 Nov 1;49(21):5810–5

Flow cytometric analysis of primary and metastatic bladder cancer. Badalament RA, et al. **J Urol** 1990 May; 143(5):912–5; discussion 915–6

Fibronectin distribution in normal and malignant urothelium. Grossman HB, et al. **J Urol** 1990 Feb;143(2):418–20

Comparative flow cytometric deoxyribonucleic acid studies on exophytic tumor and random mucosal biopsies in untreated carcinoma of the bladder. Norming U, et al. **J Urol** 1989 Dec;142(6):1442–7

Correlation of cytokeratin patterns with histopathology during neoplastic progression in the rat urinary bladder. Reedy EA, et al. **Pathobiology** 1990;58(1):15–27

[The DNA content of bladder carcinoma in relation to pathologic grading, staging and prognosis: a flow cytometric study] Xue J. **Chung Hua Wai Ko Tsa Chih** 1989 Nov;27(11):650–3, 700 (Eng. Abstr.) **(Chi)**

[Blood and urine determinations of tissue polypeptide antigen in patients with bladder carcinoma] Tizzani A, et al. **Minerva Urol Nefrol** 1990 Apr-Jun;42(2):69–71 (Eng. Abstr.) **(Ita)**

[Human chorionic gonadotropin and carcinoembryonic antigen in small cell carcinoma (oat cell) of the urinary bladder] Bonet Palau I, et al. **Actas Urol Esp** 1989 Nov-Dec;13(6):476–9 (Eng. Abstr.) **(Spa)**

BLOOD

B5 tumour marker and urine cytology in diagnosis and follow-up of transitional cell bladder cancer. Malpani K, et al. **Br J Urol** 1989 Sep;64(3):257–62

Correlation of tumor necrosis factor and prostaglandin E2 production of monocytes in bladder cancer patients. Ikemoto S, et al. **Cancer** 1989 Nov 15;64(10):2076–80

ABO blood groups and bladder carcinoma. Llopis B, et al. **Eur Urol** 1990;17(4):289–92

Enhanced bladder cancer detection with the Lewis X antigen as a marker of neoplastic transformation. Sheinfeld J, et al. **J Urol** 1990 Feb;143(2):285–8

Lewis negative phenotype and bladder cancer [letter] Langkilde NC, et al. **Lancet** 1990 Apr 14;335(8694):926

Relationship between blood groups and bladder tumors. Kvist E, et al. **Scand J Urol Nephrol** 1989;23(4):279–81

Antigenic detection and prognosis of patients with transitional cell carcinoma of the urinary bladder. Tan LB, et al. **Urol Int** 1989;44(5):264–71

BLOOD SUPPLY

Hemodynamic effect of the metallopurpurin SnET2 and light on transplantable FANFT induced bladder tumor. Selman SH, et al. **J Urol** 1990 Mar;143(3):630–3

CHEMICALLY INDUCED

Urothelial cancer and some industry-related chemicals: an evaluation of the epidemiologic literature. Steineck G, et al. **Am J Ind Med** 1990;17(3):371–91 (69 ref.)

Studies on the relation between bladder cancer and benzidine or its derived dyes in Shanghai. You XY, et al. **Br J Ind Med** 1990 Aug;47(8):544–52

Dose response of N-butyl-N-(4-hydroxybutyl)nitrosamine on urinary bladder carcinogenesis in mutant ODS rats lacking L-ascorbic acid synthesizing ability. Mori S, et al. **Cancer Lett** 1990 Feb;49(2):139–45

Synergism by sodium L-ascorbate but inhibition by L-ascorbic acid for sodium saccharin promotion of rat two-stage bladder carcinogenesis. Fukushima S, et al. **Cancer Res** 1990 Jul 15;50(14):4195–8

Production of urothelial tumors in the heterotopic bladder of rat by benzidine derivatives. Wang CY, et al. **Cancer Res** 1990 May 15;50(10):2868–71

Nephrogenic adenoma in a patient with chronic renal failure associated with intravesical treatment with thiotepa. Embon OM, et al. **Eur Urol** 1990;17(2):181–2

Barbital sodium, a tumor promoter for kidney tubules, urinary bladder, and liver of the F344 rat, induces persistent increases in levels of DNA synthesis in renal tubules but not in urinary bladder epithelium or hepatocytes. Hagiwara A, et al. **Fundam Appl Toxicol** 1989 Aug;13(2):332–40

Bladder cancer and occupational exposure to polycyclic aromatic hydrocarbons. Bonassi S, et al. **Int J Cancer** 1989 Oct 15;44(4):648–51

Rapid screening of potential human bladder carcinogens: genotoxicity in meiosis repair deficient Drosophila melanogaster. Lamm LM, et al. **J Urol** 1989 Nov; 142(5):1356–8

Bladder leiomyosarcoma following cyclophosphamide therapy for lupus nephritis. Thrasher JB, et al. **J Urol** 1990 Jan;143(1):119–21

Stimulation of urinary bladder tumorigenesis by carcinogen-exposed stroma. Uchida K, et al. **J Urol** 1990 Mar;143(3):618–21

Urothelial damage and tumor initiation by urinary metabolites of sodium o-phenylphenate in the urinary bladder of female rats. Hasegawa R, et al. **Jpn J Cancer Res** 1990 May; 81(5):483–8

Structure-activity relations in promotion of rat urinary bladder carcinogenesis by phenolic antioxidants. Kurata Y, et al. **Jpn J Cancer Res** 1990 Aug;81(8):754–9

DNA adduct formation in relation to tumorigenesis in mice chronically fed 2-acetylaminofluorene. Beland FA, et al. **Prog Clin Biol Res** 1990;331:121–9; discussion 147–8

DNA adduct formation in relation to tumorigenesis in mice continuously administered 4-aminobiphenyl. Beland FA, et al. **Prog Clin Biol Res** 1990;340A:81–90

Proliferative and genotoxic cellular effects in 2-acetylaminofluorene bladder and liver carcinogenesis: biological modeling of the ED01 study. Cohen SM, et al. **Toxicol Appl Pharmacol** 1990 Jun 1;104(1):79–93

Toxic and nontoxic changes induced in the urothelium by xenobiotics. Cohen SM. **Toxicol Appl Pharmacol** 1989 Dec; 101(3):484–98

Evaluation of nitrofurantoin on the two stages of urinary bladder carcinogenesis in the rat. Hasegawa R, et al. **Toxicology** 1990 Jun;62(3):333–47

[Cancer of the bladder after cystitis due to cyclophosphamide. Apropos of a case] Dore B, et al. **J Urol (Paris)** 1989;95(7):427–31 (42 ref.) (Eng. Abstr.) **(Fre)**

[Cancer of the bladder after treatment with cyclophosphamide. Apropos of a case and a review of the literature] Lupera H, et al. **J Urol (Paris)** 1990;96(1):48–52

(15 ref.) (Eng. Abstr.) (Fre)
[Mechanisms of induced epithelium–fibroblast conversion in a line of vesical cancer in the rat] Thiery JP, et al. **Pathol Biol (Paris)** 1989 Nov;37(9):1034 (Fre)
[Induction of urinary bladder urothelial cancers in the rabbit by dibutylnitrosamine with an artificial bladder calculus as cocarcinogen] Bornhof C, et al. **Urologe [A]** 1989 Nov; 28(6):339–43 (Eng. Abstr.) (Ger)
[Clinical problems in patients who were exposed to carcinogens] Kotake T. **Hinyokika Kiyo** 1989 Dec; 35(12):2063–7 (Eng. Abstr.) (Jpn)
[Benzidine dyes and risk of bladder cancer] Miyakawa M, et al. **Hinyokika Kiyo** 1989 Dec;35(12):2049–56 (Eng. Abstr.) (Jpn)
[Occupational uroepithelial cancer: current status in Wakayama city and clinical study] Morimoto S, et al. **Hinyokika Kiyo** 1989 Dec;35(12):2015–22 (Eng. Abstr.) (Jpn)
[Urothelial carcinoma related to exposure to aromatic amines] Naito S, et al. **Hinyokika Kiyo** 1989 Dec;35(12):2023–31 (Eng. Abstr.) (Jpn)
[Present status and background of occupational uroepithelial tumors] Tachibana M, et al. **Hinyokika Kiyo** 1989 Dec; 35(12):2003–9 (Eng. Abstr.) (Jpn)
[Present aspects and problems regarding occupational bladder cancer due to exposure to aromatic amines] Yamamura J. **Sangyo Ika Daigaku Zasshi** 1989 Dec 1; 11(4):495–504 (66 ref.) (Eng. Abstr.) (Jpn)
[Usefulness of biological tumor markers for early detection of neoplastic changes in the bladder of persons exposed to aromatic amines] Hanke J, et al. **Med Pr** 1989; 40(6):376–80 (26 ref.) (Eng. Abstr.) (Pol)
[The effect of sodium selenite on the butyl butanol nitrosamine induction of bladder tumors in rats] Frolov AG. **Vopr Onkol** 1990;36(6):697–700 (Eng. Abstr.) (Rus)
[Effects of forced diuresis on butylbutanolnitrosamine induction of bladder tumors in rats] Pliss GB, et al. **Vopr Onkol** 1990;36(1):33–6 (Eng. Abstr.) (Rus)

COMPLICATIONS

Tumor–associated tissue eosinophilia in the urinary bladder: is it a real relationship? Dworák O, et al. **Appl Pathol** 1989; 7(5):294–7
Acute retention due to multiple urethral calculi—an unusual presentation of bladder tumour. Hastie KJ, et al. **Br J Urol** 1989 Sep;64(3):316
Paraneoplastic hypercalcaemia in association with schistosomal bladder cancer. Lortholary O, et al. **Br J Urol** 1989 Nov;64(5):550–1
Pyrexia of unknown origin. An atypical presentation of bladder carcinoma. Saa–Gandi FW, et al. **Br J Urol** 1989 Nov;64(5):548
Hamartoma of the urinary bladder in an infant with Beckwith–Wiedemann syndrome. Williams MP, et al. **Br J Urol** 1990 Jan;65(1):106–7
Multiple myeloma of the bladder and vagina. Weide R, et al. **Cancer** 1990 Sep 1;66(5):989–91
Verrucous carcinoma in situ of the bladder, not associated with urinary schistosomiasis. Pierangeli T, et al. **Int Urol Nephrol** 1989;21(6):597–602
Serial bone scintigrams demonstrating obstructive uropathy and nephropathy due to transitional cell carcinoma of the urinary bladder. Shih WJ, et al. **Radiat Med** 1989 Sep–Oct; 7(5):203–8
Urachal cyst complicated with carcinoma: diagnosis by magnetic resonance imaging. Suzuki M, et al. **Radiat Med** 1990 Jan–Feb;8(1):17–9
Microbiological study of bladder tumors, their histology and infective complications. Badenoch DF, et al. **Urology** 1990 Jan;35(1):5–8
Bladder carcinoma presenting with rectal obstruction. Stillwell TJ, et al. **Urology** 1989 Nov;34(5):238–40
[Internal iliac artery embolization for the control of severe bladder and prostate haemorrhage] Li BC. **Chung Hua Wai Ko Tsa Chih** 1990 Apr;28(4):220–1, 253 (Eng. Abstr.) (Chi)
[A rare cause of hematuria: vesical nephrogenic adenoma] Houlgatte A, et al. **J Urol (Paris)** 1989;95(7):436–7 (Eng. Abstr.) (Fre)
[Leukemoid reaction and hypercalcemia in carcinoma of the bladder] Alamé T, et al. **Rev Med Brux** 1990 Mar; 11(3):59–62 (21 ref.) (Eng. Abstr.) (Fre)
[Paraneoplastic syndromes associated with bladder carcinoma. Apropos of 2 cases of hypercalcemia] Mottola A, et al. **Minerva Urol Nefrol** 1990 Apr–Jun;42(2):99–101 (22 ref.) (Eng. Abstr.) (Ita)
[Hematuria: an initial sign of cecal carcinoma] Arai E, et al. **Hinyokika Kiyo** 1990 Mar;36(3):347–9 (Eng. Abstr.) (Jpn)
[A case of leiomyoma of urinary bladder with relapse from the external urethral orifice—clinical analysis of leiomyoma of urinary bladder in Japan] Sakuma T, et al. **Hinyokika Kiyo** 1989 Sep;35(9):1591–5 (17 ref.) (Eng. Abstr.) (Jpn)
[Adenocarcinoma of the urinary bladder with a bladder stone: report of a case] Tanaka S, et al. **Hinyokika Kiyo** 1989 May;35(5):881–3 (Eng. Abstr.) (Jpn)
[Obstruction of the upper urinary tract caused by a malignant retrovesicular schwannoma. Therapeutic strategy] González Enguita C, et al. **Actas Urol Esp** 1990 Jan–Feb; 14(1):46–9 (Eng. Abstr.) (Spa)
[Intra–diverticular neoplasms of the bladder. Apropos of a squamous carcinoma] Pellice C Jr, et al. **Actas Urol Esp** 1990 Mar–Apr;14(2):161–2 (Eng. Abstr.) (Spa)
[Urinary amebiasis: a parasitosis of exceptional presentation] Castiñeiras Fernández J, et al. **Arch Esp Urol** 1990 Mar; 43(2):190–2 (Eng. Abstr.) (Spa)
[Eosinophilic polypoid cystitis with flat carcinoma in situ of the overlying epithelium] Spitale L, et al. **Arch Esp Urol** 1989 Oct;42(8):809–11 (12 ref.) (Eng. Abstr.) (Spa)
[Hematuria in young people should be investigated. Bladder cancer could be the cause of symptoms] Bergman B. **Lakartidningen** 1990 May 30;87(22):1966 (Swe)

CONGENITAL

[Rhabdomyosarcomas discovered in newborn infants. Study of markers of muscle differentiation] Barbet JP, et al. **Ann Pathol** 1989;9(5):363–8 (Eng. Abstr.) (Fre)

DIAGNOSIS

Diagnostic pitfalls in the diagnosis of soft tissue bladder tumors in pediatric patients. Goldschneider KR, et al. **Ann Clin Lab Sci** 1990 Jan–Feb;20(1):22–7
Dipstick haematuria and bladder cancer in men over 60 [letter; comment] Jones BF. **BMJ** 1989 Dec 16; 299(6714):1528 Comment on: BMJ 1989 Oct 21;299(6706):1010–2.
Validation of a self–administered urological questionnaire. Britton JP, et al. **Br J Urol** 1990 Feb;65(2):131–3
Surveillance of an at risk population: assessment of postal urine cytology. Cumming JA, et al. **Br J Urol** 1989 Dec; 64(6):579–81
Detection of recurrent bladder tumours by transrectal and abdominal ultrasound compared with cystoscopy. Davies AH, et al. **Br J Urol** 1989 Oct;64(4):409–11
Diagnosis of clinically occult bladder cancer by in vivo staining with methylene blue. Mufti GR, et al. **Br J Urol** 1990 Feb;65(2):173–5
Detection of bladder carcinoma in females by flow cytometry and cytology. Hermansen DK, et al. **Cytometry** 1989 Nov; 10(6):739–42
Follow–up of superficial bladder cancer: how to spare cystoscopies? Vera–Donoso CD, et al. **Eur Urol** 1990; 17(1):17–9
Sarcomatoid carcinoma mimicking sarcoma [letter; comment] Young RH. **Histopathology** 1990 Jan;16(1):105 Comment on: Histopathology 1989 Jul;15(1):93–6.
Current status of urinary cytology in the evaluation of bladder neoplasms. Murphy WM. **Hum Pathol** 1990 Sep; 21(9):886–96 (22 ref.)
The Nd:YAG laser and methylene blue staining in the diagnosis and treatment of premalignant vesical lesions and carcinoma in situ (CIS). Gaboardi F, et al. **Int Urol Nephrol** 1989;21(3):289–97
Schistosomiasis associated bladder carcinoma expression of cytokeratin. Essa MH, et al. **J Egypt Soc Parasitol** 1990 Jun;20(1):161–7
Pheochromocytoma of the urinary bladder (report of 2 cases with review of literature). Punekar S, et al. **J Postgrad Med** 1989 Apr;35(2):90–2 (7 ref.)
Bladder neurofibromatosis in childhood. Noninvasive imaging. Shapeero LG, et al. **J Ultrasound Med** 1990 Mar; 9(3):177–80
A clinically applicable method to preserve urine and bladder washing cells for flow cytometric monitoring of bladder cancer patients. Deitch AD, et al. **J Urol** 1990 Apr; 143(4):700–5
Quantitative immunocytology in the management of patients with superficial bladder carcinoma. I. A marker to identify patients who do not require prophylaxis. Huland E, et al. **J Urol** 1990 Sep;144(3):637–9; discussion 639–40
Human chorionic gonadotropin, neuron specific enolase and deoxyribonucleic acid flow cytometry in patients with high grade bladder carcinoma. Jacobsen AB, et al. **J Urol** 1990 Apr;143(4):706–9
Bladder lymphoma: diagnosis and documentation of response by magnetic resonance imaging. Johnson AJ, et al. **J Urol** 1989 Nov;142(5):1318–20
The use of transrectal ultrasound in the detection and evaluation of local pelvic recurrences after a radical urological pelvic operation. Parra RO, et al. **J Urol** 1990 Sep;144(3):707–9
Eosinophilic cystitis presenting as invasive bladder cancer: comments on pathogenesis and management. Thijssen A, et al. **J Urol** 1990 Oct;144(4):977–9 (19 ref.)
A new 180 kDa. urine protein marker associated with bladder cancer. Zhau HY, et al. **J Urol** 1990 Jul;144(1):47–52
Sonographic features of a renal pelvic neurofibroma. Le Cheong L, et al. **JCU** 1990 Feb;18(2):129–31
Magnetic resonance imaging of the genitourinary tract. LiPuma JP, et al. **Magn Reson Annu** 1985;:149–96 (28 ref.)
Cystometric evaluation of vesical endometriosis before and after hormonal or surgical treatment. Goldstein MS, et al. **Mt Sinai J Med** 1990 Mar;57(2):109–11
Tissue polypeptide antigen (TPA) in urinary bladder cancer cytology: a follow–up study. Senatore S, et al. **Oncology** 1990;47(1):37–42
Bladder cancer. What's new in diagnosis and treatment? Badalament RA, et al. **Postgrad Med** 1990 Sep 15; 88(4):63–4, 67–70 (22 ref.)
Transabdominal ultrasonography plus urine cytology in control of benign bladder tumours. Petersen SE, et al. **Scand J Urol Nephrol Suppl** 1989;125:121–5
The diagnosis, staging, and follow–up of carcinomas of the kidney, bladder, and prostate: the role of cross–sectional imaging. Singer J, et al. **Semin Ultrasound CT MR** 1989 Dec;10(6):481–97 (75 ref.)
Transabdominal ultrasound surveillance for bladder cancer. Malone PR. **Urol Clin North Am** 1989 Nov;16(4):823–7
Transrectal ultrasonography for staging tumors of the urinary bladder. Wolkoff L, et al. **Urol Clin North Am** 1989 Nov; 16(4):815–21
Gadolinium–enhanced magnetic resonance imaging in the staging of urinary bladder neoplasms. Sohn M, et al. **Urol Int** 1990;45(3):142–7
MR imaging of bladder neoplasms: correlation with pathologic staging. Tavares NJ, et al. **Urol Radiol** 1990; 12(1):27–33
[Indirect immunofluorescence in bladder tumors] Charürov S, et al. **Khirurgiia (Sofiia)** 1989;42(4):92–5 (Eng. Abstr.) (Bul)
[A case of tumors of the kidney and bladder with differing histology] Donovski L, et al. **Khirurgiia (Sofiia)** 1990; 43(1):85–7 (Eng. Abstr.) (Bul)
[Use of flow cytometry in the diagnosis of bladder tumor] Ling CH. **Chung Hua Wai Ko Tsa Chih** 1989 May; 27(5):286–8, 317 (Eng. Abstr.) (Chi)
[Comparison of MRI and CT X–ray in the evaluation of bladder cancer. Apropos of 26 cases] Chiche JF, et al. **J Radiol** 1989 Oct;70(10):529–39 (Eng. Abstr.) (Fre)
[leiomyoma of the bladder. Apropos of a case] Marc B, et al. **J Urol (Paris)** 1990;96(1):45–7 (Eng. Abstr.) (Fre)
[Prostatic and bladder cancer—desiderata of the urologist as regards diagnostic imaging] Schnorr D. **Radiol Diagn (Berl)** 1990;31(3):193–7 (Eng. Abstr.) (Ger)
[Prostatic and bladder cancer—possibilities and limitations of diagnostic imaging] Stobbe G, et al. **Radiol Diagn (Berl)** 1990;31(3):199–204 (21 ref.) (Eng. Abstr.) (Ger)
[The diagnostic value of MR tomography following gadolinium–DTPA compared to computed tomography in bladder tumors] Nicolas V, et al. **ROFO** 1990 Aug; 153(2):197–203 (Eng. Abstr.) (Ger)
[Tumor markers and prognostic parameters in urinary bladder cancer] Schneider AW, et al. **Urologe [A]** 1990 Mar;29(2):71–6 (51 ref.) (Eng. Abstr.) (Ger)
[Studies of tryptophan metabolism in cancer of the urinary bladder] Wich H, et al. **Z Urol Nephrol** 1989 Nov; 82(11):593–6 (Eng. Abstr.) (Ger)
[Bladder hemangioma. Presentation of a case and review of the literature] Bodo G, et al. **Minerva Urol Nefrol** 1990 Apr–Jun;42(2):113–5 (8 ref.) (Eng. Abstr.) (Ita)
[Urachal carcinoma producing carcinoembryonic antigen: a case report] Arai Y, et al. **Hinyokika Kiyo** 1989 Jun; 35(6):1065–8 (Eng. Abstr.) (Jpn)
[A trial of digitization and digital analysis of analog clinical images of bladder cancer] Mikata N, et al. **Hinyokika Kiyo** 1990 Mar;36(3):265–9 (Eng. Abstr.) (Jpn)
[Leiomyoma of urinary bladder: report of a case] Miura H, et al. **Hinyokika Kiyo** 1990 May;36(5):609–12 (Eng. Abstr.) (Jpn)
[A case of cystitis glandularis suspected of malignant tumor of urinary bladder] Tanaka S, et al. **Hinyokika Kiyo** 1990 Mar;36(3):351–3 (Eng. Abstr.) (Jpn)
[Pancreatic secretory trypsin inhibitor in urothelial cancer] Tashiro K, et al. **Hinyokika Kiyo** 1989 Oct;35(10):1659–63 (Eng. Abstr.) (Jpn)
[Clinical importance of microhematuria as an initial sign of bladder tumor] Hattori R, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Mar;81(3):414–9 (Eng. Abstr.) (Jpn)
[A comparative study of the sensitivity of bladder washing flow cytometry, voided urine cytology and bladder washing cytology in the detection of bladder carcinoma] Tachibana M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jul;80(7):1025–30 (Eng. Abstr.) (Jpn)
[Urinary cytodiagnosis in urothelial neoplasms. A study of 678 cases] Longatto Filho A, et al. **Rev Paul Med** 1989 Jan–Feb;107(1):15–8 (Eng. Abstr.) (Por)
[The value of urinary cytology in the diagnosis and follow–up of patients with primary bladder tumors] Ioiart I, et al. **Rev Chir [Chir]** 1989 May–Jun;38(3):173–7 (Eng. Abstr.) (Rum)
[Malignant infiltrating bladder tumors. Comments on 157 cases] Filimon C, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Jul–Sep;93(3):525–38 (Eng. Abstr.) (Rum)
[The preclinical diagnosis of bladder neoplasms] Siliutin VG, et al. **Urol Nefrol (Mosk)** 1990 Jan–Feb;(1):46–8 (Eng. Abstr.) (Rus)
[Primary adenocarcinoma of the bladder as single tumor. Study of 7 cases and review of the literature] Fernández Fernández A, et al. **Actas Urol Esp** 1990 Jan–Feb; 14(1):18–22 (31 ref.) (Eng. Abstr.) (Spa)
[Echography and cytology versus cystoscopy in the follow–up of patients with superficial tumors of the bladder] Morales López A, et al. **Actas Urol Esp** 1989 Nov–Dec;13(6):436–8 (Eng. Abstr.) (Spa)
[Bladder endometriosis] Quezada F, et al. **Arch Esp Urol** 1990 Jan–Feb;43(1):19–22 (Eng. Abstr.) (Spa)

DRUG THERAPY

Cytohistologic correlation of urothelial lesions secondary to photodynamic therapy. Broghamer WL Jr, et al. **Acta Cytol** 1989 Nov-Dec;33(6):881-6

The effect of radiation and cytotoxic platinum compounds on the growth of normal and tumour bladder explant cultures. Mothersill C, et al. **Acta Oncol** 1990;29(2):179-84

Evaluation of cortisone-heparin and cortisone-maltose tetrapalmitate therapies against rodent tumors. I. Biological studies. Benrezzak O, et al. **Anticancer Res** 1989 Nov-Dec; 9(6):1883-7

Schedule dependency of the combination methotrexate-vinblastine against human urothelial cancer grown in nude mice. Kyriazis AP, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1857-61

Long-term follow-up of intravesical Epodyl therapy for superficial bladder cancer. Mufti GR, et al. **Br J Urol** 1990 Jan;65(1):32-5

Re: Recurrence of superficial bladder carcinoma after intravesical instillation of Mitomycin-C [letter; comment] Parmar MK. **Br J Urol** 1989 Dec;64(6):659 Comment on: Br J Urol 1989 Feb;63(2):176-9.

Phase II study of carboplatin in locally advanced and metastatic transitional cell carcinoma of the urinary bladder. Raabe NK, et al. **Br J Urol** 1989 Dec;64(6):604-7

Influence of retinoids on bladder cancer growth as detected by primary tissue culture. Sawczuk IS, et al. **Br J Urol** 1990 Feb;65(2):186-8

Neo-adjuvant chemotherapy for invasive bladder cancer. Experience with the M-VAC regimen. Scher H, et al. **Br J Urol** 1989 Sep;64(3):250-6

Treatment of bladder carcinoma using a germ cell chemotherapy protocol. Williams G, et al. **Br J Urol** 1990 May;65(5):473-7

Neoadjuvant methotrexate, vinblastine, doxorubicin, and cisplatin for locally advanced transitional cell carcinoma of the bladder. Miller RJ Jr, et al. **Cancer** 1990 Jan 15; 65(2):207-10

Secondary hematologic neoplasm after intravesical chemotherapy for superficial bladder carcinoma. Sonneveld P, et al. **Cancer** 1990 Jan 1;65(1):23-5

Good tolerance of weekly oral idarubicin: (4-demethoxydaunorubicin): a phase I study with pharmacology. Hochster H, et al. **Cancer Chemother Pharmacol** 1990;26(4):297-300

ThioTEPA pharmacokinetics during intravesical chemotherapy and the influence of Tween 80. Masters JR, et al. **Cancer Chemother Pharmacol** 1990;25(4):267-73

Long-term experience with integral photodynamic therapy of TIS bladder carcinoma. Jocham D, et al. **Ciba Found Symp** 1989;146:198-205; discussion 205-8

Development and characterization of cisplatin-resistant human testicular and bladder tumour cell lines. Walker MC, et al. **Eur J Cancer** 1990;26(6):742-7

A multi-centre phase two study of intravesical epirubicin in the treatment of superficial bladder tumour. Cumming JA, et al. **Eur Urol** 1990;17(1):20-2

Long-term versus short-term doxorubicin hydrochloride instillation after transurethral resection of superficial bladder cancer. Flamm J. **Eur Urol** 1990;17(2):119-24

Selective chemoprophylaxis guided by multifactorial analysis in superficial bladder cancer. Vera-Donoso CD, et al. **Eur Urol** 1990;17(3):219-22

Systemic chemotherapy in tumor-bearing rats using high-dose cis-diamminedichloroplatinum(II) with low nephrotoxicity in combination with angiotensin II and sodium thiosulfate. Kobayashi H, et al. **Int J Cancer** 1990 May 15;45(5):940-4

Monitoring of interferon treatment in patients with renal cell carcinoma and bladder carcinoma by oligo-A synthetase assay and determination of immunological parameters. Grups JW, et al. **J Biol Regul Homeost Agents** 1989 Jul-Sep;3(3):98-101

Low dose intermittent 5-fluorouracil, epirubicin and cyclophosphamide (FEC) in poor risk patients with advanced transitional cell bladder cancer: a pilot study. Lelli G, et al. **J Chemother** 1989 Aug;1(4):269-71

Diels-Alder adducts of vinyl porphyrins: synthesis and in vivo photodynamic effect against a rat bladder tumor. Morgan AR, et al. **J Med Chem** 1990 Apr;33(4):1258-62

Escalated therapy for refractory urothelial tumors: methotrexate-vinblastine-doxorubicin-cisplatin plus unglycosylated recombinant human granulocyte-macrophage colony-stimulating factor. Logothetis CJ, et al. **J Natl Cancer Inst** 1990 Apr 18; 82(8):667-72

Methylene blue and the photodynamic therapy of superficial bladder cancer [news] Williams JL, et al. **J Photochem Photobiol B** 1989 Nov;4(2):229-32

RE: Complications of whole bladder dihematoporphyrin ether photodynamic therapy [letter] **J Urol** 1990 Sep; 144(3):750-1

Bladder wall calcification after intravesical mitomycin C treatment of superficial bladder cancer. Drago PC, et al. **J Urol** 1989 Oct;142(4):1071-2

Neoadjuvant intra-arterial chemotherapy in the treatment of advanced transitional cell carcinoma of the bladder: results and followup. Galetti TP, et al. **J Urol** 1989 Nov; 142(5):1211-4; discussion 1214-5

Comparison of different schedules of cytostatic intravesical instillations in patients with superficial bladder carcinoma: final evaluation of a prospective multicenter study with 419 patients. Huland H, et al. **J Urol** 1990 Jul;144(1):68-71; discussion 71-2

Dipyridamole-cisplatin potentiation: enhanced in vivo cytotoxicity in xenograft models of human testicular and bladder cancers. Keane TE, et al. **J Urol** 1990 Oct; 144(4):1004-9

The effect of verapamil on a multi-drug resistant bladder carcinoma cell line and its potential as an intravesical chemotherapeutic agent. Long JP Jr, et al. **J Urol** 1990 May;143(5):1053-6

Treatment system for whole bladder wall photodynamic therapy with in vivo monitoring and control of light dose rate and dose. Marynissen JP, et al. **J Urol** 1989 Nov; 142(5):1351-5

Phase I and pharmacology study of intravesical mitoxantrone for recurrent superficial bladder tumors. Stewart DJ, et al. **J Urol** 1990 Apr;143(4):714-6

Topical mitomycin C therapy for carcinoma in situ of the bladder: a followup. Stricker PD, et al. **J Urol** 1990 Jan; 143(1):34-5; discussion 35-6

Microscopic changes of the urinary bladder in patients with primary tumors locally treated with Corynebacterium parvum. Raica M, et al. **Morphol Embryol (Bucur)** 1989 Oct-Dec;35(4):275-7

Current status of chemotherapy for urothelial tract tumors. Sternberg CN, et al. **Oncology (Williston Park)** 1987 Jul; 1(5):41-50, 60 (53 ref.)

Metallopurpurins and light: effect on transplantable rat bladder tumors and murine skin. Morgan AR, et al. **Photochem Photobiol** 1990 May;51(5):589-92

Intraarterial chemotherapy for bladder cancer. Jacobs SC, et al. **Prog Clin Biol Res** 1990;350:101-6

Phase I/II study of intravesical epirubicin in patients with carcinoma in situ of the bladder. Kurth KH, et al. **Prog Clin Biol Res** 1990;350:41-59

The impact of chemotherapy on the survival of patients with metastatic urothelial tumors. Logothetis CJ, et al. **Prog Clin Biol Res** 1990;350:107-14

The evolution of active chemotherapy in metastatic and locally advanced bladder cancer. Newling DW. **Prog Clin Biol Res** 1990;350:115-27

Overview of systemic treatment of bladder cancer and results with M-VAC therapy. Yagoda A. **Prog Clin Biol Res** 1990; 350:87-99 (18 ref.)

Intravesical mitomycin C for carcinoma in situ of the urinary bladder. Hellsten S, et al. **Scand J Urol Nephrol** 1990; 24(1):35-8

Neoadjuvant therapy of carcinoma of the bladder. deVere White RW. **Semin Urol** 1990 Aug;8(3):197-200

Neoadjuvant chemotherapy for bladder cancer: the MSKCC experience. Fair WR, et al. **Semin Urol** 1990 Aug;8(3):190-6

Bladder-sparing approach in the treatment of invasive bladder cancer. Wajsman Z, et al. **Semin Urol** 1990 Aug; 8(3):210-5

Partial response to lonidamine of advanced bladder carcinoma: a case report. Lo Re G, et al. **Tumori** 1990 Jun 30;76(3):290-1

Neoadjuvant therapy for locally invasive bladder cancer. Okajima E, et al. **Urol Int** 1989;44(6):332-7

Adjuvant systemic chemotherapy after complete transurethral resection of superficially invasive bladder carcinoma (T1 G3-4 and T2 G2-4). Rübben H, et al. **Urol Int** 1990;45(2):78-83

Experimental studies of chemosensitivity testing of urothelial cancer grown in nude mice. Kyriazis AP, et al. **Urol Res** 1990;18(3):201-5

Dose response relationship of methotrexate in combination with cisplatin in murine bladder cancer. Brausi M, et al. **Urology** 1990 Mar;35(3):253-6

Long-term follow-up in patients treated with methotrexate, vinblastine, doxorubicin, and cisplatin (M-VAC) for transitional cell carcinoma of urinary bladder: cause for concern. Connor JP, et al. **Urology** 1989 Dec;34(6):353-6

Effect of systemic glutathione depletion by buthionine sulfoximine on sensitivity of murine bladder cancer to cytotoxic agents. Lee KE, et al. **Urology** 1989 Dec; 34(6):376-80

[The M-VEC chemotherapy of advanced bladder tumors] Kumanov Kh, et al. **Khirurgiia (Sofiia)** 1989;42(6):39-45 (Eng. Abstr.) **(Bul)**

[Cases of the regression of advanced bladder tumors (T2-T4) after the use of chemotherapy] Kumanov Kh, et al. **Khirurgiia (Sofiia)** 1990;43(1):87-93 (Eng. Abstr.) **(Bul)**

[Adjuvant chemotherapy with biocisplatin, methotrexate and biocarbazine in advanced bladder tumors] Ormanov I, et al. **Khirurgiia (Sofiia)** 1989;42(6):45-8 (Eng. Abstr.) **(Bul)**

[Improved argon laser photodynamic therapy for superficial bladder tumor--experimental research and clinical analysis] Guo YC. **Chung Hua Chung Liu Tsa Chih** 1990 Jan; 12(1):75-7 (Eng. Abstr.) **(Chi)**

[Photodynamic therapy with hematoporphyrin derivative for transitional-cell carcinoma of the urinary bladder--report of 30 cases] Tian ME. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):304-6 (Eng. Abstr.) **(Chi)**

[Effects of mitomycin C perfusion after bladder tumor surgery] Zhou CL. **Chung Hua Wai Ko Tsa Chih** 1989 Nov; 27(11):654-5, 700 (Eng. Abstr.) **(Chi)**

[Superficial bladder tumors. Results of preventive treatment of recurrence by intravesical instillation of BCG] Charbit L, et al. **Ann Med Interne (Paris)** 1989;140(8):695-7 (Eng. Abstr.) **(Fre)**

[Infiltrating tumors of the bladder. Local response to systemic platinum-based chemotherapy] Boccon-Gibod L, et al. **Ann Urol (Paris)** 1989;23(4):285-8 (Eng. Abstr.) **(Fre)**

[The course of 203 superficial urothelial malignant tumors of the bladder during conservative treatment] de Jong Z, et al. **Ann Urol (Paris)** 1989;23(4):269-74 (Eng. Abstr.) **(Fre)**

[Adjuvant chemotherapy using adriamycin and cisplatin in infiltrating cancer of the bladder. Prospective study of 49 cases] Azab M, et al. **J Urol (Paris)** 1989;95(8):459-63 (Eng. Abstr.) **(Fre)**

[Chemotherapy by endovesical instillation. Its value in the treatment of superficial tumors of the bladder] Le Duc A. **Pathol Biol (Paris)** 1989 Nov;37(9):1072 **(Fre)**

[Intravesical treatment of superficial tumors of the bladder (editorial)] Boccon-Gibod L. **Presse Med** 1989 Oct 21; 18(34):1685-6 **(Fre)**

[Which superficial bladder tumors should be treated directly with intravesical chemotherapy? (letter)] De Jong Z, et al. **Presse Med** 1989 Sep 23;18(29):1437-8 **(Fre)**

[Possibilities and limits of chemotherapy in multi-modality treatment of urinary bladder cancer] Rüther U, et al. **Verh Dtsch Ges Inn Med** 1989;95:544-52 **(Ger)**

[Photochemotherapy of experimental tumors in animals using various photosensitizers] König K, et al. **Z Urol Nephrol** 1989 Nov;82(11):601-7 (Eng. Abstr.) **(Ger)**

[Neoadjuvant chemotherapy in locally advanced bladder cancer. Proceedings of the 36th meeting of Lombard Urologists. Milan, 25 November 1989] **Arch Ital Urol Nefrol Androl** 1990 Jun;62(2):215-74 **(Ita)**

[Neoadjuvant chemotherapy with MVC (methotrexate, vinblastine, cisplatin)in the treatment of infiltrating transitional carcinoma of the bladder] Campo B, et al. **Arch Ital Urol Nefrol Androl** 1990 Jun;62(2):237-42 (16 ref.) (Eng. Abstr.) **(Ita)**

[Neoadjuvant chemotherapy of infiltrating carcinoma of the bladder: our experience] Graziotti P, et al. **Arch Ital Urol Nefrol Androl** 1990 Jun;62(2):223-9 (Eng. Abstr.) **(Ita)**

[Neoadjuvant systemic chemotherapy with VMC (vinblastine, methotrexate and cisplatin) in locally advanced carcinoma of the bladder] Maffezzini M, et al. **Arch Ital Urol Nefrol Androl** 1990 Jun;62(2):219-21 (Eng. Abstr.) **(Ita)**

[Neoadjuvant chemotherapy of locally advanced tumors of the bladder: introduction] Mandressi A. **Arch Ital Urol Nefrol Androl** 1990 Jun;62(2):215-7 (Eng. Abstr.) **(Ita)**

[Neoadjuvant chemotherapy using methotrexate and cisplatin in locally advanced urothelial cancer of the bladder] Pizzocaro G, et al. **Arch Ital Urol Nefrol Androl** 1990 Jun; 62(2):231-5 (Eng. Abstr.) **(Ita)**

[Neoadjuvant chemotherapy using cisplatin (CDDP) and methotrexate (MTX) in carcinoma of the bladder] Rocco F, et al. **Arch Ital Urol Nefrol Androl** 1990 Jun;62(2):249-55 (Eng. Abstr.) **(Ita)**

[Neoadjuvant chemotherapy of locally advanced tumors of the bladder: preliminary experience] Ruoppolo M, et al. **Arch Ital Urol Nefrol Androl** 1990 Jun;62(2):243-8 (Eng. Abstr.) **(Ita)**

[Adjuvant M-VEC in advanced urotheliomas of the bladder] Cocimano V, et al. **Minerva Urol Nefrol** 1989 Jul-Sep; 41(3):195-7 (Eng. Abstr.) **(Ita)**

[Intra-arterial infusion chemotherapy with [Sar1, Ile8] angiotensin II in bladder cancer] Morita T, et al. **Gan To Kagaku Ryoho** 1989 Oct;16(10):3417-22 (Eng. Abstr.) **(Jpn)**

[Intra-arterial infusion chemotherapy in bladder cancer] Sumiyoshi Y, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1697-700 (Eng. Abstr.) **(Jpn)**

[A case of advanced bladder cancer successfully treated with intraarterial chemotherapy] Takahashi Y, et al. **Gan To Kagaku Ryoho** 1989 Dec;16(12):3801-4 (Eng. Abstr.) **(Jpn)**

[Clinical and pathological evaluations of methotrexate, vinblastine, adriamycin and cisplatin (M-VAC) chemotherapy for advanced urothelial cancers] Takenaka A, et al. **Gan To Kagaku Ryoho** 1990 Sep;17(9):1909-15 (Eng. Abstr.) **(Jpn)**

[M-VAC chemotherapy for patients with lymph node metastases and/or locally advanced bladder carcinoma] Igawa M, et al. **Hinyokika Kiyo** 1989 Aug;35(8):1323-7 (Eng. Abstr.) **(Jpn)**

[Clinical study of intravesical instillation therapy of superficial bladder tumor--combination therapy of mitomycin C, adriamycin, peplomycin and cytosine arabinoside] Kinoshita N, et al. **Hinyokika Kiyo** 1990 Mar; 36(3):257-63 (Eng. Abstr.) **(Jpn)**

[Neoadjuvant chemoradiotherapy in locally invasive transitional cell carcinoma of the urinary bladder: early results of PVB and CAP therapy] Momose H, et al. **Hinyokika Kiyo** 1989 May;35(5):781-8 (Eng. Abstr.) **(Jpn)**

[A case report of retrovesical tumor effectively responsive to chemotherapy] Saito K, et al. **Hinyokika Kiyo** 1989 Jul; 35(7):1213-5 (Eng. Abstr.) **(Jpn)**

[Basal studies on combination of Chinese medicine in cancer chemotherapy: protective effects on the toxic side effects of CDDP and antitumor effects with CDDP on murine bladder tumor (MBT-2)] Ebisuno S, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jun 20;24(6):1305-12

(Eng. Abstr.) (Jpn)
[Long-term results of M-VAC for the treatment of advanced urothelial cancer] Tachibana M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Nov;80(11):1644–50 (Eng. Abstr.) (Jpn)
[The treatment of superficial bladder carcinoma with intravesical HPC-adriamycin and verapamil] Ueda K. **Nippon Hinyokika Gakkai Zasshi** 1990 Mar;81(3):461–4 (Eng. Abstr.) (Jpn)
[Usefulness of ATP-sensitivity-assay of intravesical instillation therapy of anti-cancer agents for superficial bladder cancer] Yamashita M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):554–60 (Eng. Abstr.) (Jpn)
[Treatment with a new preparation using peplomycin emulsion in hydroxypropylcellulosum. Analysis of immediate response in sixty-two patients with bladder cancer] Yasumoto R, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec;80(12):1728–32 (Eng. Abstr.) (Jpn)
[Polychemotherapy treatment with cisplatin, adriamycin, 5-fluorouracil (FAP) and cisplatin, adriamycin and cyclophosphamide (CISCA) in advanced transitional carcinoma of the bladder] Sánchez Romero JA, et al. **Actas Urol Esp** 1989 Jul-Aug;13(4):240–2 (7 ref.) (Eng. Abstr.) (Spa)
[Mitomycin C in the topical treatment of superficial neoplasms of the bladder] Milani C, et al. **Arch Esp Urol** 1989 Oct;42(8):761–7 (Eng. Abstr.) (Spa)
[Role of systemic chemotherapy in the treatment of infiltrating cancer of the bladder (editorial)] Gardella S, et al. **Med Clin (Barc)** 1989 Dec 2;93(18):693–5 (Spa)

ENZYMOLOGY

Expression of glutathione-related enzymes in human bladder cancer cell lines. Singh SV, et al. **Biochem Pharmacol** 1990 Jun 1;39(11):1817–20
Protease and plasminogen activator activity in human bladder carcinoma. Gorelik U, et al. **Br J Urol** 1990 Aug; 66(2):170–4
Glutathione-S-transferase activity in human superficial transitional cell carcinoma of the bladder. Comparison with healthy controls. Lafuente A, et al. **Cancer** 1990 May 1; 65(9):2064–8
Changes in aldehyde dehydrogenase during rat urinary bladder carcinogenesis. Campbell P, et al. **Carcinogenesis** 1989 Nov;10(11):2081–7
Galactosyl transferase in benign and neoplastic human bladder mucosa. Hagen-Cook K, et al. **Surg Forum** 1978; 29:627–9

EPIDEMIOLOGY

Investigation of a bladder cancer cluster in northwestern Illinois. Mallin K. **Am J Epidemiol** 1990 Jul;132(1 Suppl):S96–106
Occupational risks of bladder cancer among white women in the United States. Silverman DT, et al. **Am J Epidemiol** 1990 Sep;132(3):453–61
Risk for cancer of the urinary bladder among hairdressers in the Nordic countries. Skov T, et al. **Am J Ind Med** 1990; 17(2):217–23
A deficit of bladder cancer in an Asian community in the UK. McLoughlin J, et al. **Br J Clin Pract** 1990 May; 44(5):193–5
Bladder tumours in Enugu, Nigeria. Aghaji AE, et al. **Br J Urol** 1989 Oct;64(4):399–402
Human exposure to endogenous N-nitroso compounds: quantitative estimates in subjects at high risk for cancer of the oral cavity, oesophagus, stomach and urinary bladder. Bartsch H, et al. **Cancer Surv** 1989;8(2):335–62 (82 ref.)
Cigarette smoking and bladder cancer. D'Avanzo B, et al. **Eur J Cancer** 1990;26(6):714–8
Diesel exhaust exposure and bladder cancer risk. Iyer V, et al. **Eur J Epidemiol** 1990 Mar;6(1):49–54
Risk of bladder cancer by source and type of tobacco exposure: a case-control study. Burch JD, et al. **Int J Cancer** 1989 Oct 15;44(4):622–8
Vitamin A supplements, fried foods, fat and urothelial cancer. A case-referent study in Stockholm in 1985–87. Steineck G, et al. **Int J Cancer** 1990 Jun 15;45(6):1006–11
Increased risk of urothelial cancer in Stockholm during 1985–87 after exposure to benzene and exhausts. Steineck G, et al. **Int J Cancer** 1990 Jun 15;45(6):1012–7
Occupation and the risk of bladder cancer. la Vecchia C, et al. **Int J Epidemiol** 1990 Jun;19(2):264–8
Incidence of cancer among welders and other workers in a Norwegian shipyard. Melkild A, et al. **Scand J Work Environ Health** 1989 Dec;15(6):387–94
On the regression analysis of tumour recurrence rates. Seeber GU. **Stat Med** 1989 Nov;8(11):1363–9
Leiomyoma of bladder. Report of 2 cases and demonstration of ultrasonic appearance. Kabalin JN, et al. **Urology** 1990 Mar;35(3):210–2
Transitional cell carcinoma of bladder in children. Khasidy LR, et al. **Urology** 1990 Feb;35(2):142–4 (14 ref.)
[Two cases of ureteral tumors occurring after operation on bladder tumors] Hirano A, et al. **Hinyokika Kiyo** 1990 Mar; 36(3):337–41 (Eng. Abstr.) (Jpn)
[Epidemiological investigation on bladder cancer and occupations] Obata K, et al. **Hinyokika Kiyo** 1989 Dec; 35(12):2057–61 (Eng. Abstr.) (Jpn)
[Occupational bladder cancer in Japan and the world] Ohno Y. **Hinyokika Kiyo** 1989 Dec;35(12):1997–2002 (Eng. Abstr.) (Jpn)
[Factors influencing the recurrence rate and metastatic rate of bladder cancer] Kondo I, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Aug;80(8):1168–74 (Eng. Abstr.) (Jpn)
[Clinico-statistical study on bladder tumor] Nakao M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jul;80(7):1037–44 (Eng. Abstr.) (Jpn)
[Statistical evaluation of determinants of progression of superficial bladder cancer by proportional hazards model] Takashi M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):116–21 (Eng. Abstr.) (Jpn)
[The incidence of bladder tumor recurrences after transurethral resection during combined treatment] Matveev BP, et al. **Urol Nefrol (Mosk)** 1990 May-Jun; (3):53–6 (Eng. Abstr.) (Rus)
[Leiomyosarcoma of the bladder: presentation of 2 cases] Páramo PG. **Arch Esp Urol** 1989 Apr;42(3):278–80 (19 ref.) (Spa)

ETIOLOGY

The Copenhagen case-control study of bladder cancer. V. Review of the role of urinary-tract infection. Kjaer SK, et al. **Acta Oncol** 1989;28(5):631–6 (33 ref.)
Smoking, alcohol, occupation, and hair dye use in cancer of the lower urinary tract. Nomura A, et al. **Am J Epidemiol** 1989 Dec;130(6):1159–63
Squamous cell carcinoma in a patient on clean intermittent self-catheterisation. Sene AP, et al. **Br J Urol** 1990 Feb; 65(2):213–4
Selenium, lycopene, alpha-tocopherol, beta-carotene, retinol, and subsequent bladder cancer. Helzlsouer KJ, et al. **Cancer Res** 1989 Nov 1;49(21):6144–8
Epidemiological case-control study on the etiology of bladder cancer in Turkey. Akdaş A, et al. **Eur Urol** 1990; 17(1):23–6
Tobacco and bladder cancer in males: increased risk for inhalers and smokers of black tobacco. Clavel J, et al. **Int J Cancer** 1989 Oct 15;44(4):605–10
Occupation and bladder cancer in Spain: a multi-centre case-control study. González CA, et al. **Int J Epidemiol** 1989 Sep;18(3):569–77
Pre-neoplastic changes in rat urothelium following portacaval anastomosis. Mori K, et al. **J Surg Oncol** 1989 Oct;42(2):80–91
Adenocarcinoma development in the trigone 34 years after trigonocolonic urinary diversion for exstrophy of the bladder. Mortensen PB, et al. **J Urol** 1990 Oct;144(4):980–2
In situ freezing of the rat urinary bladder: DNA adduct formation in the bladder epithelium demonstrated by 32P-postlabeling assay. Hasegawa R, et al. **Jpn J Cancer Res** 1989 Sep;80(9):826–32
Biochemical epidemiology: uses in the study of human carcinogenesis. Vineis P, et al. **Teratogenesis Carcinog Mutagen** 1990;10(3):231–7 (15 ref.)
Signet ring cell adenocarcinoma of bladder secondary to long-term catheterization. Goble NM, et al. **Urology** 1990 Mar;35(3):279–81
[Postoperative pseudosarcomas of the genitourinary tract. A diagnostic trap. Presentation of 4 cases of which 2 were studied immunohistochemically and review of the literature] Guillou L, et al. **Ann Pathol** 1989;9(5):340–5 (32 ref.) (Eng. Abstr.) (Fre)
[3 experimental models applied to the study of urothelial tumors of the bladder] Rambeaud JJ, et al. **Ann Urol (Paris)** 1990;24(3):185–9 (34 ref.) (Eng. Abstr.) (Fre)
[Vesical endometriosis after cesarean section (letter)] Rossi D, et al. **Presse Med** 1990 Feb 24;19(7):334–5 (Fre)
[Case-control study for the diagnosis of occupational factors in bladder cancer] Frentzel-Beyme R, et al. **Soz Praventivmed** 1989;34(6):249–55 (Eng. Abstr.) (Ger)
[Prevention of occupational tumors: an update] Vineis P, et al. **Med Lav** 1989 Sep-Oct;80(5):371–80 (25 ref.) (Eng. Abstr.) (Ita)
[Occupation and tobacco as risk factors in urinary bladder cancer] Nishio Y, et al. **Hinyokika Kiyo** 1989 Dec; 35(12):2041–8 (Eng. Abstr.) (Jpn)
[Endometriosis of the bladder and vesico-uterine fistula as complications of cesarean section] Zięba Z, et al. **Ginekol Pol** 1989 May;60(5):297–9 (Eng. Abstr.) (Pol)
[The pathogenesis of urothelial cancer] Marković B, et al. **Urol Nefrol (Mosk)** 1990 May-Jun;(3):42–8 (33 ref.) (Rus)
[Cancer of the urothelium: background and characteristics of the care process related to the prognosis in a series of clinical cases] Villalbí JR, et al. **Actas Urol Esp** 1990 Mar-Apr;14(2):89–91 (Eng. Abstr.) (Spa)
[Cancer of the bladder and hemodialysis] De Sala O'Shea E, et al. **Arch Esp Urol** 1990 May;43(4):359–63 (17 ref.) (Eng. Abstr.) (Spa)
[Brunn's nests as a cause of benign tumor of the bladder in children] Rodó Salas J, et al. **Arch Esp Urol** 1990 Jun; 43(5):559–60 (Eng. Abstr.) (Spa)

GENETICS

Detection of numerical chromosome aberrations in bladder cancer by in situ hybridization. Hopman AH, et al. **Am J Pathol** 1989 Dec;135(6):1105–17
Flow cytometric DNA analysis after immunoselection of bladder tumor cells with monoclonal antibody DU83.21. Wright GL Jr, et al. **Cancer** 1990 Sep 15;66(6):1242–52
5q deletion. The sole chromosome change in a carcinoma of the bladder. Atkin NB, et al. **Cancer Genet Cytogenet** 1990 May;46(1):129–31
Chromosome instability in bladder carcinoma patients. Barrios L, et al. **Cancer Genet Cytogenet** 1990 Oct 1; 49(1):107–11
Distribution of marker chromosomes in relation to histologic grade in bladder cancer. Milašin J, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):135–42
Allelic losses of chromosomes 9, 11, and 17 in human bladder cancer. Tsai YC, et al. **Cancer Res** 1990 Jan 1;50(1):44–7
DNA minisatellites demonstrate somatic DNA changes in most human bladder cancers. Uchida T, et al. **Cytogenet Cell Genet** 1990;53(1):61–3
Upper urothelial tumours and the Balkan nephropathy. Inference from the study of a family pedigree. Radovanovic Z, et al. **Eur J Cancer** 1990 Mar;26(3):391–2
Genetically determined N-acetylation and oxidation capacities in Japanese patients with non-occupational urinary bladder cancer. Horai Y, et al. **Eur J Clin Pharmacol** 1989;37(6):581–7
Human-mouse hybrids carrying fragments of single human chromosomes selected by tumor growth. Porteous DJ, et al. **Genomics** 1989 Nov;5(4):680–4
Centromere splitting in bladder cancer. Berrozpe G, et al. **Hum Genet** 1990 Jul;85(2):184–6
EGF stimulates anchorage-independent growth of a human bladder carcinoma cell line (KU1) with an amplified and over-expressed EGF receptor gene. Ishikawa J, et al. **Int J Cancer** 1989 Dec 15;44(6):1000–4
Characterization of squamous cell bladder tumors by flow cytometric deoxyribonucleic acid analysis: a report of 100 cases. Shaaban AA, et al. **J Urol** 1990 Oct;144(4):879–83
Point mutations of c-ras genes in human bladder cancer and kidney cancer. Nagata Y, et al. **Jpn J Cancer Res** 1990 Jan;81(1):22–7
ras induced lesions in a heterotopic mouse bladder. Wagner HE, et al. **Oncogene** 1990 Apr;5(4):557–63
DNA replication in experimental rat bladder tumours: immunohistochemical detection of bromodeoxyuridine labelled nuclei. Langkilde NC, et al. **Scand J Urol Nephrol Suppl** 1989;125:133–9
Preneoplastic lesions induced by myc and src oncogenes in reconstituted mouse bladder. Wagner HE, et al. **Surgery** 1990 Aug;108(2):146–52; discussion 152–3
DNA ploidy and S phase fraction in human bladder cancer. Relation to survival and histological grade (WHO). Lipponen PK, et al. **Urol Int** 1990;45(1):4–9
[Significance and application of DNA ploidy of bladder cancer celis in studying the malignancy of tumors] Cao S. **Chung Hua I Hsueh Tsa Chih** 1990 Mar;70(3):143–5 (Chi)
[The acetylator phenotype in patients with urinary bladder cancer] Wich H, et al. **Z Urol Nephrol** 1989 Nov; 82(11):597–9 (Eng. Abstr.) (Ger)
[Cytogenetic analysis of human urinary bladder cancer] Moriyama M, et al. **Rinsho Byori** 1989 Feb;Spec No 80:252–7 (Jpn)

IMMUNOLOGY

Distribution of basement membrane antigens in bladder carcinomas: an additional prognostic parameter. Immunohistochemical study. Alampi G, et al. **Arch Anat Cytol Pathol** 1989;37(5–6):224–30
Immunohistochemical and immunocytochemical study of bladder carcinomas using the epithelium-specific, tumour-associated monoclonal antibodies HMFG1 and AUA1. Anagnostaki E, et al. **Br J Cancer Suppl** 1990 Jul; 10:52–6
Natural killer cell activity in workers exposed to benzidine and beta-naphthylamine. Tanigawa T, et al. **Br J Ind Med** 1990 May;47(5):338–41
Clinical studies on cell-mediated immunity in patients with urinary bladder carcinoma: blastogenic response, interleukin-2 production and interferon-gamma production of lymphocytes. Ikemoto S, et al. **Br J Urol** 1990 Apr; 65(4):333–8
Defective interleukin-1 production of monocytes in patients with bladder cancer. Ikemoto S, et al. **Br J Urol** 1990 Feb; 65(2):181–5
Activated CD4-positive T-lymphocytes and impaired cell-mediated immunity in patients with carcinoma of the urinary bladder with schistosomiasis. Raziuddin S, et al. **Cancer** 1990 Feb 15;65(4):931–9
Recombinant human interferon gamma exerts an anti-proliferative effect and modulates the expression of human leukocyte antigens A,B,C and DR in human urothelial cell lines. Ottesen SS, et al. **Cancer Immunol Immunother** 1990;31(2):93–8
Growth-regulated surface glycoproteins of human bladder cancer. Gauthier J, et al. **Cancer Res** 1990 Jan 15; 50(2):293–8
Identification by monoclonal antibodies of an antigen shed by human bladder cancer cells. Liebert M, et al. **Cancer Res** 1989 Dec 1;49(23):6720–6
Immunochemical and biochemical characterizations of two monoclonal antibody-reacting antigens associated with human bladder carcinoma. Zhang DS, et al. **Cancer Res**

1989 Dec 1;49(23):6621–8
Role of natural killer cells in bladder tumor. Tsujihashi H, et al. **Eur Urol** 1989;16(6):444–9
Enhancement by X-ray irradiation of target cell susceptibility to natural killer cells. Mizutani Y, et al. **Immunol Lett** 1989 Sep;22(3):247–51
Increase in murine monoclonal-antibody-defined urinary antigens in patients with bladder cancer and benign urogenital disease. Masuko T, et al. **Int J Cancer** 1989 Oct 15;44(4):582–8
Expression of CD15 antigen in urinary bladder transitional cell carcinoma. Parham DM, et al. **J Clin Pathol** 1990 Jul; 43(7):541–3
The relation of HLA-DR antigen, lymphocytes and natural killer cells in human bilharzial bladder carcinoma. Mangoud AM, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2 Suppl):895–902
Biological significance of beta hCG, HLA and other membrane antigen expression on bladder tumours and their relationship to tumour infiltrating lymphocytes (TIL). Oliver RT, et al. **J Immunogenet** 1989 Aug–Oct; 16(4–5):381–90 (29 ref.)
Clinical studies on bladder tumor-associated antigen in serum of patients with bladder cancer by using monoclonal antibody and sandwich ELISA. Zhu SS, et al. **J Tongji Med Univ** 1990;10(1):48–51
Clinical significance of natural killer activity in patients with transitional cell carcinoma of the bladder. Carballido J, et al. **J Urol** 1990 Jan;143(1):29–33
Monitoring host immune response in patients with bladder cancer. Cummings KB, et al. **Surg Forum** 1978;29:625–6
Nonspecific suppressor cells in peripheral blood of patients with urologic cancers. Herr HW. **Surg Forum** 1978; 29:623–5
HLA antigens and transitional cell carcinoma of the bladder. Eryilit M, et al. **Urol Int** 1990;45(2):75–7
Urine-TPA (tissue polypeptide antigen), flow cytometry and cytology as markers for tumor invasiveness in urinary bladder carcinoma. Carbin BE, et al. **Urol Res** 1989; 17(5):269–72
Flow cytometric evaluation of Thomsen-Friedenreich antigen on transitional cell cancer using monoclonal antibody. Oda H, et al. **Urol Res** 1990;18(2):107–11
Urinary cytokines following photodynamic therapy for bladder cancer. A preliminary report. Nseyo UO, et al. **Urology** 1990 Aug;36(2):167–71
[A transitional cell carcinoma of the urinary bladder with a high level of serum CA 19-9—a case report] Saito B, et al. **Gan No Rinsho** 1990 Aug;36(9):1063–5 (Eng. Abstr.) **(Jpn)**
[A study of peripheral blood lymphocyte subsets in patients with bladder tumors] Matsuda H, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1129–34 (Eng. Abstr.) **(Jpn)**
[A study on human T cells bearing IgG-Fc receptor in patients with bladder tumor] Fujiwara T. **Nippon Hinyokika Gakkai Zasshi** 1989 Aug;80(8):1154–61 (Eng. Abstr.) **(Jpn)**
[Immunohistochemical study of tissue polypeptide antigen (TPA) in human urinary bladder tumors] Kaneko K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Oct; 80(10):1430–5 (Eng. Abstr.) **(Jpn)**
[Killer activities of peripheral blood mononuclear cells in patients with bladder cancer] Okaneya T, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):532–7 (Eng. Abstr.) **(Jpn)**
[Isoantigens ABH in bladder tumors as an indicator of malignant potential. The staining pattern by PAP method and its correlation with prognosis] Saegusa M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb;81(2):196–203 (Eng. Abstr.) **(Jpn)**

METABOLISM

Polymorphic oxidation of debrisoquine in bladder cancer. Benítez J, et al. **Ann Med** 1990 Jun;22(3):157–60
Beta human chorionic gonadotrophin in serum and urine. A marker for metastatic urothelial cancer. Iles RK, et al. **Br J Urol** 1989 Sep;64(3):241–4
Plasminogen activator regulation by transforming growth factor-beta in normal and neoplastic human urothelium. Hiti AL, et al. **Cancer Commun** 1990;2(3):123–8
Comparison of the fibronectin-binding ability and antitumor efficacy of various mycobacteria. Hudson MA, et al. **Cancer Res** 1990 Jul 1;50(13):3843–7
Modulation of IdUrd-DNA incorporation and radiosensitization in human bladder carcinoma cells. Kunugi KA, et al. **Cancer Res** 1990 Aug 15;50(16):4962–7
Clinical implications of the expression of epidermal growth factor receptors in human transitional cell carcinoma. Messing EM. **Cancer Res** 1990 Apr 15;50(8):2530–7
Binding of human factors X and Xa to HepG2 and J82 human tumor cell lines. Evidence that factor Xa binds to tumor cells independent of factor Va. Sakai T, et al. **J Biol Chem** 1990 Jun 5;265(16):9105–13
Unexpectedly high serum methotrexate levels in cystectomized bladder cancer patients with an ileal conduit treated with intermediate doses of the drug. Fossâ SD, et al. **J Urol** 1990 Mar;143(3):498–501
Growth fractions of transitional cell carcinomas of the bladder defined by the monoclonal antibody Ki-67. Okamura K, et al. **J Urol** 1990 Oct;144(4):875–8
Clinicopathological significance of immunoreactive beta-hCG production by bladder cancer. Oliver RT, et al. **Mol Biother** 1988;1(1):43–5
Alpha-2-macroglobulin is not synthesized by human urothelial cell lines in vitro. Grófová M, et al. **Neoplasma** 1990;37(2):149–58
Binding of liposomes to human bladder tumor epithelial cell lines: implications for an intravesical drug delivery system for the treatment of bladder cancer. Johnson JW, et al. **Sel Cancer Ther** 1989 Winter;5(4):147–55
Expression of ras p21 oncogene product on human bladder tumors. Moriyama N, et al. **Urol Int** 1989;44(5):260–3
Immunohistochemical distribution of epithelial membrane antigen in bladder carcinomas as detected with a monoclonal antibody. Asamoto M, et al. **Urol Res** 1989; 17(5):273–7
Involucrin expression in urinary bladder carcinoma. Asamoto M, et al. **Urol Res** 1989;17(5):279–83
Detection of tumor-associated membrane proteins in prostate and bladder carcinomas by means of protein blotting. Ford SA, et al. **Urol Res** 1989;17(5):305–10
Interferon receptors on the surface of interferon-sensitive and interferon-resistant urothelial carcinomas. Grups JW, et al. **Urol Res** 1990;18(2):119–22
[Pharmacokinetic study of 4-(hydroxycarbophenyl) retinamide (RII) in cancer patients] Gu QM. **Chung Hua Chung Liu Tsa Chih** 1989 Nov;11(6):407–9 (Eng. Abstr.) **(Chi)**
[Infiltration and tissue concentration of intravesically instilled (2"R)-4'-O-tetrahydropyranyladriamycin or adriamycin in rat bladder tumor induced by BBN] Masuda H, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):577–82 (Eng. Abstr.) **(Jpn)**
[Effects of LH-RH analogue on pituitary-testicular axis and bladder carcinogenesis of BBN administered male rats] Matsuki K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jul;80(7):1051–8 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

[Bladder carcinoma in situ which harbored human papilloma virus. A case report] Kitamura T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Aug;80(8):1224–7 (Eng. Abstr.) **(Jpn)**

MORTALITY

SMRFIT: a Statistical Analysis System (SAS) program for standardized mortality ratio analyses and Poisson regression model fits in community disease cluster investigations. Hanrahan LP, et al. **Am J Epidemiol** 1990 Jul;132(1 Suppl):S116–22
Computerisation of urothelial carcinoma records: 16 years' experience with the TNM system. Hendry WF, et al. **Br J Urol** 1990 Jun;65(6):583–8
Tobacco smoking, coffee, cocoa and tea consumption in relation to mortality from urinary bladder cancer in Italy. Pannelli F, et al. **Eur J Epidemiol** 1989 Sep;5(3):392–7
Factors affecting survival in primary superficial bladder cancer. Flamm J, et al. **Eur Urol** 1990;17(2):113–8
Deoxyribonucleic acid flow cytometry on primary adenocarcinoma of the bladder: an analysis of 36 cases. Grignon DJ, et al. **J Urol** 1989 Nov;142(5):1206–10
[Survival rate of bladder tumors—an analysis of 2304 patients with bladder tumors in the Tokai Urological Cancer Registry] Suzuki K, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):96–102 (Eng. Abstr.) **(Jpn)**
[Effect of complementary treatment (radiotherapy, chemotherapy) on the survival of patients with T3 tumors of the bladder treated with radical surgery] Zudaire Bergera JJ, et al. **Actas Urol Esp** 1989 Nov–Dec; 13(6):425–31 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Three new primary pelvic carcinomas in a patient following radiotherapy for carcinoma of the cervix. Case report. Gatzen C, et al. **Acta Chir Scand** 1990 Feb;156(2):183–6
Polyomavirus infection versus high-grade bladder carcinoma. The importance of cytologic and comparative morphometric studies of plastic-embedded voided urine sediments. Boon ME, et al. **Acta Cytol** 1989 Nov–Dec; 33(6):887–93
Adenocarcinoma with a neuroendocrine component arising in the urachus. A case report. Hom JD, et al. **Acta Cytol** 1990 Mar–Apr;34(2):269–74
Cavitary pulmonary metastases in transitional cell carcinoma of urinary bladder. Alexander PW, et al. **AJR Am J Roentgenol** 1990 Mar;154(3):493–4
Aggressive bladder carcinoma in an adolescent. Report of a case with immunohistochemical, cytogenetic, and flow cytometric characterization. Scott AA, et al. **Am J Surg Pathol** 1989 Dec;13(12):1057–63
A comparative study in morphometric grading of transitional cell carcinoma of the urinary bladder. Blomjous CE, et al. **Anal Quant Cytol Histol** 1989 Dec;11(6):426–32
Evaluation of cortisone-heparin and cortisone-maltose tetrapalmitate therapies against rodent tumors. II. Pathological studies. Madarnas P, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1889–95
Different invasion capacity of NBT II and MDCK in the chick embryo chorioallantois. Schroyens W, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1665–8
A comparison between stereological estimates of mean nuclear volume and DNA flow cytometry in bladder tumours. Nielsen K, et al. **APMIS** 1989 Oct;97(10):949–56
Nucleolar organizer regions in transitional cell tumors of the bladder. Cairns P, et al. **Arch Pathol Lab Med** 1989 Nov; 113(11):1250–2
Hamartoma of the urachal remnant. Park C, et al. **Arch Pathol Lab Med** 1989 Dec;113(12):1393–5
Pelvic lipomatosis with cystitis cystica, cystitis glandularis and adenocarcinoma of the bladder: first reported case. Gordon NS, et al. **Aust N Z J Surg** 1990 Mar;60(3):229–32 (6 ref.)
Clonal analysis of a bladder cancer cell line: an experimental model of tumour heterogeneity. Brown JL, et al. **Br J Cancer** 1990 Mar;61(3):369–76
Immunohistochemical staining with monoclonal antibody 32-2B to desmosomal glycoprotein 1. Its role in the histological assessment of urothelial carcinomas. Conn IG, et al. **Br J Urol** 1990 Feb;65(2):176–80
Small bowel lymphoma invading the bladder. Dent C, et al. **Br J Urol** 1989 Oct;64(4):430
Computed tomography and magnetic resonance imaging before salvage cystectomy. Dixon AK, et al. **Br J Urol** 1990 Jul;66(1):42–6
Fractionated urinary cytology in the follow-up of bladder cancer. Hastie KJ, et al. **Br J Urol** 1990 Jul;66(1):40–1
Flow cytometry analysis of leucocytes infiltrating bladder tumours according to grade and urothelial cell DNA content. Hijazi A, et al. **Br J Urol** 1989 Sep;64(3):245–9
Comparison of morphometry and DNA flow cytometry with standard prognostic factors in bladder cancer. Lipponen PK, et al. **Br J Urol** 1990 Jun;65(6):589–97
DNA ploidy and the prognosis of stage pT1 bladder cancer. Masters JR, et al. **Br J Urol** 1989 Oct;64(4):403–8
Estimation of growth fraction in situ in human bladder cancer with bromodeoxyuridine labelling. Nemoto R, et al. **Br J Urol** 1990 Jan;65(1):27–31
Malignant lymphoma of the lower urinary tract. A clinicopathological study with review of the literature. Simpson RH, et al. **Br J Urol** 1990 Mar;65(3):254–60 (44 ref.)
Symptomatic plasmacytoma (myeloma) involving the bladder. Thornhill JA, et al. **Br J Urol** 1990 May; 65(5):542–3
Liposarcoma of the bladder. Widdison AD, et al. **Br J Urol** 1989 Dec;64(6):655–6
Pseudosarcomatous myofibroblastic proliferations in the urinary bladder of children. Albores-Saavedra J, et al. **Cancer** 1990 Sep 15;66(6):1234–41
Urethral involvement in female patients with bladder cancer. A study of 22 cystectomy specimens. De Paepe ME, et al. **Cancer** 1990 Mar 1;65(5):1237–41
A useful monoclonal antibody (BL2-10D1) to identify tumor cells in urine cytology. Longin A, et al. **Cancer** 1990 Mar 15;65(6):1412–7
Stereologic estimates of nuclear volume in noninvasive bladder tumors (Ta) correlated with the recurrence pattern. Nielsen K, et al. **Cancer** 1989 Dec 1;64(11):2269–74
The usefulness of the level of the muscularis mucosae in the staging of invasive transitional cell carcinoma of the urinary bladder. Younes M, et al. **Cancer** 1990 Aug 1;66(3):543–8
Characterization and tumorigenicity of a butyrate-adapted T24 bladder cancer cell line. Flatow U, et al. **Cancer Invest** 1989;7(5):423–35
Collagen-mediated dispersion of NBT-II rat bladder carcinoma cells. Tucker GC, et al. **Cancer Res** 1990 Jan 1;50(1):129–37
Accuracy in staging carcinoma of the bladder by magnetic resonance imaging. Johnson RJ, et al. **Clin Radiol** 1990 Apr;41(4):258–63
Urothelial grade I atypia [letter] Mincione GP. **Diagn Cytopathol** 1990;6(1):76
Clinical presentation of urinary bladder cancers in Kenya. Ndaguatha PL. **East Afr Med J** 1990 Mar;67(3):182–90
Multiple mucosal biopsies and postoperative urinary cytology in patients with bladder cancer. Gil-Salom M, et al. **Eur Urol** 1990;17(4):281–5
Primary lymphoma of the bladder: a clinicopathological study of 3 cases. Kashi SH, et al. **Eur Urol** 1990;17(2):186–8
Potential of nuclear morphometry and volume-corrected mitotic index in grading transitional cell carcinoma of the urinary bladder. Lipponen PK, et al. **Eur Urol** 1990; 17(4):333–7
Nephrogenic adenoma of the bladder in a child—immunohistochemical and lectinhistochemical investigations. Steffens J, et al. **Eur Urol** 1990;18(1):64–7
Bladder carcinosarcomas: three cases with diverse histogenesis. Bloxham CA, et al. **Histopathology** 1990 Jan; 16(1):63–7
Mixed mesonephric adenocarcinoma and transitional cell carcinoma of the bladder. Butterworth DM, et al. **Histopathology** 1990 Jun;16(6):601–4
The prognostic significance of selective nuclear morphometry in urinary bladder carcinoma. Blomjous CE, et al. **Hum Pathol** 1990 Apr;21(4):409–13
Carcinoma bladder: comparative evaluation of urinary cytology, excretory urography and ultrasonography. Ravi R, et al. **Indian J Cancer** 1990 Mar;27(1):55–61
Advanced pediatric genitourinary soft tissue sarcoma. Narang R, et al. **Indian Pediatr** 1989 Sep;26(9):944–7
Orbital metastasis, by transitional cell carcinoma of the bladder. Prats J, et al. **Int Urol Nephrol** 1989;21(4):389–92
Rearrangements of desmosomal and cytoskeletal proteins during the transition from epithelial to fibroblastoid

organization in cultured rat bladder carcinoma cells. Boyer B, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1495–509

Clinical importance of squamous metaplasia in invasive transitional cell carcinoma of the bladder [letter; comment] Coulson WF. **J Clin Pathol** 1989 Nov;42(11):1227–8 Comment on: J Clin Pathol 1989 Mar;42(3):250–3.

Observer variability in histopathological reporting of transitional cell carcinoma and epithelial dysplasia in bladders. Robertson AJ, et al. **J Clin Pathol** 1990 Jan; 43(1):17–21

Bilharzial role in staging bladder carcinoma histopathological–transurethral sonography and computerized tomography. Mangoud AM, et al. **J Egypt Soc Parasitol** 1990 Jun;20(1):273–9

Histopathology of N–methyl–N–nitrosourea–induced mesenchymal tumours of the rat urinary bladder. Kunze E, et al. **J Exp Pathol (Oxford)** 1990 Jun;71(3):337–58

Hand metastases from urothelial tumor. Heymans M, et al. **J Hand Surg [Am]** 1990 May;15(3):509–11

Carcinoma of the prostate simulating primary bladder cancer. Amin M, et al. **J Ky Med Assoc** 1990 Jan;88(1):13–6

Carcinomatous meningitis from transitional cell carcinoma of the bladder: case report. Hussein AM, et al. **J Neurooncol** 1989 Sep;7(3):255–60

Small urothelial carcinoma: diagnosis and treatment by cold forceps biopsy. Bianchi G, et al. **J Urol** 1990 Oct; 144(4):872–4

Computerized morphonuclear cell image analyses of malignant disease in bladder tissues. de Prez C, et al. **J Urol** 1990 Apr;143(4):694–9

Multi–drug resistance of a doxorubicin–resistant bladder cancer cell line. Floyd JW, et al. **J Urol** 1990 Jul; 144(1):169–71

Neurofibromatosis: bladder involvement with malignant degeneration. Hulse CA. **J Urol** 1990 Sep;144(3):742–3

Ureteral stump transitional cell carcinoma in a patient with recurrent superficial bladder cancer: an argument for complete nephroureterectomy in selected patients. Klee LW, et al. **J Urol** 1990 Oct;144(4):972–3 (9 ref.)

Re: The importance of marker chromosomes in superficial transitional cell carcinoma of the bladder: 50 patients followed up to 17 years [letter] Kleer E, et al. **J Urol** 1989 Nov;142(5):1333

Clonal growth requirements of human bladder tumor cell lines. Niell HB, et al. **J Urol** 1990 May;143(5):1049–52

Nephrogenic adenoma of the bladder in children. Nold SR, et al. **J Urol** 1989 Dec;142(6):1545–7

Prediction of lymph node metastases in bladder carcinoma with deoxyribonucleic acid flow cytometry. Shaaban AA, et al. **J Urol** 1990 Oct;144(4):884–7

Cell proliferation of human bladder tumors. Tsujihashi H, et al. **J Urol** 1989 Oct;142(4):1113–6

Endometrioid adenosarcoma of the bladder arising from endometriosis. Vara AR, et al. **J Urol** 1990 Apr; 143(4):813–5

Mechanisms of human bladder tumor invasion: role of protease cathepsin B. Weiss RE, et al. **J Urol** 1990 Sep; 144(3):798–804

Photoinactivation of bladder tumor cells by methylene blue: study of a variety of tumor and normal cells. Yu DS, et al. **J Urol** 1990 Jul;144(1):164–8

Cell lineages and differentiation programs in epidermal, urothelial and hepatic tissues and their neoplasms. Marceau N. **Lab Invest** 1990 Jul;63(1):4–20 (163 ref.)

Use of Ulex europaeus agglutinin I (UEAI) to distinguish vascular and "pseudovascular" invasion in transitional cell carcinoma of bladder with lamina propria invasion. Larsen MP, et al. **Mod Pathol** 1990 Jan;3(1):83–8

Correlation of cytokeratin patterns with histopathology during neoplastic progression in the rat urinary bladder. Reedy EA, et al. **Pathobiology** 1990;58(1):15–27

Potential of morphometry in grading transitional cell carcinoma of the urinary bladder. Lipponen P, et al. **Pathol Res Pract** 1989 Nov;185(5):617–20

Test and teach. Number Sixty. Diagnosis: Rhabdomyosarcoma presenting in the bone marrow. Ng CS, et al. **Pathology** 1989 Apr;21(2):88–9, 150–1

Fibroblast–mediated acceleration of human epithelial tumor growth in vivo. Camps JL, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):75–9

Bladder cancer: staging with CT and MR imaging. Husband JE, et al. **Radiology** 1989 Nov;173(2):435–40

Volume corrected mitotic index (M/V index) in human bladder cancer; relation to histological grade (WHO), clinical stage (UICC) and prognosis. Lipponen PK, et al. **Scand J Urol Nephrol** 1990;24(1):39–45

Urinary cytology in the detection of bladder tumours. Influence of concomitant urothelial atypia. Harving N, et al. **Scand J Urol Nephrol Suppl** 1989;125:127–31

Benign and low–grade papillary lesions of the urinary bladder: a review of the papilloma–papillary carcinoma controversy, and a report of five typical papillomas. Eble JN, et al. **Semin Diagn Pathol** 1989 Nov;6(4):351–71 (125 ref.)

Vaginal and bladder angiosarcoma after therapeutic irradiation [see comments] Morgan MA, et al. **South Med J** 1989 Nov;82(11):1434–6 (10 ref.) Comment in: South Med J 1990 Jun;83(6):723.

T–zone histiocytes and recurrence of papillary urothelial bladder carcinoma. Lopez–Beltran A, et al. **Urol Int** 1989; 44(4):205–9

The value of tumor–associated tissue inflammatory reaction in primary superficial bladder cancer. Flamm J. **Urol Res** 1990;18(2):113–7

Effect of bacterial lipopolysaccharide on growth of murine bladder cancer, MBT–2. Lee K, et al. **Urol Res** 1989; 17(5):285–8

Histopathologic changes of transitional cell carcinoma of bladder after M–VAC chemotherapy. Javadpour N, et al. **Urology** 1989 Dec;34(6):357–9

Morphology of urothelial papillary tumors. Tommasini–Degna A, et al. **Urology** 1990 Aug;36(2):177–80

Postoperative spindle cell nodule of bladder. Vekemans K, et al. **Urology** 1990 Apr;35(4):342–4

Comparison of quantitative and classic prognosticators in urinary bladder carcinoma. A multivariate analysis of DNA flow cytometric, nuclear morphometric and clinicopathological features. Blomjous CE, et al. **Virchows Arch [A]** 1989;415(5):421–8

The reproducibility of cytomorphometrical grading of bladder tumours. van der Poel HG, et al. **Virchows Arch [A]** 1990;416(6):521–5

[A comparison between clinical and echographic staging in bladder tumors] Chakürov S, et al. **Khirurgiia (Sofiia)** 1989; 42(6):33–6 (Eng. Abstr.) **(Bul)**

[Correlations in bladder tumors] Chakürov S. **Khirurgiia (Sofiia)** 1989;42(3):62–8 (Eng. Abstr.) **(Bul)**

[Clinical significance of random mucosal biopsies in patients with bladder cancer: analysis of 117 cases] Gu FL. **Chung Hua Wai Ko Tsa Chih** 1990 Mar;28(3):181–3, 191 (Eng. Abstr.) **(Chi)**

[A case of nephrogenic adenoma of the bladder. Clinical and anatomopathological aspects] Giannotti P, et al. **Acta Urol Belg** 1989;57(3):763–8 (Eng. Abstr.) **(Fre)**

[Tumors of the bladder. The pathologist's point of view] Vieillefond A, et al. **Ann Pathol** 1989;9(4):249–64 (83 ref.) **(Fre)**

[Carcinosarcoma and spindle cell carcinoma of the bladder. A comparison of 2 cases with an immunohistochemical study] Lesourd A, et al. **Ann Urol (Paris)** 1990;24(3):206–10 (Eng. Abstr.) **(Fre)**

[Primary adenocarcinoma of the bladder. Apropos of 10 cases. Retrospective study] el Mezni F, et al. **Arch Anat Cytol Pathol** 1989;37(5–6):249–53 (Eng. Abstr.) **(Fre)**

[Signet ring cell carcinoma of the bladder. Apropos of a case] el Ouakdi M, et al. **J Urol (Paris)** 1990;96(1):53–4 (Eng. Abstr.) **(Fre)**

[Primary malignant melanoma of the bladder. Apropos of a case] Philippe P, et al. **J Urol (Paris)** 1989;95(4):247–50 (7 ref.) (Eng. Abstr.) **(Fre)**

[Developmental and prognostic aspects of bladder tumors: apropos of 114 cases] Mzabi Regaya S, et al. **Tunis Med** 1989 Aug–Sep;67(8–9):499–504 (Eng. Abstr.) **(Fre)**

[Mucourothelial cancer of the urinary bladder and ureter] Goertchen R, et al. **Pathologe** 1990 May;11(3):166–70 **(Ger)**

[Systematic histologic urinary bladder mapping in primary urinary bladder cancers] Theuring F, et al. **Pathologe** 1990 May;11(3):148–53 **(Ger)**

[Small cell carcinoma with sarcomatous stroma. Immunohistochemical study of an unusual carcinosarcoma of the bladder] Wrba F, et al. **Pathologe** 1990 Jul; 11(4):248–50 **(Ger)**

[Quantitative immunocytology as a marker for indications and follow–up of recurrence prevention of superficial urinary bladder cancers] Schneider AW, et al. **Urologe [A]** 1989 Sep;28(5):289–91 (Eng. Abstr.) **(Ger)**

[Leiomyoma of the urinary bladder] Rothamel J, et al. **Z Urol Nephrol** 1989 Nov;82(11):617–21 (Eng. Abstr.) **(Ger)**

[Dynamic computerized tomography in staging of urinary bladder cancer] Schwarzbach C, et al. **Z Urol Nephrol** 1989 Nov;82(11):583–91 (Eng. Abstr.) **(Ger)**

[Histopathologic characteristics and clinical behavior of superficial bladder tumors] Kolozsy Z, et al. **Orv Hetil** 1990 Feb 11;131(6):283–4, 287–9 (46 ref.) (Eng. Abstr.) **(Hun)**

[Buprenorphine in the analgesic treatment of patients subjected to bladder mapping] Altomare M, et al. **Minerva Urol Nefrol** 1989 Jul–Sep;41(3):199–200 (Eng. Abstr.) **(Ita)**

[Primary adenocarcinoma of the bladder] Bussani R, et al. **Minerva Urol Nefrol** 1989 Oct–Dec;41(4):261–6 (Eng. Abstr.) **(Ita)**

[Pure squamous cell carcinoma and mixed transitional and squamous carcinoma of the bladder. A clinico–histopathological comparative study] Bussani R, et al. **Minerva Urol Nefrol** 1989 Jul–Sep;41(3):177–81 (Eng. Abstr.) **(Ita)**

[Nephrogenic adenoma. Presentation of 7 cases] Pierangeli T, et al. **Minerva Urol Nefrol** 1989 Oct–Dec;41(4):277–81 (Eng. Abstr.) **(Ita)**

[Carcinoma of the bladder with pseudosarcomatous stroma. Presentation of a case] Colonna A, et al. **Pathologica** 1989 Sep–Oct;81(1075):551–8 (Eng. Abstr.) **(Ita)**

[A case of urothelial tumor involving renal pelvis, ureter and bladder in a patient receiving hemodialysis] Kaneko Y, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1179–81 (Eng. Abstr.) **(Jpn)**

[Pathohistological comparison of biopsy specimens with all–layer cystectomy specimens in bladder cancer] Miyamoto K, et al. **Hinyokika Kiyo** 1989 Oct; 35(10):1687–91 (Eng. Abstr.) **(Jpn)**

[Staging of bladder carcinoma by magnetic resonance imaging compared with computed tomography and transurethral echography] Nakanishi A, et al. **Hinyokika Kiyo** 1989 Sep;35(9):1483–7 (Eng. Abstr.) **(Jpn)**

[The clinical study of 23 cases in patients with bladder cancer over 85 years old] Owada F, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1141–4 (Eng. Abstr.) **(Jpn)**

[Isoantigens ABH in bladder tumors as an indicator of malignant potential: a combined study with CEA, BMG, Leu–M1 and H–Ag] Saegusa M. **Hinyokika Kiyo** 1989 Aug; 35(8):1311–21 (Eng. Abstr.) **(Jpn)**

[A case of primary signet ring cell carcinoma of the bladder] Sato K, et al. **Hinyokika Kiyo** 1990 Apr;36(4):457–60 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Malignant mesodermal mixed tumor of the bladder: report of a case] Yamada Y, et al. **Hinyokika Kiyo** 1989 Sep; 35(9):1585–9 (Eng. Abstr.) **(Jpn)**

[A case of signet ring cell carcinoma of the urinary bladder] Yamada Y, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1207–11 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Squamous cell carcinoma co–existing vesical leukoplakia—case study and its clinicopathological analysis of the pathogenesis] Yoshida K, et al. **Hinyokika Kiyo** 1989 May;35(5):885–9 (Eng. Abstr.) **(Jpn)**

[Studies on biological characteristics of transitional cell carcinoma of the bladder in patients under 30 years of age] Asakura H, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Aug;80(8):1218–23 (Eng. Abstr.) **(Jpn)**

[A case of asynchronous triple primary malignant tumors of bladder, stomach and lung] Harima M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):630–3 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Primary culture of human bladder carcinomas and establishment of human bladder carcinoma cell line by serum–free culture] Ito H, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec;80(12):1749–54 (Eng. Abstr.) **(Jpn)**

[Tumor factors concerned with primary culture of transitional cell carcinomas] Kakizaki H, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb;81(2):204–9 (Eng. Abstr.) **(Jpn)**

[Multiple urothelial cancers accompanied by acquired cystic disease of the kidney in a long–term hemodialysis patient] Kawakami S, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):130–3 (17 ref.) (Eng. Abstr.) **(Jpn)**

[A study of intercellular communication of human transitional cell carcinoma cell lines] Kihara K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jul;80(7):988–94 (Eng. Abstr.) **(Jpn)**

[Cellular architecture of papillary and nonpapillary transitional cell carcinoma] Moriyama M. **Nippon Hinyokika Gakkai Zasshi** 1989 Jul;80(7):1017–24 (Eng. Abstr.) **(Jpn)**

[Ultrastructure of cultured normal bladder transitional epithelial cell and BBN induced rat bladder tumor cell lines] Nagata Y. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb;81(2):188–95 (Eng. Abstr.) **(Jpn)**

[Establishment of a model to evaluate inhibition of bone resorption induced by bladder tumor (MBT–2) in mice] Nishijima Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 May;81(5):694–700 (Eng. Abstr.) **(Jpn)**

[S–phase cells of human bladder tumors by in vivo bromodeoxyuridine labeling] Ohyama C, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):524–31 (Eng. Abstr.) **(Jpn)**

[Chemosensitivity testing on human bladder cancer cell lines, using MTT–assay] Sawamura M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Aug;80(8):1195–202 (Eng. Abstr.) **(Jpn)**

[Primary choriocarcinoma of the bladder: a case report of autopsy] Sone A, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jun;80(6):902–6 (15 ref.) (Eng. Abstr.) **(Jpn)**

[Monoclonal antibody to desmosome associated 34 kD protein and immunohistochemical study in relation to the malignancy of transitional cell carcinomas of urinary bladder] Takenaka A, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec;80(12):1769–75 (Eng. Abstr.) **(Jpn)**

[The analysis of the difference in anti–cancer drug sensitivity of 3 clones separated from bladder cancer cell line] Terashima Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec;80(12):1720–7 (Eng. Abstr.) **(Jpn)**

[A case of inverted papilloma with subsequent heterotopical recurrence of transitional cell carcinoma] Tomita K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Sep;80(9):1374–7 (Eng. Abstr.) **(Jpn)**

[Pathological studies of the bladder wall after contact Nd:YAG laser irradiation in the treatment of bladder cancer] Washida H, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Mar;81(3):380–5 (Eng. Abstr.) **(Jpn)**

[Pseudolymphoma of the bladder: a case report] Yoshinaga H, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jun; 80(6):899–901 (Eng. Abstr.) **(Jpn)**

[Magnetic resonance imaging of bladder tumors: superiority of serial "Fast SE" assisted by Gd–DTPA in tumor staging] Tanimoto A, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Dec 25; 49(12):1552–66 (Eng. Abstr.) **(Jpn)**

[Chronic myelogenous leukemia maintained in remission by

interferon alpha presenting with bladder cancer] Kobayashi H, et al. **Rinsho Ketsueki** 1989 Jul;30(7):1093–4 (Eng. Abstr.) **(Jpn)**

[Pheochromoblastoma of the bladder] Aliaev IuG, et al. **Urol Nefrol (Mosk)** 1989 Jul–Aug;(4):65–6 **(Rus)**

[Neurofibroma of the bladder] Baev VA, et al. **Urol Nefrol (Mosk)** 1990 Mar–Apr;(2):68–70 **(Rus)**

[Diagnosis of tumors of the bladder and rectum by the method of high-resolution transvaginal echography] Tsyb AF, et al. **Vestn Rentgenol Radiol** 1990 Jan–Feb;(1):36–41 (Eng. Abstr.) **(Rus)**

[Cancer of the bladder in a patient with lymphogranulomatosis of the stomach] Bobylev NV, et al. **Vopr Onkol** 1989;35(8):991–3 **(Rus)**

[Synchronous primary–multiple cancer of the kidney, urinary bladder and prostate gland] Vorob'ev AV, et al. **Vopr Onkol** 1989;35(10):1256–7 **(Rus)**

[Factors affecting the recurrence of epithelial tumors of the urinary bladder] Horňák M, et al. **Bratisl Lek Listy** 1989 Jul;90(7):507–9 (Eng. Abstr.) **(Slo)**

[Recurrent adenomatous polyp of the bladder with prostatic type epithelium] Sánchez Fernández de Sevilla MC, et al. **Actas Urol Esp** 1989 Jul–Aug;13(4):283–4 (Eng. Abstr.) **(Spa)**

[Signet ring cell adenocarcinoma of the bladder] Casanueva T, et al. **Arch Esp Urol** 1989 Oct;42(8):802–5 (16 ref.) (Eng. Abstr.) **(Spa)**

[Bladder adenocarcinoma. Report of 2 new cases] Domínguez Bravo C, et al. **Arch Esp Urol** 1989 Nov–Dec; 42(9):928–30 (Eng. Abstr.) **(Spa)**

[Infiltrating transitional carcinoma of the bladder. Prognostic value of anatomopathologic staging and therapeutic possibilities] Escudero Barrilero A, et al. **Arch Esp Urol** 1989 Apr;42(3):217–24 (21 ref.) (Eng. Abstr.) **(Spa)**

[Infiltrating transitional carcinoma of the bladder. Is the P/T ratio a reliable index to evaluate the effectiveness of preoperative radiotherapy on tumors of the bladder?] Escudero Barrilero A, et al. **Arch Esp Urol** 1989 Apr; 42(3):229–35 (Eng. Abstr.) **(Spa)**

[Pleomorphic bladder rhabdomyosarcoma in an adult male. Apropos of a case] Herrera Puerto J, et al. **Arch Esp Urol** 1990 May;43(4):413–5 (Eng. Abstr.) **(Spa)**

[Malignant primary lymphoma of the bladder] Lancina Martín JA, et al. **Arch Esp Urol** 1989 Apr;42(3):269–72 (Eng. Abstr.) **(Spa)**

[Bladder paraganglioma. Apropos of a case] Rodríguez-Miñón Cifuentes JL, et al. **Arch Esp Urol** 1990 May;43(4):405–7 (Eng. Abstr.) **(Spa)**

[Vesical leiomyosarcoma. Immunohistochemical and ultrastructural study] Rosales Bordes A, et al. **Arch Esp Urol** 1989 Nov–Dec;42(9):859–62 (Eng. Abstr.) **(Spa)**

[Inverted papilloma of the bladder] Ruiz Rubio JL, et al. **Arch Esp Urol** 1989 Apr;42(3):266–7 (7 ref.) (Eng. Abstr.) **(Spa)**

[Cytology by lavage in the follow-up of bladder neoplasms] Salinas Sánchez AS, et al. **Arch Esp Urol** 1989 Jul–Aug; 42(6):523–31 (Eng. Abstr.) **(Spa)**

[Signet-ring cell carcinoma of the urinary bladder: study of 4 cases and review of the literature] Valérdiz Casasola S, et al. **Arch Esp Urol** 1989 Jul–Aug;42(6):519–22 (20 ref.) (Eng. Abstr.) **(Spa)**

[Anaplastic tumor of the bladder with neurosecretory granules and benign courses] Vera-Román JM, et al. **Arch Esp Urol** 1989 Jun;42(5):437–40 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Kinetics of transitional tumor cell line 4909 adherence to injured urothelial surfaces in F-344 rats. See WA, et al. **Cancer Res** 1990 Apr 15;50(8):2499–504

[Causes of the functional disorder of the kidneys in patients with bladder cancer after cystectomy with ureterosigmoid anastomosis] Nechiporenko NA, et al. **Urol Nefrol (Mosk)** 1989 Jul–Aug;(4):43–7 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Dipstick haematuria and bladder cancer in men over 60: results of a community study [see comments] Britton JP, et al. **BMJ** 1989 Oct 21;299(6706):1010–2 Comment in: BMJ 1989 Dec 16;299(6714):1528.

Occupational bladder cancer and the hospital clinician [letter; comment] Brooke WE, et al. **Br J Ind Med** 1989 Oct; 46(10):750–1 Comment on: Br J Ind Med 1989 Feb;46(2):73.

Protection from carcinogen-induced murine bladder carcinoma by interferons and an oral interferon-inducing pyrimidinone, bropirimine. Borden EC, et al. **Cancer Res** 1990 Feb 15;50(4):1071–4

Low dose intravesical heparin as prophylaxis against recurrent noninvasive (stage Ta) bladder cancer. Bitsch M, et al. **J Urol** 1990 Sep;144(3):635–6

Inhibition of implantation of murine bladder tumor by thiotepa in cauterized bladder. Pan JS, et al. **J Urol** 1989 Dec;142(6):1589–93

Bladder cancer screening study initiated by Fox Chase [news] **Oncology (Williston Park)** 1990 Jan;4(1):16

[Effect of etoposide orally administered every other day for the prevention of recurrence of bladder tumor] Miura K, et al. **Gan To Kagaku Ryoho** 1990 Jul;17(7):1375–7 **(Jpn)**

[Prophylaxis of recurrence of superficial bladder tumor by intravesical chemotherapy] Ikeda R, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1135–9 (Eng. Abstr.) **(Jpn)**

[Occupational cancer of the urinary bladder: the diagnostic value of urinary cytology in dyestuff workers exposed to aromatic amines] Matsushima M. **Hinyokika Kiyo** 1989 Dec;35(12):2033–40 (Eng. Abstr.) **(Jpn)**

[Prophylactic effect of UFT on the recurrence of bladder cancer] Naito K, et al. **Hinyokika Kiyo** 1990 Apr; 36(4):487–94 (Eng. Abstr.) **(Jpn)**

[Intravesical instillation chemotherapy of anticancer agents including cylocide: studies of prophylactic effects on the recurrence] Yasumoto R, et al. **Hinyokika Kiyo** 1990 Apr; 36(4):407–13 (Eng. Abstr.) **(Jpn)**

[Intravesical bacillus Calmette–Guerin instillation therapy in superficial bladder cancers—clinical study on prognostic factors] Shinka T, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Mar;81(3):425–32 (Eng. Abstr.) **(Jpn)**

[Comparative study on prophylactic intravesical instillation of bacillus Calmette–Guerin (BCG) and adriamycin for superficial bladder cancers] Tachibana M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Oct;80(10):1459–65 (Eng. Abstr.) **(Jpn)**

[Clinicopathological study on microscopic urinalysis as screening for malignant cells] Kawabe T, et al. **Rinsho Byori** 1989 Oct;37(10):1167–72 (Eng. Abstr.) **(Jpn)**

[Prevention of recurrence of superficial tumors of the bladder with intravesical epirubicin] Lancina Martín JA, et al. **Actas Urol Esp** 1990 Mar–Apr;14(2):112–4 (Eng. Abstr.) **(Spa)**

[BCG vaccine and prevention of recurrence of superficial cancer of the bladder. Have all the possibilities been exhausted?] Vera-Donoso CD, et al. **Actas Urol Esp** 1989 Jul–Aug;13(4):233–5 (20 ref.) **(Spa)**

[Adriamycin versus ftorafur in the prevention of recurrence of superficial carcinoma of the bladder] Unda Urzaiz M, et al. **Arch Esp Urol** 1990 Mar;43(2):143–6 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

Quality of life in patients with advanced bladder cancer. A randomized study comparing cystectomy and irradiation—the Danish Bladder Cancer Study Group (DAVECA protocol 8201). Mommsen S, et al. **Scand J Urol Nephrol Suppl** 1989;125:115–20

RADIOGRAPHY

Uterine perforation simulating urachal carcinoma: CT diagnosis. Kronthal AJ, et al. **AJR Am J Roentgenol** 1990 Apr;154(4):741–3

Crohn's disease mimicking primary bladder tumour. Evans RH. **Br J Urol** 1990 Mar;65(3):299–300

Computed tomography in botryoid rhabdomyosarcoma of urinary bladder. Buxi TB, et al. **Comput Med Imaging Graph** 1990 May–Jun;14(3):197–200

A computerized tomographic evaluation of malignancies of the bladder and prostate. Petersen RW. **Comput Tomogr** 1977;1(4):283–93

Adenocarcinoma of the urachus: CT features. Lee SH, et al. **J Comput Assist Tomogr** 1990 Mar–Apr;14(2):232–5

Computerized tomography: an unreliable method for accurate staging of bladder tumors in patients who are candidates for radical cystectomy. Voges GE, et al. **J Urol** 1989 Oct;142(4):972–4

Computed tomography of malignant pheochromocytoma of the bladder. A case report. Frennby B, et al. **ROFO** 1990 Aug;153(2):225–7

Condylomata acuminata of the bladder: a rare cause of intraluminal-filling defects. Murphy WD, et al. **Urol Radiol** 1990;12(1):34–6

Computerized tomography in evaluation of transitional cell carcinoma in bladder diverticula. Lowe FC, et al. **Urology** 1989 Dec;34(6):390–5

Routine excretory urography in follow-up of superficial transitional cell carcinoma of bladder. Smith H, et al. **Urology** 1989 Oct;34(4):193–6

[Computed tomographic staging of bladder tumors] Nedelkov G, et al. **Khirurgiia (Sofiia)** 1989;42(5):37–42 (Eng. Abstr.) **(Bul)**

[An evaluation of lymphangiography in the diagnosis of nodal metastasis from genitourinary cancer] Liu DY. **Chung Hua Wai Ko Tsa Chih** 1989 Jun;27(6):371–2, 382–3 (Eng. Abstr.) **(Chi)**

[Leiomyoma of the bladder] Chantepie G, et al. **Ann Urol (Paris)** 1989;23(4):309–11 (7 ref.) (Eng. Abstr.) **(Fre)**

[Leiomyoma of the urinary excretory tract] Cussenot O, et al. **Ann Urol (Paris)** 1989;23(4):305–8 (19 ref.) (Eng. Abstr.) **(Fre)**

[Angiographic diagnosis of pheochromocytoma of the bladder] Pereverzev AS, et al. **Vestn Rentgenol Radiol** 1989 Jul–Aug;(4):86–8 **(Rus)**

[Fibro-epithelial polyps of the urinary tract. Apropos of 2 new cases (of the ureter and bladder)] Francisco-Mingol V, et al. **Arch Esp Urol** 1989 Oct;42(8):793–6 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

Tumour imaging of bladder carcinomas and their metastases with 111indium-labelled monoclonal anti-CEA antibody BW 431/26. Boeckmann W, et al. **Br J Cancer Suppl** 1990 Jul;10:81–4

Bone biopsy in solitary lesions on bone scan in genitourinary malignancy. Zungri E. **Eur Urol** 1990;17(4):293–5

RADIOTHERAPY

Intraoperative and external beam radiotherapy in invasive bladder cancer: pathological findings following cystectomy. Calvo FA, et al. **Am J Clin Oncol** 1990 Apr; 13(2):101–6

Palliative irradiation for bladder carcinoma. Brizel HE, et al. **Am J Roentgenol Radium Ther Nucl Med** 1967 Aug; 100(4):909–15

Nd: YAG laser treatment of vesical leiomyosarcoma. Gaboardi F, et al. **Arch Esp Urol** 1989 Apr;42(3):288–9 (10 ref.)

The fate of G3pT1 bladder cancer. Jenkins BJ, et al. **Br J Urol** 1989 Dec;64(6):608–10

Prediction of response to radiotherapy in invasive bladder cancer. Jenkins BJ, et al. **Br J Urol** 1990 Apr;65(4):345–8

Prognostic factors in patients with bladder carcinoma treated with definitive irradiation. Greven KM, et al. **Cancer** 1990 Feb 15;65(4):908–12 (18 ref.)

Use of the tetrazolium assay in measuring the response of human tumor cells to ionizing radiation. Price P, et al. **Cancer Res** 1990 Mar 1;50(5):1392–6

T2/T3 bladder carcinomas treated with definitive radiotherapy with emphasis on flow cytometric DNA ploidy values. Jacobsen AB, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):923–9

Treatment of advanced transitional cell carcinoma of the bladder with irradiation and concomitant 5-fluorouracil infusion. Rotman M, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1131–7

Radical radiotherapy for muscle invasive transitional cell carcinoma of the bladder: failure analysis. Gospodarowicz MK, et al. **J Urol** 1989 Dec;142(6):1448–53; discussion 1453–4

Preoperative irradiation and radical cystectomy for stages T2 and T3 squamous cell carcinoma of the bladder. Swanson DA, et al. **J Urol** 1990 Jan;143(1):37–40

Case report: adult rhabdomyosarcoma of bladder, complete response to radiation therapy. Taylor RE, et al. **J Urol** 1989 Nov;142(5):1321–2

Deoxyribonucleic acid flow cytometry in predicting response to radical radiotherapy of bladder cancer. Wijkström H, et al. **J Urol** 1990 Sep;144(3):646–50; discussion 650–1

Effect of misonidazole in preoperative irradiation for bladder cancer followed by total cystectomy. Ono K, et al. **Radiat Med** 1989 Mar–Apr;7(2):105–9

Split-course radiotherapy for urinary bladder cancer. Salminen E. **Radiother Oncol** 1989 Aug;15(4):327–31

Combined modality treatment with radiotherapy and chemotherapy. Tannock IF. **Radiother Oncol** 1989 Oct; 16(2):83–101 (87 ref.)

Conventionally administered preoperative radiotherapy in urinary bladder cancer. Salminen E. **Strahlenther Onkol** 1990 Jul;166(7):443–5

[Autopsy results in surgical–radiotherapeutic treatment of bladder carcinoma—conclusions for optimal radiologic therapy] Füller J, et al. **Radiobiol Radiother (Berl)** 1989; 30(5):465–71 (Eng. Abstr.) **(Ger)**

[Dynamic fractionation of the radiation dosage combined with the local use of metronidazole in bladder cancer] Pereslegin IA, et al. **Med Radiol (Mosk)** 1989 Dec; 34(12):45–9 (Eng. Abstr.) **(Rus)**

[Critical evaluation of Nd-YAG laser in the treatment of superficial tumors of the bladder] Vicente J. **Actas Urol Esp** 1990 Jan–Feb;14(1):2–3 **(Spa)**

SECONDARY

Serous adenocarcinoma of the uterus metastatic to the urinary bladder mimicking primary bladder neoplasia. A report of a case. Young RH, et al. **Am J Surg Pathol** 1990 Sep; 14(9):877–80

Chemotherapy for metastatic bladder cancer. Is there new hope? Waxman J. **Br J Urol** 1990 Jan;65(1):1–5 (26 ref.)

Bone scan of recurrent colon carcinoma involving the sacrum and urinary bladder. Stewart CA, et al. **Clin Nucl Med** 1990 Jul;15(7):513–4

Flow cytometric analysis of primary and metastatic bladder cancer. Badalament RA, et al. **J Urol** 1990 May; 143(5):912–5; discussion 915–6

[A case of metastatic urinary bladder tumor from gastric carcinoma—especially mucohistochemical study] Hashimoto S, et al. **Hinyokika Kiyo** 1989 Nov; 35(11):1929–33 (12 ref.) (Eng. Abstr.) **(Jpn)**

[A case of secondary bladder tumor the origin (gastric cancer) of which could not be identified before autopsy] Mizutani Y, et al. **Hinyokika Kiyo** 1990 May;36(5):605–8 (11 ref.) (Eng. Abstr.) **(Jpn)**

[Secondary tumors of the bladder of metastatic origin; a new case and review of the literature] Pinsach Elias L, et al. **Actas Urol Esp** 1990 Mar–Apr;14(2):157–9 (23 ref.) (Eng. Abstr.) **(Spa)**

SURGERY

A contribution to the special discussion on YAG laser irradiation of superficial bladder cancer. Beisland HO. **Acta Urol Belg** 1989;57(3):693–5

Early experiences with continent bladder substitution. Lindell O. **Ann Chir Gynaecol** 1989;78(2):130–5

Evaluation of a model to predict recurrence after radical cystectomy in bilharzial bladder cancer patients. Rafla M, et al. **Br J Cancer** 1989 Dec;60(6):925–7

Neodymium–YAG laser irradiation of stage T2 muscle–invasive bladder cancer. Long–term results. Beisland HO, et al. **Br J Urol** 1990 Jan;65(1):24–6

Transurethral resection of the prostate and bladder tumour without withdrawal of warfarin therapy. Parr NJ, et al. **Br J Urol** 1989 Dec;64(6):623–5

Advanced small cell carcinoma of the bladder. Successful treatment with combined radical cystoprostatectomy and adjuvant methotrexate, vinblastine, doxorubicin, and cisplatin chemotherapy. Oesterling JE, et al. **Cancer** 1990 May 1;65(9):1928–36

Bladder cancer in geriatric patients. Alternatives to radical cystectomy. Nitti VW, et al. **Clin Geriatr Med** 1990 Feb; 6(1):173–84 (54 ref.)

Continent reservoirs. Colberg JW, et al. **Conn Med** 1989 Oct; 53(10):573–6

Vescica Ileale Padovana: a technique for total bladder replacement. Pagano F, et al. **Eur Urol** 1990;17(2):149–54

Partial obstruction of the sigmoid colon by surgical implantation. Corfitsen MT, et al. **Int Urol Nephrol** 1989; 21(5):479–83

Partial cystectomy in the management of rhabdomyosarcoma of the bladder: a report from the Intergroup Rhabdomyosarcoma Study. Hays DM, et al. **J Pediatr Surg** 1990 Jul;25(7):719–23

Small urothelial carcinoma: diagnosis and treatment by cold forceps biopsy. Bianchi G, et al. **J Urol** 1990 Oct; 144(4):872–4

Urethral recurrence following radical cystectomy. Hardeman SW, et al. **J Urol** 1990 Sep;144(3):666–9

Indications for urethrectomy in an era of continent urinary diversion. Levinson AK, et al. **J Urol** 1990 Jul;144(1):73–5

The role of radical cystectomy in the management of high grade superficial bladder cancer (PA, P1, PIS and P2). Malkowicz SB, et al. **J Urol** 1990 Sep;144(3):641–5

Urethral remnant tumors following simultaneous partial urethrectomy and cystectomy for bladder carcinoma. Shinka T, et al. **J Urol** 1989 Oct;142(4):983–7

Laser treatment of bladder hemangioma. Smith JA Jr. **J Urol** 1990 Feb;143(2):282–4

Urethral tumor recurrences after radical cystoprostatectomy: the case for primary cystoprostatourethrectomy? Stöckle M, et al. **J Urol** 1990 Jan;143(1):41–2; discussion 43

Preservation of sexual function in men during radical pelvic surgery. Walsh PC, et al. **Md Med J** 1990 Apr;39(4):389–93

Bladder cancer: deciding on appropriate surgery. Wood DP Jr, et al. **Oncology (Williston Park)** 1989 Mar;3(3):55–61; discussion 65–6 68 (38 ref.)

Experience with a detubularized right colonic segment for bladder replacement. Månsson W, et al. **Scand J Urol Nephrol** 1990;24(1):53–6

Evaluation of upper and lower urinary tracts after Camey operation. Nurmi M, et al. **Scand J Urol Nephrol** 1989; 23(4):275–7

Large–bowel perforation. A rare complication of intravesical Nd–YAG laser irradiation of bladder tumors. D'Hallewin MA, et al. **Urol Int** 1989;44(6):373–4

Intravesical Bacillus Calmette–Guérin prophylactic treatment for superficial bladder tumors: results of a controlled prospective study. Melekos MD. **Urol Int** 1990; 45(3):137–41

Clinical experience of Kock pouch continent urinary diversion. Chen KK, et al. **Urology** 1990 Apr;35(4):317–20

Post–surgical necrobiotic granulomas of urinary bladder. Eble JN, et al. **Urology** 1990 May;35(5):454–7

Development of upper tract carcinoma after cystectomy for bladder carcinoma. Malkowicz SB, et al. **Urology** 1990 Jul; 36(1):20–2

[A comparative study of the effect of epidural analgesia on the hormonal status and humoral immunity in patients with bladder carcinoma and prostatic adenoma] Bovianska N, et al. **Khirurgiia (Sofiia)** 1990;43(1):9–14 **(Bul)**

[A severe complication following laser phototherapy of bladder carcinoma] Kaloianov D, et al. **Khirurgiia (Sofiia)** 1989;42(5):87–90 **(Bul)**

[Continent urinary diversion following cystectomy in bladder carcinoma] Petrov P, et al. **Khirurgiia (Sofiia)** 1989; 42(5):74–7 (37 ref.) **(Bul)**

[Bladder diverticula combined with bladder carcinoma] Petrov P, et al. **Khirurgiia (Sofiia)** 1989;42(5):85–6 **(Bul)**

[Squamous cell carcinoma of the bladder. Report of 19 cases] Wu KR. **Chung Hua Wai Ko Tsa Chih** 1989 May; 27(5):289–91, 317 (Eng. Abstr.) **(Chi)**

[Reconstruction of the urinary bladder following cystectomy] Langemeyer TN, et al. **Ned Tijdschr Geneeskd** 1989 Aug 12;133(32):1602–5 (Eng. Abstr.) **(Dut)**

[Treatment of superficial bladder tumors using the argon laser] Biserte J, et al. **Acta Urol Belg** 1989;57(3):697–701 (Eng. Abstr.) **(Fre)**

[Clinical experience with the ND–YAG laser in intravesical and intra–urethral pathology] Braeckman J, et al. **Acta Urol Belg** 1989;57(3):703–6 (Eng. Abstr.) **(Fre)**

[Treatment of PT1 tumors of the bladder using transurethral resection and intravesical immunotherapy] Bertault D, et al. **Ann Urol (Paris)** 1990;24(2):97–101; discussion 102 (Eng. Abstr.) **(Fre)**

[Low–pressure enterocystoplasty after prostato–cystectomy for cancer. Apropos of 13 cases] Fiatte P, et al. **Ann Urol (Paris)** 1990;24(3):193–7 (Eng. Abstr.) **(Fre)**

[Radical cystectomy for invasive tumors of the bladder in patients over 70 years of age] Jacqmin D, et al. **Ann Urol (Paris)** 1990;24(1):59–61 (Eng. Abstr.) **(Fre)**

[Comparative study of tubulate enterocystoplasty and low pressure bladder. Apropos of 20 cases] el Ouakdi M, et al. **J Urol (Paris)** 1990;96(1):1–7 (Eng. Abstr.) **(Fre)**

[Surgical urinary bladder replacement in cancer] Sauter T, et al. **Fortschr Med** 1989 Sep 10;107(26):552–6 (Eng. Abstr.) **(Ger)**

[The neodymium:YAG laser in infiltrating bladder tumors] Spitzenpfeil E, et al. **Fortschr Med** 1989 Sep 10; 107(26):548–51 (Eng. Abstr.) **(Ger)**

[The ileum neobladder—technic and results of bladder augmentation] Frohneberg D, et al. **Helv Chir Acta** 1989 Aug;56(3):335–7 (Eng. Abstr.) **(Ger)**

[Conversion of supravesical urinary diversion to an ileal neobladder. Indications, results, problems] Egghart G, et al. **Urologe [A]** 1990 May;29(3):141–5 (Eng. Abstr.) **(Ger)**

[Continent urinary diversion in the elderly patient. Results with an ileum neobladder] Miller K, et al. **Urologe [A]** 1990 Mar;29(2):87–90 (Eng. Abstr.) **(Ger)**

[Primary malignant melanoma of the distal urogenital tract. Case report and review of the literature] Thum G, et al. **Urologe [A]** 1990 May;29(3):158–60 (25 ref.) (Eng. Abstr.) **(Ger)**

[Status of surgical treatment of urinary bladder cancer] Hautmann R. **Verh Dtsch Ges Inn Med** 1989;95:537–44 (18 ref.) **(Ger)**

[Transurethral procedures with sacral anesthesia] Siegel Y, et al. **Harefuah** 1989 Jun 1;116(11):576–9 (Eng. Abstr.) **(Heb)**

[Laser treatment for transitional cell cancer of the bladder] Silber N, et al. **Harefuah** 1990 Jan 1;118(1):8–10 (Eng. Abstr.) **(Heb)**

[Radical transurethral resection of bladder tumors] Kolozsy Z, et al. **Orv Hetil** 1989 Nov 26;130(48):2571–5 (Eng. Abstr.) **(Hun)**

[Radical transurethral resection of bladder tumors (letter)] Szabó M. **Orv Hetil** 1990 Apr 29;131(17):931 **(Hun)**

[Carcinoma of the urethra in patients having undergone cystectomy for neoplasm of the bladder] Vicini D, et al. **Arch Ital Urol Nefrol Androl** 1989 Sep;61(3):217–21 (Eng. Abstr.) **(Ita)**

[Clinical investigation of 7 cases of urachal carcinoma] Iizawa H, et al. **Hinyokika Kiyo** 1989 Jun;35(6):975–9 (Eng. Abstr.) **(Jpn)**

[Left ureteral tumor five years after radical cystectomy associated with duplication of inferior vena cava: a case report] Inaba Y, et al. **Hinyokika Kiyo** 1989 Aug; 35(8):1397–400 (Eng. Abstr.) **(Jpn)**

[A case of fused pelvic kidney (lump kidney) with invasive bladder tumor] Iritani Y, et al. **Hinyokika Kiyo** 1989 Jun; 35(6):1041–5 (Eng. Abstr.) **(Jpn)**

[A case of bladder cancer with bilateral ureteral carcinoma in situ] Ishibashi Y, et al. **Hinyokika Kiyo** 1990 Mar; 36(3):333–6 (Eng. Abstr.) **(Jpn)**

[Transurethral microwave coagulation of bladder cancer in elderly patients] Kigure T, et al. **Hinyokika Kiyo** 1989 May; 35(5):789–93 (Eng. Abstr.) **(Jpn)**

[Serum uptake of doxorubicin intravesically administered soon after transurethral resection of bladder carcinoma] Nagakura K, et al. **Hinyokika Kiyo** 1989 Sep;35(9):1509–12 (Eng. Abstr.) **(Jpn)**

[Prognosis of bladder tumor patients treated by TUR] Nukui M, et al. **Hinyokika Kiyo** 1989 Sep;35(9):1497–501 (Eng. Abstr.) **(Jpn)**

[Penile and urethral metastases from superficial bladder tumor after TUR: a case report] Takahashi S, et al. **Hinyokika Kiyo** 1989 Jun;35(6):1055–9 (Eng. Abstr.) **(Jpn)**

[Clinical analysis of 40 total cystectomies for bladder tumor] Taki Y, et al. **Hinyokika Kiyo** 1989 Sep;35(9):1489–95 (Eng. Abstr.) **(Jpn)**

[Cutaneous metastases from transitional cell carcinoma of the bladder] Takigawa H, et al. **Hinyokika Kiyo** 1989 Jun; 35(6):1061–3 (Eng. Abstr.) **(Jpn)**

[Four cases of bladder replacement by enterocystoplasty after radical cystectomy for bladder cancer] Akaza H, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Mar;81(3):471–4 (Eng. Abstr.) **(Jpn)**

[Clinical experience with three cases of haemorrhagic tendency—bladder carcinoma with hemophilia A, a bladder carcinoma with von Willebrand disease and a benign prostatic hypertrophy with idiopathic thrombocytopenic purpura (ITP)] Minayoshi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb;81(2):308–11 (Eng. Abstr.) **(Jpn)**

[Analysis of histopathological prognostic factors in patients who underwent radical cystectomy in cancer of the bladder] Tachibana M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):601–7 (Eng. Abstr.) **(Jpn)**

[Clinical assessment for 152 total cysto–urethrectomized bladder cancers] Tsujihashi H, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Nov;80(11):1632–7 (Eng. Abstr.) **(Jpn)**

[Total cystectomy in the treatment of infiltrative bladder tumors. The conclusions of an analysis of postoperative results in a series of 269 nonselected patients at late follow–up] Proca E, et al. **Rev Chir [Chir]** 1989 May–Jun; 38(3):189–206 (Eng. Abstr.) **(Rum)**

[Comparative evaluation of different methods of urine derivation after cystectomy for bladder cancer] Matveev BP, et al. **Urol Nefrol (Mosk)** 1989 Jul–Aug;(4):39–43 (Eng. Abstr.) **(Rus)**

[Technical characteristics of small–pelvic drainage through the obturator foramen] Larionova TA. **Vestn Khir** 1989 Nov;143(11):129–32 **(Rus)**

[Effects of urologic surgery on lymphocyte blastogenic response to phytohemagglutinin] Gil Salmon M, et al. **Actas Urol Esp** 1989 Nov–Dec;13(6):415–9 (Eng. Abstr.) **(Spa)**

[Camey II type substitution ileocystoplasty. Our experience] Gil Sanz MJ, et al. **Actas Urol Esp** 1990 Jan–Feb; 14(1):39–42 (Eng. Abstr.) **(Spa)**

[Conservative treatment with transurethral resection of stage T2 cancer of the bladder: retrospective study] Ojea A, et al. **Actas Urol Esp** 1989 Nov–Dec;13(6):441–3 (17 ref.) (Eng. Abstr.) **(Spa)**

[Incidence of vesico–ureteral reflux after endoscopic surgery of superficial tumors of the bladder. A prospective study] Ricos Torrent JV, et al. **Arch Esp Urol** 1990 Mar; 43(2):136–9; discussion 140 (Eng. Abstr.) **(Spa)**

THERAPY

Results of cystectomy with and without preoperative radiotherapy in carcinoma of the urinary bladder. Nurmi MJ, et al. **Acta Oncol** 1990;29(1):39–42

Arthritis after Mycobacterium bovis immunotherapy for bladder cancer [letter; comment] Ochsenkühn T, et al. **Ann Intern Med** 1990 Jun 1;112(11):882 Comment on: Ann Intern Med 1989 Oct 1;111(7):581–91.

Intravesical therapy in the management of superficial transitional cell carcinoma of the bladder: the experience of the EORTC GU Group. Newling D. **Br J Cancer** 1990 Apr;61(4):497–9 (19 ref.)

BCG pyelonephritis following intravesical BCG. Kondratowicz GM. **Br J Urol** 1989 Dec;64(6):649

Clinical study of prognostic factors of superficial bladder cancer treated with intravesical bacillus Calmette–Guerin. Shinka T, et al. **Br J Urol** 1990 Jul;66(1):35–9

Presence of interleukin–2 in urine of superficial bladder cancer patients after intravesical treatment with bacillus Calmette–Guérin. De Jong WH, et al. **Cancer Immunol Immunother** 1990;31(3):182–6

Intravesical treatment of bladder cancer with recombinant human interferon–beta. Intravesical GKT–beta Chemotherapy Research Group. Niijima T. **Cancer Immunol Immunother** 1989;30(2):81–5

Rhodamine 123 phototoxicity in laser–irradiated MGH–U1 human carcinoma cells studied in vitro by electron microscopy and confocal laser scanning microscopy. Shea CR, et al. **Cancer Res** 1990 Jul 1;50(13):4167–72

High–stage bladder cancer: bladder preservation or reconstruction? Montie JE. **Cleve Clin J Med** 1990 May; 57(3):280–4

BCG product released for therapy of urinary bladder cancer [news] **Clin Pharm** 1990 Aug;9(8):598–9

Bladder tumors invading the lamina propria (stage A/T1): influence of endovesical bacillus Calmette–Guérin therapy on recurrence and progression. Boccon–Gibod L, et al. **Eur Urol** 1989;16(6):401–4

Bacillus Calmette–Guérin treatment and vesicorenal reflux. Böhle A, et al. **Eur Urol** 1990;17(2):125–8

Immunohistochemical markers defined by monoclonal antibodies and response to bacillus Calmette–Guérin endovesical immunotherapy for superficial bladder tumors. Flam TA, et al. **Eur Urol** 1990;17(4):338–42

Evaluation of tumor response in patients with bladder cancer undergoing combined radiotherapy and chemotherapy. Jakse G, et al. **Eur Urol** 1990;17(4):286–8

Comparison between short–course high–dose preoperative irradiation with immediate radical cystectomy and salvage cystectomy after full–dose irradiation. Nissenkorn I, et al. **Eur Urol** 1990;18(1):23–6

BCG vaccine therapy for treatment of superficial bladder cancer. Damianov C, et al. **Int Urol Nephrol** 1989; 21(3):305–12

Fibronectin–mediated Calmette–Guerin bacillus attachment to murine bladder mucosa. Requirement for the expression of an antitumor response. Kavoussi LR, et al. **J Clin Invest** 1990 Jan;85(1):62–7

Miliary tuberculosis secondary to transurethral bacillus Calmette–Guérin administration for superficial transitional cell carcinoma of the bladder [letter] Skoutelis A, et al. **J Natl Cancer Inst** 1990 Jul 18;82(14):1219–20

A combined therapy of hyperthermia and tumor necrosis factor for nude mice bearing KK–47 bladder cancer. Amano T, et al. **J Urol** 1990 Aug;144(2 Pt 1):370–4

In vitro and in vivo anti–tumor activity of recombinant mouse tumor necrosis factor (TNF) in a mouse bladder tumor (MBT–2). Bahnson RR, et al. **J Urol** 1990 Jul; 144(1):172–5

Effects of local bacillus Calmette–Guerin therapy in patients with bladder carcinoma on immunocompetent cells of the bladder wall. Böhle A, et al. **J Urol** 1990 Jul;144(1):53–8

Elevations of cytokines interleukin–1, interleukin–2 and

tumor necrosis factor in the urine of patients after intravesical bacillus Calmette-Guerin immunotherapy. Böhle A, et al. **J Urol** 1990 Jul;144(1):59–64

The response of patients with superficial bladder cancer to a second course of intravesical bacillus Calmette-Guerin. Bretton PR, et al. **J Urol** 1990 Apr;143(4):710–2; discussion 712–3

The preparation, handling and use of intravesical bacillus Calmette-Guerin for the management of stage Ta, T1, carcinoma in situ and transitional cell cancer. Brosman SA, et al. **J Urol** 1990 Aug;144(2 Pt 1):313–5

Long-term followup of patients treated with 1 or 2, 6-week courses of intravesical bacillus Calmette-Guerin: analysis of possible predictors of response free of tumor. Coplen DE, et al. **J Urol** 1990 Sep;144(3):652–7

Expression of blood group precursor T antigen as a prognostic marker for human bladder cancer treated by bacillus Calmette-Guerin and interleukin-2. Dow JA, et al. **J Urol** 1989 Oct;142(4):978–81; discussion 981–2

Recurrent superficial transitional cell carcinoma of the bladder: adjuvant topical chemotherapy versus immunotherapy. A prospective randomized trial. Flamm J, et al. **J Urol** 1990 Aug;144(2 Pt 1):260–3

The development of liposomes containing interferon alpha for the intravesical therapy of human superficial bladder cancer. Frangos DN, et al. **J Urol** 1990 Jun;143(6):1252–6

A randomized controlled study of intravesical alpha-2b-interferon in carcinoma in situ of the bladder. Glashan RW. **J Urol** 1990 Sep;144(3):658–61

A randomized prospective comparison of oral versus intravesical and percutaneous bacillus Calmette-Guerin for superficial bladder cancer. Lamm DL, et al. **J Urol** 1990 Jul;144(1):65–7

Bacillus Calmette-Guerin versus doxorubicin versus thiotepa: a randomized prospective study in 202 patients with superficial bladder cancer. Martínez-Piñeiro JA, et al. **J Urol** 1990 Mar;143(3):502–6

Systemic bacillus-Calmette Guerin infection after transurethral administration for superficial bladder carcinoma. Sakamoto GD, et al. **J Urol** 1989 Oct; 142(4):1073–4; discussion 1074–5

Combination immunotherapy of murine transitional cell cancer using BCG and an interferon-inducing pyrimidinone. Sarosdy MF, et al. **J Urol** 1989 Nov; 142(5):1376–9

From the Food and Drug Administration. Nightingale SL. **JAMA** 1990 Aug 8;264(6):677

The effect of high-energy underwater shock waves on implanted urinary bladder cancer in rabbits. Hosi S, et al. **Jpn J Cancer Res** 1990 Apr;81(4):317–9

Biology and management of bladder cancer. Raghavan D, et al. **N Engl J Med** 1990 Apr 19;322(16):1129–38 (155 ref.)

BCG product approved for CIS of the bladder [news] **Oncology (Williston Park)** 1990 Jul;4(7):106

Can chemo-radiotherapy plus transurethral tumor resection make cystectomy unnecessary for invasive bladder cancer? Shipley WU, et al. **Oncology (Williston Park)** 1990 Jul; 4(7):25–32; discussion 32–4, 39

Bladder cancer. What's new in diagnosis and treatment? Badalament RA, et al. **Postgrad Med** 1990 Sep 15; 88(4):63–4, 67–70 (22 ref.)

Immune modifiers in the treatment of bladder cancer. Morales A. **Prog Clin Biol Res** 1990;350:25–33 (26 ref.)

Treatment of low and high risk superficial bladder tumors (SBT). Rübben H, et al. **Prog Clin Biol Res** 1990;350:61–70

Follow up of patients receiving treatment for superficial bladder cancer with mitomycin C and BCG. Soloway MS. **Prog Clin Biol Res** 1990;350:71–9

Percutaneous BCG perfusion of the upper urinary tract for carcinoma in situ. Studer UE, et al. **Prog Clin Biol Res** 1990;350:81–6

Bladder tumour treatment in the aarhus region. 25 years of experience. Sell A, et al. **Scand J Urol Nephrol Suppl** 1989; 125:107–14

Rationale for optimizing bladder cancer treatment and control. Wolf H. **Scand J Urol Nephrol Suppl** 1989; 125:103–6 (31 ref.)

Neoadjuvant chemotherapy in deeply invasive bladder cancer: the Italian experience. The Lombard Urologists. **Semin Urol** 1990 Aug;8(3):205–9

A progress report on the results of multimodality therapy for muscle-invasive bladder cancer. Prout GR Jr, et al. **Semin Urol** 1990 Aug;8(3):201–4

Bacillus Calmette-Guérin and superficial bladder cancer. Clinical experience and mechanism of action. Catalona WJ, et al. **Surg Annu** 1990;22:363–78 (63 ref.)

Antigenic relationship between streptococcal preparation OK-432 and tumors and its effect on immunotherapy with OK-432 in patients with superficial bladder tumor. Fujioka T, et al. **Urol Int** 1989;44(4):198–204

Use of intravesical bacillus Calmette-Guérin in the treatment of superficial transitional cell carcinoma of the bladder: an overview. Witjes JA, et al. **Urol Int** 1990;45(3):129–36 (67 ref.)

Analysis of mucosal bladder leucocyte subpopulations in patients treated with intravesical Bacillus Calmette-Guerin. Peuchmaur M, et al. **Urol Res** 1989;17(5):299–303

Intravesical interferon treatment of superficial bladder cancer. Chodak GW. **Urology** 1989 Oct;34(4 Suppl):84–6; discussion 87–96 (7 ref.)

Multicenter study of superficial bladder cancer treated with intravesical bacillus Calmette-Guérin or adriamycin. Khanna OP, et al. **Urology** 1990 Feb;35(2):101–8

Conservative treatment of superficial transitional cell carcinoma of prostatic urethra with intravesical BCG. Orihuela E, et al. **Urology** 1989 Nov;34(5):231–7

Maintenance intravesical bacillus calmette-guerin for superficial transitional cell carcinoma of bladder. A retrospective study. Schwalb DM, et al. **Urology** 1990 Sep; 36(3):222–5

BCG in management of transitional cell carcinoma invasive to prostate. Siami P, et al. **Urology** 1989 Dec;34(6):381–2

[Intravesical BCG as a treatment for superficial and in situ transitional cell carcinoma of the bladder] Schmidt AC, et al. **S Afr Med J** 1990 Apr 7;77(7):354–7 (Eng. Abstr.) **(Afr)**

[Nonspecific immunotherapy with BCG vaccine in bladder tumors] Damianov Kh, et al. **Khirurgiia (Sofiia)** 1990; 43(1):48–53 (Eng. Abstr.) **(Bul)**

[Immunochemotherapy of advanced bladder tumors] Damionov C, et al. **J Urol (Paris)** 1989;95(7):406–11 (19 ref.) (Eng. Abstr.) **(Fre)**

[Systemic B.C.G. infection after intravesical B.C.G. therapy of in situ carcinoma of the bladder (letter)] Gatfosse M, et al. **Rev Med Interne** 1990 Mar-Apr;11(2):181–2 **(Fre)**

[Novel immunotherapeutic models for neoplastic diseases of the urogenital tract with special attention to bladder carcinoma] Leskovar P. **Allerg Immunol (Leipz)** 1989; 35(4):249–63 (0 ref.) (Eng. Abstr.) **(Ger)**

[Treatment of carcinoma in situ of the urinary bladder with BCG] Schnyder von Wartensee M, et al. **Helv Chir Acta** 1989 Aug;56(3):351–4 (Eng. Abstr.) **(Ger)**

[Results obtained by intravesical instillation of BCG in superficial bladder tumors] Romics I, et al. **Orv Hetil** 1990 Jan 7;131(1):25–8 (27 ref.) (Eng. Abstr.) **(Hun)**

[Results of BCG immunotherapy in the management of bladder tumors] Samodai L, et al. **Orv Hetil** 1990 Aug 5; 131(31):1697–702 (38 ref.) (Eng. Abstr.) **(Hun)**

[Balloon-occluded arterial infusion as chemotherapy in bladder cancer—long-term results] Mitsuzane K, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1701–4 (Eng. Abstr.) **(Jpn)**

[Intravesical BCG therapy in patients with recurrent superficial bladder tumors] Sugimoto M, et al. **Gan To Kagaku Ryoho** 1989 Dec;16(12):3725–8 (Eng. Abstr.) **(Jpn)**

[Intravesical bacillus Calmette-Guerin therapy for superficial bladder tumor: experience of 13 cases] Okuno H, et al. **Hinyokika Kiyo** 1989 Sep;35(9):1503–7 (Eng. Abstr.) **(Jpn)**

[Clinical effects of hyperthermia treatment for recurrent bladder cancer] Ueda K, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Aug 20;24(8):1521–5 (Eng. Abstr.) **(Jpn)**

[Preliminary results in treating superficial bladder tumors by the local instillation of Calmette-Guérin bacilli] Proca E, et al. **Rev Chir [Chir]** 1989 Nov-Dec;38(6):401–20 (Eng. Abstr.) **(Rum)**

[The combined treatment of bladder cancer] Kariakin OB, et al. **Urol Nefrol (Mosk)** 1989 Jul-Aug;(4):34–9 (Eng. Abstr.) **(Rus)**

[The use of BCG vaccine in the treatment of surface tumors of the bladder] Kumanov Kh, et al. **Urol Nefrol (Mosk)** 1989 Sep-Oct;(5):41–4 (Eng. Abstr.) **(Rus)**

[Superficial tumors of the bladder: prognostic value of the free of disease period] Sánchez de la Muela P, et al. **Actas Urol Esp** 1990 Jan-Feb;14(1):8–13 (Eng. Abstr.) **(Spa)**

[Low-dose BCG in the therapy of superficial neoplasms of the bladder] Francesco Bassi P, et al. **Arch Esp Urol** 1990 Jun;43(5):503–7 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Scanning electron microscopy of 'normal' urothelium in patients with infiltrating bladder carcinoma. Parenti A, et al. **Appl Pathol** 1989;7(6):338–43

Morphometry in human transitional cell bladder cancer. Nuclear area and standard deviation of nuclear area—relation to tumor grade (WHO) and prognosis. Lipponen PK, et al. **Eur Urol** 1990;17(2):155–60

Morphometric and flow cytometric analysis of small cell undifferentiated carcinoma of the bladder. Blomjous CE, et al. **J Clin Pathol** 1989 Oct;42(10):1032–9

Scanning electron microscopy of immuno-gold labeled antigens associated with bladder cancer. de Harven E, et al. **Scanning Microsc** 1990 Jun;4(2):467–76; discussion 476–7

Surface topography of deeper cells exposed by ultrasonic wave forces in neoplastic and non-neoplastic epithelium of human urinary bladder. Suzuki T, et al. **Urol Int** 1990; 45(4):264–8

Nucleolar organizer regions in rat urinary bladder tumors induced by N-butyl-N-(4-hydroxybutyl)nitrosamine. Takeuchi T, et al. **Virchows Arch [B]** 1990;58(5):383–7

URINE

Trichouria due to benign retrovesical teratoma. Basu A, et al. **Br J Urol** 1990 Jun;65(6):659–60

Clinical significance of urine ferritin determination in urologic malignancies. Tang DJ, et al. **Chin Med J [Engl]** 1989 May;102(5):356–60

Detection of malignant cells in voided urine from patients with bladder cancer, a novel monoclonal assay. Walker KZ, et al. **J Urol** 1989 Dec;142(6):1578–83

Various urinary properties in bladder tumor patients. Okamura T, et al. **Jpn J Clin Oncol** 1990 Jun;20(2):154–8

New urine test for diagnosis of urothelial carcinoma [news] **Oncology (Williston Park)** 1990 Mar;4(3):70

Immunocytology as a possible marker to identify patients who require prophylaxis. Huland H, et al. **Prog Clin Biol Res** 1990;350:35–9

Eosinophil cationic protein in urine in patients with urinary bladder tumors. Lose G, et al. **Urol Res** 1989;17(5):295–7

[Urine cytology as a supplement to cystoscopy and biopsy in the control of bladder tumors] Andersen OP, et al. **Ugeskr Laeger** 1989 Dec 11;151(50):3400–1 (Eng. Abstr.) **(Dan)**

[Flow cytometry in micturitional urine: its clinical application in cases of bladder cancer] Dadone C, et al. **Minerva Urol Nefrol** 1990 Apr-Jun;42(2):77–80 (Eng. Abstr.) **(Ita)**

[Study on influence of cigarette smoking on the mutagenicity of urine. I. Influence of cigarette smoking on the mutagenicity of urine in healthy smokers and bladder cancer patients] Kanaoka T, et al. **Hinyokika Kiyo** 1990 Apr;36(4):385–93 (Eng. Abstr.) **(Jpn)**

[Clinical study of urinary cytology in bladder tumors—analysis of factors related with positivity of urinary cytology] Tanaka K, et al. **Hinyokika Kiyo** 1990 Jan;36(1):7–11 (Eng. Abstr.) **(Jpn)**

VETERINARY

Erythrocyte glutathione and its metabolizing enzymes in bovine urinary bladder cancer. Dawra RK, et al. **Cancer Lett** 1989 Nov 30;48(2):143–6

What is your diagnosis? Thick bladder wall and an irregular mixed echoic density consistent with an infiltrative bladder mass. Love NE, et al. **J Am Vet Med Assoc** 1989 Nov 15;195(10):1409–10

Epidemiologic study of insecticide exposures, obesity, and risk of bladder cancer in household dogs. Glickman LT, et al. **J Toxicol Environ Health** 1989;28(4):407–14

Cisplatin (cisdiamminedichloroplatinum) for treatment of transitional cell carcinoma of the urinary bladder or urethra. A retrospective study of 15 dogs. Moore AS, et al. **J Vet Intern Med** 1990 May-Jun;4(3):148–52

Massive endometriosis in two rhesus monkeys. Saegusa J, et al. **Jikken Dobutsu** 1989 Jul;38(3):275–8

Disorders of the lower urinary tract in old dogs. Moreau PM. **Vet Rec** 1990 Apr 28;126(17):415–25 (34 ref.)

BLADDER, NEUROGENIC

CLASSIFICATION

The neurogenic overactive bladder. Classification based on urodynamics. Fall M, et al. **Br J Urol** 1989 Oct;64(4):368–73

COMPLICATIONS

Impaired healing of neuropathic foot ulcers due to neuropathic bladder distension in a patient with diabetes. Masson EA, et al. **BMJ** 1990 Aug 4;301(6746):281

[Terminal renal failure of pediatric urologic origin according to cause and inverted morphometry] Sigel A, et al. **Urologe [A]** 1989 Sep;28(5):285–8 (12 ref.) (Eng. Abstr.) **(Ger)**

[Bladder augmentation in three patients with contracted bladder caused by neurogenic bladder] Suemori T, et al. **Hinyokika Kiyo** 1990 Jan;36(1):77–82 (Eng. Abstr.) **(Jpn)**

[The role of uninhibited bladder in antireflux surgery. Special reference to reflux recurrence and diverticulum formation] Gotoh T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Oct; 80(10):1451–8 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Surgical management of the congenital neuropathic bladder. Parry JR, et al. **Br J Urol** 1990 Feb;65(2):164–7

DIAGNOSIS

Ultrasound measurement of urine volume of children with neurogenic bladder. Massagli TL, et al. **Dev Med Child Neurol** 1990 Apr;32(4):314–8

[Cystalgia] Khairliev GZ, et al. **Sov Med** 1990;(2):87–90 **(Rus)**

[The use of the M-cholinomimetic test in predicting treatment efficacy in neurogenic bladder dysfunctions] Dzhavad-Zade MD, et al. **Urol Nefrol (Mosk)** 1990 Mar-Apr;(2):7–11 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Vesical instillation of emepronium bromide in defunctionalized postobstructive noncompliant bladder: an alternative to intestinal augmentation surgery? Aragona F, et al. **Child Nephrol Urol** 1990;10(1):39–43

Desmopressin: a new principle for symptomatic treatment of urgency and incontinence in patients with multiple sclerosis. Kinn AC, et al. **Scand J Urol Nephrol** 1990; 24(2):109–12

Prazosin treatment of neurological patients with detrusor hyperreflexia and bladder emptying disability. Petersen T, et al. **Scand J Urol Nephrol** 1989;23(3):189–94

Prospective study utilizing transdermal scopolamine in

detrusor instability. Cornella JL, et al. **Urology** 1990 Jan; 35(1):96–7

[[The effect of cisapride on the neurogenic bladder] Hanson P, et al. **Acta Belg Med Phys** 1989 Jul–Sep;12(3):81–8 (Eng. Abstr.) **(Fre)**

[Instability of the detrusor. Treatment with oxybutynin chloride (Ditropan) in children] Vallejo Herrador J, et al. **Actas Urol Esp** 1990 Jan–Feb;14(1):23–7 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Non-neurogenic neurogenic bladder. Pesce F, et al. **Acta Urol Belg** 1990;58(1):139–43

Bladder dysfunction after simple hysterectomy: urodynamic and neurological evaluation. Parys BT, et al. **Eur Urol** 1990; 17(2):129–33

An animal model of non-obstructive bladder instability. Sethia KK, et al. **J Urol** 1990 Jun;143(6):1243–6

Clinical, urodynamic and neurophysiological findings in patients with neuropathic bladder due to a lumbar intervertebral disc protrusion. Fanciullacci F, et al. **Paraplegia** 1989 Oct;27(5):354–8

Prognostic and therapeutic observations of manifestations in the genitourinary tract of adenocarcinoma of the colon and rectum. Lee PH, et al. **Surg Gynecol Obstet** 1989 Dec; 169(6):511–8

Neuropathic bladder in ankylosing spondylitis with spinal diverticula. Haddad FS, et al. **Urology** 1990 Apr; 35(4):313–6

Analysis of voiding disorders in patients with cerebrovascular accidents. Khan Z, et al. **Urology** 1990 Mar;35(3):265–70

[Urodynamic, radiological and clinical studies in children with spina bifida] Vereecken RL, et al. **Acta Urol Belg** 1990;58(1):79–86 (Eng. Abstr.) **(Fre)**

[Vesico-sphincter disorders in neurosyphilis] Amarenco G, et al. **J Urol (Paris)** 1989;95(6):343–5 (Eng. Abstr.) **(Fre)**

[Urological problems in paraplegic patients (editorial)] Rist M. **Schweiz Rundsch Med Prax** 1990 Jun 5;79(23):717–8 **(Ger)**

[Neurogenic bladder dysfunction due to tethered spinal cord syndrome in adults: report of two cases] Onishi N, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1229–34 (Eng. Abstr.) **(Jpn)**

[Spina bifida accompanied with neurogenic bladder in a patient who lived to be 81 years old] Ushiyama T, et al. **Hinyokika Kiyo** 1989 Aug;35(8):1413–6 (Eng. Abstr.) **(Jpn)**

[Neurogenic bladder in patients with cervical cord compression disorders] Ando M. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb;81(2):243–50 (Eng. Abstr.) **(Jpn)**

[Two cases of neurogenic bladder due to HTLV-1 associated myelopathy (HAM)] Namima T, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Mar;81(3):475–8 (Eng. Abstr.) **(Jpn)**

[A case of neurogenic bladder due to arachnoid cyst of the middle cranial fossa] Namima T, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):134–6 (Eng. Abstr.) **(Jpn)**

[A case of primary Sjögren syndrome associated with neurogenic bladder] Yamashita K, et al. **Nippon Naika Gakkai Zasshi** 1989 Jun;78(6):848–9 **(Jpn)**

[Paralytic ileus and atonic bladder in a case of mitochondrial encephalomyopathy—electrophysiological, chemical and pathological study with evidence of the peripheral nerve involvement] Takeda K, et al. **Rinsho Shinkeigaku** 1989 May;29(5):643–6 (Eng. Abstr.) **(Jpn)**

[The role of estrogens in the pathogenesis of bladder dysfunction of the hyperreflexia type and vesico-ureteral reflux in children] Derzhavin VM, et al. **Pediatriia** 1990; (2):10–4 (Eng. Abstr.) **(Rus)**

[Neurogenic bladder caused by meningomyelocele in childhood: urodynamic pattern and treatment regimens] Artibani W, et al. **Arch Esp Urol** 1990 May;43(4):371–4 (20 ref.) (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Urethral function after chronic cauda equina lesions in cats. I. The contribution of mechanical factors and sympathetic innervation to proximal sphincter dysfunction. Flood HD, et al. **J Urol** 1990 Oct;144(4):1022–8

Urethral function after chronic cauda equina lesion in cats. II. The role of autonomically-innervated smooth and striated muscle in distal sphincter dysfunction. Flood HD, et al. **J Urol** 1990 Oct;144(4):1029–35

Reduction in human bladder wall compliance following decentralization. Sislow JG, et al. **J Urol** 1990 Oct; 144(4):945–7

[2 classical contraindications for enteroplasty in spina bifida] Penders L, et al. **Acta Urol Belg** 1990;58(1):87–94 (Eng. Abstr.) **(Fre)**

[Bladder disorders in young adults with myelomeningocele: results of urodynamic-electromyographic studies] Rösler KM, et al. **Schweiz Med Wochenschr** 1990 Jul 28; 120(30):1091–7 (Eng. Abstr.) **(Ger)**

[Disorders of bladder function in Parkinson syndrome] Jünemann KP, et al. **Urologe [A]** 1990 Jul;29(4):170–5 (Eng. Abstr.) **(Ger)**

[An electromyographic study of detrusor sphincter dyssynergia in the neurogenic vesical dysfunction. Part 1. Its type and further sub-typing based on the analysis of motor units] Shinno Y. **Nippon Hinyokika Gakkai Zasshi** 1989 Oct;80(10):1436–42 (Eng. Abstr.) **(Jpn)**

[An electromyographic study of detrusor sphincter dyssynergia in neurogenic vesical dysfunction. Part 2. Changes after radical transurethral resection of prostate and response to alpha-adrenergic stimulation] Shinno Y. **Nippon Hinyokika Gakkai Zasshi** 1989 Oct;80(10):1443–50 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Descent of the bladder neck: a urographic finding in denervation of the urethral sphincter in children with myelodysplasia. Zerin JM, et al. **Radiology** 1990 Mar;174(3 Pt 1):833–6

Cystourethrograms characteristic of bladder instability in children. Kondo A. **Urology** 1990 Mar;35(3):242–6

RADIONUCLIDE IMAGING

Direct radionuclide cystogram (DRCG) and urine flowmetry (UFMT) in the evaluation of patients with vesicoureteral reflux (VUR) and/or associated obstructive or neurogenic pathology of the lower urinary tract. Padhy AK, et al. **Indian J Pediatr** 1989 Jul–Aug;56(4):483–92

REHABILITATION

Behavioral methods for teaching self-catheterization skills to anxious children with myelomeningocele. Rickert VI, et al. **Arch Phys Med Rehabil** 1990 Sep;71(10):751–3

Treating urinary incontinence in a head-injured adult. Garcia JG, et al. **Brain Inj** 1990 Apr–Jun;4(2):203–7

Teaching self-catheterization skills to children with neurogenic bladder complications. Neef NA, et al. **J Appl Behav Anal** 1989 Fall;22(3):237–43

SURGERY

Is evaluation of the right colon necessary prior to cecocystoplasty? Beshai AZ, et al. **J Urol** 1990 Aug;144(2 Pt 1):359–61

Continent urinary reservoirs in pediatric urological practice. Leonard MP, et al. **J Urol** 1990 Aug;144(2 Pt 1):330–3

Urethral lengthening for neurogenic urinary incontinence (Kropp's procedure): results of 16 cases. Mollard P, et al. **J Urol** 1990 Jan;143(1):95–7

Upper urinary tract deterioration after implantation of artificial urinary sphincter. Bitsch M, et al. **Scand J Urol Nephrol** 1990;24(1):31–4

Clinical experience of Kock pouch continent urinary diversion. Chen KK, et al. **Urology** 1990 Apr;35(4):317–20

Long-term follow-up of percutaneous radiofrequency sacral rhizotomy. Mulcahy JJ, et al. **Urology** 1990 Jan;35(1):76–7

[Surgical treatment of spastic bladder paralysis in paraplegic patients. Sacral deafferentation with implantation of a sacral anterior root stimulator] Sauerwein D. **Urologe [A]** 1990 Jul;29(4):196–203 (Eng. Abstr.) **(Ger)**

[Management of female neurogenic bladders caused by cervical spinal cord injuries—cutaneous vesicostomy] Natsume O, et al. **Hinyokika Kiyo** 1990 Mar;36(3):271–4 (Eng. Abstr.) **(Jpn)**

[Review of a 14-year experience of augmentation enterocystoplasty. Observations on bowel dynamics] Esa A, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 May; 81(5):713–8 (Eng. Abstr.) **(Jpn)**

THERAPY

Bladder instability and enuresis treated by acupuncture and electro-therapeutics: early urodynamic observations. Minni B, et al. **Acupunct Electrother Res** 1990;15(1):19–25

Effects of external and direct pudendal nerve maximal electrical stimulation in the treatment of the uninhibited overactive bladder. Ohlsson BL, et al. **Br J Urol** 1989 Oct; 64(4):374–80

Urethral dilation improves bladder compliance in children with myelomeningocele and high leak point pressures. Bloom DA, et al. **J Urol** 1990 Aug;144(2 Pt 2):430–3; discussion 443–4

Management of the obstructed urinary tract associated with neurogenic bladder dysfunction. Bauer SB, et al. **Urol Clin North Am** 1990 May;17(2):395–406 (81 ref.)

[Neurogenic urinary incontinence: current treatment concepts] Madersbacher H. **Urologe [A]** 1990 Jul; 29(4):176–84 (23 ref.) (Eng. Abstr.) **(Ger)**

[Clinical use of neurostimulation] Schmidt RA, et al. **Urologe [A]** 1990 Jul;29(4):191–5 (Eng. Abstr.) **(Ger)**

[Principles and indications of electrostimulation of the urinary bladder] Tanagho EA. **Urologe [A]** 1990 Jul; 29(4):185–90 (32 ref.) (Eng. Abstr.) **(Ger)**

[Differentiated electrotherapy of neurogenic urination disorders] Mokhort VA, et al. **Urol Nefrol (Mosk)** 1989 Jul–Aug;(4):20–5 (Eng. Abstr.) **(Rus)**

BLADDER STONES see **BLADDER CALCULI**

BLADE IMPLANTATION see under **DENTAL IMPLANTATION, ENDOSSEOUS**

BLAST-2 ANTIGEN, B-CELL see **ANTIGENS, DIFFERENTIATION, B-LYMPHOCYTE**

BLAST CRISIS

Natural killer lymphocyte blast crisis of chronic myelogenous leukemia. Warzynski MJ, et al. **Am J Hematol** 1989 Dec; 32(4):279–86

Hypercalcemia associated with osteolytic lesions in the extramedullary blastic crisis of chronic myelogenous leukemia: report of a case. Kubota K, et al. **Blut** 1989 Nov; 59(5):458–9

Risk of leukemic transformation in two types of acquired idiopathic sideroblastic anemia. Gattermann N, et al. **Hamatol Bluttransfus** 1990;33:374–81

Effect of luteotrophic hormone (LH) and thymosin on mitogen-induced blast transformation of Balb/c mouse lymphoid cells. Rouabhia M, et al. **Life Sci** 1990; 46(4):257–64

[Existence and significance of T-lymphoid crisis of chronic myeloid leukemia] Kuriyama K. **Rinsho Ketsueki** 1990 May; 31(5):625–32 (56 ref.) **(Jpn)**

[Adult T-cell leukemia (chronic type) with unusual surface phenotype CD 4+5+8-, Leu 7+ at acute crisis] Morikawa T, et al. **Rinsho Ketsueki** 1989 May;30(5):702–6 (Eng. Abstr.) **(Jpn)**

[Bone marrow aplasia without blast crisis in a case of CML of 10-year survival] Shiga Y, et al. **Rinsho Ketsueki** 1989 May;30(5):752–6 (Eng. Abstr.) **(Jpn)**

[Myeloid crisis of chronic myelogenous leukemia showing dramatic response to mithramycin and hydroxyurea combination] Ueki K, et al. **Rinsho Ketsueki** 1989 Oct; 30(10):1840–2 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

A new murine monoclonal antibody for the diagnosis of erythroleukemia. Solberg LA Jr, et al. **Am J Clin Pathol** 1990 Mar;93(3):387–90

Ovarian granulocytic sarcoma in chronic granulocytic leukaemia with myeloblastic crisis. Sagar TG, et al. **J Assoc Physicians India** 1989 Aug;37(8):542–3

[Differential diagnostic criteria of blast cells in the peripheral blood in acute myeloid leukemias] Galdukova SN, et al. **Vrach Delo** 1989 Sep;(9):38–41 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Continuous infusion of mitoxantrone combined with high-dose cytarabine in refractory/relapsed acute myeloblastic leukemia and blast crisis of chronic myelogenous leukemia. Linkesch W, et al. **Hamatol Bluttransfus** 1990;33:330–2

Oral idarubicin in the treatment of acute myelogenous leukaemia and the blast phase of chronic myeloid leukaemia. Malik ST, et al. **Hematol Oncol** 1989 Nov–Dec; 7(6):423–7

Continuous infusion diaziquone and etoposide: a phase I study in adult patients with acute leukemia. Lee EJ, et al. **Leukemia** 1990 Mar;4(3):189–92

[Recurrent lymphoblastic crises sensitive to vincristine in a case of chronic myeloid leukemia] Pentimone F, et al. **Clin Ter** 1989 Jul 31;130(2):89–93 (Eng. Abstr.) **(Ita)**

[P-glycoprotein and treatment with plicamycin + hydroxyurea in myeloid blastic crisis of chronic myeloid leukemia] Carulli G, et al. **Medicina (Firenze)** 1989 Oct–Dec;9(4):409–10 (Eng. Abstr.) **(Ita)**

[Chemotherapy of chronic myelogenous leukemia—VP(M) regimen initiated during its chronic phase, and evaluation of MCNU in the phase of blastic crisis] Kitajima K, et al. **Gan To Kagaku Ryoho** 1989 Nov;16(11):3573–9 (Eng. Abstr.) **(Jpn)**

[Influence of morphine and naloxone on the blast transformation++ of lymphocytes] Tarchalska-Kryńska B, et al. **Otolaryngol Pol** 1989;43(1):12–8 (Eng. Abstr.) **(Pol)**

ENZYMOLOGY

[Changes in serum RNase activities in chronic phase and acute crisis of chronic myelocytic leukemia] Maruoka K, et al. **Rinsho Ketsueki** 1989 Jul;30(7):988–93 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Cigarette smoking, blast crisis, and survival in chronic myeloid leukemia. Herr R, et al. **Am J Hematol** 1990 May; 34(1):1–4

GENETICS

Extramedullary pleural blast crisis in chronic myelogenous leukemia: cytogenetic and molecular study. Sacchi S, et al. **Acta Haematol (Basel)** 1990;83(4):198–202

Rearrangement of immunoglobulin and TCR genes in lymphoid blast crisis of Ph+ chronic myeloid leukaemia. Kerim S, et al. **Br J Haematol** 1990 Apr;74(4):414–9

Expression of a multidrug resistance gene in blast crisis of chronic myelogenous leukemia. Pirker R, et al. **Cancer Commun** 1989;1(2):141–4

Double minute chromosomes and monosomy 7 in a lymphatic blast crisis of chronic myeloid leukemia [letter] Cigudosa JC, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):133–4

Blastic transformation associated with 5q- and 12p- [letter] Silva ML, et al. **Cancer Genet Cytogenet** 1990 Jul 15; 47(2):275–6

Cytogenetic and molecular analysis of a "masked"

Philadelphia chromosome in chronic and blastic phases of chronic myeloid leukemia. Zitzelsberger H, et al. **Cancer Genet Cytogenet** 1990 Jul 15;47(2):219–25

Ratios between the abundance of messenger RNA and the corresponding protein of two growth-related genes, c-myc and vimentin, in leukemia blast cells. Ferrari S, et al. **Cancer Res** 1990 Apr 1;50(7):1988–91

Genetic heterogeneity in blast crisis of chronic myelocytic leukemia. Ikeda T, et al. **Leuk Res** 1990;14(2):195–201

Electric field-mediated gene transfer into K562 cells: optimization of parameters affecting efficiency. Croaker GM, et al. **Leukemia** 1990 Jul;4(7):502–7

Immunoglobulin and T cell receptor gene rearrangements in Philadelphia chromosome-positive leukemia: a different involvement pattern in blast crisis and acute leukemia. Ohyashiki JH, et al. **Leukemia** 1990 Aug;4(8):572–9

Blast crisis accompanied with occurrence of the point-mutational activation of N-ras proto-oncogene and the chromosomal abnormality inv(3q) in chronic myelogenous leukemia presenting thrombocytosis [letter] Okabe M, et al. **Leukemia** 1990 May;4(5):381–2

Molecular analysis of a CML patient with a long duration of chronic phase before and after lymphoid blast crisis. Price CM, et al. **Leukemia** 1990 Jun;4(6):455–7

[Discrepancy in karyotypes between peripheral blood and bone marrow during blastic crisis in chronic myelocytic leukemia] Maeda T, et al. **Rinsho Ketsueki** 1989 Jul; 30(7):1032–6 (Eng. Abstr.) **(Jpn)**

[Mixed blast crisis with the cytogenetic evidence of three clonal evolutions] Okamoto T, et al. **Rinsho Ketsueki** 1990 Mar;31(3):352–8 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Repeated blast crisis (BC) of changing morphology, immunologic phenotype and cytogenetics in chronic myeloid leukemia (CML). Jehn U, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1721–3

Prognostic significance of surface marker expression on blasts of patients with de novo acute myeloblastic leukemia. Schwarzinger I, et al. **J Clin Oncol** 1990 Mar;8(3):423–30

METABOLISM

Expression of the multidrug transporter, P-glycoprotein, in chronic myelogenous leukaemia cells in blast crisis. Kuwazuru Y, et al. **Br J Haematol** 1990 Jan;74(1):24–9

Receptor binding of human granulocyte colony-stimulating factor to the blast cells of myeloid leukemia. Piao YF, et al. **Cancer Res** 1990 Mar 15;50(6):1671–4

Heterogeneity in protein patterns of CGL blast crisis cells: discrimination between lymphatic and myeloic lineages. Doxiadis I, et al. **Hamatol Bluttransfus** 1990;33:62–6

PATHOLOGY

Blastic transformation of essential thrombocythemia. A case report. Honma K, et al. **Acta Pathol Jpn** 1989 Oct; 39(10):670–6

Lymphoblastic crisis of chronic myelogenous leukemia. Hand mirror variant. Kowal-Vern A, et al. **Arch Pathol Lab Med** 1990 Jul;114(7):676–8

Hematopoietic stem cell theory in relation to possible lymphoblastic conversion of chronic myeloid leukemia [editorial] Boggs DR. **Blood** 1974 Sep;44(3):449–53

Peripheral acute leukemia: high peripheral but low-marrow blast count. Cason JD, et al. **Blood** 1989 Oct;74(5):1758–61

Relationship of bcr breakpoint to chronic phase duration, survival, and blast crisis lineage in chronic myelogenous leukemia patients presenting in early chronic phase. Morris SW, et al. **Blood** 1990 May 15;75(10):2035–41

Blastic transformation in essential thrombocythemia. In vitro differentiation of blast cells into granulocytic, erythroid, and megakaryocytic lineages. Kimura A, et al. **Cancer** 1990 Apr 1;65(7):1538–44

Colony-stimulating factors (rhG-CSF, rhGM-CSF, rhIL-3, and BCGF) recruit myeloblastic and lymphoblastic leukemic cells and enhance the cytotoxic effects of cytosine-arabinoside. Andreeff M, et al. **Hamatol Bluttransfus** 1990;33:747–62

Clinical characteristics of the blast phase of chronic granulocytic leukemia. Canellos GP. **Hematol Oncol Clin North Am** 1990 Apr;4(2):359–67 (49 ref.)

Extramedullary blast crisis in chronic myelogenous leukaemia [letter] Mishra A, et al. **J Assoc Physicians India** 1990 Jun; 38(6):441–2

Erythroleukaemic blast crisis in chronic granulocytic leukaemia. Varma N, et al. **J Assoc Physicians India** 1989 Jul;37(7):460–1

Lymph node blast crisis of chronic myelogenous leukemia. One case report. Hwang SM, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 Jun; 6(6):302–8

Control of blast cell proliferation and differentiation in acute myelogenous leukemia by soluble polypeptide growth factors. Herrmann F, et al. **Klin Padiatr** 1990 Jul-Aug; 202(4):212–7 (56 ref.)

Clinical and cytogenetic correlations of abnormal megakaryocytopoiesis in patients with acute leukemia and chronic myelogenous leukemia in blast crisis. Lee EJ, et al. **Leukemia** 1990 May;4(5):350–3

A case of chronic myelocytic leukemia in blast crisis: the myeloblasts became overt from lymphoid and myeloid mixed population of the blast crisis cells after chemotherapy. Ikeda T, et al. **Nippon Ketsueki Gakkai Zasshi** 1990 Feb;53(1):62–9

Morphologic heterogeneity and plasmablastic transformation in advanced plasmacytic/plasmablastic myeloma: a study of 35 serial bone marrow biopsies in 9 patients. Paule B, et al. **Nouv Rev Fr Hematol** 1989;31(3):203–8

[Analysis of 30 cases of chronic myeloid leukemia with non-myeloid blast crisis] Ge CW, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Dec;28(12):731–3, 768 (Eng. Abstr.) **(Chi)**

[Sensitivity of leukemic blasts in acute lymphoblastic leukemia to biological response modifiers (cytokines)] Wörrmann B, et al. **Verh Dtsch Ges Inn Med** 1989;95:12–5 **(Ger)**

[Blastic crisis of primary myelofibrosis associated with multiple myeloblastomas] Fukushima T, et al. **Rinsho Ketsueki** 1990 Jan;31(1):95–9 (Eng. Abstr.) **(Jpn)**

[Megakaryoblastic crisis of chronic myelogenous leukemia cytological and clinical studies in three cases] Ikegami T, et al. **Rinsho Ketsueki** 1989 Jun;30(6):898–903 (Eng. Abstr.) **(Jpn)**

[Long survival of a patient presented with blastic crisis of chronic myelomonocytic leukemia] Kurata H, et al. **Rinsho Ketsueki** 1990 Jan;31(1):41–5 (Eng. Abstr.) **(Jpn)**

[Hypercalcemia associated with blast crisis of chronic myeloid leukemia] Murata T, et al. **Rinsho Ketsueki** 1990 Feb;31(2):177–82 (15 ref.) (Eng. Abstr.) **(Jpn)**

[Acquisition of Philadelphia chromosome with bcr rearrangement concomitant with transformation of refractory anemia with excess of blasts with 8 trisomy into acute myelogenous leukemia] Niikura H, et al. **Rinsho Ketsueki** 1990 Mar;31(3):335–40 (Eng. Abstr.) **(Jpn)**

[Chronic myelogenous leukemia characterized by successive lymphoid and myelomonocytic blast crises] Shirai T, et al. **Rinsho Ketsueki** 1989 May;30(5):668–73 (Eng. Abstr.) **(Jpn)**

[Parameters of granulocyte proliferation in chronic myeloid leukemia and their prognostic value] Kotel'nikov VM, et al. **Gematol Transfuziol** 1989 Aug;34(8):7–10 (Eng. Abstr.) **(Rus)**

[Blast crisis of chronic myeloid leukemia with positive Philadelphia chromosome: course and clinico-hematologic profile in 80 patients] Cervantes F, et al. **Med Clin (Barc)** 1990 May 12;94(18):681–4 (Eng. Abstr.) **(Spa)**

[Ocular infiltration as a presenting form of extramedullary blast crisis in CML] Alegre A, et al. **Sangre (Barc)** 1990 Jun;35(3):236–7 **(Spa)**

[Study of leukemic colony-forming units (CFU-L) in non-lymphoblastic malignant hemopathies] Almeida J, et al. **Sangre (Barc)** 1989 Dec;34(6):467–70 (Eng. Abstr.) **(Spa)**

BLAST INJURIES

[Blast injury of the ear] Roth Y, et al. **Harefuah** 1989 Nov 15;117(10):297–301 (Eng. Abstr.) **(Heb)**

CLASSIFICATION

[Blast injuries of the 1st commissure] Toussaint B, et al. **Ann Chir Main** 1989;8(4):338–43 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

[Eye injuries in explosive mine wounds] Dalinchuk MM, et al. **Voen Med Zh** 1989 Aug;(8):28–30 **(Rus)**

[Lung lesions in gunshot wounds and explosive mine trauma preceding the development of pneumonia] Viazitskiĭ PO, et al. **Voen Med Zh** 1989 Sep;(9):19–22 **(Rus)**

ETIOLOGY

Glass shrapnel injuries to children resulting from "dry ice bomb" explosions: a report of three cases. Gorrin NR, et al. **J Pediatr Surg** 1990 Mar;25(3):296

[Lighter accidents. Burns caused by lighter explosions] Lindblad LN. **Ugeskr Laeger** 1990 Jun 25;152(26):1909–10 (Eng. Abstr.) **(Dan)**

[The flight behavior of hand grenade fragments and their shock-producing effect on the human] Echsel H. **Beitr Gerichtl Med** 1989;47:601–13 (Eng. Abstr.) **(Ger)**

[Multiple injuries after explosion of a home-made bomb] Kabanchuk IN, et al. **Klin Khir** 1990;(4):75 **(Rus)**

MORTALITY

Analysis of 828 servicemen killed or injured by explosion in Northern Ireland 1970–84: the Hostile Action Casualty System. Mellor SG, et al. **Br J Surg** 1989 Oct; 76(10):1006–10

PATHOLOGY

Blast trauma in a child. Knapp JF, et al. **Pediatr Emerg Care** 1990 Jun;6(2):122–6

[Histological and ultrastructural changes of the kidneys in burn-blast combined injuries in dogs] Shi JQ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):166–8, 237 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

[War injuries of the thorax. Aggressors and wound balistics] Jourdan P, et al. **J Chir (Paris)** 1990 Feb;127(2):68–75 (31 ref.) (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

Isolated pulmonary blast injury in rats—a new model using extracorporeal shock wave lithotriptor [letter; comment] Cooper GJ. **Milit Med** 1990 Apr;155(4):A17–8 Comment on: Milit Med 1989 Jun;154(6):288–93.

SURGERY

Amputation for antipersonnel mine injuries of the leg: preservation of the tibial stump using a medial gastrocnemius myoplasty. Coupland RM. **Ann R Coll Surg Engl** 1989 Nov;71(6):405–8

Optimum management of hand blast injuries. Logan SE, et al. **Int Surg** 1990 Apr-Jun;75(2):109–14

An evaluation of myringoplasty in war injured people. Makki HT. **J Laryngol Otol** 1989 Oct;103(10):945–6

[Subcutaneous avulsion of the flexor digitorum profundus and flexor digitorum superficialis tendons of the ring and little fingers caused by blast injury] Toussaint B, et al. **Ann Chir Main Memb Super** 1990;9(3):232–5 (Eng. Abstr.) **(Fre)**

[The mini-punch technic: a method for late removal of traumatic facial tattooing] Kaufmann R. **Hautarzt** 1990 Mar;41(3):149–50 (Eng. Abstr.) **(Ger)**

[Gunshot and explosion injuries of the hand] Melzer B, et al. **Zentralbl Chir** 1990;115(4):223–9 (Eng. Abstr.) **(Ger)**

THERAPY

[The treatment of the burned hand in massive trauma in a glove with an ointment with a water-soluble base] Dakova B. **Khirurgiia (Sofiia)** 1990;43(2):15–8 (Eng. Abstr.) **(Bul)**

BLAST PHASE see **BLAST CRISIS**

BLAST TRANSFORMATION see **BLAST CRISIS**

BLASTOCLADIELLA see under **MASTIGOMYCOTINA**

BLASTOCYST

see related

PREIMPLANTATION PHASE

The production of mouse fetal-placental chimeras using trisomy 16 and euploid blastocysts. Bogart MH, et al. **Anat Embryol (Berl)** 1990;181(2):137–47

Post-implantation development and cytogenetic analysis of diandric heterozygous diploid mouse embryos. Kaufman MH, et al. **Cytogenet Cell Genet** 1989;52(1-2):15–8

Expression of Na,K-ATPase alpha and beta subunit genes during preimplantation development of the mouse. Watson AJ, et al. **Dev Genet** 1990;11(1):41–8

Research on human embryos. Schenker JG. **Eur J Obstet Gynecol Reprod Biol** 1990 Sep;36(3):267–73

Frozen pre-embryos. **JAMA** 1990 May 9;263(18):2484–7

Embryo research [letter; comment] Reynolds JL. **Lancet** 1990 Jun 23;335(8704):1530 Comment on: Lancet 1990 Apr 21;335(8695):943–4.

The use of DNA probes in preimplantation and prenatal diagnosis. West JD. **Mol Reprod Dev** 1989;1(2):138–45 (61 ref.)

Pregnancies from biopsied human preimplantation embryos sexed by Y-specific DNA amplification. Handyside AH, et al. **Nature** 1990 Apr 19;344(6268):768–70

ANALYSIS

Neoplastic embryoid bodies of embryonal carcinoma C44 as a source of blastocele-like fluid. Parchment RE, et al. **Differentiation** 1990 Mar;43(1):51–8

Identification of specific gene sequences in preimplantation embryos by genomic amplification: detection of a transgene. King D, et al. **Mol Reprod Dev** 1988;1(1):57–62

CYTOLOGY

Differentiation of the inner cell mass of the baboon blastocyst. Enders AC, et al. **Anat Rec** 1990 Feb;226(2):237–48

Programmed cell death in the blastocyst. Pierce GB, et al. **Ann N Y Acad Sci** 1989;567:182–6 (29 ref.)

Differentiation of blastocysts derived from in vitro-fertilized rhesus monkey ova. Enders AC, et al. **Biol Reprod** 1989 Oct;41(4):715–27

Transitions in trophectoderm cellular shape and cytoskeletal organization in the elongating pig blastocyst. Mattson BA, et al. **Biol Reprod** 1990 Jan;42(1):195–205

Differentiation of an epithelium: factors affecting the polarized distribution of Na+,K(+)-ATPase in mouse trophectoderm. Watson AJ, et al. **Dev Biol** 1990 Sep; 141(1):104–14

Decreased inner cell mass proportion in blastocysts from diabetic rats. Pampfer S, et al. **Diabetes** 1990 Apr; 39(4):471–6

Co-culture of rabbit one-cell embryos with rabbit oviduct epithelial cells. Carney EW, et al. **In Vitro Cell Dev Biol** 1990 Jun;26(6):629–35

Development of two-cell mouse embryos in protein-free and protein-supplemented media. Dandekar PV, et al. **J In Vitro Fert Embryo Transf** 1990 Apr;7(2):107–13

Cytoplasmic projections of trophectoderm distinguish implanting from preimplanting and implantation-delayed

mouse blastocytes. McRae AC, et al. **J Reprod Fertil** 1990 Jan;88(1):31–40

Time–lapse analysis and normal stages of development of cleavage and blastocyst formation in the marsupials the brown antechinus and the stripe–faced dunnart. Selwood L, et al. **Mol Reprod Dev** 1990 May;26(1):53–62

Tetraploid mouse embryos produced by cytochalasin B during cleavage. Snow MH. **Nature** 1973 Aug 24; 244(5417):513–5

Amine oxidases, programmed cell death, and tissue renewal. Pierce GB, et al. **Philos Trans R Soc Lond [Biol]** 1990 Mar 12;327(1239):67–74 (44 ref.)

Mesoderm induction by fibroblast growth factor in early Xenopus development. Slack JM, et al. **Philos Trans R Soc Lond [Biol]** 1990 Mar 12; 327(1239):75–84 (35 ref.)

Rapid preimplantation detection of mutant (shiverer) and normal alleles of the mouse myelin basic protein gene allowing selective implantation and birth of live young. Gomez CM, et al. **Proc Natl Acad Sci U S A** 1990 Jun; 87(12):4481–4

Development of four–cell hamster embryos to the blastocyst stage in vitro and its regulation by components of the culture milieu. Monis H, et al. **Reprod Fertil Dev** 1990; 2(1):1–9

DRUG EFFECTS

The effects of serum from women with miscarriages on the in vitro development of mouse preimplantation embryos. Abir R, et al. **Acta Obstet Gynecol Scand** 1990;69(1):27–33

Effects of nitrous oxide on preimplantation mouse embryo cleavage and development. Warren JR, et al. **Biol Reprod** 1990 Jul;43(1):158–61

Presence of amino acids and insulin in a chemically defined medium improves development of 8–cell rat embryos in vitro and subsequent implantation in vivo. Zhang X, et al. **Biol Reprod** 1990 Apr;42(4):662–8

Effect of the secretions from the IUD–bearing uterus on peri–implantation mouse embryos. Takeuchi K, et al. **Contraception** 1990 Jun;41(6):655–62

Unique role of studies on preimplantation embryos to understand mechanisms of embryotoxicity in early pregnancy. Spielmann H, et al. **Crit Rev Toxicol** 1989; 20(2):51–64 (97 ref.)

Identification of a retinoic acid–sensitive period during primary axis formation in Xenopus laevis. Sive HL, et al. **Genes Dev** 1990 Jun;4(6):932–42

In–vitro development and implantation of human embryos following culture on fetal bovine uterine fibroblast cells. Wiemer KE, et al. **Hum Reprod** 1989 Jul;4(5):595–600

Effect of calcium–modifying drugs on mouse in vitro fertilization and preimplantation development. Blancato JK, et al. **Int J Fertil** 1990 May–Jun;35(3):171–6

Centrosome duplication continues in cycloheximide–treated Xenopus blastulae in the absence of a detectable cell cycle. Gard DL, et al. **J Cell Biol** 1990 Jun;110(6):2033–42

Antagonists of embryo–derived platelet–activating factor act by inhibiting the ability of the mouse embryo to implant. Spinks NR, et al. **J Reprod Fertil** 1990 Jan;88(1):241–8

Methoxychlor accelerates embryo transport through the rat reproductive tract. Cummings AM, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):110–6

Comparative embryotoxicity of selenite and selenate: uptake in murine embryonal and fetal tissues and effects on blastocysts and embryonic cells in vitro. Danielsson BR, et al. **Toxicology** 1990 Aug;63(2):123–36

ENZYMOLOGY

Preimplantation mouse embryos express a heat–stable alkaline phosphatase. Lepire ML, et al. **Biol Reprod** 1989 Sep; 41(3):464–73

Is there any delta 5–3 beta hydroxysteroid dehydrogenase activity in preimplantation embryo of rhesus monkey? Sengupta J, et al. **Indian J Exp Biol** 1989 May;27(5):417–20

Biosynthesis and secretion of the hatching enzyme during sea urchin embryogenesis. Roe JL, et al. **J Biol Chem** 1990 May 25;265(15):8704–11

Aromatase activity in individual day–11 pig blastocysts. van der Meulen J, et al. **J Reprod Fertil** 1989 Nov;87(2):783–8

Transfer of a mutant dihydrofolate reductase gene into pre– and postimplantation mouse embryos by a replication–competent retrovirus vector. Stuhlmann H, et al. **J Virol** 1989 Nov;63(11):4857–65

Germ–line transmission of a planned alteration made in a hypoxanthine phosphoribosyltransferase gene by homologous recombination in embryonic stem cells. Koller BH, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(22):8927–31

Expression of beta–galactosidase in preimplantation ovine and porcine embryos. Murnane RD, et al. **Proc Soc Exp Biol Med** 1990 Jun;194(2):144–8

Metabolism of estrogens by rabbit blastocysts: formation of estrogen glucosides and preferential conversion of estrone to estradiol–17 beta. Wu JT, et al. **Steroids** 1989 Oct; 54(4):401–19

IMMUNOLOGY

Cell–mediated immune responses to sperm antigens: effects on mouse sperm and embryos. Naz RK, et al. **Biol Reprod** 1989 Sep;41(3):533–42

Germ–line transmission of a disrupted beta 2–microglobulin gene produced by homologous recombination in embryonic stem cells. Zijlstra M, et al. **Nature** 1989 Nov 23; 342(6248):435–8

METABOLISM

Inhibition of transport system b0,+ in blastocysts by inorganic and organic cations yields insight into the structure of its amino acid receptor site. Van Winkle LJ, et al. **Biochim Biophys Acta** 1990 Jun 27;1025(2):215–24

Changes in the activities of amino acid transport systems b0,+ and L during development of preimplantation mouse conceptuses. Van Winkle LJ, et al. **Biochim Biophys Acta** 1990 Jan 15;1021(1):77–84

Development of system B0,+ and a broad–scope Na(+)–dependent transporter of zwitterionic amino acids in preimplantation mouse conceptuses. Van Winkle LJ, et al. **Biochim Biophys Acta** 1990 Jun 27;1025(2):225–33

Transport of benzenoid amino acids by system T and four broad scope systems in preimplantation mouse conceptuses. Van Winkle LJ, et al. **Biochim Biophys Acta** 1990 Sep 7; 1027(3):268–77

Suppression of lymphocyte proliferation by a greater than 30,000 molecular weight factor in horse conceptus–conditioned medium. Roth TL, et al. **Biol Reprod** 1990 Aug;43(2):298–304

A retroviral gp70–related protein is expressed at specific stages during mouse oocyte maturation and in preimplantation embryos. Kättström PO, et al. **Cell Differ Dev** 1989 Oct;28(1):47–54

Pertussis toxin–catalyzed ADP–ribosylation of a G protein in mouse oocytes, eggs, and preimplantation embryos: developmental changes and possible functional roles. Jones J, et al. **Dev Biol** 1990 Jun;139(2):250–62

Endogenous lectins and cell adhesion in embryonic cells. Zalik SE, et al. **Dev Biol (N Y 1985)** 1986;2:145–94 (223 ref.)

Connexin32, a gap junction protein, is a persistent oogenetic product through preimplantation development of the mouse. Barron DJ, et al. **Dev Genet** 1989;10(4):318–23

Stage–specific gene expression in early chick embryo. Zagris N, et al. **Dev Genet** 1989;10(4):333–8

Analysis of competence: receptors for fibroblast growth factor in early Xenopus embryos. Gillespie LL, et al. **Development** 1989 May;106(1):203–8

Presence of cdc2(+)–like proteins in the preimplantation mouse embryo. McConnell J, et al. **Development** 1989 Nov; 107(3):481–7

Hydrogen peroxide levels in mouse oocytes and early cleavage stage embryos developed in vitro or in vivo. Nasr–Esfahani MH, et al. **Development** 1990 Jun; 109(2):501–7

Development of a noninvasive ultramicrofluorometric method for measuring net uptake of glutamine by single preimplantation mouse embryos. Gardner DK, et al. **Gamete Res** 1989 Dec;24(4):427–38

Non–invasive measurement of pyruvate and glucose uptake and lactate production by single human preimplantation embryos. Gott AL, et al. **Hum Reprod** 1990 Jan;5(1):104–8

Cloning of a gap junctional protein from vascular smooth muscle and expression in two–cell mouse embryos. Lash JA, et al. **J Biol Chem** 1990 Aug 5;265(22):13113–7

Glutamine uptake and utilization by preimplantation mouse embryos in CZB medium. Chatot CL, et al. **J Reprod Fertil** 1990 May;89(1):335–46

Oxidative metabolism of energy substrates by preimplantation mouse embryos in the presence of platelet–activating factor. Ryan JP, et al. **J Reprod Fertil** 1990 May;89(1):301–7

Conversion of pregnenolone to progesterone by mouse morulae and blastocysts. Wu JT, et al. **J Reprod Fertil** 1990 Jan;88(1):93–8

Prostaglandin–E2 released by pre–implantation human conceptuses. Holmes PV, et al. **J Reprod Immunol** 1990 Mar;17(1):79–86

Analysis of the sequence and expression during sea urchin development of two members of a multigenic family, coding for butanol–extractable proteins. Di Carlo M, et al. **Mol Reprod Dev** 1990 Jan;25(1):28–36

Effects of ultrasound on DNA and RNA synthesis in preimplantation mouse embryos. Heyner S, et al. **Mol Reprod Dev** 1990 Mar;25(3):209–14

Spatial patterns of gene expression in preimplantation mouse embryos. Nisson PE, et al. **Mol Reprod Dev** 1989; 1(4):254–63

Transition from maternal to embryonic control in early mammalian development: a comparison of several species. Telford NA, et al. **Mol Reprod Dev** 1990 May;26(1):90–100 (109 ref.)

Estimates of mRNA abundance in the mouse blastocyst based on cDNA library analysis. Weng DE, et al. **Mol Reprod Dev** 1989;1(4):233–41

Hypermethylated tRNA in cleaving rabbit embryos. Manes C, et al. **Nature** 1973 Aug 3;244(5414):283–4

[3H]prostaglandin uptake in vivo by rabbit uterine tissues and blastocysts. Jones MA, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Apr; 39(4):267–75

Effects of oxygen concentration on the metabolism of [U–14C]glucose by mouse morulae and early blastocysts in vitro. Khurana NK, et al. **Reprod Fertil Dev** 1989; 1(2):99–106

Effects of macromolecules recovered from uterine luminal fluid on the metabolism of [U–14C]glucose by mouse morulae and early blastocysts in vitro. Khurana NK, et al. **Reprod Fertil Dev** 1989;1(2):89–98

Participation of glucose in the synthesis of glycoproteins in preimplantation mouse embryos. Wales RG, et al. **Reprod Fertil Dev** 1990;2(1):35–50

PATHOLOGY

Evidence linking programmed cell death in the blastocyst to polyamine oxidation. Gramzinski RA, et al. **Differentiation** 1990 Mar;43(1):59–65

PHYSIOLOGY

Fluidity of the phospholipid bilayer of the endometrium at the time of implantation of the blastocyst—a spin label study. Laloraya M. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):561–7

Development of porcine embryos from one– and two–cell stages to blastocysts in culture medium supplemented with porcine oviductal fluid. Archibong AE, et al. **Biol Reprod** 1989 Dec;41(6):1076–83

Birth of normal calves resulting from bovine oocytes matured, fertilized, and cultured with cumulus cells in vitro up to the blastocyst stage. Fukuda Y, et al. **Biol Reprod** 1990 Jan;42(1):114–9

Protein secretion by the mouse trophoblast during attachment and outgrowth in vitro. Nieder GL. **Biol Reprod** 1990 Aug; 43(2):251–9

Genetic control of survival of frozen mouse embryos. Pomp D, et al. **Biol Reprod** 1990 May–Jun;42(5–6):775–86

Regulation of mouse preimplantation development: differential effects of CZB medium and Whitten's medium on rates and patterns of protein synthesis in 2–cell embryos. Poueymirou WT, et al. **Biol Reprod** 1989 Aug;41(2):317–22

Vascular response in a non–uterine site to implantation–stage embryos following interspecies transfers between the rat, mouse, and guinea–pig. Macpherson AM, et al. **Cell Tissue Res** 1989 Nov;258(2):417–23

Effect of dimethyl sulfoxide and protein concentration on the viability of two–cell mouse embryos frozen with a rapid freezing technique. Shaw JM, et al. **Cryobiology** 1989 Oct; 26(5):413–21

Apparent absence of Na+/H+ antiport activity in the two–cell mouse embryo. Baltz JM, et al. **Dev Biol** 1990 Apr;138(2):421–9

Blastocoel expansion in the preimplantation mouse embryo: stimulation of sodium uptake by cAMP and possible involvement of cAMP–dependent protein kinase. Manejwala FM, et al. **Dev Biol** 1989 Dec;136(2):560–3

Establishment and maintenance of a regionalized glycoprotein distribution during early mouse development. Pierce KE, et al. **Dev Biol** 1990 Jan;137(1):56–67

Effect of cell contact on regionalization of mouse embryos. Sepúlveda S, et al. **Dev Biol** 1990 Jun;139(2):363–9

Cell–cell interactions in mammalian preimplantation development. Calarco–Gillam P. **Dev Biol (N Y 1985)** 1986; 2:329–71 (221 ref.)

Regulation of the mid–blastula transition in amphibians. Etkin LD. **Dev Biol (N Y 1985)** 1988;5:209–25 (81 ref.)

Transactivation of the adenovirus EIIa promoter in the absence of adenovirus E1A protein is restricted to mouse oocytes and preimplantation embryos. Dooley TP, et al. **Development** 1989 Dec;107(4):945–56

The role of the nucleocytoplasmic ratio in development regulation of the early mouse embryo. Evsikov SV, et al. **Development** 1990 Jun;109(2):323–8

The human blastocyst: cell number, death and allocation during late preimplantation development in vitro. Hardy K, et al. **Development** 1989 Nov;107(3):597–604

Inducible expression of an hsp68–lacZ hybrid gene in transgenic mice. Kothary R, et al. **Development** 1989 Apr; 105(4):707–14

Blastocyst implantation precedes induction of insulin–like growth factor II gene expression in human trophoblasts. Ohlsson R, et al. **Development** 1989 Jul;106(3):555–9

Permissiveness to murine leukemia, virus expression during preimplantation and early postimplantation mouse development. Savatier P, et al. **Development** 1990 Jul; 109(3):655–65

Expression of the proto–oncogene fos (c–fos) by preimplantation blastocysts of the pig. Whyte A, et al. **Development** 1989 Mar;105(3):651–6

Experimental diabetes impairs rat embryo development during the preimplantation period. Vercheval M, et al. **Diabetologia** 1990 Apr;33(4):187–91

Octaploid mouse embryos produced by electrofusion polarize and cavitate at the same time as normal embryos. Winkel GK, et al. **Gamete Res** 1989 Sep;24(1):93–107

The potential of early human embryos to form blastocysts, hatch from their zona and secrete HCG in culture. Lopata A, et al. **Hum Reprod** 1989 Nov;4(8 Suppl):87–94

Assessment of embryonic quality. Michelmann HW. **Hum Reprod** 1989 Nov;4(8 Suppl):95–8

Cytoskeleton organization during oogenesis, fertilization and preimplantation development of the mouse. Maro B, et al. **Int J Dev Biol** 1990 Mar;34(1):127–37 (76 ref.)

Neural induction. Saxen L. **Int J Neurol** 1982–83; 16–17:155–66 (61 ref.)

Monozygous double inner cell masses in mouse blastocysts following fertilization in vitro and in vivo. Chida S. **J In Vitro Fert Embryo Transf** 1990 Jun;7(3):177–9

Screening test for mouse blastocysts as an index of the vitality

of embryos. Chida S, et al.
J In Vitro Fert Embryo Transf 1989 Oct;6(5):310–2
Human amniotic fluid for fertilization and culture of human embryos: results of clinical trials in human in vitro fertilization (IVF) programs. Gianaroli L, et al.
J In Vitro Fert Embryo Transf 1989 Aug;6(4):213–7
Impact of asynchronous ovulations on the expression of sex-dependent growth rate in bovine preimplantation embryos. Avery B. **J Reprod Fertil** 1989 Nov;87(2):627–31
Effects of the putative phospholipid precursors, inositol, choline, serine and ethanolamine, on formation and expansion of rabbit blastocysts in vitro. Kane MT.
J Reprod Fertil 1989 Sep;87(1):275–9
Avoidance of used endometrial sites by blastocysts of the bank vole, Clethrionomys glareolus. Nerquaye-Tetteh JO, et al. **J Reprod Fertil** 1990 Jul;89(2):729–34
Development of preimplantation goat (Capra hircus) embryos in vivo and in vitro. Sakkas D, et al. **J Reprod Fertil** 1989 Sep;87(1):359–65
Effect of oxygen concentration on in-vitro development of preimplantation sheep and cattle embryos. Thompson JG, et al. **J Reprod Fertil** 1990 Jul;89(2):573–8
Blastocyst formation by pig embryos resulting from in-vitro fertilization of oocytes matured in vitro. Yoshida M, et al. **J Reprod Fertil** 1990 Jan;88(1):1–8
Prostaglandin secretion by the blastocyst. Lewis GS.
J Reprod Fertil Suppl 1989;37:261–7 (42 ref.)
Measurement and clinical significance of preimplantation blastocyst gonadotrophins. Saxena BB.
J Reprod Fertil Suppl 1989;37:115–9 (26 ref.)
Antiluteolytic effects of blastocyst-secreted interferon investigated in vitro and in vivo in the sheep. Stewart HJ, et al. **J Reprod Fertil Suppl** 1989;37:127–38
Antiluteolytic effects of bovine trophoblast protein-1. Thatcher WW, et al. **J Reprod Fertil Suppl** 1989;37:91–9
Developmental expression of myeloid leukemia inhibitory factor gene in preimplantation blastocysts and in extraembryonic tissue of mouse embryos. Conquet F, et al. **Mol Cell Biol** 1990 Jul;10(7):3801–5
The genes for leukemia inhibitory factor and interleukin-6 are expressed in mouse blastocysts prior to the onset of hemopoiesis. Murray R, et al. **Mol Cell Biol** 1990 Sep; 10(9):4953–6
Local effect of the rabbit embryo–foetus on uterine progesterone and pregnenolone levels. Dugré FJ, et al.
Mol Cell Endocrinol 1989 Jul;64(2):251–5
Changes in protein phosphorylation associated with compaction of the mouse preimplantation embryo. Bloom T, et al. **Mol Reprod Dev** 1990 Jul;26(3):199–210
Lectin-induced abnormalities of mouse blastocyst hatching and outgrowth in vitro. Dealtry GB, et al.
Mol Reprod Dev 1990 May;26(1):24–9
Regulation of mouse preimplantation development: inhibitory effect of the calmodulin antagonist W-7 on the first cleavage. Poueymirou WT, et al. **Mol Reprod Dev** 1990 Jul;26(3):211–6
Temporal and spatial transcriptional regulation of the aboral ectoderm-specific Spec genes during sea urchin embryogenesis. Tomlinson CR, et al. **Mol Reprod Dev** 1990 Apr;25(4):328–38
Lithium can transform ear placodes of Xenopus into multiple otic vesicles connected by tubes. Gutknecht D, et al.
Naturwissenschaften 1990 May;77(5):235–7
The microenvironment created by grafting rostral half-somites is mitogenic for neural crest cells. Goldstein RS, et al. **Proc Natl Acad Sci U S A** 1990 Jun; 87(12):4476–80
Inactivating the beta 2-microglobulin locus in mouse embryonic stem cells by homologous recombination. Koller BH, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(22):8932–5
Preimplantation embryo development in vitro: cooperative interactions among embryos and role of growth factors. Paria BC, et al. **Proc Natl Acad Sci U S A** 1990 Jun; 87(12):4756–60
In vivo cleavage rates and viability obtained for early cleavage mouse embryos in co-culture with oviduct cells. Sakkas D, et al. **Reprod Fertil Dev** 1989;1(2):127–36
In vitro culture of bovine egg fertilized either in vivo or in vitro. Marquant-Le Guienne B, et al.
Reprod Nutr Dev 1989;29(5):559–68
A mouse macrophage factor induces head structures and organizes a body axis in Xenopus. Sokol S, et al.
Science 1990 Aug 3;249(4968):561–4
[Deep-freezing of human preimplantation embryos] Maltau JM. **Tidsskr Nor Laegeforen** 1990 Jan 10;110(1):20–1 **(Nor)**
[Detection of protease-sensitive factors with properties of beta-type transforming growth factor in early loach embryos] Fedishin IaIa, et al. **Ontogenez** 1990 Jan–Feb; 21(1):63–8 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Temperature dependence of combined exposure of preimplantation mouse embryos to X-rays and mercury. Müller WU. **Radiat Environ Biophys** 1990;29(2):109–14

SECRETION

Analysis of proteins secreted by mouse embryos developing in vivo and in vitro. Nieder GL. **J Exp Zool** 1989 Nov; 252(2):134–42

ULTRASTRUCTURE

Effect of osmolarity of the fixative on the ultrastructure of preimplantation rabbit embryos. Hegele-Hartung C, et al.
Acta Anat (Basel) 1989;136(1):79–88
Submicroscopic localization of glycogen in mouse blastocysts developed in vivo and in blastocysts developed in vitro from two-cell embryos. Stastná J, et al.
Acta Histochem (Jena) 1989;86(2):143–50
Blastocyst implantation in the Chinese hamster (Cricetulus griseus). Blankenship TN, et al. **Am J Anat** 1990 Feb; 187(2):137–57
Differentiation of trophoblast of the baboon blastocyst. Enders AC, et al. **Anat Rec** 1989 Dec;225(4):329–40
In vivo staining of mouse preimplantation embryos with Hoechst 33342. Sawicki W, et al. **Anat Rec** 1990 Jul; 227(3):359–62
Polar trophoblast (Rauber's layer) of the rabbit blastocyst. Williams BS, et al. **Anat Rec** 1990 Jun;227(2):211–22
Ultrastructure of preimplantation human embryos co-cultured with human ampullary cells. Sathananthan H, et al. **Hum Reprod** 1990 Apr;5(3):309–18
'Blebbing' of the nuclear envelope of mouse zygotes, early embryos and hybrid cells. Szöllösi MS, et al. **J Cell Sci** 1988 Oct;91 (Pt 2):257–67
Integrity of the preimplantation pig blastocyst during expansion and loss of polar trophectoderm (Rauber cells) and the morphology of the embryoblast as an indicator for developmental stage. Barends PM, et al.
J Reprod Fertil 1989 Nov;87(2):715–26
Cytodifferentiation and dynamics of intercellular relations during early ontogenesis. Mirancea N, et al.
Morphol Embryol (Bucur) 1989 Jul–Sep;35(3):163–71

BLASTOCYST TRANSFER see **EMBRYO TRANSFER**

BLASTOCYSTIS see **PROTOZOA**

BLASTOCYTES see **BLASTOMERES**

BLASTODERM

ANALYSIS

The serendipity alpha gene encodes a membrane-associated protein required for the cellularization of the Drosophila embryo. Schweisguth F, et al. **Genes Dev** 1990 Jun; 4(6):922–31

CYTOLOGY

Production of somatic and germline chimeras in the chicken by transfer of early blastodermal cells. Petitte JN, et al.
Development 1990 Jan;108(1):185–9
Cell population growth in chick blastoderms cultured in vitro. Ghatpande SK, et al. **Indian J Exp Biol** 1990 Jun; 28(6):526–30
The stellate layer and rhythmic contractions of the Oryzias latipes embryo. Cope J, et al. **J Exp Zool** 1990 Jun; 254(3):270–5
Fate mapping the avian epiblast with focal injections of a fluorescent-histochemical marker: ectodermal derivatives. Schoenwolf GC, et al. **J Exp Zool** 1990 Sep;255(3):323–39

METABOLISM

The gastrulating chick blastoderm contains 16-kDa and 14-kDa galactose-binding lectins possibly associated with an apolipoprotein. Zalik SE, et al. **Cell Differ Dev** 1990 Mar;29(3):217–31
cis-regulatory elements of the Drosophila blastoderm-specific serendipity alpha gene: ectopic activation in the embryonic PNS promoted by the deletion of an upstream region. Schweisguth F, et al. **Dev Biol** 1989 Nov;136(1):181–93
fushi tarazu protein expression in the cellular blastoderm of Drosophila detected using a novel imaging technique. Karr TL, et al. **Development** 1989 May;106(1):95–103
Hexose transport in preimplantation rabbit blastocysts. Robinson DH, et al. **J Reprod Fertil** 1990 May;89(1):1–11

PHYSIOLOGY

Migration of chick blastoderm under the vitelline membrane: the role of fibronectin. Lash JW, et al. **Dev Biol** 1990 Jun; 139(2):407–16
Two gap genes mediate maternal terminal pattern information in Drosophila. Weigel D, et al. **Science** 1990 Apr 27;248(4954):495–8

BLASTOGENESIS see **LYMPHOCYTE TRANSFORMATION**

BLASTOMERES

ANALYSIS

Enzymatic amplification of a Y chromosome repeat in a single blastomere allows identification of the sex of preimplantation mouse embryos. Bradbury MW, et al.
Proc Natl Acad Sci U S A 1990 Jun;87(11):4053–7

CYTOLOGY

Survival and cell acquisition rates after preimplantation embryo biopsy: use of two mechanical techniques and two mouse strains. Roudebush WE, et al.
Am J Obstet Gynecol 1990 Apr;162(4):1084–90
Use of zona drilling for safe and effective biopsy of murine oocytes and embryos. Gordon JW, et al. **Biol Reprod** 1990 May–Jun;42(5–6):869–76
Development of cell surface activity and cell surface adhesiveness in early embryos of the newt, Cynops pyrrhogaster. Komazaki S. **Cell Differ Dev** 1990 Mar; 29(3):195–204
Early inductive interactions are involved in restricting cell fates of mesomeres in sea urchin embryos. Henry JJ, et al. **Dev Biol** 1989 Nov;136(1):140–53
Novel origins of lineage founder cells in the direct-developing sea urchin Heliocidaris erythrogramma. Wray GA, et al. **Dev Biol** 1990 Sep;141(1):41–54
Altered expression of spatially regulated embryonic genes in the progeny of separated sea urchin blastomeres. Hurley DL, et al. **Development** 1989 Jul;106(3):567–79
Transplantation of nuclei from 2- to 16-cell embryos into enucleated blastomeres of 2-cell mouse embryos. Landa V. **Folia Biol (Praha)** 1989;35(5):299–305
"Two-step" freezing of individual blastomeres from mouse eight-cell embryos. Landa V. **Folia Biol (Praha)** 1990; 36(1):51–6
Marking time and making space: chronology and topography in the early mouse embryo. Pratt HP. **Int Rev Cytol** 1989; 117:99–130 (141 ref.)

ENZYMOLOGY

Immunohistochemical localization of prostaglandin H synthase in the embryo and uterus of the mouse from ovulation through implantation. Marshburn PB, et al.
Mol Reprod Dev 1990 Apr;25(4):309–16

METABOLISM

The synthesis and secretion of collagen by cultured sea urchin micromeres. Benson S, et al. **Exp Cell Res** 1990 May; 188(1):141–6
A voltage-dependent chloride current linked to the cell cycle in ascidian embryos. Block ML, et al. **Science** 1990 Mar 2;247(4946):1090–2

PHYSIOLOGY

Cell polarity and development of the first epithelium. Wiley LM, et al. **Bioessays** 1990 Feb;12(2):67–73 (41 ref.)
The influence of cell interactions and tissue mass on differentiation of sea urchin mesomeres. Khaner O, et al.
Development 1990 Jul;109(3):625–34
Lithium changes the ectodermal fate of individual frog blastomeres because it causes ectopic neural plate formation. Klein SL, et al. **Development** 1989 Jul; 106(3):599–610
Range and stability of cell fate determination in isolated sea urchin blastomeres. Livingston BT, et al. **Development** 1990 Mar;108(3):403–10
Early determination in the C. elegans embryo: a gene, cib-1, required to specify a set of stem-cell-like blastomeres. Schnabel R, et al. **Development** 1990 Jan;108(1):107–19
Mesoderm induction in Xenopus laevis: responding cells must be in contact for mesoderm formation but suppression of epidermal differentiation can occur in single cells. Symes K, et al. **Development** 1988 Dec;104(4):609–18
Involvement of oocyte-coded message in cell differentiation control of early human embryos. Tesařík J.
Development 1989 Feb;105(2):317–22
Polarization of blastomeres in the cleaving rabbit embryo. Ziomek CA, et al. **J Exp Zool** 1990 Oct;256(1):84–91
The use of an alginic acid matrix to support in vitro development of isolated murine blastomeres. Eaton NL, et al. **J In Vitro Fert Embryo Transf** 1990 Feb;7(1):28–32
Cytological effects of the microinjection of antibody to ras p21 in early cleavage Xenopus embryos. Miron MJ, et al.
Mol Reprod Dev 1990 Apr;25(4):317–27
[Morphologic characteristics of the development of embryos in the preimplantation phase of the process of extracorporeal fertilization] Khi'lkevich LV, et al.
Akush Ginekol (Mosk) 1989 Aug;(8):39–43 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

Mesoderm-inducing factors and Spemann's organiser phenomenon in amphibian development. Cooke J.
Development 1989 Oct;107(2):229–41

ULTRASTRUCTURE

The silver-stained NOR and argentophilic nuclear proteins in early mouse embryogenesis: a cytological study. Dyban AP, et al. **Cell Differ Dev** 1990 Mar;29(3):165–79
Structural and functional polarity of starfish blastomeres. Kuraishi R, et al. **Dev Biol** 1989 Dec;136(2):304–10
The effects of phorbol ester on mouse blastomeres: a role for protein kinase C in compaction? Bloom TL.
Development 1989 May;106(1):159–71
Cytoplasts from two-cell embryos for nuclear transplantation in the mouse. Landa V. **Folia Biol (Praha)** 1989;35(6):353–9
Morphometric categorization of the human oocyte and early conceptus. Goyanes VJ, et al. **Hum Reprod** 1990 Jul; 5(5):613–8
Interblastomeric plasma membrane formation during

cleavage of Xenopus laevis embryos. Bieliavsky N, et al. **J Submicrosc Cytol Pathol** 1990 Jul;22(3):445–57

Cytodifferentiation and dynamics of intercellular relations during early ontogenesis. Mirancea N, et al. **Morphol Embryol (Bucur)** 1989 Jul–Sep;35(3):163–71

[Morphologic characteristics of intercellular junctions in early embryogenesis of mice] Khozhaĭ LI, et al. **Arkh Anat Gistol Embriol** 1990 Mar;98(3):10–5 (Eng. Abstr.) (Rus)

BLASTOMYCES

CYTOLOGY

Giant forms of Blastomyces dermatitidis in the pulmonary lesions of blastomycosis. Potential confusion with Coccidioides immitis. Watts JC, et al. **Am J Clin Pathol** 1990 Apr;93(4):575–8

GROWTH & DEVELOPMENT

Cottonseed extract versus pharmamedia for the in vitro mould–yeast conversion of Blastomyces dermatitidis. Chaturvedi S, et al. **J Med Vet Mycol** 1990;28(2):139–45

IMMUNOLOGY

Enhanced killing of Blastomyces dermatitidis by gamma interferon–activated murine peripheral blood polymorphonuclear neutrophils. Morrison CJ, et al. **Int J Immunopharmacol** 1989;11(8):855–62

METABOLISM

Attachment of Blastomyces dermatitidis conidia to murine bronchoalveolar macrophages: characterization of binding and elicitation of respiratory burst. Sugar AM, et al. **Antonie Van Leeuwenhoek** 1990;57(1):21–7

ULTRASTRUCTURE

Isolation and partial characterization of a plasma membrane–enriched fraction of Blastomyces dermatitidis. Chaturvedi VP, et al. **Microbios** 1990;61(248–249):145–51

BLASTOMYCOSIS

COMPLICATIONS

Concurrent pulmonary Blastomyces dermatitidis and Mycobacterium tuberculosis infection in an HIV-1 seropositive man [letter] Kitchen LW, et al. **J Infect Dis** 1989 Nov;160(5):911–2

Endophthalmitis due to Blastomyces dermatitidis. Case report and review of the literature. Safneck JR, et al. **Ophthalmology** 1990 Feb;97(2):212–6

DIAGNOSIS

A new enzyme immunoassay specific for blastomycosis. Lo CY, et al. **Am Rev Respir Dis** 1990 Jan;141(1):84–8

Isolation, purification, and radiolabeling of a novel 120–kD surface protein on Blastomyces dermatitidis yeasts to detect antibody in infected patients. Klein BS, et al. **J Clin Invest** 1990 Jan;85(1):152–61

[Serodiagnosis of blastomycosis and coccidioidomycosis] Ikemoto H. **Nippon Rinsho** 1990 Feb;48 Suppl:427–9 (Jpn)

DRUG THERAPY

Successful treatment of systemic blastomycosis with high–dose ketoconazole in a renal transplant recipient. Hii JH, et al. **Am J Kidney Dis** 1990 Jun;15(6):595–7

Evaluation of nikkomycins X and Z in murine models of coccidioidomycosis, histoplasmosis, and blastomycosis. Hector RF, et al. **Antimicrob Agents Chemother** 1990 Apr; 34(4):587–93

Therapeutic effect of the triazole Bay R 3783 in mouse models of coccidioidomycosis, blastomycosis, and histoplasmosis. Pappagianis D, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1132–8

Treatment of murine pulmonary blastomycosis with SCH 39304, a new triazole antifungal agent. Sugar AM, et al. **Antimicrob Agents Chemother** 1990 May;34(5):896–8

Blastomycosis in Namibia—report of a case successfully treated with itraconazole. Jordaan HF. **Clin Exp Dermatol** 1989 Sep;14(5):347–51

Efficacy of itraconazole in blastomycosis in a murine model and comparison with ketoconazole. Arathoon EG, et al. **Mycoses** 1989;32 Suppl 1:109–12

Comparison of fluconazole and ketoconazole in experimental murine blastomycosis. Stevens DA, et al. **Rev Infect Dis** 1990 Mar–Apr;12 Suppl 3:S304–6

EPIDEMIOLOGY

Significance of false–positive serologic tests for histoplasmosis and blastomycosis in an endemic area. Jordan MM, et al. **Am Rev Respir Dis** 1990 Jun; 141(6):1487–90

Blastomycosis in Africa. A review of known cases diagnosed between 1951 and 1987. Carman WF, et al. **Mycopathologia** 1989 Jul;107(1):25–32 (48 ref.)

IMMUNOLOGY

Development of long–term specific cellular immunity after acute Blastomyces dermatitidis infection: assessments following a large point–source outbreak in Wisconsin. Klein BS, et al. **J Infect Dis** 1990 Jan;161(1):97–101

Functions of polymorphonuclear leukocytes and individuality of Jorge Lobo's disease: absence of the specific leukocyte digestive defect against Paracoccidioides brasiliensis. Goihman–Yahr M, et al. **Mycoses** 1989 Dec; 32(12):603–8

MICROBIOLOGY

Giant forms of Blastomyces dermatitidis in the pulmonary lesions of blastomycosis. Potential confusion with Coccidioides immitis. Watts JC, et al. **Am J Clin Pathol** 1990 Apr;93(4):575–8

PATHOLOGY

Subcutaneous blastomycosis: diagnosis by fine–needle aspiration cytology. Mamikunian C, et al. **Otolaryngol Head Neck Surg** 1989 Nov;101(5):607–10

Blastomycosis of the head and neck. Mikaelian AJ, et al. **Otolaryngol Head Neck Surg** 1989 Oct;101(4):489–95 (32 ref.)

RADIOGRAPHY

Pulmonary blastomycosis: findings on chest radiographs in 63 patients. Sheflin JR, et al. **AJR Am J Roentgenol** 1990 Jun;154(6):1177–80

Orthopaedic manifestations of blastomycosis. MacDonald PB, et al. **J Bone Joint Surg [Am]** 1990 Jul;72(6):860–4

BLASTOMYCOSIS, NORTH AMERICAN see **BLASTOMYCOSIS**

BLASTOMYCOSIS, SOUTH AMERICAN see **PARACOCCIDIOIDOMYCOSIS**

BLASTOPORE see **GASTRULA**

BLASTULA see **BLASTOCYST**

BLEEDING see **HEMORRHAGE**

BLEEDING TIME see under **PLATELET FUNCTION TESTS**

BLENNORRHEA, INCLUSION see **CONJUNCTIVITIS, INCLUSION**

BLEOMYCINS

Cell proliferation during the process of bleomycin–induced pulmonary fibrosis in rats. Kawamoto M, et al. **Acta Pathol Jpn** 1990 Apr;40(4):227–38

Hydroxylation of collagen by lungs of rats administered bleomycin. Last JA, et al. **Am J Respir Cell Mol Biol** 1990 Jun;2(6):543–8

Bronchoalveolar lavage desmosine in bleomycin–induced lung injury in marmosets and patients with adult respiratory distress syndrome. Idell S, et al. **Exp Lung Res** 1989 Sep; 15(5):739–53

Orientation of dioxygen bound to cobalt(II) bleomycin–DNA fibers. Chikira M, et al. **J Biol Chem** 1989 Dec 25; 264(36):21478–80

ESR parameters for cupric bleomycin in the mobilized state. Antholine WE, et al. **J Biomol Struct Dyn** 1984 Oct; 2(2):469–80

Complete assignment of the 500 MHz 1H–NMR spectra of bleomycin A2 in H2O and D2O solution by means of two–dimensional NMR spectroscopy. Haasnoot CA, et al. **J Biomol Struct Dyn** 1984 Oct;2(2):449–67

Studies on bleomycin–DNA and bleomycin–iron interactions. Sakai TT, et al. **J Biomol Struct Dyn** 1983 Dec;1(3):809–27 (31 ref.)

Coordinate regulation of transforming growth factor beta gene expression and cell proliferation in hamster lungs undergoing bleomycin–induced pulmonary fibrosis. Raghow B, et al. **J Clin Invest** 1989 Dec;84(6):1836–42

ADMINISTRATION & DOSAGE

Treatment of advanced Kaposi's sarcoma using a combination of bleomycin and vincristine. Gill P, et al. **Am J Clin Oncol** 1990 Aug;13(4):315–9

Endolymphatic chemotherapy in gynecologic cancer. Tarrats A, et al. **Cancer** 1990 May 15;65(10):2213–6

Intrapericardial instillation of bleomycin in the management of malignant pericardial effusion. van der Gaast A, et al. **Eur J Cancer Clin Oncol** 1989 Oct;25(10):1505–6

Combination of radiation therapy and intracranial bleomycin in the 9L rat brain tumor model. Kimler BF, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1115–21

Enhancement of cytotoxicity of bleomycin by dithiocarbamates: formation of bis(dithiocarbamato) cu(II). Ujjani B, et al. **J Inorg Biochem** 1990 Jan;38(1):81–93

Chemotherapy and multimodality treatment in thyroid carcinoma. Ekman ET, et al. **Otolaryngol Clin North Am** 1990 Jun;23(3):523–7 (21 ref.)

[An attempt to treat esophageal cancer by intraoperative local administration of oil bleomycin] Nomi A, et al. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 1):649–54 (Eng. Abstr.) (Jpn)

[Arterial chemoembolization using microencapsulated anticancer drugs] Sato K, et al. **Gan To Kagaku Ryoho** 1990 Jun;17(6):1105–10 (Eng. Abstr.) (Jpn)

[Clinical evaluation of high dose rate intra–cavitary irradiation in the treatment of uterine cervical cancer, combined with pepleomycin suppository in uterine cavity] Yamanashi S, et al. **Gan To Kagaku Ryoho** 1990 Feb; 17(2):245–51 (Eng. Abstr.) (Jpn)

[Treatment of lymphangiomas arising around cervico–facial region: surgery, bleomycin therapy and OK–432 therapy] Ogita S, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep; 90(9):1389–91 (Eng. Abstr.) (Jpn)

[Treatment with a new preparation using peplomycin emulsion in hydroxypropylcellulosum. Analysis of immediate response in sixty–two patients with bladder cancer] Yasumoto R, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec;80(12):1728–32 (Eng. Abstr.) (Jpn)

[Use of cytostatics in polymer–drug complexes in the treatment of malignant neoplasms of the maxilla] Rusakov IG, et al. **Sov Med** 1990;(1):23–4 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Hyaluronan (hyaluronic acid) in bronchoalveolar lavage fluid during the development of bleomycin–induced alveolitis in the rat. Nettelbladt O, et al. **Am Rev Respir Dis** 1989 Oct;140(4):1028–32

Arterial thrombosis after treatment with bleomycin and cisplatin. Garstin IW, et al. **BMJ** 1990 Apr 14; 300(6730):1018

Capillary microscopy is a potentially useful method for detecting bleomycin vascular toxicity. Bellmunt J, et al. **Cancer** 1990 Jan 15;65(2):303–9

Life–threatening bleomycin pulmonary toxicity with ultimate reversibility. Hartmann LC, et al. **Chest** 1990 Aug; 98(2):497–9

Systemic toxicity following intracavitary administration of bleomycin. Siegel RD, et al. **Chest** 1990 Aug;98(2):507

Possible mechanisms of bleomycin–induced fibrosis. Chandler DB. **Clin Chest Med** 1990 Mar;11(1):21–30 (96 ref.)

Bleomycin–induced pulmonary toxicity. Jules–Elysee K, et al. **Clin Chest Med** 1990 Mar;11(1):1–20 (109 ref.)

Linear streaking after bleomycin administration [letter; comment] Vignini M, et al. **Clin Exp Dermatol** 1989 May; 14(3):261 Comment on: Clin Exp Dermatol 1987 Nov;12(6):457–9.

'Flagellate' erythema from bleomycin. With histopathological findings suggestive of inflammatory oncotaxis. Cortina P, et al. **Dermatologica** 1990;180(2):106–9

Reticulate pigmentation due to bleomycin: light– and electron–microscopic studies. Wright AL, et al. **Dermatologica** 1990;180(4):255–7

Niacin attenuates bleomycin–induced lung fibrosis in the hamster. Wang QJ, et al. **J Biochem Toxicol** 1990 Spring; 5(1):13–22

Acute pericarditis following bleomycin: a case report and literature analysis. Ben Yosef R, et al. **J Chemother** 1990 Feb;2(1):70–1 (8 ref.)

Detecting bleomycin pulmonary toxicity: a continued conundrum [comment] Comis RL. **J Clin Oncol** 1990 May; 8(5):765–7 Comment on: J Clin Oncol 1990 May;8(5):779–83.

Carbon monoxide diffusing capacity is a poor predictor of clinically significant bleomycin lung. New Zealand Clinical Oncology Group [see comments] McKeage MJ, et al. **J Clin Oncol** 1990 May;8(5):779–83 Comment in: J Clin Oncol 1990 May;8(5):765–7.

Chromosome abnormalities in skin fibroblasts probably induced by an anti–cancer drug. Sadamori N, et al. **J Dermatol** 1990 Mar;17(3):155–8

Fulminant hyperpyrexia induced by bleomycin. Leung WH, et al. **Postgrad Med J** 1989 Jun;65(764):417–9

[Chromosome aberrations induced by bleomycin in the lymphocytes of young and old persons] Musilová J, et al. **Cas Lek Cesk** 1989 Sep 8;128(37):1166–9 (Eng. Abstr.) (Cze)

[Amelioration of pulmonary toxicity of bleomycin by free radical scavengers] Fujimoto J, et al. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 2):946–9 (19 ref.) (Jpn)

[Pulmonary toxicity of antineoplastic drugs] Shigematsu N, et al. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 2):942–5 (42 ref.) (Jpn)

[A case of recurrent lung cancer complicated acute interstitial pneumonia, just after injected peplomycin] Shimizu T, et al. **Gan To Kagaku Ryoho** 1990 Sep;17(9):1941–4 (Eng. Abstr.) (Jpn)

[Effects of vitamin E deficiency on bleomycin–induced pulmonary fibrosis in hamsters] Kato S, et al. **Kokyu To Junkan** 1990 May;38(5):445–50 (Eng. Abstr.) (Jpn)

[Preventive effect of ciclopidine on peplomycin pulmonary fibrosis] Tari K, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Jan 20;25(1):121–5 (Eng. Abstr.) (Jpn)

[Acute adverse reactions to bleomycin] Drzewoski J, et al. **Pol Tyg Lek** 1989 Jun 19–26;44(25–26):614–6 (Pol)

[Toxic death after a low dose of bleomycin (letter)] Zamora P, et al. **Med Clin (Barc)** 1990 Apr 21;94(15):597 (Spa)

[Raynaud's phenomenon induced by bleomycin: a clinical

case] Niklander C, et al. **Rev Med Chil** 1988 Dec; 116(12):1302–5 (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS

The effect of corticosteroid administration on bleomycin lung toxicity. Jensen JL, et al. **Cancer** 1990 Mar 15;65(6):1291–7

DIAGNOSTIC USE

Accumulation of low molecular weight (bleomycin detectable) iron in bone marrow cells of rats after benzene exposure. Pandya KP, et al. **Arch Toxicol** 1990;64(4):339–42

A comparison of cobalt (57Co) bleomycin scanning and contrast-enhanced CT scanning for assessment of the mediastinum in lung cancer. Wathen CG, et al. **Chest** 1990 May;97(5):1148–51

METABOLISM

The interaction of unfused polyaromatic heterocycles with DNA: intercalation, groove-binding and bleomycin amplification. Wilson WD, et al. **Anticancer Drug Des** 1990 Feb;5(1):31–42 (45 ref.)

An experimental study on the effects of elastase, bleomycin and infection on the growth and tensile strength of elastic tissue in rabbit fetal membranes. Chimura T, et al. **Asia Oceania J Obstet Gynaecol** 1989 Sep;15(3):307–12

Degradation of DNA and structure-activity relationship between bleomycins A2 and B2 in the absence of DNA repair. Moore CW. **Biochemistry** 1990 Feb 6;29(5):1342–7

In vitro interaction of bleomycin with collagen—equilibrium dialysis technique. Ramesh DV, et al. **Indian J Biochem Biophys** 1989 Jun;26(3):196–8

Interaction of citrate with Fe(III)–bleomycin. Løvstad RA. **Int J Biochem** 1989;21(9):1039–42

Interaction of iron–bleomycin with catecholamines. Løvstad RA. **Int J Biochem** 1990;22(6):641–4

A role for the metal binding domain in determining the DNA sequence selectivity of Fe–bleomycin. Carter BJ, et al. **J Biol Chem** 1990 Mar 15;265(8):4193–6

NMR studies of the interaction of bleomycin with (dC–dG)3. Gamcsik MP, et al. **J Biomol Struct Dyn** 1990 Apr; 7(5):1117–33

[Interaction of bleomycin with the plasmid membrane: changes in the fluidity and peroxidation of lipids] Bailly C, et al. **Bull Cancer (Paris)** 1989;76(8):835–7 **(Fre)**

PHARMACOKINETICS

[Distribution of CDDP and BLM after intra-vaginal administration with a suppository] Kigawa J, et al. **Gan To Kagaku Ryoho** 1990 Sep;17(9):1945–7 **(Jpn)**

PHARMACOLOGY

Bleomycin and cyclophosphamide increase pulmonary type IV procollagen mRNA in mice. Hoyt DG, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):L47–52

Augmentation of bleomycin-induced DNA damage in intact cells. Moseley PL. **Am J Physiol** 1989 Nov;257(5 Pt 1):C882–7

Bleomycin induces the hsp 70 heat shock promoter in cultured cells. Moseley PL, et al. **Am J Respir Cell Mol Biol** 1989 Aug;1(2):89–93

DNA sequence recognition by bleomycin. Fox KR. **Anticancer Drug Des** 1990 Feb;5(1):99–104

Cytotoxic drug sensitivity of squamous cell carcinoma as predicted by an in vitro testing model. Elprana D, et al. **Anticancer Res** 1989 Jul–Aug;9(4):1089–94

Potentiation of bleomycin cytotoxicity in cultured mammalian cells by high molecular weight polyacrylic acid. Suzuki T, et al. **Anticancer Res** 1990 Jul–Aug; 10(4):1001–4

Potentiation of bleomycin cytotoxicity by polyhydric alcohols. Suzuki T, et al. **Anticancer Res** 1990 Jan–Feb; 10(1):97–103

Growth phase dependency of chromatin cleavage and degradation by bleomycin. Moore CW, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1592–9

Enhancement of bleomycin-induced DNA damage by exposing isolated DNA to high concentrations of the calcium antagonist verapamil. Weber J, et al. **Arzneimittelforschung** 1989 Dec;39(12):1550–4

In vitro and in vivo induction of squamous cell carcinoma antigen (SCC) in a uterine cervical cancer cell line (SKG-IIIa) with peplomycin and sodium butyrate. Nozawa S, et al. **Asia Oceania J Obstet Gynaecol** 1990 Jun;16(2):153–60

Analysis of bleomycin-resistant DNA synthesis in cells from an inherited human disorder, ataxia telangiectasia. Noda A, et al. **Basic Life Sci** 1990;52:355–9

Two different mechanisms are involved for the bleomycin-induced DNA repair synthesis in permeabilized HeLa cells. Park IS, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1226–33

Bleomycin-induced DNA lesions are dependent on nucleosome repeat length. Lönn U, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):101–7

Activity of bleomycin in iron- and copper-deficient cells. Lyman S, et al. **Biochem Pharmacol** 1989 Dec 1; 38(23):4273–82

Bleomycin-induced DNA repair synthesis in permeable human fibroblasts: mediation of long-patch and short-patch repair by distinct DNA polymerases. DiGiuseppe JA, et al. **Biochemistry** 1989 Nov 28;28(24):9515–20

Degradation of DNA and structure-activity relationship between bleomycins A2 and B2 in the absence of DNA repair. Moore CW. **Biochemistry** 1990 Feb 6;29(5):1342–7

Bleomycin–iron can degrade DNA in the presence of excess ethylenediaminetetraacetic acid in vitro. Solomon LR, et al. **Biochemistry** 1989 Dec 26;28(26):9932–7

Bleomycin-treated DNA is specifically cleaved only by endonuclease IV in E. coli. Hagensee ME, et al. **Biochim Biophys Acta** 1990 Jan 30;1048(1):19–23

Different effects of chlorpromazine on bleomycin- and epirubicin induced cytotoxicity. Grankvist K, et al. **Biosci Rep** 1990 Apr;10(2):173–7

Bleomycins. Muraoka Y, et al. **Cancer Chemother Biol Response Modif** 1988;10:40–4 (42 ref.)

Bleomycins. Muraoka Y, et al. **Cancer Chemother Biol Response Modif** 1987;9:50–5 (40 ref.)

Involvement of the cellular vacuolar system with the cytotoxicity of bleomycin-like agents. Lazo JS, et al. **Cancer Commun** 1990;2(2):81–6

Killing of human lung cancer cells using a new [111In]bleomycin complex [111In]BLMC. Hou DY, et al. **Cancer Invest** 1989;7(6):543–50

Plasma membrane perturbations of KB3 cells induced by the bleomycin–iron complex. Bailly C, et al. **Cancer Res** 1990 Jan 15;50(2):385–92

Damage and repair induced by bleomycin in the domain of human amplified MYC oncogenes. Bianchi NO, et al. **Cancer Res** 1990 Apr 15;50(8):2379–84

Intracellular DNA strand scission and growth inhibition of Ehrlich ascites tumor cells by bleomycins. Byrnes RW, et al. **Cancer Res** 1990 Sep 1;50(17):5275–86

Effect of the metal chelating agent o-phenanthroline on the DNA and chromosome damage induced by bleomycin in Chinese hamster ovary cells. Larramendy ML, et al. **Cancer Res** 1989 Dec 1;49(23):6583–6

Cleavage of cellular and extracellular Saccharomyces cerevisiae DNA by bleomycin and phleomycin. Moore CW. **Cancer Res** 1989 Dec 15;49(24 Pt 1):6935–40

Bleomycin-induced DNA damage and repair in human cells permeabilized with lysophosphatidylcholine. Sidik K, et al. **Cancer Res** 1990 Mar 1;50(5):1613–9

Liblomycin-mediated DNA cleavage in human head and neck squamous carcinoma cells and purified DNA. Wassermann K, et al. **Cancer Res** 1990 Mar 15;50(6):1732–7

Aphidicolin-sensitive DNA repair synthesis in human fibroblasts damaged with bleomycin is distinct from UV-induced repair. DiGiuseppe JA, et al. **Carcinogenesis** 1990 Jun;11(6):1021–6

The role of redox-active metals in the mechanism of action of bleomycin. Petering DH, et al. **Chem Biol Interact** 1990; 73(2–3):133–82 (244 ref.)

Chromosome breakage induced by bleomycin in an ataxia telangiectasia lymphoblastoid line: correlation with fragile sites and Epstein–Barr virus DNA localization. Caporossi D, et al. **Cytogenet Cell Genet** 1989;52(3–4):180–5

Bleomycin hypersensitivity in dyskeratosis congenita fibroblasts, lymphocytes, and transformed lymphoblasts. Pai GS, et al. **Cytogenet Cell Genet** 1989;52(3–4):186–9

Flow cytometric recognition of clastogen induced chromatin damage in G0/G1 lymphocytes by non-stoichiometric Hoechst fluorochrome binding. Kubbies M. **Cytometry** 1990;11(3):386–94

Bleomycin–kanamycin resistance as a marker of the presence of transposon Tn5 in clinical strains of Escherichia coli. Baquero F, et al. **Eur J Clin Microbiol Infect Dis** 1989 Nov;8(11):995–8

Cytotoxic factor for fibroblasts in bronchoalveolar lavage fluid of bleomycin-treated rats. Tani K, et al. **Exp Lung Res** 1990 May–Jun;16(3):293–307

Bleomycin–iron damage to DNA with formation of 8-hydroxydeoxyguanosine and base propenals. Indications that xanthine oxidase generates superoxide from DNA degradation products. Gutteridge JM, et al. **Free Radic Res Commun** 1990;10(3):159–65

Cloning of Saccharomyces cerevisiae promoters using a probe vector based on phleomycin resistance. Gatignol A, et al. **Gene** 1990 Jul 2;91(1):35–41

Differential bleomycin susceptibility in cultured lymphocytes of fragile X patients and normal individuals. Li SY, et al. **Hum Genet** 1990 Aug;85(3):267–71

Correlation of fragile sites and bleomycin induced chromosome break points. Murthy SK, et al. **Indian J Exp Biol** 1989 May;27(5):442–4

Changes in collagen cross-linking in bleomycin-induced pulmonary fibrosis. Reiser KM, et al. **J Biochem Toxicol** 1986 Mar;1(1):83–91

Differences between sites of binding to DNA and strand cleavage for complexes of bleomycin with iron or cobalt. McLean MJ, et al. **J Mol Recognit** 1989 Apr;1(4):184–92

Molecular basis for potentiation of bleomycin-mediated degradation of DNA by polyamines. Experimental and molecular mechanical studies. Strekowski L, et al. **J Mol Recognit** 1989 Dec;2(4):158–66

Enhanced killing of human small cell lung cancer by hyperthermia and indium-111–bleomycin complex. Hou DY, et al. **J Surg Oncol** 1990 May;44(1):5–9

Potentiation of bleomycin-induced chromosome aberrations by the radioprotector reduced glutathione [published erratum appears in Mutat Res 1990 Feb;228(2):230] Chatterjee A, et al. **Mutat Res** 1989 Oct;214(2):207–13

A unique human mutant B-lymphoblastoid cell line (ataxia telangiectasia) which exhibits increased sister-chromatid exchange retaining hypersensitivity to neocarzinostatin and bleomycin. Li MJ, et al. **Mutat Res** 1990 Jun;230(2):167–75

Micronucleus formation in different lymphocyte subpopulations in peplomycin-treated and control cultures. Slavutsky I, et al. **Mutat Res** 1989 Sep–Nov; 219(5–6):257–61

Cassettes of the Streptoalloteichus hindustanus ble gene for transformation of lower and higher eukaryotes to phleomycin resistance. Drocourt D, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):4009

The effect of diclofenac acid (Voltaren) on bleomycin-induced pulmonary fibrosis in hamsters. Chandler DB, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Oct; 38(1):9–14

Dynamics of uptake and channeling of arachidonic acid in hamster alveolar macrophages and the effect of bleomycin on arachidonyl distribution. Rose DM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Jun; 40(2):131–6

Response of plateau-phase C3H 10T1/2 cells to radiation and concurrent administration of bleomycin. Jiang GL, et al. **Radiat Res** 1989 Nov;120(2):306–12

Irradiation of the mouse lip mucosa with cobalt-60 gamma rays and d(50)+Be neutrons; combination with bleomycin. Scalliet P, et al. **Strahlenther Onkol** 1990 Jan;166(1):114

Comparison of the toxic and radiosensitizing effects of five therapeutic drugs on the mouse jejunum. Veena K, et al. **Strahlenther Onkol** 1990 Aug;166(8):554–6

[Preclinical pharmacologic evaluation of bleomycin A6] Lin FT. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):257–9 (Eng. Abstr.) **(Chi)**

[Specific binding and internalization of anti-CCT2 monoclonal antibody and bleomycin A6 conjugate in human leukemia cells] Tian PY, et al. **Yao Hsueh Hsueh Pao** 1989 Jan;24(1):16–21 (Eng. Abstr.) **(Chi)**

[Studies on the effect of bleomycin on hair growth dynamics in rats] Brzezińska-Wcisło L. **Przegl Dermatol** 1989 Jan–Mar;76(1):33–8 (Eng. Abstr.) **(Pol)**

RADIATION EFFECTS

Effect of ultraviolet irradiation on the antitumor activity of bleomycin. Mori H. **Chem Pharm Bull (Tokyo)** 1990 May; 38(5):1400–2

THERAPEUTIC USE

Combined bleomycin and radiation treatment of penile carcinoma [letter] Maiche AG. **Acta Oncol** 1989; 28(4):548–9

Intrapericardial bleomycin for the management of cardiac tamponade secondary to malignant pericardial effusion. Cormican MC, et al. **Br Heart J** 1990 Jan;63(1):61–2

Comparison of intracavitary bleomycin and talc for control of pleural effusions secondary to carcinoma of the breast. Hamed H, et al. **Br J Surg** 1989 Dec;76(12):1265–7

Phase II study of tallysomycin S10b in patients with advanced colorectal cancer. Nicaise C, et al. **Cancer Chemother Pharmacol** 1990;26(3):221–2

Heavy water enhances the antineoplastic effect of 5-fluoro-uracil and bleomycin in nude mice bearing human carcinoma. Altermatt HJ, et al. **Int J Cancer** 1990 Mar 15;45(3):475–80

Phase I trial of tallysomycin S10b, a bleomycin analogue. Paolozzi FP, et al. **Invest New Drugs** 1990 May;8(2):171–80

The potentiation of the antitumor activity but not toxicity of bleomycin by 3-aminobenzamide. Pan QC, et al. **J Antibiot (Tokyo)** 1989 Dec;42(12):1860–8

Regional chemotherapy of inoperable maxillofacial tumours combined with radiotherapy. Long-term results. Hollmann K, et al. **J Craniomaxillofac Surg** 1990 Feb;18(2):88–90

The effects of a single high voltage electrical stimulation with an anticancer drug on in vivo growing malignant tumors. Okino M, et al. **Jpn J Surg** 1990 Mar;20(2):197–204

Host immune responses to tumor cells augmented by bleomycin and their therapeutic effects on rat fibrosarcoma. Hosokawa M, et al. **Mol Biother** 1988;1(2):74–80

Antitumoral property of ethanolic extract of propolis in mice-bearing Ehrlich carcinoma, as compared to bleomycin. Scheller S, et al. **Z Naturforsch [C]** 1989 Nov–Dec;44(11–12):1063–5

[Effects of pingyangmycin on the growth and differentiation of the transplantable squamous cell carcinoma of forestomach (GS-742) in mice] Wang FR. **Chung Hua Chung Liu Tsa Chih** 1989 Sep;11(5):326–8 (Eng. Abstr.) **(Chi)**

[Local injection of bleomycin A5 in lymphangioma in children. Analysis of 100 cases] Jiang JP. **Chung Hua Wai Ko Tsa Chih** 1989 Dec;27(12):741–2, 781 (Eng. Abstr.) **(Chi)**

[Feasibility and radicality of PEP-chemoradiation therapy in oral squamous cell carcinoma] Hibi G, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1692–5 (Eng. Abstr.) **(Jpn)**

[Basic and clinical investigations of the effectiveness of hyperthermia combined with chemotherapy and irradiation in the treatment in patients with esophageal carcinoma] Kuwano H, et al. **Kyobu Geka** 1989 Jul;42(8 Suppl):677–81

(Eng. Abstr.) (Jpn)
[Direct current therapy with chemotherapy for the local control of lung cancer] Matsushima Y, et al.
Nippon Gan Chiryo Gakkai Shi 1989 Oct 20;24(10):2341–8 (Eng. Abstr.) (Jpn)

TOXICITY

Remodeling of the lung in bleomycin–induced pulmonary fibrosis in the rat. An immunohistochemical study of laminin, type IV collagen, and fibronectin. Lazenby AJ, et al. **Am Rev Respir Dis** 1990 Jul;142(1):206–14
Effect of erythrocytes on alveolar macrophage cytostatic activity induced by bleomycin lung damage in rats. Huot AE, et al. **Cancer Res** 1990 Apr 15;50(8):2351–5
Bleomycin–induced lung injury in the rat: effects of the platelet–activating factor (PAF) receptor antagonist BN 52021 and platelet depletion. Evans TW, et al.
Environ Health Perspect 1990 Apr;85:65–9
Cytogenetic characterization of 20 lymphoblastoid lines derived from human individuals differing in bleomycin sensitivity. Hsu TC, et al. **In Vitro Cell Dev Biol** 1990 Jan; 26(1):80–4
Assessment of pulmonary and hematologic toxicities of liblomycin, a novel bleomycin analog. Newman RA, et al. **Invest New Drugs** 1990 Feb;8(1):33–41
Comparative flow cytometric analysis of bleomycin toxicity on normal and tumour sheep cell kinetics in vitro. Shrivastava R, et al. **J Appl Toxicol** 1990 Apr;10(2):99–103
A study on the toxicity of antineoplastic drugs (bleomycin, peplomycin and cis–diamminedichloroplatinum) by simultaneous administration (Part 1). Matsumoto H, et al. **J Nihon Univ Sch Dent** 1989 Dec;31(4):597–611
Bleomycin–induced chromosomal damage in tuberous sclerosis. Vorechovsky I, et al. **Jinrui Idengaku Zasshi** 1990 Jun;35(2):207–13
Botran and bleomycin induce crossing–over, and bleomycin also increases aneuploidy in diploid strains of Aspergillus. Käfer E. **Mutat Res** 1990 May;241(1):49–66
The kinetics of DNA damage by bleomycin in mammalian cells. López–Larraza D, et al. **Mutat Res** 1990 Sep; 232(1):57–61
Vitamin C intake influences the bleomycin–induced chromosome damage assay: implications for detection of cancer susceptibility and chromosome breakage syndromes. Pohl H, et al. **Mutat Res** 1989 Oct;224(2):247–52
Effect of in vitro cleavage of apurinic/apyrimidinic sites on bleomycin–induced mutagenesis of repackaged lambda phage. Steighner RJ, et al. **Mutat Res** 1990 Feb; 240(2):93–100
Effects of sodium arsenite on the cytotoxicity of bleomycin. Jan KY, et al. **Toxicol Lett** 1990 Mar;51(1):81–90
ICRF 187 and polyhydroxyphenyl derivatives fail to protect against bleomycin induced lung injury. Tryka AF. **Toxicology** 1989 Dec 1;59(2):127–38

BLEPHARITIS see under **EYELID DISEASES**

BLEPHAROPTOSIS

Parental age in the blepharophimosis, ptosis, epicanthus inversus, telecanthus complex. Finley WH, et al.
Am J Med Genet 1990 Aug;36(4):414–7
Ptosis in blepharoplasty surgery [letter; comment] Kersten RC, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jan; 116(1):108–9 Comment on: Arch Otolaryngol Head Neck Surg 1989 Feb;115(2):198–201.
Unknown syndrome: congenital heart disease, ptosis, hypodontia, and craniosynostosis. Mehta L, et al.
J Med Genet 1989 Oct;26(10):664–5

CHEMICALLY INDUCED

Ocular myasthenia gravis after D–penicillamine administration. Katz LJ, et al. **Br J Ophthalmol** 1989 Dec; 73(12):1015–8 (39 ref.)

CLASSIFICATION

A new classification of blepharoptosis. Beard C.
Int Ophthalmol Clin 1989 Winter;29(4):214–6

COMPLICATIONS

Posttraumatic headache with ptosis, miosis and chronic forehead hyperhidrosis. Khurana RK. **Headache** 1990 Jan; 30(2):64–8 (15 ref.)
Ophthalmoplegic migraine with superior ramus oculomotor paresis. Katz B, et al. **J Clin Neuro Ophthalmol** 1989 Sep; 9(3):181–3
Association of congenital heart disease, blepharoptosis, and short stature. Sonoda T, et al. **Jinrui Idengaku Zasshi** 1989 Dec;34(4):291–6
Lacrimal gland prolapse in craniosynostosis syndromes and poor function congenital ptosis. Jordan DR, et al.
Ophthalmic Surg 1990 Feb;21(2):97–101
[Descending ocular myopathy—apropos of a case] Darrason G, et al. **Bull Soc Ophtalmol Fr** 1989 Feb;89(2):325–9 (Eng. Abstr.) (Fre)

CONGENITAL

The aponeurotic approach to congenital ptosis. Jordan DR, et al. **Ophthalmic Surg** 1990 Apr;21(4):237–44

DIAGNOSIS

[Nosologic evaluation of oculopharyngeal myopathic syndromes] Lössner J, et al.
Psychiatr Neurol Med Psychol (Leipz) 1989 Oct; 41(10):577–85 (Eng. Abstr.) (Ger)
[Ptosis—clinical differential diagnosis] Sturzenegger M.
Schweiz Med Wochenschr 1989 Oct 7;119(40):1386–99 (46 ref.) (Eng. Abstr.) (Ger)

ETIOLOGY

Ptosis as the early manifestation of pituitary tumour. Yen MY, et al. **Br J Ophthalmol** 1990 Mar;74(3):188–91
Transient acquired ptosis [published erratum appears in J Am Optom Assoc 1990 Jan;61(1):22] Haskes LP, et al.
J Am Optom Assoc 1989 Sep;60(9):668–75
Postcataract extraction ptosis: effect of the bridle suture. Loeffler M, et al. **J Cataract Refract Surg** 1990 Jul; 16(4):501–4
Seizure–induced miosis and ptosis: association with temporal lobe magnetic resonance imaging abnormalities. Afifi AK, et al. **J Child Neurol** 1990 Apr;5(2):142–6
Ptosis as the sole manifestation of compression of the oculomotor nerve by an aneurysm of the posterior communicating artery. Good EF.
J Clin Neuro Ophthalmol 1990 Mar;10(1):59–61
Enhanced ptosis in Fisher's syndrome after Epstein–Barr virus infection. Ishikawa H, et al.
J Clin Neuro Ophthalmol 1990 Sep;10(3):197–200
[Complications of dermolipoma ablation] François P, et al.
Bull Soc Ophtalmol Fr 1989 Feb;89(2):289–90 (Eng. Abstr.) (Fre)
[Ptosis as the leading symptom of Kearns–Sayre syndrome. A case report for differential diagnosis of external ophthalmoplegia] Vock K, et al. **Kinderarztl Prax** 1990 Feb; 58(2):93–7 (Eng. Abstr.) (Ger)
[Oculopharyngeal muscular dystrophy] Tamir G, et al.
Harefuah 1990 Jun 1;118(11):634–6 (Eng. Abstr.) (Heb)
[Two cases of mitochondrial myopathy (focal cytochrome c oxidase deficiency), long–term follow–up on a diagnosis of ocular type myasthenia gravis] Matsuda Y, et al.
Rinsho Shinkeigaku 1989 Sep;29(9):1180–2 (Eng. Abstr.) (Jpn)
[A case of ophthalmic manifestations in progressive muscular dystrophy] Szyrocka–Szwed K, et al. **Wiad Lek** 1990 Mar 1–15;43(5–6):223–6 (Eng. Abstr.) (Pol)
[The effect of the method for forming the conjunctival flap in glaucoma fistulizing operations on the development of a stable acquired ptosis of the upper eyelid] Nesterov AP, et al. **Vestn Oftalmol** 1989 Sep–Oct;105(5):49–52 (Eng. Abstr.) (Rus)

GENETICS

Familial occurrence of neuroblastoma, von Recklinghausen's neurofibromatosis, Hirschsprung's agangliosis and jaw–winking syndrome. Clausen N, et al.
Acta Paediatr Scand 1989 Sep;78(5):736–41
Benign autosomal dominant syndrome of neuronal Charcot–Marie–Tooth disease, ptosis, parkinsonism, and dementia. Tandan R, et al. **Neurology** 1990 May;40(5):773–9 (13 ref.)
[Oculopharyngeal muscular dystrophy. A census of French families and genealogic study] Brunet G, et al.
Rev Neurol (Paris) 1990;146(6–7):425–9 (27 ref.) (Eng. Abstr.) (Fre)
[Oculopharyngeal muscular dystrophy. Clinical, electromyography and muscle biopsy findings in 2 cases] Klostermann W, et al. **Nervenarzt** 1990 Jun;61(6):351–5 (Ger)

PATHOLOGY

[Oculopharyngeal muscular dystrophy. Contribution of electron microscopy] Dominguez M, et al.
Bull Soc Ophtalmol Fr 1989 Oct;89(10):1181–3 (Fre)

PHYSIOPATHOLOGY

Cranial nerve palsies in benign intracranial hypertension. Agarwal MP, et al. **J Assoc Physicians India** 1989 Aug; 37(8):533–4
[Gaze–evoked eyelid closure. Report of two cases] Tanaka M, et al. **Rinsho Shinkeigaku** 1989 Apr;29(4):464–8 (Eng. Abstr.) (Jpn)

SURGERY

The surgical management of upper eyelid hooding. Paul MD.
Aesthetic Plast Surg 1989 Summer;13(3):183–7
Blepharoptosis repair by fascia lata suspension with direct tarsal and frontalis fixation. Spoor TC, et al.
Am J Ophthalmol 1990 Mar 15;109(3):314–7
Upper eyelid ptosis correction by a revised tarsal resection technique. Lesavoy MA, et al. **Ann Plast Surg** 1990 Jul; 25(1):7–13
Conjunctival flap–cosmetic shell–ptosis procedure. Treatment of blepharoptosis in severe keratopathy. Putterman AM. **Arch Ophthalmol** 1989 Dec;107(12):1816–8
Different technical approaches for blepharoplasty in eyelid rejuvenation surgery. Mahé E, et al.
Arch Otorhinolaryngol 1989;246(5):353–6
A modified frontalis sling in the treatment of combined blepharoptosis and facial nerve paresis. Chait LA, et al.
Br J Plast Surg 1989 Sep;42(5):610–2
Ptosis revision. Brown BZ. **Int Ophthalmol Clin** 1989 Winter; 29(4):217–8
Is there still a place for conjunctival–approach ptosis surgery? Collin R, et al. **Int Ophthalmol Clin** 1989 Winter; 29(4):219–25
Recognising aponeurotic ptosis. Deady JP, et al.
J Neurol Neurosurg Psychiatry 1989 Aug;52(8):996–8
Muller's muscle–conjunctival resection procedure in the treatment of ptosis in Horner's syndrome. Glatt HJ, et al.
Ophthalmic Surg 1990 Feb;21(2):93–6
Comparison of 2.5% and 10% phenylephrine in the elevation of upper eyelids with ptosis. Glatt HJ, et al.
Ophthalmic Surg 1990 Mar;21(3):173–6
Patient satisfaction in oculoplastic surgery. Putterman AM.
Ophthalmic Surg 1990 Jan;21(1):15–21
[Correction of severe ptosis by a fascia suspension method: report of 25 cases] Hao ZR.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Dec;4(4):269–70, 318 (Eng. Abstr.) (Chi)
[The treatment of ptosis by suspension with a frontal myofascial flap] Zhou ML.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Jun;3(2):120–1, 157 (Eng. Abstr.) (Chi)
[Choice of treatment in surgery of congenital ptosis] Morax S. **Ann Chir Plast Esthet** 1989;34(4):307–16 (13 ref.) (Eng. Abstr.) (Fre)
[Use of Gore–Tex in ptosis surgery for suspension from the frontal muscle] Arnaud B, et al. **Bull Soc Ophtalmol Fr** 1989 Mar;89(3):483–6 (Fre)
[Surgical treatment of the Marcus–Gunn syndrome. Indications and results. Apropos of 15 cases] Morax S, et al. **Ophtalmologie** 1989 Apr–May;3(2):160–3 (Eng. Abstr.) (Fre)
[Congenital blepharoptosis. Diagnosis and treatment] Guieu R, et al. **Rev Stomatol Chir Maxillofac** 1990;91(1):33–40 (22 ref.) (Eng. Abstr.) (Fre)
[Ptosis surgery: shortening the levator aponeurosis of Müller's muscle and the tarsus using an anterior approach] Bruun D, et al. **Klin Monatsbl Augenheilkd** 1990 May; 196(5):394–7 (Eng. Abstr.) (Ger)
[Personal experience with transcutaneous resection of the palpebral levator muscle in the correction of congenital ptosis] Juhás T, et al. **Cesk Oftalmol** 1990 Feb;46(1):14–22 (Eng. Abstr.) (Slo)

THERAPY

Complete post–traumatic ptosis: a mechanism for recovery? Arden RL, et al. **Laryngoscope** 1989 Nov;99(11):1175–9

BLEPHAROSPASM see under **EYELID DISEASES**

BLIND LOOP SYNDROME

The blind loop syndrome in children. Stewart BA, et al.
J Pediatr Surg 1990 Aug;25(8):905–8

COMPLICATIONS

Multiple malignant lymphoma within an ileal blind loop—report of a case. Sumi K, et al. **Jpn J Surg** 1989 Nov;19(6):747–50
[A protein–losing enteropathy accompanied with multiple ulcerations in blind loop: report of a case] Saitoh O, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jun; 86(6):1316–20 (Jpn)

METABOLISM

The deconjugation ability of bacteria isolated from the jejunal fluids in the blind loop syndrome with high 14CO2 excretion—using the breath analysis technique and thin–layer chromatography. Shindo K, et al. **Life Sci** 1989; 45(24):2275–83

PATHOLOGY

Tight junction regulation during impaired ion transport in blind loops of rat jejunum. Schulzke JD, et al.
Res Exp Med (Berl) 1990;190(1):59–68

SURGERY

Cure of arthritis–dermatitis syndrome due to intestinal bypass by resection of nonfunctional segment of blind loop. Drenick EJ, et al. **Dig Dis Sci** 1990 May;35(5):656–60

BLIND SPOT see **OPTIC DISK**

BLINDNESS

see related
SENSORY AIDS

Providing drug information to the blind [letter] McIntyre WJ, et al. **Am J Hosp Pharm** 1990 May;47(5):1013–4
Falling among the sensorially impaired elderly. Tobis JS, et al. **Arch Phys Med Rehabil** 1990 Feb;71(2):144–7
Sectioning of patients with visual difficulties [letter] Seymour R, et al. **BMJ** 1990 Mar 17;300(6726):751
Simultaneous reading of braille with the two hands: reply to Millar (1987). Bertelson P, et al. **Cortex** 1989 Sep; 25(3):495–8
Simultaneous reading with the two hands: reply to Bertelson and Mousty. Millar S. **Cortex** 1989 Sep;25(3):499–502
Alphanumerical display module for blind people. Burger D,

et al. **Med Biol Eng Comput** 1989 May;27(3):327–9

Legal blindness can be compatible with safe driving [see comments] Fonda G. **Ophthalmology** 1989 Oct; 96(10):1457–9 Comment in: Ophthalmology 1989 Oct;96(10):1455–6.

Communicative competence in a group of visually impaired children. Simpson M, et al. **S Afr J Commun Disord** 1989; 36:23–8

Case report 613: Osteoporosis pseudoglioma syndrome. Spriggs DW. **Skeletal Radiol** 1990;19(4):302–4

CHEMICALLY INDUCED

Sudden cortical blindness following transient enhancement of steroids administered in congenital adrenal hyperplasia (case report). Decsi T, et al. **Acta Paediatr Hung** 1990; 30(1):107–10

Visual disturbance after transurethral resection of the prostate [letter] Cashman JN. **Anaesthesia** 1990 Aug;45(8):691–2

Painless loss of vision after transurethral resection of the prostate. Russell D. **Anaesthesia** 1990 Mar;45(3):218–21

Early blindness and coma during intrathecal chemotherapy for meningeal carcinomatosis. Boogerd W, et al. **Cancer** 1990 Feb 1;65(3):452–7

Subconjunctival injections of antibiotics are used increasingly at the conclusion of intraocular and extraocular procedures. Morris RJ, et al. **Eye** 1989;3 (Pt 6):860–1

Visual loss following intranasal anesthetic injection. Savino PJ, et al. **J Clin Neuro Ophthalmol** 1990 Jun;10(2):140–4

Reversible visual loss in a patient receiving high-dose ciprofloxacin hydrochloride (Cipro). Vrabec TR, et al. **Ophthalmology** 1990 Jun;97(6):707–10

[Transitory blindness after transurethral resection of the prostate (letter)] Torcal Lapuente E, et al. **Rev Esp Anestesiol Reanim** 1990 Mar–Apr;37(2):109 **(Spa)**

CLASSIFICATION

Amaurosis fugax. An overview. Burde RM. **J Clin Neuro Ophthalmol** 1989 Sep;9(3):185–9 (34 ref.)

COMPLICATIONS

Seasonal affective disorder and visual impairment: two case studies. Rosenthal NE, et al. **J Clin Psychiatry** 1989 Dec; 50(12):469–72

Melatonin stabilises sleep onset time in a blind man without entrainment of cortisol or temperature rhythms. Folkard S, et al. **Neurosci Lett** 1990 May 31;113(2):193–8

Age-related differences in prevalence and intensity of Trichuris trichiura in sensory impaired children from two schools in Guatemala. Scott ME, et al. **Trans R Soc Trop Med Hyg** 1989 Jul–Aug;83(4):542–4

Capgras's syndrome associated with sensory loss. Signer SF, et al. **West J Med** 1990 Jun;152(6):719–20

CONGENITAL

Norrie's disease: a prospective study of development. Goodyear HM, et al. **Arch Dis Child** 1989 Nov; 64(11):1587–92

Hyperopia in complicated Leber's congenital amaurosis. Dagi LR, et al. **Arch Ophthalmol** 1990 May;108(5):709–12

Bilateral macular colobomas in Leber's congenital amaurosis. Murayama K, et al. **Doc Ophthalmol** 1989 Jun;72(2):181–8

[Clinical findings and trace metals (zinc & copper) in Leber's congenital amaurosis] Zeng LH. **Chung Hua Yen Ko Tsa Chih** 1990 Jan;26(1):26–8 (Eng. Abstr.) **(Chi)**

DIAGNOSIS

Citing the differential diagnosis [letter; comment] Clark RB. **Ann Emerg Med** 1989 Oct;18(10):1137 Comment on: Ann Emerg Med 1989 Apr;18(4):414–7.

Punctional blindness in photorefractive keratectomy [letter; comment] Blodi FC. **Arch Ophthalmol** 1990 Mar;108(3):318 Comment on: Arch Ophthalmol 1989 Nov;107(11):1563–5.

Rapid epidemiologic assessment of cataract blindness. The Aravind Rapid Epidemiologic Assessment Staff. Venkataswamy G, et al. **Int J Epidemiol** 1989;18(4 Suppl 2):S60–7

DRUG THERAPY

High dose corticosteroids for treatment of vision loss due to indirect injury to the optic nerve. Seiff SR. **Ophthalmic Surg** 1990 Jun;21(6):389–95

EPIDEMIOLOGY

Visual impairment of age-related macular degeneration. An epidemiological study of 1000 aged individuals. Vinding T. **Acta Ophthalmol (Copenh)** 1990 Apr;68(2):162–7

Blindness and visual impairment in an American urban population. The Baltimore Eye Survey. Tielsch JM, et al. **Arch Ophthalmol** 1990 Feb;108(2):286–90

3.8 million blinded by cataract each year: projections from the first epidemiological study of incidence of cataract blindness in India [see comments] Minassian DC, et al. **Br J Ophthalmol** 1990 Jun;74(6):341–3 Comment in: Br J Ophthalmol 1990 Jun;74(6):324.

Blindness and eye disease in Kenya: ocular status survey results from the Kenya Rural Blindness Prevention Project [see comments] Whitfield R, et al. **Br J Ophthalmol** 1990 Jun;74(6):333–40 Comment in: Br J Ophthalmol 1990 Jun;74(6):324.

Magnitude and causes of blindness in the developing world. Foster A, et al. **Int Ophthalmol** 1990 May;14(3):135–40 (12 ref.)

Prevalence of blindness and eye disease: discussion paper. Johnson GJ, et al. **J R Soc Med** 1989 Jun;82(6):351–4

[Changing prevalence of blindness in 30 years in Guangdong Province] Su XL, et al. **Chung Hua Yen Ko Tsa Chih** 1990 Mar;26(2):108–10 (Eng. Abstr.) **(Chi)**

[A survey of blindness and low vision in Shanxi Province] Zhang JX. **Chung Hua Yen Ko Tsa Chih** 1990 Jan; 26(1):39–42 (Eng. Abstr.) **(Chi)**

[An epidemiological survey of blindness and low vision in Chongqing] Zhou YF. **Chung Hua Yen Ko Tsa Chih** 1989 Sep;25(5):296–9 (Eng. Abstr.) **(Chi)**

[Prevalence and causes of blindness in the Congo] Négrel AD, et al. **Bull World Health Organ** 1990;68(2):237–43 (Eng. Abstr.) **(Fre)**

[Causes of blindness in Togo] Balo K, et al. **J Fr Ophtalmol** 1989;12(4):291–5 (Eng. Abstr.) **(Fre)**

[Surveillance of trachoma and glaucoma in areas of endemic trachoma. Evaluation (1966–1987) and perspectives] Aouchiche M, et al. **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique** 1988;65(3–4):83–106 (Eng. Abstr.) **(Fre)**

[Prevalence of blindness in Niger] Kabo AM. **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique** 1989;66(1–2):55–62 (Eng. Abstr.) **(Fre)**

[Results obtained by the Moroccan Association of Ambulatory Ophthalmologists during 1 year (1987–1988)] Rafi M, et al. **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique** 1988;65(3–4):111–7 (Eng. Abstr.) **(Fre)**

ETIOLOGY

Ocular drug abuse in Lagos, Nigeria. Adefule-Ositelu AO. **Acta Ophthalmol (Copenh)** 1989 Aug;67(4):396–400

Microdeletion in the X-chromosome and prenatal diagnosis in a family with Norrie disease. Zhu DP, et al. **Am J Med Genet** 1989 Aug;33(4):485–8

Postpartum pulmonary embolus as an unusual cause of cortical blindness. Stiller RJ, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):696–7

Visual loss from endothelial cell melanization of the cornea. Mosteller MW, et al. **Am J Ophthalmol** 1990 Jun 15; 109(6):733–5

Spontaneous visual recovery from traumatic optic neuropathy after blunt head injury. Wolin MJ, et al. **Am J Ophthalmol** 1990 Apr 15;109(4):430–5

Spontaneous bleeding from a normal-appearing iris: an unusual cause of atypical amaurosis fugax. Mader TH, et al. **Ann Emerg Med** 1990 Sep;19(9):1066–8

Immediate contralateral amaurosis after retrobulbar anesthesia. Bishara SA, et al. **Ann Ophthalmol** 1990 Feb; 22(2):63–5

The natural history of amaurosis fugax with minor degrees of internal carotid artery stenosis. Torem S, et al. **Ann Vasc Surg** 1990 Jan;4(1):46–51

Bonnet syndrome and posterior parasagittal tumor: clues to neural mechanisms. Ribeiro SA, et al. **Arq Neuropsiquiatr** 1989 Jun;47(2):230–4

Transient postoperative blindness as a possible effect of glycine toxicity. Burkhart SS, et al. **Arthroscopy** 1990; 6(2):112–4

Blindness in the painless white eye. Colvin J, et al. **Aust Fam Physician** 1989 Sep;18(9):1165–6

Blindness in leprosy—a forgotten complication. ffytche T. **Aust N Z J Ophthalmol** 1989 Aug;17(3):257–60

Lymphomatoid granulomatosis presenting as sudden blindness. McKay D, et al. **Aust N Z J Ophthalmol** 1990 May;18(2):215–9

Leprosy [letter; comment] Newland HS. **Aust N Z J Ophthalmol** 1990 Feb;18(1):110 Comment on: Aust N Z J Ophthalmol 1989 Aug;17(3):211–3.

Student elective award winners! **Br J Hosp Med** 1989 Dec; 42(6):434

Loss of vision in one eye following scoliosis surgery. West J, et al. **Br J Ophthalmol** 1990 Apr;74(4):243–4

Reversible cortical blindness as a complication of rheumatoid arthritis of the cervical spine. Snelling JP, et al. **Br J Rheumatol** 1990 Jun;29(3):228–30

Visual recovery after blindness from pituitary apoplexy. Parent AD. **Can J Neurol Sci** 1990 Feb;17(1):88–91 (17 ref.)

Acute visual loss due to a calcified optic nerve glioma. Jordan DR, et al. **Can J Ophthalmol** 1989 Dec;24(7):335–9

The eye in stroke: amaurosis fugax, ischaemic optic neuropathy and chronic ocular ischaemia. King J. **Clin Exp Neurol** 1988;25:27–32 (24 ref.)

Transient visual symptoms and carotid artery disease. Exploration by real-time B-mode echotomography. Maiuri F, et al. **Clin Neurol Neurosurg** 1990;92(1):43–7

Sudden monocular blindness associated with homozygous B-thalassemia in a young Liberian. Njoh J, et al. **East Afr Med J** 1990 May;67(5):373–5

Blindness following bilateral radical neck dissection. Marks SC, et al. **Head Neck** 1990 Jul–Aug;12(4):342–5 (21 ref.)

Anton syndrome and cortical blindness due to bilateral occipital infarction. Misra M, et al. **Indian J Ophthalmol** 1989 Oct–Dec;37(4):196

Xerophthalmia, keratomalacia and nutritional blindness. Sommer A. **Int Ophthalmol** 1990 May;14(3):195–9 (19 ref.)

Cataract blindness in developing nations. Schwab L. **Int Ophthalmol Clin** 1990 Winter;30(1):16–8 (11 ref.)

Blindness from trauma in developing nations. Schwab L. **Int Ophthalmol Clin** 1990 Winter;30(1):28–9 (5 ref.)

Childhood blindness. O'Keefe M, et al. **Ir Med J** 1990 Jun; 83(2):57–8

Orbital emphysema causing vision loss after a dental extraction. Buckley MJ, et al. **J Am Dent Assoc** 1990 Apr; 120(4):421–2, 424; discussion 423

Arteriovenous malformation of the posterior ethmoidal artery as an unusual cause of amaurosis fugax. The ophthalmic steal syndrome. Fritz W, et al. **J Clin Neuro Ophthalmol** 1989 Sep;9(3):165–8

Cortical blindness during chemotherapy: clinical, CT, and MR correlations. Heran F, et al. **J Comput Assist Tomogr** 1990 Mar–Apr;14(2):262–6

Blindness following minor head trauma in children: a report of two cases with a review of the literature. Harrison DW, et al. **J Emerg Med** 1990 Jan–Feb;8(1):21–4 (19 ref.)

Transient cortical blindness following cerebral angiography. Shyn PB, et al. **J La State Med Soc** 1989 Nov;141(11):35–7

Blindness: a potential complication of bilateral neck dissection. Balm AJ, et al. **J Laryngol Otol** 1990 Feb; 104(2):154–6

Causes of blindness and restoration of sight for the students in the School for the Blind, Khon Kaen. Prabriputaloong A, et al. **J Med Assoc Thai** 1989 Nov;72(11):606–12

Encephalopathy, deafness and blindness in young women: a distinct retinocochleocerebral arteriolopathy? [letter; comment] Asherson RA, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug;52(8):1020–1 Comment on: J Neurol Neurosurg Psychiatry 1989 Jan;52(1):43–6.

Cavernous sinus thrombosis and blindness as complications of an odontogenic infection: report of a case and review of literature. Ogundiya DA, et al. **J Oral Maxillofac Surg** 1989 Dec;47(12):1317–21 (16 ref.)

Pseudoxanthoma elasticum presenting with blindness. Davis AL, et al. **J R Soc Med** 1989 Oct;82(10):627–8

Amaurosis fugax in a young woman [letter] Booy R. **Lancet** 1990 Jun 23;335(8704):1538

Amaurosis fugax and antiphospholipid antibodies [letter] Valesini G, et al. **Lancet** 1990 Aug 11;336(8711):374

Optic nerve decompression via the lateral facial approach. Knox BE, et al. **Laryngoscope** 1990 May;100(5):458–62

Transient cortical blindness following an acute hypotensive event in the postpartum period. Stein LB, et al. **N Y State J Med** 1989 Dec;89(12):682–3

Transient cortical blindness in a severe preeclamptic [letter] Beg MF, et al. **N Z Med J** 1990 Feb 14;103(883):52

Ocular stroke and carotid artery dissection. Newman NJ, et al. **Neurology** 1989 Nov;39(11):1462–4

Causes of blindness and partial sight in the Bradford Metropolitan District from 1980 to 1985. Yap M, et al. **Ophthalmic Physiol Opt** 1989 Jul;9(3):289–92

Transient central retinal artery occlusion and contralateral amaurosis after retrobulbar anesthetic injection. Brod RD. **Ophthalmic Surg** 1989 Sep;20(9):643–6

Blindness following blepharoplasty: two case reports, and a discussion of management. Goldberg RA, et al. **Ophthalmic Surg** 1990 Feb;21(2):85–9

Temporary conduction block of optic nerve after retrobulbar anesthesia. Verma L, et al. **Ophthalmic Surg** 1990 Feb; 21(2):109–12

Ophthalmic complications of sinus surgery. Buus DR, et al. **Ophthalmology** 1990 May;97(5):612–9

Visual loss caused by rapidly progressive intracranial meningiomas during pregnancy. Wan WL, et al. **Ophthalmology** 1990 Jan;97(1):18–21

Blindness and intranasal endoscopic ethmoidectomy: prevention and management. Stankiewicz JA. **Otolaryngol Head Neck Surg** 1989 Sep;101(3):320–9

Visual loss following intranasal injection. Rettinger G, et al. **Rhinol Suppl** 1989;9:66–72

Current management of amaurosis fugax. The Amaurosis Fugax Study Group. **Stroke** 1990 Feb;21(2):201–8 (85 ref.)

Occipital infarction with hemianopsia from carotid occlusive disease [letter; comment] Cohen SN. **Stroke** 1989 Oct; 20(10):1433–4 Comment on: Stroke 1989 Mar;20(3):409–11.

[The causes of blindness by corneal diseases in 3,499 cases] Feng CM. **Chung Hua Yen Ko Tsa Chih** 1990 May; 26(3):151–3 (Eng. Abstr.) **(Chi)**

[Retrobulbar neuritis in an isolated sphenoidal mucocele] De Paepe E, et al. **Acta Otorhinolaryngol Belg** 1989; 43(2):169–75 (Eng. Abstr.) **(Fre)**

[Ectopic parathyroid adenoma disclosed by cortical blindness and hypercalcemic encephalopathy] Bord G, et al. **Bull Soc Ophtalmol Fr** 1988 Dec;88(12):1451–4, 1457–9 (Eng. Abstr.) **(Fre)**

[Amaurosis during surgery of strabismus. Apropos of a case] Retout A, et al. **Bull Soc Ophtalmol Fr** 1989 Feb; 89(2):247–9 (Eng. Abstr.) **(Fre)**

[Bilateral blindness caused by disseminated arterial lupus erythematosus] Van Coppenolle F, et al. **Bull Soc Ophtalmol Fr** 1989 Feb;89(2):207–9 **(Fre)**

[Blindness caused by central artery occlusion following nasal septum correction] Rettinger G, et al. **HNO** 1990 Mar; 38(3):105–9 (Eng. Abstr.) **(Ger)**

[Acute unilateral blindness as the initial symptom of meningeosis lymphomatosa] Müller P, et al. **Klin Wochenschr** 1990 Mar 16;68(6):332–4 (Eng. Abstr.)

(Ger)
[Amaurosis sub partu] Seidel H. **Zentralbl Gynakol** 1989; 111(17):1189–91 (Eng. Abstr.) (Ger)
[Intraorbital mass and blindness in IgD (lambda) myeloma as the presenting symptoms] Fukushima M, et al. **Nippon Naika Gakkai Zasshi** 1989 Jul;78(7):992–3 (Jpn)
[The most frequent causes of loss and impairment of vision] Lenkiewicz E, et al. **Klin Oczna** 1989 Jul–Sep;91(7–9):186–7 (Eng. Abstr.) (Pol)
[Hereditary diseases of the eye and their relative significance among the causes of blindness and diminished vision in the pupils of boarding schools for blind and amblyopic children in Uzbekistan] Il'ina TG, et al. **Oftalmol Zh** 1989; (5):294–6 (Eng. Abstr.) (Rus)
[Syndromic involvements of the body as the cause of blindness and poor sight in schoolchildren at the boarding schools for blind and vision-impaired children in Uzbekistan] Il'ina TG, et al. **Vestn Oftalmol** 1989 Jul–Aug; 105(4):77–8 (Rus)
[Etiologic moments and the prevention of blindness] Cupić S. **Med Arh** 1986;40(3):99–100 (Eng. Abstr.) (Scr)
[Neurologic and ophthalmologic complications of mitral valve prolapse] Puchala M. **Cesk Neurol Neurochir** 1990 Jan;53(1):27–35 (Eng. Abstr.) (Slo)
[Causes of blindness and low vision in children in Slovakia] Gerinec A, et al. **Cesk Oftalmol** 1990 Mar;46(2):121–7 (Eng. Abstr.) (Slo)
[Cortical blindness in the course of meningitis caused by type B Haemophilus influenzae] Moreno Montesinos M, et al. **An Esp Pediatr** 1990 Apr;32(4):353–4 (Spa)
[Late recovery of macular vision in cortical blindness (letter)] Díaz M, et al. **Neurologia** 1989 Jul–Aug;4(6):219–20 (Spa)
[Ischemic optic neuropathy. Blindness which can be reversed by carotid endarterectomy] Ferrero Arias J, et al. **Neurologia** 1988 Sep–Oct;3(5):193–6 (Eng. Abstr.) (Spa)

GENETICS

Ocular responses of genetically blind chicks to the light environment and to lid suture. Lauber JK, et al. **Curr Eye Res** 1989 Aug;8(8):757–64
Physical fine-mapping of a deletion spanning the Norrie gene. Diergaarde PJ, et al. **Hum Genet** 1989 Dec;84(1):22–6
Molecular genetics. Insight into blindness [news] Applebury ML. **Nature** 1990 Jan 25;343(6256):316–7
Carrier detection and prenatal diagnosis in Norrie disease. Curtis D, et al. **Prenat Diagn** 1989 Oct;9(10):735–40

HISTORY

'Transient monocular blindness' versus 'amaurosis fugax'. Fisher CM. **Neurology** 1989 Dec;39(12):1622–4
[Michel de Montaigne (1533–1592): report of a case of not perceiving own blindness] Bernoulli R. **Gesnerus** 1990;47 Pt 1:13–20 (Eng. Abstr.) (Ger)
[Medieval ophthalmology in the St. Gallen monastery. 2] Bischoff P, et al. **Gesnerus** 1990;47 Pt 1:7–12 (Eng. Abstr.) (Ger)

METABOLISM

Glucose utilization in human visual cortex is abnormally elevated in blindness of early onset but decreased in blindness of late onset. Veraart C, et al. **Brain Res** 1990 Feb 26;510(1):115–21
Depressed prolactin cell activity in long-term blind-pinealectomized female hamsters is due to loss of estrous cyclicity. Massa JS, et al. **Proc Soc Exp Biol Med** 1990 Oct;195(1):119–22

MORTALITY

Retinopathy of prematurity-induced blindness: birth weight-specific survival and the new epidemic. Gibson DL, et al. **Pediatrics** 1990 Sep;86(3):405–12

PATHOLOGY

[Comparison of relay neurons in the lateral geniculate body of normal, bilaterally enucleated and congenitally blind strain 944 mice during ontogenesis] Hilbig H, et al. **J Hirnforsch** 1989;30(6):731–6 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Spontaneous recovery of vision following an orbital haemorrhage. McIlwaine GG, et al. **Br J Ophthalmol** 1989 Nov;73(11):926–7
Response to pinealectomy and blinding in vitellogenic female frogs (Rana perezi) subjected to high temperature in autumn. Alonso-Gómez AL, et al. **Can J Physiol Pharmacol** 1990 Jan;68(1):94–8
Reversible cortical blindness (Anton's syndrome) associated with bilateral occipital EEG abnormalities. Roos KL, et al. **Clin Electroencephalogr** 1990 Apr;21(2):104–9
Blindness impairs plasma growth hormone response to L-dopa but not to arginine. Bellastella A, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):856–8
Blindness influences the growth of institutionalized prepubertal subjects. Bellastella A, et al. **J Endocrinol Invest** 1989 Oct;12(9):605–9
Time-course study of blood pressure over a 20-year period in congenital blindness. Timio M, et al. **J Hypertens Suppl** 1989 Dec;7(6):S328–9
Endocrine effects of blinding in male Syrian hamsters are associated with increased hypothalamic 5-hydroxyindoleacetic acid/serotonin ratios. Vriend J. **J Pineal Res** 1989;7(4):401–9
Patterns of pineal melatonin secretion in rabbits: diurnal variation of basal and pulsatile release. Chan YS, et al. **Neuroendocrinology** 1990 Feb;51(2):147–55
Effects of blindness on play fighting in golden hamster infants. Guerra RF, et al. **Physiol Behav** 1989 Nov; 46(5):775–7
The Ferrier lecture, 1989. Outlooks for blindsight: explicit methodologies for implicit processes. Weiskrantz L. **Proc R Soc Lond [Biol]** 1990 Apr 23;239(1296):247–78 (69 ref.)
[Holographic deformation analysis of the optic canal in blunt cranial trauma] Rochels R. **Fortschr Ophthalmol** 1990; 87(2):182–5 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Organizing to prevent Third World blindness [letter; comment] Brian G, et al. **Am J Ophthalmol** 1989 Oct 15; 108(4):466–7 Comment on: Am J Ophthalmol 1989 May 15;107(5):544–6.
Prevention of blindness by screening for diabetic retinopathy: a quantitative assessment [see comments] Rohan TE, et al. **BMJ** 1989 Nov 11;299(6709):1198–201 Comment in: BMJ 1989 Dec 16;299(6714):1528.
Prevention of blindness by screening for diabetic retinopathy [letter; comment] Wormald R, et al. **BMJ** 1989 Dec 16; 299(6714):1528 Comment on: BMJ 1989 Nov 11;299(6709):1198–201.
Screening: the need for a balance [editorial] Khaw KT. **Eye** 1989;3 (Pt 4):vii–ix
The Madurai experience in preventing nutritional blindness. Venkataswamy G. **Indian J Pediatr** 1989 Jan–Feb;56(1):1–3
Prevention of blindness. Reddy PS. **Indian J Public Health** 1988 Apr–Jun;32(2):61–4
The International Agency for the Prevention of Blindness and non-governmental organisations: an effective network. Johns A. **Int Ophthalmol** 1990 May;14(3):227–30
Screening and surgical intervention results from cataract-free-zone projects in Campinas, Brazil and Chimbote, Peru. Jose NK, et al. **Int Ophthalmol** 1990 May; 14(3):155–64
The World Health Organization's programme for the prevention of blindness. Thylefors B. **Int Ophthalmol** 1990 May;14(3):211–9 (23 ref.)
Blindness prevention for refugees and displaced persons. Heiden D, et al. **Int Ophthalmol Clin** 1990 Winter; 30(1):52–3
Primary eye care and the design of the WHO Programme for the Prevention of Blindness. Thylefors B. **Int Ophthalmol Clin** 1990 Winter;30(1):12–5
International affairs. Project ORBIS—exchanging skills around the globe. Frandsen JL, et al. **J Prof Nurs** 1990 Jul–Aug;6(4):192, 246
Distributing ivermectin [letter] Foege WH. **Lancet** 1990 Aug 11;336(8711):377
Diabetic retinopathy: recent advances to eliminate treatable blindness. Goldman EJ. **Md Med J** 1990 Jul;39(7):643–7
Battling blindness throughout the world: a team of scientists in Maryland leads the way. Humphrey JH, et al. **Md Med J** 1989 Oct;38(10):825–8
Diabetes 2000—elimination of preventable blindness from diabetes by the year 2000 [editorial] Hagan JC 3d. **Mo Med** 1990 Jun;87(6):335–6
Diabetic retinopathy [letter] **N Engl J Med** 1990 Aug 30; 323(9):613–4
Detecting and treating retinopathy in patients with type I diabetes mellitus. A health policy model. Javitt JC, et al. **Ophthalmology** 1990 Apr;97(4):483–94; discussion 494–5
Ophthalmic screening for diabetics: the importance of physician-ophthalmologist collaboration in the prevention of blindness. Chew SJ, et al. **Singapore Med J** 1990 Feb; 31(1):26–9
[A blindness prevention monitoring system and its application] Ai KF. **Chung Hua Yen Ko Tsa Chih** 1989 Jul;25(4):230–1 (Eng. Abstr.) (Chi)
[The methodology and focus in blindness prevention from an epidemiologic point of view] Wei ZX. **Chung Hua Yen Ko Tsa Chih** 1989 Nov;25(6):365–7 (Eng. Abstr.) (Chi)
[A challenge to be taken up. Management of 16 million cases of cataract not surgically treated in developing countries] Thylefors B, et al. **J Fr Ophtalmol** 1989;12(2):75–8 (Fre)
[Present problems of the Blindness Prevention Section of the Polish Ophthalmologic Society] Kęcik T. **Klin Oczna** 1989 Jul–Sep;91(7–9):185 (Pol)
[Scleroplasty as a prophylaxis against blindness and asthenopia in children with progressive myopia] Teleuova TS, et al. **Oftalmol Zh** 1989;(4):207–9 (Eng. Abstr.) (Rus)
[Prevention of blindness as sequelae of corneal pathology] Malchuk IuF. **Vestn Oftalmol** 1990 May–Jun;106(3):58–60 (Eng. Abstr.) (Rus)

PSYCHOLOGY

Articulatory coding in prose reading: evidence from braille on changes with skill. Millar S. **Br J Psychol** 1990 May; 81 (Pt 2):205–19
Early language development and severe visual impairment. McConachie H. **Child Care Health Dev** 1990 Jan–Feb; 16(1):55–61
A study of psychosocial profile of institutionalised blind individuals in Pune. Dutta PK, et al. **Indian J Public Health** 1988 Jul–Sep;32(3):148–53
Hypnotic blindness, awareness, and attribution. Bryant RA, et al. **J Abnorm Psychol** 1989 Nov;98(4):443–7
Of blindness and courage. Underwood CR. **J Med Assoc Ga** 1989 Nov;78(11):735–6
Alienation among the visually impaired: some important predictors. Agrawal R, et al. **J Psychol** 1989 Sep; 123(5):517–9
The self-concepts of visually impaired and normally sighted middle school children. Obiakor FE, et al. **J Psychol** 1990 Mar;124(2):199–206
Music affects learning of a braille-like task by sighted subjects. Kennison RF, et al. **Percept Mot Skills** 1989 Dec; 69(3 Pt 1):923–9
Picture and pattern perception in the sighted and the blind: the advantage of the late blind. Heller MA. **Perception** 1989;18(3):379–89
The importance of alignment in blind subjects' use of tactual maps. Rossano MJ, et al. **Perception** 1989;18(6):805–16
Stigmatizing artifacts and their effect on personal space. Conigliaro L, et al. **Psychol Rep** 1989 Dec;65(3 Pt 1):897–8
On acquiring knowledge about people and the capacity to pretend: response to Leslie (1987) [see comments] Hobson RP. **Psychol Rev** 1990 Jan;97(1):114–21 Comment in: Psychol Rev 1990 Jan;97(1):122–31.
Stigma, biomedical efficacy, and institutional control. Goldin CS. **Soc Sci Med** 1990;30(8):895–900
[The development of spatial problem solving ability in early blind] Yamamoto T. **Shinrigaku Kenkyu** 1990 Feb; 60(6):363–9 (Eng. Abstr.) (Jpn)

RADIOGRAPHY

Computed tomography of the brains of children with cortical visual impairment. Flodmark O, et al. **Dev Med Child Neurol** 1990 Jul;32(7):611–20

REHABILITATION

Getting in touch with pictures and words: educational strategies for the blind. Pring L. **Int J Rehabil Res** 1989; 12(1):57–65
Training ophthalmology residents to treat patients with vision loss. Results of a demonstration program. Greenblatt SL. **Ophthalmology** 1990 Jan;97(1):138–43
Habilitation and rehabilitation of visually impaired and blind children. Jan JE, et al. **Pediatrician** 1990;17(3):202–7 (46 ref.)
Guide dogs and the profession. Turner T. **Vet Rec** 1989 Dec 23–30;125(26–27):635
[Low vision services in Switzerland. The Lausanne example] Ducrey N, et al. **Klin Monatsbl Augenheilkd** 1990 May; 196(5):433–5 (Eng. Abstr.) (Fre)
[Should the ophthalmologist provide low vision counseling?] Bischoff P. **Klin Monatsbl Augenheilkd** 1990 May; 196(5):430–2 (Eng. Abstr.) (Ger)
[Support and counseling of blind and visually handicapped students] Wieler R. **Ther Umsch** 1990 Apr;47(4):329–33 (Eng. Abstr.) (Ger)
[Rehabilitation of patients with vision disorders] Moeller W. **Z Arztl Fortbild (Jena)** 1989;83(19):973–6 (13 ref.) (Ger)
[Improving the organization of primary health care for invalids with impaired vision] Kondakov NN. **Sov Zdravookhr** 1989;(7):14–7 (Eng. Abstr.) (Rus)

SURGERY

Functional blindness in photorefractive keratectomy [letter; comment] [see comments] **Arch Ophthalmol** 1989 Nov; 107(11):1563–5 Comment on: Arch Ophthalmol 1989 May;107(5):641–2. Comment in: Arch Ophthalmol 1990 Mar;108(3):318.
[Transient monocular blindness and carotid surgery] Fabiani JN. **Bull Soc Ophtalmol Fr** 1989 Dec;89(12):1357 (Fre)
[Retinopathic visual loss in hemorrhagic necrotizing pancreatitis] Weber J, et al. **Zentralbl Chir** 1989; 114(22):1466–70 (Eng. Abstr.) (Ger)
[Traumatic blindness and decompression of the optical canal by the naso-sinusal route] Pisonero Ruiz P. **An Otorrinolaringol Ibero Am** 1990;17(3):267–85 (19 ref.) (Eng. Abstr.) (Spa)

THERAPY

An unusual application of prisms for field enhancement. Weiss NJ. **J Am Optom Assoc** 1990 Apr;61(4):291–3
Cure of 2 cases of cortical blindness with acupuncture therapy. Liu SD. **J Tradit Chin Med** 1982 Dec;2(4):303–5

VETERINARY

Orbital injury causing blindness in a Thoroughbred horse. Blogg JR, et al. **Aust Vet J** 1990 May;67(5):193–5
Inherited changes in concentrations of retinal and serum melatonin in the chicken. Pang SF, et al. **Gen Comp Endocrinol** 1989 Dec;76(3):427–36
Ischemic optic neuropathy and blindness after arterial occlusion for treatment of guttural pouch mycosis in two horses. Hardy J, et al. **J Am Vet Med Assoc** 1990 May 15;196(10):1631–4
Squamous cell carcinoma causing blindness and ophthalmoplegia in a cat. Murphy CJ, et al.

J Am Vet Med Assoc 1989 Oct 1;195(7):965–8
Resolution of lymphosarcoma associated blindness in a dog following chemotherapy [see comments] Butterworth SJ. Vet Rec 1989 Sep 9;125(11):305 Comment in: Vet Rec 1990 Feb 17;126(7):174.

BLINKING

Lesch–Nyhan syndrome with delayed onset of self-mutilation: hyperactivity of interneurons at the brainstem and blink reflex. Hatanaka T, et al. Acta Neurol Scand 1990 Feb;81(2):184–7
Seasonal independence of low prolactin concentration and high spontaneous eye blink rates in unipolar and bipolar II seasonal affective disorder. Depue RA, et al. Arch Gen Psychiatry 1990 Apr;47(4):356–64
Reflex facilitation of the rabbit nictitating membrane response by an auditory stimulus as a function of interstimulus interval. Weisz DJ, et al. Behav Neurosci 1990 Feb; 104(1):11–20
An associative process maintains reflex facilitation of the unconditioned nictitating membrane response during the early stages of training. Weisz DJ, et al. Behav Neurosci 1990 Feb;104(1):21–7
Increased blink rate in drug-naive acute schizophrenic patients. Mackert A, et al. Biol Psychiatry 1990 Jun 1; 27(11):1197–202
An IBM-PC and Commodore 64 microcomputer-based system for elicitation and recording of eyeblink reflexes. Flaten MA, et al. Biol Psychol 1989 Dec;29(3):291–8
Corneal oxygenation: blink frequency as a variable in rigid contact lens wear. Fink BA, et al. Br J Ophthalmol 1990 Mar;74(3):168–71
Maturation of blink reflex in children. Tomita Y, et al. Brain Dev 1989;11(6):389–93
The blink reflex: maturation and modification in the neonate. Anday EK, et al. Dev Med Child Neurol 1990 Feb; 32(2):142–50
The R3 component of the blink reflex in man: a reflex response induced by activation of high threshold cutaneous afferents. Rossi B, et al. Electroencephalogr Clin Neurophysiol 1989 Oct; 73(4):334–40
Tap-induced blink reflex and central nervous system dysfunction in diabetics with hyperosmolality. Tachibana Y, et al. Eur Neurol 1990;30(3):145–8
Paroxysmal blinking provoked by head movements. Tinuper P, et al. Eur Neurol 1989;29(5):298–300
Classical eyeblink conditioning in the bilaterally hemispherectomized cat. Norman RJ, et al. Exp Neurol 1974 Sep;44(3):363–80
Blink reflex in Parkinson's disease with levodopa-induced dyskinesia. Iriarte LM, et al. Funct Neurol 1989 Jul–Sep; 4(3):257–61
Eye movements and blinks: their relationship to higher cognitive processes. Fogarty C, et al. Int J Psychophysiol 1989 Sep;8(1):35–42
Auditory brain stem response and electrically elicited blink reflex in handicapped children. Tanaka J, et al. J Child Neurol 1990 Jan;5(1):40–4
Chronic progressive spinobulbar spasticity with disturbance of voluntary eyelid closure. Report of a case with special reference to MRI and electrophysiological findings. Nishimura M, et al. J Neurol Sci 1990 May;96(2–3):183–90
Functional interneuronal connections in the motor cortex of alert and anesthetized cats. Bogdanov AV, et al. Neurosci Behav Physiol 1989 Jul–Aug;19(4):346–51
Computed extraocular muscle activity during blinks. Boylan C, et al. Ophthalmic Physiol Opt 1989 Jan;9(1):50–2
Emotion, attention, and the startle reflex. Lang PJ, et al. Psychol Rev 1990 Jul;97(3):377–95 (110 ref.)
[Increased blink rate in schizophrenic patients] Mackert A, et al. Nervenarzt 1990 Jul;61(7):426–30 (Ger)
[Comments on the contribution of H.-H. v. Albert. A simple method for evaluating the corneal reflex] Odenwald G. Nervenarzt 1989 Nov;60(11):715 (Ger)
[Study of the blink reflex in spinocerebellar degeneration] Konishi T, et al. Rinsho Shinkeigaku 1990 Mar;30(3):272–5 (Eng. Abstr.) (Jpn)

DRUG EFFECTS

Blink rate response to haloperidol as possible predictor of therapeutic outcome. Bartkó G, et al. Biol Psychiatry 1990 Jan 1;27(1):113–5
Vecuronium neuromuscular blockade at the diaphragm, orbicularis oculi and adductor pollicis muscles. Donati F, et al. Can J Anaesth 1990 May;37(4 Pt 2):S13
Effects of anticholinergic agents on the excitability of the blink reflex in Meige syndrome. Rossi B, et al. Eur Neurol 1989;29(5):281–3
[The antagonism and elimination by midazolam of the blink reflex] Catoire P, et al. Ann Fr Anesth Reanim 1989;8 Suppl:R5 (Fre)
[Modulation using racemic and levo-rotary baclofen of the trigeminal reflex in man] Leardi MG, et al. Boll Soc Ital Biol Sper 1990 Mar;66(3):271–7 (Eng. Abstr.) (Ita)

PHYSIOLOGY

Blinking and corneal sensitivity. Collins M, et al. Acta Ophthalmol (Copenh) 1989 Oct;67(5):525–31
The blink reflex in patients with idiopathic torsion dystonia. Nakashima K, et al. Arch Neurol 1990 Apr;47(4):413–6
Facilitation and inhibition of the human startle blink reflexes by stimulus anticipation. Ison JR, et al. Behav Neurosci 1990 Jun;104(3):418–29
Electrical stimulation of brainstem nuclei: elicitation, modification, and conditioning of the rabbit nictitating membrane response. Nowak AJ, et al. Behav Neurosci 1990 Feb;104(1):4–10
Restoration of the blinking reflex in facial palsy by a simple lid-load operation. Smellie GD. Br J Plast Surg 1966 Jul; 19(3):279–83
Long-term effects of early social isolation in Macaca mulatta: changes in dopamine receptor function following apomorphine challenge. Lewis MH, et al. Brain Res 1990 Apr 9;513(1):67–73
Electrically and mechanically elicited blink reflexes in infants and children—maturation and recovery curves of blink reflex. Hatanaka T, et al. Electroencephalogr Clin Neurophysiol 1990 Jul;76(1):39–46
Photo-evoked eyelid microvibration in newborn infants and children—reflex arc and maturational change. Yasuhara A, et al. Electromyogr Clin Neurophysiol 1989 Nov–Dec; 29(7–8):439–44
Photo-evoked eyelid microvibration in neonates with hyperosmolality. Yasuhara A, et al. J Child Neurol 1990 Jul;5(3):191–4
Blink reflexes and magnetic resonance imaging in focal unilateral central trigeminal pathway demyelination. Kiers L, et al. J Neurol Neurosurg Psychiatry 1990 Jun; 53(6):526–9
Human tear film pre-rupture phase time (TP-RPT)—a non-invasive technique for evaluating the pre-corneal tear film using a novel keratometer mire. Hirji N, et al. Ophthalmic Physiol Opt 1989 Apr;9(2):139–42
Blink reflex: prognostic value in acute peripheral facial palsy. Ghonim MR, et al. ORL J Otorhinolaryngol Relat Spec 1990;52(2):75–9
Altered brainstem sensory processing as assessed by reflex modification procedures in infants at risk for apnea. Anday EK, et al. Pediatr Res 1989 Dec;26(6):576–82
Blink rates in schizophrenia. Karson CN, et al. Schizophr Bull 1990;16(2):345–54 (80 ref.)
[The trigemino-facial reflex in patients with essential blepharospasm. A contribution to the etiology of the disease picture] Laskawi R, et al. Laryngorhinootologie 1990 Jan;69(1):45–7 (Eng. Abstr.) (Ger)
[Usefulness of selected psychophysical methods in the evaluation of lighting conditions] Marzec S. Klin Oczna 1989 Feb–Mar;91(2–3):47–8 (Eng. Abstr.) (Pol)
[Visual evaluation of the dynamics of the action of a myorelaxant based on the threshold contractile reaction of the orbicular muscles of the eye during indirect electric stimulation] Pashchuk AIu, et al. Anesteziol Reanimatol 1989 Nov–Dec;(6):22–4 (Eng. Abstr.) (Rus)
[Comparative studies of hearing in children by recording reflex reactions and long-latency auditory evoked potentials] Ryndina AM, et al. Vestn Otorinolaringol 1990 Mar–Apr;(2):18–21 (Eng. Abstr.) (Rus)

BLISTER

Blisters and pustules in the newborn. Frieden IJ. Curr Probl Pediatr 1989 Nov;19(11):549–614 (182 ref.)

CHEMICALLY INDUCED

Antidotes to vesicant chemotherapy extravasations. Dorr RT. Blood Rev 1990 Mar;4(1):41–60 (181 ref.)
Blistering, erosions and scarring in a patient on etretinate. Ramsay B, et al. Br J Dermatol 1989 Sep;121(3):397–400
Coma blisters: report and review. Dunn C, et al. Cutis 1990 Jun;45(6):423–6

COMPLICATIONS

Recurrent blistering distal dactylitis of the great toe associated with an ingrowing toenail. Telfer NR, et al. Clin Exp Dermatol 1989 Sep;14(5):380–1
A cluster of blister-associated toxic shock syndrome in male military trainees and a study of staphylococcal carriage patterns. Berkley SF, et al. Milit Med 1989 Oct; 154(10):496–9

DIAGNOSIS

[A case from practice (183). Left-sided overdistended lung bullae] Müller R. Schweiz Rundsch Med Prax 1990 Jul 3; 79(27–28):869–70 (Ger)

ENZYMOLOGY

Plasmin-like proteinase associated with high molecular weight complexes in blister fluid of bullous pemphigoid. Lauharanta J, et al. Acta Derm Venereol (Stockh) 1989; 69(6):527–9
Cytotoxic proteases in blister fluid of pemphigus and pemphigoid patients. Grando SA, et al. Int J Tissue React 1989;11(4):195–201

ETIOLOGY

Morbidity associated with antigravity suits [letter] Pattison J, et al. Anaesthesia 1989 Oct;44(10):867
A transient bullous eruption associated with adenovirus infection in a child [letter] White MI, et al. Br J Dermatol 1990 Jun;122(6):839–40
A blistering eruption associated with Wilson's disease. Feldman SR, et al. J Am Acad Dermatol 1989 Nov;21(5 Pt 1):1030–2
Blisters of the fingertips: a variant of bullous dermatosis of hemodialysis. Shelley WB, et al. J Am Acad Dermatol 1989 Nov;21(5 Pt 2):1049–51
Consultation section. conjunctional bleb at the temporal extreme of cataract incision site. J Cataract Refract Surg 1990 Jul;16(4):520–4
[Blister dermatitis caused by Epicauta flagellaria (Erichson) (Coleoptera: Meloidae) species] Méndez E, et al. Rev Med Panama 1989 Sep;14(3):139–44 (Eng. Abstr.) (Spa)

IMMUNOLOGY

[New paraclinical approaches for the diagnosis of autoimmune bullous diseases] Sarret Y, et al. Pathol Biol (Paris) 1989 Oct;37(8):915–20 (34 ref.) (Eng. Abstr.) (Fre)

METABOLISM

Multiple-dose pharmacokinetics of ofloxacin in serum, saliva, and skin blister fluid of healthy volunteers. Warlich R, et al. Antimicrob Agents Chemother 1990 Jan;34(1):78–81
Interleukin 2, soluble interleukin 2 receptor, and interferon-gamma in the suction blister fluids from psoriatic skin. Takematsu H, et al. Arch Dermatol Res 1990; 282(3):149–52
Fluconazole levels in human epidermis and blister fluid [letter] Haneke E. Br J Dermatol 1990 Aug;123(2):273–4
Dynamic changes of cell-surface glycoconjugates in human palmar epidermis following friction-blisters. Ohno J, et al. Cell Tissue Res 1989 Nov;258(2):403–8
Levels of itraconazole in skin blister fluid after a single oral dose and during repetitive administration. Schäfer-Korting M, et al. J Am Acad Dermatol 1990 Feb;22(2 Pt 1):211–5
Urocanic acid isomers in epidermal samples and suction blister fluid of nonirradiated and UVB-irradiated human skin. Pasanen P, et al. Photodermatol Photoimmunol Photomed 1990 Feb;7(1):40–2
[A comparative study of free amino-acids in serum and blister fluid in burned patients] Chen YZ. Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Jun;2(2):109–10, 154 (Eng. Abstr.) (Chi)
[An analysis of contents of burn blister fluid] Guo ZR. Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Sep;3(3):208–9 (Chi)
[Trace elements in the serum and blister fluid of burn patients] Yang HY. Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Sep;3(3):187–90 (Chi)
[Leukotriene (LT) B4 and LTC4 in the blister fluid of bullous pemphigoid] Kawana S, et al. Nippon Hifuka Gakkai Zasshi 1989 May;99(6):659–64 (Eng. Abstr.) (Jpn)

PATHOLOGY

Vesiculo-bullous Darier's disease. Telfer NR, et al. Br J Dermatol 1990 Jun;122(6):831–4

PHYSIOPATHOLOGY

Antagonism of the algesic action of bradykinin on the human blister base. Whalley ET, et al. Adv Exp Med Biol 1989; 247A:261–8
NK-1 receptor mediation of neurogenic plasma extravasation in rat skin. Andrews PV, et al. Br J Pharmacol 1989 Aug; 97(4):1232–8
Evaluation of the effect of azapropazone on neutrophil migration in anaesthetized swine using a multichamber blister suction technique. Mousa SA, et al. Br J Pharmacol 1990 Feb;99(2):233–6
Fibrinolysis inhibition in human burn blister fluid. Rockwell WB, et al. J Burn Care Rehabil 1990 Jan–Feb;11(1):1–6

PREVENTION & CONTROL

Friction blisters and sock fiber composition. A double-blind study. Herring KM, et al. J Am Podiatr Med Assoc 1990 Feb;80(2):63–71

SURGERY

Thoracoscopic ablation of blebs in the treatment of recurrent or persistent spontaneous pneumothorax [see comments] Wakabayashi A. Ann Thorac Surg 1989 Nov;48(5):651–3 Comment in: Ann Thorac Surg 1990 May;49(5):851.

THERAPY

Should burn blister fluid be evacuated? Rockwell WB, et al. J Burn Care Rehabil 1990 Jan–Feb;11(1):93–5
[Treatment of the infected emphysematous bulla] Tanaka K, et al. Nippon Kyobu Geka Gakkai Zasshi 1989 Aug; 37(8):1511–6 (Eng. Abstr.) (Jpn)

BLOOD

see related
HEMATOPOIESIS
Effects of serum deprivation on Ki-67-reactive antigen.

Expression in HeLa cells. Sasaki K, et al. **Acta Pathol Jpn** 1989 Oct;39(10):638–42

Action of blood serum from rats with turpentine sterile inflammation on the development of CFU erythrocyte colonies. Possible role of erythropoietin. Gutnisky A, et al. **Acta Physiol Pharmacol Latinoam** 1989;39(2):127–32

Comparative studies of erythroid growth factors. Juaristi JA, et al. **Acta Physiol Pharmacol Latinoam** 1989;39(2):133–44

Silibinin (Legalon-70) enhances the motility of human neutrophils immobilized by formyl-tripeptide, calcium ionophore, lymphokine and by normal human serum. Kalmár L, et al. **Agents Actions** 1990 Mar;29(3–4):239–46

Serum volumes should not be reduced when testing neonates for unexpected red cell antibodies. Cordle DG, et al. **Am J Clin Pathol** 1990 Feb;93(2):267–9

Blood exposure in single versus double gloving during pelvic surgery. Cohn GM, et al. **Am J Obstet Gynecol** 1990 Mar; 162(3):715–7

Potential for laboratory exposures to biohazardous agents found in blood [published erratum appears in Am J Public Health 1990 Jun;80(6):658] Evans MR, et al. **Am J Public Health** 1990 Apr;80(4):423–7

Histological parameters useful in the identification of multiple bloodmeals in mosquitoes. Romoser WS, et al. **Am J Trop Med Hyg** 1989 Dec;41(6):737–42

Impaired epidural analgesia after dural puncture with and without subsequent blood patch. Ong BY, et al. **Anesth Analg** 1990 Jan;70(1):76–9

Prophylactic epidural blood patch in obstetrics [letter; comment] Woodworth GE. **Anesth Analg** 1990 May; 70(5):568–9 Comment on: Anesth Analg 1989 Oct;69(4):522–3.

Oxygenated cardioplegia: blood is a many splendored thing [comment] Buckberg GD. **Ann Thorac Surg** 1990 Aug; 50(2):175–7 Comment on: Ann Thorac Surg 1990 Aug;50(2):230–7.

Preservation of myocardial function and biochemistry after blood and oxygenated crystalloid cardioplegia during cardiac arrest [see comments] Coetzee A, et al. **Ann Thorac Surg** 1990 Aug;50(2):230–7 Comment in: Ann Thorac Surg 1990 Aug;50(2):175–7.

Operation for acute postinfarction mitral insufficiency using continuous oxygenated blood cardioplegia. Panos A, et al. **Ann Thorac Surg** 1989 Dec;48(6):816–9

Risks of blood exposure to the cardiac surgical team. Pate JW. **Ann Thorac Surg** 1990 Aug;50(2):248–50

In-vitro assessment of centrifugal pumps for ventricular assist. Jakob H, et al. **Artif Organs** 1990 Aug;14(4):278–83

Development of sheep embryos in vitro in a medium supplemented with different serum fractions. Batt PA, et al. **Aust J Biol Sci** 1988;41(2):189–99

Blood/injury fear, fainting and avoidance of medically-related situations: a family correspondence study. Kleinknecht RA, et al. **Behav Res Ther** 1989; 27(5):537–47

Inhibition by serum components of the expression of lipoprotein lipase gene upon stimulation by growth hormone. Pradines-Figueres A, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1118–25

Variations in c-fos mRNA expression during serum induction and the synchronous cell cycle. Bird RC, et al. **Biochem Cell Biol** 1990 May;68(5):858–62

The effects of serum and human albumin on calcium hydroxyapatite crystal growth. Garnett J, et al. **Biochem J** 1990 Mar 15;266(3):863–8

The fuel of the spleen. Studies using a new method for perfusing the rat spleen with whole blood. Mindham MA, et al. **Biochem J** 1989 Oct 15;263(2):325–32

Stimulatory effect of serum albumin on the proliferation of serum-free SV40-transformed Balb/c 3T3 cells. Bedotti R, et al. **Biochim Biophys Acta** 1990 Jun 12;1053(1):74–80

Serum growth factors cause rapid stimulation of protein synthesis and dephosphorylation of eIF-2 in serum deprived Ehrlich cells. Montine KS, et al. **Biochim Biophys Acta** 1989 Dec 14;1014(3):282–8

The development of a latex agglutination inhibition assay for the determination of foetal calf serum in viral vaccines. Sladoljev S, et al. **Biologicals** 1990 Jan;18(1):45–8

Workshop on the characterization of biomaterials in contact with blood. Siena, Italy, 18–19 January 1988. Abstracts. **Biomaterials** 1990 Mar;11(2):138–51

Blood modeling using polystyrene microspheres. Fukada E, et al. **Biorheology** 1989;26(2):401–13

Blood splashes: an underestimated hazard to surgeons. Brearley S, et al. **BMJ** 1989 Nov 25;299(6711):1315

Hazards of blood splashes [letter] [see comments] Jessop JH. **BMJ** 1990 Jan 6;300(6716):49 Comment in: BMJ 1990 Feb 17;300(6722):466.

Blood doping—a literature review. Jones M, et al. **Br J Sports Med** 1989 Jun;23(2):84–8 (48 ref.)

Amelioration of postischemic stunning by deferoxamine-blood cardioplegia. Illes RW, et al. **Circulation** 1989 Nov;80(5 Pt 2):III30–5

Prolonged headache after lumbar puncture. Successful treatment with an epidural blood patch in a 12-year-old boy. Robbins KB, et al. **Clin Pediatr (Phila)** 1990 Jun; 29(6):350–2

Spin-lattice relaxation rates in Fe(III)-doped human serum measured by magnetic resonance imaging. Yilmaz A, et al. **Clin Phys Physiol Meas** 1989 Nov;10(4):361–4

Transrectal ultrasound in the investigation of haemospermia. Etherington RJ, et al. **Clin Radiol** 1990 Mar;41(3):175–7

Serum-induced proliferation of retinal capillary endothelial cells is inhibited in the presence of retinal extract. McIntosh LC, et al. **Curr Eye Res** 1989 Sep;8(9):871–81

The consequences of asanguineous versus sanguineous reperfusion after long-term preservation of the heart. Galinanes M, et al. **Eur J Cardiothorac Surg** 1990;4(5):273–7

Occupational exposures to blood and risk of HIV transmission in a general hospital (1986–88). Puro V, et al. **Eur J Epidemiol** 1990 Mar;6(1):67–70

Blood-stained maternal milk: prevalence, characteristics and counselling. Merlob P, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 May-Jun; 35(2–3):153–7

c-fos and c-myc expression in human endothelial cells as a function of different culture conditions. Lampugnani MG, et al. **Exp Cell Res** 1990 Feb;186(2):381–4

The down-regulation of the mitogenic fibrinogen receptor (MFR) in serum-containing medium does not occur in defined medium. Levesque JP, et al. **Exp Cell Res** 1990 Feb;186(2):257–63

The impact of maternal serum on development of enolase activity in fetal rat brain cell culture. Shambaugh GE 3d, et al. **Exp Cell Res** 1990 Feb;186(2):210–7

Posterior penetrating injury in the rabbit eye: effect of blood and ferrous ions. Vergara O, et al. **Exp Eye Res** 1989 Dec; 49(6):1115–26

Epidural blood patch reduces the incidence of post lumbar puncture headache. Heide W, et al. **Headache** 1990 Apr; 30(5):280–1

Epidural blood patch in the treatment of post dural puncture headache: a double blind study. Seebacher J, et al. **Headache** 1989 Nov;29(10):630–2

Seminal plasma anti-sperm antibodies and IVF: the effect of semen sample collection into 50% serum. Elder KT, et al. **Hum Reprod** 1990 Feb;5(2):179–84

A modified distillation technique for the recovery of tritium from blood. Cuthbertson AZ, et al. **Int J Rad Appl Instrum [A]** 1989;40(6):545–6

Hematospermia in an adolescent. Chipkevitch E. **J Adolesc Health Care** 1989 Nov;10(6):554–6

Hematospermia in the adolescent. Ferrari ND 3d. **J Adolesc Health Care** 1989 Nov;10(6):561–3

The effect of fresh human serum on ofloxacin bactericidal activity. Fabbri A, et al. **J Chemother** 1990 Jun;2(3):164–6

"Observations and statistics relating to suicide weapons": an update [letter] Stone IC. **J Forensic Sci** 1990 Jan;35(1):10–2

Comparison of cold flush perfusion with modified blood versus modified Euro-Collins solution for lung preservation. Hooper TL, et al. **J Heart Transplant** 1990 Jul-Aug;9(4):429–34

Theatre gowns: a survey of the extent of user protection. Closs SJ, et al. **J Hosp Infect** 1990 May;15(4):375–8

Use of serum ultrafiltrate in the serum dilution test. Leggett JE, et al. **J Infect Dis** 1989 Oct;160(4):616–23

Determination by near-infrared reflectance spectroscopy of mosquito (Diptera: Culicidae) bloodmeal size. Hall MH, et al. **J Med Entomol** 1990 Jan;27(1):76–9

Substitute blood meal for investigating and maintaining Aedes aegypti (Diptera: Culicidae). Kogan PH. **J Med Entomol** 1990 Jul;27(4):709–12

Serum-stimulated feeding in vitro by third-stage infective larvae of the canine hookworm Ancylostoma caninum. Hawdon JM, et al. **J Parasitol** 1990 Jun;76(3):394–8

Effects of serum and endotoxin in experimental lung injury. Romero LA, et al. **J Pediatr Surg** 1990 Aug;25(8):846–8; discussion 849

Effect of serum on dose- and temperature-dependent hepatic uptake of multilamellar vesicles (MLV). Tahara K, et al. **J Pharmacobiodyn** 1989 Oct;12(10):596–601

Mouse embryo fibroblast proliferation and prostaglandin production in medium supplemented with fetal bovine serum or serum substitutes (Ultroser SF and G): role of glucocorticoids. Durant S, et al. **J Steroid Biochem** 1989 Dec;33(6):1103–10

Comparison of blood-based and asanguineous cardioplegic solutions administered at 4 degrees C. An ultrastructural morphometric study in the dog. Axford-Gatley RA, et al. **J Thorac Cardiovasc Surg** 1990 Sep;100(3):400–9

The efficacy of blood cardioplegia is not due to oxygen delivery. Illes RW, et al. **J Thorac Cardiovasc Surg** 1989 Dec;98(6):1051–6

Adjuvant N-(2-mercaptopropionyl)-glycine in blood cardioplegia does not improve myocardial protection in ischemically damaged hearts. Vinten-Johansen J, et al. **J Thorac Cardiovasc Surg** 1990 Jul;100(1):65–76

Efficacy of a home made quality control serum. Lalani R, et al. **JPMA** 1989 Dec;39(12):317–20

Enhancement of polymorphonuclear leukocyte-mediated tumor cytotoxicity by serum factor(s). Araki A, et al. **Jpn J Cancer Res** 1990 Jan;81(1):69–78

Prenatal sex determination by DNA amplification from maternal peripheral blood [see comments] Lo YM, et al. **Lancet** 1989 Dec 9;2(8676):1363–5 Comment in: Lancet 1990 Feb 3;335(8684):291. Comment in: Lancet 1990 May 19;335(8699):1220. Comment in: Lancet 1990 May 19;335(8699):1220–1.

On the origin of paramagnetic inhomogeneity effects in blood. Brooks RA, et al. **Magn Reson Med** 1989 Nov; 12(2):241–8

Magnetic relaxation in blood and blood clots. Bryant RG, et al. **Magn Reson Med** 1990 Jan;13(1):133–44

Risk of exposure of surgical personnel to patients' blood during surgery at San Francisco General Hospital. Gerberding JL, et al. **N Engl J Med** 1990 Jun 21; 322(25):1788–93

Prognostic significance of ventricular blood in supratentorial hemorrhage: a volumetric study. Young WB, et al. **Neurology** 1990 Apr;40(4):616–9

Blood component induction of cerebral vasospasm. Harada T, et al. **Neurosurgery** 1990 Aug;27(2):252–5; discussion 255–6

The effect of carbon dioxide on the changes in blood pH during hypoxia. Watanabe H, et al. **Nippon Hoigaku Zasshi** 1989 Jun;43(3):233–7

Influence of fetal calf serum in combination with pharmacological doses of progesterone or estradiol on proliferation and cell cycle kinetics of cultured mammary cancer cells. Kiss R, et al. **Oncology** 1989;46(6):391–9

Effects of Panmede and various horse serum concentrations on the axenic cultivation of Entamoeba histolytica strains in TPS-1 medium. Chávez-Dueñas L, et al. **Parasitol Res** 1989;76(1):50–4

A serum factor that activates the phosphatidylinositol phosphate signaling system in Xenopus oocytes. Tigyi G, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1521–5

Usefulness of the blood patch technique after transthoracic needle aspiration biopsy. Herman SJ, et al. **Radiology** 1990 Aug;176(2):395–7

Intimal protection of bypass-veins during intraoperative storage in blood or Euro-Collins-solution: the role of medium, temperature, and time. Wagner R. **Thorac Cardiovasc Surg** 1990 Jun;38(3):151–6

A comparison of the Doppler spectra from human blood and artificial blood used in a flow phantom. Hoskins PR, et al. **Ultrasound Med Biol** 1990;16(2):141–7

Long-term results and curative mechanisms of vesicoureteral reflux by endoscopic injection of blood. Kohri K, et al. **Urology** 1989 Nov;34(5):258–61

Enteric adenovirus 41 (Tak) requires low serum for growth in human primary cells. Pieniazek D, et al. **Virology** 1990 Sep;178(1):72–80

[Post-dural-puncture headache and epidural blood patch] Chan-Liao MG. **Ma Tsui Hsueh Tsa Chi** 1989 Jun; 27(2):163–75 (164 ref.) (Eng. Abstr.) **(Chi)**

[General seizures in connection with an epidural blood patch] Christensen K. **Ugeskr Laeger** 1989 Dec 11;151(50):3405–6 (Eng. Abstr.) **(Dan)**

[Blood, the control and guide of history] Bernard J. **Bull Acad Natl Med** 1989 Dec;173(9):1175–89 **(Fre)**

[Confidential donor self-exclusion for raising the safety of blood preparations] Koerner K, et al. **Dtsch Med Wochenschr** 1990 Jan 5;115(1):8–11 (Eng. Abstr.) **(Ger)**

[A method for continuous exposure of blood in vitro and in vivo to light, radiation or gas] Lee KH, et al. **Masui** 1989 Jul;38(7):874–9 (Eng. Abstr.) **(Jpn)**

[Retrograde continuous cold blood cardioplegia for aortic valve surgery] Yamamoto S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jan;38(1):78–85 (Eng. Abstr.) **(Jpn)**

[A clinicopathological study of candidemia in the elderly] Kawahata N, et al. **Nippon Ronen Igakkai Zasshi** 1990 Jan; 27(1):45–51 (Eng. Abstr.) **(Jpn)**

[Chemical determination of blood in gastric contents] Daae LN, et al. **Tidsskr Nor Laegeforen** 1989 Oct 30; 109(30):3109–10 (Eng. Abstr.) **(Nor)**

[Effect of brown enriched Livex on the general condition of patients with proliferative diseases of the bone marrow and lymphatic system] Kuliczkowski K, et al. **Wiad Lek** 1990 Mar 1–15;43(5–6):188–92 (Eng. Abstr.) **(Pol)**

[Selective ultrafiltration: a new variant of hemoconcentration during surgery with artificial circulation] Osipov VP, et al. **Anesteziol Reanimatol** 1989 Jul-Aug;(4):28–31 (Eng. Abstr.) **(Rus)**

[A mechanism of luminol-dependent chemiluminescence of human serum in the presence of hydrogen peroxide] Kozlov AV, et al. **Biofizika** 1990 Mar-Apr;35(2):347–9 (Eng. Abstr.) **(Rus)**

[The effect of blood serum on synthesis of lipids in rat thymocytes] Kulagina TP, et al. **Biokhimiia** 1989 Aug; 54(8):1325–8 (Eng. Abstr.) **(Rus)**

[Filling with autologous blood of residual pleural cavity after partial resection of the lungs] Kariev TM, et al. **Khirurgiia (Mosk)** 1989 Sep;(9):133–4 **(Rus)**

[A clamp for securing bottles containing blood and blood substitutes] Ostrovskiĭ VP, et al. **Klin Khir** 1990;(3):69 **(Rus)**

[The effect of freezing-thawing of human blood serum on the results of the determination of high density lipoprotein cholesterol] Poteshnykh EM, et al. **Lab Delo** 1989;(8):29–31 (Eng. Abstr.) **(Rus)**

[A toxicological hygiene study of a dye made from abattoir blood for sausage products] Lerina IV, et al. **Vopr Pitan** 1990 Jan-Feb;(1):61–4 (Eng. Abstr.) **(Rus)**

[Hemospermia: clinical study] Soler Fernández JM, et al. **Actas Urol Esp** 1989 Sep-Oct;13(5):371–4 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Effects of dexamethasone on body fluid and electrolyte composition of rats. Kenyon CJ, et al. **Acta Endocrinol (Copenh)** 1990 May;122(5):599–604

Influence of cilazapril on blood rheology in healthy subjects.

A pilot study. Ernst E, et al. **Am J Med** 1989 Dec 26; 87(6B):70S–71S

Somnogenic, pyrogenic, and hematologic effects of bacterial peptidoglycan. Johannsen L, et al. **Am J Physiol** 1990 Jan; 258(1 Pt 2):R182–6

Haematological changes induced by dimethoate in rat. Reena K, et al. **Arh Hig Rada Toksikol** 1989 Mar;40(1):23–7

Elevated mean corpuscular volume as a predictor of hematologic toxicity due to methotrexate therapy. Weinblatt ME, et al. **Arthritis Rheum** 1989 Dec; 32(12):1592–6

Haematological recovery following high-dose cyclophosphamide with autologous bone marrow transplantation. Twelves C, et al. **Cancer Chemother Pharmacol** 1989;25(3):213–8

Haematological changes after renal transplantation: differences between cyclosporin-A and azathioprine therapy. Fang GX, et al. **Int Urol Nephrol** 1990;22(2):181–7

Lipid IVA inhibits synthesis and release of tumor necrosis factor induced by lipopolysaccharide in human whole blood ex vivo. Kovach NL, et al. **J Exp Med** 1990 Jul 1;172(1):77–84

[Changes in redox potentials in serum samples as affected by adenosine triphosphate] Heinrich H, et al. **Radiobiol Radiother (Berl)** 1990;31(3):239–42 (Eng. Abstr.) **(Ger)**

[Effect of the combined action of sodium nitrite and fenitrothion on certain biochemical parameters in rat blood] Tyburczyk W, et al. **Rocz Panstw Zakl Hig** 1989; 40(1):58–64 (Eng. Abstr.) **(Pol)**

[Chemiluminescence activated by rhodamine G in plasma in the presence of divalent iron ions] Sherstnev MP, et al. **Biofizika** 1989 Jul–Aug;34(4):684–7 (Eng. Abstr.) **(Rus)**

[The morphofunctional status of the blood during the experimental intravenous administration of ultradispersed ferromagnetic particles] Volkonskiĭ VA. **Gematol Transfuziol** 1989 Dec;34(12):37–40 (Eng. Abstr.) **(Rus)**

[Changes in the blood composition in workers exposed to solvents containing benzene] Kraljić J, et al. **Arh Hig Rada Toksikol** 1989 Dec;40(4):367–71 (Eng. Abstr.) **(Ser)**

IMMUNOLOGY

Immunoregulatory properties of T-cell lines derived from the systemic and intrathecal compartments: a phenotypic and functional study. Freedman MS, et al. **Ann Neurol** 1990 Mar;27(3):258–65

Endometrial antibodies in serum and peritoneal fluid of infertile patients with and without endometriosis. Badaway SZ, et al. **Fertil Steril** 1990 May;53(5):930–2

Immunotoxicity of blood-synthetic membrane interactions. Henderson LW. **Fundam Appl Toxicol** 1989 Aug; 13(2):228–34 (31 ref.)

[The effect of zymosan activated blood plasma (products of the activation of complement system) on heart function] Shebeko VI, et al. **Dokl Akad Nauk SSSR** 1989; 309(3):753–6 **(Rus)**

METABOLISM

Specific identification of fibrin(ogen) degradation products in plasma and serum using blotting and peroxidase labeled antiserum. Proietti AB, et al. **Am J Hematol** 1990 Aug; 34(4):270–4

Hypertonic and hypovolemic stimulation of thirst in pigs. Anderson CR, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R149–54

Spontaneous drinking: is it stimulated by hypertonicity or hypovolemia? Houpt TR, et al. **Am J Physiol** 1990 Jan; 258(1 Pt 2):R143–8

Role of nonworking muscle on blood metabolites and ions with intense intermittent exercise. Lindinger MI, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1486–94

Effect on blood, liver, and kidney variables of age and of dosing rats with lead acetate orally or via the drinking water. Korsrud GO, et al. **Biol Trace Elem Res** 1988 Sep–Dec;17:151–66

Blood–tissue exchange via transport and transformation by capillary endothelial cells. Bassingthwaighte JB, et al. **Circ Res** 1989 Oct;65(4):997–1020

The degradation of amino acids, protein, and blood to short-chain fatty acids in colon is prevented by lactulose. Mortensen PB, et al. **Gastroenterology** 1990 Feb; 98(2):353–60

Inhibition by halothane, but not by isoflurane, of oxidative response to opsonized zymosan in whole blood. Lieners C, et al. **Inflammation** 1989 Dec;13(6):621–30

Estimation of in vivo reticuloendothelial system phagocytic activity in rats by direct blood clearance techniques and nuclear scintigraphy. Goyal DG, et al. **J Leukoc Biol** 1990 Jul;48(1):60–6

Positron emission tomographic measurement of blood–to–brain and blood–to–tumour transport of 82Rb. II: Clinical data and validation of technique. Dhawan V, et al. **Phys Med Biol** 1989 Dec;34(12):1785–94

Positron emission tomographic measurement of blood–to–brain and blood–to–tumour transport of 82Rb. I: Error analysis and computer simulations. Dhawan V, et al. **Phys Med Biol** 1989 Dec;34(12):1773–84

Etiology of the disruption in blood–arterial wall barrier following experimental subarachnoid hemorrhage. Nakagomi T, et al. **Surg Neurol** 1990 Jul;34(1):16–26

[Biochemical characterization of calf sera used in the maintenance of cell cultures used in virology] Tenório EC, et al. **Rev Saude Publica** 1989 Apr;23(2):162–9 (Eng. Abstr.) **(Por)**

[The TRA-2 triboluminometer, a rapid analyzer of lipid peroxidation of the blood] Orel VE, et al. **Med Tekh** 1989 Jul–Aug;(4):34–7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Clinical relevance of viridans and nonhemolytic streptococci isolated from blood and cerebrospinal fluid in a pediatric population. Hamoudi AC, et al. **Am J Clin Pathol** 1990 Feb;93(2):270–2

Abnormalities of leukocyte histograms resulting from microorganisms. Marshall BA, et al. **Am J Clin Pathol** 1990 Apr;93(4):526–32

The risk of bacterial growth in units of blood that have warmed to more than 10 degrees C. Saxena S, et al. **Am J Clin Pathol** 1990 Jul;94(1):80–3

Sterilization of blood films [letter] Abdalla SH, et al. **Clin Lab Haematol** 1990;12(1):112

Importance of blood volume cultured in the detection of bacteremia. Arpi M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):838–42

Fungal blood cultures. Telenti A, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):825–31 (35 ref.)

Blood cultures: an overview. Washington JA. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):803–6 (24 ref.)

A comparative study of the microbiological contamination of postmortem blood and vitreous humour samples taken for ethanol determination. Harper DR. **Forensic Sci Int** 1989 Sep;43(1):37–44

Analysis of blood-culture isolates from neonates of a rural hospital. Chaturvedi P, et al. **Indian Pediatr** 1989 May; 26(5):460–5

Blood culture technique: current controversies. Shanson DC. **J Antimicrob Chemother** 1990 Apr;25 Suppl C:17–29 (40 ref.)

Quantitative blood cultures for catheter–associated infections [letter] **J Clin Microbiol** 1990 Jun;28(6):1487–8

Comparative evaluation of nonradiometric BACTEC and improved oxoid signal blood culture systems in a clinical laboratory. Daley C, et al. **J Clin Microbiol** 1990 Jul; 28(7):1586–90

Virulence–related genes in ColV plasmids of Escherichia coli isolated from human blood and intestines. Fernandez–Beros ME, et al. **J Clin Microbiol** 1990 Apr;28(4):742–6

BacT/Alert: an automated colorimetric microbial detection system. Thorpe TC, et al. **J Clin Microbiol** 1990 Jul; 28(7):1608–12

Effect of altered headspace atmosphere on yield and speed of detection of the Oxoid Signal blood culture system versus the BACTEC radiometric system. Weinstein MP, et al. **J Clin Microbiol** 1990 Apr;28(4):795–7

Rapid detection and identification of mycobacteria from blood of patients with acquired immune deficiency syndrome. Colombrita D, et al. **J Med Microbiol** 1990 Aug; 32(4):271–3

Cultivation of human immunodeficiency virus from whole blood: effect of anticoagulant and inoculum size on virus growth. Bayliss GJ, et al. **J Med Virol** 1990 Jun;31(2):161–4

Immune blot analysis of viral surface proteins in serum and liver of patients with chronic hepatitis B virus infection. Gerken G, et al. **J Med Virol** 1989 Dec;29(4):261–5

Artery, periarterial adipose tissue, and blood microbiology during vascular reconstructive surgery: perioperative and early postoperative observations. Wakefield TW, et al. **J Vasc Surg** 1990 May;11(5):624–8

Peroxidase–labeled primary antibody method for detection of pestivirus contamination in cell cultures. Potts BJ, et al. **J Virol Methods** 1989 Oct;26(1):119–24

Microbiological screening of blood donations: cost versus effectiveness [published erratum appears in Med Lab Sci 1989 Oct;46(4):368] Barbara JA. **Med Lab Sci** 1989 Jul; 46(3):250–4 (9 ref.)

Blood cultures: eight years' experience of a conventional in–house system and trends in antimicrobial susceptibilities. Ispahani P, et al. **Med Lab Sci** 1989 Oct;46(4):295–304

Multiplication in human blood and deoxyribonuclease production by group G streptococci isolated from animals and humans. Reitmeyer JC, et al. **Microbios** 1990; 61(246):33–7

Quantitation of human immunodeficiency virus in the blood [letter] **N Engl J Med** 1990 May 17;322(20):1466–9

Frequent isolation of HIV–1 from the blood of patients receiving zidovudine (AZT) therapy [letter] Burke DS, et al. **N Engl J Med** 1989 Dec 14;321(24):1682

Quantitation of human immunodeficiency virus type 1 in the blood of infected persons [see comments] Ho DD, et al. **N Engl J Med** 1989 Dec 14;321(24):1621–5 Comment in: N Engl J Med 1989 Dec 14;321(24):1673–5.

OSHA reviews bloodborne disease standard [news] **Occup Health Saf** 1990 Mar;59(3):15, 17

How safe is the blood supply? Pazin GJ. **Pa Med** 1989 Sep; 92(9):34, 36–7

Arterial blood cultures in disseminated fungal disease [letter] Byard RW. **Pediatr Infect Dis J** 1989 Oct;8(10):728–9

Comparison of Oxoid Signal and biphasic blood culture systems in clinical practice. Malmborg AS, et al. **Scand J Infect Dis** 1990;22(1):117–8

Yeasts in blood cultures: impact of early therapy. Rantala A, et al. **Scand J Infect Dis** 1989;21(5):557–61

Viral inactivation of blood products. Fratantoni JC, et al. **Transfusion** 1990 Jul–Aug;30(6):480–1

The 30–minute rule for reissuing blood: are we needlessly discarding units? [published erratum appears in Transfusion 1990 Feb;30(2):103] Hamill TR. **Transfusion** 1990 Jan; 30(1):58–62 (48 ref.)

Development of a model to demonstrate photosensitizer–mediated viral inactivation in blood. Neyndorff HC, et al. **Transfusion** 1990 Jul–Aug; 30(6):485–90

Investigations of bluetongue and other arboviruses in the blood and semen of naturally infected bulls. Gard GP, et al. **Vet Microbiol** 1989 Aug;20(4):315–22

[Importance of blood culture in septicemia, particularly bacterial endocarditis] Kezzal K, et al. **Arch Inst Pasteur Alger** 1986;55:41–60 (Eng. Abstr.) **(Fre)**

[Analysis of 3 years of blood cultures in the University Hospital Center of Treichville (Abidjan)] Edoh V, et al. **Med Trop (Mars)** 1989 Oct–Dec;49(4):429–30 (Eng. Abstr.) **(Fre)**

[The isolation by blood culture of Campylobacter is no longer a rarity (letter)] Bastard JP, et al. **Presse Med** 1990 Mar 10;19(9):431 **(Fre)**

[Perpropionic and peracetic acids destroy HIV in suspension, but do not inhibit the virus in contaminated units of blood] Lopez M, et al. **Rev Fr Transfus Hemobiol** 1990 Mar; 33(2):97–100 (Eng. Abstr.) **(Fre)**

[Microbiology studies of intra– and postoperative autotransfusion in orthopedics] Decker K, et al. **Infusionstherapie** 1990 Apr;17 Suppl 2:43–5 (Eng. Abstr.) **(Ger)**

[The use of bacteriological analysis of the blood in the diagnosis of death by drowning] Mishul'skiĭ AM. **Sud Med Ekspert** 1990 Jan–Mar;33(1):26–8 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Prevention of Chagas' disease resulting from blood transfusion by treatment of blood: toxicity and mode of action of gentian violet. Docampo R, et al. **Biomed Environ Sci** 1988 Dec;1(4):406–13 (33 ref.)

Hemocultures from chronic Chagasic patients using EDTA or heparin as anticoagulants. Galvão LM, et al. **Braz J Med Biol Res** 1989;22(7):841–3

Blood–films in the diagnosis of malaria [letter; comment] Singh S, et al. **Lancet** 1989 Nov 11;2(8672):1165–6 Comment on: Lancet 1989 Sep 9;2(8663):619.

A rapid DNA assay for the species–specific detection and quantification of Brugia in blood samples. Poole CB, et al. **Mol Biochem Parasitol** 1990 Apr;40(1):129–36

[Prevention of post–transfusional malaria in France: a descriptive survey] Peyron F, et al. **Rev Epidemiol Sante Publique** 1990;38(2):111–6 (Eng. Abstr.) **(Fre)**

[Distribution pattern of Dirofilaria immitis microfilariae in peripheral blood of a dog and their intake by mosquitoes] Makiya K, et al. **Sangyo Ika Daigaku Zasshi** 1990 Mar 1; 12(1):43–52 (Eng. Abstr.) **(Jpn)**

[Xenodiagnosis, hemoculture and the complement mediated lysis test, as criteria in selecting chronic chagasic patients for chemotherapy] Pereira VL, et al. **Rev Inst Med Trop Sao Paulo** 1989 Sep–Oct;31(5):301–7 (Eng. Abstr.) **(Por)**

PHYSIOLOGY

Serum–inducible genes. Rollins BJ, et al. **Adv Cancer Res** 1989;53:1–32 (226 ref.)

Blood–induced superoxide anion generation on the cerebral cortex of newborn pigs. Mirro R, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1560–4

Central venous blood temperature fluctuations and thermodilution signal processing in dogs. Johnson RW, et al. **Ann Biomed Eng** 1989;17(6):657–69

Effects of percutaneous transhepatic biliary drainage on blood–bile permeability and selective IgA transport in patients with biliary obstructions. Ohshio G, et al. **Ann Surg** 1990 Apr;211(4):428–32

Interactions at the blood/material interface. Greisler HP. **Ann Vasc Surg** 1990 Jan;4(1):98–103

Fatty acid release in incubations of serum with synaptosome and myelin subfractions of brain. Baker RR, et al. **Biochem Cell Biol** 1990 Jan;68(1):148–53

Evidence for functional differences between the two sites of rabbit transferrin: effects of serum and carbon dioxide. Zak O, et al. **Biochim Biophys Acta** 1990 Apr 9;1052(1):24–8

A three—dimensional dyadic Walburn–Schneck constitutive equation for blood. Easthope P. **Biorheology** 1989; 26(1):37–44

Thirty–first annual meeting of the American Society of Hematology. Atlanta, GA, December 1–5, 1989. Abstracts. **Blood** 1989 Nov;74(7 Suppl 1):1a–448a

Effect of blood in the gut on measurements of endogenous carbon monoxide production. Brouillard RP, et al. **Blood** 1975 Jan;45(1):67–9

Blood. Sperryn PN. **Br J Sports Med** 1989 Jun;23(2):129–31

Modulation of retinoic acid–induced differentiation of human

leukemia (HL–60) cells by serum factors and sphinganine. Stevens VL, et al. **Cancer Res** 1990 Jan 15;50(2):222–6

Rat myometrial Na/K ATPase is increased by serum but not by isoproterenol and relaxin. Sanborn BM. **Comp Biochem Physiol [C]** 1989;93(2):341–4

Fibroblast colony-forming cells with high sensitivity to serum mitogen(s) exist in bone marrow of patients with chronic myelocytic leukemia. Kimura A, et al. **Eur J Haematol** 1990 May;44(5):291–5

Normal mouse serum contains two erythroid stimulating activities differing by their mode of action. Mouchiroud G, et al. **Eur J Haematol** 1990 Jan;44(1):51–5

Potentiation of stretch-induced myogenic tone of dog cerebral artery by hemolysate and the inhibitory action of calcium antagonists. Nakayama K, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):33–42

The biology of hematopoietic growth factors: studies in vitro under serum-deprived conditions. Migliaccio G, et al. **Exp Hematol** 1990 Oct;18(9):1049–55 (88 ref.)

Effect of serum on hyperthermic killing of cells in vitro [letter] Moriyama Y, et al. **Exp Hematol** 1990 Oct; 18(9):1056

Characterization with a simple clotting assay of the tissue factor inhibiting activity in serum. Cassetti M, et al. **Haematologica** 1990 Jan–Feb;75(1):32–7

Loss of antibody productivity during long-term cultivation of a hybridoma cell line in low serum and serum-free media. Ozturk SS, et al. **Hybridoma** 1990 Apr;9(2):167–75

Hematological variations at rest and during maximal and submaximal exercise in a cold (0 degree C) environment. Vogelaere P, et al. **Int J Biometeorol** 1990 May;34(1):1–14

On the application of a constitutive equation for whole human blood. Rodkiewicz CM, et al. **J Biomech Eng** 1990 May;112(2):198–206

Neurotransmission in the sheep middle cerebral artery: modulation of responses by 5-HT and haemolysate. Gaw AJ, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):409–16

Release of heparan sulfate from endothelial cells. Implications for pathogenesis of hyperacute rejection. Platt JL, et al. **J Exp Med** 1990 Apr 1;171(4):1363–8

Oesophagostomum radiatum: inhibition of in vitro development by newborn calf serum. East IJ, et al. **J Helminthol** 1990 Mar;64(1):9–14

Increased yield of antibody-producing murine spleen cell hybridomas from fusions cultured in medium supplemented with mouse serum. Persson MA, et al. **J Immunol Methods** 1990 Feb 20;127(1):39–42

Serum promotes asbestos-induced injury to human pulmonary epithelial cells. Kamp DW, et al. **J Lab Clin Med** 1990 Sep;116(3):289–97

A hormonally controlled serum factor which stimulates sulfate incorporation by cartilage in vitro. 1956 [classical article] Salmon WD Jr, et al. **J Lab Clin Med** 1990 Sep; 116(3):408–19

Tumor necrosis factor-alpha gene expression in human whole blood. Strieter RM, et al. **J Leukoc Biol** 1990 Apr; 47(4):366–70

Inhibition of attachment of human gingival fibroblast-like cells in vitro by saliva and salivary-sulfated glycoprotein in the presence of serum. Heaney TG. **J Periodontol** 1990 Aug;61(8):504–9

The effect of synovial fluid and serum on the growth of calcium hydroxyapatite crystals. Campion GV, et al. **J Rheumatol** 1990 Apr;17(4):515–20

Heterogeneity of potential for hematogenous metastasis in a human pancreatic carcinoma. Vezeridis MP, et al. **J Surg Res** 1990 Jan;48(1):51–5

Case studies on the effect of exercise and hot water submersion on intracardiac temperature and the performance of a pacemaker which varies pacing rate based on temperature. Fearnot NE, et al. **Jpn Heart J** 1989 May; 30(3):353–63

Influence of serum on in vitro digestion of Paracoccidioides brasiliensis by neutrophils. Goihman-Yahr M, et al. **Mycoses** 1990 Mar;33(3):111–5

Experimental intracranial hypertension following cisternal injection of various blood components. Fujii H, et al. **Neurochirurgia (Stuttg)** 1989 Nov;32(6):165–7

Analysis of parameters for maximal in vitro proliferation and activation of lymphokine-activated killer cells (LAK). Coze C, et al. **Nouv Rev Fr Hematol** 1989;31(5):339–43

Serum-stimulated phosphatidylinositol turnover is enhanced in 3T3 cells with active pp60v-src. Gray GM, et al. **Oncogene** 1989 Oct;4(10):1213–7

Regulation of c-myc mRNA levels by insulin or platelet-poor plasma. Gai XX, et al. **Oncogene Res** 1989; 5(2):111–20

Serum and neutrophils alter the rate of excretory/secretory antigen release by Toxocara canis infective larvae in vitro. Williamson HJ, et al. **Parasite Immunol** 1990 Mar; 12(2):175–87

Perivascular blood attenuates noradrenergic but not cholinergic effects on piglet pial arterioles. Busija DW, et al. **Stroke** 1990 Mar;21(3):441–6

[Value and study methods of hemorheology in vascular pathology and pharmacology] Zannad F, et al. **Arch Mal Coeur** 1990 Mar;83 Spec No 2:33–6 (Eng. Abstr.) (Fre)

[The flow properties of blood and their characterization by hemorheologic methods] Lerche D, et al. **Folia Haematol (Leipz)** 1989;116(5):631–52 (118 ref.) (Eng. Abstr.) (Ger)

[Analysis of the function of the circulatory system and its components based on rheologic viewpoints] Mikita J, et al. **Orv Hetil** 1989 Oct 8;130(41):2187–8, 2191–4 (35 ref.) (Eng. Abstr.) (Hun)

[The physiologic and physical patterns of blood heat exchange with tissues and the environment] Ivanov KP, et al. **Fiziol Zh SSSR** 1989 Jun;75(6):851–6 (Eng. Abstr.) (Rus)

[Temperature differences between the arterial and venous blood in the major vessels of the rabbit] Khoreva EV, et al. **Fiziol Zh SSSR** 1989 Aug;75(8):1140–5 (Eng. Abstr.) (Rus)

[Effect of low-frequency electromagnetic fields on the individual functional systems of the body] Zagorskaia EA, et al. **Kosm Biol Aviakosm Med** 1990 May–Jun;24(3):3–11 (116 ref.) (Eng. Abstr.) (Rus)

[The use of the blood serum refraction index in the diagnosis of acute pancreatitis] Lisienko VM, et al. **Vestn Khir** 1989 Oct;143(10):49–51 (Rus)

RADIATION EFFECTS

Hematological changes in peripheral blood of workers occupationally exposed to microwave radiation. Goldoni J. **Health Phys** 1990 Feb;58(2):205–7

Haematocytometrical changes in chicken blood to acute 60Co gamma radiation. Malhotra N, et al. **Indian J Exp Biol** 1989 Dec;27(12):1106–8

Photopheresis. Edelson RL. **J Clin Apheresis** 1990;5(2):77–9

Method for alpha-irradiation of blood cultures with short-lived radon-222 decay products. Pohl-Rüling J, et al. **Mutat Res** 1990 Feb;234(1):43–5

RNA and DNA changes in the bone marrow and blood of rats after neutron and continuous gamma irradiation. Mišúrová E, et al. **Radiobiol Radiother (Berl)** 1989; 30(5):423–9

[Systemic effects of ultraviolet, visible and infrared radiation in serial whole body irradiation. I. Oxygen utilization, flow properties of blood, hemodynamics, blood components and phagocytosis] Meffert H, et al. **Dermatol Monatsschr** 1989; 175(10):609–22 (Eng. Abstr.) (Ger)

[Examination of the differential hematocrit and the plasma viscosity under the influence of ionizing radiation] Thiel J, et al. **Folia Haematol (Leipz)** 1990;117(1):7–14 (Eng. Abstr.) (Ger)

[Changes in the redox potential of serum samples following in vitro irradiation—an indicator of malignant tumor growth] Hamann D, et al. **Radiobiol Radiother (Berl)** 1989; 30(6):527–34 (Eng. Abstr.) (Ger)

[Prophylactic irradiation of blood components with conventional radiotherapy devices] Adamietz IA, et al. **Strahlenther Onkol** 1989 Dec;165(12):855–9 (Eng. Abstr.) (Ger)

[The effects of transfusion of irradiated blood upon cellular immune response in patients underwent open heart surgery] Togashi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep;37(9):1958–64 (Eng. Abstr.) (Jpn)

[Use of leukocyte-filtered, cytomegalovirus-antibody negative and irradiated cellular blood products] Solheim BG, et al. **Tidsskr Nor Laegeforen** 1990 Jan 10;110(1):42–5 (Eng. Abstr.) (Nor)

[Photo-modification of the autologous blood in combined treatment of inflammatory suppurative-infective diseases of the female genitalia] Chalenko VV, et al. **Akush Ginekol (Mosk)** 1990 Apr;(4):67–8 (Rus)

[Laser exposure of the blood as a method of preventing inflammatory complications following cesarean section] Krasnopol'skii VI, et al. **Akush Ginekol (Mosk)** 1989 Nov; (11):46–8 (Eng. Abstr.) (Rus)

[Transfusion of UV-irradiated autologous blood in the complex treatment of women with anemia after cesarean section] Kurapov EP, et al. **Akush Ginekol (Mosk)** 1990 May;(5):28–32 (Eng. Abstr.) (Rus)

[A method of reinfusing ultraviolet-irradiated autoblood in combined modality intensive therapy of pyo-inflammatory diseases in premature infants] Gavriushov VV, et al. **Anesteziol Reanimatol** 1989 Jul–Aug;(4):38–40 (Eng. Abstr.) (Rus)

[Ultraviolet irradiation of the blood in the intensive treatment of acute exogenous poisoning] Luzhnikov EA, et al. **Anesteziol Reanimatol** 1989 Jul–Aug;(4):31–5 (Eng. Abstr.) (Rus)

[An initial experience of extracorporeal irradiation of the blood in heart surgery patients] Soboleva ER, et al. **Anesteziol Reanimatol** 1990 Jan–Feb;(1):22–4 (Eng. Abstr.) (Rus)

[The activation of the immunosorptive properties of blood during its UV irradiation at therapeutic doses] Vasil'eva ZF, et al. **Biull Eksp Biol Med** 1989 Dec;108(12):689–91 (Eng. Abstr.) (Rus)

[Effect of intravascular irradiation of blood by helium-neon laser on the markers of the area of ischemic myocardial damage in patients with acute myocardial infarction] Kipshidze NN, et al. **Kardiologiia** 1990 Apr;30(4):44–7 (Eng. Abstr.) (Rus)

[Combined helium-neon laser therapy in patients with ischemic heart disease] Korochkin IM, et al. **Kardiologiia** 1990 Mar;30(3):24–8 (Eng. Abstr.) (Rus)

[Immunocorrective therapy of destructive pancreatitis complicated by hepatic insufficiency] Shabalin VN, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):76–9 (Eng. Abstr.) (Rus)

[Autotransfusion of blood irradiated by helium-neon lasers in obliterating arterial diseases] Buga DA, et al. **Klin Khir** 1989;(7):70–1 (Rus)

[Correction of anemia in the early postoperative period in patients with acute gastrointestinal hemorrhage] Gluz AM, et al. **Klin Khir** 1989;(10):76 (Rus)

[Effect of intracorporeal laser irradiation of the blood on the function of the cardiovascular system in patients with suppurative-inflammatory diseases] Grigorash GA, et al. **Klin Khir** 1990;(1):12–4 (Eng. Abstr.) (Rus)

[Use of ultraviolet irradiation of the blood in the complex treatment of peritonitis] Mil'kov BO, et al. **Klin Khir** 1990; (1):45–6 (Eng. Abstr.) (Rus)

[The effect of ultraviolet irradiation of the blood on its oxygen transport function] Rotar' VI, et al. **Klin Khir** 1990; (3):29–30 (Rus)

[Effect of hemosorption and ultraviolet irradiation of the blood on the levels of middle molecules, circulating immune complexes and lipid peroxidation in suppurative-septic diseases] Shelobod AL, et al. **Klin Khir** 1990;(1):66 (Rus)

[Effect of intravenous laser irradiation of blood on the homeostasis in patients with hemorrhagic pancreatitis] Dedenko IK. **Klin Med (Mosk)** 1989 Aug;67(8):70–3 (Eng. Abstr.) (Rus)

[The ALOK-1 laser apparatus for intravenous irradiation of the blood (initial experience with its clinical use)] Gausman BIa, et al. **Med Tekh** 1990 Jan–Feb;(1):42–3 (Eng. Abstr.) (Rus)

[Experience with using autologous transfusion of ultraviolet-irradiated blood] Kliuchevskii VV, et al. **Ortop Travmatol Protez** 1989 Oct;(10):59–62 (Eng. Abstr.) (Rus)

[Effectiveness of combined laser therapy of rheumatoid arthritis in children] Kel'sev VA, et al. **Pediatriia** 1990; (1):80–1 (Rus)

[Experience in the use of ultraviolet irradiation of autologous blood in multimodal treatment of circulatory encephalopathies] Berdichevskii MIa, et al. **Sov Med** 1990; (4):97–100 (Rus)

[Intravenous use of low-energy helium-neon laser irradiation in unstable angina] Ionin AP, et al. **Sov Med** 1989;(8):17–9 (Eng. Abstr.) (Rus)

[Effectiveness of blood irradiation using a helium-neon laser in the acute period of myocardial infarction] Kipshidze NN, et al. **Sov Med** 1990;(3):9–12 (Eng. Abstr.) (Rus)

[Clinical aspects of laser therapy of ischemic heart disease] Larionov VA, et al. **Sov Med** 1990;(3):50–1 (Rus)

[The effect of ultraviolet irradiation of the blood on various hormonal indicators in women with sclerocystic ovaries] Makeev SA, et al. **Sov Med** 1990;(3):98–100 (Rus)

[Difficulties in the evaluation of the activity of chronic brucellosis and in the selection of the methods of treatment] Po'lshchikova NN, et al. **Sov Med** 1989;(11):109–10 (Rus)

[Intravenous laser irradiation of the blood in occlusive vascular diseases of the extremities] Shval'b PG, et al. **Sov Med** 1990;(3):21–3 (Eng. Abstr.) (Rus)

[The use of low-intensity laser irradiation of the blood in myocardial infarction] Sirenko IuN, et al. **Sov Med** 1990; (3):18–21 (Eng. Abstr.) (Rus)

[Experience with the use of UV irradiation of autologous blood in oral surgery] Mazepin AS, et al. **Stomatologiia (Mosk)** 1990 May–Jun;69(3):49–50 (Eng. Abstr.) (Rus)

[The use of ultraviolet-irradiated blood plasma in the treatment of pyelonephritis patients] Riabinskii VS, et al. **Urol Nefrol (Mosk)** 1989 Jul–Aug;(4):12–6 (Eng. Abstr.) (Rus)

[Positive clinical effect of autologous transfusion of photomodified blood in the treatment of a patient with AIDS] Dvaladze NA, et al. **Vestn Khir** 1990 Jan; 144(1):55–7 (Rus)

[Intravascular laser irradiation of the blood] Gamaleia NF, et al. **Vestn Khir** 1989 Apr;142(4):143–6 (33 ref.) (Rus)

[The mechanism of the action of UV-irradiated autotransfusions in treating patients with suppurative-inflammatory diseases of the face and neck] Karandashov VI, et al. **Vestn Khir** 1989 Oct;143(10):92–4 (Eng. Abstr.) (Rus)

[Intravascular laser irradiation of the blood in the treatment of patients with surgical infection] KarniushinaNL, et al. **Vestn Khir** 1989 Sep;143(9):48–51 (Eng. Abstr.) (Rus)

[Comparative experimental study of various methods of photomodification++ of the blood] Krylenkov VA, et al. **Vestn Khir** 1989 Jun;142(6):100–4 (Eng. Abstr.) (Rus)

[Immunologic reactivity of young children with severe forms of suppurative diseases of the lungs and pleura and the methods of its correction] Kushch NL, et al. **Vestn Khir** 1989 Jul;143(7):74–5 (Rus)

[Possibilities of using UV-irradiated blood in the prevention of serum hepatitis after blood transfusions during surgery] Marchenko AV, et al. **Vestn Khir** 1990 Feb;144(2):87–9 (Eng. Abstr.) (Rus)

[Transfusion of photomodified autologous blood as a method of correcting hypoxemic disorders in surgical patients] Petukhov EB, et al. **Vestn Khir** 1989 Aug;144(8):117–9 (Eng. Abstr.) (Rus)

[Decreased activity of lipid peroxidation and thrombocyte aggregation in patients with chronic arterial insufficiency of the extremities after the treatment by the method of infusion of UV-irradiated blood] Petukhov EB, et al. **Vestn Khir** 1989 May;142(5):36–9 (Eng. Abstr.) (Rus)

[Hemosorption and ultraviolet irradiation of the blood in the

complex treatment of peritonitis] Riabtsev VG, et al. **Vestn Khir** 1989 Apr;142(4):84–7 (Eng. Abstr.) **(Rus)**

[Trigger mechanisms of the therapeutic effects of autologous transfusion of UV–irradiated blood (membranotropic effect on erythrocytes and thrombocytes)] Samollova KA, et al. **Vestn Khir** 1989 Dec;144(12):51–60 (Eng. Abstr.) **(Rus)**

[Autologous transfusion of UV–irradiated blood in the treatment of occlusive arterial diseases of the lower extremities] Zhulikova II, et al. **Vestn Khir** 1989 Jun; 142(6):104–8 (Eng. Abstr.) **(Rus)**

[Effect of transfusion of UV–irradiated blood on the changes in serum cholinesterase activity in patients with peritonitis] Zinevich VP, et al. **Vestn Khir** 1989 Jul;143(7):25–8 (Eng. Abstr.) **(Rus)**

[The intravasal ultraviolet irradiation of autologous blood in the treatment of central nonexudative chorioretinal dystrophy] Dzhaliashvili OA, et al. **Vestn Oftalmol** 1990 Jan–Feb;106(1):41–3 (Eng. Abstr.) **(Rus)**

[Use of ultraviolet irradiation of autologous blood in combined therapy of suppurative–infectious states in otorhinolaryngology] Shishkin SA, et al. **Vestn Otorinolaringol** 1989 Jul–Aug;(4):90 **(Rus)**

[The use of ultraviolet irradiation of the blood in dermatologic practice] Gromov VV, et al. **Voen Med Zh** 1990 Feb;(2):45–6 **(Rus)**

[The autotransfusion of ultraviolet–irradiated blood in the rehabilitation of patients with ischemic heart disease at a sanatorium] Il'nitskiĭ IV, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jul–Aug; (4):19–21 (Eng. Abstr.) **(Rus)**

[Dynamic microcirculatory disorders in patients with nonspecific lung diseases during the autotransfusion of ultraviolet–irradiated blood] Kravtsova NA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jul–Aug;(4):21–3 (Eng. Abstr.) **(Rus)**

[Treatment via autotransfusion of UV–irradiated blood in patients with nonspecific lung diseases] Ivanov EM, et al. **Vrach Delo** 1990 Jan;(1):42–3 (Eng. Abstr.) **(Rus)**

[The ultraviolet irradiation of autologous blood and endolymphatic antibiotic therapy in treating pneumonia in patients with craniocerebral trauma] Kibirev AB, et al. **Zh Vopr Neirokhir** 1990 May–Jun;(3):11–4 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

[Control scintigrams of rat organs with 99mTc labeled compounds] Takano H, et al. **Radioisotopes** 1990 Mar; 39(3):110–3 (Eng. Abstr.) **(Jpn)**

BLOOD–AIR BARRIER

[Blood gases and the small airways] Harnoncourt K. **Wien Med Wochenschr Suppl** 1989;104:suppl 16–8 **(Ger)**

DRUG EFFECTS

[Changes in surface activity of surfactant and ultrastructure of the air–blood barrier in alcoholic intoxication in experimental animals] Zagorul'ko AK, et al. **Biull Eksp Biol Med** 1990 May;109(5):489–92 (Eng. Abstr.) **(Rus)**

[Effect of the antihypoxic agent ionol on the morphofunctional state of the air–blood barrier of the lungs in hypoxic anoxia] Rozova EV, et al. **Fiziol Zh** 1990 Jan–Feb;36(1):20–5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Protein traffic across lung epithelia [comment] Crandall ED, et al. **Am J Respir Cell Mol Biol** 1989 Oct;1(4):255 Comment on: Am J Respir Cell Mol Biol 1989 Oct;1(4):257–62.

NHLBI workshop summary. Workshop on techniques to evaluate lung alveolar–microvascular injury. Staub NC, et al. **Am Rev Respir Dis** 1990 Apr;141(4 Pt 1):1071–7 (37 ref.)

Pulmonary clearance of inhaled [99Tcm]DTPA: effects of ventilation pattern. Evander E, et al. **Clin Physiol** 1990 Mar;10(2):189–99

Reactive uptake governs the pulmonary air space removal of inhaled nitrogen dioxide. Postlethwait EM, et al. **J Appl Physiol** 1990 Feb;68(2):594–603

Lung permeability in adult obliterative bronchiolitis. Sweatman MC, et al. **Respir Med** 1989 Jul;83(4):323–7

[The alveolo–arterial oxygen gradient in the management of the neurologic patient (letter)] Gea J, et al. **Neurologia** 1989 May;4(4):148–9 **(Spa)**

BLOOD, ARTIFICIAL see BLOOD SUBSTITUTES

BLOOD BACTERICIDAL ACTIVITY

A comparison of serum bactericidal activity and phenotypic characteristics of bacteremic, pneumonia–causing strains, and colonizing strains of Branhamella catarrhalis. Jordan KL, et al. **Am J Med** 1990 May 14;88(5A):28S–32S

An assessment of the factors contributing to the killing of type 3 Streptococcus pneumoniae by human polymorphonuclear leukocytes in vitro. Esposito AL, et al. **APMIS** 1990 Feb;98(2):111–21

In vitro antimicrobial activity of defensins against ocular pathogens. Cullor JS, et al. **Arch Ophthalmol** 1990 Jun; 108(6):861–4

Interaction of fluid phase C1/C1q and macrophage membrane–associated C1q with gram–negative bacteria. Clas F, et al. **Behring Inst Mitt** 1989 Jul;(84):236–54 (71 ref.)

Antibacterial resistance induced by recombinant interleukin 1 in myelosuppressed mice: effect of treatment schedule and correlation with colony–stimulating activity in the bloodstream. Campanile F, et al. **Cell Immunol** 1990 Jun; 128(1):250–60

Natural bactericidal activity of human serum against strains of Campylobacter jejuni isolated in Lagos, Nigeria. Obi CL, et al. **Cent Afr J Med** 1989 Aug;35(8):444–8

Neutrophil killing of single microorganisms as measured by a new method. Dugger KO, et al. **Diagn Microbiol Infect Dis** 1989 May–Jun;12(3):199–203

Role of bacterial and host factors in the pathogenesis of Shigella septicemia. Struelens MJ, et al. **Eur J Clin Microbiol Infect Dis** 1990 May;9(5):337–44

Defensins. Ganz T, et al. **Eur J Haematol** 1990 Jan;44(1):1–8 (85 ref.)

Surface phagocytosis of Staphylococcus epidermidis and Escherichia coli by human neutrophils: serum requirements for opsonization and chemiluminescence. Gordon DL, et al. **FEMS Microbiol Immunol** 1989 Dec;1(8–9):417–23

Bacterial iron enhances oxygen radical–mediated killing of Staphylococcus aureus by phagocytes. Hoepelman IM, et al. **Infect Immun** 1990 Jan;58(1):26–31

Multiple mechanisms in serum factor–induced resistance of Haemophilus influenzae type b to antibody. Kuratana M, et al. **Infect Immun** 1990 Apr;58(4):914–9

Neutrophil killing of two type 1 fimbria–bearing Escherichia coli strains: dependence on respiratory burst activation. Lock R, et al. **Infect Immun** 1990 Jan;58(1):37–42

O antigen and lipid A phosphoryl groups in resistance of Salmonella typhimurium LT–2 to nonoxidative killing in human polymorphonuclear neutrophils. Stinavage P, et al. **Infect Immun** 1989 Dec;57(12):3894–900

Suppression of bactericidal activity of human polymorphonuclear leukocytes by Bacteroides gingivalis. Yoneda M, et al. **Infect Immun** 1990 Feb;58(2):406–11

The influence of human monocytes on the antibacterial activity of vancomycin and teicoplanin against Staphylococcus aureus. van der Broek PJ, et al. **J Antimicrob Chemother** 1990 May;25(5):787–95

Serum sensitivity of Escherichia coli strains present in the clinical environment. Miglioli PA, et al. **J Chemother** 1989 Jun;1(3):162–3

Neutrophil bactericidal activity against Staphylococcus aureus adherent on biological surfaces. Surface–bound extracellular matrix proteins activate intracellular killing by oxygen–dependent and –independent mechanisms. Hermann M, et al. **J Clin Invest** 1990 Sep;86(3):942–51

Separation of sublethal and lethal effects of polymorphonuclear leukocytes on Escherichia coli. Mannion BA, et al. **J Clin Invest** 1990 Aug;86(2):631–41

Separation of sublethal and lethal effects of the bactericidal/permeability increasing protein on Escherichia coli. Mannion BA, et al. **J Clin Invest** 1990 Mar; 85(3):853–60

Bacterial phospholipid hydrolysis enhances the destruction of Escherichia coli ingested by rabbit neutrophils. Role of cellular and extracellular phospholipases. Wright GC, et al. **J Clin Invest** 1990 Jun;85(6):1925–35

Cytidine 5'–monophospho–N–acetylneuraminic acid or a related compound is the low Mr factor from human red blood cells which induces gonococcal resistance to killing by human serum. Nairn CA, et al. **J Gen Microbiol** 1988 Dec;134 (Pt 12):3295–306

Bactericidal defect of neutrophils in a guinea pig model of thermal injury is related to elevation of intracellular cyclic–3',5'–adenosine monophosphate. Bjornson AB, et al. **J Immunol** 1989 Oct 15;143(8):2609–16

A rapid turbidimetric assay of phagocytosis and serum opsonizing capacity. Kuypers TW, et al. **J Immunol Methods** 1989 Nov 13;124(1):85–94

Comparison of two serum bactericidal assays for Neisseria gonorrhoeae. Pettit RK, et al. **J Immunol Methods** 1990 May 8;129(1):15–22

Bactericidal capacity of neutrophils in rabbits with experimental acute and chronic abscesses. Bamberger DM, et al. **J Infect Dis** 1990 Jul;162(1):186–92

A transient granulocyte killing defect secondary to a varicella infection. Blank CA, et al. **Md Med J** 1989 Sep;38(9):739–42

Serum killing of meningococci and several other gram–negative bacterial species is not decreased by incubating them with cytidine 5'–monophospho–N–acetyl neuraminic acid [letter] Fox AJ, et al. **Microb Pathog** 1989 Oct;7(4):317–8

Sources of low–molecular–weight host factors that phenotypically increase the resistance of Haemophilus influenzae type b to bacteriolysis: non–identity with a factor active in gonococci. Kuratana M, et al. **Microb Pathog** 1989 Jul;7(1):73–7

Development of serum bactericidal activity following nontypable Haemophilus influenzae acute otitis media. Barenkamp SJ, et al. **Pediatr Infect Dis J** 1990 May; 9(5):333–9

Opsonophagocytosis of Staphylococcus aureus by diabetics' sera and monocytes. Chou MY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Apr;88(4):352–9

[An in vitro micromethod for studying phagocytic and bacteriocidal activity of granulocytes from peripheral blood] Divanian Kh, et al. **Eksp Med Morfol** 1989; 28(4):49–53 (Eng. Abstr.) **(Bul)**

[Evaluation of the bactericidal effect of the membrane attack complex of serum complement] Ponard D, et al. **Pathol Biol (Paris)** 1990 Feb;38(2):89–92 (Eng. Abstr.) **(Fre)**

[Bactericides against Pasteurella multocida in whole blood, plasma and lung lavage fluid of untreated and immunized young swine and calves] Müller G, et al. **Arch Exp Veterinarmed** 1990;44(1):65–73 (Eng. Abstr.) **(Ger)**

[The generation of active microbicidal forms of oxygen by leukocytes transiting the vascular bed of the lungs] Kogan AKh, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):688–90 (Eng. Abstr.) **(Rus)**

[Prospects for production of immune plasma with antibacterial activity without intentional immunization of donors] Mel'nikova VN, et al. **Gematol Transfuziol** 1989 Jul;34(7):52–4 **(Rus)**

[Determination of the bacteriocidal activity of the blood serum and lymph] Slonim AA, et al. **Lab Delo** 1989;(7):65–6 (Eng. Abstr.) **(Rus)**

[Killing of seroresistant plasmid bearing E. coli strains in polymorphonuclear leukocytes] Siegfried L, et al. **Bratisl Lek Listy** 1990 Apr;91(4):292–7 (Eng. Abstr.) **(Slo)**

DRUG EFFECTS

Human mannose–binding protein activates the alternative complement pathway and enhances serum bactericidal activity on a mannose–rich isolate of Salmonella. Schweinle JE, et al. **J Clin Invest** 1989 Dec;84(6):1821–9

Influence of subinhibitory concentrations of cephalosporins on the serum sensitivity of Pseudomonas aeruginosa. Darveau RP, et al. **J Infect Dis** 1990 Oct;162(4):914–21

Gamma interferon induces monocyte killing of Listeria monocytogenes by an oxygen–dependent pathway; alpha– or beta–interferons by oxygen–independent pathways. Peck R. **J Leukoc Biol** 1989 Nov;46(5):434–40

Sialylation of lipopolysaccharide and loss of absorption of bactericidal antibody during conversion of gonococci to serum resistance by cytidine 5'–monophospho–N–acetyl neuraminic acid. Parsons NJ, et al. **Microb Pathog** 1989 Jul;7(1):63–72

[Interaction of bactericidal serum effect and antibiotics in subminimal inhibitory concentrations on E. coli strains] Gillissen G, et al. **Pathol Biol (Paris)** 1990 May;38(5):436–40 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Blood clearance and tissue distribution of 99Tc–labelled pneumococci following splenectomy in rabbits. Holdsworth RJ, et al. **Br J Exp Pathol** 1989 Dec; 70(6):669–77

Staphylococcus aureus–stimulated mononuclear leucocyte–conditioned medium increases the neutrophil bactericidal activity, and augments oxygen radical production and degranulation in response to the bacteria. Ferrante A, et al. **Clin Exp Immunol** 1989 Dec;78(3):366–71

Serum bactericidal resistance of faecal Escherichia coli and bactericidal competence of serum from patients with ulcerative colitis. Burke DA, et al. **J Clin Pathol** 1990 Apr; 43(4):316–9

Serovars and serum resistance of Neisseria gonorrhoeae from disseminated and uncomplicated infections. Morello JA, et al. **J Infect Dis** 1989 Dec;160(6):1012–7

An experimental investigation of the rôle of the blood fluids in connection with phagocytosis. 1903 [classical article] Wright AE, et al. **Rev Infect Dis** 1989 Sep–Oct;11(5):827–34

Serum resistance is correlated with encapsulation of avian strains of Pasteurella multocida. Hansen LM, et al. **Vet Microbiol** 1989 Dec;21(2):177–84

[Sensitivity of Proteus mirabilis strains to the bactericidal action of human serum] Frolov AF, et al. **Mikrobiol Zh** 1986 May–Jun;48(3):23–6 (Eng. Abstr.) **(Rus)**

[Value of the study of the functional potential of neutrophils in suppurative, septic and allergic diseases in children] Nesterova IV, et al. **Pediatriia** 1989;(9):63–5 (Eng. Abstr.) **(Rus)**

[Use of the lysosomal–cationic test for the prognosis of postoperative suppurative complications in patients with infectious endocarditis] Kucherenko AD, et al. **Vestn Khir** 1989 Nov;143(11):101–3 **(Rus)**

PHYSIOLOGY

Microbicidal mechanisms of phagocytes. Gabay JE. **Curr Opin Immunol** 1988 Sep–Oct;1(1):36–40 (24 ref.)

BLOOD BANKS

Deformability of stored normal and sickle haemoglobin erythrocytes. Adewuyi JO, et al. **Afr J Med Med Sci** 1990 Jun;19(2):115–9

HIV–2 testing in blood banks [news] **Am Fam Physician** 1990 Jul;42(1):236

Risk of HIV infection from former blood donations of donors found to be HIV antibody–positive in blood bank routine testing. "Look–back" study in German Red Cross Blood Banks in the FRG. Glück D, et al. **Infusionstherapie** 1990 Apr;17(2):73–6

Safety of Iowa's blood supply. Strauss R. **Iowa Med** 1990 Apr;80(4):195–8
Carboxyhemoglobin and methemoglobin levels in banked blood. Uchida I, et al. **J Clin Anesth** 1990 Mar–Apr; 2(2):86–90
Survival of cytomegalovirus in viremic blood under blood bank storage conditions [letter] Dworkin RJ, et al. **J Infect Dis** 1990 Jun;161(6):1310–1
Emergency transport of AS–1 red cell units by pneumatic tube system. Hardin G, et al. **J Trauma** 1990 Mar; 30(3):346–8
Blood bank officials hope donor altruism will pass new (anti–HCV) test [news] Goldsmith MF. **JAMA** 1990 Apr 4;263(13):1749–51
Human serum banks: a valuable resource—maybe. Annesley TM. **Mayo Clin Proc** 1989 Oct;64(10):1320–3
The impact of HIV infection on the hemophilia community. Whitney CK. **Ment Retard** 1989 Aug;27(4):227–8
Linkage of serum sample bank and cancer registry in epidemiological studies. Hakama M, et al. **Prog Clin Biol Res** 1990;346:169–78 (11 ref.)
Research opportunities in transfusion medicine. Report from an American Association of Blood Banks Think Tank. **Transfusion** 1989 Oct;29(8):711–42
Hepatitis C look–back: our next challenge [letter] Kolins J. **Transfusion** 1990 May;30(4):380
Blood use during extracorporeal membrane oxygenation. McCoy–Pardington D, et al. **Transfusion** 1990 May; 30(4):307–9
Survival of Borrelia burgdorferi in human blood stored under blood banking conditions. Nadelman RB, et al. **Transfusion** 1990 May;30(4):298–301
Blood bank of the future [letter] Tilzer L, et al. **Transfusion** 1989 Nov–Dec;29(9):830
Systematic pre–deposit autologous blood provision for elective surgery: an important contribution to hospital blood supply. Kay LA, et al. **Vox Sang** 1990;59(1):23–5
[Preoperative autologous blood deposit and liquid storage for replacement arthroplasty] Lorentz A, et al. **Anaesthesist** 1989 Sep;38(9):480–9 (Eng. Abstr.) **(Ger)**
[Serologic screening of infectious diseases in blood banks as an indicator of morbidity in the population] de Andrade AL, et al. **Rev Saude Publica** 1989 Feb;23(1):20–5 (Eng. Abstr.) **(Por)**
[Why are we not self–supporting with plasma? A national blood supply committee should be established] Högman C. **Lakartidningen** 1989 Sep 13;86(37):3031–2 **(Swe)**

ECONOMICS

Ways to assess test costs vary [news] Goldsmith MF. **JAMA** 1990 Apr 4;263(13):1750
A model for estimating incremental benefits and costs of testing donated blood for human immunodeficiency virus antigen (HIV–Ag). Mendelson DN, et al. **Transfusion** 1990 Jan;30(1):73–5

HISTORY

Fifty years of an organized blood transfusion service in Scotland. Girdwood RH. **Scott Med J** 1990 Feb;35(1):24–8
[Blood transfusion service during World War II] Gavrilov OK. **Gematol Transfuziol** 1990 May;35(5):3–6 **(Rus)**

LEGISLATION & JURISPRUDENCE

Legal liability for transfusion injury in the acquired immunodeficiency syndrome era. Zuck TF. **Arch Pathol Lab Med** 1990 Mar;114(3):309–15 (55 ref.)
Blood transfusion services and the European community [editorial] Cash JD. **BMJ** 1990 Feb 24;300(6723):481–2

METHODS

On closing the circle of quality assurance [editorial] Moore SB. **Transfusion** 1989 Nov–Dec;29(9):755–6

ORGANIZATION & ADMINISTRATION

Risks remain for self–donated blood transfusions. Eubanks P. **Hospitals** 1989 Oct 20;63(20):86, 88
[Blood donation programs in the context of refugee populations] Perrin P. **Rev Med Suisse Romande** 1990 May; 110(5):433–6 **(Fre)**
[Experience with blood typing of active donors at the Rhesus Laboratory of the Sverdlovsk District Station of Blood Transfusion] Skuditskiĭ AE. **Gematol Transfuziol** 1990 Apr; 35(4):34–5 **(Rus)**

STANDARDS

The epidemiology of HIV transmission among paid plasma donors, Mexico City, Mexico. Avila C, et al. **AIDS** 1989 Oct;3(10):631–3
ABC of transfusion. The blood donor and tests on donor blood. Hewitt PE, et al. **BMJ** 1989 Dec 2;299(6712):1391–4 (0 ref.)
A consensus development conference on the practice of platelet transfusion in The Netherlands. van Aken WG, et al. **Int J Technol Assess Health Care** 1990;6(1):163–74 (6 ref.)
Blood and plasma donations among a cohort of intravenous drug users. Nelson KE, et al. **JAMA** 1990 Apr 25; 263(16):2194–7
Blood typing errors on U.S. Army identification (ID) cards and tags [letter; comment] Gaydos JC, et al. **Milit Med** 1990 Apr;155(4):A19 Comment on: Milit Med 1989 May;154(5):273–4.
Bad blood between Red Cross and FDA [news] Gershon D. **Nature** 1990 Jul 19;346(6281):210
How safe is the blood supply? Pazin GJ. **Pa Med** 1989 Sep; 92(9):34, 36–7
Results of follow–up survey sent to laboratories participating in a nationwide ALT standardization program [letter] AuBuchon JP. **Transfusion** 1990 Jan;30(1):76–7
The Tower of Babel [editorial] Berkman EM. **Transfusion** 1989 Oct;29(8):661–2
FDA and surrogate testing for non–A,non–B hepatitis [letter; comment] Biswas R. **Transfusion** 1989 Oct;29(8):750 Comment on: Transfusion 1989 Mar–Apr;29(3):277–8.
Testing in the years ahead: new pressures and new concerns. Bove JR. **Transfusion** 1990 Jan;30(1):63–7
Questionable efficacy of confidential unit exclusion [letter] Busch MP, et al. **Transfusion** 1990 Sep;30(7):668–9
The 30–minute rule for reissuing blood: are we needlessly discarding units? [published erratum appears in Transfusion 1990 Feb;30(2):103] Hamill TR. **Transfusion** 1990 Jan; 30(1):58–62 (48 ref.)
Efficacy of new tests and the safety of the blood supply [editorial] Young FE. **Transfusion** 1990 Jan;30(1):4–5
Quality control of anti–D sera by a panel of donor red cells with weak reacting D antigen and with partial D antigens by the Federation of Netherlands Red Cross Blood Banks [letter] van Rhenen DJ, et al. **Vox Sang** 1989;57(4):273–4
[Prevention of post–transfusional malaria in France: a descriptive survey] Peyron F, et al. **Rev Epidemiol Sante Publique** 1990;38(2):111–6 (Eng. Abstr.) **(Fre)**

STATISTICS & NUMERICAL DATA

Autologous transfusion practice. Burckhardt JJ, et al. **Vox Sang** 1990;58(3):242–5
Massive transfusion in adults. Diagnoses, survival and blood bank support. Sawyer PR, et al. **Vox Sang** 1990; 58(3):199–203
[The situation of hemotherapy in Spain] Arrieta R, et al. **Rev Sanid Hig Publica (Madr)** 1989 Jul–Aug;63(7–8):101–15 **(Spa)**

SUPPLY & DISTRIBUTION

ABC of transfusion. National self–sufficiency in blood and blood products. Gunson HH. **BMJ** 1989 Dec 16; 299(6714):1514–6 (0 ref.)

TRENDS

Collection and transfusion of blood in the United States, 1982–1988 [see comments] Surgenor DM, et al. **N Engl J Med** 1990 Jun 7;322(23):1646–51 Comment in: N Engl J Med 1990 Jun 7;322(23):1666–8.

BLOOD–BRAIN BARRIER

Blood–brain barrier disturbance in patients with Alzheimer's disease is related to vascular factors. Blennow K, et al. **Acta Neurol Scand** 1990 Apr;81(4):323–6
Blood–brain–barrier and intrathecal immunoglobulin changes in tuberculous meningitis and demyelinating disorders: a preliminary report from a south Indian hospital. Prabhakar S, et al. **Acta Neurol Scand** 1990 May;81(5):448–51
Blood brain barrier function in vascular dementia. Wallin A, et al. **Acta Neurol Scand** 1990 Apr;81(4):318–22
Computerized three–dimensional reconstruction of the developing blood–brain barrier. Bertossi M, et al. **Acta Neuropathol (Berl)** 1989;79(1):48–51
Blood–to–brain sodium transport in ischemic brain edema. Betz AL, et al. **Adv Neurol** 1990;52:73–80
Role of blood–brain barrier permeability in focal ischemic brain edema. Hatashita S, et al. **Adv Neurol** 1990;52:327–33
Morphological changes in acute cerebral ischemia after occlusion and reperfusion in the rat. Nakagawa Y, et al. **Adv Neurol** 1990;52:21–7
Effect of blood–brain barrier disruption on the permeability of peritumoral edema. Sato S, et al. **Adv Neurol** 1990;52:555
Arachidonic acid and cerebromicrovascular endothelial permeability. Villacara A, et al. **Adv Neurol** 1990; 52:195–201
Intra–blood–brain–barrier synthesis of immunoglobulins in patients with dementia of the Alzheimer type. Blennow K, et al. **Alzheimer Dis Assoc Disord** 1990 Summer; 4(2):79–86
Increased vesicular transport and decreased mitochondrial content in blood–brain barrier endothelial cells during experimental autoimmune encephalomyelitis. Claudio L, et al. **Am J Pathol** 1989 Dec;135(6):1157–68
Peptide transport systems for opiates across the blood–brain barrier. Banks WA, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):E1–10 (126 ref.)
Mechanism of L–glucose, raffinose, and inulin transport across intact blood–brain barriers. Lucchesi KJ, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H695–705
Disruption of blood–brain barrier during acute hypertension in adult and aged rats. Mayhan WG. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1735–8
Mechanisms of autoimmune neuropathies. Brosnan CF, et al. **Ann Neurol** 1990;27 Suppl:S75–9 (15 ref.)
A commentary on correlates between cerebrospinal fluid gamma–globulins and magnetic resonance imaging in multiple sclerosis. Baumhefner RW, et al. **Arch Neurol** 1990 Aug;47(8):841–3
The brain–type glucose transporter mRNA is specifically expressed at the blood–brain barrier. Boado RJ, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):174–9
Blood–brain barrier glucose transporter mRNA is increased in experimental diabetes mellitus. Choi TB, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):375–80
Kinetics of arginine–vasopressin uptake at the blood–brain barrier. Zlokovic BV, et al. **Biochim Biophys Acta** 1990 Jun 27;1025(2):191–8
Duration and selectivity of blood–brain barrier breakdown in chronic relapsing experimental allergic encephalomyelitis studied by gadolinium–DTPA and protein markers. Hawkins CP, et al. **Brain** 1990 Apr;113 (Pt 2):365–78
Fluoro–Gold injected either subcutaneously or intravascularly results in extensive retrograde labelling of CNS neurones having axons terminating outside the blood–brain barrier. Ambalavanar R, et al. **Brain Res** 1989 Dec 25;505(1):171–5
Serum amyloid P immunoreactivity in hippocampal tangles, plaques and vessels: implications for leakage across the blood–brain barrier in Alzheimer's disease. Kalaria RN, et al. **Brain Res** 1990 May 21;516(2):349–53
Blood–brain barrier characteristic enzymatic properties in cultured brain capillary endothelial cells. Meyer J, et al. **Brain Res** 1990 Apr 30;514(2):305–9
Magnetic resonance imaging increases the blood–brain barrier permeability to 153–gadolinium diethylenetriaminepentaacetic acid in rats. Prato FS, et al. **Brain Res** 1990 Jul 23;523(2):301–4
Pial venous pressure and acute hypertensive disruption of the blood–brain barrier in spontaneous and renal hypertension. Werber AH, et al. **Brain Res** 1990 May 7; 515(1–2):235–40
Manganese transport across the blood–brain barrier: relationship to iron homeostasis. Aschner M, et al. **Brain Res Bull** 1990 Jun;24(6):857–60
Sequential appearance of anionic domains in the developing blood–brain barrier. Vorbrodt AW, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1–2):31–7
Effect of bile duct ligation–induced liver damage on the blood–brain barrier. Stewart PA, et al. **Can J Neurol Sci** 1989 Nov;16(4):451–2
Brain edema: a classification based on blood–brain barrier integrity. Betz AL, et al. **Cerebrovasc Brain Metab Rev** 1989 Summer;1(2):133–54 (193 ref.)
The role of the blood–brain barrier in movement disorders. Paleologos NA, et al. **Clin Neuropharmacol** 1990 Apr; 13(2):129–46 (90 ref.)
Downregulation of blood–brain barrier glucose transporter in experimental diabetes. Pardridge WM, et al. **Diabetes** 1990 Sep;39(9):1040–4
Prevention of nerve edema and increased blood–nerve barrier permeability–surface area product in galactosemic rats by aldose reductase or thromboxane synthetase inhibitors. Wadhwani KC, et al. **Diabetes** 1989 Nov;38(11):1469–77
The inducible blood—brain barrier specific molecule HT7 is a novel immunoglobulin–like cell surface glycoprotein. Seulberger H, et al. **EMBO J** 1990 Jul;9(7):2151–8
Structural factors in the in vivo chelate mobilization of aged cadmium deposits. Singh PK, et al. **Environ Health Perspect** 1990 Apr;85:361–70
Brain histology, blood–brain barrier and brain water after normothermic and hypothermic cardiopulmonary bypass in pigs. Laursen H, et al. **Eur J Cardiothorac Surg** 1989; 3(6):539–43
Comparative kinetics of oxiracetam in serum and CSF of patients with dementia of Alzheimer type. Parnetti L, et al. **Eur J Drug Metab Pharmacokinet** 1990 Jan–Mar; 15(1):75–8
A saturable mechanism for transport of immunoglobulin G across the blood–brain barrier of the guinea pig. Zlokovic BV, et al. **Exp Neurol** 1990 Mar;107(3):263–70
Quantitative detection of blood–brain barrier–associated enzymes in cultured endothelial cells of porcine brain microvessels. Fukushima H, et al. **In Vitro Cell Dev Biol** 1990 Jun;26(6):612–20
Experimental allergic encephalomyelitis in the monkey: humoral immunity and blood–brain barrier function. Gallo P, et al. **Ital J Neurol Sci** 1989 Dec;10(6):561–5
Neurothelin: an inducible cell surface glycoprotein of blood–brain barrier–specific endothelial cells and distinct neurons. Schlosshauer B, et al. **J Cell Biol** 1990 Apr; 110(4):1261–74
A determination of the regional brain/blood partition coefficient of water using dynamic positron emission tomography. Iida H, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):874–85
Asymmetrical transport of amino acids across the blood–brain barrier in humans. Knudsen GM, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):698–706
Blood–brain transfer and metabolism of 6–[18F]fluoro–L–dopa in rat. Reith J, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):707–19
Plasma binding and transport of diazepam across the blood–brain barrier. No evidence for in vivo enhanced dissociation. Dubey RK, et al. **J Clin Invest** 1989 Oct; 84(4):1155–9
Evidence for carrier–mediated transport of glutathione across the blood–brain barrier in the rat. Kannan R, et al.

J Clin Invest 1990 Jun;85(6):2009–13
Correction of serum neuroleptic activity for blood–to–brain distribution: a method that may render radioreceptor assay results comparable between neuroleptics. Young AS, et al. **J Clin Psychopharmacol** 1989 Oct;9(5):361–3
The fine structure of human cerebral perivascular pericytes and juxtavascular phagocytes: their possible role in hydrocephalic edema resolution. Hasan M, et al. **J Hirnforsch** 1990;31(2):237–49
Vasogenic brain edema in focal 4–aminopyridine seizures: the role of neuronal hyperactivity. Mihály A, et al. **J Hirnforsch** 1990;31(1):77–86
Embryonic nervous tissue transplantation accelerates restoration of hypoxia–damaged blood–brain barrier in rats. Saburina IN. **J Hirnforsch** 1989;30(6):737–45
Borrelia burgdorferi in the central nervous system: experimental and clinical evidence for early invasion. Garcia–Monco JC, et al. **J Infect Dis** 1990 Jun; 161(6):1187–93
The effect of plasma valine, isoleucine and leucine on the control of the flux through tyrosine– and tryptophan–hydroxylase in the brain. Hommes FA, et al. **J Inherited Metab Dis** 1990;13(2):151–5
Structure–activity relationships for metal–labeled blood flow tracers: comparison of keto aldehyde bis(thiosemicarbazonato)copper(II) derivatives. John EK, et al. **J Med Chem** 1990 Jun;33(6):1764–70
Permeability of the blood–brain barrier to the immunosuppressive cyclic peptide cyclosporin A. Begley DJ, et al. **J Neurochem** 1990 Oct;55(4):1222–30
Transport of lead–203 at the blood–brain barrier during short cerebrovascular perfusion with saline in the rat. Deane R, et al. **J Neurochem** 1990 Mar;54(3):905–14
Small rises in plasma choline reverse the negative arteriovenous difference of brain choline. Klein J, et al. **J Neurochem** 1990 Oct;55(4):1231–6
Kinetic analysis of leucine–enkephalin cellular uptake at the luminal side of the blood–brain barrier of an in situ perfused guinea–pig brain. Zlokovic BV, et al. **J Neurochem** 1989 Nov;53(5):1333–40
Lymphocyte infiltration into normal rat brain following hyperosmotic blood–brain barrier opening. Kajiwara K, et al. **J Neuroimmunol** 1990 May;27(2–3):133–40
Blood brain barrier permeability in multiple sclerosis using labelled DTPA with PET, CT and MRI [letter; comment] Tofts PS, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug; 52(8):1019–20 Comment on: J Neurol Neurosurg Psychiatry 1988 Aug;51(8):1058–62.
In–vitro characterization of blood–brain barrier permeability to delta sleep–inducing peptide. Raeissi S, et al. **J Pharm Pharmacol** 1989 Dec;41(12):848–52
Estimating the rate of thiopental blood–brain equilibration using pseudo steady state serum concentrations. Maitre PO, et al. **J Pharmacokinet Biopharm** 1990 Jun;18(3):175–87
Transport of histone through the blood–brain barrier. Pardridge WM, et al. **J Pharmacol Exp Ther** 1989 Dec; 251(3):821–6
Blood–brain transport of triiodothyronine is reduced in aged rats. Mooradian AD. **Mech Ageing Dev** 1990 Mar 15; 52(2–3):141–7
New approaches to the delivery of drugs to the brain. Ayre SG. **Med Hypotheses** 1989 Aug;29(4):283–91
Strategies for drug delivery through the blood–brain barrier. Pardridge WM. **Neurobiol Aging** 1989 Sep–Oct;10(5):636–7; discussion 648–50
Queuine is incorporated into brain transfer RNA. Siard TJ, et al. **Neurochem Res** 1989 Nov;14(11):1159–64
Observations on cerebral ischaemia in cats at injury threshold levels. Seida M, et al. **Neurol Res** 1989 Dec;11(4):205–12
Heterogeneity of blood–brain barrier changes in multiple sclerosis: an MRI study with gadolinium–DTPA enhancement. Kermode AG, et al. **Neurology** 1990 Feb; 40(2):229–35
Angioarchitectonics of the cerebral cortex and the blood–brain barrier in Alzheimer's disease. Orlova ML. **Neurosci Behav Physiol** 1989 Nov–Dec;19(6):498–503
Disturbed brain purine metabolism results in a gross opening of the blood–brain barrier in newborn piglets following experimental pneumothorax. Temesvári P, et al. **Neurosci Lett** 1990 May 31;113(2):163–8
Permeability of blood vessels in experimental gliomas: uptake of 99mTc–glucoheptonate and alteration in blood–brain barrier as determined by cytochemistry and electron microscopy. Nir I, et al. **Neurosurgery** 1989 Oct; 25(4):523–31; discussion 531–2
The influence of volume expansion with induced hypertension on vessel reactivities, the blood–brain barrier, and cerebral infarction in cats with one–hour occlusion of the middle cerebral artery. Sakaki T, et al. **Neurosurgery** 1990 Aug;27(2):268–73; discussion 273–4
Alterations of the blood–brain barrier in bacterial meningitis: in vivo and in vitro models. Tunkel AR, et al. **Pediatr Infect Dis J** 1989 Dec;8(12):911–3
Improved delivery through biological membranes. XXXVII. Synthesis and stability of novel redox derivatives of naproxen and indomethacin. Phelan MJ, et al. **Pharm Res** 1989 Aug;6(8):667–76
The application of bovine brain microvessel endothelial–cell monolayers grown onto polycarbonate membranes in vitro to estimate the potential permeability of solutes through the blood–brain barrier. Shah MV, et al. **Pharm Res** 1989 Jul;6(7):624–7
Transport of desglycinamide–arginine vasopressin across the blood–brain barrier in rats as evaluated by the unit impulse response methodology. van Bree JB, et al. **Pharm Res** 1990 Mar;7(3):293–8
Permeability of the murine blood–brain barrier to some octapeptide analogs of somatostatin. Banks WA, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6762–6
Localization of cellular retinol–binding protein and retinol–binding protein in cells comprising the blood–brain barrier of rat and human. MacDonald PN, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4265–9
Abnormalities of the glucose transporter at the blood–brain barrier and in brain in Alzheimer's disease. Kalaria RN, et al. **Prog Clin Biol Res** 1989;317:415–21
Blood–brain barrier permeability after electrically induced seizure in normoglycemic, hypoglycemic, and hyperglycemic rats. Oztaş B, et al. **Psychiatry Res** 1989 Aug;29(2):151–9
Drug delivery to the central nervous system: general principles and relevance to therapy for infections of the central nervous system. Scheld WM. **Rev Infect Dis** 1989 Nov–Dec;11 Suppl 7:S1669–90 (215 ref.)
Blood–brain barrier disturbance following subarachnoid hemorrhage in rabbits. Johshita H, et al. **Stroke** 1990 Jul; 21(7):1051–8
Blood–brain barrier integrity during cardiopulmonary resuscitation in dogs. Schleien CL, et al. **Stroke** 1990 Aug; 21(8):1185–91
Lessons from magnetic resonance imaging in multiple sclerosis. McDonald WI, et al. **Trends Neurosci** 1989 Oct; 12(10):376–9 (36 ref.)
Passage of immunomodulators across the blood–brain barrier. Stitt JT. **Yale J Biol Med** 1990 Mar–Apr;63(2):121–31 (32 ref.)
Ultrastructural investigation of the meningeal compartment of the blood–cerebrospinal fluid–barrier in rats and cats. A horseradish peroxidase study. Angelov DN. **Z Mikrosk Anat Forsch** 1990;104(1):1–16
[The penetration of cephalosporins across the blood–brain barrier and its clinical significance] Zhang YY, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jun;28(6):340–2, 381 (Eng. Abstr.) **(Chi)**
[Changes in cerebrospinal fluid immunoglobulin serial parameters in neurologic disorders] Wang WZ, et al. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Feb; 22(1):12–6, 61 (Eng. Abstr.) **(Chi)**
[Pathogenesis of bilirubin encephalopathy and subsequent therapeutic consequences] Jährig K, et al. **Zentralbl Gynakol** 1989;111(15):1025–32 (14 ref.) (Eng. Abstr.) **(Ger)**
[Transplantation of embryonal nerve tissue accelerates the recovery of the rat blood–brain barrier disrupted as a result of hypoxia] Saburina IN. **Dokl Akad Nauk SSSR** 1989; 306(5):1242–6 **(Rus)**
[Ultrastructural changes in the hemato–encephalic barrier of adult animals after acute hypoxic hypoxia] Konorova IL, et al. **Patol Fiziol Eksp Ter** 1990 Jan–Feb;(1):37–9 (Eng. Abstr.) **(Rus)**
[Brain barriers and the problem of autoimmunity in neurology] Nadareishvili ZG, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):3–7 (Eng. Abstr.) **(Rus)**
[The kinin and plasmin systems of the blood serum and cerebro– spinal fluid in patients with multiple sclerosis and schizophrenia] Vilkov GA, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):23–7 (Eng. Abstr.) **(Rus)**
[Integrity of the blood–brain barrier and intrathecal synthesis of IgG in parenchymatous and subarachnoid cerebral cysticercosis] Estañol Vidal B, et al. **Rev Invest Clin** 1989 Oct–Dec;41(4):327–30 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Transcytosis of macromolecules through the blood–brain barrier: a cell biological perspective and critical appraisal. Broadwell RD. **Acta Neuropathol (Berl)** 1989;79(2):117–28 (77 ref.)
Blood–brain barrier injury following intracarotid injection of radiographic contrast media. In vivo quantification using magnetic resonance imaging and Gd–DTPA. Hayakawa K, et al. **Acta Radiol** 1990 Mar;31(2):203–8
Effect of halothane on ischemic brain edema. Cahn R, et al. **Adv Neurol** 1990;52:93–6
Brain edema, autoregulation, and calcium antagonism. An experimental study with nimodipine. Gaab MR, et al. **Adv Neurol** 1990;52:391–400
Intravenous glutamate enhances edema formation after a freezing lesion. Kempski O, et al. **Adv Neurol** 1990; 52:219–23
Transport of calcium and other metals across the blood–brain barrier: mechanisms and implications for neurodegenerative disorders. Smith QR. **Adv Neurol** 1990;51:217–22 (41 ref.)
Effects of drugs on blood–brain barrier permeability in rats chronically intoxicated by ethanol. Borisenko SA. **Ann Ist Super Sanita** 1990;26(1):39–42
Reversal of scopolamine–induced alterations of choline transport across the blood–brain barrier by the nootropics piracetam and pramiracetam. Brust P. **Arzneimittelforschung** 1989 Oct;39(10):1220–2
31P–NMR studies on time–course of change in the blood–brain barrier after treatment with hypertonic solution. Sogabe T, et al. **Biochim Biophys Acta** 1990 Mar 9;1051(3):282–4
Aluminum transfer as glutamate complex through blood–brain barrier. Possible implication in dialysis encephalopathy. Deloncle R, et al. **Biol Trace Elem Res** 1990 Apr;25(1):39–45
Opening the blood–brain barrier to zinc. Blair–West JR, et al. **Brain Res** 1990 Jan 15;507(1):6–10
Stilbenes inhibit exchange of chloride between blood, choroid plexus and cerebrospinal fluid. Deng QS, et al. **Brain Res** 1989 Oct 30;501(1):183–7
Sodium dodecylsulphate induces a breach in the blood–brain barrier and enables a West Nile virus variant to penetrate into mouse brain. Kobiler D, et al. **Brain Res** 1989 Sep 4;496(1–2):314–6
Changes in blood–brain barrier and cerebral blood flow following elevation of circulating serotonin level in anesthetized rats. Sharma HS, et al. **Brain Res** 1990 May 28;517(1–2):215–23
Bidirectional transport of interleukin–1 alpha across the blood–brain barrier. Banks WA, et al. **Brain Res Bull** 1989 Dec;23(6):433–7
Passage of Tyr–MIF–1 from blood to brain. Barrera CM, et al. **Brain Res Bull** 1989 Dec;23(6):439–42
Catecholaminergic and muscarinergic receptors in chronic experimental uremia. Lübbecke F, et al. **Clin Physiol Biochem** 1989;7(3–4):149–60
Experimental spike–and–wave discharges induced by pentylenetetrazol and tolerance to repeated injections: an electrophysiological and biochemical study. Sierra–Paredes G, et al. **Epilepsy Res** 1989 Sep–Oct;4(2):139–46
Amitriptyline–induced morphological alterations of the rat blood–brain barrier. Sarmento A, et al. **Eur J Pharmacol** 1990 Jan 25;176(1):69–74
Albumin content in brain and CSF after intracarotid infusion of protamine sulfate: a longitudinal study. Westergren I, et al. **Exp Neurol** 1990 Feb;107(2):192–6
How chronically administered valproate increases chlordiazepoxide transfer through the blood–brain barrier. Riant P, et al. **Fundam Clin Pharmacol** 1990;4(1):105–14
Systematic studies on the effects of the NMDA receptor antagonist MK–801 on cerebral blood flow and responsivity, EEG, and blood–brain barrier following complete reversible cerebral ischemia. Stevens MK, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):77–88
Effect of tunicamycin on the blood–brain barrier and on endothelial cells in vitro. Finnie JW, et al. **J Comp Pathol** 1990 May;102(4):363–74
Atrial natriuretic peptide modulates amiloride–sensitive Na+ transport across the blood–brain barrier. Ibaragi M, et al. **J Neurochem** 1989 Dec;53(6):1802–6
Chronic amphetamine intoxication and the blood–brain barrier permeability to inert polar molecules studied in the vascularly perfused guinea pig brain. Rakic LM, et al. **J Neurol Sci** 1989 Dec;94(1–3):41–50
Temporal effects of dexamethasone on blood–to–brain and blood–to–tumor transport of 14C–alpha–aminoisobutyric acid in rat C6 glioma. Shapiro WR, et al. **J Neurooncol** 1990 Jun;8(3):197–204
Effect of hyperosmotic blood–brain barrier disruption on transcapillary transport in canine brain tumors. Groothuis DR, et al. **J Neurosurg** 1990 Mar;72(3):441–9
The effect of steroids on gentamicin delivery to brain after blood–brain barrier disruption. Neuwelt EA, et al. **J Neurosurg** 1990 Jan;72(1):123–6
Blood–brain barrier disruption in brain–tumor therapy [letter] Rapoport SI. **J Neurosurg** 1990 Sep;73(3):475–7
Arecoline, but not haloperidol, induces changes in the permeability of the blood–brain barrier in the rat. Saija A, et al. **J Pharm Pharmacol** 1990 Feb;42(2):135–8
Comparison of in vitro and in vivo models of drug transcytosis through the blood–brain barrier. Pardridge WM, et al. **J Pharmacol Exp Ther** 1990 May;253(2):884–91
Ethyl–oxide effects on a newly formed blood–brain barrier. Nico B, et al. **J Submicrosc Cytol Pathol** 1989 Jul; 21(3):535–41
Noninvasive drug delivery to the brain. Brewster ME. **Neurobiol Aging** 1989 Sep–Oct;10(5):638–9; discussion 648–50
Novel CNS–directed drug delivery systems in Alzheimer's disease and other neurological disorders. Harbaugh RE. **Neurobiol Aging** 1989 Sep–Oct;10(5):623–9 (68 ref.)
Modifications of the permeability of the blood–brain barrier and local cerebral metabolism in pentobarbital– and ketamine–anaesthetized rats. Saija A, et al. **Neuropharmacology** 1989 Sep;28(9):997–1002
Mercury neurotoxicity: mechanisms of blood–brain barrier transport. Aschner M, et al. **Neurosci Biobehav Rev** 1990 Summer;14(2):169–76 (109 ref.)
An investigation into the early stages of the inflammatory response following ibotenic acid–induced neuronal degeneration. Coffey PJ, et al. **Neuroscience** 1990; 35(1):121–32
The effects of anesthesia on osmotic blood–brain barrier disruption. Gumerlock MK, et al. **Neurosurgery** 1990 Feb; 26(2):268–77
Blood–brain barrier permeability to bilirubin in the rat studied using intracarotid bolus injection and in situ brain perfusion techniques. Ives NK, et al. **Pediatr Res** 1990 May; 27(5):436–41
Prednisone effects on blood–brain barrier permeability and CNS IgG synthesis in healthy humans. Wolkowitz OM, et al. **Psychoneuroendocrinology** 1990;15(2):155–8

Impromidine-induced changes in the permeability of the blood-brain barrier of normotensive and spontaneously hypertensive rats. Boertje SB, et al. **Res Commun Chem Pathol Pharmacol** 1990 Aug; 69(2):249–52

[Characterization and pharmacological effect on brain damage as a result of cold injury.] Funk KF, et al. **Biomed Biochim Acta** 1990;49(1):91–5 (Eng. Abstr.) **(Ger)**

[The observation of blood–brain barrier of organic mercury poisoned rat: a Gd–DTPA enhanced magnetic resonance study] Kuwabara T, et al. **No To Shinkei** 1989 Jul; 41(7):681–5 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Quantitative multiple sclerosis plaque assessment with magnetic resonance imaging. Its correlation with clinical parameters, evoked potentials, and intra–blood–brain barrier IgG synthesis. Baumhefner RW, et al. **Arch Neurol** 1990 Jan;47(1):19–26

Immune function of the blood–brain barrier: incomplete presentation of protein (auto–)antigens by rat brain microvascular endothelium in vitro. Risau W, et al. **J Cell Biol** 1990 May;110(5):1757–66

PHYSIOLOGY

Brain edema and the blood brain barrier in galactosamine–induced fulminant hepatic failure rats. An animal model for evaluation of liver support systems. Dixit V, et al. **ASAIO Trans** 1990 Jan–Mar;36(1):21–7

Permeability of the normal rat brain, spinal cord and dorsal root ganglia microcirculations to immunoglobulins G. Azzi G, et al. **Biol Cell** 1990;68(1):31–6

Are close contacts between astrocytes and endothelial cells a prerequisite condition of a blood–brain barrier? The rat subfornical organ as an example. Bouchaud C, et al. **Biol Cell** 1989;67(2):159–65

Correlations between cisternal CSF and plasma concentrations of HVA, MHPG, 5–HIAA, DA, and NA. Degrell I, et al. **Biol Psychiatry** 1990 May 15; 27(10):1179–82

An investigation into the effect of traumatically produced cerebrospinal fluid fistulae on the passage of Augmentin across the blood–brain barrier. Lyons AJ. **Br J Oral Maxillofac Surg** 1990 Feb;28(1):8–11

Ontogenesis of cell surface mu–opioid ([3H]DAGO) binding sites in rat hypothalamus and ex vivo determination of blood–brain barrier penetration by opioid peptide FK 33–824. Landymore KM, et al. **Brain Res Dev Brain Res** 1990 Jul 1;54(2):169–76

Hypertension and cerebral arteries: relationship to disruption of the blood–brain barrier. Werber AH, et al. **Clin Exp Hypertens [A]** 1990;12(2):243–65

Comparison between blood and saline perfusion on the uptake of amino acids by choroid plexus of the sheep. Segal MB, et al. **Endocrinol Exp** 1990 Mar;24(1–2):29–36

Circulating neuroactive peptides and the blood–brain and blood–cerebrospinal fluid barriers. Zlokovic BV, et al. **Endocrinol Exp** 1990 Mar;24(1–2):9–17

Beta–endorphin chimeric peptides: transport through the blood–brain barrier in vivo and cleavage of disulfide linkage by brain. Pardridge WM, et al. **Endocrinology** 1990 Feb;126(2):977–84

The blood–brain barrier protects foreign antigens in the brain from immune attack. Pollack IF, et al. **Exp Neurol** 1990 May;108(2):114–21

Studies on the potential neurotoxic and convulsant effects of increased blood levels of quinolinic acid in rats with altered blood–brain barrier permeability. Vezzani A, et al. **Exp Neurol** 1989 Oct;106(1):90–8

The blood–brain interface. Bradbury MW, et al. **Eye** 1990; 4 (Pt 2):249–54 (33 ref.)

Glutathione metabolism at the blood–cerebrospinal fluid barrier. Anderson ME, et al. **FASEB J** 1989 Nov; 3(13):2527–31

Decrease in perfusion of cerebral capillaries during incomplete ischemia and reperfusion. Ennis SR, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):213–20

Model for drug uptake by brain tumors: effects of osmotic treatment and of diffusion in brain. Robinson PJ, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):153–61

An easier, reproducible, and mass–production method to study the blood–brain barrier in vitro. Dehouck MP, et al. **J Neurochem** 1990 May;54(5):1798–801

Role of the blood–brain barrier in the formation of long–chain omega–3 and omega–6 fatty acids from essential fatty acid precursors. Moore SA, et al. **J Neurochem** 1990 Aug;55(2):391–402

Transport into brain of albumin–bound amino acids [letter; comment] Rassin DK. **J Neurochem** 1990 Aug;55(2):722 Comment on: J Neurochem 1990 Mar;54(3):971–6.

Capillary depletion method for quantification of blood–brain barrier transport of circulating peptides and plasma proteins. Triguero D, et al. **J Neurochem** 1990 Jun; 54(6):1882–8

The blood/cerebrospinal fluid partitioning of pyrazinamide: a study during the course of treatment of tuberculous meningitis. Phuapradit P, et al. **J Neurol Neurosurg Psychiatry** 1990 Jan;53(1):81–2

The blood–brain barrier. Gregoire N. **J Neuroradiol** 1989; 16(3):238–50 (15 ref.) **(Eng, Fre)**

Acidic drug transport in vivo through the blood–brain barrier. A role of the transport carrier for monocarboxylic acids. Kang YS, et al. **J Pharmacobiodyn** 1990 Feb; 13(2):158–63

Dysfunction of choline transport system through blood–brain barrier in stroke–prone spontaneously hypertensive rats. Kang YS, et al. **J Pharmacobiodyn** 1990 Jan;13(1):10–9

Absorptive–mediated endocytosis of a dynorphin–like analgesic peptide, E–2078 into the blood–brain barrier. Terasaki T, et al. **J Pharmacol Exp Ther** 1989 Oct; 251(1):351–7

Measurement of filtration coefficient in single cerebral microvessels of the frog. Fraser PA, et al. **J Physiol (Lond)** 1990 Apr;423:343–61

MRI gradient fields increase brain mannitol space. Garber HJ, et al. **Magn Reson Imaging** 1989 Nov–Dec;7(6):605–10

Age related changes in the effect of electroconvulsive shock on the blood brain barrier permeability in rats. Oztas B, et al. **Mech Ageing Dev** 1990 Feb 1;51(2):149–55

Kinetic analysis of blood–brain barrier transport of D–glucose in man: quantitative evaluation in the presence of tracer backflux and capillary heterogeneity. Knudsen GM, et al. **Microvasc Res** 1990 Jan;39(1):28–49

Potential role of host cytokines in Haemophilus influenzae lipopolysaccharide–induced blood–brain barrier permeability. Scheld WM, et al. **Pediatr Infect Dis J** 1989 Dec;8(12):910–11

The effects of bilirubin on brain energy metabolism during hyperosmolar opening of the blood–brain barrier: an in vivo study using 31P nuclear magnetic resonance spectroscopy. Ives NK, et al. **Pediatr Res** 1989 Oct;26(4):356–61

Positron emission tomographic measurement of blood–to–brain and blood–to–tumour transport of 82Rb. I: Error analysis and computer simulations. Dhawan V, et al. **Phys Med Biol** 1989 Dec;34(12):1773–84

Positron emission tomographic measurement of blood–to–brain and blood–to–tumour transport of 82Rb. II: Clinical data and validation of technique. Dhawan V, et al. **Phys Med Biol** 1989 Dec;34(12):1785–94

Quantitation of blood–brain barrier permeability by positron emission tomography. Webb S, et al. **Phys Med Biol** 1989 Dec;34(12):1767–71 (19 ref.)

Placental and blood–brain barrier transfer following prenatal and postnatal exposures to neuroactive drugs: relationship with partition coefficient and behavioral teratogenesis. Watanabe T, et al. **Toxicol Appl Pharmacol** 1990 Aug; 105(1):66–77

Development of the blood–brain barrier. Risau W, et al. **Trends Neurosci** 1990 May;13(5):174–8

[Transport processes through the blood–brain barrier] Lefauconnier JM. **Reprod Nutr Dev** 1989;29(6):689–702 (95 ref.) (Eng. Abstr.) **(Fre)**

[Cerebrospinal fluid penetration of ofloxacin (Tarivid) in non–inflamed meninges] Staffensky RH, et al. **Neurochirurgia (Stuttg)** 1990 Jul;33(4):110–2 (Eng. Abstr.) **(Ger)**

[Postmortem diagnosis of fatal diabetic metabolic dyscontrol: what is the significance of cerebrospinal fluid and vitreous body total values and HbA1?] Ritz S, et al. **Pathologe** 1990 May;11(3):158–65 **(Ger)**

[Electrophoretographic analysis of blood–brain barrier function] Uchizawa T. **Neurol Med Chir (Tokyo)** 1989 Apr; 29(4):273–9 (Eng. Abstr.) **(Jpn)**

[Physiological principles of imipramine pharmacokinetics] Szymura–Oleksiak J. **Folia Med Cracov** 1989; 30(3–4):103–21 (Eng. Abstr.) **(Pol)**

[Penetration of the anti–arrhythmia preparation ethmozin through the hemato–encephalic barrier of the guinea pig brain perfused in situ] Zlokovich BV, et al. **Kardiologiia** 1990 Jan;30(1):69–72 (Eng. Abstr.) **(Rus)**

[The postresuscitation changes in the permeability of the hemato–encephalic barrier and their possible pathogenetic significance] Gannushkina IV, et al. **Patol Fiziol Eksp Ter** 1990 May–Jun;(3):13–6 (Eng. Abstr.) **(Rus)**

[Disordered permeability of the hemato–encephalic barrier in the development of allergic processes of the nervous system] Zhitnukhin IuL, et al. **Patol Fiziol Eksp Ter** 1989 Sep–Oct;(5):44–7 (Eng. Abstr.) **(Rus)**

[Regulation of the blood–brain barrier permeability in suppurative–inflammatory diseases of the maxillofacial area] Chulkin SV, et al. **Stomatologiia (Mosk)** 1990 Mar–Apr;69(2):38–40 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Cerebrovascular and metabolic perturbations in delayed heavy charged particle radiation injury. Lo EH, et al. **Brain Res** 1989 Dec 11;504(1):168–72

[The effect of neodymium yttrium aluminum garment laser on the cerebral blood vessel and blood brain barrier] Sakaki T, et al. **No Shinkei Geka** 1989 Jul;17(7):641–6 (Eng. Abstr.) **(Jpn)**

BLOOD CELL COUNT

Biologic variation of common hematologic laboratory quantities in the elderly. Fraser CG, et al. **Am J Clin Pathol** 1989 Oct;92(4):465–70

Addition of lithium carbonate to carbamazepine: hematological and thyroid effects. Kramlinger KG, et al. **Am J Psychiatry** 1990 May;147(5):615–20

Heterogeneity of common hematologic parameters among racial, ethnic, and gender subgroups. Saxena S, et al. **Arch Pathol Lab Med** 1990 Jul;114(7):715–9

Elevated mean corpuscular volume as a predictor of hematologic toxicity due to methotrexate therapy. Weinblatt ME, et al. **Arthritis Rheum** 1989 Dec; 32(12):1592–6

Alpha–thalassemia changes the cell density profile in sickle cell anaemia. Tejuca M, et al. **Haematologia (Budap)** 1989; 22(3):175–80

Peripheral blood mononuclear–stem cell (PBMSC) collection in two continuous flow cell separators: yields and crosscellular contamination. Hester JP, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:48 **(Eng, Ger)**

Use of a mildly restrictive administrative protocol to reduce orders for manual blood film examination from the emergency department. Edelman BB, et al. **J Emerg Med** 1990 Jan–Feb;8(1):1–13

Hematological changes in the mice transplanted with methylcholanthrene–induced fibrosarcoma. Higashihara T, et al. **Jikken Dobutsu** 1990 Jul;39(3):407–11

Effect of storage on blood count variables in small samples. Bellamy GJ, et al. **Med Lab Sci** 1990 Jul;47(3):230–3

An automated reticulocyte counting method: preliminary observations. Tatsumi N, et al. **Med Lab Sci** 1989 Apr; 46(2):157–60

Yield of the admission complete blood count in medical inpatients. Mozes B, et al. **Postgrad Med J** 1989 Aug; 65(766):525–7

Effects of acute exercise on bleeding time, bleeding amount and blood cell counts: a comparative study. Chen HI, et al. **Thromb Res** 1989 Aug 15;55(4):503–10

Automated CBC count may obscure L–tryptophan toxicity diagnosis [letter; comment] Ende M. **Va Med** 1990 Apr; 117(4):141 Comment on: Va Med 1990 Feb;117:68–70.

[Normal blood cell values for Chinese children of various ages] Yang CP, et al. **Acta Paediatr Sin** 1988 May–Jun; 29(3):167–73 (Eng. Abstr.) **(Chi)**

[The prognostic significance of the differential blood count in patients with chronic myeloid leukemia] Zankovich R, et al. **Med Klin** 1989 Aug 15;84(8):373–7 (Eng. Abstr.) **(Ger)**

[Profile of hematological values in hybrid hairless dogs] Kimura T, et al. **Jikken Dobutsu** 1990 Jul;39(3):417–20 (Eng. Abstr.) **(Jpn)**

[Normal hematologic parameters] Karazawa EH, et al. **Rev Saude Publica** 1989 Feb;23(1):58–66 (29 ref.) (Eng. Abstr.) **(Por)**

[A simulator for training clinical laboratory workers in the estimation of erythrocytes, leukocytes, and platelets] Batkov IuV, et al. **Lab Delo** 1989;(9):38–9 **(Rus)**

[Peripheral blood indices in preoperative radiotherapy (using radiomodifiers) of lung cancer] Demidchik IuE, et al. **Med Radiol (Mosk)** 1989 Sep;34(9):49–52 **(Rus)**

[Differences in hematologic variables according to ABO blood group] Valenzuela CY, et al. **Rev Med Chil** 1988 Oct;116(10):981–4 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

[Changes in various hematologic parameters following treatment with zinc acetate] Mengó MS, et al. **Sangre (Barc)** 1990 Jun;35(3):227–30 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

Advantages of a new anticoagulant in routine hematology on the Coulter Counter S–Plus STKR analyzer. Lippi U, et al. **Am J Clin Pathol** 1990 Jun;93(6):760–4

The technicon H6000 automated hematology analyzer in the diagnosis and classification of the myelodysplastic syndromes. Orazi A, et al. **Haematologica** 1990 Jan–Feb; 75(1):87–90

[Enhancing safety of hemocytometer GTsMK–3] Ostroukhov VD, et al. **Med Tekh** 1990 May–Jun;(3):37 **(Rus)**

METHODS

Evaluation of reticulocyte counts by flow cytometry in a routine laboratory. Ferguson DJ, et al. **Am J Hematol** 1990 Jan;33(1):13–7

EDTA–induced platelet aggregation can be avoided by a new anticoagulant also suitable for automated complete blood count. Lippi U, et al. **Haematologica** 1990 Jan–Feb; 75(1):38–41

A new development in haematological cell counting: the Sysmex NE–8000, automaton for cell count and physical five–part leukocyte differentiation. van Wersch JW, et al. **J Clin Chem Clin Biochem** 1990 Apr;28(4):233–40

White cell counting in red cells and platelets: how few can we count? Friedman LI, et al. **Transfusion** 1990 Jun; 30(5):387–9

RADIATION EFFECTS

Haematologic changes in young adult Swiss albino mice after tritiated water administration. Bhatia AL, et al. **Radiobiol Radiother (Berl)** 1990;31(3):293–6

[Dynamics of change in the status of peripheral blood during radical treatment with irradiation in patients with cervical cancer] Kożuch–Gdak W. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:61–6 (Eng. Abstr.) **(Pol)**

VETERINARY

Age-related changes in the haematology of female F344 rats. Turton JA, et al. **Lab Anim** 1989 Oct;23(4):295–301

Hematology and serum chemistry values of adult, pregnant and newborn New Zealand rabbits (Oryctolagus cuniculus). Bortolotti A, et al. **Lab Anim Sci** 1989 Sep; 39(5):437–9

Husbandry and hematology of captive spiny mice (Acomys cahirinus). Keller GL, et al. **Lab Anim Sci** 1989 Nov; 39(6):625–6

[Preliminary experience with a buffy coat analyser in horses] van de Velde LF. **Tijdschr Diergeneeskd** 1989 Dec 1; 114(23):1193–4 (Eng. Abstr.) **(Dut)**

BLOOD CELL NUMBER see BLOOD CELL COUNT

BLOOD CELLS

Changes of the blood lymphocyte population following 32P treatment for polycythemia vera. Blomgren H, et al. **Eur J Haematol** 1990 May;44(5):302–6

Different blood particle parameters for samples collected by skin puncture and venously. Daae LN. **Eur J Haematol** 1989 Aug;43(2):190

Relationship of thrombin generation to peripheral blast cell count in patients with acute myeloblastic leukemia (AML). Scharf RE, et al. **Eur J Haematol** 1990 May;44(5):273–6

Purification of peripheral blood hematopoietic cells using Campath-1M monoclonal antibody. Law P, et al. **Exp Hematol** 1990 May;18(4):289–93

Blood cell labeling with 99mTc: progress and perspectives. Srivastava SC, et al. **Semin Nucl Med** 1990 Jan;20(1):41–51 (78 ref.)

Histological and immunohistochemical studies on the preparation of leukocyte-poor red cell concentrates by filtration: the filtration process on cellulose acetate fibers. Steneker I, et al. **Vox Sang** 1990;58(3):192–8

ANALYSIS

A monoclonal antibody to a megakaryoblast-like cell line detects a protein found in blood cells and in the epithelial cell lining of various rat tissues. Gulowsen AC, et al. **Eur J Cell Biol** 1990 Jun;52(1):142–6

Immunocytochemical evidence of vertebrate bioactive peptide-like molecules in the immuno cell types of the freshwater snail Planorbarius corneus (L.) (Gastropoda, Pulmonata). Ottaviani E, et al. **FEBS Lett** 1990 Jul 16; 267(2):250–2

Immunodetection of haemocyte subpopulations by N-acetylmuramic acid antibody in Planorbarius corneus (L.) (Gastropoda, Pulmonata). Ottaviani E, et al. **Histochem J** 1989 Nov;21(11):675–8

Immunocytochemical localization of a calcium-binding phosphoprotein in hemocytes of heterodont bivalves. Marsh ME. **J Exp Zool** 1990 Mar;253(3):280–6

Using clinical data to predict abnormal serum electrolytes and blood cell profiles. Tierney WM, et al. **J Gen Intern Med** 1989 Sep-Oct;4(5):375–83

[Clinical significance of C3 receptors (CR1, 2, 3, 4) analysis] Seya T, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:641–6 **(Jpn)**

[A method of determining the magnitude of the intracellular reserve of heparin in the blood] Gabitov SZ, et al. **Lab Delo** 1989;(11):59–61 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Flow cytometric and immunohistochemical characterization of the gamma/delta T-lymphocyte population in normal human lymphoid tissue and peripheral blood. Inghirami G, et al. **Am J Pathol** 1990 Feb;136(2):357–67

Comparison of three hexagonal tessellations through extraction of blood cell geometric features. Graham MD. **Anal Quant Cytol Histol** 1990 Feb;12(1):56–72

Growth factors and blood cells. Ross DW. **Arch Pathol Lab Med** 1990 Sep;114(9):995–6

Identification of hematopoietic progenitors of macrophages and dendritic Langerhans cells (DL-CFU) in human bone marrow and peripheral blood. Reid CD, et al. **Blood** 1990 Sep 15;76(6):1139–49

The control of growth and differentiation in normal and leukemic blood cells. Sachs L. **Cancer** 1990 May 15; 65(10):2196–206 (110 ref.)

Flow cytometric analysis of recombinant murine GM-CSF (rmuGM-CSF) induced changes in the distribution of specific cell populations in vivo. Pennline KJ, et al. **Cytometry** 1990;11(2):283–91

Recurrence of colorectal cancer and perioperative blood transfusion. Is blood storage time important? Hoh H, et al. **Dis Colon Rectum** 1990 Feb;33(2):127–30

Separation of blood cells using colloidal silica-polysaccharide gradients. Pertoft H. **Exp Cell Res** 1967 Jun;46(3):621–3

Human bone marrow processing using Cobe 2991 and CS 3000 blood cell separators for further ex vivo manipulation. Angelini A, et al. **Haematologica** 1990 Jan-Feb;75 Suppl 1:43–7

Surface affinity chromatographic separation of blood cells. VII. Relationship between capacity factors of human peripheral blood cells and the rate of penetration of liquids into xerogel column packings. Matsumoto U, et al. **J Chromatogr** 1990 Mar 30;504(1):69–78

Mitogenic activity on human arterial smooth muscle cells is increased in the plasma of patients undergoing hemodialysis with cuprophane membranes. Hemmendinger S, et al. **Nephron** 1989;53(2):147–51

A new technique for C-banding. Bugallo JD, et al. **Stain Technol** 1990;65(1):48–50

A modified mallory-cason staining procedure for large cryosections. van Leeuwen MB, et al. **Stain Technol** 1990; 65(1):37–42

Microbial challenge of a blood cell separator outside-seal bowl system. Jacobson MS, et al. **Transfusion** 1990 Feb; 30(2):146–9

[Determining normal values of the peripheral blood in children 1–84 months of age from urban and rural regions of the Rzeszow district] Domagała J. **Pediatr Pol** 1989 May; 64(5):317–22 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

Hematologic effects of recombinant murine granulocyte-macrophage colony-stimulating factor on the peripheral blood and bone marrow. Ulich TR, et al. **Am J Pathol** 1990 Aug;137(2):369–76

Effects of recombinant cytokines on the growth of purified peripheral blood progenitors (PBSC). Kawano Y, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:19

The effect of alpha-adrenergic blockade on responses of peripheral blood cells to acute insulin-induced hypoglycaemia in humans. Fisher BM, et al. **Eur J Clin Invest** 1990 Feb;20(1):51–5

In vivo effects of human recombinant interleukin 6 on hemopoietic stem and progenitor cells and circulating blood cells in normal mice. Pojda Z, et al. **Exp Hematol** 1990 Oct;18(9):1034–7

Effects of the nonsteroidal anti-inflammatory compounds Lonazolac Ca, indomethacin and NDGA on inflammatory mediator generation and release from various cells. Raulf M, et al. **Immunopharmacology** 1990 Mar-Apr;19(2):103–11

Hematological findings among styrene-exposed workers in the reinforced plastics industry. Stengel B, et al. **Int Arch Occup Environ Health** 1990;62(1):11–8

Influence of ciprofloxacin on leukotriene generation from various cells in vitro. Knöller J, et al. **J Antimicrob Chemother** 1990 Apr;25(4):605–12

The effect of chronic apomorphine treatment on the ultrastructure of the prolactin cells and on plasma prolactin levels in young and aged male Wistar rats. van Putten LJ, et al. **Mech Ageing Dev** 1990 Mar 1;52(1):45–59

Cytostatic effects of 2',3'-dideoxyribonucleosides on transformed human hemopoietic cell lines. Blakley RL, et al. **Mol Pharmacol** 1990 Feb;37(2):328–32

[Current status of knowledge of the effect of benzene. Impairment of blood and hemopoiesis] Bittersohl G. **Z Gesamte Hyg** 1990 Mar;36(3):136–8 (18 ref.) (Eng. Abstr.) **(Ger)**

[The morphofunctional status of the blood during the experimental intravenous administration of ultradispersed ferromagnetic particles] Volkonskiĭ VA. **Gematol Transfuziol** 1989 Dec;34(12):37–40 (Eng. Abstr.) **(Rus)**

[Hematologic alterations and reduction in serum folate in epileptics treated with anticonvulsants] Peñarrocha Diago M, et al. **Neurologia** 1989 May;4(4):119–23 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Improved avidin-biotin immunoperoxidase method for terminal deoxyribonucleotidyl transferase and immunophenotypic characterization of blood cells. Miller RT, et al. **Am J Clin Pathol** 1990 May;93(5):670–4

A new variant of glucose-6-phosphate dehydrogenase deficiency hereditary hemolytic anemia, G6PD Cornell: erythrocyte, leukocyte, and platelet studies. Miller DR, et al. **Blood** 1974 Sep;44(3):323–31

Evaluation of monomethoxypolyethyleneglycol derivatized superoxide dismutase in blood and evidence for its binding to blood cells. Caliceti P, et al. **Farmaco** 1989 Jul-Aug; 44(7-8):711–20

[Clinical significance of non-specific esterase and its isoenzymes of blood cells] Sakamoto S. **Nippon Rinsho** 1989 Dec;48 Suppl:1007–10 **(Jpn)**

IMMUNOLOGY

Expansion of a lymphocyte population co-expressing T4 (CD4) and T8 (CD8) antigens in the peripheral blood of a normal adult male. Kay NE, et al. **Blood** 1990 May 15; 75(10):2024–9

Osteoclasts and a small population of peripheral blood cells share common surface antigens. Hentunen TA, et al. **Calcif Tissue Int** 1990 Jul;47(1):8–17

Schistosoma mansoni modulation of phagocytosis in Biomphalaria glabrata. Fryer SE, et al. **J Parasitol** 1990 Feb;76(1):45–52

Immune competence of Aedes trivittatus hemocytes as assessed by lectin binding. Li JY, et al. **J Parasitol** 1990 Apr;76(2):276–8

[Targetted hemotherapy with special reference to the cellular components] Dörner R. **Dtsch Med Wochenschr** 1990 Jul 6;115(27):1066–72 (26 ref.) **(Ger)**

[Autoimmune diseases of blood cells and hematopoiesis] Heimpel H, et al. **Internist (Berl)** 1990 Jan;31(1):50–60 (59 ref.) **(Ger)**

METABOLISM

The intracellular pH of tunicate blood cells: Ascidia ceratodes whole blood, morula cells, vacuoles and cytoplasm. Lee SH, et al. **Biochim Biophys Acta** 1990 Mar 26;1033(3):311–7

In vitro distribution of diacetyl didemnin B in human blood cells and plasma. Phillips JL, et al. **Cancer Invest** 1989; 7(2):123–8

Capability of human blood cells to form the DNA adduct, C8-(N2-aminofluorenyl)-deoxyguanosine-3'-5'-diphosphate from 2-aminofluorene. Shen JH, et al. **Carcinogenesis** 1990 Aug;11(8):1441–4

Superoxide anion release from blood and bone marrow neutrophils is altered by endotoxemia. Cerasoli F Jr, et al. **Circ Res** 1990 Jul;67(1):154–65

vav, a novel human oncogene derived from a locus ubiquitously expressed in hematopoietic cells. Katzav S, et al. **EMBO J** 1989 Aug;8(8):2283–90

Influence of 5-hydroxymethylfurfural (5-HMF) on the overall metabolism of human blood cells. Nässberger L. **Hum Exp Toxicol** 1990 Jul;9(4):211–4

The effects of the anti-tumor agent mezerein on the cytotoxic capacity and oxidative metabolism of human blood cells. Barton K, et al. **Invest New Drugs** 1989 Jul;7(2-3):179–88

Blood eosinophils and eosinophil-derived proteins in allergic asthma. Durham SR, et al. **J Allergy Clin Immunol** 1989 Dec;84(6 Pt 1):931–6

Use of colloidal silica (Sepracell-MN) for enrichment of dendritic cells from human peripheral blood: comparison with other methods. Chehimi J, et al. **J Leukoc Biol** 1990 Jul;48(1):74–80

[Distribution of N-isopropyl-p-[I-123]iodoamphetamine among the peripheral blood components: an in vitro study] Kumazaki S, et al. **Kaku Igaku** 1990 Mar;27(3):243–8 (Eng. Abstr.) **(Jpn)**

[Insulin and glucocorticoid binding by blood cell receptors after hydrocortisone administration in rabbits] Tikhonova NE, et al. **Fiziol Zh SSSR** 1989 Jul;75(7):986–91 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Blood culture. Bhat BV, et al. **Indian Pediatr** 1990 Jan; 27(1):95–8

PATHOLOGY

Number and types of hemocytes in Sunetta scripta and Villorita cyprinoides var. cochinensis (Bivalvia), and leukocytosis subsequent to bacterial challenge. Suresh K, et al. **J Invertebr Pathol** 1990 May;55(3):312–8

Comparative analysis of CD4 subsets in peripheral blood and synovial fluid of patients with inflammatory joint disease. Crockard AD, et al. **Scand J Rheumatol** 1990;19(2):157–61

[Use of a new silicon chamber system for carrying out immunologic technics with blood and bone marrow samples and histologic specimens] Ebener U, et al. **Klin Padiatr** 1990 Jul-Aug;202(4):278–81 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Blood cells and ischemia-reperfusion injury. Leff JA, et al. **Blood Cells** 1990;16(1):183–91; discussion 191–2 (22 ref.)

Immune regulation and haemopoiesis. Gordon J. **Curr Opin Cell Biol** 1989 Apr;1(2):192–5 (15 ref.)

Hemocytes of Pomacea canaliculata: I. Reversible aggregation induced by Ca2+. Shozawa A, et al. **Dev Comp Immunol** 1990 Spring;14(2):175–84

Human interleukin 3: effects on normal and leukemic cells. Barber KE, et al. **Growth Factors** 1989;1(2):101–14

Cytoplasmic pH recovery in acid-loaded haemocytes of squid (Sepioteuthis lessoniana). Heming TA, et al. **J Exp Biol** 1990 Jan;148:385–94

Effect of gamma irradiation on the hemocyte-mediated immune response of Aedes aegypti against microfilariae. Christensen BM, et al. **J Invertebr Pathol** 1990 Jul; 56(1):123–7

The effect of schistosome excretory-secretory products on Biomphalaria glabrata hemocyte motility. Lodes MJ, et al. **J Invertebr Pathol** 1990 Jul;56(1):75–85

Studies on the cellular defense reactions of the madeira cockroach, Leucophaea maderae: in vitro phagocytosis of different strains of Bacillus cereus and their effect on hemocyte viability. Rahmet-Alla M, et al. **J Invertebr Pathol** 1990 May;55(3):350–6

Spontaneous chemiluminescence activity of peripheral blood cells during experimental allergic neuritis (EAN). Stevens A, et al. **J Neuroimmunol** 1990 Apr;27(1):33–40

Binding specificity of Fusobacterium nucleatum to human erythrocytes, polymorphonuclear leukocytes, fibroblasts, and HeLa cells. Ozaki M, et al. **J Periodont Res** 1990 May; 25(3):129–34

Anti-tumor x anti-CD3 heteroconjugates direct human peripheral blood lymphocytes to lyse colon tumor cells. Nelson H, et al. **J Surg Res** 1990 Apr;48(4):284–90

Asymmetric cell flow in narrow tubes: experimental analysis of cellular interactions. Gaehtgens P, et al. **Microvasc Res** 1990 Mar;39(2):240–5

Study on vitreous fibrosis induced by blood cells. Katakami C. **Nippon Ganka Gakkai Zasshi** 1990 Jan;94(1):33–43

Migratory deficiency of Clithon retropictus hemocytes to Vibrio parahaemolyticus and Escherichia coli. Kumazawa

NH, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):753–7
Ecology of normal and leukemic blood cells. Bernard J. **Nouv Rev Fr Hematol** 1990;32(1):43–8 (Eng, Fre)
Cellular interaction regulating the production of colony-stimulating factors. Griffin JD, et al. **Prog Clin Biol Res** 1990;338:129–41 (49 ref.)
Cell physiology of blood. **Soc Gen Physiol Ser** 1988;43:1–402
[Preliminary observation of blood cells and hematopoietic organs in Lutjanus herenbergi and Lutjanus flaviflammus] Rosaspina S, et al. **Boll Soc Ital Biol Sper** 1990 Jan; 66(1):21–7 (Eng. Abstr.) (Ita)
[The effect of blast cells on blood coagulation in patients with acute leukemia] Rozanova LS, et al. **Patol Fiziol Eksp Ter** 1990 Jan–Feb;(1):43–5 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Blood responses under chronic low daily dose gamma irradiation: I. Differential preclinical responses of irradiated male dogs in progression to either aplastic anemia or myeloproliferative disease. Seed TM, et al. **Leuk Res** 1989; 13(12):1069–84

TRANSPLANTATION

Proceedings of the International Symposium on Peripheral Blood Stem Cell Autografts. 15–17 October, 1989, Mulhouse, France. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:1–81
Transplants of blood-derived hematopoietic cells. Gale RP, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:2–4 (0 ref.)
Biocompatibility and safety of cytapheresis. Kretschmer V, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:10–20; discussion 28–9 (Eng, Ger)
[Recommendations from the 12th Scandinavian meeting on transfusion medicine] Eklund J, et al. **Nord Med** 1990; 105(4):119–20 (Dan)

ULTRASTRUCTURE

A new hematopoietic cell line, KMT-2, having human interleukin-3 receptors. Tamura S, et al. **Blood** 1990 Aug 1;76(3):501–7
Ultrastructural studies of the hemocytes of Panstrongylus megistus (Hemiptera: Reduviidae). Barracco MA, et al. **Mem Inst Oswaldo Cruz** 1989 Apr–Jun;84(2):171–88
Scanning electron microscopy of normal human peripheral blood cells. Yang SC. **Taiwan I Hsueh Hui Tsa Chih** 1989 Nov–Dec;88(11–12):1128–32
[Ag-negative phenomenon of nucleolar organizers of bone marrow and blood cells in children with acute lymphoblastic leukemia] Ikonnikova OA, et al. **Eksp Onkol** 1990;12(4):40–3 (Eng. Abstr.) (Rus)

BLOOD CHEMICAL ANALYSIS

Clinical chemistry reference intervals for healthy elderly subjects [see comments] Garry PJ, et al. **Am J Clin Nutr** 1989 Nov;50(5 Suppl):1219–30; discussion 1231–5 Comment in: Am J Clin Nutr 1990 Jun;51(6):1115–6.
Intravenous fluorescein interference with clinical laboratory tests. Bloom JN, et al. **Am J Ophthalmol** 1989 Oct 15; 108(4):375–9
Interference by haemolysis, icterus and lipaemia in assays on the Beckman Synchron CX5 and methods for correction. Randall AG, et al. **Ann Clin Biochem** 1990 Jul; 27 (Pt 4):345–52
Biochemical values of immigrant groups in north-east France. Vincent-Viry M, et al. **Ann Hum Biol** 1990 Jul–Aug;17(4):277–87
The impact of whole-blood testing on response time. A challenge for the new College of American Pathologists Q-Probes program. Kost GJ. **Arch Pathol Lab Med** 1990 Sep;114(9):921–2
New whole-blood testing for laboratory support of critical care at cardiac transplant centers and US hospitals. Kost GJ, et al. **Arch Pathol Lab Med** 1990 Aug;114(8):865–8
Delay in centrifugation and measurement of serum constituents in normal subjects. Devgun MS. **Clin Physiol Biochem** 1989;7(3–4):189–97
A simple immunosorbent assay for detection of human blood. Kashyap VK. **J Immunoassay** 1989;10(4):315–24
Multichannel 18-test panels: are 60% of panels abnormal by chance? Desbiens NA, et al. **J Lab Clin Med** 1990 Mar; 115(3):292–7
Routine blood chemistry screen: a diagnostic aid for Alzheimer's disease. Kasa M, et al. **Neuroepidemiology** 1989;8(5):254–61
Sex differences in blood constituents of rats following tail suspension. Nakaya M, et al. **Physiologist** 1990 Feb;33(1 Suppl):S110–1
DST status and blood chemistries in prepubertal children. Yaylayan SA, et al. **Psychiatry Res** 1989 Aug;29(2):215–9
Comparative blood chemical data related to aging, femoral neck fracture and hip osteoarthrosis. Rapin CH, et al. **Z Rheumatol** 1989 Jul–Aug;48(4):175–81
[Laboratory findings for the preoperative evaluation of patients with otherwise no organic disorders] Pfaff A, et al. **Ned Tijdschr Geneeskd** 1989 Nov 18;133(46):2291–3 (Eng. Abstr.) (Dut)
[Individual physical performance capacity with physiological and biochemical indicators of stress] Bergert KD, et al. **Z Gesamte Hyg** 1989 Sep;35(9):572–4 (Eng. Abstr.) (Ger)
[Effects of breathing high concentrations of oxygen on changes in blood indices during bicycle exercise] Nagata A, et al. **Ann Physiol Anthropol** 1990 Jan;9(1):21–9 (Eng. Abstr.) (Jpn)
[Screening of drugs and chemicals by wide-bore capillary gas chromatography. II. Detection of drugs and chemicals in the blood] Kageura M, et al. **Nippon Hoigaku Zasshi** 1990 Apr;44(2):126–30 (Eng. Abstr.) (Jpn)
[Blood chemical analysis, urinalysis, immunologic tests—interpretation of the data] **Nippon Rinsho** 1989 Dec; 48 Suppl:1–1300 (Jpn)
[Age, sex and genetics in normal value] Funato T, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:19–26 (Jpn)
[Five-year follow-up studies of laboratory data in the elderly group] Fushimi N, et al. **Nippon Ronen Igakkai Zasshi** 1989 Mar;26(2):179–80 (Jpn)
[A simple and informative method of diagnosing myocardial infarct, based on a determination of blood density] Rozenshteĭn IuB, et al. **Klin Med (Mosk)** 1989 Jul; 67(7):137–9 (Eng. Abstr.) (Rus)

INSTRUMENTATION

Transcutaneous bilirubinometry. Interinstrumental variability of TcB instruments. Yamauchi Y, et al. **Acta Paediatr Scand** 1989 Nov;78(6):844–7
Precision and accuracy of a portable blood analyzer system during cholesterol screening. Greenland P, et al. **Am J Public Health** 1990 Feb;80(2):181–4
The interpretation of results by doctor technicians [letter] Verma PK, et al. **Anaesthesia** 1990 May;45(5):412
Blood chemistry by disposable ISE with the Chempro 500 system. Gourmelin Y, et al. **Ann Biol Clin (Paris)** 1989; 47(10):597–600
Near patient testing is within reach [letter] Lawrie B. **Br J Gen Pract** 1990 Apr;40(333):169–70
Continuous ex vivo and in vivo monitoring with chemical sensors. Fogt EJ. **Clin Chem** 1990 Aug;36(8 Pt 2):1573–80 (35 ref.)
New in vitro analytical approaches for clinical chemistry measurements in critical care. Meyerhoff ME. **Clin Chem** 1990 Aug;36(8 Pt 2):1567–72
Direct reading glucose electrodes detect the molality of glucose in plasma and whole blood. Fogh-Andersen N, et al. **Clin Chim Acta** 1990 Jul;189(1):33–8
Lidocaine interference with Ektachem analyzer determinations of serum creatinine concentration. Spinler SA, et al. **Clin Pharm** 1989 Sep;8(9):659–63
Transducer mechanisms for optical biosensors. Part 2: Transducer design. Ashworth DC, et al. **Comput Methods Programs Biomed** 1989 Sep;30(1):21–31 (9 ref.)
Transducer mechanisms for optical biosensors. Part 1: The chemistry of transduction. Seitz WR. **Comput Methods Programs Biomed** 1989 Sep;30(1):9–19 (56 ref.)
Bedside blood gas and electrolyte monitoring in critically ill patients [letter; comment] Burrows S. **Crit Care Med** 1990 Jun;18(6):684–5 Comment on: Crit Care Med 1989 Sep;17(9):920–5.
Effects of introducing an office chemistry machine. O'Brien DK, et al. **Fam Pract Res J** 1990 Spring-Summer; 9(2):115–22
Instrumentation Laboratory Monarch 2000-761 Chemistry Analyzer Systems. **Health Devices** 1989 May;18(5):177
Eastman Kodak Ektachem 400 clinical chemistry analyzers. **Health Devices** 1988 Nov;17(11):355–6
Instrumentation Laboratory Genesis 21 clinical chemistry analyzers. **Health Devices** 1988 Jun–Jul;17(6–7):213
An evaluation of the improved Technicon Chem 1 system. Blijenberg BG, et al. **J Clin Chem Clin Biochem** 1989 Jul; 27(7):457–69
Evaluation of the Beckman Synchron CX4 clinical chemistry analyzer in a hospital laboratory. Ambus T, et al. **J Clin Lab Anal** 1990;4(2):120–5
Clinical assessment of the Hitachi 736-30 chemistry analyzer. Schotters SB, et al. **J Clin Lab Anal** 1990;4(2):157–60
How reliably can compact chemistry analyzers measure lipids? [see comments] Kaufman HW, et al. **JAMA** 1990 Mar 2;263(9):1245–9 Comment in: JAMA 1990 Mar 2;263(9):1250–2.
The accuracy of portable cholesterol analyzers in public screening programs [see comments] Naughton MJ, et al. **JAMA** 1990 Mar 2;263(9):1213–7 Comment in: JAMA 1990 Mar 2:263(9):1250–2.
Performance of dry-chemistry instruments in primary health care. Sandberg S, et al. **Scand J Clin Lab Invest** 1989 Sep; 49(5):483–8
Reliability of the Reflotron in the determination of cholesterol. Selmer R, et al. **Scand J Clin Lab Invest** 1990 May;50(3):261–71
[Mass spectroscopy and headspace gas chromatography] Weller JP, et al. **Beitr Gerichtl Med** 1989;47:525–32 (Eng. Abstr.) (Ger)
[Use and evaluation of reflectometry determination procedures in pediatric-internal medicine acute and emergency diagnosis] Krawinkel M, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:227–8 (Ger)

METHODS

Chemical sensors for bedside monitoring of critically ill patients. Collison ME, et al. **Anal Chem** 1990 Apr 1; 62(7):425A–437A
Extended life for blood serum analysis columns using dual zone chromatographic materials. Williams DE, et al. **Anal Chem** 1990 Apr 15;62(8):807–10
Reference values: Bhattacharya or the method proposed by the IFCC? Oosterhuis WP, et al. **Ann Clin Biochem** 1990 Jul;27 (Pt 4):359–65
Interference by haemolysis, icterus and lipaemia in assays on the Beckman Synchron CX5 and methods for correction. Randall AG, et al. **Ann Clin Biochem** 1990 Jul; 27 (Pt 4):345–52
The bone marrow as a source of laboratory studies. Orlowski JP, et al. **Ann Emerg Med** 1989 Dec;18(12):1348–51
Macroenzymes: biochemical characterization, clinical significance, and laboratory detection. Remaley AT, et al. **Clin Chem** 1989 Dec;35(12):2261–70 (153 ref.)
Multicentre evaluation of the Boehringer Mannheim/Hitachi 717 analysis system. Baadenhuijsen H, et al. **J Clin Chem Clin Biochem** 1990 Apr;28(4):261–9
The clinical measurement of serum transferrin receptor. Flowers CH, et al. **J Lab Clin Med** 1989 Oct;114(4):368–77
Immunoassay of serum transferrin receptors: clinical implications [editorial] Trowbridge IS. **J Lab Clin Med** 1989 Oct;114(4):336–7
Comparison of total serum lipids measured by two methods. Heubi JE, et al. **J Pediatr Gastroenterol Nutr** 1990 May; 10(4):468–72
Plasma alloisoleucine: analytical method and clearance in ketoacid-supplemented normals. Ponto KH, et al. **Kidney Int Suppl** 1989 Nov;27:S177–83
Effects of serum storage on the determination of cholesterol. Pini C, et al. **Ric Clin Lab** 1990 Jan–Mar;20(1):37–44
[Clinical and biochemical monitoring] Schauder P. **Beitr Infusionther** 1990;25:19–28 (12 ref.) (Ger)
[Methods of cholesterol determination: conventional procedure or "dry chemistry"?] Riesen W, et al. **Ther Umsch** 1990 Jun;47(6):456–66 (Eng. Abstr.) (Ger)
[Biochemical microanalysis in a practical laboratory: use of capillary blood] Deviatova ON, et al. **Lab Delo** 1989; (8):73–4 (Rus)
[A membrane method of treating the blood during the determination of low molecular metabolites] Il'inich OM, et al. **Lab Delo** 1990;(4):64–6 (Rus)

STANDARDS

Quantitative serum toxic screening in the management of suspected drug overdose. Mahoney JD, et al. **Am J Emerg Med** 1990 Jan;8(1):16–22
Screening trace elements and electrolytes in serum by inductively-coupled plasma emission spectrometry. Melton LA, et al. **Clin Chem** 1990 Feb;36(2):247–50
Evaluation of human serum based tumor marker control. Chapman D, et al. **J Nucl Med Allied Sci** 1989 Jul–Sep; 33(3 Suppl):114–7
Technical considerations and analytical performances concerning an automated IEMA method for the quantitative measurement of alpha-fetoprotein (AFP) in serum. Cristoferi M, et al. **J Nucl Med Allied Sci** 1989 Jul–Sep;33(3 Suppl):125–30
Normal? Tis or it isn't? Manser WW. **JPMA** 1989 Oct; 39(10):254–6
Actual situation in the field of standardization of methods for the determination of lipid parameters. Jaross W. **Przegl Lek** 1989;46(7):566–73 (Eng, Pol)
[Help with decisions on the assessment of clinical chemistry results] Keller H. **Z Med Lab Diagn** 1989;30(8):416–24 (8 ref.) (Ger)
[Analyses of alcohol performed at hospitals are not quite reliable. External quality control should be performed at least once a year] Falkensson M, et al. **Lakartidningen** 1990 Feb 14;87(7):470–3 (Swe)

STATISTICS & NUMERICAL DATA

Multivariate calibration for assays in clinical chemistry using attenuated total reflection infrared spectra of human blood plasma. Janatsch G, et al. **Anal Chem** 1989 Sep 15; 61(18):2016–23
Pediatric reference intervals for 19 biologic variables in healthy children [see comments] Burritt MF, et al. **Mayo Clin Proc** 1990 Mar;65(3):329–36 Comment in: Mayo Clin Proc 1990 Mar;65(3):431–5.

TRENDS

Current analytical approaches to measuring blood analytes. Burritt MF. **Clin Chem** 1990 Aug;36(8 Pt 2):1562–6
[Superfluous clinico-chemical studies, a contribution to rational clinico-chemical diagnosis] Greiling H. **Verh Dtsch Ges Inn Med** 1989;95:147–51 (Ger)

VETERINARY

Reference blood chemical values in ostriches (Struthio camelus). Levy A, et al. **Am J Vet Res** 1989 Sep; 50(9):1548–50
Hematology and blood chemistry of chicks of white and black storks (Ciconia ciconia and Ciconia nigra). Puerta ML, et al. **Comp Biochem Physiol [A]** 1989;94(2):201–4
Evaluation of an automated tabletop blood biochemical

analyzer for the veterinary clinical pathology laboratory. Sallee S, et al. **J Am Vet Med Assoc** 1990 Jan 15; 196(2):307–12

Changes in mallard (Anas platyrhynchos) serum chemistry due to age, sex, and reproductive condition. Fairbrother A, et al. **J Wildl Dis** 1990 Jan;26(1):67–77

Reference values of hematological, serum biochemical and hormonal examinations in female cynomolgus monkeys (Macaca fascicularis) of feral origin. Yoshida T, et al. **Jikken Dobutsu** 1989 Jul;38(3):259–62

[The dry chemical system Kodak Ectachem DT 60. Working methods, performance and suitability for laboratory diagnosis in dogs and cats] Scholz U, et al. **Tierarztl Prax** 1989;17(3):327–37 (Eng. Abstr.) **(Ger)**

[A comparison of hematological and serum biochemical values between two groups of female cynomolgus monkeys reared under different conditions] Yoshida T, et al. **Jikken Dobutsu** 1990 Jan;39(1):21–6 (Eng. Abstr.) **(Jpn)**

BLOOD CIRCULATION

see related
HYPEREMIA
ISCHEMIA
PLETHYSMOGRAPHY

Increases in flow reduce the release of endothelium-derived relaxing factor in the aorta of normotensive and spontaneously hypertensive rats. Hoeffner U, et al. **Am J Hypertens** 1989 Oct;2(10):762–7

Intrauterine growth retardation and the circulatory responses to acute hypoxemia in fetal sheep. Block BS, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1576–9

Intrauterine asphyxia and the breakdown of physiologic circulatory compensation in fetal sheep. Block BS, et al. **Am J Obstet Gynecol** 1990 May;162(5):1325–31

Influence of lung inflation reflex on vascular capacitance in the systemic circulation. Cheng EY, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1004–11

Baroreflex regulation of regional blood flow in congestive heart failure. Creager MA, et al. **Am J Physiol** 1990 May; 258(5 Pt 2):H1409–14

Local blood flow measured by fluorescence excitation of nonradioactive microspheres. Morita Y, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1573–84

Measurement of mean circulatory filling pressure and vascular compliance in domestic pigs. Ogilvie RI, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1925–32

Blood flow and oxygen delivery to fetal organs and tissues during sustained hypoxemia. Rurak DW, et al. **Am J Physiol** 1990 May;258(5 Pt 2):R1116–22

ADH, renal, and circulatory responses to adrenergic stimulation in anterior third ventricle. Simon-Oppermann C, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R294–304

CPR-dependent consciousness: evidence for cardiac compression causing forward flow. Lewinter JR, et al. **Ann Emerg Med** 1989 Oct;18(10):1111–5

Temporal muscle blood flow in chronic tension-type headache. Langemark M, et al. **Arch Neurol** 1990 Jun; 47(6):654–8

Dynamic monitoring of platelet deposition on severely damaged vessel wall in flowing blood. Effects of different stenoses on thrombus growth. Lassila R, et al. **Arteriosclerosis** 1990 Mar-Apr;10(2):306–15

Noninvasive assessment of cranial blood circulation in the fetus. Lingman G, et al. **Biol Neonate** 1989;56(3):129–35

Abstracts. 12. annual meeting, Japanese Society of Biorheology. Tsukuba Science City, Japan, 5–7 July 1989. **Biorheology** 1989;26(6):1051–81

Rheological properties of erythrocytes in recombinant human erythropoietin-administered normal rat. Maeda N, et al. **Br J Haematol** 1989 Sep;73(1):105–11

Physical exercise and blood flow properties. Ciuffetti G, et al. **Br J Sports Med** 1990 Mar;24(1):45–6

Pulsatile flow patterns in distensible tubes. Attinger EO, et al. **Circ Res** 1966 Apr;18(4):447–56

Regional redistribution of blood flow in the mature fetal lamb. Campbell AG, et al. **Circ Res** 1967 Aug;21(2):229–35

The circulation of the fetus in utero. Methods for studying distribution of blood flow, cardiac output and organ blood flow. Rudolph AM, et al. **Circ Res** 1967 Aug;21(2):163–84

Detection of moving flow separation in pulsatile flow and the degree of stenosis by power of Doppler shift signals. Tamura T, et al. **Circ Res** 1990 Jul;67(1):166–74

High-dose atrial natriuretic factor enhances albumin escape from the systemic but not the pulmonary circulation. Zimmerman RS, et al. **Circ Res** 1990 Aug;67(2):461–8

The diastolic hyperemic flow versus pressure relation. A new index of coronary stenosis severity and flow reserve. Mancini GB, et al. **Circulation** 1989 Oct;80(4):941–50

The peripheral circulation and lactic acid metabolism in heart, or cardiovascular, failure. Wasserman K. **Circulation** 1989 Oct;80(4):1084–6

Two-needle calculation of recirculation compared with the standard three-needle method. Pederson JA, et al. **Clin Nephrol** 1990 Apr;33(4):203–6

Reference values for resting blood flow to organs of man. Williams LR, et al. **Clin Phys Physiol Meas** 1989 Aug; 10(3):187–217 (291 ref.)

Tissue perfusion in anaesthetised sheep. Weaver BM, et al. **Comp Biochem Physiol [A]** 1990;95(3):359–61

Peripheral tissue perfusion [editorial] Tremper KK. **Crit Care Med** 1989 Dec;17(12):1362–3

Improving exercise tolerance in patients with chronic heart failure: should we treat the heart or the periphery? VO2 French Study Group. Cohen-Solal A. **Eur Heart J** 1989 Oct;10(10):866–71 (59 ref.)

Transabdominal and transvaginal color Doppler in the assessment of fetomaternal circulation during all three trimesters of pregnancy. Kurjak A, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Sep;36(3):240–7

Effects of temperature on blood circulation measured with the laser Doppler method. Song CW, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):1041–7

Translation of Otto Frank's paper "Die Grundform des Arteriellen Pulses" Zeitschrift für Biologie 37: 483–526 (1899).[classical article] Sagawa K, et al. **J Mol Cell Cardiol** 1990 Mar;22(3):253–77

Continuous volume infusion improves circulatory stability in anesthesized rats. Quintin L, et al. **J Neurosci Methods** 1989 Oct;30(1):77–83

Regional blood flow distribution during extracorporeal membrane oxygenation in rabbits. Nowlen TT, et al. **J Thorac Cardiovasc Surg** 1989 Dec;98(6):1138–43

Determination of left to right shunt by thermodilution in patients with ventricular septal defect. Saitoh M, et al. **Jpn Circ J** 1989 Oct;53(10):1205–14

Non-invasive assessment of the steal phenomenon following femoro-femoral bypass. Yamashita H, et al. **Jpn J Surg** 1990 Jan;20(1):1–9

Epidural block for Caesarean section and circulatory changes. **Lancet** 1989 Nov 4;2(8671):1076–8 (21 ref.)

Shear-induced platelet aggregation. O'Brien JR. **Lancet** 1990 Mar 24;335(8691):711–3 (29 ref.)

SMRM Workshop on Magnetic Resonance Imaging of Blood Flow. March 13–14, 1989, Philadelphia, Pennsylvania. **Magn Reson Med** 1990 May;14(2):171–320

Mechanics and imaging of the macrocirculation. Caro CG, et al. **Magn Reson Med** 1990 May;14(2):179–86

Flow artifact reduction in MRI: a review of the roles of gradient moment nulling and spatial presaturation. Ehman RL, et al. **Magn Reson Med** 1990 May;14(2):293–307

The application of phase shifts in NMR for flow measurement. Firmin DN, et al. **Magn Reson Med** 1990 May;14(2):230–41

Time-of-flight MR angiography. Nishimura DG. **Magn Reson Med** 1990 May;14(2):194–201

Time-of-flight effects in MR imaging of flow. Wehrli FW. **Magn Reson Med** 1990 May;14(2):187–93

Convective-dispersive characteristics of tracer transport calculated from transfer function analysis of biological indicator-dilution curves. Palmer BM, et al. **Med Phys** 1989 Nov-Dec;16(6):889–95

Theoretical investigation of estimation of steady and pulsatile blood flow and blood vessel cross section by CW NMR excitation. De DK. **Phys Med Biol** 1990 Feb;35(2):197–211

A computer controlled flow phantom for generation of physiological Doppler waveforms. Hoskins PR, et al. **Phys Med Biol** 1989 Nov;34(11):1709–17

Distribution of systemic blood flow during anoxia in the turtle, Chrysemys scripta. Davies DG. **Respir Physiol** 1989 Dec;78(3):383–9

Principles of design of fluid transport systems in zoology. LaBarbera M. **Science** 1990 Aug 31;249(4972):992–1000

Maldistribution of blood flow during positive end expiratory pressure. Manny J, et al. **Surg Forum** 1978;29:203–5

Fluid mechanics and biorheology. Copley AL. **Thromb Res** 1990 Feb 1;57(3):315–31

Changes in blood cell rheology associated with acute rejection following cardiac transplantation. Roberts D, et al. **Transplant Proc** 1990 Aug;22(4):1444–5

Effects of vasopressin and catecholamines on the maintenance of circulatory stability in brain-dead patients. Iwai A, et al. **Transplantation** 1989 Oct;48(4):613–7

[The role of hemorheologic changes in the pathogenesis of acute hemorrhagic necrotizing pancreatitis] Yan L, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Mar;21(1):25–9 (Eng. Abstr.) **(Chi)**

[Quantification of pulmonary to systemic flow ratio (Qp/Qs) in children with patent ductus arteriosus by echocardiography] Zhang YO, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Jun;20(2):190–3 (Eng. Abstr.) **(Chi)**

[Additional findings on age differences in the blood circulation in rats] Kapitola J, et al. **Sb Lek** 1989 Sep; 91(8):259–64 (Eng. Abstr.) **(Cze)**

[Hemorheology and thrombosis. Proceedings of the 3d national meeting of the Italian Society of Hemorheology. Firenze, 4–6 February 1988] **Ric Clin Lab** 1989;19 Suppl 1:1–191 **(Ita)**

[Quantitative assessment of arterial capacitance in human by noninvasive method] Akizuki S, et al. **Kokyu To Junkan** 1989 Nov;37(11):1215–9 (Eng. Abstr.) **(Jpn)**

[Experimental study on the changes in circulatory kinetics due to an increase of intraabdominal pressure: the effective monitoring of the pressure of inferior vena cava] Uno T, et al. **Nippon Geka Gakkai Zasshi** 1989 Oct;90(10):1685–91 (Eng. Abstr.) **(Jpn)**

[Blood flow measurement with impedance plethysmography—experimental and clinical application in orthopaedic surgery] Matsumoto T, et al. **Nippon Seikeigeka Gakkai Zasshi** 1990 Apr;64(4):198–207 (Eng. Abstr.) **(Jpn)**

[Comparative studies of the circulatory system during high frequency inspiratory ventilation and inspiratory positive pressure ventilation] Nestorowicz A, et al. **Pol Tyg Lek** 1989 Feb 6;44(6):142–3 (Eng. Abstr.) **(Pol)**

[Possibilities of Doppler ultrasonics in the study of blood flow in the iliac and ovarian arteries in healthy women] Strizhakov AN, et al. **Akush Ginekol (Mosk)** 1989 Jul; (7):28–31 (Eng. Abstr.) **(Rus)**

[Effect of acute preoperative hemodilution on circulation, oxygen budget and blood coagulation] Syvorotkin MV, et al. **Anesteziol Reanimatol** 1989 May-Jun;(3):35–7 (Eng. Abstr.) **(Rus)**

[Systemic and regional hemodynamics in conscious rats during 24-hour antiorthostatic posture] Bychkova EIu, et al. **Biull Eksp Biol Med** 1990 Jan;109(1):20–3 (Eng. Abstr.) **(Rus)**

[The role of the leukocytes in the blood-vasal regulation of the blood circulation] Gabrielian ES, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):660–2 (Eng. Abstr.) **(Rus)**

[Characteristics of the circulation of the lower extremities in young schoolchildren engaged in various types of sports] Ul'nitskii VI, et al. **Fiziol Cheloveka** 1989 May-Jun; 15(3):113–20 **(Rus)**

[Changes in the structure of the gastric mucosa in chronic disorders of visceral blood circulation] Karimov ShI, et al. **Khirurgiia (Mosk)** 1989 Sep;(9):73–8 (Eng. Abstr.) **(Rus)**

[Functional reserves of blood circulation in aged patients] Riabov GA, et al. **Khirurgiia (Mosk)** 1989 Sep;(9):68–72 (Eng. Abstr.) **(Rus)**

[Characteristics of arterial and venous hemodynamics in peptic ulcer and chronic gastroduodenitis] Uspenskii VM, et al. **Klin Med (Mosk)** 1990 Mar;68(3):101–4 **(Rus)**

[Dynamics of the indicators of blood circulation in children with bronchial asthma treated by reflexotherapy] Podgalo DA, et al. **Pediatriia** 1990;(6):72–6 **(Rus)**

[Time-related adaptation of hemodynamics of the greater and pulmonary circulation in healthy newborn infants] Smishnaia MP. **Pediatriia** 1989;(8):112 **(Rus)**

[Characteristics of blood circulation disorders in meningococcal meningoencephalitis] Radzivil GG, et al. **Sov Med** 1990;(6):7–10 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Circulatory effect of kallikrein; with special reference to cerebral circulation. Miyazaki M. **Adv Exp Med Biol** 1989; 247B:607–10

Hemodynamic effects of antiarrhythmic drugs: negative inotropy versus influence on peripheral circulation. Seipel L, et al. **Am J Cardiol** 1989 Dec 5;64(20):37J–40J

Cyclosporine augments renal but not systemic vascular reactivity. Garr MD, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):F211–7

Effects of vasopressin on pulmonary and systemic vascular mechanics. Wallace AW, et al. **Am J Physiol** 1989 Oct; 257(4 Pt 2):H1228–34

Long-term effects of nimodipine on pial microvasculature and systemic circulation in conscious rats. Yuan XQ, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1395–401

The effects of long term administration of prazosin on the microcirculation in skeletal muscles. Dawson JM, et al. **Cardiovasc Res** 1989 Nov;23(11):913–20

Blood rheology: effect of fibrinogen deduced by addition. Merrill EW, et al. **Circ Res** 1966 Apr;18(4):437–46

Influence of 7% NaCl on the mechanical properties of the systemic circulation in the hypovolemic dog. Schertel ER, et al. **Circ Shock** 1990 Jun;31(2):203–14

The effect of calcitonin gene-related peptide (CGRP) on human forearm blood flow. Jernbeck J, et al. **Clin Physiol** 1990 Jul;10(4):335–43

Fetal umbilical and internal carotid artery blood flow velocity waveforms during maternal fenoterol administration. Cheung K, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 May-Jun; 35(2-3):147–51

Effect of hindlimb suspension on cardiovascular responses to sympathomimetics and lower body negative pressure. Overton JM, et al. **J Appl Physiol** 1990 Jan;68(1):355–62

Local inhibition of converting enzyme and vascular responses to angiotensin and bradykinin in the human forearm. Benjamin N, et al. **J Physiol (Lond)** 1989 May;412:543–55

Effects of arachidonic acid in the rabbit pulmonary and systemic vascular beds in vivo. el-Kashef HA, et al. **Pharmacology** 1990;40(1):60–8

PGE1 improves blood flow in skin capillaries of conscious rats (WKY and SHR) through their lifetime in different dose ranges. Hertel RF, et al. **Prog Clin Biol Res** 1989; 301:429–33

[Blood circulation and oxygen consumption are important subjects for research on the principle of promoting blood circulation and relieving stasis] Zhao LG. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Oct;9(10):624–5 (Eng. Abstr.) **(Chi)**

[Insulin has direct effects on circulation and the sympathetic nervous system (letter)] Christensen NJ. **Ugeskr Laeger** 1990 Jan 29;152(5):332–3 **(Dan)**

[Effects of pentoxifylline on the ocular rheographic pulse in diabetic patients] Colombati S, et al. **Ric Clin Lab** 1989; 19 Suppl 1:185–7 **(Ita)**

[Rheographic effects of timolol maleate in a collyrium on the ocular microcirculation in diabetic patients] Colombati S, et al. **Ric Clin Lab** 1989;19 Suppl 1:189–91 **(Ita)**

[Respiratory and circulatory changes after the intratracheal infusion of bile acids in dogs] Kaneko T. **Masui** 1989 Nov; 38(11):1411–20 (Eng. Abstr.) **(Jpn)**

[Effects of isosorbide dinitrate on body water spaces in chronic blood circulation insufficiency] Sharashidze ML, et al. **Ter Arkh** 1989;61(6):119–21 **(Rus)**

[Nifedipine in the treatment of diseases of the circulatory organs (a review of the literature)] Revutskiĭ EL, et al. **Vrach Delo** 1989 Nov;(11):62–7 (59 ref.) **(Rus)**

PHYSIOLOGY

Effects of diazepam on the carotid sinus baroreflex control of circulation in rabbits. Sakamoto M, et al. **Acta Physiol Scand** 1990 Jun;139(2):281–7

Noninvasive methods to study autonomic nervous control of circulation. Lindqvist A. **Acta Physiol Scand Suppl** 1990; 588:1–107 (262 ref.)

Doppler assessment of the fetal and uteroplacental circulation during nifedipine therapy for preterm labor. Mari G, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1514–8

Flow stimulates endothelial cells to release a nitrovasodilator that is potentiated by reduced thiol. Cooke JP, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H804–12

Epicardial serotonin receptors in circulatory control in conscious Sprague–Dawley rats. Veelken R, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H466–72

Characteristics of the limb circulation in hypertension. Solti F, et al. **Angiology** 1990 Jul;41(7):541–6

A theoretical description of arterial pressure–flow relationships with verification in the isolated hindlimb of the dog. Jackman AP, et al. **Ann Biomed Eng** 1990; 18(1):89–101

Electric properties of flowing blood and impedance cardiography. Visser KR. **Ann Biomed Eng** 1989; 17(5):463–73

Respiration, circulation, and energy metabolism in exercise—their regulation and coordination. Tokyo, Japan, October 11, 1989. Proceedings. **Ann Physiol Anthropol** 1990 Apr;9(2):115–239

Artificial blood circulation: stabilization, physiological control, and optimization. Lerner AY. **Artif Organs** 1990 Apr;14(2):110–7

Loss of anticoagulant effect of heparin during circulation of human blood in vitro. Pijl AJ, et al. **Artif Organs** 1990 Apr;14(2):125–9

Physiological and immunocytochemical evidence for a new concept of blood flow regulation in the corpus luteum. Wiltbank MC, et al. **Biol Reprod** 1990 Jan;42(1):139–49

International Symposium on Biofluid Mechanics and Biorheology. Munich, F.R. Germany, 25–28 June 1989. Abstracts. **Biorheology** 1990;27(1):79–102

Microcontinuum model for pulsatile blood flow through a stenosed tube. Chaturani P, et al. **Biorheology** 1989; 26(4):835–46

Circulatory regulation at rest and exercise and the functional assessment of patients with congestive heart failure. Jennings GL, et al. **Circulation** 1990 Jan;81(1 Suppl):II5–13 (64 ref.)

Neurocirculatory regulation in cortisol-induced hypertension. Szemeredi K, et al. **Clin Exp Hypertens [A]** 1989;11(8):1425–39

Individual features of circulatory power spectra in man. Honzíková N, et al. **Eur J Appl Physiol** 1990;59(6):430–4

Control of regional blood flow by endothelium-derived nitric oxide. Gardiner SM, et al. **Hypertension** 1990 May; 15(5):486–92

Respiration during recovery from exercise: effects of trapping and release of femoral blood flow. Innes JA, et al. **J Appl Physiol** 1989 Dec;67(6):2608–13

A computerized respiratory system including test functions of lung and circulation. Jansen JR, et al. **J Appl Physiol** 1989 Oct;67(4):1687–91

Oxygen consumption and distribution of blood flow in rats climbing a laddermill. Norton KI, et al. **J Appl Physiol** 1990 Jan;68(1):241–7

Influence of the renin-angiotensin system on human forearm blood flow. Stadeager C, et al. **J Appl Physiol** 1990 Feb; 68(2):527–32

Linear and nonlinear one-dimensional models of pulse wave transmission at high Womersley numbers. Reuderink PJ, et al. **J Biomech** 1989;22(8–9):819–27

Adaptation of the uterine arcade in rats to pregnancy. Nienartowicz A, et al. **J Dev Physiol** 1989 Aug;12(2):101–8

Simple electrical model of the circulation to explore design parameters for a skeletal muscle ventricle. Voytik SL, et al. **J Heart Transplant** 1990 Mar–Apr;9(2):160–74

Cardiac hypertrophy impairs cardiac receptor control of circulation in man. Giannattasio C, et al. **J Hypertens Suppl** 1989 Dec;7(6):S56–7

Systemic and forearm vascular resistance changes after upright bicycle exercise in man. Coats AJ, et al. **J Physiol (Lond)** 1989 Jun;413:289–98

Role of central opiate receptor subtypes in the circulatory responses of awake rabbits to graded caval occlusions. Evans RG, et al. **J Physiol (Lond)** 1989 Dec;419:15–31

Paraplegic pressure sore frequency versus circulation measurements. Bennett L, et al. **J Rehabil Res Dev** 1990 Spring;27(2):115–26

Blood flow redistribution during spontaneous wheel walk of the rat. Takemoto Y, et al. **Jpn J Physiol** 1989; 39(6):847–55

Dye studies on flow through branching tubes. Rong FW, et al. **Microvasc Res** 1990 Mar;39(2):186–202

Blood flow in large arteries: applications to atherogenesis and clinical medicine. International Symposium on Biofluid Mechanics. Palm Springs, CA, April 27–29, 1988. **Monogr Atheroscler** 1990;15:1–281

Influence of fluid removal during haemodialysis on macro- and skin microcirculation. Haemodynamic pathophysiologic study of fluid removal during haemodialysis. Leunissen KM, et al. **Nephron** 1990; 54(2):162–8

An NMR assessment of the rheological properties of blood and its constituents: a review. Berling C, et al. **NMR Biomed** 1989 Jun;2(1):1–6 (46 ref.)

Blood flow: insights from ultrasound. Wells PN. **Proc Inst Mech Eng [H]** 1990;204(H1):1–20 (96 ref.)

Central control of the circulation by the rostral ventrolateral reticular nucleus: anatomical substrates. Ruggiero DA, et al. **Prog Brain Res** 1989;81:49–79 (98 ref.)

[Study of venous inflow and outflow using mercury gauge venous occlusion plethysmography during pregnancy] Lermusiaux P, et al. **J Mal Vasc** 1990;15(1):26–9 (Eng. Abstr.) **(Fre)**

[Doppler sonographic determination of specific hemodynamic changes in fetal circulation during the last four weeks before birth] Vetter K, et al. **Z Geburtshilfe Perinatol** 1989 Sep–Oct;193(5):215–8 (Eng. Abstr.) **(Ger)**

[Analysis of the function of the circulatory system and its components based on rheologic viewpoints] Mikita J, et al. **Orv Hetil** 1989 Oct 8;130(41):2187–8, 2191–4 (35 ref.) (Eng. Abstr.) **(Hun)**

[Hemorheological factors and diabetic arterial and arteriolar diseases] Pozza G, et al. **Ric Clin Lab** 1989;19 Suppl 1:53–7 **(Ita)**

[The heart as an organ regulating the circulation] Takeshita A. **Fukuoka Igaku Zasshi** 1990 Feb;81(2):69–70 **(Jpn)**

[Postnatal development of regulatory function of the circulation] Shimizu T. **Nippon Seirigaku Zasshi** 1989; 51(5):137–52 (99 ref.) **(Jpn)**

[Autonomic regulation of the circulatory system in early type I diabetes] Rynkiewicz A, et al. **Kardiol Pol** 1989; 32(10–12):459–65 (Eng. Abstr.) **(Pol)**

[Possibilities of using impedance rheography in pediatrics] Wójtowicz J, et al. **Pediatr Pol** 1989 Jul;64(7):505–12 **(Pol)**

[Notes on vascular impedance] de Bettencourt MJ. **Rev Port Cardiol** 1989 Jul–Aug;8(7–8):531–9 (6 ref.) (Eng. Abstr.) **(Por)**

[Circulatory adaptation of the hemostatic system to the gestational process] Abdurakhmanov FM. **Akush Ginekol (Mosk)** 1989 Nov;(11):6–10 (66 ref.) **(Rus)**

[Study of peripheral blood circulation during continuous and pulsatile perfusion based on the data of transcutaneous pO2 and pCO2 monitoring] Divonin AL, et al. **Anesteziol Reanimatol** 1990 Mar–Apr;(2):12–6 (Eng. Abstr.) **(Rus)**

[A functional evaluation of the circulatory system during ergothermal effects] Bukharin AN, et al. **Fiziol Cheloveka** 1990 Jan–Feb;16(1):106–11 **(Rus)**

[Blood circulation and blood gas composition in various sections of the cardiovascular system in the healthy subject during measured physical loading] Chestukhin VV, et al. **Fiziol Cheloveka** 1989 Sep–Oct;15(5):75–9 **(Rus)**

[The effect of altitude hypoxia on respiration and blood circulation in the initial period of adaptation] Mellenberg GV. **Fiziol Cheloveka** 1989 Nov–Dec;15(6):83–8 **(Rus)**

[The relation of the circulatory system reactions to changes in body posture and physical load to the initial level of arterial pressure and heart contraction frequency] Vilkov VG, et al. **Fiziol Cheloveka** 1989 Sep–Oct;15(5):65–9 **(Rus)**

[Local circulatory regulation: the characteristics of the behavior of vascular smooth muscles] Begiashvili VT. **Fiziol Zh SSSR** 1989 Nov;75(11):1527–33 (20 ref.) (Eng. Abstr.) **(Rus)**

[Electric stimulation of skeletal muscles as the optimal method of left-ventricular bypass] Tolpekin VE, et al. **Grud Serdechnososudistaia Khir** 1990;(2):36–8 (Eng. Abstr.) **(Rus)**

[Baroreceptor regulation of blood circulation in healthy persons and in patients with hypertension] Babaev AA, et al. **Kardiologiia** 1990 Jan;30(1):26–30 (Eng. Abstr.) **(Rus)**

[Clinico-hemorheological aspects of the course of hypertension] Shchepotin BM, et al. **Kardiologiia** 1989 Sep; 29(9):18–21 (Eng. Abstr.) **(Rus)**

[Restoration of blood flow after resection of an aneurysm of the abdominal aorta] Sukharev II, et al. **Khirurgiia (Mosk)** 1990 Apr;(4):107–9 **(Rus)**

[Algorithms for automatic recognition of basic points in the rheogram] Demina GN, et al. **Kosm Biol Aviakosm Med** 1990 Jan–Feb;24(1):44–7 **(Rus)**

[Stress and blood circulation in man] Fedorov BM, et al. **Kosm Biol Aviakosm Med** 1990 May–Jun;24(3):35–40 (36 ref.) (Eng. Abstr.) **(Rus)**

[Biophysical substantiation of photoplethysmography in reflected light] Gaĭduk MI, et al. **Med Tekh** 1990 Mar–Apr; (2):4–8 (Eng. Abstr.) **(Rus)**

[The effect of age on the antigravitational reactions of the blood circulation and the occurrence of precollapse states] Kostina TF, et al. **Patol Fiziol Eksp Ter** 1990 Jan–Feb; (1):13–5 (Eng. Abstr.) **(Rus)**

[The opiate system and its role in ensuring circulatory homeostasis in shock] Tiukavin AI. **Patol Fiziol Eksp Ter** 1990 Mar–Apr;(2):23–6 (Eng. Abstr.) **(Rus)**

[Assessment of the reserve potentials of the circulatory system in patients in the postoperative period] Vasil'ev VIu. **Patol Fiziol Eksp Ter** 1989 Sep–Oct;(5):34–7 (Eng. Abstr.) **(Rus)**

[The role of an endogenous digoxin-like factor in regulating blood circulation and in the origin of arrhythmia in myocardial ischemia] Bagrov AIa, et al. **Ter Arkh** 1989; 61(7):84–9 (52 ref.) (Eng. Abstr.) **(Rus)**

[Hemodynamics of the greater and lesser circulation in patients with hypertension] Iakovlev GM, et al. **Ter Arkh** 1989;61(9):15–7 (Eng. Abstr.) **(Rus)**

[Emotional tension, the postural regulation of blood circulation and some contradictions in the concepts of the pathogenesis of arterial hypertension] Belkaniia GS, et al. **Usp Fiziol Nauk** 1990 Jan–Mar;21(1):78–96 (55 ref.) **(Rus)**

[Alternating anesthesia as a method of optimizing the blood circulation and gas exchange in thoracic interventions] Buniatian AA, et al. **Vestn Akad Med Nauk SSSR** 1990; (3):17–22 **(Rus)**

[Characteristics of blood supply and regeneration of simple and vascularized autologous nerve transplants] Popovich MI, et al. **Vestn Khir** 1989 Jul;143(7):90–3 **(Rus)**

[The effect of a sauna on the reactivity of the circulatory indices in an isometric load test] Kuz'menko VA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Sep–Oct;(5):10–3 (Eng. Abstr.) **(Rus)**

BLOOD CIRCULATION, COLLATERAL see **COLLATERAL CIRCULATION**

BLOOD CIRCULATION TIME

The effect of bolus injection on circulation times during cardiac arrest. Emerman CL, et al. **Am J Emerg Med** 1990 May;8(3):190–3

BLOOD COAGULATION

see related

HEMOSTATICS

Haemostatic abnormalities in brain tumours. Singh VP, et al. **Acta Neurochir (Wien)** 1990;102(3–4):103–7

Blood clot formation in angiographic catheters. In vitro tests with various contrast media. Raininko R, et al. **Acta Radiol** 1990 Mar;31(2):217–20

Estimation of plasma kallikrein in sickle-cell anemia, and its relation to the coagulation and fibrinolytic systems. LourenCo D, et al. **Adv Exp Med Biol** 1989;247B:553–7

Studies on coagulation-fibrinolysis and kallikrein-kinin systems and kininase activity and kininase II quantity in amniotic fluid. Mutoh S, et al. **Adv Exp Med Biol** 1989; 247B:559–67

Studies on urinary coagulation-fibrinolysis and kallikrein-kinin systems and kininase in normal pregnancy, labor and puerpreium. Mutoh S, et al. **Adv Exp Med Biol** 1989;247B:569–78

Effect of clot formation and retraction on spin-echo MR images of blood: an in vitro study. Hayman LA, et al. **AJNR** 1989 Nov–Dec;10(6):1155–8

Alterations in the blood clotting system in disseminated intravascular coagulation. Phillips LL. **Am J Cardiol** 1967 Aug;20(2):174–84

One-stage method for assay of tissue factor activity of leukemic cell with special reference to disseminated intravascular coagulation. Andoh K, et al. **Am J Clin Pathol** 1990 May;93(5):679–84

Measurement of the natural anticoagulant protein S. How and when [editorial; comment] Comp PC. **Am J Clin Pathol** 1990 Aug;94(2):242–3 Comment on: Am J Clin Pathol 1990 Aug;94(2):176–86.

Biochemistry of heparin antithrombin interactions, and the physiologic role of this natural anticoagulant mechanism. Rosenberg RD. **Am J Med** 1989 Sep 11;87(3B):2S–9S (51 ref.)

Postpartum Budd-Chiari syndrome with prolonged hypercoagulability state. Ilan Y, et al. **Am J Obstet Gynecol** 1990 May;162(5):1164–5

Dark green pit viper (Trimeresurus popeorum) bite: clinical and serial coagulation profiles in 51 cases. Visudhiphan S, et al. **Am J Trop Med Hyg** 1989 Nov;41(5):570–5

Vascular permeability and coagulation during Rickettsia rickettsii infection in dogs. Davidson MG, et al. **Am J Vet Res** 1990 Jan;51(1):165–70

Epidural blood patch: a rapid coagulation response [letter] Cook MA, et al. **Anesth Analg** 1990 May;70(5):567–8

Hypercoagulability in arterial disease. Spillert CR, et al. **Angiology** 1989 Oct;40(10):886–9

Activation of endothelial cells induces platelet thrombus formation on their matrix. Studies of new in vitro thrombosis model with low molecular weight heparin as anticoagulant. Zwaginga JJ, et al. **Arteriosclerosis** 1990 Jan–Feb;10(1):49–61

Loss of anticoagulant effect of heparin during circulation of human blood in vitro. Pijl AJ, et al. **Artif Organs** 1990 Apr;14(2):125–9

Heparin free hemodialysis does not cause fibrin consumptive coagulopathy and maintains alternate pathway complement activation. Liboro R, et al. **ASAIO Trans** 1990 Apr–Jun; 36(2):86–9

Observations on blood coagulation after snakebite in dogs and cats. Holloway SA, et al. **Aust Vet J** 1989 Nov; 66(11):364–6

Human alpha– to zeta–thrombin cleavage occurs with neutrophil cathepsin G or chymotrypsin while fibrinogen clotting activity is retained. Brezniak DV, et al. **Biochemistry** 1990 Apr 10;29(14):3536–42

Detection of factor X activation in humans. Bauer KA, et al. **Blood** 1989 Nov 1;74(6):2007–15

A monoclonal antibody specific for two–chain urokinase–type plasminogen activator. Application to the study of the mechanism of clot lysis with single–chain urokinase–type plasminogen activator in plasma. Declerck PJ, et al. **Blood** 1990 May 1;75(9):1794–800

Initiation of the extrinsic pathway of coagulation by human and rabbit alveolar macrophages: a kinetic study. McGee MP, et al. **Blood** 1989 Oct;74(5):1583–90

Noncoagulation inhibitory factor VIII antibodies after induction of tolerance to factor VIII in hemophilia A patients. Nilsson IM, et al. **Blood** 1990 Jan 15;75(2):378–83

Factor VIIa–catalyzed activation of factor X independent of tissue factor: its possible significance for control of hemophilic bleeding by infused factor VIIa. Rao LV, et al. **Blood** 1990 Mar 1;75(5):1069–73

Disseminated intravascular coagulation in rabbits induced by administration of endotoxin or tissue factor: effect of anti–tissue factor antibodies and measurement of plasma extrinsic pathway inhibitor activity. Warr TA, et al. **Blood** 1990 Apr 1;75(7):1481–9

The role of stasis in the clotting of blood and milk flows around solid objects. Christy JR, et al. **Cardiovasc Res** 1989 Nov;23(11):949–59

Epidemic hemorrhagic fever. The mechanism of coagulation and fibrinolysis. Xiang LB, et al. **Chin Med J [Engl]** 1990 May;103(5):391–5

Effect of velocity gradient on the clotting time of blood and on the consistency of clots formed in vitro. Dintenfass L. **Circ Res** 1966 Apr;18(4):349–56

Endotoxin–induced procoagulant activity, eicosanoid synthesis, and tumor necrosis factor production by rat peritoneal macrophages: effect of endotoxin tolerance and glucan. Moore JN, et al. **Circ Shock** 1990 Jul;31(3):281–95

Inhibition of clot–bound alpha 2–antiplasmin enhances in vivo thrombolysis. Reed GL 3d, et al. **Circulation** 1990 Jul;82(1):164–8

Modulation of morphological differentiation of human neuroepithelial cells by serine proteases: independence from blood coagulation. Grand RJ, et al. **EMBO J** 1989 Aug; 8(8):2209–15

Vascular anticoagulant beta: a novel human Ca2+/phospholipid binding protein that inhibits coagulation and phospholipase A2 activity. Its molecular cloning, expression and comparison with VAC–alpha. Hauptmann R, et al. **Eur J Biochem** 1989 Oct 20; 185(1):63–71

The effect of parenteral estrogen versus orchiectomy on blood coagulation and fibrinolysis in prostatic cancer patients. Aro J, et al. **Eur Urol** 1990;17(2):161–5

A study of impaired fibrin polymerization in patients with the nephrotic syndrome. Mysliwiec M, et al. **Folia Haematol (Leipz)** 1990;117(1):73–8

New trends in the field of coagulation diagnosis—new possibilities to improve monitoring of antithrombotic therapy. Pelzer H, et al. **Folia Haematol (Leipz)** 1989; 116(6):867–71

The use of two new coagulation probes for control of hemorrhage in laparoscopic liver biopsy. Jeffers LJ, et al. **Gastrointest Endosc** 1989 Sep–Oct;35(5):398–402

Computerized analysis of the in vitro activation of the plasmatic clotting system. Baumann P, et al. **Haemostasis** 1989;19(6):309–21

Importance of factor–IX–dependent prothrombinase formation—the Josso pathway—in clotting plasma. Xi M, et al. **Haemostasis** 1989;19(6):301–8

Lipid metabolism and coagulation during the normal menstrual cycle. Lebech AM, et al. **Horm Metab Res** 1989 Aug;21(8):445–8

Physiopathology and management of coagulation during long–term extracorporeal respiratory assistance. Uziel L, et al. **Int J Artif Organs** 1990 May;13(5):280–7

Structure and properties of calphobindin II, an anticoagulant protein from human placenta. Yoshizaki H, et al. **J Biochem (Tokyo)** 1990 Jan;107(1):43–50

Binding of vascular anticoagulant alpha (VAC alpha) to planar phospholipid bilayers. Andree HA, et al. **J Biol Chem** 1990 Mar 25;265(9):4923–8

Domain structure of the endothelial cell receptor thrombomodulin as deduced from modulation of its anticoagulant functions. Evidence for a glycosaminoglycan–dependent secondary binding site for thrombin. Preissner KT, et al. **J Biol Chem** 1990 Mar 25; 265(9):4915–22

Clot–bound thrombin is protected from inhibition by heparin–antithrombin III but is susceptible to inactivation by antithrombin III–independent inhibitors. Weitz JI, et al. **J Clin Invest** 1990 Aug;86(2):385–91

Fibrin deposition and adaptive changes in glomerular procoagulant and fibrinolytic activities in rat renoprival nephropathy. Ruedin P, et al. **J Exp Pathol (Oxford)** 1990 Apr;71(2):269–78

The accuracy of blood alcohol analysis using headspace gas chromatography when performed on clotted samples. Senkowski CM, et al. **J Forensic Sci** 1990 Jan;35(1):176–80

An arginine carboxypeptidase generated during coagulation is diminished or absent in patients with rheumatoid arthritis. Campbell W, et al. **J Lab Clin Med** 1990 May;115(5):610–2

Notes on clotting in a Burmese python (Python molurus bivittatus). Ratnoff OD, et al. **J Lab Clin Med** 1990 May; 115(5):629–35

Atherosclerosis and the coagulation system. Thompson WD, et al. **J Pathol** 1989 Oct;159(2):97–106 (109 ref.)

Umbilical cord blood coagulability, acidosis and intracranial hemorrhage. Sakuraba M, et al. **J Perinat Med** 1989; 17(2):99–106 (25 ref.)

Preliminary observations on clotting under three hydrocolloid dressings. Mulder GD, et al. **J R Soc Med** 1989 Dec;82(12):739–40

Changes in protein C and free protein S during pregnancy and following hysterectomy. Warwick R, et al. **J R Soc Med** 1989 Oct;82(10):591–4

The effect of hemorrhagic shock on the clotting cascade in injured patients. Harrigan C, et al. **J Trauma** 1989 Oct; 29(10):1416–21; discussion 1421–2

Protein C and protein S. Vitamin K–dependent inhibitors of blood coagulation [clinical conference] Rick ME. **JAMA** 1990 Feb 2;263(5):701–3

Application of thrombin–antithrombin III complex for detecting a latent hypercoagulable state in patients with coronary artery disease. Uno M, et al. **Jpn Circ J** 1989 Oct;53(10):1185–91

Circadian rhythms of blood clotting time and coagulation factors II, VII, IX and X in rats. Soulban G, et al. **Life Sci** 1989;45(25):2485–9

Insidious onset of airway obstruction of an endotracheal tube by blood–mucus plugs. Lin DC, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Sep;27(3):293–6

Proton NMR study of the state of water in fibrin gels, plasma, and blood clots. Blinc A, et al. **Magn Reson Med** 1990 Apr;14(1):105–22

Magnetic relaxation in blood and blood clots. Bryant RG, et al. **Magn Reson Med** 1990 Jan;13(1):133–44

Studies on contact activation: effects of surface and inhibitors. Cameron CL, et al. **Med Prog Technol** 1989;15(1–2):53–62

Activation of platelets, coagulation and fibrinolysis in patients on long–term haemodialysis: influence of cuprophan and polyacrylonitrile membranes. Sultan Y, et al. **Nephrol Dial Transplant** 1990;5(5):362–8

A patient with probable systemic lupus erythematosus, lupus anticoagulant and myocardial infarction. Coenen JL, et al. **Neth J Med** 1989 Dec;35(5–6):253–9

Pre– and postsurgery activation of blood coagulation in gastric and large bowel cancers: diagnostic, therapeutic and prognostic hints. Abbasciano V, et al. **Oncology** 1990; 47(3):261–6

Improved healing of microvascular PTFE prostheses by induction of a clot layer: an experimental study in rats. van der Lei B, et al. **Plast Reconstr Surg** 1989 Dec; 84(6):960–8

Overview of the hypercoagulable states. Comp PC. **Semin Thromb Hemost** 1990 Apr;16(2):158–61 (56 ref.)

The quest for thromboresistant materials. Didisheim P. **Semin Thromb Hemost** 1989 Jul;15(3):240–3 (20 ref.)

Procoagulant activity of T lymphoblastoid cells in extrinsic and intrinsic coagulation systems. Barrowcliffe TW, et al. **Thromb Haemost** 1989 Nov 24;62(3):880–4

Changes of plasma coagulation and fibrinolysis in response to mental stress. Jern C, et al. **Thromb Haemost** 1989 Sep 29;62(2):767–71

Influences of strenuous exercise (triathlon) on blood coagulation and fibrinolytic system. Arai M, et al. **Thromb Res** 1990 Feb 1;57(3):465–71

Local activation of the coagulation and fibrinolysis systems in lung disease. Nakstad B, et al. **Thromb Res** 1990 Mar 15;57(6):827–38

Activation of the coagulation cascade in falciparum malaria. Pukrittayakamee S, et al. **Trans R Soc Trop Med Hyg** 1989 Nov–Dec;83(6):762–6

Coagulation changes following hepatic revascularization during liver transplantation. Harper PL, et al. **Transplantation** 1989 Oct;48(4):603–7

Induction and regulation of monocyte procoagulant activity. Szabo G, et al. **Transplantation** 1990 Aug;50(2):301–9

Blood coagulation changes in liver disease. al Mofleh IA, et al. **Trop Geogr Med** 1989 Jul;41(3):247–53

Hemostatic alterations in pigs fed sublethal doses of Sarcocystis miescheriana. Daugschies A, et al. **Vet Parasitol** 1989 Nov;34(1–2):1–13

Coagulation profile in different stages of pregnancy and under consideration of placental expulsion in dairy cattle. Heuwieser W, et al. **Zentralbl Veterinarmed [A]** 1990 May; 37(4):310–5

Coagulation profile of dairy cattle in the periparturient period. Heuwieser W, et al. **Zentralbl Veterinarmed [A]** 1990 Feb;37(1):8–15

[Changes in the values of antithrombin III and other blood coagulation indices in liver cirrhosis without ascites and in the ascitic stage] Doncheva N. **Vutr Boles** 1989; 28(4):96–9 **(Bul)**

[A heparin–like anticoagulant in a patient with Wegener's granulomatosis] Chrobák L, et al. **Bratisl Lek Listy** 1990 May;91(5):396–8 (Eng. Abstr.) **(Cze)**

[The effect of the hemocoagulation status in hemodialyzed patients on the patency of arteriovenous fistulas] Charvát J, et al. **Cas Lek Cesk** 1989 Jul 28;128(31):974–6 (Eng. Abstr.) **(Cze)**

[Serine protease inhibitors (serpins); regulators of coagulation and inflammation reactions with therapeutic potential] Hack CE, et al. **Ned Tijdschr Geneeskd** 1990 May 26; 134(21):1035–9 (51 ref.) **(Dut)**

[Circulating anticoagulants in immunodeficiency virus infection. Results of a prospective study of 157 seropositive patients] Taillan B, et al. **Ann Med Interne (Paris)** 1989; 140(5):405–7 (Eng. Abstr.) **(Fre)**

[The physiology of hemostasis: plasma and tissue factors in coagulation and fibrinolysis] François P, et al. **J Pharm Belg** 1989 Jul–Aug;44(4):308–14 (8 ref.) (Eng. Abstr.) **(Fre)**

[Postoperative thromboembolism in the young subject. Coagulation and fibrinolysis in 24 orthopedic patients (letter)] Borg JY, et al. **Presse Med** 1989 Sep 23; 18(29):1438–9 **(Fre)**

[Factor V–specific circulating anticoagulant and enteropathy. 2 cases] Taillan B, et al. **Presse Med** 1990 Feb 10; 19(5):211–2 (Eng. Abstr.) **(Fre)**

[Coagulation changes during aortofemoral bifurcation bypass: is volume and plasma substitution possible with hydroxyethyl starch alone?] von Sommoggy S, et al. **Anaesthesist** 1990 Jul;39(7):353–60 (Eng. Abstr.) **(Ger)**

[Blood resistance measurement and changes in blood coagulation] Wuilleret B. **Angiologica** 1967;4(3–4):173–83 (Eng. Abstr.) **(Ger)**

[Intraoperative coagulation activity—a defined group of trauma surgery patients] Tilsner V, et al. **Folia Haematol (Leipz)** 1989;116(6):915–25 (Eng. Abstr.) **(Ger)**

[The use of homologous coagulated blood for prevention of pneumothorax following percutaneous lung biopsy (experimental study)] Petsas T, et al. **ROFO** 1990 May; 152(5):565–8 (Eng. Abstr.) **(Ger)**

[Natural anticoagulants as a cause of hereditary familial thrombosis] Tripodi A, et al. **Haematologica** 1990 Mar–Apr; 75 Suppl 2:1–5 (29 ref.) **(Ita)**

[Correlation between hemorheological and blood coagulation parameters in patients with arteriosclerosis of supraaortic vessels and/or recent cerebral ischemic attacks] Avellone G, et al. **Ric Clin Lab** 1989;19 Suppl 1:103–7 **(Ita)**

[Study of hemorheological parameters in relation to coagulation/fibrinolytic and plethysmographic parameters in patients with deep venous thrombosis] Gelmini G, et al. **Ric Clin Lab** 1989;19 Suppl 1:83–6 **(Ita)**

[Biochemistry of blood coagulation and fibrinolysis underlying pulmonary thrombosis and embolism] Matsuda M. **Kokyu To Junkan** 1989 Sep;37(9):929–35 **(Jpn)**

[Serine proteinase inhibitors for blood coagulation and fibrinolysis (AT III, HC II, PCI, t–PAI, C1INA)] Deyashiki Y, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:866–8 **(Jpn)**

[Relationship between coagulation, fibrinolysis and arachidonic acid cascade] Matsuda T. **Nippon Rinsho** 1990 Jun;48(6):1181–6 **(Jpn)**

[Clinical significance of circulating anticoagulant analysis in blood coagulo–fibrinolytic analysis] Watanabe K. **Nippon Rinsho** 1989 Dec;48 Suppl:938–41 **(Jpn)**

[Relation between blood coagulability and prognosis in patients with ovarian cancer] Sawaguchi K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Apr;42(4):313–9 (Eng. Abstr.) **(Jpn)**

[Changes in blood coagulation and fibrinolysis following endoscopic injection sclerotherapy] Kawashima Y. **Nippon Shokakibyo Gakkai Zasshi** 1990 Feb;87(2):163–72 (Eng. Abstr.) **(Jpn)**

[Effects on blood coagulation–fibrinolytic system after transcatheter hepatic arterial therapy in cases of hepatocellular carcinoma analyzed by plasma levels of plasmin–alpha 2–PI complex, D dimer and thrombin–ATIII complex] Mizuguchi A, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Mar;87(3):790–8 (Eng. Abstr.) **(Jpn)**

[Coagulation and fibrinolysis associated with contact phase in plasma with high molecular weight kininogen deficiency] Iijima K, et al. **Rinsho Ketsueki** 1989 Oct;30(10):1702–7 (Eng. Abstr.) **(Jpn)**

[Hemostatic changes before and after the onset of disseminated intravascular coagulation] Wada H, et al. **Rinsho Ketsueki** 1989 Oct;30(10):1755–62 (Eng. Abstr.) **(Jpn)**

[Fibrinogen–fibrin conversion] Shimizu A. **Seikagaku** 1990 Feb;62(2):121–5 **(Jpn)**

[Protein and gene structures of the contact factors and their abnormalities] Fujikawa K, et al. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):976–83 **(Jpn)**

[Introduction to congenital abnormalities of plasma proteins involved in blood clotting, fibrinolysis and their regulations] Saito H. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):955–8 **(Jpn)**

[Changes in the blood coagulation and fibrinolysis systems in newborn infants with infections and normal and low birth weight] Grygalewicz J, et al. **Wiad Lek** 1989 Jan 15; 42(2):87–93 (Eng. Abstr.) **(Pol)**

[Changes in blood coagulation time in patients bitten by young and adult Bothrops jararaca snakes] Ribeiro LA,

et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Jul–Aug; 44(4):143–5 (Eng. Abstr.) (Por)

[Comparative evaluation of the system of hemostasis in term and premature labor] Abdurakhmanov FM. **Akush Ginekol (Mosk)** 1989 Aug;(8):43–6 (Eng. Abstr.) (Rus)

[Correlation of the coagulative properties of blood and the amount of postpartum blood loss] Gazazian MG, et al. **Akush Ginekol (Mosk)** 1989 Aug;(8):52–4 (Eng. Abstr.) (Rus)

[Heparin therapy of pregnant women with placental insufficiency] Makatsariia AD, et al. **Akush Ginekol (Mosk)** 1989 Aug;(8):30–3 (Eng. Abstr.) (Rus)

[Hemostasis in pregnant women with varicose veins] Repina MA, et al. **Akush Ginekol (Mosk)** 1989 Aug;(8):67–8 (Rus)

[Effect of acute preoperative hemodilution on circulation, oxygen budget and blood coagulation] Syvorotkin MV, et al. **Anesteziol Reanimatol** 1989 May–Jun;(3):35–7 (Eng. Abstr.) (Rus)

[Nonlinear effects in kinetics of blood coagulation] Semenov VV, et al. **Biofizika** 1990 Jan–Feb;35(1):139–41 (Eng. Abstr.) (Rus)

[Wide–spectrum effects of lupus anticoagulant in a patient with complex immunopathologic processes] Barkagan ZS, et al. **Gematol Transfuziol** 1989 Jun;34(6):25–31 (Rus)

[Tasks of present–day coagulology] Gavrilov OK. **Gematol Transfuziol** 1989 Jun;34(6):3–7 (Eng. Abstr.) (Rus)

[Hemostasis and homeostasis] Glants RM. **Gematol Transfuziol** 1989 Jun;34(6):7–13 (Eng. Abstr.) (Rus)

[Effects of middle–weight molecules on the mechanism of hemostasis] Siatkovskii VA, et al. **Gematol Transfuziol** 1989 Jun;34(6):45–9 (Eng. Abstr.) (Rus)

[The role of disorders of components of the RASC system (regulation of the aggregation system of coagulation) in the pathogenesis of microangiopathies in vibration disease] Pakhomova AM, et al. **Gig Tr Prof Zabol** 1989;(7):10–3 (Eng. Abstr.) (Rus)

[State of nonspecific reactivity in patients with strangulated hernias after surgery] Lupal'tsev VI, et al. **Klin Khir** 1990; (2):6–8 (Eng. Abstr.) (Rus)

[Hemostasis and lipid metabolism in patients with non–insulin– dependent diabetes mellitus and angiopathy of the lower extremities] Mamedgasanov RM, et al. **Klin Med (Mosk)** 1989 Aug;67(8):74–6 (Eng. Abstr.) (Rus)

[Evaluation of the status of hemostasis in the selection of surgical tactics for patients with chronic osteomyelitis] Puchi'hian DM, et al. **Ortop Travmatol Protez** 1989 Jul; (7):7–10 (Eng. Abstr.) (Rus)

[The coagulability of the blood and lymph under normal and pathological conditions] Malezhik LP, et al. **Patol Fiziol Eksp Ter** 1990 Jan–Feb;(1):56–9 (66 ref.) (Rus)

[The blood coagulation potential in experimental nephrotoxic glomerulonephritis] Nazar PS, et al. **Patol Fiziol Eksp Ter** 1990 Jan–Feb;(1):45–7 (Eng. Abstr.) (Rus)

[The effect of blast cells on blood coagulation in patients with acute leukemia] Rozanova LS, et al. **Patol Fiziol Eksp Ter** 1990 Jan–Feb;(1):43–5 (Eng. Abstr.) (Rus)

[Rheological properties of blood in children and adolescents with borderline arterial hypertension] Remizov VO, et al. **Pediatriia** 1989;(11):110–1 (Rus)

[Blood anticoagulation system and urine fibrinolysis in newborn infants with suppurative–inflammatory diseases] Samsygina GA, et al. **Pediatriia** 1989;(10):40–5 (Eng. Abstr.) (Rus)

[Blood coagulation function in pulmonary tuberculosis patients at the stages of surgical treatment] Bykov AG, et al. **Probl Tuberk** 1989;(12):41–6 (Eng. Abstr.) (Rus)

[Shifts in the blood coagulation during adenomectomy of the prostate] Shafer VM, et al. **Urol Nefrol (Mosk)** 1990 Jan–Feb;(1):48–52 (Eng. Abstr.) (Rus)

[Blood coagulation in angiitis of the skin] Gurdus VO, et al. **Vestn Dermatol Venerol** 1989;(9):35–8 (Eng. Abstr.) (Rus)

[Changes in the blood coagulation in surgical trauma and exogenous thromboplastinemia during administration of vitamins] Galian SL, et al. **Vopr Med Khim** 1990 Mar–Apr; 36(2):41–5 (Eng. Abstr.) (Rus)

[Recovery of the anticoagulation system function in patients with insulin–dependent diabetes by neutralization of the activity of diabetogenic factor] Kudriashov BA, et al. **Vopr Med Khim** 1990 May–Jun;36(3):79–81 (Eng. Abstr.) (Rus)

[The role of endogenous heparin in the protection against risk factors causing experimental diabetes] Kudriashov BA, et al. **Vopr Med Khim** 1989 Nov–Dec;35(6):80–2 (Eng. Abstr.) (Rus)

[Destabilization of erythrocyte lipid structures in blood coagulation] Rubin VI, et al. **Vopr Med Khim** 1990 May–Jun;36(3):32–4 (Eng. Abstr.) (Rus)

[Nonenzymatic fibrinolysis of the blood and urine in oncourologic diseases] Popov AI. **Vopr Onkol** 1989; 35(10):1161–5 (45 ref.) (Rus)

[Blood coagulation in patients with thyrotoxicosis before and after surgery] Kovalev AP. **Vrach Delo** 1990 Mar;(3):75–8 (Eng. Abstr.) (Rus)

[Blood coagulation and fibrinolysis in patients with pulmonary tuberculosis suffering from chronic alcoholism] Larionov VG, et al. **Vrach Delo** 1989 Aug;(8):46–7 (Eng. Abstr.) (Rus)

[The kallikrein–kinin, coagulation and fibrinolytic systems of the blood in patients with chronic glomerulonephritis and the hypertension syndrome] Nazar PS, et al. **Vrach Delo** 1989 Aug;(8):6–8 (Eng. Abstr.) (Rus)

[Changes in hemostasis as one of the paraneoplastic manifestations] Hromec A, et al. **Bratisl Lek Listy** 1990 Apr;91(4):284–8 (Eng. Abstr.) (Slo)

DRUG EFFECTS

Plasma substitution with 3% dextran–60 in orthopaedic surgery: influence on plasma colloid osmotic pressure, coagulation parameters, immunoglobulins and other plasma constituents. Bergman A, et al. **Acta Anaesthesiol Scand** 1990 Jan;34(1):21–9

Coagulation and fibrinolytic parameters in patients undergoing total hip replacement: influence of the anaesthesia technique. Donadoni R, et al. **Acta Anaesthesiol Scand** 1989 Oct;33(7):588–92

Effects of two triphasic oral contraceptives containing ethinylestradiol plus levonorgestrel or gestodene on blood coagulation and fibrinolysis. Omsjø IH, et al. **Acta Obstet Gynecol Scand** 1989;68(1):27–30

Some cardiovascular and hematological changes induced in the rat by activation of Hageman factor with ellagic acid. Damas J, et al. **Adv Exp Med Biol** 1989;247A:461–5

Coagulation and fibrinolytic changes in evolving acute myocardial infarction treated by high–dose, brief–duration intracoronary or intravenous streptokinase. Lurie AA, et al. **Am J Clin Pathol** 1990 Feb;93(2):246–51

Norfloxacin and protime elevation [letter] Kaplan DS. **Am J Gastroenterol** 1990 Jul;85(7):901

Effects of long–term gestodene–containing oral contraceptive administration on hemostasis. Abbate R, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):424–9

Comparative studies of 30 micrograms ethinyl estradiol combined with gestodene and desogestrel on blood coagulation, fibrinolysis, and platelets. Daly L, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):430–7

Effects of newer oral contraceptives on the inhibition of coagulation and fibrinolysis in relation to dosage and type of steroid. Jespersen J, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):396–403 (52 ref.)

Influence of oral contraceptives on coagulation tests in native blood and plasma. Kunz F, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):417–20

Metabolic changes during the normal menstrual cycle: a longitudinal study. Lebech AM, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):414–6

Metabolic changes during treatment with two different progestogens. Refn H, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):374–7

Nitroglycerin antagonism of heparin [letter] Amin F, et al. **Anesthesiology** 1990 Jul;73(1):193–4

Ranitidine–warfarin interaction [letter] Baciewicz AM, et al. **Ann Intern Med** 1990 Jan 1;112(1):76–7

Tackling the non–linearizeable dose–response relationship in clotting time assays of heparin. Zwillenberg LO, et al. **Arzneimittelforschung** 1990 May;40(5):578–86

New natural polysaccharides with potent antithrombic activity: fucans from brown algae. Grauffel V, et al. **Biomaterials** 1989 Aug;10(6):363–8

Pharmacodynamics and pharmacokinetics of dermatan sulfate in humans. Dol F, et al. **Blood** 1989 Oct;74(5):1577–82

Inhibition of coagulation and thrombin–induced platelet activities by a synthetic dodecapeptide modeled on the carboxy–terminus of hirudin. Jakubowski JA, et al. **Blood** 1990 Jan 15;75(2):399–406

Low–molecular–weight heparin Fraxiparin in chronic hemodialysis. A dose–finding study. Morinière P, et al. **Blood Purif** 1989;7(6):301–8

Flavone acetic acid induces a coagulopathy in mice. Murray JC, et al. **Br J Cancer** 1989 Nov;60(5):729–33

A Bothrops jararaca plasma cysteine–proteinase inhibitor related to mammalian kininogen. Chudzinski AM, et al. **Braz J Med Biol Res** 1989;22(8):945–8

Lack of hemostatic effects of adult and suckling cat salivary gland heteropolysaccharides on blood coagulation. Menghi G, et al. **Cell Mol Biol** 1990;36(1):49–56

Hematological studies on naturally occurring substances. II. Effects of animal crude drugs on blood coagulation and fibrinolysis systems. Wang JD, et al. **Chem Pharm Bull (Tokyo)** 1989 Aug;37(8):2236–8

Asbestos exposure results in increased lung procoagulant activity in vivo and in vitro. Callahan KS, et al. **Chest** 1990 Jul;98(1):112–9

Pharmacodynamics of thrombolysis with recombinant tissue–type plasminogen activator. Correlation with characteristics of and clinical outcomes in patients with acute myocardial infarction. The TAMI Study Group. Stump DC, et al. **Circulation** 1989 Nov;80(5):1222–30

The effect of n–3 polyunsaturated fatty acids on lipids, platelet function, coagulation, fibrinolysis and monocyte chemotaxis in patients with hypertension. Schmidt EB, et al. **Clin Chim Acta** 1990 Jul;189(1):25–32

Inactivation of heparin during extracorporeal circulation in infants. Green TP, et al. **Clin Pharmacol Ther** 1990 Aug; 48(2):148–54

Effects of oral elastase on lipid metabolism, platelet function, and blood coagulability in patients with diabetes mellitus. Furui H, et al. **Clin Ther** 1989 Nov–Dec;11(6):786–94

Lipid metabolism and coagulation of two contraceptives: correlation to serum concentrations of levonorgestrel and gestodene. Kjaer A, et al. **Contraception** 1989 Dec; 40(6):665–73

Lipoprotein(a) enhances plasma clot lysis in vitro. Mao SJ, et al. **FEBS Lett** 1990 Jul 2;267(1):131–4

The effects of dietary marine fish oils (omega–3 fatty acids) on coagulation profiles in men. Lox CD. **Gen Pharmacol** 1990;21(2):241–6

Induction of labor in intrauterine fetal death with 16–phenoxy–prostaglandin–E2–methylsulfonylamide (sulprostone)—effects on uterine contractility, coagulation and kallikrein–kinin systems. Laudański T, et al. **Gynecol Obstet Invest** 1990;29(4):269–72

Aspirin at very ultra low dosage in healthy volunteers: effects on bleeding time, platelet aggregation and coagulation. Doutremepuich C, et al. **Haemostasis** 1990;20(2):99–105

Interaction of the combined medication with the new low–molecular–weight heparinoid Lomoparan (Org 10172) and acenocoumarol. Stiekema JC, et al. **Haemostasis** 1990; 20(3):136–46

Comparison of two hemodialysis membranes, polyacrylonitrile and cellulose acetate, on complement and coagulation systems. Moll S, et al. **Int J Artif Organs** 1990 May;13(5):273–9

Isolation of two hemorrhagic toxins from Crotalus basiliscus basiliscus (Mexican west coast rattlesnake) venom and their effect on blood clotting and complement. Molina O, et al. **Int J Biochem** 1990;22(3):253–61

The new phosphodiesterase inhibitor enoximone in patients following cardiac surgery––pharmacokinetics and influence on parameters of coagulation. Boldt J, et al. **Intensive Care Med** 1990;16(1):54–9

A technique for estimating the probability of clots in blood–contrast agent mixtures. Grabowski EF. **Invest Radiol** 1989 Nov;24(11):940–2

Sphingosine inhibits monocyte tissue factor–initiated coagulation by altering factor VII binding. Conkling PR, et al. **J Biol Chem** 1989 Nov 5;264(31):18440–4

In vivo behavior of detergent–solubilized purified rabbit thrombomodulin on intravenous injection into rabbits. Ehrlich HJ, et al. **J Lab Clin Med** 1990 Feb;115(2):182–9

Prevention of heparin–resistant thrombotic occlusion of hollow–fiber hemodialyzers by synthetic antithrombin. Kelly AB, et al. **J Lab Clin Med** 1989 Oct;114(4):411–8

Influence of blood withdrawal and anticoagulant on clotting activity, hematologic data, and certain rheologic measurements. Reinhart WH, et al. **J Lab Clin Med** 1990 Jan;115(1):98–103

Maternal–fetal transport of vitamin K1 and its effects on coagulation in premature infants. Yang YM, et al. **J Pediatr** 1989 Dec;115(6):1009–13

Heparin dosing and monitoring for cardiopulmonary bypass. A comparison of techniques with measurement of subclinical plasma coagulation. Gravlee GP, et al. **J Thorac Cardiovasc Surg** 1990 Mar;99(3):518–27

Changes in coagulative and fibrinolytic activities in Triton WR–1339–induced hyperlipidemia in rats. Okazaki M, et al. **Jpn J Pharmacol** 1990 Feb;52(2):353–61

Effect of TRK–100, a prostacyclin analogue, on endotoxin–induced enhancement of blood coagulation in rats. Sakai A, et al. **Jpn J Pharmacol** 1989 Nov;51(3):450–4

Activation of coagulation after administration of tumor necrosis factor to normal subjects. van der Poll T, et al. **N Engl J Med** 1990 Jun 7;322(23):1622–7

A low–molecular–weight heparin (Kabi 2165, 'Fragmin') in repeated use for haemodialysis: prevention of clotting and prolongation of the venous compression time in comparison with commercial unfractionated heparin. Anastassiades E, et al. **Nephrol Dial Transplant** 1990;5(2):135–40

Maternal administration of vitamin K does not improve the coagulation profile of preterm infants. Kazzi NJ, et al. **Pediatrics** 1989 Dec;84(6):1045–50

Blood coagulation changes in rats poisoned with methylmercuric chloride (MeHg). Kostka B, et al. **Pol J Pharmacol Pharm** 1989 Mar–Apr;41(2):183–9

Adverse effect of topical methylsalicylate ointment on warfarin anticoagulation: an unrecognized potential hazard. Yip AS, et al. **Postgrad Med J** 1990 May;66(775):367–9

Anticoagulant effect of myotoxic phospholipase A2 isolated from the venom of the snake Bothrops asper (Viperidae). Alvarado J, et al. **Rev Biol Trop** 1988 Nov;36(2B):563–5

No effect of terodiline on anticoagulation effect of warfarin and steady–state plasma levels of warfarin enantiomers in healthy volunteers. Höglund P, et al. **Ther Drug Monit** 1989 Nov;11(6):667–73

Effect of protein C and activated protein C on coagulation and fibrinolysis in normal human subjects. Okajima K, et al. **Thromb Haemost** 1990 Feb 19;63(1):48–53

The effect of dermatan sulfate on in vitro human plasma coagulation, platelet aggregation and beta TG/PF4 release. Cofrancesco E, et al. **Thromb Res** 1990 Feb 1;57(3):405–14

Beneficial effect of low molecular weight heparin on the hemodialysis model in dogs. Hamano S, et al. **Thromb Res** 1989 Aug 15;55(4):439–49

Anticoagulant activity in the plasma after a single administration of nebulized heparin or LMW heparin fraction (Fraxiparine) in patients undergoing abdominal surgery. Lewandowski K, et al. **Thromb Res** 1990 Jun 1;

58(5):525–30
The effect of fluorescent humic substances existing in the well water of Blackfoot disease endemic areas in Taiwan on prothrombin time and activated partial thromboplastin time in vitro. Lu FJ, et al. **Thromb Res** 1990 Mar 1; 57(5):747–53
The inhibition of clotting complexes of the extrinsic coagulation cascade by the phospholipase A2 isoenzymes from Naja nigricollis venom. Stefansson S, et al. **Thromb Res** 1989 Aug 15;55(4):481–91
Hypercoagulable state after thrombolytic therapy in patients with acute myocardial infarction (AMI) treated with streptokinase. Vila V, et al. **Thromb Res** 1990 Mar 1; 57(5):783–94
Effect of a highly selective plasma-kallikrein synthetic inhibitor on contact activation relating to kinin generation, coagulation and fibrinolysis. Wanaka K, et al. **Thromb Res** 1990 Mar 15;57(6):889–95
Blood coagulation variations induced by carbon tetrachloride inhalation in Wistar rats. Vázquez C, et al. **Toxicol Appl Pharmacol** 1990 Apr;103(2):206–13
[Effect of an extract of Paeonia lactiflora on the blood coagulative and fibrinolytic enzymes] Wang Y, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1990 Feb;10(2):101–2, 70 (Eng. Abstr.) (Chi)
[Effects of anisodamine on blood coagulation, fibrin and thrombosis in rabbits] Xu QY, et al. **Chung Kuo Yao Li Hsueh Pao** 1990 Jan;11(1):44–7 (Eng. Abstr.) (Chi)
[The protease inhibitor gabexate mesilate in experimentally-induced acute pancreatitis with early gram-negative infection in the Göttingen minipig: therapeutic efficacy and effects on blood coagulation and fibrinolysis] Heitz J, et al. **Z Gastroenterol** 1990 Apr; 28(4):192–7 (Eng. Abstr.) (Ger)
[Isolation of calphobindin-II and its mechanism of anticoagulant activity] Kume K. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Oct; 41(10):1537–44 (Eng. Abstr.) (Jpn)
[Effects of low molecular weight heparin (FR-860) on coagulative and fibrinolytic activities] Hamano S, et al. **Nippon Yakurigaku Zasshi** 1989 Oct;94(4):243–9 (Eng. Abstr.) (Jpn)
[Antithrombotic effects of low molecular weight heparin (FR-860) in rabbits] Hamano S, et al. **Nippon Yakurigaku Zasshi** 1989 Oct;94(4):237–42 (Eng. Abstr.) (Jpn)
[The effects of various anticoagulants on blood coagulation: with special reference to false positive lupus anticoagulants] Onda H, et al. **Rinsho Byori** 1989 Dec;37(12):1385–91 (Eng. Abstr.) (Jpn)
[Evaluation of crude heparin and commercial preparation of Polish production] Jarzębiński J, et al. **Acta Pol Pharm** 1989;46(2):179–82 (Eng. Abstr.) (Pol)
[Effect of Polfos on the bleeding time. II. Changes in selected parameters of the blood coagulation system and fibrinolysis] Konopelko M, et al. **Med Pr** 1989;40(2):80–4 (Eng. Abstr.) (Pol)
[Exposure of women to chemical solvents during work at chemical plants and its relation to various biochemical parameters] Lembas-Bogaczyk J, et al. **Med Pr** 1989; 40(2):111–8 (Eng. Abstr.) (Pol)
[Some parameters of hemostasis in diabetic patients] Sroczyński J, et al. **Pol Tyg Lek** 1989 May 1–8; 44(18–19):420–2 (Eng. Abstr.) (Pol)
[An optimal coagulation method to determine anti-heparin compounds in biological specimens] Roszkowska-Jakimiec W. **Rocz Akad Med Bialymstoku** 1986–87;31–32:143–51 (Eng. Abstr.) (Pol)
[Lymphatic flow and blood coagulation in the liver in experimental carbon tetrachloride poisoning in the pre-cirrhotic stage] Iaroshenko IF, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;123:345–9 (Rus)
[Correction of rheologic disorders of the blood in patients with uterine myoma in the postoperative period] Kirsanova MI, et al. **Akush Ginekol (Mosk)** 1990 Feb;(2):27–30 (Eng. Abstr.) (Rus)
[Mast cell and blood coagulation functions during prolonged noradrenaline administration] Frolenko VI, et al. **Biull Eksp Biol Med** 1989 Dec;108(12):663–6 (Eng. Abstr.) (Rus)
[The influence of ciprofloxacin and pefloxacin on blood coagulation and the anticoagulant effect of heparin] Lepakhin VK, et al. **Farmakol Toksikol** 1989 Sep–Oct; 52(5):33–6 (Eng. Abstr.) (Rus)
[Effect of vasopressin and its analogs on blood coagulation in rats] Golubeva MG, et al. **Fiziol Zh** 1990 May–Jun; 36(3):25–30 (Eng. Abstr.) (Rus)
[The role of cholinergic receptors in the reactions of the hemostasis system to vasopressin] Kalishevskaia TM, et al. **Fiziol Zh** 1989 Sep–Oct;35(5):9–14 (Eng. Abstr.) (Rus)
[Study of tissue coagulation factors of native and cryopreserved bone marrow] Lipkan GN, et al. **Fiziol Zh** 1990 Jan–Feb;36(1):79–81 (Eng. Abstr.) (Rus)
[The coagulation characteristics of human oxyhemoglobin in the presence of a mercury (II) ion in a neutral phosphate buffer] Bogdanova LD, et al. **Izv Akad Nauk SSSR [Biol]** 1990 Mar–Apr;(2):194–201 (Eng. Abstr.) (Rus)
[Effect of sodium nitroprusside on coagulative and rheologic properties of the blood in patients in the acute period of myocardial infarction] Zabelin IV, et al. **Kardiologiia** 1990 Feb;30(2):90–1 (Rus)
[Status of blood coagulation in acute intestinal infection in infants: effect of various combinations of infusion media] Kramarev SA. **Pediatriia** 1990;(1):73–7 (Rus)
[Blood coagulating properties of the copperhead Agkisrodon halys halys venom and its thrombin-like fractions] Kalmykova IB, et al. **Vopr Med Khim** 1990 Mar–Apr; 36(2):12–4 (Eng. Abstr.) (Rus)
[The effect of vitamins A, E, C, P and PP on blood coagulation in experimental thromboplastinemia] Bysheskiĭ ASh, et al. **Vopr Pitan** 1989 Nov–Dec;(6):50–2 (Eng. Abstr.) (Rus)
[Proteolytic, procoagulant activity and electrophoretic characterization of the proteins of 2 toxic extracts of Loxosceles laeta venom] Heredia V, et al. **Bol Chil Parasitol** 1989 Jan–Jun;44(1–2):8–16 (Eng. Abstr.) (Spa)

GENETICS

The molecular biology of coagulation. **Baillieres Clin Haematol** 1989 Oct;2(4):787–1042

IMMUNOLOGY

Fetal demise associated with lupus anticoagulant: clinical features and results of treatment. Carp HJ, et al. **Gynecol Obstet Invest** 1989;28(4):178–84
[Circulating anticoagulant during visceral Mediterranean leishmaniasis (letter)] Disdier P, et al. **Presse Med** 1990 May 12;19(19):922 (Fre)

PHYSIOLOGY

High plasma levels of extrinsic pathway inhibitor and low levels of other coagulation inhibitors in advanced cancer. Lindahl AK, et al. **Acta Chir Scand** 1989 Aug;155(8):389–93
Malignant melanoma. Interaction with coagulation and fibrinolysis pathways in situ. Wojtukiewicz MZ, et al. **Am J Clin Pathol** 1990 Apr;93(4):516–21
Changes in coagulation and fibrinolysis in horses during exercise. McKeever KH, et al. **Am J Vet Res** 1990 Sep; 51(9):1335–9
Blood coagulation factors in the elderly. Hager K, et al. **Arch Gerontol Geriatr** 1989 Nov–Dec;9(3):277–82
The significance of high molecular weight kininogen for contact activation of rat blood coagulation, in vitro. Damas J, et al. **Arch Int Physiol Biochim** 1990 Mar;98(1):67–73
Contributions of negatively charged chemical groups to the surface-dependent activation of human plasma by soluble dextran derivatives. Nigretto JM, et al. **Biomaterials** 1989 Sep;10(7):449–54
Surface-dependent reactions of the vitamin K-dependent enzyme complexes. Mann KG, et al. **Blood** 1990 Jul 1; 76(1):1–16 (172 ref.)
Changes in the natural anticoagulants following bone marrow transplantation. Harper PL, et al. **Bone Marrow Transplant** 1990 Jan;5(1):39–42
Abnormal regulation of coagulation/fibrinolysis in small cell carcinoma of the lung. Wojtukiewicz MZ, et al. **Cancer** 1990 Feb 1;65(3):481–5
Viral activation of the coagulation cascade: molecular interactions at the surface of infected endothelial cells. Etingin OR, et al. **Cell** 1990 May 18;61(4):657–62
Heterogeneous activity of rodent and lagomorph parotid gland extracts on the hemocoagulation process. Menghi G, et al. **Cell Mol Biol** 1989;35(5):495–502
The coagulant and thrombogenic properties of human atheroma. Lyford CL, et al. **Circulation** 1967 Aug; 36(2):284–93
Blood coagulation and fibrinolysis: an overview. Mosher DF. **Clin Cardiol** 1990 Apr;13(4 Suppl 6):VI5–11 (3 ref.)
The haemostatic balance in groups of thrombosis-prone patients. With particular reference to fibrinolysis in patients with myocardial infarction. Gram J. **Dan Med Bull** 1990 Jun;37(3):210–34 (402 ref.)
Primary hemostasis, platelet functions and coagulation in psoriasis [letter] Dandurand M, et al. **Dermatologica** 1989; 179(4):218–9
Hemostatic alterations in non-cirrhotic portal fibrosis, extrahepatic portal venous obstruction and Budd-Chiari syndrome. Prasad CV, et al. **Indian J Gastroenterol** 1990 Jan;9(1):57–60
Contact phase of blood coagulation is not activated in edema of high altitude. Bärtsch P, et al. **J Appl Physiol** 1989 Oct; 67(4):1336–40
Localization of anticoagulantly active heparan sulfate proteoglycans in vascular endothelium: antithrombin binding on cultured endothelial cells and perfused rat aorta. de Agostini AI, et al. **J Cell Biol** 1990 Sep;111(3):1293–304
Dynamic viscoelasticity of blood. Fukada E, et al. **Monogr Atheroscler** 1990;15:170–80
The role of complex formation and epidermal growth factor-like domains in the regulation of blood coagulation by the thrombomodulin-protein C system. Kurosawa S. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec;52(8):1343–9 (34 ref.)
Hepatic neoplasms: effects of transcatheter arterial embolization on coagulation and fibrinolysis. Katsushima S, et al. **Radiology** 1990 Mar;174(3 Pt 1):747–50
Blood coagulation alterations after embolic occlusion of the renal circulation. Törngren S, et al. **Scand J Urol Nephrol** 1990;24(2):141–4
Blood coagulation after long distance running: antithrombin III prevents fibrin formation. Bärtsch P, et al. **Thromb Haemost** 1990 Jun 28;63(3):430–4
Effect of glycosaminoglycans on thrombin- and atroxin-induced fibrin assembly and structure. Carr ME Jr, et al. **Thromb Haemost** 1989 Dec 29;62(4):1057–61
Relation of intraperitoneal and intravascular coagulation and fibrinolysis related antigens in peritoneal dialysis. Gries E, et al. **Thromb Haemost** 1990 Jun 28;63(3):356–60
Primary haemostasis, plasmatic coagulation and fibrinolysis in renal transplantation. Fellström B, et al. **Thromb Res** 1990 Jul 1;59(1):97–104
Activation of coagulation and fibrinolysis in patients with arteriosclerosis: relation to localization of vessel disease and risk factors. Speiser W, et al. **Thromb Res** 1990 Jul 1; 59(1):77–88
Hypercoagulability in acute ischemic stroke: analysis of the extrinsic coagulation reactions in plasma by a highly sensitive automated method. Takano K, et al. **Thromb Res** 1990 Jun 1;58(5):481–91
[Preparation-related effects on the coagulation activity of plasma] Schmitt H. **Beitr Infusionther** 1989;24:91–4 (4 ref.) (Eng. Abstr.) (Ger)
[The endothelium as the central control site of the coagulation cascade] Nawroth PP, et al. **Z Kardiol** 1989; 78 Suppl 6:16–24 (60 ref.) (Eng. Abstr.) (Ger)
[Hemorheological and coagulation aspects in plasmacytoma] Reali GL, et al. **Boll Soc Ital Biol Sper** 1989 Oct; 65(10):923–9 (Eng. Abstr.) (Ita)
[Physiology and physiopathology of the coagulation system] Neri Serneri GG. **Ric Clin Lab** 1989;19 Suppl 1:1–21 (119 ref.) (Ita)
[Reaction of the blood system in extra- and intracorporeal detoxication] Chelmakina VP. **Anesteziol Reanimatol** 1990 Mar–Apr;(2):33–6 (Eng. Abstr.) (Rus)
[Changes in hemolymphocoagulation in acute arterial occlusive diseases of the lower extremity] Garaev GSh, et al. **Biull Eksp Biol Med** 1990 Apr;109(4):332–3 (Eng. Abstr.) (Rus)
[The role of the adrenoreceptors in regulating the blood coagulation system] Golubeva MG. **Fiziol Cheloveka** 1989 Nov–Dec;15(6):127–37 (65 ref.) (Rus)
[The indices of the function of the anticoagulation system and of the nonenzymatic fibrinolytic activity of the antithrombin III-heparin-thrombin complex in the blood of children with burn and traumatic shock] Pastorova VE, et al. **Fiziol Cheloveka** 1990 Mar–Apr;16(2):71–6 (Rus)
[Effect of the adrenoreactive structures of the anterior hypothalamus on blood coagulation] Glukhov VP. **Fiziol Zh** 1990 Jan–Feb;36(1):75–8 (Eng. Abstr.) (Rus)
[Coagulative capacity of the blood and anti-aggregative activity of the vascular wall in rats subjected to immobilization stress] Loban'-Chereda GA, et al. **Fiziol Zh** 1990 Mar–Apr;36(2):13–8 (Eng. Abstr.) (Rus)
[Microtests for evaluating hemostasis and their clinical value] Barkagan LZ, et al. **Gematol Transfuziol** 1990 Jan; 35(1):21–3 (Eng. Abstr.) (Rus)
[Thrombokinetic study of patients with idiopathic thrombocytopenic purpura] Kostadinova I, et al. **Gematol Transfuziol** 1989 Nov;34(11):39–41 (Eng. Abstr.) (Rus)
[Rupture resistance of blood clots and plasma] Savushkin AV. **Gematol Transfuziol** 1990 Mar;35(3):36–8 (Rus)
[Evaluation of the status of the anticoagulative system of blood in ischemic heart disease based on the calculation of the reserve of blood intracellular heparin] Gabitov SZ, et al. **Kardiologiia** 1990 Jan;30(1):85–7 (Rus)
[Platelet aggregation, hemostasis and rheological properties of arterial and venous blood in patients with acute myocardial infarction] Solo'vev BV, et al. **Kardiologiia** 1989 Oct;29(10):40–3 (Eng. Abstr.) (Rus)
[Hemostasis and humoral immunity in patients with peptic ulcer hemorrhage] Esperov BN, et al. **Klin Khir** 1990; (4):12–4 (Eng. Abstr.) (Rus)
[Gravitational surgical correction of the aggregative status of the blood in ischemic heart disease] Gavrilov OK. **Klin Med (Mosk)** 1989 Oct;67(10):8–12 (Eng. Abstr.) (Rus)
[The hemostasis system in hypoxic anoxia of varying degree] Pak GD, et al. **Kosm Biol Aviakosm Med** 1990 Mar–Apr; 24(2):4–9 (62 ref.) (Eng. Abstr.) (Rus)
[The status of hemocoagulation in patients with essential varicosis of the lower extremities] Matantseva EF, et al. **Lab Delo** 1990;(4):62 (Rus)
[Changes in the membrane permeability of erythrocytes during blood coagulation in vitro] Bezrukova GA, et al. **Patol Fiziol Eksp Ter** 1989 Sep–Oct;(5):22–3 (Eng. Abstr.) (Rus)
[The system of regulation of blood coagulation in girls with juvenile uterine hemorrhage] Kokolina VF, et al. **Pediatriia** 1990;(5):68–70 (Rus)
[C-peptide, diabetogenic factor and the blood anticoagulating system in patients with the insulin-dependent type of diabetes mellitus before and after heparin therapy] Balabolkin MI, et al. **Probl Endokrinol (Mosk)** 1990 Jan–Feb;36(1):25–8 (Eng. Abstr.) (Rus)
[Blood coagulation potential in patients with mechanical jaundice during hemosorption] Lekhtman AM, et al. **Sov Med** 1990;(2):65–7 (Rus)
[Hemostatic changes in post-mastectomy edema of the arm in patients with breast cancer] Pronin VI, et al. **Sov Med** 1990;(2):112–6 (Rus)

[The blood coagulation and fibrinolytic properties of the mucosa in the gastroduodenal area in patients with duodenal peptic ulcer] Tabidze ZSh. **Ter Arkh** 1990; 62(2):35–8 (Eng. Abstr.) **(Rus)**

[Prevention and treatment of thromboembolic complications in patients with facial furunculosis and carbuncles] Zakharova GN, et al. **Vestn Khir** 1989 Jul;143(7):100–2 **(Rus)**

[Characteristics of blood coagulation changes in patients with dilated cardiomyopathy] Amosova EN, et al. **Vrach Delo** 1989 Sep;(9):32–5 (Eng. Abstr.) **(Rus)**

[Histidine-rich glycoprotein: modulator of coagulation and fibrinolysis] Velasco F, et al. **Sangre (Barc)** 1989 Dec; 34(6):502–8 (50 ref.) **(Spa)**

RADIATION EFFECTS

Photocoagulation of human plasma: acyl serine proteinase photochemistry. Porter NA, et al. **Photochem Photobiol** 1990 Jan;51(1):37–43

BLOOD COAGULATION DISORDERS

Disturbances in haemostasis the vascular surgeon should know about. Abildgaard U. **Acta Chir Scand Suppl** 1990; 555:17–20

The anti-phospholipid antibody syndrome in a 77 year old man with digital gangrene. Roche SW, et al. **Postgrad Med J** 1989 Nov;65(769):837–9

Hypercoagulability: introduction and perspective. Joist JH. **Semin Thromb Hemost** 1990 Apr;16(2):151–7 (17 ref.)

[Autoimmunity and platelet disorders] Balduini CL, et al. **Haematologica (Pavia)** 1989 Oct;74(5 Suppl):179–89 (27 ref.) **(Ita)**

BLOOD

Correlation between lupus anticoagulants and anticardiolipin antibodies in patients with prolonged activated partial thromboplastin times. Alving BM, et al. **Am J Med** 1990 Feb;88(2):112–6

Circulating heparin-like anticoagulants: report of five consecutive cases and a review. Tefferi A, et al. **Am J Med** 1990 Feb;88(2):184–8 (35 ref.)

Ehlers-Danlos syndrome, clotting disorders and muscular dystrophy. Bertin P, et al. **Ann Rheum Dis** 1989 Nov; 48(11):953–6

The laboratory diagnosis of lupus anticoagulants [letter; comment] Exner T. **Arch Pathol Lab Med** 1990 Jan; 114(1):8–9 Comment on: Arch Pathol Lab Med 1989 Feb;113(2):177–80.

Assessment of hypercoagulable states by measurement of activation fragments and peptides. Boisclair MD, et al. **Blood Rev** 1990 Mar;4(1):25–40 (113 ref.)

The rational use of coagulation studies in obstetrics: an audit. Basu SN, et al. **Br J Obstet Gynaecol** 1990 May;97(5):452–4

The coagulopathy of childhood leukemia. Thrombin activation or primary fibrinolysis? Abshire TC, et al. **Cancer** 1990 Aug 15;66(4):716–21

Lowered antithrombin III activity and other clotting changes in homocystinuria: effects of a pyridoxine-folate regimen. Palareti G, et al. **Haemostasis** 1989;19 Suppl 1:24–8

Elevated plasminogen activator inhibitor (PAI), a cause of thrombophilia? A study in 203 patients with familial or sporadic venous thrombophilia. Engesser L, et al. **Thromb Haemost** 1989 Sep 29;62(2):673–80

Activation of the coagulation cascade in falciparum malaria. Pukrittayakamee S, et al. **Trans R Soc Trop Med Hyg** 1989 Nov-Dec;83(6):762–6

[Heparin cofactor II studies in thrombophilic patients] Pál A, et al. **Orv Hetil** 1990 Mar 4;131(9):461–2, 465 (30 ref.) (Eng. Abstr.) **(Hun)**

[Assay of blood coagulation factors in factor deficiency plasma] Hino S. **Rinsho Ketsueki** 1989 Oct;30(10):1903–4 **(Jpn)**

[Middle molecules as an indicator of the degree of disruption of blood coagulation in hemophilia] Pan'kov VN, et al. **Lab Delo** 1989;(9):23–5 (Eng. Abstr.) **(Rus)**

[Disorders of blood coagulation and microcirculation in diabetics] Titova SI, et al. **Probl Endokrinol (Mosk)** 1989 Nov-Dec;35(6):3–7 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Diclofenac sodium and bruising [letter] Khazan U, et al. **Ann Intern Med** 1990 Mar 15;112(6):472–3

Effects of oestrogen therapy and orchidectomy on coagulation and prostanoid synthesis in patients with prostatic cancer. Henriksson P, et al. **Med Oncol Tumor Pharmacother** 1989;6(3):219–25

[Hemostasis disturbance caused by cephalosporins with an N-methylthiotetrazole side chain. A randomized pilot study] Schäfer H, et al. **Arzneimittelforschung** 1989 Sep; 39(9):1156–62 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Fibrinolysis in pseudotumor cerebri. al-Kawi MZ, et al. **Adv Neurol** 1990;52:539

Blood hypercoagulability as a risk factor for leg ulcers in sickle cell disease [letter; comment] Cacciola E, et al. **Blood** 1990 Jun 15;75(12):2467–8 Comment on: Blood 1989 Sep;74(4):1403–8.

Isodense extradural haematoma [letter; comment] Iplikcioğlu A. **Br J Neurosurg** 1990;4(2):161 Comment on: Br J Neurosurg 1989;3(2):221–4.

Safety of invasive procedures in patients with the coagulopathy of liver disease. Friedman EW, et al. **Clin Lab Haematol** 1989;11(3):199–204

IgA nephritis associated with plasminogen abnormalities. Kitamoto Y, et al. **Clin Nephrol** 1990 Feb;33(2):61–5

Superficial thrombophlebitis. I. Primary hypercoagulable states. Samlaska CP, et al. **J Am Acad Dermatol** 1990 Jun; 22(6 Pt 1):975–89 (173 ref.)

Superficial thrombophlebitis. II. Secondary hypercoagulable states. Samlaska CP, et al. **J Am Acad Dermatol** 1990 Jul; 23(1):1–18 (211 ref.)

Myopathic form of arthrogryposis and microcirculation lesion. Fidziańska A, et al. **J Neurol Sci** 1989 Sep; 92(2–3):337–48

Obstetric duplex sonography in patients with lupus anticoagulant syndrome. Carroll BA. **J Ultrasound Med** 1990 Jan;9(1):17–21

Sudden infant death syndrome: a possible clue to causation [letter] Goldwater PN, et al. **Med J Aust** 1990 Jul 2; 153(1):59–60

Anesthetic management of the patient with a bleeding disorder. Scheinman GM. **Middle East J Anesthesiol** 1989 Feb;10(1):29–38

Subdural hematoma as a complication of hemostatic deficiency secondary to liver cirrhosis—report of two cases. Furui T, et al. **Neurol Med Chir (Tokyo)** 1989 Jul; 29(7):588–91

Coagulopathy and warfarin-associated breast necrosis in a patient with a primary brain tumor. Heaton RB, et al. **Surg Neurol** 1990 Jun;33(6):395–9

[A case of disseminated intravascular coagulation thought to be caused by tooth extraction in the hypercoagulable condition due to abdominal aortic aneurysm] Chishiro T. **Nippon Naika Gakkai Zasshi** 1989 Dec;78(12):1777–8 **(Jpn)**

[Comparative evaluation of the system of hemostasis in term and premature labor] Abdurakhmanov FM. **Akush Ginekol (Mosk)** 1989 Aug;(8):43–6 (Eng. Abstr.) **(Rus)**

[Diagnosis and intensive therapy of obstetric coagulopathic syndrome in parturients in the early post-resuscitation period] Novikova RI, et al. **Akush Ginekol (Mosk)** 1989 Aug;(8):49–51 (Eng. Abstr.) **(Rus)**

[Diagnosis of postoperative coagulopathic hemorrhage in oncology patients] Madzhuga AV, et al. **Khirurgiia (Mosk)** 1990 Apr;(4):85–9 (Eng. Abstr.) **(Rus)**

[Current aspects of pathogenesis, diagnosis and treatment of hemorrhagic vasculitis in children] Barkagan LZ, et al. **Pediatriia** 1990;(5):82–7 **(Rus)**

[The skin manifestations of congenital and acquired hemostatic disorders] Zerbino DD, et al. **Vestn Dermatol Venerol** 1990;(4):62–7 (27 ref.) (Eng. Abstr.) **(Rus)**

[Otorhinolaryngologic surgery in patients with coagulopathy] Pastore A, et al. **Acta Otorrinolaringol Esp** 1989 Nov-Dec;40(6):417–8 (Eng. Abstr.) **(Spa)**

[Death caused by hemopericardium following severe coagulopathy in chronic hepatitis (letter)] Jiménez Sáenz M, et al. **Rev Clin Esp** 1990 Mar;186(4):191–2 **(Spa)**

CONGENITAL

[Distribution of the causes of congenital thrombophilia] Domján G, et al. **Orv Hetil** 1989 Sep 17;130(38):2023–5 (Eng. Abstr.) **(Hun)**

[Introduction to congenital abnormalities of plasma proteins involved in blood clotting, fibrinolysis and their regulations] Saito H. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):955–8 **(Jpn)**

[Congenital and hereditary defects in hemostasis predisposing to recurrent thromboses and pregnancy (a clinical lecture)] Makatsariia AD, et al. **Akush Ginekol (Mosk)** 1989 Nov; (11):3–6 **(Rus)**

DIAGNOSIS

A comparative evaluation of assays for markers of activated coagulation and/or fibrinolysis: thrombin-antithrombin complex, D-dimer and fibrinogen/fibrin fragment E antigen. Boisclair MD, et al. **Br J Haematol** 1990 Apr; 74(4):471–9

Two ELISA's for measurement of protein S, and their use in the laboratory diagnosis of protein S deficiency. Deutz-Terlouw PP, et al. **Clin Chim Acta** 1990 Jan 31; 186(3):321–34

Biological relevance of the protein C system and laboratory diagnosis of protein C and protein S deficiencies. Preissner KT. **Clin Sci** 1990 Apr;78(4):351–64 (141 ref.)

Coagulation disturbances in cancer of the breast and colon measured with specific monoclonal antibody enzyme immunoassay for fibrin-fibrinogen degradation products. McCulloch P, et al. **Haemostasis** 1990;20(2):73–80

Pursuit of abnormal coagulation screening tests generates modest hidden preoperative costs. Bushick JB, et al. **J Gen Intern Med** 1989 Nov-Dec;4(6):493–7

Use of the activated partial thromboplastin time for the diagnosis of congenital coagulation disorders: problems and possible solutions. Barna L, et al. **Ric Clin Lab** 1989 Oct-Dec;19(4):345–54

Screening for congenital coagulation disorders. Tripodi A. **Ric Clin Lab** 1989 Oct-Dec;19(4):327–32

Current issues in laboratory diagnosis of bleeding disorders and hypercoagulable states. Dedicated to the memory of Anthony P. Fletcher, M.D. **Semin Thromb Hemost** 1990 Apr;16(2):151–97

[Should blood coagulation tests be performed before locoregional anesthesia in class 1 ASA patients?] Bléry C. **Ann Fr Anesth Reanim** 1990;9(4):371–4 (Eng. Abstr.) **(Fre)**

[Hemostasis and regional anesthesia] Tryba M. **Ann Fr Anesth Reanim** 1990;9(4):375–7 **(Fre)**

[A comprehensive laboratory evaluation of changes in the fibrinogen molecule in the diagnosis of acquired coagulopathy conditions] Siatkovskiĭ VA, et al. **Lab Delo** 1989;(8):45–8 (Eng. Abstr.) **(Rus)**

[The value of graphic methods: thrombodynamoelastography, resonance thrombography and coagulography in the detection of hemostasis disorders in patients with liver cirrhosis] Rezaković D, et al. **Med Arh** 1985;39(2–3):51–6 (Eng. Abstr.) **(Scr)**

DRUG THERAPY

Role of antithrombin III in coagulation disorders: state-of-the-art review. Proceedings of a symposium. Boston, Massachusetts, September 16 to 18, 1988. **Am J Med** 1989 Sep 11;87(3B):1S–67S (0 ref.)

1-Deamino-8-D-arginine vasopressin in the treatment of non-haemophilic patients with acquired factor VIII inhibitor. Muhm M, et al. **Haemostasis** 1990;20(1):15–20

Severe acquired deficiency of vitamin K-dependent factors and resistance to multiple vitamin K injections [letter; comment] Hanss M, et al. **Thromb Haemost** 1989 Sep 29; 62(2):816 Comment on: Thromb Haemost 1987 Aug 4;58(2):790.

Pharmacologic agents in the management of bleeding disorders. Bolan CD, et al. **Transfusion** 1990 Jul-Aug; 30(6):541–51 (130 ref.)

Transmission of human parvovirus B19 by coagulation factor concentrates. Williams MD, et al. **Vox Sang** 1990; 58(3):177–81

[Antithrombotic therapy in correcting hemostatic disorders in patients with chronic glomerulonephritis] Nazar PS, et al. **Vrach Delo** 1990 Mar;(3):18–20 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

The antiphospholipid syndrome: prevalence among patients with stroke and transient ischemic attacks. Trimble M, et al. **Am J Med** 1990 Jun;88(6):593–7

ETIOLOGY

The cause of coagulopathy after peritoneovenous shunt for malignant ascites. Gleysteen JJ, et al. **Arch Surg** 1990 Apr; 125(4):474–7

Direct activation of platelets by heat is the possible trigger of the coagulopathy of heat stroke. Gader AM, et al. **Br J Haematol** 1990 Jan;74(1):86–92

The haemostatic defect following extracorporeal circulation. Douglas AS, et al. **Br J Surg** 1966 May;53(5):455–67 (116 ref.)

A hypercoagulable state follows orthotopic liver transplantation. Stahl RL, et al. **Hepatology** 1990 Sep;12(3 Pt 1):553–8

Coagulation abnormalities in systemic lupus erythematosus. Saraya AK, et al. **Indian J Med Res** 1989 Oct;90:335–40

Physiopathology and management of coagulation during long-term extracorporeal respiratory assistance. Uziel L, et al. **Int J Artif Organs** 1990 May;13(5):280–7

Acquired hemostatic abnormalities in the elderly. Mansouri A, et al. **J Am Geriatr Soc** 1990 Jul;38(7):809–16 (74 ref.)

Coagulation disturbances following ascites recirculation. Wilde JT, et al. **J Hepatol** 1990 Mar;10(2):217–22

Coagulopathy in patients with hemorrhagic fever with renal syndrome. Lee M. **J Korean Med Sci** 1987 Dec;2(4):201–11

Abnormal blood clotting after head injury. **Lancet** 1989 Oct 21;2(8669):957–8 (24 ref.)

Coagulation abnormalities in chronic peritoneal dialysis. Jones CL, et al. **Pediatr Nephrol** 1990 Mar;4(2):152–5

Spontaneous postpartum factor VIII inhibitor development with bleeding into the face and neck. O'Sullivan JL, et al. **Plast Reconstr Surg** 1989 Nov;84(5):802–5

Coagulation and cancer. **Semin Oncol** 1990 Apr;17(2):137–237

Hyperviscosity syndromes and coagulopathies. Patterson WP, et al. **Semin Oncol** 1990 Apr;17(2):210–6 (69 ref.)

Coagulation and cancer: an overview. Patterson WP. **Semin Oncol** 1990 Apr;17(2):137–9 (31 ref.)

Studies on blood coagulation and fibrinolysis in patients bitten by Bothrops jararaca (jararaca). Maruyama M, et al. **Thromb Haemost** 1990 Jun 28;63(3):449–53

[Hemostatic disorders in anesthesiology and surgical intensive care] Blauhut B, et al. **Anaesthesiol Reanim** 1990; 15(2):67–80 (24 ref.) (Eng. Abstr.) **(Ger)**

[Infectious diseases and hemostasis] Orosz L, et al. **Orv Hetil** 1990 Mar 11;131(10):521–4 (Eng. Abstr.) **(Hun)**

[Blood coagulation problems during long-term extracorporeal circulation] Agostoni A, et al. **Ann Ital Med Int** 1986 Sep;1(3):212–20 (Eng. Abstr.) **(Ita)**

[Neonatal hypoxia and hemocoagulative changes] Fichera A, et al. **Pediatr Med Chir** 1989 Nov-Dec;11(6):643–7 (41 ref.) (Eng. Abstr.) **(Ita)**

[Coagulation disorders during orthotopic liver

transplantation] Suzumura N. **Nippon Geka Gakkai Zasshi** 1989 Jun;90(6):847–54 (Eng. Abstr.) **(Jpn)**

[Hypercoagulability after surgery of esophageal carcinoma] Usuba A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Mar;38(3):401–11 (Eng. Abstr.) **(Jpn)**

[Diverse hemostatic abnormalities in a patient with biclonal multiple myeloma] Komiya I, et al. **Rinsho Ketsueki** 1990 Jan;31(1):62–5 (Eng. Abstr.) **(Jpn)**

[Snake bites by Bothrops moojeni: correlation of the clinical picture with the snake size] Kouyoumdjian JA, et al. **Rev Inst Med Trop Sao Paulo** 1989 Mar–.\pr;31(2):84–90 (Eng. Abstr.) **(Por)**

[Blood rheologic disorders in patients with polycythemia vera and their correction by therapeutic erythrocytapheresis] Likhovetskaia ZM, et al. **Gematol Transfuziol** 1989 Nov;34(11):33–6 (Eng. Abstr.) **(Rus)**

[Blood coagulation changes in lung surgery and their prevention by heparin] Ruselkin NS, et al. **Grudn Khir** 1989 Jul–Aug;(4):47–50 (Eng. Abstr.) **(Rus)**

[Clinico-genetic and hemostatic disorders in viral hepatitis B] Gebesh VV, et al. **Klin Med (Mosk)** 1990 Mar;68(3):57–61 (Eng. Abstr.) **(Rus)**

[The mechanisms of disorders in the hemostatic system of patients with chronic diffuse liver diseases] Podymova SD, et al. **Ter Arkh** 1990;62(2):72–6 (Eng. Abstr.) **(Rus)**

GENETICS

Laboratory diagnosis of inherited protein S deficiency [see comments] Edson JR, et al. **Am J Clin Pathol** 1990 Aug;94(2):176–86 Comment in: Am J Clin Pathol 1990 Aug;94(2):242–3.

Fibrinogen Milano. VI: A heterozygous dysfibrinogenemia (A alpha 16 Arg——His) with bleeding tendency. Bögli C, et al. **Eur J Haematol** 1990 Jul;45(1):26–30

Fibrinogen Barcelona II: a new case of A alpha 16 Arg——His substitution. Borrell M, et al. **Haemostasis** 1990;20(1):1–7

Oral surgery in patients with hereditary bleeding disorders. A survey of treatment in the Stockholm area (1974–1985). Ramström G, et al. **Int J Oral Maxillofac Surg** 1989 Dec;18(6):320–2

Hereditary antithrombin III deficiency with a superior sagittal sinus thrombosis: evidence for a possible mutation starting in the mother of the propositus. Muramatsu S, et al. **Thromb Res** 1990 Feb 15;57(4):593–600

Fibrinogen Baltimore IV: congenital dysfibrinogenemia with a gamma 275 (Arg——Cys) substitution. Schmelzer CH, et al. **Thromb Res** 1989 Oct 15;56(2):307–16

[Congenital and hereditary defects in hemostasis predisposing to recurrent thromboses and pregnancy (a clinical lecture)] Makatsariia AD, et al. **Akush Ginekol (Mosk)** 1989 Nov;(11):3–6 **(Rus)**

IMMUNOLOGY

The antiphospholipid syndrome. Many A, et al. **Isr J Med Sci** 1989 Dec;25(12):674–7 (13 ref.)

Peripheral neuropathy, coagulopathy and nodular regenerative hyperplasia of the liver in a patient with multiple serologic auto-antibody activities and IgM B-cell lymphoma. Zuber M, et al. **J Intern Med** 1989 Nov;226(5):291–5

Inadequate periods of anticoagulation in the 'lupus anticoagulant syndrome'—a case report. Wathen CG, et al. **Respir Med** 1989 Jul;83(4):367–8

METABOLISM

Recurrent thrombosis and renal vascular disease in patients with a lupus anticoagulant. Kleinknecht D, et al. **Nephrol Dial Transplant** 1989;4(10):854–8

PHYSIOPATHOLOGY

Computerized analysis of the in vitro activation of the plasmatic clotting system. Baumann P, et al. **Haemostasis** 1989;19(6):309–21

Impaired fibrinolysis in patients with thrombotic or haemostatic defects. Sloan IG, et al. **Thromb Res** 1989 Sep 1;55(5):559–67

[Hemodynamic, coagulation and glycoregulation changes induced by brain death] Masson F, et al. **Ann Fr Anesth Reanim** 1990;9(2):115–22 (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

Failure of ascitic fluid replacement for prevention of coagulopathy post peritoneovenous shunt. Case report. Gagner M, et al. **Acta Chir Scand** 1990 Apr;156(4):337–40

Avoiding coagulopathy in vascular surgery. Tawes RL Jr, et al. **Am J Surg** 1990 Aug;160(2):212–6

Hypercoagulability during L-asparaginase treatment: the effect of antithrombin III supplementation in vivo. Gugliotta L, et al. **Br J Haematol** 1990 Apr;74(4):465–70

Screening for hypercoagulable states in vascular surgical practice: a preliminary study [see comments] Donaldson MC, et al. **J Vasc Surg** 1990 Jun;11(6):825–31 Comment in: J Vasc Surg 1990 Jun;11(6):846–7.

Hypercoagulable states [editorial; comment] Silver D. **J Vasc Surg** 1990 Jun;11(6):846–7 Comment on: J Vasc Surg 1990 Jun;11(6):825–31.

SURGERY

Open-heart surgery in a patient with heterozygous alpha 2-antiplasmin deficiency. Perioperative strategies in the first reported case. Shahian DM, et al. **Chest** 1990 Jun;97(6):1488–90

THERAPY

Report on the diagnosis and treatment of homozygous protein C deficiency. Report of the Working Party on Homozygous Protein C Deficiency of the ICTH-Subcommittee on Protein C and Protein S. Marlar RA, et al. **Thromb Haemost** 1989 Jun 30;61(3):529–31

Improved prognosis of fulminant hepatic failure (FHF) after plasma derivative replacement therapy. Enhanced proteolysis of hemostatic proteins confirmed by proteinase-inhibitor complexes determination. Egbring R, et al. **Z Gastroenterol** 1990 Feb;28(2):104–9

[The status of blood coagulation preparations within the scope of modern hemotherapy in surgical patients] Kretschmer V. **Beitr Infusionther** 1989;24:134–50 (120 ref.) (Eng. Abstr.) **(Ger)**

[Dental therapy in patients with coagulopathies] Rapalino M, et al. **Minerva Stomatol** 1990 Mar;39(3):231–2 (Eng. Abstr.) **(Ita)**

[Modern methods for correcting thrombocytic hemostasis] Matveev SA. **Vestn Khir** 1989 Oct;143(10):153–6 (39 ref.) **(Rus)**

VETERINARY

[Secondary effects caused by feed medication in swine] Wendt M, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Jan;97(1):34–9 (Eng. Abstr.) **(Ger)**

BLOOD COAGULATION FACTORS

Bleeding factors and tonsil and adenoid surgery. Johnson F. **Arch Otolaryngol** 1967 Nov;86(5):584–6

Current safety of clotting factor concentrates. Epstein JS, et al. **Arch Pathol Lab Med** 1990 Mar;114(3):335–40 (50 ref.)

Generalized pseudoxanthoma elasticum with deficiency of vitamin K-dependent clotting factors. Rongioletti F, et al. **J Am Acad Dermatol** 1989 Nov;21(5 Pt 2):1150–2

Blood products: avoiding imports in Japan [news] Swinbanks D. **Nature** 1989 Sep 28;341(6240):270–1

Thermal inactivation by sequential dry-heat treatments at sterilizing temperatures (100 degrees C-boiling) of factor VIII and factor IX concentrates to produce sterile concentrates [letter] Rubinstein AI, et al. **Vox Sang** 1989;57(4):272

[Comparative evaluation of Escherichia coli strains as markers for the study of bacteriophages] Liberti R, et al. **Boll Soc Ital Biol Sper** 1990 May;66(5):479–85 (Eng. Abstr.) **(Ita)**

[Natural anticoagulants as a cause of hereditary familial thrombosis] Tripodi A, et al. **Haematologica** 1990 Mar–Apr;75 Suppl 2:1–5 (29 ref.) **(Ita)**

[Introduction to congenital abnormalities of plasma proteins involved in blood clotting, fibrinolysis and their regulations] Saito H. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):955–8 **(Jpn)**

[Significance of leukocytic factors of coagulation and fibrinolysis in the forecasting of unfavorable neurologic sequelae in convalescents after mumps meningitis] Babachenko IV, et al. **Pediatriia** 1989;(11):112 **(Rus)**

ADMINISTRATION & DOSAGE

[Perioperative blood coagulation therapy and diagnosis] Kretschmer V. **Infusionstherapie** 1990 Apr;17 Suppl 2:9–19 (143 ref.) (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Disseminated intravascular coagulation and myocardial infarction in a haemophilia B patient during therapy with prothrombin complex concentrates. Chistolini A, et al. **Acta Haematol (Basel)** 1990;83(3):163–5

Evaluation of the risk of hepatitis from clotting factor concentrates. Fricke WA. **Prog Clin Biol Res** 1990;324:161–6 (14 ref.)

An outbreak of non-A, non-B hepatitis associated with the infusion of a commercial factor IX complex during cardiovascular surgery. Gerber AR, et al. **Vox Sang** 1990;58(4):270–5

ANALYSIS

Characterization of immune responses in different lymphoid compartments during small intestinal allograft rejection. Kim PC, et al. **Am J Surg** 1990 Jan;159(1):161–6

Effect of parenteral oestrogen on the coagulation system in patients with prostatic carcinoma. Henriksson P, et al. **Br J Urol** 1990 Mar;65(3):282–5

Coagulation factors in orbital venous vasculitis. Hannerz J, et al. **Cephalalgia** 1990 Apr;10(2):83–6

Coagulation and anticoagulation systems in newborns—correlation with their mothers at delivery. Lower levels of anticoagulants and fibrinolytic activity in the newborn. Lao TT, et al. **Gynecol Obstet Invest** 1990;29(3):181–4

Cancer procoagulant in serum of rats during development of experimental epithelioma. Mielicki W, et al. **Int J Cancer** 1990 Jan 15;45(1):125–6

Procoagulant activity of mononuclear phagocytes from different anatomical sites in patients with gynecological malignancies. Semeraro N, et al. **Int J Cancer** 1990 Feb 15;45(2):251–4

Chromatography of human plasma on aminohexyl Sepharose: separation of factor VIII/vWf and behaviour of factors II, VII, IX and X and antithrombin III. Ruttyn Y, et al. **J Chromatogr** 1989 Jul 21;491(2):299–308

Determination of haemoglobin and prothrombin complex in whole blood using optothermal spectrometry. Masson P, et al. **J Clin Chem Clin Biochem** 1989 Dec;27(12):947–52

Hypercoagulable states [editorial; comment] Silver D. **J Vasc Surg** 1990 Jun;11(6):846–7 Comment on: J Vasc Surg 1990 Jun;11(6):825–31.

Glomerular deposition of coagulation factors VII, VIII, and IX in IgA nephropathy: possible coagulation system involvement in IgA nephropathy. Matsubara M, et al. **Nephron** 1989;53(4):381–3

Procoagulant activity of human stomach and colon cancers. Mielicki W, et al. **Oncology** 1990;47(4):299–302

Separation of equine bronchopulmonary lavage cells by density gradient centrifugation and expression of procoagulant activity in unpurified cells and cell subpopulations. Grünig G, et al. **Res Vet Sci** 1990 Jul;49(1):39–45

Factors of the extrinsic pathway of blood coagulation in tumour associated macrophages. Adány R, et al. **Thromb Haemost** 1989 Nov 24;62(3):850–5

Procoagulant activity of T lymphoblastoid cells in extrinsic and intrinsic coagulation systems. Barrowcliffe TW, et al. **Thromb Haemost** 1989 Nov 24;62(3):880–4

Procoagulant activity of endocardial vegetations and blood monocytes in rabbits with Streptococcus sanguis endocarditis. Buiting AG, et al. **Thromb Haemost** 1989 Nov 24;62(3):1029–33

Animal tumor procoagulants: registry of the Subcommittee on Haemostasis and Malignancy of the Scientific and Standardization Committee, International Society of Thrombosis and Haemostasis. Edwards RL, et al. **Thromb Haemost** 1990 Feb 19;63(1):133–8 (50 ref.)

Indirect activation of blood coagulation in colon cancer. Wojtukiewicz MZ, et al. **Thromb Haemost** 1989 Dec 29;62(4):1062–6

Tissue factor gene expression in acute myeloblastic leukemia. Bauer KA, et al. **Thromb Res** 1989 Nov 1;56(3):425–30

Analysis of serum cancer procoagulant activity and its possible use as a tumor marker. Gordon SG, et al. **Thromb Res** 1989 Nov 1;56(3):431–40

Determination of the minimal concentrations of contact activation factors in deficient substrate plasmas required to assess accurately factor XII, factor XI, factor IX, and high molecular weight kininogen. Munakata M, et al. **Thromb Res** 1990 Jan 15;57(2):197–203

Prostaglandin E2 prevents fulminant hepatitis and the induction of procoagulant activity in susceptible animals. Abecassis M, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1103–5

[Antiprothrombinase and myocardial infarction. Apropos of 2 cases] Philippe P, et al. **Rev Med Interne** 1990 Mar–Apr;11(2):154–6 (Eng. Abstr.) **(Fre)**

[Initial experiences with the correlation of biochemical parameters and fetal and utero-placental blood flow] Loos W, et al. **Arch Gynecol Obstet** 1989;245(1–4):63–6 **(Ger)**

[The quality of blood donation and its effect on subsequent preparation of coagulation active plasma fractions] Sander W. **Z Arztl Fortbild (Jena)** 1989;83(24):1247–50 (23 ref.) **(Ger)**

[Vitamin K 1 concentration and vitamin K-dependent clotting factors in newborn infants after intramuscular and oral administration of vitamin K 1] Goldschmidt B, et al. **Orv Hetil** 1990 Jun 17;131(24):1297–300 (Eng. Abstr.) **(Hun)**

[Assay of blood coagulation factors in factor deficiency plasma] Hino S. **Rinsho Ketsueki** 1989 Oct;30(10):1903–4 **(Jpn)**

[Activity of procoagulant and fibrinolysis in homogenate of leukemic cells] Wada H, et al. **Rinsho Ketsueki** 1989 Oct;30(10):1783–7 (Eng. Abstr.) **(Jpn)**

[Antiphospholipid syndrome and lupus anticoagulant (letter)] Wisløff F, et al. **Tidsskr Nor Laegeforen** 1990 Jan 10;110(1):94 **(Nor)**

[Changes in coagulation in normal pregnancy] Pizzuto J, et al. **Ginecol Obstet Mex** 1977 Jul;42(249):1–10 (Eng. Abstr.) **(Spa)**

BIOSYNTHESIS

Clonal analysis of CD4+ T helper cell subsets that induce the monocyte procoagulant response. Fan ST, et al. **Cell Immunol** 1990 Jun;128(1):52–62

Increased macrophage procoagulant activity but normal endothelial thrombomodulin in rabbits fed an atherogenic diet. Semeraro N, et al. **Haemostasis** 1990;20(1):54–61

Tissue factor production by cultured rat mesangial cells. Stimulation by TNF alpha and lipopolysaccharide. Wiggins RC, et al. **Kidney Int** 1990 May;37(5):1281–5

Synergistic effect of low doses of tumor necrosis factor and sera from patients with systemic lupus erythematosus on the expression of procoagulant activity by cultured endothelial cells. Hasselaar P, et al. **Thromb Haemost** 1989 Sep 29;62(2):654–60

[Effects of middle-weight molecules on the mechanism of

hemostasis] Siatkovskiĭ VA, et al. **Gematol Transfuziol** 1989 Jun;34(6):45–9 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effect of warfarin on plasma concentrations of vitamin K dependent coagulation factors in patients with stable control and monitored compliance. Kumar S, et al. **Br J Haematol** 1990 Jan;74(1):82–5

GENETICS

Blood coagulation factors in human embryonic–fetal development: preferential expression of the FVII/tissue factor pathway. Hassan HJ, et al. **Blood** 1990 Sep 15; 76(6):1158–64

Studies on coagulation and fibrinolysis in Greenland Eskimos. Schmidt EB, et al. **Thromb Res** 1989 Nov 15;56(4):553–8

IMMUNOLOGY

Lupus anticoagulant and late onset seizures [letter; comment] Vecht CJ, et al. **Acta Neurol Scand** 1990 Jan;81(1):88–9 Comment on: Acta Neurol Scand 1989 Feb;79(2):114–8.

Lupus anticoagulant and HIV infection: a prospective study [letter] Boue F, et al. **AIDS** 1990 May;4(5):467–8

Thrombocytopenic purpura in a patient with lupus anticoagulant: requirement of both immunosuppressive and antithrombotic therapies. Iwahara Y, et al. **Am J Hematol** 1990 Jan;33(1):75–7

Sensitivities of lupus anticoagulant assays [letter] Rosove MH, et al. **Am J Hematol** 1989 Nov;32(3):237–8

Correlation between lupus anticoagulants and anticardiolipin antibodies in patients with prolonged activated partial thromboplastin times. Alving BM, et al. **Am J Med** 1990 Feb;88(2):112–6

Laboratory identification of the lupus anticoagulant in normal pregnancy and pregnancy–induced hypertension [letter] Riveros DA, et al. **Am J Obstet Gynecol** 1990 Aug; 163(2):704–5

Antiphospholipid antibodies and recurrent pregnancy loss: correlation between the activated partial thromboplastin time and antibodies against phosphatidylserine and cardiolipin. Rote NS, et al. **Am J Obstet Gynecol** 1990 Aug; 163(2):575–84

Antiphospholipid antibodies and recurrent pregnancy loss. Triplett DA. **Am J Reprod Immunol** 1989 Jun;20(2):52–67 (235 ref.)

Antiphospholipid antibodies: anticardiolipin and the lupus anticoagulant in systemic lupus erythematosus (SLE) and in non–SLE disorders. Prevalence and clinical significance. Love PE, et al. **Ann Intern Med** 1990 May 1;112(9):682–98 (178 ref.)

The lupus anticoagulant. Moriau M, et al. **Ann Ital Med Int** 1986 Dec;1(4):303–6

Antiphospholipid antibodies. Levine SR, et al. **Ann Neurol** 1989 Sep;26(3):386–9 (26 ref.)

Cardiogenic brain embolism and lupus anticoagulant. Young SM, et al. **Ann Neurol** 1989 Sep;26(3):390–2

The lupus anticoagulant and retinal vaso–occlusive disease. Fitzpatrick EP, et al. **Ann Ophthalmol** 1990 Apr; 22(4):148–52

Risk factors for thrombosis in lupus patients. Hasselaar P, et al. **Ann Rheum Dis** 1989 Nov;48(11):933–40

Cutaneous histopathologic findings in 'antiphospholipid syndrome'. Correlation with disease, including human immunodeficiency virus disease. Smith KJ, et al. **Arch Dermatol** 1990 Sep;126(9):1176–83

Antiphospholipid antibodies associated with human immunodeficiency virus infection [letter] Taillan B, et al. **Arch Intern Med** 1990 Sep;150(9):1975

The effect of phospholipid on the detection of lupus anticoagulants by the dilute Russell viper venom time. Brandt JT, et al. **Arch Pathol Lab Med** 1989 Dec; 113(12):1376–8

The laboratory diagnosis of lupus anticoagulants [letter; comment] Exner T. **Arch Pathol Lab Med** 1990 Jan; 114(1):8–9 Comment on: Arch Pathol Lab Med 1989 Feb;113(2):177–80.

Nonsteroidal antiinflammatory drugs and the lupus anticoagulant [letter] Wohlgethan JR, et al. **Arthritis Rheum** 1990 Jul;33(7):1061–2

Prevalence of lupus anticoagulant and anticardiolipin antibodies in a healthy population. Shi W, et al. **Aust N Z J Med** 1990 Jun;20(3):231–6

Discrimination of normal and abnormal prothrombin and protein C in plasma using a calcium ion–inhibited monoclonal antibody to a common epitope on several vitamin K–dependent proteins. Church WR, et al. **Blood** 1989 Nov 15;74(7):2418–25

Impaired catalytic function of activated protein C: a new in vitro manifestation of lupus anticoagulant. Marciniak E, et al. **Blood** 1989 Nov 15;74(7):2426–32

Study of three patients with monoclonal gammopathies and 'lupus–like' anticoagulants. Bellotti V, et al. **Br J Haematol** 1989 Oct;73(2):221–7

Anticardiolipin antibodies and lupus anticoagulants comprise separate antibody subgroups with different phospholipid binding characteristics. McNeil HP, et al. **Br J Haematol** 1989 Dec;73(4):506–13

Laboratory identification of the lupus anticoagulant. Triplett DA, et al. **Br J Haematol** 1989 Oct;73(2):139–42 (48 ref.)

Lupus–like anticoagulants and lower extremity arterial occlusive disease. Eldrup–Jorgensen J, et al. **Circulation** 1989 Nov;80(5 Pt 2):III54–8

Kienböck's disease and antiphospholipid antibodies. Alijotas J, et al. **Clin Exp Rheumatol** 1990 May–Jun;8(3):297–8

IgG1 and IgG2 are the predominant subclasses of antiphospholipid antibody in women with the lupus anticoagulant. Dostal–Johnson D, et al. **Clin Immunol Immunopathol** 1990 Feb;54(2):309–19

Influence of the lupus anticoagulant on clotting tests. Vermylen J, et al. **Clin Rheumatol** 1990 Mar;9(1 Suppl 1):45–8 (23 ref.)

Lupus anticoagulant–related conditions. Lockshin MD. **Curr Opin Rheumatol** 1989 Oct;1(3):339–42 (23 ref.)

Maternal and fetal complications associating lupus anticoagulant and its management; three case reports. Makar AP, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jul–Aug;36(1–2):185–95

Occlusion of small hepatic veins associated with systemic lupus erythematosus with the lupus anticoagulant and anti–cardiolipin antibody. Nakamura H, et al. **Hepatogastroenterology** 1989 Oct;36(5):393–7

Cutaneous thrombosis, cerebrovascular thrombosis, and lupus anticoagulant—the Sneddon syndrome. Report of 10 cases. Alegre VA, et al. **Int J Dermatol** 1990 Jan–Feb;29(1):45–9 (58 ref.)

Superficial migratory thrombophlebitis and the lupus anticoagulant. Blum F, et al. **Int J Dermatol** 1990 Apr; 29(3):190–2

Lupus anticoagulant. Williams PE. **J Arkansas Med Soc** 1990 May;86(12):493–7

Detection of lupus like anticoagulant: current laboratory practice in the United Kingdom. The Lupus Anticoagulant Working Party. **J Clin Pathol** 1990 Jan;43(1):73–5

Lupus cofactor phenomenon [letter; comment] Magrath M. **J Clin Pathol** 1990 Mar;43(3):264 Comment on: J Clin Pathol 1989 May;42(5):495–7.

Lupus anticoagulant—antiphospholipid antibodies and thrombophilia. Relation to protein C—protein S—thrombomodulin. Tsakiris DA, et al. **J Rheumatol** 1990 Jun;17(6):785–9

Obstetric duplex sonography in patients with lupus anticoagulant syndrome. Carroll BA. **J Ultrasound Med** 1990 Jan;9(1):17–21

Lupus anticoagulant as a risk factor for cerebral infarction and habitual abortions. Mizoguchi K, et al. **Kurume Med J** 1989;36(3):113–6

Addison's disease and primary antiphospholipid syndrome [letter] Asherson RA, et al. **Lancet** 1989 Oct 7;2(8667):874

Anticardiolipin antibodies (ACA) directed not to cardiolipin but to a plasma protein cofactor. Galli M, et al. **Lancet** 1990 Jun 30;335(8705):1544–7

Recurrent thrombosis and renal vascular disease in patients with a lupus anticoagulant. Kleinknecht D, et al. **Nephrol Dial Transplant** 1989;4(10):854–8

Renal thrombotic microvascular disease associated with lupus anticoagulant. Kincaid–Smith P, et al. **Nephron** 1990; 54(4):285–8

Antiphospholipid antibodies and cerebral ischemia in young people. Brey RL, et al. **Neurology** 1990 Aug;40(8):1190–6

The prevalence of autoantibodies and lupus anticoagulant in healthy pregnant women. el–Roeiy A, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 1):390–6

Heparin therapy for pregnant women with lupus anticoagulant or anticardiolipin antibodies. Rosove MH, et al. **Obstet Gynecol** 1990 Apr;75(4):630–4

Lupus anticoagulant associated with renal thrombotic microangiopathy and pregnancy–related renal failure. Kincaid–Smith P, et al. **Q J Med** 1988 Oct;68(258):795–815

Inadequate periods of anticoagulation in the 'lupus anticoagulant syndrome'—a case report. Wathen CG, et al. **Respir Med** 1989 Jul;83(4):367–8

Screening for the lupus anticoagulant. Triplett DA. **Ric Clin Lab** 1989 Oct–Dec;19(4):379–89 (54 ref.)

Laboratory diagnosis of lupus anticoagulants. Triplett DA. **Semin Thromb Hemost** 1990 Apr;16(2):182–92 (116 ref.)

Premature stroke in a family with lupus anticoagulant and antiphospholipid antibodies. Ford PM, et al. **Stroke** 1990 Jan;21(1):66–71

Recurrent fetal loss with circulating lupus anticoagulant: report of 2 cases. Huang LW, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Oct;88(10):1056–9

Distinguishing plasma lupus anticoagulants from anti–factor antibodies using hexagonal (II) phase phospholipids. Rauch J, et al. **Thromb Haemost** 1989 Nov 24;62(3):892–6

Prothrombin–antibody coexistent with lupus anticoagulant (LA): clinical study and immunochemical characterization. Baudo F, et al. **Thromb Res** 1990 Jan 15;57(2):279–87

IgM lupus anticoagulants can be associated with recurrent fetal loss and thrombotic episodes. Chamley LW, et al. **Thromb Res** 1990 May 1;58(3):343–7

Inhibition of the tissue factor–factor VII mediated activation of coagulation factor X by a monoclonal IgM antibody expressing lupus anticoagulant activity. Skjønsberg OH, et al. **Thromb Res** 1990 May 1;58(3):349–52

Quantitation of anticephalin antibodies in a computer–assisted enzyme–linked immunosorbent assay (ELISA): relation to lupus anticoagulant. Sletnes KE, et al. **Thromb Res** 1990 Jan 15;57(2):235–46

Lupus anticoagulant and thrombosis of kidney allograft vessels. Marcén R, et al. **Transplant Proc** 1990 Aug; 22(4):1396–8

[Comparative study of 2 common tests for lupus anticoagulant determination: critical analysis of the results observed in 21 patients] Efira A, et al. **Acta Clin Belg** 1989; 44(4):244–54 (Eng. Abstr.) **(Fre)**

[Evan's syndrome and pseudolupic circulating anticoagulants during endocarditis with Q fever (letter)] Fest T, et al. **Ann Med Interne (Paris)** 1990;141(1):79–80 **(Fre)**

[Clinical manifestations associated with the presence of lupus anticoagulant] Miori L, et al. **G Ital Dermatol Venereol** 1989 Mar;124(3):107–10 (Eng. Abstr.) **(Ita)**

[Lupus anticoagulant antibody (LAC) and juvenile cerebral ischemic attack: a clinical case] Menabue R, et al. **Riv Neurol** 1989 Nov–Dec;59(6):203–6 (29 ref.) (Eng. Abstr.) **(Ita)**

[Clinical significance of lupus anticoagulant analysis in blood coagulo–fibrinolytic tests] Watanabe S, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:942–5 **(Jpn)**

[The effects of various anticoagulants on blood coagulation: with special reference to false positive lupus anticoagulants] Onda H, et al. **Rinsho Byori** 1989 Dec;37(12):1385–91 (Eng. Abstr.) **(Jpn)**

[Idiopathic thrombocytopenic purpura complicated with circulating lupus anticoagulant] Saito K, et al. **Rinsho Ketsueki** 1990 Jan;31(1):52–6 (Eng. Abstr.) **(Jpn)**

[Wide–spectrum effects of lupus anticoagulant in a patient with complex immunopathologic processes] Barkagan ZS, et al. **Gematol Transfuziol** 1989 Jun;34(6):25–31 **(Rus)**

[Experience in the use of staged plasmapheresis for preventing fetal loss in women with lupus–type anticoagulants circulating in their blood] Barkagan ZS, et al. **Ter Arkh** 1989;61(7):124–8 **(Rus)**

[Primary antiphospholipid syndrome: study of 27 patients] Barquinero J, et al. **Med Clin (Barc)** 1990 Jan 20;94(2):41–5 (Eng. Abstr.) **(Spa)**

[Lupus anticoagulant and recurrent transient ischemic attacks] Guerrero A, et al. **Neurologia** 1989 Jul–Aug; 4(6):216–8 (Eng. Abstr.) **(Spa)**

[Lupus anticoagulant and cerebral infarction] Romero López J, et al. **Neurologia** 1988 Jul–Aug;3(4):161–3 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

A semi–continuous method for purification of factor IX complex from human plasma. Tharakan JP, et al. **Vox Sang** 1989;57(4):233–9

[Purification and some properties of platelet aggregating protein (PAP) from the plasma of a patient with thrombotic thrombocytopenic purpura] Chen SH. **Chung Hua I Hsueh Tsa Chih** 1989 Jul;69(7):382–4, 28 (Eng. Abstr.) **(Chi)**

METABOLISM

Hemostatic variables in Japanese and Caucasian men. Plasma fibrinogen, factor VIIc, factor VIIIc, and von Willebrand factor and their relations to cardiovascular disease risk factors. Iso H, et al. **Am J Epidemiol** 1989 Nov; 130(5):925–34

Complement components in neonatal sepsis. Singh RP, et al. **Ann Trop Paediatr** 1990 Mar;10(1):35–7

Induction of procoagulant activity in human epidermal cells. Schöne A, et al. **Arch Dermatol Res** 1989;281(5):316–20

Procoagulant activity expression by macrophages from atheromatous vascular plaques. Tipping PG, et al. **Atherosclerosis** 1989 Oct;79(2–3):237–43

Tuftsin induces tissue factor–like activity in human mononuclear cells and in monocytic cell lines. Kornberg A, et al. **Blood** 1990 Aug 15;76(4):814–9

Comparison of two triphasic contraceptives with different progestogens: effects on metabolism and coagulation proteins. Ball MJ, et al. **Contraception** 1990 Apr; 41(4):363–76

Estrogen regulation of a tissue factor–like procoagulant in the immature rat uterus. Jazin EE, et al. **Endocrinology** 1990 Jan;126(1):176–85

Thrombogenicity of total parenteral nutrition solutions: I. Effect on induction of monocyte/macrophage procoagulant activity. Wakefield A, et al. **Gastroenterology** 1989 Nov;97(5):1210–9

Thrombogenicity of total parenteral nutrition solutions: II. Effect on induction of endothelial cell procoagulant activity. Wakefield A, et al. **Gastroenterology** 1989 Nov; 97(5):1220–8

Disparate mechanisms of induction of procoagulant activity by live and inactivated bacteria and viruses. Sinclair SB, et al. **Infect Immun** 1990 Jun;58(6):1821–7

Changes in coagulation factors in patients with burns during acute blood loss. Cullen JJ, et al. **J Burn Care Rehabil** 1989 Nov–Dec;10(6):517–22

Procoagulant activity and thrombelastography in korean hemorrhagic fever. Lee M, et al. **J Korean Med Sci** 1986 Sep;1(1):53–8

Levels of acarboxy prothrombin (PIVKA–II) and coagulation factors in warfarin–treated patients. Umeki S, et al. **Med Lab Sci** 1990 Apr;47(2):103–7

The effect of carbamoylpiperidine and nipecotoylpiperazine analogs on ADP–stimulated human thrombocyte aggregation and platelet factor 3 availability. Dillingham EO, et al. **Res Commun Chem Pathol Pharmacol** 1990 Feb; 67(2):179–99

Blood coagulation alterations after embolic occlusion of the renal circulation. Törngren S, et al. **Scand J Urol Nephrol** 1990;24(2):141–4

Coagulation factors and the increased risk of stroke in

nonvalvular atrial fibrillation. Gustafsson C, et al. **Stroke** 1990 Jan;21(1):47–51

Human platelet factor V is crosslinked to actin by FXIIIa during platelet activation by thrombin. Wang DL, et al. **Thromb Res** 1990 Jan 1;57(1):39–57

Improved prognosis of fulminant hepatic failure (FHF) after plasma derivative replacement therapy. Enhanced proteolysis of hemostatic proteins confirmed by proteinase–inhibitor complexes determination. Egbring R, et al. **Z Gastroenterol** 1990 Feb;28(2):104–9

PHYSIOLOGY

Factors of the extrinsic pathway of blood coagulation in fetal placental macrophages. Kappelmayer J, et al. **Am J Reprod Immunol** 1989 Oct;21(2):37–40

Prothrombin complex proteins as cofactors in platelet aggregation. I. Inhibition of aggregation by antiserum. Miale JB, et al. **Blood** 1975 Jan;45(1):97–106

Procoagulant activity in gastroenterology. Wakefield A, et al. **Gut** 1990 Feb;31(2):239–41 (35 ref.)

Role of the membrane skeleton in preventing the shedding of procoagulant–rich microvesicles from the platelet plasma membrane. Fox JE, et al. **J Cell Biol** 1990 Aug; 111(2):483–93

Interaction of plasma clotting factors with vascular endothelial cells in hemostasis and thrombosis with special reference to endothelial cell tissue factor. Narahara N, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec;52(8):1330–6

The platelet aggregating factor(s) of thrombotic thrombocytopenic purpura. Kelton JG, et al. **Prog Clin Biol Res** 1990;337:141–9 (31 ref.)

The relative importance of the factors II, VII, IX and X for the prothrombinase activity in plasma of orally anticoagulated patients. Xi M, et al. **Thromb Haemost** 1989 Sep 29;62(2):788–91

[Hemostaseologic changes as causes of venous thromboses] Speiser W. **Vasa Suppl** 1989;27:160–2 (20 ref.) **(Ger)**

[Mediators and the bronchial system. Pathophysiologic and biochemical aspects of mediators of the bronchial system] Czarnetzki BM. **Wien Med Wochenschr Suppl** 1987; 103:52–6 (31 ref.) **(Ger)**

[Functional domains of vitamin K–dependent blood coagulation factors] Kawabata S, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2276–82 **(Jpn)**

THERAPEUTIC USE

Induction of immune tolerance in hemophiliacs with inhibitors by combined treatment with i.v. IgG, cyclophosphamide and factor VIII or IX. Nilsson IM, et al. **Prog Clin Biol Res** 1990;324:69–78

Efficacy and safety of vapor–heated anti–inhibitor coagulant complex in hemophilia patients. FEIBA Study Group. Hilgartner M, et al. **Transfusion** 1990 Sep;30(7):626–30

Transmission of human parvovirus B19 by coagulation factor concentrates. Williams MD, et al. **Vox Sang** 1990; 58(3):177–81

BLOOD COAGULATION TESTS

Effect of clot–detection methods and reagents on activated partial thromboplastin time (APTT). Implications in heparin monitoring by APTT. D'Angelo A, et al. **Am J Clin Pathol** 1990 Sep;94(3):297–306

Comparison of two APTT methods of monitoring heparin therapy. APTT ratio and heparin response of pooled normal plasma. Zanke B, et al. **Am J Clin Pathol** 1990 May; 93(5):684–9

Correlation between lupus anticoagulants and anticardiolipin antibodies in patients with prolonged activated partial thromboplastin times. Alving BM, et al. **Am J Med** 1990 Feb;88(2):112–6

Antiphospholipid antibodies and recurrent pregnancy loss: correlation between the activated partial thromboplastin time and antibodies against phosphatidylserine and cardiolipin. Rote NS, et al. **Am J Obstet Gynecol** 1990 Aug; 163(2):575–84

Iatrogenic immunization with bovine thrombin: a mechanism for prolonged thrombin times after surgery. Flaherty MJ, et al. **Ann Intern Med** 1989 Oct 15;111(8):631–4

Low activated coagulation time during cardiopulmonary bypass does not increase postoperative bleeding. Metz S, et al. **Ann Thorac Surg** 1990 Mar;49(3):440–4

Evaluation of APTT reagent sensitivity to factor IX and factor IX assay performance. Results from the College of American Pathologists Survey Program. Brandt JT, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):135–41

Influences of ventricular assist device pumping on blood coagulation. Taenaka Y, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):396–8

Assessment of hypercoagulable states by measurement of activation fragments and peptides. Boisclair MD, et al. **Blood Rev** 1990 Mar;4(1):25–40 (113 ref.)

A critical appraisal of coagulation studies prior to transfemoral angiography. Wilson NV, et al. **Br J Radiol** 1990 Feb;63(746):147–8

Changes of antithrombin III and antithrombin III–heparin complex levels, and ACT in cardiac surgery. Inada E, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S75

Platelet hyperreactivity and inefficient spontaneous thrombolysis in patients at high risk from an acute coronary event. Peters NS, et al. **Cardiovasc Res** 1989 Jul; 23(7):567–72

Experience with a computer–assisted anticoagulant clinic. Kubie A, et al. **Clin Lab Haematol** 1989;11(4):385–91

Discrepant INR values: a comparison between Manchester and Thrombotest reagents using capillary and venous samples. Morrison M, et al. **Clin Lab Haematol** 1989; 11(4):393–8

A comparison of two APTT reagents which use silica activators. Ray MJ, et al. **Clin Lab Haematol** 1989; 11(3):221–32

Influence of the lupus anticoagulant on clotting tests. Vermylen J, et al. **Clin Rheumatol** 1990 Mar;9(1 Suppl 1):45–8 (23 ref.)

Whole blood activated clotting time in infants during extracorporeal membrane oxygenation. Green TP, et al. **Crit Care Med** 1990 May;18(5):494–8

Characterization with a simple clotting assay of the tissue factor inhibiting activity in serum. Cassetti M, et al. **Haematologica** 1990 Jan–Feb;75(1):32–7

Automated amidolytic method for evaluating the activated partial thromboplastin time compared with a conventional coagulation method. Tripodi A, et al. **Haemostasis** 1989; 19(4):205–12

Development of a simple chromogenic factor VIII assay for clinical use. Wagenvoord RJ, et al. **Haemostasis** 1989; 19(4):196–204

Heparin monitoring in the coronary care unit after percutaneous transluminal coronary angioplasty. Varah N, et al. **Heart Lung** 1990 May;19(3):265–70

Comparison of two methods for heparin monitoring: a semi–automated heparin monitoring device and activated clotting time during extracorporeal circulation. Stead SW. **Int J Clin Monit Comput** 1989 Dec;6(4):247–54

Bayesian forecasting of APTT response to continuously infused heparin with and without warfarin administration. Mungall D, et al. **J Clin Pharmacol** 1989 Nov;29(11):1043–7

Routine predelivery coagulation screening in previous cesarean patients: impact on patient management. Sakala EP, et al. **J Perinatol** 1989 Dec;9(4):386–7

Routine use of the prothrombin and partial thromboplastin times [see comments] Erban SB, et al. **JAMA** 1989 Nov 3;262(17):2428–32 Comment in: JAMA 1990 May 23–30;263(20):2749–50.

Activated partial thromboplastin time performed on capillary blood. Boumerfeg M, et al. **Nouv Rev Fr Hematol** 1989; 31(5):359–61

Carrier detection in hemophilia using pedigree analysis coagulation tests and DNA probes. de la Salle C, et al. **Nouv Rev Fr Hematol** 1989;31(3):193–202

Use of the activated partial thromboplastin time for the diagnosis of congenital coagulation disorders: problems and possible solutions. Barna L, et al. **Ric Clin Lab** 1989 Oct–Dec;19(4):345–54

Performance guidelines for the partial thromboplastin time test. Koepke JA. **Ric Clin Lab** 1989 Oct–Dec;19(4):359–62

Use of the activated partial thromboplastin time for monitoring heparin therapy: problems and possible solutions. Poller L, et al. **Ric Clin Lab** 1989 Oct–Dec; 19(4):363–70

Chromogenic substrates for activated partial thromboplastin time testing: are they worth using? Tripodi A. **Ric Clin Lab** 1989 Oct–Dec;19(4):355–8

Standardization of the activated partial thromboplastin time for monitoring of heparin therapy: where should we go? van den Besselaar AM. **Ric Clin Lab** 1989 Oct–Dec; 19(4):371–7

Discordance between reptilase time measured by the hook manual method and the optical method in patients with high fibrinogen level [letter] Capel P, et al. **Thromb Haemost** 1989 Dec 29;62(4):1143

Mechanism by which recombinant factor VIIa shortens the aPTT: activation of factor X in the absence of tissue factor. Telgt DS, et al. **Thromb Res** 1989 Dec 1;56(5):603–9

[Update on a titration method for measuring the interferon–producing capacity in humans] Kita M, et al. **C R Soc Biol (Paris)** 1989;183(6):578–83 (Eng. Abstr.) **(Fre)**

[Modification of blood coagulation by antihypertensive therapy? Effect of enalapril and hydrochlorothiazide on blood coagulation parameters in patients with essential hypertension] Wichmann C, et al. **Fortschr Med** 1989 Aug 20;107(24):521–4 (Eng. Abstr.) **(Ger)**

[Obstetrical management in dysfibrinogenemia] Heidegger H, et al. **Geburtshilfe Frauenheilkd** 1990 May;50(5):365–7 (Eng. Abstr.) **(Ger)**

[Routine preoperative diagnosis of blood coagulation?] Kuss E. **Geburtshilfe Frauenheilkd** 1990 Jun;50(6):499–501 **(Ger)**

[Perioperative blood coagulation therapy and diagnosis] Kretschmer V. **Infusionstherapie** 1990 Apr;17 Suppl 2:9–19 (143 ref.) (Eng. Abstr.) **(Ger)**

[A 61–year–old patient with thrombotic diathesis and liver function disorder] Fischer G, et al. **Internist (Berl)** 1990 Apr;31(4):288–91 **(Ger)**

[Malaria tropica with activation of blood coagulation and detection of tumor necrosis factor (NF–alpha) in serum] Hemmer CJ, et al. **Klin Wochenschr** 1990 Mar 5;68(5):281–5 (Eng. Abstr.) **(Ger)**

[The quality of blood donation and its effect on subsequent preparation of coagulation active plasma fractions] Sander W. **Z Arztl Fortbild (Jena)** 1989;83(24):1247–50 (23 ref.) **(Ger)**

[Polybrene thrombin time—a simple new method for monitoring a fibrinolytic therapy] Lutze G, et al. **Z Med Lab Diagn** 1990;31(3):169–75 (Eng. Abstr.) **(Ger)**

[Individual dosage schedule of heparin therapy in chronic hemodialysis by analytic studies of blood coagulation] Gläser V, et al. **Z Urol Nephrol** 1990 Mar;83(3):133–40 (Eng. Abstr.) **(Ger)**

[Effect of smoking on hemostasis and hemorheology in pregnancy] Voigt T, et al. **Zentralbl Gynakol** 1990; 112(9):529–33 (Eng. Abstr.) **(Ger)**

[Comparative studies of measuring condition of activated partial thromboplastin time and contact factors in experimental animals] Noguchi M, et al. **Jikken Dobutsu** 1989 Jul;38(3):221–9 (Eng. Abstr.) **(Jpn)**

[Prediction of embolism in patient with mitral stenosis studied by two–dimensional echocardiography and blood coagulation tests] Yasaka M, et al. **Nippon Naika Gakkai Zasshi** 1989 Dec;78(12):1736–41 **(Jpn)**

[Clinical significance of prothrombin time and activated partial thromboplastin time in blood coagulo–fibrinolysis tests] Samori T. **Nippon Rinsho** 1989 Dec;48 Suppl:917–20 **(Jpn)**

[Clinical significance of fibrinogen analysis in blood coagulation tests] Samori T. **Nippon Rinsho** 1989 Dec;48 Suppl:807–10 **(Jpn)**

[Effects of thrombin produced in blood prior to mixing with anticoagulant on the platelet function and blood coagulation tests] Sato S, et al. **Rinsho Byori** 1990 Jul; 38(7):813–8 (Eng. Abstr.) **(Jpn)**

[Heparinization control by activated coagulation time in cardiac surgery with extracorporeal circulation] Daudt CA, et al. **Arq Bras Cardiol** 1989 Mar;52(3):137–9 (Eng. Abstr.) **(Por)**

[The value of graphic methods: thrombodynamoelastography, resonance thrombography and coagulography in the detection of hemostasis disorders in patients with liver cirrhosis] Rezaković D, et al. **Med Arh** 1985;39(2–3):51–6 (Eng. Abstr.) **(Scr)**

INSTRUMENTATION

Effect of clot–detection methods and reagents on activated partial thromboplastin time (APTT). Implications in heparin monitoring by APTT. D'Angelo A, et al. **Am J Clin Pathol** 1990 Sep;94(3):297–306

Patient self–management of oral anticoagulation guided by capillary (fingerstick) whole blood prothrombin times. Ansell J, et al. **Arch Intern Med** 1989 Nov;149(11):2509–11

Evaluation of a capillary whole–blood prothrombin time measurement system. Weibert RT, et al. **Clin Pharm** 1989 Dec;8(12):864–7

Spuriously low fibrinogen level with ACL coagulometers in the presence of a translucent clot [letter] Guffiet V, et al. **Thromb Haemost** 1990 Apr 12;63(2):325

The dependence of the International Sensitivity Index on the coagulometer used to perform the prothrombin time. Ray MJ, et al. **Thromb Haemost** 1990 Jun 28;63(3):424–9

[Blood resistance measurement and changes in blood coagulation] Wuilleret B. **Angiologica** 1967;4(3–4):173–83 (Eng. Abstr.) **(Ger)**

[A new test system for evaluating the risk of thromboembolism in the use of hormonal contraceptives] Pechlaner C, et al. **Gynakol Rundsch** 1989;29 Suppl 2:312–4 **(Ger)**

[The GKTTs–01 hemocoagulometer, an apparatus for studying the coagulating activity of blood] Aleksandrov GV, et al. **Lab Delo** 1990;(4):61–2 **(Rus)**

[A universal measuring rectifier for a multifunctional hemocoagulation analyzer] Dorokhov AP, et al. **Med Tekh** 1989 Jul–Aug;(4):13–7 (Eng. Abstr.) **(Rus)**

METHODS

A comparative evaluation of assays for markers of activated coagulation and/or fibrinolysis: thrombin–antithrombin complex, D–dimer and fibrinogen/fibrin fragment E antigen. Boisclair MD, et al. **Br J Haematol** 1990 Apr; 74(4):471–9

Procedural variables which affect activated clotting time test results during extracorporeal membrane oxygenation therapy. Uden DL, et al. **Crit Care Med** 1989 Oct; 17(10):1048–51

Thrombin activity and oral anticoagulant therapy: a further evaluation [letter] Marongiu F, et al. **Haemostasis** 1990; 20(1):63–4

Immunoassay by particle counting for coagulation testing: application to the determination of protein C. Poncelet S, et al. **J Clin Chem Clin Biochem** 1990 Mar;28(3):181–3

Screening for congenital coagulation disorders. Tripodi A. **Ric Clin Lab** 1989 Oct–Dec;19(4):327–32

Hypercoagulability in acute ischemic stroke: analysis of the extrinsic coagulation reactions in plasma by a highly sensitive automated method. Takano K, et al. **Thromb Res** 1990 Jun 1;58(5):481–91

[Hemostasis monitoring in intensive therapy—studies using resonance thrombography] Hinsenbrock KP, et al. **Anaesthesiol Reanim** 1989;14(4):219–25 (Eng. Abstr.) **(Ger)**

[Microtests for evaluating hemostasis and their clinical value] Barkagan LZ, et al. **Gematol Transfuziol** 1990 Jan; 35(1):21–3 (Eng. Abstr.) **(Rus)**

[Mathematical assessment of the blood prothrombinase-thrombin activity by the autocoagulation test] Ivanov EP, et al. **Lab Delo** 1990;(1):12–4 (Eng. Abstr.) **(Rus)**

[A photodynamic method of studying hemocoagulation] Rusiaev VF. **Med Tekh** 1989 Jul–Aug;(4):8–13 (Eng. Abstr.) **(Rus)**

STANDARDS

Second International Symposium on Standardization and Quality Control of Coagulation Tests: Implications for the Clinical Laboratory. Rome, September 28–29, 1989. Proceedings. **Ric Clin Lab** 1989 Oct–Dec;19(4):327–402

UTILIZATION

Controlling the hemorrhage of routine coagulation tests [letter; comment] Fox GN. **JAMA** 1990 May 23–30; 263(20):2749–50 Comment on: JAMA 1989 Nov 3;262(17):2428–32.

BLOOD COMPONENT REMOVAL

see related

CELL SEPARATION

New perspectives in hemodialysis, peritoneal dialysis, arteriovenous hemofiltration, and plasmapheresis. Proceedings of an international symposium. Freiburg i. Br. (FRG), October 6–8, 1988. **Adv Exp Med Biol** 1989; 260:1–213

Therapeutic apheresis update. Gurland HJ. **Adv Exp Med Biol** 1989;260:193–201 (37 ref.)

Improvement of peripheral circulation by low density lipoprotein adsorption. Agishi T, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):349–51

ABC of transfusion. Therapeutic apheresis. Urbaniak SJ, et al. **BMJ** 1990 Mar 10;300(6725):662–5 (0 ref.)

Clinical application of therapeutic hemapheresis. Chow MP, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Feb;45(2):87–92

Italian Society of Hemapheresis. The Italian Cooperative Study Group on Cell Manipulation in Hematology. Proceedings of the third meeting. Pescara, Italy, June 30, 1989. **Haematologica** 1990 Jan–Feb;75 Suppl 1:1–98

Immunosuppressive agents, gamma-globulin, immunomodulation, immunization, and apheresis. Kniker WT. **J Allergy Clin Immunol** 1989 Dec;84(6 Pt 2):1104–7

Abstracts of the eleventh annual meeting of the American Society for Apheresis. San Francisco, California, March 8–10, 1990. **J Clin Apheresis** 1990;5(3):153–77

Selected proceedings from the tenth annual meeting of the American Society of Apheresis and the eleventh annual meeting of the Society of Hemapheresis Specialists. Jacksonville, Florida, April 6–8, 1989. **J Clin Apheresis** 1990;5(2):74–120

Therapeutic apheresis and polymyositis. Howard JF Jr. **J Clin Apheresis** 1990;5(2):61

Pathophysiology of systemic lupus erythematosus for pheresis operators. Hubbell E. **J Clin Apheresis** 1990; 5(2):115–8 (14 ref.)

Therapeutic apheresis in childhood. Kevy SV, et al. **J Clin Apheresis** 1990;5(2):87–90

Thermofiltration in hypercholesterolemia treatment: analysis of removal and posttreatment cholesterol recovery. Malchesky PS, et al. **J Clin Apheresis** 1990;5(3):145–50

Use of pre-operatively obtained platelets and plasma in patients undergoing cardiopulmonary bypass. Noon GP, et al. **J Clin Apheresis** 1990;5(2):91–6

Treatment of polycythemia vera by isovolemic large-volume erythrocytapheresis. Kaboth U, et al. **Klin Wochenschr** 1990 Jan 4;68(1):18–25

Homozygous familial hypercholesterolaemia: metabolic studies and treatment with LDL apheresis. Mol MJ, et al. **Neth J Med** 1990 Jun;36(5–6):279–87

Apheresis. Proceedings of the 2nd International Congress of the World Apheresis Association. Ottawa, Ontario, Canada, May 18–20, 1988. **Prog Clin Biol Res** 1990; 337:1–592

Cellular support of the marrow transplant recipient. Clift RA. **Prog Clin Biol Res** 1990;337:87–92 (12 ref.)

Erythropheresis in four cases of congenital hemolytic anemia (CHA). Schooneman F, et al. **Prog Clin Biol Res** 1990; 337:79–81

Biological response modifiers (BRM), chemotherapy, and activated cytotoxic leukocyte subsets: strategies for rational design of apheresis-based cancer immunotherapies. Stevenson HC, et al. **Prog Clin Biol Res** 1990;337:559–65

The HELP system: an efficient and safe method of plasma therapy in the treatment of severe hypercholesterolemia. Seidel D. **Ther Umsch** 1990 Jun;47(6):514–9

Humoral immune response following extracorporeal immunoadsorption therapy of patients with hypercholesterolemia. Gordon BR, et al. **Transfusion** 1990 May;30(4):327–32

Hyperactivation of platelets in asthma and introduction of platelet apheresis as treatment procedure. Chuchalin AG, et al. **Z Erkr Atmungsorgane** 1990;174(3):178–84

[Apheresis today] Gurland HJ. **Cas Lek Cesk** 1989 Dec 15; 128(51):1601–6 (37 ref.) (Eng. Abstr.) **(Cze)**

[Performance of Pall filters (RC 100 and PL 100) for the removal of leukocytes from red-cell concentrates and platelets] Hurel C, et al. **Rev Fr Transfus Hemobiol** 1989 Sep;32(4):307–22 (Eng. Abstr.) **(Fre)**

[Erythrocyte deformability in patients with chronic respiratory insufficiency undergoing erythrocytapheresis] Zacco R, et al. **Ric Clin Lab** 1989;19 Suppl 1:79–82 **(Ita)**

[Blood rheologic disorders in patients with polycythemia vera and their correction by therapeutic erythrocytapheresis] Likhovetskaia ZM, et al. **Gematol Transfuziol** 1989 Nov;34(11):33–6 (Eng. Abstr.) **(Rus)**

[Gravitational surgical correction of the aggregative status of the blood in ischemic heart disease] Gavrilov OK. **Klin Med (Mosk)** 1989 Oct;67(10):8–12 (Eng. Abstr.) **(Rus)**

[Results of therapeutic use of plasma- and erythrocytapheresis in patients with arterial thromboobliterating diseases of the extremities] Litmanovich KIu, et al. **Vestn Khir** 1989 Aug;144(8):120–4 (Eng. Abstr.) **(Rus)**

[Glomectomy, plasmapheresis and plasmacytapheresis in the treatment of bronchial asthma patients] Pakhomov VN, et al. **Vrach Delo** 1990 Mar;(3):35–7 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Clinical aspects of biocompatibility issues on apheresis. Schmitt E, et al. **Prog Clin Biol Res** 1990;337:513–9

Mobilisation of tissue cholesterol by apheresis. Thompson GR. **Prog Clin Biol Res** 1990;337:183–7 (16 ref.)

[Adverse effects of hemapheresis] Bláha M, et al. **Vnitr Lek** 1989 Oct;35(10):972–81 (Eng. Abstr.) **(Cze)**

HISTORY

Apheresis: past and present. Jones JV. **Prog Clin Biol Res** 1990;337:xxxiii–xliv (24 ref.)

INSTRUMENTATION

Long-term clinical experience with HELP-LDL-apheresis in combination with HMG-CoA-reductase inhibitors for maximum treatment of coronary heart disease associated with severe hypercholesterolemia. Eisenhauer T, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):580–3

Comparison of plateletapheresis with two cell separators using identical donors. Bertholf MF, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:45 **(Eng, Ger)**

The safety of blood component preparation with blood cell separators. Borberg H, et al. **Infusionstherapie** 1989 Aug; 16 Suppl 2:21–9; discussion 28–9 **(Eng, Ger)**

Simulated plasma exchange procedures with the COBE Spectra apheresis system using healthy donors. Chapman R, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:47 **(Eng, Ger)**

Detection and analysis of particles during thrombocytapheresis with a Haemonetics V 50 cellseparator. Hönlinger M, et al. **Infusionstherapie** 1990 Jun;17(3):164–6

Use of the COBE Spectra System (CSS) for platelet pheresis (PP) and intensive plasma exchange (IPE). Kevy SV, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:46 **(Eng, Ger)**

Further results with the COBE Spectra system. Platelet collection using the COBE Spectra. Price TH, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:44 **(Eng, Ger)**

COBE Spectra Apheresis System: designs, protocols and results. Urdahl SG. **Infusionstherapie** 1989 Aug;16 Suppl 2:30–43 **(Eng, Ger)**

Haemonetics V50 and Plasma Collection System: common concerns and troubleshooting. Gilcher RO, et al. **J Clin Apheresis** 1990;5(2):106–9

COBE: 2997 TPE Spectra operation troubleshooting and common concerns. Senack E. **J Clin Apheresis** 1990; 5(2):110–4

Assessing the stem cell collection efficiency of the Fenwal CS3000. Haylock D, et al. **Prog Clin Biol Res** 1990;337:67–9

Peripheral blood stem cell collections for autologous transplantation using the CS-3000 blood cell separator. Hogge DE, et al. **Prog Clin Biol Res** 1990;337:71–3

Microbial challenge of the COBE extended life platelet set to verify that it functions as a closed system. Moore RC, et al. **Prog Clin Biol Res** 1990;337:7–9

Storage of haemonetics V50 derived platelets for five days. Rock G, et al. **Prog Clin Biol Res** 1990;337:1–5

'Eccentriplate': a new centrifugal plate for platelet concentrates. Schooneman F, et al. **Prog Clin Biol Res** 1990; 337:19–21

Preliminary results of a new plateletpheresis prototype based on autopheresis C. Schooneman F, et al. **Prog Clin Biol Res** 1990;337:15–8

Viability of 5-day apheresis platelets in a citrate-plasticized bag using a new cell separator. Simon TL, et al. **Prog Clin Biol Res** 1990;337:11–3

Platelet collection with the Autopheresis-C apheresis system. Schoendorfer DW, et al. **Vox Sang** 1990;58(2):100–5

Effectiveness of the Imugard E leukocyte removal filter for preparation of leukocyte-poor concentrated red cells. Takebe M, et al. **Vox Sang** 1990;59(1):19–22

[Use of the isoradial chamber in the preparation of thrombocyte concentrates using the Travenol CS-3000 separator] Bláha M, et al. **Cas Lek Cesk** 1989 Oct 13; 128(42):1336–7 (Eng. Abstr.) **(Cze)**

METHODS

Three different schedules of low-density lipoprotein apheresis compared with plasmapheresis in patients with homozygous familial hypercholesterolemia. Berger GM, et al. **Am J Med** 1990 Feb;88(2):94–100

Peripheral blood stem cell collection: comparison of two protocols. Espigado I, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:32

Collection of peripheral blood stem cells by apheresis with continuous flow blood cell separator Dideco Vivacell. Del Monte C, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:18–21

Collection of peripheral blood stem cells in normal donors. Iacone A, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:33–8

Photopheresis. Edelson RL. **J Clin Apheresis** 1990;5(2):77–9

Counterflow centrifugation apheresis for the collection of autologous peripheral blood stem cells from patients with malignancies: a comparison with a standard centrifugation apheresis procedure. Schouten HC, et al. **J Clin Apheresis** 1990;5(3):140–4

Continuous anti-dsDNA antibody apheresis in systemic lupus erythematosus [letter] Suzuki K, et al. **Lancet** 1990 Sep 22;336(8717):753–4

LDL apheresis by dextran sulfate cellulose (DSC) column in two patients with monogenic familial hypercholesterolemia (FH). Aubert I, et al. **Prog Clin Biol Res** 1990;337:205–7

Immunosorptive apheresis of LDL. Borberg H, et al. **Prog Clin Biol Res** 1990;337:163–7 (12 ref.)

Use of hemapheresis techniques in the management of major ABO incompatible bone marrow transplantation. Bussel A, et al. **Prog Clin Biol Res** 1990;337:107–13

Hemapheresis in treatment of systemic autoimmune vasculitis. Dmitriev AA. **Prog Clin Biol Res** 1990;337:345–6

Harvesting of peripheral blood stem cells (PBSC) by apheresis with cell separators. Höcker P, et al. **Prog Clin Biol Res** 1990;337:63–5

Platelet collection during plasma exchange donation of cryoprecipitate. McLeod BC, et al. **Prog Clin Biol Res** 1990;337:481–3

Repeat plateletpheresis—the effects on the donor and the yield. Rock G, et al. **Prog Clin Biol Res** 1990;337:27–30

Therapeutic trial of low density lipoprotein apheresis (LDL-A) in conjunction with double filtration plasmapheresis (DFPP) in drug-resistant nephrotic syndrome due to focal glomerular sclerosis (FGS). Tojo K, et al. **Prog Clin Biol Res** 1990;337:193–4

In vitro and in vivo comparison of platelet concentrates collected by automated versus manual apheresis. Ross DG, et al. **Vox Sang** 1989;57(1):25–8

[Apheresis of low-density lipids in the treatment of hereditary hypercholesterolemia] Konovalov GA, et al. **Vutr Boles** 1989;28(4):133–6 **(Bul)**

[Leukocyte removal in a closed system of human red-cell concentrates: a technic coupled with the automated extraction of the buffy coat using a sterile connector from a filtration kit] Angué M, et al. **Rev Fr Transfus Hemobiol** 1989 Sep;32(4):265–75 (Eng. Abstr.) **(Fre)**

[Performance of Pall filters (RC 100 and PL 100) for the removal of leukocytes from red-cell concentrates and platelets] Hurel C, et al. **Rev Fr Transfus Hemobiol** 1989 Sep;32(4):307–22 (Eng. Abstr.) **(Fre)**

[Preparation and preservation of labile products obtained from whole blood using the leuko-platelet layer] Robert F, et al. **Rev Fr Transfus Hemobiol** 1989 Dec;32(6):451–65 **(Fre)**

[Kinetics of lipids and lipoproteins with determination of the recovery rate in the non-steady state following plasma, membrane filtration and dextran sulfate adsorption apheresis in hypercholesterolemia] Schwartzkopff W, et al. **Biomed Tech (Berlin)** 1989 Oct;34(10):232–42 (Eng. Abstr.) **(Ger)**

[Preliminary evaluation of erythrapheresis in the treatment of chronic cor pulmonale] Bisaga W. **Wiad Lek** 1989 Feb 15;42(4):218–22 (Eng. Abstr.) **(Pol)**

[Plasma-cytapheresis in patients and donors (prospects of Soviet-American cooperation] Kalinin NN, et al. **Gematol Transfuziol** 1990 Mar;35(3):26–30 **(Rus)**

[Neocytapheresis] Varlamova SV. **Gematol Transfuziol** 1990 Jan;35(1):31–5 (45 ref.) **(Rus)**

[Methods of plasmapheresis using blood fractionation devices] Kalinin NN. **Sov Med** 1989;(8):40–5 (53 ref.) **(Rus)**

[Transfusion-sorption correction of microhemocirculatory disorders in primary pulmonary hypertension] Konopleva LF, et al. **Sov Med** 1990;(2):42–4 **(Rus)**

STANDARDS

Optimizing blood component preparation: qualitative, logistic and economic aspects. Högman CF, et al. **Biomed Biochim Acta** 1990;49(2–3):S198–203 (20 ref.)

TRENDS

The future in apheresis: the cell revisited. Hamblin T. **Prog Clin Biol Res** 1990;337:xlv–xlvii

VETERINARY

Aspects of veterinary hemapheresis involving the horse, cow, sheep, goat, llama, dog and chimpanzee. Gordon EJ, et al. **Prog Clin Biol Res** 1990;337:375–8

BLOOD DISEASES see HEMATOLOGIC DISEASES

BLOOD DONORS

Different lymphocyte activity in patients with polycythaemia vera versus secondary polycythaemia and healthy blood donors. Rueda F, et al. **Acta Haematol (Basel)** 1990; 83(1):31–4

The epidemiology of HIV transmission among paid plasma donors, Mexico City, Mexico. Avila C, et al. **AIDS** 1989 Oct;3(10):631–3

Identification of a subset of group B donors reactive with monoclonal anti-A reagent. Beck ML, et al. **Am J Clin Pathol** 1989 Nov;92(5):625–9

Directed blood donations and the concept of individualized care in transfusion medicine [editorial] Goldfinger D, et al. **Am J Clin Pathol** 1989 Oct;92(4):516–7

Testing the blood supply for non-A, non-B hepatitis. A nonspecific approach for improving transfusion safety has a heterogeneous impact on blood donors [comment] Menitove JE. **Am J Clin Pathol** 1990 Apr;93(4):589–91 Comment on: Am J Clin Pathol 1990 Apr;93(4):533–37.

The impact of screening a heterogeneous donor population for alanine aminotransferase and hepatitis B core antibody. Experience at a large southern California hospital [see comments] Saxena S, et al. **Am J Clin Pathol** 1990 Apr; 93(4):533–7 Comment in: Am J Clin Pathol 1990 Apr;93(4):589–91.

The prediction of autologous red cell survival. Myhre BA, et al. **Ann Clin Lab Sci** 1990 Jul–Aug;20(4):258–62 (11 ref.)

Transfusion of blood components from a donor with human T-lymphotropic virus type II (HTLV-II) infection. The Transfusion Safety Study Group. Donegan E, et al. **Ann Intern Med** 1990 Oct 1;113(7):555–6

Anti-A1 antibodies in blood donors in the Warsaw region. Lenkiewicz B, et al. **Arch Immunol Ther Exp (Warsz)** 1971; 19(5):643–7

The significance of HIV-1-indeterminate western blot results in blood donor populations. Kleinman S. **Arch Pathol Lab Med** 1990 Mar;114(3):298–303 (24 ref.)

Current risk of transfusion-associated human immunodeficiency virus infection. Menitove JE. **Arch Pathol Lab Med** 1990 Mar;114(3):330–4 (46 ref.)

Province of origin of hepatitis B surface antigen carriers among blood donors in Port Moresby. Iga T, et al. **Asia Pac J Public Health** 1989;3(3):237–41

Serological confirmation of human T-lymphotropic virus type I infection in healthy blood and plasma donors. Anderson DW, et al. **Blood** 1989 Nov 15;74(7):2585–91

High frequency of human T-cell leukemia-lymphoma virus type II infection in New Mexico blood donors: determination by sequence-specific oligonucleotide hybridization. Hjelle B, et al. **Blood** 1990 Aug 1;76(3):450–4

Is screening of blood donors for anti-HBc useful? [letter] Caspari G, et al. **Blut** 1990 Jun;60(6):352–3

Cytomegalovirus in blood from blood donors [letter; comment] Contreras M, et al. **BMJ** 1989 Oct 28; 299(6707):1098 Comment on: BMJ 1989 Oct 7;299(6704):897–8.

ABC of transfusion. The blood donor and tests on donor blood. Hewitt PE, et al. **BMJ** 1989 Dec 2;299(6712):1391–4 (0 ref.)

Persistence of cytomegalovirus in peripheral blood from blood donors [letter] Morris DJ, et al. **BMJ** 1989 Nov 4; 299(6708):1164–5

Persistence of cytomegalovirus in mononuclear cells in peripheral blood from blood donors [see comments] Stanier P, et al. **BMJ** 1989 Oct 7;299(6704):897–8 Comment in: BMJ 1989 Oct 28;299(6707):1098.

Measurement of alanine aminotransferase (ALT) levels in Zimbabwean donor serum—a possible indicator of non-A, non-B hepatitis [letter] Emmanuel JC, et al. **Cent Afr J Med** 1989 Aug;35(8):469–70

Screening with zinc protoporphyrin for iron deficiency in non-anemic female blood donors. Jensen BM, et al. **Clin Chem** 1990 Jun;36(6):846–8

The Rh-negative donor. Contreras M, et al. **Clin Lab Haematol** 1989;11(4):317–22

HIV testing of transfusion recipients. Connecticut State Medical Society Committee on Organ and Tissue Transfers. **Conn Med** 1990 Apr;54(4):217–8

Clinical implications of positive tests for antibodies to human immunodeficiency virus type 1 in asymptomatic blood donors. **Dis Markers** 1990 Mar-Apr;8(2):103–4

What do western blot indeterminate patterns for human immunodeficiency virus mean in EIA-negative blood donors. **Dis Markers** 1990 Mar-Apr;8(2):108

The status of alpha and beta haemolysins in Nigerian blood donors. Emeribe AO. **East Afr Med J** 1990 Mar;67(3):205–8

Haematological status of blood-donors with sickle cell trait and alpha thalassaemia in northern Nigeria. Niazi GA, et al. **East Afr Med J** 1989 Dec;66(12):824–9

Hepatitis A antibody in blood donors in North East Thames region: implications to prevention policies. Scott NJ, et al. **Epidemiol Infect** 1989 Oct;103(2):377–82

Examination of serum ferritin and erythrocyte ferritin—its role in the blood transfusion service. Sebestik V, et al. **Folia Haematol (Leipz)** 1990;117(1):185–91

Prevalence of hepatitis B surface antigen in Kashmiri blood donors. Makroo RN, et al. **Indian J Med Res** 1989 Sep; 89:310–3

The high rate of blood donor exposure for critically ill neonates. Donowitz LG, et al. **Infect Control Hosp Epidemiol** 1989 Nov;10(11):509–10

The safety of blood component preparation with blood cell separators. Borberg H, et al. **Infusionstherapie** 1989 Aug; 16 Suppl 2:21–9; discussion 28–9 **(Eng, Ger)**

Simulated plasma exchange procedures with the COBE Spectra apheresis system using healthy donors. Chapman R, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:47 **(Eng, Ger)**

Risk of HIV infection from former blood donations of donors found to be HIV antibody-positive in blood bank routine testing. "Look-back" study in German Red Cross Blood Banks in the FRG. Glück D, et al. **Infusionstherapie** 1990 Apr;17(2):73–6

Collection and transfusion of single donor platelets and their clinical response. Hester J, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:4–9; discussion 28–9 **(Eng, Ger)**

Use of the COBE Spectra System (CSS) for platelet pheresis (PP) and intensive plasma exchange (IPE). Kevy SV, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:46 **(Eng, Ger)**

Biocompatibility and safety of cytapheresis. Kretschmer V, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:10–20; discussion 28–9 **(Eng, Ger)**

Further results with the COBE Spectra system. Platelet collection using the COBE Spectra. Price TH, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:44 **(Eng, Ger)**

Prevalence of Erythema migrans Borreliosis in blood donors. Schmidt R, et al. **Infusionstherapie** 1989 Dec;16(6):248–51

COBE Spectra Apheresis System: designs, protocols and results. Urdahl SG. **Infusionstherapie** 1989 Aug;16 Suppl 2:30–43 **(Eng, Ger)**

Human immunodeficiency virus infection in the blood donors of Delhi, India. Singh YN, et al. **J Acquir Immune Defic Syndr** 1990;3(2):152–4

Immunologic and clinical status of blood donors with subnormal levels of IgG2. Nahm MH, et al. **J Allergy Clin Immunol** 1990 Apr;85(4):769–77

Donation and typing of blood [letter] Carlin S. **J Am Vet Med Assoc** 1990 Jan 1;196(1):13

Blood donor programs [letter] Henness AM. **J Am Vet Med Assoc** 1989 Nov 1;195(9):1190

Incidence of hepatitis B carriers in Calcutta, West Bengal [see comments] Roychoudhury A, et al. **J Assoc Physicians India** 1989 Feb;37(2):160–1 Comment in: J Assoc Physicians India 1989 Sep;37(9):620.

Preferential loss of Leu 8-, CD45R, HLA-DR+ CD8 cell subsets during in vitro culture of mononuclear cells from human immunodeficiency virus type I (HIV)-seropositive former blood donors. Prince HE, et al. **J Clin Immunol** 1989 Sep;9(5):421–8

An epidemiological study of hepatitis B virus amongst blood donors. Verma J, et al. **J Commun Dis** 1989 Mar;21(1):52–8

The collaborative study on typing group-specific component by eight forensic science laboratories. Westwood SA, et al. **J Forensic Sci Soc** 1989 May-Jun;29(3):173–83

The prevalence of anti-Helicobacter (Campylobacter) pylori antibodies in patients and healthy blood donors. Loffeld RJ, et al. **J Med Microbiol** 1990 Jun;32(2):105–9

Alternative test sequences for HIV screening of donated blood. Imrey HH, et al. **J Med Syst** 1989 Jun;13(3):177–86

Oklahoma blood center to study human retroviruses in donors [news] **J Okla State Med Assoc** 1989 Nov;82(11):580

The prevalence of markers for hepatitis B and human immunodeficiency viruses, malarial parasites and microfilaria in blood donors in a large hospital in south India. Singhvi A, et al. **J Trop Med Hyg** 1990 Jun; 93(3):178–82

Autologous blood donations before elective cardiac surgery [letter; comment] Avoy DR. **JAMA** 1990 Mar 2; 263(9):1202 Comment on: JAMA 1989 Oct 13;262(14):1963–8.

Blood donor groups and crossing over [letter; comment] Fawcett K. **JAMA** 1990 Jun 20;263(23):3149 Comment on: JAMA 1989 Dec 22–29;262(24):3452–4.

Blood bank officials hope donor altruism will pass new (anti-HCV) test [news] Goldsmith MF. **JAMA** 1990 Apr 4;263(13):1749–51

Strategies for screening blood for human immunodeficiency virus antibody. Use of a decision support system. Schwartz JS, et al. **JAMA** 1990 Oct 3;264(13):1704–10

Markers for transfusion-transmitted disease in different groups of blood donors [see comments] Starkey JM, et al. **JAMA** 1989 Dec 22–29;262(24):3452–4 Comment in: JAMA 1990 Jun 20;263(23):3149.

Evaluation of the human T-cell leukemia virus type I seropositivity of blood donors by the particle agglutination inhibition test. Kwon KW, et al. **Jpn J Cancer Res** 1989 Sep;80(9):833–9

Performance certification of gelatin particle agglutination assay for anti-HTLV-1 antibody: inconclusive positive results. Maeda Y, et al. **Jpn J Cancer Res** 1989 Oct; 80(10):915–9

Handling the HTLV-III antibody positive blood donor [news] **Lancet** 1985 Jan 26;1(8422):234

Infectivity of blood that is immunoblot intermediate reactive on hepatitis C virus antibody testing [letter] Bellobuono A, et al. **Lancet** 1990 Aug 4;336(8710):309

Screening donors for hepatitis C virus antibody [letter] Cash JD. **Lancet** 1990 Aug 4;336(8710):309

Detection of hepatitis C virus RNA in serum [letter] Clewley JP. **Lancet** 1990 Aug 4;336(8710):309–10

HTLV-I/II antibodies in French blood donors [letter] Coste J, et al. **Lancet** 1990 May 12;335(8698):1167–8

Detection of hepatitis C viral sequences in blood donations by "nested" polymerase chain reaction and prediction of infectivity. Garson JA, et al. **Lancet** 1990 Jun 16; 335(8703):1419–22

What do western blot indeterminate patterns for human immunodeficiency virus mean in EIA-negative blood donors? [see comments] Genesca J, et al. **Lancet** 1989 Oct 28;2(8670):1023–5 Comment in: Lancet 1989 Dec 2;2(8675):1330–1. Comment in: Lancet 1990 Feb 3;335(8684):292–3.

Screening for hepatitis C virus antibody in plasma for fractionation [letter] [see comments] Habibi B, et al. **Lancet** 1990 Apr 7;335(8693):855–6 Comment in: Lancet 1990 May 19;335(8699):1216. Comment in: Lancet 1990 May 26;335(8700):1274–5.

Lack of transmission of Borrelia burgdorferi by blood transfusion [letter] Halkier-Sørensen L, et al. **Lancet** 1990 Mar 3;335(8688):550

Antibiotics in donated blood [letter; comment] Hewitt PE. **Lancet** 1989 Oct 28;2(8670):1035 Comment on: Lancet 1989 Sep 2;2(8662):563.

Anti-HCV and transaminase testing of blood donors [letter] Kakaiya R, et al. **Lancet** 1990 Jul 21;336(8708):187–8

Early US experience with anti-HCV kit in blood donors [letter] Menitove JE, et al. **Lancet** 1990 Jul 28; 336(8709):244–5

Hepatitis C antibody and transaminase activities in blood donors. Morgan C, et al. **Lancet** 1990 Apr 14;335(8694):921

HTLV-I/II antibodies in UK blood donors [letter] Salker R, et al. **Lancet** 1990 Aug 4;336(8710):317

Infectivity of blood seropositive for hepatitis C virus antibodies [see comments] van der Poel CL, et al. **Lancet** 1990 Mar 10;335(8689):558–60 Comment in: Lancet 1990 Apr 21;335(8695):982–3.

HCV testing in low-risk population [letter] Weiner AJ, et al. **Lancet** 1990 Sep 15;336(8716):695

Hepatitis C virus RNA in symptomless donors implicated in post-transfusion non-A, non-B hepatitis [letter] Zanetti AR, et al. **Lancet** 1990 Aug 18;336(8712):448

Hepatitis C virus causing non-A, non-B hepatitis in plasmapheresis centre [letter] Zhang WH, et al. **Lancet** 1990 Feb 10;335(8685):353

Microbiological screening of blood donations: cost versus effectiveness [published erratum appears in Med Lab Sci 1989 Oct;46(4):368] Barbara JA. **Med Lab Sci** 1989 Jul; 46(3):250–4 (9 ref.)

Brucella antibodies in Sudanese blood donors. Khalil IA, et al. **Med Lab Sci** 1988 Oct;45(4):312–4

HIV antibodies in beggar blood donors in Rio de Janeiro, Brazil—II. Carvalho MI, et al. **Mem Inst Oswaldo Cruz** 1988 Oct-Dec;83(4):533

Detection of the human parvovirus B19 in a blood donor plasma in Rio de Janeiro. da Silva Cruz A, et al. **Mem Inst Oswaldo Cruz** 1989 Apr-Jun;84(2):279–80

The poisoned gift: AIDS and blood. Murray TH. **Milbank Q** 1990;68 Suppl 2:205–25

Absence of HIV infection in blood donors with indeterminate western blot tests for antibody to HIV-1. Jackson JB, et al. **N Engl J Med** 1990 Jan 25;322(4):217–22

Value of routine inquiry about blood donation [letter] Woolley RJ, et al. **N Engl J Med** 1990 Jan 11;322(2):132–3

Blood donor must answer questions. **N J Med** 1989 Aug; 86(8):592–3

Hepatitis viruses. Blood donors to be screened [news] Swinbanks D. **Nature** 1989 Nov 30;342(6249):467

Serial maternal blood donations for intrauterine transfusion. Gonsoulin WJ, et al. **Obstet Gynecol** 1990 Feb;75(2):158–62

Blood donors to be screened for cancer virus [news] **Oncology (Williston Park)** 1988 Oct;2(10):38

Transfusion safety: minimal risk of AIDS remains despite HIV antibody testing. Menitove JE. **Oncology (Williston Park)** 1988 Oct;2(10):12–3, 16, 19

Plasma exchange donation of cryoprecipitate after DDAVP stimulation: an alternative source of factor VIII. McLeod BC, et al. **Prog Clin Biol Res** 1990;324:189–98

Repeat plateletpheresis—the effects on the donor and the yield. Rock G, et al. **Prog Clin Biol Res** 1990;337:27–30

Adverse reactions in healthy blood donors undergoing plasmapheresis. Schroeder ML, et al. **Prog Clin Biol Res** 1990;337:485–6

Methodologic approaches to surveillance of HIV infection among blood donors. Petersen LR, et al. **Public Health Rep** 1990 Mar-Apr;105(2):153–7

Effect of ABO blood group and secretor status on the frequency of Helicobacter pylori antibodies. Höök-Nikanne J, et al. **Scand J Gastroenterol** 1990 Aug; 25(8):815–8

Lack of evidence of HTLV-I antibodies in the Finnish population. Leinikki P, et al. **Scand J Infect Dis** 1989; 21(5):515–9

Hepatitis-B surface antigen and VDRL in healthy blood donors of Brunei Darussalam. Sebastian VJ, et al. **Singapore Med J** 1989 Dec;30(6):568–70

Results of follow-up survey sent to laboratories participating in a nationwide ALT standardization program [letter] AuBuchon JP. **Transfusion** 1990 Jan;30(1):76–7

Serum alanine aminotransferase (ALT) assay and incidence of posttransfusion non-A,non-B hepatitis [letter] Barcena Marugan R, et al. **Transfusion** 1989 Oct;29(8):751

Recruiting blood donors into a local bone marrow donor registry. Beatty PG, et al. **Transfusion** 1989 Nov-Dec;

29(9):778–82
Anti-hepatitis C virus in blood donors with raised ALT levels [letter] Bellobuono A, et al. **Transfusion** 1990 May; 30(4):382
The Tower of Babel [editorial] Berkman EM. **Transfusion** 1989 Oct;29(8):661–2
Controversies in transfusion medicine: should donor hemoglobin standards be lowered? [letter] Bettigole RE. **Transfusion** 1989 Nov–Dec;29(9):829
FDA and surrogate testing for non-A,non-B hepatitis [letter; comment] Biswas R. **Transfusion** 1989 Oct;29(8):750 Comment on: Transfusion 1989 Mar–Apr;29(3):277–8.
Testing in the years ahead: new pressures and new concerns. Bove JR. **Transfusion** 1990 Jan;30(1):63–7
Minimal-exposure transfusion and the committed donor. Brecher ME, et al. **Transfusion** 1990 Sep;30(7):599–604
Monitoring blood donors for HIV-2 infection by testing anti-HIV-1 reactive sera. Busch MP, et al. **Transfusion** 1990 Feb;30(2):184–7
Questionable efficacy of confidential unit exclusion [letter] Busch MP, et al. **Transfusion** 1990 Sep;30(7):668–9
Red blood cell mass in autologous and homologous blood units. Implications for risk/benefit assessment of autologous blood crossover and directed blood transfusion. Goodnough LT, et al. **Transfusion** 1989 Nov–Dec; 29(9):821–2
Prevention of iron deficiency with carbonyl iron in female blood donors. Gordeuk VR, et al. **Transfusion** 1990 Mar–Apr;30(3):239–45
Risks and benefits of blood donation [editorial] Grindon AJ. **Transfusion** 1990 Sep;30(7):581–2
Exposure to hepatitis via directed blood donations [letter] Huestis DW, et al. **Transfusion** 1989 Nov–Dec;29(9):827
Controversies in transfusion medicine. Alanine aminotransferase screening of blood donors: pro. Klein HG. **Transfusion** 1990 May;30(4):363–7
Practice guidelines and prenatal and perinatal immunohematology [letter] Kolins MD. **Transfusion** 1990 Sep;30(7):669–70
Controversies in transfusion medicine. The safety and utility of autologous donations by pregnant patients: pro. Kruskall MS. **Transfusion** 1990 Feb;30(2):168–71
Low incidence of HTLV infections in random blood donors with indeterminate western blot patterns. Kwok S, et al. **Transfusion** 1990 Jul–Aug;30(6):491–4
Group A variants defined with a monoclonal anti-A reagent. Lau P, et al. **Transfusion** 1990 Feb;30(2):142–5
Efficacy of various methods of confidential unit exclusion in identifying potentially infectious blood donations. Loiacono BR, et al. **Transfusion** 1989 Nov–Dec;29(9):823–6
Donation reactions among autologous donors. McVay PA, et al. **Transfusion** 1990 Mar–Apr;30(3):249–52
Infectious disease markers in autologous blood [letter] Mazzei C, et al. **Transfusion** 1989 Nov–Dec;29(9):829–30
A model for estimating incremental benefits and costs of testing donated blood for human immunodeficiency virus antigen (HIV-Ag). Mendelson DN, et al. **Transfusion** 1990 Jan;30(1):73–5
Antibodies to hepatitis C virus in Japanese blood donors and in hospital personnel [letter] Nishimura Y, et al. **Transfusion** 1990 Sep;30(7):667–8
Epidemiologic background of blood donors with antibody to human T-cell lymphotropic virus. Transfusion Safety Study Group. Operskalski EA, et al. **Transfusion** 1989 Oct; 29(8):746–8
Inactivation of HIV-2 by solvent/detergent treatment [letter] Piszkiewicz D, et al. **Transfusion** 1990 Feb;30(2):192
Identification of HIV-infected transfusion recipients: the utility of crossreferencing previous donor records with AIDS case reports. Samson S, et al. **Transfusion** 1990 Mar–Apr;30(3):214–8
Controversies in transfusion medicine. Autologous blood donation in pregnancy: con. Sayers MH. **Transfusion** 1990 Feb;30(2):172–4
Controversies in transfusion medicine. Alanine aminotransferase screening of blood donors: con. Spurling CL, et al. **Transfusion** 1990 May;30(4):368–73
Directed and limited-exposure blood donations for infants and children. Strauss RG, et al. **Transfusion** 1990 Jan; 30(1):68–72
The true rate of donor seropositivity to HIV [letter; comment] Strauss RG. **Transfusion** 1990 Jan;30(1):77–8 Comment on: Transfusion 1989 Feb;29(2):119–23.
Potential risks of blood donation during pregnancy for autologous transfusion [letter] Tabor E. **Transfusion** 1990 Jan;30(1):76
The role of blacks in blood donation and the organ and tissue transplantation process. Bayton JA, et al. **Transplant Proc** 1989 Dec;21(6):3971–2
Reduction of anti-HLA antibody using small-dose single-donor blood transfusion. Ettenger R, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):740–2
Autologous transfusion practice. Burckhardt JJ, et al. **Vox Sang** 1990;58(3):242–5
An epidemiological and clinical study of transaminase levels and hepatitis B antibodies in 1,100 blood donors. Driss F, et al. **Vox Sang** 1989;57(1):43–8
Provision of a panel of anti-toxoplasma-negative blood donors. McDonald CP, et al. **Vox Sang** 1989;57(1):55–8
Prevalence of hepatitis C virus antibodies in Italian blood donors. The Italian Cooperative Group. Sirchia G, et al. **Vox Sang** 1990;59(1):26–9
International round table conference on the definition of the Rh-negative blood donor. van Rhenen DJ. **Vox Sang** 1990; 58(3):254–5
[Screening of antibodies to human T-cell leukemia virus type I (HTLV-I) in sera of blood donors and comparison of different methods] Fan FS, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jul;44(1):71–6 (Eng. Abstr.) (Chi)
[Significance of HBsAg in screening donors] Wang GH. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Dec; 10(6):363–5 (Eng. Abstr.) (Chi)
[Lipids in the plasma of voluntary blood donors. A 2-year retrospective study (1985–1987)] Mathiesen O, et al. **Ugeskr Laeger** 1989 Oct 2;151(40):2580–2 (Eng. Abstr.) (Dan)
[Screening of donor blood for anti-HIV. Experiences from blood donor screening 1986–1988] Schmidt KW, et al. **Ugeskr Laeger** 1990 Sep 3;152(36):2552–6 (Eng. Abstr.) (Dan)
[HIV-1 serology and carrier state for HBs and HBe in blood donors at Yaounde University Hospital Center, Cameroon] Zekeng L, et al. **Ann Soc Belg Med Trop** 1990 Mar; 70(1):49–53 (Eng. Abstr.) (Fre)
[Prevention of post-transfusion hepatitis in Guadeloupe: results after application of new measures for detecting blood donors potentially at risk] Fest T, et al. **Gastroenterol Clin Biol** 1990;14(1):56–61 (Eng. Abstr.) (Fre)
[Human T lymphocyte virus type I infection in 2 related blood donors (letter)] Moncharmont P, et al. **Presse Med** 1990 Mar 3;19(8):380 (Fre)
[Epidemiologic study of HIV serology in blood donors from 5 departments in northeastern France (1985–1989)] Aymard JP, et al. **Rev Fr Transfus Hemobiol** 1989 Dec;32(6):421–9 (Eng. Abstr.) (Fre)
[Markers of viral hepatitis B and D and levels of alanine aminotransferase in military blood donors: a profile of 30,000 blood donations in 1989] Boulesteix G, et al. **Rev Fr Transfus Hemobiol** 1990 Jan;33(1):9–20 (Eng. Abstr.) (Fre)
[HIV seropositivity among blood donors from 1985 to 1989. CTS du Groupe de Travail Rétrovirus de la Société Nationale de Transfusion Sanguine] Courouce AM, et al. **Rev Fr Transfus Hemobiol** 1989 Sep;32(4):299–305 (Fre)
[Prevention of non-A non-B hepatitis in Guadeloupe (letter)] Fest T, et al. **Rev Fr Transfus Hemobiol** 1989 Dec; 32(6):483–4 (Fre)
[Blood donation programs in the context of refugee populations] Perrin P. **Rev Med Suisse Romande** 1990 May; 110(5):433–6 (Fre)
[Population genetics of HLA polymorphism in blood donors of Bremen and Hannover] Kowald B, et al. **Anthropol Anz** 1990 Mar;48(1):37–63 (Eng. Abstr.) (Ger)
[Post-transfusion non-A, non-B hepatitis: is a specific test in sight?] Kühnl P, et al. **Beitr Infusionther** 1989;24:60–8 (11 ref.) (Eng. Abstr.) (Ger)
[Confidential donor self-exclusion for raising the safety of blood preparations] Koerner K, et al. **Dtsch Med Wochenschr** 1990 Jan 5;115(1):8–11 (Eng. Abstr.) (Ger)
[Significance of cytomegalovirus in blood donation] Albert S, et al. **Infusionstherapie** 1990 Feb;17(1):48–56 (Eng. Abstr.) (Ger)
[Comparative study of the side effects and donor safety in preparatory cell collection using the cell separators CS 3,000 and V 50] Taborski U, et al. **Infusionstherapie** 1989 Aug;16(4):186–8 (Eng. Abstr.) (Ger)
[The quality of blood donation and its effect on subsequent preparation of coagulation active plasma fractions] Sander W. **Z Arztl Fortbild (Jena)** 1989;83(24):1247–50 (23 ref.) (Ger)
[Progress in the development of a detection test for parenteral non-A, non-B hepatitis--results of enzyme immunoassay for anti-hepatitis C virus] Wiese M, et al. **Z Gesamte Inn Med** 1990 Mar 1;45(3):80–3 (Eng. Abstr.) (Ger)
[AIDS and blood transfusion] Baumgarten K. **Z Hautkr** 1990 Jul;65(7):677–80, 683 (Eng. Abstr.) (Ger)
[Physicians, old age and blood donation (editorial)] Kohn D. **Harefuah** 1990 Jan 15;118(2):120–1 (Heb)
[The presence of nucleotide sequences of the hepatitis B virus in the serum of HBsAg-negative blood donors in Sardinia] Lai ME, et al. **Minerva Med** 1990 Apr;81(4):283–6 (Eng. Abstr.) (Ita)
[Is routine analysis of ferritin in all blood donors necessary?] Dahl IM. **Tidsskr Nor Laegeforen** 1990 Jan 20;110(2):187–8 (Nor)
[Cholesterol status of blood donors. Motivation for dietary changes and their effects] Flesland O, et al. **Tidsskr Nor Laegeforen** 1990 Jun 30;110(17):2226–9 (Eng. Abstr.) (Nor)
[Iron status in blood donors evaluated by serum ferritin] Halvorsen R, et al. **Tidsskr Nor Laegeforen** 1990 Jan 20; 110(2):189–91 (Eng. Abstr.) (Nor)
[Frequency of blood donors with HIV antibodies in the Fundação Hemocentro de São Paulo] Dorlhiac-Llacer PE, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Jan–Feb; 44(1):33–5 (Eng. Abstr.) (Por)
[Assessment of the functional activity of lymphokine-activated killer cells in healthy donors and in patients with interleukin-2-dependent immunodeficiency] Petrov RV, et al. **Biull Eksp Biol Med** 1989 Jun; 107(6):713–5 (Eng. Abstr.) (Rus)
[Natural antistaphylococcal immunity in a potential donor population] Nazarchuk LV. **Fiziol Zh** 1990 Jan–Feb; 36(1):82–4 (Eng. Abstr.) (Rus)
[Effect of thiamine and its metabolites on aspartate and alanine aminotransferase activity in the body of white rats and in donor blood] Petrov SA, et al. **Fiziol Zh** 1989 Jul–Aug;35(4):94–6 (Eng. Abstr.) (Rus)
[The rheologic aspects of washed donor erythrocytes] Ganapiev AA, et al. **Gematol Transfuziol** 1989 Dec; 34(12):7–9 (Eng. Abstr.) (Rus)
[Antibodies to human immunodeficiency virus (HIV) in blood donors] Golosova TV, et al. **Gematol Transfuziol** 1989 Oct;34(10):35–7 (Rus)
[Plasma-cytapheresis in patients and donors (prospects of Soviet-American cooperation] Kalinin NN, et al. **Gematol Transfuziol** 1990 Mar;35(3):26–30 (Rus)
[Conditions for obtaining hemostatic preparations from donor plasma] Kunakova NV, et al. **Gematol Transfuziol** 1989 Oct; 34(10):40–2 (Rus)
[Optimal industrial conditions for the production of antistaphylococcal immunoglobulin] Rusanov VM, et al. **Gematol Transfuziol** 1990 Feb;35(2):34–6 (Rus)
[Changes in the pH of leukocyte granules during the storage of preserved donor blood] Shestova OLO, et al. **Gematol Transfuziol** 1989 Dec;34(12):28–32 (Eng. Abstr.) (Rus)
[Experience with blood typing of active donors at the Rhesus Laboratory of the Sverdlovsk District Station of Blood Transfusion] Skuditskiĭ AE. **Gematol Transfuziol** 1990 Apr; 35(4):34–5 (Rus)
[Complex isolation of macroglobulins from retroplacental serum and analysis of their levels in the blood serum of donors] Zorin NA, et al. **Gematol Transfuziol** 1990 May; 35(5):31–2 (Rus)
[Thrombin and anti-thrombin antibody levels in the blood of patients with acute myocardial infarction] Korochkin IM, et al. **Kardiologiia** 1990 Jan;30(1):45–8 (Eng. Abstr.) (Rus)
[An immunonephelometric micromethod of determining the levels of fibrin-fibrinogen degradation products] Ivanov EP, et al. **Lab Delo** 1989;(10):12–5 (Eng. Abstr.) (Rus)
[The clinical efficacy of donor plasma with an elevated titer of endotoxin antibodies] Rumiantsev AG, et al. **Ter Arkh** 1989;61(8):123–6 (Rus)
[Results of clinical and hematologic examination of donors infected with the human immunodeficiency virus] Tsyba NN, et al. **Ter Arkh** 1989;61(11):34–6 (Eng. Abstr.) (Rus)
[Etiology and prevention of post-transfusion hepatitis upon systematic screening of donor sera] Kirilenko VA, et al. **Vopr Virusol** 1989 Sep–Oct;34(5):621–3 (Rus)
[The use of a test for anti-HBc for prevention of post-transfusion hepatitis B] Somova AV, et al. **Vopr Virusol** 1989 Nov–Dec;34(6):749–52 (Rus)
[Virus-induced receptors on the lymphocytes of HBsAg-negative donors] Marichev IL, et al. **Vrach Delo** 1989 Oct;(10):116–8 (Eng. Abstr.) (Rus)
[The effect of an immune antibacterial plasma and a donor leukocyte mass on the immune system of patients with suppurative-septic processes] Bulava GV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Oct;(10):91–6 (Eng. Abstr.) (Rus)
[The reactogenicity and immunological efficacy of a Klebsiella vaccine in donors] Kurbatova EA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 May;(5):53–6 (Eng. Abstr.) (Rus)
[Preliminary results of the analysis of donations carried out in Catalonia from 1985 to 1987 (letter)] Casabona J, et al. **Med Clin (Barc)** 1990 Jan 20;94(2):77 (Spa)
[Non-A, non-B hepatitis in plasma donors. Apropos of 3 cases (letter)] Llauger MA, et al. **Med Clin (Barc)** 1990 Feb 3;94(4):157–8 (Spa)
[Should antibodies against HTLV-1 be analyzed in Spanish blood donations? (letter)] Soriano V, et al. **Med Clin (Barc)** 1989 Nov 11;93(15):596 (Spa)
[Paid plasma donors and human immunodeficiency virus infection. Are they a new risk group for AIDS? (letter)] Rivero Román A, et al. **Rev Clin Esp** 1990 Apr;186(6):310–1 (Spa)
[Prevalence of HBSAG in blood donors and patients at the central hospital of Maputo, Mozambique, 1985] Pérez O, et al. **Rev Cubana Med Trop** 1989 Sep–Dec;41(3):355–61 (Eng. Abstr.) (Spa)
[Apropos of the paper "Levels of alanine aminotransferase and aspartate aminotransferase in a population of altruistic donors" (letter)] Marín López A. **Rev Invest Clin** 1989 Jul–Sep;41(3):297–8 (Spa)
[Paid blood donors: a new risk group for the development of AIDS in Mexico] Alvarez-Suárez Y, et al. **Salud Publica Mex** 1989 Sep–Oct;31(5):642–4 (Eng. Abstr.) (Spa)
[31st meeting of the Spanish Association of Hematology and Hemotherapy. Córdoba, 2–4 November 1989. Abstracts] **Sangre (Barc)** 1989 Dec;34(6):525–67 (Spa)
[Incidence of anti-HCV and ALT in blood donors] Martín Y, et al. **Sangre (Barc)** 1990 Jun;35(3):197–200 (Eng. Abstr.) (Spa)
[Anti-HCV antibodies among blood donors in Cantabria. Incidence and relation to transaminase levels] Pastor JM, et al. **Sangre (Barc)** 1990 Jun;35(3):205–7 (Eng. Abstr.) (Spa)

LEGISLATION & JURISPRUDENCE

[Effects of health legislation against HIV in blood donation in Guadalajara, Mexico] Vázquez-Valls E, et al. **Salud Publica Mex** 1990 Jan-Feb;32(1):38-42 (Eng. Abstr.) (Spa)

PSYCHOLOGY

Directed blood procurement does not benefit patients who are enrolled in an autologous blood predeposit program. Goodnough LT. **Am J Clin Pathol** 1989 Oct;92(4):484-7

A direct patient approach for pre-operative autologous blood donation and transfusion. Roxby DJ, et al. **Aust N Z J Surg** 1988 Jun;58(6):471-3

Education for blood donation as an avenue for school and community cooperation. Felts WM, et al. **J Sch Health** 1990 Mar;60(3):103-5

Differences between blood donors and nondonors in AIDS-related attitudes. LoBello SG. **Psychol Rep** 1990 Jun;66(3 Pt 1):867-70

Why do they give the gift of life? A review of research on blood donors since 1977. Piliavin JA. **Transfusion** 1990 Jun; 30(5):444-59 (124 ref.)

[Characteristics of first-time blood donors and their motives. A prospective study among voluntary and unpaid blood donors] Mathiesen O, et al. **Ugeskr Laeger** 1989 Nov 20; 151(47):3155-7 (Eng. Abstr.) (Dan)

STATISTICS & NUMERICAL DATA

HIV prevalence in blood donors in urban and in rural areas of the Federal Republic of Germany. Glück D, et al. **Blut** 1990 May;60(5):304-7

Blood and plasma donations among a cohort of intravenous drug users. Nelson KE, et al. **JAMA** 1990 Apr 25; 263(16):2194-7

Epidemiology of hepatitis C virus. A preliminary study in volunteer blood donors. Stevens CE, et al. **JAMA** 1990 Jan 5;263(1):49-53

Decreasing seroprevalence of human immunodeficiency virus type 1 in a regional blood donor population. Ness PM, et al. **Transfusion** 1990 Mar-Apr;30(3):201-6

[Current data on the prevalence and epidemiology of HIV from the HIV study by the German Red Cross of West Germany] Glück D, et al. **Infusionstherapie** 1990 Jun; 17(3):160-2 (Eng. Abstr.) (Ger)

SUPPLY & DISTRIBUTION

Plasma procurement world-wide. Leikola J. **Beitr Infusionther** 1989;24:69-73 (8 ref.)

Second fingerstick: a simple method to increase the blood supply. Bravo J, et al. **Transfusion** 1990 Jun;30(5):474-6

[The situation of hemotherapy in Spain] Arrieta R, et al. **Rev Sanid Hig Publica (Madr)** 1989 Jul-Aug;63(7-8):101-15 (Spa)

BLOOD EXPANDERS see PLASMA SUBSTITUTES

BLOOD FLOW VELOCITY

Disturbances of blood-flow velocity in the dorsal veins of the hand after vein cannulation and cannula fixation in the anaesthetised patient. Nitescu P, et al. **Acta Anaesthesiol Scand** 1990 Feb;34(2):120-5

Postocclusive reactive hyperaemia of cutaneous blood flow in premature newborn infants. Beaufort-Krol GC, et al. **Acta Paediatr Scand Suppl** 1989;360:20-5

Superior vena cava Doppler flow velocity patterns in pericardial disease. Byrd BF 3d, et al. **Am J Cardiol** 1990 Jun 15;65(22):1464-70

Transcatheter occlusion of high flow Blalock-Taussig shunts with a detachable balloon. Gewillig M, et al. **Am J Cardiol** 1990 Jun 15;65(22):1518-9

Flow velocity waveforms of the vascular system in the anemic fetus before and after intravascular transfusion for severe red blood cell alloimmunization. Mari G, et al. **Am J Obstet Gynecol** 1990 Apr;162(4):1060-4

Blood flow velocity and pulsatile diameter changes in the fetal descending aorta: a longitudinal study. Stale H, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):26-9

Effect of amniotomy on uteroplacental and fetoplacental flow velocity waveforms. Bruner JP, et al. **Am J Perinatol** 1989 Oct;6(4):421-3

Pulsed and color Doppler analysis of normal carotid bifurcation flow dynamics using an in-vitro model. Polak JF, et al. **Angiology** 1990 Mar;41(3):241-7

Decrease in xenon clearance during response to cold, dry air: problems of interpretation. Naclerio RM, et al. **Ann Otol Rhinol Laryngol** 1990 Feb;99(2 Pt 1):155-9

A two-dimensional Doppler ultrasonic probe for flow measurement. Ashrafzadeh AR, et al. **Biomed Instrum Technol** 1989 Jul-Aug;23(4):301-7

Stroboscopic nuclear magnetic resonance microscopy of arterial blood flow. Behling RW, et al. **Biophys J** 1990 Jul;58(1):267-71

Steady flow of couple stress fluid through tubes of slowly varying cross-sections--application to blood flows. Sagayamary RV, et al. **Biorheology** 1989;26(4):753-69

Increase of blood flow in skin and spinal cord following activation of small diameter primary afferents. Koltzenburg M, et al. **Brain Res** 1990 Feb 12;509(1):145-9

Epidural anaesthesia and blood flow velocity in mother and fetus. Morrow RJ, et al. **Can J Anaesth** 1989 Sep; 36(5):519-22

Doppler echocardiographic quantitation of volumetric flow rate. Calafiore P, et al. **Cardiol Clin** 1990 May;8(2):191-202 (38 ref.)

Principles and physics of Doppler. Waggoner AD, et al. **Cardiol Clin** 1990 May;8(2):173-90 (43 ref.)

The areas ratio of normal arterial junctions and its implications in pulse wave reflections. Papageorgiou GL, et al. **Cardiovasc Res** 1990 Jun;24(6):478-84

Accuracy of 20-MHz Doppler catheter coronary artery velocimetry for measurement of coronary blood flow velocity. Tadaoka S, et al. **Cathet Cardiovasc Diagn** 1990 Mar;19(3):205-13

Effect of velocity gradient on the clotting time of blood and on the consistency of clots formed in vitro. Dintenfass L. **Circ Res** 1966 Apr;18(4):349-56

Quantification of jet flow by momentum analysis. An in vitro color Doppler flow study. Thomas JD, et al. **Circulation** 1990 Jan;81(1):247-59

Doppler blood flow studies. **Clin Obstet Gynecol** 1989 Dec; 32(4):627-748

Fetal cerebral blood flow. Wladimiroff JW. **Clin Obstet Gynecol** 1989 Dec;32(4):710-8 (24 ref.)

Acute and protracted effects of intratracheal surfactant application on internal carotid blood flow velocity, blood pressure and carbondioxide tension in very low birth weight infants. Jorch G, et al. **Eur J Pediatr** 1989 Aug; 148(8):770-3

Cochlear blood flow autoregulation in Wistar-Kyoto rats. Quirk WS, et al. **Hear Res** 1989 Aug;41(1):53-60

Partial splenic embolization guided by blood flow measurements. Link DP, et al. **Invest Radiol** 1989 Sep; 24(9):678-83

An evaluation of the Doppler-laser system in monitoring the free skin flap in the rat. Moneta MR, et al. **Ital J Orthop Traumatol** 1989 Sep;15(3):361-6

Pulsed Doppler echocardiographic description of a circular flow pattern in spontaneous left ventricular contrast. Delemarre BJ, et al. **J Am Soc Echocardiogr** 1988 Mar-Apr; 1(2):114-8

Realtime colour flow mapping and Doppler studies of normal carotid vertebral system. Shah KD, et al. **J Assoc Physicians India** 1989 Feb;37(2):167-71

Color Doppler as a morphologic modality. Rigauts H, et al. **J Belge Radiol** 1989 Aug;72(4):301-5

Velocity field of pulsatile flow in a porous tube. Chang HN, et al. **J Biomech** 1989;22(11-12):1257-62

Effect of systolic flow rate on the prediction of effective prosthetic valve orifice area. Schoephoerster R, et al. **J Biomech** 1989;22(6-7):705-15

Model studies of nonsteady flow using magnetic resonance imaging. Fei DY, et al. **J Biomech Eng** 1990 Feb; 112(1):93-9

Numerical study on the unsteady flow of non-Newtonian fluid. Nakamura M, et al. **J Biomech Eng** 1990 Feb; 112(1):100-3

On the application of a constitutive equation for whole human blood. Rodkiewicz CM, et al. **J Biomech Eng** 1990 May;112(2):198-206

Doppler sonographic evaluation of exercise-induced blood flow velocity and waveform changes in fetal, uteroplacental and large maternal vessels in pregnant women. Baumann H, et al. **J Perinat Med** 1989;17(4):279-87

On the application of ultrasonic contrast agents for blood flowmetry and assessment of cardiac perfusion. Bleeker H, et al. **J Ultrasound Med** 1990 Aug;9(8):461-71

Quantitative color flow imaging to measure the two-dimensional distribution of blood flow velocity and the flow rate. Kitabatake A, et al. **Jpn Circ J** 1990 Mar; 54(3):304-8

Blood flow effects in magnetic resonance imaging. Axel L. **Magn Reson Annu** 1986;:237-44 (21 ref.)

Echo-planar high-resolution flow velocity mapping. Firmin DN, et al. **Magn Reson Med** 1989 Dec;12(3):316-27

Nuclear magnetic resonance velocity spectra of steady flow. Wendt RE 3d, et al. **Magn Reson Med** 1990 Jul;15(1):90-101

Selection of a spectral analysis method for the assessment of velocity distribution based on the spectral distribution of ultrasonic Doppler signals. Kaluzynski K. **Med Biol Eng Comput** 1989 Sep;27(5):463-9

Simple system for automatic intermittent recording of blood flow in femoro-distal bypass grafts using Doppler ultrasound. Thrush AJ, et al. **Med Biol Eng Comput** 1990 Mar;28(2):193-5

Cerebral blood flow velocity alterations during obstructive sleep apnea syndrome. Siebler M, et al. **Neurology** 1990 Sep;40(9):1461-2

Major pitfalls in Doppler investigations. Part II. Low flow velocities and colour Doppler applications. Winkler P, et al. **Pediatr Radiol** 1990;20(5):304-10

Effects of a second heating on blood flow in tumors. Song CW, et al. **Radiat Res** 1990 Apr;122(1):66-71

Assurance of consistent peak-velocity measurements with a variety of duplex Doppler instruments. Kimme-Smith C, et al. **Radiology** 1990 Oct;177(1):265-72

Rapid MR imaging of blood flow with a phase-sensitive, limited-flip-angle, gradient recalled pulse sequence: preliminary experience. Spritzer CE, et al. **Radiology** 1990 Jul;176(1):255-62

Position modifies carotid artery blood flow velocity during straining. Therrien B. **Res Nurs Health** 1990 Apr; 13(2):69-76

Characteristics of Doppler blood-velocity waveforms in a cardiovascular in vitro model. II. The influence of peripheral resistance, perfusion pressure and blood flow. Legarth J, et al. **Scand J Clin Lab Invest** 1989 Sep; 49(5):459-64

Color duplex imaging and Doppler spectrum analysis: principle, capabilities, and limitations. Zwiebel WJ. **Semin Ultrasound CT MR** 1990 Apr;11(2):84-96 (11 ref.)

Intraoperative measurement of spinal cord blood velocity using pulsed Doppler ultrasound. A Case report. Giller CA, et al. **Surg Neurol** 1989 Nov;32(5):387-93

Platelet and shear rate promote tumor cell adhesion to human endothelial extracellular matrix--absence of a role for platelet cyclooxygenase. Bastida E, et al. **Thromb Haemost** 1989 Jun 30;61(3):485-9

[The relation of flow velocity in the carotid vessels to age] Kallmünzer B, et al. **Cas Lek Cesk** 1989 Nov 17; 128(47):1496-8 (Eng. Abstr.) (Cze)

[The importance of doppler velocimetry in pregnancy complicated by arterial hypertension] Uzan M, et al. **Cesk Gynekol** 1989 Jul;54(6):448-55 (Cze)

[Blood flow measurement in arteriovenous fistula. Comparison of 2 ultrasonic methods, direct and indirect by compression of the fistula] Deklunder G, et al. **Presse Med** 1990 May 19;19(20):943-6 (Eng. Abstr.) (Fre)

[Control of the ultrafiltration rate as the main component of a new balancing system in continuous hemofiltration] Stein B, et al. **Anaesthesist** 1989 Oct;38(10):536-8 (Eng. Abstr.) (Ger)

[Crevice flow through artificial heart valves] Köhler J, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:101-2 (Ger)

[A computer-assisted evaluation device for artificial heart valves] Schichl K, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:95-6 (Ger)

[Animal experimental studies on the effect of flow restriction on the thrombogenicity of the Palmaz stent using 111Indium-marked thrombocytes] Nöldge G, et al. **ROFO** 1990 Mar;152(3):264-70 (Eng. Abstr.) (Ger)

[Phantom measurements of blood flow using color-coded Doppler sonography (Quantum Angiodynograph): accuracy and sources of error] von Boetticher H, et al. **ROFO** 1990 Jan;152(1):42-6 (Eng. Abstr.) (Ger)

[Reference values for the pulsatility index and the resistance index of blood flow curves of the umbilical artery and fetal aorta in the 3d trimester] Hecher K, et al. **Ultraschall Med** 1989 Aug;10(4):226-9 (Eng. Abstr.) (Ger)

[Conventional and color-coded duplex sonography in a comparative study: quantitative flow measurements in a phantom in vitro] Ranke C, et al. **Vasa Suppl** 1989;27:366-8 (Ger)

[Accuracy of various Doppler technics in recording blood flow velocity. Studies in vitro] von Bibra H, et al. **Z Kardiol** 1990 Feb;79(2):73-82 (Eng. Abstr.) (Ger)

[Simultaneous direct flow and 86Rb-based measurements in the determination of sublingual blood flow in rats] Györfi A, et al. **Fogorv Sz** 1988 Aug;81(8):239-43 (Eng. Abstr.) (Hun)

DRUG EFFECTS

Doppler assessment of fetal blood flow velocity waveforms during acute maternal oxygen administration as predictor of fetal outcome in post-term pregnancy. Arduini D, et al. **Am J Perinatol** 1990 Jul;7(3):258-62

A double blind placebo controlled trial of the calcium entry blocking drug, nicardipine, in the treatment of vasospasm following severe head injury. Compton JS, et al. **Br J Neurosurg** 1990;4(1):9-15

Changes of blood flow in oestrogen-induced hyperplastic anterior pituitary lobe following bromocriptine administration. Kemeny AA, et al. **Br J Neurosurg** 1987; 1(2):243-50

Effects of drinking and central angiotensin II stimulation on organ blood flow in conscious rats. Rettig R, et al. **Brain Res** 1989 Dec 29;505(2):251-6

Cochlear blood flow autoregulation in Wistar-Kyoto rats. Quirk WS, et al. **Hear Res** 1989 Aug;41(1):53-60

[Intra- and postoperative effect of different hydroxyethyl starch solutions on the flow properties of the blood and on the oxygen partial pressure of the conjunctiva] Tormann T, et al. **Anaesthesist** 1990 Mar;39(3):166-72 (Eng. Abstr.) (Ger)

[The effect of naftidrofuryl on macro- and microcirculation, tissue oxygen supply and blood rheology] Jung F, et al. **Vasa Suppl** 1989;27:38 (Ger)

PHYSIOLOGY

Influence of postural change on transmitral flow velocity profile assessed by pulsed Doppler echocardiography in normal individuals and in patients with myocardial infarction. Suzuki T, et al. **Am Heart J** 1990 Jul; 120(1):110-5

Effect of age on diastolic left ventricular filling at rest and during inotropic stimulation and acute systemic hypertension: experimental studies in conscious beagles. Vandenberg BF, et al. **Am Heart J** 1990 Jul;120(1):73-81

The cardiovascular thoracic air plethysmogram. Verdouw PD, et al. **Bibl Cardiol** 1967;(19):63-7

Time-dependent rheological behaviour of blood flow at low shear in narrow horizontal tubes. Alonso C, et al.

Biorheology 1989;26(2):229–46

Microcontinuum model for pulsatile blood flow through a stenosed tube. Chaturani P, et al. **Biorheology** 1989; 26(4):835–46

Osmolality- and hematocrit-mediated flow behavior of RBC suspensions in 33 micrometer ID tubes. McKay CB, et al. **Biorheology** 1989;26(4):863–74

The flow rate of blood in an environment of weightlessness. Takano Y. **Biorheology** 1989;26(4):703–10

Evaluation of left ventricular diastolic function. Bessen M, et al. **Cardiol Clin** 1990 May;8(2):315–32 (86 ref.)

Effect of blood viscocity on arterial flow induced dilator response. Melkumyants AM, et al. **Cardiovasc Res** 1990 Feb;24(2):165–8

Studies of velocity fields and turbulence downstream of aortic valve prostheses in vitro and in vivo. Hasenkam JM. **Dan Med Bull** 1990 Jun;37(3):235–49 (109 ref.)

Alpha- and beta-adrenergic receptors of noradrenergic innervation modulate the lower limits of cerebral and cerebellar blood flow autoregulation in spontaneously hypertensive rats. Shiokawa O, et al. **Gerontology** 1989; 35(2–3):106–12

Portal blood velocity and flow in aging man. Zoli M, et al. **Gerontology** 1989;35(2–3):61–5

High flow velocity across a complicated atrial septal defect: Doppler findings and hemodynamic correlations. Goldfarb A, et al. **J Am Soc Echocardiogr** 1988 Sep–Oct;1(5):348–50

Analysis of Doppler-obtained velocity curves in functional evaluation of mechanical prosthetic valves in the mitral and aortic positions. Goldrath N, et al.
J Am Soc Echocardiogr 1988 May–Jun;1(3):211–25

Comparison of peak and modal aortic blood flow velocities with invasive measures of left ventricular performance. Sagar KB, et al. **J Am Soc Echocardiogr** 1988 May–Jun; 1(3):194–200

The effect of changes in afterload on Doppler echocardiographic indexes of left ventricular performance. Wallmeyer K, et al. **J Am Soc Echocardiogr** 1988 Mar–Apr; 1(2):135–40

Axial flow velocity patterns in a normal human pulmonary artery model: pulsatile in vitro studies. Sung HW, et al. **J Biomech** 1990;23(3):201–14

Doppler blood velocity waveforms and the relation to peripheral resistance in the brachial artery. Legarth J, et al. **J Ultrasound Med** 1990 Aug;9(8):449–53

A method for MR quantification of flow velocities in blood and CSF using interleaved gradient-echo pulse sequences. Ståhlberg F, et al. **Magn Reson Imaging** 1989 Nov–Dec; 7(6):655–67

Velocity profiles in stenosed models using magnetic resonance imaging. Rittgers SE, et al.
Monogr Atheroscler 1990;15:43–53

[Pulsed Doppler sonography of the umbilical artery and fetoplacental resistance. A histometric study of gestosis placentas in comparison with a normal sample] Hitschold T, et al. **Geburtshilfe Frauenheilkd** 1989 Dec;49(12):1056–62 (Eng. Abstr.) **(Ger)**

[The portal system and the hepatic artery in children with extrahepatic bile duct atresia. 2: Further duplex sonography parameters and flowmetry] Grunert D, et al.
Klin Padiatr 1990 Mar–Apr;202(2):87–93 (Eng. Abstr.) **(Ger)**

[Validation of a Doppler catheter for intravascular flow measurement in vivo. A comparison with simultaneous electromagnetic flow measurement] Voelker W, et al.
Ultraschall Med 1990 Apr;11(2):91–4 (Eng. Abstr.) **(Ger)**

[Modification of blood flow properties by physical stimuli] Ernst E. **Wien Klin Wochenschr** 1990 Jan 5;102(1):16–21 (54 ref.) (Eng. Abstr.) **(Ger)**

[A new method for determining capillary filtration coefficients in tissues. 1. Methodologic principles] Petrow JM. **Z Gesamte Inn Med** 1990 Mar 1;45(5):137–40 (Eng. Abstr.) **(Ger)**

[A new method for determining capillary filtration coefficients in tissues. 2. Animal experiment studies] Petrow JM. **Z Gesamte Inn Med** 1990 Mar 1;45(5):141–4 (Eng. Abstr.) **(Ger)**

[Possibilities and limits of quantitative analyses using Doppler echocardiography] Curtius JM. **Z Kardiol** 1989;78 Suppl 7:143–52 (83 ref.) (Eng. Abstr.) **(Ger)**

[Color Doppler echocardiography—possibilities and limits of a new procedure] Redel DA. **Z Kardiol** 1989;78 Suppl 7:117–21 (20 ref.) (Eng. Abstr.) **(Ger)**

[Potential clinical application of Doppler ultrasound in obstetrics] Hoffmann H, et al. **Zentralbl Gynakol** 1989; 111(19):1277–84 (28 ref.) (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

Effects of microwave irradiation on blood flow in the dog hindlimb. McMeeken JM, et al. **Exp Physiol** 1990 May; 75(3):367–74

VETERINARY

Variability of coronary blood flow measurements with microspheres in the rat: role of injection site and sphere number. Wicker PA, et al. **Cardiovasc Res** 1989 May; 23(5):443–52

BLOOD GAS ANALYSIS

ABGs. Six easy steps to interpreting blood gases. Anderson S. **Am J Nurs** 1990 Aug;90(8):42–5

Fetal umbilical blood gas values as diagnostic criteria [letter; comment] Weiner CP. **Am J Obstet Gynecol** 1990 Apr; 162(4):1124–5 Comment on: Am J Obstet Gynecol 1989 Jan;160(1):197.

Temperature measurement and blood gas reporting in studies of hypothermic cardiopulmonary bypass [letter; comment] Murkin JM. **Anesthesiology** 1990 Jun;72(6):1100–1 Comment on: Anesthesiology 1990 Jan;72(1):7–15.

International Federation of Clinical Chemistry (IFCC). Scientific Division. Committee on pH, Blood Gases and Electrolytes. Guidelines for transcutaneous PO2 and PCO2 measurement. Winberley PD, et al.
Ann Biol Clin (Paris) 1990;48(1):39–43

Changes in blood gas tensions following administration of amine buffer THAM to infants with respiratory distress syndrome. Gupta JM, et al. **Arch Dis Child** 1967 Aug; 42(224):416–27

Sensitivity of arterial blood gas analyses [letter; comment] Kufs WM. **Chest** 1989 Oct;96(4):953 Comment on: Chest 1989 Jan;95(1):48–51.

Normal values of blood gases in children living at an altitude over 7000 feet. Rangel ML, et al. **Crit Care Med** 1976 Nov–Dec;4(6):311–2

Analysis of hemodynamics and blood gas in relation to blood ketone body ratio in partially hepatectomized patients. Nakatani T, et al. **Eur Surg Res** 1989;21(3–4):205–12

Monitoring of blood gases during extracorporeal circulation with an artificial lung. Lautier A, et al.
Int J Artif Organs 1990 Feb;13(2):117–24

ANABEL: intelligent blood-gas analysis in the intensive care unit. Zarkadakis G, et al. **Int J Clin Monit Comput** 1989 Jul;6(3):167–71

Effect of endotracheal suctioning on arterial blood gases in children. Kerem E, et al. **Intensive Care Med** 1990; 16(2):95–9

Conscious sedation [letter; comment] Anderson JA, et al. **J Am Dent Assoc** 1989 Oct;119(4):474, 476 Comment on: J Am Dent Assoc 1989 Jul;119(1):153–6.

Arterial blood gas and expiratory pressure monitoring in infants with pneumothorax: prognostic predictability. Mandal AK, et al. **J Natl Med Assoc** 1990 Jan;82(1):33–7

Blood gas analysis as a determinant of occupationally related disability. Morgan WK, et al. **J Occup Med** 1990 May; 32(5):440–3

Ventilation parameters and arterial blood gases as a prediction of hypoplasia in congenital diaphragmatic hernia. Johnston PW, et al. **J Pediatr Surg** 1990 May; 25(5):496–9

[Comparison of blood gas analysis and skin oximetry in phlebopathic dermatitis of the lower limbs] Petruzzellis V, et al. **G Ital Dermatol Venereol** 1989 Jul–Aug; 124(7–8):329–34 (Eng. Abstr.) **(Ita)**

[A simple method of extracorporeal membrane oxygenation (ECMO)—2: The effects of ECMO (arterio-venous shunt) on the arterial blood gases measured for 24 hours] Kasama A, et al. **Masui** 1990 Jan;39(1):45–50 (Eng. Abstr.) **(Jpn)**

[Comparison of O2 saturation measurements by oximetry and by gas analysis] Takahashi T, et al. **Masui** 1989 Aug; 38(8):986–91 (Eng. Abstr.) **(Jpn)**

INSTRUMENTATION

Syringe injection pressure: a neglected factor in blood PO2 determination. Gosling P, et al. **Ann Clin Biochem** 1990 Mar;27 (Pt 2):147–51

In-vitro evaluation of a dual oxygen saturation/hematocrit intravascular fiberoptic catheter. Mendelson Y, et al.
Biomed Instrum Technol 1990 May–Jun;24(3):199–206

Intravascular monitoring: problems and promise. Halbert SA. **Clin Chem** 1990 Aug;36(8 Pt 2):1581–4

Blood gas/pH analyzers. **Health Devices** 1989 Jul–Aug; 18(7–8):245–66

Incompatibility of Nellcor ADAP-PS gas sampling tee and Dryden CPRAM breathing circuit. **Health Devices** 1989 Oct;18(10):364–5

Assessing respiratory status with blood gas/pH analyzers and in vitro multiwavelength oximeters. **Health Devices** 1989 Jul–Aug;18(7–8):239–84

Decision support alerts for clinical laboratory and blood gas data. Shabot MM, et al. **Int J Clin Monit Comput** 1990 Jan;7(1):27–31

Operation Everest II: comparison of four instruments for measuring blood O2 saturation. Forte VA Jr, et al.
J Appl Physiol 1989 Nov;67(5):2135–40

Bedside analysis of arterial blood gases and electrolytes during and after cardiac surgery. Strickland RA, et al.
J Clin Anesth 1989;1(4):248–52

Pulse oximetry versus arterial blood gas specimens in long-term oxygen therapy. Pierson DJ. **Lung** 1990;168 Suppl:782–8 (23 ref.)

[pH, pO2 and pCO2 determinations using maintenance electrodes on the CIBA-CORNING 278 (letter)] Gouget B, et al. **Ann Biol Clin (Paris)** 1990;48(5):333–4 **(Fre)**

[A method of automated blood gas analysis] Szillat P.
Z Erkr Atmungsorgane 1990;174(1):46–50 (Eng. Abstr.) **(Ger)**

[Comparative measurement of oxygen uptake and cardiac output at rest and during stress—evaluation of a new monitor for continuous determination of oxygen uptake and carbon dioxide release] Kreymann G, et al. **Z Kardiol** 1990 May;79(5):341–6 (Eng. Abstr.) **(Ger)**

METHODS

The pK'1 of the carbonic acid–bicarbonate buffer system in hemodialyzed patients. Kirschbaum B, et al.
Am J Med Sci 1989 Oct;298(4):237–42

IFCC document stage 3, draft 1, dated 1989 02 01. An approved IFCC recommendation. IFCC method (1988) for tonometry of blood: reference materials for pCO2 and pO2. International Federation of Clinical Chemistry Scientific Division. Committee on pH, Blood Gases and Electrolytes. Burnett RW, et al. **Clin Chim Acta** 1989 Oct 31; 185(1):S17–24

Prediction of arterial oxygen partial pressure from intrapulmonary venous admixture. Ogawa S, et al.
Crit Care Med 1989 Nov;17(11):1191–3

Comparative study of capillary and arterial, blood gas values in plastic and glass syringes at various intervals in normal and asthmatic subjects. Mathur US, et al.
Indian J Chest Dis Allied Sci 1989 Oct–Dec;31(4):247–50

Oxygen saturation calculation procedures: a critical analysis of six equations for the determination of oxygen saturation. Breuer HW, et al. **Intensive Care Med** 1989;15(6):385–9

A comparison of indirect methods for continuous estimation of arterial PCO2 in men. Robbins PA, et al.
J Appl Physiol 1990 Apr;68(4):1727–31

Quantifying the minimum discard sample required for accurate arterial blood gases. Preusser BA, et al.
Nurs Res 1989 Sep–Oct;38(5):276–9

[Conjunctival oxygen tension. Testing oxygen tension measurement of the conjunctiva] Gellett SC, et al.
Ugeskr Laeger 1990 Jul 9;152(28):2050–2 (Eng. Abstr.) **(Dan)**

[Invasive blood gas analysis] Helm M, et al.
Biomed Tech (Berlin) 1990;35 Suppl 1:19–21 **(Ger)**

[In-vivo catheter blood gas analysis] Sammler D.
Biomed Tech (Berlin) 1990;35 Suppl 1:22–3 **(Ger)**

[Ointments for collecting blood gas samples from the external ear] Kapfhammer G, et al.
Wien Med Wochenschr Suppl 1989;104:suppl 3–4 **(Ger)**

[Atrial blood sampling and blood gas analysis] Grebstad JA.
Tidsskr Nor Laegeforen 1990 Jun 20;110(16):2088–9 **(Nor)**

STANDARDS

Assessing precision and accuracy in blood gas proficiency testing. Hansen JE, et al. **Am Rev Respir Dis** 1990 May; 141(5 Pt 1):1190–3

VETERINARY

Blood gas measurements during exercise: errors due to temperature correction. Jones JH, et al. **J Appl Physiol** 1989 Aug;67(2):879–84

Evaluation of acid–base disturbances in calf diarrhoea [see comments] Groutides C, et al. **Vet Rec** 1990 Jan 13; 126(2):29–31 Comment in: Vet Rec 1990 Feb 3;126(5):120. Comment in: Vet Rec 1990 Mar 3;126(9):225.

BLOOD GAS MONITORING, TRANSCUTANEOUS

Pre- and postischemic transcutaneous oxygen tension measurements and the determination of amputation level in ischemic limbs. Slagsvold CE, et al. **Acta Chir Scand** 1989 Oct;155(10):527–31

Intraosseous pressure, oxygenation, and histology in arthrosis and osteonecrosis of the hip. Pedersen NW, et al.
Acta Orthop Scand 1989 Aug;60(4):415–7

Objectifying exercise ischemia in peripheral vascular disease: a study in 120 patients. Caillard P, et al. **Angiology** 1990 Jun;41(6):469–78

Transcutaneous oximetry monitoring during the early phase of exercise in patients with peripheral artery disease. Modesti PA, et al. **Angiology** 1990 Jul;41(7):553–8

Transcutaneous measurement of oxygen and carbon dioxide tension (TcPO2 and TcPCO2) during treadmill exercise in patients with arterial occlusive disease (AOD)—stages I and II. Schmidt JA, et al. **Angiology** 1990 Jul;41(7):547–52

Intraoperative transcutaneous oxygen tension criteria for completion arteriography. Alexander JB, et al.
Ann Vasc Surg 1990 Jul;4(4):333–7

Transcutaneous oxygen saturation in sleeping infants: prone and supine. Levene S, et al. **Arch Dis Child** 1990 May; 65(5):524–6

Comparison between transcutaneous oximetry and ankle-brachial pressure ratio in predicting runoff and outcome in patients who undergo aortobifemoral bypass. Ameli FM, et al. **Can J Surg** 1989 Nov;32(6):428–32

Reliability of pulse oximetry during exercise in pulmonary patients. Escourrou PJ, et al. **Chest** 1990 Mar;97(3):635–8

Transcutaneous monitoring and response to handgrip exercise [letter] Lopez A, et al. **Chest** 1989 Nov;96(5):1218

Continuous monitoring of O2 saturation [letter; comment] Nelson LD. **Chest** 1989 Oct;96(4):956–7 Comment on: Chest 1989 Mar;95(3):607–11.

Discrepancies between transcutaneous and end-tidal carbon dioxide monitoring in the critically ill neonate with respiratory distress syndrome [letter] Luz G, et al.
Crit Care Med 1990 Sep;18(9):1050

The influence of central haemodynamics on transcutaneous oxygen (TcpO2) measurements. Joyce WP, et al.
Eur J Vasc Surg 1990 Aug;4(4):375–7

Forefoot transcutaneous oxygen tension at different leg

positions in patients with peripheral vascular disease. Larsen JF, et al. **Eur J Vasc Surg** 1990 Apr;4(2):185–9
Assessment of intermittent claudication by means of the transcutaneous oxygen tension exercise profile. Larsen JF, et al. **Eur J Vasc Surg** 1990 Aug;4(4):409–12
Transcutaneous oxygen tension in the leg during exercise in patients with chronic cardiac failure. Elborn JS, et al. **Int J Cardiol** 1990 Jul;28(1):51–6
Transcutaneous measurement of oxygen tension [letter; comment] Mani R, et al. **J Am Acad Dermatol** 1990 Feb; 22(2 Pt 1):323–5 Comment on: J Am Acad Dermatol 1989 Feb;20(2 Pt 1):186–90. Comment on: J Am Acad Dermatol 1989 Feb;20(2 Pt 1):191–7.
Ulcerated edematous limb and transcutaneous oxygen tension [letter; comment] Pekanmäki K, et al. **J Am Acad Dermatol** 1990 Feb;22(2 Pt 1):322–3 Comment on: J Am Acad Dermatol 1989 Feb;20(2 Pt 1):191–7.
Testicular oximetry: a new method for the assessment of tissue perfusion and viability following torsion and detorsion. Kram HB, et al. **J Pediatr Surg** 1989 Dec; 24(12):1297–302
Effects of position changes on transcutaneous carbon dioxide tension in neonates with respiratory distress. Crane LD, et al. **J Perinatol** 1990 Mar;10(1):35–7
Tissue oxygenation, venous ulcers and fibrin cuffs [letter; comment] Scott HJ, et al. **J R Soc Med** 1989 Oct; 82(10):635–6 Comment on: J R Soc Med 1989 Jun;82(6):345–6.
Skin surface oxygen pressure fields during administration of prostaglandin E1 in patients with arterial occlusive disease. Creutzig A, et al. **Klin Wochenschr** 1990 Feb 15; 68(4):207–12
Effects of indomethacin on cerebral haemodynamics in very preterm infants. Edwards AD, et al. **Lancet** 1990 Jun 23; 335(8704):1491–5
Studies on the changes in myocardial oxygen tension. Nakamura T, et al. **Nippon Juigaku Zasshi** 1990 Feb; 52(1):79–84
Transcutaneous blood gas analysis during sleep and exercise in cystic fibrosis. Pradal U, et al. **Pediatr Pulmonol** 1990; 8(3):162–7
Ear lobe oximetry was of value for assessing disability in asbestos-related lung disease [letter] Cotes JE, et al. **Respir Med** 1990 Jan;84(1):86
The relationship of conjunctival and arterial blood gas oxygen measurements. Podolsky S, et al. **Resuscitation** 1989 Oct;18(1):31–6
Effects of heavy hyperventilation on transcutaneous and arterial oxygen tensions in healthy adults. Steenfos HH, et al. **Scand J Clin Lab Invest** 1989 Oct;49(6):567–71
Assessment of the respiratory metabolism in the skin from transcutaneous measurements of pO2 and pCO2: potential for non-invasive monitoring of response to tuberculin skin testing. Abbot NC, et al. **Tubercle** 1990 Mar;71(1):15–22
[Monitoring of percutaneous oxygen and carbon dioxide partial pressure] Ding M. **Chung Hua Hu Li Tsa Chih** 1990 Apr;25(4):192–3 **(Chi)**
[Preliminary study of transcutaneous oxygen partial pressure in adults after discontinuing normobaric hyperoxia during intubation] Brille P, et al. **Agressologie** 1989 Oct–Nov; 30(9–10):549–51 (Eng. Abstr.) **(Fre)**
[Value of measuring transcutaneous oxygen pressure in arterial disease of the legs] Becker F, et al. **Ann Cardiol Angeiol (Paris)** 1989 Oct;38(8):465–72 (Eng. Abstr.) **(Fre)**
[Cutaneous microvascularization after tissue expansion: experimental study in rats. Proposal of a method for monitoring the expansion by measuring the transcutaneous pressure of oxygen] Garnier D, et al. **Ann Chir Plast Esthet** 1989;34(6):531–5 (Eng. Abstr.) **(Fre)**
[Monitoring of CO2 in resuscitation: transcutaneous measurement of capnometry?] Barré E, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R223 **(Fre)**
[Can oximetry contribute to the detection of apnea? The use of a mathematical analysis of the oximetry signal] Pepin JL, et al. **Rev Mal Respir** 1990;7(3):239–48 (Eng. Abstr.) **(Fre)**
[TcPO2 of the top of the foot in the sitting position] Becker F, et al. **Vasa Suppl** 1989;27:45 **(Fre)**
[Transcutaneous oxygen partial pressure measurement in follow-up of patients with eryaipelas] Reimers I, et al. **Hautarzt** 1990 Jul;41(7):384–7 (Eng. Abstr.) **(Ger)**
[The skin oxygen histogram in patients with arterial occlusive disorders] Creutzig A, et al. **Vasa Suppl** 1989;27:225–7 **(Ger)**
[Intravital measurement of transcutaneous oxygen diffusion distance in healthy patients] Vesti B, et al. **Vasa Suppl** 1989; 27:51–4 **(Ger)**
[Blood gas analysis as an essential diagnostic test for a correct morphofunctional diagnosis of the respiratory system] Pacia A, et al. **Arch Monaldi Mal Torace** 1988 Jul–Aug; 43(4):361–70 (Eng. Abstr.) **(Ita)**
[Changes in transcutaneous tcPO2 during water immersion and its effects on the human body] Kakitsuba N, et al. **Ann Physiol Anthropol** 1989 Jan;8(1):21–4 (Eng. Abstr.) **(Jpn)**
[Transcutaneous measurement of gas exchange parameters in anesthesiologic practice] Khodas MIa, et al. **Anesteziol Reanimatol** 1989 Jul–Aug;(4):12–4 (Eng. Abstr.) **(Rus)**
[Pulse oximetry and capnography are necessary in monitoring during anesthesia] Leksell LG. **Lakartidningen** 1990 Jan 24;87(4):206–7 **(Swe)**

INSTRUMENTATION

Another unusual capnographic tracing [letter] Collier HW. **Anesthesiology** 1990 Jul;73(1):189
A comparison of end-tidal and transcutaneous PCO2 measurements during anaesthesia. Reid CW, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S89
Interpretation of non-invasive oxygen and carbon dioxide data. Tremper KK. **Can J Anaesth** 1990 May;37(4 Pt 2):Slxxvii–Slxxxviii (18 ref.) **(Eng, Fre)**
Transcutaneous oxygen monitoring in neonates. Adeni S, et al. **Indian J Pediatr** 1990 Jan–Feb;57(1):47–52 (15 ref.)
Progress in the development of a fluorescent intravascular blood gas system in man. Mahutte CK, et al. **J Clin Monit** 1990 Apr;6(2):147–57
Characterization of the silicone tonometer using a membrane-covered transcutaneous electrode. Larsen PN, et al. **Scand J Clin Lab Invest** 1989 Oct;49(6):513–9
Cutaneous reactive hyperemia in short-term and long-term type I diabetes--continuous monitoring by a combined laser Doppler and transcutaneous oxygen probe. Franzeck UK, et al. **Vasa** 1990;19(1):8–15
[In-vivo catheter blood gas analysis] Sammler D. **Biomed Tech (Berlin)** 1990;35 Suppl 1:22–3 **(Ger)**
[Continuous transcutaneous PCO2 measurement and laser spectroscopy for fetal monitoring in 3d degree atrioventricular block] Decleer W, et al. **Geburtshilfe Frauenheilkd** 1990 Mar;50(3):227–30 (Eng. Abstr.) **(Ger)**
[Transcutaneous oxygen partial pressure in the evaluation of circulatory disorders in myocutaneous island flaps in the rat] Herrberger U, et al. **Handchir Mikrochir Plast Chir** 1989 Sep;21(5):246–51 (Eng. Abstr.) **(Ger)**
[Transcutaneous blood gas measurements in ergometry] Breuer HW, et al. **Pneumologie** 1990 Feb;44 Suppl 1:629–30 (Eng. Abstr.) **(Ger)**
[Comparison of the course of oxygen saturation and transcutaneous oxygen pressure in nonspecific inhalative provocation] Hoffarth HP, et al. **Pneumologie** 1990 Feb;44 Suppl 1:364–5 (Eng. Abstr.) **(Ger)**
[A new triple probe for simultaneous measurement of transcutaneous oxygen partial pressure in combination with laser Doppler flowmetry and dynamic fluorescence videomicroscopy] Franzeck UK, et al. **Vasa Suppl** 1989; 27:55–7 **(Ger)**
[Reflexion oximetry measurement of cutaneous hemoglobin saturation and concentration in patients with chronic venous insufficiency] Thum J, et al. **Vasa Suppl** 1989; 27:150–3 **(Ger)**
[pO2 microelectrodes for measuring oxygen pressure of tissues in humans and experimental animals] Raneburger J, et al. **Wien Med Wochenschr Suppl** 1987;103:38–9 **(Ger)**
[The value of transcutaneous measuring procedures of pO2 and pCO2 in physical stress] Steinacker JM. **Wien Med Wochenschr Suppl** 1987;103:40–2 **(Ger)**
[Correlation of the magnitude of fetal movement associated fetal heart rate accelerations, amplitude of "classical" accelerations and transcutaneous fetal oxygen partial pressure] Gross W, et al. **Z Geburtshilfe Perinatol** 1990 Mar–Apr;194(2):90–4 (Eng. Abstr.) **(Ger)**

METHODS

Selection of lower limb amputation level not aided by transcutaneous pO2 measurements. Falstie-Jensen N, et al. **Acta Orthop Scand** 1989 Aug;60(4):483–5
International Federation of Clinical Chemistry (IFCC). Scientific Division. Committee on pH, Blood Gases and Electrolytes. Guidelines for transcutaneous PO2 and PCO2 measurement. Winberley PD, et al. **Ann Biol Clin (Paris)** 1990;48(1):39–43
Transcutaneous carbon dioxide monitoring. Rennie JM. **Arch Dis Child** 1990 Apr;65(4 Spec No):345–6 (25 ref.)
Comparative accuracy of pulse oximetry and transcutaneous oxygen in assessing arterial saturation in pediatric intensive care. Ross Russell RI, et al. **Crit Care Med** 1990 Jul; 18(7):725–7
A topical metabolic inhibitor to improve transcutaneous estimation of arterial oxygen tension in adults. Patel BT, et al. **J Biomed Eng** 1989 Sep;11(5):381–3
Scalp blood flow, measured by laser Doppler flowmetry, and transcutaneous PO2 and PCO2 in the lamb. Smits TM, et al. **Pediatr Res** 1990 May;27(5):442–4
[Experience with transcutaneous measurement of oxygen and carbon dioxide in neonatology practice] Velemínský M. **Cesk Pediatr** 1989 Dec;44(12):735–6 **(Cze)**
[Pulse oximetry in pediatric practice] Brackel HJ, et al. **Tijdschr Kindergeneeskd** 1990 Feb;58(1):7–12 (22 ref.) (Eng. Abstr.) **(Dut)**
[Value of transcutaneous staged dynamic oximetry of stage II arteritis of the leg] Grard C, et al. **Arch Mal Coeur** 1990 Mar;83 Spec No 2:51–7 (Eng. Abstr.) **(Fre)**
[Possible errors in the technic of transcutaneous oxygen measurement] Neumann HA. **Phlebologie** 1990 Jan–Mar; 43(1):102–6 **(Fre)**
[Transcutanea partial pressure measurement] Huch R. **Biomed Tech (Berlin)** 1990;35 Suppl 1:24–6 **(Ger)**
[Methodologic comparison of the polyfrequency oscillation method, transcutaneous oxygen pressure measurement and body plethysmography in bronchial provocation with methacholine] Fichter J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:624–6 (Eng. Abstr.) **(Ger)**
[Blood gas changes during treadmill exercise in convalescents from pulmonary tuberculosis. 1. Method of measurement] Yoshida F. **Kekkaku** 1989 Sep;64(9):563–77 (Eng. Abstr.) **(Jpn)**
[A method of redoxometry in clinical studies] Prokhorov GG, et al. **Vopr Med Khim** 1989 Sep–Oct;35(5):2–6 (20 ref.) (Eng. Abstr.) **(Rus)**

STANDARDS

Transcutaneous PCO2 and PO2: a multicenter study of accuracy. Palmisano BW, et al. **J Clin Monit** 1990 Jul; 6(3):189–95

VETERINARY

Experimental studies on the oxygen tension in the myocardium and changes of cardiac function in hypoxia. Nakamura T, et al. **Nippon Juigaku Zasshi** 1990 Apr; 52(2):285–92
Evaluation of acid–base disturbance [letter] Michell AR. **Vet Rec** 1990 Feb 17;126(7):173–4

BLOOD GLUCOSE

see related
GLUCOSE CLAMP TECHNIC
GLUCOSE TOLERANCE TEST
HYPERGLYCEMIA
HYPOGLYCEMIA

A comparison of chromogen test strip (Chemstrip bG) and serum glucose values in newborns. Holtrop PC, et al. **Am J Dis Child** 1990 Feb;144(2):183–5
Post-load plasma glucose and cancer mortality in middle-aged men and women. 12-year follow-up findings of the Chicago Heart Association Detection Project in Industry. Levine W, et al. **Am J Epidemiol** 1990 Feb; 131(2):254–62
Glucose tolerance and insulin response in normal-weight and obese cats. Nelson RW, et al. **Am J Vet Res** 1990 Sep; 51(9):1357–62
Blood glucose discrimination training in patients with type II diabetes. Lamparski DM, et al. **Biofeedback Self Regul** 1989 Sep;14(3):195–206
International Workshop on Intracorporal Glucose Sensors. September 27–30, 1988. Gohren-Lebbin, GDR. Proceedings. **Biomed Biochim Acta** 1989;48(11–12):857–971
Neither adrenergic nor cholinergic antagonists in the central nervous system affect 2-deoxy-D-glucose(2-DG)-induced hyperglycemia. Iguchi A, et al. **Brain Res** 1990 Mar 5; 510(2):321–5
Tight blood glucose control: is it worth it? Hoogwerf BJ. **Cleve Clin J Med** 1990 Jun;57(4):390–5 (48 ref.)
Nifedipine and blood glucose in normal human volunteers. Purohit AK, et al. **J Assoc Physicians India** 1989 Feb; 37(2):148–9
No relationship between pregnancy complications and variations in blood glucose levels among nondiabetic women. Weiss BD, et al. **J Fam Pract** 1989 Oct; 29(4):389–95; discussion 395–6
Insulin injections: rotation of anatomic regions and plasma glucose [letter] Bernstein RK. **JAMA** 1990 Sep 26; 264(12):1535–6
Perioperative glucose control in diabetic patients--strategies for the 1990s [editorial] Watts NB. **West J Med** 1989 Nov; 151(5):552–3
[Blood sugar regulation and diabetic retinopathy] Hooymans JM. **Ned Tijdschr Geneeskd** 1989 Jul 22;133(29):1438–9 **(Dut)**
[Effects of induced hyperglycemia on the activity of pancreatic and gastrointestinal secretion of hormones in oncologic patients] Prokhorova VI, et al. **Eksp Onkol** 1990; 12(1):63–6 (Eng. Abstr.) **(Rus)**

ANALYSIS

Influence of the fluid balance on the cortisol and glucose responses to transurethral prostatic surgery. Hahn RG. **Acta Anaesthesiol Scand** 1989 Nov;33(8):638–41
Fetal growth and fetal glucose and C-peptide levels in relation to the degree of anemia in fetuses affected by rhesus iso-immunization. Westgren M, et al. **Acta Obstet Gynecol Scand** 1989;68(4):309–11
The postprandial blood glucose response to sucrose/glucose intake in a mixed snack in diabetic teenagers. Cedermark G, et al. **Acta Paediatr Scand** 1990 Apr;79(4):473–4
Clinical evaluation of acetylsalicylic acid to improve glycemia in type II diabetic patients. Mata-Segreda JF, et al. **Acta Physiol Pharmacol Latinoam** 1989;39(1):9–13
On changes in pancreas cytomorphometry, serum insulin and metabolic adjustments induced by long term orchidectomy and substitutive therapy with testosterone in dogs. Renauld A, et al. **Acta Physiol Pharmacol Latinoam** 1988; 38(3):345–61
Maternally administered epidermal growth factor stimulates fetal growth in the rat. Jansson T, et al. **Acta Physiol Scand** 1990 Feb;138(2):245–6
Thyroxine in blood plasma related to plasma levels of acetoacetate and glucose in ketotic and healthy cows. Ropstad E, et al. **Acta Vet Scand** 1989;30(2):175–83

Effects of cows' urine concoction with and without tobacco leaves on plasma glucose concentration in fasted rats. Oyebola DD, et al. **Afr J Med Med Sci** 1990 Mar;19(1):5–9

Screening for gestational diabetes mellitus. Kaufman HW. **Am Fam Physician** 1989 Dec;40(6):109–11 (16 ref.)

Comparison of the effects of lovastatin and gemfibrozil on lipids and glucose control in non-insulin-dependent diabetes mellitus. Goldberg R, et al. **Am J Cardiol** 1990 Sep 18;66(8):16B–21B

The hypoglycemic effect of the crude drug prescription resources from Taiwan on experimental diabetic-mellitus (II)—the antihyperglycemic effect of tang-niao-tung no. 2 and no. 3. Lin CC, et al. **Am J Chin Med** 1989; 17(1–2):9–15

Hypoglucaemic activity of Opuntia streptacantha throughout its annual cycle. Meckes-Lozoya M, et al. **Am J Chin Med** 1989;17(3–4):221–4

Pasta cooking time: influence on starch digestion and plasma glucose and insulin responses in healthy subjects. Bornet FR, et al. **Am J Clin Nutr** 1990 Mar;51(3):421–7

Plasma glucose and insulin responses to traditional Pima Indian meals. Brand JC, et al. **Am J Clin Nutr** 1990 Mar; 51(3):416–20

Insulin response and glycemic effects of meals in non-insulin-dependent diabetes. Cohen C, et al. **Am J Clin Nutr** 1990 Sep;52(3):519–23

Differential effect of protein and fat ingestion on blood glucose responses to high- and low-glycemic-index carbohydrates in noninsulin-dependent diabetic subjects. Gulliford MC, et al. **Am J Clin Nutr** 1989 Oct;50(4):773–7

Comparative effects of three cereal brans on plasma lipids, blood pressure, and glucose metabolism in mildly hypercholesterolemic men. Kestin M, et al. **Am J Clin Nutr** 1990 Oct;52(4):661–6

Cornstarch ingestion after oral glucose loading: effect on glucose concentrations, hormone response, and symptoms in patients with postprandial hypoglycemic syndrome. Lozano R, et al. **Am J Clin Nutr** 1990 Oct;52(4):667–70

Day-long glucose, insulin, and fructose responses of hyperinsulinemic and nonhyperinsulinemic men adapted to diets containing either fructose or high-amylose cornstarch. Reiser S, et al. **Am J Clin Nutr** 1989 Nov; 50(5):1008–14

Fructans of Jerusalem artichokes: intestinal transport, absorption, fermentation, and influence on blood glucose, insulin, and C-peptide responses in healthy subjects. Rumessen JJ, et al. **Am J Clin Nutr** 1990 Oct;52(4):675–81

Relationship between dietary fiber content and composition in foods and the glycemic index. Wolever TM. **Am J Clin Nutr** 1990 Jan;51(1):72–5

Antipyretics in patients with juvenile diabetes mellitus. Comparison of salicylate and a salicylate substitute (experimental preparation PAJ-102). Kaye R, et al. **Am J Dis Child** 1966 Jul;112(1):52–5

A clinical comparison of the performance of four blood glucose reagent strips. Cheeley RD, et al. **Am J Emerg Med** 1990 Jan;8(1):11–5

Adult onset nesidioblastosis: response of glucose, insulin, and secondary peptides to therapy with Sandostatin. Mozell EJ, et al. **Am J Gastroenterol** 1990 Feb;85(2):181–8

Carbohydrate tolerance improves with fasting in obese subjects with noninsulin-dependent (type II) diabetes. Watts NB, et al. **Am J Med Sci** 1990 Apr;299(4):250–6

Glucose tolerance in pregnancy: ethnic variation and influence of body habitus. Green JR, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):86–92

Gestational diabetes mellitus: the prevalence of glucose intolerance and diabetes mellitus in the first two months post partum. Kjos SL, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):93–8

Audiometric configuration as a reflection of low plasma glucose and diabetes. Carmen RE, et al. **Am J Otol** 1989 Sep;10(5):372–9

Prevalence of abnormal glucose tolerance in six Solomon Islands populations. Beizer RA. **Am J Phys Anthropol** 1990 Apr;81(4):471–82

Metabolic effects of theophylline and norepinephrine in the dog at normal and acid pH. Poyart C, et al. **Am J Physiol** 1967 Jun;212(6):1247–54

Glucose tolerance testing in women with premenstrual syndrome. Denicoff KD, et al. **Am J Psychiatry** 1990 Apr; 147(4):477–80

Pulsed amperometric detection of glucose in biological fluids at a surface-modified gold electrode. Bindra DS, et al. **Anal Chem** 1989 Nov 15;61(22):2566–70

Multivariate determination of glucose in whole blood by attenuated total reflection infrared spectroscopy. Heise HM, et al. **Anal Chem** 1989 Sep 15;61(18):2009–15

Carbon paste-tetrathiafulvalene amperometric enzyme electrode forthe determination of glucose in flowing systems. Gunasingham H, et al. **Analyst** 1990 Jan; 115(1):35–9

A comparison of washed red blood cells versus packed red blood cells (AS-1) for cardiopulmonary bypass prime and their effects on blood glucose concentration in children. Hosking MP, et al. **Anesthesiology** 1990 Jun;72(6):987–90

Hypoglycaemia misdiagnosed by capillary glucose measurement. Lee KO, et al. **Ann Acad Med Singapore** 1989 Jul;18(4):453–5

Effect of delay in separating plasma for glucose measurement upon the interpretation of oral glucose tolerance tests. Chan AY, et al. **Ann Clin Biochem** 1990 Jan;27 (Pt 1):73–4

Diluted glucose oxidase reagents adapted for use with Analox GM 7 Analyser for measuring plasma glucose. Loh SH. **Ann Clin Biochem** 1989 Sep;26 (Pt 5):453–4

Colorimetric glucose assay using thermostable glucokinase. Scott DA, et al. **Ann Clin Biochem** 1990 Jan;27 (Pt 1):33–7

How well do nurses perform blood glucose analyses at the diabetic clinic? An assessment using the Reflotron analyser. Smith LA, et al. **Ann Clin Biochem** 1990 Mar;27 (Pt 2):156–7

How well do nurses perform blood glucose analyses at the diabetic clinic? An assessment using the Reflotron analyser. Smith LA, et al. **Ann Clin Biochem** 1989 Nov;26 (Pt 6):554–5

Somatostatin and glucose homeostasis in liver cirrhosis of the elderly. Buzzelli G, et al. **Ann Ital Med Int** 1987 Oct–Dec;2(4):294–8

A comparison of brain glucose metabolism in diabetes as measured by positron emission tomography or by arteriovenous techniques. Grill V. **Ann Med** 1990 Jun; 22(3):171–6

Effects of sodium nitroprusside on blood glucose concentration, B-cell morphology and islet glutamate dehydrogenase activity in mice. Boquist L. **APMIS** 1989 Nov;97(11):971–80

Immobilization of glucose oxidase and peroxidase and their application in flow-injection analysis for glucose in serum. Guo JA, et al. **Appl Biochem Biotechnol** 1990 Jan; 23(1):15–24

Fasting serum insulin levels in childhood. Grant DB. **Arch Dis Child** 1967 Aug;42(224):375–8

Misdiagnosis of gestational diabetes and hypoglycemia using portable blood glucose meters [letter] Bergman M, et al. **Arch Intern Med** 1989 Nov;149(11):2602–3

Hypoglycaemia associated to vaginal insulin placement in rats. Ortega-Corona BG, et al. **Arch Invest Med (Mex)** 1989 Jul–Sep;20(3):239–42

A hospital-wide blind control program for bedside glucose meters. Bain OF, et al. **Arch Pathol Lab Med** 1989 Dec; 113(12):1370–5

Ischemic heart disease risk in postmenopausal women. Effects of estrogen use on glucose and insulin levels. Barrett-Connor E, et al. **Arteriosclerosis** 1990 Jul–Aug; 10(4):531–4

Wick technique: reference method for implanted glucose sensors. Fischer U, et al. **Artif Organs** 1989 Oct;13(5):453–7

Portable closed loop feedback system for control of the blood glucose level in the pig. Pierzynowski SG, et al. **Artif Organs** 1990 Apr;14(2):118–21

A thin-film glucose electrode system with compensation for drift. Yao SJ, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):742–4

Glucose sensors in a control circuit: a modeling study. Biermann E. **Biomed Biochim Acta** 1989;48(11–12):857–66

Implications of an intracorporeal glucose sensor in the management of diabetic patients. Bruns W. **Biomed Biochim Acta** 1989;48(11–12):925–33

Preparation and validation of implantable electrodes for the measurement of oxygen and glucose. Brunstein E, et al. **Biomed Biochim Acta** 1989;48(11–12):911–7

In vivo response of microfabricated glucose sensors to glycemia changes in normal rats. Koudelka M, et al. **Biomed Biochim Acta** 1989;48(11–12):953–6

Flow-through and catheter biosensors with an extended concentration range. Laurinavicius VA, et al. **Biomed Biochim Acta** 1989;48(11–12):905–9

Mathematical simulation of an enzyme-based glucose sensor with pO2-basic sensor. Lemke K. **Biomed Biochim Acta** 1989;48(11–12):867–77

In vitro measurements with electrocatalytic glucose sensor in blood. Preidel W, et al. **Biomed Biochim Acta** 1989; 48(11–12):897–903

Glucose measurement in diluted blood. Scheller FW, et al. **Biomed Biochim Acta** 1989;48(11–12):891–6

Glucose determination by differential pulse voltammetry with a platinum electrode. Temme J, et al. **Biomed Biochim Acta** 1989;48(11–12):883–9

The needle glucose electrode: in vitro performance and optimisation for implantation. Vadgama P, et al. **Biomed Biochim Acta** 1989;48(11–12):935–42

Strategies for calibrating a subcutaneous glucose sensor. Velho G, et al. **Biomed Biochim Acta** 1989;48(11–12):957–64

In situ calibration of implanted electrochemical glucose sensors. von Woedtke T, et al. **Biomed Biochim Acta** 1989; 48(11–12):943–52

Electrochemical glucose sensing at low potentials. Wolfson SK Jr, et al. **Biomed Biochim Acta** 1989;48(11–12):919–24

A novel approach to electrode signal analysis for glucose determination. Zawicki I, et al. **Biomed Biochim Acta** 1989; 48(11–12):879–82

A simple, sensitive liquid chromatographic method for quantitation of D-galactose and D-glucose in blood plasma. Griffin BW, et al. **Biomed Chromatogr** 1990 Mar; 4(2):87–8

Light scattering by blood components after supplying glucose. Chira IS, et al. **Biomed Tech (Berlin)** 1990 May; 35(5):102–6

Thermoelectric enzyme sensor for measuring blood glucose. Muehlbauer MJ, et al. **Biosens Bioelectron** 1990;5(1):1–12

Development of a potentially wearable glucose sensor for patients with diabetes mellitus: design and in-vitro evaluation. Schoonen AJ, et al. **Biosens Bioelectron** 1990; 5(1):37–46

Interpreting laboratory results [letter; comment] Karnad DR. **BMJ** 1989 Aug 5;299(6695):392 Comment on: **BMJ** 1989 Jun 24;298(6689):1659–60.

Changes in glucose tolerance and development of gall stones during high dose treatment with octreotide for acromegaly [see comments] McKnight JA, et al. **BMJ** 1989 Sep 2; 299(6699):604–5 Comment in: **BMJ** 1989 Nov 4;299(6708):1162. Comment in: **BMJ** 1989 Nov 4;299(6708):1162–3.

Effect of rate of infusion of quinine on insulin and glucose responses in Malawian children with falciparum malaria. Molyneux ME, et al. **BMJ** 1989 Sep 2;299(6699):602–3

Monitoring of blood glucose concentration in subjects with hypoglycaemic symptoms during everyday life. Snorgaard O, et al. **BMJ** 1990 Jan 6;300(6716):16–8

Paediatric glucose homeostasis during anaesthesia. Aun CS, et al. **Br J Anaesth** 1990 Apr;64(4):413–8

Local analgesia prevents the cortisol and glycaemic responses to cataract surgery. Barker JP, et al. **Br J Anaesth** 1990 Apr;64(4):442–5

Influence of fluid regimens on perioperative blood-glucose concentrations in neonates. Larsson LE, et al. **Br J Anaesth** 1990 Apr;64(4):419–24

Metabolic response to anaesthesia and upper abdominal surgery in Nigerians: changes in plasma cortisol, insulin and blood sugar. Magbagbeola JA, et al. **Br J Anaesth** 1974 Dec;46(12):942–6

Effects of protein-calorie malnutrition on endocrine pancreatic function in young pregnant rats. de-Mello MA, et al. **Braz J Med Biol Res** 1989;22(6):791–4

A time-course study of physiological indicators of handling stress in the tropical fish Piaractus mesopotamicus (pacu). Krieger-Azzolini MH, et al. **Braz J Med Biol Res** 1989; 22(8):1019–22

Glycemia and immunohistochemical changes in the endocrine pancreas of the turtle Chrysemys dorbigni treated with streptozotocin. Muniz WW, et al. **Braz J Med Biol Res** 1989;22(8):1033–7

Clinical trial of Myrcia uniflora and Bauhinia forficata leaf extracts in normal and diabetic patients. Russo EM, et al. **Braz J Med Biol Res** 1990;23(1):11–20

Bedside testing of the blood glucose level in neonates: what to use? [letter] Taylor HM, et al. **Can Med Assoc J** 1990 Apr 15;142(8):802

Determinants of plasma glucose level and diabetic status in a northern Canadian Indian population. Young TK, et al. **Can Med Assoc J** 1990 Apr 15;142(8):821–30

The glycaemic index of foods [letter] Wikramanayake TW. **Ceylon Med J** 1990 Mar;35(1):35

Simultaneous determination of 2-deoxy-D-glucose and D-glucose in rat serum by high-performance liquid chromatography with post-column fluorescence derivatization. Umegae Y, et al. **Chem Pharm Bull (Tokyo)** 1990 Apr;38(4):963–5

Sample evaporation and its impact on the operating performance of an automated selective-access analytical system. Burtis CA. **Clin Chem** 1990 Mar;36(3):544–6

Glucose and other constituents of blood determined by ATR-FTIR-spectroscopy [letter; comment] Kruse-Jarres JD, et al. **Clin Chem** 1990 Feb;36(2):401–2 Comment on: Clin Chem 1989 Sep;35(9):1854–6.

Amperometric determinations of glucose in whole blood by the YSI 23AM analyzer [letter] Wandrup J, et al. **Clin Chem** 1990 Jun;36(6):1260–1

Direct reading glucose electrodes detect the molality of glucose in plasma and whole blood. Fogh-Andersen N, et al. **Clin Chim Acta** 1990 Jul;189(1):33–8

A carry-over study in three different instruments for the determination of serum glucose: the importance of Student's t test [letter] Yücel D, et al. **Clin Chim Acta** 1990 Mar 15;187(3):333–4

Diuretics and other antihypertensive drugs and glycemic control in non-insulin-dependent diabetics with hypertension. A survey by the Fukuoka Diabetes Clinic Group. Tsutsu N, et al. **Clin Exp Hypertens [A]** 1989; 11(8):1487–504

Plasma glucose concentration in symptomatic osteoarthritis: a clinical and epidemiological survey. Cimmino MA, et al. **Clin Exp Rheumatol** 1990 May–Jun;8(3):251–7

Effects of circulating endogenous catecholamines on plasma glucose, potassium and magnesium. Corr LA, et al. **Clin Sci** 1990 Feb;78(2):185–91

Ultrastructure and endocrine function in acute and chronic pancreatitis: results of pancreatic polypeptide replacement. Bastidas JA, et al. **Curr Surg** 1989 Sep–Oct;46(5):390–2

Home blood glucose monitoring, glycosylated hemoglobin and fructosamine: their relationships in diabetic patients with and without residual C-peptide secretion. Brichard SM, et al. **Diabete Metab** 1989 Nov–Dec;15(6):388–93

Glucokinase as glucose sensor and metabolic signal generator in pancreatic beta-cells and hepatocytes. Matschinsky FM. **Diabetes** 1990 Jun;39(6):647–52 (31 ref.)

Evaluation of WHO and NDDG criteria for impaired glucose tolerance. Results from two national samples. Modan M, et al. **Diabetes** 1989 Dec;38(12):1630–5

Clinical significance of erythrocyte sorbitol-blood glucose ratios in type II diabetes mellitus. Aida K, et al. **Diabetes Care** 1990 May;13(5):461–7

Blood or urine glucose-based insulin therapy and control of glycemia. Computer-simulation study. Albisser AM, et al. **Diabetes Care** 1990 Apr;13(4):393–400

Testing for blood glucose by office-based physicians in the U.S. Harris MI. **Diabetes Care** 1990 Apr;13(4):419–26

Influence of low battery voltage on glucose testing meters [letter] Kabadi UM, et al. **Diabetes Care** 1990 Feb; 13(2):178–9

Influence of frequency, time interval from initial instruction, and method of instruction on performance competency for blood glucose monitoring. Kucler MA, et al. **Diabetes Care** 1990 May;13(5):488–91

Stability of stored chemstrip bG [letter; comment] Mezitis NH, et al. **Diabetes Care** 1990 Feb;13(2):179–80 Comment on: Diabetes Care 1989 Jun;12(6):379–83.

Relationship between hyperglycemia and cognitive function in older NIDDM patients. Reaven GM, et al. **Diabetes Care** 1990 Jan;13(1):16–21

Classical microangiopathic diabetic complications in the absence of overt diabetes mellitus. Abdella N, et al. **Diabetes Res Clin Pract** 1990 Mar;8(3):283–6

Development of carbohydrate intolerance in offspring of Asian Indian conjugal type 2 diabetic parents. Ramachandran A, et al. **Diabetes Res Clin Pract** 1990 Mar; 8(3):269–73

What is blood glucose: can it be measured? Burrin JM, et al. **Diabetic Med** 1990 Mar–Apr;7(3):199–206 (77 ref.)

Computer based quality assessment of hospital capillary blood glucose monitoring. Phillipou G, et al. **Diabetic Med** 1990 Mar–Apr;7(3):234–7

An analysis of glycosylated blood proteins and blood glucose profiles over one year in patients with type 1 diabetes. Winocour PH, et al. **Diabetic Med** 1989 Nov;6(8):709–16

Unexplained variability of glycated haemoglobin in non–diabetic subjects not related to glycaemia. Yudkin JS, et al. **Diabetologia** 1990 Apr;33(4):208–15

Growth hormone, insulin, prolactin and glucose levels in ewe and ram lambs during normal and compensatory growth. Onischuk LA, et al. **Domest Anim Endocrinol** 1990 Jul; 7(3):365–81

The desensitization of normal B–cells to glucose in vitro is transient and not related to high glucose levels. Giroix MH, et al. **Endocrinology** 1989 Oct;125(4):1999–2007

Effects of intravenous xylazine hydrochloride on blood glucose, plasma insulin and rectal temperature in neonatal foals. Robertson SA, et al. **Equine Vet J** 1990 Jan;22(1):43–7

Plasma glucose and thiocyanate responses to different mixed cassava meals in non–diabetic Nigerians. Akanji AO, et al. **Eur J Clin Nutr** 1990 Jan;44(1):71–7

Salt and glycaemic response in diabetes [letter] Vrr K, et al. **Eur J Clin Nutr** 1989 Sep;43(9):661–2

Glucose tolerance and insulin secretion in experimental peritonitis in the rat. Andersson R, et al. **Eur Surg Res** 1990;22(2):101–12

Progress in practical endocrinology. The Glucosensor Unitec Ulm—a portable monitor for continuous blood glucose measurement. Brückel J, et al. **Horm Metab Res** 1990 Jul; 22(7):382–4

Family resemblance for glucose tolerance in a Melanesian population, the Tolai. King H, et al. **Hum Hered** 1989; 39(4):212–7

Blood glucose measurement by multiple attenuated total reflection and infrared absorption spectroscopy. Mendelson Y, et al. **IEEE Trans Biomed Eng** 1990 May;37(5):458–65

Glucose tolerance test in leprosy. Garg R, et al. **Indian J Lepr** 1990 Jan–Mar;62(1):50–4

Effect of centrally administered glucagon on liver glycogen & enzymes in anaesthetised dogs. Agarwala GC, et al. **Indian J Med Res** 1989 Oct;90:372–8

An evaluation of the relative utility of different criteria of positivity in assessing the response to insulin induced hypoglycemic stimulation of the vagus as test for completeness of vagotomy. Ananthakrishnan N, et al. **Indian J Med Sci** 1989 Jul;43(7):184–8

Plasma lipids and blood glucose in infants of toxemic mothers. Khatua SP, et al. **Indian J Pediatr** 1989 May–Jun; 56(3):403–8

Heterogeneity in the familial aggregation of fasting plasma glucose in five North American populations: the Lipid Research Clinics Family Study. Rice T, et al. **Int J Epidemiol** 1990 Jun;19(2):290–6

Effect of triiodothyronine on leucine kinetics, metabolic rate, glucose concentration and insulin secretion rate during two weeks of fasting in obese women. Nair KS, et al. **Int J Obes** 1989;13(4):487–96

Blood viscosity in human obesity: relation to glucose tolerance and insulin status. Rillaerts E, et al. **Int J Obes** 1989;13(6):739–45

Variables associated with weight loss and improvements in glycemic control in type II diabetic patients in behavioral weight control programs. Wing RR, et al. **Int J Obes** 1990; 14(6):495–503

Growth hormone, insulin and glucose concentrations in bovine fetal and maternal plasmas at several stages of gestation. Reynolds LP, et al. **J Anim Sci** 1990 Mar; 68(3):725–33

Nutritional anestrus in beef cows: concentrations of glucose and nonesterified fatty acids in plasma and insulin in serum. Richards MW, et al. **J Anim Sci** 1989 Sep;67(9):2354–62

Insulin response and glucose tolerance in survivors of myocardial infarction. Gupta MS, et al. **J Assoc Physicians India** 1989 Apr;37(4):255–7

Physiological preparation for studying the response of subcutaneously implanted glucose and oxygen sensors. Ertefai S, et al. **J Biomed Eng** 1989 Sep;11(5):362–8

Towards implantable glucose sensors: a review. Wilkins ES. **J Biomed Eng** 1989 Sep;11(5):354–61 (79 ref.)

Handling of blood specimens for glucose analysis. Chan AY, et al. **J Clin Chem Clin Biochem** 1990 Mar;28(3):185–6

Suppression of hyperandrogenism does not improve peripheral or hepatic insulin resistance in the polycystic ovary syndrome. Dunaif A, et al. **J Clin Endocrinol Metab** 1990 Mar;70(3):699–704

A glucose reduction challenge in the differential diagnosis of fasting hypoglycemia: a two–center study. Ipp E, et al. **J Clin Endocrinol Metab** 1990 Mar;70(3):711–7

Changes in the concentrations of glucose and galactose in the peripheral blood of sucking piglets. Holmes MA, et al. **J Dairy Res** 1990 Aug;57(3):331–7

Pulsatile insulin infusion and glucose–homeostasis in well–controlled type 1 (insulin–dependent) diabetic patients. Heinemann L, et al. **J Intern Med** 1989 Nov; 226(5):325–30

Differential effects of honey, sucrose, and fructose on blood sugar levels. Shambaugh P, et al. **J Manipulative Physiol Ther** 1990 Jul–Aug;13(6):322–5

The effect of acarbose and miglitol (BAY–M–1099) on postprandial glucose levels following ingestion of various sources of starch by nondiabetic and streptozotocin–induced diabetic rats. Madar Z. **J Nutr** 1989 Dec;119(12):2023–9

Dietary guar gum effects on postprandial blood glucose, insulin and hydroxyproline in humans. Torsdottir I, et al. **J Nutr** 1989 Dec;119(12):1925–31

Accuracy and reliability of glucose reflectance meters in the high–risk neonate. Lin HC, et al. **J Pediatr** 1989 Dec; 115(6):998–1000

Exact timing of the one–hour glucose sample as a factor in the screen for gestational diabetes. Chervenak JL, et al. **J Perinatol** 1989 Dec;9(4):369–71

Detection of glucose intolerance in pregnancy. Helton DG, et al. **J Perinatol** 1989 Sep;9(3):259–61

Effects of melatonin on gonadal steroids and glucose plasma levels in frogs (Rana perezi and Rana temporaria). Alonso–Bedate M, et al. **J Pineal Res** 1990;8(1):79–89

A random plasma glucose method for screening for gestational diabetes. Maheshwari JR, et al. **J Postgrad Med** 1989 Jan;35(1):36–9

Rotation of the anatomic regions used for insulin injections and day–to–day variability of plasma glucose in type I diabetic subjects. Bantle JP, et al. **JAMA** 1990 Apr 4; 263(13):1802–6

Increased serum levels of lipoprotein(a) in diabetes mellitus and their reduction with glycemic control [letter; comment] Bruckert E, et al. **JAMA** 1990 Jan 5;263(1):35–6 Comment on: JAMA 1989 Apr 14;261(14):2013–4.

Hypoglycemia of squirrel monkey neonates: implications for infant survival. Brady AG, et al. **Lab Anim Sci** 1990 May; 40(3):262–5

Reagent–strip glucose methods and haematocrit [letter; comment] **Lancet** 1990 Apr 21;335(8695):973–4 Comment on: Lancet 1990 Mar 24;335(8691):735–6.

Long–term blood glucose control and diabetic retinopathy [letter; comment] Finotti P, et al. **Lancet** 1990 Jan 13; 335(8681):107–8 Comment on: Lancet 1989 Oct 7;2(8667):824–8.

Suitability of reflectometry in epidemiology of diabetes mellitus in Africans [letter] Fisch A, et al. **Lancet** 1990 Mar 17;335(8690):661–2

Comparison of insulin analogue B9AspB27Glu and soluble human insulin in insulin–treated diabetes. Kang S, et al. **Lancet** 1990 Feb 10;335(8685):303–6

Specificity of hypoglycaemia for cerebral malaria in children. Kawo NG, et al. **Lancet** 1990 Aug 25;336(8713):454–7

Diagnostic interpretation of the intravenous tolbutamide test for insulinoma [see comments] McMahon MM, et al. **Mayo Clin Proc** 1989 Dec;64(12):1481–8 Comment in: Mayo Clin Proc 1989 Dec;64(12):1558–61.

Diagnosis of gestational diabetes in Australia: a national survey of current practice. Hunter A, et al. **Med J Aust** 1990 Sep 3;153(5):290–2

Arteriovenous differences across human adipose and forearm tissues after overnight fast. Coppack SW, et al. **Metabolism** 1990 Apr;39(4):384–90

Long–term follow–up after early protein–calorie malnutrition in young rats: sex difference in glucose tolerance and serum insulin levels. Crace CJ, et al. **Metabolism** 1989 Oct; 38(10):933–8

Effects of dexamethasone on glucose–induced insulin and proinsulin release in low and high insulin responders. Grill V, et al. **Metabolism** 1990 Mar;39(3):251–8

Diminished insulin sensitivity and increased insulin response in nonobese, nondiabetic Mexican Americans. Haffner SM, et al. **Metabolism** 1990 Aug;39(8):842–7

Glucose counterregulation in diabetes secondary to chronic pancreatitis. Larsen S, et al. **Metabolism** 1990 Feb; 39(2):138–43

Blood glucose in suspected hypoglycemia [letter; comment] **N Engl J Med** 1990 Apr 12;322(15):1087–8 Comment on: N Engl J Med 1989 Nov 23;321(21):1421–5.

Blood glucose measurements during symptomatic episodes in patients with suspected postprandial hypoglycemia [see comments] Palardy J, et al. **N Engl J Med** 1989 Nov 23; 321(21):1421–5 Comment in: N Engl J Med 1989 Nov 23;321(21):1472–4. Comment in: N Engl J Med 1990 Apr 12;322(15):1087–8.

Hypoglycemia and the postprandial syndrome [editorial; comment] Service FJ. **N Engl J Med** 1989 Nov 23; 321(21):1472–4 Comment on: N Engl J Med 1989 Nov 23;321(21):1421–5.

Progress of impaired glucose tolerance to diabetes mellitus among Niueans. Tukuitonga CF. **N Z Med J** 1990 Jul 25; 103(894):351–3

Subcutaneous injection with an insulin pen. Insulin absorption and plasma concentrations of glucose and free insulin. de Meijer PH, et al. **Neth J Med** 1990 Feb;36(1–2):4–12

Weight reduction with a high protein, low carbohydrate, calorie–restricted diet: effects on blood pressure, glucose and insulin levels. Nobels F, et al. **Neth J Med** 1989 Dec; 35(5–6):295–302

Postterm pregnancy: effects on temperature and glucose regulation. Beckmann CA. **Nurs Res** 1990 Jan–Feb; 39(1):21–4

Metabolic control of von Gierke disease (glycogen storage disease type Ia) in pregnancy: maintenance of euglycemia with cornstarch. Johnson MP, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 2):507–10

Spontaneous abortions in repeat diabetic pregnancies: a relationship with glycemic control. Miodovnik M, et al. **Obstet Gynecol** 1990 Jan;75(1):75–8

Glucose and insulin responses during mixed meals or infusion of glucose in pregnant and lactating rats. Koiter TR, et al. **Physiol Behav** 1989 Nov;46(5):881–7

Response to chronic insulin administration: effect of area postrema ablation. Kott JN, et al. **Physiol Behav** 1989 Dec; 46(6):971–6

Blood glucose prior to meal request in humans isolated from all temporal cues. Pollak CP, et al. **Physiol Behav** 1989 Sep;46(3):529–34

Properties of Thai cooked rice and noodles differing in glycemic index in noninsulin–dependent diabetics. Juliano BO, et al. **Plant Foods Hum Nutr** 1989 Dec;39(4):369–74

Increasing age, diabetes mellitus and recovery from stroke. Gray CS, et al. **Postgrad Med J** 1989 Oct;65(768):720–4

Blood glucose testing strips—essential in general practice. Charlton R. **Practitioner** 1989 Sep 22;233(1475):1208

Avoiding spurious results [letter] Howell P. **Practitioner** 1989 Sep 8;233(1474):1129

Effects of age on fasting–induced changes in insulin, glucose, urea nitrogen, and free fatty acids in sera of sheep. Hileman SM, et al. **Proc Soc Exp Biol Med** 1990 May;194(1):21–5

Symptom beliefs and actual blood glucose in type II diabetes. O'Connell KA, et al. **Res Nurs Health** 1990 Jun; 13(3):145–51

Comparative effects of proligestone and megestrol acetate on basal plasma glucose concentrations and cortisol responses to exogenous adrenocorticotrophic hormone in cats. Watson AD, et al. **Res Vet Sci** 1989 Nov;47(3):374–6

The acute effects of glucosidase inhibition on post–meal glucose increments in insulin–dependent diabetics. Wing J, et al. **S Afr Med J** 1990 Mar 17;77(6):286–8

Early morning glycaemia and the metabolic consequences of delaying breakfast/morning insulin. A comparison of continuous subcutaneous insulin infusion and multiple injection therapy with human isophane or human ultralente insulin at bedtime in insulin–dependent diabetics. Haakens K, et al. **Scand J Clin Lab Invest** 1989 Nov;49(7):653–9

Problems with the use of whole blood as a sample material in novel direct glucose analysers. Savolainen K, et al. **Scand J Clin Lab Invest** 1990 Apr;50(2):221–3

Effects of rioprostil on the postprandial glucose, GIP, insulin and gastrin levels in volunteers. Demol P, et al. **Scand J Gastroenterol Suppl** 1989;164:112–7

Metabolic evaluation of non–insulin–dependent diabetes in primary health care—the clinical usefulness of glycated haemoglobin measurements. Larsen ML, et al. **Scand J Prim Health Care** 1989 Oct;7(3):167–71

Screening for glycosuria during pregnancy. Watson WJ. **South Med J** 1990 Feb;83(2):156–8

Effect of plasma glucose concentration on cerebral metabolism during partial ischemia in neonatal piglets. Laptook AR, et al. **Stroke** 1990 Mar;21(3):435–40

Effects of high–fructose (90%) corn syrup on plasma glucose, insulin, and C–peptide in non–insulin–dependent diabetes mellitus and normal subjects. Hung CT. **Taiwan I Hsueh Hui Tsa Chih** 1989 Sep;88(9):883–5

Plasma insulin, C–peptide, HBA1c, and plasma glucose levels in organ donors. van Houten H, et al. **Transplant Proc** 1990 Apr;22(2):435–6

Factors influencing islet transplantation. Number, location, and metabolic control. Hayek A, et al. **Transplantation** 1990 Jan;49(1):224–5

Pancreatic islet transplantation in cynomolgus monkeys. Initial studies and evidence that cyclosporine impairs glucose tolerance in normal monkeys. Stegall MD, et al. **Transplantation** 1989 Dec;48(6):944–50

Lack of requirement for normal insulin secretory dynamics in reversal of diabetes by denervated grafted islets [letter] Tuch BE. **Transplantation** 1989 Dec;48(6):1079–80

Blood glucose, calcium and urea in cows from a herd with congenital nuclear cataract. France MP, et al. **Vet Rec** 1990 May 12;126(19):484–5

Characterization of guinea pigs adapted to differently high vitamin C supplies. 1. Blood–levels of cholesterol, glucose, triacylglycerides and hemoglobin. Degkwitz E, et al. **Z Ernahrungswiss** 1990 Mar;29(1):21–6

[The correlation of glycohemoglobin (HbA1) with the parameters of blood glucose control during the treatment of diabetes mellitus] Khristov V, et al. **Vutr Boles** 1989; 28(6):48–52 (Eng. Abstr.) **(Bul)**

[Changes in thyroxin, insulin and blood sugar levels in burn

patients] Tian FQ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Dec;3(4):262–4, 318 (Eng. Abstr.) **(Chi)**

[Diagnosis and treatment of insulinomas—analysis of 6 cases] Yang JZ. **Chung Hua Chung Liu Tsa Chih** 1989 Sep; 11(5):389–91 (Eng. Abstr.) **(Chi)**

[Comparison of blood sugar and insulin reactions of obese and non-obese patients with NIDDM] Wang H, et al.
Chung Hua I Hsueh Tsa Chih 1989 Nov;69(11):631–2 **(Chi)**

[Multivariate twin crossover design parallel line assay for estimating potency of insulin] Lin ZG, et al.
Chung Kuo Yao Li Hsueh Pao 1989 Nov;10(6):565–8 (Eng. Abstr.) **(Chi)**

[Fructosamine—a dynamic indicator of compensation in diabetes] Skrha J, et al. **Cas Lek Cesk** 1990 Mar 23; 129(12):357–60 (Eng. Abstr.) **(Cze)**

[Insulin levels in plasma during a 3-hour blood glucose profile in obese children monitored by the Biostator] Stejskalová S, et al. **Cesk Pediatr** 1989 Oct;44(10):619–21 **(Cze)**

[The effect of elevated blood glucose levels and body weight on the metabolic profile in type 2 diabetes after long-term therapy] Válek J, et al. **Vnitr Lek** 1990 Feb;36(2):154–62 (Eng. Abstr.) **(Cze)**

[Hypoglycemia in the neonatal period. The need for blood sugar control] Hamborg-Petersen B, et al.
Ugeskr Laeger 1990 Jan 29;152(5):327–9 (Eng. Abstr.) **(Dan)**

[Methodologic problems related to the interpretation of glycemic response studies] Nielsen GL. **Ugeskr Laeger** 1990 Jan 22;152(4):217–20 (Eng. Abstr.) **(Dan)**

[Sense and nonsense in the diagnosis of spontaneous hypoglycemia (letter)] **Ned Tijdschr Geneeskd** 1989 Nov 11;133(45):2251–2 **(Dut)**

[Levels of fasting blood glucose and serum fructosamine for monitoring of glucose control in patients with non-insulin-dependent diabetes mellitus] Mercelina LF, et al. **Ned Tijdschr Geneeskd** 1989 Sep 23;133(38):1887–90 (Eng. Abstr.) **(Dut)**

[Determination of fasting blood glucose and serum fructosamine levels for the assessment of glucose regulation in patients with non-insulin dependent diabetes mellitus (letter)] van Haeften TW, et al. **Ned Tijdschr Geneeskd** 1989 Nov 25;133(47):2356–7 **(Dut)**

[Tunnel syndromes and blood glucose anomalies] Isselin J, et al. **Ann Chir Main** 1989;8(4):344–6 (Eng. Abstr.) **(Fre)**

[Hemodynamic, coagulation and glycoregulation changes induced by brain death] Masson F, et al.
Ann Fr Anesth Reanim 1990;9(2):115–22 (Eng. Abstr.) **(Fre)**

[Determination of some usual and frequent values in clinical biochemistry in a Polynesian population sample. Comparison with French reference values] Hasselot N, et al. **Med Trop (Mars)** 1989 Apr-Jun;49(2):179–82 (Eng. Abstr.) **(Fre)**

[Glucose determination by means of NMR spectrometry] Chira IS, et al. **Biomed Tech (Berlin)** 1989 Sep;34(9):210–4 (Eng. Abstr.) **(Ger)**

["Glucosensor Unitec Ulm". A portable, continuously measuring glucose sensor and monitor] Zier H, et al.
Biomed Tech (Berlin) 1990 Jan-Feb;35(1-2):2–4 (Eng. Abstr.) **(Ger)**

[Critical evaluation of fructosamine as a control parameter in the assessing diabetic metabolic control (letter)] Windeler J. **Klin Wochenschr** 1989 Oct 17;67(20):1066–7 **(Ger)**

[A case from practice (167). Decreased glucose tolerance with reactive postprandial hypoglycemia in obesity] Ryff A, et al. **Schweiz Rundsch Med Prax** 1990 Mar 13; 79(11):341–3 **(Ger)**

[Treatment of type I diabetes mellitus with continuous subcutaneous insulin infusion: indications and quality control] Berger M, et al. **Verh Dtsch Ges Inn Med** 1989; 95:135–40 **(Ger)**

[Glucose sensors and insulin infusion systems—current technical status and future aspects] Pfeiffer EF.
Verh Dtsch Ges Inn Med 1989;95:725–36 (13 ref.) **(Ger)**

[The reliability of the blood glucose test strip "Glucosignal" in self monitoring of blood glucose by diabetic patients with diabetic retinopathy and acquired color vision disorders] Pilz D, et al. **Z Arztl Fortbild (Jena)** 1989; 83(23):1175–8 **(Ger)**

[The suitability of filter paper for obtaining and transporting blood samples for glucose determination] Rehfeld N, et al. **Z Med Lab Diagn** 1990;31(2):105–7 **(Ger)**

[Serum fructosamine studies in pediatric diabetology] Acsai L, et al. **Orv Hetil** 1989 Oct 1;130(40):2147–50 (30 ref.) (Eng. Abstr.) **(Hun)**

[A case of non-insulin dependent diabetes mellitus whose insulin requirement was markedly reduced after disopyramide treatment in arrhythmia] Onoda N, et al.
Nippon Naika Gakkai Zasshi 1989 Jun;78(6):820–5 **(Jpn)**

[Significance of glucose analysis in clinical tests] Ochi Y.
Nippon Rinsho 1989 Dec;48 Suppl:457–61 **(Jpn)**

[Reflectometric measurement of blood glucose in general practice] Roksund G, et al. **Tidsskr Nor Laegeforen** 1989 Aug 30;109(24):2436–8 (Eng. Abstr.) **(Nor)**

[Hyperglycemia in newborn infants. I. Transient hyperglycemia in the neonatal period] Bialkowski J, et al.
Endokrynol Pol 1989;40(2):85–7 (9 ref.) **(Pol)**

[Effect of biguanide derivatives (phenformin) on glucose tolerance in "borderline" and asymptomatic ("chemical") diabetes mellitus. Results of a 5-year prospective study] Kasperska-Czyżykowa T, et al. **Pol Arch Med Wewn** 1987 Nov;78(5):241–50 (Eng. Abstr.) **(Pol)**

[Insulin level and carbohydrate tolerance in patients with chronic pancreatitis evaluated by endoscopic ascending pancreatography] Kinalska I, et al.
Pol Arch Med Wewn 1987 Jul;78(1):1–7 (Eng. Abstr.) **(Pol)**

[Correlation of glycosylated serum protein and glycosylated hemoglobin in patients with diabetes mellitus type 2 at various stages of metabolic compensation] Plechanow J, et al. **Pol Arch Med Wewn** 1987 Sep;78(3):149–53 (Eng. Abstr.) **(Pol)**

[Early-morning hyperglycemia in patients with diabetes mellitus types 1 and 2] Jasik M. **Wiad Lek** 1989 Apr 30; 42(8):529–32 (11 ref.) (Eng. Abstr.) **(Pol)**

[Changes in the serum levels of lactate dehydrogenase, gamma- glutamyltransferase, glucose and alpha amino nitrogen in guinea pigs with experimental ascariasis] Biaduń W. **Wiad Parazytol** 1989;35(4):305–14 (Eng. Abstr.) **(Pol)**

[Indicators of lipid and carbohydrate metabolism in uncomplicated pregnancy] Tigranian ER, et al.
Akush Ginekol (Mosk) 1989 Aug;(8):60–1 **(Rus)**

[The effect of whole-body and local irradiation, modified by hyperglycemia, on the metastasis of Walker carcinosarcoma 256 in rats] Kutlimuratov AB, et al.
Eksp Onkol 1990;12(2):76–9 (Eng. Abstr.) **(Rus)**

[Effect of noise of moderate intensity on the functional status of the sympathetic-adrenal system] Oleshkevich LA, et al.
Gig Sanit 1989 Dec;(12):93–5 **(Rus)**

[Clinical evaluation of the Glucophot reflecting photometer in determining glucose in whole blood] Lukicheva TI, et al. **Lab Delo** 1989;(11):34–7 (Eng. Abstr.) **(Rus)**

[Adaptation of a micromethod for determining glucose in the FP-900 analytical system] Prudnik IM, et al.
Lab Delo 1989;(7):25–7 **(Rus)**

[Glucose determination by using luminol] Tokmanov AA, et al. **Lab Delo** 1990;(1):31–4 (Eng. Abstr.) **(Rus)**

[The relationship of disorders of glucose tolerance in patients with chronic hepatitis and liver cirrhosis to the severity of the pathological process] Abdurakhmanova AM, et al.
Probl Endokrinol (Mosk) 1989 Nov-Dec;35(6):20–3 (Eng. Abstr.) **(Rus)**

[Carbohydrate tolerance and the blood levels of insulin and cortisol in the nonnative population of Chukotia] Stepanova EG, et al. **Probl Endokrinol (Mosk)** 1989 Jul-Aug; 35(4):16–9 (Eng. Abstr.) **(Rus)**

[Characteristics of the postoperative period in diabetes mellitus type 1 in patients with distal splenorenal anastomosis] Ivanov PA, et al. **Sov Med** 1990;(2):17–9 (Eng. Abstr.) **(Rus)**

[The role of the TRS-Glucotest apparatus in self-monitoring by patients with diabetes mellitus] Giljević Z, et al.
Lijec Vjesn 1989 Sep-Oct;111(9–10):344–7 (Eng. Abstr.) **(Scr)**

[Insulin response to the oral glucose tolerance test in obese patients and in subjects with a family history of diabetes mellitus] Fernandez Feo N, et al. **Acta Cient Venez** 1988; 39(5–6):443–6 (Eng. Abstr.) **(Spa)**

[Hypoglycemic action of different doses of nopal (Opuntia streptacantha Lemaire) in patients with type II diabetes mellitus] Frati-Munari AC, et al.
Arch Invest Med (Mex) 1989 Apr-Jun;20(2):197–201 (Eng. Abstr.) **(Spa)**

[Effect of fasting and maintenance solutions on perioperative blood glucose in children] Bisono-Bido JD, et al.
Bol Med Hosp Infant Mex 1989 Oct;46(10):658–62 (Eng. Abstr.) **(Spa)**

[The dawn phenomenon in diabetic pregnancy] Fernández I, et al. **Med Clin (Barc)** 1990 Jan 20;94(2):46–8 (Eng. Abstr.) **(Spa)**

[Blood glucose as a prognostic factor in cerebral infarction] Peinado E, et al. **Neurologia** 1988 Mar-Apr;3(2):50–3 (20 ref.) (Eng. Abstr.) **(Spa)**

[Prognosis factors in conservatively treated patients with non-traumatic supratentorial intracerebral hematoma] Posada IJ, et al. **Neurologia** 1989 Jan-Feb;4(1):19–23 (Eng. Abstr.) **(Spa)**

[2,070 simultaneous determinations of blood glucose, glucosylated hemoglobin and fructosamine as index of metabolic control in 519 diabetic patients] Gómez Reyes D, et al. **Rev Clin Esp** 1989 Nov;185(7):354–8 (Eng. Abstr.) **(Spa)**

[Glycosylated hemoglobin and insulin secretion in obese subjects with glucose intolerance] Durruty P, et al.
Rev Med Chil 1988 Oct;116(10):993–7 (Eng. Abstr.) **(Spa)**

BIOSYNTHESIS

The effect of ethanol on glucose production in phosphorylase b kinase deficiency. Collins JE, et al.
J Inherited Metab Dis 1989;12(3):317–22

GENETICS

Type 2 diabetes, impaired glucose tolerance, and hypertension in offspring of migrants and the structure of the population of origin. Leonetti DL, et al. **Hum Biol** 1989 Jun;61(3):369–86

METABOLISM

Reduction in blood and urine glucose levels in streptozotocin and alloxan diabetes by phenazine methosulfate. Akpan JO.
Acta Diabetol Lat 1989 Jul-Sep;26(3):195–201

Red cell sorbitol concentration in relation to short- and medium-term variation of plasma glucose. Lapolla A, et al. **Acta Diabetol Lat** 1989 Jul-Sep;26(3):211–6

Influence of exogenous ATP on blood sugar, serum insulin and serum free fatty acids in short-term experimental hyperthyroid dogs and in euthyroid controls. Renauld A, et al. **Acta Diabetol Lat** 1989 Oct-Dec;26(4):301–7

Impairment of lymphocyte suppressive system in recent onset insulin-dependent diabetes mellitus. Correlation with blood glucose and serum insulin levels. Secchi A, et al.
Acta Diabetol Lat 1989 Jul-Sep;26(3):257–63

Effect of dietary environment on the development of impaired glucose tolerance and pancreatic hormone secretion in neonatal streptozocin-treated (NSZ) rats. Seino Y, et al. **Acta Diabetol Lat** 1990 Apr-Jun;27(2):95–104

Metabolic effects of pulsatile insulin infusion in the elderly. Paolisso G, et al. **Acta Endocrinol (Copenh)** 1990 Jul; 123(1):19–23

Hypoglycemia: a pathophysiologic approach. Senior B, et al. **Acta Paediatr Scand Suppl** 1989;352:1–27

Insulin sensitivity in patients with anorexia nervosa and bulimia. Kiriike N, et al. **Acta Psychiatr Scand** 1990 Mar; 81(3):236–9

Glucose tolerance and secretion of insulin in chronic pancreatitis. Perušičová J.
Acta Univ Carol [Med Monogr] (Praha) 1989;131:1–92 (225 ref.)

Plasma glucose, ketone bodies, insulin, glucagon and enteroglucagon in cows: diurnal variations related to ketone levels before feeding and to the ketogenic effects of feeds. Borrebaek B, et al. **Acta Vet Scand** 1990;31(1):5–15

Exercise-induced increase in glandular kallikrein activity in human plasma and its significance in peripheral glucose metabolism. Koh H, et al. **Adv Exp Med Biol** 1989; 247A:555–62

All bran vs corn flakes: plasma glucose and insulin responses in young females [see comments] Behme MT, et al.
Am J Clin Nutr 1989 Dec;50(6):1240–3 Comment in: Am J Clin Nutr 1990 Jun;51(6):1113–4.

Interrelationships of insulin, glucose, lipid and anthropometric data in a natural population. Gibson TC, et al. **Am J Clin Nutr** 1975 Dec;28(12):1387–94

Water volume and consumption time: influence on the glycemic and insulinemic responses in non-insulin-dependent diabetic subjects. Gregersen S, et al. **Am J Clin Nutr** 1990 Sep;52(3):515–8

Glycemic response to food [letter; comment] Thompson DB.
Am J Clin Nutr 1989 Dec;50(6):1474 Comment on: Am J Clin Nutr 1989 Apr;49(4):658–66.

Gastric emptying and glycemic response after ingestion of mashed bean or potato flakes in composite meals. Torsdottir I, et al. **Am J Clin Nutr** 1989 Dec;50(6):1415–9

Metabolic response to glucose ingested with various amounts of protein. Westphal SA, et al. **Am J Clin Nutr** 1990 Aug; 52(2):267–72

Glycemic index and mixed meals [letter; comment] Wolever TM. **Am J Clin Nutr** 1990 Jun;51(6):1113–4 Comment on: Am J Clin Nutr 1989 Dec;50(6):1240–3.

Effects of dietary propionate on carbohydrate and lipid metabolism in healthy volunteers. Venter CS, et al.
Am J Gastroenterol 1990 May;85(5):549–53

Occurrence of intercapillary nodular glomerulosclerosis in the absence of glucose intolerance. Kanwar YS, et al.
Am J Kidney Dis 1990 Mar;15(3):281–3

Impairment of glucose tolerance: mechanism of action and impact on the cardiovascular system. Beck-Nielsen H, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):292–5 (17 ref.)

Effects of ethinyl estradiol combined with desogestrel and cyproterone acetate on glucose tolerance and insulin response to an oral glucose load: a one-year randomized, prospective, comparative trial. Jandrain BJ, et al.
Am J Obstet Gynecol 1990 Jul;163(1 Pt 2):378–81

Maternal-fetal glucose gradient in normal pregnancies and in pregnancies complicated by alloimmunization and fetal growth retardation. Nicolini U, et al.
Am J Obstet Gynecol 1989 Oct;161(4):924–7

Carbohydrate metabolism in the course of intrahepatic cholestasis in pregnancy. Wójcicka-Jagodzińska J, et al.
Am J Obstet Gynecol 1989 Oct;161(4):959–64

Dissociation of the effects of epinephrine and insulin on glucose and protein metabolism. Castellino P, et al.
Am J Physiol 1990 Jan;258(1 Pt 1):E117–25

Placental-fetal glucose exchange and placental glucose consumption in pregnant sheep. DiGiacomo JE, et al.
Am J Physiol 1990 Feb;258(2 Pt 1):E360–7

Sepsis does not alter red blood cell glucose metabolism or Na+ concentration: a 2H-, 23Na-NMR study. Hotchkiss RS, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R21–31

Effect of insulin-induced hypoglycemia on protein metabolism in vivo. Hourani H, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):E342–50

Paraventricular nucleus modulation of glycemia and insulinemia in freely moving lean rats. Ionescu E, et al.
Am J Physiol 1989 Dec;257(6 Pt 2):R1370–6

Effect of exercise on insulin action, glucose tolerance, and insulin secretion in aging. Kahn SE, et al.
Am J Physiol 1990 Jun;258(6 Pt 1):E937–43

Glucagon–cortisol interactions on glucose turnover and lactate gluconeogenesis in normal humans. Lecavalier L, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):E569–75

Effects of norepinephrine infusion on in vivo insulin sensitivity and responsiveness. Lupien JR, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):E210–5

Estimation of glucose kinetics in fetal–maternal studies: potential errors, solutions, and limitations. Menon RK, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):E1006–13

Insulin, growth hormone, glucose, and fatty acids in gilts selected for rapid vs. slow growth rate. Norton SA, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):E554–60

Insulin–sensitive tyrosine kinase: relationship with in vivo insulin action in humans. Nyomba BL, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):E964–74

Underestimation of glucose turnover corrected with high–performance liquid chromatography purification of [6–3H]glucose. Schwenk WF, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):E228–33

Evolution of dexamethasone–induced insulin resistance in rats. Stojanovska L, et al. **Am J Physiol** 1990 May;258(5 Pt 1):E748–56

Effect of hepatic portal glucose concentration on food intake and metabolism. Tordoff MG, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1474–80

Glucose kinetics in gluconeogenesis–inhibited rats during rest and exercise. Turcotte LP, et al. **Am J Physiol** 1990 Jan; 258(1 Pt 1):E203–11

Differential roles of splanchnic and peripheral tissues in determining diurnal fluctuation of glucose tolerance. Verrillo A, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):E459–65

Capsaicin–sensitive nerves are required for glucostasis but not for catecholamine output during hypoglycemia in rats. Zhou XF, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):E212–9

Stability of plasma glucose during storage. Clark ML, et al. **Ann Clin Biochem** 1990 Jul;27 (Pt 4):373–7

Perturbation of glucose metabolism in familial amyloidotic polyneuropathy [letter] Ando Y, et al. **Ann Neurol** 1990 Jun;27(6):689

Effect of pre– and postnatal protein undernutrition on glycemia, ketonemia and liver glycogen concentration in suckling rats. Gamallo JL, et al. **Ann Nutr Metab** 1989; 33(5):266–70

Kinetics and balance of glucose and galactose appearance in the portal blood after intake of lactose or hydrolysed lactose in conscious pigs. Rérat A, et al. **Ann Nutr Metab** 1990;34(2):119–32

Plasma glucose and insulin, urinary catecholamine and cortisol responses to test breakfasts with high or low fibre content: the importance of the previous diet. Sundell IB, et al. **Ann Nutr Metab** 1989;33(6):333–40

Effect of pentoxifylline on carbohydrate metabolism in type II diabetics [letter] Ambrus JL, et al. **Arch Intern Med** 1990 Apr;150(4):921

Relationship of insulin secretion and glycemic response to dietary intervention in non–insulin–dependent diabetes. Lomasky SJ, et al. **Arch Intern Med** 1990 Jan;150(1):169–72

Prediction of glucose response to weight loss in patients with non–insulin–dependent diabetes mellitus. Watts NB, et al. **Arch Intern Med** 1990 Apr;150(4):803–6

Insulin resistance is associated with lipid and lipoprotein abnormalities in subjects with varying degrees of glucose tolerance. Laakso M, et al. **Arterioscler Thromb** 1990 Mar–Apr; 10(2):223–31

Bioequivalence and pharmacodynamics of a modified glibenclamide formulation in healthy volunteers. Molz KH, et al. **Arzneimittelforschung** 1989 Oct;39(10):1280–2

Maintenance of normoglycemia in pancreatectomized dogs with a controlled release micropump. Horvath V, et al. **ASAIO Trans** 1990 Apr–Jun;36(2):78–85

Effect of dietary fructose on triglyceride turnover in streptozotocin–diabetic rats. Yoshino G, et al. **Atherosclerosis** 1989 Sep;79(1):41–6

Control of glucose homeostasis in lactating ewes: use of the alloxan–diabetic/insulin–stabilized ewe to study effects of insulin and growth hormone. Leenanuruksa D, et al. **Aust J Biol Sci** 1988;41(4):421–33

Experimental diabetes in lactating sheep: effects of alloxan on plasma insulin, glucose, glucose kinetics and milk characteristics. Leenanuruksa D, et al. **Aust J Biol Sci** 1988; 41(2):223–9

Atropine: effects on glucose metabolism. Durkot M, et al. **Aviat Space Environ Med** 1990 May;61(5):424–9

Comparative study of serum insulin, glucose, growth hormone and cortisol of students at 794.7 mm Hg (Dead Sea level) and 697.5 mm Hg (Amman) barometric pressures. Khraisha S. **Aviat Space Environ Med** 1990 Feb; 61(2):145–7

Homeostatic disruption and memory: effect of insulin administration in rats. Santucci AC, et al. **Behav Neural Biol** 1990 May;53(3):321–33

Pattern of [14C]2–deoxyglucose concentration associated with potentiation of reproductive behavior by prostaglandin E2. Diakow C, et al. **Behav Neurosci** 1989 Oct;103(5):1028–34

2–[3H]deoxyglucose uptake patterns in rats exploring a six–arm radial tunnel maze: differences between experienced and nonexperienced rats. Sarter M, et al. **Behav Neurosci** 1989 Dec;103(6):1217–25

Blood–brain barrier glucose transporter mRNA is increased in experimental diabetes mellitus. Choi TB, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):375–80

The putative hormone islet amyloid polypeptide (IAPP) induces impaired glucose tolerance in cats. Johnson KH, et al. **Biochem Biophys Res Commun** 1990 Mar 16; 167(2):507–13

Suppression of insulin–stimulated glucose transport in L6 myocytes by calcitonin gene–related peptide. Kreutter D, et al. **Biochem Biophys Res Commun** 1989 Oct 16; 164(1):461–7

Role of brown adipose tissue in glucose utilization in conscious pre–obese Zucker rats. Krief S, et al. **Biochem J** 1989 Oct 1;263(1):305–8

Hypoglycaemic effect of metformin in genetically obese (fa/fa) rats results from an increased utilization of blood glucose by intestine. Pénicaud L, et al. **Biochem J** 1989 Sep 15;262(3):881–5

Initial glucose kinetics and hormonal response to a gastric glucose load in unrestrained post–absorptive and starved rats. Smadja C, et al. **Biochem J** 1990 Sep 1;270(2):505–10

Supplemental taurine in diabetic rats: effects on plasma glucose and triglycerides. Goodman HO, et al. **Biochem Med Metab Biol** 1990 Feb;43(1):1–9

Modification of diazinon–induced changes in carbohydrate metabolism by adrenalectomy in rats. Matin MA, et al. **Biochem Pharmacol** 1990 Jun 1;39(11):1781–6

Modulation of red blood cell sugar transport by lyso–lipid. Naderi S, et al. **Biochim Biophys Acta** 1989 Oct 16; 985(2):173–83

Comparison of growth hormone response after clonidine and insulin hypoglycemia in affective illness. Amsterdam JD, et al. **Biol Psychiatry** 1990 Aug 15;28(4):308–14

Basal ganglia regional glucose metabolism asymmetry during a catatonic episode. Luchins DJ, et al. **Biol Psychiatry** 1989 Nov;26(7):725–8

Chromium induced clinical improvement in symptomatic hypoglycemia. Clausen J. **Biol Trace Elem Res** 1988 Sep–Dec;17:229–36

The formamidine amitraz as a hyperglycemic alpha–agonist in worker honeybees (Apis mellifera mellifera L.) in vivo. Cascino P, et al. **Biomed Environ Sci** 1989 Jun;2(2):106–14

Glycogenolytic effect of pancreastatin in the rat. Sanchez V, et al. **Biosci Rep** 1990 Feb;10(1):87–91

Changes in glucose tolerance after treatment for acromegaly [letter; comment] Fonseca V, et al. **BMJ** 1989 Nov 4; 299(6708):1162 Comment on: BMJ 1989 Sep 2;299(6699):604–5.

Cognitive function in diabetes mellitus: the effects of duration of illness and glycaemic control. Prescott JH, et al. **Br J Clin Psychol** 1990 May;29 (Pt 2):167–75

The effect of near–normoglycaemic control on plasma levels of coagulation factor VII and the anticoagulant proteins C and S in insulin–dependent diabetic patients. Schernthaner G, et al. **Br J Haematol** 1989 Nov;73(3):356–9

Alpha–amylase (EC 3.2.1.1) susceptibility rather than viscosity or gastric emptying rate controls plasma responses to starch in healthy humans. Bornet FR, et al. **Br J Nutr** 1990 Mar;63(2):207–20

The effect of soluble– and insoluble–fibre supplementation on post–prandial glucose tolerance, insulin and gastric inhibitory polypeptide secretion in healthy subjects. Morgan LM, et al. **Br J Nutr** 1990 Jul;64(1):103–10

Relation between maternal–to–fetal blood glucose gradient and uterine and umbilical Doppler blood flow measurements. Economides DL, et al. **Br J Obstet Gynaecol** 1990 Jun;97(6):543–4

Role of adrenoceptors in vitro and in vivo in the effects of lithium on blood glucose levels and insulin secretion in the rat. Fontela T, et al. **Br J Pharmacol** 1990 Jun; 100(2):283–8

Effect of capsaicin–sensitive sensory nerves on plasma glucose and catecholamine levels during 2–deoxyglucose–induced stress in conscious rats. Zhou XF, et al. **Br J Pharmacol** 1990 Jul;100(3):523–9

Intermittent hepatic dearterialization induces glucose intolerance: an experimental study in the rat. Sjövall S, et al. **Br J Surg** 1990 Apr;77(4):405–8

Diurnal insulin and glucose profiles following transplantation of fresh and cryopreserved canine pancreatic islets. Walsh TN, et al. **Br J Surg** 1989 Dec;76(12):1287–90

2–Deoxyglucose uptake following visual stimulation in squamate reptiles. Allen EE, et al. **Brain Behav Evol** 1989; 34(5):299–300

Effect of injections of contrast media on regional uptake of (14C)–2–deoxyglucose by the rat brain. Cicciarello R, et al. **Brain Inj** 1990 Jan–Mar;4(1):71–6

Adrenal demedullation blocks and brain norepinephrine depletion potentiates the hyperglycemic response to a variety of stressors. Bialik RJ, et al. **Brain Res** 1989 Nov 13;502(1):88–98

Effects of intrathecal administration of thyrotropin releasing hormone and its analogue, DN1417, on plasma glucose and catecholamine levels in conscious rats. Ishikawa Y, et al. **Brain Res** 1990 Apr 23;514(1):1–4

Sex–related canatoxin–induced blood glucose alterations in the rat. Pires–Barbosa R, et al. **Braz J Med Biol Res** 1989; 22(12):1507–13

Alterations in rat carbohydrate metabolism induced by canatoxin as a probable consequence of primary hypoxia. Ribeiro–DaSilva G, et al. **Braz J Med Biol Res** 1989; 22(11):1405–13

Effect of dietary fibers on glycemia and insulinemia and on gastrointestinal function in rats. Bégin F, et al. **Can J Physiol Pharmacol** 1989 Oct;67(10):1265–71

Metabolic response to insulin and glucose infusions in starved tumor–bearing rats. Rofe AM, et al. **Cancer Res** 1989 Nov 1;49(21):5949–53

Size heterogeneity of immunoreactive prolactin in hyperprolactinaemic serum following stimulation with TRH and insulin hypoglycaemia, and suckling in postpartum period. Soong YK. **Chung Hua I Hsueh Tsa Chih** 1990 Feb;45(2):103–10

Glucoregulatory, hormonal, and metabolic responses to endotoxicosis or cecal ligation and puncture sepsis in the rat: a direct comparison. Yelich MR. **Circ Shock** 1990 Jul; 31(3):351–63

A comparison of direct measures of glycaemia and glycated blood proteins in insulin–dependent diabetes mellitus. Winocour PH, et al. **Clin Biochem** 1989 Dec;22(6):457–61

The relationship of plasma acetate with glucose and other blood intermediary metabolites in non–diabetic and diabetic subjects. Akanji AO, et al. **Clin Chim Acta** 1989 Oct 31; 185(1):25–34

Effects of improved blood glucose on insulin–induced hypoglycaemia, TRH, GnRH and exercise tests in insulin–dependent diabetes. Würzburger MI, et al. **Clin Endocrinol (Oxf)** 1990 Jun;32(6):799–807

The effects of improved blood glucose on growth hormone and cortisol secretion in insulin–dependent diabetes mellitus. Würzburger MI, et al. **Clin Endocrinol (Oxf)** 1990 Jun;32(6):787–97

Effect of glycaemic control on glomerular filtration rate in the streptozotocin diabetic rat. Jackson B, et al. **Clin Exp Pharmacol Physiol** 1988 Apr;15(4):361–5

Effect of dipyridamole on blood glucose and liver cyclic AMP levels and platelet count during endotoxaemia in mice. Al–Jibouri LM, et al. **Clin Exp Pharmacol Physiol** 1988 Jul;15(7):527–32

Glucose–intolerance and prolonged renal–transplant insufficiency due to ketoconazole–cyclosporin A interaction [letter] Kiss D, et al. **Clin Nephrol** 1990 Apr; 33(4):207–8

Effects of blood glucose concentration on thermogenesis and glucose disposal during hyperinsulinaemia. Gallen IW, et al. **Clin Sci** 1990 Sep;79(3):279–85

Hepatic and peripheral insulin action in chronic renal failure before and during continuous ambulatory peritoneal dialysis. Heaton A, et al. **Clin Sci** 1989 Oct;77(4):383–8

Effects of bunazosin on plasma glucose levels in hypertensive diabetic patients. Takeda N, et al. **Clin Ther** 1989 Sep–Oct; 11(5):568–71

A study of diurnal changes in cortisol and glucose levels and FDPA activity in foals during the first 13 weeks of life and in their lactating mothers. Flisińska–Bojanowska A, et al. **Comp Biochem Physiol [A]** 1989;94(2):283–8

Relative oxidation of glutamate and glucose by vertebrate erythrocytes. Mauro NA, et al. **Comp Biochem Physiol [A]** 1989;94(1):95–7

The effect of acute changes in blood glucose on lenses in diabetic and non–diabetic subjects using quasi–elastic light scattering spectroscopy. Bursell SE, et al. **Curr Eye Res** 1989 Aug;8(8):821–34

The incidence of unknown diabetes mellitus and impaired glucose tolerance in idiopathic presenile cataract. al Samarrai AR, et al. **Dev Ophthalmol** 1989;17:79–81

Effects of undernutrition and handling during suckling on shuttle avoidance and footshock escape behavior and on plasma glucose levels of young rats. Rocha JB, et al. **Dev Psychobiol** 1990 Mar;23(2):157–68

Inter and intra individual variability of acute insulin response during intravenous glucose tolerance tests. Bardet S, et al. **Diabete Metab** 1989 Sep–Oct;15(5):224–32

Different daily blood glucose control and free insulin levels during treatment with mixtures of soluble and lente or soluble and NPH semisynthetic human insulins. Cucinotta D, et al. **Diabete Metab** 1989 Jul–Aug;15(4):182–7

Elevated blood pressure predicts the development of persistent proteinuria in the presence of poor glycemic control, in patients with type I diabetes. Derby L, et al. **Diabete Metab** 1989;15(5 Pt 2):320–6

Effect of short term fasting on glucose tolerance and insulin secretion: influence of the initial glucose level. Féry F, et al. **Diabete Metab** 1990 Mar–Apr;16(2):77–85

Action of a semi–synthetic human insulin preparation (30/70 NPH insulin Organon): comparison with another 30/70 NPH (Actraphane Novo). Gin H, et al. **Diabete Metab** 1989 Sep–Oct;15(5):247–50

The effect of blood pressure intervention on renal function in insulin–dependent diabetes. Mogensen CE. **Diabete Metab** 1989;15(5 Pt 2):343–51

Pulsatile rather than continuous glucagon infusion leads to greater metabolic derangements in insulin–dependent diabetic subjects. Paolisso G, et al. **Diabete Metab** 1990 Jan–Feb;16(1):42–7

Operation of Randle's cycle in patients with NIDDM. Bevilacqua S, et al. **Diabetes** 1990 Mar;39(3):383–9

Effects of fish oil supplementation on glucose and lipid metabolism in NIDDM. Borkman M, et al. **Diabetes** 1989 Oct;38(10):1314–9

High prevalence of NIDDM and impaired glucose tolerance in Indian, Creole, and Chinese Mauritians. Mauritius Noncommunicable Disease Study Group. Dowse GK, et al. **Diabetes** 1990 Mar;39(3):390–6

Muscarinic stimulation and antagonism and glucoregulation in nondiabetic and obese hyperglycemic mice. Fukudo S,

et al. **Diabetes** 1989 Nov;38(11):1433–8
Effects of aging on insulin secretion. Gumbiner B, et al. **Diabetes** 1989 Dec;38(12):1549–56
Incidence of type II diabetes in Mexican Americans predicted by fasting insulin and glucose levels, obesity, and body–fat distribution. Haffner SM, et al. **Diabetes** 1990 Mar; 39(3):283–8
Diminished serum insulin response to glucose in genetic prediabetic males with normal glucose tolerance. Soeldner JS, et al. **Diabetes** 1968 Jan;17(1):17–26
Reversal of glomerular hyperfiltration and renal hypertrophy by blood glucose normalization in diabetic rats. Stackhouse S, et al. **Diabetes** 1990 Aug;39(8):989–95
Effects of prolonged pulsatile hyperinsulinemia in humans. Enhancement of insulin sensitivity. Ward GM, et al. **Diabetes** 1990 Apr;39(4):501–7
Reduction of glycemic and lipid levels in db/db diabetic mice by psyllium plant fiber. Watters K, et al. **Diabetes** 1989 Dec;38(12):1528–33
Impact of physical fitness and glycemic control on in vivo insulin action in adolescents with IDDM. Arslanian S, et al. **Diabetes Care** 1990 Jan;13(1):9–15
Effect of temporal distribution of calories on diurnal patterns of glucose levels and insulin secretion in NIDDM. Beebe CA, et al. **Diabetes Care** 1990 Jul;13(7):748–55
Computer simulation of plasma insulin and glucose dynamics after subcutaneous insulin injection. Berger M, et al. **Diabetes Care** 1989 Nov–Dec;12(10):725–36
Frozen desserts and glycemic response in well–controlled NIDDM patients. Bukar J, et al. **Diabetes Care** 1990 Apr; 13(4):382–5
Postprandial oscillatory patterns of blood glucose and insulin in NIDDM. Abnormal diurnal insulin secretion patterns and glucose homeostasis independent of obesity. Calles–Escandon J, et al. **Diabetes Care** 1989 Nov–Dec; 12(10):709–14
Evidence for elevated glucose threshold in patients with impaired glucose tolerance and symptoms of hypoglycemia during OGTT. Chalew SA, et al. **Diabetes Care** 1990 May; 13(5):507–12
Acute hypoglycemic effect of Opuntia streptacantha Lemaire in NIDDM [letter] Frati AC, et al. **Diabetes Care** 1990 Apr;13(4):455–6
Failure of nocturnal hypoglycemia to cause daytime hyperglycemia in patients with IDDM. Hirsch IB, et al. **Diabetes Care** 1990 Feb;13(2):133–42
Psychological characteristics of adults with IDDM. Comparison of patients in poor and good glycemic control. Jacobson AM, et al. **Diabetes Care** 1990 Apr;13(4):375–81
Blood glucose area under the curve. Methodological aspects. Le Floch JP, et al. **Diabetes Care** 1990 Feb;13(2):172–5
Lack of relationship between glucose tolerance and complications of pregnancy in nondiabetic women. Little RR, et al. **Diabetes Care** 1990 May;13(5):483–7
Fish oil and glycemic control: importance of dose [letter] Popp–Snijders C, et al. **Diabetes Care** 1990 Jan;13(1):80–1
Abnormal glucose tolerance and hypertension. Reaven PD, et al. **Diabetes Care** 1990 Feb;13(2):119–25
Differences between prebreakfast and late afternoon glycemic responses to exercise in IDDM patients. Ruegemer JJ, et al. **Diabetes Care** 1990 Feb;13(2):104–10
Metabolic response to oral challenge of hydrogenated starch hydrolysate versus glucose in diabetes. Wheeler ML, et al. **Diabetes Care** 1990 Jul;13(7):733–40
Relative clinical usefulness of glycosylated serum albumin and fructosamine during short–term changes in glycemic control in IDDM. Winocour PH, et al. **Diabetes Care** 1989 Nov–Dec;12(10):665–72
Glycemic index of foods in individual subjects. Wolever TM, et al. **Diabetes Care** 1990 Feb;13(2):126–32
Effect of metformin on carbohydrate and lipoprotein metabolism in NIDDM patients. Wu MS, et al. **Diabetes Care** 1990 Jan;13(1):1–8
Microalbuminuria is associated with long term poor glycemic control in adolescent insulin dependent diabetics. Bangstad HJ, et al. **Diabetes Res** 1989 Oct;12(2):71–4
Effect of human proinsulin on blood glucose control and metabolic instability in type 1 diabetes mellitus. Bock E, et al. **Diabetes Res** 1989 Apr;10(4):165–9
Carbohydrate, lipid and amino acid metabolism of insulin–dependent diabetic patients regulated by an artificial beta–cell unit. Foss MC, et al. **Diabetes Res** 1989 May; 11(1):1–8
The utility of glycated hemoglobin in identification of impaired glucose tolerance. Larsen ML. **Diabetes Res** 1989 Oct;12(2):67–70
Long–term treatment with active vitamin D (alphacalcidol) in middle–aged men with impaired glucose tolerance. Effects on insulin secretion and sensitivity, glucose tolerance and blood pressure. Lind L, et al. **Diabetes Res** 1989 Jul;11(3):141–7
The influence of zinc supplementation on glucose homeostasis in NIDDM. Raz I, et al. **Diabetes Res** 1989 Jun;11(2):73–9
Glucose tolerance and insulin response to glucose load before and after enzyme inducing therapy in subjects with glucose intolerance and patients with NIDDM having hyperinsulinemia or relative insulin deficiency. Sotaniemi EA, et al. **Diabetes Res** 1989 Jul;11(3):131–9
Endogenous insulin secretion in newly diagnosed diabetic patients in Saudi Arabia. al–Attas OS, et al. **Diabetes Res Clin Pract** 1990 Jan;8(1):51–9
Alterations of glucose metabolism in chronic liver disease. Del Vecchio Blanco C, et al. **Diabetes Res Clin Pract** 1990 Jan;8(1):29–36
Immunohistochemical study of insulitis induced by multiple low doses of streptozocin in CD–1 mice. Iwakiri R, et al. **Diabetes Res Clin Pract** 1990 Apr;9(1):75–82
A supplementary infusion of glucose–dependent insulinotropic polypeptide (GIP) with a meal does not significantly improve the beta cell response or glucose tolerance in type 2 diabetes mellitus. Jones IR, et al. **Diabetes Res Clin Pract** 1989 Nov 6;7(4):263–9
Prior long term glycaemic control and insulin therapy in insulin–dependent diabetic adolescents with microalbuminuria. Kalk WJ, et al. **Diabetes Res Clin Pract** 1990 Apr;9(1):83–8
Differential effects of dopamine on glucoregulatory hormones in rats. Keck FS, et al. **Diabetes Res Clin Pract** 1990 Jan;8(2):155–9
Effect of Gymnema sylvestre, R.Br. on glucose homeostasis in rats. Okabayashi Y, et al. **Diabetes Res Clin Pract** 1990 May–Jun;9(2):143–8
Diurnal variation in glucose and leucine metabolism in non–insulin–dependent diabetes. Umpleby AM, et al. **Diabetes Res Clin Pract** 1990 Apr;9(1):89–96
The relevance of persistent C–peptide secretion in type 1 (insulin–dependent) diabetes mellitus to glycaemic control and diabetic complications. Winocour PH, et al. **Diabetes Res Clin Pract** 1990 Apr;9(1):23–35
Topical application of the hypoglycemic agent glibenclamide and changes in blood glucose, plasma insulin (IRI) levels and plasma concentration of glibenclamide in normal rats. Yamamoto T, et al. **Diabetes Res Clin Pract** 1990 Jan; 8(1):19–22
Postprandial hyperglycaemia following a morning hypoglycaemia in type 1 diabetes mellitus. Fowelin J, et al. **Diabetic Med** 1990 Feb;7(2):156–61
Xiaoke tea, a Chinese herbal treatment for diabetes mellitus. Hale PJ, et al. **Diabetic Med** 1989 Nov;6(8):675–6
Insulin insensitivity in offspring of parents with type 2 diabetes mellitus. Ho LT, et al. **Diabetic Med** 1990 Jan; 7(1):31–4
Blood glucose control determines the renal haemodynamic response to angiotensin converting enzyme inhibition in type 1 diabetes. Jenkins DA, et al. **Diabetic Med** 1990 Mar–Apr;7(3):252–7
Placebo–controlled trial of the effects of guar gum and metformin on fasting blood glucose and serum lipids in obese, type 2 diabetic patients. Lalor BC, et al. **Diabetic Med** 1990 Mar–Apr;7(3):242–5
An unbiased glucose clamp method using a variable insulin infusion: its application in diabetic adolescents. Matthews DR, et al. **Diabetic Med** 1990 Mar–Apr;7(3):246–51
Decreased insulin sensitivity in offspring whose parents both have type 2 diabetes. Ramachandran A, et al. **Diabetic Med** 1990 May;7(4):331–4
Metabolic abnormalities in obese patients with impaired glucose tolerance. Robertson DA, et al. **Diabetic Med** 1990 Jan;7(1):45–9
Combination of insulin with glipizide increases peripheral glucose disposal in secondary failure type 2 diabetic patients. Simpson HC, et al. **Diabetic Med** 1990 Feb; 7(2):143–7
Glucose metabolism in a patient with insulinoma complicated by hyperosmolar non–ketotic state. Skrha J, et al. **Diabetic Med** 1990 May;7(4):361–3
Knowledge about diabetes in type 1 patients is related to metabolic control. Surawy C. **Diabetic Med** 1989 Dec; 6(9):784–6
Intramuscular versus subcutaneous injection of unmodified insulin: consequences for blood glucose control in patients with type 1 diabetes mellitus. Vaag A, et al. **Diabetic Med** 1990 May;7(4):335–42
High plasma insulin and triglyceride concentrations and blood pressure in offspring of people with impaired glucose tolerance. Zavaroni I, et al. **Diabetic Med** 1990 Jul; 7(6):494–8
Normal insulin sensitivity during the phase of glucose intolerance but insulin resistance at the onset of diabetes in the spontaneously diabetic BB rat. Baudon MA, et al. **Diabetologia** 1989 Dec;32(12):839–44
Insulin regulation of glucose and lipid metabolism in massive obesity. Del Prato S, et al. **Diabetologia** 1990 Apr; 33(4):228–36
Toxic effects of vanadium in streptozotocin–treated rats after administration of vanadate to normalize blood glucose levels [letter; comment] Domingo JL, et al. **Diabetologia** 1990 Jan;33(1):62–3 Comment on: Diabetologia 1989 Mar;32(3):185–90.
Ocular complications in the old and glucose–intolerant genetically obese (fa/fa) rat. Dosso A, et al. **Diabetologia** 1990 Mar;33(3):137–44
Action profiles of fast onset insulin analogues. Heinemann L, et al. **Diabetologia** 1990 Jun;33(6):384–6
Alcohol causes hypoglycaemic unawareness in healthy volunteers and patients with type 1 (insulin–dependent) diabetes. Kerr D, et al. **Diabetologia** 1990 Apr;33(4):216–21
No evidence for isotope discrimination of tritiated glucose tracers in measurements of glucose turnover rates in man. Koivisto VA, et al. **Diabetologia** 1990 Mar;33(3):168–73
Albuminuria in type 2 (non–insulin–dependent) diabetes mellitus and impaired glucose tolerance in Pima Indians. Nelson RG, et al. **Diabetologia** 1989 Dec;32(12):870–6
Pulsatile glucagon has greater hyperglycaemic, lipolytic and ketogenic effects than continuous hormone delivery in man: effect of age. Paolisso G, et al. **Diabetologia** 1990 May; 33(5):272–7
Enzymatic determination of 1–14C–glucose in pig plasma. Schäffer L, et al. **Diabetologia** 1989 Sep;32(9):660–2
Mechanism of glucose–induced (Na+, K+)–ATPase inhibition in aortic wall of rabbits. Simmons DA, et al. **Diabetologia** 1989 Jul;32(7):402–8
The prevalence of impaired glucose counter–regulation during an insulin–infusion test in insulin–treated diabetic patients prone to severe hypoglycaemia. Sjöbom NC, et al. **Diabetologia** 1989 Nov;32(11):818–25
Effects of insulin on kidney function and sodium excretion in healthy subjects. Skøtt P, et al. **Diabetologia** 1989 Sep; 32(9):694–9
Islet amyloid polypeptide amide causes peripheral insulin resistance in vivo in dogs. Sowa R, et al. **Diabetologia** 1990 Feb;33(2):118–20
Direct relationship of antepartum glucose control and fetal erythropoietin in human type 1 (insulin–dependent) diabetic pregnancy. Widness JA, et al. **Diabetologia** 1990 Jun; 33(6):378–83
Influence of carvedilol on blood glucose and glycohaemoglobin A1 in non–insulin–dependent diabetics. Ehmer B, et al. **Drugs** 1988;36 Suppl 6:136–40
Overt diabetes induced by overeating in neonatally STZ–treated impaired glucose tolerant mice: long–term follow up study. Hasegawa G, et al. **Endocrinol Jpn** 1989 Aug;36(4):471–9
Paradoxical reduction in pancreatic glucagon with normalization of somatostatin and decrease in insulin in normoglycemic alloxan–diabetic dogs: a putative mechanism of glucagon irresponsiveness to hypoglycemia. Rastogi KS, et al. **Endocrinology** 1990 Feb;126(2):1096–104
Enzymatic activities related to intermediary metabolism of glucose in circulating mononuclear cells from obese humans: relationship to enzyme activity in adipose tissue. Moghetti P, et al. **Enzyme** 1990;43(1):26–32
Evidence that hyperglycaemia per se does not inhibit hepatic glucose production in man. Müller MJ, et al. **Eur J Appl Physiol** 1990;60(4):293–9
Dietary salt and the glycaemic response to meals of different fibre content. Akanji AO, et al. **Eur J Clin Nutr** 1989 Oct; 43(10):699–703
Effect of fenugreek seeds on blood glucose and serum lipids in type I diabetes. Sharma RD, et al. **Eur J Clin Nutr** 1990 Apr;44(4):301–6
The effects of ingestion time of gliclazide in relationship to meals on plasma glucose, insulin and C–peptide levels. Batch J, et al. **Eur J Clin Pharmacol** 1990;38(5):465–7
Reduction of postprandial blood glucose by the alpha–glucosidase inhibitor Miglitol (BAY m 1099) in type II diabetes. Heinz G, et al. **Eur J Clin Pharmacol** 1989; 37(1):33–6
Role of the adrenal gland in the metabolic and cardiovascular effects of 8–OH–DPAT in the rat. Bouhelal R, et al. **Eur J Pharmacol** 1990 May 31;181(1–2):89–95
Effects of orchiectomy and polyestradiol phosphate therapy on serum lipoprotein lipids and glucose tolerance in prostatic cancer patients. Aro J, et al. **Eur Urol** 1990; 17(3):229–35
Carbohydrate metabolism during treatment of endometriosis with the progestin dienogest. Nikschick S, et al. **Exp Clin Endocrinol** 1989 Sep;94(1–2):211–4
Effect of insulin administered intracisternally on the glucose level of the blood and the cerebrospinal fluid in vagotomized dogs. Chowers I, et al. **Exp Neurol** 1966 Mar; 14(3):383–9
Intermediary metabolism in a lizard, Calotes versicolor: role of thyroid hormones. Jacob V, et al. **Gen Comp Endocrinol** 1990 Feb;77(2):324–36
Influence of chronic melatonin implantation on circulating levels of catecholamines, growth hormone, thyroid hormones, glucose, and free fatty acids in the pigeon. John TM, et al. **Gen Comp Endocrinol** 1990 Aug;79(2):226–32
On the role of vitamin D binding globulin in glucose homeostasis: results from the San Luis Valley Diabetes Study. Iyengar S, et al. **Genet Epidemiol** 1989;6(6):691–8
Prevention of hyperglycemia in streptozotocin–treated rats by submandibular ablation. Boros I, et al. **Horm Metab Res** 1989 Aug;21(8):460–1
Beta–endorphin, insulin, ACTH and cortisol plasma levels during oral glucose tolerance test in obesity after weight loss. Giovannini C, et al. **Horm Metab Res** 1990 Feb; 22(2):96–100
Influence of hydrocortisone acetate administered to the lactating rat on protein and lactose content in milk and serum protein, glucose and insulin levels in dams and pups. Llopis J, et al. **Horm Metab Res** 1990 Feb;22(2):71–4
Multivariable analysis of serum 3,5,3'–L–triiodothyronine concentration in patients of diabetes mellitus by blood glucose level and body weight. Yagura T, et al. **Horm Metab Res** 1990 Apr;22(4):237–40
Effects of antihypertensive treatment on glucose metabolism. An international symposium. Bühlerhöhe, November 1988. Proceedings. **Horm Metab Res Suppl** 1990;22:1–95
Significance of the Randle–Mechanism in the etiology of diabetes type II. Felber JP. **Horm Metab Res Suppl** 1990; 22:11–7 (13 ref.)
Effects of ACE–inhibition on glucose metabolism. Ferrière M, et al. **Horm Metab Res Suppl** 1990;22:65–9 (33 ref.)

Longterm effects of captopril and hydrochlorothiazide on glucose metabolism in the hypertensive patient. Lithell H, et al. **Horm Metab Res Suppl** 1990;22:74

Long-term effects of beta-blockers and Ca2+(+)-antagonists on glucose metabolism. Pollare T, et al. **Horm Metab Res Suppl** 1990;22:56

Glucose metabolism and calcium antagonists. Trost BN. **Horm Metab Res Suppl** 1990;22:48–56 (79 ref.)

Effects of alpha and beta adrenoceptor blocking drugs and ACE inhibitors on long term glucose and lipid control in hypertensive non-insulin dependent diabetics. Whitcroft IA, et al. **Horm Metab Res Suppl** 1990;22:42–6

Aerosolized insulin [letter; comment] Creasia DA, et al. **Hosp Pract [Off]** 1990 Jan 15;25(1):19 Comment on: Hosp Pract [Off] 1989 Oct 15;24(10);15–6.

A study of oral glucose tolerance test in patients of hypertension receiving propranolol. Gautam VK, et al. **Indian Heart J** 1989 Jul–Aug;41(4):261–4

Hyperglycaemic effect of verapamil—an experimental study. Srivastava VK, et al. **Indian J Exp Biol** 1990 Mar; 28(3):293–4

Effect of electroconvulsions on glucose homeostasis in rabbits. Jaju BP, et al. **Indian J Med Res** 1990 Apr; 92:128–32

On choosing babies' first feeding. Srinivasan G, et al. **Indian J Pediatr** 1989 Sep–Oct;56(5):631–3

The influence of different formula diets and different pharmaceutical formulations on the systemic availability of paracetamol, gallbladder size, and plasma glucose. Walter-Sack IE, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Nov;27(11):544–50

Blunted glucose-induced thermogenesis in 'overweight' patients: a factor contributing to relapse of obesity. Golay A, et al. **Int J Obes** 1989;13(6):767–75

Effects of BRL 35135, a beta-adrenoceptor agonist with novel selectivity, on glucose tolerance and insulin sensitivity in obese subjects. Mitchell TH, et al. **Int J Obes** 1989;13(6):757–66

Associations between regional body fat distribution, fasting plasma free fatty acid levels and glucose tolerance in premenopausal women. Pouliot MC, et al. **Int J Obes** 1990; 14(4):293–302

Ventromedial hypothalamic lesions attenuate responses of sympathetic nerves to carotid arterial infusions of glucose and insulin. Sakaguchi T, et al. **Int J Obes** 1990; 14(2):127–33

Incorporation of blood lactate and glucose into tissues in rats after short-term strenuous exercise. Hatta H, et al. **Int J Sports Med** 1989 Aug;10(4):275–8 (30 ref.)

Influence of carbohydrate ingestion on counterregulatory hormones during prolonged exercise. Mitchell JB, et al. **Int J Sports Med** 1990 Feb;11(1):33–6

Effect of training and detraining on in vivo insulin sensitivity. Nagasawa J, et al. **Int J Sports Med** 1990 Apr;11(2):107–10

Effect of an acute bout of exercise on glucose disposal in human obesity. Burstein R, et al. **J Appl Physiol** 1990 Jul; 69(1):299–304

Endurance training decreases plasma glucose turnover and oxidation during moderate-intensity exercise in men. Coggan AR, et al. **J Appl Physiol** 1990 Mar;68(3):990–6

Effect of body weight gain on insulin sensitivity after retirement from exercise training. Dolkas CB, et al. **J Appl Physiol** 1990 Feb;68(2):520–6

Glucoregulation and hormonal responses to maximal exercise in non-insulin-dependent diabetes. Kjaer M, et al. **J Appl Physiol** 1990 May;68(5):2067–74

Tissue glucose utilization during epinephrine-induced hyperglycemia. Mészáros K, et al. **J Appl Physiol** 1989 Nov;67(5):1770–5

Differences in insulin-induced glucose uptake and enzyme activity in running rats. Rodnick KJ, et al. **J Appl Physiol** 1990 Feb;68(2):513–9

Effect of 10 days of physical inactivity on glucose tolerance in master athletes. Rogers MA, et al. **J Appl Physiol** 1990 May;68(5):1833–7

Effects of training on glucose metabolism of gluconeogenesis-inhibited short-term-fasted rats. Turcotte LP, et al. **J Appl Physiol** 1990 Mar;68(3):944–54

Spontaneous remission of insulin dependent diabetes mellitus [letter] Ram S. **J Assoc Physicians India** 1989 Nov; 37(11):730

Effects of purified insulins on insulin requirement and metabolic control. Yajnik VH, et al. **J Assoc Physicians India** 1990 Apr;38(4):281–2

Effect of biofeedback assisted relaxation training on blood glucose levels in a type I insulin dependent diabetic. A case report. McGrady A, et al. **J Behav Ther Exp Psychiatry** 1990 Mar;21(1):69–75

Glucose and lipid metabolism during long-term treatment with cilazapril in hypertensive patients with or without impaired glucose metabolism. Shionoiri H, et al. **J Cardiovasc Pharmacol** 1990 Jun;15(6):933–8

Reduced regional cerebral metabolic rate for glucose at the terminal stage in a case of late infantile neuronal ceroid lipofuscinosis. Fueki N, et al. **J Child Neurol** 1990 Apr; 5(2):98–100

Stimulation of glucose metabolism in human blood cells by inhibitors of carnitine-dependent fatty acid transport. Haeckel R, et al. **J Clin Chem Clin Biochem** 1990 May; 28(5):329–33

Reduced postprandial skeletal muscle blood flow contributes to glucose intolerance in human obesity. Baron AD, et al. **J Clin Endocrinol Metab** 1990 Jun;70(6):1525–33

The modified minimal model: application to measurement of insulin sensitivity in children. Cutfield WS, et al. **J Clin Endocrinol Metab** 1990 Jun;70(6):1644–50

Effect of calcitonin on gastric emptying and on serum insulin and gastrin concentrations after ingestion of a mixed solid–liquid meal in humans. Jonderko K, et al. **J Clin Gastroenterol** 1990 Feb;12(1):22–8

Failure of substrate-induced gluconeogenesis to increase overall glucose appearance in normal humans. Demonstration of hepatic autoregulation without a change in plasma glucose concentration. Jenssen T, et al. **J Clin Invest** 1990 Aug;86(2):489–97

Effects of growth hormone-releasing hormone on the secretion of islet hormones and on glucose homeostasis in lean and genetically obese-diabetic (ob/ob) mice and normal rats. Bailey CJ, et al. **J Endocrinol** 1989 Oct; 123(1):19–24

Amylin and amylin-amide lack an acute effect on blood glucose and insulin. Ghatei MA, et al. **J Endocrinol** 1990 Feb;124(2):R9–11

Potential mechanism of insulin resistance in ageing: impaired insulin-stimulated glucose transport due to a depletion of the intracellular pool of glucose transporters in Fischer rat adipocytes. Matthaei S, et al. **J Endocrinol** 1990 Jul; 126(1):99–107

Effects of naloxone on prolactin, growth hormone and cortisol response to insulin hypoglycemia in obese subjects. Papalia D, et al. **J Endocrinol Invest** 1989 Dec; 12(11):777–82

Effect of aloes on blood glucose levels in normal and alloxan diabetic mice. Ajabnoor MA. **J Ethnopharmacol** 1990 Feb; 28(2):215–20

Effect of Zizyphus sativa leaves on blood glucose levels in normal and alloxan-diabetic rats. Anand KK, et al. **J Ethnopharmacol** 1989 Nov;27(1–2):121–7

The effects of cyclosporin A on glucose homeostasis and the kidney in the normal rat. Whiting PH, et al. **J Exp Pathol (Oxford)** 1990 Apr;71(2):245–55

Poor blood glucose regulation predicts sleep and memory deficits in normal aged rats. Stone WS, et al. **J Gerontol** 1990 Sep;45(5):B169–73

Comparison of the effects of magnesium hydroxide and a bulk laxative on lipids, carbohydrates, vitamins A and E, and minerals in geriatric hospital patients in the treatment of constipation. Kinnunen O, et al. **J Int Med Res** 1989 Sep–Oct;17(5):442–54

The predictive capability of the glycaemic response to spaghetti in non-insulin dependent (NIDDM) and insulin dependent (IDDM) diabetic subjects. Rasmussen O, et al. **J Intern Med** 1990 Aug;228(2):97–101

Dietary supplementation with n-3 fatty acids may impair glucose homeostasis in patients with non-insulin-dependent diabetes mellitus. Vessby B, et al. **J Intern Med** 1990 Aug; 228(2):165–71

Impaired glucose tolerance in Thai adults: serum insulin profiles after a 75 gram oral glucose load. Puavilai G, et al. **J Med Assoc Thai** 1989 Sep;72(9):498–505

Increased insulin secretion in subjects with impaired glucose tolerance. Puavilai G, et al. **J Med Assoc Thai** 1989 Oct; 72(10):548–52

Oral hypoglycemic agents. Discovery and structure-activity relationships of phenacylimidazolium halides. Dominianni SJ, et al. **J Med Chem** 1989 Oct;32(10):2301–6

Cerebral metabolic pattern in young adult Down's syndrome subjects: altered intercorrelations between regional rates of glucose utilization. Horwitz B, et al. **J Ment Defic Res** 1990 Jun;34 (Pt 3):237–52

The role of glucose uptake and metabolism in hyperglycemic exacerbation of neurological deficit in the paraplegic rat. LeMay DR, et al. **J Neurosurg** 1989 Oct;71(4):594–600

The effect of various thermal processes on the glycemic response to whole grain wheat products in humans and rats. Holm J, et al. **J Nutr** 1989 Nov;119(11):1631–8

Effect of age and diet on glucose tolerance in Sprague-Dawley rats. McDonald RB. **J Nutr** 1990 Jun; 120(6):598–601

Perinatal glucose metabolism as an indicator for stress and hypoxia during different forms of delivery. Nikischin W, et al. **J Perinat Med** 1990;18(3):209–13

Glucose and insulin levels after six months of treatment with a triphasic oral contraceptive containing ethinyl estradiol and norethindrone. Spellacy WN, et al. **J Reprod Med** 1989 Aug;34(8):540–2

Plasma glucose and insulin levels during the menstrual cycles of normal women and premenstrual syndrome patients. Spellacy WN, et al. **J Reprod Med** 1990 May;35(5):508–11

Glucose control and renal and retinal complications of diabetes mellitus [letter; comment] **JAMA** 1990 Aug 1; 264(5):573–4 Comment on: JAMA 1989 Feb 24;261(8):1155–60.

Effects of Acacia arabica and Caralluma edulis on blood glucose levels of normal and alloxan diabetic rabbits. Wadood A, et al. **JPMA** 1989 Aug;39(8):208–12

Effects of calcium channel blockers and hydralazine on plasma glucose levels in streptozotocin-induced diabetic rats in vivo. Sunaga K, et al. **Jpn J Pharmacol** 1990 Mar; 52(3):449–55

Positron emission tomography in epilepsy: correlative study. Hosokawa S, et al. **Jpn J Psychiatry Neurol** 1989 Sep; 43(3):349–53

Concordance and discordance between PET images and foci of scalp EEG. Iinuma K, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):379–83

Uncoupling between local cerebral glucose utilization and local cerebral blood flow in kainic acid-induced limbic seizure status. Tanaka S, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):559–60

Comparison of glycemic response and insulin requirements after mixed meals of equal carbohydrate content in healthy, type-1, and type-2 diabetic man. Schrezenmeir J, et al. **Klin Wochenschr** 1989 Oct 2;67(19):985–94

Low light level in vitro monitoring of cellular and antigen-antibody reactions using a photon detection camera system—new perspectives for clinical diagnosis and research. Wiedemann G, et al. **Klin Wochenschr** 1990 Jan 4;68(1):33–7

Modern concepts of free-fatty-acid and blood-glucose homoeostasis in diseases involving altered lipid metabolism. Jenkins DJ. **Lancet** 1967 Aug 12;2(7511):341–4

Hypoaminoacidemia caused by imipramine but not by clenbuterol is dissociable from hyperglycemia and hyperinsulinemia. Edwards DJ, et al. **Life Sci** 1990; 47(6):PL13–8

Acid–base, plasma lactate and glucose changes in the rabbit following administration of Gaboon viper (Bitis gabonica) venom. Gattullo D, et al. **Life Sci** 1989;45(20):1893–901

Norepinephrine triggers medullar epinephrine depletion during normoglycemia. Porta S, et al. **Life Sci** 1989; 45(19):1763–9

The intrinsic and interactive effects of RO 15-4513 and ethanol on locomotor activity, body temperature, and blood glucose concentration. Wood AL, et al. **Life Sci** 1989; 45(16):1467–73

Lactate and glucose electrochemical biosensors for the evaluation of the aerobic and anaerobic threshold in runners. Palleschi G, et al. **Med Biol Eng Comput** 1990 May;28(3):B25–8

Equine laminitis—another hypothesis for pathogenesis. Field JR, et al. **Med Hypotheses** 1989 Nov;30(3):203–10

Comparison of glycaemic control with human and porcine insulins—a meta-analysis [letter] Shannon AG, et al. **Med J Aust** 1990 Jan 1;152(1):49

Effects of 4 h preexercise carbohydrate feedings on cycling performance. Sherman WM, et al. **Med Sci Sports Exerc** 1989 Oct;21(5):598–604

UK Prospective Diabetes Study 7: response of fasting plasma glucose to diet therapy in newly presenting type II diabetic patients, UKPDS Group. **Metabolism** 1990 Sep; 39(9):905–12

Insulin resistance in rats with non-insulin-dependent diabetes induced by neonatal (5 days) streptozotocin: evidence for reversal following phlorizin treatment. Blondel O, et al. **Metabolism** 1990 Aug;39(8):787–93

Effects of body composition and exercise capacity on glucose tolerance, insulin, and lipoprotein lipids in healthy older men: a cross-sectional and longitudinal intervention study. Coon PJ, et al. **Metabolism** 1989 Dec;38(12):1201–9

Copper deficiency in pregnancy: effect on maternal and fetal polyol metabolites. Fields M, et al. **Metabolism** 1990 May; 39(5):531–7

Effect of interleukin-1 and tumor necrosis factor/cachectin on glucose turnover in the rat. Flores EA, et al. **Metabolism** 1990 Jul;39(7):738–43

Persistent abnormalities of the metabolism of an oral glucose load in insulin-treated type I diabetics [letter] Frayn K, et al. **Metabolism** 1990 Sep;39(9):1000–1

Abnormal regulation of intermediary metabolism after oral glucose ingestion in myotonic dystrophy. Krentz AJ, et al. **Metabolism** 1990 Sep;39(9):938–42

Chronic hyperinsulinemia decreases insulin action but not insulin sensitivity. McGuinness OP, et al. **Metabolism** 1990 Sep;39(9):931–7

Effect of metformin treatment on insulin action in diabetic rats: in vivo and in vitro correlations. Rossetti L, et al. **Metabolism** 1990 Apr;39(4):425–35

Effects of an alpha 2-adrenoceptor antagonist on glucose tolerance in the genetically obese mouse (C57BL/6J ob/ob). Saperstein R, et al. **Metabolism** 1990 May; 39(5):445–51

Visceral fat accumulation in men is positively associated with insulin, glucose, and C-peptide levels, but negatively with testosterone levels. Seidell JC, et al. **Metabolism** 1990 Sep; 39(9):897–901

Metabolic effects of continuous feeding. Wolever TM. **Metabolism** 1990 Sep;39(9):947–51

Aspartame ingestion with and without carbohydrate in phenylketonuric and normal suojects: effect on plasma concentrations of amino acids, glucose, and insulin. Wolf-Novak LC, et al. **Metabolism** 1990 Apr;39(4):391–6

Regulation of plasma lactate concentration in resting human subjects. Yki-Järvinen H, et al. **Metabolism** 1990 Aug; 39(8):859–64

Where all the glucose doesn't go in non-insulin-dependent diabetes mellitus [editorial; comment] Bogardus C, et al. **N Engl J Med** 1990 Jan 25;322(4):262–3 Comment on: N Engl J Med 1990 Jan 25;322(4):223–8.

The effect of parity on the later development of non-insulin-dependent diabetes mellitus or impaired glucose tolerance [see comments] Kritz-Silverstein D, et al. **N Engl J Med** 1989 Nov 2;321(18):1214–9 Comment in: N Engl J Med 1990 May 3;322(18):1320.

The ratio of waist-to-hip circumference, plasma insulin level, and glucose intolerance as independent predictors of the

HDL2 cholesterol level in older adults. Ostlund RE Jr, et al. **N Engl J Med** 1990 Jan 25;322(4):229–34

The quest for normoglycaemia: is it worth the effort? Mann JI. **N Z Med J** 1990 Jun 27;103(892):292–3

Beneficial effects of angiotensin-converting enzyme inhibitor on renal function and glucose homeostasis in diabetics with hypertension. Ueda Y, et al. **Nephron** 1990;55 Suppl 1:85–9

Glucose enhancement of performance on memory tests in young and aged humans. Hall JL, et al. **Neuropsychologia** 1989;27(9):1129–38

The effects of 0.8 g.kg ethanol on cerebral metabolism and mood in normal volunteers. de Wit H, et al. **NIDA Res Monogr** 1989;95:450

Metabolic effects of carnitine supplementation in subjects with low plasma carnitine levels. **Nutr Rev** 1990 Mar; 48(3):159–61

Macular blood flow response to acute reduction of plasma glucose in diabetic patients measured by the blue light entoptic technique. Davies EG, et al. **Ophthalmology** 1990 Feb;97(2):160–4

The effect of blood glucose concentration on postasphyxia cerebral hemodynamics in newborn lambs. Rosenberg AA, et al. **Pediatr Res** 1990 May;27(5):454–9

Effects of energy restriction on norepinephrine turnover and serum glucose and fatty acids in lean mice. Davis-Street JE, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):677–83

Plasma catecholamine, corticosterone and glucose responses to repeated stress in rats: effect of interstressor interval length. De Boer SF, et al. **Physiol Behav** 1990 Jun; 47(6):1117–24

Does alcohol promote reactive hypoglycemia in the rat? Larue-Achagiotis C, et al. **Physiol Behav** 1990 May; 47(5):819–23

Glycemic control of pain threshold in diabetic and control rats. Lee JH, et al. **Physiol Behav** 1990 Feb;47(2):225–30

Ambulatory activity in streptozotocin-induced diabetic rats. Shimomura Y, et al. **Physiol Behav** 1990 Jun;47(6):1153–5

Researches on the influence of some pharmacological interferences of the metabolism of icosanoids on the glycemia in rats. Nechifor M, et al. **Physiologie** 1989 Jul–Sep;26(3):213–6

Hypoglycemic effect of liposome-entrapped insulin administered by various routes into normal rats. Petkowicz J, et al. **Pol J Pharmacol Pharm** 1989 Jul–Aug; 41(4):299–304

Fasting hypoglycaemia due to insulinoma in pregnancy [letter] Akanji AO, et al. **Postgrad Med J** 1990 Feb; 66(772):156

Intra-operative blood glucose and serum insulin concentrations in the surgical management of insulinoma. Krentz AJ, et al. **Postgrad Med J** 1990 Jan;66(771):24–7

Isotopic estimation of plasma glucose conversion to plasma lactate using [6-3H]glucose and [6-14C]glucose. Nurjhan N, et al. **Proc Soc Exp Biol Med** 1989 Oct;192(1):43–6

Nervous regulation of metabolism. Niijima A. **Prog Neurobiol** 1989;33(2):135–47 (91 ref.)

PET: studies in dementia. Frackowiak RS. **Psychiatry Res** 1989 Sep;29(3):353–5 (17 ref.)

Positron emission tomography as an imaging tool in psychiatric disorders. Heiss WD, et al. **Psychiatry Res** 1989 Sep;29(3):351–2

Cerebral glucose consumption measured by PET in patients with and without psychiatric symptoms of Huntington's disease. Kuwert T, et al. **Psychiatry Res** 1989 Sep; 29(3):361–2

Cerebral involvement in systemic lupus erythematosus (SLE): comparison of positron emission tomography (PET) with other imaging methods. Meyer GJ, et al. **Psychiatry Res** 1989 Sep;29(3):367–8

Acute effects of ethanol on regional brain glucose metabolism and transport. Volkow ND, et al. **Psychiatry Res** 1990 Apr; 35(1):39–48

Comparison of metabolic control among diabetic subjects at two clinics. O'Connor PJ, et al. **Public Health Rep** 1989 Sep–Oct;104(5):478–82

Intravenous glucose tolerance and mortality in non-insulin-dependent diabetes mellitus. Coppack SW, et al. **Q J Med** 1990 May;75(277):451–60

Prognostic importance of admission plasma glucose in diabetic and non-diabetic patients with acute myocardial infarction. Sewdarsen M, et al. **Q J Med** 1989 May; 71(265):461–6

Renal hemodynamic response to galanin: importance of elevated plasma glucose. Premen AJ. **Regul Pept** 1989 Dec; 26(3):277–85

The effects of high dose inhaled beclomethasone dipropionate on glucose and lipid profiles in normal and diet controlled diabetic subjects. Ebden P, et al. **Respir Med** 1989 Jul; 83(4):289–91

Blood pressure and blood glucose—is there a link? [editorial] Rosendorff C. S **Afr Med J** 1989 Dec 16;76(12):640–2

Evidence of both decreased nuclear receptor-binding of T3 and inhibited thyroid hormone-stimulated glucose-uptake in cells from a euthyroid patient with hyperthyroxinaemia [letter] Kvetny J, et al. **Scand J Clin Lab Invest** 1990 Jun; 50(4):461–2

Relationship between plasma glucose, brain lactate, and intracellular pH during cerebral ischemia in gerbils. Combs DJ, et al. **Stroke** 1990 Jun;21(6):936–42

Effect of insulin on acute experimental cerebral ischemia in gerbils [letter; comment] Vázquez-Cruz J, et al. **Stroke** 1989 Nov;20(11):1592–3 Comment on: Stroke 1989 Mar;20(3):396–9.

Glucose turnover and gluconeogenesis from alanine in tumor-bearing animals. Lowry SF, et al. **Surg Forum** 1978; 29:140–2

Late effect of tobanum and tobanum + furosemide therapy on the glucose tolerance of patients and on the insulin response to oral glucose doses. Kempler P, et al. **Ther Hung** 1990;38(1):22–5

Glucose control after simultaneous segmental pancreas and kidney transplantation. Brons IG, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2288–9

Normal glucose metabolism and insulin secretion in CyA-treated nondiabetic renal allograft patients not receiving steroids. Cantarovich D, et al. **Transplant Proc** 1990 Apr;22(2):643–4

Endocrine function of the pancreas after transplantation: the contribution of partial pancreatectomy, systemic hormone delivery, and duct obliteration to glucose regulation by the canine pancreas. Gooszen HG, et al. **Transplant Proc** 1990 Apr;22(2):712–5

Whole versus segmental pancreas graft: two years metabolic results. La Rocca E, et al. **Transplant Proc** 1990 Apr; 22(2):653–4

Long-term glucose control after pancreatic transplantation. Tibell A, et al. **Transplant Proc** 1990 Apr;22(2):645–6

Effects of cyclosporine on glucose metabolism in kidney transplant recipients and rats. Yagisawa T, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1801–3

The glycemic index. Wolever TM. **World Rev Nutr Diet** 1990;62:120–85 (291 ref.)

Carbohydrate tolerance status in patients with myocardial infarction. Rahman MA, et al. **Z Naturforsch [C]** 1990 Jan–Feb;45(1–2):125–8

Hypocalcemia reduces rate of disappearance of glucose from plasma. Schlumbohm C, et al. **Zentralbl Veterinarmed [A]** 1990 May;37(4):285–93

[The glucose tolerance test and insulin secretion test as risk factors in liver cancer surgery] Wen TF. **Chung Hua Wai Ko Tsa Chih** 1989 Oct;27(10):597–600, 638 (Eng. Abstr.) (Chi)

[Relationship between blood glucose and serum lipoproteins in alloxan diabetic rabbit] Li XH. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Oct; 11(5):363–5 (Eng. Abstr.) (Chi)

[Effect of high carbohydrate and high fat diets on plasma glucose, insulin and lipids in normal and hypertriglyceridemic subjects] Liu B, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Jun;21(2):145–9 (Eng. Abstr.) (Chi)

[The hypoglycemic effect of clausenacoumarine] Shen ZF, et al. **Yao Hsueh Hsueh Pao** 1989;24(5):391–2 (Eng. Abstr.) (Chi)

[The effect of heart surgery during extracorporeal circulation and deep hypothermia on glucose metabolism in infants and young children] Kučera V, et al. **Cesk Pediatr** 1989 Oct;44(10):588–91 (Eng. Abstr.) (Cze)

[Blood sugar regulation and diabetic retinopathy (letter)] van der Sluijs FA. **Ned Tijdschr Geneeskd** 1989 Oct 28; 133(43):2143 (Dut)

[Diabetes mellitus in the elderly] van der Veen EA. **Tijdschr Gerontol Geriatr** 1990 Feb;21(1):7–10 (7 ref.) (Eng. Abstr.) (Dut)

[Changes in the glucose tolerance parameters in non-diabetic hypertensive patients treated with cicletanine] Clerson P, et al. **Arch Mal Coeur** 1989 Nov;82 Spec No 4:139–43 (Eng. Abstr.) (Fre)

[Abnormalities of glucose tolerance following myocardial infarction] Fredenrich A, et al. **Diabete Metab** 1990 Mar–Apr;16(2):107–9 (Fre)

[Lowering of the glycemic threshold in pituitary and adrenal response to hyperglycemia in insulinoma (letter)] Grimaldi A, et al. **Diabete Metab** 1989 Jul–Aug;15(4):209 (Fre)

[Comparative effects of couscous and pasta on glycemia in normal subjects and type I diabetics] Jamel N, et al. **Diabete Metab** 1990 Jan–Feb;16(1):37–41 (Eng. Abstr.) (Fre)

[Antidiabetic treatment and monitoring during pregnancy in diabetes] Leblanc H. **Diabete Metab** 1990;16(2 Pt 2):120–4 (26 ref.) (Eng. Abstr.) (Fre)

[Effect of glipizide on glycemic control and peripheral insulin sensitivity in type 1 diabetics] Leblanc H, et al. **Diabete Metab** 1990 Mar–Apr;16(2):93–7 (Eng. Abstr.) (Fre)

[Sugar diabetes mellitus and physical exercise] Horton ES, et al. **Journ Annu Diabetol Hotel Dieu** 1990;:335–47 (39 ref.) (Fre)

[Effect of alloxans on pancreatic B-cells with special regard to the alloxan-metal-complex theory. I. Effects of alloxan, alloxan-zinc chelates, dilauric acid and colchicine on blood sugar and rate of mitosis of B-cell Langerhans islets] Schmidt R, et al. **Acta Histochem (Jena)** 1990;88(1):29–46 (Eng. Abstr.) (Ger)

[The effect of ganglionectomy and cold exposure on the ventromedial hypothalamic nucleus, blood glucose and liver glycogen in regard to circadian rhythms] Peschke D, et al. **Anat Anz** 1990;170(3–4):237–55 (Eng. Abstr.) (Ger)

[Growth factors, carbohydrate and lipid metabolism in females with polycystic ovary syndrome] Urdl W, et al. **Arch Gynecol Obstet** 1989;245(1–4):990–2 (Ger)

[Measuring the metabolism of glucose in normal and hyperinsulinemic conditions] Reinauer H, et al. **Beitr Infusionther** 1990;25:399–411 (Ger)

[Pregnancy outcome with intensified insulin therapy in manifest diabetes] Crombach G, et al. **Geburtshilfe Frauenheilkd** 1990 Apr;50(4):263–9 (Eng. Abstr.) (Ger)

[Effect of liver passage on peripheral glucose and hormone concentrations in early postoperative enteral nutrition] Butters M, et al. **Infusionstherapie** 1990 Apr;17(2):89–92 (Eng. Abstr.) (Ger)

[Normoglycemia as a therapy goal in diabetes treatment—concept and realization] Siegel EG. **Klin Wochenschr** 1990 Mar 16;68(6):306–12 (60 ref.) (Eng. Abstr.) (Ger)

[Use of fluorodeoxyglucose PET in the diagnosis of central nervous system lupus erythematosus and a comparison with CT and MRI] Stoppe G, et al. **Nuklearmedizin** 1989 Oct; 28(5):187–92 (Eng. Abstr.) (Ger)

[Metabolic studies of gliomas with positron emission tomography and phosphorus 31 MR spectroscopy in diagnosis and treatment planning] Jeske J, et al. **Onkologie** 1989 Aug;12 Suppl 1:42–5 (Eng. Abstr.) (Ger)

[Postmortem diagnosis of fatal diabetic metabolic dyscontrol: what is the significance of cerebrospinal fluid and vitreous body total values and HbA1?] Ritz S, et al. **Pathologe** 1990 May;11(3):158–65 (Ger)

[Biochemical basis of pharmaceutical chemistry. 7. Drugs for maintenance of calcium-, fluid volume- and blood sugar homeostasis] Nuhn P. **Pharmazie** 1990 Jun;45(6):448–58 (50 ref.) (Ger)

[Comparison of several variables of metabolic, immunologic and endocrine function with personality factors in perioperative stress] Grabow L, et al. **Psychother Psychosom Med Psychol** 1990 Jun;40(6):207–15 (Eng. Abstr.) (Ger)

[Diagnosis of the diabetic metabolic status using fructosamine (and HbA1c) determination. The glycation quotient Glyc-Q, the glycation nomogram] Henrichs HR. **Wien Klin Wochenschr Suppl** 1990;180:64–9; discussion 78–81 (Eng. Abstr.) (Ger)

[Fructosamine as a parameter for monitoring carbohydrate metabolism in the treatment of diabetes mellitus] Rotmann D, et al. **Wien Klin Wochenschr Suppl** 1990;180:69–71; discussion 78–81 (Eng. Abstr.) (Ger)

[Changes in carbohydrate and lipid metabolism and modification of diabetes mellitus by hormonal contraceptives] Hopp H, et al. **Z Arztl Fortbild (Jena)** 1990; 84(1–2):31–4 (20 ref.) (Ger)

[Pathologic changes in selected laboratory parameters in patients with delirium tremens] Schmickaly R, et al. **Z Arztl Fortbild (Jena)** 1989;83(23):1171–4 (Ger)

[Hormonal changes in enteral nutrition] Schusdziarra V, et al. **Z Gastroenterol** 1989 Jun;27 Suppl 2:19–22 (Ger)

[Age as a risk factor for the development of dementias? Consideration of changes in cerebral glucose metabolism with increasing age] Hoyer S. **Z Gerontol** 1989 Jul–Aug; 22(4):206–11 (82 ref.) (Eng. Abstr.) (Ger)

[Nocturnal continuous subcutaneous insulin infusion—a therapeutic possibility in labile type I diabetes under exceptional conditions] Bruns W, et al. **Z Gesamte Inn Med** 1990 Mar 15;45(6):154–8 (Eng. Abstr.) (Ger)

[Biochemical changes in cervix mucus in stepwise malignant transformation of cervix epithelium] Elling D, et al. **Zentralbl Gynakol** 1990;112(9):555–60 (Eng. Abstr.) (Ger)

[Hormonal changes during administration of dietary fibers in patients with decreased glucose tolerance] Rinfel J, et al. **Orv Hetil** 1990 Jan 28;131(4):175–7 (25 ref.) (Eng. Abstr.) (Hun)

[Erythrocyte aggregation in subjects with alterations in glucose metabolism during the preclinical phase] Giansanti R, et al. **Ric Clin Lab** 1989;19 Suppl 1:169–71 (Ita)

[Radioimmunologic analysis of insulin (IRI) in glucose metabolism in uremic patients] Martino F, et al. **Riv Eur Sci Med Farmacol** 1989 Aug;11(4):329–39 (Eng. Abstr.) (Ita)

[The effect of glucose loading on changes in ketone and glucose metabolism during gastrectomy] Kondo U, et al. **Masui** 1990 Apr;39(4):465–72 (Eng. Abstr.) (Jpn)

[The application of the glycemic index to the treatment of diabetes mellitus in the elderly] Goriya Y, et al. **Nippon Ronen Igakkai Zasshi** 1990 Jan;27(1):57–62 (Eng. Abstr.) (Jpn)

[Assay of glycated fibrinogen in plasma as an indicator of blood glucose control] Suzuki S, et al. **Rinsho Byori** 1990 Mar;38(3):306–10 (Eng. Abstr.) (Jpn)

[Non-enzymatic protein glycosylation and its clinico-biological significance] Tomaszewski L. **Pol Tyg Lek** 1989 Jan 23;44(4):75–80 (Pol)

[Comparison of the value of the glucagon test and galactose tolerance test in the clinical diagnosis of cirrhosis] Poniewierka E. **Wiad Lek** 1990 Feb 1–15;43(3–4):107–13 (Eng. Abstr.) (Pol)

[Impairment of glucose metabolism and changes in insulin activity during open heart surgery] Meshcheriakov AV, et al. **Anesteziol Reanimatol** 1989 Sep–Oct;(5):12–8 (Eng. Abstr.) (Rus)

[Liver glycogen and glucose tolerance in rats with prenatal development under hypoglycemic conditions] Drzhevetskaia IA, et al. **Fiziol Zh SSSR** 1989 Aug; 75(8):1151–6 (Eng. Abstr.) (Rus)

[A new diagnostic index of diabetes mellitus based on the 2-dimensional parameter of glucose kinetics] Dreval' AV. **Probl Endokrinol (Mosk)** 1989 Sep-Oct;35(5):41-5 (Eng. Abstr.) **(Rus)**

[Changes in carbohydrate metabolism before and after the development of focal cerebral ischemia. III. Function of the diencephalon] Bartko D, et al. **Cesk Neurol Neurochir** 1989 May;52(3):193-200 (Eng. Abstr.) **(Slo)**

[Bopindolol does not affect normal glucose and lipid metabolism in hypertensive patients] Fedeleková V, et al. **Vnitr Lek** 1989 Sep;35(9):873-9 (Eng. Abstr.) **(Slo)**

[Effect of a dehydrated extract of nopal (Opuntia ficus indica Mill.) on blood glucose] Frati-Munari AC, et al. **Arch Invest Med (Mex)** 1989 Jul-Sep;20(3):211-6 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Influence of serum glucose on glutamate decarboxylase activity in the ventromedial nucleus of rats. Beverly JL, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):R697-703

Modulation of baroreflex by varying insulin and glucose in conscious dogs. Fitzovich DE, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):R624-33

Importance of blood glucose concentration in regulating lipolysis during fasting in humans. Klein S, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):E32-9

Memory-improving action of glucose: indirect evidence for a facilitation of hippocampal acetylcholine synthesis. Messier C, et al. **Behav Brain Res** 1990 Jul 9;39(2):135-43

Splenic responses to acute insulin-induced hypoglycaemia in humans. Fisher BM, et al. **Clin Sci** 1990 May; 78(5):469-74

Glucose disappearance rates into peripheral tissues of adult rabbits (Silvilagus floridans), Wistar rats (Rattus rattus) and sand rats (Psammomys obesus) in relation to body weight and blood glucose concentration. Schäfer H. **Comp Biochem Physiol [A]** 1990;95(2):209-13

Metabolic effects of high glucose concentrations: inhibition of hepatic pyruvate kinase. Belfiore F, et al. **Diabetes Res** 1989 Apr;10(4):183-6

Progressive increases in luminal glucose stimulate proximal sodium absorption in normal and diabetic rats. Bank N, et al. **J Clin Invest** 1990 Jul;86(1):309-16

Effects of altered glucose homeostasis on glucose transporter expression in skeletal muscle of the rat. Bourey RE, et al. **J Clin Invest** 1990 Aug;86(2):542-7

Acute changes in blood glucose affect resistance to ischemic nerve conduction failure. Parry GJ, et al. **Neurology** 1990 Jan;40(1):107-10

Adrenalectomy-induced memory deficits: role of plasma glucose levels. Hall JL, et al. **Physiol Behav** 1990 Jan; 47(1):27-33

Anxiety and cerebral cortical metabolism in normal persons. Giordani B, et al. **Psychiatry Res** 1990 Apr;35(1):49-60

[Nervous mechanisms in the regulation of blood sugar] Niijima A. **Arch Int Physiol Biochim** 1989 Aug; 97(4):A37-49 (57 ref.) (Eng. Abstr.) **(Fre)**

[Do elevated blood and cerebrospinal fluid glucose levels and other factors modify the density of cerebrospinal fluid and the spread of isobaric spinal anesthesia?] Döbler K, et al. **Reg Anasesth** 1990 Jun;13(4):101-7 (Eng. Abstr.) **(Ger)**

[Glucose regulation in diabetes mellitus (the Somogyi effect and the "dawn" phenomenon)] Duțu A, et al. **Rev Med Interna [Med Interna]** 1989 Jul-Aug;41(4):289-94 (18 ref.) **(Rum)**

[Peripheral blood indices in preoperative radiotherapy (using radiomodifiers) of lung cancer] Demidchik IuE, et al. **Med Radiol (Mosk)** 1989 Sep;34(9):49-52 **(Rus)**

[The significance of tumor size in radiotherapy using modifiers] Kozin SV, et al. **Med Radiol (Mosk)** 1990 May; 35(5):49-55 (64 ref.) **(Rus)**

[Possibility of lowering the dose of metronidazole during the irradiation of tumors using subsequent artificial hyperglycemia] Vinskaia NP, et al. **Med Radiol (Mosk)** 1989 Oct;34(10):61-5 (Eng. Abstr.) **(Rus)**

STANDARDS

Comments on the proposed revision of the oral glucose tolerance test [letter; comment] Massé J. **Clin Chem** 1990 May;36(5):819-21 Comment on: Clin Chem 1990 Jan;36(1):125-8.

BLOOD GLUCOSE SELF-MONITORING

Impact of glucose self-monitoring on glycohemoglobin values in a veteran population. Newman WP, et al. **Arch Intern Med** 1990 Jan;150(1):107-10

Patient education. Blood glucose monitoring at home. **Aust Fam Physician** 1990 Aug;19(8):1283-4

Results of intensified insulin therapy in type-I diabetics receiving instruction in self-monitoring. Dryáková M, et al. **Czech Med** 1990;13(1):1-8

Home blood glucose monitoring, glycosylated hemoglobin and fructosamine: their relationships in diabetic patients with and without residual C-peptide secretion. Brichard SM, et al. **Diabete Metab** 1989 Nov-Dec;15(6):388-93

Is glucose self-monitoring beneficial in non-insulin-treated diabetic patients? Results of a randomized comparative trial. Fontbonne A, et al. **Diabete Metab** 1989 Sep-Oct; 15(5):255-60

SMBG in NIDDM patients treated by general practitioners in France [letter] Chwalow AJ, et al. **Diabetes Care** 1990 Apr;13(4):454

Deception in diabetes research [letter; comment] Dedrick RF. **Diabetes Care** 1990 Feb;13(2):182-4 Comment on: Diabetes Care 1989 Mar;12(3):184-8.

[Errors in the reading of self-monitoring reagent strips in diabetics with dyschromatopsia (letter)] Doucet J, et al. **Presse Med** 1989 Oct 28;18(35):1756 **(Fre)**

[Home self-control of child and adolescent diabetics] Chiarelli F, et al. **Riv Eur Sci Med Farmacol** 1989 Aug; 11(4):321-7 (Eng. Abstr.) **(Fre)**

[Evaluation of diabetes knowledge in patients with insulin-dependent diabetes mellitus. Influential factors and analysis of its relation with blood glucose control] Costa Mestanza CJ, et al. **Rev Clin Esp** 1989 Jul-Aug;185(3):113-8 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

Implantable glucose monitor [news] **Anal Chem** 1989 Oct 1;61(19):1077A

Portable meters for self-monitoring of blood glucose. Thai AC. **Ann Acad Med Singapore** 1989 Jul;18(4):444-52 (90 ref.)

Misdiagnosis of gestational diabetes and hypoglycemia using portable blood glucose meters [letter] Bergman M, et al. **Arch Intern Med** 1989 Nov;149(11):2602-3

ExacTech cheating [letter] Strumph PS. **Diabetes Care** 1990 Apr;13(4):454-5

Blood glucose monitors. **Health Devices** 1988 Sep; 17(9):253-71

Blood glucose monitors. **Health Devices** 1988 Dec; 17(12):372-3

Progress in practical endocrinology. The Glucosensor Unitec Ulm—a portable monitor for continuous blood glucose measurement. Brückel J, et al. **Horm Metab Res** 1990 Jul; 22(7):382-4

Risk of cross-infection through shared diabetic devices [letter] Shalit P, et al. **JAMA** 1990 Jan 5;263(1):34-5

[Role of and current technical possibilities for intracorporeal determination of blood glucose in the treatment of insulin-dependent diabetes mellitus] Fischer U, et al. **Journ Annu Diabetol Hotel Dieu** 1990;:247-66 (77 ref.) **(Fre)**

[Developments in decision support for intensified insulin therapy] Peters A, et al. **Internist (Berl)** 1990 Mar; 31(3):218-25 (19 ref.) **(Ger)**

[Evaluation of Pen meters for blood glucose analysis in ambulatory diabetics (published erratum appears in Schweiz Med Wochenschr 1990 Mar 17;120(11):392)] Spinas GA, et al. **Schweiz Med Wochenschr** 1990 Feb 3; 120(5):125-8 (Eng. Abstr.) **(Ger)**

[The role of the TRS-Glucotest apparatus in self-monitoring by patients with diabetes mellitus] Giljević Z, et al. **Lijec Vjesn** 1989 Sep-Oct;111(9-10):344-7 (Eng. Abstr.) **(Scr)**

METHODS

GLUCOPAGE: a computer program for managing diabetic pregnancy. Bradford R, et al. **Int J Biomed Comput** 1990 Apr;25(2-3):91-9

Inpatient capillary glucose monitoring: a useful adjunct to the management of diabetes in community hospitals. Borst GC, et al. **J Ky Med Assoc** 1989 Sep;87(9):451-5

[The reliability of the blood glucose test strip "Glucosignal" in self monitoring of blood glucose by diabetic patients with diabetic retinopathy and acquired color vision disorders] Pilz D, et al. **Z Arztl Fortbild (Jena)** 1989; 83(23):1175-8 **(Ger)**

[Blood glucose self-monitoring with the Glucosignal test strip in routine practice—experiences of a district diabetes center] Groh G. **Z Gesamte Inn Med** 1990 Jan 1;45(1):12-4 (Eng. Abstr.) **(Ger)**

STANDARDS

Effects of self-monitoring of blood glucose on quality of life in elderly diabetic patients. Gilden JL, et al. **J Am Geriatr Soc** 1990 May;38(5):511-5

Reflectance meter type and management of gestational diabetes [letter] [see comments] Harmelin D, et al. **Lancet** 1990 Mar 24;335(8691):735-6 Comment in: Lancet 1990 Apr 21;335(8695):973-4.

BLOOD GROUP INCOMPATIBILITY

Bone marrow transplantation in Polish conditions. Method for removal of red cells from the transplant in the case of major blood group incompatibility. Wiktor-Jędrzejczak W, et al. **Arch Immunol Ther Exp (Warsz)** 1989; 37(3-4):261-7

Transfusion of ABO-incompatible platelets causing severe haemolytic reaction. Reis MD, et al. **Clin Lab Haematol** 1989;11(3):237-40

Plasma exchange for removal of anti-A and anti-B group antibodies in AB0 major-incompatible bone marrow transplantation. Haustein B, et al. **Folia Haematol (Leipz)** 1989;116(3-4):463-7

Transplantation of major ABO-incompatible bone marrow: removal of red cells by dextrane sedimentation. Müller A, et al. **Folia Haematol (Leipz)** 1989;116(3-4):475-9

Clinical survey of heart transplantation between ABO blood group-incompatible recipients and donors. Cooper DK. **J Heart Transplant** 1990 Jul-Aug;9(4):376-81

New approaches to living donor renal transplantation [corrected] [published erratum appears in Minn Med 1989 Nov;72(11):637] Matas AJ, et al. **Minn Med** 1989 Oct; 72(10):589-92

Cardiac transplantation from a blood group ABO-incompatible donor: a case report. Albrechtsen D, et al. **Transplant Proc** 1990 Feb;22(1):143

A clinical survey of cardiac transplantation between ABO blood group-incompatible recipients and donors. Cooper DK. **Transplant Proc** 1990 Aug;22(4):1457

ABO-incompatible living related donor criteria. Haberal M, et al. **Transplant Proc** 1990 Apr;22(2):345

[Transfusion reactions after SAG-M blood] Hansen P. **Ugeskr Laeger** 1990 Apr 23;152(17):1229-30 (Eng. Abstr.) **(Dan)**

[Compatibility problems in transfusion. Special reference to the delayed hemolytic transfusion reaction] Nordhagen R, et al. **Tidsskr Nor Laegeforen** 1990 Jun 10;110(15):1933-5 (Eng. Abstr.) **(Nor)**

BLOOD

ABO incompatible newborn infants [letter; comment] Levine DH, et al. **J Perinatol** 1990 Jun;10(2):229 Comment on: J Perinatol 1989 Jun;9(2):154-8.

[Identification of immune anti-A and anti-B antibodies] Matveeva MA, et al. **Gematol Transfuziol** 1989 Oct; 34(10):42-4 **(Rus)**

COMPLICATIONS

Pure red cell aplasia of long duration complicating major ABO-incompatible bone marrow transplantation. Gmür JP, et al. **Blood** 1990 Jan 1;75(1):290-5

Neonatal ABO incompatibility. Complicated by hemoglobinuria and acute renal failure. Merlob P, et al. **Clin Pediatr (Phila)** 1990 Apr;29(4):219-22

Acute haemolysis after ABO-incompatible platelet transfusions [letter; comment] Murphy MF, et al. **Lancet** 1990 Apr 21;335(8695):974-5 Comment on: Lancet 1990 Jan 20;335(8682):142-3.

[Neonatal thrombocytopenia caused by fetomaternal alloimmunization: clinical, immunological and therapeutic aspects] Bizzaro N. **G Clin Med** 1990 May;71(5):351-60 (70 ref.) **(Ita)**

[Hemolytic disease of the newborn due to anti-Kidd Jka sensitization during pregnancy] Mizutani T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Oct; 41(10):1587-90 **(Jpn)**

[Analysis of the causes of post-transfusion complications in the Uzbek SSR] Sakhibov IaD, et al. **Gematol Transfuziol** 1990 May;35(5):28-9 (Eng. Abstr.) **(Rus)**

[Transfusion management of a patient with multiple anti-erythrocyte antibodies (anti-c + anti-K + anti-Fyb + anti-Jkb) subjected to a valvular reoperation using extracorporeal circulation] de la Rubia J, et al. **Sangre (Barc)** 1990 Feb;35(1):78-81 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

[Transfusion of incompatible blood from the aspect of forensic serology] Klír P, et al. **Soud Lek** 1989 Aug; 34(3):33-6 (Eng. Abstr.) **(Cze)**

[Perinatal research on feto-maternal anti-Kell immunization] Gavriil P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(6):761-4 (12 ref.) (Eng. Abstr.) **(Fre)**

[Recent studies of the incidence of IgG allo-antibodies in blood transfusion recipients] Lynen R, et al. **Infusionstherapie** 1989 Dec;16(6):273-5 **(Ger)**

ETIOLOGY

Hemolytic transfusion reaction due to interdonor kell incompatibility. Report of two cases and review of the literature. Reiner AP, et al. **Arch Pathol Lab Med** 1990 Aug;114(8):862-4 (26 ref.)

The risk of an overt hemolytic transfusion reaction following the use of an immediate spin crossmatch. Shulman IA. **Arch Pathol Lab Med** 1990 Apr;114(4):412-4

[Cases of immunization of Rh-positive recipients of the CCDee group with erythrocyte antigens] Morokov VA. **Gematol Transfuziol** 1990 May;35(5):30-1 **(Rus)**

[Significance of blood groups in surgical practice] Dutkevich IG, et al. **Vestn Khir** 1989 Jun;142(6):92-5 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

ABC of transfusion. Immunological complications of transfusion. Contreras M, et al. **BMJ** 1990 Jan 20; 300(6718):173-6 (0 ref.)

Antibody to blood group glycosyltransferases in a patient transplanted with an ABO incompatible bone marrow. Kominato Y, et al. **Exp Clin Immunogenet** 1990;7(2):85-90

ABO incompatibility and platelet transfusion [editorial] [see comments] **Lancet** 1990 Jan 20;335(8682):142-3 Comment in: Lancet 1990 Apr 21;335(8695):974-5.

ABO incompatible blood transfusion. Bacon JM, et al. **Pathology** 1989 Jul;21(3):181-4

Temporary suppression of Kidd system antigen expression

accompanied by transient production of anti-Jk3. Issitt PD, et al. **Transfusion** 1990 Jan;30(1):46–50

[Diagnostic and therapeutic possibilities in incompatibility processes] Kozlowski P. **Ginekologe** 1990 Jun;23(3):172–7 (42 ref.) **(Ger)**

PATHOLOGY

[ABO incompatibility: on immunohistochemistry of fatal transfusion reactions] Pedal I, et al. **Pathologe** 1990 May; 11(3):143–7 **(Ger)**

PREVENTION & CONTROL

Autologous transfusions. Perkins HA. **Adv Intern Med** 1990; 35:221–33 (38 ref.)

[The problem of homologous blood in transfusiology and its solution] Sumbatov LA, et al. **Gematol Transfuziol** 1989 Oct;34(10):12–4 (Eng. Abstr.) **(Rus)**

SURGERY

Liver transplantation across ABO blood group barriers. Gugenheim J, et al. **Lancet** 1990 Sep 1;336(8714):519–23

BLOOD GROUPING AND CROSSMATCHING

Identification of a subset of group B donors reactive with monoclonal anti-A reagent. Beck ML, et al. **Am J Clin Pathol** 1989 Nov;92(5):625–9

Availability of immunostaining methods for identification of mixed-up tissue specimens. Ota M, et al. **Am J Clin Pathol** 1989 Nov;92(5):665–9

Clinically significant anti-A1 in blood group A2 patients [letter] Pereira A, et al. **Am J Clin Pathol** 1989 Nov; 92(5):709–10

Hemolytic transfusion reaction due to interdonor kell incompatibility. Report of two cases and review of the literature. Reiner AP, et al. **Arch Pathol Lab Med** 1990 Aug;114(8):862–4 (26 ref.)

The risk of an overt hemolytic transfusion reaction following the use of an immediate spin crossmatch. Shulman IA. **Arch Pathol Lab Med** 1990 Apr;114(4):412–4

Blood ordering for haematemesis. Kohn MR, et al. **Aust N Z J Surg** 1990 May;60(5):351–4

Transfusion of ABO-mismatched platelets leads to early platelet refractoriness. Carr R, et al. **Br J Haematol** 1990 Jul;75(3):408–13

The Rh-negative donor. Contreras M, et al. **Clin Lab Haematol** 1989;11(4):317–22

The status of alpha and beta haemolysins in Nigerian blood donors. Emeribe AO. **East Afr Med J** 1990 Mar;67(3):205–8

Biochemical heterozygosity and morphological variability: interpopulational versus intrapopulational analyses. Comuzzie AG, et al. **Hum Biol** 1990 Feb;62(1):101–12

Do we need to cross-match blood in closed fractures of the shaft of the femur? Cope AR, et al. **Injury** 1989 Jan; 20(1):27–8

The collaborative study on typing group-specific component in casework bloodstains. Westwood SA, et al. **J Forensic Sci Soc** 1990 Jan–Feb;30(1):33–8

The collaborative study on typing group-specific component by eight forensic science laboratories. Westwood SA, et al. **J Forensic Sci Soc** 1989 May–Jun;29(3):173–83

X-ray film digestion: a semi-quantitative assay for proteolytic enzymes used in immunohaematology. Giles JM, et al. **Med Lab Sci** 1990 Jul;47(3):195–8

Blood typing errors on U.S. Army identification (ID) cards and tags [letter; comment] Gaydos JC, et al. **Milit Med** 1990 Apr;155(4):A19 Comment on: Milit Med 1989 May;154(5):273–4.

Beyond ABO and D antigen matching: how far and for whom? Blumberg N. **Transfusion** 1990 Jul–Aug;30(6):482–4

Prenatal and perinatal immunohematology: recommendations for serologic management of the fetus, newborn infant, and obstetric patient. Judd WJ, et al. **Transfusion** 1990 Feb; 30(2):175–83

The relative utility of the autologous control and the antiglobulin test phase of the crossmatch. Perkins JT, et al. **Transfusion** 1990 Jul–Aug;30(6):503–7

When should antibody screening tests be done for recently transfused patients? Shulman IA, et al. **Transfusion** 1990 Jan;30(1):39–41

Invalidation of antiglobulin tests by a high thermal amplitude cryoglobulin. Ylagen ES, et al. **Transfusion** 1990 Feb; 30(2):154–7

Donor-specific T cell alloreactivity in relation to 1 haplotype-mismatched blood transfusion prior to living-donor renal transplantation. Bakran A, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):748–9

The importance of sharing major histocompatibility complex and minor antigens between blood and graft donors in the blood transfusion effect. Peugh WN, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):744–5

Early postoperative monitoring of natural anti-A and anti-B isoantibodies in ABO-incompatible living donor renal allografts. Reding R, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):1989–90

Detrimental effect of ABO mismatching in renal transplantation. Stock P, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 1):711–2

Characterization of lymphocytotoxic antibodies causing a positive crossmatch in renal transplantation. Relationship to primary and regraft outcome. Taylor CJ, et al. **Transplantation** 1989 Dec;48(6):953–8

Platelet crossmatching for kidney transplants by flow cytometry. Wang GX, et al. **Transplantation** 1989 Dec; 48(6):959–61

Report on the fourth ISBT/ICSH platelet serology workshop (London 1988). Metcalfe P, et al. **Vox Sang** 1990; 58(2):170–5

Deceptively low morbidity from failure to practice safe blood transfusion: an analysis of serious blood transfusion errors. Murphy WG, et al. **Vox Sang** 1989;57(1):59–62

Massive transfusion in adults. Diagnoses, survival and blood bank support. Sawyer PR, et al. **Vox Sang** 1990; 58(3):199–203

[The use of anti-A, anti-B and anti-AB monoclonal antibodies in a blood transfusion center. Preliminary results] Micali C, et al. **Minerva Med** 1989 Oct;80(10):1079–81 (Eng. Abstr.) **(Ita)**

[Preparation of partially fixed erythrocytes and its application for immunohematologic examination] Saga K. **Nippon Hoigaku Zasshi** 1990 Apr;44(2):147–62 (Eng. Abstr.) **(Jpn)**

[Blood groups] Uchikawa M. **Nippon Rinsho** 1990 Feb;48 Suppl:791–7 **(Jpn)**

[Blood type and screen for crossmatch] Taniwaki K. **Rinsho Byori** 1989 Jul;37(7):745–9 (Eng. Abstr.) **(Jpn)**

[Compatibility problems in transfusion. Special reference to the delayed hemolytic transfusion reaction] Nordhagen R, et al. **Tidsskr Nor Laegeforen** 1990 Jun 10;110(15):1933–5 (Eng. Abstr.) **(Nor)**

[Unsuitable formulation of guidelines on preoperative blood grouping] Högman C, et al. **Lakartidningen** 1990 Jan 31; 87(5):281 **(Swe)**

INSTRUMENTATION

[Introduction of a new card for the "bedside test" (published erratum appears in Anaesthesist 1990 Jun;39(6):340)] Meinshausen E, et al. **Anaesthesist** 1989 Oct;38(10):555–7 (Eng. Abstr.) **(Ger)**

METHODS

Monoclonal blood group antibodies. Voak D. **Beitr Infusionther** 1989;24:200–13 (24 ref.)

ABC of transfusion. Testing before transfusion, and blood ordering policies [published erratum appears in BMJ 1990 Mar 10;300(6725):672] Contreras M, et al. **BMJ** 1989 Dec 9;299(6713):1446–9 (0 ref.)

Safety of the abbreviated cross-match in association with sensitive serum screening. Dodsworth H. **Clin Lab Haematol** 1989;11(3):249–53

Monoclonal antibodies in ABO serology: an evaluation. Odeigah PG. **East Afr Med J** 1989 Nov;66(11):764–8

First results with Capture-P, a solid phase immunoassay for the detection of platelet antibodies. Mayr WR, et al. **Folia Haematol (Leipz)** 1989;116(3–4):459–61

A sensitive enzyme-linked immunosorbent assay used to differentiate type AB specimen from a mixture of type A and type B specimens. Sato M, et al. **Forensic Sci Int** 1990 Jul;46(3):231–42

Platelet crossmatching with Capture P: clinical relevance. Böck M, et al. **Infusionstherapie** 1989 Aug;16(4):183–5

An improved method for complement subcomponent C1R typing. Kamboh MI, et al. **J Forensic Sci** 1990 Jan; 35(1):190–2

Gm/Km typing of bloodstains in U-bottom microtiter plates. Moniri M. **J Forensic Sci** 1990 Jan;35(1):181–5

A modification of the microplate method for reverse ABO typing of bloodstains and additional validation studies. Mudd JL, et al. **J Forensic Sci** 1990 Mar;35(2):447–51

Relative indices of efficiency [letter] Laux DL, et al. **J Forensic Sci Soc** 1990 May–Jun;30(3):135–6

6-phosphogluconate dehydrogenase typing from dried bloodstains—under Indian conditions. Sachdeva MP, et al. **Med Sci Law** 1989 Oct;29(4):337–40

Applicability of an immuno-microsphere technique for a forensic identification of ABO blood types: the use of fluorescent microspheres. Maeda H. **Nippon Hoigaku Zasshi** 1989 Aug;43(4):322–7

Determination of ABO blood groups from saliva and saliva stains by an indirect enzyme-linked immunosorbent assay (ELISA) using monoclonal antibodies. Takizawa N, et al. **Nippon Hoigaku Zasshi** 1989 Aug;43(4):294–302

Solid phase platelet crossmatching versus complement dependent lymphocytotoxicity—clinical utility. Lane D, et al. **Prog Clin Biol Res** 1990;337:59–62

The gel test: a new way to detect red cell antigen-antibody reactions. Lapierre Y, et al. **Transfusion** 1990 Feb; 30(2):109–13

Group A variants defined with a monoclonal anti-A reagent. Lau P, et al. **Transfusion** 1990 Feb;30(2):142–5

The relative utility of the autologous control and the antiglobulin test phase of the crossmatch. Perkins JT, et al. **Transfusion** 1990 Jul–Aug;30(6):503–7

Evaluation of the polyethylene glycol–indirect antiglobulin test for routine compatibility testing. Slater JL, et al. **Transfusion** 1989 Oct;29(8):686–8

Percutaneous umbilical blood sampling and umbilical vein transfusions. Rapid serologic differentiation of fetal blood from maternal blood. Steiner EA, et al. **Transfusion** 1990 Feb;30(2):104–8

Solid-phase antiglobulin test for screening and identification of red cell antibodies. Uthemann H, et al. **Transfusion** 1990 Feb;30(2):114–6

Human monoclonal anti-D with reactivity against category DVI cells used in blood grouping and determination of the incidence of the category DVI phenotype in the DU population. Leader KA, et al. **Vox Sang** 1990;58(2):106–11

Differences in substrate specificities for cysteine proteinases used in blood group serology, and the use of bromelain in a two-phase inhibitor technique. Ogasawara K, et al. **Vox Sang** 1989;57(1):72–6

Factor B subtyping in sera and bloodstains by isoelectric focusing and immunoblotting. Kido A, et al. **Z Rechtsmed** 1990;103(5):345–9

Gc in bloodstains. Rand S, et al. **Z Rechtsmed** 1990; 103(6):453–6

[Screening for irregular erythrocyte antibodies] Herzog P. **Cas Lek Cesk** 1989 Mar 24;128(13):407–9 (Eng. Abstr.) **(Cze)**

[Sensitivity of various study technics in blood stains] Förster R, et al. **Arch Kriminol** 1990 May–Jun;185(5–6):150–62 (Eng. Abstr.) **(Ger)**

[Specimen preparation for ABO determination of various kinds of blood stains] Lötterle J, et al. **Arch Kriminol** 1989 Jul–Aug;184(1–2):38–47 (Eng. Abstr.) **(Ger)**

[Typing of stored, hemolyzed blood samples by DNA fingerprinting] Roewer L, et al. **Arch Kriminol** 1989 Sep–Oct;184(3–4):103–7 (Eng. Abstr.) **(Ger)**

[Methodologic variants of DNA blood stain analysis: extraction in agarose and digoxigenin marking] Prinz M, et al. **Beitr Gerichtl Med** 1989;47:175–9 (Eng. Abstr.) **(Ger)**

[Quantitative determinations of Hp, Pi, Tf and GC in stored blood stains] Schwerd W, et al. **Z Rechtsmed** 1989; 102(8):531–4 (Eng. Abstr.) **(Ger)**

[Ultramicroassay of red cell group using Terasaki-plate] Kuwao F, et al. **Rinsho Byori** 1990 Feb;38(2):213–9 (Eng. Abstr.) **(Jpn)**

[Experience with blood typing of active donors at the Rhesus Laboratory of the Sverdlovsk District Station of Blood Transfusion] Skuditskil AE. **Gematol Transfuziol** 1990 Apr; 35(4):34–5 **(Rus)**

[The problem of homologous blood in transfusiology and its solution] Sumbatov LA, et al. **Gematol Transfuziol** 1989 Oct;34(10):12–4 (Eng. Abstr.) **(Rus)**

[Establishment of a group classification of isolated cells using anti-A and anti-B monoclonal antibodies] Druz' AF, et al. **Sud Med Ekspert** 1989 Jul–Sep;32(3):42–3 (Eng. Abstr.) **(Rus)**

[Critical analysis of the routine use of the direct antiglobulin test in 22,517 cross-matching tests] López J, et al. **Sangre (Barc)** 1990 Feb;35(1):15–7 (Eng. Abstr.) **(Spa)**

VETERINARY

Behavior of animal blood in blood typing systems. Isoelectric focusing of erythrocyte acid phosphatase and phosphoglucomutase. Stowell LI, et al. **J Forensic Sci** 1989 Sep;34(5):1095–103

BLOOD GROUPS

see related
CONSANGUINITY
COOMBS' TEST
ISOANTIBODIES
ISOANTIGENS
PATERNITY

Genetic structure of three Naikpod subpopulations of Andhra Pradesh, India. Muralidhar B, et al. **Am J Phys Anthropol** 1989 Sep;80(1):41–7

Blood group antigen expression in dysplasia and adenocarcinoma of the prostate. Perlman EJ, et al. **Am J Surg Pathol** 1990 Sep;14(9):810–8

Structural similarities between ganglioside GM1 and antigens of the P2 phenotype [letter; comment] Meyer MA, et al. **Ann Neurol** 1989 Nov;26(5):693–4 Comment on: Ann Neurol 1989 May;25(5):511–3.

The relationship of blood-group type to American cutaneous leishmaniasis. Esterre P, et al. **Ann Trop Med Parasitol** 1989 Aug;83(4):345–8

Influence of the blood group reactive substances in saliva on the aggregation of Streptococcus rattus. Ligtenberg AJ, et al. **Antonie Van Leeuwenhoek** 1990 Feb;57(2):97–107

Hemolytic transfusion reaction due to interdonor kell incompatibility. Report of two cases and review of the literature. Reiner AP, et al. **Arch Pathol Lab Med** 1990 Aug;114(8):862–4 (26 ref.)

Intrauterine transfusion for anti-Duffy(Fya) haemolytic disease. Cook SG, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 Pt 1):263–4

Postnatal development of rat colon epithelial cells is associated with changes in the expression of the beta 1,4-N-acetylgalactosaminyltransferase involved in the synthesis of Sda antigen of alpha 2,6-sialyltransferase activity towards N-acetyl-lactosamine. Dall'Olio F, et al. **Biochem J** 1990 Sep 1;270(2):519–24

Frequency of Mg, Nya, Sc 2 and Wra antigens and antibodies in central Slovakia. Calkovská Z, et al. **Biomed Biochim Acta** 1990;49(4):301–4

Evidence that several high-frequency human blood group antigens reside on phosphatidylinositol-linked erythrocyte membrane proteins. Telen MJ, et al. **Blood** 1990 Apr 1; 75(7):1404–7

Bleeding time, blood groups and von Willebrand factor. Caekebeke-Peerlinck KM, et al. **Br J Haematol** 1989 Oct; 73(2):217–20

Hypertension, diabetes mellitus, and blood groups in benign prostatic hypertrophy. Bourke JB, et al. **Br J Urol** 1966 Feb;38(1):18–23

Binding specificity of the combining site of cholera toxin for human erythrocytes. Sugii S. **Can J Microbiol** 1990 Jun;36(6):452–4

Expression of UDP-GalNAc:NeuAc alpha 2,3Gal beta-R beta 1,4(GalNAc to Gal) N-acetylgalactosaminyltransferase involved in the synthesis of Sda antigen in human large intestine and colorectal carcinomas. Malagolini N, et al. **Cancer Res** 1989 Dec 1;49(23):6466–70

Blood group antigen expression in developing pancreas and in induced pancreatic cancer cells in Syrian hamsters. Takiyama Y, et al. **Carcinogenesis** 1990 Apr;11(4):577–82

Benign hyperphosphatasemia. Kricka LJ, et al. **Clin Chem** 1990 Feb;36(2):389

Plasmodium vivax interaction with the human Duffy blood group glycoprotein: identification of a parasite receptor-like protein. Wertheimer SP, et al. **Exp Parasitol** 1989 Nov;69(4):340–50

Blood group, secretor status and susceptibility to bacterial meningitis. Blackwell CC, et al. **FEMS Microbiol Immunol** 1989 Jun;1(6–7):351–6 (27 ref.)

HLA antigens, blood groups and serum protein groups in patients with intermittent claudication. Norrgård O, et al. **Hum Hered** 1989;39(4):192–5

The study of tasters and non-tasters of phenyl-thio-carbamide (PTC) and its relation to blood groups. Bhatkar RS, et al. **Indian J Physiol Pharmacol** 1989 Jul-Sep;33(3):168–70

The Dr hemagglutinin, afimbrial adhesins AFA-I and AFA-III, and F1845 fimbriae of uropathogenic and diarrhea-associated Escherichia coli belong to a family of hemagglutinins with Dr receptor recognition. Nowicki B, et al. **Infect Immun** 1990 Jan;58(1):279–81

Frequencies of feline blood groups in the United States. Giger U, et al. **J Am Vet Med Assoc** 1989 Nov 1;195(9):1230–2

Leprosy and blood groups [letter; comment] Shankar A, et al. **J Assoc Physicians India** 1989 May;37(5):350 Comment on: J Assoc Physicians India 1987 Nov;35(11):803.

A simple theoretical treatment of a competitive enzyme-linked immunosorbent assay (ELISA) and its application to the detection of human blood group antigens. Chapman V, et al. **J Immunol Methods** 1990 Jul 20; 131(1):91–8

Cancer family syndrome: cytogenetic investigations, in vitro tetraploidy, and biomarker studies in a large family. Guanti G, et al. **J Med Genet** 1990 Jul;27(7):441–5

Expression of blood group antigen-related carbohydrates by human gingival epithelia. Mackenzie IC, et al. **J Periodont Res** 1989 Sep;24(5):289–97

Macroscopic changes seen in human erythrocytes heated in a suspension and the resulting effect on their blood group activity. Maeda H, et al. **Nippon Hoigaku Zasshi** 1989 Aug; 43(4):287–93

Role of blood groups as prognostic factors in primary breast cancer. Costantini M, et al. **Oncology** 1990;47(4):308–12

The Nobel lectures in immunology. The Nobel Prize for Physiology or Medicine, 1930, awarded to Karl Landsteiner. 'In recognition of his discovery of human blood groups' [classical article] **Scand J Immunol** 1990 Jul; 32(1):1–12

P blood group and proneness to urinary tract infection in Japanese children. Tomisawa S, et al. **Scand J Infect Dis** 1989;21(4):403–8

Overrepresentation of blood group non-secretors in adults with renal scarring. Jacobson SH, et al. **Scand J Urol Nephrol** 1990;24(2):145–50

Relationship between blood groups and bladder tumors. Kvist E, et al. **Scand J Urol Nephrol** 1989;23(4):279–81

UMC, another Cromer-related blood group antigen. Daniels GL, et al. **Transfusion** 1989 Nov-Dec;29(9):794–7

Anti-Sc1 in pregnancy. Kaye T, et al. **Transfusion** 1990 Jun; 30(5):439–40

The Kell blood group system: a review. Marsh WL, et al. **Transfusion** 1990 Feb;30(2):158–67 (40 ref.)

Red cell antigens and renal transplantation. Duguid JK, et al. **Transplantation** 1990 Aug;50(2):265–7

Blood group terminology 1990. The ISBT Working Party on Terminology for Red Cell Surface Antigens. **Vox Sang** 1990;58(2):152–69 (42 ref.)

[Blood group phenotyping and their application in Taiwan] Yung CH, et al. **Chung Hua I Hsueh Tsa Chih** 1989 May; 43(5):345–54 (Eng. Abstr.) **(Chi)**

[Revised definition of the concept rhesus-negative blood donor; practical experiences] van Rhenen DJ, et al. **Ned Tijdschr Geneeskd** 1990 May 19;134(20):1005–7 (Eng. Abstr.) **(Dut)**

[A new case of allo-anti-LWab] Taliano V, et al. **Rev Fr Transfus Hemobiol** 1989 Oct;32(5):337–43 (Eng. Abstr.) **(Fre)**

[Experience with blood typing of active donors at the Rhesus Laboratory of the Sverdlovsk District Station of Blood Transfusion] Skuditskii AE. **Gematol Transfuziol** 1990 Apr; 35(4):34–5 **(Rus)**

[Epidemiology of multiple sclerosis in the health region of Alcoy: influence of the blood group (letter)] Martín R, et al. **Neurologia** 1989 Oct;4(8):301–2 **(Spa)**

GENETICS

Blood genetic markers in the Chinese of two eastern provinces. Saha N. **Am J Phys Anthropol** 1989 Nov; 80(3):295–303

21st International Conference on Animal Blood Groups and Biochemical Polymorphisms. Turin, Italy, 4–8 July 1988. Invited papers. **Anim Genet** 1989;20(3):324–50

21st International Conference on Animal Blood Groups and Biochemical Polymorphisms. Turin, Italy, 4–8 July 1988. Abstracts. **Anim Genet** 1989;20 Suppl 1:1–115

Blood groups and biochemical polymorphism in the Namaqua sheep breed. Clarke SW, et al. **Anim Genet** 1989; 20(3):279–86

Linkage relationships among 20 genetic markers in cattle. Evidence for linkage between two pairs of blood group systems: B-Z and S-F/V respectively. Georges M, et al. **Anim Genet** 1990;21(2):95–105

Linkage between the expressed hypervariable gene locus PUM and the gene coding for the Duffy blood group FY. Swallow DM, et al. **Ann Hum Genet** 1988 Oct;52 (Pt 4):269–71

Frequency of types in the Hp, Gc and Gm serum systems and acid phosphatase of erythrocytes in the Greek population. Schlesinger D, et al. **Arch Immunol Ther Exp (Warsz)** 1971;19(5):679–87

Effect of phosphatidylserine on the shape of McLeod red cell acanthocytes. Redman CM, et al. **Blood** 1989 Oct; 74(5):1826–35

A linkage study of malignant hyperthermia (MH). Bender K, et al. **Clin Genet** 1990 Mar;37(3):221–5

Genetic studies of type 2 (non-insulin-dependent) diabetes mellitus: lack of association with seven genetic markers. Iyengar S, et al. **Diabetologia** 1989 Sep;32(9):690–3

Hereditary factors in Takayasu disease. II. Various blood types. Numano F, et al. **Exp Clin Immunogenet** 1986; 3(1):20–7

Recent advances in the study of associations between infection and genetic markers. Mourant AE. **FEMS Microbiol Immunol** 1989 Jun;1(6–7):317–9

Demonstration of incompatible mother-child pairs in PGM1 and Duffy systems in a three-generation family from the upper Silesia (Poland). Raczek E. **Forensic Sci Int** 1990 Feb;44(2–3):143–9

Linkage between the Colton blood group locus and ASSP11 on chromosome 7. Zelinski T, et al. **Genomics** 1990 Apr; 6(4):623–5

The blood-group frequencies of European peoples, and racial origins. 1940 [classical article] Haldane JB. **Hum Biol** 1989 Oct-Dec;61(5–6):667–90; discussion 691–702

Bulgarian Jews in Israel: genetic blood markers. Red-cell antigens, serum proteins and red-cell isozymes. Nevo S, et al. **Hum Hered** 1989;39(6):333–44

Distribution of blood groups in Korea. Ohkura K, et al. **Hum Hered** 1989;39(4):223–9

Purification of H gene-encoded beta-galactoside alpha 1——2 fucosyltransferase from human serum. Sarnesto A, et al. **J Biol Chem** 1990 Sep 5;265(25):15067–75

Search for consanguinity within and among families of patients with trichothiodystrophy associated with xeroderma pigmentosum. Nuzzo F, et al. **J Med Genet** 1990 Jan;27(1):21–5

Inbreeding effects on average heterozygosity in the Sudan. Saha N, et al. **Jinrui Idengaku Zasshi** 1989 Sep;34(3):225–9

Monoclonal antibody specific for chicken blood group A antigens. Fulton JE, et al. **Prog Clin Biol Res** 1989; 307:213–9

Blood group gene frequencies of four population groups in the western Cape. May RM, et al. **S Afr Med J** 1989 Dec 16;76(12):647–50

Differential reactions of HLA typing sera with cells homozygous for crossreacting antigens. Gantan ZP, et al. **Transfusion** 1990 Sep;30(7):631–3

Evidence for genetic linkage between the KEL and YT blood group loci. Coghlan G, et al. **Vox Sang** 1989;57(1):88–9

Heterogeneity of anti-U [letter; comment] Issitt PD. **Vox Sang** 1990;58(1):70–1 Comment on: Vox Sang 1989;56(1):62.

Coexpression of sialosyl-Tn (NeuAc alpha 2——6GalNAc alpha 1——O-Ser/Thr) and Tn (GalNAc alpha 1——O-Ser/Thr) blood group antigens on Tn erythrocytes. Kjeldsen T, et al. **Vox Sang** 1989;57(1):81–7

Exclusion of unassigned blood group system loci from the regulator of complement activation gene cluster on chromosome 1q32. Lewis M, et al. **Vox Sang** 1989; 57(3):210–2

Genetic evidence that the gene controlling Aub is located on chromosome 19. Zelinski T, et al. **Vox Sang** 1990; 58(2):126–8

Genetic studies in four populations of the northern Aegean Sea, Greece. Schliwa R, et al. **Z Morphol Anthropol** 1989; 78(1):89–106

[Duffy blood groups and HLA antigens in hereditary motor-sensory neuropathy] Nevšímalová S, et al. **Cesk Neurol Neurochir** 1989 Oct;52(6):409–16 (Eng. Abstr.) **(Cze)**

[Assessment of apparent non-maternity using individual specific gene probes] Fischer G, et al. **Wien Klin Wochenschr** 1990 May 11;102(10):309–11 (Eng. Abstr.) **(Ger)**

[Hemolyzing antibodies to markers of the P blood factor system as a problem in blood transfusion and pregnancy. With reference to serology, biochemistry and genetics] Pausch V, et al. **Wien Klin Wochenschr** 1990 Feb 2; 102(3):80–90 (Eng. Abstr.) **(Ger)**

[Use of DNA polymorphism in forensic paternity evaluation] Henke L, et al. **Z Rechtsmed** 1990;103(4):235–48 (Eng. Abstr.) **(Ger)**

[Local geographic variability of genic frequency of blood groups used in calculating paternity probability] Giorgetti R, et al. **Boll Soc Ital Biol Sper** 1989 Sep;65(9):807–13 (Eng. Abstr.) **(Ita)**

[Genetic markers of erythrocytes among the subpopulations of Komi] Morokov VA. **Gematol Transfuziol** 1989 Oct; 34(10):24–7 (Eng. Abstr.) **(Rus)**

[Blood groups of great gerbils (Rhombomys opimus Licht.) as an indicator of population resistance to infections] Ergaliev KKh, et al. **Genetika** 1990 Jan;26(1):103–8 (Eng. Abstr.) **(Rus)**

[The results of international comparative testing of reagents to swine serum protein allotypes conducted in 1987–1988] Ermolaev VI, et al. **Genetika** 1990 May;26(5):956–7 (Eng. Abstr.) **(Rus)**

[Genetics of human populations of Caucasus: distribution of various immunological and biochemical markers in eastern Georgia] Nasidze IS, et al. **Genetika** 1990 May;26(5):936–45 (Eng. Abstr.) **(Rus)**

[Genetic characteristics of the Yakut aboriginal cattle and its hybrids] Ukhanov SV, et al. **Genetika** 1990 Mar; 26(3):525–30 (Eng. Abstr.) **(Rus)**

[Phenotypical features of a heterogeneous group of frequently ill children] Mozalevskii AF. **Tsitol Genet** 1989 Jul-Aug;23(4):30–6 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Serum volumes should not be reduced when testing neonates for unexpected red cell antibodies. Cordle DG, et al. **Am J Clin Pathol** 1990 Feb;93(2):267–9

Vel isoimmunization in pregnancy. Stiller RJ, et al. **Am J Obstet Gynecol** 1990 Apr;162(4):1071–2

Ontogeny and expression of chicken A blood group antigens. Fulton JE, et al. **Anim Genet** 1990;21(1):47–57

An unusual case of isoimmunization by D, Cellano (k) and Duffy (Fyb) antigens. Chojnacka-Jachimiak I, et al. **Arch Immunol Ther Exp (Warsz)** 1971;19(5):585–91

Anti-I antibodies in human milk. Dzierżkowa-Borodej W, et al. **Arch Immunol Ther Exp (Warsz)** 1971;19(5):609–12

A rare case of embryonic chimerism in human twins. Osińska M, et al. **Arch Immunol Ther Exp (Warsz)** 1971;19(5):657–65

Z/Z antigen as a result of interaction of two identical allelic genes of the Z blood group system in cattle. Węgrzyn J, et al. **Arch Immunol Ther Exp (Warsz)** 1971;19(5):717–20

Monoclonal blood group antibodies. Voak D. **Beitr Infusionther** 1989;24:200–13 (24 ref.)

Relationship of the human erythrocyte Wrb antigen to an interaction between glycophorin A and band 3. Telen MJ, et al. **Blood** 1990 Aug 15;76(4):842–8

Anti-Bra antibodies in the French population. [letter] Bierling P, et al. **Br J Haematol** 1989 Nov;73(3):428–9

Gangliosides and sialoglycoproteins carrying a rare blood group antigen determinant, Cad, associated with human cancers as detected by specific monoclonal antibodies. Hiraiwa N, et al. **Cancer Res** 1990 Sep 1;50(17):5497–503

Neonatal hematemesis: use of red blood cell antigens to differentiate maternal from fetal blood. Okstein CJ, et al. **Clin Pediatr (Phila)** 1989 Dec;28(12):589–90

Antigenic determinants of human C4, Rodgers and Chido. Giles CM. **Exp Clin Immmunogenet** 1988;5(2–3):99–114 (73 ref.)

Influence of P blood group phenotype on susceptibility to urinary tract infection. Lomberg H, et al. **FEMS Microbiol Immunol** 1989 Jun;1(6–7):363–70

Relationship between secretion of the Anton blood group antigen in saliva and adherence of Haemophilus influenzae to oropharynx epithelial cells. van Alphen L, et al. **FEMS Microbiol Immunol** 1989 Jun;1(6–7):357–62

Bile duct antibodies crossreacting with blood group antigens in primary sclerosing cholangitis. Jeffrey GP, et al. **Gut** 1990 Jun;31(6):698–701

Quantitation of Ina blood group antigens. Dumasia AN, et al. **Indian J Med Res** 1990 Feb;92:50–3

Lack of detectable blood groups in domestic ferrets: implications for transfusion. Manning DD, et al. **J Am Vet Med Assoc** 1990 Jul 1;197(1):84–6

Comparative studies on the expression of gastrointestinal-cancer-associated antigen, PA8–15, CA19–9 and the blood-group antigens in non-malignant and malignant human pancreatic tissues. Egami H, et al. **J Cancer Res Clin Oncol** 1990;116(4):365–71

Enzyme-linked immunosorbent assay for Shiga toxin and Shiga-like toxin II using P1 glycoprotein from hydatid cysts. Acheson DW, et al. **J Infect Dis** 1990 Jan; 161(1):134–7

Expression of Forssman glycolipid and blood group-related antigens A, Le(x), and Le(y) in human gastric cancer and in fetal tissues. Uemura K, et al. **Jpn J Exp Med** 1989 Dec; 59(6):239–49

Effect of race and blood group on the immune response to bacterial polysaccharide and conjugate vaccines [letter] [see comments] Cryz SJ Jr, et al. **Lancet** 1989 Dec 23–30; 2(8678–8679):1533–4 Comment in: Lancet 1990 Apr 28;335(8696):1034.

A study of the P blood group system in the Singaporean population. Mohan TC, et al. **Singapore Med J** 1989 Aug; 30(4):372–5

Incidence of red cell antibodies after multiple blood transfusion. Fluit CR, et al. **Transfusion** 1990 Jul–Aug; 30(6):532–5

Temporary suppression of Kidd system antigen expression accompanied by transient production of anti–Jk3. Issitt PD, et al. **Transfusion** 1990 Jan;30(1):46–50

Solid–phase antiglobulin test for screening and identification of red cell antibodies. Uthemann H, et al. **Transfusion** 1990 Feb;30(2):114–6

Expression of blood group antigens including HLA markers on human liver allografts. Gugenheim J, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):223–5

Blood group–active surface molecules of the human red blood cell. Anstee DJ. **Vox Sang** 1990;58(1):1–20 (183 ref.)

Evidence that the Auberger blood group antigens are located on the Lutheran glycoproteins. Daniels G. **Vox Sang** 1990; 58(1):56–60

Haemolytic disease of the newborn due to anti–k [letter] Duguid JK, et al. **Vox Sang** 1990;58(1):69

A novel human alloantibody in the Gerbich system. McShane K, et al. **Vox Sang** 1989;57(3):205–9

A private red cell antigen, Jones, causing haemolytic disease of the newborn. Reid M, et al. **Vox Sang** 1989;57(1):77–80

An erythrocyte glycoprotein of apparent Mr 60,000 expresses the Sc1 and Sc2 antigens. Spring FA, et al. **Vox Sang** 1990; 58(2):122–5

Relationship of Inb antigen to other antigens on In(Lu)–related p80. Telen MJ, et al. **Vox Sang** 1990; 58(2):118–21

[Screening for irregular erythrocyte antibodies] Herzog P. **Cas Lek Cesk** 1989 Mar 24;128(13):407–9 (Eng. Abstr.) **(Cze)**

[Monoclonal antibodies against erythrocyte antigens. Present status] Májský A. **Vnitr Lek** 1989 Dec;35(12):1158–63 (Eng. Abstr.) **(Cze)**

[Perinatal research on feto–maternal anti–Kell immunization] Gavriil P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(6):761–4 (12 ref.) (Eng. Abstr.) **(Fre)**

[Blood groups] Uchikawa M. **Nippon Rinsho** 1990 Feb;48 Suppl:791–7 **(Jpn)**

[Hemolytic disease of the newborn due to anti–Kidd Jka sensitization during pregnancy] Mizutani T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Oct; 41(10):1587–90 **(Jpn)**

[Severe aplastic anemia accompanied with abnormality of T cell subset and appearance of anti–BI antibody] Inada T, et al. **Rinsho Ketsueki** 1989 Aug;30(8):1314–8 (Eng. Abstr.) **(Jpn)**

[Anti–G antibodies from the RH system. I. Diagnostic antibodies and their clinical significance] Kuśnierz–Alejska G. **Acta Haematol Pol** 1989 Jul–Dec;20(2):223–8 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Binding of the blood group–reactive lectins to human adult kidney specimens. Laitinen L, et al. **Anat Rec** 1990 Jan; 226(1):10–7

Purification of Shiga toxin and Shiga–like toxins I and II by receptor analog affinity chromatography with immobilized P1 glycoprotein and production of cross–reactive monoclonal antibodies. Donohue–Rolfe A, et al. **Infect Immun** 1989 Dec;57(12):3888–93

Characterization of a neuraminidase from Corynebacterium aquaticum responsible for Th polyagglutination. Sondag–Thull D, et al. **Vox Sang** 1989;57(3):193–8

BLOOD PLASMA see **PLASMA**

BLOOD PLASMA VOLUME see **PLASMA VOLUME**

BLOOD PLATELET COUNT see **PLATELET COUNT**

BLOOD PLATELET DISORDERS

Platelets in health and disease. **Hematol Oncol Clin North Am** 1990 Feb;4(1):1–317

BLOOD

An integrin receptor on normal and thrombasthenic platelets that binds thrombospondin. Lawler J, et al. **Blood** 1989 Nov 1;74(6):2022–7

The origin of the membrane convolute in degranulating platelets. A comparative study of normal and "gray" platelets. Morgenstern E, et al. **Blut** 1990 Jan;60(1):15–22

The common pathway for alpha– and gamma–thrombin–induced platelet activation is independent of GPIb: a study of Bernard–Soulier platelets. Jandrot–Perrus M, et al. **Br J Haematol** 1990 Jul; 75(3):385–92

Decreased stability and structural heterogeneity of the residual platelet glycoprotein IIb/IIIa complex in a variant of Glanzmann's thrombasthenia. Modderman PW, et al. **Br J Haematol** 1989 Dec;73(4):514–21

Variation in surface platelet glycoprotein Ib expression in Bernard–Soulier syndrome. Poulsen LO, et al. **Haemostasis** 1990;20(3):155–61

Studies on platelet protein phosphorylation in patients with impaired responses to platelet agonists. Speiser–Ellerton S, et al. **J Lab Clin Med** 1990 Jan;115(1):104–11

A variant of Glanzmann's thrombasthenia characterized by abnormal glycoprotein IIb/IIIa complex formation. Fournier DJ, et al. **Thromb Haemost** 1989 Nov 24; 62(3):977–83

Analysis of platelet cytoskeleton assembly during platelet activation in Hermansky–Pudlak syndrome and thrombasthenia. Fujimura K, et al. **Thromb Haemost** 1990 Feb 19;63(1):103–11

Aggregation to thrombin and collagen of platelets from a Glanzmann thrombasthenic patient lacking glycoproteins IIb and IIIa. McGregor L, et al. **Thromb Haemost** 1989 Nov 24;62(3):962–7

Platelet membrane defects in fawn hooded bleeder rats. Kirchmaier CM, et al. **Thromb Res** 1990 Feb 1;57(3):353–60

Aequorin–detected calcium changes in stimulated thrombasthenic platelets. Aggregation–dependent calcium movement in response to ADP. Lecompte T, et al. **Thromb Res** 1990 Jun 15;58(6):561–70

[Membrane glycoproteins of human platelets: structures, functions, and abnormalities in Glanzmann's thrombasthenia and Bernard–Soulier syndrome] Ando Y, et al. **Rinsho Byori** 1989 Dec;37(12):1344–52 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Primary pulmonary hypertension in a patient with a familial platelet storage pool disease: role of serotonin. Herve P, et al. **Am J Med** 1990 Jul;89(1):117–20

Migraine: the platelet hypothesis after 10 years. Hanington E. **Biomed Pharmacother** 1989;43(10):719–26 (50 ref.)

Simultaneous occurrence of grey platelet syndrome and idiopathic pulmonary fibrosis: a role for abnormal megakaryocytes in the pathogenesis of pulmonary fibrosis? Facon T, et al. **Br J Haematol** 1990 Apr;74(4):542–3

Early presence of activated ('exhausted') platelets in malignant tumors (breast adenocarcinoma and malignant melanoma). Mannucci PM, et al. **Eur J Cancer Clin Oncol** 1989 Oct;25(10):1413–7

A pigmentary purpuric eruption associated with an unusual platelet dysfunction. Brozena SJ, et al. **Int J Dermatol** 1989 Oct;28(8):537–8

Acquired platelet dysfunction with eosinophilia: review of seven adult cases. Lim SH, et al. **J Clin Pathol** 1989 Sep; 42(9):950–2

Spontaneous spinal epidural hematoma with associated platelet dysfunction from excessive garlic ingestion: a case report. Rose KD, et al. **Neurosurgery** 1990 May;26(5):880–2

[A case of surgical excision of intracerebral cavernous angioma in a patient with thrombasthenia] Miyagawa Y, et al. **No Shinkei Geka** 1990 Feb;18(2):205–8 (Eng. Abstr.) **(Jpn)**

[Availability of DDAVP in hemostasis control for the breast tumor resection in a patient with thrombasthenia (type II)] Ohishi K, et al. **Rinsho Ketsueki** 1990 Apr;31(4):468–73 (Eng. Abstr.) **(Jpn)**

[The system of regulation of blood coagulation in girls with juvenile uterine hemorrhage] Kokolina VF, et al. **Pediatriia** 1990;(5):68–70 **(Rus)**

CONGENITAL

Congenital disorders of platelet function. Rao AK. **Hematol Oncol Clin North Am** 1990 Feb;4(1):65–86 (138 ref.)

Characterization of platelet cytoplasmic Ca2+ mobilization in patients with congenital cyclo–oxygenase deficiency and with defective platelet aggregation to A23187. Fuse I, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec;52(8):1522–33

DIAGNOSIS

Platelet storage pool deficiency: diagnosis in patients with prolonged bleeding times and normal platelet aggregation. Israels SJ, et al. **Br J Haematol** 1990 May;75(1):118–21

Differentiation between Bernard–Soulier syndrome and immune thrombocytopenia by immunostaining of peripheral blood. Poulsen LO, et al. **J Clin Pathol** 1989 Dec;42(12):1296–7

Malondialdehyde formation by blood platelets: a diagnostic test to assess acetylsalicylic acid induced thrombocytopathy? Hovinga JK, et al. **Thromb Res** 1990 Jul 1;59(1):89–95

DRUG THERAPY

Use of DDAVP in inherited and acquired platelet dysfunction. DiMichele DM, et al. **Am J Hematol** 1990 Jan;33(1):39–45

[Application of DDAVP for hemostatic control in platelet dysfunctions] Hattori A. **Rinsho Ketsueki** 1990 Jan; 31(1):1–9 (45 ref.) **(Jpn)**

ETIOLOGY

Thrombocytopathy due to a defect of the platelet membrane complex. Canizares C, et al. **Acta Haematol (Basel)** 1990; 83(2):99–104

Platelet abnormalities in hepatobiliary diseases. Glassman AB. **Ann Clin Lab Sci** 1990 Mar–Apr;20(2):119–22 (7 ref.)

Acquired platelet dysfunction in patients with uremia. Carvalho AC. **Hematol Oncol Clin North Am** 1990 Feb; 4(1):129–43 (102 ref.)

[The induction of an acquired storage pool deficiency of the thrombocytes by IgG antibodies in systemic lupus erythematosus and chronic polyarthritis] Falke S, et al. **Z Rheumatol** 1990 Mar–Apr;49(2):70–6 (Eng. Abstr.) **(Ger)**

[Thrombocytic diseases in generalized myasthenia gravis and their correction by using plasmapheresis and administration of anti– immunoglobulin antisera] Shimkevich LL, et al. **Zh Nevropatol Psikhiatr** 1989;89(11):47–50 (Eng. Abstr.) **(Rus)**

GENETICS

Structural defects in inherited and giant platelet disorders. White JG. **Adv Hum Genet** 1990;19:133–234 (243 ref.)

Pathophysiological significance of integrin expression by vascular endothelial cells. van Mourik JA, et al. **Biochem Pharmacol** 1990 Jan 15;39(2):233–9

Identification of an abnormal gene for the GPIIIa subunit of the platelet fibrinogen receptor resulting in Glanzmann's thrombasthenia. Bray PF, et al. **Blood** 1990 Feb 15; 75(4):881–8

Evidence that an abnormality in the glycoprotein Ib alpha gene is not the cause of abnormal platelet function in a family with classic Bernard–Soulier disease. Finch CN, et al. **Blood** 1990 Jun 15;75(12):2357–62

Nonsense mutation in the glycoprotein Ib alpha coding sequence associated with Bernard–Soulier syndrome. Ware J, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):2026–30

May–Hegglin anomaly (a presentation of a family). Gökalp A, et al. **Turk J Pediatr** 1989 Apr–Jun;31(2):167–71

[Genetic markers and thrombin reaction in a family of Bernard–Soulier syndrome] Shimamoto Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Nov;52(7):1155–8 (Eng. Abstr.) **(Jpn)**

METABOLISM

The clinical significance of platelet membrane glycoproteins. McEver RP. **Hematol Oncol Clin North Am** 1990 Feb; 4(1):87–105 (134 ref.)

[The platelet fibrinogen receptor: a model for the analysis of cellular adhesion mechanisms and their modification in pathology] Pidard D. **Pathol Biol (Paris)** 1989 Dec; 37(10):1107–13 (33 ref.) (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

A new congenital platelet abnormality characterized by spontaneous platelet aggregation, enhanced von Willebrand factor platelet interaction, and the presence of all von Willebrand factor multimers in plasma. Casonato A, et al. **Blood** 1989 Nov 1;74(6):2028–33

Glanzmann's thrombasthenia: the spectrum of clinical disease. George JN, et al. **Blood** 1990 Apr 1;75(7):1383–95 (119 ref.)

Variant Bernard–Soulier syndrome type bolzano. A congenital bleeding disorder due to a structural and functional abnormality of the platelet glycoprotein Ib–IX complex. De Marco L, et al. **J Clin Invest** 1990 Jul; 86(1):25–31

PREVENTION & CONTROL

Preservation of platelet function during trimethaphan infusion. Hines R. **Anesthesiology** 1990 May;72(5):834–7

[The effect of vitamins A, E, C, P and PP on blood coagulation in experimental thromboplastinemia] Bysheskii ASh, et al. **Vopr Pitan** 1989 Nov–Dec;(6):50–2 (Eng. Abstr.) **(Rus)**

THERAPY

Transfusion of infants with activation of erythrocyte T antigen. Williams RA, et al. **J Pediatr** 1989 Dec; 115(6):949–53

VETERINARY

Functional and morphological studies on blood platelets in a thrombasthenic horse. Sutherland RJ, et al. **Aust Vet J** 1989 Nov;66(11):366–70

Preliminary studies of a platelet function disorder in Simmental cattle. Searcy GP, et al. **Can J Vet Res** 1990 Jun;54(3):394–6

Absent platelet aggregation with normal fibrinogen binding in basset hound hereditary thrombopathy. Patterson WR, et al. **Thromb Haemost** 1989 Nov 24;62(3):1011–5

BLOOD PLATELET NUMBER see **PLATELET COUNT**

BLOOD PLATELETS

see related
PLATELET ACTIVATION
PLATELET ADHESIVENESS
PLATELET AGGREGATION
PLATELET COUNT
PLATELET FUNCTION TESTS

Platelet surface–bound IgG and platelet–specific IgG in plasma in childhood thrombocytopenia. Donnér M, et al. **Acta Paediatr Scand** 1990 Mar;79(3):328–34

Platelet infusion–related echocardiographic contrast. Monsuez JJ, et al. **Am J Cardiol** 1990 Jul 15;66(2):244

Availability of 111In–labeled platelet scintigraphy in patients with postinfarction left ventricular aneurysm. Tsuda T, et al. **Ann Nucl Med** 1989 Mar;3(1):15–24

A method for the determination of circulating aggregated platelets and its application to patients in the course of unstable angina. Fuchs J, et al. **Arch Pathol Lab Med** 1990 Jan;114(1):43–9

Dynamic monitoring of platelet deposition on severely

damaged vessel wall in flowing blood. Effects of different stenoses on thrombus growth. Lassila R, et al. **Arteriosclerosis** 1990 Mar-Apr;10(2):306-15

Concentration profiles of platelet-sized latex beads for conditions relevant to hollow-fiber hemodialyzers. Waters CM, et al. **Artif Organs** 1990 Feb;14(1):7-13

Rapid blood platelet activation: continuous- and quenched-flow versus stopped-flow approaches [letter] Jones GD, et al. **Biochem J** 1990 Jan 1;265(1):305-7

Platelet deposition studies on copolyether urethanes modified with poly(ethylene oxide). Brinkman E, et al. **Biomaterials** 1990 Apr;11(3):200-5

Development of a combined storage medium for 7-day storage of platelet concentrates and 42-day storage of red cell concentrates. Heaton WA, et al. **Br J Haematol** 1990 Jul;75(3):400-7

Cryopreservation of human platelets with propane-1,2-diol. Arnaud FG, et al. **Cryobiology** 1990 Apr;27(2):130-6

The role of platelets in blood-aqueous barrier breakdown induced by anterior chamber paracentesis in the rabbit. Latour E, et al. **Curr Eye Res** 1989 Nov;8(11):1105-10

The PhastSystem equipment used for crossed immunoelectrophoresis combined with immunoblotting of coprecipitated monoclonal antibodies as studied with platelet membrane receptor proteins. Solum NO, et al. **Electrophoresis** 1989 Nov;10(11):752-8

Detection of prosthetic valve thrombosis using 111indium platelet imaging. Acar J, et al. **Eur Heart J** 1990 May; 11(5):389-98

Megakaryocyte colony-stimulating factor and thrombopoiesis. Murphy MJ Jr. **Hematol Oncol Clin North Am** 1989 Sep;3(3):465-78 (135 ref.)

Mechanisms of arterial thrombosis in nonparallel streamlines: platelet thrombi grow on the apex of stenotic severely injured vessel wall. Experimental study in the pig model. Badimon L, et al. **J Clin Invest** 1989 Oct;84(4):1134-44

Refractoriness to platelet transfusion after single-donor consecutive platelet transfusions and its relationship to platelet antibodies. Lee M, et al. **J Korean Med Sci** 1988 Dec;3(4):143-9

The use of indium-111 oxine platelet scintigraphy and survival studies in pediatric patients with thrombocytopenia. Castle VP, et al. **J Nucl Med** 1989 Nov; 30(11):1819-24

Splenic dynamics of indium-111-labeled platelets in idiopathic thrombocytopenic purpura (ITP) [letter; comment] Peters AM, et al. **J Nucl Med** 1990 Mar; 31(3):383-5 Comment on: J Nucl Med 1989 Sep;30(9):1546-9.

Platelet-rich plasma reduces postoperative blood loss after cardiopulmonary bypass. DelRossi AJ, et al. **J Thorac Cardiovasc Surg** 1990 Aug;100(2):281-6

Storage of haemonetics V50 derived platelets for five days. Rock G, et al. **Prog Clin Biol Res** 1990;337:1-5

Platelet changes with in vivo exposure to prosthetic arterial surfaces. Clagett GP, et al. **Surg Forum** 1978;29:226-9

Cryopreservation of human platelets with 1.4 m glycerol at -75 degrees C in PVC blood packs. Arnaud FG, et al. **Thromb Res** 1990 Mar 15;57(6):919-24

Radiolabelling of platelets with technetium-99m. Sundrehagen E, et al. **Thromb Res** 1990 Mar 1;57(5):737-45

Unacceptable platelet counts and pH in PVC blood bags [letter; comment] Heinz R. **Transfusion** 1989 Nov-Dec; 29(9):827-9 Comment on: Transfusion 1989 Feb;29(2):159-64.

Evaluation of platelets prepared by apheresis and stored for 5 days. In vitro and in vivo studies. Shanwell A, et al. **Transfusion** 1989 Nov-Dec;29(9):783-8

Effect of white cells on platelets during storage. Sloand EM, et al. **Transfusion** 1990 May;30(4):333-8

Preliminary investigations on the effects of a Strongylus vulgaris larval extract, mononuclear factors and platelet factors on equine smooth muscle cells in vitro. Morgan SJ, et al. **Vet Res Commun** 1989;13(6):479-89

The platelet storage capability of different plastic containers. Wallvik J, et al. **Vox Sang** 1990;58(1):40-4

[Relation of blood platelets and the cause of bronchial asthma] Xiao HS. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Oct;9(10):635-6 (12 ref.) **(Chi)**

[Comparison of methods of cryopreservation of blood platelets] Gašová Z. **Vnitr Lek** 1990 Apr;36(4):387-90 (Eng. Abstr.) **(Cze)**

[Mechanical plasmapheresis by means of the Haemonetics-ultralite- plasma collection system: 2. Generation of platelet-rich plasma] Richter E, et al. **Folia Haematol (Leipz)** 1990;117(1):127-33 (Eng. Abstr.) **(Ger)**

[Prostaglandins released from the isolated perfused arterial segment and vasocontractile response—influence of plasma constituents and platelets] Michibayashi T. **Nippon Heikatsukin Gakkai Zasshi** 1989 Feb;25(1):31-8 (Eng. Abstr.) **(Jpn)**

[A simulator for training clinical laboratory workers in the estimation of erythrocytes, leukocytes, and platelets] Batkov IuV, et al. **Lab Delo** 1989;(9):38-9 **(Rus)**

[Studies of aggregation using pairs of agonists in platelet concentrates stored for 5 days. Influence of autologous fresh plasma] Espinosa JI, et al. **Sangre (Barc)** 1990 Jun; 35(3):185-8 (Eng. Abstr.) **(Spa)**

ANALYSIS

Inhibition of platelet-derived mitogen release by nitric oxide (EDRF). Barrett ML, et al. **Agents Actions** 1989 Jun; 27(3-4):488-91

An evaluation of a solid phase red cell adherence test for detecting platelet-associated IgG in immune thrombocytopenia. Jones CD, et al. **Am J Clin Pathol** 1990 Apr;93(4):552-4

Measurement of platelet von Willebrand factor is dependent on method of platelet isolation. Solymoss S, et al. **Am J Clin Pathol** 1990 Mar;93(3):400-3

The platelet count in Kawasaki syndrome [letter; comment] Barton LL, et al. **Am J Dis Child** 1990 Jun;144(6):617-8 Comment on: Am J Dis Child 1990 Jan;144(1):19-20.

Type II H von Willebrand disease: new structural abnormality of plasma and platelet von Willebrand factor in a patient with prolonged bleeding time and borderline levels of ristocetin cofactor activity. Federici AB, et al. **Am J Hematol** 1989 Dec;32(4):287-93

Precise quantitation of PAIgG: a new radiometric microtechnique. Schwartz KA, et al. **Am J Hematol** 1990 Mar;33(3):167-76

Platelet catecholamine contents are cumulative indexes of sympathoadrenal activity. Chamberlain KG, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):E141-7

Altered platelet alpha 2-adrenergic receptor binding sites in borderline personality disorder. Southwick SM, et al. **Am J Psychiatry** 1990 Aug;147(8):1014-7

Quantitation of paf-acether by release of endogenous platelet serotonin assessed by liquid chromatography with electrochemical detection. Bossant MJ, et al. **Anal Biochem** 1989 Nov 1;182(2):419-23

Determination of epsilon (gamma-glutamyl)lysine crosslink in proteins using phenylisothiocyanate derivatization and high-pressure liquid chromatographic separation. Tarcsa E, et al. **Anal Biochem** 1990 Apr;186(1):135-40

Molecular cloning of smg p21B and identification of smg p21 purified from bovine brain and human platelets as smg p21B. Matsui Y, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):1010-6

Actin-binding ability of the protein with the molecular weight of 47,000 phosphorylated during platelet activation. Sasaki A, et al. **Biochem Int** 1989 Oct;19(4):737-44

Purification and characterization of a major phosphatidylserine-binding phosphoprotein from human platelets. Burgener R, et al. **Biochem J** 1990 Aug 1; 269(3):729-34

The identification of sarcoplasmic reticulum terminal cisternae proteins in platelets. Fischer TH, et al. **Biochem J** 1989 Oct 15;263(2):605-8

Use of fluo-3 to measure cytosolic Ca2+ in platelets and neutrophils. Loading cells with the dye, calibration of traces, measurements in the presence of plasma, and buffering of cytosolic Ca2+. Merritt JE, et al. **Biochem J** 1990 Jul 15;269(2):513-9

Purification and partial characterization of human platelet calcium-binding proteins. Munkonge FM, et al. **Biochem Soc Trans** 1990 Jun;18(3):471-2

Partial purification of the 5-hydroxytryptophan-reuptake system from human blood platelets using a citalopram-derived affinity resin. Biessen EA, et al. **Biochemistry** 1990 Apr 3;29(13):3349-54

Organization of the gene for platelet glycoprotein IIb. Heidenreich R, et al. **Biochemistry** 1990 Feb 6; 29(5):1232-44

Rapid purification and characterization of human platelet glycoprotein V: the amino acid sequence contains leucine-rich repetitive modules as in glycoprotein Ib. Shimomura T, et al. **Blood** 1990 Jun 15;75(12):2349-56

Selenium and vitamin E status of healthy and institutionalized elderly subjects: analysis of plasma, erythrocytes and platelets. Campbell D, et al. **Br J Nutr** 1989 Jul;62(1):221-7

Manganese content of the cellular components of blood. Milne DB, et al. **Clin Chem** 1990 Mar;36(3):450-2

Platelet cytosolic free calcium before and after antihypertensive treatment in perinephritis hypertension of the rabbit. Barr SM, et al. **Clin Exp Hypertens [A]** 1989; 11(4):633-48

Alterations in beta-adrenergic sensitivity and platelet alpha 2-adrenoceptors in obese women: effect of exercise and caloric restriction. Berlin I, et al. **Clin Sci** 1990 Jan; 78(1):81-7

A cross-sectional study of basal platelet intracellular free calcium concentration in normotensive and hypertensive primigravid pregnancies. Kilby MD, et al. **Clin Sci** 1990 Jan;78(1):75-80

Flow-cytometric detection of surface membrane alterations and concomitant changes in the cytoskeletal actin status of activated platelets. Tschoepe D, et al. **Cytometry** 1990; 11(5):652-6

Protein composition in resting and activated platelets of type I diabetic patients. Maresca M, et al. **Diabete Metab** 1989 Sep-Oct;15(5):242-6

Platelet function in nephrotic syndrome patients at the Kenyatta National Hospital. Kayima JK, et al. **East Afr Med J** 1990 Feb;67(2):109-12

The use of PhastSystem crossed immunoelectrophoresis with immunoblotting to demonstrate a complex between glycoprotein Ib and the actin-binding protein (ABP) of human platelets. Aakhus AM, et al. **Electrophoresis** 1989 Nov;10(11):758-61

Purification of a vasodilator-regulated phosphoprotein from human platelets. Halbrügge M, et al. **Eur J Biochem** 1989 Oct 20;185(1):41-50

Characterization of purified pp60c-src protein tyrosine kinase from human platelets. Reuter C, et al. **Eur J Biochem** 1990 Jun 20;190(2):343-50

Identification of multiple ral gene products in human platelets that account for some but not all of the platelet Gn-proteins. Bhullar RP, et al. **FEBS Lett** 1990 Jan 15; 260(1):48-52

Is oxytocin present in platelets? Helmerhorst FM, et al. **Gynecol Endocrinol** 1989 Sep;3(3):249-54

Platelet ionic calcium and serum total calcium in essential hypertension. Chandra M, et al. **Indian J Exp Biol** 1990 Jan;28(1):96-7

Electrophoresis pattern of the human platelet subpopulation proteins. Nubile G, et al. **Ital J Biochem** 1989 Jul-Aug; 38(4):283A-284A

Purification and structural analysis of a latent form of transforming growth factor-beta from rat platelets. Okada F, et al. **J Biochem (Tokyo)** 1989 Aug;106(2):304-10

Purification and enzymatic characterization of pp60c-src from human platelets [published erratum appears in J Biol Chem 1990 Aug 15;265(23):14056] Feder D, et al. **J Biol Chem** 1990 May 15;265(14):8205-11

Purification, identification, and characterization of two GTP-binding proteins with molecular weights of 25,000 and 21,000 in human platelet cytosol. One is the rap1/smg21/Krev-1 protein and the other is a novel GTP-binding protein. Nagata K, et al. **J Biol Chem** 1989 Oct 15;264(29):17000-5

Thrombospondin forms complexes with single-chain and two-chain forms of urokinase [published erratum appears in J Biol Chem 1990 Sep 15;265(26):16025] Silverstein RL, et al. **J Biol Chem** 1990 Jul 5;265(19):11289-94

High-performance liquid chromatographic determination of 3',5'-cyclic adenosine monophosphate in human platelets. DePetrillo PB, et al. **J Chromatogr** 1990 May 18; 527(2):421-7

Determination of 4-cyano-5,5-bis(4-methoxyphenyl)-4-pentenoic acid in human plasma and platelets by gas chromatography-mass spectrometry. Yamano Y, et al. **J Chromatogr** 1990 Jun 8;528(1):199-207

Platelet and plasma serotonin in patients with liver cirrhosis. Marasini B, et al. **J Clin Chem Clin Biochem** 1989 Jul; 27(7):419-21

Basal platelet intracellular free calcium concentrations in untreated hypertensive patients and normotensive controls. Barr SM, et al. **J Hum Hypertens** 1989 Aug;3(4):263-6

Cholesterol:phospholipid ratio is elevated in platelet plasma membrane in patients with hypertension. Benjamin N, et al. **J Hum Hypertens** 1990 Jun;4(3):273-6

Platelet cyclic AMP in essential hypertensive and normotensive offspring. Mazeaud MM, et al. **J Hypertens Suppl** 1989 Dec;7(6):S148-9

Properties of alpha 2-adrenoceptors in human myometrium and kidney: similarities with human platelets, but differences in the rat kidney. Motomura S, et al. **J Hypertens Suppl** 1989 Dec;7(6):S50-1

Modification of rat platelet fatty acid composition by dietary lipids of animal and vegetable origin. Piché LA, et al. **J Nutr** 1990 May;120(5):444-9

Platelet angiotensin II binding sites in hypertension in pregnancy [letter] [see comments] Baker PN, et al. **Lancet** 1989 Nov 11;2(8672):1151 Comment in: Lancet 1990 Jan 27;335(8683):225-6.

Platelet serotonin levels and gonadal hormones in rats. Čičin-Sain L, et al. **Life Sci** 1989;45(20):1885-92

Platelet prostaglandin E1 hyposensitivity in schizophrenia: reduction of prostaglandin E1- or forskolin-stimulated cyclic AMP response in platelets. Ofuji M, et al. **Life Sci** 1989;45(22):2135-40

Partial separation of platelet and placental adenosine receptors from adenosine A2-like binding protein. Zolnierowicz S, et al. **Mol Pharmacol** 1990 Apr;37(4):554-9

Platelet vasopressin receptor in patients with chronic renal failure. Inaba K, et al. **Nippon Jinzo Gakkai Shi** 1989 Oct; 31(10):1079-84

Diurnal concordance of human platelet serotonin content and plasma alpha-1-acid glycoprotein concentration. Meyerson LR, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):1043-7

Platelet coagulation factor XIa-inhibitor, a form of Alzheimer amyloid precursor protein. Smith RP, et al. **Science** 1990 Jun 1;248(4959):1126-8

Protease nexin-II (amyloid beta-protein precursor): a platelet alpha-granule protein. Van Nostrand WE, et al. **Science** 1990 May 11;248(4956):745-8

Extraction of protein-bound ATP and ADP from human platelets in plasma. Beurling-Harbury C, et al. **Thromb Haemost** 1990 Apr 12;63(2):286-90

On the slow in vitro inhibition of tissue plasminogen activator in plasma and platelet lysates [letter] Felding P, et al. **Thromb Haemost** 1989 Jun 30;61(3):539

Ouabain enhances basal and stimulus-induced cytoplasmic calcium concentrations in platelets. Lees AD, et al. **Thromb Haemost** 1989 Nov 24;62(3):1000-5

Isolation and characterization of human blood platelet mRNA and construction of a cDNA library in lambda gt11. Confirmation of the platelet derivation by identification of GPIb coding mRNA and cloning of a GPIb coding cDNA insert. Wicki AN, et al. **Thromb Haemost** 1989 Jun 30;61(3):448-53

Dose responses in platelet fatty acid composition, aggregation and prostanoid metabolism during moderate freshwater fish diet. Agren JJ, et al. **Thromb Res** 1990 Feb 15;57(4):565–75

Comparison and functional characterization of C-CAM, glycoprotein IIb/IIIa and integrin beta 1 in rat platelets. Hansson M, et al. **Thromb Res** 1990 Apr 1;58(1):61–73

Alpha 2-adrenoceptors and platelet function in patients with variant angina. Kusui A, et al. **Thromb Res** 1989 Nov 1; 56(3):453–63

A simple and sensitive determination for plasmalogen lysophosphatidylethanolamine in rabbit platelets. Morikawa S, et al. **Thromb Res** 1989 Aug 15;55(4):427–38

Structural and immunological properties of myosin from human platelet external and internal membranes. Peleg I, et al. **Thromb Res** 1989 Oct 1;56(1):1–12

Triton X contaminating platelet lysate critically affects the measurement of von Willebrand factor ristocetin cofactor activity. Rodeghiero F, et al. **Thromb Res** 1989 Aug 15; 55(4):521–6

In vitro effect of thymic epithelial culture supernate on cyclic GMP levels in rabbit platelets. Hashimoto S, et al. **Thymus** 1990 Feb;15(1):47–55

In vitro and in vivo comparison of platelet concentrates collected by automated versus manual apheresis. Ross DG, et al. **Vox Sang** 1989;57(1):25–8

[Free calcium in platelets and the serum in essential hypertension] Chen S, et al.
Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1989 Jun; 17(3):137–9, 189 (Eng. Abstr.) **(Chi)**

[Uptake of 5-hydroxy-tryptophane by platelets in hypertensive patients and their children] Hong B.
Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1989 Dec; 17(6):324–6 **(Chi)**

[A quantitative study of human platelet membrane glycoproteins using immunocolloidal gold under the electron microscope] Song M, et al.
Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1989 Oct; 17(5):302–4, 319 (Eng. Abstr.) **(Chi)**

[Correlation of thrombocyte reactivity and serum levels of HbA1c, cholesterol and creatinine in diabetes mellitus] Tóth L, et al. **Orv Hetil** 1990 Feb 25;131(8):405–6, 409–10 (34 ref.) (Eng. Abstr.) **(Hun)**

[The role of catecholamine content in human platelets; clinical implications in patients with pheochromocytoma] Okutani R, et al. **Masui** 1989 Nov;38(11):1463–8 (Eng. Abstr.) **(Jpn)**

[A rapid method of isolation of platelet membranes for radioligand and enzymatic assays] Gurevich VS, et al. **Biokhimiia** 1990 May;55(5):808–13 (Eng. Abstr.) **(Rus)**

[Increase in the number of alpha-2 adrenoceptors in blood platelets of patients with hypo-alpha-cholesterolemia] Prusskikh GA, et al. **Biull Eksp Biol Med** 1989 Oct; 108(10):423–6 **(Rus)**

[The amount of thrombocyte alpha 2-adrenoreceptors in patients with different clinical variants in the course of ischemic heart disease] Prusskikh GA, et al.
Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR 1989;12(2):65–9 (Eng. Abstr.) **(Rus)**

[Tha fatty acid spectrum of the thrombocyte phospholipids in experimental diabetes mellitus complicated by proteinuria] Bondar' VI, et al. **Probl Endokrinol (Mosk)** 1990 May-Jun;36(3):76–81 (Eng. Abstr.) **(Rus)**

[Activity of platelet serotonin receptors of patients with endogenous depression before and after treatment with antidepressive agents] Katasonov AB, et al.
Zh Nevropatol Psikhiatr 1989;89(12):75–8 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Filtration of platelet-poor plasma specimens yields platelet-free plasma. Application for batch analysis of beta-thromboglobulin and platelet factor 4.
Schiebout-Clark RC, et al. **Am J Clin Pathol** 1990 Aug; 94(2):206–10

Enhancement of sickle erythrocyte adherence to endothelium by autologous platelets. Antonucci R, et al.
Am J Hematol 1990 May;34(1):44–8

Synergistic effect of recombinant human erythropoietin and phorbol diester in platelet production by the human megakaryoblastic leukemia cell line (MEG-01) [letter] Imamura N, et al. **Am J Hematol** 1990 May;34(1):77–9

Surface-activated bovine platelets do not spread, they unfold. Grouse LH, et al. **Am J Pathol** 1990 Feb;136(2):399–408

Hemolymph cells and the platelet-like structures of the land slug, Incilaria bilineata (Gastropoda: Pulmonata). Furuta E, et al. **Anat Anz** 1990;170(2):99–109

Electrokinetic, analytical and functional heterogeneity of circulating human platelets: separation of subpopulations by continuous flow electrophoresis after taxol stabilization. Crook M, et al. **Biochim Biophys Acta** 1989 Oct 30; 1014(1):26–39

Morphological characterization of surface-induced platelet activation. Park K, et al. **Biomaterials** 1990 Jan;11(1):24–31

Adenosine diphosphate-induced aggregation of human platelets in flow through tubes. I. Measurement of concentration and size of single platelets and aggregates. Bell DN, et al. **Biophys J** 1989 Nov;56(5):817–28

A freeze-capture method for the study of platelet-sized particle distributions. Bilsker DL, et al. **Biorheology** 1989; 26(6):1031–40

Comparative studies of turbidimetrically measured rates of platelet aggregation require adjustment of the platelet suspension according to the mean relative size and optical efficiency of the platelets used [letter; comment] Frojmovic MM. **Blood** 1989 Nov 1;74(6):2302–3 Comment on: Blood 1988 Apr;71(4):978–82.

GMP-140 mediates adhesion of stimulated platelets to neutrophils. Hamburger SA, et al. **Blood** 1990 Feb 1; 75(3):550–4

Effect of recombinant granulocyte-macrophage colony-stimulating factor on murine thrombocytopoiesis in vitro and in vivo. Ishibashi T, et al. **Blood** 1990 Apr 1;75(7):1433–8

Culture of isolated bovine megakaryocytes on reconstituted basement membrane matrix leads to proplatelet process formation. Topp KS, et al. **Blood** 1990 Sep 1;76(5):912–24

Preparation of leukocyte-poor platelet concentrates from buffy coats by a new type of quadruple bag. Misterek J, et al. **Blut** 1990 Jan;60(1):28–30

Factors affecting chicken thrombocyte morphology and the relationship with heterophil:lymphocyte ratios. Gross WB. **Br Poult Sci** 1989 Dec;30(4):919–25

Distribution of platelets on flat substrata. Alexandrova AY, et al. **Cell Biol Int Rep** 1989 Jul;13(7):601–7

Non-parametric analysis of platelet lifespan. Kimmel M, et al. **Cell Tissue Kinet** 1990 May;23(3):191–202

Thrombopoietin derived from human embryonic kidney cells stimulates an increase in DNA content of murine megakaryocytes in vivo. McDonald TP, et al.
Exp Hematol 1990 Aug;18(7):758–63

Effects of thrombocytopoiesis-stimulating factor on terminal cytoplasmic maturation of human megakaryocytes. Straneva JE, et al. **Exp Hematol** 1989 Dec;17(11):1122–7

Survival of rabbit platelets exposed to immune complexes. Parbtani A, et al. **Exp Mol Pathol** 1990 Feb;52(1):109–21

Human megakaryocyte production: cell biology and clinical considerations. Gewirtz AM, et al.
Hematol Oncol Clin North Am 1990 Feb;4(1):43–64 (182 ref.)

The control of megakaryocyte ploidy and platelet production: biology and pathology. Gladwin AM, et al. **Int J Cell Cloning** 1990 Jul;8(4):291–8 (31 ref.)

High frequency of elongated platelet forms in guinea pig blood: ultrastructure and resistance to micropipette aspiration. Smith CM 2d, et al. **J Lab Clin Med** 1990 Jun; 115(6):729–37

Viability of 5-day apheresis platelets in a citrate-plasticized bag using a new cell separator. Simon TL, et al.
Prog Clin Biol Res 1990;337:11–3

What causes the increase in platelet mean volume in thyroid pathological conditions? [letter] Marongiu F, et al.
Thromb Haemost 1990 Apr 12;63(2):323–4

Platelet size affects both micro- and macro-aggregation: contributions of platelet number, volume fraction and cell surface. Wong T, et al. **Thromb Haemost** 1989 Sep 29; 62(2):733–41

Ionomycin, a Ca++ ionophore, increases platelet volume independently of the Na+/H+ exchanger. Ozaki Y, et al. **Thromb Res** 1990 Jan 1;57(1):87–95

Effects of exercise on platelet indices in well-trained athletes. Ricci G, et al. **Thromb Res** 1989 Dec 15;56(6):767–8

Platelet activation during preparation of platelet concentrates: a comparison of the platelet-rich plasma and the buffy coat methods. Fijnheer R, et al. **Transfusion** 1990 Sep;30(7):634–8

White cell counting in red cells and platelets: how few can we count? Friedman LI, et al. **Transfusion** 1990 Jun; 30(5):387–9

A comparison of results obtained by two different chromium-51 methods of determining platelet survival and recovery. Rock G, et al. **Transfusion** 1990 Jun;30(5):407–10

A new radioimmunoassay for the detection of small amounts of white cells and platelets in red cell concentrates: implications for blood transfusion. Webster MR, et al.
Transfusion 1990 Feb;30(2):117–25

Platelet storage lesions in second-generation containers: correlation with in vivo behavior with storage up to 14 days. Holme S, et al. **Vox Sang** 1990;59(1):12–8

[Exclusion chromatography for the separation of cryoprotective agents from freeze-preserved blood cells] Mavrina L, et al. **Folia Haematol (Leipz)** 1990;117(2):251–8 (Eng. Abstr.) **(Ger)**

[beta-Thromboglobulin concentration, thrombocyte count and thrombocyte volume from four selected sample collections] Ruby C, et al. **Z Med Lab Diagn** 1989; 30(6):336–40 (Eng. Abstr.) **(Ger)**

[Hemorheological studies on platelet counts and size in normal pregnancy and pregnancies with preeclampsia and intrauterine growth retardation] Marumoto Y, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1989 Sep;41(9):1380–6 (Eng. Abstr.) **(Jpn)**

[QBC--a centrifugation method of quantitative analysis of erythrocytes and leukocytes (with granulocyte and lympho-monocyte count) and blood platelets] Tadeusiak W, et al. **Pol Tyg Lek** 1989 Aug 7–14;44(32–33):774–6 (Eng. Abstr.) **(Pol)**

[Stromal fibroblasts of normal bone marrow in children] Vladimirskaia EB, et al. **Gematol Transfuziol** 1990 Jan; 35(1):3–5 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

The effects of local anesthetics on maternal and neonatal platelet function. Grant GJ, et al.
Acta Anaesthesiol Scand 1989 Jul;33(5):409–12

Effect of the post-reserpine adrenergic block on thrombocytopoiesis and thrombocyte aggregation in rats. Ganchev T, et al. **Acta Physiol Pharmacol Bulg** 1989; 15(3):25–30

Platelet 5-HT transport in depressed patients under double-blind treatment with paroxetine versus amitriptyline. Schlake HP, et al.
Acta Psychiatr Scand Suppl 1989;350:149–51

The effect of ethanol on platelet function and vascular prostanoids. Mikhailidis DP, et al. **Alcohol** 1990 Mar-Apr; 7(2):171–80 (114 ref.)

Effects of ethanol on human platelets stimulated with platelet-activating factor, a biologically active ether phospholipid. Baker RC, et al. **Alcoholism (N Y)** 1989 Dec; 13(6):824–8

The effect of clofibrate on platelets. Mustard JF.
Am Heart J 1968 Sep;76(3):436

Hemodynamic, platelet and clinical responses to prostacyclin in unstable angina pectoris. Théroux P, et al.
Am J Cardiol 1990 May 1;65(16):1084–9

Platelet responses to intravenous infusion of Intralipid in healthy volunteers. Jarnvig IL, et al. **Am J Clin Nutr** 1990 Oct;52(4):628–31

Endothelin does not affect intracellular calcium ion concentration in the platelets of rats. Murakawa K, et al.
Am J Hypertens 1990 Apr;3(4):307–9

Comparative studies of 30 micrograms ethinyl estradiol combined with gestodene and desogestrel on blood coagulation, fibrinolysis, and platelets. Daly L, et al.
Am J Obstet Gynecol 1990 Jul;163(1 Pt 2):430–7

Effect of magnesium on cocaine-induced, catecholamine-mediated platelet and vascular response in term pregnant ewes. Weaver K, et al.
Am J Obstet Gynecol 1989 Nov;161(5):1331–7

Influence of taxol on the response of platelets to chilling. White JG. **Am J Pathol** 1982 Aug;108(2):184–95

Diminished responsiveness of human platelets to platelet-activating factor during pregnancy. Kornecki E, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H766–71

The effect of daunomycin on platelets in vitro. Whaun JM, et al. **Arch Int Pharmacodyn Ther** 1989 Jul-Aug; 300:292–304

Effects of dilazep on arachidonic acid metabolism by neutrophils and platelet/neutrophil interactions. Okuma M, et al. **Arzneimittelforschung** 1989 Aug;39(8):898–50

Effects of cilostazol on platelet function. Uehara S, et al.
Arzneimittelforschung 1989 Dec;39(12):1531–4

A comparison of the antiplatelet effect of aspirin on human and bovine platelets. Swier P, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):205–8

Functional and morphological studies on blood platelets in a thrombasthenic horse. Sutherland RJ, et al.
Aust Vet J 1989 Nov;66(11):366–70

Effect of genistein, a tyrosine kinase inhibitor, on U46619-induced phosphoinositide phosphorylation in human platelets. Gaudette DC, et al.
Biochem Biophys Res Commun 1990 Jul 16;170(1):238–42

Phosphorylation of high molecular weight proteins in platelets treated with 12-O-tetradecanoylphorbol-13-acetate. Litchfield DW, et al. **Biochem Int** 1990;20(3):615–21

Effects of separate proteolytic and high-affinity binding activities of human thrombin on rapid platelet activation. A quenched-flow study. Jones GD, et al. **Biochem J** 1989 Sep 1;262(2):611–6

Effect of phorbol ester treatment on receptor-mediated versus G-protein-activator-mediated responses in platelets. Evidence for a two-site action of phorbol ester at the level of G-protein function. Krishnamurthi S, et al.
Biochem J 1989 Aug 15;262(1):77–81

ADP evokes biphasic Ca2+ influx in fura-2-loaded human platelets. Evidence for Ca2+ entry regulated by the intracellular Ca2+ store. Sage SO, et al. **Biochem J** 1990 Feb 1;265(3):675–80

Influence of nitric oxide on agonist-mediated calcium mobilization in platelets. Rao GH, et al.
Biochem Med Metab Biol 1990 Jun;43(3):271–5

5-Hydroxytryptamine and the metabolism of arachidonic acid by the lipoxygenase and cyclooxygenase of washed human platelets. Dragan YP, et al. **Biochem Pharmacol** 1990 Jul 15;40(2):309–14

Chlorpromazine makes the platelet plasma membrane permeable for low-molecular weight substances and reduces ATP production. Holmsen H, et al.
Biochem Pharmacol 1990 Jul 15;40(2):373–6

Separation of different receptor-mediated effects of a prostaglandin H2 analogue (U46619) on human platelets by means of human granulocytic elastase and chymotrypsin. Lukasiewicz H, et al. **Biochem Pharmacol** 1989 Oct 1;38(19):3213–7

Thrombin receptor antagonists. Structure-activity relationships for the platelet thrombin receptor and effects on prostacyclin synthesis by human umbilical vein endothelial cells. Ruda EM, et al. **Biochem Pharmacol** 1990 Jan 15;39(2):373–81

5-Hydroxytryptamine2 (5-HT2) structure-function relationships of the nitro and amino phenylpiperazines on intact human platelets. VandenBerg SR, et al.
Biochem Pharmacol 1989 Dec 1;38(23):4237–44

Interactions of pyridoxine derivatives with rat blood platelets. Dodin A, et al. **Biochem Soc Trans** 1990 Apr;18(2):329

Chlorpromazine is unable to block the protein kinase C

translocation to human platelet plasma membranes stimulated by phorbol ester. Font J, et al. **Biochem Soc Trans** 1989 Dec;17(6):1008–9

Guanine nucleotides enhance Ca2(+)-driven protein storage granule secretion from electropermeabilized human platelets. Peltola K, et al. **Biochem Soc Trans** 1990 Jun; 18(3):466–7

Role of cationic residues in cytolytic activity: modification of lysine residues in the cardiotoxin from Naja nigricollis venom and correlation between cytolytic and antiplatelet activity. Kini RM, et al. **Biochemistry** 1989 Nov 14; 28(23):9209–15

Stimulation of human platelets by collagen occurs by a Na+/H+ exchanger independent mechanism. Joseph S, et al. **Biochim Biophys Acta** 1990 Aug 13;1054(1):26–32

Effects of marine oil-enriched diets on guinea pig megakaryocyte and platelet lipids: effects on thromboxane synthesis and platelet function. Schick PK, et al. **Biochim Biophys Acta** 1990 Feb 16;1022(1):49–56

Changes in platelet 3H-imipramine binding with chronic imipramine treatment are not state-dependent. DeMet EM, et al. **Biol Psychiatry** 1989 Sep;26(5):478–88

Up-regulatory effect of estrogen on platelet 3H-imipramine binding sites in surgically menopausal women. Sherwin BB, et al. **Biol Psychiatry** 1990 Aug 15;28(4):339–48

In vivo effects of recombinant human interleukin-6 in primates: stimulated production of platelets. Asano S, et al. **Blood** 1990 Apr 15;75(8):1602–5

Inhibition of coagulation and thrombin-induced platelet activities by a synthetic dodecapeptide modeled on the carboxy-terminus of hirudin. Jakubowski JA, et al. **Blood** 1990 Jan 15;75(2):399–406

Effect of aspirin on platelet-von Willebrand factor surface expression on thrombin and ADP-stimulated platelets. Parker RI, et al. **Blood** 1989 Nov 1;74(6):2016–21

Paradoxical effects of isothiocyanate analog of tolazoline on rat aorta and human platelets. Venkataraman BV, et al. **Blood Vessels** 1989;26(6):335–46

The abnormal in vitro response to aspirin of platelets from aspirin-sensitive asthmatics is inhibited after inhalation of nedocromil sodium but not of sodium cromoglycate. Marquette CH, et al. **Br J Clin Pharmacol** 1990 May; 29(5):525–31

The effects of dopexamine, a new dopamine analogue, on platelet function in stress. Wagaine-Twabwe D, et al. **Br J Clin Pharmacol** 1990 Jul;30(1):87–95

Characterization of the prostanoid receptor profile of enprostil and isomers in smooth muscle and platelets in vitro. Eglen RM, et al. **Br J Pharmacol** 1989 Dec; 98(4):1335–43

Interaction of the Paf antagonist WEB 2086 and its hetrazepine analogues with human platelets and endothelial cells. Korth R, et al. **Br J Pharmacol** 1989 Oct;98(2):653–61

The effects of siguazodan, a selective phosphodiesterase inhibitor, on human platelet function. Murray KJ, et al. **Br J Pharmacol** 1990 Mar;99(3):612–6

The effect of nabumetone and its principal active metabolite on in vitro human gastric mucosal prostanoid synthesis and platelet function. Jeremy JY, et al. **Br J Rheumatol** 1990 Apr;29(2):116–9

Isoflurane does not inhibit platelet-induced vasoconstriction in the canine coronary arteries. Blaise GA, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S146

Platelets acquire a secretion defect after high-dose chemotherapy. Panella TJ, et al. **Cancer** 1990 Apr 15; 65(8):1711–6

Effects of PGE1 on platelet deformability. Chang YN, et al. **Chin J Physiol** 1990;33(1):31–40

Effect of gram-negative endotoxin on levels of serum corticosterone, TNF alpha, circulating blood cells, and the survival of rats. Feuerstein G, et al. **Circ Shock** 1990 Mar; 30(3):265–78

Dietary fish oil accelerates the response to coronary thrombolysis with tissue-type plasminogen activator. Evidence for a modest platelet inhibitory effect in vivo. Braden GA, et al. **Circulation** 1990 Jul;82(1):178–87

Inhibition of lung colonization of mouse colon 26 adenocarcinoma by recombinant mouse interferon beta through a modification of platelet function. Tsuruo T, et al. **Clin Exp Metastasis** 1990 Mar-Apr;8(2):203–13

Effect of labetalol on human platelet function. Anfossi G, et al. **Clin Exp Pharmacol Physiol** 1988 Jun;15(6):437–48

Effects of oral elastase on lipid metabolism, platelet function, and blood coagulability in patients with diabetes mellitus. Furui H, et al. **Clin Ther** 1989 Nov-Dec;11(6):786–94

Some effects of propane-1,2-diol on human platelets. Arnaud FG, et al. **Cryobiology** 1990 Apr;27(2):119–29

Ethanol stimulates basal and serotonin-induced formation of [32P]phosphatidic acid in human platelets. Simonsson P, et al. **Drug Alcohol Depend** 1989 Oct;24(2):169–74

Albumin interferes with arachidonate metabolism in platelets and neutrophils. Colli S, et al. **Eicosanoids** 1989;2(1):51–7

Polymyxin B increases TXA2/PGH2 agonist and antagonist affinities in human platelet membranes. Halushka PV, et al. **Eicosanoids** 1988;1(1):41–4

An abnormality of arachidonic acid metabolism is not a generalized phenomenon in patients with aspirin-induced asthma. Nizankowska E, et al. **Eicosanoids** 1988;1(1):45–8

Simvastatin reduces platelet thromboxane formation and restores normal platelet sensitivity against prostacyclin in type IIa hypercholesterolemia. Schrör K, et al. **Eicosanoids** 1989;2(1):39–45

Structure-activity relationship between prostacyclin and its platelet receptor. Correlation of structure change and the platelet activity. Tsai AL, et al. **Eicosanoids** 1989; 2(3):131–43 (59 ref.)

Structural determinants of the platelet agonist activity of cotton bract condensed tannin. Rohrbach MS, et al. **Environ Res** 1990 Aug;52(2):199–209

A comparative study of prostacyclin infusion given before and during cardiopulmonary bypass to assess the first pass effect of the circuit on platelet number and function. Jestice HK, et al. **Eur J Cardiothorac Surg** 1990;4(1):40–4

The direct effects of metformin on platelet function in vitro. De Caterina R, et al. **Eur J Clin Pharmacol** 1989;37(2):211–3

Effect of felodipine, a new calcium channel antagonist, on platelet function and fibrinolytic activity at rest and after exercise. Sengeløv H, et al. **Eur J Clin Pharmacol** 1989; 37(5):453–7

The effects of intravenous and oral nifedipine on ex vivo platelet function. Walley TJ, et al. **Eur J Clin Pharmacol** 1989;37(5):449–52

An investigation into the effects of bacterial lipopolysaccharide on human platelets. Whitworth NH, et al. **Eur J Haematol** 1989 Aug;43(2):112–9

Effect of quinidine on platelets. Chong BH, et al. **Haemostasis** 1990;20(2):106–11

Platelet functions in recombinant hirudin-anticoagulated blood. Glusa E, et al. **Haemostasis** 1990;20(2):112–8

In vitro studies of the effect of buflomedil on platelet responsiveness. Ryckewaert JJ, et al. **Haemostasis** 1990; 20(3):181–91

Heparin and platelets. Warkentin TE, et al. **Hematol Oncol Clin North Am** 1990 Feb;4(1):243–64 (162 ref.)

Effect of sodium fluoride on the generation of lipoxygenase products from human polymorphonuclear granulocytes, mononuclear cells and platelets—indication for the involvement of G proteins. Brom C, et al. **Immunology** 1989 Oct;68(2):240–6

Effect of adenosine and inosine administration on platelet function in rabbits [letter] Singh J, et al. **Indian J Physiol Pharmacol** 1990 Jan;34(1):63–4

A new approach to evaluate platelet function in hemodialysis patients—saponin susceptibility of the platelet. Tanaka H, et al. **Int J Artif Organs** 1989 Aug;12(8):519–23

Human equivalent doses of platelet inhibitors and experimental atherosclerosis. Mittal SR, et al. **Int J Cardiol** 1990 May;27(2):275–6

Relationship between the inhibition of receptor-induced increase in cytosolic free calcium concentration and the vasodilator effects of nitrates in patients with congestive heart failure. Negrescu EV, et al. **Int J Cardiol** 1990 Feb; 26(2):175–84 (22 ref.)

NSAIDs [letter; comment] Gardner FH. **J Am Board Fam Pract** 1990 Jan-Mar;3(1):71–2 Comment on: J Am Board Fam Pract 1989 Oct-Dec;2(4):257–71.

Effect of variable doses of aspirin on platelet functions. Jha S, et al. **J Assoc Physicians India** 1989 Apr;37(4):269–70

The effect of beta-blockade on platelet function and fibrinolytic activity. Winther K. **J Cardiovasc Pharmacol** 1987;10 Suppl 2:S94–8; discussion S99

Stimulation of glucose metabolism in human blood cells by inhibitors of carnitine-dependent fatty acid transport. Haeckel R, et al. **J Clin Chem Clin Biochem** 1990 May; 28(5):329–33

Hydrogen peroxide and methyl mercury are primary stimuli of eicosanoid release in human platelets. Hornberger W, et al. **J Clin Chem Clin Biochem** 1989 Sep;27(9):567–75

Stimulation of thrombopoiesis in mice by human recombinant interleukin 6. Hill RJ, et al. **J Clin Invest** 1990 Apr; 85(4):1242–7

Increased platelet aggregation and intracellular calcium in hypertensive patients: effects of cyclo-oxygenase blockade. Lechi C, et al. **J Hypertens Suppl** 1989 Dec;7(6):S160–1

Effects of noradrenaline infusion on platelet catecholamine levels and platelet aggregation. Tomlinson B, et al. **J Hypertens Suppl** 1989 Dec;7(6):S166–7

Effect of platelet activation inhibitors on the loss of glycoprotein Ib during storage of platelet concentrates. Bode AP, et al. **J Lab Clin Med** 1990 Jun;115(6):669–79

Effect of minoxidil on platelet function and the synthesis of prostaglandins in platelets. O'Barr TP, et al. **J Lab Clin Med** 1989 Nov;114(5):575–8

Synthesis and alpha 2-adrenoceptor effects of substituted catecholimidazoline and catecholimidazole analogues in human platelets. Miller DD, et al. **J Med Chem** 1990 Apr; 33(4):1138–44

Agonist-evoked changes in cytosolic pH and calcium concentration in human platelets: studies in physiological bicarbonate. Sage SO, et al. **J Physiol (Lond)** 1990 Jan; 420:31–45

The in-vitro and ex-vivo effects of chloroquine sulphate on platelet function: implications for malaria prophylaxis in patients with impaired haemostasis. Cummins D, et al. **J Trop Med Hyg** 1990 Apr;93(2):112–5

Effect of fat infusions on platelet concentration in premature infants. Spear ML, et al. **JPEN J Parenter Enteral Nutr** 1990 Mar-Apr;14(2):165–8

Studies on antiplatelet effects of OP-41483, a prostaglandin I2 analog, in experimental animals. II. Mechanism of its antiplatelet effect. Fujitani B, et al. **Jpn J Pharmacol** 1990 May;53(1):25–33

Influence of Bay k 8644 on aequorin-loaded human platelets. Ogawa N, et al. **Jpn J Pharmacol** 1989 Oct;51(2):306–8

The effect of prophylactic anti-asthma drugs on PAF-induced platelet accumulation in the thorax of the guinea pig. Smith D, et al. **Jpn J Pharmacol** 1989 Oct; 51(2):161–6

Bicarbonate and cytoplasmic pH [letter; comment] **Lancet** 1990 Jun 30;335(8705):1586–8 Comment on: Lancet 1990 May 26;335(8700):1243–6.

Effects of tricyclic antidepressants upon human platelet monoamine oxidase. Edwards DJ, et al. **Life Sci** 1974 Dec 15;15(12):2045–58

Ascorbic acid, glutathione and synthetic antioxidants prevent the oxidation of vitamin E in platelets. Vatassery GT, et al. **Lipids** 1989 Dec;24(12):1043–7

Air pollution by gasoline exhaust fumes: effect on platelet function and blood viscosity. Coppola L, et al. **Med Lav** 1989 May-Jun;80(3):187–91

A rapid embedding procedure for the study of platelet interactions with extracellular matrices in a flowing system. Effect of aspirin on platelet activity. Aznar-Salatti J, et al. **Methods Find Exp Clin Pharmacol** 1990 Mar; 12(2):149–54

Novel mechanism of heterologous desensitization of adenylate cyclase: prostaglandins bind with different affinities to both stimulatory and inhibitory receptors on platelets. Ashby B. **Mol Pharmacol** 1990 Jul;38(1):46–53

Platelet-activating factor stimulation of tyrosine kinase and its relationship to phospholipase C in rabbit platelets: studies with genistein and monoclonal antibody to phosphotyrosine. Dhar A, et al. **Mol Pharmacol** 1990 Apr; 37(4):519–25

Effect of platelet activation on the agglutination of platelets by von Willebrand factor. Mills DC, et al. **Mol Pharmacol** 1990 Feb;37(2):271–7

KT5926, a potent and selective inhibitor of myosin light chain kinase. Nakanishi S, et al. **Mol Pharmacol** 1990 Apr; 37(4):482–8

Stereostructure activity relationships of catecholamines on human platelet function. Ahn CH, et al. **Proc Soc Exp Biol Med** 1990 Jun;194(2):149–56

Acetylsalicylic acid stimulates murine megakaryocyte precursor cells. Sullivan PS, et al. **Proc Soc Exp Biol Med** 1990 Jul;194(3):216–20

Ethanol modulation of the effects of platelet-activating factor on human platelets and a macrophage cell line. Baker RC. **Prog Clin Biol Res** 1990;325:113–22

R68070, a combined thromboxane/endoperoxide receptor antagonist (TRA) and thromboxane synthase inhibitor (TSI), prolongs the bleeding time more than aspirin in man. Hoet B, et al. **Prog Clin Biol Res** 1989;301:573–7

Effects of PGD2, PGE1, and PGI2-analogues on PGDF-release and aggregation of human gelfiltered platelets. Stürzebecher S, et al. **Prog Clin Biol Res** 1989; 301:365–9

Vitamin E and platelet eicosanoids in diabetes mellitus. Gisinger C, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Jul; 40(3):169–76 (115 ref.)

Equivalent inhibition of in vivo platelet function by low dose and high dose aspirin treatment. Sullivan MH, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Apr; 39(4):319–21

Effects of bopindolol on platelet function in hypertension at rest and during exercise. Virgolini I, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Jun; 40(2):125–30

Platelet adrenoceptors and prostaglandin responses in depressed patients. Roy A, et al. **Psychiatry Res** 1989 Nov; 30(2):181–9

Acetylsalicylic acid inhibits platelet PAI-1 antigen release without affecting circulating PAI-1 antigen in plasma. Cogo A, et al. **Ric Clin Lab** 1990 Apr-Jun;20(2):113–7

Effect of nimodipine on platelet function in patients with subarachnoid hemorrhage. Juvela S, et al. **Stroke** 1990 Sep; 21(9):1283–8

Platelet preservation during in vitro extracorporeal circulation by albumin adsorption. Addonizio VP Jr, et al. **Surg Forum** 1978;29:289–90

Eicosapentaenoic acid interferes with U46619-stimulated formation of inositol phosphates in washed rabbit platelets. Chetty N, et al. **Thromb Haemost** 1989 Dec 29; 62(4):1116–20

Platelet distribution in rabbits following infusion of liposomes. Doerschuk CM, et al. **Thromb Haemost** 1989 Jun 30;61(3):392–6

Desmopressin induces decrease in platelet serotonin content in uremia [letter] Małyszko J, et al. **Thromb Haemost** 1989 Jun 30;61(3):537

Agglutination of rabbit platelets in plasma by the thrombin inhibitor D-phenylalanyl-L-prolyl-L-arginyl chloromethyl ketone. Packham MA, et al. **Thromb Haemost** 1990 Apr 12;63(2):282–5

Association of reduced factor VIII with impaired platelet reactivity to adrenalin and collagen after total thyroidectomy. Palareti G, et al. **Thromb Haemost** 1989 Dec 29;62(4):1053–6

Effect of albumin-bound DHA on phosphoinositide phosphorylation in collagen stimulated human platelets. Gaudette DC, et al. **Thromb Res** 1990 May 15;58(4):435–44

Antiplatelet effects of protopine isolated from Corydalis tubers. Ko FN, et al. **Thromb Res** 1989 Oct 15;56(2):289–98

In vitro bleeding test—a simple method for the detection

of aspirin effects on platelet function. Kretschmer V, et al. **Thromb Res** 1989 Dec 1;56(5):593–602

Aromatic tetra-amidines with antiproteolytic activity inhibit platelet aggregation and secretion. Milani L, et al. **Thromb Res** 1989 Nov 1;56(3):417–24

Platelet activating factor and sheep platelets: a sensitive new bioassay. Moon DG, et al. **Thromb Res** 1990 Feb 15; 57(4):551–64

Role of protein kinase C in U46619-induced platelet shape change, aggregation and secretion. Nakano T, et al. **Thromb Res** 1989 Oct 15;56(2):299–306

Platelet responses to platelet-activating factor are inhibited in alcoholics undergoing alcohol withdrawal. Neiman J, et al. **Thromb Res** 1989 Nov 1;56(3):399–405

The influence of nicardipine on platelet tests in patients with claudication. O'Brien JR, et al. **Thromb Res** 1990 Apr 1; 58(1):75–80

Failure of endothelin to influence in vitro platelet responses. Patel A, et al. **Thromb Res** 1989 Dec 15;56(6):769–70

LDL induced shape change reaction of platelets is not due to PAF. Pletscher A, et al. **Thromb Res** 1989 Nov 15; 56(4):571–2

Helenalin and 11 alpha,13-dihydrohelenalin, two constituents from Arnica montana L., inhibit human platelet function via thiol-dependent pathways. Schröder H, et al. **Thromb Res** 1990 Mar 15;57(6):839–45

Aspirin and human platelets: from clinical trials to acetylation of cyclooxygenase and back. Patrono C. **Trends Pharmacol Sci** 1989 Nov;10(11):453–8 (24 ref.)

Pathomechanisms of atherosclerosis beneficially affected by prostaglandin E1 (PGE1)—an update. Sinzinger H, et al. **Vasa Suppl** 1989;28:6–13 (39 ref.)

New approach to eliminate HLA class I antigens from platelet surface without cell damage: acid treatment at pH 3.0. Kurata Y, et al. **Vox Sang** 1989;57(3):199–204

[Blood platelets, neoplasm metastasis and anti-metastatic effect of huoxue-huayu drugs] Li XL. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Oct;9(10):637–40 (40 ref.) **(Chi)**

[Lack of effect of low dose acetylsalicylic acid (100 mg/die) on thrombocyte survival and beta-thromboglobulin (beta-TG) and platelet factor 4 (PF 4) in patients with peripheral arterial occlusive disease] Minar E, et al. **Vasa Suppl** 1989;27:244–6 **(Ger)**

[Biostatistics, cosmetics and clinical research: a time for reflection? (letter)] Davi G, et al. **Cardiologia** 1989 Jun; 34(6):572 **(Ita)**

[Drugs interfering with platelet function] Marino A, et al. **Clin Ter** 1990 Feb 15;132(3):193–9 (5 ref.) (Eng. Abstr.) **(Ita)**

[Effects of ticlopidine on platelet function at rest and after exercise in patients with previous myocardial infarct. An acute crossover double-blind study] Tullio D, et al. **Minerva Med** 1990 Jan–Feb;81(1–2):87–92 (Eng. Abstr.) **(Ita)**

[Functional alterations of human platelets following 111In labeling with different ligands and incubation media] Mieno M, et al. **Kaku Igaku** 1990 May;27(5):443–9 (Eng. Abstr.) **(Jpn)**

[Stimulation of spreading and aggregation of platelets on immobilized type V collagen: mechanisms depending on Ca2+ and protein kinase C] Leitin VL, et al. **Biokhimiia** 1989 Sep;54(9):1565–70 (Eng. Abstr.) **(Rus)**

[The direct and indirect antiaggregation action of sodium hypochlorite on thrombocyte-enriched blood plasma] Murina MA, et al. **Biull Eksp Biol Med** 1989 Dec; 108(12):702–4 (Eng. Abstr.) **(Rus)**

[A comparative study of the cryoprotective properties of dimethylacetamide and dimethyl sulfoxide in preserving thrombocytes at moderately low temperatures] Azovskaia SA, et al. **Gematol Transfuziol** 1989 Dec;34(12):18–21 (Eng. Abstr.) **(Rus)**

[Changes in the functional and biochemical characteristics of the thrombocytes in the side effects of nonsteroidal anti-inflammatory preparations] Astaf'eva NG. **Ter Arkh** 1990;62(5):55–9 (Eng. Abstr.) **(Rus)**

[The effect of nitrates and miskleron on the prostacyclin-thromboxane ratio and on the functional activity of the thrombocytes in stenocardia patients] Volkov VI, et al. **Vrach Delo** 1989 Nov;(11):60–2 (Eng. Abstr.) **(Rus)**

[The action of interferon and reaferon on the functional activity of human thrombocytes] Poliakova AM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Nov;(11):52–4 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Abnormalities of mitochondrial enzymes in hereditary ataxias. Sorbi S, et al. **Acta Neurol Scand** 1989 Aug; 80(2):103–10

Platelet monoamine oxidase, plasma dopamine beta-hydroxylase activity, dementia and family history of alcoholism in chronic alcoholics. Lykouras E, et al. **Acta Psychiatr Scand** 1989 Nov;80(5):487–91

In situ phosphorylation of human platelet and rat basophilic leukemia cell (RBL-2H3) myosin heavy chain and light chain. Adelstein RS, et al. **Adv Exp Med Biol** 1989; 255:289–97

Lipoxin formation: evaluation of the role and actions of leukotriene A4. Serhan CN, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1990; 20:54–62

The coumarin derivative AD6 inhibits the release of arachidonic acid by interfering with phospholipase A2 activity in human platelets stimulated with thrombin. Porcellati S, et al. **Agents Actions** 1990 Mar;29(3–4):364–73

Clinical characteristics of female alcoholics with low platelet monoamine oxidase activity. Hallman J, et al. **Alcoholism** 1990 Apr;14(2):227–31

Platelet peroxidase-like activity detected in mature erythroblasts from a patient with pernicious anemia. Kawaguchi M, et al. **Am J Hematol** 1990 Apr;33(4):267–70

Kinetics of Ca2(+)-ATPase activation in platelet membranes of essential hypertensives and normotensives. Takaya J, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C988–94

Platelet MAO inhibition, urinary MHPG, and leukocyte beta-adrenergic receptors in depressed patients treated with phenelzine. Sharma RP, et al. **Am J Psychiatry** 1990 Oct;147(10):1318–21

Discrepancy of protein kinase C translocation and platelet aggregation—immunocytobiochemical evidence. Hagiwara M, et al. **Arch Biochem Biophys** 1990 Jul;280(1):201–5

Persistent activation of platelet membrane phospholipase C by proteolytic action of trypsin and thrombin. Lazarowski ER, et al. **Arch Biochem Biophys** 1990 Jan;276(1):265–9

Immunoaffinity purification of human thromboxane synthase. Nüsing R, et al. **Arch Biochem Biophys** 1990 Aug 1; 280(2):325–30

Alpha 2-adrenoceptor-mediated inhibition of platelet adenylate cyclase and induction of aggregation in major depression. Effect of long-term cyclic antidepressant drug treatment. García-Sevilla JA, et al. **Arch Gen Psychiatry** 1990 Feb;47(2):125–32

Purification and characterization of a cytosolic phosphoinositide-phospholipase C (gamma 2-type) from human platelets. Banno Y, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):396–401

Vasopressin dependent tyrosine phosphorylation of a 38 kDa protein in human platelets. Granot Y, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):566–73

Phosphorylation by protein kinase C inactivates an inositol 1,4,5-trisphosphate 3-kinase purified from human platelets. Lin AN, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1371–6

Properties of the exchange rate of guanine nucleotides to the novel rap-2B protein. Molina y Vedia L, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):319–24

Purification of soluble guanylate cyclase enzyme from human platelets. Chhajlani V, et al. **Biochem Int** 1989 Nov; 19(5):1039–44

Re-examination by improved reverse transcriptase assay of DNA polymerase in platelets from myelodysplastic disease patients. Yoshida S, et al. **Biochem Int** 1989 Nov; 19(5):1133–41

Kinetics of inhibition of platelet calpain II by human kininogens. Bradford HN, et al. **Biochem J** 1990 Aug 15; 270(1):83–90

Further characterization of the plasma membrane- and intracellular membrane-associated platelet Ca2+ transport systems. Enouf J, et al. **Biochem J** 1989 Oct 15; 263(2):547–52

Collagen-induced platelet activation mainly involves the protein kinase C pathway. Karniguian A, et al. **Biochem J** 1990 Jun 1;268(2):325–31

Regulation of platelet AMP deaminase activity in situ. Verhoeven AJ, et al. **Biochem J** 1990 Jan 1;265(1):267–75

Receptor- and phorbol-ester-mediated redistribution of protein kinase C in human platelets. Evidence that aggregation promotes degradation of protein kinase C. Wheeler-Jones CP, et al. **Biochem J** 1989 Nov 1; 263(3):969–72

Subcellular distribution of alpha 2-adrenergic receptors, pertussis-toxin substrate and adenylate cyclase in human platelets. Zamorski MA, et al. **Biochem J** 1990 Feb 1; 265(3):755–62

Characterization of a protein:glucosyltransferase activity in human platelets. Rodríguez P, et al. **Biochem Med Metab Biol** 1990 Apr;43(2):147–58

Characterization of [3H]Ro 16-6491 binding to digitonin solubilized monoamine oxidase-B and purification of the enzyme from human platelets by affinity chromatography. Cesura AM, et al. **Biochem Pharmacol** 1990 Jan 1; 39(1):216–20

Effect of adenine nucleotides on cyclooxygenase and lipoxygenase enzyme products of arachidonic acid in human platelets. Dragan YP, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):27–32

Inhibition of platelet membrane hormone-transducing GTPases by cyclic GMP-dependent protein kinase. Newby AC, et al. **Biochem Soc Trans** 1990 Jun;18(3):477–8

Regulation of acetylcholinesterase associated with platelet plasma membranes by changes in the environment. Sanchez-Yague J, et al. **Biochem Soc Trans** 1989 Dec; 17(6):1011–2

Role of protein kinase C in the regulation of phospholipase A2 activity in human platelets. Wheeler-Jones CP, et al. **Biochem Soc Trans** 1990 Jun;18(3):467–8

Phosphorylation of a second site for myosin light chain kinase on platelet myosin. Ikebe M. **Biochemistry** 1989 Oct 31; 28(22):8750–5

Rapid kinetics of alpha 2-adrenergic inhibition of adenylate cyclase. Evidence for a distal rate-limiting step. Thomsen WJ, et al. **Biochemistry** 1989 Oct 31;28(22):8778–86

Structure of genomic DNA for rat platelet phospholipase A2. Kusunoki C, et al. **Biochim Biophys Acta** 1990 Sep 10;1087(1):95–7

In vivo release and clearance of rat platelet phospholipase A2. Murakami M, et al. **Biochim Biophys Acta** 1989 Oct 17;1005(3):270–6

Immunochemical detection of 'platelet type' phospholipase A2 in the rat. Murakami M, et al. **Biochim Biophys Acta** 1990 Mar 12;1043(1):34–42

Studies on the acyl-chain selectivity of cellular phospholipases A2. Schalkwijk CG, et al. **Biochim Biophys Acta** 1990 May 1;1044(1):139–46

Platelet adenylate cyclase and phospholipase C activity in posttraumatic stress disorder. Lerer B, et al. **Biol Psychiatry** 1990 Apr 1;27(7):735–40

Platelet MAO in subtypes of alcoholism. Sullivan JL, et al. **Biol Psychiatry** 1990 Apr 15;27(8):911–22

Basal activities of adenylate and guanylate cyclase in lymphocytes and platelets of alcoholics. Anokina IP, et al. **Biomed Biochim Acta** 1989;48(8):593–6

Activation of protein kinase C in platelets by epinephrine and A23187: correlation with fibrinogen binding. Saitoh M, et al. **Blood** 1989 Nov 1;74(6):2001–6

Subcellular distribution and characterization of acetylcholinesterase activities from sheep platelets: relationships between temperature-dependence and environment. Sánchez-Yagüe J, et al. **Blood** 1990 Aug 15; 76(4):737–44

Translocation of protein kinase C (PKC) in stimulated platelets: a role for aggregation in PKC degradation. Wheeler-Jones CP, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:845P

Lactate dehydrogenase isoenzyme composition of human platelets. Miyada DS, et al. **Clin Chem** 1989 Dec; 35(12):2325–6

Human platelet thermostable phenol sulfotransferase: assay of frozen samples and correlation between frozen and fresh activities. Anderson RJ, et al. **Clin Chim Acta** 1990 Aug 15;189(2):221–9

Sulfation pharmacogenetics: correlation of human platelet and small intestinal phenol sulfotransferase. Sundaram RS, et al. **Clin Pharmacol Ther** 1989 Nov;46(5):501–9

Lack of platelet monoamine oxidase activity in Cebus monkeys (Cebus albifrons). Heintz R, et al. **Comp Biochem Physiol [C]** 1989;93(2):421–3

Guanine nucleotides and Ca2(+)-dependent lysosomal secretion in electropermeabilised human platelets. Athayde CM, et al. **Eur J Biochem** 1990 May 20;189(3):647–55

Platelet protein phosphorylation and protein kinase C activation by phorbol esters with different biological activity and a novel synergistic response with Ca2+ ionophore. Brooks SF, et al. **Eur J Biochem** 1990 Mar 10; 188(2):431–7

Human selenium status and glutathione peroxidase activity in north-west England. Pearson DJ, et al. **Eur J Clin Nutr** 1990 Apr;44(4):277–83

Guanylate cyclase in human platelets with different aggregability. Chirkov YuYu, et al. **Experientia** 1990 Jul 15;46(7):697–9

A novel and sensitive assay for phospholipase D in intact cells. Randall RW, et al. **FEBS Lett** 1990 May 7; 264(1):87–90

Effect of nomifensine on platelet monoamine oxidase activity in chronic schizophrenic patients. Filinger EJ. **Gen Pharmacol** 1989;20(6):821–2

Effect of retinoic acid on adenosine diphosphate and collagen-induced alterations in enzymes of GSH-linked antioxidant defence system of human blood platelets in vitro. Mukherjee G, et al. **Indian J Exp Biol** 1990 Jun; 28(6):550–2

Protein kinase C (PKC) activities in human platelet membrane preparations. Chiosi E, et al. **Ital J Biochem** 1990 May–Jun;39(3):188A–190A

Elevated platelet MAO is related to impulsivity in disruptive behavior disorders. Stoff DM, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Sep;28(5):754–60

Structure of cDNA coding for rat platelet phospholipase A2. Komada M, et al. **J Biochem (Tokyo)** 1989 Oct;106(4):545–7

Thrombin stimulates the activities of multiple previously unidentified protein kinases in platelets. Ferrell JE Jr, et al. **J Biol Chem** 1989 Dec 5;264(34):20723–9

Identification of a novel arachidonate 12-lipoxygenase in bovine tracheal epithelial cells distinct from leukocyte and platelet forms of the enzyme. Hansbrough JR, et al. **J Biol Chem** 1990 Jan 25;265(3):1771–6

A peptidase in human platelets that deamidates tachykinins. Probable identity with the lysosomal "protective protein". Jackman HL, et al. **J Biol Chem** 1990 Jul 5; 265(19):11265–72

Histamine-stimulated and GTP-binding proteins-mediated phospholipase A2 activation in rabbit platelets. Murayama T, et al. **J Biol Chem** 1990 Mar 15;265(8):4290–5

Thrombin and phorbol ester stimulate inositol 1,3,4,5-tetrakisphosphate 3-phosphomonoesterase in human platelets. Oberdisse E, et al. **J Biol Chem** 1990 Jan 15;265(2):726–30

Interaction of endotoxic lipid A and lipid X with purified human platelet protein kinase C. Romano M, et al. **J Biol Chem** 1990 Jan 25;265(3):1765–70

Assembly of the platelet prothrombinase complex is linked to vesiculation of the platelet plasma membrane. Studies in Scott syndrome: an isolated defect in platelet procoagulant activity. Sims PJ, et al. **J Biol Chem** 1989

Oct 15;264(29):17049–57

Modification of substrate–inhibitor affinities of human platelet monoamine oxidase B in vitro. Szutowicz A, et al. **J Biol Chem** 1989 Oct 25;264(30):17660–4

Regulation of platelet protein kinase C by oleic acid. Kinetic analysis of allosteric regulation and effects on autophosphorylation, phorbol ester binding, and susceptibility to inhibition. el Touny S, et al. **J Biol Chem** 1990 Sep 25;265(27):16437–43

Lipoxin formation during human neutrophil–platelet interactions. Evidence for the transformation of leukotriene A4 by platelet 12–lipoxygenase in vitro. Serhan CN, et al. **J Clin Invest** 1990 Mar;85(3):772–80

Association of adenosine deaminase with erythrocyte and platelet plasma membrane: an immunological study using light and electron microscopy. Franco R, et al. **J Histochem Cytochem** 1990 May;38(5):653–8

Decreased activity of the platelet Na+,K(+)–adenosine triphosphatase enzyme in allergic subjects [published erratum appears in J Lab Clin Med 1990 Aug;116(2):252] [see comments] Skoner DP, et al. **J Lab Clin Med** 1990 May;115(5):535–40 Comment in: J Lab Clin Med 1990 May;115(5):533–4.

Platelet monoamine oxidase–B activity in Parkinson's disease. Steventon GB, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(4):255–61

Correlation of phenol sulphotransferase activities in the liver and platelets of rat. Nakamura J, et al. **J Pharm Pharmacol** 1990 Mar;42(3):207–8

Increased human platelet monoamine oxidase activity during lithium carbonate therapy. Bockar J, et al. **Life Sci** 1974 Dec 15;15(12):2109–18

Net increase of platelet membrane tyrosine specific–protein kinase activity by phorbol myristate acetate. Ishihara N, et al. **Life Sci** 1990;46(1):29–36

Thrombin–dependent association of phosphatidylinositol–3 kinase with p60c–src and p59fyn in human platelets. Gutkind JS, et al. **Mol Cell Biol** 1990 Jul;10(7):3806–9

Carnitine acetyltransferase activity is not changed with age in rat brain and human platelets. Moret C, et al. **Neurobiol Aging** 1990 Jan–Feb;11(1):57–9

Evidence for a defect in NADH: ubiquinone oxidoreductase (complex I) in Huntington's disease. Parker WD JR, et al. **Neurology** 1990 Aug;40(8):1231–4

Cytochrome oxidase deficiency in Alzheimer's disease. Parker WD Jr, et al. **Neurology** 1990 Aug;40(8):1302–3

Ca2(+)–dependent protein kinase cascade of platelets. Hidaka H, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec; 52(8):1516–21 (19 ref.)

Expression of p60fyn in human platelets. Horak ID, et al. **Oncogene** 1990 Apr;5(4):597–602

A novel candidate for receptor–coupled phospholipase C purified from human platelets. Manne V. **Oncogene** 1988 Nov;3(5):579–85

The in vitro effect of methylmercuric chloride on superoxide dismutase activity of pig platelets. Kostka B, et al. **Pol J Pharmacol Pharm** 1989 Sep–Oct;41(5):453–8

Molecular cloning, primary structure, and expression of the human platelet/erythroleukemia cell 12–lipoxygenase. Funk CD, et al. **Proc Natl Acad Sci U S A** 1990 Aug; 87(15):5638–42

Gi2 mediates alpha 2–adrenergic inhibition of adenylyl cyclase in platelet membranes: in situ identification with G alpha C–terminal antibodies. Simonds WF, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7809–13

Characterization of 12–L–hydroperoxyeicosa–5,8,10,14–tetraenoic acid peroxidase in platelets by monoclonal antibody against glutathione peroxidase. Chang WC, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Jan; 39(1):75–81

Optimization of an assay for studying the effects of agents on cyclooxygenase and lipoxygenase metabolism of arachidonic acid in washed human platelets. Dragan YP, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Feb; 39(2):105–9

Platelet glutathione peroxidase and monoamine oxidase activity in schizophrenics with CT scan abnormalities: relation to psychosocial variables. Buckman TD, et al. **Psychiatry Res** 1990 Jan;31(1):1–14

Low platelet monoamine oxidase activity in borderline personality disorder. Yehuda R, et al. **Psychiatry Res** 1989 Dec;30(3):265–73

Effect of thromboxane antagonists on prostaglandin regulation of platelet adenylate cyclase. Ashby B. **Second Messengers Phosphoproteins** 1988–89; 12(5–6):241–50

Characterization of N,N'–bis(3–picolyl)–4–methoxy–isophtalamide (picotamide) as a dual thromboxane synthase inhibitor/thromboxane A2 receptor antagonist in human platelets. Gresele P, et al. **Thromb Haemost** 1989 Jun 30; 61(3):479–84

Purification and characterization of a cyclic GMP–stimulated cyclic nucleotide phosphodiesterase from the cytosol of human platelets. Grant PG, et al. **Thromb Res** 1990 Jul 1;59(1):105–19

Adenylate kinase as a marker for platelet lysis. Gulliksson H. **Transfusion** 1990 Jul–Aug;30(6):536–40

[Phospholipase C hypersensitivity in hypertensive rats results from innate and acquired factors] Limon I, et al. **Arch Mal Coeur** 1989 Jul;82(7):1315–8 (Eng. Abstr.) (Fre)

[Defects in the prostaglandin system. IX. Lipoxygenase defect of thrombocytes in a patient with polycythemia vera] Sinzinger H, et al. **Wien Klin Wochenschr** 1990 Feb 2; 102(3):74–6 (Eng. Abstr.) (Ger)

[Diagnosis of leukemia and peroxidase in leukemic cells] Sakamoto S. **Nippon Rinsho** 1989 Dec;48 Suppl:1025–8 (Jpn)

[Inhibitory effect of various traditional Chinese medicines on rabbit platelet phospholipase A2 in vitro and suppressive effect of tôki–syakuyaku–san on increased aggregability in hypercholesterolemic rabbit ex vivo] Sato T, et al. **Yakugaku Zasshi** 1989 Nov;109(11):869–76 (Eng. Abstr.) (Jpn)

[Detection of phenylalanine hydroxylase protein in human platelets. Immunochemical detection] Zamotrinskiĭ AV, et al. **Biokhimiia** 1990 Apr;55(4):760–5 (Eng. Abstr.) (Rus)

[Heterogeneity of platelet monoamine oxidase in man] Moskvitina TA. **Biull Eksp Biol Med** 1990 Feb;109(2):152–3 (Eng. Abstr.) (Rus)

[Change in the adenylate cyclase activity of the lymphocytes and thrombocytes in irradiated sheep] Shevchenko AS. **Radiobiologiia** 1990 May–Jun;30(3):308–11 (Eng. Abstr.) (Rus)

[Activity of tyrosine hydroxylase and monoamine oxidase in human platelets during alcoholism] Drozdov AZ, et al. **Vopr Med Khim** 1990 Jan–Feb;36(1):54–7 (Eng. Abstr.) (Rus)

[Physico–chemical and catalytic properties of hypoxanthine guanine phosphoribosyltransferase in thrombocytes from blood donors and patients with hemophilia A] Mareeva TB, et al. **Vopr Med Khim** 1989 Sep–Oct;35(5):99–103 (Eng. Abstr.) (Rus)

[Analogy and differences in properties of soluble forms of guanylate cyclase of the heart and rat blood platelets] Miroshnichenko VP, et al. **Vopr Med Khim** 1989 Jul–Aug; 35(4):60–6 (Eng. Abstr.) (Rus)

[Characteristics of changes in amine oxidase activity during pesticide poisoning] Zelnalov TA, et al. **Vopr Med Khim** 1990 Jan–Feb;36(1):78–81 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Neonatal alloimmune thrombocytopenic purpura induced by anti–Bak(a): a case report and review of the literature. Hidajat M, et al. **Acta Clin Belg** 1989;44(6):377–82

An evaluation of a solid phase red cell adherence test for detecting platelet–associated IgG in immune thrombocytopenia. Jones CD, et al. **Am J Clin Pathol** 1990 Apr;93(4):552–4

Micromethod for demonstrating increased platelet surface immunoglobulin G: findings in acute, chronic, and human immunodeficiency virus–1–related immunologic thrombocytopenias. Sthoeger D, et al. **Am J Hematol** 1990 Aug;34(4):275–82

Treatment of platelet–alloimmunization with cyclosporin A in a patient with aplastic anemia. Yamamoto M, et al. **Am J Hematol** 1990 Mar;33(3):220–1

Maternal platelet antibody levels in neonatal isoimmune thrombocytopenia. Lazarchick J, et al. **Ann Clin Lab Sci** 1990 May–Jun;20(3):200–4

Thrombocytopenia associated with heparin–coated catheters in patients with heparin–associated antiplatelet antibodies. Laster JL, et al. **Arch Intern Med** 1989 Oct;149(10):2285–7

Autoreactive platelet antibody in post transfusion purpura. Minchinton RM, et al. **Aust N Z J Med** 1990 Apr; 20(2):111–5

Stimulus–response coupling in human platelets activated by monoclonal antibodies to the CD9 antigen, a 24 kDa surface–membrane glycoprotein. Carroll RC, et al. **Biochem J** 1990 Mar 1;266(2):527–35

Developmentally regulated expression of a 78 kDa erythroblast membrane glycoprotein immunologically related to the platelet thrombospondin receptor. Kieffer N, et al. **Biochem J** 1989 Sep 15;262(3):835–42

Characterization of monoclonal antibodies to human platelet myosin that recognize highly conserved epitopes within the 50 kDa fragment of myosin subfragment–1. Deutsch VR, et al. **Biochim Biophys Acta** 1990 May 8;1038(3):286–90

Is decreased imipramine binding by platelet membranes in major depression associated with plasma autoantibodies to imipramine binding sites? Alosachie I, et al. **Biol Psychiatry** 1990 Aug 15;28(4):365–8

Direct detection of activated platelets and platelet–derived microparticles in humans. Abrams CS, et al. **Blood** 1990 Jan 1;75(1):128–38

Platelet immunoglobulin G: its significance for the evaluation of thrombocytopenia and for understanding the origin of alpha–granule proteins. George JN. **Blood** 1990 Sep 1; 76(5):859–70 (174 ref.)

Regulation of autoimmune anti–platelet antibody–mediated adhesion of monocytes to platelet GPIIb/GPIIIa: effect of armed monocytes and the Mac–1 receptor. Hymes KB, et al. **Blood** 1990 May 1;75(9):1813–9

Gova/b alloantigen system on human platelets. Kelton JG, et al. **Blood** 1990 Jun 1;75(11):2172–6

The expression of IgG allotypes on platelets and immunization to IgG allotypes in multitransfused thrombocytopenic patients. Kickler TS, et al. **Blood** 1990 Aug 15;76(4):849–52

Polymorphism of human platelet membrane glycoprotein IIb associated with the Baka/Bakb alloantigen system. Lyman S, et al. **Blood** 1990 Jun 15;75(12):2343–8

Identification of the platelet–specific alloantigen, Naka, on platelet membrane glycoprotein IV. Tomiyama Y, et al. **Blood** 1990 Feb 1;75(3):684–7

Neonatal alloimmune thrombocytopenia. Skacel PO, et al. **Blood Rev** 1989 Sep;3(3):174–9 (34 ref.)

Immunochemical analysis of platelet autoantibodies in HIV–related thrombocytopenic purpura: a study of 68 patients. Bettaieb A, et al. **Br J Haematol** 1989 Oct; 73(2):241–7

Alloimmunization to the PlA1 platelet antigen: results of a prospective study. Blanchette VS, et al. **Br J Haematol** 1990 Feb;74(2):209–15

HLA class I expression on erythrocytes and platelets from patients with systemic lupus erythematosus, rheumatoid arthritis and from normal subjects. Botto M, et al. **Br J Haematol** 1990 May;75(1):106–11

Two human monoclonal antiplatelet autoantibodies established from patients with chronic idiopathic thrombocytopenic purpura. Honda S, et al. **Br J Haematol** 1990 Jun;75(2):245–9

Receptor–ligand complexes are cleared to the open canalicular system of surface–activated platelets. Leistikow EA, et al. **Br J Haematol** 1990 Jan;74(1):93–100

Antibodies against cryptantigens of platelets in patients with HIV–related thrombocytopenia [letter] Muñiz–Diaz E, et al. **Br J Haematol** 1990 Jun;75(2):298–9

Demonstration of platelet antigens that bind platelet–associated autoantibodies in chronic ITP by direct immunoprecipitation procedure. Tomiyama Y, et al. **Br J Haematol** 1990 May;75(1):92–8

Antigen induces leucopenia in non–immunised guinea–pigs injected with platelets from actively sensitized animals. Pretolani M, et al. **Br J Pharmacol** 1990 May;100(1):185–9

Platelet specific monoclonal antibody [letter] Rhys Davies E. **Br J Radiol** 1990 Jun;63(750):501

Sequential imaging of post–operative thrombus using the In–111–labelled platelet–specific monoclonal antibody P256. Stuttle AW, et al. **Br J Radiol** 1989 Nov; 62(743):963–9

Biological effect of interferon–gamma during the course of experimental infection of rat by Schistosoma mansoni. Pancré V, et al. **Cell Immunol** 1990 Jan;125(1):58–64

The neuropeptide substance P stimulates the effector functions of platelets. Damonneville M, et al. **Clin Exp Immunol** 1990 Aug;81(2):346–51

Autoantibodies against peripheral blood cells appear early in HIV infection and their prevalence increases with disease progression. Klaassen RJ, et al. **Clin Exp Immunol** 1990 Jul;81(1):11–7

Naturally occurring human IgG antibodies to intracellular and cytoskeletal components of human platelets. Pfueller SL, et al. **Clin Exp Immunol** 1990 Mar;79(3):367–73

Clinical significance of platelet–associated immunoglobulins in narcotic addicts with human immunodeficiency virus infection. Borradori L, et al. **Clin Immunol Immunopathol** 1990 Feb;54(2):256–65

Thrombocytopenia in systemic lupus erythematosus: association with antiplatelet and anticardiolipin antibodies. Rupin A, et al. **Clin Immunol Immunopathol** 1990 Jun; 55(3):418–26

Platelet–associated immunoproteins (PAIg): specificity of measurement. Han P, et al. **Clin Lab Haematol** 1990; 12(1):49–56

Human autoantibodies identify a nuclear chromatin–associated antigen (PSL or p55) in human platelets. Barque JP, et al. **Eur J Cell Biol** 1990 Feb; 51(1):183–7

Platelet autoantibodies detected by immunoblotting in systemic lupus erythematosus: association with the lupus anticoagulant, and with history of thrombosis and thrombocytopenia. Jouhikainen T, et al. **Eur J Haematol** 1990 Apr;44(4):234–9

Lymphocyte–mediated inhibition of platelet cytotoxic functions during Hymenoptera venom desensitization: characterization of a suppressive lymphokine. Tsicopoulos A, et al. **Eur J Immunol** 1990 Jun;20(6):1201–7

Severe thrombocytopenia in a pregnant patient with platelet–associated IgM, and known von Willebrand's disease; a case report. Valster FA, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jul–Aug; 36(1–2):197–201

Purification and partial characterization of CD9 antigen of human platelets. Higashihara M, et al. **FEBS Lett** 1990 May 21;264(2):270–4

Mononuclear leucocytes, granulocytes and thrombocytes in the calcium ionophore–induced leucocyte adherence inhibition in multiple sclerosis patients and controls. Mayer M. **Folia Biol (Praha)** 1990;36(2):91–101

First results with Capture–P, a solid phase immunoassay for the detection of platelet antibodies. Mayr WR, et al. **Folia Haematol (Leipz)** 1989;116(3–4):459–61

Platelets and polymorphonuclear leukocytes in experimental ocular inflammation in the rabbit eye. Krootila K, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(5):465–9

Allo and auto–antibodies against platelet antigens: a new immunoenzymatic assay for their detection and quantitation. Borzini P, et al. **Haematologica (Pavia)** 1989 Sep–Oct;74(5):441–7

Multidirectionality of anti–platelet antibodies in idiopathic thrombocytopenic purpura. Oda K. **Hiroshima J Med Sci** 1989 Jun;38(2):75–86

Evaluation of individual specificities of class I HLA on

platelets by a newly developed monoclonal antibody. Kao KJ, et al. **Hum Immunol** 1990 Apr;27(4):285–97

Modulation of Fc receptor clearance and antiplatelet antibodies as a consequence of intravenous immune globulin infusion in patients with immune thrombocytopenic purpura. Bussel JB. **J Allergy Clin Immunol** 1989 Oct;84(4 Pt 2):566–77; discussion 577–8 (22 ref.)

Structural, functional, and antigenic differences between bovine heart endothelial CD36 and human platelet CD36. Greenwalt DE, et al. **J Biol Chem** 1990 Sep 25; 265(27):16296–9

Platelets in hyperthyroidism: studies on platelet counts, mean platelet volume, 111–indium–labeled platelet kinetics, and platelet–associated immunoglobulins G and M. Panzer S, et al. **J Clin Endocrinol Metab** 1990 Feb;70(2):491–6

CD69 is expressed on platelets and mediates platelet activation and aggregation. Testi R, et al. **J Exp Med** 1990 Sep 1;172(3):701–7

The monoclonal antibody 41H16 detects the Leu 4 responder form of human Fc gamma RII. Gosselin EJ, et al. **J Immunol** 1990 Mar 1;144(5):1817–22

Activated platelets express IL–1 activity. Hawrylowicz CM, et al. **J Immunol** 1989 Dec 15;143(12):4015–8

A simple, rapid method for screening hybridomas producing monoclonal antibodies to platelet proteins. Perutelli P, et al. **J Immunol Methods** 1989 Oct 24;123(2):227–32

Platelets as inhibitory cells in neutrophil–mediated cytolysis. Dallegri F, et al. **J Lab Clin Med** 1989 Nov;114(5):502–9

Platelet–neutrophil interaction: modulation of the inflammatory response [editorial] Kazura JW. **J Lab Clin Med** 1989 Nov;114(5):469–70

Dose–dependent platelet stimulation and inhibition induced by anti–PIA1 IgG. Ryu T, et al. **J Lab Clin Med** 1990 Jul;116(1):91–9

Of monoclonal antibodies and thrombus–specific imaging [comment] Oster ZH, et al. **J Nucl Med** 1990 Jun; 31(6):1055–8 (28 ref.) Comment on: J Nucl Med 1990 Jun;31(6):1048–54.

Human platelets effectively kill K–562 cells, a chronic myelogenic leukemia cell line, in vitro. Sagawa T, et al. **Jpn J Cancer Res** 1990 May;81(5):449–53

Deoxyribonucleic acid–binding properties of human monoclonal anti–platelet antibodies obtained from patients with idiopathic thrombocytopenic purpura. Matsumoto M, et al. **Jpn J Med** 1989 Sep–Oct;28(5):593–8

Transmission of idiopathic (autoimmune) thrombocytopenic purpura by liver transplantation. Friend PJ, et al. **N Engl J Med** 1990 Sep 20;323(12):807–11

The frequency of platelet alloantibodies in pregnant women and the occurrence and management of neonatal alloimmune thrombocytopenic purpura. Taaning E, et al. **Obstet Gynecol Surv** 1990 Aug;45(8):521–5 (47 ref.)

In–vitro lysis of sensitized Trypanosoma cruzi by platelets: role of C3b receptors. Umekita LF, et al. **Parasite Immunol** 1989 Sep;11(5):561–6

Chronic ITP as a model for immunization by platelets. McMillan R. **Prog Clin Biol Res** 1990;337:31–9 (25 ref.)

Target antigens of anti–platelet antibodies in patients with acute, steroid–resistant ITP. The Canadian Apheresis Study Group. Rock G, et al. **Prog Clin Biol Res** 1990;337:157–61

Mechanisms of platelet destruction in immune–mediated thrombocytopenia: in vitro studies with canine platelets exposed to heterologous and isologous antiplatelet antibodies. Shebani OI, et al. **Res Vet Sci** 1989 Nov; 47(3):288–93

Characterization by monoclonal antibody of a highly conserved antigenic determinant expressed on human platelet membranes and intermediate filament type III. Alessio M, et al. **Scand J Immunol** 1990 May;31(5):609–17

Crossreactivity of antibodies directed against cardiolipin, DNA, endothelial cells and blood platelets. Hasselaar P, et al. **Thromb Haemost** 1990 Apr 12;63(2):169–73

Expression of the drug–dependent antigen for quinine–dependent antiplatelet antibodies on GP IIIa but not that on GPIb, IIb or IX on human endothelial cells. Pfueller SL, et al. **Thromb Haemost** 1990 Apr 12; 63(2):279–81

In vitro studies with the platelet–reactive antibody 50H.19 and its fragments. Shah VO, et al. **Thromb Res** 1990 Jun 1;58(5):493–504

A study of HLA (Bg) on red cells and platelets by immunoblotting with monoclonal antibodies. Giles CM, et al. **Transfusion** 1990 Feb;30(2):126–32

Frequency of platelet–specific antigens among Koreans determined by a simplified immunofluorescence test. Han KS, et al. **Transfusion** 1989 Oct;29(8):708–10

Platelet crossmatching for kidney transplants by flow cytometry. Wang GX, et al. **Transplantation** 1989 Dec; 48(6):959–61

Detection of antiplatelet immunoglobulin in thrombocytopenic dogs. McVey DS, et al. **Vet Immunol Immunopathol** 1989 Sep;22(2):101–11

A new platelet–specific antigen, Naka, involved in the refractoriness of HLA–matched platelet transfusion. Ikeda H, et al. **Vox Sang** 1989;57(3):213–7

Rifampin–induced immune thrombocytopenia. A case report. Kakaiya RM, et al. **Vox Sang** 1989;57(3):185–7

Platelet anti–Bakb antibody associated with neonatal alloimmune thrombocytopenia. McGrath K, et al. **Vox Sang** 1989;57(3):182–4

Report on the fourth ISBT/ICSH platelet serology workshop (London 1988). Metcalfe P, et al. **Vox Sang** 1990; 58(2):170–5

HLA–DRw6, a new immune response marker for immunization against the platelet alloantigen Bra. Mueller–Eckhardt C, et al. **Vox Sang** 1989;57(1):90–1

Development of lymphocytotoxic and platelet reactive antibodies: a prospective study in patients with acute leukaemia. Pamphilon DH, et al. **Vox Sang** 1989; 57(3):177–81

New method for the elution of platelet antibodies [letter] Pujol M, et al. **Vox Sang** 1990;58(4):305–6

Amount of immunoglobulin G in fresh and stored platelets [letter] Szymanski IO, et al. **Vox Sang** 1989;57(1):92–3

ICSH/ISBT Working Party on platelet serology. Nomenclature of platelet–specific antigens. von dem Borne AE, et al. **Vox Sang** 1990;58(2):176

[The origin of HLA antigens in thrombocytes] Kořínková P. **Vnitr Lek** 1989 Sep;35(9):880–4 (Eng. Abstr.) **(Cze)**

[The effect of blood platelet freezing on their antigen activity] Vopatová M, et al. **Vnitr Lek** 1989 Oct;35(10):982–6 (Eng. Abstr.) **(Cze)**

[Thrombocyte–specific antigens/antibodies and their clinical importance] Mueller–Echardt C, et al. **Beitr Infusionther** 1989;24:221–30 (50 ref.) (Eng. Abstr.) **(Ger)**

[Alopecia areata universalis in Werlhof disease] Lamminger C, et al. **Hautarzt** 1990 Jun;41(6):324–5 (Eng. Abstr.) **(Ger)**

[Thrombocyte function and thrombocyte–associated immunoglobulins in patients with systemic lupus erythematosus and chronic polyarthritis] Horn A, et al. **Klin Wochenschr** 1990 May 4;68(9):460–5 (Eng. Abstr.) **(Ger)**

[Neonatal thrombocytopenia caused by fetomaternal alloimmunization: clinical, immunological and therapeutic aspects] Bizzaro N. **G Clin Med** 1990 May;71(5):351–60 (70 ref.) **(Ita)**

[Autoimmunity and platelet disorders] Balduini CL, et al. **Haematologica (Pavia)** 1989 Oct;74(5 Suppl):179–89 (27 ref.) **(Ita)**

[Immunochemical characterization of platelet–specific alloantigen Baka] Tomiyama Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Aug;52(5):887–94 (Eng. Abstr.) **(Jpn)**

[Elevated IgM platelet antibody in a case of acute idiopathic thrombocytopenic purpura following mumps] Honda S, et al. **Nippon Naika Gakkai Zasshi** 1989 Nov;78(11):1619–20 **(Jpn)**

[Clinical significance of antiplatelet antibody assay] Handa M, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:529–32 **(Jpn)**

[Clinical significance of platelet antigen assay] Ikeda Y. **Nippon Rinsho** 1990 Feb;48 Suppl:837–40 **(Jpn)**

[ELISA for platelet–associated IgG, IgM, and C3, and their clinical application] Enokido C, et al. **Rinsho Byori** 1989 Aug;37(8):923–8 (Eng. Abstr.) **(Jpn)**

[Test for anti–platelet antibody] Kurata Y. **Rinsho Byori** 1989 Jul;37(7):750–5 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Acute leukemia with active hemophagocytosis, positive immunologic markers for the megakaryocyte–platelet lineage, and translocation (16; 21) (p11; q22] Shimizu H, et al. **Rinsho Ketsueki** 1990 Jan;31(1):70–4 (Eng. Abstr.) **(Jpn)**

[Phagocytic activity of platelets in patients with pneumonia] Kemona H, et al. **Acta Haematol Pol** 1989 Jul–Dec; 20(2):201–5 (Eng. Abstr.) **(Pol)**

[The role of the thrombocytes in the pathogenesis of certain forms of bronchial asthma] Tatarskiĭ AR, et al. **Ter Arkh** 1990;62(3):149–51 (44 ref.) **(Rus)**

[Platelet immunoglobulins and complement in idiopathic thrombocytopenic purpura. Specificity to the IIb/IIIa membrane complex] del Real Llorente M, et al. **An Esp Pediatr** 1990 Apr;32(4):293–8 (34 ref.) (Eng. Abstr.) **(Spa)**

[Posttransfusion thrombocytopenic purpura. 1st case described in Spain] Macià J, et al. **Sangre (Barc)** 1990 Feb; 35(1):74–7 (Eng. Abstr.) **(Spa)**

METABOLISM

Specification of 3H–imipramine bindings on human platelets and in rat hypothalamus. Krpálek P, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):285–6

Subdivision of human platelet 3H–imipramine binding based on ion dependence. Pacáková E, et al. **Act Nerv Super (Praha)** 1989 Jun;31(2):124–5

Exogenous arachidonic acid metabolism in platelets from psoriatic patients. Vila L, et al. **Acta Derm Venereol (Stockh)** 1990;70(2):110–4

Increased erythrocyte membrane arachidonate and platelet malondialdehyde (MDA) production in psoriasis: normalization after fish–oil. Schena D, et al. **Acta Derm Venereol Suppl (Stockh)** 1989;146:42–4

Platelet 5–HT uptake in post–stroke depression. Barry S, et al. **Acta Psychiatr Scand** 1990 Jul;82(1):88–9

Role of anions in platelet intra cellular calcium ion rise and arachidonic acid release induced by thrombin. Ozaki Y, et al. **Adv Exp Med Biol** 1989;255:455–60

Characterization of a secretable phospholipase A2 from human platelets. Kramer RM, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1990; 20:79–86 (50 ref.)

Platelet–granulocyte interactions and the production of leukotrienes and lipoxins. Lindgren JA, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1990; 20:63–70

Novel eicosanoids generated by cytochrome P450: effects on platelet aggregation and protein phosphorylation. Malcolm K, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1990; 20:87–94

I–BOP, the most potent radiolabelled agonist for the TXA2/PGH2 receptor. Morinelli TA, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1990; 20:102–9

Histamine release by platelet aggregation. Mannaioni PF, et al. **Agents Actions** 1990 Apr;30(1–2):44–8

Reduced production of oxygen–free radicals of platelets in aspirin–induced–asthma. Schmitz–Schumann M, et al. **Agents Actions Suppl** 1989;28:195–203

Dietary canola oil: effect on the accumulation of eicosapentaenoic acid in the alkenylacyl fraction of human platelet ethanolamine phosphoglyceride. Weaver BJ, et al. **Am J Clin Nutr** 1990 Apr;51(4):594–8

Deficient elevation of the cytoplasmic calcium ion concentration by epinephrine in epinephrine–insensitive platelets of patients with myeloproliferative disorders. Ushikubi F, et al. **Am J Hematol** 1990 Feb;33(2):96–100

A V1–vascular vasopressin antagonist suitable for radioiodination and photoaffinity labeling. Thibonnier M, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 1):471–5

Platelet activity and phosphoinositide turnover increase with advancing age. Bastyr EJ 3d, et al. **Am J Med** 1990 Jun; 88(6):601–6

Adenine nucleotides, serotonin, and aggregation properties of platelets of blue foxes (Alopex lagopus) with the Chediak–Higashi syndrome. Sjaastad OV, et al. **Am J Med Genet** 1990 Mar;35(3):373–8

Changes in platelet angiotensin II binding sites associated with the human menstrual cycle. Baker PN, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):175–6

Platelet–activating factor (PAF)–dependent biochemical, morphologic, and physiologic responses of human platelets: demonstration of translocation of protein kinase C associated with protein phosphorylation. Block LH, et al. **Am J Respir Cell Mol Biol** 1989 Oct;1(4):277–88

Sequential decrease in platelet energy charge after hepatic resection in cirrhotics. Zaima M, et al. **Am J Surg** 1990 Feb;159(2):246–9

Determination of platelet adhesion to collagen and the associated formation of phosphatidic acid and calcium mobilization. Smith JB, et al. **Anal Biochem** 1990 May 15; 187(1):173–8

Platelet and plasma vasoactive amines in type 1 (insulin–dependent) diabetes mellitus with and without vascular disease. Winocour PH, et al. **Ann Clin Biochem** 1990 May;27 (Pt 3):238–43

Calcium signaling in human platelets. Rink TJ, et al. **Annu Rev Physiol** 1990;52:431–49 (91 ref.)

Very high proportion of disaturated molecular species in rat platelet diacyl–glycerophosphocholine: involvement of CoA–dependent transacylation reactions. Masrar H, et al. **Arch Biochem Biophys** 1990 Aug 15;281(1):116–23

Modes of inhibitory action of 4 beta–phorbol 12–myristate 13–acetate in thrombin–stimulated arachidonic acid release in intact and permeabilized platelets. Murayama T, et al. **Arch Biochem Biophys** 1990 Jan;276(1):146–52

Platelet serotonin metabolism and ultrastructure in migraine. D'Andrea G, et al. **Arch Neurol** 1989 Nov;46(11):1187–9

Platelet secretory products increase low density lipoprotein oxidation, enhance its uptake by macrophages, and reduce its fluidity. Aviram M, et al. **Arteriosclerosis** 1990 Jul–Aug; 10(4):559–63

Fibrinogen receptors do not undergo spontaneous redistribution on surface–activated platelets. White JG, et al. **Arteriosclerosis** 1990 Sep–Oct;10(5):738–44

Arachidonic acid and related methyl ester mediate protein kinase C activation in intact platelets through the arachidonate metabolism pathways. Fan XT, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):933–40

A small GTP–binding protein (G protein) recognized by smg p25A GDP dissociation inhibitor (GDI) in human platelet membranes and GDI for this small G protein in human platelet cytosol. Fujioka H, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):1244–52

Protein–tyrosine phosphorylation and aggregation of intact human platelets by vanadate with H2O2. Inazu T, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):259–63

Increased immunoreactive neuropeptide Y in platelets of spontaneously hypertensive rats (SHR). Ogawa T, et al. **Biochem Biophys Res Commun** 1989 Dec 29; 165(3):1399–405

Cyclic GMP analogs inhibit gamma thrombin–induced arachidonic acid release in human platelets. Sane DC, et al. **Biochem Biophys Res Commun** 1989 Dec 15; 165(2):708–14

Histamine formed in stimulated human platelets is cytoplasmic. Saxena SP, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):164–8

Rap1–B is phosphorylated by protein kinase A in intact human platelets. Siess W, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):944–50

Protein kinase C–mediated formation of phosphatidylinositol 3,4–bisphosphate in human platelets. Yamamoto K, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):466–72

Transfer of arachidonic acid from phosphatidylcholine to

phosphatidylethanolamine during storage of human platelets for 5 days. Lacasse J, et al. **Biochem Cell Biol** 1990 Jan;68(1):117–22

Mobilization of arachidonic acid in thrombin-stimulated human platelets. Mahadevappa VG, et al. **Biochem Cell Biol** 1990 Feb;68(2):520–7

Role of calcium on protein phosphorylation in collagen-stimulated platelets. Effect of a new dihydropyridine derivative. Catalán RE, et al. **Biochem Int** 1989 Oct;19(4):919–28

The correlation between Ca2+ influx and inositol 1, 4, 5-trisphosphate (IP3) formation in platelets stimulated by various agonists. Uemura Y, et al. **Biochem Int** 1990; 20(5):853–61

Regulation of sn-1,2-diacylglycerol second-messenger formation in thrombin-stimulated human platelets. Potentiation by protein kinase C inhibitors. Bishop WR, et al. **Biochem J** 1990 Jul 15;269(2):465–73

Ca2(+)-stimulatable and protein kinase C-inhibitable accumulation of inositol 1,3,4,6-tetrakisphosphate in human platelets. King WG, et al. **Biochem J** 1990 Aug 15; 270(1):125–31

Extracellular Na+, but not Na+/H+ exchange, is necessary for receptor-mediated arachidonate release in platelets. Krishnamurthi S, et al. **Biochem J** 1990 Jan 1;265(1):155–60

The effect of iloprost on the ADP-ribosylation of Gs alpha (the alpha-subunit of Gs). Molina y Vedia L, et al. **Biochem J** 1989 Aug 1;261(3):841–5

The inositol 1,4,5-trisphosphate receptor binding sites of platelet membranes. pH-dependency, inhibition by polymeric sulphates, and the possible presence of arginine at the binding site. O'Rourke F, et al. **Biochem J** 1990 Apr 15;267(2):297–302

Aggregation and/or oxygenated products of arachidonic acid are not required for collagen-induced deacylation of phosphatidylcholine in human platelets. Piché LA, et al. **Biochem J** 1989 Oct 1;263(1):143–8

Translocation-independent activation of protein kinase C by platelet-activating factor, thrombin and prostacyclin. Lack of correlation with polyphosphoinositide hydrolysis in rabbit platelets. Salari H, et al. **Biochem J** 1990 May 1; 267(3):689–96

Cathepsin G binding to human platelets. Evidence for a specific receptor. Selak MA, et al. **Biochem J** 1990 Feb 15;266(1):55–62

Stimulated cholesterol-enriched platelets display increased cytosolic Ca2+ and phospholipase A activity independent of changes in inositol trisphosphates and agonist/receptor binding. Sorisky A, et al. **Biochem J** 1990 Feb 1; 265(3):747–54

The local anaesthetic benzyl alcohol attenuates the alpha 2-adrenoceptor-mediated inhibition of human platelet adenylate cyclase activity when stimulated by prostaglandin E1, but not that stimulated by forskolin. Spence S, et al. **Biochem J** 1989 Dec 1;264(2):483–8

Evidence for tight metabolic control of the receptor-activated polyphosphoinositide cycle in human platelets. Steen VM, et al. **Biochem J** 1989 Oct 15; 263(2):621–4

The novel inositol lipid phosphatidylinositol 3,4-bisphosphate is produced by human blood platelets upon thrombin stimulation. Sultan C, et al. **Biochem J** 1990 Aug 1; 269(3):831–4

Platelet adhesion to collagen. Factors affecting Mg2(+)-dependent and bivalent-cation-independent adhesion. Zijenah LS, et al. **Biochem J** 1990 Jun 1; 268(2):481–6

Stimulation of the active transport of serotonin into human platelets by hydrogen peroxide. Bosin TR. **Biochem Pharmacol** 1990 Aug 15;40(4):723–9

Diets rich in n-9, n-6 and n-3 fatty acids differentially affect the generation of inositol phosphates and of thromboxane by stimulated platelets, in the rabbit. Medini L, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):129–33

Lack of effect of heparin on TXA2 binding to platelets. Modesti PA, et al. **Biochem Pharmacol** 1990 Aug 15; 40(4):898–900

Novel inhibitory actions on platelet thromboxane and inositolphosphate formation by xanthones and their glycosides. Teng CM, et al. **Biochem Pharmacol** 1989 Nov 1;38(21):3791–5

5HT2 receptor changes in rat cortex and platelets following chronic ritanserin and clorgyline administration. Twist EC, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):161–6

Receptor-operated calcium channels in human platelets. Garcia-Sancho J, et al. **Biochem Soc Trans** 1989 Dec; 17(6):980–2

Cross-linking of a monomeric 39/34-kDa dispase fragment of von Willebrand factor (Leu-480/Val-481–Gly-718) to the N-terminal region of the alpha-chain of membrane glycoprotein Ib on intact platelets with bis(sulfosuccinimidyl) suberate. Andrews RK, et al. **Biochemistry** 1989 Oct 17;28(21):8326–36

Synergistic release of arachidonic acid from platelets by activators of protein kinase C and Ca2+ ionophores. Evidence for the role of protein phosphorylation in the activation of phospholipase A2 and independence from the Na+/H+ exchanger. Halenda SP, et al. **Biochemistry** 1989 Sep 5;28(18):7356–63

Phosphorylation of bovine platelet myosin by protein kinase C. Ikebe M, et al. **Biochemistry** 1990 Mar 20;29(11):2713–20

Vanadate and molybdate increase tyrosine phosphorylation in a 50-kilodalton protein and stimulate secretion in electropermeabilized platelets. Lerea KM, et al. **Biochemistry** 1989 Nov 28;28(24):9286–92

Involvement of a guanine-nucleotide-binding protein-mediated mechanism in the enhancement of arachidonic acid liberation by phorbol 12-myristate 13-acetate and Ca2+ in saponin-permeabilized platelets. Akiba S, et al. **Biochim Biophys Acta** 1990 Jun 14; 1044(3):291–6

High level of expression of functional human platelet alpha 2-adrenergic receptors in a stable mouse C127 cell line. Bresnahan MR, et al. **Biochim Biophys Acta** 1990 May 22; 1052(3):439–45

Kinetic evidence that arachidonate-induced calcium efflux from platelet microsomes involves a carrier-type ionophoric mechanism. Fischer TH, et al. **Biochim Biophys Acta** 1990 Feb 28;1022(2):215–28

ESR analysis with long-chain alkyl spin labels in bovine blood platelets. Relationship between the increase in membrane fluidity by alcohols and phenolic compounds and their inhibitory effects on aggregation. Kitagawa S, et al. **Biochim Biophys Acta** 1990 Aug 24;1027(2):123–9

Antiplatelet effects of chelerythrine chloride isolated from Zanthoxylum simulans. Ko FN, et al. **Biochim Biophys Acta** 1990 May 22;1052(3):360–5

Tropomyosin-caldesmon/actomyosin systems in platelets and arterial smooth muscle: results from exchange experiments. Onji T, et al. **Biochim Biophys Acta** 1989 Dec 21; 999(3):248–53

Binding of rat serum phosphorylcholine binding protein to platelets. Randell E, et al. **Biochim Biophys Acta** 1990 Jun 20;1034(3):281–4

Feedback regulation of platelet function by 12S-hydroxyeicosatetraenoic acid: inhibition of arachidonic acid liberation from phospholipids. Sekiya F, et al. **Biochim Biophys Acta** 1990 May 1;1044(1):165–8

Synthesis of platelet-activating factor by human blood platelets and leucocytes. Evidence against selective utilization of cellular ether-linked phospholipids. Sturk A, et al. **Biochim Biophys Acta** 1989 Dec 8;993(2-3):148–56

Translocation of exogenous platelet-activating factor and its lyso-compound through plasma membranes is a rate-limiting step for their metabolic conversions into alkylacylglycerophosphocholines in rabbit platelets and guinea-pig leukocytes. Tokumura A, et al. **Biochim Biophys Acta** 1990 May 1;1044(1):91–100

Tritiated imipramine binding in obsessive-compulsive volunteers and psychiatrically normal controls. Black DW, et al. **Biol Psychiatry** 1990 Feb 1;27(3):319–27

Adrenergic status in anxiety disorders: platelet alpha 2-adrenergic receptor binding, blood pressure, pulse, and plasma catecholamines in panic and generalized anxiety disorder patients and in normal subjects. Cameron OG, et al. **Biol Psychiatry** 1990 Jul 1;28(1):3–20

Seasonal rhythm of platelet 3H-imipramine binding in normal controls. DeMet EM, et al. **Biol Psychiatry** 1989 Sep; 26(5):489–95

Accumulation of diacylglycerol in platelet phosphoinositide turnover in schizophrenia: a biological marker of good prognosis? Kaiya H, et al. **Biol Psychiatry** 1989 Nov; 26(7):669–76

Alpha 2-adrenoreceptor status in obsessive-compulsive disorder. Lee MA, et al. **Biol Psychiatry** 1990 May 15; 27(10):1083–93

Circadian variation of platelet 3H-imipramine binding, platelet serotonin content, and plasma cortisol in healthy volunteers. Montero D, et al. **Biol Psychiatry** 1989 Dec; 26(8):794–804

Platelet serotonin-2 receptor binding sites in depression and suicide. Pandey GN, et al. **Biol Psychiatry** 1990 Aug 1; 28(3):215–22

A test of the tridimensional personality theory: association with diagnosis and platelet imipramine binding in obsessive-compulsive disorder. Pfohl B, et al. **Biol Psychiatry** 1990 Jul 1;28(1):41–6

Alpha-granule pool of glycoprotein IIb-IIIa in normal and pathologic platelets and megakaryocytes. Cramer EM, et al. **Blood** 1990 Mar 15;75(6):1220–7

von Willebrand factor competes with fibrin for occupancy of GPIIb:IIIa on thrombin-stimulated platelets. Hantgan RR, et al. **Blood** 1990 Feb 15;75(4):889–94

Calcium mobilization in human platelets using indo-1 and flow cytometry. Jennings LK, et al. **Blood** 1989 Dec; 74(8):2674–80

Human platelet osteonectin: release, surface expression, and partial characterization. Kelm RJ Jr, et al. **Blood** 1990 Mar 1;75(5):1105–13

Flow cytometric analysis of thiazole orange uptake by platelets: a diagnostic aid in the evaluation of thrombocytopenic disorders. Kienast J, et al. **Blood** 1990 Jan 1;75(1):116–21

An integrin receptor on normal and thrombasthenic platelets that binds thrombospondin. Lawler J, et al. **Blood** 1989 Nov 1;74(6):2022–7

Glycoprotein IIIa is phosphorylated in intact human platelets. Parise LV, et al. **Blood** 1990 Jun 15;75(12):2363–8

Identification of and partial characterization of platelet vitronectin: evidence for complex formation with platelet-derived plasminogen activator inhibitor-1. Preissner KT, et al. **Blood** 1989 Nov 1;74(6):1989–96

Synthesis of proteins from [35S]methionine by guinea pig megakaryocytes in vivo and time course of appearance of newly synthesized proteins in platelets. Schick BP. **Blood** 1990 Sep 1;76(5):887–91

Membrane expression of platelet calpain. Schmaier AH, et al. **Blood** 1990 Mar 15;75(6):1273–81

Identification of the pertussis toxin-sensitive G proteins in platelets, megakaryocytes, and human erythroleukemia cells. Williams AG, et al. **Blood** 1990 Aug 15;76(4):721–30

Properties of GMP-140, an inducible granule membrane protein of platelets and endothelium. McEver RP. **Blood Cells** 1990;16(1):73–80; discussion 80–3 (25 ref.)

Arachidonic acid metabolism in platelets stored for 5 days. Cesar JM, et al. **Br J Haematol** 1990 Mar;74(3):295–9

Heparin-induced thrombocytopenia: mechanism of interaction of the heparin-dependent antibody with platelets. Chong BH, et al. **Br J Haematol** 1989 Oct; 73(2):235–40

P47 phosphoprotein of blood platelets (pleckstrin) is a major target for phorbol ester-induced protein phosphorylation in intact platelets, granulocytes, lymphocytes, monocytes and cultured leukaemic cells: absence of P47 in non-haematopoietic cells. Gailani D, et al. **Br J Haematol** 1990 Feb;74(2):192–202

The effect of molecular weight on heparin binding to platelets. Horne MK 3d, et al. **Br J Haematol** 1990 Mar; 74(3):306–12

Platelet membrane abnormalities in myeloproliferative disorders: decrease in glycoproteins Ib and IIb/IIIa complex is associated with deficient receptor function. Mazzucato M, et al. **Br J Haematol** 1989 Nov;73(3):369–74

Elevated platelet-free calcium in uraemia. Moosa A, et al. **Br J Haematol** 1990 Mar;74(3):300–5

Characteristics of [3H]-GR 32191 binding to the thromboxane (TP) receptor of human platelets. Armstrong RA, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:843P

Heterogeneity of alpha 2-adrenoceptors in rat cortex but not human platelets can be defined by 8-OH-DPAT, RU 24969 and methysergide. Brown CM, et al. **Br J Pharmacol** 1990 Mar;99(3):481–6

No evidence for differences between pre- and postjunctional alpha 2-adrenoceptors in the periphery. Connaughton S, et al. **Br J Pharmacol** 1990 Jan;99(1):97–102

Evaluation of ZK110841 and AH6809, an agonist and an antagonist of prostaglandin DP-receptors on human platelets, with a PGD2-responsive cell line from bovine embryonic trachea. Ito S, et al. **Br J Pharmacol** 1990 Jan; 99(1):13–4

Characterisation of platelet-activating factor-induced diacylglycerol generation in rabbit platelets. Murphy CT, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:844P

Effects of N-ethylmaleimide on 5-hydroxytryptamine transport and sodium content in rabbit platelets. Wölfel R, et al. **Br J Pharmacol** 1989 Aug;97(4):1308–14

Platelet monoamine oxidase activity and 5-hydroxytryptamine uptake in agoraphobic patients. Flaskos J, et al. **Br J Psychiatry** 1989 Nov;155:680–5

The platelet alpha 2-adrenoceptor as a potential biological marker in depression. García-Sevilla JA. **Br J Psychiatry Suppl** 1989 May;(4):67–72 (12 ref.)

Interaction between the serotonin and dopamine systems in humans: preliminary findings. Castrogiovanni P, et al. **Brain Res** 1989 Dec 11;504(1):129–31

Epinephrine potentiates calcium mobilization and activation of protein kinases in platelets stimulated by ADP through a mechanism unrelated to phospholipase C. Olbrich C, et al. **Cell Signal** 1989;1(5):483–92

Platelet-specific alpha-granule proteins and thrombospondin in bronchoalveolar lavage in the adult respiratory distress syndrome. Idell S, et al. **Chest** 1989 Nov;96(5):1125–32

Platelet and plasma catecholamines in relation to plasma minerals and parathyroid hormone following acute myocardial infarction. Joborn H, et al. **Chest** 1990 May; 97(5):1098–105

Variations in platelets 3H-imipramine binding during two different periods of the year. Marazziti D, et al. **Chronobiol Int** 1989;6(4):303–4

Effect of platelet factors on migration of cultured bovine aortic endothelial and smooth muscle cells. Bell L, et al. **Circ Res** 1989 Oct;65(4):1057–65

Impaired prostaglandin E1/I2 receptor activity of human blood platelets in acute ischemic heart disease. Kahn NN, et al. **Circ Res** 1990 Apr;66(4):932–40

EDRF increases cyclic GMP in platelets during passage through the coronary vascular bed. Pohl U, et al. **Circ Res** 1989 Dec;65(6):1798–803

Increased platelet thromboxane A2/prostaglandin H2 receptors in patients with acute myocardial infarction. Dorn GW 2d, et al. **Circulation** 1990 Jan;81(1):212–8

Induction of plasminogen activator inhibitor by products released from platelets. Fujii S, et al. **Circulation** 1990 Oct; 82(4):1485–93

Validation of a method to measure the uptake of [3H]dopamine by human platelets. Dean B, et al. **Clin Chim Acta** 1990 Jan 31;187(1):37–46

Abnormal platelet hydrogen peroxide metabolism in aspirin hypersensitivity. Pearson DJ, et al. **Clin Exp Allergy** 1990 Mar;20(2):157–63

Effects of orpanoxin on arachidonic acid metabolism of human polymorphonuclear leucocytes and platelets in vitro. Doerr IL, et al. **Clin Exp Pharmacol Physiol** 1988 Jul;15(7):539–49

Arginine vasopressin release from human platelets after irreversible aggregation. Anfossi G, et al. **Clin Sci** 1990

Jan;78(1):113–6
Permeation of glycerol and propane–1,2–diol into human platelets. Arnaud FG, et al. **Cryobiology** 1990 Apr; 27(2):107–18
The structure and function of platelet integrins. Parise LV. **Curr Opin Cell Biol** 1989 Oct;1(5):947–52 (20 ref.)
The growth factor–platelet–transformation connection. Bowen–Pope DF. **Dev Biol (N Y 1985)** 1986;3:111–28 (132 ref.)
Altered cellular Ca2+ and Na+ transport in diabetes mellitus. Mazzanti L, et al. **Diabetes** 1990 Jul;39(7):850–4
Modification of prostaglandin synthesis in washed human platelets and cultured bovine aortic endothelial cells by glycosylated low density lipoprotein. Ishii H, et al. **Diabetes Res** 1989 Dec;12(4):177–82
Metabolism of endogenous arachidonic acid in weakly activated platelets. Absence of leukocyte cooperative products in whole blood. Guichardant M, et al. **Eicosanoids** 1989;2(2):117–21
[3H]S–145 and [125I]I–S–145–OH: new radioligands for platelet thromboxane A2 receptor with low nonspecific binding and high binding affinity for various receptor preparations. Ushikubi F, et al. **Eicosanoids** 1989;2(1):21–7
Primary stimuli of icosanoid release inhibit arachidonoyl–CoA synthetase and lysophospholipid acyltransferase. Mechanism of action of hydrogen peroxide and methyl mercury in platelets. Hornberger W, et al. **Eur J Biochem** 1990 Jan 12;187(1):175–81
Platelet noradrenaline release in patients with familial hypercholesterolaemia. Smith CC, et al. **Eur J Clin Invest** 1989 Jun;19(3):246–50
Platelet P1, P4–Di (adenosine–51) tetraphosphate (AP4A) in migraine patients before and during beta–adrenoceptor blockade. Winther K, et al. **Eur J Clin Invest** 1990 Jun; 20(3):336–8
Platelets of patients affected with essential thrombocythemia are abnormal in plasma membrane and adenine nucleotide content. Leoncini G, et al. **Eur J Haematol** 1990 Feb; 44(2):116–20
Clinical value of a direct platelet suspension immunofluorescence test in adult idiopathic thrombocytopenic purpura. Nieminen UK. **Eur J Haematol** 1990 Mar;44(3):145–9
Long–term verapamil treatment increases [3H]imipramine binding in human platelets. Cohen A, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):311–4
Dopamine uptake by the human platelet: effects of dopamine receptor agonists. Dean B, et al. **Eur J Pharmacol** 1989 Dec 7;173(2–3):165–9
Effect of thromboxane A2 synthetase inhibition, singly and combined with thromboxane A2/prostaglandin endoperoxide receptor antagonism, on inositol phospholipid turnover and on 5–HT release by washed human platelets. de Chaffoy de Courcelles D, et al. **Eur J Pharmacol** 1990 Mar 13;188(2–3):161–9
Antagonistic actions of S–145 on vascular and platelet thromboxane A2 receptors. Mihara S, et al. **Eur J Pharmacol** 1989 Nov 21;171(2–3):179–87
Competitive inhibition of platelet thromboxane A2 receptor binding by picotamide. Modesti PA, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):85–93
Lithium potentiates agonist formation of [3H]CDP–diacylglycerol in human platelets. Watson SP, et al. **Eur J Pharmacol** 1990 Apr 25;188(4–5):273–6
In vitro interaction of heterologous platelets with isolated neoplastic cells from a murine mammary gland tumor. Eynard AR, et al. **Exp Cell Biol** 1989;57(4):213–8
Membrane–associated 41–kDa GTP–binding protein in collagen–induced platelet activation. Walker G, et al. **FASEB J** 1990 Aug;4(11):2925–33
Tyrosine–specific phosphorylation of gpIIIa in platelet membranes. Elmore MA, et al. **FEBS Lett** 1990 Sep 3; 269(2):283–7
Activation of protein kinase C alters the interaction of alpha 2–adrenoceptors and the inhibitory GTP–binding protein (Gi) in human platelets. García–Sáinz JA, et al. **FEBS Lett** 1989 Nov 6;257(2):427–30
The signal transduction induced by thrombin in human platelets. Lapetina EG. **FEBS Lett** 1990 Aug 1;268(2):400–4 (33 ref.)
Polyphosphoinositide synthesis in platelets stimulated with low concentrations of thrombin is enhanced before the activation of phospholipase C. Lassing I, et al. **FEBS Lett** 1990 Mar 26;262(2):231–3
Gamma–thrombin–induced phospholipase A2 activation in rabbit platelets: comparison with alpha–thrombin. Touqui L, et al. **FEBS Lett** 1989 Sep 25;255(2):445–50
Evidence that chlorpromazine and prostaglandin E1 but not neomycin interfere with the inositol phospholipid metabolism in intact human platelets. Tysnes OB, et al. **FEBS Lett** 1990 May 7;264(1):33–6
Recombinant TGF–beta 1 is synthesized as a two–component latent complex that shares some structural features with the native platelet latent TGF–beta 1 complex. Wakefield LM, et al. **Growth Factors** 1989;1(3):203–18
Platelet norepinephrine and serotonin balance in migraine. D'Andrea G, et al. **Headache** 1989 Nov;29(10):657–9
Detection of platelets in routinely processed specimens [letter; comment] Adány R. **Histopathology** 1989 Sep; 15(3):316 Comment on: Histopathology 1988 Sep;13(3):257–67.
Platelet phospholipase C activity in salt–dependent hypertension. Limon I, et al. **Hypertension** 1990 Apr; 15(4):381–7
Platelet phosphatidylcholine turnover in experimental hypertension. Marche P, et al. **Hypertension** 1990 Aug; 16(2):190–3
Abnormal calcium handling by platelets of spontaneously hypertensive rats. Oshima T, et al. **Hypertension** 1990 Jun; 15(6 Pt 1):606–11
Variations in the apparent pH set point for activation of platelet Na–H antiport. Tokudome G, et al. **Hypertension** 1990 Aug;16(2):180–9
Platelet serotonergic mechanisms and glomerulonephritis. Mitra MK, et al. **Indian J Exp Biol** 1989 Jun;27(6):545–7
Effect of azelastine on leukotriene synthesis in murine peritoneal cells and on thromboxane synthesis in human platelets. Nishihira J, et al. **Int Arch Allergy Appl Immunol** 1989;90(3):285–90
Serotonin in panic disorder: platelet uptake and concentration. McIntyre IM, et al. **Int Clin Psychopharmacol** 1989 Jan;4(1):1–6
Radiolabeled blood cells: perspectives and directions. Thakur ML. **Int J Rad Appl Instrum [B]** 1990;17(1):41–7 (29 ref.)
Platelet system changes associated with a training period of 18–20 months: a transverse and a longitudinal approach. van Wersch JW, et al. **Int J Sports Med** 1989 Oct;10 Suppl 3:S181–5
High–affinity platelet [3H]LSD binding is decreased in panic disorder. Norman TR, et al. **J Affective Disord** 1990 Jun; 19(2):119–23
Evidence that platelet glycoprotein IIIa has a large disulfide–bonded loop that is susceptible to proteolytic cleavage. Beer J, et al. **J Biol Chem** 1989 Oct 15; 264(29):17564–73
Human platelets and megakaryocytes contain alternately spliced glycoprotein IIb mRNAs. Bray PF, et al. **J Biol Chem** 1990 Jun 15;265(17):9587–90
The amyloid precursor protein of Alzheimer's disease is released by human platelets. Bush AI, et al. **J Biol Chem** 1990 Sep 15;265(26):15977–83
Simultaneous flow cytometric measurements of thrombin–induced cytosolic pH and Ca2+ fluxes in human platelets. Davies TA, et al. **J Biol Chem** 1990 Jul 15; 265(20):11522–6
Cyclic oxidation–reduction reactions regulate thromboxane A2/prostaglandin H2 receptor number and affinity in human platelet membranes. Dorn GW 2nd. **J Biol Chem** 1990 Mar 15;265(8):4240–6
Stoichiometric and reversible phosphorylation of a 46–kDa protein in human platelets in response to cGMP– and cAMP–elevating vasodilators. Halbrügge M, et al. **J Biol Chem** 1990 Feb 25;265(6):3088–93
Inhibition of the ras p21 GTPase–activating protein–stimulated GTPase activity of c–Ha–ras p21 by smg p21 having the same putative effector domain as ras p21s. Hata Y, et al. **J Biol Chem** 1990 May 5;265(13):7104–7
The activation of human platelets mediated by anti–human platelet p24/CD9 monoclonal antibodies. Jennings LK, et al. **J Biol Chem** 1990 Mar 5;265(7):3815–22
Stimulation of prostaglandin E1 binding to human blood platelet membrane by insulin and the activation of adenylate cyclase. Kahn NN, et al. **J Biol Chem** 1990 Mar 25;265(9):4976–81
Human platelets form 3–phosphorylated phosphoinositides in response to alpha–thrombin, U46619, or GTP gamma S. Kucera GL, et al. **J Biol Chem** 1990 Apr 5; 265(10):5345–8
Covalent binding of arachidonic acid metabolites to human platelet proteins. Identification of prostaglandin H synthase as one of the modified substrates. Lecomte M, et al. **J Biol Chem** 1990 Mar 25;265(9):5178–87
Regulation of the synthesis of platelet–activating factor and its inactive storage precursor (1–alkyl–2–acyl–sn–glycero–3–phosphocholine) from 1–alkyl–2–acetyl–sn–glycerol by rabbit platelets. Lee TC, et al. **J Biol Chem** 1990 Jun 5;265(16):9181–7
Thrombin stimulates the production of a novel polyphosphoinositide in human platelets. Nolan RD, et al. **J Biol Chem** 1990 Feb 15;265(5):2441–5
Sodium fluoride prevents receptor– and protein kinase C–mediated activation of the human platelet Na+/H+ exchanger without inhibiting its basic pHi–regulating activity. Siffert W, et al. **J Biol Chem** 1990 Sep 15; 265(26):15441–8
Na+/H+ exchange modulates Ca2+ mobilization in human platelets stimulated by ADP and the thromboxane mimetic U 46619. Siffert W, et al. **J Biol Chem** 1990 Jan 15; 265(2):719–25
Evidence of GTP–binding protein regulation of phospholipase A2 activity in isolated human platelet membranes. Silk ST, et al. **J Biol Chem** 1989 Dec 25; 264(36):21466–9
Identification of a site in the alpha chain of platelet glycoprotein Ib that participates in von Willebrand factor binding. Vicente V, et al. **J Biol Chem** 1990 Jan 5; 265(1):274–80
Adsorption of plasma proteins and adhesion of platelets onto novel polyetherurethaneureas—relationship between denaturation of adsorbed proteins and platelet adhesion. Ito Y, et al. **J Biomed Mater Res** 1990 Feb;24(2):227–42
Activation–dependent redistribution of the adhesion plaque protein, talin, in intact human platelets [published erratum appears in J Cell Biol 1990 Mar;110(3):865] Beckerle MC, et al. **J Cell Biol** 1989 Dec;109(6 Pt 2):3333–46
Decreased high affinity state in platelet alpha 2–adrenoceptors from diabetic patients with orthostatic hypotension. Senard JM, et al. **J Clin Endocrinol Metab** 1990 Aug;71(2):311–7
Distinct abnormalities in the interaction of purified types IIA and IIB von Willebrand factor with the two platelet binding sites, glycoprotein complexes Ib–IX and IIb–IIIa. De Marco L, et al. **J Clin Invest** 1990 Sep;86(3):785–92
Distinct platelet thromboxane A2/prostaglandin H2 receptor subtypes. A radioligand binding study of human platelets. Dorn GW 2d. **J Clin Invest** 1989 Dec;84(6):1883–91
Uptake of plasma fibrinogen into the alpha granules of human megakaryocytes and platelets. Harrison P, et al. **J Clin Invest** 1989 Oct;84(4):1320–4
Membrane fatty acids, glutathione–peroxidase activity, and cation transport systems of erythrocytes and malondialdehyde production by platelets in Laurence Moon Barter Biedl syndrome. Corrocher R, et al. **J Endocrinol Invest** 1989 Jul–Aug;12(7):475–81
Analysis of angiotensin II binding to human platelets: differences in young and old subjects. Siebers MJ, et al. **J Gerontol** 1990 Mar;45(2):B42–7
Basal and stimulated cytosolic platelet calcium in essential hypertension. Norris KC, et al. **J Hum Hypertens** 1990 Apr;4(2):110–2
Platelet activation induces increased Fc gamma receptor expression. McCrae KR, et al. **J Immunol** 1990 May 15; 144(10):3920–7
Eicosanoid synthesis in children with cholestatic disease. Dupont J, et al. **J Inherited Metab Dis** 1990;13(2):212–8
Stimulation of pyrophosphate production in articular cartilage by a platelet–derived factor is independent of mitogenesis. Rosenthal AK, et al. **J Lab Clin Med** 1990 Mar;115(3):352–5
Thrombin–induced inositol phosphate production by platelets from rats with diet–induced or genetically determined hypercholesterolemia. Winocour PD, et al. **J Lab Clin Med** 1990 Feb;115(2):241–8
Cooperation between platelets and neutrophils for paf–acether (platelet–activating factor) formation. Coëffier E, et al. **J Leukoc Biol** 1990 Mar;47(3):234–43
Stimulated platelets release factor(s) affecting the in vitro response of human polymorphonuclear cells. Del Principe D, et al. **J Leukoc Biol** 1990 Jul;48(1):7–14
Albumin redirects platelet eicosanoid metabolism toward 12(S)–hydroxyeicosatetraenoic acid. Broekman MJ, et al. **J Lipid Res** 1989 Dec;30(12):1925–32
Binding of apoE–rich high density lipoprotein particles by saturable sites on human blood platelets inhibits agonist–induced platelet aggregation. Desai K, et al. **J Lipid Res** 1989 Jun;30(6):831–40
Trans n–3 eicosapentaenoic and docosahexaenoic acid isomers exhibit different inhibitory effects on arachidonic acid metabolism in human platelets compared to the respective cis fatty acids. O'Keefe SF, et al. **J Lipid Res** 1990 Jul;31(7):1241–6
Platelet–neutrophil interactions. 12S,20– and 5S,12S–dihydroxyeicosapentaenoic acids: two novel neutrophil metabolites from platelet–derived 12S–hydroxyeicosapentaenoic acid. von Schacky C, et al. **J Lipid Res** 1990 May;31(5):801–10
Intraplatelet and urinary serotonin concentrations in systemic lupus erythematosus with reference to its clinical manifestations. Kanai H, et al. **J Med** 1989;20(5–6):371–90
Alteration of 5–HT uptake by plasma fractions in the premenstrual syndrome. Ashby CR Jr, et al. **J Neural Transm Gen Sect** 1990;79(1–2):41–50
Phenolsulfotransferase (PST) and PAPS in catecholamine metabolism in human tissues: an overview. Wong KP, et al. **J Neural Transm Suppl** 1990;29:163–71 (43 ref.)
Two affinity states for [3H]imipramine binding to the human platelet 5–hydroxytryptamine carrier: an explanation for the allosteric interaction between 5–hydroxytryptamine and imipramine. O'Riordan C, et al. **J Neurochem** 1990 Apr; 54(4):1275–80
Release of platelet Met–enkephalin, but not serotonin, in migraine. A platelet response unique to migraine patients? Ferrari MD, et al. **J Neurol Sci** 1989 Oct;93(1):51–60
Alpha 2 adrenoceptors of blood platelets from hypertensive and normotensive rhesus monkeys. Pham NA, et al. **J Protein Chem** 1989 Jun;8(3):445–6
Receptor–operated channels in human platelets. Tkachuk VA, et al. **J Protein Chem** 1989 Jun;8(3):427–8
Effects of intravenous fat infusion on neonatal neutrophil and platelet function. Herson VC, et al. **JPEN J Parenter Enteral Nutr** 1989 Nov–Dec;13(6):620–2
Platelet noradrenaline content as an integrated measure of variations in plasma noradrenaline. Ueda E, et al. **Jpn Circ J** 1990 Apr;54(4):383–90
Antagonistic action of AA–2414 on thromboxane A2/prostaglandin endoperoxide receptor in platelets and blood vessels. Imura Y, et al. **Jpn J Pharmacol** 1990 Jan; 52(1):35–43
Effect of concanavalin A on serotonin transport into blood platelets: possible involvement of protein kinase C. Jikoh Y, et al. **Jpn J Pharmacol** 1990 Jul;53(3):403–10
Concentrations of beta–phenylethylamine in plasma and plateletes of schizophrenics. Myojin T, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):171–6
Correlation of blood pressure in end–stage renal disease with platelet cytosolic free–calcium concentration. Schiffl H.

Klin Wochenschr 1990 Jul 17;68(14):718–22
Platelet membrane fluidity in pregnancy hypertension [letter; comment] Gleeson R, et al. **Lancet** 1990 Jan 27; 335(8683):225–6 Comment on: Lancet 1989 Nov 11;2(8672):1151.
Kinetics of serotonin in platelets in essential hypertension. Nityanand S, et al. **Life Sci** 1990;46(5):367–72
Effects of lithium on platelet ionic intracellular calcium concentration in patients with bipolar (manic–depressive) disorder and healthy controls. Tan CH, et al. **Life Sci** 1990; 46(16):1175–80
Changes in renal, platelet and cardiac nitrobenzylthioinosine binding in spontaneously hypertensive rats. Williams EF, et al. **Life Sci** 1990;46(14):1007–12
Biochemical and functional abnormalities in hypercholesterolemic rabbit platelets. Dalal KB, et al. **Lipids** 1990 Feb;25(2):86–92
Inhibitory effect of stearidonic acid (18:4 n–3) on platelet aggregation and arachidonate oxygenation. Kockmann V, et al. **Lipids** 1989 Dec;24(12):1004–7
Magnesium deprivation or short–term essential fatty acid deficiency in rats: effects on serum lipids, platelet fatty acid composition and arachidonic acid incorporation into platelet phospholipids. Thomas–Benhamou G, et al. **Magnes Res** 1988 Jul;1(1–2):39–44
A study of platelet fibronectin immunofluorescence in peripheral vascular disease and diabetes mellitus. Ejim OS, et al. **Microcirc Endothelium Lymphatics** 1989 Dec; 5(6):373–90
Model of prostaglandin–regulated cyclic AMP metabolism in intact platelets: examination of time–dependent effects on adenylate cyclase and phosphodiesterase activities. Ashby B. **Mol Pharmacol** 1989 Dec;36(6):866–73
p–[125I]iodoclonidine is a partial agonist at the alpha 2–adrenergic receptor. Gerhardt MA, et al. **Mol Pharmacol** 1990 Aug;38(2):214–21
2–Iodoimipramine, a novel ligand for the serotonin transporter. Humphreys CJ, et al. **Mol Pharmacol** 1989 Oct; 36(4):620–6
Irreversible loss of [3H]forskolin binding sites in human platelets by alpha–haloacetyl analogs of forskolin. Laurenza A, et al. **Mol Pharmacol** 1990 Jan;37(1):69–74
Interaction of purified bovine brain A1–adenosine receptors with guanine nucleotide–binding proteins of human platelet membranes following reconstitution. Munshi R, et al. **Mol Pharmacol** 1990 Aug;38(2):170–6
Platelets and the beginnings of preeclampsia [editorial; comment] Redman CW. **N Engl J Med** 1990 Aug 16; 323(7):478–80 Comment on: N Engl J Med 1990 Aug 16;323(7):434–8.
Altered platelet calcium metabolism as an early predictor of increased peripheral vascular resistance and preeclampsia in urban black women [see comments] Zemel MB, et al. **N Engl J Med** 1990 Aug 16;323(7):434–8 Comment in: N Engl J Med 1990 Aug 16;323(7):478–80.
Age–related differences in human platelet 5–HT uptake. Marazziti D, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Nov; 340(5):593–4
Light–dark differences in [3H]–paroxetine binding to rabbit platelet membranes. Rocca P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jul; 340(1):41–4
Platelet lipid peroxidation in haemodialysis patients: effects of vitamin E supplementation. Taccone–Gallucci M, et al. **Nephrol Dial Transplant** 1989;4(11):975–8
Dialyzable factors from uremic serum increase 125I–fibrinogen binding by normal blood platelets. Komarnicki M, et al. **Nephron** 1990;55(4):372–4
Platelet [3H]–imipramine binding according to DSM–III subtypes of depression. Jeanningros R, et al. **Neuropsychobiology** 1989;22(1):33–40
Alpha–2–adrenoreceptor binding as a possible vulnerability marker for affective disorders. Mendlewicz J, et al. **Neuropsychobiology** 1989;22(2):61–7
Serotonin uptake by platelets of suicidal and aggressive adolescent psychiatric inpatients. Modai I, et al. **Neuropsychobiology** 1989;21(1):9–13
Human platelet [125I]R–DOI binding sites. Characterization by in vitro autoradiography. Himeno A, et al. **Neuropsychopharmacology** 1990 Feb;3(1):25–32
Elevated 3H–para–aminoclonidine binding to platelet purified plasma membranes from depressed patients. Piletz JE, et al. **Neuropsychopharmacology** 1990 Jun;3(3):201–10
Abnormalities of calcium ion movement in platelets of patients with myeloproliferative disorders. Fujimoto T, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec;52(8):1542–8
Plasma levels of von Willebrand factor and plasminogen activator in patients with arterial thromboembolism—with special reference to their correlation to the increased catabolism of both fibrinogen and platelets. Matsumoto M, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Sep; 52(6):1105–14
The role of intracellular pH and Ca++ on arachidonic acid metabolism in human platelets. Ozaki Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec;52(8):1498–505
cDNA sequence of a new ras–related gene (rap2b) isolated from human platelets with sequence homology to rap2. Farrell FX, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4281
Intracellular localization of pp60c–src in human platelets. Ferrell JE Jr, et al. **Oncogene** 1990 Jul;5(7):1033–6
[3H]imipramine binding in idiopathic pain syndromes. Basal values and changes after treatment with antidepressants. Eberhard G, et al. **Pain** 1989 Sep;38(3):261–7
Thrombin–induced cytosolic alkalinization in human platelets occurs without an apparent involvement of HCO3–/Cl– exchange. Clemens N, et al. **Pflugers Arch** 1990 Apr; 416(1–2):68–73
Established facts, doubts and future perspectives on PGI2 vascular and platelet receptors. Giovanazzi S, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:83–4
Human platelet activation by PAF: receptor characterization. Montesi L, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:119–20
Dipyridamole specifically decreases platelet–derived growth factor release from platelets. Takehara K, et al. **Pharmacology** 1990;40(3):150–6
Validity of imipramine platelet binding sites as a biological marker of endogenous depression. A World Health Organization Collaborative Study. **Pharmacopsychiatry** 1990 May;23(3):113–7
Inhibition of sheep platelet arachidonate metabolism by flavonoids from Spanish and Indian medicinal herbs. Ferrándiz ML, et al. **Pharmazie** 1990 Mar;45(3):206–8
Endogenous inhibitors of the Na+, K(+)–pump and platelet Ca2+ handling in hypertension. Devynck MA, et al. **Physiol Bohemoslov** 1990;39(1):71–8
MAO activity, serotonin metabolism and aggregation of platelets from migraine patients. A preliminary study. Kovács K, et al. **Pol J Pharmacol Pharm** 1988 Nov–Dec; 40(6):691–5
Agonist–induced ADP–ribosylation of a cytosolic protein in human platelets. Brüne B, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3304–8
RAP2B: a RAS–related GTP–binding protein from platelets. Ohmstede CA, et al. **Proc Natl Acad Sci U S A** 1990 Sep; 87(17):6527–31
Isolation of a 5–kilodalton actin–sequestering peptide from human blood platelets. Safer D, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2536–40
Production of platelet–derived endothelial cell growth factor by normal and transformed human cells in culture. Usuki K, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7427–31
Refined estimation of kinetic parameters of the Na+/H+ antiport in human fibroblasts and platelets. Gardner JP, et al. **Proc Soc Exp Biol Med** 1990 Jun;194(2):165–71
Modulation of platelet [3H] iloprost binding by cholesterol, dibucaine and pentoxifylline. Jaschonek K, et al. **Prog Clin Biol Res** 1989;301:321–5
The binding of [3H]9,11–dideoxy,9 alpha–11 alpha–methanoepoxy prostaglandin F2 alpha (U 46619) to washed human platelets. Jaschonek K, et al. **Prog Clin Biol Res** 1989;301:327–33
Different pathways initiating arachidonic acid (AA) release/thromboxane (TxA2) formation in human platelets—studies with fluoride and phorbol ester. Lenfers B, et al. **Prog Clin Biol Res** 1989;301:309–14
Photoaffinity labelling of the human platelet thromboxane A2/prostaglandin H2 (TXA2/PGH2) receptor. Mais DE, et al. **Prog Clin Biol Res** 1989;301:303–7
Abnormal interaction between platelets and von Willebrand factor in patients with TTP. Rock G, et al. **Prog Clin Biol Res** 1990;337:129–33
The reduced thromboxane formation of thrombin–degranulated platelets is not restored upon prolonged incubation in plasma. Scharf RE, et al. **Prog Clin Biol Res** 1989;301:335–9
Sulfhydryl/disulfide–status of blood platelets—a target for pharmacological intervention? Till U, et al. **Prog Clin Biol Res** 1989;301:341–5 (13 ref.)
Relationship between 3H–imipramine binding, 14C–serotonin uptake, and the surface area of blood platelets. Demet EM, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(3):289–96
Effect of nicotine on human blood platelet serotonin uptake and efflux. Rausch JL, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(6):907–16
Glutathione disulfide production during arachidonic acid oxygenation in human platelets. Burch JW, et al. **Prostaglandins** 1990 Feb;39(2):123–34
Mechanisms of platelet activating factor–induced aggregation and secretion in human platelets. McCulloch RK, et al. **Prostaglandins** 1990 Jan;39(1):13–21
Successful therapy of the prostaglandin defect "Wien–Hietzing" (lack of platelet high–affinity binding sites for prostaglandin I2). Steurer G, et al. **Prostaglandins** 1990 Jun;39(6):693–703
Pharmacologic profile of BN 50739, a new PAF antagonist in vitro and in vivo. Yue TL, et al. **Prostaglandins** 1990 May;39(5):469–80
Modulation of TXA2 generation of platelets by human lipoproteins. Beitz A, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 May; 40(1):57–61
Inhibition of platelet aggregation and arachidonate metabolism in platelets by procyanidins. Chang WC, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Dec; 38(3):181–8
Sex related differences in platelet TxA2 generation. Pinto S, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Jul; 40(3):217–21
3H–imipramine binding in the blood platelets of normal twins. Arora RC, et al. **Psychiatry Res** 1990 Jun; 32(3):265–73
Platelet serotonin level in rats is under genetic control. Jernej B, et al. **Psychiatry Res** 1990 May;32(2):167–74
Imipramine binding in depressed patients with psychogenic pain. Mellerup ET, et al. **Psychiatry Res** 1990 Apr; 32(1):29–34
Platelet alpha 2–adrenergic receptor binding to 3H–yohimbine and personality variations in normals. Shekim WO, et al. **Psychiatry Res** 1990 May;32(2):125–34
Binding of tritiated yohimbine to platelets in women with maternity blues. Best NR, et al. **Psychol Med** 1988 Nov; 18(4):837–42
Increased plasma free serotonin but unchanged platelet serotonin in bipolar patients treated chronically with lithium. Artigas F, et al. **Psychopharmacology (Berl)** 1989; 99(3):328–32
Serotonin 5–HT2 receptor binding on blood platelets as a state dependent marker in major affective disorder. Biegon A, et al. **Psychopharmacology (Berl)** 1990;102(1):73–5
Increased serotonin 5–HT2 receptor binding on blood platelets of suicidal men. Biegon A, et al. **Psychopharmacology (Berl)** 1990;100(2):165–7
Regulatory mechanisms in platelets. Arnout J, et al. **Rev Port Cardiol** 1988 Jan–Feb;7(1):54–7 (28 ref.)
Effect of lonapalene on metabolism of exogenous arachidonic acid in human platelets. Gibert C, et al. **Skin Pharmacol** 1989;2(2):86–92
Platelet thromboxane release after subarachnoid hemorrhage and surgery. Juvela S, et al. **Stroke** 1990 Apr;21(4):566–71
Effect of reinfusion of ascitic fluid with the LeVeen shunt on fibrinogen and platelet survival. Ansley JD, et al. **Surg Forum** 1978;29:483–5
Traumatic shock in the rat: characterization of platelet sequestration and fibrin deposition. DiMarzo SV, et al. **Surg Forum** 1978;29:36–8
Evaluation of the binding to fixed platelets of agonists and antagonists of ADP–induced aggregation. Agarwal AK, et al. **Thromb Haemost** 1989 Dec 29;62(4):1103–6
Depletion of dense granulc nucleotides during storage of human platelets. de Korte D, et al. **Thromb Haemost** 1990 Apr 12;63(2):275–8
Expression of fibrinogen receptors in platelets of migraine patients—correlation with GPIIb content and plasma cholesterol—reply [letter; comment] Harrison B, et al. **Thromb Haemost** 1990 Apr 12;63(2):318 Comment on: Thromb Haemost 1989 Jun 30;61(3):419–22.
The inhibitory effect of GR32191, a thromboxane receptor blocking drug, on human platelet aggregation, adhesion and secretion. Hornby EJ, et al. **Thromb Haemost** 1989 Jun 30;61(3):429–36
Inhibition of platelet thromboxane formation and phosphoinositides breakdown by osthole from Angelica pubescens. Ko FN, et al. **Thromb Haemost** 1989 Nov 24; 62(3):996–9
Thrombin stimulated platelet accumulation on protein coated glass capillaries: role of adhesive platelet alpha–granule proteins. Mulvihill JN, et al. **Thromb Haemost** 1989 Nov 24;62(3):989–95
Awareness of high blood pressure stimulates platelet release reaction. Rostrup M, et al. **Thromb Haemost** 1990 Jun 28; 63(3):367–70
Human platelets contain mRNA transcripts for platelet factor 4 and actin. Sottile J, et al. **Thromb Haemost** 1989 Dec 29;62(4):1100–2
Failure of preactivated human blood platelets to restore defective thromboxane synthesis despite prolonged incubation in plasma. Stockschläder M, et al. **Thromb Haemost** 1989 Nov 24;62(3):1016–22
Expression of fibrinogen receptors in platelets of migraine patients—correlation with platelet GPIIb content and plasma cholesterol [see comments] Walkowiak B, et al. **Thromb Haemost** 1989 Jun 30;61(3):419–22 Comment in: Thromb Haemost 1990 Apr 12;63(2):318.
Role of free radicals in pulmonary thromboembolism in mice. Dikshit M, et al. **Thromb Res** 1989 Sep 1;55(5):549–57
A flow cytometric analysis of fibronectin binding to platelets from patients with peripheral vascular disease. Ejim OS, et al. **Thromb Res** 1990 Jun 1;58(5):519–24
Calcium rise in human platelets elicited by anti–CD9 and –CD41 murine monoclonal antibodies. Favier R, et al. **Thromb Res** 1989 Sep 1;55(5):591–9
Binding and internalization of soluble fibrin by thrombocytes. Hörmann H, et al. **Thromb Res** 1990 Apr 15;58(2):175–83
Malondialdehyde formation by blood platelets: a diagnostic test to assess acetylsalicylic acid induced thrombocytopathy? Hovinga JK, et al. **Thromb Res** 1990 Jul 1;59(1):89–95
Glycocalicin binding to von Willebrand factor adsorbed onto collagen–coated or polystyrene surfaces. Inbal A, et al. **Thromb Res** 1989 Nov 1;56(3):347–57
The interaction of thrombin with platelet protease nexin. Knupp CL. **Thromb Res** 1989 Oct 1;56(1):77–90
A biological method for studying the interaction between platelets and vascular endothelium. Korbut R, et al. **Thromb Res** 1990 Feb 1;57(3):361–70
Aequorin–detected calcium changes in stimulated thrombasthenic platelets. Aggregation–dependent calcium movement in response to ADP. Lecompte T, et al. **Thromb Res** 1990 Jun 15;58(6):561–70
Compartmentation of 4,6–difluoro–5HT studied by nuclear magnetic resonance in normal and CHS bovine platelets. Meyers KM, et al. **Thromb Res** 1990 May 1;58(3):265–72

Factor VIII influences binding of factor IX and factor X to intact human platelets. Muntean W, et al. **Thromb Res** 1989 Sep 1;55(5):537–48

Platelet serotonergic mechanisms in ischaemic heart disease. Puri VK, et al. **Thromb Res** 1990 Feb 1;57(3):445–51

Inhibition of fibrin(ogen) binding to stimulated platelets by a monoclonal antibody specific for a conformational determinant of GPIIIa. Ramsamooj P, et al. **Thromb Res** 1990 Jun 15;58(6):577–92

Sheep platelets as a model for human platelets: evidence for specific PAF (platelet activating factor) receptors. Slattery CW, et al. **Thromb Res** 1989 Sep 1;55(5):569–76

Inhibition of thrombin- and collagen-induced phosphoinositides breakdown in rabbit platelets by a PAF antagonist—denudatin B, an isomer of kadsurenone. Teng CM, et al. **Thromb Res** 1990 Jul 1;59(1):121–30

Cyclic AMP-dependent protein kinase does not increase calcium transport in platelet microsomes. White GC 2d, et al. **Thromb Res** 1989 Dec 1;56(5):575–81

Factor XIII is not involved in human platelet–collagen interaction. Aihara M, et al. **Tohoku J Exp Med** 1989 Sep; 159(1):37–44

The effect of different agitation modes on platelet metabolism, thromboxane formation, and alpha-granular release during platelet storage. Wallvik J, et al. **Transfusion** 1990 Sep;30(7):639–43

Metabolic status of platelet concentrates during extended storage: improvement with pharmacological inhibitors and reduced surface-to-volume ratio. Bode AP, et al. **Vox Sang** 1989;57(1):19–24

[Binding of acid mucopolysaccharides of Stichopus japanicus to washed human platelets] Hu JB, et al. **Chung Kuo Yao Li Hsueh Pao** 1990 Jan;11(1):47–50 (Eng. Abstr.) **(Chi)**

[Effect of 2-naphthyl-3- (3,4-dimethoxy) phenyl-propenoic acid on the metabolism of arachidonic acid in rabbit platelets] Sun XM, et al. **Chung Kuo Yao Li Hsueh Pao** 1990 Jan;11(1):51–4 (Eng. Abstr.) **(Chi)**

[Effects of anisodamine on the metabolism of arachidonic acid by washed rat platelets] Yue TL, et al. **Yao Hsueh Hsueh Pao** 1989;24(9):647–52 (Eng. Abstr.) **(Chi)**

[Essential hypertension and platelet cytosolic concentrations of H(+) and Ca2(+)] Astarie C, et al. **Arch Mal Coeur** 1989 Jul;82(7):1173–6 (Eng. Abstr.) **(Fre)**

[Platelet-modified LDL: uptake and metabolism in macrophages] Fuhrman B, et al. **Harefuah** 1989 Oct; 117(7–8):177–81 (Eng. Abstr.) **(Heb)**

[Platelet adrenergic alpha receptors in hypertensive subjects undergoing treatment with calcium antagonists] Radaelli A, et al. **Boll Soc Ital Biol Sper** 1990 Jan;66(1):9–13 (Eng. Abstr.) **(Ita)**

[Analysis of platelet surface conformation in thrombin-induced aggregation] Nomura S, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Aug;52(5):895–905 (Eng. Abstr.) **(Jpn)**

[Taurine metabolism in platelets in patients with pregnancy induced hypertension] Otani F, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jan;42(1):107–8 **(Jpn)**

[Analysis of adhesive proteins on the surface membrane of platelet in malignant neoplasm] Soga T, et al. **Rinsho Ketsueki** 1990 Feb;31(2):161–7 (Eng. Abstr.) **(Jpn)**

[Superoxide dismutase activity and malonic dialdehyde level in blood platelets of patients with coronary disease] Buczyński A, et al. **Pol Tyg Lek** 1989 Jun 5;44(23):548–50 (Eng. Abstr.) **(Pol)**

[Prostaglandins, platelets and cardiovascular disease] Cunha-Ribeiro LM, et al. **Rev Port Cardiol** 1988 Jan–Feb; 7(1):63–80 (305 ref.) (Eng. Abstr.) **(Por)**

[The role of thrombocyte prostanoids and products secreted by dense granules in the platelet attachment, spreading and aggregation on collagen substrates] Leitin VL, et al. **Biokhimiia** 1989 Nov;54(11):1804–14 (Eng. Abstr.) **(Rus)**

[Interaction of platelets with 125I-labelled collagen type III. The necessity for forming a fibrillary structure] Mazurov AV, et al. **Biokhimiia** 1989 Aug;54(8):1280–9 (Eng. Abstr.) **(Rus)**

[Biochemical features of platelet alpha2-adrenergic receptors and their connection with an increase in concentration of intracellular Ca2+] Negresku EV, et al. **Biokhimiia** 1989 Jun;54(6):909–15 (Eng. Abstr.) **(Rus)**

[The role of active forms of oxygen in platelet aggregation and deaggregation] Samal' AB, et al. **Biokhimiia** 1990 May; 55(5):786–90 (Eng. Abstr.) **(Rus)**

[Fatty acid and lipid levels in the blood platelets of patients with alcoholism] Iusupova IU, et al. **Gematol Transfuziol** 1989 Jun;34(6):31–7 (Eng. Abstr.) **(Rus)**

[Effects of ubinon-9, a synthetic antioxidant, on intensity of lipid peroxidation in blood platelets and plasma of patients with ischemic heart disease] Shevchenko IA, et al. **Kardiologiia** 1989 Nov;29(11):91–5 (Eng. Abstr.) **(Rus)**

[The thrombocytolysis phenomenon in patients with myocardial infarct] Kitaev MI, et al. **Lab Delo** 1989;(7):54–6 (Eng. Abstr.) **(Rus)**

[Aggregation of blood platelets and their energetic status in acute arterial hypertension] Shestakova SA, et al. **Patol Fiziol Eksp Ter** 1989 May-Jun;(3):61–3 (Eng. Abstr.) **(Rus)**

[The lipid composition and aggregating capacity of thrombocytes in hyper- and hypothyroidism] Saipov TD, et al. **Probl Endokrinol (Mosk)** 1989 Sep-Oct;35(5):47–50 (Eng. Abstr.) **(Rus)**

[Methodological approaches to evaluation of prostaglandin synthesis by isolated human thrombocytes] Geling NG. **Vopr Med Khim** 1990 Mar-Apr;36(2):83–6 (Eng. Abstr.) **(Rus)**

[Thrombocyte binding sites for 3H-imipramine in patients with depression] Pacáková E. **Cesk Psychiatr** 1989 Oct; 85(5):289–95 (Eng. Abstr.) **(Slo)**

[Platelet function in tension headache] Leira R, et al. **Neurologia** 1990 Mar;5(3):78–81 (Eng. Abstr.) **(Spa)**

[Effect of hyperbaric oxygen therapy on the binding of C-14 arachidonic acid by platelets from diabetic rats (letter)] Pérez C, et al. **Rev Esp Fisiol** 1989 Sep;45(3):297–8 **(Spa)**

MICROBIOLOGY

Internalization of human immunodeficiency virus type I and other retroviruses by megakaryocytes and platelets. Zucker-Franklin D, et al. **Blood** 1990 May 15;75(10):1920–3

Adherence of Staphylococcus epidermidis to fibrin-platelet clots in vitro mediated by lipoteichoic acid. Chugh TD, et al. **Infect Immun** 1990 Feb;58(2):315–9

Rapid diagnosis of typhoid fever through identification of Salmonella typhi within 18 hours of specimen acquisition by culture of the mononuclear cell–platelet fraction of blood. Rubin FA, et al. **J Clin Microbiol** 1990 Apr; 28(4):825–7

Potentiation of platelet responses in vitro by feline infectious peritonitis virus. Boudreaux MK, et al. **Vet Pathol** 1990 Jul;27(4):261–8

[Mechanisms of human platelet aggregation and release reaction induced by influenza virus] Hagiwara S. **Nippon Ketsueki Gakkai Zasshi** 1989 Aug;52(5):906–15 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Structural defects in inherited and giant platelet disorders. White JG. **Adv Hum Genet** 1990;19:133–234 (243 ref.)

The effect of bacteremia on automated platelet measurements in neonates. Patrick CH, et al. **Am J Clin Pathol** 1990 Mar; 93(3):391–4

Coronary atherosclerosis in the pig. Induced plaque injury and platelet response. Reddick RL, et al. **Arteriosclerosis** 1990 Jul-Aug;10(4):541–50

Studies on a patient with thrombocytopenia, giant platelets and a platelet membrane glycoprotein Ib with reduced amount of sialic acid. Aakhus AM, et al. **Br J Haematol** 1990 Mar;74(3):320–9

Regulation of platelet heterogeneity: effects of thrombocytopenia on platelet volume and density. Corash L, et al. **Exp Hematol** 1990 Mar;18(3):205–12

Platelet microcytosis in hematologic diseases [letter] Mocchi N, et al. **Haematologica** 1990 Jan-Feb;75(1):98–9

Estimation of shear stress-related blood damage in heart valve prostheses—in vitro comparison of 25 aortic valves. Giersiepen M, et al. **Int J Artif Organs** 1990 May; 13(5):300–6

A new method to evaluate extravascular albumin and blood cell accumulation in the lung. Bureau MF, et al. **J Appl Physiol** 1989 Oct;67(4):1479–88

Gray platelet syndrome: relationship between morphological abnormality of the dense tubular system (DTS) and intracellular Ca++ mobilization in the platelet. Mori K, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec; 52(8):1534–41

Analysis of platelet cytoskeleton assembly during platelet activation in Hermansky-Pudlak syndrome and thrombasthenia. Fujimura K, et al. **Thromb Haemost** 1990 Feb 19;63(1):103–11

Platelet kinetics in patients with atherosclerosis. Sinzinger H, et al. **Thromb Res** 1990 Feb 15;57(4):507–16

[Fechtner syndrome: report of two families and review of the literature on the related disorders] Takai K, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 May;52(3):644–54 (34 ref.) (Eng. Abstr.) **(Jpn)**

[Automated measurement of reticulocyte count by flow cytometry. II: Analysis of the blood containing abnormal erythrocytes or giant platelets] Oyamatsu T, et al. **Rinsho Byori** 1989 Jul;37(7):807–12 (Eng. Abstr.) **(Jpn)**

[Biochemical and morphological aspects of the aggregation capability of thrombocytes in peritonitis] Arkaov VA, et al. **Anesteziol Reanimatol** 1989 Sep-Oct;(5):54–6 (Eng. Abstr.) **(Rus)**

[Thrombocyte size as one of the indices of their function in rheumatoid arthritis in children and the criteria of the efficacy of sanatorium-health resort treatment] Tret'iakova OS. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Nov-Dec; (6):45–7 **(Rus)**

PHYSIOLOGY

Blood lipid peroxides in TIA: relation to platelet function and metabolic profile. Violi F, et al. **Acta Neurol Scand** 1989 Oct;80(4):273–6

Comorbidity of panic disorder and major depressive disorder: effects on platelet alpha 2 adrenergic receptors. Grunhaus LJ, et al. **Acta Psychiatr Scand** 1990 Mar;81(3):216–9

Platelets and asthma. Page CP. **Agents Actions Suppl** 1989; 28:75–84 (56 ref.)

Platelet role in pathogenesis of atopic and nonimmunologic asthma. Astafieva NG. **Allergol Immunopathol (Madr)** 1990 Jan-Feb;18(1):19–26

Properties of the exchangeable splenic platelets released into the circulation during exercise-induced thrombocytosis. Chamberlain KG, et al. **Am J Hematol** 1990 Jul;34(3):161–8

Hereditary sideroblastic anemia with associated platelet abnormalities. Soslau G, et al. **Am J Hematol** 1989 Dec; 32(4):298–304

Acute effects of exposure to cold on blood pressure, platelet function and sympathetic nervous activity in humans. Kawahara J, et al. **Am J Hypertens** 1989 Sep;2(9):724–6

Platelets mediate glomerular cell proliferation in immune complex nephritis induced by anti-mesangial cell antibodies in the rat. Johnson RJ, et al. **Am J Pathol** 1990 Feb; 136(2):369–74

Platelet-activating factor increases platelet-dependent glycoconjugate secretion from tracheal submucosal gland. Sasaki T, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):L373–8

Homologous regulation of human platelet vasopressin receptors does not occur in vivo. Vittet D, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1400–5

Enhanced platelet reactivity in heartworm-infected dogs. Boudreaux MK, et al. **Am J Vet Res** 1989 Sep;50(9):1544–7

The requirement for platelets in allergen-induced late asthmatic airway obstruction. Eosinophil infiltration and heightened airway responsiveness in allergic rabbits. Coyle AJ, et al. **Am Rev Respir Dis** 1990 Sep;142(3):587–93

Thrombocytopenia and platelet functional defects in pre-eclampsia: implications for regional anaesthesia. Schindler M, et al. **Anaesth Intensive Care** 1990 May; 18(2):169–74

Cells in acute and chronic inflammation. Kay AB. **Ann Ital Med Int** 1987 Apr-Jun;2(2):89–93 (8 ref.)

Effects of fish oil capsules in two dosages on blood pressure, platelet functions, haemorheological and clinical chemistry parameters in apparently healthy subjects. Bach R, et al. **Ann Nutr Metab** 1989;33(6):359–67

Characterization of the effects of propranolol on the physical state of platelet membrane. Dash D, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):343–7

Characteristics of a thrombin inhibitor secreted by activated platelets. Miller JJ, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):364–8

Erythropoiesis and thrombopoiesis in the head-kidney of the sea bass (Dicentrarchus labrax L.): an ultrastructural study. Esteban MA, et al. **Arch Histol Cytol** 1989 Oct;52(4):407–19

Analysis of atherosclerosis susceptibility in mice with genetic defects in platelet function. Paigen B, et al. **Arteriosclerosis** 1990 Jul-Aug;10(4):648–52

Collagen type III induced ex vivo thrombogenesis in humans. Role of platelets and leukocytes in deposition of fibrin. Sakariassen KS, et al. **Arteriosclerosis** 1990 Mar-Apr; 10(2):276–84

Activation of endothelial cells induces platelet thrombus formation on their matrix. Studies of new in vitro thrombosis model with low molecular weight heparin as anticoagulant. Zwaginga JJ, et al. **Arteriosclerosis** 1990 Jan-Feb;10(1):49–61

Specific induction of 68 KD protein synthesis in rabbit smooth muscle cells by growth stimuli in platelets: comparison of intimal and medial SMC. Nishida K, et al. **Artery** 1989;17(1):6–20

Kinetics and quantitation of In-111 labeled platelet deposition on control and heparin-bonded polyurethane angio catheters in a dog model. Dewanjee MK, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):365–8

Molecular understanding of cellular adhesion on artificial surfaces. Takemoto Y, et al. **ASAIO Trans** 1989 Jul-Sep; 35(3):354–6

Development of a novel biocompatibility test method based on intracellular calcium ion mobilization. Takemoto Y, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):325–7

Elevation of cAMP, but not cGMP, inhibits thrombin-stimulated tyrosine phosphorylation in human platelets. Pumiglia KM, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):738–45

Novel peptides derived from a region of local homology between uteroglobin and lipocortin-1 inhibit platelet aggregation and secretion. Vostal JG, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):27–36

Intracellular ionized calcium mobilization of CD 9 monoclonal antibody-activated human platelets. Yatomi Y, et al. **Biochem Biophys Res Commun** 1990 Aug 31; 171(1):109–15

Ethanol inhibits thrombin-induced secretion by human platelets at a site distinct from phospholipase C or protein kinase C. Benistant C, et al. **Biochem J** 1990 Jul 15; 269(2):489–97

How does fluoroaluminate activate human platelets? Rendu F, et al. **Biochem J** 1990 Jan 15;265(2):343–9

Ligands to the platelet fibrinogen receptor glycoprotein IIb-IIIa do not affect agonist-induced second messengers Ca2+ or cyclic AMP. Williams JA, et al. **Biochem J** 1990 Aug 15;270(1):149–55

Membrane/cytoskeletal interactions in blood platelets and leucocytes: structural and functional implications. Crawford N, et al. **Biochem Soc Trans** 1989 Dec; 17(6):966–71 (12 ref.)

Bidirectional transbilayer lipid movement in human platelets as vizualized by the fluorescent membrane probe 1-[4-(trimethylammonio)phenyl]-6-phenyl-1,3,5-

hexatriene. Bevers EM, et al. **Biochemistry** 1990 May 29; 29(21):5132–7

Platelet–neutrophil–smooth muscle cell interactions: lipoxygenase–derived mono– and dihydroxy acids activate cholesteryl ester hydrolysis by the cyclic AMP dependent protein kinase cascade. Hajjar DP, et al. **Biochemistry** 1989 Oct 31;28(22):8885–91

Role of calcium and calpain in complement–induced vesiculation of the platelet plasma membrane and in the exposure of the platelet factor Va receptor. Wiedmer T, et al. **Biochemistry** 1990 Jan 23;29(3):623–32

Loss of membrane phospholipid asymmetry in platelets and red cells may be associated with calcium–induced shedding of plasma membrane and inhibition of aminophospholipid translocase. Comfurius P, et al. **Biochim Biophys Acta** 1990 Jul 24;1026(2):153–60

Membrane fluidity of non–activated and activated human blood platelets. Feijge MA, et al. **Biochim Biophys Acta** 1990 Jun 27;1025(2):173–8

Platelet and erythrocyte membrane changes in Alzheimer's disease. Hajimohammadreza I, et al. **Biochim Biophys Acta** 1990 Jun 27;1025(2):208–14

Purification and partial characterization of platelet–derived adherence–inhibiting factor in guinea pig. Iwabuchi K, et al. **Biochim Biophys Acta** 1989 Nov 30;999(2):183–91

Adenosine diphosphate–induced aggregation of human platelets in flow through tubes. II. Effect of shear rate, donor sex, and ADP concentration. Bell DN, et al. **Biophys J** 1989 Nov;56(5):829–43

Mathematical analysis of mural thrombogenesis. Concentration profiles of platelet–activating agents and effects of viscous shear flow. Folie BJ, et al. **Biophys J** 1989 Dec;56(6):1121–41

Artificial surface effect on red blood cells and platelets in laminar shear flow. Alkhamis TM, et al. **Blood** 1990 Apr 1;75(7):1568–75

Beta–lactam antibiotic–induced platelet dysfunction: evidence for irreversible inhibition of platelet activation in vitro and in vivo after prolonged exposure to penicillin. Burroughs SF, et al. **Blood** 1990 Apr 1;75(7):1473–80

Evidence that an abnormality in the glycoprotein Ib alpha gene is not the cause of abnormal platelet function in a family with classic Bernard–Soulier disease. Finch CN, et al. **Blood** 1990 Jun 15;75(12):2357–62

A role for protein kinase C in the membrane fusion necessary for platelet granule secretion. Gerrard JM, et al. **Blood** 1989 Nov 15;74(7):2405–13

Glycoprotein Ib, von Willebrand factor, and glycoprotein IIb:IIIa are all involved in platelet adhesion to fibrin in flowing whole blood. Hantgan RR, et al. **Blood** 1990 Jul 15;76(2):345–53

Induction of platelet Ca2+ influx and mobilization by a monoclonal antibody to CD9 antigen. Hato T, et al. **Blood** 1990 Mar 1;75(5):1087–91

Fish oil: a potent inhibitor of platelet adhesiveness. Li XL, et al. **Blood** 1990 Sep 1;76(5):938–45

Heterogeneous phenotypes of platelet and plasma von Willebrand factor in obligatory heterozygotes for severe von Willebrand disease. Mannucci PM, et al. **Blood** 1989 Nov 15;74(7):2433–6

A role for intracellular histamine in collagen–induced platelet aggregation. Saxena SP, et al. **Blood** 1990 Jan 15; 75(2):407–14

Platelet and phagocyte activation. A series of papers from the Blood Cells Symposium. April 1989, Banff, Alberta, Canada. Proceedings. **Blood Cells** 1990;16(1):1–216

Platelet–derived growth factors. Miyazono K, et al. **Blood Rev** 1989 Dec;3(4):269–76 (69 ref.)

The origin and physiological relevance of alpha–granule adhesive proteins. Harrison P, et al. **Br J Haematol** 1990 Feb;74(2):125–30 (68 ref.)

The common pathway for alpha– and gamma–thrombin–induced platelet activation is independent of GPIb: a study of Bernard–Soulier platelets. Jandrot–Perrus M, et al. **Br J Haematol** 1990 Jul; 75(3):385–92

The circulating platelet in acute malaria infection [letter; comment] Paul B. **Br J Haematol** 1990 Jan;74(1):122 Comment on: Br J Haematol 1989 Aug;72(4):589–90.

Release of a neutrophil–derived vasoconstrictor agent which augments platelet–induced contractions of blood vessels in vitro. Sessa WC, et al. **Br J Pharmacol** 1990 Mar; 99(3):553–9

Differences in bleeding time, aspirin sensitivity and adrenaline between acute myocardial infarction and unstable angina. Kristensen SD, et al. **Cardiovasc Res** 1990 Jan;24(1):19–23

Platelet hyperreactivity and inefficient spontaneous thrombolysis in patients at high risk from an acute coronary event. Peters NS, et al. **Cardiovasc Res** 1989 Jul; 23(7):567–72

PADGEM protein: a receptor that mediates the interaction of activated platelets with neutrophils and monocytes. Larsen E, et al. **Cell** 1989 Oct 20;59(2):305–12

Characterization of the Fc gamma receptor on human platelets. King M, et al. **Cell Immunol** 1990 Jul; 128(2):462–79

Serotonergic hypofunction in migraine: a synthesis of evidence based on platelet dense body dysfunction. Joseph R, et al. **Cephalalgia** 1989 Dec;9(4):293–9

A plasmatic factor may cause platelet activation in acute ischemic stroke. Joseph R, et al. **Circ Res** 1989 Dec; 65(6):1679–87

Are there markers of the blood–vessel wall interaction and of thrombus formation that can be used clinically? Gershlick AH. **Circulation** 1990 Jan;81(1 Suppl):I28–34; discussion I40–1 (43 ref.)

Role of platelets and antiplatelet agents in cerebrovascular disease. Clues from trials. Harrison MJ. **Circulation** 1990 Jan;81(1 Suppl):I20–1; discussion I22–3

Prevention of platelet–rich arterial thrombosis by selective thrombin inhibition. Jang IK, et al. **Circulation** 1990 Jan; 81(1):219–25

Platelets, blood flow, and the vessel wall. Mustard JF, et al. **Circulation** 1990 Jan;81(1 Suppl):I24–7; discussion I40–1 (39 ref.)

Alleviation of myocardial stunning by leukocyte and platelet depletion. Westlin W, et al. **Circulation** 1989 Dec; 80(6):1828–36

Thrombin–induced serotonin release as an in vitro indicator of the functional integrity of stored platelets. Hervig T, et al. **Clin Chem** 1990 Jan;36(1):28–31

The effect of n–3 polyunsaturated fatty acids on lipids, platelet function, coagulation, fibrinolysis and monocyte chemotaxis in patients with hypertension. Schmidt EB, et al. **Clin Chim Acta** 1990 Jul;189(1):25–32

The role of platelets in allergic disease [editorial; comment] Page C. **Clin Exp Allergy** 1990 Jul;20(4):339–40 Comment on: Clin Exp Allergy 1990 Jul;20(4):367–72.

Primary hemostasis, platelet functions and coagulation in psoriasis [letter] Dandurand M, et al. **Dermatologica** 1989; 179(4):218–9

Effect of glycaemic control, metformin and gliclazide on platelet density and aggregability in recently diagnosed type 2 (non–insulin–dependent) diabetic patients. Collier A, et al. **Diabete Metab** 1989 Nov–Dec;15(6):420–5

Desensitization of the platelet aggregation response to adrenaline during insulin–induced hypoglycaemia in man. Trovati M, et al. **Diabetic Med** 1990 Jun;7(5):414–9

Thromboxane receptor antagonists and endotoxaemia [letter; comment] Mikhailidis DP, et al. **Eicosanoids** 1989;2(1):59, 61–2 Comment on: Eicosanoids 1988;1(1):27–33.

Regulation of hormone–induced Ca2+ mobilization in the human platelets. Crouch MF, et al. **Environ Health Perspect** 1990 Mar;84:41–4 (4 ref.)

Thromboxane A2 and platelets as mediators of coronary arterial vasoconstriction in myocardial ischaemia. Schrör K. **Eur Heart J** 1990 Apr;11 Suppl B:27–34 (55 ref.)

Stress response and platelet function in minor surgery during epidural bupivacaine and general anaesthesia: effect of epidural morphine addition. Nielsen TH, et al. **Eur J Anaesthesiol** 1989 Nov;6(6):409–17

Vinculin is a permanent component of the membrane skeleton and is incorporated into the (re)organising cytoskeleton upon platelet activation. Asijee GM, et al. **Eur J Biochem** 1990 Apr 20;189(1):131–6

Accelerated atherogenesis occurs following platelet destruction and increases in megakaryocyte size and DNA content. Kristensen SD, et al. **Eur J Clin Invest** 1990 Jun; 20(3):239–47

Platelet behavior in essential thrombocythemia: a study of 31 cases [letter] Bazzan M, et al. **Eur J Haematol** 1989 Oct;43(4):350–1

Platelet calmodulin correlates with platelet turnover. Endoh N, et al. **Eur J Haematol** 1990 Jan;44(1):45–50

The management of thrombocytosis. Kutti J. **Eur J Haematol** 1990 Feb;44(2):81–8 (85 ref.)

Qualitative platelet defects in chronic myeloproliferative disorders: evidence for reduced ATP secretion. Löfvenberg E, et al. **Eur J Haematol** 1989 Nov;43(5):435–40

The blood platelet as an inflammatory cell. de Gaetano G, et al. **Eur Respir J Suppl** 1989 Jun;6:441s–445s (31 ref.)

The interaction between PAF, platelets and eosinophils in bronchial asthma. Page CP, et al. **Eur Respir J Suppl** 1989 Jun;6:483s–487s (42 ref.)

Blood platelet behaviour in patients with a type I diabetes mellitus. Spangenberg P, et al. **Exp Clin Endocrinol** 1989; 94(3):329–37

The relationship between megakaryocyte ploidy and platelet volume in normal and thrombocytopenic C3H mice. Corash L, et al. **Exp Hematol** 1990 Oct;18(9):985–9

Maintenance of normal platelet mass in anemic Belgrade rats and their response to iron. Kellar KL, et al. **Exp Hematol** 1990 Oct;18(9):979–84

Kinetics of pulmonary platelet deposition and clearance during thrombin–induced microembolism in rabbits. Konstam MA, et al. **Exp Lung Res** 1989 Dec;15(6):867–79

Membrane depolarization inhibits thrombin–induced calcium influx and aggregation in human platelets. Kovács T, et al. **FEBS Lett** 1990 Jun 18;266(1–2):171–4

Erbstatin blocks platelet activating factor–induced protein–tyrosine phosphorylation, polyphosphoinositide hydrolysis, protein kinase C activation, serotonin secretion and aggregation of rabbit platelets. Salari H, et al. **FEBS Lett** 1990 Apr 9;263(1):104–8

Striking feature of alpha–fetoprotein (AFP): stimulation of the phagocytic capabilities of human blood platelets. Kemona H, et al. **Folia Haematol (Leipz)** 1990;117(1):161–5

Study on mechanisms of a haemostatic effect of 1 deamino–8–D–arginine vasopressin (desmopressin) in uraemic patients. Malyszko J, et al. **Folia Haematol (Leipz)** 1990;117(2):319–24

Thrombin–stimulated effects on megakaryocytopoiesis and pulmonary–platelet interactions. Warheit DB, et al. **Gen Physiol Biophys** 1989 Dec;8(6):611–31

Platelets in health and disease. **Hematol Oncol Clin North Am** 1990 Feb;4(1):1–317

Platelet function in cardiopulmonary bypass and artificial organs. Addonizio VP. **Hematol Oncol Clin North Am** 1990 Feb;4(1):145–55 (50 ref.)

Platelet receptors. Colman RW. **Hematol Oncol Clin North Am** 1990 Feb;4(1):27–42 (100 ref.)

New families of adhesion molecules play a vital role in platelet functions. Parmentier S, et al. **Immunol Today** 1990 Jul;11(7):225–7 (9 ref.)

[3H]yohimbine binding to platelet alpha 2–adrenoceptors in depression. Katona CL, et al. **J Affective Disord** 1989 Nov–Dec;17(3):219–28

The effect of platelet releasate on wound healing in animal models. Ksander GA, et al. **J Am Acad Dermatol** 1990 May; 22(5 Pt 1):781–91

Endothelial, platelet and leukocyte interactions in ischemic heart disease: insights into potential mechanisms and their clinical relevance. Dinerman JL, et al. **J Am Coll Cardiol** 1990 Jul;16(1):207–22 (162 ref.)

Indomethacin attenuates the constriction of canine epicardial coronary arteries to acetylcholine in the absence of endothelium: contribution of platelets to vasoconstriction in vivo. Miller WL, et al. **J Am Coll Cardiol** 1989 Dec; 14(7):1794–802

Effects of hypomagnesemia on reactivity of bovine and ovine platelets: possible relevance to infantile apnea and sudden infant death syndrome. Miller JK, et al. **J Am Coll Nutr** 1990 Feb;9(1):58–64

Leukocyte and platelet margination within microvasculature of rabbit lungs. Doerschuk CM, et al. **J Appl Physiol** 1990 May;68(5):1956–61

Platelet receptor occupancy with factor IXa promotes factor X activation. Ahmad SS, et al. **J Biol Chem** 1989 Nov 25;264(33):20012–6

Staphylococcus aureus alpha–toxin attack on human platelets promotes assembly of the prothrombinase complex. Arvand M, et al. **J Biol Chem** 1990 Aug 25;265(24):14377–81

Cytoplasmic Ca2+ is necessary for thrombin–induced platelet activation. Davies TA, et al. **J Biol Chem** 1989 Nov 25;264(33):19600–6

Endotoxic lipid A interaction with human platelets. Structure–function analysis of lipid A homologs obtained from Salmonella minnesota Re595 lipopolysaccharide. Grabarek J, et al. **J Biol Chem** 1990 May 15; 265(14):8117–21

Identification of a monoclonal antibody against platelet GPIIb that interacts with a calcium–binding site and induces aggregation. Gulino D, et al. **J Biol Chem** 1990 Jun 5;265(16):9575–81

Receptor–activated single channels in intact human platelets. Mahaut–Smith MP, et al. **J Biol Chem** 1990 Jun 25; 265(18):10479–83

Regulatory control of complement on blood platelets. Modulation of platelet procoagulant responses by a membrane inhibitor of the C5b–9 complex. Sims PJ, et al. **J Biol Chem** 1989 Nov 15;264(32):19228–35

The alpha 2 beta 1 integrin cell surface collagen receptor binds to the alpha 1 (I)–CB3 peptide of collagen. Staatz WD, et al. **J Biol Chem** 1990 Mar 25;265(9):4778–81

The response to thromboxane A2 analogues in human platelets. Discrimination of two binding sites linked to distinct effector systems. Takahara K, et al. **J Biol Chem** 1990 Apr 25;265(12):6836–44

Platelet interaction to prosthetic materials—role of von Willebrand factor in platelet interaction to PTFE. Badimon L, et al. **J Biomater Appl** 1990 Jul;5(1):27–48

Prostacyclin inhibits the platelet–dependent effects of platelet–activating factor in the rabbit isolated heart. Alloatti G, et al. **J Cardiovasc Pharmacol** 1990 May; 15(5):745–51

Occlusion and reperfusion–induced arrhythmias in rats: involvement of platelets and effects of calcium antagonists. Swies J, et al. **J Cardiovasc Pharmacol** 1990 May; 15(5):816–25

Association of profilin with filament–free regions of human leukocyte and platelet membranes and reversible membrane binding during platelet activation. Hartwig JH, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1571–9

Platelet thrombospondin modulates endothelial cell adhesion, motility, and growth: a potential angiogenesis regulatory factor. Taraboletti G, et al. **J Cell Biol** 1990 Aug; 111(2):765–72

The role of thrombocytes in liver fibrogenesis: effects of platelet lysate and thrombocyte–derived growth factors on the mitogenic activity and glycosaminoglycan synthesis of cultured rat liver fat storing cells. Bachem MG, et al. **J Clin Chem Clin Biochem** 1989 Sep;27(9):555–65

Vitronectin binds to activated human platelets and plays a role in platelet aggregation. Asch E, et al. **J Clin Invest** 1990 May;85(5):1372–8

A patient with platelets deficient in glycoprotein VI that lack both collagen–induced aggregation and adhesion. Moroi M, et al. **J Clin Invest** 1989 Nov;84(5):1440–5

Microtitre plate measurement of platelet response to hypotonic stress. Farrugia A, et al. **J Clin Pathol** 1989 Dec; 42(12):1298–301

The hypertension–coronary heart disease dilemma: the catecholamine–blood platelet connection. Kjeldsen SE, et al. **J Hypertens** 1989 Nov;7(11):851–60 (143 ref.)

Platelet intracellular pH in essential hypertensives and

normotensives. Weder AB, et al. **J Hypertens Suppl** 1989 Dec;7(6):S152–3

Modulation of platelet responses to collagen by Clq receptors. Peerschke EI, et al. **J Immunol** 1990 Jan 1; 144(1):221–5

Aggregated platelets enhance adherence of Candida yeasts to endothelium. Klotz SA, et al. **J Infect Dis** 1989 Oct; 160(4):669–77

Inhibition of platelet–dependent thrombosis by low molecular weight heparin (CY222): comparison with standard heparin. Cadroy Y, et al. **J Lab Clin Med** 1989 Oct; 114(4):349–57

Neutrophils inhibit platelet reactivity by multiple mechanisms: relevance to thromboregulation [editorial] Marcus AJ. **J Lab Clin Med** 1990 Aug;116(2):138–9

Increased plasma membrane fluidity and decreased receptor availability of nonmuscle cells in myotonic dystrophy. Hübner C, et al. **J Neurol Sci** 1989 Sep;92(2–3):205–14

Impaired hemostasis and platelet function in rats fed low zinc diets based on egg white protein. Emery MP, et al. **J Nutr** 1990 Sep;120(9):1062–7

Effects of calcium channel–blocking agents on platelet–osteogenic sarcoma interaction: platelet aggregation and electron microscopic findings. Mehta P, et al. **J Orthop Res** 1990 Sep;8(5):629–34

Effect of sodium restriction on platelet function in patients with essential hypertension. Ikeda T, et al. **Jpn Heart J** 1989 May;30(3):365–73

Hepatocyte regeneration after partial hepatectomy occurs even under severely thrombocytopenic conditions in the rat. Kuwashima Y, et al. **Jpn J Cancer Res** 1990 Jun–Jul; 81(6–7):607–12

Mechanisms and kinetics for platelet and neutrophil localization in immune complex nephritis. Johnson RJ, et al. **Kidney Int** 1989 Nov;36(5):780–9

Interactions between neutrophils and platelets. Henson PM. **Lab Invest** 1990 Apr;62(4):391–3

Albumin–bound docosahexaenoic acid and collagen–induced human platelet reactivity. Gaudette DC, et al. **Lipids** 1990 Mar;25(3):166–9

Effects of exercise and exercise conditioning on blood platelet function. Davis RB, et al. **Med Sci Sports Exerc** 1990 Feb; 22(1):49–53

Molecular basis of the synergistic inhibition of platelet function by nitrovasodilators and activators of adenylate cyclase: inhibition of cyclic AMP breakdown by cyclic GMP. Maurice DH, et al. **Mol Pharmacol** 1990 May; 37(5):671–81

Platelets and thrombolysis [letter] Bath PM, et al. **N Engl J Med** 1990 Sep 20;323(12):831

Platelets and thrombolytic therapy. Coller BS. **N Engl J Med** 1990 Jan 4;322(1):33–42 (147 ref.)

Thromboxane biosynthesis and platelet function in type II diabetes mellitus. Davì G, et al. **N Engl J Med** 1990 Jun 21;322(25):1769–74

Thrombocytosis and thrombocythemia: qualitative platelet abnormalities. Okuma M. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec;52(8):1265–72

Interactions via eicosanoids between vascular and blood cells. Takayama H. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec; 52(8):1322–9 (17 ref.)

Platelet function in sickle cell disease during steady state. Triadou P, et al. **Nouv Rev Fr Hematol** 1990;32(2):137–42

Human platelets involvement in immune modulation of graft rejection in mice. Bundschuh G. **Padiatr Grenzgeb** 1989; 28(4):245–52

Plasmodium falciparum growth inhibition by human platelets in vitro. Peyron F, et al. **Parasitology** 1989 Dec;99 Pt 3:317–22

Blood platelets as a model system for studying serotonergic dysfunction and effects of antidepressants. Lingjaerde O. **Pharmacol Toxicol** 1990;66 Suppl 3:61–8 (35 ref.)

Dynamics and compartmentation of water in certain biosystems. Katona E, et al. **Physiologie** 1989 Oct–Dec; 26(4):285–96

Agkistrodon piscivorus piscivorus platelet aggregation inhibitor: a potent inhibitor of platelet activation. Chao BH, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):8050–4

Role of platelets in smooth muscle cell proliferation and migration after vascular injury in rat carotid artery. Fingerle J, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(21):8412–6

An L–arginine/nitric oxide pathway present in human platelets regulates aggregation. Radomski MW, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5193–7

Calcium–activated potassium channels in human platelets. Fine BP, et al. **Proc Soc Exp Biol Med** 1989 Nov; 192(2):109–13

Blood platelets and schistosome egg excretion. Ngaiza JR, et al. **Proc Soc Exp Biol Med** 1990 Jan;193(1):73–9

Prostaglandin H2 in human platelet activation: coactivator and substitute for thromboxane A2. Hornberger WB, et al. **Prog Clin Biol Res** 1989;301:315–9

Altered sensitivity to prostacyclin may be involved in the exercise–induced activation of platelets in patients with ischemic heart disease. Kishi Y, et al. **Prog Clin Biol Res** 1989;301:181–5

Platelet function, surface structure and antigenicity. Moake JL. **Prog Clin Biol Res** 1990;337:41–3 (10 ref.)

Platelet activation and cyclo–and lipoxygenase–activities in diabetes type II. Rösen P, et al. **Prog Clin Biol Res** 1989; 301:359–63

Modulation of prostanoid formation by various polyunsaturated fatty acids during platelet–endothelial cell interactions. Bordet JC, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Mar; 39(3):197–202

The effects of plasma lipoproteins on platelet responsiveness and on platelet and vascular prostanoid synthesis. Bruckdorfer KR. **Prostaglandins Leukot Essent Fatty Acids** 1989 Dec; 38(4):247–54 (72 ref.)

The effects of very low fat diets enriched with fish or kangaroo meat on cold–induced vasoconstriction and platelet function. Butcher LA, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Mar; 39(3):221–6

Dietary polyenoic fatty acids change the response of cat blood platelets to inductions of aggregation by ADP. Davidson BC, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Jan; 39(1):31–7

Aspirin, prostaglandin E1 and Quin–2 AM–induced platelet dysfunction: restoration of function by noradrenalin. Rao GH, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Feb;39(2):141–6

Primary platelet activation in recent–onset type 1 diabetes mellitus. Vicari AM, et al. **Scand J Clin Lab Invest** 1990 Jun;50(4):429–32

Initiation and termination of Ca2+ signals: studies in human platelets. Rink TJ, et al. **Soc Gen Physiol Ser** 1988; 43:381–94 (45 ref.)

Platelet membrane potentials and their significance in monitoring stimulus response coupling. Simons ER, et al. **Soc Gen Physiol Ser** 1988;43:265–79 (46 ref.)

Effects of subarachnoid hemorrhage on platelet–derived vasoconstriction of rabbit basilar artery. Tanaka Y, et al. **Surg Neurol** 1989 Dec;32(6):439–44

Effects of exercise and ticlopidine on platelet function and prostanoids in patients with old myocardial infarction. Ding YA, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Aug; 88(8):765–71

XIIth congress of the International Society on Thrombosis and Haemostasis. Tokyo, Japan, 19–25 August 1989. Abstracts. **Thromb Haemost** 1989 Aug 19;62(1):1–647

Platelet and shear rate promote tumor cell adhesion to human endothelial extracellular matrix—absence of a role for platelet cyclooxygenase. Bastida E, et al. **Thromb Haemost** 1989 Jun 30;61(3):485–9

Coated pits and vesicles transfer plasma components to platelet granules. Behnke O. **Thromb Haemost** 1989 Sep 29;62(2):718–22

Platelets as scavengers of neutrophil–derived oxidants: a possible defence mechanism at sites of vascular injury. Dallegri F, et al. **Thromb Haemost** 1989 Jun 30;61(3):415–8

Platelet modulation of neutrophil superoxide anion production. Moon DG, et al. **Thromb Haemost** 1990 Feb 19;63(1):91–6

Abnormal typical pattern of platelet function and thromboxane generation in unstable angina. Zahavi M, et al. **Thromb Haemost** 1989 Nov 24;62(3):840–5

Functions and tocopherol content of blood platelets from elderly people after low intake of purified eicosapentaenoic acid. Croset M, et al. **Thromb Res** 1990 Jan 1;57(1):1–12

Differential effect of platelets on plasminogen activation by tissue plasminogen activator, urokinase, and streptokinase. Gao SW, et al. **Thromb Res** 1990 May 15;58(4):421–33

Platelet release reaction and plasma catecholamines during total hip replacement. No effects of high doses of corticosteroids. Høgevold HE, et al. **Thromb Res** 1990 Jan 1;57(1):21–9

Congenital changes of platelet functions in stroke–prone SHR: aggregability of gel–filtered platelets, PRP and whole blood, and effects of hypotensive treatment. Ikeda M, et al. **Thromb Res** 1989 Nov 1;56(3):441–52

The role of platelet prostanoids and dense granule components in initial attachment, spreading and aggregation of platelets on collagen substrates. Leytin VL, et al. **Thromb Res** 1989 Aug 15;55(4):395–406

Platelet function and exercise–induced myocardial ischaemia in coronary heart disease patients. McGill D, et al. **Thromb Res** 1989 Oct 15;56(2):147–58

Detection of platelet activation with monoclonal antibodies and flow cytometry. Changes during platelet storage. Fijnheer R, et al. **Transfusion** 1990 Jan;30(1):20–5

Properties of platelet concentrates prepared after extended whole blood holding time. Holme S, et al. **Transfusion** 1989 Oct;29(8):689–92

The maintenance of platelet properties upon limited discontinuation of agitation during storage. Moroff G, et al. **Transfusion** 1990 Jun;30(5):427–30

Activated platelets, asthma and vascular injury. Pathophysiology of platelets [letter] Florip MG, et al. **Trends Pharmacol Sci** 1988 Sep;9(9):314

Platelet collection with the Autopheresis–C apheresis system. Schoendorfer DW, et al. **Vox Sang** 1990;58(2):100–5

[Effects of experimental coronary artery stenosis on platelet function] Chen SL, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Oct; 17(5):285–7, 318 (Eng. Abstr.) **(Chi)**

[Platelet functions in patients with acute myocardial infarction] Jin L, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Oct; 17(5):275–8, 317 (Eng. Abstr.) **(Chi)**

[Progress in biological roles of several products released from platelet alpha–granules] Chen GQ. **Sheng Li Ko Hsueh Chin Chan** 1990 Jan;21(1):27–30 (31 ref.) **(Chi)**

[The relation of the calcium messenger system and platelet function] Zhuang QQ. **Sheng Li Ko Hsueh Chin Chan** 1989 Jul;20(3):215–8 (15 ref.) **(Chi)**

[The effect of thrombocytes on the inhibition of granulocyte adherence induced by the ionophore A 23187 in multiple sclerosis] Mayer M. **Cas Lek Cesk** 1990 Jun 1;129(22):693–5 (Eng. Abstr.) **(Cze)**

[Blood platelet adhesion. I. Adhesion to the vascular wall and the role of platelet transport] Sixma JJ, et al. **Ned Tijdschr Geneeskd** 1989 Jul 22;133(29):1441–4 **(Dut)**

[Endothelium–dependent modulation of circulation and thrombocyte function by endothelium–derived relaxing factor, an "endogenous nitro–vasodilator"] Pohl U. **Med Klin** 1990 Feb;85 Suppl 1:10–3 (16 ref.) **(Ger)**

[Significance of thrombocyte–collagen interaction in arterial laceration] Scola E, et al. **Unfallchirurg** 1990 Feb;93(2):45–8 (22 ref.) (Eng. Abstr.) **(Ger)**

[Arterial hypertension and platelet function] Davì G, et al. **Cardiologia** 1989 Jun;34(6):483–7 (37 ref.) **(Ita)**

[Neonatal hypoxia and hemocoagulative changes] Fichera A, et al. **Pediatr Med Chir** 1989 Nov–Dec;11(6):643–7 (41 ref.) (Eng. Abstr.) **(Ita)**

[Behavior of fibrinogen, hematocrit and platelets in relation to variations in body mass index in a group of female subjects] Carnevale Schianca GP, et al. **Ric Clin Lab** 1989; 19 Suppl 1:125–8 **(Ita)**

[Effects of the administration of urinary trypsin inhibitor on the morphology and function of platelets in the rat septic models] Taniguchi T, et al. **Nippon Geka Gakkai Zasshi** 1990 Feb;91(2):163–8 (Eng. Abstr.) **(Jpn)**

[Effect of short–term hypoxia on blood platelet function tests of normal subjects] Mizumoto Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jul;27(7):811–7 (Eng. Abstr.) **(Jpn)**

[Megaloblastic anemia and platelet function—a qualitative platelet defect in pernicious anemia] Terade H, et al. **Rinsho Ketsueki** 1990 Feb;31(2):254–5 (Eng. Abstr.) **(Jpn)**

[Regulation of platelet functions] Nakashima S, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2265–75 **(Jpn)**

[Blood platelet function in patients with chronic renal failure] Myśliwiec M, et al. **Pol Arch Med Wewn** 1988 Oct; 80(4):189–95 (Eng. Abstr.) **(Pol)**

[Morphologic and molecular aspects of the interaction of platelets with elements of the vascular wall] Strukova SM, et al. **Arkh Patol** 1989;51(6):3–12 (65 ref.) (Eng. Abstr.) **(Rus)**

[The role of the leukocytes in the blood–vasal regulation of the blood circulation] Gabrielian ES, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):660–2 (Eng. Abstr.) **(Rus)**

[Disordered function of the vascular–thrombocyte link in the hemostatic system during tumor growth] Liubina LV, et al. **Biull Eksp Biol Med** 1989 Dec;108(12):716–8 (Eng. Abstr.) **(Rus)**

[The correlation between the indices of lipid metabolism and of thrombocyte function determined by statometry] Blagosklonnyĭ MV, et al. **Fiziol Cheloveka** 1990 Mar–Apr; 16(2):77–82 **(Rus)**

[Beta1– and beta2–adrenergic effects on thrombocytopoiesis in rats] Ganchev TS, et al. **Gematol Transfuziol** 1989 Nov; 34(11):50–3 (Eng. Abstr.) **(Rus)**

[Thrombokinetic study of patients with idiopathic thrombocytopenic purpura] Kostadinova I, et al. **Gematol Transfuziol** 1989 Nov;34(11):39–41 (Eng. Abstr.) **(Rus)**

[State of the blood platelet link of hemostasis and microcirculation in patients with ischemic heart disease during plasmapheresis treatment] Kirichenko LL, et al. **Kardiologiia** 1989 Dec;29(12):85–90 (Eng. Abstr.) **(Rus)**

[Functional state of blood platelets in arterial hypertension and the changes in serotonin–containing cellular granules] Mezhlumian AG, et al. **Kardiologiia** 1989 Sep;29(9):13–8 (Eng. Abstr.) **(Rus)**

[Study of peripheral blood thrombocytes in smokers] German AK, et al. **Lab Delo** 1989;(10):23–5 (Eng. Abstr.) **(Rus)**

[The thrombocyte function of bronchial asthma patients] Emirova AS, et al. **Ter Arkh** 1990;62(3):100–2 (Eng. Abstr.) **(Rus)**

[The role of changes in thrombocytic hemostasis in the pathokinesis of purulent surgical infection] Mazurov VI, et al. **Vestn Akad Med Nauk SSSR** 1989;(7):34–40 (Eng. Abstr.) **(Rus)**

[Modern methods for correcting thrombocytic hemostasis] Matveev SA. **Vestn Khir** 1989 Oct;143(10):153–6 (39 ref.) **(Rus)**

[Thrombocytic diseases in generalized myasthenia gravis and their correction by using plasmapheresis and administration of anti– immunoglobulin antisera] Shimkevich LL, et al. **Zh Nevropatol Psikhiatr** 1989;89(11):47–50 (Eng. Abstr.) **(Rus)**

[Platelet eicosanoids and hypercholesterolemia] Eynard AR, et al. **Rev Fac Cien Med Univ Nac Cordoba** 1987;45(2):6–8, 11 (56 ref.) **(Spa)**

RADIATION EFFECTS

Platelet concentrates irradiated with ultraviolet light retain

satisfactory in vitro storage characteristics and in vivo survival. Pamphilon DH, et al. **Br J Haematol** 1990 Jun; 75(2):240–4

Changes of the peripheral blood picture after combined neutron and gamma irradiation. Chlebovský O, et al. **Radiobiol Radiother (Berl)** 1989;30(5):445–51

Ultraviolet irradiation of platelet concentrates: feasibility in transfusion practice. Andreu G, et al. **Transfusion** 1990 Jun; 30(5):401–6

[Trigger mechanisms of the therapeutic effects of autologous transfusion of UV-irradiated blood (membranotropic effect on erythrocytes and thrombocytes)] Samollova KA, et al. **Vestn Khir** 1989 Dec;144(12):51–60 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

111In platelet imaging of left ventricular thrombi. Predictive value for systemic emboli [see comments] Stratton JR, et al. **Circulation** 1990 Apr;81(4):1182–9 Comment in: Circulation 1990 Apr;81(4):1419–21.

RADIONUCLIDE IMAGING

Indium-111 oxine technique of studying platelet aggregation in vivo. Some physiological considerations. Oyekan AO, et al. **Acta Haematol (Basel)** 1990;83(2):57–64

111In platelet scintigraphy and risk stratification for embolization from chronic left ventricular thrombi [comment] Vandenberg BF. **Circulation** 1990 Apr; 81(4):1419–21 Comment on: Circulation 1990 Apr;81(4):1182–9.

Use of indium-111-labelled platelets in black stroke patients. A pilot study. Joubert J, et al. **S Afr Med J** 1990 Mar 3;77(5):246–8

SECRETION

Effect of platelet release products on cytosolic calcium in cardiac myocytes. Chien WW, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1121–7

Stimulated platelets release amyloid beta-protein precursor. Cole GM, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):288–95

Platelet factor 4 and the platelet secreted proteoglycan: immunologic characterization by crossed immunoelectrophoresis. Levine SP, et al. **Blood** 1990 Feb 15;75(4):902–10

Platelet aggregation and ATP secretion in whole blood of normal cats and cats homozygous and heterozygous for Chediak-Higashi syndrome. Colgan SP, et al. **Blood Cells** 1989;15(3):585–95; discussion 596–600

Lysosomal concept of platelet secretion—revisited. Polasek J. **Eur J Haematol Suppl** 1989;50:3–24 (289 ref.)

Preliminary evidence of growth factor(s) from chicken thrombocytes—growth effects on chicken embryo fibroblasts culture. Horiuchi H, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):559–65

The effect of venous occlusion on the PAI and antiplasmins release from platelets. Woods AI, et al. **Thromb Res** 1989 Nov 1;56(3):491–5

[Effects of polypeptides from thrombocytes on the status of the hemostasis and immunogenesis systems in in vitro experiments] Aiushiev OD, et al. **Gematol Transfuziol** 1989 Jun;34(6):41–5 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

In vitro and in vivo evaluation of platelet transfusions administered through an electromechanical infusion pump. Snyder EL, et al. **Am J Clin Pathol** 1990 Jul;94(1):77–80

Branch retinal artery occlusion after platelet transfusion. Greven CM, et al. **Am J Ophthalmol** 1990 Jan 15; 109(1):105–6

Vancomycin-dependent antibodies associated with thrombocytopenia and refractoriness to platelet transfusion in patients with leukemia. Christie DJ, et al. **Blood** 1990 Jan 15;75(2):518–23

Analyses of thrombocytopenia in idiopathic thrombocytopenic purpura-prone mice by platelet transfer experiments between (NZW x BXSB)F1 and normal mice. Mizutani H, et al. **Blood** 1990 May 1;75(9):1809–12

Effective prophylaxis against platelet refractoriness in multitransfused patients by use of leukocyte-free blood components. Saarinen UM, et al. **Blood** 1990 Jan 15; 75(2):512–7

Platelet transfusions: the problem of refractoriness. Murphy MF, et al. **Blood Rev** 1990 Mar;4(1):16–24 (114 ref.)

ABC of Transfusion. Platelet and granulocyte transfusions. Hows JM, et al. **BMJ** 1990 Feb 24;300(6723):520–3 (0 ref.)

Transfusion of ABO-mismatched platelets leads to early platelet refractoriness. Carr R, et al. **Br J Haematol** 1990 Jul;75(3):408–13

Factors influencing the transfusion response to HLA-selected apheresis donor platelets in patients refractory to random platelet concentrates. McFarland JG, et al. **Br J Haematol** 1989 Nov;73(3):380–6

Prophylactic transfusion of platelets and plasma in trauma care [letter] [published erratum appears in Can Med Assoc J 1990 Jul 15;143(2):91] [comment] Ferguson DJ, et al. **Can Med Assoc J** 1990 May 15;142(10):1039–40 Comment on: Can Med Assoc J 1989 Sep 15;141(6):529–33.

The effects of heterologous platelet transfusion on pulmonary function during ARDS. Eichacker PQ, et al. **Chest** 1990 Apr;97(4):923–6

Transfusion of ABO-incompatible platelets causing severe haemolytic reaction. Reis MD, et al. **Clin Lab Haematol** 1989;11(3):237–40

Supportive haemotherapy in bone marrow transplantation. Mayr WR. **Folia Haematol (Leipz)** 1989;116(3–4):455–8 (3 ref.)

Preparation of leukocyte-poor platelet concentrates for transfusion by filtration through a new cellulose acetate filter. Koerner K. **Haematologia (Budap)** 1989;22(3):181–8

Platelet transfusion therapy. Slichter SJ. **Hematol Oncol Clin North Am** 1990 Feb;4(1):291–311 (99 ref.)

Comparison of plateletapheresis with two cell separators using identical donors. Bertholf MF, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:45 **(Eng, Ger)**

Platelet crossmatching with Capture P: clinical relevance. Böck M, et al. **Infusionstherapie** 1989 Aug;16(4):183–5

Collection and transfusion of single donor platelets and their clinical response. Hester J, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:4–9; discussion 28–9 **(Eng, Ger)**

Use of the COBE Spectra System (CSS) for platelet pheresis (PP) and intensive plasma exchange (IPE). Kevy SV, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:46 **(Eng, Ger)**

Further results with the COBE Spectra system. Platelet collection using the COBE Spectra. Price TH, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:44 **(Eng, Ger)**

COBE Spectra Apheresis System: designs, protocols and results. Urdahl SG. **Infusionstherapie** 1989 Aug;16 Suppl 2:30–43 **(Eng, Ger)**

A consensus development conference on the practice of platelet transfusion in The Netherlands. van Aken WG, et al. **Int J Technol Assess Health Care** 1990;6(1):163–74 (6 ref.)

Use of platelets in transfusion medicine. Brubaker DB. **J Am Osteopath Assoc** 1989 Dec;89(12):1553–9

Platelet transfusions: applications and controversies. Murphy MF, et al. **J Clin Apheresis** 1990;5(2):83–6 (57 ref.)

ABO incompatibility and platelet transfusion [editorial] [see comments] **Lancet** 1990 Jan 20;335(8682):142–3 Comment in: Lancet 1990 Apr 21;335(8695):974–5.

Beneficial effect of pre-transfusion warming of platelets prepared from buffy coats [letter] Fijnheer R, et al. **Lancet** 1990 Jun 23;335(8704):1524

Acute haemolysis after ABO-incompatible platelet transfusions [letter; comment] Murphy MF, et al. **Lancet** 1990 Apr 21;335(8695):974–5 Comment on: Lancet 1990 Jan 20;335(8682):142–3.

Blood component therapy. New guidelines for avoiding complications. Tarnower A, et al. **Postgrad Med** 1989 Dec; 86(8):48–51, 55–8, 63–5

Alloimmunization by leukocyte-rich or leukocyte-poor random single donor platelets. Gmür J, et al. **Prog Clin Biol Res** 1990;337:45–8

Review of definitions and mechanisms of refractoriness to platelet transfusions. Hester JP, et al. **Prog Clin Biol Res** 1990;337:49–58 (6 ref.)

Solid phase platelet crossmatching versus complement dependent lymphocytotoxicity—clinical utility. Lane D, et al. **Prog Clin Biol Res** 1990;337:59–62

Platelet transfusion therapy for the cancer patient. Heyman MR, et al. **Semin Oncol** 1990 Apr;17(2):198–209 (77 ref.)

Febrile reactions after platelet transfusion: the effect of single versus multiple donors. Chambers LA, et al. **Transfusion** 1990 Mar-Apr;30(3):219–21

Platelet transfusions administered to patients with splenomegaly. Hussein MA, et al. **Transfusion** 1990 Jul-Aug;30(6):508–10

Accurate quantitation of the low number of white cells in white cell-depleted blood components. Kao KJ, et al. **Transfusion** 1989 Nov-Dec;29(9):774–7

Donor selection for alloimmunized patients by platelet crossmatching of random-donor platelet concentrates. O'Connell BA, et al. **Transfusion** 1990 May;30(4):314–7

Preparation of white-cell poor platelet concentrates [letter; comment] Tedrow HE. **Transfusion** 1990 Mar-Apr; 30(3):288 Comment on: Transfusion 1989 Jul-Aug;29(6):562–3.

Filtration. A method to prepare white cell-poor platelet concentrates with optimal preservation of platelet viability. van Marwijk Kooy M, et al. **Transfusion** 1990 Jan; 30(1):34–8

Pretransplant transfusion of donor-specific class I major histocompatibility complex antigen in dogs. Gores PF, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1407–8

The mechanism of platelet-induced rat renal allograft prolongation. Hibberd AD, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 2):1411–3

Selective effect of noncytotoxic blocking alloantibodies produced after platelet transfusions on MLC, and mitogen and soluble antigen-induced responses of human lymphocytes. Horuzsko A, et al. **Transplantation** 1990 Sep; 50(3):497–501

Leukocyte-poor platelet concentrates at the bedside by filtration through Sepacell-PL. Miyamoto M, et al. **Vox Sang** 1989;57(3):164–7

Management of fetal alloimmune thrombocytopenia by weekly in utero platelet transfusions. Murphy MF, et al. **Vox Sang** 1990;58(1):45–9

[The effect of HLA alloimmunization and other factors on the effectiveness of thrombocyte concentrates] Pittrová H, et al. **Cas Lek Cesk** 1990 Jun 15;129(24):751–3 (Eng. Abstr.) **(Cze)**

[Thrombocyte concentrate infusions—a study of the frequency of contamination and its clinical significance] Mortensen LS, et al. **Ugeskr Laeger** 1990 Aug 20; 152(34):2431–3 (Eng. Abstr.) **(Dan)**

[Neonatal alloimmunothrombocytopenia—effect of combination therapy consisting of i.v. immunoglobulin administration and transfusion of PLA1-negative maternal thrombocytes] Choudhury AR, et al. **Monatsschr Kinderheilkd** 1989 Aug;137(8):458–62 (Eng. Abstr.) **(Ger)**

[Use of vincristine-loaded blood platelets, danazol and gamma globulin in the treatment of patients with idiopathic thrombocytopenic purpura] Górski J, et al. **Acta Haematol Pol** 1989 Jan-Jun;20(1):65–71 (Eng. Abstr.) **(Pol)**

[Indications for blood transfusion] Khollan SR. **Gematol Transfuziol** 1989 Aug;34(8):47–53 **(Rus)**

[Therapeutic effectiveness of preserved thrombocytic concentrates] Kompaniets AM, et al. **Klin Med (Mosk)** 1989 Dec;67(12):74–80 **(Rus)**

[Enhancement of the efficacy of thrombocyte transfusion in aplastic anemia by the use of plasmapheresis] Mikhallova EA, et al. **Ter Arkh** 1989;61(7):141–2 **(Rus)**

ULTRASTRUCTURE

Thrombocytopathy due to a defect of the platelet membrane complex. Canizares C, et al. **Acta Haematol (Basel)** 1990; 83(2):99–104

Localization of granular components in ADP- and/or teleocidin-stimulated human blood platelets as revealed by immunocytochemical methods. Kawakami H, et al. **Acta Haematol (Basel)** 1989;82(2):75–80

Platelet vacuoles in acute megakaryoblastic leukemia. McClellan JE, et al. **Am J Clin Pathol** 1989 Nov; 92(5):700–2

Detection of 'activated platelets' in the urinary sediments using a scanning electron microscope in patients with IgA nephropathy. Shirato I, et al. **Am J Nephrol** 1990; 10(3):186–90

Platelet membrane skeleton revealed by quick-freeze deep-etch. Bearer EL. **Anat Rec** 1990 May;227(1):1–11

Divalent cation-dependent structure in the platelet membrane glycoprotein Ia-IIa (VLA-2) complex. Staatz WD, et al. **Biochem Biophys Res Commun** 1990 Apr 16; 168(1):107–14

Signal transduction by the platelet Fc receptor. Anderson GP, et al. **Blood** 1990 Sep 15;76(6):1165–72

The fate of the open canalicular system in surface and suspension-activated platelets. Escolar G, et al. **Blood** 1989 Nov 1;74(6):1983–8

PPACK-thrombin inhibits thrombin-induced platelet aggregation and cytoplasmic acidification but does not inhibit platelet shape change. Greco NJ, et al. **Blood** 1990 May 15;75(10):1989–90

The origin of the membrane convolute in degranulating platelets. A comparative study of normal and "gray" platelets. Morgenstern E, et al. **Blut** 1990 Jan;60(1):15–22

Studies of human platelet ultrastructure and quantitative analyses of membrane glycoprotein IIB/IIIA in shear stress-induced platelet quick release reaction. Song M, et al. **Chin Med J [Engl]** 1990 Feb;103(2):166–72

Actin cytoskeleton of resting bovine platelets. Takeuchi K, et al. **Exp Cell Res** 1990 Feb;186(2):374–80

New possibilities for platelet shape change evaluation using the laser rheoaggregometer. Jung G, et al. **Haemostasis** 1990;20(1):37–47

Role of the membrane skeleton in preventing the shedding of procoagulant-rich microvesicles from the platelet plasma membrane. Fox JE, et al. **J Cell Biol** 1990 Aug; 111(2):483–93

Anchorage of secretion-competent dense granules on the plasma membrane of bovine platelets in the absence of secretory stimulation. Morimoto T, et al. **J Cell Biol** 1990 Jul;111(1):79–86

Human platelet dense granules: improved isolation and preliminary characterization of [3H]-serotonin uptake and tetrabenazine-displaceable [3H]-ketanserin binding. Chatterjee D, et al. **Life Sci** 1990;46(24):1755–64

Binding of an [125I] labelled thromboxane A2/prostaglandin H2 receptor agonist to baboon platelets. Dorn GW 2d, et al. **Prostaglandins** 1989 Dec;38(6):645–53

Scanning electron microscopy analysis of polyethylene oxide hydrogels for blood contact. Verdon SL, et al. **Scanning Microsc** 1990 Jun;4(2):341–9; discussion 349–50

Polyurethane support films: structure and cellular adhesion. Goodman SL, et al. **Scanning Microsc Suppl** 1989;3:285–94; discussion 294–5

Application of video-enhanced interference reflection microscopy to the study of platelet-surface interactions. Park K, et al. **Scanning Microsc Suppl** 1989;3:137–45; discussion 145–6

Structure and function of the platelet membrane skeleton. Fox JE, et al. **Soc Gen Physiol Ser** 1988;43:111–23 (39 ref.)

Platelet ultrastructure and secretion in acute ischemic stroke. Joseph R, et al. **Stroke** 1989 Oct;20(10):1316–9

Gold-labeled bovine fibrinogen for study of human platelets. Grouse LH, et al. **Thromb Haemost** 1989 Dec 29; 62(4):1112–5

Demonstration of secondary lysosomes in bovine megakaryocytes and platelets using acid phosphatase cytochemistry with cerium as a trapping agent. Ménard M, et al. **Thromb Haemost** 1990 Feb 19;63(1):127–32

[The structure of the cytoskeleton and its role during platelet activation] Cierniewski CS, et al.
Postepy Hig Med Dosw 1989;43(1):71–92 (96 ref.) **(Pol)**
[An ultrastructural and ultracytochemical study of peripheral blood thrombocytes in women with habitual spontaneous abortion] Bonartsev PD, et al.
Vestn Akad Med Nauk SSSR 1990;(5):23–6 (Eng. Abstr.) **(Rus)**

BLOOD PRESERVATION

Can storage of thawed cryoprecipitate be extended to more than six hours? Saxena S, et al. **Am J Clin Pathol** 1990 Aug;94(2):203–6
Lymphoblastoid cell lines from frozen whole blood: a quick and economical safeguard for linkage analysis [letter] Chenevix-Trench G, et al. **Am J Hum Genet** 1990 Mar; 46(3):635–6
Stability of plasma glucose during storage. Clark ML, et al. **Ann Clin Biochem** 1990 Jul;27 (Pt 4):373–7
Infectivity of gametocytes of Plasmodium falciparum and Plasmodium vivax after storage in vitro. Somboon P, et al. **Ann Trop Med Parasitol** 1990 Feb;84(1):89–91
Utilization patterns of frozen autologous red blood cells. Experience in a referral center and a community hospital. DePalma L, et al. **Arch Pathol Lab Med** 1990 May; 114(5):516–8
Application of phosphoenolpyruvate into the preparation of frozen and thawed red cells. Shiraki H, et al.
Biomed Biochim Acta 1990;49(2–3):S204–7
Investigations on the deformability of human red blood cells stored in different preservative solutions: relation between cellular hemoglobin concentration and in vivo survival. Wegner G, et al. **Biomed Biochim Acta** 1989;48(8):561–7
Platelet activation may explain the storage lesion in platelet concentrates. Bode AP. **Blood Cells** 1990;16(1):109–25; discussion 125–6 (60 ref.)
Arachidonic acid metabolism in platelets stored for 5 days. Cesar JM, et al. **Br J Haematol** 1990 Mar;74(3):295–9
Formation of reactive species that lead to hemoglobin adducts during storage of blood samples. Törnqvist M. **Carcinogenesis** 1990 Jan;11(1):51–4
Optimized preservation of isoforms of creatine kinase MM isoenzyme in plasma specimens and their rapid quantification by semi-automated chromatofocusing. Abendschein DR, et al. **Clin Chem** 1990 May;36(5):723–7
Effect of transport conditions on the stability of biochemical markers in blood. Hankinson SE, et al. **Clin Chem** 1989 Dec;35(12):2313–6
Thrombin-induced serotonin release as an in vitro indicator of the functional integrity of stored platelets. Hervig T, et al. **Clin Chem** 1990 Jan;36(1):28–31
Effect of repeated freezing and thawing on vitamins and hormones in serum. Hsing AW, et al. **Clin Chem** 1989 Oct; 35(10):2145
More on stability of lithium in clotted blood [letter; comment] Rostron P, et al. **Clin Chem** 1990 Mar;36(3):582–3 Comment on: Clin Chem 1987 Oct;33(10):1944.
Cryopreservation enhances interleukin-1 production in human mononuclear cells. Venkataraman M, et al.
Cryobiology 1990 Apr;27(2):137–42
Recurrence of colorectal cancer and perioperative blood transfusion. Is blood storage time important? Hoh H, et al. **Dis Colon Rectum** 1990 Feb;33(2):127–30
Oxidative stress of red blood cells stored for transfusion use. Lippa S, et al. **Folia Haematol (Leipz)** 1990;117(1):105–10
Storage of blood for methemoglobin determination: comparison of storage with a cryoprotectant at –30 degrees C and without any additions at –80 degrees C or –196 degrees C. Sato K, et al. **Forensic Sci Int** 1990 Mar; 45(1–2):129–34
The effect of storage upon cyanide in blood samples. Bright JE, et al. **Hum Exp Toxicol** 1990 May;9(3):125–9
Survival of cytomegalovirus in viremic blood under blood bank storage conditions [letter] Dworkin RJ, et al.
J Infect Dis 1990 Jun;161(6):1310–1
Effect of platelet activation inhibitors on the loss of glycoprotein Ib during storage of platelet concentrates. Bode AP, et al. **J Lab Clin Med** 1990 Jun;115(6):669–79
In vitro stability of insulin-loaded erythrocytes after freezing storage. Ito Y, et al. **J Pharmacobiodyn** 1989 Apr; 12(4):201–7
Sex and storage affect cholinesterase activity in blood plasma of Japanese quail. Hill EF. **J Wildl Dis** 1989 Oct;25(4):580–5
Morphological classification by scanning electron microscopy of erythrocytes stored at 4 degrees C in citrate-phosphate-dextrose anticoagulant. Truter EJ, et al. **Med Lab Sci** 1990 Apr;47(2):113–9
Potential hazard of hypoalbuminemia in newborn babies after exchange transfusions with ADSOL red blood cell concentrates [letter] Tuchschmid P, et al. **Pediatrics** 1990 Feb;85(2):234–5
Oxidative injuries to the red cell membrane during conventional blood preservation. Wolfe LC.
Semin Hematol 1989 Oct;26(4):307–12 (42 ref.)
Depletion of dense granule nucleotides during storage of human platelets. de Korte D, et al. **Thromb Haemost** 1990 Apr 12;63(2):275–8
Cytomegalovirus infections in seropositive patients after transfusion. The effect of red cell storage and volume. Adler SP, et al. **Transfusion** 1989 Oct;29(8):667–71
The preservation of red cell antigens at low ionic strength. Allan JC, et al. **Transfusion** 1990 Jun;30(5):423–6
Unacceptable platelet counts and pH in PVC blood bags [letter; comment] Heinz R. **Transfusion** 1989 Nov–Dec; 29(9):827–9 Comment on: Transfusion 1989 Feb;29(2):159–64.
Properties of platelet concentrates prepared after extended whole blood holding time. Holme S, et al. **Transfusion** 1989 Oct;29(8):689–92
Lack of success with a combination of alanine and phosphoenolpyruvate as an additive for liquid storage of red cells at 4 degrees C. Matsuyama H, et al.
Transfusion 1990 May;30(4):339–43
Survival of Borrelia burgdorferi in human blood stored under blood banking conditions. Nadelman RB, et al.
Transfusion 1990 May;30(4):298–301
Evaluation of platelets prepared by apheresis and stored for 5 days. In vitro and in vivo studies. Shanwell A, et al. **Transfusion** 1989 Nov–Dec;29(9):783–8
Effect of white cells on platelets during storage. Sloand EM, et al. **Transfusion** 1990 May;30(4):333–8
Platelet storage lesions in second-generation containers: correlation with in vivo behavior with storage up to 14 days. Holme S, et al. **Vox Sang** 1990;59(1):12–8
Spin label studies of erythrocytes during storage of blood. Pessina GP, et al. **Z Naturforsch [C]** 1989 Sep–Oct; 44(9–10):824–8
[Preoperative autologous blood deposit and liquid storage for replacement arthroplasty] Lorentz A, et al.
Anaesthesist 1989 Sep;38(9):480–9 (Eng. Abstr.) **(Ger)**
[Typing of stored, hemolyzed blood samples by DNA fingerprinting] Roewer L, et al. **Arch Kriminol** 1989 Sep–Oct;184(3–4):103–7 (Eng. Abstr.) **(Ger)**
[Improving the quality of washed and buffy coat-free erythrocyte concentrates] Kaiser M, et al.
Folia Haematol (Leipz) 1990;117(1):79–88 (Eng. Abstr.) **(Ger)**
[New formation of fructosamine in patient serum following blood collection] Sommer R.
Wien Klin Wochenschr Suppl 1990;180:42–4; discussion 57–9 (Eng. Abstr.) **(Ger)**
[Initial experience of work on a program of complete preservation of the patient's blood in heart surgery] Osipov VP, et al. **Anesteziol Reanimatol** 1989 Sep–Oct;(5):10–2 (Eng. Abstr.) **(Rus)**
[Effect of erythropifadin on the morphofunctional characteristics of donor blood preserved for a long time] Belkin AL, et al. **Fiziol Zh** 1989 Jul–Aug;35(4):15–9 (Eng. Abstr.) **(Rus)**
[The oxygen supply of the isolated rat heart during perfusion with a suspension of human erythrocytes prepared on the blood preservative citroglucophosphate] Iarochkin VS, et al. **Gematol Transfuziol** 1989 Dec;34(12):32–7 (Eng. Abstr.) **(Rus)**
[Study of the complement system and the inhibitors of plasma proteolytic enzymes in the erythrocytes during blood preservation] Krizhevskaia IuV, et al.
Gematol Transfuziol 1990 May;35(5):18–21 (Eng. Abstr.) **(Rus)**
[Changes in the pH of leukocyte granules during the storage of preserved donor blood] Shestova OLO, et al.
Gematol Transfuziol 1989 Dec;34(12):28–32 (Eng. Abstr.) **(Rus)**
[The yield and quality of DNA extracted from blood samples stored under various conditions] Poláková H, et al.
Bratisl Lek Listy 1989 Nov;90(11):844–7 (Eng. Abstr.) **(Slo)**
[Studies of aggregation using pairs of agonists in platelet concentrates stored for 5 days. Influence of autologous fresh plasma] Espinosa JI, et al. **Sangre (Barc)** 1990 Jun; 35(3):185–8 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

The Initial Blood Storage Experiment—the spaceflight hardware program. Almgren DW, et al.
Aviat Space Environ Med 1989 Dec;60(12):1215–21
The platelet storage capability of different plastic containers. Wallvik J, et al. **Vox Sang** 1990;58(1):40–4
[Autologous blood donation with preservation by freezing] Höhne M. **Infusionstherapie** 1990 Apr;17 Suppl 2:46–9 (Eng. Abstr.) **(Ger)**

METHODS

Effect of storage time on red blood cell membrane permeability to creatinine and uric acid. Buzdygon KJ, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):693–6
Inactivation of viruses and safety of stable plasma products. Morgenthaler JJ. **Beitr Infusionther** 1989;24:33–9 (28 ref.)
Development of a combined storage medium for 7-day storage of platelet concentrates and 42-day storage of red cell concentrates. Heaton WA, et al. **Br J Haematol** 1990 Jul;75(3):400–7
Blood conservation in major orthopedic surgery. Turner RH, et al. **Clin Orthop** 1990 Jul;(256):299–305
Cryopreservation of human platelets with propane-1,2-diol. Arnaud FG, et al. **Cryobiology** 1990 Apr;27(2):130–6
Permeation of glycerol and propane-1,2-diol into human platelets. Arnaud FG, et al. **Cryobiology** 1990 Apr; 27(2):107–18
Some effects of propane-1,2-diol on human platelets. Arnaud FG, et al. **Cryobiology** 1990 Apr;27(2):119–29
Effect of storage time and temperature on DNA extracted from whole blood samples. Towne B, et al. **Hum Biol** 1990 Apr;62(2):301–6
Platelet volume parameters as a diagnostic tool: the influence of anticoagulation and storage conditions on platelet impedance volume. Wehmeier A, et al.
Klin Wochenschr 1989 Oct 2;67(19):980–4
Granulocyte storage [letter] Babior BM, et al. **Lancet** 1990 Jan 6;335(8680):50–1
Deformability of erythrocytes stored between –20 and –25 degrees C [letter] Wegner G, et al. **Lancet** 1990 Sep 29; 336(8718):809
Storage of haemonetics V50 derived platelets for five days. Rock G, et al. **Prog Clin Biol Res** 1990;337:1–5
Viability of 5-day apheresis platelets in a citrate-plasticized bag using a new cell separator. Simon TL, et al.
Prog Clin Biol Res 1990;337:11–3
Cryopreservation of human platelets with 1.4 m glycerol at –75 degrees C in PVC blood packs. Arnaud FG, et al. **Thromb Res** 1990 Mar 15;57(6):919–24
Prolonged storage of red cells with ammonium chloride and mannitol. Mazor D, et al. **Transfusion** 1990 Feb;30(2):150–3
Human blood cells at microgravity: the NASA Initial Blood Storage Experiment. Surgenor DM, et al. **Transfusion** 1990 Sep;30(7):605–16
Long-term preservation of blood samples for diagnosis of Trypanosoma cruzi infection. Pérez AC, et al.
Trop Med Parasitol 1990 Mar;41(1):75–6
Metabolic status of platelet concentrates during extended storage: improvement with pharmacological inhibitors and reduced surface-to-volume ratio. Bode AP, et al.
Vox Sang 1989;57(1):19–24
Use of frozen neutrophils in serological testing. Carrington PA, et al. **Vox Sang** 1989;57(1):67–71
Studies in red blood cell preservation. 1. Effect of the other formed elements. Greenwalt TJ, et al. **Vox Sang** 1990; 58(2):85–9
Studies in red blood cell preservation. 2. Comparison of vesicle formation, morphology, and membrane lipids during storage in AS-1 and CPDA-1. Greenwalt TJ, et al. **Vox Sang** 1990;58(2):90–3
Studies in red blood cell preservation. 3. A phosphate-ammonium-adenine additive solution.
Greenwalt TJ, et al. **Vox Sang** 1990;58(2):94–9
Storage of leukocyte-poor red cell concentrates: filtration in a closed system using a sterile connection device. Pietersz RN, et al. **Vox Sang** 1989;57(1):29–36
[Comparison of methods of cryopreservation of blood platelets] Gašová Z. **Vnitr Lek** 1990 Apr;36(4):387–90 (Eng. Abstr.) **(Cze)**
[Preparation and preservation of labile products obtained from whole blood using the leuko-platelet layer] Robert F, et al. **Rev Fr Transfus Hemobiol** 1989 Dec;32(6):451–65 **(Fre)**
[Deep freezing of blood with special reference to autologous blood donation] Luboldt W. **Beitr Infusionther** 1989; 24:231–6 (14 ref.) (Eng. Abstr.) **(Ger)**
[Preparation-related effects on the coagulation activity of plasma] Schmitt H. **Beitr Infusionther** 1989;24:91–4 (4 ref.) (Eng. Abstr.) **(Ger)**
[Virus safety of labile plasma products from the German viewpoint] Stephan W. **Beitr Infusionther** 1989;24:40–5 (15 ref.) (Eng. Abstr.) **(Ger)**
[Exclusion chromatography for the separation of cryoprotective agents from freeze-preserved blood cells] Mavrina L, et al. **Folia Haematol (Leipz)** 1990;117(2):251–8 (Eng. Abstr.) **(Ger)**
[The first clinical experience with cryopreserved erythrocyte concentrate] Pfefferkorn S, et al. **Folia Haematol (Leipz)** 1989;116(5):793–7 (Eng. Abstr.) **(Ger)**
[Quantitative determinations of Hp, Pi, Tf and GC in stored blood stains] Schwerd W, et al. **Z Rechtsmed** 1989; 102(8):531–4 (Eng. Abstr.) **(Ger)**
[Studies of the possibility of preservation of leukocyte concentrates] Rosiek A, et al. **Acta Haematol Pol** 1989 Jan–Jun;20(1):42–6 (Eng. Abstr.) **(Pol)**
[Study of tissue coagulation factors of native and cryopreserved bone marrow] Lipkan GN, et al.
Fiziol Zh 1990 Jan–Feb;36(1):79–81 (Eng. Abstr.) **(Rus)**
[A comparative study of the cryoprotective properties of dimethylacetamide and dimethyl sulfoxide in preserving thrombocytes at moderately low temperatures] Azovskaia SA, et al. **Gematol Transfuziol** 1989 Dec;34(12):18–21 (Eng. Abstr.) **(Rus)**
[Therapeutic effectiveness of preserved thrombocytic concentrates] Kompaniets AM, et al. **Klin Med (Mosk)** 1989 Dec;67(12):74–80 **(Rus)**

VETERINARY

Effects of collection methods and storage on the in vitro stability of canine plasma catecholamines. D'Alesandro MM, et al. **Am J Vet Res** 1990 Feb;51(2):257–9
Survival and infectivity of Trypanosoma brucei in refrigerated pig blood. Otesile EB. **Vet Parasitol** 1990 Jul; 36(3–4):333–6

BLOOD PRESSURE

Changes of blood pressure and cerebral arterio-venous oxygen content differences (AVDO2) with and without bupivacaine scalp infiltration during craniotomy. Engberg M, et al. **Acta Anaesthesiol Scand** 1990 Jul;34(5):346–9
Prognostic significance of digital blood pressure in leg ulcer

patients. Sindrup JH, et al.
Acta Derm Venereol (Stockh) 1990;70(3):259–61
Relationship between retinal ischemia and cardiovascular autonomic damage in diabetes. Giardullo A, et al.
Acta Diabetol Lat 1989 Jul–Sep;26(3):245–55
Influence of cardiovascular diseases upon the results of the cardiovascular reflex tests in diabetic and nondiabetic subjects. Krönert K, et al. **Acta Diabetol Lat** 1990 Jan–Mar; 27(1):1–10
Mineralocorticoid excess in two brothers with dwarfism, hypokalaemic alkalosis and normal blood pressure. Visser HK, et al. **Acta Endocrinol (Copenh)** 1967 Aug;55(4):661–72
Chronological changes in genetic variance and heritability of systolic and diastolic blood pressure among Chinese twin neonates. Yu MW, et al.
Acta Genet Med Gemellol (Roma) 1990;39(1):99–108
Continuous recording of middle cerebral artery blood velocity in clinical neurosurgery. Lundar T, et al.
Acta Neurochir (Wien) 1990;102(3–4):85–90
Normovolaemic induced hypertension therapy for cerebral vasospasm after subarachnoid haemorrhage. Otsubo H, et al. **Acta Neurochir (Wien)** 1990;103(1–2):18–26
Growth of aneurysms can be understood as passive yield to blood pressure. An experimental study. Steiger HJ, et al. **Acta Neurochir (Wien)** 1989;100(1–2):74–8
Non–invasive cardiovascular monitoring in Shy–Drager syndrome. Bellomo G, et al. **Acta Neurol (Napoli)** 1989 Aug;11(4):279–84
Hemodynamic variables in progressive and non–progressive low tension glaucoma. Rouhiainen HJ, et al.
Acta Ophthalmol (Copenh) 1990 Feb;68(1):34–6
Relation of serum and erythrocyte magnesium levels to blood pressure and a family history of hypertension. A follow–up study in Japanese children, 12–14 years old. Shibutani Y, et al. **Acta Paediatr Scand** 1990 Mar;79(3):316–21
Role of the kidney in long–term control of blood pressure. Kirchheim HR, et al. **Acta Physiol Pharmacol Bulg** 1989; 15(2):3–12 (27 ref.)
Role of different serotonergic receptors in the long–lasting blood pressure depression following muscle stimulation in the spontaneously hypertensive rat. Hoffmann P, et al.
Acta Physiol Scand 1990 Jun;139(2):305–10
Role of renal kallikrein in the regulation of blood pressure in the rat remnant kidney model of chronic renal failure. Kanazawa M, et al. **Adv Exp Med Biol** 1989;247B:121–5
Urinary kallikrein excretion in neurogenic hypertension in the dogs: possible relationship between kallikrein excretion and catecholamines. Valet P, et al. **Adv Exp Med Biol** 1989; 247B:437–42
Blood pressure, renin–angiotensin–aldosterone axis and cortisol changes during withdrawal from alcohol. Mander AJ, et al. **Alcohol Alcohol** 1989;24(5):409–14
Validation of pressure–volume data obtained in patients by initial transit radionuclide angiocardiography. Harpole DH, et al. **Am Heart J** 1989 Nov;118(5 Pt 1):983–9
Prognostic value of abnormal postexercise systolic blood pressure response: prehospital discharge test after myocardial infarction in Japan. Kato K, et al.
Am Heart J 1990 Feb;119(2 Pt 1):264–71
Arterial plasma norepinephrine correlates to blood pressure in middle–aged men with sustained essential hypertension. Kjeldsen SE, et al. **Am Heart J** 1989 Oct;118(4):775–81
The mechanism and significance of ventricularization of intracoronary pressure during coronary angiography. Pacold I, et al. **Am Heart J** 1989 Dec;118(6):1160–6
The important role of left ventricular relaxation and left atrial pressure in the left ventricular filling velocity profile. Takagi S, et al. **Am Heart J** 1989 Nov;118(5 Pt 1):954–62
Assessment of the daily blood pressure load as a determinant of cardiac function in patients with mild–to–moderate hypertension. White WB, et al. **Am Heart J** 1989 Oct; 118(4):782–95
Prospective Doppler echocardiographic evaluation of pulmonary artery diastolic pressure in the medical intensive care unit. Lee RT, et al. **Am J Cardiol** 1989 Dec 1; 64(19):1366–70
Reversal of systemic hypertension with serum protein changes. Loyke HF. **Am J Cardiol** 1990 May 15; 65(18):1268–9
Effects of low altitude exposure on 24–hour blood pressure and adrenergic activity. Palatini P, et al. **Am J Cardiol** 1989 Dec 1;64(19):1379–82
Association of echocardiographic left ventricular mass with body size, blood pressure and physical activity (the Framingham Study). Savage DD, et al. **Am J Cardiol** 1990 Feb 1;65(5):371–6
Univariate genetic analysis of blood pressure in children (the Medical College of Virginia Twin Study). Schieken RM, et al. **Am J Cardiol** 1989 Dec 1;64(19):1333–7
Analysis of different methods of assessing the stenotic mitral valve area with emphasis on the pressure gradient half–time concept. Wranne B, et al. **Am J Cardiol** 1990 Sep 1; 66(5):614–20
Comparative effects of three cereal brans on plasma lipids, blood pressure, and glucose metabolism in mildly hypercholesterolemic men. Kestin M, et al.
Am J Clin Nutr 1990 Oct;52(4):661–6
Blood pressure decrease prior to initiating pharmacological therapy in nonemergent hypertension. Lebby T, et al.
Am J Emerg Med 1990 Jan;8(1):27–9
Comparison of three weight–for–height indices in blood pressure studies in children. Ballew C, et al.
Am J Epidemiol 1990 Mar;131(3):532–7
Body mass index versus height and weight in relation to blood pressure. Findings for the 10,079 persons in the INTERSALT Study. Dyer AR, et al. **Am J Epidemiol** 1990 Apr;131(4):589–96
Effect of long–term community health education on blood pressure and hypertension control. The Stanford Five–City Project. Fortmann SP, et al. **Am J Epidemiol** 1990 Oct; 132(4):629–46
Re: "Blood lead–blood pressure relations: alcohol intake and hemoglobin as confounders" [letter; comment] Sharp DS. **Am J Epidemiol** 1990 Jun;131(6):1098 Comment on: Am J Epidemiol 1989 Apr;129(4):732–9.
Primary hypertension, neural tone, and behavior. Role in pressor responses to stress. DeQuattro V.
Am J Hypertens 1989 Dec;2(12 Pt 2):345S–352S (35 ref.)
Factors participating in blood pressure elevation after discharge from the hospital in patients with essential hypertension. Hirata Y, et al. **Am J Hypertens** 1990 May; 3(5 Pt 1):397–9
Blood pressure, catecholamines, and pancreatic polypeptide in obstructive sleep apnea with and without nasal Continuous Positive Airway Pressure (nCPAP) treatment. Jennum P, et al. **Am J Hypertens** 1989 Nov;2(11 Pt 1):847–52
Acute effects of exposure to cold on blood pressure, platelet function and sympathetic nervous activity in humans. Kawahara J, et al. **Am J Hypertens** 1989 Sep;2(9):724–6
Identifying hypertensive patients with elevated systolic workplace blood pressures. Lerman CE, et al.
Am J Hypertens 1990 Jul;3(7):544–8
Correlates of drug therapy of diastolic blood pressure between 80–89 mm Hg by physicians in the community. McClellan W, et al. **Am J Hypertens** 1989 Nov;2(11 Pt 1):869–71
Decrease of blood pressure in spontaneously hypertensive mice by heat treatment. Malo D, et al.
Am J Hypertens 1990 May;3(5 Pt 1):400–4
Insulinemia and blood pressure. Relationships in patients with primary and secondary hypertension, and with or without glucose metabolism impairment. Marigliano A, et al.
Am J Hypertens 1990 Jul;3(7):521–6 (33 ref.)
Beats modulate blood pressure during running. Palatini P, et al. **Am J Hypertens** 1989 Nov;2(11 Pt 1):872–4
Ambulatory blood pressure monitoring and echocardiographic left ventricular wall thickness and mass. Prisant LM, et al. **Am J Hypertens** 1990 Feb;3(2):81–9
Effect of genetic background on cosegregation of renin alleles and blood pressure in Dahl rats. Rapp JP, et al.
Am J Hypertens 1990 May;3(5 Pt 1):391–6
The C1 area of the rostral ventrolateral medulla oblongata. A critical brainstem region for control of resting and reflex integration of arterial pressure. Reis DJ, et al.
Am J Hypertens 1989 Dec;2(12 Pt 2):363S–374S (84 ref.)
Comparison of clinic and home blood pressure levels and the role of the sympathetic nervous system in clinic–home differences. Saito I, et al. **Am J Hypertens** 1990 Mar; 3(3):219–24
Low–level lead exposure, blood pressure, and calcium metabolism. Morris C, et al. **Am J Kidney Dis** 1990 Jun; 15(6):568–74
The relationship between experimentally determined litter size and maternal blood pressure in spontaneously hypertensive rats. Ahokas RA, et al.
Am J Obstet Gynecol 1990 Mar;162(3):841–7
Methodologic queries: clinical significance of mean arterial blood pressure in second trimester [letter; comment] Ales KL, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):876–7 Comment on: Am J Obstet Gynecol 1989 Feb;160(2):419–23.
Plasma atrial natriuretic factor and urinary excretion of a ouabain displacing factor and dopamine in normotensive pregnant women before and after delivery. Gregoire I, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):71–6
The diagnostic efficacy of the umbilical arterial systolic/diastolic ratio as a screening tool: a prospective blinded study. Maulik D, et al. **Am J Obstet Gynecol** 1990 Jun;162(6):1518–23; discussion 1523–5
Genetic epidemiological study of blood pressure in a sedentary rural agricultural population of West Bengal, India. Majumder PP, et al. **Am J Phys Anthropol** 1990 Apr; 81(4):563–72
Brain histamine regulates pressor responses to peripheral hyperosmolality. Akins VF, et al. **Am J Physiol** 1990 Sep; 259(3 Pt 2):R507–13
Cocaine inhibits baroreflex control of blood pressure by actions at arterial baroreceptors. Andresen MC, et al.
Am J Physiol 1990 Apr;258(4 Pt 2):H1244–9
Pressor responses in conscious rats with chronic portal venous hypertension. Battarbee HD, et al.
Am J Physiol 1989 Nov;257(5 Pt 1):G773–81
Ventrolateral medullary neurons modulate pressor reflex to muscular contraction. Bauer RM, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1154–61
Two zero–flow pressure intercepts exist in autoregulating isolated skeletal muscle. Braakman R, et al.
Am J Physiol 1990 Jun;258(6 Pt 2):H1806–14
24–hour blood pressure recordings in Dahl rats on high– and low–salt diets. Brown DR, et al. **Am J Physiol** 1989 Nov; 257(5 Pt 2):R1225–31
Role of lowering arterial pressure on maximal coronary flow with and without regression of cardiac hypertrophy. Canby CA, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1110–8
Effects of left ventricular pressure reductions on right ventricular systolic performance. Chow E, et al.
Am J Physiol 1989 Dec;257(6 Pt 2):H1878–85
LV pressure–volume area and oxygen consumption: evaluation in intact dog by fast CT. Chung N, et al.
Am J Physiol 1990 Apr;258(4 Pt 2):H1208–15
Vascular pressure–volume relationships in pregnant and estrogen–treated guinea pigs. Davis LE, et al.
Am J Physiol 1989 Nov;257(5 Pt 2):R1205–11
Pressure–flow characteristics of coronary collaterals in dogs [letter; comment] Downey JM. **Am J Physiol** 1990 Mar; 258(3 Pt 2):H921–2 Comment on: Am J Physiol 1989 Feb;256(2 Pt 2):H441–5.
Effect of perfusate rheology on the diastolic coronary pressure–flow relationship. Drossner M, et al.
Am J Physiol 1990 Aug;259(2 Pt 2):H603–9
Response of rainbow trout to constant–pressure and constant–volume hemorrhage. Duff DW, et al.
Am J Physiol 1989 Dec;257(6 Pt 2):R1307–14
Neurogenic control of pressure natriuresis in conscious dogs. Ehmke H, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):F466–73
Systemic arterial blood pressure and pulse rate in chronically restrained rhesus monkeys. Forsyth RP, et al.
Am J Physiol 1967 Jun;212(6):1461–3
Chronic hyperinsulinemia and blood pressure regulation. Hall JE, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):F722–31
Role of the ventral surface of medulla in the generation of Mayer waves. Haxhiu MA, et al. **Am J Physiol** 1989 Oct; 257(4 Pt 2):R804–9
A sheath for repetitive insertion of high–fidelity micromanometer–tipped catheters. Held–Munzenmaier D, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1312–4
Responses of vasopressin, atrial natriuretic peptide, and blood pressure to central osmotic stimulation. Iitake K, et al.
Am J Physiol 1989 Oct;257(4 Pt 1):E611–6
Duration of pressure overload alters regression of coronary circulation abnormalities. Ito N, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1753–60
Prolonged renal sympathoinhibition following sustained elevation in arterial pressure. Kenney MJ, et al.
Am J Physiol 1990 May;258(5 Pt 2):H1476–81
Contractility is the main determinant of coronary systolic flow impediment. Krams R, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):H1936–44
1/f fluctuations in arterial pressure and regulation of renal blood flow in dogs. Marsh DJ, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1394–400
Role of renal nerves in regulation of vasopressin secretion and blood pressure in conscious rabbits. Matsukawa S, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):F821–30
Atrial natriuretic peptide and pressure natriuresis: interactions with the renin–angiotensin system. Mizelle HL, et al.
Am J Physiol 1989 Nov;257(5 Pt 2):R1169–74
Phasic pressures and diameters in small epicardial veins of the unrestrained heart. Nellis SH, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1056–61
Effect of O2 availability on intrinsic vascular response to venous pressure elevation in postnatal swine intestine. Nowicki PT, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):G873–7
Time course of recovery of arterial pressure control after carotid denervation. O'Leary DS, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):H73–9
Pressor responsiveness in pseudopregnant and pregnant rats: role of maternal factors. Paller MS, et al.
Am J Physiol 1989 Oct;257(4 Pt 2):R866–71
Cardiovascular control by arterial and cardiopulmonary baroreceptors in awake dogs with atrioventricular block. Raymundo H, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):H2048–58
Analysis of short–term oscillations of R–R and arterial pressure in conscious dogs. Rimoldi O, et al.
Am J Physiol 1990 Apr;258(4 Pt 2):H967–76
Coronary sinus pressure has a direct effect on gradient for coronary perfusion. Scheel KW, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1739–44
Rat venular pressure–diameter relationships are regulated by sympathetic activity. Shoukas AA, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H674–80
Area postrema: essential for support of arterial pressure after hemorrhage in rats. Skoog KM, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1472–8
Posterior hypothalamic influences on cardiovascular effects of aortic nerve stimulation. Smith JK, et al.
Am J Physiol 1989 Dec;257(6 Pt 2):H1994–2000
Kinetics of Ca2(+)–ATPase activation in platelet membranes of essential hypertensives and normotensives. Takaya J, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C988–94
Cerebral blood flow during fastigial pressor response in cats. Williams JL, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H729–33
Effects of elevated venous pressure on capillary permeability in cat hindlimbs. Wolf MB, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):H2025–32
Importance of prostaglandins in hypertension during reduced uteroplacental perfusion pressure. Woods LL.
Am J Physiol 1989 Dec;257(6 Pt 2):R1558–61
Admission blood pressure and anaesthesia [letter] Colquhoun AD, et al. **Anaesthesia** 1990 Aug;45(8):684–5
Transport of ill patients [letter; comment] Runcie CJ, et al. **Anaesthesia** 1990 Jan;45(1):66 Comment on: Anaesthesia

1989 May;44(5):428–31.
Comparison of brachial and radial arterial pressure monitoring in patients undergoing coronary artery bypass surgery. Bazaral MG, et al. **Anesthesiology** 1990 Jul; 73(1):38–45
Cardiovascular responses to noxious stimuli in experimental animals: "pressor or depressor"? [letter] Fukunaga AF, et al. **Anesthesiology** 1990 Apr;72(4):769–71
Aortic–to–radial arterial pressure gradient after bypass [letter; comment] Urzua J. **Anesthesiology** 1990 Jul;73(1):191 Comment on: Anesthesiology 1989 Jun;70(6):935–41.
A dynamic nonlinear lumped parameter model for skeletal muscle circulation. Braakman R, et al. **Ann Biomed Eng** 1989;17(6):593–616
Artefacts in measurement of blood pressure and lack of target organ involvement in the assessment of patients with treatment–resistant hypertension. Mejia AD, et al. **Ann Intern Med** 1990 Feb 15;112(4):270–7
Predictors of functional capacity in elderly Finnish men; a path analysis. Lammi UK. **Ann Med** 1990 Feb;22(1):25–30
Atrial natriuretic factor and blood pressure fluctuations in Guillain–Barré syndrome [letter] Wijdicks EF, et al. **Ann Neurol** 1990 Mar;27(3):337–8
Effects of fish oil capsules in two dosages on blood pressure, platelet functions, haemorheological and clinical chemistry parameters in apparently healthy subjects. Bach R, et al. **Ann Nutr Metab** 1989;33(6):359–67
Carotid artery stump pressure: how reliable is it in predicting the need for a shunt? Gnanadev DA, et al. **Ann Vasc Surg** 1989 Oct;3(4):313–7
Circulatory effects of fast ventilator rates in preterm infants. Fenton AC, et al. **Arch Dis Child** 1990 Jul;65(7 Spec No):662–6
Coarctation of the aorta corrected during the first month of life [letter; comment] Watkin SL, et al. **Arch Dis Child** 1989 Jul;64(7):1095 Comment on: Arch Dis Child 1989 Mar;64(3):330–2.
Blood pressure and functional aspects of the aging brain. Parnetti L, et al. **Arch Gerontol Geriatr** 1989 Sep–Oct; 9(2):155–61
High–normal blood pressure and early diabetic nephropathy. Chase HP, et al. **Arch Intern Med** 1990 Mar;150(3):639–41
Is blood pressure a predictor of the incidence or progression of diabetic retinopathy? Klein R, et al. **Arch Intern Med** 1989 Nov;149(11):2427–32
Effects of meals and time of day on postural blood pressure responses in young and elderly subjects. Mader SL. **Arch Intern Med** 1989 Dec;149(12):2757–60
Blood pressure fluctuations in the dysautonomia of Guillain–Barré syndrome. Ropper AH, et al. **Arch Neurol** 1990 Jun;47(6):706–8
Noninvasive ultrasound evaluation of pressure gradients in aortic root of homozygotes for familial hypercholesterolemia. Faccenda F, et al. **Arteriosclerosis** 1990 Sep–Oct;10(5):710–3
Association of fasting insulin with blood pressure and lipids in young adults. The CARDIA study. Manolio TA, et al. **Arteriosclerosis** 1990 May–Jun;10(3):430–6
Coarctation of the aorta and lower limb blood pressure [letter] Colditz PB, et al. **Aust Paediatr J** 1989 Aug; 25(4):250
Acute baroreflex resetting and its control of blood pressure in an open loop model. Tan W, et al. **Basic Res Cardiol** 1989 Jul–Aug;84(4):431–41
The relationship between hostility and blood pressure in children. Treiber FA, et al. **Behav Med** 1989 Winter; 15(4):173–8
Maternal behavior of spontaneously hypertensive and Wistar–Kyoto normotensive rats: effects of reciprocal cross–fostering of litters. Cierpial MA, et al. **Behav Neural Biol** 1990 Jul;54(1):90–6
The presence or absence of light during flotation restricted environmental stimulation: effects on plasma cortisol, blood pressure, and mood. Turner JW Jr, et al. **Biofeedback Self Regul** 1989 Dec;14(4):291–300
Correlation of an invasive measure of right ventricular pressure and mean arterial pressure. Lu B, et al. **Biomed Sci Instrum** 1990;26:137–40
Ionized calcium plays a pivotal role in controlling blood pressure during haemodialysis. Leunissen KM, et al. **Blood Purif** 1989;7(5):233–9
Fetal and placental size and risk of hypertension in adult life. Barker DJ, et al. **BMJ** 1990 Aug 4;301(6746):259–62
Measurement of blood pressure in children. Recommendations of a working party of the British Hypertension Society [see comments] de Swiet M, et al. **BMJ** 1989 Aug 19;299(6697):497 Comment in: BMJ 1989 Sep 23;299(6702):793–4.
Migration and geographic variations in blood pressure in Britain. Elford J, et al. **BMJ** 1990 Feb 3;300(6720):291–5
Geographic variations in blood pressure [letter] Miall WE. **BMJ** 1990 Mar 3;300(6724):612
The Kenyan Luo migration study: observations on the initiation of a rise in blood pressure. Poulter NR, et al. **BMJ** 1990 Apr 14;300(6730):967–72
Blood pressure response to percutaneous transluminal angioplasty for renovascular hypertension: an overview of published series. Ramsay LE, et al. **BMJ** 1990 Mar 3; 300(6724):569–72
Relaxation therapy and continuous ambulatory blood pressure in mild hypertension: a controlled study. van Montfrans GA, et al. **BMJ** 1990 May 26;300(6736):1368–72
Early influences on blood pressure: a study of children aged 5–7 years. Whincup PH, et al. **BMJ** 1989 Sep 2; 299(6699):587–91
Ambulatory pulmonary arterial pressure in primary pulmonary hypertension: variability, relation to systemic arterial pressure, and plasma catecholamines. Richards AM, et al. **Br Heart J** 1990 Feb;63(2):103–8
Effects of lung surgery and one–lung ventilation on pulmonary arterial pressure, venous admixture and immediate postoperative lung function. Malmkvist G, et al. **Br J Anaesth** 1989 Dec;63(6):696–701
Effect of fluid preloading on cardiovascular variables after spinal anaesthesia with glucose–free 0.75% bupivacaine. Venn PJ, et al. **Br J Anaesth** 1989 Dec;63(6):682–7
Normotension, ventricular tachycardia and palpitation: an unusual presentation of phaeochromocytoma. Manning LV, et al. **Br J Clin Pract** 1989 Apr;43(4):163–4
Blood lead concentration, renal function, and blood pressure in London civil servants. Staessen J, et al. **Br J Ind Med** 1990 Jul;47(7):442–7
Blood pressure measurement in the lateral position. Kinsella SM, et al. **Br J Obstet Gynaecol** 1989 Sep;96(9):1110–2
Aortic compression by the uterus: identification with the Finapres digital arterial pressure instrument. Kinsella SM, et al. **Br J Obstet Gynaecol** 1990 Aug;97(8):700–5
Hypertensive anal cushions as a cause of the high anal canal pressures in patients with haemorrhoids. Sun WM, et al. **Br J Surg** 1990 Apr;77(4):458–62
Lesions of rostral ventrolateral medulla abolish some cardio– and cerebrovascular components of the cerebellar fastigial pressor and depressor responses. Chida K, et al. **Brain Res** 1990 Jan 29;508(1):93–104
Acute increases in arterial blood pressure produced by occlusion of the abdominal aorta induces antinociception: peripheral and central substrates. Thurston CL, et al. **Brain Res** 1990 Jun 11;519(1–2):12–22
The effects of stimulation of the A5 region on blood pressure and heart rate in rabbits. Drye RG, et al. **Brain Res Bull** 1990 Jan;24(1):33–9
Contribution between dorsal and ventrolateral regions of medulla oblongata in vasomotor function of cats. Su CK, et al. **Brain Res Bull** 1989 Dec;23(6):447–56
Pressor responses to common carotid occlusion in female rats: effects of gonadectomy and treatment with gonadal steroid hormones. Bedran–de–Castro MT, et al. **Braz J Med Biol Res** 1989;22(7):885–7
The relationship between extracellular calcium and isovolumic systolic pressure in the Langendorff–perfused rat heart. Stefanon I, et al. **Braz J Med Biol Res** 1989; 22(7):905–7
In vivo myocardial bioenergetics during acute volume and/or pressure loading in a canine model: a 31P NMR study. Osbakken M, et al. **Cardiology** 1989;76(6):405–17
Circadian rhythms of atrial natriuretic peptide, blood pressure and heart rate in normal subjects. Portaluppi F, et al. **Cardiology** 1989;76(6):428–32
The hypertensive response to vasopressor agents stimulates the release of thromboxane A2 in hypercholesterolaemic rabbits. Takahashi K, et al. **Cardiovasc Res** 1989 Sep; 23(9):788–96
Transection of aortic depressor nerve fails to raise blood pressure in spontaneously hypertensive rats. Takeda K, et al. **Cardiovasc Res** 1989 Jul;23(7):573–6
Metabolic and haemodynamic changes in the heart during the early phase of cardiopulmonary bypass: I. Clinical observations. van der Veen FH, et al. **Cardiovasc Res** 1989 Jun;23(6):468–71
Metabolic and haemodynamic changes in the heart during the early phase of cardiopulmonary bypass: II. Animal experiments. van der Veen FH, et al. **Cardiovasc Res** 1989 Jun;23(6):472–7
Specific frequency properties of renal and superior mesenteric arterial beds in rats. Young ST, et al. **Cardiovasc Res** 1989 Jun;23(6):465–7
P–wave configuration as an indicator of echocardiographic indices of cardiac structure and function in normotensive adolescents. Graettinger WF, et al. **Chest** 1990 Apr; 97(4):896–900
Intramedullary pressure in the proximal femur before and after treatment of congenital dislocation of the hip in children. Ma RX, et al. **Chin Med J [Engl]** 1989 Jul; 102(7):549–52
Dietary patterns in 10 groups and the relationship with blood pressure. Collaborative Study Group for Cardiovascular Diseases and Their Risk Factors. Zhou BF, et al. **Chin Med J [Engl]** 1989 Apr;102(4):257–61
Baroreflex modulation of ultradian oscillations of blood pressure and heart rate in unanesthetized dogs. Broten TP, et al. **Chronobiologia** 1989 Jul–Sep;16(3):241–55
Changes in cerebrovascular prostaglandins and thromboxane as a function of systemic blood pressure. Cerebral blood flow autoregulation of the newborn. Chemtob S, et al. **Circ Res** 1990 Sep;67(3):674–82
Regulation of large cerebral arteries and cerebral microvascular pressure. Faraci FM, et al. **Circ Res** 1990 Jan;66(1):8–17 (98 ref.)
Diameter change and pressure–red blood cell velocity relations in coronary microvessels during long diastoles in the canine left ventricle. Kanatsuka H, et al. **Circ Res** 1990 Feb;66(2):503–10
Starling resistor versus compliance. Which explains the zero–flow pressure of a dynamic arterial pressure–flow relation? Magder S. **Circ Res** 1990 Jul;67(1):209–20
The linear relation between oxygen consumption and pressure–volume area can be reconciled with the Fenn effect in dog left ventricle. Nozawa T, et al. **Circ Res** 1989 Nov;65(5):1380–9
Effect of changes in circulating blood volume on cardiac output and arterial and ventricular blood pressure in the stage 18, 24, and 29 chick embryo. Wagman AJ, et al. **Circ Res** 1990 Jul;67(1):187–92
Altered cardiovascular and neurohumoral responses to head–up tilt after heart–lung transplantation. Banner NR, et al. **Circulation** 1990 Sep;82(3):863–71
dP/dt and isovolumic pressure decline [letter] Fifer MA. **Circulation** 1990 Sep;82(3):1077
Cardiopulmonary receptor reflexes in normotensive athletes with cardiac hypertrophy. Giannattasio C, et al. **Circulation** 1990 Oct;82(4):1222–9
Effect of age on the in vitro reflection coefficient of the aortoiliac bifurcation in humans. Greenwald SE, et al. **Circulation** 1990 Jul;82(1):114–23
Measurement of end–systolic pressure–volume relations by intra–aortic balloon occlusion. Gupta KB, et al. **Circulation** 1989 Oct;80(4):1016–28
Interstudy variability of coronary flow reserve. Influence of heart rate, arterial pressure, and ventricular preload. McGinn AL, et al. **Circulation** 1990 Apr;81(4):1319–30
The diastolic hyperemic flow versus pressure relation. A new index of coronary stenosis severity and flow reserve. Mancini GB, et al. **Circulation** 1989 Oct;80(4):941–50
Relation between central and peripheral hemodynamics during exercise in patients with chronic heart failure. Muscle blood flow is reduced with maintenance of arterial perfusion pressure. Sullivan MJ, et al. **Circulation** 1989 Oct; 80(4):769–81
Relation of left ventricular filling dynamics to alterations in load and compliance in patients with and without pressure–overload hypertrophy. Wisenbaugh T, et al. **Circulation** 1990 Jan;81(1):101–6
Parkinson's disease and hypotension: 24–hour blood pressure recording in ambulant patients. Brevetti G, et al. **Clin Cardiol** 1990 Jul;13(7):474–8
Changes in blood pressure and plasma noradrenaline in short–term hypothyroidism. Brown RT, et al. **Clin Endocrinol (Oxf)** 1989 Jun;30(6):635–8
The INTERSALT study: main results, conclusions and some implications. Elliott P, et al. **Clin Exp Hypertens [A]** 1989; 11(5–6):1025–34
Exercise, cardiovascular disease and blood pressure. Jennings GL, et al. **Clin Exp Hypertens [A]** 1989;11(5–6):1035–52 (25 ref.)
In vivo potentiation of vasopressors by spontaneously hypertensive rat plasma: correlation with blood pressure and calcium uptake. Lewanczuk RZ, et al. **Clin Exp Hypertens [A]** 1989;11(8):1471–85
Influence of parathyroidectomy on blood pressure and vascular reactivity in spontaneously hypertensive rats. Więcek A, et al. **Clin Exp Hypertens [A]** 1989;11(8):1515–33
Voluntary blood pressure control using continuous systolic blood pressure biofeedback. Cejnar M, et al. **Clin Exp Pharmacol Physiol** 1988 Apr;15(4):265–9
Renal venous wedge pressure in renal wrap hypertension in rabbits. Denton KM, et al. **Clin Exp Pharmacol Physiol** 1989 Aug;16(8):681–4
Blood pressure, salt appetite and mortality of genetically hypertensive and normotensive rats maintained on high and low salt diets from weaning. Di Nicolantonio R, et al. **Clin Exp Pharmacol Physiol** 1988 Oct;15(10):741–51
Cardiovascular response to emotional stress and spontaneous blood pressure variability in genetically hypertensive rats of the Lyon strain. Julien C, et al. **Clin Exp Pharmacol Physiol** 1988 Jul;15(7):533–8
The relevance of baroreflex mechanisms to the control of ambulatory and exercise blood pressure in humans. Sleight P. **Clin Exp Pharmacol Physiol Suppl** 1989;15:65–9
Reliability of the Dinamap non–invasive monitor in the measurement of blood pressure of ill Asian newborns. Chia F, et al. **Clin Pediatr (Phila)** 1990 May;29(5):262–7
An automatic system for capturing and processing ultrasonic Doppler signals and blood pressure signals. Evans DH, et al. **Clin Phys Physiol Meas** 1989 Aug;10(3):241–51
Blood pressure, left ventricular mass and intracellular calcium in primary hyperparathyroidism. Dominiczak AF, et al. **Clin Sci** 1990 Feb;78(2):127–32
Effects of meal composition on the postprandial blood pressure, catecholamine and insulin changes in elderly subjects. Potter JF, et al. **Clin Sci** 1989 Sep;77(3):265–72
Cardiovascular response to coughing: its value in the assessment of autonomic nervous control. van Lieshout EJ, et al. **Clin Sci** 1989 Sep;77(3):305–10
Observations of hemodynamics during human cardiopulmonary resuscitation. Chandra NC, et al. **Crit Care Med** 1990 Sep;18(9):929–34
Reliability of right atrial pressure monitoring to assess left ventricular preload in critically ill septic patients. Knobel E, et al. **Crit Care Med** 1989 Dec;17(12):1344–5
Resuscitation from cardiac arrest [letter] Stemp LI. **Crit Care Med** 1990 Mar;18(3):349
Elevated blood pressure predicts the development of persistent proteinuria in the presence of poor glycemic control, in patients with type I diabetes. Derby L, et al. **Diabete Metab** 1989;15(5 Pt 2):320–6
Blood pressure, proteinuria and their relationship with

circulatory mortality: the WHO Multinational Study of Vascular Disease in Diabetics. Fuller JH, et al. **Diabete Metab** 1989;15(5 Pt 2):273–7

Impact of blood pressure on diabetic retinopathy. Janka HU, et al. **Diabete Metab** 1989;15(5 Pt 2):333–7 (27 ref.)

Blood pressure and microvascular complications in type 1 (insulin dependent) diabetic patients without hypertension. Le Floch JP, et al. **Diabete Metab** 1990 Jan–Feb;16(1):26–9

The effect of blood pressure intervention on renal function in insulin-dependent diabetes. Mogensen CE. **Diabete Metab** 1989;15(5 Pt 2):343–51

Response of pancreatic polypeptide to a protein rich meal in diabetic autonomic neuropathy. Weil R, et al. **Diabete Metab** 1989 Jul–Aug;15(4):163–9

Effect of coronary artery disease on parasympathetic cardiovascular reflexes in NIDDM patients. Airaksinen KE, et al. **Diabetes Care** 1990 Feb;13(2):83–6

Autonomic influence on pregnancy outcome in IDDM. Airaksinen KE, et al. **Diabetes Care** 1990 Jul;13(7):756–61

Exercise-induced hypertension in normotensive patients with NIDDM. Blake GA, et al. **Diabetes Care** 1990 Jul; 13(7):799–801

Abnormal glucose tolerance and hypertension. Reaven PD, et al. **Diabetes Care** 1990 Feb;13(2):119–25

Effect of phase of menstrual cycle on insulin sensitivity, peripheral blood flow and cardiovascular responses to hyperinsulinaemia in young women with type 1 diabetes. Scott AR, et al. **Diabetic Med** 1990 Jan;7(1):57–62

High plasma insulin and triglyceride concentrations and blood pressure in offspring of people with impaired glucose tolerance. Zavaroni I, et al. **Diabetic Med** 1990 Jul; 7(6):494–8

The assessment of cardiovascular reflex activity: standardization is needed. Wieling W, et al. **Diabetologia** 1990 Mar;33(3):182–3

Blood pressure and growth at 6 years of age among offsprings of mothers with hypertension of pregnancy. Palti H, et al. **Early Hum Dev** 1989 Jul;19(4):263–9

Neuropeptide Y and blood pressure in haemodialysis patients. Takahashi K, et al. **Endocrinol Jpn** 1989 Aug;36(4):553–8

Kindled seizures elevate blood pressure and induce cardiac arrhythmias. Goodman JH, et al. **Epilepsia** 1990 Sep–Oct; 31(5):489–95

Therapeutic use of right atrial pressures early after the Fontan operation. Kirklin JW, et al. **Eur J Cardiothorac Surg** 1990; 4(1):2–7

In vitro flow characteristics of the Jarvik-7 prosthesis with respect to filling pressure, stroke frequency, and systolic duration. Liska J, et al. **Eur J Cardiothorac Surg** 1989; 3(6):515–20

Relationship between socio-demographic and behaviour variables, and body mass index in a population with high-normal blood pressure: Hypertension Prevention Trial. Shah M, et al. **Eur J Clin Nutr** 1989 Sep;43(9):583–96

Fat distribution and gamma-glutamyl transferase in relation to serum lipids and blood pressure in 38-year old Dutch males. van Barneveld T, et al. **Eur J Clin Nutr** 1989 Dec; 43(12):809–18

Longitudinal study of blood pressure during the 1st year of life. Gemelli M, et al. **Eur J Pediatr** 1990 Feb;149(5):318–20

Acute and protracted effects of intratracheal surfactant application on internal carotid blood flow velocity, blood pressure and carbondioxide tension in very low birth weight infants. Jorch G, et al. **Eur J Pediatr** 1989 Aug; 148(8):770–3

How far should blood pressure be lowered? What is the importance of the J-curve phenomenon? Hansson L. **G Ital Cardiol** 1990 Jan;20(1):1–4 (13 ref.)

Cardiovascular risk factors in a French Canadian population: resolution of genetic and familial environmental effects on blood pressure using twins, adoptees, and extensive information on environmental correlates. Rice T, et al. **Genet Epidemiol** 1989;6(5):571–88

Health beliefs in a population: the Michigan blood pressure survey. Weissfeld JL, et al. **Health Educ Q** 1990 Summer; 17(2):141–55

Relationship of racial stressors to blood pressure responses and anger expression in black college students. Armstead CA, et al. **Health Psychol** 1989;8(5):541–56

Associations of blood pressure with self-report measures of anger and hostility among black and white men and women. Durel LA, et al. **Health Psychol** 1989;8(5):557–75

Race differences in stress-induced reactivity in young adults. Falkner B, et al. **Health Psychol** 1989;8(5):613–27

Cardiovascular responses to family visits in coronary care unit patients. Simpson T, et al. **Heart Lung** 1990 Jul; 19(4):344–51

Endoscopic markers of impending variceal hemorrhage: correlation with the pressure in the varices. Beppu K, et al. **Hepatology** 1990 Jan;11(1):147–8

Magnitude, reproducibility, and components of the pressor response to the clinic. Elijovich F, et al. **Hypertension** 1990 Feb;15(2 Suppl):I161–5

Sympathetic activity and blood pressure increases with bladder distension in humans. Fagius J, et al. **Hypertension** 1989 Nov;14(5):511–7

Body fat and its distribution in relation to casual and ambulatory blood pressure. Gerber LM, et al. **Hypertension** 1990 May;15(5):508–13

Blood pressure in blacks. Twin studies in Barbados. Grim CE, et al. **Hypertension** 1990 Jun;15(6 Pt 2):803–9

Chronic hyperinsulinemia and blood pressure. Interaction with catecholamines? Hall JE, et al. **Hypertension** 1990 May;15(5):519–27

Aerobic fitness and the diurnal rhythm of blood pressure in adolescents. Harshfield GA, et al. **Hypertension** 1990 Jun;15(6 Pt 2):810–4

Race and gender influence ambulatory blood pressure patterns of adolescents. Harshfield GA, et al. **Hypertension** 1989 Dec;14(6):598–603

Lability of arterial pressure after baroreceptor denervation is not pressure dependent. Jacob HJ, et al. **Hypertension** 1989 Nov;14(5):501–10

Cardiovascular reactivity to the cold pressor test as a predictor of hypertension. Menkes MS, et al. **Hypertension** 1989 Nov;14(5):524–30

Arterial stiffness, systolic blood pressure, and logical treatment of arterial hypertension. O'Rourke M. **Hypertension** 1990 Apr;15(4):339–47 (69 ref.)

Lesions of the anteroventral third ventricle prevent salt-induced hypertension in the borderline hypertensive rat. Sanders BJ, et al. **Hypertension** 1989 Dec;14(6):619–22

INTERSALT study findings. Public health and medical care implications. Stamler J, et al. **Hypertension** 1989 Nov; 14(5):570–7

C5a/C5ades-Arg-induced increase in blood pressure in the guinea pig: role of thromboxane. Fraser DG, et al. **Immunopharmacology** 1990 Jan–Feb;19(1):59–68

Experimental evaluation of a new transducer tipped catheter. Kar S, et al. **Indian Heart J** 1989 Jul–Aug;41(4):213–20

Blood pressure in relation to smoking. Nirmala A, et al. **Indian J Med Sci** 1989 Oct;43(10):263–7

Selection of informative correlates in blood pressure study: an analysis of covariance approach. Mukhopadhyay BB, et al. **Indian J Public Health** 1989 Apr–Jun;33(2):84–5

Normal blood pressures and the evaluation of sustained blood pressure elevation in childhood. Gupta AK, et al. **Indian Pediatr** 1990 Jan;27(1):33–42

Profile of blood pressure in normal school children. Laroia D, et al. **Indian Pediatr** 1989 Jun;26(6):531–6

Blood pressure studies in Jaipur children. Mangal N, et al. **Indian Pediatr** 1989 Apr;26(4):358–65

Noise-induced hearing loss and blood pressure. Milković-Kraus S. **Int Arch Occup Environ Health** 1990; 62(3):259–60

Arterial pressure and aging. Lakatta EG. **Int J Cardiol** 1989; 25 Suppl 1:S81–9 (76 ref.)

Changes in blood pressure and heart rate during passive upright tilt upon electrical carotid sinus nerve stimulation. Peters TK, et al. **Int J Cardiol** 1990 Jan;26(1):31–5

Blood pressure by age in childhood and adolescence: a review of 129 surveys worldwide. Brotons C, et al. **Int J Epidemiol** 1989 Dec;18(4):824–9 (49 ref.)

Cardiovascular changes in obese subjects on very low calorie diet. Ramhamadany E, et al. **Int J Obes** 1989;13 Suppl 2:95–9

Conditioned diastolic blood pressure: the effects of magnitude of acquired response and feedback schedules on resistance to extinction. Gamble EH, et al. **Int J Psychophysiol** 1990 Jul;9(1):13–20

The effect of tidal volume and intravascular volume state on systolic pressure variation in ventilated dogs. Szold A, et al. **Intensive Care Med** 1989;15(6):368–71

Relationship between systolic blood pressure, ventricular volume and ischemic pain perception in patients with angina pectoris: a potential role for baroreceptors. Sheps DS, et al. **Isr J Med Sci** 1989 Sep;25(9):482–7

Interrelationships between psychological factors, overweight, and blood pressure in adolescents. Johnson EH. **J Adolesc Health Care** 1990 Jul;11(4):310–8

The ductus arteriosus: a window for assessment of pulmonary artery pressures? [comment] Snider AR. **J Am Coll Cardiol** 1990 Feb;15(2):457–8 Comment on: J Am Coll Cardiol 1990 Feb;15(2):446–56.

The effect of dietary interventions to reduce blood pressure in normal humans. Luft FC, et al. **J Am Coll Nutr** 1989 Dec;8(6):495–503 (34 ref.)

The influence of oral glucose loading on baroreflex function in the elderly. Jansen RW, et al. **J Am Geriatr Soc** 1989 Nov;37(11):1017–22

Pressure half-time does not always predict mitral valve area correctly. Loyd D, et al. **J Am Soc Echocardiogr** 1988 Sep–Oct;1(5):313–21

Comparison of several noninvasive methods for estimation of pulmonary artery pressure. Stevenson JG. **J Am Soc Echocardiogr** 1989 May–Jun;2(3):157–71

Blood pressure response to tourniquet use in anesthetized horses. Copland VS, et al. **J Am Vet Med Assoc** 1989 Oct 15;195(8):1097–103

Occlusion pressures vs. micropipette pressures in the pulmonary circulation. Hakim TS, et al. **J Appl Physiol** 1989 Sep;67(3):1277–85

Cardiovascular and respiratory responses to slow ramp carotid sinus pressures in the dog. Jung R, et al. **J Appl Physiol** 1990 Apr;68(4):1465–74

Pressor response and respiratory depression evoked by intravertebral arterial injections of hypoxic saline. Arita H, et al. **J Auton Nerv Syst** 1989 Oct;28(1):27–33

Spectral analysis of blood pressure and heart rate in conscious rats: effects of autonomic blockers. Japundzic N, et al. **J Auton Nerv Syst** 1990 Jun;30(2):91–100

Temporal and spatial summation caused by aortic nerve stimulation in rabbits. Effects of stimulation frequencies and amplitudes. Peters TK, et al. **J Auton Nerv Syst** 1989 Aug; 27(3):193–205

Renal sympathetic responses to changes in arterial pressure in conscious rabbits. Sano N, et al. **J Auton Nerv Syst** 1989 Oct;28(1):75–83

Defensive coping and blood pressure reactivity in medical patients. Warrenburg S, et al. **J Behav Med** 1989 Oct; 12(5):407–24

Predicting postoperative arterial pressure in renovascular hypertensive patients. Krotovsky GS, et al. **J Cardiovasc Surg (Torino)** 1989 Nov–Dec;30(6):916–20

The use of systolic pressure variation in hemodynamic monitoring during deliberate hypotension in spine surgery. Pizov R, et al. **J Clin Anesth** 1990 Mar–Apr;2(2):96–100

The utility of indirect measures of obesity in racial comparisons of blood pressure. CARDIA Study Group. Ballew C, et al. **J Clin Epidemiol** 1990;43(8):799–804

Geographical variations in blood pressure in British men and women. Bruce NG, et al. **J Clin Epidemiol** 1990; 43(4):385–98

Lack of correlation between clinic and 24 hour ambulatory blood pressure in subjects participating in a therapeutic drug trial. Gradman AH, et al. **J Clin Epidemiol** 1989; 42(11):1049–54

On the spurious correlation between changes in blood pressure and initial values [letter] Nieto-García FJ, et al. **J Clin Epidemiol** 1990;43(7):727–8

Cosegregation of the renin allele of the spontaneously hypertensive rat with an increase in blood pressure. Kurtz TW, et al. **J Clin Invest** 1990 Apr;85(4):1328–32

Quantitative monitoring of brain function, vital signs, and hormonal response during acute insulin-induced hypoglycemia. Chalew SA, et al. **J Clin Monit** 1989 Oct; 5(4):229–35

Suprarenal aortic flow reduction versus angiotensin I infusion in fetal sheep. Anderson DF, et al. **J Dev Physiol** 1989 May;11(5):317–21

Is blood pressure an important variable in research on aging and neuropsychological test performance? Elias MF, et al. **J Gerontol** 1990 Jul;45(4):P128–35 (37 ref.)

Altered blood pressure homeostasis in advanced age: clinical and research implications. Lipsitz LA. **J Gerontol** 1989 Nov;44(6):M179–83 (39 ref.)

The INTERSALT Co-operative Research Group. Appendix tables. Centre-specific results by age and sex. **J Hum Hypertens** 1989 Oct;3(5):331–407

The INTERSALT study. An international co-operative study of electrolyte excretion and blood pressure: further results. **J Hum Hypertens** 1989 Oct;3(5):279–407

Responses of the African hypertensive to exercise training: preliminary observations. Akinpelu AO. **J Hum Hypertens** 1990 Apr;4(2):74–6

Factors related to blood pressure among urban Nigerian workers. Bunker CH, et al. **J Hum Hypertens** 1990 Apr; 4(2):82–4

Acute effects of smoking on blood pressure and cerebral blood flow. Cruickshank JM, et al. **J Hum Hypertens** 1989 Dec;3(6):443–9

The INTERSALT study: relations of body mass index to blood pressure. INTERSALT Co-operative Research Group. Dyer AR, et al. **J Hum Hypertens** 1989 Oct; 3(5):299–308

The INTERSALT study: results for 24 hour sodium and potassium, by age and sex. INTERSALT Co-operative Research Group. Elliott P, et al. **J Hum Hypertens** 1989 Oct;3(5):323–30

Urinary sodium and potassium excretion, body mass index, alcohol intake and blood pressure in three Japanese populations. Hashimoto T, et al. **J Hum Hypertens** 1989 Oct;3(5):315–21

Blood pressure and electrolyte excretion in the Yanomamo Indians, an isolated population. Mancilha-Carvalho JJ, et al. **J Hum Hypertens** 1989 Oct;3(5):309–14

Blood pressure in Nigerian college males. Nwankwo MU, et al. **J Hum Hypertens** 1990 Apr;4(2):72–3

Cardiovascular responses to exercise in Nigerian women. Oluseye KA. **J Hum Hypertens** 1990 Apr;4(2):77–9

Relationships among the variables age, weight, A/B behaviour, cholesterol, ways of coping and blood pressure levels. Smyth KA. **J Hum Hypertens** 1990 Apr;4(2):116–8

Relationship between serum gamma-glutamyl transpeptidase activity, blood pressure and alcohol consumption. Yamada Y, et al. **J Hum Hypertens** 1989 Dec;3(6):409–17

Treating hypertension in the older person: an evaluation of the association of blood pressure level and its reduction with cognitive performance. Bird AS, et al. **J Hypertens** 1990 Feb;8(2):147–52

The mechanism of pressure natriuresis. Firth JD, et al. **J Hypertens** 1990 Feb;8(2):97–103 (58 ref.)

Autonomic control of the diurnal variation in arterial blood pressure and heart rate in spontaneously hypertensive and Wistar-Kyoto rats. Friberg P, et al. **J Hypertens** 1989 Oct; 7(10):799–807

Blood pressure in the very old. Heikinheimo RJ, et al. **J Hypertens** 1990 Apr;8(4):361–7

Sodium-lithium countertransport and systolic blood pressure response to exercise. McDonald AM, et al. **J Hypertens** 1990 Feb;8(2):129–37

Serum sodium, potassium, calcium and magnesium and blood pressure in a Dutch population. Rinner MD, et al. **J Hypertens** 1989 Dec;7(12):977–81

Pulse pressure in essential hypertension: clinical and therapeutical implications. Safar ME. **J Hypertens** 1989

Oct;7(10):769–76 (42 ref.)
Natriuresis–pressure relationship in polycystic kidney disease. Schmid M, et al. **J Hypertens** 1990 Mar;8(3):277–83
Erythrocyte volume and blood pressure in a cross–sectional population–based study. Strazzullo P, et al. **J Hypertens** 1990 Feb;8(2):179–83
Determinants of atrial natriuretic factor levels in coronary heart disease: significance of central pressures, heart chamber volumes and left ventricular mass. Keller N, et al. **J Intern Med** 1989 Sep;226(3):195–200
Plasma concentrations of calcitonin gene–related peptide increase during haemodialysis: relation to blood pressure. Odar–Cederlöf I, et al. **J Intern Med** 1989 Sep; 226(3):177–82
Factors influencing progression in patients with chronic renal failure. Stenvinkel P, et al. **J Intern Med** 1989 Sep; 226(3):183–8
A representative value for 24–hour monitored ambulatory blood pressure. Yoo WS, et al. **J Korean Med Sci** 1986 Sep;1(1):59–62
Translation of Otto Frank's paper "Die Grundform des Arteriellen Pulses" Zeitschrift für Biologie 37: 483–526 (1899).[classical article] Sagawa K, et al.
J Mol Cell Cardiol 1990 Mar;22(3):253–77
Body fat distribution patterns and blood pressure in black and white women. Adams–Campbell LL, et al.
J Natl Med Assoc 1990 Aug;82(8):573–6
Responses of nucleus ambiguus neurons to arterial pressure manipulations. Felsten G, et al.
J Neural Transm Gen Sect 1989;78(3):271–8
Threshold of carotid artery back pressure for delayed neuronal injury in the hippocampus after bilateral common carotid artery occlusion in gerbils. Kuroiwa T, et al.
J Neurol Sci 1990 Jul;97(2–3):251–9
Transcortical streaming potentials are generated by circulatory pressure gradients in living canine tibia. Otter MW, et al. **J Orthop Res** 1990 Jan;8(1):119–26
Blood pressure, the renin–angiotensin system and neurogenic vasoconstriction in pithed rats. Henrion D, et al.
J Pharm Pharmacol 1989 Nov;41(11):766–9
Blood pressure and renal function in a novel vasopressin–deficient, genetically hypertensive rat strain. Ashton N, et al. **J Physiol (Lond)** 1989 Mar;410:21–34
The human pressor response during and following voluntary and evoked isometric contraction with occluded local blood supply. Bull RK, et al. **J Physiol (Lond)** 1989 Apr; 411:63–70
Cellular mechanism of the modulation of contractile function by coronary perfusion pressure in ferret hearts. Kitakaze M, et al. **J Physiol (Lond)** 1989 Jul;414:455–72
Cardiovascular responses to brief static contractions in man with topical nervous blockade. Lassen A, et al.
J Physiol (Lond) 1989 Feb;409:333–41
The relationship between repressive and defensive coping styles and blood pressure responses in healthy, middle–aged men and women. King AC, et al. **J Psychosom Res** 1990; 34(4):461–71
Individual and cross–spouse correlations of perceptions of family functioning, blood pressure and dimensions of anger. Musante L, et al. **J Psychosom Res** 1990;34(4):393–9
The effects of aerobic and anaerobic training on fitness, blood pressure, and psychological stress and well–being. Norris R, et al. **J Psychosom Res** 1990;34(4):367–75
Effect of handlebar gripping on blood pressure during cycle ergometry. Dlin R, et al. **J Sports Med Phys Fitness** 1990 Mar;30(1):89–92
Cardiovascular response to isokinetic endurance exercise testing. Vinson S, et al. **J Sports Med Phys Fitness** 1990 Mar;30(1):93–6
Pulmonary artery pressure and resistance late after repair of tetralogy of Fallot with pulmonary atresia. Shimazaki Y, et al. **J Thorac Cardiovasc Surg** 1990 Sep;100(3):425–40
Hemodynamic effects of external cardiac massage in trauma shock. Luna GK, et al. **J Trauma** 1989 Oct;29(10):1430–3
Blood pressure profiles of a group of African children in the first year of life. Youmbissi TJ, et al.
J Trop Pediatr 1989 Oct;35(5):245–6
Comparison of selective internal iliac pharmaco–angiography, penile brachial index and duplex sonography with pulsed Doppler analysis for the evaluation of vasculogenic (arteriogenic) impotence. Mueller SC, et al. **J Urol** 1990 May;143(5):928–32
Walking ability and ankle systolic pressures: observations in patients with intermittent claudication in a short–term walking exercise program. Carter SA, et al.
J Vasc Surg 1989 Dec;10(6):642–9
Blood pressure reduction and the risk of myocardial infarction [letter; comment] **JAMA** 1990 Feb 2;263(5):660–1 Comment on: JAMA 1989 Aug 18;262(7):920–4.
Blood pressure, fitness, and fatness in 5– and 6–year–old children. Gutin B, et al. **JAMA** 1990 Sep 5;264(9):1123–7
The association of borderline hypertension with target organ changes and higher coronary risk. Tecumseh Blood Pressure study. Julius S, et al. **JAMA** 1990 Jul 18; 264(3):354–8
Blood pressure changes following extracorporeal shock wave lithotripsy and other forms of treatment for nephrolithiasis. Lingeman JE, et al. **JAMA** 1990 Apr 4;263(13):1789–94
Coronary perfusion pressure and the return of spontaneous circulation in human cardiopulmonary resuscitation [see comments] Paradis NA, et al. **JAMA** 1990 Feb 23; 263(8):1106–13 Comment in: JAMA 1990 Jun 27;263(24):3257–8.
The relationship between 'job strain,' workplace diastolic blood pressure, and left ventricular mass index. Results of a case–control study [see comments] Schnall PL, et al. **JAMA** 1990 Apr 11;263(14):1929–35 Comment in: JAMA 1990 Apr 11;263(14):1971–2.
California living II: not–the–big–one had no effect on blood pressure [letter] Swislocki A, et al. **JAMA** 1990 Sep 19; 264(11):1411
Preventive distinction of patients with primary or secondary hypertension by discriminant analysis of chronobiologic parameters estimated on 24–hour blood pressure patterns. Cugini P, et al. **Jpn Circ J** 1989 Nov;53(11):1363–70
Increased secretion of atrial natriuretic polypeptide in response to cardiac pacing. Obata K, et al. **Jpn Circ J** 1989 Sep;53(9):1055–60
Measurement of digital arterial pressure in patients with essential hypertension. Takahashi H, et al. **Jpn Circ J** 1990 Mar;54(3):221–30
Beta–adrenergic blood pressure regulation in Shy–Drager syndrome and pheochromocytoma. Middeke M, et al.
Klin Wochenschr 1989 Oct 2;67(19):1004–9
The ferret as a model for vasomotor biocompatibility testing of medical devices. Hoglind J, et al. **Lab Anim Sci** 1989 Sep;39(5):450–2
Technique for cardiovascular monitoring in awake tethered rats. Parker GW, et al. **Lab Anim Sci** 1989 Sep;39(5):463–7
Regression dilution bias [letter; comment] **Lancet** 1990 May 19;335(8699):1230–1 Comment on: Lancet 1990 Mar 31;335(8692):765–74.
Gravity, blood pressure, and bleeding time [letter] Comaish JS, et al. **Lancet** 1989 Dec 16;2(8677):1452
Potential problems with random zero sphygmomanometer [letter] [see comments] Kronmal RA, et al. **Lancet** 1990 Feb 10;335(8685):360 Comment in: Lancet 1990 Mar 24;335(8691):727–8.
Blood pressure, stroke, and coronary heart disease. Part 1, Prolonged differences in blood pressure: prospective observational studies corrected for the regression dilution bias [see comments] MacMahon S, et al. **Lancet** 1990 Mar 31;335(8692):765–74 Comment in: Lancet 1990 May 5;335(8697):1092–4. Comment in: Lancet 1990 May 19;335(8699):1230–1. Comment in: Lancet 1990 Jun 23;335(8704):1534.
Correction for regression dilution bias [letter; comment] Rennolls K. **Lancet** 1990 Jun 23;335(8704):1534 Comment on: Lancet 1990 Mar 31;335(8692):765–74.
Norepinephrine–induced atriopeptin release in conscious dogs is mediated by alterations in atrial pressure. Zhu JL, et al. **Life Sci** 1990;46(2):139–45
The relationship between magnesium, calcium, sodium, potassium and blood pressure in South African adult males. Touyz RM, et al. **Magnesium** 1989;8(3–4):145–53
Intrarenal mechanisms that regulate sodium excretion in relationship to changes in blood pressure. Romero JC, et al. **Mayo Clin Proc** 1989 Nov;64(11):1406–24 (125 ref.)
Alterations in blood pressure by derangement of the mechanisms that regulate sodium excretion. Romero JC, et al. **Mayo Clin Proc** 1989 Nov;64(11):1425–35 (68 ref.)
Hypertension and left ventricular diastolic function. Shepherd RF, et al. **Mayo Clin Proc** 1989 Dec; 64(12):1521–32 (65 ref.)
Endurance training and blood pressure in normotensive and hypertensive adults. Gilders RM, et al.
Med Sci Sports Exerc 1989 Dec;21(6):629–36
Atrial natriuretic factor in central nervous system regulatory mechanisms: effect of experimental alterations in water and salt homeostasis and blood pressure. Palkovits M, et al.
Miner Electrolyte Metab 1990;16(1):42–7
Trends in cardiovascular risk factors in Auckland, 1982 to 1987. Jackson R, et al. **N Z Med J** 1990 Aug 8; 103(895):363–5
The stability of high blood pressure in Dunedin children: an eight year longitudinal study. St George IM, et al.
N Z Med J 1990 Mar 28;103(886):115–7
Stroboscopic NMR microscopy of the carotid artery. Behling RW, et al. **Nature** 1989 Sep 28;341(6240):321–3
Interrelations of blood pressure, glomerular filtration rate, protein clearances and sodium excretion in patients with glomerulonephritis and diabetic nephropathy. Ala–Houhala I, et al. **Nephrol Dial Transplant** 1990;5(5):337–41
Factors contributing to blood pressure levels in chronic glomerulonephritis: an analysis of 105 biopsied patients. Eto T, et al. **Nephron** 1990;55(2):129–32
Weight reduction with a high protein, low carbohydrate, calorie–restricted diet: effects on blood pressure, glucose and insulin levels. Nobels F, et al. **Neth J Med** 1989 Dec; 35(5–6):295–302
Blood pressure and plasma catecholamines in never–treated parkinsonian patients: effect of a selective D1 agonist (CY 208–243). Durrieu G, et al. **Neurology** 1990 Apr;40(4):707–9
Renin correlates with blood pressure reactivity to stressors. Dimsdale JE, et al. **Neuropsychopharmacology** 1990 Aug; 3(4):237–42
The influence of volume expansion with induced hypertension on vessel reactivities, the blood–brain barrier, and cerebral infarction in cats with one–hour occlusion of the middle cerebral artery. Sakaki T, et al.
Neurosurgery 1990 Aug;27(2):268–73; discussion 273–4
Uterine resting tonus and maternal hypertension during late pregnancy—existence of intrauterine capacity. Hidaka A, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jun; 42(6):631–4
Effect of position on cardiovascular response during the Valsalva maneuver. Metzger BL, et al. **Nurs Res** 1990 Jul–Aug;39(4):198–202
Effects of age on autonomic cardiovascular responsiveness in healthy men and women. Storm DS, et al. **Nurs Res** 1989 Nov–Dec;38(6):326–30
Type A behavior and cardiovascular responses during verbalization in cardiac patients. Thomas SA, et al.
Nurs Res 1990 Jan–Feb;39(1):48–53
Omega–3 fatty acids, endogenous prostaglandins, and blood pressure regulation in humans. Knapp HR. **Nutr Rev** 1989 Oct;47(10):301–13 (76 ref.)
Blood pressure and retinopathy in type I diabetes. Chase HP, et al. **Ophthalmology** 1990 Feb;97(2):155–9
Low–tension glaucoma [letter] O'Rourke J.
Ophthalmology 1990 Jul;97(7):838–9
Blood pressure distribution in children at Port Moresby, Papua New Guinea. Ampofo EK. **P N G Med J** 1989 Jun; 32(2):101–8
Studies of blood pressure and prevalence of hypertension in schoolchildren in Jakarta [published erratum appears in Paediatr Indones 1989 Jan–Feb;29(1–2):preceding 1] Wirya IW, et al. **Paediatr Indones** 1988 Sep–Oct;28(9–10):183–91
The effect of specific hypnotic suggestions on blood pressure in normotensive subjects. Sletvold H, et al.
Pavlov J Biol Sci 1990 Jan–Mar;25(1):20–4
Doppler estimation of pressure gradient in pulmonary stenosis: maximal instantaneous vs peak–to–peak, vs mean catheter gradient. Aldousany AW, et al. **Pediatr Cardiol** 1989 Summer;10(3):145–9
Fluctuating blood pressure and intraventricular hemorrhage [letter] Perlman JM, et al. **Pediatrics** 1990 Apr;85(4):620–2
Blood lipids as related to cardiovascular and neuroendocrine functions under different conditions in healthy males and females. Lundberg U, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):381–6
Long–term profiles of sleep–related hemodynamic changes in the postoperative chronic cat. Sei H, et al.
Physiol Behav 1989 Sep;46(3):499–502
Dam strain affects cardiovascular reactivity to acute stress in BHR. Woodworth CH, et al. **Physiol Behav** 1990 Jan; 47(1):139–44
Blood pressure and red cell sodium transport changes following salt load in patients with glomerulonephritis. Kuzemková L, et al. **Physiol Bohemoslov** 1990;39(1):57–63
Pressure–flow relations in coronary circulation. Hoffman JI, et al. **Physiol Rev** 1990 Apr;70(2):331–90 (732 ref.)
The role of the nucleus tractus solitarius and the locus coeruleus in the abdominal vagal pressor response. Chen C, et al.
Proc Chin Acad Med Sci Peking Union Med Coll 1989; 4(3):142–6
Generation of transgenic mice with elevated blood pressure by introduction of the rat renin and angiotensinogen genes. Ohkubo H, et al. **Proc Natl Acad Sci U S A** 1990 Jul; 87(13):5153–7
Sympathetic and metabolic correlates of hypoxic moderation of spontaneous hypertension in the rat. Henley WN, et al. **Proc Soc Exp Biol Med** 1989 Nov;192(2):114–20
N–6 and N–3 PUFA in liver lipids, thromboxane formation and blood pressure from SHR during diets supplemented with evening primrose, sunflowerseed or fish oil. Singer P, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Mar;39(3):207–11
Blood pressure and serum lipids from SHR after diets supplemented with evening primrose, sunflowerseed or fish oil. Singer P, et al.
Prostaglandins Leukot Essent Fatty Acids 1990 May; 40(1):17–20
Coping strategies and diastolic blood pressure. Wright TA, et al. **Psychol Rep** 1989 Oct;65(2):443–9
Lifestyle, stress, and blood pressure in a southern black community. Dressler WW. **Psychosom Med** 1990 Mar–Apr; 52(2):182–98
Participation rates, weight loss, and blood pressure changes among obese women in a nutrition–exercise program. Lasco RA, et al. **Public Health Rep** 1989 Nov–Dec; 104(6):640–6
Percutaneous transluminal angioplasty for atheromatous renal artery stenosis—blood pressure response and discriminant analysis of outcome predictors. Marshall FI, et al.
Q J Med 1990 May;75(277):483–9
Blood pressure and blood glucose—is there a link? [editorial] Rosendorff C. **S Afr Med J** 1989 Dec 16;76(12):640–2
Blood pressure, physical activity and left ventricular hypertrophy in the prehypertensive state. Assessment by echocardiography. Nielsen JR.
Scand J Clin Lab Invest Suppl 1989;196:48–52 (6 ref.)
Effect of fish oil on blood pressure and blood lipids in men with mild to moderate hypertension. Meland E, et al.
Scand J Prim Health Care 1989 Oct;7(3):131–5
Relation of blood pressure and hypertension to hemoglobin. Walls J. **Semin Nephrol** 1990 Mar;10(2 Suppl 1):51
Are postischemic hearts really stiffer? Schaff HV, et al.
Surg Forum 1978;29:265–7
Saphenous vein rupture pressure, rupture stress, and carotid endarterectomy vein patch reconstruction. Archie JP Jr, et al. **Surgery** 1990 Apr;107(4):389–96
Evaluation of cardiovascular autonomic function tests in normal subjects. Chu TS, et al.
Taiwan I Hsueh Hui Tsa Chih 1989 Apr;88(4):404–6

Ambulatory blood pressure in normal Chinese. Lin LJ, et al. **Taiwan I Hsueh Hsi Tsa Chih** 1990 Feb;89(2):90–6

The ischaemic leg: a long–term follow–up with special reference to the predictive value of the systolic digital blood pressure. Part I: No arterial reconstruction. Andersen HJ, et al. **Thorac Cardiovasc Surg** 1989 Dec;37(6):348–50

The ischaemic leg: a long–term follow–up with special reference to the predictive value of the systolic digital blood pressure. Part II: After arterial reconstruction. Nielsen PH, et al. **Thorac Cardiovasc Surg** 1989 Dec; 37(6):351–4

Blood pressure, obesity and urine cation excretion in two populations of the Cook Islands. Katoh K, et al. **Tohoku J Exp Med** 1990 Feb;160(2):117–28

The improvement of systolic function of depressed left ventricle by external vibration at diastole. Koiwa Y, et al. **Tohoku J Exp Med** 1989 Oct;159(2):169–70

The circadian variation of blood pressure and heart rate in patients with hyperthyroidism. Minami N, et al. **Tohoku J Exp Med** 1989 Nov;159(3):185–93

Detection of platelet activation with monoclonal antibodies and flow cytometry. Changes during platelet storage. Fijnheer R, et al. **Transfusion** 1990 Jan;30(1):20–5

Hemodialysis or continuous ambulatory peritoneal dialysis before transplantation: prospective comparison of clinical and hemodynamic outcome. Odor–Morales A, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2197–9

Circadian variation of heart rate but not of blood pressure after heart transplantation. Wenting GJ, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2554–5

Choice of intravenous fluid infusion in labour and maternal postpartum blood pressure. Omigbodun AO. **Trop Geogr Med** 1989 Jul;41(3):227–9

[Changes in monoamine neurotransmitters in CSF during inhibition of defensive hypertensive reactions by inputs of deep peroneal nerve] Xia Y, et al. **Chen Tzu Yen Chiu** 1989; 14(3):339–43, 333 (Eng. Abstr.) **(Chi)**

[Comparison of erythrocyte membrane Ca2(+)–Mg2(+)–ATPase activity in children with and without a family history of essential hypertension] Cheng HY, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Dec;17(6):321–3, 382 (Eng. Abstr.) **(Chi)**

[A quantitative study of pulmonary artery systolic pressure in patients with tricuspid regurgitation using continuous wave Doppler] Shen XD, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Dec; 17(6):347–9, 382 (Eng. Abstr.) **(Chi)**

[Serum fatty acid and blood pressure (an analysis of five groups of the population in China)] Zhao G. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1990 Feb; 18(1):35–8 **(Chi)**

[Tracking of blood pressure in children] Li LM. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1990 Jan;24(1):16–8 (Eng. Abstr.) **(Chi)**

[Peripheral pathway of the blood pressure raised by exciting habenular nuclei] Zhao H, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar;10(2):161–5 (Eng. Abstr.) **(Chi)**

[Evaluation of three multiple regression equations of rheogram of pulmonary impedance for pulmonary artery pressure measurement] Chen WB, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Dec;20(4):413–6 (Eng. Abstr.) **(Chi)**

[Preliminary studies on the relationship between the blood pressure and renin–angiotensin system in brain and blood vessels in SHRSP] Ding H, et al. **Sheng Li Hsueh Pao** 1990 Feb;42(1):61–7 (Eng. Abstr.) **(Chi)**

[Mechanisms underlying depressor and bradycardia effects of A5–excitation (compared with that of A1–excitation) in rats] Wei D, et al. **Sheng Li Hsueh Pao** 1989 Oct; 41(5):452–8 (Eng. Abstr.) **(Chi)**

[Mechanisms underlying depressor and bradycardia effects of A1–excitation in rats] Wei D, et al. **Sheng Li Hsueh Pao** 1989 Oct;41(5):444–51 (Eng. Abstr.) **(Chi)**

[The functional connection of rat habenular nucleus and lateral hypothalamic area in the regulation of cardiovascular activities] Yang SN, et al. **Sheng Li Hsueh Pao** 1990 Feb;42(1):82–8 (Eng. Abstr.) **(Chi)**

[Cardiovascular effect mediated by phencyclidine receptor in central nervous system] Yu CX, et al. **Sheng Li Hsueh Pao** 1990 Feb;42(1):45–52 (Eng. Abstr.) **(Chi)**

[Thyrotropin releasing hormone and blood pressure regulation] Wu ZY. **Sheng Li Ko Hsueh Chin Chan** 1989 Jul;20(3):263–4 (18 ref.) **(Chi)**

[What is the relation between pressure parameters and claudication distance?] Puchmayer V, et al. **Cas Lek Cesk** 1989 Nov 17;128(47):1481–6 (Eng. Abstr.) **(Cze)**

[The influence of menopause on blood pressure] Staessen J, et al. **Arch Belg** 1989;47(1–4):118–22 (Eng. Abstr.) **(Dut)**

[The neglected blood pressure determination in pregnancy (letter)] Kanhai HH. **Ned Tijdschr Geneeskd** 1989 Dec 23; 133(51):2578 **(Dut)**

[Reduction in blood pressure after meals in the elderly. A review article] Jansen RW, et al. **Tijdschr Gerontol Geriatr** 1989 Aug;20(4):141–6 (45 ref.) (Eng. Abstr.) **(Dut)**

[Studies on the mechanism of blood pressure variability] Clement DL. **Verh K Acad Geneeskd Belg** 1989; 51(6):509–31; discussion 532–3 (63 ref.) (Eng. Abstr.) **(Dut)**

[The Bayliss effect (its effect on the properties of the carotid wall)] Jaeger M. **Angiologica** 1967;4(3–4):216–24 (Eng. Abstr.) **(Fre)**

[Ambulatory measurement of arterial pressure] Herpin D. **Ann Cardiol Angeiol (Paris)** 1989 Sep 30;38(7 Pt 2):451–4 (25 ref.) (Eng. Abstr.) **(Fre)**

[Peroperative monitoring of hepatic arterial (DSAH) and portal venous (DSVP) output in orthotropic liver transplantation in man] Gatecel C, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R53 **(Fre)**

[Variability of blood pressure measured using an oscillometric method in children 4 to 48 months of age] Bérard E, et al. **Arch Fr Pediatr** 1989 Nov;46(9):655–60 (Eng. Abstr.) **(Fre)**

[Blood pressure variations from clinostatism to orthostatism] André JL, et al. **Arch Mal Coeur** 1989 Jul;82(7):1027–32 (Eng. Abstr.) **(Fre)**

[Relationship between heart mass and semi–ambulatory pressure profiles] Balansard P, et al. **Arch Mal Coeur** 1989 Jul;82(7):1129–33 (Eng. Abstr.) **(Fre)**

[Reference values of ambulatory arterial pressure in activity and during the night. Multicenter study of 394 normotensive subjects at rest] Battistella P, et al. **Arch Mal Coeur** 1989 Jul;82(7):1019–22 (Eng. Abstr.) **(Fre)**

[Pressure profile during exertion in subjects aged 70 years and older] Bayada JM, et al. **Arch Mal Coeur** 1989 Jul; 82(7):1083–7 (Eng. Abstr.) **(Fre)**

[Vegetative neuropathy and pressure regulation in diabetics] Chanudet X, et al. **Arch Mal Coeur** 1989 Jul;82(7):1147–51 (Eng. Abstr.) **(Fre)**

[Determination of variability factors of arterial pressure using 3843 self–measurements of blood pressure in 34 active hypertensives] Chatelin A, et al. **Arch Mal Coeur** 1989 Jul; 82(7):1013–7 (Eng. Abstr.) **(Fre)**

[Normal and borderline ambulatory arterial pressures. A new method for establishing reference values] Chau NP, et al. **Arch Mal Coeur** 1989 Jul;82(7):1023–5 (Eng. Abstr.) **(Fre)**

[Determination of physiologic disturbances due to rotating shift schedules using ambulatory measurement of the arterial pressure] de Gaudemaris R, et al. **Arch Mal Coeur** 1989 Jul;82(7):1033–7 (Eng. Abstr.) **(Fre)**

[Course in time of the blood pressure profile in effort] Deloraine A, et al. **Arch Mal Coeur** 1989 Jul;82(7):1053–6 (Eng. Abstr.) **(Fre)**

[Changes in blood pressure during static work. Practical implication] Kahn JF, et al. **Arch Mal Coeur** 1989 Aug;82 Spec No 2:17–22 (Eng. Abstr.) **(Fre)**

[Doppler echocardiographic evaluation of right heart pressure in children with ventricular septal defect] Nascimento L, et al. **Arch Mal Coeur** 1990 May; 83(5):689–93 (Eng. Abstr.) **(Fre)**

[Alpha 2–adrenergic receptors and arterial pressure] Senard JM, et al. **Arch Mal Coeur** 1989 Jul;82(7):1139–41 (Eng. Abstr.) **(Fre)**

[Paradoxal diminution of resistance of the large arteries in human essential hypertension] Simon A, et al. **Arch Mal Coeur** 1989 Jul;82(7):1181–3 (Eng. Abstr.) **(Fre)**

[Nyctohemeral changes in arterial pressure in hospitalized subjects] Valty J, et al. **Arch Mal Coeur** 1989 Jul; 82(7):1039–42 (Eng. Abstr.) **(Fre)**

[Arterial pressure in adolescents: epidemiologic approach] Rorive G, et al. **Bull Mem Acad R Med Belg** 1989; 144(3–4):260–6; discussion 266–70 (Eng. Abstr.) **(Fre)**

[Optimal blood pressure in diabetics] Passa P. **Presse Med** 1990 Mar 24;19(11):497–8 **(Fre)**

[Is this patient truly hypertensive? (editorial)] Loew F. **Schweiz Rundsch Med Prax** 1990 Jan 16;79(3):31–2 **(Fre)**

[Current findings in the physiopathology of hypertension in the elderly] Loew F. **Schweiz Rundsch Med Prax** 1990 Feb 27;79(9):227–8 **(Fre)**

[A mechanical method for changing heart rate and blood pressure] Vaitl D. **Arch Psychol (Frankf)** 1989;141(1):49–69 (Eng. Abstr.) **(Ger)**

[Electrical impedance of the carotid artery in relation to arterial blood pressure and following balloon catheterization] Apfel H, et al. **Biomed Tech (Berlin)** 1989; 34 Suppl:225–6 **(Ger)**

[Vector cardiography parameters in assessing changing loads of the heart ventricles] Kuhtz JP, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:213–4 **(Ger)**

[The value of blood pressure–lowering operations in portal hypertension] Steegmüller KW, et al. **Dtsch Med Wochenschr** 1990 Apr 13;115(15):589–94 (40 ref.) **(Ger)**

[Risk factors for the vis a tergo of the "open eye" in cataract extraction with local anesthesia] Michelson G, et al. **Fortschr Ophthalmol** 1989;86(4):298–300 (Eng. Abstr.) **(Ger)**

[Blood pressure and relative body weight, alcohol consumption and electrolyte excretion in the FRG and the GDR: the Intersalt Study. The Intersalt Study Group form the FRG and the GDR] **Klin Wochenschr** 1990 Jul 5; 68(13):655–63 (Eng. Abstr.) **(Ger)**

[Why are blood pressure values higher in the doctor's office than at home?] Bättig B, et al. **Schweiz Rundsch Med Prax** 1989 Nov 28;78(48):1350–2 (Eng. Abstr.) **(Ger)**

[Sex– and age–related differences in blood pressure response to local muscular work during noise] Kobryn U, et al. **Z Gesamte Hyg** 1990 Jul;36(7):360–2 (Eng. Abstr.) **(Ger)**

[Behavior of blood pressure in 3 shift work of workers with level I WHO hypertension] Zwingenberger W, et al. **Z Gesamte Hyg** 1989 Sep;35(9):552–6 (Eng. Abstr.) **(Ger)**

[Observations on the course of borderline hypertension in workers in ore mining with variable occupational body burden] Zwingenberger W, et al. **Z Gesamte Hyg** 1990 Mar; 36(3):176–8 (Eng. Abstr.) **(Ger)**

[Renal crisis in scleroderma with normal blood pressure] Asali A, et al. **Harefuah** 1990 Mar 15;118(6):319–20 (Eng. Abstr.) **(Heb)**

[Blood pressure of Yemenites in Israel similar to that of other Israelis] Weingarten M, et al. **Harefuah** 1989 Dec 1; 117(11):353–6 (Eng. Abstr.) **(Heb)**

[Arterial pressure in a student population in Aquila] Tarsitani G, et al. **Ann Ig** 1989 Jan–Apr;1(1–2):73–80 (Eng. Abstr.) **(Ita)**

[Coronary vascular resistance during transitory variations in aortic pressure] Gattullo D, et al. **Cardiologia** 1989 Jun; 34(6):499–506 (Eng. Abstr.) **(Ita)**

[Cardiovascular effects of isometric contraction of the masticatory muscles in humans] Bevilacqua R, et al. **Medicina (Firenze)** 1990 Jan–Mar;10(1):36–8 (Eng. Abstr.) **(Ita)**

[Development of percentile curves of arterial pressure of a school population of children aged 6–11 years] Manganaro R, et al. **Minerva Pediatr** 1990 Apr;42(4):125–30 (Eng. Abstr.) **(Ita)**

[Evaluation of arterial pressure in the first 3 days of life in a group of healthy newborn infants weighing between 2000 and 4600 g at birth] Paolino GP, et al. **Minerva Pediatr** 1989 Jun;41(6):291–5 (Eng. Abstr.) **(Ita)**

[Overall biostatistical approach to the 24–h behavior of arterial blood pressure in chronic uremic normotensive patients] Cugini P, et al. **Recenti Prog Med** 1990 Apr; 81(4):252–8 (Eng. Abstr.) **(Ita)**

[Clinical usefulness of non–invasive automatic monitoring of arterial blood pressure] Rizzoni D, et al. **Recenti Prog Med** 1990 Apr;81(4):269–75 (40 ref.) (Eng. Abstr.) **(Ita)**

[Response of cardiac patients to dynamic exercise: analysis with "systolic" pressure–volume area] Yagi Y, et al. **J Cardiol** 1989 Sep;19(3):921–31 (Eng. Abstr.) **(Jpn)**

[Left ventricular diastolic reserve during acute pressure loading in hypertrophic cardiomyopathy and dilated cardiomyopathy] Yokote Y, et al. **J Cardiol** 1988 Dec; 18(4):1051–60 (Eng. Abstr.) **(Jpn)**

[Influence of elevation of lower extremities on the left ventricular function in hypertrophic cardiomyopathy and essential hypertension] Mukai M, et al. **J Cardiol Suppl** 1989;22:83–4 **(Jpn)**

[Evaluation of antihypertensive therapy by ambulatory blood pressure monitoring and establishment of the level of antihypertensive goal on the circadian rhythm of blood pressure] Fujioka T, et al. **Kokyu To Junkan** 1990 Jan; 38(1):71–6 (Eng. Abstr.) **(Jpn)**

[Circadian variation of blood pressure] Otsuka K, et al. **Kokyu To Junkan** 1989 Oct;37(10):1045–54 (24 ref.) **(Jpn)**

[Progressive factors of renal injury: exercise and blood pressure] **Nippon Jinzo Gakkai Shi** 1989 May;31(5):439–43 **(Jpn)**

[Clinical investigation on the involvement of an endogenous digitalis–like substance in blood pressure regulation] Takahashi H, et al. **Nippon Jinzo Gakkai Shi** 1990 Jan; 32(1):53–64 (Eng. Abstr.) **(Jpn)**

[Prevention of spinal cord ischemia after cross–clamping of the thoracic aorta—monitoring of spinal cord perfusion pressure and somatosensory evoked potentials] Maeda S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep; 37(9):1923–31 (Eng. Abstr.) **(Jpn)**

[The best time to begin and reduce the administration of antihypertensive agents in order to achieve an optimum blood pressure level] Fujii J. **Nippon Naika Gakkai Zasshi** 1990 Jan 10;79(1):38–42 **(Jpn)**

[A case of essential hypertension with marked orthostatic elevation of blood pressure] Okazawa K, et al. **Nippon Naika Gakkai Zasshi** 1989 Jul;78(7):982–3 **(Jpn)**

[Roles of prostaglandins and their related substances for the development of hypertension] Numabe A, et al. **Nippon Rinsho** 1989 Sep;47(9):1963–8 **(Jpn)**

[Development of multisensor rate responsive pacemaker] Sugiura T. **Nippon Rinsho** 1990 Feb;48(2):395–400 **(Jpn)**

[Role of sodium and potassium in hypertension] Takahashi K, et al. **Nippon Rinsho** 1989 Sep;47(9):1923–9 **(Jpn)**

[Role of the central nervous system and autonomic nervous system in the development of essential hypertension] Ueno Y, et al. **Nippon Rinsho** 1989 Sep;47(9):1917–22 **(Jpn)**

[Sequential changes in blood pressure and electrocardiographic findings over seventeen years in three different regions in Okayama Prefecture] Haraoka S, et al. **Nippon Ronen Igakkai Zasshi** 1989 Jul;26(4):375–86 (Eng. Abstr.) **(Jpn)**

[Effects of maternal exercise using bicycle ergometer on maternal heart rate, blood pressure, oxygen consumption and fetal heart rate] Asai M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Mar;

42(3):246–52 (Eng. Abstr.) (Jpn)
[Responses of cerebral arteries to the changes in cerebral perfusion pressure] Yamaguchi S, et al. **No To Shinkei** 1989 Aug;41(8):807–11 (Eng. Abstr.) (Jpn)
[Endothelin and endogenous digitalis-like substance in cardiovascular regulation: a review] Takahashi H, et al. **Rinsho Byori** 1989 Oct;37(10):1103–13 (57 ref.) (Eng. Abstr.) (Jpn)
[Blood pressure and the incidence of hypertension in Cracow's elderly] Kocemba J, et al. **Folia Med Cracov** 1988; 29(3–4):141–52 (Eng. Abstr.) (Pol)
[Arterial hypertension in the elderly] Cabral Filho H. **Arq Bras Cardiol** 1989 Oct;53(4):229–30 (Por)
[Estimation of blood pressure in children using a regression equation] Cavalcante JW. **Arq Bras Cardiol** 1989 Apr; 52(4):197–200 (Eng. Abstr.) (Por)
[Non-invasive evaluation of systolic pressure of the pulmonary artery in patients with tricuspid regurgitation, using Doppler echocardiography] Abreu J, et al. **Rev Port Cardiol** 1990 Mar;9(3):199–203 (Eng. Abstr.) (Por)
[Electrocardiographic and arterial pressure changes in the acute phase of subarachnoid hemorrhage] Popescu M, et al. **Rev Med Interna [Med Interna]** 1989 Sep–Oct; 41(5):459–66 (Eng. Abstr.) (Rum)
[Arterial pressure and the risk factors in the 20- to 59-year-old male population (an epidemiological autopsy study in Riga)] Volkov VA, et al. **Arkh Patol** 1990; 52(5):7–11 (Eng. Abstr.) (Rus)
[Angiotensin II in the mechanisms of hypothalamic pressor reactions] Kashtanov SI. **Biull Eksp Biol Med** 1989 Jun; 107(6):643–5 (Eng. Abstr.) (Rus)
[Correlations between the endothelium-dependent relaxation of the aorta and arterial pressure in rats with myocardial infarction] Meerson FZ, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):21–4 (Eng. Abstr.) (Rus)
[The effect of an endothelium-dependent stabilization of a pressure drop in small arteries] Nikol'skiĭUi VP, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):649–51 (Eng. Abstr.) (Rus)
[Effect of emotional stress on electrocardiogram parameters and diuresis in persons with different levels of arterial pressure] Kruchinina NA, et al. **Fiziol Cheloveka** 1989 May–Jun;15(3):745–50 (Rus)
[Characteristics of the functional state of the cardiovascular system in children 5–7 years of age] Aksianova EA, et al. **Gig Sanit** 1990 Apr;(4):13–4 (Rus)
[Functional state of the cardiovascular system as an indicator of the effect of occupational activity on white collar workers] Stolbun BM, et al. **Gig Tr Prof Zabol** 1989; (7):45–7 (Rus)
[Sympathetic-adrenal activity and arterial pressure at rest and during psychoemotional stress in patients with essential hypertension] Balazhovi'ekh I, et al. **Kardiologiia** 1989 Dec; 29(12):90–3 (Eng. Abstr.) (Rus)
[Effects of surgical treatment on circadian variations of arterial pressure in patients with primary aldosteronism and renovascular hypertension] Kosmacheva ED, et al. **Kardiologiia** 1990 May;30(5):33–7 (Eng. Abstr.) (Rus)
[ECG changes in leads over the left ventricular epicardial surface during bicycle ergometry and perfusion pressure in the left coronary artery] Leshchenko AI, et al. **Kardiologiia** 1989 Jul;29(7):99–100 (Rus)
[Role of genetic and environmental factors in determination of arterial blood pressure level] Rozanov VB, et al. **Pediatriia** 1989;(12):36–41 (Eng. Abstr.) (Rus)
[Arterial pressure in patients with active tuberculosis of the lungs] Bogomaz MS, et al. **Probl Tuberk** 1990;(5):67–8 (Rus)
[A new device for measuring blood pressure in the ophthalmic artery: automated vacuum ophthalmodynamometer] Doronina NM, et al. **Vestn Oftalmol** 1990 May–Jun;106(3):55–7 (Eng. Abstr.) (Rus)
[Dynamics of intraocular pressure and pressure in the central retinal artery in cerebral disorders with vascular hypertension in children] Kadyrova TK, et al. **Vestn Oftalmol** 1990 May–Jun;106(3):30–2 (Eng. Abstr.) (Rus)
[The status of the visual field in relation to the size of the pulse blood volume in intraocular vessels in glaucoma without increased intraocular pressure] Jovanović M, et al. **Srp Arh Celok Lek** 1987 Jul;115(7):725–30 (See)
[The mean values and correlation between blood pressure, body weight, height, heart rate, the PQ, QT and QTc intervals, the QRS-complex and the echocardiographic dimensions of the left atrium and ventricle in 515 14-year-old students] Catipović-Veselica K, et al. **Ljec Vjesn** 1989 Nov;111(11):377–81 (Eng. Abstr.) (Scr)
[Reversible functional changes in the heart and circulation in extreme athletic exertion] Brkić I, et al. **Med Arh** 1988; 42(5–6):239–41 (Scr)
[The Fuenlabrada study: normal values of arterial pressure in children and adolescents] Muñoz Calvo MT, et al. **An Esp Pediatr** 1989 Oct;31(4):336–41 (29 ref.) (Eng. Abstr.) (Spa)
[Arterial pressure in children and adolescents] Sánchez Bayle M, et al. **An Esp Pediatr** 1989 Jun;30(6):493–8 (Eng. Abstr.) (Spa)
[Normal values of arterial pressure in adolescent students in the Federal District, Mexico] Yamamoto-Kimura L, et al. **Bol Med Hosp Infant Mex** 1990 Apr;47(4):234–46 (Eng. Abstr.) (Spa)
[Arterial hypertension: a dynamic concept (editorial)] González-Juanatey JR, et al. **Med Clin (Barc)** 1989 Oct 21;93(12):460–2 (Spa)
[Methodologic evaluation of the relation of blood pressure and skinfold thickness: an epidemiologic approach] Rosenthal J. **Rev Saude Publica** 1989 Aug;23(4):322–35 (37 ref.) (Eng. Abstr.) (Spa)

DRUG EFFECTS

Influence of equipotent doses propofol and thiopentone on arterial pressure and heart rate at induction of anesthesia. A comparison between young and old patients. Scheepstra GL, et al. **Acta Anaesthesiol Belg** 1989;40(3):167–74
The influence of ketanserin on blood pressure and heart rate during induction of anesthesia: a randomized double blind controlled evaluation. Vanacker B, et al. **Acta Anaesthesiol Belg** 1990;41(1):9–12
The effects of propofol on intracranial pressure and cerebral perfusion pressure in patients with brain tumors. Van Hemelrijck J, et al. **Acta Anaesthesiol Belg** 1989; 40(2):95–100
The cardiovascular effects of vecuronium during halothane anaesthesia. Kristensen J, et al. **Acta Anaesthesiol Scand** 1989 Aug;33(6):494–7
Effects of alfentanil on the responses to awake fiberoptic nasotracheal intubation. Randell T, et al. **Acta Anaesthesiol Scand** 1990 Jan;34(1):59–62
QT interval of the ECG, heart rate and arterial pressure using propofol, methohexital or midazolam for induction of anaesthesia. Saarnivaara L, et al. **Acta Anaesthesiol Scand** 1990 May;34(4):276–81
Hemodynamic effect of epidurally administered epinephrine in middle-aged and elderly patients. Tomoda MK, et al. **Acta Anaesthesiol Scand** 1989 Nov;33(8):647–51
Dietary fat and blood pressure. Pietinen P. **Acta Cardiol** 1989; 44(6):460–2
Effects of central osmotic stimulation on vasopressin and enkephalin release into the blood and cerebrospinal fluid and blood pressure. Ota K, et al. **Acta Endocrinol (Copenh)** 1990 Jan;122(1):62–70
The response of the light reflex of retinal vessels to reduced blood pressure in hypertensive patients. Brinchmann-Hansen O, et al. **Acta Ophthalmol (Copenh)** 1990 Apr;68(2):155–61
Investigation of the effects of paralysis by pancuronium on heart rate variability, blood pressure and fluid balance. Greenough A, et al. **Acta Paediatr Scand** 1989 Nov; 78(6):829–34
Pressor responsiveness to vasopressin in spontaneously hypertensive rats. Stępniakowski K, et al. **Acta Physiol Pol** 1989 Mar–Apr;40(2):171–82
Interactions between substance P and serotonergic mechanisms at preganglionic sympathetic nerves in thoracic spinal cord. Gradin K. **Acta Physiol Scand** 1990 Jan;138(1):101–2
Atrial natriuretic factor (ANF 103–126) enhances volume- and pressor-induced heart rate response in the conscious rat. Marks ES, et al. **Acta Physiol Scand** 1990 Feb; 138(2):161–5
Fluid balance and arterial blood pressure during intracarotid infusions of atrial natriuretic peptide (ANP) in water-deprived goats. Olsson K, et al. **Acta Physiol Scand** 1989 Oct;137(2):249–57
Paroxetine: lack of effect on the tyramine pressor response in man. Hassan SM, et al. **Acta Psychiatr Scand Suppl** 1989; 350:49
Cardiovascular and psychomotor effects of repeated doses of paroxetine: a comparison with amitriptyline and placebo in healthy men. Warrington SJ, et al. **Acta Psychiatr Scand Suppl** 1989;350:42–4
Acute effects of ethanol (0.5 mg/kg) and its interaction with diazepam (5 mg) and meclophenoxate (100 mg) on the blood pressure, the body temperature and the heart rate in man. Hrbek J, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;121:235–52
The effect of a bradykinin antagonist on vasodilatation in the cat and rabbit. Barton S, et al. **Adv Exp Med Biol** 1989; 247A:435–8
The design of specific inhibitors of tissue kallikrein and their effect on the blood pressure of the rat. Burton J, et al. **Adv Exp Med Biol** 1989;247B:9–13
Some cardiovascular and hematological changes induced in the rat by activation of Hageman factor with ellagic acid. Damas J, et al. **Adv Exp Med Biol** 1989;247A:461–5
Competitive antagonists of bradykinin: in vitro (jugular vein) and in vivo (blood pressure response) studies. Hoffmann H, et al. **Adv Exp Med Biol** 1989;247B:407–9
Mechanism of bradykinin-induced nociceptive response. Katori M, et al. **Adv Exp Med Biol** 1989;247A:255–9
Renal function as affected by inhibitors of kininase II and of neutral endopeptidase 24.11 in rats with and without desoxycorticosterone pretreatment. Nakagawa M, et al. **Adv Exp Med Biol** 1989;247B:495–9
Effect of the substance(s) released in vitro by the interaction of Bothrops jararaca (BJ) venom or trypsin and BJ plasma on BJ blood pressure and uterus. Prezoto BC, et al. **Adv Exp Med Biol** 1989;247B:419–24
Central effect of aprotinin, a serine protease inhibitor, on blood pressure in spontaneously hypertensive and Wistar-Kyoto rats. Seto S, et al. **Adv Exp Med Biol** 1989; 247B:49–54
Contribution of kinin system to the antihypertensive action of angiotensin converting enzyme inhibitors. Sharma JN. **Adv Exp Med Biol** 1989;247A:197–205 (39 ref.)
The hypotensive response to des-Arg9-bradykinin increases during E. coli septicemia in the pig. Siebeck M, et al. **Adv Exp Med Biol** 1989;247B:389–93
Selective expression of des-Arg9-BK sensitive (B1) receptors in vivo and in vitro by angiotensin converting enzyme inhibitors. Whalley ET, et al. **Adv Exp Med Biol** 1989; 247A:185–9
Effects on blood pressure of intracerebroventricular administration of a kinin antagonist. Yang XP, et al. **Adv Exp Med Biol** 1989;247A:439–45
Kinin receptors in smooth muscle and vascular effects in sodium depleted rats. Yasujima M, et al. **Adv Exp Med Biol** 1989;247B:411–7
Role of the endogenous angiotensin II in the antihypertensive effect of MK 421 in rats made hypertensive by norepinephrine or vasopressin. Yasujima M, et al. **Adv Exp Med Biol** 1989;247A:35–8
Antagonistic effect of naloxone on the hypertensive response of intraventricularly administered histamine. Młynarska MS. **Agents Actions** 1990 Apr;30(1–2):226–30
Effect of intracoronary contrast medium on left ventricular diastolic pressure-volume relationships. Kløw NE, et al. **Am Heart J** 1990 Jan;119(1):59–63
Antihypertensive effects of beta-blockers administered once daily: 24-hour measurements. Neutel JM, et al. **Am Heart J** 1990 Jul;120(1):166–71
Pressor effect of inhaled ergotamine in orthostatic hypotension. Biaggioni I, et al. **Am J Cardiol** 1990 Jan 1; 65(1):89–92
Attenuation of the pressor response to intravenous furosemide by angiotensin converting enzyme inhibition in congestive heart failure. Goldsmith SR, et al. **Am J Cardiol** 1989 Dec 1;64(19):1382–5
Twenty-four-hour blood pressure monitoring and effects of indapamide. Ocon J, et al. **Am J Cardiol** 1990 May 2; 65(17):58H–61H
Spironolactone and altizide used in combination with enalapril: twenty-four-hour ambulatory recording of blood pressure. Poncelet P, et al. **Am J Cardiol** 1990 Jun 19; 65(23):33K–35K
Radial arterial pressure measurements may be a poor guide to the beneficial effects of nitroprusside on left ventricular systolic pressure in congestive heart failure. Simkus GJ, et al. **Am J Cardiol** 1990 Aug 1;66(3):323–6
Effects of caffeine on blood pressure response during exercise in normotensive healthy young men. Sung BH, et al. **Am J Cardiol** 1990 Apr 1;65(13):909–13
The hypotensive action of Desmodium styracifolium and Clematis chinensis. Ho CS, et al. **Am J Chin Med** 1989; 17(3–4):189–202
The effects of vandellia cordifolia on renal functions and arterial blood pressure. Tsai HY, et al. **Am J Chin Med** 1989;17(3–4):203–10
The herbal medicine tian ma gou teng yen alters the development of high blood pressure in the spontaneously hypertensive rat. Zhang TX, et al. **Am J Chin Med** 1989; 17(3–4):211–9
n-3 fatty acids of marine origin lower systolic blood pressure and triglycerides but raise LDL cholesterol compared with n-3 and n-6 fatty acids from plants. Kestin M, et al. **Am J Clin Nutr** 1990 Jun;51(6):1028–34
Relationship of mineral metabolism and long-term calcium and cholecalciferol supplementation to blood pressure in normotensive men. Orwoll ES, et al. **Am J Clin Nutr** 1990 Oct;52(4):717–21
Metabolic and hemodynamic effects of magnesium supplementation in patients with essential hypertension. Zemel PC, et al. **Am J Clin Nutr** 1990 Apr;51(4):665–9
Cardiovascular effects of caffeine therapy in preterm infants. Walther FJ, et al. **Am J Dis Child** 1990 Oct;144(10):1164–6
Effects of magnesium on changes in blood pressure and plasma aldosterone induced by angiotensin II. Atarashi K, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 1):488–90
The calcium antagonist isradipine and its effect on blood pressure related to plasma renin activity. Carr AA, et al. **Am J Hypertens** 1990 May;3(5 Pt 1):354–9
Disturbances of transmembranous sodium transport systems induced by ethanol in human erythrocytes. An approach to the pressor effect of alcohol. Coca A, et al. **Am J Hypertens** 1989 Oct;2(10):784–7
Prediction of salt sensitivity. Dimsdale JE, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 1):429–35 (36 ref.)
High magnesium diets increase blood pressure and enhance stroke mortality in hypertensive SHRsp rats. Ganguli M, et al. **Am J Hypertens** 1989 Oct;2(10):780–3
Dietary K determines NaCl sensitivity in NaCl-induced rises of blood pressure in spontaneously hypertensive rats. Ganguli M, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 1):482–4
Parathyroid hormone and cardiovascular effects of dihydropyridines in chronic renal failure. Guerin AP, et al. **Am J Hypertens** 1990 Jul;3(7):566–9
Differential blood pressure responses to oral and central salt administration in two substrains of Dahl rats. Katahira K, et al. **Am J Hypertens** 1990 Apr;3(4):274–80
Increasing sensitivity of blood pressure to dietary sodium and potassium with increasing age. A population study using casual urine specimens. Khaw KT, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 1):505–11
The effects of dietary calcium on blood pressure in

spontaneously hypertensive rats may be mediated by parathyroid hypertensive factor. Lewanczuk RZ, et al. **Am J Hypertens** 1990 May;3(5 Pt 1):349–53

Characterization of a primate model of hypertension. The response of hypertensive and normotensive male vervets (Cercopithecus aethiops) to cold pressor stress, captopril administration, and acute bolus of atrial natriuretic factor. Martin S, et al. **Am J Hypertens** 1990 Jan;3(1):27–32

Enhanced sympathetic pressor responses to intracerebrovascularly infused saline in awake salt–loaded rats. Miyajima E, et al. **Am J Hypertens** 1990 Feb; 3(2):117–22

Effects of canrenone on blood pressure in rats with reduced renal mass. Pamnani MB, et al. **Am J Hypertens** 1990 Mar; 3(3):188–95

The effects of calcium channel blockade on blood pressure and calcium metabolism. Resnick LM, et al. **Am J Hypertens** 1989 Dec;2(12 Pt 1):927–30

Clonidine abolishes exaggerated pressor responses to shaker stress in spontaneously hypertensive rats. Takeda K, et al. **Am J Hypertens** 1990 Jan;3(1):39–44

Taurine lowers blood pressure in the spontaneously hypertensive rat by a catecholamine independent mechanism. Trachtman H, et al. **Am J Hypertens** 1989 Dec; 2(12 Pt 1):909–12

Thromboxane mediation of the pressor response to infused angiotensin II. Wilcox CS, et al. **Am J Hypertens** 1990 Mar; 3(3):242–9

Acute effects of endothelin on renal hemodynamics and blood pressure in anesthetized rats. Yokokawa K, et al. **Am J Hypertens** 1989 Sep;2(9):715–7

Excess sucrose and glucose ingestion acutely elevate blood pressure in spontaneously hypertensive rats. el Zein M, et al. **Am J Hypertens** 1990 May;3(5 Pt 1):380–6

Long–term effects of excess sucrose ingestion on three strains of rats. el Zein M, et al. **Am J Hypertens** 1990 Jul;3(7):560–2

Salt–sensitive blood pressure and exaggerated vascular reactivity in the hypertension of diabetes mellitus. Tuck M, et al. **Am J Med** 1990 Mar;88(3):210–6

Magnesium plus nifedipine [letter; comment] Ales K. **Am J Obstet Gynecol** 1990 Jan;162(1):288 Comment on: Am J Obstet Gynecol 1988 Aug;159(2):308–9.

Flow velocity waveforms in uterine and umbilical arteries during the angiotensin II sensitivity test. Erkkola RU, et al. **Am J Obstet Gynecol** 1990 May;162(5):1193–7

Estrogen replacement and cardiovascular disease: serum lipids and blood pressure effects. Hazzard WR. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 2):1847–53 (80 ref.)

Pregnancy increases cardiovascular toxicity to cocaine. Woods JR Jr, et al. **Am J Obstet Gynecol** 1990 Feb; 162(2):529–33

Beneficial effects of two forms of NO administration in feline splanchnic artery occlusion shock. Aoki N, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):G275–81

Release of atrial natriuretic factor during infusion of isoproterenol and angiotensin II. Christensen G, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R896–900

Synthetic capsaicin reversibly impairs vasopressin–mediated blood pressure recovery. Gardiner SM, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1429–35

Axons of passage may be responsible for fastigial nucleus pressor response. Henry RT, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):R1436–40

Intrarenal atrial natriuretic peptide infusion lowers arterial pressure chronically. Hildebrandt DA, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):R585–92

Role for central angiotensin II in control of blood pressure during pregnancy. Hines T, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):R1457–61

Angiotensin III and pressor responsiveness in 3–day renal artery stenosis rabbits. Johnson JA, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H540–8

Effects of antimineralocorticoid RU 26752 on steroid–induced hypertension in rats. Kalimi M, et al. **Am J Physiol** 1990 May;258(5 Pt 1):E737–9

Chronic effects of a physiological dose of ANP on arterial pressure and renin release. Kivlighn SD, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1491–7

Adrenergic regulation of calcium–deficient hypertension in chick embryos. Koide M, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):H1900–9

mu–Opioid peptide modulation of cardiovascular and sympathoadrenal responses to stress. Marson L, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R901–8

Pressor and sympathetic responses to dorsal raphe nucleus infusions of TRH in rats. Mattila J, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1464–71

Platelet–activating factor: an endogenous mediator of mesenteric ischemia–reperfusion–induced shock. Mózes T, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R872–7

Attenuation of pressor responses to arginine vasopressin in right–sided congestive heart failure. Stone CK, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1882–8

Altered pressor responses to NE and ANG II during cyclosporin A administration to conscious rats. Textor SC, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H854–60

Blood pressure in streptozotocin–treated Brattleboro and Long–Evans rats. Tomlinson KC, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):R852–9

Pressor effect of endothelium–derived relaxing factor inhibition in conscious virgin and gravid rats. Umans JG, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):F293–6

Effects of naloxone on renin and pressor responses to acute renal hypotension in rats. Weaver CJ, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):E432–6

Structure–function analyses of brain angiotensin control of pressor action in rats. Wright JW, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1551–7

Cardiopulmonary effects of butorphanol tartrate intravenously administered for placement of duodenal cannulae in isoflurane–anesthetized yearling steers. Cornick JL, et al. **Am J Vet Res** 1990 Jul;51(7):1062–4

Cardiovascular and respiratory effects of inspired oxygen fraction in halothane–anesthetized horses. Cuvelliez SG, et al. **Am J Vet Res** 1990 Aug;51(8):1226–31

Effects of halothane and isoflurane on mean arterial blood pressure, heart rate, and respiratory rate in adult Pekin ducks. Goelz MF, et al. **Am J Vet Res** 1990 Mar; 51(3):458–60

Cardiovascular effects of butorphanol in halothane–anesthetized dogs. Greene SA, et al. **Am J Vet Res** 1990 Aug;51(8):1276–9

Hemodynamic responses of the equine digit to intravenous and digital arterial infusion of dopamine. Hunt RJ, et al. **Am J Vet Res** 1990 Apr;51(4):567–70

Determination of a sedative dose and influence of midazolam on cardiopulmonary function in Canada geese. Valverde A, et al. **Am J Vet Res** 1990 Jul;51(7):1071–4

Effects of sequential doses of parenteral terbutaline on plasma levels of potassium and related cardiopulmonary responses. Clifton GD, et al. **Am Rev Respir Dis** 1990 Mar; 141(3):575–9

The haemodynamic effects of propofol and thiopentone for induction of caesarean section. Gin T, et al. **Anaesth Intensive Care** 1990 May;18(2):175–9

Interaction between enalapril and propofol [letter] Littler C, et al. **Anaesth Intensive Care** 1989 Nov;17(4):514–5

Pressor responses to tracheal intubation after sublingual captopril. A pilot study. McCarthy GJ, et al. **Anaesthesia** 1990 Mar;45(3):243–5

Effect of combined infusion of nitroglycerin and nicardipine on femoral–to–radial arterial pressure gradient after cardiopulmonary bypass. Maruyama K, et al. **Anesth Analg** 1990 Apr;70(4):428–32

Neuromuscular and cardiovascular effects of high–dose vecuronium. Tullock WC, et al. **Anesth Analg** 1990 Jan; 70(1):86–90

Intracranial volume–pressure relationship following thiopental or etomidate. Artru AA. **Anesthesiology** 1989 Nov;71(5):763–8

Effect of angiotensin converting enzyme inhibition on blood pressure and renal function during open heart surgery. Colson P, et al. **Anesthesiology** 1990 Jan;72(1):23–7

Calcium channel modulation of alpha 1– and alpha 2–adrenergic pressor responses in conscious and anesthetized dogs. Kenny D, et al. **Anesthesiology** 1990 May;72(5):874–81

Pulmonary reactivity to methacholine during beta–adrenergic blockade: propranolol versus esmolol. Tobias JD, et al. **Anesthesiology** 1990 Jul;73(1):132–6

A pressor effect of noncardioselective beta–blockers in mildly hypertensive patients during acute hospitalization. Cleophas TJ, et al. **Angiology** 1990 Feb;41(2):124–32

Metabolic, electrocardiographic, and hemodynamic responses to increased circulating adrenaline: effects of selective and nonselective beta adrenoceptor blockade. Hansen O, et al. **Angiology** 1990 Mar;41(3):175–88

Hypotensive effects of nifedipine in patients with primary hyperparathyroidism: case reports. Takata Y, et al. **Angiology** 1989 Dec;40(12):1079–82

Supraventricular tachyarrhythmias and rate–related hypotension: cardiovascular effects and efficacy of intravenous verapamil. Haynes BE, et al. **Ann Emerg Med** 1990 Aug;19(8):861–4

The safety of phenylpropanolamine in patients with stable hypertension. Kroenke K, et al. **Ann Intern Med** 1989 Dec 15;111(12):1043–4

Prostaglandin E1 and intrapulmonary shunt in cardiac surgical patients with pulmonary hypertension [published erratum appears in Ann Thorac Surg 1990 Aug;50(2):337] Heerdt PM, et al. **Ann Thorac Surg** 1990 Mar;49(3):463–5

The acute pressor response to cadmium in rats. Balaraman R, et al. **Arch Int Pharmacodyn Ther** 1989 Sep–Oct; 301:254–66

Effect of nicardipine and BAY K–8644 on the pressor responses to afferent nervous stimulation in dogs. Estan L, et al. **Arch Int Pharmacodyn Ther** 1989 Sep–Oct; 301:246–53

Critical evaluation of the in vivo selectivity between hypotensive and platelet antiaggregating actions of iloprost and prostacyclin in beagle dogs. Hermán F, et al. **Arch Int Pharmacodyn Ther** 1989 Jul–Aug;300:281–91

Effects of chronic oral administration of a new beta–blocker, bopindolol, on serum lipoprotein concentrations and blood pressure of spontaneously hypertensive rats. Ishihara T, et al. **Arch Int Pharmacodyn Ther** 1989 Nov–Dec; 302:145–57

Comparison of the cardiovascular effects of three dihydropyridine compounds. Nagura J, et al. **Arch Int Pharmacodyn Ther** 1989 Nov–Dec;302:174–85

Effects of nilvadipine, a new calcium entry blocker, on systemic blood pressure, cardiac hypertrophy and venous distensibility in spontaneously hypertensive rats. Ohtsuka M, et al. **Arch Int Pharmacodyn Ther** 1989 Sep–Oct; 301:228–45

Blood pressure lowering action and alpha–adrenolytic effect of adimolol in rats. Palluk R, et al. **Arch Int Pharmacodyn Ther** 1989 Sep–Oct;301:215–27

Acute reduction of blood pressure in asymptomatic patients with severe hypertension. An idea whose time has come—and gone [editorial] Fagan TC. **Arch Intern Med** 1989 Oct;149(10):2169–70

Studies on the mechanism of action of the antihypertensive agent cicletanine. Castro A, et al. **Arch Mal Coeur** 1989 Nov;82 Spec No 4:51–4

Antihypertensive treatment with cilazapril. Resting and exercise blood pressure, hormones and enzymes. Breithaupt K, et al. **Arzneimittelforschung** 1990 Feb;40(2 Pt 1):136–41

Beneficial attenuating effect of L–threo–3,4–dihydroxyphenylserine on postural hypotension in anesthetized rats. Satoh S, et al. **Arzneimittelforschung** 1989 Sep;39(9):1123–9

Effect of 14,15–epoxyeicosatrienoic acid infusion on blood pressure in normal and hypertensive rats. Lin WK, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):977–81

Sodium and potassium intake and blood pressure change in childhood. Geleijnse JM, et al. **BMJ** 1990 Apr 7; 300(6729):899–902

Effect of captopril on blood pressure and kidney function in normotensive insulin dependent diabetics with nephropathy. Parving HH, et al. **BMJ** 1989 Aug 26; 299(6698):533–6

Sodium and potassium intake and blood pressure change in childhood [letter] Sinclair L, et al. **BMJ** 1990 May 26; 300(6736):1397

Sympathetic tone and relation between sodium intake and blood pressure in the general population. Staessen J, et al. **BMJ** 1989 Dec 16;299(6714):1502–3

Effect of nicardipine on the cardiovascular response to tracheal intubation. Mikawa K, et al. **Br J Anaesth** 1990 Feb;64(2):240–2

Effect of temazepam on blood pressure regulation in healthy elderly subjects. Ford GA, et al. **Br J Clin Pharmacol** 1990 Jan;29(1):61–7

Renal function and blood pressure in psoriatic patients treated with cyclosporin A. Feutren G, et al. **Br J Dermatol** 1990 Jun;122 Suppl 36:57–69

GABAB receptor–mediated inhibition of the neurogenic vasopressor response in the pithed rat. Kohlenbach A, et al. **Br J Pharmacol** 1990 Jun;100(2):365–9

Rapid tolerance to the hypotensive effects of glyceryl trinitrate in the rat: prevention by N–acetyl–L– but not N–acetyl–D–cysteine. Newman CM, et al. **Br J Pharmacol** 1990 Apr;99(4):825–9

SK&F S–106203 inhibits leukotriene C4, leukotriene D4 and leukotriene E4 vasopressor responses in the conscious rat. Smith EF 3d, et al. **Br J Pharmacol** 1990 Jun;100(2):195–200

Hypotensive effects of 8–hydroxy–2–(di–n–propylamino)tetralin and 5–methylurapidil following stereotaxic microinjection into the ventral medulla of the rat. Valenta B, et al. **Br J Pharmacol** 1990 Apr;99(4):713–6

Synthesis, release and receptor binding of acetylcholine in the C1 area of the rostral ventrolateral medulla: contributions in regulating arterial pressure. Arneric SP, et al. **Brain Res** 1990 Mar 12;511(1):98–112

Cardiovascular effects of substance P peptides in the nucleus of the solitary tract. Hall ME, et al. **Brain Res** 1989 Sep 18;497(2):280–90

Spinal mediation of the increases in arterial pressure and heart rate in response to intrathecal administration of bicuculline. Hong Y, et al. **Brain Res** 1990 Apr 9;513(1):86–93

Sensitization to pressor effects by repeated central injections of vasopressin in conscious rats. Lebrun CJ, et al. **Brain Res** 1989 Dec 25;505(1):39–43

Atrial natriuretic polypeptide attenuates central angiotensin II–induced catecholamine and ACTH secretion. Makino S, et al. **Brain Res** 1989 Oct 30;501(1):84–9

Cholinergic mechanisms in the ventrolateral medullary depressor area. Murugaian J, et al. **Brain Res** 1989 Nov 6;501(2):355–63

Central pressor actions of neurokinin B: increases in neurokinin B contents in discrete nuclei in spontaneously hypertensive rats. Nagashima A, et al. **Brain Res** 1989 Oct 9;499(1):198–203

Intrathecal administration of delta receptor agonists in the urethane anesthetized rat provokes an increase in arterial pressure via a non–opioid mechanism. Rochford J, et al. **Brain Res** 1990 Apr 2;512(2):259–68

Cardiovascular effects of L–glutamate and tetrodotoxin microinjected into the rostral and caudal ventrolateral medulla in normotensive and spontaneously hypertensive rats. Smith JK, et al. **Brain Res** 1990 Jan 1;506(1):1–8

Intracerebroventricularly infused [D–Arg1]angiotensin III, is superior to [D–Asp1]angiotensin II, as a pressor agent in rats. Wright JW, et al. **Brain Res** 1990 Apr 23;514(1):5–10

Dopamine D2 receptors in the posterior region of the nucleus tractus solitarius mediate the central pressor action of quinpirole (LY171555). Yang RH, et al. **Brain Res Bull** 1990 Jan;24(1):97–103

Effect of urea on the mechanical and electrical activity of the perfused rat heart. Abaurre PF, et al. **Braz J Med Biol Res** 1989;22(10):1307–10

Effects of hypertonic NaCl solution on the hamster cheek pouch microcirculation in normo– and hypovolemia.

Bouskela E, et al. **Braz J Med Biol Res** 1989;22(2):259–64

Pressor responses of clonidine injected into some prosencephalic areas of conscious rats. Colombari E, et al. **Braz J Med Biol Res** 1989;22(6):769–71

Cardiac performance following hypertonic saline. Kien ND, et al. **Braz J Med Biol Res** 1989;22(2):245–8

Nutritional aspects of pediatric hypertension. Ingelfinger JR. **Bull N Y Acad Med** 1989 Dec;65(10):1109–20; discussion 1154–60 (88 ref.)

Preoperative beta-blockade for patients undergoing craniotomy: a comparison between propranolol and atenolol. Allberry RA, et al. **Can J Anaesth** 1990 May;37(4 Pt 1):448–51

Prophylactic administration of histamine1 and histamine2 receptor blockers in the prevention of protamine-related haemodynamic effects. Kambam J, et al. **Can J Anaesth** 1990 May;37(4 Pt 1):420–2

Esmolol bolus and infusion attenuates increases in blood pressure and heart rate during electroconvulsive therapy. Kovac AL, et al. **Can J Anaesth** 1990 Jan;37(1):58–62

Attenuation of cardiovascular responses to intubation with combination of labetalol and sufentanyl. Mahesh K. **Can J Anaesth** 1990 May;37(4 Pt 2):S114

A comparison of the cerebral pressure-flow relationship for halothane and isoflurane at haemodynamically equivalent end-tidal concentrations in the rabbit. Mutch WA, et al. **Can J Anaesth** 1990 Mar;37(2):223–30

Intrathecal morphine and bupivacaine in the rat; analgesic synergy without augmentation of motor dysfunction or hypotension. Penning JP, et al. **Can J Anaesth** 1990 May; 37(4 Pt 2):S49

Intravenous lidocaine does not attenuate the haemodynamic response of children to laryngoscopy and tracheal intubation. Splinter WM. **Can J Anaesth** 1990 May;37(4 Pt 1):440–3

Efficacy of oral sotalol in suppression of premature ventricular complexes and analysis of its beta-adrenergic blocking activity. Giorgi C, et al. **Can J Cardiol** 1990 Jun; 6(5):191–7

Carotid sinus pressure, blood volume, and vasopressin in the anaesthetized rabbit. Courneya CA, et al. **Can J Physiol Pharmacol** 1989 Nov;67(11):1386–90

Dietary sodium restriction and blood pressure response to sympathetic blockade in young versus adolescent spontaneously hypertensive rats. Leenen FH, et al. **Can J Physiol Pharmacol** 1990 Jan;68(1):46–50

Hypotensive properties of antibodies directed against an endogenous pressor peptide isolated from rat blood. Todd DG, et al. **Can J Physiol Pharmacol** 1989 Dec;67(12):1580–5

Effect of dietary sodium intake on the pressor reactivity to angiotensin II in rats with experimental cirrhosis of the liver. Villamediana LM, et al. **Can J Physiol Pharmacol** 1989 Dec;67(12):1506–11

Dissociation between right atrial pressure and plasma atrial natriuretic factor following prolonged high salt intake. Widimsky J Jr, et al. **Can J Physiol Pharmacol** 1990 Mar; 68(3):408–12

Effects of chronic glyceryl trinitrate on left ventricular haemodynamics in a rat model of congestive heart failure: demonstration of a simple animal model for the study of in vivo nitrate tolerance. Bauer JA, et al. **Cardiovasc Res** 1990 Mar;24(3):198–203

Effect of changes in load on monophasic action potential and segment length of pig heart in situ. Dean JW, et al. **Cardiovasc Res** 1989 Oct;23(10):887–96

Effects of antihypertensive drugs on heart and resistance vessels. Kobayashi H, et al. **Cardiovasc Res** 1990 Feb; 24(2):137–43

Cardiorespiratory effects of D-Ala-2-Me-Phe-4-Met-(0)-ol enkephalin in the third ventricle, and in anterior hypothalamic and paraventricular areas of the rat brain. Rabkin SW. **Cardiovasc Res** 1989 Oct;23(10):904–12

Effects of opiates during baroreceptor and ergoreceptor induced changes in blood pressure. Williams CA. **Cardiovasc Res** 1989 Mar;23(3):191–9

The pressor hyperresponsiveness to phenylephrine unmasks sympathetic hypofunction in migraine. Boccuni M, et al. **Cephalalgia** 1989 Dec;9(4):239–45

The hypotensive effect and antifungal activity of 3,3'-dihydroxy-alpha,beta-diethyldiphenylethane. Inamori Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Nov;37(11):3137–8

The cardiovascular effects of inhaled fenoterol alone and during treatment with oral theophylline. Flatt A, et al. **Chest** 1989 Dec;96(6):1317–20

The hemodynamics and clinical effects of labetalol in hypotensive anesthesia. Lin YF, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Jan;45(1):7–14

Effect of protein intake on regional vascular resistance and reactivity to angiotensin II in the rat. Murray BM. **Circ Res** 1990 Aug;67(2):440–7

Thyrotropin-releasing hormone given intrathecally to the rat increases arterial pressure and heart rate. Yashpal K, et al. **Circ Res** 1989 Oct;65(4):859–68

Microvascular vasopressin effects during endotoxin shock in the rat. Baker CH, et al. **Circ Shock** 1990 Feb;30(2):81–95

Protective effects of a novel 21-aminosteroid during splanchnic artery occlusion shock. Johnson G 3d, et al. **Circ Shock** 1990 Feb;30(2):155–64

Characterization of hemodynamic, hematologic, and biochemical responses to administration of liposome-encapsulated hemoglobin in the conscious, freely moving rat. Rabinovici R, et al. **Circ Shock** 1989 Oct; 29(2):115–32

Dietary magnesium does not affect blood pressure in spontaneously hypertensive rats. Evans GH, et al. **Clin Exp Hypertens [A]** 1989;11(4):619–32

The effects of oestradiol administration on blood pressure and erythrocyte Na+ influx in oophorectomized rats. Flemming CL, et al. **Clin Exp Hypertens [A]** 1989; 11(7):1235–48

Effect of metoprolol on serial measurements of exchangeable sodium, blood pressure, renin and pulse rate in spontaneously hypertensive rats. Manhem PJ, et al. **Clin Exp Hypertens [A]** 1989;11(4):603–17

Effects of dopamine on blood pressure and heart rate after microinjection into the hypothalamus of spontaneously hypertensive and normotensive Wistar-Kyoto rats. Mok JS, et al. **Clin Exp Hypertens [A]** 1990;12(1):15–36

Central infusion of aldosterone increases blood pressure by mechanisms independent of Na retention. Peysner K, et al. **Clin Exp Hypertens [A]** 1990;12(3):399–414

The effect of dietary fish oil and long-term salt loading on blood pressure and eicosanoid metabolism in spontaneously hypertensive rats. Croft KD, et al. **Clin Exp Pharmacol Physiol** 1988 Apr;15(4):367–71

Effects of regular alcohol consumption on 24 hour ambulatory blood pressure recordings. Howes LG, et al. **Clin Exp Pharmacol Physiol** 1990 Apr;17(4):247–50

High salt diet ameliorates effects of angiotensin converting enzyme inhibition in spontaneously hypertensive streptozotocin diabetic rats. Jackson B, et al. **Clin Exp Pharmacol Physiol** 1990 Mar;17(3):229–34

Effects of autonomic blockade on the hypertensive response of the fetus to hyperosmolality. Kingsford NM, et al. **Clin Exp Pharmacol Physiol** 1989 Nov;16(11):873–83

Effects on sheep blood pressure of treatment with angiotensin, steroids and salt. Lumbers ER. **Clin Exp Pharmacol Physiol** 1990 Apr;17(4):315–9

N-methyl-D-aspartate receptors in the spinal cord mediate pressor responses to stimulation of the rostral ventrolateral medulla in the rat. Mills EH, et al. **Clin Exp Pharmacol Physiol** 1988 Feb;15(2):147–55

A lack of potency for the delta-opioid antagonist naltrindole after microinjection into the rostral ventrolateral medulla of rabbits. Morilak D, et al. **Clin Exp Pharmacol Physiol** 1990 Jul;17(7):527–30

Change in blood pressure in relation to change in nutrients effected by manipulation of dietary sodium and potassium. Nowson CA, et al. **Clin Exp Pharmacol Physiol** 1988 Mar; 15(3):225–42

An appraisal of the effects of usual vs recent alcohol intake on blood pressure. Puddey IB, et al. **Clin Exp Pharmacol Physiol** 1988 Apr;15(4):261–4

A factorial study of fat and fibre changes and sodium restriction on blood pressure of human hypertensive subjects. Sciarrone SE, et al. **Clin Exp Pharmacol Physiol** 1990 Mar;17(3):197–201

The effect of epanolol on intra-arterial ambulatory blood pressure and baroreceptor heart rate reflex in essential hypertension. Smith SA, et al. **Clin Exp Pharmacol Physiol** 1988 Apr;15(4):327–31

A 'hypertensinogenic' class of steroid hormone activity in man? Whitworth JA, et al. **Clin Exp Pharmacol Physiol** 1990 Mar;17(3):163–6

Effects of indomethacin on steroid-induced changes in pressor responsiveness in man. Whitworth JA, et al. **Clin Exp Pharmacol Physiol** 1988 Apr;15(4):305–10

Effect of fish oil feeding on blood pressure and vascular reactivity in spontaneously hypertensive rats. Yin K, et al. **Clin Exp Pharmacol Physiol** 1990 Mar;17(3):235–9

Effect of pure eicosapentaenoic acid feeding on blood pressure and vascular reactivity in spontaneously hypertensive rats. Yin K, et al. **Clin Exp Pharmacol Physiol** 1988 Apr;15(4):275–80

A study of the cardiopressor effects of lisuride in the treatment of parkinsonism and pathological aging brain. Micieli G, et al. **Clin Neuropharmacol** 1989 Oct; 12(5):404–15

Pharmacokinetic-pharmacodynamic relationships of alpha-adrenoceptor antagonists. Donnelly R, et al. **Clin Pharmacokinet** 1989 Oct;17(4):264–74 (57 ref.)

Predictability of antihypertensive responsiveness and alpha-adrenoceptor antagonism during prazosin treatment. Elliott HL, et al. **Clin Pharmacol Ther** 1989 Nov; 46(5):576–83

Clinical evaluation of a benzofuroquinolizine alpha 2-adrenoceptor antagonist. Gertz BJ, et al. **Clin Pharmacol Ther** 1989 Nov;46(5):566–75

Comparative effects of diltiazem sustained-release formulation and metoprolol on ambulatory blood pressure and plasma lipoproteins. Lacourcière Y, et al. **Clin Pharmacol Ther** 1990 Sep;48(3):318–24

The effect of hepatic cirrhosis on the pharmacokinetics and blood pressure response to nicardipine. Razak TA, et al. **Clin Pharmacol Ther** 1990 Apr;47(4):463–9

Pharmacoepidemiology of the effect of caffeine on blood pressure. Sharp DS, et al. **Clin Pharmacol Ther** 1990 Jan; 47(1):57–60

Pharmacokinetics and pharmacodynamics of dilevalol. Tenero DM, et al. **Clin Pharmacol Ther** 1989 Dec; 46(6):648–56

Diurnal blood pressure in patients with mild-to-moderate hypertension treated with once-daily benazepril hydrochloride. Weinberger MH, et al. **Clin Pharmacol Ther** 1990 May;47(5):608–17

The effect of high-dose short-term ibuprofen on antihypertensive control with hydrochlorothiazide. Wright JT, et al. **Clin Pharmacol Ther** 1989 Oct;46(4):440–4

Cardiovascular and metabolic response to adrenaline infusion in weight-losing patients with and without cancer. Drott C, et al. **Clin Physiol** 1989 Oct;9(5):427–39

Peptide histidine valine: its haemodynamic actions and pharmacokinetics in man differ from those of vasoactive intestinal peptide and peptide histidine methionine. Gill JS, et al. **Clin Sci** 1990 May;78(5):487–92

Effect of atrial natriuretic peptide on blood pressure, guanosine 3':5'-cyclic monophosphate release and blood volume in uraemic patients. Jespersen B, et al. **Clin Sci** 1990 Jan;78(1):67–73

Influence of raising maternal blood pressure with angiotensin II on utero-placental and feto-placental blood velocity indices in the human. Loquet P, et al. **Clin Sci** 1990 Jan; 78(1):95–100

The effects of enalapril on blood pressure, renal hemodynamics, and renal function. Weir MR. **Clin Ther** 1989 Sep-Oct;11(5):685–700 (78 ref.)

24-hour ambulatory blood pressure monitoring in the treatment of mild hypertension with isradipine. Cihák R, et al. **Cor Vasa** 1990;32(2 Suppl 1):54–60

Haemodynamic effect of prazosin during hyperosmolar mannitol load in essential hypertension. Pecháň J, et al. **Cor Vasa** 1989;31(6):467–75

Increased blood kynurenine level as a factor inhibiting the therapeutic effect of antihypertensive agents in combined long-term treatment of essential hypertension. Rudzite VK, et al. **Cor Vasa** 1990;32(1):56–63

Calcium does not augment phenylephrine's hypertensive effects. Butterworth JF 4th, et al. **Crit Care Med** 1990 Jun; 18(6):603–6

Intramuscular injection of chlorpromazine decreases intraocular pressure by lowering systemic blood pressure. Liu JH, et al. **Curr Eye Res** 1989 Dec;8(12):1315–21

The use of a calcium-channel blocker, nicardipine, for severely asphyxiated newborn infants. Levene MI, et al. **Dev Med Child Neurol** 1990 Jul;32(7):567–74

Long-term treatment with active vitamin D (alphacalcidol) in middle-aged men with impaired glucose tolerance. Effects on insulin secretion and sensitivity, glucose tolerance and blood pressure. Lind L, et al. **Diabetes Res** 1989 Jul;11(3):141–7

The cardiovascular and oncotic effects of albumin infusion in premature infants. Bignall S, et al. **Early Hum Dev** 1989 Dec;20(3–4):191–201

Correction of arterial blood pressure in adult rats with inherited stress-induced arterial hypertension by enhancement of catecholamine metabolism in early postnatal period. Naumenko EV, et al. **Endocrinol Exp** 1990 Mar;24(1–2):241–8

Differential central effects of mineralocorticoid and glucocorticoid agonists and antagonists on blood pressure. van den Berg DT, et al. **Endocrinology** 1990 Jan; 126(1):118–24

Acute haemodynamic effects of the beta 1-adrenoceptor partial agonist xamoterol at rest and during supine exercise in patients with left ventricular dysfunction due to ischaemic heart disease: a double-blind randomized trial. de Feyter PJ, et al. **Eur Heart J** 1990 Apr;11 Suppl A:48–9

Nitroglycerin has more favourable effects on left ventricular afterload than apparent from measurement of pressure in a peripheral artery. Kelly RP, et al. **Eur Heart J** 1990 Feb; 11(2):138–44

Effect of xamoterol on haemodynamics and plasma catecholamines in chronic heart failure. Ollivier JP, et al. **Eur Heart J** 1990 Apr;11 Suppl A:59–60

Coffee, blood pressure and plasma lipids: a randomized controlled trial. Burr ML, et al. **Eur J Clin Nutr** 1989 Jul; 43(7):477–83 (37 ref.)

Dose adjustment of nifedipine in hypertensive patients. Bacracheva N, et al. **Eur J Clin Pharmacol** 1990;38(1):17–20

Effects of low-dose atenolol on postural and postprandial changes in heart rate, blood pressure, venous plasma catecholamines, and plasma renin activity. de Mey C, et al. **Eur J Clin Pharmacol** 1989;37(2):121–5

A randomized double-blind study of bisoprolol versus atenolol in mild to moderate essential hypertension. Dixon MS, et al. **Eur J Clin Pharmacol** 1990;38(1):21–4

Pharmacokinetics and pharmacodynamics of the ace inhibitor benazepril hydrochloride in the elderly. Kaiser G, et al. **Eur J Clin Pharmacol** 1990;38(4):379–85

Blood-pressure-lowering effect of carvedilol vs nitrendipine in geriatric hypertensives. Krönig B, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S167–70

A comparison of the haemodynamic and hormonal effects of low and conventional dose cyclopenthiazide in normal volunteers. McVeigh GE, et al. **Eur J Clin Pharmacol** 1990; 38(4):351–7

Hypotensive and peripheral vascular effects in healthy volunteers of repeated oral administration of pinacidil. Saumet JL, et al. **Eur J Clin Pharmacol** 1989;37(5):527–9

Effect of imipramine treatment on changes in heart rate and blood pressure during postural and isometric handgrip tests. Yeragani VK, et al. **Eur J Clin Pharmacol** 1990; 38(2):139–44

The effect of ethanol on habituation and the cardiovascular response to stimulation in fetal sheep. Leader LR, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jul-Aug;

36(1-2):87-95
Effect of an angiotensin-converting enzyme inhibitor on blood pressure and erythropoiesis in rats. Gould AB, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):225-34
Biphasic blood pressure response to neuropeptide Y in anesthetized rats. Grundemar L, et al. **Eur J Pharmacol** 1990 Apr 10;179(1-2):83-7
Contribution of baroreceptor reflexes to blood pressure and sympathetic responses to cholecystokinin and vasoactive intestinal peptide in anesthetized dogs. Koyama S, et al. **Eur J Pharmacol** 1990 Jan 17;175(3):245-51
Influence of SQ 29,548 on vasoconstrictor responses in the mesenteric vascular bed of the cat. Minkes RK, et al. **Eur J Pharmacol** 1990 Apr 10;179(1-2):119-27
Effects of verapamil and carbon monoxide on blood pressure and heart mass in the spontaneously hypertensive rat. Penney DG, et al. **Eur J Pharmacol** 1990 Jun 21; 182(1):29-36
The role of alpha 1-adrenoceptor subtypes in the regulation of arterial blood pressure. Piascik MT, et al. **Eur J Pharmacol** 1990 May 16;180(2-3):381-6
Effects of MCI-154, a novel cardiotonic agent, on mean circulatory filling pressure in anesthetized dogs. Satoh N, et al. **Eur J Pharmacol** 1990 Jan 17;175(3):317-22
Effects of cronakalim, pinacidil and nicorandil on cardiac refractoriness and arterial pressure in open-chest dogs. Spinelli W, et al. **Eur J Pharmacol** 1990 Apr 25; 179(3):243-52
Effects of beta-agonist and antagonist on the pulmonary circulation and the pulmonary pressor response to 5-HT. Takashio T, et al. **Eur J Pharmacol** 1989 Oct 4; 169(1):179-82
Beneficial effect of an ACTH-(4-9) analog on peripheral neuropathy and blood pressure response to tyramine in streptozocin diabetic rats. Van der Zee CE, et al. **Eur J Pharmacol** 1990 Feb 27;177(3):211-3
The l-enantiomer of nebivolol potentiates the blood pressure lowering effect of the d-enantiomer. Xhonneux R, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):261-5
N-methyl D-aspartate (NMDA) evoked changes in blood pressure and heart rate from the rat superior colliculus. Keay KA, et al. **Exp Brain Res** 1990;80(1):148-56
Excitatory amino acid receptors in the caudal ventrolateral medulla mediate a vagal cardiopulmonary reflex in the rat. Verberne AJ, et al. **Exp Brain Res** 1989;78(1):185-92
The effect of antihypertensive treatment on kidney function in insulin-dependent (type I) diabetics with renal failure. Zander E, et al. **Exp Clin Endocrinol** 1990 Feb;95(1):70-6
Effects of dextronatrin on blood pressure, hematocrit, urinary sodium excretion and sympathetic nerve activity of rats. Flückiger JP, et al. **Fundam Clin Pharmacol** 1990; 4(2):129-39
Effects of jian bu wan--a traditional Chinese medication on behavioral and cardiovascular parameters after acute alcohol intake in normal subjects. Frisk-Holmberg M, et al. **Fundam Clin Pharmacol** 1990;4(1):11-5
Acute effect of parathyroid hormone-(1-34) fragment on blood pressure in rats fed a low calcium diet. Togari A, et al. **Gen Pharmacol** 1990;21(4):547-9
Impact of caffeine and psychological stress on blood pressure in black and white men. Myers HF, et al. **Health Psychol** 1989;8(5):597-612
The effects of intracerebroventricularly administered angiotensin II on blood pressure and cochlear blood flow in rats and guinea pigs. Flynn AJ, et al. **Hear Res** 1989 Sep;41(2-3):249-54
Cochlear blood flow autoregulation in Wistar-Kyoto rats. Quirk WS, et al. **Hear Res** 1989 Aug;41(1):53-60
Effect of ouabain on the relation between left ventricular oxygen consumption and systolic pressure-volume area (PVA) in dog heart. Wu DQ, et al. **Heart Vessels** 1989; 5(1):17-24
Anesthesia and pressor responsiveness in chronic bile-duct-ligated dogs. Bomzon A, et al. **Hepatology** 1990 Apr;11(4):551-6
Aldosterone and pressor responses to angiotensin II in primary hyperparathyroidism. Fallo F, et al. **Horm Metab Res** 1989 Aug;21(8):457-9
Effect of insulin pump therapy on blood pressure and the renin-angiotensin system of diabetic rats. Hartmann JF, et al. **Horm Metab Res** 1990 Mar;22(3):141-4
Reversal by ethanol of the hypotensive effect of clonidine in conscious spontaneously hypertensive rats. Abdel-Rahman AA. **Hypertension** 1989 Nov;14(5):531-41
Enalapril can prevent vascular amplifier development in spontaneously hypertensive rats. Adams MA, et al. **Hypertension** 1990 Sep;16(3):252-60
Relative contributions of dietary Na+ and Cl- to salt-sensitive hypertension. Boegehold MA, et al. **Hypertension** 1989 Dec;14(6):579-83 (33 ref.)
Prolonged duration of blood pressure response to enalkiren, the novel dipeptide renin inhibitor, in essential hypertension. Boger RS, et al. **Hypertension** 1990 Jun;15(6 Pt 2):835-40
Reversal of hyperreactivity to bradykinin in renal hypertensive rats. Camacho AA, et al. **Hypertension** 1990 Feb;15(2 Suppl):I140-3
Pressor response to norepinephrine in essential hypertension. A study in families. De Lima JJ, et al. **Hypertension** 1990 Feb;15(2 Suppl):I137-9
Perinatal salt intake alters blood pressure and salt balance in hypertensive rats [published erratum appears in **Hypertension** 1990 Jun;15(6 Pt 1):664] Di Nicolantonio R, et al. **Hypertension** 1990 Feb;15(2):177-82
Systemic and regional hemodynamics in patients with salt-sensitive hypertension. Fujita T, et al. **Hypertension** 1990 Sep;16(3):235-44
Aspirin lowers blood pressure in patients with renovascular hypertension. Imanishi M, et al. **Hypertension** 1989 Nov; 14(5):461-8
Relation between renin release and blood pressure response to nonsteroidal anti-inflammatory drugs in hypertension. Jackson EK. **Hypertension** 1989 Nov;14(5):469-71
Atrial natriuretic factor prevents NaCl-sensitive hypertension in spontaneously hypertensive rats. Jin HK, et al. **Hypertension** 1990 Feb;15(2):170-6
Role of epinephrine in the development of hypertension in Dahl salt-sensitive rats. Johnson MD, et al. **Hypertension** 1990 Sep;16(3):282-9
Blood pressure in spontaneously hypertensive rats fed butterfat, corn oil, or fish oil. Karanja N, et al. **Hypertension** 1989 Dec;14(6):674-9
Altered pituitary hormone response to naloxone in hypertension development. McCubbin JA, et al. **Hypertension** 1989 Dec;14(6):636-44
Brain kinins are responsible for the pressor effect of intracerebroventricular captopril in spontaneously hypertensive rats [see comments] Madeddu P, et al. **Hypertension** 1990 Apr;15(4):407-12 Comment in: Hypertension 1990 Apr;15(4):413-4.
Characteristics of pressor response to endothelin in spontaneously hypertensive and Wistar-Kyoto rats. Miyauchi T, et al. **Hypertension** 1989 Oct;14(4):427-34
Hyperinsulinemia and the aldosterone and pressor responses to angiotensin II. Rocchini AP, et al. **Hypertension** 1990 Jun;15(6 Pt 2):861-6
High sodium chloride diets injure arteries and raise mortality without changing blood pressure. Tobian L, et al. **Hypertension** 1990 Jun;15(6 Pt 2):900-3
Effect of decaffeinated versus regular coffee on blood pressure. A 12-week, double-blind trial. van Dusseldorp M, et al. **Hypertension** 1989 Nov;14(5):563-9
Deuterium oxide normalizes blood pressure and vascular calcium uptake in Dahl salt-sensitive hypertensive rats. Vasdev S, et al. **Hypertension** 1990 Feb;15(2):183-9
Hypothalamic GABA and sympathetic regulation in spontaneously hypertensive rats. Wible JH Jr, et al. **Hypertension** 1989 Dec;14(6):623-8
Role of endogenous brain kinins in the cardiovascular response to intracerebroventricular melittin. Yang XP, et al. **Hypertension** 1989 Dec;14(6):629-35
Failure of reversal of cardiovascular responses of clonidine by centrally administered naloxone in anaesthetised rats. Srivastava RK, et al. **Indian J Exp Biol** 1989 Jul; 27(7):628-30
Role of dopaminergic system in opioid-induced cardiovascular responses in dogs. Agarwal RK, et al. **Indian J Med Sci** 1989 Dec;43(12):323-8
Central actions of angiotensin II on heart rate and blood pressure in mongrel dogs. Singh RJ, et al. **Indian J Med Sci** 1989 Aug;43(8):205-9
A clinical study of effect of oral atenolol on normal intraocular pressure and systemic blood pressure. Chauhan JK, et al. **Indian J Ophthalmol** 1989 Oct-Dec;37(4):179-81
Effects on casual and 24-h ambulatory blood pressure of slow-release nicardipine and chlorthalidone in arterial essential hypertension: double-blind, crossover study. Celentano A, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 May;28(5):190-6
Serum concentrations of phenylpropanolamine and associated effects on blood pressure in normotensive subjects: a pilot-study. Dowse R, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 May;28(5):205-10
Ketanserin in chronic treatment of hypertension in type 2 diabetes mellitus. Fogari R, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 May;28(5):218-22
Time course of cardiac performance in hypertensive patients after verapamil assessed by nuclear ventriculography. González-Gómez A, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 Jul;28(7):292-7
The effect of phenylpropanolamine on blood pressure during upright bicycle exercise in normal subjects. Davies SF, et al. **Int J Obes** 1989;13(4):505-10
Aerobic physical training and alterations in pressor response during norepinephrine infusion: a controlled single-subject experiment. Morrell EM, et al. **Int J Sports Med** 1990 Feb; 11(1):53-7
Long posterior ciliary arterial blood flow and systemic blood pressure. Okubo H, et al. **Invest Ophthalmol Vis Sci** 1990 May;31(5):819-26
Relationship of dietary fat to plasma fatty acids, blood pressure, and urinary eicosanoids in adult men. Judd JT, et al. **J Am Coll Nutr** 1989 Oct;8(5):386-99
The effects of omega-3 polyunsaturated fatty acids on blood pressure: a methodologic analysis of the evidence. Radack K, et al. **J Am Coll Nutr** 1989 Oct;8(5):376-85
The effect of dietary salt ingestion on blood pressure of old-old subjects. A double-blind, placebo-controlled, crossover trial. Palmer RM, et al. **J Am Geriatr Soc** 1989 Oct;37(10):931-6
Concerned about intravenous use of doxycycline in horses [letter] Riond JL, et al. **J Am Vet Med Assoc** 1989 Oct 1;195(7):846, 848
Time-dependent changes in cardiovascular regulation caused by chronic tobacco smoke exposure. Bennett CH, et al. **J Appl Physiol** 1990 Jan;68(1):248-52
Influences of exogenous insulin on arterial blood pressure measurements of the rat. Edwards JG, et al. **J Appl Physiol** 1989 Dec;67(6):2335-42
Attenuation of reflex pressor and ventilatory responses to static muscular contraction by intrathecal opioids. Hill JM, et al. **J Appl Physiol** 1990 Jun;68(6):2466-72
Fetal breathing, sleep state, and cardiovascular responses to adenosine in sheep. Koos BJ, et al. **J Appl Physiol** 1990 Feb;68(2):489-95
Effect of hindlimb suspension on cardiovascular responses to sympathomimetics and lower body negative pressure. Overton JM, et al. **J Appl Physiol** 1990 Jan;68(1):355-62
Age-related differences in the depressor responses to sodium nitroprusside and nifedipine in anaesthetized rats. Docherty JR. **J Auton Pharmacol** 1990 Feb;10(1):49-53
Plasma concentration vs. effect relationship for felodipine. Blychert E, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 4:S57
The efficacy of different felodipine formulations: a comparison using 24-h blood pressure monitoring. Blychert E, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 4:S58
Isotonic and isometric responses of blood pressure and heart rate in mild to moderate hypertension with isradipine and propranolol. Cantor A, et al. **J Cardiovasc Pharmacol** 1990; 15 Suppl 1:S76-8
Nicardipine decreases blood pressure and heart rate at nucleus tractus solitarii of spontaneously hypertensive rats. Champéroux P, et al. **J Cardiovasc Pharmacol** 1989 Nov; 14(5):694-8
Effects of Ro 40-5967, a novel calcium antagonist, on myocardial function during ischemia induced by lowering coronary perfusion pressure in dogs: comparison with verapamil. Clozel JP, et al. **J Cardiovasc Pharmacol** 1989 Nov;14(5):713-21
Blood pressure lowering and renal hemodynamic effects of fosinopril in conscious animal models. DeForrest JM, et al. **J Cardiovasc Pharmacol** 1990 Jul;16(1):139-46
Vascular pressor responses in treated and untreated essential hypertension. Donnelly R, et al. **J Cardiovasc Pharmacol** 1990 Aug;16(2):191-6
Differences in the central hypotensive actions of alpha-methyldopa and clonidine in the spontaneously hypertensive rat: contribution of neurons arising from the B3 and the C1 areas of the rostral ventrolateral medulla. Drolet G, et al. **J Cardiovasc Pharmacol** 1990 Jan; 15(1):118-23
Effects of swim training alone and in combination with clonidine and rilmenidine on blood pressure, plasma electrolytes, vasopressin, and renin activity in spontaneously hypertensive rats. Ghaemmaghami F, et al. **J Cardiovasc Pharmacol** 1990 Jan;15(1):68-74
Vascular responses to dopamine and dobutamine in the awake calf during constant aortic flow or constant aortic pressure. Greiner AS, et al. **J Cardiovasc Pharmacol** 1990 Mar; 15(3):392-7
Long-term effects of felodipine on blood pressure and renal hemodynamics in severe hypertension. Herlitz H, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 4:S100-2
Sympathetic inhibition and vasopressin mediation during centrally induced responses to serotonin in rats. Inoue A, et al. **J Cardiovasc Pharmacol** 1989 Jun;13(6):902-7
Effect of intrathecal amino acid receptor antagonists on basal blood pressure and pressor responses to brainstem stimulation in normotensive and hypertensive rats. Mills E, et al. **J Cardiovasc Pharmacol** 1990 Jun;15(6):877-83
Effects of atrial natriuretic factor on pressor responsiveness to angiotensin II, norepinephrine, and vasopressin in conscious sheep. Parkes DG, et al. **J Cardiovasc Pharmacol** 1990 Jan;15(1):16-21
Effects of captopril on blood pressure and respiratory function compared to verapamil in patients with hypertension and asthma. Riska H, et al. **J Cardiovasc Pharmacol** 1990 Jan;15(1):57-61
Systemic and regional hemodynamic interactions of perindopril and nitrendipine in the spontaneously hypertensive rat. Scalbert E, et al. **J Cardiovasc Pharmacol** 1990 Apr;15(4):676-83
Renal and depressor effects of SQ 29,072, a neutral endopeptidase inhibitor, in conscious hypertensive rats. Seymour AA, et al. **J Cardiovasc Pharmacol** 1990 Jul; 16(1):163-72
Timing of blood pressure measurements in determining anomalies in duration of effect of an antihypertensive drug: assessment of isradipine. Stokes GS, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S65-9
Vascular calcium overload produced by administration of vitamin D3 and nicotine in rats. Changes in tissue calcium levels, blood pressure, and pressor responses to electrical stimulation or norepinephrine in vivo. Thorin E, et al. **J Cardiovasc Pharmacol** 1990 Aug;16(2):257-66
Hypotensive effects of angiotensin II analogues and angiotensin converting enzyme inhibitors in water-deprived Brattleboro rats. Tomlinson KC, et al. **J Cardiovasc Pharmacol** 1990 Apr;15(4):562-8
Enhanced presynaptic beta 2-adrenoceptor-mediated facilitation of the pressor responses in the prehypertensive SHR. Tsuji T, et al. **J Cardiovasc Pharmacol** 1989 Nov; 14(5):737-46
Interaction with pyridoxal as a possible mechanism of hydralazine hypotension. Vidrio H.

J Cardiovasc Pharmacol 1990 Jan;15(1):150–6

Alcohol intake and blood pressure in young adults: the CARDIA Study. Dyer AR, et al. J Clin Epidemiol 1990; 43(1):1–13

Effect of heme arginate administration on blood pressure in spontaneously hypertensive rats. Levere RD, et al. J Clin Invest 1990 Jul;86(1):213–9

A comparison of the anti-hypertensive effectiveness of two triameterene/hydrochlorothiazide combinations: Maxzide versus Dyazide. Casner PR, et al. J Clin Pharmacol 1990 Aug;30(8):715–9

Noninvasive blood pressure monitoring at the finger for studying short lasting pressor responses in man. Christen Y, et al. J Clin Pharmacol 1990 Aug;30(8):711–4

Betaxolol: a new long-acting beta 1-selective adrenergic blocker. Frishman WH, et al. J Clin Pharmacol 1990 Aug; 30(8):686–92

ACE inhibition and pressor responsiveness to norepinephrine in hypertensive patients. Malini PL, et al. J Clin Pharmacol 1990 May;30(5):422–4

Altered hemodynamic response to isosorbide dinitrate in essential hypertension. Pannier BM, et al. J Clin Pharmacol 1990 Feb;30(2):127–32

Comparison of labetalol and hydrochlorothiazide in elderly patients with hypertension using 24-hour ambulatory blood pressure monitoring. Weidler DJ, et al. J Clin Pharmacol 1990 Jun;30(6):524–32

Preliminary observations of the acute effects of selective serum thromboxane inhibition and angiotensin converting enzyme inhibition on blood pressure and renal hemodynamics in hypertensive humans. Weir MR, et al. J Clin Pharmacol 1989 Dec;29(12):1108–16

Evaluation of the clinical pharmacology of nilvadipine in patients with mild to moderate essential hypertension. Weir MR, et al. J Clin Pharmacol 1990 May;30(5):425–37

Monosodium glutamate and tranylcypromine administration in healthy subjects. Balon R, et al. J Clin Psychiatry 1990 Jul;51(7):303–6

Lesion of the subfornical organ affects the haemotensive response to centrally administered relaxin in anaesthetized rats. Mumford AD, et al. J Endocrinol 1989 Sep; 122(3):747–55

Effect of anatoxin-a(s) from Anabaena flos-aquae NRC-525-17 on blood pressure, heart rate, respiratory rate, tidal volume, minute volume, and phrenic nerve activity in rats. Cook WO, et al. J Environ Pathol Toxicol Oncol 1989 Dec;9(5–6):393–400

Coffee consumption and blood pressure: a randomized, crossover clinical trial. Rosmarin PC, et al. J Gen Intern Med 1990 May-Jun;5(3):211–3

Reduction of portal pressure by acute administration of furosemide in patients with alcoholic cirrhosis. Cereda JM, et al. J Hepatol 1989 Sep;9(2):246–51

Haemodynamic effect of triglycyl-lysine-vasopressin (glypressin) on intravascular oesophageal variceal pressure in patients with cirrhosis. A randomized placebo controlled trial. Cestari R, et al. J Hepatol 1990 Mar;10(2):205–10

A randomized study on coffee and blood pressure. Bak AA, et al. J Hum Hypertens 1990 Jun;4(3):259–64

Cardiovascular responses to physical exercise and tyramine infusion in hypertensive and normotensive subjects. Colombo F, et al. J Hum Hypertens 1989 Aug;3(4):245–9

Interactions between indices of calcium metabolism and blood pressure during calcium infusion in humans. Hvarfner A, et al. J Hum Hypertens 1989 Aug;3(4):211–20

Effects of dilevalol, propranolol and placebo on retinal blood flow, blood pressure and heart rate: a double-blind study. Hyer SL, et al. J Hum Hypertens 1990 Jun;4 Suppl 2:63

First-dose effects of enalapril and atenolol upon blood pressure and cerebral blood flow in patients with mild hypertension on diuretic therapy. Kamlow F, et al. J Hum Hypertens 1990 Jun;4(3):281–5

The effects of indomethacin and sulindac upon the blood pressures of individuals with untreated labile or mild hypertension. Lewis RV, et al. J Hum Hypertens 1989 Aug; 3(4):233–7

Effects of nitrendipine and atenolol on blood pressure and intracellular sodium in hypertensive blacks. Lijnen P, et al. J Hum Hypertens 1990 Apr;4(2):85–7

Blood pressure and lipid lowering effects of terazosin. Rosenthal J. J Hum Hypertens 1989 Dec;3 Suppl 2:85–9; discussion 90–1 (12 ref.)

Effects of dietary oleic, linoleic and alpha-linolenic acids on blood pressure, serum lipids, lipoproteins and the formation of eicosanoid precursors in patients with mild essential hypertension. Singer P, et al. J Hum Hypertens 1990 Jun;4(3):227–33

Dilevalol: a dose-response study in normal volunteers. Walden RJ, et al. J Hum Hypertens 1990 Jun;4 Suppl 2:69–75

Association of magnesium deficiency with the blood pressure-lowering effects of calcium. Evans GH, et al. J Hypertens 1990 Apr;8(4):327–37

Cardiovascular, renal and endocrine effects of alpha-human atrial natriuretic peptide in patients with Cushing's syndrome and primary aldosteronism. Fujio N, et al. J Hypertens 1989 Aug;7(8):653–9

Sexual dimorphism of blood pressure in spontaneously hypertensive rats: effects of anti-androgen treatment. Ganten U, et al. J Hypertens 1989 Sep;7(9):721–6

Control of arterial pressure and renal function during chronic renin inhibition. Hall JE, et al. J Hypertens 1990 Apr; 8(4):351–9

Effect of calcium on blood pressure, platelet aggregation and erythrocyte sodium transport in Dahl salt-sensitive rats. Kang JS, et al. J Hypertens 1990 Mar;8(3):245–50

Do angiotensin converting enzyme inhibitors lower blood pressure in the rat partly via the humorally mediated antihypertensive system of the renal medulla? Karlström G, et al. J Hypertens 1990 Jun;8(6):501–13

Sodium bicarbonate and sodium chloride: effects on blood pressure and electrolyte homeostasis in normal and hypertensive man. Luft FC, et al. J Hypertens 1990 Jul; 8(7):663–70

Acute hypotensive responses to peptide inhibitors of renin in conscious monkeys: an effect on blood pressure independent of plasma renin inhibition. Schaffer LW, et al. J Hypertens 1990 Mar;8(3):251–9

Cardiovascular effects of vasopressin micro-injections into the nucleus tractus solitarii in normotensive and hypertensive rats. Sonntag M, et al. J Hypertens 1990 May; 8(5):417–21

Lack of effect of fish oil supplementation on blood pressure in treated hypertensives. Wing LM, et al. J Hypertens 1990 Apr;8(4):339–43

Biochemical effects of prolonged renin inhibition in marmosets. Wood JM, et al. J Hypertens 1989 Aug; 7(8):615–8

Effects of intracerebroventricular atrial natriuretic factor on angiotensin II- or sodium-induced blood pressure elevation and natriuresis. Yoshida K, et al. J Hypertens 1989 Aug; 7(8):639–43 (25 ref.)

Effects of a chronic high salt intake on blood pressure and the kinetics of sodium and potassium transport in erythrocytes of young and adult subtotally nephrectomized Sprague–Dawley rats. Zicha J, et al. J Hypertens 1990 Mar; 8(3):207–17

Renin inhibition with A-64662: effect on blood pressure and hormonal response in man. Bursztyn M, et al. J Hypertens Suppl 1989 Dec;7(6):S306–7

Reduction of blood pressure in obese hyperinsulinaemic hypertensive patients during somatostatin infusion. Carretta R, et al. J Hypertens Suppl 1989 Dec;7(6):S196–7

Osmoregulation of vasopressin during acute lowering of arterial pressure by clonidine in moderate hypertension. Del Bo A, et al. J Hypertens Suppl 1989 Dec;7(6):S200–1

Aldosterone and pressor responses to angiotensin II in primary hyperparathyroidism. Fallo F, et al. J Hypertens Suppl 1989 Dec;7(6):S192–3

Effects of alcohol intake on blood pressure and sympathetic nerve activity in normotensive humans: a preliminary report. Grassi GM, et al. J Hypertens Suppl 1989 Dec; 7(6):S20–1

Role of corticosteroids in the diurnal rhythm of blood pressure. Jyothinagaram SG, et al. J Hypertens Suppl 1989 Dec;7(6):S68–9

Angiotensin converting enzyme inhibition lowers blood pressure in patients with primary autonomic failure independently of plasma renin levels and sympathetic nervous activity. Kooner JS, et al. J Hypertens Suppl 1989 Dec;7(6):S42–3

The effects of daily sodium intake on the relationship of blood pressure, renal plasma flow and natriuresis in essential hypertension. Lasaridis AN, et al. J Hypertens Suppl 1989 Dec;7(6):S180–1

Blood pressure elevation caused by inhibition of brain glutathione reductase. Murakami E, et al. J Hypertens Suppl 1989 Dec;7(6):S24–5

Effect of cyclosporine on blood pressure and renal function of recent type 1 diabetes mellitus. Ribstein J, et al. J Hypertens Suppl 1989 Dec;7(6):S198–9

Characterization of the renal effects of an intravenous calcium gluconate infusion in normotensive volunteers. Ruilope LM, et al. J Hypertens Suppl 1989 Dec;7(6):S170–1

How much should blood pressure be lowered? The problem of the J-shaped curve [clinical conference] Zanchetti A, et al. J Hypertens Suppl 1989 Dec;7(6):S338–48

Comparison of slow-release piretanide and bendroflumethiazide in the treatment of mild to moderate hypertension. Hegbrant J, et al. J Int Med Res 1989 Sep-Oct;17(5):426–34

Effects of a new fluid fish oil concentrate, ESKIMO-3, on triglycerides, cholesterol, fibrinogen and blood pressure. Haglund O, et al. J Intern Med 1990 May;227(5):347–53

Dihydropyrimidines: novel calcium antagonists with potent and long-lasting vasodilative and antihypertensive activity. Cho H, et al. J Med Chem 1989 Oct;32(10):2399–406

Synthesis and biological evaluation of substituted benzo[h]cinnolinones and 3H-benzo[6,7]cyclohepta[1,2-c]pyridazinones: higher homologues of the antihypertensive and antithrombotic 5H-indeno[1,2-c]pyridazinones. Cignarella G, et al. J Med Chem 1989 Oct;32(10):2277–82

1-(Thienylalkyl)imidazole-2(3H)-thiones as potent competitive inhibitors of dopamine beta-hydroxylase. McCarthy JR, et al. J Med Chem 1990 Jul;33(7):1866–73

Water-soluble renin inhibitors: design of a subnanomolar inhibitor with a prolonged duration of action. Rosenberg SH, et al. J Med Chem 1990 Jul;33(7):1962–9

Blood pressure and sympathetic activity in spontaneously hypertensive rats during food restriction. Gradin K, et al. J Neural Transm Gen Sect 1990;79(3):183–91

Tyramine potentiation during treatment with MAO inhibitors: brofaromine and moclobemide vs irreversible inhibitors. Bieck PR, et al. J Neural Transm Suppl 1989; 28:21–31

Effect of nicardipine on the relationship of renal blood flow and of renal vascular resistance to perfusion pressure in dog kidney. Ogawa N. J Pharm Pharmacol 1990 Feb; 42(2):138–40

Alpha-blockade on blood pressure and on cardiac noradrenaline content in SHR and DOCA-salt rats. Sanchez A, et al. J Pharm Pharmacol 1989 Aug;41(8):545–8

Bromocriptine-induced decrease in blood pressure in conscious spontaneously hypertensive rats: evidence for a peripheral site of action. van den Buuse M, et al. J Pharm Pharmacol 1989 Sep;41(9):644–6

Systemic effects of carteolol, a beta-adrenoceptor antagonist in stroke-prone spontaneously hypertensive rats. Yamashita K, et al. J Pharmacobiodyn 1990 Jan;13(1):64–9

Role of aminopeptidase activity in the regulation of the pressor activity of circulating angiotensins. Ahmad S, et al. J Pharmacol Exp Ther 1990 Feb;252(2):643–50

Kinin antagonist does not protect against the hypotensive response to endotoxin, anaphylaxis or acute pancreatitis. Berg T, et al. J Pharmacol Exp Ther 1989 Nov;251(2):731–4

Effects of nebivolol, atenolol and propranolol on in vivo cardiovascular and metabolic responses to isoproterenol in dogs. Bowden CR, et al. J Pharmacol Exp Ther 1989 Nov; 251(2):599–605

Role of imidazole receptors in the vasodepressor response to clonidine analogs in the rostral ventrolateral medulla. Ernsberger P, et al. J Pharmacol Exp Ther 1990 Apr; 253(1):408–18

Effects of paraventricular hypothalamic microinfusions of kainic acid on cardiovascular and renal excretory function in conscious rats. Jin CB, et al. J Pharmacol Exp Ther 1989 Dec;251(3):969–75

Selective pressor enhancement by monoamine oxidase inhibitors in conscious rats. Kerecsen L, et al. J Pharmacol Exp Ther 1989 Nov;251(2):645–9

Characterization of the effects of activation of ventral medullary serotonin receptor subtypes on cardiovascular activity and respiratory motor outflow to the diaphragm and larynx. King KA, et al. J Pharmacol Exp Ther 1990 Feb;252(2):665–74

Sympathoadrenal, cardiovascular and blood gas responses to highly selective mu and delta opioid peptides. Kiritsy-Roy JA, et al. J Pharmacol Exp Ther 1989 Dec; 251(3):1096–103

Enhanced slow-pressor response to angiotensin II in spontaneously hypertensive rats. Li P, et al. J Pharmacol Exp Ther 1989 Dec;251(3):909–21

Depressor and natriuretic effects of M&B 22,948, a guanosine cyclic 3',5'-monophosphate-selective phosphodiesterase inhibitor. McMahon EG, et al. J Pharmacol Exp Ther 1989 Dec;251(3):1000–5

Effect of an alkylating analog of prazosin on alpha-1 adrenoceptor subtypes and arterial blood pressure. Piascik MT, et al. J Pharmacol Exp Ther 1989 Dec;251(3):878–83

Pharmacological characterization of alpha adrenoceptors involved in the antinociceptive and cardiovascular effects of intrathecally administered clonidine. Solomon RE, et al. J Pharmacol Exp Ther 1989 Oct;251(1):27–38

Comparison between the vasoactive actions of endothelin and arginine vasopressin in pithed rats after pretreatment with BAY K 8644, nifedipine or pertussis toxin. Tabrizchi R, et al. J Pharmacol Exp Ther 1990 Apr;253(1):272–6

The role of central and autonomic neural mechanisms in the cardiovascular effects of cocaine in conscious squirrel monkeys. Tella SR, et al. J Pharmacol Exp Ther 1990 Feb; 252(2):491–9

Centrally active antimuscarinic analogs of oxotremorine selectively block physostigmine-induced hypertension, but not peripheral muscarinic vasodepression. Vargas HM, et al. J Pharmacol Exp Ther 1990 Apr;253(1):165–70

Hemodynamic effects of adenosine agonists in the conscious spontaneously hypertensive rat. Webb RL, et al. J Pharmacol Exp Ther 1990 Sep;254(3):1090–9

Nonpeptide angiotensin II receptor antagonists. IX. Antihypertensive activity in rats of DuP 753, an orally active antihypertensive agent. Wong PC, et al. J Pharmacol Exp Ther 1990 Feb;252(2):726–32

Cardiorespiratory effects induced by acetazolamide on the ventromedullary surface of the cat. Andreatta-van Leyen S, et al. J Physiol (Lond) 1990 Feb;421:171–84

Central and peripheral effects of the peptide ANF on renal function and blood pressure in hypertensive rats. al-Barazanji K, et al. J Physiol (Lond) 1989 Nov;418:261–71

The renal and vascular effects of central angiotensin II and atrial natriuretic factor in the anaesthetized rat. Al-Barazanji KA, et al. J Physiol (Lond) 1990 Apr; 423:485–93

Vasopressin-induced natriuresis in the conscious rat: role of blood pressure, renal prostaglandin synthesis and the peptide ANF. Lote CJ, et al. J Physiol (Lond) 1989 Apr; 411:481–91

Autonomic blockade and cardiovascular responses to static exercise in partially curarized man. Mitchell JH, et al. J Physiol (Lond) 1989 Jun;413:433–45

Some determinants of papaverine-induced femoral artery pressure gradients. Archie JP Jr. J Surg Res 1990 Mar; 48(3):211–6

Improvement in post-traumatic spinal cord blood flow with a combination of a calcium channel blocker and a vasopressor. Guha A, et al. J Trauma 1989 Oct;

29(10):1440–7
Central and peripheral alpha–adrenoceptor actions of amitraz in the dog. Cullen LK, et al. **J Vet Pharmacol Ther** 1990 Mar;13(1):86–92
The effects of jingsongling, a xylazine analog, on mean arterial blood pressure and heart rate in dogs—influences of yohimbine, tolazoline, prazosin, and atropine. Hsu WH, et al. **J Vet Pharmacol Ther** 1989 Sep;12(3):283–8
The cardiorespiratory effects of intrathecal xylazine in the conscious rabbit. Nolan AM, et al.
J Vet Pharmacol Ther 1990 Mar;13(1):29–35
Cardiovascular effects of detomidine, a new alpha 2-adrenoceptor agonist, in the conscious pony. Sarazan RD, et al. **J Vet Pharmacol Ther** 1989 Dec;12(4):378–88
The pressor effect of phenylpropanolamine [letter] Pentel P, et al. **JAMA** 1989 Nov 3;262(17):2386–7
Differential vasodilator effect of nitroglycerin on systemic capacitance and resistance vessels in anesthetized dogs, and the mechanism of its action—a study by measuring mean circulatory pressure and total peripheral resistance. Nagata K, et al. **Jpn Circ J** 1989 Nov;53(11):1371–81
Suppression of the renin–angiotensin system induced by streptozotocin treatment in neonatal spontaneously hypertensive rats. Takata Y, et al. **Jpn Circ J** 1990 Feb; 54(2):192–200
Pharmacological analysis of cardiac effects of a central cholinergic agent, WEB 1881–FU, in isolated canine heart preparations. Chiba S, et al. **Jpn Heart J** 1990 Mar; 31(2):217–25
Effect of sodium intake on the hypotensive effect of calcium antagonists. Sakurai J, et al. **Jpn Heart J** 1989 Nov; 30(6):841–51
Complicated central effects of endothelin on blood pressure in rats. Minamisawa K, et al. **Jpn J Physiol** 1989; 39(6):825–32
Renal nerve blunts natriuretic and diuretic response to atrial natriuretic peptide in conscious rabbits. Morita H, et al. **Jpn J Physiol** 1989;39(6):931–41
Reduced angiotensin receptors and pressor responses in hypotensive hemodialysis patients. Moore TJ, et al.
Kidney Int 1989 Oct;36(4):696–701
Dietary linoleic acid deprivation: an experimental model of salt–sensitive hypertension. Düsing R, et al.
Klin Wochenschr 1990;68 Suppl 20:4–10
Dietary fat and blood pressure in humans. Iacono JM, et al. **Klin Wochenschr** 1990;68 Suppl 20:23–32 (37 ref.)
Polyunsaturated fatty acids and cardiovascular function in man. Knapp HR. **Klin Wochenschr** 1990;68 Suppl 20:33–9 (47 ref.)
Does a high P/S ratio diet lower blood pressure? Margetts BM. **Klin Wochenschr** 1990;68 Suppl 20:11–5 (31 ref.)
Blood pressure–lowering effect of mackerel diet. Singer P. **Klin Wochenschr** 1990;68 Suppl 20:40–8 (71 ref.)
Effects of antihypertensive agents on blood pressure and the progress of renal failure in partially nephrectomized spontaneously hypertensive rats. Katsumata H, et al.
Lab Invest 1990 Apr;62(4):474–80
Blood pressure, stroke, and coronary heart disease. Part 2, Short–term reductions in blood pressure: overview of randomised drug trials in their epidemiological context [see comments] Collins R, et al. **Lancet** 1990 Apr 7; 335(8693):827–38 (84 ref.) Comment in: Lancet 1990 Jun 23;335(8704):1534–5.
Cardiorenal actions of endothelin, Part I: Effects of converting enzyme inhibition. Cao LQ, et al. **Life Sci** 1990; 46(8):577–83
Cardiorenal actions of endothelin, Part II: Effects of cyclooxygenase inhibitors. Cao LQ, et al. **Life Sci** 1990; 46(8):585–90
Lack of a difference between ketanserin and ritanserin in central vs. peripheral serotonin receptor antagonism. Cohen ML, et al. **Life Sci** 1989;45(13):1185–9
Central mechanisms of action involved in cocaine–induced tachycardia. Jones LF, et al. **Life Sci** 1990;46(10):723–8
Biphasic pattern of hypersensitivity following acute propranolol withdrawal in normal subjects. Krukemyer JJ, et al. **Life Sci** 1989;45(17):1547–51
Increased pressor effect of repeated doses of rat or porcine endothelin in the anaesthetised rat. Spokes RA, et al.
Life Sci 1990;47(5):433–7
Endothelin–induced sudden death and the possible involvement of platelet activating factor (PAF). Terashita Z, et al. **Life Sci** 1989;45(20):1911–8
Sodium intake influences the effects of atriopeptin on blood pressure and transcapillary fluid shift in the rat. Valentin JP, et al. **Life Sci** 1989;45(25):2437–41
Effects of endothelin and vasopressin on portal pressure of rats. Yang MC, et al. **Life Sci** 1990;46(26):1929–36
Effect of parathyroid hormone on portal pressure in portal hypertensive rats. Yang MC, et al. **Liver** 1990 Feb; 10(1):11–6
New oral salt in treatment of high blood pressure. Karppanen H. **Magnesium** 1989;8(5–6):274–87 (56 ref.)
Mechanisms of blood pressure regulation by magnesium in man. Rude R, et al. **Magnesium** 1989;8(5–6):266–73
Beta–adrenergic control and inter–relationships between heart rate and blood pressure in neonatal lambs. Grönlund JU, et al. **Med Biol Eng Comput** 1989 Mar;27(2):163–70
Real–time expert–system–based fuzzy control of mean arterial pressure in pigs with sodium nitroprusside infusion. Ying H, et al. **Med Prog Technol** 1990 May;16(1–2):69–76
Possible involvement of atrial natriuretic factor in the antihypertensive action of a high–calcium diet in spontaneously hypertensive and Wistar–Kyoto rats. Kohno M, et al. **Metabolism** 1989 Oct;38(10):997–1004
Effect of the calcium antagonist nicardipine on the pressor action of endothelin. Otsuka A, et al.
Methods Find Exp Clin Pharmacol 1990 Apr;12(3):189–92
Deoxycorticosterone prevents the blood pressure–lowering effect of calcium in spontaneously hypertensive rats. Wuorela H, et al. **Methods Find Exp Clin Pharmacol** 1990 Jan–Feb;12(1):37–42
Blood pressure changes induced by ciclosporin A in type I diabetes. Hannedouche T, et al.
Miner Electrolyte Metab 1990;16(1):12–5
Enhancement by an ACE inhibitor of first–dose hypotension caused by an alpha 1–blocker [letter] Baba T, et al.
N Engl J Med 1990 Apr 26;322(17):1237
Effect of eicosapentaenoic and docosahexaenoic acids on blood pressure in hypertension. A population–based intervention trial from the Tromsø study. Bønaa KH, et al. **N Engl J Med** 1990 Mar 22;322(12):795–801
The influence of oral potassium chloride on blood pressure in hypertensive men on a low–sodium diet [see comments] Grimm RH Jr, et al. **N Engl J Med** 1990 Mar 1; 322(9):569–74 Comment in: N Engl J Med 1990 Mar 1;322(9):623–4.
Body weight and the sensitivity of blood pressure to sodium [letter; comment] Roduy J, et al. **N Engl J Med** 1990 Feb 15;322(7):476–7 Comment on: N Engl J Med 1989 Aug 31;321(9):580–5.
Comparison of the effects of oat bran and low–fiber wheat on serum lipoprotein levels and blood pressure [see comments] Swain JF, et al. **N Engl J Med** 1990 Jan 18; 322(3):147–52 Comment in: N Engl J Med 1990 Jan 18;322(3):193–5. Comment in: N Engl J Med 1990 Jun 14;322(24):1746–9.
Influence of capsaicin–induced denervation on neurogenic and humoral control of arterial pressure. Donnerer J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Dec;340(6 Pt 2):740–3
Simultaneous determination of plasma noradrenaline and adrenaline kinetics. Responses to nitroprusside–induced hypotension and 2–deoxyglucose–induced glucopenia in the rabbit. Medvedev OS, et al.
Naunyn Schmiedebergs Arch Pharmacol 1990 Mar; 341(3):192–9
Adrenaline–induced enhancement of the blood pressure response to sympathetic nerve stimulation in adrenal demedullated pithed rats. Tarizzo VI, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Aug; 340(2):144–50
Interaction of enalapril with sodium restriction, diuretics, and slow–channel calcium–blocking drugs. Anderson A, et al. **Nephron** 1990;55 Suppl 1:70–2
Evaluation of the effect–duration of once–daily enalapril compared with once–daily captopril. Germanò G, et al. **Nephron** 1990;55 Suppl 1:65–9
Enalapril in the long–term treatment of elderly hypertensives. Mondal BK, et al. **Nephron** 1990;55 Suppl 1:96–7
Efficacy of long–term antihypertensive therapy with enalapril. Rüddel H, et al. **Nephron** 1990;55 Suppl 1:77–80
Long–term renal effects of enalapril therapy in patients with renal insufficiency. Smith RD, et al. **Nephron** 1990;55 Suppl 1:49–58 (79 ref.)
Beneficial effects of angiotensin–converting enzyme inhibitor on renal function and glucose homeostasis in diabetics with hypertension. Ueda Y, et al. **Nephron** 1990;55 Suppl 1:85–9
The effect of fenoldopam on renal haemodynamics and natriuresis in chronic renal failure. de Fijter CW, et al. **Neth J Med** 1990 Jun;36(5–6):267–78
Loss of the effects of clonidine on the growth hormone release and hypotensive action in long–term castrated rats: the possible role of testosterone on alpha–2–adrenergic mechanisms of clonidine. Kiem DT, et al.
Neuroendocrinology 1990 Feb;51(2):226–32
Cardioacceleration provoked by intrathecal administration of vasoactive intestinal peptide (VIP): mediation by a non–central nervous system mechanism. Rochford J, et al. **Neuropeptides** 1989 Nov–Dec;14(4):243–52
Cardiovascular effects of increasing sodium chloride concentrations microinjected into the nucleus tractus solitarii of the rat. Lukovič L, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):337–42
The anteroventral third ventricle (AV3V) region is essential for pressor, dipsogenic and natriuretic responses to central carbachol. Menani JV, et al. **Neurosci Lett** 1990 Jun 8; 113(3):339–44
Intrathecal kynurenate reduces arterial pressure, heart rate and baroreceptor–heart rate reflex in conscious rats. Verberne AJ, et al. **Neurosci Lett** 1990 Jul 13;114(3):309–15
Dietary fats and blood pressure: a critical review of the evidence. Sacks FM. **Nutr Rev** 1989 Oct;47(10):291–300 (45 ref.)
Effect of intrathecal tizanidine on antinociception and blood pressure in the rat. McCarthy RJ, et al. **Pain** 1990 Mar; 40(3):333–8
Cardiovascular actions of intrahypothalamic injections of atrial natriuretic peptide. Mullally DF, et al. **Peptides** 1989 Sep–Oct;10(5):1081–7
Capsaicin–sensitive primary afferents are involved in the hypotensive effect of neurotensin in ganglion–blocked guinea pigs. Rioux F, et al. **Peptides** 1989 Sep–Oct; 10(5):1033–40
Increase in the blood pressure and decrease in the norepinephrine release in the ventrolateral medulla during intraventricular administration of hypertonic NaCl. Katahira K, et al. **Pflugers Arch** 1989 Sep;414(6):719–25
Caffeine and cigarette smoking: behavioral, cardiovascular, and metabolic interactions. Brown CR, et al.
Pharmacol Biochem Behav 1989 Nov;34(3):565–70
The effects of combinations of intranasal cocaine, smoked marijuana, and task performance on heart rate and blood pressure. Foltin RW, et al. **Pharmacol Biochem Behav** 1990 Jun;36(2):311–5
Effects of bromocriptine pretreatment on subjective and physiological responses to i.v. cocaine. Kumor K, et al.
Pharmacol Biochem Behav 1989 Aug;33(4):829–37
Effects of buspirone on plasma catecholamines, heart rate, and blood pressure in stressed and nonstressed rats. Taylor J, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):349–53
Behavioral performance effects of nifedipine in normotensive baboons: single dosing. Turkkan JS, et al.
Pharmacol Biochem Behav 1989 Aug;33(4):923–6
Matching to sample, blood pressure and hormonal effects of chronic enalapril in baboons. Turkkan JS, et al.
Pharmacol Biochem Behav 1989 Dec;34(4):685–90
Cardiovascular and respiratory effects of an opioid kappa agonist ethylketazocine and sigma agonist N–allylnormetazocine in acutely decerebrated dogs. Wu KM, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):405–11
Alanine increases blood pressure during hypotension. Conlay LA, et al. **Pharmacol Toxicol** 1990 May;66(5):415–6
Effects of the selective beta 1–adrenoceptor antagonist, nebivolol, on cardiovascular parameters in the pithed normotensive rat. Schneider J, et al. **Pharmacology** 1990; 40(1):33–41
Transdermal timolol: beta blockade and plasma concentrations after application for 48 hours and 7 days. McCrea JB, et al. **Pharmacotherapy** 1990;10(4):289–93
The effect of single–dose phenylpropanolamine on blood pressure in patients with hypertension controlled by beta blockers. O'Connell MB, et al. **Pharmacotherapy** 1990; 10(2):85–91
High fat/sucrose feeding attenuates the hypertension of spontaneously hypertensive rats. Contreras RJ, et al.
Physiol Behav 1989 Aug;46(2):285–91
Hypotensive activity of 8,24–euphadien–3 beta–ol (euphol). Singh GB, et al. **Planta Med** 1989 Dec;55(6):498–500
The effect of ethanol on arterial blood pressure, central venous pressure and ECG in rabbits treated with the single or multiple dose of amitriptyline or imipramine. Polakowski P, et al. **Pol J Pharmacol Pharm** 1989 May–Jun; 41(3):247–51
Cardiac hypotensive extract: responses of single comb White Leghorn hens fed low– or high–sodium diets. Anthony HL, et al. **Poult Sci** 1990 Apr;69(4):679–85
Dietary protein and blood pressure in monozygotic twins. Havlik RJ, et al. **Prev Med** 1990 Jan;19(1):31–9
NG–methyl–L–arginine inhibits tumor necrosis factor–induced hypotension: implications for the involvement of nitric oxide. Kilbourn RG, et al.
Proc Natl Acad Sci U S A 1990 May;87(9):3629–32
Actions of beta–endorphin and related peptide fragments on a pressor response induced by cholinergic stimulation. Hong M, et al. **Prog Clin Biol Res** 1990;328:371–4
Effects of linoleic and alpha linolenic acids intake on blood pressure in man. Olaf A. **Prog Clin Biol Res** 1989;301:523–8
Effects of OKY–046, a selective thromboxane synthetase inhibitor, on blood pressure and thromboxane synthesis in spontaneously hypertensive rats. Gomi T, et al.
Prostaglandins Leukot Essent Fatty Acids 1989 Sep; 37(3):139–44
Pressor, norepinephrine, and pituitary responses to two TRH doses in Alzheimer's disease and normal older men. Lampe TH, et al. **Psychoneuroendocrinology** 1989;14(4):311–20
Behavioral and physiological effects of a beta blocker and relaxation therapy on mild hypertensives. Adsett CA, et al. **Psychosom Med** 1989 Sep–Oct;51(5):523–36
Cardiovascular responses induced by endothelin microinjection into area postrema. Ferguson AV, et al.
Regul Pept 1990 Jan;27(1):75–85
Effects of neuropeptide Y and noradrenaline on uterine artery blood pressure and blood flow velocity in the pregnant guinea–pig. Fried G, et al. **Regul Pept** 1990 Mar 27; 28(1):1–9
Effects of conjugated equine oestrogens with and without the addition of cyclical medrogestone on hot flushes, liver function, blood pressure and endocrinological indices. Sonnendecker EW, et al. **S Afr Med J** 1990 Mar 17; 77(6):281–5
The impact of dietary sodium, potassium and calcium on blood pressure. Hung JS, et al.
Taiwan I Hsueh Hui Tsa Chih 1990 Jan;89(1):17–22
Abnormal cardiovascular responses to postural changes and pharmacologic agents in a case of Shy–Drager syndrome. Liu JS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Sep; 88(9):936–9
Calcium channel blockers reverse the sustained elevation of blood pressure induced by chronic infusion of endothelin in conscious rats. Yasujima M, et al.
Tohoku J Exp Med 1990 Feb;160(2):157–65
Acute effects of intravenous cyclosporine on blood pressure, renal hemodynamics, and urine prostaglandin production of healthy humans. Weir MR, et al. **Transplantation** 1990 Jan;49(1):41–7

[Effects of verapamil on pulmonary arterial pressure in patients with cor pulmonale complicated by heart failure] Shan ZY. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Dec;12(6):340–2, 381 (Eng. Abstr.) **(Chi)**

[The clinical use of captopril in the diagnosis and treatment of primary aldosteronism] Li J. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1990 Feb; 18(1):2–4, 60 (Eng. Abstr.) **(Chi)**

[Effects of nimodipine on blood pressure and cardiac function in hypertensive patients] Wang W. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Dec; 17(6):341–3 **(Chi)**

[A preliminary study on the correlation of nutritional factors and blood pressure in the regions of Shanxi, Zhejiang and Guangxi] Zhu AM. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Dec; 17(6):330–2 **(Chi)**

[Effect of crystal No. 4 of Polygonum cuspidatum on the restoration of pulse pressure and microcirculatory perfusion during shock] Zhu ZJ. **Chung Hua I Hsueh Tsa Chih** 1989 May;69(5):279–81, 20 (Eng. Abstr.) **(Chi)**

[The role of substance P and catecholamine in the mechanism of pressor response elicited by application of kainic acid to the rostral ventral surface of the medulla oblongata in rat] Chen JA. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Jun; 11(3):215–9 (Eng. Abstr.) **(Chi)**

[Effects of an endogenous GABA receptor binding inhibitor on rat blood pressure] Cai NS, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar;10(2):101–3 (Eng. Abstr.) **(Chi)**

[Effects of alpha-adrenoceptor agonists on cardiac function and blood pressure in rats] Li Q, et al. **Chung Kuo Yao Li Hsueh Pao** 1990 Jan;11(1):21–5 (Eng. Abstr.) **(Chi)**

[Effects of xylazole on heart rate and blood pressure in conscious dogs] Rong YF, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Sep;10(5):410–4 (Eng. Abstr.) **(Chi)**

[Clonidine stimulates central nervous alpha 2 adrenoceptors not mediating Ca2+ channels] Yang Y, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Nov;10(6):488–91 (Eng. Abstr.) **(Chi)**

[Effects of dietary K on blood pressure, prostaglandin, and kallikrein in renovascular hypertensive rats] Zhang HY, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Sep;10(5):418–21 (Eng. Abstr.) **(Chi)**

[Effects of labetalol and nitroglycerin during induction of anesthesia and endotracheal intubation in hypertensive patients] Lee SC, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Sep; 27(3):247–54 (Eng. Abstr.) **(Chi)**

[Effects of intracisternal injection of naloxone on the depressor response to stimulation of renal afferent nerve in rabbits] Pan JY, et al. **Sheng Li Hsueh Pao** 1989 Aug; 41(4):367–74 (Eng. Abstr.) **(Chi)**

[Changes in blood pressure and erythrocyte sodium transport in subjects with normal blood pressure after dietary sodium loading] Janata V, et al. **Cas Lek Cesk** 1989 Sep 29; 128(40):1261–4 (Eng. Abstr.) **(Cze)**

[Sympathetic modification of the relationship between salt intake and blood pressure in the general population] Staessen J, et al. **Arch Belg** 1989;47(1–4):42–5 (Eng. Abstr.) **(Dut)**

[Left ventricular telesystolic pressure-volume relations in propofol perfusion] Martin C, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R17 **(Fre)**

[Effects of diltiazem on arterial pressure and renal function in renal transplanted and cyclosporin A treated subjects. Results after 3 months of a prospective study] Guerin C, et al. **Arch Mal Coeur** 1989 Jul;82(7):1223–7 (Eng. Abstr.) **(Fre)**

[Blood pressure response to antihypertension treatment. Comparison of data obtained at the doctor's office and by ambulatory blood pressure measurement] Herpin D, et al. **Arch Mal Coeur** 1989 Oct;82(10):1733–7 (Eng. Abstr.) **(Fre)**

[New discoveries in the regulation of arterial pressure: endazoline, rilmenidine and imidazoline receptors (editorial)] Safar ME. **Arch Mal Coeur** 1989 Dec;82 Spec No 5:9–10 **(Fre)**

[Non-invasive regional and cardiac output determination in healthy volunteers. Predictive value] Thuillez C, et al. **Arch Mal Coeur** 1989 Jul;82(7):1275–9 (Eng. Abstr.) **(Fre)**

[Hemodynamic effects of clonidine on the fetus and newborn infant] Wingtin LN, et al. **Rev Fr Gynecol Obstet** 1989 Oct; 84(10):695–8 (Eng. Abstr.) **(Fre)**

[Pharmacology of neurotransmitters. Current data on the central regulation of blood pressure] Bousquet P. **Therapie** 1990 Mar–Apr;45 Suppl 2:171–5 **(Fre)**

[Serotoninergic 1A receptors (5-HT1A) and the regulation of blood pressure] Dabire H. **Therapie** 1990 Mar–Apr;45 Suppl 2:183–6 **(Fre)**

[Effects of various alfentanil doses on blood pressure, heart rate and plasma catecholamine level in endotracheal intubation] Tolksdorf W, et al. **Anasth Intensivther Notfallmed** 1990 Jun;25(3):198–202 (Eng. Abstr.) **(Ger)**

[Hemodynamic effect of unsaturated fatty acids. Do fish oils have an antihypertensive effect?] Düsing R. **Fortschr Med** 1989 Nov 20;107(33):701–4 (30 ref.) (Eng. Abstr.) **(Ger)**

[Local anesthetic level and cardiovascular changes following local anesthesia in cataract operations with 3% mepivacaine] Schäffer J, et al. **Fortschr Ophthalmol** 1989; 86(4):319–22 (Eng. Abstr.) **(Ger)**

[Effect of bradykinin on systemic and pulmonary hemodynamics in the human] Bönner G, et al. **Klin Wochenschr** 1989 Nov 3;67(21):1085–95 (Eng. Abstr.) **(Ger)**

[The effect of silver carp oil on the blood pressure and lipids of spontaneously hypertensive rats] Wirth M, et al. **Nahrung** 1990;34(6):575–8 **(Ger)**

[Cerebral perfusion pressure in acute blood pressure decrease with hyperosmolar sorbitol in anesthesia conditions] Panning B, et al. **Neurochirurgia (Stuttg)** 1990 Mar; 33(2):37–41 (Eng. Abstr.) **(Ger)**

[Long-term blood pressure measurements with i.v. prostaglandin E1 infusion] Heidrich H, et al. **Vasa Suppl** 1989;27:46 **(Ger)**

[Effect of low dose omega-3-fatty acids on blood pressure, blood lipids and blood fluidity in patients with hyperlipoproteinemia] Staedt U, et al. **Vasa Suppl** 1989; 27:253–4 **(Ger)**

[Effect of long-term therapy with prazosin/propranolol on blood pressure and cardiopulmonary function in essential hypertension] Schaller K, et al. **Z Gesamte Inn Med** 1990 Jun 15;45(11):321–2 (Eng. Abstr.) **(Ger)**

[24-hour blood pressure behavior in patients with untreated and treated hypertension in comparison with normotensive patients] Schrader J, et al. **Z Kardiol** 1989 Dec; 78(12):804–10 (Eng. Abstr.) **(Ger)**

[Suppression of coronary sclerosis in hypertensive rats by calcium channel antagonists without lowering blood pressure] Schwabedal PE, et al. **Z Kardiol** 1989;78 Suppl 5:108–11 (Eng. Abstr.) **(Ger)**

[Combination therapy with isosorbide dinitrate and verapamil in patients with coronary heart disease and hypertension: effect on blood pressure, ischemia and left ventricular function] Vogler AC, et al. **Z Kardiol** 1989;78 Suppl 2:183–7; discussion 188–9 (Eng. Abstr.) **(Ger)**

[Renal effects of ibopamine in comparison with furosemide in patients with mild heart failure] Wehling M, et al. **Z Kardiol** 1990 Feb;79(2):120–5 (Eng. Abstr.) **(Ger)**

[Afterload reduction by long-term nitrate therapy] Wortmann A, et al. **Z Kardiol** 1989;78 Suppl 2:95–8; discussion 115–7 (Eng. Abstr.) **(Ger)**

[Effect of phentolamine on the reflex increase in arterial pressure] Orani GP, et al. **Boll Soc Ital Biol Sper** 1989 Dec; 65(12):1119–25 (Eng. Abstr.) **(Ita)**

[Circulatory and renin response to the administration of nifedipine in renovascular hypertension] Fiorentini C, et al. **Cardiologia** 1989 Sep;34(9):793–6 (Eng. Abstr.) **(Ita)**

[Study of the interactions of atrial natriuretic peptides with the autonomic nervous system. Effects on cardiocirculatory and respiratory reflexes caused by activation of chemosensitive muscle receptors] Peruzzi G, et al. **Cardiologia** 1989 Oct;34(10):841–6 (Eng. Abstr.) **(Ita)**

[Preoperative intraarterial infusion chemotherapy in combination with angiotensin II pressor by BOAI method in cervical cancer] Kondoh T, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1788–92 (Eng. Abstr.) **(Jpn)**

[Etoposide delivery to malignant brain tumors by induced hypertension with angiotensin II] Ogasawara H, et al. **Gan To Kagaku Ryoho** 1990 May;17(5):1033–8 (Eng. Abstr.) **(Jpn)**

[Dose intensity and clinical response in patients with advanced gastric carcinoma treated by induced hypertension chemotherapy] Sato H, et al. **Gan To Kagaku Ryoho** 1990 Mar;17(3 Pt 2):564–9 (Eng. Abstr.) **(Jpn)**

[The hypertensive effect induced with angiotensin II and the physiological and pharmacokinetic aspects of two-route chemotherapy using CDDP and STS] Takizawa K, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1569–74 (Eng. Abstr.) **(Jpn)**

[Metastatic endometrial stromal sarcoma successfully treated by intra-arterial hypertension chemotherapy with CDDP and ADM] Yoshino N, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1773–6 (Eng. Abstr.) **(Jpn)**

[Development of fuzzy blood pressure control system] Fukui Y, et al. **Iyodenshi To Seitai Kogaku** 1989 Jun;27(2):79–85 (Eng. Abstr.) **(Jpn)**

[Circadian blood pressure variation and antihypertensive medications] Tochikubo O, et al. **Kokyu To Junkan** 1990 Jul;38(7):629–35 **(Jpn)**

[The effect of nitroglycerin ointment on cardiovascular functions in hypertensive patients during emergence from anesthesia] Nagatani A, et al. **Masui** 1989 Oct;38(10):1312–6 (Eng. Abstr.) **(Jpn)**

[Role of the serotonergic nervous system in hemodynamic and vasopressin responses to centrally administrated angiotensin-II in spontaneously hypertensive rats] Hatayama Y, et al. **Nippon Naibunpi Gakkai Zasshi** 1990 Jul 20;66(7):678–87 (Eng. Abstr.) **(Jpn)**

[A comparative study of C19 steroid-induced hypertension and deoxycorticosterone acetate (DOCA)-salt hypertension] Minato M, et al. **Nippon Naibunpi Gakkai Zasshi** 1990 Jan 20;66(1):29–41 (Eng. Abstr.) **(Jpn)**

[The significance of cGMP and dopamine receptor on the natriuretic and hypotensive activities of synthetic atrial natriuretic polypeptide in essential hypertension] Mori K, et al. **Nippon Naibunpi Gakkai Zasshi** 1990 Feb 20; 66(2):83–93 (Eng. Abstr.) **(Jpn)**

[Experimental studies on the effects of insulin on central regulation of blood pressure] Nishimura M. **Nippon Naibunpi Gakkai Zasshi** 1990 Mar 20;66(3):182–97 (Eng. Abstr.) **(Jpn)**

[Increased plasma and urinary Na+-K+ ATPase inhibitory activity and elevated blood pressure in metoclopramide-treated rats] Shigetomi S, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Jun 20;65(6):549–57 (Eng. Abstr.) **(Jpn)**

[The role of Na+-K+ ATPase activity on blood pressure regulation and sodium metabolism in DOCA-treated rats] Shigetomi S, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Oct 20;65(10):1198–207 (Eng. Abstr.) **(Jpn)**

[The kallikrein-kinin system and blood pressure regulation] Yasujima M, et al. **Nippon Rinsho** 1989 Sep;47(9):1956–62 **(Jpn)**

[Comparison of hypotensive effects of acutely administered human parathyroid hormone (1–34) in normal young and elderly subjects] Morimoto S, et al. **Nippon Ronen Igakkai Zasshi** 1989 Jul;26(4):395–400 (Eng. Abstr.) **(Jpn)**

[Dynamic CT under angiotensin II-induced hypertension—application for the differential diagnosis between benign and malignant solid ovarian tumors] Higashijima H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 May;42(5):450–5 (Eng. Abstr.) **(Jpn)**

[Studies on renal dysfunction after intra-arterial hypertensive chemotherapy (CDDP, PEP) for advanced cancer of the uterine cervix—serum.urinary alpha 1-microglobulin, beta 2-microglobulin and urinary lysozyme, albumin] Iwanari O, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Feb; 42(2):115–20 (Eng. Abstr.) **(Jpn)**

[Serotonin and blood pressure regulation—antihypertensive mechanism of ketanserin] Matsumoto M, et al. **Nippon Yakurigaku Zasshi** 1989 Oct;94(4):207–22 (215 ref.) (Eng. Abstr.) **(Jpn)**

[Post-operative blood pressure management by nitroglycerin in the field of neurosurgery] Kamiya K, et al. **No Shinkei Geka** 1989 Jun;17(6):521–4 (Eng. Abstr.) **(Jpn)**

[Effect of calcium antagonist nimodipine and induced hypertension on cerebral vessel reactivities, cerebral blood flow, cerebral edema and infarction in cats with one hour middle-cerebral-artery occlusion] Sakaki T, et al. **No Shinkei Geka** 1990 May;18(5):423–30 (Eng. Abstr.) **(Jpn)**

[A new anti-arrhythmia drug. II. Comparative studies of the effects of a new acyl derivative of procainamide, procainamide and N-acetylprocainamide on blood pressure and the electrocardiogram in rabbits] Kusowska J. **Acta Pol Pharm** 1989;46(1):90–7 (Eng. Abstr.) **(Pol)**

[Synthesis of new aminoalkanol derivatives of benzofuran with potential beta-adrenolytic activity] Zawadowski T, et al. **Acta Pol Pharm** 1989;46(3):201–8 (Eng. Abstr.) **(Pol)**

[Effect of Polfos on the bleeding time. III. Changes in various parameters of the circulatory system] Konopelko M, et al. **Med Pr** 1989;40(3):147–52 (Eng. Abstr.) **(Pol)**

[Evaluation of the hypotensive effect of guanfacine] Adamska-Dyniewska H, et al. **Pol Arch Med Wewn** 1988 Jun;79(6):289–95 (Eng. Abstr.) **(Pol)**

[Current views on the treatment of borderline and mild hypertension] Czarniecki W. **Pol Arch Med Wewn** 1988 Aug-Sep;80(2-3):156–61 (17 ref.) **(Pol)**

[Effect of combined use of pindolol and clopamide on arterial blood pressure and blood and plasma volume in patients with primary arterial hypertension] Wyrzykowski B, et al. **Pol Arch Med Wewn** 1987 Jan-Feb;77(1-2):25–30 (Eng. Abstr.) **(Pol)**

[Effect of atrial natriuretic factor on arterial blood pressure and frequency of heart contraction in rats with genetically determined hypertension and in normotensive rats] Lapiński M, et al. **Pol Tyg Lek** 1989 Mar 20–27; 44(12-13):285–8 (Eng. Abstr.) **(Pol)**

[New look at old and new hypotensive drugs] Chodakowska J. **Przegl Lek** 1989;46(6):507–10 **(Pol)**

[Alcohol and arterial blood pressure. The role of alcohol as a risk factor of arterial hypertension] Kawecka-Jaszcz K, et al. **Przegl Lek** 1989;46(12):811–5 (53 ref.) **(Pol)**

[Effect of beta blockers with intrinsic sympathomimetic activity on blood pressure and blood lipids in patients with essential hypertension] Serro-Azul JB, et al. **Arq Bras Cardiol** 1989 Dec;53(6):321–5 (Eng. Abstr.) **(Por)**

[Behavior of arterial pressure during administration of intravenous streptokinase, in patients with acute myocardial infarct] Torres S, et al. **Rev Port Cardiol** 1989 Apr; 8(4):269–73 (Eng. Abstr.) **(Por)**

[Changes in arterial blood pressure of women using hormonal contraceptives in relation to their cardiovascular history] Manuilova IA, et al. **Akush Ginekol (Mosk)** 1989 Jul; (7):48–51 (Eng. Abstr.) **(Rus)**

[The effect of morphine and opiate receptor agonists on arterial pressure and the bioelectrical activity of the renal nerve during stimulation of the midbrain central gray substance] Bogdanov EG. **Biull Eksp Biol Med** 1989 Sep; 108(9):309–11 (Eng. Abstr.) **(Rus)**

[Character of arterial pressure changes under combined action of pressor and depressor agents] Lioznov MV, et

al. **Biull Eksp Biol Med** 1990 Jan;109(1):13–5 (Eng. Abstr.) **(Rus)**

[Changes in arterial pressure during the joint action of vasoactive substances with unidirectional effects] Lioznov MV, et al. **Biull Eksp Biol Med** 1990 Mar;109(3):222–4 **(Rus)**

[The effect of baclofen on the nociceptive reactions of the blood pressure in waking rats] Ignatov IuD, et al. **Farmakol Toksikol** 1989 Nov–Dec;52(6):61–4 (Eng. Abstr.) **(Rus)**

[The effect of pharmacologic blockade of serotonin receptors (S2) on arterial pressure in rats with 2 forms of hereditary arterial hypertension] Popova NK, et al. **Farmakol Toksikol** 1989 Nov–Dec;52(6):58–61 (Eng. Abstr.) **(Rus)**

[The effect of parathormone on the reactivity of the cardiovascular system to angiotensin–2 in normotensive and spontaneously hypertensive rats] Brin VB, et al. **Fiziol Zh SSSR** 1990 Mar;76(3):345–50 (Eng. Abstr.) **(Rus)**

[The dependence of the hemodynamic shifts in the systemic arterial and venous vascular beds on the degree of change in the arterial pressure under the action of vasoactive substances] Lioznov MV, et al. **Fiziol Zh SSSR** 1990 Mar; 76(3):362–70 (Eng. Abstr.) **(Rus)**

[Table salt and arterial hypertension] Bakhshaliev AB, et al. **Kardiologiia** 1989 Sep;29(9):107–12 (66 ref.) **(Rus)**

[Pharmacodynamics, pharmacokinetics and clinical effectiveness of captopril in patients with hypertension] Kukes VG, et al. **Kardiologiia** 1990 Mar;30(3):28–32 (Eng. Abstr.) **(Rus)**

[Hypotensive effect of hydrochlorothiazide and its combination with triamterene] Levinzon AM, et al. **Sov Med** 1989;(6):5–8 (Eng. Abstr.) **(Rus)**

[The role of minipress in hypertension] Liusov VA, et al. **Sov Med** 1989;(11):52–5 **(Rus)**

[Hypotensive effect of tobanum in hypertension] Shliakhto EV, et al. **Sov Med** 1989;(10):65–7 **(Rus)**

[Effect of linoleic acid in the diet on arterial pressure, ATPase activity and cyclic nucleotide level in the heart of rats with spontaneous hypertension] Vasil'eva EM, et al. **Vopr Pitan** 1989 May–Jun;(3):41–4 (Eng. Abstr.) **(Rus)**

[Comparative cardiovascular effects of nifedipine in anesthetized dogs] Mosca SM, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(4):467–77 (Eng. Abstr.) **(Spa)**

[Somatostatin and ventricular function in liver cirrhosis] de la Villa FM, et al. **Rev Clin Esp** 1990 Feb;186(2):58–62 (Eng. Abstr.) **(Spa)**

[Pheochromocytoma: review of the preoperative treatment and anesthesiologic technic in 14 patients] Mora A, et al. **Rev Esp Anestesiol Reanim** 1990 Jan–Feb;37(1):23–7 (Eng. Abstr.) **(Spa)**

[Comparative study of iohexol and iopamidol as cardioangiographic contrast media] Esplugas E, et al. **Rev Esp Cardiol** 1990 Feb;43(2):84–6 (Eng. Abstr.) **(Spa)**

GENETICS

Commingling and segregation analysis of blood pressure in a French–Canadian population. Rice T, et al. **Am J Hum Genet** 1990 Jan;46(1):37–44

Heterogeneity of the blood pressure distribution among Solomon Islands societies with increasing acculturation. Zerba KE, et al. **Am J Phys Anthropol** 1990 Apr; 81(4):493–511

Evidence of a rare gene for low systolic blood pressure in the Framingham Heart Study. Carter CL, et al. **Hum Hered** 1990;40(4):235–41

Increased pulse pressure and carotid vascular resistance in normotensive black African subjects. Toto–Moukouo JA, et al. **J Hum Hypertens** 1990 Jun;4(3):247–51

Failure of alleles at the Na+, K(+)–ATPase alpha 1 locus to cosegregate with blood pressure in Dahl rats. Rapp JP, et al. **J Hypertens** 1990 May;8(5):457–62

PHYSIOLOGY

Influence of low– and high–pressure baroreflexes on vasopressin release in humans. Norsk P. **Acta Endocrinol (Copenh)** 1989;121 Suppl 1:3–27

The importance of nose–breathing for the systolic blood pressure rise during exercise. Petruson B, et al. **Acta Otolaryngol (Stockh)** 1990 May–Jun;109(5–6):461–6

Atherosclerosis and endothelium. Part II. Properties of aortic endothelial and smooth muscle cells cultured at various ambient pressures. Tokunaga O, et al. **Acta Pathol Jpn** 1989 Jun;39(6):356–62

Learned control of systolic blood pressure raising and lowering in rhesus monkeys. Bárdos G, et al. **Acta Physiol Hung** 1989;73(4):433–46

Cardiovascular regulation in the acute decerebrate rat. Futuro–Neto H de A, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(4):445–53

Cardiovascular and endocrine responses to haemorrhage in the pig. Jacobsen J, et al. **Acta Physiol Scand** 1990 Feb; 138(2):167–73

Differences in cardiorespiratory responses during and after arm crank and cycle exercise. Louhevaara V, et al. **Acta Physiol Scand** 1990 Feb;138(2):133–43

Sympathetic alpha–adrenergic control of large–bore arterial vessels, arterioles and veins, and of capillary pressure and fluid exchange in whole–organ cat skeletal muscle. Maspers M, et al. **Acta Physiol Scand** 1990 Apr;138(4):509–21

Cardiovascular responses to carotid sinus baroreceptor stimulation during moderate to severe exercise in man. Strange S, et al. **Acta Physiol Scand** 1990 Feb;138(2):145–53

Interaction of vasopressin and of the atrial natriuretic peptide in blood pressure control. Szczepanska–Sadowska E. **Acta Physiol Scand Suppl** 1989;583:79–87

Ambulatory intra–arterial blood pressure in normal subjects. Broadhurst P, et al. **Am Heart J** 1990 Jul;120(1):160–6

Mechanism of abnormal postexercise systolic blood pressure response and its diagnostic value in patients with coronary artery disease. Miyahara T, et al. **Am Heart J** 1990 Jul; 120(1):40–9

Comparison of Doppler indexes of left ventricular diastolic function with simultaneous high fidelity left atrial and ventricular pressures in idiopathic dilated cardiomyopathy. David D, et al. **Am J Cardiol** 1989 Nov 15;64(18):1173–9

Geometry and pump function in cardiac ventricular hypertrophy. Elzinga G, et al. **Am J Cardiol** 1990 Apr 3; 65(14):23G–29G

Validity of arm ergometer blood pressures immediately after exercise. Hollingsworth V, et al. **Am J Cardiol** 1990 Jun 1;65(20):1358–60

Noninvasive estimation of right atrial pressure from the inspiratory collapse of the inferior vena cava. Kircher BJ, et al. **Am J Cardiol** 1990 Aug 15;66(4):493–6

Pericardial constrictive tissue buffers cardiac transmural pressures [letter] Spodick DH. **Am J Cardiol** 1990 Aug 15;66(4):528

Exaggerated pressure response to exercise in men at risk for systemic hypertension. Wilson MF, et al. **Am J Cardiol** 1990 Sep 15;66(7):731–6

Comparison of right ventricular impedance, pulse pressure and maximal dP/dt for determination of hemodynamic stability of ventricular arrhythmias associated with coronary artery disease. Wood MA, et al. **Am J Cardiol** 1990 Sep 1;66(5):575–82

Diastolic fourth and fifth phase blood pressure in 10–15–year–old children. The Children and Adolescent Blood Pressure Program. Sinaiko AR, et al. **Am J Epidemiol** 1990 Oct;132(4):647–55

Spontaneous changes of systolic blood pressure as predictors of future fatal events. Italian Research Group of the Seven Countries Study. Menotti A, et al. **Am J Hypertens** 1990 Jul;3(7):549–54

Renal denervation decreases blood pressure in DOCA–treated miniature swine with established hypertension. O'Hagan KP, et al. **Am J Hypertens** 1990 Jan;3(1):62–4

Central hemodynamics and 24–hour blood pressure in obstructive sleep apnea syndrome: effects of corrective surgery. Lund–Johansen P, et al. **Am J Med** 1990 Jun; 88(6):678–82

The effect of intravascular transfusion on umbilical venous pressure in anemic fetuses with and without hydrops. Weiner CP, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1498–501

Arterial pressure effects on preglomerular microvasculature of juxtamedullary nephrons. Carmines PK, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):F94–102

Neural and hormonal control of blood pressure in conscious monkeys. Cornish KG, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):H107–12

Spinal noradrenergic pathways and pressor responses to central angiotensin II. Elghozi JL, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):H240–6

Inhibition of hypoxic pulmonary vasoconstriction by increased left atrial pressure in dogs. Lejeune P, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H93–100

Enhanced norepinephrine sensitivity in renal arteries at elevated transmural pressure. Lombard JH, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H29–33

Analysis of vasomotion waveform changes during pressure reduction and adenosine application. Oude Vrielink HH, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):H29–37

Regulation of blood pressure in pregnancy: pressor system blockade and stimulation. Pan ZR, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1559–72

Baroreflex attenuates pressor response to graded muscle ischemia in exercising dogs. Sheriff DD, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H305–10

Parasympathetic impairment of baroreflex control of heart rate in Dahl S rats. Whitescarver SA, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):R76–83

Use of relaxation half–time as an index of ventricular relaxation in clinically normal cats and cats with hypertrophic cardiomyopathy. Golden AL, et al. **Am J Vet Res** 1990 Sep;51(9):1352–6

The role of activation of neutrophils and microvascular pressure in acute pulmonary edema. Patterson CE, et al. **Am Rev Respir Dis** 1989 Oct;140(4):1052–62

Cardiovascular response to insertion of Brain's laryngeal mask. Hickey S, et al. **Anaesthesia** 1990 Aug;45(8):629–33

Clinical significance of initial systolic hypertension after myocardial infarction. Katayama T, et al. **Angiology** 1990 Jan;41(1):23–9

A theoretical description of arterial pressure–flow relationships with verification in the isolated hindlimb of the dog. Jackman AP, et al. **Ann Biomed Eng** 1990; 18(1):89–101

Left ventricular hypertrophy in men with normal blood pressure: relation to exaggerated blood pressure response to exercise [see comments] Gottdiener JS, et al. **Ann Intern Med** 1990 Feb 1;112(3):161–6 Comment in: Ann Intern Med 1990 Feb 1;112(3):157–9.

Atrial pressure and hormonal and renal responses to acute cardiac tamponade. Hynynen M, et al. **Ann Thorac Surg** 1990 Apr;49(4):632–7

Distal aortic pressure during coarctation operation. Watterson KG, et al. **Ann Thorac Surg** 1990 Jun; 49(6):987–90

The Hypertension Prevention Trial: three–year effects of dietary changes on blood pressure. Hypertension Prevention Trial Research Group. **Arch Intern Med** 1990 Jan;150(1):153–62

The effects of weight reduction on blood pressure in 301 obese patients. Schotte DE, et al. **Arch Intern Med** 1990 Aug;150(8):1701–4

Role of kinins and prostacyclin in blood pressure regulation. Bönner G. **Arch Mal Coeur** 1989 Nov;82 Spec No 4:15–9 (22 ref.)

Pressure indices of myocardial oxygen consumption during pulsatile ventricular assistance. Marks JD, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):436–9

Reduced systolic blood pressure elevations during maximum exercise at simulated altitudes. Knudtzon J, et al. **Aviat Space Environ Med** 1989 Nov;60(11):1072–6

Blood pressure response to exercise in normotensive and hypertensive young men. Rosenberg E, et al. **Aviat Space Environ Med** 1990 May;61(5):433–5

Circadian blood pressure pattern in full–term newborn infants. Gemelli M, et al. **Biol Neonate** 1989;56(6):315–23

Physiological and immunocytochemical evidence for a new concept of blood flow regulation in the corpus luteum. Wiltbank MC, et al. **Biol Reprod** 1990 Jan;42(1):139–49

The effects of partial hepatectomy on portal pressure in rats. Oliver RH, et al. **Br J Surg** 1966 Feb;53(2):138–41

Localization of vasodepressor neurons in the caudal ventrolateral medulla in the rabbit. Li YW, et al. **Brain Res** 1990 May 28;517(1–2):57–63

The surface electrocardiogram as a means of refining a murine pressure overload model of congestive heart failure [letter; comment] Bestetti RB, et al. **Cardiovasc Res** 1989 Jun;23(6):560 Comment on: Cardiovasc Res 1988 Oct;22(10):696–702.

Response of tertiary centres to pressure changes. Is there a mechano–electrical association? Sideris DA, et al. **Cardiovasc Res** 1990 Jan;24(1):13–8

Left ventricular pressure effects on right ventricular pressure and volume outflow. Damiano RJ Jr, et al. **Cathet Cardiovasc Diagn** 1990 Apr;19(4):269–78

Cough–cardiopulmonary resuscitation in the cardiac catheterization laboratory: hemodynamics during an episode of prolonged hypotensive ventricular tachycardia. Miller B. et al. **Cathet Cardiovasc Diagn** 1989 Nov; 18(3):168–71

Doppler evaluation [letter; comment] Faber J. **Chest** 1990 Mar;97(3):765–6 Comment on: Chest 1989 Mar;95(3):525–9.

The respiratory and vascular responses evoked by chemical activation of small fiber phrenic nerve afferents in dogs. Hussain S, et al. **Chest** 1990 Mar;97(3 Suppl):44S–45S

Baroreflex adaptation and resetting on the control of arterial pressure. Chen HI, et al. **Chin J Physiol** 1990;33(1):19–30

Roles of the kidneys and fluid volumes in arterial pressure regulation and hypertension. Guyton AC. **Chin J Physiol** 1989;32(2):49–57 (7 ref.)

Multiple inhibitory actions of the paramedian reticular nucleus—effects on blood pressure and motor activities in rats. Lee EH, et al. **Chin J Physiol** 1990;33(1):49–61

Ultradian rhythmic models of blood pressure variation in normal human daily life. Benton LA, et al. **Chronobiologia** 1990 Apr–Jun;17(2):95–116

Determinants of renal actions of atrial natriuretic peptide. Lack of effect of atrial natriuretic peptide on pressure–induced vasoconstriction. Hayashi K, et al. **Circ Res** 1990 Jul;67(1):1–10

The effects of increasing mean arterial pressure on left ventricular output in newborn lambs. Van Hare GF, et al. **Circ Res** 1990 Jul;67(1):78–83

Inverse relation between serum cotinine concentration and blood pressure in cigarette smokers [see comments] Benowitz NL, et al. **Circulation** 1989 Nov;80(5):1309–12 Comment in: Circulation 1989 Nov;80(5):1493–4.

Black–white differences in exercise blood pressure. The Lipid Research Clinics Program Prevalence Study. Ekelund LG, et al. **Circulation** 1990 May;81(5):1568–74

Cigarette smoking, cotinine, and blood pressure [comment] Friedman GD. **Circulation** 1989 Nov;80(5):1493–4 Comment on: Circulation 1989 Nov;80(5):1309–12.

Continuous 24–hour assessment of the neural regulation of systemic arterial pressure and RR variabilities in ambulant subjects. Furlan R, et al. **Circulation** 1990 Feb;81(2):537–47

The clinical significance of diurnal blood pressure variations. Dippers and nondippers [comment] Pickering TG. **Circulation** 1990 Feb;81(2):700–2 Comment on: Circulation 1990 Feb;81(2):528–36.

Circadian blood pressure changes and left ventricular hypertrophy in essential hypertension [see comments] Verdecchia P, et al. **Circulation** 1990 Feb;81(2):528–36 Comment in: Circulation 1990 Feb;81(2):700–2.

Left ventricular diastolic function in normotensive adolescents with different genetic risk of hypertension. Alli C, et al. **Clin Cardiol** 1990 Feb;13(2):115–8

Controlled comparison of effects of exercise and alcohol on blood pressure and serum high density lipoprotein cholesterol in sedentary males. Cox KL, et al. **Clin Exp Pharmacol Physiol** 1990 Apr;17(4):251–5

The effect of sympathetic blockade and cooling in Raynaud's phenomenon. Engelhart M. **Clin Physiol** 1990 Mar; 10(2):131–6

Arm and ankle blood pressure response to treadmill exercise in normal people. Engvall J, et al. **Clin Physiol** 1989 Dec; 9(6):517–24

Limitation of finger systolic pressure measurement as a diagnostic test for primary Raynaud's phenomenon in a female population. Leppert J. **Clin Physiol** 1989 Oct; 9(5):457–65

Sympathetic activation during the cold pressor test: influence of stimulus area. Seals DR. **Clin Physiol** 1990 Mar; 10(2):123–9

Short-term variability of systolic blood pressure and heart rate in normotensive subjects. Turjanmaa V, et al. **Clin Physiol** 1990 Jul;10(4):389–401

Fluorescein angiography and distal arterial pressure in patients with arterial disease of the legs. Wallin L, et al. **Clin Physiol** 1989 Oct;9(5):467–80

Orthostatic circulatory control in the elderly evaluated by non-invasive continuous blood pressure measurement. Imholz BP, et al. **Clin Sci** 1990 Jul;79(1):73–9

The effects of posture changes on blood pressure and heart rate of anesthetized and reserpinized sloths. Duarte DP, et al. **Comp Biochem Physiol [A]** 1989;94(1):159–65

Combined Doppler and M-mode analysis of diastolic filling behaviour in arterial hypertension with and without left ventricular hypertrophy. Wallrabe D, et al. **Cor Vasa** 1990; 32(1):26–35

Studies of velocity fields and turbulence downstream of aortic valve prostheses in vitro and in vivo. Hasenkam JM. **Dan Med Bull** 1990 Jun;37(3):235–49 (109 ref.)

Arterial blood pressure related to degree of albuminuria and low-molecular-weight proteinuria in IDDM. Holm J, et al. **Diabetes Care** 1990 Apr;13(4):443–6

Patency of foramen ovale—does it influence haemodynamics in newborn infants? Hannu H, et al. **Early Hum Dev** 1989 Dec;20(3–4):281–7

Atrial natriuretic factor in central nervous system regulatory mechanisms: effect of experimental alterations in water and salt homeostasis and blood pressure. Palkovits M, et al. **Endocrinol Exp** 1990 Mar;24(1–2):87–95

Relationship between the most proximal His bundle and the morphology of intracavitary pressure curves. Alboni P, et al. **Eur Heart J** 1989 Oct;10(10):887–91

The results of surgery for atrial septal defect in patients aged fifty years and over. Cowen ME, et al. **Eur Heart J** 1990 Jan;11(1):29–34

Haemodynamics of induced atrial fibrillation: a comparative assessment with sinus rhythm, atrial and ventricular pacing. Lau CP, et al. **Eur Heart J** 1990 Mar;11(3):219–24

Is left ventricular mass in apparently healthy, normotensive men correlated to maximal blood pressure during exercise? Michelsen S, et al. **Eur Heart J** 1990 Mar;11(3):241–8

Hypertrophic cardiomyopathy: is a left ventricular outflow tract gradient a major prognostic determinant? Romeo F, et al. **Eur Heart J** 1990 Mar;11(3):233–40

Reduction in extracellular muscle volume increases heart rate and blood pressure response to isometric exercise. Baum K, et al. **Eur J Appl Physiol** 1990;60(3):217–21

Carotid baroreflex sensitivity at rest and during exercise is not influenced by opioid receptor antagonism. Staessen J, et al. **Eur J Appl Physiol** 1989;59(1–2):131–7

The effect of oral glucose, protein, fat and water loading on blood pressure and the gastrointestinal peptides VIP and somatostatin in hypertensive elderly subjects. Jansen RW, et al. **Eur J Clin Invest** 1990 Apr;20(2):192–8

Blood pressure and hypertension in an elderly population. Strulov A, et al. **Eur J Epidemiol** 1990 Jun;6(2):160–5

Pressure measurements as predictors for peroperative neurologic deficits in carotid surgery. Forssell C, et al. **Eur J Vasc Surg** 1990 Apr;4(2):153–8

Depressor effects of muscarinic and non-muscarinic mediation induced by lateral hypothalamic stimulation in the cat. Blum B, et al. **Experientia** 1989 Oct 15;45(10):991–6

Physiologic changes during colonoscopy. Fennerty MB, et al. **Gastrointest Endosc** 1990 Jan–Feb;36(1):22–5

Special issue on race, reactivity, and blood pressure regulation. **Health Psychol** 1989;8(5):483–627

Patterns of cardiovascular responses to stress as a function of race and parental hypertension in men. Anderson NB, et al. **Health Psychol** 1989;8(5):525–40

Neuropeptide and cardiovascular responses to intravenous catheterization in normotensive and hypertensive blacks and whites. McNeilly M, et al. **Health Psychol** 1989; 8(5):487–501

Cardiovascular and neurohumoral responses to behavioral challenge as a function of race and sex. Tischenkel NJ, et al. **Health Psychol** 1989;8(5):503–24

Diastolic compliance of the left atrium in man: a determinant of preload of the left ventricle. Nagano T, et al. **Heart Vessels** 1989;5(1):25–32

Upregulation of renal alpha 2-adrenergic receptors is not indicative of salt-related increases in blood pressure in spontaneously hypertensive rats. Meldrum MJ, et al. **Hypertension** 1990 Jul;16(1):49–54

Discovery of the renomedullary system of blood pressure control and its hormones. Muirhead EE. **Hypertension** 1990 Jan;15(1):114–6

Influence of prostaglandins on papillary blood flow and pressure-natriuretic response. Roman RJ, et al. **Hypertension** 1990 Jan;15(1):29–35

The brain kallikrein-kinin system. A possible role in blood pressure regulation [editorial; comment] Scicli AG, et al. **Hypertension** 1990 Apr;15(4):413–4 Comment on: Hypertension 1990 Apr;15(4):407–12.

Seasonal variations of arterial blood pressure in normotensive and essential hypertensives. Sharma BK, et al. **Indian Heart J** 1990 Jan–Feb;42(1):66–72

Centrally mediated alpha & beta adrenoceptors controlling blood pressure in rabbits. Satyanarayanan M, et al. **Indian J Med Res** 1990 Jun;92:201–4

Vasodilatory hormones in hemodialysis [editorial] Kjellstrand CM. **Int J Artif Organs** 1990 Mar;13(3):133

Is calcitonin gene-related peptide (CGRP) a regulator of blood pressure in hemodialysis patients? Odar-Cederlöf I, et al. **Int J Artif Organs** 1990 Mar;13(3):134–7 (36 ref.)

Eicosanoids and blood pressure during hemodialysis. Schultze G. **Int J Artif Organs** 1990 Mar;13(3):145–8 (46 ref.)

Atrial natriuretic factor, renal failure and hemodialysis. Shaw SG, et al. **Int J Artif Organs** 1990 Mar;13(3):138–44 (39 ref.)

The haemodynamic response to ST segment changes during coronary arteriography. Levy RD, et al. **Int J Cardiol** 1990 Mar;26(3):343–8

Relationship of menopausal status and sex hormones to serum lipids and blood pressure. Wu ZY, et al. **Int J Epidemiol** 1990 Jun;19(2):297–302

The relationship of body fat distribution to blood pressure in normotensive men: the normative aging study. Troisi RJ, et al. **Int J Obes** 1990;14(6):515–25

Heart rate and blood pressure response to upright tilt in young patients with unexplained syncope. Pongiglione G, et al. **J Am Coll Cardiol** 1990 Jul;16(1):165–70

Hemodynamics for the sonographer. Adams DB, et al. **J Am Soc Echocardiogr** 1988 Mar–Apr;1(2):158–60

High flow velocity across a complicated atrial septal defect: Doppler findings and hemodynamic correlations. Goldfarb A, et al. **J Am Soc Echocardiogr** 1988 Sep–Oct;1(5):348–50

Predictive value of two-dimensional echocardiographic and hemodynamic measurements on admission with acute myocardial infarction. Jaarsma W, et al. **J Am Soc Echocardiogr** 1988 May–Jun;1(3):187–93

Assessment of pulmonary artery pressure with Doppler ultrasound. Ryan TJ. **J Am Soc Echocardiogr** 1988 May–Jun;1(3):253–4

Shivering and cardiorespiratory responses during normocapnic hypoxia in the pigeon. Barnas GM, et al. **J Appl Physiol** 1990 Jan;68(1):84–7

Pulmonary vascular pressure-flow characteristics in canine pulmonary embolism. Hasinoff I, et al. **J Appl Physiol** 1990 Feb;68(2):462–7

Analysis of pulmonary arterial pressure profile after occlusion of pulsatile blood flow. Maarek JM, et al. **J Appl Physiol** 1990 Feb;68(2):761–9

Metabolic effects of exposure to hypoxia plus cold at rest and during exercise in humans [published errata appear in J Appl Physiol 1990 May;68(5):preceding 1777 and 1990 Jun;68(6):following 2701] Robinson KA, et al. **J Appl Physiol** 1990 Feb;68(2):720–5

Assessment of cardiovascular reflexes: influence of posture and period of preceding rest. Ten Harkel AD, et al. **J Appl Physiol** 1990 Jan;68(1):147–53

Mechanisms of pulsus paradoxus in airway obstruction. Viola AR, et al. **J Appl Physiol** 1990 May;68(5):1927–31

Cardiovascular responses to hypoxia and hypercapnia in barodenervated rats. Walker BR, et al. **J Appl Physiol** 1990 Feb;68(2):678–86

Phasic capillary pressure determined by arterial occlusion in intact dog lung lobes. Yamada Y, et al. **J Appl Physiol** 1989 Dec;67(6):2205–11

The Valsalva manoeuvre. Bhagwat AR, et al. **J Assoc Physicians India** 1990 Mar;38(3):221–3

Longitudinally measured blood pressure, antihypertensive medication use, and cognitive performance: the Framingham Study. Farmer ME, et al. **J Clin Epidemiol** 1990;43(5):475–80

End-tidal carbon dioxide concentration, carbon dioxide production, heart rate, and blood pressure as indicators of induced hyperthermia. de las Alas V, et al. **J Clin Monit** 1990 Jul;6(3):183–5

Oxygen uptake and mean blood pressure as indicators of induced hyperthermia. de las Alas V, et al. **J Clin Monit** 1990 Jul;6(3):186–8

Does measurement of systolic blood pressure with a pulse oximeter correlate with conventional methods? Talke P, et al. **J Clin Monit** 1990 Jan;6(1):5–9

The effects of changes in heart rate and aortic systolic pressure on left ventricular myocardial oxygen consumption in lambs. Shaddy RE, et al. **J Dev Physiol** 1989 Apr;11(4):213–7

Central muscarinic modulation of fetal blood pressure and heart rate. Szeto HH, et al. **J Dev Physiol** 1990 Jan; 13(1):17–23

Cardiovascular response during postural change in the elderly. Goldstein IB, et al. **J Gerontol** 1990 Jan; 45(1):M20–5

Hypertension: the cause of the J-curve. Coope J. **J Hum Hypertens** 1990 Feb;4(1):1–4 (36 ref.)

Circadian variation of blood pressure in blacks: influence of age, gender and activity. Harshfield GA, et al. **J Hum Hypertens** 1990 Feb;4(1):43–7

Pressor response to mental stress and exercise in hypertension [letter] Koyama F, et al. **J Hum Hypertens** 1990 Feb; 4(1):64–5

The influence of menopause on blood pressure. Staessen J, et al. **J Hum Hypertens** 1989 Dec;3(6):427–33

Evidence for a curvilinear relation between blood pressure and urinary sodium in men. Staessen J, et al. **J Hum Hypertens** 1990 Feb;4(1):19–24

Correlation of increased serum calcium with elevated blood pressure and vascular resistance during calcium infusion in normotensive man. Aoki K, et al. **J Hypertens** 1990 Jun; 8(6):579–83

Enhanced blood pressure response to regular daily stress in urban hypertensive men. Baba S, et al. **J Hypertens** 1990 Jul;8(7):647–55

Effect of dietary calcium supplementation on blood pressure and calciotropic hormones in mineralocorticoid-salt hypertension. DiPette DJ, et al. **J Hypertens** 1990 Jun; 8(6):515–20

The relation of blood sodium concentration to blood pressure in the rat. Friedman SM, et al. **J Hypertens** 1990 Jan; 8(1):61–6

The relation of cell volume, cell sodium and the transmembrane sodium gradient to blood pressure. Friedman SM. **J Hypertens** 1990 Jan;8(1):67–73

Blood pressure distribution in a school-age population aged 8–10 years: the Odense Schoolchild Study. Hansen HS, et al. **J Hypertens** 1990 Jul;8(7):641–6

Circadian rhythms of atrial natriuretic peptide, renin, aldosterone, cortisol, blood pressure and heart rate in normal and hypertensive subjects. Portaluppi F, et al. **J Hypertens** 1990 Jan;8(1):85–95

Association between habitual coffee consumption and blood pressure levels. Salvaggio A, et al. **J Hypertens** 1990 Jun; 8(6):585–90

The J-shaped relationship between coronary heart disease and achieved blood pressure level in treated hypertension: further analyses of 12 years of follow-up of treated hypertensives in the Primary Prevention Trial in Gothenburg, Sweden. Samuelsson OG, et al. **J Hypertens** 1990 Jun;8(6):547–55

Role of bradykinin in the regulation of blood pressure and renal blood flow in DOCA-salt hypertensive rats. Seino M, et al. **J Hypertens** 1990 May;8(5):411–6

Lack of association between blood pressure and insulin in patients with insulinoma. Tsutsu N, et al. **J Hypertens** 1990 May;8(5):479–82

Nocturnal hypertension in renal failure, haemodialysis and after renal transplantation. Baumgart P, et al. **J Hypertens Suppl** 1989 Dec;7(6):S70–1

Changes in peripheral venous distensibility and blood pressure modifications in borderline hypertension: evidence against a primary role for the renin-angiotensin-aldosterone system. Borghi C, et al. **J Hypertens Suppl** 1989 Dec;7(6):S80–1

First Björn Folkow Award lecture. The role of cardiac output in the control of blood pressure. Conway J. **J Hypertens Suppl** 1989 Dec;7(6):S3–7 (35 ref.)

Comparison of Finapres non-invasive beat-to-beat finger blood pressure with intrabrachial artery pressure during and after bicycle ergometry. Idema RN, et al. **J Hypertens Suppl** 1989 Dec;7(6):S58–9

Does age influence the blood pressure and sodium excretion responses to sodium depletion in rats? Jover B, et al. **J Hypertens Suppl** 1989 Dec;7(6):S182–3

Altered plasma leucine-enkephalin concentrations in patients with established hypertension may be involved in impaired regulation of blood pressure. Kraft K, et al. **J Hypertens Suppl** 1989 Dec;7(6):S18–9

The effects of a microgravitational environment on the blood pressure maturation curve in normotensive rats. Magrini F, et al. **J Hypertens Suppl** 1989 Dec;7(6):S74–5

Calcium intake, calcium excretion and blood pressure in adolescents in the upper decile of the distribution: the Torrejon study. Martell-Claros N, et al. **J Hypertens Suppl** 1989 Dec;7(6):S256–7

Blood pressure rather than humoral factors regulate arterial wall trophicity in rats with an aortocaval fistula. Michel JB, et al. **J Hypertens Suppl** 1989 Dec;7(6):S124–5

Time-course of the changes in blood pressure and in plasma renin activity during the first week after dilation of renal artery stenosis. Morganti A, et al. **J Hypertens Suppl** 1989 Dec;7(6):S186–7

Spectral analysis of R-R and arterial pressure variabilities to assess sympatho-vagal interaction during mental stress in humans. Pagani M, et al. **J Hypertens Suppl** 1989 Dec; 7(6):S14–5

Blood pressure changes during heavy-resistance exercise. Palatini P, et al. **J Hypertens Suppl** 1989 Dec;7(6):S72–3

Effects of twenty-four hours of bed rest with head-down tilt on cardiopulmonary baroreflex control: preliminary study. Pannier B, et al. **J Hypertens Suppl** 1989 Dec; 7(6):S38–9

Early twenty-four-hour blood pressure elevation in subjects with parental hypertension. Parati G, et al. **J Hypertens Suppl** 1989 Dec;7(6):S64–5

Hypertension and cardiac complications in normotensive myocardial infarction patients with elevated exercise blood pressure. Patyna WD, et al. **J Hypertens Suppl** 1989 Dec;

7(6):S334–5
Change in posture during sleep causes errors in non–invasive automatic blood pressure recordings. Schwan A, et al. **J Hypertens Suppl** 1989 Dec;7(6):S62–3
Cortisol–stimulated phosphoinositide metabolism in vascular smooth muscle cells: a role for glucocorticoids in blood pressure control? Steiner A, et al. **J Hypertens Suppl** 1989 Dec;7(6):S140–1
Strenuous short–term dynamic exercise: effects on heart rate, blood pressure, potassium homeostasis, and packed cell volume in mild hypertension. Sullivan PA, et al. **J Hypertens Suppl** 1989 Dec;7(6):S90–1
Pressor responsiveness, age and hypertension. Sumner DJ, et al. **J Hypertens Suppl** 1989 Dec;7(6):S88–9
Time–course study of blood pressure over a 20–year period in congenital blindness. Timio M, et al. **J Hypertens Suppl** 1989 Dec;7(6):S328–9
Brain corticosteroid receptors and regulation of arterial blood pressure. van den Berg DT, et al. **J Hypertens Suppl** 1989 Dec;7(6):S202–3
Twenty–four–hour ambulatory blood pressure pattern in youngsters with a different family history of hypertension: the Dutch Hypertension and Offspring Study. van Hooft IM, et al. **J Hypertens Suppl** 1989 Dec;7(6):S66–7
Correlations between ST–segment depressions in patients with arterial hypertension and changes in arterial blood pressure and the heart rate. Wehling M, et al. **J Hypertens Suppl** 1989 Dec;7(6):S110–1
Rapid left ventricular filling is more dependent on age and twenty–four–hour blood pressure than on cardiac size. White WB, et al. **J Hypertens Suppl** 1989 Dec;7(6):S102–3
Blood pressure response during maximal exercise in apparently healthy men and women. Michelsen S, et al. **J Intern Med** 1990 Mar;227(3):157–63
Assessment of the splanchnic vascular capacity and capacitance using quantitative equilibrium blood–pool scintigraphy [see comments] Robinson VJ, et al. **J Nucl Med** 1990 Feb;31(2):154–9 Comment in: J Nucl Med 1990 Feb;31(2):160–2.
Effects of variation in systemic blood pressure on intraosseous pressure, PO2, and PCO2. Kiaer T, et al. **J Orthop Res** 1990 Jul;8(4):618–22
A multimethod approach to the measurement of childhood physical activity and its relationship to blood pressure and body weight. Klesges RC, et al. **J Pediatr** 1990 Jun; 116(6):888–93
Blood pressure and cerebral ischemia in very low birth weight infants. Kopelman AE. **J Pediatr** 1990 Jun; 116(6):1000–2 (12 ref.)
Differential modulation by pulmonary stretch afferents of some reflex cardioinhibitory responses in the cat. Daly MB, et al. **J Physiol (Lond)** 1989 Oct;417:323–41
Heart rate and arterial blood pressure at the onset of static exercise in man with complete neural blockade. Friedman DB, et al. **J Physiol (Lond)** 1990 Apr;423:543–50
Increasing atrial pressure during cardiac tamponade does not elevate plasma levels of the peptide ANP in conscious dogs. Klopfenstein HS, et al. **J Physiol (Lond)** 1990 Feb; 421:309–19
Epidural anaesthesia and cardiovascular responses to static exercise in man. Mitchell JH, et al. **J Physiol (Lond)** 1989 Oct;417:13–24
Acute carotid baroreflex resetting in conscious dogs. Tan W, et al. **J Physiol (Lond)** 1989 Sep;416:557–69
Cardiovascular load in off–shore sailing competition. Bernardi M, et al. **J Sports Med Phys Fitness** 1990 Jun; 30(2):127–31
Fourth–order blood pressure waves. Carroll GC. **JAMA** 1990 Feb 9;263(6):856–7
The role of alpha 1– and alpha 2–adrenoceptors in canine systemic capacitance vessels—a study with measurement of mean circulatory pressure. Hirose I, et al. **Jpn Circ J** 1990 Feb;54(2):152–60
Circulatory and respiratory responses to lower body negative pressure in man. Ahn B, et al. **Jpn J Physiol** 1989; 39(6):919–29
Metabolic and blood pressure response to feeding activity is enhanced in freely moving spontaneously hypertensive rats. Shido O, et al. **Jpn J Physiol** 1989;39(4):537–48
Blood flow redistribution during spontaneous wheel walk of the rat. Takemoto Y, et al. **Jpn J Physiol** 1989; 39(6):847–55
Correlation of blood pressure in end–stage renal disease with platelet cytosolic free–calcium concentration. Schiffl H. **Klin Wochenschr** 1990 Jul 17;68(14):718–22
Potential problems with random zero sphygmomanometer [letter; comment] Macintyre CC, et al. **Lancet** 1990 Mar 24;335(8691):727–8 Comment on: Lancet 1990 Feb 10;335(8685):360.
Acetylcholine in the posterior hypothalamic nucleus is involved in the elevated blood pressure in the spontaneously hypertensive rat. Brezenoff HE, et al. **Life Sci** 1989;45(13):1163–70
Endurance training alters arterial baroreflex function in dogs. Gwirtz PA, et al. **Med Sci Sports Exerc** 1990 Apr; 22(2):200–6
Cardiovascular response to sustained maximal voluntary static muscle contraction. Misner JE, et al. **Med Sci Sports Exerc** 1990 Apr;22(2):194–9
Does increasing haemoglobin concentration and haematocrit have a pressor effect in dialysis patients? Williams B, et al. **Nephrol Dial Transplant** 1989;4(9):787–91
Pathophysiological characteristics of clinical death in rats. Majkowska–Wierzbicka J. **Neuropatol Pol** 1989;27(1):85–96
Interrelationships among the renin–angiotensin system, sympathetic nervous system and atrial natriuretic peptide in end–stage renal failure. Nakajima S, et al. **Nippon Jinzo Gakkai Shi** 1990 Mar;32(3):305–11
Role of prostaglandin I2 and thromboxane A2 in the regulation of blood pressure. Osanai T. **Nippon Jinzo Gakkai Shi** 1989 Jun;31(6):677–85
Studies on the changes in myocardial oxygen tension. Nakamura T, et al. **Nippon Juigaku Zasshi** 1990 Feb; 52(1):79–84
Blood pressure increases, birth weight–dependent stability boundary, and intraventricular hemorrhage. Perry EH, et al. **Pediatrics** 1990 May;85(5):727–32
Cardiovascular and sympathetic nervous system responses to an acute stressor in borderline hypertensive rats (BHR). Kirby RF, et al. **Physiol Behav** 1989 Aug;46(2):309–13
Effects of behavior and social condition on cardiovascular response to footshock stress. Viken RJ, et al. **Physiol Behav** 1989 Dec;46(6):961–6
Predictability of repeated challenge: effects on cardiovascular activity in the type A (coronary prone) behavior pattern. Zeichner A, et al. **Physiol Behav** 1990 Jan;47(1):149–54
Baroreflex responses and LBNP tolerance following exercise training. Convertino VA, et al. **Physiologist** 1990 Feb;33(1 Suppl):S40–1
Carotid baroreceptor cardiac–vagal reflex responses during 10 days of head–down tilt. Eckberg DL, et al. **Physiologist** 1990 Feb;33(1 Suppl):S177
Effects of lower body positive pressure on forearm vasculature. Leftheriotis G, et al. **Physiologist** 1990 Feb; 33(1 Suppl):S52–3
The autonomic nervous system in blood pressure regulation during 10 days 6 degrees head down tilt. ten Harkel AD, et al. **Physiologist** 1990 Feb;33(1 Suppl):S178–9
Pathogenesis of hypertension in IgA nephropathy. Tamura T, et al. **Pol Arch Med Wewn** 1988 Oct;80(4):221–7
Control of phrenic nerve activity and blood pressure by the medullary raphe nuclei in cats. Yen CT, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Apr;13(2):89–96
Renal sympathetic nerve activity and arterial pressure responses to changes in postural position of conscious dogs. Osborn JL, et al. **Proc Soc Exp Biol Med** 1989 Dec; 192(3):248–54
Role of the glycine sensitive area in the regulation of cardiac output. Campos Júnior RR, et al. **Prog Brain Res** 1989; 81:243–51
Integration of cardiorespiratory responses in the ventrolateral medulla. Cherniack NS, et al. **Prog Brain Res** 1989; 81:215–20
Cardiovascular control by the rostral ventrolateral medulla in the conscious dog. Dormer KJ, et al. **Prog Brain Res** 1989;81:265–77
Pressor responses to muscular contraction in the cat: contributions by caudal and rostral ventrolateral medulla. Iwamoto GA, et al. **Prog Brain Res** 1989;81:253–63
Cholinergic mechanisms subserving cardiovascular function in the medulla and spinal cord. Sapru HN. **Prog Brain Res** 1989;81:171–9
Differential regulation of sympathetic nerve activity by lateral and medial subregions of the rostral ventral medulla. Varner KJ, et al. **Prog Brain Res** 1989;81:99–103
Acute changes in osmolality and renin and respiratory control of arterial PCO2 and [H+]. Anderson JW, et al. **Respir Physiol** 1990 Apr;80(1):1–16
Beta–endorphin and central control of arterial blood pressure during challenge of circulatory homeostasis. de Jong W, et al. **Resuscitation** 1989 Dec;18(2–3):173–82
Plasma catecholamines, pH, and blood pressure during cardiac arrest in pigs. Lathers CM, et al. **Resuscitation** 1989 Oct;18(1):59–74
Reproducibility of cumulative work, heart rate and blood pressure response during stepwise versus continuous load increment during a maximal bicycle ergometer test. Michelsen S. **Scand J Clin Lab Invest** 1990 Jun;50(4):409–15
Acute blood pressure reduction in the presence of hypertensive cardiac hypertrophy: any interference with coronary circulation? Guazzi MD, et al. **Scand J Clin Lab Invest Suppl** 1989;196:53–61 (17 ref.)
The three phases of blood pressure in stroke. Loyke HF. **South Med J** 1990 Jun;83(6):660–3 (24 ref.)
Improved compliance and ventricular function curves after open–heart surgery: role of the pericardium. Misbach GA, et al. **Surg Forum** 1978;29:251–3
Renin secretion during nonpulsatile left ventricular bypass in the awake calf. Shoor PM, et al. **Surg Forum** 1978; 29:120–1
Cosinor analysis of changes in circadian blood pressure rhythm with aging in spontaneously hypertensive rats. Munakata M, et al. **Tohoku J Exp Med** 1990 May; 161(1):55–64
Blood pressure in newborn term and preterm infants. Rankova S. **Tokai J Exp Clin Med** 1989 Jun;14(3):181–90 (21 ref.)
[The sympathetic and renin–angiotensin systems are complementary in blood pressure regulation] Sassard J, et al. **Bull Acad Natl Med** 1989 Dec;173(9):1219–22; discussion 1223 (Eng. Abstr.) (Fre)
[Spectrum analysis of blood pressure and cardiac rate in the conscious rat] Grichois ML, et al. **C R Acad Sci [III]** 1989; 309(18):683–9 (Eng. Abstr.) (Fre)
[Arterial pressure and puberty: relation to height–weight characteristics] Spyckerelle Y, et al. **Pediatrie** 1989; 44(6):505–11 (Eng. Abstr.) (Fre)
[Control of arterial blood pressure] Groza P. **Physiologie** 1989 Apr–Jun;26(2):131–46 (40 ref.) (Fre)
[Alpha 1 receptors and blood pressure control. Mechanisms of hypotensive action of urapidil?] Brisac AM. **Therapie** 1990 Mar–Apr;45 Suppl 2:187–90 (Fre)
[Effect of a single mild infrared A hyperthermia on body temperature, heart rate, blood pressure and blood viscosity in healthy probands and patients with stage I and II arterial hypertension] Scherf HP, et al. **Dermatol Monatsschr** 1989; 175(12):733–40 (Eng. Abstr.) (Ger)
[Doctor's–office blood pressure, home blood pressure, ergometry blood pressure and 24–hour blood pressure. The correlations with the echocardiographic parameters of heart muscle mass] Baumgart P, et al. **Dtsch Med Wochenschr** 1990 Apr 27;115(17):643–7 (Eng. Abstr.) (Ger)
[Blood pressure and nutrition] Greminger P. **Dtsch Med Wochenschr** 1989 Nov 3;114(44):1717–9 (18 ref.) (Ger)
[Stimulation of vascular prostacyclin formation. A new action principle for decreasing blood pressure?] Simmet T, et al. **Dtsch Med Wochenschr** 1990 Jun 22;115(25):994–6 (15 ref.) (Ger)
[Changes in the circulation of the eye caused by Vörösmarthy preoperative ocular pressure] Hessemer V, et al. **Klin Monatsbl Augenheilkd** 1990 Jan;196(1):11–6 (Eng. Abstr.) (Ger)
[Morning rise in blood pressure: before or following awakening?] Baumgart P, et al. **Klin Wochenschr** 1990 Mar 16;68(6):320–3 (Eng. Abstr.) (Ger)
[Non–invasive Doppler echocardiography assessment of right ventricular pressure in patients with ventricular septal defect] Wippermann CF, et al. **Monatsschr Kinderheilkd** 1990 Apr;138(4):206–10 (Eng. Abstr.) (Ger)
[Age–related and pathophysiologic significance of capillary bed rarefaction of the hypertensive vascular system] Henrich HA, et al. **Z Gerontol** 1990 May–Jun;23(3):147–51 (Eng. Abstr.) (Ger)
[A new method for determining capillary filtration coefficients in tissues. 1. Methodologic principles] Petrow JM. **Z Gesamte Inn Med** 1990 Mar 1;45(5):137–40 (Eng. Abstr.) (Ger)
[A new method for determining capillary filtration coefficients in tissues. 2. Animal experiment studies] Petrow JM. **Z Gesamte Inn Med** 1990 Mar 1;45(5):141–4 (Eng. Abstr.) (Ger)
[The behavior of arterial blood pressure in dynamic and static muscle exercise with respect to atrial natriuretic peptide and neurotransmitters] Hollmann W, et al. **Z Kardiol** 1989; 78 Suppl 7:211–9 (13 ref.) (Eng. Abstr.) (Ger)
[Cardiocirculatory and respiratory reflexes of muscular origin during prolonged experimental dynamic exercise. Effects of sectioning of the sino–carotid and aortic nerves and bilateral vagotomy] Peruzzi G, et al. **Cardiologia** 1989 Nov; 34(11):919–24 (Eng. Abstr.) (Ita)
[Stroop's color–word test as a mental stressor in the functional evaluation of recent myocardial infarction: comparison with arithmetic calculation] Mazzuero G, et al. **G Ital Cardiol** 1989 Nov;19(11):1024–7 (Eng. Abstr.) (Ita)
[The association of arithmetic calculation and noise as a mental stressor in the functional evaluation of recent myocardial infarction] Mazzuero G, et al. **G Ital Cardiol** 1989 Nov;19(11):1028–31 (Eng. Abstr.) (Ita)
[The echocardiographic examination associated with the cold pressor test or the isometric force test in the evaluation of ischemic heart disease] Canale C, et al. **Minerva Cardioangiol** 1989 Jul–Aug;37(7–8):341–9 (Eng. Abstr.) (Ita)
[Atrial natriuretic peptide, renin–aldosterone system and arterial pressure. Analysis by circadian rhythm measurement] Colantonio D, et al. **Minerva Cardioangiol** 1989 Jul–Aug;37(7–8):319–22 (Eng. Abstr.) (Ita)
[Usefulness of long–term monitoring of neonatal arterial pressure] Menghetti E, et al. **Pediatr Med Chir** 1990 Jan–Feb;12(1):61–3 (Eng. Abstr.) (Ita)
[Incidence of exertion hypertension in normotensive individuals] Monaldi ML, et al. **Recenti Prog Med** 1990 Apr;81(4):245–8 (Eng. Abstr.) (Ita)
[Behavior of fibrinogen, hematocrit and platelets in relation to variations in body mass index in a group of female subjects] Carnevale Schianca GP, et al. **Ric Clin Lab** 1989; 19 Suppl 1:125–8 (Ita)
[Change of blood pressure and pulse rate in intravenous urography] Hasegawa N. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Oct 25; 49(10):1258–71 (Eng. Abstr.) (Jpn)
[Angiotensin and prostaglandins in the pressure–natriuresis response in rats] Yuasa S, et al. **Nippon Jinzo Gakkai Shi** 1990 Feb;32(2):191–8 (Eng. Abstr.) (Jpn)
[Blood lipids and the clinical state of hormone–treated women during menopause] Dominiczak–Gawrońska M. **Ann Acad Med Stetin** 1989;35:145–66 (Eng. Abstr.) (Pol)
[Twenty–four hour automatic recording of blood pressure and cardiac rhythm in patients with borderline hypertension] Cybulska I, et al. **Kardiol Pol** 1989;

32(7–9):380–5 (Eng. Abstr.) (Pol)
[Primary reninism—a rare cause of hypertension] Januszewicz P, et al. **Kardiol Pol** 1989;32(5):288–92 (44 ref.) (Pol)
[Ultrasonic diagnosis of atrial septal defect with normal pressure of the right ventricle and left–to–right shunt] Rydlewska–Sadowska W, et al. **Kardiol Pol** 1989;32 Suppl 2:67–70 (Eng. Abstr.) (Pol)
[Dopamine beta–hydroxylase in disorders of blood pressure regulation] Wocial B, et al. **Kardiol Pol** 1989;32 Suppl 1:79–86 (Pol)
[Long–term oxygen therapy of chronic pulmonary heart disease] Sroczyński J, et al. **Pneumonol Pol** 1990 Jan; 58(1):8–11 (Eng. Abstr.) (Pol)
[Studies of the mechanism of arterial hypotension induced by water immersion in healthy persons and in patients with diabetes mellitus] Dulawa J, et al. **Pol Arch Med Wewn** 1987 Oct;78(4):185–96 (Eng. Abstr.) (Pol)
[Plasma renin activity in patients with sodium–responsive and unresponsive essential hypertension] Kuska J, et al. **Pol Arch Med Wewn** 1987 Oct;78(4):197–206 (Eng. Abstr.) (Pol)
[Arterial hypertension in acromegaly] Słowińska–Srzednicka J, et al. **Pol Arch Med Wewn** 1987 Aug;78(2):81–8 (Eng. Abstr.) (Pol)
[Hyperuricemia and arterial hypertension] Tykarski A. **Pol Tyg Lek** 1989 Jul 23–30;44(30–31):691–5 (Pol)
[Results of blood pressure measurements depending on the place and method of measurement in individuals with normal blood pressure and borderline hypertension] Przestalska–Malkin H, et al. **Przegl Epidemiol** 1989; 43(4):405–14 (Eng. Abstr.) (Pol)
[Arterial hypertension in children and adolescents] Wyszyńska T. **Przegl Lek** 1989;46(6):504–6 (Pol)
[Value of Doppler echocardiography in evaluating pulmonary arterial pressure in patients with mitral valve defect] Trojnar R, et al. **Wiad Lek** 1989 May 1;42(9):561–6 (Eng. Abstr.) (Pol)
[Are we overdiagnosing and overtreating mild arterial hypertension?] Monteiro AA, et al. **Rev Port Cardiol** 1989 Nov;8(11):751–3 (Eng. Abstr.) (Por)
[Epidemiology of essential arterial hypertension in collectives of schoolchildren. The prevalence of blood pressure changes] Ivan A, et al. **Rev Pediatr Obstet Ginecol [Pediatr]** 1989 Jul–Sep; 38(3):247–54 (Eng. Abstr.) (Rum)
[The role of inappropriate vasopressin secretion syndrome in the development of intraventricular hemorrhage in premature infants] Baĭbarina EN, et al. **Akush Ginekol (Mosk)** 1990 Jan;(1):36–8 (Rus)
[Periodic fluctuations of the blood pressure and heart contraction rate in premature newborn infants] Siutkina EV, et al. **Biull Eksp Biol Med** 1990 Mar;109(3):217–9 (Eng. Abstr.) (Rus)
[The renin–angiotensin–aldosterone system in women with normal arterial pressure ill with neurasthenia] Ashkinazi IIa, et al. **Fiziol Cheloveka** 1989 Sep–Oct;15(5):133–6 (Rus)
[baroreflex activation of the sympathetic nervous system during a paroxysm of supraventricular tachycardia] Kuz'min AI, et al. **Fiziol Cheloveka** 1989 Sep–Oct; 15(5):54–60 (Rus)
[The relation of the circulatory system reactions to changes in body posture and physical load to the initial level of arterial pressure and heart contraction frequency] Vilkov VG, et al. **Fiziol Cheloveka** 1989 Sep–Oct;15(5):65–9 (Rus)
[Local blood flow of the brain and hip muscle during hypoxia in normo– and hypobaric conditions] Agafonov VP. **Fiziol Zh** 1990 Mar–Apr;36(2):95–9 (Eng. Abstr.) (Rus)
[The effect of a psychoemotional load on the cardiovascular system and catecholamines in subjects with different levels of arterial pressure] Kruchinina NA, et al. **Fiziol Zh SSSR** 1990 Jan;76(1):33–40 (Eng. Abstr.) (Rus)
[The effect of the ventral structures of the medulla oblongata on systemic arterial pressure and on the resistance and capacitance of the skeletal muscle vessels] Kul'chitskiĭ VA, et al. **Fiziol Zh SSSR** 1989 Jun;75(6):786–92 (Eng. Abstr.) (Rus)
[The interrelations of arterial pressure, cardiac output and coronary blood flow during orthostatic reactions] Osadchiĭ LI, et al. **Fiziol Zh SSSR** 1989 Aug;75(8):1126–32 (Eng. Abstr.) (Rus)
[Changes in arterial pressure in teenage boys and girls under emotional tension] Vediaev FP, et al. **Fiziol Zh SSSR** 1989 Dec;75(12):1697–707 (Eng. Abstr.) (Rus)
[Circadian rhythm of arterial blood pressure in adolescents during the study process in South–Western Siberia] Nedbaeva ND, et al. **Gig Sanit** 1989 Nov;(11):12–5 (Eng. Abstr.) (Rus)
[Hygienic evaluation of the number of stories at children's day care establishments] Teren'eva GV, et al. **Gig Sanit** 1989 Aug;(8):88–90 (Rus)
[Changes in vascular reactivity during the noradrenaline test in patients with hypertension] Bakhshaliev AB, et al. **Kardiologiia** 1990 Jan;30(1):22–6 (Eng. Abstr.) (Rus)
[Inhibitory effect of the adaptation to physical load on the development of spontaneous hereditary hypertension in rats] Dvurechenskaia GIa, et al. **Kardiologiia** 1989 Sep; 29(9):84–7 (Eng. Abstr.) (Rus)
[Correlation of the size and mean pressure in the left atrium and the effectiveness of treatment of persistent atrial fibrillation in patients with acquired heart defects] Gorentsvit IE. **Kardiologiia** 1990 Feb;30(2):100–2 (Rus)
[Serotonin and its physiological and pathophysiological roles. Ketanserin] Metelitsa TV. **Kardiologiia** 1989 Sep; 29(9):120–5 (73 ref.) (Rus)
[Use of the calibrometry of retinal vessels in the diagnosis of borderline arterial hypertension and early stages of hypertension] Perepech NV. **Kardiologiia** 1990 Jan; 30(1):78–9 (Rus)
[Graded physical exercise and urinary excretion of albumin and beta 2 microglobulin in patients with hypertension] Shkhvatsabaia IK, et al. **Kardiologiia** 1990 Jan;30(1):81–3 (Rus)
[Incidence and severity of pulmonary hypertension in patients with diseases of the lungs and heart] Aleksandrov AL, et al. **Klin Med (Mosk)** 1990 May;68(5):71–4 (Rus)
[Precursors and the main risk factors of hypertension] Gogin EE. **Klin Med (Mosk)** 1989 Oct;67(10):3–7 (Eng. Abstr.) (Rus)
[Circadian changes in arterial blood pressure and hemodynamics and the morphofunctional state of the myocardium in patients with hypertension during long–term treatment with estulic] Komarov FI, et al. **Klin Med (Mosk)** 1990 Feb;68(2):58–61 (Eng. Abstr.) (Rus)
[The role of atrial natriuretic peptide in the pathogenesis of arterial hypertension in chronic glomerulonephritis] Konstantinov IuV, et al. **Klin Med (Mosk)** 1989 Oct; 67(10):57–60 (Eng. Abstr.) (Rus)
[The renin–angiotensin–aldosterone system in hypertension of hypothalamic origin] Slavnov VN, et al. **Klin Med (Mosk)** 1989 Oct;67(10):60–4 (Eng. Abstr.) (Rus)
[Criteria of tolerance of the hypercapnia–hypoxia test] Nekhaev AS, et al. **Kosm Biol Aviakosm Med** 1990 Mar–Apr;24(2):46–8 (Eng. Abstr.) (Rus)
[The effect of diabetes mellitus on the renal prostanoid system and on the arterial pressure level in spontaneously hypertensive rats] Markov KhM, et al. **Patol Fiziol Eksp Ter** 1990 Mar–Apr;(2):10–2 (Eng. Abstr.) (Rus)
[The reactivity of postsynaptic alpha 1– and alpha 2–adrenoreceptors and arterial pressure in acute pancreatitis] Simavorian PS, et al. **Patol Fiziol Eksp Ter** 1990 Mar–Apr;(2):20–2 (Eng. Abstr.) (Rus)
[The relation of arterial pressure and the rate of Na–Li countertransport in a representative subsample of the population of Moscow residents] Petrov VV, et al. **Ter Arkh** 1990;62(4):81–5 (Eng. Abstr.) (Rus)
[Prognostic significance of arterial blood pressure levels and the effectiveness of the treatment of arterial hypertension in a non–organized male population 40–59 years of age in Moscow] Kalinina AM, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):50–5 (Eng. Abstr.) (Rus)
[Mechanisms of the therapeutic effect of hyperbaric oxygenation in minor differential pressure in stroke] Gusev EI, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):34–40 (Eng. Abstr.) (Rus)
[Normal blood pressure values in neonates and physiologic factors in its variability] Kellerová E, et al. **Bratisl Lek Listy** 1990 Mar;91(3):241–6 (Eng. Abstr.) (Slo)
[Aging and efficiency of the baroreflex arc. Analysis of a large sample of normal individuals studied with a computerized technic] Iglesias Guerrero M, et al. **Rev Esp Cardiol** 1990 Jan;43(1):29–34 (Eng. Abstr.) (Spa)
[Hemodynamics of arterial hypertension] Navarro Salas E, et al. **Rev Esp Cardiol** 1990;43 Suppl 1:34–6 (7 ref.) (Eng. Abstr.) (Spa)
[The Fuenlabrada study: arterial pressure in children and adolescents] Plaza I, et al. **Rev Esp Cardiol** 1989 Nov; 42(9):570–80 (Eng. Abstr.) (Spa)

RADIATION EFFECTS

Thermal and physiologic responses to 1200–MHz radiofrequency radiation: differences between exposure in E and H orientation. Jauchem JR, et al. **Proc Soc Exp Biol Med** 1990 Sep;194(4):358–63
[Functional asymmetry as an indicator of the biological effect of ultrahigh frequency electromagnetic fields] Stoian EF. **Gig Sanit** 1989 Oct;(10):81–2 (Rus)

BLOOD PRESSURE DETERMINATION

Noninvasive ambulatory blood pressure control in normotensive pregnant women. Margulies M, et al. **Am J Hypertens** 1989 Dec;2(12 Pt 1):924–6
Comparison of clinic and home blood pressure levels and the role of the sympathetic nervous system in clinic–home differences. Saito I, et al. **Am J Hypertens** 1990 Mar; 3(3):219–24
The measuring of blood pressure during pregnancy. Villar J, et al. **Am J Obstet Gynecol** 1989 Oct;161(4):1019–24
Skin perfusion pressure assessed by measuring the external pressure required to stop blood cell flux. Svensson H, et al. **Angiology** 1990 Mar;41(3):169–74
Measuring blood pressure in the elderly [letter; comment] Grant IW. **BMJ** 1990 Feb 24;300(6723):538 Comment on: BMJ 1990 Jan 20;300(6718):162–3.
Measuring blood pressure in the elderly: does atrial fibrillation increase observer variability? [see comments] Sykes D, et al. **BMJ** 1990 Jan 20;300(6718):162–3 Comment in: BMJ 1990 Feb 24;300(6723):538.
Pathophysiology of silent myocardial ischemia during daily life. Hemodynamic evaluation by simultaneous electrocardiographic and blood pressure monitoring [see comments] Deedwania PC, et al. **Circulation** 1990 Oct; 82(4):1296–304 Comment in: Circulation 1990 Oct;82(4):1528–30.
Ambulatory blood pressure monitoring in elderly hypertensive patients. Miller ST, et al. **Clin Geriatr Med** 1989 Nov;5(4):733–51 (50 ref.)
Once daily nisoldipine in hypertension: cuff and ambulatory intra–arterial blood pressure. Brigden G, et al. **Eur J Clin Pharmacol** 1989;37(6):551–4
Ambulatory blood pressure monitoring during sustained treatment with conventional and extended–release felodipine in mild–to–moderate hypertension. Porcellati C, et al. **Eur J Clin Pharmacol** 1989;37(6):555–7
Single versus triplicate measurements: a commentary on Fagan et al [letter; comment] Shapiro D, et al. **Hypertension** 1990 Jul;16(1):103–6 Comment on: Hypertension 1988 Mar;11(3):282–4.
Pulse oximetry and finger blood pressure measurement during open–heart surgery [published erratum appears in J Clin Monit 1990 Jan;6(1):9] Kurki TS, et al. **J Clin Monit** 1989 Oct;5(4):221–8
Discrepancy between clinic and ambulatory blood pressure measurement in the evaluation of two antihypertensive agents. O'Brien E, et al. **J Hum Hypertens** 1989 Aug; 3(4):259–62
Are we overtreating hypertensive patients? Chronobiologic vs. sphygmomanometric evaluation of ambulatory antihypertensive therapy. Portaluppi F, et al. **Jpn Heart J** 1990 Jan;31(1):35–41
Should school nurses measure blood pressure? Kelsall JE, et al. **Public Health** 1990 May;104(3):191–4
[24–hour ambulatory monitoring of blood pressure and the diagnosis of resistant hypertension] Cihák R, et al. **Cas Lek Cesk** 1989 Nov 10;128(46):1456–60 (Eng. Abstr.) (Cze)
[Diagnostic activity in general practice. 2. Frequency of examination of urinary glucose and blood pressure determination among patients in general practice] Astvad K, et al. **Ugeskr Laeger** 1989 Dec 11;151(50):3391–3 (Eng. Abstr.) (Dan)
[The neglected blood pressure determination in pregnancy (letter)] Lind J. **Ned Tijdschr Geneeskd** 1990 Jan 13; 134(2):86–7 (Dut)
[The neglected blood pressure determination in pregnancy] Schuitemaker NW, et al. **Ned Tijdschr Geneeskd** 1989 Oct 28;133(43):2105–7 (Dut)
[Blood pressure measurement and the echocardiographic parameters (letter)] Franz IW. **Dtsch Med Wochenschr** 1990 Aug 31;115(35):1331–2 (Ger)
[Value of self–measured blood pressure (editorial)] Rosenfeld J. **Harefuah** 1989 Dec 1;117(11):407–8 (Heb)
[Usefulness of long–term monitoring of neonatal arterial pressure] Menghetti E, et al. **Pediatr Med Chir** 1990 Jan–Feb;12(1):61–3 (Eng. Abstr.) (Ita)
[Healthy persons are classified as hypertensive due to faulty equipment for blood pressure determination] Stolt M, et al. **Lakartidningen** 1989 Dec 6;86(49):4323–6 (Swe)

INSTRUMENTATION

Evaluation of a microprocessor–controlled sphygmomanometer for recording blood pressure during exercise. Ogasawara S, et al. **Am J Cardiol** 1989 Oct 1; 64(12):806–8
An evaluation of home blood–pressure monitoring devices. Schmidt GR, et al. **Am Pharm** 1989 Sep;NS29(9):25–30
A disposable blood pressure cuff. An assessment of its accuracy. Dodd FM, et al. **Anaesthesia** 1990 Aug; 45(8):666–8
Blood pressure measurement during transport. A comparison of direct and oscillotonometric readings in critically ill patients. Runcie CJ, et al. **Anaesthesia** 1990 Aug; 45(8):659–65
Measurement of blood pressure during the intraoperative period. Pasch T. **Ann Fr Anesth Reanim** 1989;8(5):572–5, 532–5 (Eng, Fre)
Accuracy of sphygmomanometers in hospital practice. Perlman LV, et al. **Arch Intern Med** 1970 Jun;125(6):1000–3
Human centrifuge non–invasive measurements of arterial pressure at eye level during Gz acceleration. Wood EH, et al. **Aviat Space Environ Med** 1989 Oct;60(10 Pt 1):1005–10
Design of a microprocessor–based sphygmomanometer. Kalaitzakis KC, et al. **Biomed Instrum Technol** 1990 Jan–Feb;24(1):31–6
A surrogate arm for evaluating the accuracy of instruments for indirect measurement of blood pressure. Yong P, et al. **Biomed Instrum Technol** 1990 Mar–Apr;24(2):130–5
Measurement of blood pressure in children [letter; comment] Whincup PH, et al. **BMJ** 1989 Sep 23;299(6702):793–4 Comment on: BMJ 1989 Aug 19;299(6697):497.
Reliability of central venous pressure measured by water column [letter] Halck S, et al. **Crit Care Med** 1990 Apr; 18(4):461–2

Miniature electronic blood pressure monitor compared with a blind–reading mercury sphygmomanometer in pregnancy. Dawson AJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Nov;33(2):147–53

How accurate are high thigh narrow cuff pressure measurements in the assessment of aorto–iliac obstructive disease? Beijneveld WJ, et al. **Eur J Vasc Surg** 1989 Dec; 3(6):523–7

An adaptive aortic pressure observer for the Penn State Electric Ventricular Assist Device. Tasch U, et al. **IEEE Trans Biomed Eng** 1990 Apr;37(4):374–83

The accuracy of the Marshall 85 oscillometric sphygmomanometer in the ambulatory care setting. Bradley JG, et al. **J Am Board Fam Pract** 1989 Oct–Dec;2(4):247–51

Noninvasive blood pressure monitoring at the finger for studying short lasting pressor responses in man. Christen Y, et al. **J Clin Pharmacol** 1990 Aug;30(8):711–4

Blood pressure measurement in adults: large cuffs for all? Croft PR, et al. **J Epidemiol Community Health** 1990 Jun; 44(2):170–3

Validation of the Accutracker ambulatory blood pressure recorder [letter; comment] Sheridan JJ. **J Hum Hypertens** 1990 Jun;4(3):287 Comment on: J Hum Hypertens 1989 Dec;3(6):463–5.

Clinical evaluation of semiautomatic and automatic devices for home blood pressure measurement: comparison between cuff–oscillometric and microphone methods. Imai Y, et al. **J Hypertens** 1989 Dec;7(12):983–90

An evaluation of the A&D UA–751 semi–automated cuff–oscillometric sphygmomanometer. Jamieson MJ, et al. **J Hypertens** 1990 Apr;8(4):377–81

Inaccuracy of seven popular sphygmomanometers for home measurement of blood pressure. O'Brien E, et al. **J Hypertens** 1990 Jul;8(7):621–34

Optimal size of cuff bladder for indirect measurement of arterial pressure in adults. Russell AE, et al. **J Hypertens** 1989 Aug;7(8):607–13 (27 ref.)

Blood pressure measurement in children: the importance of cuff bladder size. Whincup PH, et al. **J Hypertens** 1989 Oct;7(10):845–50

Clinical evaluation of the Accutracker II ambulatory blood pressure monitor: assessment of performance in two countries and comparison with sphygmomanometry and intra–arterial blood pressure at rest and during exercise. White WB, et al. **J Hypertens** 1989 Dec;7(12):967–75

Is early diagnosis of hypertension a function of cuff width? Arcuri EA, et al. **J Hypertens Suppl** 1989 Dec;7(6):S60–1

A microcomputer–based system for the accurate continuous measurement of ventilation and blood pressure parameters under anaesthesia. Tooley MA, et al. **J Med Eng Technol** 1989 Sep–Oct;13(5):243–51

Cuff–link [editorial] **Lancet** 1990 Aug 18;336(8712):410

Potential problems with random zero sphygmomanometer [letter] **Lancet** 1990 Jul 28;336(8709):254–5

Potential problems with random zero sphygmomanometer [letter; comment] Macintyre CC, et al. **Lancet** 1990 Mar 24;335(8691):727–8 Comment on: Lancet 1990 Feb 10;335(8685):360.

Electric impedance cuff for the indirect measurement of blood pressure and volume elastic modulus in human limb and finger arteries. Shimazu H, et al. **Med Biol Eng Comput** 1989 Sep;27(5):477–83

Simplified micropressure measurements via bridge current feedback. Intaglietta M, et al. **Microvasc Res** 1990 May; 39(3):386–9

Electronic sphygmomanometry [letter] London M. **N Z Med J** 1990 May 23;103(890):250

Modification of an automated vascular diagnostic system for hyperbaric use. Dooley JW, et al. **Undersea Biomed Res** 1990 May;17(3):247–51

[Evaluation of an automatic sphygmomanometer] Slabý A, et al. **Sb Lek** 1989 Sep;91(8):274–84 (Eng. Abstr.) **(Cze)**

[Continuous non–invasive measurement of blood pressure] Jensen FB, et al. **Ugeskr Laeger** 1989 Dec 18; 151(51):3487–90 (Eng. Abstr.) **(Dan)**

[Evaluation of automatic oscillometric measurement of arterial pressure. Is comparison with radial pressure justified?] Caramella JP. **Ann Fr Anesth Reanim** 1989;8 Suppl:R224 **(Fre)**

[Evaluation of a new ambulatory blood pressure measuring device, the Sandoz Pressure System] Abetel G, et al. **Schweiz Med Wochenschr** 1989 Dec 9;119(49):1786–90 (Eng. Abstr.) **(Fre)**

[Self measurement of blood pressure. Equipment and comparison of equipment] Schubert M, et al. **Schweiz Rundsch Med Prax** 1989 Nov 28;78(48):1343–5 (Eng. Abstr.) **(Ger)**

[Determination of the diastolic function of the left ventricle in post–infarction patients using a complex echocardiographic index] Szabóki F, et al. **Orv Hetil** 1989 Oct 8;130(41):2201–6 (20 ref.) (Eng. Abstr.) **(Hun)**

[Sphygmomanometer cuffs and diagnosis of systemic arterial hypertension] Arcuri EA. **Arq Bras Cardiol** 1989 Apr; 52(4):181–3 **(Por)**

[Technical report of the Study Group on Arterial Hypertension: self–measurement of arterial pressure] **Rev Port Cardiol** 1989 Apr;8(4):323–7 (Eng. Abstr.) **(Por)**

[Selection of an optimal system for measurement of blood pressure] Izrail'tian IM, et al. **Biull Eksp Biol Med** 1989 Nov;108(11):526–8 (Eng. Abstr.) **(Rus)**

[The triple cuff. The importance of information about commercial product] Werkö L. **Lakartidningen** 1990 Mar 28;87(13):1041 **(Swe)**

METHODS

Effects of nifedipine SR and enalapril on office, home and ambulatory blood pressure in "white–coat" systemic hypertension. Ashida T, et al. **Am J Cardiol** 1990 Aug 15; 66(4):498–501

Validity of arm ergometer blood pressures immediately after exercise. Hollingsworth V, et al. **Am J Cardiol** 1990 Jun 1;65(20):1358–60

Radial arterial pressure measurements may be a poor guide to the beneficial effects of nitroprusside on left ventricular systolic pressure in congestive heart failure. Simkus GJ, et al. **Am J Cardiol** 1990 Aug 1;66(3):323–6

Differences in blood pressure levels obtained by auscultatory and oscillometric methods. Weaver MG, et al. **Am J Dis Child** 1990 Aug;144(8):911–4

The accuracy and precision of the Accutracker ambulatory blood pressure monitor. Appel LJ, et al. **Am J Epidemiol** 1990 Aug;132(2):343–54

Effect of back support and stethoscope head on seated blood pressure determinations. Cushman WC, et al. **Am J Hypertens** 1990 Mar;3(3):240–1

Ambulatory blood pressure monitoring in hypertensive adolescents. Fixler DE, et al. **Am J Hypertens** 1990 Apr; 3(4):288–92

Identifying hypertensive patients with elevated systolic workplace blood pressures. Lerman CE, et al. **Am J Hypertens** 1990 Jul;3(7):544–8

Characterization of a primate model of hypertension. The response of hypertensive and normotensive male vervets (Cercopithecus aethiops) to cold pressor stress, captopril administration, and acute bolus of atrial natriuretic factor. Martin S, et al. **Am J Hypertens** 1990 Jan;3(1):27–32

Blood pressure measured telemetrically from home throughout pregnancy. Mooney P, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):30–6

An improved method for recording blood pressure in the tethered monkey. Talan MI, et al. **Am J Physiol** 1990 Jun; 258(6 Pt 2):R1512–5

Problems and solutions in diagnosing systemic hypertension. Choo MH. **Ann Acad Med Singapore** 1990 Jan;19(1):113–7 (14 ref.)

On line cerebral blood flow velocity and blood pressure measurement in neonates: a new method. Fenton AC, et al. **Arch Dis Child** 1990 Jan;65(1 Spec No):11–4

The Tecumseh Blood Pressure Study. Normative data on blood pressure self–determination. Mejia AD, et al. **Arch Intern Med** 1990 Jun;150(6):1209–13

Measurement of blood pressure in children. Recommendations of a working party of the British Hypertension Society [see comments] de Swiet M, et al. **BMJ** 1989 Aug 19;299(6697):497 Comment in: BMJ 1989 Sep 23;299(6702):793–4.

Accurate, reproducible measurement of blood pressure. Campbell NR, et al. **Can Med Assoc J** 1990 Jul 1; 143(1):19–24 (32 ref.)

Pulmonary artery pressure estimation by Doppler and two–dimensional echocardiography. Schiller NB. **Cardiol Clin** 1990 May;8(2):277–87 (18 ref.)

Non–invasive continuous finger blood pressure measurement during orthostatic stress compared to intra–arterial pressure. Imholz BP, et al. **Cardiovasc Res** 1990 Mar; 24(3):214–21

The slope of the end–systolic pressure–volume relationship compared with the global end–systolic pressure–volume ratio in humans. Abboud L, et al. **Clin Cardiol** 1990 Jan; 13(1):19–26

Value of echocardiographic and ambulatory blood pressure monitoring in hypertension. Mancia G, et al. **Clin Exp Hypertens [A]** 1989;11(5–6):869–86 (34 ref.)

Noninvasive ambulatory blood pressure monitoring during clinic visit in elderly hypertensive patients. Shimada K, et al. **Clin Exp Hypertens [A]** 1990;12(2):151–70

Isolated systolic hypertension: does it really exist on ambulatory blood pressure monitoring? Silagy CA, et al. **Clin Exp Pharmacol Physiol** 1990 Mar;17(3):203–6

Reliability of the Dinamap non–invasive monitor in the measurement of blood pressure of ill Asian newborns. Chia F, et al. **Clin Pediatr (Phila)** 1990 May;29(5):262–7

Immediate detection of postreconstructive ischaemia by intra–operative Doppler ankle pressure index monitoring during aortic reconstructions. Giulini SM, et al. **Eur J Vasc Surg** 1990 Apr;4(2):141–7 (40 ref.)

Two–step blood pressure method [letter] Cheney AM. **Geriatr Nurs (New York)** 1990 May–Jun;11(3):113

Intricacies of blood pressure measurement: reexamining the rituals [letter; comment] Lipschultz A. **Heart Lung** 1990 Mar;19(2):212–3 Comment on: Heart Lung 1989 May;18(3):263–71.

Body fat and its distribution in relation to casual and ambulatory blood pressure. Gerber LM, et al. **Hypertension** 1990 May;15(5):508–13

24 h sequential spectral analysis of arterial blood pressure and pulse interval in free–moving subjects. Di Rienzo M, et al. **IEEE Trans Biomed Eng** 1989 Nov;36(11):1066–75

Effects on casual and 24–h ambulatory blood pressure of slow–release nicardipine and chlorthalidone in arterial essential hypertension: double–blind, crossover study. Celentano A, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 May;28(5):190–6

The ductus arteriosus: a window for assessment of pulmonary artery pressures? [comment] Snider AR. **J Am Coll Cardiol** 1990 Feb;15(2):457–8 Comment on: J Am Coll Cardiol 1990 Feb;15(2):446–56.

Comparison of several noninvasive methods for estimation of pulmonary artery pressure. Stevenson JG. **J Am Soc Echocardiogr** 1989 May–Jun;2(3):157–71

Comparison of labetalol and hydrochlorothiazide in elderly patients with hypertension using 24–hour ambulatory blood pressure monitoring. Weidler DJ, et al. **J Clin Pharmacol** 1990 Jun;30(6):524–32

Value of patient–recorded home blood pressure series in distinguishing sustained from office hypertension: effects on diagnosis and treatment of mild hypertension. Bath District Hypertension Study Group. Hall CL, et al. **J Hum Hypertens** 1990 Jun;4 Suppl 2:9–13

Stability of home blood pressure over time. Jyothinagaram SG, et al. **J Hum Hypertens** 1990 Jun;4(3):269–71

The influence of a heart level pillow on the result of blood pressure measurement. Ljungvall P, et al. **J Hum Hypertens** 1989 Dec;3(6):471–4

Self–monitoring of blood pressure. Mengden T, et al. **J Hum Hypertens** 1990 Feb;4 Suppl 1:47–50 (32 ref.)

Problems in the measurement of blood pressure. Padfield PL, et al. **J Hum Hypertens** 1990 Jun;4 Suppl 2:3–7 (17 ref.)

Can mean arterial pressure be estimated from measurements of systolic and diastolic blood pressure, and vice versa? Christensen KL, et al. **J Hypertens** 1990 Apr;8(4):321–6

The measurement of blood pressure: sitting or supine, once or twice? Jamieson MJ, et al. **J Hypertens** 1990 Jul; 8(7):635–40

Pseudohypertension in the elderly. Kuwajima I, et al. **J Hypertens** 1990 May;8(5):429–32

Radionuclide ventriculography and central aorta pressure change in noninvasive assessment of myocardial performance. Marmor A, et al. **J Nucl Med** 1989 Oct; 30(10):1657–65

Measurement of digital arterial pressure in patients with essential hypertension. Takahashi H, et al. **Jpn Circ J** 1990 Mar;54(3):221–30

Effects of cuff inflation on self–recorded blood pressure. Veerman DP, et al. **Lancet** 1990 Feb 24;335(8687):451–3

Clinical use of home and ambulatory blood pressure monitoring. Zachariah PK, et al. **Mayo Clin Proc** 1989 Nov; 64(11):1436–46 (43 ref.)

Vibration technique for indirect measurement of diastolic arterial pressure in human fingers. Shimazu H, et al. **Med Biol Eng Comput** 1989 Mar;27(2):130–6

Automated blood pressure measurements during exercise. Lightfoot JT, et al. **Med Sci Sports Exerc** 1989 Dec; 21(6):698–707

Direct and indirect blood pressure in critical care patients. Byra–Cook CJ, et al. **Nurs Res** 1990 Sep–Oct;39(5):285–8

[Comparison of oscillometric and intra–arterial measurement of pressure in critically ill neonates] Plavka R, et al. **Cesk Pediatr** 1989 Nov;44(11):671–2 **(Cze)**

[Ambulatory measurement of arterial pressure] Herpin D. **Ann Cardiol Angeiol (Paris)** 1989 Sep 30;38(7 Pt 2):451–4 (25 ref.) (Eng. Abstr.) **(Fre)**

[Variability of blood pressure measured using an oscillometric method in children 4 to 48 months of age] Bérard E, et al. **Arch Fr Pediatr** 1989 Nov;46(9):655–60 (Eng. Abstr.) **(Fre)**

[Reference values of ambulatory arterial pressure in activity and during the night. Multicenter study of 394 normotensive subjects at rest] Battistella P, et al. **Arch Mal Coeur** 1989 Jul;82(7):1019–22 (Eng. Abstr.) **(Fre)**

[Normal and borderline ambulatory arterial pressures. A new method for establishing reference values] Chau NP, et al. **Arch Mal Coeur** 1989 Jul;82(7):1023–5 (Eng. Abstr.) **(Fre)**

[Blood pressure response to antihypertension treatment. Comparison of data obtained at the doctor's office and by ambulatory blood pressure measurement] Herpin D, et al. **Arch Mal Coeur** 1989 Oct;82(10):1733–7 (Eng. Abstr.) **(Fre)**

[Arterial pressure—self measurement. Recommendations. French Society for Arterial Hypertension—the Measurement Group] Mallion JM, et al. **Arch Mal Coeur** 1989 Jul;82(7):1001–5 (29 ref.) (Eng. Abstr.) **(Fre)**

[Measurement of arterial pressure using 3 measurement methods in medial arterial calcification] Thierry FX, et al. **Arch Mal Coeur** 1989 Jul;82(7):1007–11 (Eng. Abstr.) **(Fre)**

[Spectrum analysis of blood pressure and cardiac rate in the conscious rat] Grichois ML, et al. **C R Acad Sci [III]** 1989; 309(18):683–9 (Eng. Abstr.) **(Fre)**

[Measurement of ambulatory blood pressure. Values and limitations] Mallion JM, et al. **Presse Med** 1990 Feb 17; 19(6):245–6 **(Fre)**

[The contribution of ambulatory arterial pressure measurement in the management of hypertensive patients] Warling X, et al. **Rev Med Liege** 1989 Dec 15;44(24):746–9 (36 ref.) **(Fre)**

[Blood pressure measurement by students—health education by peers] Schlegel V. **Arztl Jugendkd** 1990;81(1):62–4 (Eng. Abstr.) **(Ger)**

[Why are blood pressure values higher in the doctor's office than at home?] Bättig B, et al. **Schweiz Rundsch Med Prax** 1989 Nov 28;78(48):1350–2

(Eng. Abstr.) (Ger)
[Self measurement of blood pressure: patient education] Jeck T, et al. **Schweiz Rundsch Med Prax** 1989 Nov 28; 78(48):1346–9 (Eng. Abstr.) (Ger)
[Distribution and acceptance of self measurement of blood pressure in the Hamburg area] Krecke HJ, et al. **Schweiz Rundsch Med Prax** 1989 Nov 28;78(48):1336–42 (Eng. Abstr.) (Ger)
[Diagnostic and prognostic aspects of home blood pressure measurement] Mengden T, et al. **Schweiz Rundsch Med Prax** 1989 Nov 28;78(48):1353–6 (31 ref.) (Eng. Abstr.) (Ger)
[The therapeutic significance of home blood pressure measurement] Mengden T, et al. **Schweiz Rundsch Med Prax** 1989 Nov 28;78(48):1357–60 (17 ref.) (Eng. Abstr.) (Ger)
[Significance of continuous monitoring of arterial blood pressure in the diagnosis of hypertension] Mancia G, et al. **Ann Ital Med Int** 1986 Mar;1(1):17–27 (Eng. Abstr.) (Ita)
[Blood pressure in resting and tilting by tonometry method with noninvasive continuous blood pressure monitor] Yoneyama K, et al. **Kokyu To Junkan** 1990 Jul;38(7):655–8 (Jpn)
[Diagnostic criteria in hypertension—blood pressure determination] Abe K. **Nippon Naika Gakkai Zasshi** 1990 Jan 10;79(1):3–8 (Jpn)
[Measurement of blood pressure in children aged 0 to 2 years by four indirect methods] Sapiński A. **Pediatr Pol** 1989 Jun;64(6):389–94 (Eng. Abstr.) (Pol)
[Results of blood pressure measurements depending on the place and method of measurement in individuals with normal blood pressure and borderline hypertension] Przestalska-Malkin H, et al. **Przegl Epidemiol** 1989; 43(4):405–14 (Eng. Abstr.) (Pol)
[Are we overdiagnosing and overtreating mild arterial hypertension?] Monteiro AA, et al. **Rev Port Cardiol** 1989 Nov;8(11):751–3 (Eng. Abstr.) (Por)
[The Doppler echocardiographic method of determining right ventricular pressure in patients with congenital heart defects in the early postoperative period] Bagaturiia DSh. **Anesteziol Reanimatol** 1989 Jul–Aug;(4):46–9 (Eng. Abstr.) (Rus)
[Methodologic characteristics of recording the cerebral blood flow and arterial pressure of rats in a chronic experiment] Sitdikov II, et al. **Fiziol Zh SSSR** 1989 Jun;75(6):876–7 (Rus)
[Doppler sphygmomanometry in the diagnosis of obliterating atherosclerosis] Zatevakhin II, et al. **Khirurgiia (Mosk)** 1989 Dec;(12):7–11 (Eng. Abstr.) (Rus)
[The use of vacuum ophthalmodynamometry for assessing pressure in the cortical arteries of the brain] Listopadova NA, et al. **Voen Med Zh** 1989 Sep;(9):52–3 (Rus)
[Blood pressure measurement with Doppler in normal newborn infants and infants] Lagomarsino E, et al. **Rev Chil Pediatr** 1989 Jan–Feb;60(1):10–4 (Eng. Abstr.) (Spa)
[Methodology problems in the study of arterial hypertension] López Merino V, et al. **Rev Esp Cardiol** 1990;43 Suppl 1:37–53 (34 ref.) (Eng. Abstr.) (Spa)
[The triple cuff. The ambition of the scientist/physician must be to give correct information] Atterstam I. **Lakartidningen** 1990 Mar 21;87(12):940–1 (Swe)
[More reliable blood pressure measurement by elimination of error sources] Hansson L, et al. **Lakartidningen** 1990 Jul 25;87(30–31):2410–2 (Swe)
[Wrong conclusions based on blood pressure measured intra-arterially and using a standard cuff] Schwan A. **Lakartidningen** 1990 Feb 21;87(8):553–4 (Swe)
[Morals, the mass media and blood pressure determination] Sjönell G. **Lakartidningen** 1990 Apr 25;87(17):1448 (20 ref.) (Swe)
[A study on blood pressure determination] Taube A. **Lakartidningen** 1990 Jan 17;87(3):99, 102 (Swe)

PSYCHOLOGY

Effect of repeated measurements of blood pressure on blood pressure in essential hypertension: role of anxiety. McGrady A, et al. **J Behav Med** 1990 Feb;13(1):93–101

STANDARDS

Ratio of cuff width/arm circumference as a determinant of arterial blood pressure measurements in adults. Råstam L, et al. **J Intern Med** 1990 Apr;227(4):225–32
Potential problems with random zero sphygmomanometer [letter] [see comments] Kronmal RA, et al. **Lancet** 1990 Feb 10;335(8685):360 Comment in: Lancet 1990 Mar 24;335(8691):727–8.

UTILIZATION

[Blood pressure screening in the present health service] Bredkjaer SR, et al. **Ugeskr Laeger** 1989 Nov 13; 151(46):3065–8 (Eng. Abstr.) (Dan)

VETERINARY

A low cost tail-cuff method for the estimation of mean arterial pressure in conscious rats. Zatz R. **Lab Anim Sci** 1990 Mar;40(2):198–201
Non-invasive measurement of systemic arterial pressure by Finapres in anesthetized dogs. Tabaru H, et al. **Nippon Juigaku Zasshi** 1990 Apr;52(2):427–30

BLOOD PRESSURE, HIGH see **HYPERTENSION**

BLOOD PRESSURE, LOW see **HYPOTENSION**

BLOOD PRESSURE MONITORS

Intravascular microcatheter pressure monitoring: experimental results and early clinical evaluation. Duckwiler G, et al. **AJNR** 1990 Jan–Feb;11(1):169–75
Ambulatory intra-arterial blood pressure in normal subjects. Broadhurst P, et al. **Am Heart J** 1990 Jul;120(1):160–6
Fidelity of micromanometer pressure transduction in closed-end angiographic catheters. Lloyd TR, et al. **Am J Cardiol** 1989 Nov 15;64(18):1213–5
Twenty-four-hour blood pressure monitoring and effects of indapamide. Ocon J, et al. **Am J Cardiol** 1990 May 2; 65(17):58H–61H
Risk stratification of left ventricular hypertrophy in systemic hypertension using noninvasive ambulatory blood pressure monitoring. Verdecchia P, et al. **Am J Cardiol** 1990 Sep 1;66(5):583–90
Determination of clinical accuracy and nocturnal blood pressure pattern by new portable device for monitoring indirect ambulatory blood pressure. Imai Y, et al. **Am J Hypertens** 1990 Apr;3(4):293–301
Ambulatory blood pressure monitoring in the evaluation of antihypertensive treatment. Mancia G, et al. **Am J Med** 1989 Dec 26;87(6B):64S–69S (24 ref.)
Comparison of the Finapres blood pressure monitor with intra-arterial manometry during induction of anaesthesia. Kermode JL, et al. **Anaesth Intensive Care** 1989 Nov; 17(4):470–5
Artefactual 'hypotension' from shivering [letter] de Courcy JG. **Anaesthesia** 1989 Sep;44(9):787–8
Oscillometric blood pressure determination from the adult thumb using an infant cuff. Gorback MS, et al. **Anesth Analg** 1989 Nov;69(5):668–70
Experimental analysis of catheter–manometer systems in vitro and in vivo. Hipkins SF, et al. **Anesthesiology** 1989 Dec; 71(6):893–906
Measurement of blood pressure during the intraoperative period. Pasch T. **Ann Fr Anesth Reanim** 1989;8(5):572–5, 532–5 (Eng, Fre)
Accuracy of a piezoelectric crystal microphone interfaced through an audio amplifier board for use in an automated blood pressure device. Crespo CJ, et al. **Biomed Instrum Technol** 1990 Jul–Aug;24(4):278–82
CO2 waveforms revisited [letter] Wickens CD. **Biomed Instrum Technol** 1990 Jan–Feb;24(1):55
Effects of regular alcohol consumption on 24 hour ambulatory blood pressure recordings. Howes LG, et al. **Clin Exp Pharmacol Physiol** 1990 Apr;17(4):247–50
Clinical evaluation of the Dinamap non-invasive blood pressure monitor in pre-term neonates. Dellagrammaticas HD, et al. **Clin Phys Physiol Meas** 1981 Nov;2(4):271–6
Current status of 24-hour ambulatory blood pressure monitoring in clinical practice. Cihák R, et al. **Cor Vasa** 1990;32(1):72–81 (53 ref.)
Miniature electronic blood pressure monitor compared with a blind-reading mercury sphygmomanometer in pregnancy. Dawson AJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Nov;33(2):147–53
Accuracy of ambulatory blood pressure monitoring in four exercise situations. Kouamé N, et al. **Herz** 1989 Aug; 14(4):221–31
The role of ambulatory monitoring in reducing the errors associated with blood pressure measurement. Pickering TG. **Herz** 1989 Aug;14(4):214–20 (20 ref.)
Accurate measurement of intraarterial pressure through radial artery catheters in neonates. Hack WW, et al. **J Clin Monit** 1990 Jul;6(3):211–6
Does measurement of systolic blood pressure with a pulse oximeter correlate with conventional methods? Talke P, et al. **J Clin Monit** 1990 Jan;6(1):5–9
Non-invasive ambulatory blood pressure monitors: a cautionary note. Broadhurst P, et al. **J Hypertens** 1990 Jul; 8(7):595–7 (26 ref.)
Application of cusums to ambulatory blood pressure data: a simple statistical technique for detecting trends over time. O'Brien E, et al. **J Hypertens** 1989 Sep;7(9):707–9
Clinical evaluation of the Accutracker II ambulatory blood pressure monitor: assessment of performance in two countries and comparison with sphygmomanometry and intra-arterial blood pressure at rest and during exercise. White WB, et al. **J Hypertens** 1989 Dec;7(12):967–75
Comparison of Finapres non-invasive beat-to-beat finger blood pressure with intrabrachial artery pressure during and after bicycle ergometry. Idema RN, et al. **J Hypertens Suppl** 1989 Dec;7(6):S58–9
Change in posture during sleep causes errors in non-invasive automatic blood pressure recordings. Schwan A, et al. **J Hypertens Suppl** 1989 Dec;7(6):S62–3
Are we overtreating hypertensive patients? Chronobiologic vs. sphygmomanometric evaluation of ambulatory antihypertensive therapy. Portaluppi F, et al. **Jpn Heart J** 1990 Jan;31(1):35–41
Reference data for ambulatory blood pressure monitoring: what results are equivalent to the established limits of office blood pressure? Baumgart P, et al. **Klin Wochenschr** 1990 Jul 17;68(14):723–7
Clinical use of home and ambulatory blood pressure monitoring. Zachariah PK, et al. **Mayo Clin Proc** 1989 Nov; 64(11):1436–46 (43 ref.)
Development of a microprocessor-based adaptive technique for blood pressure measurements. Kalaitzakis KC, et al. **Med Prog Technol** 1988–89;14(2):63–72
A quantitative technique for characterizing tasks in psychophysiology studies. Dimsdale JE, et al. **Psychosom Med** 1990 Jul–Aug;52(4):435–44
Central venous pressure monitoring for the critically ill in Zambia. Deedat AM, et al. **Trop Doct** 1990 Apr;20(2):74–6
The practice of central venous pressure monitoring in the tropics. Watters DA, et al. **Trop Doct** 1990 Apr;20(2):56–60
[24-hour ambulatory blood pressure monitoring in normal and hypertensive subjects] Feng JZ, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Apr; 17(2):111–4, 128 (Eng. Abstr.) (Chi)
[Comparative study of one-way transducers for invasive blood pressure measurement] Matzek F, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:219–20 (Ger)
[Simulation of biosignals in blood pressure measurement] Mieke S, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:130–1 (Ger)
[Ambulatory invasive and noninvasive blood pressure monitoring] Bachmann K, et al. **Herz** 1989 Aug;14(4):232–7 (31 ref.) (Eng. Abstr.) (Ger)
[24-hour blood pressure in primary and secondary hypertension] Baumgart P. **Herz** 1989 Aug;14(4):246–50 (Eng. Abstr.) (Ger)
[Noninvasive, continuous measurement of finger artery pressure with the servo-plethysmo-manometer Finapres] Hartmann B, et al. **Herz** 1989 Aug;14(4):251–9 (23 ref.) (Eng. Abstr.) (Ger)
[Long-term automatic blood pressure measurement in clinical management] Hollenstein U, et al. **Herz** 1989 Aug; 14(4):238–45 (Eng. Abstr.) (Ger)
[Technical and methodologic aspects of ambulatory long-term blood pressure monitoring systems] Zurmann J. **Herz** 1989 Aug;14(4):205–13 (20 ref.) (Eng. Abstr.) (Ger)
[24-hour blood pressure determination in Shy-Drager syndrome. A case report] Wöber-Bingöl C, et al. **Wien Klin Wochenschr** 1990 Feb 2;102(3):90–4 (Eng. Abstr.) (Ger)
[The current status of noninvasive blood pressure measurement technics] Rossberg F, et al. **Z Gesamte Inn Med** 1989 Aug 1;44(15):437–41 (32 ref.) (Eng. Abstr.) (Ger)
[The behavior of arterial blood pressure in dynamic and static muscle exercise with respect to atrial natriuretic peptide and neurotransmitters] Hollmann W, et al. **Z Kardiol** 1989; 78 Suppl 7:211–9 (13 ref.) (Eng. Abstr.) (Ger)
[Determination of the blood pressure level in mild hypertension. Significance of 20 minute resting blood pressure measurement comparing to 24 hour ambulatory blood pressure monitoring] Doba N, et al. **Kokyu To Junkan** 1989 Aug;37(8):903–8 (Eng. Abstr.) (Jpn)
[Evaluation of antihypertensive therapy by ambulatory blood pressure monitoring and establishment of the level of antihypertensive goal on the circadian rhythm of blood pressure] Fujioka T, et al. **Kokyu To Junkan** 1990 Jan; 38(1):71–6 (Eng. Abstr.) (Jpn)
[Blood pressure in resting and tilting by tonometry method with noninvasive continuous blood pressure monitor] Yoneyama K, et al. **Kokyu To Junkan** 1990 Jul;38(7):655–8 (Jpn)
[A newly devised continuous catheter flush system for arterial pressure monitoring] Hashimoto S, et al. **Masui** 1989 Oct;38(10):1378–82 (Eng. Abstr.) (Jpn)
[Clinical significance of blood pressure at the time of the office visit and at home and 24-hour blood pressure monitoring] Tochikubo O. **Nippon Naika Gakkai Zasshi** 1990 Jan 10;79(1):9–13 (Jpn)
[A device for measuring instantaneous values of arterial pressure and intersystolic intervals] Bogdanov EG, et al. **Fiziol Zh SSSR** 1989 Oct;75(10):1463–5 (Rus)
[Methodology problems in the study of arterial hypertension] López Merino V, et al. **Rev Esp Cardiol** 1990;43 Suppl 1:37–53 (34 ref.) (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Morbidity after use of the Finapres blood pressure monitor [letter] Northwood D. **Anaesthesia** 1989 Dec;44(12):1010–1
Acute radial nerve injury from use of an automatic blood pressure monitor. Bickler PE, et al. **Anesthesiology** 1990 Jul;73(1):186–8

STANDARDS

Assessment of four ambulatory blood pressure monitors and measurements by clinicians versus intraarterial blood pressure at rest and during exercise. White WB, et al. **Am J Cardiol** 1990 Jan 1;65(1):60–6
Differences in blood pressure levels obtained by auscultatory and oscillometric methods. Weaver MG, et al. **Am J Dis Child** 1990 Aug;144(8):911–4
The accuracy and precision of the Accutracker ambulatory blood pressure monitor. Appel LJ, et al. **Am J Epidemiol** 1990 Aug;132(2):343–54
A community-based evaluation of the Vita-Stat automatic blood pressure recorder. Salaita K, et al.

Am J Hypertens 1990 May;3(5 Pt 1):366–72
A comparison of two ambulatory blood pressure monitors, the Del Mar Avionics Pressurometer IV and the Spacelabs 90202. Santucci S, et al. Am J Hypertens 1989 Oct; 2(10):797–9
The use of automatic blood pressure monitors in the burned patient. Bainbridge LC, et al. Br J Plast Surg 1990 May; 43(3):322–4
Intra-arterial blood pressure monitoring in the evaluation of the hypertensive athlete. Palatini P, et al. Eur Heart J 1990 Apr;11(4):348–54
A clinical evaluation of the Accutracker--a lightweight ambulatory blood pressure monitor [see comments] Phillips DI, et al. J Hum Hypertens 1989 Dec;3(6):463–5 Comment in: J Hum Hypertens 1990 Jun;4(3):287.
Bench and ambulatory field evaluation of the A & D TM-2420 automated sphygmomanometer [see comments] Jamieson MJ, et al. J Hypertens 1990 Jul;8(7):599–605 Comment in: J Hypertens 1990 Jul;8(7):591–3.
The British Hypertension Society protocol for the evaluation of automated and semi-automated blood pressure measuring devices with special reference to ambulatory systems [see comments] O'Brien E, et al. J Hypertens 1990 Jul;8(7):607–19 Comment in: J Hypertens 1990 Jul;8(7):591–3.
The assessment of portable, non-invasive blood pressure recorders [comment] White WB. J Hypertens 1990 Jul; 8(7):591–3 Comment on: J Hypertens 1990 Jul;8(7):599–605. Comment on: J Hypertens 1990 Jul;8(7):607–19.
Reliability of compact electronic blood pressure monitors for hypertensive pregnant women. Smith CV, et al. J Reprod Med 1990 Apr;35(4):399–401

VETERINARY

Adaptation of human oscillometric blood pressure monitors for use in dogs. Hunter JS Jr, et al. Am J Vet Res 1990 Sep;51(9):1439–42

BLOOD PRESSURE, VENOUS see VENOUS PRESSURE

BLOOD PROTEIN DISORDERS

[The cryopathies] Rønnov-Jessen AD, et al. Ugeskr Laeger 1990 Mar 19;152(12):799–803 (Eng. Abstr.) (Dan)

COMPLICATIONS

Protein C deficiency associated with venous thromboembolism. Wysokinski W, et al. Acta Clin Belg 1990;45(2):78–84
Angioimmunoblastic lymphadenopathy with dysproteinemia: report of a case in infancy with review of literature. de Terlizzi M, et al. Pediatr Hematol Oncol 1989;6(1):37–44 (27 ref.)
Idiopathic periosteal hyperostosis with dysproteinemia–Goldbloom's syndrome. Gerscovich EO, et al. Pediatr Radiol 1990;20(3):208–11

EPIDEMIOLOGY

Dysproteinemias and cryoglobulinemia. Kyle RA. Curr Opin Rheumatol 1989 Aug;1(2):221–5 (25 ref.)

GENETICS

[Genetic abnormalities of serum protein] Migita S, et al. Tanpakushitsu Kakusan Koso 1988 Apr;33(5):924–9 (Jpn)

THERAPY

Lymphogranulomatosis X: complete remission by low dose interferon-alpha. Meuthen I, et al. Br J Haematol 1990 Jul;75(3):438–9

BLOOD PROTEIN ELECTROPHORESIS

see related
IMMUNOELECTROPHORESIS

Capillary tube isotachophoresis of proteins in early postmortem serum, cerebrospinal fluid and pericardial fluid. Takahama K, et al. Nippon Hoigaku Zasshi 1989 Jun; 43(3):246–50
Determination of MN blood group from blood stains by electrophoresis and immunoblotting. Moriya F, et al. Z Rechtsmed 1989;103(1):21–5
[Evaluation of unusual band patterns in immunochemophoresis] Rand S, et al. Beitr Gerichtl Med 1989;47:159–64 (Eng. Abstr.) (Ger)

INSTRUMENTATION

[Use of a conductometric detector in capillary isotachophoresis of blood serum proteins] Kovalenko ON, et al. Lab Delo 1989;(10):47–50 (Eng. Abstr.) (Rus)

METHODS

Chromatographic separations of serum proteins on immobilized metal ion stationary phases. Margolis SA, et al. Anal Biochem 1989 Nov 15;183(1):108–21
A comparison of two methods for the discrimination of VWF:AG multimers. Rock G. Thromb Res 1990 Mar 1; 57(5):817–24
[A rapid method of blood protein electrophoresis on cellulose acetate films] Zakhvatova ND, et al. Lab Delo 1989; (12):79–80 (Ras)

STANDARDS

Serum protein electrophoresis: Italian survey 1986 [letter] Aguzzi F, et al. Ann Clin Biochem 1990 Jan;27 (Pt 1):90

VETERINARY

Clinical reference values for serum protein electrophoresis for the llama (Lama glama). Mulrooney DM, et al. Am J Vet Res 1989 Nov;50(11):1889–92

BLOOD PROTEINS

Possible interaction between SPPS and enalapril. McKenzie AJ. Anaesth Intensive Care 1990 Feb;18(1):124–6
Solution structures of proteins from NMR data and modeling: alternative folds for neutrophil peptide 5. Levy RM, et al. Biochemistry 1989 Nov 28;28(24):9361–72
Distortion of the electrophoretic titration curves of some proteins. Suttnar J, et al. Electrophoresis 1989 Oct; 10(10):704–8
A strategy for founding a global lymphocyte proteinpaedia and gene catalogue. Lefkovits I, et al. Immunol Today 1990 May;11(5):157–62 (12 ref.)
Physico-chemical study of the radiopharmaceuticals 99mTc-DMSA, 99mTc-EDTA and 99mTc-DTPA interaction with plasmatic proteins. Garcia Domenech R, et al. Int J Rad Appl Instrum [A] 1989;40(6):536–8
Identification of a disaccharide (Xyl-Glc) and a trisaccharide (Xyl2-Glc) O-glycosidically linked to a serine residue in the first epidermal growth factor-like domain of human factors VII and IX and protein Z and bovine protein Z. Nishimura H, et al. J Biol Chem 1989 Dec 5; 264(34):20320–5
Potential distribution across a plasma protein-coated poly(L-lactide) microcapsule surface. Makino K, et al. J Microencapsul 1990 Apr-Jun;7(2):199–208
Hepatocytes and scatter factor [letter] Gherardi E, et al. Nature 1990 Jul 19;346(6281):228
Virus safe plasma exchange medium containing essential human plasma proteins. Kotitschke R, et al. Prog Clin Biol Res 1990;337:399–401
Protein C inhibitor: structure and function. Suzuki K, et al. Thromb Haemost 1989 Jun 30;61(3):337–42 (52 ref.)
[Virus safety of labile plasma products from the German viewpoint] Stephan W. Beitr Infusionther 1989;24:40–5 (15 ref.) (Eng. Abstr.) (Ger)

ANALYSIS

Plasma substitution with 3% dextran-60 in orthopaedic surgery: influence on plasma colloid osmotic pressure, coagulation parameters, immunoglobulins and other plasma constituents. Bergman A, et al. Acta Anaesthesiol Scand 1990 Jan;34(1):21–9
Isolation and partial characterization of IGF-like peptides from Cohn fraction IV of human plasma. Van den Brande JL, et al. Acta Endocrinol (Copenh) 1990 Jun;122(6):683–95
Selected trace elements and proteins in serum of apparently healthy newborn infants of mothers who smoked during pregnancy. Ahlsten G, et al. Acta Paediatr Scand 1989 Sep; 78(5):671–6
Components of the plasma defense systems in intensive care patients with and with without ARDS. Heller W, et al. Adv Exp Med Biol 1989;247A:615–20
Improvement in plasma protein concentrations with fibronectin treatment in severe malnutrition. Sandberg LB, et al. Am J Clin Nutr 1990 Oct;52(4):651–6
Measurement of the natural anticoagulant protein S. How and when [editorial; comment] Comp PC. Am J Clin Pathol 1990 Aug;94(2):242–3 Comment on: Am J Clin Pathol 1990 Aug;94(2):176–86.
Smoking and serum proteins in atomic-bomb survivors in Japan. Stram DO, et al. Am J Epidemiol 1990 Jun; 131(6):1038–45
Decreased tetranectin in multiple myeloma. Nielsen H, et al. Am J Hematol 1990 Feb;33(2):142–4
Dehydration and serum electrolyte changes in South African gold miners with heat disorders. Shearer S. Am J Ind Med 1990;17(2):225–39
Use of digoxin in pregnancy [letter; comment] De Lia JE, et al. Am J Obstet Gynecol 1990 Feb;162(2):606–8 Comment on: Am J Obstet Gynecol 1987 Aug;157(2):368–71.
Digoxin-like immunoreactive factor and respiratory distress syndrome [letter] Goodlin RC. Am J Obstet Gynecol 1990 Sep;163(3):1091
The influence of pregnancy and oral contraceptive steroids on the concentration of plasma proteins. Studies with a quantitative immunodiffusion method. Song CS, et al. Am J Obstet Gynecol 1970 Sep 15;108(2):227–31
Genetic structure of three Naikpod subpopulations of Andhra Pradesh, India. Muralidhar B, et al. Am J Phys Anthropol 1989 Sep;80(1):41–7
Comparative analysis of protein content in rat mesenteric tissue, peritoneal fluid, and plasma. Barber BJ, et al. Am J Physiol 1990 May;258(5 Pt 1):G714–8
Clinical reference values for serum protein electrophoresis for the llama (Lama glama). Mulrooney DM, et al. Am J Vet Res 1989 Nov;50(11):1889–92
Inflammatory cells and eosinophilic activity in asthmatics investigated by bronchoalveolar lavage. The effects of antiasthmatic treatment with budesonide or terbutaline. Adelroth E, et al. Am Rev Respir Dis 1990 Jul;142(1):91–9
Digoxin-like immunoreactive substances in the plasma of intensive care unit patients: relationship to organ dysfunction. Howarth DM, et al. Anaesth Intensive Care 1990 Feb;18(1):45–52
Digoxinlike materials in human breast cyst fluids. Chasalow FI, et al. Ann N Y Acad Sci 1990;586:107–16
Human serum steroid-binding proteins and malignancy (review). Englebienne P. Anticancer Res 1989 Nov-Dec; 9(6):1769–76 (97 ref.)
Miniature electrophoresis for speed and productivity. Zeineh MM, et al. Appl Biochem Biotechnol 1990 Jan;23(1):81–90
Purification and characterization of a high-molecular-weight protein induced in rat serum during the development of cardiac hypertrophy. Mariappan M, et al. Arch Biochem Biophys 1990 Sep;281(2):287–97
Bacterial antigens and neutrophil granule proteins in middle ear effusions. Miller MB, et al. Arch Otolaryngol Head Neck Surg 1990 Mar;116(3):335–7
Determination of cis-diamminedichloroplatinum (II) in plasma proteins and hemoglobin of cancer patients. Mustonen R, et al. Arch Toxicol 1989;63(5):361–6
Drug-protein interactions. Comparative studies of levamisole and structural analogs or agents with immunomodulatory effect on the mechanism of protein aggregation. Chicault M, et al. Arzneimittelforschung 1990 Jan;40(1):55–7
Actin-binding ability of the protein with the molecular weight of 47,000 phosphorylated during platelet activation. Sasaki A, et al. Biochem Int 1989 Oct;19(4):737–44
The identification of sarcoplasmic reticulum terminal cisternae proteins in platelets. Fischer TH, et al. Biochem J 1989 Oct 15;263(2):605–8
Structural analysis of sulphated glycoprotein 2 from amino acid sequence. Relationship to clusterin and serum protein 40,40. Tsuruta JK, et al. Biochem J 1990 Jun 15; 268(3):571–8
Cell-adhesive immunoglobulin M in human plasma. Takahashi S, et al. Biochemistry 1989 Sep 19;28(19):7623–9
Two novel molecular isoforms of band 4.2 in Japanese Sika deer (Cervus nippon yesoensis, Heude) erythrocytes. Inaba M, et al. Biochim Biophys Acta 1990 Jan 15;1021(1):101–4
Identification of a 25 kDa polypeptide associated with the L antigen in low potassium-type sheep red cells. Pittman SJ, et al. Biochim Biophys Acta 1990 Mar;1022(3):408–10
Carriers of ataxia-telangiectasia gene display additional protein fraction and changes in the environment of SH groups in erythrocyte membrane. Rybczynska M, et al. Biochim Biophys Acta 1990 Mar;1022(3):260–4
The eosinophil granulocyte in psoriasis. Lundin A, et al. Br J Dermatol 1990 Feb;122(2):181–93
Intraepidermal leakage of plasma proteins after tape stripping of normal skin and uninvolved psoriatic skin. Verschoore M, et al. Br J Dermatol 1990 Mar;122(3):391–7
Serum protein electrophoresis in canine parvovirus enteritis. van den Broek AH. Br Vet J 1990 May-Jun;146(3):255–9
Analysis of human neutrophil granule protein composition in chronic myeloid leukaemia by immuno-electron microscopy. Mutasa HC. Cell Tissue Res 1989 Oct; 258(1):111–7
Eosinophil granule major basic protein in contact lenses of patients with giant papillary conjunctivitis. Trocme SD, et al. CLAO J 1990 Jul-Sep;16(3):219–22
Computerized quantitative analysis of coomassie-blue-stained serum proteins separated by two-dimensional electrophoresis. Burgess-Cassler A, et al. Clin Chem 1989 Dec;35(12):2297–304
Digoxin-like immunoreactive substances in kidney- and liver-transplant patients [letter] Dasgupta A, et al. Clin Chem 1990 Jan;36(1):171–2
DuPont aca overestimates high concentrations of total protein [letter] Mueller RG, et al. Clin Chem 1990 Jan; 36(1):171
Specific binding of cardiac glycoside drugs and endogenous digitalis-like substances to particulate membrane fractions from human placenta. Paci A, et al. Clin Chem 1989 Oct; 35(10):2093–7
Interference of plasma expanders in determination of total protein. Weber JA, et al. Clin Chem 1989 Oct;35(10):2143–4
Immunochemical assays of serum proteins: a European external quality assessment survey and the effects of calibration procedures on interlaboratory agreement. Bullock DG, et al. Clin Chim Acta 1990 Jan 31;187(1):21–35
Immunodepletion of albumin from human serum samples. Burgess-Cassler A, et al. Clin Chim Acta 1989 Aug 31; 183(3):359–65
Studies on the clinical significance of serum alpha 2 HS-glycoprotein measurement in metabolic bone diseases. Scarnecchia L, et al. Clin Chim Acta 1990 Aug 15; 189(2):245–8
Distribution of proteins in erythrocyte membranes from patients with hypertension. Loginov VA, et al. Clin Exp Hypertens [A] 1989;11(4):553–71
Structural analysis of hemolymph proteins from Schistosoma mansoni (Trematoda)-susceptible and resistant Biomphalaria glabrata (Gastropoda). Spray FJ, et al. Comp Biochem Physiol [B] 1989;94(3):543–53
Relationship of visceral proteins to nutritional status in chronic and acute stress [letter] Sherman BW, et al. Crit Care Med 1990 Aug;18(8):898–9

Fluid, electrolyte and haematological changes in experimental peste des petits ruminants virus infection in West African dwarf goats. Olaleye OD, et al. **Cytobios** 1989;58(232):39–51

Protein composition in resting and activated platelets of type I diabetic patients. Maresca M, et al. **Diabete Metab** 1989 Sep–Oct;15(5):242–6

Radioimmunoassay of glycated serum protein using monoclonal antibody to glucitollysine and coomassie–brilliant–blue–coated polystyrene beads. Yamamoto Y, et al. **Diabetes Res** 1989 May;11(1):45–9

Plasma albumin and total protein in preterm babies from birth to eight weeks. Reading RF, et al. **Early Hum Dev** 1990 May;22(2):81–7

Two–dimensional electrophoresis of plasma proteins and high density lipoproteins during inflammation. Choukaife A, et al. **Electrophoresis** 1989 Nov;10(11):781–4

Cystic fibrosis proteins detected by electrophoretic techniques. Guy–Crotte O, et al. **Electrophoresis** 1989 Aug–Sep;10(8–9):628–32

Consecutive radiofluorography and silver staining of two–dimensional gel electrophoretograms: application in determining the biosynthesis of serum and tissue proteins. Kuhn L, et al. **Electrophoresis** 1989 Oct;10(10):708–13

Two–dimensional electrophoresis of human serum proteins following acute myocardial infarction. Marshall T, et al. **Electrophoresis** 1989 Aug–Sep;10(8–9):584–8

An endogenous digitalis–like factor derived from the adrenal gland: studies of adrenal tissue from various sources. Doris PA, et al. **Endocrinology** 1989 Nov;125(5):2573–9

A monoclonal antibody to a megakaryoblast–like cell line detects a protein found in blood cells and in the epithelial cell lining of various rat tissues. Gulowsen AC, et al. **Eur J Cell Biol** 1990 Jun;52(1):142–6

Correlation of grain counts with radioactivity (125I and tritium) in autoradiography. Ada GL, et al. **Exp Cell Res** 1966 Mar;41(3):557–72

Identification of an interleukin–1 beta binding protein in human plasma. Eastgate JA, et al. **FEBS Lett** 1990 Jan 29;260(2):213–6

N–terminal amino acid sequence, immunohistochemical localization and tissue distribution of a plasma membrane protein (Prot17) of rat enterocytes. Schiechl H. **Histochemistry** 1990;93(5):513–8

Coomassie brilliant blue R–250 as a highly sensitive pre–stain for immediate visualization of human serum proteins on polyacrylamide gel disc electrophoresis and raising monospecific antibodies. Saoji AM, et al. **Indian J Pathol Microbiol** 1989 Oct;32(4):286–90

Allergen–induced increase of eosinophil cationic protein in nasal lavage fluid: effect of the glucocorticoid budesonide. Bisgaard H, et al. **J Allergy Clin Immunol** 1990 May; 85(5):891–5

Bovine plasma protein C inhibitor with structural and functional homologous properties to human plasma protein C inhibitor. Suzuki K, et al. **J Biochem (Tokyo)** 1990 Mar; 107(3):381–8

Identification of plasma proteins adsorbed to hemodialyzers during clinical use. Mulzer SR, et al. **J Biomed Mater Res** 1989 Dec;23(12):1483–504

A marginal band–associated protein has properties of both microtubule– and microfilament–associated proteins. Birgbauer E, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1609–20

An isoform of ankyrin is localized at nodes of Ranvier in myelinated axons of central and peripheral nerves. Kordeli E, et al. **J Cell Biol** 1990 Apr;110(4):1341–52

Identification of a membrane–cytoskeletal complex containing the cell adhesion molecule uvomorulin (E–cadherin), ankyrin, and fodrin in Madin–Darby canine kidney epithelial cells. Nelson WJ, et al. **J Cell Biol** 1990 Feb;110(2):349–57

Red cell membrane protein distribution during malarial invasion. Dluzewski AR, et al. **J Cell Sci** 1989 Apr;92 (Pt 4):691–9

Characterization of a reversed–phase high–performance liquid chromatographic system for the determination of blood amino acids. Buzzigoli G, et al. **J Chromatogr** 1990 May 16;507:85–93

Detection of the exercise–associated changes in serum proteins by two–dimensional electrophoresis under non–denaturing conditions. Hiro T, et al. **J Chromatogr** 1990 Jun 29;528(2):315–23

Determination of leucine and alpha–ketoisocaproic acid concentrations and specific activity in plasma and leucine specific activities in proteins using high–performance liquid chromatography. Horber FF, et al. **J Chromatogr** 1989 Oct 27;495:81–94

Direct injection of highly protein–bound compounds by column–switching high–performance liquid chromatography. Morita I, et al. **J Chromatogr** 1990 Apr 27;527(1):127–33

Use of airless sealed plastic tubes in interlaboratory quality control of various protein profiles [letter] Dingeon B, et al. **J Clin Chem Clin Biochem** 1990 May;28(5):287–8

Sound speed, density and total protein concentration of blood. Schneditz D, et al. **J Clin Chem Clin Biochem** 1989 Oct;27(10):803–6

Identification of a highly mobilizable subset of human neutrophil intracellular vesicles that contains tetranectin and latent alkaline phosphatase. Borregaard N, et al. **J Clin Invest** 1990 Feb;85(2):408–16

The evaluation of five electrophoretic phenotyping systems for routine screening of bloodstains. Thomas AS. **J Forensic Sci Soc** 1989 Jul–Aug;29(4):243–8

Phenotyping of alpha–2–HS glycoprotein in bloodstains by isoelectric focusing and immunoblotting [published erratum appears in J Forensic Sci Soc 1989 Nov–Dec;29(6):424] Thomas AS. **J Forensic Sci Soc** 1989 Sep–Oct;29(5):325–30

Immunoglobulins and some serum proteins in children with altered resistance coming from areas with variously polluted atmosphere. Wagner V, et al. **J Hyg Epidemiol Microbiol Immunol** 1990;34(1):17–26

Sandwich ELISA assay for quantitative measurement of SP–40,40 in seminal plasma and serum. Choi NH, et al. **J Immunol Methods** 1990 Aug 7;131(2):159–63

Triton X–100 eliminates plasma proteins interference in a radioimmunoassay for luteinizing hormone–releasing hormone (LHRH) and LHRH analogues. Ezan E, et al. **J Immunol Methods** 1989 Sep 1;122(2):291–6

Male sex–linked protein in human placental villi. Osathanondh V, et al. **J Med Assoc Thai** 1990 Feb;73 Suppl 1:93–6

Radioreceptor assay for the measurement of endogenous digitalis–like factors using membrane particulate fraction of human placenta and 125I–digoxin: comparison with RIA method. Cocci F, et al. **J Nucl Med Allied Sci** 1990 Jan–Mar;34(1):24–8

Effect of environmental enrichment during nutritional rehabilitation on body growth, blood parameters and cerebral cortical development of rats. Carughi A, et al. **J Nutr** 1989 Dec;119(12):2005–16

Effect of endogenous digoxin–like substances on the interpretation of high concentrations of digoxin in children. Stone J, et al. **J Pediatr** 1990 Aug;117(2 Pt 1):321–5

Neonatal serum protein levels as indicators of nutritional status: normal values and correlation with anthropometric data. Raubenstine DA, et al. **J Pediatr Gastroenterol Nutr** 1990 Jan;10(1):53–61

Morphologic characteristics of adsorbed human plasma proteins on vascular grafts and biomaterials. Pankowsky DA, et al. **J Vasc Surg** 1990 Apr;11(4):599–606

A digoxin–like immunoreactive substance and atrioventricular block induced by a Chinese medicine "kyushin". Lin CS, et al. **Jpn Circ J** 1989 Sep;53(9):1077–80

A blood protein monitor for the continuous measurement of blood volume changes during hemodialysis. Schneditz D, et al. **Kidney Int** 1990 Aug;38(2):342–6

Hematology and serum chemistry values of adult, pregnant and newborn New Zealand rabbits (Oryctolagus cuniculus). Bortolotti A, et al. **Lab Anim Sci** 1989 Sep; 39(5):437–9

Activated eosinophils in chronic inflammatory bowel disease [letter] Choy MY, et al. **Lancet** 1990 Jul 14;336(8707):126–7

Electrophysiologic study of experimental demyelination induced by serum of patients with IgM M proteins and neuropathy. Trojaborg W, et al. **Neurology** 1989 Dec; 39(12):1581–6

Localization of the alpha 1 and alpha 2 subunits of the dihydropyridine receptor and ankyrin in skeletal muscle triads. Flucher BE, et al. **Neuron** 1990 Sep;5(3):339–51

Identification and isolation of calcium–dependent and –independent bovine immunoglobulins reactive with sepharose 4B. Sugii S, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):727–33

Colloid oncotic pressure in children with nephrotic syndrome. Tambunan T, et al. **Paediatr Indones** 1988 Sep–Oct;28(9–10):200–8

Tissue distribution of hepatopoietin–A: a heparin–binding polypeptide growth factor for hepatocytes. Zarnegar R, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1252–6

Scanning microfluorometry in intravital microvascular research. Witte S. **Res Exp Med (Berl)** 1989;189(4):229–39

Biochemical reference values in elderly black subjects. Bester FC, et al. **S Afr Med J** 1990 Sep 1;78(5):241–4

Pancreatic pseudocyst fluid—a mixture of plasma proteins and pancreatic juice possessing a high proteolytic activity. Lasson A, et al. **Scand J Clin Lab Invest** 1989 Sep; 49(5):403–12

Pleural effusion: comparison of clinical judgment and Light's criteria in determining the cause. Scheurich JW, et al. **South Med J** 1989 Dec;82(12):1487–91

Comparison of digoxin–like immunoreactive substance cross–reactivity with two digoxin automated immunoassay [letter] Lacarelle B, et al. **Ther Drug Monit** 1989 Nov; 11(6):725–7

Radioimmunoassay of digoxin in serum using monoclonal antibodies and assessment of interference by digoxin–like immunoreactive substances. Loucari–Yiannakou E, et al. **Ther Drug Monit** 1990 Mar;12(2):195–200

Functional protein S assay shows improved correlation with clinical symptoms in hereditary deficiency. Woodhams BJ, et al. **Thromb Res** 1990 Feb 15;57(4):651–7

Eosinophil cationic protein in urine in patients with urinary bladder tumors. Lose G, et al. **Urol Res** 1989;17(5):295–7

Serum proteins in guinea–pigs and horses infected with Trypanosoma evansi (Steel, 1885). Monzón CM, et al. **Vet Parasitol** 1990 Jul;36(3–4):295–301

[Correlation of changes in serum zinc with serum proteins and alkaline phosphatase in rabbits with burns] Cai DL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Jun;5(2):127–9, 159–60 (Eng. Abstr.) **(Chi)**

[Alterations in serum proteins following thermal injuries] Huang WH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Mar;5(1):25–7, 76 (Eng. Abstr.) **(Chi)**

[Clinical significance of changes in the serum level of endogenous digitalis–like factor in patients with chronic congestive heart failure] Ko YS, et al. **Chung Hua Nei Ko Tsa Chih** 1990 Jan;29(1):11–3, 59–60 (Eng. Abstr.) **(Chi)**

[Follow–up of burn injuries using the PINI index] Kudláčková M, et al. **Rozhl Chir** 1989 Sep;68(8–9):595–9 (Eng. Abstr.) **(Cze)**

[Blood levels of ACTH and endogenous digitalis–like substances in in man] Horký K, et al. **Sb Lek** 1989 Sep; 91(8):265–73 (Eng. Abstr.) **(Cze)**

[Plasma proteins and other substances in membrane plasmapheresis. Relation to possibiiities and limitations of this therapeutic method] Opatrný K, et al. **Vnitr Lek** 1989 Sep;35(9):864–72 (Eng. Abstr.) **(Cze)**

[Determination of fructosamine and plasma proteins (letter)] Quillet P. **Ann Biol Clin (Paris)** 1989;47(8):508 **(Fre)**

[Hemoglobin niosomes. II. In vitro interactions of plasma proteins and phagocytes] Moser P, et al. **Pharm Acta Helv** 1990;65(3):82–92 (32 ref.) (Eng. Abstr.) **(Fre)**

[Hyperphosphatemia in case of abnormal proteinemia (letter)] Dugre V, et al. **Presse Med** 1990 Feb 24;19(7):338 **(Fre)**

[Multiple myeloma. General etiologic data (68 cases). Blood and/or urine protein anomalies (67 cases)] Ben Abdeladhim A, et al. **Tunis Med** 1989 Oct;67(10):607–12 (17 ref.) (Eng. Abstr.) **(Fre)**

[Quantitative determination of 5 vitreal proteins in the normal vitreous body and proliferative retinal diseases] Clausen R, et al. **Fortschr Ophthalmol** 1990;87(3):283–6 (Eng. Abstr.) **(Ger)**

[Plasmapheresis in light urticaria. A rational therapy concept in cases with a proven serum factor] Duschet P, et al. **Hautarzt** 1989 Sep;40(9):553–5 (Eng. Abstr.) **(Ger)**

[Relation of atrial natriuretic peptide and endogenous digoxin–like activity in the plasma of young hypertensive patients] Musca A, et al. **Medicina (Firenze)** 1989 Jul–Sep; 9(3):304–6 (Eng. Abstr.) **(Ita)**

[Familial history of cancer and dietary pattern, serum cholesterol, serum protein and blood hemoglobin] Yamaguchi N, et al. **Gan No Rinsho** 1990 Feb;Spec No:377–81 (Eng. Abstr.) **(Jpn)**

[Clinical significance of serum protein and fraction analysis in biochemical tests] Kagimoto T, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:118–22 **(Jpn)**

[Relationship between fructosamine and protein concentration in serum] Saito E, et al. **Rinsho Byori** 1989 Jun;37(6):655–60 **(Jpn)**

[Correlation of glycosylated serum protein and glycosylated hemoglobin in patients with diabetes mellitus type 2 at various stages of metabolic compensation] Plechanow J, et al. **Pol Arch Med Wewn** 1987 Sep;78(3):149–53 (Eng. Abstr.) **(Pol)**

[Endogenous digoxin–like substance level in essential arterial hypertension, renal failure and acromegaly] Soszyński P, et al. **Pol Arch Med Wewn** 1988 Jan;79(1):20–5 (Eng. Abstr.) **(Pol)**

[Control of the metabolic state of diabetic patients by determining the concentration of serum glycosylated proteins (the fructosamine test)] Dogaru C, et al. **Rev Med Interna [Med Interna]** 1989 Sep–Oct;41(5):449–58 (Eng. Abstr.) **(Rum)**

[The effect of low molecular weight ligands on relaxation of water protons in protein solutions] Aksenov SI, et al. **Biofizika** 1990 Jan–Feb;35(1):39–42 (Eng. Abstr.) **(Rus)**

[Isolation of blood coagulation factors (VII, VIII and IX)] Dzegilenko NB. **Gematol Transfuziol** 1990 May;35(5):38–40 **(Rus)**

[Use of the methods of blood protein fractionation for increasing the activity of natural anti–A and anti–B antibodies] Klimova KN, et al. **Gematol Transfuziol** 1990 May;35(5):16–8 (Eng. Abstr.) **(Rus)**

[Study of biologically active admixtures in protein preparations by the methods of medical microanalysis] Migunov VN, et al. **Gematol Transfuziol** 1990 May; 35(5):34–5 **(Rus)**

[The protein–blood volume indices during moderate plasmapheresis] Movshev BE, et al. **Gematol Transfuziol** 1989 Dec;34(12):12–7 (Eng. Abstr.) **(Rus)**

[Value of biochemical and immunological indicators in differential diagnosis of dust–induced diseases of the respiratory organs] Pavlovskaia NA, et al. **Gig Sanit** 1990 May;(5):28–31 (Eng. Abstr.) **(Rus)**

[State of nonspecific reactivity in patients with strangulated hernias after surgery] Lupal tsev VI, et al. **Klin Khir** 1990; (2):6–8 (Eng. Abstr.) **(Rus)**

[The level of non–enzyme cation proteins in the leukocytes during profuse gastrointestinal hemorrhage] Prilma OB. **Klin Khir** 1990;(3):66–7 **(Rus)**

[Changes in the levels of serum proteins in patients with chronic obstructive bronchitis] Lutoshkin SF, et al. **Klin Med (Mosk)** 1990 May;68(5):56–9 (Eng. Abstr.) **(Rus)**

[Protein composition of blood serum and the products of nitrogen metabolism in humans during long–term hypokinesia] Zaltseva LB, et al. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):50–4 (Eng. Abstr.) **(Rus)**

[A study of blood serum proteins using spin probes in athletes during prolonged physical exercise] Kormanovskiĭ AIa, et al. **Lab Delo** 1990;(5):12–5 (Eng. Abstr.) **(Rus)**

[Circulating blood plasma proteins during the infusion therapy of blood loss] Movshev BE, et al. **Patol Fiziol Eksp Ter** 1990 May-Jun;(3):40-3 (Eng. Abstr.) **(Rus)**

[Use of the resochin test in pediatric rheumatology] Davidovskiĭ LIa, et al. **Pediatriia** 1989;(9):112 **(Rus)**

[The value of quantitative analysis of neutrophil cation proteins in patients with infiltrative pulmonary tuberculosis] Grigorian VG, et al. **Probl Tuberk** 1990;(3):26-9 (Eng. Abstr.) **(Rus)**

[Erythropoiesis inhibitor in the plasma of patients with hemopoietic dysplasias] Gudim VI, et al. **Ter Arkh** 1989;61(7):48-52 (Eng. Abstr.) **(Rus)**

[The level of R proteins in reactive arthritis] Salikhbaeva US, et al. **Ter Arkh** 1989;61(11):134-7 (Eng. Abstr.) **(Rus)**

[Effect of various physical factors on clinical and laboratory indicators and on nonspecific resistance of the body in reactive arthritis] Kapinos EN, et al. **Vestn Akad Med Nauk SSSR** 1990;(2):61-4 (14 ref.) (Eng. Abstr.) **(Rus)**

[Use of the lysosomal-cationic test for the prognosis of postoperative suppurative complications in patients with infectious endocarditis] Kucherenko AD, et al. **Vestn Khir** 1989 Nov;143(11):101-3 **(Rus)**

[The effect of qualitatively different nutrition on various indicators of the functional status of the parasympathetic nervous system and blood proteins in students during an examination period] Kerimova MG, et al. **Vopr Pitan** 1989 Nov-Dec;(6):17-20 (Eng. Abstr.) **(Rus)**

[The content of middle molecules in the blood plasma of patients with proctologic diseases] Davtian OIa, et al. **Vrach Delo** 1989 Sep;(9):69-71 **(Rus)**

[Dynamics of the blood serum protein fractions in patients with insulinoma] Dubitskiĭ AE, et al. **Vrach Delo** 1989 Dec;(12):71-4 (Eng. Abstr.) **(Rus)**

[A decrease in the activity of granulocyte cationic protein in patients with chronic lympholeukemia] Gaĭdukova SN. **Vrach Delo** 1989 Dec;(12):29-31 (Eng. Abstr.) **(Rus)**

[Changes in the protein spectrum of the blood serum in acute leukemia patients in relation to age] Pesotskaia LA, et al. **Vrach Delo** 1990 Feb;(2):34-6 **(Rus)**

[The blood serum protein spectrum of patients with acute leukemia] Pesotskaia LA. **Vrach Delo** 1989 Nov;(11):74-7 **(Rus)**

[The activity of cationic proteins, peroxidase and alkaline phosphatase in the blood neutrophils of diabetics] Podil'chak MD, et al. **Vrach Delo** 1989 Nov;(11):81-3 (Eng. Abstr.) **(Rus)**

[Evaluation of the inflammatory and nutritional status in children with cystic fibrosis] Sarriá Chueca A, et al. **An Esp Pediatr** 1989 Jun;30(6):447-50 (Eng. Abstr.) **(Spa)**

BIOSYNTHESIS

Whole body and plasma protein synthesis in exercise and recovery in human subjects. Carraro F, et al. **Am J Physiol** 1990 May;258(5 Pt 1):E821-31

The tumour promoter okadaic acid inhibits reticulocyte-lysate protein synthesis by increasing the net phosphorylation of elongation factor 2. Redpath NT, et al. **Biochem J** 1989 Aug 15;262(1):69-75

Synthesis of proteins from [35S]methionine by guinea pig megakaryocytes in vivo and time course of appearance of newly synthesized proteins in platelets. Schick BP. **Blood** 1990 Sep 1;76(5):887-91

Sensitive inhibitory effect of interferon-alpha on M-protein secretion of human myeloma cells. Tanaka H, et al. **Blood** 1989 Oct;74(5):1718-22

Biological and clinical effects of the combination of beta- and gamma-interferons administered as a 5-day continuous infusion. Schiller JH, et al. **Cancer Res** 1990 Aug 1; 50(15):4588-94

Albumin synthetic rate: a comparison of arginine and alpha-ketoisocaproate precursor methods using stable isotope techniques. Olufemi OS, et al. **Eur J Clin Nutr** 1990 May;44(5):351-61

Influence of insulin on albumin and non-albumin protein fractional synthetic rates in post-absorptive type I diabetic patients. Pacy PJ, et al. **Eur J Clin Nutr** 1990 May; 44(5):343-9

Maternal and fetal digoxin-like immunoreactive factor in elective cesarean sections and spontaneous vaginal delivery. Zimmer EZ, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jul-Aug;36(1-2):53-8

Identification of specific serum proteins synthesized de novo by monolayer cultures of glandular cells of gestational endometrium. Fay TN, et al. **Hum Reprod** 1990 Jan; 5(1):14-8

Phenotypic variation in human HepG2 hepatoma cells: alterations in cell growth, plasma protein synthesis and heme pathway enzymes. Iwasa F, et al. **Int J Biochem** 1990; 22(3):303-10

Dissociation between interleukin-1 beta mRNA and protein synthesis in human peripheral blood mononuclear cells. Schindler R, et al. **J Biol Chem** 1990 Jun 25;265(18):10232-7

Granulocyte-macrophage colony-stimulating factor enhances cationic antimicrobial protein synthesis by human neutrophils. Waksman Y, et al. **J Immunol** 1990 May 1; 144(9):3437-43

Digoxin-like immunoreactive factor in twin and pregnancy-associated hypertensive pregnancies [letter; comment] Goodlin RC. **Obstet Gynecol** 1989 Dec; 74(6):974-6 Comment on: Obstet Gynecol 1989 Jul;74(1):29-33.

[The role of spectrin-like peptides in the regulation of the initiation of protein synthesis in rabbit reticulocytes] Kudlicki W. **Postepy Biochem** 1989;35(3):311-9 (25 ref.) **(Pol)**

[Incorporation of amino acids into liver and serum proteins during prolonged administration to animals of ethanol and cholesterol] Bozhko GKh, et al. **Ukr Biokhim Zh** 1990 Jan-Feb;62(1):30-4 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Digoxin-like immunoreactivity detected in cerebrospinal fluid of humans with fever [letter] Krivoy N, et al. **Clin Chem** 1990 Apr;36(4):703-4

CLASSIFICATION

HLA antigens, blood groups and serum protein groups in patients with intermittent claudication. Norrgård O, et al. **Hum Hered** 1989;39(4):192-5

DEFICIENCY

Paroxysmal nocturnal hemoglobinuria and decay-accelerating factor. Rosse WF. **Annu Rev Med** 1990; 41:431-6 (35 ref.)

A haemolytic syndrome associated with the complete absence of red cell membrane protein 4.2 in two Tunisian siblings. Ghanem A, et al. **Br J Haematol** 1990 Jul;75(3):414-20

A genetic defect of erythrocyte band 4.2 protein associated with hereditary spherocytosis. Ideguchi H, et al. **Br J Haematol** 1990 Mar;74(3):347-53

The p67-phox cytosolic peptide of the respiratory burst oxidase from human neutrophils. Functional aspects. Okamura N, et al. **J Clin Invest** 1990 May;85(5):1583-7

[A case of spherocytosis with complete deficiency of erythrocyte membrane protein band 4.2, accompanied with arachnoid cyst and congenital ocular anomalies] Ito H, et al. **Nippon Naika Gakkai Zasshi** 1989 Jul;78(7):990-1 **(Jpn)**

DRUG EFFECTS

Differences in the nature and kinetics of the ethanol-related circulating cytotoxic proteins in normal subjects and patients with alcohol-induced cirrhosis. Wickramasinghe SN, et al. **Alcoholism (N Y)** 1989 Dec;13(6):723-9

Acetaldehyde-modified serum proteins inhibit mitogen-stimulated human lymphocyte transformation. Wickramasinghe SN, et al. **Br J Haematol** 1989 Sep; 73(1):23-8

[The relation of the toxicity of copper phthalocyanines to their distribution in blood serum proteins] Balabanova EL, et al. **Gig Tr Prof Zabol** 1989;(10):54-6 **(Rus)**

GENETICS

Blood genetic markers in the Chinese of two eastern provinces. Saha N. **Am J Phys Anthropol** 1989 Nov; 80(3):295-303

Two-dimensional electrophoresis of the plasma proteins of alpacas and llamas: genetic polymorphism of alpha 1B-glycoprotein and three other proteins. Juneja RK, et al. **Anim Genet** 1989;20(4):395-406

Phenotyping of pig alpha 1B-glycoprotein (PO2) and haemopexin by 1D polyacrylamide gel electrophoresis and immunoblotting. Kaláb P, et al. **Anim Genet** 1989; 20(3):295-8

Isolation and characterization of a cDNA clone for a novel serine-rich neutrophil protein. Bellavite P, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):915-22

Primary structure of vitamin K-dependent human protein Z. Sejima H, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):661-8

The cytochrome P450 IV family: constitutive and inducible haemoproteins. Gibson GG. **Biochem Soc Trans** 1990 Feb; 18(1):14-5 (21 ref.)

In vitro transcription of the plasma protein genes of Bombyx mori. Sakurai H, et al. **Biochim Biophys Acta** 1990 Sep 10;1087(1):18-24

Expression of human plasma protein genes in ageing transgenic mice. Bowman BH, et al. **Bioessays** 1990 Jul; 12(7):317-22 (34 ref.)

Linkage between alpha 1B-glycoprotein (A1BG) and Lutheran (LU) red blood group system: assignment to chromosome 19: new genetic variants of A1BG. Eiberg H, et al. **Clin Genet** 1989 Dec;36(6):415-8

Genetic variability in domesticated and wild sheep based on blood protein characters. Wang S, et al. **Comp Biochem Physiol [B]** 1990;96(1):201-7

Insect immunity: expression of the two major inducible antibacterial peptides, defensin and diptericin, in Phormia terranovae. Dimarcq JL, et al. **EMBO J** 1990 Aug; 9(8):2507-15

Hereditary factors in Takayasu disease. II. Various blood types. Numano F, et al. **Exp Clin Immmunogenet** 1986; 3(1):20-7

Expression of liver-specific genes coding for plasma proteins in protein deficiency. Perozzi G, et al. **FEBS Lett** 1989 Nov 6;257(2):215-8

Cloning and sequence analysis of the human gene encoding eosinophil major basic protein. Barker RL, et al. **Gene** 1990 Feb 14;86(2):285-9

Transcription factor ATF cDNA clones: an extensive family of leucine zipper proteins able to selectively form DNA-binding heterodimers [published erratum appears in Genes Dev 1990 Apr;4(4):682] Hai TW, et al. **Genes Dev** 1989 Dec;3(12B):2083-90

Blood biochemical polymorphisms as markers for genetic characteristics of wild Spanish and domestic rabbits. Arana A, et al. **Genetica** 1989;79(1):1-9

Structure and chromosome localization of the human eosinophil-derived neurotoxin and eosinophil cationic protein genes: evidence for intronless coding sequences in the ribonuclease gene superfamily. Hamann KJ, et al. **Genomics** 1990 Aug;7(4):535-46

Localization of the cryptdin locus on mouse chromosome 8. Ouellette AJ, et al. **Genomics** 1989 Aug;5(2):233-9

Chromosomal organization and localization of the human urokinase inhibitor gene: perfect structural conservation with ovalbumin. Samia JA, et al. **Genomics** 1990 Jan; 6(1):159-67

Genetic structure of Mennonite populations of Kansas and Nebraska. Crawford MH, et al. **Hum Biol** 1989 Aug; 61(4):493-514

Red cell enzyme and serum protein polymorphisms in South Korea. Benkmann HG, et al. **Hum Hered** 1989;39(5):263-70

Genetic studies of low-abundance human plasma proteins. XII. A new variant of corticosteroid-binding globulin detected by isoelectric focusing/immunoblotting. Eichner JE, et al. **Hum Hered** 1989;39(3):170-3

Distribution of plasma alpha-1-B-glycoprotein phenotypes in several Mongoloid populations of East Asia. Juneja RK, et al. **Hum Hered** 1989;39(4):218-22

Bulgarian Jews in Israel: genetic blood markers. Red-cell antigens, serum proteins and red-cell isozymes. Nevo S, et al. **Hum Hered** 1989;39(6):333-44

Amino-terminal amino acid sequence and chemical and functional properties of a membrane attack complex-inhibitory factor from human erythrocyte membranes. Sugita Y, et al. **J Biochem (Tokyo)** 1989 Oct; 106(4):589-92

Molecular cloning and characterization of MACIF, an inhibitor of membrane channel formation of complement. Sugita Y, et al. **J Biochem (Tokyo)** 1989 Oct;106(4):555-7

The complete cDNA and amino acid sequence of bovine fetuin. Its homology with alpha 2HS glycoprotein and relation to other members of the cystatin superfamily. Dziegielewska KM, et al. **J Biol Chem** 1990 Mar 15; 265(8):4354-7

Mapping the domain structure of human erythrocyte adducin. Joshi R, et al. **J Biol Chem** 1990 Aug 5; 265(22):13130-6

The primary structure of glycoprotein III from bovine adrenal medullary chromaffin granules. Sequence similarity with human serum protein-40,40 and rat Sertoli cell glycoprotein. Palmer DJ, et al. **J Biol Chem** 1990 Apr 25; 265(12):6617-23

The presence of methionine or threonine at position 381 in vitronectin is correlated with proteolytic cleavage at arginine 379. Tollefsen DM, et al. **J Biol Chem** 1990 Jun 15;265(17):9778-81

A polymorphic protein character of red blood cells (EP-1) in domesticated and wild sheep. Wang S, et al. **J Hered** 1990 May-Jun;81(3):206-8

Loss of a phosphorylated form of transcription factor CREB/ATF in poliovirus-infected cells. Kliewer S, et al. **J Virol** 1990 Sep;64(9):4507-15

Inbreeding effects on average heterozygosity in the Sudan. Saha N, et al. **Jinrui Idengaku Zasshi** 1989 Sep;34(3):225-9

Tumor-associated expression of a serum protein, termed aX protein (alpha 1-inhibitor III), and its mRNA in rat liver. Sugiyama K, et al. **Jpn J Cancer Res** 1989 Aug;80(8):759-64

Abnormal distribution of CF delta F508 allele in azoospermic men with congenital aplasia of epididymis and vas deferens [letter] Dumur V, et al. **Lancet** 1990 Aug 25;336(8713):512

CAP 37, a 37 kD human neutrophil granule cationic protein shares homology with inflammatory proteinases. Pereira HA, et al. **Life Sci** 1990;46(3):189-96

Interleukin-6: a regulator of plasma protein gene expression in hepatic and non-hepatic tissues. Sehgal PB. **Mol Biol Med** 1990 Apr;7(2):117-30 (101 ref.)

Hereditary spherocytosis associated with deletion of human erythrocyte ankyrin gene on chromosome 8. Lux SE, et al. **Nature** 1990 Jun 21;345(6277):736-9

Analysis of cDNA for human erythrocyte ankyrin indicates a repeated structure with homology to tissue-differentiation and cell-cycle control proteins. Lux SE, et al. **Nature** 1990 Mar 1;344(6261):36-42

Cystic fibrosis. A transport problem? [news; comment] Ringe D, et al. **Nature** 1990 Jul 26;346(6282):312-3 Comment on: Nature 1990 Jul 26;346(6282):362-5. Comment on: Nature 1990 Jul 26;346(6282):366-9.

Isolation and characterization of a novel human gene expressed specifically in the cells of hematopoietic lineage. Kitamura D, et al. **Nucleic Acids Res** 1989 Nov 25; 17(22):9367-79

Nucleotide sequence of the bovine bactericidal permeability increasing protein (BPI). Leong SR, et al. **Nucleic Acids Res** 1990 May 25;18(10):3052

Complete amino acid sequence and homologies of human erythrocyte membrane protein band 4.2. Korsgren C, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):613-7

cDNA sequence for human erythrocyte ankyrin. Lambert

S, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1730–4

Molecular cloning of human protein 4.2: a major component of the erythrocyte membrane. Sung LA, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):955–9

Ankyrin and the hemolytic anemia mutation, nb, map to mouse chromosome 8: presence of the nb allele is associated with a truncated erythrocyte ankyrin. White RA, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3117–21

Genetic relationships among dog breeds with special reference to Asian dog breeds studied by biochemical polymorphisms of blood proteins. Tanabe Y. **Prog Clin Biol Res** 1990;344:619–37

Structure and function of lipopolysaccharide binding protein. Schumann RR, et al. **Science** 1990 Sep 21; 249(4975):1429–31

Allele-specific occurrence of multiple C4 and Slp mRNAs. Bruisten SM, et al. **Tissue Antigens** 1989 Oct;34(4):242–9

[An electrophoretic comparison (Sds-page) of the serum protein in 8 species of animals] Wang ZG, et al. **J Chuan Hsueh Pao** 1988;15(4):290–8 (Eng. Abstr.) **(Chi)**

[Sensitivity of various study technics in blood stains] Förster R, et al. **Arch Kriminol** 1990 May-Jun;185(5–6):150–62 (Eng. Abstr.) **(Ger)**

[Evaluation of unusual band patterns in immunochemophoresis] Rand S, et al. **Beitr Gerichtl Med** 1989;47:159–64 (Eng. Abstr.) **(Ger)**

[Distribution of serum haptoglobin groups in affective psychoses—more than a genetic marker indication?] Lange V. **Fortschr Neurol Psychiatr** 1990 Mar;58(3):114–21 (Eng. Abstr.) **(Ger)**

[Quantitative determinations of Hp, Pi, Tf and GC in stored blood stains] Schwerd W, et al. **Z Rechtsmed** 1989; 102(8):531–4 (Eng. Abstr.) **(Ger)**

[Genetic characteristics of erythrocyte antigens and various polymorphic blood proteins in the Jersey cattle in Moldavia] Bukataru NN, et al. **Genetika** 1990 Feb; 26(2):319–24 (Eng. Abstr.) **(Rus)**

[Genetics of human populations of Caucasus: distribution of various immunological and biochemical markers in eastern Georgia] Nasidze IS, et al. **Genetika** 1990 May;26(5):936–45 (Eng. Abstr.) **(Rus)**

[Testing the homozygosity of Baikal seal using data on genetic variability of proteins] Shubin PN, et al. **Genetika** 1990 Feb;26(2):370–3 (Eng. Abstr.) **(Rus)**

[The joint variability of the growth-weight characteristics and biochemical gene markers in newborn infants] Dubrova IuE, et al. **Tsitol Genet** 1990 Mar-Apr;24(2):46–52 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Antimicrobial proteins of maternal and cord sera and human milk in relation to maternal nutritional status. Chang SJ. **Am J Clin Nutr** 1990 Feb;51(2):183–7

The presence of a novel protein in calf serum that recognizes beta amyloid in the formalin-fixed section. Kanemaru K, et al. **Am J Pathol** 1990 Sep;137(3):677–87

The homologous restriction factor is immunologically related to complement components C8 and C9 and to lymphocyte pore-forming protein perforin through cysteine-rich domains. Young JD, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):648–52

Immunochemical characterization of interactions between circulating autologous immunoglobulin G and normal human erythrocyte membrane proteins. Heegaard NH. **Biochim Biophys Acta** 1990 Apr 13;1023(2):239–46

Discrimination of normal and abnormal prothrombin and protein C in plasma using a calcium ion-inhibited monoclonal antibody to a common epitope on several vitamin K-dependent proteins. Church WR, et al. **Blood** 1989 Nov 15;74(7):2418–25

Western blot identification of platelet proteins that bind normal serum immunoglobulins. Characteristics of a 95-Kd reactive protein. Reid DM, et al. **Blood** 1990 Jun 1; 75(11):2194–203

Hypotensive properties of antibodies directed against an endogenous pressor peptide isolated from rat blood. Todd DG, et al. **Can J Physiol Pharmacol** 1989 Dec;67(12):1580–5

Comparative studies on an antigenicity of plasma proteins from humans and apes by ELISA: a close relationship of chimpanzee and human. Tsutsumi H, et al. **Comp Biochem Physiol [B]** 1989;94(4):647–9

A 12 kDa protein in chicken serum antigenically cross-reactive with, but unrelated to, beta 2-microglobulin. Warr GW. **Dev Comp Immunol** 1990 Spring;14(2):247–53

Antigenic structure of four human plasma proteins, retinol-binding protein, 9,5S-alpha-1-glycoprotein, alpha-2-pregnancy-associated glycoprotein and histidine-rich alpha-2-glycoprotein. Bauer K. **Exp Clin Immunogenet** 1986;3(4):230–3

Evolution of the immunologic species specificity of human serum proteins. 1962 [classical article] Goodman M. **Hum Biol** 1989 Oct-Dec;61(5–6):879–924; discussion 925–34

The use of an immunoassay index for antibodies against isocyanate human protein conjugates and application to human isocyanate disease. Grammer LC, et al. **J Allergy Clin Immunol** 1990 Jul;86(1):94–8

C4b-binding protein and a 60,000-Dalton plasma protein share antigenic determinants with membrane cofactor protein of complement. Seya T, et al. **J Immunol** 1990 Mar 15;144(6):2312–20

Anti-idiotypic antibodies derived against C8, C9 and perforin bind homologous restriction factor. Young JD, et al. **J Immunol Methods** 1990 Mar 27;128(1):133–42

Anticardiolipin antibodies (ACA) directed not to cardiolipin but to a plasma protein cofactor. Galli M, et al. **Lancet** 1990 Jun 30;335(8705):1544–7

Non-oxidative antibacterial activity of bovine neutrophil granule proteins towards mastitis pathogens. Grieve PA, et al. **Zentralbl Veterinarmed [B]** 1989 Sep;36(7):500–8

ISOLATION & PURIFICATION

Isolation of several fractions from human serum, inhibiting rabbit cartilage metabolism in vitro. Du Caju MV, et al. **Acta Endocrinol (Copenh)** 1990 Feb;122(2):277–82

Chromatographic separations of serum proteins on immobilized metal ion stationary phases. Margolis SA, et al. **Anal Biochem** 1989 Nov 15;183(1):108–21

Biotechnology of plasma proteins. Fractionation and applications. Stoltz JF, et al. **Beitr Infusionther** 1989; 24:74–82 (1 ref.)

Enkephalin-binding protein in human blood. Nakajima S, et al. **Biochem Int** 1989 Sep;19(3):529–36

Purification and characterization of a major phosphatidylserine-binding phosphoprotein from human platelets. Burgener R, et al. **Biochem J** 1990 Aug 1; 269(3):729–34

Preparation and properties of human red-cell ankyrin. Pinder JC, et al. **Biochem J** 1989 Dec 1;264(2):423–8

Isolation and characterization of a membrane-attack-complex-inhibiting protein present in human serum and other biological fluids. Watts MJ, et al. **Biochem J** 1990 Jan 15;265(2):471–7

Identification of phosphatidylserine-binding proteins in human white blood cells. Wolf M, et al. **Biochem J** 1990 Aug 1;269(3):723–8

Purification and partial characterization of human platelet calcium-binding proteins. Munkonge FM, et al. **Biochem Soc Trans** 1990 Jun;18(3):471–2

A study into the nature and organ source of digoxin-like immunoreactive substance(s) in the perinatal period. Seccombe DW, et al. **Biol Neonate** 1989;56(3):136–46

High sample throughput using sodium dodecyl sulfate-polyacrylamide gel electrophoresis. Marshall T, et al. **Biotechniques** 1988 Nov-Dec;6(10):948, 950

P47 phosphoprotein of blood platelets (pleckstrin) is a major target for phorbol ester-induced protein phosphorylation in intact platelets, granulocytes, lymphocytes, monocytes and cultured leukaemic cells: absence of P47 in non-haematopoietic cells. Gailani D, et al. **Br J Haematol** 1990 Feb;74(2):192–202

Antigenic relationship among antihemorrhagic factors from snake and opossum plasmas. Moura-da-Silva AM, et al. **Braz J Med Biol Res** 1989;22(6):717–9

Inactivation of HIV-1 and HIV-2 by various manufacturing procedures for human plasma proteins. Hilfenhaus JW, et al. **Cancer Detect Prev** 1990;14(3):369–75

Distribution of thiobarbituric acid-reactive substances in lipoproteins and proteins in serum. Bonnefont D, et al. **Clin Chem** 1989 Oct;35(10):2054–8

Evidence for the existence of the same endogenous digitalis-like factor in several mammalian species. Castañeda-Hernández G. **Comp Biochem Physiol [C]** 1989; 94(1):49–53

Erythrocyte binding factors in the sera of the adult lamprey Geotria australis. Feldwick AC, et al. **Dev Comp Immunol** 1990 Winter;14(1):39–48

Effect of polyethylene glycol on the non-specific adsorption of proteins to Eupergit C and agarose. Fleminger G, et al. **J Chromatogr** 1990 Jun 27;510:271–9

Chemistry and preparation of affinity ligands useful in immunoglobulin isolation and serum protein separation. Ngo TT, et al. **J Chromatogr** 1990 Jun 27;510:281–91

Apheresis of low molecular weight protein fraction and the onset of labor. Lentz MR, et al. **J Clin Apheresis** 1990; 5(2):62–7

Purification and characterization of an abundant cytosolic protein from human neutrophils that promotes Ca2(+)-dependent aggregation of isolated specific granules. Ernst JD, et al. **J Clin Invest** 1990 Apr; 85(4):1065–71

CAP37, a human neutrophil-derived chemotactic factor with monocyte specific activity. Pereira HA, et al. **J Clin Invest** 1990 May;85(5):1468–76

Evidence of eosinophil granule major basic protein in human placenta. Wasmoen TL, et al. **J Exp Med** 1989 Dec 1; 170(6):2051–63

On the mechanism of the cold ethanol precipitation method of plasma protein fractionation. van Oss CJ. **J Protein Chem** 1989 Oct;8(5):661–8

Platelet coagulation factor XIa-inhibitor, a form of Alzheimer amyloid precursor protein. Smith RP, et al. **Science** 1990 Jun 1;248(4959):1126–8

Protein C inhibitor from human plasma: characterization of native and cleaved inhibitor and demonstration of inhibitor complexes with plasma kallikrein. Laurell M, et al. **Thromb Haemost** 1989 Nov 24;62(3):885–91

A second plasma inhibitor of activated protein C: alpha 1-antitrypsin. van der Meer FJ, et al. **Thromb Haemost** 1989 Sep 29;62(2):756–62

[The results of 5 years' use of a method for heparin cryoprecipitation of plasma proteins (selective plasmapheresis) in patients with an immune-complex pathology] Margulis EIa, et al. **Ter Arkh** 1989;61(7):65–9 (Eng. Abstr.) **(Rus)**

[Immunoelectrophoretic identification of proteins separated by zonal electrophoresis and isoelectric focusing] Zhabin SG, et al. **Vopr Med Khim** 1990 Mar-Apr;36(2):91–3 (Eng. Abstr.) **(Rus)**

METABOLISM

Protein binding of prilocaine in human plasma: influence of concentration, pH and temperature. Bachmann B, et al. **Acta Anaesthesiol Scand** 1990 May;34(4):311–4

Displacement of warfarin from human serum proteins by halothane anaesthesia. Calvo R, et al. **Acta Anaesthesiol Scand** 1989 Oct;33(7):575–7

A simple flow injection analysis for studies of drug-protein binding interactions in serum. Gizurarson S, et al. **Acta Pharm Nord** 1989;1(5):291–4

Is gout related to an alteration of the uric acid protein binding? Anna T, et al. **Adv Exp Med Biol** 1989; 253A:225–32

Isolation of [hydroxyproline3]Lysyl-bradykinin formed by kallikrein from human plasma protein. Sasaguri M, et al. **Adv Exp Med Biol** 1989;247A:539–44

Relation of body size and composition to clinical biochemical and hematologic indices in US men and women. Micozzi MS, et al. **Am J Clin Nutr** 1989 Dec;50(6):1276–81

Plasma digitalis-like activity and cytosolic Ca2+ in essential hypertension. Le Quan Sang KH, et al. **Am J Hypertens** 1990 Mar;3(3):171–5

Comparison of in vivo bioavailability of progestational agents into the rat uterus and liver and the effect of plasma protein binding. Van Voorhis B, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1698–703

Plasma protein-mediated transport of steroid and thyroid hormones: further comment. Ekins P, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E394–7

Microvascular permeability to endogenous plasma proteins in the jejunum. Mortillaro NA, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1650–4

Binding of thiopental in neonatal serum. Kingston HG, et al. **Anesthesiology** 1990 Mar;72(3):428–31

Effects of age on plasma protein binding of sufentanil. Meistelman C, et al. **Anesthesiology** 1990 Mar;72(3):470–3

Interference by haemolysis, icterus and lipaemia in assays on the Beckman Synchron CX5 and methods for correction. Randall AG, et al. **Ann Clin Biochem** 1990 Jul; 27 (Pt 4):345–52

Effects of dosage, peak and trough concentrations in serum, protein binding, and bactericidal rate on efficacy of teicoplanin in a rabbit model of endocarditis. Chambers HF, et al. **Antimicrob Agents Chemother** 1990 Apr; 34(4):510–4

Effects of supraphysiologic temperature and broth dilution on serum protein binding. White RL, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1257–8

Effects of psoriatic patients' neutrophils and sera on angiogenic capability and natural cytotoxicity of normal human peripheral blood mononuclear cells. Majewski S, et al. **Arch Immunol Ther Exp (Warsz)** 1989;37(3–4):465–70

Proteins adsorbed on hemodialysis membranes modulate neutrophil activation. Kuwahara T, et al. **Artif Organs** 1989 Oct;13(5):427–31

CO2 removal with hemodialysis and control of plasma oncotic pressure. Gille JP, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):654–7

Tyrosine phosphorylation of cytosolic proteins in human erythrocytes. Clari G, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1378–83

Rap1-B is phosphorylated by protein kinase A in intact human platelets. Siess W, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):944–50

Phosphorylation of high molecular weight proteins in platelets treated with 12-O-tetradecanoylphorbol-13-acetate. Litchfield DW, et al. **Biochem Int** 1990;20(3):615–21

Acute-phase-response induction in rat hepatocytes co-cultured with rat liver epithelial cells. Conner J, et al. **Biochem J** 1990 Mar 15;266(3):683–8

A fluorescent residualizing label for studies on protein uptake and catabolism in vivo and in vitro. Maxwell JL, et al. **Biochem J** 1990 Apr 1;267(1):155–62

Transport and cellular uptake of polychlorinated biphenyls (PCBs)—II. Changes in vivo in plasma lipoproteins and proteins of pigeons in response to PCBs, and a proposed model for the transport and cellular uptake of PCBs. Borlakoglu JT, et al. **Biochem Pharmacol** 1990 Jul 15; 40(2):273–81

Transport and cellular uptake of polychlorinated biphenyls (PCBs)—I. Association of individual PCB isomers and congeners with plasma lipoproteins and proteins in the pigeon. Borlakoglu JT, et al. **Biochem Pharmacol** 1990 Jul 15;40(2):265–72

Ceftriaxone binding to human serum albumin. Indirect displacement by probenecid and diazepam. McNamara PJ, et al. **Biochem Pharmacol** 1990 Sep 15;40(6):1247–53

Binding of retelliptine, a new antitumoral agent, to serum proteins and erythrocytes. Maulard C, et al. **Biochem Pharmacol** 1990 Aug 15;40(4):895–8

Plasma protein binding and blood cell distribution of propranolol enantiomers in rats. Takahashi H, et al. **Biochem Pharmacol** 1990 May 1;39(9):1495–8

Kinetics of ligand binding to haemoproteins. Gibson QH. **Biochem Soc Trans** 1990 Feb;18(1):1–6 (23 ref.)

Vanadate and molybdate increase tyrosine phosphorylation in a 50-kilodalton protein and stimulate secretion in electropermeabilized platelets. Lerea KM, et al. **Biochemistry** 1989 Nov 28;28(24):9286-92

Conformational lability of vitronectin: induction of an antigenic change by alpha-thrombin-serpin complexes and by proteolytically modified thrombin. Tomasini BR, et al. **Biochemistry** 1989 Sep 19;28(19):7617-23

Scavenger receptor of human monocytic leukemia cell line (THP-1) and murine macrophages for nonenzymatically glycosylated proteins. Takata K, et al. **Biochim Biophys Acta** 1989 Nov 17;986(1):18-26

Passive and carrier-mediated permeation of different nucleosides through the reconstituted nucleoside transporter. Tse CM, et al. **Biochim Biophys Acta** 1989 Nov 3;985(3):343-6

Mapping the binding site of the nucleoside transporter protein: a 3D-QSAR study. Viswanadhan VN, et al. **Biochim Biophys Acta** 1990 Jul 6;1039(3):356-66

The influence of vaccines and hyper immune serums on protein/platelet interaction towards an artificial surface. Chandy T, et al. **Biomater Artif Cells Artif Organs** 1990; 18(3):403-21

The influence of noise stress on plasma epinephrine and its binding to plasma protein in the rat. Schmid P, et al. **Biomed Biochim Acta** 1989;48(7):453-6

Effects of obesity and ancillary variables (dialysis time, drug, albumin, and fatty acid concentrations) on theophylline serum protein binding. Shum L, et al. **Biopharm Drug Dispos** 1989 Nov-Dec;10(6):549-62

Enrichment of two glycosyl-phosphatidylinositol-anchored proteins, acetylcholinesterase and decay accelerating factor, in vesicles released from human red blood cells. Bütikofer P, et al. **Blood** 1989 Oct;74(5):1481-5

Molecular basis of vitamin K-dependent gamma-carboxylation. Furie B, et al. **Blood** 1990 May 1; 75(9):1753-62 (65 ref.)

The ontogeny of a 57-Kd cationic antimicrobial protein of human polymorphonuclear leukocytes: localization to a novel granule population. Pereira HA, et al. **Blood** 1990 Aug 15;76(4):825-34

Effects of a modified hemodiafiltration method on low-molecular-weight protein composition in plasma. Wizemann V, et al. **Blood Purif** 1990;8(1):45-51

Oestrogen binding and risk factors for breast cancer. Ingram DM, et al. **Br J Cancer** 1990 Feb;61(2):303-7

Plasma protein binding of disopyramide in pregnant and postpartum women, and in neonates and their mothers. Echizen H, et al. **Br J Clin Pharmacol** 1990 Apr; 29(4):423-30

Influence of plasma protein content and platelet number on the potency of PAF and its antagonist RP 59227 in rabbit platelet preparations. Floch A, et al. **Br J Pharmacol** 1990 May;100(1):163-7

Immunohistochemical localization of alpha 2HS glycoprotein in dentin. Takagi Y, et al. **Calcif Tissue Int** 1990 Jul; 47(1):40-5

Delivery of the tumour photosensitizer zinc(II)-phthalocyanine to serum proteins by different liposomes: studies in vitro and in vivo. Ginevra F, et al. **Cancer Lett** 1990 Jan;49(1):59-65

A specific member of the ATF transcription factor family can mediate transcription activation by the adenovirus E1a protein. Liu F, et al. **Cell** 1990 Jun 29;61(7):1217-24

Serum protein binding of antiepileptic drugs in Sri Lankans. Karunanayake EH, et al. **Ceylon Med J** 1990 Mar; 35(1):25-8

Binding of sulfonamides to erythrocyte proteins and possible drug-drug interaction. Matsumoto K, et al. **Chem Pharm Bull (Tokyo)** 1989 Oct;37(10):2807-10

5-Fluorouracil derivatives with serum protein binding potencies. Yamashita S, et al. **Chem Pharm Bull (Tokyo)** 1989 Oct;37(10):2861-3

A comparison of direct measures of glycaemia and glycated blood proteins in insulin-dependent diabetes mellitus. Winocour PH, et al. **Clin Biochem** 1989 Dec;22(6):457-61

Changes in concanavalin A-reactive proteins in inflammatory disorders. Silvestrini B, et al. **Clin Chem** 1989 Nov; 35(11):2207-11

Serum protein markers in Chinese schizophrenics--haptoglobin types and transferrin and group-specific component subtypes. Saha N, et al. **Clin Genet** 1990 Jan;37(1):54-8

Plasma protein binding of drugs in pregnancy and in neonates. Notarianni LJ. **Clin Pharmacokinet** 1990 Jan; 18(1):20-36 (105 ref.)

Disease-induced variations in plasma protein levels. Implications for drug dosage regimens (Part II). Zini R, et al. **Clin Pharmacokinet** 1990 Sep;19(3):218-29 (242 ref.)

Disease-induced variations in plasma protein levels. Implications for drug dosage regimens (Part I). Zini R, et al. **Clin Pharmacokinet** 1990 Aug;19(2):147-59 (0 ref.)

Severity of cirrhosis and the relationship of alpha 1-acid glycoprotein concentration to plasma protein binding of lidocaine. Barry M, et al. **Clin Pharmacol Ther** 1990 Mar; 47(3):366-70

Characterization of theophylline binding to serum proteins in pregnant and nonpregnant women. Connelly TJ, et al. **Clin Pharmacol Ther** 1990 Jan;47(1):68-72

Binding of d-methadone, l-methadone, and dl-methadone to proteins in plasma of healthy volunteers: role of the variants of alpha 1-acid glycoprotein. Eap CB, et al. **Clin Pharmacol Ther** 1990 Mar;47(3):338-46

Differences in plasma binding of drugs between Caucasians and Chinese subjects. Zhou HH, et al. **Clin Pharmacol Ther** 1990 Jul;48(1):10-7

Glycosaminoglycan content, oxalate self-exchange and protein phosphorylation in erythrocytes of patients with 'idiopathic' calcium oxalate nephrolithiasis. Baggio B, et al. **Clin Sci** 1990 Aug;79(2):113-6

Comparison between endogenous digoxin-like immunoreactivity and 86Rb uptake by erythrocytes in extracts of human plasma [published erratum appears in Clin Sci 1989 Dec;77(6):following xxii] Balzan S, et al. **Clin Sci** 1989 Oct;77(4):375-81

Endogenous digoxin-like immunoreactive factor and digitalis-like factor associated with the hypertension of patients receiving multiple alkylating agents as part of autologous bone marrow transplantation. Graves SW, et al. **Clin Sci** 1989 Nov;77(5):501-7

Liver function and protein binding in camels. Ben-Zvi Z, et al. **Comp Biochem Physiol [A]** 1989;93(2):349-52

Biochemical analysis of serum proteins from Eales' patients. Rengarajan K, et al. **Curr Eye Res** 1989 Dec;8(12):1259-69

Bilirubin displaces furosemide from serum protein: the effect is greater in newborn infants than adult subjects. Viani A, et al. **Dev Pharmacol Ther** 1989;14(2):90-5

Protein glycation after return to normoglycaemia: implications for mild, repetitive hyperglycaemia [letter] Furth AJ. **Diabetologia** 1989 Sep;32(9):700-1

Thiol-mediated catalysis of nitroglycerin degradation by serum proteins. Increase in metabolism was not accompanied by S-nitrosothiol production. Chong S, et al. **Drug Metab Dispos** 1990 Jan-Feb;18(1):61-7

Species-dependent enantioselective plasma protein binding of MK-571, a potent leukotriene D4 antagonist. Lin JH, et al. **Drug Metab Dispos** 1990 Jul-Aug;18(4):484-7

Affinity electrophoresis for studies of mechanisms regulating glycosylation of plasma proteins. Mackiewicz A, et al. **Electrophoresis** 1989 Dec;10(12):830-5

Parenchymal changes related to plasma protein extravasation in experimental seizures. Sokrab TE, et al. **Epilepsia** 1990 Jan-Feb;31(1):1-8

Pharmacokinetics of anticonvulsants in pregnancy: alterations in plasma protein binding. Yerby MS, et al. **Epilepsy Res** 1990 Apr;5(3):223-8

Endogenous digoxin-like immunoreactive substance in patients undergoing coronary surgery. Preliminary report. Nashef SA, et al. **Eur J Cardiothorac Surg** 1988;2(5):380-1

Possible protein binding displacement interaction between glibenclamide and metolazone. George S, et al. **Eur J Clin Pharmacol** 1990;38(1):93-5

Plasma protein binding of alpidem in healthy volunteers, in neonates and in liver or renal insufficiency. Pacifici GM, et al. **Eur J Clin Pharmacol** 1989;37(1):29-32

Effect of selenium supplementation on the distribution of selenium among plasma proteins of a patient with maple syrup urine disease. Borglund M, et al. **Eur J Pediatr** 1989 Aug;148(8):767-9

Pharmacological properties of a new kinin-potentiating peptide generated from human serum proteins. Assreuy J, et al. **Eur J Pharmacol** 1989 Sep 13;168(2):231-7

The selective utilization of serum proteins by different cell lines growing in vitro. Tritsch GL. **Exp Cell Res** 1967 Jun; 46(3):628-31

Cosmos 1887 mission overview: effects of microgravity on rat body and adrenal weights and plasma constituents. Grindeland RE, et al. **FASEB J** 1990 Jan;4(1):105-9

Serum proteins as mediators of hemin efflux from red cell membranes: specificity of hemopexin. Solar I, et al. **FEBS Lett** 1989 Oct 9;256(1-2):225-9

Macroxyproteinase (M.O.P.): a 670 kDa proteinase complex that degrades oxidatively denatured proteins in red blood cells [published erratum appears in Free Radic Biol Med 1990;8(2):211-2] Pacifici RE, et al. **Free Radic Biol Med** 1989;7(5):521-36

Effects of streptozotocin diabetes in the rat on blood levels of ten specific plasma proteins and on their net biosynthesis by the isolated perfused liver. Miller LL, et al. **Hepatology** 1990 Apr;11(4):635-45

Influence of hydrocortisone acetate administered to the lactating rat on protein and lactose content in milk and serum protein, glucose and insulin levels in dams and pups. Llopis J, et al. **Horm Metab Res** 1990 Feb;22(2):71-4

Effect of balanced amino acid solution on protein metabolism after surgery. A clinical study. Figueras J, et al. **Infusionstherapie** 1990 Apr;17(2):100-3

Endogenous proteolysis of the human erythrocyte membrane as studied by two-dimensional gel electrophoresis and electron spin resonance. Gromov PS, et al. **Int J Biochem** 1989;21(8):941-5

Intra-cellular electrolyte changes and levels of endogenous digoxin-like substance within the plasma in patients with congestive heart failure. Liu ZQ, et al. **Int J Cardiol** 1990 Apr;27(1):47-53

The binding of 99mTc(Sn)-MDP complexes to human serum albumin and other blood proteins determined with gel chromatography and ultrafiltration. Huigen YM, et al. **Int J Rad Appl Instrum [A]** 1989;40(7):629-35

Plasma urea, creatinine, uric acid, albumin, and total protein concentrations before and after 15-, 25-, and 42-km contests. Janssen GM, et al. **Int J Sports Med** 1989 Oct; 10 Suppl 3:S132-8

Influence of prolonged physical exercise on plasma volume, plasma proteins, electrolytes, and fluid-regulating hormones. Röcker L, et al. **Int J Sports Med** 1989 Aug; 10(4):270-4 (45 ref.)

Blood eosinophils and eosinophil-derived proteins in allergic asthma. Durham SR, et al. **J Allergy Clin Immunol** 1989 Dec;84(6 Pt 1):931-6

Effects of three liquid diets on nutrition-sensitive plasma proteins of tube-fed elderly men. Feller AG, et al. **J Am Geriatr Soc** 1990 Jun;38(6):663-8

Protein clearance from the air spaces and lungs of unanesthetized sheep over 144 h. Berthiaume Y, et al. **J Appl Physiol** 1989 Nov;67(5):1887-97

Glycosylation of proteins: relevance to diabetes mellitus. Seshiah V, et al. **J Assoc Physicians India** 1989 Jun; 37(6):403-5 (40 ref.)

Mapping the binding sites of human erythrocyte ankyrin for the anion exchanger and spectrin. Davis LH, et al. **J Biol Chem** 1990 Jun 25;265(18):10589-96

Stoichiometric and reversible phosphorylation of a 46-kDa protein in human platelets in response to cGMP- and cAMP-elevating vasodilators. Halbrügge M, et al. **J Biol Chem** 1990 Feb 25;265(6):3088-93

The phagocyte 47-kilodalton cytosolic oxidase protein is an early reactant in activation of the respiratory burst. Kleinberg ME, et al. **J Biol Chem** 1990 Sep 15; 265(26):15577-83

Arsenite inhibits two steps in the ubiquitin-dependent proteolytic pathway. Klemperer NS, et al. **J Biol Chem** 1989 Nov 15;264(32):19245-52

Covalent binding of arachidonic acid metabolites to human platelet proteins. Identification of prostaglandin H synthase as one of the modified substrates. Lecomte M, et al. **J Biol Chem** 1990 Mar 25;265(9):5178-87

Highly sulfated glycosaminoglycans augment the cross-linking of vitronectin by guinea pig liver transglutaminase. Functional studies of the cross-linked vitronectin multimers. Sane DC, et al. **J Biol Chem** 1990 Feb 25;265(6):3543-8

Protein structural requirements and properties of membrane binding by gamma-carboxyglutamic acid-containing plasma proteins and peptides. Schwalbe RA, et al. **J Biol Chem** 1989 Dec 5;264(34):20288-96

Kinetics and regulation of the ankyrin-band 3 interaction of the human red blood cell membrane. Thevenin BJ, et al. **J Biol Chem** 1990 Sep 25;265(27):16166-72

Adsorption of plasma proteins and adhesion of platelets onto novel polyetherurethaneureas--relationship between denaturation of adsorbed proteins and platelet adhesion. Ito Y, et al. **J Biomed Mater Res** 1990 Feb;24(2):227-42

Detection of surface-adsorbed (lipo)proteins by means of a two-step enzyme-immunoassay: a study on the Vroman effect. Poot A, et al. **J Biomed Mater Res** 1990 Aug; 24(8):1021-36

A comparison of the biological activities of the cell-adhesive proteins vitronectin and fibronectin. Underwood PA, et al. **J Cell Sci** 1989 Aug;93 (Pt 4):641-9

Binding of lidocaine to plasma proteins resolved by high-performance liquid chromatography. Abe J, et al. **J Chromatogr** 1990 Apr 6;526(2):562-8

Protein glycation: measurement and clinical relevance. Schleicher E, et al. **J Clin Chem Clin Biochem** 1989 Sep; 27(9):577-87 (77 ref.)

Study of bilirubin binding in human serum by high-performance liquid chromatography. Soltés L, et al. **J Clin Chem Clin Biochem** 1989 Dec;27(12):935-9

Extended presence of antide (Nal-Lys GnRH antagonist) in circulation: prolonged duration of gonadotropin inhibition may derive from antide binding to serum proteins. Danforth DR, et al. **J Clin Endocrinol Metab** 1990 Feb;70(2):554-6

Studies on platelet protein phosphorylation in patients with impaired responses to platelet agonists. Speiser-Ellerton S, et al. **J Lab Clin Med** 1990 Jan;115(1):104-11

Nonazotemic hyperkalemia with renal and extrarenal defects in potassium transport: association with high levels of digoxin-like immunoreactive factor. Szylman P, et al. **J Lab Clin Med** 1990 Sep;116(3):315-26

Metabolic response of Acylation Stimulating Protein to an oral fat load. Cianflone K, et al. **J Lipid Res** 1989 Nov; 30(11):1727-33

Capillary depletion method for quantification of blood-brain barrier transport of circulating peptides and plasma proteins. Triguero D, et al. **J Neurochem** 1990 Jun; 54(6):1882-8

Studies of the reversible binding of biotin to human plasma. Mock DM, et al. **J Nutr** 1990 Apr;120(4):375-81

Continuous cultivation of Trypanosoma brucei blood stream forms in a medium containing a low concentration of serum protein without feeder cell layers. Hirumi H, et al. **J Parasitol** 1989 Dec;75(6):985-9

Differential binding of hemolymph proteins from schistosome-resistant and -susceptible Biomphalaria glabrata to Schistosoma mansoni sporocysts. Spray FJ, et al. **J Parasitol** 1990 Apr;76(2):225-9

Influence of lignocaine on plasma protein binding and pharmacokinetics of verapamil in dogs. Belpaire FM, et al. **J Pharm Pharmacol** 1990 Jan;42(1):45-9

Pipequaline transport from blood to brain and liver: role of plasma protein-bound drug. Essassi D, et al. **J Pharm Pharmacol** 1989 Sep;41(9):595-600

Serum protein binding of noscapine: influence of a reversible hydrolysis. Karlsson MO, et al. **J Pharm Pharmacol** 1990 Feb;42(2):140-3

Influence of plasma protein binding on the brain uptake of an antifungal agent, terbinafine, in rats. Machard B, et al. **J Pharm Pharmacol** 1989 Oct;41(10):700–4

Magnesium cerebrospinal fluid concentrations and protein binding in magnesium–deficient rats. Morris ME, et al. **J Pharm Sci** 1990 May;79(5):458–9

In vivo and in vitro binding of (–)–hydroxyhexamide, a major metabolite of acetohexamide, to rabbit serum. Imamura Y, et al. **J Pharmacobiodyn** 1989 Aug;12(8):503–7

Effect of phenylbutazone on serum protein binding and pharmacokinetic behavior of sulfadimethoxine in rabbits, dogs and rats. Imamura Y, et al. **J Pharmacobiodyn** 1989 Apr;12(4):208–15

Effects of plasma protein binding displacement on the pharmacokinetics, tissue and tumor concentrations and efficacy of brequinar, a highly protein–bound antitumor agent. Aungst BJ, et al. **J Pharmacol Exp Ther** 1990 Apr; 253(1):230–6

Determination and metabolism of dithiol chelating agents: X. In humans, meso–2,3–dimercaptosuccinic acid is bound to plasma proteins via mixed disulfide formation. Maiorino RM, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):570–7

Effect of esterase inhibition on the disposition of zomepirac glucuronide and its covalent binding to plasma proteins in the guinea pig. Smith PC, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):218–24

Plasma protein binding of propranolol enantiomers as a major determinant of their stereoselective tissue distribution in rats. Takahashi H, et al. **J Pharmacol Exp Ther** 1990 Jan; 252(1):272–8

Protein binding of the contraceptive steroids gestodene, 3–keto–desogestrel and ethinylestradiol in human serum. Kuhnz W, et al. **J Steroid Biochem** 1990 Feb;35(2):313–8

Serum protein binding characteristics of cyproterone acetate, gestodene, levonorgestrel and norethisterone in rat, rabbit, dog, monkey and man. Li QG, et al. **J Steroid Biochem** 1990 Feb;35(2):319–26

Design and analysis of protein binding experiments. Khan AZ, et al. **J Theor Biol** 1989 Sep 22;140(2):145–66

Effect of non–linear plasma protein binding on unbound and total plasma phenylbutazone concentrations in cows. Boudinot FD, et al. **J Vet Pharmacol Ther** 1990 Jun; 13(2):132–6

Pharmacokinetics and plasma protein binding of gentamicin in Bubalus bubalis calves. Garg SK, et al. **J Vet Pharmacol Ther** 1990 Mar;13(1):105–8

Influence of preoperative intravenous nutrition upon hepatic protein synthesis and plasma proteins and amino acids. Young GA, et al. **JPEN J Parenter Enteral Nutr** 1989 Nov–Dec;13(6):596–602

Identification of a protein increasing in serum of Nagase analbuminemic rats bearing intestinal tumors as an isotype of T–kininogen. Kanda S, et al. **Jpn J Cancer Res** 1990 Jan;81(1):63–8

Sequestration of eosinophil major basic protein in human mast cells. Butterfield JH, et al. **Lab Invest** 1990 Jan;62(1):77–86

Extracellular deposition of eosinophil and neutrophil granule proteins in the IgE–mediated cutaneous late phase reaction. Leiferman KM, et al. **Lab Invest** 1990 May;62(5):579–89

Gallium–transferrin binding in Alzheimer's disease [letter] Brammer M, et al. **Lancet** 1990 Sep 8;336(8715):635

Intensive treatment of multiple myeloma and criteria for complete remission [see comments] Gore ME, et al. **Lancet** 1989 Oct 14;2(8668):879–82 Comment in: Lancet 1989 Dec 2;2(8675):1336.

Anticardiolipin antibodies and binding of anionic phospholipids and serum protein [letter] Harris EN, et al. **Lancet** 1990 Aug 25;336(8713):505–6

Interactions of nitroxides with plasma and blood: effect on 1/T1 of water protons. Bennett HF, et al. **Magn Reson Med** 1990 Apr;14(1):40–55

Blood plasma proteins on polyurethane and alkylsiloxane plasma–treated polyurethane surfaces. Dynamic approach by stimulus–response technique. Part 2. Evaluation of adsorption data by moment technique. Mutlu M, et al. **Med Biol Eng Comput** 1990 May;28(3):232–6

Studies on contact activation: effects of surface and inhibitors. Cameron CL, et al. **Med Prog Technol** 1989;15(1–2):53–62

A mathematical model of interstitial transport. I. Theory. Taylor DG, et al. **Microvasc Res** 1990 May;39(3):253–78 (54 ref.)

A mathematical model of interstitial transport. II. Microvascular exchange in mesentery. Taylor DG, et al. **Microvasc Res** 1990 May;39(3):279–306 (29 ref.)

Proteolytic elimination of decay–accelerating factor (DAF): lytic abnormality coincides with removal of DAF in papain–treated human erythrocytes. Seya T, et al. **Mol Immunol** 1990 Jan;27(1):69–78

The effect of indomethacin on serum proteins in continuously irradiated rats. Chlebovská K, et al. **Neoplasma** 1989; 36(5):549–55

Distribution of Na+ channels and ankyrin in neuromuscular junctions is complementary to that of acetylcholine receptors and the 43 kd protein. Flucher BE, et al. **Neuron** 1989 Aug;3(2):163–75

1H NMR studies on protein binding of histidine, tyrosine and phenylalanine in blood plasma. Nicholson JK, et al. **NMR Biomed** 1989 Jul;2(2):77–82

Localization of terminal complement components S–protein and SP–40,40 in renal biopsies. Murphy BF, et al. **Pathology** 1989 Oct;21(4):275–8

Disposition of bismuth in the rat. I. Red blood cell and plasma protein binding. Rao N, et al. **Pharm Res** 1990 Feb; 7(2):188–91

Nonlinear binding of valproic acid (VPA) and E–delta 2–valproic acid to rat plasma proteins. Semmes RL, et al. **Pharm Res** 1990 May;7(5):461–7

Effect of plasma protein binding on kinetics of PN 200–110 in the isolated perfused rat heart. Machard B, et al. **Pharmacol Toxicol** 1989 Oct;65(4):258–64

Stress–protection action of beta–phenyl(GABA): involvement of central and peripheral type benzodiazepine binding sites. Rägo L, et al. **Pharmacol Toxicol** 1990 Jan; 66(1):41–4

Endogenous inhibitors of the Na+, K(+)–pump and platelet Ca2+ handling in hypertension. Devynck MA, et al. **Physiol Bohemoslov** 1990;39(1):71–8

Increased concentrations of a circulating sodium pump inhibitor in essential hypertension and uraemia and its partial purification from haemofiltrate. Wenzel M, et al. **Physiol Bohemoslov** 1990;39(1):79–85

Agonist–induced ADP–ribosylation of a cytosolic protein in human platelets. Brüne B, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3304–8

Thrombolamban, the 22–kDa platelet substrate of cyclic AMP–dependent protein kinase, is immunologically homologous with the Ras family of GTP–binding proteins. White TE, et al. **Proc Natl Acad Sci U S A** 1990 Jan; 87(2):758–62

Phylogeny of the plasma regulatory proteins of the complement system. Kaidoh T, et al. **Prog Clin Biol Res** 1989;297:199–209

A comparison of the changes in plasma proteins following plasma exchange with albumin or fresh frozen plasma. Rock G, et al. **Prog Clin Biol Res** 1990;337:403–4

Covalent binding of diflunisal and probenecid to plasma protein in humans: persistence of the adducts in the circulation. McKinnon GE, et al. **Res Commun Chem Pathol Pharmacol** 1989 Dec; 66(3):339–54

Interaction of tetranectin with sulphated polysaccharides and trypan blue. Clemmensen I. **Scand J Clin Lab Invest** 1989 Dec;49(8):719–25

A new method for measurements of plasma protein steroid–binding kinetics in human plasma at 37 C. Einer–Jensen N. **Steroids** 1989 Aug;54(2):195–216

Nutritional manipulation of tumor–bearing animals: effects on body weight, serum protein levels, and tumor growth. Daly JM, et al. **Surg Forum** 1978;29:143–4

Distribution of moricizine in human blood: binding to plasma proteins and erythrocytes. Yang JM, et al. **Ther Drug Monit** 1990 Jan;12(1):59–64

Quantitation of plasma levels of tetranectin—effects of oral contraceptives, pregnancy, treatment with L–asparaginase and liver cirrhosis. Kluft C, et al. **Thromb Haemost** 1989 Sep 29;62(2):792–6

Protein C inhibitor and other components of the protein C pathway in patients with acute deep vein thrombosis during heparin treatment. Tabernero D, et al. **Thromb Haemost** 1990 Jun 28;63(3):380–2

Protein binding of benzene under ambient exposure conditions. Travis CC, et al. **Toxicol Ind Health** 1989 Dec; 5(6):1017–24

Expression and modulation of homologous restriction factor (HRF) on peripheral white blood cells. Sayama K, et al. **Trans Assoc Am Physicians** 1988;101:270–81

The role of plasma protein binding on the metabolism and renal excretion of sulphadimethoxine and its metabolite N4–acetylsulphadimethoxine in pigs. Shimoda M, et al. **Vet Q** 1990 Apr;12(2):87–97

[The significance of digoxin–like immunoreactive factor (DLIF) for intensive care medicine] Simon HB, et al. **Anasth Intensivther Notfallmed** 1990 Jun;25(3):235–6 (Eng. Abstr.) **(Ger)**

[Postoperative protein metabolism with the 13C–leucine tracer technic in demand–adapted parenteral nutrition] Günther HJ, et al. **Beitr Infusionther** 1990;25:412–22 **(Ger)**

[Effect of human recombinant erythropoietin therapy on protein metabolism of patients with terminal renal failure on hemodialysis] Scigalla P, et al. **Beitr Infusionther** 1990; 25:430–8 **(Ger)**

[Serum level of digoxin–like immunoreactive substances in newborn infants in the first two weeks of life, in umbilical cord blood and in pregnant patients at the time of labor] Gawaz MP, et al. **Klin Padiatr** 1990 Jan–Feb;202(1):31–6 (Eng. Abstr.) **(Ger)**

[15N tracer technical studies of protein metabolism in arteriosclerosis patients] Barleben H, et al. **Klin Wochenschr** 1990 May 17;68(10):518–22 (Eng. Abstr.) **(Ger)**

[Malaria tropica with activation of blood coagulation and detection of tumor necrosis factor (NF–alpha) in serum] Hemmer CJ, et al. **Klin Wochenschr** 1990 Mar 5;68(5):281–5 (Eng. Abstr.) **(Ger)**

[Comparison of several variables of metabolic, immunologic and endocrine function with personality factors in perioperative stress] Grabow L, et al. **Psychother Psychosom Med Psychol** 1990 Jun;40(6):207–15 (Eng. Abstr.) **(Ger)**

[Albumin or protein standardized fructosamine–plus, 2 new indices for evaluating diabetic metabolic status] Furrer J. **Wien Klin Wochenschr Suppl** 1990;180:85–93; discussion 95–7 (Eng. Abstr.) **(Ger)**

[Diagnosis of the diabetic metabolic status using fructosamine (and HbA1c) determination. The glycation quotient Glyc–Q, the glycation nomogram] Henrichs HR. **Wien Klin Wochenschr Suppl** 1990;180:64–9; discussion 78–81 (Eng. Abstr.) **(Ger)**

[Changes in the plasma protein concentration as a factor influencing the fructosamine value] Thomas L, et al. **Wien Klin Wochenschr Suppl** 1990;180:82–5; discussion 95–7 (Eng. Abstr.) **(Ger)**

[Changes in protein metabolism in arteriosclerosis patients] Junker L, et al. **Z Gesamte Inn Med** 1990 Apr 15; 45(8):234–5 (Eng. Abstr.) **(Ger)**

[Removal of small molecular proteins by push/pull HDF and alleviation of shoulder joint pain] Usuda M, et al. **Nippon Jinzo Gakkai Shi** 1990 Jan;32(1):25–31 (Eng. Abstr.) **(Jpn)**

[Alteration of erythrocyte membrane proteins in a family with hereditary spherocytosis] Inoue F, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Nov;52(7):1122–7 (Eng. Abstr.) **(Jpn)**

[Drug–protein binding in elderly subjects] Shin K, et al. **Nippon Ronen Igakkai Zasshi** 1989 Sep;26(5):481–8 (Eng. Abstr.) **(Jpn)**

[Fractional determination of bile acids bound with protein in serum by high–performance liquid chromatography using dual–column switching system] Yoshida S, et al. **Yakugaku Zasshi** 1989 Nov;109(11):847–52 (Eng. Abstr.) **(Jpn)**

[Values of haptoglobins, total protein, alpha2–globulins and 5'– nucleotidases in acute viral hepatitis in relation to the treatment used] Radomińska I, et al. **Ann Univ Marise Curie Sklodowska [Med]** 1985;40:95–9 (Eng. Abstr.) **(Pol)**

[Blood levels of immunoglobulins G,A,M, circulating immune complexes, complement and proteins in patients on intermittent peritoneal dialysis] Majdan M, et al. **Pol Tyg Lek** 1989 May 1–8;44(18–19):415–8 (Eng. Abstr.) **(Pol)**

[Non–enzymatic protein glycosylation and its clinico–biological significance] Tomaszewski L. **Pol Tyg Lek** 1989 Jan 23;44(4):75–80 **(Pol)**

[Glycosylated proteins and various acute phase factors in patients with type II diabetes] Knapik–Kordecka M, et al. **Wiad Lek** 1990 Mar 1–15;43(5–6):193–8 (Eng. Abstr.) **(Pol)**

[Study of the binding of diuretics by serum proteins according to changes in tryptophan fluorescence] Lebedev AA, et al. **Farmakol Toksikol** 1989 May–Jun;52(3):40–3 (Eng. Abstr.) **(Rus)**

[Age–related characteristics of the activity of phagocytes in the normal state and in infections] Bazhora IuI, et al. **Fiziol Zh** 1990 May–Jun;36(3):56–60 (Eng. Abstr.) **(Rus)**

[Dynamics of absorption of C–14–biotin by blood cells and plasma protein binding in ontogenesis] El'kina VA, et al. **Fiziol Zh** 1990 May–Jun;36(3):86–90 (Eng. Abstr.) **(Rus)**

[Effect of peptide–protein binding on the elimination of somatostatin and epidermal growth factor from the vascular bed by lung tissue] Glinskii GV, et al. **Fiziol Zh** 1989 Jul–Aug;35(4):96–100 (Eng. Abstr.) **(Rus)**

[Mammalian plasma proteins bindings with single–stranded DNA; their effect on DNA polymerization and degradation reactions] Novoradovskaia NA, et al. **Ukr Biokhim Zh** 1990 May–Jun;62(3):31–7 (Eng. Abstr.) **(Rus)**

[Age–related characteristics of corticosteroid interactions with blood transport proteins] Konoplia EF, et al. **Vopr Med Khim** 1989 Sep–Oct;35(5):40–5 (Eng. Abstr.) **(Rus)**

[Turnover of liver hemoproteins in guinea pigs with various resistance to hexenal after peroral sensitization] Mal'tsev GIu, et al. **Vopr Med Khim** 1990 Mar–Apr;36(2):68–71 (Eng. Abstr.) **(Rus)**

[Binding of 3H–alanine and 125I–diiodotyrosine with serum proteins in vitro and in vivo] Mazo VK, et al. **Vopr Med Khim** 1989 Nov–Dec;35(6):69–73 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Influence of steroid hormones on protein–platelet interaction at the blood–polymer interface. Sharma CP, et al. **Biomaterials** 1989 Nov;10(9):609–16

Brain histology, blood–brain barrier and brain water after normothermic and hypothermic cardiopulmonary bypass in pigs. Laursen H, et al. **Eur J Cardiothorac Surg** 1989; 3(6):539–43

Protein adsorption and cellular adhesion and activation on biomedical polymers. Anderson JM, et al. **Int J Artif Organs** 1990 Jun;13(6):375–82

Elevated intracranial pressure increases pulmonary vascular permeability to protein. McClellan MD, et al. **J Appl Physiol** 1989 Sep;67(3):1185–91

PHARMACOLOGY

Effects of serum and hypothalamic extracts in intact and hypophysectomized recipients of the Parlow test. de Groot CA. **Acta Endocrinol (Copenh)** 1967 Aug;55(4):611–21

The effect of sodium chloride concentration, water content, and protein on the gas chromatographic headspace analysis of ethanol in plasma. Watts MT, et al. **Am J Clin Pathol** 1990 Mar;93(3):357–62

Dependence of cytokine–induced human myelogenous leukemic cell differentiation on the type of serum in the

medium. Sakagami H, et al. **Anticancer Res** 1990 Mar–Apr; 10(2A):385–90

In vitro antimicrobial activity of defensins against ocular pathogens. Callor JS, et al. **Arch Ophthalmol** 1990 Jun; 108(6):861–4

Chloroquine's modulation of endothelial cell activity induced with basic fibroblast growth factor and human serum: effect on mitogenesis, protease production and cell migration. Inyang AL, et al. **Cell Biol Int Rep** 1990 Jan;14(1):35–46

Purification of a serum factor which reverses dibutyryl cAMP induced differentiation. Grabham PW, et al. **Cell Signal** 1989;1(3):269–81

A study of serum nerve growth stimulating activity in patients with neurofibromatosis utilizing a modified bioassay technique. Tischler AS. **Exp Neurol** 1974 Sep; 44(3):440–7

Serum influences the differentiation of membrane structure in cultured astrocytes. Landis DM, et al. **GLIA** 1990; 3(3):212–21

Expression of high molecular weight astroglial extracellular proteins is altered by growth environment. Quarless SA, et al. **GLIA** 1989;2(6):403–11

Mechanism of action of an inhibitor of complement-mediated prevention of immune precipitation. Ahmed AE, et al. **Immunology** 1990 Jun;70(2):139–44

Suppression of rat mammary tumor cell growth in vitro by glucocorticoids requires serum proteins. Characterization of wild type and glucocorticoid-resistant epithelial tumor cells. Webster MK, et al. **J Biol Chem** 1990 Mar 25; 265(9):4831–8

Preadipocyte stimulating factor in rat serum: evidence for a discrete 63 kDa protein that promotes cell differentiation of rat preadipocytes in primary cultures. Li ZH, et al. **J Cell Physiol** 1989 Dec;141(3):543–57

Impaired response of fibroblasts from patients with hyperapobetalipoproteinemia to acylation-stimulating protein. Cianflone KM, et al. **J Clin Invest** 1990 Mar; 85(3):722–30

Separation of sublethal and lethal effects of the bactericidal/permeability increasing protein on Escherichia coli. Mannion BA, et al. **J Clin Invest** 1990 Mar; 85(3):853–60

Monocyte-chemotactic activity of defensins from human neutrophils. Territo MC, et al. **J Clin Invest** 1989 Dec; 84(6):2017–20

Effects of corticostatin-I on rat adrenal cells in vitro. Tominaga T, et al. **J Endocrinol** 1990 May;125(2):287–92

Bactericidal/permeability-increasing protein has endotoxin-neutralizing activity. Marra MN, et al. **J Immunol** 1990 Jan 15;144(2):662–6

Investigation on interaction of fractionated 3H-heparin with plasma proteins by gel filtration chromatography. Watanabe J, et al. **J Pharmacobiodyn** 1989 Jul;12(7):416–22

A serum protein SP40,40 modulates the formation of membrane attack complex of complement on erythrocytes. Choi NH, et al. **Mol Immunol** 1989 Sep;26(9):835–40

How different eukaryotic transcriptional activators can cooperate promiscuously. Lin YS, et al. **Nature** 1990 May 24;345(6273):359–61

Cell culture studies on neurofibromatosis (von Recklinghausen). VI. No increased stimulation of cell proliferation by sera from neurofibromatosis patients. Binder K, et al. **Neurofibromatosis** 1988;1(2):85–92

Efficient induction of focus formation in a subclone of NIH3T3 cells by c-myc and its inhibition by serum and by growth factors. Blondel B, et al. **Oncogene** 1990 Jun; 5(6):857–65

Presynaptic modulation by endogenous ouabain-like substances of noradrenaline release from blood vessels. Oberfrank F, et al. **Pol J Pharmacol Pharm** 1988 Nov–Dec; 40(6):685–90

Positive inotropic effects of the endogenous Na+/K(+)-transporting ATPase inhibitor from the hypothalamus. Haltaq HA, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10080–4

[The effect of the cationic proteins of human blood cells on the growth of Escherichia coli] Rybakova LP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 May;(5):3–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

A bacterial biofilm in a hemodialysis system. Assessment of disinfection and crossing of endotoxin. Vincent FC, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):310–3

Modulators of the multidrug-transporter, P-glycoprotein, exist in the human plasma. Ichikawa M, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):74–80

Plasma proteins as nutritional indicators in the perioperative period. Fleck A. **Br J Clin Pract Symp Suppl** 1988 Dec; 63:20–4 (34 ref.)

The origin and physiological relevance of alpha-granule adhesive proteins. Harrison P, et al. **Br J Haematol** 1990 Feb;74(2):125–30 (68 ref.)

Effect of human plasma proteins on spontaneous contractile activity of rat mesenteric portal vein. Pillai G, et al. **Can J Physiol Pharmacol** 1990 Jun;68(6):737–43

Body fluid variations and endogenous digitalis-like compounds during chronic NaCl loading in Wistar rats. Wauquier I, et al. **Clin Exp Hypertens [A]** 1989; 11(7):1217–34

Ice nucleating activity in the blood of the freeze-tolerant frog, Rana sylvatica. Wolanczyk JP, et al. **Cryobiology** 1990 Jun;27(3):328–35

Growth of human keratinocytes in a defined medium supplemented with growth factor of serum. Kitano Y, et al. **Dermatologica** 1990;180(4):236–9

The possible role of endogenous digitalis-like substance in the regulation of circadian changes in urinary electrolyte excretion in man. Morise T, et al. **Endocrinol Jpn** 1989 Dec;36(6):845–50

Defensins. Ganz T, et al. **Eur J Haematol** 1990 Jan;44(1):1–8 (85 ref.)

The O2.- generating oxidase activation of bovine neutrophils. Evidence for synergism of multiple cytosolic factors in a cell-free system. Pilloud MC, et al. **FEBS Lett** 1989 Oct 23;257(1):167–70

Adsorption protein layers above erythrocytes and an electrophoretic method for studying their properties under pathogenesis of infection and malignant tumors. Sigal VL. **Folia Haematol (Leipz)** 1990;117(1):23–9

Isolation of two isoforms of a novel 15-kDa protein from rabbit polymorphonuclear leukocytes that modulate the antibacterial actions of other leukocyte proteins. Ooi CE, et al. **J Biol Chem** 1990 Sep 15;265(26):15956–62

Vitronectin binds to activated human platelets and plays a role in platelet aggregation. Asch E, et al. **J Clin Invest** 1990 May;85(5):1372–8

Comparative platelet inhibitory effects of human neutrophils and lymphocytes. Nicolini FA, et al. **J Lab Clin Med** 1990 Aug;116(2):147–52

Nature of the trypanocidal factor in human serum. Seed JR, et al. **J Parasitol** 1989 Dec;75(6):1003–6

E4F and ATF, two transcription factors that recognize the same site, can be distinguished both physically and functionally: a role for E4F in E1A trans activation. Rooney RJ, et al. **Mol Cell Biol** 1990 Oct;10(10):5138–49

Homology of cytotoxic protein of eosinophilic leukocytes with IgE receptor Fc epsilon RII: implications for its structure and function. Patthy L. **Mol Immunol** 1989 Dec; 26(12):1151–4

Serum protein interactions with neurotransmitter receptors: implications for Alzheimer's disease. Andorn AC, et al. **Prog Clin Biol Res** 1989;317:695–701

Ankyrin and the node of Ranvier. Baines AJ. **Trends Neurosci** 1990 Apr;13(4):119–21 (37 ref.)

[Pathophysiologic-nephrologic hypothesis of the protective function of an endogenous natriuretic and digoxin-like substance (endoxin) for residual nephrons] Wüstenberg PW, et al. **Z Urol Nephrol** 1989 Dec;82(12):679–84 (27 ref.) (Eng. Abstr.) **(Ger)**

[Endogenous digoxin-like factor: serum concentration and interrelations with the electrolyte picture in normal subjects] Andronico G, et al. **Boll Soc Ital Biol Sper** 1989 Nov;65(11):1053–8 (Eng. Abstr.) **(Ita)**

[Recent topics on cell-membrane impairment by bacteriocidal substances--special reference to defensin and perforin] Kohashi O. **Fukuoka Igaku Zasshi** 1989 Aug; 80(8):401–3 **(Jpn)**

[Clinical investigation on the involvement of an endogenous digitalis-like substance in blood pressure regulation] Takahashi H, et al. **Nippon Jinzo Gakkai Shi** 1990 Jan; 32(1):53–64 (Eng. Abstr.) **(Jpn)**

[Role of an endogenous digitalis-like substance in the development of hypertension] Morise T, et al. **Nippon Rinsho** 1989 Sep;47(9):1973–8 **(Jpn)**

[Endothelin and endogenous digitalis-like substance in cardiovascular regulation: a review] Takahashi H, et al. **Rinsho Byori** 1989 Oct;37(10):1103–13 (57 ref.) (Eng. Abstr.) **(Jpn)**

[Role of maternal and fetal plasma proteins in transplacental transport of drugs] Bender KI, et al. **Farmakol Toksikol** 1989 Jul–Aug;52(4):100–10 (88 ref.) (Eng. Abstr.) **(Rus)**

[The role of an endogenous digoxin-like factor in regulating blood circulation and in the origin of arrhythmia in myocardial ischemia] Bagrov AIa, et al. **Ter Arkh** 1989; 61(7):84–9 (52 ref.) (Eng. Abstr.) **(Rus)**

[The effect of middle molecules isolated from the serum of burn patients on the state of lipid peroxidation in animal tissues] Tupikova ZA, et al. **Vopr Med Khim** 1990 May–Jun; 36(3):24–6 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Irreversible photobinding of nitrofurantoin and of nitrofurfural to plasma proteins in vitro. Busker RW, et al. **J Photochem Photobiol B** 1989 Nov;4(2):207–18

Serum proteins in rats after combined neutron and gamma irradiation. Chlebovská K, et al. **Radiobiol Radiother (Berl)** 1989;30(5):453–8

Radiation response of plasma protein and albumin of peripheral blood and its modification by MPG (2-Mercaptopropionylglycine) in mice. Nandchahal KK, et al. **Strahlenther Onkol** 1990 Apr;166(4):306–9

[Changes in serum parameters in amphibian vertebrates: a bioindicator model for evidence of radiation load] Giannetti M, et al. **Naturwissenschaften** 1990 Apr;77(4):179–82 **(Ger)**

[Effects of low-intensity laser irradiation on the state of blood proteins] Genkin VM, et al. **Biull Eksp Biol Med** 1989 Aug; 108(8):188–90 (Eng. Abstr.) **(Rus)**

SECRETION

Microtubular response to colchicine in adult and fetal rat hepatocytes. Kaufman SS, et al. **Comp Biochem Physiol [A]** 1990;95(2):281–90

An endogenous digitalis-factor derived from the adrenal gland: studies of adrenocortical tumor cells. Doris PA, et al. **Endocrinology** 1989 Nov;125(5):2580–6

THERAPEUTIC USE

Prolongation of red-cell life-span by incorporation of decay-accelerating factor (DAF) into red cells of paroxysmal nocturnal haemoglobinuria (PNH) [letter] Ninomiya H, et al. **Br J Haematol** 1989 Sep;73(1):132–3

Neonatal polycythaemia: effect of partial dilutional exchange transfusion with human albumin on whole blood viscosity. Levy I, et al. **Eur J Pediatr** 1990 Feb;149(5):354–5

[Effect of defensin on the process of healing of aseptic skin wound and on the permeability of blood vessels] Kudriashov BA, et al. **Biull Eksp Biol Med** 1990 Apr; 109(4):391–3 (Eng. Abstr.) **(Rus)**

TOXICITY

Serum cytotoxicity to human and rat oligodendrocytes in culture. Ruijs TC, et al. **Brain Res** 1990 May 28; 517(1-2):99–104

O antigen and lipid A phosphoryl groups in resistance of Salmonella typhimurium LT-2 to nonoxidative killing in human polymorphonuclear neutrophils. Stinavage P, et al. **Infect Immun** 1989 Dec;57(12):3894–900

Cytotoxicity of human eosinophil granule major basic protein to human nasal sinus mucosa in vitro. Hisamatsu K, et al. **J Allergy Clin Immunol** 1990 Jul;86(1):52–63

In vitro killing of microfilariae of Brugia pahangi and Brugia malayi by eosinophil granule proteins. Hamann KJ, et al. **J Immunol** 1990 Apr 15;144(8):3166–73

ULTRASTRUCTURE

In vivo protein adsorption onto polymers: a transmission electron microscopic study. Nojiri C, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):357–61

URINE

Endogenous digoxin-like substance in the urine of newborns and children. Kovács L, et al. **Bratisl Lek Listy** 1990 Jun; 91(6):423–32 **(Eng, Slo)**

Biochemical characterization of a digitalis-like substance in human urine, partially purified by high pressure liquid chromatography. Takeda R, et al. **Cardiology** 1989; 76(6):442–9

Urinary excretion of brush-border antigen and plasma proteins in early stages of diabetic nephropathy. Mutti A, et al. **Clin Chim Acta** 1990 Apr 30;188(2):93–100

Partial purification and characterization of human megakaryocyte colony-stimulating factor (Meg-CSF). Ogata K, et al. **Int J Cell Cloning** 1990 Jan;8 Suppl 1:103–20

Urinary excretion of placental male sex-linked protein during pregnancy. Osathanondh V, et al. **J Med Assoc Thai** 1990 Feb;73 Suppl 1:97–9

Does digoxin-like immunoreactivity really represent the natriuretic hormone? Goto A, et al. **Nephron** 1990; 54(1):99–100

[Fundamental examination of measurement of urinary urokinase inhibitor activity using chromogenic substrate] Tanaka O, et al. **Rinsho Byori** 1989 Jun;37(6):687–91 **(Jpn)**

BLOOD-RETINAL BARRIER

Permeability changes at blood-retinal barrier in diabetes and effect of aldose reductase inhibition. Lightman S, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):R601–5

Localised blood-retinal barrier leakage and retinal light sensitivity in diabetic retinopathy [see comments] Bek T, et al. **Br J Ophthalmol** 1990 Jul;74(7):388–92 Comment in: Br J Ophthalmol 1990 Jul;74(7):385.

Fundus changes in mesangiocapillary glomerulonephritis type II: vitreous fluorophotometry. Raines MF, et al. **Br J Ophthalmol** 1989 Nov;73(11):907–10

Permeability of ocular vessels and transport across the blood-retinal-barrier. Törnquist P, et al. **Eye** 1990;4 (Pt 2):303–9 (42 ref.)

Localization of blood-retinal barrier breakdown in human pathologic specimens by immunohistochemical staining for albumin. Vinores SA, et al. **Lab Invest** 1990 Jun; 62(6):742–50

Fluorophotometric analysis of the blood retinal barrier: two techniques compared. Raines MF, et al. **Ophthalmic Res** 1989;21(6):446–9

[Breakdown of the blood-retino-vitreal barrier after photocoagulation] Fandiño Fernandez JM, et al. **Ophtalmologie** 1989 Jun–Aug;3(3):237–8 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Effect of antihypertensive treatment on blood-retinal barrier permeability to fluorescein in hypertensive type 1 (insulin-dependent) diabetic patients with background retinopathy. Parving HH, et al. **Diabetologia** 1989 Jul; 32(7):440–4

Effect of calcium dobesilate on the blood-retinal barrier in early diabetic retinopathy. Leite EB, et al. **Int Ophthalmol** 1990 Mar;14(2):81–8

Integrity of the blood-ocular barrier after intravitreal gas

injection. Ogura Y, et al. **Retina** 1989;9(3):199–202
[Early effects of sodium iodate shown by detection of the destruction of anionic sites in outer blood–retinal barrier] Kishimoto N, et al. **Nippon Ganka Gakkai Zasshi** 1990 Jan; 94(1):25–32 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Are accessory molecules implicated in activation of T cells at the blood–retinal barrier? Liversidge J, et al. **Curr Eye Res** 1990;9 Suppl:131–4

PHYSIOLOGY

Ultrastructural localization of blood–retinal barrier breakdown in diabetic and galactosemic rats. Vinores SA, et al. **J Histochem Cytochem** 1990 Sep;38(9):1341–52
[Changes in the concentration of K+ induced by a flash of light in the preretinal vitreous of the anesthesized minipig] Poitry–Yamate CL, et al. **Klin Monatsbl Augenheilkd** 1990 May;196(5):351–3 (Eng. Abstr.) **(Fre)**
[Fluorescence photometry study of the normal rat retina before and following fluorescein administration] Baurmann H, et al. **Klin Monatsbl Augenheilkd** 1989 Dec; 195(6):368–70 (Eng. Abstr.) **(Ger)**
[Postmortem diagnosis of fatal diabetic metabolic dyscontrol: what is the significance of cerebrospinal fluid and vitreous body total values and HbA1?] Ritz S, et al. **Pathologe** 1990 May;11(3):158–65 **(Ger)**

RADIATION EFFECTS

Fluorophotometric assessment of blood–retinal barrier function after white light exposure in the rabbit eye. Borsje RA, et al. **Exp Eye Res** 1990 Mar;50(3):297–304
The correlation between excessive vitreal protein levels, prostaglandin E2 levels, and the blood retinal barrier. Naveh N, et al. **Prostaglandins** 1990 Feb;39(2):147–56

BLOOD SEDIMENTATION

Erythrocyte sedimentation realizable in terms of population dynamics. Kuo CD, et al. **Biorheology** 1989;26(6):1003–10
Effect of electric field on erythrocyte sedimentation rate. I. Enhancement in saline solution. Long M, et al. **Biorheology** 1990;27(2):241–6
Significance of a high erythrocyte sedimentation rate in general practice. Kirkeby OJ, et al. **Br J Clin Pract** 1989 Jul;43(7):252–4
Red blood cell aggregation and sedimentation: the role of the cell shape. Reinhart WH, et al. **Br J Haematol** 1989 Dec;73(4):551–6
Polymyalgia rheumatica and persistent ESR elevation [letter] Grayson MF. **Br J Rheumatol** 1990 Aug;29(4):316
It is said that elevated erythrocyte sedimentation rate and the elevation of C–reactive protein (CRP) may be indicators of continuing joint destruction in rheumatoid arthritis. What then is the explanation for joint destruction in some patients in whom there is no such apparent elevation of either the sedimentation rate of CRP? McConkey B. **Br J Rheumatol** 1990 Apr;29(2):88
Erythrocyte sedimentation rate and heterotopic bone formation after cemented total hip arthroplasty. Kjaersgaard–Andersen P, et al. **Clin Orthop** 1989 Nov; (248):189–94
Blood sample transportation and the erythrocyte sedimentation rate [letter] Dinant GJ, et al. **J R Coll Gen Pract** 1989 Jul;39(324):302
The erythrocyte sedimentation rate in pregnancy [letter] Brosnan EA, et al. **N Z Med J** 1990 Jun 13;103(891):278
The erythrocyte sedimentation rate compared to plasma viscosity measurement as a routine laboratory test [letter] Shand BI. **N Z Med J** 1990 Aug 8;103(895):379
Changes in erythrocyte sedimentation rate, C–reactive protein and hematological parameters in patients with acute malaria. Eriksson B, et al. **Scand J Infect Dis** 1989; 21(4):434–41
Reliability of the erythrocyte sedimentation rate in general practice. Dinant GJ, et al. **Scand J Prim Health Care** 1989 Dec;7(4):231–5
[Blood sedimentation rate in healthy persons] Dalhøj J, et al. **Ugeskr Laeger** 1990 Feb 12;152(7):456–9 (Eng. Abstr.) **(Dan)**
[Relation of fever and the erythrocyte sedimentation rate] Vinceneux P, et al. **Presse Med** 1990 Jun 16;19(24):1147–9 (Eng. Abstr.) **(Fre)**
[Evaluation of blood sedimentation rate following orthopedic operations] Schuckmann W. **Beitr Orthop Traumatol** 1989 Aug;36(8):362–7 (Eng. Abstr.) **(Ger)**
[Blood sedimentation rate. 1 or 2 hour values?] Kleinteich B, et al. **Kinderarztl Prax** 1989 Dec;57(12):617–9 (Eng. Abstr.) **(Ger)**
[A case from practice (149). Increased blood sedimentation rate of unknown etiology] Thouvay C. **Schweiz Rundsch Med Prax** 1989 Oct 3;78(40):1107–8 **(Ger)**
[The effect of cholesterol level in erythrocyte membranes on the sedimentation rate, electrophoretic motility, and the rate of potassium ferricyanide reduction] Balmukhanov BS, et al. **Biofizika** 1990 Mar–Apr;35(2):293–6 (Eng. Abstr.) **(Rus)**
[Biomedical approaches to electrokinetic characteristics of erythrocyte sedimentation] Piruzian LA, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jul–Aug;(4):522–6 (Eng. Abstr.) **(Rus)**
[Theoretical and practical aspects of globular sedimentation velocity] Amilachwari M, et al. **Bol Med Hosp Infant Mex** 1990 May;47(5):355–60 (27 ref.) (Eng. Abstr.) **(Spa)**
[Modified erythrocyte sedimentation rate. Study in pre–school and school children] Barra V, et al. **Bol Med Hosp Infant Mex** 1990 Apr;47(4):256–60 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

[Erythrocyte aggregation and stasis: effect of intravascular sedimentation on microvascular perfusion in hypotension and treatment with defibrinogenization (Arwin)] Schmid–Schönbein H, et al. **Vasa Suppl** 1989;27:58–60 **(Ger)**

BLOOD SPECIMEN COLLECTION

Recovery of HIV antibodies in eluates from plasma and erythrocytes dried on filter paper and stored under various conditions [letter] van den Akker R, et al. **AIDS** 1990 Jan; 4(1):90–1
Blood cholesterol screening in several environments using a portable, dry–chemistry analyzer and fingerstick blood samples. Lipid Research Clinics Cholesterol Screening Study Group. Bradford RH, et al. **Am J Cardiol** 1990 Jan 1;65(1):6–13
Plasma amino acid concentrations in premature infants: effect of sampling site. Jones MR, et al. **Am J Clin Nutr** 1989 Dec;50(6):1389–94
Directed blood procurement does not benefit patients who are enrolled in an autologous blood predeposit program. Goodnough LT. **Am J Clin Pathol** 1989 Oct;92(4):484–7
Umbilical amino acid concentrations in normal and growth–retarded fetuses sampled in utero by cordocentesis. Cetin I, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):253–61
Detection of fetal blood contamination by amniotic fluid obtained during cordocentesis. Lazebnik N, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):78–80
Antepartum heart rate patterns in small–for–gestational–age third–trimester fetuses: correlations with blood gas valuesobtained at cordocentesis. Visser GH, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):698–703
Iatrogenic anaemia? A survey of venesection in patients in the intensive therapy unit. Tarpey J, et al. **Anaesthesia** 1990 May;45(5):396–8
Lack of effect of overnight storage of heparinised blood at 4 degrees C on plasma phosphate concentration [letter; comment] Siebers R, et al. **Ann Clin Biochem** 1990 Jan;27 (Pt 1):90–1 Comment on: Ann Clin Biochem 1989 May;26 (Pt 3):300–1.
Intravenous catheter aspiration for obtaining basic analytes during intravenous infusion. Herr RD, et al. **Ann Emerg Med** 1990 Jul;19(7):789–92
Safety in numbers for cordocentesis [letter; comment] Atkins AF. **Br J Hosp Med** 1989 Dec;42(6):510 Comment on: Br J Hosp Med 1989 Jun;41(6):511.
Invalidity of hand heating as a method to arterialize venous blood. Green JH, et al. **Clin Chem** 1990 May;36(5):719–22
The phenomenon and rationale of marked dependence of drug concentration on blood sampling site. Implications in pharmacokinetics, pharmacodynamics, toxicology and therapeutics (Part I). Chiou WL. **Clin Pharmacokinet** 1989 Sep;17(3):175–99 (0 ref.)
Importance of blood volume cultured in the detection of bacteremia. Arpi M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):838–42
Detection of bloodstream infections in children. Campos JM. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):815–24 (95 ref.)
Different blood particle parameters for samples collected by skin puncture and venously. Daae LN. **Eur J Haematol** 1989 Aug;43(2):190
Effects of storage conditions on lymphocyte phenotypes from healthy and diseased persons. Miller CH, et al. **J Clin Lab Anal** 1989;3(5):296–300
The forensic science implications of site and temporal influences on postmortem blood–drug concentrations. Prouty RW, et al. **J Forensic Sci** 1990 Mar;35(2):243–70
An unexpected cause of pseudobacteraemia [letter] Cox RA. **J Hosp Infect** 1989 Oct;14(3):266
Density increase and ageing of erythrocytes in stored blood. Rocchigiani M, et al. **J Int Med Res** 1989 Sep–Oct; 17(5):461–6
Effect of storage on blood count variables in small samples. Bellamy GJ, et al. **Med Lab Sci** 1990 Jul;47(3):230–3
No advantage of capillary blood compared with venous blood for culture in neonates [letter] Paerregaard A, et al. **Pediatr Infect Dis J** 1989 Sep;8(9):659–60
Finger–prick blood collection and computer–assisted enzyme–linked immunosorbent assay for large–scale serological studies on leprosy. Chanteau S, et al. **Trans R Soc Trop Med Hyg** 1989 May–Jun;83(3):414–6
A new method of plasma collection suitable for large scale seroepidemiological surveys of malaria in the tropics. Kano S, et al. **Trans R Soc Trop Med Hyg** 1989 May–Jun; 83(3):304
Establishment of a schedule of optimal preoperative collection of autologous blood. Axelrod FB, et al. **Transfusion** 1989 Oct;29(8):677–80
[New formation of fructosamine in patient serum following blood collection] Sommer R. **Wien Klin Wochenschr Suppl** 1990;180:42–4; discussion 57–9 (Eng. Abstr.) **(Ger)**
[The suitability of filter paper for obtaining and transporting blood samples for glucose determination] Rehfeld N, et al. **Z Med Lab Diagn** 1990;31(2):105–7 **(Ger)**

ADVERSE EFFECTS

Reply to Weiner (1989;161:1091–2) [letter] Daffos F. **Am J Obstet Gynecol** 1990 Jan;162(1):298
Abruptio placentae after percutaneous umbilical cord sampling: a case report. Feinkind L, et al. **Am J Obstet Gynecol** 1990 May;162(5):1203–4
[Evaluation of the fetal risk after echo–guided blood sampling from the umbilical cord in the 2d trimester of pregnancy] Levi Setti PE, et al. **Ann Ostet Ginecol Med Perinat** 1989 Mar–Apr;110(2):98–104 (Eng. Abstr.) **(Ita)**

ECONOMICS

Blood among the waffle. Best J. **Med J Aust** 1990 Feb 5; 152(3):146–8

INSTRUMENTATION

Intraoperative collection of shed blood with citrated compresses for autotransfusion. An experimental study in pigs. Vagianos C, et al. **Acta Chir Scand** 1990 Feb; 156(2):121–6
Effect on 16 analytes of overnight storage of specimens collected into heparinised evacuated tubes with plasma separator. Bailey IR. **Ann Clin Biochem** 1990 Jan;27 (Pt 1):56–8
Development of a heating device for sampling arterialized venous blood from a hand vein. Zello GA, et al. **Ann Clin Biochem** 1990 Jul;27 (Pt 4):366–72
Hemoglobin by first derivative spectrophotometry: extent of hemolysis in plasma and serum collected in vacuum container devices. Copeland BE, et al. **Ann Clin Lab Sci** 1989 Sep–Oct;19(5):383–8
Arterial blood gas sampling using a modified standard plastic syringe. Campbell JH, et al. **Br J Clin Pract** 1990 Mar; 44(3):96–7
Effect of serum separator tubes on serum quinidine concentration measurements. Mauro LS, et al. **Clin Pharm** 1990 Apr;9(4):292–4
Who decides whether one should "vacutube" or not? [letter] Neill AL. **Med J Aust** 1990 Sep 3;153(5):302
An outbreak of hepatitis B in an endocrinology unit traced to a capillary–blood–sampling device [letter] Douvin C, et al. **N Engl J Med** 1990 Jan 4;322(1):57–8
Inappropriate use of non–siliconized citrate tubes for clotting tests [letter] Exner T, et al. **Pathology** 1990 Jan;22(1):50
Lack of effect of changing needles on contamination of blood cultures. Isaacman DJ, et al. **Pediatr Infect Dis J** 1990 Apr; 9(4):274–8
Suitability of collection tubes with separator gels for therapeutic drug monitoring. Koch TR, et al. **Ther Drug Monit** 1990 May;12(3):277–80
Cryopreservation of human platelets with 1.4 m glycerol at –75 degrees C in PVC blood packs. Arnaud FG, et al. **Thromb Res** 1990 Mar 15;57(6):919–24
On the use of "vacuated closed system" blood sampling for ex vivo evaluation of platelet function in man. Naesh O, et al. **Thromb Res** 1990 Feb 15;57(4):665–8
Filter paper sampling methodology of whole blood cyclosporine (WBCyA) concentration: a critical review. Foradori AC, et al. **Transplant Proc** 1990 Jun;22(3):1226–30
Optimization of the blood sample filter paper technique for cyclosporine determination. Manrique RV, et al. **Transplant Proc** 1990 Jun;22(3):1231–3
["Glucosensor Unitec Ulm". A portable, continuously measuring glucose sensor and monitor] Zier H, et al. **Biomed Tech (Berlin)** 1990 Jan–Feb;35(1–2):2–4 (Eng. Abstr.) **(Ger)**
[A combination stand for holding test tubes during the collection of blood] Kolesnikov VF. **Lab Delo** 1990;(3):73–4 **(Rus)**

METHODS

A method for continuous infusion and blood sampling in unanaesthetized rats. Stoynev AG, et al. **Acta Physiol Pharmacol Bulg** 1989;15(3):59–64
Measurement of platelet von Willebrand factor is dependent on method of platelet isolation. Solymoss S, et al. **Am J Clin Pathol** 1990 Mar;93(3):400–3
Whole blood aggregometry. Influence of sample collection and delay in study performance on test results. Sweeney JD, et al. **Am J Clin Pathol** 1989 Nov;92(5):676–9
Capillary vs venous bilirubin values [letter] Maisels MJ. **Am J Dis Child** 1990 May;144(5):521–2
Is sampling technique beneficial to fetus? [letter; comment] Lenke RR, et al. **Am J Obstet Gynecol** 1990 Feb; 162(2):597–8 Comment on: Am J Obstet Gynecol 1988 Nov;159(5):1066–8.
Cordocentesis in the investigation of fetal erythropoiesis. Nicolaides KH, et al. **Am J Obstet Gynecol** 1989 Nov; 161(5):1197–200
A new method of sampling blood for measurement of plasma adenosine. Shryock JC, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H1232–9

Blood collection by evacuated tubes: the effects of the order of filling tubes on the serum values of potassium and lactate dehydrogenase [letter] Alegre B, et al. **Ann Biol Clin (Paris)** 1989;47(8):507

Effect of delay in separating plasma for glucose measurement upon the interpretation of oral glucose tolerance tests. Chan AY, et al. **Ann Clin Biochem** 1990 Jan;27 (Pt 1):73–4

Blood culture phlebotomy: switching needles does not prevent contamination. Krumholz HM, et al. **Ann Intern Med** 1990 Aug 15;113(4):290–2

Evaluation of the sensitivity of microfilter paper assays in an anthropological study: results of samples from Cameroon and Tanzania. Aebischer ML, et al. **Anthropol Anz** 1990 Mar;48(1):15–23

Comparison between Bactec Nr. 660 and a conventional 12-tube blood culture system. Nir M, et al. **APMIS** 1990 Jul;98(7):645–51

Measurement of hemodialysis access recirculation: a two-needle method at the start of dialysis. Kobrin SM, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):508–10

Optimal sites and depths for skin puncture of infants and children as assessed from anatomical measurements. Reiner CB, et al. **Clin Chem** 1990 Mar;36(3):547–9

Bilateral inferior petrosal sinus sampling as a routine procedure in ACTH-dependent Cushing's syndrome. McCance DR, et al. **Clin Endocrinol (Oxf)** 1989 Feb; 30(2):157–66

Sensitivity and specificity of blood cultures obtained through intravascular catheters. Wormser GP, et al. **Crit Care Med** 1990 Feb;18(2):152–6 (20 ref.)

Blood-derived stem cell collection in acute nonlymphoblastic leukemia: predictive factors for a good yield. Cantin G, et al. **Exp Hematol** 1989 Nov;17(10):991–6

Collection of PBSC with Fenwal CS-3000 for autografting. Indovina A, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:26–8

Blood culture collection and needle punctures in healthcare workers [letter] Martin MA, et al. **Infect Control Hosp Epidemiol** 1989 Sep;10(9):390–1

Screening of anti-M. leprae antibodies in the blood samples eluted from filter paper blood blots. Patil SA, et al. **Int J Lepr Other Mycobact Dis** 1990 Mar;58(1):123–6

The importance of blood collection site for the determination of basic drugs: a case with fluoxetine and diphenhydramine overdose [letter] Roettger JR. **J Anal Toxicol** 1990 May–Jun;14(3):191–2

Long-term sampling of cerebral venous blood in conscious rats. Frerichs KU, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):902–5

Use of paper-absorbed fingerstick blood samples for studies of antibody to human immunodeficiency virus type 1 in intravenous drug users. Steger KA, et al. **J Infect Dis** 1990 Oct;162(4):964–7

Percutaneous umbilical cord blood sampling. Vantanasiri C, et al. **J Med Assoc Thai** 1989 Oct;72(10):541–4

Blood sample transportation and the erythrocyte sedimentation rate [letter] Dinant GJ, et al. **J R Coll Gen Pract** 1989 Jul;39(324):302

Transfusion of fresh whole blood stored (4 degrees C) for short period fails to improve platelet aggregation on extracellular matrix and clinical hemostasis after cardiopulmonary bypass. Golan M, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):354–60

Fetal haemorrhage after fetal scalp blood sampling [letter] Jaiyesimi RK, et al. **Lancet** 1990 Sep 29;336(8718):819–20

Alcohol in drink driving swabs: does it make any difference? [letter] Carter PG, et al. **Med Sci Law** 1990 Jan;30(1):90

No rationale for finger-stick blood sampling [letter] Grenell SL. **N Engl J Med** 1990 Jul 5;323(1):66

Safety of cordocentesis under ultrasound guidance for fetal blood sampling. Maeda H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Feb; 42(2):199–202

Quantifying the minimum discard sample required for accurate arterial blood gases. Preusser BA, et al. **Nurs Res** 1989 Sep–Oct;38(5):276–9

Fetal blood sampling from the intrahepatic vein: analysis of safety and clinical experience with 214 procedures. Nicolini U, et al. **Obstet Gynecol** 1990 Jul;76(1):47–53

Hepatitis B virus transmission via Autolet guard [letter] Besman CK, et al. **S Afr Med J** 1990 Jun 16;77(12):654

Fetal intestinal obstruction: necessity for percutaneous umbilical blood sampling to assess the severity of Rh sensitization. Meyer WR, et al. **South Med J** 1990 Feb; 83(2):258–9

A comparison of venous versus capillary measurements of drug concentration. Murphy JE, et al. **Ther Drug Monit** 1990 May;12(3):264–7

Blood collection in strong acidic citrate anticoagulant used in a study of dietary influence on basal tPA activity. Ränby M, et al. **Thromb Haemost** 1989 Nov 24;62(3):917–22

Percutaneous umbilical blood sampling and umbilical vein transfusions. Rapid serologic differentiation of fetal blood from maternal blood. Steiner EA, et al. **Transfusion** 1990 Feb;30(2):104–8

[Fetal blood sampling for karyotype using echoguided puncture of the cord. Study of 103 pregnancies] Boulot P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(8):1007–15 (Eng. Abstr.) **(Fre)**

[Fetal blood sampling through the intra-abdominal umbilical vein] Boubli L, et al. **Pediatrie** 1990;45(2):123–7 (Eng. Abstr.) **(Fre)**

[Blood collection from cadavers] Brettel HF. **Versicherungsmedizin** 1989 Nov 1;41(6):193–5 (Eng. Abstr.) **(Ger)**

[Fructosamine values in venous and capillary blood] Lemke C, et al. **Wien Klin Wochenschr Suppl** 1990;180:38–9; discussion 57–9 (Eng. Abstr.) **(Ger)**

[Differences in blood collection for blood gas analysis in oxygen inhalation therapy] Kapfhammer G, et al. **Wien Med Wochenschr Suppl** 1987;103:36–7 **(Ger)**

[Ointments for collecting blood gas samples from the external ear] Kapfhammer G, et al. **Wien Med Wochenschr Suppl** 1989;104:suppl 3–4 **(Ger)**

[The quality of blood donation and its effect on subsequent preparation of coagulation active plasma fractions] Sander W. **Z Arztl Fortbild (Jena)** 1989;83(24):1247–50 (23 ref.) **(Ger)**

[Sampling fetal blood from the umbilical cord under echographic guidance] Buscaglia M, et al. **Ann Ostet Ginecol Med Perinat** 1989 Mar–Apr;110(2):89–97 (Eng. Abstr.) **(Ita)**

[Determination of isepamicin in the eluates from the dried blood spots on filter paper for monitoring of blood levels in a guinea-pig] Kase K, et al. **Yakugaku Zasshi** 1989 Dec; 109(12):938–42 (Eng. Abstr.) **(Jpn)**

[Atrial blood sampling and blood gas analysis] Grebstad JA. **Tidsskr Nor Laegeforen** 1990 Jun 20;110(16):2088–9 **(Nor)**

[Sampling and sending of blood specimens] Sandberg S. **Tidsskr Nor Laegeforen** 1990 May 10;110(12):1541–2 **(Nor)**

[A method of storing and transporting blood sera for examination for the presence of antibodies to the human immunodeficiency virus] Podoliako MP, et al. **Lab Delo** 1990;(4):57–9 **(Rus)**

[Cordocentesis—a new diagnostic approach in modern perinatology] Radunović N, et al. **Jugosl Ginekol Perinatol** 1989 Sep–Dec;29(5–6):161–4 (Eng. Abstr.) **(Ser)**

STANDARDS

A source of error in blood alcohol analysis [letter] Taberner PV. **Alcohol Alcohol** 1989;24(5):489–90

Recommendation for collection of venous blood from children, with special reference to production reference values. Lindblad B, et al. **Scand J Clin Lab Invest** 1990 Feb;50(1):99–104

[Hemoculture in patients with infective endocarditis. Current patterns and our experience] Mendes CM, et al. **Arq Bras Cardiol** 1989 Aug;53(2):75–9 (33 ref.) **(Por)**

VETERINARY

Effects of collection methods and storage on the in vitro stability of canine plasma catecholamines. D'Alesandro MM, et al. **Am J Vet Res** 1990 Feb;51(2):257–9

Aortic catheterization in cattle via the costoabdominal artery and validation for progesterone and estradiol-17 beta sample collection. Haibel GK, et al. **Am J Vet Res** 1989 Nov;50(11):1923–5

Effects of experimenters and different blood sampling procedures on blood metabolite values in growing pigs. Dubreuil P, et al. **Can J Vet Res** 1990 Jun;54(3):379–82

Blood collection from the transverse sinus in the chinchilla. Boettcher FA, et al. **Lab Anim Sci** 1990 Mar;40(2):223–4

Blood collection and intravenous injection in the guinea pig via the medial saphenous vein. Carraway JH, et al. **Lab Anim Sci** 1989 Nov;39(6):623–4

Vacuum-assisted cardiac puncture in chickens. Foytik JE, et al. **Lab Anim Sci** 1989 Nov;39(6):626–8

Simultaneous sampling of portal, hepatic and systemic blood during intragastric loading and tracer infusion in conscious pigs. Olesen HP, et al. **Lab Anim Sci** 1989 Sep;39(5):429–32

The use of subcutaneous ports in the woodchuck (Marmota monax). Woolf A, et al. **Lab Anim Sci** 1989 Nov;39(6):620–2

Intravenous catheterisation of conventional pigs without application of antimicrobial agents. Pijpers A, et al. **Vet Q** 1989 Oct;11(4):216–21

[A practical vein catheter for small ruminants (short report)] Ganter M, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Jan;97(1):44–5 **(Ger)**

[The effect of postpartum blood collection on the health and liveweight development of calves and the use of neonatal calf serum (NCS) for the in vitro cultivation of mouse embryos] Methling W, et al. **Z Med Lab Diagn** 1989; 30(7):391–4 (Eng. Abstr.) **(Ger)**

BLOOD STAINS

Evaluation of the sensitivity of microfilter paper assays in an anthropological study: results of samples from Cameroon and Tanzania. Aebischer ML, et al. **Anthropol Anz** 1990 Mar;48(1):15–23

Autoantibodies to thyroglobulin and thyroid peroxidase in blood spots measured with a sensitive, direct radioimmunoassay [letter] Phillips DI, et al. **Clin Chem** 1990 May;36(5):823–4

Application of immunoglobulin allotyping in forensic stain analysis: reliability and sensitivity of Gm and Km typing. Kloosterman A. **Exp Clin Immunogenet** 1989;6(1):123–32

The use of hybrid isoelectric focusing for the detection of polymorphic proteins in blood stains. Lopez-Rodriguez I, et al. **Forensic Sci Int** 1989 Dec;43(3):239–45

Haptoglobin typing of human bloodstains using a specific DNA probe. Yokoi T, et al. **Forensic Sci Int** 1990 Mar; 45(1–2):39–46

Deciphering bloody imprints through chemical enhancement. Doherty PE, et al. **J Forensic Sci** 1990 Mar;35(2):457–65

Sex determination of bloodstains by the use of a ribonucleic acid (RNA) probe. Kobayashi R, et al. **J Forensic Sci** 1989 Sep;34(5):1078–81

Km(3) identification by enzyme-linked immunosorbent assay (ELISA) as an internal control for Km(1) activity determined by inhibition in dried bloodstains. Lima SM, et al. **J Forensic Sci** 1990 May;35(3):537–47

Evaluation of deoxyribonucleic acid (DNA) isolated from human bloodstains exposed to ultraviolet light, heat, humidity, and soil contamination. McNally L, et al. **J Forensic Sci** 1989 Sep;34(5):1059–69

Gm/Km typing of bloodstains in U-bottom microtiter plates. Moniri M. **J Forensic Sci** 1990 Jan;35(1):181–5

A modification of the microplate method for reverse ABO typing of bloodstains and additional validation studies. Mudd JL, et al. **J Forensic Sci** 1990 Mar;35(2):447–51

The effects of heat upon the glyoxalase I isoenzyme. Parigian MJ, et al. **J Forensic Sci** 1990 Mar;35(2):452–6

Human chorionic gonadotropin detection by means of enzyme immunoassay: a useful method in forensic pregnancy diagnosis in bloodstains. Vallejo G. **J Forensic Sci** 1990 Mar;35(2):293–300

Relative indices of efficiency [letter] Laux DL, et al. **J Forensic Sci Soc** 1990 May–Jun;30(3):135–6

Phenotyping of alpha-2-HS glycoprotein in bloodstains by isoelectric focusing and immunoblotting [published erratum appears in J Forensic Sci Soc 1989 Nov–Dec;29(6):424] Thomas AS. **J Forensic Sci Soc** 1989 Sep–Oct;29(5):325–30

The evaluation of five electrophoretic phenotyping systems for routine screening of bloodstains. Thomas AS. **J Forensic Sci Soc** 1989 Jul–Aug;29(4):243–8

The application of immunoblotting to the phenotyping of group-specific component. Thomas AS, et al. **J Forensic Sci Soc** 1989 May–Jun;29(3):197–205

The collaborative study on typing group-specific component in casework bloodstains. Westwood SA, et al. **J Forensic Sci Soc** 1990 Jan–Feb;30(1):33–8

A simple immunosorbent assay for detection of human blood. Kashyap VK. **J Immunoassay** 1989;10(4):315–24

Dihydropteridine reductase activity in eluates from dried blood spots: automation of an assay for a national screening service. Surplice IM, et al. **J Inherited Metab Dis** 1990; 13(2):169–77

6-phosphogluconate dehydrogenase typing from dried bloodstains—under Indian conditions. Sachdeva MP, et al. **Med Sci Law** 1989 Oct;29(4):337–40

Species identification of blood stains using a biotin-labeled DNA probe. Tajima N, et al. **Nippon Hoigaku Zasshi** 1989 Apr;43(2):117–21

Individual identification of human bloodstains investigated with hypervariable DNA loci. Yokoi T, et al. **Tohoku J Exp Med** 1990 May;161(1):9–18

Filter paper sampling methodology of whole blood cyclosporine (WBCyA) concentration: a critical review. Foradori AC, et al. **Transplant Proc** 1990 Jun;22(3):1226–30

Optimization of the blood sample filter paper technique for cyclosporine determination. Manrique RV, et al. **Transplant Proc** 1990 Jun;22(3):1231–3

Determination of MN blood group from blood stains by electrophoresis and immunoblotting. Moriya F, et al. **Z Rechtsmed** 1989;103(1):21–5

The effect of various stain carriers on the quality and quantity of DNA extracted from dried bloodstains. Prinz M, et al. **Z Rechtsmed** 1990;103(3):191–7

Gc in bloodstains. Rand S, et al. **Z Rechtsmed** 1990; 103(6):453–6

Rapid and sensitive identification of human blood by an ELISA-ABC method using a biotinylated antibody against human HbA0. Tokiwa K, et al. **Z Rechtsmed** 1990; 103(5):329–34

[Subtyping of Pi in human bloodstains by isoelectric focusing] Cao ZM, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Sep;20(3):321–3 (Eng. Abstr.) **(Chi)**

[Study on application of Tf subtyping in forensic medicine] Tan M, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Sep;20(3):317–21 (Eng. Abstr.) **(Chi)**

[Sensitivity of various study technics in blood stains] Förster R, et al. **Arch Kriminol** 1990 May–Jun;185(5–6):150–62 (Eng. Abstr.) **(Ger)**

[Specimen preparation for ABO determination of various kinds of blood stains] Lötterle J, et al. **Arch Kriminol** 1989 Jul–Aug;184(1–2):38–47 (Eng. Abstr.) **(Ger)**

[Sex determination of human blood micro-stains and single hairs using specific DNA amplification with polymerase chain reaction] Muellener D, et al. **Arch Kriminol** 1989 Nov–Dec;184(5–6):175–85 (Eng. Abstr.) **(Ger)**

[Identification of blood stains and fetal tissue using genetic fingerprinting] Sprecher W, et al. **Arch Kriminol** 1990 Jan–Feb;185(1–2):44–51 (Eng. Abstr.) **(Ger)**

[Classification of blood stains inside a car using molecular genetic methods] Josephi E, et al. **Beitr Gerichtl Med** 1989; 47:557–61 (Eng. Abstr.) **(Ger)**

[Methodologic variants of DNA blood stain analysis: extraction in agarose and digoxigenin marking] Prinz M, et al. **Beitr Gerichtl Med** 1989;47:175–9 (Eng. Abstr.) **(Ger)**

[Species identification in traces using molecular biology

methods] Teifel-Greding J, et al. **Beitr Gerichtl Med** 1989; 47:545-50 (Eng. Abstr.) **(Ger)**

[Quantitative determinations of Hp, Pi, Tf and GC in stored blood stains] Schwerd W, et al. **Z Rechtsmed** 1989; 102(8):531-4 (Eng. Abstr.) **(Ger)**

[Methods of determining phenylalanine in blood and blood stains dried on paper] Gerasimova NS, et al. **Lab Delo** 1990; (3):38-41 (Eng. Abstr.) **(Rus)**

[The possibility for determining haptoglobin phenotypes in blood stains after treatment with a luminol solution] Alesho NA, et al. **Sud Med Ekspert** 1989 Oct-Dec;32(4):42-4 (Eng. Abstr.) **(Rus)**

BLOOD SUBSTITUTES

see related
PLASMA SUBSTITUTES

Hemoglobin solutions as blood substitutes: an overview. Bellelli A, et al. **Ann Ital Med Int** 1986 Dec;1(4):275-80 (17 ref.)

Pyridoxylated hemoglobin solution as an oxygen carrier [editorial; comment] Alexander JW. **Ann Surg** 1990 Apr; 211(4):381 Comment on: Ann Surg 1990 Apr;211(4):394-8.

The efficacy of polymerized pyridoxylated hemoglobin solution as an O2 carrier [see comments] Gould SA, et al. **Ann Surg** 1990 Apr;211(4):394-8 Comment in: Ann Surg 1990 Apr;211(4):381.

The culture of human skin fibroblasts on microcarriers in the presence of serum substitute: Ultroser G. Miech G, et al. **Biol Cell** 1990;68(1):85-7

Red blood cell substitutes. Selected papers from an international symposium. 1989, San Francisco. Proceedings. **Biomater Artif Cells Artif Organs** 1990;18(2):133-365

International Symposium on Red Cell Substitutes. 16-19 May 1989, San Francisco, California. Abstracts. **Biomater Artif Cells Artif Organs** 1989;17(5):617-705

Resonance Raman spectroscopy of chemically modified hemoglobins. Bruzzese FJ, et al. **Biomater Artif Cells Artif Organs** 1990;18(2):143-56

Hemoglobin in a coacervate system. Ecanow J, et al. **Biomater Artif Cells Artif Organs** 1990;18(2):359-65

Viscosity measurements of suspensions of hemoglobin-containing liposomes of varying lipid composition. Jopski B, et al. **Biomater Artif Cells Artif Organs** 1990;18(2):345-58

Artificial red cells. A link between the membrane skeleton and RES detectability? MacGregor RD, et al. **Biomater Artif Cells Artif Organs** 1990;18(2):329-43

Functional measurements on carboxymethylated hemoglobin, a potential blood substitute: effects of sodium chloride on pH values that influence the alkaline Bohr effect. Manning LR, et al. **Biomater Artif Cells Artif Organs** 1990; 18(2):133-41

Haemoglobin pyridoxalation in phosphate buffer: comparison of results with those obtained with Tris-HCl buffer. Menu P, et al. **Biomater Artif Cells Artif Organs** 1990;18(2):157-68

Usual physicochemical criteria provide insufficient evidence that a functional hemoglobin solution can be used for transfusions after storage for 36 months at +4 degrees C. Menu P, et al. **Biomater Artif Cells Artif Organs** 1990; 18(2):169-81

Whole complement hemolytic activity (CH50) following infusion of stroma-free and polyhemoglobin solutions in rats. Ning J, et al. **Biomater Artif Cells Artif Organs** 1990; 18(2):203-17

On the hydrodynamic instability of hemoglobin solutions. Pfistoupil TI, et al. **Biomater Artif Cells Artif Organs** 1990; 18(2):183-8

Liposome-encapsulated hemoglobin as an artificial red blood cell: characterization and scale-up. Vidal-Naquet A, et al. **Biomater Artif Cells Artif Organs** 1989;17(5):531-52

Synthetic erythrocytes. Djordjevich L, et al. **Crit Rev Ther Drug Carrier Syst** 1989;6(2):131-62 (80 ref.)

Conjugated human hemoglobin as a physiological oxygen carrier--pyridoxalated hemoglobin polyoxyethylene conjugate (PHP). Malchesky PS, et al. **Int J Artif Organs** 1990 Jul;13(7):442-50 (36 ref.)

The effects of a glycerin-based blood analog on the testing of bioprosthetic heart valves. Carey RF, et al. **J Biomech** 1989;22(11-12):1185-92

Hemodynamic effects and oxygen transport properties of a new blood substitute in a model of massive blood replacement. Vlahakes GJ, et al. **J Thorac Cardiovasc Surg** 1990 Sep;100(3):379-88

Use of serum substitutes for the growth of four cell lines commonly used for virus isolation. Gleaves CA, et al. **J Virol Methods** 1990 May;28(2):171-8

The effect of perfluorochemical artificial blood on lipoprotein metabolism in rats. Nagata Y, et al. **Metabolism** 1990 Jul; 39(7):682-9

Ovchinnikov defended [letter; comment] Baev AA, et al. **Nature** 1990 Mar 8;344(6262):99 Comment on: Nature 1988 Sep 8;335(6186):107.

Blood substitutes--minireview. Winslow RM. **Prog Clin Biol Res** 1989;319:305-21; discussion 322-3 (29 ref.)

Evaluation of cytochrome P-450 mediated metabolism of antipyrine in the rat at different extents of fluosol-DA hemodilution. Shrewsbury RP, et al. **Res Commun Chem Pathol Pharmacol** 1990 Mar;67(3):411-4

Functional properties of a new crosslinked hemoglobin designed for use as a red cell substitute [see comments] Keipert PE, et al. **Transfusion** 1989 Nov-Dec;29(9):768-73 Comment in: Transfusion 1989 Nov-Dec;29(9):753-4.

Blood substitutes. Current status [editorial; comment] Winslow RM. **Transfusion** 1989 Nov-Dec;29(9):753-4 Comment on: Transfusion 1989 Nov-Dec;29(9):768-73.

A comparison of the Doppler spectra from human blood and artificial blood used in a flow phantom. Hoskins PR, et al. **Ultrasound Med Biol** 1990;16(2):141-7

[Artificial blood: the future of blood transfusion? I. Hemoglobin solutions] Guyot M, et al. **J Pharm Belg** 1990 Jan-Feb;45(1):20-8 (76 ref.) (Eng. Abstr.) **(Fre)**

[Artificial blood: the future of blood transfusion? II. Blood substitutes other than hemoglobin solutions] Guyot M, et al. **J Pharm Belg** 1990 May-Jun;45(3):196-206 (123 ref.) (Eng. Abstr.) **(Fre)**

[A clamp for securing bottles containing blood and blood substitutes] Ostrovskii VP, et al. **Klin Khir** 1990;(3):69 **(Rus)**

ADMINISTRATION & DOSAGE

Reduction in reperfusion injury by blood-free reperfusion after experimental myocardial infarction. Schaer GL, et al. **J Am Coll Cardiol** 1990 May;15(6):1385-93

Liposome encapsulated hemoglobin: stabilization, encapsulation, and storage. Ligler FS, et al. **Prog Clin Biol Res** 1989;319:435-50; discussion 451-5

ADVERSE EFFECTS

The effect of moderately severe hemodilution with Fluosol-DA on cytochrome P-450 mediated antipyrine metabolism. Shrewsbury RP, et al. **Biomater Artif Cells Artif Organs** 1989;17(4):393-402

Biological responses to liposome-encapsulated hemoglobin (LEH) are improved by a PAF antagonist. Rabinovici R, et al. **Circ Shock** 1990 Aug;31(4):431-45

ANALYSIS

[The structuro-functional heterogeneity of an artificial oxygen carrier based on hemoglobin] Viazova EP, et al. **Biull Eksp Biol Med** 1990 Mar;109(3):254-6 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Fine tuning of polymerized pyridoxylated hemoglobin as a red blood cell substitute. Hsia CJ. **Prog Clin Biol Res** 1989; 319:339-49

DIAGNOSTIC USE

In vitro measurement of tissue vascular space by 19F NMR of a perfluorocarbon blood substitute. Negendank WG, et al. **Biomater Artif Cells Artif Organs** 1990;18(1):119-23

METABOLISM

Catabolism and excretion of crosslinked hemoglobin. Keipert PE, et al. **Prog Clin Biol Res** 1989;319:383-402; discussion 403-5

PHARMACOKINETICS

Intravascular behavior of a perfluorochemical emulsion. Tsuda Y, et al. **J Pharmacobiodyn** 1990 Mar;13(3):165-71

The intravascular persistence of crosslinked human hemoglobin. Hess JR, et al. **Prog Clin Biol Res** 1989; 319:351-7; discussion 358-60

[The effect of the degree of hemoglobin polymerization on its interaction with the body] Azhigirova MA, et al. **Biull Eksp Biol Med** 1990 Mar;109(3):262-4 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Dissociation of ST segment elevation and regional wall motion with open-artery, intracoronary Fluosol. Schaer GL, et al. **Am Heart J** 1989 Oct;118(4):679-85

Requirement of serum factors for wound closure of embryonic skin in vitro. Kistler A, et al. **Ann Plast Surg** 1989 Dec;23(6):479-87

Fluorocarbon (FC-43) in augmentation of tissue oxygen and its experimental use for flap survival. Yoshimura Y, et al. **Ann Plast Surg** 1986 Feb;16(2):111-5

Effects of pyridoxalated hemoglobin polyoxyethylene conjugate and stroma-free hemoglobin on cardiac function in isolated rat heart. Yamakawa T, et al. **Artif Organs** 1990 Jun;14(3):208-17

Effects of pyridoxalated polyhemoglobin and stroma-free hemoglobin on ADP-induced platelet aggregation. Lalla FR, et al. **Biomater Artif Cells Artif Organs** 1989; 17(3):363-9

Dynamic evaluation of clotting phenomena in vitro and perfluorochemical oxygen transport across a membrane-bound thrombus model. Nguyen PD, et al. **Biomater Artif Cells Artif Organs** 1989;17(3):245-62

Effect of fluorocarbon blood substitute on neutrophil phagocytic function. Xiao N, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Nov;10(6):537-9

Characterization of hemodynamic, hematologic, and biochemical responses to administration of liposome-encapsulated hemoglobin in the conscious, freely moving rat. Rabinovici R, et al. **Circ Shock** 1989 Oct; 29(2):115-32

Improved biological properties of synthetic distearoyl phosphatidyl choline-based liposome in the conscious rat. Rabinovici R, et al. **Circ Shock** 1990 Mar;30(3):207-19

Evaluation of a synthetic serum substitute to replace fetal cord serum for human oocyte fertilization and embryo growth in vitro. Psalti I, et al. **Fertil Steril** 1989 Nov; 52(5):807-11

Cultivation of HeLa cells with fetal bovine serum or Ultroser G: effects on the plasma membrane constitution. Blixt Y, et al. **In Vitro Cell Dev Biol** 1990 Jul;26(7):691-700

The effect of varying extents of Fluosol-DA or normal saline haemodilution on the dose dependent kinetics of phenytoin in the rat. Shrewsbury RP, et al. **J Pharm Pharmacol** 1989 Aug;41(8):582-4

[The experimental study on long-term cardiac preservation: the efficacy of low-flow continuous perfusion with fluorocarbon] Umemoto M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Nov; 37(11):2328-38 (Eng. Abstr.) **(Jpn)**

[Induction of cytochrome P-450 in rat liver microsomes by perfluorodecalin] Adrianov NV, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):164-6 (Eng. Abstr.) **(Rus)**

[The rheological properties of the blood during its partial substitution in rats with a solution of a modified hemoglobin] Shuvaeva VN, et al. **Fiziol Zh SSSR** 1990 Feb;76(2):192-9 **(Rus)**

THERAPEUTIC USE

Reduction of myocardial ischemia during percutaneous transluminal coronary angioplasty with oxygenated Fluosol. Kent KM, et al. **Am J Cardiol** 1990 Aug 1; 66(3):279-84

Metabolic and functional effects of perfluorocarbon distal perfusion during coronary angioplasty [published erratum appears in Am J Cardiol 1990 Sep 15;66(7):772] Young LH, et al. **Am J Cardiol** 1990 Apr 15;65(15):986-90

ABC of transfusion. Red cell substitutes. Odling-Smee W. **BMJ** 1990 Mar 3;300(6724):599-601 (0 ref.)

Effect of hemoglobin solution on compensation to anemia in the erythrocyte-free primate. Rosen AL, et al. **J Appl Physiol** 1990 Mar;68(3):938-43

TOXICITY

Morphologic effects of hypervolemic administration of DBBF hemoglobin in the rat. Clifford CB, et al. **Biomater Artif Cells Artif Organs** 1990;18(2):321-8

Nephrotoxicity of hemoglobin solutions. Feola M, et al. **Biomater Artif Cells Artif Organs** 1990;18(2):233-49

Coronary vasoconstrictor activity of purified and modified human hemoglobin. Macdonald VW, et al. **Biomater Artif Cells Artif Organs** 1990;18(2):263-82

Effects of homologous and heterologous stroma-free hemoglobin and polyhemoglobin on complement activation, leucocytes and platelets. Ning J, et al. **Biomater Artif Cells Artif Organs** 1990;18(2):219-32

Morphologic alterations in rat retina after hypervolemic infusion of cross-linked hemoglobin. Schuschereba ST, et al. **Biomater Artif Cells Artif Organs** 1990;18(2):299-307

Generation of free oxygen radicals and the toxicity of hemoglobin solutions. Simoni J, et al. **Biomater Artif Cells Artif Organs** 1990;18(2):189-202

Liver and kidney injury after administration of hemoglobin cross-linked with bis(3,5-dibromosalicyl) fumarate. Smith CD, et al. **Biomater Artif Cells Artif Organs** 1990; 18(2):251-61

Chronotropic effects of in vitro perfusion with albumin, stroma-free hemoglobin, and polyhemoglobin solutions. Walter SV, et al. **Biomater Artif Cells Artif Organs** 1990; 18(2):283-98

Efficacy of a new blood substitute based on ultra-pure polymerized bovine hemoglobulin. A preliminary report. Vlahakes GJ, et al. **Eur J Cardiothorac Surg** 1989;3(4):353-4

BLOOD SUGAR see **BLOOD GLUCOSE**

BLOOD SUGAR SELF-MONITORING see **BLOOD GLUCOSE SELF-MONITORING**

BLOOD-TESTIS BARRIER

[Cell junctions between Sertoli cells and the blood-testis barrier in goldfish testis] Guan TL. **Shih Yen Sheng Wu Hsueh Pao** 1990 Mar;23(1):29-39 (Eng. Abstr.) **(Chi)**

PHYSIOLOGY

Ultrastructural studies on the development of the blood-epididymis barrier in immature rats. Agarwal A, et al. **J Androl** 1989 Nov-Dec;10(6):425-31

The blood-testis barrier in experimental unilateral cryptorchidism. Stewart RJ, et al. **J Pathol** 1990 Jan; 160(1):51-5

BLOOD TESTS see **HEMATOLOGIC TESTS**

BLOOD TRANSFUSION

see related
BLOOD GROUP INCOMPATIBILITY

The extent of transfusion medicine education during the fourth year at U.S. and Canadian medical schools. Fang

WL, et al. **Acad Med** 1990 Jun;65(6):419

Prevention of transfusion-associated HIV transmission in Kinshasa, Zaire: HIV screening is not enough. Jäger H, et al. **AIDS** 1990 Jun;4(6):571–4

Reversal of echocardiographic signs of pericardial tamponade by transfusion. Tunick PA, et al. **Am Heart J** 1990 Jan;119(1):199–201

Platelet infusion-related echocardiographic contrast. Monsuez JJ, et al. **Am J Cardiol** 1990 Jul 15;66(2):244

Directed blood donations and the concept of individualized care in transfusion medicine [editorial] Goldfinger D, et al. **Am J Clin Pathol** 1989 Oct;92(4):516–7

In vitro and in vivo evaluation of platelet transfusions administered through an electromechanical infusion pump. Snyder EL, et al. **Am J Clin Pathol** 1990 Jul;94(1):77–80

Effectiveness of the cryosupernatant fraction of plasma in the treatment of refractory thrombotic thrombocytopenic purpura. Byrnes JJ, et al. **Am J Hematol** 1990 Jul; 34(3):169–74

Liver histopathologic findings in women with sickle cell disease given prophylactic transfusion during pregnancy. Yeomans E, et al. **Am J Obstet Gynecol** 1990 Sep; 163(3):958–64

Diamond-blackfan anemia: etiology, pathophysiology, and treatment. Halperin DS, et al. **Am J Pediatr Hematol Oncol** 1989 Winter;11(4):380–94 (113 ref.)

Reversibility of anatomical and functional asplenia by chronic transfusion in a child with sickle cell anemia. Ozkaynak MF, et al. **Am J Pediatr Hematol Oncol** 1989 Winter; 11(4):445–6

Risks, options, and informed consent for blood transfusion in elective surgery. Goodnough LT, et al. **Am J Surg** 1990 Jun;159(6):602–9 (93 ref.)

Elective surgery without transfusion: influence of preoperative hemoglobin level and blood loss on mortality. Spence RK, et al. **Am J Surg** 1990 Mar;159(3):320–4

Incidence and range of carboxyhaemoglobin in blood for transfusion. Freeman R, et al. **Anaesthesia** 1990 Jul; 45(7):581–3

Carboxyhaemoglobin [letter] Freeman R, et al. **Anaesthesia** 1990 Jan;45(1):57

A comparison of washed red blood cells versus packed red blood cells (AS-1) for cardiopulmonary bypass prime and their effects on blood glucose concentration in children. Hosking MP, et al. **Anesthesiology** 1990 Jun;72(6):987–90

Rapid volume replacement with warmed blood and fluids. Falcone RE, et al. **Angiology** 1989 Nov;40(11):964–9

The role of the emergency physician in the management of Jehovah's Witnesses. Fontanarosa PB, et al. **Ann Emerg Med** 1989 Oct;18(10):1089–95

Transfusions and the acquired immunodeficiency syndrome (AIDS) [letter] Billings PR. **Ann Intern Med** 1989 Nov 1;111(9):767

Blood transfusion and surgery: the effect on growth of a syngeneic sarcoma. Parrott NR, et al. **Ann R Coll Surg Engl** 1990 Mar;72(2):77–81

Shock, transfusion, and pneumonectomy. Death is due to right heart failure and increased pulmonary vascular resistance. Cryer HG, et al. **Ann Surg** 1990 Aug; 212(2):197–201

Effects of intraoperative plasmapheresis on blood loss in cardiac surgery. Jones JW, et al. **Ann Thorac Surg** 1990 Apr;49(4):585–9; discussion 590

Caught between religion and medicine. Fox V. **AORN J** 1990 Jul;52(1):131–4, 136, 138–9, passim

Prolongation of heart graft survival and spleen suppressor cell activity after donor specific blood transfusions in rats differing across the MHC. Wąsowska B, et al. **Arch Immunol Ther Exp (Warsz)** 1989;37(1–2):1–10

Transfusion of the patient with acquired immunodeficiency syndrome. Mayer K. **Arch Pathol Lab Med** 1990 Mar; 114(3):295–7

Blood transfusion and caesarean section. Maxwell CN. **Aust N Z J Obstet Gynaecol** 1989 May;29(2):121–3

Blood ordering for haematemesis. Kohn MR, et al. **Aust N Z J Surg** 1990 May;60(5):351–4

Inactivation of viruses and safety of stable plasma products. Morgenthaler JJ. **Beitr Infusionther** 1989;24:33–9 (28 ref.)

Biotechnology of plasma proteins. Fractionation and applications. Stoltz JF, et al. **Beitr Infusionther** 1989; 24:74–82 (1 ref.)

The expression of IgG allotypes on platelets and immunization to IgG allotypes in multitransfused thrombocytopenic patients. Kickler TS, et al. **Blood** 1990 Aug 15;76(4):849–52

Transient neutropenia induced by transfusion of blood exposed to nylon fiber filters. Schiffer CA, et al. **Blood** 1975 Jan;45(1):141–6

Platelet transfusions: the problem of refractoriness. Murphy MF, et al. **Blood Rev** 1990 Mar;4(1):16–24 (114 ref.)

Preparation of leukocyte-poor platelet concentrates from buffy coats by a new type of quadruple bag. Misterek J, et al. **Biut** 1990 Jan;60(1):28–30

ABC of transfusion. Plasma, plasma products, and indications for their use. Cohen H, et al. **BMJ** 1990 Mar 24; 300(6727):803–6 (0 ref.)

ABC of transfusion. Testing before transfusion, and blood ordering policies [published erratum appears in BMJ 1990 Mar 10;300(6725):672] Contreras M, et al. **BMJ** 1989 Dec 9;299(6713):1446–9 (0 ref.)

ABC of transfusion. Transfusion of red cells [published erratum appears in BMJ 1990 Mar 10;300(6725):672] Davies SC, et al. **BMJ** 1990 Jan 27;300(6719):248–52 (0 ref.)

ABC of transfusion. National self-sufficiency in blood and blood products. Gunson HH. **BMJ** 1989 Dec 16; 299(6714):1514–6 (0 ref.)

ABC of transfusion. Massive blood transfusion. Hewitt PE, et al. **BMJ** 1990 Jan 13;300(6717):107–9 (0 ref.)

ABC of Transfusion. Platelet and granulocyte transfusions. Hows JM, et al. **BMJ** 1990 Feb 24;300(6723):520–3 (0 ref.)

ABC of transfusion. Fetal and neonatal transfusion. Letsky EA. **BMJ** 1990 Mar 31;300(6728):862–6 (0 ref.)

ABC of transfusion. Red cell substitutes. Odling-Smee W. **BMJ** 1990 Mar 3;300(6724):599–601 (0 ref.)

Identification of transfused blood cells in children with severe combined immunodeficiency syndrome by analysis of multiple cell lineages using restriction fragment length polymorphisms. Blazar BR, et al. **Bone Marrow Transplant** 1990 May;5(5):327–33

A new blood warmer. Jackson DM. **Br J Anaesth** 1974 Sep; 46(9):692–6

Abstracts of papers selected for presentation at the joint meeting of the British Society for Haematology and the British Blood Transfusion Society. London, 10 November 1989. **Br J Haematol** 1989 Dec;73(4):584–5

Transfusion of ABO-mismatched platelets leads to early platelet refractoriness. Carr R, et al. **Br J Haematol** 1990 Jul;75(3):408–13

Factors influencing the transfusion response to HLA-selected apheresis donor platelets in patients refractory to random platelet concentrates. McFarland JG, et al. **Br J Haematol** 1989 Nov;73(3):380–6

Duration of first remission in leukaemic recipients of leucocyte-poor blood components [letter] Rebulla P, et al. **Br J Haematol** 1990 Jul;75(3):441–2

Apparent removal of graft-versus-leukaemia effect by the use of leucocyte-poor blood components in patients with acute myeloblastic leukaemia [letter] Tucker J, et al. **Br J Haematol** 1989 Dec;73(4):572–4

Association between transfusion with plasma and the recurrence of colorectal carcinoma. Marsh J, et al. **Br J Surg** 1990 Jun;77(6):623–6

Chronic inflammatory demyelinating polyneuropathy. Conduction failure before and during immunoglobulin or plasma therapy. van der Meché FG, et al. **Brain** 1989 Dec; 112 (Pt 6):1563–71

NIH consensus statement on perioperative red cell transfusions. **Bull Pan Am Health Organ** 1989;23(3):356–7 (0 ref.)

Hyperkalaemia during massive blood transfusion in paediatric craniofacial surgery. Brown KA, et al. **Can J Anaesth** 1990 May;37(4 Pt 1):401–8

Perioperative management of patients with von Willebrand's disease. Cameron CB, et al. **Can J Anaesth** 1990 Apr; 37(3):341–7 (30 ref.)

Surgery in Jehovah's Witnesses [see comments] Wong DH, et al. **Can J Anaesth** 1989 Sep;36(5):578–85 Comment in: Can J Anaesth 1990 Apr;37(3):391–2.

Prophylactic transfusion of platelets and plasma in trauma care [letter] [published erratum appears in Can Med Assoc J 1990 Jul 15;143(2):91] [comment] Ferguson DJ, et al. **Can Med Assoc J** 1990 May 15;142(10):1039–40 Comment on: Can Med Assoc J 1989 Sep 15;141(6):529–33.

Issue of transfusion-related lawsuits under study. Moran T. **Can Med Assoc J** 1989 Oct 15;141(8):815

HIV transmission to patients with hemophilia by heat-treated, donor-screened factor concentrate. Remis RS, et al. **Can Med Assoc J** 1990 Jun 1;142(11):1247–54

Effect of perioperative transfusions on survival in osteosarcoma treated by multimodal therapy. Chesi R, et al. **Cancer** 1989 Oct 15;64(8):1727–37

The potential benefit of granulocyte transfusion therapy. Dutcher JP. **Cancer Invest** 1989;7(5):457–62

Cure of murine Ehrlich ascites tumors with chronic oral indomethacin therapy combined with intraperitoneal administration of LAK cells and IL-2. Lala PK, et al. **Cancer Lett** 1990 May 15;51(1):27–35

Effect of red cell transfusion on oxygen consumption following fluid resuscitation in septic shock. Conrad SA, et al. **Circ Shock** 1990 Aug;31(4):419–29

C-reactive protein concentrations pre- and post-transfusion. Enright H, et al. **Clin Lab Haematol** 1990;12(1):25–9

The M1 Kegworth aircraft disaster: experience in three hospital blood transfusion laboratories and the regional transfusion centre. Wood JK, et al. **Clin Lab Haematol** 1990; 12(1):1–7

HIV testing of transfusion recipients. Connecticut State Medical Society Committee on Organ and Tissue Transfers. **Conn Med** 1990 Apr;54(4):217–8

The Jehovah's Witness parent's right to refuse treatment. Healey JM. **Conn Med** 1990 Jun;54(6):357

Cardiovascular and metabolic response to red blood cell transfusion in critically ill volume-resuscitated nonsurgical patients [see comments] Dietrich KA, et al. **Crit Care Med** 1990 Sep;18(9):940–4 Comment in: Crit Care Med 1990 Sep;18(9):1045.

To transfuse or not to transfuse—that is the question! [editorial; comment] Greenburg AG. **Crit Care Med** 1990 Sep;18(9):1045 Comment on: Crit Care Med 1990 Sep;18(9):940–4.

Pulmonary reactions associated with the combined use of amphotericin B and leukocyte transfusions [letter] Krimerman S, et al. **Crit Care Med** 1989 Oct;17(10):1081

Blood transfusion and constituent transfusion. Brand A, et al. **Curr Opin Immunol** 1989 Aug;1(6):1184–90 (8 ref.)

Kinetics of mixed lymphocyte reaction after blood transfusions. Korčáková L, et al. **Czech Med** 1989; 12(3):145–8

The use of fresh blood to control severe haemorrhage associated with massive blood transfusion after cardiopulmonary bypass. Macfie A, et al. **Eur J Cardiothorac Surg** 1990;4(3):171–3

HLA-A antigen incompatibility and HLA-B antigen compatibility associated with enhanced kidney allograft survival in blood-transfused patients. Bućin D. **Exp Clin Immmunogenet** 1986;3(3):138–44

Therapeutic applications of phagocytes. Yap PL, et al. **FEMS Microbiol Immunol** 1989 Apr;1(5):313–4

Supportive haemotherapy in bone marrow transplantation. Mayr WR. **Folia Haematol (Leipz)** 1989;116(3–4):455–8 (3 ref.)

Preparation of leukocyte-poor platelet concentrates for transfusion by filtration through a new cellulose acetate filter. Koerner K. **Haematologia (Budap)** 1989;22(3):181–8

Prevention of non-hemolytic transfusion reactions with leucocyte-poor blood: a prospective study. Reverberi R, et al. **Haematologica (Pavia)** 1989 May-Jun;74(3):283–8

Lymphocyte contamination in leukocyte-depleted red cell and platelet concentrates obtained by filtration. Müller N, et al. **Hamatol Bluttransfus** 1990;33:563–5

Platelet transfusion therapy. Slichter SJ. **Hematol Oncol Clin North Am** 1990 Feb;4(1):291–311 (99 ref.)

Effect of donor specific transfusion (DST) is restricted to the rat combination used and closely related with alloantibody in heart transplantation. Hamano K, et al. **Immunol Cell Biol** 1989 Oct;67 (Pt 5):297–302

Progesterone receptors in lymphocytes of liver-transplanted and transfused patients. Szekeres-Bartho J, et al. **Immunol Lett** 1989 Oct;22(4):259–61

Transfusion malaria amongst operated neurosurgical patients--a prospective study of 22 cases. Mahapatra AK, et al. **Indian J Malariol** 1989 Jun;26(2):91–4

Recent developments in transfusion medicine. Bharucha Z. **Indian J Med Sci** 1989 Sep;43(9):247–52

Comparison of plateletapheresis with two cell separators using identical donors. Bertholf MF, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:45 **(Eng, Ger)**

Platelet crossmatching with Capture P: clinical relevance. Böck M, et al. **Infusionstherapie** 1989 Aug;16(4):183–5

The safety of blood component preparation with blood cell separators. Borberg H, et al. **Infusionstherapie** 1989 Aug; 16 Suppl 2:21–9; discussion 28–9 **(Eng, Ger)**

Chemical and immunochemical characterization of polymers of aggregates in preparations of human serum albumin. Dengler T, et al. **Infusionstherapie** 1989 Aug;16(4):160–4

Collection and transfusion of single donor platelets and their clinical response. Hester J, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:4–9; discussion 28–9 **(Eng, Ger)**

Use of the COBE Spectra System (CSS) for platelet pheresis (PP) and intensive plasma exchange (IPE). Kevy SV, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:46 **(Eng, Ger)**

Biocompatibility and safety of cytapheresis. Kretschmer V, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:10–20; discussion 28–9 **(Eng, Ger)**

Further results with the COBE Spectra system. Platelet collection using the COBE Spectra. Price TH, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:44 **(Eng, Ger)**

COBE Spectra Apheresis System: designs, protocols and results. Urdahl SG. **Infusionstherapie** 1989 Aug;16 Suppl 2:30–43 **(Eng, Ger)**

Blood conservation techniques in orthopaedic surgery. Nelson CL, et al. **Instr Course Lect** 1990;39:425–9 (21 ref.)

In the matter of Cabrera. Barkow JM. **Issues Law Med** 1989 Winter;5(3):371–2

Use of platelets in transfusion medicine. Brubaker DB. **J Am Osteopath Assoc** 1989 Dec;89(12):1553–9

Lack of detectable blood groups in domestic ferrets: implications for transfusion. Manning DD, et al. **J Am Vet Med Assoc** 1990 Jul 1;197(1):84–6

Major burns managed without blood or blood products. Schlagintweit S, et al. **J Burn Care Rehabil** 1990 May-Jun; 11(3):214–20

Platelet transfusions: applications and controversies. Murphy MF, et al. **J Clin Apheresis** 1990;5(2):83–6 (57 ref.)

Long-term follow-up of posttransfusion and sporadic chronic hepatitis non-A, non-B and frequency of circulating antibodies to hepatitis C virus (HCV). Hopf U, et al. **J Hepatol** 1990 Jan;10(1):69–76

Prevalence of antibodies to human immunodeficiency virus and to human T cell leukemia virus type I in transfused sickle cell disease patients. Castro O, et al. **J Infect Dis** 1990 Sep;162(3):743–5

Borrelia burgdorferi: survival in experimentally infected human blood processed for transfusion. Johnson SE, et al. **J Infect Dis** 1990 Aug;162(2):557–9

Effect of red cell transfusions on clinical, immunological and biochemical parameters of a child with adenosine deaminase deficiency. Bory C, et al. **J Inherited Metab Dis** 1990;13(2):229–30

Refractoriness to platelet transfusion after single-donor consecutive platelet transfusions and its relationship to platelet antibodies. Lee M, et al. **J Korean Med Sci** 1988 Dec;3(4):143–9

Granulocyte transfusions in septic adult and newborn rats:

distribution of granulocytes and effect on peripheral blood and bone marrow [see comments] Baley JE, et al. **J Lab Clin Med** 1990 Mar;115(3):283–91 Comment in: J Lab Clin Med 1990 Mar;115(3):271–2.

Granulocyte transfusions: have we learned anything? [editorial; comment] Lazarus HM. **J Lab Clin Med** 1990 Mar;115(3):271–2 Comment on: J Lab Clin Med 1990 Mar;115(3):283–91.

Audit of blood transfusion policy in head and neck surgery. Wake M, et al. **J Laryngol Otol** 1990 Jan;104(1):28–30

Splenic accumulation of technetium–99m–methylene diphosphonate in a transfusion–dependent patient with chronic myelogenous leukemia. Franceschi D, et al. **J Nucl Med** 1990 Sep;31(9):1552–3

Prediction of the need for transfusion during anemia of prematurity. Brown MS, et al. **J Pediatr** 1990 May; 116(5):773–8

Splenic phagocytic function in children with sickle cell anemia receiving long–term hypertransfusion therapy. Buchanan GR, et al. **J Pediatr** 1989 Oct;115(4):568–72

Long–term management of splenic sequestration in children with sickle cell disease. Kinney TR, et al. **J Pediatr** 1990 Aug;117(2 Pt 1):194–9

Fetal heart rate monitoring casebook. Successful treatment of fetal hypoxemia in chronic anemia by artificially increasing maternal oxygen–carrying capacity. Gimovsky ML. **J Perinatol** 1990 Jun;10(2):198–201

A randomized trial to develop criteria for administering erythrocyte transfusions to anemic preterm infants 1 to 3 months of age. Ross MP, et al. **J Perinatol** 1989 Sep; 9(3):246–53

Requirement for solutions with oncotic pressure to release ANF during blood volume expansion in conscious and anesthetized rats. Hebden RA, et al. **J Pharmacol Methods** 1990 May;23(3):171–8

Blood transfusion and the prognosis of patients with gastric cancer. Sugezawa A, et al. **J Surg Oncol** 1989 Oct; 42(2):113–6

Transfusion–induced immunosuppression results in diminished host survival in a murine neuroblastoma model. Lieberman MD, et al. **J Surg Res** 1990 May;48(5):498–503

The effect of blood transfusions on immune function. V. The effect on the inflammatory response to bacterial infections. Waymack JP, et al. **J Surg Res** 1990 Feb;48(2):147–53

Predictors of excessive blood use after coronary artery bypass grafting. A multivariate analysis. Ferraris VA, et al. **J Thorac Cardiovasc Surg** 1989 Oct;98(4):492–7

Is transfusion of fresh plasma after cardiac operations indicated? Martinowitz U, et al. **J Thorac Cardiovasc Surg** 1990 Jul;100(1):92–8

Hemodynamic effects and oxygen transport properties of a new blood substitute in a model of massive blood replacement. Vlahakes GJ, et al. **J Thorac Cardiovasc Surg** 1990 Sep;100(3):379–88

Emergency transport of AS–1 red cell units by pneumatic tube system. Hardin G, et al. **J Trauma** 1990 Mar; 30(3):346–8

Technical consideration in radical retropubic prostatectomy: blood loss after ligation of dorsal venous complex. Rainwater LM, et al. **J Urol** 1990 Jun;143(6):1163–5

Blood transfusion before radiation for malignancies [letter] Hunt TK. **JAMA** 1989 Oct 27;262(16):2234

Markers for transfusion–transmitted disease in different groups of blood donors [see comments] Starkey JM, et al. **JAMA** 1989 Dec 22–29;262(24):3452–4 Comment in: JAMA 1990 Jun 20;263(23):3149.

Peritoneal macrophages transfusion in the treatment of chronic postoperative wound infections. al–Waili NS. **JPMA** 1989 Dec;39(12):310–2

Effects of recombinant human erythropoietin on HLA sensitization and cell mediated immunity. Grimm PC, et al. **Kidney Int** 1990 Jul;38(1):12–8

Donor specific transfusions or cyclosporine for related–donor kidney transplantation? Jayes RL Jr, et al. **Kidney Int** 1989 Sep;36(3):485–96

Effect of perioperative blood transfusion on recurrence of Crohn's disease [letter] **Lancet** 1989 Oct 28;2(8670):1048

Granulocyte storage [letter] Babior BM, et al. **Lancet** 1990 Jan 6;335(8680):50–1

Jehovah's Witness transfused without consent: a Canadian case. Brahams D. **Lancet** 1989 Dec 9;2(8676):1407–8

Erythropoietin for patient refusing blood transfusion [letter] Davis HP. **Lancet** 1990 Aug 11;336(8711):384–5

Beneficial effect of pre–transfusion warming of platelets prepared from buffy coats [letter] Fijnheer R, et al. **Lancet** 1990 Jun 23;335(8704):1524

Acute haemolysis after ABO–incompatible platelet transfusions [letter; comment] Murphy MF, et al. **Lancet** 1990 Apr 21;335(8695):974–5 Comment on: Lancet 1990 Jan 20;335(8682):142–3.

Preliminary trial of specific targeting therapy against malignant glioma. Nitta T, et al. **Lancet** 1990 Feb 17; 335(8686):368–71

Effect of haemodilution on transfusion requirements in liver resection [see comments] Sejourne P, et al. **Lancet** 1989 Dec 9;2(8676):1380–2 Comment in: Lancet 1990 Jan 27;335(8683):227–8.

Effect of perioperative blood transfusion on recurrence of Crohn's disease [letter] Williams JG, et al. **Lancet** 1989 Dec 23–30;2(8678–8679):1524

A minor's refusal of treatment. Rhodes AM. **MCN** 1990 Jul–Aug;15(4):261

The effect of perioperative blood transfusions on long–term survival of colon cancer patients. Waymack JP, et al. **Milit Med** 1989 Oct;154(10):515–7

The clinical significance of blood transfusion at the time of radical hysterectomy. Eisenkop SM, et al. **Obstet Gynecol** 1990 Jul;76(1):110–3

Blood transfusion in contemporary obstetric practice. Klapholz H. **Obstet Gynecol** 1990 Jun;75(6):940–3

The management of severe erythroblastosis fetalis by fetal transfusion: survival of transfused adult erythrocytes in the fetus. Pattison N, et al. **Obstet Gynecol** 1989 Dec; 74(6):901–4

Use of fresh frozen plasma (FFP) in the treatment of haemolytic uraemic syndrome (HUS) [letter] Vickers DW, et al. **Pediatr Nephrol** 1989 Apr;3(2):225–6

Comparison of red cell transfusion and polyethylene glycol–modified adenosine deaminase therapy in an adenosine deaminase–deficient child: measurement of erythrocyte deoxyadenosine triphosphate as a useful tool. Bory C, et al. **Pediatr Res** 1990 Aug;28(2):127–30

Blood component therapy. New guidelines for avoiding complications. Tarnower A, et al. **Postgrad Med** 1989 Dec; 86(8):48–51, 55–8, 63–5

Hematopoietic growth factors in transfusion medicine. Proceedings of the XXth annual scientific symposium of the American Red Cross. Bethesda, Maryland, May 10–11, 1989. **Prog Clin Biol Res** 1990;338:1–176

Availability of exchange blood transfusion and plasma exchange in treatment of acute liver failure. Fujiwara K, et al. **Prog Clin Biol Res** 1990;337:221–2

Solid phase platelet crossmatching versus complement dependent lymphocytotoxicity—clinical utility. Lane D, et al. **Prog Clin Biol Res** 1990;337:59–62

Correction of hemorrhagic shock–induced liver hypoxia with whole blood, Ringer's solution or with hetastarch. Mäkisalo HJ, et al. **Res Exp Med (Berl)** 1989;189(6):397–407

Complement deficiency and neutrophil dysfunction as risk factors for bacterial infection in newborns and the role of granulocyte transfusion in therapy. Berger M. **Rev Infect Dis** 1990 May–Jun;12 Suppl 4:S401–9 (47 ref.)

Is there a use for stabilised human serum in the treatment of Scoline apnoea? A case report. Mets B, et al. **S Afr Med J** 1990 Mar 17;77(6):311–2

Platelet transfusion therapy for the cancer patient. Heyman MR, et al. **Semin Oncol** 1990 Apr;17(2):198–209 (77 ref.)

In vivo activation of lymphokine–activated killer activity with interleukin–2: prospects for combination therapies. Sosman JA, et al. **Semin Oncol** 1990 Feb;17(1 Suppl 1):22–30; discussion 38–41 (62 ref.)

Decreasing homologous blood transfusion in spinal surgery by use of the cell saver and predeposited blood. Mann DC, et al. **Spine** 1989 Dec;14(12):1296–300

Superiority of soluble antigen extracts and anti–thymocyte globulin over whole blood and cytotoxic agents in inducing allograft prolongation. Burke S, et al. **Surg Forum** 1978; 29:360–2

Effects of citrated plasma on pulmonary capillary permeability. Mayer JE Jr, et al. **Surg Forum** 1978;29:185–7

Breast cancer survival and perioperative blood transfusion. Crowe JP, et al. **Surgery** 1989 Nov;106(5):836–41

An experimental assessment of the effect of blood transfusion on susceptibility to bacterial infection. Galandiuk S, et al. **Surgery** 1990 Sep;108(3):567–71

Effect of blood transfusions on immune function. Part VI. Effect on immunologic response to tumor. Waymack JP, et al. **Surgery** 1990 Aug;108(2):172–7; discussion 177–8

Blood conservation in coronary artery bypass surgery: prediction with assistance of a computer model. Bilfinger TV, et al. **Thorac Cardiovasc Surg** 1989 Dec;37(6):365–8

Research opportunities in transfusion medicine. Report from an American Association of Blood Banks Think Tank. **Transfusion** 1989 Oct;29(8):711–42

Cytomegalovirus infections in seropositive patients after transfusion. The effect of red cell storage and volume. Adler SP, et al. **Transfusion** 1989 Oct;29(8):667–71

Serum alanine aminotransferase (ALT) assay and incidence of posttransfusion non–A,non–B hepatitis [letter] Barcena Marugan R, et al. **Transfusion** 1989 Oct;29(8):751

The relationship of blood transfusion, tumor staging, and cancer recurrence. Blumberg N, et al. **Transfusion** 1990 May;30(4):291–4

Preparation of white cell–depleted blood. Comparison of two bedside filter systems. Böck M, et al. **Transfusion** 1990 Jan; 30(1):26–9

Mechanisms of transfusion–induced immunosuppression. Brunson ME, et al. **Transfusion** 1990 Sep;30(7):651–8 (129 ref.)

Potassium levels in irradiated blood [letter; comment] Ferguson DJ. **Transfusion** 1989 Oct;29(8):749–50 Comment on: Transfusion 1989 Feb;29(2):185.

Incidence of red cell antibodies after multiple blood transfusion. Fluit CR, et al. **Transfusion** 1990 Jul–Aug; 30(6):532–5

The in vivo survival of human red cells with low oxygen affinity prepared by the osmotic pulse method of inositol hexaphosphate incorporation. Franco R, et al. **Transfusion** 1990 Mar–Apr;30(3):196–200

Red blood cell mass in autologous and homologous blood units. Implications for risk/benefit assessment of autologous blood crossover and directed blood transfusion. Goodnough LT, et al. **Transfusion** 1989 Nov–Dec; 29(9):821–2

Determinants of blood product use during extracorporeal membrane oxygenation [editorial] Green TP, et al. **Transfusion** 1990 May;30(4):289–90

The 30–minute rule for reissuing blood: are we needlessly discarding units? [published erratum appears in Transfusion 1990 Feb;30(2):103] Hamill TR. **Transfusion** 1990 Jan; 30(1):58–62 (48 ref.)

Studies with nonradioisotopic sodium chromate. II. Single– and double–label 52Cr/51Cr posttransfusion recovery estimations. Heaton WA, et al. **Transfusion** 1989 Oct; 29(8):703–7

Properties of platelet concentrates prepared after extended whole blood holding time. Holme S, et al. **Transfusion** 1989 Oct;29(8):689–92

Platelet transfusions administered to patients with splenomegaly. Hussein MA, et al. **Transfusion** 1990 Jul–Aug;30(6):508–10

The polymerase chain reaction in transfusion medicine. Jackson JB. **Transfusion** 1990 Jan;30(1):51–7 (73 ref.)

Red cell transfusion therapy for anemia in patients with AIDS and ARC: incidence, associated factors, and outcome. Jacobson MA, et al. **Transfusion** 1990 Feb; 30(2):133–7

Estimating the incubation time distribution and expected number of cases of transfusion–associated acquired immune deficiency syndrome. Kalbfleisch JD, et al. **Transfusion** 1989 Oct;29(8):672–6

Controversies in transfusion medicine. Alanine aminotransferase screening of blood donors: pro. Klein HG. **Transfusion** 1990 May;30(4):363–7

The National Heart, Lung, and Blood Institute and transfusion medicine. Lenfant C, et al. **Transfusion** 1990 Feb;30(2):97–100

Physiologic effects of acute anemia: implications for a reduced transfusion trigger. Levine E, et al. **Transfusion** 1990 Jan;30(1):11–4

Absence of graft–versus–leukemia effect of standard hemotherapy in patients with acute myeloblastic leukemia [letter] Lopez J, et al. **Transfusion** 1990 Feb;30(2):191–2

Blood use during extracorporeal membrane oxygenation. McCoy–Pardington D, et al. **Transfusion** 1990 May; 30(4):307–9

Ethics and the journal Transfusion [editorial] McCullough J, et al. **Transfusion** 1989 Oct;29(8):665–6

Donor selection for alloimmunized patients by platelet crossmatching of random–donor platelet concentrates. O'Connell BA, et al. **Transfusion** 1990 May;30(4):314–7

What's happening to the epidemic of transfusion–associated AIDS? [editorial] Peterman TA, et al. **Transfusion** 1989 Oct;29(8):659–60

The relative roles of major and minor histocompatibility antigens in the induction of immunologic unresponsiveness by blood transfusion. Quigley RL, et al. **Transfusion** 1989 Nov–Dec;29(9):789–93

Blood component therapy during the neonatal period: a national survey of red cell transfusion practice, 1985. Sacher RA, et al. **Transfusion** 1990 Mar–Apr;30(3):271–6

When should antibody screening tests be done for recently transfused patients? Shulman IA, et al. **Transfusion** 1990 Jan;30(1):39–41

Transfusion of PNH patients [letter] Sirchia G, et al. **Transfusion** 1990 Jun;30(5):479

Removal of white cells from red cells by transfusion through a new filter. Sirchia G, et al. **Transfusion** 1990 Jan; 30(1):30–3

Controversies in transfusion medicine. Alanine aminotransferase screening of blood donors: con. Spurling CL, et al. **Transfusion** 1990 May;30(4):368–73

How low can we go? Is there a way to know? [editorial] Stehling L, et al. **Transfusion** 1990 Jan;30(1):1–3

Commentary on small–volume red cell transfusions for neonatal patients. Strauss RG, et al. **Transfusion** 1990 Jul–Aug;30(6):565–70

Directed and limited–exposure blood donations for infants and children. Strauss RG, et al. **Transfusion** 1990 Jan; 30(1):68–72

Can the efficacy of white cell depletion as a means to eliminate transfusion–transmitted AIDS ever be proved in man? [letter; comment] Strauss RG. **Transfusion** 1990 Feb; 30(2):191 Comment on: Transfusion 1989 Jun;29(5):460–2.

Filtration. A method to prepare white cell–poor platelet concentrates with optimal preservation of platelet viability. van Marwijk Kooy M, et al. **Transfusion** 1990 Jan; 30(1):34–8

A new radioimmunoassay for the detection of small amounts of white cells and platelets in red cell concentrates: implications for blood transfusion. Webster MR, et al. **Transfusion** 1990 Feb;30(2):117–25

Informed consent for blood transfusion: brief historical survey and summary of a conference. Widmann FK. **Transfusion** 1990 Jun;30(5):460–70

Invalidation of antiglobulin tests by a high thermal amplitude cryoglobulin. Ylagen ES, et al. **Transfusion** 1990 Feb; 30(2):154–7

Donor–specific transfusion via the portal venous route induces prolongation of H–2–compatible but not H–2–incompatible cardiac graft survival. Górecki D, et al. **Transpl Int** 1989 Dec;2(4):199–202

Dendritic cells in the blood transfusion effect. Austyn JM, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1434

Donor–specific T cell alloreactivity in relation to 1 haplotype–mismatched blood transfusion prior to

living–donor renal transplantation. Bakran A, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):748–9

Influence of number and timing of serum transfusions on liver allograft survival in rats. Baquerizo A, et al. **Transplant Proc** 1990 Aug;22(4):2020–2

Donor–specific transfusion in living–unrelated renal donor–recipient combinations. Belzer FO, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1514–5

Sensitization following donor–specific transfusions detected by 51Cr release assays—CyA modulation of early rejection effects. Birtch AG, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):805–7

Randomized clinical trial of cyclosporine or donor specific transfusions in high risk living–related donor transplantation. Bordes–Aznar J, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2276–7

Kinetics of antidonor mixed lymphocyte culture responses in donor specific transfusions plus azathioprine–treated patients. Burlingham WJ, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 3):2255–7

Donor specific blood transfusion in renal transplantation: analysis of 22 cases. Casadei DH, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2274–5

Early acute tubular necrosis, late rejection in pediatric renal transplantation with donor–specific transfusions. Chavers BM, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1526–7

Optimization of donor specific blood transfusion in kidney transplantation. Cheigh JS, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 3):2250–1

Modulation of T cell subsets in immune responses to alloantigens by allo–specific blood transfusion. Chen–Woan M, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1476–8

Blood transfusion plus allograft—but not blood transfusion alone—induce IL 2–producing suppressor cells in Lew–1A recipients of LEW–1W heart allograft. Chevalier S, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):544–6

Attempts to ameliorate transfusion–induced sensitization to heart grafts by additional multiple blood transfusions. de Bruin RW, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1425–6

Transfusion effect on graft–versus–host disease and leukemic relapse in HLA–matched bone marrow transplantation. de Gast GC, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2700

T cell–specific monoclonal antibodies abrogate the blood transfusion effect on kidney allograft survival in rhesus monkeys. den Butter G, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 2):1461–3

The effect of donor–specific blood transfusion on in vitro alloreactive precursor cell frequencies. Duffy B, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):753–4

Donor–specific transfusions in HLA–one haplotype–matched kidney transplantation. Eklund B, et al. **Transplant Proc** 1990 Feb;22(1):151–2

Serologic response to donor–specific blood transfusions under azathioprine immunosuppression. Etheredge EE, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):746–7

Reduction of anti–HLA antibody using small–dose single–donor blood transfusion. Ettenger R, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):740–2

Blood transfusions lower natural killer cell activity. Ford CD, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1456–7

Enhancement of renal allografts by simultaneous cyclosporine and donor–specific blood transfusion. Francis DM, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1464–6

Donor specific blood transfusions do not improve graft survival in living related donor transplantation. Garcia VD, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2271–3

Pretransplant transfusion of donor–specific class I major histocompatibility complex antigen in dogs. Gores PF, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1407–8

Blood transfusion induces alterations in the circulation of immunoglobulin–secreting cells and activates helper T cells for Ig synthesis. Górski A, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 2):1455

Effect of posttransplant injection of peripheral blood lymphocytes on skin graft prolongation in mice treated with antilymphocyte serum (ALS) or ALS plus donor bone marrow. Gozzo JJ, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1409–10

There is no need to give blood transfusions as pretreatment for renal transplantation in the cyclosporine era. Groth CG. **Transplant Proc** 1987 Feb;19(1 Pt 1):153–4

The effects of donor specific transfusion and cyclosporine A on graft outcome. Haberal M, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2269–70

Establishment of a human T–cell hybridoma producing an MLR suppressing factor: relationship to the mechanism of action of donor–specific transfusion. Haisa M, et al. **Transplant Proc** 1990 Aug;22(4):1977–80

The donor transfusion phenomenon in a rat kidney allograft model. Heineman E, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1467–9

Modified graft rejection by transfusion of the donor: a role for deadritic cells. Heineman E, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1470–2

Long–term residual cyclosporine levels following short–term administration in various allograft models demonstrating extensive survival prolongation. Hewitt CW, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1244–5

The mechanism of platelet–induced rat renal allograft prolongation. Hibberd AD, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 2):1411–3

Three year experience of donor specific transfusion and concomitant cyclosporine A. Hillis AN, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2248–9

Induction of suppressor cells by ultraviolet–irradiated DST in monkey skin allografts. Hoshinaga K, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):448–50

Monoclonal antibodies can reduce transfusion–induced sensitisation. Jones MC, et al. **Transplant Proc** 1990 Aug; 22(4):1791–2

Specific inhibition of heart allograft rejection by serum from liver–grafted rats. Kamada N, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):570–1

Mechanisms of immunosuppression by serum from liver grafted rats: evidence for functional clonal deletion in vivo. Kamada N, et al. **Transplant Proc** 1990 Aug;22(4):1971–2

Mechanisms of immunosuppression by serum from liver grafted rats: demonstration of suppressor cell activity in vivo and in vitro. Kamada N, et al. **Transplant Proc** 1990 Aug;22(4):1973–4

The effect of blood pretransfusion on orthotopic cardiac transplantation. Keogh A, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 3):2503

Suppression of graft versus host reactivity by a single host–specific blood transfusion to prospective donors of hemopoietic cells. Knulst AC, et al. **Transplant Proc** 1990 Aug;22(4):1975–6

Cyclosporine inhibits nonspecific transfusion–induced immunity in dogs. Kyriakides GK, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1432–3

Immunomodulation after blood transfusion in the rat. Lenhard V, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1437–8

The transfusion effect in dogs: no indication for the presence of transfusion–induced suppressor cells in the spleen. Marquet RL, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1430–1

Induction of long–term rat renal allograft survival: a specific synergistic effect of limited pretransplant cyclosporine combined with multiple nonspecific blood transfusions. Martin DC, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):462–3

Prolonged heart allograft survival following postoperative blood transfusion. Marushack MM, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1420–1

Has cyclosporine really relegated pretransplant blood transfusions to therapeutic obsolescence? Melzer JS, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):1971–3

Donor specific transfusions: a five–year experience with alternative protocols. Norman DJ, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2252–4

Transplant outcome of desensitized recipients after donor–specific transfusion. Okazaki H, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):750–2

Allogeneic lymphocytes are rejected by DST–pretreated, CyA–treated rats with accepted heart allograft from the same donor in a hyperacute fashion. Olszewski WL, et al. **Transplant Proc** 1990 Aug;22(4):1985–6

Synergistic effect of UV–irradiated donor–specific transfusions with peritransplant cyclosporine on cardiac allograft survival in rats. Oluwole S, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):451–3

The blood transfusion effect and colorectal cancer recurrence. Parrott NR, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 2):1475

The importance of sharing major histocompatibility complex and minor antigens between blood and graft donors in the blood transfusion effect. Peugh WN, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):744–5

Suppression of donor lymphocyte reactivity by pretreatment with recipient type UV–irradiated blood. Polijak–Blaži M, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):944–5

The effect of repeated transfusion and cyclosporine A administration on alloantibody levels in sensitized rats. Power DA, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1422

Low–dose FK 506 inhibits sensitisation after blood transfusions. Propper DJ, et al. **Transplant Proc** 1990 Aug; 22(4):1649–51

Spontaneous reversal of rejection episodes in renal allografted dogs. Roper L, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 2):1423–4

Renal retransplantation from living related donors using donor specific blood transfusions. Shapira Z, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2280–1

Effect of prostaglandin inhibitors on transfusion–induced immune suppression. Shelby J, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1435–6

Suppression of specific allograft reactivity of normal rat lymphocytes by treatment in vitro with serum from liver–grafted rats. Shinomiya T, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):558–9

The blood transfusion effect: characterization of T cell alloantigen–specific receptors by sera from transfused mice. Singal DP, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1429–31

The role of suppressor cells in the blood transfusion phenomenon. Singh SK, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 2):1442–4

Promotion of tumor growth by blood transfusions. Singh SK, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1473–4

Abrogation of cyclosporine/transfusion–induced enhancement of rabbit skin allografts by increased cyclosporine dosage. Smit WJ, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1427–8

Does cyclosporine eliminate the need for preparatory blood transfusions? Stevens DW, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 3):1850–1

Antiidiotypic antibody activity in patients receiving donor specific transfusions and cyclosporine A. Stewart KN, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2262–3

Induction of anti–F(ab)2 gamma antibodies by buffy coat transfusions and their effect in kidney transplantation. Süsal C, et al. **Transplant Proc** 1990 Aug;22(4):1893–4

Examination of the clonal deletion hypothesis following transfusions in rat cardiac transplants. Takiff H, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1452–4

The combined effect of deoxyspergualin and a donor–specific blood transfusion on canine kidney transplantation. Tanabe K, et al. **Transplant Proc** 1990 Aug;22(4):1620–1

Fc–dependent suppression of in vitro B–cell response by IgG of alloimmunized rats. Terness P, et al. **Transplant Proc** 1990 Aug;22(4):1957–9

Anti–idiotypic autoantibodies after donor–specific blood transfusions. Toma H, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):755–7

Association between blood transfusion, HLA–DRW6, and response to dinitrochlorobenzene skin test. Tsakiris D, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):705–7

Evaluation of the risk factors associated with donor specific blood transfusion. Vaidya S, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2268

B cell antibodies after planned transfusions. van den Berg–Loonen PM, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):743

Blood transfusion induces specific cytotoxic cells. Wood KJ, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1458–60

Identification of cell population mediating suppression after blood transfusion. Wood ML, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1448–9

Suppressed antidonor MLC responses in renal transplant candidates conditioned with donor–specific transfusions that carry the recipient's noninherited maternal HLA haplotype. Bean MA, et al. **Transplantation** 1990 Feb; 49(2):382–6

Association of donor–specific blood transfusion enhancement of rat renal allografts with accelerated development of antiidiotypic antibodies and reduced alloantibody responses. Downey WE 3d, et al. **Transplantation** 1990 Jan; 49(1):160–6

Partial tolerance in rat renal allograft recipients following multiple blood transfusions and concomitant cyclosporine. Hewitt CW, et al. **Transplantation** 1990 Jan;49(1):194–8

Selective effect of noncytotoxic blocking alloantibodies produced after platelet transfusions on MLC, and mitogen and soluble antigen–induced responses of human lymphocytes. Horuzsko A, et al. **Transplantation** 1990 Sep; 50(3):497–501

The transfusion effect in cadaver kidney transplants—yes or no. Iwaki Y, et al. **Transplantation** 1990 Jan;49(1):56–9

Blood transfusion–induced suppression of delayed–type hypersensitivity to allogeneic histocompatibility antigens. Knulst AC, et al. **Transplantation** 1989 Nov;48(5):829–33

Evidence that HLA class II disparity is required for the induction of renal allograft enhancement by donor–specific blood transfusions in man. Lazda VA, et al. **Transplantation** 1990 Jun;49(6):1084–7

Depression of peripheral lymph node lymphocyte traffic in sheep following central venous allogeneic whole–blood transfusion. Moore TC, et al. **Transplantation** 1990 Apr; 49(4):838–43

Living–donor renal transplantation in SEOPF. The impact of histocompatibility, transfusions, and cyclosporine on outcome. Sanfilippo F, et al. **Transplantation** 1990 Jan; 49(1):25–9

Moderate effect of preoperative blood transfusions on pancreas allograft survival in rats and dogs. Spillenaar–Bilgen EJ, et al. **Transplantation** 1990 Jul; 50(1):21–5

An increase of donor–specific T helper precursors resulting from blood transfusions. Vandekerckhove BA, et al. **Transplantation** 1990 May;49(5):987–91

Increase of donor–specific cytotoxic T lymphocyte precursors after transfusion. Vandekerckhove BA, et al. **Transplantation** 1989 Oct;48(4):672–5

HIV: implications for blood transfusion and banking in Africa. Carswell JW. **Trop Doct** 1990 Jan;20(1):42–3

Treatment of severe anaemia in children in a rural hospital. Dorward JA, et al. **Trop Doct** 1989 Oct;19(4):155–8

A rare case of Rh immunization [letter] Govoni M, et al. **Vox Sang** 1990;58(2):137

A simple protocol for the screening and preliminary identification of antibodies to human IgA using unpurified proteins in the passive haemagglutination test. Hunt A, et al. **Vox Sang** 1990;59(1):30–3

A new platelet–specific antigen, Naka, involved in the refractoriness of HLA–matched platelet transfusion. Ikeda H, et al. **Vox Sang** 1989;57(3):213–7

Leukocyte–poor platelet concentrates at the bedside by filtration through Sepacell–PL. Miyamoto M, et al. **Vox Sang** 1989;57(3):164–7

Serological and immunochemical specificity of a human autoanti–Gerbich–like antibody. Poole J, et al. **Vox Sang** 1990;58(4):287–91

Red cell alloantibodies in patients with thalassemia. Spanos T, et al. **Vox Sang** 1990;58(1):50–5

Absence of seroconversion in a PCR–positive person 18

months after transfusion of HIV-infected blood [letter] Vaira D, et al. **Vox Sang** 1989;57(3):220–1

Retrospective screening for HTLV I infections in 68 acute leukemic patients multiply transfused before 1985. Visani G, et al. **Vox Sang** 1990;58(1):67–8

Correlation of monocyte-monolayer assay results, number of erythrocyte-bound IgG molecules, and IgG subclass composition in the study of red cell alloantibodies other than D. Zupańska B, et al. **Vox Sang** 1990;58(4):276–80

The effects of blood transfusion on the prognosis of patients with gastric cancer. Kampschöer GH, et al. **World J Surg** 1989 Sep–Oct;13(5):637–43 (37 ref.)

[The effect of whole blood or balanced solution transfusion on heart contractility during the shock period—experimental study] Gao WY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Dec;3(4):293–5 (Chi)

[Further development of the transfusion service in Czechoslovakia] Kvasnička J, et al. **Cas Lek Cesk** 1989 Jul 28;128(31):966–9 (Eng. Abstr.) (Cze)

[The effect of HLA alloimmunization and other factors on the effectiveness of thrombocyte concentrates] Pittrová H, et al. **Cas Lek Cesk** 1990 Jun 15;129(24):751–3 (Eng. Abstr.) (Cze)

[Hematology and the transfusion service. A collection of guidelines, methodologic instructions, technical standards, methodologic lists and research methods] Dobrý E, et al. **Zdrav Aktual** 1987;211:1–310 (Cze)

[Recommendations from the 12th Scandinavian meeting on transfusion medicine] Eklund J, et al. **Nord Med** 1990; 105(4):119–20 (Dan)

[Immunologic consequences of surgery, anesthesia and blood transfusion. Surgical immunosuppression] Nielsen HJ, et al. **Ugeskr Laeger** 1989 Sep 11;151(37):2348–52 (30 ref.) (Eng. Abstr.) (Dan)

[Blood transfusion and hepatitis: hepatitis C virus detection] Ranki M, et al. **Duodecim** 1990;106(2):147–9 (14 ref.) (Fin)

[Infection by the HIV virus and transfusions. Study of 38 pediatric cases] Kone I, et al. **Arch Fr Pediatr** 1989 Aug–Sep;46(7):499–502 (Eng. Abstr.) (Fre)

[Blood transfusion, short perioperative intraportal chemotherapy and recurrence of colorectal cancer] Harder F, et al. **Chirurgie** 1989;115(10):759–65; discussion 765–6 (Eng. Abstr.) (Fre)

[Treatment of hypovolemia after upper digestive hemorrhage caused by portal hypertension in cirrhosis] Bernuau J. **Gastroenterol Clin Biol** 1990;14(1 (Pt 2)):25B–28B (31 ref.) (Fre)

[Artificial blood: the future of blood transfusion? I. Hemoglobin solutions] Guyot M, et al. **J Pharm Belg** 1990 Jan–Feb;45(1):20–8 (76 ref.) (Eng. Abstr.) (Fre)

[Systematic blood transfusions in adult homozygote sickle-cell anemia. Study of 11 cases followed for 5 to 10 years] Laulan S, et al. **Presse Med** 1990 Apr 28;19(17):785–9 (Eng. Abstr.) (Fre)

[Transfusion technology. Methods of scientific information] Faure A. **Rev Fr Transfus Hemobiol** 1989 Oct;32(5):379–89 (Fre)

[The erythrocyte phenotype Rh: 32,–46: transfusional and obstetric importance] Le Pennec PY, et al. **Rev Fr Transfus Hemobiol** 1989 Sep;32(4):291–7 (Eng. Abstr.) (Fre)

[Introduction of a new card for the "bedside test" (published erratum appears in Anaesthesist 1990 Jun;39(6):340)] Meinshausen E, et al. **Anaesthesist** 1989 Oct;38(10):555–7 (Eng. Abstr.) (Ger)

[A new procedure for decreasing transfusion risk in administration of fresh frozen plasma] Tryba M. **Anaesthesist** 1989 Oct;38(10):553–4 (Eng. Abstr.) (Ger)

[Puerperal infection in cesarean section patients with perioperative blood transfusion] Weissenbacher ER, et al. **Arch Gynecol Obstet** 1989;245(1–4):305–7 (Ger)

[Transfusion-associated HIV infection] Frey-Wettstein M. **Beitr Infusionther** 1989;24:18–26 (12 ref.) (Eng. Abstr.) (Ger)

[Problems in the production of human albumin solutions] Fürst G, et al. **Beitr Infusionther** 1989;24:83–90 (Eng. Abstr.) (Ger)

[The significance of HTLV-1 and HIV-2 for transfusion medicine in Europe] Gürtler L. **Beitr Infusionther** 1989; 24:27–32 (7 ref.) (Eng. Abstr.) (Ger)

[Post-transfusion non-A, non-B hepatitis: is a specific test in sight?] Kühnl P, et al. **Beitr Infusionther** 1989;24:60–8 (11 ref.) (Eng. Abstr.) (Ger)

[Strategies for using albumin] Laubenthal H. **Beitr Infusionther** 1989;24:102–11 (46 ref.) (Eng. Abstr.) (Ger)

[Prevention of transfusion-associated virus infections in hemophilic patients needing replacement therapy] Meili EO. **Beitr Infusionther** 1989;24:46–55 (Eng. Abstr.) (Ger)

[Thrombocyte-specific antigens/antibodies and their clinical importance] Mueller-Echardt C, et al. **Beitr Infusionther** 1989;24:221–30 (50 ref.) (Eng. Abstr.) (Ger)

[Preparation-related effects on the coagulation activity of plasma] Schmitt H. **Beitr Infusionther** 1989;24:91–4 (4 ref.) (Eng. Abstr.) (Ger)

[Virus safety of labile plasma products from the German viewpoint] Stephan W. **Beitr Infusionther** 1989;24:40–5 (15 ref.) (Eng. Abstr.) (Ger)

[Virus safety of fresh frozen plasma] Sugg U. **Beitr Infusionther** 1989;24:56–9 (8 ref.) (Eng. Abstr.) (Ger)

[Following curative resection of colorectal cancer, portal chemotherapy especially benefits non-transfused patients] Harder F, et al. **Chirurg** 1990 Apr;61(4):280–5 (Eng. Abstr.) (Ger)

[Commentary on the agreement on blood transfusion] Weissauer W. **Chirurg** 1989 Jul;60(7):suppl 108–11 (Ger)

[Agreement between the Professional Association of German Anesthetists and the Professional Association of German Surgeons on cooperation in blood transfusions] Zinganell K, et al. **Chirurg** 1989 Jul;60(7):supply 107–8 (Ger)

[The first clinical experience with cryopreserved erythrocyte concentrate] Pfefferkorn S, et al. **Folia Haematol (Leipz)** 1989;116(5):793–7 (Eng. Abstr.) (Ger)

[HIV-/HTLV-I infection. Little danger through blood transfusion (news)] Marcus U. **Fortschr Med** 1989 Jul 30; 107(22):8 (Ger)

[Blood transfusions and prognosis following curative resection of colorectal cancer: is there an association?] Laffer U, et al. **Helv Chir Acta** 1989 Dec;56(4):461–4 (Eng. Abstr.) (Ger)

[Neoplasia of the adrenal gland—surgical problems, approaches and the need for blood] Weissmüller J, et al. **Helv Chir Acta** 1989 Aug;56(3):369–70 (Eng. Abstr.) (Ger)

[Recent studies of the incidence of IgG allo-antibodies in blood transfusion recipients] Lynen R, et al. **Infusionstherapie** 1989 Dec;16(6):273–5 (Ger)

[A screening procedure for determining tetanus antibody concentrations in blood products] Schütt KH, et al. **Infusionstherapie** 1990 Jun;17(3):156–9 (Eng. Abstr.) (Ger)

[Comparative study of the side effects and donor safety in preparatory cell collection using the cell separators CS 3,000 and V 50] Taborski U, et al. **Infusionstherapie** 1989 Aug;16(4):186–8 (Eng. Abstr.) (Ger)

[Neonatal alloimmunothrombocytopenia—effect of combination therapy consisting of i.v. immunoglobulin administration and transfusion of PLA1-negative maternal thrombocytes] Choudhury AR, et al. **Monatsschr Kinderheilkd** 1989 Aug;137(8):458–62 (Eng. Abstr.) (Ger)

[Hemolyzing antibodies to markers of the P blood factor system as a problem in blood transfusion and pregnancy. With reference to serology, biochemistry and genetics] Pausch V, et al. **Wien Klin Wochenschr** 1990 Feb 2; 102(3):80–90 (Eng. Abstr.) (Ger)

[Possibilities for saving homologous blood in heart surgery] Waldenberger FR, et al. **Wien Klin Wochenschr** 1989 Nov 10;101(21):738–40 (Eng. Abstr.) (Ger)

[Autologous and heterologous blood transfusion in obstetrics] Umbach GE, et al. **Z Geburtshilfe Perinatol** 1989 Jul–Aug; 193(4):172–7 (Eng. Abstr.) (Ger)

[Progress in the development of a detection test for parenteral non-A, non-B hepatitis—results of enzyme immunoassay for anti-hepatitis C virus] Wiese M, et al. **Z Gesamte Inn Med** 1990 Mar 1;45(3):80–3 (Eng. Abstr.) (Ger)

[AIDS and blood transfusion] Baumgarten K. **Z Hautkr** 1990 Jul;65(7):677–80, 683 (Eng. Abstr.) (Ger)

[Blood transfusions in hemorrhage of the upper digestive tract] Loperfido S, et al. **Minerva Chir** 1989 Oct 15; 44(19):2073–6 (Eng. Abstr.) (Ita)

[Bone metabolism in thalassemic children with multiple transfusions. Compartmental analysis of 99mTc-Sn-MDP kinetics] Mele M, et al. **Radiol Med (Torino)** 1989 Nov; 78(5):455–60 (Eng. Abstr.) (Ita)

[Effect of recombinant human erythropoietin on reduce of homologous blood transfusion in open heart surgery] Shinonaga M, et al. **Kyobu Geka** 1990 Apr;43(4):276–9 (Eng. Abstr.) (Jpn)

[Therapeutic implication of plasma C3 rich fraction against bacterial infection in surgical patients] Inoue S. **Nippon Geka Gakkai Zasshi** 1989 Jul;90(7):988–98 (Eng. Abstr.) (Jpn)

[Clinical efficacy of recombinant interleukin-2 for renal cell carcinoma and the effect of blood transfusion upon the immune response of these patients] Fujioka T, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb;81(2):296–303 (Eng. Abstr.) (Jpn)

[The effect of donor specific blood transfusion (DST) on graft survival—intermittent coverage of cyclophosphamide] Kasai I, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Mar;81(3):367–71 (Eng. Abstr.) (Jpn)

[Spontaneous remission of four months' duration in hypoplastic leukemia with tetraploid chromosome after blood transfusions and infection] Maekawa T, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Aug;52(5):849–57 (Eng. Abstr.) (Jpn)

[The effects of transfusion of irradiated blood upon cellular immune response in patients underwent open heart surgery] Togashi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep;37(9):1958–64 (Eng. Abstr.) (Jpn)

[The determinant factors for open heart surgery with non-blood transfusion—analysis by quantitative theory class II] Yamaguchi A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jul;37(7):1347–52 (Eng. Abstr.) (Jpn)

[Blood transfusion and the problems in the therapy of anemia] Muto Y. **Nippon Naika Gakkai Zasshi** 1990 May 10; 79(5):642–5 (Jpn)

[Clinical significance of red cell autoantibody assay] Tohyama H. **Nippon Rinsho** 1990 Feb;48 Suppl:576–9 (Jpn)

[Pretransfusion screening tests for HIV and HTLV-I in donated blood] Okubo S. **Rinsho Byori** 1989 Jul;37(7):762–7 (Eng. Abstr.) (Jpn)

[Blood transfusion in cancer of the colon and rectum. Friend or foe of the surgeon? A review] Wiig JN. **Tidsskr Nor Laegeforen** 1990 Feb 10;110(4):503–7 (31 ref.) (Eng. Abstr.) (Nor)

[Use of vincristine-loaded blood platelets, danazol and gamma globulin in the treatment of patients with idiopathic thrombocytopenic purpura] Górski J, et al. **Acta Haematol Pol** 1989 Jan–Jun;20(1):65–71 (Eng. Abstr.) (Pol)

[Studies of the possibility of preservation of leukocyte concentrates] Rosiek A, et al. **Acta Haematol Pol** 1989 Jan–Jun;20(1):42–6 (Eng. Abstr.) (Pol)

[Usefulness of transfusion of a leukocytic mass in the treatment of staphylococcal septicemia in a newborn infant with a disorder of phagocytosis] Godula-Stuglik U, et al. **Pediatr Pol** 1989 Feb;64(2):100–3 (Pol)

[Immunomodulating effect of blood transfusion] Gaciong Z, et al. **Pol Arch Med Wewn** 1987 Jul;78(1):52–6 (Pol)

[Changes in central hemodynamics and acid-base equilibrium after programmed infusion therapy of pathologic blood loss in labor] Osadchaia OV, et al. **Akush Ginekol (Mosk)** 1989 Aug;(8):46–8 (Eng. Abstr.) (Rus)

[Choice of the optimal variant of blood loss replacement during reconstructive surgery of the major vessels with the object of preventing postoperative anemia] Cherednichenko MA, et al. **Anesteziol Reanimatol** 1990 May–Jun;(3):35–7 (Eng. Abstr.) (Rus)

[Use of prostaglandin E2 in the complex treatment of acute renal failure] Glants RM, et al. **Gematol Transfuziol** 1990 May;35(5):35–8 (Rus)

[Articles on hematology, transfusion science and biotechnology published in Soviet medical journals in 1988] Kaveshnikova BF. **Gematol Transfuziol** 1989 Dec; 34(12):55–8 (Rus)

[Effect of infusion hemodilution on hemodynamic indicators and oxygen transport homeostasis during planned surgical procedures in children] Lekmanov AU, et al. **Gematol Transfuziol** 1990 May;35(5):6–9 (Eng. Abstr.) (Rus)

[Treatment of acquired aplastic anemia in children with Soviet-produced antilymphocyte globulin] Nikitin DO, et al. **Gematol Transfuziol** 1990 Jan;35(1):23–5 (Eng. Abstr.) (Rus)

[Production of transfusion media on the base of erythrocytes and plasma substitute solutions] Selivanov EA, et al. **Gematol Transfuziol** 1990 May;35(5):23–5 (66 ref.) (Eng. Abstr.) (Rus)

[Neocytapheresis] Varlamova SV. **Gematol Transfuziol** 1990 Jan;35(1):31–5 (45 ref.) (Rus)

[Intensive transfusion-infusion therapy of patients with cirrhosis of the liver] Zherebtsov LA, et al. **Gematol Transfuziol** 1990 May;35(5):9–12 (Eng. Abstr.) (Rus)

[Correction of immunologic disorders in patients with burns] Shkrob LO, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):116–9 (Eng. Abstr.) (Rus)

[Therapeutic effectiveness of preserved thrombocytic concentrates] Kompaniets AM, et al. **Klin Med (Mosk)** 1989 Dec;67(12):74–80 (Rus)

[Substitution therapy in immunologic deficiency syndromes] Iartsev MN, et al. **Pediatriia** 1989;(12):71–6 (Rus)

[Principles of current transfusiology] Kazakova LM. **Pediatriia** 1990;(4):85–8 (Rus)

[Choices in infusion-transfusion therapy of isolated trauma of the thorax and abdomen] Stazhadze LL, et al. **Sov Med** 1990;(3):108–11 (Rus)

[Indications for blood transfusion] Hollán Z. **Ter Arkh** 1989; 61(7):113–21 (Rus)

[Enhancement of the efficacy of thrombocyte transfusion in aplastic anemia by the use of plasmapheresis] Mikhallova EA, et al. **Ter Arkh** 1989;61(7):141–2 (Rus)

[The clinical efficacy of donor plasma with an elevated titer of endotoxin antibodies] Rumiantsev AG, et al. **Ter Arkh** 1989;61(8):123–6 (Rus)

[The effect of pretransplantation blood transfusions on the survival of the kidney allograft] Drannik GN, et al. **Urol Nefrol (Mosk)** 1989 Jul–Aug;(4):70–4 (76 ref.) (Rus)

[Transfusion problems in artificial blood circulation] Shanoian SA, et al. **Vestn Akad Med Nauk SSSR** 1989; (10):86–90 (15 ref.) (Eng. Abstr.) (Rus)

[Possibilities of using UV-irradiated blood in the prevention of serum hepatitis after blood transfusions during surgery] Marchenko AV, et al. **Vestn Khir** 1990 Feb;144(2):87–9 (Eng. Abstr.) (Rus)

[The role of daylight on the blood in the mechanism of the therapeutic effect of blood transfusion] Marchenko AV, et al. **Vestn Khir** 1989 Aug;144(8):114–7 (Eng. Abstr.) (Rus)

[Erythrocyte concentrate versus whole blood (letter)] Valverde Conde A. **Med Clin (Barc)** 1989 Oct 7;93(10):399 (Spa)

[Antibodies against HTLV-1 in patients undergoing multiple transfusions] Soriano V, et al. **Rev Clin Esp** 1989 Dec; 185(9):448–50 (Eng. Abstr.) (Spa)

[Renal transplantation from a related living donor: effect of donor specific blood transfusion] Fiabane A, et al. **Rev Med Chil** 1988 Oct;116(10):1003–7 (Eng. Abstr.) **(Spa)**

[31st meeting of the Spanish Association of Hematology and Hemotherapy. Córdoba, 2–4 November 1989. Abstracts] **Sangre (Barc)** 1989 Dec;34(6):525–67 **(Spa)**

[Transfusion management of a patient with multiple anti-erythrocyte antibodies (anti-c + anti-K + anti-Fyb + anti-Jkb) subjected to a valvular reoperation using extracorporeal circulation] de la Rubia J, et al. **Sangre (Barc)** 1990 Feb;35(1):78–81 (Eng. Abstr.) **(Spa)**

[Hemorrhage and transfusion in routine surgery increases the risk of delayed healing, infection and mortality] Nyström PO, et al. **Lakartidningen** 1989 Sep 6;86(36):2956–8, 2961 **(Swe)**

ADVERSE EFFECTS

Thalassemic patients are at high risk for transfusion-transmitted cytomegalovirus infections. Germenis A, et al. **Acta Haematol (Basel)** 1989;82(2):57–60

Influence of blood transfusion on recurrence, survival and postoperative infections of laryngeal cancer. Böck M, et al. **Acta Otolaryngol (Stockh)** 1990 Jul–Aug; 110(1–2):155–60

The influence of age on the latency period to AIDS in people infected by HIV through blood transfusion. Blaxhult A, et al. **AIDS** 1990 Feb;4(2):125–9

Sex ratio of human T-lymphotropic virus type I infection and blood transfusion. Chavance M, et al. **Am J Epidemiol** 1990 Mar;131(3):395–9

Branch retinal artery occlusion after platelet transfusion. Greven CM, et al. **Am J Ophthalmol** 1990 Jan 15; 109(1):105–6

Treatment of transfusional iron overload. Cohen A. **Am J Pediatr Hematol Oncol** 1990 Spring;12(1):4–8 (16 ref.)

Association of cytomegalovirus infection with increased morbidity is independent of transfusion. Curtsinger LJ, et al. **Am J Surg** 1989 Dec;158(6):606–10; discussion 610–1

Perioperative blood transfusion may conceal atypical pseudocholinesterase. Lovely MJ, et al. **Anesth Analg** 1990 Mar;70(3):326–7

Blood transfusion, anesthesia, and host defense [letter; comment] Singal DP, et al. **Anesth Analg** 1990 Jul; 71(1):102–3 Comment on: Anesth Analg 1989 Aug;69(2):163–8.

Transfusion of blood components from a donor with human T-lymphotropic virus type II (HTLV-II) infection. The Transfusion Safety Study Group. Donegan E, et al. **Ann Intern Med** 1990 Oct 1;113(7):555–6

Transfusion-associated acute Chagas disease acquired in the United States. Grant IH, et al. **Ann Intern Med** 1989 Nov 15;111(10):849–51

Is Trypanosoma cruzi a new threat to our blood supply? Kirchhoff LV. **Ann Intern Med** 1989 Nov 15;111(10):773–5 (16 ref.)

Transfusion-associated Trypanosoma cruzi infection in a non-endemic area. Nickerson P, et al. **Ann Intern Med** 1989 Nov 15;111(10):851–3

High prevalence of antibody to hepatitis C virus in multitransfused hemophiliacs with normal transaminase levels. Rumi MG, et al. **Ann Intern Med** 1990 Mar 1; 112(5):379–80

Nationwide survey of HTLV-I-associated myelopathy in Japan: association with blood transfusion. Osame M, et al. **Ann Neurol** 1990 Jul;28(1):50–6

Large bowel cancer: the effect of perioperative blood transfusion on outcome. Cheslyn-Curtis S, et al. **Ann R Coll Surg Engl** 1990 Jan;72(1):53–9

Blood transfusion and lung cancer recurrence [letter; comment] Keller SM, et al. **Ann Thorac Surg** 1989 Nov; 48(5):746–7 Comment on: Ann Thorac Surg 1989 Mar;47(3):346–51.

Blood transfusions and the development of cytotoxic antibodies in dialyzed patients. Matej H, et al. **Arch Immunol Ther Exp (Warsz)** 1989;37(1–2):115–20

Probable posttransfusion hepatitis during the course of cirrhosis. Eschar J, et al. **Arch Intern Med** 1967 Aug; 120(2):193–201

Blood transfusion and other risk factors for recurrence of cancer of the head and neck. Jones KR, et al. **Arch Otolaryngol Head Neck Surg** 1990 Mar;116(3):304–9

Current risk of transfusion-associated human immunodeficiency virus infection. Menitove JE. **Arch Pathol Lab Med** 1990 Mar;114(3):330–4 (46 ref.)

Kaposi's sarcoma in transfusion-associated acquired immunodeficiency syndrome. A case report and review of the literature. Padilla S, et al. **Arch Pathol Lab Med** 1990 Jan;114(1):40–2 (20 ref.)

Hemolytic transfusion reaction due to interdonor kell incompatibility. Report of two cases and review of the literature. Reiner AP, et al. **Arch Pathol Lab Med** 1990 Aug;114(8):862–4 (26 ref.)

Legal liability for transfusion injury in the acquired immunodeficiency syndrome era. Zuck TF. **Arch Pathol Lab Med** 1990 Mar;114(3):309–15 (55 ref.)

Autoreactive platelet antibody in post transfusion purpura. Minchinton RM, et al. **Aust N Z J Med** 1990 Apr; 20(2):111–5

Perioperative blood transfusion and recurrence of cancer: is there a direct association? Francis DM. **Aust N Z J Surg** 1990 Oct;60(10):743–5

Perioperative blood transfusion and gastric cancer: adverse effects or unfavourable conditions of pretreatment? Yamaguchi K, et al. **Aust N Z J Surg** 1990 Oct; 60(10):765–72

Retroviruses and blood transfusion. Contreras M, et al. **Baillieres Clin Haematol** 1990 Jan;3(1):65–77 (18 ref.)

Prevention of Chagas' disease resulting from blood transfusion by treatment of blood: toxicity and mode of action of gentian violet. Docampo R, et al. **Biomed Environ Sci** 1988 Dec;1(4):406–13 (33 ref.)

Serum hepatitis B virus DNA detects cryptic hepatitis B virus infections in multitransfused hemophilic patients. Rumi MG, et al. **Blood** 1990 Apr 15;75(8):1654–8

Blood, HIV, and compensation [news] **BMJ** 1990 Jan 13; 300(6717):67–8

ABC of transfusion. Infectious complications of blood transfusion: bacteria and parasites [see comments] Barbara JA, et al. **BMJ** 1990 Feb 10;300(6721):386–9 (0 ref.) Comment in: BMJ 1990 Mar 10;300(6725):678–9.

ABC of transfusion. Infectious complications of blood transfusion: viruses. Barbara JA, et al. **BMJ** 1990 Feb 17; 300(6722):450–3 (0 ref.)

Seizures related to blood transfusion and erythropoietin treatment in patients undergoing dialysis [see comments] Brown AL, et al. **BMJ** 1989 Nov 18;299(6710):1258–9 Comment in: BMJ 1990 Jan 6;300(6716):46.

ABC of transfusion. Immunological complications of transfusion. Contreras M, et al. **BMJ** 1990 Jan 20; 300(6718):173–6 (0 ref.)

Post-transfusion hepatitis in Trent Regional Health Authority, 1988. Flanagan P, et al. **BMJ** 1989 Sep 9; 299(6700):656–7

Infectious complications of blood transfusion [letter; comment] Prentice M, et al. **BMJ** 1990 Mar 10; 300(6725):678–9 Comment on: BMJ 1990 Feb 10;300(6721):386–9.

Post-transfusion thrombocytopenia [letter] Hart S, et al. **Br J Haematol** 1989 Oct;73(2):284–5

Comparison of one dose versus three doses of prophylactic antibiotics, and the influence of blood transfusion, on infectious complications in acute and elective colorectal surgery. Jensen LS, et al. **Br J Surg** 1990 May;77(5):513–8

Blood transfusion and survival following surgery for prostatic carcinoma. McClinton S, et al. **Br J Surg** 1990 Feb; 77(2):140–2

Transfusion-related 2-to-1 electromechanical block during surgery [letter] Doyle DJ, et al. **Can J Anaesth** 1989 Nov; 36(6):732–3

Primary stomal lymphoma. An unusual complication of ileostomy in a patient with transfusion-related acquired immune deficiency syndrome. Levecq H, et al. **Cancer** 1990 Feb 15;65(4):1028–32

The negative aspects of granulocyte transfusions. Herzig RH. **Cancer Invest** 1989;7(6):589–92

The effects of heterologous platelet transfusion on pulmonary function during ARDS. Eichacker PQ, et al. **Chest** 1990 Apr;97(4):923–6

Immunologic and virologic status of multitransfused thalassemic patients. Hwang KC, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1990 Feb;23(1):19–26

Explaining the risks of blood transfusion to patients. Hoeltge GA, et al. **Cleve Clin J Med** 1990 Jun;57(4):396–8

Transfusion of ABO-incompatible platelets causing severe haemolytic reaction. Reis MD, et al. **Clin Lab Haematol** 1989;11(3):237–40

Transfusion-related HIV exposure. **Colo Med** 1990 May; 87(5):suppl 1 p.

Ways of post-transfusion hepatitis prevention. Pintera J. **Czech Med** 1989;12(3):149–57

Perioperative blood transfusion increases the risk of recurrence in colorectal cancer. Beynon J, et al. **Dis Colon Rectum** 1989 Nov;32(11):975–9

Recurrence of colorectal cancer and perioperative blood transfusion. Is blood storage time important? Hoh H, et al. **Dis Colon Rectum** 1990 Feb;33(2):127–30

Blood transfusion and prognosis in Dukes' B and C colorectal cancer. Bentzen SM, et al. **Eur J Cancer** 1990 Apr; 26(4):457–63

Influence of blood transfusions on tumor recurrence and survival rate in colorectal carcinoma. Liewald F, et al. **Eur J Cancer** 1990 Mar;26(3):327–35

Adverse effect of blood transfusion on the long-term outcome of kidney transplantation. Bućin D. **Exp Clin Immunogenet** 1988;5(1):39–47

Clinicopathological studies and operative results of hepatocellular carcinoma with liver cirrhosis, comparing HB-associated cirrhosis to alcoholic and post-transfusion cirrhosis. Imai T, et al. **Gastroenterol Jpn** 1990 Feb; 25(1):54–60

Human immunodeficiency virus testing in acute leukemia patients transfused between 1978 and 1985: a retrospective study on 91 cases. Visani G, et al. **Haematologica (Pavia)** 1989 Jul–Aug;74(4):371–3

Current transfusion issues. Rosen NR. **Indiana Med** 1989 Oct; 82(10):764–6

Blood products: optimal use, conservation, and safety. Cone J, et al. **Instr Course Lect** 1990;39:431–4 (32 ref.)

Safety of Iowa's blood supply. Strauss R. **Iowa Med** 1990 Apr;80(4):195–8

Transfusion-associated AIDS in Mexico: clinical manifestations and incubation period [letter] Volkow P, et al. **J Acquir Immune Defic Syndr** 1990;3(8):835–6

AIDS test accuracy and transfusion-associated AIDS: comments on Saxon and Campen [letter; comment] Cantani A. **J Allergy Clin Immunol** 1989 Oct;84(4 Pt 1):564 Comment on: J Allergy Clin Immunol 1988 May;81(5 Pt 1):796–802.

Transfusion-associated graft-versus-host disease [letter] LeBlanc MH. **J Am Acad Dermatol** 1990 Jun;22(6 Pt 1):1121–2

Anaphylactic reaction associated with anti-IgA antibodies. Description of one case successfully treated by means of extracorporeal circulation. Martínez-Sanz R, et al. **J Cardiovasc Surg (Torino)** 1990 Mar–Apr;31(2):247–8 (20 ref.)

Anaphylactic/anaphylactoid reactions during cardiac surgery. Levy JH. **J Clin Anesth** 1989;1(6):426–30

Hepatitis C virus and transfusion transmitted liver disease: review. Underwood JC. **J Clin Pathol** 1990 Jun;43(6):445–7 (40 ref.)

Transfusion acquired hepatitis A in a patient with B thalassaemia major [letter] Nigro G, et al. **J Infect** 1990 Mar;20(2):175–6

Development of HTLV-I associated myelopathy (HAM) in a seroconverted patient for antibody to HTLV-I [letter] Sakai Y, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec; 52(12):1445

Posttransfusion graft-versus-host disease in infancy. Sanders MR, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):159–63 (47 ref.)

Pitfalls in diagnosing galactosemia: false negative newborn screening following red blood cell transfusion [letter] Korson MS, et al. **J Pediatr Gastroenterol Nutr** 1990 Feb; 10(2):272–3

Decreasing blood donor exposure in neonates on extracorporeal membrane oxygenation. Minifee PK, et al. **J Pediatr Surg** 1990 Jan;25(1):38–42

Congenital cytomegalovirus infection as a preventable complication of maternal transfusion. A case report. McGregor JA, et al. **J Reprod Med** 1990 Jan;35(1):61–4

Variable infection risk following allogeneic blood transfusions. Brunson ME, et al. **J Surg Res** 1990 Apr; 48(4):308–12

Informed consent, risk, and blood transfusion. Kolins J, et al. **J Thorac Cardiovasc Surg** 1990 Jul;100(1):88–91

Unusual occurrence of six anti-erythrocyte alloantibodies in an Rh(D)-negative man with myelodysplastic syndrome. Wakui H, et al. **Jpn J Med** 1989 Nov–Dec;28(6):736–9

No compensation for HIV-infected haemophiliacs [news] **Lancet** 1989 Nov 18;2(8673):1230

Two cases of HIV infection [news] Brahams D. **Lancet** 1990 Jan 13;335(8681):102

Donor HIV-1 p24 antigenaemia and course of infection in recipients Transfusion Safety Study Group [letter] Busch MP, et al. **Lancet** 1990 Jun 2;335(8701):1342

Delayed onset of HIV infection in child transfused in Italy in 1978 [letter] [see comments] Guarino A, et al. **Lancet** 1990 Jan 6;335(8680):46 Comment in: Lancet 1990 Feb 17;335(8686):425–6.

Lack of transmission of Borrelia burgdorferi by blood transfusion [letter] Halkier-Sørensen L, et al. **Lancet** 1990 Mar 3;335(8688):550

HTLV-I in Spain [letter] Soriano V, et al. **Lancet** 1990 Sep 8;336(8715):627–8

Infectivity of blood seropositive for hepatitis C virus antibodies [see comments] van der Poel CL, et al. **Lancet** 1990 Mar 10;335(8689):558–60 Comment in: Lancet 1990 Apr 21;335(8695):982–3.

A risk of blood transfusions for premature infants. Wise BV, et al. **MCN** 1990 Mar–Apr;15(2):86–9

Pathogenesis of acute graft-versus-host disease after open heart surgery. Arsura E, et al. **Med Hypotheses** 1990 Jan; 31(1):39–42

The hippocratic irrelevance variable (HIV). Dwyer JM. **Med J Aust** 1990 Feb 19;152(4):169–70

Screening of blood donations for hepatitis C virus antibody [letter] Kimber RJ. **Med J Aust** 1990 Jun 4;152(11):613

The impact of HIV infection on the hemophilia community. Whitney CK. **Ment Retard** 1989 Aug;27(4):227–8

Risks of viral transmission by blood products: current status of preventive measures. Chaplin H Jr, et al. **Mo Med** 1990 Jan;87(1):37–40

Risk associated with transfusion of HIV-antibody negative blood [letter; comment] **N Engl J Med** 1990 Mar 22; 322(12):850–1 Comment on: N Engl J Med 1989 Oct 5;321(14):941–6.

HLA-homozygous donors and transfusion-associated graft-versus-host disease [letter; comment] **N Engl J Med** 1990 Apr 5;322(14):1004–7 Comment on: N Engl J Med 1989 Jul 6;321(1):25–8.

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 5-1990. Fever three weeks after an operation for pancreatic cancer. **N Engl J Med** 1990 Feb 1;322(5):318–25

Detection of antibody to hepatitis C virus in prospectively followed transfusion recipients with acute and chronic non-A, non-B hepatitis. Alter HJ, et al. **N Engl J Med** 1989 Nov 30;321(22):1494–500

Transfusion-associated graft-versus-host disease. Anderson KC, et al. **N Engl J Med** 1990 Aug 2;323(5):315–21 (110 ref.)

Problems in transfusion therapy [editorial; comment] Charache S. **N Engl J Med** 1990 Jun 7;322(23):1666–8 Comment on: N Engl J Med 1990 Jun 7;322(23):1617–21.

Comment on: N Engl J Med 1990 Jun 7;322(23):1666–8.
Rapid development of myelopathy after HTLV–I infection acquired by transfusion during cardiac transplantation. Gout O, et al. **N Engl J Med** 1990 Feb 8;322(6):383–8
Transfusion–associated HIV infection [letter; comment] Keidan AJ. **N Engl J Med** 1990 Mar 15;322(11):775 Comment on: N Engl J Med 1989 Oct 5;321(14):947–52.
Transmission of retroviruses by blood transfusion [letter; comment] Sandler SG, et al. **N Engl J Med** 1989 Nov 9; 321(19):1338–9 Comment on: N Engl J Med 1989 May 4;320(18):1172–6.
Alloimmunization in sickle cell anemia and transfusion of racially unmatched blood [see comments] Vichinsky EP, et al. **N Engl J Med** 1990 Jun 7;322(23):1617–21 Comment in: N Engl J Med 1990 Jun 7;322(23):1666–8.
Risk of HIV transmission through blood transfusions is decreasing [news] **N Y State J Med** 1989 Dec;89(12):695–6
AIDS risk and prevention in transfusions. Hamerschlak N. **Nat Immun Cell Growth Regul** 1990;9(3):150–4
Fatal graft–versus–host disease following transfusion during open heart surgery. Aso T, et al.
Nippon Ketsueki Gakkai Zasshi 1989 Sep;52(6):1064–71
A cDNA fragment of hepatitis C virus isolated from an implicated donor of post–transfusion non–A, non–B hepatitis in Japan. Kubo Y, et al. **Nucleic Acids Res** 1989 Dec 25;17(24):10367–72
Current issues in blood component therapy: transmission of infectious diseases. Menitove JE.
Oncology (Williston Park) 1987 Jun;1(4):21–30 (46 ref.)
Transfusion safety: minimal risk of AIDS remains despite HIV antibody testing. Menitove JE.
Oncology (Williston Park) 1988 Oct;2(10):12–3, 16, 19
Influence of perioperative transfusion therapy on the recurrence potential of locally advanced laryngeal carcinoma. Bongioannini G, et al.
ORL J Otorhinolaryngol Relat Spec 1990;52(4):260–4
ABO incompatible blood transfusion. Bacon JM, et al.
Pathology 1989 Jul;21(3):181–4
Prolongation of acute renal failure in two patients with hemolytic–uremic syndrome due to excessive plasma infusion therapy. Eddy AA, et al. **Pediatr Nephrol** 1989 Oct;3(4):420–3
How safe is our blood? [editorial] Gunson H. **Practitioner** 1989 Oct 8;233(1476):1265
Detection of antibody against antigen expressed by molecularly cloned hepatitis C virus cDNA: application to diagnosis and blood screening for posttransfusion hepatitis. Miyamura T, et al.
Proc Natl Acad Sci U S A 1990 Feb;87(3):983–7
Alloimmunization by leukocyte–rich or leukocyte–poor random single donor platelets. Gmür J, et al.
Prog Clin Biol Res 1990;337:45–8
Review of definitions and mechanisms of refractoriness to platelet transfusions. Hester JP, et al.
Prog Clin Biol Res 1990;337:49–58 (6 ref.)
Sensationalism and superficiality in medicine: transfusion–associated AIDS. Cantani A.
Riv Eur Sci Med Farmacol 1988 Nov;10(5):371–5 (50 ref.)
Blood transfusion and HTLV–I–associated myelopathy [letter] Bhigjee AI, et al. **S Afr Med J** 1989 Dec 16; 76(12):700
The bad blood. Schein M. **S Afr Med J** 1990 Jul 21;78(2):60
Perioperative blood transfusion and recurrence and death after resection for cancer of the colon and rectum. Jakobsen EB, et al. **Scand J Gastroenterol** 1990 May;25(5):435–42
Serum levels of the aminoterminal propeptide of type III procollagen and hyaluronan during resolving and nonresolving posttransfusion non–A, non–B hepatitis. Mattsson L, et al. **Scand J Infect Dis** 1990;22(1):11–7
Studies of the oral chelator 1,2–dimethyl–3–hydroxypyrid–4–one in thalassemia patients. Olivieri NF, et al. **Semin Hematol** 1990 Apr; 27(2):101–4
Transfusion–acquired hepatitis A. Giacoia GP, et al.
South Med J 1989 Nov;82(11):1357–60 (21 ref.)
Massive transfusion: complications and their management. Rudolph R, et al. **South Med J** 1990 Sep;83(9):1065–70 (25 ref.)
Study of mechanisms of post–transfusion hypertension in thalassaemic patients. Thirawarapan SS, et al.
Southeast Asian J Trop Med Public Health 1989 Sep; 20(3):471–8
Risk of postoperative septic complications after abdominal surgical treatment in relation to perioperative blood transfusion. Wobbes T, et al. **Surg Gynecol Obstet** 1990 Jul;171(1):59–62
Transfusion–associated Yersinia enterocolitica [editorial] Aber RC. **Transfusion** 1990 Mar–Apr;30(3):193–5
Posttransfusion purpura: the therapeutic value of PlA1–negative platelets. Brecher ME, et al. **Transfusion** 1990 Jun;30(5):433–5
Febrile reactions after platelet transfusion: the effect of single versus multiple donors. Chambers LA, et al.
Transfusion 1990 Mar–Apr;30(3):219–21
Risks and benefits of blood donation [editorial] Grindon AJ. **Transfusion** 1990 Sep;30(7):581–2
Posttransfusion hepatitis B. Hoofnagle JH. **Transfusion** 1990 Jun;30(5):384–6
Posttransfusion hepatitis B transmitted by blood from a hepatitis B surface antigen–negative hepatitis B virus carrier. Larsen J, et al. **Transfusion** 1990 Jun;30(5):431–2
Blood transfusion–associated relapsing fever [letter; comment] Nadelman RB, et al. **Transfusion** 1990 May; 30(4):380–1 Comment on: Transfusion 1989 Sep;29(7):646–5.
Reports of 355 transfusion–associated deaths: 1976 through 1985. Sazama K. **Transfusion** 1990 Sep;30(7):583–90
To err is human... [editorial] Sherwood WC. **Transfusion** 1990 Sep;30(7):579–80
Effect of blood transfusions on experimental pulmonary metastases in mice. Shirwadkar S, et al. **Transfusion** 1990 Feb;30(2):188–90
Sepsis associated with transfusion of red cells contaminated with Yersinia enterocolitica. Tipple MA, et al.
Transfusion 1990 Mar–Apr;30(3):207–13
Transfusion–related acute lung injury caused by an NB2 granulocyte–specific antibody in a patient with thrombotic thrombocytopenic purpura. Van Buren NL, et al.
Transfusion 1990 Jan;30(1):42–5
Transfusion–associated graft–versus–host disease in nonimmunocompromised hosts [editorial] Vogelsang GB. **Transfusion** 1990 Feb;30(2):101–3
Hemolysis caused by half–physiologic–strength saline [letter] Whitelaw JP. **Transfusion** 1990 Jan;30(1):78
Disease–related effects of perioperative blood transfusions associated with 125I seed implantation for prostate carcinoma. Petersen JP, et al. **Urology** 1990 Aug; 36(2):103–6
The possibility of HIV transmission via anti–HIV–negative blood in polytransfused beta–thalassemia patients in northern Thailand. Chanarat P, et al. **Vox Sang** 1990; 58(3):224–5
Anti–hepatitis C antibodies in prospectively followed–up transfused patients. Couroucé AM, et al. **Vox Sang** 1990; 58(3):226–7
Fatal pulmonary transfusion reaction to plasma containing donor HLA antibody. Eastlund T, et al. **Vox Sang** 1989; 57(1):63–6
An outbreak of non–A, non–B hepatitis associated with the infusion of a commercial factor IX complex during cardiovascular surgery. Gerber AR, et al. **Vox Sang** 1990; 58(4):270–5
Severe transfusion reaction to donor plasma containing HLA antibody. Jensen S, et al. **Vox Sang** 1990;59(1):62
Deceptively low morbidity from failure to practice safe blood transfusion: an analysis of serious blood transfusion errors. Murphy WG, et al. **Vox Sang** 1989;57(1):59–62
Clinical efficacy of five filters specific for leukocyte removal. Reverberi R, et al. **Vox Sang** 1990;58(3):188–91
Acquired immunodeficiency syndrome (AIDS).
Wkly Epidemiol Rec 1990 Feb 23;65(8):56–7 **(Eng, Fre)**
[Influence of blood transfusion on postoperative prognosis of stage I (No) lung cancer] Wu HS.
Chung Hua Chung Liu Tsa Chih 1989 Jul;11(4):297–9 (Eng. Abstr.) **(Chi)**
[The main causal agent of posttransfusion non–A, non–B hepatitis is hepatitis C virus] Stránský J. **Cas Lek Cesk** 1989 Dec 15;128(51):1627–8 (Eng. Abstr.) **(Cze)**
[Transfusion of incompatible blood from the aspect of forensic serology] Klír P, et al. **Soud Lek** 1989 Aug; 34(3):33–6 (Eng. Abstr.) **(Cze)**
[Transfusion reactions after SAG–M blood] Hansen P.
Ugeskr Laeger 1990 Apr 23;152(17):1229–30 (Eng. Abstr.) **(Dan)**
[Blood transfusion and prognosis of colorectal canmcer] Mecklin JP, et al. **Duodecim** 1989;105(19):1602–6 (22 ref.) **(Fin)**
[Fatal pulmonary leukoagglutination after administration of fresh frozen plasma] Cléro B, et al.
Ann Fr Anesth Reanim 1989;8(4):357–8 (Eng. Abstr.) **(Fre)**
[Iron chelation in children] de Montalembert M, et al.
Ann Pediatr (Paris) 1989 Oct;36(8):533–8 (23 ref.) (Eng. Abstr.) **(Fre)**
[Prospective study of HIV infection in a group of 30 young hemophiliacs] Tricoire J, et al. **Arch Fr Pediatr** 1990 Mar; 47(3):169–71 (Eng. Abstr.) **(Fre)**
[Prevention of post–transfusion hepatitis in Guadeloupe: results after application of new measures for detecting blood donors potentially at risk] Fest T, et al.
Gastroenterol Clin Biol 1990;14(1):56–61 (Eng. Abstr.) **(Fre)**
[Post–transfusion cytomegalovirus infection in premature infants weighing less than 1,500 g] Hubert C, et al.
Pediatrie 1989;44(6):471–9 (29 ref.) (Eng. Abstr.) **(Fre)**
[Transfusion–induced Yersinia infection] Bach A, et al.
Dtsch Med Wochenschr 1990 Aug 17;115(33):1232–4 (Eng. Abstr.) **(Ger)**
[ABO incompatibility: on immunohistochemistry of fatal transfusion reactions] Pedal I, et al. **Pathologe** 1990 May; 11(3):143–7 **(Ger)**
[The role of blood transfusion on the postoperative morbidity of tumors of the colon and rectum] Leardi S, et al.
Ann Ital Chir 1989 Nov–Dec;60(6):537–41; discussion 541–2 (Eng. Abstr.) **(Ita)**
[Cytomegalovirus transmission following a blood transfusion] Micali C, et al. **Minerva Med** 1989 Dec;80(12):1305–8 (Eng. Abstr.) **(Ita)**
[Treatment of hemophilia in children] Stucchi C, et al.
Pediatr Med Chir 1989 Nov–Dec;11(6):607–15 (42 ref.) (Eng. Abstr.) **(Ita)**
[Fatal delayed hemolytic transfusion reaction in a postoperative case of traumatic aortic rupture] Shigeta O, et al. **Kyobu Geka** 1990 Jun;43(6):498–501 (Eng. Abstr.) **(Jpn)**
[Studies of pathogenicity of GVHD induced by blood transfusion after open heart surgery] Hisatomi K, et al.
Nippon Geka Gakkai Zasshi 1989 Jun;90(6):928–32 (Eng. Abstr.) **(Jpn)**
[Effect of blood transfusion on prognosis of colorectal cancer patients] Onodera H, et al. **Nippon Geka Gakkai Zasshi** 1989 Nov;90(11):1890–8 (Eng. Abstr.) **(Jpn)**
[HTLV–I carriers in ATL/L–nonendemic area—with reference to blood transfusions] Sakuma M, et al.
Nippon Ketsueki Gakkai Zasshi 1989 Aug;52(5):869–79 (Eng. Abstr.) **(Jpn)**
[Clinical and histological features of acute post–transfusion non–A, non–B hepatitis: histological diagnosis in acute stage and clinical outcome] Okuno T, et al.
Nippon Shokakibyo Gakkai Zasshi 1989 Aug;86(8):1661–5 (Eng. Abstr.) **(Jpn)**
[The influence of dose of transfusion and component of blood on the incidence of post–transfusion hepatitis] Takano S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Dec; 86(12):2735–41 (Eng. Abstr.) **(Jpn)**
[Anti–HCV and long–term prognosis in patients with non–A, non–B post–transfusion hepatitis] Tanaka E, et al.
Nippon Shokakibyo Gakkai Zasshi 1990 Apr;87(4):1003–9 (Eng. Abstr.) **(Jpn)**
[Reference value of glutamic transaminase to prevent non–A non–B post–transfusion hepatitis] Irita Y, et al.
Rinsho Byori 1989 Oct;37(10):1129–33 (Eng. Abstr.) **(Jpn)**
[The clinical examination for posttransfusion hepatitis] Kuroki T, et al. **Rinsho Byori** 1989 Jul;37(7):756–61 (Eng. Abstr.) **(Jpn)**
[Allogeneic bone marrow transplantation after the treatment of alpha–IFN and high–dose SNMC in two cases of acute myeloblastic leukemia with post–transfusional non–A, non–B hepatitis] Hashino S, et al. **Rinsho Ketsueki** 1989 Nov;30(11):2029–34 (Eng. Abstr.) **(Jpn)**
[Compatibility problems in transfusion. Special reference to the delayed hemolytic transfusion reaction] Nordhagen R, et al. **Tidsskr Nor Laegeforen** 1990 Jun 10;110(15):1933–5 (Eng. Abstr.) **(Nor)**
[Anti–hepatitis C (HCV) ELISA. A serologic test for non–A non–B hepatitis (NANBH) after blood transfusion (letter)] Orstavik I, et al. **Tidsskr Nor Laegeforen** 1989 Dec 10; 109(34–36):3648 **(Nor)**
[Blood transfusion in cancer of the colon and rectum. Blood transfusion and immunology (letter)] Sundal E.
Tidsskr Nor Laegeforen 1990 May 20;110(13):1745–6 **(Nor)**
[Subcutaneous administration of deferoxamine in a patient with panmyelopathy and post–transfusion hemosiderosis] Zdziarska B, et al. **Pol Arch Med Wewn** 1987 Jul; 78(1):48–51 (Eng. Abstr.) **(Pol)**
[Repercussions of blood transfusions on postoperative complications in patients with multiple trauma] Costa OL, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Jul–Aug; 44(4):139–42 (Eng. Abstr.) **(Por)**
[Post–transfusion acute Chagas disease without myocarditis. Presentation of a case] de Campos EP, et al.
Rev Soc Bras Med Trop 1988 Oct–Dec;21(4):205–8 (Eng. Abstr.) **(Por)**
[Cases of immunization of Rh–positive recipients of the CCDee group with erythrocyte antigens] Morokov VA.
Gematol Transfuziol 1990 May;35(5):30–1 **(Rus)**
[Analysis of the causes of post–transfusion complications in the Uzbek SSR] Sakhibov IaD, et al.
Gematol Transfuziol 1990 May;35(5):28–9 (Eng. Abstr.) **(Rus)**
[The problem of homologous blood in transfusiology and its solution] Sumbatov LA, et al. **Gematol Transfuziol** 1989 Oct;34(10):12–4 (Eng. Abstr.) **(Rus)**
[Hemophilia and AIDS] Epifanov NS. **Klin Med (Mosk)** 1989 Nov;67(11):10–4 (38 ref.) **(Rus)**
[Risk of HIV infection in children with hemophilia] Mazurin AV, et al. **Pediatriia** 1990;(5):96–7 **(Rus)**
[Surgical problems of AIDS] Aganov VV, et al.
Vestn Khir 1989 Aug;144(8):130–3 (Eng. Abstr.) **(Rus)**
[Significance of blood groups in surgical practice] Dutkevich IG, et al. **Vestn Khir** 1989 Jun;142(6):92–5 (Eng. Abstr.) **(Rus)**
[Hemorrhagic complications caused by heparin therapy] Fedorova ZD, et al. **Vestn Khir** 1989 Dec;144(12):82–5 (Eng. Abstr.) **(Rus)**
[Etiology and prevention of post–transfusion hepatitis upon systematic screening of donor sera] Kirilenko VA, et al.
Vopr Virusol 1989 Sep–Oct;34(5):621–3 **(Rus)**
[The use of a test for anti–HBc for prevention of post–transfusion hepatitis B] Somova AV, et al.
Vopr Virusol 1989 Nov–Dec;34(6):749–52 **(Rus)**
[Blood transfusion complications based on data from a provincial blood transfusion station] Khodakovskiĭ AV, et al. **Vrach Delo** 1990 May;(5):42–5 (Eng. Abstr.) **(Rus)**
[The danger of hepatitis B virus infection from transfusions of plasma in which the HBs–antigen was detected retrospectively by highly sensitive methods] Sychev AV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 May; (5):61–5 (Eng. Abstr.) **(Rus)**
[Risk of transmission of the human immunodeficiency virus by transfusion: real or hypothetical? (letter)] Ortiz de Lejarazu Leonardo R, et al. **Med Clin (Barc)** 1989 Jun 17; 93(3):119 **(Spa)**
[Immunologic studies in thalassemia major] Sen L, et al.

Medicina (B Aires) 1989;49(2):131–4 (Eng. Abstr.) **(Spa)**
[Blood transfusion worsens the prognosis in colorectal cancer. Preliminary study in a series of 717 cases] Pellicer Franco EM, et al. **Rev Esp Enferm Dig** 1990 Mar; 77(3):189–92 (Eng. Abstr.) **(Spa)**
[Post-transfusion hepatitis: a serious problem (letter)] García Bueno MJ, et al. **Sangre (Barc)** 1989 Oct;34(5):379 **(Spa)**
[Nearing the end of post-transfusional hepatitis? (editorial)] Hernández JM, et al. **Sangre (Barc)** 1990 Jun;35(3):169–71 **(Spa)**
[Posttransfusion thrombocytopenic purpura. 1st case described in Spain] Macià J, et al. **Sangre (Barc)** 1990 Feb; 35(1):74–7 (Eng. Abstr.) **(Spa)**
[Non-hemolytic transfusion reactions of the febrile type] Muñiz Díaz E, et al. **Sangre (Barc)** 1990 Feb;35(1):18–25 (Eng. Abstr.) **(Spa)**
[Are there negative effects of blood transfusions?] Angerås U. **Lakartidningen** 1989 Sep 6;86(36):2921–2 **(Swe)**
[The pattern of non-A, non-B hepatitis is more and more evident. A new test for diagnosis of hepatitis C makes it possible to mass screen blood donors] Iwarson S. **Lakartidningen** 1990 Jan 10;87(1–2):13–4 **(Swe)**
[Randomized studies of blood transfusion risks are not unethical] Nyström PO, et al. **Lakartidningen** 1989 Nov 29;86(48):4210 **(Swe)**
[Do blood transfusions have adverse effects?] Angerås U. **Nord Med** 1989;104(10):256–7 (Eng. Abstr.) **(Swe)**

ECONOMICS

Blood transfusion services and the European community [editorial] Cash JD. **BMJ** 1990 Feb 24;300(6723):481–2

HISTORY

Development of the blood transfusion and clinical haematology services in Singapore. Kwa SB. **Ann Acad Med Singapore** 1989 Jul;18(4):490–3
Fifty years of an organized blood transfusion service in Scotland. Girdwood RH. **Scott Med J** 1990 Feb;35(1):24–8
The first recorded blood transfusions: 1656 to 1668. Myhre BA. **Transfusion** 1990 May;30(4):358–62
[In memoriam. Bernard Jaulmes. 10 July 1922 – 15 May 1989] Pelissier E, et al. **Rev Fr Transfus Hemobiol** 1989 Oct; 32(5):333–5 **(Fre)**
[Blood transfusion service during World War II] Gavrilov OK. **Gematol Transfuziol** 1990 May;35(5):3–6 **(Rus)**
[40 years of the Czechoslovak transfusion service] Hrubiško M, et al. **Cas Lek Cesk** 1989 Jul 28;128(31):961–5 (Eng. Abstr.) **(Slo)**

INSTRUMENTATION

Evaluation of a new high-efficiency blood warmer for children. Presson RG Jr, et al. **Anesthesiology** 1990 Jul; 73(1):173–6
Use of microaggregate filters: need for audit [letter] O'Connor NT, et al. **BMJ** 1990 Apr 14;300(6730):1012
Effects of saline dilution and i.v. catheter size on the infusion of packed red blood cells. Boisvenu G, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S85
An evaluation of a simple, in-line fluid warming device. Hackmann T, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S107
Simple pressuring plate—RIPPS [letter] Watanabe H, et al. **Crit Care Med** 1989 Oct;17(10):1086–7
Substandard infusion sets, inadequate transfusion sets, weak bottle hangers and missing spoons and droppers [letter] Kulkarni KB. **Indian Pediatr** 1989 Nov;26(11):1167–8
Evaluation of a blood warmer that utilizes a 40 degrees C heat exchanger. Kruskall MS, et al. **Transfusion** 1990 Jan; 30(1):7–10

METHODS

Rapid infusion of additive red blood cells: alternative techniques for massive hemorrhage. Floccare DJ, et al. **Ann Emerg Med** 1990 Feb;19(2):129–33
Rapid infusion [letter] Iserson KV. **Ann Emerg Med** 1990 Sep;19(9):1075–6
Monoclonal blood group antibodies. Voak D. **Beitr Infusionsther** 1989;24:200–13 (24 ref.)
Management of hypovolaemic shock [letter] Touquet R. **BMJ** 1990 Jul 21;301(6744):179
Elimination of T cells from human bone marrow and peripheral blood by means of E-rosettes and density gradient centrifugation. Jankovic MB, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:110
Intensive chemotherapy and autologous peripheral blood stem cell transplantation in a patient with persistent marrow involvement with Hodgkin's disease. Phillips GL, et al. **Bone Marrow Transplant** 1990 Jul;6(1):45–7
The use of normosol-R for dilution of red blood cell concentrates prior to transfusion. Collins RM, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S36
The effect of a single whole-blood transfusion on cytokine secretion. Kalechman Y, et al. **J Clin Immunol** 1990 Mar; 10(2):99–105
Transfusion of infants with activation of erythrocyte T antigen. Williams RA, et al. **J Pediatr** 1989 Dec; 115(6):949–53
Combined intravascular and intraperitoneal transfusions for erythroblastosis fetalis. A report of two cases. Lenke RR, et al. **J Reprod Med** 1990 Apr;35(4):425–8
Transfusion of fresh whole blood stored (4 degrees C) for short period fails to improve platelet aggregation on extracellular matrix and clinical hemostasis after cardiopulmonary bypass. Golan M, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):354–60
A comparison of 2 protocols for living-related renal transplantation in children: donor-specific transfusions versus cyclosporine. Leone MR, et al. **J Urol** 1990 Sep; 144(3):721–3
ABO incompatibility and platelet transfusion [editorial] [see comments] **Lancet** 1990 Jan 20;335(8682):142–3 Comment in: Lancet 1990 Apr 21;335(8695):974–5.
Cardiovascular effects of hypertransfusion therapy in children with sickle cell anemia. Lester LA, et al. **Pediatr Cardiol** 1990 Jul;11(3):131–7
Paroxysmal nocturnal hemoglobinuria and the transfusion of washed red cells. A myth revisited. Brecher ME, et al. **Transfusion** 1989 Oct;29(8):681–5
Prevention of primary cytomegalovirus infection in patients with hematologic malignancies by intensive white cell depletion of blood products. de Graan-Hentzen YC, et al. **Transfusion** 1989 Nov-Dec;29(9):757–60
Neonatal pretransfusion testing for cytomegalovirus antibody [letter] Grossman BJ, et al. **Transfusion** 1989 Nov-Dec; 29(9):830–1
Transfusion in paroxysmal nocturnal hemoglobinuria. To wash or not to wash? [editorial] Rosse WF. **Transfusion** 1989 Oct;29(8):663–4
Utility of DRG and ICD-9-CM classification codes for the study of transfusion issues. Transfusions in patients with digestive diseases. Surgenor DM, et al. **Transfusion** 1989 Nov-Dec;29(9):761–7
Restrictive versus liberal blood transfusion policy for hepatectomies in cirrhotic patients. Makuuchi M, et al. **World J Surg** 1989 Sep-Oct;13(5):644–8
[The status of blood coagulation preparations within the scope of modern hemotherapy in surgical patients] Kretschmer V. **Beitr Infusionther** 1989;24:134–50 (120 ref.) (Eng. Abstr.) **(Ger)**
[Leukocyte filtration] Müller N. **Beitr Infusionther** 1989; 24:237–42 (6 ref.) (Eng. Abstr.) **(Ger)**
[Blood replacement in liver and pancreas/kidney transplantation] Rosmanith P, et al. **Beitr Infusionther** 1989; 24:165–71 (Eng. Abstr.) **(Ger)**
[Blood replacement in heart transplantation] von Segesser L, et al. **Beitr Infusionther** 1989;24:159–64 (Eng. Abstr.) **(Ger)**
[Hypovolemic-hemorrhagic shock. Pathophysiology and therapy] Groh J, et al. **Infusionstherapie** 1990 Apr;17 Suppl 2:4–8 (10 ref.) (Eng. Abstr.) **(Ger)**
[Perioperative blood coagulation therapy and diagnosis] Kretschmer V. **Infusionstherapie** 1990 Apr;17 Suppl 2:9–19 (143 ref.) (Eng. Abstr.) **(Ger)**
[Quantitative and qualitative analysis of various blood-preserving measures in heart surgery] Walpoth BH, et al. **Schweiz Med Wochenschr** 1990 Jun 2;120(22):817–22 (Eng. Abstr.) **(Ger)**
[The quality of blood donation and its effect on subsequent preparation of coagulation active plasma fractions] Sander W. **Z Arztl Fortbild (Jena)** 1989;83(24):1247–50 (23 ref.) **(Ger)**
[Perioperative blood transfusions. Changed indications and new alternatives] Eiseman B, et al. **Zentralbl Chir** 1990; 115(4):193–9 (6 ref.) (Eng. Abstr.) **(Ger)**
[Substantiation, tactics and effectiveness of frozen plasma-enzyme inhibitor therapy in septicemia and infectious-destructive processes] Barkagan ZS, et al. **Gematol Transfuziol** 1989 Oct;34(10):8–12 (Eng. Abstr.) **(Rus)**
[Systematic approach to transfusiology] Galkin VV. **Gematol Transfuziol** 1989 Oct;34(10):3–7 (Eng. Abstr.) **(Rus)**
[Indications for blood transfusion] Khollan SR. **Gematol Transfuziol** 1989 Aug;34(8):47–53 **(Rus)**
[The therapeutic efficacy of transfusions of erythrocyte mass in anemia in patients with internal diseases] Zherebtsov LA, et al. **Gematol Transfuziol** 1989 Dec;34(12):3–6 (Eng. Abstr.) **(Rus)**

NURSING

Add two transfusion steps? [letter; comment] Harmon DG. **Am J Nurs** 1989 Dec;89(12):1612 Comment on: Am J Nurs 1989 Apr;89(4):486–9.

PSYCHOLOGY

Use of erythropoietin in Jehovah's Witness patients. Jim RT. **Hawaii Med J** 1990 Jun;49(6):209

STANDARDS

Reducing the risk of transmission of HIV by blood transfusion [news] **Bull World Health Organ** 1990; 68(2):262–4, 268–71 **(Eng, Fre)**
A consensus development conference on the practice of platelet transfusion in The Netherlands. van Aken WG, et al. **Int J Technol Assess Health Care** 1990;6(1):163–74 (6 ref.)
Avoiding blood transfusion. A report of two cases. Rabinowitz M, et al. **J Reprod Med** 1990 May;35(5):569–72
Regional blood usage review: a quality assessment study from New Jersey hospitals. Kuriyan M, et al. **QRB** 1989 Dec; 15(12):369–75
Blood component transfusion audit: a comprehensive microcomputer program. Kuriyan M, et al. **QRB** 1989 Nov; 15(11):347–53
Anti-HTLV-I in blood donors in Natal [letter] Neill AG, et al. **S Afr Med J** 1990 Sep 15;78(6):376
Revision of the protocol recommended for studies of safety from hepatitis of clotting factor concentrates. International Society for Thrombosis and Hemostasis. Mannucci PM, et al. **Thromb Haemost** 1989 Jun 30;61(3):532–4
Efficacy of new tests and the safety of the blood supply [editorial] Young FE. **Transfusion** 1990 Jan;30(1):4–5
Guidelines for autologous blood transfusion. A consensus opinion of the Committee of Experts on Blood Transfusion and Immunohematology. **Vox Sang** 1989;57(4):278–80 (0 ref.)
[Public Health Council advisory: prevention of post-transfusion non-A non-B hepatitis; is application of a surrogate test a missed station?] Brandt KH. **Ned Tijdschr Geneeskd** 1989 Nov 11;133(45):2212–4 **(Dut)**
[Confidential donor self-exclusion for raising the safety of blood preparations] Koerner K, et al. **Dtsch Med Wochenschr** 1990 Jan 5;115(1):8–11 (Eng. Abstr.) **(Ger)**
[Use of leukocyte-filtered, cytomegalovirus-antibody negative and irradiated cellular blood products] Solheim BG, et al. **Tidsskr Nor Laegeforen** 1990 Jan 10;110(1):42–5 (Eng. Abstr.) **(Nor)**
[Quality control of erythrocyte concentrates in 6 transfusion centers in Croatia] Grgičević D, et al. **Lijec Vjesn** 1989 Jun-Jul;111(6–7):209–12 (Eng. Abstr.) **(Scr)**

STATISTICS & NUMERICAL DATA

Modification of fresh-frozen plasma transfusion practices through educational intervention. Barnette RE, et al. **Transfusion** 1990 Mar-Apr;30(3):253–7
Massive transfusion in adults. Diagnoses, survival and blood bank support. Sawyer PR, et al. **Vox Sang** 1990; 58(3):199–203
[Consideration on transfusion in urologic surgery—a retrospective study on homologous and autologous transfusions] Ihara H, et al. **Hinyokika Kiyo** 1990 Jan; 36(1):27–33 (Eng. Abstr.) **(Jpn)**

TRENDS

Fresh frozen plasma: past, present and future. McCarthy LJ. **Indiana Med** 1989 Dec;82(12):968–70
Collection and transfusion of blood in the United States, 1982–1988 [see comments] Surgenor DM, et al. **N Engl J Med** 1990 Jun 7;322(23):1646–51 Comment in: N Engl J Med 1990 Jun 7;322(23):1666–8.
[Artificial blood: the future of blood transfusion? II. Blood substitutes other than hemoglobin solutions] Guyot M, et al. **J Pharm Belg** 1990 May-Jun;45(3):196–206 (123 ref.) (Eng. Abstr.) **(Fre)**
[Important trends in the development of current hematology and transfusion] Tokarev IuN, et al. **Gematol Transfuziol** 1989 Jul;34(7):3–6 **(Rus)**

UTILIZATION

Effects of a CME program on physicians' transfusion practices. Hull AL, et al. **Acad Med** 1989 Nov;64(11):681–5
Blood transfusion during cesarean section. A 12 years' retrospective analysis. Imberti R, et al. **Acta Anaesthesiol Belg** 1990;41(2):139–44
Blood usage for elective surgery. A reappraisal of the need for autologous transfusion. Williamson LM, et al. **Clin Lab Haematol** 1989;11(3):233–6
Use of blood components. **Clin Pediatr (Phila)** 1990 Apr; 29(4):218
The high rate of blood donor exposure for critically ill neonates. Donowitz LG, et al. **Infect Control Hosp Epidemiol** 1989 Nov;10(11):509–10
Factors in intraoperative blood transfusion in cesarean section at Ramathibodi Hospital. Suchartwatnachai C, et al. **J Med Assoc Thai** 1990 Feb;73 Suppl 1:61–4
Blood ordering habits for elective surgery: time for change. Juma T, et al. **J R Soc Med** 1990 Jun;83(6):368–70
Influence of clinical knowledge, organizational context, and practice style on transfusion decision making. Implications for practice change strategies. Salem-Schatz SR, et al. **JAMA** 1990 Jul 25;264(4):476–83
A survey of fresh frozen plasma use in a teaching hospital in Hong Kong. Feng CS, et al. **Pathology** 1989 Apr; 21(2):85–7
Present status of blood transfusion in Japan. Fujii H, et al. **Prog Clin Biol Res** 1990;337:535–7
[A critical analysis of the transfusion protocol in lung surgery] Radaelli F, et al. **Minerva Chir** 1990 Feb; 45(3–4):153–5 (Eng. Abstr.) **(Ita)**
[Blood transfusion in heart surgery] Fosse E, et al. **Tidsskr Nor Laegeforen** 1990 Feb 28;110(6):698–700 (Eng. Abstr.) **(Nor)**
[Surgery without blood transfusion] Pillgram-Larsen J. **Tidsskr Nor Laegeforen** 1990 Feb 28;110(6):690–1 **(Nor)**
[The working requirements for blood components in clinical practice] Volkov NN, et al. **Ter Arkh** 1989;61(7):121–4 **(Rus)**

VETERINARY

Use of blood and blood products. Hunt E, et al. **Vet Clin North Am Food Anim Pract** 1990 Mar;6(1):133–47 (33 ref.)

[Blood transfusion] Slappendel RJ. **Tijdschr Diergeneeskd** 1989 Oct 1;114(19):1010 (Dut)

BLOOD TRANSFUSION, AUTOLOGOUS

Autologous transfusions. Perkins HA. **Adv Intern Med** 1990; 35:221–33 (38 ref.)

Blood and fluid replacement in major liposuction procedures. Mandel MA. **Aesthetic Plast Surg** 1990 Summer; 14(3):187–91

Autotransfusion during cesarean section [letter] Zichella L, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):295

Eliminating homologous blood transfusions during abdominal aortic aneurysm repair [published erratum appears in Am J Surg 1990 Aug;160(2):A10] Pittman RD, et al. **Am J Surg** 1990 May;159(5):522–4

Complement activation and reinfusion of wound drainage blood. Bengtson JP, et al. **Anesthesiology** 1990 Sep; 73(3):376–80

Autotransfusion of shed mediastinal blood [letter; comment] Thompson JF, et al. **Ann Thorac Surg** 1989 Dec;48(6):887–8 Comment on: Ann Thorac Surg 1989 Mar;47(3):400–6.

Blood use in head and neck tumor surgery [letter; comment] Landis G. **Arch Otolaryngol Head Neck Surg** 1990 Jun; 116(6):741–2 Comment on: Arch Otolaryngol Head Neck Surg 1989 Nov;115(11):1314–7.

Blood use in head and neck tumor surgery. Potential for autologous blood [see comments] McCulloch TM, et al. **Arch Otolaryngol Head Neck Surg** 1989 Nov; 115(11):1314–7 Comment in: Arch Otolaryngol Head Neck Surg 1990 Jun;116(6):741–2.

Normovolemic hemodilution in head and neck surgery. Marchiori C, et al. **Arch Otorhinolaryngol** 1989; 246(5):333–5

Utilization patterns of frozen autologous red blood cells. Experience in a referral center and a community hospital. DePalma L, et al. **Arch Pathol Lab Med** 1990 May; 114(5):516–8

Intraoperative autotransfusion in vascular surgery. Reddy DJ, et al. **Arch Surg** 1990 Aug;125(8):1012–5; discussion 1015–6

The simultaneous use of autologous blood transfusion and hypotensive anesthesia to the radical hysterectomy for uterine carcinomas. Yamasaki M, et al. **Asia Oceania J Obstet Gynaecol** 1989 Dec;15(4):317–24

Recombinant human erythropoietin as adjuvant treatment for autologous blood donation. Graf H, et al. **BMJ** 1990 Jun 23;300(6740):1627–8

Autologous transfusion [letter] Harrison NW. **BMJ** 1990 Jun 2;300(6737):1464

Autologous transfusion [letter; comment] Page RJ, et al. **BMJ** 1990 Apr 28;300(6732):1139 Comment on: BMJ 1990 Mar 17;300(6726):737–40.

Proceedings of the International Symposium on Peripheral Blood Stem Cell Autografts. 15–17 October, 1989, Mulhouse, France. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:1–81

Collection, cryopreservation and autologous transplantation with circulating hemopoietic stem cells in patients with multiple myeloma and lymphoma. Adam M, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:33–4

Peripheral blood stem cell autografts in myeloma. Bell AJ, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:52–4

Blood stem cell autografts in patients with high risk multiple myeloma. De Rosa L, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:58–9

Unequal results of collection of peripheral blood stem cells in view of autografting in high risk multiple myeloma. Eisenmann JC, et al. **Bone Marrow Transplant** 1990 Jan; 5 Suppl 1:56–7

Transplants of blood-derived hematopoietic cells. Gale RP, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:2–4 (0 ref.)

Autologous blood stem cell transplantation in hematological malignancies. The Italian experience. Italian Cooperative Study Group. Iacone A, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:46–7

Approaches to blood stem cell mobilisation. Initial Australian clinical results. Juttner CA, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:22–4

Cryopreservation and infusion of autologous peripheral blood stem cells. Kessinger A, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:25–7

Therapeutic efficacy of autologous blood stem cell transplantation (ABSCT): the role of cytotoxic/cytokine stem cell mobilization. Körbling M, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:39–40

Molecular determination of minimal residual disease in peripheral blood stem cell harvests. Langlands K, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:64–5

Infusion of autologous peripheral blood nucleated cells hastens hematological recovery after high dose chemotherapy and autologous transplantation of bone marrow. Lopez M, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:44–5

Autologous blood stem cell transplantation in high risk myeloma. Marit G, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:55

High dose chemotherapy with peripheral blood stem cell (PBSC) support in solid tumours: preliminary results. Martín Algarra S, et al. **Bone Marrow Transplant** 1990 Jan; 5 Suppl 1:60–1

Autologous blood stem cell transplantation in acute leukaemia: present status and future directions. Reiffers J, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:48–9 (23 ref.)

Peripheral blood stem cell (PBSC) autograft in the treatment of high-risk leukemia/lymphoma of children. Children's PBSC Autografts Study Group of Japan. Takaue Y, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:50

Assaying the CFU-GM in blood: correlation between cell dose and haemopoietic reconstitution. To LB. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:16–8

High dose cyclophosphamide, BCNU and VP-16 with autologous blood stem cell support for refractory multiple myeloma. Ventura GJ, et al. **Bone Marrow Transplant** 1990 Apr;5(4):265–8

Autotransfusion has many forms. Carroll SE. **Can J Surg** 1989 Nov;32(6):395

Evaluation of autotransfusion in elective aortic reconstruction. Graham AM, et al. **Can J Surg** 1989 Nov; 32(6):458–62

Blood usage for elective surgery. A reappraisal of the need for autologous transfusion. Williamson LM, et al. **Clin Lab Haematol** 1989;11(3):233–6

Peripheral blood mononuclear-stem cell (PBMSC) collection in two continuous flow cell separators: yields and crosscellular contamination. Hester JP, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:48 (Eng, Ger)

Is there a generally valid, minimum acceptable hemoglobin level? Lundsgaard-Hansen P, et al. **Infusionstherapie** 1989 Aug;16(4):167–75

Intraoperative blood salvage: a new trend in blood transfusion medicine. Valbonesi M, et al. **Int J Artif Organs** 1990 Jan;13(1):3–10

Potential role of recombinant human erythropoietin in the peri-surgical setting. Goodnough LT. **Int J Cell Cloning** 1990 Jan;8 Suppl 1:203–10

Oxygen transport by a modified haemoglobin solution (PPSFH) in a dog model of acute anaemia following hypovolaemia. Gilroy D, et al. **Intensive Care Med** 1990; 16(4):237–41

Metastatic malignant melanoma treated with combined bolus and continuous infusion interleukin-2 and lymphokine-activated killer cells [see comments] Bar MH, et al. **J Clin Oncol** 1990 Jul;8(7):1138–47 Comment in: J Clin Oncol 1990 Jul;8(7):1125–7.

Pattern of changes in clinico-immunological indicators of patients with drug allergy during treatment with autologous blood. Khodanova RN, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(4):463–9

Safety of predeposit autologous blood donation in the third trimester of pregnancy. Lindenbaum CR, et al. **J Reprod Med** 1990 May;35(5):537–40

Autologous transfusions for cancer patients undergoing elective ablative surgery. Lichtiger B, et al. **J Surg Oncol** 1990 Jan;43(1):19–23

Effects of plasmapheresis and autotransfusion on complement recovery in dogs. Ross M, et al. **J Surg Res** 1990 Jul; 49(1):30–3

A comparison of the cerebral and cardiovascular effects of complete resuscitation with isotonic and hypertonic saline, hetastarch, and whole blood following hemorrhage. Ducey JP, et al. **J Trauma** 1989 Nov;29(11):1510–8

The use of autologous blood. The National Blood Resource Education Program Expert Panel [see comments] **JAMA** 1990 Jan 19;263(3):414–7 Comment in: JAMA 1990 Jun 20;263(23):3150–1.

The use of autologous blood [letter; comment] **JAMA** 1990 Jun 20;263(23):3150–1 Comment on: JAMA 1990 Jan 19;263(3):414–7.

Autologous blood donations before elective cardiac surgery [letter; comment] Avoy DR. **JAMA** 1990 Mar 2; 263(9):1202 Comment on: JAMA 1989 Oct 13;262(14):1963–8.

Blood donor groups and crossing over [letter; comment] Fawcett K. **JAMA** 1990 Jun 20;263(23):3149 Comment on: JAMA 1989 Dec 22–29;262(24):3452–4.

Erythropoietin and autologous blood donation [letter; comment] Hennigan T, et al. **Lancet** 1989 Nov 11; 2(8672):1153–4 Comment on: Lancet 1989 Jul 29;2(8657):284.

Effect of autolymphocyte therapy on survival and quality of life in patients with metastatic renal-cell carcinoma [see comments] Osband ME, et al. **Lancet** 1990 Apr 28; 335(8696):994–8 Comment in: Lancet 1990 Jul 7;336(8706):62.

Liposuction: blood loss and autotransfusion. Kanter MA, et al. **Md Med J** 1990 Jul;39(7):667–9

Effects of blood transfusions on some hematological variables in endurance athletes. Berglund B, et al. **Med Sci Sports Exerc** 1989 Dec;21(6):637–42

Erythropoietin and preoperative blood donation [letter; comment] **N Engl J Med** 1990 Apr 19;322(16):1157–9 Comment on: N Engl J Med 1989 Oct 26;321(17):1163–8.

Increased preoperative collection of autologous blood with recombinant human erythropoietin therapy [see comments] Goodnough LT, et al. **N Engl J Med** 1989 Oct 26; 321(17):1163–8 Comment in: N Engl J Med 1990 Apr 19;322(16):1157–9.

Treatment of chronic granulocytic leukemia in the accelerated phase by transfusion of autologous buffy-coat cells—a case report. Takeshita A, et al. **Nippon Ketsueki Gakkai Zasshi** 1990 Feb;53(1):51–6

Perioperative red cell transfusion. Reiling RB. **Ohio Med** 1990 Mar;86(3):191–2

Autologous blood transfusion in pediatrics. DePalma L, et al. **Pediatrics** 1990 Jan;85(1):125–8

Autologous blood transfusions and plastic surgery: comments concerning "other" "elective" procedures [letter; comment] Courtiss EH. **Plast Reconstr Surg** 1990 Jul; 86(1):163–6 Comment on: Plast Reconstr Surg 1989 Oct;84(4):662–4.

Autologous blood transfusion in plastic surgery [letter; comment] Ersek RA. **Plast Reconstr Surg** 1990 May; 85(5):828–9 Comment on: Plast Reconstr Surg 1989 Oct;84(4):662–4.

Autologous blood transfusion in reduction mammaplasty [letter; comment] Metz PS. **Plast Reconstr Surg** 1990 Jun; 85(6):1003–4 Comment on: Plast Reconstr Surg 1989 Oct;84(4):662–4.

Autologous blood transfusion [editorial] Kay L. **Practitioner** 1989 Jul 8;233(1472):967

Peripheral blood and positive selection of marrow as a source of stem cells for transplantation. Bensinger WI, et al. **Prog Clin Biol Res** 1990;337:93–8 (17 ref.)

Treatment of neuroblastoma using autologous peripheral blood stem cells. Girard A, et al. **Prog Clin Biol Res** 1990; 337:75–7

Harvesting of peripheral blood stem cells (PBSC) by apheresis with cell separators. Höcker P, et al. **Prog Clin Biol Res** 1990;337:63–5

Blood transfusion in hemorrhagic shock. Nieri A, et al. **Resuscitation** 1989 Dec;18(2–3):155

The Tower of Babel [editorial] Berkman EM. **Transfusion** 1989 Oct;29(8):661–2

Minimal-exposure transfusion and the committed donor. Brecher ME, et al. **Transfusion** 1990 Sep;30(7):599–604

Controversies in transfusion medicine. The safety and utility of autologous donations by pregnant patients: pro. Kruskall MS. **Transfusion** 1990 Feb;30(2):168–71

Controversies in transfusion medicine. Autologous blood donation in pregnancy: con. Sayers MH. **Transfusion** 1990 Feb;30(2):172–4

Potential risks of blood donation during pregnancy for autologous transfusion [letter] Tabor E. **Transfusion** 1990 Jan;30(1):76

Evaluation of 99mtechnetium/51chromium post-transfusion recovery of red cells stored in saline, adenine, glucose, mannitol for 42 days. Heaton WA, et al. **Vox Sang** 1989; 57(1):37–42

Systematic pre-deposit autologous blood provision for elective surgery: an important contribution to hospital blood supply. Kay LA, et al. **Vox Sang** 1990;59(1):23–5

Autologous transfusion practice. Controversies about current fashions and real needs. Zuck TF, et al. **Vox Sang** 1990; 58(3):234–42; discussion 246–53 (79 ref.)

[Autologous blood transfusion in thoracic and abdominal injuries] Abakumov M, et al. **Khirurgiia (Sofiia)** 1989; 42(6):93–9 (Eng. Abstr.) (Bul)

[Autotransfusion] Podroužek P, et al. **Cesk Gynekol** 1989 Nov;54(9):705–8 (Cze)

[Advantages of autotransfusion] Fanta J, et al. **Rozhl Chir** 1989 Jul;68(7):506–10 (Eng. Abstr.) (Cze)

[The general course of hematocrit in the postoperative period in various diseases that benefit from autotransfusion: a comparison of cases] Baron JF, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R118 (Fre)

[Use of the Cell Saver IV in hepatic transplantation] Christophe JL, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R58 (Fre)

[Autologous transfusion in cesarean section] Le Guillou JL, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R66 (Fre)

[Postoperative autologous transfusion in heart surgery with extracorporeal circulation] Parrot D, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R122 (Fre)

[Differential autotransfusion: one year's experience in a French multicenter study] Wagner B, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R119 (Fre)

[Delayed autotransfusion associated with the cell-saver method in cardiovascular surgery. Values, methods, initial results] Jault F, et al. **Arch Mal Coeur** 1989 Nov; 82(11):1863–5 (Eng. Abstr.) (Fre)

[Systematic perioperative use of an autotransfusion system in heart surgery. A prospective and comparative study in 283 patients] Nataf P, et al. **Arch Mal Coeur** 1989 Nov; 82(11):1869–73 (Eng. Abstr.) (Fre)

[Acute intentional normovolemic hemodilution. The value of plasma autotransfusion in maxillofacial surgery] Dubost J, et al. **Cah Anesthesiol** 1990 Jan;38(1):21–4 (Fre)

[Autologous blood transfusion. A multidisciplinary challenge] Habibi B. **Presse Med** 1990 Jun 16;19(24):1123–5 (Fre)

[Saving of blood during reoperations in heart surgery. Value of aprotinin and peroperative autotransfusion (letter)] Wintrebert P, et al. **Presse Med** 1989 Sep 30;18(30):1481 (Fre)

[Original technic for preoperative hemodilution permitting deferred autologous transfusion (apropos of 106 cases)] Laubriat-Bianchin M. **Rev Fr Transfus Hemobiol** 1990 Mar;

33(2):111–20 (Eng. Abstr.) (Fre)
[Differed autotransfusion in orthognathic surgery. Impact on the economics of blood products. Our experience of 40 cases] Compère JF, et al. **Rev Stomatol Chir Maxillofac** 1990;91(3):216–8 (Eng. Abstr.) (Fre)
[Preoperative autologous blood deposit and liquid storage for replacement arthroplasty] Lorentz A, et al. **Anaesthesist** 1989 Sep;38(9):480–9 (Eng. Abstr.) (Ger)
[Blood loss and the need for homologous blood transfusion in elective general surgery as a basis for indications for preoperative autologous blood donation] Bott K, et al. **Chirurg** 1990 Feb;61(2):121–3 (Eng. Abstr.) (Ger)
[Blood saving measures in heart surgery] Egloff L, et al. **Helv Chir Acta** 1989 Aug;56(3):399–403 (Eng. Abstr.) (Ger)
[Preoperative autologous blood donation in thoracic surgery] Sültz J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:197–8 (Eng. Abstr.) (Ger)
[Quantitative and qualitative analysis of various blood-preserving measures in heart surgery] Walpoth BH, et al. **Schweiz Med Wochenschr** 1990 Jun 2;120(22):817–22 (Eng. Abstr.) (Ger)
[Blood-saving procedures—transfusion medicine aspects] Sachs V. **Unfallchirurgie** 1989 Aug;15(4):201–7 (50 ref.) (Eng. Abstr.) (Ger)
[Blood-saving procedures—anesthesiologic aspects. Autotransfusion procedures at a large clinic] von Bormann B. **Unfallchirurgie** 1989 Aug;15(4):194–200 (32 ref.) (Eng. Abstr.) (Ger)
[Blood-saving procedures—legal aspects] Weissauer W. **Unfallchirurgie** 1989 Aug;15(4):190–3 (Eng. Abstr.) (Ger)
[Autologous and heterologous blood transfusion in obstetrics] Umbach GE, et al. **Z Geburtshilfe Perinatol** 1989 Jul–Aug; 193(4):172–7 (Eng. Abstr.) (Ger)
[Autologous blood transfusion in surgical interventions] Hackenbruch W. **Z Unfallchir Versicherungsmed Berufskr** 1989;82(3):155–62 (Eng. Abstr.) (Ger)
[The role of autotransfusion in vascular surgery] Péter S, et al. **Orv Hetil** 1990 Mar 11;131(10):503–5 (Eng. Abstr.) (Hun)
[Hemodilution and autotransfusion] Cévese PG, et al. **Chir Patol Sper** 1985 Dec;33(6):171–82 (64 ref.) (Ita)
[Protection systems of erythrocytes during intraoperative autotransfusion. Experience with the use of S-adenosyl-L-methionine] Giorgetti PL, et al. **Minerva Chir** 1989 Nov 30;44(22):2289–94 (Eng. Abstr.) (Ita)
[Autotransfusion in elective surgery. Preliminary report on 215 cases] Ritossa C, et al. **Minerva Chir** 1989 Dec 31; 44(23–24):2413–20 (Eng. Abstr.) (Ita)
[Normovolemic hemodilution in clinical practice] Nieri A, et al. **Ric Clin Lab** 1989;19 Suppl 1:159–61 (Ita)
[Anesthesia and preoperative hemodilution for autotransfusion] Takaori M, et al. **Masui** 1989 Dec; 38(12):1627–32 (Jpn)
[Antitumor responses after reinfusion of autologous plasma perfused over immobilized protein A: a study in patients at advanced stages of cancer] Yamamoto T, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Jan 20;25(1):13–24 (Eng. Abstr.) (Jpn)
[Autotransfusion in urological surgery—experience with transurethral resection] Ihara H, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):54–60 (Eng. Abstr.) (Jpn)
[Benefits and limitation of extracorporeal circulation with autologous blood using low priming membrane oxygenator] Kaneko Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Nov;37(11):2359–66 (Eng. Abstr.) (Jpn)
[Heart surgery without blood transfusion] Ovrum E, et al. **Tidsskr Nor Laegeforen** 1990 Feb 28;110(6):694–7 (Eng. Abstr.) (Nor)
[Photo-modification of the autologous blood in combined treatment of inflammatory suppurative-infective diseases of the female genitalia] Chalenko VV, et al. **Akush Ginekol (Mosk)** 1990 Apr;(4):67–8 (Rus)
[Transfusion of UV-irradiated autologous blood in the complex treatment of women with anemia after cesarean section] Kurapov EP, et al. **Akush Ginekol (Mosk)** 1990 May;(5):28–32 (Eng. Abstr.) (Rus)
[Choice of the optimal variant of blood loss replacement during reconstructive surgery of the major vessels with the object of preventing postoperative anemia] Cherednichenko MA, et al. **Anesteziol Reanimatol** 1990 May–Jun;(3):35–7 (Eng. Abstr.) (Rus)
[A method of reinfusing ultraviolet-irradiated autoblood in combined modality intensive therapy of pyo-inflammatory diseases in premature infants] Gavriushov VV, et al. **Anesteziol Reanimatol** 1989 Jul–Aug;(4):38–40 (Eng. Abstr.) (Rus)
[Initial experience of work on a program of complete preservation of the patient's blood in heart surgery] Osipov VP, et al. **Anesteziol Reanimatol** 1989 Sep-Oct;(5):10–2 (Eng. Abstr.) (Rus)
[The effect of autohemotransfusions on the hemostasis system in open heart surgery] Shanoian SA, et al. **Anesteziol Reanimatol** 1990 May–Jun;(3):33–5 (Rus)
[An initial experience of extracorporeal irradiation of the blood in heart surgery patients] Soboleva ER, et al. **Anesteziol Reanimatol** 1990 Jan–Feb;(1):22–4 (Eng. Abstr.) (Rus)
[Immunocorrective therapy of destructive pancreatitis complicated by hepatic insufficiency] Shabalin VN, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):76–9 (Eng. Abstr.) (Rus)
[Autotransfusion of blood irradiated by helium-neon lasers in obliterating arterial diseases] Buga DA, et al. **Klin Khir** 1989;(7):70–1 (Rus)
[Correction of anemia in the early postoperative period in patients with acute gastrointestinal hemorrhage] Gluz AM, et al. **Klin Khir** 1989;(10):76 (Rus)
[Use of ultraviolet irradiation of the blood in the complex treatment of peritonitis] Mil'kov BO, et al. **Klin Khir** 1990; (1):45–6 (Eng. Abstr.) (Rus)
[Reinfusion of blood in injuries of the digestive organs] Nartsissov TV, et al. **Klin Khir** 1990;(4):49–52 (58 ref.) (Rus)
[Experience with using autologous transfusion of ultraviolet-irradiated blood] Kliuchevskiĭ VV, et al. **Ortop Travmatol Protez** 1989 Oct;(10):59–62 (Eng. Abstr.) (Rus)
[The effect of ultraviolet irradiation of the blood on various hormonal indicators in women with sclerocystic ovaries] Makeev SA, et al. **Sov Med** 1990;(3):98–100 (Rus)
[Difficulties in the evaluation of the activity of chronic brucellosis and in the selection of the methods of treatment] Po'lshchikova NN, et al. **Sov Med** 1989;(11):109–10 (Rus)
[The effect of ultraviolet irradiation of patients' blood on the morphofunctional status of erythrocytes] Cherniakov VL, et al. **Ter Arkh** 1989;61(9):118–20 (Eng. Abstr.) (Rus)
[Functional and structural changes in the surface of human erythrocytes following irradiation with ultraviolet rays of various wave lengths. V. Modification of the glycocalyx in autotransfusions of UV-irradiated blood] Snopov SA, et al. **Tsitologiia** 1989 Jun;31(6):696–705 (Eng. Abstr.) (Rus)
[Positive clinical effect of autologous transfusion of photomodified blood in the treatment of a patient with AIDS] Dvaladze NA, et al. **Vestn Khir** 1990 Jan; 144(1):55–7 (Rus)
[Characteristics of the effect of various erythrocyte-containing media on central hemodynamics, microcirculation and oxygen consumption during the treatment of massive hemorrhage] Gorkun AV, et al. **Vestn Khir** 1989 Jun;142(6):96–100 (Eng. Abstr.) (Rus)
[Reinfusion of blood in emergency prostatic adenomectomy] Komiakov BK, et al. **Vestn Khir** 1990 Jan;144(1):99–100 (Rus)
[Transfusion of photomodified autologous blood as a method of correcting hypoxemic disorders in surgical patients] Petukhov EB, et al. **Vestn Khir** 1989 Aug;144(8):117–9 (Eng. Abstr.) (Rus)
[Trigger mechanisms of the therapeutic effects of autologous transfusion of UV-irradiated blood (membranotropic effect on erythrocytes and thrombocytes)] Samoĭlova KA, et al. **Vestn Khir** 1989 Dec;144(12):51–60 (Eng. Abstr.) (Rus)
[Dynamics of neutrophilic enzyme indicators in patients with peptic ulcer after autologous blood transfusion and hemosorption] Zhidkov KP, et al. **Vestn Khir** 1990 Jan; 144(1):95–7 (Eng. Abstr.) (Rus)
[Autologous transfusion of UV-irradiated blood in the treatment of occlusive arterial diseases of the lower extremities] Zhulikova II, et al. **Vestn Khir** 1989 Jun; 142(6):104–8 (Eng. Abstr.) (Rus)
[Effect of transfusion of UV-irradiated blood on the changes in serum cholinesterase activity in patients with peritonitis] Zinevich VP, et al. **Vestn Khir** 1989 Jul;143(7):25–8 (Eng. Abstr.) (Rus)
[Use of ultraviolet irradiation of autologous blood in combined therapy of suppurative-infectious states in otorhinolaryngology] Shishkin SA, et al. **Vestn Otorinolaringol** 1989 Jul–Aug;(4):90 (Rus)
[The use of ultraviolet irradiation of the blood in dermatologic practice] Gromov VV, et al. **Voen Med Zh** 1990 Feb;(2):45–6 (Rus)
[The use of autohemoreflexotherapy in various diseases] Gur'ianov AA. **Voen Med Zh** 1989 Jun;(6):59 (Rus)
[The ultraviolet irradiation of autologous blood and endolymphatic antibiotic therapy in treating pneumonia in patients with craniocerebral trauma] Kibirev AB, et al. **Zh Vopr Neirokhir** 1990 May–Jun;(3):11–4 (Eng. Abstr.) (Rus)
[Problems with blood replacement in splenic injuries] Cernilevski M, et al. **Acta Chir Iugosl** 1989;36 Suppl 2:427–30 (Scr)
[Autotransfusion in splenic injuries] Tucaković M, et al. **Acta Chir Iugosl** 1989;36 Suppl 2:430–2 (Scr)
[Evolution of autotransfusion: effect of a diet with and without the ingestion of iron] Bofill C, et al. **Sangre (Barc)** 1990 Jun;35(3):179–83 (Eng. Abstr.) (Spa)
[Studies of aggregation using pairs of agonists in platelet concentrates stored for 5 days. Influence of autologous fresh plasma] Espinosa JI, et al. **Sangre (Barc)** 1990 Jun; 35(3):185–8 (Eng. Abstr.) (Spa)
[Autotransfusion of peripheral stem cells as an alternative to bone marrow transplantation] Sureda A, et al. **Sangre (Barc)** 1990 Feb;35(1):54–9 (71 ref.) (Spa)
[Reuse blood lost during surgery. A prospective study of hip joint surgery] Lisander B, et al. **Lakartidningen** 1990 Jan 31;87(5):291–2 (Swe)

ADVERSE EFFECTS

The salvaged blood syndrome: a sequel to mechanochemical activation of platelets and leukocytes? Bull BS, et al. **Blood Cells** 1990;16(1):5–20; discussion 20–3
Infection after autologous blood-derived stem cell transplantation. D'Antonio D, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:83–6
Hemolysis and renal dysfunction associated with autotransfusion. **Health Devices** 1990 Jan;19(1):25–7
Risks remain for self-donated blood transfusions. Eubanks P. **Hospitals** 1989 Oct 20;63(20):86, 88
Donation reactions among autologous donors. McVay PA, et al. **Transfusion** 1990 Mar–Apr;30(3):249–52
[The origin of non-emulsified fat during autotransfusions in elective hip surgery] Henn-Beilharz A, et al. **Anaesthesist** 1990 Feb;39(2):88–95 (Eng. Abstr.) (Ger)
[Reinfusion of contaminated blood in abdominal surgery (review of the literature)] Tsatsanidi KN, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):142–6 (66 ref.) (Rus)

INSTRUMENTATION

Anaphylatoxin and terminal complement complexes in red cell salvage. Bengtsson A, et al. **Acta Anaesthesiol Scand** 1990 Jul;34(5):339–41
Intraoperative collection of shed blood with citrated compresses for autotransfusion. An experimental study in pigs. Vagianos C, et al. **Acta Chir Scand** 1990 Feb; 156(2):121–6
Simultaneous use of microfibrillar collagen hemostat and blood saving devices in a canine kidney perfusion model. Niebauer GW, et al. **Ann Thorac Surg** 1989 Oct;48(4):523–7
Hard-shell cardiotomy reservoir for reinfusion of shed mediastinal blood. Page R, et al. **Ann Thorac Surg** 1989 Oct;48(4):514–7
Transfusion using a cell saver apparatus during surgery for coronary artery disease: is it beneficial? Hall RI, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S155
Automated intraoperative processing autotransfusion machines. **Health Devices** 1988 Aug;17(8):219–42
Autotransfusion machines. **Health Devices** 1988 Dec; 17(12):371
Ultrasound cardiac output units. **Health Devices** 1988 Dec; 17(12):371
Dual tracer technique to measure salvaged red cell survival following autotransfusion in aortic surgery. Thorley PJ, et al. **Nucl Med Commun** 1990 May;11(5):369–74
[First use of the DIDECO peroperative autotransfusion system in the treatment of emergencies in gynecology] Piños I, et al. **Cesk Gynekol** 1990 May;55(4):276–8 (Cze)
[Intraoperative autologous blood transfusion. Value in major orthopedic surgery] Plötz W, et al. **Fortschr Med** 1990 Mar 20;108(8):143–7 (Eng. Abstr.) (Ger)
[Microbiology studies of intra- and postoperative autotransfusion in orthopedics] Decker K, et al. **Infusionstherapie** 1990 Apr;17 Suppl 2:43–5 (Eng. Abstr.) (Ger)
[Autologous blood replacement in urology] Faul P, et al. **Infusionstherapie** 1990 Apr;17 Suppl 2:41–2 (Eng. Abstr.) (Ger)
[Autologous blood donation with preservation by freezing] Höhne M. **Infusionstherapie** 1990 Apr;17 Suppl 2:46–9 (Eng. Abstr.) (Ger)
[Organization and practical aspects of autologous blood replacement in a community hospital surgery department] Partecke G. **Infusionstherapie** 1990 Apr;17 Suppl 2:37–40 (Eng. Abstr.) (Ger)
[Intraoperative autotransfusion in massive hemorrhage following thoracic-abdominal trauma] Vara-Thorbeck R, et al. **Langenbecks Arch Chir** 1990;375(2):71–5 (Eng. Abstr.) (Ger)

METHODS

Changes in plasma concentrations of atrial natriuretic peptide during exchange transfusion in premature infants. Khoór A, et al. **Acta Paediatr Scand** 1990 May;79(5):513–7
Intraoperative autotransfusion for a patient with homozygous sickle cell disease. Cook A, et al. **Anesthesiology** 1990 Jul; 73(1):177–9
Acute preoperative plasmapheresis and established blood conservation techniques. Boldt J, et al. **Ann Thorac Surg** 1990 Jul;50(1):62–8
Comparative study of cell saver and ultrafiltration nontransfusion in cardiac surgery. Nakamura Y, et al. **Ann Thorac Surg** 1990 Jun;49(6):973–8
The plasma collection system: a new concept in autotransfusion. Tawes RL Jr, et al. **Ann Vasc Surg** 1989 Oct;3(4):304–6
A direct patient approach for pre-operative autologous blood donation and transfusion. Roxby DJ, et al. **Aust N Z J Surg** 1988 Jun;58(6):471–3
Elastase levels in salvaged blood and the effect of cell washing. Sieunarine K, et al. **Aust N Z J Surg** 1990 Aug; 60(8):613–6
ABC of transfusion. Autologous transfusion [see comments] Lee D, et al. **BMJ** 1990 Mar 17;300(6726):737–40 (0 ref.) Comment in: BMJ 1990 Apr 28;300(6732):1139.
Blood conservation in major orthopedic surgery. Turner RH, et al. **Clin Orthop** 1990 Jul;(256):299–305
Autotransfusion during aorto-iliac surgery. Duchateau J, et al. **Eur J Vasc Surg** 1990 Aug;4(4):349–54
Whole blood intra-operative salvage and reinfusion in patients undergoing venous thrombectomy. Husfeldt KJ,

et al. **Eur J Vasc Surg** 1990 Aug;4(4):391–3
Autologous blood stem cell transplantation as intensive consolidation therapy in hematological malignancies. Fioritoni G, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:60–4
Blood stem cell autografts in malignant blood disease: the French experience with a special focus on myeloma. The France Autogreffe Group (FAG). Hénon PR. **Haematologica** 1990 Jan–Feb;75 Suppl 1:53–9
Circulating stem cell autograft in malignant lymphomas. Majolino I, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:74–8
Blood stem cells autografts in patients with high risk multiple myeloma. Montuoro A, et al. **Haematologica** 1990 Jan–Feb; 75 Suppl 1:65–9
Rationale for very high–dose chemotherapy with peripheral blood stem cell support in advanced ovarian cancer. Panici PB, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:87–9 (26 ref.)
GM–CSF–exposed peripheral blood progenitors as sole source of stem cells for autologous transplantation in two patients with multiple myeloma. Pileri A, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:79–82
Use of peripheral blood stem cells to accelerate hemopoietic recovery following autologous bone marrow transplantation. Tarella C, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:90–4
Autologous peripheral blood stem cell transplantation in hematological malignancies. Teofili L, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:70–3
Intraoperative autologous transfusion in primary and revision total hip arthroplasty. McMurray MR, et al. **J Arthroplasty** 1990 Mar;5(1):61–5
Administration and logistics of a mobile intraoperative salvage program. Wallace BA, et al. **J Clin Apheresis** 1990; 5(2):104–5
Indications for intraoperative blood salvage. Williamson KR, et al. **J Clin Apheresis** 1990;5(2):100–3 (23 ref.)
Platelet–rich plasma reduces postoperative blood loss after cardiopulmonary bypass. DelRossi AJ, et al. **J Thorac Cardiovasc Surg** 1990 Aug;100(2):281–6
Clinical application of closed–loop postoperative autotransfusion. Blankenship HB, et al. **Med Prog Technol** 1990 May;16(1–2):89–93
Methods of autologous blood transfusion. Kay L. **Practitioner** 1989 Sep 8;233(1474):1147–8, 1151
Erythropoietin therapy in autologous blood donors. Goodnough LT. **Prog Clin Biol Res** 1990;338:105–12
Decreasing homologous blood transfusion in spinal surgery by use of the cell saver and predeposited blood. Mann DC, et al. **Spine** 1989 Dec;14(12):1296–300
[Autologous epidural blood patch and post–lumbar puncture headache. A review of a 1–year period at a central hospital] Jacobsen J. **Ugeskr Laeger** 1989 Sep 11;151(37):2366–8 (Eng. Abstr.) **(Dan)**
[Perioperative autologous transfusion in cardiac surgery. Course, medical and economic evaluation. Prospects] Gaillard D, et al. **Ann Chir** 1990;44(2):110–4 (Eng. Abstr.) **(Fre)**
[Autologous transfusion by peroperative salvage in orthotopic transplantation of the liver] Houvenaeghel M, et al. **Ann Fr Anesth Reanim** 1989;8(4):326–33 (Eng. Abstr.) **(Fre)**
[Tolerance and efficacy of delayed autologous transfusion in cardiovascular surgery] Pelissier E, et al. **Ann Fr Anesth Reanim** 1990;9(1):11–5 (Eng. Abstr.) **(Fre)**
[Autotransfusion by peroperative recuperation in neurosurgery. Preliminary study apropos of 40 cases] Lefèvre P, et al. **Neurochirurgie** 1989;35(4):217–21 (Eng. Abstr.) **(Fre)**
[Deep freezing of blood with special reference to autologous blood donation] Luboldt W. **Beitr Infusionther** 1989; 24:231–6 (14 ref.) (Eng. Abstr.) **(Ger)**
[Use of fresh frozen plasma in surgery with special reference to autologous fresh frozen plasma] Heim MU, et al. **Infusionstherapie** 1990 Apr;17 Suppl 2:34–6 (Eng. Abstr.) **(Ger)**
[4 years experience with the Ulm autologous transfusion concept] Mehrkens HH, et al. **Infusionstherapie** 1990 Apr; 17 Suppl 2:28–33 (Eng. Abstr.) **(Ger)**
[Preoperative autologous blood donation] Sachs V, et al. **Infusionstherapie** 1990 Jun;17(3):131–4 (24 ref.) (Eng. Abstr.) **(Ger)**
[Autotransfusion protocol for patients undergoing elective orthopedic surgery] Ferrari GM, et al. **Minerva Anestesiol** 1989 May;55(5):227–30 (Eng. Abstr.) **(Ita)**
[Autotransfusion technic in surgery of craniostenoses in children] Paccagnella F, et al. **Minerva Anestesiol** 1989 Apr;55(4):165–8 (Eng. Abstr.) **(Ita)**
[A method for the intraoperative return of blood from the excised spleen] Tsybyrné KA, et al. **Klin Khir** 1990;(3):68 **(Rus)**
[Experience with the use of UV irradiation of autologous blood in oral surgery] Mazepin AS, et al. **Stomatologiia (Mosk)** 1990 May–Jun;69(3):49–50 (Eng. Abstr.) **(Rus)**
[The use of ultraviolet–irradiated blood plasma in the treatment of pyelonephritis patients] Riabinskiĭ VS, et al. **Urol Nefrol (Mosk)** 1989 Jul–Aug;(4):12–6 (Eng. Abstr.) **(Rus)**
[The mechanism of the action of UV–irradiated autotransfusions in treating patients with suppurative–inflammatory diseases of the face and neck] Karandashov VI, et al. **Vestn Khir** 1989 Oct;143(10):92–4 (Eng. Abstr.) **(Rus)**
[Comparative experimental study of various methods of photomodification++ of the blood] Krylenkov VA, et al. **Vestn Khir** 1989 Jun;142(6):100–4 (Eng. Abstr.) **(Rus)**
[Blood reinfusion in injuries of the chest and abdomen] Kutushev FKh, et al. **Vestn Khir** 1989 Oct;143(10):94–6 (Eng. Abstr.) **(Rus)**
[The intravassal ultraviolet irradiation of autologous blood in the treatment of central nonexudative chorioretinal dystrophy] Dzhaliashvili OA, et al. **Vestn Oftalmol** 1990 Jan–Feb;106(1):41–3 (Eng. Abstr.) **(Rus)**
[The autotransfusion of ultraviolet–irradiated blood in the rehabilitation of patients with ischemic heart disease at a sanatorium] Il'nitskiĭ IV, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jul–Aug; (4):19–21 (Eng. Abstr.) **(Rus)**
[Dynamic microcirculatory disorders in patients with nonspecific lung diseases during the autotransfusion of ultraviolet–irradiated blood] Kravtsova NA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jul–Aug;(4):21–3 (Eng. Abstr.) **(Rus)**
[Treatment via autotransfusion of UV–irradiated blood in patients with nonspecific lung diseases] Ivanov EM, et al. **Vrach Delo** 1990 Jan;(1):42–3 (Eng. Abstr.) **(Rus)**

STANDARDS

[Autotransfusion—standards and quality control are necessary (editorial)] Kretschmer V. **Infusionstherapie** 1990 Apr;17 Suppl 2:3 **(Ger)**

STATISTICS & NUMERICAL DATA

Directed blood procurement does not benefit patients who are enrolled in an autologous blood predeposit program. Goodnough LT. **Am J Clin Pathol** 1989 Oct;92(4):484–7
[Consideration on transfusion in urologic surgery—a retrospective study on homologous and autologous transfusions] Ihara H, et al. **Hinyokika Kiyo** 1990 Jan; 36(1):27–33 (Eng. Abstr.) **(Jpn)**

UTILIZATION

Effects of a CME program on physicians' transfusion practices. Hull AL, et al. **Acad Med** 1989 Nov;64(11):681–5
As more surgeons opt for autologous transfusion route, what's ahead? [news] Goldsmith MF. **JAMA** 1989 Dec 8; 262(22):3101–2
Establishment of a schedule of optimal preoperative collection of autologous blood. Axelrod FB, et al. **Transfusion** 1989 Oct;29(8):677–80
Directed–donor programs may adversely affect autologous donor participation. Chambers LA, et al. **Transfusion** 1990 Mar–Apr;30(3):246–8
Should autologous blood that tests positive for infectious diseases be used or discarded? A decision analysis approach. Dzik WH, et al. **Transfusion** 1989 Oct;29(8):743–5
Surgeons' knowledge, attitude, and use of preoperative autologous blood donation. Strauss RG, et al. **Transfusion** 1990 Jun;30(5):418–22
Autologous transfusion: just about time [letter] Daneshvar A. **Vox Sang** 1990;59(1):60

VETERINARY

Critical care surgical techniques. Paddleford RR, et al. **Vet Clin North Am Small Anim Pract** 1989 Nov; 19(6):1079–94 (6 ref.)

BLOOD TRANSFUSION, INTRAUTERINE

Ovine fetal cardiovascular responses to packed red blood cell transfusions. Brace RA. **Am J Obstet Gynecol** 1989 Nov;161(5):1367–74
Does furosemide alter the hemodynamic response to rapid intravascular transfusion of the anemic fetal lamb? Chestnut DH, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1571–5
Chronic, massive fetomaternal hemorrhage treated with repeated fetal intravascular transfusions. Fischer RL, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):203–4
Blood sampling and transfusion in utero suggested in the pumping twin [letter; comment] Jakobi P, et al. **Am J Obstet Gynecol** 1990 Jun;162(6):1632–3 Comment on: Am J Obstet Gynecol 1989 May;160(5 Pt 1):1194–6.
Prediction of hematocrit decline after intravascular fetal transfusion. MacGregor SN, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1491–3
Acute fetal hemodynamic alterations after intrauterine transfusion for treatment of severe red blood cell alloimmunization. Moise KJ Jr, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):776–84
The effect of intravascular transfusion on umbilical venous pressure in anemic fetuses with and without hydrops. Weiner CP, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1498–501
Intrauterine transfusion for anti–Duffy(Fya) haemolytic disease. Cook SG, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 Pt 1):263–4
ABC of transfusion. Fetal and neonatal transfusion. Letsky EA. **BMJ** 1990 Mar 31;300(6728):862–6 (0 ref.)
Red cell glycolytic intermediates in normal, anaemic and transfused human fetuses. Lestas AN, et al. **Br J Haematol** 1989 Nov;73(3):387–91
Radiological aspects of intra–uterine blood transfusion [letter] Bowman JM. **Br J Radiol** 1967 Dec;40(480):960
Intra–uterine blood transfusion of the foetus [letter] Dempster WH. **Br J Radiol** 1967 Dec;40(480):960
Obstetric intervention. Thurmond AS. **Curr Opin Radiol** 1990 Apr;2(2):274–8 (17 ref.)
Twenty–two years of intra–uterine intraperitoneal transfusions. Bennebroek Gravenhorst J, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Oct;33(1):71–7
Successful ultrasound–guided intrauterine blood transfusion in severe non–immune hydrops fetalis. Buckshee K, et al. **Int J Gynaecol Obstet** 1990 Jun;32(2):153–6
Combined intravascular and intraperitoneal transfusions for erythroblastosis fetalis. A report of two cases. Lenke RR, et al. **J Reprod Med** 1990 Apr;35(4):425–8
Intrauterine blood transfusion for non–immune hydrops fetalis due to parvovirus B19 infection [letter] Soothill P. **Lancet** 1990 Jul 14;336(8707):121–2
Flow velocity waveforms of the umbilical and cerebral arteries before and after intravascular transfusion. Mari G, et al. **Obstet Gynecol** 1990 Apr;75(4):584–9
Intravenous pancuronium bromide for fetal neuromuscular blockade during intrauterine transfusion for red–cell alloimmunization. Moise KJ Jr, et al. **Obstet Gynecol** 1989 Dec;74(6):905–8
Percutaneous umbilical blood sampling and umbilical vein transfusions. Rapid serologic differentiation of fetal blood from maternal blood. Steiner EA, et al. **Transfusion** 1990 Feb;30(2):104–8
Management of fetal alloimmune thrombocytopenia by weekly in utero platelet transfusions. Murphy MF, et al. **Vox Sang** 1990;58(1):45–9
[Doppler sonographic follow–up in monitoring prenatal therapy of Rh incompatibility] Hünecke B, et al. **Arch Gynecol Obstet** 1989;245(1–4):102–4 **(Ger)**
[Ultrasonic monitoring of intravascular transfusion in severe Rhesus incompatibility. Diagnostic and therapeutic aspects after fetal relaxation] Keckstein G, et al. **Zentralbl Gynakol** 1989;111(19):1319–24 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Hyperkalemia after irradiation of packed red blood cells: possible effects with intravascular fetal transfusion. Thorp JA, et al. **Am J Obstet Gynecol** 1990 Aug;163(2):607–9
Umbilical cord haematoma as a complication of intrauterine intravascular blood transfusion. Keckstein G, et al. **Prenat Diagn** 1990 Jan;10(1):59–65

METHODS

Intrauterine transfusion—intraperitoneal versus intravascular approach: a case–control comparison. Harman CR, et al. **Am J Obstet Gynecol** 1990 Apr;162(4):1053–9
Amnioscopy for prenatal transfusion. Mandelbaum B, et al. **Am J Obstet Gynecol** 1967 Aug 15;98(8):1140–3
Intra–uterine exchange transfusion under ultrasound guidance. Lemery D, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Nov;33(2):161–8
Effects of intravascular, intrauterine transfusion on prenatal and postnatal hemolysis and erythropoiesis in severe fetal isoimmunization. Millard DD, et al. **J Pediatr** 1990 Sep; 117(3):447–54
Intrauterine treatment of severe fetal erythroblastosis: intravascular transfusion with ultrasonic guidance. Keckstein G, et al. **J Perinat Med** 1989;17(5):341–9
Nomograms for rapid estimation of intravascular intrauterine exchange transfusion. Christmas JT, et al. **Obstet Gynecol** 1990 May;75(5):887–91
Serial maternal blood donations for intrauterine transfusion. Gonsoulin WJ, et al. **Obstet Gynecol** 1990 Feb;75(2):158–62
Intrauterine intravascular transfusion for severe erythroblastosis fetalis: how much to transfuse? Plecas DV, et al. **Obstet Gynecol** 1990 Jun;75(6):965–9

BLOOD TYPING see **BLOOD GROUPING AND CROSSMATCHING**

BLOOD UREA NITROGEN

The role of urea kinetic modeling, TACurea, and Kt/V in achieving optimal dialysis: a critical reappraisal. Levine J, et al. **Am J Kidney Dis** 1990 Apr;15(4):285–301 (56 ref.)
Modeling urea kinetics with two vs. three BUN measurements. A critical comparison. Depner TA, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):499–502
Measurement of hemodialysis access recirculation: a two–needle method at the start of dialysis. Kobrin SM, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):508–10
Post to predialysis plasma urea nitrogen ratio, ultrafiltration and weight to estimate K.t/V. Use in auditing the amount of dialysis being administered. Manahan FJ, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):511–2
Determination of urinary urea nitrogen concentration with modified blood urea nitrogen procedures. Spruill WJ, et al. **Clin Pharm** 1990 May;9(5):371–3
Evaluating Kt/V and NPCR [letter] Enia G, et al.

Int J Artif Organs 1990 Jun;13(6):388
Intraoperative urinary output and postoperative blood urea nitrogen and creatinine levels in patients undergoing aortic reconstructive surgery. Knos GB, et al. **J Clin Anesth** 1989; 1(3):181–5
Peritoneal clearances with different dialysis regimens in children undergoing continuous cycling peritoneal dialysis. Leichter HE, et al. **Nephrol Dial Transplant** 1989; 4(10):893–9
Significance of blood urea nitrogen as an index of renal function in mice infected with Plasmodium berghei. Hioki A, et al. **Parasitol Res** 1989;76(2):127–30
Effects of age on fasting–induced changes in insulin, glucose, urea nitrogen, and free fatty acids in sera of sheep. Hileman SM, et al. **Proc Soc Exp Biol Med** 1990 May;194(1):21–5
[Necessity of blood test to diagnosis kidney diseases] Koide H. **Nippon Naika Gakkai Zasshi** 1990 Feb 10;79(2):134–9 **(Jpn)**
[Significance of BUN and non–protein nitrogen analysis in clinical tests] Orita Y, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:417–20 **(Jpn)**
[Value of the BUN/creatinine ratio in localizing digestive system hemorrhage in children] Prieto Bozano G, et al. **An Esp Pediatr** 1990 Mar;32(3):222–4 (Eng. Abstr.) **(Spa)**

BLOOD VESSEL PROSTHESIS

Postoperative changes in lipid profile: their relations with inflammatory markers and endocrine mediators. Canivet JL, et al. **Acta Anaesthesiol Belg** 1989;40(4):263–8
Aortofemoral reconstruction for multilevel disease: a prospective hemodynamic study. Nevelsteen A, et al. **Acta Chir Belg** 1989 Jul–Aug;89(4):179–84
Aortoduodenal fistula reconstructed with autogenous tissue. Case report. Lundbom J, et al. **Acta Chir Scand** 1989 Oct; 155(10):545–7
Optimal reconstruction of the renal arteries. Bergentz SE, et al. **Acta Chir Scand Suppl** 1990;555:227–35 (43 ref.)
Which is the best vascular prosthesis below the inguinal ligament? Charlesworth D. **Acta Chir Scand Suppl** 1990; 555:49–50
The benefits of proximal and distal vascular reconstruction as a one–stage procedure. Charlesworth D. **Acta Chir Scand Suppl** 1990;555:65–7
Extra–anatomic bypass for treatment of leg ischemia. DeFrang R, et al. **Acta Chir Scand Suppl** 1990;555:73–80 (58 ref.)
Management of late failures of aorto–femoral reconstructions. Goldstone J. **Acta Chir Scand Suppl** 1990;555:149–53
Adjuvant medical therapy to improve patency rate following reconstruction for atherosclerosis obliterans (ASO). Lepäntalo M. **Acta Chir Scand Suppl** 1990;555:51–8 (55 ref.)
The ideal operation for unilateral iliac occlusion. Should the asymptomatic iliac artery also be reconstructed? Lorentzen JE, et al. **Acta Chir Scand Suppl** 1990;555:69–71
The best alternative to reduce thrombogenicity of small diameter grafts. Swedenborg J. **Acta Chir Scand Suppl** 1990; 555:45–8 (30 ref.)
Management of late failures of femoro–popliteal and femoro–distal bypasses. Veith FJ, et al. **Acta Chir Scand Suppl** 1990;555:139–48 (34 ref.)
Can prosthetic graft infection be avoided? If not, how do we treat it? Yeager RA, et al. **Acta Chir Scand Suppl** 1990; 555:155–63 (80 ref.)
Treatment of iliac artery stenoses with the Wallstent endoprosthesis. Raillat C, et al. **AJR Am J Roentgenol** 1990 Mar;154(3):613–6
Removal of intimal hyperplasia in vascular endoprostheses by atherectomy and balloon dilatation. Vorwerk D, et al. **AJR Am J Roentgenol** 1990 Mar;154(3):617–9
Transcatheter occlusion of high flow Blalock–Taussig shunts with a detachable balloon. Gewillig M, et al. **Am J Cardiol** 1990 Jun 15;65(22):1518–9
Lipid accumulation in prosthetic vascular grafts. Experimental study. Chignier E, et al. **Am J Pathol** 1990 Sep;137(3):531–40
Hydrostatic pressure reduces thrombogenicity of polytetrafluoroethylene vascular grafts. Ritter EF, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1076–81
Experimental prosthetic vein valve [letter] Garcia Rinaldi R, et al. **Am J Surg** 1990 Jan;159(1):186
End–to–end anastomosis by enclosure between a prosthesis and a vessel with a significant difference in diameter. Merlini MP. **Am J Surg** 1990 Apr;159(4):417–9
Improving survival and limb salvage in patients with aortic graft infection. Yeager RA, et al. **Am J Surg** 1990 May; 159(5):466–9
Arteriotomy patching—a new technic. Sundt TM, et al. **Am Surg** 1966 Mar;32(3):207–12
Solid state line scan cameras for measuring strain in soft tissues and implants. Stewart SF, et al. **Ann Biomed Eng** 1989;17(6):671–84
Serial noninvasive studies do not herald postoperative failure of femoropopliteal or femorotibial bypass grafts. Barnes RW, et al. **Ann Surg** 1989 Oct;210(4):486–93; discussion 493–4
A reconsideration of risk factors for the Fontan operation. Myers JL, et al. **Ann Surg** 1990 Jun;211(6):738–43; discussion 744
Modified Cabrol shunt for control of hemorrhage in repair of type A dissection of the aorta. Blum M, et al. **Ann Thorac Surg** 1989 Nov;48(5):709–11
Tubular supravalvar aortic stenosis: replacement of ascending aorta in a young patient. Gargiulo G, et al. **Ann Thorac Surg** 1990 Sep;50(3):467–8
Repair of thoracic dissections [letter] Hammond GL. **Ann Thorac Surg** 1990 Aug;50(2):330
Evaluation of composite graft replacement of the aortic root and ascending aorta. Helseth HK, et al. **Ann Thorac Surg** 1974 Aug;18(2):138–41
Use of azygos vein as interposition graft for surgical unifocalization of pulmonary blood supply. Iyer KS, et al. **Ann Thorac Surg** 1989 Dec;48(6):776–8
Disruption of a modified Blalock–Taussig shunt by rapid deceleration injury. Joyce DH, et al. **Ann Thorac Surg** 1990 Jul;50(1):124
Vein graft permeability [letter] Kennedy JH, et al. **Ann Thorac Surg** 1990 Aug;50(2):334
Aortic graft–valve (composite) replacement at 20 years: wrap or no wrap? Shunt or no shunt? Kouchoukos NT. **Ann Thorac Surg** 1989 Nov;48(5):615–6
Sutureless ring graft replacement of ascending aorta and aortic arch. Oz MC, et al. **Ann Thorac Surg** 1990 Jul; 50(1):74–9
Simplified technique for aortic arch replacement. First–stage right subclavian–to–left carotid artery bypass. Panday SR, et al. **Ann Thorac Surg** 1974 Aug;18(2):186–90
Aorticorenal disease. A surgical entity. Sanger PW, et al. **Ann Thorac Surg** 1967 Mar;3(3):195–203
Replacement of the descending thoracic aorta with intraluminal ring graft. Serra AJ, et al. **Ann Thorac Surg** 1989 Nov;48(5):689–92
The albumin–coated knitted Dacron aortic prosthesis: a clinical study. Branchereau A, et al. **Ann Vasc Surg** 1990 Mar;4(2):138–42
An ultrastructural and immunocytochemical analysis of human endothelial cell adhesion on coated vascular grafts. Curti T, et al. **Ann Vasc Surg** 1989 Oct;3(4):351–63
Implant site: a determinant of completeness of arterial prosthesis healing in the dog and possibly in humans. Durante KR, et al. **Ann Vasc Surg** 1990 Mar;4(2):171–8
A new technique for bilateral iliac vein and inferior vena cava reconstruction using reinforced polytetrafluoroethylene. Murchan P, et al. **Ann Vasc Surg** 1990 May;4(3):302–4
Preferential use of EPTFE for above–knee femoropopliteal bypass grafts. Patterson RB, et al. **Ann Vasc Surg** 1990 Jul;4(4):338–43
Traumatically–induced embolus to the hand from a thrombosed PTFE vascular access graft. Senofsky G, et al. **Ann Vasc Surg** 1990 Mar;4(2):182–4
Experimental aortic replacement with a vascularized tissue graft. Coltharp WH. **Arch Surg** 1989 Nov;124(11):1331–4
Exertional disruption of axillofemoral graft anastomosis. 'The axillary pullout syndrome'. White GH, et al. **Arch Surg** 1990 May;125(5):625–7
Hepatic artery reconstruction for hepatic artery thrombosis after orthotopic liver transplantation. Yanaga K, et al. **Arch Surg** 1990 May;125(5):628–31
Influence of high and low wall shear rates on the inhibition of factor Xa and thrombin at surfaces coated with immobilized heparin. Arnander C, et al. **Artif Organs** 1989 Dec;13(6):521–6
Clinical application of a self–sealing poly(ether–urethane) graft applicable to blood access for hemodialysis. Ota K, et al. **Artif Organs** 1989 Dec;13(6):498–503
Fibronectin coating of expanded polytetrafluoroethylene (ePTFE) grafts and its role in endothelial seeding. Vohra RK, et al. **Artif Organs** 1990 Feb;14(1):41–5
Effects of duration of acetylsalicylic acid administration on patency and anastomotic hyperplasia of ePTFE grafts. Brothers TE, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):558–60
Performance of a new vascular xeno prosthesis. Burns P, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):214–8
Platelet interactions with heparin binding growth factor and fibronectin. Greisler HP, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):561–3
Imaging analysis of platelet deposition on the extracardiac valved conduit in humans. Kawata H, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):190–2
Development of hybrid compliant graft: rapid preparative method for reconstruction of a vascular wall. Matsuda T, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):553–5
Immobilized albumin–immunoglobulin G for improved hemocompatibility of biopolymers. Mohammad SF, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):384–7
Laser vascular welding in biologic grafts. Ninomiya J, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):208–11
Development of ultrafine polyester fiber vascular grafts with high endothelialization capability. Angiogenesis by ultrafine polyester fibers. Niu S, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):202–5
Long–term evaluation of a growable graft. Noishiki Y, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):267–70
In vivo protein adsorption onto polymers: a transmission electron microscopic study. Nojiri C, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):357–61
Dynamics of platelet adhesion to artificial materials and cultured endothelial cells under shear flow. Ohshima N, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):379–81
An autologous connective tissue tube with high healing ability as a small diameter vascular substitute with temporary antithrombogenicity. Satoh S, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):185–7
Clinical trial of a self–sealing PTFE–silicone dialysis graft. Schanzer H, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):211–3
Aortocoronary bypass grafting with hydrophilic small caliber vascular grafts. Tomizawa Y, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):199–202
Compliance effect on patency of small diameter vascular grafts. Uchida N, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):556–8
Graft compliance and anastomotic flow patterns. Wang LC, et al. **ASAIO Trans** 1990 Apr–Jun;36(2):90–4
The tearing strength of glutaraldehyde fixed bovine pericardium. Trowbridge EA, et al. **Biomater Artif Cells Artif Organs** 1989;17(3):315–28
Effect of diabetes on the healing process of synthetic grafts implanted in dogs: a preliminary study. Awad JA, et al. **Biomaterials** 1989 Nov;10(9):590–7
Endothelial cell response to polyvinyl chloride–packaged GORETEX: effect of surface contamination. Hodgkin JH, et al. **Biomaterials** 1990 Jan;11(1):9–12
Comparative study of the thromboresistance of Dacron combined with various polyurethanes. Leake DL, et al. **Biomaterials** 1989 Sep;10(7):441–4
In vivo evaluation of hydrophobic and fibrillar microporous polyetherurethane urea graft. Marois Y, et al. **Biomaterials** 1989 Oct;10(8):521–31
Hemashield vascular graft [letter; comment] Munjal D. **Biomaterials** 1989 Nov;10(9):642 Comment on: Biomaterials 1989 Apr;10(3):156–65.
Rapid endothelialization of microporous vascular prostheses covered with meshed vascular tissue: a preliminary report. Sedlarik KM, et al. **Biomaterials** 1990 Jan;11(1):4–8
Hydrophobic and fibrillar microporous polyetherurethane urea prosthesis: an ESCA study on the internal and external surfaces of explanted grafts. Therrien M, et al. **Biomaterials** 1989 Oct;10(8):517–20
Balloon dilatation of a stenosed modified (polytetrafluoroethylene) Blalock–Taussig shunt. Parsons JM, et al. **Br Heart J** 1989 Sep;62(3):228–9
Prosthetic microvenous grafting into the femoral vein of the rat; considerations concerning the anastomotic technique. Robinson PH, et al. **Br J Plast Surg** 1989 Sep;42(5):538–43
Patency and long–term biological fate of a two–ply biodegradable microarterial prosthesis in the rat. Robinson PH, et al. **Br J Plast Surg** 1989 Sep;42(5):544–9
A silicone rubber arterial prosthesis. Ashton F, et al. **Br J Surg** 1967 Aug;54(8):709–12
Operative assessment of femorodistal bypass grafts using a new Doppler flowmeter [see comments] Beard JD, et al. **Br J Surg** 1989 Sep;76(9):925–8 Comment in: Br J Surg 1990 Feb;77(2):235.
Attachment of indium–111 labelled endothelial cells to pretreated polytetrafluoroethylene vascular grafts. Budd JS, et al. **Br J Surg** 1989 Dec;76(12):1259–61
Simultaneous aortic and renal artery reconstruction. Cooper GG, et al. **Br J Surg** 1990 Feb;77(2):194–8
Salvage of an exposed arterial prosthesis by tissue expansion. Foo IT, et al. **Br J Surg** 1989 Dec;76(12):1320–1
Feasibility of pulmonary artery balloon counterpulsation via the percutaneous route: pathological studies on the heart and lungs. Sweet JM, et al. **Can J Cardiol** 1989 Oct; 5(7):352–6
Comparison between transcutaneous oximetry and ankle–brachial pressure ratio in predicting runoff and outcome in patients who undergo aortobifemoral bypass. Ameli FM, et al. **Can J Surg** 1989 Nov;32(6):428–32
Expanded polytetrafluoroethylene prostheses as secondary blood access sites for hemodialysis: pathological findings in 29 excised grafts. Canizales S, et al. **Can J Surg** 1989 Nov;32(6):433–9
Transluminal angioplasty of failing infrainguinal arterial by–pass grafts: initial and long–term results in 13 patients. Laissy JP, et al. **Cardiovasc Intervent Radiol** 1990 Feb–Mar; 13(1):14–7
Evaluation of ferromagnetism and magnetic resonance imaging artifacts of the Strecker tantalum vascular stent. Teitelbaum GP, et al. **Cardiovasc Intervent Radiol** 1989 May–Jun;12(3):125–7
Aortic wraps a modification to aortic grafting. Gordon JA. **Cent Afr J Med** 1989 Sep;35(9):490–2
Reconstruction of superior vena cava in invasive thymoma. Chiou GT, et al. **Chest** 1990 Feb;97(2):502–3
Postoperative evaluation of ascending aortic prosthetic conduits by magnetic resonance imaging. Pucillo AL, et al. **Chest** 1990 Jan;97(1):106–10
Seeding of autogenous endothelial cells to inner surface of small–caliber dacron vascular prostheses. An experimental study on canines. Wang ZG, et al. **Chin Med J [Engl]** 1989 Aug;102(8):606–13
Seeding of intravascular stents with genetically engineered endothelial cells [see comments] Dichek DA, et al. **Circulation** 1989 Nov;80(5):1347–53 Comment in: Circulation 1989 Nov;80(5):1495–6.
Adjuvant therapy for intracoronary stents. Investigations in atherosclerotic swine. Rodgers GP, et al. **Circulation** 1990 Aug;82(2):560–9
Vascular stenting in normal and atherosclerotic rabbits. Studies of the intravascular endoprosthesis of titanium–nickel–alloy. Sutton CS, et al. **Circulation** 1990 Feb;81(2):667–83
Intimal fibromuscular hyperplasia at the venous anastomosis of PTFE grafts in hemodialysis patients. Clinical,

immunocytochemical, light and electron microscopic assessment. Swedberg SH, et al. **Circulation** 1989 Dec; 80(6):1726–36

Gas in an infected vascular prosthesis. An unusual finding on plain radiographs. Campbell C, et al. **Clin Radiol** 1990 Jan;41(1):60–2

Budd–Chiari syndrome: shunt selection and post-operative assessment. Raby N, et al. **Clin Radiol** 1989 Nov; 40(6):586–90

Aspergillus ball thrombus occluding a homograft conduit. Bhatnagar NK, et al. **Eur J Cardiothorac Surg** 1989; 3(3):270–2

Right pulmonary artery development after modified Blalock–Taussig shunt (MBTS) in infants with pulmonary atresia, VSD and confluent pulmonary arteries. Cotrufo M, et al. **Eur J Cardiothorac Surg** 1989;3(1):12–5

Right-sided intrathoracic bypass graft for complex or recurrent coarctation of the aorta. Karolczak MA, et al. **Eur J Cardiothorac Surg** 1989;3(3):278–81

Emergency treatment of rupture of the proximal anastomosis of an infected thoracoabdominal aortic graft with bleeding into a postpneumonectomy empyema cavity. Larsson S, et al. **Eur J Cardiothorac Surg** 1987;1(1):59–62

Quantitative analysis of neovascularization of different PTFE-implants. Menger MD, et al. **Eur J Cardiothorac Surg** 1990;4(4):191–6

Outflow resistance and early occlusion of infrainguinal bypass grafts. Cooper GG, et al. **Eur J Vasc Surg** 1990 Jun; 4(3):279–83

Does dextran 40 reduce early graft thrombogenicity? An experimental investigation on patency and platelet deposition on prosthetic graft materials in sheep. Lindblad B, et al. **Eur J Vasc Surg** 1990 Aug;4(4):341–4

The effect of distal anastomotic site on PTFE graft patency in lower extremity bypass. McLoughlin R, et al. **Eur J Vasc Surg** 1989 Oct;3(5):417–9

Technical advantages of a ringed intra-luminal graft in the management of difficult aortic aneurysms. Moody P, et al. **Eur J Vasc Surg** 1990 Aug;4(4):355–9

Immune response to collagen impregnated Dacron double velour grafts for aortic and aorto-femoral reconstructions. Norgren L, et al. **Eur J Vasc Surg** 1990 Aug;4(4):379–84

Flow waveform analysis and long-term results of autogenous saphenous vein and polytetrafluoroethylene grafts in 140 arterial reconstructions of the lower limbs. Okadome K, et al. **Eur J Vasc Surg** 1990 Aug;4(4):369–74

Conservative treatment of major aortic graft infection. Quick CR, et al. **Eur J Vasc Surg** 1990 Feb;4(1):63–7

Vascular graft infection: the role of indium scanning. Reilly DT, et al. **Eur J Vasc Surg** 1989 Oct;3(5):393–7

Long-term behaviour of modified human umbilical vein grafts; late aneurysmal degeneration established by colour-duplex scanning. Sommeling CA, et al. **Eur J Vasc Surg** 1990 Feb;4(1):89–94

Recurrent graft-enteric fistulae. Sørensen S, et al. **Eur J Vasc Surg** 1989 Dec;3(6):583–5

Role of magnetic resonance imaging in the evaluation of aortic graft healing, perigraft fluid collection, and graft infection. Spartera C, et al. **Eur J Vasc Surg** 1990 Feb; 4(1):69–73

Is arterial reconstruction to the ankle worthwhile in the absence of autologous vein? Tyrrell MR, et al. **Eur J Vasc Surg** 1989 Oct;3(5):429–34

Experimental evidence to support the use of interposition vein collars/patches in distal PTFE anastomoses. Tyrrell MR, et al. **Eur J Vasc Surg** 1990 Feb;4(1):95–101

Effects of shear stress on endothelial cell monolayers on expanded polytetrafluoroethylene (ePTFE) grafts using preclot and fibronectin matrices. Vohra RK, et al. **Eur J Vasc Surg** 1990 Feb;4(1):33–41

The correlation of peroperative outflow resistance measurements with patency 109 infrainguinal arterial reconstructions. Vos GA, et al. **Eur J Vasc Surg** 1989 Dec; 3(6):539–42

The influence of smoking and plasma factors on prosthetic graft patency. Wiseman S, et al. **Eur J Vasc Surg** 1990 Feb;4(1):57–61

Colonoscopic diagnosis of paraprosthetic-enteric fistula [letter] Wilcox CM, et al. **Gastrointest Endosc** 1990 Mar–Apr;36(2):166–7

Pseudomonas stutzeri synthetic vascular graft infection. George LJ, et al. **Heart Lung** 1990 Mar;19(2):203–5

Dissection of the thoracic aorta following partial clamping. Banchini E, et al. **Int Angiol** 1989 Jul–Sep;8(3):157–60

Late results of reconstructive surgery for renovascular hypertension. Fiorani P, et al. **Int Angiol** 1989 Apr–Jun; 8(2):81–91

Twenty years experience with abdominal aneurysmectomy. Surgical considerations and analysis of late results. Poulias GE, et al. **Int Angiol** 1989 Jul–Sep;8(3):111–9

Femorotibial bypass grafting for lower limb ischaemia. Sipponen J, et al. **Int Angiol** 1989 Apr–Jun;8(2):65–9

Isolation of vascular endothelial cells for investigations on hybrid prostheses. Gerlach J, et al. **Int J Artif Organs** 1989 Dec;12(12):805–10

Aortopulmonary shunt with replacement of a common atrioventricular valve in a patient with double inlet ventricle. Shimoyama Y, et al. **Int J Cardiol** 1990 Aug; 28(2):263–6

Platelet interaction to prosthetic materials—role of von Willebrand factor in platelet interaction to PTFE. Badimon L, et al. **J Biomater Appl** 1990 Jul;5(1):27–48

Towards an ideal polyurethane graft for hemodialysis. Ota K. **J Biomater Appl** 1989 Oct;4(2):141–57 (39 ref.)

Predicting the compliance of small diameter vascular grafts from uniaxial tensile tests. Stewart SF, et al. **J Biomech** 1990;23(7):629–37

In vivo biostability of four types of arterial grafts with impervious walls; their haemodynamic and pathological characteristics. Charara J, et al. **J Biomed Eng** 1989 Sep; 11(5):416–28

Small-caliber polyurethane and polytetrafluoroethylene grafts: a comparative study in a canine aortoiliac model. Brothers TE, et al. **J Biomed Mater Res** 1990 Jun; 24(6):761–71

Interaction of human serum lipoproteins with biomaterials. Jayakumari N, et al. **J Biomed Mater Res** 1989 Nov; 23(11):1261–70

Repair of experimental arteriotomy in rabbit aorta using a new resorbable elastin-fibrin biomaterial. Lefebvre F, et al. **J Biomed Mater Res** 1989 Dec;23(12):1423–32

Series shunt evaluation of polyurethane vascular graft materials in chronically AV-shunted canines. McCoy TJ, et al. **J Biomed Mater Res** 1990 Jan;24(1):107–29

In vitro and in vivo studies of heparinized-collageno-elastic tubes. Senatore F, et al. **J Biomed Mater Res** 1990 Jul; 24(7):939–57

Development of monoclonal antibodies to collagens for assessing host-implant interactions. Werkmeister JA, et al. **J Biomed Mater Res** 1989 Dec;23(A3 Suppl):273–83

Prosthetic aortic arch replacement. A new experimental technique. Brodman RF, et al. **J Cardiovasc Surg (Torino)** 1990 Mar–Apr;31(2):142–6

Quantitative analysis of anastomotic intimal hyperplasia in paired Dacron and PTFE grafts. Cantelmo NL, et al. **J Cardiovasc Surg (Torino)** 1989 Nov–Dec;30(6):910–5

Venous reconstruction using prosthetic grafts. Hasegawa T, et al. **J Cardiovasc Surg (Torino)** 1989 Sep–Oct;30(5):833–7

The management of aortoenteric and paraprosthetic fistulae. Higgins RS, et al. **J Cardiovasc Surg (Torino)** 1990 Jan–Feb; 31(1):81–6

The current role of isolated profundaplasty. Kalman PG, et al. **J Cardiovasc Surg (Torino)** 1990 Jan–Feb;31(1):107–11

Proximal anastomosis in aortobifemoral bypass: end-to-end or end-to-side? Mellière D, et al. **J Cardiovasc Surg (Torino)** 1990 Jan–Feb;31(1):77–80

Fresh venous femoral autografts and allografts as carotid substitutes in matched dogs from the same litter. Merhi Y, et al. **J Cardiovasc Surg (Torino)** 1990 Mar–Apr; 31(2):147–55

Results of 132 PTFE (Gore-Tex) bifurcated graft implantations. Petrovic P, et al. **J Cardiovasc Surg (Torino)** 1989 Nov–Dec;30(6):897–901

Nine year patent femorotibial expanded polytetrafluoroethylene graft bypass. Pittaluga RD. **J Cardiovasc Surg (Torino)** 1990 Jan–Feb;31(1):127–9

Apicoaortic conduit implanted without cardiopulmonary bypass: a useful contingency technique. Salas J, et al. **J Cardiovasc Surg (Torino)** 1989 Sep–Oct;30(5):798–800

Duodenal fistula after reconstruction of the inferior vena cava with an externally stented PTFE graft. San Nicolo M, et al. **J Cardiovasc Surg (Torino)** 1990 May–Jun;31(3):382–4

Cryopreserved saphenous vein homografts for femoral-distal vascular reconstruction. Sellke FW, et al. **J Cardiovasc Surg (Torino)** 1989 Sep–Oct;30(5):838–42

Aortobipopliteal bypass via the obturator foramina. Sottiurai VS, et al. **J Cardiovasc Surg (Torino)** 1990 Jan–Feb; 31(1):121–3

Comparative analysis of pseudointima biogenesis in Gelseal coated Dacron knitted graft versus crimped and noncrimped graft. Sottiurai VS, et al. **J Cardiovasc Surg (Torino)** 1989 Nov–Dec;30(6):902–9

Pseudointima formation in woven and knitted dacron grafts. A comparative ultrastructural analysis. Sottiurai VS, et al. **J Cardiovasc Surg (Torino)** 1989 Sep–Oct;30(5):808–16

Aspirin improves the patency rate of seeded vena cava grafts. Vo NM, et al. **J Cardiovasc Surg (Torino)** 1989 Nov–Dec; 30(6):936–41

Regional versus general anesthesia in high-risk surgical patients: the need for a clinical trial. Manolio TA, et al. **J Clin Anesth** 1989;1(6):414–21

Repair of infected pseudoaneurysm with aortic arch replacement after orthotopic heart transplantation. Slater AD, et al. **J Heart Transplant** 1990 May–Jun;9(3 Pt 1):230–5

Femoropopliteal bypass; factors influencing long term patency. Vennesland O, et al. **J Oslo City Hosp** 1989 Nov–Dec;39(11–12):137–42

Histological appearances of the long saphenous vein. Milroy CM, et al. **J Pathol** 1989 Dec;159(4):311–6

Magnetic resonance imaging of abdominal aortic grafts. Alessi G, et al. **J R Coll Surg Edinb** 1989 Dec;34(6):316–20

Intraperitoneal placement of gentamicin beads in the management of prosthetic graft sepsis. Reilly DT, et al. **J R Coll Surg Edinb** 1989 Dec;34(6):314–5

The early and late responses of the arterial wall to graft placement. Mason RA, et al. **J Surg Res** 1989 Nov; 47(5):383–8

Impact of postantibiotic effect on bacterial adherence to vascular prostheses. Schmitt DD, et al. **J Surg Res** 1990 Apr;48(4):373–8

Tobramycin–adhesive in preventing and treating PTFE vascular graft infections. Shenk JS, et al. **J Surg Res** 1989 Dec;47(6):487–92

Invited letter concerning: conduit repair of tetralogy of Fallot [letter; comment] Castaneda AR. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 1):792 Comment on: J Thorac Cardiovasc Surg 1989 Nov;98(5 Pt 1):730–6; discussion 736–7.

Pulmonary allograft conduit repair of tetralogy of Fallot. An alternative to transannular patch repair [see comments] Clarke DR, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 1):730–6; discussion 736–7 Comment in: J Thorac Cardiovasc Surg 1989 Nov;98(5 Pt 1):792.

Aortic valve replacement with stentless porcine aortic bioprosthesis. David TE, et al. **J Thorac Cardiovasc Surg** 1990 Jan;99(1):113–8

Invited letter concerning: inferior vena cava–pulmonary artery extracardiac conduit [letter; comment] Doty DB. **J Thorac Cardiovasc Surg** 1990 Aug;100(2):313–4 Comment on: J Thorac Cardiovasc Surg 1990 Aug;100(2):228–32.

Effects of low-dose marine oils on intimal hyperplasia in autologous vein grafts. Landymore RW, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 1):788–91

Replacement of the ascending aorta. Early and late results. Lytle BW, et al. **J Thorac Cardiovasc Surg** 1990 Apr; 99(4):651–7; discussion 657–8

Tricuspid valve operations in 530 patients. Twenty-five-year assessment of early and late phase events. McGrath LB, et al. **J Thorac Cardiovasc Surg** 1990 Jan;99(1):124–33

Inferior vena cava–pulmonary artery extracardiac conduit. A new form of right heart bypass [see comments] Marcelletti C, et al. **J Thorac Cardiovasc Surg** 1990 Aug; 100(2):228–32 Comment in: J Thorac Cardiovasc Surg 1990 Aug;100(2):313–4.

Replacement of thrombosed graft of descending aorta [letter] Marcinkevičius A, et al. **J Thorac Cardiovasc Surg** 1990 Mar;99(3):571–2

Mechanical testing of cryopreserved aortic allografts. Comparison with xenografts and fresh tissue. Vesely I, et al. **J Thorac Cardiovasc Surg** 1990 Jan;99(1):119–23

Fibrin glue-antibiotic suspension in the prevention of prosthetic graft infection. Ney AL, et al. **J Trauma** 1990 Aug;30(8):1000–5; discussion 1005–6

Lateral plantar artery bypass grafting: defining the limits of foot revascularization. Andros G, et al. **J Vasc Surg** 1989 Nov;10(5):511–9; discussion 520–1

Increased platelet deposition on polytetrafluoroethylene grafts after balloon catheter thrombectomy. Bech FR, et al. **J Vasc Surg** 1990 Jun;11(6):804–10; discussion 810–1

The effect of varying fibronectin concentration on the attachment of endothelial cells to polytetrafluoroethylene vascular grafts. Budd JS, et al. **J Vasc Surg** 1990 Aug; 12(2):126–30

The vascular endothelial cell as a vehicle for gene therapy. Callow AD. **J Vasc Surg** 1990 Jun;11(6):793–8

Recombinant human tissue-type plasminogen activator is an effective agent for thrombolysis of peripheral arteries and bypass grafts: a preliminary report [letter] Dawson K, et al. **J Vasc Surg** 1990 Sep;12(3):374–5

The use of composite grafts in femorocrural bypasses performed for limb salvage: a review of 108 consecutive cases and comparison with 57 in situ saphenous vein bypasses. Feinberg RL, et al. **J Vasc Surg** 1990 Sep; 12(3):257–63

Differential effects of a gram-negative and a gram-positive infection on autogenous and prosthetic grafts. Geary KJ, et al. **J Vasc Surg** 1990 Feb;11(2):339–45; discussion 346–7

Reconstruction of the vena cava and of its primary tributaries: a preliminary report. Gloviczki P, et al. **J Vasc Surg** 1990 Mar;11(3):373–81

Growth factor gene expression by intimal cells in healing polytetrafluoroethylene grafts. Golden MA, et al. **J Vasc Surg** 1990 Apr;11(4):580–5

Healing of polytetrafluoroethylene arterial grafts is influenced by graft porosity. Golden MA, et al. **J Vasc Surg** 1990 Jun;11(6):838–44; discussion 845

Comparison of infrainguinal graft surveillance techniques. Green RM, et al. **J Vasc Surg** 1990 Feb;11(2):207–14; discussion 214–5

Effects of class I heparin binding growth factor and fibronectin on platelet adhesion and aggregation. Greisler HP, et al. **J Vasc Surg** 1990 May;11(5):665–74

Significance and management of inflow gradients unexpectedly generated after femorofemoral, femoropopliteal, and femoroinfrapopliteal bypass grafting. Gupta SK, et al. **J Vasc Surg** 1990 Sep;12(3):278–83

Evacuation of microscopic air bubbles from Dacron reduces complement activation and platelet aggregation. Kalman PG, et al. **J Vasc Surg** 1990 Apr;11(4):591–8

Contouring of long vascular fabric grafts [letter] Kon ND, et al. **J Vasc Surg** 1990 Jun;11(6):848

Efficacy of prophylactic antibiotics in vascular surgery: an arterial wall microbiologic and pharmacokinetic perspective. Lalka SG, et al. **J Vasc Surg** 1989 Nov; 10(5):501–9; discussion 509–10

Combined coronary artery bypass grafting and bilateral renal revascularization for unstable angina and impeding renal failure. McCready RA, et al. **J Vasc Surg** 1990 Sep; 12(3):241–5

Postoperative dilation of knitted Dacron aortic bifurcation graft. Nunn DB, et al. **J Vasc Surg** 1990 Sep;12(3):291–7

Rupture of a Dacron aortic prosthesis into the jejunum. Okita Y, et al. **J Vasc Surg** 1989 Nov;10(5):554–6

Endothelial cell seeding reduces thrombogenicity of Dacron grafts in humans. Ortenwall P, et al. **J Vasc Surg** 1990

Mar;11(3):403–10
Reduced platelet deposition on seeded versus unseeded segments of expanded polytetrafluoroethylene grafts: clinical observations after a 6–month follow–up. Ortenwall P, et al. **J Vasc Surg** 1989 Oct;10(4):374–80
Twelve–year experience with intraluminal sutureless ringed graft replacement of the descending thoracic and thoracoabdominal aorta. Oz MC, et al. **J Vasc Surg** 1990 Feb;11(2):331–8
Morphologic characteristics of adsorbed human plasma proteins on vascular grafts and biomaterials. Pankowsky DA, et al. **J Vasc Surg** 1990 Apr;11(4):599–606
Thrombus–free, human endothelial surface in the midregion of a Dacron vascular graft in the splanchnic venous circuit—observations after nine months of implantation. Park PK, et al. **J Vasc Surg** 1990 Mar;11(3):468–75
Long–term results with the above–knee popliteal expanded polytetrafluoroethylene graft. Prendiville EJ, et al. **J Vasc Surg** 1990 Apr;11(4):517–24
Retrohepatic vena cava reconstruction with polytetrafluoroethylene graft. Risher WH, et al. **J Vasc Surg** 1990 Sep;12(3):367–70
Carotid patch angioplasty: immediate and long–term results. Rosenthal D, et al. **J Vasc Surg** 1990 Sep;12(3):326–33
Anastomotic femoral pseudoaneurysm: an investigation of occult infection as an etiologic factor. Seabrook GR, et al. **J Vasc Surg** 1990 May;11(5):629–34
Factors affecting patency of venous allografts in miniature swine. Stevens SL, et al. **J Vasc Surg** 1990 Sep;12(3):361–6
Intragraft drug infusion as an adjunct to balloon catheter thrombectomy for salvage of thrombosed infragenicular vein grafts: a preliminary report. Walsh DB, et al. **J Vasc Surg** 1990 Jun;11(6):753–9; discussion 760
Rapid cellular luminal coverage of Dacron inferior vena cava prostheses in dogs by immediate seeding of autogenous endothelial cells derived from omental tissue: results of a preliminary trial. Wang ZG, et al. **J Vasc Surg** 1990 Aug; 12(2):168–79
Cerebral infarction due to disseminated intravascular coagulation with thromboexclusion for dissecting aortic aneurysms. Urakami K, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):241–4
The assessment of pelvic circulation after internal iliac arterial reconstruction: a retrospective study of the treatment for vasculogenic impotence and hip claudication. Iwai T, et al. **Jpn J Surg** 1989 Sep;19(5):549–55
Freeze–dried microarterial replacement allografts in rabbits. Pratt MF, et al. **Laryngoscope** 1989 Oct;99(10 Pt 1):1020–6
The challenge of small diameter vascular grafts. Burkel WE. **Med Prog Technol** 1988–89;14(3–4):165–75
Tissue–derived biomaterials and their use in cardiovascular prosthetic devices. Hilbert SL, et al. **Med Prog Technol** 1988–89;14(3–4):115–63 (246 ref.)
Morphological studies of cellular responses to experimental arterial grafts. Kischer CW, et al. **Microsurgery** 1990; 11(1):34–9
Long–term histological changes in 1 millimeter polytetrafluoroethylene (Gore–Tex) prosthetic arterial grafts. Samuels RM, et al. **Microsurgery** 1989;10(4):274–82
A comparison between visual and quantitative analysis in a prospective evaluation of labelled 111In leucocyte imaging in vascular infection. Berridge DC, et al. **Nucl Med Commun** 1989 Jul;10(7):487–95
Improved healing of microvascular PTFE prostheses by induction of a clot layer: an experimental study in rats. van der Lei B, et al. **Plast Reconstr Surg** 1989 Dec; 84(6):960–8
Case of the day. Pediatric. Mycotic pseudoaneurysm and thrombosis of modified left Blalock–Taussig shunt. Boulden TF, et al. **Radiographics** 1990 Jan;10(1):119–21
Aortoenteric fistula and perigraft infection: evaluation with CT. Low RN, et al. **Radiology** 1990 Apr;175(1):157–62
Infection due to Actinobacillus actinomycetemcomitans [letter; comment] Piliero P, et al. **Rev Infect Dis** 1989 Nov–Dec;11(6):1033–4 Comment on: Rev Infect Dis 1989 Jan–Feb;11(1):46–63.
Healing of prosthetic arterial grafts. Pasquinelli G, et al. **Scanning Microsc** 1990 Jun;4(2):351–62 (82 ref.)
Small–diameter portacaval H–graft for variceal hemorrhage. Rypins EB, et al. **Surg Clin North Am** 1990 Apr; 70(2):395–404
Pyrolytic carbon–coated Dacron grafts. Sharp WV, et al. **Surg Forum** 1978;29:218–20
Vascular reconstruction after extended resection of a retroperitoneal fibromatosis. Piquet P, et al. **Surgery** 1990 Mar;107(3):346–9
Pseudointimal thrombogenicity changes in small arterial grafts. Seeger JM, et al. **Surgery** 1990 Jun;107(6):620–6
Adherence of mucin and non–mucin–producing staphylococci to preclotted and albumin–coated velour knitted vascular grafts. Siverhus DJ, et al. **Surgery** 1990 Jun;107(6):613–9
Neovascularization of prosthetic vascular grafts. Quantitative analysis of angiogenesis and microhemodynamics by means of intravital microscopy. Menger MD, et al. **Thorac Cardiovasc Surg** 1990 Jun;38(3):139–45
From a synthetic, microporous, compliant, biodegradable small–caliber vascular graft to a new artery. van der Lei B, et al. **Thorac Cardiovasc Surg** 1989 Dec;37(6):337–47 (90 ref.)
Fibrinogen and platelet deposition in PTFE grafts. Christenson JT, et al. **Vasa** 1990;19(2):129–33
Fistulisation of an iliac pseudoaneurysm into the appendix. Presentation of a case and a review of the literature. Sahlman EA, et al. **Vasa** 1989;18(3):242–5 (16 ref.)
Xenotracheal graft as biological material for replacement of the affected vessels. Shvetsov IM, et al. **Vasa Suppl** 1989; 27:309
[Grafting of a dacron blood vessel seeded with autogenous canine endothelial cells in the vein of dogs] Pu LQ. **Chung Hua I Hsueh Tsa Chih** 1989 Sep;69(9):519–21 (Chi)
[Reconstruction of an aneurysm of the abdominal aorta using a single–ring, fibrin–impregnated prosthesis with an intraluminal bifurcation] Wiesner K. **Rozhl Chir** 1989 Dec; 68(12):815–23 (Eng. Abstr.) (Cze)
[Infection around abdominal blood vessel prostheses] Kitslaar PJ. **Ned Tijdschr Geneeskd** 1990 Aug 11;134(32):1532–5 (25 ref.) (Dut)
[Application of auto–expansible endoprostheses to arteries of the legs] Rousseau H, et al. **Ann Cardiol Angeiol (Paris)** 1989 Oct;38(8):455–9 (Eng. Abstr.) (Fre)
[Peri– and postoperative use of low molecular weight heparin in peripheral vascular surgery] Samama CM, et al. **Ann Fr Anesth Reanim** 1990;9(2):102–5 (Eng. Abstr.) (Fre)
[Usefulness of a percutaneous endoprosthesis in the treatment of renal artery stenoses] Joffre F, et al. **Arch Mal Coeur** 1989 Jul;82(7):1199–204 (Eng. Abstr.) (Fre)
[Implantation of endoprostheses in aortocoronary bypass. Preliminary experience at the Thoraxcenter of Rotterdam] Leborgne O, et al. **Arch Mal Coeur** 1989 Sep;82(9):1595–9 (Eng. Abstr.) (Fre)
[The neoartery, myth or reality? Study of 79 explanted arterial prostheses] Descotes J, et al. **Chirurgie** 1989; 115(1):58–65 (Eng. Abstr.) (Fre)
[Mechanical obstruction of the duodenum after surgery of the abdominal aorta] Chaillou P, et al. **J Chir (Paris)** 1989 Nov;126(11):596–7 (Eng. Abstr.) (Fre)
[The Dacron vascular prosthesis in men. Mechanical performance, lesions and molecular stability] Vinard E, et al. **Presse Med** 1990 Apr 14;19(15):709–14 (25 ref.) (Eng. Abstr.) (Fre)
[Extra–anatomic bypass as therapy of infected bacterial (mycotic) infrarenal aortic aneurysm. A comparative, literature supported analysis] Belz J, et al. **Chirurg** 1989 Jul;60(7):479–8 (33 ref.) (Eng. Abstr.) (Ger)
[Inflammatory aneurysm of the infrarenal aorta] Hoffmeister AW. **Chirurg** 1990 Mar;61(3):168–70 (Eng. Abstr.) (Ger)
[Aorto–iliac artery aneurysm] Imig H, et al. **Chirurg** 1990 Mar;61(3):155–62 (Ger)
["Inflammatory aneurysm" of the aorta. Diagnosis, therapy, results] Kniemeyer HW, et al. **Chirurg** 1990 Jan;61(1):27–31 (Eng. Abstr.) (Ger)
[Percutaneous implantation of vascular endoprostheses (stents) in the iliac and femoral arteries] Günther RW, et al. **Dtsch Med Wochenschr** 1989 Oct 6;114(40):1517–23 (Eng. Abstr.) (Ger)
[Solvents—dehydrated vascular transplant in the animal experiment] Farmand M, et al. **Fortschr Kiefer Gesichtschir** 1990;35:22–4 (Ger)
[Morphology and volume behavior of allogeneic vascular implants. An animal experiment study of the carotid artery of the rat] Fleiner B, et al. **Fortschr Kiefer Gesichtschir** 1990;35:19–21 (Ger)
[Artificial vascular replacement in microsurgery. Results of a comprehensive experimental study] Voy ED, et al. **Fortschr Kiefer Gesichtschir** 1990;35:17–9 (Ger)
[Long–term results following aorto–femoral Y bypass. Doppler ultrasound pressure measurement, real–time ultrasound, CT and i.v. DSA] Pirschel J, et al. **Helv Chir Acta** 1989 Dec;56(4):609–13 (Eng. Abstr.) (Ger)
[Inflammatory aneurysm of the abdominal aorta and ureteral obstruction] Ruckert R, et al. **Helv Chir Acta** 1989 Dec; 56(4):629–32 (Eng. Abstr.) (Ger)
[Surgical experiences with the arteriovenous hemodialysis shunt (1970–1988)] Wehrli H, et al. **Helv Chir Acta** 1989 Dec;56(4):621–7 (Eng. Abstr.) (Ger)
[An aorto–bronchial fistula following prosthetic replacement of the descending aorta. A comparison of diagnostic possibilities] Deider S, et al. **ROFO** 1989 Dec;151(6):735–7 (Ger)
[Adaptability of fine–needle biopsy for preoperative and postoperative studies in femoro–crural vascular reconstruction] Hofmann–Preiss K, et al. **ROFO** 1990 Jul; 153(1):56–60 (Eng. Abstr.) (Ger)
[Thoracic aorta dissection—the place of MRT and CT in the follow–up after prosthetic aortic replacement] Neufang KF, et al. **ROFO** 1989 Dec;151(6):659–65 (Eng. Abstr.) (Ger)
[Infected vascular prostheses] Ammann J. **Ther Umsch** 1990 Jul;47(7):612–7 (23 ref.) (Eng. Abstr.) (Ger)
[Aneurysm of the aortic isthmus as a complication following dilatation of coarctation] Amiri MA, et al. **Vasa** 1990; 19(1):75–8 (Eng. Abstr.) (Ger)
[Cholesterol crystal embolization, a rare cause of postoperative ischemic colitis] Pfeifer M, et al. **Vasa** 1990; 19(1):54–8 (Eng. Abstr.) (Ger)
[Use of color–coded Duplex sonography for morphologic and hemodynamic assessment of postoperative aneurysms in bioprostheses] Ellinghaus L, et al. **Vasa Suppl** 1989; 27:356–7 (Ger)
[Value of profunda revascularization in aorto–femoral 2–level occlusion] Hohlbach G, et al. **Vasa Suppl** 1989;27:318–9 (Ger)
[Early and late results of percutaneous transluminal angioplasty of the common femoral artery branch with special reference to postoperative service interventions] Ostheim–Dzerowycz W. **Vasa Suppl** 1989;27:322–3 (Ger)
[Surgical treatment of renovascular hypertension in children] Mau H, et al. **Z Kinderchir** 1989 Oct;44(5):299–303 (Eng. Abstr.) (Ger)
[Vascular replacement—a critical evaluation of status] Kadletz M, et al. **Zentralbl Chir** 1989;114(19):1249–58 (31 ref.) (Eng. Abstr.) (Ger)
[The biosynthetic Omniflow prosthesis: preliminary experience] Battisti G, et al. **Ann Ital Chir** 1989 Sep–Oct; 60(5):431–3 (Eng. Abstr.) (Ita)
[Extra–anatomical bypasses: axillofemoral and femorofemoral. Indications and results] Pegoraro M, et al. **Minerva Cardioangiol** 1990 Apr;38(4):171–3 (Eng. Abstr.) (Ita)
[Dacron–EXS prosthesis in axillo–femoral bypass] Adovasio R, et al. **Minerva Chir** 1989 Nov 15;44(21):2237–9 (Eng. Abstr.) (Ita)
[Use of diverse prosthetic materials in preparation of sequential bypasses in combined lesions of the aorto–iliac–femoral axis] Gullà P, et al. **Minerva Chir** 1989 Dec 31;44(23–24):2403–7 (Eng. Abstr.) (Ita)
[Prosthesis replacement of the inferior vena cava] Ratto GB, et al. **Minerva Chir** 1990 Jan;45(1–2):37–40 (Eng. Abstr.) (Ita)
[Angioplasty of the deep femoral artery using a semirigid PTFE prosthesis. Experimental studies] Rengo M, et al. **Minerva Chir** 1990 Apr 15;45(7):469–76 (Eng. Abstr.) (Ita)
[The value of venous digital angiography in the postoperative follow–up of thromboendarterectomy and aorto–iliac–femoral prosthetic replacement] Origlia PG, et al. **Minerva Med** 1990 Mar;81(3 Suppl):1–3 (Eng. Abstr.) (Ita)
[Successful Bentall's procedure for annulo–aortic ectasia in a patient with abdominal aortic aneurysmectomy] Ozawa S, et al. **J Cardiol Suppl** 1989;22:42 (Jpn)
[Surgical treatment of Budd–Chiari syndrome] Yasuda K, et al. **Kokyu To Junkan** 1989 Nov;37(11):1185–90 (Jpn)
[A case of supravalvular aortic stenosis treated by Doty's operation] Asai T, et al. **Kyobu Geka** 1990 Mar;43(3):223–5 (Eng. Abstr.) (Jpn)
[Implantation of a ringed intraluminal graft in ruptured type III dissecting aneurysm] Hirooka K, et al. **Kyobu Geka** 1990 May;43(5):409–12 (Eng. Abstr.) (Jpn)
[Replacement of superior vena cava with resection of Hodgkin's disease of the thymus: a case report] Ikeuchi K, et al. **Kyobu Geka** 1990 Apr;43(4):305–7 (Eng. Abstr.) (Jpn)
[A technique of end–to–side anastomosis of a prosthetic graft to the ascending aorta: reinforcement of the anastomosis with wrapping of the ascending aorta] Kazuno H, et al. **Kyobu Geka** 1989 Aug;42(9):746–8 (Eng. Abstr.) (Jpn)
[Influences of irradiation on the anastomotic sites of artificial grafts] Ogawa J, et al. **Kyobu Geka** 1989 Jul;42(7):541–5 (Eng. Abstr.) (Jpn)
[Spasm in aortocoronary vein graft] Okada Y, et al. **Kyobu Geka** 1989 Sep;42(10):873–5 (7 ref.) (Eng. Abstr.) (Jpn)
[A case of ruptured pseudoaneurysm of the aortic arch associated with hemoptysis and hoarseness] Sasaki H, et al. **Kyobu Geka** 1990 Feb;43(2):133–7 (Eng. Abstr.) (Jpn)
[Repairing the thoracic and abdominal aortic aneurysms at the same time] Takeuchi E, et al. **Kyobu Geka** 1989 Aug; 42(9):782–5 (Eng. Abstr.) (Jpn)
[A case report of combined composite valve graft replacement of the aortic root and graft replacement of the abdominal aorta] Ueda T, et al. **Kyobu Geka** 1990 Jan; 43(1):61–3 (Eng. Abstr.) (Jpn)
[The surgical treatment of ruptured thoracic aortic aneurysm with use of permanent bypass] Yamane M, et al. **Kyobu Geka** 1989 Nov;42(12):1000–4 (Eng. Abstr.) (Jpn)
[A case report of emergency Bentall re–operation] Yamazato A, et al. **Kyobu Geka** 1989 Aug;42(9):778–81 (Eng. Abstr.) (Jpn)
[Experimental and clinical studies on the exclusion and bypassing operation for abdominal aortic and iliac artery aneurysms] Inaba M. **Nippon Geka Gakkai Zasshi** 1989 Dec; 90(12):2044–9 (Eng. Abstr.) (Jpn)
[A small–caliber synthetic vascular prosthesis prelined with autogenous canine endothelial cells] Shindo S. **Nippon Geka Gakkai Zasshi** 1989 Jun;90(6):933–40 (Eng. Abstr.) (Jpn)
[The effect of the administration of slow releasing type of dipyridamole on teflon graft patency for experimental superior vena cava replacement in mongrel dogs] Hasegawa S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Nov;37(11):2262–8 (Eng. Abstr.) (Jpn)
[Pathological findings of the aortic wall at the site of ligation against the rigid rings of an intraluminal graft for acute DeBakey type I aortic dissection] Kanabuchi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep;37(9):2020–4 (Eng. Abstr.) (Jpn)
[Total graft replacement of the thoracoabdominal aorta with reconstruction of visceral branches, intercostal and lumbar

arteries in expanding chronic dissecting aneurysms of the thoracoabdominal aorta] Kazui T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jul;37(7):1436–40 (Eng. Abstr.) **(Jpn)**

[A case report of superior vena cava reconstruction using a heparin-coated temporary bypass tube] Koike T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Feb;38(2):298–302 (Eng. Abstr.) **(Jpn)**

[Experimental and clinical study of an intraluminal sutureless prosthesis] Maruyama Y. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Oct; 37(10):2150–60 (Eng. Abstr.) **(Jpn)**

[Evaluation of aortocoronary bypass operation using a He-Ne laser flowmeter—comparison between internal mammary artery grafts and saphenous vein grafts] Mizutani T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Mar; 38(3):389–95 (Eng. Abstr.) **(Jpn)**

[Gore-Tex grafts for replacement of the superior vena cava in 10 patients with intrathoracic malignant tumors] Nakahara K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jan;38(1):66–71 (Eng. Abstr.) **(Jpn)**

[An operated case of atresia of aortic arch without PDDT in an adult] Nasu M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jan;38(1):146–9 (Eng. Abstr.) **(Jpn)**

[Clinical experience of bovine internal mammary artery graft (BIOFLOW) for coronary artery bypass surgery] Suma H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep; 37(9):1965–8 (Eng. Abstr.) **(Jpn)**

[Improvement in the mechanical properties of artificial blood vessel suitable for the extracranial cerebral artery] Miyamoto S, et al. **No Shinkei Geka** 1990 Mar;18(3):253–8 (Eng. Abstr.) **(Jpn)**

[Experimental study of the vascular prosthesis "Dallon" with velour on both sides] Dąbrowski A, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:251–5 (Eng. Abstr.) **(Pol)**

[Providing antibacterial properties to a vascular prosthesis made of polyethylene terephthalate fibers] Georgiewa A, et al. **Polim Med** 1988;18(4):239–43 (Eng. Abstr.) **(Pol)**

[Experimental direction and development of synthetic vascular grafts] Głowiński S. **Polim Med** 1988;18(4):221–38 (129 ref.) (Eng. Abstr.) **(Pol)**

[Reconstruction of the femoro-popliteal vessels: indications and late results] Balas P, et al. **Grud Serdechnososudistaia Khir** 1990;(1):44–9 (Eng. Abstr.) **(Rus)**

[Radical correction of an atypical variant of aortic coarctation] Solov'ev GM, et al. **Grud Serdechnososudistaia Khir** 1990;(5):74–5 **(Rus)**

[A new method of surgical treatment of recurrent aortic coarctation (aorto-aortic shunting from the ascending to the descending thoracic aorta)] Spiridonov AA, et al. **Grud Serdechnososudistaia Khir** 1990;(1):38–43 (Eng. Abstr.) **(Rus)**

[Repeated arterial anastomoses in surgery of Fallot's tetralogy] Makhmudov MM, et al. **Grudn Khir** 1989 Jul-Aug;(4):26–7 (Eng. Abstr.) **(Rus)**

[5-year experience with roentgenologically controlled endovascular nitinol prosthesis] Rabkin IKh, et al. **Kardiologiia** 1990 Apr;30(4):11–7 (Eng. Abstr.) **(Rus)**

[Reconstructive surgery in arteriosclerosis obliterans of the aorta and arteries in severe ischemia of the lower extremities] Makarov NA. **Khirurgiia (Mosk)** 1990 May; (5):133–6 **(Rus)**

[Evaluation of the results of reconstructive operations in patients with occlusive diseases of the abdominal aorta and its branches] Mikaelian AL, et al. **Khirurgiia (Mosk)** 1990 May;(5):56–9 (Eng. Abstr.) **(Rus)**

[Restoration of blood flow after resection of an aneurysm of the abdominal aorta] Sukharev II, et al. **Khirurgiia (Mosk)** 1990 Apr;(4):107–9 **(Rus)**

[Recurrence of ischemia of the lower limbs in patients with functioning vascular prosthesis] Zatevakhin II, et al. **Khirurgiia (Mosk)** 1989 Sep;(9):35–9 (Eng. Abstr.) **(Rus)**

[Studies and clinical experiences in the use of domestic blood vessel prostheses with increased thromboresistance] Spiridonov AA, et al. **Klin Khir** 1989;(7):22–5 (Eng. Abstr.) **(Rus)**

[Construction of left ventricle-aorta conduits (review of the literature)] Roeva LA, et al. **Med Tekh** 1989 Nov-Dec; (6):38–45 (51 ref.) (Eng. Abstr.) **(Rus)**

[Vascular prosthesis made of polyester threads for microsurgery] Gorbunov GN, et al. **Polim Med** 1988; 18(4):244–53 (Eng. Abstr.) **(Rus)**

[Use of an autovenous transplant, polytetrafluoroethylene prosthesis and human umbilical vein bioprosthesis for creating an arteriovenous fistula for programmed hemodialysis] Filiptsev PIa, et al. **Vestn Khir** 1989 Nov; 143(11):36–8 (Eng. Abstr.) **(Rus)**

[Surgical treatment of congenital spindle-shaped aneurysm of the internal jugular vein] Ivanov AM, et al. **Vestn Khir** 1989 Dec;144(12):71–3 **(Rus)**

[Total vessel obliteration in arteriosclerosis] Lebedev LV, et al. **Vestn Khir** 1990 Jan;144(1):7–13 (Eng. Abstr.) **(Rus)**

[Hemodynamic changes in patients with arteriosclerosis obliterans of the lower extremities after restoration of the circulation] Peregudov IG, et al. **Vestn Khir** 1989 Jul; 143(7):50–2 (Eng. Abstr.) **(Rus)**

[Indications for and the methods of revascularization of visceral branches in aorto-femoral reconstruction] Pokrovskiĭ AV, et al. **Vestn Khir** 1990 Mar;144(3):3–10 (Eng. Abstr.) **(Rus)**

[Roentgeno-endovascular prosthetics of the superior vena cava in compression syndrome] Rabkin IKh, et al. **Vopr Onkol** 1990;36(1):63–9 (Eng. Abstr.) **(Rus)**

[Bilateral trans-obturator bypass after graft infection in the aorto-bifemoral position] Ristić M, et al. **Srp Arh Celok Lek** 1989 May-Jun;117(5–6):361–9 (Eng. Abstr.) **(Scc)**

[Results of bypass in the aortoiliac region] Solaković E. **Acta Chir Iugosl** 1989;36 Suppl 2:691–3 **(Scr)**

[A by-pass to the internal jugular. An original method to salvage a dysfunctional vascular prosthesis in the arm for hemodialysis] Abad C, et al. **Angiologia** 1989 Sep-Oct; 41(5):182–4 (Eng. Abstr.) **(Spa)**

[Importance of symptomatic balance in peripheral arterial surgery] Becade P, et al. **Angiologia** 1989 Jul-Aug; 41(4):137–9 (24 ref.) (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Diagnosis of synthetic vascular graft infection: comparison of CT and gallium scans. Johnson KK, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):405–9

What is the etiology of "reactions" to vascular graft material? [letter; comment] Kaufman JL. **Anesthesiology** 1990 Jan; 72(1):217–8 Comment on: Anesthesiology 1989 Sep;71(3):331–8.

Paraprosthetic cecal fistula: CT demonstration—a case report. Arrington ER, et al. **Angiology** 1990 Jun;41(6):502–4

Aortic graft—enteric fistula. Aarnio P, et al. **Ann Chir Gynaecol** 1989;78(4):329–31

False aneurysms after prosthetic reconstructions for aortoiliac obstructive disease. van den Akker PJ, et al. **Ann Surg** 1989 Nov;210(5):658–66

Severe stenotic scar contracture of the Microvel Hemashield right-sided extracardiac conduit. Angelini GD, et al. **Ann Thorac Surg** 1989 Nov;48(5):714–6

Bovine pericardium: another cautionary note [letter] Bullaboy CA. **Ann Thorac Surg** 1989 Nov;48(5):743

Thromboembolism from undersized Dacron grafts in the descending thoracic aorta. Verdant A, et al. **Ann Thorac Surg** 1989 Nov;48(5):686–8

A paraprosthetic–enteric fistula associated with a duodenal tumor. Dachs R, et al. **Ann Vasc Surg** 1990 Jan;4(1):65–8

False aneurysm infected by Aspergillus fumigatus: an unusual complication of aortofemoral bypass graft. Nussaume O, et al. **Ann Vasc Surg** 1990 Jul;4(4):388–92

Autogenous tissue reconstruction in the management of aortoiliofemoral graft infection. Quiñones-Baldrich WJ, et al. **Ann Vasc Surg** 1990 May;4(3):223–8

Closure of the internal carotid artery after endarterectomy: the advantages of patch angioplasty without its disadvantages. Vanmaele R, et al. **Ann Vasc Surg** 1990 Jan; 4(1):81–4

Improved strategies for secondary operations on infrainguinal arteries. Veith FJ, et al. **Ann Vasc Surg** 1990 Jan;4(1):85–93 (33 ref.)

The possibility of distal embolization from a femoral–popliteal prosthesis above the knee. A consideration against its routine use in this position. Friedman SG, et al. **Arch Surg** 1990 May;125(5):668–70

Establishment of a vascular graft infection model in the sheep carotid artery. Fletcher JP, et al. **Aust N Z J Surg** 1990 Oct;60(10):801–3

Femoral false aneurysms: a recommendation for the method of repair. Schache DJ, et al. **Aust N Z J Surg** 1988 May; 58(5):377–80

In vivo evaluation of four chemically processed biological grafts implanted as infrarenal arterial substitutes in dogs. Marois Y, et al. **Biomaterials** 1989 Aug;10(6):369–79

Acute aortic occlusion as a late complication of coarctation repair. Williams CR, et al. **Cardiovasc Intervent Radiol** 1989 Sep-Oct;12(5):286–9

Heparin-resistant thrombus formation by endovascular stents in baboons. Interruption by a synthetic antithrombin. Krpski WC, et al. **Circulation** 1990 Aug;82(2):570–7

Experience with vascular grafts in total artificial heart replacement. Weidemann H, et al. **Int J Artif Organs** 1990 May;13(5):288–92

An histo-morphological evaluation of ninety surgically excised human umbilical vein grafts. Gill F, et al. **J Biomed Mater Res** 1989 Dec;23(A3 Suppl):363–80

Delayed reaction to a Dacron velour bypass graft. De Clerck LS, et al. **J Cardiovasc Surg (Torino)** 1990 Jan–Feb; 31(1):124–6

Graft excision and extra-anatomic revascularization: the treatment of choice for the septic aortic prosthesis. Schmitt DD, et al. **J Cardiovasc Surg (Torino)** 1990 May–Jun; 31(3):327–32

The acquisition of antibiotic resistant coagulase-negative staphylococci by aortic graft recipients. Mannion PT, et al. **J Hosp Infect** 1989 Nov;14(4):313–23

Bacteriology of aortic aneurysm sac contents. Stonebridge PA, et al. **J R Coll Surg Edinb** 1990 Feb;35(1):42–3

A modified method for management of prosthetic graft infections involving an anastomosis to the common femoral artery. Calligaro KD, et al. **J Vasc Surg** 1990 Apr; 11(4):485–92

Graft geometry and venous intimal-medial hyperplasia in arteriovenous loop grafts. Fillinger MF, et al. **J Vasc Surg** 1990 Apr;11(4):556–66

Disruption of externally supported knitted dacron graft three years after implantation—a case report. Ohta T, et al. **J Vasc Surg** 1990 Jul;12(1):65–9

Late occurrence of aortoenteric fistula. After removal of a prosthetic graft. Harding AD, et al. **Mo Med** 1989 Oct; 86(10):696–8

Percutaneous management of abscesses that involve native arteries or synthetic arterial grafts. Lambiase RE, et al. **Radiology** 1989 Dec;173(3):815–8

Anastomotic aneurysms: facts and fancy. Gaylis H, et al. **Surg Annu** 1990;22:317–41 (62 ref.)

Platelet changes with in vivo exposure to prosthetic arterial surfaces. Clagett GP, et al. **Surg Forum** 1978;29:226–9

[False ruptured mycotic aneurysm developing on an pre-existing venous bypass. Complication of Candida albicans septicemia in a patient with acquired immunodeficiency syndrome (letter)] Thomas P, et al. **Ann Med Interne (Paris)** 1990;141(2):195 **(Fre)**

[Monomelic hypertrophic osteoarthropathy associated with infection of a vascular prosthesis] Fauquert P, et al. **Rev Rhum Mal Osteoartic** 1990 Jan;57(1):13–6 (18 ref.) **(Fre)**

[Treatment of an infected vascular prosthesis by irrigation-suction (lavage)] Entz L, et al. **Orv Hetil** 1990 Jun 10;131(23):1255–7 (Eng. Abstr.) **(Hun)**

[Experimental and clinical studies on prevention of vascular prosthetic infection] Kurata H. **Nippon Geka Gakkai Zasshi** 1989 Aug;90(8):1251–7 (Eng. Abstr.) **(Jpn)**

[Effectiveness of fibrinogen to avoid serous fluid leakage through polytetrafluoroethylene (PTFE) tubular graft] Suzuki T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Apr;38(4):596–600 (Eng. Abstr.) **(Jpn)**

[Predicting early postoperative thrombosis after reconstructive surgery in occlusive diseases of major arteries of the extremities] Shcherbiuk AN, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):105–8 **(Rus)**

[Formation of pseudoaneurysms at the site of prosthetic surgery of the aorta using a synthetic prosthesis in coarctation] Solov'ev GM, et al. **Khirurgiia (Mosk)** 1989 Sep;(9):13–7 (Eng. Abstr.) **(Rus)**

[Surgical methods of preventing aorto(prosthesis)intestinal erosions and fistulae in surgery of the abdominal aorta and its branches] Ignashov AM, et al. **Vestn Khir** 1989 Oct; 143(10):88–91 (Eng. Abstr.) **(Rus)**

HISTORY

Vascular grafts in the 1990s: lessons from the past. Greenhalgh RM. **Acta Chir Scand Suppl** 1990;555:249–53

Toward a durable and safe aortic root reconstruction. Helseth HK. **Ann Thorac Surg** 1990 Apr;49(4):678–9

METHODS

Abdominal aortic aneurysms. Hardy JD. **Am J Med Sci** 1967 Aug;254(2):221–35

Comparison of two techniques to isolate microvascular endothelial cells from the omentum. Sterpetti AV, et al. **J Surg Res** 1990 Feb;48(2):101–6

[Results of bypass surgery for imperiled leg] Buth J, et al. **Ned Tijdschr Geneeskd** 1990 Jun 23;134(25):1216–20 (Eng. Abstr.) **(Dut)**

STANDARDS

Late results of preferential use of tube versus bifurcation grafts for abdominal aortic aneurysmectomy. Friedman SG, et al. **Ann Vasc Surg** 1990 Jan;4(1):39–41

Interactions at the blood/material interface. Greisler HP. **Ann Vasc Surg** 1990 Jan;4(1):98–103

Polyurethane arterial prosthesis: experimental evaluation. Martin-Mondiere C, et al. **Ann Vasc Surg** 1990 Jan; 4(1):52–7

The evolution of a clinically relevant experimental model for the realistic evaluation of long-length (80-cm) arterial prostheses. Wu HD, et al. **Ann Vasc Surg** 1990 Jan; 4(1):58–64

BLOOD VESSELS

see related
ANGIOGRAPHY
VASCULAR RESISTANCE
VASCULAR SURGERY

Indications for fiberoptic angioscopy and intraluminal ultrasound. White RA. **Compr Ther** 1990 Jun;16(6):23–30

Conduction block in neuropathies with necrotizing vasculitis. Ropert A, et al. **Muscle Nerve** 1990 Feb;13(2):102–5

Experience with new retrieval forceps for foreign body removal in the vascular, urinary, and biliary systems. Selby JB, et al. **Radiology** 1990 Aug;176(2):535–8

[The application of vascular endoscope for the extracranial cerebrovascular occlusive disease: the development of the endoscopic system] Miyamoto S, et al. **No Shinkei Geka** 1989 Jul;17(7):625–8 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

Cardiovascular anomalies of cephalothoracopagus synotus. A case report and review of the literature of 23 Japanese autopsied cases. Ishida T, et al. **Acta Pathol Jpn** 1990 Feb; 40(2):128–36 (33 ref.)

Small bowel angiodysplasia in association with Crohn's ileitis.

A case report. Minervini S, et al. **Ital J Surg Sci** 1989; 19(4):399–400

Cryptic vascular malformations of the spinal cord: diagnosis by magnetic resonance imaging and outcome of surgery. Barnwell SL, et al. **J Neurosurg** 1990 Mar;72(3):403–7

Multiple focal nodular hyperplasia of the liver associated with vascular malformations of various organs and neoplasia of the brain: a new syndrome. Wanless IR, et al. **Mod Pathol** 1989 Sep;2(5):456–62

Angiodysplasia of the gastrointestinal tract: report of 5 cases and review of the literature. Sun JS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Apr;88(4):400–3

[Congenital angiodysplasia of the limbs; diagnosis and therapy] Paes EH, et al. **Ned Tijdschr Geneeskd** 1990 Feb 3;134(5):235–9 (Eng. Abstr.) (Dut)

[Rectal angiodysplasia] Pradel E, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Dec;25(7):305–6 (Eng. Abstr.) (Fre)

[Digestive hemorrhages in the elderly and angiodysplasias] Le Bodic L, et al. **Rev Med Suisse Romande** 1990 Jun; 110(6):497–8 (Fre)

[A case of Solomon's syndrome with multiple vascular malformations] Cherif O, et al. **Tunis Med** 1989 Dec; 67(12):825–8 (Fre)

[Vascular malformation of the spinal cord] Konstantinov GS. **Arkh Patol** 1989;51(9):79–82 (Eng. Abstr.) (Rus)

ANALYSIS

In situ distribution of the beta-subunit of platelet-derived growth factor receptor in nonneoplastic tissue and in soft tissue tumors. Franklin WA, et al. **Cancer Res** 1990 Oct 1;50(19):6344–8

Blood platelet aggregation inhibiting substances contained in rabbit blood vessels. Suzuki T, et al. **Fukushima J Med Sci** 1988 Dec;34(2):81–94

Cationic distribution in vessels, heart, skeletal muscle, and blood of normotensive (NWR) and spontaneously hypertensive rats (SHR). Boeckh-Haebisch EM. **Gegenbaurs Morphol Jahrb** 1989;135(6):855–64

Massive vascular AA-amyloidosis: a histologically and biochemically distinctive subtype of reactive systemic amyloidosis. Westermark GT, et al. **Scand J Immunol** 1989 Nov;30(5):605–13

ANATOMY & HISTOLOGY

Artifacts in maximum-intensity-projection display of MR angiograms. Anderson CM, et al. **AJR Am J Roentgenol** 1990 Mar;154(3):623–9

MR angiography with gadopentetate dimeglumine-polylysine: evaluation in rabbits. Marchal G, et al. **AJR Am J Roentgenol** 1990 Aug;155(2):407–11

Blood vessel structure and function: a brief update on recent advances. Tennant M, et al. **Aust N Z J Surg** 1990 Oct; 60(10):747–53 (77 ref.)

Casts of the vessels of the head and vertebral column. Tompsett D. **Br J Surg** 1967 Aug;54(8):719–23

Structure and function of the pulmonary vascular bed: an update. Rabinovitch M. **Cardiol Clin** 1989 Nov; 7(4):895–914 (116 ref.)

Application of a new phased-array ultrasound imaging catheter in the assessment of vascular dimensions. In vivo comparison to cineangiography. Nissen SE, et al. **Circulation** 1990 Feb;81(2):660–6

Color Doppler ultrasonography. Middleton WD, et al. **Curr Opin Radiol** 1990 Apr;2(2):229–36 (21 ref.)

Vascularity of the posterior tibial tendon. Frey C, et al. **J Bone Joint Surg [Am]** 1990 Jul;72(6):884–8

Magnetic resonance imaging of vascular anatomy before vascularized fibular grafting. Manaster BJ, et al. **J Bone Joint Surg [Am]** 1990 Mar;72(3):409–14

Morphology of the dorsal vessel in the abdomen of the blood-feeding insect Rhodnius prolixus. Chiang RG, et al. **J Morphol** 1990 Apr;204(1):9–23

Magnetic resonance angiography. Wedeen VJ, et al. **Magn Reson Annu** 1987;:113–78 (47 ref.)

Flow artifact reduction in MRI: a review of the roles of gradient moment nulling and spatial presaturation. Ehman RL, et al. **Magn Reson Med** 1990 May;14(2):293–307

Optimizing blood vessel contrast in fast three-dimensional MRI. Haacke EM, et al. **Magn Reson Med** 1990 May; 14(2):202–21

3-D MR angiography with scanning 2-D images—simultaneous data acquisition of arteries and veins (SAAV). Kim JH, et al. **Magn Reson Med** 1990 Jun; 14(3):554–61

Displays for MR angiography. Laub G. **Magn Reson Med** 1990 May;14(2):222–9

Flow-compensated limited flip angle MR angiography. Lee JN, et al. **Magn Reson Med** 1989 Oct;12(1):1–13

Time-of-flight MR angiography. Nishimura DG. **Magn Reson Med** 1990 May;14(2):194–201

Theoretical investigation of estimation of steady and pulsatile blood flow and blood vessel cross section by CW NMR excitation. De DK. **Phys Med Biol** 1990 Feb;35(2):197–211

Fundamental laws of vascular anatomy [letter] Acland RD. **Plast Reconstr Surg** 1990 Aug;86(2):387

Quantitative measurement from vascular casts. Kratky RG, et al. **Scanning Microsc** 1989 Sep;3(3):937–42; discussion 942–3 (53 ref.)

[The current approach to the ultrasonic examination of vascular areas] Bonnin P, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Jan-Mar;93(1):9–19 (Fre)

[3D-MR-angiography using Gd-DTPA] Seiderer M, et al. **ROFO** 1990 Mar;152(3):327–32 (Eng. Abstr.) (Ger)

[Ultrasonography, x-ray computed tomography and magnetic resonance imaging of the blood vessels] Ide K, et al. **Rinsho Hoshasen** 1989 Sep;34(10):1285–93 (13 ref.) (Jpn)

[The size and suitability of blood vessels for transplantation into the knee of the dog] Mikić Z, et al. **Acta Chir Iugosl** 1990;37 Suppl 1:19–23 (Eng. Abstr.) (Ser)

CYTOLOGY

Blood vascular architecture of the rat lingual papillae with special reference to their relations to the connective tissue papillae and surface structures: a light and scanning electron microscope study. Ohshima H, et al. **Acta Anat (Basel)** 1990;137(3):213–21

The Third Grover Conference on the pulmonary Circulation. The control of cellular proliferation in the pulmonary circulation. Reid LM. **Am Rev Respir Dis** 1989 Nov; 140(5):1490–3 (29 ref.)

SEM characterization of a cellular layer separating blood vessels from endoderm in the quail embryo. Reiss KZ, et al. **Anat Rec** 1989 Oct;225(2):165–75

Platelet adhesion to vascular cells. The role of exogenous von Willebrand factor in platelet adhesion. Nievelstein PF, et al. **Arteriosclerosis** 1990 May-Jun;10(3):462–9

The interactions of vascular cells with solid phase (matrix) and soluble factors. Madri JA, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 6:S70–5 (23 ref.)

DRUG EFFECTS

Vascular effects of photodynamic therapy in an intraocular retinoblastoma-like tumour. Horsman MR, et al. **Acta Oncol** 1989;28(5):693–7

Cardiovascular protective properties of indapamide. Campbell DB, et al. **Am J Cardiol** 1990 May 2; 65(17):11H–27H (142 ref.)

Vascular effects of calcium antagonists: implications for hypertension and other risk factors for coronary heart disease. van Zwieten PA. **Am J Cardiol** 1989 Nov 7; 64(17):117I–121I (57 ref.)

Effects of a human-derived sodium transport inhibitor on in vitro vascular reactivity. Weber MA, et al. **Am J Hypertens** 1989 Oct;2(10):754–61

Effect of magnesium on cocaine-induced, catecholamine-mediated platelet and vascular response in term pregnant ewes. Weaver K, et al. **Am J Obstet Gynecol** 1989 Nov;161(5):1331–7

Vascular effects of kinins in trout and bradykinin metabolism by perfused gill. Lipke DW, et al. **Am J Physiol** 1990 Feb; 258(2 Pt 2):R515–22

Comparative responses to endothelin 2 and sarafotoxin 6b in systemic vascular bed of cats. Minkes RK, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1550–8

The use of vascularised spheroids to investigate the action of flavone acetic acid on tumour blood vessels. Zwi LJ, et al. **Br J Cancer** 1990 Aug;62(2):231–7

Neovascularization in kainic acid-induced lesions of rat striatum. An immunohistochemical study with laminin. Shigematsu K, et al. **Brain Res** 1989 Nov 6;501(2):215–22

Reactivity of the vessels of collapsed and ventilated lungs to drugs and hypoxia. Barer GR. **Circ Res** 1966 Apr; 18(4):366–78

Comparison of the reactivity of micro-and macrovessels to noradrenaline and endothelin in rats with renal (2K1C) hypertension. Fortes ZB, et al. **Clin Exp Hypertens [A]** 1990;12(1):47–61

Effects of ONO-3708, an antagonist of the thromboxane A2/prostaglandin endoperoxide receptor, on blood vessels. Kondo K, et al. **Eur J Pharmacol** 1989 Sep 13; 168(2):193–200

Vasoactive peptides in venoms. Pisano JJ. **Fed Proc** 1968 Jan-Feb;27(1):58–62

Pathologic changes in blood vessels following administration of an inotropic vasodilator (ICI 153,110) to the rat. Westwood FR, et al. **Fundam Appl Toxicol** 1990 May; 14(4):797–809

Comparative pharmacology of cardiac and vascular tissues in heart failure. Godfraind T. **J Cardiovasc Pharmacol** 1989; 14 Suppl 8:S1–20 (101 ref.)

Endothelium-dependent relaxation in resistance vessels from the spontaneously hypertensive rats. Watt PA, et al. **J Hypertens** 1989 Aug;7(8):661–6 (27 ref.)

Massive regional differences in the vascular effects of endothelin. Hof RP, et al. **J Hypertens Suppl** 1989 Dec; 7(6):S274–5

Differential vasodilator effect of nitroglycerin on systemic capacitance and resistance vessels in anesthetized dogs, and the mechanism of its action—a study by measuring mean circulatory pressure and total peripheral resistance. Nagata K, et al. **Jpn Circ J** 1989 Nov;53(11):1371–81

Reactivity of resistance blood vessels ex vivo after administration of toxic chemicals to laboratory animals: arteriolotoxicity. Bekemeier H, et al. **Toxicol Lett** 1989 Oct; 49(1):49–54

[Effect of buyang huanwu decoction on the antithrombotic functions of the vessel wall] Li AG, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Sep;9(9):545–7, 517 (Eng. Abstr.) (Chi)

[Evaluation of the cardiac and peripheral vascular effects of the single-dose administration of enalapril and captopril in essential arterial hypertension (letter)] Longhini C, et al. **Cardiologia** 1989 Sep;34(9):813 (Ita)

[Angio-protective effect of catergen in experimental liver injury] Gaskina TK, et al. **Biull Eksp Biol Med** 1989 Jul; 108(7):28–30 (Eng. Abstr.) (Rus)

[Histamine. Its action on the heart and vessels] Mokhort NA, et al. **Farmakol Toksikol** 1989 Nov-Dec;52(6):95–100 (40 ref.) (Eng. Abstr.) (Rus)

[The effect of testosterone propionate on energy metabolism indices and the catecholamine content of the vascular wall] Nikulin AA, et al. **Farmakol Toksikol** 1989 Nov-Dec; 52(6):65–8 (Eng. Abstr.) (Rus)

[Effect of fenicoberan on parameters of carbohydrate metabolism and electrolyte levels in blood vessel tissue] Puchkova VA, et al. **Farmakol Toksikol** 1989 Jul-Aug; 52(4):30–3 (Eng. Abstr.) (Rus)

[The dependence of the hemodynamic shifts in the systemic arterial and venous vascular beds on the degree of change in the arterial pressure under the action of vasoactive substances] Lioznov MV, et al. **Fiziol Zh SSSR** 1990 Mar; 76(3):362–70 (Eng. Abstr.) (Rus)

[Responsiveness of peripheral blood vessels to physiologically vasoactive agents in myocardial infarct] Shterental' ISh, et al. **Kardiologiia** 1989 Nov;29(11):87–91 (Eng. Abstr.) (Rus)

[The role of the carbohydrate composition of the diet in the development of morphofunctional changes in the wall of blood vessels] Gulich MP. **Vrach Delo** 1989 Dec;(12):25–7 (Eng. Abstr.) (Rus)

EMBRYOLOGY

Fetal vasculogenesis and angiogenesis in human placental villi. Demir R, et al. **Acta Anat (Basel)** 1989;136(3):190–203

Embryonic and postnatal development of endolymphatic sac blood vessels. Hultcrantz M, et al. **Am J Otol** 1990 Mar; 11(2):90–4

Embryonic origins and assembly of blood vessels. Noden DM. **Am Rev Respir Dis** 1989 Oct;140(4):1097–103 (65 ref.)

The influence of cell-matrix interactions on the development of quail chorioallantoic vascular system. Britsch S, et al. **Anat Embryol (Berl)** 1989;180(5):479–84

The early development of the tunica media in the vascular system of rat embryos. de Ruiter MC, et al. **Anat Embryol (Berl)** 1990;181(4):341–9

The role of basement membranes in vascular development. Grant DS, et al. **Ann N Y Acad Sci** 1990;588:61–72 (50 ref.)

Origins and assembly of avian embryonic blood vessels. Noden DM. **Ann N Y Acad Sci** 1990;588:236–49 (72 ref.)

Epidermal growth factor promotes chick embryonic angiogenesis. Stewart R, et al. **Cell Biol Int Rep** 1989 Nov; 13(11):957–65

Cell lineage analyses of epithelia and blood vessels in chimeric mouse embryos by use of an embryonic stem cell line expressing the beta-galactosidase gene. Kadokawa Y, et al. **Cell Differ Dev** 1990 Mar;29(3):187–94

Relationship between vasculogenesis, angiogenesis and haemopoiesis during avian ontogeny. Pardanaud L, et al. **Development** 1989 Mar;105(3):473–85

ENZYMOLOGY

Reninlike enzymes in human vasculature. Rosenthal J, et al. **Hypertension** 1990 Jun;15(6 Pt 2):848–53

Neurovascular fibrinolytic activity in normal Lewis rats and rats with cell-transferred experimental allergic encephalomyelitis. Koh CS, et al. **J Neuroimmunol** 1990 Aug;28(3):189–200

Rat vascular tissue contains a neutral endopeptidase capable of degrading atrial natriuretic peptide. Tamburini PP, et al. **J Pharmacol Exp Ther** 1989 Dec;251(3):956–61

Effect of several vasoactive agents on guanylate cyclase activity in isolated rat brain microvessels. Homayoun P, et al. **Neurosci Lett** 1989 Dec 15;107(1-3):273–8

GROWTH & DEVELOPMENT

Influence of adrenergic innervation on vascular growth and mature characteristics. Bevan RD. **Am Rev Respir Dis** 1989 Nov;140(5):1478–82 (30 ref.)

Angiogenesis: its importance in normal eye growth and in ocular pathology. Cuthbertson RA. **Aust N Z J Ophthalmol** 1990 Feb;18(1):1–3

Vascular remodeling in the growth hormone transgenic mouse. Dilley RJ, et al. **Circ Res** 1989 Nov;65(5):1233–40

Establishment of a neovascular bed in a collagen-impregnated polyurethane sponge. Lipsky MH, et al. **J Biomed Mater Res** 1989 Dec;23(12):1441–52

INJURIES

Frequency of vascular injury with blunt trauma-induced extremity injury. Bunt TJ, et al. **Am J Surg** 1990 Aug; 160(2):226–8

An experience with upper-extremity vascular trauma. Cikrit DF, et al. **Am J Surg** 1990 Aug;160(2):229–33

Growth response of tetraploid smooth muscle cells to balloon embolectomy-induced vascular injury in the spontaneously hypertensive rat. Owens GK. **Am Rev Respir Dis** 1989 Nov; 140(5):1467–70

The problem of vascular shotgun injuries: diagnostic and management strategy. Bongard FS, et al. **Ann Vasc Surg** 1989 Oct;3(4):299–303 (11 ref.)
Basic data related to vascular trauma. Louridas G, et al. **Ann Vasc Surg** 1989 Oct;3(4):397–9 (40 ref.)
Neurovascular injuries. **Clin Sports Med** 1990 Apr; 9(2):229–517
Neurovascular injuries in the wrists and hands of athletes. Rettig AC. **Clin Sports Med** 1990 Apr;9(2):389–417 (53 ref.)
Vascular problems in the proximal upper extremity. Sotta RP. **Clin Sports Med** 1990 Apr;9(2):379–88 (18 ref.)
Lower limb fractures with associated vascular injury. Howard PW, et al. **J Bone Joint Surg [Br]** 1990 Jan; 72(1):116–20
Laser-assisted microsurgical anastomoses in traumatized blood vessels. Ruiz-Razura A, et al. **J Reconstr Microsurg** 1990 Jan;6(1):55–9
Predicting and preventing infection after abdominal vascular injuries. Wilson RF, et al. **J Trauma** 1989 Oct;29(10):1371–5
Complex upper extremity vascular trauma in an urban population. Myers SI, et al. **J Vasc Surg** 1990 Sep; 12(3):305–9
Recognition of vascular injury in the trauma patient. Baker MS. **Milit Med** 1990 May;155(5):225–6
External fixation and vascular damage: report of a case. Schuurman AH, et al. **Neth J Surg** 1990 Jun;42(3):92–3
Hemorrhagic shock and anaesthesia: operative experience. Romiti P, et al. **Resuscitation** 1989 Dec;18(2–3):157–8
The role of neutrophils in vascular injury: a summary of signal transduction mechanisms in cell/cell interactions. Weissmann G. **Springer Semin Immunopathol** 1989; 11(3):235–58 (190 ref.)
Retroperitoneal vascular injury. Mattox KL, et al. **Surg Clin North Am** 1990 Jun;70(3):635–53 (58 ref.)
[Fractures accompanied by injuries of the great vessels in sport and leisure accidents. Diagnosis and management concept] Schlickewei W, et al. **Radiologe** 1989 Nov; 29(11):554–60 (Eng. Abstr.) **(Ger)**
[Optimal methods and means in the surgical treatment of injuries of major blood vessels] Gataullin NG, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):123–7 **(Rus)**
[Surgical treatment of sequelae in injuries of main peripheral blood vessels] Usmanov NU, et al. **Khirurgiia (Mosk)** 1989 Sep;(9):55–9 (Eng. Abstr.) **(Rus)**
[Iatrogenic injuries of the blood vessels] Tregubenko AI, et al. **Klin Khir** 1989;(7):60–2 **(Rus)**
[Surgical tactics in injuries of blood vessels during surgical interventions] Shevchuk VR. **Vestn Khir** 1989 Sep; 143(9):125–8 **(Rus)**
[Errors and complications in the treatment of injuries of major blood vessels] Svitich IuM. **Vestn Khir** 1989 Sep; 143(9):128–31 **(Rus)**
[Combined injuries to the nerves and vessels in children] Govenko FS. **Zh Vopr Neirokhir** 1989 Nov–Dec;(6):12–4 (Eng. Abstr.) **(Rus)**
[Traumatic arteriovenous fistula] Radonić V, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:246–50 (Eng. Abstr.) **(Scr)**
[Injuries of the peripheral blood vessels] Solaković E. **Med Arh** 1988;42(1–2):51–6 (Eng. Abstr.) **(Scr)**

INNERVATION

Cerebrovascular nerves in old rats show reduced accumulation of 5-hydroxytryptamine and loss of nerve fibres. Cowen T, et al. **Brain Res** 1990 Apr 16;513(2):237–43
Adrenergic innervation in the tibial and vagus nerves of rats with streptozotocin-induced diabetes. Koistinaho J, et al. **Brain Res** 1990 Apr 9;513(1):106–12
Ultrastructure of intracellularly labeled trigeminal vascular convergence neurons. Potrebic S, et al. **Brain Res** 1990 Jan 22;507(2):317–20
Effect of systemic endotoxin on skeletal muscle vascular conductance during high and low adrenergic tone. Bond RF, et al. **Circ Shock** 1990 Apr;30(4):311–22
Effects of a protein kinase C inhibitor (H-7) on norepinephrine release from vascular adrenergic neurons in spontaneously hypertensive rats. Tsuda K, et al. **Clin Exp Hypertens [A]** 1990;12(4):581–96
Non-invasive tests of neurovascular function. Westerman RA, et al. **Clin Exp Neurol** 1987;24:129–37
Vascular control by purines with emphasis on the coronary system. Burnstock G. **Eur Heart J** 1989 Nov;10 Suppl F:15–21 (60 ref.)
Sympathetic noradrenergic neurons containing dynorphin but not neuropeptide Y innervate small cutaneous blood vessels of guinea-pigs. Gibbins IL, et al. **J Auton Nerv Syst** 1990 Feb;29(2):137–49
Increased density of perivascular adrenergic innervation in tibial and vagus nerves of spontaneously hypertensive rats. Koistinaho J, et al. **J Neurosci Res** 1989 Nov;24(3):424–30
Role of calcitonin gene-related peptide-containing nerves in the vascular adrenergic neurotransmission. Kawasaki H, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):403–9
Selective uptake of gamma-[3H]aminobutyric acid by neural elements and vascular nerves of the rat intestinal submucosa. Krantis A. **Neurosci Lett** 1990 Feb 5; 109(1–2):1–6
Vasomotor neurons in the rostral ventrolateral medulla are organized topographically with respect to type of vascular bed but not body region. McAllen RM, et al. **Neurosci Lett** 1990 Mar 2;110(1–2):91–6
Co-localization of vasoactive intestinal polypeptide and neuropeptide Y immunoreactivities in the nerve fibers of the rat adrenal gland. Maubert E, et al. **Neurosci Lett** 1990 May 31;113(2):121–6
Regrowth of damaged neurosecretory axons to fenestrated vessels of implanted peripheral tissues. Kadota Y, et al. **Synapse** 1990;5(3):175–89

METABOLISM

Relevance of vascular PGI2 synthase to vascular prostacyclin production in Dahl rats susceptible to salt-induced hypertension. Uehara Y, et al. **Am J Hypertens** 1990 Apr; 3(4):313–6
Chronic transvascular fluid flux and lymph flow during volume-loading hypertension. Valenzuela-Rendon J, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1524–33
Leaky vessels, fibrin deposition, and fibrosis: a sequence of events common to solid tumors and to many other types of disease. Brown LF, et al. **Am Rev Respir Dis** 1989 Oct; 140(4):1104–7 (34 ref.)
Glucose transporters at the blood-nerve barrier are associated with perineurial cells and endoneurial microvessels. Gerhart DZ, et al. **Brain Res** 1990 Jan 29; 508(1):46–50
Immunogold localization of basal laminar heparan sulfate proteoglycan in rat brain and retinal capillaries. Lin WL. **Brain Res Bull** 1990 Mar;24(3):533–6
Immunohistochemical localization of 14 kDa beta-galactoside-binding lectin in various organs of rat. Wasano K, et al. **Cell Tissue Res** 1990 Jan;259(1):43–9
Gap junction messenger RNA expression by vascular wall cells. Larson DM, et al. **Circ Res** 1990 Apr;66(4):1074–80
Vasocortin-like proteins induced by glucocorticoids in vascular tissue. Carnuccio R, et al. **Eur J Pharmacol** 1989 Aug 3;166(3):535–9
Action of adenosine and characterization of adenosine receptors in human placental vasculature. Reviriego J, et al. **Gen Pharmacol** 1990;21(2):227–33
Angiotensin II vascular receptors in fowl aorta: binding specificity and modulation by divalent cations and guanine nucleotides. Stallone JN, et al. **J Pharmacol Exp Ther** 1989 Dec;251(3):1076–82
Coexistence of Alzheimer's amyloid precursor protein and amyloid protein in cerebral vessel walls. Tagliavini F, et al. **Lab Invest** 1990 Jun;62(6):761–7
Increased alpha 2- and beta 2-adrenergic receptors in cerebral microvessels in Alzheimer disease. Kalaria RN, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):233–8
Autoradiographic localization of substance P binding sites in rat footpad skin. O'Flynn NM, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):43–8
The effects of plasma lipoproteins on platelet responsiveness and on platelet and vascular prostanoid synthesis. Bruckdorfer KR. **Prostaglandins Leukot Essent Fatty Acids** 1989 Dec; 38(4):247–54 (72 ref.)
[Interaction of cholesterol in plasma and cholesterol in the vessel wall] Demant T. **Arzneimittelforschung** 1990 Mar; 40(3A):350–3 (21 ref.) (Eng. Abstr.) **(Ger)**
[DNA synthesis in the foam cells of the vascular wall in experimental atherosclerosis in rabbits] Babushkina TG, et al. **Arkh Patol** 1990;52(1):47–53 (Eng. Abstr.) **(Rus)**
[Effect of peptide-protein binding on the elimination of somatostatin and epidermal growth factor from the vascular bed by lung tissue] Glinskiĭ GV, et al. **Fiziol Zh** 1989 Jul–Aug;35(4):96–100 (Eng. Abstr.) **(Rus)**
[Study of reserve possibilities of antiaggregation activities of the vascular wall] Udut VV, et al. **Lab Delo** 1989;(7):36–8 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Altered angioarchitecture in selected areas of brains with Alzheimer's disease. Fischer VW, et al. **Acta Neuropathol (Berl)** 1990;79(6):672–9
MR angiography. Edelman RR, et al. **AJR Am J Roentgenol** 1990 May;154(5):937–46 (56 ref.)
A rapid method for studying vascular patterns three dimensionally and histologically. Marcarian HQ, et al. **Am Heart J** 1967 Aug;74(2):219–21
Combined mechanical and chemical thrombolysis in an experimental animal model: evaluation by angiography and angioscopy. Ritchie JL, et al. **Am Heart J** 1990 Jan; 119(1):64–72
Percutaneous ventricular endomyocardial biopsy with angioscopic guidance. Uchida Y, et al. **Am Heart J** 1989 Nov;118(5 Pt 1):1039–41
Sympathoadrenal activity, catecholamines, and the pathogenesis of vasculopathic hypertensive target-organ damage. Izzo JL Jr. **Am J Hypertens** 1989 Dec;2(12 Pt 2):305S–312S (52 ref.)
Microvascular changes in early and advanced dermatomyositis: a quantitative study. Emslie-Smith AM, et al. **Ann Neurol** 1990 Apr;27(4):343–56
The effects of laser energy on the arterial wall. Faught WE, et al. **Ann Vasc Surg** 1990 Mar;4(2):198–207
Microangiopathy and the colocalization of heparan sulfate proteoglycan with amyloid in senile plaques of Alzheimer's disease. Perlmutter LS, et al. **Brain Res** 1990 Jan 29; 508(1):13–9
Microangiopathy, the vascular basement membrane and Alzheimer's disease: a review. Perlmutter LS, et al. **Brain Res Bull** 1990 May;24(5):677–86 (87 ref.)
Detection of moving flow separation in pulsatile flow and the degree of stenosis by power of Doppler shift signals. Tamura T, et al. **Circ Res** 1990 Jul;67(1):166–74
Intravascular and intracardiac ultrasound imaging. An old concept, now on the road to reality. Pandian NG. **Circulation** 1989 Oct;80(4):1091–4 (27 ref.)
Intravascular ultrasound. Looking below the surface of vascular disease [comment] Yock PG, et al. **Circulation** 1990 May;81(5):1715–8 Comment on: Circulation 1990 May;81(5):1575–85.
Alterations in biochemistry of laser-fused vascular tissue. Guthrie CR, et al. **Curr Surg** 1990 Jul–Aug;47(4):258–62
Syndromes of accelerated atherosclerosis: role of vascular injury and smooth muscle cell proliferation. Ip JH, et al. **J Am Coll Cardiol** 1990 Jun;15(7):1667–87 (222 ref.)
Early ultrastructural alterations in adult dermatomyositis. Capillary abnormalities precede other structural changes in muscle. De Visser M, et al. **J Neurol Sci** 1989 Dec; 94(1–3):181–92
Peripheral vascular and abdominal applications of MR flow imaging techniques. Steinberg FL, et al. **Magn Reson Med** 1990 May;14(2):315–20
Vascular dysplasia of arteries in neurocristopathies: a lesson for neurofibromatosis. Lassmann G. **Neurofibromatosis** 1988;1(5–6):281–93
Schistosoma mansoni: evidence that vascular abnormalities correlate with the 'non-permissive' trait in 129/Ola mice. Elsaghier AA, et al. **Parasitology** 1989 Dec;99 Pt 3:377–81
Morphology and morphometry of male gonad in diabetes. Sośnik H. **Patol Pol** 1989;40(3):281–92
Diagnostic histopathology of major systemic and pulmonary vasculitic syndromes. Lie JT. **Rheum Dis Clin North Am** 1990 May;16(2):269–92 (54 ref.)
Atherosclerotic lesions in peripheral vessels? Simonsen U, et al. **Scand J Clin Lab Invest Suppl** 1990;199:37–40 (27 ref.)
[Operative results in cancer of the pancreas, especially complicated with large vascular involvement] Tamura K, et al. **Nippon Geka Gakkai Zasshi** 1989 Jul;90(7):1032–42 (Eng. Abstr.) **(Jpn)**
[Lymphocytic necrotizing vasculitis in a child with decreased nonspecific resistance to Staphylococcus aureus infection] Miklaszewska M. **Przegl Dermatol** 1990 Jan–Feb; 77(1):47–50 (Eng. Abstr.) **(Pol)**
[Systemic and organic changes in the microcirculatory bed in experimental dehydration of the body] Tikhomirov AN, et al. **Arkh Anat Gistol Embriol** 1989 Sep;97(9):54–60 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effects of dietary protein intake on vasoactive hormones. Daniels BS, et al. **Am J Physiol** 1990 May;258(5 Pt 2):R1095–100
Abolition of long-term vascular influence of renin-angiotensin system. Randall RD, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):H543–53
Altered development of pharyngeal arch vessels after neural crest ablation. Bockman DE, et al. **Ann N Y Acad Sci** 1990; 588:296–304 (19 ref.)
Fractal analysis of vasomotion. Yamashiro SM, et al. **Ann N Y Acad Sci** 1990;591:410–6
The functions of blood vessel wall cells in atherogenesis and coronary artery disease. Libby P. **Arq Bras Cardiol** 1989 Aug;53(2):71–4 (40 ref.)
Leukotrienes in airways and blood vessels. Piper PJ. **Arzneimittelforschung** 1989 Aug;39(8A):1005–8; discussion 1008–9 (45 ref.)
Some atherosclerosis may be a consequence of the normal adaptive vascular response to shear. Friedman MH. **Atherosclerosis** 1990 Jun;82(3):193–6
Blood vessel structure and function: a brief update on recent advances. Tennant M, et al. **Aust N Z J Surg** 1990 Oct; 60(10):747–53 (77 ref.)
A theoretically-based experimental approach for identifying vascular constitutive relations. Humphrey JD, et al. **Biorheology** 1989;26(4):687–702
Effects of non-Newtonian blood and metabolic states of the blood and vessel wall on the optimum design of single vessels and the vascular bifurcation. Oka S, et al. **Biorheology** 1989;26(5):921–34
Evaluation of blood vessel and neurite growth into a collagen matrix placed within a surgically created gap in rat spinal cord. Gelderd JB. **Brain Res** 1990 Mar 12;511(1):80–92
Vascular response in a non-uterine site to implantation-stage embryos following interspecies transfers between the rat, mouse, and guinea-pig. Macpherson AM, et al. **Cell Tissue Res** 1989 Nov;258(2):417–23
Influence of the new inotropic agent DPI 201-106 on the total capacitance vasculature in dogs. Bell L, et al. **Circ Shock** 1990 Aug;31(4):377–85
Influence of parathyroidectomy on blood pressure and vascular reactivity in spontaneously hypertensive rats. Więcek A, et al. **Clin Exp Hypertens [A]** 1989;11(8):1515–33
The measurement and visualisation of vessel blood flow by magnetic resonance imaging. Smith MA. **Clin Phys Physiol Meas** 1990 May;11(2):101–23 (46 ref.)
EDRF and the regulation of vascular tone. Griffith TM, et al. **Int J Microcirc Clin Exp** 1989 Nov;8(4):383–96 (55 ref.)
Relationships between permeable vessels, nerves, and mast cells in rat cutaneous neurogenic inflammation. Baraniuk JN, et al. **J Appl Physiol** 1990 Jun;68(6):2305–11
Heat transport by countercurrent blood vessels in the

presence of an arbitrary temperature gradient. Baish JW. **J Biomech Eng** 1990 May;112(2):207–11

Three-dimensional steady flow through a bifurcation. Yung CN, et al. **J Biomech Eng** 1990 May;112(2):189–97

Endothelium-dependent vascular responses. Mediators and mechanisms. Brenner BM, et al. **J Clin Invest** 1989 Nov; 84(5):1373–8 (70 ref.)

Scanning electron microscopic observations on the endothelial healing mechanism of vessels. Gu YD, et al. **J Reconstr Microsurg** 1989 Oct;5(4):327–30

Effect of nicardipine hydrochloride on circulating blood volume and vascular compliance in dogs. Hashimoto S, et al. **Jpn Circ J** 1990 Feb;54(2):146–51

Rheological properties and blood flow behavior in tube flow and vascular networks. Gaehtgens P. **Monogr Atheroscler** 1990;15:160–9 (19 ref.)

Multi-purpose ultrasound Doppler system for quantitative evaluation of blood flow in superficial as well as deep lying vessels. Preissler H. **Monogr Atheroscler** 1990;15:30–1

Pathways of peripheral nerve microvascularization and their plasticity (review). Mellman EP. **Neurosci Behav Physiol** 1990 Jan–Feb;20(1):84–93 (64 ref.)

The effects of capsaicin applied topically to inferior alveolar nerve on antidromic vasodilatation in cat gingiva. Izumi H, et al. **Neurosci Lett** 1990 Apr 20;112(1):65–9

Role of membrane glycoproteins in the interaction of blood platelets with the vessel wall—the study on platelet adhesion to in vitro cultured subendothelial matrix. Kawai Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec; 52(8):1312–21

Interactions via eicosanoids between vascular and blood cells. Takayama H. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec; 52(8):1322–9 (17 ref.)

The effect of LBNP (lower body negative pressure) on lower limb capacitance vessels during a 30 day –6 degrees head-down bedrest. Louisy F, et al. **Physiologist** 1990 Feb; 33(1 Suppl):S63–4

Role of the blood–nerve barrier in experimental nerve edema. Mizisin AP, et al. **Toxicol Pathol** 1990;18(1 Pt 2):170–85 (93 ref.)

The role of the endothelium in the regulation of vascular tone. **Z Kardiol** 1989;78 Suppl 6:1–151 **(Eng, Ger)**

[Regeneration of blood and lymphatic vessels after incision and skin graft] Leduc A, et al. **Phlebologie** 1990 Jan–Mar; 43(1):2 **(Fre)**

[Stimulation of vascular prostacyclin formation. A new action principle for decreasing blood pressure?] Simmet T, et al. **Dtsch Med Wochenschr** 1990 Jun 22;115(25):994–6 (15 ref.) **(Ger)**

[Analysis of the function of the circulatory system and its components based on rheologic viewpoints] Mikita J, et al. **Orv Hetil** 1989 Oct 8;130(41):2187–8, 2191–4 (35 ref.) (Eng. Abstr.) **(Hun)**

[Granulocyte adherence] Hrycek A, et al. **Pol Arch Med Wewn** 1987 Mar;77(3):101–4 (15 ref.) **(Pol)**

[Morphologic and molecular aspects of the interaction of platelets with elements of the vascular wall] Strukova SM, et al. **Arkh Patol** 1989;51(6):3–12 (65 ref.) (Eng. Abstr.) **(Rus)**

[Determination of mechanical properties and tone of blood vessels] Vainshtein LG. **Biofizika** 1989 Jul–Aug;34(4):708–9 (Eng. Abstr.) **(Rus)**

[The participation of cardiac, vascular and coronary components in the shaping of cardiovascular reactions to head–down tilt exposures] Osadchii LI, et al. **Fiziol Zh SSSR** 1990 Feb;76(2):219–26 (Eng. Abstr.) **(Rus)**

[A thromboelastographic method of determining the antiaggregation activity of the vascular wall] Golubenkova NI, et al. **Lab Delo** 1990;(4):32–5 (Eng. Abstr.) **(Rus)**

[Occlusion of resistive blood vessels] Rodionov IM, et al. **Usp Fiziol Nauk** 1989 Oct–Dec;20(4):59–76 (122 ref.) **(Rus)**

[The physiology of the blood vessels (research results and prospects)] Tkachenko BI, et al. **Usp Fiziol Nauk** 1989 Oct–Dec;20(4):3–26 (28 ref.) **(Rus)**

PHYSIOPATHOLOGY

Cardiac and peripheral vascular contributions to hypotension in spinal cats. Yardley CP, et al. **Am J Physiol** 1989 Nov; 257(5 Pt 2):H1347–53

Vascular neuroeffector mechanisms in hypertension. Cheung DW. **Can J Physiol Pharmacol** 1989 Sep;67(9):1146–50 (59 ref.)

Capacity of the terminal vascular bed during normal growth, in cardiomegaly, and in cardiac atrophy. Rakusan K, et al. **Circ Res** 1967 Aug;21(2):209–15

Potassium channels and vascular reactivity in genetically hypertensive rats. Furspan PB, et al. **Hypertension** 1990 Jun;15(6 Pt 2):687–91

Vascular filtration function in galactose-fed versus diabetic rats: the role of polyol pathway activity. Pugliese G, et al. **Metabolism** 1990 Jul;39(7):690–7

[Disordered function of the vascular–thrombocyte link in the hemostatic system during tumor growth] Liubina LV, et al. **Biull Eksp Biol Med** 1989 Dec;108(12):716–8 (Eng. Abstr.) **(Rus)**

[Interaction of thrombocytes with immobilized collagen in the vascular wall (a model for step-by-step study of formation of parietal thrombi)] Leitin VL, et al. **Kardiologiia** 1989 Sep;29(9):74–7 (Eng. Abstr.) **(Rus)**

[Functional state of the vascular wall in patients with coronary arteriosclerosis and different types of reactions to psycho- emotional stress] Sokolov EI, et al. **Kardiologiia** 1990 Apr;30(4):69–72 (Eng. Abstr.) **(Rus)**

[Characteristics of the vestibulo-vascular interaction in patients with chronic hypertensive encephalopathy] Luchikhin LA, et al. **Vestn Otorinolaringol** 1990 Mar–Apr; (2):30–4 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Effects of radiation on the microvasculature. Implications for normal-tissue damage. Hopewell JW, et al. **Front Radiat Ther Oncol** 1989;23:85–95 (19 ref.)

Irradiation of rats abolishes susceptibility of PGI2 synthesis in blood vessels to peroxidative agents. Sochanowicz B, et al. **Prostaglandins** 1990 Mar;39(3):287–98

Vascular and cellular damage in a murine tumour during fractionated treatment with radiation and hyperthermia. Zywietz F. **Strahlenther Onkol** 1990 Jul;166(7):493–501

SECRETION

Prostanoid release from ex vivo perfused canine arteries and veins: effects of prolonged perfusion, intermittent perfusion, as well as exposure to exogenous arachidonic acid, thrombin and bradykinin. Brunkwall JS, et al. **Thromb Haemost** 1989 Nov 24;62(3):1034–9

[Isolation of tissue factors of blood coagulation from vascular walls in persons with various individual-typologic personality traits] Mishchenko VP, et al. **Gematol Transfuziol** 1989 Oct;34(10):33–5 **(Rus)**

TRANSPLANTATION

Autogenous tissue reconstruction in the management of aortoiliofemoral graft infection. Quiñones-Baldrich WJ, et al. **Ann Vasc Surg** 1990 May;4(3):223–8

Percutaneous transluminal angioplasty versus surgery for limb-threatening ischemia [letter; comment] Sacks D. **J Vasc Surg** 1990 Feb;11(2):358–9 Comment on: J Vasc Surg 1989 May;9(5):698–703.

The challenge of small diameter vascular grafts. Burkel WE. **Med Prog Technol** 1988–89;14(3–4):165–75

ULTRASTRUCTURE

The vasa nervorum: microcorrosion casts for scanning electron microscopy. Mackenzie ML, et al. **Acta Anat (Basel)** 1989;136(4):319–24

[The morphology of vascular balls in the dermal layer of the sole of foot under scanning electron microscopy] Bai SL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Jun;2(2):125–7, 156–7 (Eng. Abstr.) **(Chi)**

BLOOD VISCOSITY

Randomized clinical trials of hemodilution in acute ischemic stroke. Asplund K. **Acta Neurol Scand Suppl** 1989; 127:22–30

The influence of haematocrit on the cerebral circulation. Thomas DJ. **Acta Neurol Scand Suppl** 1989;127:5–8 (16 ref.)

Hyperviscosity syndrome in multiple myeloma. Kopp WL, et al. **Am J Med** 1967 Jul;43(1):141–6

Viscoelasticity and red blood cell aggregation in patients with coronary heart disease. Hahn R, et al. **Angiology** 1989 Oct; 40(10):914–20

Blood viscosity and hearing levels in the Caerphilly Collaborative Heart Disease Study. Gatehouse S, et al. **Arch Otolaryngol Head Neck Surg** 1989 Oct; 115(10):1227–30

Hyperviscosity syndrome secondary to rheumatoid arthritis. Bach LA, et al. **Aust N Z J Med** 1989 Dec;19(6):710–2

Correlation of umbilical cord whole blood viscosity and the presence of fetal distress at birth: a mathematical modelling study. Umapathysivam K, et al. **Aust N Z J Obstet Gynaecol** 1990 Feb;30(1):71–3

Microviscosity of human erythrocytes studied with hypophosphite and 31P-NMR. Price WS, et al. **Biophys Chem** 1989 Jul;33(3):205–15

Blood as a near-"ideal" emulsion: a retrospective on the concept of the red cell as a fluid drop, its implications for the structure of the red cell membrane. Dintenfass L. **Biorheology** 1990;27(2):149–61

A rheological study of packed red blood cell suspensions with an oscillating ball microrheometer. Tran-Son-Tay R, et al. **Biorheology** 1989;26(2):143–51

Red cell aggregation and viscoelasticity of blood from seals, swine and man. Wickham LL, et al. **Biorheology** 1990; 27(2):191–204

Haemorrheological abnormalities in unstable angina pectoris: a relation independent of risk factor profile and angiographic severity. Neumann FJ, et al. **Br Heart J** 1989 Dec;62(6):421–8

Blood viscosity and open heart surgery. A comparison of values in systemic and pulmonary blood vessels. Aronson HB, et al. **Br J Anaesth** 1974 Oct;46(10):722–5

Correlation between Doppler flow velocity waveforms and cord blood viscosity. Steel SA, et al. **Br J Obstet Gynaecol** 1989 Oct;96(10):1168–72

Hypoxic viscosity and diabetic retinopathy [see comments] Rimmer T, et al. **Br J Ophthalmol** 1990 Jul;74(7):400–4 Comment in: Br J Ophthalmol 1990 Jul;74(7):387.

Endothelium dependent control of arterial diameter by blood viscosity. Melkumyants AM, et al. **Cardiovasc Res** 1989 Sep;23(9):741–7

Effect of blood viscocity on arterial flow induced dilator response. Melkumyants AM, et al. **Cardiovasc Res** 1990 Feb;24(2):165–8

Hemorrheological investigation on healthy natives and immigrants at 3658 M above sea level in Lhasa. Pei SX, et al. **Chin Med J [Engl]** 1989 May;102(5):392–4

Lunar phases, myocardial infarction and hemorrheological character. A Western medical study combined with appraisal of the related traditional Chinese medical theory. Sha LR, et al. **Chin Med J [Engl]** 1989 Sep;102(9):722–5

Effect of velocity gradient on the clotting time of blood and on the consistency of clots formed in vitro. Dintenfass L. **Circ Res** 1966 Apr;18(4):349–56

Changes in hemorheology in patients with sepsis or septic shock. Voerman HJ, et al. **Circ Shock** 1989 Nov; 29(3):219–27

Relation of blood viscosity to demographic and physiologic variables and to cardiovascular risk factors in apparently normal adults. de Simone G, et al. **Circulation** 1990 Jan; 81(1):107–17

Blood viscosity and filtration abnormalities in mixed cryoglobulinemia patients. Ferri C, et al. **Clin Exp Rheumatol** 1990 May–Jun;8(3):271–81

Erythrocyte rheology. Shiga T, et al. **Crit Rev Oncol Hematol** 1990;10(1):9–48 (394 ref.)

Neonatal polycythaemia: effect of partial dilutional exchange transfusion with human albumin on whole blood viscosity. Levy I, et al. **Eur J Pediatr** 1990 Feb;149(5):354–5

Hyperviscosity syndrome in a hypercholesterolemic patient with primary biliary cirrhosis. Rosenson RS, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1351–7

Blood viscosity in human obesity: relation to glucose tolerance and insulin status. Rillaerts E, et al. **Int J Obes** 1989;13(6):739–45

Automated measurement of plasma viscosity using the Coulter Viscometer II [letter] Darwood S, et al. **J Clin Pathol** 1990 Jan;43(1):86

Clinical significance of hemorrheological parameters in patients with renal transplantation. Wang XY, et al. **J Tongji Med Univ** 1989;9(4):232–4

Tongue color and whole blood viscosity in patients of diabetes mellitus after treatment by TCM prescription for replenishing qi, nourishing yin and activating blood circulation. Guo SS, et al. **J Tradit Chin Med** 1989 Dec; 9(4):294–6

Blood viscosity in horses with colic. Andrews FM, et al. **J Vet Intern Med** 1990 Jul–Aug;4(4):183–6

Effect of zero gravity on blood cells and viscosity [letter] Dintenfass L. **Lancet** 1990 Jan 27;335(8683):239–40

Shear-induced platelet aggregation. O'Brien JR. **Lancet** 1990 Mar 24;335(8691):711–3 (29 ref.)

The erythrocyte sedimentation rate, C-reactive protein, plasma fibrinogen and viscosity in chronic renal disease patients with infection. Ishak R, et al. **Malays J Pathol** 1989 Aug;11:29–31

The erythrocyte sedimentation rate compared to plasma viscosity measurement as a routine laboratory test [letter] Shand BI. **N Z Med J** 1990 Aug 8;103(895):379

Morning increase in blood viscoelasticity of patients with ischemic stroke [letter; comment] Koeltringer P, et al. **Stroke** 1990 May;21(5):826–7 Comment on: Stroke 1989 Apr;20(4):473–6.

Erythrocyte deformability in patients with an ischemic pathology. Vayá A, et al. **Thromb Res** 1990 Feb 15; 57(4):669–71

Haematological measurements as an aid to early diagnosis and prognosis of respiratory viral infections in thoroughbred horses. Mason DK, et al. **Vet Rec** 1990 Apr 14;126(15):359–63

[Blood rheologic changes in patients with various clinical forms of ischemic heart disease] Tsekov Kh, et al. **Vutr Boles** 1989;28(4):143–5 **(Bul)**

[The anti-hemorrhagic shock of acupuncture on neiguan and its effect on the cardial pump function and the blood viscosity] Song X, et al. **Chen Tzu Yen Chiu** 1990;15(1):30–4 (Eng. Abstr.) **(Chi)**

[Clinical study on hemodynamics, blood gases and hemorheologic monitoring of patients with cor pulmonale] Jin WY. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Sep; 9(9):522–5, 514 (Eng. Abstr.) **(Chi)**

[Changes of hemorrheology in COPD patients with or without cor pulmonale] Wang TS. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Aug; 12(4):228–9, 255 (Eng. Abstr.) **(Chi)**

[Haemorheologic changes during tumor development after subcutaneous transplantation of mouse forestomach carcinoma (FC)] Gao J. **Chung Hua Chung Liu Tsa Chih** 1989 Nov;11(6):429–32 (Eng. Abstr.) **(Chi)**

[Relation of the changes in hemorheologic indices and the site and size of cerebral infarction] Zhou G, et al. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1990 Feb; 23(1):31–4, 63 (Eng. Abstr.) **(Chi)**

[Visco-elasticity of whole blood in healthy young men and women] Chen H, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Mar;21(1):22–4 (Eng. Abstr.) **(Chi)**

[Research on thixotropic parameters of whole blood from Chinese adult subjects] Chen HQ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Dec;20(4):356–60

(Eng. Abstr.) (Chi)
[Blood viscosity in pregnancy complications] Zondervan HA. **Ned Tijdschr Geneeskd** 1990 Jun 23;134(25):1209–13 (28 ref.) (Dut)
[Blood viscosity is a chronic adjustment factor of arterial vasodilatation in humans] Levenson J, et al. **Arch Mal Coeur** 1989 Jul;82(7):1177–9 (Eng. Abstr.) (Fre)
[Value and study methods of hemorheology in vascular pathology and pharmacology] Zannad F, et al. **Arch Mal Coeur** 1990 Mar;83 Spec No 2:33–6 (Eng. Abstr.) (Fre)
[Diabetes and hemorheology] Attali JR, et al. **Diabete Metab** 1990 Jan–Feb;16(1):1–6 (36 ref.) (Eng. Abstr.) (Fre)
[Rheologic findings in patients with Eales disease] Bertram B, et al. **Klin Monatsbl Augenheilkd** 1989 Oct;195(4):254–6 (Eng. Abstr.) (Ger)
[Hemodynamic and hemorheologic findings in patients with pregnancy-induced hypertension: comparison of pre-eclampsia and chronic hypertension] Heilmann L, et al. **Klin Wochenschr** 1990 Jun 5;68(11):559–64 (Eng. Abstr.) (Ger)
[Infection and tissue ischemia: what role does the rheologic behavior of blood cells play?] Ciufetti G, et al. **Z Gesamte Inn Med** 1989 Sep 15;44(18):555–7 (Eng. Abstr.) (Ger)
[Effect of smoking on hemostasis and hemorheology in pregnancy] Voigt T, et al. **Zentralbl Gynakol** 1990; 112(9):529–33 (Eng. Abstr.) (Ger)
[Hyperviscosity syndrome and eye involvement] Avisar R, et al. **Harefuah** 1990 Jun 15;118(12):696–9 (Eng. Abstr.) (Heb)
[Acute ischemic cerebral infarction: a possible role of hemorheologic changes caused by ischemia in the interpretation of pathological findings] Di Lollo F, et al. **Ann Ital Med Int** 1988 Oct–Dec;3(4):249–55 (Eng. Abstr.) (Ita)
[Evaluation of various hemorheologic parameters in diabetes mellitus] Cella A, et al. **Boll Soc Ital Biol Sper** 1990 Apr; 66(4):335–42 (Eng. Abstr.) (Ita)
[Hemorheological and coagulation aspects in plasmacytoma] Reali GL, et al. **Boll Soc Ital Biol Sper** 1989 Oct; 65(10):923–9 (Eng. Abstr.) (Ita)
[Hematic hyperviscosity syndromes] Giannuzzi U. **Clin Ter** 1990 Jan 31;132(2):125–6 (Eng. Abstr.) (Ita)
[Regional hemorheological–hemodynamic correlations in paraproteinemia syndromes] Ansani L, et al. **Ric Clin Lab** 1989;19 Suppl 1:141–5 (Ita)
[Correlation between hemorheological and blood coagulation parameters in patients with arteriosclerosis of supraaortic vessels and/or recent cerebral ischemic attacks] Avellone G, et al. **Ric Clin Lab** 1989;19 Suppl 1:103–7 (Ita)
[Erythrocyte filtration and membrane microviscosity during treatment with ticlopidine] Caimi G, et al. **Ric Clin Lab** 1989;19 Suppl 1:121–3 (Ita)
[Erythrocyte phospholipids and membrane fluidity in a group of atherosclerotic vascular disease patients. Preliminary results] Caimi G, et al. **Ric Clin Lab** 1989;19 Suppl 1:137–9 (Ita)
[Study of hemorheological parameters in relation to coagulation/fibrinolytic and plethysmographic parameters in patients with deep venous thrombosis] Gelmini G, et al. **Ric Clin Lab** 1989;19 Suppl 1:83–6 (Ita)
[Study of some hemorheological parameters in acute and chronic venous pathology] Gelmini G, et al. **Ric Clin Lab** 1989;19 Suppl 1:87–90 (Ita)
[Cellular rheology in obliterative arterial diseases of the lower limbs] Lombardini R, et al. **Ric Clin Lab** 1989;19 Suppl 1:91–3 (Ita)
[Hemorheological aspects in relation to age and to the presence of arteriosclerotic disease] Neirotti M, et al. **Ric Clin Lab** 1989;19 Suppl 1:69–74 (Ita)
[Normovolemic hemodilution in clinical practice] Nieri A, et al. **Ric Clin Lab** 1989;19 Suppl 1:159–61 (Ita)
[Isovolemic hemodilution in cerebral ischemic attack: clinical and hemorheological evaluation] Porro F, et al. **Ric Clin Lab** 1989;19 Suppl 1:113–6 (Ita)
[Correlation between hemorheological and blood gas analytical indices in hypoxic–hypercapnic respiratory insufficiency] Porro F, et al. **Ric Clin Lab** 1989;19 Suppl 1:99–102 (Ita)
[Hemorheologic and morphologic alterations in diabetic retinopathy] Pretolani E, et al. **Ric Clin Lab** 1989;19 Suppl 1:173–5 (Ita)
[Erythrocyte aggregation, erythrocyte filterability and membrane fluidity in single-area atherosclerotic vascular disease] Sarno A, et al. **Ric Clin Lab** 1989;19 Suppl 1:133–6 (Ita)
[Hemorrheologic aspects of congestive heart insufficiency] Martins e Silva J. **Rev Port Cardiol** 1989 Feb;8(2):151–5 (52 ref.) (Eng. Abstr.) (Por)
[The effect of plasma viscosity on the resistance of erythrocyte movement along capillaries] Kopyl'tsov AV. **Biofizika** 1989 Nov–Dec;34(6):1046–50 (Eng. Abstr.) (Rus)
[Blood density in rats with experimental myocardial infarct] Pavlenko VS, et al. **Kardiologiia** 1990 May;30(5):74–5 (Rus)
[Platelet aggregation, hemostasis and rheological properties of arterial and venous blood in patients with acute myocardial infarction] Solo'vev BV, et al. **Kardiologiia** 1989 Oct;29(10):40–3 (Eng. Abstr.) (Rus)
[Rheological properties of blood in children and adolescents with borderline arterial hypertension] Remizov VO, et al. **Pediatriia** 1989;(11):110–1 (Rus)
[The clinical importance of studying disorders in the rheological properties of the blood in hypertension patients] Shabanov VA, et al. **Ter Arkh** 1990;62(5):89–94 (Eng. Abstr.) (Rus)
[The blood rheological properties in suppurative-septic urologic diseases and their correction by plasmapheresis] Kozlov VA, et al. **Urol Nefrol (Mosk)** 1990 Jan–Feb;(1):3–7 (Eng. Abstr.) (Rus)
[The blood rheological indices of patients with necrobiosis lipoidica] Petrova GA, et al. **Vestn Dermatol Venerol** 1989; (12):45–8 (Eng. Abstr.) (Rus)
[Hemostasis and the rheologic properties of the blood in patients with rheumatic mitral stenosis] Dziak GV, et al. **Vrach Delo** 1989 Jul;(7):82–4 (Rus)
[Relation of risk factors for the development of ischemic stroke and indices of blood viscosity] Vinichuk IS. **Vrach Delo** 1990 Mar;(3):57–8 (Eng. Abstr.) (Rus)
[The microcirculatory bed and the blood rheological properties in the acute period of severe craniocerebral trauma] Valeev EK, et al. **Zh Vopr Neirokhir** 1989 May–Jun;(3):24–8 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Effect of motherwort on blood hyperviscosity. Zou QZ, et al. **Am J Chin Med** 1989;17(1–2):65–70
Effect of Ginkgo biloba on fluidity of blood and peripheral microcirculation in volunteers. Jung F, et al. **Arzneimittelforschung** 1990 May;40(5):589–93
Effect of erythropoietin administration on blood and plasma viscosity in hemodialysis patients. Vaziri ND, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):505–8
Effect of lovastatin on hemorheology in type II hyperlipoproteinemia. Koppensteiner R, et al. **Atherosclerosis** 1990 Jul;83(1):53–8
The effect of malonyldialdehyde on viscosity of normal and sickle red blood cells. Jain SK, et al. **Biochem Med Metab Biol** 1990 Aug;44(1):37–41
Changes in determinants of blood rheology during treatment with haemodialysis and recombinant human erythropoietin. Koppensteiner R, et al. **BMJ** 1990 Jun 23;300(6740):1626–7
Effect of oxpentifylline on blood viscosity and cerebral blood flow in man. Brown MM. **Br J Clin Pharmacol** 1989 Oct; 28(4):488–92
Hemorheological effects of oral contraceptives. Ernst E, et al. **Contraception** 1989 Nov;40(5):571–80
Blood rheology in hemodialysis patients treated with recombinant human erythropoietin. Brunner R, et al. **Contrib Nephrol** 1989;76:306–12; discussion 312–4
Rheology in whole blood and in red blood cells under recombinant human erythropoietin therapy. Lerche D, et al. **Contrib Nephrol** 1989;76:299–303; discussion 304–5
Rheological properties of the blood in psoriasis patients during PUVA-therapy. Mordovtsev VN, et al. **Dermatol Monatsschr** 1989;175(7):437–42
Effect of omega-3 fatty acids in diet of type I diabetic subjects on lipid values and hemorheological parameters. Rillaerts EG, et al. **Diabetes** 1989 Nov;38(11):1412–6
Drugs that alter blood viscosity. Their role in therapy. Ehrly AM. **Drugs** 1990 Feb;39(2):155–9 (35 ref.)
Reduction in blood viscosity by treatment with coenzyme Q10 in patients with ischemic heart disease. Kato T, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 Mar;28(3):123–6
Effects of pentoxifylline administration on blood viscosity and leukocyte cytoskeletal function in patients with intermittent claudication. Rao KM, et al. **J Lab Clin Med** 1990 Jun;115(6):738–44
Influence of blood withdrawal and anticoagulant on clotting activity, hematologic data, and certain rheologic measurements. Reinhart WH, et al. **J Lab Clin Med** 1990 Jan;115(1):98–103
Air pollution by gasoline exhaust fumes: effect on platelet function and blood viscosity. Coppola L, et al. **Med Lav** 1989 May–Jun;80(3):187–91
Effects of Chinese medicinal herbs on hemorheology in diabetics. Liang XC, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(3):135–8
Increased whole blood viscosity during coronary artery bypass surgery. Studies to evaluate the effects of soluble fibrin and poloxamer 188. Hunter RL, et al. **Thromb Haemost** 1990 Feb 19;63(1):6–12
[Hemorheologic, micro- and macrocirculatory effects of an infusion of 500 ml of 6% medium molecular weight hydroxyethyl starch (Haes 200,000/0.5)] Jung F, et al. **Infusionstherapie** 1989 Aug;16(4):148–54 (Eng. Abstr.) (Ger)
[The effect of naftidrofuryl on macro- and microcirculation, tissue oxygen supply and blood rheolcgy] Jung F, et al. **Vasa Suppl** 1989;27:38 (Ger)
[Effect of low dose omega-3-fatty acids on blood pressure, blood lipids and blood fluidity in patients with hyperlipoproteinemia] Staedt U, et al. **Vasa Suppl** 1989; 27:253–4 (Ger)
[Hemorheologic effects of calcium antagonists in comparison with beta receptor blockers] Ernst E. **Z Kardiol** 1989;78 Suppl 5:12–5 (24 ref.) (Eng. Abstr.) (Ger)
[Effect of verapamil on blood viscosity in ischemic heart disease] Zochowski RJ, et al. **Pol Arch Med Wewn** 1987 Sep;78(3):154–65 (Eng. Abstr.) (Pol)
[Correction of rheologic disorders of the blood in patients with uterine myoma in the postoperative period] Kirsanova MI, et al. **Akush Ginekol (Mosk)** 1990 Feb;(2):27–30 (Eng. Abstr.) (Rus)
[Rheologic effects of normovolemic hemodilution] Kuznetsov NA, et al. **Anesteziol Reanimatol** 1990 Mar–Apr; (2):18–22 (Eng. Abstr.) (Rus)
[The rheological properties of the blood during its partial substitution in rats with a solution of a modified hemoglobin] Shuvaeva VN, et al. **Fiziol Zh SSSR** 1990 Feb;76(2):192–9 (Rus)
[A comparative evaluation of the effect of a number of crystalloid and colloid solutions on the rheological properties of blood] Voitenko II. **Gematol Transfuziol** 1989 Dec;34(12):9–12 (Eng. Abstr.) (Rus)
[Effect of sodium nitroprusside on coagulative and rheologic properties of the blood in patients in the acute period of myocardial infarction] Zabelin IV, et al. **Kardiologiia** 1990 Feb;30(2):90–1 (Rus)
[The effect of combined drug treatment on rheologic properties of the blood in patients with disordered circulatory encephalopathy] Ishchenko MM, et al. **Vrach Delo** 1990 Mar;(3):58–60 (Eng. Abstr.) (Rus)
[Therapeutic effect of antiaggregants in patients with neurocirculatory asthenia with the initial signs of cerebral ischemia] Lebedev AA, et al. **Zh Nevropatol Psikhiatr** 1990; 90(1):48–52 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Anti-erythropoietin antibodies in hyperviscosity syndrome associated with giant lymph node hyperplasia (GLNH; Castleman's disease). Steinberg JJ, et al. **Br J Haematol** 1990 Apr;74(4):543–4

PHYSIOLOGY

Blood rheology as a contributing factor in reduced coronary reserve in systemic hypertension. Leschke M, et al. **Am J Cardiol** 1990 Apr 3;65(14):56G–59G
Blood viscosity and sensorineural hearing loss. Hildesheimer M, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jul; 116(7):820–3
Osmolality- and hematocrit-mediated flow behavior of RBC suspensions in 33 micrometer ID tubes. McKay CB, et al. **Biorheology** 1989;26(4):863–74
Effects of cellular morphology on the viscoelastic behavior of high hematocrit RBC suspensions. Yardin G, et al. **Biorheology** 1989;26(2):153–75
Effect of hyperthermia on the internal microviscosity of erythrocytes and lymphocytes: a spin-label study. Koter M. **Int J Radiat Biol** 1990 Jul;58(1):157–64
Effects of ovariectomy on blood and plasma viscosity, fibrinogen and whole blood filterability. Gelmini G, et al. **Maturitas** 1989 Sep;11(3):199–207
Dynamic viscoelasticity of blood. Fukada E, et al. **Monogr Atheroscler** 1990;15:170–80
Rheological study on vascular occlusion and cellular hyperviscosity syndrome in polycythemia vera. Fujioka S. **Nippon Ketsueki Gakkai Zasshi** 1989 Jul;52(4):688–95
Changes in the functional state of the erythrocyte membrane: significance for red cell filterability and blood viscosity. Larsson H, et al. **Scand J Clin Lab Invest** 1990 Apr; 50(2):177–81
Hyperviscosity syndromes and coagulopathies. Patterson WP, et al. **Semin Oncol** 1990 Apr;17(2):210–6 (69 ref.)
Plasma cell leukemia and hyperviscosity syndrome. Geraci JM, et al. **South Med J** 1990 Jul;83(7):800–5 (43 ref.)
[Effect of a single mild infrared A hyperthermia on body temperature, heart rate, blood pressure and blood viscosity in healthy probands and patients with stage I and II arterial hypertension] Scherf HP, et al. **Dermatol Monatsschr** 1989; 175(12):733–40 (Eng. Abstr.) (Ger)
[Rheologic risk factors of apoplexy] Resch KL, et al. **Versicherungsmedizin** 1990 Aug 1;42(4):103–6 (52 ref.) (Eng. Abstr.) (Ger)
[Modification of blood flow properties by physical stimuli] Ernst E. **Wien Klin Wochenschr** 1990 Jan 5;102(1):16–21 (54 ref.) (Eng. Abstr.) (Ger)
[Decreased blood fluidity in progressive systemic scleroderma] Ernst E, et al. **Z Rheumatol** 1990 May–Jun; 49(3):155–9 (Eng. Abstr.) (Ger)
[Relation between blood viscosity and ischemic pathology of an organ] Bartoli V, et al. **Ric Clin Lab** 1989;19 Suppl 1:41–51 (41 ref.) (Ita)
[Indicators of blood viscosity in women during menopause] Kochmański M, et al. **Pol Arch Med Wewn** 1987 Sep; 78(3):139–48 (Eng. Abstr.) (Pol)
[Selected biochemical components of plasma and blood viscosity in patients with arteriosclerosis] Turczyński B, et al. **Pol Arch Med Wewn** 1987 Jun;77(6):300–5 (Eng. Abstr.) (Pol)
[Reaction of the blood system in extra- and intracorporeal detoxication] Chelmakina VP. **Anesteziol Reanimatol** 1990 Mar–Apr;(2):33–6 (Eng. Abstr.) (Rus)
[Hemodynamics and rheologic properties of the blood in meningococcemia associated with meningitis and complicated by septic shock and intracranial hypertension] Radzivil GG, et al. **Anesteziol Reanimatol** 1990 Mar–Apr; (2):28–33 (Eng. Abstr.) (Rus)
[Rheologic properties of the erythrocytes and hemostatic system in patients with polycythemia vera] Bessmel'tsev

SS, et al. **Gematol Transfuziol** 1989 Nov;34(11):29–33 (Eng. Abstr.) **(Rus)**

[The rheologic aspects of washed donor erythrocytes] Ganapiev AA, et al. **Gematol Transfuziol** 1989 Dec; 34(12):7–9 (Eng. Abstr.) **(Rus)**

[The rheological properties of the leukocytes and their participation in the blood microcirculation] Redchits EG, et al. **Gematol Transfuziol** 1989 Dec;34(12):40–5 (47 ref.) **(Rus)**

[Thrombosis and cardiac arrhythmia] Liusov VA, et al. **Kardiologiia** 1989 Oct;29(10):10–5 **(Rus)**

[Relation between disorders of the rheological properties of the blood and the system of hemostasis in patients with ischemic heart disease] Parfenov AS, et al. **Kardiologiia** 1989 Oct;29(10):47–50 (Eng. Abstr.) **(Rus)**

[The role of rheological factors in circulatory disorders in patients with arteriosclerotic lesions of major arteries] Kuznetsov NA, et al. **Khirurgiia (Mosk)** 1990 May;(5):59–63 (Eng. Abstr.) **(Rus)**

[Changes in rheological properties of blood in patients with chronic glomerulonephritis] Riabov SI, et al. **Klin Med (Mosk)** 1990 Feb;68(2):97–101 (Eng. Abstr.) **(Rus)**

[Analysis of whole blood viscosity in patients with acute myocardial infarction using a rotation viscosimeter] Barinov VG, et al. **Lab Delo** 1989;(10):25–7 (Eng. Abstr.) **(Rus)**

[A rheological method of diagnosis of multiple sclerosis] Ierusalimskiĭ AP, et al. **Lab Delo** 1989;(10):39–41 (Eng. Abstr.) **(Rus)**

[Viscosimetric characteristics of various membrane filters] Voltenko II, et al. **Med Tekh** 1990 Mar–Apr;(2):21–3 (Eng. Abstr.) **(Rus)**

[Rheological disorders in rheumatoid arthritis with systemic manifestations] Balabanova RM, et al. **Revmatologiia (Mosk)** 1990 Jan–Mar;(1):36–40 (Eng. Abstr.) **(Rus)**

[Transfusion-sorption correction of microhemocirculatory disorders in primary pulmonary hypertension] Konopleva LF, et al. **Sov Med** 1990;(2):42–4 **(Rus)**

[Dynamics of blood viscosity indices in patients with alcoholic myocardiodystrophy] Kochua IN, et al. **Ter Arkh** 1989;61(11):108–11 (Eng. Abstr.) **(Rus)**

[Correction of disorders of systemic hemodynamics and rheologic indices of the blood in patients with chronic kidney failure during hemodialysis] Vlasov LE, et al. **Ter Arkh** 1989;61(7):73–5 (Eng. Abstr.) **(Rus)**

[Study of rheologic properties of the blood in patients with open-angle glaucoma] Mukha AI. **Vestn Oftalmol** 1990 Mar–Apr;106(2):7–9 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[Examination of the differential hematocrit and the plasma viscosity under the influence of ionizing radiation] Thiel J, et al. **Folia Haematol (Leipz)** 1990;117(1):7–14 (Eng. Abstr.) **(Ger)**

[Effect of ultra-high frequency electromagnetic energy on the rheologic properties of the blood] Levin GIa, et al. **Gig Tr Prof Zabol** 1990;(1):28–31 (Eng. Abstr.) **(Rus)**

BLOOD VOLUME

Estimating allowable blood loss with correction for variations in blood volume. Hahn RG. **Acta Anaesthesiol Scand** 1989 Aug;33(6):508–12

Blood volume measurement following subarachnoid haemorrhage. Nelson RJ. **Acta Neurochir Suppl (Wien)** 1990;47:114–21 (47 ref.)

Normovolaemic induced hypertension therapy for cerebral vasospasm after subarachnoid haemorrhage. Otsubo H, et al. **Acta Neurochir (Wien)** 1990;103(1–2):18–26

Variations in left ventricular volume alter myocardial oxygen consumption more at low than at high inotropy. Andersen FR, et al. **Acta Physiol Scand** 1990 May;139(1):95–102

Cumulative effect of repeated ischemia on brain edema in the gerbil. Biochemical and physiological correlates of repeated ischemic insults. Nowak TS Jr, et al. **Adv Neurol** 1990;52:1–9

Validation of pressure–volume data obtained in patients by initial transit radionuclide angiocardiography. Harpole DH, et al. **Am Heart J** 1989 Nov;118(5 Pt 1):983–9

Relationship of atrial natriuretic factor to left ventricular volume and mass. Roman MJ, et al. **Am Heart J** 1989 Dec; 118(6):1236–42

Response of pulmonary blood volume to 64 to 114 weeks of intermittent stay at high altitudes. Roy SB, et al. **Am Heart J** 1967 Aug;74(2):192–201

Ability of left ventricular stress–shortening relations, end-systolic stress/volume ratio and indirect indexes to detect severe contractile failure in ischemic or idiopathic dilated cardiomyopathy. Roman MJ, et al. **Am J Cardiol** 1989 Dec 1;64(19):1338–43

Effects of salt restriction on blood volume, hemodynamics and humoral factors in hypertensive patients with chronic glomerulonephritis. Kumagai H, et al. **Am J Hypertens** 1989 Sep;2(9):669–74

Calculation of fetoplacental volume [letter; comment] Moise KJ Jr. **Am J Obstet Gynecol** 1990 Feb;162(2):596 Comment on: Am J Obstet Gynecol 1987 Jul;157(1):50–3.

Transient oligohydramnios in a severely hypovolemic gravid woman at 35 weeks' gestation, with fluid reaccumulating immediately after intravenous maternal hydration. Sherer DM, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):770–1

Hypertonic and hypovolemic stimulation of thirst in pigs. Anderson CR, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R149–54

Fetal blood volume restoration following rapid fetal hemorrhage. Brace RA, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):H567–73

Effects of outflow pressure and vascular volume loading on thoracic duct lymph flow in adult sheep. Brace RA, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R240–4

LV pressure–volume area and oxygen consumption: evaluation in intact dog by fast CT. Chung N, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H1208–15

Vascular pressure–volume relationships in pregnant and estrogen-treated guinea pigs. Davis LE, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1205–11

Captopril reduces left ventricular enlargement induced by chronic volume overload. Gay RG. **Am J Physiol** 1990 Sep;259(3 Pt 2):H796–803

Heterogeneities in regional volumes of distribution and flows in rabbit heart. Gonzalez F, et al. **Am J Physiol** 1990 Apr; 258(4 Pt 2):H1012–24

Effect of blood filling in intramyocardial vessels on coronary arterial inflow. Goto M, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H1042–8

Spontaneous drinking: is it stimulated by hypertonicity or hypovolemia? Houpt TR, et al. **Am J Physiol** 1990 Jan; 258(1 Pt 2):R143–8

Hemodynamics and blood volume in angiotensin II salt-dependent hypertension in dogs. Krieger JE, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1402–12

Does volume catheter parallel conductance vary during a cardiac cycle? Lankford EB, et al. **Am J Physiol** 1990 Jun; 258(6 Pt 2):H1933–42

Coronary hyperperfusion and ventricular function in intact and isovolumic pig hearts. Miller WP, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H500–7

Interaction between left ventricular end-diastolic and end-systolic volumes in normal humans. Renlund DG, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H473–81

Mechanisms responsible for decline in transthoracic impedance after DC shocks. Sirna SJ, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1180–3

Volume homeostasis in calves with artificial atria and ventricles. Westenfelder C, et al. **Am J Physiol** 1990 Apr; 258(4 Pt 2):F1005–17

Pulmonary capillary blood volume in emphysema. Morrison NJ, et al. **Am Rev Respir Dis** 1990 Jan;141(1):53–61

Normovolemic hemodilution in head and neck surgery. Marchiori C, et al. **Arch Otorhinolaryngol** 1989; 246(5):333–5

The effects of propranolol or atenolol on the cardiovascular responses to central hypovolaemia in Europeans and Bengalees. Rahman MA, et al. **Br J Clin Pharmacol** 1990 Jan;29(1):69–77

Osmotic and metabolic sequelae of volumetric overload in relation to the TUR syndrome. Ghanem AN, et al. **Br J Urol** 1990 Jul;66(1):71–8

Fluid and electrolyte dynamics during development of the TURP syndrome. Hahn RG. **Br J Urol** 1990 Jul;66(1):79–84

Body fluid volume status in hemodialysis patients: the value of the chest radiograph. Don C, et al. **Can Assoc Radiol J** 1990 Jun;41(3):123–6

Carotid sinus pressure, blood volume, and vasopressin in the anaesthetized rabbit. Courneya CA, et al. **Can J Physiol Pharmacol** 1989 Nov;67(11):1386–90

In vivo myocardial bioenergetics during acute volume and/or pressure loading in a canine model: a 31P NMR study. Osbakken M, et al. **Cardiology** 1989;76(6):405–17

The regulation of the ratio of the cardiopulmonary blood volume to stroke volume in sheep. van Rooyen JM, et al. **Cardiovasc Res** 1989 May;23(5):453–9

Value of radionuclide-determined changes in pulmonary blood volume for the detection of coronary artery disease. Hanley PC, et al. **Chest** 1990 Jan;97(1):7–11

Left ventricular volume studies in tranquilized dogs with local anesthesia. Bristow JD, et al. **Circ Res** 1966 Apr; 18(4):457–63

The linear relation between oxygen consumption and pressure–volume area can be reconciled with the Fenn effect in dog left ventricle. Nozawa T, et al. **Circ Res** 1989 Nov;65(5):1380–9

Effect of changes in circulating blood volume on cardiac output and arterial and ventricular blood pressure in the stage 18, 24, and 29 chick embryo. Wagman AJ, et al. **Circ Res** 1990 Jul;67(1):187–92

dP/dt and isovolumic pressure decline [letter] Fifer MA. **Circulation** 1990 Sep;82(3):1077

Measurement of end-systolic pressure–volume relations by intra-aortic balloon occlusion. Gupta KB, et al. **Circulation** 1989 Oct;80(4):1016–28

Effects of volume expansion and contraction on plasma levels of atrial natriuretic peptide in man. Finn WL, et al. **Clin Exp Pharmacol Physiol** 1988 Apr;15(4):311–5

A renin-secreting tumour sensitive to changes in central blood volume (presumably via sympathetics) but not to circulating angiotensin II. Gordon RD, et al. **Clin Exp Pharmacol Physiol** 1990 Mar;17(3):185–9

Fluid, electrolyte and haematological changes in experimental peste des petits ruminants virus infection in West African dwarf goats. Olaleye OD, et al. **Cytobios** 1989;58(232):39–51

What does "reduced central blood volume in cirrhosis" really mean? Morali GA, et al. **Hepatology** 1990 Sep;12(3 Pt 1):615–7

The effect of tidal volume and intravascular volume state on systolic pressure variation in ventilated dogs. Szold A, et al. **Intensive Care Med** 1989;15(6):368–71

Quantitation of cerebral blood volume in human infants by near-infrared spectroscopy. Wyatt JS, et al. **J Appl Physiol** 1990 Mar;68(3):1086–91

Requirement for solutions with oncotic pressure to release ANF during blood volume expansion in conscious and anesthetized rats. Hebden RA, et al. **J Pharmacol Methods** 1990 May;23(3):171–8

Effect of hypoproteinemia on blood volume recovery after moderate hemorrhage in conscious splenectomized dogs. Joles JA, et al. **J Surg Res** 1989 Dec;47(6):515–9

Blood volume determinations in sheep before and after splenectomy. Torrington KG, et al. **Lab Anim Sci** 1989 Nov;39(6):598–602

New classification with prognostic value in cirrhotic patients. Cosby RL, et al. **Miner Electrolyte Metab** 1989;15(5):261–6

Measurement of cerebral blood flow, cerebral blood volume, and cerebral capillary permeability in glioma-bearing rats. Aizawa S, et al. **Neurol Med Chir (Tokyo)** 1990 Feb; 30(2):113–8

Determination of blood volume in dogs using an enriched stable isotope 50Cr. Kunugiyama I, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):855–60

Effect of heart rate increase on dorsal aortic flow before and after volume loading in the stage 24 chick embryo. Benson DW Jr, et al. **Pediatr Res** 1989 Nov;26(5):438–41

Effects of euvolemic and hypervolemic hyperbicarbonemia on segmental nephron HCO3 reabsorption in the newborn dog. Lorenz JM, et al. **Pediatr Res** 1990 Jun;27(6):604–11

Carbon dioxide-related changes in cerebral blood volume and cerebral blood flow in mechanically ventilated preterm neonates: comparison of near infrared spectrophotometry and 133Xenon clearance. Pryds O, et al. **Pediatr Res** 1990 May;27(5):445–9

Systemic capillary leak syndrome. Teelucksingh S, et al. **Q J Med** 1990 May;75(277):515–24 (39 ref.)

Renal blood volume vs. glomerular filtration rate: evaluation with C15O and 88Ga-ethylenediaminetetraacetic acid (EDTA) study. Yamashita M, et al. **Radioisotopes** 1989 Sep; 38(9):373–6

Effect of acute vascular fluid volume expansion on erythrocyte sodium transport in essential hypertension. Herlitz H, et al. **Scand J Clin Lab Invest** 1990 Apr; 50(2):123–8

Hyperrestitution of blood volume following hemorrhage while in the Trendelenburg position. Blake KD, et al. **Surg Forum** 1978;29:29–31

Volume loading and nitroprusside in abdominal aortic aneurysectomy. Grindlinger GA, et al. **Surg Forum** 1978; 29:234–6

Continuous measurement of atrial volume with an impedance catheter during positive pressure ventilation and volume expansion. DeMaria EJ, et al. **Surg Gynecol Obstet** 1990 Jun;170(6):501–9

[The pregnancy outcome and changes in the blood volume in relation to the time of the appearance of late toxicosis symptoms] Dimitrov A. **Akush Ginekol (Sofiia)** 1990; 29(2):5–9 (Eng. Abstr.) **(Bul)**

[Doppler echocardiography quantification of the regurgitant blood volume in patients with mitral valve insufficiency] Dittmann H, et al. **Klin Wochenschr** 1989 Sep 15; 67(18):940–5 (Eng. Abstr.) **(Ger)**

[Microcirculatory, hemorheologic and microcirculatory parameters before and following hypervolemic hemodilution in patients with acute cerebrovascular disorders] Staedt U, et al. **Vasa Suppl** 1989;27:33–4 **(Ger)**

[Intra- and postoperative blood loss] Greitemann B, et al. **Z Orthop** 1989 Jul–Aug;127(4):506–9 (Eng. Abstr.) **(Ger)**

[Estimation of lung volume and pulmonary blood volume from radioisotopic images] Kanazawa M. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Mar;27(3):263–6 (Eng. Abstr.) **(Jpn)**

[Diagnosis of hemodynamic compromise in patients with chronic cerebral ischemia; measurement of cerebral blood volume (CBV) with 99mTc-RBC SPECT] Kuroda S, et al. **No Shinkei Geka** 1990 Mar;18(3):259–66 (Eng. Abstr.) **(Jpn)**

[Analysis of regional blood flow, blood volume, oxygen and glucose metabolism in heterogeneous parts of untreated high grade gliomas using positron emission tomography (PET)] Sasajima T, et al. **No Shinkei Geka** 1989 Nov; 17(11):1005–13 (Eng. Abstr.) **(Jpn)**

[Correlation of the coagulative properties of blood and the amount of postpartum blood loss] Gazazian MG, et al. **Akush Ginekol (Mosk)** 1989 Aug;(8):52–4 (Eng. Abstr.) **(Rus)**

[Blood circulation disorders in the post-resuscitation period of myocardial infarction and the role of body fluid measurements in their development] Lisachenko GV, et al. **Biull Eksp Biol Med** 1990 Jan;109(1):16–8 (Eng. Abstr.) **(Rus)**

[The protein-blood volume indices during moderate plasmapheresis] Movshev BE, et al. **Gematol Transfuziol** 1989 Dec;34(12):12–7 (Eng. Abstr.) **(Rus)**

[Changes in fluid spaces in patients with heart failure under the effects of isolated ultrafiltration] Gel'fgat EB, et al.

Kardiologiia 1990 May;30(5):52–6 (Eng. Abstr.) **(Rus)**

[Possibility of quantitative evaluation of venous outflow in patients with acute myocardial infarction during emergency coronarography] Kuliev OA, et al. **Kardiologiia** 1989 Jul; 29(7):114–5 **(Rus)**

[The status of the visual field in relation to the size of the pulse blood volume in intraocular vessels in glaucoma without increased intraocular pressure] Jovanović M, et al. **Srp Arh Celok Lek** 1987 Jul;115(7):725–30 **(Scc)**

DRUG EFFECTS

Effect of intracoronary contrast medium on left ventricular diastolic pressure–volume relationships. Kløw NE, et al. **Am Heart J** 1990 Jan;119(1):59–63

Chloride ion plays an important role in sodium induced volume expansion in normal humans. Tomita Y, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 1):485–7

Influence of verapamil on total and regional intravascular volume in dogs. Weinstock BS, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1049–55

Measurement of cerebral blood flow and volume with positron emission tomography during isoflurane administration in the hypocapnic baboon. Archer DP, et al. **Anesthesiology** 1990 Jun;72(6):1031–7

Intracranial volume–pressure relationship following thiopental or etomidate. Artru AA. **Anesthesiology** 1989 Nov;71(5):763–8

Atrial natriuretic peptide—cyclic GMP coupling and urinary sodium excretion during acute volume expansion in man. Sagnella GA, et al. **Can J Physiol Pharmacol** 1990 Apr; 68(4):535–8

Renal hyper–responsiveness to blood volume expansion in Brattleboro rats is not related to plasma ANF immunoreactivity. Palluk R, et al. **Clin Exp Pharmacol Physiol** 1989 Jul;16(7):571–80

Effect of atrial natriuretic peptide on blood pressure, guanosine 3',5'-cyclic monophosphate release and blood volume in uraemic patients. Jespersen B, et al. **Clin Sci** 1990 Jan;78(1):67–73

The cardiovascular and oncotic effects of albumin infusion in premature infants. Bignall S, et al. **Early Hum Dev** 1989 Dec;20(3–4):191–201

Iodinated contrast media effects on extravascular lung water, central blood volume, and cardiac output in humans. Böck JC, et al. **Invest Radiol** 1990 Aug;25(8):938–41

Differential effects of the calcium antagonist, nisoldipine, versus the arterial vasodilator, minoxidil, on ventricular anatomy, intravascular volume, and sympathetic activity in rats. Fields N, et al. **J Cardiovasc Pharmacol** 1989 Dec; 14(6):826–35

Blunting of atrial natriuretic factor response to volume expansion by benazepril in hypertensive patients. Dessì-Fulgheri P, et al. **J Hypertens Suppl** 1989 Dec; 7(6):S300–1

Effect of nicardipine hydrochloride on circulating blood volume and vascular compliance in dogs. Hashimoto S, et al. **Jpn Circ J** 1990 Feb;54(2):146–51

Effects of indomethacin on cerebral haemodynamics in very preterm infants. Edwards AD, et al. **Lancet** 1990 Jun 23; 335(8704):1491–5

Effect of ACTH-(1–24) on the volume of circulating blood and on regional blood flow in rats bled to hypovolemic shock. Guarini S, et al. **Resuscitation** 1989 Dec; 18(2–3):133–4

[The importance of high-dose alpha-receptor blockade for blood volume and hemodynamics in pheochromocytoma] Grosse H, et al. **Anaesthesist** 1990 Jun;39(6):313–8 (Eng. Abstr.) **(Ger)**

[Volume substitution in acute normovolemic hemodilution. 5% human albumin vs. 6% hydroxyethyl starch] von Bormann B, et al. **Infusionstherapie** 1990 Jun;17(3):142–6 (Eng. Abstr.) **(Ger)**

[The effect of glycerol on regional cerebral blood flow, blood volume and oxygen metabolism] Ishikawa M, et al. **No Shinkei Geka** 1989 Jul;17(7):635–40 (Eng. Abstr.) **(Jpn)**

[Effect of combined use of pindolol and clopamide on arterial blood pressure and blood and plasma volume in patients with primary arterial hypertension] Wyrzykowski B, et al. **Pol Arch Med Wewn** 1987 Jan–Feb;77(1–2):25–30 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Central neuroendocrine control of the brain water, electrolyte, and volume homeostasis. Dóczi T, et al. **Acta Neurochir Suppl (Wien)** 1990;47:122–6 (52 ref.)

Cardiovascular and endocrine responses to haemorrhage in the pig. Jacobsen J, et al. **Acta Physiol Scand** 1990 Feb; 138(2):167–73

Atrial natriuretic factor (ANF 103–126) enhances volume– and pressor–induced heart rate response in the conscious rat. Marks ES, et al. **Acta Physiol Scand** 1990 Feb; 138(2):161–5

Influence of splanchnic intravascular volume changes on cardiac output during muscarinic receptor stimulation in the anaesthetized dog. Morse MA, et al. **Acta Physiol Scand** 1990 Mar;138(3):331–6

Fetal blood volume, urine flow, swallowing, and amniotic fluid volume responses to long–term intravascular infusions of saline. Brace RA. **Am J Obstet Gynecol** 1989 Oct; 161(4):1049–54

Effect of acute intravascular volume expansion on human fetal prostaglandin concentrations. Weiner CP, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1494–7

Role of blood volume expansion in Dahl rat model of hypertension. Greene AS, et al. **Am J Physiol** 1990 Feb; 258(2 Pt 2):H508–14

Attenuation of arterial baroreceptor reflex response to acute hypovolemia during induced hypotension. Taneyama C, et al. **Anesthesiology** 1990 Sep;73(3):433–40

Changes in blood volume during dialysis are dependent upon the rate and amount of ultrafiltrate. Mann H, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):250–2

Splanchnic volume, not flow rate, determines peritoneal permeability. Pietrzak I, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):583–7

Characteristic profiles of circulating blood volume during dialysis therapy. Stiller S, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):530–2

Neuroendocrine control of blood tonicity and volume. Chowdrey HS, et al. **Baillieres Clin Endocrinol Metab** 1989 Aug;3(2):229–47 (142 ref.)

Control of blood and extracellular volume. Cowley AW Jr, et al. **Baillieres Clin Endocrinol Metab** 1989 Aug; 3(2):331–69 (165 ref.)

Extracranial and digital vascular events: an analysis of methods in BVP amplitude and biofeedback research. Harrison DW, et al. **Biol Psychol** 1989 Aug;29(1):1–9

Cerebral blood flow, blood volume and oxygen utilization. Normal values and effect of age. Leenders KL, et al. **Brain** 1990 Feb;113 (Pt 1):27–47

Blood volume changes of the anaesthetized rat to a large burn or mock burn injury measured using a continuous measuring circuit. Speakman EA, et al. **Burns** 1989 Oct; 15(5):322–6

Effect of hyper– and hypovolaemia on regional myocardial oxygen consumption. Scholz PM, et al. **Cardiovasc Res** 1990 Feb;24(2):81–6

Effects of expansion of blood volume and bilateral vagotomy on specific heart granules and release of atrial natriuretic peptide in the rat. Skepper JN, et al. **Cell Tissue Res** 1989 Oct;258(1):211–8

Redistribution of regional and organ blood volume and effect on cardiac function in relation to upright exercise intensity in healthy human subjects. Flamm SD, et al. **Circulation** 1990 May;81(5):1550–9

The slope of the end–systolic pressure–volume relationship compared with the global end–systolic pressure–volume ratio in humans. Abboud L, et al. **Clin Cardiol** 1990 Jan; 13(1):19–26

Hormonal response to blood volume expansion in diabetic subjects with and without autonomic neuropathy. O'Hare JP, et al. **Clin Endocrinol (Oxf)** 1989 May;30(5):571–9

Haemodynamic and ADH responses to central blood volume shifts in cardiac–denervated humans. Convertino VA, et al. **Clin Physiol** 1990 Jan;10(1):55–67

Blood volume after coronary artery bypass grafting. Ivert T, et al. **Clin Physiol** 1989 Dec;9(6):547–54

Effects of haemorrhage and volume expansion on portal–systemic collateral vascular resistance in conscious portal hypertensive rats. Koshy A, et al. **Clin Sci** 1990 Feb; 78(2):193–7

Tissue blood content in anaesthetised sheep and horses. Weaver BM, et al. **Comp Biochem Physiol [A]** 1989; 94(3):401–4

A haemodynamic evaluation of the femoro–femoral cross–over bypass. Lee RE, et al. **Eur J Vasc Surg** 1990 Apr;4(2):167–72

Reduced central blood volume in cirrhosis. Henriksen JH, et al. **Gastroenterology** 1989 Dec;97(6):1506–13

Extracellular space, blood volume, and the early dumping syndrome after total gastrectomy. Miholic J, et al. **Gastroenterology** 1990 Oct;99(4):923–9

Atrial volume in cirrhosis: relationship to blood volume and plasma concentration of atrial natriuretic factor. Rector WG Jr, et al. **Gastroenterology** 1990 Sep;99(3):766–70

Interstitial correction of blood volume decrease during hemodialysis. Kouw PM, et al. **Int J Artif Organs** 1989 Oct;12(10):626–31

Assessment of the splanchnic vascular capacity and capacitance using quantitative equilibrium blood–pool scintigraphy [see comments] Robinson VJ, et al. **J Nucl Med** 1990 Feb;31(2):154–9 Comment in: J Nucl Med 1990 Feb;31(2):160–2.

Importance of scintigraphic measurements of human splanchnic blood volume [comment] Rowell LB. **J Nucl Med** 1990 Feb;31(2):160–2 Comment on: J Nucl Med 1990 Feb;31(2):154–9.

Role of atrial natriuretic peptide in the response to blood volume expansion in the weanling rat. Chevalier RL, et al. **Pediatr Res** 1990 Apr;27(4 Pt 1):396–400

Predictability of repeated challenge: effects on cardiovascular activity in the type A (coronary prone) behavior pattern. Zeichner A, et al. **Physiol Behav** 1990 Jan;47(1):149–54

Variations of the renal flow in relation with the volemia. Arbeille P, et al. **Physiologist** 1990 Feb;33(1 Suppl):S175–6

Increased release of the N–terminal and C–terminal portions of the prohormone of atrial natriuretic factor during immersion–induced central hypervolemia in normal humans. Vesely DL, et al. **Proc Soc Exp Biol Med** 1989 Dec;192(3):230–5

Progressive hypervolemia despite hypoproteinemia and massive edema formation in rats with nephrotoxic serum nephritis. Fujihara CK, et al. **Renal Physiol Biochem** 1990 Jul–Aug;13(4):206–12

Study of postmortem blood circulation. Gómez Zapata M, et al. **Z Rechtsmed** 1989;103(1):27–32

Experiments with volume overload in SHR/Frid and WKY/Frid. Rohde E, et al. **Z Versuchstierkd** 1990; 33(3):128–32

[Effect of hemodilution on hormone systems, implications for regulation of blood volume] De Kegel D, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R116 **(Fre)**

[Morphology and volume behavior of allogeneic vascular implants. An animal experiment study of the carotid artery of the rat] Fleiner B, et al. **Fortschr Kiefer Gesichtschir** 1990;35:19–21 **(Ger)**

[Hypovolemic–hemorrhagic shock. Pathophysiology and therapy] Groh J, et al. **Infusionstherapie** 1990 Apr;17 Suppl 2:4–8 (10 ref.) (Eng. Abstr.) **(Ger)**

[Continuous measurement of blood volume changes in hemodialysis using an ultrasound method] Roob JM, et al. **Wien Klin Wochenschr** 1990 Mar 2;102(5):131–6 (Eng. Abstr.) **(Ger)**

[The accuracy of Doppler echocardiography determination of shunt volume in children with isolated atrial septal defect and left–right shunt] Stern H, et al. **Z Kardiol** 1989 Oct; 78(10):674–9 (Eng. Abstr.) **(Ger)**

[Changes in circulating blood volume in patients with ischemic heart disease during and after surgery with extracorporeal circulation] Koziorowska B. **Folia Med Cracov** 1989;30(3–4):171–90 (Eng. Abstr.) **(Pol)**

[Development of water space volumes in calves during the first month of life. III. Changes in the plasma and circulating blood volumes] Janus K. **Pol Arch Weter** 1988; 28(3–4):43–55 (Eng. Abstr.) **(Pol)**

[Rheologic effects of normovolemic hemodilution] Kuznetsov NA, et al. **Anesteziol Reanimatol** 1990 Mar–Apr; (2):18–22 (Eng. Abstr.) **(Rus)**

[The hemodynamic changes during preoperative acute normovolemic hemodilution (prospective, randomized and comparative research)] Nikolov K, et al. **Anesteziol Reanimatol** 1990 Jan–Feb;(1):30–1 (Eng. Abstr.) **(Rus)**

[Changes in the activity of granulocytopoiesis during increasing and reducing the reactions of the lysosomal apparatus of circulating neutrophils in hypovolemic hypotension] Skripka EN. **Fiziol Zh** 1990 Jan–Feb; 36(1):35–42 (Eng. Abstr.) **(Rus)**

[A microdialysis study of catecholamine secretion in the rat adrenal gland during hypovolemic hypotension] Kuz'min AI, et al. **Fiziol Zh SSSR** 1990 Feb;76(2):227–32 (Eng. Abstr.) **(Rus)**

[The participation of cholinergic mechanisms in regulating regional blood flow in hypovolemia] Tiukavin AI. **Fiziol Zh SSSR** 1989 Jul;75(7):1006–8 **(Rus)**

[The dynamic activity of the hepatic interstitial volume receptors under conditions of varying stimulation] Tyryshkina EM. **Fiziol Zh SSSR** 1989 Dec;75(12):1752–65 (Eng. Abstr.) **(Rus)**

[Body fluids during 120–day anti–orthostatic hypokinesia] Lobachik VI, et al. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):57–61 (Eng. Abstr.) **(Rus)**

[Simultaneous measurement of blood volume in the arteries of the neck and stroke volume] Chufarev VN. **Vestn Khir** 1989 Sep;143(9):107–10 (Eng. Abstr.) **(Rus)**

[Changes in homeostasis after elimination of the cause of mechanical jaundice of non–neoplastic etiology by endoscopic methods] Shulutko AM, et al. **Vestn Khir** 1990 Jan;144(1):45–8 (Eng. Abstr.) **(Rus)**

[The dynamic changes in the regional volumetric cerebral blood flow and local vascular reactivity in acute craniocerebral trauma in animals with alloxan diabetes] Romodanov AP, et al. **Zh Vopr Neirokhir** 1990 May–Jun; (3):19–22 (Eng. Abstr.) **(Rus)**

BLOOD VOLUME DETERMINATION

Effects of peri–operatively administered diclofenac and indomethacin on blood loss, bleeding time and plasma prostanoids in man. Rorarius MG, et al. **Eur J Anaesthesiol** 1989 Sep;6(5):335–42

INSTRUMENTATION

A blood protein monitor for the continuous measurement of blood volume changes during hemodialysis. Schneditz D, et al. **Kidney Int** 1990 Aug;38(2):342–6

METHODS

In vitro measurement of tissue vascular space by 19F NMR of a perfluorocarbon blood substitute. Negendank WG, et al. **Biomater Artif Cells Artif Organs** 1990;18(1):119–23

Quantitative radionuclide assessment of total pulmonary vascular volume changes. Bell L, et al. **Can J Physiol Pharmacol** 1990 Jun;68(6):727–32

Determination of lung capillary blood volume and membrane diffusing capacity in patients with COLD using the NO–CO method. Moinard J, et al. **Eur Respir J** 1990 Mar; 3(3):318–22

Determination of circulating blood volume by measurement of indocyanine green dye in hemolysate: a preliminary study. Busse MW, et al. **Life Sci** 1990;46(9):647–52

A method for determination of normal or abnormal blood

volume in patients subjected to radionuclide cardiography. Carlsen O, et al. **Scand J Clin Lab Invest** 1990 Feb; 50(1):63–7

[A quantitative method for determining variants in the support and types of the regulation of blood flow minute volume] Iarovol VL, et al. **Fiziol Cheloveka** 1990 Mar–Apr; 16(2):165–8 **(Rus)**

[An evaluation of conductometric methods for determining circulating blood volume] Singaevskiĭ SB, et al. **Vestn Khir** 1989 Oct;143(10):97–100 (Eng. Abstr.) **(Rus)**

BLOODLETTING

Efficiency of skin sterilization for a venipuncture with the use of commercially available alcohol or iodine pads. Choudhuri M, et al. **Am J Infect Control** 1990 Apr; 18(2):82–5

Recombinant human erythropoietin and phlebotomy in the treatment of iron overload in chronic hemodialysis patients. Lazarus JM, et al. **Am J Kidney Dis** 1990 Aug;16(2):101–8

Preoperative lateralization of pituitary microadenomas by petrosal sinus sampling: utility in two patients with non–ACTH–secreting tumors. Frank SJ, et al. **Am J Med** 1989 Dec;87(6):679–82

Response of various indices of iron status to acute iron depletion produced in menstruating women by low iron intake and phlebotomy. Milne DB, et al. **Clin Chem** 1990 Mar;36(3):487–91

Effects of single and repeated blood withdrawals on circulating mononuclear cells in BB rats. Failure to prevent diabetes despite acute changes in counts. Marliss EB, et al. **Diabetes** 1990 Sep;39(9):1099–105

Prolactin response to immobilization stress and hemorrhage: the effect of hypothalamic deafferentations and posterior pituitary denervation. Jurcovicová J, et al. **Endocrinology** 1990 May;126(5):2527–33

Twenty-four hour variation of transferrin saturation in treated and untreated haemochromatosis homozygotes. Edwards CQ, et al. **J Intern Med** 1989 Nov;226(5):373–9 (41 ref.)

Influence of blood withdrawal and anticoagulant on clotting activity, hematologic data, and certain rheologic measurements. Reinhart WH, et al. **J Lab Clin Med** 1990 Jan;115(1):98–103

Needle sticks in phlebotomists: too much ado about a rare event [letter] McCowan JE Jr, et al. **JAMA** 1990 Sep 19; 264(11):1408–9

Pseudohyperkalemia caused by fist clenching during phlebotomy. Don BR, et al. **N Engl J Med** 1990 May 3; 322(18):1290–2

Treatment of a patient with end–stage renal disease, severe iron overload and ascites by weekly phlebotomy combined with recombinant human erythropoietin. Nomura S, et al. **Nephron** 1990;55(2):210–3

Pediatric procedures: do parents want to watch? [see comments] Bouchner H, et al. **Pediatrics** 1989 Nov; 84(5):907–9 Comment in: Pediatrics 1990 Apr;85(4):626.

Needlestick injuries in blood collection staff. A retrospective analysis [see comments] McGuff J, et al. **Transfusion** 1989 Oct;29(8):693–5 Comment in: Transfusion 1990 May;30(4):382–3.

[Results of treatment of porphyria cutanea tarda with bloodletting and chloroquine] Seubert S, et al. **Z Hautkr** 1990 Mar;65(3):223–5 (Eng. Abstr.) **(Ger)**

[Analysis of the costs and complications of different procedures for the administration of intravenous liquids] Campos–Oltra JR, et al. **Bol Med Hosp Infant Mex** 1989 Aug;46(8):547–53 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Effective measures for reducing blood loss from diagnostic laboratory tests in intensive care unit patients. Foulke GE, et al. **Crit Care Med** 1989 Nov;17(11):1143–5

The risk of adverse reactions from percutaneous prick–puncture allergen skin testing, venipuncture, and body measurements: data from the second National Health and Nutrition Examination Survey 1976–80 (NHANES II). Turkeltaub PC, et al. **J Allergy Clin Immunol** 1989 Dec; 84(6 Pt 1):886–90

Bruising after venepuncture [letter] Bhatia RS. **J Assoc Physicians India** 1990 Apr;38(4):310

Ulnar nerve injury: an unusual complication of basilic vein cut open. Mathur SN, et al. **J Indian Med Assoc** 1989 Jul; 87(7):164–5

Reflex sympathetic dystrophy linked to venipuncture: a case report. Brock TR. **J Oral Maxillofac Surg** 1989 Dec; 47(12):1333–5

HISTORY

Reflections on medicine. Pierre Louis and his numerical method. Massey RU. **Conn Med** 1989 Oct;53(10):613

From the museum. **Indiana Med** 1990 Apr;83(4):246

Extreme hyperferremia in two instances of hemochromatosis with notes on the treatment of one patient by means of repeated venesection. 1952 [classical article] Howard RB, et al. **J Lab Clin Med** 1990 Jul;116(1):121–32

The medicinal leech: historical perspectives. Adams SL. **Semin Thromb Hemost** 1989 Jul;15(3):261–4

METHODS

Saphenous vein cutdown [letter] Melker RJ. **Am J Emerg Med** 1990 Mar;8(2):176–7

A modified wire–guided technique for venous cutdown access. Shockley LW, et al. **Ann Emerg Med** 1990 Apr; 19(4):393–5

Limitations of the erythropoietic response to serial phlebotomy: implications for autologous blood donor programs. Goodnough LT, et al. **J Lab Clin Med** 1990 Jan;115(1):28–35

The use of lignocaine–prilocaine local anaesthetic cream for pain–free venepuncture in laboratory animals. Flecknell PA, et al. **Lab Anim** 1990 Apr;24(2):142–6

Lack of effect of changing needles on contamination of blood cultures. Isaacman DJ, et al. **Pediatr Infect Dis J** 1990 Apr; 9(4):274–8

[Effect of body posture and venous congestion on blood fat picture] Hansen WE, et al. **Dtsch Med Wochenschr** 1990 Mar 16;115(11):408–11 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Venesection as a rare form of self–mutilation. Margo GM, et al. **Am J Psychother** 1989 Jul;43(3):427–32

Stress reactions in response to the procedure of LHRH tests as measured by salivary and serum cortisol and psychological variables. Hubert W, et al. **Horm Res** 1989; 32(5–6):198–202

STANDARDS

Benefits of HIV testing during military exercises. Gross ML, et al. **Milit Med** 1989 Dec;154(12):593–5

BLOOM SYNDROME

Bloom's Syndrome Registry [letter] German JL 3d, et al. **Int J Dermatol** 1990 Apr;29(3):233–4

BLOOD

Frequency of variant erythrocytes at the glycophorin–A locus in two Bloom's syndrome patients. Kyoizumi S, et al. **Mutat Res** 1989 Oct;214(2):215–22

ENZYMOLOGY

Enhanced deoxyribonuclease activity in human transformed cells and in Bloom's syndrome cells. Mezzina M, et al. **Mol Carcinog** 1989;2(4):179–83

GENETICS

An abnormal profile of DNA replication intermediates in Bloom's syndrome. Lönn U, et al. **Cancer Res** 1990 Jun 1;50(11):3141–5

Increased levels of 5–fluorouracil–induced DNA lesions in Bloom's syndrome. Lönn U, et al. **Int J Cancer** 1990 Mar 15;45(3):494–9

Detection of free radical–induced DNA damage with bromodeoxyuridine/Hoechst flow cytometry: implications for Bloom's syndrome. Poot M, et al. **Mutat Res** 1990 May; 238(3):203–7

Levels of sister–chromatid exchanges in hybrids between Bloom syndrome B–lymphoblastoid cells and various cell lines with lymphoid malignancy. Shiraishi Y, et al. **Mutat Res** 1990 Jan;243(1):13–20

Bromodeoxyuridine (BrdU) template and thymidine pool effects on high frequencies of sister–chromatid exchange (SCE) in Bloom syndrome cells and a mutant cell line (AsHa) originated from ataxia telangiectasia. Shiraishi Y, et al. **Mutat Res** 1990 Jun;230(2):177–86

High levels of the c–myc protein in cell lines of Bloom's syndrome origin. Sullivan NF, et al. **Oncogene** 1989 Dec; 4(12):1509–11

Biochemical properties of mammalian DNA ligase I and the molecular defect in Bloom's syndrome. Tomkinson AE, et al. **Prog Clin Biol Res** 1990;340A:283–94

[Bloom syndrome, constitutional and induced genetic instability in 2 cases from Argentina] Gorla NB, et al. **Sangre (Barc)** 1989 Dec;34(6):475–80 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Malignant lymphoma antigen expressed in nude mouse tumor cells derived from carcinogen–transformed Bloom's syndrome B–lymphoblastoid cell lines. Shiraishi Y, et al. **Cancer Res** 1990 May 15;50(10):3106–12

Immunological alteration of the Bloom's syndrome uracil DNA glycosylase in Epstein–Barr virus–transformed human lymphoblastoid cells. Seal G, et al. **Mutat Res** 1990 Mar;243(3):241–8

METABOLISM

Deoxyribonucleoside triphosphate pool levels in three cell strains of human chromosome instability syndromes: ataxia telangiectasia (GM2052), Bloom's syndrome (GM1492), and Fanconi's anemia (GM368). Kenne K, et al. **Cancer Biochem Biophys** 1990 Jan;11(1):69–77

PATHOLOGY

Cell kinetic evidence suggests elevated oxidative stress in cultured cells of Bloom's syndrome. Poot M, et al. **Free Radic Res Commun** 1989;7(3–6):179–87

Western blotting analysis for malignant lymphoma and stomach cancer antigens from carcinogen–transformed Bloom syndrome cells. Shiraishi Y. **Int J Cancer** 1990 Apr 15;45(4):783–7

BLOOM–TORRE–MACHACEK SYNDROME see **BLOOM SYNDROME**

BLOTTING, NORTHERN see under **MOLECULAR PROBE TECHNICS**

BLOTTING, SOUTHERN

see related
NUCLEIC ACID HYBRIDIZATION

DNA isolation and Southern analysis: a clinician's view. Borst M, et al. **Am J Med Sci** 1990 May;299(5):356–60 (10 ref.)

Detection of conditions related to human papillomavirus. Comparison of cytology, colposcopy, histology and hybridization. Spitzer M, et al. **J Reprod Med** 1990 Jul; 35(7):697–703

[Molecular genetic detection of polyclonal immune response in autoimmune thyroiditis and inflammatory bowel diseases] Kaulfersch W, et al. **Monatsschr Kinderheilkd** 1989 Sep;137(9):610–5 (Eng. Abstr.) **(Ger)**

[HBV DNA in mononuclear cells of peripheral blood in acute hepatitis B: a comparative analysis of Southern blot and polymerase chain reaction (PCR)] Scaglioni PP, et al. **Medicina (Firenze)** 1990 Jan–Mar;10(1):32–4 (Eng. Abstr.) **(Ita)**

INSTRUMENTATION

Modulable Southern and Northern blot hybridization apparatus for routine screening of gene amplification and expression. Bignon C, et al. **J Biochem Biophys Methods** 1990 Apr–May;20(4):293–302

METHODS

Electroblotting of double–stranded DNA for hybridization experiments: DNA transfer is complete within 10 minutes after pulsed–field gel electrophoresis. Ishihara H, et al. **Anal Biochem** 1990 Feb 1;184(2):207–12

Efficient transfer of DNA to nylon membranes using vacuum blotting in presence of alkali. Aguinaga M del P, et al. **Biotechniques** 1989 Nov–Dec;7(10):1077–9

Improved chemiluminescent detection of alkaline phosphatase. Bronstein I, et al. **Biotechniques** 1990 Aug; 9(2):160–1

A simple semi–dry capillary transfer of DNA. Nakano T, et al. **Biotechniques** 1990 Feb;8(2):173–4

Southern blot analysis of polymerase chain reaction products on acrylamide gels. Nguyen TD. **Biotechniques** 1989 Mar; 7(3):238–40

A simple technique for repair of nylon blotting membranes. Pitas JW. **Biotechniques** 1989 Nov–Dec;7(10):1084

A rapid method of Southern blot analysis using polyacrylamide gel electrophoresis and vacuum blotting transfer techniques. Rosenberg J, et al. **Biotechniques** 1989 Jan;7(1):24, 26, 28

Improved genomic blot hybridization. Verma M. **Biotechniques** 1989 Oct;7(9):934

Southern blot analysis with synthetic oligonucleotides. Application to prostatic protein genes. Chapdelaine P, et al. **Int J Biochem** 1990;22(1):75–82

Optimization of non–radioactive Southern blot hybridization: single copy detection and reuse of blots. Allefs JJ, et al. **Nucleic Acids Res** 1990 May 25;18(10):3099–100

Artifactual bands associated with alkaline transfer. Chorazy PA, et al. **Nucleic Acids Res** 1990 May 25;18(10):3101

High resolution southern analysis of genomic DNA using heat denatured acrylamide gels. Préat T. **Nucleic Acids Res** 1990 Feb 25;18(4):1073

Detection of mutations and DNA polymorphisms using whole genome Southern Cross hybridization. Ruvkun G, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):809–15

BLOTTING, WESTERN

Reactivity to non–viral proteins on western blot mistaken for reactivity to HIV glycoproteins [letter; comment] Healey DS, et al. **AIDS** 1989 Aug;3(8):545–6 Comment on: AIDS 1988 Oct;2(5):405–6.

Occurrence, characteristics, and patterns of HIV–1 and HIV–2 western blot indeterminate sera in low risk populations in West Virginia and pre–AIDS Africa. Schindzielorz AH, et al. **Am J Trop Med Hyg** 1990 May; 42(5):460–4

The diagnostic dilemma of otosyphilis. A new western blot assay. Birdsall HH, et al. **Arch Otolaryngol Head Neck Surg** 1990 May;116(5):617–21

The western immunoblot procedure for HIV antibodies and its interpretation. Dodd RY, et al. **Arch Pathol Lab Med** 1990 Mar;114(3):240–5 (23 ref.)

The significance of HIV–1–indeterminate western blot results in blood donor populations. Kleinman S. **Arch Pathol Lab Med** 1990 Mar;114(3):298–303 (24 ref.)

What do western blot indeterminate patterns for human immunodeficiency virus mean in EIA–negative blood donors. **Dis Markers** 1990 Mar–Apr;8(2):108

Comparative evaluation of an immunofluorescent antibody test, enzyme immunoassay and western blot for the detection of HIV–1 antibody. Iltis JP, et al. **Intervirology** 1990;31(2–4):122–8

Immunoblotting in the clinical laboratory. Towbin H, et al. **J Clin Chem Clin Biochem** 1989 Aug;27(8):495–501 (42 ref.)
Detection of Candida antigenuria in disseminated candidiasis by immunoblotting. Ferreira RP, et al. **J Clin Microbiol** 1990 May;28(5):1075–8
Evaluation of immunoglobulin M western blot analysis in the diagnosis of congenital syphilis. Lewis LL, et al. **J Clin Microbiol** 1990 Feb;28(2):296–302
Detection of urinary TGF-alpha by HPLC and western blot in patients with melanoma. Ellis DL, et al. **J Invest Dermatol** 1990 Jul;95(1):27–30
Interpretation of western blots of specimens from children infected with human immunodeficiency virus type 1: implications for prognosis and diagnosis. Walter EB, et al. **J Pediatr** 1990 Aug;117(2 Pt 1):255–8
HIV-1 antibody testing strategy: evaluation of ELISA screening and western blot profiles in a mixed low risk/high risk patient population. Downie JC, et al. **J Virol Methods** 1989 Dec;26(3):291–303
Following up indeterminate HIV-1 western blots [letter; comment] Couroucé AM. **Lancet** 1989 Dec 2; 2(8675):1330–1 Comment on: Lancet 1989 Oct 28;2(8670):1023–5.
Evaluation of antibody responses in American visceral leishmaniasis by ELISA and immunoblot. Evans TG, et al. **Mem Inst Oswaldo Cruz** 1989 Apr–Jun;84(2):157–66
New, bioluminescence-enhanced detection systems for use in enzyme activity tests, enzyme immunoassays, protein blotting and nucleic acid hybridization. Geiger R, et al. **Mol Cell Probes** 1989 Dec;3(4):309–28 (87 ref.)
Rapid identification of cultured Mycobacterium tuberculosis with a panel of monoclonal antibodies in western blot and immunofluorescence. Verstijnen CP, et al. **Res Microbiol** 1989 Nov–Dec;140(9):653–66
An analysis of indeterminate western blot patterns of black African subjects. Schoub BD, et al. **Res Virol** 1990 May–Jun;141(3):397–401
AIDS Task Force update. Bailey RH. **Trans Assoc Life Insur Med Dir Am** 1990;73:184–5
Determination of MN blood group from blood stains by electrophoresis and immunoblotting. Moriya F, et al. **Z Rechtsmed** 1989;103(1):21–5
[Antinuclear and anticytoplasmic antibodies in 24 cases of dermatomyositis. Value of western blotting] Meyer O, et al. **Ann Med Interne (Paris)** 1989;140(6):449–52 (Eng. Abstr.) (Fre)
[Serodiagnosis of Lyme borreliosis: antibody titer and specificity in the IFT and western blot] Grellner W, et al. **Immun Infekt** 1989 Dec;17(6):189–94 (Eng. Abstr.) (Ger)
[Characterization of treponemal axial filament antigens using the Western blot] Zugehör M, et al. **Z Gesamte Hyg** 1989 Oct;35(10):614–5 (Eng. Abstr.) (Ger)

INSTRUMENTATION

A modification of the Omniblot Processing System allowing its use in western blotting. Wada RK, et al. **Biotechniques** 1990 Mar;8(3):258–62

METHODS

Analysis of urinary and circulating FDP subfragments and subunits: application of the western-blot technique. Takahashi S, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Apr;31(2):127–35
A blotting method for monitoring the formation of chemically induced DNA–protein complexes. Cohen MD, et al. **Anal Biochem** 1990 Apr;186(1):1–7
Electrotransfer of basic proteins from nondenaturing polyacrylamide acid gels to nitrocellulose: detection of enzymatic and inhibitory activities and retention of protein antigenicity. Van-Seuningen I, et al. **Anal Biochem** 1990 May 1;186(2):306–11
Western blots from sodium dodecyl sulfate-polyacrylamide gels stained by metal salts. Wang D, et al. **Anal Biochem** 1989 Aug 1;180(2):311–3
Detection of DNA–protein binding in western blots by phosphorus-labeled and biotinylated DNA probes. Herlt M, et al. **Biotechniques** 1988 Apr;6(4):324–31
A new western blotting variant. Hutchins J. **Biotechniques** 1989 Mar;7(3):248–51
A simple method for western blotting very thin SDS-polyacrylamide gels. Smith SF. **Biotechniques** 1989 Nov-Dec;7(10):1060–4
A simple method to prevent membranes from touching during western blot incubations. Triplett BA. **Biotechniques** 1989 Sep;7(8):817–8
Comparison of Western blot and enzyme-linked immunosorbent assay for diagnosis of Lyme borreliosis. Karlsson M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Oct;8(10):871–7
New, sensitive, radioactive-free bioluminescence-enhanced detection system in protein blotting and nucleic acid hybridization. Hauber R, et al. **J Biolumin Chemilumin** 1989 Jul;4(1):367–72
Use of partially purified 54-kilodalton antigen for diagnosis of nocardiosis by Western blot (immunoblot) assay. Boiron P, et al. **J Clin Microbiol** 1990 Feb;28(2):328–31
Glutaraldehyde fixation of the primary antibody–antigen complex on nitrocellulose paper increases the overall sensitivity of immunoblot assay. Ikegaki N, et al. **J Immunol Methods** 1989 Nov 30;124(2):205–10
From the Centers for Disease Control. Interpretation and use of the western blot assay for serodiagnosis of human immunodeficiency virus type 1 infections [see comments] **JAMA** 1989 Dec 22–29;262(24):3395–7 Comment in: JAMA 1989 Dec 22–29;262(24):3465–6.
Streptavidin–enzyme complexes in detection of antigens on western blots. Brakel CL, et al. **Methods Enzymol** 1990; 184:437–42
Luminescent detection of immunodot and western blots. Leong MM, et al. **Methods Enzymol** 1990;184:442–51
Electroimmunoblotting of neuropeptide Y: application to the rat vas deferens. Silva WI, et al. **Neurosci Lett** 1990 Feb 5;109(1–2):191–5

STANDARDS

What do western blot indeterminate patterns for human immunodeficiency virus mean in EIA-negative blood donors? [see comments] Genesca J, et al. **Lancet** 1989 Oct 28;2(8670):1023–5 Comment in: Lancet 1989 Dec 2;2(8675):1330–1. Comment in: Lancet 1990 Feb 3;335(8684):292–3.
Absence of HIV infection in blood donors with indeterminate western blot tests for antibody to HIV-1. Jackson JB, et al. **N Engl J Med** 1990 Jan 25;322(4):217–22
Acquired immunodeficiency syndrome (AIDS). Recommendations for the interpretation of HIV-2 western blot results. **Wkly Epidemiol Rec** 1990 Mar 9;65(10):74–5 (Eng, Fre)

BLUE CROSS see under **INSURANCE, HOSPITALIZATION**

BLUE SHIELD see under **INSURANCE, PHYSICIAN SERVICES**

BLUE TONGUE

Bluetongue viruses. **Curr Top Microbiol Immunol** 1990; 162:1–200

DIAGNOSIS

Current techniques in rapid bluetongue virus diagnosis. Gould AR, et al. **Aust Vet J** 1989 Dec;66(12):450–4
Enzyme-linked immunosorbent assay for efficient detection of antibody to bluetongue virus in pronghorn (Antilocapra americana). Drolet BS, et al. **J Wildl Dis** 1990 Jan; 26(1):34–40
Application of molecular techniques to the diagnosis of bluetongue virus infection. Squire KR, et al. **Prog Vet Microbiol Immunol** 1987;3:235–50 (51 ref.)
Dot immunobinding assay in comparison with enzyme-linked immunosorbent assay for the detection of bluetongue virus antibodies in sheep. Gupta Y, et al. **Vet Microbiol** 1990 May;22(4):365–71

EPIDEMIOLOGY

A seroepidemiological study on bluetongue virus in dairy cattle in the central valley of California. Uhaa IJ, et al. **Vet Res Commun** 1990;14(2):99–112

IMMUNOLOGY

Serological reactions in sheep and cattle experimentally infected with three Australian isolates of bluetongue virus. Squire KR. **Aust Vet J** 1989 Aug;66(8):243–6
Immune response to bluetongue virus infection. Stott JL, et al. **Curr Top Microbiol Immunol** 1990;162:163–78 (94 ref.)
T lymphocyte subset alterations following bluetongue virus infection in sheep and cattle. Ellis JA, et al. **Vet Immunol Immunopathol** 1990 Jan;24(1):49–67

MICROBIOLOGY

The bluetongue viruses. Gorman BM. **Curr Top Microbiol Immunol** 1990;162:1–19 (112 ref.)
Current knowledge on the biochemistry and immunology of bluetongue. Campbell CH, et al. **Prog Vet Microbiol Immunol** 1985;1:58–79 (96 ref.)
The pathogenesis of experimental bluetongue virus infection of calves. MacLachlan NJ, et al. **Vet Pathol** 1990 Jul; 27(4):223–9

PATHOLOGY

Pathology and pathogenesis of bluetongue infections. Parsonson IM. **Curr Top Microbiol Immunol** 1990; 162:119–41 (134 ref.)

PREVENTION & CONTROL

Recombinant virus vaccine for bluetongue disease in sheep. Roy P, et al. **J Virol** 1990 May;64(5):1998–2003
In vitro neutralization of antigenic variants of bluetongue virus is related to in vivo protection. Sundin DR, et al. **Viral Immunol** 1989 Fall;2(3):195–203

TRANSMISSION

Bluetongue in Australia—an entomologist's view. Standfast HA, et al. **Aust Vet J** 1989 Dec;66(12):396–7 (16 ref.)
Experimental transmission of bovine viral diseases by insemination with contaminated semen or during embryo transfer. Schlafer DH, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Feb;97(2):68–72

BLUE TONGUE VIRUS see under **REOVIRIDAE**

BLUECOMB OF TURKEYS see **ENTERITIS, TRANSMISSIBLE, OF TURKEYS**

BLUEGILL see **PERCIFORMES**

BLUNT INJURIES see **WOUNDS, NONPENETRATING**

BOARD, GOVERNING see **GOVERNING BOARD**

BODY BUILD see **SOMATOTYPES**

BODY BURDEN

[Equipment and instruments for use in radiological protection. XII. Recent developments and problems in radiation protection dosimetry(3)—Monitoring for internal radiation] Fujita M, et al. **Radioisotopes** 1990 Apr; 39(4):178–87 (Jpn)
[Radiation dosage received by workers occupationally exposed to radiation in Bosnia-Herzegovina 1961–1982] Ružđić M. **Med Arh** 1983;37(5–6):45–9 (Eng. Abstr.) (Ser)

BODY COMPOSITION

Reliability of the body mass prediction by means of indices. Komenda S. **Acta Univ Palacki Olomuc Fac Med** 1989; 123:329–43
Bone formation and body composition of European elk: an ontogenetic model. Bartosiewicz L. **Acta Vet Hung** 1989; 37(1–2):55–68
Exercise intensity does not affect the composition of diet- and exercise-induced body mass loss. Ballor DL, et al. **Am J Clin Nutr** 1990 Feb;51(2):142–6
Fat-free mass estimation by the two-electrode impedance method. Boulier A, et al. **Am J Clin Nutr** 1990 Oct; 52(4):581–5
Status of anthropometry and body composition data in elderly subjects. Chumlea WC, et al. **Am J Clin Nutr** 1989 Nov;50(5 Suppl):1158–66; discussion 1231–5 (91 ref.)
Assessment of body composition by bioelectrical impedance in a population aged greater than 60 y. Deurenberg P, et al. **Am J Clin Nutr** 1990 Jan;51(1):3–6
Body composition of children recovering from severe protein-energy malnutrition at two rates of catch-up growth. Fjeld CR, et al. **Am J Clin Nutr** 1989 Dec; 50(6):1266–75
The menstrual cycle's effect on the reliability of bioimpedance measurements for assessing body composition. Gleichauf CN, et al. **Am J Clin Nutr** 1989 Nov;50(5):903–7
Skinfold thickness measurements in obese subjects. Gray DS, et al. **Am J Clin Nutr** 1990 Apr;51(4):571–7
Body composition of humans: comparison of two improved four-compartment models that differ in expense, technical complexity, and radiation exposure. Heymsfield SB, et al. **Am J Clin Nutr** 1990 Jul;52(1):52–8
Body composition in elderly subjects: a critical appraisal of clinical methodology. Heymsfield SB, et al. **Am J Clin Nutr** 1989 Nov;50(5 Suppl):1167–75; discussion 1231–5 (36 ref.)
Chemical determination of human body density in vivo: relevance to hydrodensitometry. Heymsfield SB, et al. **Am J Clin Nutr** 1989 Dec;50(6):1282–9
Smoking status: effects on the dietary intake, physical activity, and body fat of adult men. Klesges RC, et al. **Am J Clin Nutr** 1990 May;51(5):784–9
Preservation of short-term energy balance in clinically stable patients with AIDS. Kotler DP, et al. **Am J Clin Nutr** 1990 Jan;51(1):7–13
Need for body composition information in elderly subjects. Kuczmarski RJ. **Am J Clin Nutr** 1989 Nov;50(5 Suppl):1150–7; discussion 1231–5 (59 ref.)
Validation of bioelectrical-impedance analysis as a measurement of change in body composition in obesity. Kushner RF, et al. **Am J Clin Nutr** 1990 Aug;52(2):219–23
Dual-energy x-ray absorptiometry for total-body and regional bone-mineral and soft-tissue composition. Mazess RB, et al. **Am J Clin Nutr** 1990 Jun;51(6):1106–12
Body composition of adult cystic fibrosis patients and control subjects as determined by densitometry, bioelectrical impedance, total-body electrical conductivity, skinfold measurements, and deuterium oxide dilution. Newby MJ, et al. **Am J Clin Nutr** 1990 Aug;52(2):209–13
Effect of intensity of physical activity on body fatness and fat distribution. Tremblay A, et al. **Am J Clin Nutr** 1990 Feb;51(2):153–7
Use of total-body electrical conductivity for the assessment of body composition in middle-aged and elderly individuals. Van Loan MD, et al. **Am J Clin Nutr** 1990 Apr;51(4):548–52
Assessment of fat-free mass in teen-agers: use of TOBEC methodology. Van Loan MD. **Am J Clin Nutr** 1990 Oct; 52(4):586–90
Body composition in children: proposal for a method for calculating body fat percentage from total body density or skinfold-thickness measurements. Weststrate JA, et al. **Am J Clin Nutr** 1989 Nov;50(5):1104–15
Age variations in the relation of body mass indices to estimates of body fat and muscle mass. Micozzi MS, et

al. **Am J Phys Anthropol** 1990 Mar;81(3):375–9
Avian basal metabolic rates: their association with body composition and energy expenditure in nature. Daan S, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R333–40
Effect of age on body composition and resting metabolic rate. Fukagawa NK, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):E233–8
Influence of preweaning food intake on body composition of young adult baboons. Lewis DS, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1128–35
Relationship of resting metabolic rate to body composition and protein turnover. Welle S, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):E990–8
Prediction of body density using A-mode ultrasonoscope in Japanese physical education major college students. Oishi K. **Ann Physiol Anthropol** 1989 Apr;8(2):65–70
Effects of age and body composition on the metabolic responses to elective colon resection. Watters JM, et al. **Ann Surg** 1990 Aug;212(2):213–20
Responsiveness to dietary cholesterol in the domestic fowl is not related to the degree of body fatness. Meijer GW, et al. **Artery** 1989;17(1):1–5
Relation of body fat distribution to serum lipids and lipoproteins in elderly women. Haarbo J, et al. **Atherosclerosis** 1989 Nov;80(1):57–62
Changes in body protein composition following aortic reconstruction. Fletcher JP, et al. **Aust N Z J Surg** 1990 Mar;60(3):209–11
Energy absorption, lean body mass, and total body fat changes during 5 weeks of continuous bed rest. Krebs JM, et al. **Aviat Space Environ Med** 1990 Apr;61(4):314–8
Correlation of commonly used measures of intrauterine growth with estimated neonatal body fat. Wolfe HM, et al. **Biol Neonate** 1990;57(3–4):167–71
The effect of zinc deficiency on the body composition of rats. White CL. **Biol Trace Elem Res** 1988 Sep–Dec; 17:175–87
An improved method for estimating changes in whole-body fat and protein mass in man. Murgatroyd PR, et al. **Br J Nutr** 1989 Sep;62(2):311–4
The effect of a low-protein diet and a cold environment on calorie intake and body composition in the rat. Schmidt P, et al. **Br J Nutr** 1967;21(2):457–65
Computerised tomography of chickens. Bentsen HB, et al. **Br Poult Sci** 1989 Sep;30(3):575–89
Response of laying hens to asymmetrical interrupted lighting regimens: reproductive performance, body weight and carcase composition. Lewis PD, et al. **Br Poult Sci** 1990 Mar;31(1):33–43
Responses of body composition, growth and food efficiency to dietary protein in genetically lean and fat broilers up to seven weeks of age. Whitehead CC. **Br Poult Sci** 1990 Mar;31(1):163–72
Body composition by photon absorptiometry. Galea V, et al. **Can J Sport Sci** 1990 Jun;15(2):143–8
Human body composition [editorial] Shephard RJ. **Can J Sport Sci** 1990 Jun;15(2):88
Body fat distribution and male/female differences in lipids and lipoproteins [see comments] Freedman DS, et al. **Circulation** 1990 May;81(5):1498–506 Comment in: Circulation 1990 May;81(5):1710–2.
Body composition in acromegaly: the effect of treatment. Bengtsson BA, et al. **Clin Endocrinol (Oxf)** 1989 Oct; 31(4):481–90
Body composition in acromegaly. Bengtsson BA, et al. **Clin Endocrinol (Oxf)** 1989 Feb;30(2):121–30
An introduction to body composition models used in nutritional studies. Mackie A, et al. **Clin Phys Physiol Meas** 1989 Nov;10(4):297–310 (51 ref.)
Return to normal body composition after ileoanal J-pouch anastomosis for ulcerative colitis. Christie PM, et al. **Dis Colon Rectum** 1990 Jul;33(7):584–6
Quetelet's index as a measure of body fatness in young infants. Davies PS, et al. **Early Hum Dev** 1989 Nov;20(2):135–41
Assessment of body composition in 8–11 year old children by bioelectrical impedance. Deurenberg P, et al. **Eur J Clin Nutr** 1989 Sep;43(9):623–9
Assessment of body composition by bioelectrical impedance in children and young adults is strongly age-dependent. Deurenberg P, et al. **Eur J Clin Nutr** 1990 Apr;44(4):261–8
Is an adaptation of Siri's formula for the calculation of body fat percentage from body density in the elderly necessary? Deurenberg P, et al. **Eur J Clin Nutr** 1989 Aug;43(8):559–67
Bioelectrical impedance or anthropometry? [letter; comment] Deurenberg P, et al. **Eur J Clin Nutr** 1989 Jul;43(7):503–4 Comment on: Eur J Clin Nutr 1989 Feb;43(2):129–37.
Is the bioelectrical impedance method suitable for epidemiological field studies? Deurenberg P, et al. **Eur J Clin Nutr** 1989 Sep;43(9):647–54
In obese subjects the body fat percentage calculated with Siri's formula is an overestimation. Deurenberg P, et al. **Eur J Clin Nutr** 1989 Aug;43(8):569–75
Potential use of bioelectrical impedance of the 'whole body' and of body segments for the assessment of body composition: comparison with densitometry and anthropometry. Fuller NJ, et al. **Eur J Clin Nutr** 1989 Nov; 43(11):779–91
Comparison of estimates of fat-free mass in normal and obese women from measurements of body potassium, body water and body density. Garrow JS, et al. **Eur J Clin Nutr** 1990 Mar;44(3):213–7
The predictive role of bioelectrical impedance analysis (BIA) in postoperative complications of cancer patients. Fritz T, et al. **Eur J Surg Oncol** 1990 Aug;16(4):326–31
Bioelectric impedance for body composition. Baumgartner RN, et al. **Exerc Sport Sci Rev** 1990;18:193–224 (125 ref.)
Sperm counts and reproductive hormones in male marathoners and lean controls. Bagatell CJ, et al. **Fertil Steril** 1990 Apr;53(4):688–92
Replicate differences in lines of mice selected for body composition. Eisen EJ, et al. **Genome** 1990 Apr; 33(2):294–301
Calcium and calmodulin changes with ageing in C57BL/6J mice. Massie HR, et al. **Gerontology** 1989;35(2–3):100–5
Body composition–research techniques and nutritional assessment. Proceedings of the international workshop. Kaiserslautern, FRG, August 21 and 22, 1988. **Infusionstherapie** 1990 Apr;17 Suppl 3:1–80
VLCD compliance and lean body mass. Astrup A, et al. **Int J Obes** 1989;13 Suppl 2:27–31
A comparison of body fat estimation methods. Brodie DA, et al. **Int J Obes** 1989;13 Suppl 2:171–2
Short term effect of a very low calorie diet on body composition and fat distribution. Dalle Grave R, et al. **Int J Obes** 1989;13 Suppl 2:177–8
Body composition analysis: a defense of anthropometry in overweight female dieters and controls. Eston R, et al. **Int J Obes** 1989;13 Suppl 2:155–6
The abdomen: hip ratio normative data and observations on selected patients. Forbes GB. **Int J Obes** 1990;14(2):149–57
Body composition and in vitro lipid metabolism of overfed hypophysectomized rats. Harris RB. **Int J Obes** 1989; 13(5):647–60
The effect of exercise on energy intake and body composition in overweight women. Keim NL, et al. **Int J Obes** 1990; 14(4):335–46
Restoration to normal body composition by VLCD: a comparison of post obese and lean subjects questions BMI 25 as diet limit. Kreitzman S, et al. **Int J Obes** 1989;13 Suppl 2:161–2
Associations between regional body fat distribution, fasting plasma free fatty acid levels and glucose tolerance in premenopausal women. Pouliot MC, et al. **Int J Obes** 1990; 14(4):293–302
Influence of body fat distribution during childhood on body fat distribution in adulthood: a two-decade follow-up study. Rolland-Cachera MF, et al. **Int J Obes** 1990; 14(6):473–81
Effects of low (LCD) and very low (VLCD) energy diets on metabolic rate and body composition in obese (fa/fa) Zucker rats. Stock MJ. **Int J Obes** 1989;13 Suppl 2:61–5
The relationship of body fat distribution to blood pressure in normotensive men: the normative aging study. Troisi RJ, et al. **Int J Obes** 1990;14(6):515–25
Changes in feeding efficiency and carcass composition in rats on repeated high-fat feedings. Uhley VE, et al. **Int J Obes** 1989;13(6):849–56
Short and long term effects of a very low calorie diet on resting metabolic rate and body composition. Vansant G, et al. **Int J Obes** 1989;13 Suppl 2:87–9
Effects of long-term, moderate exercise on body composition and serum lipid profile: a controlled study in middle-aged Swiss men and women. Suter E, et al. **Int J Vitam Nutr Res** 1989;59(4):423
Comparisons of body composition derived from anthropometric and bioelectrical impedance methods. Campos AC, et al. **J Am Coll Nutr** 1989 Dec;8(6):484–9
Diet and insulinlike growth factor I in relation to body composition in women with exercise-induced hypothalamic amenorrhea. Crist DM, et al. **J Am Coll Nutr** 1990 Jun;9(3):200–4
Efficacy of the urea dilution technique in estimating empty body composition of pigs weighing 50 kilograms. Chiba LI, et al. **J Anim Sci** 1990 Feb;68(2):372–83
Relationships of empty-body composition and fat distribution to live animal and carcass measurements in Bos indicus–Bos taurus crossbred cows. Holloway JW, et al. **J Anim Sci** 1990 Jul;68(7):1818–26
Effects of body composition, pre- and postpartum energy level and early weaning on reproductive performance of beef cows and preweaning calf gain. Houghton PL, et al. **J Anim Sci** 1990 May;68(5):1438–46
Effects of body composition, pre- and postpartum energy intake and stage of production of energy utilization by beef cows. Houghton PL, et al. **J Anim Sci** 1990 May; 68(5):1447–56
Relationship between fasting heat production, body composition and tissue distribution, in mature ewes from seven breeds. Olthoff JC, et al. **J Anim Sci** 1989 Oct; 67(10):2576–88
Composition of the whole body and component fractions in mature ewes from seven breeds. Olthoff JC, et al. **J Anim Sci** 1989 Oct;67(10):2565–75
Sensitivity of bioelectrical impedance to detect changes in human body composition [see comments] Ross R, et al. **J Appl Physiol** 1989 Oct;67(4):1643–8 Comment in: J Appl Physiol 1990 May;68(5):2246–7.
Comparison of methods for estimating body composition in young and elderly women. Blanchard J, et al. **J Gerontol** 1990 Jul;45(4):B119–24
Validity of anthropometric equations for determination of changes in body composition in adult males during training. Cisar CJ, et al. **J Sports Med Phys Fitness** 1989 Jun; 29(2):141–8
Potassium content of the fat free body in children. Cordain L, et al. **J Sports Med Phys Fitness** 1989 Jun;29(2):170–6
The effect of low impact dance training on aerobic capacity, submaximal heart rates and body composition of college-aged females. McCord P, et al. **J Sports Med Phys Fitness** 1989 Jun;29(2):184–8
Blood pressure, fitness, and fatness in 5- and 6-year-old children. Gutin B, et al. **JAMA** 1990 Sep 5;264(9):1123–7
Influence of energy source upon body composition in patients receiving intravenous nutrition. Almond DJ, et al. **JPEN J Parenter Enteral Nutr** 1989 Sep–Oct;13(5):471–7
Bioelectrical impedance analysis for body composition: clinical evaluation in general surgical patients. Schroeder D, et al. **JPEN J Parenter Enteral Nutr** 1990 Mar–Apr; 14(2):129–33
Estimation of minimal weight of adolescent males using multicomponent models. Horswill CA, et al. **Med Sci Sports Exerc** 1990 Aug;22(4):528–32
Resting metabolic rate and body composition of achondroplastic dwarfs. Owen OE, et al. **Medicine (Baltimore)** 1990 Jan;69(1):56–67
Effects of body composition and exercise capacity on glucose tolerance, insulin, and lipoprotein lipids in healthy older men: a cross-sectional and longitudinal intervention study. Coon PJ, et al. **Metabolism** 1989 Dec;38(12):1201–9
Measurement of composition changes using dual-photon absorptiometry in obese patients undergoing semistarvation. Koyama H, et al. **Metabolism** 1990 Mar; 39(3):302–6
Fitness, performance and anthropometric characteristics of 19,185 Canadian Forces personnel classified according to body mass index. Jetté M, et al. **Milit Med** 1990 Mar; 155(3):120–6
The response to long-term overfeeding in identical twins [see comments] Bouchard C, et al. **N Engl J Med** 1990 May 24;322(21):1477–82 Comment in: N Engl J Med 1990 May 24;322(21):1522–4.
Predictors of HDL2 cholesterol levels in older adults [letter] Pasquali R. **N Engl J Med** 1990 Aug 2;323(5):348–9
Destiny rides again as twins overeat [editorial; comment] Sims EA. **N Engl J Med** 1990 May 24;322(21):1522–4 Comment on: N Engl J Med 1990 May 24;322(21):1477–82. Comment on: N Engl J Med 1990 May 24;322(21):1483–7.
Body composition, energy, protein and iron intake of Nigerian female nursing students. Cole AH, et al. **Nahrung** 1989;33(8):703–8
Fat patterning during weight reduction: a multimode investigation. Weits T, et al. **Neth J Med** 1989 Oct; 35(3–4):174–84
Body composition measurements. Weits T, et al. **Neth J Med** 1989 Oct;35(3–4):204–17 (78 ref.)
Body composition, normal electrolyte concentrations, and the maintenance of normal volume, tonicity, and acid-base metabolism. Hill LL. **Pediatr Clin North Am** 1990 Apr; 37(2):241–56 (31 ref.)
Improved clinical facility for in vivo nitrogen measurement. Krishnan SS, et al. **Phys Med Biol** 1990 Apr;35(4):489–99
Calibration of a prompt neutron activation analysis facility for the measurement of total body protein. Mackie A, et al. **Phys Med Biol** 1990 May;35(5):613–24
Body composition of the broiler-breeder pullet. Bennett CD, et al. **Poult Sci** 1990 May;69(5):715–20
Weight gain, carcass yield, and composition of large white male turkeys reared to 28 weeks of age on growing and finishing diets with varying levels of dietary protein. Summers JD, et al. **Poult Sci** 1990 Apr;69(4):584–91
Growth hormone, body composition and somatomedin C after treatment of acromegaly. McLellan AR, et al. **Q J Med** 1988 Dec;69(260):997–1008
Experiences in the field of elemental analysis in vivo. Mattson S, et al. **Radiobiol Radiother (Berl)** 1990;31(2):203–7 (21 ref.)
Body composition and exercise in racing pigeons. Mulligan W, et al. **Res Vet Sci** 1990 May;48(3):321–6
Alterations in body composition after gastroplasty for morbid obesity. Zimmerman ME, et al. **Scand J Gastroenterol** 1990 Mar;25(3):263–8
Nutritional consequences of total gastrectomy: the relationship between mode of reconstruction, postprandial symptoms, and body composition. Miholic J, et al. **Surgery** 1990 Sep;108(3):488–94
The relationship between carcass characteristics, plasma hormones and metabolites in young fattening bulls. Istasse L, et al. **Vet Res Commun** 1990;14(1):19–26
[The effect of body constitution on work capacity evaluated by means of mechanical efficiency] Bunc V, et al. **Cas Lek Cesk** 1990 Jan 19;129(3):85–7 (Eng. Abstr.) (Cze)
[The use of the impedance measurement technic for calculating body fat mass. A validity study] Heitmann BL, et al. **Ugeskr Laeger** 1989 Oct 2;151(40):2588–91 (Eng. Abstr.) (Dan)
[Comparison of different methods of interpretation for the prediction of body water by heavy water dilution method: application in the male goat] Schmidely P, et al. **Reprod Nutr Dev** 1989;29(4):487–94 (Eng. Abstr.) (Fre)
[Bioelectric impedance in the study of body composition in healthy and dialyzed individuals] Petracca EG, et al. **Clin Ter** 1990 May 31;133(4):223–5 (Eng. Abstr.) (Ita)
[Body composition in chronic renal insufficiency in the primary anuric phase and after dialysis] Adami GF, et al. **Minerva Urol Nefrol** 1989 Jul–Sep;41(3):219–24 (Eng.

Abstr.) (Ita)
[Energy expenditure at rest and body composition in obese subjects before and after weight loss] Verga S, et al. **Recenti Prog Med** 1989 Nov;80(11):574–6 (Eng. Abstr.) (Ita)
[Assessment of body composition by bioelectrical impedance analysis: effects of skin resistance on impedance] Nakadomo F, et al. **Ann Physiol Anthropol** 1990 Apr;9(2):109–14 (Eng. Abstr.) (Jpn)
[Body composition changes in cancer: an experimental study] Waitzberg DL, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 May–Jun; 44(3):104–10 (Eng. Abstr.) (Por)
[Value of the tritium test for determining the fat content in the body of rats] Pisarchuk KL. **Fiziol Zh** 1990 Mar–Apr; 36(2):99–102 (Eng. Abstr.) (Rus)
[Determination of body fat by means of densitometry and anthropometry in children 6 to 10 years of age] García Llop LA, et al. **An Esp Pediatr** 1990 Feb;32(2):109–13 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Body composition in detoxified alcoholics. York JL, et al. **Alcoholism** 1990 Apr;14(2):180–3
Effect of bovine somatotropin on the growth rate, hormone profiles and carcass composition of Holstein bull calves. Groenewegen PP, et al. **Domest Anim Endocrinol** 1990 Jan; 7(1):43–54
Effects of a chronic GRF treatment on lambs having low or normal birth weight. Pastoureau P, et al. **Domest Anim Endocrinol** 1989 Oct;6(4):321–9
Growth, feed efficiency and carcass composition of finishing Friesian steers fed the beta-adrenergic agonist L-644,969. Moloney AP, et al. **J Anim Sci** 1990 May;68(5):1269–77
Effect of a potent analog of human growth hormone-releasing factor on carcass composition and quality of crossbred market pigs. Pommier SA, et al. **J Anim Sci** 1990 May;68(5):1291–8
The effects of the beta-adrenergic agonist salbutamol on meat quality in pigs. Warriss PD, et al. **J Anim Sci** 1990 Jan; 68(1):128–36
Influence of dietary carbohydrate-to-fat ratio on whole body nitrogen retention and body composition in adult rats. McCargar LJ, et al. **J Nutr** 1989 Sep;119(9):1240–5
Effects of nicotine on body weight, food consumption and body composition in male rats. Winders SE, et al. **Life Sci** 1990;46(21):1523–30
Effects of human growth hormone in men over 60 years old [see comments] Rudman D, et al. **N Engl J Med** 1990 Jul 5;323(1):1–6 Comment in: N Engl J Med 1990 Jul 5;323(1):52–4.
The effects of treatment with recombinant human growth hormone on body composition and metabolism in adults with growth hormone deficiency. Salomon F, et al. **N Engl J Med** 1989 Dec 28;321(26):1797–803
Growth hormone for the elderly? [editorial; comment] Vance ML. **N Engl J Med** 1990 Jul 5;323(1):52–4 Comment on: N Engl J Med 1990 Jul 5;323(1):1–6.
Preservation of body composition in renal transplant patients by cyclosporine, as opposed to prednisone. Zuercher RM, et al. **Transplantation** 1990 Jul;50(1):159–62
[Mechanism of action and effects of repartitioning substances for swine fattening] Brenner KV. **DTW Dtsch Tierarztl Wochenschr** 1990 May;97(5):196–202 (35 ref.) (Eng. Abstr.) (Ger)
[Influences of antitumoral chemotherapy on body composition and nitrogen balance: experimental study] Lima-Gonçalves E, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Jan–Feb;44(1):1–6 (Eng. Abstr.) (Por)

GENETICS

Associations between genetic markers and growth and carcass traits in a paternal half-sib family of Angus cattle. Beever JE, et al. **J Anim Sci** 1990 Feb;68(2):337–44

PHYSIOLOGY

A longitudinal study of gross body composition and body conformation and their association with food and activity in a teen-age population. Views of teen-age subjects on body conformation, food and activity. Huenemann RL, et al. **Am J Clin Nutr** 1966 May;18(5):325–38
Skeletal and body-composition effects of anorexia nervosa. Mazess RB, et al. **Am J Clin Nutr** 1990 Sep;52(3):438–41
Relation of body size and composition to clinical biochemical and hematologic indices in US men and women. Micozzi MS, et al. **Am J Clin Nutr** 1989 Dec;50(6):1276–81
Work capacity, exercise responses and body composition of professional pilots in relation to age. Loeppky JA, et al. **Aviat Space Environ Med** 1989 Nov;60(11):1077–84
Influence of soft tissue body composition on bone mass and metabolism. Hassager C, et al. **Bone** 1989;10(6):415–9
The assessment of the body fat percentage by skinfold thickness measurements in childhood and young adolescence. Deurenberg P, et al. **Br J Nutr** 1990 Mar; 63(2):293–303
Body composition changes in goats during early lactation estimated using a two-pool model of tritiated water kinetics. Dunshea FR, et al. **Br J Nutr** 1990 Jul;64(1):121–31
Growth, body composition, hormonal and metabolic status in lambs treated long-term with growth hormone. Pell JM, et al. **Br J Nutr** 1990 May;63(3):431–45
Changes in body-weight, composition and hepatic enzyme activities in response to dietary methionine, betaine and choline levels in growing chicks. Saunderson CL, et al. **Br J Nutr** 1990 Mar;63(2):339–49
The roles of nature and nurture in childhood obesity. Leibel RL. **Bull N Y Acad Med** 1989 Dec;55(10):1121–6; discussion 1154–60 (30 ref.)
Energy balance and body condition influence luteal function in Holstein heifers. Villa-Godoy A, et al. **Domest Anim Endocrinol** 1990 Apr;7(2):135–48
Differences in body impedance when measured with different instruments [letter] Deurenberg P, et al. **Eur J Clin Nutr** 1989 Dec;43(12):885–6
Seasonal fluctuation of BMR in populations not exposed to limitations in food availability: reality or illusion? Kashiwazaki H. **Eur J Clin Nutr** 1990;44 Suppl 1:85–93 (37 ref.)
Principles of in vivo magnetic resonance spectroscopy in whole-body magnetic resonance systems. Bachert-Baumann P, et al. **Infusionstherapie** 1990 Apr;17 Suppl 3:39–42 (13 ref.)
Obesity and adipose tissue distribution as risk factors for the development of disease. A review. Björntorp P. **Infusionstherapie** 1990 Feb;17(1):24–7 (32 ref.)
Total body water: changes during dialysis estimated by bioimpedance analysis. Böhm D, et al. **Infusionstherapie** 1990 Apr;17 Suppl 3:75–8
The ultrasonic measurement of upper arm muscle and fat area. Böhm D, et al. **Infusionstherapie** 1990 Apr;17 Suppl 3:54–5
Some aspects of body composition in cancer. Burkinshaw L. **Infusionstherapie** 1990 Apr;17 Suppl 3:57–8 (16 ref.)
Models of the distribution of protein, water and electrolytes in the human body. Burkinshaw L, et al. **Infusionstherapie** 1990 Apr;17 Suppl 3:21–5
Body composition in cancer cachexia. Fearon KC, et al. **Infusionstherapie** 1990 Apr;17 Suppl 3:63–6
Direct biochemical analyses of human muscle tissue. Fürst P. **Infusionstherapie** 1990 Apr;17 Suppl 3:26–34 (52 ref.)
MR tomography and multinuclear MR spectroscopy in a whole-body MR system—applications in cancer research. Gückel F, et al. **Infusionstherapie** 1990 Apr;17 Suppl 3:43–7 (11 ref.)
New approaches to body composition research: a reexamination of two-compartment model assumptions. Heymsfield SB, et al. **Infusionstherapie** 1990 Apr;17 Suppl 3:4–8 (22 ref.)
Clinical body composition using in vivo neutron activation analysis. Hill GL. **Infusionstherapie** 1990 Apr;17 Suppl 3:18–20 (6 ref.)
Some implications of body composition research for modern clinical management. Hill GL. **Infusionstherapie** 1990 Apr; 17 Suppl 3:79–80
How are the main indicators of the nutritional state interrelated? Kuhn C, et al. **Infusionstherapie** 1990 Apr;17 Suppl 3:56
Ultrasonic tissue characterization: its potential for the estimation of body masses. Schmitt RM. **Infusionstherapie** 1990 Apr;17 Suppl 3:52–3
Validation of the measurement of body composition from whole body bioelectric impedance. Shizgal HM. **Infusionstherapie** 1990 Apr;17 Suppl 3:67–74
Nutritional assessment with body composition measurements by multiple isotope dilution. Shizgal HM. **Infusionstherapie** 1990 Apr;17 Suppl 3:9–17 (13 ref.)
Human muscle tissue obtained intraoperatively from surgical patients—a tool for the assessment of biochemical body composition? Viell B, et al. **Infusionstherapie** 1990 Apr;17 Suppl 3:35–8
Neither high- nor low-intensity exercise promotes whole-body conservation of protein during severe dietary restrictions. Ballor DL, et al. **Int J Obes** 1990;14(3):279–87
Body composition and skin temperature variation. Frim J, et al. **J Appl Physiol** 1990 Feb;68(2):540–3
Sensitivity of bioelectrical impedance to detect changes in human body composition [letter; comment] Pennock BE. **J Appl Physiol** 1990 May;68(5):2246–7 Comment on: J Appl Physiol 1989 Oct;67(4):1643–8.
Effect of liver denervation on compensatory changes in food intake, body composition and hepatic enzyme induction after food restriction in rats. Martin RJ, et al. **J Nutr** 1990 Aug;120(8):893–9
Relationship of the anthropometric and physical characteristics of male junior gymnasts to performance. Faria IE, et al. **J Sports Med Phys Fitness** 1989 Dec; 29(4):369–78
The effect of a competitive season on the body composition of university female athletes. Johnson GO, et al. **J Sports Med Phys Fitness** 1989 Dec;29(4):314–20
Maintenance of aerobic capacity and body composition of volunteers residing on a metabolic research unit. Lukaski HC, et al. **J Sports Med Phys Fitness** 1989 Sep;29(3):273–8
The effect of sports training on the age-related changes of body composition and isokinetic peak torque in knee extensors of junior speed skaters. Nemoto I, et al. **J Sports Med Phys Fitness** 1990 Mar;30(1):83–8
Nutritional status and body composition of adolescent female gymnasts. Reggiani E, et al. **J Sports Med Phys Fitness** 1989 Sep;29(3):285–8
Body fat distribution in females: metabolic consequences and implications for weight loss. Campaigne BN. **Med Sci Sports Exerc** 1990 Jun;22(3):291–7 (34 ref.)
Surfeit and deficit of sodium: evidence from studies of body sodium in rats. Simpson FO, et al. **Nephron** 1990;54(1):61–9
Effects of maternal diet, body weight and body composition on infanticide in Syrian hamsters. Schneider JE, et al. **Physiol Behav** 1989 Nov;46(5):815–21
[Sex-specific changes in body composition during weight reduction] Bienek A, et al. **Dtsch Med Wochenschr** 1990 Jun 22;115(25):963–8 (Eng. Abstr.) (Ger)
[Clinical significance of magnesium. 1: Distribution in the organism, evaluation of current supply] Classen HG, et al. **Fortschr Med** 1990 Mar 20;108(8):148–51 (0 ref.) (Eng. Abstr.) (Ger)

BODY CONSTITUTION

Body size and menopausal status in relation to the pattern of spread in recurrent breast cancer. Kamby C, et al. **Acta Oncol** 1989;28(6):795–9
Reliability of the body mass prediction by means of indices. Komenda S. **Acta Univ Palacki Olomuc Fac Med** 1989; 123:329–43
Association of echocardiographic left ventricular mass with body size, blood pressure and physical activity (the Framingham Study). Savage DD, et al. **Am J Cardiol** 1990 Feb 1;65(5):371–6
Glucose tolerance in pregnancy: ethnic variation and influence of body habitus. Green JR, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):86–92
Size, space, and adaptation in some subfossil lemurs from Madagascar. Godfrey LR, et al. **Am J Phys Anthropol** 1990 Jan;81(1):45–66
Relationships of epidermal ridge patterns with body measurements and their possible evolutionary significance. Loesch DZ, et al. **Am J Phys Anthropol** 1990 Jun; 82(2):183–9
Body size, medullary thickness, and urine concentrating ability in mammals. Beuchat CA. **Am J Physiol** 1990 Feb; 258(2 Pt 2):R298–308
A note of caution re: circumferences [letter] Garn SM. **Am J Public Health** 1989 Nov;79(11):1572
Circumferences never went away [letter] Jelliffe DB, et al. **Am J Public Health** 1989 Nov;79(11):1571–2
Reference ranges and the influence of age and sex on hematologic and serum biochemical values in donkeys (Equus asinus). Zinkl JG, et al. **Am J Vet Res** 1990 Mar; 51(3):408–13
Cross-sectional internal diameters of human cervical and femoral blood vessels: relationship to subject's sex, age, body size. Mortensen JD, et al. **Anat Rec** 1990 Jan; 226(1):115–24
Variation in adult body dimensions in relation to economic condition among the Mahishyas of Howrah district, West Bengal, India. Bharati P. **Ann Hum Biol** 1989 Nov–Dec; 16(6):529–41
Anthropometric measurements of Saudi boys aged 6–14 years. al-Hazzaa HM. **Ann Hum Biol** 1990 Jan–Feb; 17(1):33–40
Size and shape components of anthropometric differences among the Yanadis [published erratum appears in Ann Hum Biol 1990 Jan–Feb;17(1):69] Vasulu TS, et al. **Ann Hum Biol** 1989 Sep–Oct;16(5):449–62
Cigarette smoking and increased central adiposity. Barrett-Connor E, et al. **Ann Intern Med** 1989 Nov 15; 111(10):783–7
Abdominal obesity and breast cancer risk [published erratum appears in Ann Intern Med 1990 May 15;112(10):798] [see comments] Schapira DV, et al. **Ann Intern Med** 1990 Feb 1;112(3):182–6 Comment in: Ann Intern Med 1990 Jun 1;112(11):882.
Body fat distribution and risk for breast cancer [letter; comment] Sönnichsen AC, et al. **Ann Intern Med** 1990 Jun 1;112(11):882 Comment on: Ann Intern Med 1990 Feb 1;12(3):182–6.
Variation among lines selected for body size in the fractional rate of degradation of protein and acid protease activity in the muscle of quail (Coturnix coturnix japonica). Maeda Y, et al. **Biochem Genet** 1989 Oct;27(9–10):603–11
Adaptive probit estimation and body size: the evaluation of a new psychophysical technique. Fonagy P, et al. **Br J Psychol** 1990 May;81 (Pt 2):159–71
Physiological profiles of young boys training in ballet. Pekkarinen H, et al. **Br J Sports Med** 1989 Dec;23(4):245–9
Body size and metabolic rate in the laboratory rat. Refinetti R. **Exp Biol** 1989;48(5):291–4
Successive resetting of the set point for target body size. Mosier HD, et al. **Growth Dev Aging** 1989 Spring–Summer; 53(1–2):35–41
Mechanisms of nutritional repletion during total parenteral nutrition. Pullicino E, et al. **Gut** 1989 Nov;30 Spec No:69–70
Aerosol deposition in the nose as a function of body size. Phalen RF, et al. **Health Phys** 1989;57 Suppl 1:299–305
The abdomen: hip ratio normative data and observations on selected patients. Forbes GB. **Int J Obes** 1990;14(2):149–57
The predictive validity of body mass index based on self-reported weight and height. Kuskowska-Wolk A, et al. **Int J Obes** 1989;13(4):441–53
Physique characteristics of Pan American Games lightweight rowers. DeRose EH, et al. **Int J Sports Med** 1989 Aug; 10(4):292–7
Changes in segment inertia proportions between 4 and 20

years. Jensen RK. **J Biomech** 1989;22(6–7):529–36
The appropriate use of regression equations for the estimation of segmental inertia parameters. Yeadon MR, et al. **J Biomech** 1989;22(6–7):683–9
Physical, achievement and personality characteristics of Chinese children. Falbo T, et al. **J Biosoc Sci** 1989 Oct; 21(4):483–95
Androgenicity in relation to body fat distribution and metabolism in 38–year–old women—the European Fat Distribution Study. Seidell JC, et al. **J Clin Epidemiol** 1990; 43(1):21–34
Orthostatic tilt responses of young men and women in relation to physical characteristics. Chatterjee S, et al. **J Hum Ergol (Tokyo)** 1988 Dec;17(2):161–71
Body constitution and muscle strength of becak drivers in Bandung City, Indonesia. Hyodo K. **J Hum Ergol (Tokyo)** 1988 Dec;17(2):193–200
Changes in body mass index in a Finnish population between 1972 and 1982. Jalkanen L, et al. **J Intern Med** 1989 Sep; 226(3):163–70
Mirror feedback and judgments of body size. Gardner RM, et al. **J Psychosom Res** 1989;33(5):603–7
Evaluation methods for intrauterine growth using neonatal fat stores instead of birth weight as outcome measures: fetal and neonatal measurements correlated with neonatal skinfold thicknesses. Sumners JE, et al. **JCU** 1990 Jan; 18(1):9–14
Development of a special alligator forceps for removal of pulmonary heartworms in very small dogs. Ishihara K, et al. **Nippon Juigaku Zasshi** 1990 Feb;52(1):159–61
Impact of asymptomatic congenital cytomegalovirus infection on size at birth and gestational duration [published erratum appears in Pediatr Infect Dis J 1990 May;9(5):308] Berge P, et al. **Pediatr Infect Dis J** 1990 Mar;9(3):170–5
Determinants of fetal growth and body proportionality. Kramer MS, et al. **Pediatrics** 1990 Jul;86(1):18–26
Reliability measures in distorting body–image. Brodie DA, et al. **Percept Mot Skills** 1989 Dec;69(3 Pt 1):723–32
Interaction of allometry and development in the mouse Mus musculus: heart rate and hematology. Hou PC, et al. **Respir Physiol** 1989 Dec;78(3):265–80
Anthropometric characteristics, passive hip flexion, and spinal mobility in relation to back pain in athletes. Swärd L, et al. **Spine** 1990 May;15(5):376–82
[Somatometric characteristics of patients with hypertrophic cardiomyopathies] Smahel Z, et al. **Vnitr Lek** 1990 Jan; 36(1):52–8 (Eng. Abstr.) **(Cze)**
[Physical development of young illegitimate children] Reznikov SG, et al. **Gig Sanit** 1989 Sep;(9):86–7 **(Rus)**
[The size of small mammals and the number of fleas parasitizing them] Burdelov LA, et al. **Med Parazitol (Mosk)** 1989 Jul–Aug;(4):42–5 (Eng. Abstr.) **(Rus)**
[Ecology of the peoples of the Central Asia. the anthropological aspect] Alekseeva TI. **Vestn Akad Med Nauk SSSR** 1989;(8):38–42 (Eng. Abstr.) **(Rus)**
[Various trends in the somatic development of city children and adolescents during the past 20 years (the study based on the examination of schoolchildren in Moscow)] Godina EZ, et al. **Vestn Akad Med Nauk SSSR** 1989;(8):79–84 (Eng. Abstr.) **(Rus)**
[The mean values and correlation between blood pressure, body weight, height, heart rate, the PQ, QT and QTc intervals, the QRS–complex and the echocardiographic dimensions of the left atrium and ventricle in 515 14–year–old students] Catipović–Veselica K, et al. **Lijec Vjesn** 1989 Nov;111(11):377–81 (Eng. Abstr.) **(Scr)**
[Anthropometric variables and their discriminatory potential in group of individuals stratified by sex and age] Arenas O, et al. **Acta Cient Venez** 1988;39(4):375–9 (Eng. Abstr.) **(Spa)**

ETHNOLOGY

Possible urban–rural difference in habitus of school children in Sendai. Nakatsuka H, et al. **Tohoku J Exp Med** 1990 Jan;160(1):11–7

GENETICS

Sibling similarity in annual growth increments in schoolchildren from a rural community in Oaxaca, Mexico. Little BB, et al. **Ann Hum Biol** 1990 Jan–Feb;17(1):41–7
Genetic analysis of anthropometric measures in 11–year–old twins: the Medical College of Virginia Twin Study. Bodurtha JN, et al. **Pediatr Res** 1990 Jul;28(1):1–4
[Late antiquity constitutional historical and social–anthropologic observations of middle and north European populations at the time of population migrations] Wurm H. **Anthropol Anz** 1990 Jun;48(2):165–92 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

A longitudinal study of gross body composition and body conformation and their association with food and activity in a teen–age population. Views of teen–age subjects on body conformation, food and activity. Huenemann RL, et al. **Am J Clin Nutr** 1966 May;18(5):325–38
Relation of body size and composition to clinical biochemical and hematologic indices in US men and women. Micozzi MS, et al. **Am J Clin Nutr** 1989 Dec;50(6):1276–81
Reassessment of body mass indices. Smalley KJ, et al. **Am J Clin Nutr** 1990 Sep;52(3):405–8
Effects of size on vervet (Cercopithecus aethiops) gait parameters: a longitudinal approach. Vilensky JA, et al. **Am J Phys Anthropol** 1990 Mar;81(3):429–39
The growth of Melanesian and Indian children in Fiji. Clegg EJ. **Ann Hum Biol** 1989 Nov–Dec;16(6):507–28
The adaptive significance of Polynesian body form. Houghton P. **Ann Hum Biol** 1990 Jan–Feb;17(1):19–32
The influence of altered head, thorax and pelvis mass on the postnatal development of the air–righting reaction in albino rats. Laouris Y, et al. **Behav Brain Res** 1990 May 7;38(2):185–90
Inhaled particle deposition and body habitus. Graham DR, et al. **Br J Ind Med** 1990 Jan;47(1):38–43
Increased volume and decreased emptying of the gallbladder in large (morbidly obese, tall normal, and muscular normal) people. Vezina WC, et al. **Gastroenterology** 1990 Apr; 98(4):1000–7
Fat distribution in European women: a comparison of anthropometric measurements in relation to cardiovascular risk factors. Seidell JC, et al. **Int J Epidemiol** 1990 Jun; 19(2):303–8
Relationship of the anthropometric and physical characteristics of male junior gymnasts to performance. Faria IE, et al. **J Sports Med Phys Fitness** 1989 Dec; 29(4):369–78
[Effect of the paragenetic factors on selected body measurements of newborn infants in Wroclaw] Laskowska B. **Wiad Lek** 1989 Apr 30;42(8):503–9 (Eng. Abstr.) **(Pol)**
[Changes in body composition and motor skills of young weight lifters during physical training] Farmosi I. **Arkh Anat Gistol Embriol** 1989 Oct;97(10):77–9 (Eng. Abstr.) **(Rus)**
[Body size and the thermoregulating activity of the motor units in mammals] Sorokina LV, et al. **Fiziol Zh SSSR** 1990 Feb;76(2):239–46 (Eng. Abstr.) **(Rus)**
[Characteristics of physical development of vocational technical school students] Bykova ZhE. **Gig Sanit** 1989 Nov;(11):88–9 **(Rus)**
[Medical studies during an 8–month flight on the orbital complex "Saliut–7"—"Soiuz–T"] Gazenko OG, et al. **Kosm Biol Aviakosm Med** 1990 Jan–Feb;24(1):9–14 (Eng. Abstr.) **(Rus)**
[The main indicators of morphofunctional development of schoolchildren from the Carpathian region (Ivano–Frankovsk)] Golotiuk AI, et al. **Pediatriia** 1989; (9):109 **(Rus)**
[Correlations of various functional indicators in infants under 1 year of age with a high risk of developing sudden death syndrome] Ke'lmanson IA. **Pediatriia** 1989;(9):111 **(Rus)**
[Relation between physical development and homeostatic potential of newborn infants] Kobets TV, et al. **Pediatriia** 1990;(3):107–8 **(Rus)**
[New trends in physical development of schoolchildren and students] Sautkin MF. **Pediatriia** 1989;(9):108 **(Rus)**

BODY FLUID COMPARTMENTS see under **BODY FLUIDS**

BODY FLUIDS

see related
DEHYDRATION
RADIOISOTOPE DILUTION TECHNIC

Influence of pretreatment on interstitial and intracellular space of canine left–ventricular myocardium. Schmiedl A, et al. **Acta Anat (Basel)** 1990;138(2):175–81
Electrophysiological recordings of changes in relative cell volume of neurones, glia, and muscle cells. Ballanyi K, et al. **Acta Physiol Scand Suppl** 1989;582:25
Effect of ethylisopropyl amiloride on intracellular pH regulation in cultured rat astrocytes. Boyarsky G, et al. **Acta Physiol Scand Suppl** 1989;582:30
Glial swelling during exposure to putative mediators of ischemic brain damage. Kempski O, et al. **Acta Physiol Scand Suppl** 1989;582:27
Swelling–induced membrane transport changes in astrocytes. Kimelberg HK, et al. **Acta Physiol Scand Suppl** 1989;582:26
Dissolution of crystalline gallium arsenide in aqueous solutions containing complexing agents. Pierson B, et al. **Am Ind Hyg Assoc J** 1989 Sep;50(9):455–9
New silicone tipped cannulas for subretinal fluid drainage. Grizzard WS, et al. **Br J Ophthalmol** 1989 Oct;73(10):838–9
Sonographic detection of fluid in the cul–de–sac in children—a normal finding? Jequier S, et al. **Can Assoc Radiol J** 1989 Oct;40(5):266–8
Characterization of intracellular ice formation in Drosophila melanogaster embryos. Myers SP, et al. **Cryobiology** 1989 Oct;26(5):472–84
Giant–cell tumor of the tibia in a child presenting as an expansile metaphyseal lesion with fluid–fluid levels on MR. Buetow PC, et al. **Magn Reson Imaging** 1990;8(3):341–4 (23 ref.)
Determination of extracellular/intracellular fluid ratios from magnetic resonance images: accuracy, feasibility, and implementation. Martin MA, et al. **Magn Reson Med** 1990 Jul;15(1):58–69
The relationship between 'normal' fluid retention in women and idiopathic oedema. Denning DW, et al. **Postgrad Med J** 1990 May;66(775):363–6
[Tubal fluid] Rohlíček J, et al. **Cesk Gynekol** 1989 Aug; 54(7):513–6 **(Cze)**

ANALYSIS

Fluid availability of sports drinks differing in carbohydrate type and concentration. Davis JM, et al. **Am J Clin Nutr** 1990 Jun;51(6):1054–7
Diagnosis of nitrate toxicosis in cattle, using biological fluids and a rapid ion chromatographic method. Boermans HJ. **Am J Vet Res** 1990 Mar;51(3):491–5
Pulsed amperometric detection of glucose in biological fluids at a surface–modified gold electrode. Bindra DS, et al. **Anal Chem** 1989 Nov 15;61(22):2566–70
Nanogram nitrite and nitrate determination in environmental and biological materials by vanadium (III) reduction with chemiluminescence detection. Braman RS, et al. **Anal Chem** 1989 Dec 15;61(24):2715–8
Present possibilities for the determination of inorganic arsenic and organoarsenical compounds in biological fluids. Violante N, et al. **Ann Ist Super Sanita** 1989;25(3):499–504 (37 ref.)
Concentration of placental protein 19 in body fluid and placental tissues. Takayama M, et al. **Arch Gynecol Obstet** 1990;247(2):83–93
Radioimmunoassay of neuropeptide Y (NPY) in biological fluids. Circulating NPY levels depend on renal function. Stridsberg M, et al. **Clin Chim Acta** 1989 Oct 31; 185(1):61–71
On the use of absorbing discs to sample mucosal surface liquids. Erjefält I, et al. **Clin Exp Allergy** 1990 Mar; 20(2):193–7
Method of measuring liquid junction potentials in small (nanolitre) droplets of biological fluids. Sugo E, et al. **Clin Exp Pharmacol Physiol** 1989 Jul;16(7):555–60
Neoplastic embryoid bodies of embryonal carcinoma C44 as a source of blastocele–like fluid. Parchment RE, et al. **Differentiation** 1990 Mar;43(1):51–8
Bioassay for teicoplanin in peritoneal dialysis fluid. Kenny MT, et al. **Drugs Exp Clin Res** 1989;15(11–12):549–52
Cortisol determination in follicular fluid [letter] Dehennin L. **Fertil Steril** 1990 Aug;54(2):366–7
ABO and Lewis typing of secretion stains on nitrocellulose membranes using a new dot–blot–ELISA technique. Pflug W, et al. **Forensic Sci Int** 1989 Oct–Nov;43(2):171–82
A sensitive enzyme–linked immunosorbent assay used to differentiate type AB specimen from a mixture of type A and type B specimens. Sato M, et al. **Forensic Sci Int** 1990 Jul;46(3):231–42
Estrogen–binding protein in blood and follicular fluid, and its biochemical properties in human females. Saito N, et al. **Gynecol Obstet Invest** 1989;28(2):87–93
Isolation & characterization of tumour angiogenesis factor from solid tumours & body fluids from cancer patients. Deshpande RG, et al. **Indian J Med Res** 1989 Aug;90:241–7
Effect of intravenous epinephrine on serum magnesium and free intracellular red blood cell magnesium concentrations measured by nuclear magnetic resonance. Ryzen E, et al. **J Am Coll Nutr** 1990 Apr;9(2):114–9 (54 ref.)
Sensitive high–performance liquid chromatographic assay for the determination of eugenol in body fluids. Fischer IU, et al. **J Chromatogr** 1990 Feb 23;525(2):369–77
High–performance liquid chromatographic method for the determination of aprotinin in body fluids. Raspi G, et al. **J Chromatogr** 1990 Feb 23;525(2):426–32
Assay method for the simultaneous determination of proguanil, chloroquine and their major metabolites in biological fluids. Taylor RB, et al. **J Chromatogr** 1990 May 18;527(2):490–7
Correlation between follicular fluid content and the results of in vitro fertilization and embryo transfer. II. Inhibin and aromatase inhibitor activity. Franchimont P, et al. **J Clin Endocrinol Metab** 1990 Sep;71(3):748–54
ELISA for quantitation of the extracellular domain of p185HER2 in biological fluids. Sias PE, et al. **J Immunol Methods** 1990 Aug 28;132(1):73–80
Aluminum speciation studies in biological fluids. Part 2. Quantitative investigation of aluminum–citrate complexes and appraisal of their potential significance in vivo. Venturini M, et al. **J Inorg Biochem** 1989 Sep;37(1):69–90
Radioimmunoassay of the anti–cancer agent 4–hydroxyandrostenedione in body fluids. Khubieh J, et al. **J Steroid Biochem** 1990 Mar;35(3–4):377–82
The line shapes of the water proton resonances of red blood cells containing carbonyl hemoglobin, deoxyhemoglobin, and methemoglobin: implications for the interpretation of proton MRI at fields of 1.5 T and below. Matwiyoff NA, et al. **Magn Reson Imaging** 1990;8(3):295–301
Assessment of intracellular magnesium depletion in rat striated muscle by in vivo 31P NMR. Le Rumeur E, et al. **Magn Reson Med** 1990 Mar;13(3):504–6
Admissibility of biochemical analyses results from sexual assault evidence in the United States courts. Grunbaum BW. **Med Law** 1989;8(5):485–92 (25 ref.)
Capillary tube isotachophoresis of proteins in early postmortem serum, cerebrospinal fluid and pericardial fluid. Takahama K, et al. **Nippon Hoigaku Zasshi** 1989 Jun; 43(3):246–50
Effectiveness of pH measurements in predicting feeding tube placement. Metheny N, et al. **Nurs Res** 1989 Sep–Oct; 38(5):280–5
Noninvasive sampling of biological fluids by iontophoresis. Glikfeld P, et al. **Pharm Res** 1989 Nov;6(11):988–90
Cocaine in body fluids: analysis and interpretation of the drug

abuse specimen. Martin HF. **R I Med J** 1990 Jun; 73(6):243–8

Pleural effusion: comparison of clinical judgment and Light's criteria in determining the cause. Scheurich JW, et al. **South Med J** 1989 Dec;82(12):1487–91

[Enoxacin concentration in seminal fluid, in prostate secretions and in prostatic adenoma tissue following oral administration or intravenous infusion] Naber KG, et al. **Infection** 1989;17 Suppl 1:S30–6 (Eng. Abstr.) **(Ger)**

[Analysis of the body fluids using SDS–gradient gel electrophoresis] Menschikowski M, et al. **Z Med Lab Diagn** 1989;30(8):450–5 (Eng. Abstr.) **(Ger)**

[Colorimetric determination of isoniazid in aqueous solutions and biological fluids] Csiba A. **Acta Pharm Hung** 1989 Sep; 59(5):205–12 (Eng. Abstr.) **(Hun)**

[Assay of epidermal growth factor in body fluids and the clinical significance] Hirata Y. **Nippon Rinsho** 1990 Feb;48 Suppl:145–50 **(Jpn)**

[A stat–method of determining antibiotic concentration in biological fluids] Pasternak NA, et al. **Lab Delo** 1989; (9):65–6 (Eng. Abstr.) **(Rus)**

[Biochemical and functional changes in experimental acute pancreatitis in the rat] Díez Miralles M, et al. **Rev Esp Enferm Apar Dig** 1989 Oct;76(4):331–8 (Eng. Abstr.) **(Spa)**

CYTOLOGY

Prospective study of concurrent ploidy analysis and routine cytopathology in body cavity fluids. Sinton EB, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):188–94

Factors associated with obtaining nipple aspirate fluid: analysis of 1428 women and literature review. Wrensch MR, et al. **Breast Cancer Res Treat** 1990 Jan;15(1):39–51 (29 ref.)

Liesegang rings in renal cyst fluid. Katz LB, et al. **Diagn Cytopathol** 1990;6(3):197–200

Atypical lupus erythematosus cells in pleural fluid [letter] Feng CS. **Pathology** 1989 Oct;21(4):317–8

Prenatal diagnosis of Turner syndrome using cells cultured from cystic hygromas in two pregnancies with normal maternal serum alpha–fetoprotein. Golden WL, et al. **Prenat Diagn** 1989 Oct;9(10):683–9

DRUG EFFECTS

The extrarenal effects of atrial natriuretic peptide on body fluid distribution. Hirata Y, et al. **Am J Hypertens** 1990 Feb;3(2):140–7

Midazolam potently affects free calcium concentration in astrocytes. Code WE, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S27

Effect of DDE on ionic and fluid movement in rat colon in vitro. Iturri SJ, et al. **Comp Biochem Physiol [C]** 1989; 94(1):173–6

Beneficial effects of erythropoietin on haematological parameters, aerobic capacity, and body fluid composition in patients on haemodialysis. Rosenlöf K, et al. **J Intern Med** 1989 Nov;226(5):311–7

ENZYMOLOGY

Fractionation of elastase–type enzyme activity in biological fluids using a centrifugal analyser. Franck C, et al. **Biol Chem Hoppe Seyler** 1990 Jun;371(6):465–9

Measurement of lysozyme in human body fluids: comparison of various enzyme immunoassay techniques and their diagnostic application. Porstmann B, et al. **Clin Biochem** 1989 Oct;22(5):349–55

Structure of the genes of two homologous intracellularly heterotopic isoenzymes. Cytosolic and mitochondrial aspartate aminotransferase of chicken. Juretić N, et al. **Eur J Biochem** 1990 Aug 28;192(1):119–26

IMMUNOLOGY

Nasal secretion specific IgE in rhinitis patients. Patriarca G, et al. **Allergol Immunopathol (Madr)** 1990 Jan–Feb;18(1):1–4

CA 125 in peritoneal fluid [letter; comment] Williams RS. **Am J Obstet Gynecol** 1990 Jan;162(1):296 Comment on: Am J Obstet Gynecol 1988 Dec;159(6):1526–31.

Biological functions of mouse seminal vesicle fluid. II. Role of water–soluble fraction of seminal vesicle fluid as a nonspecific immunomodulator. Emoto M, et al. **Arch Androl** 1990;25(1):75–84

Immunoglobulins in paired specimens of vitreous and subretinal fluids from patients with rhegmatogenous retinal detachment. Rose GE, et al. **Br J Ophthalmol** 1990 Mar; 74(3):160–2

CA 125 in peritoneal fluid and serum from patients with benign gynecologic conditions and ovarian cancer. Hunter VJ, et al. **Gynecol Oncol** 1990 Feb;36(2):161–5

Secretory immune responses in mouse vaginal fluid after pelvic, parenteral or vaginal immunization. Thapar MA, et al. **Immunology** 1990 May;70(1):121–5

Accumulation of anaphylatoxins and terminal complement complexes in inflammatory fluids. Bengtsson A, et al. **J Intern Med** 1990 Aug;228(2):173–6

Evaluation of dot–immunobinding assay for carcinoembryonic antigen determination in nipple discharge as an adjunct in the diagnosis of early breast cancer. Research Group for Carcinoembryonic Antigen in Nipple Discharge. Mori T, et al. **Jpn J Clin Oncol** 1989 Dec;19(4):373–9

Specific capture of ABH blood group antigens of the red cell or body fluids by double antibody sandwich–ELISA. Sagisaka K, et al. **Tohoku J Exp Med** 1989 Jul;158(3):211–9

[The diagnostic value of determining Yersinia antigens in biological substrates of a patient] Iushchuk ND, et al. **Klin Med (Mosk)** 1989 Jul;67(7):77–81 (Eng. Abstr.) **(Rus)**

[The possibilities of using variants of immunoenzyme analysis for detecting L–form Salmonella typhi bacteria in biological fluids] Gorelov AL, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Aug;(8):60–4 (Eng. Abstr.) **(Rus)**

[Use of immunoenzyme analysis in the rapid diagnosis and study of the characteristics of circulating O–antigen in biological fluids of patients with acute dysentery Sonne] Pak SG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jun;(6):77–81 (Eng. Abstr.) **(Rus)**

METABOLISM

Kassinin–like neuropeptides in the control of body fluid homeostasis. De Caro G, et al. **Acta Physiol Pol** 1989 May–Jun;40(3):319–23

Villus and crypt electrolyte and fluid transport during intestinal secretion. Sjöqvist A, et al. **Acta Physiol Scand** 1990 May;139(1):203–10

Ovine fetal lung fluid response to atrial natriuretic factor. Castro R, et al. **Am J Obstet Gynecol** 1989 Nov; 161(5):1337–43

Urea gradient–associated fluid absorption with sigma urea = 1 in rat terminal collecting duct. Chou CL, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1173–80

Membrane dynamics in relation to fluid absorption in reptilian proximal renal tubules. Dantzler WH. **Am J Physiol** 1989 Nov;257(5 Pt 2):R982–8 (33 ref.)

Effects of hyperosmolality and diuretics on heat–induced limb vasodilation in baboons. Proppe DW. **Am J Physiol** 1990 Feb;258(2 Pt 2):R309–17

Differential Na fluxes with artificial and native fluids in clip models of volume expansion. Reddy S, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):F480–4

Impaired cell volume regulation in Na(+)–H+ exchange–deficient mutants. Rotin D, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):C1158–65

A distributed model of fluid and mass transfer in peritoneal dialysis. Seames EL, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):R958–72

Endothelin–1 activates phospholipase C and mobilizes Ca2+ from extra– and intracellular pools in osteoblastic cells. Takuwa Y, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):E797–803

Regulation of lung liquid secretion by arginine vasopressin in fetal sheep. Wallace MJ, et al. **Am J Physiol** 1990 Jan; 258(1 Pt 2):R104–11

Studies of bronchoalveolar lavage cells and fluids in pulmonary sarcoidosis. I. Enhanced capacity of bronchoalveolar lavage cells from patients with pulmonary sarcoidosis to induce angiogenesis in vivo. Meyer KC, et al. **Am Rev Respir Dis** 1989 Nov;140(5):1446–9

Complement in pericardial fluid of lupus erythematosus. Studies in two patients. Hunder GG, et al. **Ann Intern Med** 1974 Apr;80(4):453–8

Comparison of cefprozil and cefaclor pharmacokinetics and tissue penetration. Barbhaiya RH, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1204–9

Pharmacokinetics of cefpodoxime in plasma and skin blister fluid following oral dosing of cefpodoxime proxetil. Borin MT, et al. **Antimicrob Agents Chemother** 1990 Jun; 34(6):1094–9

Comparative uptake, vascular transport, and cellular internalization of aflatoxin–B1 and benzo(a)pyrene. Busbee DL, et al. **Arch Toxicol** 1990;64(4):285–90

Theoretical nuclear magnetic resonance–lineshape study of a two–site chemical exchange model of sodium ions (I = 3/2) in an intracellular environment. Berggren E, et al. **Biophys J** 1990 Jul;58(1):167–75

Accumulation, intracellular metabolism, and antitumor activity of high– and low–dose methotrexate in human osteosarcoma xenografts. Meyer WH, et al. **Cancer Commun** 1990;2(6):219–29

Changes in hyaluronan concentration in tissues and body fluids in disease states. Engström–Laurent A. **Ciba Found Symp** 1989;143:233–40; discussion 240–7, 281–5 (30 ref.)

Intracellular localization of photosensitizers. Moan J, et al. **Ciba Found Symp** 1989;146:95–107; discussion 107–11 (22 ref.)

Effects of a thromboxane A2 analogue and prostacyclin on lung fluid balance in newborn lambs. Yoshimura K, et al. **Circ Res** 1989 Nov;65(5):1409–16

Diurnal variation of erythrocyte sodium–lithium countertransport rate and intracellular cation concentrations. Siebers RW, et al. **Clin Chim Acta** 1990 May;188(3):227–32

Sodium–dependent, ethylisopropylamiloride–sensitive mechanisms regulate intracellular pH in human vascular smooth muscle. Bobik A, et al. **Clin Exp Pharmacol Physiol** 1990 Apr;17(4):297–301

Simulation and evaluation of nicotine intake during passive smoking: cotinine measurements in body fluids of nonsmokers given intravenous infusions of nicotine. Curvall M, et al. **Clin Pharmacol Ther** 1990 Jan;47(1):42–9

Is central chemoreceptor sensitive to intracellular rather than extracellular pH? Lassen NA. **Clin Physiol** 1990 Jul; 10(4):311–9 (31 ref.)

Simultaneous in vivo measurements of intracellular and extracellular myocardial pH during repeated episodes of ischemia. Khabbaz KR, et al. **Curr Surg** 1989 Sep–Oct; 46(5):399–400

Fluid detection in the uterus during and after irradiation for carcinoma of the cervix—clinical implications. Aartsen EJ. **Eur J Surg Oncol** 1990 Feb;16(1):42–6

The circulation of fluid at the limbus (flow and diffusion at the limbus). McCulley JP. **Eye** 1989;3 (Pt 2):114–20 (33 ref.)

Is there influence of smoking on the mutagenicity of follicular fluid? Bos RP, et al. **Fertil Steril** 1989 Nov;52(5):774–7

Immunoreactive epidermal growth factor concentrations in follicular fluid obtained from in vitro fertilization. Hofmann GE, et al. **Fertil Steril** 1990 Aug;54(2):303–7

Identification of low and high molecular weight follicle–stimulating hormone receptor–binding inhibitors in human follicular fluid. Lee DW, et al. **Fertil Steril** 1990 May;53(5):830–5

Reduced intracellular pH in lymphocytes from the spontaneously hypertensive rat [see comments] Batlle DC, et al. **Hypertension** 1990 Jan;15(1):97–103 Comment in: Hypertension 1990 Jan;15(1):104–6.

Acidification of epididymal fluid in the boar. Rodriguez–Martinez H, et al. **Int J Androl** 1990 Jun; 13(3):238–43

Studies on cholesterol accumulation in radicular cyst fluid—origin of heat–stable cholesterol–binding protein. Yashima M, et al. **Int J Biochem** 1990;22(2):165–9

Update: mechanisms by which magnesium modulates intracellular potassium. Whang R, et al. **J Am Coll Nutr** 1990 Feb;9(1):84–5

Pharmacokinetics and tissue penetration of cefprozil. Nye K, et al. **J Antimicrob Chemother** 1990 May;25(5):831–5

Measurement of intracellular pH in hamster diaphragm by absorption spectrophotometry. Zhang RG, et al. **J Appl Physiol** 1990 Mar;68(3):1101–6

Intravascular and interstitial fluid dynamics in rats treated with minoxidil. Sanz E, et al. **J Cardiovasc Pharmacol** 1990 Mar;15(3):485–92

Intracellular pH during daily torpor in Peromyscus maniculatus. Nestler JR. **J Comp Physiol [B]** 1990; 159(6):661–6

Aluminum speciation studies in biological fluids. Part 3. Quantitative investigation of aluminum–phosphate complexes and assessment of their potential significance in vivo. Daydé S, et al. **J Inorg Biochem** 1990 Mar; 38(3):241–59

Surfactant protein A concentrations in tracheal aspirate fluid from infants requiring extracorporeal membrane oxygenation. Lotze A, et al. **J Pediatr** 1990 Mar; 116(3):435–40

Fluid and ion redistribution in skeletal muscle in an animal sepsis model. Hannon RJ, et al. **J Pediatr Surg** 1990 Jun; 25(6):599–603

Opioid modulation of basal intestinal fluid transport in the mouse: actions at central, but not intestinal, sites. Jiang Q, et al. **J Pharmacol Exp Ther** 1990 May;253(2):784–90

The role of thyroid hormones in maturation of the adrenaline–sensitive lung liquid reabsorptive mechanism in fetal sheep. Barker PM, et al. **J Physiol (Lond)** 1990 May; 424:473–85

Stimulation of protein secretion in the initial segment of the rat epididymis by fluid from the ram rete testis. Sujarit S, et al. **J Reprod Fertil** 1990 Jan;88(1):315–21

Pressure induced deformation of the interstitial route across synovium and its relation to hydraulic conductance. McDonald JN, et al. **J Rheumatol** 1990 Mar;17(3):341–8

Cartilage derived proteoglycans in body fluids of children. Inverse correlation with age. Saxne T, et al. **J Rheumatol** 1989 Oct;16(10):1341–4

Pulmonary transvascular fluid filtration response to hypoproteinemia and Hespan infusion. Harms BA, et al. **J Surg Res** 1990 May;48(5):408–14

Measurement of transcellular fluid shift during haemodialysis. Part 2. In vitro and clinical evaluation. de Vries PM, et al. **Med Biol Eng Comput** 1989 Mar;27(2):152–8

Measurement of transcellular fluid shift during haemodialysis. Part 1. Method. Meijer JH, et al. **Med Biol Eng Comput** 1989 Mar;27(2):147–51

Properties of urokinase type–plasminogen activator found in chest fluid. Hayashi S, et al. **Nippon Ketsueki Gakkai Zasshi** 1990 Feb;53(1):105–15

NMR studies of body fluids. Bell JD, et al. **NMR Biomed** 1989 Dec;2(5–6):246–56 (43 ref.)

An analysis of subretinal fluid in bullous retinal detachment. Yoshino Y, et al. **Ophthalmologica** 1990;200(3):123–7

Delayed reabsorption of subretinal fluid after pneumatic retinopexy [letter] Ambler JS, et al. **Ophthalmology** 1990 Jun;97(6):695–6

Delayed absorption of subretinal fluid [letter] Böker T, et al. **Ophthalmology** 1990 Aug;97(8):961–2

Estimate of volume/flow ratio of gastrointestinal (GI) fluids in humans using pharmacokinetic data. Macheras P, et al. **Pharm Res** 1990 May;7(5):518–22

The intracellular compartment in transcellular Ca2+ transport: effects of vitamin D deficiency. Kaune R, et al. **Prog Clin Biol Res** 1990;332:143–62

Volume of fluid and concentration of cations and energy substrates in the uteri of mice during early

pseudopregnancy. Wales RG, et al. **Reprod Fertil Dev** 1989; 1(2):171–8

Relationship between plasma glucose, brain lactate, and intracellular pH during cerebral ischemia in gerbils. Combs DJ, et al. **Stroke** 1990 Jun;21(6):936–42

[Ethanol distribution in body fluids in the human from a forensic medicine viewpoint. Prepared as an initial study] Trela FM. **Blutalkohol** 1989 Sep;26(5):305–18 (Eng. Abstr.) **(Ger)**

[Biochemical basis of pharmaceutical chemistry. 7. Drugs for maintenance of calcium-, fluid volume- and blood sugar homeostasis] Nuhn P. **Pharmazie** 1990 Jun;45(6):448–58 (50 ref.) **(Ger)**

[Intracellular potassium in normal and pathological pregnancy. I. Regulation of transport and concentration] Tranquilli AL, et al. **Ann Ostet Ginecol Med Perinat** 1989 Sep–Oct;110(5):226–8 (14 ref.) (Eng. Abstr.) **(Ita)**

[Development of water space volumes in calves during the first month of life. II. Changes in the extracellular and intracellular volumes] Janus K. **Pol Arch Weter** 1988; 28(3–4):33–42 (Eng. Abstr.) **(Pol)**

[Study of erythrocyte dehydration using spin labels] Moiseev VA, et al. **Biofizika** 1989 Nov–Dec;34(6):993–6 (Eng. Abstr.) **(Rus)**

[Evaluation of liver monooxygenase function by the kinetics of antipyrine and its metabolites in liquid media of the body] Zavodnik LB, et al. **Farmakol Toksikol** 1989 May–Jun; 52(3):95–101 (81 ref.) (Eng. Abstr.) **(Rus)**

[Effect of reduced extracellular level of sodium ions on the intracellular level of calcium ions in the cytoplasm of cultured rat cardiomyocytes] Verkhratskiĭ AN, et al. **Fiziol Zh** 1989 Nov–Dec;35(6):45–9 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Glycogen medium, antitrichomonal drug activity in vaginal liquids. Simonetti G, et al. **Drugs Exp Clin Res** 1989; 15(11–12):545–7

AIDS. Implementation of universal blood and body fluid precautions. Hopkins CC. **Infect Dis Clin North Am** 1989 Dec;3(4):747–62 (22 ref.)

Evaluation of isolator system and large-volume centrifugation method for culturing body fluids. Elston HR, et al. **J Clin Microbiol** 1990 Jan;28(1):124–5

Inactivation of human immunodeficiency virus (HIV) by ionizing radiation in body fluids and serological evidence. Bigbee PD, et al. **J Forensic Sci** 1989 Nov;34(6):1303–10

False-positive gram-stained smears of sterile body fluids due to contamination of laboratory deionized water. Medcraft JW, et al. **J Hosp Infect** 1990 Jul;16(1):75–80

Pig erythrocyte ghost cells used for concentration of enteric viruses from experimentally contaminated clinical specimens. Armon R, et al. **J Med Virol** 1989 Dec; 29(4):256–60

PHYSIOLOGY

Influence of mild sodium depletion upon peripheral and centrally mediated effects of intravenous angiotensin II in the goat. Junkergård J. **Acta Physiol Scand** 1990 Jan; 138(1):67–73

Astroglial H+ and Ca2+ changes—signals for cell activation? Kraig RP. **Acta Physiol Scand Suppl** 1989;582:32

Intracellular hydrogen ion regulation in the in vitro hippocampal slice preparation. LaManna JC. **Acta Physiol Scand Suppl** 1989;582:37

Volume and ion regulation in both intracellular and extracellular compartments determined by diffusion, gravimetric and ion analysis. Nicholson C, et al. **Acta Physiol Scand Suppl** 1989;582:24

Transcapillary fluid dynamics during ovarian stimulation for in vitro fertilization. Tollan A, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):554–8

Intracellular pH measurement using single excitation–dual emission fluorescence ratios. Bassnett S, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):C171–8

Intracellular pH and membrane potassium conductance in rabbit distal colon. Duffey ME, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C336–43

Distal perfusion studies: transport stimulation by native tubule fluid. Malnic G, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):F1523–7

Effects of amiloride on alveolar epithelial PD and fluid composition in rabbits. Nielson DW, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):L215–9

Native tubular fluid attenuates ANF-induced inhibition of tubuloglomerular feedback. Pollock DM, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):F189–98

Proximal tubule volume regulation in hyperosmotic media: intracellular K+, Na+, and Cl-. Rome L, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):C1093–100

Studies of bronchoalveolar lavage cells and fluids in pulmonary sarcoidosis. II. Enhanced capacity of bronchoalveolar lavage fluids from patients with pulmonary sarcoidosis to induce cell movement in vitro. Weber J, et al. **Am Rev Respir Dis** 1989 Nov;140(5):1450–4

Body fluid volume regulation in health and disease: a unifying hypothesis. Schrier RW. **Ann Intern Med** 1990 Jul 15; 113(2):155–9 (36 ref.)

Biological functions of mouse seminal vesicle fluid. I. Suppression of blastogenic responses of lymphocytes. Emoto M, et al. **Arch Androl** 1990;24(1):35–40

Transcellular urea gradients cause minimal depletion of extracellular volume during hemodialysis. Pastan S, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):247–50

Dynamic movement of air tract fluid in lubrication of the larynx during phonation: a basic study using excised canine larynges and experimental air tract fluid by means of X-ray stroboscope system. Kawaida M, et al. **Auris Nasus Larynx** 1990;16(4):237–43

Effect of a central redistribution of fluid volume on response to lower-body negative pressure. Tomaselli CM, et al. **Aviat Space Environ Med** 1990 Jan;61(1):38–42

Volume homeostasis and osmoregulation in human pregnancy. Davison JM, et al. **Baillieres Clin Endocrinol Metab** 1989 Aug;3(2):451–72 (92 ref.)

The renin–angiotensin–aldosterone system in volume control. Mitchell KD, et al. **Baillieres Clin Endocrinol Metab** 1989 Aug;3(2):393–430 (255 ref.)

Direct measurement of the internal viscosity of sickle erythrocytes as a function of cell density. Morse PD 2d, et al. **Biochim Biophys Acta** 1990 Jun 12;1053(1):49–55

Development of porcine embryos from one- and two-cell stages to blastocysts in culture medium supplemented with porcine oviductal fluid. Archibong AE, et al. **Biol Reprod** 1989 Dec;41(6):1076–83

Parotid secretion patterns during meals and their relationships to the tonicity of body fluids and to gastrin and pancreatic polypeptide in sheep. Carter RR, et al. **Br J Nutr** 1990 Mar;63(2):319–27

Fluid production by in vitro lungs from fetal guinea pigs. Perks AM, et al. **Can J Physiol Pharmacol** 1990 Apr; 68(4):505–13

Body fluid variations and endogenous digitalis-like compounds during chronic NaCl loading in Wistar rats. Wauquier I, et al. **Clin Exp Hypertens [A]** 1989; 11(7):1217–34

The quantification of steroidogenesis-stimulating activity in testicular interstitial fluid by an in vitro bioassay employing adult rat Leydig cells. Hedger MP, et al. **Endocrinology** 1990 Oct;127(4):1967–77

Soluble factor(s) in rat wound fluid inhibit fibroblast populated lattice contraction. Rittenberg T, et al. **Exp Mol Pathol** 1990 Feb;52(1):132–40

Atrial natriuretic factor plays a significant role in body fluid homeostasis. Blaine EH. **Hypertension** 1990 Jan;15(1):2–8

A mathematical model of flow through a collapsible tube—I. Model and steady flow results. Morgan P, et al. **J Biomech** 1989;22(11–12):1263–70

Description of dynamic lung fluid transport phenomena by linear non-equilibrium thermodynamic equations. Rosenthal VV, et al. **J Biomed Eng** 1990 Jan;12(1):46–50

Osmotic and motional properties of intracellular water as influenced by osmotic swelling and shrinkage of Xenopus oocytes. Cameron IL, et al. **J Cell Physiol** 1990 Mar; 142(3):592–602

Effects of reduced cell volume and water content on glycolysis in L-929 cells. Clegg JS, et al. **J Cell Physiol** 1990 Feb;142(2):386–91

Kappa Delta Award paper. Tissue fluid pressures: from basic research tools to clinical applications. Hargens AR, et al. **J Orthop Res** 1989;7(6):902–9 (47 ref.)

Thermoregulation and body fluids: role of blood volume and central venous pressure. Morimoto T. **Jpn J Physiol** 1990; 40(2):165–79 (64 ref.)

Effects of osmotic manipulation of intracellular hydration of HeLa S-3 cells on their proton NMR relaxation times. Wheatley DN, et al. **Magn Reson Imaging** 1990;8(3):285–93

Experimental control of intracellular environment. Baker PF, et al. **Methods Enzymol** 1989;171:817–28

Bovine oviductal fluid components and their potential role in sperm cholesterol efflux. Ehrenwald E, et al. **Mol Reprod Dev** 1990 Feb;25(2):195–204

The effect of intraocular gas and fluid volumes on intraocular pressure. Simone JN, et al. **Ophthalmology** 1990 Feb; 97(2):238–43

Alveolar liquid pressures in nonedematous and kerosene-washed rabbit lung by micropuncture. Ganesan S, et al. **Respir Physiol** 1989 Dec;78(3):281–95

Principles of design of fluid transport systems in zoology. LaBarbera M. **Science** 1990 Aug 31;249(4972):992–1000

Influence of rete testis fluid deprivation on the kinetic parameters of goat epididymal 5 alpha-reductase. Kelce WR, et al. **Steroids** 1990 Jan;55(1):27–31

Fluid and cation changes during head-out immersions in 25 degrees and 35 degrees C water [see comments] Deuster PA, et al. **Undersea Biomed Res** 1989 Nov;16(6):427–37 Comment in: Undersea Biomed Res 1990 May;17(3):255–6.

[Role of the atria in controlling body fluids] Atta AG, et al. **Rev Paul Med** 1989 Jan–Feb;107(1):37–40 (37 ref.) (Eng. Abstr.) **(Por)**

[Blood circulation disorders in the post-resuscitation period of myocardial infarction and the role of body fluid measurements in their development] Lisachenko GV, et al. **Biull Eksp Biol Med** 1990 Jan;109(1):16–8 (Eng. Abstr.) **(Rus)**

[Body fluids during 120-day anti-orthostatic hypokinesia] Lobachik VI, et al. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):57–61 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[Formation of liquid crystal structures in the tissue fluid in wound healing during periodic irradiation with helium-neon laser] Mints RI, et al. **Biofizika** 1989 Nov–Dec;34(6):1060–2 (Eng. Abstr.) **(Rus)**

[The transformation of liquid crystal complexes in biological body fluids during local laser stimulation of the healing process in an experimental suppurative wound] Mints RI, et al. **Patol Fiziol Eksp Ter** 1989 Nov–Dec;(6):35–7 (Eng. Abstr.) **(Rus)**

SECRETION

Fluid secretion and microvillar ultrastructure in mosquito malpighian tubules. Bradley TJ, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1096–102

Renal epithelial fluid secretion and cyst growth: the role of cyclic AMP. Mangoo-Karim R, et al. **FASEB J** 1989 Dec; 3(14):2629–32

Control of pH of airway surface liquid of the ferret trachea in vitro. Kyle H, et al. **J Appl Physiol** 1990 Jan;68(1):135–40

BODY HEIGHT

Short stature in children with atopic eczema. David TJ. **Acta Derm Venereol Suppl (Stockh)** 1989;144:41–4 (34 ref.)

A highly sensitive sandwich enzyme immunoassay of urinary growth hormone in children with short stature, Turner's syndrome, and simple obesity. Tomita H, et al. **Acta Endocrinol (Copenh)** 1989 Oct;121(4):513–9

Maternal height, birthweight, obstetric conjugate and their influence on the management of parturients with a previous cesarean scar. Mahmood TA. **Acta Obstet Gynecol Scand** 1989;68(7):595–8

Predictive value of short-term growth using knemometry in a large population of healthy children. Dean HJ, et al. **Acta Paediatr Scand** 1990 Jan;79(1):57–63

Standards for growth and final height in Turner's syndrome. Naeraa RW, et al. **Acta Paediatr Scand** 1990 Feb; 79(2):182–90

Parental heights of children with idiopathic growth hormone deficiency: analysis from the Kabi International Growth Study. **Acta Paediatr Scand Suppl** 1989;356:178–80

Clinical usefulness of urinary growth hormone measurement in short children. Tanaka T, et al. **Acta Paediatr Scand Suppl** 1990;366:155–8

Ventilatory pulmonary function study in healthy young Nigerian adults. Anyanwu CH, et al. **Afr J Med Med Sci** 1989 Dec;18(4):257–62

Evaluation of accuracy and reliability of calipers for measuring recumbent knee height in elderly people. Cockram DB, et al. **Am J Clin Nutr** 1990 Aug; 52(2):397–400

Ratio of actual to predicted weight as an alternative to a power-type weight–height index (Benn index). Flegal KM. **Am J Clin Nutr** 1990 Apr;51(4):540–7

Age-specific responsiveness of weight and length to nutritional supplementation. Lutter CK, et al. **Am J Clin Nutr** 1990 Mar;51(3):359–64

Adult height achieved in children after kidney transplantation. Aschendorff C, et al. **Am J Dis Child** 1990 Oct;144(10):1138–41

Growth retardation. Impaired height velocity [editorial] Penny R. **Am J Dis Child** 1989 Nov;143(11):1269–70

Comparative heights of mothers and fathers whose children are short. Rohn RD. **Am J Dis Child** 1990 Sep;144(9):995–7

Anthropometric parameters of schoolchildren with different life-styles. Sabaté J, et al. **Am J Dis Child** 1990 Oct; 144(10):1159–63

Growth hormone treatment in children with sporadic primary microcephaly. Spadoni GL, et al. **Am J Dis Child** 1989 Nov;143(11):1282–3

Body mass index versus height and weight in relation to blood pressure. Findings for the 10,079 persons in the INTERSALT Study. Dyer AR, et al. **Am J Epidemiol** 1990 Apr;131(4):589–96

Dietary intake of methylmercury as a correlate of gestational length and birth weight among newborns in Greenland. Foldspang A, et al. **Am J Epidemiol** 1990 Aug;132(2):310–7

The importance of age in evaluating anthropometric indices for predicting mortality. Katz J, et al. **Am J Epidemiol** 1989 Dec;130(6):1219–26

Stature and the risk of myocardial infarction in women. Palmer JR, et al. **Am J Epidemiol** 1990 Jul;132(1):27–32

Body size and breast cancer risk assessed in women participating in the Breast Cancer Detection Demonstration Project. Swanson CA, et al. **Am J Epidemiol** 1989 Dec; 130(6):1133–41

Single dose metrifonate or praziquantel treatment in Kenyan children. II. Effects on growth in relation to Schistosoma haematobium and hookworm egg counts. Stephenson LS, et al. **Am J Trop Med Hyg** 1989 Oct;41(4):445–53

Influence of age and stature on exercise capacity during incremental cycle ergometry in men and women. Jones NL, et al. **Am Rev Respir Dis** 1989 Nov;140(5):1373–80

Height and mortality in the counties of England and Wales. Barker DJ, et al. **Ann Hum Biol** 1990 Jan–Feb;17(1):1–6

The secular trend in height of primary school children in England and Scotland 1972–79 and 1979–86. Chinn S, et al. **Ann Hum Biol** 1989 Sep–Oct;16(5):387–95

Using the LMS method to measure skewness in the NCHS and Dutch National height standards. Cole TJ. **Ann Hum Biol** 1989 Sep–Oct;16(5):407–19

Growth of remote Australian aborigines from birth to two years [published erratum appears in Ann Hum Biol 1990 Jan–Feb;17(1):69] Gracey M, et al. **Ann Hum Biol** 1989 Sep–Oct;16(5):421–8

Heights and weights of Swedish school children born in 1955 and 1967. Lindgren GW, et al. **Ann Hum Biol** 1989 Sep–Oct;16(5):397–406

Single occasion means of height and weight of Sri Lankan Tamil children from Jaffna. Pathmanathan G, et al. **Ann Hum Biol** 1990 Mar–Apr;17(2):107–13

Lack of linkage between height and weight and age at menarche during the secular shift in growth of Japanese children. Tsuzaki S, et al. **Ann Hum Biol** 1989 Sep–Oct; 16(5):429–36

Effects of environmental changes on the phenotypic expression of human polygenic traits. Ulizzi L, et al. **Ann Hum Genet** 1988 Oct;52 (Pt 4):341–9

Evaluation of the nutritional status of 1st–year school children in Campinas, Brazil. Barros AA, et al. **Ann Trop Paediatr** 1990 Mar;10(1):75–84

Linear growth in the early neonatal period. Bishop NJ, et al. **Arch Dis Child** 1990 Jul;65(7 Spec No):707–8

Need for new reference curves for height. Chinn S, et al. **Arch Dis Child** 1989 Nov;64(11):1545–53

Growth velocity and stunting in rural Nepal. Costello AM. **Arch Dis Child** 1989 Oct;64(10):1478–82

Sleep habits and height at ages 5 to 11. Gulliford MC, et al. **Arch Dis Child** 1990 Jan;65(1):119–22

Parent–specific evaluation of growth [letter] Himes JH, et al. **Arch Dis Child** 1990 Jun;65(6):647

Bone mineral content and body size 65 to 100 weeks' postconception in preterm and full term infants. Horsman A, et al. **Arch Dis Child** 1989 Nov;64(11):1579–86

Growth after gut resection for Crohn's disease. McLain BI, et al. **Arch Dis Child** 1990 Jul;65(7):760–2

Growth in haemophilic boys after HIV infection. Pasi KJ, et al. **Arch Dis Child** 1990 Jan;65(1):115–8

Growth evaluation: parent and child specific height standards. Sorva R, et al. **Arch Dis Child** 1989 Oct; 64(10):1483–7

The influence of maternal height, obstetrical conjugate and fetal birth–weight in the management of patients with breech presentation. Mahmood TA. **Aust N Z J Obstet Gynaecol** 1990 Feb;30(1):10–4

Low birthweight and impaired growth to 5 years in Australian aborigines [published erratum appears in Aust Paediatr J 1989 Dec;25(6):384] Gracey M, et al. **Aust Paediatr J** 1989 Oct;25(5):279–83

The use of graphs in the ergonomic evaluation of tall pilots' sitting posture. de Ree JJ. **Aviat Space Environ Med** 1989 Oct;60(10 Pt 1):1011–5

Body height and risk of breast cancer. A prospective study of 23,831 Norwegian women. Vatten LJ, et al. **Br J Cancer** 1990 Jun;61(6):881–5

The Andalusian Nutritional Survey: comparison of the nutritional status of Andalusian children aged 6–60 months with that of the NCHS/CDC reference population. Briones E, et al. **Bull World Health Organ** 1989;67(4):409–16

Critical evaluation of frame size determination in the 1983 Metropolitan Life weight for height tables. Faulkner RA, et al. **Can J Public Health** 1989 Sep–Oct;80(5):369–72

Childhood cancer survivors: attained adult heights. Compared with sibling controls. Holmes GE, et al. **Clin Pediatr (Phila)** 1990 May;29(5):268–72

Height screening in the community. The commercialization of growth. The role of the pediatrician. Rosenbloom AL, et al. **Clin Pediatr (Phila)** 1990 May;29(5):288–92

Relationship of body mass index, weight and height to plasma lipid levels in people with different diets in Britain. Thorogood M, et al. **Community Med** 1989 Aug;11(3):230–3

Gain in weight and length during early infancy. Nelson SE, et al. **Early Hum Dev** 1989 Jul;19(4):223–39

Height, an important factor in the latency of somatosensory evoked potentials. Sunwoo IN, et al. **Electromyogr Clin Neurophysiol** 1990 Apr–May; 30(3):169–74

Familial type C syndrome of insulin resistance and short stature with possible autosomal dominant transmission. Nakamura F, et al. **Endocrinol Jpn** 1989 Jun;36(3):349–58

Reach distance and safety standards. Thompson D. **Ergonomics** 1989 Sep;32(9):1061–76

The importance of accurate and standardized height and weight measurements in body composition analysis [letter] Blanchard J. **Eur J Clin Nutr** 1990 Apr;44(4):337–8

Growth suppression in the Trichuris dysentery syndrome. Cooper ES, et al. **Eur J Clin Nutr** 1990 Apr;44(4):285–91

Crown–rump length measurements revisited. Koornstra G, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 May–Jun; 35(2–3):131–8

A comparative study of two different methods of measuring stature and the velocity of growth in children and adults. Thomsen J, et al. **Eur J Orthod** 1990 May;12(2):166–73

Linear growth in patients with Turner syndrome: influence of spontaneous puberty and parental height. Massa G, et al. **Eur J Pediatr** 1990 Jan;149(4):246–50

Prediction of stature from hand measurements. Abdel–Malek AK, et al. **Forensic Sci Int** 1990 Jul;46(3):181–7

Use of regression analysis in reconstruction of maximum bone length and living stature from fragmentary measures of the ulna. Badkur P, et al. **Forensic Sci Int** 1990 Mar; 45(1–2):15–25

Pubertal development, growth and final height in girls with sexual precocity after therapy with the GnRH analogue D–TRP–6–LHRH. A report on 15 girls, followed after cessation of gonadotrophin suppressive therapy. Kauli R, et al. **Horm Res** 1990;33(1):11–7

An interstitial deletion in Xp22.3 in a family with X–linked recessive chondrodysplasia punctata and short stature. Petit C, et al. **Hum Genet** 1990 Jul;85(2):247–50

Marker haplotype association with growth in German cystic fibrosis patients. Tümmler B, et al. **Hum Genet** 1990 Feb; 84(3):267–73

Height–weight relationship in young healthy Indian males. Verma SS, et al. **Indian J Med Sci** 1990 Apr;44(4):90–2

Growth chart design [letter; comment] Singh D, et al. **Indian J Pediatr** 1989 Jul–Aug;56(4):555–6 Comment on: Indian J Pediatr 1988 Jan–Feb;55(1 Suppl):S26–9.

A study of height and weight of urban school–going children of Imphal. Yaima E, et al. **Indian J Public Health** 1989 Jan–Mar;33(1):15–20

Comparative evaluation of two maternal weight–height indices during pregnancy. Bhatia BD, et al. **Indian Pediatr** 1989 Apr;26(4):353–7

Height and cancer risk in a network of case–control studies from northern Italy. La Vecchia C, et al. **Int J Cancer** 1990 Feb 15;45(2):275–9

Anthropometric variables and risk of breast cancer. Parazzini F, et al. **Int J Cancer** 1990 Mar 15;45(3):397–402

Height and weight in relation to uterine corpus cancer morbidity and mortality. A follow–up study of 570,000 women in Norway. Tretli S, et al. **Int J Cancer** 1990 Aug 15;46(2):165–72

Parental height: childhood environment and subsequent adult height in a national birth cohort. Kuh D, et al. **Int J Epidemiol** 1989 Sep;18(3):663–8

Short stature, lung function and risk of a heart attack. Walker M, et al. **Int J Epidemiol** 1989 Sep;18(3):602–6

The predictive validity of body mass index based on self–reported weight and height. Kuskowska–Wolk A, et al. **Int J Obes** 1989;13(4):441–53

Biosynthetic human growth hormone in three children with short stature. Murphy E, et al. **Ir Med J** 1990 Mar; 83(1):27–8

Management of children with short stature. O'Shea D, et al. **Ir Med J** 1990 Mar;83(1):25–7

Diagnosis of adolescent hypertension on initial screening by the use of height age. Portman RJ, et al. **J Adolesc Health Care** 1990 May;11(3):215–22

Anthropometric measurements of white and black southern adolescent girls. Korslund MK, et al. **J Am Diet Assoc** 1990 Mar;90(3):394–400

Acute clonidine administration potentiates spontaneous diurnal, but not nocturnal, growth hormone secretion in normal short children. Ghigo E, et al. **J Clin Endocrinol Metab** 1990 Aug;71(2):433–5

Oxandrolone in constitutionally delayed growth, a longitudinal study up to final height. Joss EE, et al. **J Clin Endocrinol Metab** 1989 Dec;69(6):1109–15

"Size" and "shape" variables in the presence of covariates: an application to the sudden infant death syndrome. Fujisaki JM, et al. **J Clin Epidemiol** 1990;43(2):173–80

Fitting polynomial functions to longitudinal height measurements of 65 thalassemic children. Benso L, et al. **J Endocrinol Invest** 1989;12(8 Suppl 3):147

Adult body height and childhood socioeconomic group in the Swedish population [letter; comment] Lindgren GW. **J Epidemiol Community Health** 1989 Dec;43(4):395–8 Comment on: J Epidemiol Community Health 1987 Dec;41(4):333–7.

Adult body height, self perceived health and mortality in the Swedish population. Peck AM, et al. **J Epidemiol Community Health** 1989 Dec;43(4):380–4

School meals, school milk and height of primary school children in England and Scotland in the eighties. Rona RJ, et al. **J Epidemiol Community Health** 1989 Mar; 43(1):66–71

Stature estimation from fragmentary femora: a revision of the Steele method. Simmons T, et al. **J Forensic Sci** 1990 May;35(3):628–36

Preserving adult height potential in girls with idiopathic true precocious puberty. Kreiter M, et al. **J Pediatr** 1990 Sep; 117(3):364–70

Elevated growth velocity in children with Perthes' disease [letter; comment] Exner GU. **J Pediatr Orthop** 1989 Nov–Dec;9(6):732 Comment on: J Pediatr Orthop 1989 May–Jun;9(3):285–92.

The lengthened QUAC stick: a method to determine the nutritional status of primary school children [letter] Brenninkmeijer JH, et al. **J Trop Pediatr** 1989 Dec; 35(6):327–9

Physical growth of Chinese children from birth to 6 years old in urban and rural areas in 1985. Ching RJ, et al. **J Trop Pediatr** 1989 Oct;35(5):255–60

Relative weight, height and risk of breast cancer [letter; comment] Albanes D, et al. **JAMA** 1990 Jun 20; 263(23):3148 Comment on: JAMA 1989 Nov 24;262(20):2853–8.

Prospective study of relative weight, height, and risk of breast cancer [see comments] London SJ, et al. **JAMA** 1989 Nov 24;262(20):2853–8 Comment in: JAMA 1990 Jun 20;263(23):3148.

Predicting trends in operative delivery for cephalopelvic disproportion in Africa [letter] Harrison KA. **Lancet** 1990 Apr 7;335(8693):861–2

Hypophosphataemic rickets: final height and clinical symptoms in adults [see comments] Stickler GB, et al. **Lancet** 1989 Oct 14;2(8668):902–5 Comment in: Lancet 1990 Jan 20;335(8682):178. Comment in: Lancet 1990 Mar 3;335(8688):536–7.

A study of the influence of body weight and height on military parachute landing injuries. Pirson J, et al. **Milit Med** 1990 Aug;155(8):383–5

Toward more rational nerve conduction interpretations: the effect of height. Rivner MH, et al. **Muscle Nerve** 1990 Mar; 13(3):232–9

International differences in body height and weight and their relationship to cancer incidence. Albanes D, et al. **Nutr Cancer** 1990;14(1):69–77

Correlations between ocular optical components, height and head circumference. Rasooly R, et al. **Ophthalmic Physiol Opt** 1988;8(3):351–2

Refractive error, axial length, and height as a function of age in young myopes. Goss DA, et al. **Optom Vis Sci** 1990 May;67(5):332–8

Unintentional trauma to the penis [letter; comment] Singer JI. **Pediatr Emerg Care** 1989 Dec;5(4):298–9 Comment on: Pediatr Emerg Care 1989 Jun;5(2):108–9.

Stature and weight status of children in an urban kindergarten population. Kumanyika SK, et al. **Pediatrics** 1990 May; 85(5):783–90

Developmental lag in reading in relation to physical growth and sex differences. Beech JR. **Percept Mot Skills** 1989 Dec;69(3 Pt 1):748–50

How well does average fundamental frequency correlate with speaker height and weight? Künzel HJ. **Phonetica** 1989;46(1–3):117–25

Flexible models for the analysis of growth data with an application to height prediction. Goldstein H. **Rev Epidemiol Sante Publique** 1989;37(5–6):477–84

The norm for perceived husband superiority: a cause of human assortative marriage. James WH. **Soc Biol** 1989 Fall–Winter;36(3–4):271–8

Effect of lumbar traction on stature. Bridger RS, et al. **Spine** 1990 Jun;15(6):522–4

Body height change during upright and recumbent posture. Krag MH, et al. **Spine** 1990 Mar;15(3):202–7

Measurements of the normal lumbar spinal canal by computed tomography. Segmental study of L3–L4 and L4–L5 related to the height of the subject. Gouzien P, et al. **Surg Radiol Anat** 1990;12(2):143–8

Foot length growth related to crown–rump length, gestational age and weight in human staged fresh fetuses. An index for anatomical and medical use. Mandarim–de–Lacerda CA. **Surg Radiol Anat** 1990; 12(2):103–7

Plasma growth hormone responses to growth hormone–releasing hormone in children of short stature. Tsai WY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Aug; 88(8):801–5

Physical growth measurements of 18,719 primary school children living in Adana, Turkey. Dindar H, et al. **Turk J Pediatr** 1989 Jan–Mar;31(1):45–56

Diagnostic value of insulin–like growth factor–I in short stature. Park MS, et al. **Yonsei Med J** 1989 Dec; 30(4):367–75

[Assessment of present nutrition status with weight for height method in children of Guangxi] Tan CM, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Nov; 23(6):349–51 (Eng. Abstr.) **(Chi)**

[Study on the hygienic standard of furniture for preschool children] Wang DM. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jul; 23(4):237–40 (Eng. Abstr.) **(Chi)**

[Differences in length and weight growth patterns between urban and rural infants] Yang M, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Jun;20(2):194–7 (Eng. Abstr.) **(Chi)**

[Prediction of body height and shortening of the lower part of the body in adults with achondroplasia] Mařík I, et al. **Acta Chir Orthop Traumatol Cech** 1989 Dec;56(6):507–15 (Eng. Abstr.) **(Cze)**

[Measurement or estimation of body length in older nursing home patients] Berkhout AM, et al. **Tijdschr Gerontol Geriatr** 1989 Oct;20(5):211–4 (Eng. Abstr.) **(Dut)**

[The management of small stature in children] Cabrol S, et al. **Ann Pediatr (Paris)** 1989 Nov;36(9):628–31 **(Fre)**

[The relation between the secretion of growth hormone (GH), somatomedin C/IGF I (IGF I) and steroids before and after the onset of puberty in patients of small stature] Garnier P, et al. **Ann Pediatr (Paris)** 1990 May;37(5):315–22 (Eng. Abstr.) **(Fre)**

[Height–weight development of uremic children undergoing dialysis and after kidney transplantation] Andre JL, et al. **Pediatrie** 1989;44(6):495–504 (Eng. Abstr.) **(Fre)**

[Listening to the parents of short stature children: the role of the pediatrician] de Schepper J. **Pediatrie** 1990;45(1):71–3 (Eng. Abstr.) **(Fre)**

[Evaluation of short stature in boys: delayed growth or constitutional short size?] Paulin L, et al. **Pediatrie** 1989; 44(6):449–54 (Eng. Abstr.) **(Fre)**

[Can the size of the obstetrical pelvis be predicted by the mere estimation of maternal height and or shoe size? (letter)] Iloki LH, et al. **Presse Med** 1989 Sep 23; 18(29):1436–7 **(Fre)**

[Body height, body weight and the Quetelet–Kaup Index in students 13 to 16 years of age in a rural district] Schlegel V. **Arztl Jugendkd** 1989;80(5):259–66 (Eng. Abstr.) **(Ger)**

[Neonatal percentile values for the GDR—1985. Correlation of body weight and length in newborn infants (calculation

of birth weight/body length in cm. with reference to gestational age)] Voigt M, et al. **Arztl Jugendkd** 1990; 81(2):105–16 (Eng. Abstr.) **(Ger)**

[The type and frequency of hand skeletal anomalies and their significance for body height growth] Müssig D, et al. **Fortschr Kieferorthop** 1989 Dec;50(6):551–4 (Eng. Abstr.) **(Ger)**

[Measuring short-term periodicity of pediatric growth] Hermanussen M, et al. **Monatsschr Kinderheilkd** 1989 Jul; 137(7):403–10 (Eng. Abstr.) **(Ger)**

[Long-term follow-up of lung function and standing height following scoliosis surgery in children and adolescents] Nicolai T, et al. **Monatsschr Kinderheilkd** 1989 Sep; 137(9):592–6 (Eng. Abstr.) **(Ger)**

[The psychosocial situation of tall-stature girls] Flender H, et al. **Padiatr Grenzgeb** 1990;29(2):145–7 **(Ger)**

[What body height do our children have today? (The body height and body weight of 0- to 16-year-old children, the Jena studies)] Hesse V, et al. **Padiatr Grenzgeb** 1990; 29(2):125–7 **(Ger)**

[The differential diagnosis and the problems of treating constitutional tall growth in girls] Hoepffner W, et al. **Padiatr Grenzgeb** 1990;29(2):129–36 (0 ref.) (Eng. Abstr.) **(Ger)**

[The standpoints on the therapy of tall stature in 1989] Hoepffner W, et al. **Padiatr Grenzgeb** 1990;29(2):193–6 **(Ger)**

[The determination of bone age by the Greulich–Pyle and Tanner–Whitehouse methods as a basis for the growth prognosis of tall-stature girls] Kahleyss S, et al. **Padiatr Grenzgeb** 1990;29(2):137–40 (Eng. Abstr.) **(Ger)**

[The therapy of tall stature by diet?] Knappe G. **Padiatr Grenzgeb** 1990;29(2):189–91 **(Ger)**

[A decrease in height as an expression of disordered bone metabolism in hyperthyroidism] Schober HC, et al. **Z Gesamte Inn Med** 1989 Sep 15;44(18):557–8 (Eng. Abstr.) **(Ger)**

[Neonatal percentile values for East Germany—1985. 3. On the correlation of body height and weight of the mother in a two-dimensional classification of newborn infants according to birth weight and gestational age] Voigt M, et al. **Zentralbl Gynakol** 1989;111(13):904–20 (Eng. Abstr.) **(Ger)**

[Estimation of stature based on the proximal phalangeal length of Japanese women's hands] Shintaku K, et al. **Sangyo Ika Daigaku Zasshi** 1990 Jun 1;12(2):215–9 (Eng. Abstr.) **(Jpn)**

[Indices of development in children and adolescents of Poznan aged 3 through 18] Krawczyński M, et al. **Pediatr Pol** 1989 Jan;64(1):29–39 (Eng. Abstr.) **(Pol)**

[The effect of 6-month provocation with gluten on the height and weight of children with celiac disease] Radzikowski A, et al. **Pediatr Pol** 1989 Mar;64(3):145–9 (Eng. Abstr.) **(Pol)**

[Body height of Portuguese school children. Evolution in the last half century] da Mota HC. **Acta Med Port** 1990 Jan–Feb;3(1):1–4 (Eng. Abstr.) **(Por)**

[Several problems in forecasting constitutionally tall stature] Bazieva NT, et al. **Pediatriia** 1989;(11):83–7 **(Rus)**

[Ethnic-territorial aspects of body height in urban children] Maksimova TM, et al. **Sov Zdravookhr** 1990;(4):18–22 **(Rus)**

[The determination of body height by bone remains] Nekliudov IuA. **Sud Med Ekspert** 1989 Jul–Sep;32(3):50–2 (53 ref.) **(Rus)**

[Anthropometric characteristics of preschool children from the region of Stari Grad in Sarajevo] Vila V, et al. **Med Arh** 1987;41(4):201–9 (Eng. Abstr.) **(Scr)**

[Normal values of forced spirometry in children 100 to 140 cm tall] García-Marcos L, et al. **An Esp Pediatr** 1989 Sep; 31(3):286–90 (Eng. Abstr.) **(Spa)**

[Cerebral gigantism (Sotos' syndrome). Considerations on the definitive body height] Sarriá Chueca A, et al. **An Esp Pediatr** 1990 Feb;32(2):179–82 **(Spa)**

[Height, weight and head circumference according to gestational age in newborn infants born before 35 weeks] Beca JP, et al. **Rev Chil Pediatr** 1989 Jan–Feb;60(1):1–5 (Eng. Abstr.) **(Spa)**

[Postnatal growth of very low birth weight infants. II. Anthropometry at one year of age, a longitudinal study] Rizzardini M, et al. **Rev Chil Pediatr** 1989 Jan–Feb; 60(1):5–10 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Two-year results of treatment with methionyl human growth hormone in children with Turner syndrome. Dutch Growth Hormone Working Group. Rongen-Westerlaken C, et al. **Acta Paediatr Scand** 1990 Jun–Jul;79(6–7):658–63

Response to growth hormone treatment and final height after cranial or craniospinal irradiation. Sulmont V, et al. **Acta Paediatr Scand** 1990 May;79(5):542–9

Effect of the long-acting somatostatin analogue SMS 201-995 on growth rate and reduction of predicted adult height in ten tall adolescents. Tauber MT, et al. **Acta Paediatr Scand** 1990 Feb;79(2):176–81

Response to growth hormone in children with idiopathic short stature. The Genentech Collaborative Study Group. **Acta Paediatr Scand Suppl** 1990;366:24–6; discussion 27–8

Effects of growth hormone in short, slowly growing children without growth hormone deficiency. Australasian Paediatric Endocrine Group. Cowell CT. **Acta Paediatr Scand Suppl** 1990;366:29–30; discussion 31

Hereditary hypophosphatemia [letter] Schoen EJ. **Am J Dis Child** 1967 Aug;114(2):214

Monitoring treatment in congenital adrenal hyperplasia [see comments] Appan S, et al. **Arch Dis Child** 1989 Sep; 64(9):1235–9 Comment in: Arch Dis Child 1990 Mar;65(3):333.

Effect of different oestrogen doses on final height reduction in girls with constitutional tall stature. Grüters A, et al. **Eur J Pediatr** 1989 Oct;149(1):11–3

Differential effects of oestrogen treatment on the proportionality of growth in tall girls. Hermanussen M, et al. **Eur J Pediatr** 1989 Oct;149(1):14–7

Severe thrombosis during oestrogen treatment for tall stature. Werder EA, et al. **Eur J Pediatr** 1990 Mar;149(6):389–90

Growth-promoting effect of growth hormone and low dose ethinyl estradiol in girls with Turner's syndrome. Vanderschueren-Lodeweyckx M, et al. **J Clin Endocrinol Metab** 1990 Jan;70(1):122–6

Growth and final height in classical and nonclassical 21-hydroxylase deficiency. New MI, et al. **J Endocrinol Invest** 1989;12(8 Suppl 3):91–5

Growth hormone therapy for short stature: panacea or Pandora's box? Allen DB, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):16–21 (43 ref.)

Long-term growth of children with growth hormone deficiency and hypoglycemia. Therapeutic Trial of Growth Hormone Committee. Medical Research Council of Canada. Dean HJ, et al. **J Pediatr** 1989 Oct;115(4):598–600

Hypophosphataemic rickets and final height [letter; comment] **Lancet** 1990 Mar 3;335(8688):536–7 Comment on: Lancet 1989 Oct 14;2(8668):902–5.

How far should indications for growth hormone treatment expand? [editorial] [see comments] **Lancet** 1990 Mar 31; 335(8692):764 Comment in: Lancet 1990 May 19;335(8699):1225. Comment in: Lancet 1990 Jun 2;335(8701):1351.

Growth hormone for short children [letter; comment] Gill D. **Lancet** 1990 May 19;335(8699):1225 Comment on: Lancet 1990 Mar 31;335(8692):764.

The Northern Ireland experience of growth hormone therapy for short stature. Whitehead HM, et al. **Ulster Med J** 1989 Oct;58(2):153–60

[Growth and bone maturity during congenital hypothyroidism screened in the neonatal period. Apropos of 82 cases] Moreno L, et al. **Arch Fr Pediatr** 1989 Dec; 46(10):723–8 (Eng. Abstr.) **(Fre)**

[The mental problems of hormone-treated tall-stature females—a follow-up study in early adulthood] Donczik J, et al. **Padiatr Grenzgeb** 1990;29(2):149–52 **(Ger)**

[The evaluation of the estrogen therapy of tall stature from the gynecological viewpoint] Göretzlehner G. **Padiatr Grenzgeb** 1990;29(2):159–61 **(Ger)**

[The therapy of tall stature in girls—a review] Grüters-Kieslich A, et al. **Padiatr Grenzgeb** 1990; 29(2):153–8 (18 ref.) **(Ger)**

[The results of sex steroid therapy to reduce the final height of tall-stature girls at the University Pediatric Clinic in Leipzig] Hoepffner W, et al. **Padiatr Grenzgeb** 1990; 29(2):141–3 (Eng. Abstr.) **(Ger)**

[Mineral metabolism during the therapy of tall stature] Kauf E, et al. **Padiatr Grenzgeb** 1990;29(2):179–83 **(Ger)**

[The treatment of tall stature in boys] Knorr D. **Padiatr Grenzgeb** 1990;29(2):185–7 **(Ger)**

[Follow-up studies during the therapy of tall stature] Vogel H, et al. **Padiatr Grenzgeb** 1990;29(2):175–8 **(Ger)**

[Medium high-dose estrogen/gestagen sequential therapy in constitutional stature. The results of a 10-year pediatric gynecological follow-up observation] Weinreich G, et al. **Padiatr Grenzgeb** 1990;29(2):163–5 (Eng. Abstr.) **(Ger)**

[Growth and puberal development in males with adreno-genital syndrome] Gargantini L, et al. **Pediatr Med Chir** 1989 Nov–Dec;11(6):597–602 (25 ref.) (Eng. Abstr.) **(Ita)**

[Use of difenin in the treatment of constitutionally tall girls] Bogdanova EA, et al. **Pediatriia** 1989;(11):54–7 (Eng. Abstr.) **(Rus)**

[Diabetes and growth] Gussinyé M, et al. **An Esp Pediatr Supl** 1988 Oct;35:12–5 **(Spa)**

[Patterns of growth in congenital adrenal hyperplasia. Correlation between glucocorticoid therapy and stature] Igea JM, et al. **An Esp Pediatr Supl** 1988 Oct;35:9–12 **(Spa)**

ETHNOLOGY

Adult stature in southern African Negroes—further evidence on the absence of a positive secular trend. Tobias PV. **S Afr Med J** 1990 Jul 21;78(2):97–101

GENETICS

A method for adjustment of final height for midparental height for Swedish children. Karlberg J, et al. **Acta Paediatr Scand** 1990 Apr;79(4):468–9

Three-generation dominant transmission of the Silver–Russell syndrome. Duncan PA, et al. **Am J Med Genet** 1990 Feb;35(2):245–50 (33 ref.)

A new syndrome of familial short stature, small hands, valvular heart disease and a characteristic facies. Collins FA, et al. **Clin Genet** 1990 Jan;37(1):18–23

Skin mastocytosis with short stature, conductive hearing loss and microtia: a new syndrome. Wolach B, et al. **Clin Genet** 1990 Jan;37(1):64–8

Polymorphism and mapping of the IGF1 gene, and absence of association with stature among African Pygmies. Bowcock A, et al. **Hum Genet** 1990 Aug;85(3):349–54

Isolated growth hormone deficiency: analysis of the growth hormone (GH)-releasing hormone gene and the GH gene cluster. Mullis P, et al. **J Clin Endocrinol Metab** 1990 Jan; 70(1):187–91

Insulin-like growth factor-I gene analysis in subjects with constitutionally variant stature. Schneid H, et al. **Pediatr Res** 1990 May;27(5):488–91

PHYSIOLOGY

Growth in children with partially treated coeliac disease [letter] Paerregaard A, et al. **Acta Paediatr Scand** 1990 May; 79(5):563

Variation of growth in height and weight of children. II. After infancy. Sorva R, et al. **Acta Paediatr Scand** 1990 May;79(5):498–506

On the construction of the infancy-childhood-puberty growth standard. Karlberg J. **Acta Paediatr Scand Suppl** 1989;356:26–37

A three-dimensional representation of linear growth and skeletal maturation. Rudlin CR. **Acta Paediatr Scand Suppl** 1989;356:46–50; discussion 51

The infancy-childhood-puberty model of growth: clinical aspects. Tse WY, et al. **Acta Paediatr Scand Suppl** 1989; 356:38–43; discussion 44–5 (19 ref.)

Effect of meal frequency in schoolchildren. Changes in weight-height proportion and skinfold thickness. Fábry P, et al. **Am J Clin Nutr** 1966 May;18(5):358–61

Maternal growth during pregnancy and decreased infant birth weight. Scholl TO, et al. **Am J Clin Nutr** 1990 May; 51(5):790–3

Iron in tubewell water and linear growth in rural Bangladesh. Briend A, et al. **Arch Dis Child** 1990 Feb;65(2):224–5

The effect of pre-morbid height and weight on the survival of breast cancer patients. Tretli S, et al. **Br J Cancer** 1990 Aug;62(2):299–303

Motor evoked potentials with magnetic stimulation: correlations with height. Chu NS. **Electroencephalogr Clin Neurophysiol** 1989 Nov–Dec; 74(6):481–5

The relationship between changing body height and growth related changes in maximal aerobic power. Rutenfranz J, et al. **Eur J Appl Physiol** 1990;60(4):282–7

Quantitating the effect of cystic fibrosis on linear growth by mathematical modelling of longitudinal growth curves. Barkhouse LB, et al. **Growth Dev Aging** 1989 Winter; 53(4):185–90

Quantitating the effect of cystic fibrosis on linear growth by mathematical modelling of longitudinal curves: appendix. Fahey J. **Growth Dev Aging** 1989 Winter; 53(4):191–4

Decline of height with age in adults in a general population sample: estimating maximum height and distinguishing birth cohort effects from actual loss of stature with aging. Cline MG, et al. **Hum Biol** 1989 Jun;61(3):415–25

Age-related bone loss in women [letter] Recker RR, et al. **J Bone Miner Res** 1990 Mar;5(3):307–8

Circadian and ultradian characteristics of plasma growth hormone in children with normal and short stature. Hermida RC, et al. **J Endocrinol Invest** 1989;12(8 Suppl 3):69–73

Short stature. Haquani AH. **JPMA** 1989 Aug;39(8):217–9

Changes in stature following drop jumping and post-exercise gravity inversion. Boocock MG, et al. **Med Sci Sports Exerc** 1990 Jun;22(3):385–90

Variations of pulsatile growth hormone release in healthy short prepubertal boys. Kerrigan JR, et al. **Pediatr Res** 1990 Jul;28(1):11–4

[Arterial pressure and puberty: relation to height-weight characteristics] Spyckerelle Y, et al. **Pediatrie** 1989; 44(6):505–11 (Eng. Abstr.) **(Fre)**

[The effect of different ALL therapeutic protocols on body height and the growth rate] Mohnike K, et al. **Padiatr Grenzgeb** 1990;29(2):87–93 (Eng. Abstr.) **(Ger)**

[The effect of combined ALL therapy in childhood on body growth] Reddemann H, et al. **Padiatr Grenzgeb** 1990; 29(2):81–5 (Eng. Abstr.) **(Ger)**

[Response to haloperidol and analysis of growth curve in hereditary progressive dystonia with marked diurnal fluctuation] Oki J, et al. **No To Hattatsu** 1989 Nov; 21(6):569–73 (Eng. Abstr.) **(Jpn)**

RADIATION EFFECTS

Stature loss following skeletal irradiation for childhood cancer. Silber JH, et al. **J Clin Oncol** 1990 Feb;8(2):304–12

BODY IMAGE

Dysmorphic penis image perception: the root of Koro vulnerability. A longitudinal study. Chowdhury AN. **Acta Psychiatr Scand** 1989 Nov;80(5):518–20

Penile perception of Koro patients. Chowdhury AN. **Acta Psychiatr Scand** 1989 Aug;80(2):183–6

Parents' accuracy in estimating child weight status. Jackson J, et al. **Addict Behav** 1990;15(1):65–8

Criterion-related validity of the Anorectic Cognitions Questionnaire. Mizes JS. **Addict Behav** 1990;15(2):153–63

Body image satisfaction in Turkish adolescents. Cok F. **Adolescence** 1990 Summer;25(98):409–13

The relationship of body image perception and weight status to recent change in weight status of the adolescent female. Fowler BA. **Adolescence** 1989 Fall;24(95):557–68

Clothing interests, body satisfaction, and eating behavior of adolescent females: related or independent dimensions? Littrell MA, et al. **Adolescence** 1990 Spring;25(97):77–95

Fitness promotion for adolescent girls: the impact and effectiveness of promotional material which emphasizes the slim ideal. Shaw SM, et al. **Adolescence** 1989 Fall; 24(95):677–87

Patients seeking symmetrical recontouring for "perceived" deformities in the width of the face and skull. Edgerton MT Jr, et al. **Aesthetic Plast Surg** 1990 Winter;14(1):59–72

Hypnotizability, attitudes toward eating, and concern with body size in a female college population. Groth-Marnat G, et al. **Am J Clin Hypn** 1990 Jan;32(3):194–200

Body image and eating behavior in adolescent boys. Moore DC. **Am J Dis Child** 1990 Apr;144(4):475–9

Hypokalemia in the "beautiful people". Kamel KS, et al. **Am J Med** 1990 May;88(5):534–6

Body part identification in 1- to 2-year-old children. Witt A, et al. **Am J Occup Ther** 1990 Feb;44(2):147–53 (32 ref.)

Body-dysmorphic disorder [letter] Thomas CS. **Am J Psychiatry** 1990 Jun;147(6):816–7

Skoptic syndrome: the treatment of an obsessional gender dysphoria with lithium carbonate and psychotherapy. Coleman E, et al. **Am J Psychother** 1990 Apr;44(2):204–17

Patients requesting facial surgery [letter; comment] Thomas CS. **Aust N Z J Psychiatry** 1989 Sep;23(3):314 Comment on: Aust N Z J Psychiatry 1989 Jun;23(2):249–54.

The thin ideal, depression and eating disorders in women. McCarthy M. **Behav Res Ther** 1990;28(3):205–15 (58 ref.)

Assessing bulimics' dissatisfaction with their bodies. Huon GF, et al. **Br J Clin Psychol** 1989 Sep;28 (Pt 3):283–4

Psychiatry and the skin. Cotterill JA. **Br J Hosp Med** 1989 Nov;42(5):401–4 (18 ref.)

Distorting patient or distorting instrument? Body shape disturbance in patients with anorexia nervosa and bulimia. Bowden PK, et al. **Br J Psychiatry** 1989 Aug;155:196–201

Adaptive probit estimation and body size: the evaluation of a new psychophysical technique. Fonagy P, et al. **Br J Psychol** 1990 May;81 (Pt 2):159–71

Split body and self: an unusual case of misidentification. Silva JA, et al. **Can J Psychiatry** 1989 Oct;34(7):728–30

Body image disturbance in anorexia nervosa: beyond body image. Warah A. **Can J Psychiatry** 1989 Dec;34(9):898–905 (56 ref.)

Dysmorphophobia: body dysmorphic disorder or delusional disorder, somatic subtype? de Leon J, et al. **Compr Psychiatry** 1989 Nov–Dec;30(6):457–72 (124 ref.)

Long-term effects of a psychologically based group programme for women preoccupied with body weight and eating behaviour. Roughan P, et al. **Int J Obes** 1990; 14(2):135–47

Female genital anxieties, conflicts and typical mastery modes. Bernstein D. **Int J Psychoanal** 1990;71 (Pt 1):151–65

A model for body-image care. Price B. **J Adv Nurs** 1990 May;15(5):585–93

Parental mislabeling of female genitals as a determinant of penis envy and learning inhibitions in women. Lerner HE. **J Am Psychoanal Assoc** 1976;24(5):269–83

Adaptation of self-image in burn-disfigured children. Beard SA, et al. **J Burn Care Rehabil** 1989 Nov–Dec;10(6):550–4

Body image, self-esteem, and depression in burn-injured adolescents and young adults. Orr DA, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):454–61

Food cues and perceptual distortion of the female body: implications for food avoidance in the early dynamics of anorexia nervosa. Heilbrun AB Jr, et al. **J Clin Psychol** 1989 Nov;45(6):843–51

Emotional indicators in human figure drawings of sexually victimized and nonabused children. Hibbard RA, et al. **J Clin Psychol** 1990 Mar;46(2):211–9

The weight control practices of 15 year old New Zealanders. Worsley A, et al. **J Paediatr Child Health** 1990 Feb; 26(1):41–5

Body image or body images?: Comparative, multidimensional assessment among college students. Keeton WP, et al. **J Pers Assess** 1990 Spring;54(1–2):213–30

The Body Esteem Scale: construct validity of the female subscales. Thomas CD, et al. **J Pers Assess** 1990 Spring; 54(1–2):204–12

Body image and depression in women with early and late onset obesity. Faubel M. **J Psychol** 1989 Jul;123(4):385–95

Body image and comprehension of body part names. Benedet MJ, et al. **J Psycholinguist Res** 1989 Sep;18(5):485–96

Mirror feedback and judgments of body size. Gardner RM, et al. **J Psychosom Res** 1989;33(5):603–7

Psychological problems of patients with cleft lip and palate: discussion paper. Lansdown R. **J R Soc Med** 1990 Jul; 83(7):448–50

Black and white adolescents' perceptions of their weight. Desmond SM, et al. **J Sch Health** 1989 Oct;59(8):353–8

Verbal asomatognosia. Feinberg TE, et al. **Neurology** 1990 Sep;40(9):1391–4

Physical fitness in relation to amount of physical exercise, body image, and locus of control among college men and women. Adame DD, et al. **Percept Mot Skills** 1990 Jun; 70(3 Pt 2):1347–50

Reliability measures in distorting body-image. Brodie DA, et al. **Percept Mot Skills** 1989 Dec;69(3 Pt 1):723–32

Subjective equality and just noticeable differences in body-size judgments by obese persons. Gardner RM, et al. **Percept Mot Skills** 1989 Oct;69(2):595–604

Body cathexis and clothed body cathexis: is there a difference? Markee NL, et al. **Percept Mot Skills** 1990 Jun; 70(3 Pt 2):1239–44

Etiology of Nigerian adolescents' perception of their weight. Toriola AL. **Percept Mot Skills** 1989 Oct;69(2):466

Child sexual abuse sequelae and body-image surgery. Morgan E, et al. **Plast Reconstr Surg** 1990 Sep;86(3):475–8; discussion 479–80

Distorted body image as a risk factor in anorexia nervosa: replication and clarification. Heilbrun AB Jr, et al. **Psychol Rep** 1990 Apr;66(2):407–16

Dysmorphophobia misdiagnosed as obsessive-compulsive disorder. Vitiello B, et al. **Psychosomatics** 1990 Spring; 31(2):220–2

Body awareness group therapy for patients with personality disorders. 2. Evaluation of the Body Awareness Rating Scale. Friis S, et al. **Psychother Psychosom** 1989;51(1):18–24

Body awareness group therapy for patients with personality disorders. 1. Description of the therapeutic method. Skatteboe UB, et al. **Psychother Psychosom** 1989;51(1):11–7

Perceived health status, self-esteem and body image in women with rheumatoid arthritis or systemic lupus erythematosus. Cornwell CJ, et al. **Res Nurs Health** 1990 Apr;13(2):99–107

Why are girls so dissatisfied with their shape? [editorial] Walker AR, et al. **S Afr Med J** 1990 Jan 6;77(1):2–4

The fattening room in Nigeria [editorial] Brink PJ. **West J Nurs Res** 1989 Dec;11(6):655–6

[The body in Islam] Boughanmi L, et al. **Ann Med Psychol (Paris)** 1989 May–Jun;147(3):306–10 (0 ref.) **(Fre)**

[Body image in hemodialyzed and kidney transplant patients] Tabbane K, et al. **Ann Med Psychol (Paris)** 1989 May–Jun; 147(3):325–8 **(Fre)**

[Disorders of body perception in schizophrenic psychosis. A case report] Schmoll D, et al. **Nervenarzt** 1989 Oct; 60(10):619–27 **(Ger)**

[Evaluation of body image perception in patients with anorexia nervosa] Probst M, et al. **Psychiatr Prax** 1990 May;17(3):115–20 (Eng. Abstr.) **(Ger)**

[Physical and social comparisons at admission to therapy: a contribution to the differential diagnosis in obesity] Haisch J. **Z Klin Psychol Psychopathol Psychother** 1990; 38(1):4–14 (Eng. Abstr.) **(Ger)**

[Body image of patients with eating disorders] Baba K. **Seishin Shinkeigaku Zasshi** 1989;91(9):682–9 **(Jpn)**

[Psychopathological characteristics of the dysmorphophobia syndrome in attack-like progressive schizophrenia] Tazabekova ZhK. **Zh Nevropatol Psikhiatr** 1990;90(3):95–9 (Eng. Abstr.) **(Rus)**

BODY LANGUAGE see **KINESICS**

BODY MASS INDEX

see related
SKINFOLD THICKNESS

Glomerular filtration rate increases with body mass in children with reduced nephronic population. Polito C, et al. **Acta Paediatr Scand** 1990 Mar;79(3):372–4

Lithium-induced changes in the body mass index. Mathew B, et al. **Acta Psychiatr Scand** 1989 Dec;80(6):538–40

Reliability of the body mass prediction by means of indices. Komenda S. **Acta Univ Palacki Olomuc Fac Med** 1989; 123:329–43

Body mass indices based on the chest diameters. Komenda S. **Acta Univ Palacki Olomuc Fac Med** 1989;122:387–97

Ratio of actual to predicted weight as an alternative to a power-type weight-height index (Benn index). Flegal KM. **Am J Clin Nutr** 1990 Apr;51(4):540–7

Reassessment of body mass indices. Smalley KJ, et al. **Am J Clin Nutr** 1990 Sep;52(3):405–8

Body composition in children: proposal for a method for calculating body fat percentage from total body density or skinfold-thickness measurements. Weststrate JA, et al. **Am J Clin Nutr** 1989 Nov;50(5):1104–15

Body mass index versus height and weight in relation to blood pressure. Findings for the 10,079 persons in the INTERSALT Study. Dyer AR, et al. **Am J Epidemiol** 1990 Apr;131(4):589–96

Increased incidence of carcinoma of the breast associated with abdominal adiposity in postmenopausal women. Folsom AR, et al. **Am J Epidemiol** 1990 May; 131(5):794–803

Re: "Secular trends in body mass in the United States, 1960–1980" [letter; comment] Gortmaker SL, et al. **Am J Epidemiol** 1990 Jul;132(1):194–7 Comment on: Am J Epidemiol 1988 Nov;128(5):1065–74.

Gallstone prevalence and gallbladder volume in children and adolescents: an epidemiological ultrasonographic survey and relationship to body mass index. Palasciano G, et al. **Am J Gastroenterol** 1989 Nov;84(11):1378–82

Age variations in the relation of body mass indices to estimates of body fat and muscle mass. Micozzi MS, et al. **Am J Phys Anthropol** 1990 Mar;81(3):375–9

Obesity and body mass indices in Chinese, Malays and Indians in Singapore. Hughes K, et al. **Ann Acad Med Singapore** 1990 May;19(3):333–8

Effect of body mass and other factors on serum liver enzyme levels in men attending for well population screening. Robinson D, et al. **Ann Clin Biochem** 1989 Sep;26 (Pt 5):393–400

Body circumferences as alternatives to skinfold measures of body fat distribution in children. Mueller WH, et al. **Ann Hum Biol** 1989 Nov–Dec;16(6):495–506

Predictors of functional capacity in elderly Finnish men; a path analysis. Lammi UK. **Ann Med** 1990 Feb;22(1):25–30

Some restrictions on dietary restraint. Westenhoefer J, et al. **Appetite** 1990 Apr;14(2):137–41; discussion 142–3

Properties and clinical implications of body mass indices. Fung KP, et al. **Arch Dis Child** 1990 May;65(5):516–9

The influence of altered head, thorax and pelvis mass on the postnatal development of the air-righting reaction in albino rats. Laouris Y, et al. **Behav Brain Res** 1990 May 7;38(2):185–90

Independent effects of weight change and attained body weight on prevalence of arterial hypertension in obese and non-obese men [see comments] Sonne-Holm S, et al. **BMJ** 1989 Sep 23;299(6702):767–70 Comment in: BMJ 1989 Nov 18;299(6710):1281–2.

Body weight and mortality in middle aged British men: impact of smoking. Wannamethee G, et al. **BMJ** 1989 Dec 16;299(6714):1497–502

Standardization of renal function measurements in children: kidney size versus metabolic rate. Kurtin PS. **Child Nephrol Urol** 1988–89;9(6):337–9

Relationship of body mass index, weight and height to plasma lipid levels in people with different diets in Britain. Thorogood M, et al. **Community Med** 1989 Aug;11(3):230–3

Quetelet's index as a measure of body fatness in young infants. Davies PS, et al. **Early Hum Dev** 1989 Nov;20(2):135–41

The importance of accurate and standardized height and weight measurements in body composition analysis [letter] Blanchard J. **Eur J Clin Nutr** 1990 Apr;44(4):337–8

Body mass index and the limits of human survival. Henry CJ. **Eur J Clin Nutr** 1990 Apr;44(4):329–35

Energy expenditure economy induced by decrease in lean body mass in anorexia nervosa. Melchior JC, et al. **Eur J Clin Nutr** 1989 Nov;43(11):793–9

Body mass index and body energy stores in developing countries. Norgan NG. **Eur J Clin Nutr** 1990;44 Suppl 1:79–84

Relationship between socio-demographic and behaviour variables, and body mass index in a population with high-normal blood pressure: Hypertension Prevention Trial. Shah M, et al. **Eur J Clin Nutr** 1989 Sep;43(9):583–96

Failure of body mass index or body weight to influence markedly the response to ovarian hyperstimulation in normal cycling women. Lewis CG, et al. **Fertil Steril** 1990 Jun;53(6):1097–9

Ponderal index as a marker of intrauterine growth. Prasad SR, et al. **Indian J Med Res** 1989 Dec;90:442–7

Use of body mass index for assessing the growth status of infants. Raman L, et al. **Indian Pediatr** 1989 Jul;26(7):630–5

Ultrasonic tissue characterization: its potential for the estimation of body masses. Schmitt RM. **Infusionstherapie** 1990 Apr;17 Suppl 3:52–3

Overweight: fat distribution and health risks. Epidemiological observations. A review. Seidell JC, et al. **Infusionstherapie** 1989 Dec;16(6):276–81 (10 ref.)

Anthropometric variables and risk of breast cancer. Parazzini F, et al. **Int J Cancer** 1990 Mar 15;45(3):397–402

Body mass index and risk of breast cancer. A prospective study of 23,826 Norwegian women. Vatten LJ, et al. **Int J Cancer** 1990 Mar 15;45(3):440–4

A positive correlation between energy intake and body mass index in a population of 1312 overweight subjects. Fricker J, et al. **Int J Obes** 1989;13(5):673–81

Secular trends in body mass index among Danish young men. Sørensen TI, et al. **Int J Obes** 1990;14(5):411–9

Anthropometric measurements of white and black southern adolescent girls. Korslund MK, et al. **J Am Diet Assoc** 1990 Mar;90(3):394–400

Simplifying the calculation of body mass index for quick reference. Stensland SH, et al. **J Am Diet Assoc** 1990 Jun; 90(6):856

A new nutritional indicator [letter; comment] Kwok T, et al. **J Am Geriatr Soc** 1989 Nov;37(11):1100–1 Comment on: J Am Geriatr Soc 1989 May;37(5):397–406.

Obesity and mortality in the Lipid Research Clinics Program Follow-up Study [see comments] Wilcosky T, et al. **J Clin Epidemiol** 1990;43(8):743–52 Comment in: J Clin Epidemiol 1990;43(8):753–4; discussion 755–6.

The INTERSALT study: relations of body mass index to blood pressure. INTERSALT Co-operative Research Group. Dyer AR, et al. **J Hum Hypertens** 1989 Oct; 3(5):299–308

Urinary sodium and potassium excretion, body mass index, alcohol intake and blood pressure in three Japanese populations. Hashimoto T, et al. **J Hum Hypertens** 1989 Oct;3(5):315–21

Body mass index as a discriminant function among health-related variables and risk factors. Chainé G, et al. **J Sports Med Phys Fitness** 1989 Sep;29(3):253–61

Validity and intertester error of anthropometric estimations of body density. Housh TJ, et al. **J Sports Med Phys Fitness** 1989 Jun;29(2):149–56 (19 ref.)

Timing weight-control measures in obese children [letter] Rolland-Cachera MH, et al. **Lancet** 1990 Apr 14; 335(8694):918

Fitness, performance and anthropometric characteristics of 19,185 Canadian Forces personnel classified according to

body mass index. Jetté M, et al. **Milit Med** 1990 Mar; 155(3):120–6
Physical activity, smoking, alcohol consumption, body mass index, and plasma lipid profiles of military reserve officers [published erratum appears in Milit Med 1990 Feb;155(2):51] Kokkinos PF, et al. **Milit Med** 1989 Dec; 154(12):600–3
Body–mass indexes of British separated twins [letter; comment] MacDonald A, et al. **N Engl J Med** 1990 May 24;322(21):1530 Comment on: N Engl J Med 1990 May 24;322(21):1483–7.
Destiny rides again as twins overeat [editorial; comment] Sims EA. **N Engl J Med** 1990 May 24;322(21):1522–4 Comment on: N Engl J Med 1990 May 24;322(21):1477–82. Comment on: N Engl J Med 1990 May 24;322(21):1483–7.
Lipoprotein lipase [letter; comment] Strokosch G, et al. **N Engl J Med** 1990 Feb 15;322(7):477 Comment on: N Engl J Med 1989 Apr 20;320(16):1060–8.
The body–mass index of twins who have been reared apart [see comments] Stunkard AJ, et al. **N Engl J Med** 1990 May 24;322(21):1483–7 Comment in: N Engl J Med 1990 May 24;322(21):1522–4. Comment in: N Engl J Med 1990 May 24;322(21):1530.
Trends in cardiovascular risk factors in Auckland, 1982 to 1987. Jackson R, et al. **N Z Med J** 1990 Aug 8; 103(895):363–5
Body weight and physical activity as predictors of colorectal cancer risk. Kune GA, et al. **Nutr Cancer** 1990;13(1–2):9–17
Maternal obesity: a potential source of error in sonographic prenatal diagnosis. Wolfe HM, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 1):339–42
[Clinical significance of the quantification of obesity. The Quetelet index and its use] Sucharda P. **Cas Lek Cesk** 1989 Aug 11;128(33):1040–3 (Eng. Abstr.) **(Cze)**
[The significance of the body mass index. Evaluation using impedance tests (letter)] Schlienger JL, et al. **Presse Med** 1989 Oct 21;18(34):1711 **(Fre)**
[Body mass indices: results and problems in their application] Ratzmann GW. **Arztl Jugendkd** 1990;81(2):139–42 **(Ger)**
[Body height, body weight and the Quetelet–Kaup Index in students 13 to 16 years of age in a rural district] Schlegel V. **Arztl Jugendkd** 1989;80(5):259–66 (Eng. Abstr.) **(Ger)**
[Blood pressure and relative body weight, alcohol consumption and electrolyte excretion in the FRG and the GDR: the Intersalt Study. The Intersalt Study Group form the FRG and the GDR] **Klin Wochenschr** 1990 Jul 5; 68(13):655–63 (Eng. Abstr.) **(Ger)**
[Criteria for the assessment of data and measures in obesity in children] Hövels O, et al. **Padiatr Padol** 1990;25(2):85–97 (22 ref.) (Eng. Abstr.) **(Ger)**
[Body mass index, blood lactate and therapeutic effectiveness of metformin in type II diabetes mellitus] Gregorio F, et al. **Medicina (Firenze)** 1989 Apr–Jun;9(2):200–4 (Eng. Abstr.) **(Ita)**
[Behavior of fibrinogen, hematocrit and platelets in relation to variations in body mass index in a group of female subjects] Carnevale Schianca GP, et al. **Ric Clin Lab** 1989; 19 Suppl 1:125–8 **(Ita)**
[Content of overall fat in the body and levels of selected coronary risk factors] Sodolski W, et al. **Kardiol Pol** 1989; 32(1):7–12 (Eng. Abstr.) **(Pol)**
[Diagnosis of malnutrition in chronic renal failure: what are the basic criteria?] Faintuch J. **AMB Rev Assoc Med Bras** 1989 Jan–Feb;35(1):3–4 **(Por)**
[Quetelet's index in the male population aged 20 to 59 (epidemiological autopsy research in Riga)] Volkov VA, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(2):61–4 (Eng. Abstr.) **(Rus)**
[Relative mass and serum lipids in men with various coronary scores] Kusá O, et al. **Vnitr Lek** 1990 Apr;36(4):342–8 (Eng. Abstr.) **(Slo)**

BODY ROCKING see **STEREOTYPED BEHAVIOR**

BODY SIZE see **BODY CONSTITUTION**

BODY SURFACE AREA

Growth of the human heart relative to body surface area. Gutgesell HP, et al. **Am J Cardiol** 1990 Mar 1;65(9):662–8
Validity of surface anthropometry to estimate upper–arm muscularity, including changes with body mass loss. Katch FI, et al. **Am J Clin Nutr** 1990 Oct;52(4):591–5
Surface area estimates [letter] Callahan CW Jr. **Ann Emerg Med** 1989 Oct;18(10):1137
Modified fluid regimen for an extensively burned patient with a previous major amputation [letter] Tiwari VK, et al. **Burns** 1989 Dec;15(6):412
Patterns of body surface potential and ventriculograms specific to occlusion of subdivisions of the coronary arteries. Horan LG, et al. **Circ Res** 1990 Sep;67(3):683–93
Body surface area of Africans: a study based on direct measurements of Nigerian males. Nwoye LO. **Hum Biol** 1989 Jun;61(3):439–57 (52 ref.)
Changes in insulation of body tissue and wet suits during underwater exercise at various atmospheric pressures. Iwamoto J, et al. **J Appl Physiol** 1990 Feb;68(2):659–64
Calculation of body surface area from bodyweight [letter] Butterworth SJ. **Vet Rec** 1990 Mar 3;126(9):225
[A new aid for the determination of body surface area from 3 to 18 years of age] Bystrý J, et al. **Cesk Pediatr** 1989 Nov;44(11):653–7 (Eng. Abstr.) **(Cze)**

VETERINARY

Chemotherapy for lymphosarcoma [letter; comment] Hatch AS. **Vet Rec** 1990 Feb 17;126(7):174 Comment on: Vet Rec 1989 Sep 9;125(11):305.
Estimation of the total surface area in Indian elephants (Elephas maximus indicus). Sreekumar KP, et al. **Vet Res Commun** 1990;14(1):5–17

BODY TEMPERATURE

see related
FEVER
THERMOGRAPHY
THERMOMETERS

Circadian phase diagrams of oral temperature and urinary functions in a healthy man studied "longitudinally". Haus E, et al. **Acta Endocrinol (Copenh)** 1966 Feb;51(2):215–23
Positive correlation of calcium concentration in cerebrospinal fluid and rectal temperature in rabbits. Palmi M, et al. **Acta Physiol Hung** 1990;75 Suppl:229–30
Heating of the scrotum by high–field–strength MR imaging. Shellock FG, et al. **AJR Am J Roentgenol** 1990 Jun; 154(6):1229–32
Body temperature and ethanol pharmacokinetics in temperature–challenged mice. Bejanian M, et al. **Alcohol** 1990 Jul–Aug;7(4):331–7
The inaccuracy of axillary temperatures measured with an electronic thermometer. Ogren JM. **Am J Dis Child** 1990 Jan;144(1):109–11
Measurements of core temperature in spontaneously hypertensive rats by radiotelemetry. Berkey DL, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):R743–9
Muscle temperature of mammals: cooling impairs most functional properties. Faulkner JA, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R259–65
Effect of gastrointestinal flora on body temperature of rats and mice. Kluger MJ, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):R552–7
Atropine–induced cutaneous vasodilation decreases esophageal temperature during exercise. Kolka MA, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1089–95
Body temperature effects on hypoxic and hypercapnic responses in awake rats. Maskrey M. **Am J Physiol** 1990 Sep;259(3 Pt 2):R492–8
Development of circadian cycle of core temperature in juvenile rats. Nuesslein B, et al. **Am J Physiol** 1990 Aug; 259(2 Pt 2):R270–6
Elevated body temperature and increased blood vessel sensitivity in spontaneously hypertensive rats. Price JM, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H946–53
Effects of ammoniation of endophyte fungus–infested fescue hay on serum prolactin concentration and rectal temperature in beef cattle. Kerr LA, et al. **Am J Vet Res** 1990 Jan;51(1):76–8
A nomographic ruler for body temperature, pressure, saturated with water (BTPS) correction. Vooren PH. **Am Rev Respir Dis** 1967 Aug;96(2):324–5
Temperature measurement and blood gas reporting in studies of hypothermic cardiopulmonary bypass [letter; comment] Murkin JM. **Anesthesiology** 1990 Jun;72(6):1100–1 Comment on: Anesthesiology 1990 Jan;72(1):7–15.
Porcine malignant hyperthermia: critical temperatures for in vivo and in vitro responses. Nelson TE. **Anesthesiology** 1990 Sep;73(3):449–54
Tympanic temperatures [letter] Auerbach AJ. **Ann Emerg Med** 1990 Sep;19(9):1078
The effect of mild hyperthermia and hypothermia on brain damage following 5, 10, and 15 minutes of forebrain ischemia. Minamisawa H, et al. **Ann Neurol** 1990 Jul; 28(1):26–33
Rewarming infants on a heated mattress [letter; comment] Weaver LT. **Arch Dis Child** 1989 Nov;64(11):1642 Comment on: Arch Dis Child 1989 May;64(5):687–92.
Gingival blood flow and temperature changes in young humans with a history of periodontitis. Baab DA, et al. **Arch Oral Biol** 1990;35(2):95–101
Heating produced by ultrasound in bone and soft tissue. Lehmann JF, et al. **Arch Phys Med Rehabil** 1967 Aug; 48(8):397–401
Simple office methods to predict ovulation: the clinical usefulness of a new urine luteinizing hormone kit compared to basal body temperature, cervical mucus and ultrasound. Yong EL, et al. **Aust N Z J Obstet Gynaecol** 1989 May; 29(2):155–60
Cusum plotting of temperature charts for assessing antimicrobial treatment in neutropenic patients. Kinsey SE, et al. **BMJ** 1989 Sep 23;299(6702):775–6
Effect of peroperative normothermia on postoperative protein metabolism in elderly patients undergoing hip arthroplasty. Carli F, et al. **Br J Anaesth** 1989 Sep; 63(3):276–82
Alterations in body and skin temperatures caused by MRI [letter; comment] Dennis JA, et al. **Br J Radiol** 1990 Apr; 63(748):317 Comment on: Br J Radiol 1989 Oct;62(742):904–9.
Alterations in body and skin temperatures caused by magnetic resonance imaging: is the recommended exposure for radiofrequency radiation too conservative? [see comments] Shellock FG, et al. **Br J Radiol** 1989 Oct;62(742):904–9 Comment in: Br J Radiol 1990 Apr;63(748):317.
Reducing renal injury during transplantation [see comments] Forsythe JL, et al. **Br J Surg** 1989 Oct;76(10):999–1001 Comment in: Br J Surg 1990 Apr;77(4):474.
Hyperthermia–induced seizures with a servo system: neurophysiological roles of age, temperature elevation rate and regional GABA content in the rat. Morimoto T, et al. **Brain Dev** 1990;12(3):279–83
Core threshold temperatures for sweating. Mekjavić IB, et al. **Can J Physiol Pharmacol** 1989 Sep;67(9):1038–44
Evaluation of an inaccurate pulmonary artery catheter thermistor. Gotchall JI, et al. **Chest** 1989 Oct;96(4):941–3
The chronopathology of breast pre–cancer. Simpson HW, et al. **Chronobiologia** 1989 Oct–Dec;16(4):365–72
Assessment of an aural infrared sensor for body temperature measurement in children. Rhoads FA, et al. **Clin Pediatr (Phila)** 1990 Feb;29(2):112–5
Prediction of oesophageal temperatures from core temperatures measured at other sites in man. Gibson TM, et al. **Clin Phys Physiol Meas** 1981 Nov;2(4):247–52
Tympanic thermometry in heat stroke: is it justifiable? Tayeb OS, et al. **Clin Physiol Biochem** 1989;7(5):255–62
Retrospective study of temperature rhythms of intensive care patients. Tweedie IE, et al. **Crit Care Med** 1989 Nov; 17(11):1159–65
Ocular surface temperature. Efron N, et al. **Curr Eye Res** 1989 Sep;8(9):901–6
gamma–Hydroxybutyric acid–induced seizures bear no relation to core temperature. Snead OC 3d. **Epilepsia** 1990 May–Jun;31(3):253–8
Testicular temperatures measured by thermistor probe and contact thermography. Harrison RM, et al. **Fertil Steril** 1990 Jul;54(1):173–4
Improved prediction of postovulatory day using temperature recording, endometrial biopsy, and serum progesterone. Pillet MC, et al. **Fertil Steril** 1990 Apr;53(4):614–9
Spontaneous otoacoustic emissions in the European edible frog (Rana esculenta): spectral details and temperature dependence. van Dijk P, et al. **Hear Res** 1989 Nov; 42(2–3):273–82 (50 ref.)
Characterization of tumour temperature distributions in hyperthermia based on assumed mathematical forms. Edelstein–Keshet L, et al. **Int J Hyperthermia** 1989 Nov–Dec;5(6):757–77 (15 ref.)
An evaluation of the Doppler–laser system in monitoring the free skin flap in the rat. Moneta MR, et al. **Ital J Orthop Traumatol** 1989 Sep;15(3):361–6
Blood gas measurements during exercise: errors due to temperature correction. Jones JH, et al. **J Appl Physiol** 1989 Aug;67(2):879–84
Measurement of pulp temperature increase to externally applied heat (argon laser, hot water, drilling). Renneboog–Squilbin C, et al. **J Biol Buccale** 1989 Sep; 17(3):179–86
Core temperature response to immersed bicycle ergometer exercise at water temperatures of 21 degrees, 25 degrees, and 29 degrees C. Israel DJ, et al. **J Burn Care Rehabil** 1989 Jul–Aug;10(4):336–45
The influence of mild body and brain hypothermia on ischemic brain damage. Minamisawa H, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):365–74
Effect of temperature on long–term survival of anucleate giant axons in crayfish and goldfish. Blundon JA, et al. **J Comp Neurol** 1990 Jul 15;297(3):377–91
Studies on experimental Jembrana disease in Bali cattle. II. Clinical signs and haematological changes. Soesanto M, et al. **J Comp Pathol** 1990 Jul;103(1):61–71
Endogenous 24–hour cycle of core temperature and oxygen consumption in week–old Zucker rat pups. Mumm B, et al. **J Comp Physiol [B]** 1989;159(5):569–75
Observation by MR imaging of in vivo temperature changes induced by radio frequency hyperthermia. Hall AS, et al. **J Comput Assist Tomogr** 1990 May–Jun;14(3):430–6
Infrared tympanic thermography in the emergency department. Green MM, et al. **J Emerg Med** 1989 Sep–Oct; 7(5):437–40
The relationship between body mass and rate of rewarming from hibernation and daily torpor in mammals. Geiser F, et al. **J Exp Biol** 1990 Jul;151:349–59
Thermal self–regulation for pain control in reflex sympathetic dystrophy syndrome. Grunert BK, et al. **J Hand Surg [Am]** 1990 Jul;15(4):615–8
Thermographic evaluation of rats with complete sciatic nerve transection. Gerow G, et al. **J Manipulative Physiol Ther** 1990 Jun;13(5):257–61
Prediction of temperature profiles in the human skin and subcutaneous tissues. Pal DS, et al. **J Math Biol** 1990; 28(3):355–64
Body temperature differentially affects ethanol sensitivity in both inbred strains and selected lines of mice. Finn DA, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):1229–35
Temperature biofeedback for Raynaud's syndrome [letter] Freedman RR. **JAMA** 1989 Nov 17;262(19):2681
Case studies on the effect of exercise and hot water submersion on intracardiac temperature and the performance of a pacemaker which varies pacing rate based on temperature. Fearnot NE, et al. **Jpn Heart J** 1989 May; 30(3):353–63
Metabolic and blood pressure response to feeding activity is enhanced in freely moving spontaneously hypertensive rats. Shido O, et al. **Jpn J Physiol** 1989;39(4):537–48
A simplified telemetry system for monitoring body

temperature in small animals. Varosi SM, et al. **Lab Anim Sci** 1990 May;40(3):299–302

Temperature, labour, and epidural analgesia [letter] Gleeson NC, et al. **Lancet** 1989 Oct 7;2(8667):861–2

Analysis of gender differences in the auditory brainstem response. Dehan CP, et al. **Laryngoscope** 1990 Jan; 100(1):18–24

Whole body heat balance during the human thoracic hyperthermia. Lou Z, et al. **Med Biol Eng Comput** 1990 Mar;28(2):171–81

Does heat damage fetuses? Gericke GS, et al. **Med Hypotheses** 1989 Aug;29(4):275–8

Toe temperatures during arctic training. Travis S, et al. **Milit Med** 1990 Apr;155(4):162–6

The use of rectal temperature to monitor thermal injury of marathon runners in temperate weather. Ash CJ, et al. **Mo Med** 1990 May;87(5):298–303

Temperature dependence of the electrical and mechanical responses of the adductor pollicis muscle in humans. Hopf HC, et al. **Muscle Nerve** 1990 Mar;13(3):259–62

How long is too long in a spa pool? [letter] Ridge BR, et al. **N Engl J Med** 1990 Sep 20;323(12):835–6

Cot death and temperature [letter] Holborow P. **N Z Med J** 1990 Apr 11;103(887):164

Postoperative temperature measurement. Heidenreich T, et al. **Nurs Res** 1990 May–Jun;39(3):153–5

Liquid crystal thermographs: 'best choice' for body-heat measurement. Arenas Páez EA. **Nurse Pract** 1990 Apr; 15(4):8, 10

Thermally controlled laser irradiation of the myocardium with intraoperative ultrasound monitoring. Watanabe G, et al. **PACE** 1990 May;13(5):653–62

Correlation of body temperatures taken by different routes. Lorin MI. **Pediatr Infect Dis J** 1990 Jun;9(6):459

Temperature affects ethanol lethality in C57BL/6, 129, LS and SS mice. Finn DA, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):375–80

Electrophysiologic responses of human sural nerve to temperature. Greathouse DG, et al. **Phys Ther** 1989 Nov; 69(11):914–22

Body temperature changes during inflammation: their mediation and nutritional significance. Kluger MJ. **Proc Nutr Soc** 1989 Sep;48(3):337–45 (69 ref.)

Effects of placebo (saline) injections on core temperature in the rat. Dilsaver SC, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(3):417–22

Temperature effects on pulmonary receptor responses to airway pressure and CO2 in Alligator mississippiensis. Douse MA, et al. **Respir Physiol** 1989 Dec;78(3):331–43

Respiratory heat exchange in mammals. Schroter RC, et al. **Respir Physiol** 1989 Dec;78(3):357–67

Moderate cold exposure in the Faroe fishing industry. Lundqvist GR, et al. **Scand J Work Environ Health** 1990 Aug;16(4):278–83

Evaluation of tolerance limits for humans under heat stress and the problems involved. Wenzel HG, et al. **Scand J Work Environ Health** 1989;15 Suppl 1:7–14

Effects of normothermic versus mild hyperthermic forebrain ischemia in rats. Dietrich WD, et al. **Stroke** 1990 Sep; 21(9):1318–25

Preservation of brain temperature during ischemia in rats. Minamisawa H, et al. **Stroke** 1990 May;21(5):758–64

Biometrical research on some parameters of the menstrual cycle. Colombo B. **Suppl Int J Gynecol Obstet** 1989;1:13–8

Effect of different body–exercise modes on the rate response of the temperature-controlled pacemaker Nova MR. Zegelman M, et al. **Thorac Cardiovasc Surg** 1990 Jun; 38(3):181–5

Hypothermia protects brain function in acute carbon monoxide poisoning. Sutariya B, et al. **Vet Hum Toxicol** 1989 Oct;31(5):436–41

Febrile response in malnutrition. Doherty JF, et al. **West Indian Med J** 1989 Dec;38(4):209–12

Milk temperature in the claw piece of the milking machine and mammary surface temperature are predictors of internal mammary temperature in goats. Caruolo EV, et al. **Zentralbl Veterinarmed [A]** 1990 Feb;37(1):61–7

[Differences in temperature of the cervical, axillary and rectal region in children] Wang Q, et al. **Chung Hua Hu Li Tsa Chih** 1990 Jun;25(6):268–9 **(Chi)**

[Influence of atrial and ventricular temperature during cardiac arrest for open heart surgery on postoperative arrhythmias] Gao SZ. **Chung Hua Wai Ko Tsa Chih** 1990 Jan;28(1):13–5, 60 (Eng. Abstr.) **(Chi)**

[Body temperature measurement. Rectal—oral?] Bagger H. **Ugeskr Laeger** 1990 Feb 26;152(9):607–9 (Eng. Abstr.) **(Dan)**

[Axillary temperature rhythms: the predominance of ultradian periodicity in major affective disorders] Bicakova-Rocher A, et al. **C R Acad Sci [III]** 1989; 309(9):331–5 (Eng. Abstr.) **(Fre)**

[Prognostic factors in ruptured intracranial aneurysm. Significance of the temperature curve] Sindou M, et al. **Presse Med** 1990 Mar 10;19(9):411–5 (Eng. Abstr.) **(Fre)**

[The differential diagnosis of sudden infant death or child abuse—a case of fatal hyperthermia] Joachim H, et al. **Beitr Gerichtl Med** 1989;47:333–6 (Eng. Abstr.) **(Ger)**

[Does measuring axillo-rectal temperature difference help in the diagnosis of acute appendicitis?] Putzki H, et al. **Langenbecks Arch Chir** 1988;373(5):310–2 (Eng. Abstr.) **(Ger)**

[Evaluation of individual thermal load in working environments with non-homogeneous microclimatic conditions] Terzi R, et al. **Med Lav** 1989 May–Jun; 80(3):211–7 (Eng. Abstr.) **(Ita)**

[Computerized dynamic endothermography of the gastrointestinal mucosa as an indirect index of the state of vascularization of the abdominal organs. A preliminary note] Terrizzi A, et al. **Minerva Chir** 1989 Dec 31; 44(23–24):2389–92 (Eng. Abstr.) **(Ita)**

[Diurnal rhythms of body temperature, heart rate, and behaviour in the stanchioned adult Shiba goats] Matsui K. **Jikken Dobutsu** 1990 Apr;39(2):231–8 (Eng. Abstr.) **(Jpn)**

[Body temperature of newborn cynomolgus monkeys] Ono T, et al. **Jikken Dobutsu** 1989 Oct;38(4):293–6 (Eng. Abstr.) **(Jpn)**

[Myocardial protection of temperature] Araki K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep;37(9):1950–7 (Eng. Abstr.) **(Jpn)**

[Development of multisensor rate responsive pacemaker] Sugiura T. **Nippon Rinsho** 1990 Feb;48(2):395–400 **(Jpn)**

[Central venous temperature sensing] Tanaka S, et al. **Nippon Rinsho** 1990 Feb;48(2):386–94 **(Jpn)**

[Body temperature measurement. A comparison of rectal measurement using a mercury thermometer with oral axillary measurement using a new electronic thermometer] Fretheim R, et al. **Tidsskr Nor Laegeforen** 1990 Jan 30; 110(3):369–71 (Eng. Abstr.) **(Nor)**

[Changes in the functional activity of macrophages of the skin and regional lymph node after exposure of albino rats to total deep hyperthermia] Miadelets OD. **Arkh Anat Gistol Embriol** 1989 Jun;96(6):65–9 (Eng. Abstr.) **(Rus)**

[Microanatomical organization and cytoarchitectonics of lymphoid tissue in the mesenteric lymph nodes under conditions of experimental total hyperthermia] Zalko TM, et al. **Arkh Anat Gistol Embriol** 1989 Jun;96(6):60–5 (Eng. Abstr.) **(Rus)**

[Daily rhythms of human body temperature during clinostatic hypokinesis] Lkhagva L. **Probl Kosm Biol** 1989;64:76–82 **(Rus)**

[Radiothermometric monitoring of the dynamics of wound process in the eye] Lychev VV, et al. **Vestn Oftalmol** 1989 Jul–Aug;105(4):67–70 (Eng. Abstr.) **(Rus)**

[The Northern variant of the norm in the thermal picture of the face] Egorova TA, et al. **Vestn Otorinolaringol** 1990 Jan–Feb;(1):54–8 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Dihydropyridino-sensitive calcium channels in opioid-induced thermic and behavioral effects. Cavicchini E, et al. **Acta Physiol Hung** 1990;75 Suppl:55–6

Central temperature effects of the transmitter amino acids. Yakimova K, et al. **Acta Physiol Pharmacol Bulg** 1989; 15(3):50–4

Modification of rat thermal responses to morphine by alpha-FMH suggests a role for neural histamine in morphine tolerance. Arrigo-Reina R, et al. **Agents Actions** 1990 Apr;30(1–2):213–5

Central interleukin 1-elicited hyperinsulinemia is mediated by prostaglandins but not autonomics. Cornell RP. **Am J Physiol** 1989 Oct;257(4 Pt 2):R839–46

Prostaglandin fevers in rats: regulated change in body temperature or change in regulated body temperature? Feng JD, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R695–9

Enhanced thermogenic response to epinephrine after 48-h starvation in humans. Mansell PI, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R87–93

Intrapreoptically microdialyzed and microinjected norepinephrine evokes different thermal responses. Quan N, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R816–21

Comparison of the effects of several endotoxin preparations on body temperature and metabolic rate in the rat. Horan MA, et al. **Can J Physiol Pharmacol** 1989 Sep;67(9):1011–4

Body temperature-dependent action of baclofen in rat stomach. Relation to acid secretion and ulcerogenicity. Takeuchi K, et al. **Dig Dis Sci** 1990 Apr;35(4):458–66

Alcohol and the auditory brain-stem response, brain temperature, and blood alcohol curves: explanation of a paradox. Lee JA, et al. **Electroencephalogr Clin Neurophysiol** 1990 Sep–Oct; 77(5):362–75

Glucose-induced thermogenesis in obese subjects with or without familial history of obesity. Verga S, et al. **Eur J Clin Nutr** 1990 May;44(5):397–404

Gi proteins and calcium in dynorphin-induced hypothermia and behaviour. Cavicchini E, et al. **Eur J Pharmacol** 1990 May 16;180(2–3):357–60

Attenuation of hypothermic effects of ethanol by alpha 2-adrenoceptor blockers. Durcan MJ, et al. **Eur J Pharmacol** 1989 Aug 3;166(3):381–6

The role of multiple dopamine receptors in apomorphine and N-n-propylnorapomorphine-induced climbing and hypothermia. Moore NA, et al. **Eur J Pharmacol** 1990 Mar 20;178(2):195–201

Naloxone does not produce withdrawal hypothermia in chronically phencyclidine-treated rats. Pechnick RN, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):295–8

The effects of dopamine D-1 and D-2 receptor agonists on body temperature in male mice. Sánchez C. **Eur J Pharmacol** 1989 Nov 21;171(2–3):201–6

Different effects of 8-OH-DPAT, a 5-HT1A receptor agonist, on cortical acetylcholine release, electrocortigram and body temperature in guinea pigs and rats. Siniscalchi A, et al. **Eur J Pharmacol** 1990 Jan 10;175(2):219–23

The rise of body temperature induced by the stimulation of dopamine D1 receptors is increased in acutely reserpinized mice. Vasse M, et al. **Eur J Pharmacol** 1990 May 31; 181(1–2):23–33

Involvement of GABAA receptor sites in diazepam hypothermia. Zarrindast MR, et al. **Gen Pharmacol** 1989; 20(6):855–9

Effect of a single oral dose of ascorbic acid on body temperature and trace mineral fluxes in healthy men and women. Johnston CS. **J Am Coll Nutr** 1990 Apr;9(2):150–4

Immunoadjuvants enhance the febrile responses of rats to endogenous pyrogen. Stitt JT, et al. **J Appl Physiol** 1989 Nov;67(5):1734–9

Enhancement of the febrile responses of rats to endogenous pyrogen occurs within the OVLT region. Stitt JT, et al. **J Appl Physiol** 1989 Nov;67(5):1740–6

The effect of repeated treatment with antidepressant drugs on the thyrotropin-releasing hormone (TRH)-induced hyperthermia in mice. Przegaliński E, et al. **J Pharm Pharmacol** 1989 Sep;41(9):639–41

Effects of acute and chronic administration of (+)-SKF 10,047 on body temperature in the rat: cross-sensitization with phencyclidine. Bejanian M, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):1253–8

Pharmacological evaluation of water soluble cannabinoids and related analogs. Compton DR, et al. **Life Sci** 1990; 46(22):1575–85

Central administration of neuropeptide Y induces hypothermia in mice. Possible interaction with central noradrenergic systems. Esteban J, et al. **Life Sci** 1989; 45(25):2395–400

The intrinsic and interactive effects of RO 15-4513 and ethanol on locomotor activity, body temperature, and blood glucose concentration. Wood AL, et al. **Life Sci** 1989; 45(16):1467–73

The parasympathetic nervous system and the thermic effect of glucose/insulin infusions in humans. Dériaz O, et al. **Metabolism** 1989 Nov;38(11):1082–8

Dopamine D1 and D2 receptors mediate opposite effects of apomorphine on the body temperature of reserpinized mice. Costentin J, et al. **Neuropharmacology** 1990 Jan;29(1):31–5

The behavioural, but not the hypothermic or corticosterone, response to 8-hydroxy-2-(DI-n-propylamino)-tetralin, is antagonized by NAN-190 in the rat. Przegaliński E, et al. **Neuropharmacology** 1990 Jun;29(6):521–6

Chronic restraint stress does not sensitize a muscarinic mechanism. Flemmer DD, et al. **Pharmacol Biochem Behav** 1989 Sep;34(1):207–8

Isolate housing alters ethanol sensitivity in long-sleep and short-sleep mice. Jones BC, et al. **Pharmacol Biochem Behav** 1990 Feb;35(2):469–72

Therapeutic and hypothermic properties of diazepam altered by a diazepam-chlorpromazine association. Taukulis HK, et al. **Pharmacol Biochem Behav** 1989 Sep;34(1):1–6

Genetic differences in opiate receptor concentration and sensitivity to ethanol's effects. Yirmiya R, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):793–6

Behavioural, electrocortical power spectrum and body temperature effects of ribavirin in the rat. Naccari F, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:33–4

Modification of CCK-8 hypothermia after chronic administration of dexamethasone in the rat. Pagano G, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:17–8

Effects of kappa- and mu-selective opiate agonists on colonic temperature in normoglycaemic and streptozotocin-treated hyperglycaemic mice. Bansinath M, et al. **Pharmacol Toxicol** 1990 May;66(5):324–8

Cocaine and body temperature in the rat: effects of ambient temperature. Lomax P, et al. **Pharmacology** 1990; 40(2):103–9

Central versus peripheral effects on temperature preference and body temperature following alteration of 5-HT in maturing mice. Goodrich C, et al. **Physiol Behav** 1989 Aug; 46(2):203–9

Effects of antithyroid drug on the rectal temperature and metabolic parameters of ducks (Cairina moschata). Artoni SM, et al. **Poult Sci** 1989 Oct;68(10):1381–4

Chronic treatment with ethanol produces supersensitivity to oxotremorine. Majchrzak MJ, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(3):379–86

Behavioral and physiological effects of leukotriene C4. Landauer MR, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Apr; 39(4):247–52

The effects of gepirone on neuroendocrine function and temperature in humans. Anderson IM, et al. **Psychopharmacology (Berl)** 1990;100(4):498–503

Antagonism of the hypothermic effect of clozapine in mice by centrally-active alpha 2-adrenergic antagonists and alpha 1-adrenergic agonists. Menon MK, et al. **Psychopharmacology (Berl)** 1990;101(1):67–72

Relationship between initial sensitivity, acute tolerance and chronic tolerance to ethanol in a heterogeneous population of Swiss mice. San-Marina A, et al. **Psychopharmacology (Berl)** 1989;99(4):450–7

Conditioned stimulus control of morphine hyperthermia. Schwarz KS, et al. **Psychopharmacology (Berl)** 1990; 101(1):77–84

Electro-thermometric study on the healing of free gingival grafts covered by two different dressings. Jańczuk Z, et al. **Zahn Mund Kieferheilkd** 1990;78(3):235-9

[Effects of synthetic new drug SC1001-sodium on respiratory frequency, heart rate, rectal temperature and electrocorticogram in rabbits] Chen QX, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Mar;20(1):28-30 (Eng. Abstr.) **(Chi)**

GENETICS

Variation in the three-week body temperature of broilers and Athens-Canadian randombred chickens. Washburn KW, et al. **Poult Sci** 1990 Mar;69(3):486-8

PHYSIOLOGY

Mechanical performance of myocardium from hibernating and nonhibernating mammals. Smith DE, et al. **Am Heart J** 1966 Apr;71(4):515-21

Influence of limb temperature on sensory nerve conduction velocity in horses. Wheeler SJ. **Am J Vet Res** 1989 Nov; 50(11):1817-9

Maintenance of body temperature in elderly patients who have joint replacement surgery. A comparison between the heat and moisture exchanger and heated humidifier. Yam PC, et al. **Anaesthesia** 1990 Jul;45(7):563-5

Skin-surface warming: heat flux and central temperature. Sessler DI, et al. **Anesthesiology** 1990 Aug;73(2):218-24

Rectal-skin temperature difference in septicaemic newborn infants. Messaritakis J, et al. **Arch Dis Child** 1990 Apr;65(4 Spec No):380-2

On chilling [editorial] Boucot KR. **Arch Environ Health** 1967 Mar;14(3):379

Temperature sensitivity of the human cardiac pacemaker during exercise. Bolter CP, et al. **Arch Int Physiol Biochim** 1989 Dec;97(6):493-7

Epidural temperature and possible intracerebral temperature gradients in man. Mellergård P, et al. **Br J Neurosurg** 1990; 4(1):31-8

Determination of luteal phase length by quantitative basal temperature methods: validation against the midcycle LH peak. Prior JC, et al. **Clin Invest Med** 1990 Jun;13(3):123-31

Nasal mucosal temperature and the effect of acute infective rhinitis. Akerlund A, et al. **Clin Otolaryngol** 1989 Dec; 14(6):529-34

Effect of fasting and acute heat stress on body temperature, blood acid-base and electrolyte status in chickens. Ait-Boulahsen A, et al. **Comp Biochem Physiol [A]** 1989; 94(4):683-7

An infrared thermographic study of surface temperature in relation to external thermal stress in the Mongolian gerbil, Meriones unguiculatus. Klir JJ, et al. **Comp Biochem Physiol [A]** 1990;96(1):141-6

Oral temperature and performance in 8 h and 12 h shifts. Daniel J, et al. **Ergonomics** 1989 Jul;32(7):689-96

Influence of repeated passive body heating on subsequent night sleep in humans. Di Nisi J, et al. **Eur J Appl Physiol** 1989;59(1-2):138-45

Effect of meal frequency on the thermic effect of food in women. Kinabo JL, et al. **Eur J Clin Nutr** 1990 May; 44(5):389-95

Hippocampal cell death following ischemia: effects of brain temperature and anesthesia. Freund TF, et al. **Exp Neurol** 1990 Jun;108(3):251-60

Hypospermia and its relationship to varicocele and intrascrotal temperature. Stephenson JD, et al. **Fertil Steril** 1968 Jan-Feb;19(1):110-7

Effect of post-hypoxic acclimatization on extremity temperature during exposure to acute cold stress in man. Nair CS, et al. **Indian J Med Res** 1989 Oct;90:341-5

Circadian rhythm of rectal temperature in man with two different types of clothing. Jeong WS, et al. **Int Arch Occup Environ Health** 1990;62(4):295-8

Effect of elevation of body temperature on the electroretinogram of the rat. Ahmed B, et al. **Int J Hyperthermia** 1989 Nov-Dec;5(6):675-82

Cerebral blood flow response to the tissue temperature in tumour and brain tissues. Satoh T, et al. **Int J Hyperthermia** 1989 Nov-Dec;5(6):683-96

Changes in insulation of body tissue and wet suits during underwater exercise at various atmospheric pressures. Iwamoto J, et al. **J Appl Physiol** 1990 Feb;68(2):659-64

Passive warming of airway gases (artificial nose) improves accuracy of esophageal temperature monitoring. Siegel MN, et al. **J Clin Monit** 1990 Apr;6(2):89-92

Plasma catecholamine concentrations of newborn piglets in thermoneutral and cold environments. Mayfield SR, et al. **J Dev Physiol** 1989 Jun;11(6):331-4

Circadian rhythms in the body temperatures of intensive care patients with brain lesions. Dauch WA, et al. **J Neurol Neurosurg Psychiatry** 1990 Apr;53(4):345-7

Modulating effect of body temperature on the toxic response produced by the pesticide chlordimeform in rats. Watkinson WP, et al. **J Toxicol Environ Health** 1989; 28(4):483-500

Effect of a practical neck cooling device on core temperature during exercise. Gordon NF, et al. **Med Sci Sports Exerc** 1990 Apr;22(2):245-9

Stimulus-activated changes in brain tissue temperature in the anesthetized rat. LaManna JC, et al. **Metab Brain Dis** 1989 Dec;4(4):225-37

Evaluation of the temperature response to exercise testing in patients with single chamber, rate adaptive pacemakers: a multicenter study. Fearnot NE, et al. **PACE** 1989 Nov; 12(11):1806-15

Evaluation of an infrared tympanic membrane thermometer in pediatric patients. Kenney RD, et al. **Pediatrics** 1990 May;85(5):854-8

Changes in heart rate and body temperature during passive avoidance behavior in rats. Wan RQ, et al. **Physiol Behav** 1990 Mar;47(3):493-9

Effect of ambient temperature and running wheel activity on the outcome of pregnancy in CD-1 mice. Berman E, et al. **Teratogenesis Carcinog Mutagen** 1990;10(1):11-20

Haematological, biochemical and physiological changes in horses and ponies during the cross country stage of driving trial competitions. Snow DH. **Vet Rec** 1990 Mar 10; 126(10):233-9

[Human tympanic membrane temperature] Uchino K. **Nippon Seirigaku Zasshi** 1989;51(12):387-404 (80 ref.) **(Jpn)**

[Relation between hearing acuity and individual diurnal rhythm of body temperature] Karnicki C. **Otolaryngol Pol** 1989;43(5-6):396-400 (Eng. Abstr.) **(Pol)**

[The temperature of the internal environment as one of the mechanisms regulating the internal organs. The regulation of the rate of cardiac contractions by the temperature of the venous inflow] Samonina GE. **Biol Nauki** 1990;(4):6-21 (99 ref.) (Eng. Abstr.) **(Rus)**

[Effect of hyperthermia on the cardio- and hemodynamics and acid-base balance of the blood in dogs] Shimanskaia TV, et al. **Fiziol Zh** 1990 May-Jun;36(3):14-20 (Eng. Abstr.) **(Rus)**

[Temperature differences between the arterial and venous blood in the major vessels of the rabbit] Khoreva EV, et al. **Fiziol Zh SSSR** 1989 Aug;75(8):1140-5 (Eng. Abstr.) **(Rus)**

[Comparative evaluation of thermographic and radiothermometric methods of examination during mass screening of women with dyshormonal hyperplasia of the breast] Terent'ev IG, et al. **Khirurgiia (Mosk)** 1990 Apr; (4):30-2 (Eng. Abstr.) **(Rus)**

[Diagnosis of diseases of the liver and biliary tract by thermography] Andreev NG, et al. **Klin Med (Mosk)** 1989 Oct;67(10):84-7 **(Rus)**

[Encephaloradiothermometry in the diagnosis of early stages of cerebrovascular insufficiency] Gustov AV, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):27-31 (Eng. Abstr.) **(Rus)**

[Thermal asymmetry of the rat brain in catalepsy] Petrova EV, et al. **Zh Vyssh Nerv Deiat** 1989 Nov-Dec;39(6):1160-2 **(Rus)**

RADIATION EFFECTS

Thermal and physiological changes in rats exposed to CW and pulsed 2.8 GHz radiofrequency radiation in E and H orientations. Frei MR, et al. **Int J Radiat Biol** 1989 Dec; 56(6):1033-44

Thermally induced optical property changes in myocardium at 1.06 microns. Derbyshire GJ, et al. **Lasers Surg Med** 1990;10(1):28-34

Thermal and physiological responses of rats exposed to 2.45-GHz radiofrequency radiation: a comparison of E and H orientation. Frei MR, et al. **Radiat Environ Biophys** 1989; 28(3):235-46

[Functional asymmetry as an indicator of the biological effect of ultrahigh frequency electromagnetic fields] Stoian EF. **Gig Sanit** 1989 Oct;(10):81-2 **(Rus)**

BODY TEMPERATURE REGULATION

Rats of Wistar strain discriminate by rectal temperature the two types of stressors (inescapable shocking versus height and open space) whereas genetically hypertensive rats of Koletsky type do not. Golda V, et al. **Act Nerv Super (Praha)** 1989 Jun;31(2):140-1

Thermic effect of parenteral nutrition in septic and nonseptic individuals. Arnold J, et al. **Am J Clin Nutr** 1989 Oct; 50(4):853-60

Comparison of thermic effects of constant and relative caloric loads in lean and obese men. Segal KR, et al. **Am J Clin Nutr** 1990 Jan;51(1):14-21

Ambient temperature and food costs: effects on behavior patterns in rats. Collier GH, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):R1328-34

Nonshivering thermogenesis and adaptation to fasting in king penguin chicks. Duchamp C, et al. **Am J Physiol** 1989 Oct; 257(4 Pt 2):R744-51

Facial vessels of desert camel (Camelus dromedarius): role in brain cooling. Elkhawad AO, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):R602-7

Prostaglandin fevers in rats: regulated change in body temperature or change in regulated body temperature? Feng JD, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R695-9

Saliva spreading, activity, and body temperature regulation in the rat. Hainsworth FR. **Am J Physiol** 1967 Jun; 212(6):1288-92

Defective regulation of thyroxine 5'-deiodinase in brown adipose tissue of ob/ob mice. Kates AL, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):E7-15

Defective thermoregulatory thermogenesis does not cause onset of obesity in Zucker rats. Kaul R, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):E11-8

Effect of age and gender on thermoregulation. McDonald RB, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R700-4

Defective metabolic effects of norepinephrine and insulin in obese Zucker rat brown adipose tissue. Marette A, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E320-8

Temperature regulation in biotelemetered spontaneously hypertensive rats. Morley RM, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):R1064-9

Heat production in isolated heart myocytes: differences among species. Ponce-Hornos JE, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H880-6

Circadian variation of thermoregulatory responses during exercise in rats. Tanaka H, et al. **Am J Physiol** 1990 Apr; 258(4 Pt 2):R836-41

Effect of hematocrit on behavioral thermoregulation of the toad Bufo marinus. Wood SC. **Am J Physiol** 1990 Apr;258(4 Pt 2):R848-51

Passive or active inspired gas humidification increases thermal steady-state temperatures in anesthetized infants. Bissonnette B, et al. **Anesth Analg** 1989 Dec;69(6):783-7

Central venous blood temperature fluctuations and thermodilution signal processing in dogs. Johnson RW, et al. **Ann Biomed Eng** 1989;17(6):657-69

The thermal environment in which 3-4 month old infants sleep at home [letter; comment] Bacon CJ. **Arch Dis Child** 1989 Oct;64(10):1515-6 Comment on: Arch Dis Child 1989 Apr;64(4):600-4.

Temperature effect on critical flicker fusion in multiple sclerosis. Namerow NS. **Arch Neurol** 1971 Sep;25(3):269-75

Central control of body temperature. A review. Hissa R. **Arctic Med Res** 1990 Jan;49(1):3-15 (62 ref.)

The effects of breathing warm air during cold exposure. Romet TT, et al. **Arctic Med Res** 1988;47 Suppl 1:272-6

Insidious hypothermia during raft use. Kaufman JW, et al. **Aviat Space Environ Med** 1990 Jun;61(6):569-75

The endocrine control of the onset of thermogenesis at birth. Gunn TR, et al. **Baillieres Clin Endocrinol Metab** 1989 Nov; 3(3):869-86 (86 ref.)

Hyperthermia impairs retrieval of an overtrained spatial task in the Morris water maze. Rauch TM, et al. **Behav Neural Biol** 1989 Nov;52(3):321-30

Preventing and alleviating hypothermia-induced amnesia in weanling and young adult rats. Hinderliter CF, et al. **Behav Neurosci** 1989 Dec;103(6):1200-6

Effects of light treatment on core body temperature in seasonal affective disorder. Rosenthal NE, et al. **Biol Psychiatry** 1990 Jan 1;27(1):39-50

Thermal load alters sleep. Shapiro CM, et al. **Biol Psychiatry** 1989 Nov;26(7):736-40

Increased thermogenesis in children with type I diabetes [letter; comment] Molnár D, et al. **BMJ** 1989 Oct 7; 299(6704):919 Comment on: BMJ 1989 Aug 19;299(6697):487-91.

Energy expenditure in children with type I diabetes: evidence for increased thermogenesis [see comments] Müller MJ, et al. **BMJ** 1989 Aug 19;299(6697):487-91 Comment in: BMJ 1989 Oct 7;299(6704):919.

Humidification and loss of body heat during anaesthesia. I: Quantification and correlation in the dog. Shanks CA. **Br J Anaesth** 1974 Nov;46(11):859-62

Humidification and loss of body heat during anaesthesia. II: Effects in surgical patients. Shanks CA. **Br J Anaesth** 1974 Nov;46(11):863-6

Review of the epidemiology of sudden infant death syndrome and its relationship to temperature regulation. Kinmonth AL. **Br J Gen Pract** 1990 Apr;40(333):161-3 (38 ref.)

Cardiovascular fitness and thermoregulation during prolonged exercise in man. Greenhaff PL. **Br J Sports Med** 1989 Jun;23(2):109-14

Effect of plumage renewal after induced moulting on subsequent laying efficiency and persistence. Herremans M, et al. **Br Poult Sci** 1989 Sep;30(3):613-22

Degeneration of hippocampal CA1 neurons following transient ischemia due to raised intracranial pressure: evidence for a temperature-dependent excitotoxic process. Duhaime AC, et al. **Brain Res** 1990 Mar 26;512(1):169-74

Maternal thermal stimulation changes metabolic activity in fetal hypothalamus. Imai-Matsumura K, et al. **Brain Res** 1990 Apr 16;513(2):295-8

Action potential duration increases as body temperature decreases during hibernation. Krilowicz BL, et al. **Brain Res** 1989 Sep 25;498(1):73-80

Thermogenetic changes following frontal neocortex stimulation. De Luca B, et al. **Brain Res Bull** 1989 Jun; 22(6):1003-7

Activation of cerebrocortical type II 5'-deiodinase activity in Syrian hamsters kept under short photoperiod and reduced ambient temperature. Puig-Domingo M, et al. **Brain Res Bull** 1989 Jun;22(6):975-9

Increased nonshivering thermogenesis, brown fat cytochrome-c oxidase activity, GDP binding, and uncoupling protein mRNA levels after short daily cold exposure of Phodopus sungorus. Wiesinger H, et al. **Can J Physiol Pharmacol** 1990 Feb;68(2):195-200

Heat production by the human left ventricle: measurement by a thermodilution technique. Stewart JT, et al. **Cardiovasc Res** 1990 May;24(5):418-22

Thermoregulatory aspects of adipose tissue. Gregory EL. **Clin Dermatol** 1989 Oct-Dec;7(4):78-92 (31 ref.)

A comparison of some thermoregulatory responses in healthy children and in children with burn injury. Childs C, et al. **Clin Sci** 1989 Oct;77(4):425-30

Effects of underfeeding and of starvation on

thermoregulatory responses to cooling in women. Mansell PI, et al. **Clin Sci** 1989 Sep;77(3):245–52

Metabolic rate and thermoregulation in two species of tuco-tuco, Ctenomys talarum and Ctenomys australis (Caviomorpha, Octodontidae). Busch C. **Comp Biochem Physiol [A]** 1989;93(2):345–7

Thyroid regulation of body temperature in anaesthetized chickens. Lam SK, et al. **Comp Biochem Physiol [A]** 1990; 95(3):435–9

Body temperature regulation in a desert lizard, Sauromalus obesus, under undisturbed field conditions. Muchlinski AE, et al. **Comp Biochem Physiol [A]** 1990;95(4):579–83

Effects of exercise training on brown adipose tissue thermogenesis in ovariectomized obese rats. Yoshioka K, et al. **Endocrinol Jpn** 1989 Jun;36(3):403–8

The regulation of lipogenesis by thyroid hormone and its contribution to thermogenesis. Freake HC, et al. **Endocrinology** 1989 Dec;125(6):2868–74

Heat production and its clinical implications in neonates. Ousey JC. **Equine Vet J** 1990 Mar;22(2):69–72

Thermal function of a clothing ensemble during work: dependency on inner clothing layer fit. Nielsen R, et al. **Ergonomics** 1989 Dec;32(12):1581–94

Thermoregulation at rest and during exercise in prepubertal boys. Delamarche P, et al. **Eur J Appl Physiol** 1990; 60(6):436–40

Solar heat load: heat balance during exercise in clothed subjects. Nielsen B. **Eur J Appl Physiol** 1990;60(6):452–6

Thermoregulatory responses to intermittent exercise are influenced by knit structure of underwear. Nielsen R, et al. **Eur J Appl Physiol** 1990;60(1):15–25

Prediction of the thermoregulatory response for clothed immersion in cold water. Tikuisis P. **Eur J Appl Physiol** 1989;59(5):334–41

Effects of prolonged caloric stimulation upon oculomotor, vestibulospinal and segmental spinal activity. Gernandt BE, et al. **Exp Neurol** 1966 Mar;14(3):249–63

Brown adipose tissue thermogenesis: interdisciplinary studies. Himms-Hagen J. **FASEB J** 1990 Aug;4(11):2890–8 (42 ref.)

Use of isolated cold stress testing in determining normal lower extremity thermoregulation. Pollock FE Jr, et al. **Foot Ankle** 1990 Feb;10(4):229–34

Are patients with chronic liver disease hypermetabolic? Heymsfield SB, et al. **Hepatology** 1990 Mar;11(3):502–5 (22 ref.)

Role of norepinephrine (NE) in thermoregulatory mechanisms in normothermic and constitutionally hypothermic rats [letter] Mehta V, et al. **Indian J Physiol Pharmacol** 1990 Jan;34(1):65–6

Effects of chronic low doses of d-fenfluramine on weight gain and calorie intake, brown adipose tissue thermogenic parameters and brain neurotransmitter content in rats fed chow or palatable diets. McCormack JG, et al. **Int J Obes** 1989;13(5):625–33

Short-term weight loss and exercise training effects on glucose-induced thermogenesis in obese adolescent males during hypocaloric feeding. Nichols JF, et al. **Int J Obes** 1989;13(5):683–90

Circadian rhythms in depression. Part II: Circadian rhythms in inpatients with various mental disorders. Tsujimoto T, et al. **J Affective Disord** 1990 Mar;18(3):199–210

Circadian rhythms in depression. Part I: Monitoring of the circadian body temperature rhythm. Tsujimoto T, et al. **J Affective Disord** 1990 Mar;18(3):193–7

Relationship between fasting heat production, body composition and tissue distribution, in mature ewes from seven breeds. Olthoff JC, et al. **J Anim Sci** 1989 Oct; 67(10):2576–88

Composition of the whole body and component fractions in mature ewes from seven breeds. Olthoff JC, et al. **J Anim Sci** 1989 Oct;67(10):2565–75

Energy utilization in mature ewes from seven breeds with diverse production potentials. Olthoff JC, et al. **J Anim Sci** 1989 Oct;67(10):2550–64

Effects of hypoxia on thermal polypnea in intact and carotid body-denervated conscious cats. Bonora M, et al. **J Appl Physiol** 1989 Aug;67(2):578–83

Convective heat transfer measured directly with a heat flux sensor. Danielsson U. **J Appl Physiol** 1990 Mar; 68(3):1275–81

Energy and thermal regulation during bed rest and spaceflight. Greenleaf JE. **J Appl Physiol** 1989 Aug; 67(2):507–16 (71 ref.)

Changes in body temperature of rats acclimated to heat with different acclimation schedules. Shido O, et al. **J Appl Physiol** 1989 Nov;67(5):2154–7

Body temperature of dry cows on pasture: environmental and behavioral effects. Lefcourt AM, et al. **J Dairy Sci** 1989 Nov;72(11):3040–9

Biology of temperature: the mammalian fetus. Power GG. **J Dev Physiol** 1989 Dec;12(6):295–304 (64 ref.)

Umbilical cord occlusion but not increased plasma T3 or norepinephrine stimulate brown adipose tissue thermogenesis in the fetal sheep. Power GG, et al. **J Dev Physiol** 1989 Mar;11(3):171–7

The control of thermoregulation in the developing lamb during slow wave sleep. Symonds ME, et al. **J Dev Physiol** 1989 May;11(5):289–98

Automatic temperature controller for maintaining body temperature in experimental animals. Campastro OJ, et al. **J Neurosci Methods** 1989 Dec;30(3):185–7

Entropy flow and entropy production in the human body in basal conditions. Aoki I. **J Theor Biol** 1989 Nov 8; 141(1):11–21

Energetics and geometry of huddling in small mammals. Canals M, et al. **J Theor Biol** 1989 Nov 21;141(2):181–9

Heat loss in exposed volunteers. English MJ, et al. **J Trauma** 1990 Apr;30(4):422–5

Changes in brown adipose tissue metabolism following intraventricular vasoactive intestinal peptide and other gastrointestinal peptides in rats. Shido O, et al. **Jpn J Physiol** 1989;39(3):359–69

Effect of acute cold-exposure on norepinephrine turnover and thermogenesis in brown adipose tissue and metabolic rate in MSG-induced obese mice. Yoshioka K, et al. **Jpn J Physiol** 1989;39(6):957–62

Acid secretagogue mechanisms of a GABA-mimetic (PCPGABA) in the anesthetized rat: effects of hypothermia. Hara N, et al. **Life Sci** 1990;46(24):1793–9

Breathing pattern affects respiratory heat loss but not bronchoconstrictor response in asthma. Ingenito EP, et al. **Lung** 1990;168(1):23–34

Testing of heat exchanging capacity and effect of the subject's position on thermal entrainment in a water bath stimulator. Lindqvist A, et al. **Med Biol Eng Comput** 1989 Jul;27(4):429–34

Temperature regulation during upper body exercise: able-bodied and spinal cord injured. Sawka MN, et al. **Med Sci Sports Exerc** 1989 Oct;21(5 Suppl):S132–40 (48 ref.)

Thermic effect of a meal over 3 and 6 hours in lean and obese men. Segal KR, et al. **Metabolism** 1990 Sep; 39(9):985–92

Thermoperiod and photoperiod interact to affect the phase of the plasma melatonin rhythm in the lizard, Tiliqua rugosa. Firth BT, et al. **Neurosci Lett** 1989 Nov 20; 106(1-2):125–30

Postterm pregnancy: effects on temperature and glucose regulation. Beckmann CA. **Nurs Res** 1990 Jan-Feb; 39(1):21–4

Thermoregulatory abnormalities of the foot. Pollock FE Jr, et al. **Orthop Clin North Am** 1989 Oct;20(4):737–49 (104 ref.)

Post-herpetic neuralgia: the relation of pain complaint, sensory disturbance, and skin temperature. Rowbotham MC, et al. **Pain** 1989 Nov;39(2):129–44

Efficacy of sponging vs acetaminophen for reduction of fever. Sponging Study Group. Friedman AD, et al. **Pediatr Emerg Care** 1990 Mar;6(1):6–7

Cold-induced and diet-induced thermogenesis in progesterone-treated rats. Nava MP, et al. **Pflugers Arch** 1990 Mar;415(6):747–50

Components of the opioid withdrawal syndrome in mice are thermoregulatory responses. Belknap JK. **Pharmacol Biochem Behav** 1989 Oct;34(2):241–5

Behavioral thermoregulation in long-tailed macaques: effect on social preference. Schino G, et al. **Physiol Behav** 1990 Jun;47(6):1125–8

Energy exchange of two breeds of hens in respiration chambers. Pesti GM, et al. **Poult Sci** 1990 Jan;69(1):98–104

Expression of melatonin receptors in arteries involved in thermoregulation. Viswanathan M, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6200–3

The role of brown adipose tissue in diet-induced thermogenesis. Stock MJ. **Proc Nutr Soc** 1989 Jul; 48(2):189–96 (59 ref.)

Laboratory and ambulatory monitoring of menopausal hot flashes. Freedman RR. **Psychophysiology** 1989 Sep; 26(5):573–9

Poikilothermia in a 68-year-old female. A risk factor for accidental hypothermia, or hyperthermia. Allen J, et al. **Q J Med** 1989 Feb;70(262):103–12

Gender differences in the circadian temperature rhythms of healthy elderly subjects: relationships to sleep quality. Campbell SS, et al. **Sleep** 1989 Dec;12(6):529–36

Environmental effects on thermoregulation and nutrition of horses. Cymbaluk NF, et al. **Vet Clin North Am Equine Pract** 1990 Aug;6(2):355–72 (72 ref.)

[Components and control of cellular energy expenditures in endothermy] Chinet AE. **Reprod Nutr Dev** 1990;30(1):1–11 (63 ref.) (Eng. Abstr.) **(Fre)**

[Heat diffusion of the temporal bone and caloric nystagmus] Lothaller R, et al. **HNO** 1989 Aug;37(8):320–2 (Eng. Abstr.) **(Ger)**

[Study of diet-induced thermogenesis using telethermography in normal and obese subjects] Federspil G, et al. **Recenti Prog Med** 1989 Sep;80(9):455–9 (Eng. Abstr.) **(Ita)**

[Skin AVA and its contribution to heat transfer through the skin] Nagasaka T. **Nippon Seirigaku Zasshi** 1990; 52(6):197–205 (42 ref.) **(Jpn)**

[Human tympanic membrane temperature] Uchino K. **Nippon Seirigaku Zasshi** 1989;51(12):387–404 (80 ref.) **(Jpn)**

[Heat exchange in machine operators and dump truck drivers during the exploitation of gravel and sand in Central Asia] Babaev AB, et al. **Gig Tr Prof Zabol** 1989;(7):20–2 (Eng. Abstr.) **(Rus)**

[Results of studies on long-term results of the effects of hot microclimate on the body of workers] Shlelfman FM, et al. **Gig Tr Prof Zabol** 1990;(5):22–4 (Eng. Abstr.) **(Rus)**

[Surgical correction of local thermoregulation of the downward-transposed testis in patients with cryptorchism] Treivas VS, et al. **Klin Khir** 1989;(9):73–4 **(Rus)**

[Neurotropic effects in local exposure to heat and cold (physiology, pathology and therapy)] Likhtenshtein VA. **Klin Med (Mosk)** 1990 Apr;68(4):149–51 **(Rus)**

[Rational body hardening: determination of a cold biodose using distant thermochronography] Lukoianov IuE. **Fediatriia** 1989;(12):82–3 **(Rus)**

[Thermoregulation curves and their determining factors] Vladimirova IG, et al. **Usp Fiziol Nauk** 1989 Jul-Sep; 20(3):21–42 (132 ref.) **(Rus)**

[Health problems of thermoregulation in humans in the Far North] Dedenko II, et al. **Vestn Akad Med Nauk SSSR** 1989;(9):16–21 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Changes of high-energy phosphorous compounds in skeletal muscle during glucose-induced thermogenesis in man. A 31P MR spectroscopy study. Thomsen C, et al. **Acta Physiol Scand** 1989 Nov;137(3):335–9

Acute effects of ethanol (0.5 mg/kg) and its interaction with diazepam (5 mg) and meclophenoxate (100 mg) on the blood pressure, the body temperature and the heart rate in man. Hrbek J, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;121:235–52

Alcohol-induced poikilothermia, sleep and motor impairment: actions on brain of EGTA and verapamil. Paez X, et al. **Alcohol** 1989 Nov-Dec;6(6):489–98

Thermoregulatory deficits following prenatal alcohol exposure: structural correlates. Zimmerberg B. **Alcohol** 1989 Sep-Oct;6(5):389–93

Increased hypothermic responses to ethanol in rats selectively bred for cholinergic supersensitivity. Overstreet DH, et al. **Alcohol Alcohol** 1990;25(1):59–65

Verapamil effects on physiological and behavioral responses to ethanol in the rat. Rezvani AH, et al. **Alcohol Alcohol** 1990;25(1):51–8

Further characterization of LSxSS recombinant inbred strains of mice: activating and hypothermic effects of ethanol. Erwin VG, et al. **Alcoholism** 1990 Apr;14(2):200–4

Impaired glucose-induced thermogenesis and arterial norepinephrine response persist after weight reduction in obese humans. Astrup A, et al. **Am J Clin Nutr** 1990 Mar; 51(3):331–7

Protein turnover and thermogenesis in response to high-protein and high-carbohydrate feeding in men. Robinson SM, et al. **Am J Clin Nutr** 1990 Jul;52(1):72–80

Energy expenditure and diet-induced thermogenesis in presence and absence of hyperphagia induced by insulin. Dulloo AG, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R717–25

Thermogenic effect of thyroid hormones: interactions with epinephrine and insulin. Piolino V, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):E305–11

Intrapreoptically microdialyzed and microinjected norepinephrine evokes different thermal responses. Quan N, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R816–21

Effects of pyrogen administration on temperature regulation in exercising rats. Tanaka H, et al. **Am J Physiol** 1990 Apr; 258(4 Pt 2):R842–7

Heat-exercise performance of pyridostigmine-treated subjects wearing chemical protective clothing. Epstein Y, et al. **Aviat Space Environ Med** 1990 Apr;61(4):310–3

Human temperature regulation during exercise after oral pyridostigmine administration. Kolka MA, et al. **Aviat Space Environ Med** 1990 Mar;61(3):220–4

Intra-ventromedial hypothalamic injection of glutamate stimulates brown adipose tissue thermogenesis in the rat. Amir S. **Brain Res** 1990 Mar 19;511(2):341–4

Stimulation of the paraventricular nucleus with glutamate activates interscapular brown adipose tissue thermogenesis in rats. Amir S. **Brain Res** 1990 Jan 29;508(1):152–5

Glutamate injection into the suprachiasmatic nucleus stimulates brown fat thermogenesis in the rat. Amir S, et al. **Brain Res** 1989 Sep 25;498(1):140–4

MK-801 reduced cerebral ischemic injury by inducing hypothermia. Corbett D, et al. **Brain Res** 1990 Apr 30; 514(2):300–4

Tumour necrosis factor-alpha and lymphotoxin have opposite effects on sympathetic efferent nerves to brown adipose tissue by direct action in the central nervous system. Holt SJ, et al. **Brain Res** 1989 Sep 11;497(1):183–6

Duration of desensitization and ultrastructural changes in dorsal root ganglia in rats treated with resiniferatoxin, an ultrapotent capsaicin analog. Szallasi A, et al. **Brain Res** 1989 Nov 27;503(1):68–72

Response of thermoresponsive neurons of rat's hypothalamus during intracarotid infusion of prostaglandin E2. Sakata Y, et al. **Brain Res Bull** 1990 Mar;24(3):529–32

Do adenosine antagonists improve cold tolerance by reducing hypothalamic adenosine activity in rats? Wang XL, et al. **Brain Res Bull** 1990 Mar;24(3):389–93

Effect on Bubalus bubalis thermoregulation by monocrotophos and antidotal therapy. Sandhu HS, et al. **Bull Environ Contam Toxicol** 1989 Nov;43(5):776–8

Effects of caffeine ingestion on body fluid balance and thermoregulation during exercise. Falk B, et al. **Can J Physiol Pharmacol** 1990 Jul;68(7):889–92

Flow-induced oxygen uptake by the perfused rat hindlimb is inhibited by vasodilators and augmented by norepinephrine: a possible role for the microvasculature in hindlimb thermogenesis. Ye JM, et al. **Can J Physiol Pharmacol** 1990 Jan;68(1):119–25

Thermogenesis and the effect of injected catecholamines on the oxygen consumption of cafeteria-fed rats. Maxwell GM, et al. **Clin Exp Pharmacol Physiol** 1988 May; 15(5):391–400

Effects of beta-adrenergic blockade on meal-induced thermogenesis [letter; comment] Astrup A, et al. **Clin Physiol** 1990 May;10(3):305–7 Comment on: Clin Physiol 1989 Aug;9(4):321–32.

Effect of dietary protein and fat content on tri-iodothyronine-induced thermogenesis in young chicks (Gallus domesticus). Jong HB, et al. **Comp Biochem Physiol [A]** 1990;95(3):429–33

Thermal salivation in rats, anesthetized with barbiturates, chloralose, urethane and ketamine. Furuyama F, et al. **Comp Biochem Physiol [C]** 1989;94(1):133–8

Failure of prior low-intensity exercise to potentiate the thermic effect of glucose. Treadway JL, et al. **Eur J Appl Physiol** 1990;60(5):377–81

Modification by nickel of instrumental thermoregulatory behavior in rats. Watanabe C, et al. **Fundam Appl Toxicol** 1990 Apr;14(3):578–88

Inhibition by vasodilators of noradrenaline and vasoconstrictor-mediated, but not skeletal muscle contraction-induced oxygen uptake in the perfused rat hindlimb; implications for non-shivering thermogenesis in muscle tissue. Colquhoun EQ, et al. **Gen Pharmacol** 1990; 21(1):141–8

A comparison of the thermogenic effects of CRF, sauvagine and urotensin I in the rat. Le Feuvre RA, et al. **Horm Metab Res** 1989 Sep;21(9):525–6

Effect of histidine on histidinol-induced heat protection in Chinese hamster ovary cells. Lee YJ, et al. **J Cell Physiol** 1990 Sep;144(3):401–7

Thermal dependence of serotonergic modulation of neural activity in the hamster. Horrigan DJ, et al. **J Comp Physiol [A]** 1990 May;167(1):79–88

Effect of nicotine on norepinephrine turnover and thermogenesis in brown adipose tissue and metabolic rate in MSG obese mice. Yoshida T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Apr;36(2):123–30

Caffeine activates brown adipose tissue thermogenesis and metabolic rate in mice. Yoshioka K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Apr;36(2):173–8

Alteration of thermoregulatory set point with opioid agonists. Spencer RL, et al. **J Pharmacol Exp Ther** 1990 Feb; 252(2):696–705

Thermoregulation during pentobarbital and ketamine anesthesia in rats. Refinetti R, et al. **J Physiol (Paris)** 1988–89;83(4):300–3

Pharmacologic effects on thermoregulation: mechanisms of drug-related heatstroke. Vassallo SU, et al. **J Toxicol Clin Toxicol** 1989;27(4–5):199–224 (67 ref.)

Effect of naloxone on body temperature in postmenopausal women with Parkinson's disease. Cagnacci A, et al. **Life Sci** 1990;46(17):1241–7

Subsensitivity of the 5-hydroxytryptamine1A (5-HT1A) receptor-mediated hypothermic response to ipsapirone in unipolar depression. Lesch KP, et al. **Life Sci** 1990; 46(18):1271–7

Effects of glycerol-induced hyperhydration prior to exercise in the heat on sweating and core temperature. Lyons TP, et al. **Med Sci Sports Exerc** 1990 Aug;22(4):477–83

Thermoregulation in mildly hypertensive men during beta-adrenergic blockade. Pescatello LS, et al. **Med Sci Sports Exerc** 1990 Apr;22(2):222–8

Cholecystokinin interferes with the thermoregulatory effect of exogenous and endogenous opioids. Kapás L, et al. **Neuropeptides** 1989 Aug–Sep;14(2):85–92

Ambient temperature modulation of fenfluramine-induced thermogenesis in the rat. Preston E, et al. **Neuropharmacology** 1990 Mar;29(3):277–83

Temperature reactions of the rat cerebral cortex and distant effects of an experimentally induced excitatory focus. Rusinov VS, et al. **Neurosci Behav Physiol** 1990 Mar–Apr; 20(2):167–73

Melatonin stabilises sleep onset time in a blind man without entrainment of cortisol or temperature rhythms. Folkard S, et al. **Neurosci Lett** 1990 May 31;113(2):193–8

Effects of histamine on thermosensitive neurons in rat preoptic slice preparations. Tsai CL, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):297–302

Thermoregulatory effects of methanol in Fischer and Long Evans rats. Mohler FS, et al. **Neurotoxicol Teratol** 1990 Jan–Feb;12(1):41–5

Effects of acute and chronic administration of (+)SKF 10,047 on body temperature in the rat. Bejanian M, et al. **NIDA Res Monogr** 1989;95:492–3

A new analysis of whole-body calorimetry data. Lynch TJ, et al. **NIDA Res Monogr** 1989;95:289–90

Physiological antagonism between prostaglandin E2 and neuropeptide Y on thermoregulation in the dog. Inui A, et al. **Peptides** 1989 Jul–Aug;10(4):869–71

Bombesin-induced hypothermia in the insulin-treated rat: effect on tail-skin temperature. Babcock AM, et al. **Percept Mot Skills** 1989 Dec;69(3 Pt 2):1339–45

The effect of increasing extracellular potassium concentration on the resting heart rate of the isolated rat papillary muscle. Holroyd SM, et al. **Pflugers Arch** 1990 Jun;416(4):406–12

Bombesin-induced hypothermia in food-deprived rats. Babcock AM, et al. **Pharmacol Biochem Behav** 1989 Nov; 34(3):539–44

Enhancement of freezing behaviour by metoclopramide: implications for neuroleptic-induced avoidance deficits. Blackburn JR, et al. **Pharmacol Biochem Behav** 1990 Mar; 35(3):685–91

Chronic injections of saline produce subsensitivity to nicotine. Flemmer DD, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):261–3

Constant exposure to darkness produces supersensitivity to nicotine. Flemmer DD, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):523–6

Potentiating effect of morphine upon d-methamphetamine-induced hyperthermia in mice. Effects of naloxone and haloperidol. Funahashi M, et al. **Pharmacol Biochem Behav** 1990 Jun;36(2):345–50

Insulin increases energy expenditure and respiratory quotient in the rat. Menéndez JA, et al. **Pharmacol Biochem Behav** 1989 Dec;34(4):765–8

Selective cross-tolerance to 5-HT1A and 5-HT2 receptor-mediated temperature and corticosterone responses. Nash JF Jr, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):781–5

The effect of ethanol on behavioral temperature regulation in mice. O'Connor CS, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):315–9

Kinetics and thresholds of several indices of lindane-induced toxicity. Woolley DE, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):787–92

Sauvagine: effects on thermoregulation in the rat. Broccardo M. **Pharmacol Res** 1990 Mar–Apr;22(2):189–96

Central versus peripheral effects on temperature preference and body temperature following alteration of 5-HT in maturing mice. Goodrich C, et al. **Physiol Behav** 1989 Aug; 46(2):203–9

Corticosteroid inhibition of thermogenesis in obese animals. York DA. **Proc Nutr Soc** 1989 Jul;48(2):231–5 (55 ref.)

Aspirin and nonfebrile waking oral temperature in healthy men and women: links with SWS changes? Horne JA. **Sleep** 1989 Dec;12(6):516–21

Effects of methanol on autonomic thermoregulation of rats at different ambient temperatures. Mohler FS, et al. **Toxicol Lett** 1990 Jul;52(2):153–62

[Continuous infusion of prostaglandin E1 facilitates weaning from cardiopulmonary bypass] Sakuragi T, et al. **Masui** 1990 Mar;39(3):343–8 (Eng. Abstr.) **(Jpn)**

[Effectiveness and mechanisms of the protective action of sidnocarb in experimental weightlessness and cooling] Lakota NG, et al. **Kosm Biol Aviakosm Med** 1990 Mar–Apr; 24(2):41–6 (Eng. Abstr.) **(Rus)**

[The effect of a single intake of naftusia mineral water on dynamic heat losses from the lumbar area] Kalugin VA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1990 Mar–Apr; (2):64–6 **(Rus)**

PHYSIOLOGY

Heterogeneity of the histological features along the course of the facial vein of the desert camel (Camelus dromedarius): relevance to brain cooling. Bou-Resli MN, et al. **Acta Morphol Neerl Scand** 1988–89;26(4):249–54

Ontogenetic development of the ophthalmic rete in relation to brain cooling in chickens and pigeons. Arad Z, et al. **Am J Anat** 1990 Jan;187(1):98–103

Decreased thermic effect of a mixed meal during overnutrition in human obesity. Katzeff HL, et al. **Am J Clin Nutr** 1989 Nov;50(5):915–21

Diurnal variation in postabsorptive resting metabolic rate and diet-induced thermogenesis. Weststrate JA, et al. **Am J Clin Nutr** 1989 Nov;50(5):908–14

The thermoregulatory threshold is inversely proportional to isoflurane concentration. Støen R, et al. **Anesthesiology** 1990 May;72(5):822–7

Effect of precooling on heat tolerance of resting men in a hot environment: comparison with seasonal effect on it. Iwanaga K, et al. **Ann Physiol Anthropol** 1989 Jul; 8(3):151–4

Effects of head cooling on circadian variations of thermoregulatory responses in man. Okada A, et al. **Ann Physiol Anthropol** 1989 Jul;8(3):165–7

Effects of repeated cold exposures on thermal responses of man. Tochihara Y, et al. **Ann Physiol Anthropol** 1989 Jul; 8(3):169–71

Physiological responses to various kinds of garments in cold, neutral, and warm conditions and their implications for physiological formation of physical characteristics in humans. Tokura H. **Ann Physiol Anthropol** 1988 Jan; 7(1):59–60

Assessment of cold environments in terms of required insulation. Holmér I. **Arctic Med Res** 1988;47 Suppl 1:239–42 (17 ref.)

The metabolic cost of exercising in cold air (-20 degrees C). Romet TT, et al. **Arctic Med Res** 1988;47 Suppl 1:280–5

Cold adaptation and energy balance. Shephard RJ, et al. **Arctic Med Res** 1988;47 Suppl 1:231–8 (39 ref.)

Study of heat dissipation to the lung from a thermal ventricular assist system. Fujimoto L, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):458–60

An analysis of thermal regulation in hemodialysis with one and three compartment models. Gotch FA, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):622–4

Do thermoregulatory reflexes pass through the hypothalamus? Studies of chronic hypothermia due to hypothalamic lesion. Johnson RH, et al. **Aust N Z J Med** 1990 Apr;20(2):154–9

Heat loss caused by immersing the hands in water. Livingstone SD, et al. **Aviat Space Environ Med** 1989 Dec; 60(12):1166–71

Role of ACTH in recovery from retrograde amnesia induced by hypothermia in rats. Santucci AC, et al. **Behav Neurosci** 1989 Dec;103(6):1267–75

Nutrient-induced thermogenesis in enteral and parenteral nutrition. Schutz Y. **Beitr Infusionther** 1990;25:227–40 (18 ref.)

Closed loop control of human body temperature: results from a one-dimensional model. Buse M, et al. **Biol Cybern** 1989; 61(6):467–75

Lumped versus distributed thermoregulatory control: results from a three-dimensional dynamic model. Werner J, et al. **Biol Cybern** 1989;62(1):63–73

Body temperature and anaesthesia. Imrie MM, et al. **Br J Anaesth** 1990 Mar;64(3):346–54 (87 ref.)

Reflex sympathetic dystrophy (algoneurodystrophy): temperature studies in the upper limb. Cooke ED, et al. **Br J Rheumatol** 1989 Oct;28(5):399–403

Retinohypothalamic tract stimulation activates thermogenesis in brown adipose tissue in the rat. Amir S. **Brain Res** 1989 Nov 27;503(1):163–6

Influence of ambient temperature on sleep and body temperature after phentolamine in rats. Kent S, et al. **Brain Res** 1990 Mar 19;511(2):227–33

Do medial preoptic lesions interfere with the set-point of temperature regulation? Briese E. **Brain Res Bull** 1989 Jul–Aug;23(1–2):137–44

Temperature monitoring during major abdominal and thoracic surgery. Harioka T, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S71

Evaluation of esophageal temperature measured by gastric tube with thermistor. Koyama K, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S111

Liquid crystalline temperature monitoring: does it estimate core temperature in anaesthetized paediatric patients? Leon JE, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S98

Potassium correction of hypothermic hypokalemia induces hyperkalemia after rewarming. Sprung J, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S69

A commentary on the interpretation of in vitro biochemical measures of brown adipose tissue thermogenesis. Trayhurn P, et al. **Can J Physiol Pharmacol** 1989 Aug;67(8):811–9 (74 ref.)

The use of infrared radiation to reduce heat loss in burned patients: experiments with a phantom. Bowker P, et al. **Clin Phys Physiol Meas** 1981 Nov;2(4):257–70

Burn wound evaporation—an evaluation of air diffusion resistances governing heat transfer in a clean air unit. Ferguson JC, et al. **Clin Phys Physiol Meas** 1989 Nov; 10(4):319–30

Meal-induced thermogenesis in previously obese patients. Thörne A, et al. **Clin Physiol** 1990 Jan;10(1):99–109

Non-cutaneous peripheral thermosensitivity in the goat (Capra hircus). Asaki Y, et al. **Comp Biochem Physiol [A]** 1989;94(4):583–6

Thermoregulatory patterns of two sympatric rodents: Otomys unisulcatus and Parotomys brantsii. Du Plessis A, et al. **Comp Biochem Physiol [A]** 1989;94(2):215–20

CSF ion composition and manipulation during thermoregulation in an avian species, Gallus domesticus. Maki AA, et al. **Comp Biochem Physiol [A]** 1990; 96(1):135–40

Panting and acid-base regulation in heat stressed birds. Marder J, et al. **Comp Biochem Physiol [A]** 1989; 94(3):395–400 (56 ref.)

Thermoregulatory responses of diabetic rats. Shalaby TH, et al. **Comp Biochem Physiol [A]** 1989;94(1):153–7

Ultradian, circahoral and circadian structures in endothermic vertebrates and humans. Stupfel M, et al. **Comp Biochem Physiol [A]** 1990;96(1):1–11 (133 ref.)

Effects of cigarette smoke on norepinephrine turnover and thermogenesis in brown adipose tissue in MSG-induced obese mice. Yoshida T, et al. **Endocrinol Jpn** 1989 Aug; 36(4):537–44

The role of insulin in norepinephrine turnover and thermogenesis in brown adipose tissue after acute cold-exposure. Yoshioka K, et al. **Endocrinol Jpn** 1989 Aug;36(4):491–9

Evaluation of a temperate-environment test of heat tolerance in prior heatstroke patients and controls. Armstrong LE, et al. **Eur J Appl Physiol** 1990;60(3):202–8

Thermal exchanges during sleep in anhidrotic ectodermal dysplasia. Buguet A, et al. **Eur J Appl Physiol** 1990; 59(6):454–9

Thermoregulatory responses of firemen to exercise in the heat. Gavhed DC, et al. **Eur J Appl Physiol** 1989; 59(1–2):115–22

Thermoregulatory responses to exercise at low ambient temperature performed after precooling or preheating procedures. Kruk B, et al. **Eur J Appl Physiol** 1990; 59(6):416–20

Effects of short term nutritional manipulation on organ size and fasting heat production. Koong LJ, et al. **Eur J Clin Nutr** 1990;44 Suppl 1:73–7

The effect of psychological stress on diet-induced thermogenesis and resting metabolic rate. Weststrate JA, et al. **Eur J Clin Nutr** 1990 Apr;44(4):269–75

Loss and restoration of preoptic thermoreactiveness after lesions of the rostral raphe nuclei. Werner J, et al. **Exp Brain Res** 1990;80(2):429–35

Characterization of alpha-adrenoceptors involved in central

thermoregulation in rabbits. Srivastava AK, et al. **Indian J Exp Biol** 1989 Jun;27(6):548–50

Cold and heat injury. Kumari S, et al. **Indian Pediatr** 1988 Oct;25 Suppl:112–20

Thermogenesis and brown fat: relevance to human obesity. Stock MJ. **Infusionstherapie** 1989 Dec;16(6):282–4 (39 ref.)

Effects of repeated short-term cold exposures on cold induced thermogenesis of women. Silami-Garcia E, et al. **Int J Biometeorol** 1989 Dec;33(4):222–6

Increased heating by diagnostic ultrasound due to nonlinear propagation. Bacon DR, et al. **J Acoust Soc Am** 1990 Jul; 88(1):26–34

Thermoregulatory failure in the elderly. St. Louis University Geriatric Grand Rounds [clinical conference] Wongsurawat N, et al. **J Am Geriatr Soc** 1990 Aug; 38(8):899–906

Conductive and convective heat flows of exercising humans in cold water. Ferretti G, et al. **J Appl Physiol** 1989 Dec; 67(6):2473–80

Thermal adjustments to nonexertional heat stress in mature and senescent Fischer 344 rats. Kregel KC, et al. **J Appl Physiol** 1990 Apr;68(4):1337–42

Free fatty acid availability and temperature regulation in cold water. Martineau L, et al. **J Appl Physiol** 1989 Dec; 67(6):2466–72

Thermoregulatory responses to acute body heating in rats acclimated to continuous heat exposure. Shido O, et al. **J Appl Physiol** 1990 Jan;68(1):59–65

Heat loss responses in rats acclimated to heat loaded intermittently. Shido O, et al. **J Appl Physiol** 1990 Jan; 68(1):66–70

Radial heat and water transport across the airway wall. Tsai CL, et al. **J Appl Physiol** 1990 Jul;69(1):222–31

Enhancement of maximal thermogenesis by reducing endogenous adenosine activity in the rat. Wang LC, et al. **J Appl Physiol** 1990 Feb;68(2):580–5

On the solution of the non-linear bio-heat equation. Bardati F, et al. **J Biomech** 1990;23(8):791–8

Heat transport by countercurrent blood vessels in the presence of an arbitrary temperature gradient. Baish JW. **J Biomech Eng** 1990 May;112(2):207–11

An evaluation of the Weinbaum-Jiji bioheat equation for normal and hyperthermic conditions. Charny CK, et al. **J Biomech Eng** 1990 Feb;112(1):80–7

Alteration in temperature regulation induced by burn injury in the rat. Caldwell FT Jr, et al. **J Burn Care Rehabil** 1989 Nov–Dec;10(6):486–93

Intracellular pH during daily torpor in Peromyscus maniculatus. Nestler JR. **J Comp Physiol [B]** 1990; 159(6):661–6

Changes in physiological and neuroendocrine properties during thermal adaptation of golden hamsters (Mesocricetus auratus). Roth J, et al. **J Comp Physiol [B]** 1990;160(2):153–9

Relationships between body temperature, thermal conductance, Q10 and energy metabolism during daily torpor and hibernation in rodents. Snyder GK, et al. **J Comp Physiol [B]** 1990;159(6):667–75

A rapid cold-hardening response protecting against cold shock injury in Drosophila melanogaster. Czajka MC, et al. **J Exp Biol** 1990 Jan;148:245–54

Hypothalamic monoamines and their metabolites in the deermouse, Peromyscus maniculatus, during daily torpor. Lin LH, et al. **J Neural Transm Gen Sect** 1990;79(1-2):11–8

Continuous volume infusion improves circulatory stability in anesthetized rats [letter] Quintin L. **J Neurosci Methods** 1990 May;32(2):169

Factors affecting aerobic recovery heat production and recovery ratio of frog sartorius. Godfraind-De Becker A. **J Physiol (Lond)** 1989 Dec;419:455–75

Modes of action of local hypothalamic and skin thermal stimulation on salivary secretion in rats. Kanosue K, et al. **J Physiol (Lond)** 1990 May;424:459–71

Vicious circles in reflex sympathetic dystrophy—a hypothesis: discussion paper. Cooke ED, et al. **J R Soc Med** 1990 Feb;83(2):96–9

Skin-to-skin contact as a method of body warmth for infants of low birth weight. Mondlane RP, et al. **J Trop Pediatr** 1989 Dec;35(6):321–6

Thermoregulation and body fluids: role of blood volume and central venous pressure. Morimoto T. **Jpn J Physiol** 1990; 40(2):165–79 (64 ref.)

Heat production associated with neuromuscular transmission in the toad nerve-muscle preparation. Tasaki I, et al. **Jpn J Physiol** 1990;40(2):181–7

The role of exercise in the etiology of exertional heatstroke. Hubbard RW. **Med Sci Sports Exerc** 1990 Feb;22(1):2–5 (33 ref.)

The thermic effect of feeding in older men: the importance of the sympathetic nervous system. Schwartz RS, et al. **Metabolism** 1990 Jul;39(7):733–7

Hypothalamic warm-sensitive neurons possess a tetrodotoxin-sensitive sodium channel with a high Q10. Kiyohara T, et al. **Neurosci Res** 1990 Apr;8(1):48–53

Thermoregulation and the opioid system. Adler MW, et al. **NIDA Res Monogr** 1989;95:180–5 (18 ref.)

Effects of cold acclimation on the energetic metabolism of the staggerer mutant mouse. Bertin R, et al. **Physiol Behav** 1990 Feb;47(2):377–80

Electrical hypothalamic stimulation in rats induces hyperthermia if and only if they learn to self-stimulate. Briese E, et al. **Physiol Behav** 1990 Apr;47(4):635–9

Lack of diet-induced thermogenesis following lesions of paraventricular nucleus in rats. De Luca B, et al. **Physiol Behav** 1989 Oct;46(4):685–91

Thermal correlates of tonic immobility and social isolation in chickens. Eddy TJ, et al. **Physiol Behav** 1990 Apr; 47(4):641–6

Thermal biology of the laboratory rat. Gordon CJ. **Physiol Behav** 1990 May;47(5):963–91 (381 ref.)

Adaptation of body temperature and nociception to cold stress in preweanling rats. Hamm RJ, et al. **Physiol Behav** 1990 May;47(5):895–7

The effects of psychological stress on plasma interleukin-6 activity in rats. LeMay LG, et al. **Physiol Behav** 1990 May; 47(5):957–61

Stress-induced rise of body temperature in rats is the same in warm and cool environments. Long NC, et al. **Physiol Behav** 1990 Apr;47(4):773–5

Behavior and body weight changes under intermittent exposure to cold in C57BL/6J mice. Omata K. **Physiol Behav** 1990 Apr;47(4):743–8

Occupational hot exposures: body physiology and an approach to numerical assessment. McLean RC, et al. **Proc Inst Mech Eng [H]** 1989;203(H3):133–41 (24 ref.)

A myothermal analysis of absolute myosin crossbridge cycling rates in rat hearts. The contribution of myosin polymorphism. Alpert NR, et al. **Prog Clin Biol Res** 1989; 315:503–17

Comparative physiology of sleep, thermoregulation and metabolism from the perspective of energy conservation. Berger RJ, et al. **Prog Clin Biol Res** 1990;345:41–50; discussion 51–2 (28 ref.)

Tension independent heat reflects phospholamban regulation of sarcoplasmic reticulum activity in rabbit papillary muscle. Blanchard EM, et al. **Prog Clin Biol Res** 1989; 315:606–7

Thermoregulation and energetics in subterranean mammals. Contreras LC, et al. **Prog Clin Biol Res** 1990;335:231–50 (49 ref.)

Myothermic and polarographic studies in pressure overload hypertrophy of rabbit heart. Gibbs CL, et al. **Prog Clin Biol Res** 1989;315:519–28

Heat production in chemically skinned smooth muscle. Hellstrand P, et al. **Prog Clin Biol Res** 1989;315:465–6

The production of initial heat and recovery heat by isolated EDL and soleus muscles of euthyroid and hypothyroid mice. Leijendekker WJ, et al. **Prog Clin Biol Res** 1989; 315:233–4

Control of slow wave sleep by thermoregulatory mechanisms. Szymusiak R, et al. **Prog Clin Biol Res** 1990; 345:53–64; discussion 65–6

Brown adipose tissue thermogenesis and obesity. Himms-Hagen J. **Prog Lipid Res** 1989;28(2):67–115 (626 ref.)

Longitudinal sleep EEG, temperature, and activity measurements across the menstrual cycle in patients with premenstrual depression and in age-matched controls. Parry BL, et al. **Psychiatry Res** 1989 Dec;30(3):285–303

Respiratory heat loss during work at various ambient temperatures. Cain JB, et al. **Respir Physiol** 1990 Feb; 79(2):145–50

Brain cooling and respiratory heat exchange in camels during rest and exercise. Schroter RC, et al. **Respir Physiol** 1989 Oct;78(1):95–105

Brown adipose tissue thermogenesis above the lower critical temperature. Puerta M, et al. **Rev Esp Fisiol** 1989 Dec; 45(4):331–5

Recent trends in clothing physiology. Holmér I. **Scand J Work Environ Health** 1989;15 Suppl 1:58–65 (55 ref.)

The actual insulation of multilayer clothing. Lotens WA. **Scand J Work Environ Health** 1989;15 Suppl 1:66–75

Thermoregulatory models. Recent research, current applications and future development. Werner J. **Scand J Work Environ Health** 1989;15 Suppl 1:34–46 (47 ref.)

Wind-chill equations predicting whole-body heat loss for a range of typical civilian outdoor clothing ensembles. Wyon DP. **Scand J Work Environ Health** 1989;15 Suppl 1:76–83

Use of thermal manikins in environmental ergonomics. Wyon DP. **Scand J Work Environ Health** 1989;15 Suppl 1:84–94

Sleep-onset insomniacs have delayed temperature rhythms. Morris M, et al. **Sleep** 1990 Feb;13(1):1–14

[Physiological and hygienic studies of the thermal status of workers engaged in the manufacture of chocolate and other confectionary products] Vodichenska Ts, et al. **Probl Khig** 1989;14:25–37 (Eng. Abstr.) **(Bul)**

[Brown adipose tissue: physiologic effector of thermogenesis] Ricquier D. **Journ Annu Diabetol Hotel Dieu** 1990;:27–31 (13 ref.) **(Fre)**

[Effect of a single mild infrared A hyperthermia on body temperature, heart rate, blood pressure and blood viscosity in healthy probands and patients with stage I and II arterial hypertension] Scherf HP, et al. **Dermatol Monatsschr** 1989; 175(12):733–40 (Eng. Abstr.) **(Ger)**

[Air temperature in the outer ear canal—experimental studies in relation to radical cavity surgery] Pau HW, et al. **Laryngorhinootologie** 1990 Mar;69(3):135–9 (Eng. Abstr.) **(Ger)**

[Physiologic adaptation of the thermal manikin] Bischof W, et al. **Z Gesamte Hyg** 1989 Dec;35(12):723–5 (Eng. Abstr.) **(Ger)**

[Use of rectal temperature-time of death nomograms at the scene of death] Albrecht A, et al. **Z Rechtsmed** 1990; 103(4):257–78 (Eng. Abstr.) **(Ger)**

[Secondary hypothermia with brain tumor in an elderly woman and the circadian rhythm of body temperature] Shimamoto Y, et al. **Nippon Ronen Igakkai Zasshi** 1990 Jan;27(1):69–73 (Eng. Abstr.) **(Jpn)**

[Pathogenetic mechanisms of the development of "hot flushes" in patients with climacteric disorders of the sympathetic-adrenal type] Butareva LB, et al. **Akush Ginekol (Mosk)** 1989 Oct;(10):30–3 (Eng. Abstr.) **(Rus)**

[A device for the continuous determination of summary human moisture loss] Aldersons AA. **Fiziol Cheloveka** 1989 Sep–Oct;15(5):174–6 **(Rus)**

[The regulation of body temperature during physical loading] Iakimenko MA, et al. **Fiziol Cheloveka** 1990 Jan–Feb; 16(1):156–8 **(Rus)**

[Characteristics of human body temperature regulation and the functional activity of the skin thermoreceptors during seasonal adaptation to the high temperature of an arid zone] Khudalberdiev MD, et al. **Fiziol Cheloveka** 1989 Jul–Aug; 15(4):87–91 **(Rus)**

[The shaping of the functional state of the respiratory and thermoregulatory systems during work in an atmosphere with an elevated carbon dioxide content] Levinskiĭ SV, et al. **Fiziol Cheloveka** 1990 Jan–Feb;16(1):133–40 **(Rus)**

[A clinico-physiological assessment of the functional interrelations of the body hemodynamics and heat status in hypertension] Maĭstrakh EV, et al. **Fiziol Cheloveka** 1989 Nov–Dec;15(6):72–7 **(Rus)**

[The effect of posture on the thermoregulating activity of the shoulder muscles] Meĭgal AIu, et al. **Fiziol Cheloveka** 1989 Nov–Dec;15(6):147–9 **(Rus)**

[Heat production as a criterion of adrenergic regulation of metabolic processes of the myocardium] Khomaziuk AI, et al. **Fiziol Zh** 1989 Sep–Oct;35(5):3–9 (Eng. Abstr.) **(Rus)**

[A method for research on respiratory heat exchange] Agarkov SF, et al. **Fiziol Zh SSSR** 1990 Feb;76(2):283–8 **(Rus)**

[A comparative neurophysiological analysis of thermoregulatory muscle activity in hibernating and nonhibernating animals during the development of hypothermia] Chupakhina VL, et al. **Fiziol Zh SSSR** 1990 Mar;76(3):406–13 (Eng. Abstr.) **(Rus)**

[The physiologic and physical patterns of blood heat exchange with tissues and the environment] Ivanov KP, et al. **Fiziol Zh SSSR** 1989 Jun;75(6):851–6 (Eng. Abstr.) **(Rus)**

[The effect of adaptation to heat and increased motor activity on the thermoregulatory function of the motor neuron pool] Kuokkanen LP. **Fiziol Zh SSSR** 1989 Aug; 75(8):1063–8 (Eng. Abstr.) **(Rus)**

[Thermoregulatory parameters of normal and developmentally retarded newborn rat pups] Petrova OP, et al. **Fiziol Zh SSSR** 1989 Oct;75(10):1452–5 (Eng. Abstr.) **(Rus)**

[Correction of the thermal status of the human body in threatened overheating] Slepchuk NA, et al. **Fiziol Zh SSSR** 1989 Aug;75(8):1162–9 (Eng. Abstr.) **(Rus)**

[Body size and the thermoregulating activity of the motor units in mammals] Sorokina LV, et al. **Fiziol Zh SSSR** 1990 Feb;76(2):239–46 (Eng. Abstr.) **(Rus)**

[Complex hygienic evaluation of the production and use of artificial amide leather] Bo'ishakov AM, et al. **Gig Sanit** 1989 Aug;(8):85–7 **(Rus)**

[Hygienic significance of low humidity under the conditions of Extreme North (review of the literature)] Dedenko II, et al. **Gig Sanit** 1990 Mar;(3):7–10 (35 ref.) **(Rus)**

[Complex study of various pathogenetic and physiologic parameters of the health status of watchmen in the oil industry] Il'inskikh NN, et al. **Gig Sanit** 1989 Dec; (12):18–21 (Eng. Abstr.) **(Rus)**

[Energy metabolism during short-term thermal adaptation] Chvyrev VG, et al. **Gig Tr Prof Zabol** 1990;(2):35–8 **(Rus)**

[The correlation of the degree of thermoresistance of the cells of definitive tissues and oocytes in different individual frogs] Andronikov VB. **Izv Akad Nauk SSSR [Biol]** 1990 Mar–Apr;(2):172–7 (Eng. Abstr.) **(Rus)**

[Heat exchange and skin thermometry before and after lumbar sympathectomy] Polous IuM, et al. **Khirurgiia (Mosk)** 1990 May;(5):64–7 (Eng. Abstr.) **(Rus)**

[Thermoregulatory reactions of the human body to moderate hypercapnia] Mukhamedieva LN, et al. **Kosm Biol Aviakosm Med** 1989 Nov–Dec;23(6):51–4 (Eng. Abstr.) **(Rus)**

[Psychoautonomic syndrome in non-infectious subfebrile conditions in children] Osokina GG, et al. **Pediatriia** 1989; (9):54–9 (Eng. Abstr.) **(Rus)**

[Neurohumoral regulation in frostbite] Kotel'nikov VP, et al. **Vestn Khir** 1990 Feb;144(2):68–72 (Eng. Abstr.) **(Rus)**

[The temperature analyzer, thermoregulation and the problems of thermotherapy] Likhtenshteĭn VA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Sep–Oct;(5):50–3 (16 ref.) (Eng. Abstr.) **(Rus)**

[A method for determining human thermal resistance] Goretskiĭ OS, et al. **Vrach Delo** 1989 Oct;(10):105–7 (Eng. Abstr.) **(Rus)**

[Human thermoregulatory reaction to exposure to convective and radiant heat] Tap ChV, et al. **Vrach Delo** 1989 Jul; (7):97–9 (Eng. Abstr.) **(Rus)**

[The bioenergetic mechanisms of homeothermy] Ivanov KP. **Zh Obshch Biol** 1990 Jan–Feb;51(1):36–53 (97 ref.) (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Thermal and physiologic responses to 1200-MHz radiofrequency radiation: differences between exposure in E and H orientation. Jauchem JR, et al. **Proc Soc Exp Biol Med** 1990 Sep;194(4):358–63

Involvement of prostaglandins and histamine in radiation-induced temperature responses in rats. Kandasamy SB, et al. **Radiat Res** 1990 Jan;121(1):84–90

BODY TYPES see **SOMATOTYPES**

BODY WATER

Changes in the water holding capacity of psoriatic stratum corneum in vivo. Borroni G, et al. **Acta Derm Venereol Suppl (Stockh)** 1989;146:192–4

Changes in total body water with age. Schoeller DA. **Am J Clin Nutr** 1989 Nov;50(5 Suppl):1176–81; discussion 1231–5 (15 ref.)

Measurement of extracellular water volume by bromide ion chromatography. Wong WW, et al. **Am J Clin Nutr** 1989 Dec;50(6):1290–4

Hydrometrocolpos: diagnosis and follow-up by ultrasound—a case report. Sawhney S, et al. **Australas Radiol** 1990 Feb;34(1):93–4

The role of the gut in water balance. Gebruers EM. **Ir J Med Sci** 1990 May;159(5):131–6 (39 ref.)

Method for preservation of water content during prolonged storage of cerebral tissue. Kaufmann AM, et al. **Neurol Res** 1990 Mar;12(1):57–9

[Comparison of different methods of interpretation for the prediction of body water by heavy water dilution method: application in the male goat] Schmidely P, et al. **Reprod Nutr Dev** 1989;29(4):487–94 (Eng. Abstr.) **(Fre)**

[The state of water in intervertebral disks from data of relaxation analysis using an NMR-tomogram] Iushmanov VE, et al. **Biofizika** 1989 Sep–Oct;34(5):854–7 (Eng. Abstr.) **(Rus)**

ANALYSIS

Importance of protein content in the edema fluid for the resolution of brain edema. Gröger U, et al. **Adv Neurol** 1990;52:215–8

Imaging of water distribution in the rat brain by activation autoradiography. Kogure K, et al. **Adv Neurol** 1990;52:81–4

Comparative studies of edema produced by fluid percussion injury with lateral and central modes of injury in cats. Marmarou A, et al. **Adv Neurol** 1990;52:233–6

The effect of sodium chloride concentration, water content, and protein on the gas chromatographic headspace analysis of ethanol in plasma. Watts MT, et al. **Am J Clin Pathol** 1990 Mar;93(3):357–62

Total body water measurement in normal and diabetic pregnancy: evidence for maternal and amniotic fluid equilibrium. Denne SC, et al. **Biol Neonate** 1990; 57(5):284–91

Correction factors for gravimetric measurement of peritumoural oedema in man. Bell BA, et al. **Br J Neurosurg** 1987;1(4):441–6

Changes in skinfolds during pregnancy. Taggart NR, et al. **Br J Nutr** 1967;21(2):439–51

Use of the doubly labeled water method for measurement of energy expenditure, total body water, water intake, and metabolizable energy intake in humans and small animals. Roberts SB. **Can J Physiol Pharmacol** 1989 Oct; 67(10):1190–8 (53 ref.)

Differentiation of rat salivary glands by thermoanalytical analysis. Menghi G, et al. **Cell Mol Biol** 1990;36(1):41–7

Characterization of mouse salivary glands by water content and type. Menghi G, et al. **Cell Mol Biol** 1989;35(4):391–8

Brain histology, blood-brain barrier and brain water after normothermic and hypothermic cardiopulmonary bypass in pigs. Laursen H, et al. **Eur J Cardiothorac Surg** 1989; 3(6):539–43

Comparison of estimates of fat-free mass in normal and obese women from measurements of body potassium, body water and body density. Garrow JS, et al. **Eur J Clin Nutr** 1990 Mar;44(3):213–7

Tissue determinants of nuclear magnetic resonance relaxation times. Effect of water and collagen content in muscle and tendon. Scholz TD, et al. **Invest Radiol** 1989 Nov; 24(11):893–8

Changes in the components and content of biological water in the brain of experimental hydrocephalic rabbits. Tamaki N, et al. **J Neurosurg** 1990 Aug;73(2):274–8 (34 ref.)

Fat/water quantitation and differential relaxation time measurement using chemical shift imaging technique. Poon CS, et al. **Magn Reson Imaging** 1989 Jul–Aug;7(4):369–82

Proton NMR study of the state of water in fibrin gels, plasma, and blood clots. Blinc A, et al. **Magn Reson Med** 1990 Apr;14(1):105–22

Regional effects of repetition time on NMR quantitation of water in normal and edematous lungs. Cutillo AG, et al. **Magn Reson Med** 1989 Oct;12(1):137–44

Use of gel filtration in the preparation of biological fluids for magnetic resonance spectroscopy. Hoffman DW, et al. **Magn Reson Med** 1990 Mar;13(3):507–13

Bound water content of bovine lens capsules. Popdimitrova N, et al. **Ophthalmic Res** 1989;21(5):352–9

1H magnetic resonance imaging study of bovine ocular tissue. Williams TR, et al. **Ophthalmic Res** 1990;22(2):89–94

Renal proton magnetic resonance in experimental acute renal failure in rats. Iaina A, et al. **Renal Physiol Biochem** 1989 May–Jun;12(3):202–11

[The water content in mammalian tissues and cells] Balonov MI, et al. **Fiziol Zh SSSR** 1989 Jul;75(7):963–9 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effects of prolactin on water balance and kidney function in bullfrog tadpoles. Brown PS, et al. **Gen Comp Endocrinol** 1989 Sep;75(3):389–96

Effects of glycerol-induced hyperhydration prior to exercise in the heat on sweating and core temperature. Lyons TP, et al. **Med Sci Sports Exerc** 1990 Aug;22(4):477–83

[Mannitol for the prevention of decompensation symptoms in hydrated patients undergoing long-term hemodialysis] Gellert R, et al. **Pol Tyg Lek** 1990 Jan 22–29;45(4–5):64–7 (Eng. Abstr.) **(Pol)**

[Effects of isosorbide dinitrate on body water spaces in chronic blood circulation insufficiency] Sharashidze ML, et al. **Ter Arkh** 1989;61(6):119–21 **(Rus)**

METABOLISM

Evaluation of the hydration and the water-holding capacity in atopic skin and so-called dry skin. Thune P. **Acta Derm Venereol Suppl (Stockh)** 1989;144:133–5

Effects of drugs and fatty acids related to Reye syndrome on brain water content in rats. Katafuchi Y, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Apr;31(2):115–9

Channels for water flow in epithelia: characteristics and regulation. Whittembury G, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(4):555–63

Mechanisms subserving brain water-electrolyte homeostasis. Szczepańska-Sadowska E. **Acta Physiol Pol** 1989 May–Jun; 40(3):301–18 (47 ref.)

The effect of hydration status on plasma vasopressin release during physical exercise in man. Viinamäki O. **Acta Physiol Scand** 1990 May;139(1):133–7

Electrolyte and water absorption in the hind gut of herbivores. Argenzio RA, et al. **Acta Vet Scand Suppl** 1989; 86:159–67 (30 ref.)

Quantitative magnetic resonance imaging assessment of mannitol's effect on peritumoral brain edema. Boisvert DP, et al. **Adv Neurol** 1990;52:560

Dexamethasone effects on the distribution of water and albumin in cold-injury cerebral edema. Nakata H, et al. **Adv Neurol** 1990;52:335–42

Dehydration: a new alcohol theory. Klemm WR. **Alcohol** 1990 Jan–Feb;7(1):49–59 (99 ref.)

Simultaneous measurement of free-living energy expenditure by the doubly labeled water method and heart-rate monitoring. Livingstone MB, et al. **Am J Clin Nutr** 1990 Jul;52(1):59–65

Comparison of doubly labeled water, intake-balance, and direct- and indirect-calorimetry methods for measuring energy expenditure in adult men. Seale JL, et al. **Am J Clin Nutr** 1990 Jul;52(1):66–71

Phosphatidates inhibit vasopressin-induced water transport via protein kinase C activation. Ando Y, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):F524–30

Model study of placental water transfer and causes of fetal water disease in sheep. Faber JJ, et al. **Am J Physiol** 1990 May;258(5 Pt 2):R1257–70

Peripheral arterial chemoreceptors and reflex control of sodium and water homeostasis. Honig A. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1282–302 (304 ref.)

Prevention of salt angiotensin II hypertension by servo control of body water. Krieger JE, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H994–1003

Renal tubular sodium and water reabsorption in the isotonic sodium chloride-loaded rat. Landwehr DM, et al. **Am J Physiol** 1967 Jun;212(6):1327–33

Differential sensitivity of exchange vessel hydraulic conductivity to atrial natriuretic peptide. Meyer DJ Jr, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H521–8

Extracellular dehydration during pregnancy increases salt appetite of offspring. Nicolaidis S, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R281–3

Sodium chloride and water transport in the thin descending limb of Henle of the quail. Nishimura H, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):F994–1002

Mechanisms and regulation of water permeability in renal epithelia. Verkman AS. **Am J Physiol** 1989 Nov;257(5 Pt 1):C837–50 (109 ref.)

Measurement of changes in brain water in man by magnetic resonance imaging. Bell BA. **Ann R Coll Surg Engl** 1989 Nov;71(6):375–80

Current thoughts on the maintenance of corneal hydration in vivo. Harris JE. **Arch Ophthalmol** 1967 Aug;78(2):126–32 (31 ref.)

Water transepithelial transport; mechanisms of action of antidiuretic hormone. Third Colloque Biomembranes. Paris, 15–17 May 1988. Proceedings. **Biol Cell** 1989; 66(1–2):1–206

Wheat germ agglutinin (WGA) reduces ADH-induced water flow and induces cell surface changes in epithelial cells of frog urinary bladder. Favard P, et al. **Biol Cell** 1989; 67(2):103–14

Structure and dynamics of water in tendon from NMR relaxation measurements. Peto S, et al. **Biophys J** 1990 Jan; 57(1):71–84

Stratum corneum hydration and amino acid content in xerotic skin. Horii I, et al. **Br J Dermatol** 1989 Nov;121(5):587–92

Body composition changes in goats during early lactation estimated using a two-pool model of tritiated water kinetics. Dunshea FR, et al. **Br J Nutr** 1990 Jul;64(1):121–31

Metabolism of body water and electrolytes after surgery for ulcerative colitis: conventional ileostomy versus J pouch. Christie PM, et al. **Br J Surg** 1990 Feb;77(2):149–51

Evidence for cholinergic regulation of microvessel hydraulic conductance during tissue hypoxia. Tucker VL, et al. **Circ Res** 1990 Feb;66(2):517–24

Effects of oil and water baths on the hydration state of the epidermis. Stender IM, et al. **Clin Exp Dermatol** 1990 May; 15(3):206–9

A functional study of the skin barrier to evaporative water loss by means of repeated cellophane-tape stripping. van der Valk PG, et al. **Clin Exp Dermatol** 1990 May; 15(3):180–2

Congenital hypopituitarism. With free water intolerance and lack of thymic involution. Early recognition of clinical presentation. McQueen MC, et al. **Clin Pediatr (Phila)** 1989 Dec;28(12):579–80

Water metabolism in the Namib Desert golden mole, Eremitalpa granti namibensis (Chrysochloridae). Fielden LJ, et al. **Comp Biochem Physiol [A]** 1990;96(1):227–34

Hydration properties of lens crystallins. Bettelheim FA, et al. **Exp Eye Res** 1990 Jun;50(6):715–8

Galactose-induced cataract in rat: Raman detection of sulfhydryl decrease and water increase along an equatorial diameter. Cai MZ, et al. **Exp Eye Res** 1989 Oct;49(4):531–41

Water self-diffusion in the calf lens. Haner RL, et al. **Exp Eye Res** 1989 Sep;49(3):371–6

Confirmation of lens hydration by Raman spectroscopy. Mizuno A, et al. **Exp Eye Res** 1990 Jun;50(6):647–9

Fluid absorption from the rumen during rehydration in sheep. Dahlborn K, et al. **Exp Physiol** 1990 Jan;75(1):45–55

The effect of loop diuretics on fluid reabsorption from the rat proximal convoluted tubule. Greenwood SL, et al. **Exp Physiol** 1990 May;75(3):375–82

Atrial natriuretic factor modulates proximal glomerulotubular balance in anesthetized rats. Zhuo JL, et al. **Hypertension** 1989 Dec;14(6):666–73

Total body water: changes during dialysis estimated by bioimpedance analysis. Böhm D, et al. **Infusionstherapie** 1990 Apr;17 Suppl 3:75–8

Distribution of extravascular lung water after acute smoke inhalation. Clark WR, et al. **J Appl Physiol** 1990 Jun; 68(6):2394–402

Radial heat and water transport across the airway wall. Tsai CL, et al. **J Appl Physiol** 1990 Jul;69(1):222–31

Endocytic vesicles from renal papilla which retrieve the vasopressin-sensitive water channel do not contain a functional H+ ATPase. Lencer WI, et al. **J Cell Biol** 1990 Aug;111(2):379–89

Angiotensin converting enzyme inhibition ameliorates glomerular filtration of macromolecules and water and lessens glomerular injury in the rat. Remuzzi A, et al. **J Clin Invest** 1990 Feb;85(2):541–9

Effect of uncomplicated pregnancy on body water content and distribution in baboons. Brans YW, et al. **J Med Primatol** 1990;19(1):31–45

Effect of mercurial compounds on net water transport and intramembrane particle aggregates in ADH-treated frog urinary bladder. Ibarra C, et al. **J Membr Biol** 1989 Sep; 110(2):115–26

Water transport and estimated transmembrane potential during freezing of mouse oocytes. Toner M, et al. **J Membr Biol** 1990 May;115(3):261–72

Effect of synthesis inhibitors of thromboxane A2 and prostaglandin E2 on the regulation of sodium and water. Reyes JL, et al. **J Pharmacol Exp Ther** 1989 Nov; 251(2):694–9

The effect of calcium on gallbladder absorption. Scheeres DE, et al. **J Surg Res** 1990 Jun;48(6):547–51

Hypertonic saline resuscitation of head injury: effects on cerebral water content. Wisner DH, et al. **J Trauma** 1990 Jan;30(1):75–8

Total body water, total exchangeable sodium and potassium in patients with convalescent acute myocardial infarction one to two months after onset. Segawa I, et al. **Jpn Circ J** 1989 Oct;53(10):1215–20

Effect of furosemide on water and urea transport in cortical and inner medullary collecting duct. Kudo LH, et al. **Kidney Int** 1990 May;37(5):1248–55

Steady-state theory for quantitative microdialysis of solutes and water in vivo and in vitro. Bungay PM, et al. **Life Sci** 1990;46(2):105–19

NMR study of water exchange across the hepatocyte membrane. Bacic G, et al. **Magn Reson Imaging** 1989 Jul–Aug;7(4):411–6 (30 ref.)

Assessment of dry body-weight in haemodialysis patients by the biochemical marker cGMP. Lauster F, et al. **Nephrol Dial Transplant** 1990;5(5):356–61

Change in renal tubular sodium and water handling during progression of polycystic kidney disease: relationship to

atrial natriuretic peptide. Sørensen SS, et al. **Nephrol Dial Transplant** 1990;5(4):247–57

Does pH reduction contribute to postischemic brain edema development? Mchedlishvili G, et al. **Neuropatol Pol** 1989; 27(1):71–6

Studies of dry weight of cortical neurons under conditions of osmotic brain edema development in rabbits. Museridze DP, et al. **Neuropatol Pol** 1989;27(1):77–84

Regional water content of clear and cataractous human lenses. Deussen A, et al. **Ophthalmic Res** 1989;21(5):374–80

Total body water measured by 18–O dilution and bioelectrical impedance in well and malnourished children. Fjeld CR, et al. **Pediatr Res** 1990 Jan;27(1):98–102

Atrial natriuretic peptide has no direct effect on proximal tubule sodium and water reabsorption. Capasso G, et al. **Pflugers Arch** 1989 Dec;415(3):336–41

Evidence that the glucose transporter serves as a water channel in J774 macrophages. Fischbarg J, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8397–401

Glucose transporters serve as water channels. Fischbarg J, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3244–7

Changes in the hydration shell of actomyosin are obligatory for tension generation and movement. Oplatka A. **Prog Clin Biol Res** 1989;315:45–9 (12 ref.)

Recent advances in hormonal regulation of water metabolism in terrestrial insects. Proux JP. **Prog Clin Biol Res** 1990; 342:541–6 (27 ref.)

The increased proximal tubular reabsorption of sodium and water is maintained in long–term insulin–dependent diabetics with early nephropathy. Skøtt P, et al. **Scand J Clin Lab Invest** 1989 Sep;49(5):419–25

The acute effect of acetazolamide on glomerular filtration rate and proximal tubular reabsorption of sodium and water in normal man. Skøtt P, et al. **Scand J Clin Lab Invest** 1989 Oct;49(6):583–7

Water, fixed charge density, protein contents, and lysine incorporation into protein in chymopapain–digested intervertebral disc of rabbit. Kitano S, et al. **Spine** 1989 Nov;14(11):1226–33

Water diffusion pathway, swelling pressure, and biomechanical properties of the intervertebral disc during compression load. Ohshima H, et al. **Spine** 1989 Nov; 14(11):1234–44

Pulmonary transvascular fluid dynamics with extracorporeal membrane oxygenation in awake lambs. Delaney AG, et al. **Surg Forum** 1978;29:194–6

Effect of intracavitary ventricular filling pressure on coronary flow distribution, water content, and compliance in hypertrophied hearts. Mavroudis C, et al. **Surg Forum** 1978;29:306–8

Effect of injury and total parenteral nutrition on water and electrolytes of RBC, serum, muscle and liver tissue. Liaw KY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Mar; 88(3):253–7

[Changes in organ water content in patients with postburn multiple organ failure] Zhao ZD. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Mar;6(1):50–2, 78–9 (Eng. Abstr.) **(Chi)**

[Characterization of proton pump and osmotic water transport in endocytic vesicles from rat kidney proximal tubule] Shi LB, et al. **Sheng Li Hsueh Pao** 1990 Apr; 42(2):105–13 (Eng. Abstr.) **(Chi)**

[Changes in calcium and water content of stunned myocardium and effects of hyperosmotic mannitol in rat heart] Sun JZ, et al. **Sheng Li Hsueh Pao** 1990 Apr; 42(2):155–62 (Eng. Abstr.) **(Chi)**

[Improvement of skin moisture and skin texture with urea therapy] Puschmann M, et al. **Hautarzt** 1989;40 Suppl 9:67–70 (Eng. Abstr.) **(Ger)**

[Water content of the skin following salicylic acid and urea treatment] Rácz I, et al. **Hautarzt** 1989;40 Suppl 9:61–2 (Eng. Abstr.) **(Ger)**

[Mechanisms of water and ion transport in the intermediate renal tubule] Imai M, et al. **Nippon Rinsho** 1989 Jul; 47(7):1537–46 **(Jpn)**

[Water and urea transport in the collecting tubule] Kato A, et al. **Nippon Rinsho** 1989 Jul;47(7):1573–7 **(Jpn)**

[Effect of stimulation of the medullary reticular formation on brain water content in cold injured brain] Ogawa T. **No To Shinkei** 1990 Mar;42(3):261–8 (Eng. Abstr.) **(Jpn)**

[Current views and studies of brain edema] Szymaś J. **Neurol Neurochir Pol** 1989 May–Jun;23(3):231–7 (30 ref.) **(Pol)**

[Development of water space volumes in calves during the first month of life. I. Changes in the total amount of water] Janus K. **Pol Arch Weter** 1988;28(3–4):23–32 (Eng. Abstr.) **(Pol)**

[Value of the tritium test for determining the fat content in the body of rats] Pisarchuk KL. **Fiziol Zh** 1990 Mar–Apr; 36(2):99–102 (Eng. Abstr.) **(Rus)**

[Hygienic significance of low humidity under the conditions of Extreme North (review of the literature)] Dedenko II, et al. **Gig Sanit** 1990 Mar;(3):7–10 (35 ref.) **(Rus)**

[Age–related characteristics of the regional distribution of total water in the human brain] Petrenko AG. **Vrach Delo** 1989 Sep;(9):88–90 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Vulvar transepidermal water loss (TEWL) decay curves. Effect of occlusion, delipidation, and age. Oriba HA, et al. **Acta Derm Venereol (Stockh)** 1989;69(6):461–5

Comparative pharmacokinetics of ethanol in inbred strains of mice using doses based on total body water. Faulkner TP, et al. **Alcoholism (N Y)** 1990 Feb;14(1):82–6

Osmotic forces driving water reabsorption in the proximal tubule of the rat kidney. Green R, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):F669–75

Mechanical aspects of rabbit fecal dehydration. McKie AT, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):G391–4

Water permeability in different epithelial barriers. Capurro C, et al. **Biol Cell** 1989;66(1–2):145–8

Localization of barriers to water flow in toad urinary bladder. Levine SD, et al. **Biol Cell** 1989;66(1–2):23–7

Transepidermal water loss and skin surface hydration in the non invasive assessment of stratum corneum function. Berardesca E, et al. **Derm Beruf Umwelt** 1990 Mar–Apr; 38(2):50–3 (28 ref.)

Body impedance is largely dependent on the intra– and extra–cellular water distribution. Deurenberg P, et al. **Eur J Clin Nutr** 1989 Dec;43(12):845–53

Changes in total body water during adolescent growth. Novak LP. **Hum Biol** 1989 Jun;61(3):407–14

New approaches to body composition research: a reexamination of two–compartment model assumptions. Heymsfield SB, et al. **Infusionstherapie** 1990 Apr;17 Suppl 3:4–8 (22 ref.)

Validation of the measurement of body composition from whole body bioelectric impedance. Shizgal HM. **Infusionstherapie** 1990 Apr;17 Suppl 3:67–74

Measurement of lung water dynamics and lung aeration in the perinatal period by use of digital X–ray fluoroscopy. Maloney JE, et al. **J Appl Physiol** 1989 Sep;67(3):1286–93

Vasopressin and water distribution in rats with DOCA–salt hypertension. Kuneš J, et al. **J Hypertens Suppl** 1989 Dec; 7(6):S204–5

The physical state of water in living cells and model systems. XII. The influence of the conformation of a protein on the solubility of Na+ (sulfate), sucrose, glycine and urea in the water in which the protein is also dissolved. Ling GN, et al. **Physiol Chem Phys Med NMR** 1989;21(1):19–44

Water movements after an intraruminal water load in pregnant and lactating Sardi sheep. Benlamlih S, et al. **Reprod Nutr Dev** 1990;30(2):227–35

Water and lactate movement in the swimbladder of the eel, Anguilla anguilla. Kobayashi H, et al. **Respir Physiol** 1989 Oct;78(1):45–57

[A device for the continuous determination of summary human moisture loss] Aldersons AA. **Fiziol Cheloveka** 1989 Sep–Oct;15(5):174–6 **(Rus)**

SECRETION

Isotonic secretion via frog skin glands in vitro. Water secretion is coupled to the secretion of sodium ions. Nielsen R. **Acta Physiol Scand** 1990 May;139(1):211–21

Long–term heat adaptation results in an enhanced efficiency of muscarinically–induced water secretion in rat submaxillary glands. Oron Y, et al. **Comp Biochem Physiol [A]** 1989;94(4):673–6

Jejunal water and sodium secretion occurs in chronic idiopathic intestinal pseudo–obstruction. Rolston DD, et al. **J Clin Gastroenterol** 1990 Apr;12(2):153–6

Gabexate and camostat, synthetic proteinase inhibitors, as direct inducing factors of water and bicarbonate secretion in the isolated and blood–perfused dog pancreas. Horiuchi A, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):320–6

Water secretion and embryological layers in cystic fibrosis. Baxter P. **J R Coll Physicians Lond** 1990 Apr;24(2):98–100

BODY WEIGHT

see related
OBESITY
THINNESS

Parents' accuracy in estimating child weight status. Jackson J, et al. **Addict Behav** 1990;15(1):65–8

A psychometric study of restraint: the impact of race, gender, weight and marital status. Klem ML, et al. **Addict Behav** 1990;15(2):147–52

Identifying eating patterns in male and female undergraduates using cluster analysis. Kristeller JL, et al. **Addict Behav** 1989;14(6):631–42

Fitness promotion for adolescent girls: the impact and effectiveness of promotional material which emphasizes the slim ideal. Shaw SM, et al. **Adolescence** 1989 Fall; 24(95):677–87

Ventilatory pulmonary function study in healthy young Nigerian adults. Anyanwu CH, et al. **Afr J Med Med Sci** 1989 Dec;18(4):257–62

Adolescent pregnancy: associations among body weight, zinc nutriture, and pregnancy outcome. Cherry FF, et al. **Am J Clin Nutr** 1989 Nov;50(5):945–54

Patterns of weight change and their relation to diet in a cohort of healthy women. Colditz GA, et al. **Am J Clin Nutr** 1990 Jun;51(6):1100–5

Ratio of actual to predicted weight as an alternative to a power–type weight–height index (Benn index). Flegal KM. **Am J Clin Nutr** 1990 Apr;51(4):540–7

The menstrual cycle's effect on the reliability of bioimpedance measurements for assessing body composition. Gleichauf CN, et al. **Am J Clin Nutr** 1989 Nov;50(5):903–7

Age–specific responsiveness of weight and length to nutritional supplementation. Lutter CK, et al. **Am J Clin Nutr** 1990 Mar;51(3):359–64

Resting metabolic rate in weight–cycling collegiate wrestlers compared with physically active, noncycling control subjects. Melby CL, et al. **Am J Clin Nutr** 1990 Sep; 52(3):409–14

Maternal body weight and pregnancy outcome. Naeye RL. **Am J Clin Nutr** 1990 Aug;52(2):273–9

Urinary excretion of polyamines: importance of circadian rhythm, age, sex, menstrual cycle, weight, and creatinine excretion. Pöyhönen MJ, et al. **Am J Clin Nutr** 1990 Oct; 52(4):746–51

Anthropometric parameters of schoolchildren with different life–styles. Sabaté J, et al. **Am J Dis Child** 1990 Oct; 144(10):1159–63

Weight as a risk factor for clinical diabetes in women. Colditz GA, et al. **Am J Epidemiol** 1990 Sep;132(3):501–13

Body mass index versus height and weight in relation to blood pressure. Findings for the 10,079 persons in the INTERSALT Study. Dyer AR, et al. **Am J Epidemiol** 1990 Apr;131(4):589–96

The importance of age in evaluating anthropometric indices for predicting mortality. Katz J, et al. **Am J Epidemiol** 1989 Dec;130(6):1219–26

Body size and breast cancer risk assessed in women participating in the Breast Cancer Detection Demonstration Project. Swanson CA, et al. **Am J Epidemiol** 1989 Dec; 130(6):1133–41

Solving a weighty problem [letter] Harding J, et al. **Am J Nurs** 1990 Jul;90(7):22

Prepregnancy weight status, prenatal weight gain, and the outcome of term twin gestations. Brown JE, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):182–6

Fetal weight error perpetuated [letter] DuBose TJ. **Am J Obstet Gynecol** 1990 Mar;162(3):876

Ultrasonographic estimation of fetal weight in the clinically macrosomic fetus. Hirata GI, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):238–42

The effect of adjusting maternal serum alpha–fetoprotein levels for maternal weight in pregnancies with fetal open spina bifida. A United States collaborative study. Johnson AM, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):9–11

Ultrasonographic fetal weight estimation by an integrated computer–assisted system: can each laboratory improve its accuracy? Thompson HO, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):986–95

Sonographic estimates of fetal weight in the intrauterine growth retardation population. Guidetti DA, et al. **Am J Perinatol** 1990 Jan;7(1):5–7

Accuracy of ultrasonic fetal weight estimation and detection of small for gestational age fetuses. Palo P, et al. **Am J Perinatol** 1989 Oct;6(4):400–4

Gestation length, metabolic rate, and body and brain weights in primates: epigenetic effects. Little BB. **Am J Phys Anthropol** 1989 Oct;80(2):213–8

Weights of wild orang utans. Markham R, et al. **Am J Phys Anthropol** 1990 Jan;81(1):1–3 (10 ref.)

Rats eating and hoarding as a function of body weight and cost of foraging. Cabanac M, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R952–7

Paracellular intestinal absorption of glucose, creatinine, and mannitol in normal animals: relation to body size. Pappenheimer JR. **Am J Physiol** 1990 Aug;259(2 Pt 1):G290–9

Weight cycling in female rats subjected to varying meal patterns. Wheeler J, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R124–9

Single dose metrifonate or praziquantel treatment in Kenyan children. II. Effects on growth in relation to Schistosoma haematobium and hookworm egg counts. Stephenson LS, et al. **Am J Trop Med Hyg** 1989 Oct;41(4):445–53

Host determinants of pneumonia in slaughter weight swine. Gardner IA, et al. **Am J Vet Res** 1990 Aug;51(8):1306–11

Hanging leg weight—a rapid technique for estimating total body weight in pediatric resuscitation. Haftel AJ, et al. **Ann Emerg Med** 1990 May;19(5):523–6

Growth of remote Australian aborigines from birth to two years [published erratum appears in Ann Hum Biol 1990 Jan–Feb;17(1):69] Gracey M, et al. **Ann Hum Biol** 1989 Sep–Oct;16(5):421–8

Heights and weights of Swedish school children born in 1955 and 1967. Lindgren GW, et al. **Ann Hum Biol** 1989 Sep–Oct;16(5):397–406

Single occasion means of height and weight of Sri Lankan Tamil children from Jaffna. Pathmanathan G, et al. **Ann Hum Biol** 1990 Mar–Apr;17(2):107–13

Lack of linkage between height and weight and age at menarche during the secular shift in growth of Japanese children. Tsuzaki S, et al. **Ann Hum Biol** 1989 Sep–Oct; 16(5):429–36

The approaches to the study of human disorders in food ingestion and body weight maintenance. McHugh PR, et al. **Ann N Y Acad Sci** 1989;575:1–11; discussion 11–2 (40 ref.)

Interrelationships between body weight, body fat distribution and insulin in obese women before and after hypocaloric feeding and weight loss. Casimirri F, et al. **Ann Nutr Metab** 1989;33(2):79–87 (39 ref.)

Prevalence of obesity, leanness and anorexia nervosa in Japanese boys and girls aged 12–14 years. Ohzeki T, et al. **Ann Nutr Metab** 1990;34(4):208–12

Evaluation of the nutritional status of 1st–year school children in Campinas, Brazil. Barros AA, et al. **Ann Trop Paediatr** 1990 Mar;10(1):75–84

Three-dimensional morphometry of mammalian cells. I. Diameters. Ocqueteau C, et al. **Arch Biol Med Exp (Santiago)** 1989 Jul;22(2):89–95

Bone mineral content and body size 65 to 100 weeks' postconception in preterm and full term infants. Horsman A, et al. **Arch Dis Child** 1989 Nov;64(11):1579–86

Growth in haemophilic boys after HIV infection. Pasi KJ, et al. **Arch Dis Child** 1990 Jan;65(1):115–8

Direction of weight change in recurrent depression. Consistency across episodes. Stunkard AJ, et al. **Arch Gen Psychiatry** 1990 Sep;47(9):857–60

Diet vs exercise in weight maintenance. The effects of minimal intervention strategies on long-term outcomes in men. King AC, et al. **Arch Intern Med** 1989 Dec; 149(12):2741–6

Body weight as a risk factor in the elderly. Tayback M, et al. **Arch Intern Med** 1990 May;150(5):1065–72

Dental development, skeletal maturation and body weight at birth in pig-tail macaques (Macaca nemestrina). Swindler DR, et al. **Arch Oral Biol** 1990;35(4):289–94

Regional distribution of body fat, plasma lipoproteins, and cardiovascular disease. Després JP, et al. **Arteriosclerosis** 1990 Jul–Aug;10(4):497–511 (131 ref.)

Growth charts in pounds? [letter] Novotny R. **Asia Pac J Public Health** 1989;3(2):173

Intradialytic body weight changes and dialyzer pore size as main contributing factors to the evolution of beta-2-microglobulin in dialysis. Vanholder RC, et al. **Blood Purif** 1990;8(1):32–44

Body weight and arterial hypertension [letter; comment] O'Brien E, et al. **BMJ** 1989 Nov 18;299(6710):1281–2 Comment on: BMJ 1989 Sep 23;299(6702):767–70.

Independent effects of weight change and attained body weight on prevalence of arterial hypertension in obese and non-obese men [see comments] Sonne-Holm S, et al. **BMJ** 1989 Sep 23;299(6702):767–70 Comment in: BMJ 1989 Nov 18;299(6710):1281–2.

Body weight and breast cancer [letter; comment] Hug V. **Br J Cancer** 1989 Dec;60(6):968–9 Comment on: Br J Cancer 1988 Nov;58(5):631–4.

Gentamicin volume of distribution as a power function of body weight. Keller F. **Br J Clin Pharmacol** 1989 Oct; 28(4):479–81

Response of laying hens to asymmetrical interrupted lighting regimens: reproductive performance, body weight and carcase composition. Lewis PD, et al. **Br Poult Sci** 1990 Mar;31(1):33–43

Effect of diets with different protein levels on the growth of Walker 256 carcinosarcoma in rats. Waitzberg DL, et al. **Braz J Med Biol Res** 1989;22(4):447–55

Menstrual function and its relationship to stress, exercise, and body weight. Gindoff PR. **Bull N Y Acad Med** 1989 Sep; 65(7):774–86 (72 ref.)

The Andalusian Nutritional Survey: comparison of the nutritional status of Andalusian children aged 6–60 months with that of the NCHS/CDC reference population. Briones E, et al. **Bull World Health Organ** 1989;67(4):409–16

Critical evaluation of frame size determination in the 1983 Metropolitan Life weight for height tables. Faulkner RA, et al. **Can J Public Health** 1989 Sep–Oct;80(5):369–72

Association of change in body mass with breast cancer. Ballard-Barbash R, et al. **Cancer Res** 1990 Apr 1; 50(7):2152–5

Analysis of dietary fat, calories, body weight, and the development of mammary tumors in rats and mice: a review. Freedman LS, et al. **Cancer Res** 1990 Sep 15; 50(18):5710–9 (115 ref.)

Use of growth standards [letter; comment] Geelhuysen CJ. **Child Care Health Dev** 1990 May-Jun;16(3):205–6 Comment on: Child Care Health Dev 1989 May-Jun;15(3):167–74.

Relationship of body mass index, weight and height to plasma lipid levels in people with different diets in Britain. Thorogood M, et al. **Community Med** 1989 Aug;11(3):230–3

Axis II comorbidity of normal-weight bulimia. Zanarini MC, et al. **Compr Psychiatry** 1990 Jan–Feb;31(1):20–4

Microdose intravaginal levonorgestrel contraception: a multicentre clinical trial. III. The relationship between pregnancy rate and body weight. World Health Organization. Task Force on Long-Acting Systemic Agents for Fertility Regulation. Koetsawang S, et al. **Contraception** 1990 Feb;41(2):143–50

Postoperative fluid overload: not a benign problem. Lowell JA, et al. **Crit Care Med** 1990 Jul;18(7):728–33

Birth-interval dynamics in rural Bangladesh and maternal weight. Ford K, et al. **Demography** 1989 Aug;26(3):425–37

The importance of accurate and standardized height and weight measurements in body composition analysis [letter] Blanchard J. **Eur J Clin Nutr** 1990 Apr;44(4):337–8

Growth suppression in the Trichuris dysentery syndrome. Cooper ES, et al. **Eur J Clin Nutr** 1990 Apr;44(4):285–91

Adjusting energy expenditure for body weight in early infancy. Davies PS, et al. **Eur J Clin Nutr** 1989 Sep; 43(9):641–5

Comparison of estimates of fat-free mass in normal and obese women from measurements of body potassium, body water and body density. Garrow JS, et al. **Eur J Clin Nutr** 1990 Mar;44(3):213–7

Body weight changes and basal metabolic rates of rural Beninese women during seasons with different energy intakes. Schultink WJ, et al. **Eur J Clin Nutr** 1990;44 Suppl 1:31–40

Fetal weight estimation in twin pregnancies. Secher NJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Sep;32(3):181–6

Cosmos 1887 mission overview: effects of microgravity on rat body and adrenal weights and plasma constituents. Grindeland RE, et al. **FASEB J** 1990 Jan;4(1):105–9

Failure of body mass index or body weight to influence markedly the response to ovarian hyperstimulation in normal cycling women. Lewis CG, et al. **Fertil Steril** 1990 Jun;53(6):1097–9

Multivariable analysis of serum 3,5,3'-L-triiodothyronine concentration in patients of diabetes mellitus by blood glucose level and body weight. Yagura T, et al. **Horm Metab Res** 1990 Apr;22(4):237–40

Marker haplotype association with growth in German cystic fibrosis patients. Tümmler B, et al. **Hum Genet** 1990 Feb; 84(3):267–73

Height-weight relationship in young healthy Indian males. Verma SS, et al. **Indian J Med Sci** 1990 Apr;44(4):90–2

Can illiterate mothers understand growth charts? Rohde JE, et al. **Indian J Pediatr** 1990 Jan–Feb;57(1):73–6

Growth chart design [letter; comment] Singh D, et al. **Indian J Pediatr** 1989 Jul–Aug;56(4):555–6 Comment on: Indian J Pediatr 1988 Jan–Feb;55(1 Suppl):S26–9.

Effect of immobilization stress on food intake, body weight and weights of various organs in rat. Monteiro F, et al. **Indian J Physiol Pharmacol** 1989 Jul–Sep;33(3):186–90

A study of height and weight of urban school-going children of Imphal. Yaima E, et al. **Indian J Public Health** 1989 Jan–Mar;33(1):15–20

Comparative evaluation of two maternal weight-height indices during pregnancy. Bhatia BD, et al. **Indian Pediatr** 1989 Apr;26(4):353–7

Anthropometric variables and risk of breast cancer. Parazzini F, et al. **Int J Cancer** 1990 Mar 15;45(3):397–402

Height and weight in relation to uterine corpus cancer morbidity and mortality. A follow-up study of 570,000 women in Norway. Tretli S, et al. **Int J Cancer** 1990 Aug 15;46(2):165–72

Circadian rhythm of energy intake and corpulence status in adults. Fricker J, et al. **Int J Obes** 1990;14(5):387–93

The predictive validity of body mass index based on self-reported weight and height. Kuskowska-Wolk A, et al. **Int J Obes** 1989;13(4):441–53

Body weight variability in men: metabolic rate, health and longevity. Lissner L, et al. **Int J Obes** 1990;14(4):373–83

A longitudinal study of obesity in Japan: relationship of body habitus between at birth and at age 17. Muramatsu S, et al. **Int J Obes** 1990 Jan;14(1):39–45

Long-term effects of a psychologically based group programme for women preoccupied with body weight and eating behaviour. Roughan P, et al. **Int J Obes** 1990; 14(2):135–47

Relationships between weight change and blood lipids in men and women: the Adelaide 1000'. Sedgwick AW, et al. **Int J Obes** 1990;14(5):439–50

Studies in the distribution of body fat. II. Longitudinal effects of change in weight. Shimokata H, et al. **Int J Obes** 1989; 13(4):455–64 (52 ref.)

Long-term changes of body weight in adult obese and non-obese men. Sonne-Holm S, et al. **Int J Obes** 1990; 14(4):319–26

Body weight variability and mortality in the Charleston Heart Study [letter] Stevens J, et al. **Int J Obes** 1990; 14(4):385–6

Weight maintenance and resting metabolic rate 18–40 months after a diet/exercise treatment. van Dale D, et al. **Int J Obes** 1990;14(4):347–59

Effect of weight restoration on the dyslipoproteinemia of anorexia nervosa. Arden MR, et al. **J Adolesc Health Care** 1990 May;11(3):199–202

Interrelationships between psychological factors, overweight, and blood pressure in adolescents. Johnson EH. **J Adolesc Health Care** 1990 Jul;11(4):310–8

Diagnosis of adolescent hypertension on initial screening by the use of height age. Portman RJ, et al. **J Adolesc Health Care** 1990 May;11(3):215–22

Weight and eating concerns among pre- and young adolescent boys and girls. Richards MH, et al. **J Adolesc Health Care** 1990 May;11(3):203–9

A comparison of pregnancy outcome in overweight and normal weight women. Mitchell MC, et al. **J Am Coll Nutr** 1989 Dec;8(6):617–24 (39 ref.)

Anthropometric measurements of white and black southern adolescent girls. Korslund MK, et al. **J Am Diet Assoc** 1990 Mar;90(3):394–400

The association of pregnancy weight gain with the mother's postpartum weight. Parham ES, et al. **J Am Diet Assoc** 1990 Apr;90(4):550–4

Feed intake, weaning weight and net returns comparisons for four breeding systems. Armstrong SL, et al. **J Anim Sci** 1990 Jul;68(7):1848–56

Relationships between adipose tissue characteristics of newborn pigs and subsequent performance: II. Carcass traits at 95 and 145 kilograms live weight. Geri G, et al. **J Anim Sci** 1990 Jul;68(7):1929–35

Long-term effects of corn gluten feed on the reproductive performance and weight of gestating sows. Honeyman MS, et al. **J Anim Sci** 1990 May;68(5):1329–36

Mass selection for increased 70-day weight in a closed line of Landrace pigs. Kuhlers DL, et al. **J Anim Sci** 1990 Aug; 68(8):2271–8

Reproductive performance and variation in body weight during annual cycles for crossbred beef cows with different genetic potential for milk. Montaño-Bermudez M, et al. **J Anim Sci** 1990 Aug;68(8):2289–96

Energy utilization in mature ewes from seven breeds with diverse production potentials. Olthoff JC, et al. **J Anim Sci** 1989 Oct;67(10):2550–64

Differential compensatory growth in swine following control of feed intake by a high-alfalfa diet fed ad libitum or by limited feed. Pond WG, et al. **J Anim Sci** 1990 Feb; 68(2):352–62

Regulation of bone stress and strain in the immature and mature rat femur. Keller TS, et al. **J Biomech** 1989; 22(11–12):1115–27

Scaling of long bone fracture strength with animal mass. Selker F, et al. **J Biomech** 1989;22(11–12):1175–83

A study of the self-perception of being overweight in adult inhabitants of Cracow. Goryński P, et al. **J Clin Epidemiol** 1989;42(12):1149–54

Family dysfunction in normal weight bulimic and bulimic anorexic families. Shisslak CM, et al. **J Clin Psychol** 1990 Mar;46(2):185–9

Erythrocyte osmotic fragility, serum creatine kinase and its isoenzymes related to body weight in porcine malignant hyperthermia. Doizé F, et al. **J Comp Pathol** 1990 May; 102(4):467–73

The relationship between body mass and rate of rewarming from hibernation and daily torpor in mammals. Geiser F, et al. **J Exp Biol** 1990 Jul;151:349–59

The INTERSALT study: relations of body mass index to blood pressure. INTERSALT Co-operative Research Group. Dyer AR, et al. **J Hum Hypertens** 1989 Oct; 3(5):299–308

Suppression of clinical weakness in experimental autoimmune encephalomyelitis associated with weight changes, and post-decapitation convulsions after intracisternal-ventricular administration of 6-hydroxydopamine. Konkol RJ, et al. **J Neuroimmunol** 1990 Jan;26(1):25–34

Nutrient intake and growth performance of older infants fed human milk. Stuff JE, et al. **J Pediatr** 1989 Dec; 115(6):959–68

The accuracy of test weighing for preterm infants. Meier PP, et al. **J Pediatr Gastroenterol Nutr** 1990 Jan;10(1):62–5

A new measure of weight locus of control: the Dieting Beliefs Scale. Stotland S, et al. **J Pers Assess** 1990 Spring; 54(1–2):191–203

Women and weight: fad and fiction. Rothblum ED. **J Psychol** 1990 Jan;124(1):5–24 (80 ref.)

A comparison of weight and diet concerns and personality factors among female athletes and non-athletes. Davis C, et al. **J Psychosom Res** 1989;33(5):527–36

Adolescent concerns about weight and eating; a social-development perspective. Wardle J, et al. **J Psychosom Res** 1990;34(4):377–91

Black and white adolescents' perceptions of their weight. Desmond SM, et al. **J Sch Health** 1989 Oct;59(8):353–8

The response of serum growth hormone and prolactin to training in weight-maintaining healthy males. Hurley RS, et al. **J Sports Med Phys Fitness** 1990 Mar;30(1):45–8

Physical growth of Chinese children from birth to 6 years old in urban and rural areas in 1985. Ching RJ, et al. **J Trop Pediatr** 1989 Oct;35(5):255–60

Relative weight, height and risk of breast cancer [letter; comment] Albanes D, et al. **JAMA** 1990 Jun 20; 263(23):3148 Comment on: JAMA 1989 Nov 24;262(20):2853–8.

Prospective study of relative weight, height, and risk of breast cancer [see comments] London SJ, et al. **JAMA** 1989 Nov 24;262(20):2853–8 Comment in: JAMA 1990 Jun 20;263(23):3148.

Estimated fetal weight in the detection of the small-for-menstrual-age fetus. Dudley NJ, et al. **JCU** 1990 Jun;18(5):387–93

Fetal weight estimates in diabetic gravid women. Miller JM Jr, et al. **JCU** 1988 Oct;16(8):569–72

Predictiveness of sonographic fetal weight estimation as a function of prior probability of intrauterine growth retardation. Simon NV, et al. **JCU** 1988 Jun;16(5):285–94

Prediction of fatty liver from serum triglyceride levels and body weight indexes. Liu TY, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 Jun; 6(6):289–94

Land snails as experimental animals: a study of the variability and distribution of individual weights in Helix aspersa snails born from the same clutch. Sanz Sampelayo R, et al. **Lab Anim** 1990 Jan;24(1):1–4

Growth and nutrition in children with cerebral palsy. **Lancet** 1990 May 26;335(8700):1253–4

Diarrhoea and catch-up growth [letter; comment] Briend A, et al. **Lancet** 1990 May 12;335(8698):1157–8 Comment on: Lancet 1990 Mar 10;335(8689):599–600.

Nibbling at the cherry [letter; comment] Garrow JS. **Lancet** 1990 Feb 24;335(8687):487 Comment on: Lancet 1990 Jan 27;335(8683):200–1.

Use of fetal-weight formulae in a community hospital. Castellano J, et al. **Md Med J** 1990 Jun;39(6):571–5

Estimation of minimal weight of adolescent males using multicomponent models. Horswill CA, et al. **Med Sci Sports Exerc** 1990 Aug;22(4):528–32

Different mechanisms of increased proteolysis in atrophy induced by denervation or unweighting of rat soleus muscle. Tischler ME, et al. **Metabolism** 1990 Jul;

39(7):756–63

A study of the influence of body weight and height on military parachute landing injuries. Pirson J, et al. **Milit Med** 1990 Aug;155(8):383–5

Progeny of male rats treated with methadone: physiological and behavioural effects. Joffe JM, et al. **Mutat Res** 1990 Apr;229(2):201–11

Body weight and the sensitivity of blood pressure to sodium [letter; comment] Roduy J, et al. **N Engl J Med** 1990 Feb 15;322(7):476–7 Comment on: N Engl J Med 1989 Aug 31;321(9):580–5.

Destiny rides again as twins overeat [editorial; comment] Sims EA. **N Engl J Med** 1990 May 24;322(21):1522–4 Comment on: N Engl J Med 1990 May 24;322(21):1477–82. Comment on: N Engl J Med 1990 May 24;322(21):1483–7.

Assessment of dry body–weight in haemodialysis patients by the biochemical marker cGMP. Lauster F, et al. **Nephrol Dial Transplant** 1990;5(5):356–61

Pre–morbid height and weight as risk factors for development of central nervous system neoplasms. Helseth A, et al. **Neuroepidemiology** 1989;8(6):277–82

International differences in body height and weight and their relationship to cancer incidence. Albanes D, et al. **Nutr Cancer** 1990;14(1):69–77

The inadequacy of the current correction for maternal weight in maternal serum alpha–fetoprotein interpretation. Drugan A, et al. **Obstet Gynecol** 1989 Nov;74(5):698–701

The diet dilemma. Kirk K. **Ohio Med** 1990 Mar;86(3):198–9, 201, 204–7

Weight and dieting concerns in adolescents, fashion or symptom? Casper RC, et al. **Pediatrics** 1990 Sep; 86(3):384–90

Stature and weight status of children in an urban kindergarten population. Kumanyika SK, et al. **Pediatrics** 1990 May; 85(5):783–90

Perception of unilateral lower extremity weightbearing during bilateral upright stance. Bohannon RW, et al. **Percept Mot Skills** 1989 Dec;69(3 Pt 1):875–80

How well does average fundamental frequency correlate with speaker height and weight? Künzel HJ. **Phonetica** 1989;46(1–3):117–25

The effect of different feed restriction treatments during rearing on the luteinizing hormone concentrations, body weight, and fertility of broiler–breeder cockerels. Lilburn MS, et al. **Poult Sci** 1990 May;69(5):860–3

Effect of daily restriction and age at initiation of a skip–a–day program for young broiler breeders. Wilson HR, et al. **Poult Sci** 1989 Nov;68(11):1442–6

Smoking, body weight, and their effects on smoking behavior: a comprehensive review of the literature. Klesges RC, et al. **Psychol Bull** 1989 Sep;106(2):204–30 (313 ref.)

Anonymity, sex, and weight–preoccupation as variables on the eating disorders inventory with normal college students. Szekely BC, et al. **Psychol Rep** 1989 Dec;65(3 Pt 1):795–800

Attention deficit hyperactivity disorder and methylphenidate: the relationship between gross body weight and drug response in children. Rapport MD, et al. **Psychopharmacol Bull** 1989;25(2):285–90

Report of a special panel on desired prenatal weight gains for underweight and normal weight women. **Public Health Rep** 1990 Jan–Feb;105(1):24–8

Sonographic estimation of fetal age and weight. Hadlock FP. **Radiol Clin North Am** 1990 Jan;28(1):39–50

Age and admission weight as predictors of mortality in gastro–enteritis. Hay IT. **S Afr Med J** 1989 Nov 4; 76(9):483–4

Epidemiology and natural history of breast cancer. Implications for the body weight–breast cancer controversy. Morabia A, et al. **Surg Clin North Am** 1990 Aug;70(4):739–52 (80 ref.)

Recurrent inguinal hernia in relation to ideal body weight. Thomas SM, et al. **Surg Gynecol Obstet** 1990 Jun; 170(6):510–2

Foot length growth related to crown–rump length, gestational age and weight in human staged fresh fetuses. An index for anatomical and medical use. Mandarim–de–Lacerda CA. **Surg Radiol Anat** 1990; 12(2):103–7

Adverse effect of additional weight on exercise against gravity in patients with chronic obstructive airways disease [letter; comment] France AJ. **Thorax** 1990 Jan;45(1):79–80 Comment on: Thorax 1989 Sep;44(9):716–20.

Adverse effect of additional weight on exercise against gravity in patients with chronic obstructive airways disease [see comments] Swinburn CR, et al. **Thorax** 1989 Sep; 44(9):716–20 Comment in: Thorax 1990 Jan;45(1):79–80.

Growth, body weight, survival, and tumor trends in F344/N rats during an eleven–year period. Rao GN, et al. **Toxicol Pathol** 1990;18(1 Pt 1):61–70

Growth, body weight, survival, and tumor trends in (C57BL/6 X C3H/HeN) F1 (B6C3F1) mice during a nine–year period. Rao GN, et al. **Toxicol Pathol** 1990;18(1 Pt 1):71–7

Physical growth measurements of 18,719 primary school children living in Adana, Turkey. Dindar H, et al. **Turk J Pediatr** 1989 Jan–Mar;31(1):45–56

Identification of mechanisms responsible for fetal weight reduction in mice following ultrasound exposure. Barnett SB, et al. **Ultrasonics** 1990 May;28(3):159–65

Effect of nematode infections on growth performance of calves after stabling on commercial dairy farms. Ploeger HW, et al. **Vet Parasitol** 1990 May;36(1–2):71–81

Effect of naturally occurring nematode infections on growth performance of first–season grazing calves. Ploeger HW, et al. **Vet Parasitol** 1990 Apr;35(4):307–22

Effect of nematode infections and management practices on growth performance of calves on commercial dairy farms. Ploeger HW, et al. **Vet Parasitol** 1990 Apr;35(4):323–39

Calculation of body surface area from bodyweight [letter] Butterworth SJ. **Vet Rec** 1990 Mar 3;126(9):225

Accuracy of prediction of the liveweight of horses from body measurements. Jones RS, et al. **Vet Rec** 1989 Nov 25; 125(22):549–53

Growth characteristics of the llama (Lama glama) from birth to 12 months old. Leon JB, et al. **Vet Rec** 1989 Dec 23–30; 125(26–27):644–5

[A 1–year study of the management of fetal breech presentation by monitoring follow–up during second–stage labor instead of using external version, x–ray pelvimetry and ultrasonic assessment of fetal weight] Elmahaishi MS, et al. **Akush Ginekol (Sofiia)** 1989;28(5):22–4 (Eng. Abstr.) **(Bul)**

[Methods of feeding and increase in the body weight of neonates] Guo XJ. **Chung Hua Hu Li Tsa Chih** 1990 Jan; 25(1):5–6 **(Chi)**

[Changes in body weight after oral maxillofacial surgery] Xiao FR. **Chung Hua Hu Li Tsa Chih** 1989 Sep;24(9):529–30 **(Chi)**

[Assessment of present nutrition status with weight for height method in children of Guangxi] Tan CM, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Nov; 23(6):349–51 (Eng. Abstr.) **(Chi)**

[Differences in length and weight growth patterns between urban and rural infants] Yang M, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Jun;20(2):194–7 (Eng. Abstr.) **(Chi)**

[The effect of elevated blood glucose levels and body weight on the metabolic profile in type 2 diabetes after long–term therapy] Válek J, et al. **Vnitr Lek** 1990 Feb;36(2):154–62 (Eng. Abstr.) **(Cze)**

[The role of dietary fiber in gastroenterology: fact or fancy? (letter)] Robberecht E, et al. **Ned Tijdschr Geneeskd** 1990 Jan 27;134(4):181–2 **(Dut)**

[Height–weight development of uremic children undergoing dialysis and after kidney transplantation] Andre JL, et al. **Pediatrie** 1989;44(6):495–504 (Eng. Abstr.) **(Fre)**

[Evaluation of body mass of 9–to–12–year–old girls with reference to stage of biological development] Brauer BM, et al. **Arztl Jugendkd** 1990;81(1):59–61 (Eng. Abstr.) **(Ger)**

[Body height, body weight and the Quetelet–Kaup Index in students 13 to 16 years of age in a rural district] Schlegel V. **Arztl Jugendkd** 1989;80(5):259–66 (Eng. Abstr.) **(Ger)**

[Neonatal percentile values for the GDR—1985. Correlation of body weight and length in newborn infants (calculation of birth weight/body length in cm. with reference to gestational age)] Voigt M, et al. **Arztl Jugendkd** 1990; 81(2):105–16 (Eng. Abstr.) **(Ger)**

[Relationship between body mass, brain mass and craniometric parameters in the miniature pig Mini–Lewe] Seeger J, et al. **Gegenbaurs Morphol Jahrb** 1990; 136(3):269–78 (Eng. Abstr.) **(Ger)**

[Measuring short–term periodicity of pediatric growth] Hermanussen M, et al. **Monatsschr Kinderheilkd** 1989 Jul; 137(7):403–10 (Eng. Abstr.) **(Ger)**

[Anorexia nervosa and depression. On the relation of body weight and depressive symptoms] Herpertz–Dahlmann B, et al. **Nervenarzt** 1989 Aug;60(8):490–5 (Eng. Abstr.) **(Ger)**

[What body height do our children have today? (The body height and body weight of 0– to 16–year–old children, the Jena studies)] Hesse V, et al. **Padiatr Grenzgeb** 1990; 29(2):125–7 **(Ger)**

[Body weight progression influenced by spontaneous diseases in Han:WIST rats] Rapp KG, et al. **Z Versuchstierkd** 1990; 33(1):37–46 (Eng. Abstr.) **(Ger)**

[Neonatal percentile values for East Germany—1985. 3. On the correlation of body height and weight of the mother in a two–dimensional classification of newborn infants according to birth weight and gestational age] Voigt M, et al. **Zentralbl Gynakol** 1989;111(13):904–20 (Eng. Abstr.) **(Ger)**

[The resting–fasting oxygen consumption of the albino rat and its dependence on the body mass after the removal of the thyroid gland] Rufeger H. **Zentralbl Veterinarmed** [A] 1990 Apr;37(3):220–30 (Eng. Abstr.) **(Ger)**

[Nutritional hygiene in the prevention of dental decay: thoughts about weight gain in children in elementary schools] Sebastiani Annicchiarico L, et al. **Ann Ig** 1989 May–Aug;1(3–4):447–58 (Eng. Abstr.) **(Ita)**

[Management of individual body weight growth of infant squirrel monkey (Saimiri sciureus) in indoor breeding colony] Hamano M, et al. **Jikken Dobutsu** 1990 Jan; 39(1):43–8 (Eng. Abstr.) **(Jpn)**

[Growth curves of body weight changes in laboratory–bred female African green monkeys (Cercopithecus aethiops)] Hiyaoka A, et al. **Jikken Dobutsu** 1989 Jul;38(3):239–44 (Eng. Abstr.) **(Jpn)**

[Growth curves of body weight and their relationship to sexual maturity in laboratory–bred male African green monkeys (Cercopithecus aethiops)] Hiyaoka A, et al. **Jikken Dobutsu** 1990 Jul;39(3):345–52 (Eng. Abstr.) **(Jpn)**

[Gallbladder measurements in the green monkey (Cercopithecus aethiops) and their dependence on liver and body weight] Maciejewski R, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:91–4 (Eng. Abstr.) **(Pol)**

[Indices of development in children and adolescents of Poznan aged 3 through 18] Krawczyński M, et al. **Pediatr Pol** 1989 Jan;64(1):29–39 (Eng. Abstr.) **(Pol)**

[The effect of 6–month provocation with gluten on the height and weight of children with celiac disease] Radzikowski A, et al. **Pediatr Pol** 1989 Mar;64(3):145–9 (Eng. Abstr.) **(Pol)**

[Sphygmomanometer cuffs and diagnosis of systemic arterial hypertension] Arcuri EA. **Arq Bras Cardiol** 1989 Apr; 52(4):181–3 **(Por)**

[Body mass as a factor determining the social status of male red voles] Sokolov VE, et al. **Dokl Akad Nauk SSSR** 1990; 310(2):498–501 **(Rus)**

[Computer–automated calculation of allowed human body weight] Dedov II, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Nov–Dec;(6):899–908 (Eng. Abstr.) **(Rus)**

[Anthropometric characteristics of preschool children from the region of Stari Grad in Sarajevo] Vila V, et al. **Med Arh** 1987;41(4):201–9 (Eng. Abstr.) **(Ser)**

[Relation of weight and arterial pressure in university students] Güimez–Sandoval JC, et al. **Bol Med Hosp Infant Mex** 1990 Mar;47(3):142–5 (Eng. Abstr.) **(Spa)**

[Evaluation of the nutritional status of children seen at the ONI of Guadalajara] Vásquez–Garibay EM, et al. **Bol Med Hosp Infant Mex** 1989 Dec;46(12):771–8 (Eng. Abstr.) **(Spa)**

[Postnatal growth of very low birth weight infants. II. Anthropometry at one year of age, a longitudinal study] Rizzardini M, et al. **Rev Chil Pediatr** 1989 Jan–Feb; 60(1):5–10 (Eng. Abstr.) **(Spa)**

[Effect of body weight and acute mesenteric ischemia duration on the mortality of rats subjected to intestinal revascularization] Ortiz Lacorzana J, et al. **Rev Esp Enferm Dig** 1990 Apr;77(4):263–7 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Effects of prenatal ethanol and long–chain n–3 fatty acid supplementation on development in mice. 1. Body and brain growth, sensorimotor development, and water T–maze reversal learning. Wainwright PE, et al. **Alcohol Clin Exp Res** 1990 Jun;14(3):405–12

Effect of drinking soda sweetened with aspartame or high–fructose corn syrup on food intake and body weight. Tordoff MG, et al. **Am J Clin Nutr** 1990 Jun;51(6):963–9

Dexfenfluramine: action with estradiol on food intake and body weight in ovariectomized rats. Souquet AM, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R211–5

Weight gain associated with clozapine. Cohen S, et al. **Am J Psychiatry** 1990 Apr;147(4):503–4

Depression, antidepressants, and body weight change. Fernstrom MH. **Ann N Y Acad Sci** 1989;575:31–9; discussion 39–40 (18 ref.)

Gastrocarcinogen N–methyl–N'–nitro–N–nitrosoguanidine is an antiandrogen. Kodama M, et al. **Biomed Pharmacother** 1989;43(7):519–26

Growth, food intake and energy balance of layer and broiler chickens offered glucose in the drinking water and the effect of dietary protein content. Engku Azahan EA, et al. **Br Poult Sci** 1989 Dec;30(4):907–17

Effects of oxidised dietary oil and antioxidant supplementation on broiler growth and meat stability. Lin CF, et al. **Br Poult Sci** 1989 Dec;30(4):855–64

Sodium bentonite as a component in layer diets. Olver MD. **Br Poult Sci** 1989 Dec;30(4):841–6

Beta–carotene supplementation of turkey diets varying in fat and retinol. Stevens VI, et al. **Br Poult Sci** 1989 Dec; 30(4):877–87

Protective effect of a protein–free diet in acute experimental pancreatitis. Gonçalez Y, et al. **Braz J Med Biol Res** 1989; 22(4):477–83

Toxic effects of secalonic acid D in mice and protection by dimethylsulfoxide. Eldeib MM, et al. **Bull Environ Contam Toxicol** 1990 May;44(5):692–9

Prolonged survival of tumor–bearing rats with repetitive low–dose recombinant tumor necrosis factor. Sheppard BC, et al. **Cancer Res** 1990 Jul 1;50(13):3928–33

The effects of phenylpropanolamine on dietary intake, physical activity, and body weight after smoking cessation. Klesges RC, et al. **Clin Pharmacol Ther** 1990 Jun; 47(6):747–54

Lack of weight gain associated with short–term astemizole treatment. Ellison MJ, et al. **DICP** 1990 Jul–Aug; 24(7–8):682–4

Lead influences on physiological and growth responses in Coturnix coturnix japonica selected for large body weights. Edens FW, et al. **Environ Res** 1989 Oct;50(1):140–56

The toxicity of p–aminophenol in the Sprague–Dawley rat: effects on growth, reproduction and foetal development. Burnett CM, et al. **Food Chem Toxicol** 1989 Oct; 27(10):691–8

Iopanoic acid prevents spring premigratory increase in body weight of redheaded bunting Emberiza bruniceps. Pathak VK, et al. **Indian J Exp Biol** 1989 Jul;27(7):598–601

Long–term actions of d–fenfluramine in two rat models of obesity. II. Responses to stress. Carlton J, et al.

Int J Obes 1990 Jan;14(1):31–7
Reduction in body weight and cholesterol in spontaneously obese dogs by dehydroepiandrosterone. Kurzman ID, et al. **Int J Obes** 1990;14(2):95–104
The effect of the 5–HT re–uptake inhibitor fluoxetine on food intake and body weight in healthy male subjects. McGuirk J, et al. **Int J Obes** 1990;14(4):361–72
One–year continuous low–dose nicotine intake does not alter body weight of rats. Prasad C, et al. **Int J Vitam Nutr Res** 1989;59(4):413–6
Effect of dose and frequency of administration of a potent analog of human growth hormone–releasing factor on hormone secretion and growth in pigs. Dubreuil P, et al. **J Anim Sci** 1990 May;68(5):1254–68
Effect of recombinant porcine somatotropin on growth and carcass quality in growing pigs: interactions with genotype, gender and slaughter weight. Kanis E, et al. **J Anim Sci** 1990 May;68(5):1193–200
Effects of bovine somatotropin on milk yield and composition, body weight, and condition score of Holstein and Jersey cows. West JW, et al. **J Dairy Sci** 1990 Apr; 73(4):1062–8
A study of systemic and topical effects of topical steroid application through the comparison of two application schedules. Fukaya Y, et al. **J Dermatol** 1990 Jan;17(1):28–33
Growth hormone and growth in diabetic rats: effects of insulin and insulin–like growth factor–I infusions. Carlsson LM, et al. **J Endocrinol** 1989 Sep;122(3):661–70
Effects of nicotine on body weight, food consumption and body composition in male rats. Winders SE, et al. **Life Sci** 1990;46(21):1523–30
Rat pups exposed to morphine in utero. Olley JE, et al. **NIDA Res Monogr** 1989;95:525
Effects of a brain–enhanced chemical delivery system for estradiol on body weight and food intake in intact and ovariectomized rats. Simpkins JW, et al. **Pharm Res** 1989 Jul;6(7):592–600
Weight loss and altered circulating GI peptide levels of rats exposed chronically to nicotine. Chowdhury P, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):591–4
Changes in ingestive behaviors and body weight following intracranial application of 17 alpha–estradiol. Butera PC, et al. **Physiol Behav** 1990 Jun;47(6):1291–3
High fat/sucrose feeding attenuates the hypertension of spontaneously hypertensive rats. Contreras RJ, et al. **Physiol Behav** 1989 Aug;46(2):285–91
Response to chronic insulin administration: effect of area postrema ablation. Kott JN, et al. **Physiol Behav** 1989 Dec; 46(6):971–6
Impact of L–phenylalanine supplementation on the performance of three–week–old broilers fed diets containing ochratoxin A. 1. Effects on body weight, feed conversion, relative organ weight, and mortality. Gibson RM, et al. **Poult Sci** 1990 Mar;69(3):414–9
Regulation of food intake and body weight by cobalt porphyrins in animals. Galbraith RA, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7653–7
[From the Veterinary Chief Inspection for Public Health—Action Program Salbutamol (A beta agonist)] **Tijdschr Diergeneeskd** 1990 Jan 1;115(1):36 **(Dut)**
[The subchronic toxicity of 5–vinyloxazolidine–2–thione in rats] Lewerenz HJ, et al. **Nahrung** 1989;33(10):965–73 (Eng. Abstr.) **(Ger)**
[Twenty–eight day repeated dose toxicity testing of diphenylamine in F344 rats] Yoshida J, et al. **Eisei Shikenjo Hokoku** 1989;(107):56–61 (Eng. Abstr.) **(Jpn)**
[Effect of altered hormonal balance in the mother–fetus system on body weight, the adrenal glands, thymus gland and peripheral blood leukocyte composition in the offspring] Pavlova IG. **Arkh Anat Gistol Embriol** 1989 Sep; 97(9):60–4 (Eng. Abstr.) **(Rus)**
[Diuretic and body–weight effects of lightly mineralized waters] San Martín Bacaicoa J. **An R Acad Nac Med (Madr)** 1989;106(4):567–83 **(Spa)**

ETHNOLOGY

Possible urban–rural difference in habitus of school children in Sendai. Nakatsuka H, et al. **Tohoku J Exp Med** 1990 Jan;160(1):11–7

GENETICS

Growth hormone restriction fragment length polymorphisms that segregate with 42–day live weight of mice. Winkelmann DC, et al. **Genome** 1990 Apr;33(2):235–9
Genetic parameter estimates for postweaning traits of beef cattle in a stressful environment. DeNise SK, et al. **J Anim Sci** 1989 Oct;67(10):2619–26
Variance heterogeneity in direct and maternal weight traits by sex and percent purebred for Simmental–sired calves. Garrick DJ, et al. **J Anim Sci** 1989 Oct;67(10):2515–28
Growth of crossbred progeny of polled Hereford sires divergently selected for yearling weight and maternal ability. Mahrt GS, et al. **J Anim Sci** 1990 Jul;68(7):1889–98
Estimation of genetic parameters among reproductive and growth traits in yearling heifers. Smith BA, et al. **J Anim Sci** 1989 Nov;67(11):2886–91
Evaluation of cytoplasmic genetic effects in beef cattle using an animal model. Tess MW, et al. **J Anim Sci** 1990 Jul; 68(7):1899–909

PHYSIOLOGY

Variation of growth in length and weight of children. I. Years 1 and 2. Sorva R, et al. **Acta Paediatr Scand** 1990 May; 79(5):490–7
Variation of growth in height and weight of children. II. After infancy. Sorva R, et al. **Acta Paediatr Scand** 1990 May;79(5):498–506
Effect of meal frequency in schoolchildren. Changes in weight–height proportion and skinfold thickness. Fábry P, et al. **Am J Clin Nutr** 1966 May;18(5):358–61
Changes in preobesity weight velocities in obese children. Taubman B. **Am J Clin Nutr** 1989 Oct;50(4):737–9
Palatability of food and the ponderostat. Cabanac M. **Ann N Y Acad Sci** 1989;575:340–51; discussion 352 (122 ref.)
Iron in tubewell water and linear growth in rural Bangladesh. Briend A, et al. **Arch Dis Child** 1990 Feb;65(2):224–5
Post to predialysis plasma urea nitrogen ratio, ultrafiltration and weight to estimate K.t/V. Use in auditing the amount of dialysis being administered. Manahan FJ, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):511–2
The effect of pre–morbid height and weight on the survival of breast cancer patients. Tretli S, et al. **Br J Cancer** 1990 Aug;62(2):299–303
Changes in body–weight, composition and hepatic enzyme activities in response to dietary methionine, betaine and choline levels in growing chicks. Saunderson CL, et al. **Br J Nutr** 1990 Mar;63(2):339–49
Musculo–skeletal lesions in adult male broiler breeder fowls and their relationships with body weight and fertility at 60 weeks of age. Hocking PM, et al. **Br Poult Sci** 1989 Dec;30(4):777–84
Current bone mass and body weight changes in alcoholic males. Crilly RG, et al. **Calcif Tissue Int** 1990 Mar; 46(3):169–72
Glucose disappearance rates into peripheral tissues of adult rabbits (Silvilagus floridans), Wistar rats (Rattus rattus) and sand rats (Psammomys obesus) in relation to body weight and blood glucose concentration. Schäfer H. **Comp Biochem Physiol [A]** 1990;95(2):209–13
The effects of norepinephrine and nutritional status on resting metabolic rates in the LA/N–cp rat. Young NL, et al. **Comp Biochem Physiol [A]** 1989;94(4):597–602
Effects of complex experience on somatic growth and organ development in rats. Black JE, et al. **Dev Psychobiol** 1989 Nov;22(7):727–52 (89 ref.)
Small but healthy? Are we asking the right question? Beaton GH. **Eur J Clin Nutr** 1989 Dec;43(12):863–75 (52 ref.)
Seasonal energy deficiency in Ethiopian rural women. Ferro–Luzzi A, et al. **Eur J Clin Nutr** 1990;44 Suppl 1:7–18
Growth of whole body and organs of growing rats during feed restriction and subsequent realimentation. Anugwa FO, et al. **Growth Dev Aging** 1989 Winter;53(4):167–74
The effect of a soluble dietary fibre supplement on 24–hour energy expenditure during a standardized physical activity programme. Ryttig KR, et al. **Int J Obes** 1990;14(5):451–5
Weight set–point theory predicts HDL–cholesterol levels in previously obese long–distance runners. Williams PT. **Int J Obes** 1990;14(5):421–7
Influence of body habitus and race on bone mineral density of the midradius, hip, and spine in aging women. DeSimone DP, et al. **J Bone Miner Res** 1989 Dec;4(6):827–30
Influence of age and body weight on spine and femur bone mineral density in U.S. white men. Mazess RB, et al. **J Bone Miner Res** 1990 Jun;5(6):645–52
A multimethod approach to the measurement of childhood physical activity and its relationship to blood pressure and body weight. Klesges RC, et al. **J Pediatr** 1990 Jun; 116(6):888–93
The effect of a competitive season on the body composition of university female athletes. Johnson GO, et al. **J Sports Med Phys Fitness** 1989 Dec;29(4):314–20
Alcohol consumption, blood alcohol level and the relevance of body weight in experimental design and analysis. Devgun MS, et al. **J Stud Alcohol** 1990 Jan;51(1):24–8
Development of individual growth curve standards for estimated fetal weight: I. Weight estimation procedure. Deter RL, et al. **JCU** 1988 May;16(4):215–25
Effects of intermittent feeding upon body weight and lifespan in inbred mice: interaction of genotype and age. Goodrick CL, et al. **Mech Ageing Dev** 1990 Jul;55(1):69–87
Is cortisol involved in upper–body obesity? Rivera MP, et al. **Med Hypotheses** 1989 Oct;30(2):95–100
Weight set–point theory and the high–density lipoprotein concentrations of long–distance runners. Williams PT. **Metabolism** 1990 May;39(5):460–7
Does dietary hyperphagia contradict the lipostatic theory? Ramirez I. **Neurosci Biobehav Rev** 1990 Summer; 14(2):117–23 (60 ref.)
Effects of weight cycling in female rats. Archambault CM, et al. **Physiol Behav** 1989 Sep;46(3):417–21
Lack of diet–induced thermogenesis following lesions of paraventricular nucleus in rats. De Luca B, et al. **Physiol Behav** 1989 Oct;46(4):685–91
Estrous cycle irregularities in overfed rats. Glick Z, et al. **Physiol Behav** 1990 Feb;47(2):307–10
Maternal hormone manipulations and the development of obesity in rats. Jones AP, et al. **Physiol Behav** 1990 Jun; 47(6):1107–10
Dietary hyperphagia in rats: role of fat, carbohydrate, and energy content. Ramirez I, et al. **Physiol Behav** 1990 Jun; 47(6):1157–63
Effects of maternal diet, body weight and body composition on infanticide in Syrian hamsters. Schneider JE, et al. **Physiol Behav** 1989 Nov;46(5):815–21
Growth and development of broiler breeders. 2. Independent effects of dietary formulation versus body weight on skeletal and muscle growth. Lilburn MS, et al. **Poult Sci** 1989 Sep;68(9):1274–81
Body weight and reproduction [letter; comment] Frisch RE. **Science** 1989 Oct 27;246(4929):432 Comment on: Science 1989 Jun 16;244(4910):1326–8.
[Arterial pressure and puberty: relation to height–weight characteristics] Spyckerelle Y, et al. **Pediatrie** 1989; 44(6):505–11 (Eng. Abstr.) **(Fre)**
[Influence of partial and total castration on the growth and feed conversion performances of Poulfouli rams of the Far North Cameroon] Thys E, et al. **Rev Elev Med Vet Pays Trop** 1989;42(2):267–74 (Eng. Abstr.) **(Fre)**
[Behavior of fibrinogen, hematocrit and platelets in relation to variations in body mass index in a group of female subjects] Carnevale Schianca GP, et al. **Ric Clin Lab** 1989; 19 Suppl 1:125–8 **(Ita)**
[Lipid metabolism in obese school–age children. I. Comparative studies including children without excess weight] Małecka–Tendera E, et al. **Pediatr Pol** 1989 Aug–Sep;64(8–9):528–34 (Eng. Abstr.) **(Pol)**
[Body weight dynamics of laboratory white rats in the postnatal development period] Gansburgskiĭ AN. **Arkh Anat Gistol Embriol** 1989 Nov;97(11):27–31 (Eng. Abstr.) **(Rus)**
[Effect of the fatty mass of the body on hemodynamics in men] Belinskiĭ VP. **Vrach Delo** 1989 Aug;(8):61–4 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Effect of fluorescent light on hatchability of commercial broiler parent stock eggs and on body weight of chickens hatched under large–scale commercial conditions. Zakaria AH. **Poult Sci** 1989 Nov;68(11):1585–7
Effects of neutron and combined gamma irradiation of rats. Mišúrová E, et al. **Radiobiol Radiother (Berl)** 1989; 30(5):415–21

BOECK'S SARCOID see **SARCOIDOSIS**

BOILS see **FURUNCULOSIS**

BOMBESIN

Differential mechanisms of inositol phosphate generation at the receptors for bombesin and platelet–derived growth factor. Cattaneo MG, et al. **Biochem J** 1989 Sep 1; 262(2):665–8
NMR identification of a partial helical conformation for bombesin in solution. Carver JA, et al. **Eur J Biochem** 1990 Feb 14;187(3):645–50

ANALOGS & DERIVATIVES

Potent bombesin receptor antagonists distinguish receptor subtypes. von Schrenck T, et al. **Am J Physiol** 1990 Sep; 259(3 Pt 1):G468–73
Desmethionine alkylamide bombesin analogues: a new class of bombesin receptor antagonists with potent antisecretory activity in pancreatic acini and antimitotic activity in Swiss 3T3 cells. Wang LH, et al. **Biochemistry** 1990 Jan 23; 29(3):616–22
des–Met carboxyl–terminally modified analogues of bombesin function as potent bombesin receptor antagonists, partial agonists, or agonists. Wang LH, et al. **J Biol Chem** 1990 Sep 15;265(26):15695–703
[D–Ala1, Leu9–psi–CH2NH–Leu10]neuromedin C antagonizes neuromedin C–stimulated amylase release by acini isolated from the rat pancreas. Wisner JR Jr, et al. **Pancreas** 1990 Jul;5(4):408–14
Blockade of bombesin receptors with [Leu14–psi(CH2NH)–Leu13]bombesin fails to suppress nutrient–induced CCK release from rat duodenojejunum. Cuber JC, et al. **Peptides** 1990 Mar–Apr;11(2):255–8
Identification of the neurotransmitter/neuromodulator functions of the neuropeptide gastrin–releasing peptide in the porcine antrum, using the antagonist (Leu13–psi–CH2 NH–Leu14)–bombesin. Holst JJ, et al. **Scand J Gastroenterol** 1990 Jan;25(1):89–96

ANALYSIS

Bombesin–like peptides: from frog skin to human lung. Miller YE. **Am J Respir Cell Mol Biol** 1990 Sep;3(3):189–90 (13 ref.)
Pulmonary bombesin and calcitonin in hamsters during exposure to hyperoxia and diethylnitrosamine. Nylen ES, et al. **Am J Respir Cell Mol Biol** 1990 Jan;2(1):25–31
Noradrenaline, atrial natriuretic peptide, bombesin and neurotensin in myocardium and blood of rats in congestive cardiac failure. Ceconi C, et al. **Cardiovasc Res** 1989 Aug; 23(8):674–82
Bombesin–like immunoreactivity and the effect of bombesin in the gut, circulatory system and lung of the caiman, Caiman crocodylus crocodylus, and the crocodile, Crocodylus porosus. Holmgren S, et al. **Exp Biol** 1989; 48(5):261–71
Characterization, in some human breast cancer cell lines, of

gastrin-releasing peptide-like receptors which are absent in normal breast epithelial cells. Giacchetti S, et al. **Int J Cancer** 1990 Aug 15;46(2):293-8

Immunohistochemical localisation of a gastrin-releasing peptide-like material in area postrema, nucleus of the solitary tract and vagal motor nucleus in the brainstem of rat. King BF, et al. **J Auton Nerv Syst** 1989 Nov; 28(2):97-104

Increased levels of bombesin-like peptides in the lower respiratory tract of asymptomatic cigarette smokers. Aguayo SM, et al. **J Clin Invest** 1989 Oct;84(4):1105-13

Distribution of peptidergic terminals of enteric origin in the rat celiac ganglion. Hamaji M, et al. **Neurosci Lett** 1989 Jul 31;102(2-3):121-4

Bombesin-like immunoreactive material in the gut, and the effect of bombesin on the stomach circulatory system of an elasmobranch fish, Squalus acanthias. Bjenning C, et al. **Regul Pept** 1990 Mar 27;28(1):57-69

The distribution of endocrine cells along the mouse small intestine. Bombesin and somatostatin producing cells. Evans GS. **Virchows Arch [B]** 1989;58(2):165-72

ANTAGONISTS & INHIBITORS

Two classes of antagonist interact with receptors for the mitogenic neuropeptides bombesin, bradykinin, and vasopressin. Woll PJ, et al. **Growth Factors** 1988;1(1):75-83

Pharmacological characterization of [Leu-13-psi-CH2NH-Leu14]-bombesin as a specific bombesin receptor antagonist on isolated smooth muscle cells. Severi C, et al. **J Pharmacol Exp Ther** 1989 Nov; 251(2):713-7

N-isobutyryl-His-Trp-Ala-Val-D-Ala-His-Leu-NHMe (ICI 216140) a potent in vivo antaconist analogue of bombesin/gastrin releasing peptide (BN/GRP) derived from the C-terminal sequence lacking the final methionine residue. Camble R, et al. **Life Sci** 1989;45(17):1521-7

[D-Ala1, Leu9-psi-CH2NH-Leu10]neuromedin C antagonizes neuromedin C-stimulated amylase release by acini isolated from the rat pancreas. Wisner JR Jr, et al. **Pancreas** 1990 Jul;5(4):408-14

Antagonism by GRP(18-27) and substance P analogues on insulin release stimulated by GRP(18-27). Mukai H, et al. **Peptides** 1990 Jan-Feb;11(1):173-5

Identification of the neurotransmitter/neuromodulator functions of the neuropeptide gastrin-releasing peptide in the porcine antrum, using the antagonist (Leu13-psi-CH2 NH-Leu14)-bombesin. Holst JJ, et al. **Scand J Gastroenterol** 1990 Jan;25(1):89-96

BIOSYNTHESIS

Production of gastrin-releasing peptide-(18-27) and a stable fragment of its precursor in small cell lung carcinoma cells. Vangsted AJ, et al. **J Clin Endocrinol Metab** 1990 Jun; 70(6):1586-93

BLOOD

Mutual correlation between levels of plasma beta-endorphin, bombesin and pancreatic polypeptide in healthy subjects and ulcer patients. Zižkovský V, et al. **Endocrinol Exp** 1990 Mar;24(1-2):205-9

Tumour markers in the clinical management of patients with small cell lung cancer [editorial] Hansen M, et al. **Eur Respir J** 1989 Sep;2(8):700-1

Combined measurements of neuron specific enolase and bombesin/gastrin releasing peptide in lung cancer. Scagliotti GV, et al. **Eur Respir J** 1989 Sep;2(8):746-50

CHEMICAL SYNTHESIS

Solid-phase synthesis of bombesin by continuous flow procedure using Fmoc-amino acids. Scolaro B, et al. **Int J Pept Protein Res** 1989 Nov;34(5):423-9

DIAGNOSTIC USE

Role of cholecystokinin in bombesin- and meal-stimulated pancreatic polypeptide secretion in dogs. Jansen JB, et al. **Dig Dis Sci** 1990 Sep;35(9):1073-7

GENETICS

Isolation, sequence and biosynthetic significance of a novel fragment of gastrin-releasing peptide from chicken proventriculus. Campbell BJ, et al. **Biochim Biophys Acta** 1990 Jan 30;1048(1):66-71

Molecular cloning of a cDNA encoding the bombesin precursor in skin of Bombina variegata. Richter K, et al. **FEBS Lett** 1990 Mar 26;262(2):353-5

Expression of gastrin-releasing peptide (human bombesin) gene in large cell undifferentiated carcinoma of the lung. Hamid QA, et al. **J Pathol** 1990 Jun;161(2):145-51

ISOLATION & PURIFICATION

Six novel tachykinin- and bombesin-related peptides from the skin of the Australian frog Pseudophryne güntheri. Simmaco M, et al. **Peptides** 1990 Mar-Apr;11(2):299-304

METABOLISM

Molecular characterization of bombesin receptors on rat pancreatic acinar AR42J cells. Singh P, et al. **Am J Physiol** 1990 May;258(5 Pt 1):G803-9

Brain sites where bombesin and corticotropin-releasing factor influence gastric secretions. Gunion MW, et al. **Ann N Y Acad Sci** 1990;597:92-113

Bombesin receptor in membranes from Swiss 3T3 cells. Binding characteristics, affinity labelling and modulation by guanine nucleotides. Sinnett-Smith J, et al. **Biochem J** 1990 Jan 15;265(2):485-93

Solubilization of the receptor for the neuropeptide gastrin-releasing peptide (bombesin) with functional ligand binding properties. Naldini L, et al. **Biochemistry** 1990 May 29;29(21):5153-60

Solubilization of the bombesin receptor from Swiss 3T3 cell membranes. Functional association to a guanine nucleotide regulatory protein. Coffer A, et al. **FEBS Lett** 1990 Apr 9;263(1):80-4

Pulmonary endocrine cells in hypertensive pulmonary vascular disease. Heath D, et al. **Histopathology** 1990 Jan; 16(1):21-8

Lung carcinoid cell lines have bombesin-like peptides and EGF receptors. Moody TW, et al. **J Cell Biochem** 1990 Jun;43(2):139-47

Increased pulmonary neuroendocrine cells with bombesin-like immunoreactivity in adult patients with eosinophilic granuloma. Aguayo SM, et al. **J Clin Invest** 1990 Sep;86(3):838-44

Distribution of substance P-like, leucine-enkephalin-like, and bombesine-like immunoreactivity and acetylcholinesterase activity in the visual system of salamanders. Schmidt A, et al. **J Comp Neurol** 1989 Oct 1;288(1):123-35

Human glioblastoma cell lines have neuropeptide receptors for bombesin/gastrin-releasing peptide. Moody TW, et al. **J Mol Neurosci** 1989;1(4):235-42

Modulation of pulmonary bombesin by nicotine and vagotomy. Nylen ES, et al. **Life Sci** 1990;47(3):213-8

Blockade of bombesin receptors with [Leu14-psi(CH2NH)-Leu13]bombesin fails to suppress nutrient-induced CCK release from rat duodenojejunum. Cuber JC, et al. **Peptides** 1990 Mar-Apr;11(2):255-8

Metabolism and inactivation of gastrin releasing peptide by endopeptidase-24.11 in the dog. Bunnett NW, et al. **Q J Exp Physiol** 1989 Sep;74(5):727-34

[Localization and physiologic role of neuropeptides and their receptors--peptides of the bombesin family--GRP, neuromedin B and neuromedin C] Namba M, et al. **Nippon Rinsho** 1990 May;48(5):969-74 **(Jpn)**

PHARMACOLOGY

Nuclear inositol lipids. Relationship between growth factor induced metabolic changes and protein kinase C activity. Cocco L, et al. **Adv Enzyme Regul** 1990;30:155-72

Effects of atropine, proglumide, and somatostatin analogue (SMS 201-995) on bombesin-induced gallbladder contraction and CCK secretion in humans. Mitsukawa T, et al. **Am J Gastroenterol** 1989 Nov;84(11):1371-4

Bombesin changes excitability of rat brain stem neurons sensitive to gastric distension. Ewart WR, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):G841-7

Bombesin affects feeding independent of a gastric mechanism or site of action. Hostetler AM, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1219-24

Somatostatin mediates bombesin inhibition of chloride secretion by rectal gland. Silva P, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1459-63

Potent bombesin receptor antagonists distinguish receptor subtypes. von Schrenck T, et al. **Am J Physiol** 1990 Sep; 259(3 Pt 1):G468-73

Bombesin increases fetal lung growth and maturation in utero and in organ culture. Sunday ME, et al. **Am J Respir Cell Mol Biol** 1990 Sep;3(3):199-205

Mass measurement of inositol 1,4,5-trisphosphate and sn-1,2-diacylglycerol in bombesin-stimulated Swiss 3T3 mouse fibroblasts. Cook SJ, et al. **Biochem J** 1990 Jan 15; 265(2):617-20

Analysis of the water-soluble products of phosphatidylcholine breakdown by ion-exchange chromatography. Bombesin and TPA (12-O-tetradecanoylphorbol 13-acetate) stimulate choline generation in Swiss 3T3 cells by a common mechanism. Cook SJ, et al. **Biochem J** 1989 Oct 15;263(2):581-7

Regulation of bombesin-stimulated inositol 1,4,5-trisphosphate generation in Swiss 3T3 fibroblasts by a guanine-nucleotide-binding protein. Plevin R, et al. **Biochem J** 1990 Jun 15;268(3):605-10

Bombesin and platelet-derived growth factor stimulate phosphatidylcholine breakdown by a common mechanism. Cook SJ, et al. **Biochem Soc Trans** 1990 Jun;18(3):484-5

Mitogenic activity of GRP18-27 analogues on the ZR-75-1 human breast cancer cell line. Donnelly M, et al. **Biochem Soc Trans** 1990 Apr;18(2):354

Bombesin, neuromedin B and neuromedin C selectively depress superficial dorsal horn neurones in the cat spinal cord. De Koninck Y, et al. **Brain Res** 1989 Sep 25; 498(1):105-17

Inhibition of bombesin-stimulated gastrin release from isolated canine G cells by bombesin antagonists. Campos RV, et al. **Can J Physiol Pharmacol** 1989 Dec;67(12):1520-4

Activation of inositol phospholipid signaling and Ca2+ efflux in human breast cancer cells by bombesin. Patel KV, et al. **Cancer Res** 1990 Jan 15;50(2):235-9

Effect of guanine and adenine nucleotides on bombesin-stimulated phospholipase C activity in membranes from Swiss 3T3 and small cell lung carcinoma cells. Sharoni Y, et al. **Cancer Res** 1990 Sep 1; 50(17):5257-62

Stimulation of calcium mobilization but not proliferation by bombesin and tachykinin neuropeptides in human small cell lung cancer cells. Takuwa N, et al. **Cancer Res** 1990 Jan 15;50(2):240-4

Bombesin: an activator of specific Aeromonas antibody secretion in rat intestine. Jin GF, et al. **Dig Dis Sci** 1989 Nov;34(11):1708-12

Effect of a new CCK-receptor antagonist, CR 1409, on pancreatic growth induced by caerulein, CCK-8, bombesin and gastrin-releasing peptide in the rat. Hajri A, et al. **Digestion** 1989;43(1-2):66-72

Stimulation of growth hormone and prolactin release from rat pituitary cell aggregates by bombesin- and ranatensin-like peptides is potentiated by estradiol, 5 alpha-dihydrotestosterone, and dexamethasone. Houben H, et al. **Endocrinology** 1990 May;126(5):2257-66

Effect of loxiglumide (CR-1505) on bombesin- and meal-stimulated plasma cholecystokinin in man. Jansen JB, et al. **Eur J Clin Pharmacol** 1990;38(4):367-70

The effect of loxiglumide (CR-1505) on basal and bombesin-stimulated gallbladder volume in man. Douglas BR, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):307-9

Brain peptides and duodenal bicarbonate [letter; comment] Lenz HJ. **Gastroenterology** 1990 Jun;98(6):1728-30 Comment on: Gastroenterology 1989 Aug;97(2):412-20.

Bradykinin transiently activates protein kinase C in Swiss 3T3 cells. Distinction from activation by bombesin and vasopressin. Issandou M, et al. **J Biol Chem** 1990 Jul 15; 265(20):11890-6

Origins of myo-inositol tetrakisphosphates in agonist-stimulated rat pancreatoma cells. Stimulation by bombesin of myo-inositol 1,3,4,5,6-pentakisphosphate breakdown to myo-inositol 3,4,5,6-tetrakisphosphate. Menniti FS, et al. **J Biol Chem** 1990 Jul 5;265(19):11167-76

Chronic desensitization to bombesin by progressive down-regulation of bombesin receptors in Swiss 3T3 cells. Distinction from acute desensitization. Millar JB, et al. **J Biol Chem** 1990 Jul 15;265(20):12052-8

des-Met carboxyl-terminally modified analogues of bombesin function as potent bombesin receptor antagonists, partial agonists, or agonists. Wang LH, et al. **J Biol Chem** 1990 Sep 15;265(26):15695-703

Epidermal growth factor and bombesin differ strikingly in the induction of early responses in Swiss 3T3 cells. Bierman AJ, et al. **J Cell Physiol** 1990 Mar;142(3):441-8

Effects of bombesin on mucosal ion transport in the mouse isolated jejunum. Rivière PJ, et al. **J Pharmacol Exp Ther** 1990 May;253(2):778-83

Mechanism of contractile response to bombesin of the longitudinal muscle from guinea pig ileum. Takeda K, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):339-43

The effect of mycoplasma on the autocrine stimulation of human small cell lung cancer in vitro by bombesin and beta-endorphin. Crowell SL, et al. **Life Sci** 1989; 45(25):2471-6

Nicotine, acetylcholine and bombesin are trophic growth factors in neuroendocrine cell lines derived from experimental hamster lung tumors. Schüller HM, et al. **Life Sci** 1990;47(6):571-8

Desensitization of islet cells to bombesin involves both receptor down-modulation and inhibition of receptor function. Swope SL, et al. **Mol Pharmacol** 1990 May; 37(5):758-66

Pancreatic and biliary secretion in the anesthetized Syrian golden hamster in response to secretin, cholecystokinin-octapeptide, bombesin, and carbachol. Ali AE, et al. **Pancreas** 1990 May;5(3):314-22

Role of cholecystokinin in bombesin-stimulated pancreatic enzyme secretion in conscious rats. de Jong AJ, et al. **Pancreas** 1990 Mar;5(2):194-9

Do peptide-induced changes in feeding occur because of changes in motivation to eat? Flood JF, et al. **Peptides** 1990 Mar-Apr;11(2):265-70

The effect of bombesin-related peptides on the phagocytic function of mouse phagocytes in vitro. Jin GF, et al. **Peptides** 1990 Mar-Apr;11(2):393-6

Bombesin: potential integrative peptide for feeding and satiety. McCoy JG, et al. **Peptides** 1990 May-Jun; 11(3):595-607 (126 ref.)

Intake of individual macronutrients following IP injections of BBS and CCK in rats. McCoy JG, et al. **Peptides** 1990 Mar-Apr;11(2):221-5

Antagonism by GRP(18-27) and substance P analogues on insulin release stimulated by GRP(18-27). Mukai H, et al. **Peptides** 1990 Jan-Feb;11(1):173-5

Bombesin-induced hypothermia in the insulin-treated rat: effect on tail-skin temperature. Babcock AM, et al. **Percept Mot Skills** 1989 Dec;69(3 Pt 2):1339-45

Bombesin-induced hypothermia in food-deprived rats. Babcock AM, et al. **Pharmacol Biochem Behav** 1989 Nov; 34(3):539-44

Bombesin stimulation of fibroblast mitogenesis: specific receptors, signal transduction and early events. Rozengurt E, et al. **Philos Trans R Soc Lond [Biol]** 1990 Mar 12; 327(1239):209-21 (78 ref.)

Bombesin improves rats' operant responding maintained by a differential-reinforcement-of-low-rates schedule of food reinforcement. Bowers RL, et al. **Psychol Rep** 1990 Feb; 66(1):131-8

Role of gastrin and cholecystokinin in the growth-promoting action of bombesin on the gastroduodenal mucosa and the

pancreas. Dembiński A, et al. **Regul Pept** 1990 Mar 5; 27(3):343–54
Role of protein kinase C and phosphorylation in bombesin-evoked gastrin release from isolated perfused rat stomach. Guo YS, et al. **Regul Pept** 1989 Aug;26(1):19–25
Effect of immunoneutralisation of cholecystokinin on bombesin-stimulated pancreatic enzyme secretion in the rat. Lamers CB, et al. **Regul Pept** 1989 Dec;26(3):297–304
Promoting effect of bombesin on the cell proliferation in the rat endocrine pancreas during the early postnatal period. Lehy T, et al. **Regul Pept** 1990 Jan;27(1):87–96
Bombesin-like peptides stimulate gastrin release from isolated rat G-cells. Schepp W, et al. **Regul Pept** 1990 May 21; 28(3):241–53
Changes in gastric secretion after intracerebroventricular infusion of bombesin in dogs. Tsalis KG, et al. **Scand J Gastroenterol** 1990 Jun;25(6):563–71
Response of cholecystokinin, secretin, and pancreatic secretion to graded doses of bombesin. Miyata M, et al. **Surg Forum** 1978;29:390–2
Effect of gastrin-releasing peptide (GRP1–27), neuromedin-C (GRP18–27), and neuromedin-B on gastrin and somatostatin secretion from the rat stomach. Madaus S, et al. **Z Gastroenterol** 1989 Sep;27(9):449–54
[Effects of bombesin on gastrin, somatostatin, glucagon and acid secretion from isolated rat stomach in vitro] Chen MD, et al. **Sheng Li Hsueh Pao** 1989 Oct;41(5):497–503 (Eng. Abstr.) **(Chi)**
[Bombesin, dermorphin, physalaemin and sauvagine: effects on superficial and depth EEG tracings in epileptic and non-epileptic rats] de Romanis F, et al. **Clin Ter** 1990 Apr 15;133(1):35–8 (Eng. Abstr.) **(Ita)**
[Effects of neuromedin B and neuromedin C on insulin release from isolated perfused rat pancreas] Nakamura T, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Aug 20;65(8):695–703 (Eng. Abstr.) **(Jpn)**
[The role of bombesin in regulating thyrotropin secretion in rats. In vivo studies] Krowicki ZK, et al. **Endokrynol Pol** 1989;40(3):125–32 (Eng. Abstr.) **(Pol)**

SECRETION

Effect of met-enkephalin and met-enkephalin-Arg6-Phe7 on bombesin-like immunoreactivity (BLI), somatostatin and gastrin secretion from the perfused rat stomach. Madaus S, et al. **Hepatogastroenterology** 1990 Apr;37(2):201–3

THERAPEUTIC USE

Cholecystokinin peptides and bombesin reverse hemorrhagic shock in rats. Guarini S, et al. **Resuscitation** 1989 Dec; 18(2–3):129–31

BOMBINA see ANURA

BOMBYX see SILKWORMS

BONDING, DENTAL

Bond strength of ceramic brackets under shear stress: an in vitro report. Viazis AD, et al. **Am J Orthod Dentofacial Orthop** 1990 Sep;98(3):214–21
The development of a composite restorative system. Henderson LJ, et al. **Ann Acad Med Singapore** 1989 Sep; 18(5):569–72
Cotton roll isolation versus Vac-Ejector isolation. Wood AJ, et al. **ASDC J Dent Child** 1989 Nov-Dec;56(6):438–41
Glass ionomer cements [letter; comment] Arnold J. **Aust Dent J** 1990 Apr;35(2):185 Comment on: Aust Dent J 1989 Dec;34(6):559–62.
The bond strengths of various adhesives used for Maryland Bridges. Flood AM, et al. **Aust Dent J** 1989 Oct; 34(5):449–53
Acid etching of a glass ionomer cement base: SEM study. Smith ED, et al. **Aust Dent J** 1990 Jun;35(3):236–40
Clinical evaluation of three dentine bonding agents [see comments] Tyas MJ. **Aust Dent J** 1989 Dec;34(6):559–62 Comment in: Aust Dent J 1990 Apr;35(2):185.
Some bonding characteristics of a HEMA/maleic acid adhesion promoter. Causton BE, et al. **Br Dent J** 1989 Nov 11;167(9):308–11
Resin-bonded bridges: a note of caution [see comments] Gilmour AS. **Br Dent J** 1989 Aug 19;167(4):140–1 Comment in: Br Dent J 1989 Oct 7;167(7):224.
Resin-bonded arch bars. Booth PA, et al. **Br J Oral Maxillofac Surg** 1990 Apr;28(2):133–5
The effects of recycling on the tensile bond strength of new and clinically used stainless steel orthodontic brackets: an in vitro study. Regan D, et al. **Br J Orthod** 1990 May; 17(2):137–45
Dentine bonding. Fédération Dentaire Internationale Technical Report No. 35. **Int Dent J** 1990 Apr;40(2):127–8
Clinical biocompatibility of an experimental dentine-enamel adhesive for composites. Bowen RL, et al. **Int Dent J** 1989 Dec;39(4):247–52
Bonding to dentine with a simplified Gluma system. de Araujo PA, et al. **Int Dent J** 1989 Dec;39(4):253–7
Glass ionomer as a luting material. Christensen GJ. **J Am Dent Assoc** 1990 Jan;120(1):59–62
The effects of resin-bonded and conventional fixed partial dentures on the periodontium: restoration type evaluated. Freilich MA, et al. **J Am Dent Assoc** 1990 Aug;121(2):265–9
Etching times [letter] Hiltunen NS. **J Am Dent Assoc** 1990 Aug;121(2):218
Optimal etching time of glass ionomer cement for maximum bond of composite resin. Mangum FI, et al. **J Am Dent Assoc** 1990 May;120(5):535–8
Silver-alloy powder and glass ionomer cement. Simmons JJ. **J Am Dent Assoc** 1990 Jan;120(1):49–52
Glass ionomer-composite sandwich technique. Suzuki M, et al. **J Am Dent Assoc** 1990 Jan;120(1):55–7
Retention and maintenance of fissure sealants over 10 years. Romcke RG, et al. **J Can Dent Assoc** 1990 Mar;56(3):235–7
Effect of fatigue upon the interfacial bond strength of repaired composite resins. Saunders WP. **J Dent** 1990 Jun; 18(3):158–62
Oxide adherence and porcelain bonding to titanium and Ti-6Al-4V alloy. Adachi M, et al. **J Dent Res** 1990 Jun; 69(6):1230–5
Fracture-mechanics parameters of the composite-enamel bond. de Groot R, et al. **J Dent Res** 1990 Jan;69(1):31–5
Shear bond strength of light-cured glass ionomer to enamel and dentin. McCaghren RA, et al. **J Dent Res** 1990 Jan; 69(1):40–5
Increased wall to wall curing contraction in thin bonded resin layers [letter; comment] Mahler DB. **J Dent Res** 1990 Mar; 69(3):913–4 Comment on: J Dent Res 1989 Jan;68(1):48–50.
Adhesive bonding of titanium with a titanate coupler and 4-META/MMA-TBB opaque resin. Matsumura H, et al. **J Dent Res** 1990 Sep;69(9):1614–6
Preliminary surface analysis of etched, bleached, and normal bovine enamel. Ruse ND, et al. **J Dent Res** 1990 Sep; 69(9):1610–3
Effect of etching glass-ionomer cements on bond strength to composite resin. Sheth JJ, et al. **J Dent Res** 1989 Jun; 68(6):1082–7
Clinical performance of resin-bonded bridges: a 5-year prospective study. Part III: Failure characteristics and survival after rebonding. Creugers NH, et al. **J Oral Rehabil** 1990 Mar;17(2):179–86
Clinical performance of resin-bonded bridges: a 5-year prospective study. I. Design of the study and influence of experimental variables. Creugers NH, et al. **J Oral Rehabil** 1989 Sep;16(5):427–36
Effects of the porcelain firing sequence on the bond strengths of cements. Kanoy BE, et al. **J Oral Rehabil** 1989 Jul; 16(4):335–43
A provisional restorative technique for laminate veneer preparations [letter; comment] Bao NL. **J Prosthet Dent** 1990 May;63(5):602–3 Comment on: J Prosthet Dent 1989 Aug;62(2):139–42.
Repair of glass ionomer restorative materials: flexure strength of specimens repaired by two methods. Brackett WW, et al. **J Prosthet Dent** 1989 Sep;62(3):261–4
Success of etched-metal bonded retainers with nonrigid connections: a clinical study. Crispin BJ. **J Prosthet Dent** 1989 Sep;62(3):269–72
Bond durability between dentinal bonding agents and tooth structure. Davis EL, et al. **J Prosthet Dent** 1989 Sep; 62(3):253–6
An evaluation of the bond strengths of four organosilane materials in response to thermal stress. Diaz-Arnold AM, et al. **J Prosthet Dent** 1989 Sep;62(3):257–60
Evaluation of a chemical etching solution for nickel-chromium-beryllium and chromium-cobalt alloys. Ferrari M, et al. **J Prosthet Dent** 1989 Nov;62(5):516–21
A qualitative study for the bond and color of ceramometals. Part I. Hammad IA, et al. **J Prosthet Dent** 1990 Jun; 63(6):643–53
Correlation between air-drying duration and bond strength of composite resins to teeth. Ichiki K, et al. **J Prosthet Dent** 1990 May;63(5):525–9
Effect of opaque porcelain application on strength of bond to silver-palladium alloys. Jochen DG, et al. **J Prosthet Dent** 1990 Apr;63(4):414–8
The effect of powder/water ratio of irreversible hydrocolloid on the bond strength of irreversible hydrocolloid and agar combinations. Lewinstein I, et al. **J Prosthet Dent** 1989 Oct;62(4):412–6
Success rate experience after rebonding and renewal of resin-bonded fixed partial dentures. Marinello CP, et al. **J Prosthet Dent** 1990 Jan;63(1):8–11
The effects of rinse volumes and air and water pressures on enamel-composite resin bond strength. Mixson JM, et al. **J Prosthet Dent** 1989 Nov;62(5):522–6
Comparative study of luting agents with composite resin cores. Moody CR, et al. **J Prosthet Dent** 1989 Nov; 62(5):527–9
Use of a modified rubber dam technique when bonding resin-retained fixed partial dentures. Price RB, et al. **J Prosthet Dent** 1989 Nov;62(5):616
The bond strength of a visible light-cured reline resin to acrylic resin denture base material. Razavi R, et al. **J Prosthet Dent** 1990 Apr;63(4):485–7
Clinical evaluation of two posterior composite resins retained with bonding agents. Shintani H, et al. **J Prosthet Dent** 1989 Dec;62(6):627–32
Effect of multiple firing on the bond strength of selected matched porcelain-fused-to-metal combinations. Stannard JG, et al. **J Prosthet Dent** 1990 Jun;63(6):627–9
The effect of cavity pretreatment procedures on dentin bonding: a four-year clinical evaluation. van Dijken JW. **J Prosthet Dent** 1990 Aug;64(2):148–52
Occlusal bonding for long-term neuromuscular occlusion. Yamashita A, et al. **N Y State Dent J** 1990 Apr;56(4):31–3
Strength of bond with Comspan Opaque to three silicoated alloys and titanium. Hansson O. **Scand J Dent Res** 1990 Jun;98(3):248–56
Glass ionomer and resin-based fissure sealants: a clinical study. Mejàre I, et al. **Scand J Dent Res** 1990 Aug; 98(4):345–50
A 3-year evaluation of Gluma and Gluma/Scotchbond for restoration of cervical erosions. van Dijken JW. **Scand J Dent Res** 1990 Aug;98(4):341–4
[Bond strength of etched enamel to direct composite resins, to indirect composite resins and to etched and silanized porcelain] Prévost AP, et al. **J Can Dent Assoc** 1990 Jul; 56(7):631–5 (Eng. Abstr.) **(Fre)**
[Systematic planning in the bonded denture] Hess D, et al. **Schweiz Monatsschr Zahnmed** 1989;99(12):1418–23 **(Fre)**
[Case report: bonded prosthesis restoration] Hess D. **Schweiz Monatsschr Zahnmed** 1990;100(5):612–6 **(Fre, Ger)**
[Extracoronal bonded anchorages. Extracoronal bonded anchorages in cast-molded prosthesis: an esthetic extension of the geriatric denture reconstruction spectrum] Besimo C. **Schweiz Monatsschr Zahnmed** 1989;99(11):1292–304 **(Ger, Fre)**
[Surface and circumference determination in resin-bonded retainer elements: a possibility for long-term prognosis?] Marinello CP, et al. **Schweiz Monatsschr Zahnmed** 1990; 100(3):291–9 (Eng. Abstr.) **(Ger)**
[A comparison of the adhesive strength of unaged and aged metal-resin bonding systems. An in vitro study] Mathey Y, et al. **Schweiz Monatsschr Zahnmed** 1990;100(4):401–7 (Eng. Abstr.) **(Ger)**
[Temperature loading of resin-bonded bridges and its effect on the composite strength of the adhesive bond] Pfeiffer P, et al. **Schweiz Monatsschr Zahnmed** 1989;99(7):782–6 (Eng. Abstr.) **(Ger)**
[In vitro research on the attachment of bonded bridges] Haberland E, et al. **Zahn Mund Kieferheilkd** 1990;78(3):263 **(Ger)**
[Bonding strength of adhesive resins with non-precious metal alloys in relation to conditioning methods] Loges H, et al. **Zahn Mund Kieferheilkd** 1989;77(5):438–45 (Eng. Abstr.) **(Ger)**
[Scanning electron microscopy studies of the marginal finish conditions of tooth neck ceramic inlays treated with a silane coupling agents and bonded with a composite] Meissner M, et al. **Zahn Mund Kieferheilkd** 1989;77(6):543–8 (Eng. Abstr.) **(Ger)**
[Comparative transmission electron microscopy and shadow-profile studies of acid-etched enamel surface areas] Schultheiss S, et al. **Zahn Mund Kieferheilkd** 1989; 77(6):569–73 (Eng. Abstr.) **(Ger)**
[Characteristics of the fixation of resin-bonded bridge dentures. Possible errors and measures for their elimination] Gumetskiĭ RA, et al. **Stomatologiia (Mosk)** 1990 May-Jun; 69(3):64–5 (Eng. Abstr.) **(Rus)**
[Surface changes in the dental enamel resulting from acid etching and the bonding and removal of orthodontic fixation devices (based on data from scanning electron microscopy)] Kritskiĭ AV, et al. **Stomatologiia (Mosk)** 1989 Sep-Oct;68(5):79–81 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Human pulp reactions to resin restorations performed with different acid-etch restorative procedures. Qvist V, et al. **Acta Odontol Scand** 1989 Oct;47(5):253–63
Legal aspects of orthodontic practice: risk management concepts. Ceramic bracket update. Machen DE. **Am J Orthod Dentofacial Orthop** 1990 Aug;98(2):185–6
Mineral loss during etching of enamel lesions. van Dorp CS, et al. **Caries Res** 1990;24(1):6–10
Etched glass ionomer liners: surface properties and interfacial profile with composite resins. Papagiannoulis L, et al. **J Oral Rehabil** 1990 Jan;17(1):25–36

HISTORY

A little bit of history: the first direct bonding in orthodontia. Cueto HI. **Am J Orthod Dentofacial Orthop** 1990 Sep; 98(3):276–7

METHODS

Comparisons of different debonding techniques for ceramic brackets: an in vitro study. Part I. Background and methods. Bishara SE, et al. **Am J Orthod Dentofacial Orthop** 1990 Aug;98(2):145–53
Comparisons of different debonding techniques for ceramic brackets: an in vitro study. Part II. Findings and clinical implications. Bishara SE, et al. **Am J Orthod Dentofacial Orthop** 1990 Sep;98(3):263–73
Shear bond strength of four orthodontic bonding systems. Coreil MN, et al. **Am J Orthod Dentofacial Orthop** 1990 Feb;97(2):126–9
The shear bond strengths of stainless steel orthodontic brackets bonded to teeth with orthodontic composite resin and various fissure sealants. Joseph VP, et al. **Am J Orthod Dentofacial Orthop** 1990 Jul;98(1):66–71
The shear bond strengths of stainless steel and ceramic brackets used with chemically and light-activated composite resins. Joseph VP, et al. **Am J Orthod Dentofacial Orthop** 1990 Feb;97(2):121–5
Effects of phosphoric acid concentration and etch duration on enamel depth of etch: an in vitro study. Legler LR,

et al. **Am J Orthod Dentofacial Orthop** 1990 Aug; 98(2):154–60

Ceramic bracket bonding: a comparison of bond strength with polyacrylic acid and phosphoric acid enamel conditioning. Maskeroni AJ, et al. **Am J Orthod Dentofacial Orthop** 1990 Feb;97(2):168–75

The use of visible light-curing composites in bonding ceramic brackets. Odegaard J, et al. **Am J Orthod Dentofacial Orthop** 1990 Mar;97(3):188–93

A clinical trial of an indirect bonding technique with a visible light-cured adhesive. Read MJ, et al. **Am J Orthod Dentofacial Orthop** 1990 Sep;98(3):259–62

Thermal debracketing of orthodontic resins. Rueggeberg FA, et al. **Am J Orthod Dentofacial Orthop** 1990 Jul;98(1):56–65

An electron microscopic evaluation of the enamel surface subsequent to various debonding procedures. Howell S, et al. **Aust Dent J** 1990 Jun;35(3):245–52

Fissure sealants [letter; comment] Vaughan-Jones CW. **Br Dent J** 1990 Feb 10;168(3):94 Comment on: Br Dent J 1989 Dec 9–23;167(11):395–6.

Pioneering claim [letter] McCloskey RJ. **J Am Dent Assoc** 1990 Mar;120(3):236

Optimal etching time of glass ionomer cement for maximum bond of composite resin. Mangum FI, et al. **J Am Dent Assoc** 1990 May;120(5):535–8

Clinical status of dentine bonding agents. Douglas WH. **J Dent** 1989 Oct;17(5):209–15 (27 ref.)

Resin bonded bridgework: a review. Saunders WP. **J Dent** 1989 Dec;17(6):255–65 (170 ref.)

A scanning electron microscopic investigation of bonding of methacryloyloxyalkyl hydrogen maleate to etched dentin. Fukushima T, et al. **J Dent Res** 1990 Jan;69(1):46–50

A confocal optical microscope study of the morphology of the tooth/restoration interface using Scotchbond 2 dentin adhesive. Watson TF. **J Dent Res** 1989 Jun;68(6):1124–31

A confocal microscopic study of some factors affecting the adaptation of a light-cured glass ionomer to tooth tissue. Watson TF. **J Dent Res** 1990 Aug;69(8):1531–8

Effectiveness of a method used in bonding resins to metal. Caeg C, et al. **J Prosthet Dent** 1990 Jul;64(1):37–41

Thermal removal of composite resin: effect on rebonding etched metal. Haywood VB, et al. **J Prosthet Dent** 1990 Mar;63(3):289–91

The effect of three different surface treatments on the tensile strength of the resin bond to nickel-chromium-beryllium alloy. Kohli S, et al. **J Prosthet Dent** 1990 Jan;63(1):4–8

An in vitro study of the tensile strength of the resin bond between chemically etched non-noble alloy and enamel. Kuyinu E, et al. **J Prosthet Dent** 1990 Mar;63(3):292–5

A method for bonding extracted teeth to a cobalt-chrome prosthesis. Lim KC. **J Prosthet Dent** 1990 Jul;64(1):116

Interfacial strengths of various alloy surface treatments for resin-bonded fixed partial dentures. Lin TH, et al. **J Prosthet Dent** 1990 Aug;64(2):158–62

Clinical evaluation of two posterior composite resins retained with bonding agents. Shintani H, et al. **J Prosthet Dent** 1989 Dec;62(6):627–32

Reinforced glass ionomer cement vs. zinc phosphate cement. An interface study [see comments] Scherer W, et al. **N Y State Dent J** 1990 Jan;56(1):19–20 Comment in: N Y State Dent J 1990 May;56(5):8.

An improved technique for dental alloy etching with a potentiostatic device. Hong CY. **Proc Natl Sci Counc Repub China [B]** 1989 Oct;13(4):319–26

Aluminum oxalate/glycine solutions as pretreatment in the Gluma bonding system. de Araujo PA, et al. **Scand J Dent Res** 1989 Dec;97(6):552–8

[The resin-bonded bridge technic. Indications and contraindications in the resin-bonded bridge technic—a position paper] Besimo C. **Schweiz Monatsschr Zahnmed** 1990;100(3):324–33 **(Ger, Fre)**

[Electrochemical or mechanical preparation of metal surfaces of fixed dentures or splints] Tóth P Jr, et al. **Fogorv Sz** 1990 Mar;83(3):90–3 (Eng. Abstr.) **(Hun)**

TRENDS

[The importance and value of bonded prostheses (interview)] Marinello CP. **Schweiz Monatsschr Zahnmed** 1990; 100(5):651–3, 673–5 **(Ger, Fre)**

[Resin-bonded bridges—current trends (editorial)] Venner K. **Schweiz Monatsschr Zahnmed** 1990;100(5):527, 529 **(Ger, Fre)**

BONDING, HUMAN-PET see under **OBJECT ATTACHMENT**

BONDING (PSYCHOLOGY) see **OBJECT ATTACHMENT**

BONDS, EMOTIONAL see **OBJECT ATTACHMENT**

BONE AGE MEASUREMENT see **AGE DETERMINATION BY SKELETON**

BONE AND BONES

see related
CALCIFICATION, PHYSIOLOGIC

Where are the fractures and needles? [letter; comment] Crane RG. **Ann Emerg Med** 1990 Jun;19(6):731 Comment on: Ann Emerg Med 1989 Oct;18(10):1099–101.

Iatrogenic bilateral tibial fractures after intraosseous infusion attempts in a 3-month-old infant [see comments] La Fleche FR, et al. **Ann Emerg Med** 1989 Oct;18(10):1099–101 Comment in: Ann Emerg Med 1990 Jun;19(6):731. Comment in: Ann Emerg Med 1990 Jun;19(6):731–2.

The safety of intraosseous infusions: risks of fat and bone marrow emboli to the lungs. Orlowski JP, et al. **Ann Emerg Med** 1989 Oct;18(10):1062–7

Osseous choristoma of the tongue. Cabbabe EB, et al. **Ann Plast Surg** 1986 Feb;16(2):150–2

Ectopic ossification after median sternotomy [letter; comment] Weiman DS. **Ann Thorac Surg** 1990 Mar; 49(3):510 Comment on: Ann Thorac Surg 1989 Aug;48(2):315–6.

Calcium phosphate biomaterials and bone mineral. Differences in composition, structures and properties. Rey C. **Biomaterials** 1990 Jul;11:13–5

The effects of gamma-interferon on human peripheral blood monocyte/macrophage-mediated bone particle degradation. Terkeltaub R, et al. **Bone Miner** 1990 Feb; 8(2):131–43

Prolonged retention of fetal bones: intrauterine device and extrauterine disease. Panama S, et al. **Clin Exp Obstet Gynecol** 1990;17(1):47–9

Use of intraosseous infusions in infants and children. Zenk KE. **Clin Pharm** 1990 Feb;9(2):90–1

The use of postoperative irradiation for the prevention of heterotopic bone after total hip replacement with biologic fixation (porous coated) prosthesis: an animal model. Konski A, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr; 18(4):861–5

Adhesive bone cement both to bone and metals: 4-META in MMA initiated with tri-n-butyl borane. Ishihara K, et al. **J Biomed Mater Res** 1989 Dec;23(12):1475–82

Ectopic induction of cartilage and bone by water-soluble proteins from bovine bone using a polyanhydride delivery vehicle. Lucas PA, et al. **J Biomed Mater Res** 1990 Jul; 24(7):901–11

1990 program & abstracts. Twelfth annual meeting of the American Society for Bone and Mineral Research. Atlanta, Georgia, August 28–31, 1990. **J Bone Miner Res** 1990 Aug; 5 Suppl 2:S1–294

1989 program & abstracts. Tenth International Conference on Calcium Regulating Hormones. Eleventh annual meeting of the American Society for Bone and Mineral Research. Joint meeting. September 9–14, 1989, Montréal, Québec, Canada. **J Bone Miner Res** 1989 Aug;4 Suppl 1:S1–421

Heterotopic bone formation in the patient with burn injuries. A retrospective assessment of contributing factors and methods of investigation. VanLaeken N, et al. **J Burn Care Rehabil** 1989 Jul–Aug;10(4):331–5

The influence of support conditions in the loading fixture on failure mechanisms in the push-out test: a finite element study. Harrigan TP, et al. **J Orthop Res** 1990 Sep; 8(5):678–84

Articulated cadaveric bones as a structural endoskeleton in an ankle-foot prosthesis: a preliminary report. Kabra SG. **J Rehabil Res Dev** 1990 Winter;27(1):43–52

Heterotopic bone formation in the ciliary body of an aged guinea pig. Brooks DE, et al. **Lab Anim Sci** 1990 Jan; 40(1):88–90

Osteoporosis revisited: the new subspecialty of skeletal medicine? [letter] Prince R, et al. **Med J Aust** 1989 Nov 6;151(9):543

Viability of Salmonella in bone meal. Abalaka JA, et al. **Microbios** 1990;62(252–253):155–64

Ancient bone DNA amplified [letter] Hagelberg E, et al. **Nature** 1989 Nov 30;342(6249):485

Retention of intrauterine fetal bone increases menstrual prostaglandins. Lewis V, et al. **Obstet Gynecol** 1990 Mar; 75(3 Pt 2):561–3

Consequences of middle ear bone dust during neurotologic surgery. Feghali JG, et al. **Otolaryngol Head Neck Surg** 1990 Jun;102(6):698–700

Intraosseous fluids in emergencies [letter; comment] Macgregor DF, et al. **Pediatrics** 1990 Mar;85(3):386–7 Comment on: Pediatrics 1989 Jul;84(1):173–7.

Comparative bacterial clearances of muscle and skin/subcutaneous tissues with and without dead bone: a laboratory study. Masem M, et al. **Plast Reconstr Surg** 1990 May;85(5):773–81

Stone to bone. Ross PE. **Sci Am** 1989 Dec;261(6):31, 34

[The bone bank; current approach] van Mourik JB, et al. **Ned Tijdschr Geneeskd** 1990 May 19;134(20):987–8 **(Dut)**

[Osseous choristoma of the peripapillary choroid] Faure JF, et al. **Ophtalmologie** 1989 Jan–Mar;3(1):53–6 (Eng. Abstr.) **(Fre)**

[The skeleton: a real bazaar! 2.] Henry R. **Union Med Can** 1989 Nov–Dec;118(6):250 **(Fre)**

[Occupational asthma caused by inhalation of cuttlefish bone dust] Beltrami V, et al. **Med Lav** 1989 Sep–Oct;80(5):425–8 (Eng. Abstr.) **(Ita)**

[An experimental comparative study of hydroxyapatite and tricalcium-phosphate as bone substitutes] Nishina H. **Nippon Seikeigeka Gakkai Zasshi** 1989 Oct;63(10):1237–47 (Eng. Abstr.) **(Jpn)**

[Heterotopic formation of bone tissue in the eye] Akimov OV. **Vestn Oftalmol** 1989 Sep–Oct;105(5):75–6 **(Rus)**

[Perforation of Meckel's diverticulum by a fragment of a long tubular bone] Chitalov VA. **Voen Med Zh** 1989 Jun; (6):56 **(Rus)**

ABNORMALITIES

Campomelic syndrome: manifestations in a 20 week fetus and case history of a 5 year old child. Gillerot Y, et al. **Am J Med Genet** 1989 Dec;34(4):589–92

Apparently previously undescribed X-linked dominant syndrome with facial and skeletal anomalies. Kapur S, et al. **Am J Med Genet** 1989 Jul;33(3):357–63

Ambiguous genitalia associated with skeletal abnormalities, cutis laxa, craniostenosis, psychomotor retardation, and facial abnormalities (SCARF syndrome). Koppe R, et al. **Am J Med Genet** 1989 Nov;34(3):305–12

Acrofacial dysostoses. Le Merrer M, et al. **Am J Med Genet** 1989 Jul;33(3):318–22

Atelosteogenesis type III: a distinct skeletal dysplasia with features overlapping atelosteogenesis and oto-palato-digital syndrome type II. Stern HJ, et al. **Am J Med Genet** 1990 Jun;36(2):183–95

The radiology of Coffin-Lowry syndrome. Padley S, et al. **Br J Radiol** 1990 Jan;63(745):72–5

Thin ribs, thin tubular bones, abnormal facies and intrauterine growth retardation: a lethal syndrome. Sharma BK, et al. **Br J Radiol** 1990 Aug;63(752):654–6

Proximal phocomelia and radial ray aplasia in fetal valproic syndrome. Verloes A, et al. **Eur J Pediatr** 1990 Jan; 149(4):266–7

Holt-Oram syndrome with polydactyly and ostium primum defect [letter] Kejariwal VK, et al. **Indian Pediatr** 1989 Oct;26(10):1064–5

Drugs and the developing skeleton. Berry CL. **Invest Cell Pathol** 1978 Apr–Jun;1(2):129–37 (42 ref.)

Polymalformation syndrome. Vander Elst A. **J Belge Radiol** 1989 Dec;72(6):528–9

Mathematical analysis of single-cut osteotomy for complex long bone deformity. Sangeorzan BP, et al. **J Biomech** 1989; 22(11–12):1271–8

Extensive wormian bones in a patient with the Hallermann-Streiff syndrome. Gay CT, et al. **J Child Neurol** 1990 Jan;5(1):50–1

The Schinzel-Giedion syndrome. al-Gazali LI, et al. **J Med Genet** 1990 Jan;27(1):42–7 (4 ref.)

Unknown syndrome in sibs: microcephaly, seizures, mental retardation, congenital heart disease, and skeletal abnormalities. Holmes GE, et al. **J Med Genet** 1989 Oct; 26(10):665–6

Ophthalmologic findings in the Cornelia de Lange syndrome. Levin AV, et al. **J Pediatr Ophthalmol Strabismus** 1990 Mar–Apr;27(2):94–102

High resolution metrical analysis applied to the assessment of damage associated with induced mutations in the mouse. Johnson FM, et al. **Mutat Res** 1990 Apr;229(2):144–59

A distinct dysmorphic syndrome with congenital glaucoma and probable autosomal recessive inheritance. García-Cruz D, et al. **Ophthalmic Paediatr Genet** 1990 Mar;11(1):35–40

Prenatal ultrasonographic diagnosis of radial-ray reduction malformations. Brons JT, et al. **Prenat Diagn** 1990 May; 10(5):279–88

Fetal skeletal anomalies. Romero R, et al. **Radiol Clin North Am** 1990 Jan;28(1):75–99

Teratogenicity of the 13-cis and all-trans-isomers of the aromatic retinoid etretin: correlation to transplacental pharmacokinetics in mice during organogenesis after a single oral dose. Löfberg B, et al. **Teratology** 1990 Jun; 41(6):707–16

[Melorheostosis, osteopoikilosis and ostiopathia striata. Their clinical significance and the value of scintigraphy in the differential diagnosis] Michiels I, et al. **Beitr Orthop Traumatol** 1990 Jun;37(6):317–30 (Eng. Abstr.) **(Ger)**

[2 familial cases of cranio-metaphyseal dysostosis] Felli L, et al. **Chir Organi Mov** 1989 Jul–Dec;74(3–4):137–41 (Eng. Abstr.) **(Ita)**

[The Kabuki syndrome] Kuandykov EU, et al. **Pediatriia** 1990;(1):105–7 **(Rus)**

[Prenatal diagnosis of diastrophic dwarfism syndrome] Veropotvelian NP, et al. **Pediatriia** 1990;(2):85–9 **(Rus)**

[The blue sclera phenomenon with multiple syndromal skeletal and visceral anomalies] Gorbachev VV, et al. **Ter Arkh** 1990;62(4):135–6 **(Rus)**

[New hereditary syndrome with mental retardation] Marincheva GS. **Zh Nevropatol Psikhiatr** 1990;90(3):66–9 (Eng. Abstr.) **(Rus)**

ANALYSIS

Age changes in some inorganic constituents of bone and aorta: a comparative study in wild-trapped and laboratory mice (Mus). Morgan AJ, et al. **Age Ageing** 1975 Nov; 4(4):209–23

Bone strontium in pregnant and lactating females from archaeological samples. Blakely RL. **Am J Phys Anthropol** 1989 Oct;80(2):173–85

Fluorochrome labelling in Roman period skeletons from Dakhleh Oasis, Egypt. Cook M, et al. **Am J Phys Anthropol** 1989 Oct;80(2):137–43

Isolation and analysis of ribonucleic acids from skeletal tissues. Nemeth GG, et al. **Anal Biochem** 1989 Dec; 183(2):301–4

Predictive value of serum aluminium levels for bone accumulation in haemodialyzed patients. Costantini S, et al. **Ann Ist Super Sanita** 1989;25(3):457–61

Bone mineral content and body size 65 to 100 weeks' postconception in preterm and full term infants. Horsman

A, et al. **Arch Dis Child** 1989 Nov;64(11):1579–86
Identification and characterization of somatostatin receptors in neonatal rat long bones. Bruns C, et al. **Biochem J** 1990 Jan 1;265(1):39–44
Simultaneous determination of the reducible and nonreducible cross-links of connective tissue. Analysis of mineralized and nonmineralized bone collagen. Graham L, et al. **Biochemistry** 1989 Sep 19;28(19):7889–95
Variation of trace metals in ancient and contemporary Japanese bones. Hisanaga A, et al. **Biol Trace Elem Res** 1989 Dec;22(3):221–31
The multielemental analysis of bone. A review. Zwanziger H. **Biol Trace Elem Res** 1989 Mar;19(3):195–232 (227 ref.)
Separation of non-collagenous proteins of bone formed in titanium implants: experimental study in the rabbit tibia, using a bone harvest chamber. Lundgren T, et al. **Biomaterials** 1990 Apr;11(3):216–8
Characterization of interfaces in human cal:ified tissue. Martin M, et al. **Biomaterials** 1990 Jul;11:11–2
Bone mineral response to brief exercise test [letter; comment] Stevenson JC, et al. **BMJ** 1989 Sep 16;299(6701):736–7 Comment on: BMJ 1989 Jul 22;299(6693):233–5.
Bone marrow fat content in relation to bone remodeling and serum chemistry in intact and ovariectomized dogs. Martin RB, et al. **Calcif Tissue Int** 1990 Mar;46(3):189–94
Lipids in bone: optimal conditions for tissue storage prior to lipid analyses. Mularchuk P, et al. **Calcif Tissue Int** 1990 Jan;46(1):57–9
Distribution of fluoride concentration in the rat's bone. Narita N, et al. **Calcif Tissue Int** 1990 Mar;46(3):200–4
Sex- and age-related changes in bone and serum osteocalcin. Vanderschueren D, et al. **Calcif Tissue Int** 1990 Mar; 46(3):179–82
Effect of potassium loading on bone sodium and total exchangeable sodium in sheep. Reid AF, et al. **Clin Exp Pharmacol Physiol** 1988 Oct;15(10):781–8
Aluminum concentrations in serum, dialysate, urine and bone among patients undergoing continuous ambulatory peritoneal dialysis (CAPD). Joffe P, et al. **Clin Nephrol** 1989 Sep;32(3):133–8
A biophysical study of posttraumatic ectopic ossification. A case report. Chantraine A, et al. **Clin Orthop** 1990 Jun; (255):289–92
Immunohistochemical observations on bone morphogenetic protein in normal and abnormal conditions. Yang LJ, et al. **Clin Orthop** 1990 Aug;(257):249–56
Ex-vivo study of molecular interfaces in calcified tissues. Lamure A, et al. **Connect Tissue Res** 1989;21(1–4):275–9; discussion 280
Localization of gamma-glutamyl-phosphate residues to the alpha 2CB3-5 peptide of type I chicken bone collagen. Landais JC, et al. **Connect Tissue Res** 1989;19(1):1–9
The three-dimensional spatial relationship between the collagen fibrils and the inorganic calcium-phosphate crystals of pickerel and herring fish bone. Lee DD, et al. **Connect Tissue Res** 1989;21(1–4):247–57
Ultrastructural immunolocalization of a major phosphoprotein in embryonic chick bone. McKee MD, et al. **Connect Tissue Res** 1989;21(1–4):21–7; discussion 28–9
Bone type V collagen: chain composition and location of a trypsin cleavage site. Niyibizi C, et al. **Connect Tissue Res** 1989;20(1–4):247–50
Gla-containing proteins of bone. Price PA. **Connect Tissue Res** 1989;21(1–4):51–7; discussion 57–60 (24 ref.)
Purification and molecular cloning of a novel group of BMPs and localization of BMP mRNA in developing bone. Rosen V, et al. **Connect Tissue Res** 1989;20(1–4):313–9
Characterization of multiple forms of small collagenous apatite-binding proteins in bone. Sodek J, et al. **Connect Tissue Res** 1989;20(1–4):233–40
Cross-linking and stereospecific structure of collagen in mineralized and nonmineralized skeletal tissues. Yamauchi M, et al. **Connect Tissue Res** 1989;21(1–4):159–67; discussion 168–9
Structure and expression of osteonectin mRNA in human tissue. Young MF, et al. **Connect Tissue Res** 1990; 24(1):17–28
A critical crosslink region in human-bone-derived collagen type I. Specific cleavage site at residue Leu95. Bätge B, et al. **Eur J Biochem** 1990 Aug 28;192(1):153–9
Distribution and alpha radiation dose from naturally occurring U, Th, and Ra in the human skeleton. Harley NH, et al. **Health Phys** 1990 Apr;58(4):515–8
Calbindin-D9K immunolocalization and vitamin D-dependence in the bone of growing and adult rats. Balmain N, et al. **Histochemistry** 1989;92(5):359–65
Concentration of ciprofloxacin in bone tissue after single parenteral administration to patients older than 70 years. Wacha H, et al. **Infection** 1990 May-Jun;18(3):173–6
Aluminium bone deposits in normal renal function patients after long-term treatment by plasma exchange. Mousson C, et al. **Int J Artif Organs** 1989 Oct;12(10):664–7
Estrogen receptors and human bone cells: immunocytochemical studies. Colston KW, et al. **J Bone Miner Res** 1989 Aug;4(4):625–31
Effect of long-distance running on bone mass in women. Kirk S, et al. **J Bone Miner Res** 1989 Aug;4(4):515–22
Measurement of bone in the os calcis: a clinical evaluation [see comments] Lancaster EK, et al. **J Bone Miner Res** 1989 Aug;4(4):507–14 Comment in: J Bone Miner Res 1990 Apr;5(4):419–20.
Characterization of the latent transforming growth factor beta complex in bone. Pfeilschifter J, et al. **J Bone Miner Res** 1990 Jan;5(1):49–58
Age and bone mass in premenopausal women. Rosenthal DI, et al. **J Bone Miner Res** 1989 Aug;4(4):533–8
Limitations of ZAF correction factors in the determination of calcium/phosphorus ratios: important forensic science considerations relevant to the analysis of bone fragments using scanning electron microscopy and energy-dispersive x-ray microanalysis. Payne CM, et al. **J Forensic Sci** 1990 May;35(3):560–8
The use of radiocarbon (14C) to identify human skeletal materials of forensic science interest. Taylor RE, et al. **J Forensic Sci** 1989 Sep;34(5):1196–205
Purification of rabbit bone morphogenetic protein derived from bone, dentin, and wound tissue after tooth extraction. Bessho K, et al. **J Oral Maxillofac Surg** 1990 Feb; 48(2):162–9
Staining of bone for aluminum: use of acid solochrome azurine. Kaye M, et al. **Kidney Int** 1990 Apr;37(4):1142–7
In vivo 19F spin relaxation in index finger bones. Code RF, et al. **Magn Reson Med** 1990 Mar;13(3):358–69
Insulin-like growth factors I and II are present in the skeletal tissues of ten vertebrates. Bautista CM, et al. **Metabolism** 1990 Jan;39(1):96–100
Improvements in the precision of in vivo bone lead measurements. Chettle DR, et al. **Phys Med Biol** 1989 Sep; 34(9):1295–300
Photoelectron bremsstrahlung—analytical possibilities. Chettle DR. **Phys Med Biol** 1990 Feb;35(2):259–64
In vivo measurements of bone lead—a comparison of two x-ray fluorescence techniques used at three different bone sites. Somervaille LJ, et al. **Phys Med Biol** 1989 Dec; 34(12):1833–45
Quantification of bone density and mineral content [published erratum appears in Radiogr Today 1989 Feb;55(621):15] Bentley HB. **Radiogr Today** 1989 Jan;55(620):16–8
Feeding ecology of the stone and pine marten revealed by element analysis of their skeletons. Grupe G, et al. **Sci Total Environ** 1990 Jan;90:227–40
Uranium concentration in bone of Beijing (China) residents. Lianqing L, et al. **Sci Total Environ** 1990 Jan;90:267–72
Computed tomographic assessment of vertebral bone mineral in childhood. Fredericks BJ, et al. **Skeletal Radiol** 1990; 19(2):99–102
A method to determine the end point of decalcification of hard tissue and bone. Müller S, et al. **Stain Technol** 1990; 65(2):77–83
[Enoxacin concentration in bone tissue] Adam D, et al. **Infection** 1989;17 Suppl 1:S25–6 (Eng. Abstr.) **(Ger)**
[Lectin histochemistry of bone cells and bone tumors] Illés T, et al. **Morphol Igazsagugyi Orv Sz** 1990 Apr;30(2):117–24 (Eng. Abstr.) **(Hun)**
[Bone mineral content and quantitative computerized tomography] Lucchini CR, et al. **Radiol Med (Torino)** 1990 Jun;79(6):565–7 (Eng. Abstr.) **(Ita)**
[The history and present status of bone densitometry] Morita R. **Rinsho Hoshasen** 1990 Jan;35(1):1–6 (Eng. Abstr.) **(Jpn)**
[Concentration of lead in bone and age (letter)] González Reimers CE, et al. **Med Clin (Barc)** 1990 Jan 13;94(1):39 **(Spa)**
[Inorganic components of bone and liver tissue from building workers using the "edax" technic] Ortiz Lastra E, et al. **Rev Sanid Hig Publica (Madr)** 1988 May-Aug; 62(5–8):1525–35 **(Spa)**
[Lead in bones—a new dosimetric measurement in environmental medicine] Gerhardsson L, et al. **Lakartidningen** 1989 Dec 6;86(49):4322 **(Swe)**

ANATOMY & HISTOLOGY

Lifelong black-white differences in bone size and cortical area [letter; comment] Garn SM. **Am J Dis Child** 1990 Jul; 144(7):750–1 Comment on: Am J Dis Child 1989 Nov;143(11):1346–9.
Skeletal biological distance studies in American physical anthropology: recent trends. Buikstra JE, et al. **Am J Phys Anthropol** 1990 May;82(1):1–7 (36 ref.)
Population structure and skeletal variation in the Late Woodland of west-central Illinois. Conner MD. **Am J Phys Anthropol** 1990 May;82(1):31–43
Continuing periosteal apposition. II: The significance of peak bone mass, strain equilibrium, and age-related activity differentials for mechanical compensation in human tubular bones. Lazenby RA. **Am J Phys Anthropol** 1990 Aug; 82(4):473–84
Analysis of the Ft. Laurens, Ohio, skeletal sample. Sciulli PW, et al. **Am J Phys Anthropol** 1989 Sep;80(1):11–24
Postcranial osteology of the most primitive artiodactyl Diacodexis pakistanensis (Dichobunidae). Thewissen JG, et al. **Anat Histol Embryol** 1990 Mar;19(1):37–48
Patterns of skeletal histologic change through time: comparison of an archaic native American population with modern populations. Burr DB, et al. **Anat Rec** 1990 Mar; 226(3):307–13
Absence of cartilage canals in the long bone extremities of four species of skeletally immature marsupials. Thorp BH. **Anat Rec** 1990 Apr;226(4):440–6
Rigid endosseous implants for orthodontic and orthopedic anchorage. Roberts WE, et al. **Angle Orthod** 1989 Winter; 59(4):247–56
Evolutionary morphology of human skeletal characteristics. Eckhardt RB. **Anthropol Anz** 1989 Sep;47(3):193–228 (200 ref.)
Label escape theory revisited: the effects of resting periods and section thickness. Martin RB. **Bone** 1989;10(4):255–64
Bone strength of laying hens kept in an alternative system, compared with hens in cages and on deep-litter. Nørgaard-Nielsen G. **Br Poult Sci** 1990 Mar;31(1):81–9
The structure of the trabeculae of cancellous bone. 2. Long bones and mastoid. Lozupone E, et al. **Calcif Tissue Int** 1990 Jun;46(6):367–72
Reproducibility of ultrasound attenuation measurements in bone [letter; comment] Baran DT. **Clin Phys Physiol Meas** 1990 May;11(2):177–80 Comment on: Clin Phys Physiol Meas 1989 Nov;10(4):353–60.
Ultrasound velocity in bone [letter] Langton CM, et al. **Clin Phys Physiol Meas** 1990 May;11(2):177–80
Measurements of bone mass and bone density. Wahner HW. **Endocrinol Metab Clin North Am** 1989 Dec;18(4):995–1012 (39 ref.)
Functional differentiation of long bones in lorises. Demes B, et al. **Folia Primatol (Basel)** 1989;52(1–2):58–69
New approaches to structural evolution of limb bones in primates. Ruff CB. **Folia Primatol (Basel)** 1989; 53(1–4):142–59 (103 ref.)
Magnetic susceptibility effects of trabecular bone on magnetic resonance imaging of bone marrow. Rosenthal H, et al. **Invest Radiol** 1990 Feb;25(2):173–8
In vitro ultrasonic heating of fetal bone. Drewniak JL, et al. **J Acoust Soc Am** 1989 Oct;86(4):1254–8
Temperature elevation generated by a focused Gaussian ultrasonic beam at a tissue-bone interface. Wu JR, et al. **J Acoust Soc Am** 1990 Jun;87(6):2748–55
Backscattered electron imaging: the role in calcified tissue and implant analysis. Bloebaum RD, et al. **J Biomater Appl** 1990 Jul;5(1):56–85 (74 ref.)
Computed tomographic measurement of cortical bone geometry. Sumner DR, et al. **J Biomech** 1989; 22(6–7):649–53
A three-dimensional musculoskeletal model for gait analysis. Anatomical variability estimates. White SC, et al. **J Biomech** 1989;22(8–9):885–93
A mathematical analysis for the modelling of trabecular bone. Field RE, et al. **J Biomed Eng** 1989 Sep;11(5):384–9
Histological and ultrastructural appearance of the hydroxyapatite-bone interface. De Lange GL, et al. **J Biomed Mater Res** 1990 Jul;24(7):829–45
Tissue response to percutaneous implants in rabbits. Jansen JA, et al. **J Biomed Mater Res** 1990 Mar;24(3):295–307
Differential scaling of the long bones in the terrestrial carnivora and other mammals. Bertram JE, et al. **J Morphol** 1990 May;204(2):157–69
Relationships between mandibular and skeletal bone in a population of normal women. Kribbs PJ, et al. **J Prosthet Dent** 1990 Jan;63(1):86–9
The dependence of human bone texture on life style. Bacon GE. **Proc R Soc Lond [Biol]** 1990 Jun 22;240(1298):363–70
Bone structural parameters, dosimetry, and relative radiation risk in the beagle skeleton. Polig E, et al. **Radiat Res** 1989 Oct;120(1):83–101
Effect of trabecular bone on the appearance of marrow in gradient-echo imaging of the appendicular skeleton. Sebag GH, et al. **Radiology** 1990 Mar;174(3 Pt 1):855–9
Morphology of medullary bone during the egg formation cycle. Wilson S, et al. **Res Vet Sci** 1990 Mar;48(2):216–20
["Open sky" grafting of autoplastic spongy tissue in the treatment of chronic post-fracture osteomyelitis. Histological observations] Carugno C, et al. **Arch Putti Chir Organi Mov** 1989;37(1):173–7 (Eng. Abstr.) **(Ita)**
[Estimation of stature based on the proximal phalangeal length of Japanese women's hands] Shintaku K, et al. **Sangyo Ika Daigaku Zasshi** 1990 Jun 1;12(2):215–9 (Eng. Abstr.) **(Jpn)**
[Age-related changes of the bones of the leg, foot and ankle joint in pole-vaulters] Sudzilovskiĭ FV, et al. **Arkh Anat Gistol Embriol** 1989 Dec;97(12):65–71 (Eng. Abstr.) **(Rus)**
[Morphological aspects of the mineral phase of the bone] Denisov-Nikol'skiĭ Iul, et al. **Biull Eksp Biol Med** 1990 Jun;109(6):614–6 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Microvascular morphology of bone in arthrosis. Scanning electron microscopy in rabbits. He SZ, et al. **Acta Orthop Scand** 1990 Jun;61(3):195–200
Vascular invasion of the epiphyseal growth plate: analysis of metaphyseal capillary ultrastructure and growth dynamics. Hunter WL, et al. **Anat Rec** 1990 Jun; 227(2):223–31
Endothelial cell division in metaphyseal capillaries during endochondral bone formation in rats. Hunter WL, et al. **Anat Rec** 1990 Jul;227(3):351–8
Induction of monocyte chemotaxis in devascularized rabbit bone. Sarkar MR, et al. **Arch Orthop Trauma Surg** 1990; 109(2):97–101
Skeletal scintigraphy of multiple bone infarctions. Adcock KA, et al. **Clin Nucl Med** 1989 Nov;14(11):852–3
Reaction of the circulatory system to injury and regeneration. Kelly PJ, et al. **Clin Orthop** 1990 May;(254):275–88 (61 ref.)
Pharmacological regulation of the circulation of bone [published erratum appears in J Bone Joint Surg [Am] 1990

Sep;72(8):1270] Brinker MR, et al.
J Bone Joint Surg [Am] 1990 Aug;72(7):964–75

The effect of anaesthesia on the bone blood flow of the rabbit. Davis TR, et al. **J Orthop Res** 1990 Jul;8(4):479–84

Effects of variation in systemic blood pressure on intraosseous pressure, PO2, and PCO2. Kiaer T, et al.
J Orthop Res 1990 Jul;8(4):618–22

Blood flow evaluation of vascularized bone transfers in a canine model. Siegert JJ, et al. **J Orthop Res** 1990 Mar; 8(2):291–6

Effect of fracture fixation on cortical bone blood flow. Smith SR, et al. **J Orthop Res** 1990 Jul;8(4):471–8

Bone blood flow after spinal paralysis in the rat. Takahashi H, et al. **J Orthop Res** 1990 May;8(3):393–400

Role of free vascularized bone grafts in the experimentally-induced ischemic necrosis of the femoral head. González del Pino J, et al. **J Reconstr Microsurg** 1990 Apr;6(2):151–9

Effects of vascularized bone graft on surrounding necrotic bone: an experimental study. Uchida Y, et al.
J Reconstr Microsurg 1990 Apr;6(2):101–7; discussion 109, 111

Effect of exposure to compressed air and elevated oxygen levels on bone blood flow in the rabbit. Davis TR, et al.
Undersea Biomed Res 1990 May;17(3):201–11

[Bone infarction, or idiopathic metaphyseal and diaphyseal aseptic osteonecrosis of the long bones. Update and contribution of new imaging technics] Lafforgue P, et al.
Rev Rhum Mal Osteoartic 1990 Apr 25;57(4):359–66 (38 ref.) (Eng. Abstr.) **(Fre)**

[Experimental study of the reaction of bone to change in blood flow] Uematsu N.
Nippon Seikeigeka Gakkai Zasshi 1989 Dec;63(12):1469–78 (Eng. Abstr.) **(Jpn)**

[Experimental study on secondary living bone graft—method of creating new donor by vascular bundle implantation to isolated bone] Yajima H, et al.
Nippon Seikeigeka Gakkai Zasshi 1989 May;63(5):539–48 (Eng. Abstr.) **(Jpn)**

[Circulatory theory of the pathogenesis of post-traumatic osteomyelitis] Stetsula VI, et al.
Ortop Travmatol Protez 1990 Jan;(1):3–6 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Human uterus-derived growth substances for rat bone cells and fibroblasts. Koutsilieris M. **Am J Obstet Gynecol** 1989 Nov;161(5):1313–7

Attenuated bone aluminum deposition in nonuremic beagles with reduced bone remodeling. Quarles LD.
Am J Physiol 1990 Apr;258(4 Pt 1):E576–81

Stem cell delivery vehicle. Caplan AI. **Biomaterials** 1990 Jul; 11:44–6 (6 ref.)

Solubilization of hydroxyapatite crystals by murine bone cells, macrophages and fibroblasts. Kwong CH, et al.
Biomaterials 1989 Nov;10(9):579–84

Bone conditioned medium enhances cell aggregation, cell proliferation and alkaline phosphatase activity in serum-deprived medium. Gordon MT, et al. **Bone** 1990; 11(2):121–6

Expression of the cell proliferation-associated nuclear antigen reactive with the Ki-67 monoclonal antibody by cells of the skeletal system in humans and other species. Apte SS. **Bone Miner** 1990 Jul;10(1):37–50

In vitro mineralization of osteoblastic cells derived from human bone. Gotoh Y, et al. **Bone Miner** 1990 Mar; 8(3):239–50

Histochemical identification of oestrogen target cells in the medullary bone of laying hens. Ohashi T, et al.
Br Poult Sci 1990 Mar;31(1):221–4

A resolution restriction for Wolff's law of trabecular architecture. Cowin SC. **Bull Hosp Jt Dis Orthop Inst** 1989 Fall;49(2):205–12

Third International Workshop on Cells and Cytokines in Bone and Cartilage. 8–11 April 1990, Davos, Switzerland. Abstracts. **Calcif Tissue Int** 1990;46 Suppl 2:A1–61

The effect of strain on bone cell prostaglandin E2 release: a new experimental method. Murray DW, et al.
Calcif Tissue Int 1990 Jul;47(1):35–9

The chemistry and biology of mineralized tissues. Part I. Proceedings of the third international conference. Chatham, Massachusetts, October 16–21, 1988.
Connect Tissue Res 1989;20(1–4):1–329

The chemistry and biology of mineralized tissues: Part II. Proceedings of the third international conference. Chatham, Massachusetts, October 16–21, 1988.
Connect Tissue Res 1989;21(1–4):1–296

Cellular and molecular events during embryonic bone development. Bruder SP, et al. **Connect Tissue Res** 1989; 20(1–4):65–71 (8 ref.)

Effects of transforming growth factors on bone cells. Centrella M, et al. **Connect Tissue Res** 1989;20(1–4):267–75 (26 ref.)

SV-40 large-T immortalization of embryonic bone cells: establishment of osteoblastic clonal cell lines. Heath JK, et al. **Connect Tissue Res** 1989;20(1–4):15–21

Transforming growth factor-beta regulation of collagenase, 72 kDa-progelatinase, TIMP and PAI-1 expression in rat bone cell populations and human fibroblasts. Overall CM, et al. **Connect Tissue Res** 1989;20(1–4):289–94

Glucocorticoid receptors and inhibition of bone cell growth in primary culture. Chen TL, et al. **Endocrinology** 1977 Mar;100(3):619–28

Evidence for heterogeneity of the osteoblastic phenotype determined with clonal rat bone cells established from transforming growth factor-beta-induced cell colonies grown anchorage independently in semisolid medium. Guenther HL, et al. **Endocrinology** 1989 Oct; 125(4):2092–102

Transforming growth factor-beta stimulates bone matrix apposition and bone cell replication in cultured fetal rat calvariae. Hock JM, et al. **Endocrinology** 1990 Jan; 126(1):421–6

Bromodeoxyuridine (BrdUrd) immunohistochemistry in undecalcified plastic-embedded tissue. Elimination of the DNA denaturation step. Apte SS, et al. **Histochemistry** 1990;93(6):631–5

Quantitative histologic analysis of tissue growth into porous total knee components. Cook SD, et al. **J Arthroplasty** 1989; 4 Suppl:S33–43

The influence of calcium phosphate biomaterials on human bone cell activities. An in vitro approach. Grégoire M, et al. **J Biomed Mater Res** 1990 Feb;24(2):165–77

Influence of experimental conditions on osteoblast activity in human primary bone cell cultures. Chavassieux PM, et al. **J Bone Miner Res** 1990 Apr;5(4):337–43

Ultrastructural localization of adenylate cyclase in chicken bone cells. Yamamoto T, et al. **J Histochem Cytochem** 1989 Nov;37(11):1705–9

Confocal fluorescence microscopy: some applications in bone cell biology. Jones SJ, et al. **J Microsc** 1990 May;158 (Pt 2):249–59

Effect of donor age on the growth in vitro of cells obtained from human trabecular bone. Evans CE, et al.
J Orthop Res 1990 Mar;8(2):234–7

Measuring the volume fraction of bone ingrowth: a comparison of three techniques. Sumner DR, et al.
J Orthop Res 1990 May;8(3):448–52

Stimulation of myeloid colony development elaborated by colony forming cells—fibroblasts from rat developing ossicles. Bleiberg I. **Leuk Res** 1990;14(1):63–8

Histomorphometric analysis of bones of cosmos-1887 rats. Kaplansky AS, et al. **Physiologist** 1990 Feb;33(1 Suppl):S20–2

Bone cellular effects after weightlessness exposure—an hypothesis. Vico L, et al. **Physiologist** 1990 Feb;33(1 Suppl):S8–11 (33 ref.)

Osteopontin—a possible anchor of osteoclasts to bone. Reinholt FP, et al. **Proc Natl Acad Sci U S A** 1990 Jun; 87(12):4473–5

Bone lining cells: structure and function. Miller SC, et al. **Scanning Microsc** 1989 Sep;3(3):953–60; discussion 960–1 (62 ref.)

A new method for preparation of undecalcified bone sections. Sterchi DL, et al. **Stain Technol** 1989 Jul;64(4):201–5

A modified mallory-cason staining procedure for large cryosections. van Leeuwen MB, et al. **Stain Technol** 1990; 65(1):37–42

Immunocytochemical localization of BGP in human bones in various developmental stages and pathological conditions. Ohta T, et al. **Virchows Arch [A]** 1989; 415(5):459–66

DRUG EFFECTS

Indomethacin and bone trauma. Effects on remodeling of rabbit bone. Keller J, et al. **Acta Orthop Scand** 1990 Feb; 61(1):66–9

No effect of systemic administration of somatomedin C on bone repair in rats. Kirkeby OJ, et al.
Acta Orthop Scand 1990 Aug;61(4):335–8

Protein synthesis in bone and skin of the rat are inhibited by ethanol: implications for whole body metabolism. Preedy VR, et al. **Alcoholism** 1990 Apr;14(2):165–8

Estrogens and progestogens conserve bone in rats deficient in calcitonin and parathyroid hormone. Goulding A, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):E903–8

Dehydroepiandrosterone reduces cancellous bone osteopenia in ovariectomized rats. Turner RT, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):E673–7

Fluoride accumulation and bone strength in wild black-crowned night-herons [published erratum appears in Arch Environ Contam Toxicol 1990 May-Jun;19(3):470] Henny CJ, et al. **Arch Environ Contam Toxicol** 1990 Jan-Feb;19(1):132–7

Reaction of the bone structure to methotrexate-Palacos flow y. Experimental investigations in animals. Degreif J, et al. **Arch Orthop Trauma Surg** 1989;108(6):363–7

Histotoxicity of cyanoacrylate tissue adhesives. A comparative study. Toriumi DM, et al.
Arch Otolaryngol Head Neck Surg 1990 May;116(5):546–50

Effect of 1,25-dihydroxyvitamin D3 on bone metabolism in tissue culture. Enhancement of the steroid effect by zinc. Yamaguchi M, et al. **Biochem Pharmacol** 1989 Oct 15; 38(20):3453–9

Specific effects of retinoic acid on the skeletal morphogenesis of the 11-day mouse embryo forelimb bud in vitro. Desbiens X, et al. **Biol Cell** 1990;68(3):213–20

Loss of the anabolic effect of parathyroid hormone on bone after discontinuation of hormone in rats. Gunness-Hey M, et al. **Bone** 1989;10(6):447–52

Restoration of axial and appendicular bone volumes by h-PTH(1–34) in parathyroidectomized and osteopenic rats. Tada K, et al. **Bone** 1990;11(3):163–9

Effects of sodium fluoride, vitamin D, and calcium on cortical bone remodeling in osteoporotic patients. Kragstrup J, et al. **Calcif Tissue Int** 1989 Dec;45(6):337–41

Effect of cortisone on cells at the bone-marrow interface. Simmons DJ, et al. **Calcif Tissue Int** 1990 May;46(5):327–32

Effects of treatment with oestradiol/levonorgestrel on bone, lipoproteins and hormone status in postmenopausal women. Farish E, et al. **Clin Endocrinol (Oxf)** 1989 Nov; 31(5):607–15

Insulin-like growth factor 1 and bone turnover in glucocorticoid-treated and control subjects. Reid IR, et al. **Clin Endocrinol (Oxf)** 1989 Apr;30(4):347–53

Silicon nitride ceramic (Si3N4) on rabbit skeletal cells and tissue [letter] Griss P. **Clin Orthop** 1990 Jul;(256):306–8

The effect of indomethacin, aspirin, and ibuprofen on bone ingrowth into a porous-coated implant. Trancik T, et al. **Clin Orthop** 1989 Dec;(249):113–21

Progesterone as a bone-trophic hormone. Prior JC.
Endocr Rev 1990 May;11(2):386–98 (96 ref.)

Direct modulation by androgens of the response of human bone cells (SaOS-2) to human parathyroid hormone (PTH) and PTH-related protein. Fukayama S, et al.
Endocrinology 1989 Oct;125(4):1789–94

Comparison of the anabolic effects of synthetic parathyroid hormone-related protein (PTHrP) 1–34 and PTH 1–34 on bone in rats. Hock JM, et al. **Endocrinology** 1989 Oct; 125(4):2022–7

Leukemia inhibitory factor: a novel bone-active cytokine. Reid LR, et al. **Endocrinology** 1990 Mar;126(3):1416–20

Modulation by vitamin D status of the responsiveness of rat bone to gonadal steroids. Sömjen D, et al.
Endocrinology 1989 Oct;125(4):1870–6

Short-term effects of Carbetimer on calcium and bone metabolism in man. Body JJ, et al.
Eur J Cancer Clin Oncol 1989 Dec;25(12):1831–5

A longitudinal comparative histometric study of the biocompatibility of three local hemostatic agents. Mattsson T, et al. **Int J Oral Maxillofac Surg** 1990 Feb;19(1):47–50

Proceedings of the International Workshop on Fluoride and Bone. Niagara-on-the-Lake, Ontario, October 12–15, 1988.
J Bone Miner Res 1990 Mar;5 Suppl 1:S1–239

Effects of fluoride treatment on bone strength. Carter DR, et al. **J Bone Miner Res** 1990 Mar;5 Suppl 1:S177–84 (19 ref.)

Bone effects of fluoride in animal models in vivo. A review and a recent study. Chavassieux P. **J Bone Miner Res** 1990 Mar;5 Suppl 1:S95–9 (34 ref.)

Fluoride effects on bone crystals. Grynpas MD.
J Bone Miner Res 1990 Mar;5 Suppl 1:S169–75 (42 ref.)

Effects of transforming growth factor alpha and interleukin-1 on DNA synthesis, collagen synthesis, procollagen mRNA levels, and prostaglandin E2 production in cultured fetal rat calvaria. Hurley MM, et al. **J Bone Miner Res** 1989 Oct;4(5):731–6

Sodium fluoride lacks mitogenic activity for fetal human bone cells in vitro. Kopp JB, et al. **J Bone Miner Res** 1990 Mar; 5 Suppl 1:S137–41

The effect of cross-gender hormonal treatment on bone metabolism in male-to-female transsexuals. Lips P, et al.
J Bone Miner Res 1989 Oct;4(5):657–62

Skeletal growth factor and other growth factors known to be present in bone matrix stimulate proliferation and protein synthesis in human bone cells. Wergedal JE, et al.
J Bone Miner Res 1990 Feb;5(2):179–86

Dietary phosphorus concentrations related to breaking load and chemical bone properties in heifers. Williams SN, et al. **J Dairy Sci** 1990 Apr;73(4):1100–6

Effects of the organophosphate insecticides diazinon and parathion on bobwhite quail embryos: skeletal defects and acetylcholinesterase activity. Meneely GA, et al.
J Exp Zool 1989 Oct;252(1):60–70

Vasoactive substances in subchondral bone of the dog knee. Holm IE, et al. **J Orthop Res** 1990 Mar;8(2):205–12

Combined treatment with cyclosporin A and cortisone acetate minimizes the adverse bone effects of either agent alone. Movsowitz C, et al. **J Orthop Res** 1990 Sep; 8(5):635–41

Comparison of the effects of adriamycin and methotrexate on orthotopic and induced heterotopic bone in rats. Nilsson OS, et al. **J Orthop Res** 1990 Mar;8(2):199–204

Bone resorption in orthotopic and heterotopic bone of dichloromethylene bisphosphonate-treated rats. Nilsson OS, et al. **J Orthop Res** 1990 Mar;8(2):213–9

Differential effects of androgens on cortical bone histomorphometry in gonadectomized male and female rats. Turner RT, et al. **J Orthop Res** 1990 Jul;8(4):612–7

Impact of NSAIDS on murine antigen induced arthritis. II. A light microscopic investigation of antiinflammatory and bone protective effects. de Vries BJ, et al. **J Rheumatol** 1990 Mar;17(3):295–303

Potential protection by cyclosporin against glucocorticoid effects on bone [letter] Kelly PJ, et al. **Lancet** 1989 Dec 9;2(8676):1388

Osteotoxicity after chronic dietary administration of 13-cis-retinoic acid, retinyl palmitate or selenium in mice exposed to tumor initiation and promotion. Forsyth KS, et al. **Life Sci** 1989;45(22):2149–56

Age-dependent stimulation or inhibition of calcium release from bone cultures by 1 alpha, 25-dihydroxyvitamin D3. Goldhaber P, et al. **Mech Ageing Dev** 1989 Sep; 49(3):199–209 (34 ref.)

Corticosteroids and osteoporosis. Smith R. **Thorax** 1990 Aug; 45(8):573–8 (35 ref.)

Histologic and histochemical changes in articular cartilages of immature beagle dogs dosed with difloxacin, a fluoroquinolone. Burkhardt JE, et al. **Vet Pathol** 1990 May; 27(3):162–70

[Morphologic study of iliac crest spongiosa in patients with osteoporosis treated according to the ADFR (activation, depression of resorption, formation, repeat the cycle) with parathyroid hormone and diphosphonates (Hannover PTH I study)] Delling G, et al. **Z Orthop** 1990 Jan–Feb; 128(1):1–5 (Eng. Abstr.) (Ger)

[Microdensitometric study of maturation and fragility of the bone in male patients with cerebral palsy—the effect of long–term administration of 1 alpha–hydroxy vitamin D3 and the value of osteocalcin as a marker of bony growth] Hayashi Y, et al. **No To Hattatsu** 1990 May;22(3):209–15 (Eng. Abstr.) (Jpn)

[Current developments in antirheumatic medication. II. Metabolic and cartilage–protective medication] Bologiu HD. **Rev Med Interna [Med Interna]** 1989 May–Jun; 41(3):193–208 (47 ref.) (Rum)

EMBRYOLOGY

Growth of linear parameters in trisomy 18 fetuses. Droste S, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):158–61

Submicroscopic structure of glycosaminoglycans in osteocyte capsule of human embryonic bone as revealed by polarization microscopy. Módis L, et al. **Arch Ital Anat Embriol** 1989 Jul–Sep;94(3):283–8

Post–translational processing of chicken bone phosphoproteins. Identification of the bone phosphoproteins of embryonic tibia. Mikuni–Takagaki Y, et al. **Biochem J** 1990 Jun 15;268(3):585–91

Development and evolutionary origins of vertebrate skeletogenic and odontogenic tissues. Smith MM, et al. **Biol Rev Camb Philos Soc** 1990 Aug;65(3):277–373 (351 ref.)

A suitable culture medium for ossification of embryonic chick femur in organ culture. Kaji T, et al. **Bone Miner** 1990 May;9(2):89–100

Cartilage, bone and tooth induction during early embryonic mouse mandibular morphogenesis using serumless, chemically–defined medium. Slavkin HC, et al. **Connect Tissue Res** 1990;24(1):41–51 (55 ref.)

Temporal changes in the response of chick limb bud mesodermal cells to transforming growth factor beta–type 1. Carrington JL, et al. **Exp Cell Res** 1990 Feb; 186(2):368–73

[Organogenesis of the limb skeleton and the limb joints in the human embryo] Kabak S, et al. **Anat Anz** 1990; 170(5):349–57 (Eng. Abstr.) (Ger)

[The structural basis of bone I.] Martinko V, et al. **Anat Anz** 1990;170(3–4):153–8 (Eng. Abstr.) (Ger)

[Development of a growth model for long bones of the extremities in the fetus] Merz E, et al. **Arch Gynecol Obstet** 1989;245(1–4):109–13 (Ger)

ENZYMOLOGY

Isoenzymes of alkaline and acid phosphatases as bones metastasis marker in breast cancer patients. Desoize B, et al. **Anticancer Res** 1989 Jul–Aug;9(4):1105–9

Characterization of a 5'–flanking region of the human liver/bone/kidney alkaline phosphatase gene: two kinds of mRNA from a single gene. Matsuura S, et al. **Biochem Biophys Res Commun** 1990 May 16; 168(3):993–1000

Post–translational processing of chicken bone phosphoproteins. Identification of bone (phospho)protein kinase. Mikuni–Takagaki Y, et al. **Biochem J** 1990 Jun 15; 268(3):593–7

A monoclonal antibody against the surface of osteoblasts recognizes alkaline phosphatase isoenzymes in bone, liver, kidney, and intestine. Bruder SP, et al. **Bone** 1990; 11(2):133–9

Comparative metabolic enzymatic activity in trabecular as against cortical osteoblasts. Dodds RA, et al. **Bone** 1989; 10(4):251–4

An attempt to determine the tissue origin of equine serum alkaline phosphatase by isoelectric focusing. Ellison RS, et al. **Can J Vet Res** 1990 Jan;54(1):119–25

The preparation of monoclonal antibodies which react preferentially with human bone alkaline phosphatase and not liver alkaline phosphatase. Hill CS, et al. **Clin Chim Acta** 1990 Jan 15;186(2):315–20

A combined lectin precipitation method for differentiating modified bone alkaline phosphatase in serum [letter] Kuwana T, et al. **Clin Chim Acta** 1989 Nov;185(2):211–2

The isolation and partial sequencing of human bone alkaline phosphatase gene. Hsu HH, et al. **Int J Biochem** 1989; 21(8):847–51

The partial degradation of osteonectin by a bone–derived metalloprotease enhances binding to type I collagen. Tyree B. **J Bone Miner Res** 1989 Dec;4(6):877–83

Human bone cell enzyme expression and cellular heterogeneity: correlation of alkaline phosphatase enzyme activity with cell cycle. Fedarko NS, et al. **J Cell Physiol** 1990 Jul;144(1):115–21

Cloning and analysis of the 5' region of the rat bone/liver/kidney/placenta alkaline phosphatase gene. A dual–function promoter. Zernik J, et al. **Matrix** 1990 Mar; 10(1):38–47

Analysis of the human liver/bone/kidney alkaline phosphatase promoter in vivo and in vitro. Kiledjian M, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):957–61

[Bone alkaline phosphatase as an activity parameter of acromegaly] Hampel R, et al. **Dtsch Med Wochenschr** 1990 Mar 9;115(10):363–6 (Eng. Abstr.) (Ger)

[Identification of serum alkaline phosphatase from human bone] Shinozaki T, et al. **Nippon Seikeigeka Gakkai Zasshi** 1990 Jan;64(1):50–5 (Eng. Abstr.) (Jpn)

IMMUNOLOGY

Immunohistochemical studies using BRL 12, a monoclonal antibody reacting specifically with osteogenic tissues. Joyner CJ, et al. **Connect Tissue Res** 1989;23(4):289–97

Discussion of "ABH antigen typing in bone tissue" [letter; comment] Pedal I. **J Forensic Sci** 1990 May;35(3):514–7
Comment on: J Forensic Sci 1989 Jan;34(1):7–14.

INJURIES

Indomethacin and bone trauma. Effects on remodeling of rabbit bone. Keller J, et al. **Acta Orthop Scand** 1990 Feb; 61(1):66–9

Bone marrow scintigraphy in the diagnosis of post–traumatic avascular necrosis of bone. Tawn DJ, et al. **Br J Radiol** 1989 Sep;62(741):790–5

The predictive value of fracture, disease, and falling tendency for fragility fractures in women. Gärdsell P, et al. **Calcif Tissue Int** 1989 Dec;45(6):327–30

Imidazole salicylate in the treatment of osteoarthrosis and musculoskeletal trauma: a postmarketing survey. Scaricabarozzi I, et al. **Clin Ther** 1988;10(2):229–36

Fracture behaviour of cartilage–on–bone in response to repeated impact loading. Silyn–Roberts H, et al. **Connect Tissue Res** 1990;24(2):143–56

Effect of bone injury on circadian periodicity of plasma 17–hydroxy corticosteroids (17–OHCS) in rabbits. Singh S, et al. **Indian J Exp Biol** 1989 Mar;27(3):297–9

A management algorithm for chronically exposed war wounds of bone. Coupland RM. **Injury** 1990 Mar; 21(2):101–3

Skeletal injury in thermal trauma: a review of management. Curtis MJ, et al. **Injury** 1989 Nov;20(6):333–6

Missed injuries in an orthopaedic department. Juhl M, et al. **Injury** 1990 Mar;21(2):110–2

Radiological aspects of non–accidental injury. Chapman S. **J R Soc Med** 1990 Feb;83(2):67–71 (27 ref.)

Intensive training in young athletes. The orthopaedic surgeon's viewpoint. Maffulli N. **Sports Med** 1990 Apr; 9(4):229–43 (169 ref.)

Intrinsic risk factors and athletic injuries. Taimela S, et al. **Sports Med** 1990 Apr;9(4):205–15 (100 ref.)

[The fate of a burned necrotic tubular bone covered by tissues with adequate blood supply] Shen ZY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):264–5 (Chi)

[Burned bone treated with free skin autograft: report of 19 cases] Su ZY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):260–1, 317 (Eng. Abstr.) (Chi)

[Revascularized bone grafts. Technics, indications and results] Schuind F, et al. **Acta Orthop Belg** 1989; 55(2):135–49 (Eng. Abstr.) (Fre)

[The efficacy of x–ray skeletal diagnosis in chronic alcoholics] Reumuth HJ, et al. **Radiol Diagn (Berl)** 1989; 30(3):281–9 (Eng. Abstr.) (Ger)

[The effect of electrical injuries on the bone and cartilage structures of the hands in childhood] Trippi D, et al. **Radiol Med (Torino)** 1990 Apr;79(4):384–6 (Eng. Abstr.) (Ita)

[Spontaneous fracture and osteoporosis following renal transplantation] Takeo Y, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 May;63(5):507–13 (Eng. Abstr.) (Jpn)

[The x–ray diagnosis of plastic injuries to the bones in children (a review of the literature)] Kossovoi AL. **Ortop Travmatol Protez** 1989 Sep;(9):72–4 (26 ref.) (Rus)

[Experience with the clinical use of demineralized bone autografts in traumatology and orthopedics] Savel'ev VI, et al. **Ortop Travmatol Protez** 1989 Sep;(9):35–6 (Eng. Abstr.) (Rus)

[The formation of primary disability from injuries and diseases of the bone–muscle system] Trofimovich NI, et al. **Ortop Travmatol Protez** 1989 Sep;(9):49–52 (Rus)

[Destruction of a long tubular bone in combined mechanical and thermal exposures] Bakhmet'ev VI. **Sud Med Ekspert** 1990 Jan–Mar;33(1):19–20 (Eng. Abstr.) (Rus)

INNERVATION

Fixation and demineralization of bone tissue for immunohistochemical staining of neuropeptides. Bjurholm A, et al. **Calcif Tissue Int** 1989 Oct;45(4):227–31

METABOLISM

Effects of one–year hormone replacement therapy on peripheral bone mineral content in patients with osteoporotic spine fractures. Resch H, et al. **Acta Endocrinol (Copenh)** 1990 Jul;123(1):14–8

Effect of total food deprivation on the proteoglycans of rat hyaline cartilage and bone. Fernández Lemos SM, et al. **Acta Physiol Pharmacol Latinoam** 1989;39(3):273–80

Radiological and biochemical evaluation of bone growth in young dogs. Koscinczuk P, et al. **Acta Physiol Pharmacol Latinoam** 1989;39(3):289–97

Recent studies of bone appetite in cattle. Blair–West JR, et al. **Acta Physiol Scand Suppl** 1989;583:53–8

Determination of peak trabecular bone density: interplay of dietary fiber, carbohydrate, and androgens. Leuenberger PK, et al. **Am J Clin Nutr** 1989 Nov;50(5):955–61

Hemodialysis in a patient with cystinosis. Effects on amino acid and bone metabolism. Mahoney CP, et al. **Am J Dis Child** 1966 Jul;112(1):65–71

Osteogenesis in bone defects in rats: the effects of hydroxyapatite and demineralized bone matrix. Alper G, et al. **Am J Med Sci** 1989 Dec;298(6):371–6

Relationship between plasma calcium fractions, other bone–related variables, and serum follicle–stimulating hormone levels in premenopausal, perimenopausal, and postmenopausal women. Nordin BE, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):140–5

Ion microprobe analysis of bone surface elements: effects of 1,25(OH)2D3. Bushinsky DA, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):E815–22

PTH receptor coupling to phospholipase C is an alternate pathway of signal transduction in bone and kidney. Dunlay R, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):F223–31 (86 ref.)

Effects of simulated weightlessness on rat osteocalcin and bone calcium. Patterson–Buckendahl P, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1103–9

Attenuated bone aluminum deposition in nonuremic beagles with reduced bone remodeling. Quarles LD. **Am J Physiol** 1990 Apr;258(4 Pt 1):E576–81

Adenylate cyclase blockers dissociate PTH–stimulated bone resorption from cAMP production. Reid IR, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):E708–14

Influence of variable content of dietary zinc on copper metabolism of weanling foals. Bridges CH, et al. **Am J Vet Res** 1990 Feb;51(2):275–80

Agents affecting adenylate cyclase activity modulate the stimulatory action of 1,25–dihydroxyvitamin D3 on the production of osteocalcin by human bone cells. Evans DB, et al. **Biochem Biophys Res Commun** 1989 Nov 15; 164(3):1076–85

Osteopetrotic (grey–lethal) bone produces collagenase and TIMP in organ culture: regulation by vitamin A. Heath JK, et al. **Biochem Biophys Res Commun** 1990 May 16; 168(3):1171–6

Experimental considerations on the measurement of prostaglandins during long–time incubations of neonatal mouse calvaria. Leis HJ, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):545–50

Effects of helodermin on fetal rat bone metabolism in vitro. Pfeilschifter J, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):576–81

Target cell metabolism of 1,25–dihydroxyvitamin D3 to calcitroic acid. Evidence for a pathway in kidney and bone involving 24–oxidation. Makin G, et al. **Biochem J** 1989 Aug 15;262(1):173–80

Effect of dipicolinate, a chelator of zinc, on bone protein synthesis in tissue culture. The essential role of zinc. Yamaguchi M, et al. **Biochem Pharmacol** 1989 Dec 15; 38(24):4485–9

The possible role of collagen fibrils and collagen–phosphoprotein complexes in the calcification of bone in vitro and in vivo. Glimcher MJ. **Biomaterials** 1990 Jul;11:7–10 (37 ref.)

Phosphorylation of extracellular bone and dentine matrix proteins. Wu CB, et al. **Biomaterials** 1990 Jul;11:16–8

Influence of soft tissue body composition on bone mass and metabolism. Hassager C, et al. **Bone** 1989;10(6):415–9

Elevated accumulation of hyaluronate in the tubular bones of osteogenesis imperfecta. Oohira A, et al. **Bone** 1989; 10(6):409–13

Metabolism of collagen in bone of adjuvant induced arthritic rat. Reddy GK, et al. **Bone** 1989;10(6):439–45

Bone metabolism in juvenile rheumatoid arthritis. Bianchi ML, et al. **Bone Miner** 1990 May;9(2):153–62

Effect of dietary cadmium and/or copper on the bone lysyl oxidase in copper–deficient rats relative to the metabolism of copper in the bone. Iguchi H, et al. **Bone Miner** 1990 Jul;10(1):51–9

1,25–Dihydroxyvitamin D3 prevents the decrease of bone mineral appositional rate in rats with inflammation–mediated osteopenia (IMO). Lempert UG, et al. **Bone Miner** 1989 Sep;7(2):149–58

Calcium metabolism of rats with varying degrees of insulinopenia. Locatto ME, et al. **Bone Miner** 1990 Feb; 8(2):119–30

Short–term effects on bone and mineral metabolism of 4–amino–1–hydroxybutylidene–1,1–diphosphonate (ABDP) in Paget's disease of bone. Pedrazzoni M, et al. **Bone Miner** 1989 Nov;7(3):301–7

Recent advances in bone cell biology: interactions of vitamin D with other local and systemic factors. Raisz LG. **Bone Miner** 1990 Jun;9(3):191–7 (38 ref.)

A comparison of biochemical indices of bone turnover in elderly institutionalized and free–living subjects. Woo J, et al. **Bone Miner** 1990 Jan;8(1):31–8

Interrelations of calcium, fluorine and vitamin D in bone metabolism. Gaster D, et al. **Br J Nutr** 1967;21(2):413–8

High bone turnover in fibromyalgia. Appelboom T, et al. **Calcif Tissue Int** 1990 May;46(5):314–7

Bone metabolism during antler growth in female reindeer. Baksi SN, et al. **Calcif Tissue Int** 1989 Nov;45(5):314–7

Assessment of renal and skeletal components of hypercalcemia. Hosking DJ. **Calcif Tissue Int** 1990;46 Suppl:S11–9 (19 ref.)

The value of biomarkers in detecting alterations in bone metabolism [letter] Moro L, et al. **Calcif Tissue Int** 1990 May;46(5):351

Resolution-enhanced Fourier transform infrared spectroscopy study of the environment of phosphate ions in the early deposits of a solid phase of calcium-phosphate in bone and enamel, and their evolution with age. I: Investigations in the upsilon 4 PO4 domain. Rey C, et al. **Calcif Tissue Int** 1990 Jun;46(6):384–94

Load-induced proteoglycan orientation in bone tissue in vivo and in vitro. Skerry TM, et al. **Calcif Tissue Int** 1990 May; 46(5):318–26

Osteoblast low-molecular-weight proteinase inhibitor. I. Isolation and characterization of activity from osteoblastic cells and bone. Wezeman FH, et al. **Calcif Tissue Int** 1990 Apr;46(4):263–9

Long-term effects of ovariectomy and aging on the rat skeleton. Wronski TJ, et al. **Calcif Tissue Int** 1989 Dec; 45(6):360–6

Serum osteocalcin or bone Gla-protein, a biochemical marker for bone metabolism in horses: differences in serum levels with age. Lepage OM, et al. **Can J Vet Res** 1990 Apr; 54(2):223–6

Nerve growth factor in skeletal tissues of the embryonic chick. Frenkel SR, et al. **Cell Tissue Res** 1990 May; 260(3):507–11

The regulatory effect of phosphates on bone metabolism in vitro. Tenenbaum HC, et al. **Cell Tissue Res** 1989 Sep; 257(3):555–63

Reduced forearm bone mineral content and biochemical evidence of increased bone turnover in women with euthyroid goitre treated with thyroid hormone. Taelman P, et al. **Clin Endocrinol (Oxf)** 1990 Jul;33(1):107–17

Calcium and bone metabolic homeostasis in active and denning black bears (Ursus americanus). Floyd T, et al. **Clin Orthop** 1990 Jun;(255):301–9 (62 ref.)

Purification and chemical modification of porcine bone morphogenetic protein. Ko L, et al. **Clin Orthop** 1990 Jul; (256):229–37

The pathogenesis of loosening of total hip arthroplasties. The production of factors by periprosthetic tissues that stimulate in vitro bone resorption. Ohlin A, et al. **Clin Orthop** 1990 Apr;(253):287–96

Does a single local absorptiometric bone measurement indicate the overall skeletal status? Implications for osteoporosis and osteoarthritis of the hip. Gotfredsen A, et al. **Clin Rheumatol** 1990 Jun;9(2):193–203

Serum osteocalcin as an index of bone turnover in active rheumatoid arthritis and in active psoriatic arthritis. Magarò M, et al. **Clin Rheumatol** 1989 Dec;8(4):494–8

Osteoclastic invasion and mineral resorption of fetal mouse long bone rudiments are inhibited by culture under intermittent compressive force. Burger EH, et al. **Connect Tissue Res** 1989;20(1–4):131–41

Dystrophic calcification and mineralization during bone induction: biochemical differences. Nimni ME, et al. **Connect Tissue Res** 1989;20(1–4):193–204

Expression of genes for non-collagenous proteins during embryonic bone formation. Nomura S, et al. **Connect Tissue Res** 1989;21(1–4):31–5; discussion 36–9 (22 ref.)

Matrix collagen of devitalized bone is resistant to osteoclastic bone resorption. Shimizu H, et al. **Connect Tissue Res** 1989; 20(1–4):169–75

Autoradiographic localization of osteogenin binding sites in cartilage and bone during rat embryonic development. Vukicevic S, et al. **Dev Biol** 1990 Jul;140(1):209–14

The biochemistry of bone. Gehron Robey P. **Endocrinol Metab Clin North Am** 1989 Dec;18(4):858–902 (348 ref.)

Effects of thyroid hormones on bone and mineral metabolism. Mosekilde L, et al. **Endocrinol Metab Clin North Am** 1990 Mar;19(1):35–63 (145 ref.)

Differential effects of continuous and transient treatment with parathyroid hormone related peptide (PTHrp) on bone collagen synthesis. Canalis E, et al. **Endocrinology** 1990 Apr;126(4):1806–12

Hormonal control of bone collagen synthesis in vitro. Effects of insulin and glucagon. Canalis EM, et al. **Endocrinology** 1977 Mar;100(3):668–74

Receptors for insulin-like growth factors-I and -II in osteoblast-enriched cultures from fetal rat bone. Centrella M, et al. **Endocrinology** 1990 Jan;126(1):39–44

Advancing age results in reduction of intestinal and bone 1,25-dihydroxyvitamin D receptor. Horst RL, et al. **Endocrinology** 1990 Feb;126(2):1053–7

Biological activity assessment of 1 alpha,25-dihydroxyvitamin D3-26,23-lactone and its intermediate metabolites in vivo and in vitro. Ishizuka S, et al. **Endocrinology** 1990 Aug;127(2):695–701

In vivo effect of thyrocalcitonin on bone solubility. Khan BT, et al. **Endocrinology** 1967 Aug;81(2):398–9

Evidence that adenosine 3',5'-monophosphate mediates hormonal stimulation of prostaglandin production in cultured mouse parietal bones. Klein-Nulend J, et al. **Endocrinology** 1990 Feb;126(2):1070–5

Cortisol inhibits the synthesis of insulin-like growth factor-I in skeletal cells. McCarthy TL, et al. **Endocrinology** 1990 Mar;126(3):1569–75

Effect of hydroxy-vitamin D3 derivatives on 45Ca release from rat fetal bones in vitro. Mahgoub A, et al. **Endocrinology** 1977 Mar;100(3):629–34

Development of valid methods to measure insulin-like growth factors-I and -II in bone cell-conditioned medium. Mohan S, et al. **Endocrinology** 1990 May;126(5):2534–42

Effects of atrial natriuretic factor on cyclic nucleotides, bone resorption, collagen and deoxyribonucleic acid synthesis, and prostaglandin E2 production in fetal rat bone cultures. Vargas SJ, et al. **Endocrinology** 1989 Nov;125(5):2527–31

Identification and characterization of the major chicken bone phosphoprotein. Analysis of its synthesis by cultured embryonic chick osteoblasts. Gotoh Y, et al. **Eur J Biochem** 1990 Jan 12;187(1):49–58

Longitudinal study of bone mineral content in the lumbar spine, the forearm and the lower extremities after spinal cord injury. Biering-Sørensen F, et al. **Eur J Clin Invest** 1990 Jun;20(3):330–5

The value of local 99mTc(Sn)-MDP bone to soft tissue uptake ratio in osteoporosis, before and during fluoride therapy. Raymakers JA, et al. **Eur J Nucl Med** 1990; 16(3):157–60

Effects of intraperitoneal administration of hexasodium N,N,N',N'-ethylenediaminetetramethylenephosphonate on rat bone metabolism. Moore NC, et al. **Fundam Appl Toxicol** 1990 Apr;14(3):491–501

Comparative skeletal distribution of Am and Pu in man, monkey, and baboon. Lynch TP, et al. **Health Phys** 1989; 57 Suppl 1:81–8

Sensitivity testing of an age-related, multicompartment dosimetric model for bone-surface-seeking radionuclides in man. Priest ND, et al. **Health Phys** 1989;57 Suppl 1:229–42

Talc granulomatosis in the rat. Involvement of bone in the acute-phase response. Marušić A, et al. **Inflammation** 1990 Apr;14(2):205–16

Twenty-four-hour whole-body retention of 47Ca-chloride: an index of global bone metabolism in rat models. Seto H, et al. **Int J Rad Appl Instrum [B]** 1989;16(8):799–804

Penetration of amoxycillin/clavulanate into human bone. Weismeier K, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:93–100

Amino acid sequence of bovine osteoinductive factor. Bentz H, et al. **J Biol Chem** 1990 Mar 25;265(9):5024–9

Temporal regulation of hyaluronan and proteoglycan metabolism by human bone cells in vitro. Fedarko NS, et al. **J Biol Chem** 1990 Jul 25;265(21):12200–9

Characterization of fetal porcine bone sialoproteins, secreted phosphoprotein I (SPPI, osteopontin), bone sialoprotein, and a 23-kDa glycoprotein. Demonstration that the 23-kDa glycoprotein is derived from the carboxyl terminus of SPPI. Zhang Q, et al. **J Biol Chem** 1990 May 5; 265(13):7583–9

Concentration of bone elements in osteoporosis. Baslé MF, et al. **J Bone Miner Res** 1990 Jan;5(1):41–7

Changes with age in the urinary excretion of lysyl- and hydroxylysylpyridinoline, two new markers of bone collagen turnover. Beardsworth LJ, et al. **J Bone Miner Res** 1990 Jul;5(7):671–6

Release of parathyroid hormonelike peptides by fetal rat long bones in culture. Bergmann P, et al. **J Bone Miner Res** 1990 Jul;5(7):741–53

In vivo measurement of accumulated bone fluorides by nuclear magnetic resonance. Code RF, et al. **J Bone Miner Res** 1990 Mar;5 Suppl 1:S91–4

Interleukin-6 is produced by bone and modulated by parathyroid hormone. Feyen JH, et al. **J Bone Miner Res** 1989 Aug;4(4):633–8

Perspectives: adhesion receptors in bone. Horton MA, et al. **J Bone Miner Res** 1989 Dec;4(6):803–8 (53 ref.)

Human lactation: forearm trabecular bone loss, increased bone turnover, and renal conservation of calcium and inorganic phosphate with recovery of bone mass following weaning. Kent GN, et al. **J Bone Miner Res** 1990 Apr; 5(4):361–9

Production of both interleukin-1 alpha and beta by newborn mouse calvarial cultures. Lorenzo JA, et al. **J Bone Miner Res** 1990 Jan;5(1):77–83

1,25-Dihydroxyvitamin D3 metabolism in a human osteosarcoma cell line and human bone cells. Miller BE, et al. **J Bone Miner Res** 1990 Jun;5(6):597–608

Differential effects of gonadal function on bone histomorphometry in male and female rats. Turner RT, et al. **J Bone Miner Res** 1989 Aug;4(4):557–63

Regulation of bone sialoprotein mRNA by steroid hormones. Oldberg A, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):3183–6

Bone responsiveness to parathyroid hormone in normal and osteoporotic postmenopausal women. Tsai KS, et al. **J Clin Endocrinol Metab** 1989 Nov;69(5):1024–7

Clinical value of the measurement of bone remodelling markers in primary hyperparathyroidism. Minisola S, et al. **J Endocrinol Invest** 1989 Sep;12(8):537–42

Some biochemical indices of bone turnover in elderly Chinese. Woo J, et al. **J Med** 1989;20(3–4):229–39

Fluorescence in the tandem scanning microscope. Boyde A, et al. **J Microsc** 1990 Jan;157 (Pt 1):39–49

A pharmacokinetic model in the rat and rabbit of the direct measurement of mature bone resorption in vivo with [3H]tetracycline. Li XQ, et al. **J Pharm Sci** 1989 Oct; 78(10):823–8

Evidence for a direct effect of estrogen on bone cells in vitro. Ernst M, et al. **J Steroid Biochem** 1989;34(1–6):279–84 (56 ref.)

Tissue levels of lead in experimentally exposed herring gull (Larus argentatus) chicks. Burger J, et al. **J Toxicol Environ Health** 1990;29(2):219–33

Aluminium deposition in bone after contamination of drinking water supply. Eastwood JB, et al. **Lancet** 1990 Aug 25;336(8713):462–4

The LD50, excretion and serum and bone levels of F after a high single F and F + Mg dose in rats with findings on cardiac Ca and Mg. Koskinen-Kainulainen M, et al. **Magnes Trace Elem** 1990;9(1):15–27

Effects of magnesium on skeletal metabolism. Wallach S. **Magnes Trace Elem** 1990;9(1):1–14 (107 ref.)

The effect of hypermagnesemia on serum levels of osteocalcin in an animal model. Wians FH Jr, et al. **Magnes Trace Elem** 1990;9(1):28–35

Bone aluminum content in predialysis chronic renal failure and its relation with secondary hyperparathyroidism and 1,25(OH)2D3 treatment. Coen G, et al. **Miner Electrolyte Metab** 1989;15(5):295–302

Recombinant transforming growth factor type beta 3: biological activities and receptor-binding properties in isolated bone cells. ten Dijke P, et al. **Mol Cell Biol** 1990 Sep;10(9):4473–9

Reduced deposition of aluminium in trabecular bone of uraemic rats treated with dihydroxylated vitamin D metabolites. Ittel TH, et al. **Nephrol Dial Transplant** 1989; 4(11):957–65

Nutrition and bone. Einhorn TA, et al. **Orthop Clin North Am** 1990 Jan;21(1):43–50

Gravity, calcium, and bone: update, 1989. Arnaud SB, et al. **Physiologist** 1990 Feb;33(1 Suppl):S65–8 (22 ref.)

Distribution of trace levels of therapeutic gallium in bone as mapped by synchrotron x-ray microscopy. Bockman RS, et al. **Proc Natl Acad Sci U S A** 1990 Jun; 87(11):4149–53

Molecular and cellular regulation of calcium and phosphate metabolism. Proceedings of a symposium. Vienna, November 17, 1988. **Prog Clin Biol Res** 1990;332:1–230

The role of prostaglandins in the local regulation of bone metabolism. Raisz LG. **Prog Clin Biol Res** 1990; 332:195–203 (18 ref.)

Kinetics of rapid 45Ca uptake into chick skeleton in vivo: effects of microwave fixation. Shaw AJ, et al. **Q J Exp Physiol** 1989 Nov;74(6):907–15

Evidence that gastrin enhances 45Ca uptake into bone through release of a gastric hormone. Håkanson R, et al. **Regul Pept** 1990 Mar 27;28(1):107–18

Simulated weightlessness and bone metabolism: decreases of protein and DNA syntheses in the femoral diaphysis of rats. Yamaguchi M, et al. **Res Exp Med (Berl)** 1989; 189(5):331–7

A new zinc compound, beta-alanyl-L-histidinato zinc, stimulates bone growth in weanling rats. Yamaguchi M, et al. **Res Exp Med (Berl)** 1990;190(2):105–10

A versatile new mineralized bone stain for simultaneous assessment of tetracycline and osteoid seams. Villanueva AR, et al. **Stain Technol** 1989 May;64(3):129–38

A bone-bonding bioactive material implant in the head and neck: bioglass. Karlan MS, et al. **Surg Forum** 1978;29:575–7

[Aluminum osteopathy] Povýlil C, et al. **Cesk Patol** 1990 May;26(2):65–71 (Eng. Abstr.) **(Cze)**

[Diabetic osteopathies. 1. Etiologic factors and theoretical prerequisites for the development of bone demineralization in diabetics] Kocián J, et al. **Vnitr Lek** 1989 Jun;35(6):582–6 (Eng. Abstr.) **(Cze)**

[Evaluation of new markers of bone metabolism in renal osteodystrophy in children] Deschenes G, et al. **Ann Pediatr (Paris)** 1990 Feb;37(2):120–2 (10 ref.) (Eng. Abstr.) **(Fre)**

[Bone diffusion of cefotiam in men] Farinotti R, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):638–42 (Eng. Abstr.) **(Fre)**

[Bone rarefaction in weightlessness. Osteoporosis-disease or osteopenia caused by rapid aging?] Vico L, et al. **Rev Rhum Mal Osteoartic** 1990 Feb;57(2):131–3 **(Fre)**

[Prostaglandins in bone and cartilage metabolism] Karbowski A, et al. **Z Orthop** 1990 Mar-Apr;128(2):115–22 (141 ref.) (Eng. Abstr.) **(Ger)**

[Effects of surface demineralization on fracture healing in rat tibias] Sherzer A, et al. **Harefuah** 1989 Jun 15; 116(12):620–4 (Eng. Abstr.) **(Heb)**

[Recent knowledge on a new "marker" of bone metabolism: osteocalcin] Giampaolino D, et al. **G Clin Med** 1989 Nov; 70(11):687–9 **(Ita)**

[Bone metabolism in thalassemic children with multiple transfusions. Compartmental analysis of 99mTc-Sn-MDP kinetics] Mele M, et al. **Radiol Med (Torino)** 1989 Nov; 78(5):455–60 (Eng. Abstr.) **(Ita)**

[Concentrations of cefpiramide in the human bone marrow blood and bone tissues] Hasegawa S, et al. **Jpn J Antibiot** 1990 Jan;43(1):40–6 (Eng. Abstr.) **(Jpn)**

[Factor analysis of bone mineral dynamics in patients with renal osteodystrophy] Koizumi Y, et al. **Kaku Igaku** 1989 Jul;26(7):829–34 (Eng. Abstr.) **(Jpn)**

[Bone metabolism in thyroidectomized patients—evaluation of bone mineral content by quantitative CT] Sugino K, et al. **Nippon Geka Gakkai Zasshi** 1990 Apr;91(4):500–7

(Eng. Abstr.) (Jpn)
[Calcium urolithiasis and bone change] Katayama Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):89–95 (Eng. Abstr.) (Jpn)
[Physiologic and pharmacologic effect of arachidonic acids on calcium metabolism] Fujita T. **Nippon Rinsho** 1990 Jun; 48(6):1207–11 (Jpn)
[Changes in bone mineral content and bone metabolism related to menopause] Ohta H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Sep; 41(9):1447–54 (Eng. Abstr.) (Jpn)
[Biochemical analysis of bone and mineral metabolism in liver cirrhosis] Kanda T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Jan;87(1):69–73 (Eng. Abstr.) (Jpn)
[Distribution of calcium and magnesium in soft tissues, especially in the central nervous system, and bone of rats fed with low calcium–magnesium with or without aluminum loading diets] Yasui M, et al. **No To Shinkei** 1990 Mar;42(3):283–9 (Eng. Abstr.) (Jpn)
[Regulation of calcium homeostasis and cellular functions by vitamin D] Miyaura C, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2311–23 (Jpn)
[gamma–Carboxyglutamic acid–containing proteins of bone] Otawara–Hamamoto Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1975–84 (Jpn)
[Isotope, biochemical and roentgenological studies in the diagnosis and evaluation of the treatment of osteoporosis of endocrine etiology] Phan Sy An. **Endokrynol Pol** 1988; 39 Suppl 6:1–53 (Eng. Abstr.) (Pol)
[Effect of simulated weightlessness on calcium metabolism and the condition of bone tissue in experimental animals] Morukov BV, et al. **Kosm Biol Aviakosm Med** 1990 Mar–Apr;24(2):31–4 (Eng. Abstr.) (Rus)
[Mineral density of human skeletal bones in modeling of decreased gravity load] Oganov VS, et al. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):43–6 (Eng. Abstr.) (Rus)
[Cefzol level in the blood and tissues after its intramuscular and intravenous administration in patients with post–traumatic osteomyelitis] Gritsil NP, et al. **Ortop Travmatol Protez** 1989 Nov;(11):62–4 (Eng. Abstr.) (Rus)
[The effect of age on the distribution of 241Am in the rat body] Zalikin GA, et al. **Radiobiologiia** 1990 May–Jun; 30(3):422–4 (Eng. Abstr.) (Rus)
[Carbohydrate–energy metabolism of periodontal bony tissue in the artificial modelling of traumatic occlusion] Shvarts VV. **Stomatologiia (Mosk)** 1990 Jan–Feb;69(1):17–9 (Eng. Abstr.) (Rus)
[The protein content and cathepsin D activity of the mandibular bone in rats during fracture healing] Vakulenko VI, et al. **Stomatologiia (Mosk)** 1990 May–Jun;69(3):9–11 (Eng. Abstr.) (Rus)
[Different behavior of bone turnover markers in endocrine (extrinsic) and structural (intrinsic) osteopathies] Napal J, et al. **Med Clin (Barc)** 1990 Mar 3;94(8):294–8 (Eng. Abstr.) (Spa)
[Effects of estrogens on the skeleton] Lerner U. **Lakartidningen** 1989 Oct 25;86(43):3642, 3647–8 (Swe)

PATHOLOGY

New method for bone biopsy [letter] Cassel D. **AJR Am J Roentgenol** 1990 Sep;155(3):658
Bony metaplasia in the wall of the aorta in a full–term fetus. Thapar SP, et al. **Am Heart J** 1967 Aug;74(2):261–2
Recovery of decomposed and skeletal human remains in the "Green River Murder" Investigation. Implications for medical examiner/coroner and police. Haglund WD, et al. **Am J Forensic Med Pathol** 1990 Mar;11(1):35–43
Bone mass in Guamanian patients with amyotrophic lateral sclerosis and parkinsonism–dementia. Garruto RM, et al. **Am J Phys Anthropol** 1989 Sep;80(1):107–13
Trauma, degenerative disease, and other pathologies among the Gombe chimpanzees. Jurmain R. **Am J Phys Anthropol** 1989 Oct;80(2):229–37
Rheumatoid arthritis "in the buff": erosive arthritis in defleshed bones. Rothschild BM, et al. **Am J Phys Anthropol** 1990 Aug;82(4):441–9
A historic skeleton with osteomyelosclerosis. Kramar C, et al. **Arch Pathol Lab Med** 1990 May;114(5):538–40
Regression of bone and cartilage loss in adjuvant arthritic rats after treatment with cyclosporin A. del Pozo E, et al. **Arthritis Rheum** 1990 Feb;33(2):247–52
Isolated bone–end sclerosis simulating osteonecrosis after renal transplantation [letter] Farge D, et al. **Arthritis Rheum** 1990 Sep;33(9):1444–5
The effect of prolonged fluoride therapy for osteoporosis: bone composition and histology. Lundy MW, et al. **Bone** 1989;10(5):321–7
Bone disorder in cardiomyopathic hamsters. Togari A, et al. **Bone Miner** 1989 Sep;7(2):127–36
Metaplastic bone formation in an unusual neural tumour of the oral cavity. Farthing PM, et al. **Br J Oral Maxillofac Surg** 1989 Dec;27(6):517–9 (7 ref.)
The role of the STIR sequence in magnetic resonance imaging examination of bone tumours. Golfieri R, et al. **Br J Radiol** 1990 Apr;63(748):251–6
A new motor–driven percutaneous bone biopsy system: technical note. Vorwerk D, et al. **Cardiovasc Intervent Radiol** 1989 Jul–Aug;12(4):232–5
Diagnosis of tracheopathia osteochondroplastica [letter; comment] Pérez–Rodriguez E, et al. **Chest** 1990 Mar; 97(3):763 Comment on: Chest 1988 Oct;94(4):842–4.
Bone mass in hirsute women with androgen excess. Dixon JE, et al. **Clin Endocrinol (Oxf)** 1989 Mar;30(3):271–7
Magnetic resonance differentiation of acute and chronic osteomyelitis in children. Cohen MD, et al. **Clin Radiol** 1990 Jan;41(1):53–6
Imaging of the skeleton and soft tissue in children. Oestreich AE. **Curr Opin Radiol** 1989 Dec;1(4):521–8 (35 ref.)
Histomorphometric analysis of bone in metabolic bone disease. Eriksen EF, et al. **Endocrinol Metab Clin North Am** 1989 Dec;18(4):919–54 (113 ref.)
Tumor resection and antibodies to parathyroid hormone–related protein cause similar changes on bone histomorphometry in hypercalcemia of cancer. Kukreja SC, et al. **Endocrinology** 1990 Jul;127(1):305–10
Bone biopsy in solitary lesions on bone scan in genitourinary malignancy. Zungri E. **Eur Urol** 1990;17(4):293–5
The prognostic significance of bone lesions in multiple myeloma [letter] Bettini R, et al. **Haematologica (Pavia)** 1989 Jul–Aug;74(4):414–6
Lesions produced by splinters of wood in soft tissues and bone. Middha VP, et al. **Int Orthop** 1990;14(1):47–8
Bone changes occurring early after cessation of ovarian function in beagle dogs: a histomorphometric study employing sequential biopsies. Faugere MC, et al. **J Bone Miner Res** 1990 Mar;5(3):263–72
Quantitative bone histomorphometry and circulating T lymphocyte subsets in postmenopausal osteoporosis. Imai Y, et al. **J Bone Miner Res** 1990 Apr;5(4):393–9
Relationships between histomorphometric features of bone formation and bone cell characteristics in vitro in renal osteodystrophy. Marie PJ, et al. **J Clin Endocrinol Metab** 1989 Dec;69(6):1166–73
The histomorphometry of bone in primary hyperparathyroidism: preservation of cancellous bone structure. Parisien M, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):930–8
Technique for identifying cutting artefacts in sections of undecalcified bone biopsy specimens. Wood DJ, et al. **J Clin Pathol** 1990 Jun;43(6):516–7
Calcitonin and calcium combined therapy in osteoporosis: effects on vertebra trabecular bone density. Ozoran K, et al. **J Int Med Res** 1989 Jul–Aug;17(4):395–400
Structural consequences of endosteal metastatic lesions in long bones. Hipp JA, et al. **J Orthop Res** 1989;7(6):828–37
Bone and cartilage changes following experimental varus or valgus tibial angulation. Wu DD, et al. **J Orthop Res** 1990 Jul;8(4):572–85
Bone formation in peripheral giant cell granuloma. Dayan D, et al. **J Periodontol** 1990 Jul;61(7):444–6
Relationships between mandibular and skeletal bone in an osteoporotic population. Kribbs PJ, et al. **J Prosthet Dent** 1989 Dec;62(6):703–7
Bone densitometry [editorial] Adachi JD, et al. **J Rheumatol** 1990 Apr;17(4):419–20
More emphasis on the enthesis [editorial] Littlejohn GO. **J Rheumatol** 1989 Aug;16(8):1020–2 (36 ref.)
Production of high quality ground sections of bone containing metal implants to demonstrate osseo–integration: a simplified method. Allison RT, et al. **Med Lab Sci** 1990 Jul;47(3):168–71
Bone end sclerosis. Noël C, et al. **Nephron** 1989;53(2):168–70
The development of skeletal metastases. Galasko CS. **Nippon Seikeigeka Gakkai Zasshi** 1989 May;63(5):667–76
Bone invasion by Walker 256 carcinoma, line A in young and adult rats: effects of etidronate. Bassani D, et al. **Oncology** 1990;47(2):160–5
The tissue diagnosis of metabolic bone disease. Role of histomorphometry. Bullough PG, et al. **Orthop Clin North Am** 1990 Jan;21(1):65–79
Sensitivity of bone histomorphometry in the diagnosis of metabolic bone diseases. Ballanti P, et al. **Pathol Res Pract** 1989 Nov;185(5):786–9
A simplified aluminum stain in paraffin sections of bone from hemodialysis patients. Ohtsuki Y, et al. **Stain Technol** 1989 Mar;64(2):55–9
Osteocyte lacunar area in normal bone, hyperparathyroidism, renal disease, and osteoporosis. Wright PH, et al. **Surg Forum** 1978;29:558–9
Osseous wound healing with xenogeneic bone implants with a biodegradable carrier. Hollinger JO, et al. **Surgery** 1990 Jan;107(1):50–4
Defects of skeletal morphology, density, and structure in mouse fetuses with trisomy 16. Sterz H, et al. **Teratology** 1989 Dec;40(6):627–39
The solitary tumor or tumorlike lesion of bone. Sundaram M, et al. **Top Magn Reson Imaging** 1989 Sep;1(4):17–29 (13 ref.)
Long–term evolution of renal osteodystrophy after kidney transplantation: comparative study between intact PTH levels and bone biopsy. Gonzalez MT, et al. **Transplant Proc** 1990 Aug;22(4):1407–11
Wounds associated with osseous sequestration and penetrating foreign bodies. Gift LJ, et al. **Vet Clin North Am Equine Pract** 1989 Dec;5(3):695–708 (21 ref.)
Monostotic fibrous dysplasia in a dog. Wilson RB. **Vet Pathol** 1989 Sep;26(5):449–50
Serum bone Gla protein as an indicator of parathyroidectomy in patients with secondary hyperparathyroidism. Takami H, et al. **World J Surg** 1990 May–Jun;14(3):431–5; discussion 435–6
[Morphometric study of bone in domestic pigs with fluorosis caused by coal–burning pollution] Qui MC. **Chung Hua I Hsueh Tsa Chih** 1989 Dec;69(12):677–83, 46 (Eng. Abstr.) (Chi)
[Preliminary pathological observation on bone injury after inhalation of trifluoromethyl hypofluoride in rats] Zhang YZ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Mar; 20(1):92–5 (Eng. Abstr.) (Chi)
[A program for semi–automated histomorphologic examination of bone biopsies] Prokop M, et al. **Cesk Patol** 1989 Aug;25(3):173–8 (Eng. Abstr.) (Cze)
[Methodology of diagnostic bone biopsy and its complications] Zák J, et al. **Sb Lek** 1989 Sep;91(8):253–8 (Eng. Abstr.) (Cze)
[Osteomalacia caused by deficiency. Correlations of radioclinical and histomorphometric data] Chouc PY, et al. **Rev Rhum Mal Osteoartic** 1990 Jan;57(1):9–11 (Fre)
[Pathologic anatomy of osteogenesis imperfecta. Light and electron microscopic studies of supportive tissue and skin] Stöss H. **Veroff Pathol** 1990;134:1–88 (Eng. Abstr.) (Ger)
[Infantile cortical hyperostosis (Caffey–Silverman syndrome). Histologic, histochemical and electron microscopic studies] Stiller D. **Zentralbl Allg Pathol** 1990;136(1–2):151–69 (Eng. Abstr.) (Ger)
[Mammary fibroadenoma showing osseous metaplasia: a case report] Nishida Y, et al. **Gan No Rinsho** 1989 Oct; 35(12):1461–5 (21 ref.) (Eng. Abstr.) (Jpn)
[Effects of activate–depress–free–repeat (ADFR) treatment on bone mass in old beagles with osteoporosis] Kuranobu K. **Nippon Seikeigeka Gakkai Zasshi** 1990 May; 64(5):430–41 (Eng. Abstr.) (Jpn)
[Evaluation of bone atrophy by microdensitometry and effect of active vitamin D3 (1 alpha–OH–D3) administration in patients receiving anticonvulsants] Takeno Y. **No To Shinkei** 1989 Sep;41(9):887–93 (Eng. Abstr.) (Jpn)
[Sclerotic changes in bone tumors following radiation therapy] Monzen Y, et al. **Rinsho Hoshasen** 1990 Apr; 35(4):465–70 (Eng. Abstr.) (Jpn)
[Calcium regulating hormone in the pathological changes of bone in rheumatoid arthritis] Ueyoshi A, et al. **Ryumachi** 1989 Oct;29(5):349–57 (Eng. Abstr.) (Jpn)
[A needle for bone perforation and intraosseous infusions] Komarov NV, et al. **Khirurgiia (Mosk)** 1989 Dec;(12):105–6 (Rus)
[Complex special examination of children with hematogenic osteomyelitis] Malyshev ES, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):94–7 (Eng. Abstr.) (Rus)
[Mechanisms of destruction and atrophy of the cartilage and bone from the point of view of a rheumatologist] Havelka S. **Revmatologiia (Mosk)** 1989 Jul–Sep;(3):47–51 (Rus)
[Forensic medical expertise on burned bone remains] Golubovich LL. **Sud Med Ekspert** 1990 Apr–Jun;33(2):24–8 (Eng. Abstr.) (Rus)
[The determination of body height by bone remains] Nekliudov IuA. **Sud Med Ekspert** 1989 Jul–Sep;32(3):50–2 (53 ref.) (Rus)

PHYSIOLOGY

Bone response to normal weight bearing after a period of skeletal unloading. Sessions ND, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):E606–10
Effect of physical activity on calciotropic hormones and calcium balance in rats. Yeh JK, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E263–8
Muscle precursor replication after repeated regeneration of skeletal muscle in mice. Morlet K, et al. **Anat Embryol (Berl)** 1989;180(5):471–8
A theoretical model of endochondral ossification and bone architectural construction in long bone ontogeny. Wong M, et al. **Anat Embryol (Berl)** 1990;181(6):523–32
Skeletal structural adaptations to mechanical usage (SATMU): 1. Redefining Wolff's law: the bone modeling problem. Frost HM. **Anat Rec** 1990 Apr;226(4):403–13 (71 ref.)
Skeletal structural adaptations to mechanical usage (SATMU): 2. Redefining Wolff's law: the remodeling problem. Frost HM. **Anat Rec** 1990 Apr;226(4):414–22 (62 ref.)
Skeletal structural adaptations to mechanical usage (SATMU): 3. The hyaline cartilage modeling problem. Frost HM. **Anat Rec** 1990 Apr;226(4):423–32 (46 ref.)
Skeletal structural adaptations to mechanical usage (SATMU): 4. Mechanical influences on intact fibrous tissues. Frost HM. **Anat Rec** 1990 Apr;226(4):433–9 (36 ref.)
Adaptation of cancellous bone to overloading in the adult rat: a single photon absorptiometry and histomorphometry study. Jee WS, et al. **Anat Rec** 1990 Aug;227(4):418–26
Adaptation of cancellous bone to aging and immobilization in the rat: a single photon absorptiometry and histomorphometry study. Li XJ, et al. **Anat Rec** 1990 May; 227(1):12–24
Role of transforming growth factor–beta in fracture repair. Joyce ME, et al. **Ann N Y Acad Sci** 1990;593:107–23
The role of vitamin D in bone and intestinal cell differentiation. Suda T, et al. **Annu Rev Nutr** 1990; 10:195–211 (56 ref.)

Piezoelectricity in cementum, dentine and bone. Marino AA, et al. **Arch Oral Biol** 1989;34(7):507–9

Heating produced by ultrasound in bone and soft tissue. Lehmann JF, et al. **Arch Phys Med Rehabil** 1967 Aug; 48(8):397–401

Effects of bone ingrowth on the strength and non-invasive assessment of a coralline hydroxyapatite material. Martin RB, et al. **Biomaterials** 1989 Sep;10(7):481–8

Decreasing rates of bone resorption in growing rats in vivo: comparison of different types of bones. Li XQ, et al. **Bone** 1990;11(2):95–101

Increased cancellous bone remodeling during lactation in beagles. Miller MA, et al. **Bone** 1989;10(4):279–85

Effects of prostaglandin E2 on production of new cancellous bone in the axial skeleton of ovariectomized rats. Mori S, et al. **Bone** 1990;11(2):103–13

Consequences of the remodelling process for vertebral trabecular bone structure: a scanning electron microscopy study (uncoupling of unloaded structures). Mosekilde L. **Bone Miner** 1990 Jul;10(1):13–35

Neo-osteogenesis of haversian trabeculae through a bone chamber implanted in a rabbit tibial cortex: a control model. Winet H, et al. **Calcif Tissue Int** 1990 Jul;47(1):24–34

The effects of physiologic dynamic compression on bone healing under external fixation. Aro HT, et al. **Clin Orthop** 1990 Jul;(256):260–73

Bone physiology. 1926 [classical article] Müller W. **Clin Orthop** 1990 Sep;(258):3–8

The healing of bone and cartilage. Motoki DS, et al. **Clin Plast Surg** 1990 Jul;17(3):527–44 (117 ref.)

The potential role of platelet-derived growth factor as an autocrine or paracrine factor for human bone cells. Graves DT, et al. **Connect Tissue Res** 1989;23(2–3):209–18

Association of the C-propeptide of type II collagen with mineralization of embryonic chick long bone and sternal development. Kujawa MJ, et al. **Connect Tissue Res** 1989; 23(2–3):179–99

Mineral induction by polyanionic dentin and bone proteins at physiological ionic conditions. Linde A, et al. **Connect Tissue Res** 1989;21(1–4):197–202; discussion 203

Insulin-like growth factor (IGF) and bone. McCarthy TL, et al. **Connect Tissue Res** 1989;20(1–4):277–82 (19 ref.)

Bone cell physiology. Martin TJ, et al. **Endocrinol Metab Clin North Am** 1989 Dec;18(4):833–58 (185 ref.)

Effects of prostaglandin F2 alpha on bone formation and resorption in cultured neonatal mouse calvariae: role of prostaglandin E2 production. Raisz LG, et al. **Endocrinology** 1990 Feb;126(2):1076–9

Exercise-induced stress fractures and stress reactions of bone: epidemiology, etiology, and classification. Jones BH, et al. **Exerc Sport Sci Rev** 1989;17:379–422 (78 ref.)

Biomechanical response of bone to weightlessness. Zernicke RF, et al. **Exerc Sport Sci Rev** 1990;18:167–92 (69 ref.)

Acute modification of biomechanical properties of the bone–ligament insertion to rat limb unweighting. Vanderby R Jr, et al. **FASEB J** 1990 May;4(8):2499–505

The effect of human and rat fetal bone on hematopoiesis in vitro and in vivo. Afanasyev BV, et al. **Hamatol Bluttransfus** 1989;32:183–7

Bone mechanical properties after exercise training in young and old rats. Raab DM, et al. **J Appl Physiol** 1990 Jan; 68(1):130–4

Purification and characterization of a unique osteoinductive factor from bovine bone. Bentz H, et al. **J Biol Chem** 1989 Dec 5;264(34):20805–10

The bending properties of single osteons. Ascenzi A, et al. **J Biomech** 1990;23(8):763–71

The effect of boundary conditions on the results of mechanical tests [letter; comment] Aspden RM. **J Biomech** 1990;23(6):623 Comment on: J Biomech 1989;22(5):485–90.

An improved design of electrodes for measurement of streaming potentials on wet bone in vitro and in vivo. Cochran GV, et al. **J Biomech** 1989;22(6–7):745–50

Errors in the orientation of the principal stress axes if bone tissue is modeled as isotropic. Cowin SC, et al. **J Biomech** 1990;23(4):349–52

Identification of the elastic symmetry of bone and other materials. Cowin SC, et al. **J Biomech** 1989;22(6–7):503–15 (24 ref.)

Physical characteristics affecting the tensile failure properties of compact bone. Currey JD. **J Biomech** 1990;23(8):837–44

Comment on 'Some Viscoplastic Characteristics of Bovine and Human Cortical Bone' [letter; comment] Lakes RS. **J Biomech** 1989;22(8–9):973–4 Comment on: J Biomech 1988;21(8):623–30.

Compressive axial strain distributions in cancellous bone specimens. Odgaard A, et al. **J Biomech** 1989; 22(8–9):829–35

Comment on 'An Application of Beam Theory to Determine the Stress and Deformation of Long Bones' [letter; comment] Paul JP. **J Biomech** 1989;22(11–12):1297 Comment on: J Biomech 1989;22(3):189–99.

Dental implant abutment resembling the two-phase tooth mobility. Richter EJ, et al. **J Biomech** 1990;23(4):297–306

Oscillatory and step response electromechanical phenomena in human and bovine bone. Scott GC, et al. **J Biomech** 1990;23(2):127–43 (37 ref.)

The fabric dependence of the orthotropic elastic constants of cancellous bone. Turner CH, et al. **J Biomech** 1990; 23(6):549–61

Elastic constants of composites formed from PMMA bone cement and anisotropic bovine tibial cancellous bone. Williams JL, et al. **J Biomech** 1989;22(6–7):673–82

A mathematical method for the measurement of bone motion with skin-mounted accelerometers. Trujillo DM, et al. **J Biomech Eng** 1990 May;112(2):229–31

Non-contacting electrode system for the measurement of strain generated potentials in bone. Hastings GW, et al. **J Biomed Eng** 1989 Sep;11(5):403–8

Dynamic analysis of a simplified bone model during the process of fracture healing. Laura PA, et al. **J Biomed Eng** 1990 Mar;12(2):157–60

Electromagnetic phenomena in bone [letter] Yadav S, et al. **J Biomed Eng** 1989 Nov;11(6):525–6

Mechanical properties of bone after implantation of apatite-wollastonite containing glass ceramic-fibrin mixture. Ono K, et al. **J Biomed Mater Res** 1990 Jan; 24(1):47–63

Study of the osteoconductive properties of bioactive glass fibers. Pazzaglia UE, et al. **J Biomed Mater Res** 1989 Nov; 23(11):1289–97

Continuously applied compressive pressure induces bone resorption by a mechanism involving prostaglandin E2 synthesis. Imamura K, et al. **J Cell Physiol** 1990 Aug; 144(2):222–8

Membrane potential of rat calvaria bone cells: dependence on temperature. Massass R, et al. **J Cell Physiol** 1990 Jul; 144(1):1–11

Age and menopause-related changes in indices of bone turnover. Kelly PJ, et al. **J Clin Endocrinol Metab** 1989 Dec;69(6):1160–5

Methodological considerations about skeletal maturity during puberty. Nicoletti I. **J Endocrinol Invest** 1989;12(8 Suppl 3):135

An approach for time-dependent bone modeling and remodeling-application: a preliminary remodeling simulation. Beaupré GS, et al. **J Orthop Res** 1990 Sep; 8(5):662–70

An approach for time-dependent bone modeling and remodeling—theoretical development. Beaupré GS, et al. **J Orthop Res** 1990 Sep;8(5):651–61

Young's modulus, bending strength, and tissue physical properties of human compact bone. Keller TS, et al. **J Orthop Res** 1990 Jul;8(4):592–603

Finite element analysis of bone-adapted and bone-bonded endosseous implants. Rieger MR, et al. **J Prosthet Dent** 1989 Oct;62(4):436–40

Enlightening article by Drs. Rieger, Adams, Kinzel, and Brose [letter] Schwarz WD. **J Prosthet Dent** 1990 Mar; 63(3):367

Phenol red mimics biological actions of estradiol: enhancement of osteoblast proliferation in vitro and of type I collagen gene expression in bone and uterus of rats in vivo. Ernst M, et al. **J Steroid Biochem** 1989 Nov; 33(5):907–14

Cell and molecular strategies for massive bone repair/regeneration. Caplan AI. **Nippon Seikeigeka Gakkai Zasshi** 1989 May;63(5):692–9

Effects of a 40 day tail-suspension on rat weight-bearing bones. Vico L, et al. **Physiologist** 1990 Feb;33(1 Suppl):S96–7

Bone effects of 13 days of weightlessness on rat and monkey some results of biocosmos 1887 and ground simulations. Zérath E, et al. **Physiologist** 1990 Feb;33(1 Suppl):S94–5

The three processes that make bone. Jaworski Z. **Pol Arch Med Wewn** 1988 Aug–Sep;80(2–3):133–43

Isolation of an inhibitory insulin-like growth factor (IGF) binding protein from bone cell-conditioned medium: a potential local regulator of IGF action. Mohan S, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8338–42

Direct effects of 17 beta-estradiol on trabecular bone in ovariectomized rats. Takano-Yamamoto T, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2172–6

Bone healing. Mann FA, et al. **Semin Vet Med Surg (Small Anim)** 1989 Nov;4(4):312–21 (97 ref.)

[The biology of the bone in relation to orthodontic treatment in the adult] Melsen B, et al. **Orthod Fr** 1986;57 Pt 2:403–19 (24 ref.) (Eng. Abstr.) **(Fre)**

[Bone tissue and cancer] Rossi JF. **Pathol Biol (Paris)** 1990 Jan;38(1):69–79 (754 ref.) (Eng. Abstr.) **(Fre)**

[Mechanical characteristics of the human mandible and study of in vivo behavior of compact bone tissue, a contribution to the description of biomechanics of the mandible—II] Arendts FJ, et al. **Biomed Tech (Berlin)** 1990 Jun; 35(6):123–30 (Eng. Abstr.) **(Ger)**

[Intra- and interindividual differences in tensile strength of human bone] Jerosch J, et al. **Biomed Tech (Berlin)** 1990 Jan–Feb;35(1–2):10–4 (Eng. Abstr.) **(Ger)**

[High-frequency bone-tissue audiometry from the forehead in health and in latent hearing disorders] Varmanian IA, et al. **Fiziol Cheloveka** 1989 May–Jun;15(3):164–9 **(Rus)**

[The bone system and weightlessness] Stupakov GP, et al. **Probl Kosm Biol** 1989;63:1–184 (319 ref.) **(Rus)**

PHYSIOPATHOLOGY

The effects of uremia and dietary phosphorus on the bone of rats. Lieuallen WG, et al. **Bone** 1990;11(1):41–6

Mechanical and morphological effects of strain rate on fatigue of compact bone. Schaffler MB, et al. **Bone** 1989; 10(3):207–14

Bone and mineral metabolism in BB rats with long-term diabetes. Decreased bone turnover and osteoporosis. Verhaeghe J, et al. **Diabetes** 1990 Apr;39(4):477–82

Osteopetrosis in the rat: coexistence of reductions in osteocalcin and bone resorption. Lian JB, et al. **Endocrinology** 1990 Feb;126(2):955–62

The affinity of bone to hydroxyapatite and alumina in experimentally induced osteoporosis. Hayashi K, et al. **J Arthroplasty** 1989 Sep;4(3):257–62

Bone creep-fatigue damage accumulation. Caler WE, et al. **J Biomech** 1989;22(6–7):625–35

Scaling of long bone fracture strength with animal mass. Selker F, et al. **J Biomech** 1989;22(11–12):1175–83

Effects on bone of primary hyperparathyroidism [letter; comment] Hesp R, et al. **J Bone Miner Res** 1990 Feb; 5(2):103–4 Comment on: J Bone Miner Res 1989 Jun;4(3):283–91.

Response to retreatment of malignant hypercalcemia with the bisphosphonate AHPrBP (APD): respective role of kidney and bone. Thiebaud D, et al. **J Bone Miner Res** 1990 Mar;5(3):221–6

The effect of a brain lesion on bone healing. Spencer RF, et al. **J Orthop Res** 1990 Sep;8(5):646–50

[Effect of physical exercise on calcified bone tissue] Vico L, et al. **Presse Med** 1990 Apr 21;19(16):739–40 **(Fre)**

[Effect of active metabolites of vitamin D 3 on the status of rat bone tissue in various experimental models of hypokinesia] Belakovskiĭ MS, et al. **Kosm Biol Aviakosm Med** 1989 Nov–Dec;23(6):36–9 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Effect of radiation on normal tissues in the head and neck. Bone, cartilage, and soft tissue. Million RR, et al. **Front Radiat Ther Oncol** 1989;23:221–37; discussion 251–4 (30 ref.)

Normal-tissue tolerance of skin, cartilage, and bone. Parker RG, et al. **Front Radiat Ther Oncol** 1989;23:215–20; discussion 251–4

Effect of postoperative radiation on the incorporation of tibial bone grafts in the rabbit. De Santis G, et al. **J Bone Joint Surg [Br]** 1990 Mar;72(2):309–11

[Estimation of the energy fraction emitted by alpha particles in the mineralized part of trabecular bone which is absorbed in the bone marrow] Franić Z. **Arh Hig Rada Toksikol** 1989 Mar;40(1):29–36 (Eng. Abstr.) **(Scr)**

RADIOGRAPHY

Roentgen stereophotogrammetry. A method for the study of the kinematics of the skeletal system. Selvik G. **Acta Orthop Scand Suppl** 1989;232:1–51 (42 ref.)

A simple method for coloring digital radiographs (of bone) [letter] Channin DS. **AJR Am J Roentgenol** 1990 Sep; 155(3):657–8

Radiologic features of eosinophilic granuloma of bone. David R, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):1021–6

High-spatial-frequency (bone) algorithm improves quality of standard CT of the thorax. Zwirewich CV, et al. **AJR Am J Roentgenol** 1989 Dec;153(6):1169–73

Value of radiographs and bone scans in determining the need for therapy in diabetic patients with foot ulcers. Shults DW, et al. **Am J Surg** 1989 Dec;158(6):525–9; discussion 529–30

Methods and applications of three-dimensional imaging in orthopedics. Englmeier KH, et al. **Arch Orthop Trauma Surg** 1990;109(4):186–90

Quantitative microfocal radiography of children with renal osteodystrophy; comparison with laboratory and histological findings. Buckland-Wright JC, et al. **Br J Radiol** 1990 Aug;63(752):609–14

Pseudopermeative skeletal lesions. Helms CA, et al. **Br J Radiol** 1990 Jun;63(750):461–7

Skeletal abnormalities in Refsum's disease (heredopathia atactica polyneuritiformis). Plant GR, et al. **Br J Radiol** 1990 Jul;63(751):537–41

Linear calibration of radiographic mineral density using video-digitizing methods. Martin RB, et al. **Calcif Tissue Int** 1990 Aug;47(2):82–91

Bone radiogrametry: caliper versus magnifying glass. Rico H, et al. **Calcif Tissue Int** 1989 Nov;45(5):285–7

Giant bone island. Computed tomography findings. Ehara S, et al. **Clin Imaging** 1989 Sep;13(3):231–3

Radiology of metabolic bone disease. Cooper KL. **Endocrinol Metab Clin North Am** 1989 Dec;18(4):955–76 (31 ref.)

Radiological and dermatological findings in two patients suffering from early yaws in Indonesia. Engelkens HJ, et al. **Genitourin Med** 1990 Aug;66(4):259–63

Unusual bone changes and laboratory features in congenital syphilis. Khubchandani RP, et al. **Indian Pediatr** 1989 Jun; 26(6):603–7

Osteopetrosis reports of four cases. Kumar VV, et al. **Indian Pediatr** 1989 Sep;26(9):938–42

Microradiographic study of bone and tooth alterations in bovine fluorosis. Nyssen-Behets C, et al. **Int J Tissue React** 1989;11(1):31–7

Computer aided stress analysis of long bones utilizing computed tomography. Marom SA, et al. **J Biomech** 1990; 23(5):399–404

Positive identification of American Indian skeletal remains from radiograph comparison. Ubelaker DH. **J Forensic Sci** 1990 Mar;35(2):466–72

The significance of postmortem radiographs in infants.

Williamson SL, et al. **J Forensic Sci** 1990 Mar;35(2):365–7
Radio-opacity of fishbones. Ell SR. **J Laryngol Otol** 1989 Dec;103(12):1224–6
The spectrum of soft tissue and skeletal abnormalities of hypertrophic osteoarthropathy. Pineda C, et al. **J Rheumatol** 1990 May;17(5):626–32
Radiographic imaging in orthopedics. **Orthop Clin North Am** 1990 Jul;21(3):405–624
Not-so-normal variants. Lawson JP. **Orthop Clin North Am** 1990 Jul;21(3):483–95
Radiographic distortion of bones: a marker study. Stevens PM. **Orthopedics** 1989 Nov;12(11):1457–63
Physeal involvement in chronic recurrent multifocal osteomyelitis. Manson D, et al. **Pediatr Radiol** 1989; 20(1–2):76–9
Neonatal mucolipidosis 2. The spontaneous evolution of early bone lesions and the effect of vitamin D treatment. Report of two cases. Pazzaglia UE, et al. **Pediatr Radiol** 1989; 20(1–2):80–4
Non-accidental injury. Goggins M. **Radiogr Today** 1989 Sep; 55(628):35
Using the anode heel effect for extremity radiography. Gratale P, et al. **Radiol Technol** 1990 Jan–Feb;61(3):195–8
Storage phosphor versus screen-film radiography: effect of varying exposure parameters and unsharp mask filtering on the detectability of cortical bone defects. Prokop M, et al. **Radiology** 1990 Oct;177(1):109–13
[Normal radiologic anatomic variants and X-ray findings of hypervitaminosis D of the ulna, radius and carpal bones in children] Jiang Y. **Chung Hua I Hsueh Tsa Chih** 1990 Jan;70(1):32–4, 4 (Eng. Abstr.) (Chi)
[Bone changes in tuberous sclerosis (Bourneville–Pringle disease)] Kreuzberg B, et al. **Cesk Radiol** 1989 Oct; 43(5):332–8 (Eng. Abstr.) (Cze)
[The scanner: contribution of 3-dimensional (3D) imaging in rheumatology] Fredy D. **Rev Rhum Mal Osteoartic** 1990 Apr 10;57(3 (Pt 2)):249–52 (Eng. Abstr.) (Fre)
[Roentgen identification of unknown cadavers and living persons] Riepert T, et al. **Beitr Gerichtl Med** 1989;47:207–14 (Eng. Abstr.) (Ger)
[Computed tomographic analysis of bone minerals] Goltermann J, et al. **Radiol Diagn (Berl)** 1990;31(3):261–5 (Eng. Abstr.) (Ger)
[3-dimensional display of computed tomographic bone findings—a critical evaluation] Carduck HP, et al. **Rontgenpraxis** 1990 Apr;43(4):142–50 (Ger)
[Computerized tomography in paleopathology] Hodler J, et al. **Z Orthop** 1990 May–Jun;128(3):319–21 (Eng. Abstr.) (Ger)
[Evaluation of bone age in patients with kwashiorkor] Belli L, et al. **Radiol Med (Torino)** 1990 Jun;79(6):568–70 (Eng. Abstr.) (Ita)
[A case of pulmonary alveolar microlithiasis on the bone image of dual-energy subtraction radiography] Takashima T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Mar; 27(3):380–4 (Eng. Abstr.) (Jpn)
[Quantitative computed tomography for bone mineral assessment] Suzuki S, et al. **Rinsho Hoshasen** 1990 Jan; 35(1):49–56 (Eng. Abstr.) (Jpn)
[Clinico-roentgenological characteristics of acute leukemia] Novikova EZ, et al. **Gematol Transfuziol** 1989 Aug; 34(8):15–20 (Eng. Abstr.) (Rus)
[X-ray and radionuclide studies of bones and joints in psoriasis] Spuziak MI, et al. **Med Radiol (Mosk)** 1990 Apr; 35(4):38–40 (Eng. Abstr.) (Rus)
[The x-ray diagnosis of plastic injuries to the bones in children (a review of the literature)] Kossovoĭ AL. **Ortop Travmatol Protez** 1989 Sep;(9):72–4 (26 ref.) (Rus)

RADIONUCLIDE IMAGING

Radionuclide imaging in osteitis deformans. Chaudhuri TK, et al. **Am J Physiol Imaging** 1990;5(1):42–5 (36 ref.)
Predictors of bone mass in perimenopausal women. A prospective study of clinical data using photon absorptiometry. Slemenda CW, et al. **Ann Intern Med** 1990 Jan 15;112(2):96–101
Evaluation of diffusely high uptake by the calvaria in bone scintigraphy. Senda K, et al. **Ann Nucl Med** 1987 Sep; 1(1):23–6
Bone-scintigraphic examinations in patients treated with retinoids: a prospective study. Török L, et al. **Br J Dermatol** 1989 Jan;120(1):31–6
Skeletal scintigraphy in patients with bilateral retinoblastoma. Pratt CB, et al. **Cancer** 1990 Jan 1;65(1):26–8
Tc-99m MDP bone imaging in inflammatory enthesopathy. Aburano T, et al. **Clin Nucl Med** 1990 Feb;15(2):105–6
Pulmonary tumor associated with diffuse bilateral lung uptake of bone imaging agent. Antar MA, et al. **Clin Nucl Med** 1990 Jan;15(1):46–7
Evaluation of intense renal parenchymal activity ("hot kidneys") on bone scintigraphy. Bernard MS, et al. **Clin Nucl Med** 1990 Apr;15(4):254–6
Triple-phase bone image abnormalities in Lyme arthritis. Brown SJ, et al. **Clin Nucl Med** 1989 Oct;14(10):730–3
Splenic uptake on bone scanning in autoimmune hemolytic anemia. Dravid VS, et al. **Clin Nucl Med** 1990 Aug; 15(8):584
Simple digital clubbing. Characteristic bone scan appearance. Frates MC, et al. **Clin Nucl Med** 1990 Jul;15(7):511
Scintigraphic and CT findings of Tietze's syndrome: report of a case and review of the literature. Honda N, et al. **Clin Nucl Med** 1989 Aug;14(8):606–9 (15 ref.)
Thoracic bone imaging after the Heimlich maneuver. Lette J, et al. **Clin Nucl Med** 1990 Jul;15(7):512
Bone imaging after cementless press fit total hip arthroplasty. Lette J, et al. **Clin Nucl Med** 1989 Aug;14(8):614–22
Bone scintigraphy in pleural metastases of osteogenic sarcoma. Palestro CJ, et al. **Clin Nucl Med** 1990 May; 15(5):346–7
Osteopetrosis: nuclear medicine pathophysiologic correlation. Palestro CJ, et al. **Clin Nucl Med** 1989 Nov; 14(11):854–5
"Sub"-super scan—manifestation of bone marrow metastases? Podoloff DA, et al. **Clin Nucl Med** 1989 Aug; 14(8):597–602
Synovial sarcoma seen on bone scan. Rice S, et al. **Clin Nucl Med** 1990 Jun;15(6):445–6
Bone imaging in patients with unexpected elevation of serum alkaline phosphatase. Salomon CG, et al. **Clin Nucl Med** 1989 Aug;14(8):567–70
"Ink blot" bone imaging in metastatic osteogenic sarcoma. Spencer RP. **Clin Nucl Med** 1989 Nov;14(11):848–9
Soft tissue uptake on Tc-99m MDP bone scan after cardioversion. Vanhecke W, et al. **Clin Nucl Med** 1989 Dec; 14(12):923
Radionuclide bone imaging. Rosenthall L. **Curr Opin Radiol** 1989 Dec;1(4):440–5 (8 ref.)
24 hour whole body retention of 99mTc-methylene-diphosphonate in the assessment of bone formation. Methodological evaluation, clinical applications and comparison with serum alkaline phosphatase and serum osteocalcin. Hyldstrup L. **Dan Med Bull** 1989 Sep;36(4):349–58 (103 ref.)
Bone seeking pharmaceuticals. de Ligny CL, et al. **Int J Rad Appl Instrum [B]** 1990;17(2):161–79 (107 ref.)
Nuclear medicine studies of aging—VIII. Bone to soft-tissue ratio of 99mTc labeled MDP and HMDP vs age. Kassamali H, et al. **Int J Rad Appl Instrum [B]** 1989;16(5):473–4
Clinical and radiographic correlates of femoral artery visualization on bone scan. Silberstein EB, et al. **Int J Rad Appl Instrum [B]** 1989;16(7):709–13
Heterotopic ossification: can early surgery be performed, with a positive bone scan? Peters WJ. **J Burn Care Rehabil** 1990 Jul–Aug;11(4):318–21
McCune-Albright syndrome: the patterns of scintigraphic abnormalities. Pfeffer S, et al. **J Nucl Med** 1990 Sep; 31(9):1474–8
Bone SPECT evaluation of patients with persistent back pain following lumbar spinal fusion [letter; comment] Slizofski WJ. **J Nucl Med** 1989 Oct;30(10):1739 Comment on: J Nucl Med 1989 Apr;30(4):490–6.
Multifocal skeletal uptake of labeled leukocytes: infection versus tumor metastasis. Wahner-Roedler DL. **J Nucl Med** 1990 Sep;31(9):1543–7
Bone imaging: radionuclide scan vs MRI [letter; comment] Moinuddin M, et al. **JAMA** 1990 Jul 25;264(4):456 Comment on: JAMA 1989 Nov 3;262(17):2420–7.
Quantitative bone scanning in the diagnosis of aluminium osteomalacia. Worth DP, et al. **Nephrol Dial Transplant** 1989;4(8):721–4
1, 2, 3, or 4 phase bone imaging—how many are necessary? [editorial] Fogelman I. **Nucl Med Commun** 1990 Jan; 11(1):7–9
Consistency in nuclear medicine reporting—a pilot study using bone scans. McKillop JH, et al. **Nucl Med Commun** 1990 Mar;11(3):253–7
Analysis of bone scintigram data using speech recognition reporting system—data analysis with speech recognition system. Ikehira H, et al. **Radiat Med** 1990 Jan–Feb;8(1):8–12
Serial bone scintigrams demonstrating obstructive uropathy and nephropathy due to transitional cell carcinoma of the urinary bladder. Shih WJ, et al. **Radiat Med** 1989 Sep–Oct; 7(5):203–8
Bone scintigraphy in the evaluation of extraskeletal injuries from child abuse. Howard JL, et al. **Radiographics** 1990 Jan;10(1):67–81
Pixel overflow artifacts in SPECT evaluation of the skeleton. Bunker SR, et al. **Radiology** 1990 Jan;174(1):229–32
Clinical radionuclide bone imaging. Holder LE. **Radiology** 1990 Sep;176(3):607–14 (97 ref.)
Bone scans with one or two new abnormalities in cancer patients with no known metastases: reliability of interpretation of initial correlative radiographs. Jacobson AF, et al. **Radiology** 1990 Feb;174(2):503–7
Small, solitary, focal "hot spots" on bone scans. Smith JJ, et al. **Semin Nucl Med** 1990 Jul;20(3):276–7
Bone scan: a useful test for evaluating patients with low back pain. Collier BD, et al. **Skeletal Radiol** 1990;19(4):267–70
The role of single photon emission computed tomography in bone scintigraphy. Murray IP, et al. **Skeletal Radiol** 1989; 18(7):493–505 (36 ref.)
Nuclear medical bone imaging and targeted radiography for evaluation of skeletal neoplasms in 23 dogs. Parchman MB, et al. **Vet Surg** 1989 Nov–Dec;18(6):454–8
Super bone scan in metastatic stomach cancer. Saphner T, et al. **Wis Med J** 1990 Apr;89(4):161–3
[Clinical value of radionuclide whole body bone imaging in the diagnosis of skeletal metastasis] Chen YQ. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):193–5 (Eng. Abstr.) (Chi)
[Bone imaging in the detection of skeletal metastasis] Shi QX. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):196–8 (Eng. Abstr.) (Chi)
[The effect of calcium and vitamin D deficiency in the food on the uptake and retention of 99mTc-methylenediphosphonate and 85Sr in the bones in rats] Kapitola J, et al. **Sb Lek** 1990 May;92(5):135–41 (Eng. Abstr.) (Cze)
[Bone scintigraphy] Moretti J. **J Radiol** 1989 Aug–Sep; 70(8–9):439–41 (Fre)
[Bone pain in adults as the first symptom of late congenital syphilis] Rauh G, et al. **Dtsch Med Wochenschr** 1990 Apr 6;115(14):534–8 (Eng. Abstr.) (Ger)
[A pathologic skeletal scintigram as the first indication of Hodgkin's disease] Pilgrim S, et al. **ROFO** 1990 Aug; 153(2):221–2 (Ger)
[Indications for immunoscintigraphy in orthopedics and its interpretation] Pastl K, et al. **Wien Med Wochenschr** 1990 Mar 15;140(5):140–6 (Eng. Abstr.) (Ger)
[The problem of false positives in bone scintigraphy in patients with breast neoplasms. A follow-up at 10 years] Campostrini F, et al. **Radiol Med (Torino)** 1990 May; 79(5):539–43 (Eng. Abstr.) (Ita)
[Multiple exostoses and bone scintigraphy. A clinical case] Gravili S, et al. **Radiol Med (Torino)** 1990 Mar;79(3):258–9 (Ita)
[Studies on prognosis of prostate cancer with bone metastasis by using pretreatment bone scintigraphy] Kubota Y, et al. **Hinyokika Kiyo** 1989 Oct;35(10):1693–9 (Eng. Abstr.) (Jpn)
[The evaluation of the bone marrow accumulation of Ga-67 citrate] Ohnishi T, et al. **Kaku Igaku** 1989 Nov; 26(11):1371–9 (Eng. Abstr.) (Jpn)
[Bone scintigraphy in evaluation of the effect of renal transplantation in the patients with renal osteodystrophy] Seto K. **Kaku Igaku** 1989 Sep;26(9):1213–6 (Eng. Abstr.) (Jpn)
[Quantitative assessment of metabolic bone disease in rat models by dual tracer method] Ihara F, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 May 25; 49(5):657–66 (Eng. Abstr.) (Jpn)
[Control scintigrams of rat organs with 99mTc labeled compounds] Takano H, et al. **Radioisotopes** 1990 Mar; 39(3):110–3 (Eng. Abstr.) (Jpn)
[Bone scintigraphy in evaluation of the effect of renal transplantation in patients with renal osteodystrophy] Seto K. **Rinsho Hoshasen** 1989 Nov;34(12):1433–6 (Eng. Abstr.) (Jpn)
[Bone scintigraphy of the McCune-Albright syndrome] Takeda Y, et al. **Rinsho Hoshasen** 1989 Oct;34(11):1409–10 (Jpn)
[Evaluation of the applicability of scintigraphic examinations of bone to determine staging and to monitor treatment of patients with hodgkin's disease] Kozłowicz-Gudzińska I, et al. **Nowotwory** 1989 Jan–Mar;39(1):19–24 (Eng. Abstr.) (Pol)
[X-ray and radionuclide studies of bones and joints in psoriasis] Spuziak MI, et al. **Med Radiol (Mosk)** 1990 Apr; 35(4):38–40 (Eng. Abstr.) (Rus)
[Algorithms and computation methods of diagnostic coefficients in dynamic scintigraphy of skeleton and skeletal muscles] Novikov AI, et al. **Med Tekh** 1990 May–Jun; (3):15–8 (Eng. Abstr.) (Rus)
[Osteoscintigraphy in the diagnosis of latent psoriatic arthritis] Milevskaia SG, et al. **Vestn Dermatol Venerol** 1989;(10):75–8 (Eng. Abstr.) (Rus)
[Scintigraphy of the bones] Kocić D, et al. **Med Arh** 1986; 40(3):85–90 (Eng. Abstr.) (Scr)
[Magistral preparation of methylene diphosphonate and its clinical evaluation in radionuclide diagnosis of the skeleton] Lepej J, et al. **Cesk Farm** 1989 Jul;38(5):204–9 (Eng. Abstr.) (Slo)

SURGERY

Polymorphonuclear leucocyte activation after trauma: evidence for increased generation of oxygen free radicals in response to in vitro endotoxin stimulation. Røkke O, et al. **Acta Chir Scand** 1989 Apr–May;155(4–5):233–9
Possibilities of the use of biocompatible polymer rods for internal fixation and filling of the defects of bone tissue. Prantskyavichus S, et al. **Acta Orthop Belg** 1989;55(1):31–4
Carbon and polyester fibers as a scaffold for bone repair. Studies of segmentary implants in the rabbit radius. Guiral J, et al. **Acta Orthop Scand** 1990 Feb;61(1):16–20
The interface of calcium-phosphate and glass-ceramic in bone, a structural analysis. Gross UM, et al. **Biomaterials** 1990 Jul;11:83–5
Use of methyl methacrylate in bone reconstruction. Govila A. **Br J Plast Surg** 1990 Mar;43(2):210–6
Exposed endoprosthesis. Management protocol using muscle and myocutaneous flap coverage. Eckardt JJ, et al. **Clin Orthop** 1990 Feb;(251):220–9
Controlled thermal injury of bone. Report of a percutaneous technique using radiofrequency electrode and generator. Tillotson CL, et al. **Invest Radiol** 1989 Nov;24(11):888–92
Macroporous calcium phosphate ceramic for long bone surgery in humans and dogs. Clinical and histological study. Daculsi G, et al. **J Biomed Mater Res** 1990 Mar; 24(3):379–96
Stabilization of plating screws during placement for osseous surgery [letter] Orr DL 2d. **J Oral Maxillofac Surg** 1990 Mar;48(3):328
Comparison of the erbium-yttrium aluminum garnet and carbon dioxide lasers for in vitro bone and cartilage ablation. Gonzalez C, et al. **Laryngoscope** 1990 Jan;

100(1):14–7
Laboratory testing of bolts and screws in cancellous bone. Pratt WB, et al. **Orthop Rev** 1989 Oct;18(10):1073–7
Replantation of canine forelimbs [letter] Graf P. **Plast Reconstr Surg** 1990 Aug;86(2):383–5
The effect of rigid fixation on the survival of onlay bone grafts: an experimental study. Lin KY, et al. **Plast Reconstr Surg** 1990 Sep;86(3):449–56
[Significance of preservation of a length of a burned phalangeal bone and its method of reconstruction] Sun YH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):252–4 **(Chi)**
[One-stage reconstruction of the exposed bone due to electric burn with an island latissimus dorsi myocutaneous flap] Yang JJ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Sep;4(3):189–90 **(Chi)**
[Surface bioactive ceramics (preliminary report)] Urban K, et al. **Acta Chir Orthop Traumatol Cech** 1989 Oct; 56(5):391–7 (Eng. Abstr.) **(Cze)**
[Bone replacement-plasty with tricalcium phosphate ceramics in children] Pochon JP. **Aktuel Probl Chir Orthop** 1990;36:1–51 **(Ger)**
[Destructive and reparative processes after UHF and cryo-effect on bone regeneration in dogs] Plotnikov NA, et al. **Biull Eksp Biol Med** 1990 May;109(5):478–81 (Eng. Abstr.) **(Rus)**
[External fixation and its role in bone surgery] Princič J. **Acta Chir Iugosl** 1989;36 Suppl 1:331–5 **(Slv)**

ULTRASTRUCTURE

Transmission electron microscopy of bone tissue. A review. Boivin G, et al. **Acta Orthop Scand** 1990 Apr;61(2):170–80 (108 ref.)
Observations on pigment granules in the bones of silky fowls. Hirano S. **Arch Histol Cytol** 1990 Mar;53(1):89–93
An electron microscope study of the distal segment of the os penis of the rat. Yamamoto M. **Arch Histol Cytol** 1989 Dec;52(5):529–41
Qualitative interfacial study between bone and tantalum, niobium or commercially pure titanium. Johansson CB, et al. **Biomaterials** 1990 May;11(4):277–80
The quantitative study of the orientation of collagen in compact bone slices. Boyde A, et al. **Bone** 1990;11(1):35–9
Ultrastructural features of the osteoid of patients with fibrogenesis imperfecta ossium. Ralphs JR, et al. **Bone** 1989; 10(4):243–9
Bone surface structure in osteopetrotic grey lethal (gl/gl) and microphthalmic (mi/mi) mutant mice as revealed by scanning electron microscopy. Johnson DR, et al. **Bone Miner** 1990 Feb;8(2):109–17
Crystal size and organization in bone. Weiner S, et al. **Connect Tissue Res** 1989;21(1–4):259–65
The fate of the centrosome-microtubule network in monocyte-derived giant cells. Moudjou M, et al. **J Cell Sci** 1989 Oct;94 (Pt 2):237–44
Preparation of bone for high-voltage electron microscopic radioautography. Pylypas SP, et al. **J Electron Microsc Tech** 1990 Apr;14(4):324–8
An improved method for preparing cryostat sections of undecalcified bone for multiple uses. Hill EL, et al. **J Histochem Cytochem** 1990 Mar;38(3):443–8
Routine use of backscattered electron imaging to visualize cytochemical and autoradiographic reactions in semi-thin plastic sections. Nanci A, et al. **J Histochem Cytochem** 1990 Mar;38(3):403–14
Comparison of the trabecular and cortical tissue moduli from human iliac crests. Kuhn JL, et al. **J Orthop Res** 1989; 7(6):876–84
Osteoclast cytomorphometry and scanning electron microscopy of bone eroded surfaces during leukemic disorders. Chappard D, et al. **Scanning Microsc** 1990 Jun; 4(2):323–8
Scanning and transmission electron microscopy, and electron probe analysis of the interface between implants and host bone. Osseo-coalescence versus osseo-integration. Daculsi G, et al. **Scanning Microsc** 1990 Jun;4(2):309–14
Sections from double mesas obtained at the same tissue plane. Ellender G. **Stain Technol** 1990;65(3):107–11
Ultrastructural abnormalities in bone and calcifying cartilage in two siblings with a newly described recessive lethal chondrodysplasia. Gruber HE, et al. **Ultrastruct Pathol** 1990 Jul-Aug;14(4):343–55
[Amplification of mitochondrial DNA fragments from ancient human teeth and bones] Hänni C, et al. **C R Acad Sci [III]** 1990;310(9):365–70 (Eng. Abstr.) **(Fre)**
[Microprobe study of bones in the determination of individual age] Kósa F, et al. **Morphol Igazsagugyi Orv Sz** 1989 Jul; 29(3):227–32 (Eng. Abstr.) **(Hun)**

BONE CEMENTS

Early detection of prosthetic-hip loosening. Comparison of low- and high-viscosity bone cement. Mjöberg B, et al. **Acta Orthop Scand** 1990 Jun;61(3):273–4
Decreased blood perfusion in canine tibial diaphysis after filling with acrylic bone cement compared with inert bone wax. Stürup J, et al. **Acta Orthop Scand** 1990 Apr; 61(2):143–7
Pathology of the bone-cement interface in loosening of total hip replacement. Pazzaglia UE. **Arch Orthop Trauma Surg** 1990;109(2):83–8
Comparison of cemented and cementless hip and knee replacements. Mehlhoff MA, et al. **Arthritis Rheum** 1990 Feb;33(2):293–7
Calcium phosphate cements: action of setting regulators on the properties of the beta-tricalcium phosphate-monocalcium phosphate cements. Mirtchi AA, et al. **Biomaterials** 1989 Nov;10(9):634–8
Calcium phosphate cements: study of the beta-tricalcium phosphate—monocalcium phosphate system. Mirtchi AA, et al. **Biomaterials** 1989 Sep;10(7):475–80
Implantation of porous acrylic cement in soft tissues: an animal and human biopsy histological study. van Mullem PJ, et al. **Biomaterials** 1990 Jul;11(5):299–304
Optimization and comparison of three vacuum mixing systems for porosity reduction of Simplex P cement. Davies JP, et al. **Clin Orthop** 1990 May;(254):261–9
Prophylaxis with systemic antibiotics versus gentamicin bone cement in total hip arthroplasty. A five-year survey of 1688 hips. Josefsson G, et al. **Clin Orthop** 1990 Apr;(253):173–8
Air inclusion in bone cement. Importance of the mixing technique. Lindén U, et al. **Clin Orthop** 1989 Oct; (247):148–51
Walking efficiency after cemented and noncemented total hip arthroplasty. Mattsson E, et al. **Clin Orthop** 1990 May; (254):170–9
Cemented versus cementless total hip arthroplasty. A critical review. Rothman RH, et al. **Clin Orthop** 1990 May; (254):153–69 (112 ref.)
A comparative study of the initial stability of cementless hip prostheses. Schneider E, et al. **Clin Orthop** 1989 Nov; (248):200–9
Release of gentamicin from acrylic bone cement. Bunetel L, et al. **Clin Pharmacokinet** 1989 Oct;17(4):291–7
Temporary resection-arthrodesis of the knee using an intramedullary rod and bone cement. Capanna R, et al. **Int Orthop** 1989;13(4):253–8
Development and application of antibiotic-loaded bone cement beads. Stabile DE, et al. **J Am Podiatr Med Assoc** 1990 Jul;80(7):354–9 (25 ref.)
A radiological analysis of uncemented PCA tibial implants with a follow-up period of 4–7 years. Knahr K, et al. **J Arthroplasty** 1990 Jun;5(2):131–41
Cefuroxime in total joint arthroplasty. Intravenous or in bone cement. McQueen MM, et al. **J Arthroplasty** 1990 Jun; 5(2):169–72
Use of high-energy shock waves for bone cement removal. May TC, et al. **J Arthroplasty** 1990 Mar;5(1):19–27
Removal of bone cement from the femoral shaft using a femoral windowing device. Nelson CL, et al. **J Arthroplasty** 1990 Mar;5(1):67–9
On the correlation between micromotion and histology of the bone-cement interface. Report of three cases of knee arthroplasty followed by roentgen stereophotogrammetric analysis. Ryd L, et al. **J Arthroplasty** 1989 Dec;4(4):303–9
Experimental method for the in vitro testing of the initial stability of cementless hip prostheses. Schneider E, et al. **J Biomech** 1989;22(6–7):735–44
Elastic constants of composites formed from PMMA bone cement and anisotropic bovine tibial cancellous bone. Williams JL, et al. **J Biomech** 1989;22(6–7):673–82
Shape optimal design of the stem of a cemented hip prosthesis to minimize stress concentration in the cement layer. Yoon YS, et al. **J Biomech** 1989;22(11–12):1279–84
Effect of vacuum mixing on the mechanical properties of antibiotic-impregnated polymethylmethacrylate bone cement. Askew MJ, et al. **J Biomed Mater Res** 1990 May; 24(5):573–80
Adhesive bone cement both to bone and metals: 4-META in MMA initiated with tri-n-butyl borane. Ishihara K, et al. **J Biomed Mater Res** 1989 Dec;23(12):1475–82
A fractographic analysis of in vivo poly(methyl methacrylate) bone cement failure mechanisms. Topoleski LD, et al. **J Biomed Mater Res** 1990 Feb;24(2):135–54
The effect of centrifugation on the mechanical properties of cement. An in vitro total hip-arthroplasty model. Chin HC, et al. **J Bone Joint Surg [Am]** 1990 Mar;72(3):363–8
Perioperative blood loss associated with total knee arthroplasty. A comparison of procedures performed with and without cementing. Mylod AG Jr, et al. **J Bone Joint Surg [Am]** 1990 Aug;72(7):1010–2
Source of the cement within the Charnley hip. Isaac GH, et al. **J Bone Joint Surg [Br]** 1990 Jan;72(1):149–50
The influence of support conditions in the loading fixture on failure mechanisms in the push-out test: a finite element study. Harrigan TP, et al. **J Orthop Res** 1990 Sep; 8(5):678–84
Cemented internal fixation for supracondylar femur fractures in osteoporotic patients. Struhl S, et al. **J Orthop Trauma** 1990;4(2):151–7
Effect of intramedullary bone cement fixation on fracture healing. Ikeda M, et al. **Kobe J Med Sci** 1989 Jun; 35(3):151–64
Cyanoacrylate fixed silicone sheet in medial blowout fracture repair. Seiff SR. **Ophthalmic Surg** 1989 Sep;20(9):674–6
An investigation into the effect of cyclic loading and frequency on the temperature of PMMA bone cement in hip prostheses. Humphreys PK, et al. **Proc Inst Mech Eng [H]** 1989;203(H3):167–70
Prothesis cement envelope in femoral component total hips. Savino AW, et al. **Surg Forum** 1978;29:556–7
[An in vivo study of inorganic bone particle-impregnated bone cement] Dai KR. **Chung Hua Wai Ko Tsa Chih** 1989 May;27(5):309–13, 319 (Eng. Abstr.) **(Chi)**
[Clinical application of bone cement in cranioplasty] Lin HG. **Chung Hua Wai Ko Tsa Chih** 1989 Dec;27(12):746–7, 781 (Eng. Abstr.) **(Chi)**
[Experimental study on the bone cement-precoated implant in arthroplasty] Zheng ZK. **Chung Hua Wai Ko Tsa Chih** 1989 Jun;27(6):376–8, 383 (Eng. Abstr.) **(Chi)**
[Extensometry and primary anchorage of femur implants. Study of the upper metaphyseal intracortical support of the B.P.R cement-less implant] Delecrin J, et al. **Acta Orthop Belg** 1989;55(2):150–61 (Eng. Abstr.) **(Fre)**
[Comparative studies on the radioactivity of bone cements containing x-ray contrast media and of the contrast media] Hopf C, et al. **ROFO** 1990 May;152(5):601–2 (Eng. Abstr.) **(Ger)**
[Simulated stenosis of the common femoral artery in intravenous digital subtraction angiography by palacos following hip joint endoprosthesis implant—a possible source of error in videodensitometric determination of the degree of stenosis] Neufang KF, et al. **Rontgenblatter** 1990 Aug;43(8):329–31 (Eng. Abstr.) **(Ger)**
[Reactions of the osseous site following implantation of cemented endoprostheses in the femur] Köller W, et al. **Z Orthop** 1990 Jan-Feb;128(1):67–72 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Modern cementing techniques. An experimental study of vacuum insertion of bone cement. Draenert K. **Acta Orthop Belg** 1989;55(3):273–93 (137 ref.)
Use of antibiotic-loaded bone cement in the management of common infections of the foot and ankle. Jacobs AM, et al. **Clin Podiatr Med Surg** 1990 Jul;7(3):523–44 (271 ref.)
Acrylic cement stabilized joint replacements. Urist MR. **Curr Probl Surg** 1975 Nov;:1–54 (104 ref.)
[Percutaneous vertebroplasty in the treatment of metastases. Technic and results] Kaemmerlen P, et al. **J Radiol** 1989 Oct;70(10):557–62 (Eng. Abstr.) **(Fre)**
[Diagnosis of recurrence and therapy of recurrence with in situ bone cement filling in the treatment of giant cell tumor] Becker W. **Z Orthop** 1989 Jul-Aug;127(4):379–81 (Eng. Abstr.) **(Ger)**
[Curettage of giant cell tumors with temporary implantation of bone cement] Härle A, et al. **Z Orthop** 1989 Jul-Aug; 127(4):382–6 (Eng. Abstr.) **(Ger)**
[Ventral stabilization of primary tumors and metastases of the spine with vertebral body implant and palacos] Polster J, et al. **Z Orthop** 1989 Jul-Aug;127(4):414–7 (Eng. Abstr.) **(Ger)**
[The role of a bone cement filling in intralesional tumor treatment] Willert HG, et al. **Z Orthop** 1989 Jul-Aug; 127(4):376–8 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Osteolysis in alloarthroplasty of the hip. The role of bone cement fragmentation. Willert HG, et al. **Clin Orthop** 1990 Sep;(258):108–21
Cementless revision of aggressive granulomatous lesions in hip replacements. Eskola A, et al. **J Bone Joint Surg [Br]** 1990 Mar;72(2):212–6
Case report 589: Use of Ostamer in fusion of lumbar spine, postoperative appearance. Gonda RL Jr, et al. **Skeletal Radiol** 1990;19(1):62–4
Thermotoxicity of palacos cement. Clinical observation. Euler E, et al. **Unfallchirurg** 1989 Dec;92(12):606–10

ANALYSIS

[A quantitative analysis for determining porosity of pre-compressed and vacuum-mixed bone cement] Hahn M, et al. **Chirurg** 1990 Jul;61(7):512–7 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

A reduced-modulus acrylic bone cement: preliminary results. Litsky AS, et al. **J Orthop Res** 1990 Jul;8(4):623–6

METABOLISM

Growth hormone in polymethylmethacrylate cement. Downes S, et al. **Clin Orthop** 1990 Mar;(252):294–8
A bone-bonding bioactive material implant in the head and neck: bioglass. Karlan MS, et al. **Surg Forum** 1978;29:575–7

PHARMACOLOGY

Retrograde root filling using antibiotic-containing, radiopaque, bone cement. High AS, et al. **J Dent** 1989 Oct; 17(5):241–5

STANDARDS

Fatigue properties of bone cement. Comparison of mixing techniques. Lindén U. **Acta Orthop Scand** 1989 Aug; 60(4):431–3
Endoprosthetic surgery in 1988. Morscher E. **Ann Chir Gynaecol** 1989;78(3):242–53 (104 ref.)
Vancomycin vs tobramycin elution from polymethylmethacrylate: an in vitro study. Lawson KJ, et al. **Orthopedics** 1990 May;13(5):521–4

THERAPEUTIC USE

Reaction of the bone structure to methotrexate–Palacos flow y. Experimental investigations in animals. Degreif J, et al. **Arch Orthop Trauma Surg** 1989;108(6):363–7

External skeletal fixation versus cement fixation in the treatment of redislocated Colles' fracture. Schmalholz A. **Clin Orthop** 1990 May;(254):236–41

Methotrexate diffusion from acrylic cement. Local chemotherapy for bone tumours. Hernigou P, et al. **J Bone Joint Surg [Br]** 1989 Nov;71(5):804–11

Deep infection of cemented total hip arthroplasties caused by coagulase-negative staphylococci. Hope PG, et al. **J Bone Joint Surg [Br]** 1989 Nov;71(5):851–5

Survivorship of cemented knee replacements. Scuderi GR, et al. **J Bone Joint Surg [Br]** 1989 Nov;71(5):798–803

The total condylar prosthesis. 10- to 12-year results of a cemented knee replacement. Vince KG, et al. **J Bone Joint Surg [Br]** 1989 Nov;71(5):793–7

Evaluation of hip pain following cemented total hip arthroplasty. Horne G, et al. **Orthopedics** 1990 Apr; 13(4):415–9

[Use of cement plugs in the care of giant cell bone tumors] Kofránek I, et al. **Acta Chir Orthop Traumatol Cech** 1990 Apr;57(2):151–60 (Eng. Abstr.) **(Cze)**

[Reconstruction of the facial skeleton using Pallacos R] Slapák I, et al. **Cesk Otolaryngol** 1990 Feb;39(1):14–6 (Eng. Abstr.) **(Cze)**

BONE CONDUCTION

Use of the bone conduction ABR Wave I response in determination of cochlear reserve. Tucci DL, et al. **Am J Otol** 1990 Mar;11(2):119–24

Auditory brain stem responses to bone-conducted tones in infants. Stapells DR, et al. **Ann Otol Rhinol Laryngol** 1989 Dec;98(12 Pt 1):941–9

Input–voltage method of bone-conduction calibration. Meissner WA, et al. **Arch Otolaryngol** 1976 Dec; 102(12):735–6

Guidelines for audiometric symbols. Committee on Audiologic Evaluation. American Speech-Language-Hearing Association. **ASHA** 1990 Apr; 32(4 Suppl 2):25–30

Recent changes in audiometric standards. Shipton MS. **Br J Audiol** 1989 Aug;23(3):261–3

Are seismic communication signals transmitted by bone conduction in the blind mole rat? Rado R, et al. **Hear Res** 1989 Aug;41(1):23–9

Bone conduction implants. Browning GG. **Laryngoscope** 1990 Sep;100(9):1018–9

Clinical application of an implantable bone conduction hearing device. Roush J, et al. **Laryngoscope** 1990 Mar; 100(3):281–5

PHYSIOLOGY

The occlusion effect created by custom canal hearing aids. Dempsey JJ. **Am J Otol** 1990 Jan;11(1):44–6

Emergence of the brain-stem auditory evoked potential in the premature lamb. Wolfson MR, et al. **Electroencephalogr Clin Neurophysiol** 1990 Mar; 75(3):242–50

Percutaneous vs. transcutaneous transducers for hearing by direct bone conduction. Håkansson B, et al. **Otolaryngol Head Neck Surg** 1990 Apr;102(4):339–44

[The effect of occlusion. Part I. The mechanism] Kuźniarz J. **Otolaryngol Pol** 1989;43(1):52–61 (Eng. Abstr.) **(Pol)**

[Effect of occlusion. Part II. Theoretical and practical implications] Kuźniarz J. **Otolaryngol Pol** 1989;43(1):62–9 (Eng. Abstr.) **(Pol)**

[Evaluation of hearing in patients with otospongiosis based on direct measurement of bone conduction] Sliwińska-Kowalska M. **Otolaryngol Pol** 1989; 43(4):298–307 (Eng. Abstr.) **(Pol)**

[Prognostic value of the study of direct bone conduction in patients with otospongiosis] Sliwińska-Kowalska M. **Otolaryngol Pol** 1989;43(5–6):381–8 (Eng. Abstr.) **(Pol)**

[The frequency-threshold curve of human hearing as a reflection of the resonance properties of the bony tissue pathways of sound conduction] Vartanian IA, et al. **Fiziol Cheloveka** 1990 Jan–Feb;16(1):66–71 **(Rus)**

BONE CYSTS

Intradiploic epidermoid cysts of the skull: report of 10 cases and review of the literature. Ciappetta P, et al. **Acta Neurochir (Wien)** 1990;102(1–2):33–7 (47 ref.)

Unicameral bone cyst of the medial malleolus of the ankle. Wu KK. **J Foot Surg** 1990 Mar–Apr;29(2):183–7

Aneurysmal bone cyst of the zygomatic bone. Carmichael F, et al. **Oral Surg Oral Med Oral Pathol** 1989 Nov; 68(5):558–62 (31 ref.)

Solitary bone cyst of a lumbar vertebra. A case report and review of literature. Matsumoto K, et al. **Spine** 1990 Jun; 15(6):605–7 (5 ref.)

[Personal experience with the diagnosis and treatment of aneurysmal bone cysts] Urban K, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1989;32(2):209–16 (Eng. Abstr.) **(Cze)**

CHEMICALLY INDUCED

Myospherulosis of the mastoid antrum: a case report. Gillespie CA, et al. **Auris Nasus Larynx** 1990;16(4):199–207

COMPLICATIONS

Frontal bone epidermoid—a rare cause of proptosis. Chowdury CR, et al. **Br J Ophthalmol** 1990 Jul;74(7):445–6

Unicameral bone cysts. Natural history and the risk of fracture. Kaelin AJ, et al. **Int Orthop** 1989;13(4):275–82

Acute haemorrhage into a subperiosteal ganglion. Barry M, et al. **J Bone Joint Surg [Br]** 1990 May;72(3):519

[Large articular geode cyst in rheumatoid polyarthritis] Sabri F, et al. **Acta Orthop Belg** 1989;55(2):242–7 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Aneurysmal bone cyst. Long-term follow-up of 20 cases. Farsetti P, et al. **Arch Orthop Trauma Surg** 1990; 109(4):221–3

Aneurysmal bone cysts of the dorsal spine. Mohan V, et al. **Arch Orthop Trauma Surg** 1989;108(6):390–3

Aneurysmal bone cyst of the sphenoid with orbital involvement. Hunter JV, et al. **Br J Ophthalmol** 1990 Aug; 74(8):505–8 (20 ref.)

Giant-cell tumor of the tibia in a child presenting as an expansile metaphyseal lesion with fluid–fluid levels on MR. Buetow PC, et al. **Magn Reson Imaging** 1990;8(3):341–4 (23 ref.)

MRI diagnosis of aneurysmal bone cyst. Jansen J, et al. **Neurosurg Rev** 1990;13(2):161–6

Aneurysmal bone cyst of the fifth metacarpal. Schwartz GB, et al. **Orthop Rev** 1989 Dec;18(12):1309–14

Case report 611: Subperiosteal aneurysmal bone cyst of tibia. Burnstein MI, et al. **Skeletal Radiol** 1990;19(4):294–7

Percutaneous intralesional brushing of cystic lesions of bone: a technical improvement of diagnostic cytology. Iaccarino V, et al. **Skeletal Radiol** 1990;19(3):187–90

Case report 566: Osteoblastoma of sacrum with secondary aneurysmal bone cyst. Vade A, et al. **Skeletal Radiol** 1989; 18(6):475–80

[A unicameral aneurysmal bone cyst of the cervical spine. The differential diagnosis of a lateral cervical cyst] Dietlein M, et al. **ROFO** 1990 Jun;152(6):732–3 **(Ger)**

[An atypical finding in a bone cyst] Schmidtchen M, et al. **Rontgenblatter** 1989 Dec;42(12):520–1 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Prostaglandin levels in unicameral bone cysts treated by intralesional steroid injection. Shindell R, et al. **J Pediatr Orthop** 1989 Sep–Oct;9(5):516–9

Treatment options in unicameral bone cysts. Farber JM, et al. **Orthopedics** 1990 Jan;13(1):25–32

ETIOLOGY

Acetabular reaction to the Bateman bipolar prosthesis. Vázquez-Vela E, et al. **Clin Orthop** 1990 Feb;(251):87–91

Post-traumatic aneurysmal bone cyst of the temporal bone. Rustiadji, et al. **Radiol Med (Torino)** 1989 Oct;78(4):386–7

Growing bone cysts in long-term hemodialysis. Gielen JL, et al. **Skeletal Radiol** 1990;19(1):43–9

[Carpal cysts in hemodialysis patients] Viglietta G, et al. **Radiol Med (Torino)** 1989 Oct;78(4):305–10 (Eng. Abstr.) **(Ita)**

HISTORY

Incipient lingual cortical mandibular defect in a 10- to 12-year-old American Indian child [letter] Mann RW. **AJR Am J Roentgenol** 1990 Mar;154(3):658–9

PATHOLOGY

A small aneurysmal bone cyst restricted to the cortical bone of the femur resembling so-called subperiosteal giant cell tumor or subperiosteal osteoclasia. Okada K, et al. **Acta Pathol Jpn** 1989 Aug;39(8):539–44

Solitary bone cyst of the radius containing Liesegang's rings. Kragel PJ, et al. **Am J Clin Pathol** 1989 Dec;92(6):831–3

A subset of systemic lupus erythematosus with progressive cystic bone lesions. Laasonen L, et al. **Ann Rheum Dis** 1990 Feb;49(2):118–20

Aneurysmal bone cyst of the maxillary sinus. Hady MR, et al. **J Laryngol Otol** 1990 Jun;104(6):501–3

[Malignant transformation in bone cysts] Pašoski S, et al. **Acta Chir Iugosl** 1989;36 Suppl 2:780–2 (Eng. Abstr.) **(Scr)**

RADIOGRAPHY

Radiological cases of the month. Expansile bone cyst in osteogenesis imperfecta. Goodman P, et al. **Am J Dis Child** 1990 Aug;144(8):933–4

Inflammation as the possible cause of cystic radiolucencies in carpal bones of patients on hemodialysis. Ogawa H, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):317–9

Case of the month. A painful knee. Davies AM, et al. **Br J Radiol** 1989 Dec;62(744):1103–4

Effect of renal transplantation on the radiological signs of dialysis amyloid osteoarthropathy. Jadoul M, et al. **Clin Nephrol** 1989 Oct;32(4):194–7

Aneurysmal bone cysts in the hand. De Durante C, et al. **Ital J Orthop Traumatol** 1990 Mar;16(1):73–8

Aneurysmal bone cyst associated with fibrous dysplasia of the skull. Rappaport ZH. **Neurochirurgia (Stuttg)** 1989 Nov; 32(6):192–4

A "hole in a rib" as a sign of child abuse. Magid N, et al. **Pediatr Radiol** 1990;20(5):334–6

CT appearances of an aneurysmal cyst of the spine in childhood. Hoeffel JC, et al. **Rontgenblatter** 1990 Apr; 43(4):169–70

Case report 573. Aneurysmal bone cyst of acetabulum. Berson B, et al. **Skeletal Radiol** 1989;18(7):547–9

Sacral cysts with exophytic components. A report of two cases. Ehara S, et al. **Skeletal Radiol** 1990;19(2):117–9

Case report 606: Gas-filled subchondral cyst of ilium secondary to osteoarthritis of the sacroiliac joint. Hertzanu Y, et al. **Skeletal Radiol** 1990;19(3):225–6

Subchondral cysts of the tibia secondary to osteoarthritis of the knee. Ostlere SJ, et al. **Skeletal Radiol** 1990;19(4):287–9

Aneurysmal bone cyst of the frontal bone. Cataltepe O, et al. **Surg Neurol** 1990 Jun;33(6):391–4

[Aneurysmal bone cyst of the visceral cranium] Podliashchuk EL, et al. **Med Radiol (Mosk)** 1990 Jan;35(1):48–50 **(Rus)**

RADIONUCLIDE IMAGING

Scintigraphic demonstration of a large communicating posterior fossa cyst. Dehdashti F, et al. **Clin Nucl Med** 1989 Aug;14(8):627–8

SURGERY

Venous air embolism during surgical manipulation of a femoral bone cyst. Rusheen JM, et al. **Anesthesiology** 1990 Jan;72(1):200–1

Juxta-articular bone cysts at the insertion of the pes anserinus. Report of two cases. Matsumoto K, et al. **J Bone Joint Surg [Am]** 1990 Feb;72(2):286–90

Aneurysmal bone cyst: a preliminary report on a new surgical approach. Papavasiliou VA, et al. **J Pediatr Orthop** 1990 May–Jun;10(3):362–4

L5 radicular pain related to lumbar extradural gas-containing pseudocyst. Role of CT-guided aspiration. Bosser V, et al. **Neuroradiology** 1990;31(6):552–3

[Comparison of treatment of juvenile bone cysts using local administration of corticoids and surgical therapy] Štědrý V, et al. **Acta Chir Orthop Traumatol Cech** 1990 Apr; 57(2):161–7 (Eng. Abstr.) **(Cze)**

[Coral as a substitute for bone in pediatric orthopedics] Pouliquen JC, et al. **Ann Pediatr (Paris)** 1990 Jan; 37(1):59–61 **(Fre)**

[Bone replacement-plasty with tricalcium phosphate ceramics in children] Pochon JP. **Aktuel Probl Chir Orthop** 1990;36:1–51 **(Ger)**

[Stimulated osteogenesis in bone cysts] Löwicke G, et al. **Beitr Orthop Traumatol** 1989 Jul;36(7):297–302 (Eng. Abstr.) **(Ger)**

[Sarcoidosis of the hand] Dahm M, et al. **Chirurg** 1990 Jan; 61(1):81–3 **(Ger)**

[The role of a bone cement filling in intralesional tumor treatment] Willert HG, et al. **Z Orthop** 1989 Jul–Aug; 127(4):376–8 (Eng. Abstr.) **(Ger)**

[A case of aneurysmal bone cyst arising from the left first rib] Sugawara E, et al. **Kyobu Geka** 1989 Aug;42(9):775–7 (Eng. Abstr.) **(Jpn)**

THERAPY

Therapeutic embolization of aneurysmal bone cyst. Radanović B, et al. **Cardiovasc Intervent Radiol** 1989 Nov–1990 Dec;12(6):313–6

Arterial embolization of aneurysmal bone cyst of the lumbar spine. A report of two cases. DeRosa GP, et al. **J Bone Joint Surg [Am]** 1990 Jun;72(5):777–80

[Constant electric current and laser irradiation in the complex treatment of complicated epithelial passages and cysts of the coccyx] Alekseenko AV, et al. **Vestn Khir** 1989 Apr; 142(4):116–7 **(Rus)**

VETERINARY

What is your diagnosis? Subchondral bone cyst in a bull. Scott E, et al. **J Am Vet Med Assoc** 1990 Feb 15; 196(4):639–40

BONE DENSITY

see related

ABSORPTIOMETRY, PHOTON

Androgens and bone mineral content in patients with subtotal thyroidectomy for benign nodular disease. Lakatos P, et al. **Acta Med Hung** 1989;46(4):297–305

Quantification of bone mineral measured by single-energy computed tomography. Husby T, et al. **Acta Orthop Scand** 1989 Aug;60(4):435–8

In vivo bone-mineral measurement. How and why—a review. Nilsson BE, et al. **Acta Orthop Scand** 1990 Jun; 61(3):275–81 (31 ref.)

Quantitative computed tomography [letter; comment] Overton TR. **Acta Orthop Scand** 1989 Oct;60(5):629–30 Comment on: Acta Orthop Scand 1989 Feb;60(1):101–4.

Bone mineral analysis in obese children [letter; comment] de la Torre W, et al. **Acta Paediatr Scand** 1990 Mar; 79(3):362–3 Comment on: Acta Paediatr Scand 1988 Sep;77(5):741–6.

Bone mineral content of appropriate and light for gestational

age preterm and term newborn infants. Pohlandt F, et al. **Acta Paediatr Scand** 1989 Nov;78(6):835–9

Axial and appendicular bone mineral content determined by computed tomography. Relationship to age and body size in males. Høiseth A, et al. **Acta Radiol** 1990 Mar; 31(2):137–40

Vertebral body trabecular density at the thoracolumbar junction using quantitative computed tomography. A post–mortem study. Singer KP, et al. **Acta Radiol** 1990 Jan;31(1):37–40

Determination of peak trabecular bone density: interplay of dietary fiber, carbohydrate, and androgens. Leuenberger PK, et al. **Am J Clin Nutr** 1989 Nov;50(5):955–61

Skeletal and body–composition effects of anorexia nervosa. Mazess RB, et al. **Am J Clin Nutr** 1990 Sep;52(3):438–41

Dual–energy x–ray absorptiometry for total–body and regional bone–mineral and soft–tissue composition. Mazess RB, et al. **Am J Clin Nutr** 1990 Jun;51(6):1106–12

Calcium supplementation and bone loss in middle–aged women. Smith EL, et al. **Am J Clin Nutr** 1989 Oct; 50(4):833–42

Lifelong black–white differences in bone size and cortical area [letter; comment] Garn SM. **Am J Dis Child** 1990 Jul; 144(7):750–1 Comment on: Am J Dis Child 1989 Nov;143(11):1346–9.

Bone mineral content in black and white children 1 to 6 years of age. Early appearance of race and sex differences [see comments] Li JY, et al. **Am J Dis Child** 1989 Nov; 143(11):1346–9 Comment in: Am J Dis Child 1990 Jul;144(7):750–1.

Longitudinal changes in the bone mineral content of term and premature infants. Pittard WB 3d, et al. **Am J Dis Child** 1990 Jan;144(1):36–40

Quantitative determination of alveolar bone density using digital image analysis of microradiographs. Jäger A, et al. **Anat Anz** 1990;170(3–4):171–9

Should prescription of postmenopausal hormone therapy be based on the results of bone densitometry? Cummings SR, et al. **Ann Intern Med** 1990 Oct 15;113(8):565–7 (27 ref.)

Hypouricemia, hypercalciuria, and decreased bone density: a hereditary syndrome. Sperling O, et al. **Ann Intern Med** 1974 Apr;80(4):482–7

Cost effectiveness of screening perimenopausal white women for osteoporosis: bone densitometry and hormone replacement therapy. Tosteson AN, et al. **Ann Intern Med** 1990 Oct 15;113(8):594–603

Progress in radiology: dual–energy radiographic absorptiometry for bone densitometry. Current status and perspective. Sartoris DJ, et al. **Ann N Y Acad Sci** 1990; 592:307–25; discussion 334–45 (32 ref.)

Radial bone mineral content in healthy Mexican women. Forsbach G, et al. **Arch Invest Med (Mex)** 1989 Apr–Jun; 20(2):157–61

Bone mineral density after bicycle ergometry training. Leeds EM, et al. **Arch Phys Med Rehabil** 1990 Mar;71(3):207–9

Relationship between grip strength and related regional bone mineral content. Sinaki M, et al. **Arch Phys Med Rehabil** 1989 Nov;70(12):823–6

Factors affecting the precision of bone mineral measurements. Part 2: Some statistical notes relating to photon counting statistics and rates of bone loss. Cormack J, et al. **Australas Phys Eng Sci Med** 1990 Mar;13(1):25–30

Factors affecting the precision of bone mineral measurements. Part 1: Review of experimentally derived results obtained from single photon absorptiometry. McDonald SP, et al. **Australas Phys Eng Sci Med** 1990 Mar;13(1):18–24

Non–invasive techniques for the measurement of bone mineral. Seeman E, et al. **Baillieres Clin Endocrinol Metab** 1989 May;3(1):1–33 (92 ref.)

Simultaneous determination of the reducible and nonreducible cross–links of connective tissue. Analysis of mineralized and nonmineralized bone collagen. Graham L, et al. **Biochemistry** 1989 Sep 19;28(19):7889–95

Dietary calcium, sex hormones, and bone mineral density in men. Kelly PJ, et al. **BMJ** 1990 May 26;300(6736):1361–4

Influence of soft tissue body composition on bone mass and metabolism. Hassager C, et al. **Bone** 1989;10(6):415–9

Sex differences in age–related changes in vertebral body size, density and biomechanical competence in normal individuals. Mosekilde L, et al. **Bone** 1990;11(2):67–73

The predictive value of quantitative computed tomography for vertebral body compressive strength and ash density. Mosekilde L, et al. **Bone** 1989;10(6):465–70

Perimenopausal bone mass and risk factors. Elders PJ, et al. **Bone Miner** 1989 Nov;7(3):289–99

Influence of fat on bone measurements with dual–energy absorptiometry. Hangartner TN, et al. **Bone Miner** 1990 Apr;9(1):71–81

Identification of women at risk for developing postmenopausal osteoporosis with vertebral fractures: role of history and single photon absorptiometry. Kleerekoper M, et al. **Bone Miner** 1989 Sep;7(2):171–86

Decreased serum osteocalcin levels in patients with liver cirrhosis. Pietschmann P, et al. **Bone Miner** 1990 Feb; 8(2):103–8

Effect of swimming on bone growth and development in young rats. Swissa–Sivan A, et al. **Bone Miner** 1989 Sep; 7(2):91–105

Bone mineral density after adjuvant chemotherapy for premenopausal breast cancer. Bruning PF, et al. **Br J Cancer** 1990 Feb;61(2):308–10

The effect of anorexia nervosa on skin thickness, skin collagen and bone density. Savvas M, et al. **Br J Obstet Gynaecol** 1989 Dec;96(12):1392–4

Effect of radiographic abnormalities on rate of bone loss from the spine. Dawson–Hughes B, et al. **Calcif Tissue Int** 1990 Apr;46(4):280–1

Calcitonin and bone mass status in congenital hypothyroidism. Demeester–Mirkine N, et al. **Calcif Tissue Int** 1990 Apr;46(4):222–6

Involvement of low–calcium diet in the reduced bone mineral content of idiopathic renal stone formers. Fuss M, et al. **Calcif Tissue Int** 1990 Jan;46(1):9–13

Nondestructive measurement of bone mineral in femurs from ovariectomized rats. Kimmel DB, et al. **Calcif Tissue Int** 1990 Feb;46(2):101–10

Linear calibration of radiographic mineral density using video–digitizing methods. Martin RB, et al. **Calcif Tissue Int** 1990 Aug;47(2):82–91

Bone diminution of osteoporotic females at different skeletal sites. Mautalen C, et al. **Calcif Tissue Int** 1990 Apr; 46(4):217–21

A comparison of quantitative dual–energy radiographic absorptiometry and dual photon absorptiometry of the lumbar spine in postmenopausal women. Strause L, et al. **Calcif Tissue Int** 1989 Nov;45(5):288–91

Effects of physical activity, dietary calcium intake and selected lifestyle factors on bone density in young women. McCulloch RG, et al. **Can Med Assoc J** 1990 Feb 1; 142(3):221–7

Bone densitometry of osteopetrosis in an adolescent girl. Joyce JM, et al. **Clin Nucl Med** 1990 Jan;15(1):48–9

Triple photon absorptiometry cannot correct for fat inhomogeneities in lumbar spine bone mineral measurements. Farrell TJ, et al. **Clin Phys Physiol Meas** 1990 Feb;11(1):77–84

Low influence of fat on spine densitometry? [letter; comment] Mazess RB, et al. **Clin Phys Physiol Meas** 1989 Aug; 10(3):287–90 Comment on: Clin Phys Physiol Meas 1989 Feb;10(1):57–64.

Comparison of speed of sound and ultrasound attenuation in the os calcis to bone density of the radius, femur and lumbar spine [see comments] Rossman P, et al. **Clin Phys Physiol Meas** 1989 Nov;10(4):353–60 Comment in: Clin Phys Physiol Meas 1990 May;11(2):177–80.

Does a single local absorptiometric bone measurement indicate the overall skeletal status? Implications for osteoporosis and osteoarthritis of the hip. Gotfredsen A, et al. **Clin Rheumatol** 1990 Jun;9(2):193–203

Dual photon absorptiometry of lumbar spine in west European (Belgian) postmenopausal females: normal range and fracture threshold. Reginster JY, et al. **Clin Rheumatol** 1990 Jun;9(2):220–4

Assessment of broadband ultrasound attenuation in the os calcis in vitro. McCloskey EV, et al. **Clin Sci** 1990 Feb; 78(2):221–5

Broadband ultrasound attenuation in the os calcis: relationship to bone mineral at other skeletal sites. McCloskey EV, et al. **Clin Sci** 1990 Feb;78(2):227–33

Non–apatitic environments in bone mineral: FT–IR detection, biological properties and changes in several disease states. Rey C, et al. **Connect Tissue Res** 1989; 21(1–4):267–73

Innovative approaches to noninvasive bone densitometry. Sartoris DJ, et al. **Crit Rev Diagn Imaging** 1990;30(1):19–39 (25 ref.)

Densitometry and bone mineral measurement. Wilson CR, et al. **Curr Opin Rheumatol** 1990 Apr;2(2):369–78 (46 ref.)

Bone and mineral metabolism in BB rats with long–term diabetes. Decreased bone turnover and osteoporosis. Verhaeghe J, et al. **Diabetes** 1990 Apr;39(4):477–82

Measurements of bone mass and bone density. Wahner HW. **Endocrinol Metab Clin North Am** 1989 Dec;18(4):995–1012 (39 ref.)

Impact of bone mineral measurements on osteoporosis. Fogelman I, et al. **Eur J Nucl Med** 1990;16(1):39–52 (108 ref.)

Interval bone mineral density with long–term gonadotropin–releasing hormone agonist suppression. Damewood MD, et al. **Fertil Steril** 1989 Oct;52(4):596–9

Bone mass in women with primary biliary cirrhosis: the relation with histological stage and use of glucocorticoids. Van Berkum FN, et al. **Gastroenterology** 1990 Oct; 99(4):1134–9

Osteoporosis in children with leukemia: a potentially debilitating anomaly? Leeuw JA, et al. **Hamatol Bluttransfus** 1990;33:580–2

Bone densitometry of the peripheral skeleton with a new photon counting and imaging device. Angelini F, et al. **Invest Radiol** 1989 Sep;24(9):684–91

Predicting femoral neck strength from bone mineral data. A structural approach. Beck TJ, et al. **Invest Radiol** 1990 Jan;25(1):6–18

A DPA technique for simultaneously measuring bone, soft tissue, and fat content. Goodsitt MM, et al. **Invest Radiol** 1989 Oct;24(10):762–7

Quantitative CT of the spine. Significance of intervertebral body variability. Thickman D, et al. **Invest Radiol** 1990 Jan;25(1):19–23

Evaluation of postprocessing dual–energy methods in quantitative computed tomography. Part 1. Theoretical considerations. van Kuijk C, et al. **Invest Radiol** 1990 Aug; 25(8):876–81

Evaluation of postprocessing dual–energy methods in quantitative computed tomography. Part 2. Practical aspects. van Kuijk C, et al. **Invest Radiol** 1990 Aug; 25(8):882–9

Appropriate clinical application of bone density measurements. Wasnich RD, et al. **J Am Med Wom Assoc** 1990 May–Jun;45(3):99–102

Determinants of bone density among athletes engaged in weight–bearing and non–weight–bearing activity. Block JE, et al. **J Appl Physiol** 1989 Sep;67(3):1100–5

Measurement of the density of trabecular bone. Sharp DJ, et al. **J Biomech** 1990;23(8):853–7

Clinical indications for bone mass measurements. A report from the Scientific Advisory Board of the National Osteoporosis Foundation. **J Bone Miner Res** 1989 Nov;4 Suppl 2:1–28 (222 ref.)

American Society for Bone and Mineral Research awards. **J Bone Miner Res** 1990 Jun;5(6):665–7

Mild versus definite osteoporosis: comparison of bone densitometry techniques using different statistical models. Heuck AF, et al. **J Bone Miner Res** 1989 Dec;4(6):891–900

Calibration and standardization of bone mineral densitometers. Kelly TL, et al. **J Bone Miner Res** 1989 Oct;4(5):663–9

NOF Task Force on bone mass measurement [letter] Parfitt AM. **J Bone Miner Res** 1990 May;5(5):533

Interpretation of bone densitometry measurements: disadvantages of a percentage scale and a discussion of some alternatives. Parfitt AM. **J Bone Miner Res** 1990 Jun; 5(6):537–40 (39 ref.)

Bone density changes in osteoporosis–prone women exposed to pulsed electromagnetic fields (PEMFs). Tabrah F, et al. **J Bone Miner Res** 1990 May;5(5):437–42

Lateral dual–photon absorptiometry: a new technique to measure the bone mineral density at the lumbar spine. Uebelhart D, et al. **J Bone Miner Res** 1990 May;5(5):525–31

Noninvasive axial and peripheral assessment of bone mineral content: a comparison between osteoporotic women and normal subjects. Van Berkum FN, et al. **J Bone Miner Res** 1989 Oct;4(5):679–85

Measurement of bone mineral content of the lumbar spine by dual energy x–ray absorptiometry in normal children: correlations with growth parameters. Glastre C, et al. **J Clin Endocrinol Metab** 1990 May;70(5):1330–3

The response of vertebral bone mineral density during the treatment of osteoporosis with sodium fluoride. Hodsman AB, et al. **J Clin Endocrinol Metab** 1989 Nov;69(5):932–8

Somatomedin–C, physical fitness, and bone density. Kelly PJ, et al. **J Clin Endocrinol Metab** 1990 Mar;70(3):718–23

Negative correlation between the change in bone mineral density and serum osteocalcin in patients with hyperthyroidism. Lee MS, et al. **J Clin Endocrinol Metab** 1990 Mar;70(3):766–70

The impact of osteophytic and vascular calcifications on vertebral mineral density measurements in men. Orwoll ES, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):1202–7

Increased monocyte interleukin–1 activity and decreased vertebral bone density in patients with fasting idiopathic hypercalciuria. Pacifici R, et al. **J Clin Endocrinol Metab** 1990 Jul;71(1):138–45

Weight training decreases vertebral bone density in premenopausal women: a prospective study. Rockwell JC, et al. **J Clin Endocrinol Metab** 1990 Oct;71(4):988–93

Lateral dual energy radiography: a new method for measuring vertebral bone density: a preliminary study. Rupich R, et al. **J Clin Endocrinol Metab** 1990 Jun; 70(6):1768–70

Impact of marrow fat on accuracy of quantitative CT. Glüer CC, et al. **J Comput Assist Tomogr** 1989 Nov–Dec; 13(6):1023–35

Evaluation of alveolar bone in relation to nutritional status during pregnancy. Clark DE, et al. **J Dent Res** 1990 Mar; 69(3):890–5

Effect of source strength and attenuation on dual photon absorptiometry. DaCosta MC, et al. **J Nucl Med** 1989 Nov; 30(11):1875–80

Dual–energy x–ray absorptiometry: a precise method of measuring bone mineral density in the lumbar spine. Hansen MA, et al. **J Nucl Med** 1990 Jul;31(7):1156–62

Osteoporosis in women with eating disorders: comparison of physical parameters, exercise, and menstrual status with SPA and DPA evaluation. Joyce JM, et al. **J Nucl Med** 1990 Mar;31(3):325–31

Precision of regional bone mineral measurements obtained from total–body scans. LeBlanc AD, et al. **J Nucl Med** 1990 Jan;31(1):43–5

Dual–photon absorptiometry: depleted sources inappropriate in obese patients with narrow collimation [letter] Mazess RB. **J Nucl Med** 1990 Apr;31(4):538–40

Statistical artifact in DPA measurements at low count rates [letter] Sorenson JA. **J Nucl Med** 1990 Apr;31(4):537–8, 539

Relationships between mandibular and skeletal bone in an osteoporotic population. Kribbs PJ, et al. **J Prosthet Dent** 1989 Dec;62(6):703–7

Relationships between mandibular and skeletal bone in a population of normal women. Kribbs PJ, et al. **J Prosthet Dent** 1990 Jan;63(1):86–9

Plain radiographs can be useful in estimating lumbar bone density. Michel BA, et al. **J Rheumatol** 1990 Apr; 17(4):528–31

Appendicular bone density and age predict hip fracture in

women. The Study of Osteoporotic Fractures Research Group [see comments] Cummings SR, et al. **JAMA** 1990 Feb 2;263(5):665–8 Comment in: JAMA 1990 Feb 2;263(5):708–9.

Menstrual history as a determinant of current bone density in young athletes. Drinkwater BL, et al. **JAMA** 1990 Jan 26;263(4):545–8

Accuracy and reproducibility of lumbar bone mineral status determined by dual photon absorptiometry in live male cynomolgus macaques (Macaca fascicularis). Jayo MJ, et al. **Lab Anim Sci** 1990 May;40(3):266–9

Bone density screening for osteoporosis [letter] **Lancet** 1990 Aug 25;336(8713):502–3

Bone density screening for osteoporosis [letter] Raffle AE, et al. **Lancet** 1990 Jul 28;336(8709):242

Bone density screening for osteoporosis [letter] van Hemert AM. **Lancet** 1990 Sep 29;336(8718):818

A technique for measuring regional bone mineral density in human lumbar vertebral bodies. Cody DD, et al. **Med Phys** 1989 Sep–Oct;16(5):766–72

Effects of age and sex on bone density at the hip and spine in a normal Caucasian New Zealand population. Elliott JR, et al. **N Z Med J** 1990 Feb 14;103(883):33–6

Trabecular mineral contents of lumbar vertebra in patients with osteoporosis. Suzuki S, et al. **Nippon Seikeigeka Gakkai Zasshi** 1990 Jan;64(1):17–26

Bone mineral and matrix. Are they altered in osteoporosis? Boskey AL. **Orthop Clin North Am** 1990 Jan;21(1):19–29 (101 ref.)

Bone densitometry of the axial skeleton. Mazess RB. **Orthop Clin North Am** 1990 Jan;21(1):51–63 (137 ref.)

Dual–photon absorptiometry for determination of bone mineral content in the calcaneus with correction for fat. Jonson R, et al. **Phys Med Biol** 1990 Jul;35(7):961–9

A special purpose x–ray fan–beam CT scanner for trabecular bone density measurement in the appendicular skeleton. McClean BA, et al. **Phys Med Biol** 1990 Jan;35(1):11–9

Relationship of extremity muscle torque and bone mineral density in postmenopausal women. Zimmermann CL, et al. **Phys Ther** 1990 May;70(5):302–9

Advances in the prevention of osteoporosis. Fogelman I. **Practitioner** 1989 Nov 8;233(1478):1446–7

Is osteoporosis a pediatric disease? Peak bone mass attainment in the adolescent female. Chesnut CH 3d. **Public Health Rep** 1989 Sep–Oct;104 Suppl:50–4 (12 ref.)

Usefulness of bone mass measurements by photon absorptiometry. Hassager C, et al. **Public Health Rep** 1989 Sep–Oct;104 Suppl:23–6

Bone mass measurement, fracture risk, and screening for osteoporosis. Rosenthal DI, et al. **Public Health Rep** 1989 Sep–Oct;104 Suppl:31–3 (19 ref.)

Technical aspects and clinical interpretation of bone mineral measurements. Wahner H. **Public Health Rep** 1989 Sep–Oct;104 Suppl:27–30 (7 ref.)

Quantification of bone density and mineral content [published erratum appears in Radiogr Today 1989 Feb;55(621):15] Bentley HB. **Radiogr Today** 1989 Jan;55(620):16–8

Bone mineral analysis using a Picker CT scanner. Brown G. **Radiogr Today** 1989 Aug;55(627):13–5

Current and innovative methods for noninvasive bone densitometry. Sartoris DJ, et al. **Radiol Clin North Am** 1990 Mar;28(2):257–78 (35 ref.)

Comparative assessment of dual–photon absorptiometry and dual–energy radiography. Glüer CC, et al. **Radiology** 1990 Jan;174(1):223–8

Dual–energy radiographic absorptiometry of the lumbar spine: clinical experience with two different systems. Gundry CR, et al. **Radiology** 1990 Feb;174(2):539–41

Accuracy of dual–energy radiographic absorptiometry of the lumbar spine: cadaver study. Ho CP, et al. **Radiology** 1990 Jul;176(1):171–3

Spinal bone mineral density measured with quantitative CT: effect of region of interest, vertebral level, and technique. Steiger P, et al. **Radiology** 1990 May;175(2):537–43

Acronym for dual–energy x–ray absorptiometry [letter] Wilson CR, et al. **Radiology** 1990 Sep;176(3):875–6

Regional bone mineral in healthy and osteoporotic women: a cross–sectional study. Gotfredsen A, et al. **Scand J Clin Lab Invest** 1989 Dec;49(8):739–49

Peripheral bone mineral content in patients with fatty liver and hepatic cirrhosis. Resch H, et al. **Scand J Gastroenterol** 1990 Apr;25(4):412–6

Bone density distribution within the femoral head and neck. An examination by high–resolution computed tomography. Field RE, et al. **Skeletal Radiol** 1990;19(5):319–25

Computed tomography–osteoabsorptiometry for assessing the density distribution of subchondral bone as a measure of long–term mechanical adaptation in individual joints. Müller–Gerbl M, et al. **Skeletal Radiol** 1989;18(7):507–12

Skeletal remineralization after surgery for primary and secondary hyperparathyroidism. Abugassa S, et al. **Surgery** 1990 Feb;107(2):128–33

Measurement of bone mineral density in amenorrheic women with dual photon absorptiometry. Soong YK, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Nov–Dec;88(11–12):1097–103

Serum content of zinc and vitamin C in severely handicapped children. Inamo Y, et al. **Tohoku J Exp Med** 1989 Aug;158(4):301–7

[Experimental study of thyroid hormone and bone metabolism in the rat] Ding G. **Chung Hua I Hsueh Tsa Chih** 1990 Apr;70(4):198–200, 16 (Eng. Abstr.) **(Chi)**

[Bone mineral content in 1094 healthy residents of the Taiyuan district] Zhou T. **Chung Hua I Hsueh Tsa Chih** 1990 May;70(5):286–8 **(Chi)**

[Survey and analysis of incidence and relevant factors of osteoporosis in the elderly (with a report of 2041 cases)] Zhu H. **Chung Hua I Hsueh Tsa Chih** 1990 May;70(5):248–51, 18 (Eng. Abstr.) **(Chi)**

[Effect of immobilization on the physical properties of cancellous bone: an experimental study] Chen XZ. **Chung Hua Wai Ko Tsa Chih** 1990 Feb;28(2):72–6, 125 (Eng. Abstr.) **(Chi)**

[The measurement of radial bone mineral content in children] Zhang J, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Jun;21(2):141–4 (Eng. Abstr.) **(Chi)**

[The effect of oophorectomy on blood flow, 85Sr uptake and mineral content in the tibia of female rats] Kapitola J, et al. **Cas Lek Cesk** 1989 Sep 8;128(37):1175–7 (Eng. Abstr.) **(Cze)**

[Normal values in children of bone mineral content measured by dual photon absorptiometry] Tison F, et al. **Ann Pediatr (Paris)** 1990 May;37(5):334–6 (Eng. Abstr.) **(Fre)**

[Increase of vertebral bone density in heavy drinkers of mineral water with a high fluoride content] Meunier PJ, et al. **Presse Med** 1989 Sep 23;18(29):1423–6 (Eng. Abstr.) **(Fre)**

[Measurement by dual–photon absorptiometry of vertebral mineral density in osteomalacia. Development during treatment] Audran M, et al. **Rev Rhum Mal Osteoartic** 1989 Dec;56(12):847–9 **(Fre)**

[Lumbar vertebrae mineral content in women. Normal values obtained using quantitative digital radiography] Braillon P, et al. **Rev Rhum Mal Osteoartic** 1989 Jul–Sep;56(8–9):589–92 (Eng. Abstr.) **(Fre)**

[Measurement of lumbar bone density by biphotonic absorptiometry. Contribution of a multidetector system] Dubceuf F, et al. **Rev Rhum Mal Osteoartic** 1990 Mar;57(3):171–5 (Eng. Abstr.) **(Fre)**

[The level of osteocalcin and bone mass in patients receiving anti–vitamin K agents] Houvenagel E, et al. **Rev Rhum Mal Osteoartic** 1989 Oct;56(10):677–9 **(Fre)**

[Bone demineralization and rheumatoid polyarthritis] Mole P, et al. **Rev Rhum Mal Osteoartic** 1989 Oct;56(10):671–6 (37 ref.) **(Fre)**

[Changes in the spongiosa density in the femoral head of rabbits in atherosclerosis] Bartels T, et al. **Beitr Orthop Traumatol** 1990 Jun;37(6):291–7 (Eng. Abstr.) **(Ger)**

[Serum osteocalcin (BGP) as a "marker" of bone mineral content in postmenopausal women] Heytmanek G, et al. **Gynakol Rundsch** 1989;29(4):245–7 **(Ger)**

[Computed tomographic analysis of bone minerals] Goltermann J, et al. **Radiol Diagn (Berl)** 1990;31(3):261–5 (Eng. Abstr.) **(Ger)**

[The relation of computed tomography–determined mineral content and the fracture behavior of healthy and metastatic vertebral bodies] Crone–Münzebrock W, et al. **ROFO** 1989 Sep;151(3):326–30 (Eng. Abstr.) **(Ger)**

[Comparative measurements of bone mineral content using DPA and DPX—initial clinical experiences] Spitz J, et al. **ROFO** 1990 Mar;152(3):340–4 (Eng. Abstr.) **(Ger)**

[Bone densitometry. A critical review and the authors' own experience] D'Amore M, et al. **Minerva Med** 1990 May;81(5):341–7 (7 ref.) (Eng. Abstr.) **(Ita)**

[Linear bone densitometry by monochromatic photon absorptiometry. A study of a normal population in Apulia] D'Amore M, et al. **Minerva Med** 1989 Nov;80(11):1187–91 (Eng. Abstr.) **(Ita)**

[Mineral bone content in full–term infants. Effect of anthropometric characteristics] Rubinacci A, et al. **Minerva Pediatr** 1989 Aug;41(8):413–7 (Eng. Abstr.) **(Ita)**

[The measurement of ultradistal radial bone minerals in women in the menopause] Rubinacci A, et al. **Radiol Med (Torino)** 1989 Dec;78(6):632–7 (Eng. Abstr.) **(Ita)**

[Assessment of the relation between bone mineral metabolism and mitral annular calcification or aortic valve sclerosis in elderly patients] Sugihara N, et al. **Kokyu To Junkan** 1989 Oct;37(10):1119–25 (Eng. Abstr.) **(Jpn)**

[Bone metabolism in thyroidectomized patients—evaluation of bone mineral content by quantitative CT] Sugino K, et al. **Nippon Geka Gakkai Zasshi** 1990 Apr;91(4):500–7 (Eng. Abstr.) **(Jpn)**

[CT evaluation of trabecular and cortical bone mineral density of the lumbar spine in patients on hemodialysis] Ito M. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Nov 25;49(11):1382–9 (Eng. Abstr.) **(Jpn)**

[Evaluation of bone mineral density with dual energy quantitative computed tomography (DEQCT)] Ito M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Aug 25;49(8):999–1008 (Eng. Abstr.) **(Jpn)**

[Fundamental evaluation of bone densitometry using dual energy X–ray absorptiometry (DEXA)] Koizumi K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Feb 25;50(2):123–9 (Eng. Abstr.) **(Jpn)**

[Usefulness of assessing bone mineral content of cortical bone in patients with lingering imbalance of bone metabolism] Sakurai K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Jan 25;50(1):81–3 (Eng. Abstr.) **(Jpn)**

[Quantitative assessment of mineral content in metacarpal bone with Fuji computed radiography] Tagami T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 May 25;50(5):512–8 (Eng. Abstr.) **(Jpn)**

[Pregnancy induced hypertension (PIH) and osteoporosis] Morikawa H, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Oct 20;65(10):1123–34 (Eng. Abstr.) **(Jpn)**

[Distribution pattern of density in lumbar vertebra studied with computed tomography: a study of histogram plot] Tanno M, et al. **Nippon Ronen Igakkai Zasshi** 1989 Jul;26(4):334–9 (Eng. Abstr.) **(Jpn)**

[Changes in bone mineral content and bone metabolism related to menopause] Ohta H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Sep;41(9):1447–54 (Eng. Abstr.) **(Jpn)**

[Bone mineral loss due to premenopausal oophorectomy assessed by dual photon absorptiometry] Ohta H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Feb;42(2):185–91 (Eng. Abstr.) **(Jpn)**

[Developing factors of osteoporosis] Yamamoto K. **Nippon Seikeigeka Gakkai Zasshi** 1990 Jan;64(1):122–31 (37 ref.) **(Jpn)**

[Bone mineral assessment] Yamada H. **Radioisotopes** 1989 Nov;38(11):473–84 (42 ref.) **(Jpn)**

[Clinical significance of bone density] **Rinsho Hoshasen** 1990 Jan;35(1):1–56 **(Jpn)**

[Bone mineral determination using dual energy X–ray absorptiometry (DEXA)] Fukunaga M, et al. **Rinsho Hoshasen** 1990 Jan;35(1):41–8 (Eng. Abstr.) **(Jpn)**

[Microdensitometric method (MD method) of the second metacarpal bone] Hayashi Y. **Rinsho Hoshasen** 1990 Jan;35(1):15–22 (Eng. Abstr.) **(Jpn)**

[The history and present status of bone densitometry] Morita R. **Rinsho Hoshasen** 1990 Jan;35(1):1–6 (Eng. Abstr.) **(Jpn)**

[Principle and instruments of bone densitometry] Mukai T. **Rinsho Hoshasen** 1990 Jan;35(1):7–13 (Eng. Abstr.) **(Jpn)**

[Dual photon absorptiometry] Ochi H, et al. **Rinsho Hoshasen** 1990 Jan;35(1):33–40 (Eng. Abstr.) **(Jpn)**

[Quantitative computed tomography for bone mineral assessment] Suzuki S, et al. **Rinsho Hoshasen** 1990 Jan;35(1):49–56 (Eng. Abstr.) **(Jpn)**

[SPA method; monitoring of bone mass during the treatment of osteoporosis] Yamamoto K, et al. **Rinsho Hoshasen** 1990 Jan;35(1):23–31 (Eng. Abstr.) **(Jpn)**

[Physique types and the skeletal mineral saturation of young men and women] Kornev MA. **Arkh Anat Gistol Embriol** 1989 Dec;97(12):55–8 (Eng. Abstr.) **(Rus)**

[Microphotometric research on roentgenograms of the alveolar processes in chronic gingivitis in children and adolescents] Simanovskaia ElIu, et al. **Stomatologiia (Mosk)** 1990 May–Jun;69(3):70–2 (Eng. Abstr.) **(Rus)**

[Bone mass measurement (letter)] López Navidad A, et al. **Med Clin (Barc)** 1990 Mar 3;94(8):317–8 **(Spa)**

[Bone mass measurement] Rico Lenza H. **Med Clin (Barc)** 1989 Sep 23;93(8):292–4 (63 ref.) **(Spa)**

DRUG EFFECTS

Nephrocalcinosis, hypercalciuria and elevated serum levels of 1,25–dihydroxyvitamin D in children. Possible link to vitamin D toxicity. Misselwitz J, et al. **Acta Paediatr Scand** 1990 Jun–Jul;79(6–7):637–43

Effects of nafarelin on bone density. Jacobson JB. **Am J Obstet Gynecol** 1990 Feb;162(2):591–2

Monitoring skeletal response to estrogen. Mazess RB, et al. **Am J Obstet Gynecol** 1989 Oct;161(4):843–8 (60 ref.)

Effects of epidermal growth factor on bone formation and resorption in vivo. Marie PJ, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E275–81

Accelerated bone loss in hypothyroid patients overtreated with L–thyroxine. Stall GM, et al. **Ann Intern Med** 1990 Aug 15;113(4):265–9

Corticosteroids and bone mass [letter] van der Wiel HE, et al. **Ann Intern Med** 1990 Oct 1;113(7):560

Assessment of the effect of oral corticosteroids on bone mineral density in systemic lupus erythematosus: a preliminary study with dual energy x ray absorptiometry. Dhillon VB, et al. **Ann Rheum Dis** 1990 Aug;49(8):624–6

Treatment of postmenopausal hyperparathyroidism with norethindrone. Long–term effects on forearm mineral content. Wishart J, et al. **Arch Intern Med** 1990 Sep;150(9):1951–3

Bone mineral content in patients with myasthenia gravis treated with cortisone. Harmut M, et al. **Arh Hig Rada Toksikol** 1988 Dec;39(4):359–63

The effect of prolonged fluoride therapy for osteoporosis: bone composition and histology. Lundy MW, et al. **Bone** 1989;10(5):321–7

Effects of tobacco use on axial and appendicular bone mineral density. Pocock NA, et al. **Bone** 1989;10(5):329–31

A randomized study on the effects of estrogen/gestagen or high dose oral calcium on trabecular bone remodeling in postmenopausal osteoporosis. Steiniche T, et al. **Bone** 1989;10(5):313–20

Relation of axial bone mass to habitual calcium intake and to cortical bone loss in healthy early postmenopausal women. van Beresteijn EC, et al. **Bone** 1990;11(1):7–13

Antiestrogen and antiandrogen administration reduce bone mass in the rat. Feldmann S, et al. **Bone Miner** 1989 Nov; 7(3):245–54

Beta–carotene supplementation of turkey diets varying in fat and retinol. Stevens VI, et al. **Br Poult Sci** 1989 Dec; 30(4):877–87

Reduced forearm bone mineral content and biochemical evidence of increased bone turnover in women with euthyroid goitre treated with thyroid hormone. Taelman P, et al. **Clin Endocrinol (Oxf)** 1990 Jul;33(1):107–17

Prevention of postmenopausal bone loss in rheumatoid arthritis patients. A two–year prospective study. Verstraeten A, et al. **Clin Exp Rheumatol** 1989 Jul–Aug; 7(4):351–8

A comparison of the skeletal effects of goserelin and danazol in premenopausal women with endometriosis. Stevenson JC, et al. **Horm Res** 1989;32 Suppl 1:161–3; discussion 164

Trabecular bone remodeling and bone mineral density in the adult cat during chronic dietary acidification with ammonium chloride. Ching SV, et al. **J Bone Miner Res** 1990 Jun;5(6):547–56

Urinary fluoride excretion in responders and nonresponders after fluoride therapy in osteoporosis. Duursma SA, et al. **J Bone Miner Res** 1990 Mar;5 Suppl 1:S43–7

Fluoride therapy for osteoporosis promotes a progressive increase in spinal bone density. Farley SM, et al. **J Bone Miner Res** 1990 Mar;5 Suppl 1:S37–42

Fluoride pharmacokinetics in good and poor responders to fluoride therapy. Kraenzlin ME, et al. **J Bone Miner Res** 1990 Mar;5 Suppl 1:S49–52

Long–term estrogen replacement therapy in postmenopausal women sustains vertebral bone mineral density. Moore M, et al. **J Bone Miner Res** 1990 Jun;5(6):659–64

Aluminum administration in the rat separately affects the osteoblast and bone mineralization. Rodriguez M, et al. **J Bone Miner Res** 1990 Jan;5(1):59–67

Bone mineral content in hypothyroid male patients with hormone replacement: a 3–year study. Toh SH, et al. **J Bone Miner Res** 1990 May;5(5):463–7

Differences in mineral metabolism among nonhuman primates receiving diets with only vitamin D3 or only vitamin D2. Marx SJ, et al. **J Clin Endocrinol Metab** 1989 Dec; 69(6):1282–90

Bone mass reduction after estrogen deprivation by long–acting gonadotropin–releasing hormone agonists and its relation to pretreatment serum concentrations of 1,25–dihydroxyvitamin D3. Scharla SH, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):1055–61

Bone responsiveness to parathyroid hormone in normal and osteoporotic postmenopausal women. Tsai KS, et al. **J Clin Endocrinol Metab** 1989 Nov;69(5):1024–7

Efficacy of long–term fluoride and calcium therapy in correcting the deficit of spinal bone density in osteoporosis. Farley SM, et al. **J Clin Epidemiol** 1989;42(11):1067–74

Long–term adjuvant tamoxifen in early breast cancer: effect on bone mineral density in postmenopausal women. Fornander T, et al. **J Clin Oncol** 1990 Jun;8(6):1019–24

Water–borne fluoride and cortical bone mass: a comparison of two communities. Phipps KR, et al. **J Dent Res** 1990 Jun;69(6):1256–60

The effects of calcium on bone mineral density in postmenopausal women with colles fractures. Cimino PM, et al. **J La State Med Soc** 1989 Nov;141(11):24–9

Effects of transdermal versus oral hormone replacement therapy on bone density in spine and proximal femur in postmenopausal women. Stevenson JC, et al. **Lancet** 1990 Aug 4;336(8710):265–9

Effects of gonadotrophin–releasing hormone agonist on uterine fibroids and bone density. Bianchi G, et al. **Maturitas** 1989 Sep;11(3):179–85

Effects of nandrolone decanoate therapy on bone mass and calcium metabolism in women with established post–menopausal osteoporosis: a double–blind placebo–controlled study. Gennari C, et al. **Maturitas** 1989 Sep;11(3):187–97

Calcitonin and lumbar bone mineral content during oestrogen–progestogen administration in post–menopausal women. Isaia G, et al. **Maturitas** 1989 Dec;11(4):287–94

Reduced axial bone mineral content in patients taking an oral anticoagulant. Fiore CE, et al. **South Med J** 1990 May; 83(5):538–42

[Morphologic study of iliac crest spongiosa in patients with osteoporosis treated with combination therapy of pulsatile administration of parathyroid hormone (1–38 hPTH) and sequential addition of calcitonin nasal spray] Vogel M, et al. **Med Klin** 1990 Feb 15;85(2):82–6 (Eng. Abstr.) **(Ger)**

[Does COPD affect bone mineral content?] Hens C, et al. **Pneumologie** 1990 Feb;44 Suppl 1:204–5 (Eng. Abstr.) **(Ger)**

[Effects of mellitic acid on matrix–induced, ectopic osteogenesis in the rat] Rüther W, et al. **Z Orthop** 1989 Nov–Dec;127(6):706–10 (Eng. Abstr.) **(Ger)**

[The effect of oral contraceptives on bone density in climacteric females] Enzelsberger H, et al. **Zentralbl Gynakol** 1989;111(14):967–73 (Eng. Abstr.) **(Ger)**

[Effect on phospho–calcium metabolism of testosterone administration in hypogonadal males] Salamano G, et al. **Arch Ital Urol Nefrol Androl** 1990 Mar;62(1):149–53 (Eng. Abstr.) **(Ita)**

[The effect of 1,25(OH)2D3 on bone mineral content in senile osteoporosis—a dose–finding study] Shiraki M, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Nov 20; 65(11):1253–63 (Eng. Abstr.) **(Jpn)**

[Reaction of osseous tissue and the osteoclast population in rats to biphosphonates and vitamin D3 under conditions of hypokinesia] Gol'dovskaia MD, et al. **Kosm Biol Aviakosm Med** 1989 Aug–Sep;23(4):47–51 (Eng. Abstr.) **(Rus)**

[The effect of magnesium sulfate electrophoresis and galvanization on the mineralization of teeth and bones] Varava GN, et al. **Stomatologiia (Mosk)** 1990 May–Jun; 69(3):12–4 (Eng. Abstr.) **(Rus)**

GENETICS

Ethnic and genetic differences in bone mass: a review with a hereditary vs environmental perspective [published erratum appears in Am J Clin Nutr 1990 Jul;52(1):181] Pollitzer WS, et al. **Am J Clin Nutr** 1989 Dec;50(6):1244–59 (90 ref.)

Influence of body habitus and race on bone mineral density of the midradius, hip, and spine in aging women. DeSimone DP, et al. **J Bone Miner Res** 1989 Dec;4(6):827–30

PHYSIOLOGY

Bone mineral density in adult celiac patients and the effect of gluten–free diet from childhood. Molteni N, et al. **Am J Gastroenterol** 1990 Jan;85(1):51–3

Running, osteoarthritis, and bone density: initial 2–year longitudinal study. Lane NE, et al. **Am J Med** 1990 May; 88(5):452–9

The rate of bone mineral loss in normal men and the effects of calcium and cholecalciferol supplementation. Orwoll ES, et al. **Ann Intern Med** 1990 Jan 1;112(1):29–34

Predictors of bone mass in perimenopausal women. A prospective study of clinical data using photon absorptiometry. Slemenda CW, et al. **Ann Intern Med** 1990 Jan 15;112(2):96–101

Exercise and the regulation of bone mass [editorial] Marcus R. **Arch Intern Med** 1989 Oct;149(10):2170–1

Weight–bearing exercise, overexercise, and lumbar bone density over age 50 years. Michel BA, et al. **Arch Intern Med** 1989 Oct;149(10):2325–9

The relationship of swimming exercise to bone mass in men and women. Orwoll ES, et al. **Arch Intern Med** 1989 Oct; 149(10):2197–200

Relationship between forearm and vertebral mineral density in postmenopausal women with primary hyperparathyroidism. Wishart J, et al. **Arch Intern Med** 1990 Jun;150(6):1329–31

Reduced bone mineral in patients with eating disorders. Davies KM, et al. **Bone** 1990;11(3):143–7

The effect of ovariectomy on spine bone mineral density in rhesus monkeys. Longcope C, et al. **Bone** 1989;10(5):341–4

Wrist fracture, heel bone density and thoracic kyphosis: a case control study. Porter RW, et al. **Bone** 1990;11(3):211–4

Modification of strain–specific femoral bone density by bone marrow chimerism in mice: a study on the spontaneously osteoporotic mouse (SAM–P/6). Tsuboyama T, et al. **Bone** 1989;10(4):269–77

The response of circulating parameters of bone mineral metabolism to ethanol– and EDTA–induced hypocalcemia in the rat. Thomas S, et al. **Bone Miner** 1990 Jan;8(1):1–6

Bone mass in young patients with type I diabetes. Weber G, et al. **Bone Miner** 1990 Jan;8(1):23–30

Bone mass, muscle function and fracture of the proximal femur. Cooper C. **Br J Hosp Med** 1989 Oct;42(4):277–80 (41 ref.)

The range of bone density in normal British women. Hall ML, et al. **Br J Radiol** 1990 Apr;63(748):266–9

Current bone mass and body weight changes in alcoholic males. Crilly RG, et al. **Calcif Tissue Int** 1990 Mar; 46(3):169–72

Bone mass and osteoporotic fractures. Heaney RP. **Calcif Tissue Int** 1990 Aug;47(2):63–5

In vivo analysis of the half–life of the osteoinductive potential of demineralized bone matrix using diffusion chambers. Landesman R, et al. **Calcif Tissue Int** 1989 Dec; 45(6):348–53

A critical review of bone mass and the risk of fractures in osteoporosis. Ross PD, et al. **Calcif Tissue Int** 1990 Mar; 46(3):149–61

Familial resemblance of radial bone mass between premenopausal mothers and their college–age daughters. Tylavsky FA, et al. **Calcif Tissue Int** 1989 Nov;45(5):265–72

The relationship between spinal trabecular bone mineral content and iliac crest trabecular bone volume. Wright CD, et al. **Calcif Tissue Int** 1990 Mar;46(3):162–5

Regional bone mineral measurements. Ormerod S, et al. **Can Assoc Radiol J** 1990 Apr;41(2):59–64

Longitudinal study of bone mineral content in the lumbar spine, the forearm and the lower extremities after spinal cord injury. Biering–Sørensen F, et al. **Eur J Clin Invest** 1990 Jun;20(3):330–5

Osteoporosis and skeletal fractures in chronic liver disease. Diamond T, et al. **Gut** 1990 Jan;31(1):82–7

Theoretical determination of the current density distributions in human vertebral bodies during electrical stimulation. Carter EL Jr, et al. **IEEE Trans Biomed Eng** 1990 Jun; 37(6):606–14

The effect of high level physical activity (8.5 METs or greater) and estrogen replacement therapy upon bone mass in postmenopausal females, aged 50–68 years. Ballard JE, et al. **Int J Sports Med** 1990 Jun;11(3):208–14

Bone mineral content of junior competitive weightlifters. Virvidakis K, et al. **Int J Sports Med** 1990 Jun;11(3):244–6

Mineral and matrix contributions to rigidity in fracture healing. Chakkalakal DA, et al. **J Biomech** 1990; 23(5):425–34

Femoral head apparent density distribution predicted from bone stresses. Fyhrie DP, et al. **J Biomech** 1990;23(1):1–10

Cross–sectional moment of inertia of the distal radius from absorptiometric data. Gilbert JA, et al. **J Biomech** 1989; 22(6–7):751–4

The origin of electrokinetic potentials in bone tissue: the organic phase. Guzelsu N, et al. **J Biomech** 1990; 23(7):661–72

X–ray quantitative computed tomography: the relations to physical properties of proximal tibial trabecular bone specimens. Hvid I, et al. **J Biomech** 1989;22(8–9):837–44

Effect of season on physical activity score, back extensor muscle strength, and lumbar bone mineral density. Bergstralh EJ, et al. **J Bone Miner Res** 1990 Apr;5(4):371–7

Exercise patterns and trabecular bone density in college women. Davee AM, et al. **J Bone Miner Res** 1990 Mar; 5(3):245–50

A new method for automatic recognition of the radiographic trabecular pattern. Geraets WG, et al. **J Bone Miner Res** 1990 Mar;5(3):227–33

Effects of weight lifting on bone mineral density in premenopausal women. Gleeson PB, et al. **J Bone Miner Res** 1990 Feb;5(2):153–8

Human lactation: forearm trabecular bone loss, increased bone turnover, and renal conservation of calcium and inorganic phosphate with recovery of bone mass following weaning. Kent GN, et al. **J Bone Miner Res** 1990 Apr; 5(4):361–9

Influence of age and body weight on spine and femur bone mineral density in U.S. white men. Mazess RB, et al. **J Bone Miner Res** 1990 Jun;5(6):645–52

Age–related bone loss in women [letter] Recker RR, et al. **J Bone Miner Res** 1990 Mar;5(3):307–8

Cigarette smoking, obesity, and bone mass. Slemenda CW, et al. **J Bone Miner Res** 1989 Oct;4(5):737–41

Muscle strength as a predictor of bone mineral density in young women. Snow–Harter C, et al. **J Bone Miner Res** 1990 Jun;5(6):589–95

Calcitropic hormone levels in polynesians: evidence against their role in interracial differences in bone mass. Reid IR, et al. **J Clin Endocrinol Metab** 1990 May;70(5):1452–6

Mechanical properties of trabecular bone from the proximal femur: a quantitative CT study. Lotz JC, et al. **J Comput Assist Tomogr** 1990 Jan–Feb;14(1):107–14

Update on the use of distal radial bone density measurements in prediction of hip and Colles' fracture risk. Lester GE, et al. **J Orthop Res** 1990 Mar;8(2):220–6

Ultrasound and bone fragility [editorial] **Lancet** 1989 Oct 7; 2(8667):842

Effect of exercise on bone: permissive influence of estrogen and calcium. Dalsky GP. **Med Sci Sports Exerc** 1990 Jun; 22(3):281–5 (27 ref.)

Bone mineral content in black pre–schoolers: normative data using single photon absorptiometry. Laraque D, et al. **Pediatr Radiol** 1990;20(6):461–3

Decreased bone density in adolescent girls with anorexia nervosa. Bachrach LK, et al. **Pediatrics** 1990 Sep; 86(3):440–7

Effects of structural variation on Young's modulus of non–human cancellous bone. Hodgskinson R, et al. **Proc Inst Mech Eng [H]** 1990;204(H1):43–52

Structural and compositional changes in aging bone: osteopenia in lumbar vertebrae of Wistar female rats. Silbermann M, et al. **Scanning Microsc** 1989 Sep; 3(3):945–51; discussion 952

Bone mineral density and its association with inherited protein S deficiency. Pan EY, et al. **Thromb Res** 1990 May 1;58(3):221–31

[Effect of physical exercise on calcified bone tissue] Vico L, et al. **Presse Med** 1990 Apr 21;19(16):739–40 **(Fre)**

[The development of bone mass during a lifetime] Renier JC, et al. **Rev Rhum Mal Osteoartic** 1990 May;57(5):409–14 (43 ref.) (Eng. Abstr.) **(Fre)**

[Quantitative mineral salt determination and structure analysis of vertebral bodies using roentgen computerized tomography] Faust U, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:184–5 **(Ger)**

[The effects of smoking on estrogen level and bone mass] Enzelsberger H, et al. **Gynakol Rundsch** 1989;29 Suppl 2:315–6 **(Ger)**

[Double photon absorptiometry in renal osteodystrophy] Lechleitner P, et al. **Wien Klin Wochenschr** 1990 Mar 2; 102(5):136–40 (Eng. Abstr.) **(Ger)**

[Aging bones as a paradigm for individual differences in aging] Pesch HJ. **Z Gerontol** 1990 May–Jun;23(3):128–9 (Eng. Abstr.) **(Ger)**

[Recent concepts of the organization and structure of human trabecular bone—results of combined 2– and 3–dimensional analysis] Delling G. **Z Gesamte Inn Med** 1989 Sep 15; 44(18):536–40 (Eng. Abstr.) **(Ger)**

[Demonstration of subchondral density pattern using CT–osteoabsorptiometry (CT–OAM) for the assessment of individual joint stress in live patients] Müller–Gerbl M, et al. **Z Orthop** 1990 Mar–Apr;128(2):128–33 (Eng. Abstr.) **(Ger)**

[Assessment of patients at risk for osteoporosis using a risk

factor analysis and quantitative computerized tomography] Dambacher MA, et al. **Z Rheumatol** 1989;48 Suppl 1:88–9 **(Ger)**

[Diagnosis, pathophysiology and therapy of osteomalacia] Kruse HP. **Z Rheumatol** 1989;48 Suppl 1:55–63 (65 ref.) **(Ger)**

[Diagnostic value of noninvasive assessment methods of bone mineral content] Kruse HP, et al. **Z Rheumatol** 1989;48 Suppl 1:32–6 (15 ref.) **(Ger)**

[Clinical efficacy of treatment with salmon calcitonin, administered intranasally for 1 year, in stabilized postmenopausal osteoporosis] Agnusdei D, et al. **Minerva Endocrinol** 1989 Jul–Sep;14(3):169–76 (Eng. Abstr.) **(Ita)**

[Participation of osteoporosis in femoral neck fracture—bone mineral measurement of proximal femur using quantitative computed tomography] Mizuno N. **Nippon Seikeigeka Gakkai Zasshi** 1989 Oct;63(10):1188–200 (Eng. Abstr.) **(Jpn)**

[Assessment of lumbar trabecular bone density by means of single energy quantitative CT in hospital control children and bone metabolic disorders. 1] Nakano K, et al. **No To Hattatsu** 1990 Mar;22(2):173–8 (Eng. Abstr.) **(Jpn)**

[Effect of active metabolites of vitamin D 3 on the status of rat bone tissue in various experimental models of hypokinesia] Belakovskiĭ MS, et al. **Kosm Biol Aviakosm Med** 1989 Nov–Dec;23(6):36–9 (Eng. Abstr.) **(Rus)**

[Effect of simulated weightlessness on calcium metabolism and the condition of bone tissue in experimental animals] Morukov BV, et al. **Kosm Biol Aviakosm Med** 1990 Mar–Apr;24(2):31–4 (Eng. Abstr.) **(Rus)**

[Mineral density of human skeletal bones in modeling of decreased gravity load] Oganov VS, et al. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):43–6 (Eng. Abstr.) **(Rus)**

[Changes in the reaction of rat bone tissue to hypokinesia after administration of hydroxymethyl aminopropylidene bisphosphonate] Shvets VN, et al. **Kosm Biol Aviakosm Med** 1989 Nov–Dec;23(6):39–42 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Osteodensitometry of vertebral metastases after radiotherapy using quantitative computed tomography. Reinbold WD, et al. **Skeletal Radiol** 1989;18(7):517–21

BONE DEVELOPMENT

see related

GROWTH PLATE

The role of insulin–like growth factor I in growth of diabetic rats. Binz K, et al. **Acta Endocrinol (Copenh)** 1989 Nov; 121(5):628–32

Radiological and biochemical evaluation of bone growth in young dogs. Koscinczuk P, et al. **Acta Physiol Pharmacol Latinoam** 1989;39(3):289–97

Bone formation and body composition of European elk: an ontogenetic model. Bartosiewicz L. **Acta Vet Hung** 1989; 37(1–2):55–68

Somatic development in cleidocranial dysplasia. Jensen BL. **Am J Med Genet** 1990 Jan;35(1):69–74

Long–bone growth in fetuses with Down syndrome. FitzSimmons J, et al. **Am J Obstet Gynecol** 1989 Nov; 161(5):1174–7

Continuing periosteal apposition. II: The significance of peak bone mass, strain equilibrium, and age–related activity differentials for mechanical compensation in human tubular bones. Lazenby RA. **Am J Phys Anthropol** 1990 Aug; 82(4):473–84

Continuing periosteal apposition. I: Documentation, hypotheses, and interpretation. Lazenby RA. **Am J Phys Anthropol** 1990 Aug;82(4):451–72 (82 ref.)

Endothelial cell division in metaphyseal capillaries during endochondral bone formation in rats. Hunter WL, et al. **Anat Rec** 1990 Jul;227(3):351–8

Role of TGF beta in bone remodeling. Mundy GR, et al. **Ann N Y Acad Sci** 1990;593:91–7 (37 ref.)

Bone induction and transforming growth factor–beta. Rosen DM, et al. **Ann N Y Acad Sci** 1990;593:98–106

Hypertrophic cartilage matrix. Type X collagen, supramolecular assembly, and calcification. Schmid TM, et al. **Ann N Y Acad Sci** 1990;580:64–73 (29 ref.)

Skeletal growth and chondroid tissue. Dhem A, et al. **Arch Ital Anat Embriol** 1989 Jul–Sep;94(3):237–41 (26 ref.)

Effect of the macroporosity for osseous substitution of calcium phosphate ceramics. Daculsi G, et al. **Biomaterials** 1990 Jul;11:86–7

Skeletal change in response to altered strain environments: is woven bone a response to elevated strain? Burr DB, et al. **Bone** 1989;10(3):223–33

Osteopenia in the immobilized rat hind limb is associated with increased bone resorption and decreased bone formation. Weinreb M, et al. **Bone** 1989;10(3):187–94

Expression of the cell proliferation–associated nuclear antigen reactive with the Ki–67 monoclonal antibody by cells of the skeletal system in humans and other species. Apte SS. **Bone Miner** 1990 Jul;10(1):37–50

Variation of resorption rates in vivo of various bones in immature rats. Klein L, et al. **Bone Miner** 1990 Feb; 8(2):169–75

Effect of swimming on bone growth and development in young rats. Swissa–Sivan A, et al. **Bone Miner** 1989 Sep; 7(2):91–105

Bone strength of laying hens kept in an alternative system, compared with hens in cages and on deep–litter. Nørgaard–Nielsen G. **Br Poult Sci** 1990 Mar;31(1):81–9

A resolution restriction for Wolff's law of trabecular architecture. Cowin SC. **Bull Hosp Jt Dis Orthop Inst** 1989 Fall;49(2):205–12

Bone formation by osteoblast–like cells in a three–dimensional cell culture. Casser–Bette M, et al. **Calcif Tissue Int** 1990 Jan;46(1):46–56

Heterotopic new bone formation causes resorption of the inductive bone matrix. Nilsson OS, et al. **Clin Orthop** 1990 Aug;(257):280–5

The human growth process from infancy to maturity. Growth of the facial skeleton and neck. Anous MM, et al. **Clin Plast Surg** 1990 Jan;17(1):7–12

Bioactive factors in bone development and repair. Part I. A conference held in honor of Dr. Marshall R. Urist. Kerrville, Texas, May 15–18, 1988. Proceedings. **Connect Tissue Res** 1989;23(2–3):101–218

24 hour whole body retention of 99mTc–methylene–diphosphonate in the assessment of bone formation. Methodological evaluation, clinical applications and comparison with serum alkaline phosphatase and serum osteocalcin. Hyldstrup L. **Dan Med Bull** 1989 Sep;36(4):349–58 (103 ref.)

The role of growth factors in skeletal remodeling. Canalis E, et al. **Endocrinol Metab Clin North Am** 1989 Dec; 18(4):903–18 (89 ref.)

Glucocorticoid receptors and inhibition of bone cell growth in primary culture. Chen TL, et al. **Endocrinology** 1977 Mar;100(3):619–28

Evidence for extrarenal production of 1,25–dihydroxyvitamin during physiological bone growth: in vivo and in vitro production by deer antler cells. Sempere AJ, et al. **Endocrinology** 1989 Nov;125(5):2312–9

Histomorphometric and electron microscopic analyses of tibial epiphyseal plates from Cosmos 1887 rats. Duke PJ, et al. **FASEB J** 1990 Jan;4(1):41–6

Spatial and temporal expression pattern of retinoic acid receptor genes during mouse bone development. Noji S, et al. **FEBS Lett** 1989 Oct 23;257(1):93–6

A comparative study of neonatal skeletal development in Cebus and other primates. Watts ES. **Folia Primatol (Basel)** 1990;54(3–4):217–24

The evaluation of cortical bone remodeling with a new ultrasonic technique. Zimmerman MC, et al. **IEEE Trans Biomed Eng** 1990 May;37(5):433–41

The development of pneumatisation in the skull of the domestic fowl (Gallus gallus domesticus). Hogg DA. **J Anat** 1990 Apr;169:139–51

The influence of mineral supplementation on growth and skeletal development of yearling horses. Ott EA, et al. **J Anim Sci** 1989 Nov;67(11):2831–40

The effect of exercise on bone growth and development in weanling horses [published erratum appears in J Anim Sci 1990 Jan;68(1):281] Raub RH, et al. **J Anim Sci** 1989 Oct; 67(10):2508–14

Quantitative histologic analysis of tissue growth into porous total knee components. Cook SD, et al. **J Arthroplasty** 1989; 4 Suppl:S33–43

Purification and characterization of a unique osteoinductive factor from bovine bone. Bentz H, et al. **J Biol Chem** 1989 Dec 5;264(34):20805–10

Induction of bone formation in an adenoid cystic carcinoma of the maxillary sinus by adoptive immunotherapy involving intra–arterial injection of lymphokine–activated killer cells and recombinant interleukin–2 in combination with radiotherapy. Sato M, et al. **J Biol Response Mod** 1990 Jun;9(3):329–34

Regulation of bone stress and strain in the immature and mature rat femur. Keller TS, et al. **J Biomech** 1989; 22(11–12):1115–27

Apatite—wollastonite containing glass ceramic granule–fibrin mixture as a bone graft filler: use with low granular density. Ono K, et al. **J Biomed Mater Res** 1990 Jan;24(1):11–20

Immunoelectron microscopic studies of type X collagen in endochondral ossification. Poole AR, et al. **J Cell Biol** 1989 Nov;109(5):2547–54

Factors that promote progressive development of the osteoblast phenotype in cultured fetal rat calvaria cells. Aronow MA, et al. **J Cell Physiol** 1990 May;143(2):213–21

Measurement of bone mineral content of the lumbar spine by dual energy x–ray absorptiometry in normal children: correlations with growth parameters. Glastre C, et al. **J Clin Endocrinol Metab** 1990 May;70(5):1330–3

Relationships between histomorphometric features of bone formation and bone cell characteristics in vitro in renal osteodystrophy. Marie PJ, et al. **J Clin Endocrinol Metab** 1989 Dec;69(6):1166–73

Analysis of craniofacial growth in Crouzon syndrome using landmark data. Richtsmeier JT, et al. **J Craniofac Genet Dev Biol** 1990;10(1):39–62

Fluorescence in the tandem scanning microscope. Boyde A, et al. **J Microsc** 1990 Jan;157 (Pt 1):39–49

Purification of rabbit bone morphogenetic protein derived from bone, dentin, and wound tissue after tooth extraction. Bessho K, et al. **J Oral Maxillofac Surg** 1990 Feb; 48(2):162–9

Congenital dislocation of the hip: acetabular deficiency in adolescence (absence of the lateral acetabular epiphysis) after limbectomy in infancy. O'Hara JN. **J Pediatr Orthop** 1989 Nov–Dec;9(6):640–8

Peptide portions may hold key to amplifying bone against porosis [news] Cotton P. **JAMA** 1990 Feb 2;263(5):621

Stimulation of myeloid colony development elaborated by colony forming cells—fibroblasts from rat developing ossicles. Bleiberg I. **Leuk Res** 1990;14(1):63–8

Venous pressure and bone formation. Kelly PJ, et al. **Microvasc Res** 1990 May;39(3):364–75

Growth and development of broiler breeders. 2. Independent effects of dietary formulation versus body weight on skeletal and muscle growth. Lilburn MS, et al. **Poult Sci** 1989 Sep;68(9):1274–81

Patterns of cell proliferation and growth rate in limb bones of the domestic fowl (Gallus domesticus). Kirkwood JK, et al. **Res Vet Sci** 1989 Sep;47(2):139–47

Bone formation by micro–revascularized periosteum compared with traditional bone grafts. Puckett C, et al. **Surg Forum** 1978;29:609–10

Immunocytochemical localization of BGP in human bones in various developmental stages and pathological conditions. Ohta T, et al. **Virchows Arch [A]** 1989; 415(5):459–66

[The development of bone mass during a lifetime] Renier JC, et al. **Rev Rhum Mal Osteoartic** 1990 May;57(5):409–14 (43 ref.) (Eng. Abstr.) **(Fre)**

[New bone formation following implantation of various hydroxyapatite ceramics. Animal experiment with bore hole models of the sheep tibia] Mandelkow HK, et al. **Unfallchirurg** 1990 Aug;93(8):376–9 (Eng. Abstr.) **(Ger)**

[Polychrome sequential labeling of subchondral bone tissue in early and advanced stages of gonarthrosis in male STR/IN–mice] Benske J, et al. **Z Orthop** 1989 Sep–Oct; 127(5):616–9 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Biphasic response of rat tibial growth to thyroxine administration. Ren SG, et al. **Acta Endocrinol (Copenh)** 1990 Mar;122(3):336–40

Parathyroid hormone potentiates the effect of insulin–like growth factor–I on bone formation. Spencer EM, et al. **Acta Endocrinol (Copenh)** 1989 Sep;121(3):435–42

Fibroblast growth factor stimulates bone formation. Bone induction studied in rats. Aspenberg P, et al. **Acta Orthop Scand** 1989 Aug;60(4):473–6

Effect of recombinant human growth hormone therapy on bone and clinical parameters in girls with Turner's syndrome. The Spanish Collaborative Group. Ferrández A, et al. **Acta Paediatr Scand Suppl** 1989;356:87–91; discussion 92

Effects of epidermal growth factor on bone formation and resorption in vivo. Marie PJ, et al. **Am J Physiol** 1990 Feb; 258(2 Pt 1):E275–81

Skeletal deformities in smallmouth bass, Micropterus dolomieui, from southern Appalachian reservoirs. Van den Avyle MJ, et al. **Arch Environ Contam Toxicol** 1989 Sep; 18(5):688–96

Effects of maternal caffeine with zinc intake during gestation and lactation on bone development in newborn rats. Sasahara H, et al. **Arch Oral Biol** 1990;35(6):425–30

Vitamin A and bone formation. Different responses to retinol and retinoic acid of chick bone cells in organ culture. Dickson IR, et al. **Biochim Biophys Acta** 1989 Oct 9; 1013(3):254–8

Dietary salt affects biochemical markers of resorption and formation of bone in elderly women. McParland BE, et al. **BMJ** 1989 Sep 30;299(6703):834–5

Effect of calcitonin administration on young pig trabecular bone remodeling. de Vernejoul MC, et al. **Bone** 1990; 11(1):29–33

Simultaneous assessment of bone resorption and formation in cultures of 22–day fetal rat parietal bones: effects of parathyroid hormone and prostaglandin E2. Vargas SJ, et al. **Bone** 1990;11(1):61–5

Effect of heparin on bone formation in cultured fetal rat calvaria. Hurley MM, et al. **Calcif Tissue Int** 1990 Mar; 46(3):183–8

Elongation of fetal chick long bone in vitro is formed by a mitogenic activity preparation from porcine bone. Kukoschke KG, et al. **Calcif Tissue Int** 1990 Feb; 46(2):111–5

Bone morphogenetic protein [letter; comment] Kakaiya R. **Clin Orthop** 1990 Apr;(253):309–10 Comment on: Clin Orthop 1989 Feb;(239):299–305.

Initiation of bone development by osteogenin and promotion by growth factors. Reddi AH, et al. **Connect Tissue Res** 1989;20(1–4):303–12 (22 ref.)

Hormonal control of bone collagen synthesis in vitro. Effects of insulin and glucagon. Canalis EM, et al. **Endocrinology** 1977 Mar;100(3):668–74

Glucocorticoid receptors and inhibition of bone cell growth in primary culture. Chen TL, et al. **Endocrinology** 1977 Mar;100(3):619–28

Effects of prostaglandin F2 alpha on bone formation and resorption in cultured neonatal mouse calvariae: role of prostaglandin E2 production. Raisz LG, et al. **Endocrinology** 1990 Feb;126(2):1076–9

23(S),25(R)–1,25–dihydroxyvitamin D3–26,23–lactone stimulates murine bone formation in vivo. Shima M, et al. **Endocrinology** 1990 Feb;126(2):832–6

Estrogen inhibition of periosteal bone formation in rat long

bones: down-regulation of gene expression for bone matrix proteins. Turner RT, et al. **Endocrinology** 1990 Sep; 127(3):1346–51

The effect of hydrocortisone on the growth of chick bone rudiments in chemically defined medium. Reynolds JJ. **Exp Cell Res** 1966 Jan;41(1):174–89

A short course of recombinant human growth hormone treatment stimulates osteoblasts and activates bone remodeling in normal human volunteers. Brixen K, et al. **J Bone Miner Res** 1990 Jun;5(6):609–18

Trabecular bone remodeling and bone mineral density in the adult cat during chronic dietary acidification with ammonium chloride. Ching SV, et al. **J Bone Miner Res** 1990 Jun;5(6):547–56

The effects of fluoride on ectopic bone formation. Harrison JE, et al. **J Bone Miner Res** 1990 Mar;5 Suppl 1:S81–5

The effects of fluoride on bone and implant histomorphometry in growing rats. Turner RT, et al. **J Bone Miner Res** 1989 Aug;4(4):477–84

Bovine tooth-derived bone morphogenetic protein. Kawai T, et al. **J Dent Res** 1989 Jun;68(6):1069–74

Effect of calcium citrate-malate on skeletal development in young, growing rats. Kochanowski BA. **J Nutr** 1990 Aug; 120(8):876–81

Effects on wound healing of tricalcium phosphate-collagen complex implants in periodontal osseous defects in the dog. Sugaya A, et al. **J Periodont Res** 1990 Jan;25(1):60–3

Stimulatory effect of calcitonin on bone formation in tissue culture. Yamaguchi M, et al. **J Pharmacobiodyn** 1989 Nov; 12(11):708–15

Stimulation of bone formation—experimental studies. Thorngren KG. **Nippon Seikeigeka Gakkai Zasshi** 1989 May;63(5):677–86

Recombinant human bone morphogenetic protein induces bone formation. Wang EA, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2220–4

Effects of caffeine intake during gestation and lactation on bones of young growing rats. Schneider PE, et al. **Res Exp Med (Berl)** 1990;190(2):131–6

A new zinc compound, beta-alanyl-L-histidinato zinc, stimulates bone growth in weanling rats. Yamaguchi M, et al. **Res Exp Med (Berl)** 1990;190(2):105–10

The effects of lindane and linuron on calcium metabolism, bone morphometry and the kidney in rats. Andrews JE, et al. **Toxicology** 1990 Jan–Feb;60(1-2):99–107

[Local factors in bone repair] Bergmann P. **Rev Med Brux** 1989 Dec;10(10):419–23 (34 ref.) (Eng. Abstr.) **(Fre)**

[Preventive value of vitamin D in various doses based on a prospective study of healthy infants] Fábián K, et al. **Orv Hetil** 1990 Mar 4;131(9):447–50 (Eng. Abstr.) **(Hun)**

[Microdensitometric study of maturation and fragility of the bone in male patients with cerebral palsy—the effect of long-term administration of 1 alpha-hydroxy vitamin D3 and the value of osteocalcin as a marker of bony growth] Hayashi Y, et al. **No To Hattatsu** 1990 May;22(3):209–15 (Eng. Abstr.) **(Jpn)**

[Stimulation of growth of long tubular bones with methyluracil] Siagallo PT, et al. **Vestn Khir** 1989 Sep; 143(9):98 **(Rus)**

GENETICS

The influence of heredity factors on skeletal growth and age-dependent transformations. Kogan BI. **Folia Morphol (Praha)** 1989;37(4):347–50

PHYSIOLOGY

Pneumatization and mesenchyme in the human middle ear. Rauchfuss A. **Acta Anat (Basel)** 1989;136(4):285–90

Growth and bone characteristics of phenylketonurics. Comparative analysis of treated and untreated phenylketonuric children. Fisch RO, et al. **Am J Dis Child** 1966 Jul;112(1):3–10

A theoretical model of endochondral ossification and bone architectural construction in long bone ontogeny. Wong M, et al. **Anat Embryol (Berl)** 1990;181(6):523–32

The effects of cold upon bone growth: a preliminary study. Bierens de Haan B, et al. **Ann Plast Surg** 1986 Jun; 16(6):509–15

Interactive effects of nutrition, environment, and rat-strain on cortical and vertebral bone geometry and biomechanics. Zernicke RF, et al. **Aviat Space Environ Med** 1990 Jul; 61(7):640–7

Age dependent development of osteopenia in the long bones of tail-suspended mice. Simske SJ, et al. **Biomed Sci Instrum** 1990;26:87–94

Increased cancellous bone remodeling during lactation in beagles. Miller MA, et al. **Bone** 1989;10(4):279–85

Bone and cartilage formation in diffusion chambers by subcultured cells derived from the periosteum. Nakahara H, et al. **Bone** 1990;11(3):181–8

In vivo analysis of the half-life of the osteoinductive potential of demineralized bone matrix using diffusion chambers. Landesman R, et al. **Calcif Tissue Int** 1989 Dec; 45(6):348–53

Serum markers of bone formation in parenteral nutrition patients. Lipkin EW, et al. **Calcif Tissue Int** 1990 Aug; 47(2):75–81

Regional patterns of bone loss and altered bone remodeling in response to calcium deprivation in laboratory rabbits. Wu DD, et al. **Calcif Tissue Int** 1990 Jul;47(1):18–23

Skeletal tissue response to cytokines. Goldring MB, et al. **Clin Orthop** 1990 Sep;(258):245–78 (418 ref.)

Response of the growth plate to distraction close to skeletal maturity. Is fracture necessary? Kenwright J, et al. **Clin Orthop** 1990 Jan;(250):61–72

Bone morphogenetic protein-mediated interaction of periosteum and diaphysis. Citric acid and other factors influencing the generation of parosteal bone. Kübler N, et al. **Clin Orthop** 1990 Sep;(258):279–94

The chemistry and biology of mineralized tissues: Part II. Proceedings of the third international conference. Chatham, Massachusetts, October 16–21, 1988. **Connect Tissue Res** 1989;21(1–4):1–296

Bioactive factors in bone development and repair. A conference held in honor of Dr. Marshall R. Urist. Proceedings. **Connect Tissue Res** 1990;24(1):1–81

The chemistry and biology of mineralized tissues. Part I. Proceedings of the third international conference. Chatham, Massachusetts, October 16–21, 1988. **Connect Tissue Res** 1989;20(1–4):1–329

The role of cells versus matrix in bone induction. Anderson HC. **Connect Tissue Res** 1990;24(1):3–12 (56 ref.)

Role of transforming growth factor beta in bone remodeling: a review. Bonewald LF, et al. **Connect Tissue Res** 1989; 23(2–3):201–8 (64 ref.)

Cellular and molecular events during embryonic bone development. Bruder SP, et al. **Connect Tissue Res** 1989; 20(1–4):65–71 (8 ref.)

The emergence and maturation of the first apatite crystals in an in vitro bone formation system. Grynpas MD, et al. **Connect Tissue Res** 1989;21(1–4):227–33; discussion 234–7

Association of the C-propeptide of type II collagen with mineralization of embryonic chick long bone and sternal development. Kujawa MJ, et al. **Connect Tissue Res** 1989; 23(2–3):179–99

Expression of genes for non-collagenous proteins during embryonic bone formation. Nomura S, et al. **Connect Tissue Res** 1989;21(1–4):31–5; discussion 36–9 (22 ref.)

Bone formation following intrarenal transplantation of isolated murine chondrocytes: chondrocyte-bone cell transdifferentiation? Moskalewski S, et al. **Development** 1989 Nov;107(3):473–80

Stimulation of bone matrix apposition in vitro by local growth factors: a comparison between insulin-like growth factor I, platelet-derived growth factor, and transforming growth factor beta. Pfeilschifter J, et al. **Endocrinology** 1990 Jul;127(1):69–75

Ratios between growth parameters for the prenatal ultrasonographic diagnosis of skeletal dysplasias. Brons JT, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jan–Feb; 34(1–2):37–46

The fetal skeleton; ultrasonographic evaluation of the normal growth. Brons JT, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jan–Feb; 34(1–2):21–36

Cosmos 1887: morphology, histochemistry, and vasculature of the growing rat tibia. Doty SB, et al. **FASEB J** 1990 Jan;4(1):16–23

Preosteoblast production 55 hours after a 12.5-day spaceflight on Cosmos 1887. Garetto LP, et al. **FASEB J** 1990 Jan;4(1):24–8

Regional distribution of mineral and matrix in the femurs of rats flown on Cosmos 1887 biosatellite. Mechanic GL, et al. **FASEB J** 1990 Jan;4(1):34–40

Maturation of bone and dentin matrices in rats flown on the Soviet biosatellite Cosmos 1887. Simmons DJ, et al. **FASEB J** 1990 Jan;4(1):29–33

Effects of spaceflight on rat humerus geometry, biomechanics, and biochemistry. Vailas AC, et al. **FASEB J** 1990 Jan;4(1):47–54

Calbindin-D9K immunolocalization and vitamin D-dependence in the bone of growing and adult rats. Balmain N, et al. **Histochemistry** 1989;92(5):359–65

Growth of the humerus after denervation. An experimental study in the rat. Dysart PS, et al. **J Anat** 1989 Dec; 167:147–59

Bone growth and calcium balance during simulated weightlessness in the rat. Roer RD, et al. **J Appl Physiol** 1990 Jan;68(1):13–20

A theoretical study of the influence of bone maturation rate on surface remodeling predictions: idealized models. Hart RT. **J Biomech** 1990;23(3):241–57

Cancellous bone remodeling in type I (postmenopausal) osteoporosis: quantitative assessment of rates of formation, resorption, and bone loss at tissue and cellular levels. Eriksen EF, et al. **J Bone Miner Res** 1990 Apr;5(4):311–9

Long-term organ culture of embryonic chick femora: a system for investigating bone and cartilage formation at an intermediate level of organization. Roach HI. **J Bone Miner Res** 1990 Jan;5(1):85–100

Modulation of type X collagen gene expression by calcium beta-glycerophosphate and levamisole: implications for a possible role for type X collagen in endochondral bone formation. Thomas JT, et al. **J Cell Sci** 1990 Apr;95 (Pt 4):639–48

The presence of classical insulin-like growth factor (IGF) type-I and -II receptors on mouse osteoblasts: autocrine/paracrine growth effect of IGFs? Slootweg MC, et al. **J Endocrinol** 1990 May;125(2):271–7

Growth factors and the skeletal system. Canalis E, et al. **J Endocrinol Invest** 1989 Sep;12(8):577–84 (49 ref.)

Effect of donor age on the growth in vitro of cells obtained from human trabecular bone. Evans CE, et al. **J Orthop Res** 1990 Mar;8(2):234–7

Is longitudinal bone growth influenced by diurnal variation in the mitotic activity of chondrocytes of the growth plate? Stevenson S, et al. **J Orthop Res** 1990 Jan;8(1):132–5

Measuring the volume fraction of bone ingrowth: a comparison of three techniques. Sumner DR, et al. **J Orthop Res** 1990 May;8(3):448–52

Physiological mechanisms adopted by chondrocytes in regulating longitudinal bone growth in rats. Hunziker EB, et al. **J Physiol (Lond)** 1989 Jul;414:55–71

The three processes that make bone. Jaworski ZF. **Pol Arch Med Wewn** 1988 Aug–Sep;80(2–3):133–43

Vitamin D and other extracellular factors in the control of growth. Braidman IP. **Proc Nutr Soc** 1990 Feb;49(1):91–101 (31 ref.)

[The structural basis of bone I.] Martinko V, et al. **Anat Anz** 1990;170(3–4):153–8 (Eng. Abstr.) **(Ger)**

[Effect of the osteomyelitic process on bone growth in children and its correction] Siagallo PT, et al. **Ortop Travmatol Protez** 1989 Nov;(11):51–4 (Eng. Abstr.) **(Rus)**

[Endocrine, autocrine and paracrine factors in the regulation of growth of skeletal bones] Carrascosa A. **An Esp Pediatr Supl** 1988 Oct;35:1–2 **(Spa)**

RADIATION EFFECTS

Influence of whole body irradiation and local shielding on matrix-induced endochondral bone differentiation. Wientroub S, et al. **Calcif Tissue Int** 1990 Jan;46(1):38–45

Bone growth retardation induced by single and multifractionated irradiation. Masuda K, et al. **Radiother Oncol** 1990 Jun;18(2):137–45

BONE DISEASES

Orthopaedic problems in pottery workers. Report of a paper read by Mr C.H. Wynn Jones, Orthopaedic Department, North Staffordshire Hospital Centre, Stoke-on-Trent. Ellison JM. **Ann Occup Hyg** 1989;33(3):397–8

Bone disease in preterm infants. Bishop N. **Arch Dis Child** 1989 Oct;64(10 Spec No):1403–9 (21 ref.)

Symposium: Abnormalities and deformities of the knee in childhood. **Clin Orthop** 1990 Jun;(255):1–110

[11th symposium of the Working Group for Osteology. 21–22 October 1988, Bern. Abstracts] **Acta Med Austriaca Suppl** 1990;40:1–50 **(Ger)**

[The rare phenomenon of intraosseous gas collections (the so-called pneumatoceles] Freyschmidt J, et al. **ROFO** 1990 Jan;152(1):6–9 (Eng. Abstr.) **(Ger)**

[Proceedings of the German Society of Orthopedics and Traumatology. 74th meeting. 16–20 September 1988, Saarbrücken] **Z Orthop** 1989 Jul–Aug;127(4):375–529 **(Ger)**

[Papers on the occasion of an experts discussion on "Rheumatologic syndromes with bone diseases". 12–15 November 1987, Marrakech] **Z Rheumatol** 1989;48 Suppl 1:1–97 **(Ger)**

[Clinical significance of bone density] **Rinsho Hoshasen** 1990 Jan;35(1):1–56 **(Jpn)**

[Epidermoid of the petrous apex] Fontal Alvarez M, et al. **An Otorrinolaringol Ibero Am** 1990;17(1):67–76 (Eng. Abstr.) **(Spa)**

BLOOD

Endemic skeletal fluorosis in children: hypocalcemia and the presence of renal resistance to parathyroid hormone. Pettifor JM, et al. **Bone Miner** 1989 Nov;7(3):275–88

[Serum osteocalcin in rheumatologic practice] Costes O, et al. **Rev Rhum Mal Osteoartic** 1989 Oct;56(10):681–6 **(Fre)**

[Different behavior of bone turnover markers in endocrine (extrinsic) and structural (intrinsic) osteopathies] Napal J, et al. **Med Clin (Barc)** 1990 Mar 3;94(8):294–8 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Structure-activity relationships for osteolathyrism. III. Substituted thiosemicarbazides. Dawson DA, et al. **J Appl Toxicol** 1990 Feb;10(1):59–64

Drug-induced lesions of the musculoskeletal system. Lawson JP. **Radiol Clin North Am** 1990 Mar;28(2):233–46 (57 ref.)

[Drug-induced bone pathology] Schiano A, et al. **Ann Med Interne (Paris)** 1989;140(7):605–8 (31 ref.) (Eng. Abstr.) **(Fre)**

[Fluoride poisoning secondary to prolonged treatment with niflumic acid in a dialysis patient (letter)] de Cornelissen F, et al. **Nephrologie** 1989;10(2):94–5 **(Fre)**

[Drug-induced syndromes of the locomotor system] Keitel W, et al. **Z Arztl Fortbild (Jena)** 1989;83(24):1227–9 (15 ref.) **(Ger)**

[Bone disorders in children with chronic renal insufficiency exposed to high ingestion of aluminum] Gordillo-Paniagua G, et al. **Bol Med Hosp Infant Mex** 1990 May;47(5):336–41 (Eng. Abstr.) **(Spa)**

CLASSIFICATION

[Occupational diseases of the musculoskeletal system of the SUVA (Swiss Accident Insurance Institute)] Debrunner

HU. **Orthopade** 1990 Jun;19(3):163–71 (Eng. Abstr.) (Ger)

COMPLICATIONS

Musculoskeletal case of the day. Osseous sarcoidosis and chronic polyarthritis. Stull MA, et al. **AJR Am J Roentgenol** 1990 Jun;154(6):1332–4

Hypouricemia, hypercalciuria, and decreased bone density: a hereditary syndrome. Sperling O, et al. **Ann Intern Med** 1974 Apr;80(4):482–7

Eagle's syndrome: an atypical cause of dysphonia [letter] Sundmaker WH. **Ear Nose Throat J** 1989 Jul;68(7):561

Treatment of painful bone lesions and hypercalcemia. Ascari E, et al. **Eur J Haematol Suppl** 1989;51:135–9

Bone disease in patients with primary biliary cirrhosis. Maddrey WC. **Prog Liver Dis** 1990;9:537–54 (93 ref.)

[Differential diagnosis of periosteal reactions] Zenklusen C, et al. **Rev Med Suisse Romande** 1989 Oct;109(10):843–51 (Fre)

[Orthopedic diseases in children and adolescents—indications for prohibiting sports participation] Dahmen G. **Off Gesundheitswes** 1989 Aug–Sep;51(8–9):488–95 (Eng. Abstr.) (Ger)

[Musculoskeletal manifestations of human immunodeficiency virus infection] Buskila D, et al. **Harefuah** 1990 Jun 1; 118(11):644–6 (44 ref.) (Heb)

CONGENITAL

Profile of congenital cholesteatomas of the petrous apex. DeSouza CE, et al. **J Postgrad Med** 1989 Apr;35(2):93–7 (57 ref.)

DIAGNOSIS

Granulomatous infiltration of the talus and abnormal vitamin D and calcium metabolism in a patient with sarcoidosis: successful treatment with hydroxychloroquine [see comments] DeSimone DP, et al. **Am J Med** 1989 Dec; 87(6):694–6 Comment in: Am J Med 1990 May;88(5):553–4.

Digital subtraction angiography in musculoskeletal tumors and other conditions. Kolář J, et al. **Arch Orthop Trauma Surg** 1990;109(2):89–93

Cholesterol granuloma of the petrous apex. Clifton AG, et al. **Br J Radiol** 1990 Sep;63(753):724–6

Atypical amyloidosis of bone. Daly BD, et al. **Br J Radiol** 1989 Sep;62(741):859–61

Scintigraphic and radiologic manifestations of yaws. du Cret RP, et al. **Clin Nucl Med** 1990 Aug;15(8):580–1

Femoral anteversion in adolescents and adults measured by ultrasound. Terjesen T, et al. **Clin Orthop** 1990 Jul; (256):274–9

Skeletal complications of type I Gaucher disease: the magnetic resonance features. Cremin BJ, et al. **Clin Radiol** 1990 Apr;41(4):244–7

Musculoskeletal radiology. **Curr Opin Radiol** 1989 Oct; 1(3):387–408

Musculoskeletal manifestations of systemic disease. Feldman F. **Curr Opin Radiol** 1989 Oct;1(3):341–9 (38 ref.)

Miscellaneous reports of interest. Stoker DJ, et al. **Curr Opin Radiol** 1989 Oct;1(3):369–71

Metabolic, systemic, and other childhood conditions affecting the musculoskeletal system. Jacobs JC. **Curr Opin Rheumatol** 1989 Oct;1(3):268–71 (12 ref.)

Lectin affinity electrophoresis of alkaline phosphatase for the differentiation of bone and hepatobiliary disease. Rosalki SB, et al. **Electrophoresis** 1989 Aug–Sep;10(8–9):604–11

The role of imprint cytology in diagnosis of various bone and joint diseases. Arora HL, et al. **Indian J Cancer** 1990 Mar;27(1):38–45

Physical examination of musculoskeletal pain. Wilson G, et al. **J Am Podiatr Med Assoc** 1990 Aug;80(8):429–32

Musculoskeletal applications of magnetic resonance imaging. Council on Scientific Affairs [published erratum appears in JAMA 1990 Jul 25;264(4):456] [see comments] **JAMA** 1989 Nov 3;262(17):2420–7 (75 ref.) Comment in: JAMA 1990 Jul 25;264(4):456.

Magnetic resonance imaging for pediatric diagnosis. Brasch RC. **Magn Reson Annu** 1987;:179–201 (32 ref.)

Musculoskeletal magnetic resonance imaging. Murphy WA, et al. **Magn Reson Annu** 1986;:1–35 (28 ref.)

Magnetic resonance contrast agents in the evaluation of the musculoskeletal system. Bloem JL, et al. **Magn Reson Q** 1990 Apr;6(2):136–63 (43 ref.)

Magnetic resonance imaging of injuries to bone and articular cartilage. Emphasis on radiographically occult abnormalities. Deutsch AL, et al. **Orthop Rev** 1990 Jan; 19(1):66–75 (28 ref.)

Musculoskeletal applications of MRI. Kattapuram SV, et al. **Radiat Med** 1989 Mar–Apr;7(2):47–54 (44 ref.)

Fibrous lesions of bones. Kumar R, et al. **Radiographics** 1990 Mar;10(2):237–56 (33 ref.)

[Ultrasonic diagnosis of the locomotor system. A review] Gregersen HE, et al. **Ugeskr Laeger** 1989 Nov 27; 151(48):3219–21 (30 ref.) (Eng. Abstr.) (Dan)

[Bourneville's disease of the bones or metastasis? Apropos of a case] Hambye AS, et al. **Acta Clin Belg** 1989; 44(4):237–43 (Eng. Abstr.) (Fre)

[Echography of the musculoskeletal system] Morvan G. **J Radiol** 1989 Oct;70(10):513–27 (58 ref.) (Eng. Abstr.) (Fre)

[Experiences after 2 years of the federal operating cost rate directive] Swoboda A. **Z Orthop** 1989 Jul–Aug; 127(4):451–4 (Eng. Abstr.) (Ger)

[Results of voluntary and mandatory statistics 1986/87—including a comparison with the preliminary study 1984/85. Scope of the topic: experiences after 2.5 years of the federal directive on operating cost rates of 1985] Winter T. **Z Orthop** 1989 Jul–Aug;127(4):455–7 (Eng. Abstr.) (Ger)

[Diagnostic value of noninvasive assessment methods of bone mineral content] Kruse HP, et al. **Z Rheumatol** 1989;48 Suppl 1:32–6 (15 ref.) (Ger)

[Bone diseases and rheumatic symptoms] Müller W, et al. **Z Rheumatol** 1989;48 Suppl 1:37–43 (43 ref.) (Ger)

[Prognosis of congenital orthopedic pathology] Aladashvili LT. **Ortop Travmatol Protez** 1990 Mar;(3):57–8 (Rus)

[Somatization of mental disorders simulating pathology of the locomotor system] Lisina MA. **Sov Med** 1990;(5):104–7 (Rus)

DRUG THERAPY

Resolution of musculoskeletal symptoms in the carcinoid syndrome after treatment with the somatostatin analog octreotide. Smith S, et al. **Ann Intern Med** 1990 Jan 1; 112(1):66–8

Blastomycosis in Namibia—report of a case successfully treated with itraconazole. Jordaan HF. **Clin Exp Dermatol** 1989 Sep;14(5):347–51

Use of antibiotic-loaded bone cement in the management of common infections of the foot and ankle. Jacobs AM, et al. **Clin Podiatr Med Surg** 1990 Jul;7(3):523–44 (271 ref.)

Long-term effects of parenteral dichloromethylene bisphosphonate (CL2MBP) on bone disease of myeloma patients treated with chemotherapy. Merlini G, et al. **Hematol Oncol** 1990 Jan–Feb;8(1):23–30

Fusidic acid in staphylococcal bone and joint infection. Coombs RR. **J Antimicrob Chemother** 1990 Feb;25 Suppl B:53–60 (29 ref.)

Treatment of bone and soft tissue infections with teicoplanin. Marone P, et al. **J Antimicrob Chemother** 1990 Mar; 25(3):435–9

Chemical sterilization of bacterially contaminated bone without destruction of osteogenic potential. Dahners LE, et al. **J Orthop Trauma** 1989;3(3):241–4

Effect of high-dose vitamin D supplementation on radiographically detectable bone disease of very low birth weight infants. Evans JR, et al. **J Pediatr** 1989 Nov;115(5 Pt 1):779–86

Early therapy of renal bone disease with calcitriol: a prospective double-blind study. Baker LR, et al. **Kidney Int Suppl** 1989 Nov;27:S140–2

[Chronic bone infections after surgery. Treatment with the new quinolones] Bricaire F, et al. **Presse Med** 1989 Sep 16;18(28):1383–6 (Eng. Abstr.) (Fre)

[Mesotherapy with naproxin sodium in musculoskeletal diseases] Guazzetti R, et al. **Riv Eur Sci Med Farmacol** 1988 Dec;10(6):539–42 (Eng. Abstr.) (Ita)

ECONOMICS

A summary of the impact of musculoskeletal conditions in the United States. Yelin EH, et al. **Arthritis Rheum** 1990 May;33(5):750–5

[Occupational diseases in Europe: diseases of the locomotor system] Lehnert G. **Orthopade** 1990 Jun;19(3):126–31 (Eng. Abstr.) (Ger)

ENZYMOLOGY

Biochemical data and diagnoses—a novel use for alkaline phosphatase. Tormey WP. **Br J Clin Pract** 1989 Jul; 43(7):255–7

Liver- and bone-derived isoenzymes of alkaline phosphatase in serum as determined by high-performance affinity chromatography. Anderson DJ, et al. **Clin Chem** 1990 Feb; 36(2):240–6

[Alkaline phosphatase level in bone diseases; frequently too high, sometimes too low] Macfarlane JD, et al. **Ned Tijdschr Geneeskd** 1989 Aug 26;133(34):1679–83 (47 ref.) (Dut)

[Alkaline phosphatase levels in bone diseases; frequently too high, sometimes too low (letter)] Oosterhuis WP, et al. **Ned Tijdschr Geneeskd** 1989 Oct 7;133(40):1997 (Dut)

EPIDEMIOLOGY

Report of bone registry, 1970–1982 (a twelve year study). Chitale AR, et al. **Indian J Pathol Microbiol** 1987 Apr; 30(2):201–18

Symptoms of stress predict musculoskeletal disorders [see comments] Leino P. **J Epidemiol Community Health** 1989 Sep;43(3):293–300 Comment in: J Epidemiol Community Health 1989 Dec;43(4):395.

Factors influencing the turnover of Swedish professional drivers. Hedberg GE, et al. **Scand J Soc Med** 1989; 17(3):231–7

Disability among female garment workers. A comparison with a national sample. Brisson C, et al. **Scand J Work Environ Health** 1989 Oct;15(5):323–8

[Prevalence of histological types of bone disease in a hemodialysis center limiting the oral intake of aluminum hydroxide] Belbrik S, et al. **Nephrologie** 1990;11(2):83–90 (Eng. Abstr.) (Fre)

[The formation of primary disability from injuries and diseases of the bone-muscle system] Trofimovich NI, et al. **Ortop Travmatol Protez** 1989 Sep;(9):49–52 (Rus)

[Why do musculo-skeletal stress injuries increase?] Winkel J. **Nord Med** 1989;104(12):324–7 (Eng. Abstr.) (Swe)

ETIOLOGY

Nephrolithiasis and bone involvement in primary hyperparathyroidism. Silverberg SJ, et al. **Am J Med** 1990 Sep;89(3):327–34

Hemodialysis-associated amyloidosis of bone of beta-2 microglobulin origin. Mikawa Y, et al. **Arch Orthop Trauma Surg** 1990;109(2):109–12

Concurrent musculoskeletal pain in a patient with symptomatic lower extremity arterial insufficiency. Sliwa JA, et al. **Arch Phys Med Rehabil** 1989 Nov;70(12):848–50

Bone disease in children with homozygous beta-thalassemia. Rioja L, et al. **Bone Miner** 1990 Jan;8(1):69–86

Skeletal sequelae of radiation therapy for malignant childhood tumors. Butler MS, et al. **Clin Orthop** 1990 Feb; (251):235–40

Osteoarthropathy in congenital sensory neuropathy with anhidrosis. Hasegawa Y, et al. **Clin Orthop** 1990 Sep; (258):232–6

Osseous xanthomatosis associated with type IIb hyperlipidemia [letter] Yokoyama K, et al. **Clin Orthop** 1990 Feb;(251):308

Musculoskeletal injuries caused by weight training. Guidelines for prevention. Risser WL. **Clin Pediatr (Phila)** 1990 Jun;29(6):305–10 (20 ref.)

Musculoskeletal manifestations of primary hyperparathyroidism. Bhalla AK. **Clin Rheum Dis** 1986 Dec;12(3):691–705 (77 ref.)

Beta-2-microglobulin amyloidosis and osteo-articular pathology of the uremic patient on regular dialysis. Brancaccio D, et al. **Contrib Nephrol** 1990;77:177–86 (46 ref.)

Bone and joints alterations in uremic patients. Role of parathyroid hormone. Colussi G, et al. **Contrib Nephrol** 1990;77:157–67 (49 ref.)

Bone disease in primary hyperparathyroidism. Parisien M, et al. **Endocrinol Metab Clin North Am** 1990 Mar; 19(1):19–34 (56 ref.)

Bilateral sabre-like tibial deformity in secondary syphilis: case report. Kumar B, et al. **Genitourin Med** 1989 Dec; 65(6):394–6

Bone and joint manifestations of sickle cell anaemia. Bennett OM, et al. **J Bone Joint Surg [Br]** 1990 May;72(3):494–9

Mechanisms of bone destruction in multiple myeloma: the importance of an unbalanced process in determining the severity of lytic bone disease. Bataille R, et al. **J Clin Oncol** 1989 Dec;7(12):1909–14

Symptoms of stress predict musculoskeletal disorders [letter; comment] Hasan J. **J Epidemiol Community Health** 1989 Dec;43(4):395 Comment on: J Epidemiol Community Health 1989 Sep;43(3):293–300.

Orthopaedic manifestations in congenitally insensate patients. Guidera KJ, et al. **J Pediatr Orthop** 1990 Jul–Aug; 10(4):514–21

Granulomatous reaction in total hip arthroplasty [letter; comment] Malcolm AJ. **Lancet** 1990 Mar 10;335(8689):602 Comment on: Lancet 1990 Jan 27;335(8683):203–4.

Environmentally induced disorders of the musculoskeletal system. Parniapour M, et al. **Med Clin North Am** 1990 Mar; 74(2):347–59 (59 ref.)

Diagnosis and management of bone disorders in chronic renal failure and dialyzed patients. Tzamaloukas AH. **Med Clin North Am** 1990 Jul;74(4):961–74 (53 ref.)

Bone end sclerosis. Noël C, et al. **Nephron** 1989;53(2):168–70

Musculoskeletal problems in hemoglobinopathy. Johanson NA. **Orthop Clin North Am** 1990 Jan;21(1):191–8

Musculoskeletal manifestations of infection with human immunodeficiency virus. Buskila D, et al. **Rev Infect Dis** 1990 Mar–Apr;12(2):223–35 (133 ref.)

Effect of duration of employment in piecework on severe disability among female garment workers. Brisson C, et al. **Scand J Work Environ Health** 1989 Oct;15(5):329–34

[Osseous sarcoidosis with destructive development] Michaud V, et al. **Ann Dermatol Venereol** 1989;116(11):820–2 (Fre)

[Treatment of systemic lupus erythematosus: the point of view of the rheumatologist] Kahn MF. **Ann Med Interne (Paris)** 1990;141(3):269–71 (Fre)

[A lacuna of the skull disclosing polyvisceral sarcoidosis (letter)] Ménard O, et al. **Ann Med Interne (Paris)** 1989; 140(6):534–5 (Fre)

[Stress fractures. Fatigue fractures and bone insufficiency fractures] Péré P, et al. **Presse Med** 1990 Apr 14; 19(15):694–5 (Fre)

[Bilateral genu flessum in a patient with Cooley's disease] Argenson JN, et al. **Rev Chir Orthop** 1989;75(3):191–4 (Eng. Abstr.) (Fre)

[Femoropatellar complications of 87 total condylar and Insall Burstein knee joint prostheses] Pascarel X, et al. **Rev Chir Orthop** 1989;75(7):459–65 (Eng. Abstr.) (Fre)

[Bone pain in adults as the first symptom of late congenital syphilis] Rauh G, et al. **Dtsch Med Wochenschr** 1990 Apr 6;115(14):534–8 (Eng. Abstr.) (Ger)

[The efficacy of x-ray skeletal diagnosis in chronic alcoholics] Reumuth HJ, et al. **Radiol Diagn (Berl)** 1989; 30(3):281–9 (Eng. Abstr.) (Ger)

[Modeling hyperparathyroid osteodystrophy in animals] Spuzjak MI. **Radiol Diagn (Berl)** 1989;30(6):697–702 (Eng. Abstr.) (Ger)

[Weakness, bone pain (clinical conference)] Baumeister B, et al. **Schweiz Rundsch Med Prax** 1990 Jun 5;79(23):737–9 (Eng. Abstr.) (Ger)

[Osteo-articular involvement in microdrepanocytic anemia] De Palma L, et al. **Arch Putti Chir Organi Mov** 1989; 37(2):371–8 (13 ref.) (Eng. Abstr.) (Ita)

[Musculoskeletal diseases. A review of musculoskeletal diseases and environment] Kjustad L. **Tidsskr Nor Laegeforen** 1989 Oct 10;109(28):2905–7 (Eng. Abstr.) (Nor)

[Severe bone changes in acute lymphoblastic leukemia of children] Zaręba A, et al. **Pediatr Pol** 1988 Dec; 63(12):792–7 (Pol)

[Mechanisms of destruction and atrophy of the cartilage and bone from the point of view of a rheumatologist] Havelka S. **Revmatologiia (Mosk)** 1989 Jul–Sep;(3):47–51 (Rus)

[A case of a generalized form of hyperparathyroid osteodystrophy] Lipko AA, et al. **Vestn Rentgenol Radiol** 1989 Nov–Dec;(6):72–4 (Rus)

[Value of bone gammagraphy and pain in the follow-up of carcinoma of the prostate] Ruiz Cerdá JL, et al. **Arch Esp Urol** 1989;42 Suppl 2:206–8 (Eng. Abstr.) (Spa)

[Study of bone involvement in hypothyroidism determining the blood levels of osteocalcin] León Sanz M, et al. **Rev Clin Esp** 1989 Nov;185(7):345–7 (Eng. Abstr.) (Spa)

[Unsuitable posture at work causes musculoskeletal injuries among stereo operators] Järup L, et al. **Lakartidningen** 1989 Nov 8;86(45):3892–3 (Swe)

GENETICS

Congenital and genetic disorders affecting the musculoskeletal system. Szer IS. **Curr Opin Rheumatol** 1989 Oct;1(3):272–7 (14 ref.)

HISTORY

Anatomical and osteopathologic reference collections for podiatric research. Owsley DW, et al. **J Am Podiatr Med Assoc** 1989 Nov;79(11):572–5

Bone disease in the Anglo-Saxons. Lorimer DH. **Radiogr Today** 1989 Mar;55(622):11–3

METABOLISM

Clinical disorders of renal tubular phosphate transport. Levi M. **Am J Med Sci** 1989 Sep;298(3):194–205 (92 ref.)

Non-apatitic environments in bone mineral: FT-IR detection, biological properties and changes in several disease states. Rey C, et al. **Connect Tissue Res** 1989; 21(1–4):267–73

Computed tomographic assessment of vertebral bone mineral in childhood. Fredericks BJ, et al. **Skeletal Radiol** 1990; 19(2):99–102

MICROBIOLOGY

An unusual presentation of Salmonella infection [letter] Chattopadhyay B, et al. **J Infect** 1990 May;20(3):265–6

PATHOLOGY

Sediment cytology in bone biopsies. Pai N, et al. **Acta Cytol** 1990 May–Jun;34(3):409–12

Bilateral cholesterol granulomas of the petrous apices: case report and review. Linstrom CJ, et al. **Am J Otol** 1989 Sep;10(5):393–401 (29 ref.)

Echinococcosis of bone: clinico-laboratory findings and differential diagnostic problems. Markakis P, et al. **Arch Anat Cytol Pathol** 1990;38(3):92–4

Ultrastructural features of the osteoid of patients with fibrogenesis imperfecta ossium. Ralphs JR, et al. **Bone** 1989; 10(4):243–9

Fine-needle aspiration of bone lesions. Bennett JD, et al. **Can Assoc Radiol J** 1990 Apr;41(2):65–8

The prognostic significance of bone lesions in multiple myeloma [letter] Bettini R, et al. **Haematologica (Pavia)** 1989 May–Jun;74(3):335

Rhinosporidioma of bone—a case report. Aravindan KP, et al. **Indian J Pathol Microbiol** 1989 Oct;32(4):312–3

Skeletal fluorosis: histomorphometric findings. Boivin G, et al. **J Bone Miner Res** 1990 Mar;5 Suppl 1:S185–9

Pathology of the otic capsule. Milroy CM, et al. **J Laryngol Otol** 1990 Feb;104(2):83–90

A simplified aluminum stain in paraffin sections of bone from hemodialysis patients. Ohtsuki Y, et al. **Stain Technol** 1989 Mar;64(2):55–9

[Importance of osteologic collections in museums of pathologic anatomy as materials for study and comparison in paleopathology] Fulcheri E. **Pathologica** 1989 May–Jun; 81(1073):315–24 (25 ref.) (Ita)

PREVENTION & CONTROL

Prevention of osteitis fibrosa, aluminium bone disease and soft-tissue calcification in dialysis patients: a long-term comparison of moderate doses of oral calcium +/- Mg(OH)2 vs Al(OH)3 +/- 1 alpha OH vitamin D3. Morinière P, et al. **Nephrol Dial Transplant** 1989; 4(12):1045–53

Disappearance of aluminic bone disease in a long term asymptomatic dialysis population restricting Al(OH)3 intake: emergence of an idiopathic adynamic bone disease not related to aluminum. Morinière P, et al. **Nephron** 1989; 53(2):93–101

PSYCHOLOGY

[Psychosocial aspects in diseases of the locomotor system] Jähnig M, et al. **Beitr Orthop Traumatol** 1990 Mar; 37(3):160–4 (Eng. Abstr.) (Ger)

[How important are psychosocial factors in musculoskeletal disorders?] Linton SJ, et al. **Lakartidningen** 1989 Dec 6; 86(49):4341–2, 4347 (Swe)

RADIOGRAPHY

Methods and applications of three-dimensional imaging in orthopedics. Englmeier KH, et al. **Arch Orthop Trauma Surg** 1990;109(4):186–90

Epidermoid and cholesterol cysts in the apex of the petrous bone. King TT, et al. **Br J Neurosurg** 1989;3(4):451–61

Pseudopermeative skeletal lesions. Helms CA, et al. **Br J Radiol** 1990 Jun;63(750):461–7

Fibrous cortical defect. Radiologic analysis of 6 cases. Gong YR. **Chin Med J [Engl]** 1989 Nov;102(11):868–71

Eosinophilic granuloma. The management of solitary lesions of bone. Greis PE, et al. **Clin Orthop** 1990 Aug;(257):204–11 (21 ref.)

CT diagnosis and differential diagnosis of otodystrophic lesions of the temporal bone. d'Archambeau O, et al. **Eur J Radiol** 1990 Jul–Aug;11(1):22–30

The skeletal manifestations of congenital syphilis. A review of 197 cases. Rasool MN, et al. **J Bone Joint Surg [Br]** 1989 Nov;71(5):752–5

Radiographic imaging in orthopedics. **Orthop Clin North Am** 1990 Jul;21(3):405–624

Craniofacial dysostosis (Crouzon's disease) associated with metaphyseal dysplasia (Pyle's disease) in the same subject. A roentgenologic study. Nardi P, et al. **Panminerva Med** 1989 Oct–Dec;31(4):192–7

Comparison of digital and conventional musculoskeletal radiography: an observer performance study. Wegryn SA, et al. **Radiology** 1990 Apr;175(1):225–8

The chest and the skeleton: radiological correlations. Schultz E, et al. **Semin Roentgenol** 1989 Oct;24(4):259–80 (77 ref.)

Anterior chest wall involvement in patients with pustulosis palmoplantaris. Jurik AG. **Skeletal Radiol** 1990;19(4):271–7

Case report 594: Osseous sarcoidosis (osteolytic) of lumbar spine and pelvis. Resnik CS, et al. **Skeletal Radiol** 1990; 19(1):79–81

Giant cell reparative granuloma of the skull base mimicking an intracranial tumor. Case report and review of the literature. Ciappetta P, et al. **Surg Neurol** 1990 Jan; 33(1):52–6

[Some problems concerning the radiologic diagnosis of eosinophilic granuloma of the bone] Li JM. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Jun;23(3):168–9 (Eng. Abstr.) (Chi)

[3-dimensional reconstructions of the skull, axial and extremity skeleton] Langer M, et al. **Digitale Bilddiagn** 1989 Sep;9(3):89–96 (Eng. Abstr.) (Ger)

[Determination of rotation errors of the tibia using 2 standard roentgen images] Meyer HH. **Unfallchirurg** 1989 Aug; 92(8):381–93 (Eng. Abstr.) (Ger)

[X-ray diagnosis of echinococcosis of the bones] Marin IM, et al. **Vestn Rentgenol Radiol** 1989 Nov–Dec;(6):20–4 (Eng. Abstr.) (Rus)

[Clinico-roentgenologic signs of osteo- and arthropathy in children with syringomyelia] Mirganiev ShM, et al. **Vestn Rentgenol Radiol** 1989 Sep–Oct;(5):16–20 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

Bone scans and ballet dancers [letter; comment] Goldfarb CR, et al. **AJR Am J Roentgenol** 1990 Mar;154(3):657–8
Comment on: AJR Am J Roentgenol 1988 Apr;150(4):851–5.

The differential diagnosis of benign and malignant bony lesions in bone scanning. Using the ratio of radiouptake at different times. Guan SI, et al. **Clin Nucl Med** 1990 Jun; 15(6):424–7

Bone imaging in patients with unexpected elevation of serum alkaline phosphatase. Salomon CG, et al. **Clin Nucl Med** 1989 Aug;14(8):567–70

Bone scanning in metabolic and endocrine bone disease. Clarke SE, et al. **Endocrinol Metab Clin North Am** 1989 Dec;18(4):977–93 (61 ref.)

Bone lesions mimicking disseminated malignancy after remission of thoracic sarcoidosis. Jager J, et al. **Neth J Med** 1990 Apr;36(3–4):204–6

Role of thallium-201 in the diagnosis of solitary bone lesions. Elgazzar AH, et al. **Nucl Med Commun** 1989 Jul; 10(7):477–85

1, 2, 3, or 4 phase bone imaging—how many are necessary? [editorial] Fogelman I. **Nucl Med Commun** 1990 Jan; 11(1):7–9

Bone and gallium scintigraphy in a patient with bone sarcoidosis. Hoshi H, et al. **Radiat Med** 1989 Jul–Aug; 7(4):178–80

Metastatic neuroblastoma: new abnormalities on bone scintigraphy may not indicate tumour recurrence. Hall-Craggs MA, et al. **Skeletal Radiol** 1990;19(1):33–6

The role of single photon emission computed tomography in bone scintigraphy. Murray IP, et al. **Skeletal Radiol** 1989; 18(7):493–505 (36 ref.)

[Specificity and indications of bone scan in non-neoplastic bone and joint disease in children. A study of seventy cases] Griffet J, et al. **Ann Pediatr (Paris)** 1989 Dec;36(10):675–9 (Eng. Abstr.) (Fre)

[Bone scintigraphy] Moretti J. **J Radiol** 1989 Aug–Sep; 70(8–9):439–41 (Fre)

[The validity of selected nuclear medicine imaging procedures (brain, skeletal, and hepatobiliary diagnosis)] Deckart H, et al. **Radiol Diagn (Berl)** 1990;31(2):153–61 (Eng. Abstr.) (Ger)

REHABILITATION

[Physical therapy in medical rehabilitation] Burkhardt E. **Z Arztl Fortbild (Jena)** 1989;83(19):985–8 (Ger)

SURGERY

Giant epidermoid cysts of the skull. Dias PS, et al. **Br J Neurosurg** 1989;3(1):51–7

China's achievements in orthopedics. Guo SF, et al. **Chin Med J [Engl]** 1989 Nov;102(11):815–8 (0 ref.)

Treatment of benign lesions of the femoral head and neck. Jaffe KA, et al. **Clin Orthop** 1990 Aug;(257):134–7

Art and learning. Catterall A. **J Pediatr Orthop** 1990 Sep–Oct;10(5):670–2

Subcochlear approach for cholesterol granulomas of the inferior petrous apex. Ghorayeb BY, et al. **Otolaryngol Head Neck Surg** 1990 Jul;103(1):60–5

[Revascularized bone grafts. Technics, indications and results] Schuind F, et al. **Acta Orthop Belg** 1989; 55(2):135–49 (Eng. Abstr.) (Fre)

[Axial correction of the legs of children using the Ilizarov method. Apropos fo 22 cases] Plawecki S, et al. **Chir Pediatr** 1990;31(1):35–42 (Eng. Abstr.) (Fre)

[Report of experiences with 31 surgically treated patients with deformity of the femur shaft] Winter T, et al. **Unfallchirurgie** 1989 Dec;15(6):295–302 (Eng. Abstr.) (Ger)

[5 years' infection statistics of an orthopedic clinic—pathogen spectrum, resistance status, therapeutic consequences] Braun M. **Z Orthop** 1989 Jul–Aug;127(4):471–3 (Eng. Abstr.) (Ger)

[Orthopedic basic documentation: requirements of diagnostic statistics and results in Göttingen university clinics] Graubner B. **Z Orthop** 1989 Jul–Aug;127(4):437–44 (Eng. Abstr.) (Ger)

[The importance of nosocomial infections for patients and socio-political representatives] Härle A. **Z Orthop** 1989 Jul–Aug;127(4):463–6 (Eng. Abstr.) (Ger)

[Prevention of infection: facts and myths] Kappstein I, et al. **Z Orthop** 1989 Jul–Aug;127(4):467–70 (11 ref.) (Eng. Abstr.) (Ger)

[The informational value of L1 statistics required as of 1988 (Federal Law IV) exemplified by an orthopedic university clinic] Schepp HJ, et al. **Z Orthop** 1989 Jul–Aug, 127(4):448–50 (Eng. Abstr.) (Ger)

[The reliability and sources of error in basic clinical documentation—a critical report of experiences] Schmidt-Ohlemann M, et al. **Z Orthop** 1989 Jul–Aug; 127(4):445–7 (Eng. Abstr.) (Ger)

[Rheumatic syndromes in bone diseases—orthopedic treatment] Thabe H. **Z Rheumatol** 1989;48 Suppl 1:90–7 (15 ref.) (Ger)

[Extensive echinococcosis of the femur] Gorun N, et al. **Rev Chir [Chir]** 1989 Nov–Dec;38(6):465–72 (30 ref.) (Rum)

[Psychological preparation of children with orthopedic diseases for surgical treatment] Mamaichuk II, et al. **Ortop Travmatol Protez** 1989 Jul;(7):60–4 (Rus)

THERAPY

The destabilization of an abnormal physiological balanced situation, chronic musculoskeletal pain, utilizing magnetic biological device. Stewart DJ, et al. **Acta Med Hung** 1989; 46(4):323–37

Allied health professionals in rheumatology. Patient education in arthritis and musculoskeletal diseases [editorial] Dequeker J, et al. **Clin Rheumatol** 1990 Jun; 9(2):165–7

Fundamental and practical aspects of therapeutic uses of pulsed electromagnetic fields (PEMFs). Bassett CA. **Crit Rev Biomed Eng** 1989;17(5):451–529 (330 ref.)

Histiocytosis X in bone only. Berry DH, et al. **Med Pediatr Oncol** 1990;18(4):292–4

[Therapeutic effect of low-fluorine drinking water on fluorosis of bone] Song XK. **Chung Hua I Hsueh Tsa Chih** 1989 Sep;69(9):491–2, 34 (Eng. Abstr.) (Chi)

[Application of "cold" laser (I.R. with semiconductors) as antalgic and anti-inflammatory therapy in osteo-articular and musculotendinous pathologies] Petrachi F, et al. **Clin Ter** 1990 May 31;133(4):219–22 (Eng. Abstr.) (Ita)

[Proceedings of the 63d meeting of the Japanese Orthopaedic Association. Nagoya, 13–15 April 1990. Abstracts] **Nippon Seikeigeka Gakkai Zasshi** 1990 Feb;64(2):S1–409 (Jpn)

VETERINARY

Skeletal and dental pathology of free-ranging mountain gorillas. Lovell NC. **Am J Phys Anthropol** 1990 Mar; 81(3):399–412

Pharmacokinetics of phenylbutazone in mature Holstein bulls: steady-state kinetics after multiple oral dosing. Williams RJ, et al. **Am J Vet Res** 1990 Mar;51(3):371–5

Musculo-skeletal lesions in adult male broiler breeder fowls and their relationships with body weight and fertility at 60 weeks of age. Hocking PM, et al. **Br Poult Sci** 1989 Dec;30(4):777–84

Regression of hypertrophic osteopathy in a filly following successful management of an intrathoracic abscess. Chaffin MK, et al. **Equine Vet J** 1990 Jan;22(1):62–5

Full-length diaphyseal sequestrum as a consequence of segmental transverse fractures of the large metatarsal bone in a calf. Squire KR, et al. **J Am Vet Med Assoc** 1990 Jun 15;196(12):2006–8

Disseminated skeletal lesions associated with pathogenic actinomycetes in a Pygmy hog (Sus salvanius). Macdonald AA, et al. **J Comp Pathol** 1990 May;102(4):385–91

Dietary aspects of developmental orthopedic disease in young horses. Kronfeld DS, et al.
Vet Clin North Am Equine Pract 1990 Aug;6(2):451–65 (43 ref.)

BONE DISEASES, DEVELOPMENTAL

Mild form of Jeune syndrome in two sisters. Giorgi PL, et al. **Am J Med Genet** 1990 Feb;35(2):280–2

Osteoglophonic dysplasia [letter; comment] Greenberg F, et al. **J Med Genet** 1990 Mar;27(3):213 Comment on: J Med Genet 1989 Sep;26(9):572–6.

Rothmund–Thomson syndrome: a case report. Roth DE, et al. **Pediatr Dermatol** 1989 Dec;6(4):321–4

The management of intoeing: a review. Briggs RG, et al. **S D J Med** 1990 Feb;43(2):13–6 (6 ref.)

CHEMICALLY INDUCED

Distal phalangeal hypoplasia in children with prenatal phenytoin exposure: results of a controlled anthropometric study. Gaily E. **Am J Med Genet** 1990 Apr;35(4):574–8

Studies of methotrexate-induced limb dysplasias utilizing a 51chromium release assay. Brewton RG, et al.
Teratology 1990 Feb;41(2):211–21

CLASSIFICATION

Radiologic nosology of bone dysplasias. Spranger J.
Am J Med Genet 1989 Sep;34(1):96–104 (48 ref.)

[Bone diseases: review and classification of congenital developmental disorders] Lenz W.
Monatsschr Kinderheilkd 1989 Aug;137(8):428–37 (45 ref.) (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Ocular and systemic findings in the Aarskog (facial–digital–genital) syndrome. Brodsky MC, et al.
Am J Ophthalmol 1990 Apr 15;109(4):450–6

Glaucoma in oculo-dento-osseous dysplasia. Traboulsi EI, et al. **Am J Ophthalmol** 1990 Mar 15;109(3):310–3

Mixed-sclerosing-bone-dystrophy (osteopathia striata and osteopetrosis) and Cushing's syndrome. Proto G, et al.
Bone 1990;11(3):199–203

Lateral frontal encephalocele associated with dysplasia of orbit, eyeball, and eyelid. Kulali A, et al.
Childs Nerv Syst 1990 Jan;6(1):54–6

Diaphyseal dysplasia [corrected] with anemia and thrombocytopenia [letter] [published erratum appears in Indian Pediatr 1989 Nov;26(11):1145] Bagga A, et al.
Indian Pediatr 1989 Nov;26(11):1162–3

[Duplication of mouth and mandible. Apropos of a case] Chaouachi B, et al. **Ann Pediatr (Paris)** 1990 Mar; 37(3):193–4 (Eng. Abstr.) **(Fre)**

[Marshall–Smith syndrome with clinodactyly, joint instability and retarded language development] de la Torre Cecilia MC, et al. **An Esp Pediatr** 1989 Aug;31(2):148–51 **(Spa)**

[Infantile appearance at age 16 in a girl with hypothyroidism and total situs inversus] López de la Torre Casares M, et al. **An Esp Pediatr** 1989 Aug;31(2):158–60 **(Spa)**

CONGENITAL

Rotational deformities of the tibia and foot in preterm infants. Katz K, et al. **J Pediatr Orthop** 1990 Jul–Aug;10(4):483–5

DIAGNOSIS

Bone dysplasias: the prenatal diagnostic challenge. Escobar LF, et al. **Am J Med Genet** 1990 Aug;36(4):488–94

Autosomal recessive inheritance of a syndrome of hypertelorism, hypospadias, and tetralogy of Fallot? Farag TI, et al. **Am J Med Genet** 1990 Apr;35(4):516–8

Brief historical note on the Brachmann–de Lange syndrome: a patient closely resembling the case described by Brachmann in 1916. Meinecke P, et al.
Am J Med Genet 1990 Mar;35(3):449–50

A "new" skeletal dysplasia in two unrelated boys. Saul RA, et al. **Am J Med Genet** 1990 Mar;35(3):388–93

Potential mistakes in hip-joint sonography. Melzer C, et al.
Arch Orthop Trauma Surg 1990;109(3):126–30

The prenatal diagnosis of skeletal dysplasias. Romero R, et al. **Clin Diagn Ultrasound** 1989;25:163–202 (7 ref.)

The fetal skeleton; ultrasonographic evaluation of the normal growth. Brons JT, et al.
Eur J Obstet Gynecol Reprod Biol 1990 Jan–Feb; 34(1–2):21–36

Ratios between growth parameters for the prenatal ultrasonographic diagnosis of skeletal dysplasias. Brons JT, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jan–Feb; 34(1–2):37–46

Osteoglophonic dysplasia [see comments] Beighton P.
J Med Genet 1989 Sep;26(9):572–6 Comment in: J Med Genet 1990 Mar;27(3):213.

Yunis–Varon syndrome with severe osteodysplasty. Garrett C, et al. **J Med Genet** 1990 Feb;27(2):114–21

A case of atelosteogenesis. Temple K, et al.
J Med Genet 1990 Mar;27(3):194–7

Diagnosis of von Recklinghausen neurofibromatosis and the Albright syndrome. Two case reports. Bachmann Andersen L, et al. **Neurofibromatosis** 1988;1(2):120–3

Pediatric approach to the skeletal dysplasias. Wilson GN.
Pediatr Ann 1990 Feb;19(2):141–2, 147–51 (6 ref.)

Unilateral congenital short femur: a case report. Ashkenazy M, et al. **Prenat Diagn** 1990 Jan;10(1):67–70

In utero ultrasonographic features of campomelic dysplasia. Cordone M, et al. **Prenat Diagn** 1989 Nov;9(11):745–50

Prenatal diagnosis of Opitz (BBB) syndrome in the second trimester by ultrasound detection of hypospadias and hypertelorism. Hogdall C, et al. **Prenat Diagn** 1989 Nov; 9(11):783–93

Analysis of 4628 cases in the genetic counselling clinic of PUMC Hospital. Ye LZ, et al.
Proc Chin Acad Med Sci Peking Union Med Coll 1989; 4(3):126–30

Angular deformities of the tibia in children: a review of three cases. Briggs RG, et al. **S D J Med** 1990 May;43(5):5–9

[Benign fibrous histiocytoma of the distal femoral metaphysis. Differential diagnosis between neoplasm and growth disorder with identical morphology] Exner GU, et al.
Z Orthop 1990 May–Jun;128(3):308–12 (Eng. Abstr.) **(Ger)**

[Prenatal diagnosis of hereditary systemic bone diseases] Grechanina EIa, et al. **Ortop Travmatol Protez** 1989 Jul; (7):48–52 **(Rus)**

DIET THERAPY

[Value of a phosphorus supplemented formula for premature infants] Narbouton R, et al. **Ann Pediatr (Paris)** 1989 Dec; 36(10):703–6 (Eng. Abstr.) **(Fre)**

ETIOLOGY

A new lethal brittle bone syndrome with increased amount of type V collagen in a patient. Bonaventure J, et al.
Am J Med Genet 1989 Jul;33(3):299–310

Abnormal bones in a 25-year-old man. Braeuning MP.
Indiana Med 1989 Aug;82(8):606–7

Growth retardation after experimental limb lengthening by epiphyseal distraction. Fjeld TO, et al.
J Pediatr Orthop 1990 Jul–Aug;10(4):463–6

Distal tibial physeal arrest: a complication of meningococcal septicemia. O'Sullivan ME, et al. **J Pediatr Orthop** 1990 Jul–Aug;10(4):549–50

Extrinsic fetal akinesia and skeletal development: a study in oligohydramnios sequence. Palacios J, et al. **Teratology** 1990 Jul;42(1):1–5

[Coxa vara. Isolated growth of the greater trochanter. Prevention–treatment] Litt R, et al. **Acta Orthop Belg** 1990; 56(1 (Pt B)):301–6 (Eng. Abstr.) **(Fre)**

[Growth and bone maturity during congenital hypothyroidism screened in the neonatal period. Apropos of 82 cases] Moreno L, et al. **Arch Fr Pediatr** 1989 Dec; 46(10):723–8 (Eng. Abstr.) **(Fre)**

[Forms of fetal dwarfism—attempt at prenatal differential diagnosis] Wisser J, et al. **Gynakol Rundsch** 1989;29 Suppl 2:268–9 **(Ger)**

GENETICS

20th anniversary, Clinical Genetics Conference. Heritable disorders of connective tissue and skeletal dysplasias. July 10–13, 1988, Baltimore, Maryland. Proceedings.
Am J Med Genet 1989 Sep;34(1):1–147

Epiphyseal dysplasia with coxa vara, microcephaly, and normal intelligence in sibs: expanded spectrum of Lowry–Wood syndrome? Hankenson LG, et al.
Am J Med Genet 1989 Jul;33(3):336–40

RAPADILINO syndrome with radial and patellar aplasia/hypoplasia as main manifestations. Kääriäinen H, et al. **Am J Med Genet** 1989 Jul;33(3):346–51

Epiphyseal dysplasia, microcephaly, nystagmus, and retinitis pigmentosa. Lowry RB, et al. **Am J Med Genet** 1989 Jul; 33(3):341–5

Autosomal recessive Robinow syndrome. Teebi AS.
Am J Med Genet 1990 Jan;35(1):64–8

Familial expansile osteolysis. Wallace RG, et al.
Clin Orthop 1989 Nov;(248):265–77

Heritable metabolic and dysplastic bone diseases. Whyte MP.
Endocrinol Metab Clin North Am 1990 Mar;19(1):133–73 (150 ref.)

Psychosocial reactions in the spouses of patients suffering polycystic lipomembranous osteodysplasia with sclerosing leukoencephalopathy. Hakola HP. **J Clin Psychiatry** 1990 Jan;51(1):21–4

A "new" epi-metaphyseal skeletal dysplasia in four members of a family. Fryns JP, et al. **J Genet Hum** 1989 Sep: 37(3):237–41

Exclusion of COL2A1 as a candidate gene in a family with Wagner–Stickler syndrome. Fryer AE, et al.
J Med Genet 1990 Feb;27(2):91–3

Microspherophakia–metaphyseal dysplasia: a 'new' dominantly inherited bone dysplasia with severe eye involvement. Verloes A, et al. **J Med Genet** 1990 Jul; 27(7):467–71

Rothmund–Thomson syndrome in two siblings. Nanda A, et al. **Pediatr Dermatol** 1989 Dec;6(4):325–8

[Radius–femoral dysplasia. A new form of hereditary metaphyseal dysplasia] Braun HS, et al. **Cas Lek Cesk** 1989 Aug 4;128(32):1017–8 (Eng. Abstr.) **(Cze)**

[Optic atrophy in children in Pyle's craniometaphyseal dysplasia] Auclin F, et al. **Bull Soc Ophtalmol Fr** 1989 Aug–Sep;89(8–9):923–4 **(Fre)**

[Multiple pterygium syndrome in children. 7 cases] Fenoll B, et al. **Rev Chir Orthop** 1990;76(2):102–11 (Eng. Abstr.) **(Fre)**

[Hypertelorism–hypospadias (BBB) syndrome. 2 additional family studies] Krause M, et al.
Monatsschr Kinderheilkd 1990 Jan;138(1):31–3 (Eng. Abstr.) **(Ger)**

[A new heart defect–brachydactyly syndrome] Göblyös P, et al. **Orv Hetil** 1989 Oct 1;130(40):2151–3 (Eng. Abstr.) **(Hun)**

[Analysis of the metacarpophalangeal pattern profile in a male with cerebral gigantism (Sotos syndrome)] Oliván Gonzalvo G, et al. **An Esp Pediatr** 1990 May;32(5):455–6 **(Spa)**

IMMUNOLOGY

Associations of the skeletal and immune systems. Hong R.
Am J Med Genet 1989 Sep;34(1):55–9 (16 ref.)

METABOLISM

Sex steroid hormone receptors in normal and dysplastic bone disorders in children. Pensler JM, et al.
J Bone Miner Res 1990 May;5(5):493–8

Diastrophic dysplasia: evidence against a defect of type II collagen. Murray LW, et al. **Matrix** 1990 Jan;9(6):459–67

The effects of prenatal protein-energy malnutrition on ossification of fetal rat bones: a biochemical study. Miwa T, et al. **Orthopedics** 1990 May;13(5):541–8

PATHOLOGY

Report of a case: acromesomelic dysplasia: radiologic, clinical, and pathological study. Fernández del Moral R, et al. **Am J Med Genet** 1989 Jul;33(3):415–9

Fibrous metaphyseal defect. Ritschl P, et al. **Int Orthop** 1990; 14(2):205–11

Weaver syndrome and instability of the upper cervical spine. Muhonen MG, et al. **J Pediatr** 1990 Apr;116(4):596–9

Variability in radiographic measurement of bowleg deformity in children. Henderson RC, et al. **J Pediatr Orthop** 1990 Jul–Aug;10(4):491–4

A case of Marshall–Smith or Weaver syndrome. Smyth RL, et al. **J R Soc Med** 1989 Nov;82(11):682–3

PHYSIOPATHOLOGY

Saethre–Chotzen syndrome associated with defective neutrophil chemotaxis. Etzioni A, et al.
Acta Paediatr Scand 1990 Mar;79(3):375–9

Experimental tibial fractures in rabbits simulating proximal tibial metaphyseal fractures in children. Aronson DD, et al. **Clin Orthop** 1990 Jun;(255):61–7

The management of intoeing: a review. Briggs RG, et al. **S D J Med** 1990 Feb;43(2):13–6 (6 ref.)

[Importance of the position of the greater trochanter] Maquet P. **Acta Orthop Belg** 1990;56(1 (Pt B)):307–22 (Eng. Abstr.) **(Fre)**

RADIOGRAPHY

Correlative imaging of sphenoid dysplasia accompanying neurofibromatosis. Harkens K, et al.
Ann Otol Rhinol Laryngol 1990 Feb;99(2 Pt 1):137–41

Pathological fracture of the femoral shaft in a case of Servelle–Martorell syndrome (phleboectatic osteohypoplastic angiodysplasia with associated arterio–venous malformation). Gibbon WW, et al.
Br J Radiol 1990 Jul;63(751):574–6

Unilateral dysplasia of the superior articular facet of the axis: a case report. Steinberg EL, et al. **J Pediatr Orthop** 1990 Jul–Aug;10(4):540–1

Usefulness of a short femur in the in utero detection of skeletal dysplasias. Kurtz AB, et al. **Radiology** 1990 Oct; 177(1):197–200

Spondylometaphyseal dysplasia, corner fracture type: a heritable condition associated with coxa vara. Langer LO Jr, et al. **Radiology** 1990 Jun;175(3):761–6

The radiographic features of familial expansile osteolysis. Crone MD, et al. **Skeletal Radiol** 1990;19(4):245–50

[Dysplasia of the femoral trochlea] Dejour H, et al.
Rev Chir Orthop 1990;76(1):45–54 (Eng. Abstr.) **(Fre)**

[Developmental Weismann–Netter and Stuhl toxopachyosteosis in adults] Durocher AM, et al.
Rev Rhum Mal Osteoartic 1990 Mar;57(3):229–31 **(Fre)**

[The x-ray picture of cheirolumbar dysostosis] Kretzschmar R. **Radiologe** 1989 Sep;29(9):447–50 (Eng. Abstr.) **(Ger)**

SURGERY

Computerized tomographic analysis of orbital hypertelorism repair: spatial relationship of the globe and the bony orbit. Hoffman WY, et al. **Ann Plast Surg** 1990 Aug;25(2):124–31

Infantile tibia vara. Johnston CE 2d. **Clin Orthop** 1990 Jun; (255):13–23

Correction of distal femoral deformity. Knapp DR Jr, et al. **Clin Orthop** 1990 Jun;(255):75–80

Triple osteotomy of the pelvis. A review of 51 cases. Kooijman MA, et al. **Clin Orthop** 1990 Jun;(255):133–7

Femoral head autografting with total hip arthroplasty for lateral acetabular dysplasia. A 12-year experience. Wolfgang GL. **Clin Orthop** 1990 Jun;(255):173–85

Bipartite patella in the adolescent: results of surgical excision. Bourne MH, et al. **J Pediatr Orthop** 1990 Jan–Feb; 10(1):69–73

Effect of interposition material on mechanical behavior in partial physeal resection: a canine model. Bueche MJ, et al. **J Pediatr Orthop** 1990 Jul–Aug;10(4):459–62

Hypertelorism correction in the young child. McCarthy JG, et al. **Plast Reconstr Surg** 1990 Aug;86(2):214–25; discussion 226–8

[The operative treatment of orbital hypertelorism (report of a case)] Chen RT. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):224–6 **(Chi)**

[The fate of children undergoing bone lengthening in congenital hypoplasia of the legs] Dutoit M, et al. **Rev Chir Orthop** 1990;76(1):1–7 (Eng. Abstr.) **(Fre)**

THERAPY

Late-onset tibia vara (Blount's disease). Current concepts. Thompson GH, et al. **Clin Orthop** 1990 Jun;(255):24–35 (53 ref.)

BONE DISEASES, METABOLIC

[Osteopenia in premature children: an emerging problem] Weber G, et al. **Minerva Pediatr** 1989 Jul;41(7):347–52 (48 ref.) (Eng. Abstr.) **(Ita)**

BLOOD

Studies on the clinical significance of serum alpha 2 HS-glycoprotein measurement in metabolic bone diseases. Scarnecchia L, et al. **Clin Chim Acta** 1990 Aug 15; 189(2):245–8

[Osteocalcin and endocrine pathology] Sartorio A, et al. **Minerva Endocrinol** 1989 Jul–Sep;14(3):185–92 (62 ref.) (Eng. Abstr.) **(Ita)**

[Serum osteocalcin and bone turnover in hyperthyroidism] León Sanz M, et al. **Rev Clin Esp** 1990 Mar;186(4):155–8 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Treatment of steroid-induced osteopenia with calcitonin in corticosteroid-dependent asthma. A one-year follow-up study. Luengo M, et al. **Am Rev Respir Dis** 1990 Jul; 142(1):104–7

Bone loss in response to long-term glucocorticoid therapy. LoCascio V, et al. **Bone Miner** 1990 Jan;8(1):39–51

Osteopenia in pregnancy during long-term heparin treatment: a radiological study post partum. Dahlman T, et al. **Br J Obstet Gynaecol** 1990 Mar;97(3):221–8

Hazards of gallium for the treatment of Paget's disease of bone [letter; comment] **Lancet** 1990 Feb 24;335(8687):477 Comment on: Lancet 1990 Jan 13;335(8681):72–5.

COMPLICATIONS

Insufficiency fracture of the sternum caused by osteopenia: plain film findings in seven patients. Chen C, et al. **AJR Am J Roentgenol** 1990 May;154(5):1025–7

Management of orthopedic complications of metabolic bone disease. Stulberg BN, et al. **Cleve Clin J Med** 1989 Oct; 56(7):696–703 (20 ref.)

The association between renal dysfunction and osteopenia in environmental cadmium-exposed subjects. Kido T, et al. **Environ Res** 1990 Feb;51(1):71–82

Prognostic significance of osteopenia and immunoparesis at presentation in patients with solitary myeloma of bone. Jackson A, et al. **Eur J Cancer** 1990 Mar;26(3):363–71

Skeletal osteopenia and residual ridge resorption [letter; comment] Baxter JC. **J Prosthet Dent** 1989 Oct;62(4):492 Comment on: J Prosthet Dent 1989 Mar;61(3):321–5.

Resorptive arthropathy and rib erosions in mixed connective tissue disease. Martínez-Cordero E, et al. **J Rheumatol** 1990 May;17(5):719–22

Pathological fractures in metabolic bone disease. **Orthop Clin North Am** 1990 Jan;21(1):1–209

[Fractures due to bone insufficiency of the sternum] Péré P, et al. **Rev Rhum Mal Osteoartic** 1989 Dec;56(12):843–6 **(Fre)**

DIAGNOSIS

Osteogenesis imperfecta and other bone disorders in the differential diagnosis of unexplained fractures. Paterson CR. **J R Soc Med** 1990 Feb;83(2):72–4

The tissue diagnosis of metabolic bone disease. Role of histomorphometry. Bullough PG, et al. **Orthop Clin North Am** 1990 Jan;21(1):65–79

[Craniotabes, craniomalacia (Wieland) and active ricketts in infants] Otto FM, et al. **Kinderarztl Prax** 1990 Apr; 58(4):179–83 (33 ref.) (Eng. Abstr.) **(Ger)**

[A decrease in height as an expression of disordered bone metabolism in hyperthyroidism] Schober HC, et al. **Z Gesamte Inn Med** 1989 Sep 15;44(18):557–8 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Restoration of axial and appendicular bone volumes by h-PTH(1–34) in parathyroidectomized and osteopenic rats. Tada K, et al. **Bone** 1990;11(3):163–9

[Importance of vitamin D doses in bone mineralization in preterm infants] Moya M, et al. **An Esp Pediatr** 1989 Sep; 31(3):216–20 **(Spa)**

[Treatment of chronic cholestasis] Rodés J. **Rev Clin Esp** 1989 Jul–Aug;185(3):147–52 (57 ref.) **(Spa)**

EPIDEMIOLOGY

Osteopenia in the men of a Veterans Administration nursing home. Nagraj HS, et al. **Am J Clin Nutr** 1990 Jan; 51(1):100–6

ETIOLOGY

Stress protection by external fixation of the rabbit tibia. Adolphson P, et al. **Acta Orthop Scand** 1990 Aug; 61(4):324–6

Errors in bone remodeling: toward a unified theory of metabolic bone disease. Burr DB, et al. **Am J Anat** 1989 Oct;186(2):186–216 (249 ref.)

Bone disease in chronic liver disease [editorial] Iber F. **Am J Gastroenterol** 1989 Oct;84(10):1229–30

Predictive value of serum aluminium levels for bone accumulation in haemodialyzed patients. Costantini S, et al. **Ann Ist Super Sanita** 1989;25(3):457–61

Paradoxical bone mineralisation in the twin to twin transfusion syndrome. Bishop NJ, et al. **Arch Dis Child** 1990 Jul;65(7 Spec No):705–6

Long-term irreversibility of bone loss after surgery for primary hyperparathyroidism. Martin P, et al. **Arch Intern Med** 1990 Jul;150(7):1495–7

Rapid periarticular bone loss in rheumatoid arthritis. Possible promotion by normal circulating concentrations of parathyroid hormone or calcitriol (1,25-dihydroxyvitamin D3). Sambrook PN, et al. **Arthritis Rheum** 1990 May; 33(5):615–22

Age dependent development of osteopenia in the long bones of tail-suspended mice. Simske SJ, et al. **Biomed Sci Instrum** 1990;26:87–94

Time course of vertebral osteopenia in ovariectomized rats. Wronski TJ, et al. **Bone** 1989;10(4):295–301

Low calcium diet in idiopathic urolithiasis: a risk factor for osteopenia as great as in primary hyperparathyroidism. Fuss M, et al. **Br J Urol** 1990 Jun;65(6):560–3

Effect of radiographic abnormalities on rate of bone loss from the spine. Dawson-Hughes B, et al. **Calcif Tissue Int** 1990 Apr;46(4):280–1

224Ra-induced osteopenia in male CBA mice. Robins MW. **Calcif Tissue Int** 1990 Feb;46(2):94–100

Long-term parenteral nutrition and metabolic bone disease. Hurley DL, et al. **Endocrinol Metab Clin North Am** 1990 Mar;19(1):113–31 (136 ref.)

Prevalence and prediction of osteopenia in chronic liver disease. Bonkovsky HL, et al. **Hepatology** 1990 Aug; 12(2):273–80

Long-term bone loss in insulin-dependent diabetes mellitus. Mathiassen B, et al. **J Intern Med** 1990 May;227(5):325–7

Hypocalcemia complicating deferoxamine therapy in an infant with parenteral nutrition-associated aluminum overload: evidence for a role of aluminum in the bone disease of infants. Klein GL, et al. **J Pediatr Gastroenterol Nutr** 1989 Oct;9(3):400–3

Systemic bone diseases and reduction of the residual ridge of the mandible; primary hyperparathyroidism. A preliminary report. Lekkas C. **J Prosthet Dent** 1989 Nov; 62(5):546–50

Progressive bone loss during long-term home total parenteral nutrition. Foldes J, et al. **JPEN J Parenter Enteral Nutr** 1990 Mar–Apr;14(2):139–42

Deconditioning increases bone resorption and decreases bone formation in the rat. Yeh JK, et al. **Metabolism** 1990 Jun; 39(6):659–63

Bone disease of primary hyperoxaluria in infancy. Ring E, et al. **Pediatr Radiol** 1989;20(1–2):131–3 (21 ref.)

[Diabetic osteopathies. 3. The effect of diabetic complications on bone mineralization] Kocián J, et al. **Vnitr Lek** 1989 Sep;35(9):890–8 (Eng. Abstr.) **(Cze)**

[Diabetic osteopathy. 4. Laboratory findings] Kocián J, et al. **Vnitr Lek** 1990 May;36(5):460–6 (Eng. Abstr.) **(Cze)**

[Diabetic osteopathies. 1. Etiologic factors and theoretical prerequisites for the development of bone demineralization in diabetics] Kocián J, et al. **Vnitr Lek** 1989 Jun;35(6):582–6 (Eng. Abstr.) **(Cze)**

[Diabetic osteopathies. 2. Findings on bones] Kocián J, et al. **Vnitr Lek** 1989 Jul;35(7):656–64 (Eng. Abstr.) **(Cze)**

[Cu deficiency as a cause of spontaneous fracture in a premature infant] Pontz BF, et al. **Monatsschr Kinderheilkd** 1989 Jul;137(7):419–21 (Eng. Abstr.) **(Ger)**

[Primary hyperparathyroidism] Ziegler R. **Z Rheumatol** 1989; 48 Suppl 1:64–7 (9 ref.) **(Ger)**

[Bone changes in congenital biliary atresia—review of 42 cases after surgery] Hirano A, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Jan 25; 50(1):29–39 (Eng. Abstr.) **(Jpn)**

[Usefulness of assessing bone mineral content of cortical bone in patients with lingering imbalance of bone metabolism] Sakurai K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Jan 25;50(1):81–3 (Eng. Abstr.) **(Jpn)**

[Assessment of osteopenia following oophorectomy by quantitative computed tomography and its relation with Ca-regulating hormones] Ohta H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Sep;41(9):1471–8 (Eng. Abstr.) **(Jpn)**

GENETICS

Heritable metabolic and dysplastic bone diseases. Whyte MP. **Endocrinol Metab Clin North Am** 1990 Mar;19(1):133–73 (150 ref.)

[Bone changes in Gaucher disease] Butora M, et al. **Z Rheumatol** 1989 Nov–Dec;48(6):326–30 (Eng. Abstr.) **(Ger)**

METABOLISM

Osteopenia in the immobilized rat hind limb is associated with increased bone resorption and decreased bone formation. Weinreb M, et al. **Bone** 1989;10(3):187–94

1,25-Dihydroxyvitamin D3 prevents the decrease of bone mineral appositional rate in rats with inflammation-mediated osteopenia (IMO). Lempert UG, et al. **Bone Miner** 1989 Sep;7(2):149–58

Osteopenia in rheumatoid arthritis: a biochemical, hormonal and histomorphometric study. Rico H, et al. **Clin Rheumatol** 1990 Mar;9(1):63–8

Biochemical markers of bone turnover for the clinical assessment of metabolic bone disease. Delmas PD. **Endocrinol Metab Clin North Am** 1990 Mar;19(1):1–18 (90 ref.)

Histomorphometric analysis of bone in metabolic bone disease. Eriksen EF, et al. **Endocrinol Metab Clin North Am** 1989 Dec;18(4):919–54 (113 ref.)

Increased monocyte interleukin-1 activity and decreased vertebral bone density in patients with fasting idiopathic hypercalciuria. Pacifici R, et al. **J Clin Endocrinol Metab** 1990 Jul;71(1):138–45

The bisphosphonate 2-PEBP inhibits cyclosporin A induced high-turnover osteopenia in the rat. Movsowitz C, et al. **J Lab Clin Med** 1990 Jan;115(1):62–8

PATHOLOGY

Measurements of bone mass and bone density. Wahner HW. **Endocrinol Metab Clin North Am** 1989 Dec;18(4):995–1012 (39 ref.)

A scanning electron microscopic and photon absorptiometric study of the development, prolongation, and pattern of recovery from lactation-induced osteopenia in rats. Hagaman JR, et al. **J Bone Miner Res** 1990 Feb;5(2):123–32

An automatic method for bone histomorphometry: assessment with reference to usual static and dynamic parameters. Juvin R, et al. **J Bone Miner Res** 1990 Mar; 5(3):235–44

Sensitivity of bone histomorphometry in the diagnosis of metabolic bone diseases. Ballanti P, et al. **Pathol Res Pract** 1989 Nov;185(5):786–9

Structural and compositional changes in aging bone: osteopenia in lumbar vertebrae of Wistar female rats. Silbermann M, et al. **Scanning Microsc** 1989 Sep; 3(3):945–51; discussion 952

Histomorphometric analysis of vertebral and iliac crest bone samples. A correlated study. Alexiades MM, et al. **Spine** 1990 Apr;15(4):286–8

[Bone demineralization and rheumatoid polyarthritis] Mole P, et al. **Rev Rhum Mal Osteoartic** 1989 Oct;56(10):671–6 (37 ref.) **(Fre)**

[Recent concepts of the organization and structure of human trabecular bone—results of combined 2- and 3-dimensional analysis] Delling G. **Z Gesamte Inn Med** 1989 Sep 15; 44(18):536–40 (Eng. Abstr.) **(Ger)**

[The morphology of metabolic osteopathies] Delling G. **Z Rheumatol** 1989;48 Suppl 1:15–20 (16 ref.) **(Ger)**

PHYSIOPATHOLOGY

Osteopenia, pathological fractures, and increased urinary calcium excretion in schizophrenic patients with polydipsia. Delva NJ, et al. **Biol Psychiatry** 1989 Dec;26(8):781–93

Bone cell physiology. Martin TJ, et al. **Endocrinol Metab Clin North Am** 1989 Dec;18(4):833–58 (185 ref.)

Comparison of the effects of synthetic human parathyroid hormone (PTH)-(1–34)-related peptide of malignancy and bovine PTH-(1–34) on bone formation and resorption in organ culture. Klein-Nulend J, et al. **Endocrinology** 1990 Jan;126(1):223–7

Parathyroid hormone is not required for normal milk composition or secretion or lactation-associated bone loss in normocalcemic rats. Garner SC, et al. **J Bone Miner Res** 1990 Jan;5(1):69–75

Osteoporosis and osteopenia. Kanis JA. **J Bone Miner Res** 1990 Mar;5(3):209–11 (23 ref.)

[Pathophysiologic aspects of gastrointestinal, pancreatic and hepatic osteopathies] Huchzermeyer H. **Z Rheumatol** 1989; 48 Suppl 1:46–54 (51 ref.) **(Ger)**

[Assessment of lumbar trabecular bone density by means of single energy quantitative CT in hospital control children and bone metabolic disorders. 1] Nakano K, et al. **No To Hattatsu** 1990 Mar;22(2):173–8 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

12-O-tetradecanoylphorbol-13-acetate, a phorbol ester stimulating protein kinase C, inhibits bone resorption in vitro induced by parathyroid hormone and parathyroid hormone-related peptide of malignancy. Ransjö M, et al. **Acta Physiol Scand** 1990 May;139(1):249-50

Dehydroepiandrosterone reduces cancellous bone osteopenia in ovariectomized rats. Turner RT, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):E673-7

Aminohydroxybutane bisphosphonate inhibits bone loss due to immobilization in rats. Thompson DD, et al. **J Bone Miner Res** 1990 Mar;5(3):279-86

Tetracycline administration prevents diabetes-induced osteopenia in the rat: initial observations. Golub LM, et al. **Res Commun Chem Pathol Pharmacol** 1990 Apr; 68(1):27-40

RADIOGRAPHY

Fluorotic radiculomyelopathy in a Libyan male. Maloo JC, et al. **Clin Neurol Neurosurg** 1990;92(1):63-5

Radiology of metabolic bone disease. Cooper KL. **Endocrinol Metab Clin North Am** 1989 Dec;18(4):955-76 (31 ref.)

RADIONUCLIDE IMAGING

Quantification by dual photonabsorptiometry of local bone loss after fracture. Ulivieri FM, et al. **Clin Orthop** 1990 Jan;(250):291-6

Metabolic bone disease evaluated by a combined calcium balance and tracer kinetic study. Charles P. **Dan Med Bull** 1989 Oct;36(5):463-79 (148 ref.)

Bone scanning in metabolic and endocrine bone disease. Clarke SE, et al. **Endocrinol Metab Clin North Am** 1989 Dec;18(4):977-93 (61 ref.)

[Quantitative assessment of metabolic bone disease in rat models by dual tracer method] Ihara F, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 May 25; 49(5):657-66 (Eng. Abstr.) (Jpn)

[Dual photon absorptiometry] Ochi H, et al. **Rinsho Hoshasen** 1990 Jan;35(1):33-40 (Eng. Abstr.) (Jpn)

[Hyperthyroidism, hypercalcemia and symmetrical and uniform increase in technetium 99m MDP uptake (letter)] Vaquer Arnau P, et al. **Med Clin (Barc)** 1989 Nov 4; 93(14):559 (Spa)

SURGERY

[Metabolic diseases of bones. Catamnestic study of the incidence and kind of problems in surgical treatment] Hesselschwerdt HJ, et al. **Aktuel Traumatol** 1990 Jun; 20(3):136-43 (Eng. Abstr.) (Ger)

THERAPY

The relationship of swimming exercise to bone mass in men and women. Orwoll ES, et al. **Arch Intern Med** 1989 Oct; 149(10):2197-200

Progress in the understanding and management of metabolic bone disease. Boyle IT. **Scott Med J** 1989 Oct;34(5):515-8 (0 ref.)

URINE

Urinary excretion of pyridinium crosslinks: a new marker of bone resorption in metabolic bone disease. Uebelhart D, et al. **Bone Miner** 1990 Jan;8(1):87-96

BONE DYSPLASIAS see **BONE DISEASES, DEVELOPMENTAL**

BONE GLA PROTEIN see **OSTEOCALCIN**

BONE HYPERTROPHY see **HYPEROSTOSIS**

BONE LENGTHENING

Sonographic evaluation of bone production at the distraction site in Ilizarov limb-lengthening procedures. Young JW, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):125-8

Lower limb equalization in dyschondroplasia. Mukhopadhyay D. **Br J Surg** 1967 Aug;54(8):701-3

Modern techniques in limb lengthening. **Clin Orthop** 1990 Jan;(250):1-309

Preliminary studies of mineralization during distraction osteogenesis. Aronson J, et al. **Clin Orthop** 1990 Jan; (250):43-9

Bone regenerate formation in cortical bone during distraction lengthening. An experimental study. Delloye C, et al. **Clin Orthop** 1990 Jan;(250):34-42

Lengthening osteotomy in the metaphysis and diaphysis. An experimental study in the ovine tibia. Steen H, et al. **Clin Orthop** 1989 Oct;(247):297-305

Effect on force transmission across the carpus in procedures used to treat Kienböck's disease. Horii E, et al. **J Hand Surg [Am]** 1990 May;15(3):393-400

Humeral lengthening for septic neonatal growth arrest. Katz K, et al. **J Hand Surg [Am]** 1989 Sep;14(5):903-7

Radiologic assessment of bones after Ilizarov procedures. Young JW, et al. **Radiology** 1990 Oct;177(1):89-93

[Prediction of body height and shortening of the lower part of the body in adults with achondroplasia] Mařík I, et al. **Acta Chir Orthop Traumatol Cech** 1989 Dec;56(6):507-15 (Eng. Abstr.) (Cze)

[The fate of children undergoing bone lengthening in congenital hypoplasia of the legs] Dutoit M, et al. **Rev Chir Orthop** 1990;76(1):1-7 (Eng. Abstr.) (Fre)

[Histologic characteristics of the tendons after lengthening of hypoplastic fingers in children] Tiazhelkov AP, et al. **Ortop Travmatol Protez** 1990 Mar;(3):29-32 (Eng. Abstr.) (Rus)

[Consider carefully the orthopedic possibilities in compensating short stature] Hägglund G, et al. **Lakartidningen** 1990 Jul 11;87(28-29):2331 (Swe)

ADVERSE EFFECTS

Problems, obstacles, and complications of limb lengthening by the Ilizarov technique. Paley D. **Clin Orthop** 1990 Jan; (250):81-104 (22 ref.)

Peripheral nerve damage during limb lengthening. Neurophysiology in five cases of bilateral tibial lengthening. Galardi G, et al. **J Bone Joint Surg [Br]** 1990 Jan;72(1):121-4

Growth retardation after experimental limb lengthening by epiphyseal distraction. Fjeld TO, et al. **J Pediatr Orthop** 1990 Jul-Aug;10(4):463-6

HISTORY

Leg-lengthening procedures. A historical review. Paterson D. **Clin Orthop** 1990 Jan;(250):27-33

The operative lengthening of the femur. 1921 [classical article] Putti V. **Clin Orthop** 1990 Jan;(250):4-7

INSTRUMENTATION

Mechanical evaluation of external fixators used in limb lengthening. Paley D, et al. **Clin Orthop** 1990 Jan;(250):50-7

The Ilizarov apparatus in the treatment of congenital dysmetria of the leg. Canuti M, et al. **Ital J Orthop Traumatol** 1988 Dec;14(4):483-91

Design of a load cell for the Wagner distractor. Verkerke GJ, et al. **Proc Inst Mech Eng [H]** 1989;203(H2):91-6

[Surgical lengthening of the femur using the Poldi 7 device] Cech O, et al. **Acta Chir Orthop Traumatol Cech** 1989 Oct; 56(5):398-407 (Eng. Abstr.) (Cze)

METHODS

Proximal toe phalanx transplantation for bony stabilization and lengthening of partially aplastic digits. Buck-Gramcko D, et al. **Ann Chir Main Memb Super** 1990;9(2):107-18

Bone lengthening in the craniofacial skeleton. Karp NS, et al. **Ann Plast Surg** 1990 Mar;24(3):231-7

Ilizarov external fixation. Surgical principles, nursing implications. Valentine WA, et al. **AORN J** 1990 Jun; 51(6):1530-45

Lengthening of the humerus using the Ilizarov technique. Description of the method and report of 43 cases. Cattaneo R, et al. **Clin Orthop** 1990 Jan;(250):117-24

Experimental physeal distraction in immature sheep. de Pablos J Jr, et al. **Clin Orthop** 1990 Jan;(250):73-80

Amputation stump lengthening with the Ilizarov technique. A case report. Eldridge JC, et al. **Clin Orthop** 1990 Jul; (256):76-9

Femoral lengthening by the Wagner method. Guarniero R, et al. **Clin Orthop** 1990 Jan;(250):154-9

Clinical application of the tension-stress effect for limb lengthening. Ilizarov GA. **Clin Orthop** 1990 Jan;(250):8-26 (20 ref.)

Response of the growth plate to distraction close to skeletal maturity. Is fracture necessary? Kenwright J, et al. **Clin Orthop** 1990 Jan;(250):61-72

Leg lengthening. A review of 30 years. Moseley CF. **Clin Orthop** 1989 Oct;(247):38-43 (30 ref.)

Limb lengthening by callotasis for children and adolescents. Early experience. Price CT, et al. **Clin Orthop** 1990 Jan; (250):105-11

Lengthening in the congenital short femur. Renzi-Brivio L, et al. **Clin Orthop** 1990 Jan;(250):112-6

Lengthening of the lower limbs and correction of lumbar hyperlordosis in achondroplasia. Vilarrubias JM, et al. **Clin Orthop** 1990 Jan;(250):143-9

Lengthening of the forearm by the Ilizarov technique. Villa A, et al. **Clin Orthop** 1990 Jan;(250):125-37

Twenty-five years' experience with lengthening of shortened lower extremities using cylindrical allografts. Wasserstein I. **Clin Orthop** 1990 Jan;(250):150-3

Force and stiffness changes during Ilizarov leg lengthening. Wolfson N, et al. **Clin Orthop** 1990 Jan;(250):58-60

Distraction lengthening for the congenitally short metatarsal: a case report. Upton J, et al. **Foot Ankle** 1989 Dec; 10(3):184-7

Factors influencing the choice of external fixation for distraction osteogenesis. Aronson J, et al. **Instr Course Lect** 1990;39:175-83 (33 ref.)

Treatment of tibial nonunion and bone loss with the Ilizarov technique. Paley D. **Instr Course Lect** 1990;39:185-97 (25 ref.)

Computer-aided manipulation of photographs for leg lengthening. Nicholls M. **J Audiov Media Med** 1990 Jan; 13(1):13-6

A formula for diaphyseal limb lengthening. Hadlow AT, et al. **J Bone Joint Surg [Br]** 1990 Jan;72(1):146

Late lengthening of the fibula for malaligned ankle fractures. Ward AJ, et al. **J Bone Joint Surg [Br]** 1990 Jul;72(4):714-7

The timing of distraction of an osteotomy. White SH, et al. **J Bone Joint Surg [Br]** 1990 May;72(3):356-61

Distraction osteogenesis of a congenital amputation at the elbow. Seitz WH Jr. **J Hand Surg [Am]** 1989 Nov; 14(6):945-8

Effect of direct current stimulation on bone growth after distraction epiphysiolysis of the rabbit tibia. van Roermund PM, et al. **J Orthop Res** 1990 Sep;8(5):769-75

Surgical lengthening of the humerus: case report and review. Peterson HA. **J Pediatr Orthop** 1989 Sep-Oct;9(5):596-601

Limb lengthening for achondroplasia: early experience [published erratum appears in J Pediatr Orthop 1989 Nov-Dec;9(6):733] Price CT. **J Pediatr Orthop** 1989 Sep-Oct;9(5):512-5

Metaphyseal distraction for lower limb lengthening and correction of axial deformities. Schlenzka D, et al. **J Pediatr Orthop** 1990 Mar-Apr;10(2):202-5

Thumb reconstruction by metacarpal lengthening after traumatic loss at the level of the interphalangeal joint. Cobb TK, et al. **Orthop Rev** 1990 Jan;19(1):47-51

Magnetic resonance imaging in the assessment of revascularization in Kienbock's disease. A preliminary report. Viegas SF, et al. **Orthop Rev** 1989 Dec; 18(12):1285-8

Radiographic features of bone lengthening procedures. Vade A, et al. **Radiology** 1990 Feb;174(2):531-7

[Personal experience with lower extremity lengthening] Foldyna K, et al. **Cas Lek Cesk** 1989 Nov 3;128(45):1421-2 (Eng. Abstr.) (Cze)

[Lengthening of the femur and tibia using Wagner's method] Jensen FS, et al. **Ugeskr Laeger** 1990 Jul 30;152(31):2238-40 (Eng. Abstr.) (Dan)

[Resection of bony tumors around the knee and lengthening of the stump by the Van Nes rotation plastic surgery technic] Gebhart M, et al. **Acta Orthop Belg** 1989; 55(1):26-30 (Eng. Abstr.) (Fre)

[Limb lengthening in children and osteogenesis using the technics of Wagner and Ilizarov and their modifications] Lokietek W, et al. **Acta Orthop Belg** 1989;55(2):119-28 (Eng. Abstr.) (Fre)

[Percutaneous epiphysiodesis. First trials with the long bones of the lower limbs] Brax P, et al. **Chir Pediatr** 1989; 30(6):263-5 (Eng. Abstr.) (Fre)

[Ultrasound follow-up of bone lengthening osteotomy] Huppertz R, et al. **Z Orthop** 1990 Jan-Feb;128(1):90-5 (Eng. Abstr.) (Ger)

[Post-traumatic varus deformity of the tibia. Correction by osteoclasia and callotaxis] Baranowski D, et al. **Zentralbl Chir** 1989;114(21):1427-36 (Ger)

[Fundamental considerations in leg lengthening] Hiroshima K. **Nippon Seikeigeka Gakkai Zasshi** 1989 May; 63(5):593-605 (Jpn)

[Characteristics of myohistogenesis during experimental mono- and bilocal distraction osteosynthesis] Kochutina LN, et al. **Arkh Anat Gistol Embriol** 1989 Nov;97(11):44-52 (Eng. Abstr.) (Rus)

[Changes in neural conductors and their end organs in the muscles and skin after major procedures of one-stage lengthening of the extremity by the G.A. Ilizarov method] Kochutina LN, et al. **Arkh Anat Gistol Embriol** 1990 Apr; 98(4):24-31 (Eng. Abstr.) (Rus)

[Vascularization of the tibia during compensation for a diaphyseal defect by lengthening one of the fragments using Ilizarov's method] Larionov AA. **Arkh Anat Gistol Embriol** 1989 Nov;97(11):21-7 (Eng. Abstr.) (Rus)

[Multi-stage treatment of congenital radial deformity in a child] Komarevtsev VD, et al. **Ortop Travmatol Protez** 1990 Mar;(3):58-9 (Rus)

[Reconstruction of a free bone transplant in long bone defect after distraction] Larionov AA. **Ortop Travmatol Protez** 1989 Jul;(7):17-21 (Eng. Abstr.) (Rus)

[Lengthening of the extremities in osteochondrodysplasias] Oliván G, et al. **An Esp Pediatr** 1990 Apr;32(4):281-5 (53 ref.) (Spa)

PSYCHOLOGY

Psychologic, vascular, and physiologic aspects of lower limb lengthening in achondroplastics. Lavini F, et al. **Clin Orthop** 1990 Jan;(250):138-42 (11 ref.)

Operative lengthening of the lower extremity and associated psychological aspects: the Children's Hospital experience. Hrutkay JM, et al. **J Pediatr Orthop** 1990 May-Jun; 10(3):373-7

BONE LOSS, AGE-RELATED see **OSTEOPOROSIS**

BONE LOSS, ALVEOLAR see **BONE RESORPTION**

BONE LOSS, OSTEOCLASTIC see **BONE RESORPTION**

BONE LOSS, PERIMENOPAUSAL see **OSTEOPOROSIS, POSTMENOPAUSAL**

BONE LOSS, PERIODONTAL see **BONE RESORPTION**

BONE LOSS, POSTMENOPAUSAL see **OSTEOPOROSIS, POSTMENOPAUSAL**

BONE MARROW

Bone marrow involvement in cutaneous T-cell lymphoma

[letter; comment] Pinto A, et al. **Am J Clin Pathol** 1990 Jul;94(1):119–20 Comment on: Am J Clin Pathol 1989 Dec;92(6):747–54.

Comparison of intraosseous versus intravenous loading of phenytoin in pigs and effect on bone marrow. Vinsel PJ, et al. **Am J Emerg Med** 1990 May;8(3):181–3

A practical method of teaching emergency intraosseous infusions [letter] Walter GP, et al. **Am J Emerg Med** 1990 May;8(3):272–3

Comparison of serum phenobarbital levels after single versus multiple attempts at intraosseous infusion. Brickman K, et al. **Ann Emerg Med** 1990 Jan;19(1):31–3

Marrow aspiration from small infants [letter] Carr R. **Arch Dis Child** 1990 Jul;65(7):813

Marrow embolus to posterior ciliary vessel. Kalina PH, et al. **Arch Pathol Lab Med** 1990 Sep;114(9):979–80

In vitro purging of human rhabdomyosarcoma cells using 4-hydroperoxycyclophosphamide. Ozkaynak MF, et al. **Cancer Res** 1990 Mar 1;50(5):1455–8

Antioxidants for bone marrow cryopreservation. Matthes G, et al. **Folia Haematol (Leipz)** 1989;116(3–4):451–4

Characterization of an embryonal rhabdomyosarcoma cell line showing amplification and over-expression of the N-myc oncogene. Hayashi Y, et al. **Int J Cancer** 1990 Apr 15;45(4):705–11

Liposarcoma of bone marrow origin in a kudu (Tragelaphus strepsiceros). Raubenheimer EJ, et al. **J Wildl Dis** 1990 Apr;26(2):271–4

Intraosseous succinylcholine for orotracheal intubation. Tobias JD, et al. **Pediatr Emerg Care** 1990 Jun;6(2):108–9

Bone marrow storage and processing: is it time to set standards? [letter] Areman EM, et al. **Transfusion** 1990 Jul–Aug;30(6):574–5

The first-year costs of establishing an unrelated bone marrow donor registry. Larson EB, et al. **Transfusion** 1990 Feb; 30(2):138–41

[Pulmonary bone marrow embolism in nonselected autopsy material] Kemona A, et al. **Patol Pol** 1989;40(2):197–204 (Eng. Abstr.) **(Pol)**

[The cytomorphological characteristics of hemopoiesis and of the organs of immunogenesis in exposure to thymus and bone marrow peptides during hematopoietic depression] Khmel'nitskii OK, et al. **Arkh Patol** 1989;51(12):39–44 (Eng. Abstr.) **(Rus)**

[Effects of thymosin and B-activin on lateralization of sensomotor control in rats] Dobrynin VP, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):139–42 (Eng. Abstr.) **(Rus)**

[Osteogenic properties of adhesive cells in Dexter culture of the mouse bone marrow] Kuznetsov SA, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):236–8 (Eng. Abstr.) **(Rus)**

[Study of tissue coagulation factors of native and cryopreserved bone marrow] Lipkan GN, et al. **Fiziol Zh** 1990 Jan–Feb;36(1):79–81 (Eng. Abstr.) **(Rus)**

ANALYSIS

The bone marrow as a source of laboratory studies. Orlowski JP, et al. **Ann Emerg Med** 1989 Dec;18(12):1348–51

Bone marrow trephine biopsies as a source of nucleic acids for molecular diagnosis of haematological neoplasms. Fey MF, et al. **Br J Haematol** 1990 Feb;74(2):229–31

Anaemia of chronic disease: diagnostic significance of erythrocyte and serological parameters in iron deficient rheumatoid arthritis patients. Vreugdenhil G, et al. **Br J Rheumatol** 1990 Apr;29(2):105–10

Bone marrow fat content in relation to bone remodeling and serum chemistry in intact and ovariectomized dogs. Martin RB, et al. **Calcif Tissue Int** 1990 Mar;46(3):189–94

A heparan sulfate-containing fraction of bone marrow stroma induces maturation of HL-60 cells in vitro. Luikart SD, et al. **Cancer Res** 1990 Jun 15;50(12):3781–5

Further characterization of osteogenic-cell growth promoting activity derived from healing bone marrow. Gazit D, et al. **Connect Tissue Res** 1989;23(2–3):153–61

Glutaredoxin from rabbit bone marrow. Purification, characterization, and amino acid sequence determined by tandem mass spectrometry. Hopper S, et al. **J Biol Chem** 1989 Dec 5;264(34):20438–47

Analysis of bone marrow and decomposed body tissue for the presence of paracetamol and dextropropoxyphene. Bal TS, et al. **J Forensic Sci Soc** 1989 May–Jun;29(3):219–23

Stromal hemopoietic microenvironment in aging. Sidorenko AV, et al. **Mech Ageing Dev** 1990 May 30;54(2):131–42

Identification of a series of differentiation-associated gene sequences from GM-CSF stimulated bone marrow. Moscinski LC, et al. **Oncogene** 1990 Jan;5(1):31–7

Bursin localization in mammalian bone marrow and epithelial cells of intrahepatic bile ducts. Audhya T, et al. **Scand J Immunol** 1990 Feb;31(2):199–204

[The differentiation factor in the bone marrow and blood serum of healthy subjects and in acute leukemia] Khoperskaia OA, et al. **Biull Eksp Biol Med** 1989 Dec; 108(12):732–4 (Eng. Abstr.) **(Rus)**

[Circadian rhythm of lipid levels in the rat bone marrow and thymus: the effect of starvation at various times of the day] Alers I, et al. **Probl Kosm Biol** 1989;64:173–8 **(Rus)**

ANATOMY & HISTOLOGY

Star volume of marrow space and trabeculae in iliac crest: sampling procedure and correlation to star volume of first lumbar vertebra. Vesterby A. **Bone** 1990;11(3):149–55

Magnetic susceptibility effects of trabecular bone on magnetic resonance imaging of bone marrow. Rosenthal H, et al. **Invest Radiol** 1990 Feb;25(2):173–8

The foci of the red bone marrow observed in the laryngeal cartilages of the Suncus murinus. Nakano T, et al. **Okajimas Folia Anat Jpn** 1989 Dec;66(5):271–5

Red and yellow marrow in the femur: age-related changes in appearance at MR imaging. Moore SG, et al. **Radiology** 1990 Apr;175(1):219–23

Normal age-related patterns of cellular and fatty bone marrow distribution in the axial skeleton: MR imaging study. Ricci C, et al. **Radiology** 1990 Oct;177(1):83–8

Effect of trabecular bone on the appearance of marrow in gradient-echo imaging of the appendicular skeleton. Sebag GH, et al. **Radiology** 1990 Mar;174(3 Pt 1):855–9

MR imaging of bone marrow: a map could help [editorial] Weinreb JC. **Radiology** 1990 Oct;177(1):23–4

CYTOLOGY

Immunomagnetic purging of bone marrow grafts for autologous transplantation in neuroblastoma. Van Riet I, et al. **Acta Clin Belg** 1990;45(2):97–106

Early regeneration of colony forming units in culture (CFUc) of murine bone marrow after moderate doses of dibromomannitol. Kovács P, et al. **Acta Physiol Hung** 1990; 75 Suppl:183–4

Synergistic activity for high-proliferative-potential colony-forming cell (HPP-CFC) development, stable to trypsin digestion, present in pregnant mouse uterus and placenta extract. Zangheri EO, et al. **Acta Physiol Pharmacol Latinoam** 1989;39(3):315–23

The lymphopoietic microenvironment in bone marrow. Kincade PW. **Adv Cancer Res** 1990;54:235–72 (278 ref.)

Incorporation of arachidonic acid into glycerophospholipids of a murine bone marrow derived mast cell. Bettazzoli L, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1990;20:71–8

Bone marrow sampling. Paulman PM. **Am Fam Physician** 1989 Dec;40(6):85–9

Ultrastructural morphometric study of efferent nerve terminals on murine bone marrow stromal cells, and the recognition of a novel anatomical unit: the "neuro-reticular complex". Yamazaki K, et al. **Am J Anat** 1990 Mar; 187(3):261–76

Regarding the article entitled "Monocytoid B-cell lymphoma with bone marrow and peripheral blood involvement at presentation" [letter; comment] Traweek ST, et al. **Am J Clin Pathol** 1990 Jul;94(1):117–8 Comment on: Am J Clin Pathol 1989 Aug;92(2):228–36.

Rapid reduction of methemoglobin in rat bone marrow erythroid cells. Yubisui T, et al. **Am J Hematol** 1990 May; 34(1):5–7

Flow cytometric determination with bromodeoxyuridine/DNA assay of sensitivity of S-phase cells to cytosine arabinoside in childhood acute lymphoblastic leukemia. Katano N, et al. **Am J Pediatr Hematol Oncol** 1989 Winter;11(4):411–6

A new filtration system for bone marrow transplantation. Clinical and laboratory studies. Paolucci P, et al. **Am J Pediatr Hematol Oncol** 1989 Winter;11(4):424–8

Effect of incorporation of serum from dogs with renal impairment on canine erythroid bone marrow cultures. Petrites-Murphy MB, et al. **Am J Vet Res** 1989 Sep; 50(9):1537–43

Effects of prolonged nitrous oxide exposure on hemopoietic stem cells in splenectomized mice. Suzuki KS, et al. **Anesth Analg** 1990 Oct;71(4):389–93

The molecular control of normal and leukemic hematopoiesis: myeloid cells as a model system. Sachs L. **Ann N Y Acad Sci** 1989;567:141–53 (48 ref.)

Eosinophil chemotactic factor released from murine bone marrow derived cultured mast cells. Abe T, et al. **Arerugi** 1990 Feb;39(2 Pt 1):69–74

The stimuli releasing histamine from murine bone marrow-derived mast cells. 1. The presence of P2-purinoceptors. Nakamura H, et al. **Arerugi** 1989 Dec; 38(12):1359–63

Effects of spaceflight on levels and activity of immune cells. Sonnenfeld G, et al. **Aviat Space Environ Med** 1990 Jul; 61(7):648–53

Induction and activity of NO synthase in bone-marrow-derived macrophages are independent of Ca2+. Hauschildt S, et al. **Biochem J** 1990 Sep 1; 270(2):351–6

Isolation of an early T-cell precursor (CFU-TL) from human bone marrow. Bertho JM, et al. **Blood** 1990 Mar 1; 75(5):1064–8

Bone marrow stromal cell regulation of B lymphopoiesis: interleukin-1 (IL-1) and IL-4 regulate stromal cell support of pre-B cell production in vitro. Billips LG, et al. **Blood** 1990 Feb 1;75(3):611–9

Enhanced stimulation of human bone marrow macrophage colony formation in vitro by recombinant human macrophage colony-stimulating factor in agarose medium and at low oxygen tension. Broxmeyer HE, et al. **Blood** 1990 Jul 15;76(2):323–9

Long- and short-lived murine hematopoietic stem cell clones individually identified with retroviral integration markers. Capel B, et al. **Blood** 1990 Jun 15;75(12):2267–70

Mechanisms that regulate the cell cycle status of very primitive hematopoietic cells in long-term human marrow cultures. I. Stimulatory role of a variety of mesenchymal cell activators and inhibitory role of TGF-beta. Cashman JD, et al. **Blood** 1990 Jan 1;75(1):96–101

Effects of recombinant human granulocyte colony-stimulating factor (CSF), human granulocyte macrophage-CSF, and gibbon interleukin-3 on hematopoiesis in human long-term bone marrow culture. Coutinho LH, et al. **Blood** 1990 Jun 1;75(11):2118–29

Effector function for RAS oncogene in interleukin-3-dependent myeloid cells involves diminished efficacy of prostaglandin E1-mediated inhibition of proliferation. Derigs HG, et al. **Blood** 1989 Nov 1; 74(6):1942–51

Fibroblasts induce heparin synthesis in chondroitin sulfate E containing human bone marrow-derived mast cells. Gilead L, et al. **Blood** 1990 Sep 15;76(6):1188–95

Differential effects of TGF-beta 1 on lymphohemopoiesis in long-term bone marrow cultures. Hayashi S, et al. **Blood** 1989 Oct;74(5):1711–7

Proliferative properties of unfractionated, purified, and single cell human progenitor populations stimulated by recombinant human interleukin-3. Kannourakis G, et al. **Blood** 1990 Jan 15;75(2):370–7

Bone marrow stromal cells modulate both kappa light chain and Ly1 antigen expression on Ly1+ pre-B cell lines in vitro. Kruger MG, et al. **Blood** 1990 Jul 15;76(2):383–92

Analysis of megakaryocyte ploidy in rat bone marrow cultures. Kuter DJ, et al. **Blood** 1989 Nov 1;74(6):1952–62

Analysis of immunoglobulin and T-cell receptor gene rearrangements in human fetal bone marrow B lineage cells. LeBien TW, et al. **Blood** 1990 Sep 15;76(6):1196–200

Transplantation of hematopoietic stem cells obtained by a combined dye method fractionation of murine bone marrow. McAlister I, et al. **Blood** 1990 Mar 15;75(6):1240–6

Comparative analysis of hematopoietic growth factors released by stromal cells from normal donors or transplanted patients. Migliaccio AR, et al. **Blood** 1990 Jan 1;75(1):305–12

Proliferation of early human myeloid precursors induced by interleukin-1 and recombinant soluble CD23. Mossalayi MD, et al. **Blood** 1990 May 15;75(10):1924–7

Human marrow stromal cells: response to interleukin-6 (IL-6) and control of IL-6 expression. Nemunaitis J, et al. **Blood** 1989 Nov 1;74(6):1929–35

Interleukin-1 enhances survival of lethally irradiated mice treated with allogeneic bone marrow cells. Oppenheim JJ, et al. **Blood** 1989 Nov 1;74(6):2257–63

Stromal cell progeny of murine bone marrow fibroblast colony-forming units are clonal endothelial-like cells that express collagen IV and laminin. Perkins S, et al. **Blood** 1990 Feb 1;75(3):620–5

Identification of hematopoietic progenitors of macrophages and dendritic Langerhans cells (DL-CFU) in human bone marrow and peripheral blood. Reid CD, et al. **Blood** 1990 Sep 15;76(6):1139–49

Long-term marrow cultures after allogeneic bone marrow transplantation [letter] Rice A, et al. **Blood** 1990 Jul 1; 76(1):266–7

Monoclonal antibody T-cell-depleted HLA-haploidentical bone marrow transplantation for Wiskott-Aldrich syndrome. Rumelhart SL, et al. **Blood** 1990 Feb 15; 75(4):1031–5

Human immunodeficiency virus infection of human bone marrow stromal fibroblasts. Scadden DT, et al. **Blood** 1990 Jul 15;76(2):317–22

Interleukin-6 is not involved in the interleukin-1-induced production of colony-stimulating factors by human bone marrow stromal cells and fibroblasts. Schaafsma MR, et al. **Blood** 1989 Dec;74(8):2619–23

Preferential suppression of myelopoiesis in normal human bone marrow cells after in vitro challenge with human cytomegalovirus. Sing GK, et al. **Blood** 1990 May 15; 75(10):1965–73

Regulation of cytokine and growth factor gene expression in human bone marrow stromal cells transformed with simian virus 40. Slack JL, et al. **Blood** 1990 Jun 15; 75(12):2319–27

Enrichment of natural suppressor activity in a wheat germ agglutinin positive hematopoietic progenitor-enriched fraction of monkey bone marrow. Sugiura K, et al. **Blood** 1990 Mar 1;75(5):1125–31

Characterization and partial purification of human marrow cells capable of initiating long-term hematopoiesis in vitro. Sutherland HJ, et al. **Blood** 1989 Oct;74(5):1563–70

Molecular basis of homing of intravenously transplanted stem cells to the marrow. Tavassoli M, et al. **Blood** 1990 Sep 15;76(6):1059–70 (183 ref.)

Stimulation of myelopoiesis in a patient with congenital neutropenia: biology and nature of response to recombinant human granulocyte-macrophage colony-stimulating factor. Vadhan-Raj S, et al. **Blood** 1990 Feb 15;75(4):858–64

Divergent effects of interleukin-4 (IL-4) on the granulocyte colony-stimulating factor and IL-3-supported myeloid colony formation from normal and leukemic bone marrow cells. Vellenga E, et al. **Blood** 1990 Feb 1;75(3):633–7

Clonal growth of murine pre-B colony-forming cells and their targeted infection by a retroviral vector: dependence on interleukin-7. Williams DE, et al. **Blood** 1990 Mar 1; 75(5):1132–8

Further studies on growth factor production by the TC-1 stromal cell line: pre-B stimulating activity. Woodward

TA, et al. **Blood** 1990 Jun 1;75(11):2130–6

How do normal and leukemic white blood cells egress from the bone marrow? Morphological facts and biochemical riddles. Petrides PE, et al. **Blut** 1990 Jul;61(1):3–13 (95 ref.)

Usefulness of Y-body study on bone marrow smears to demonstrate the origin of fibroblast stromal cells in allogeneic bone marrow transplantation. Ribera JM, et al. **Blut** 1990 Jul;61(1):14–6

Adhesive properties distinguish sub-populations of haemopoietic stem cells with different spleen colony-forming and marrow repopulating capacities. Bearpark AD, et al. **Bone Marrow Transplant** 1989 Nov; 4(6):625–8

Age dependent in vitro stromal growth [letter] Clarke E, et al. **Bone Marrow Transplant** 1989 Sep;4(5):596–7

Immunomagnetic depletion of CD6+ cells from bone marrow and peripheral blood. Egeland T, et al. **Bone Marrow Transplant** 1990 Mar;5(3):193–8

T cell depletion from human bone marrow using magnetic beads. Knobloch C, et al. **Bone Marrow Transplant** 1990 Jul;6(1):21–4

Origin of marrow stromal cells and haemopoietic chimaerism following bone marrow transplantation determined by in situ hybridisation. Athanasou NA, et al. **Br J Cancer** 1990 Mar;61(3):385–9

The effects of interleukin 3 (IL-3) on cells responsive to macrophage colony-stimulating factor (CSF-1) in liquid murine bone marrow culture. Breen FN, et al. **Br J Haematol** 1990 Feb;74(2):138–45

Interleukin-4 suppresses the interleukin-3 dependent erythroid colony formation from normal human bone marrow cells. de Wolf JT, et al. **Br J Haematol** 1990 Mar; 74(3):246–50

Human liquid bone marrow culture in serum-free medium. Drouet X, et al. **Br J Haematol** 1989 Oct;73(2):143–7

In vitro priming of human bone marrow with recombinant GM-CSF [letter] Korthout M, et al. **Br J Haematol** 1990 Mar;74(3):376–7

Interleukin 3 alone does not support the proliferation of bone marrow cells from A/J mice: a novel system for studying the synergistic activities of IL-3. Morris CF, et al. **Br J Haematol** 1990 Feb;74(2):131–7

Isolation of human megakaryocytes by immunomagnetic beads. Tanaka H, et al. **Br J Haematol** 1989 Sep;73(1):18–22

Third International Workshop on Cells and Cytokines in Bone and Cartilage. 8–11 April 1990, Davos, Switzerland. Abstracts. **Calcif Tissue Int** 1990;46 Suppl 2:A1–61

Generation of macrophage cell line from fresh bone marrow cells with a myc/raf recombinant retrovirus. Blasi E, et al. **Cancer Biochem Biophys** 1989 Oct;10(4):303–17

Long-term bone marrow cultures: their use in autologous marrow transplantation. Chang J, et al. **Cancer Cells** 1989 Sep;1(1):17–24 (42 ref.)

In vitro bone marrow purging of multidrug-resistant cells with a mouse monoclonal antibody directed against Mr 170,000 glycoprotein and a saporin-conjugated anti-mouse antibody. Dinota A, et al. **Cancer Res** 1990 Jul 15; 50(14):4291–4

L-arginine-dependent reactive nitrogen intermediates as mediators of tumor cell killing by activated macrophages. Keller R, et al. **Cancer Res** 1990 Mar 1;50(5):1421–5

Differences in in vitro proliferative responsiveness to granulocyte colony-stimulating factor and interleukin 2 of bone marrow cells from mice treated with chemotherapeutic drugs. Mizushima Y, et al. **Cancer Res** 1990 Mar 15;50(6):1847–52

Inhibition of tumor cell proliferation by natural suppressor cells present in murine bone marrow. Sugiura K, et al. **Cancer Res** 1990 May 1;50(9):2582–6

Establishment of myoid cells from bone marrow. Kamo I, et al. **Cell Biol Int Rep** 1990 Jul;14(7):595–600

Beta-lactam antibiotics inhibit human in vitro granulopoiesis and proliferation of some other cell types. Neftel KA, et al. **Cell Biol Toxicol** 1986 Dec;2(4):513–21 (16 ref.)

Development of T cells in vitro from precursors in mouse bone marrow. Benveniste P, et al. **Cell Immunol** 1990 Apr 15;127(1):92–104

Intravenous endotoxin recruits a distinct subset of human neutrophils, defined by monoclonal antibody 31D8, from bone marrow to the peripheral circulation. Brown CC, et al. **Cell Immunol** 1989 Oct 15;123(2):294–306

In vitro maintenance of bone marrow-resident T cell precursors in cultures supplemented with exogenous IL-3. Chervenak R, et al. **Cell Immunol** 1990 Oct 1;130(1):150–9

Quantitative analysis of bone marrow thymic progenitors in young and aged mice. Eren R, et al. **Cell Immunol** 1990 May;127(2):238–46

The myelopoietic inducing potential of mouse thymic stromal cells. Izon DJ, et al. **Cell Immunol** 1989 Dec;124(2):264–77

Phenotypic analysis of the early events during repopulation of the thymus by the bone marrow prothymocyte. Lesley J, et al. **Cell Immunol** 1990 Jun;128(1):63–78

Further characterization of murine bone marrow-derived natural suppressor cells. Potential relationships between NS and NK/LAK activities. Saffran DC, et al. **Cell Immunol** 1990 Jun;128(1):301–13

In vitro and in vivo analysis of bone marrow-derived CD3+, CD4-, CD8-, NK1.1+ cell lines. Sykes M, et al. **Cell Immunol** 1990 Sep;129(2):478–93

Natural suppressor cells in spleens of irradiated, bone marrow-reconstituted mice and normal bone marrow: lack of Sca-1 expression and enrichment by depletion of Mac1-positive cells. Sykes M, et al. **Cell Immunol** 1990 May;127(2):260–74

Formation of capillary networks from bone marrow cultured in collagen gel. Mori M, et al. **Cell Struct Funct** 1989 Aug; 14(4):393–8

Cell proliferation in the bone marrow, thymus and spleen of mice studied by continuous, in vivo bromodeoxycytidine labelling and flow cytometric analysis. Crippen TL, et al. **Cell Tissue Kinet** 1989 May;22(3):203–12

Stromal cells in haemopoiesis. Dexter TM, et al. **Ciba Found Symp** 1990;148:76–86; discussion 86–95 (34 ref.)

A phenotypic study of B lymphocyte subpopulations in human bone marrow. Chapple MR, et al. **Clin Exp Immunol** 1990 Jul;81(1):166–72

Effects of interleukin-2 and interleukin-2-activated cells on in vitro myelopoiesis. Clerigue M, et al. **Clin Exp Immunol** 1990 Sep;81(3):459–65

Flow cytometric analysis of the megakaryocyte DNA distribution in whole and partially purified human and rabbit bone marrow. Lawry J, et al. **Clin Lab Haematol** 1989;11(4):361–8

Flow cytometric assay for the measurement of human bone marrow phenotype, function and cell cycle. Lund-Johansen F, et al. **Cytometry** 1990;11(5):610–6

Flow cytometric analysis of recombinant murine GM-CSF (rmuGM-CSF) induced changes in the distribution of specific cell populations in vivo. Pennline KJ, et al. **Cytometry** 1990;11(2):283–91

Analysis of hemopoietic cells in rat bone marrow and fetal liver with monoclonal antibody. Fujikura Y, et al. **Dev Comp Immunol** 1990 Winter;14(1):121–9

Identification of committed mononuclear precursors for osteoclast-like cells formed in long term human marrow cultures. Kurihara N, et al. **Endocrinology** 1990 May; 126(5):2733–41

The effect of hemopoietic growth factors on the generation of osteoclast-like cells in mouse bone marrow cultures. Shinar DM, et al. **Endocrinology** 1990 Mar;126(3):1728–35

Biphasic effects of transforming growth factor-beta on the production of osteoclast-like cells in mouse bone marrow cultures: the role of prostaglandins in the generation of these cells. Shinar DM, et al. **Endocrinology** 1990 Jun; 126(6):3153–8

The bone marrow-derived stromal cell lines MC3T3-G2/PA6 and ST2 support osteoclast-like cell differentiation in cocultures with mouse spleen cells. Udagawa N, et al. **Endocrinology** 1989 Oct;125(4):1805–13

Different haematopoietic growth factors have different capacity in overcoming the in vitro interferon gamma-induced suppression of bone marrow progenitor cells. Zoumbos NC, et al. **Eur J Haematol** 1990 May; 44(5):282–90

In rat B lymphocyte genesis sixty percent is lost from the bone marrow at the transition of nondividing pre-B cell to sIgM+ B lymphocyte, the stage of Ig light chain gene expression. Deenen GJ, et al. **Eur J Immunol** 1990 Mar; 20(3):557–64

Syngeneic preference manifested by thymic stroma during development of thymocytes from bone marrow cells. Eren R, et al. **Eur J Immunol** 1989 Nov;19(11):2087–92

Adipogenesis in a murine bone marrow stromal cell line capable of supporting B lineage lymphocyte growth and proliferation: biochemical and molecular characterization. Gimble JM, et al. **Eur J Immunol** 1990 Feb;20(2):379–87

Cytofluorometric and cytomorphologic analysis of human bone marrow cells derived from stromal cultures stimulated by granulocyte-macrophage colony-stimulating factor, interferon-gamma and splenopentin pentapeptide. Maciejewski J, et al. **Eur J Immunol** 1990 Jun;20(6):1209–13

Dynamics of early B lymphocyte precursor cells in mouse bone marrow: proliferation of cells containing terminal deoxynucleotidyl transferase. Park YH, et al. **Eur J Immunol** 1989 Nov;19(11):2139–44

Relationships between the cell cycle and the expression of c-myc and transferrin receptor genes during induced myeloid differentiation. Barker KA, et al. **Exp Cell Res** 1990 Jan;186(1):1–5

Long-term cultures of chicken bone marrow cells. Cormier F, et al. **Exp Cell Res** 1990 Sep;190(1):113–7

Immortalization of macrophages from mouse bone marrow and fetal liver. Gandino L, et al. **Exp Cell Res** 1990 Jun; 188(2):192–8

Fibroblast-like transformation of human bone marrow fat cells in vitro. Miyoshi I, et al. **Exp Cell Res** 1966 Jan; 41(1):220–3

Mitotic stimulation in normal and irradiated suspension cultures of rat bone marrow by an elevated salt concentration. Whitfield JF, et al. **Exp Cell Res** 1966 Jan; 41(1):49–54

Ontogeny of human suppressor inducer T cell subset. Adinolfi M, et al. **Exp Clin Immmunogenet** 1987;4(1):56–60

Assessment of purging with multidrug resistance (MDR) modulators and VP-16: results of long-term marrow culture. Aihara M, et al. **Exp Hematol** 1990 Sep;18(8):940–4

Long-term culture of human bone marrow. I. characterization of adherent cells in flow cytometry. Andreoni C, et al. **Exp Hematol** 1990 Jun;18(5):431–7

Hematon, a multicellular functional unit in normal human bone marrow: structural organization, hemopoietic activity, and its relationship to myelodysplasia and myeloid leukemias. Blazsek I, et al. **Exp Hematol** 1990 May; 18(4):259–65

Selection of two human bone marrow stromal cell subpopulations with different effects on the maintenance and differentiation of myeloid progenitor cells. Bol SJ, et al. **Exp Hematol** 1990 Aug;18(7):764–9

HLA-class II antigens on hemopoietic and stromal cells in human micro long-term bone marrow cultures. Brühl P, et al. **Exp Hematol** 1990 Feb;18(2):103–8

Long-term culture of canine marrow: cytogenetic evaluation of purging of lymphoma and leukemia. Carter RF, et al. **Exp Hematol** 1990 Oct;18(9):995–1001

The cytoskeleton of stromal cells from human bone marrow cultures resembles that of cultured smooth muscle cells. Charbord P, et al. **Exp Hematol** 1990 May;18(4):276–82

Erythropoiesis in murine long-term marrow cultures following transfer of the erythropoietin cDNA into marrow stromal cells. Corey CA, et al. **Exp Hematol** 1990 Mar;18(3):201–4

Histogenesis of hemopoietic bone marrow in adult mice. Fan HX, et al. **Exp Hematol** 1990 Mar;18(3):159–66

A method to establish pure fibroblast and endothelial cell colony cultures from murine bone marrow. Fei RG, et al. **Exp Hematol** 1990 Sep;18(8):953–7

Interleukin 3 can compensate for the deficiency in erythroid burst-forming cells in anemic mice of genotype W/Wv. Goldwasser E, et al. **Exp Hematol** 1990 Sep;18(8):936–9

Hemopoietic progenitor cell binding to the stromal microenvironment in vitro. Gordon MY, et al. **Exp Hematol** 1990 Aug;18(7):837–42

Migration of stem cells and progenitors between marrow and spleen following thiamphenicol treatment of mice. Goris H, et al. **Exp Hematol** 1990 Jun;18(5):400–7

Use of bone marrow somatic cell hybrid lines to generate monoclonal antibodies specifically reactive with rare marrow cells. Hasthorpe S, et al. **Exp Hematol** 1990 Mar; 18(3):223–7

Mast cell growth-enhancing activity (MEA) stimulates interleukin 6 production in a mouse bone marrow-derived mast cell line and a malignant subline. Hültner L, et al. **Exp Hematol** 1990 Sep;18(8):873–7

Human granulocyte colony formation in serum-free cultures stimulated with purified recombinant granulocyte colony-stimulating factor. Ieki R, et al. **Exp Hematol** 1990 Sep;18(8):883–7

Early B-lymphocyte precursor cells in mouse bone marrow: subosteal localization of B220+ cells during postirradiation regeneration. Jacobsen K, et al. **Exp Hematol** 1990 May; 18(4):304–10

Antagonistic effects of interleukin 6 and G-CSF in the later stage of human granulopoiesis in vitro. Katayama K, et al. **Exp Hematol** 1990 Jun;18(5):390–4

Effect of different promoters on expression of genes introduced into hematopoietic and marrow stromal cells by electroporation. Keating A, et al. **Exp Hematol** 1990 Feb;18(2):99–102

Murine spleen culture: homing of hemopoietic progenitor cells to spleen is not mediated by a similar mechanism to that in marrow. Konno M, et al. **Exp Hematol** 1990 Jan; 18(1):65–8

Progenitor cells in murine bone marrow stimulated by growth factors produced by the AF1-19T rat cell line. Kriegler AB, et al. **Exp Hematol** 1990 Jun;18(5):372–8

Increased efficiency of gene transfer with retroviral vectors in neonatal hematopoietic progenitor cells. al-Lebban ZS, et al. **Exp Hematol** 1990 Mar;18(3):180–4

Modulation of erythropoiesis and myelopoiesis by exogenous erythropoietin in human long-term marrow cultures. Mayani H, et al. **Exp Hematol** 1990 Mar;18(3):174–9

In vitro differentiation and proliferation of purified human thymic and bone marrow CD7+CD2- T-cell precursors. Mossalayi MD, et al. **Exp Hematol** 1990 May;18(4):326–31

Cloned stromal cell lines derived from human Whitlock/Witte-type long-term bone marrow cultures. Novotny JR, et al. **Exp Hematol** 1990 Aug;18(7):775–84

Human megakaryocytes. VII. Analysis of megakaryocytes for nuclear DNA content distribution in whole marrow cell suspensions by flow cytometry. Rabellino EM, et al. **Exp Hematol** 1990 Mar;18(3):167–73

Regulation of mast cell differentiation studied using the diffusion chamber technique. Ru XM, et al. **Exp Hematol** 1990 Mar;18(3):238–42

Tumor necrosis factor exerts dose-dependent effects on erythropoiesis and myelopoiesis in vivo. Ulich TR, et al. **Exp Hematol** 1990 May;18(4):311–5

Marrow repopulating cells, but not CFU-S, establish long-term in vitro hemopoiesis on a marrow-derived stromal layer. van der Sluijs JP, et al. **Exp Hematol** 1990 Sep;18(8):893–6

Intraperitoneally injected cultured mast cells suppress recruitment and differentiation of bone marrow-derived mast cell precursors in the peritoneal cavity of W/Wv mice. Waki N, et al. **Exp Hematol** 1990 Mar;18(3):243–7

Dissecting the hematopoietic microenvironment. VI. The effects of several growth factors on the in vitro growth of murine bone marrow CFU-F. Wang QR, et al. **Exp Hematol** 1990 May;18(4):341–7

Purging of T-lymphocytes with magnetic affinity colloid. Yau JC, et al. **Exp Hematol** 1990 Mar;18(3):219–22

Stimulation of immune-suppressive bone marrow cells by colony-stimulating factors. Young MR, et al. **Exp Hematol** 1990 Aug;18(7):806–11

Peptidylarginine deiminase in rat and mouse hemopoietic cells. Nagata S, et al. **Experientia** 1990 Jan 15;46(1):72–4

Tissue inhibitor of metalloproteinases from human bone marrow stromal cell line KM 102 has erythroid-potentiating activity, suggesting its possibly bifunctional role in the hematopoietic microenvironment. Hayakawa T, et al. **FEBS Lett** 1990 Jul 30;268(1):125–8

Marrow grown in long–term culture can be used for autologous transplantation in the treatment of acute myeloid leukaemia. Chang J, et al. **Folia Haematol (Leipz)** 1989;116(3–4):597–600

Transplantation of major AB0–incompatible bone marrow: removal of red cells by dextrane sedimentation. Müller A, et al. **Folia Haematol (Leipz)** 1989;116(3–4):475–9

Elimination of red blood cells from marrow suspension prior to transplantation using polysaccharide–ditrizoate gradient centrifugation. Experimental studies. Ratajczak MZ, et al. **Folia Haematol (Leipz)** 1989;116(3–4):469–73

The mutated, myeloid cell–specific growth factor receptor v–fms transforms avian erythroid but not myeloid cells. Fuhrmann U, et al. **Genes Dev** 1989 Dec;3(12B):2072–82

Human interleukin 3: effects on normal and leukemic cells. Barber KE, et al. **Growth Factors** 1989;1(2):101–14

Effect of human recombinant interleukin 4 on in vitro granulopoiesis of human bone marrow cells. Kajitani H, et al. **Growth Factors** 1989;1(4):283–6

Establishment of IL–5–dependent early B cell lines by long–term bone marrow cultures. Tominaga A, et al. **Growth Factors** 1989;1(2):135–46

Bone marrow processing with a gravity sedimentation technique: experience of 13 cases. Adorno G, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:48–50

Human bone marrow processing using Cobe 2991 and CS 3000 blood cell separators for further ex vivo manipulation. Angelini A, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:43–7

Hemopoiesis in human micro long–term bone marrow culture with preformed extracellular matrix. Mergenthaler HG, et al. **Haematologica** 1990 Jan–Feb;75(1):12–6

Bone marrow stromal cells in myelodysplastic syndromes and acute nonlymphocytic leukemia. Elstner E, et al. **Hamatol Bluttransfus** 1989;32:168–71

Isolation of revertants from a factor–independent myeloid cell line. Kawai M, et al. **Hamatol Bluttransfus** 1989; 32:206–7

A microcytofluorometric method for quantitative and qualitative evaluation of CFU–E and BFU–E colonies. Maruo N, et al. **Histochemistry** 1990;94(3):257–62

Donor and recipient specific tolerance in cells from semi–allogeneic, H–2 subregion compatible or fully allogeneic bone marrow chimeras attributable to clonal deletion. Onoé K, et al. **Immunobiology** 1989 Jun; 179(2–3):172–89

Murine recombinant GM–CSF–driven rat bone marrow cell differentiation and factors suppressing cell proliferation. Wiltschke C, et al. **Immunobiology** 1989 Jun; 179(2–3):145–58

Antibody which defines a subset of bone marrow cells that can migrate to thymus. O'Neill HC. **Immunology** 1989 Sep; 68(1):59–65

The effect of serum from patients of chronic renal failure on colony forming units (CFU–S) in mice. Srivastava A, et al. **Indian J Pathol Microbiol** 1990 Apr;33(2):166–70

Comparative distribution of marrow CFU–e and CFU–gm progenitors in different anatomic sites in the dog. Deldar A, et al. **Int J Cell Cloning** 1990 May;8(3):196–208

Bone marrow cell modulation and inhibition of myelopoiesis by large granular lymphocytes and natural killer cells. Nagler A, et al. **Int J Cell Cloning** 1990 May;8(3):171–83

Multilineage hemopoiesis induced by cloned stromal cells. Tamir M, et al. **Int J Cell Cloning** 1989 Nov;7(6):373–84

Heat sensitivity, thermotolerance and protein synthesis of granulocyte and macrophage progenitors from mice and from long–term bone marrow cultures. Mivechi NF, et al. **Int J Hyperthermia** 1990 May–Jun;6(3):529–41

Megakaryocytes in the yolk sac, liver and bone marrow of the mouse: a cytometrical analysis by semithin light microscopy. Matsumura G, et al. **J Anat** 1989 Dec; 167:181–7

Thrombin binds to murine bone marrow–derived macrophages and enhances colony–stimulating factor–1–driven mitogenesis. Clohisy DR, et al. **J Biol Chem** 1990 May 15;265(14):7729–32

Prostaglandin E2 inhibits formation of osteoclastlike cells in long–term human marrow cultures but is not a mediator of the inhibitory effects of transforming growth factor beta. Chenu C, et al. **J Bone Miner Res** 1990 Jul;5(7):677–81

Impairment of macrophage colony–stimulating factor production and lack of resident bone marrow macrophages in the osteopetrotic op/op mouse. Felix R, et al. **J Bone Miner Res** 1990 Jul;5(7):781–9

Continuously applied compressive pressure induces bone resorption by a mechanism involving prostaglandin E2 synthesis. Imamura K, et al. **J Cell Physiol** 1990 Aug; 144(2):222–8

Marrow stromal stem cells. Owen M. **J Cell Sci Suppl** 1988; 10:63–76 (59 ref.)

Settling–time dependence of rat bone marrow cell partition and counter–current distribution in charge–sensitive aqueous two–phase systems. Relationship with the cell partitioning mechanism. García–Pérez AI, et al. **J Chromatogr** 1990 Mar 30;504(1):79–88

Cytokine–dependent long–term culture of highly enriched precursors of hematopoietic progenitor cells from human bone marrow. Brandt J, et al. **J Clin Invest** 1990 Sep; 86(3):932–41

Inhibition of human colony–forming–unit erythroid by tumor necrosis factor requires accessory cells. Means RT Jr, et al. **J Clin Invest** 1990 Aug;86(2):538–41

Human hematopoietic precursors in long–term culture: single CD34+ cells that lack detectable T cell, B cell, and myeloid cell antigens produce multiple colony–forming cells when cultured with marrow stromal cells. Andrews RG, et al. **J Exp Med** 1990 Jul 1;172(1):355–8

The generation of natural killer (NK) cells from NK precursor cells in rat long–term bone marrow cultures. van den Brink MR, et al. **J Exp Med** 1990 Jul 1;172(1):303–13

T–cell depletion of human bone marrow. Gee AP, et al. **J Immunogenet** 1989 Apr;16(2):103–15 (45 ref.)

Generation and characterization of IL–2–activated bone marrow cells as a potent graft vs tumor effector in transplantation. Agah R, et al. **J Immunol** 1989 Nov 1; 143(9):3093–9

Characterization of cells with T cell markers in athymic nude bone marrow and of their in vitro–derived clonal progeny. Comparison with euthymic bone marrow. Benveniste P, et al. **J Immunol** 1990 Jan 15;144(2):411–9

Functional characterization of two stromal cell lines that support B lymphopoiesis. Henderson AJ, et al. **J Immunol** 1990 Jul 15;145(2):423–8

Precursors (pre–CFCmulti) of multilineage hemopoietic colony–forming cells quantitated in vitro. Uniqueness of IL–1 requirement, partial separation from pluripotential colony–forming cells, and correlation with long term reconstituting cells in vivo. Iscove NN, et al. **J Immunol** 1990 Jul 1;145(1):190–5

The age–dependent loss of bone marrow B cell precursors in autoimmune NZ mice results from decreased mitotic activity, but not from inherent stromal cell defects. Kruger MG, et al. **J Immunol** 1990 Jan 1;144(1):103–10

IL–6 stimulates osteoclast–like multinucleated cell formation in long term human marrow cultures by inducing IL–1 release. Kurihara N, et al. **J Immunol** 1990 Jun 1; 144(11):4226–30

Bradykinin sensitization of colony–stimulating factor–1–responsive murine marrow progenitors to prostaglandin E. A property of the amino–terminal tetrapeptide fragment. Moore RN, et al. **J Immunol** 1990 Jan 15;144(2):667–70

Maturation–dependent adhesion of human B cell precursors to the bone marrow microenvironment. Ryan DH, et al. **J Immunol** 1990 Jul 15;145(2):477–84

Genetically distinct cell populations in naturally occurring bone marrow–chimeric primates express similar MHC class I gene products. Watkins DI, et al. **J Immunol** 1990 May 15;144(10):3726–35

Bone marrow–derived cells are essential for intrathymic deletion of self–reactive T cells in both the host– and donor–derived thymocytes of fully allogeneic bone marrow chimeras. Yoshikai Y, et al. **J Immunol** 1990 Jul 15; 145(2):505–9

A colony assay system that detects B cell progenitors in fresh and cultured bone marrow. Dorshkind K, et al. **J Immunol Methods** 1989 Sep 29;123(1):93–101

A one step cell sorting procedure for the enrichment of murine bone marrow CFU–S which is independent of their proliferative activity. Lepault F, et al. **J Immunol Methods** 1990 Apr 17;128(2):249–55

In vitro growth and hemopoietic differentiation of mouse bone marrow–derived adherent stromal cells in long–term culture: formation of spheroidal bodies mimicking hemopoietic anlagen. Islam A, et al. **J Med** 1989; 20(3–4):193–207

Primary culture of marrow core in collagen gels: modulation and transformation of endosteal cells. I. Morphologic observations. Islam A, et al. **J Med** 1989;20(3–4):241–50

Fluorescent in–situ hybridization to detect cellular RNA by flow cytometry and confocal microscopy. Bauman JG, et al. **J Microsc** 1990 Jan;157 (Pt 1):73–81

Cell proliferation in bone marrow following surgical extraction of teeth: a pilot study. Yücel E. **J Nihon Univ Sch Dent** 1990 Mar;32(1):1–3

Role of delayed type hypersensitivity responses in protection during chronic Plasmodium berghei infection as evidenced by homing of radiolabelled bone marrow cells and contact sensitivity. Wangoo A, et al. **Jpn J Exp Med** 1990 Apr; 60(2):45–50

Serum erythropoietin level: relationships to blood hemoglobin concentration and erythrocytic activity of the bone marrow. Jelkmann W, et al. **Klin Wochenschr** 1990 Apr 17;68(8):403–7

Stimulation of myeloid colony development elaborated by colony forming cells—fibroblasts from rat developing ossicles. Bleiberg I. **Leuk Res** 1990;14(1):63–8

Evidence for a factor in normal human serum that induces human neutrophilic granulocyte end–stage maturation in vitro. Evans WH, et al. **Leuk Res** 1989;13(8):673–82

The effects of alpha interferon on human long–term bone marrow culture. Galvani DW, et al. **Leuk Res** 1990; 14(6):525–31

Recombinant lymphotoxin enhances the growth of normal, but not of chronic myeloid leukemic, human hematopoietic progenitor cells in vitro. Gullberg U, et al. **Leuk Res** 1989; 13(11):953–7

Effects of calcium antagonists on anti–cancer drug toxicity to haematopoietic progenitor cells in normal human bone marrow. Nakarai T, et al. **Leuk Res** 1990;14(5):401–5

The pattern of myeloid suppression and recovery after the addition of methotrexate to murine long–term bone marrow culture. Udupa KB, et al. **Leuk Res** 1989;13(8):667–72

Cytogenetic study of maturing granulocytes in bone marrow of patients with acute myelogenous leukemia. Baer MR, et al. **Leukemia** 1990 Apr;4(4):297–301

Morphological evidence for a motile behavior by plasma cells. Berneman ZN, et al. **Leukemia** 1990 Jan;4(1):53–9

Synergistic effects between GM–CSF and G–CSF or M–CSF on highly enriched human marrow progenitor cells. Bot FJ, et al. **Leukemia** 1990 May;4(5):325–8

Multiparameter flow cytometric analysis of human fetal bone marrow B cells. LeBien TW, et al. **Leukemia** 1990 May; 4(5):354–8

Flow cytometric analysis of human bone marrow. III. Neutrophil maturation. Terstappen LW, et al. **Leukemia** 1990 Sep;4(9):657–63

Detection of residual T–cells in T–cell depleted bone marrow: a comparison of immunofluorescence and limiting dilution culture techniques. Williamson IK, et al. **Med Lab Sci** 1989 Apr;46(2):127–34

Response of bone marrow stromal cells to adipogenic antagonists. Gimble JM, et al. **Mol Cell Biol** 1989 Nov; 9(11):4587–95

Transformation of murine bone marrow cells with combined v–raf–v–myc oncogenes yields clonally related mature B cells and macrophages. Principato M, et al. **Mol Cell Biol** 1990 Jul;10(7):3562–8

Clastogenic effects of cesium chloride on mouse bone marrow cells in vivo. Ghosh A, et al. **Mutat Res** 1990 Aug; 244(4):295–8

Development of a method to increase the proportion of polychromatic erythrocytes from mouse bone marrow for more rapid evaluation of the micronucleus assay. Comparison with the conventional method with respect to micronucleus frequency and time required for preparation and evaluation. Selig C, et al. **Mutat Res** 1990 Feb;234(1):23–30

Separation of pluripotent haematopoietic stem cells from spleen colony–forming cells [see comments] Jones RJ, et al. **Nature** 1990 Sep 13;347(6289):188–9 Comment in: Nature 1990 Sep 13;347(6289):126–7.

A harvesting method of monocytes/macrophages derived from bone marrow and their characteristics—special reference to the effect of 1,25–dihydroxyvitamin D3 on monocytes/macrophages. Takagi M, et al. **Nippon Seikeigeka Gakkai Zasshi** 1990 Jan;64(1):89–98

Retroviral mediated gene transfer into bone marrow progenitor cells: use of beta–galactosidase as a selectable marker. Strair RK, et al. **Nucleic Acids Res** 1990 Aug 25; 18(16):4759–62

The proportion of erythroid mitoses in normal human bone marrow in short–term culture systems. Rudduck C, et al. **Pathology** 1989 Jul;21(3):185–8

Foamy histiocytes in repeat marrow aspirates [letter] Wong KF, et al. **Pathology** 1989 Apr;21(2):153–4

The bulk of the peripheral B–cell pool in mice is stable and not rapidly renewed from the bone marrow. Förster I, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4781–4

Functional characterization of individual human hematopoietic stem cells cultured at limiting dilution on supportive marrow stromal layers. Sutherland HJ, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3584–8

Stimulation of the expression of osteogenic and chondrogenic phenotypes in vitro by osteogenin. Vukicevic S, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8793–7

Proliferation of tartrate–resistant acid phosphatase positive multinucleate cells in ovariectomized animals. Kalu DN. **Proc Soc Exp Biol Med** 1990 Oct;195(1):70–4

Automated isolation of mononuclear cells using the Fenwal CS3000 blood cell separator. Areman EM, et al. **Prog Clin Biol Res** 1990;333:379–85

Hemonectin: a novel hematopoietic adhesion molecule. Campbell A, et al. **Prog Clin Biol Res** 1990;352:97–105

Purging in auto– and allografts: monoclonal antibodies which use human complement and other natural effector mechanisms. Cobbold SP, et al. **Prog Clin Biol Res** 1990; 333:139–51; discussion 152–4

Isolation of hemopoietic precursor cells from human marrow by negative selection using monoclonal antibodies and immunomagnetic beads. Cottler–Fox M, et al. **Prog Clin Biol Res** 1990;333:277–84

The use of cultured bone marrow cells in autologous transplantation. Coutinho LH, et al. **Prog Clin Biol Res** 1990;333:415–32; discussion 433 (37 ref.)

Lymphokine–activated killer (LAK) cell purging of bone marrow. Cramer DV, et al. **Prog Clin Biol Res** 1990; 333:125–35; discussion 136–7

Purging of small cell lung cancer–contaminated bone marrow by monoclonal antibodies and magnetic beads. Elias AD, et al. **Prog Clin Biol Res** 1990;333:263–75

Bone marrow purging and processing—a review of ancillary effects. Gee AP. **Prog Clin Biol Res** 1990;333:507–21 (39 ref.)

Efficacy of T cell depletion of surgically resected cadaveric marrows by monoclonal antibodies: considerations in HLA–mismatched marrow transplantation. Gress RE, et al. **Prog Clin Biol Res** 1990;333:471–88; discussion 489

Perspectives in marrow purging. Gross S. **Prog Clin Biol Res** 1990;333:xxix–xxxiv

The efficiency of a new cell separation technique in bone

marrow purging without damaging the purged tumor cells. Handgretinger R, et al. **Prog Clin Biol Res** 1990;333:303–9

Immunomagnetic microsphere mediated purging of cALLa positive leukemic cells from bone marrow for autologous reinfusion. Janssen WE, et al. **Prog Clin Biol Res** 1990; 333:285–92

Immunomagnetic manipulation of bone marrow and tumour cells: an update. Kemshead JT, et al. **Prog Clin Biol Res** 1990;333:235–50; discussion 251 (38 ref.)

Kinetic response of haemopoietic cell lineages to growth factors in vivo: their relationship to the microarchitecture of the tissue and its microenvironment. Lord BI. **Prog Clin Biol Res** 1990;352:391–407 (47 ref.)

Efficacy of bone marrow purging in AML using monoclonal antibodies and complement. Mills LE, et al. **Prog Clin Biol Res** 1990;333:165–70

Elimination of clonogenic leukemic cells from bone marrow using monoclonal antibodies and magnetic immunobeads. Murakami S, et al. **Prog Clin Biol Res** 1990;333:253–61

Elutriation of bone marrow delineates two distinct natural suppressor cell populations. Noga SJ, et al. **Prog Clin Biol Res** 1990;333:363–8

Using elutriation to engineer bone marrow allografts. Noga SJ, et al. **Prog Clin Biol Res** 1990;333:345–59; discussion 360–1

Stromal regulation of hemopoiesis. Quesenberry PJ, et al. **Prog Clin Biol Res** 1990;352:107–14 (28 ref.)

Density-gradient separation for 4-hydroperoxycyclophosphamide purging of autologous bone marrow grafts. Rowley S, et al. **Prog Clin Biol Res** 1990;333:369–77

Purging of myeloma cells from bone marrow using monoclonal antibodies and magnetic immunobeads in combination with 4-hydroperoxycyclophosphamide. Shimazaki C, et al. **Prog Clin Biol Res** 1990;333:311–9

Immunopharmacologic purging of breast cancer from bone marrow for autologous bone marrow transplantation. Shpall EJ, et al. **Prog Clin Biol Res** 1990;333:321–35; discussion 336

The use of immunorosettes for purging of bone marrow in childhood cancer. Slaper-Cortenbach IC, et al. **Prog Clin Biol Res** 1990;333:337–44

Molecular mechanism of hematopoietic stem cell binding to the supportive stroma. Tavassoli M, et al. **Prog Clin Biol Res** 1990;352:87–95 (31 ref.)

Elimination of chemoresistant myeloma clonogenic cells from human bone marrow by monoclonal antibody and complement. Tong AW, et al. **Prog Clin Biol Res** 1990; 333:155–64

Bone marrow purging with immunotoxins for treatment of T cell acute lymphoblastic leukemia (T-ALL). Vallera DA, et al. **Prog Clin Biol Res** 1990;333:191–204; discussion 205

Preclinical evaluation of immunoconjugates consisting of doxorubicin linked to complement-fixing monoclonal antibody DLC-48 for bone marrow purging of B-cell lymphomas. Winter JN, et al. **Prog Clin Biol Res** 1990; 333:171–83

Role of stromal cell factors (restrictins) in microorganization of hemopoietic tissues. Zipori D. **Prog Clin Biol Res** 1990; 352:115–22 (14 ref.)

Response of murine bone marrow granulocyte-macrophage colony-forming units to hyperthermia in situ. O'Hara MD, et al. **Radiat Res** 1990 May;122(2):149–54

In vitro development of bone-marrow-derived macrophages. Influence of mouse genotype on response to colony-stimulating factors and autocrine interferon induction. Kruse A, et al. **Scand J Immunol** 1989 Dec; 30(6):731–40

Human colony-stimulating factors and stromal cell function. Sieff CA, et al. **Soc Gen Physiol Ser** 1988;43:47–55 (23 ref.)

Kinetics of thymocyte regeneration in adult adriamycin treated rats: evidence for an exclusive role of bone marrow derived cells. Murawska MB, et al. **Thymus** 1990 May; 15(3):131–46

Increase in colony stimulating factor (CSF) in serum and augmentation of CSF responsiveness of lymphoid mononuclear cells by acute Trypanosoma cruzi infection in mice. Takasu N, et al. **Tohoku J Exp Med** 1990 Jan; 160(1):67–79

Evidence that long-term bone marrow culture of patients with multiple myeloma favors normal hemopoietic proliferation. Visani G, et al. **Transplantation** 1989 Dec; 48(6):1026–31

The biology and clinical potential of growth factors that regulate myeloid cell production. Whetton AD. **Trends Pharmacol Sci** 1990 Jul;11(7):285–9 (36 ref.)

Ovine haemopoiesis: the development of bone marrow-derived colony-forming cells in vitro in the presence of factors derived from lymphoid cells and helper T-cells. Haig DM, et al. **Vet Immunol Immunopathol** 1990 Jun;25(2):125–37

Phenotypic analysis of ovine bone marrow cells using monoclonal antibodies and lectins. Haig DM, et al. **Vet Immunol Immunopathol** 1990 Jul;25(3):219–33

Culture of macrophages from bovine bone marrow. Pontzer CH, et al. **Vet Immunol Immunopathol** 1989 Jul; 21(3–4):351–62

Emperipolesis of hematopoietic cells within megakaryocytes in bone marrow of the rat. Lee KP. **Vet Pathol** 1989 Nov; 26(6):473–8

[Influence of Rhizoma pinelliae on the occurrence of micronucleus in bone marrow polychromatic erythrocytes (PCE) in mice and frequencies of SCE in cultured human lymphocytes] Yang S, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1990 Jun;10(6):356–8, 326 (Eng. Abstr.) **(Chi)**

[Morphological observation of erythroid progenitor cell differentiation in vitro] Zhang QY. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Jun; 11(3):210–4 (Eng. Abstr.) **(Chi)**

[Effects of histamine H2-receptor antagonists on hemopoietic reconstruction in bone marrow] Du XX, et al. **Sheng Li Hsueh Pao** 1989 Dec;41(6):597–601 (Eng. Abstr.) **(Chi)**

[The conditions and clinical feasibility of technics of bone marrow stem cell culture] Müller A. **Folia Haematol (Leipz)** 1989;116(5):731–43 (48 ref.) (Eng. Abstr.) **(Ger)**

[Evaluation of a modified immunomagnetic procedure for the purging of neuroblastoma cells from bone marrow] Kremens B, et al. **Monatsschr Kinderheilkd** 1990 Jun; 138(6):331–6 (Eng. Abstr.) **(Ger)**

[Characterization of cultivated rat bone marrow cells modified by CSF-1 with lectins. A soybean agglutinin binding 30-kDa glycoprotein as a marker of mature macrophages] Krugluger W. **Wien Klin Wochenschr** 1989 Oct 27;101(20):710–4 **(Ger)**

[Differentiation and maturation processes of the hematopoietic system in bone marrow using flow cytometry] Hollander Z, et al. **Harefuah** 1989 Dec 1; 117(11):384–9 (36 ref.) **(Heb)**

[Decreased bone marrow cellularity and hemosiderin in normal and overtrained runners] Wishnitzer R, et al. **Harefuah** 1990 Jan 15;118(2):74–8 (Eng. Abstr.) **(Heb)**

[Granulocyte-macrophage progenitor cells in allogenic bone marrow transplantation: correlation of progenitor cell content and regeneration in the graft] Gidáli J, et al. **Orv Hetil** 1989 Oct 15;130(42):2251–4, 2257 (Eng. Abstr.) **(Hun)**

[Viability assay of cryopreserved bone marrow cells before autologous transplant] De Caro L, et al. **Boll Soc Ital Biol Sper** 1988 Oct;64(10):893–900 (Eng. Abstr.) **(Ita)**

[Long-term cultures of marrow cells from the patients with aplastic anemia] Fujiwara M. **Nippon Ketsueki Gakkai Zasshi** 1990 May;53(3):533–40 (Eng. Abstr.) **(Jpn)**

[Microcytofluorometrical measurement of DNA content in immunologically identified micromegakaryocytes of human bone marrow] Kobayashi Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Nov;52(7):1165–9 (Eng. Abstr.) **(Jpn)**

[Role of arachidonic acid cascade and related substances in blood and bone marrow cells] Okuma M. **Nippon Rinsho** 1990 Jun;48(6):1154–9 **(Jpn)**

[Effect of hemodialysate and its peptide fragments on stromal cells and heme synthesis in bone marrow culture and the activity of selected enzymes and GSH in human erythrocytes. II. Effect on heme synthesis by the erythroid cells of the human bone marrow in vitro] Smoleński O. **Przegl Lek** 1989;46(8):648–53 (Eng. Abstr.) **(Pol)**

[Normal hematopoiesis] Chertkov IL. **Gematol Transfuziol** 1990 Feb;35(2):30–3 **(Rus)**

[Identification of primitive hematopoietic stem cells in mice by the limiting dilution method] Deriugina EI, et al. **Gematol Transfuziol** 1989 Oct;34(10):29–33 (Eng. Abstr.) **(Rus)**

[Early hematopoietic stem cells (pre-CFU) studied in long-term culture of murine bone marrow] Deriugina EI, et al. **Gematol Transfuziol** 1990 Feb;35(2):3–7 (Eng. Abstr.) **(Rus)**

[Methods of isolating hematopoiesis islets from the bone marrow] Gol'dberg ED, et al. **Gematol Transfuziol** 1990 Mar;35(3):20–2 (Eng. Abstr.) **(Rus)**

[Lymphocyte subpopulations in the bone marrow of children] Man'ko VM, et al. **Gematol Transfuziol** 1989 Sep;34(9):44–9 (Eng. Abstr.) **(Rus)**

[Hematopoietic stem cells: stochastic differentiation and humoral control of their proliferation] Ogava M. **Gematol Transfuziol** 1990 Feb;35(2):24–30 (112 ref.) **(Rus)**

[Two-dimensional size-charge distribution of bone marrow cells in children with chronic immune neutropenia] Shcherbakova TI, et al. **Gematol Transfuziol** 1989 Sep; 34(9):55–8 (Eng. Abstr.) **(Rus)**

[Stromal fibroblasts of normal bone marrow in children] Vladimirskaia EB, et al. **Gematol Transfuziol** 1990 Jan; 35(1):3–5 (Eng. Abstr.) **(Rus)**

[The stimulating effect of preliminary irradiation of the hematopoietic stroma with small doses on the content of hematopoietic stem cells in the bone marrow in vivo and in a long-term culture system] Lebedev VG, et al. **Radiobiologiia** 1989 Nov-Dec;29(6):782–6 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Interleukin-2 inhibits growth of fibroblasts derived from human bone marrow. MacDonald D, et al. **Acta Haematol (Basel)** 1990;83(1):26–30

In vitro effects of phorbol and phorbol ester on the proliferation and enzyme activities of bone marrow stromal cells in rats. Miszta H. **Acta Haematol (Basel)** 1989; 82(3):131–5

Comparative effects of busulfan, cytosine arabinoside and adriamycin on different maturation stages of normal human bone marrow cells. Tohda S, et al. **Acta Haematol (Basel)** 1990;83(1):16–21

Serum thymidine kinase—a marker of bone marrow toxicity during treatment with zidovudine. Pedersen C, et al. **AIDS** 1989 Nov;3(11):743–6

Reversal of azidothymidine-induced bone marrow suppression by 2',3'-dideoxythymidine as studied by hemopoietic clonal culture. Yoshida Y, et al. **AIDS Res Hum Retroviruses** 1990 Jul;6(7):929–32

Lack of response of bone marrow, in vitro, to growth factors in congenital neutropenia. Chang J, et al. **Am J Hematol** 1990 Oct;35(2):125–6

Role of heme metabolism in AZT-induced bone marrow toxicity. Lutton JD, et al. **Am J Hematol** 1990 Sep;35(1):1–5

Effect of granulocyte-macrophage colony-stimulating factor on neutropenia and related morbidity induced by myelotoxic chemotherapy. Herrmann F, et al. **Am J Med** 1990 Jun;88(6):619–24

Hematologic effects of recombinant murine granulocyte-macrophage colony-stimulating factor on the peripheral blood and bone marrow. Ulich TR, et al. **Am J Pathol** 1990 Aug;137(2):369–76

Acute in vivo effects of IL-3 alone and in combination with IL-6 on the blood cells of the circulation and bone marrow. Ulich TR, et al. **Am J Pathol** 1989 Oct;135(4):663–70

Prognostic importance of myelosuppression during maintenance treatment of lymphoblastic leukaemia. Leukaemia in Childhood Working Party of the Medical Research Council. Dolan G, et al. **Arch Dis Child** 1989 Sep;64(9):1231–4

Lindane and hematologic reactions. West I. **Arch Environ Health** 1967 Jul;15(1):97–101

Generation of hydroxyl radicals during benzene toxicity. Khan S, et al. **Biochem Pharmacol** 1990 Apr 15;39(8):1393–5

Role of interleukin-1 in 4-hydroperoxycyclophosphamide toxicity to bone marrow progenitor cells: a review. Moreb J, et al. **Biotherapy** 1989;1(4):273–80 (66 ref.)

2'-Deoxycytidine protects normal human bone marrow progenitor cells in vitro against the cytotoxicity of 3'-azido-3'-deoxythymidine with preservation of antiretroviral activity. Bhalla K, et al. **Blood** 1989 Nov 1; 74(6):1923–8

Pretreatment of murine donor grafts with L-leucyl-L-leucine methyl ester: elimination of graft-versus-host disease without detrimental effects on engraftment. Blazar BR, et al. **Blood** 1990 Feb 1; 75(3):798–805

Enhancing and suppressing effects of recombinant murine macrophage inflammatory proteins on colony formation in vitro by bone marrow myeloid progenitor cells. Broxmeyer HE, et al. **Blood** 1990 Sep 15;76(6):1110–6

Effects of injected leukemia inhibitory factor on hematopoietic and other tissues in mice. Metcalf D, et al. **Blood** 1990 Jul 1;76(1):50–6

Sensitivity of CFU-GM from normal human bone marrow and leukaemic clonogenic cells (CFU-L) from blood of patients with myelogenous leukaemia to 3'-deoxy-3'-fluorothymidine in comparison to 3'-azido-3'-deoxythymidine. Blau IW, et al. **Blut** 1989 Nov;59(5):455–7

Bone marrow purging with mafosfamide—a critical survey. Sindermann H, et al. **Blut** 1989 Nov;59(5):432–41 (132 ref.)

Hemopoietic reconstitution after repeated autologous transplantation with mafosfamide-purged marrow. Beaujean F, et al. **Bone Marrow Transplant** 1989 Sep; 4(5):537–41

An immunotoxin system intended for bone marrow purging composed of glucose oxidase and lactoperoxidase coupled to monoclonal antibody 097. Ito HO, et al. **Bone Marrow Transplant** 1989 Sep;4(5):519–27

The use of recombinant cytokines for enhancing immunohematopoietic reconstitution following bone marrow transplantation. II. The influence of lymphokines on CFU-GM colonies from human untreated, ASTA-Z or Campath-1M treated bone marrow. Mumcuoglu M, et al. **Bone Marrow Transplant** 1990 Mar;5(3):153–8

Prospects for eradication of therapy-induced myelosuppression. Ventura G, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:41–2

The long-term effects of MVPP chemotherapy for Hodgkin's disease on bone marrow function. Radford JA, et al. **Br J Cancer** 1990 Jul;62(1):127–32

Bone marrow suppression secondary to carbamazepine. Varghese A, et al. **Br J Clin Pract** 1989 Aug;43(8):302–4

Long-term bone marrow damage after chemotherapy for acute myeloid leukaemia does not improve with time. Chang J, et al. **Br J Haematol** 1990 May;75(1):68–72

Effect of cortisone on cells at the bone-marrow interface. Simmons DJ, et al. **Calcif Tissue Int** 1990 May;46(5):327–32

Maintenance chemotherapy for childhood acute lymphoblastic leukemia: relation of bone-marrow and hepatotoxicity to the concentration of methotrexate in erythrocytes. Schmiegelow K, et al. **Cancer Chemother Pharmacol** 1989;25(1):65–9

Pharmacological elimination of tumor cells contaminating normal human bone marrow using PTT-119. Lemoli RM, et al. **Cancer Commun** 1990;2(2):87–91

Sister chromatid exchange induced by secondary and tertiary amine containing dyes and in combination with nitrite in vivo in mice. Giri AK, et al. **Cancer Lett** 1990 Jun 30; 52(1):33–7

Application of target-specific drug immunoconjugates to experimental bone marrow replacement therapy in mice. Ding L, et al. **Cancer Res** 1990 Mar 1;50(5):1538–43

Prevention of hematotoxic side effects of cytostatic drugs in mice by a synthetic hemoregulatory peptide. Paukovits WR, et al. **Cancer Res** 1990 Jan 15;50(2):328–32

Diethyldithiocarbamate modulation of murine bone marrow toxicity induced by cis-diammine(cyclobutanedicarboxylato)platinum (II). Schmalbach TK, et al. **Cancer Res** 1989 Dec 1; 49(23):6629–33

Effect of beta-lactam antibiotics on a human myeloid cell line: investigation of potential in vivo correlates in the mouse. Weston BJ, et al. **Cell Biol Toxicol** 1986 Dec; 2(4):549–57

IL-3, IL-4, and IL-6 enhance IFN-gamma-dependent bone marrow natural suppressor activity. Holda JH, et al. **Cell Immunol** 1990 Feb;125(2):459–68

Effect of aluminum overload on the bone marrow response to recombinant human erythropoietin. Grützmacher P, et al. **Contrib Nephrol** 1989;76:315–21; discussion 322–3

Genotoxicity studies on mice after short term inhalation exposure to methyl isocyanate. Kar RN, et al. **Cytobios** 1989;59(238–239):167–76

Activation of bone marrow phagocytes following benzene treatment of mice. Laskin DL, et al. **Environ Health Perspect** 1989 Jul;82:75–9

Studies on the mechanism of benzene toxicity. Snyder R, et al. **Environ Health Perspect** 1989 Jul;82:31–5

Assays of three carcinogen/non-carcinogen chemical pairs for in vivo induction of chromosome aberrations, sister chromatid exchanges and micronuclei. McFee AF, et al. **Environ Mol Mutagen** 1989;14(4):207–20

13-cis retinoic acid augments the production of macrophages in mouse bone marrow cultures stimulated with interleukin 3. Bender JG, et al. **Exp Hematol** 1990 Oct;18(9):990–4

In vitro myelotoxicity of 2',3'-dideoxynucleosides on human hematopoietic progenitor cells. Du DL, et al. **Exp Hematol** 1990 Aug;18(7):832–6

In vitro cytotoxicity of VP-16-213 and nitrogen mustard: agonistic on tumor cells but not on normal human bone marrow progenitors. Lemoli RM, et al. **Exp Hematol** 1990 Oct;18(9):1008–12

Non-clastogenicity in mouse bone marrow of fructose/lysine and other sugar/amino acid browning products with in vitro genotoxicity. MacGregor JT, et al. **Food Chem Toxicol** 1989 Nov;27(11):715–21

Long-term alteration of adult bone marrow colony formation by prenatal chlordane exposure. Barnett JB, et al. **Fundam Appl Toxicol** 1990 May;14(4):688–95

The use of long-term bone marrow cultures (LTBMC) to detect hematotoxic side effects of purging methods. Schulze E, et al. **Hamatol Bluttransfus** 1989;32:46–50

The myelotoxicity of carboplatin is influenced by the time of its administration. Kerr DJ, et al. **Hematol Oncol** 1990 Jan-Feb;8(1):59–63

Cell type-dependent difference in the distribution and frequency of aphidicolin-induced fragile sites: T and B lymphocytes and bone marrow cells. Murano I, et al. **Hum Genet** 1989 Dec;84(1):71–4

Effect of fluoroquinolones on the in-vitro proliferation of myeloid precursor cells. Pessina A, et al. **J Antimicrob Chemother** 1989 Aug;24(2):203–8

The lack of long-term suppressive effect of ciprofloxacin on murine bone marrow. Somekh E, et al. **J Antimicrob Chemother** 1989 Aug;24(2):209–13

Hypoplasia of bone marrow secondary to sodium antimony gluconate [letter] Mallick BK. **J Assoc Physicians India** 1990 Apr;38(4):310–1

Granulocyte colony-stimulating factor stimulates recovery of granulocytes in patients receiving dose-intensive chemotherapy without bone marrow transplantation. Neidhart J, et al. **J Clin Oncol** 1989 Nov;7(11):1685–92

Hematologic effects of interleukin-1 beta, granulocyte colony-stimulating factor, and granulocyte-macrophage colony-stimulating factor in tumor-bearing mice treated with fluorouracil. Moore MA, et al. **J Natl Cancer Inst** 1990 Jun 20;82(12):1031–7

6-bis-(2-chloroethyl)amino-6-deoxy-D-galactopyranose hydrochloride: synthesis, chemical characterization, murine P388 antitumor activity, and bone marrow toxicity. Schein PS, et al. **J Pharm Sci** 1989 Nov;78(11):918–21

Gold induced marrow suppression: a review of 10 cases. Yan A, et al. **J Rheumatol** 1990 Jan;17(1):47–51

Hematologic and cytogenetic findings in myelodysplastic syndromes treated with recombinant human granulocyte colony-stimulating factor. Ohyashiki K, et al. **Jpn J Cancer Res** 1989 Sep;80(9):848–54

Effects of retinoic acid, 1,25-dihydroxyvitamin D3, cytosine arabinoside and alpha-interferon on bone marrow cells from patients with myelodysplastic syndromes. Hellström E, et al. **Leuk Res** 1989;13(12):1113–21

Suitability of a new stable acetal analogue of aldoifosphamide for purging leukemic cells from human bone marrow. Andersson BS, et al. **Leukemia** 1990 Jun;4(6):435–40

In vivo effects of interleukin-1 alpha on regenerating mouse bone marrow myeloid colony-forming cells after treatment with 5-fluorouracil. Bradley TR, et al. **Leukemia** 1989 Dec; 3(12):893–6

Collagen gel cultures for detection of spared hematopoietic progenitors in Asta Z 7557 purged human marrows. Praloran V, et al. **Leukemia** 1990 Apr;4(4):282–6

Cumulative bone marrow stromal damage caused by X-irradiation and cytosine-arabinoside in leukemic mice. Ben-Ishay Z, et al. **Med Oncol Tumor Pharmacother** 1990; 7(1):55–9

Low concentrations of cytosine arabinoside, 6-thioguanine, actinomycin-D and aclacinomycin A stimulates the differentiation of normal human marrow myeloid progenitor cells. Hassan HT, et al. **Med Oncol Tumor Pharmacother** 1989;6(3):213–7

The micronucleus test and erythropoiesis. Effects of erythropoietin and a mutagen on the ratio of polychromatic to normochromatic erythrocytes (P/N ratio). Suzuki Y, et al. **Mutagenesis** 1989 Nov;4(6):420–4

Serial versus single dosing protocols for the rodent bone-marrow micronucleus assay. **Mutat Res** 1990 Jun-Aug;234(3-4):111–261

Single versus multiple dosing in the micronucleus test: the summary of the fourth collaborative study by CSGMT/JEMS.MMS. Collaborative Study Group for the Micronucleus Test, the Mammalian Mutagenesis Study Group of the Environmental Mutagen Society, Japan (CSGMT/JEMS.MMS). **Mutat Res** 1990 Jun-Aug; 234(3-4):205–22

Evaluation of chromosomal aberrations in bone marrow of 1C3F1 mice. Adler ID, et al. **Mutat Res** 1989 Nov; 224(3):343–5

Comparison of single and multiple treatment regimens in the mouse bone marrow micronucleus assay for hydroquinone (HQ) and cyclophosphamide (CP). Adler ID, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):115–23

The serial dosing rodent bone-marrow micronucleus assay test protocol: context, purpose and design of the collaborative study. Ashby J, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):111–4 (9 ref.)

Overview of the study in relation to protocol design for the rodent bone-marrow micronucleus assay. Ashby J, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):223–48 (17 ref.)

Dose and time dependence of chromosomal aberration yields of bone marrow cells in male Chinese hamsters after a single i.p. injection of aflatoxin B1. Bárta I, et al. **Mutat Res** 1990 Jul;244(3):189–95

Activity of acrylamide in single-, double-, and triple-dose mouse bone marrow micronucleus assays. Cihák R, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):125–7

Evaluation of genotoxicity of clofazimine, an antileprosy drug, in mice in vivo. I. Chromosome analysis in bone marrow and spermatocytes. Das RK, et al. **Mutat Res** 1990 Jun;241(2):161–8

Micronucleus induction by azobenzene and 1,2-dibromo-3-chloropropane in the rat: evaluation of a triple-dose protocol. George E, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):129–34

Radiomodifying influence of camphor on sister-chromatid exchange induction in mouse bone marrow. Goel HC, et al. **Mutat Res** 1989 Oct;224(2):157–60

Comparison of single-, double- or triple-exposure protocols for the rodent bone marrow/peripheral blood micronucleus assay using 4-aminobiphenyl and treosulphan. Gulati DK, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):135–9

Micronucleus test on quinacrine dihydrochloride in mice: a comparison of dosage regimens. Hitotsumachi S, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):141–5

Induction of micronuclei in bone marrow of mice exposed to 1, 2 or 3 daily doses of urethane. Holmstrom M. **Mutat Res** 1990 Jun-Aug;234(3-4):147–54

Interaction of Mesna (2-mercaptoethane sulfonate) with the mutagenicity of cyclophosphamide in vitro and in vivo. Lähdetie J, et al. **Mutat Res** 1990 Sep;245(1):27–32

Caprolactam and benzoin: tests for induction of chromosome aberrations and SCEs in mouse bone marrow. McFee AF, et al. **Mutat Res** 1989 Nov;224(3):347–50

Activity of 1,2-dimethylhydrazine in the mouse bone marrow micronucleus assay using a triple- and a single-dosing protocol. Meli C, et al. **Mutat Res** 1990 Jun-Aug; 234(3-4):155–9

Activity of the human carcinogens benzidine and 2-naphthylamine in triple- and single-dose mouse bone marrow micronucleus assays: results for a combined test protocol. Mirkova E. **Mutat Res** 1990 Jun-Aug; 234(3-4):161–3

The evaluation of a multiple dosing protocol for the mouse bone-marrow micronucleus assay using benzidine and 2,6-xylidine. Parton JW, et al. **Mutat Res** 1990 Jun-Aug; 234(3-4):165–8

Cytogenetic effects of ribavirin on mouse bone marrow. Rao KP, et al. **Mutat Res** 1989 Oct;224(2):213–8

Comparison of single/multiple-dose protocols using triethylenemelamine and procarbazine hydrochloride for the mouse bone marrow micronucleus test. Romagna F, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):169–78

Evaluation of genotoxicity of clofazimine, an antileprosy drug, in mice in vivo. II. Micronucleus test in bone marrow and hepatocytes. Roy B, et al. **Mutat Res** 1990 Jun; 241(2):169–73

Activity of human carcinogens in the Salmonella and rodent bone-marrow cytogenetics tests. Shelby MD, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):257–61

Multiple-dosing effects of benzo[a]pyrene in the mouse bone marrow micronucleus test. Shimada H, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):179–81

Effects of multiple dosing of phenacetin in the micronucleus test. Sutou S, et al. **Mutat Res** 1990 Jun-Aug; 234(3-4):183–6

The effect of agent dose and treatment time on the intercellular distribution of sister-chromatid exchanges induced by genotoxic agents in mouse bone marrow cells in vivo. Tice RR, et al. **Mutat Res** 1989 Nov;215(1):25–37

Activity of DMBA, DMH and CP in triple- and single-dose rodent bone-marrow micronucleus assays. Tinwell H, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):195–8

The micronucleus assay as a test for the detection of aneugenic activity. Vanparys P, et al. **Mutat Res** 1990 Jun; 244(2):95–103

Bone marrow toxicity of dideoxyinosine [letter] Molina JM, et al. **N Engl J Med** 1989 Nov 23;321(21):1478

Study of differentiation of fresh human leukemic cells by low dose cytosine arabinoside (LD Ara-C) and 12-O-tetradecanoylphorbol-13-acetate (TPA). Kuliczkowski K, et al. **Neoplasma** 1989;36(5):589–97

Effect of excess parathyroid hormone on human bone marrow fibroblasts. Meytes D, et al. **Nephron** 1990; 55(1):6–9

Combination chemotherapy and verapamil to purge drug resistant leukemia cells from human bone marrow. Cairo MS, et al. **Prog Clin Biol Res** 1990;333:47–55

Bone marrow purging with glucocorticoids. Kapoor N, et al. **Prog Clin Biol Res** 1990;333:39–46

Combinations of 4-hydroperoxycyclophosphamide (4-HC) and cisplatin for bone marrow purging in autologous marrow transplantation: an update. Peters RH, et al. **Prog Clin Biol Res** 1990;333:57–68

Pharmacological-mediated purging with mafosfamide in acute and chronic myeloid leukemias. The Italian Study Group. Rizzoli V, et al. **Prog Clin Biol Res** 1990;333:21–36; discussion 37–8

Effect of methylprednisolone and VP-16 on acute lymphocytic leukemia cells. Skala JP, et al. **Prog Clin Biol Res** 1990;333:79–86

Role of metabolism in benzene-induced myelotoxicity and leukemogenesis. Smith MT, et al. **Prog Clin Biol Res** 1990; 340B:125–36 (49 ref.)

Purging leukemia remission marrows with alkyl-lysophospholipids, preclinical and clinical results. Vogler WR, et al. **Prog Clin Biol Res** 1990;333:1–18; discussion 19–20

Reduced bone marrow pO2 following treatment with radioprotective drugs. Allalunis-Turner MJ. **Radiat Res** 1990 Jun;122(3):262–7

Zidovudine intolerance. Groopman JE. **Rev Infect Dis** 1990 Jul-Aug;12 Suppl 5:S500–6 (17 ref.)

The effect of sepsis and short-term exposure to nitrous oxide on the bone marrow and the metabolism of vitamin B12 and folate. van Achterbergh SM, et al. **S Afr Med J** 1990 Sep 1;78(5):260–3

Drug combination against single drug treatment in radiation protection of the bone marrow CFU. Bisht KS, et al. **Strahlenther Onkol** 1990 Aug;166(8):545–8

Radioprotection of pronormoblasts and normoblasts by WR-2721. Naruka K, et al. **Strahlenther Onkol** 1990 Aug; 166(8):542–4

Macrophage regulation of myelopoiesis is altered by exposure to the benzene metabolite hydroquinone [published erratum appears in Toxicol Appl Pharmacol 1989 Jun 15;99(2):376] Thomas DJ, et al. **Toxicol Appl Pharmacol** 1989 Mar 1; 97(3):440–53

In vitro effect of copper on the stromal cells of bone marrow in rats. Miszta H. **Toxicol Ind Health** 1989 Dec;5(6):1117–23

In vitro effect of copper on the stromal cells of bone marrow in rats. Miszta H. **Toxicol Ind Health** 1990 Jan;6(1):33–9

Phenol-induced stimulation of hydroquinone bioactivation in mouse bone marrow in vivo: possible implications in benzene myelotoxicity. Subrahmanyam VV, et al. **Toxicology** 1990 May 14;62(1):107–16

Multiparametric evaluation of retinoic acid-induced terminal differentiation of blastoid cells from acute non-lymphocytic leukemia patients in vitro. Joshi KS, et al. **Tumori** 1989 Oct 31;75(5):435–42

[Effect of negative ions on spontaneous and cyclophosphamide-induced micronucleus frequency in mouse bone marrow polychromatophilic erythroblasts] Xie L, et al. **I Chuan Hsueh Pao** 1988;15(5):368–73 (Eng. Abstr.) **(Chi)**

[Doxifluridine toxicity, a fluorouracil analog with low myelosuppressive effect] Winkelmann JJ, et al. **Bull Cancer (Paris)** 1990;77(3):225–34 (Eng. Abstr.) **(Fre)**

[Clastogenicity effect of ruthenium red in vivo, in bone marrow cells in mice] Deknudt G, et al. **C R Soc Biol (Paris)** 1989;183(4):362–5 (Eng. Abstr.) **(Fre)**

[Nephrotoxicity and myelotoxicity of antineoplastic Pt(II) and Pt(IV) coordination compounds in rats] Horn U, et al. **Arch Geschwulstforsch** 1989;59(4):245–50 (Eng. Abstr.) **(Ger)**

[Interleukin-3: a preclinical study] Valent P, et al. **Wien Klin Wochenschr** 1989 Oct 13;101(19):652–63 (Eng. Abstr.) **(Ger)**

[Bone marrow suppression in gynecological patients with malignant tumor treated with combination chemotherapy cyclophosphamide, pirarubicin and cisplatin] Kozaki S, et al. **Gan To Kagaku Ryoho** 1990 Jun;17(6):1189–93 (Eng. Abstr.) **(Jpn)**

[The effect of cepharanthin on adjuvant chemotherapy induced bone marrow suppression in patients with breast

cancer] Tsukikawa S, et al. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 1):645–8 (Eng. Abstr.) **(Jpn)**

[A successfully treated case of splenic abscess due to candidiasis associated with drug induced myelosuppression] Sakane M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Feb;87(2):278–82 **(Jpn)**

[The influence of carbofuran on the development of neutrophils in rats] Tochman A, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:125–32 (Eng. Abstr.) **(Pol)**

[Studies of the ingrowth of gentamicin–septopal beads into bone with inflammatory changes] Misterka S, et al. **Pol Przegl Radiol** 1988 Nov–Dec;52(6):266–70 (Eng. Abstr.) **(Pol)**

[Evaluation of the effects of ionizing radiation and cyclophosphamide on the bone marrow of mice, by counting non–nucleated and nucleated cells] Segreto RA, et al. **Rev Paul Med** 1989 Jul–Dec;107(4–6):233–8 (Eng. Abstr.) **(Por)**

[Interrelation of the osteogenic and hemopoietic tissues of the bone marrow during the development of estrogenic myelofibrosis] Ivasenko IN. **Arkh Anat Gistol Embriol** 1989 Nov;97(11):92–8 (Eng. Abstr.) **(Rus)**

[Interrelations between hemopoietic microenvironment, osteogenesis and hemopoiesis under the effects of estrone] Almazov VA, et al. **Biull Eksp Biol Med** 1990 Feb; 109(2):140–2 (Eng. Abstr.) **(Rus)**

[The frequency of sister chromatid exchanges in cultured cells of mouse blood, bone marrow and spleen] Chebotarev AN, et al. **Biull Eksp Biol Med** 1989 Dec;108(12):720–1 (Eng. Abstr.) **(Rus)**

[Regulatory effects of opioid peptides on bone marrow hematopoiesis in stress] Gol'dberg ED, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):216–9 (Eng. Abstr.) **(Rus)**

[Sensitivity of bone marrow cells damaged by antitumor drugs to cytotoxic action of effectors of a normal spleen] Klimova MIu, et al. **Biull Eksp Biol Med** 1990 Jan; 109(1):60–2 (Eng. Abstr.) **(Rus)**

[Myelopeptide correction of the differentiation of hematopoietic precursor cells in mice with experimental T–immunodeficiency] Rudneva TB, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):718–20 (Eng. Abstr.) **(Rus)**

[Mutagenic effect of pesticides fastac 10 EK and durs ban 4E studied in a micronucleus test iin mouse bone marrow cells] Benova DK, et al. **Genetika** 1989 Dec;25(12):2266–8 (Eng. Abstr.) **(Rus)**

[Cytogenetic effect of pesticides in relation to their hygienic standardization] German IV. **Gig Sanit** 1990 May;(5):72–4 (Eng. Abstr.) **(Rus)**

[Changes in the occurrence of sister chromatid exchange and chromosome aberrations in bone marrow cells of mice after administration of chromium with drinking water] Go'dina IR, et al. **Gig Sanit** 1989 Nov;(11):7–9 (Eng. Abstr.) **(Rus)**

[The micronucleus test: characteristics of the micronuclei count and the method of statistical data processing] Zhurkov VS, et al. **Gig Sanit** 1990 Mar;(3):73–4 **(Rus)**

[Transcutaneous trephining and closed lavage of the medullary canal in children with acute hematogenic osteomyelitis] Elovoi MM. **Khirurgiia (Mosk)** 1989 Nov; (11):119–23 **(Rus)**

[The mutagenic effect of beryllium on animals] Nikiforova VIa, et al. **Tsitol Genet** 1989 Jul–Aug;23(4):27–30 (Eng. Abstr.) **(Rus)**

[The natural background of chromosome anomalies in the bone marrow cells of mice and the control of vaccines for genotoxicity] Volgareva GM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 May;(5):14–7 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Adenosine deaminase activity in recipients of bone marrow from immunodeficient mice homozygous for the wasted mutation. Willis EH, et al. **Adv Exp Med Biol** 1989; 253B:209–12

Characteristic enzymatic changes during rabbit bone marrow erythroid cell development. Setchenska MS, et al. **Biomed Biochim Acta** 1990;49(2–3):S59–63

Kinetic studies of pyruvate kinase during in vitro differentiation of GM–CFC haemopoietic precursor and bone marrow cells in mice. Cuenllas E, et al. **Biosci Rep** 1990 Apr;10(2):141–54

Expression of human glucocerebrosidase in murine long–term bone marrow cultures after retroviral vector–mediated transfer. Nolta JA, et al. **Blood** 1990 Feb 1;75(3):787–97

The fine structural localization of endogenous and exogenous peroxidase activity in human bone marrow mast cells under pathological conditions. Escribano LM, et al. **Histochemistry** 1990;93(3):279–85

Enzyme cytochemistry of unfixed leukocytes and bone marrow cells using polyvinyl alcohol for the diagnosis of leukemia. Van Noorden CJ, et al. **Histochemistry** 1989; 92(4):313–8

Purification of an inhibitor of erythroid progenitor cell cycling and antagonist to interleukin 3 from mouse marrow cell supernatants and its identification as cytosolic superoxide dismutase. Pluthero FG, et al. **J Cell Biol** 1990 Sep;111(3):1217–23

Low molecular weight peptide inhibitors of medullasin: purification and structure. Aoki Y, et al. **J Enzym Inhib** 1990;3(4):279–87

Identification and induction of cytochromes P450, P450IIE1 and P450IA1 in rabbit bone marrow. Schnier GG, et al. **J Pharmacol Exp Ther** 1989 Nov;251(2):790–6

Bone marrow peroxidases of spontaneously hypertensive rats. Kariya K, et al. **Jpn J Pharmacol** 1990 May;53(1):19–23

Myeloid expression of the human c–fps/fes proto–oncogene in transgenic mice. Greer P, et al. **Mol Cell Biol** 1990 Jun; 10(6):2521–7

1 alpha,25–dihydroxyvitamin D3 regulates the expression of carbonic anhydrase II in nonerythroid avian bone marrow cells. Billecocq A, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6470–4

Abnormally high expression of proteasomes in human leukemic cells. Kumatori A, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7071–5

Bone marrow peroxidase in mice: determination of the level and the catalytic activity. Lee E, et al. **Res Commun Chem Pathol Pharmacol** 1989 Oct; 66(1):135–43

Differences in quinone reductase activity in primary bone marrow stromal cells derived from C57BL/6 and DBA/2 mice. Twerdok LE, et al. **Res Commun Chem Pathol Pharmacol** 1990 Mar; 67(3):375–86

IMMUNOLOGY

Immunoglobulin gene rearrangement in the peripheral blood and bone marrow of patients with lymphomas of the mucosa–associated lymphoid tissues. Liang R, et al. **Acta Haematol (Basel)** 1990;84(1):19–23

Acute leukemia evolving from multiple myeloma and co–expressing myeloid and plasma cell antigens. Stewart AK, et al. **Am J Hematol** 1990 Jul;34(3):210–4

J chain disease: an aggressive evolution of multiple myeloma. Lokhorst HM, et al. **Am J Med** 1990 Apr;88(4):417–20

J. chain disease: a novel form of plasma cell dyscrasia. Mestecky J, et al. **Am J Med** 1990 Apr;88(4):411–6

Analysis of lymphocyte subsets of bone marrow in patients with rheumatoid arthritis by two colour immunofluorescence and flow cytometry. Doita M, et al. **Ann Rheum Dis** 1990 Mar;49(3):168–71

Interleukin–2 induction of lymphokine–activated killer (LAK) activity in the peripheral blood and bone marrow of acute leukemia patients: II. Feasibility of LAK generation in children with active disease and in remission. Adler A, et al. **Blood** 1989 Oct;74(5):1690–7

Growth and detection of human bone marrow B–lineage colonies. McGinnes K, et al. **Blood** 1990 Sep 1; 76(5):896–905

Reconstitution of T–cell function after CD6–depleted allogeneic bone marrow transplantation. Soiffer RJ, et al. **Blood** 1990 May 15;75(10):2076–84

Loss of blastogenic response to PHA in cultured bone marrow cells [letter] Gibson J, et al. **Bone Marrow Transplant** 1989 Sep;4(5):597–8

In situ hybridization detection of light chain mRNA in routine bone marrow trephines from patients with suspected myeloma. Akhtar N, et al. **Br J Haematol** 1989 Nov;73(3):296–301

Light chain restriction analysis of bone marrow plasma cells in patients with MGUS or 'solitary' plasmacytoma: diagnostic value and correlation with clinical course. Bezwoda WR, et al. **Br J Haematol** 1990 Apr;74(4):420–3

Clinical significance of the presence of myeloid associated antigens in acute lymphoblastic leukaemia. Urbano–Ispizua A, et al. **Br J Haematol** 1990 Jun;75(2):202–7

Evaluation of monoclonal antibody DF3 conjugated with ricin as a specific immunotoxin for in vitro purging of human bone marrow. Tondini C, et al. **Cancer Res** 1990 Feb 15;50(4):1170–5

Induction of linked suppression in addition to the donor H–2 class I–specific unresponsiveness in recipient T cells by transfusing class I plus class II–disparate, but not class I alone–disparate, bone marrow cells. Muraoka S. **Cell Immunol** 1990 Jun;128(1):261–76

An 80,000–kd glycoprotein cell surface antigen found only on nonhematopoietic cells in human bone marrow. Iyer J, et al. **Exp Hematol** 1990 Jun;18(5):384–9

Identification of a specific receptor for interleukin–1 on rat bone marrow cells. Mizuno K, et al. **FEBS Lett** 1989 Oct 23;257(1):27–30

Kappa/lambda ratio on peripheral blood lymphocytes and bone marrow plasma cell labeling index in monoclonal gammopathies. Büchi G, et al. **Haematologica** 1990 Mar–Apr;75(2):132–6

Multiple myeloma: altered CD4/CD8 ratio in bone marrow. Redoglia V, et al. **Haematologica** 1990 Mar–Apr; 75(2):129–31

Significance of common acute lymphoblastic leukemia antigen (cALLA) positive cells in bone marrow of children off therapy in complete remission. Self SE, et al. **Hematol Oncol** 1990 Mar–Apr;8(2):91–5

Myelopoiesis–associated suppressor–cell activity in mice with Lewis lung carcinoma tumors: interferon–gamma plus tumor necrosis factor–alpha synergistically reduce suppressor cell activity. Young MR, et al. **Int J Cancer** 1990 Aug 15;46(2):245–50

Inhibition of mouse bone marrow granulocyte–macrophage colony formation by factors derived from natural killer cells: an in vitro model for hybrid resistance. Lukomska B, et al. **J Biol Regul Homeost Agents** 1989 Apr–Jun; 3(2):55–60

Strong T cell tolerance in parent——F1 bone marrow chimeras prepared with supralethal irradiation. Evidence for clonal deletion and anergy. Gao EK, et al. **J Exp Med** 1990 Apr 1;171(4):1101–21

Monoclonal antibodies to Pgp–1/CD44 block lympho–hemopoiesis in long–term bone marrow cultures. Miyake K, et al. **J Exp Med** 1990 Feb 1;171(2):477–88

Cloning of self–major histocompatibility complex antigen–specific suppressor cells from adult bone marrow. Takahashi T, et al. **J Exp Med** 1990 Sep 1;172(3):901–9

Concerted generation of Ig isotype diversity in human fetal bone marrow. Dosch HM, et al. **J Immunol** 1989 Oct 15; 143(8):2464–9

Natural killer and lymphokine–activated killer cell activities from human marrow precursors. II. The effects of IL–3 and IL–4. Keever CA, et al. **J Immunol** 1989 Nov 15; 143(10):3241–9

The role of IL–4 in the generation of B lymphocytes in the bone marrow. Simons A, et al. **J Immunol** 1989 Oct 15; 143(8):2540–5

High cytotoxic cell activity in the marrow from patients with aplastic anemia. Morikawa K, et al. **Jpn J Med** 1989 Sep–Oct;28(5):585–92

The bone marrow as an effector T cell organ in aging. Sharp A, et al. **Mech Ageing Dev** 1990 Mar 15;52(2–3):219–33

The functional properties of Fc gamma RI, II and III on myeloid cells: a comparative study of killing of erythrocytes and tumor cells mediated through the different Fc receptors. Shen L, et al. **Mol Immunol** 1989 Oct;26(10):959–69

Hypothalamic control of the generation of mature natural killer lymphocytes in bone marrow and spleen of the mouse. Belluardo N, et al. **Nat Immun Cell Growth Regul** 1990;9(1):26–35

In vitro immunoglobulin production in mitogen–stimulated cultures of peripheral blood and bone marrow cells from young and old adults, and cases of benign monoclonal gammopathy. Suzuki K, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Jul;52(4):756–62

Clonal deletion of autoreactive B lymphocytes in bone marrow chimeras. Nemazee D, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):8039–43

Development of B–lineage cells in the bone marrow of scid/scid mice following the introduction of functionally rearranged immunoglobulin transgenes. Reichman–Fried M, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2730–4

Depletion of bone marrow T–lymphocytes with an anti–CD5 monoclonal immunotoxin (ST–1 immunotoxin): effective prophylaxis for graft–versus–host disease. Antin JH, et al. **Prog Clin Biol Res** 1990;333:207–15

CD9 is an unreliable antibody for bone marrow purging. Fort JA, et al. **Prog Clin Biol Res** 1990;333:185–9

Restoration of prostaglandin E2–producing splenic macrophages in 89Sr–treated mice with bone marrow from Corynebacterium parvum primed donors. Shibata Y. **Reg Immunol** 1989 May–Jun;2(3):169–75

Lymphokines: enhancement by granulocyte–macrophage and granulocyte colony–stimulating factors of neonatal myeloid kinetics and functional activation of polymorphonuclear leukocytes. Cairo MS, et al. **Rev Infect Dis** 1990 May–Jun; 12 Suppl 4:S492–7 (38 ref.)

Isolation by continuous density gradient centrifugation and characterization of bone marrow cells active in prolonging allograft survival in antilymphocyte serum (ALS)–treated mice. De Fazio SR, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):547–8

Evidence that reduction of immunogenicity of T–depleted bone marrow depends on additional depletion of accessory cells. Implications for prevention of graft rejection. Dreger P, et al. **Transplantation** 1990 Mar;49(3):622–30

[The induction of differentiation of myeloid antigen positive acute lymphoblastic leukemia by phorbol ester (TPA) or GM–CSF] Takeuchi H, et al. **Rinsho Ketsueki** 1990 May; 31(5):639–46 (Eng. Abstr.) **(Jpn)**

[Suppression by bone marrow cells of the level of specific IgE antibodies in the blood of mice and decrease in the production of IGE by bone marrow cells] Siusiukin MIu, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):220–1 (Eng. Abstr.) **(Rus)**

[Myelopeptides inhibit development of hereditary macrocytic anemia in W/Wv mice] Petrov RV, et al. **Dokl Akad Nauk SSSR** 1990 Jan–Feb;310(1):247–9 **(Rus)**

[Suppressor activity of bone marrow and spleen cells in C57Bl/6 mice during carcinogenesis induced by 7,12–dimethylbenz(a)anthracene] Kusmartsev SA, et al. **Eksp Onkol** 1989;11(5):23–6 (Eng. Abstr.) **(Rus)**

[Immunotherapy with taktivin and myelolipid in experimental influenzal infection] Aleksandrova NN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jul;(7):89–92 (Eng. Abstr.) **(Rus)**

METABOLISM

Infection of hematopoietic and stromal cells in human continuous bone marrow cultures by a retroviral vector containing the neomycin resistance gene. Holland CA, et al. **Acta Haematol (Basel)** 1989;82(3):136–43

Copper complexes stimulate hemopoiesis and lymphopoiesis. Soderberg LS, et al. **Adv Exp Med Biol** 1989;258:209–17

Arachidonic acid metabolism during interactions between glomerular and bone marrow–derived cells. Sraer J, et al. **Adv Exp Med Biol** 1989;259:23–47 (90 ref.)

Synergy of inhibition of DNA synthesis in human bone marrow by azidothymidine plus deficiency of folate and/or vitamin B12? Herzlich BC, et al. **Am J Hematol** 1990 Mar; 33(3):177–83

In vitro endocytosis of benign and malignant human bone marrow plasma cells. Ohtake K, et al. **Am J Hematol** 1990 Oct;35(2):100–3

Detection of interleukin–6 (IL–6) in human bone marrow myeloma cells by light and electron microscopy. Ohtake K, et al. **Am J Hematol** 1990 Oct;35(2):84–7

Penetration of ciprofloxacin into heart valves, myocardium, mediastinal fat, and sternal bone marrow in humans. Mertes PM, et al. **Antimicrob Agents Chemother** 1990 Mar; 34(3):398–401

Accumulation of low molecular weight (bleomycin detectable) iron in bone marrow cells of rats after benzene exposure. Pandya KP, et al. **Arch Toxicol** 1990;64(4):339–42

Sulphation of secreted phosphoprotein I (SPPI, osteopontin) is associated with mineralized tissue formation. Nagata T, et al. **Biochem Biophys Res Commun** 1989 Nov 30; 165(1):234–40

Retention of in vivo antipyrimidine effects of Brequinar sodium (DUP–785; NSC 368390) in murine liver, bone marrow and colon cancer. Peters GJ, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):135–44

Oximetry in cells and tissues using a nitroxide–liposome system. Chan HC, et al. **Biochim Biophys Acta** 1989 Nov 20;1014(2):141–4

Methylthioadenosine serves as a single carbon source to the folate co–enzyme pool in rat bone marrow cells. Deacon R, et al. **Biochim Biophys Acta** 1990 Jun 20;1034(3):342–6

Effects of nitrous oxide inactivation of vitamin B12 and of methionine on folate coenzyme metabolism in rat liver, kidney, brain, small intestine and bone marrow. Horne DW. **Biofactors** 1989 Mar;2(1):65–8

Interleukin–1 alpha also induces granulocyte–macrophage colony–stimulating factor in immature normal bone marrow cells. Bot FJ, et al. **Blood** 1990 Jul 15;76(2):307–11

Phenotypic variations dictate the intracellular compartmentalization of doxorubicin in normal human bone marrow cells. Aghaï E, et al. **Cancer Chemother Pharmacol** 1990;25(4):295–8

Mechanism of diethyldithiocarbamate modulation of murine bone marrow toxicity. Schmalbach TK, et al. **Cancer Res** 1990 Oct 1;50(19):6218–21

Constitutive and induced expression of growth factors in normal and chronic phase chronic myelogenous leukemia Ph1 bone marrow stroma. Wetzler M, et al. **Cancer Res** 1990 Sep 15;50(18):5801–5

Superoxide anion release from blood and bone marrow neutrophils is altered by endotoxemia. Cerasoli F Jr, et al. **Circ Res** 1990 Jul;67(1):154–65

Regulatory effect of recombinant interleukin (IL)3 and IL4 on cytokine gene expression of bone marrow and peripheral blood mononuclear cells. Brantschen S, et al. **Eur J Immunol** 1989 Nov;19(11):2017–23

Changes in collagen synthesis by human bone marrow fibroblasts with progressive subcultivation. Fernandez M, et al. **Exp Cell Biol** 1989;57(5):257–63

Interaction of late murine erythroid progenitors and stroma involves a recognition mechanism with fucosyl specificity. Konno M, et al. **Exp Hematol** 1990 Mar;18(3):185–9

A 17–kd polypeptide, sensitive to bacterial collagenase, is synthesized by bone marrow macrophages. Ruland LJ 3d, et al. **Exp Hematol** 1990 Oct;18(9):969–73

Dissecting the hematopoietic microenvironment. VII. The production of an autostimulatory factor as well as a CSF by unstimulated murine marrow fibroblasts. Yan ZJ, et al. **Exp Hematol** 1990 May;18(4):348–54

The effect of aluminium on the heam biosynthesis (in vitro) in bone marrow cells in rats. Zaman K, et al. **Folia Haematol (Leipz)** 1990;117(2):307–11

Activation and deactivation of quinones catalyzed by DT–diaphorase. Evidence for bioreductive activation of diaziquone (AZQ) in human tumor cells and detoxification of benzene metabolites in bone marrow stroma. Ross D, et al. **Free Radic Res Commun** 1990;8(4–6):373–81

Differentiation–associated expression of two functionally distinct classes of granulocyte–macrophage colony–stimulating factor receptors by human myeloid cells. Cannistra SA, et al. **J Biol Chem** 1990 Jul 25; 265(21):12656–63

Chylomicron metabolism. Chylomicron uptake by bone marrow in different animal species. Hussain MM, et al. **J Biol Chem** 1989 Oct 25;264(30):17931–8

Bone marrow myelopoiesis in rats after 10%, 20%, or 30% thermal injury. Gruber DF, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):410–7

Immunohistological optimization of detection of bromodeoxyuridine–labeled cells in decalcified tissue. Hume WJ, et al. **J Histochem Cytochem** 1990 Apr; 38(4):509–13

Bone marrow and serum concentrations of 25–hydroxyvitamin D, 24,25–dihydroxyvitamin D, and 1 alpha,25–dihydroxyvitamin D in patients with leukemia and normal subjects. Masuda S, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Aug;35(4):211–23

AcSDKP, an inhibitor of CFU–S proliferation, is synthesized in mice under steady–state conditions and secreted by bone marrow in long–term culture. Wdzieczak–Bakala J, et al. **Leukemia** 1990 Mar;4(3):235–7

Bone marrow stromal cell bioactivation and detoxification of the benzene metabolite hydroquinone: comparison of macrophages and fibroblastoid cells. Thomas DJ, et al. **Mol Pharmacol** 1990 Feb;37(2):255–62

The effect of indomethacin on nucleic acids in blood, hemopoietic and lymphoid tissues in continuously irradiated rats. Mišúrová E, et al. **Neoplasma** 1989; 36(5):541–7

Monocyte ferritin as a possible index of bone marrow iron stores in patients on chronic hemodialysis. Nuwayri–Salti N, et al. **Nephron** 1990;54(1):7–11

Overview of myeloid growth factors. Golde DW. **Semin Hematol** 1990 Jul;27(3 Suppl 3):1–7 (42 ref.)

Bayesian estimation of cyclosporine clearance in bone marrow graft. Serre–Debeauvais F, et al. **Ther Drug Monit** 1990 Jan;12(1):16–22

[Concentrations of cefpiramide in the human bone marrow blood and bone tissues] Hasegawa S, et al. **Jpn J Antibiot** 1990 Jan;43(1):40–6 (Eng. Abstr.) **(Jpn)**

[Effect of myelopeptides on DNA and protein synthesis and antibody secretion by mouse B–cell hybridomas] Novikov VI, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):724–6 **(Rus)**

MICROBIOLOGY

Nongranulomatous involvement of the bone marrow in lepromatous leprosy. Suster S, et al. **Am J Clin Pathol** 1989 Dec;92(6):797–801

Bacillaemia and bone marrow involvement in leprosy. Sen R, et al. **Indian J Lepr** 1989 Oct;61(4):445–52

Results of Salmonella typhi culture in patients with suspected typhoid fever, treated in the Department of Child Health Medical School, Padjadjaran University, Hasan Sadikin General Hospital Bandung. Sekarwana N, et al. **Paediatr Indones** 1989 May–Jun;29(5–6):105–11

PARASITOLOGY

Observations on human bone–marrow for Leishmania donovani. Rajendran P, et al. **Indian J Pathol Microbiol** 1989 Oct;32(4):282–5

PATHOLOGY

Sternal–manubrial separation as a complication of marrow aspiration in a patient with protein–calorie malnutrition and osteoporosis. Eastlund DT. **Acta Haematol (Basel)** 1990; 83(1):42–4

Myelodysplastic syndrome preceding acute myelomonocytic leukemia with dysplastic marrow eosinophilia and inv(16). Horiike S, et al. **Acta Haematol (Basel)** 1989;82(3):161–4

Gelatinous transformation of the bone marrow: manifestation of an acute leukemia? Ifrah N, et al. **Acta Haematol (Basel)** 1989;82(3):165–8

Extramedullary pleural blast crisis in chronic myelogenous leukemia: cytogenetic and molecular study. Sacchi S, et al. **Acta Haematol (Basel)** 1990;83(4):198–202

Evidence for the neoplastic involvement of monocytic, eosinophilic and basophilic lineages in acute myelomonocytic leukemia with eosinophilia. Yanagisawa K, et al. **Acta Haematol (Basel)** 1990;83(3):145–8

Bone marrow and spleen cell colony formation in mice infected with Schistosoma japonicum. Ishii A, et al. **Acta Med Okayama** 1990 Jun;44(3):149–53

Diagnostic and prognostic value of the MB2 monoclonal antibody in paraffin–embedded bone marrow sections of patients with multiple myeloma and monoclonal gammopathy of undetermined significance. Dehou MF, et al. **Am J Clin Pathol** 1990 Sep;94(3):287–91

Discordant morphologic characteristics of B–cell lymphomas in bone marrow and lymph node biopsies. Kluin PM, et al. **Am J Clin Pathol** 1990 Jul;94(1):59–66

Detection of breast carcinoma cells in human bone marrow using fluorescence–activated cell sorting and conventional cytology. Leslie DS, et al. **Am J Clin Pathol** 1990 Jul; 94(1):8–13

Immunophenotypic analysis of cells isolated from bone marrow biopsies in patients with failed bone marrow aspiration ('dry tap'). Pihan GA, et al. **Am J Clin Pathol** 1990 Apr;93(4):545–8

Bone marrow findings in connective tissue disease. Rosenthal NS, et al. **Am J Clin Pathol** 1989 Nov;92(5):650–4

Marrow involvement in cutaneous T–cell lymphoma. A clinicopathologic study of 60 cases [see comments] Salhany KE, et al. **Am J Clin Pathol** 1989 Dec;92(6):747–54 Comment in: Am J Clin Pathol 1990 Jul;94(1):119–20.

Bone marrow examination in patients with AIDS and AIDS–related complex (ARC). Morphologic and in situ hybridization studies. Sun NC, et al. **Am J Clin Pathol** 1989 Nov;92(5):589–94

Massive fat and necrotic bone marrow embolization in a previously undiagnosed patient with sickle cell disease. Garza JA. **Am J Forensic Med Pathol** 1990 Mar;11(1):83–8

Responsiveness of bone marrow erythropoietic stem cells (CFU–E and BFU–E) to recombinant human erythropoietin (rh–Ep) in vitro in aplastic anemia and myelodysplastic syndrome. Aoki I, et al. **Am J Hematol** 1990 Sep;35(1):6–12

Multiple myeloma: relationship between survival and cellular morphology. Pasqualetti P, et al. **Am J Hematol** 1990 Feb; 33(2):145–7

Bone marrow in vitro growth and cytogenetic studies in patients with FAB–classified primary myelodysplastic syndromes. Swolin B, et al. **Am J Hematol** 1990 Jul; 34(3):175–80

Stimulation of myelopoiesis in chronic lymphocytic leukemia and in other lymphoproliferative disorders by recombinant human granulocyte–macrophage colony–stimulating factor. Vadhan–Raj S, et al. **Am J Hematol** 1990 Mar; 33(3):189–97

Epithelioid angiomatosis secondary to disseminated cat scratch disease involving the bone marrow and skin in a patient with acquired immune deficiency syndrome: a case report. Milam MW, et al. **Am J Med** 1990 Feb;88(2):180–3

Congenital amegakaryocytic thrombocytopenia: an intrinsic hematopoietic stem cell defect. Freedman MH, et al. **Am J Pediatr Hematol Oncol** 1990 Summer;12(2):225–30

Aplastic presentation of acute lymphoblastic leukemia: evidence for cellular inhibition of normal hematopoietic progenitors. Homans AC, et al. **Am J Pediatr Hematol Oncol** 1989 Winter;11(4):456–62

Immunohistochemistry in bone marrow diagnosis [letter] Chilosi M, et al. **Am J Surg Pathol** 1989 Dec;13(12):1069–71

A histomorphometric analysis of trephine biopsies of bone marrow from 65 patients with chronic myeloid leukemia. Classification of patients into subgroups with different survival patterns. Thiele J, et al. **Anal Quant Cytol Histol** 1990 Apr;12(2):103–16

Extensive bone marrow necrosis in cancer. Suri R, et al. **Ann Acad Med Singapore** 1989 Jul;18(4):459–61

Comparative studies of bone marrow from the United States and Japan. Liu PI, et al. **Ann Clin Lab Sci** 1989 Sep–Oct; 19(5):345–51

Bone marrow micrometastases detected by a monoclonal antibody in patients with breast cancer. Giai M, et al. **Anticancer Res** 1990 Jan–Feb;10(1):119–21

The A.H.E.A.D. method: a quantitative automated measurement of the hematotoxicity of anticancer drugs. Saint–Dizier D, et al. **Anticancer Res** 1990 May–Jun; 10(3):765–71

Comparative yield of blood culture for fungi and mycobacteria, liver biopsy, and bone marrow biopsy in the diagnosis of fever of undetermined origin in human immunodeficiency virus–infected patients. Prego V, et al. **Arch Intern Med** 1990 Feb;150(2):333–6

The differentiation–promoting potential of a cytostatic fluoro–pyranosyl adriamycin analog (FAD 104). Blazsek I, et al. **Biomed Pharmacother** 1989;43(4):267–70

Drug–induced agranulocytosis: bone marrow granulocytic progenitor cells. Stojanović N, et al. **Biomed Pharmacother** 1990;44(3):181–4

Peripheral acute leukemia: high peripheral but low–marrow blast count. Cason JD, et al. **Blood** 1989 Oct;74(5):1758–61

Intranuclear inclusions in Bence Jones lambda plasma cell myeloma. Cohen HJ, et al. **Blood** 1975 Jan;45(1):131–9

Multipotent stem cell involvement in megakaryoblastic leukemia: cytologic and cytogenetic evidence in 15 patients. Cuneo A, et al. **Blood** 1989 Oct;74(5):1781–90

Abnormal responses of myeloid progenitor cells to recombinant human colony–stimulating factors in congenital neutropenia. Kobayashi M, et al. **Blood** 1990 Jun 1;75(11):2143–9

Elimination of drug–resistant myeloma tumor cell lines by monoclonal anti–P–glycoprotein antibody and rabbit complement. Kulkarni SS, et al. **Blood** 1989 Nov 1; 74(6):2244–51

Magnetic resonance imaging of bone marrow in sickle cell disease: clinical, hematologic, and pathologic correlations. Mankad VN, et al. **Blood** 1990 Jan 1;75(1):274–83

Establishment and characterization of a granulocyte–macrophage colony–stimulating factor–dependent human myeloid cell line. Oez S, et al. **Blood** 1990 Aug 1;76(3):578–82

In vivo administration of antibody to interleukin–5 inhibits increased generation of eosinophils and their progenitors in bone marrow of parasitized mice. Rennick DM, et al. **Blood** 1990 Jul 15;76(2):312–6

Variations of fat tissue fraction in abnormal human bone marrow depend both on size and number of adipocytes: a stereologic study. Rozman C, et al. **Blood** 1990 Sep 1; 76(5):892–5

Alcohol–induced bone marrow damage: status before and after a 4–week period of abstinence from alcohol with or without disulfiram. A randomized bone marrow study in alcohol–dependent individuals. Casagrande G, et al. **Blut** 1989 Sep;59(3):231–6

Karyotype and in vitro–response to GM–CSF. Analysis of bone marrow cultures in leukemia, myelodysplasia and aplastic anemia. Haase D, et al. **Blut** 1990 Mar;60(3):192–7

Bone marrow purging by a xanthine oxidase–antibody conjugate. Dinota A, et al. **Bone Marrow Transplant** 1990 Jul;6(1):31–6

Histology of bone marrow in acute leukaemia. Dominis M, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:10–1

DIC after bone marrow harvesting in a patient with Hodgkin's disease in remission [letter] McCarthy DM, et al. **Bone Marrow Transplant** 1990 Jun;5(6):443

Elimination of malignant clonogenic T cells from human bone marrow using chemoimmunoseparation with 2'–deoxycoformycin, deoxyadenosine and an immunotoxin. Montgomery RB, et al. **Bone Marrow Transplant** 1990 Jun; 5(6):395–402

Bone marrow metastases in small cell lung cancer: detection with magnetic resonance imaging and monoclonal antibodies. Trillet V, et al. **Br J Cancer** 1989 Jul;60(1):83–8

IL–2 and myelopoiesis: IL–2 induces blast cell proliferation

in some cases of acute myeloid leukaemia. Carron JA, et al. **Br J Haematol** 1989 Oct;73(2):168–72

Interferon–alpha–induced morphological changes of megakaryocytes: a histomorphometrical study on bone marrow biopsies in chronic myeloproliferative disorders with excessive thrombocytosis. Chott A, et al. **Br J Haematol** 1990 Jan;74(1):10–6

Functional studies of bone marrow haemopoietic and stromal cells in the myelodysplastic syndrome (MDS). Coutinho LH, et al. **Br J Haematol** 1990 May;75(1):16–25

Magnetic resonance imaging of bone marrow in lymphoproliferative disorders: correlation with bone marrow biopsy. Döhner H, et al. **Br J Haematol** 1989 Sep; 73(1):12–7

Long–term culture of aplastic anaemia bone marrow. Gibson FM, et al. **Br J Haematol** 1990 Jul;75(3):421–7

Regulatory abnormalities in the marrow of patients with myelodysplastic syndromes. Merchav S, et al. **Br J Haematol** 1989 Oct;73(2):158–64

Incomplete marrow recovery associated with hepatitis after syngeneic bone marrow transplantation for aplastic anaemia: successful treatment with second marrow transplantation without preconditioning. Niki T, et al. **Br J Haematol** 1990 Jun;75(2):285–6

Myelodysplastic syndrome (MDS)–associated inhibitory activity on haemopoietic progenitor cells. Ohmori M, et al. **Br J Haematol** 1990 Feb;74(2):179–84

Bone marrow biopsy in myelodysplastic syndromes: morphological characteristics and contribution to the study of prognostic factors. Ríos A, et al. **Br J Haematol** 1990 May;75(1):26–33

Characterization of the erythropoietic progenitor cells (BFU–E) in paroxysmal nocturnal haemoglobinuria (PNH). Terasawa T, et al. **Br J Haematol** 1990 Jul;75(3):428–32

Immunohistology for quantification of normal bone marrow lymphocyte subsets [letter; comment] Thaler J, et al. **Br J Haematol** 1989 Dec;73(4):576–7 Comment on: Br J Haematol 1989 Mar;71(3):313–21.

Effect of antilymphocyte globulin (ALG) on bone marrow T/non–T cells from aplastic anaemia patients and normal controls. Tong J, et al. **Br J Haematol** 1989 Dec; 73(4):546–50

Experimental murine schistosomiasis mansoni: hyperplasia of the mono–macrophage cell lineage and stimulation of myeloid proliferation by peripheral macrophages. Borojevic R, et al. **Braz J Med Biol Res** 1989;22(5):579–86

Immunohistochemical staining of bone marrow biopsies for detection of occult metastasis in breast cancer. Mathieu MC, et al. **Breast Cancer Res Treat** 1990 Jan;15(1):21–6

Role of MRI bone marrow imaging in recurrent lymphoma [letter; comment] Graeb D. **Can Assoc Radiol J** 1990 Feb; 41(1):51 Comment on: Can Assoc Radiol J 1989 Aug;40(4):216–8.

Diffuse large cell lymphoma with discordant bone marrow histology. Clinical features and biological implications [published erratum appears in Cancer 1990 Jan 1;65(1):64] Fisher DE, et al. **Cancer** 1989 Nov 1;64(9):1879–87

Pathogenetic implications of internuclear bridging in myelodysplastic syndrome. An Eastern Cooperative Oncology Group/Southwest Oncology Group Cooperative Study. Head DR, et al. **Cancer** 1989 Dec 1; 64(11):2199–2202

A case of malignant mastocytosis with near–haploid, near–diploid, and polyploid cells in the bone marrow. Bauchinger M, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):13–21

A translocation (1;10)(p32;q24) in a neuroblastoma cell line derived from marrow metastases. Skinnider L, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):131–5

Use of conditioned media in cell culture can mask cytogenetic abnormalities in acute leukemia. Sun GX, et al. **Cancer Genet Cytogenet** 1990 May;46(1):107–13

Selective elimination of breast cancer cells from human bone marrow using an antibody–Pseudomonas exotoxin A conjugate. Bjorn MJ, et al. **Cancer Res** 1990 Sep 15; 50(18):5992–6

Protective effects of tumor necrosis factor on murine hematopoiesis during cycle–specific cytotoxic chemotherapy. Sigrdal L, et al. **Cancer Res** 1990 Jul 15; 50(14):4216–20

Effects of azobenzene and aniline in the rodent bone marrow micronucleus test. George E, et al. **Carcinogenesis** 1990 Sep;11(9):1551–6

Is there an accumulation of cells during G2 in some acute lymphoblastic leukaemias? Ffrench M, et al. **Cell Tissue Kinet** 1990 Jul;23(4):251–60

Identification of megakaryocytic cells by Ulex Europaeus Agglutinin I (UEA 1) in B5 fixed, decalcified, paraffin–embedded specimens. Liu SM, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Feb;45(2):75–82

Lymphocyte populations in autopsy bone marrow sections from recipients of allogeneic marrow and non–transplant sudden death cases. Dilly SA, et al. **Clin Exp Immunol** 1990 Jul;81(1):127–31

Bone marrow MRI in sickle cell disease [letter; comment] Saywell WR. **Clin Radiol** 1990 May;41(5):364 Comment on: Clin Radiol 1989 Sep;40(5):486–9.

Imaging the bone marrow with magnetic resonance during a crisis and in chronic forms of sickle cell disease [published erratum appears in Clin Radiol 1990 Feb;41(2):145] [see comments] van Zanten TE, et al. **Clin Radiol** 1989 Sep; 40(5):486–9 Comment in: Clin Radiol 1990 May;41(5):364.

Urticaria with macroglobulinaemia. Disease activity associated alterations in immunoglobulins profile and bone marrow hypodiploidy. Bonnetblanc JM, et al. **Dermatologica** 1990;181(1):41–3

Cytologic evaluation of Papanicolaou–stained bone marrow aspirates. Berman JJ, et al. **Diagn Cytopathol** 1989; 5(4):383–7

Comparison of the cytotoxicity of amsacrine and its analogue CI–921 against cultured human and mouse bone marrow tumour cells. Ching LM, et al. **Eur J Cancer** 1990 Jan; 26(1):49–54

Small cell lung cancer cell line from histologically and immunocytochemically negative bone marrow [letter] Everard MJ, et al. **Eur J Cancer** 1990;26(6):766–7

Differences in bone marrow cytogenetic characteristics between treated and untreated myeloma. Clark RE, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1789–93

Immunological detection and definition of minimal residual neuroblastoma disease in bone marrow samples obtained during or after therapy. Gussetis ES, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1745–53

Influence of recombinant alpha and gamma interferons on the in vitro proliferation of myeloid and leukemic progenitors. Delforge A, et al. **Eur J Haematol** 1990 May; 44(5):307–11

Bone marrow morphology during alpha–interferon treatment in hairy cell leukemia. Hassan IB, et al. **Eur J Haematol** 1989 Aug;43(2):120–6

Bone marrow karyotypes in 94 children with acute leukemia. Heim S, et al. **Eur J Haematol** 1990 Apr;44(4):227–33

Comparative study of immunocytochemical staining versus Giemsa stain for detecting dysmegakaryopoiesis in myelodysplastic syndromes (MDS). Kawaguchi M, et al. **Eur J Haematol** 1990 Feb;44(2):89–94

Fibroblast colony–forming cells with high sensitivity to serum mitogen(s) exist in bone marrow of patients with chronic myelocytic leukemia. Kimura A, et al. **Eur J Haematol** 1990 May;44(5):291–5

Bone marrow histopathology in primary myelofibrosis: clinical and haematologic correlations and prognostic evaluation. Pereira A, et al. **Eur J Haematol** 1990 Feb; 44(2):95–9

Comparison of bone marrow histology in early chronic granulocytic leukemia and in leukemoid reaction. Schmid C, et al. **Eur J Haematol** 1990 Mar;44(3):154–8

An immunomorphometric study on megakaryocyte precursor cells in bone marrow tissue from patients with chronic myeloid leukemia (CML). Thiele J, et al. **Eur J Haematol** 1990 Jan;44(1):63–70

Bone marrow histology and serum beta 2 microglobulin in multiple myeloma—a new prognostic strategy. Bartl R, et al. **Eur J Haematol Suppl** 1989;51:88–98

Autologous bone marrow transplantation with immunotoxin–purged marrow for advanced multiple myeloma. Gobbi M, et al. **Eur J Haematol Suppl** 1989; 51:176–81

Histology and immunohistology of bone marrow biopsy in multiple myeloma. Pileri S, et al. **Eur J Haematol Suppl** 1989;51:52–9

Ex vivo bone marrow purging with immunotoxins. Stirpe F, et al. **Eur J Haematol Suppl** 1989;51:173–5

Variable effect of recombinant human granulocyte–macrophage colony–stimulating factor on bone marrow fibrosis in patients with myelodysplasia. Antin JH, et al. **Exp Hematol** 1990 May;18(4):266–70

Hematopoietic stem cell– and marrow stromal cell–specific requirements for gamma irradiation leukemogenesis in vitro. Greenberger JS, et al. **Exp Hematol** 1990 Jun; 18(5):408–15

Lectin–binding properties of Burkitt's lymphoma cell lines: application to bone marrow purging. Mumcuoglu M, et al. **Exp Hematol** 1990 Jan;18(1):55–60

Effective purging of bone marrow by a combination of immunorosette depletion and complement lysis. Slaper–Cortenbach IC, et al. **Exp Hematol** 1990 Jan; 18(1):49–54

Experimental pancytopenia of the peripheral blood with granulocytopoietic bone marrow hyperplasia in the beagle–dog. Schneider P, et al. **Exp Pathol** 1990; 38(4):201–15

Bone marrow and spleen morphology following haemolytic anaemia in adult laboratory rats of various age groups. Berger J. **Folia Haematol (Leipz)** 1990;117(1):1–5

Acquired amegakaryocytic thrombocytopenic purpura (AATP): a study of autologous megakaryocyte progenitors and the effect of patients plasma on normal marrow megakaryocyte colony formation. Podolak–Dawidziak M. **Folia Haematol (Leipz)** 1990;117(2):347–51

Growth of hemopoietic cells after incubation with VP 16–213. Schulze E, et al. **Folia Haematol (Leipz)** 1989; 116(3–4):591–6

Combination chemotherapy for advanced diffuse large cell lymphoma. The adverse effects of bone marrow invasion, gastrointestinal tract involvement or high bulk disease. Jacobs P, et al. **Haematologia (Budap)** 1990;23(1):41–7

New clinical aspects of Pearson's syndrome. Report of three cases. Favareto F, et al. **Haematologica** 1989 Nov–Dec; 74(6):591–4

Bone marrow morphology and proliferative activity in acquired immunodeficiency syndrome. Danova M, et al. **Haematologica (Pavia)** 1989 Jul–Aug;74(4):365–9

Prognostic significance of eosinophilia in acute myelomonocytic leukemia in relation to induction treatment. Creutzig U, et al. **Hamatol Bluttransfus** 1990; 33:226–32

Minimal residual disease in acute leukemia: lessons learned from animal models. Hagenbeck A, et al. **Hamatol Bluttransfus** 1990;33:31–5

Histopathological study of bone marrow biopsies in 30 cases of T–cell lymphoma with clinical, biological and survival correlations. Caulet S, et al. **Hematol Oncol** 1990 May–Jun; 8(3):155–68

Germinal centers in the bone marrow. Farhi DC. **Hematol Pathol** 1989;3(3):133–6

Again about bone marrow necrosis: particular diagnostic aspects [letter; comment] Musto P, et al. **Hematol Pathol** 1989;3(4):185–7 Comment on: Hematol Pathol 1988;2(1):51–4.

Bone marrow changes in patients with refractory aplastic anemia treated by recombinant GM–CSF. Naeim F, et al. **Hematol Pathol** 1990;4(2):79–85

Differential effect of continuous versus cyclic maintenance chemotherapy on cytokine–induced myeloid colony growth. Ridgway D, et al. **Hematol Pathol** 1990;4(2):87–92

Histopathology of bone marrow reconstitution after allogeneic bone marrow transplantation. van den berg H, et al. **Histopathology** 1989 Oct;15(4):363–73

Bone marrow involvement in large granular lymphocyte leukemia [letter; comment] Merlio JP, et al. **Hum Pathol** 1990 Apr;21(4):458–9 Comment on: Hum Pathol 1989 Jul;20(7):643–51.

Bone marrow iron in nutritional anaemias. Mehta BC, et al. **J Assoc Physicians India** 1989 Nov;37(11):687–8

Bone marrow biopsy in staging of malignant lymphomas. Singh T, et al. **J Assoc Physicians India** 1989 Aug; 37(8):513–4

Estimation of marrow iron stores, biopsy vs. aspirate. Singh T, et al. **J Assoc Physicians India** 1989 Nov;37(11):705–6

Sequential study on spontaneous colony formation by bone marrow cells during butylnitrosourea–induced leukemogenesis in the rat. Takano Y, et al. **J Cancer Res Clin Oncol** 1990;116(1):24–8

Long–term exposure to retrovirally expressed granulocyte–colony–stimulating factor induces a nonneoplastic granulocytic and progenitor cell hyperplasia without tissue damage in mice. Chang JM, et al. **J Clin Invest** 1989 Nov;84(5):1488–96

Atypical multinucleated cells form in long–term marrow cultures from patients with Paget's disease. Kukita A, et al. **J Clin Invest** 1990 Apr;85(4):1280–6

Bone marrow involvement by non–Hodgkin's lymphoma: the clinical significance of morphologic discordance between the lymph node and bone marrow. Nebraska Lymphoma Study Group. Conlan MG, et al. **J Clin Oncol** 1990 Jul; 8(7):1163–72

Erythropoietin for the treatment of anemia of malignancy associated with neoplastic bone marrow infiltration. Oster W, et al. **J Clin Oncol** 1990 Jun;8(6):956–62

Epithelial tumor cells in bone marrow of patients with colorectal cancer: immunocytochemical detection, phenotypic characterization, and prognostic significance. Schlimok G, et al. **J Clin Oncol** 1990 May;8(5):831–7

Use of monoclonal anti–actin as a megakaryocyte marker in paraffin wax embedded bone marrow biopsy specimens. Boqué C, et al. **J Clin Pathol** 1989 Sep;42(9):982–4

Immunocytochemical examination of bone marrow in disseminated neuroblastoma. Carey PJ, et al. **J Clin Pathol** 1990 Jan;43(1):9–12

Use of APAAP technique on paraffin wax embedded bone marrow trephines. Erber WN, et al. **J Clin Pathol** 1989 Nov;42(11):1201–5

Simple method for granulocyte–macrophage cell culture and staining in soft agar: comparison with a standard research technique. Hyde K, et al. **J Clin Pathol** 1989 Dec; 42(12):1302–8

Value of bilateral bone marrow biopsy specimens in non–Hodgkin's lymphoma. Juneja SK, et al. **J Clin Pathol** 1990 Aug;43(8):630–2

Immunohistochemical detection of neuroblastoma in frozen sections of bone marrow trephine biopsy specimens. Reid MM, et al. **J Clin Pathol** 1990 Apr;43(4):334–6

Bone marrow biopsy in monoclonal gammopathies: correlations between pathological findings and clinical data. The Cooperative Group for Study and Treatment of Multiple Myeloma. Riccardi A, et al. **J Clin Pathol** 1990 Jun;43(6):469–75

Early reconstitution of haematopoiesis after allogeneic bone marrow transplantation: a prospective histopathological study of bone marrow biopsy specimens. van den Berg H, et al. **J Clin Pathol** 1990 May;43(5):365–9

Systemic bone marrow disorders: characterization with proton chemical shift imaging. Gückel F, et al. **J Comput Assist Tomogr** 1990 Jul–Aug;14(4):633–42

Granulocyte transfusions in septic adult and newborn rats: distribution of granulocytes and effect on peripheral blood and bone marrow [see comments] Baley JE, et al. **J Lab Clin Med** 1990 Mar;115(3):283–91 Comment in: J Lab Clin Med 1990 Mar;115(3):271–2.

Abnormalities of hematopoietic progenitor cells in patients with aplastic anemia after hematologic recovery. Issaragrisil S, et al. **J Med Assoc Thai** 1989 Nov; 72(11):643–8

Experimental bone and bone marrow metastasis in laboratory animals [letter; comment] Arguello F, et al.

J Natl Cancer Inst 1990 Jun 20;82(12):1069–70 Comment on: J Natl Cancer Inst 1990 Mar 7;82(5):408–12.

Nude rat model for studying metastasis of human tumor cells to bone and bone marrow [see comments] Kjønniksen I, et al. **J Natl Cancer Inst** 1990 Mar 7;82(5):408–12 Comment in: J Natl Cancer Inst 1990 Jun 20;82(12):1069–70.

Bone marrow cells in patients with multiple sclerosis. Fredrikson S, et al. **J Neuroimmunol** 1989 Sep; 24(1–2):23–31

Thymoma with bone marrow eosinophilia. Fitzmaurice RJ, et al. **J R Soc Med** 1990 Apr;83(4):270–1

Characteristic of marrow culture and clinical relevance in leukemia with 8/21 translocation. Sun GX, et al. **J Tongji Med Univ** 1989;9(4):228–31

Studies on biological characteristics and modulating factors of long-term cultured bone marrow cells of a myeloma patient in vitro. Wang XL, et al. **J Tongji Med Univ** 1989; 9(3):134–8

Combined infection by Moloney murine leukemia virus and a mink cell focus-forming virus recombinant induces cytopathic effects in fibroblasts or in long-term bone marrow cultures from preleukemic mice. Li QX, et al. **J Virol** 1990 Aug;64(8):3701–11

Serial measurement of sister chromatid exchanges in the peripheral lymphocytes of patients with lung cancer receiving chemotherapy in relation to bone marrow toxicity. Shinkai T, et al. **Jpn J Cancer Res** 1989 Aug; 80(8):783–6

Clonal growth of haemopoietic progenitor cells from myelodysplastic marrow in response to recombinant haemopoietins. Baines P, et al. **Leuk Res** 1990;14(3):247–53

Survival and characteristics of murine leukaemic and normal stem cells after hyperthermia: a murine model for human bone marrow purging. Gidáli J, et al. **Leuk Res** 1990; 14(5):453–7

B-cell lymphoma of the mucosa-associated lymphatic tissue (MALT) presenting with bone marrow and peripheral blood involvement. Griesser H, et al. **Leuk Res** 1990; 14(7):617–22

In vitro growth response to G-CSF and GM-CSF by bone marrow cells of patients with acute myeloid leukemia. Jinnai I. **Leuk Res** 1990;14(3):227–40

Bone marrow cultures and prognosis in primary myelodysplastic syndromes. Korthout M, et al. **Leuk Res** 1990;14(1):85–9

A simple method for short-term culturing bone marrow and unstimulated blood from acute leukemias. Macera MJ, et al. **Leuk Res** 1989;13(9):729–34

5-bromodeoxyuridine (BUdR) quenching of acridine orange fluorescence distinguishes cycling and non-cycling normal and malignant bone marrow cells in vitro. Maddox AM, et al. **Leuk Res** 1989;13(9):781–90

Tumor associated myelopoiesis inhibiting factors. Olsson I, et al. **Leuk Res** 1990;14(8):715–6 (8 ref.)

Correlation of bone marrow colony growth in the myelodysplastic syndromes with the FAB classification and the Bournemouth score. Oscier DG, et al. **Leuk Res** 1989; 13(9):833–9

Differentiation induction of HL60 cells in a long-term bone marrow culture of acute myeloid leukemia. Ossenkoppele GJ, et al. **Leuk Res** 1990;14(7):611–6

Growth of normal and malignant bone marrow cells. Reizenstein P. **Leuk Res** 1990;14(8):679–81 (13 ref.)

Comparative activities of rabbit complements of different ages using an in-vitro marrow purging model. Roy DC, et al. **Leuk Res** 1990;14(5):407–16

Disruption of stromal niches by diffusible factors in the conditioned media of leukemic cell-lines and sera of chronic myelogenous leukemia patients. Shetty A, et al. **Leuk Res** 1989;13(9):811–7

Prognostic implication of sequential bone marrow cultures in the myelodysplastic syndromes. Yoshida Y, et al. **Leuk Res** 1989;13(11):967–72

Sequestration of Philadelphia chromosome-positive cells in the bone marrow of a chronic myeloid leukemia patient in very prolonged remission. Birnie GD, et al. **Leukemia** 1990 Jun;4(6):452–4

Chronic myeloid leukemia arising in a progenitor common to T cells and myeloid cells. Schuh AC, et al. **Leukemia** 1990 Sep;4(9):631–6

Monoclonal antibody B-ly7: a sensitive marker for detection of minimal residual disease in hairy cell leukemia. Thaler J, et al. **Leukemia** 1990 Mar;4(3):170–6

Bone marrow findings on magnetic resonance images of the knee: accentuation by fat suppression. Harned EM, et al. **Magn Reson Imaging** 1990;8(1):27–31

Magnetic resonance imaging of bone marrow: diagnostic value in diffuse hematologic disorders. Steiner RM, et al. **Magn Reson Q** 1990 Jan;6(1):17–34 (55 ref.)

Waldenstrom's macroglobulinaemia—a case report. Chin NS, et al. **Med J Malaysia** 1989 Jun;44(2):167–70

Bone marrow relapse occurring as first relapse in children with acute lymphoblastic leukemia. Behrendt H, et al. **Med Pediatr Oncol** 1990;18(3):190–6

Day 7 marrow response and outcome for children with acute lymphoblastic leukemia and unfavorable presenting features. Gaynon PS, et al. **Med Pediatr Oncol** 1990; 18(4):273–9

Bone marrow involvement in young patients with non-Hodgkin's lymphoma: the importance of multiple bone marrow samples for accurate staging. Haddy TB, et al. **Med Pediatr Oncol** 1989;17(5):418–23

IgM monoclonal gammopathy/Waldenström's macroglobulinemia: a morphological and immunophenotypic study of the bone marrow. Feiner HD, et al. **Mod Pathol** 1990 May;3(3):348–56

Bone marrow biopsy (BMB). II. Bone marrow biopsy in myeloproliferative disorders. Macavei I, et al. **Morphol Embryol (Bucur)** 1989 Apr-Jun;35(2):117–27

Modification of clastogenicity of lead and aluminium in mouse bone marrow cells by dietary ingestion of Phyllanthus emblica fruit extract. Dhir H, et al. **Mutat Res** 1990 Jul;241(3):305–12

The effect of the pyrrolizidine alkaloid integerrimine on the chromosomes of mouse bone marrow cells. Gimmler-Luz MC, et al. **Mutat Res** 1990 Jul;241(3):297–304

Length of cell cycle in vitro and sister-chromatid exchange (SCE) frequency in bone marrow cells from severely malnourished rats. Ortiz R, et al. **Mutat Res** 1990 Sep; 232(1):71–5

Minimal residual disease in childhood B-lineage lymphoblastic leukemia. Persistence of leukemic cells during the first 18 months of treatment. Yamada M, et al. **N Engl J Med** 1990 Aug 16;323(7):448–55

Bone marrow necrosis in malignant diseases. A report on seven intravitally recognized cases. Ščudla V, et al. **Neoplasma** 1989;36(5):603–10

Virus-associated hemophagocytic syndrome: the diagnostic usefulness of immature histiocytes with benign features in the bone marrow. Hara T, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Jul;52(4):796–9

Prognostic value of bone marrow biopsy in chronic lymphoid leukemia. A study of 98 initial bone marrow biopsies. Desablens B, et al. **Nouv Rev Fr Hematol** 1989;31(3):179–82

Smokers' dysmyelopoiesis—bone marrow alterations associated with cigarette smoking. Budde R, et al. **Pathol Res Pract** 1989 Sep;185(3):347–50

Proliferation and maturation of human bone marrow cells in infectious diseases. Dörmer P, et al. **Pathol Res Pract** 1990 Feb;186(1):145–9

Chronic myeloproliferative disorders in bone marrow biopsies. Georgii A, et al. **Pathol Res Pract** 1990 Feb; 186(1):3–27

Severe anaemia with unusual blasts in the bone marrow. Schaefer HE. **Pathol Res Pract** 1989 Oct;185(4):533–5

Test and teach. Number Sixty. Diagnosis: Rhabdomyosarcoma presenting in the bone marrow. Ng CS, et al. **Pathology** 1989 Apr;21(2):88–9, 150–1

Detection of neuroblastoma cells in the bone marrow with immunohistochemical staining of neuron-specific enolase. Muchi H, et al. **Pediatr Hematol Oncol** 1989;6(1):63–6

Comparison of radiolabeled monoclonal antibody and magnetic resonance imaging in the detection of metastatic neuroblastoma in bone marrow: preliminary results. Fletcher BD, et al. **Pediatr Radiol** 1989;20(1–2):72–5

Changes in T1 relaxation processes in the bone marrow following treatment in children with acute lymphoblastic leukemia. A magnetic resonance imaging study. Jensen KE, et al. **Pediatr Radiol** 1990;20(6):464–8

A new human highly tumorigenic neuroblastoma cell line with undetectable expression of N-myc. Cornaglia-Ferraris P, et al. **Pediatr Res** 1990 Jan;27(1):1–6

Total absence of colony-stimulating factor 1 in the macrophage-deficient osteopetrotic (op/op) mouse. Wiktor-Jedrzejczak W, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4828–32

Detection of minimal acute myeloid leukemia cells in bone marrow by probing for mutated ras oncogenes using the polymerase chain reaction. Ball ED, et al. **Prog Clin Biol Res** 1990;333:499–506

Malignant lymphoma: bone marrow imaging versus biopsy. Linden A, et al. **Radiology** 1989 Nov;173(2):335–9

Pathophysiological mechanisms of HIV-induced defects in haematopoiesis: pathology of the bone marrow. Stutte HJ, et al. **Res Virol** 1990 Mar-Apr;141(2):195–200

Eosinophil levels in the acute phase of experimental Chagas' disease. Nakhle MC, et al. **Rev Inst Med Trop Sao Paulo** 1989 Nov-Dec;31(6):384–91

Purging cancer from the bone marrow [news] Waldrop MM. **Science** 1990 May 18;248(4957):816–7

Bone marrow. Unger EC, et al. **Top Magn Reson Imaging** 1989 Sep;1(4):31–52 (90 ref.)

Falciparum malaria with bone marrow abnormalities resembling malignant histiocytosis. Hamada A, et al. **Trans R Soc Trop Med Hyg** 1989 May-Jun;83(3):331

Bone marrow biopsy in the staging of small cell lung cancer. Franciosi V, et al. **Tumori** 1989 Dec 31;75(6):576–9 (32 ref.)

Megakaryocyte precursors (pro- and megakaryoblasts) in bone marrow tissue from patients with reactive thrombocytosis, polycythemia vera and primary (essential) thrombocythemia. An immunomorphometric study. Thiele J, et al. **Virchows Arch [B]** 1990;58(4):295–302

[Monoclonal antibody in the detection of neuroblastoma cells in bone marrow aspirates] Bai Y. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):260–2 (Eng. Abstr.) **(Chi)**

[Gelatinous bone marrow transformation] Jensen KD, et al. **Ugeskr Laeger** 1990 Jan 15;152(3):171–2 (Eng. Abstr.) **(Dan)**

[Immunologic studies of bone marrow aspirations in breast cancer patients at the time of primary therapy] Forell-Engelken G, et al. **Arch Gynecol Obstet** 1989; 245(1–4):722–4 **(Ger)**

[Abnormal hematopoiesis in psoriasis—in vitro studies] Weber H, et al. **Dermatol Monatsschr** 1990;176(2–3):163–8 (Eng. Abstr.) **(Ger)**

[Infection-associated hemophagocytic syndrome with a lethal outcome] Gollub H, et al. **Dtsch Med Wochenschr** 1989 Nov 3;114(44):1697–701 (Eng. Abstr.) **(Ger)**

[Micrometastases in bone marrow at the time of primary treatment of breast cancer: a new prognostic criterion?] Untch M, et al. **Gynakol Rundsch** 1989;29 Suppl 2:231–3 **(Ger)**

[Use of a new silicon chamber system for carrying out immunologic technics with blood and bone marrow samples and histologic specimens] Ebener U, et al. **Klin Padiatr** 1990 Jul-Aug;202(4):278–81 (Eng. Abstr.) **(Ger)**

[Bone marrow scintigraphy and magnetic resonance tomography in malignant lymphomas: comparison with histologic results] Linden A, et al. **Nuklearmedizin** 1989 Oct;28(5):166–71 (Eng. Abstr.) **(Ger)**

[MR tomography detection of bone marrow infiltration by malignant lymphomas] Gückel F, et al. **Onkologie** 1989 Aug;12 Suppl 1:34–7 (Eng. Abstr.) **(Ger)**

[Immunologic identification of undetectable neuroblastoma cells by current cytohistological studies of bone marrow samples] Gussetis ES, et al. **Onkologie** 1989 Aug;12 Suppl 1:9–11 (Eng. Abstr.) **(Ger)**

[Bone marrow scintigraphy and magnetic resonance tomography in plasmacytoma] Ruhlmann J, et al. **Onkologie** 1989 Aug;12 Suppl 1:38–41 (Eng. Abstr.) **(Ger)**

[Bone marrow metastases of neuroblastoma: MRT in comparison with bone marrow cytology and mIBG scintigraphy] Benz-Bohm G, et al. **ROFO** 1990 May; 152(5):523–7 (Eng. Abstr.) **(Ger)**

[Disseminated sclerosing bone marrow carcinosis with peripheral expansion in undifferentiated gastric carcinoma] Borgis KJ, et al. **ROFO** 1990 Jul;153(1):99–100 **(Ger)**

[MR-tomographic quantification of infiltrative bone marrow changes and therapeutic follow-up of patients with hairy cell leukemia] Gückel F, et al. **ROFO** 1990 May; 152(5):595–600 (Eng. Abstr.) **(Ger)**

[Detection and effects of bone marrow intravasations in operations in the area of the femoral marrow cavity] Wenda K, et al. **Unfallchirurg** 1990 Feb;93(2):56–61 (Eng. Abstr.) **(Ger)**

[Bone metastases of small cell bronchial cancer—a differential diagnosis of acute leukemia] Wolf H, et al. **Z Arztl Fortbild (Jena)** 1990;84(3):93–5 **(Ger)**

[Histomorphologic findings of the bone marrow in chronic myeloproliferative diseases] Thiele J, et al. **Z Hautkr** 1989 Oct 15;64(10):903–4, 909–12 (18 ref.) (Eng. Abstr.) **(Ger)**

[Prognostic value of the ratio of bone marrow plasma cells in multiple myeloma] Pasqualetti P, et al. **Minerva Med** 1990 Mar;81(3):129–33 (Eng. Abstr.) **(Ita)**

[Two cases of advanced gastric cancer with diffuse carcinomatosis of the bone marrow showing a widespread osteoplastic bone metastasis] Kato M, et al. **Gan No Rinsho** 1990 Mar;36(4):551–6 (Eng. Abstr.) **(Jpn)**

[Monoclonal antibody and purging] Ueda R, et al. **Gan No Rinsho** 1989 May;Spec No:294–302 **(Jpn)**

[A case of Plasmodium vivax malaria complicated with pancytopenia due to hypoplasia of the bone marrow] Yamakawa H, et al. **Kansenshogaku Zasshi** 1989 Sep; 63(9):1043–6 (Eng. Abstr.) **(Jpn)**

[Rapid bone marrow dissemination of gastrointestinal lymphomas after surgical resection] Abe Y, et al. **Rinsho Ketsueki** 1989 Aug;30(8):1294–8 (Eng. Abstr.) **(Jpn)**

[Acute myelomonocytic leukemia (M4) with CD19 antigen expression, eosinophilia and basophilia in bone marrow] Inaba T, et al. **Rinsho Ketsueki** 1989 May;30(5):726–30 (Eng. Abstr.) **(Jpn)**

[Bone marrow necrosis in thymic T cell lymphoma] Kunieda Y, et al. **Rinsho Ketsueki** 1990 Apr;31(4):492–6 (Eng. Abstr.) **(Jpn)**

[Discrepancy in karyotypes between peripheral blood and bone marrow during blastic crisis in chronic myelocytic leukemia] Maeda T, et al. **Rinsho Ketsueki** 1989 Jul; 30(7):1032–6 (Eng. Abstr.) **(Jpn)**

[Acute myelomonocytic leukemia with mastocytosis in bone marrow] Natori H, et al. **Rinsho Ketsueki** 1990 Feb; 31(2):239–44 (Eng. Abstr.) **(Jpn)**

[Hodgkin's disease diagnosed from the numerous Reed-Sternberg cells in the bone marrow] Noguchi Y, et al. **Rinsho Ketsueki** 1989 May;30(5):731–5 (Eng. Abstr.) **(Jpn)**

[Study of reinduction chemotherapy in bone marrow relapse of childhood acute lymphoblastic leukemia] Sato Y, et al. **Rinsho Ketsueki** 1989 Nov;30(11):1923–30 (Eng. Abstr.) **(Jpn)**

[Bone marrow aplasia without blast crisis in a case of CML of 10-year survival] Shiga Y, et al. **Rinsho Ketsueki** 1989 May;30(5):752–6 (Eng. Abstr.) **(Jpn)**

[Proliferative activity of granulocyte progenitors from the bone marrow of patients with chronic myeloid leukemia in 14-day culture in vivo] Hansz J, et al. **Acta Haematol Pol** 1989 Jan-Jun;20(1):29–35 (Eng. Abstr.) **(Pol)**

[Two-phenotype and two-clonal leukemia] Robak T. **Acta Haematol Pol** 1989 Jan-Jun;20(1):107–17 (66 ref.) **(Pol)**

[Effect of sera from children with acute lymphoblastic leukemia on the morphology of granulocyte-macrophage colonies grown from murine bone marrow cells and the cells of murine myelomonocytic leukemia WEHI 3B D+] Swiderska J, et al. **Nowotwory** 1989 Apr-Jun;39(2):90-8 (Eng. Abstr.) **(Pol)**

[Sclerosis and fibrosis of the bone marrow in lung and gastrointestinal tract cancers] Dzięcioł J, et al. **Patol Pol** 1989;40(2):187-95 (Eng. Abstr.) **(Pol)**

[Necrosis of the bone marrow] Dzięcioł J, et al. **Patol Pol** 1989;40(2):211-8 (Eng. Abstr.) **(Pol)**

[Lymphocytic aggregations in the bone marrow: their occurrence and morphologic analysis] Kemona A, et al. **Patol Pol** 1989;40(2):219-25 (Eng. Abstr.) **(Pol)**

[Neoplastic metastases in the bone marrow from cancers of the digestive system (stomach, pancreas, liver and gallbladder)] Kemona A, et al. **Patol Pol** 1989;40(2):205-9 (Eng. Abstr.) **(Pol)**

[Analysis of neoplasm metastases to the bone marrow in patients with lung cancer] Dzięcioł J, et al. **Pneumonol Pol** 1989 Apr;57(4):235-9 (Eng. Abstr.) **(Pol)**

[Correlation of serum lactate dehydrogenase activity with bone marrow proliferation in patients with acute myeloblastic leukemia] Król-Grela H, et al. **Pol Arch Med Wewn** 1988 Apr;79(4):188-94 (Eng. Abstr.) **(Pol)**

[Evaluation of bone marrow granulopoiesis in patients on the long-term hemodialysis program] Wańkowicz Z, et al. **Pol Arch Med Wewn** 1987 Mar;77(3):87-93 (Eng. Abstr.) **(Pol)**

[Biological and clinical aspects of cyclic neutropenia] Robak T. **Przegl Lek** 1989;46(9):700-4 (42 ref.) **(Pol)**

[Effect of hemodialysate and its peptide fractions on stromal cells and heme synthesis in bone marrow culture and the activity of selected enzymes and GSH level in human erythrocytes. I. Effect on human bone marrow stromal cells in vitro] Smoleński O. **Przegl Lek** 1989;46(8):641-7 (Eng. Abstr.) **(Pol)**

[Coexistence of Hodgkin's disease and myelodysplastic syndrome with late conversion to acute myeloblastic leukemia] Woźny T. **Wiad Lek** 1989 Feb 1;42(3):170-2 (Eng. Abstr.) **(Pol)**

[Early and late effects of the cytogenetic action of doxorubicin] Klimova MIu, et al. **Antibiot Khimioter** 1990 Jan;35(1):30-2 (Eng. Abstr.) **(Rus)**

[Morphology of erythroblastic bone marrow islands in hematologic patients] Rassokhin AG, et al. **Arkh Patol** 1989;51(9):61-7 (Eng. Abstr.) **(Rus)**

[Precursor cells of the granulomonocytopoiesis in children with immune neutropenia] Gerasimova LP, et al. **Gematol Transfuziol** 1990 Feb;35(2):13-5 (Eng. Abstr.) **(Rus)**

[Clinical picture and diagnosis of refractory anemia with an excess of blasts and with bone marrow hypoplasia] Gladysh VV, et al. **Gematol Transfuziol** 1989 Jul;34(7):6-10 (Eng. Abstr.) **(Rus)**

[The role of endogenous enkephalins in the regulation of bone marrow hematopoiesis in stress] Gol'dberg ED, et al. **Gematol Transfuziol** 1989 Aug;34(8):20-3 (Eng. Abstr.) **(Rus)**

["Centrocytic leukemia"--a new variant of chronic lymphocytic leukemia?] Iavorkovskiĭ LL, et al. **Gematol Transfuziol** 1990 Feb;35(2):18-21 (Eng. Abstr.) **(Rus)**

[Trephine biopsy of the bone marrow in patients with hairy cell leukemia] Iavorkovskiĭ LL, et al. **Gematol Transfuziol** 1989 Aug;34(8):10-5 (Eng. Abstr.) **(Rus)**

[Detection of cells with phenotype of multiple drug resistance in myeloproliferative disorders before the treatment] Kemnitz J, et al. **Gematol Transfuziol** 1990 Feb;35(2):15-8 (Eng. Abstr.) **(Rus)**

[Parameters of granulocyte proliferation in chronic myeloid leukemia and their prognostic value] Kotel'nikov VM, et al. **Gematol Transfuziol** 1989 Aug;34(8):7-10 (Eng. Abstr.) **(Rus)**

[The prognostic significance of parameters of bone marrow blast cell proliferation in patients with acute leukemia] Kotel'nikov VM, et al. **Gematol Transfuziol** 1989 Nov; 34(11):14-8 (Eng. Abstr.) **(Rus)**

[Characteristics of lymphocyte populations in the bone marrow and peripheral blood of children with non-T cell acute lymphoblastic leukemia during remission] Lenskaia RV, et al. **Gematol Transfuziol** 1990 Jan;35(1):8-10 (Eng. Abstr.) **(Rus)**

[Phenotyping of blood and bone marrow lymphocytes in children with primary immunologic deficiency] Nefedova EV, et al. **Gematol Transfuziol** 1990 Apr;35(4):30-3 (Eng. Abstr.) **(Rus)**

[Various morphofunctional characteristics of hematopoietic tissue in preleukemic conditions] Rakov AA, et al. **Gematol Transfuziol** 1990 Jan;35(1):27-31 (Eng. Abstr.) **(Rus)**

[Biological effect of brown coal dust on the bronchopulmonary system and immunocompetent organs (experimental morphological study)] Ivanova LG. **Gig Tr Prof Zabol** 1990;(2):21-4 (Eng. Abstr.) **(Rus)**

[Morphocytochemical characteristics of hemopoietic cells in sideroblastic anemia] Dul'tsina SM, et al. **Lab Delo** 1990; (3):28-32 (Eng. Abstr.) **(Rus)**

[An acute undifferentiated leukemia accompanied by an increase in the content of basophilic granulocytes in the peripheral blood and bone marrow] Ronin VS, et al. **Lab Delo** 1989;(11):71-2 **(Rus)**

[Incidence of lymphoma cells in the bone marrow and peripheral blood in patients with non-Hodgkin's type lymphoma] Rajić M, et al. **Srp Arh Celok Lek** 1989 Jan-Feb;117(1-2):27-37 (Eng. Abstr.) **(Scc)**

[Necrosis of the bone marrow and cancer] Feliu J, et al. **Rev Clin Esp** 1989 Nov;185(8):405-8 (41 ref.) (Eng. Abstr.) **(Spa)**

[Bone marrow biopsy in myeloproliferative syndromes: prognostic value of cellular quantification] Esquivias López-Cuervo JJ, et al. **Sangre (Barc)** 1990 Apr; 35(2):98-101 (Eng. Abstr.) **(Spa)**

[Erythroid colonies derived from BFU-E from the bone marrow in a patient with type I congenital dyserythropoietic anemia] Florensa L, et al. **Sangre (Barc)** 1990 Jun;35(3):219-21 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Immunogenetic analysis of bone marrow aspirates in patients with non-Hodgkin lymphomas. Ellison DJ, et al. **Am J Hematol** 1990 Mar;33(3):160-6

Bone lining (endosteal) cells and hematopoiesis: a light microscopic study of normal and pathologic human bone marrow in plastic-embedded sections. Islam A, et al. **Anat Rec** 1990 Jul;227(3):300-6

Regulation of hemopoiesis by bone marrow stromal cells and their products. Dorshkind K. **Annu Rev Immunol** 1990; 8:111-37 (180 ref.)

Retroviral vector-mediated transfer of the bacterial neomycin resistance gene into fetal and adult sheep and human hematopoietic progenitors in vitro. Ekhterae D, et al. **Blood** 1990 Jan 15;75(2):365-9

In vitro hemopoiesis in human micro long-term bone marrow cultures recharged with either allogeneic, T-cell-depleted allogeneic, or syngeneic bone marrow cells. Mergenthaler HG, et al. **Blut** 1990 Apr;60(4):228-32

Anaemia and marrow blood flow in the rat. Schoutens A, et al. **Br J Haematol** 1990 Apr;74(4):514-8

A mathematical model of erythropoiesis in mice and rats. Part 4: Differences between bone marrow and spleen. Pantel K, et al. **Cell Tissue Kinet** 1990 Jul;23(4):283-97

Regenerating marrow induces systemic increase in osteo- and chondrogenesis. Gazit D, et al. **Endocrinology** 1990 May;126(5):2607-13

A novel mast cell growth factor (MCGF-3) produced by marrow-adherent cells that synergizes with interleukin 3 and interleukin 4. Boswell HS, et al. **Exp Hematol** 1990 Aug;18(7):794-800

Stromal-hematopoietic interrelationships: Maximov's ideas and modern models. Friedenstein A. **Hamatol Bluttransfus** 1989;32:159-67 (44 ref.)

Factors influencing proliferation and histamine content of cultured human bone marrow cells. Brantschen S, et al. **Immunobiology** 1989 Jun;179(2-3):271-82

Osteogenic response to marrow aspiration: increased serum osteocalcin and alkaline phosphatase in human bone marrow donors. Foldes J, et al. **J Bone Miner Res** 1989 Aug;4(4):643-6

Purified primitive human hematopoietic progenitor cells with long-term in vitro repopulating capacity adhere selectively to irradiated bone marrow stroma. Verfaillie C, et al. **J Exp Med** 1990 Aug 1;172(2):509-2

IL-3 induces differentiation of bone marrow precursor cells to osteoclast-like cells. Barton BE, et al. **J Immunol** 1989 Nov 15;143(10):3211-6

Maturational steps of bone marrow-derived dendritic murine epidermal cells. Phenotypic and functional studies on Langerhans cells and Thy-1+ dendritic epidermal cells in the perinatal period. Elbe A, et al. **J Immunol** 1989 Oct 15;143(8):2431-8

Erythropoietic bone marrow in the pigeon: development of its distribution and volume during growth and pneumatization of bones. Schepelmann K. **J Morphol** 1990 Jan;203(1):21-34

"Turning the tables"--making normal marrow resistant to chemotherapy [editorial; comment] Bertino JR. **J Natl Cancer Inst** 1990 Aug 1;82(15):1234-5 Comment on: J Natl Cancer Inst 1990 Aug 1;82(15):1260-3.

A stratified binomial marker model for bone-marrow repopulation experiments. Stone M, et al. **J Theor Biol** 1990 May 22;144(2):267-73

Suppression of mast cell colony formation by a low molecular weight fraction of fetal calf bone marrow extract. Lenfant M, et al. **Leuk Res** 1989;13(12):1085-9

Detection of BrdU in the regenerating bone marrow cells of a patient with AML. Raza A, et al. **Leuk Res** 1989; 13(12):1055-9

Effects of donor age on osteogenic cells of rat bone marrow in vitro. Tsuji T, et al. **Mech Ageing Dev** 1990 Feb 1; 51(2):121-32

Nucleotide sequence and expression of a cDNA encoding MyD88, a novel myeloid differentiation primary response gene induced by IL6. Lord KA, et al. **Oncogene** 1990 Jul; 5(7):1095-7

Rheology of bovine bone marrow. Bryant JD, et al. **Proc Inst Mech Eng [H]** 1989;203(H2):71-5

Origin of osteoclasts: mature monocytes and macrophages are capable of differentiating into osteoclasts under a suitable microenvironment prepared by bone marrow-derived stromal cells. Udagawa N, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7260-4

[The role of T-lymphocytes, macrophages and stromal mechanocytes in regulating bone marrow hematopoiesis during stress] Dygai AM, et al. **Biol Nauki** 1990;(4):52-7 (Eng. Abstr.) **(Rus)**

[Effects of high and low molecular soluble factors of the bone marrow on antibody formation and pain sensitivity in animals] Ianovskiĭ OG, et al. **Biull Eksp Biol Med** 1990 Jan;109(1):55-7 (Eng. Abstr.) **(Rus)**

[Changes in the erythroblast islands of the bone marrow in animals under combined heat amd muscle loads] Vorgova LV, et al. **Fiziol Zh SSSR** 1990 Feb;76(2):200-6 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Transient abnormal myelopoiesis and diffuse hepatic necrosis in Down's syndrome with prominent bleeding diathesis. Tsuda T, et al. **Acta Paediatr Scand** 1990 Feb;79(2):241-4

The anemia of chronic disorders: studies of marrow regulation and iron metabolism. Douglas SW, et al. **Blood** 1975 Jan;45(1):55-65

Congenital hypoplastic anemia inhibition of erythropoiesis by sera from patients with congenital hypoplastic anemia. Ortega JA, et al. **Blood** 1975 Jan;45(1):83-9

Bone marrow failure after hemorrhagic shock. Livingston DH, et al. **Circ Shock** 1990 Mar;30(3):255-63

Haematopoietic suppressing activity of gamma-interferon in serum and bone marrow of aplastic anaemia patients. Tohda S, et al. **Nippon Ketsueki Gakkai Zasshi** 1990 Feb; 53(1):14-20

[Abnormalities in the regulation of erythropoiesis by bone marrow fibroblasts in aplastic anemia] Satou Y, et al. **Rinsho Ketsueki** 1989 May;30(5):631-7 (Eng. Abstr.) **(Jpn)**

[The participation of opiatergic mechanisms in the regulation of bone marrow hematopoiesis in stress] Zakharova OIu, et al. **Patol Fiziol Eksp Ter** 1989 Nov-Dec;(6):11-4 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Combined effect of radiation and YM-881 (SMANCS) on murine tumors and bone marrow. Ono K, et al. **Acta Oncol** 1990;29(4):455-9

Early and late bone-marrow changes after irradiation: MR evaluation. Stevens SK, et al. **AJR Am J Roentgenol** 1990 Apr;154(4):745-50

The therapeutic potential of interleukin-1 beta in the treatment of chemotherapy- or radiation-induced myelosuppression and in tumor therapy. Nakai S, et al. **Biotherapy** 1989;1(4):339-54

Lack of recovery of murine hematopoietic stromal cells after irradiation-induced damage. Chamberlin W, et al. **Blood** 1974 Sep;44(3):385-92

Emergency response to nuclear and radiation accidents. Gale RP, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:2-3 (14 ref.)

Use of hematopoietic growth factors to control myelosuppression caused by radioimmunotherapy. Blumenthal RD, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):1003s-1007s

Tumor, red marrow, and organ dosimetry for 131I-labeled anti-carcinoembryonic antigen monoclonal antibody. Siegel JA, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):1039s-1042s

Prevention of GVHD by modulation of rat bone marrow with UV-B irradiation: II. Kinetics of migration of UV-B-irradiated bone marrow cells in naive and lethally irradiated rats. Oluwole SF, et al. **Cell Immunol** 1990 Jun; 128(1):289-300

The radiation response and recovery of bone marrow stroma with particular reference to long-term bone marrow cultures. Bierkens JG, et al. **Eur J Haematol** 1989 Aug; 43(2):95-107 (71 ref.)

Bone marrow replacement in the treatment of hemolytic disease in mice. Bernstein SE, et al. **Exp Hematol** 1989 Nov;17(10):1004-10

Survival enhancement and hemopoietic regeneration following radiation exposure: therapeutic approach using glucan and granulocyte colony-stimulating factor. Patchen ML, et al. **Exp Hematol** 1990 Oct;18(9):1042-8

Gap-junctional communication of bone marrow stromal cells is resistant to irradiation in vitro. Umezawa A, et al. **Exp Hematol** 1990 Oct;18(9):1002-7

Haemopoiesis in murine bone marrow and spleen after fractionated irradiation and repeated bone marrow transplantation. I. Erythropoiesis. Hofer M, et al. **Folia Biol (Praha)** 1989;35(6):405-17

Haemopoiesis in murine bone marrow and spleen after fractionated irradiation and repeated bone marrow transplantation. II. Granulopoiesis. Hofer M, et al. **Folia Biol (Praha)** 1989;35(6):418-28

Increase in the capacity of bone marrow exposed to He-Ne laser radiation for growth of GM-CFC colonies in vitro. Vacek A, et al. **Folia Biol (Praha)** 1990;36(1):65-70

Morphological changes in spleen, bone marrow and blood of rats after continuous gamma irradiation and indomethacin treatment. Macková N, et al. **Folia Haematol (Leipz)** 1990;117(2):353-7

Sacral scintigraphy for bone marrow dosimetry in radioimmunotherapy. Siegel JA, et al. **Int J Rad Appl Instrum [B]** 1989;16(6):553-9

Induction of cytogenetic adaptive response of somatic and

germ cells in vivo and in vitro by low-dose X-irradiation. Cai L, et al. **Int J Radiat Biol** 1990 Jul;58(1):187–94

Mouse bone-marrow response to low doses of whole-body gamma irradiation: induction of micronuclei. Uma Devi P, et al. **Int J Radiat Biol** 1990 Jan;57(1):97–101

Bone marrow from Balb/c mice radiocontaminated with 241Am in utero shows a deficient in vitro haemopoiesis. Van Den Heuvel RL. **Int J Radiat Biol** 1990 Jan; 57(1):103–15

Gamma-irradiation response of cocultivated bone marrow stromal cell lines of differing intrinsic radiosensitivity. Santucci MA, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1083–92

Etoposide protects mice from radiation-induced bone marrow death. Yamada S, et al. **Jpn J Cancer Res** 1990 Feb;81(2):112–4

Cumulative bone marrow stromal damage caused by X-irradiation and cytosine-arabinoside in leukemic mice. Ben-Ishay Z, et al. **Med Oncol Tumor Pharmacother** 1990; 7(1):55–9

Frequency of micronucleated cells in the mouse bone marrow after exposure to various doses of gamma-radiation. Jagetia GC. **Mutat Res** 1990 May;230(1):45–8

Radiation doses and risks in dento-maxillofacial radiology. Borrman H, et al. **Proc Finn Dent Soc** 1989;85(6):457–79 (90 ref.)

Photoradiation methods for purging autologous bone marrow grafts. Gulati S, et al. **Prog Clin Biol Res** 1990;333:87–102

Radioisotope-mediated purging in bone marrow transplantation. Macklis RM. **Prog Clin Biol Res** 1990; 333:109–19; discussion 120–3

Effect of copperglycinate on the radiation induced micronuclei formation in mice bone marrow. Jagetia GC, et al. **Radiat Environ Biophys** 1990;29(2):115–8

Early and late effects in the bone marrow of mice following 2 Gy (6 MeV) neutron irradiation. Peterson HP, et al. **Radiat Environ Biophys** 1989;28(4):291–302

Analysis of dose-incidence relationships for marrow failure in different species, in terms of radiosensitivity of tissue-rescuing units. Hendry JH, et al. **Radiat Res** 1990 May;122(2):155–60

Accelerated postirradiation recovery of hematopoietic marrow following priming with low doses of vincristine. Johnke RM, et al. **Radiat Res** 1990 Jun;122(3):234–40

Inhibition of hematopoietic recovery from radiation-induced myelosuppression by natural killer cells. Pantel K, et al. **Radiat Res** 1990 May;122(2):168–71

Bone marrow toxicity of total-body irradiation combined with radiosensitizers. Shields AF, et al. **Radiat Res** 1989 Nov;120(2):364–9

Changes in cellularity, CFU-S number and chromosome aberrations in bone marrow and blood of rats after neutron and continuous gamma irradiation. Brezáni P, et al. **Radiobiol Radiother (Berl)** 1989;30(5):431–8

Morphologic alterations in rat bone marrow and spleen after neutron and gamma irradiation. Macková N. **Radiobiol Radiother (Berl)** 1989;30(5):439–44

RNA and DNA changes in the bone marrow and blood of rats after neutron and continuous gamma irradiation. Mišúrová E, et al. **Radiobiol Radiother (Berl)** 1989; 30(5):423–9

Demonstration of strong classic immune reactivity after total-body irradiation for bone marrow transplantation. Implications for human T-depleted bone marrow transplantation. Gassmann W, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2687–8

Transplantation of T cell-depleted bone marrow in histoincompatible rabbits: improved engraftment and long-term chimeras after the addition of irradiated donor buffy coat cells and irradiated autologous cryopreserved bone marrow. Gratwohl A, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2756–7

UVB-irradiated bone marrow allografts in rats: induction of unresponsiveness for long-term heart allografts without GVHD. Wasfie T, et al. **Transplant Proc** 1990 Aug; 22(4):2011–2

UVB pretreatment of rat bone marrow allografts. Prevention of GVHD and induction of allochimerism and donor-specific unresponsiveness. Chabot JA, et al. **Transplantation** 1990 May;49(5):886–9

[Selective accumulation of 147Pm in organism on induction of micronucleus and SCE of bone marrow cells as well as the mutagenic effect on fetal liver and spleen] Zhu SP. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 May; 23(3):166–9 (Eng. Abstr.) **(Chi)**

[MR study of bone marrow changes of the spine following radiotherapy] Starz I, et al. **Rontgenblatter** 1990 Aug; 43(8):355–8 (Eng. Abstr.) **(Ger)**

[The effect of small radiation doses: desoxyribonucleic acid (DNA) synthesis and DNA repair by the thymus, spleen and bone marrow cells of rats following fractionated whole-body X-ray irradiation] Tempel K, et al. **Strahlenther Onkol** 1989 Sep;165(9):672–9 (Eng. Abstr.) **(Ger)**

[Evaluation of the effects of ionizing radiation and cyclophosphamide on the bone marrow of mice, by counting non-nucleated and nucleated cells] Segreto RA, et al. **Rev Paul Med** 1989 Jul-Dec;107(4–6):233–8 (Eng. Abstr.) **(Por)**

[An analysis of the cell composition of the reserve population in the colony-forming unit system of bone marrow fibroblasts under the action of ionizing radiation] Kovrigina AM, et al. **Patol Fiziol Eksp Ter** 1989 Nov-Dec;(6):18–20 (Eng. Abstr.) **(Rus)**

[The significance of the cellular factor in realizing the restorative effect of the procedure of bone marrow exfusion, incubation and reimplantation in irradiated mice] Zernichenko AN, et al. **Radiobiologiia** 1990 Mar-Apr; 30(2):203–6 (Eng. Abstr.) **(Rus)**

[The cytogenetic action of x-ray irradiation on the myelokaryocytes of rats immunized with a tularemia vaccine] Nersesian AK, et al. **Tsitol Genet** 1989 Nov-Dec; 23(6):15–8 (Eng. Abstr.) **(Rus)**

[Estimation of the energy fraction emitted by alpha particles in the mineralized part of trabecular bone which is absorbed in the bone marrow] Franić Z. **Arh Hig Rada Toksikol** 1989 Mar;40(1):29–36 (Eng. Abstr.) **(Scr)**

[Bone marrow and thymus lipids in rats irradiated with continually decreasing doses of gamma rays] Ahlers I, et al. **Bratisl Lek Listy** 1990 May;91(5):357–62 (Eng. Abstr.) **(Slo)**

RADIOGRAPHY

[Intraosseous pressure measurement and bone marrow venography in idiopathic necrosis of femoral head] Li YZ, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Oct;11(5):338–43 (Eng. Abstr.) **(Chi)**

RADIONUCLIDE IMAGING

Bone marrow scintigraphy in Paget's disease of bone. Rudberg U, et al. **Acta Radiol** 1990 Mar;31(2):141–4

Bone marrow scintigraphy in the diagnosis of post-traumatic avascular necrosis of bone. Tawn DJ, et al. **Br J Radiol** 1989 Sep;62(741):790–5

Comparison of In-111 granulocytes and Tc-99m albumin colloid for bone marrow scintigraphy by the use of quantitative SPECT imaging. Axelsson B, et al. **Clin Nucl Med** 1990 Jul;15(7):473–9

Dissociation between In-111 chloride and Tc-99m colloid bone marrow scintigraphy in refractory anemia with excess blasts. Itoh H, et al. **Clin Nucl Med** 1990 Feb;15(2):124–5

Diagnosis of heterotopic bone marrow in the mediastinum using 52Fe and positron emission tomography. Borgies P, et al. **Eur J Nucl Med** 1989;15(11):761–3

Scintigraphy with nanocolloid Tc 99m in patients with small cell lung cancer, with special reference to bone marrow and hepatic metastasis. Widding A, et al. **Eur J Nucl Med** 1990;16(8–10):717–9

Effects of propylthiouracil on the biodistribution of an iodine-131-labeled anti-myeloid antibody in normal dogs: dosimetry and clinical implications. Bianco JA, et al. **J Nucl Med** 1990 Aug;31(8):1384–9

Radioimmune imaging of bone marrow in patients with suspected bone metastases from primary breast cancer. Duncker CM, et al. **J Nucl Med** 1990 Sep;31(9):1450–5

Acute effects of radiation therapy on indium-111-labeled leukocyte uptake in bone marrow. Palestro CJ, et al. **J Nucl Med** 1989 Nov;30(11):1889–91

Comparison of immunoscintigraphy and colloid scintigraphy of bone marrow [letter] Munz DL, et al. **Lancet** 1990 Jul 28;336(8709):258–9

Comparison of radiolabeled monoclonal antibody and magnetic resonance imaging in the detection of metastatic neuroblastoma in bone marrow: preliminary results. Fletcher BD, et al. **Pediatr Radiol** 1989;20(1–2):72–5

[Scintigraphic imaging of the bone marrow in hematologic diseases] Kostadinova I, et al. **Vutr Boles** 1989;28(5):49–53 (Eng. Abstr.) **(Bul)**

[Detection of bone marrow involvement in breast cancer and malignant lymphoma using immunoscintigraphy of the hematopoietic bone marrow] Reske SN, et al. **ROFO** 1990 Jan;152(1):60–6 (Eng. Abstr.) **(Ger)**

[The evaluation of the bone marrow accumulation of Ga-67 citrate] Ohnishi T, et al. **Kaku Igaku** 1989 Nov; 26(11):1371–9 (Eng. Abstr.) **(Jpn)**

[Bone marrow scintigraphy with 111In-citrin in the diagnosis of hemoblastoses] Vasil'ev LIa, et al. **Gematol Transfuziol** 1989 Nov;34(11):36–9 (Eng. Abstr.) **(Rus)**

[Radionuclide study of the bone marrow using 99mTc-coren in patients with polycythemia vera] Vasil'ev LIa, et al. **Med Radiol (Mosk)** 1990 Jun;35(6):11–4 (Eng. Abstr.) **(Rus)**

SECRETION

The collagens and glycosaminoglycans of the extracellular matrices secreted by bone marrow stromal cells cultured in vivo in diffusion chambers. Ashhurst DE, et al. **J Orthop Res** 1990 Sep;8(5):741–9

SURGERY

Anesthesia for bone marrow harvesting in the prone position in a patient with preexisting pericardial tamponade. Boucek CD. **J Clin Anesth** 1990 Mar-Apr;2(2):133–7

ULTRASTRUCTURE

Endothelial attachment and plasmalemmal apposition in the transcellular movement of intravascular leukemic cells entering the myeloid parenchyma. De Bruyn PP, et al. **Am J Anat** 1989 Oct;186(2):115–26

Chromosome evolution and high-resolution analysis of leucocytes, bone marrow, and tumor cells of retinoblastoma patients. Lemieux N, et al. **Am J Med Genet** 1990 Aug; 36(4):456–62

Ultrastructure of cytoskeletal elements of endothelial and stromal cells of rat marrow. Campbell FR. **Anat Rec** 1990 Jun;227(2):152–8

Clastogenic activity of strontium chloride on bone marrow cells in vivo. Ghosh S, et al. **Biol Trace Elem Res** 1990 Apr;25(1):51–6

Mixed-lineage leukemia revisited: acute lymphocytic leukemia with myeloperoxidase-positive blasts by electron microscopy. Kantarjian HM, et al. **Blood** 1990 Aug 15; 76(4):808–13

Common fragile sites in chromosomes of bone marrow cells and peripheral blood lymphocytes from healthy persons and leukemia patients. Furuya T, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):131–8

Cytogenetics in autologous bone marrow transplantation [letter] Maserati E, et al. **Cancer Genet Cytogenet** 1990 Mar; 45(1):137–8

Macrophage heterogeneity in bone marrow culture in vitro. Mori M, et al. **J Cell Sci** 1990 Mar;95 (Pt 3):481–5

Electron microscopic evidence for hemopoietic and stromal cells in murine long-term bone marrow cultures. Islam A, et al. **J Med** 1989;20(3–4):217–28

Extensive nuclear lobulation in the cells of a patient with acute myelomonocytic leukemia. The role of electron microscopy for establishment of a correct diagnosis. Djaldetti M, et al. **J Submicrosc Cytol Pathol** 1990 Jul; 22(3):441–3

Comment to 'Ultrastructure of Megakaryocytes in the Human Bone Marrow of Patients with Primary (Essential) Thrombocythemia' [letter; comment] Trowbridge EA, et al. **J Submicrosc Cytol Pathol** 1989 Jul;21(3):597–8

Comment on: J Submicrosc Cytol Pathol 1988 Oct;20(4):671–81.

A simple technique to facilitate the ultrastructural analysis of cells in soft agar culture systems: demonstration of the development in vitro of morphologically mature mast cells and phagocytic macrophages from the bone marrow cells of genetically mast cell-deficient W/Wv or congenic normal mice. Dvorak AM, et al. **Lab Invest** 1990 Jun; 62(6):774–81

Origin of aneuploidy in relation to disturbances of cell-cycle progression. I. Effects of vinblastine on mouse bone marrow cells. Manca A, et al. **Mutat Res** 1990 Mar; 229(1):29–36

A simple technique for preparation of bone marrow or peripheral blood buffy coat cells for electron microscopy. Mills AE, et al. **Ultrastruct Pathol** 1990 Mar-Apr; 14(2):173–6

Bone marrow monocytes in histiocytosis X acquire some phenotypic features of Langerhans cells in long term bone marrow cultures. Luksch R, et al. **Virchows Arch [A]** 1989; 416(1):43–9

[Impaired superoxide production by neutrophils in myelodysplastic syndrome: correlation with bone marrow karyotype] Uike N, et al. **Rinsho Ketsueki** 1989 Jun; 30(6):830–4 (Eng. Abstr.) **(Jpn)**

[Ag-negative phenomenon of nucleolar organizers of bone marrow and blood cells in children with acute lymphoblastic leukemia] Ikonnikova OA, et al. **Eksp Onkol** 1990;12(4):40–3 (Eng. Abstr.) **(Rus)**

[Ultrastructural features of erythropoiesis disorder in Rauscher virus leukemia] Naumenko OI. **Eksp Onkol** 1990; 12(1):25–31 (Eng. Abstr.) **(Rus)**

[State of nucleolus-forming regions in bone marrow and blood cells in acute leukemia in children] Ikonnikova OA, et al. **Gematol Transfuziol** 1989 Sep;34(9):28–33 (Eng. Abstr.) **(Rus)**

[Ultrastructural characteristics of the bone marrow in albino rats exposed to nitrogen oxide mixtures] Kovalishin VI, et al. **Gig Sanit** 1989 Jul;(7):79–81 **(Rus)**

BONE MARROW DISEASES

[Disseminated sclerosing bone marrow carcinosis with peripheral expansion in undifferentiated gastric carcinoma] Borgis KJ, et al. **ROFO** 1990 Jul;153(1):99–100 **(Ger)**

BLOOD

Serum transferrin receptor measurements in hematologic malignancies. Klemow D, et al. **Am J Hematol** 1990 Jul; 34(3):193–8

CHEMICALLY INDUCED

Effect of exposure route, regimen, and duration on benzene-induced genotoxic and cytotoxic bone marrow damage in mice. Tice RR, et al. **Environ Health Perspect** 1989 Jul;82:65–74

Serum albumin: its relationship to marrow and renal toxicity from platinum-based combination chemotherapy. Belinson JL, et al. **Gynecol Oncol** 1990 Apr;37(1):93–5

Chlorpromazine-induced liver and bone marrow granulomas associated with agranulocytosis. Ben-Yehuda A, et al. **Isr J Med Sci** 1990 Aug;26(8):449–51

Reversible bone marrow granulomata and fever induced by phenytoin administration. Eisenstein SJ, et al. **J Fam Pract** 1989 Nov;29(5):564–5

Azathioprine and allopurinol: a potentially dangerous combination. Venkat Raman G, et al. **J Intern Med** 1990 Jul;228(1):69–71

Sulfasalazine hypersensitivity with hepatotoxicity, thrombocytopenia, and erythroid hypoplasia. Gremse DA, et al. **J Pediatr Gastroenterol Nutr** 1989 Aug;9(2):261–3
Gold induced marrow suppression: a review of 10 cases. Yan A, et al. **J Rheumatol** 1990 Jan;17(1):47–51
6-mercaptopurine plasma levels in children with acute lymphoblastic leukemia: relation to relapse risk and myelotoxicity. Hayder S, et al. **Ther Drug Monit** 1989 Nov; 11(6):617–22

CLASSIFICATION

[Syndrome of abnormal chromatin clumping in leukocytes (letter)] Recio M, et al. **Sangre (Barc)** 1990 Feb;35(1):86–7 **(Spa)**

COMPLICATIONS

Hodgkin's disease with bone marrow involvement. Gupta R, et al. **Indian J Cancer** 1989 Jun;26(2):58–66
Bone marrow necrosis in malignant diseases. A report on seven intravitally recognized cases. Ščudla V, et al. **Neoplasma** 1989;36(5):603–10
Extrapulmonary Pneumocystis carinii infection in AIDS: CT findings. Lubat E, et al. **Radiology** 1990 Jan;174(1):157–60
[Bone marrow necrosis with a septic picture preliminary to subtype L3 acute lymphoblastic leukemia (letter)] Martín Noya A, et al. **Sangre (Barc)** 1989 Dec;34(6):518–20 **(Spa)**

DIAGNOSIS

Detection of bone marrow minimal disease in non-Hodgkin's lymphoma patients by gene rearrangement analysis. Bregni M, et al. **Haematologica (Pavia)** 1989 Jul–Aug;74(4):397–400
Magnetic resonance imaging and magnetic resonance spectroscopy of bone tumors and bone marrow disease. Lenkinski RE, et al. **Invest Radiol** 1989 Dec;24(12):1006–10
Musculoskeletal magnetic resonance imaging. Murphy WA, et al. **Magn Reson Annu** 1986;:1–35 (28 ref.)
Magnetic resonance imaging of bone marrow: diagnostic value in diffuse hematologic disorders. Steiner RM, et al. **Magn Reson Q** 1990 Jan;6(1):17–34 (55 ref.)
Bone marrow. Unger EC, et al. **Top Magn Reson Imaging** 1989 Sep;1(4):31–52 (90 ref.)

DRUG THERAPY

Effects of recombinant human interleukin-3 in patients with normal hematopoiesis and in patients with bone marrow failure. Ganser A, et al. **Blood** 1990 Aug 15;76(4):666–76
ChlVPP combination chemotherapy for Hodgkin's disease: long-term results. Selby P, et al. **Br J Cancer** 1990 Aug; 62(2):279–85
Application of target-specific drug immunoconjugates to experimental bone marrow replacement therapy in mice. Ding L, et al. **Cancer Res** 1990 Mar 1;50(5):1538–43
Oral cyclosporin-A is effective treatment for untreated and also for previously immunosuppressed patients with severe bone marrow failure. Hinterberger-Fischer M, et al. **Eur J Haematol** 1989 Aug;43(2):136–42
Granulocyte colony-stimulating factor: preclinical and clinical studies. Gabrilove JL, et al. **Hematol Oncol Clin North Am** 1989 Sep;3(3):427–40 (65 ref.)
Clinical role of granulocyte-macrophage colony-stimulating factor. Mitsuyasu RT, et al. **Hematol Oncol Clin North Am** 1989 Sep;3(3):411–25 (46 ref.)

ETIOLOGY

Hemophagocytic syndrome causing complete bone marrow failure. Report of an extreme case of a reactive histiocytic disorder. de la Serna FJ, et al. **Acta Haematol (Basel)** 1989; 82(4):197–200
Histiocytic hemophagocytosis in the bone marrow in children with sepsis and disseminated intravascular coagulation. Hara T, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Jun; 31(3):335–9
Mouse hepatitis virus 3 pathogenicity expressed by a lytic viral infection in bone marrow 14.8+ mu+ B lymphocyte subpopulations. Jolicoeur P, et al. **J Immunol** 1989 Dec 1;143(11):3722–30
Leukopenia secondary to mycobacterium leprae. Brooks BJ Jr, et al. **J La State Med Soc** 1990 Feb;142(2):35–6
Flaviviruses and bone marrow failure [clinical conference] Young NS. **JAMA** 1990 Jun 13;263(22):3065–8
Erythroid hypoplasia due to chronic infection with parvovirus B19 [letter] Belloy M, et al. **N Engl J Med** 1990 Mar 1;322(9):633–4
Impaired bone marrow in AIDS. Mehta KU, et al. **N J Med** 1989 Aug;86(8):623–7 (20 ref.)
B19 chronic bone marrow failure: a persistent parvovirus infection of humans. Morinet F, et al. **Nouv Rev Fr Hematol** 1990;32(1):91–4 (23 ref.)
Bone marrow involvement in Kaposi's disease. Report of a case. Pich A, et al. **Panminerva Med** 1989 Jul–Sep; 31(3):144–7
Hematopoietic emergencies. Gerson SL, et al. **Semin Oncol** 1989 Dec;16(6):532–42 (83 ref.)
[Long-term side effects of successful anti-tumor therapy. 2: Effects on fertility and bone marrow function; risk of secondary neoplasms] Clemm C. **Fortschr Med** 1989 Oct 20;107(30):636–40 (32 ref.) (Eng. Abstr.) **(Ger)**
[Microangiopathic hemolytic anemia and leukoerythroblastosis as the presenting form of a gastric adenocarcinoma] Pasquau Liaño F, et al. **Rev Esp Enferm Apar Dig** 1989 Oct;76(4):397–400 (20 ref.) (Eng. Abstr.) **(Spa)**

GENETICS

Deletion of 7p: lymphoid and non-lymphoid disorders cluster in different break points [letter] Pedersen B. **Br J Haematol** 1989 Oct;73(2):281–2
Asthma: an inherited dysfunction of bone marrow cells? [editorial] Higenbottam T, et al. **Eur Respir J** 1989 Nov; 2(10):921–2

MICROBIOLOGY

Pneumocystis carinii infection of bone marrow in patients with malignant lymphoma and acquired immunodeficiency syndrome. Original report of three cases. Rossi JF, et al. **Arch Intern Med** 1990 Feb;150(2):450–2

MORTALITY

Prediction of clinical outcome of radiation accident victims. Fliedner TM, et al. **Prog Clin Biol Res** 1990;352:459–70 (10 ref.)

PATHOLOGY

Marrow involvement in cutaneous T-cell lymphoma. A clinicopathologic study of 60 cases [see comments] Salhany KE, et al. **Am J Clin Pathol** 1989 Dec;92(6):747–54 Comment in: Am J Clin Pathol 1990 Jul;94(1):119–20.
Bone lining (endosteal) cells and hematopoiesis: a light microscopic study of normal and pathologic human bone marrow in plastic-embedded sections. Islam A, et al. **Anat Rec** 1990 Jul;227(3):300–6
Metastatic retinoblastoma. Case report. Char D, et al. **Arch Ophthalmol** 1989 Nov;107(11):1570–1
Epidermal growth factor responsiveness of a new human neuroblastoma cell line. Suardet L, et al. **Int J Cancer** 1989 Oct 15;44(4):661–8
[A case of early gastric carcinoma with disseminated carcinomatosis of bone marrow] Yasutake K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jun;86(6):1304–9 (25 ref.) **(Jpn)**
[Acute myelomonocytic leukemia (M4) with CD19 antigen expression, eosinophilia and basophilia in bone marrow] Inaba T, et al. **Rinsho Ketsueki** 1989 May;30(5):726–30 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Prevention of benzene-induced myelotoxicity by nonsteroidal anti-inflammatory drugs. Kalf GF, et al. **Environ Health Perspect** 1989 Jul;82:57–64

RADIOGRAPHY

Sclerotic lesions of bone in myeloma. Langley GR, et al. **Can Med Assoc J** 1966 Apr 30;94(18):940–6

RADIONUCLIDE IMAGING

"Sub"-super scan--manifestation of bone marrow metastases? Podoloff DA, et al. **Clin Nucl Med** 1989 Aug; 14(8):597–602

SURGERY

Bone marrow transplantation in primary disorders of the haematopoietic stem cell. Parkman R, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:137–8 (10 ref.)
Peripheral blood-derived stem cell collections for use in autologous transplantation after high dose chemotherapy: an alternative approach. Williams SF, et al. **Bone Marrow Transplant** 1990 Feb;5(2):129–33

THERAPY

GM-CSF and G-CSF in hematology and oncology. Offner FC, et al. **Acta Clin Belg** 1989;44(5):318–25 (36 ref.)
Target cells for GM-CSF and kinetics of response. Aglietta M, et al. **Prog Clin Biol Res** 1990;352:519–30 (46 ref.)
Radioprotection and therapy of radiation injury with cytokines. Neta R. **Prog Clin Biol Res** 1990;352:471–8

VETERINARY

Investigations of bone marrow dyscrasia in a poodle with macrocytosis. Canfield PJ, et al. **J Comp Pathol** 1989 Oct; 101(3):269–78

BONE MARROW EXAMINATION

Role of bone marrow examination in the child with prolonged fever. Hayani A, et al. **J Pediatr** 1990 Jun; 116(6):919–20
[Bone marrow biopsy in myeloproliferative syndromes: prognostic value of cellular quantification] Esquivias López-Cuervo JJ, et al. **Sangre (Barc)** 1990 Apr; 35(2):98–101 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

The significance of 'dry tap' bone marrow aspirations in Zimbabweans. Mukiibi JM, et al. **East Afr Med J** 1989 Jul;66(7):481–4

METHODS

Bone marrow sampling. Paulman PM. **Am Fam Physician** 1989 Dec;40(6):85–9
DIC after bone marrow harvesting in a patient with Hodgkin's disease in remission [letter] McCarthy DM, et al. **Bone Marrow Transplant** 1990 Jun;5(6):443
Flow cytometric analysis of the megakaryocyte DNA distribution in whole and partially purified human and rabbit bone marrow. Lawry J, et al. **Clin Lab Haematol** 1989;11(4):361–8
Cytologic evaluation of Papanicolaou-stained bone marrow aspirates. Berman JJ, et al. **Diagn Cytopathol** 1989; 5(4):383–7
Histology and immunohistology of bone marrow biopsy in multiple myeloma. Pileri S, et al. **Eur J Haematol Suppl** 1989;51:52–9
Impact of marrow fat on accuracy of quantitative CT. Glüer CC, et al. **J Comput Assist Tomogr** 1989 Nov–Dec; 13(6):1023–35
MRI of the knee region in leukemic children. Part I. Initial pattern in patients with untreated disease. Bohndorf K, et al. **Pediatr Radiol** 1990;20(3):179–83

UTILIZATION

Misuse of marrow examination in the diagnosis of Gaucher disease. Beutler E, et al. **Blood** 1990 Aug 1;76(3):646–8

BONE MARROW FIBROSIS see **MYELOFIBROSIS**

BONE MARROW TRANSPLANTATION

Hypertension in bone marrow transplanted patients. De Plaen JF, et al. **Acta Clin Belg** 1989;44(5):295–302
Autologous bone marrow transplantation in hematology. Ferrant A. **Acta Clin Belg** 1987;42(4):233–7
Immunomagnetic purging of bone marrow grafts for autologous transplantation in neuroblastoma. Van Riet I, et al. **Acta Clin Belg** 1990;45(2):97–106
Clonal evolution in Ph-negative, bcr-positive chronic myeloid leukaemia before and after bone marrow transplantation. Secker-Walker LM, et al. **Acta Haematol (Basel)** 1989;82(4):205–9
Clinical and biochemical outcome of marrow transplantation for Gaucher disease of the Norrbottnian type. Erikson A, et al. **Acta Paediatr Scand** 1990 Jun–Jul;79(6–7):680–5
Bone marrow transplantation for severe aplastic anemia in children: conditioning with cyclophosphamide and total lymphoid irradiation. Lin KH, et al. **Acta Paediatr Sin** 1989 Jan–Feb;30(1):1–6
Immunological and metabolic reconstitution following successful bone marrow transplantation from a HLA-identical sibling in an infant with adenosine deaminase deficiency and severe combined immunodeficiency: partial restoration of purine metabolism. Hyodo Y, et al. **Adv Exp Med Biol** 1989;253A:543–7
Plasma vitamin E and beta-carotene concentrations during radiochemotherapy preceding bone marrow transplantation. Clemens MR, et al. **Am J Clin Nutr** 1990 Feb;51(2):216–9
Pharmacokinetics of very high-dose oral melphalan in cancer patients. Boros L, et al. **Am J Clin Oncol** 1990 Feb; 13(1):19–22
Long-term complete remission of stage IV breast cancer after high-dose chemotherapy and autologous bone marrow transplantation. Dunphy FR 2d, et al. **Am J Clin Oncol** 1990 Aug;13(4):364–6
Phase I trial of high-dose etoposide, high-dose cisplatin, and reinfusion of autologous bone marrow for lung cancer. Lazarus HM, et al. **Am J Clin Oncol** 1990 Apr;13(2):107–12
Steroid-responsive chronic hepatic graft-versus-host disease without extrahepatic graft-versus-host disease. Gholson CF, et al. **Am J Gastroenterol** 1989 Oct;84(10):1306–9
Transient engraftment of syngeneic bone marrow after conditioning with high-dose cyclophosphamide and thoracoabdominal irradiation in a patient with aplastic anemia. Matsue K, et al. **Am J Hematol** 1990 Jan; 33(1):56–60
Disseminated echovirus infection complicating bone marrow transplantation. Biggs DD, et al. **Am J Med** 1990 Apr; 88(4):421–5 (39 ref.)
Autologous bone marrow transplantation in non-Hodgkin's lymphoma [letter; comment] Schattner A, et al. **Am J Med** 1990 Jan;88(1):87 Comment on: Am J Med 1988 Dec;85(6):829–34.
Ecthyma gangrenosum in the absence of Pseudomonas bacteremia in a bone marrow transplant recipient. Wolf JE, et al. **Am J Med** 1989 Nov;87(5):595–7
Bone marrow transplant. Today and tomorrow. Wikle T, et al. **Am J Nurs** 1990 May;90(5):48–56
Normal intraocular pressure after a bone marrow transplant in glaucoma associated with mucopolysaccharidosis type I-H. Christiansen SP, et al. **Am J Ophthalmol** 1990 Feb 15;109(2):230–1
Acute and chronic graft-versus-host disease in dogs given hemopoietic grafts from DLA-nonidentical littermates. Two distinct syndromes. Atkinson K, et al. **Am J Pathol** 1982 Aug;108(2):196–205
Allogeneic bone marrow transplantation for thalassemia in Taiwan: factors associated with graft failure. Lin KH, et al. **Am J Pediatr Hematol Oncol** 1989 Winter;11(4):417–23

Epstein-Barr-virus-related post-bone-marrow-transplant lymphoproliferative disease: association with cytomegalovirus infection and Down syndrome donor marrow. Patton DF, et al. **Am J Pediatr Hematol Oncol** 1989 Winter;11(4):429-32

Graft-versus-host disease of the gastrointestinal tract. Snover DC. **Am J Surg Pathol** 1990;14 Suppl 1:101-8 (22 ref.)

Bone marrow transplantation for treatment of chronic myelogenous leukaemia (CML)--preliminary experience in Singapore. Ong YW, et al. **Ann Acad Med Singapore** 1990 Mar;19(2):169-74

Allogeneic bone marrow transplantation for acute non-lymphoblastic leukaemia--the Singapore experience. Tan P, et al. **Ann Acad Med Singapore** 1990 Mar;19(2):161-8

Bone marrow transplantation for patients with myelodysplasia. Pretreatment variables and outcome. Appelbaum FR, et al. **Ann Intern Med** 1990 Apr 15; 112(8):590-7

Bone marrow transplantation: what is the question? [editorial] Chao NJ, et al. **Ann Intern Med** 1990 Sep 1;113(5):340-1

Allogeneic bone marrow transplantation, zidovudine, and human immunodeficiency virus type 1 (HIV-1) infection. Studies in a patient with non-Hodgkin lymphoma. Holland HK, et al. **Ann Intern Med** 1989 Dec 15;111(12):973-81

Syngeneic bone marrow transplantation and adoptive transfer of peripheral blood lymphocytes combined with zidovudine in human immunodeficiency virus (HIV) infection. Lane HC, et al. **Ann Intern Med** 1990 Oct 1; 113(7):512-9

Busulfan and veno-occlusive disease of the liver [letter] Vassal G, et al. **Ann Intern Med** 1990 Jun 1;112(11):881

Bone marrow transplantation. The state of the art. Thomas ED. **Ann Ital Med Int** 1986 Jun;1(2):109-14 (9 ref.)

Bone marrow transplantation for familial hemophagocytic lymphohistiocytosis. Ahmed T, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1567-8

Clinical importance of erythrocyte polyamine level determination during bone marrow transplantation in children. Bergeron C, et al. **Anticancer Res** 1989 Nov-Dec; 9(6):1757-60

Effects on oral and intestinal microfloras of norfloxacin and pefloxacin for selective decontamination in bone marrow transplant patients. Giuliano M, et al. **Antimicrob Agents Chemother** 1989 Oct;33(10):1709-13

Investigation of potential interaction of ciprofloxacin with cyclosporine in bone marrow transplant recipients. Krüger HU, et al. **Antimicrob Agents Chemother** 1990 Jun; 34(6):1048-52

Assessment of the viability of haemopoietic cells in the livers of mouse fetuses stored at 4 degrees C. Comparison of various methods of testing their usefulness for haemopoietic transplantation. Ratajczak MZ, et al. **Arch Immunol Ther Exp (Warsz)** 1989;37(3-4):269-76

High dose chemotherapy including vepeside, cyclophosphamide and carboplatin with autologous bone marrow transplantation in one case of chemoresistant testicular cancer. Colombat P, et al. **Biomed Pharmacother** 1989;43(6):455-6

Thalidomide for the therapy of graft-versus-host disease following allogeneic bone marrow transplantation. McCarthy DM, et al. **Biomed Pharmacother** 1989; 43(9):693-7 (23 ref.)

Autologous bone marrow transplantation for acute myeloid leukemia using monoclonal antibody-purged bone marrow. Ball ED, et al. **Blood** 1990 Mar 1;75(5):1199-206

Antibody-mediated marrow failure after allogeneic bone marrow transplantation. Barge AJ, et al. **Blood** 1989 Oct; 74(5):1477-80

Acute toxicity and first clinical results of intensive postinduction therapy using a modified busulfan and cyclophosphamide regimen with autologous bone marrow rescue in first remission of acute myeloid leukemia [see comments] Beelen DW, et al. **Blood** 1989 Oct;74(5):1507-16 Comment in: Blood 1990 Jun 1;75(11):2265.

High-dose etoposide and cyclophosphamide without bone marrow transplantation for resistant hematologic malignancy. Brown RA, et al. **Blood** 1990 Aug 1; 76(3):473-9

Use of an anti-pan T-lymphocyte ricin a chain immunotoxin in steroid-resistant acute graft-versus-host disease. Byers VS, et al. **Blood** 1990 Apr 1;75(7):1426-32

Autoimmune-like thrombocytopenia after bone marrow transplantation [letter; comment] Cahn JY, et al. **Blood** 1989 Dec;74(8):2771 Comment on: Blood 1989 Mar;73(4):1054-8.

Bone marrow transplantation for children with severe aplastic anemia: use of donors other than HLA-identical siblings. Camitta B, et al. **Blood** 1989 Oct;74(5):1852-7

Selective depletion of CD8+ T lymphocytes for prevention of graft-versus-host disease after allogeneic bone marrow transplantation. Champlin R, et al. **Blood** 1990 Jul 15; 76(2):418-23

Indications for marrow transplantation in chronic myelogenous leukemia [letter; comment] Copelan EA. **Blood** 1989 Dec;74(8):2771-2 Comment on: Blood 1989 Mar;73(4):861-4.

Clinical toxicity of cryopreserved bone marrow graft infusion. Davis JM, et al. **Blood** 1990 Feb 1;75(3):781-6

BVAC ablative chemotherapy followed by autologous bone marrow transplantation for patients with advanced lymphoma. Gingrich RD, et al. **Blood** 1990 Jun 15; 75(12):2276-81

Pure red cell aplasia of long duration complicating major ABO-incompatible bone marrow transplantation. Gmür JP, et al. **Blood** 1990 Jan 1;75(1):290-5

Effects of recombinant interleukin-2 administration on cytotoxic function following high-dose chemo-radiotherapy for hematological malignancy. Gottlieb DJ, et al. **Blood** 1989 Nov 15;74(7):2335-42

Anti-leukemia potential of interleukin-2 activated natural killer cells after bone marrow transplantation for chronic myelogenous leukemia. Hauch M, et al. **Blood** 1990 Jun 1;75(11):2250-62

Expression of human adenosine deaminase in mice after transplantation of genetically-modified bone marrow. Kaleko M, et al. **Blood** 1990 Apr 15;75(8):1733-41

Disease-free survival after autologous bone marrow transplantation in patients with acute myelogenous leukemia. Körbling M, et al. **Blood** 1989 Nov 1; 74(6):1898-904

Therapy for chronic myelogenous leukemia with unrelated donor bone marrow transplantation: results in 102 cases [published erratum appears in Blood 1990 Aug 1;76(3):654] McGlave PB, et al. **Blood** 1990 Apr 15;75(8):1728-32

High-dose chemotherapy and autologous bone marrow transplantation in acute myeloid leukemia. McMillan AK, et al. **Blood** 1990 Aug 1;76(3):480-8

BAVC regimen and autologous bone marrow transplantation in patients with acute myelogenous leukemia in second remission. Meloni G, et al. **Blood** 1990 Jun 15;75(12):2282-5

Different repopulation profile between erythroid and nonerythroid progenitor cells in genetically anemic W/Wv mice after bone marrow transplantation. Nakano T, et al. **Blood** 1989 Oct;74(5):1552-6

Indications for marrow transplantation in acute lymphoblastic leukemia. Ramsay NK, et al. **Blood** 1990 Feb 15;75(4):815-8 (27 ref.)

Autologous bone marrow transplantation in follicular non-Hodgkin's lymphoma before and after histologic transformation. Schouten HC, et al. **Blood** 1989 Nov 15; 74(7):2579-84

Bone marrow donor registries: the relation between registry size and probability of finding complete and partial matches [see comments] Sonnenberg FA, et al. **Blood** 1989 Nov 15;74(7):2569-78 Comment in: Blood 1990 May 15;75(10):2093-4.

Lymphokine production by T-cell clones after human bone marrow transplantation. Velardi A, et al. **Blood** 1989 Oct; 74(5):1665-72

Comparison of high-dose therapy and autologous bone marrow transplantation for T-cell and B-cell non-Hodgkin's lymphomas. Vose JM, et al. **Blood** 1990 Jul 15;76(2):424-31

Bone marrow transplantation for genetic disorders. Barrett J, et al. **Blood Rev** 1990 Jun;4(2):116-31 (29 ref.)

Bone marrow purging with mafosfamide--a critical survey. Sindermann H, et al. **Blut** 1989 Nov;59(5):432-41 (132 ref.)

Psoriasis and bone marrow transplantation [letter] Jowitt SN, et al. **BMJ** 1990 May 26;300(6736):1398-9

Modification of strain-specific femoral bone density by bone marrow chimerism in mice: a study on the spontaneously osteoporotic mouse (SAM-P/6). Tsuboyama T, et al. **Bone** 1989;10(4):269-77

Proceedings of the international symposium. Bone marrow transplantation in children and adults. Biology, strategies, perspectives. September 27-29, 1989, Pavia, Italy. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:1-170

Abstracts of the sixteenth annual meeting of the European Cooperative Group for Bone Marrow Transplantation. 6-9 May, 1990, The Hague, The Netherlands. **Bone Marrow Transplant** 1990 May;5 Suppl 2:1-168

Cytogenetic follow-up after allogeneic bone-marrow transplantation for Ph1-positive chronic myelogenous leukemia. Alimena G, et al. **Bone Marrow Transplant** 1990 Feb;5(2):119-27

Marrow transplantation for patients with severe myelodysplasia. Appelbaum FR, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:40

Italian survey on allogeneic BMT for chronic myeloid leukaemia. Arcese W, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:90-1

Allogeneic bone marrow transplantation for myelodysplastic syndromes (MDS). Arnold R, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:101-3 (11 ref.)

T-cell depletion in allogeneic bone marrow transplantation for acute leukaemias. Aversa F, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:69-72 (18 ref.)

Bone marrow transplantation for leukaemia: the role of total body irradiation, graft vs host disease, and haemopoietic chimerism. Bacigalupo A, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:85

Bone marrow transplantation for severe aplastic anaemia (SAA): the Genova experience. Bacigalupo A, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:121-2

Allogeneic versus autologous bone marrow transplantation versus intensive post-remission chemotherapy in acute leukaemias. Bernasconi C, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:65-8 (26 ref.)

Cytogenetic analysis may improve BMT strategies in acute leukaemias. Bernasconi P, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:73-6 (12 ref.)

Mixed chimerism after allogeneic bone marrow transplantation for leukemias. Bertheas MF, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:61-3

Restriction fragment length polymorphism analysis of hematopoietic cells following successful treatment of relapsed acute lymphoblastic leukemia following bone marrow transplantation. Biondi A, et al. **Bone Marrow Transplant** 1989 Nov;4(6):705-9

Allogeneic or autologous bone marrow transplantation for acute lymphoblastic leukemia in first complete remission. Blaise D, et al. **Bone Marrow Transplant** 1990 Jan;5(1):7-12

Allogeneic bone marrow transplantation for ALL in Zagreb. Bogdanić V, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:88-9

Bone marrow transplantation for advanced acute leukemia: a pilot study of high-energy total body irradiation, cyclophosphamide and continuous infusion etoposide. Bostrom B, et al. **Bone Marrow Transplant** 1990 Feb; 5(2):83-9

Evaluation of cytoreductive therapy prior to high dose treatment with autologous bone marrow transplantation in relapsed and refractory Hodgkin's disease. Brandwein JM, et al. **Bone Marrow Transplant** 1990 Feb;5(2):99-103

Severe giardiasis in two patients undergoing bone marrow transplantation. Bromiker R, et al. **Bone Marrow Transplant** 1989 Nov;4(6):701-3

Clinical studies of allogeneic marrow transplantation in patients with acute non-lymphoblastic leukaemia. Seattle Marrow Transplant Team. Buckner CD, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:82 (9 ref.)

Bone marrow transplantation in children: between therapeutic and medico-legal problems. Burgio GR, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:34-7

Autograft to eliminate minimal residual disease in AML in first remission--update on the Glasgow experience. Burnett AK, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:59-60

Autologous BMT for ALL. Burnett AK. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:79-80 (8 ref.)

Autologous BMT for AML without purging. Burnett AK. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:76-8 (17 ref.)

Allogeneic and autologous bone marrow transplantation for patients with acute non-lymphoblastic leukemia in first complete remission. The Genoa experience on 119 patients. Carella AM, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:55

Italian experience with autologous bone marrow transplantation in 104 advanced Hodgkin's lymphoma patients. Carella AM, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:113-6

Successful autologous bone marrow transplantation in second remission of malignant histiocytosis. Cazin B, et al. **Bone Marrow Transplant** 1990 Jun;5(6):431-3

Age dependent in vitro stromal growth [letter] Clarke E, et al. **Bone Marrow Transplant** 1989 Sep;4(5):596-7

BMT in children: AIEOP experience. AIEOP BMT Group. Colleselli P, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:58

Allogeneic marrow transplantation in non-Hodgkin's lymphoma. Copelan EA, et al. **Bone Marrow Transplant** 1990 Jan;5(1):47-50

Autologous bone marrow transplantation (ABMT) in poor prognosis diffuse non-Hodgkin's lymphomas (NHL). Report of Non-Hodgkin's Lymphoma Cooperative Study Group (NHLCSG). Coser P, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:164

Autologous bone marrow transplantation in first remission AML--its relative value. de Gast GC, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:52-4 (10 ref.)

Allogeneic bone marrow transplantation for secondary leukaemia and myelodysplastic syndromes. Leukaemia Working Party of the European Bone Marrow Transplantation Group (EBMTG). De Witte T, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:38-9

Reconstitution of normal neutrophil function in chronic granulomatous disease by bone marrow transplantation. Di Bartolomeo P, et al. **Bone Marrow Transplant** 1989 Nov; 4(6):695-700

Double intensification including autologous bone marrow transplantation (ABMT) in AML: long term follow-up and detection of residual disease. Dicke KA, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:27-34

Bone marrow transplantation for neuroblastoma: a review of 509 cases. EBMT Group. Dini G, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:42-6 (11 ref.)

Immunotherapy in conjunction with autologous bone marrow transplantation. Eckerstein A, et al. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:38

Effect of in vivo therapy with a CD8 monoclonal antibody on delayed engraftment after autologous bone marrow transplantation. Favrot M, et al. **Bone Marrow Transplant** 1990 Jan;5(1):33-8

Systemic interleukin-2 therapy in children with progressive neuroblastoma after high dose chemotherapy and bone marrow transplantation. Favrot MC, et al. **Bone Marrow Transplant** 1989 Sep;4(5):499-503

Bone marrow transplantation in immunodeficiency and osteopetrosis. Fischer A. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:12-4 (22 ref.)

Allogeneic bone marrow transplantation in haematological malignancies. Leukemia Working Party of the European Group for Bone Marrow Transplantation (EBMT). Gahrton G, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:4-6

IBMTR analysis of bone marrow transplants in acute leukaemia. Advisory Committee of the International Bone

Marrow Transplant Registry (IBMTR). Gale RP, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:83–4 (4 ref.)

Bone marrow transplantation monitoring by DNA analysis. Gasparini P, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:157–9

Transient cyclic neutropenia following GM–CSF in a patient with chronic granulocytic leukemia transplanted with HLA–identical T cell–depleted donor bone marrow. Gluckman E, et al. **Bone Marrow Transplant** 1989 Sep; 4(5):591–2

Bone marrow transplantation for chronic myeloid leukaemia using matched unrelated donors. Goldman JM, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:38–9

Choice of bone marrow transplantation as treatment for severe aplastic anaemia. Gordon–Smith EC. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:118–20 (17 ref.)

The type of chimerism after allogeneic bone marrow transplantation as detected by isoenzymatic polymorphism. Grahovac B, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:93–4

Results of autologous bone marrow transplantation for acute leukaemia. Gulati SC, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:61–4

Cure after allogeneic bone marrow transplantation: chemo–radiotherapy and/or graft–versus–leukemia? Hagenbeek A, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:91–3

Use of M13 phage–derived probe for genotypic analysis of engraftment following bone marrow transplantation [letter] Han CW, et al. **Bone Marrow Transplant** 1990 May; 5(5):363–4

Unrelated donor bone marrow transplantation for severe aplastic anaemia and Fanconi's anaemia. Hows JM. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:126–8 (18 ref.)

Bone marrow transplantation for Fanconi's anaemia: the Hammersmith experience 1977–89. Hows JM, et al. **Bone Marrow Transplant** 1989 Nov;4(6):629–34

Biological importance of residual leukaemic cells after BMT for CML: does the polymerase chain reaction help? Hughes TP, et al. **Bone Marrow Transplant** 1990 Jan;5(1):3–6 (19 ref.)

In vitro evaluation of combination drug purging for autologous bone marrow transplantation. Jones RJ, et al. **Bone Marrow Transplant** 1990 May;5(5):301–7

Bone marrow transplantation in comparison with conventional therapy in children with adult type chronic myelogenous leukemia. Klingebiel T, et al. **Bone Marrow Transplant** 1990 May;5(5):317–20

Immunomagnetic removal of B–lymphoma cells using a novel mono–sized magnetizable polymer bead, M–280, in conjunction with primary IgM and IgG antibodies. Kvalheim G, et al. **Bone Marrow Transplant** 1989 Sep; 4(5):567–74

Allogeneic BMT for AML in Zagreb. Labar B, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:86–7

Immunological reconstitution after HLA–haploidentical bone marrow transplantation for SCID in an infant with ADA deficiency. Lanfranchi A, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:168–70

Gene therapy using bone marrow transplantation: a 1990 update. Lehn PM. **Bone Marrow Transplant** 1990 May; 5(5):287–93 (71 ref.)

A randomized trial of oral versus intravenous acyclovir for treatment of herpes zoster in bone marrow transplant recipients. Nordic Bone Marrow Transplant Group. Ljungman P, et al. **Bone Marrow Transplant** 1989 Nov; 4(6):613–5

Allogeneic bone marrow transplantation (BMT) for acquired severe aplastic anaemia (SAA) in children. Locasciulli A, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:123–5

VAMP followed by high dose melphalan and autologous bone marrow transplantation for multiple myeloma. McElwain TJ, et al. **Bone Marrow Transplant** 1989 Dec; 4 Suppl 4:109–12

A comparison of the outcome of ABMT in first remission acute myeloid and lymphoblastic leukemia in a single centre. McMillan AK, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:72

Recurrent graft failure following syngeneic bone marrow transplantation for aplastic anaemia. Marsh JC, et al. **Bone Marrow Transplant** 1989 Sep;4(5):581–5

Intensive chemotherapy versus allogeneic bone marrow transplantation in first–remission acute myeloid leukemia. Mayer RJ. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:48–51 (38 ref.)

Autologous bone marrow or peripheral blood stem cell transplantation for patients with chronic myelogenous leukaemia in chronic phase. Meloni G, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:92–4

Norfloxacin prophylaxis for neutropenic patients undergoing bone marrow transplantation. Menichetti F, et al. **Bone Marrow Transplant** 1989 Sep;4(5):489–92

Successful pregnancy following bone marrow transplantation for leukaemia. Milliken S, et al. **Bone Marrow Transplant** 1990 Feb;5(2):135–7

Disseminated Fusarium infections in patients following bone marrow transplantation. Minor RL Jr, et al. **Bone Marrow Transplant** 1989 Nov;4(6):653–8

Overview of immunodeficiency diseases where bone marrow transplantation is feasible. Nelson DL, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:132 (4 ref.)

Treatment of acute leukaemia with intensive radiochemotherapy and autologous bone marrow transplantation—Zagreb experience. Nemet D, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:90–1

Supportive therapy after bone marrow transplantation. AIEOP BMT Group. Nespoli L, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:85–8

Actual role and perspectives of BMT in children. Niethammer D, et al. **Bone Marrow Transplant** 1989 Dec; 4 Suppl 4:7–11 (26 ref.)

Intensification of induction prior to intensification of consolidation and bone marrow rescue in disseminated neuroblastoma. Paolucci P, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:151–2

Bone marrow transplantation in primary disorders of the haematopoietic stem cell. Parkman R, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:137–8 (10 ref.)

Serum neopterin in patients receiving bone marrow transplant. Pavletić Z, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:97–8

High–dose cytosine arabinoside, total body irradiation and marrow transplantation for advanced malignant lymphoma. Petersen FB, et al. **Bone Marrow Transplant** 1989 Sep; 4(5):483–8

Foscarnet prophylaxis in marrow transplant recipients [letter] Ringden O, et al. **Bone Marrow Transplant** 1989 Nov; 4(6):713

Autologous marrow transplantation in acute lymphoblastic leukemia: control of residual disease with mafosfamide and induction of syngeneic GVHD with cyclosporin. The Italian Mafosfamide Study Group. Rizzoli V, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:76–8

Cytogenetic monitoring in CML patients treated with BMT. Rosti G, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:95–7

Correlation of hematologic recovery with CFU–GM content of autologous bone marrow grafts treated with 4–hydroperoxycyclophosphamide. Culture after cryopreservation. Rowley SD, et al. **Bone Marrow Transplant** 1989 Sep;4(5):553–8

Adult respiratory syndrome following autologous bone marrow transfusion. Roy V, et al. **Bone Marrow Transplant** 1989 Nov;4(6):711–2

Full–term pregnancy after allogeneic transplantation for leukemia in a patient with oligomenorrhea. Russell JA, et al. **Bone Marrow Transplant** 1989 Sep;4(5):579–80

A Nordic registry for volunteer marrow donors? Ruutu T, et al. **Bone Marrow Transplant** 1990 Apr;5(4):273–7 (23 ref.)

The use of recombinant cytokines for enhancing immunohematopoietic reconstitution following bone marrow transplantation. I. Effects of in vitro culturing with IL–3 and GM–CSF on human and mouse bone marrow cells purged with mafosfamide (ASTA–Z). Slavin S, et al. **Bone Marrow Transplant** 1989 Sep;4(5):459–64

Bone marrow transplantation for haemopoietic neoplasia. Evaluation of a new approach to T cell depletion. Speck B, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:56–7

Double intensification with amsacrine/high dose ara–C and high dose chemotherapy with autologous bone marrow transplantation produces durable remissions in acute myelogenous leukemia. Spinolo JA, et al. **Bone Marrow Transplant** 1990 Feb;5(2):111–8

Fractionated total body irradiation plus high–dose VP–16 prior to allogeneic bone marrow transplantation in children with poor risk acute leukaemias. Suttorp M, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:144–8

An in vitro predictive test for clinical graft–versus–host disease in allogeneic bone marrow transplant recipients. Sviland L, et al. **Bone Marrow Transplant** 1990 Feb; 5(2):105–9

Graft–versus–leukemia effect using mixed allogeneic bone marrow transplantation. Sykes M, et al. **Bone Marrow Transplant** 1989 Sep;4(5):465–74

Assaying the CFU–GM in blood: correlation between cell dose and haemopoietic reconstitution. To LB. **Bone Marrow Transplant** 1990 Jan;5 Suppl 1:16–8

Enhancement of BMT management in children and adults. Torlontano G, et al. **Bone Marrow Transplant** 1989 Dec; 4 Suppl 4:59–60

Allogeneic bone marrow transplantation versus chemotherapy in the treatment of childhood acute lymphoblastic leukemia in second complete remission. Torres A, et al. **Bone Marrow Transplant** 1989 Nov; 4(6):609–12

Allogeneic bone marrow transplantation for multiple myeloma. Tura S, et al. **Bone Marrow Transplant** 1989 Dec; 4 Suppl 4:106–8

Busulfan/cyclophosphamide plus bone marrow transplantation is not sufficient to eradicate the malignant clone in juvenile chronic myelogenous leukemia. Urban C, et al. **Bone Marrow Transplant** 1990 May;5(5):353–6

Retrospectives and perspectives in bone marrow transplantation. van Bekkum DW. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:47–53 (53 ref.)

High dose melphalan and autologous marrow rescue in advanced epithelial ovarian carcinomas: a retrospective analysis of 35 patients treated in France. Viens P, et al. **Bone Marrow Transplant** 1990 Apr;5(4):227–33

Comparison of intensive consolidation therapy and autologous bone marrow transplantation in acute myeloid leukaemia. The Leiden experience. Willemze R, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:73

Association of hepatic veno–occlusive disease with interstitial pneumonitis in bone marrow transplant recipients. Wingard JR, et al. **Bone Marrow Transplant** 1989 Nov;4(6):685–9

Minimal risk of chronic renal dysfunction in marrow transplant recipients treated with cyclosporine for 6 months. Yee GC, et al. **Bone Marrow Transplant** 1989 Nov; 4(6):691–4

Relative value of allogeneic BMT, autologous BMT and intensive chemotherapy during the first complete remission (CR) of acute myelogenous leukemia (AML). An interim analysis of the AML8 EORTC–GIMEMA protocol. Zittoun R, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:56–8

Donor characteristics in allogeneic bone marrow transplantation. Zupančić–Salek S, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:107

Acute lymphoblastic leukemia; factors influencing relapse after allogeneic bone marrow transplantation. Zwaan FE, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:71

The role of dentistry in patients undergoing bone marrow transplantation. Maxymiw WG, et al. **Br Dent J** 1989 Oct 7;167(7):229–34 (40 ref.)

Origin of marrow stromal cells and haemopoietic chimaerism following bone marrow transplantation determined by in situ hybridisation. Athanasou NA, et al. **Br J Cancer** 1990 Mar;61(3):385–9

Potential therapeutic role of cisplatinum in autologous bone marrow transplantation: in vitro eradication of neuroblastoma cells from bone marrow. Bettan–Renaud L, et al. **Br J Cancer** 1989 Oct;60(4):529–32

An immunotoxin containing momordin suitable for bone marrow purging in multiple myeloma patients. Dinota A, et al. **Br J Cancer** 1989 Sep;60(3):315–9

Quantitative magnetic resonance imaging in autologous bone marrow transplantation for Hodgkin's disease. Smith SR, et al. **Br J Cancer** 1989 Dec;60(6):961–5

Allogeneic bone marrow transplantation for secondary leukaemia and myelodysplastic syndrome [letter] Bandini G, et al. **Br J Haematol** 1990 Jul;75(3):442–4

Allogeneic bone marrow transplantation for secondary leukaemia and myelodysplastic syndrome: a survey by the Leukaemia Working Party of the European Bone Marrow Transplantation Group (EBMTG). De Witte T, et al. **Br J Haematol** 1990 Feb;74(2):151–5

The effect of total body irradiation dose and chronic graft–versus–host disease on leukaemic relapse after allogeneic bone marrow transplantation. Frassoni F, et al. **Br J Haematol** 1989 Oct;73(2):211–6

Slow evolution of chronic myeloid leukaemia relapsing after BMT with T–cell depleted donor marrow. Hughes TP, et al. **Br J Haematol** 1989 Dec;73(4):462–7

Allogeneic bone marrow transplantation for primary myelofibrosis [letter; comment] Ifrah N, et al. **Br J Haematol** 1989 Dec;73(4):575–6 Comment on: Br J Haematol 1989 Jan;71(1):158–60.

Chimaerism following allogeneic bone marrow transplantation: detection of residual host cells using the polymerase chain reaction. Lawler M, et al. **Br J Haematol** 1989 Oct;73(2):205–10

Bone marrow transplantation for adult poor prognosis lymphoblastic lymphoma in first complete remission. Milpied N, et al. **Br J Haematol** 1989 Sep;73(1):82–7

A case of cALL relapse after allogeneic BMT: recurrence of recipient cell origin, initially determined as being that of donor cell origin by sex chromosome analysis. Naoe T, et al. **Br J Haematol** 1989 Nov;73(3):420–2

Total body irradiation in bone marrow transplantation: fractionated vs single dose. Acute toxicity and preliminary results. Valls A, et al. **Bull Cancer (Paris)** 1989; 76(8):797–804

An overview of bone marrow transplantation for chronic myeloid leukemia. Barnett MJ, et al. **Can Med Assoc J** 1990 Aug 1;143(3):187–93 (57 ref.)

Central nervous system relapses after bone marrow transplantation for acute lymphoblastic leukemia in remission. Ganem G, et al. **Cancer** 1989 Nov 1; 64(9):1796–804

Hyperalimentation in autologous bone marrow transplantation for solid tumors. Comparison of total parenteral versus partial parenteral plus enteral nutrition. Mulder PO, et al. **Cancer** 1989 Nov 15;64(10):2045–52

Platelets acquire a secretion defect after high–dose chemotherapy. Panella TJ, et al. **Cancer** 1990 Apr 15; 65(8):1711–6

Bone marrow transplantation in hematologic malignancies. Current status. Santos GW. **Cancer** 1990 Feb 1;65(3 Suppl):786–91 (49 ref.)

High–dose chemotherapy and unpurged autologous bone marrow transplantation for acute leukemia in second or subsequent remission. Spinolo JA, et al. **Cancer** 1990 Aug 15;66(4):619–26

Allogeneic bone marrow transplantation for Langerhans' cell histiocytosis. Stoll M, et al. **Cancer** 1990 Jul 15;66(2):284–8

Detection of posttransplant minimal disease chronic myelogenous leukemia by bcr rearrangement analysis. Anderson AE, et al. **Cancer Genet Cytogenet** 1989 Nov; 43(1):67–71

Multiple clones with (3;21) translocation in a case of Ph–positive chronic myelogenous leukemia during relapse after allogeneic bone marrow transplantation. Gilliland G, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):55–60

Cytogenetic studies of leukemic recurrence in recipients of

bone marrow allografts. Lawler SD, et al. **Cancer Genet Cytogenet** 1990 Jul 15;47(2):249–63

Cytogenetics in autologous bone marrow transplantation [letter] Maserati E, et al. **Cancer Genet Cytogenet** 1990 Mar; 45(1):137–8

Complex translocations in a patient with chronic myelocytic leukemia: t(9;22;17) and t(10;18;19) after two failed bone marrow transplantations. Melnyk A, et al. **Cancer Genet Cytogenet** 1990 May;46(1):83–7

Cytogenetic follow-up after bone marrow transplantation for Philadelphia-positive chronic myeloid leukemia. Sessarego M, et al. **Cancer Genet Cytogenet** 1989 Oct 15;42(2):253–61

Busulfan and cyclophosphamide in allogeneic and autologous bone marrow transplantation [editorial; comment] Ahmed T. **Cancer Invest** 1989;7(5):521–2 Comment on: Cancer Invest 1989;7(5):509–13.

The role of busulfan/cyclophosphamide regimens in allogeneic and autologous bone marrow transplantation [see comments] Brodsky I, et al. **Cancer Invest** 1989; 7(5):509–13 Comment in: Cancer Invest 1989;7(5):521–2.

Infusion of high doses of undiluted etoposide through central venous catheters during preparation for bone marrow transplantation. Creger RJ, et al. **Cancer Invest** 1990; 8(1):13–6

In vitro chemosensitivity of two Ewing's sarcoma cell lines: implication for autologous bone marrow transplantation. Gulati SC, et al. **Cancer Invest** 1989;7(5):411–6

Autologous bone marrow transplantation in the treatment of acute myeloid leukemia: the Dartmouth experience and a review of literature. Mills LE, et al. **Cancer Invest** 1990; 8(2):181–90 (61 ref.)

Potent graft antitumor effect in natural killer-resistant disseminated tumors by transplantation of interleukin 2-activated syngeneic bone marrow in mice. Agah R, et al. **Cancer Res** 1989 Nov 1;49(21):5959–63

Application of target-specific drug immunoconjugates to experimental bone marrow replacement therapy in mice. Ding L, et al. **Cancer Res** 1990 Mar 1;50(5):1538–43

Role of bone marrow transplantation in 90Y antibody therapy of colon cancer xenografts in nude mice. Morton BA, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):1008s–1010s

Autologous bone marrow transplantation in acute leukemia and lymphoma following ex vivo treatment with monoclonal antibodies and complement. Freedman AS, et al. **Cancer Treat Res** 1988;38:265–83 (83 ref.)

Analysis of airflow obstruction by bronchoalveolar lavage following bone marrow transplantation. Implications for pathogenesis and treatment. St. John RC, et al. **Chest** 1990 Sep;98(3):600–7

Allogeneic bone marrow transplantation for the treatment of leukemia. Lu DP, et al. **Chin Med J [Engl]** 1990 Feb; 103(2):125–30

Bone marrow transplantation: updated indications. Bolwell BJ. **Cleve Clin J Med** 1990 Jun;57(4):315–6

Pyoderma gangrenosum in an allogeneic bone marrow transplant recipient. Blanc D, et al. **Clin Exp Dermatol** 1989 Sep;14(5):376–9

Batten's disease: failure of allogeneic bone marrow transplantation to arrest disease progression in a canine model. Deeg HJ, et al. **Clin Genet** 1990 Apr;37(4):264–70

Transplantation studies in mice with congenital hemolytic anemia. Maggio-Price L, et al. **Clin Immunol Immunopathol** 1990 Jun;55(3):468–85

Endogenous digoxin-like immunoreactive factor and digitalis-like factor associated with the hypertension of patients receiving multiple alkylating agents as part of autologous bone marrow transplantation. Graves SW, et al. **Clin Sci** 1989 Nov;77(5):501–7

Oral complications of cancer therapies: diagnosis, prevention, and treatment. National Institutes of Health. **Conn Med** 1989 Oct;53(10):595–601

Need for mechanical ventilation in the treatment of acute infections complicating bone marrow transplantation [letter] Martin C, et al. **Crit Care Med** 1990 Jan;18(1):120–1

Cryopreserved autologous bone marrow transplantation in patients with acute nonlymphoid leukemia: chemotherapy before harvesting is the main factor in delaying hematological recovery. Visani G, et al. **Cryobiology** 1990 Apr;27(2):103–6

Bone marrow transplantation. Gress RE. **Curr Opin Immunol** 1989 Aug;1(6):1213–20 (37 ref.)

Invasive hyalohyphomycosis caused by Scopulariopsis brevicaulis in a patient undergoing allogeneic bone marrow transplant. Phillips P, et al. **Diagn Microbiol Infect Dis** 1989 Sep–Oct;12(5):429–32

Bone marrow transplantation versus chemotherapy in acute non-lymphocytic leukemia: a meta-analytic review [comment] Begg CB, et al. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1519–23 Comment on: Eur J Cancer Clin Oncol 1989 Mar;25(3):545–50.

Immunoprophylaxis of cytomegalovirus infections in transplanted patients. Bron D, et al. **Eur J Cancer Clin Oncol** 1989 Sep;25(9):1365–8 (16 ref.)

Current approaches to management of infections in bone marrow transplants. Winston DJ, et al. **Eur J Cancer Clin Oncol** 1989;25 Suppl 2:S25–35 (87 ref.)

Human bone marrow transplantation. Storb R, et al. **Eur J Clin Invest** 1990 Apr;20(2):119–32 (33 ref.)

Treatment of a patient in a relapse after bone marrow transplantation for acute lymphoblastic leukemia with the systemic administration of allogeneic lymphokine-activated killer cells and recombinant interleukin-2 [letter] Komori T, et al. **Eur J Haematol** 1989 Aug;43(2):184–5

Autologous bone marrow transplantation therapy for multiple myeloma. Anderson KC, et al. **Eur J Haematol Suppl** 1989;51:157–63

Marrow transplantation for malignant plasma cell disorders: summary of the Seattle experience. Buckner CD, et al. **Eur J Haematol Suppl** 1989;51:186–90

Allogeneic bone marrow transplantation in patients with multiple myeloma. Gahrton G, et al. **Eur J Haematol Suppl** 1989;51:182–5

Autologous bone marrow transplantation with immunotoxin-purged marrow for advanced multiple myeloma. Gobbi M, et al. **Eur J Haematol Suppl** 1989; 51:176–81

High-dose chemotherapy and autologous bone marrow transplantation for myeloma. McElwain TJ, et al. **Eur J Haematol Suppl** 1989;51:152–6 (9 ref.)

High-dose chemoradiotherapy and allogenic bone marrow transplantation in multiple myeloma. Tura S, et al. **Eur J Haematol Suppl** 1989;51:191–5

Facial growth and morphology in long-term survivors after bone marrow transplantation. Dahllöf G, et al. **Eur J Orthod** 1989 Nov;11(4):332–40

HLA-haploidentical bone marrow transplantation in three infants with adenosine deaminase deficiency: stable immunological reconstitution and reversal of skeletal abnormalities. Bluetters-Sawatzki R, et al. **Eur J Pediatr** 1989 Nov;149(2):104–9

Misleading radiology following bone marrow transplantation for infantile osteopetrosis [letter] O'Meara A, et al. **Eur J Pediatr** 1990 Mar;149(6):447–8

Role of bronchoalveolar lavage in the assessment of pulmonary complications following bone marrow and organ transplantation. Rennard SI. **Eur Respir J** 1990 Mar; 3(3):373–5 (10 ref.)

Bone marrow transplantation for chronic myeloid leukemia: the use of histocompatible unrelated volunteer donors. Mackinnon S, et al. **Exp Hematol** 1990 Jun;18(5):421–5

Haemopoiesis in murine bone marrow and spleen after fractionated irradiation and repeated bone marrow transplantation. II. Granulopoiesis. Hofer M, et al. **Folia Biol (Praha)** 1989;35(6):418–28

Haemopoiesis in murine bone marrow and spleen after fractionated irradiation and repeated bone marrow transplantation. I. Erythropoiesis. Hofer M, et al. **Folia Biol (Praha)** 1989;35(6):405–17

Biochemical parameters of osteogenesis in epiphysis of mice irradiated and repopulated with syngeneic bone marrow. Włodarski KH, et al. **Folia Biol (Praha)** 1989;35(4):197–206

International Symposium on Bone Marrow Transplantation. The Society of Haematology and Blood Transfusion of GDR. Leipzig, June 29–30, 1987. **Folia Haematol (Leipz)** 1989;116(3–4):349–608

Marrow grown in long-term culture can be used for autologous transplantation in the treatment of acute myeloid leukaemia. Chang J, et al. **Folia Haematol (Leipz)** 1989;116(3–4):597–600

Autologous BMT in acute myeloid leukaemia in first remission (Dutch prospective study). de Gast GC, et al. **Folia Haematol (Leipz)** 1989;116(3–4):499

Bone marrow transplantation in children with neuroblastoma. Dopfer R, et al. **Folia Haematol (Leipz)** 1989; 116(3–4):427–36

Acute and late effects in the course of and after total body irradiation with following bone marrow transplantation in patients with different forms of leukaemia. Feyer P, et al. **Folia Haematol (Leipz)** 1989;116(3–4):487–91

Double autografting in first remission acute myeloid leukaemia. Goldstone AH, et al. **Folia Haematol (Leipz)** 1989;116(3–4):501–4

EBMT experience of autologous bone marrow transplantation in lymphoma. Goldstone AH, et al. **Folia Haematol (Leipz)** 1989;116(3–4):505–8

Treatment of severe aplastic anaemia by bone marrow transplantation. Gordon-Smith EC. **Folia Haematol (Leipz)** 1989;116(3–4):367–76 (30 ref.)

Bone marrow transplantation for leukaemia in Europe. Gratwohl A, et al. **Folia Haematol (Leipz)** 1989; 116(3–4):353–60

Allogeneic bone marrow transplantation for leukaemia and aplastic anaemia. Results of the Leipzig BMT Group. Helbig W, et al. **Folia Haematol (Leipz)** 1989;116(3–4):383–7

Bone marrow transplantation for the treatment of leukaemia-results of the Munich Cooperative Group. Kolb HJ, et al. **Folia Haematol (Leipz)** 1989;116(3–4):397–402

Autologous bone marrow transplantation (ABMT) using unpurged marrow as intensification for first complete remission in acute leukaemia (AL). Kubel M, et al. **Folia Haematol (Leipz)** 1989;116(3–4):493–8

Supportive haemotherapy in bone marrow transplantation. Mayr WR. **Folia Haematol (Leipz)** 1989;116(3–4):455–8 (3 ref.)

Bone marrow transplantation in childhood leukaemia—experience and strategies in the Federal Republic of Germany. Niethammer D, et al. **Folia Haematol (Leipz)** 1989;116(3–4):361–6

ALG/ATG treatment—a useful alternative for BMT in selected aplastic anaemia patients. Pawelski S, et al. **Folia Haematol (Leipz)** 1989;116(3–4):377–81

Initial experiences in allogeneic bone marrow transplantation for leukaemias: report of National Institute of Haematology and Blood Transfusion (Hungary). Poros A, et al. **Folia Haematol (Leipz)** 1989;116(3–4):409–11

Elimination of red blood cells from marrow suspension prior to transplantation using polysaccharide-ditrizoate gradient centrifugation. Experimental studies. Ratajczak MZ, et al. **Folia Haematol (Leipz)** 1989;116(3–4):469–73

Cryopreservation of marrow, purging and autologous bone marrow transplantation in childhood. Reiners B, et al. **Folia Haematol (Leipz)** 1989;116(3–4):601–8

Fundamentals, trends and our experiences with total body irradiation (TBI) before bone marrow transplantation (BMT). Standke E. **Folia Haematol (Leipz)** 1989; 116(3–4):481–5 (3 ref.)

Allogeneic bone marrow transplantation from HLA-identical siblings following conditioning with busulfan and cyclophosphamide. First results. Wiktor-Jedrzejczak W, et al. **Folia Haematol (Leipz)** 1989;116(3–4):403–8

Prospects for the future of bone marrow transplantation from the experimental studies on cells and animals. Wiktor-Jedrzejczak W. **Folia Haematol (Leipz)** 1989; 116(3–4):437–43 (38 ref.)

Status of allogeneic bone marrow transplantation in childhood in the GDR. Zintl F, et al. **Folia Haematol (Leipz)** 1989;116(3–4):389–96

Decreased essential antioxidants and increased lipid hydroperoxides following high-dose radiochemotherapy. Clemens MR, et al. **Free Radic Res Commun** 1989; 7(3–6):227–32

Isolated cytomegalovirus ileitis detected by colonoscopy. Lepinski SM, et al. **Gastroenterology** 1990 Jun;98(6):1704–6

Autologous bone marrow transplantation in acute lymphoblastic leukemia: biological and clinical aspects [published erratum appears in Haematologica 1990 Mar–Apr;75(2):following 201] Carella AM. **Haematologica** 1990 Jan–Feb;75(1):79–83 (36 ref.)

Use of peripheral blood stem cells to accelerate hemopoietic recovery following autologous bone marrow transplantation. Tarella C, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:90–4

Allogeneic bone marrow transplantation for hematological malignancies following therapy with high doses of busulphan and cyclophosphamide. Angelucci E, et al. **Haematologica (Pavia)** 1989 Sep–Oct;74(5):455–61

Bone marrow transplantation (BMT) for acute non lymphoid leukemia (ANLL) in first remission: an update [letter] Bacigalupo A, et al. **Haematologica (Pavia)** 1989 Jul–Aug; 74(4):418–9

Chemotherapy versus transplantation: II. Acute lymphoblastic leukemia. Butturini A, et al. **Haematologica (Pavia)** 1989 Jul–Aug;74(4):337–9

Isolated testicular relapse in a boy with acute lymphoblastic leukemia following allogeneic bone marrow transplantation. Conter V, et al. **Haematologica (Pavia)** 1989 Sep–Oct;74(5):507–9

T-cell depletion in allogeneic bone marrow transplantation: progress and problems. Marmont AM, et al. **Haematologica (Pavia)** 1989 May–Jun;74(3):235–48 (121 ref.)

Use of recombinant human granulocyte macrophage colony-stimulating factor to speed engraftment and treat graft failure following marrow transplantation in man. Appelbaum FR, et al. **Hematol Bluttransfus** 1990;33:736–40

Influence of treatment modality, patient/donor characteristics, and disease stage on the risk of relapse after allogeneic marrow transplantation for acute leukemia. Beelen DW, et al. **Hematol Bluttransfus** 1990;33:688–91

Bone marrow transplantation from histocompatible sibling donors for patients with acute lymphoblastic leukemia. Blume KG, et al. **Hematol Bluttransfus** 1990;33:636–7

Role of autologous bone marrow transplantation in acute leukemia. Dicke KA, et al. **Hematol Bluttransfus** 1990; 33:667–74 (26 ref.)

Complotyping and subtyping of MHC class I gene products in haplotype determination for bone marrow transplantation. Doxiadis I, et al. **Hematol Bluttransfus** 1990;33:709–11

Comparison of chemotherapy and autologous and allogeneic transplantation as postinduction regimen in adult acute lymphoblastic leukemia: a preliminary multicentric study. Fiere D, et al. **Hematol Bluttransfus** 1990;33:409–12

Treatment strategies for acute lymphoblastic leukemia. Gale RP, et al. **Hematol Bluttransfus** 1990;33:684–7 (4 ref.)

Autologous bone marrow transplantation for acute leukemia in remission: an analysis of 1322 cases. Gorin NC, et al. **Hematol Bluttransfus** 1990;33:660–6 (3 ref.)

Myelopoietic reconstitution following autologous bone marrow transplantation. Henke M, et al. **Hematol Bluttransfus** 1990;33:702–6

High-dose chemotherapy with noncryopreserved autologous bone marrow transplantation for acute myeloid leukemia in first complete remission. Koeppler H, et al. **Hematol Bluttransfus** 1990;33:699–701

Long-term disease-free survival following autologous bone marrow/blood stem cell transplantation in 89 patients with acute leukemia. Körbling M, et al. **Hematol Bluttransfus** 1990;33:675–8

Preliminary results of intensive therapy of children and adolescents with acute nonlymphocytic leukemia—a Childrens Cancer Study Group report. Lampkin BC, et al. **Hematol Bluttransfus** 1990;33:210–4

Autologous bone marrow transplantation in acute myeloid leukemia in first remission: first Dutch prospective study. Löwenberg B, et al. **Hematol Bluttransfus** 1990;33:655–60

Allogeneic bone marrow transplantation in childhood leukemia: results and strategies in the Federal Republic of Germany. Niethammer D, et al. **Hamatol Bluttransfus** 1990; 33:638–48 (17 ref.)

Allogeneic and autologous bone marrow transplantation in acute leukemia: the Essen Experience. Schaefer UW, et al. **Hamatol Bluttransfus** 1990;33:649–51

Determination of soluble interleukin-2 receptors after bone marrow transplantation. Siegert W, et al. **Hamatol Bluttransfus** 1990;33:76–7

Marrow grafting for acute leukemia: results and future treatment strategies. Storb R, et al. **Hamatol Bluttransfus** 1990;33:629–35 (27 ref.)

Supportive care of the marrow transplant recipient: the Seattle Experience. Sullivan KM, et al. **Hamatol Bluttransfus** 1990;33:539–45 (39 ref.)

Bone marrow transplantation with a fixed low number of T-cells in the graft. Verdonck LF, et al. **Hamatol Bluttransfus** 1990;33:707–8

Allogeneic and autologous bone marrow transplantation for acute lymphoblastic leukemia. Weisdorf D, et al. **Hamatol Bluttransfus** 1990;33:679–83

Comparison of allogeneic and autologous bone marrow transplantation for treatment of acute lymphocytic leukemia in childhood. Zintl F, et al. **Hamatol Bluttransfus** 1990;33:692–8

Use of xenograft bone with aspirated bone marrow for treatment of cystic defect of the jaws. Horowitz I, et al. **Head Neck** 1989 Nov–Dec;11(6):516–23

Bone marrow transplantation. **Hematol Oncol Clin North Am** 1990 Jun;4(3):507–709

The evolving role of bone marrow transplantation in the treatment of chronic myelogenous leukemia. Delage R, et al. **Hematol Oncol Clin North Am** 1990 Apr;4(2):369–88 (96 ref.)

Allogeneic bone marrow transplantation for acute leukemia. Forman SJ, et al. **Hematol Oncol Clin North Am** 1990 Jun; 4(3):517–33 (83 ref.)

Autologous bone marrow transplantation for Hodgkin's and non-Hodgkin's lymphoma. Kessinger A, et al. **Hematol Oncol Clin North Am** 1990 Jun;4(3):577–87 (39 ref.)

Bone marrow transplaatation for genetic diseases. Lenarsky C, et al. **Hematol Oncol Clin North Am** 1990 Jun; 4(3):589–602 (83 ref.)

Treatment of aplastic anemia. Loughran TP Jr, et al. **Hematol Oncol Clin North Am** 1990 Jun;4(3):559–75 (70 ref.)

Treatment of chronic myelogenous leukemia with bone marrow transplantation. Snyder DS, et al. **Hematol Oncol Clin North Am** 1990 Jun;4(3):535–57 (172 ref.)

The use of HLA-non-identical T-cell-depleted marrow transplants for correction of severe combined immunodeficiency disease. O'Reilly RJ, et al. **Immunodefic Rev** 1989;1(4):273–309 (204 ref.)

Bone marrow transplantation for the treatment of chronic myelogenous leukemia. Fefer A, et al. **Important Adv Oncol** 1990;:143–58 (71 ref.)

Adoptive transfer of resistance to Pseudomonas aeruginosa infection by splenocytes and bone marrow cells from BALB/c mice immunized by Pseudomonas aeruginosa lectin preparations. Avichezer D, et al. **Infection** 1989 Nov–Dec;17(6):407–10

Clinical use of GM-CSF in autologous bone marrow transplantation. Carella AM, et al. **Int J Cell Cloning** 1990 Jan;8 Suppl 1:279–82 (19 ref.)

Hematopoietic growth factors: in vitro and in vivo studies in bone marrow transplantation. Rizzoli V, et al. **Int J Cell Cloning** 1990 Jan;8 Suppl 1:270–7; discussion 277–8 (16 ref.)

Use of recombinant human hematopoietic growth factors and autologous bone marrow transplantation to attenuate the neutropenic trough of high-dose therapy. Spitzer G, et al. **Int J Cell Cloning** 1990 Jan;8 Suppl 1:249–59; discussion 259–61

Late complications following total-body irradiation and bone marrow rescue in mice: predominance of glomerular nephropathy and hemolytic anemia. Down JD, et al. **Int J Radiat Biol** 1990 Mar;57(3):551–65

16,16-Dimethyl prostaglandin E2 and/or syngeneic bone marrow transplantation increase mouse survival after supra-lethal total body irradiation. Berk LB, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1387–92

A technique for delivery of total body irradiation for bone marrow transplantation in adults and adolescents. Breneman JC, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1233–6

Total lymphoid irradistion, high-dose chemotherapy and autologous bone marrow transplantation for chemotherapy-resistant Hodgkin's disease. Yahalom J, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):915–22

Prevalence of nutrition-related problems among long-term survivors of allogeneic marrow transplantation. Lenssen P, et al. **J Am Diet Assoc** 1990 Jun;90(6):835–42

Lymphocytic infiltrations of lip salivary glands in bone marrow recipients. A model for the development of the histopathological changes in Sjögren's syndrome? Lindahl G, et al. **J Autoimmun** 1989 Aug;2(4):579–83

In vivo effects of cytokines on development of natural killer cells and antitumor activity in lethally irradiated bone marrow transplanted recipients. Riccardi C, et al. **J Biol Response Mod** 1990 Feb;9(1):15–23

Osteogenic response to marrow aspiration: increased serum osteocalcin and alkaline phosphatase in human bone marrow donors. Foldes J, et al. **J Bone Miner Res** 1989 Aug;4(4):643–6

19th annual UCLA symposium: New strategies in bone marrow transplantation. Abstracts. **J Cell Biochem Suppl** 1990;14A:249–335

Anesthesia for bone marrow harvesting in the prone position in a patient with preexisting pericardial tamponade. Boucek CD. **J Clin Anesth** 1990 Mar–Apr;2(2):133–7

Bone marrow transplantation (BMT) for the syndrome of pigmentary dilution and lymphohistiocytosis (Griscelli's syndrome). Schneider LC, et al. **J Clin Immunol** 1990 May; 10(3):146–53

Intestinal graft-versus-host disease is initiated by donor T cells distinct from classic cytotoxic T lymphocytes. Thiele DL, et al. **J Clin Invest** 1989 Dec;84(6):1947–56

Bone marrow transplantation for childhood Ki-1 lymphoma. Chakravarti V, et al. **J Clin Oncol** 1990 Apr;8(4):657–60

The role of autologous bone marrow transplantation in 46 adult patients with non-Hodgkin's lymphomas. Colombat P, et al. **J Clin Oncol** 1990 Apr;8(4):630–7

Allogeneic bone marrow transplantation in a program of intensive sequential chemotherapy for children and young adults with acute nonlymphocytic leukemia in first remission. Dahl GV, et al. **J Clin Oncol** 1990 Feb; 8(2):295–303

Treatment of estrogen receptor-negative or hormonally refractory breast cancer with double high-dose chemotherapy intensification and bone marrow support. Dunphy FR, et al. **J Clin Oncol** 1990 Jul;8(7):1207–16

A phase I–II study of cyclophosphamide, thiotepa, and carboplatin with autologous bone marrow transplantation in solid tumor patients. Eder JP, et al. **J Clin Oncol** 1990 Jul;8(7):1239–45

Effectiveness of high-dose combination chemotherapy and autologous bone marrow transplantation for patients with non-Hodgkin's lymphomas who are still responsive to conventional-dose therapy. Gribben JG, et al. **J Clin Oncol** 1989 Nov;7(11):1621–9

High-dose cytotoxic therapy and bone marrow transplantation for relapsed Hodgkin's disease. Jones RJ, et al. **J Clin Oncol** 1990 Mar;8(3):527–37

The role of marrow transplantation in acute lymphoblastic leukemia [editorial] Kersey JH. **J Clin Oncol** 1989 Nov; 7(11):1589–90

Autologous bone marrow transplantation in acute myeloid leukemia in first remission: results of a Dutch prospective study. Löwenberg B, et al. **J Clin Oncol** 1990 Feb; 8(2):287–94

Autologous marrow transplantation for malignant lymphoma: a report of 101 cases from Seattle. Petersen FB, et al. **J Clin Oncol** 1990 Apr;8(4):638–47

Autologous bone marrow transplantation for acute lymphoblastic leukemia. Sallan SE, et al. **J Clin Oncol** 1989 Nov;7(11):1594–601

Recombinant human granulocyte colony-stimulating factor hastens granulocyte recovery after high-dose chemotherapy and autologous bone marrow transplantation in Hodgkin's disease [published erratum appears in J Clin Oncol 1990 Mar;8(3):567] Taylor KM, et al. **J Clin Oncol** 1989 Dec;7(12):1791–9

Allogeneic bone marrow transplantation in adults with Burkitt's lymphoma or acute lymphoblastic leukemia in first complete remission. Troussard X, et al. **J Clin Oncol** 1990 May;8(5):809–12

Cyclophosphamide, carmustine, and etoposide with autologous bone marrow transplantation in refractory Hodgkin's disease and non-Hodgkin's lymphoma: a dose-finding study. Wheeler C, et al. **J Clin Oncol** 1990 Apr;8(4):648–56

Allogeneic bone marrow transplantation for patients with high-risk acute lymphoblastic leukemia. Wingard JR, et al. **J Clin Oncol** 1990 May;8(5):820–30

Carriage of Candida species and C albicans biotypes in patients undergoing chemotherapy or bone marrow transplantation for haematological disease. Odds FC, et al. **J Clin Pathol** 1989 Dec;42(12):1259–66

Virus infections in bone marrow transplant recipients: a three year prospective study. Taylor CE, et al. **J Clin Pathol** 1990 Aug;43(8):633–7

Longitudinal study of cyclosporine and lipids in patients undergoing bone marrow transplantation. Luke DR, et al. **J Clin Pharmacol** 1990 Feb;30(2):163–9

Oral gram-negative bacilli in bone marrow transplant patients given chlorhexidine rinses. Brown AT, et al. **J Dent Res** 1989 Jul;68(7):1199–204

In vivo administration of interleukin 2 plus T cell-depleted syngeneic marrow prevents graft-versus-host disease mortality and permits alloengraftment. Sykes M, et al. **J Exp Med** 1990 Mar 1;171(3):645–58

Behavior of genetic markers in recipients after bone marrow transplantation and problems in forensic medicine. Ikemoto S, et al. **J Forensic Sci** 1990 May;35(3):548–53

Diffuse biliary tract involvement mimicking primary sclerosing cholangitis after bone marrow transplantation. Geubel AP, et al. **J Hepatol** 1990 Jan;10(1):23–8

Immunomagnetic depletion of malignant cells from autologous bone marrow graft: from experimental models to clinical trials. Combaret V, et al. **J Immunogenet** 1989 Apr;16(2):125–36

Murine cytomegalovirus infection can enhance hybrid resistance through modulation of host natural killer activity. Muluk SC, et al. **J Immunol** 1990 Aug 15; 145(4):1113–9

Effects of T cell depletion in radiation bone marrow chimeras. III. Characterization of allogeneic bone marrow cell populations that increase allogeneic chimerism independently of graft-vs-host disease in mixed marrow recipients. Sykes M, et al. **J Immunol** 1989 Dec 1; 143(11):3503–11

Acyclovir-resistant herpes simplex virus causing pneumonia after marrow transplantation. Ljungman P, et al. **J Infect Dis** 1990 Jul;162(1):244–8

Cytomegalovirus excretion as a predictor of cytomegalovirus disease after marrow transplantation: importance of cytomegalovirus viremia. Meyers JD, et al. **J Infect Dis** 1990 Aug;162(2):373–80

Therapy of severe aplastic anemia with anti-human thymocyte globulin (ATGAM) with and without HLA-haploidentical bone-marrow infusion. Kim KY. **J Korean Med Sci** 1986 Sep;1(1):37–41

Secondary reconstruction of the alveolar process after correction of mandibular discontinuity defects. Ohya T, et al. **J Oral Maxillofac Surg** 1990 Jan;48(1):34–7

Successful treatment with an unrelated-donor bone marrow transplant in an HLA-deficient patient with severe combined immune deficiency ("bare lymphocyte syndrome"). Casper JT, et al. **J Pediatr** 1990 Feb; 116(2):262–5

Eosinophilic fasciitis after allogeneic bone marrow transplantation. Markusse HM, et al. **J Rheumatol** 1990 May;17(5):692–4

Estimating the size of the dividing stem cell pool after allogeneic bone marrow transplantation. O'Quigley J, et al. **J Theor Biol** 1989 Nov 8;141(1):73–9

Rapid detection of cytomegalovirus in bronchoalveolar lavage specimens from marrow transplant patients: evaluation of a direct fluorescein-conjugated monoclonal antibody reagent. Gleaves CA, et al. **J Virol Methods** 1989 Dec;26(3):345–9

Diagnostic and therapeutic technology assessment. Autologous bone marrow transplantation--reassessment [published erratum appears in JAMA 1990 Jul 18;264(3):338] **JAMA** 1990 Feb 9;263(6):881–7

A prospective study of complications in Hickman right-atrial catheters in marrow transplant patients. Ulz L, et al. **JPEN J Parenter Enteral Nutr** 1990 Jan–Feb;14(1):27–30

Granulocyte colony-stimulating factor in allogeneic bone marrow transplantation. Kitayama H, et al. **Jpn J Clin Oncol** 1989 Dec;19(4):367–72

High dose chemotherapy with autologous bone marrow transplantation for limited small cell lung cancer. Nomura F, et al. **Jpn J Clin Oncol** 1990 Mar;20(1):94–8

Protecting donor marrow from HIV [news] **Lancet** 1990 Jan 20;335(8682):158

Autotransplants in chronic myelogenous leukaemia: strategies and results. Butturini A, et al. **Lancet** 1990 May 26; 335(8700):1255–8 (21 ref.)

Treatment of acute lymphoblastic leukaemia after relapse [letter; comment] Darbyshire PJ, et al. **Lancet** 1990 Mar 24;335(8691):733 Comment on: Lancet 1989 Dec 23–30;2(8678–8679):1517–8.

GM-CSF and ganciclovir for cytomegalovirus infection after autologous bone-marrow transplantation [letter] Fouillard L, et al. **Lancet** 1989 Nov 25;2(8674):1273

Migraine after bone-marrow transplantation [letter; comment] Gharpure VS, et al. **Lancet** 1990 Jan 6; 335(8680):57 Comment on: Lancet 1989 Nov 25;2(8674):1286–7.

Intensive treatment of multiple myeloma and criteria for complete remission [see comments] Gore ME, et al. **Lancet** 1989 Oct 14;2(8668):879–82 Comment in: Lancet 1989 Dec 2;2(8675):1336.

Treating acute lymphoblastic leukaemia after relapse: bone marrow transplantation or not? [letter] [see comments] Graham-Pole J. **Lancet** 1989 Dec 23–30; 2(8678–8679):1517–8 Comment in: Lancet 1990 Mar 24;335(8691):733.

Induced differentiation of leukaemic cells [letter; comment] Hassan HT. **Lancet** 1990 Jan 13;335(8681):118 Comment on: Lancet 1989 Nov 11;2(8672):1125–8.

Significance of residual leukaemia transcripts after bone marrow transplant for CML [letter; comment] [see comments] Hughes T, et al. **Lancet** 1990 Jan 6;335(8680):50 Comment on: Lancet 1989 Nov 11;2(8672):1125–8. Comment in: Lancet 1990 Feb 17;335(8686):417–8.

Migraine precipitated by red wine after bone-marrow transplantation [letter] Lönnqvist B, et al. **Lancet** 1990 Feb 10;335(8685):364

Effect of GM-CSF on circulating granulocyte-monocyte progenitors in autologous bone marrow transplantation [letter] Nemunaitis J, et al. **Lancet** 1989 Dec 9; 2(8676):1405–6

Bone-marrow transplant from father to son and subsequent graft from son to father. Powles RL, et al. **Lancet** 1990 Apr 28;335(8696):999–1000

Is transplantation in first remission AML more effective than in advanced leukemia? Gale RP, et al. **Leuk Res** 1989; 13(12):1035–8

The role of haemopoietic growth factors in bone marrow transplantation. Goldstone AH, et al. **Leuk Res** 1990; 14(8):721–9 (62 ref.)

Host metaphases after chemoradiotherapy and allogeneic bone marrow transplantation for acute nonlymphoblastic leukemia. Przepiorka D, et al. **Leuk Res** 1989;13(8):661–5
Etoposide in leukemia, lymphoma and bone marrow transplantation. Stadtmauer EA, et al. **Leuk Res** 1989; 13(8):639–50 (104 ref.)
HLA–DP genotyping in HLA–A,B, and DR identical intrafamilial bone marrow transplantation. al–Daccak R, et al. **Leukemia** 1990 Mar;4(3):222–6
Detection of minimal residual disease in chronic myeloid leukemia patients after bone marrow transplantation by polymerase chain reaction. Delfau MH, et al. **Leukemia** 1990 Jan;4(1):1–5
Further studies on the mechanism of radiation induced thymic lymphoma prevention by bone marrow transplantation in C57BL mice. Humblet C, et al. **Leukemia** 1989 Nov;3(11):813–8
Expression of bcr–abl fusion transcripts following bone marrow transplantation for Philadelphia chromosome–positive leukemia. Kohler S, et al. **Leukemia** 1990 Aug;4(8):541–7
Frequent detection of minimal residual disease by use of the polymerase chain reaction in long–term survivors after bone marrow transplantation for chronic myeloid leukemia. Pignon JM, et al. **Leukemia** 1990 Feb;4(2):83–6
The challenge of bone marrow transplantation. Clark JG. **Mayo Clin Proc** 1990 Jan;65(1):111–4
High–dose chemotherapy with busulphan and cyclophosphamide and bone–marrow transplantation for drug–sensitive malignancies in adults: a preliminary report. Sheridan WP, et al. **Med J Aust** 1989 Oct 2;151(7):379–86 (40 ref.)
Tumour cell purging for autologous bone marrow transplantation. Trickett AE. **Med Lab Sci** 1990 Apr; 47(2):120–31 (66 ref.)
Double autologous bone marrow transplantation for acute myelogenous leukemia in a patient treated for Hodgkin's disease. Russell JA, et al. **Med Pediatr Oncol** 1989; 17(6):524–7
Respiratory syncytial virus–induced acute lung injury in adult patients with bone marrow transplants: a clinical approach and review of the literature. Hertz MI, et al. **Medicine (Baltimore)** 1989 Sep;68(5):269–81 (76 ref.)
Reversal of early neurologic and neuroradiologic manifestations of X–linked adrenoleukodystrophy by bone marrow transplantation. Aubourg P, et al. **N Engl J Med** 1990 Jun 28;322(26):1860–6
Treatment of late infantile metachromatic leukodystrophy by bone marrow transplantation [see comments] Krivit W, et al. **N Engl J Med** 1990 Jan 4;322(1):28–32 Comment in: N Engl J Med 1990 Jan 4;322(1):54–5.
Bone marrow transplantation in patients with thalassemia. Lucarelli G, et al. **N Engl J Med** 1990 Feb 15;322(7):417–21
Clonal hematopoiesis after bone marrow transplantation [letter; comment] Nash R, et al. **N Engl J Med** 1989 Dec 21;321(25):1758–9 Comment on: N Engl J Med 1989 Jun 22;320(25):1655–61.
Bone marrow transplantation for patients with severe aplastic anemia and myelodysplastic syndrome. Kai S, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec;52(8):1402–11
Bone marrow transplantation for chronic myelogenous leukemia. Results of the French Cooperative Group (GEGMO). Devergie A, et al. **Nouv Rev Fr Hematol** 1990; 32(1):86–9
Autologous bone marrow transplantation in Hodgkin's disease. Gisselbrecht C, et al. **Nouv Rev Fr Hematol** 1990; 32(1):5–7 (11 ref.)
Bone marrow transplantation. Buchsel PC, et al. **Nurs Clin North Am** 1989 Dec;24(4):907–38 (98 ref.)
Clinical trial to test whether BMT and AZT can eliminate AIDS virus [news] **Oncology (Williston Park)** 1990 Feb; 4(2):91
Three–drug therapy plus marrow transplants effective against metastatic breast Ca [news] **Oncology (Williston Park)** 1988 Oct;2(10):38
Marrow transplant and radiation improve survival in leukemia patients [news] **Oncology (Williston Park)** 1988 Aug;2(8):15
The National Marrow Donor Program: how it works, accomplishments to date. McCullough J, et al. **Oncology (Williston Park)** 1989 Feb;3(2):63–8, 72; discussion 72–4 (23 ref.)
Low–grade lymphomas—will they respond to marrow transplants? [letter] Toh B. **Oncology (Williston Park)** 1988 Jun;2(6):15, 28
High–dose chemotherapy with autologous bone marrow support in advanced malignant melanoma. Koeppler H, et al. **Onkologie** 1989 Dec;12(6):277–9
EBV and HSV infections in a patient who had undergone bone marrow transplantation: oral manifestations and diagnosis by in situ nucleic acid hybridization. Birek C, et al. **Oral Surg Oral Med Oral Pathol** 1989 Nov; 68(5):612–7
The oral cavity as a port of entry for early infections in patients treated with bone marrow transplantation. Heimdahl A, et al. **Oral Surg Oral Med Oral Pathol** 1989 Dec;68(6):711–6
A cancellous marrow bone–cartilage composite autograft for maxillofacial reconstructive surgery. A case report. Sinn DP, et al. **Oral Surg Oral Med Oral Pathol** 1989 Nov; 68(5):535–40 (29 ref.)
High–dose chemotherapy and autologous bone marrow rescue in advanced resistant/relapsing Hodgkin's disease. Marmont AM, et al. **Pathol Biol (Paris)** 1989 Nov;37(9):973
Treatment of familial lymphohistiocytosis: chemotherapy or bone marrow transplant? Blanche S, et al. **Pediatr Hematol Oncol** 1989;6(3):273–5
Autologous bone marrow rescue as part of a curative approach for pediatric solid tumors: the case of neuroblastoma. Vossen JM. **Pediatr Hematol Oncol** 1990; 7(1):iii–vii
Bone marrow transplants [letter; comment] **Pediatrics** 1990 Feb;85(2):235–7 Comment on: Pediatrics 1989 Jul;84(1):195.
Bone marrow transplantation in pediatrics. Abramowsky CR, et al. **Perspect Pediatr Pathol** 1989;13:6–43 (92 ref.)
Curing acute leukemias in the 1990s. Corey CA, et al. **Postgrad Med** 1990 Sep 1;88(3):159–62, 164, 167
Bone marrow transplantation. What you need to known. Weisdorf DJ. **Postgrad Med** 1990 Jan;87(1):91–101 (21 ref.)
Clonal deletion of autoreactive B lymphocytes in bone marrow chimeras. Nemazee D, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):8039–43
Molecular relapse in chronic myelogenous leukemia patients after bone marrow transplantation detected by polymerase chain reaction. Sawyers CL, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):563–7
Generation of lymphokine–activated killer (LAK) cells and possible implications in autologous bone marrow transplantation—a preliminary report. Tzeng CH, et al. **Proc Natl Sci Counc Repub China [B]** 1990 Jan;14(1):47–53
Adoptive transfer of tsk skin fibrosis to +/+ recipients by tsk bone marrow and spleen cells. Walker MA, et al. **Proc Soc Exp Biol Med** 1989 Nov;192(2):196–200
Peripheral blood and positive selection of marrow as a source of stem cells for transplantation. Bensinger WI, et al. **Prog Clin Biol Res** 1990;337:93–8 (17 ref.)
Bone marrow proliferation after passage through an irradiated host. Brecher G, et al. **Prog Clin Biol Res** 1990; 352:449–58
Development of a national registry of unrelated bone marrow donors in Canada. Buskard N, et al. **Prog Clin Biol Res** 1990;337:99–105
Cellular support of the marrow transplant recipient. Clift RA. **Prog Clin Biol Res** 1990;337:87–92 (12 ref.)
Breast cancer and laser photoradiation therapy: an in vitro model for autologous bone marrow purging. Gulliya KS, et al. **Prog Clin Biol Res** 1990;333:103–7
Hematopoietic growth factors in bone marrow transplantation for hematologic malignancies. Lazarus HM. **Prog Clin Biol Res** 1990;352:531–8 (32 ref.)
Radioisotope–mediated purging in bone marrow transplantation. Macklis RM. **Prog Clin Biol Res** 1990; 333:109–19; discussion 120–3
The use of recombinant human granulocyte–macrophage colony–stimulating factor in autologous bone marrow transplantation. Peters WP, et al. **Prog Clin Biol Res** 1990; 338:121–8
Factors influencing reconstitution by bone marrow transplantation. van Bekkum DW, et al. **Prog Clin Biol Res** 1990;352:479–91
Hypertension and renal dysfunction in bone marrow transplant recipients. Kone BC, et al. **Q J Med** 1988 Dec; 69(260):985–95
Repopulation of marrow after transplantation: MR imaging with pathologic correlation. Stevens SK, et al. **Radiology** 1990 Apr;175(1):213–8
Fractionated total body irradiation and allogeneic bone marrow transplantation for standard risk leukemia. Altschuler C, et al. **Radiother Oncol** 1989 Dec;16(4):289–95
Bone marrow transplantation in the treatment of Hodgkin's lymphoma: problems, remaining challenges, and future prospects. Armitage JO, et al. **Recent Results Cancer Res** 1989;117:246–53 (27 ref.)
Treatment of resistant Hodgkin's lymphoma with bone marrow transplantation in Italy. Carella AM, et al. **Recent Results Cancer Res** 1989;117:239–41
Preliminary results of autologous bone marrow transplantation in the management of resistant Hodgkin's disease: experience of the Bloomsbury Transplant Group at University College, London. Gribben JG, et al. **Recent Results Cancer Res** 1989;117:242–5
High–dose combination chemotherapy with cyclophosphamide, carmustine, etoposide, and autologous bone marrow transplantation in 60 patients with relapsed Hodgkin's disease: the M. D. Anderson experience. Spinolo JA, et al. **Recent Results Cancer Res** 1989;117:233–8
Prevention of cytomegalovirus infection after marrow transplantation. Meyers JD. **Rev Infect Dis** 1989 Nov–Dec; 11 Suppl 7:S1691–705 (75 ref.)
Comparative trials of chemotherapy and bone marrow transplantation in acute nonlymphocytic leukemia. Sullivan KM, et al. **Rinsho Ketsueki** 1990 May;31(5):527–33 (23 ref.)
Fiberoptic bronchoscopy for diagnosis of opportunistic pulmonary infections after bone marrow transplantation. Heurlin N, et al. **Scand J Infect Dis** 1989;21(4):359–66 (14 ref.)
Prevention of allogeneic bone marrow graft rejection by H–2 transgene in donor mice. Ohlén C, et al. **Science** 1989 Nov 3;246(4930):666–8
Bone marrow transplants in chronic myelogenous leukemia: an overview of determinants of survival. McGlave P. **Semin Hematol** 1990 Jul;27(3 Suppl 4):23–30 (33 ref.)
Symposium on bone marrow transplantation. September 9, 1989, Dallas, TX. Proceedings. **Semin Oncol** 1990 Feb;17(1 Suppl 3):1–48
The role of bone marrow transplantation in the non–Hodgkin's lymphomas. Williams SF. **Semin Oncol** 1990 Feb;17(1):88–95 (49 ref.)
High–dose N,N',N''–triethylenethiophosphoramide (thiotepa) with autologous bone marrow transplantation: phase I studies. Wolff SN, et al. **Semin Oncol** 1990 Feb; 17(1 Suppl 3):2–6 (9 ref.)
The reaction of lymphatic component of hemopoiesis to fractionated irradiation and repeated bone marrow transplantation. Hofer M, et al. **Strahlenther Onkol** 1990 Feb;166(2):176–80
Changes in hemopoiesis of dying and surviving mice after fractionated irradiation and repeated bone marrow transplantation. Tkadleček L, et al. **Strahlenther Onkol** 1990 Feb;166(2):171–5
Enzyme replacement therapy in acatalasemic mice by bone marrow transplantation. Hong C, et al. **Surg Forum** 1978; 29:333–5
Percutaneous placement of femoral central venous catheter in patients undergoing transplantation of bone marrow. Lazarus HM, et al. **Surg Gynecol Obstet** 1990 May; 170(5):403–6
Single–dose cyclosporine pharmacokinetics in various biological fluids of patients receiving allogeneic marrow transplantation. Brunner LJ, et al. **Ther Drug Monit** 1990 Mar;12(2):134–8
Bayesian estimation of cyclosporine clearance in bone marrow graft. Serre–Debeauvais F, et al. **Ther Drug Monit** 1990 Jan;12(1):16–22
Perturbation of T–cell differentiation in lethally irradiated rats reconstituted with syngeneic bone marrow and treated with cyclosporin–A. Bos GM, et al. **Thymus** 1989; 14(1–3):155–61
Serum tumor necrosis factor–alpha levels in allogeneic bone marrow transplant recipients with acute leukemia. Hirokawa M, et al. **Tohoku J Exp Med** 1989 Nov; 159(3):237–44
Effects of in vitro treatment with 4–hydroperoxycyclophosphamide and hyperthermia on leukemic progenitor cells. Minegishi N, et al. **Tohoku J Exp Med** 1989 Oct;159(2):101–11
Preservation of immature hematopoietic progenitor cells responding to interleukin 3 in marrow treated with 4–hydroperoxycyclophosphamide. Minegishi N, et al. **Tohoku J Exp Med** 1989 Oct;159(2):113–22
Long–term results of bone marrow transplantation for leukemia or aplastic anemia. Witherspoon RP. **Trans Assoc Life Insur Med Dir Am** 1990;73:144–54
Recruiting blood donors into a local bone marrow donor registry. Beatty PG, et al. **Transfusion** 1989 Nov–Dec; 29(9):778–82
Transfusion of red cells after autologous bone marrow harvest in patients with acute leukemia and malignant lymphoma. Sonneveld P, et al. **Transfusion** 1990 May; 30(4):310–3
Proceedings of the sixth scientific congress of the Transplantation Society of Australia and New Zealand. April 12–14, 1989, Canberra, Australia. **Transplant Proc** 1989 Oct;21(5):3751–829
Serum erythropoietin levels after bone marrow transplantation. Abedi MR, et al. **Transplant Proc** 1990 Feb; 22(1):205
One year's experience using the Anthony Nolan Bone Marrow Registry for Australasian patients requiring unrelated marrow transplantation. Atkinson K, et al. **Transplant Proc** 1989 Oct;21(5):3815
Postoperative bone marrow infusions with cyclosporine, silica, and antilymphocyte serum in rat islet allografts. Barneo L, et al. **Transplant Proc** 1990 Apr;22(2):859–60
Bone marrow transplantation in leukemia using family donors other than HLA–identical siblings: a preliminary report from the International Bone Marrow Transplant Registry. Bortin MM. **Transplant Proc** 1987 Feb;19(1 Pt 3):2629–31
The impact of pretransplant herpesvirus serology on acute and chronic graft–versus–host disease. Leukaemia Working Party of the European Group for Bone Marrow Transplantation. Boström L, et al. **Transplant Proc** 1990 Feb;22(1):206–7
Bone marrow transplantation for acute leukemia: a preliminary report from the International Bone Marrow Transplant Registry. Champlin R. **Transplant Proc** 1987 Feb;19(1 Pt 3):2626–8
Transfusion effect on graft–versus–host disease and leukemic relapse in HLA–matched bone marrow transplantation. de Gast GC, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2700
Monitoring low molecular weight serum proteins in cyclosporine A–treated bone marrow transplant recipients. Duraj FF, et al. **Transplant Proc** 1990 Feb;22(1):203–4
A prospective randomized study of acute graft–v–host disease in 107 patients with leukemia: methotrexate/prednisone v cyclosporine A/prednisone. Forman SJ, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2605–7
Long–term follow–up of patients who received transplants for aplastic anemia or leukemia. Gluckman E, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2643
Effect of posttransplant injection of peripheral blood lymphocytes on skin graft prolongation in mice treated with antilymphocyte serum (ALS) or ALS plus donor bone marrow. Gozzo JJ, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1409–10

Tumor recurrence after liver transplantation followed by high-dose cyclophosphamide, total body irradiation, and autologous bone marrow transplantation for treatment of metastatic liver disease. Margreiter R, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2403-4

Effect of antilymphocyte serum-treated bone marrow on skin graft survival in rats. Sato T, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):578

Improvement in the neurologic signs and storage lesions of fucosidosis in dogs given marrow transplants at an early age. Taylor RM, et al. **Transplant Proc** 1989 Oct; 21(5):3818-9

Prediction of leukemic relapse soon after bone marrow transplantation. Tratkiewicz JA, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2648-50

Successful bone marrow transplantation in a patient with severe pretransplant pneumonia. Agematsu K, et al. **Transplantation** 1990 Aug;50(2):326-7

The somatostatin analog octreotide in the management of the secretory diarrhea of the acute intestinal graft-versus-host disease in a patient after bone marrow transplantation. Bianco JA, et al. **Transplantation** 1990 Jun; 49(6):1194-5

A European multicenter study of chronic graft-versus-host disease. The role of cytomegalovirus serology in recipients and donors--acute graft-versus-host disease, and splenectomy. Boström L, et al. **Transplantation** 1990 Jun; 49(6):1100-5

Comparison of interleukin 2 and gamma-interferon production by peripheral blood mononuclear cells in response to cytomegalovirus after marrow transplantation. Bowden RA, et al. **Transplantation** 1990 Jul;50(1):38-42

Chronic cyclosporine-associated nephrotoxicity in bone marrow transplant patients. Dieterle A, et al. **Transplantation** 1990 Jun;49(6):1093-100

Evidence that anti-asialo GM1 in vivo improves engraftment of T cell-depleted bone marrow in hybrid recipients. Ferrara JL, et al. **Transplantation** 1990 Jan;49(1):134-8

Durable complete remission of acute nonlymphocytic leukemia associated with discontinuation of immunosuppression following relapse after allogeneic bone marrow transplantation. A case report of a probable graft-versus-leukemia effect. Higano CS, et al. **Transplantation** 1990 Jul;50(1):175-7

Prediction of graft versus host disease by frequency analysis of cytotoxic T cells after unrelated donor bone marrow transplantation. Kaminski E, et al. **Transplantation** 1989 Oct;48(4):608-13

Monitoring of bone marrow transplant recipient liver by fine-needle aspiration biopsy. Leskinen R, et al. **Transplantation** 1989 Dec;48(6):969-74

Epstein-Barr virus--determined clonality in posttransplant lymphoproliferative disease. Patton DF, et al. **Transplantation** 1990 Jun;49(6):1080-4

Allogeneic versus semiallogeneic F1 bone marrow transplantation into sublethally irradiated MHC-disparate hosts. Effects on mixed lymphoid chimerism, skin graft tolerance, host survival, and alloreactivity. Pierce GE. **Transplantation** 1990 Jan;49(1):138-44

Allogeneic bone marrow-plus-liver transplantation in the C57BL/KsJ spm/spm mouse, an animal model of Niemann-Pick disease. Yasumizu R, et al. **Transplantation** 1990 Apr;49(4):759-64

Bone marrow transplantation. Part II--autologous. Chao NJ, et al. **West J Med** 1990 Jan;152(1):46-51 (74 ref.)

[Chimerism pattern following allogeneic bone marrow transplantation; a retrospective study of the connection with post-transplantation complications] Vlieger AM, et al. **Ned Tijdschr Geneeskd** 1990 May 5;134(18):908-13 (Eng. Abstr.) (Dut)

[Porphyria cutanea tarda in a patient undergoing bone marrow transplant. Addition of chronic cytomegalovirus hepatitis and multiple hepatic aggressions] Augey F, et al. **Ann Dermatol Venereol** 1990;117(5):363-6 (Fre)

[Whole body irradiation in the conditioning of bone marrow transplantation. Current indications and limiting factors] Ganem G, et al. **Ann Med Interne (Paris)** 1989; 140(5):387-92 (Fre)

[Allogeneic bone marrow grafts in children. Indications and results] Bordigoni P. **Ann Pediatr (Paris)** 1989 Oct; 36(8):545-55 (86 ref.) (Eng. Abstr.) (Fre)

[The accelerated phase of Chediak-Higashi syndrome] Bejaoui M, et al. **Arch Fr Pediatr** 1989 Dec;46(10):733-6 (35 ref.) (Eng. Abstr.) (Fre)

[Allogenic bone marrow graft in thalassemia major. The French experience] Frappaz D, et al. **Arch Fr Pediatr** 1990 Feb;47(2):97-102 (25 ref.) (Eng. Abstr.) (Fre)

[Acute lymphoblastic leukemia in children. Results of a protocol including bone marrow transplantation during the first remission in high-risk forms for relapse] Michel G, et al. **Arch Fr Pediatr** 1990 Mar;47(3):163-8 (28 ref.) (Eng. Abstr.) (Fre)

[Value of high-dose chemotherapy followed by bone marrow autograft in non-seminomatous germinal tumor with poor prognosis. Results of the combination of cisplatinum, etoposide and cyclophosphamide (PEC protocol)] Baume D, et al. **Bull Cancer (Paris)** 1990;77(2):169-80 (Eng. Abstr.) (Fre)

[Role of massive chemotherapy and bone marrow graft in the treatment of non-Hodgkin's lymphoma] Bouffet E, et al. **Bull Cancer (Paris)** 1990;77(2):159-67 (29 ref.) (Eng. Abstr.) (Fre)

[Role of high-dose chemotherapy followed by bone marrow autograft in the treatment of metastatic Ewing's sarcoma in children] Hartmann O, et al. **Bull Cancer (Paris)** 1990; 77(2):181-7 (Eng. Abstr.) (Fre)

[4 years after Chernobyl: medical repercussions] Hubert D. **Bull Cancer (Paris)** 1990;77(5):419-28 (31 ref.) (Eng. Abstr.) (Fre)

[High doses of alkylating agents and bone marrow autograft in ovarian cancer with poor prognosis: a retrospective analysis of 40 patients treated in France] Maraninchi D, et al. **Bull Cancer (Paris)** 1990;77(2):149-57 (Eng. Abstr.) (Fre)

[New perspectives in the treatment of cancer] Degos L. **Pathol Biol (Paris)** 1989 Nov;37(9):979-80 (Fre)

[Methodology and indications of autografts of stem cells in hematology] Gorin NC. **Pathol Biol (Paris)** 1989 Nov; 37(9):965-6 (Fre)

[Therapeutic intensification with bone marrow autografting in cancer in children] Philip T. **Pathol Biol (Paris)** 1989 Nov;37(9):967-8 (Fre)

[Broncho-alveolar lavage by fibroscopy in immunodepressed children] Farge A, et al. **Pediatrie** 1989;44(1):45-51 (Eng. Abstr.) (Fre)

[Bone marrow autograft treated with mafosfamide in the acceleration phase in chronic myeloid leukemia. Inversion of the clinical d~velopment] Fouillard L, et al. **Presse Med** 1989 Nov 4;18(36):1785-8 (Eng. Abstr.) (Fre)

[Informational structure of the national registry of bone marrow donor volunteers] Busson M, et al. **Rev Fr Transfus Hemobiol** 1989 Dec;32(6):413-20 (Eng. Abstr.) (Fre)

[Bone marrow grafts: current status at the University Hospital Center in Liège] Beguin Y, et al. **Rev Med Liege** 1990 Jun; 45(6):268-79 (Fre)

[Current approach to HLA typing for bone marrow transplantation: oligonucleotide typing by hybridization on DNA amplified by polymerase chain reaction] Tiercy JM, et al. **Schweiz Med Wochenschr** 1989 Sep 30;119(39):1344-6 (Eng. Abstr.) (Fre)

[Feasibility and limitations of bone marrow transplantation in children] Zintl F. **Folia Haematol (Leipz)** 1989; 116(5):723-9 (22 ref.) (Eng. Abstr.) (Ger)

[Relation of peak flow and spirometry values in patients following bone marrow transplantation] Seibold H, et al. **Pneumologie** 1990 Feb;44 Suppl 1:439-40 (Eng. Abstr.) (Ger)

[Granulocyte-macrophage progenitor cells in allogenic bone marrow transplantation: correlation of progenitor cell content and regeneration in the graft] Gidáli J, et al. **Orv Hetil** 1989 Oct 15;130(42):2251-4, 2257 (Eng. Abstr.) (Hun)

[The allograft in chronic myeloid leukemia] Arcese W, et al. **Haematologica (Pavia)** 1989 Oct;74(5 Suppl):443-59 (71 ref.) (Ita)

[Allogeneic bone marrow transplantation in acute and chronic myeloid leukemia: role of conditioning and of graft-versus-host disease in the long-term maintenance of remission] Bacigalupo A, et al. **Haematologica (Pavia)** 1989 Oct;74(5 Suppl):425-32 (Ita)

[Allogeneic bone marrow transplantation in multiple myeloma] Bandini G, et al. **Haematologica (Pavia)** 1989 Oct; 74(5 Suppl):463-72 (Ita)

[Bone marrow transplantation in leukemia from donors other than HLA-identical siblings] Lucarelli G, et al. **Haematologica (Pavia)** 1989 Oct;74(5 Suppl):418-24 (6 ref.) (Ita)

[Bone marrow transplant in thalassemia. The Pesaro experience] Lucarelli G, et al. **Haematologica (Pavia)** 1989 Oct;74(5 Suppl):266-70 (Ita)

[Autotransplantation in acute leukemia] Rizzoli V, et al. **Haematologica (Pavia)** 1989 Oct;74(5 Suppl):24-48 (52 ref.) (Ita)

[The allograft in acute lymphoblastic leukemia] Torlontano G, et al. **Haematologica (Pavia)** 1989 Oct;74(5 Suppl):433-42 (21 ref.) (Ita)

[Fractionated and hyperfractionated total body irradiation in the conditioning of allogenic bone marrow transplant in acute lymphatic leukemia. Results] Corvò R, et al. **Radiol Med (Torino)** 1989 Oct;78(4):367-72 (Eng. Abstr.) (Ita)

[Autologous bone marrow transplantation--its role in the chemotherapy of solid tumor] Tajima T, et al. **Gan No Rinsho** 1989 May;Spec No:303-11 (Jpn)

[Monoclonal antibody and purging] Ueda R, et al. **Gan No Rinsho** 1989 May;Spec No:294-302 (Jpn)

[Clinical effect of recombinant human granulocyte colony-stimulating factor in bone marrow transplantation. The Japan rhG-CSF Clinical Study Group] Asano S, et al. **Gan To Kagaku Ryoho** 1990 Jun;17(6):1201-9 (Eng. Abstr.) (Jpn)

[Relapsed stage I neuroblastoma successfully treated by allogeneic bone marrow transplantation in second remission: case report of a 7-year-old girl] Hanada R, et al. **Gan To Kagaku Ryoho** 1990 Sep;17(9):1937-9 (Eng. Abstr.) (Jpn)

[A case of refractory testicular cancer showing complete response to high-dose chemotherapy with autologous bone marrow transplantation] Ishii H, et al. **Gan To Kagaku Ryoho** 1989 Oct;16(10):3483-6 (Eng. Abstr.) (Jpn)

[Indication of BMT and/or CSF for the recovery of radiation-injured hematopoietic stem cells] Kuramoto A. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 2):919-21 (5 ref.) (Jpn)

[Granulocyte colony stimulating factor for bone marrow transplantation] Masaoka T. **Gan To Kagaku Ryoho** 1989 Nov;16(11):3543-9 (5 ref.) (Eng. Abstr.) (Jpn)

[Effect of high dose etoposide, adriamycin, cisplatin (EAP) therapy with autologous bone marrow transplantation in gastric cancer] Suzuki T, et al. **Gan To Kagaku Ryoho** 1990 May;17(5):1069-72 (Eng. Abstr.) (Jpn)

[Early development of the thymus-dependent cells attributable to recipient micro-environment in bone marrow chimera mice] Iwabuchi C. **Hokkaido Igaku Zasshi** 1989 Nov;64(6):777-91 (Eng. Abstr.) (Jpn)

[Recent progress in the treatment of hematological malignancies II. Acute nonlymphocytic leukemia in adult] Kimura K, et al. **Nippon Naika Gakkai Zasshi** 1989 Jun; 78(6):765-8 (Jpn)

[Bone marrow transplantation for the therapy of anemia] Kodera Y. **Nippon Naika Gakkai Zasshi** 1990 May 10; 79(5):646-51 (Jpn)

[Recent progress in the treatment of hematological malignancies. III. Acute leukemia--bone marrow transplantation] Masaoka T. **Nippon Naika Gakkai Zasshi** 1989 Jun;78(6):789-91 (Jpn)

[Recent progress in the treatment of hematological malignancies. IV. Chronic myelocytic leukemia] Nagi K, et al. **Nippon Naika Gakkai Zasshi** 1989 Jun;78(6):792-5 (Jpn)

[High dose chemotherapy in malignant gliomas using autologous bone marrow transplantation and GM-CSF: granulocyte-macrophage colony stimulating factors] Yamashita J, et al. **No Shinkei Geka** 1990 Apr;18(4):329-38 (71 ref.) (Jpn)

[Allogeneic bone marrow transplantation after the treatment of alpha-IFN and high-dose SNMC in two cases of acute myeloblastic leukemia with post-transfusional non-A, non-B hepatitis] Hashino S, et al. **Rinsho Ketsueki** 1989 Nov;30(11):2029-34 (Eng. Abstr.) (Jpn)

[Control of graft-vs-host disease] Hiraoka A. **Rinsho Ketsueki** 1990 May;31(5):577-83 (Eng. Abstr.) (Jpn)

[Allogeneic bone marrow transplantation in a case of acute lymphoblastic leukemia with positive Philadelphia chromosome] Kitoh T, et al. **Rinsho Ketsueki** 1989 May; 30(5):680-5 (Eng. Abstr.) (Jpn)

[Allogeneic bone marrow transplantation as primary treatment in acute myelofibrosis] Maruta A, et al. **Rinsho Ketsueki** 1989 Jun;30(6):904-9 (Eng. Abstr.) (Jpn)

[Detection of minimal residual leukemia after bone marrow transplantation in patients with chronic myeloid leukemia using the polymerase chain reaction] Matsue K, et al. **Rinsho Ketsueki** 1990 May;31(5):603-8 (Eng. Abstr.) (Jpn)

[Comparison among three preconditioning regimens for allogeneic bone marrow transplantation in hematological malignancies] Minami S, et al. **Rinsho Ketsueki** 1990 May; 31(5):572-6 (Eng. Abstr.) (Jpn)

[Application of polymerase chain reaction for bone marrow transplantation] Miyamura K, et al. **Rinsho Ketsueki** 1990 May;31(5):597-602 (Eng. Abstr.) (Jpn)

[Unrelated bone marrow transplantation b. Bone Marrow Donor Registry. Nagoya Bone Marrow Transplantation Group] Mizuno S, et al. **Rinsho Ketsueki** 1990 May; 31(5):620-4 (Eng. Abstr.) (Jpn)

[Control of interstitial pneumonia with the application of immune transfer] Otsuka M, et al. **Rinsho Ketsueki** 1990 May;31(5):584-8 (Eng. Abstr.) (Jpn)

[Allogeneic bone marrow transplantation] Shibata H. **Rinsho Ketsueki** 1989 Aug;30(8):1227-9 (Eng. Abstr.) (Jpn)

[Clinical application of recombinant human colony-stimulating factor (rhG-CSF) in bone marrow transplantation] Takahashi S, et al. **Rinsho Ketsueki** 1990 May;31(5):589-96 (Eng. Abstr.) (Jpn)

[Treatment results of bone marrow transplantation in Kyushu Cancer Center. Bone Marrow Transplantation Team] Tasaka H, et al. **Rinsho Ketsueki** 1990 Mar;31(3):315-9 (Eng. Abstr.) (Jpn)

[Interstitial pneumonia (IP) in bone marrow transplantation in leukemia--120 cases analysis in Nagoya Bone Marrow Transplantation Group] Yamada H, et al. **Rinsho Ketsueki** 1989 Nov;30(11):1937-42 (Eng. Abstr.) (Jpn)

[Attempts to treat AIDS] Kazimierska E. **Postepy Hig Med Dosw** 1989;43(1):53-60 (Eng. Abstr.) (Pol)

[Etiopathogenesis of aplastic anemia and of the severe form treated with immunosuppression and bone marrow transplantation] Dulley FL, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Jul-Aug; 44(4):167-70 (26 ref.) (Eng. Abstr.) (Por)

[Modeling of the "universal" bone marrow using monoclonal antibodies] Chimishkian KL, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):83-5 (Eng. Abstr.) (Rus)

[Treatment of acquired aplastic anemia in children with Soviet-produced antilymphocyte globulin] Nikitin DO, et al. **Gematol Transfuziol** 1990 Jan;35(1):23-5 (Eng. Abstr.) (Rus)

[Allogenic transplantation of bone marrow in hematologic diseases. Preparation and completion of transplantation at the Hematology Clinic in Novi Sad] Pejin D, et al. **Acta Chir Iugosl** 1990;37 Suppl 1:11–5 (Eng. Abstr.) **(Scr)**

[Transplantation of autologous bone marrow—a new approach in the treatment of neoplastic hematologic diseases. II. Clinical results in acute leukemia, malignant lymphoma and solid tumors] Nemet D. **Lijec Vjesn** 1990 Jan–Feb;112(1–2):53–8 (Eng. Abstr.) **(Scr)**

[Treatment of neoplastic hematologic diseases with intensive radio–chemotherapy and transplantation of cryopreserved autologous bone marrow] Nemet D, et al. **Lijec Vjesn** 1989 Sep–Oct;111(9–10):348–53 (Eng. Abstr.) **(Scr)**

[Aplastic anemia] Dorantes S, et al. **Gac Med Mex** 1989 Nov–Dec;125(11–12):341–60 (106 ref.) **(Spa)**

[Treatment of resistant or relapsing Hodgkin's disease with high doses of chemotherapy followed by autologous bone marrow transplant] Domingo–Albós A, et al. **Med Clin (Barc)** 1990 Mar 10;94(9):321–4 (Eng. Abstr.) **(Spa)**

[Treatment of resistant or relapsing non–Hodgkin lymphomas] López Guillermo A, et al. **Med Clin (Barc)** 1989 Sep 23;93(8):304–8 (51 ref.) **(Spa)**

[Thrombocytopenia after bone marrow transplant] Ortuño F, et al. **Med Clin (Barc)** 1990 Apr 7;94(13):510–4 (57 ref.) **(Spa)**

[Bone marrow autotransplant: preliminary results in 20 patients with acute leukemia] Sierra J, et al. **Med Clin (Barc)** 1989 Oct 14;93(11):401–5 (Eng. Abstr.) **(Spa)**

[Intensive chemotherapy followed by autotransplant of non–cryopreserved bone marrow (letter) (published erratum appears in Med Clin (Barc) 1990 May 26;94(20):781)] Villarrubia VG, et al. **Med Clin (Barc)** 1990 Apr 7;94(13):518–9 **(Spa)**

[Hepatic veno–occlusive disease in a patient undergoing bone marrow autotransplant after busulfan and melphalan conditioning (letter)] Zuazu I, et al. **Med Clin (Barc)** 1990 Jan 27;94(3):119 **(Spa)**

[Autotransplantation of bone marrow in acute leukemias. Possibilities of eliminating the minimal residual disease] Richard C, et al. **Sangre (Barc)** 1989 Dec;34(6):463–6 (39 ref.) **(Spa)**

[Bone marrow transplantation as possible treatment of HIV–1 infection in the future] Ljungman P. **Lakartidningen** 1990 Jul 11;87(28–29):2338–9 **(Swe)**

[Bone marrow transplantation is a successful therapeutic alternative in Gaucher's disease] Ringdén O, et al. **Lakartidningen** 1990 Jan 17;87(3):105 **(Swe)**

ADVERSE EFFECTS

Frequency of veno–occlusive disease of the liver in bone marrow transplantation with a modified busulfan/cyclophosphamide preparative regimen. Brodsky R, et al. **Am J Clin Oncol** 1990 Jun;13(3):221–5

An unusual extramedullary relapse of acute nonlymphocytic leukemia after allogeneic bone marrow transplantation. Kelch BP, et al. **Am J Clin Oncol** 1990 Jun;13(3):238–43

Porphyria cutanea tarda after allogeneic bone marrow transplantation for chronic myelogenous leukemia. Guyotat D, et al. **Am J Hematol** 1990 May;34(1):69–70

Hemolytic uremic syndrome following bone marrow transplantation: a case report and review of the literature. Loomis LJ, et al. **Am J Kidney Dis** 1989 Oct;14(4):324–8 (21 ref.)

Prevalence of clinically relevant bacteremia after upper gastrointestinal endoscopy in bone marrow transplant recipients. Bianco JA, et al. **Am J Med** 1990 Aug; 89(2):134–6

Progression of human immunodeficiency virus type–1 infection after allogeneic marrow transplantation. Bowden RA, et al. **Am J Med** 1990 May;88(5N):49N–52N

Diffuse alveolar hemorrhage in autologous bone marrow transplant recipients. Robbins RA, et al. **Am J Med** 1989 Nov;87(5):511–8

Hypertension and reversible myocardial depression associated with autologous bone marrow transplantation. Sugarman J, et al. **Am J Med** 1990 Jan;88(1N):52N–55N

Mycobacterium avium–intracellulare infections after allogeneic bone marrow transplantation in children. Ozkaynak MF, et al. **Am J Pediatr Hematol Oncol** 1990 Summer;12(2):220–4

Ganciclovir for the treatment of cytomegalovirus gastroenteritis in bone marrow transplant patients. A randomized, placebo–controlled trial. Reed EC, et al. **Ann Intern Med** 1990 Apr 1;112(7):505–10

Cytomegalovirus is frequently isolated in bronchoalveolar lavage fluid of bone marrow transplant recipients without pneumonia. Ruutu P, et al. **Ann Intern Med** 1990 Jun 15; 112(12):913–6

The value of immunohistochemistry and in situ hybridization in detecting cytomegalovirus in bone marrow transplant recipients. Rasing LA, et al. **APMIS** 1990 Jun;98(6):479–88

Cytotoxin–negative Clostridium difficile [letter; comment] Beaman MH, et al. **Aust N Z J Med** 1990 Feb;20(1):99–100 Comment on: Aust N Z J Med 1989 Feb;19(1):31–6.

Increased serum levels of tumor necrosis factor alpha precede major complications of bone marrow transplantation. Holler E, et al. **Blood** 1990 Feb 15;75(4):1011–6

Value of day 100 screening studies for predicting the development of chronic graft–versus–host disease after allogeneic bone marrow transplantation. Loughran TP Jr, et al. **Blood** 1990 Jul 1;76(1):228–34

Use of recombinant human granulocyte–macrophage colony–stimulating factor in graft failure after bone marrow transplantation. Nemunaitis J, et al. **Blood** 1990 Jul 1; 76(1):245–53

Cytogenetic analysis of chimerism and leukemia relapse in chronic myelogenous leukemia patients after T cell–depleted bone marrow transplantation. Offit K, et al. **Blood** 1990 Mar 15;75(6):1346–55

Cytomegalovirus infection after autologous bone marrow transplantation: occurrence of cytomegalovirus disease and effect on engraftment. Reusser P, et al. **Blood** 1990 May 1;75(9):1888–94

Hepatic failure after bone marrow transplantation [letter; comment] Sardaş OS, et al. **Blood** 1990 Jun 1;75(11):2265 Comment on: Blood 1989 Oct;74(5):1507–16.

Allogeneic bone marrow transplantation for leukemia with marrow grafts depleted of lymphocytes by counterflow centrifugation. Schattenberg A, et al. **Blood** 1990 Mar 15; 75(6):1356–63

Treatment of moderate/severe acute graft–versus–host disease after allogeneic bone marrow transplantation: an analysis of clinical risk features and outcome. Weisdorf D, et al. **Blood** 1990 Feb 15;75(4):1024–30

Acute upper gastrointestinal graft–versus–host disease: clinical significance and response to immunosuppressive therapy. Weisdorf DJ, et al. **Blood** 1990 Aug 1;76(3):624–9

Veno–occlusive disease of the liver complicating ABMT successfully treated with recombinant tissue plasminogen activator (rt–PA). Baglin TP, et al. **Bone Marrow Transplant** 1990 Jun;5(6):439–41

Cytomegalovirus infections in thalassemic patients after bone marrow transplantation. Baronciani D, et al. **Bone Marrow Transplant** 1990 Mar;5(3):167–72

Pneumocystis prophylaxis after bone marrow transplantation for severe aplastic anaemia [letter] Bashey A, et al. **Bone Marrow Transplant** 1990 Apr;5(4):285

A pilot study of continuous infusion heparin for the prevention of hepatic veno–occlusive disease after bone marrow transplantation. Bearman SI, et al. **Bone Marrow Transplant** 1990 Jun;5(6):407–11

Pretransplant herpes virus serology and chronic graft–versus–host disease. Boström L, et al. **Bone Marrow Transplant** 1989 Sep;4(5):547–52

A role of herpes virus serology for the development of acute graft–versus–host disease. Leukaemia Working Party of the European Group for Bone Marrow Transplantation. Boström L, et al. **Bone Marrow Transplant** 1990 May; 5(5):321–6

Empiric antibiotic association in the management of febrile episodes in patients submitted to bone marrow transplantation. Caldera D, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:160–3

Dry eye syndrome in long–term follow–up of bone marrow transplanted patients. Calissendorff B, et al. **Bone Marrow Transplant** 1989 Nov;4(6):675–8

Management of acute graft–versus–host disease. Deeg HJ, et al. **Bone Marrow Transplant** 1990 Jul;6(1):1–8 (72 ref.)

Long–term follow–up after bone marrow transplantation for chronic myelogenous leukemia: factors associated with relapse. Devergie A, et al. **Bone Marrow Transplant** 1990 Jun;5(6):379–86

Sputum induction as an aid to diagnosis of active cytomegalovirus infection following bone marrow transplantation. Foot AB, et al. **Bone Marrow Transplant** 1990 Apr;5(4):283–4

Myasthenia gravis after allogeneic bone marrow transplantation: report of a new case and pathogenetic considerations. Grau JM, et al. **Bone Marrow Transplant** 1990 Jun;5(6):435–7

Incapacitating peripheral neuropathy as a manifestation of chronic graft–versus–host disease. Greenspan A, et al. **Bone Marrow Transplant** 1990 May;5(5):349–52

Failure of thalidomide to control bronchiolitis obliterans post bone marrow transplant [letter] Heaton DC. **Bone Marrow Transplant** 1989 Sep;4(5):598

Growth failure and growth hormone deficiency in children after bone marrow transplantation for leukemia. Hovi L, et al. **Bone Marrow Transplant** 1990 Mar;5(3):183–6

Transient acanthosis nigricans following bone marrow transplantation for lymphoid malignancy. Ifrah N, et al. **Bone Marrow Transplant** 1990 Apr;5(4):281–2

Graft–versus–leukaemia activity associated with CMV–seropositive donor, post–transplant CMV infection, young donor age and chronic graft–versus–host disease in bone marrow allograft recipients. The Nordic Bone Marrow Transplantation Group. Jacobsen N, et al. **Bone Marrow Transplant** 1990 Jun;5(6):413–8

Fulminant hepatic necrosis caused by adenovirus type 5 following bone marrow transplantation. Johnson PR, et al. **Bone Marrow Transplant** 1990 May;5(5):345–7

Graft–versus–host disease: effects on long term disease free survival in marrow transplantation for haematological malignancies. Kapoor N, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:153–5

Thyroid dysfunction following bone marrow transplantation: long–term follow–up of 80 pediatric patients. Katsanis E, et al. **Bone Marrow Transplant** 1990 May;5(5):335–40

Successful treatment of CMV retinitis with ganciclovir after allogeneic marrow transplantation. Kaulfersch W, et al. **Bone Marrow Transplant** 1989 Sep;4(5):587–9

Cytomegalovirus seroconversion in patients receiving intensive induction therapy prior to allogeneic bone marrow transplantation. Kelsey SM, et al. **Bone Marrow Transplant** 1989 Sep;4(5):543–6

Cardiac involvement in bone marrow transplantation: electrocardiographic changes, arrhythmias, heart failure and autopsy findings. Kupari M, et al. **Bone Marrow Transplant** 1990 Feb;5(2):91–8

Hepatitis B virus (HBV) infection and liver disease after allogeneic bone marrow transplantation: a report of 30 cases. Locasciulli A, et al. **Bone Marrow Transplant** 1990 Jul;6(1):25–9

Fatal encephalitis in a patient with chronic graft–versus–host disease. Marosi C, et al. **Bone Marrow Transplant** 1990 Jul; 6(1):53–7

Hemorrhagic cystitis associated with urinary excretion of adenovirus type 11 following allogeneic bone marrow transplantation. Miyamura K, et al. **Bone Marrow Transplant** 1989 Sep;4(5):533–5

Combination of cyclosporine and methotrexate for prophylaxis of acute graft versus host disease after allogeneic bone marrow transplantation for leukaemias. Mrsić M, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:95–6

Toxoplasmosis after BMT for CML [letter] Pendry K, et al. **Bone Marrow Transplant** 1990 Jan;5(1):65–6

Graft versus host disease in children: the AIEOP BMT group experience. Porta F, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:149–50

Hyperferritinaemia in children undergoing bone marrow transplantation. Rajantie J. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:92

Long term effects and quality of life in children and adults after marrow transplantation. Sanders J, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:27–9 (28 ref.)

Gynecological abnormalities following allogeneic bone marrow transplantation. Schubert MA, et al. **Bone Marrow Transplant** 1990 Jun;5(6):425–30

A case of thrombotic thrombocytopenic purpura following allogeneic bone marrow transplantation. Tschuchnigg M, et al. **Bone Marrow Transplant** 1990 Jan;5(1):61–3

Early complications of bone marrow transplantation in children and adults. Tutschka PJ. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:22–6 (30 ref.)

Fulminant hepatic failure following bone marrow transplantation for hepatitis–associated aplastic anemia. Van Dam J, et al. **Bone Marrow Transplant** 1990 Jan; 5(1):57–60

The clinical spectrum of infections with viridans streptococci in bone marrow transplant patients. Villablanca JG, et al. **Bone Marrow Transplant** 1990 Jun;5(6):387–93

Fatal rhabdomyolysis as a complication of bone marrow transplantation. Volin L, et al. **Bone Marrow Transplant** 1990 Jul;6(1):59–60

Myelodysplasia and acute myeloid leukaemia following bone marrow transplantation for acute lymphoblastic leukaemia: secondary leukaemia or stem–cell relapse? Brito–Babapulle F, et al. **Br J Haematol** 1989 Nov;73(3):417–9

Previous donor pregnancy as a risk factor for acute graft–versus–host disease in patients with aplastic anaemia treated by allogeneic marrow transplantation. Flowers ME, et al. **Br J Haematol** 1990 Apr;74(4):492–6

Use of prostaglandin E1 for prevention of liver veno–occlusive disease in leukaemic patients treated by allogeneic bone marrow transplantation. Gluckman E, et al. **Br J Haematol** 1990 Mar;74(3):277–81

Long–term cyclosporin therapy may decrease the risk of chronic graft–versus–host disease [letter; comment] Lönnqvist B, et al. **Br J Haematol** 1990 Apr;74(4):547–8 Comment on: Br J Haematol 1989 Aug;72(4):567–72.

Autologous bone marrow transplantation and factor XII, factor VII, and protein C deficiencies. Report of a new association and its possible relationship to endothelial cell injury. Kaufman PA, et al. **Cancer** 1990 Aug 1;66(3):515–21

Cutaneous toxicity of autologous bone marrow transplantation in nonseminomatous germ cell tumors. Linassier C, et al. **Cancer** 1990 Mar 1;65(5):1143–5

Cutaneous and mucosal neoplasms in bone marrow transplant recipients. Lishner M, et al. **Cancer** 1990 Feb 1;65(3):473–6

Pharmacokinetics of busulfan: correlation with veno–occlusive disease in patients undergoing bone marrow transplantation. Grochow LB, et al. **Cancer Chemother Pharmacol** 1989;25(1):55–61

Pulmonary complications following bone marrow transplantation. Chan CK, et al. **Clin Chest Med** 1990 Jun; 11(2):323–32 (56 ref.)

Sequential measurement of the murine acute–phase protein serum amyloid P component (SAP) as an indicator of graft–versus–host disease following allogeneic bone marrow transplantation in mice. Bayston KF, et al. **Clin Exp Immunol** 1990 Aug;81(2):329–33

Pneumonitis in bone marrow transplant recipients results from a local immune response. Milburn HJ, et al. **Clin Exp Immunol** 1990 Aug;81(2):232–7

Graft–versus–host disease and viral infections. Gratama JW. **Curr Opin Immunol** 1989 Aug;1(6):1221–4 (13 ref.)

Immunodeficiency associated with bone marrow transplantation. Ringdén O. **Curr Opin Immunol** 1989 Feb; 1(3):497–501 (14 ref.)

Endoscopic appearance of the colon and small intestine of a patient with hemorrhagic enteric graft–vs.–host disease. Saito H, et al. **Dis Colon Rectum** 1990 Aug;33(8):695–7

Red cell aplasia due to host type isohemagglutinins with exuberant red cell progenitor production of donor type in an ABO–mismatched allogeneic bone marrow transplant recipient. Cockerill KJ, et al. **Eur J Haematol** 1989 Sep; 43(3):195–200

Vascular endothelial cell function and ultrastructure in thrombotic microangiopathy following allogeneic bone marrow transplantation. Cohen H, et al. **Eur J Haematol** 1989 Sep;43(3):207–14

Ocular complications of bone marrow transplantation. Livesey SJ, et al. **Eye** 1989;3 (Pt 3):271–6

Influence of allogeneic bone marrow transplantation on the endocrine system in children. Dopfer R, et al. **Folia Haematol (Leipz)** 1989;116(3–4):541–5

Endocrine dysfunction after total body irradiation and bone marrow transplantation. Feyer P, et al. **Folia Haematol (Leipz)** 1989;116(3–4):547–52

Lethal complications in 30 patients after allogeneic BMT (BMT) and autografted (ABMT) patients (1980–1986) examined by autopsy. Friedrich T, et al. **Folia Haematol (Leipz)** 1989;116(3–4):585–9

Interstitial pneumonia as a cause of early mortality in allogeneic bone marrow transplantation: the Viennese experience. Hinterberger W, et al. **Folia Haematol (Leipz)** 1989;116(3–4):565–7

Germ monitoring of patients, staff and environment in reverse isolation. Hoffmann FA, et al. **Folia Haematol (Leipz)** 1989; 116(3–4):577–80

Complications in early posttransplantation period in the patients with allogenic and autological bone marrow transplantation. Lubimova LS, et al. **Folia Haematol (Leipz)** 1989;116(3–4):581–3

Bacteriological findings in patients with bone marrow transplantation (Karl Marx University Leipzig, 1985–1987). Wonitzki C, et al. **Folia Haematol (Leipz)** 1989; 116(3–4):569–76

CMV infections in bone marrow transplanted patients—evaluation of prophylaxis with Cytotect (CMV hyperimmuneglobulin). Zintl F, et al. **Folia Haematol (Leipz)** 1989;116(3–4):557–64

Jejunal vasculitis with protein–losing enteropathy after bone marrow transplantation. Jafri FM, et al. **Gastroenterology** 1990 Jun;98(6):1689–92

Orthotopic liver transplantation for graft–versus–host disease following bone marrow transplantation. Rhodes DF, et al. **Gastroenterology** 1990 Aug;99(2):536–8

Irradiation cataract in children after bone marrow transplantation. Lappi M, et al. **Graefes Arch Clin Exp Ophthalmol** 1990;228(3):218–21

Respiratory syncytial virus infection in bone marrow transplantation: a case report (syncytial virus infection). Sica S, et al. **Haematologica** 1990 Mar–Apr;75(2):184–6

Complications of bone marrow transplantation in Chinese. Chen PM, et al. **Hematol Bluttransfus** 1990;33:712–4

Regeneration of granulopoiesis with recombinant human granulocyte–macrophage colony–stimulating factor after bone marrow transplantation. Link H, et al. **Hematol Bluttransfus** 1990;33:741–6

T–cell depletion to prevent graft–versus–host disease after bone marrow transplantation. Champlin R. **Hematol Oncol Clin North Am** 1990 Jun;4(3):687–98 (85 ref.)

Delayed complications and long–term effects after bone marrow transplantation. Deeg HJ. **Hematol Oncol Clin North Am** 1990 Jun;4(3):641–57 (93 ref.)

Graft–versus–host disease. Vogelsang GB, et al. **Hematol Oncol Clin North Am** 1990 Jun;4(3):625–39 (95 ref.)

Viral infections associated with bone marrow transplantation. Zaia JA. **Hematol Oncol Clin North Am** 1990 Jun; 4(3):603–23 (121 ref.)

Neuropathologic findings after bone marrow transplantation: an autopsy study. Mohrmann RL, et al. **Hum Pathol** 1990 Jun;21(6):630–9

Graft–versus–host disease: an alternative hypothesis [see comments] Parkman R. **Immunol Today** 1989 Nov; 10(11):362–4 (28 ref.) Comment in: Immunol Today 1990 Apr;11(4):107.

Intravenous immune globulin prophylaxis in recipients of a marrow transplant. Sullivan KM. **J Allergy Clin Immunol** 1989 Oct;84(4 Pt 2):632–8; discussion 638–9 (45 ref.)

Preliminary experience with allogeneic bone marrow transplantation in haematological disorders in India. Saikia TK, et al. **J Assoc Physicians India** 1990 May;38(5):332–4

Alpha–interferon therapy for lymphoproliferative disorders developing in two children following bone marrow transplants. Trigg ME, et al. **J Biol Response Mod** 1989 Dec;8(6):603–13

Development of multiple monoclonal serum immunoglobulins (multiclonal gammopathy) following both HLA–identical unfractionated and T cell–depleted haploidentical bone marrow transplantation in severe combined immunodeficiency. Kent EF Jr, et al. **J Clin Immunol** 1990 Mar;10(2):106–14

Cardiac involvement in bone marrow transplantation: serial changes in left ventricular size, mass and performance. Kupari M, et al. **J Intern Med** 1990 Apr;227(4):259–66

Detection of circulating Aspergillus fumigatus antigen in bone marrow transplant patients. Johnson TM, et al. **J Lab Clin Med** 1989 Dec;114(6):700–7

Increased lung uptake on technetium–99m–sulfur colloid liver–spleen scans in patients with hepatic venoocclusive disease following bone marrow transplantation. Jacobson AF, et al. **J Nucl Med** 1990 Mar;31(3):372–4

Effect of human macrophage colony–stimulating factor on granulopoiesis and survival in bone–marrow–transplanted mice. Yanai N, et al. **Jpn J Cancer Res** 1990 Apr; 81(4):355–62

Sonographic diagnosis of venocclusive disease of the liver and danazol therapy for autoimmune thrombocytopenia in an autologous marrow transplant patient. Matsuishi E, et al. **Jpn J Clin Oncol** 1990 Jun;20(2):188–92

Lung disease following allogeneic marrow transplantation [letter; comment] Milburn H. **Lancet** 1990 Jan 27; 335(8683):237 Comment on: Lancet 1989 Dec 9;2(8676):1368–9.

Migraine after bone–marrow transplantation [letter] [see comments] Williams AC, et al. **Lancet** 1989 Nov 25; 2(8674):1286–7 Comment in: Lancet 1990 Jan 6;335(8680):57.

A prospective study of airway reactivity before bone marrow transplantation. Krowka MJ, et al. **Mayo Clin Proc** 1990 Jan;65(1):5–12

Secondary cancers after bone marrow transplantation [letter; comment] Lishner M, et al. **N Engl J Med** 1990 Mar 22; 322(12):853 Comment on: N Engl J Med 1989 Sep 21;321(12):784–9.

Inadvertent transmission of a donor's acute myeloid leukemia in bone marrow transplantation for chronic myelocytic leukemia. Niederwieser DW, et al. **N Engl J Med** 1990 Jun 21;322(25):1794–6

Immunomodulatory and antimicrobial efficacy of intravenous immunoglobulin in bone marrow transplantation. Sullivan KM, et al. **N Engl J Med** 1990 Sep 13;323(11):705–12

Infection prevention in bone marrow transplantation and radiation patients. Epstein JB. **NCI Monogr** 1990;(9):73–85 (165 ref.)

Recognition, incidence, and management of oral graft–versus–host disease. Schubert MM, et al. **NCI Monogr** 1990;(9):135–43 (104 ref.)

Polymyositis following autologous bone marrow transplantation in Hodgkin's disease. Schmidley JW, et al. **Neurology** 1990 Jun;40(6):1003–4

Role of PGE1 to prevent veno–occlusive disease of the liver after bone marrow transplantation. Gluckman E, et al. **Nouv Rev Fr Hematol** 1990;32(1):1–3

Treatment of severe cytomegalovirus infection with ganciclovir and high–dose intravenous immunoglobulin in patients with allogeneic bone marrow transplants. A pilot study. Lehn P, et al. **Nouv Rev Fr Hematol** 1990;32(1):17–20

Management of infectious complications of bone marrow transplantation. Wingard JR. **Oncology (Williston Park)** 1990 Feb;4(2):69–75; discussion 76, 81–2 (39 ref.)

An unusual presentation of chronic graft–versus–host disease in an unrelated bone marrow transplantation. LeVeque FG. **Oral Surg Oral Med Oral Pathol** 1990 May;69(5):581–4

Self–administration of morphine in bone marrow transplant patients reduces drug requirement. Hill HF, et al. **Pain** 1990 Feb;40(2):121–9

Toxicity of autologous bone marrow graft infusion. Davis J, et al. **Prog Clin Biol Res** 1990;333:531–40

Catheter–related right–sided endocarditis in bone marrow transplant recipients. Martino P, et al. **Rev Infect Dis** 1990 Mar–Apr;12(2):250–7

Immunodeficiency after allogeneic bone marrow transplantation in man. Effect of phorbol ester (phorbol myristate acetate) and calcium ionophore (A23187) in vitro. Møller J, et al. **Scand J Immunol** 1989 Oct;30(4):441–7

Effects of granulocyte–macrophage colony–stimulating factor in iatrogenic myelosuppression, bone marrow failure, and regulation of host defense. Gutterman J, et al. **Semin Hematol** 1990 Jul;27(3 Suppl 3):15–24 (28 ref.)

Current approaches to the prevention and treatment of cytomegalovirus disease after bone marrow transplantation: an overview. Levin MJ. **Semin Hematol** 1990 Apr;27(2 Suppl 1):1–4; discussion 28–9 (7 ref.)

Fungal infections in bone marrow transplant patients. Meyers JD. **Semin Oncol** 1990 Jun;17(3 Suppl 6):10–3

Difference in onset between cytomegalovirus and idiopathic interstitial pneumonitis following allogeneic bone marrow transplantation for leukemia. Inoue T, et al. **Strahlenther Onkol** 1990 May;166(5):322–5

Cytomegalovirus interstitial pneumonitis in a bone marrow transplant recipient. Liu YC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Oct;88(10):1063–6

Late onset hemorrhagic cystitis after allogeneic bone marrow transplantation. Shieh CC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 May;88(5):508–11

Excessive vulnerability of herpes–infected endothelium to lymphokine–activated lymphocytes: a possible role in lethal viral pneumonitis following bone marrow transplantation. Vercellotti GM, et al. **Trans Assoc Am Physicians** 1988; 101:310–3

The risk of cytomegalovirus infection in solid organ and bone marrow transplant recipients: transfusion of blood products. Hillyer CD, et al. **Transfusion** 1990 Sep;30(7):659–66 (89 ref.)

Acute graft–versus–host disease following bone marrow transplantation in humans: prognostic factors. Advisory Committee of the International Bone Marrow Transplant Registry. Bortin MM. **Transplant Proc** 1987 Feb;19(1 Pt 3):2655–7

Immunodeficiency after transplantation of alloantigen–matched bone marrow from an immunoregulatory mutant. Allen RD, et al. **Transplantation** 1990 Sep;50(3):516–8

Successful treatment of hepatic venoocclusive disease in a bone marrow transplant patient with orthotopic liver transplantation. Nimer SD, et al. **Transplantation** 1990 Apr; 49(4):819–21

[Ophthalmologic complications of bone marrow transplant] Castier P, et al. **Bull Soc Ophtalmol Fr** 1989 Feb;89(2):291–4 **(Fre)**

[Allogeneic skin transplantation in chronic graft–versus–host disease following bone marrow transplantation] Baumeister RG, et al. **Chirurg** 1990 Jun;61(6):438–40 (Eng. Abstr.) **(Ger)**

[Thrombocytopenia after autologous bone marrow transplantation in in acute lymphatic leukemia] Siegert E, et al. **Folia Haematol (Leipz)** 1990;117(2):265–70 (Eng. Abstr.) **(Ger)**

[Factors influencing delayed type graft–versus–host disease after allogeneic bone marrow transplantation] Sueyoshi A. **Nippon Ketsueki Gakkai Zasshi** 1989 May;52(3):630–8 (Eng. Abstr.) **(Jpn)**

[Rejection of allogeneic bone marrow transplant. Case report] Szczylik C, et al. **Pol Arch Med Wewn** 1988 Jan;79(1):30–7 (Eng. Abstr.) **(Pol)**

[Prevention of infection in patients undergoing bone marrow transplantation or chemotherapy: various aspects] Guiot HF, et al. **Antibiot Khimioter** 1990 Apr;35(4):45–9 **(Rus)**

[Graft vs host disease of the skin] Martín Ortega E. **Med Clin (Barc)** 1990 Feb 10;94(5):180–3 **(Spa)**

[Interstitial pneumonia in bone marrow transplantation. Preventive and therapeutic aspects. Our experience and review of the literature] Zabala P, et al. **Sangre (Barc)** 1989 Dec;34(6):489–96 (34 ref.) (Eng. Abstr.) **(Spa)**

ECONOMICS

Cost effectiveness of bone marrow transplantation [letter; comment] N **Engl J Med** 1990 Mar 8;322(10):702–3 Comment on: N Engl J Med 1989 Sep 21;321(12):807–12.

IMMUNOLOGY

Lymphocytes after autologous and allogenic bone marrow transplantation. Nonoyama S, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Aug;31(4):469–75

Sequential analysis of distributions of donor–derived thymocytes bearing T–cell antigen receptor (TCR) and donor–derived Ia+ cells in thymuses of fully allogeneic bone marrow chimera in mice. Hatakeyama S, et al. **Acta Pathol Jpn** 1990 Jun;40(6):391–401

The pathogenesis of graft–versus–host reaction in the intrahepatic bile duct. An immunohistochemical study. Tanaka M, et al. **Acta Pathol Jpn** 1989 Oct;39(10):648–55

Detection of engraftment and chimerism after bone marrow transplantation by in situ hybridization using a Y–chromosome specific probe. Agematsu K, et al. **Am J Hematol** 1990 Apr;33(4):255–60

T–cell–depleted autologous bone marrow transplantation therapy: analysis of immune deficiency and late complications. Anderson KC, et al. **Blood** 1990 Jul 1; 76(1):235–44

Risk factors for chronic graft–versus–host disease after HLA–identical sibling bone marrow transplantation. Atkinson K, et al. **Blood** 1990 Jun 15;75(12):2459–64

Pretreatment of murine donor grafts with L–leucyl–L–leucine methyl ester: elimination of graft–versus–host disease without detrimental effects on engraftment. Blazar BR, et al. **Blood** 1990 Feb 1; 75(3):798–805

Enhanced resistance of bone marrow transplanted mice to bacterial infection induced by recombinant granulocyte–macrophage colony–stimulating factor. Bleiberg I, et al. **Blood** 1990 Mar 15;75(6):1262–6

Graft failure after T–cell–depleted human leukocyte antigen identical marrow transplants for leukemia: II. In vitro analyses of host effector mechanisms. Bordignon C, et al. **Blood** 1989 Nov 1;74(6):2237–43

Allogeneic mixed lymphocyte reactions during a second round of ontogeny: normal accessory cells did not restore defective interleukin–2 (IL–2) synthesis in T cells but induced responsiveness to exogeneous IL–2. Cayeux S, et al. **Blood** 1989 Nov 1;74(6):2278–84

Prevention of transfusion–induced graft–versus–host disease in dogs by ultraviolet irradiation. Deeg HJ, et al. **Blood** 1989 Nov 15;74(7):2592–5

Third–party–mediated graft rejection and graft–versus–host disease after T–cell–depleted bone marrow transplantation, as demonstrated by hypervariable DNA probes and HLA–DR polymorphism. Drobyski W, et al. **Blood** 1989 Nov 1;74(6):2285–94

Graft–versus–leukemia reactions after bone marrow transplantation. Horowitz MM, et al. **Blood** 1990 Feb 1; 75(3):555–62

Studies on transfer of varicella–zoster–virus specific T–cell immunity from bone marrow donor to recipient. Kato S, et al. **Blood** 1990 Feb 1;75(3):806–9

Graft failure after T–cell–depleted human leukocyte antigen identical marrow transplants for leukemia: I. Analysis of risk factors and results of secondary transplants. Kernan NA, et al. **Blood** 1989 Nov 1;74(6):2227–36

Low incidence of acute graft–versus–host disease by the

administration of methotrexate and cyclosporine in Japanese leukemia patients after bone marrow transplantation from human leukocyte antigen compatible siblings; possible role of genetic homogeneity. The Nagoya Bone Marrow Transplantation Group. Morishima Y, et al. **Blood** 1989 Nov 1;74(6):2252–6

Anti–B–cell monoclonal antibody–purged autologous bone marrow transplantation for B–cell non–Hodgkin's lymphoma: phenotypic reconstitution and B–cell function. Pedrazzini A, et al. **Blood** 1989 Nov 1;74(6):2203–11

Monoclonal antibody T–cell–depleted HLA–haploidentical bone marrow transplantation for Wiskott–Aldrich syndrome. Rumelhart SL, et al. **Blood** 1990 Feb 15; 75(4):1031–5

An antibody that facilitates hematopoietic engraftment recognizes CD44. Sandmaier BM, et al. **Blood** 1990 Aug 1;76(3):630–5

Immunoglobulin G subclass deficiency and pneumococcal infection after allogeneic bone marrow transplantation. Sheridan JF, et al. **Blood** 1990 Apr 1;75(7):1583–6

Reconstitution of T–cell function after CD6–depleted allogeneic bone marrow transplantation. Soiffer RJ, et al. **Blood** 1990 May 15;75(10):2076–84

Specific recognition of human leukemic cells by allogeneic T cells: II. Evidence for HLA–D restricted determinants on leukemic cells that are crossreactive with determinants present on unrelated nonleukemic cells. Sosman JA, et al. **Blood** 1990 May 15;75(10):2005–16

What role for prednisone in prevention of acute graft–versus–host disease in patients undergoing marrow transplants? Storb R, et al. **Blood** 1990 Sep 1;76(5):1037–45

Cell–type–specific cytotoxicity of anti–CD4 and anti–CD8 ricin immunotoxins against human alloreactive T–cell clones. Uckun FM, et al. **Blood** 1989 Nov 15;74(7):2445–54

A fixed low number of T cells in HLA–identical allogeneic bone marrow transplantation. Verdonck LF, et al. **Blood** 1990 Feb 1;75(3):776–80

Development of immunologic functions after bone marrow transplantation in 33 patients with severe combined immunodeficiency. Wijnaendts L, et al. **Blood** 1989 Nov 1;74(6):2212–9

Bone marrow transplantation utilizing HLA–matched unrelated marrow donors. Gajewski J, et al. **Blood Rev** 1990 Jun;4(2):132–8 (72 ref.)

Clearance of severe psoriasis after allogenic bone marrow transplantation. Eedy DJ, et al. **BMJ** 1990 Apr 7; 300(6729):908

Bone marrow transplantation across major histocompatibility barriers in rabbits. I. A positive role for graft–versus–host reactivity in engraftment. Adler LT, et al. **Bone Marrow Transplant** 1990 Jan;5(1):51–6

Graft versus host disease—clinical features and biology. Barrett AJ. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:18–21 (24 ref.)

A comparison of DNA–RFLP typing with serology and mixed lymphocyte reaction in the selection of matched unrelated bone marrow donors. Clay TM, et al. **Bone Marrow Transplant** 1989 Sep;4(5):493–7

Graft–versus–leukemia activity after T–cell depletion using counterflow centrifugation. de Witte T, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:103–5 (18 ref.)

Graft–versus–leukemia in bone marrow transplantation. The Advisory Committee of the International Bone Marrow Transplant Registry. Gale RP, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:94–7

Treatment of leukemia by marrow transplantation from HLA incompatible donors. Effect of HLA–disparity on GVHD, relapse and survival. Hansen JA, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:108–11

Bone marrow transplantation from donors other than HLA identical siblings. What have we learned from previous experiences? Hervé P, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:112–4

Autoantibody analysis in chronic graft–versus–host disease. Holmes JA, et al. **Bone Marrow Transplant** 1989 Sep; 4(5):529–31

The use of polymerase chain reaction (PCR) gene amplification and synthetic oligonucleotide probes for HLA–DP typing in bone marrow transplantation [letter] Howell WM, et al. **Bone Marrow Transplant** 1990 Jan; 5(1):66–7

Failure of anti–MHC antibodies to prevent GVHD in DLA mismatched unrelated canine marrow recipients. Ladiges WC, et al. **Bone Marrow Transplant** 1990 Jan;5(1):43–6

Development of tolerance to donor type and host type H–2 antigens following transplantation of allogeneic bone marrow in mice. Levite M, et al. **Bone Marrow Transplant** 1990 Jul;6(1):37–44

Restriction fragment length polymorphism analysis with a cross–reactive HLA class II DR–beta gene probe for the detection of engraftment of MHC–mismatched marrow in the rhesus monkey. Moses RD, et al. **Bone Marrow Transplant** 1989 Sep;4(5):475–81

Comparative effects of various T cell subtypes on GVHD in a murine model for MHC–matched unrelated donor transplant. OKunewick JP, et al. **Bone Marrow Transplant** 1990 Mar;5(3):145–52

The significance of immunological monitoring after allogeneic bone marrow transplantation. Pavletić Z, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:111

Mixed lymphocyte cultures using automated blood cell counters. Poulter L, et al. **Bone Marrow Transplant** 1989 Nov;4(6):659–62

Pharmacokinetics of cytomegalovirus specific IgG antibody following intravenous immunoglobulin in bone marrow transplant patients. Rand KH, et al. **Bone Marrow Transplant** 1989 Nov;4(6):679–83

Early induction of immune resistance against leukemia in lethally total body irradiated mice reconstituted with syngeneic bone marrow cells obtained from previously immunized donor mice. Skorski T, et al. **Bone Marrow Transplant** 1990 Jan;5(1):23–7

HLA–identical marrow transplantation in the leukemias without T–cell depletion. The Seattle Marrow Transplant Team. Storb R, et al. **Bone Marrow Transplant** 1990 Jul; 6 Suppl 1:80–4 (37 ref.)

Suppressive activity in recipients of non–T cell–depleted allogeneic bone marrow transplants: role of T cell–depleted syngeneic marrow. Sykes M. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:30–3

Cyclosporine–induced graft–versus–host disease following autologous bone marrow transplantation in acute myeloid leukaemia. Talbot DC, et al. **Bone Marrow Transplant** 1990 Jul;6(1):17–20

Autoimmune thyroiditis after bone marrow transplantation. Wyatt DT, et al. **Bone Marrow Transplant** 1990 May; 5(5):357–61

Increased numbers of CD8+CD11+, CD8+CD11– and CD8+Leu7+ cells in patients with chronic graft–versus–host disease after allogeneic bone marrow transplantation. Yabe H, et al. **Bone Marrow Transplant** 1990 May;5(5):295–300

Adoptive transfer of hyperthyroidism and autoimmune thyroiditis following allogeneic bone marrow transplantation for chronic myeloid leukaemia. Aldouri MA, et al. **Br J Haematol** 1990 Jan;74(1):118–9

Cytokine activity after human bone marrow transplantation. III. Defect in IL2 production by peripheral blood mononuclear cells is not corrected by stimulation with Ca++ ionophore plus phorbol ester. Cooley MA, et al. **Br J Haematol** 1989 Nov;73(3):341–7

Histocompatibility antigen DR4 is associated with chronic graft–versus–host disease in the south Wales population [letter] Holmes JA, et al. **Br J Haematol** 1989 Nov;73(3):424

Characterization of effector cells of graft vs leukemia following allogeneic bone marrow transplantation in mice inoculated with murine B–cell leukemia. Weiss L, et al. **Cancer Immunol Immunother** 1990;31(4):236–42

Lymphokine–activated killer function following autologous bone marrow transplantation for refractory hematological malignancies. Higuchi CM, et al. **Cancer Res** 1989 Oct 15; 49(20):5509–13

Induction of linked suppression in addition to the donor H–2 class I–specific unresponsiveness in recipient T cells by transfusing class I plus class II–disparate, but not class I alone–disparate, bone marrow cells. Muraoka S. **Cell Immunol** 1990 Jun;128(1):261–76

Prevention of GVHD by modulation of rat bone marrow with UV–B irradiation: II. Kinetics of migration of UV–B–irradiated bone marrow cells in naive and lethally irradiated rats. Oluwole SF, et al. **Cell Immunol** 1990 Jun; 128(1):289–300

In vitro and in vivo analysis of bone marrow–derived CD3+, CD4–, CD8–, NK1.1+ cell lines. Sykes M, et al. **Cell Immunol** 1990 Sep;129(2):478–93

A preliminary study of serum class II levels in healthy individuals and bone–marrow transplant patients. Thompson S, et al. **Clin Chim Acta** 1989 Oct 31; 185(1):45–52

IgG subclass levels and immune reconstitution after T cell–depleted allogeneic bone marrow transplantation. Kelsey SM, et al. **Clin Exp Immunol** 1990 Jun;80(3):409–12

Tolerance induction in the adult using monoclonal antibodies to CD4, CD8, and CD11a (LFA–1). Waldmann H, et al. **Cold Spring Harb Symp Quant Biol** 1989;54 Pt 2:885–92

Immunobiology of bone marrow transplantation: studies using scid mice. Murphy WJ, et al. **Curr Top Microbiol Immunol** 1989;152:251–8

Transplantation analysis of B cell destruction in (NOD x CBA)F1 mouse bone marrow chimeras. Serreze DV, et al. **Diabetologia** 1990 Feb;33(2):84–92

Prevention of infection and graft–versus–host disease by suppression of intestinal microflora in children treated with allogeneic bone marrow transplantation. Vossen JM, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jan;9(1):14–23

Splenopentin (DAc SP–5)–accelerated reconstitution of antibody formation after syngeneic bone marrow transplantation. Eckert R, et al. **Exp Clin Endocrinol** 1989 Sep;94(1–2):219–22

Antibody to blood group glycosyltransferases in a patient transplanted with an ABO incompatible bone marrow. Kominato Y, et al. **Exp Clin Immunogenet** 1990;7(2):85–90

Abnormally expanded CD8+/Leu–7+ lymphocytes persisting in long–term bone marrow–transplanted patients are resting pre–cytotoxic T–lymphocytes. Leroy E, et al. **Exp Hematol** 1990 Aug;18(7):770–4

Characteristics of engraftment after repeated autologous bone marrow transplantation. van Besien K, et al. **Exp Hematol** 1990 Aug;18(7):785–8

Recovery of haemopoiesis and the immune system after ABMT. de Gast GC, et al. **Folia Haematol (Leipz)** 1989; 116(3–4):531

Plasma exchange for removal of anti–A and anti–B group antibodies in AB0 major–incompatible bone marrow transplantation. Haustein B, et al. **Folia Haematol (Leipz)** 1989;116(3–4):463–7

Improved survival following HLA–incompatible bone marrow transplantation. Munich Cooperative Group of Bone Marrow Transplantation. Kolb HJ, et al. **Folia Haematol (Leipz)** 1989;116(3–4):421–5

Transplantation of major AB0–incompatible bone marrow: removal of red cells by dextrane sedimentation. Müller A, et al. **Folia Haematol (Leipz)** 1989;116(3–4):475–9

Regeneration of lymphocyte subpopulations after bone marrow transplantation: a study with monoclonal antibodies of the BL–series. Pönisch W, et al. **Folia Haematol (Leipz)** 1989;116(3–4):527–30

Kinetic of the antibody titers to tetanus toxoid (TT), diphtheria toxoid (DT), measles virus, poliomyelitis virus and S. pneumoniae after marrow grafting. Prager J, et al. **Folia Haematol (Leipz)** 1989;116(3–4):533–40

Histocompatibility and bone marrow transplantation (BMT). Richter KV. **Folia Haematol (Leipz)** 1989;116(3–4):445–50 (11 ref.)

Immune recovery following bone marrow transplantation. Schwenke H, et al. **Folia Haematol (Leipz)** 1989; 116(3–4):509–18

Immunoreconstitution after human bone marrow transplantation. Zintl F, et al. **Folia Haematol (Leipz)** 1989; 116(3–4):519–26

Kinetics of anti–CMV antibodies after administration of intravenous immunoglobulins to bone marrow transplant recipients. Bosi A, et al. **Haematologica** 1990 Mar–Apr; 75(2):109–12

Role of cytokines and major histocompatibility complex antigens in graft–versus–host disease: in vitro studies using T–cell lines and keratinocytes or hemopoietic targets. Huber C, et al. **Hamatol Bluttransfus** 1990;33:652–4

Toward improvement of therapeutic strategies in leukemia by amplification of the immune responses against leukemia. Slavin S, et al. **Hamatol Bluttransfus** 1990;33:36–40

Marrow transplantation from donors other than HLA identical siblings. Beatty PG, et al. **Hematol Oncol Clin North Am** 1990 Jun;4(3):677–86 (48 ref.)

The HLA system in clinical marrow transplantation. Hansen JA, et al. **Hematol Oncol Clin North Am** 1990 Jun; 4(3):507–15 (22 ref.)

Immune recovery after bone marrow transplantation. Lum LG. **Hematol Oncol Clin North Am** 1990 Jun;4(3):659–75 (163 ref.)

In vivo administration of cytokine in allogeneic bone marrow chimeras. Imamura M, et al. **Immunobiology** 1990 Jun; 180(4–5):441–57

Establishment of a novel method to induce tolerance in adult mice across fully allogeneic (entire H–2 plus multiminor histocompatibility) antigen barriers, using supralethal irradiation followed by injection of syngeneic bone marrow cells plus (donor X recipient) F1 spleen cells. Tomita Y, et al. **Immunobiology** 1989 Jun;179(2–3):214–29

Evidence for differentiation of NK1+ cells into cytotoxic T cells during acute rejection of allogeneic bone marrow grafts. Dennert G, et al. **Immunogenetics** 1990;31(3):161–8

Positive selection of hematopoietic progenitors from marrow and peripheral blood for transplantation. Besinger WI, et al. **J Clin Apheresis** 1990;5(2):74–6

Successful bone marrow transplantation with split lymphoid chimerism in DiGeorge syndrome. Borzy MS, et al. **J Clin Immunol** 1989 Sep;9(5):386–92

Antibacterial polysaccharide antibody deficiency after allogeneic bone marrow transplantation. Quinti I, et al. **J Clin Immunol** 1990 May;10(3):160–6

Age–related factors in cyclosporine–induced syngeneic graft–versus–host disease: regulatory role of marrow–derived T lymphocytes. Fischer AC, et al. **J Exp Med** 1990 Jul 1;172(1):85–94

Effects of transplantation on the primitive immunohematopoietic stem cell. Harrison DE, et al. **J Exp Med** 1990 Aug 1;172(2):431–7

Generation and characterization of IL–2–activated bone marrow cells as a potent graft vs tumor effector in transplantation. Agah R, et al. **J Immunol** 1989 Nov 1; 143(9):3093–9

An absence of T cells in murine bone marrow allografts leads to an increased susceptibility to rejection by natural killer cells and T cells. Murphy WJ, et al. **J Immunol** 1990 May 1;144(9):3305–11

Induction of tolerance to parental marrow grafts in F1 hybrid mice. Evidence for recognition of self–antigens. Nowicki M, et al. **J Immunol** 1990 Jan 1;144(1):47–52

Both ongoing suppression and clonal elimination contribute to graft–host tolerance after transplantation of HLA mismatched T cell–depleted marrow for severe combined immunodeficiency. Rosenkrantz K, et al. **J Immunol** 1990 Mar 1;144(5):1721–8

Host natural suppressor activity regulates hemopoietic engraftment kinetics in antibody–conditioned recipient mice. Sadelain MW, et al. **J Immunol** 1990 Mar 1; 144(5):1729–36

Requirements for the adoptive transfer of antibody responses to a priming antigen in man. Wimperis JZ, et al. **J Immunol** 1990 Jan 15;144(2):541–7

Bone marrow–derived cells are essential for intrathymic deletion of self–reactive T cells in both the host– and donor–derived thymocytes of fully allogeneic bone marrow chimeras. Yoshikai Y, et al. **J Immunol** 1990 Jul 15;

145(2):505–9
Response to tetanus toxoid immunization after allogeneic bone marrow transplantation. Ljungman P, et al. **J Infect Dis** 1990 Aug;162(2):496–500
Diagnostic open-lung biopsy after bone marrow transplantation. Snyder CL, et al. **J Pediatr Surg** 1990 Aug; 25(8):871–6; diacussion 876–7
Clonal deletion: a mechanism of tolerance in mixed bone marrow chimeras. Yu JC, et al. **J Surg Res** 1990 Jun; 48(6):517–22
Induction of a syngeneic graft-versus-leukemia effect following bone marrow transplantation for chronic myeloid leukemia. Mackinnon S, et al. **Leukemia** 1990 Apr; 4(4):287–91
Interleukin-2 after autologous bone marrow transplantation as consolidative immunotherapy against minimal residual disease. Bosly A, et al. **Nouv Rev Fr Hematol** 1990; 32(1):13–6
Discovery of new immune cells reveals reason for rejection of bone marrow grafts [news] **Oncology (Williston Park)** 1990 Apr;4(4):132, 137
A tribute; and some personal reflections on the trials and tribulations of an immunological research project. Brent L. **Pol Arch Med Wewn** 1988 Aug–Sep;80(2–3):124–7
Thymus: a direct target tissue in graft-versus-host reaction after allogeneic bone marrow transplantation that results in abrogation of induction of self-tolerance. Fukushi N, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6301–5
Enhancement of bone marrow allografts from nude mice into mismatched recipients by T cells void of graft-versus-host activity. Lapidot T, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4595–9
Interleukin 2 prevents graft-versus-host disease while preserving the graft-versus-leukemia effect of allogeneic T cells. Sykes M, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5633–7
Regression of adjuvant-induced arthritis in rats following bone marrow transplantation. van Bekkum DW, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10090–4
Bone marrow purging and processing. Proceedings of the Second International Symposium on Bone Marrow Purging and Processing. Cancun, Mexico, April 27 and 28, 1989. **Prog Clin Biol Res** 1990;333:1–549
Use of hemapheresis techniques in the management of major ABO incompatible bone marrow transplantation. Bussel A, et al. **Prog Clin Biol Res** 1990;337:107–13
Antifungal prophylaxis in bone marrow transplantation. Milliken ST, et al. **Rev Infect Dis** 1990 Mar–Apr;12 Suppl 3:S374–9 (49 ref.)
Improved survival in marrow recipients above 30 years of age with better prevention of graft-versus-host disease. Aschan J, et al. **Transplant Proc** 1990 Feb;22(1):195–7
Clinical correlations with cyclosporine blood levels after allogeneic bone marrow transplantation: an analysis of four different assays. Atkinson K, et al. **Transplant Proc** 1990 Jun;22(3):1331–4
Dominant role of Mlsa antigens in the induction of unresponsiveness to non-H-2 antigens. Berumen L, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):506–7
Increased HLA-DR compatibility between patients with acute myeloid leukemia and their parents: implication for bone marrow transplantation. Carpentier NA, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2644–5
Bone marrow transplantation for leukemia: effects of T lymphocyte depletion of donor bone marrow. Champlin R. **Transplant Proc** 1987 Feb;19(1 Pt 1):157–9
A murine model for pharmacological marrow purging. Copelan EA, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2754–5
Lymphocyte reconstitution in children receiving soybean agglutinin T-depleted bone marrow transplants. Cowan MJ, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2744
Serological, cellular, and molecular biology HLA typing methods for selection of unrelated bone marrow donors. al Daccak R, et al. **Transplant Proc** 1990 Aug;22(4):1913–4
Cyclosporine-induced graft vs host disease in two patients receiving syngeneic bone marrow transplants. Dale BM, et al. **Transplant Proc** 1989 Oct;21(5):3816–7
A CD48 monoclonal antibody for reduction of graft immunogenicity. Dreger P, et al. **Transplant Proc** 1990 Aug;22(4):1930
DNA restriction fragment length analysis of the human class II genes (DR,DQ) of bone marrow transplant donor-recipient pairs by DNA-DNA hybridization. Gaidulis L, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2636–8
Demonstration of strong classic immune reactivity after total-body irradiation for bone marrow transplantation. Implications for human T-depleted bone marrow transplantation. Gassmann W, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2687–8
Augmentation by donor bone marrow of the survival of neonatal skin transplants to ALS-treated recipients. Gozzo JJ, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):470–1
Herpes virus immunity and acute graft-versus-host disease. Gratama JW, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2680–2
Transplantation of T cell-depleted bone marrow in histoincompatible rabbits: improved engraftment and long-term chimeras after the addition of irradiated donor buffy coat cells and irradiated autologous cryopreserved bone marrow. Gratwohl A, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2756–7
Specific tolerance to canine renal allografts following treatment with fractionated bone marrow and antilymphocyte serum. Hartner WC, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):476–7
Fibronectin restores defective in vitro proliferation of lymphocytes from patients after marrow grafting. Klingemann HG, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2646–7
Hyperfractionation of total-body irradiation and engraftment of marrow from DLA-haploidentical littermates. Lösslein LK, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2707–8
Immunogenetic analysis of fully allogeneic rat bone marrow transplantation. Marquarding E, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2715–7
Haploidentical bone marrow transplantation using soybean agglutinin-processed, T-depleted marrow. Matthay K, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2678–9
Predisposing factors for development of oral lesions after allogeneic bone marrow transplantation. Mattsson T, et al. **Transplant Proc** 1990 Feb;22(1):210
HLA-DP matching in allogeneic bone marrow transplantation. Pawelec G, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 3):2741–3
Suppression of donor lymphocyte reactivity by pretreatment with recipient type UV-irradiated blood. Polijak-Blaži M, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):944–5
T cell depletion in allogeneic bone marrow transplantation. Prentice HG. **Transplant Proc** 1987 Feb;19(1 Pt 1):155–6
Role of radiation-resistant large granular lymphocytes in the rejection of unrelated DLA-nonidentical marrow grafts in dogs. Raff RF, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2718–20
Characteristics and functions of inflammatory cells isolated from acute graft-versus-host disease target organs after bone marrow transplantation in the rat. Renkonen R, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2689
Acute graft-versus-host disease and slow marrow recovery after transplantation of OKT8-positive T cell-depleted marrow from an HLA mismatched related donor. Kanazawa Bone Marrow Transplantation Team. Shiobara S, et al. **Transplant Proc** 1990 Feb;22(1):257–9
Ex vivo depletion of human bone marrow T lymphocytes by soybean lectin fractionation followed by treatment with an anti-pan-T cell (CD5) ricin A- chain immunotoxin. Siena S, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2735–7
Allogeneic bone marrow transplantation without graft-v-host disease: true tolerance of graft against the host through depletion of donor T lymphocytes pregrafting in malignant and nonmalignant disorders. Slavin S, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2614–5
Cyclosporine treatment of chronic graft-versus-host disease following allogeneic bone marrow transplantation. Sullivan KM, et al. **Transplant Proc** 1990 Jun;22(3):1336–8 (27 ref.)
Japanese conference on cyclosporine blood level monitoring. Takagi H, et al. **Transplant Proc** 1990 Jun;22(3):1224–5
Comparison of the effect of total body and total lymphoid irradiation on bone marrow engraftment in MHC-matched dogs. Taylor RM, et al. **Transplant Proc** 1989 Oct; 21(5):3820–1
Transplantation tolerance following conditioning with C1q-affinity anti-Thy-1 monoclonal antibodies. Thierfelder S, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):459–61
Which bone marrow transplant recipients are at risk of acquiring life-threatening fungal infections? Tollemar J, et al. **Transplant Proc** 1990 Feb;22(1):208–9
Synergy between injection of F1 spleen cells and thymectomy on maintenance of skin allograft tolerance in adult recipient mice treated with supralethal irradiation followed by syngeneic bone marrow cell transplantation. Tomita Y, et al. **Transplant Proc** 1990 Feb;22(1):251–6
Transfer of B memory cells to a T-dependent antigen in murine bone marrow transplantation. Tsuberi B, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2747–9
French multicentre study: comparison of two specific and four nonspecific methods for Sandimmune (cyclosporine) blood and plasma (separated at 37 degrees C or at 22 degrees C) monitoring. Vernillet L, et al. **Transplant Proc** 1990 Jun;22(3):1218–23
UVB-irradiated bone marrow allografts in rats: induction of unresponsiveness for long-term heart allografts without GVHD. Wasfie T, et al. **Transplant Proc** 1990 Aug; 22(4):2011–2
Ia-positive donor-specific bone marrow cells prolong renal allografts in dogs treated with fractionated lymphoid irradiation. Watanabe K, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 1):632–4
Pharmacokinetic and pharmacodynamic studies of cyclosporine in bone marrow transplantation. Yee GC. **Transplant Proc** 1990 Jun;22(3):1327–30 (31 ref.)
Development of IgA deficiency after bone marrow transplantation. The influence of acute and chronic graft-versus-host disease. Abedi MR, et al. **Transplantation** 1990 Sep;50(3):415–21
Six weeks of continuous intravenous cyclosporine and short-course methotrexate as prophylaxis for acute graft-versus-host disease after allogeneic bone marrow transplantation. Beelen DW, et al. **Transplantation** 1990 Sep;50(3):421–7
UVB pretreatment of rat bone marrow allografts. Prevention of GVHD and induction of allochimerism and donor-specific unresponsiveness. Chabot JA, et al. **Transplantation** 1990 May;49(5):886–9
Changing of hepatitis B virus markers in patients with bone marrow transplantation. Chen PM, et al. **Transplantation** 1990 Apr;49(4):708–13
T cell depletion with anti-CD5 immunotoxin in histocompatible bone marrow transplantation. The correlation between residual CD5 negative T cells and subsequent graft-versus-host disease. Filipovich AH, et al. **Transplantation** 1990 Sep;50(3):410–5
Prospective study of the occurrence of monoclonal gammapathies following bone marrow transplantation in young children. Fischer AM, et al. **Transplantation** 1990 Apr;49(4):731–5
Diagnosis of graft-versus-host disease in mice transplanted across minor histocompatibility barriers. Fontaine P, et al. **Transplantation** 1990 Jun;49(6):1177–9
Bone marrow transplantation using unrelated donors for patients with advanced leukemia or bone marrow failure. Gajewski JL, et al. **Transplantation** 1990 Aug;50(2):244–9
Serological and molecular studies of Epstein-Barr virus infection in allogeneic marrow graft recipients. Gratama JW, et al. **Transplantation** 1990 Apr;49(4):725–30
Unrelated donor marrow transplantation between 1977 and 1987 at four centers in the United Kingdom. Howard MR, et al. **Transplantation** 1990 Mar;49(3):547–53
Cardiac allograft survival across major histocompatibility complex barriers in the rhesus monkey following T lymphocyte-depleted autologous marrow transplantation. III. Late allograft rejection. Moses RD, et al. **Transplantation** 1989 Nov;48(5):769–73
Cardiac allograft survival across major histocompatibility complex barriers in the rhesus monkey following T lymphocyte-depleted autologous marrow transplantation. IV. Immune reconstitution. Moses RD, et al. **Transplantation** 1989 Nov;48(5):774–81
Antilymphocytic antibodies and bone marrow transplantation. XI. Evidence that reduced Thy-1 expression in Thy-1.1 mice prevents suppression of graft-versus-host disease with anti-Thy-1 monoclonal antibodies. Mysliwietz J, et al. **Transplantation** 1990 Apr; 49(4):749–55
Graft rejection by cytolytic T cells. Specificity of the effector mechanism in the rejection of allogeneic marrow. Nakamura H, et al. **Transplantation** 1990 Feb;49(2):453–8
Interleukin 2 enhancement of veto suppressor cell function in T-cell-depleted bone marrow in vitro and in vivo. Nakamura H, et al. **Transplantation** 1990 May;49(5):931–7
Predictive strength of mixed lymphocyte cultures for acute graft-versus-host disease in patients transplanted with HLA-identical sibling bone marrow. Pawelec G, et al. **Transplantation** 1989 Nov;48(5):890–1
Hemopoietic histocompatibility (Hh-1) regulatory and structural genes of the f haplotype map to H-2. Rembecki RM, et al. **Transplantation** 1990 Mar;49(3):633–8
Comparative analysis of in vivo T cell depletion with radiotherapy, combination chemotherapy, and the monoclonal antibody Campath-1G, using limiting dilution methodology. Theobald M, et al. **Transplantation** 1990 Mar; 49(3):553–9
Deficient T cell granulocyte-macrophage colony stimulating factor production in allogeneic bone marrow transplant recipients. Thomas S, et al. **Transplantation** 1990 Apr; 49(4):703–8
Evidence that anti-LFA-1 in vivo improves engraftment and survival after allogeneic bone marrow transplantation. van Dijken PJ, et al. **Transplantation** 1990 May;49(5):882–6
Soluble HLA class I concentrations and GVHD after allogeneic marrow transplantation. Westhoff U, et al. **Transplantation** 1989 Nov;48(5):891–3
Serum 5'nucleotidase and alkaline phosphatase--highly predictive liver function tests for the diagnosis of graft-versus-host disease in bone marrow transplant recipients. Yasmineh WG, et al. **Transplantation** 1989 Nov; 48(5):809–14
[Immunologic monitoring of bone marrow transplantation. Experience with 16 cases] Májský A, et al. **Vnitr Lek** 1990 Apr;36(4):318–23 (Eng. Abstr.) **(Cze)**
[Therapeutic intensification with bone marrow autografting in adults] Symann M, et al. **Pathol Biol (Paris)** 1989 Nov; 37(9):969–72 **(Fre)**
[Serum immunoglobulin concentrations in patients following bone marrow transplantation and preventive administration of high-dose nonspecific or normal-dose CMV-specific immunoglobulin] Berger C, et al. **Beitr Infusionther** 1989; 24:112–21 (Eng. Abstr.) **(Ger)**
[Initial experiences with pentamidine aerosol in prevention of Pneumocystis carinii pneumonia following bone marrow transplantation] Link H, et al. **Med Klin** 1990 Apr;85 Suppl 2:288–90 (Eng. Abstr.) **(Ger)**
[Immunological studies in experimental bone marrow transplantation] Onoe K. **Gan No Rinsho** 1989 May;Spec No:279–86 (29 ref.) **(Jpn)**
[Alloreactivity and mitogen-induced responses in allogeneic murine bone marrow chimeras] Fujimoto H. **Nippon Ketsueki Gakkai Zasshi** 1989 Aug;52(5):858–68 (Eng. Abstr.) **(Jpn)**
[Flow cytometric analysis of T lymphocyte subsets after human bone marrow transplantation using monoclonal antibodies and dual immunofluorescence] Matsue K, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 May;52(3):659–64 (Eng. Abstr.) **(Jpn)**

[Biology of bone marrow transplantation--from radiation protection to life sciences] Sado T. **Radioisotopes** 1990 Mar; 39(3):114–23 (28 ref.) **(Jpn)**

[Antigen-specific antibody response in allogeneic bone marrow transplantation patients: in vivo and in vitro antibody production after the primary immunization with tetanus toxoid. Kanazawa University Bone Marrow Transplantation Team] Otsuka M, et al. **Rinsho Ketsueki** 1990 Mar;31(3):301–7 (Eng. Abstr.) **(Jpn)**

[Skin changes in GVHD] Górkiewicz-Petkow A, et al. **Przegl Dermatol** 1988 Nov–Dec;75(6):460–6 (22 ref.) **(Pol)**

[Bone marrow transplantation (immunology, immunosuppression)] Shabalin VN, et al. **Gematol Transfuziol** 1989 Aug;34(8):28–34 (Eng. Abstr.) **(Rus)**

[DNA polymorphisms as implant markers in allogeneic bone marrow transplantation. Preliminary evaluation] Brunet S, et al. **Med Clin (Barc)** 1989 Dec 16;93(20):765–71 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

A new filtration system for bone marrow transplantation. Clinical and laboratory studies. Paolucci P, et al. **Am J Pediatr Hematol Oncol** 1989 Winter;11(4):424–8

METHODS

Bone marrow transplantation in Polish conditions. Method for removal of red cells from the transplant in the case of major blood group incompatibility. Wiktor-Jędrzejczak W, et al. **Arch Immunol Ther Exp (Warsz)** 1989; 37(3–4):261–7

Unrelated donor bone marrow transplantation. Current concepts and future prospects. Hows JM. **Beitr Infusionther** 1989;24:172–9 (9 ref.)

Stem cell delivery vehicle. Caplan AI. **Biomaterials** 1990 Jul; 11:44–6 (6 ref.)

GM–CSF administration after transplantation of purged autologous marrow [letter; comment] Januszewicz EH. **Blood** 1990 Jan 1;75(1):319–20 Comment on: Blood 1989 Feb 15;73(3):849–57.

Bone marrow graft engineering by counterflow centrifugal elutriation: results of a phase I–II clinical trial. Wagner JE, et al. **Blood** 1990 Mar 15;75(6):1370–7

Cryopreservation of marrow cells for ABMT. Is there any effect on the harvested leukaemic cells? Alessandrino EP, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:81–4 (24 ref.)

Hemopoietic reconstitution after repeated autologous transplantation with mafosfamide–purged marrow. Beaujean F, et al. **Bone Marrow Transplant** 1989 Sep; 4(5):537–41

Bone marrow transplantation following busulfan and cyclophosphamide for acute myelogenous leukemia. Crilley P, et al. **Bone Marrow Transplant** 1990 Mar;5(3):187–91

In vitro chemosensitivity of leukemic progenitor cells (AML–CFU) to a combination of mafosfamide lysine (ASTA–Z 7654) and etoposide (VP16–213). Deconinck E, et al. **Bone Marrow Transplant** 1990 Jan;5(1):13–8

Monoclonal antibody purging and autologous bone marrow transplantation in acute myelogenous leukemia in complete remission. De Fabritiis P, et al. **Bone Marrow Transplant** 1989 Nov;4(6):669–74

Options and limitations of long-term oral ciprofloxacin as antibacterial prophylaxis in allogeneic bone marrow transplant recipients. De Pauw BE, et al. **Bone Marrow Transplant** 1990 Mar;5(3):179–82

Bone marrow purging by a xanthine oxidase-antibody conjugate. Dinota A, et al. **Bone Marrow Transplant** 1990 Jul;6(1):31–6

Elimination of antibodies by plasma exchange in ABO incompatible bone marrow transplantation. Gašparović V, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:109

Elimination of T cells from human bone marrow and peripheral blood by means of E-rosettes and density gradient centrifugation. Jankovic MB, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:110

Relative efficiency of leukemic cell depletion using anti-murine-IgG1(Fc) or anti-murine-IgG coated immunomagnetic microbeads. Janssen WE, et al. **Bone Marrow Transplant** 1990 Jan;5(1):19–22

New conditioning regimens for high risk marrow transplants. Jones RJ, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:15–7

The use of locus-specific minisatellite probes to check engraftment following allogeneic bone marrow transplantation for severe combined immunodeficiency disease. Katz F, et al. **Bone Marrow Transplant** 1990 Mar; 5(3):199–204

T cell depletion from human bone marrow using magnetic beads. Knobloch C, et al. **Bone Marrow Transplant** 1990 Jul;6(1):21–4

Total body irradiation with or without lung shielding for allogeneic bone marrow transplantation. Labar B, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:108

Autologous bone marrow transplantation in patients with AML in first complete remission. Results of two different conditioning regimens after the same induction and consolidation therapy. Meloni G, et al. **Bone Marrow Transplant** 1990 Jan;5(1):29–32

The use of recombinant cytokines for enhancing immunohematopoietic reconstitution following bone marrow transplantation. II. The influence of lymphokines on CFU–GM colonies from human untreated, ASTA–Z or Campath–1M treated bone marrow. Mumcuoglu M, et al. **Bone Marrow Transplant** 1990 Mar;5(3):153–8

Busulfan, cyclophosphamide and fractionated total body irradiation as a preparatory regimen for marrow transplantation in patients with advanced hematological malignancies: a phase I study. Petersen FB, et al. **Bone Marrow Transplant** 1989 Nov;4(6):617–23

Intensive chemotherapy and autologous peripheral blood stem cell transplantation in a patient with persistent marrow involvement with Hodgkin's disease. Phillips GL, et al. **Bone Marrow Transplant** 1990 Jul;6(1):45–7

Purging procedures for acute leukaemias in autologous BMT. Rizzoli V, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:77–80

Escalating doses of etoposide with cyclophosphamide and fractionated total body irradiation or busulfan as conditioning for bone marrow transplantation. Spitzer TR, et al. **Bone Marrow Transplant** 1989 Sep;4(5):559–65

Hematopoietic growth factors in marrow transplantation and radiation injury. Storb R, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:116–20 (15 ref.)

Autotransplantation using peripheral blood stem cells mobilized by cyclophosphamide [letter] To LB, et al. **Bone Marrow Transplant** 1989 Sep;4(5):595–6

Variables predicting deep fungal infections in bone marrow transplant recipients. Tollemar J, et al. **Bone Marrow Transplant** 1989 Nov;4(6):635–41

Bone marrow transplantation for acute lymphocytic leukemia utilizing total body irradiation followed by high doses of cytosine arabinoside: lack of superiority over cyclophosphamide–containing conditioning regimens. Woods WG, et al. **Bone Marrow Transplant** 1990 Jul; 6(1):9–16

Favourable outcome of patients older than 40 years of age after transplantation with marrow grafts depleted of lymphocytes by counterflow centrifugation. Bär BM, et al. **Br J Haematol** 1990 Jan;74(1):53–60

Anaesthetic implications for bone marrow transplant recipients. Stein RA Jr, et al. **Can J Anaesth** 1990 Jul; 37(5):571–8 (43 ref.)

Haematological recovery following high-dose cyclophosphamide with autologous bone marrow transplantation. Twelves C, et al. **Cancer Chemother Pharmacol** 1989;25(3):213–8

Autologous marrow transplantation for Hodgkin's disease current techniques and prospects. Ahmed T. **Cancer Invest** 1990;8(1):99–106 (53 ref.)

Monoclonal antibody 55 (CD10) and complement used for purging autologous bone marrow in common acute lymphoblastic leukemia. Bai Y, et al. **Chin Med J [Engl]** 1990 May;103(5):385–90

Percutaneous bone marrow grafting of delayed union and nonunion in cancer patients. Healey JH, et al. **Clin Orthop** 1990 Jul;(256):280–5

A comparison between regimens containing chemotherapy alone (busulfan and cyclophosphamide) and chemotherapy (V. RAPID) plus total body irradiation on marrow engraftment following allogeneic bone marrow transplantation. Reynolds M, et al. **Eur J Haematol** 1989 Oct;43(4):314–20

Bone marrow replacement in the treatment of hemolytic disease in mice. Bernstein SE, et al. **Exp Hematol** 1989 Nov;17(10):1004–10

Recombinant human granulocyte colony-stimulating factor in allogeneic bone marrow transplantation. Masaoka T, et al. **Exp Hematol** 1989 Nov;17(10):1047–50

Bone marrow processing with a gravity sedimentation technique: experience of 13 cases. Adorno G, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:48–50

Human bone marrow processing using Cobe 2991 and CS 3000 blood cell separators for further ex vivo manipulation. Angelini A, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:43–7

Allogenic versus autologous marrow transplantation for patients with acute non lymphoblastic leukemia in first complete remission [letter] Carella AM, et al. **Haematologica** 1990 Mar–Apr;75(2):198

A preliminary survey of Italian experience on bone marrow harvesting, processing and manipulation. The Italian Cooperative Study Group on Cell Manipulation in Hematology. Menichella G, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:39–42

Role of recombinant human granulocyte-macrophage colony stimulating factor for large scale collection of peripheral blood stem cells for autologous transplantation. Ravagnani F, et al. **Haematologica** 1990 Jan–Feb;75 Suppl 1:22–5

Public health service. Reassessment autologous bone marrow transplantation. Handelsman H. **Health Technol Assess Rep** 1988;(3):1–18 (181 ref.)

Clinical experience with a new artificial bone graft: preliminary results of a prospective study. Kocialkowski A, et al. **Injury** 1990 May;21(3):142–4

A simplified method for purification, concentration and freezing of bone marrow cells for autologous transplantation. Wendel S, et al. **Int J Artif Organs** 1990 Apr;13(4):247–53

Autologous bone marrow transplantation (ABMT) in acute myelogenous leukaemia--Heidelberg experience. Pai VR, et al. **J Assoc Physicians India** 1990 Apr;38(4):275–6

Autologous marrow injection for delayed unions of the tibia: a preliminary report. Connolly JF, et al. **J Orthop Trauma** 1989;3(4):276–82

Refractory and relapsing Hodgkin's disease: role of high-dose chemotherapy with bone marrow transplantation. Thomas M, et al. **Klin Wochenschr** 1990 Jun 5;68(11):539–44 (39 ref.)

Canine models of bone marrow transplantation. Ladiges WC, et al. **Lab Anim Sci** 1990 Jan;40(1):11–5 (46 ref.)

Granulocyte colony-stimulating factor and neutrophil recovery after high-dose chemotherapy and autologous bone marrow transplantation. Sheridan WP, et al. **Lancet** 1989 Oct 14;2(8668):891–5

Rejection of bone-marrow graft by recipient-derived cytotoxic T lymphocytes against minor histocompatibility antigens. Voogt PJ, et al. **Lancet** 1990 Jan 20; 335(8682):131–4

Bone marrow transplantation for childhood acute lymphoblastic leukaemia after marrow relapse. Vowels MR, et al. **Med J Aust** 1990 Apr 16;152(8):416–8

Bone marrow transplantation in childhood leukemia using reverse isolation techniques. Ogden AK, et al. **Med Pediatr Oncol** 1990;18(1):1–5 (19 ref.)

Successful allogeneic transplantation of T-cell-depleted bone marrow from closely HLA-matched unrelated donors. Ash RC, et al. **N Engl J Med** 1990 Feb 22;322(8):485–94

Cyclosporine administration practices on bone marrow transplant units: a national survey. Caudell KA, et al. **Oncol Nurs Forum** 1990 Jul–Aug;17(4):563–8

GM–CSF may hasten patient recovery while reducing costs [news] **Oncology (Williston Park)** 1989 Jul;3(7):56, 59

Depletion of bone marrow T-lymphocytes with an anti-CD5 monoclonal immunotoxin (ST-1 immunotoxin): effective prophylaxis for graft-versus-host disease. Antin JH, et al. **Prog Clin Biol Res** 1990;333:207–15

Cryopreservation and storage of human bone marrow: a survey of current practices. Areman EM, et al. **Prog Clin Biol Res** 1990;333:523–9

Stem cell selection--clinical experience. Berenson RJ, et al. **Prog Clin Biol Res** 1990;333:403–10; discussion 411–3

Combination chemotherapy and verapamil to purge drug resistant leukemia cells from human bone marrow. Cairo MS, et al. **Prog Clin Biol Res** 1990;333:47–55

Positive stem cell selection--basic science. Civin CI, et al. **Prog Clin Biol Res** 1990;333:387–401; discussion 402

Purging in auto- and allografts: monoclonal antibodies which use human complement and other natural effector mechanisms. Cobbold SP, et al. **Prog Clin Biol Res** 1990; 333:139–51; discussion 152–4

The use of cultured bone marrow cells in autologous transplantation. Coutinho LH, et al. **Prog Clin Biol Res** 1990;333:415–32; discussion 433 (37 ref.)

Bone marrow purging and processing--a review of ancillary effects. Gee AP. **Prog Clin Biol Res** 1990;333:507–21 (39 ref.)

Efficacy of T cell depletion of surgically resected cadaveric marrows by monoclonal antibodies: considerations in HLA-mismatched marrow transplantation. Gress RE, et al. **Prog Clin Biol Res** 1990;333:471–88; discussion 489

Photoradiation methods for purging autologous bone marrow grafts. Gulati S, et al. **Prog Clin Biol Res** 1990;333:87–102

Transporting bone marrow for in vitro purging before autologous reinfusion. Janssen WE, et al. **Prog Clin Biol Res** 1990;333:541–9

Immunomagnetic microsphere mediated purging of cALLa positive leukemic cells from bone marrow for autologous reinfusion. Janssen WE, et al. **Prog Clin Biol Res** 1990; 333:285–92

Immunomagnetic manipulation of bone marrow and tumour cells: an update. Kemshead JT, et al. **Prog Clin Biol Res** 1990;333:235–50; discussion 251 (38 ref.)

Efficacy of bone marrow purging in AML using monoclonal antibodies and complement. Mills LE, et al. **Prog Clin Biol Res** 1990;333:165–70

Using elutriation to engineer bone marrow allografts. Noga SJ, et al. **Prog Clin Biol Res** 1990;333:345–59; discussion 360–1

Elutriation of bone marrow delineates two distinct natural suppressor cell populations. Noga SJ, et al. **Prog Clin Biol Res** 1990;333:363–8

Combinations of 4-hydroperoxycyclophosphamide (4-HC) and cisplatin for bone marrow purging in autologous marrow transplantation: an update. Peters RH, et al. **Prog Clin Biol Res** 1990;333:57–68

Pharmacological-mediated purging with mafosfamide in acute and chronic myeloid leukemias. The Italian Study Group. Rizzoli V, et al. **Prog Clin Biol Res** 1990;333:21–36; discussion 37–8

Density-gradient separation for 4-hydroperoxycyclophosphamide purging of autologous bone marrow grafts. Rowley S, et al. **Prog Clin Biol Res** 1990;333:369–77

Immunopharmacologic purging of breast cancer from bone marrow for autologous bone marrow transplantation. Shpall EJ, et al. **Prog Clin Biol Res** 1990;333:321–35; discussion 336

Bone marrow purging with immunotoxins for treatment of T cell acute lymphoblastic leukemia (T-ALL). Vallera DA, et al. **Prog Clin Biol Res** 1990;333:191–204; discussion 205

Purging leukemia remission marrows with alkyl-lysophospholipids, preclinical and clinical results. Vogler WR, et al. **Prog Clin Biol Res** 1990;333:1–18;

discussion 19–20

Bone marrow transplantation for severe aplastic anemia. Effect of a preparative regimen of cyclophosphamide–low–dose total–lymphoid irradiation and posttransplant cyclosporine–methotrexate therapy. Champlin RE, et al. **Transplantation** 1990 Apr;49(4):720–4

Evidence that appearance of thymulin in plasma follows lymphoid chimerism and precedes development of immunity in patients with lethal combined immunodeficiency transplanted with T cell–depleted haploidentical marrow. Incefy GS, et al. **Transplantation** 1990 Jul;50(1):55–61

Spotlight on cord blood transplant reminds them of a Va Med first [letter] Ende N, et al. **Va Med** 1990 Summer; 117(7):282–3

Bone marrow transplantation [editorial] Beutler E. **West J Med** 1989 Dec;151(6):658–9

Bone marrow transplantation. Part I—Allogeneic. Chao NJ, et al. **West J Med** 1989 Dec;151(6):638–43 (117 ref.)

[T–cell depletion today: pros and cons] Martelli MF, et al. **Haematologica (Pavia)** 1989 Oct;74(5 Suppl):405–17 (28 ref.) **(Ita)**

[Invasive conservative treatment in hematology and oncology] Kotlarek–Haus S. **Pol Arch Med Wewn** 1987 Apr;77(4):158–64 (28 ref.) **(Pol)**

[The significance of the cellular factor in realizing the restorative effect of the procedure of bone marrow exfusion, incubation and reimplantation in irradiated mice] Zernichenko AN, et al. **Radiobiologiia** 1990 Mar–Apr; 30(2):203–6 (Eng. Abstr.) **(Rus)**

[Myelochondroplasty of bone cavities and defects of the jaw bones] Plotnikov NA, et al. **Stomatologiia (Mosk)** 1989 Sep–Oct;68(5):49–52 (Eng. Abstr.) **(Rus)**

[Autologous bone marrow transplantation—a new approach in the treatment of neoplastic hematologic diseases. I. Scientific principles and methodology of the treatment] Nemet D. **Lijec Vjesn** 1989 Dec;111(12):466–74 (99 ref.) (Eng. Abstr.) **(Scr)**

MORTALITY

Impact of RLA matching and cyclosporine on long–term survival in transplanted rabbits. Bigelow CL, et al. **Exp Hematol** 1990 Jan;18(1):3–6

Autologous bone marrow transplantation in B–cell non–Hodgkin's lymphoma: very low treatment–related mortality in 100 patients in sensitive relapse. Freedman AS, et al. **J Clin Oncol** 1990 May;8(5):784–91

GM–CSF boosts survival rate in marrow transplant failures [news] **Oncology (Williston Park)** 1990 Apr;4(4):137

[Result of allogeneic bone marrow transplantation from unrelated donor] Yabe H, et al. **Rinsho Ketsueki** 1990 May; 31(5):614–9 (Eng. Abstr.) **(Jpn)**

[Prolonged survival after bone marrow transplantation in patients older than 30 years of age] Aschan J, et al. **Lakartidningen** 1990 Mar 7;87(10):752–4, 756 **(Swe)**

NURSING

Bone marrow transplant. Recent advances and nursing implications. Ford R, et al. **Nurs Clin North Am** 1990 Jun; 25(2):405–22 (109 ref.)

[Bone marrow transplantation treated in total environmental protection] Jiang XX. **Chung Hua Hu Li Tsa Chih** 1989 Jul;24(7):391–2 **(Chi)**

[Total nursing care in bone marrow transplantation] Wang MM. **Chung Hua Hu Li Tsa Chih** 1989 May;24(5):259–61 **(Chi)**

PATHOLOGY

The cytopathology of bone marrow transplantation. Lobenthal SW, et al. **Acta Cytol** 1990 Jul–Aug;34(4):559–66

Hematologic and immunologic effects of the systemic administration of recombinant interleukin–2 after autologous bone marrow transplantation. Blaise D, et al. **Blood** 1990 Sep 15;76(6):1092–7

Improved survival and leukocyte reconstitution without detrimental effects on engraftment in murine recipients of human recombinant granulocyte colony–stimulating factor after transplantation of T–cell–depleted histoincompatible bone marrow. Blazar BR, et al. **Blood** 1989 Nov 1; 74(6):2264–9

T–cell ontogeny after autologous bone marrow transplantation: failure to synthesize interleukin–2 (IL–2) and lack of CD2– and CD3–mediated proliferation by both CD4– and CD8+ cells even in the presence of exogeneous IL–2. Cayeux S, et al. **Blood** 1989 Nov 1;74(6):2270–7

Serial transplantation of methotrexate–resistant bone marrow: protection of murine recipients from drug toxicity by progeny of transduced stem cells. Corey CA, et al. **Blood** 1990 Jan 15;75(2):337–43

Analysis of the origin of marrow cells in bone marrow transplant recipients using a Y–chromosome–specific in situ hybridization assay. Durnam DM, et al. **Blood** 1989 Nov 1;74(6):2220–6

Monoclonal and oligoclonal gammopathy after bone marrow transplantation. Mitus AJ, et al. **Blood** 1989 Dec; 74(8):2764–8

Interleukin–1 enhances survival of lethally irradiated mice treated with allogeneic bone marrow cells. Oppenheim JJ, et al. **Blood** 1989 Nov 1;74(6):2257–63

Long–term marrow cultures after allogeneic bone marrow transplantation [letter] Rice A, et al. **Blood** 1990 Jul 1; 76(1):266–7

Natural history of mixed chimerism after bone marrow transplantation with CD6–depleted allogeneic marrow: a stable equilibrium. Roy DC, et al. **Blood** 1990 Jan 1; 75(1):296–304

Delayed activation of quiescent donor hematopoietic stem cells in the host marrow cavity by anti–host monoclonal antibody. Sadelain MW, et al. **Blood** 1989 Nov 15; 74(7):2325–9

Recombinant human granulocyte colony–stimulating factor accelerates hematopoietic recovery after DLA–identical littermate marrow transplants in dogs. Schuening FG, et al. **Blood** 1990 Aug 1;76(3):636–40

Comparison of five methods for concentrating progenitor cells in human marrow transplantation. Dragani A, et al. **Blut** 1990 May;60(5):278–81

Usefulness of Y–body study on bone marrow smears to demonstrate the origin of fibroblast stromal cells in allogeneic bone marrow transplantation. Ribera JM, et al. **Blut** 1990 Jul;61(1):14–6

Reconstruction of the haemopoietic and immune systems after marrow transplantation. Atkinson K. **Bone Marrow Transplant** 1990 Apr;5(4):209–26 (209 ref.)

Mixed chimerism after allogeneic marrow transplantation for leukaemia: correlation with dose of total body irradiation and graft–versus–host disease. Frassoni F, et al. **Bone Marrow Transplant** 1990 Apr;5(4):235–40

Two populations of CD56 (Leu–19)+/CD16+ cells in bone marrow transplant recipients. Gottschalk LR, et al. **Bone Marrow Transplant** 1990 Apr;5(4):259–64

Delayed engraftment associated with splenomegaly in patients undergoing bone marrow transplantation for chronic myeloid leukaemia. Helenglass G, et al. **Bone Marrow Transplant** 1990 Apr;5(4):247–51

Recovery of circulating haemopoietic progenitor cells in the early phase of haemopoietic reconstitution after autologous and allogeneic bone marrow transplantation. Kwong YL, et al. **Bone Marrow Transplant** 1989 Sep;4(5):575–8

Use of bronchoalveolar lavage cytology and determination of protein contents in pulmonary complications of bone marrow transplant recipients. Leskinen R, et al. **Bone Marrow Transplant** 1990 Apr;5(4):241–5

Stem cell self–renewal considerations in bone marrow transplantation. Mauch P, et al. **Bone Marrow Transplant** 1989 Nov;4(6):601–7 (84 ref.)

Chimerism studies using in situ hybridization for the Y chromosome after T cell–depleted bone marrow transplantation. Przepiorka D, et al. **Bone Marrow Transplant** 1990 Apr;5(4):253–7

CD8+/DR+/CD25—T–lymphocytes associated with marrow graft failure. Voltarelli JC, et al. **Bone Marrow Transplant** 1989 Nov;4(6):647–52

Thrombocytopenia after bone marrow transplantation for leukaemia: changes in megakaryocyte growth and growth–promoting activity. Adams JA, et al. **Br J Haematol** 1990 Jun;75(2):195–201

Incomplete marrow recovery associated with hepatitis after syngeneic bone marrow transplantation for aplastic anaemia: successful treatment with second marrow transplantation without preconditioning. Niki T, et al. **Br J Haematol** 1990 Jun;75(2):285–6

Phenotypic analysis of the early events during repopulation of the thymus by the bone marrow prothymocyte. Lesley J, et al. **Cell Immunol** 1990 Jun;128(1):63–78

Natural suppressor cells in spleens of irradiated, bone marrow–reconstituted mice and normal bone marrow: lack of Sca–1 expression and enrichment by depletion of Mac1–positive cells. Sykes M, et al. **Cell Immunol** 1990 May;127(2):260–74

Lymphocyte populations in autopsy bone marrow sections from recipients of allogeneic marrow and non–transplant sudden death cases. Dilly SA, et al. **Clin Exp Immunol** 1990 Jul;81(1):127–31

Successful autologous transplantation of blood stem cells mobilized with recombinant human granulocyte–macrophage colony–stimulating factor. Haas R, et al. **Exp Hematol** 1990 Feb;18(2):94–8

Acceleration of autologous hematopoietic recovery by GM–CSF after allograft rejection [letter] Bandini G, et al. **Haematologica** 1989 Nov–Dec;74(6):627–8

Histopathology of bone marrow reconstitution after allogeneic bone marrow transplantation. van den berg H, et al. **Histopathology** 1989 Oct;15(4):363–73

Sequential analysis of the thymocyte differentiation in fully allogeneic bone marrow chimera in mice. II. Further characterization of the CD4+ or CD8+ single positive thymocytes. Arase H, et al. **Immunobiology** 1990 Feb; 180(2–3):167–83

Sequential analysis of the thymocyte differentiation in fully allogeneic bone marrow chimera in mice. I. Relationship between functions and surface characteristics of thymocytes. Ogasawara K, et al. **Immunobiology** 1990 Feb; 180(2–3):149–66

B lymphocyte regeneration in marrow and blood after autologous bone marrow transplantation: increased numbers of B cells carrying activation and progression markers. Bengtsson M, et al. **Leuk Res** 1989;13(9):791–7

The effect of bone marrow–derived cells on lysosomal enzyme activity in the brain after marrow engraftment. Taylor RM, et al. **Transplant Proc** 1989 Oct;21(5):3822–3

Hepatic venoocclusive disease in an infant following marrow grafting for severe combined immunodeficiency. Hayward AR, et al. **Transplantation** 1989 Oct;48(4):708–10

PHYSIOLOGY

Effects of 5–fluorouracil on thymidylate synthase activity and development of bone marrow grafts in spleens of irradiated mice. Panfil B. **Acta Pol Pharm** 1989;46(2):195–9

Gamma–interferon and tumor necrosis factor production after bone marrow transplantation is augmented by exposure to marrow fibroblasts infected with cytomegalovirus. Duncombe AS, et al. **Blood** 1990 Sep 1; 76(5):1046–53

Autologous bone marrow transplantation for acute myelocytic leukemia in first remission: a European survey of the role of marrow purging. Gorin NC, et al. **Blood** 1990 Apr 15;75(8):1606–14

Cytolytic function of clonable T cells after human bone marrow transplantation. Velardi A, et al. **Blood** 1990 Mar 15;75(6):1364–9

The gut mucosal barrier in bone marrow transplantation. Fegan C, et al. **Bone Marrow Transplant** 1990 Jun; 5(6):373–7

Changes in the natural anticoagulants following bone marrow transplantation. Harper PL, et al. **Bone Marrow Transplant** 1990 Jan;5(1):39–42

Thyroid function tests in patients undergoing bone marrow transplantation. Hershman JM, et al. **Bone Marrow Transplant** 1990 Jul;6(1):49–51

Evaluation of renal function in patients treated with bone marrow transplantation. Stavljenić A, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:112–3

Recombinant GM–CSF in patients with poor graft function after bone marrow transplantation. Klingemann HG, et al. **Clin Invest Med** 1990 Apr;13(2):77–81

Early reconstitution of haematopoiesis after allogeneic bone marrow transplantation: a prospective histopathological study of bone marrow biopsy specimens. van den Berg H, et al. **J Clin Pathol** 1990 May;43(5):365–9

Collagen gel cultures for detection of spared hematopoietic progenitors in Asta Z 7557 purged human marrows. Praloran V, et al. **Leukemia** 1990 Apr;4(4):282–6

Changes in strain–specific urine odors of mice due to bone marrow transplantations. Eggert F, et al. **Neuropsychobiology** 1989;22(1):57–60

Gamma interferon production and two–color fluorescence flow cytometry analysis of peripheral blood mononuclear cells in allogeneic bone marrow transplant recipients. Shinohara K, et al. **Nippon Ketsueki Gakkai Zasshi** 1990 Feb;53(1):76–83

Expression of human adenosine deaminase in mice reconstituted with retrovirus–transduced hematopoietic stem cells. Wilson JM, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):439–43

Peripheral blood chemiluminescence as an early indicator of successful bone marrow transplantation. Toivanen A, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2745–6

Effect of age on cyclosporine pharmacokinetics in marrow transplant recipients. Yee GC, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1704–5

Use of polymerase chain reaction–detected sequence polymorphisms to document engraftment following allogeneic bone marrow transplantation. Roth MS, et al. **Transplantation** 1990 Apr;49(4):714–20

[Changed chemosensory identity following experimental bone marrow transplantation: recognition by another species] Sobottka B, et al. **Z Exp Angew Psychol** 1989; 36(4):654–64 (Eng. Abstr.) **(Ger)**

[The dynamic morphofunctional state of the adrenals in irradiated recipients following bone marrow transplantation] Tsutsaeva AA, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):750–3 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Sensory–motor and cognitive functioning in children who have undergone bone marrow transplantation. Smedler AC, et al. **Acta Paediatr Scand** 1990 Jun–Jul;79(6–7):613–21

Longitudinal assessment of psychosocial functioning of adult survivors of allogeneic bone marrow transplantation. Andrykowski MA, et al. **Bone Marrow Transplant** 1989 Sep;4(5):505–9

Principles of supportive psychological care for patients undergoing bone marrow transplantation. Neuser J, et al. **Hamatol Bluttransfus** 1990;33:583–6

Psychodynamic themes of bone marrow transplantation. When I becomes thou. Futterman AD, et al. **Hematol Oncol Clin North Am** 1990 Jun;4(3):699–709 (15 ref.)

An experimental bone marrow transplant experience. Connell SG. **Transplant Proc** 1990 Jun;22(3):955–6

The quality of life in adult survivors of allogeneic bone marrow transplantation. Correlates and comparison with matched renal transplant recipients. Andrykowski MA, et al. **Transplantation** 1990 Sep;50(3):399–406

[Psychological and psychiatric problems posed by bone marrow graft] Alby N. **Ann Med Psychol (Paris)** 1990 Jan; 148(1):78–81 **(Fre)**

[Long–term sequelae in the area of personality and achievement following bone marrow transplantations in children and adolescents—a pilot study] Schmidt B. **Padiatr Grenzgeb** 1990;29(3):237–47 (Eng. Abstr.) **(Ger)**

[Psychosomatic research on stress in bone marrow

transplantation] Neuser J.
Psychother Psychosom Med Psychol 1990 Mar-Apr; 40(3-4):136-42 (Eng. Abstr.) **(Ger)**

STANDARDS

Autologous bone marrow transplantation for acute myeloid leukaemia in remission: a preliminary report. Bradstock KF, et al. **Aust N Z J Med** 1990 Feb;20(1):26-31
The American Society of Clinical Oncology and American Society of Hematology Recommended Criteria for the Performance of Bone Marrow Transplantation.
J Clin Oncol 1990 Mar;8(3):563-4
Standards for bone marrow processing laboratories. Rowley SD, et al. **Transfusion** 1990 Jul-Aug;30(6):571-2

STATISTICS & NUMERICAL DATA

Bone marrow donor registries: discordance in HLA frequencies between donor and recipient populations [letter; comment] Howard M, et al. **Blood** 1990 May 15; 75(10):2093-4 Comment on: Blood 1989 Nov 15;74(7):2569-78.
Allogeneic bone marrow transplantation for leukemia in Europe: regional differences. Report from the Leukemia Working party of the European Group for Bone Marrow Transplantation. Gratwohl A, et al.
Bone Marrow Transplant 1990 Mar;5(3):159-65
Aspergillosis results questioned [letter; comment] Dash GP. **Infect Control Hosp Epidemiol** 1989 Dec;10(12):539-40 Comment on: Infect Control Hosp Epidemiol 1989 Jul;10(7):299-305.
[Allogenic bone marrow transplant in Italy] Marmont AM. **Recenti Prog Med** 1989 Oct;80(10):537-42 (34 ref.) (Eng. Abstr.) **(Ita)**

TRENDS

Current issues and future directions in marrow transplantation. Storb R. **Hamatol Bluttransfus** 1989; 32:37-45 (38 ref.)
Bone marrow transplantation in lysosomal storage diseases: a prelude to gene-insertion therapy. Yeager AM.
Md Med J 1990 Apr;39(4):337-41
[Recent progress of bone marrow transplantation] Morishima Y, et al. **Nippon Rinsho** 1990 Jul;48(7):1599-606 (23 ref.) **(Jpn)**
[Bone marrow transplant: current perspectives] Abecasis MM. **Acta Med Port** 1989 Nov;Suppl 2:S16-20 (47 ref.) (Eng. Abstr.) **(Por)**
[The Antonio Raichs memorial lecture. Future trends in marrow transplantation] Buckner CD. **Sangre (Barc)** 1990 Feb;35(1):60-3 **(Spa)**

UTILIZATION

Bone marrow transplantation for metabolic disorders at Huddinge Hospital. Ringdén O, et al. **Transplant Proc** 1990 Feb;22(1):198-202
[International bone marrow donor exchange] Ehninger G, et al. **Beitr Infusionther** 1989;24:180-4 (Eng. Abstr.) **(Ger)**

VETERINARY

Clinical and lymphohematologic responses after bone marrow transplantation in sibling and unrelated donor-recipient pairs of cats. Cain JL, et al.
Am J Vet Res 1990 May;51(5):839-44

BONE MATRIX

Synthetic peptide antisera: their production and use in the cloning of matrix proteins. Fisher LW, et al.
Connect Tissue Res 1989;21(1-4):43-8; discussion 49-50
Increased osteogenesis in alveolar wound healing elicited by demineralized bone powder. Guglielmotti MB, et al.
J Oral Maxillofac Surg 1990 May;48(5):487-90; discussion 491
Calvarial bone regeneration using osteogenin [see comments] Hollinger J, et al. **J Oral Maxillofac Surg** 1989 Nov; 47(11):1182-6; discussion 1187 Comment in: J Oral Maxillofac Surg 1990 May;48(5):547.
Alveolar ridge augmentation in Macaca fascicularis using polysulfone with and without demineralized bone powder. Salama F, et al. **J Oral Maxillofac Surg** 1989 Nov; 47(11):1169-76
Bone induction in primates by demineralized bone matrix [letter; comment] Sharawy M. **J Oral Maxillofac Surg** 1990 May;48(5):547 Comment on: J Oral Maxillofac Surg 1989 Nov;47(11):1182-6; discussion 1187.

ANALYSIS

Purification of bone morphogenetic protein derived from bovine bone matrix. Bessho K, et al.
Biochem Biophys Res Commun 1989 Dec 15;165(2):595-601
Macromolecules in bone matrix. Heinegård D, et al.
Connect Tissue Res 1989;21(1-4):3-11; discussion 12-4 (31 ref.)
Chains of matrix-derived type X collagen: size and aggregation properties. Schmid TM, et al.
Connect Tissue Res 1989;20(1-4):215-22
Matrix collagen of devitalized bone is resistant to osteoclastic bone resorption. Shimizu H, et al. **Connect Tissue Res** 1989; 20(1-4):169-75
Heterogeneity of latent transforming growth factor-beta isolated from bone matrix proteins. Jennings JC, et al.
Endocrinology 1990 Feb;126(2):1014-21
Inhibitory effects of the bone-derived growth factors osteoinductive factor and transforming growth factor-beta on isolated osteoclasts. Oreffo RO, et al. **Endocrinology** 1990 Jun;126(6):3069-75
A simple and efficient scheme for the purification of insulin-like growth factor II from human bone matrix extract. Mohan S. **Growth Factors** 1990;2(4):267-71
Ectopic induction of cartilage and bone by water-soluble proteins from bovine bone using a polyanhydride delivery vehicle. Lucas PA, et al. **J Biomed Mater Res** 1990 Jul; 24(7):901-11
Immunoreactive calbindin-D9K localization in matrix vesicle-initiated calcification in rat epiphyseal cartilage: an immunoelectron microscope study. Balmain N, et al.
J Bone Miner Res 1989 Aug;4(4):565-75
Skeletal growth factor and other growth factors known to be present in bone matrix stimulate proliferation and protein synthesis in human bone cells. Wergedal JE, et al.
J Bone Miner Res 1990 Feb;5(2):179-86

ANATOMY & HISTOLOGY

Equivalency of various methods for estimating osteoid seam width. Quarles LD, et al. **J Bone Miner Res** 1989 Oct; 4(5):671-7

CYTOLOGY

Microcinematographic and autoradiographic kinetic studies of bone cell differentiation in vitro: matrix formation and mineralization. Nefussi JR, et al. **Bone** 1989;10(5):345-52
The ability of induced osteo-progenitor cells to maintain and rebuild long-term ectopic osteo-hematopoietic foci in vitro. Gurevitch OA. **Int J Cell Cloning** 1990 Mar; 8(2):130-7

DRUG EFFECTS

Fibroblast growth factor stimulates bone formation. Bone induction studied in rats. Aspenberg P, et al.
Acta Orthop Scand 1989 Aug;60(4):473-6

EMBRYOLOGY

An electron microscopical study on the presence of proteoglycans in the calcified bone matrix by use of cuprolinic blue. Sauren YM, et al. **Bone** 1989;10(4):287-94
Hyaluronates in developing skeletal tissues. Nathanson MA. **Clin Orthop** 1990 Feb;(251):275-89 (121 ref.)
Stimulation of bone matrix apposition in vitro by local growth factors: a comparison between insulin-like growth factor I, platelet-derived growth factor, and transforming growth factor beta. Pfeilschifter J, et al. **Endocrinology** 1990 Jul;127(1):69-75

ENZYMOLOGY

Procollagenase associated with the noncalcified matrix of bone and its regulation by parathyroid hormone. Jilka RL. **Bone** 1989;10(5):353-8
Effect of Zn(II) and Mg(II) on phosphohydrolytic activity of rat matrix-induced alkaline phosphatase. Ciancaglini P, et al. **Cell Mol Biol** 1989;35(5):503-10
Effect of membrane moiety and magnesium ions on the inhibition of matrix-induced alkaline phosphatase by zinc ions. Ciancaglini P, et al. **Int J Biochem** 1990;22(7):747-51

GROWTH & DEVELOPMENT

Matrix vesicles as a marker of endochondral ossification. Boyan BD, et al. **Connect Tissue Res** 1990;24(1):67-75
[Heterotopic bone formation and induced osteogenesis] Gurevich OA. **Gematol Transfuziol** 1989 Aug;34(8):41-7 (50 ref.) **(Rus)**

METABOLISM

Effect of condylotomy on matrix synthesis and mineralization in the rat mandibular condylar cartilage. Hinton RJ.
Arch Oral Biol 1989;34(12):1003-9
Mechanical stimulation by intermittent compression stimulates sulfate incorporation and matrix mineralization in fetal mouse long-bone rudiments under serum-free conditions. Bagi C, et al. **Calcif Tissue Int** 1989 Dec; 45(6):342-7
Immunoelectron microscopy of osteonectin and type I collagen in osteoblasts and bone matrix. Romanowski R, et al. **Calcif Tissue Int** 1990 Jun;46(6):353-60
Heterotopic new bone formation causes resorption of the inductive bone matrix. Nilsson OS, et al. **Clin Orthop** 1990 Aug;(257):280-5
Type beta transforming growth factor regulates expression of genes encoding bone matrix proteins. Noda M, et al.
Connect Tissue Res 1989;21(1-4):71-5 (28 ref.)
Estrogen inhibition of periosteal bone formation in rat long bones: down-regulation of gene expression for bone matrix proteins. Turner RT, et al. **Endocrinology** 1990 Sep; 127(3):1346-51
The effect of food restriction and germ-free environment on age-related changes in bone matrix. Nishimoto SK, et al. **J Gerontol** 1990 Sep;45(5):B164-8
Bone mineral and matrix. Are they altered in osteoporosis? Boskey AL. **Orthop Clin North Am** 1990 Jan;21(1):19-29 (101 ref.)

PHYSIOLOGY

Osteogenesis in bone defects in rats: the effects of hydroxyapatite and demineralized bone matrix. Alper G, et al. **Am J Med Sci** 1989 Dec;298(6):371-6
Ectopic bone induction by partially purified bone extract alone or attached to biomaterials. Swoboda HF, et al.
Biomater Artif Cells Artif Organs 1990;18(3):383-401
Effect of glass-ceramic implants on primary calcification in rat tibial bone after injury. Amir D, et al. **Biomaterials** 1989 Nov;10(9):585-9
In vivo analysis of the half-life of the osteoinductive potential of demineralized bone matrix using diffusion chambers. Landesman R, et al. **Calcif Tissue Int** 1989 Dec; 45(6):348-53
The role of cells versus matrix in bone induction. Anderson HC. **Connect Tissue Res** 1990;24(1):3-12 (56 ref.)
Effects of bone matrix components on osteoclast differentiation. Glowacki J, et al. **Connect Tissue Res** 1989; 20(1-4):121-9 (22 ref.)
Transforming growth factor-beta stimulates bone matrix apposition and bone cell replication in cultured fetal rat calvariae. Hock JM, et al. **Endocrinology** 1990 Jan; 126(1):421-6
The origin of electrokinetic potentials in bone tissue: the organic phase. Guzelsu N, et al. **J Biomech** 1990; 23(7):661-72
Streaming potential of intact wet bone. Guzelsu N, et al.
J Biomech 1990;23(7):673-85
Study of the osteoconductive properties of bioactive glass fibers. Pazzaglia UE, et al. **J Biomed Mater Res** 1989 Nov; 23(11):1289-97
Inductive influences of demineralized dentin and bone matrix on pulp cells: an approach of secondary dentinogenesis. Tziafas D, et al. **J Dent Res** 1990 Jan;69(1):75-81
[Standard measurements, elasticity values and tensile strength behavior of the human mandible, a contribution to the biomechanics of the mandible—I] Arendts FJ, et al.
Biomed Tech (Berlin) 1989 Oct;34(10):248-55 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Mineral and matrix contributions to rigidity in fracture healing. Chakkalakal DA, et al. **J Biomech** 1990; 23(5):425-34

TRANSPLANTATION

Cartilage resurfacing of the rabbit knee. The use of an allogeneic demineralized bone matrix-autogeneic perichondrium composite implant. Billings E Jr, et al.
Acta Orthop Scand 1990 Jun;61(3):201-6
Osteogenic enhancement of diaphyseal reconstruction. Comparison of bone grafts in the rabbit. Köhler P, et al.
Acta Orthop Scand 1990 Feb;61(1):42-5
Dog bone less osteogenetic than rat bone. Bone-matrix transplants in nude rats. Schwarz N, et al.
Acta Orthop Scand 1989 Dec;60(6):693-5
[Use of the matrix of de-calcified bone to repair nasal deformity after the repair of cleft lip] Qu YY.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Mar;5(1):15-6 **(Chi)**
[Effects of mellitic acid on matrix-induced, ectopic osteogenesis in the rat] Rüther W, et al. **Z Orthop** 1989 Nov-Dec;127(6):706-10 (Eng. Abstr.) **(Ger)**
[Induced hematopoietic foci in mice. I. Induction of extraskeletal hematopoietic areas using demineralized tooth matrix] Gurevich OA, et al. **Gematol Transfuziol** 1990 Feb; 35(2):7-12 (Eng. Abstr.) **(Rus)**
[Osteoplasty in wound infection] Boltrukevich SI, et al.
Ortop Travmatol Protez 1989 Jul;(7):14-7 (Eng. Abstr.) **(Rus)**
[Surgical treatment of chronic hematogenic osteomyelitis and its sequelae in children] Mgoian GKh, et al. **Vestn Khir** 1990 Feb;144(2):81-5 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

BAPN dose dependence of mature crosslinking in bone matrix collagen of rabbit compact bone: corresponding variation of sonic velocity and equatorial diffraction spacing. Lees S, et al. **Connect Tissue Res** 1990;24(2):95-105
A theoretical model for stress-generated fluid flow in the canaliculi-lacunae network in bone tissue. Kufahl RH, et al. **J Biomech** 1990;23(2):171-80

BONE MINERAL CONTENT see **BONE DENSITY**

BONE MINERAL DENSITY see **BONE DENSITY**

BONE MINERALIZATION see **CALCIFICATION, PHYSIOLOGIC**

BONE NAILS

Fracture fixation with biodegradable rods. Forty-one cases of severe ankle fractures. Hirvensalo E.
Acta Orthop Scand 1989 Oct;60(5):601-6
Fixation of 220 femoral neck fractures. A prospective comparison of the Rydell nail and the LIH hook pins. Holmberg S, et al. **Acta Orthop Scand** 1990 Apr;61(2):154-7
Nail versus screw fixation of femoral neck fractures. A 2-year

radiological and clinical prospective study. Alberts KA, et al. **Ann Chir Gynaecol** 1989;78(4):298–303
Osteosynthesis of the radius by double elastic spring-pinning. Functional treatment of the distal end fractures of the radius. A study of 130 cases. Desmanet E.
Ann Chir Main 1989;8(3):193–206 **(Eng, Fre)**
A self-locking pin for fixation of small bones and phalanges: a preliminary report. Rosenberg L, et al.
Ann Plast Surg 1986 Jan;16(1):60–7
Open fractures of the femur treated by the pin-in-plaster technique. Contribution to the art and practice of trauma surgery in the Third World. Bassey LO.
Arch Orthop Trauma Surg 1990;109(3):139–43
Occipital pin for rigid occipitocervical fixation in upper cervical metastasis. Laohacharoensombat W, et al.
Bull Hosp Jt Dis Orthop Inst 1990 Spring;50(1):20–6
The Gamma nail. A preliminary note. Boriani S, et al.
Chir Organi Mov 1990 Jan–Mar;75(1):67–70 **(Eng, Ita)**
Grosse-Kempf nailing in the elderly. Tigani D, et al.
Chir Organi Mov 1990 Jan–Mar;75(1):71–6 **(Eng, Ita)**
Biomechanical comparison of slotted and nonslotted interlocking nails in distal femoral shaft fractures. Covey DC, et al. **Clin Orthop** 1990 Mar;(252):246–51
Treatment of pathologic fractures of the distal femur with the Zickel supracondylar nail. Healey JH, et al.
Clin Orthop 1990 Jan;(250):216–20
Heterotopic ossification in central nervous system-injured patients following closed nailing of femoral fractures. Keret D, et al. **Clin Orthop** 1990 Jul;(256):254–9
A comparative analysis of Ender's-rod and compression screw and side plate fixation of intertrochanteric fractures of the hip. Rao JP, et al. **Clin Orthop** 1990 Jul;(256):125–31
Biomechanical analysis of pin placement and pin size for external fixation of distal radius fractures. Seitz WH Jr, et al. **Clin Orthop** 1990 Feb;(251):207–12
Unstable intertrochanteric/subtrochanteric fractures of the femur. Whitelaw GP, et al. **Clin Orthop** 1990 Mar;(252):238–45
Redirecting K-wires and Steinmann pins. Alexander IJ, et al. **Foot Ankle** 1990 Feb;10(4):243
Intertrochanteric fractures of the femur: a prospective study comparing the use of the Küntscher-Y nail and a sliding hip screw. Davis TR, et al. **Injury** 1988 Nov;19(6):421–6
Hook-pin fixation of subcapital fractures of the femur: an atraumatic procedure? Doran A, et al. **Injury** 1989 Nov; 20(6):368–70
Locking nailing: an aid to distal targetting. Hudson I.
Injury 1989 May;20(3):129–30
Technical considerations of the AO interlocking nail. Lowdon IM, et al. **Injury** 1989 Jul;20(4):222–5
Double fractures of AO intramedullary femoral nails. Stothard J, et al. **Injury** 1989 Mar;20(2):119–21
The use of Zickel supracondylar nails in the presence of a cemented hip prosthesis. Tulloch CJ, et al. **Injury** 1988 Nov;19(6):452–3
Supracondylar fractures of the humerus [letter] Gibson AG.
Int Surg 1990 Apr–Jun;75(2):133–4
The locked Grosse-Kempf intramedullary nail in the treatment of diaphyseal and metaphyseal fractures of the femur and tibia. Costa P, et al.
Ital J Orthop Traumatol 1988 Dec;14(4):475–82
Corrective femoral osteotomy and telescopic nailing in osteogenesis imperfecta. Frediani P, et al.
Ital J Orthop Traumatol 1989 Dec;15(4):473–9
Problems related to blocked nailing in fractures of the proximal femur. Moscato M, et al.
Ital J Orthop Traumatol 1989 Sep;15(3):281–5
Osteosynthesis of fractures of the femoral neck by nail-plate, screws and valgus osteotomy. Rotolo F, et al.
Ital J Orthop Traumatol 1989 Sep;15(3):331–7
A method of tack fixation of tibial bone grafts in total knee arthroplasty. Krackow KA, et al. **J Arthroplasty** 1989 Dec; 4(4):371–3
External fixation and delayed intramedullary nailing of open fractures of the tibial shaft. A sequential protocol. Blachut PA, et al. **J Bone Joint Surg [Am]** 1990 Jun;72(5):729–35
A comparison of the Brooker-Wills and Russell-Taylor nails for treatment of patients who have fractures of the femoral shaft. Blumberg KD, et al. **J Bone Joint Surg [Am]** 1990 Aug;72(7):1019–24
Intramedullary nailing of open fractures of the femoral shaft. Brumback RJ, et al. **J Bone Joint Surg [Am]** 1989 Oct; 71(9):1324–31
Migration of pins used in operations on the shoulder. Lyons FA, et al. **J Bone Joint Surg [Am]** 1990 Sep;72(8):1262–7 (42 ref.)
Arthrodesis of the knee with intramedullary nail fixation. Puranen J, et al. **J Bone Joint Surg [Am]** 1990 Mar; 72(3):433–42
Interlocked nailing for treatment of segmental fractures of the femur. Wiss DA, et al. **J Bone Joint Surg [Am]** 1990 Jun;72(5):724–8
Remodelling after pinning for slipped capital femoral epiphysis. Jones JR, et al. **J Bone Joint Surg [Br]** 1990 Jul;72(4):568–73
Intramedullary locking nails for femoral shaft fractures in elderly patients. Moran CG, et al.
J Bone Joint Surg [Br] 1990 Jan;72(1):19–22
Femoral shaft fractures treated by Ender nails using a trochanteric approach. Walters J, et al.
J Bone Joint Surg [Br] 1990 Jan;72(1):14–8
Absorbable pin: a new method of fixation for digital arthrodesis. Patton GW, et al. **J Foot Surg** 1990 Mar–Apr; 29(2):122–7
Stabilisation of the wrist in rheumatoid disease. Koka R, et al. **J Hand Surg [Br]** 1989 Aug;14(3):288–90
The effect of radial preload on the implant–bone interface: a cadaveric study. Biliouris TL, et al. **J Orthop Trauma** 1989;3(4):323–32
A modified pins-and-plaster technique incorporating early motion for fractures of the distal radius. Harper MC.
J Orthop Trauma 1989;3(4):300–5
The role of Ender rodding in tibial fractures with an intact fibula. Levy AS, et al. **J Orthop Trauma** 1990;4(1):75–80
Biomechanics of Ender rods, compression screw, and Zickel nail in the fixation of stable subtrochanteric femur osteotomies. Wainer RA, et al. **J Orthop Trauma** 1990; 4(1):58–63
Telescoping intramedullary stabilization of the lower extremities for severe osteogenesis imperfecta. Nicholas RW, et al. **J Pediatr Orthop** 1990 Mar–Apr;10(2):219–23
Use of pins and plaster in the treatment of unstable pediatric forearm fractures. Voto SJ, et al. **J Pediatr Orthop** 1990 Jan–Feb;10(1):85–9
Intramedullary nailing of femoral and tibial fractures. Christie J. **J R Coll Surg Edinb** 1989 Jun;34(3):160–1
Lower infection rate after interlocking nailing in open fractures of femur and tibia. Kaltenecker G, et al.
J Trauma 1990 Apr;30(4):474–9
Closed Ender nailing of femur fractures in older children. Kissel EU, et al. **J Trauma** 1989 Nov;29(11):1585–8
The Brooker-Wills interlocking nail in the treatment of femoral fractures. Boxma H, et al. **Neth J Surg** 1990 Jun; 42(3):78–82
The effect of pin location on the rigidity of the halo pin–bone interface. Ballock RT, et al. **Neurosurgery** 1990 Feb; 26(2):238–41
Three-point skull clamp for infants [letter; comment] Ross DA, et al. **Neurosurgery** 1990 Feb;26(2):360 Comment on: Neurosurgery 1989 Oct;25(4):660–2.
Pediatric update #10. Treatment of displaced supracondylar fractures of the humerus in children by closed reduction and percutaneous pinning. Gerardi JA, et al.
Orthop Rev 1989 Oct;18(10):1089–95
Operative technique: a new distal aiming device for locking nail fixation [letter; comment] MacMillan M.
Orthopedics 1989 Nov;12(11):1456 Comment on: Orthopedics 1988 Dec;11(12):1725–7.
Closed intramedullary pinning of metacarpal and phalanx fractures. Varela CD, et al. **Orthopedics** 1990 Feb; 13(2):213–5
[Adult femoral shaft fracture treated with an intramedullary nail] Wu CC, et al. **Chang Keng I Hsueh** 1989 Sep 20; 12(3):141–7 (Eng. Abstr.) **(Chi)**
[Ender nailing in fractures of the proximal femur. II. Analysis of our cohort] Bartoníček J.
Acta Chir Orthop Traumatol Cech 1989 Dec;56(6):484–501 (Eng. Abstr.) **(Cze)**
[Double interlocking elastic nailing for intertrochanteric fractures and various diaphyseal indications] van Elegem P. **Acta Orthop Belg** 1989;55(3):295–305 (Eng. Abstr.) **(Fre)**
[Chronic sclerosing osteomyelitis. Apropos of 4 cases and the value of the treatment by closed intramedullary reaming] Féry A. **J Chir (Paris)** 1990 Mar;127(3):157–63 (Eng. Abstr.) **(Fre)**
[The locked pin: a simple method to avoid migration in slight osteosynthesis] de la Caffinière JY, et al.
Rev Chir Orthop 1989;75(8):573–4 (Eng. Abstr.) **(Fre)**
[Knee arthrodesis using tibio-femoral rods following ablation of the septic total prosthesis] Zucman J, et al.
Rev Chir Orthop 1989;75(6):415–9 (Eng. Abstr.) **(Fre)**
[Stable elastic nailing] Prevot J.
Z Unfallchir Versicherungsmed Berufskr 1989;82(4):252–60 (Eng. Abstr.) **(Fre)**
[Interlocking nailing and percutaneous cerclage by Götze's method in caring for tibial torsion fractures—a preliminary report] Habernek H, et al. **Aktuel Traumatol** 1990 Apr; 20(2):74–6 (Eng. Abstr.) **(Ger)**
[Primary stabilization of open fractures of the lower extremity with the interlocking nail—the results of a study of 91 patients] Kaltenecker G, et al. **Aktuel Traumatol** 1990 Apr;20(2):67–73 (Eng. Abstr.) **(Ger)**
[The use of bioresorbable implants (Biofix) in surgery. The indications, technic and initial clinical results] Steinmann R, et al. **Aktuel Traumatol** 1990 Apr;20(2):102–7 (Eng. Abstr.) **(Ger)**
[Bore puncture wire tension fixation] Wozasek GE, et al.
Aktuel Traumatol 1990 Jun;20(3):120–3 (Eng. Abstr.) **(Ger)**
[Errors and risks of Ender condyle nailing in fractures of the trochanter region in elderly patients] Machan FG.
Beitr Orthop Traumatol 1990 Apr;37(4):229–36 (Eng. Abstr.) **(Ger)**
[Rivets for bone fractures] Laabs W, et al.
Biomed Tech (Berlin) 1989;34 Suppl:173–4 **(Ger)**
[Rare complications following Ender nailing of femoral neck fractures] Albrecht G. **Chirurg** 1990 Jun;61(6):462–3 **(Ger)**
[Küntscher's intramedullary stabilization versus other osteosynthesis procedures] Havemann D, et al. **Chirurg** 1990 Jun;61(6):417–21 **(Ger)**
[Küntscher's open intramedullary nailing of the clavicle. An alternative in the treatment of an old clavicular fracture] Niemeier U, et al. **Chirurg** 1990 Jun;61(6):464–6 **(Ger)**
[Choice of procedure in Küntscher nailing. A look backward—current status—perspectives] Nonnemann HC.
Chirurg 1990 Jun;61(6):422–5 **(Ger)**
[Laser focusing device for the distal locking of intramedullary nails] Stedtfeld HW, et al. **Chirurg** 1990 Jun;61(6):469–72 **(Ger)**
[Experiences with interlocking nails in the femur. A retrospective analysis of 99 operated femur shaft fractures] Strømsøe K, et al. **Chirurg** 1990 Jun;61(6):430–3 (Eng. Abstr.) **(Ger)**
[Distal radius fracture. Fracture stabilization with biodegradable osteosynthesis pins (Biofix). Experimental studies and initial clinical experiences] Hoffmann R, et al.
Unfallchirurg 1989 Sep;92(9):430–4 (Eng. Abstr.) **(Ger)**
[Osteosynthesis of proximal radius fractures using polydioxanone pins] Ehrensperger J.
Z Unfallchir Versicherungsmed 1990;83(2):84–90 (Eng. Abstr.) **(Ger)**
[Indications for and results of interlocking nailing in lower leg fractures] Klingler K, et al.
Z Unfallchir Versicherungsmed Berufskr 1989;82(2):116–9 (Eng. Abstr.) **(Ger)**
[A rare complication of metallo-osteosynthesis of the clavicle] Khvorostov ED, et al. **Klin Khir** 1989;(12):47–8 **(Rus)**
[Use of a rod apparatus for external fixation in the treatment of hand injuries] Andruson MV, et al.
Ortop Travmatol Protez 1989 Jul;(7):37–9 (Eng. Abstr.) **(Rus)**
[Theoretical aspects of using the equipment for transosseous osteosynthesis] Drachuk PS, et al.
Ortop Travmatol Protez 1990 Apr;(4):27–9 **(Rus)**
[Osteosynthesis in medial fractures of the femur neck using a bundle of nails with stop surface] Ishchenko VP, et al.
Ortop Travmatol Protez 1989 Nov;(11):69 **(Rus)**
[Possibilities of the rod apparatus of original construction in the treatment of fractures and dislocations of the bones of the extremities] Kostiuk AN, et al.
Ortop Travmatol Protez 1990 Apr;(4):6–9 (Eng. Abstr.) **(Rus)**
[A rod apparatus for external fixation in the treatment of diaphyseal fractures of long bones] Kovalenko NA.
Ortop Travmatol Protez 1990 Apr;(4):46 **(Rus)**
[Experience with stable and functional osteosynthesis in diaphyseal fractures of long bones using the "METOST" (METal OSTeosynthesis) fixation kit] Myzychenko PF.
Ortop Travmatol Protez 1989 Nov;(11):15–8 **(Rus)**
[Surgical treatment of trochanteric fractures of the femur in middle-aged and elderly patients using a bunch of metal rods] Okhotskii VP, et al. **Ortop Travmatol Protez** 1989 Oct;(10):55–8 (Eng. Abstr.) **(Rus)**
[An intraosseous fixator] Ukhanov NIu.
Ortop Travmatol Protez 1990 Jan;(1):35–6 **(Rus)**
[A device for the treatment of diaphyseal fracture] Ungbaev TE, et al. **Ortop Travmatol Protez** 1990 Jan;(1):32–4 **(Rus)**
[Functionally stable osteosynthesis in sequelae of injuries of the femoral diaphysis] Onoprienko GA, et al. **Sov Med** 1990;(2):104–6 **(Rus)**
[Osteosynthesis by the Ender method] Latal I, et al.
Vestn Khir 1989 Sep;143(9):86–8 (Eng. Abstr.) **(Rus)**
[Surgery of fractures in the trochanteric region using Ender's method] Pen M. **Acta Chir Iugosl** 1989;36 Suppl 2:734–7 (Eng. Abstr.) **(Scr)**
[An extending double pin] Torlak F. **Acta Chir Iugosl** 1989; 36 Suppl 2:743–5 **(Scr)**

ADVERSE EFFECTS

Radiological cases of the month. Expansile bone cyst in osteogenesis imperfecta. Goodman P, et al.
Am J Dis Child 1990 Aug;144(8):933–4
Disseminated intravascular coagulation complicating Ender's nailing of a pathologic fracture in prostatic carcinoma. A case report. Olson SA, et al. **Clin Orthop** 1990 Sep; (258):242–4
Reducing the hazards: brief report. Walsh ME. **Injury** 1989 Nov;20(6):322
Complications of pin and wire external fixation. Green SA.
Instr Course Lect 1990;39:219–28 (11 ref.)
Pin tract infections. Incidence and management in foot surgery. Herstik I, et al. **J Am Podiatr Med Assoc** 1990 Mar;80(3):135–44 (66 ref.)
Prophylactic pinning in slipped upper femoral epiphysis. Prevention of complications. Emery RJ, et al.
J Bone Joint Surg [Br] 1990 Mar;72(2):217–9
Scapho-trapezio-trapezoid arthrodesis for treatment of chronic static and dynamic scapho-lunate instability: a 10-year perspective on pitfalls and complications. Kleinman WB, et al. **J Hand Surg [Am]** 1990 May; 15(3):408–14
Technical difficulties with the Brooker-Wills nail in acute fractures of the femur. Barrick EF, et al.
J Orthop Trauma 1990;4(2):144–50
External fixation and vascular damage: report of a case. Schuurman AH, et al. **Neth J Surg** 1990 Jun;42(3):92–3
[Complications in Küntscher nailing, their prevention and treatment] Hempel D. **Chirurg** 1990 Jun;61(6):426–9 **(Ger)**
[Bone nail-induced anaerobic osteomyelitis] Makhson NE, et al. **Khirurgiia (Mosk)** 1989 Aug;(8):106–8 **(Rus)**
[A method of treating osteomyelitis at the site of bone nails]

Amiraslanov IuA, et al. **Ortop Travmatol Protez** 1989 Nov; (11):72 **(Rus)**

HISTORY

[The history of intramedullary nailing. A brief look backwards] Lentz W. **Chirurg** 1990 Jun;61(6):474–80 **(Ger)**

STANDARDS

Biomechanics of the interlocking nail. A study of the proximal interlock. Kinast C, et al. **Arch Orthop Trauma Surg** 1990;109(4):197–204

[The possibility of using an intramedullary Y nail in failure of the surgical treatment of trochanteric fractures of the femur using an angular McLaughlin nail] Frańczuk B. **Przegl Lek** 1989;46(10):750–2 **(Pol)**

[Various remarks concerning principles of the treatment of fractures] Abduev BD. **Ortop Travmatol Protez** 1990 Jan; (1):61–3 **(Rus)**

[Study of transverse rigidity of nail bunches in external anchor– nail osteosynthesis of forearm bones] Afaunov AI, et al. **Ortop Travmatol Protez** 1990 Apr;(4):29–30 **(Rus)**

VETERINARY

Fracture repair with transfixation pins and fiberglass cast in llamas and small ruminants. Kaneps AJ, et al. **J Am Vet Med Assoc** 1989 Nov 1;195(9):1257–61

BONE NEOPLASMS

Pulmonary metastases of a tibia adamantinoma. Case report and review of the literature. De Keyser F, et al. **Acta Clin Belg** 1990;45(1):31–3

Winged scapula due to osteochondroma. Report of 3 children. Danielsson LG, et al. **Acta Orthop Scand** 1989 Dec;60(6):728–9

Chest case of the day. Metastatic osteosarcoma to lung. Goose PW, et al. **AJR Am J Roentgenol** 1990 Jun; 154(6):1321–3

Bilateral pleural-based densities in a patient with hip pain. Benditt JO, et al. **Chest** 1990 Feb;97(2):467–8

Quiz. Clear-cell chondrosarcoma. Ferraro A, et al. **Chir Organi Mov** 1990 Jan–Mar;75(1):99–105 **(Eng, Ita)**

Giant cell tumor of the hamate bone. Vaccari A, et al. **Chir Organi Mov** 1990 Jan–Mar;75(1):77–80 **(Eng, Ita)**

Detection of pulmonary metastases in a patient with synovial cell sarcoma using In–111 labeled monoclonal antibody 19–24. Swift JE, et al. **Clin Nucl Med** 1990 Apr; 15(4):227–30

Osteoid osteoma and osteoblastoma of the pelvis. Bettelli G, et al. **Clin Orthop** 1989 Oct;(247):261–71

Tumors of the heel. Berlin SJ, et al. **Clin Podiatr Med Surg** 1990 Apr;7(2):307–21 (21 ref.)

Multicentric chondrosarcomas associated with Ollier's disease. Review and case report. Lucas D, et al. **J Fla Med Assoc** 1990 Jan;77(1):24–8 (15 ref.)

Osteogenic sarcoma of the tarsal navicular bone. Wu KK. **J Foot Surg** 1989 Jul–Aug;28(4):363–9

Bilateral calcaneal intraosseous lipomas: a case report. Rosenblatt EM, et al. **Mt Sinai J Med** 1990 May; 57(3):174–6

Ewing's sarcoma: current status of diagnosis and treatment. Horowitz ME. **Oncology (Williston Park)** 1989 Mar; 3(3):101–6; discussion 106–9 (28 ref.)

Epidermal nevus syndrome: report of association with chondroblastoma of bone [letter] Chow MJ, et al. **Pediatr Dermatol** 1989 Dec;6(4):358

Case report 585: Intracortical osteosarcoma of tibia. Anderson RB, et al. **Skeletal Radiol** 1989;18(8):627–30 (4 ref.)

Physeal osteochondroma of a phalanx. Burgess RC. **South Med J** 1990 Sep;83(9):1087–8

[Imaging of malignant lymphoma of muscular sites] Bruneton JN, et al. **J Radiol** 1990 Mar;71(3):185–9 (Eng. Abstr.) **(Fre)**

[Solitary plasmacytoma of the bone: nosological and therapeutic problems] Maalej M, et al. **Tunis Med** 1989 Nov;67(11):661–4 (19 ref.) (Eng. Abstr.) **(Fre)**

[Pediatric bone and soft tissue neoplasms] Enjoji M. **Gan No Rinsho** 1989 May;Spec No:324–31 (15 ref.) **(Jpn)**

[Chondrosarcoma of the ribs: report of two cases] Tsukioka K, et al. **Kyobu Geka** 1989 Sep;42(10):849–52 (Eng. Abstr.) **(Jpn)**

[23rd annual meeting of the JOA Musculoskeletal Tumor Society. Osaka, July 19 through 20, 1990. Abstracts] **Nippon Seikeigeka Gakkai Zasshi** 1990 Jun;64(6):S649–884 **(Jpn)**

[Diagnosis and treatment of solitary plasmacytoma] Brinch L, et al. **Tidsskr Nor Laegeforen** 1990 May 10; 110(12):1515–6 (Eng. Abstr.) **(Nor)**

[Surgical treatment of metastatic tumor of the lungs] Biriukov IuV, et al. **Khirurgiia (Mosk)** 1990 Apr;(4):8–14 (Eng. Abstr.) **(Rus)**

[Osteoid osteoma in a child] Chekanova LR, et al. **Klin Khir** 1990;(6):64 **(Rus)**

[Metachronous liposarcomatosis] Reziapkin VV, et al. **Klin Khir** 1990;(5):48–9 **(Rus)**

[Non-organ teratoid neoformations of the small pelvis] Kononenko NG. **Sov Med** 1990;(4):90–3 **(Rus)**

ANALYSIS

[The relationship between the prostaglandin E level in the tumor and the times of the metastasis of primary osteogenic sarcoma] Bassalyk LS, et al. **Vopr Onkol** 1989;35(11):1301–5 (Eng. Abstr.) **(Rus)**

[The membrane sialoglycolipids of tumor cells and the metastasis of bone tumors] Kushlinskiĭ NE, et al. **Vopr Onkol** 1990;36(7):811–7 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

The frequency and diagnostic significance of periostitis in chondroblastoma. Brower AC, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):309–14

Generalised lymphangiomatosis with chylothorax. Dunkelman H, et al. **Arch Dis Child** 1989 Jul;64(7):1058–60

Femoral vein compression in solitary osteochondroma of head of femur. Malik N, et al. **Australas Radiol** 1990 Feb; 34(1):91–2

Neurologic complications in children with soft tissue and osseous sarcoma. Kramer ED, et al. **Cancer** 1989 Dec 15; 64(12):2600–3

Primary skeletal Ewing's sarcoma in Down syndrome. Bridge JA, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):61–8

Metastatic bone disease. A study of the surgical treatment of 166 pathologic humeral and femoral fractures. Yazawa Y, et al. **Clin Orthop** 1990 Feb;(251):213–9

Prognostic significance of osteopenia and immunoparesis at presentation in patients with solitary myeloma of bone. Jackson A, et al. **Eur J Cancer** 1990 Mar;26(3):363–71

Pneumocephalus associated with a frontoethmoidal osteoma. Jackson WA, et al. **J La State Med Soc** 1989 Dec; 141(12):33–4, 37

Avascular necrosis of the capital femoral epiphysis in metachondromatosis. Keret D, et al. **J Pediatr Orthop** 1990 Sep–Oct;10(5):658–61

Solitary osteochondroma causing sural nerve entrapment neuropathy. Montgomery PQ, et al. **J R Soc Med** 1989 Dec;82(12):761

Popliteal vein thrombosis and popliteal artery compression complicating fibular osteochondroma: ultrasound diagnosis. Longo JM, et al. **JCU** 1990 Jul–Aug;18(6):507–9

Strontium and bone pain. **Lancet** 1990 Feb 17;335(8686):384–5 (14 ref.)

A special grant for special patients from the American Cancer Society [news] **Oncology (Williston Park)** 1990 Mar;4(3):99

Multicentric angiofollicular lymph node hyperplasia associated with a solitary osteolytic costal IgG lambda myeloma. POEMS syndrome in a South American (Paraguayan) patient. Rolon PG, et al. **Pathol Res Pract** 1989 Oct;185(4):468–75; discussion 476–9

Malignant fibrous histiocytoma of sternum: an unusual cause of pyrexia of undetermined origin. Grieco A, et al. **Postgrad Med J** 1989 Dec;65(770):926–8

[Chondrosarcoma in a patient with osteopoikilosis. Apropos of a case] Grimer RJ, et al. **Rev Chir Orthop** 1989; 75(3):188–90 (Eng. Abstr.) **(Fre)**

[Osteogenic exostosis of the first rib: a rare etiology of thoracic outlet syndrome. Apropos of a case] Rosset P, et al. **Rev Chir Orthop** 1990;76(1):62–5 (22 ref.) (Eng. Abstr.) **(Fre)**

[Subscapular conflict. Apropos of a case] Auvert–Colin L, et al. **Rev Rhum Mal Osteoartic** 1990 Feb;57(2):139–41 (10 ref.) **(Fre)**

[Tumor–like bone lesions in sternocostoclavicular hyperostosis and palmoplantaris pustulosis] Kasperczyk A, et al. **ROFO** 1990 Jan;152(1):10–5 (Eng. Abstr.) **(Ger)**

[Osteochondrosis dissecans and osteoid osteoma as a rare combination in the talus] Daschner H, et al. **Rontgenpraxis** 1990 Jun;43(6):214–7 **(Ger)**

[Transection of the popliteal artery caused by exostosis] Baisi A, et al. **Minerva Cardioangiol** 1990 Mar;38(3):109–13 (Eng. Abstr.) **(Ita)**

CONGENITAL

Case report 575. Infantile myofibromatosis. Present DA, et al. **Skeletal Radiol** 1989;18(7):557–60

DIAGNOSIS

A case of metatarsal Ewing's sarcoma. Goodwin MI. **Acta Orthop Scand** 1990 Apr;61(2):187–8

Chondrosarcoma in the distal phalanx of the ring finger. A case report. Sivridis E, et al. **Acta Orthop Scand** 1990 Apr; 61(2):183–4

Epiphyseal osteoid osteoma. Two case reports. van Horn JR, et al. **Acta Orthop Scand** 1989 Oct;60(5):625–7 (16 ref.)

Musculoskeletal case of the day. Parosteal osteosarcoma of the humerus. Stull MA, et al. **AJR Am J Roentgenol** 1990 Jun;154(6):1331–2

MR imaging of tumor and tumorlike lesions of bone and soft tissue. Sundaram M, et al. **AJR Am J Roentgenol** 1990 Oct;155(4):817–24 (45 ref.)

Neurological manifestations of osteoid osteoma. Kiers L, et al. **Arch Dis Child** 1990 Aug;65(8):851–5

Digital subtraction angiography in musculoskeletal tumors and other conditions. Kolář J, et al. **Arch Orthop Trauma Surg** 1990;109(2):89–93

Mesenchymal chondrosarcoma. An immunohistochemical study. Swanson PE, et al. **Arch Pathol Lab Med** 1990 Sep; 114(9):943–8

Six years of 'unnecessary' nocturnal hell. **Aust Fam Physician** 1990 Aug;19(8):1289–90

Magnetic resonance imaging in the detection of skeletal metastases in patients with breast cancer. Jones AL, et al. **Br J Cancer** 1990 Aug;62(2):296–8

The role of the STIR sequence in magnetic resonance imaging examination of bone tumours. Golfieri R, et al. **Br J Radiol** 1990 Apr;63(748):251–6

Centralised diagnosis and treatment of bone and soft tissue tumors [editorial] **Chir Organi Mov** 1990 Jan–Mar; 75(1):11–4 **(Eng, Ita)**

Tumors about the knee in children. Gebhardt MC, et al. **Clin Orthop** 1990 Jun;(255):86–110 (63 ref.)

Periosteal chondroma. A report of ten cases and review of the literature. Lewis MM, et al. **Clin Orthop** 1990 Jul; (256):185–92 (29 ref.)

Pubic osteolysis. A benign lesion of the pelvis closely mimicking a malignant neoplasm. McCarthy B, et al. **Clin Orthop** 1990 Feb;(251):300–7

Neoplastic musculoskeletal disease. Pettersson H. **Curr Opin Radiol** 1989 Oct;1(3):362–8 (15 ref.)

Magnetic resonance imaging and magnetic resonance spectroscopy of bone tumors and bone marrow disease. Lenkinski RE, et al. **Invest Radiol** 1989 Dec;24(12):1006–10

Centralized diagnosis and therapy of tumors of the bone and soft tissues. **Ital J Orthop Traumatol** 1989 Sep;15(3):401–3

The importance of clinical semiotics and instrumental investigations in the diagnosis and surgical treatment of osteoid osteoma. A report of 6 cases. Carfagni A, et al. **Ital J Orthop Traumatol** 1990 Mar;16(1):25–37

Measurement of ultrasonic velocity and attenuation in bone tumors, in vitro. Singh VR, et al. **J Acoust Soc Am** 1990 Feb;87(2):908–9

Combined MR imaging and spectroscopy of bone and soft tissue tumors. Zlatkin MB, et al. **J Comput Assist Tomogr** 1990 Jan–Feb;14(1):1–10

Plasmacytoma of the patella. McLeod GG, et al. **J R Coll Surg Edinb** 1990 Jun;35(3):195–6

Malignant fibrous histiocytoma of bone. Kumar RV, et al. **J Surg Oncol** 1990 Jul;44(3):166–70 (22 ref.)

Nuclear scan–guided rib biopsy. Moores DW, et al. **J Thorac Cardiovasc Surg** 1990 Apr;99(4):620–1

Vascular and cartilaginous hamartoma (mesenchymoma) of the ribs in infancy. Moghal N. **JPMA** 1990 May;40(5):114–5

Musculoskeletal magnetic resonance imaging. Murphy WA, et al. **Magn Reson Annu** 1986;:1–35 (28 ref.)

Magnetic resonance imaging in musculoskeletal primary malignant tumors. Vanel D, et al. **Magn Reson Annu** 1987; :237–61

Giant-cell tumor of the tibia in a child presenting as an expansile metaphyseal lesion with fluid–fluid levels on MR. Buetow PC, et al. **Magn Reson Imaging** 1990;8(3):341–4 (23 ref.)

Clear cell sarcoma of the kidney: accuracy of imaging methods for detecting bone metastases. Report from the National Wilms' Tumor Study. Feusner JH, et al. **Med Pediatr Oncol** 1990;18(3):225–7

Immunohistochemical evaluation of neoplasms in bone marrow biopsies using monoclonal antibodies reactive in paraffin–embedded tissue. Kubic VL, et al. **Mod Pathol** 1989 Nov;2(6):618–29

Malignant tumors of the upper extremity in children. Kuschner SH, et al. **Orthop Rev** 1990 May;19(5):411–7 (23 ref.)

Shoulder neoplasms mimicking rotator cuff tears. Daluga DJ, et al. **Orthopedics** 1990 Jul;13(7):765–7

Chondroblastoma of bone. Kurt AM, et al. **Orthopedics** 1990 Jul;13(7):787–90 (12 ref.)

Radiologic case study. Periosteal osteosarcoma. Olson PN, et al. **Orthopedics** 1990 Jul;13(7):796–7, 804–5 (7 ref.)

Intramedullary hemangioma of the tibia and the value of magnetic resonance imaging in its detection. Weiss KS, et al. **Orthopedics** 1990 Jan;13(1):89–90

Fibrous lesions of bones. Kumar R, et al. **Radiographics** 1990 Mar;10(2):237–56 (33 ref.)

The use of magnetic resonance imaging in the evaluation of bone and soft-tissue tumors. Dalinka MK, et al. **Radiol Clin North Am** 1990 Mar;28(2):461–70 (36 ref.)

Response of osteosarcoma and Ewing sarcoma to preoperative chemotherapy: assessment with dynamic and static MR imaging and skeletal scintigraphy. Erlemann R, et al. **Radiology** 1990 Jun;175(3):791–6

Musculoskeletal neoplasms: fast low-angle shot MR imaging with and without Gd-DTPA. Erlemann R, et al. **Radiology** 1990 Aug;176(2):489–95

Musculoskeletal neoplasms: dynamic Gd-DTPA-enhanced MR imaging [letter] Fletcher BD, et al. **Radiology** 1990 Oct;177(1):287–8

Osteoblastoma: clinical and radiologic findings in 98 new cases. Kroon HM, et al. **Radiology** 1990 Jun;175(3):783–90

Musculoskeletal neoplasms after intraarterial chemotherapy: correlation of MR images with pathologic specimens. Sanchez RB, et al. **Radiology** 1990 Jan;174(1):237–40

Osteoblastoma of the first metatarsal bone. Hoeffel JC, et al. **ROFO** 1989 Oct;151(4):506–7

The value of magnetic resonance imaging in the staging of musculoskeletal tumours. Sneider P, et al. **S Afr J Surg** 1989 Dec;27(5):173–8

Inadequate magnetic resonance imaging in bone and soft-tissue sarcoma [letter] Lindeque BG. **S Afr Med J** 1990 May 19;77(10):541

The role of imaging in musculoskeletal tumors. Manaster BJ, et al. **Semin Ultrasound CT MR** 1989 Dec;10(6):498–517

(56 ref.)
Case report 587: Adamantinoma of the tibia mimicking osteofibrous dysplasia. Adler CP. **Skeletal Radiol** 1990; 19(1):55–8
Giant cell tumor of the scapula. A review of 13 cases. Aoki J, et al. **Skeletal Radiol** 1989;18(6):427–34
Low field (0.02 T) magnetic resonance imaging of bone and soft tissue tumors. Ekelund L, et al. **Skeletal Radiol** 1989; 18(8):585–90
Magnetic resonance imaging: comparison of four pulse sequences in assessing primary bone tumours. Graif M, et al. **Skeletal Radiol** 1989;18(6):439–44
Juxta-articular large cell lymphoma. Nghiem HV, et al. **Skeletal Radiol** 1990;19(5):353–7
Detection of local recurrent disease in musculoskeletal tumors: magnetic resonance imaging versus computed tomography. Reuther G, et al. **Skeletal Radiol** 1990; 19(2):85–90
Case report 578. Painful, enlarging mass on the inner aspect of the left upper arm. Sher M, et al. **Skeletal Radiol** 1989; 18(7):568
The solitary tumor or tumorlike lesion of bone. Sundaram M, et al. **Top Magn Reson Imaging** 1989 Sep;1(4):17–29 (13 ref.)
[Osteoid osteoma and osteoblastoma] Erasmus ME, et al. **Ned Tijdschr Geneeskd** 1990 Jan 27;134(4):166–70 (Eng. Abstr.) (Dut)
[Desmoid fibroma of the scapula. Recurrence with pulmonary metastasis] Nourissat C, et al. **Rev Chir Orthop** 1989;75(8):569–72 (Eng. Abstr.) (Fre)
[Osteoid osteoma of the lower epiphysis of the tibia (letter)] Montane P, et al. **Rev Rhum Mal Osteoartic** 1990 Apr 25; 57(4):369–71 (Fre)
[Osteoid osteoma of the hand] Savornin C, et al. **Rev Rhum Mal Osteoartic** 1990 May;57(5):419–21 (Fre)
[Evaluating magnetic resonance tomography studies of the extremities—results of a multicenter study for evaluating nuclear magnetic resonance tomography] Oberstein A, et al. **Digitale Bilddiagn** 1990 Mar;10(1):17–24 (Eng. Abstr.) (Ger)
[Bone marrow scintigraphy and magnetic resonance tomography in plasmacytoma] Ruhlmann J, et al. **Onkologie** 1989 Aug;12 Suppl 1:38–41 (Eng. Abstr.) (Ger)
[Parosteal osteosarcoma: an unusual location in the tarsus] Dietlein M, et al. **ROFO** 1990 Feb;152(2):238–40 (Ger)
[The value of CT and MRT in the diagnosis of cartilage-forming tumors] Reuther G, et al. **ROFO** 1989 Dec;151(6):647–52 (Eng. Abstr.) (Ger)
[Osteoid osteoma recurrence/persistence of the hamate bone. A case report] Helzel MV, et al. **Rontgenblatter** 1990 Aug; 43(8):362–4 (Eng. Abstr.) (Ger)
[MRT of tumors of the musculoskeletal system] Lehner K, et al. **Rontgenpraxis** 1990 Jul;43(7):237–43 (Ger)
[Osteoid osteoma of the spine and pelvic area] Wespe R, et al. **Schweiz Med Wochenschr** 1990 Jul 28;120(30):1102–8 (Eng. Abstr.) (Ger)
[A case from practice (176). Suspicion of periostitis ossificans] Romanens M. **Schweiz Rundsch Med Prax** 1990 Apr 24; 79(17):542–3 (Ger)
[Diagnostic problems in Ewing's sarcoma] De Santis E, et al. **Arch Putti Chir Organi Mov** 1989;37(1):227–38 (Eng. Abstr.) (Ita)
[Osteoid osteoma of the olecranon fossa. Presentation of a clinical case] Pisaneschi A, et al. **Arch Putti Chir Organi Mov** 1989;37(2):441–6 (22 ref.) (Eng. Abstr.) (Ita)
[A case of multiple plasmacytomas of the bone] Matsui Y, et al. **Bull Chest Dis Res Inst Kyoto Univ** 1989 Mar; 22(1–2):4–10 (Eng. Abstr.) (Jpn)
[Diagnosis of bone tumors—X-ray and pathological features] Hanaoka H. **Nippon Seikeigeka Gakkai Zasshi** 1989 Oct; 63(10):1265–79 (7 ref.) (Jpn)
[Preparation of monoclonal antibodies against human bone gamma-carboxyglutamic acid containing protein (BGP) and its immunohistochemical application to various human tissues] Takada J, et al. **Nippon Seikeigeka Gakkai Zasshi** 1990 May;64(5):453–60 (Eng. Abstr.) (Jpn)
[MR imaging of bone and soft tissue tumors] Nishimura H, et al. **Rinsho Hoshasen** 1990 Jan;35(1):57–68 (Eng. Abstr.) (Jpn)
[Difficulties in the diagnosis of primary malignant histiocytoma of the lung] Wiatr E, et al. **Pneumonol Pol** 1990 Apr–May;58(4–5):228–33 (Eng. Abstr.) (Pol)
[Determining the degree of progression of Hodgkin's disease in children before starting combined therapy] Balwierz W, et al. **Pol Tyg Lek** 1989 Apr 3;44(14):334–8 (48 ref.) (Pol)
[A case od rare location of Ewing's sarcoma in a 6-year-old boy] Iwaszkiewicz-Pawlowska A, et al. **Wiad Lek** 1990 Apr 1;43(7):285–8 (Eng. Abstr.) (Pol)
[The evolution and treatment of giant-cell tumors of the bones. The author's personal experience] Floarea G. **Rev Med Chir Soc Med Nat Iasi** 1989 Oct–Dec; 93(4):705–10 (Eng. Abstr.) (Rum)
[Histiocytic proliferative diseases] Vlasov VI, et al. **Khirurgiia (Mosk)** 1990 Apr;(4):126–7 (Rus)
[Raynaud's phenomenon as a sign of malignant tumor] Slutsker GE. **Klin Khir** 1990;(5):42 (Rus)
[The comprehensive diagnosis of osteogenic sarcoma] Zabrodina AV. **Med Radiol (Mosk)** 1990 Jul;35(7):54–7 (79 ref.) (Rus)
[Osteogenic sarcoma of the talus] Zabrodina AV. **Med Radiol (Mosk)** 1990 Mar;35(3):41–2 (Rus)
[Diagnosis and treatment of mesenchymal chondrosarcoma] Murav'ev GN, et al. **Vopr Onkol** 1989;35(10):1170–5 (Eng. Abstr.) (Rus)
[Differential diagnosis of secondary chondrosarcoma of the bones] Petrovichev NN, et al. **Vopr Onkol** 1990; 36(1):96–100 (Eng. Abstr.) (Rus)
[An adamantinoma located in the pelvic bones] Vasin VA, et al. **Vrach Delo** 1990 Jun;(6):96–8 (Rus)
[Problems in the diagnosis of Ewing's sarcoma] Rehák L, et al. **Acta Chir Orthop Traumatol Cech** 1989 Dec; 56(6):528–37 (Eng. Abstr.) (Slo)

DRUG THERAPY

Use of MR imaging to assess results of chemotherapy for Ewing sarcoma. Lemmi MA, et al. **AJR Am J Roentgenol** 1990 Aug;155(2):343–6
Evaluation of spin labeled TEPA and CCNU analogs against osteosarcoma and MNU-induced mammary carcinoma of the SD-rat. Klenner T, et al. **Arch Geschwulstforsch** 1989; 59(4):251–6
Primary chemotherapy and delayed surgery (neoadjuvant chemotherapy) for osteosarcoma of the extremities. The Istituto Rizzoli Experience in 127 patients treated preoperatively with intravenous methotrexate (high versus moderate doses) and intraarterial cisplatin. Bacci G, et al. **Cancer** 1990 Jun 1;65(11):2539–53
Pediatric osteosarcoma. Successful retreatment of relapsed primary tumor and soft tissue recurrence with intraarterial cis-diamminedichloroplatin-II. Epelman S, et al. **Cancer** 1990 Aug 15;66(4):801–5
Response of osteogenic sarcoma to the combination of etoposide and cyclophosphamide as neoadjuvant chemotherapy. Saleh RA, et al. **Cancer** 1990 Feb 15; 65(4):861–5
Platinum disposition after intraarterial and intravenous infusion of cisplatin for osteosarcoma. Cooperative Osteosarcoma Study Group COSS. Bielack SS, et al. **Cancer Chemother Pharmacol** 1989;24(6):376–80
Dual-energy CT-scan quantification of recalcification in osteolyses of the vertebral body due to mammary carcinomas in the course of antineoplastic treatment. Crone-Münzebrock W, et al. **Clin Exp Metastasis** 1990 Mar–Apr;8(2):173–9
Magnetic resonance imaging (MRI) in evaluating in vivo response to neoadjuvant chemotherapy for osteosarcomas of the extremities. Hogeboom WR, et al. **Eur J Surg Oncol** 1989 Oct;15(5):424–30
Methotrexate diffusion from acrylic cement. Local chemotherapy for bone tumours. Hernigou P, et al. **J Bone Joint Surg [Br]** 1989 Nov;71(5):804–11
Anticancer-agent-linked phosphonates with antiosteolytic and antineoplastic properties: a promising perspective in the treatment of bone-related malignancies? Klenner T, et al. **J Cancer Res Clin Oncol** 1990;116(4):341–50
The importance of dose-intensity in neoadjuvant chemotherapy of osteosarcoma: a retrospective analysis of high-dose methotrexate, cisplatinum and adriamycin used preoperatively. Bacci G, et al. **J Chemother** 1990 Apr; 2(2):127–35
Multimodal therapy for the management of nonpelvic, localized Ewing's sarcoma of bone: intergroup study IESS-II. Burgert EO Jr, et al. **J Clin Oncol** 1990 Sep; 8(9):1514–24
Successful treatment of a radiation-associated extradural osteosarcoma with chemotherapy in an adolescent girl. Kellie SJ, et al. **Med Pediatr Oncol** 1989;17(6):514–9
Effect of preoperative chemotherapy by intraarterial infusion of cisplatin (cis-dichlorodiammineplatin) on primary osteosarcomas. Suda A. **Nippon Gan Chiryo Gakkai Shi** 1989 Dec 20;24(11):2594–606
[Individualization of the dosage of high-dose methotrexate by assaying plasma concentration. Therapeutic value in osteogenic sarcoma] Delepine N, et al. **Bull Cancer (Paris)** 1989;76(8):913–8 (Fre)
[Regression during chemotherapy of lytic bone lesions in a patient with type B malignant non-Hodgkin's lymphoma (letter)] Pertuiset E, et al. **Rev Rhum Mal Osteoartic** 1989 Dec;56(12):883–5 (Fre)
[Spontaneous pneumothorax in patients with osteosarcoma treated by combined chemotherapy] Rimondi E, et al. **Minerva Med** 1989 Nov;80(11):1215–7 (Eng. Abstr.) (Ita)
[A clinical study of intraarterial infusion therapy with CDDP for primary osteosarcoma] Eiro I, et al. **Gan To Kagaku Ryoho** 1990 Jan;17(1):47–52 (Eng. Abstr.) (Jpn)
[A case of breast cancer with multiple metastases to the lung and bone responding well to cisplatin and vindesine] Itoh H, et al. **Gan To Kagaku Ryoho** 1989 Nov;16(11):3631–4 (Eng. Abstr.) (Jpn)
[Continuous intra-arterial infusion chemotherapy for malignant bone and soft tissue tumors in pelvis and trunk areas] Kushida Y, et al. **Gan To Kagaku Ryoho** 1990 Aug; 17(8 Pt 2):1777–82 (Eng. Abstr.) (Jpn)
[Side effects of high dose methotrexate with citrovorum factor therapy: relationship between clinical data and serum concentration of methotrexate] Watanabe M, et al. **Gan To Kagaku Ryoho** 1990 May;17(5):1081–4 (Jpn)
[Adjuvant chemotherapy of osteosarcoma] Yamawaki S, et al. **Gan To Kagaku Ryoho** 1990 Feb;17(2):180–8 (Eng. Abstr.) (Jpn)
[Eel calcitonin treatment on patients with urogenital carcinoma for relief of pain from metastatic bone lesions] Noguchi K, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Dec 20;24(11):2577–86 (Eng. Abstr.) (Jpn)
[The results of using high-dose methotrexate in treating osteogenic sarcoma] Perevodchikova NI, et al. **Vopr Onkol** 1990;36(6):667–71 (Eng. Abstr.) (Rus)
[Possibilities and perspectives of adjuvant chemotherapy in malignant tumors] Tanneberger S. **Vopr Onkol** 1989; 35(8):899–904 (Rus)
[Immunotherapy with transfer factor in hormone-resistant metastasized carcinoma of the prostate] Corrado F, et al. **Arch Esp Urol** 1989;42 Suppl 2:191–6 (Eng. Abstr.) (Spa)

ENZYMOLOGY

The effect of phenytoin on collagenase and gelatinase activities in UMR 106-01 rat osteoblastic osteosarcoma cells. Vernillo AT, et al. **Matrix** 1990 Mar;10(1):27–32

EPIDEMIOLOGY

Report of bone registry, 1970–1982 (a twelve year study). Chitale AR, et al. **Indian J Pathol Microbiol** 1987 Apr; 30(2):201–18
Analysis of bone tumors in Ramathibodi Hospital, Thailand during 1977–1986: study of 652 cases. Pongkripetch M, et al. **J Med Assoc Thai** 1989 Nov;72(11):621–8
Osteosarcomatosis. Hopper KD, et al. **Radiology** 1990 Apr; 175(1):233–9
[Analysis of 1355 cases of tumors and tumor-like lesions in the bone] He XH. **Chung Hua Chung Liu Tsa Chih** 1990 Jan;12(1):66–8 (Eng. Abstr.) (Chi)

ETIOLOGY

Epithelioid angiomatosis secondary to disseminated cat scratch disease involving the bone marrow and skin in a patient with acquired immune deficiency syndrome: a case report. Milam MW, et al. **Am J Med** 1990 Feb;88(2):180–3
Radiation induced bone sarcomas. Report of five cases. Castro L, et al. **Am J Roentgenol Radium Ther Nucl Med** 1967 Aug; 100(4):924–30
Desmoplastic fibroma arising in fibrous dysplasia. Chromosomal analysis and review of the literature. Bridge JA, et al. **Clin Orthop** 1989 Oct;(247):272–8 (25 ref.)
Malignant fibrous histiocytoma after total hip arthroplasty. A case report. Troop JK, et al. **Clin Orthop** 1990 Apr; (253):297–300 (19 ref.)
A Bayesian methodology for scaling radiation studies from animals to man. DuMouchel W, et al. **Health Phys** 1989; 57 Suppl 1:411–8
Does the growth rate of a radionuclide-induced osteosarcoma depend on the skeletal dose rate during the growth period? Lloyd RD. **Health Phys** 1990 Jan; 58(1):73–6
Induction of lymphoma and osteosarcoma in mice by single and protracted low alpha doses. Müller WA, et al. **Health Phys** 1990 Sep;59(3):305–10
Scaling of fatal cancer risks from laboratory animals to man. Raabe OG. **Health Phys** 1989;57 Suppl 1:419–32
Inhalation carcinogenesis of repeated exposures to high-fired 244CmO2 in rats. Sanders CL, et al. **Health Phys** 1990 May;58(5):631–8
Interspecies scaling of risk for radiation-induced bone cancer. Raabe OG, et al. **Int J Radiat Biol** 1990 May;57(5):1047–61
Heterotopic bone formation in the patient with burn injuries. A retrospective assessment of contributing factors and methods of investigation. VanLaeken N, et al. **J Burn Care Rehabil** 1989 Jul–Aug;10(4):331–5
Kaposi sarcoma involving bone: CT demonstration in a patient with AIDS. Meyers SA, et al. **J Comput Assist Tomogr** 1990 Jan–Feb;14(1):161–2
Radiation-induced osteosarcoma of the sphenoid bone. Tanaka S, et al. **Neurosurgery** 1989 Oct;25(4):640–3
Osteosarcoma risk after simultaneous incorporation of the long-lived radionuclide 227Ac and the short-lived radionuclide 227Th. Müller WA, et al. **Radiat Res** 1990 Jan;121(1):14–20
Bone structural parameters, dosimetry, and relative radiation risk in the beagle skeleton. Polig E, et al. **Radiat Res** 1989 Oct;120(1):83–101
[Secondary malignomas following radiotherapy of breast carcinoma: a case report] Waller M, et al. **Strahlenther Onkol** 1990 Feb;166(2):140–2 (Eng. Abstr.) (Ger)
[A case of osteosarcoma following radiation therapy] Higashi Y, et al. **Rinsho Hoshasen** 1990 Jan;35(1):117–9 (Eng. Abstr.) (Jpn)

GENETICS

DNA cytometry of musculoskeletal tumors. A review. Kreicbergs A. **Acta Orthop Scand** 1990 Jun;61(3):282–97 (85 ref.)
Chromosomes in orthopedic tumors [editorial] Mandahl N. **Acta Orthop Scand** 1990 Apr;61(2):97–8
Osteosarcomas in transgenic mice expressing an alpha-amylase-SV40 T-antigen hybrid gene. Knowles BB,

et al. **Am J Pathol** 1990 Aug;137(2):259–62
Cytogenetic findings and biologic behavior of giant cell tumors of bone. Bridge JA, et al. **Cancer** 1990 Jun 15; 65(12):2697–703
Chromosomal rearrangements in chondromatous tumors. Mandahl N, et al. **Cancer** 1990 Jan 15;65(2):242–8
Structural chromosome aberrations in an adamantinoma. Mandahl N, et al. **Cancer Genet Cytogenet** 1989 Oct 15; 42(2):187–90
Translocation (11;22) in small cell osteosarcoma. Noguera R, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):121–4
Elevated frequency of a specific allele of the L-myc gene in male patients with bone and soft-tissue sarcomas. Kato M, et al. **Int J Cancer** 1990 Jan 15;45(1):47–9
Expression of chloramphenicol acetyltransferase (CAT) from rodent type I collagen promoters in transfected osteosarcoma cells in vivo. Zernik J, et al. **Matrix** 1989 Nov;9(5):376–81
Thymosin beta 4 is expressed in ROS 17/2.8 osteosarcoma cells in a regulated manner. Atkinson MJ, et al. **Mol Endocrinol** 1990 Jan;4(1):69–74
Cytogenetic findings in a primary malignant fibrous histiocytoma of bone and the lung metastasis. Bridge JA, et al. **Pathology** 1990 Jan;22(1):16–9
Germinal imprinting in chromosome mutation. Sasaki MS, et al. **Prog Clin Biol Res** 1990;340B:347–54 (24 ref.)
[Gardner syndrome] Török L, et al. **Hautarzt** 1990 Feb; 41(2):83–6 (Eng. Abstr.) **(Ger)**
[Detection of c-sis transcripts and PDGF-like products by in situ hybridization and immunohistochemical study] Nakajima H. **Nippon Seikeigeka Gakkai Zasshi** 1989 Oct; 63(10):1221–7 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

A case of primary osseous malignant immunoblastic B-cell lymphoma with intracytoplasmic mu lambda immunoglobulin inclusions. Fiche M, et al. **Histopathology** 1990 Feb;16(2):167–72
HLA phenotypes in patients who have osteosarcoma. Shimizu T, et al. **J Bone Joint Surg [Am]** 1990 Jan; 72(1):68–70
HLA-DR (Ia-like) reactivity in tumors of bone and soft tissue: an immunohistochemical comparison of monoclonal antibodies LN3 and LK8D3 in routinely processed specimens. Swanson PE, et al. **Mod Pathol** 1990 Mar; 3(2):113–9
[Relation of tongue color changes and red-cell immune adherence activity in patients with malignant bone tumor] Shen L. **Chung Hsi I Chieh Ho Tsa Chih** 1990 Jun; 10(6):345–7, 325 (Eng. Abstr.) **(Chi)**
[T-lymphocyte subsets in peripheral blood of patients with bone tumors] Guo W, et al. **Chung Hua Wai Ko Tsa Chih** 1990 Apr;28(4):235–7, 254 (Eng. Abstr.) **(Chi)**
[Childhood Ki-1 lymphoma complicated with multiple bone destruction] Koike K, et al. **Rinsho Ketsueki** 1989 Nov; 30(11):2008–13 (Eng. Abstr.) **(Jpn)**
[Osteogenic sarcoma in children: clinico-immunological correlations] Panteleeva ES, et al. **Vopr Onkol** 1990; 36(3):304–8 (Eng. Abstr.) **(Rus)**
[Selected immunologic indicators in malignant bone tumors] Keleová A, et al. **Acta Chir Orthop Traumatol Cech** 1990 Feb;57(1):77–88 (Eng. Abstr.) **(Slo)**

METABOLISM

Cytokeratin expression in chondroblastomas. Semmelink HJ, et al. **Histopathology** 1990 Mar;16(3):257–63
Short-term metabolic effects of pamidronate in patients with prostatic carcinoma and bone metastases [letter; comment] Pelger RC, et al. **Lancet** 1989 Oct 7;2(8667):865 Comment on: Lancet 1989 May 6;1(8645):1021–2.
Giant cell tumors of bone. An immunohistochemical study. Liu TC, et al. **Pathol Res Pract** 1989 Oct;185(4):448–53
Immunohistochemical and biochemical studies on the collagenous proteins of human osteosarcomas. Ueda Y, et al. **Virchows Arch [B]** 1989;58(1):79–88
[Biologic activity of prostacyclin in patients with malignant tumors of the bones and soft tissues] Tucci A, et al. **Medicina (Firenze)** 1989 Apr-Jun;9(2):187–9 (Eng. Abstr.) **(Ita)**
[Bone turnover markers in tumor pathology with bone involvement] Napal Lecumberri J, et al. **Med Clin (Barc)** 1990 Apr 7;94(13):487–9 (Eng. Abstr.) **(Spa)**

MORTALITY

[Problems of statistical evaluation of survival time studies] Schumacher M. **Z Orthop** 1989 Jul-Aug;127(4):428–32 (Eng. Abstr.) **(Ger)**
[Prognostic factors in parosteal sarcoma] Trapeznikov NN, et al. **Vopr Onkol** 1990;36(7):805–11 (Eng. Abstr.) **(Rus)**

PATHOLOGY

A large metatarsal giant-cell tumor. Khanna AK, et al. **Acta Orthop Scand** 1990 Jun;61(3):271–2
Clear cell chondrosarcoma. A case report with topographic analysis. Ding J, et al. **Acta Pathol Jpn** 1989 Aug; 39(8):533–8
Comparative study of neuroectodermal tumor and Ewing's sarcoma of the bone. Histopathologic, immunohistochemical and ultrastructural features. Tsuneyoshi M, et al. **Acta Pathol Jpn** 1989 Sep;39(9):573–81
Osteosarcoma with prominent epithelioid features. Yoshida H, et al. **Acta Pathol Jpn** 1989 Jul;39(7):439–45
The value of MR imaging in monitoring the effect of chemotherapy on bone sarcomas. Holscher HC, et al. **AJR Am J Roentgenol** 1990 Apr;154(4):763–9
Radiation-associated sarcoma: a review of 23 patients with postradiation sarcoma over a 50-year period. Amendola BE, et al. **Am J Clin Oncol** 1989 Oct;12(5):411–5
Melanotic schwannoma. Clinicopathologic, immunohistochemical, and ultrastructural features of a rare primary bone tumor. Myers JL, et al. **Am J Clin Pathol** 1990 Mar;93(3):424–9 (14 ref.)
Incidental glomus coccygeum. When a normal structure looks like a tumor. Albrecht S, et al. **Am J Surg Pathol** 1990 Oct;14(10):922–4
Primary lymphoma of bone. A B-cell neoplasm with a high frequency of multilobated cells. Pettit CK, et al. **Am J Surg Pathol** 1990 Apr;14(4):329–34
A rare tumor at the elbow: a glomangioma. Differential diagnosis and therapy. Castro WH, et al. **Arch Orthop Trauma Surg** 1989;108(6):380–2
Primary malignant mesenchymoma of bone. Scheele PM Jr, et al. **Arch Pathol Lab Med** 1990 Jun;114(6):614–7 (27 ref.)
Chordoma metastatic to the ovary. Zukerberg LR, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):208–10
Desmoplastic fibroma of bone: report of one case and review of the literature. de Tomas-Cabrera AR, et al. **Bol Asoc Med P R** 1990 Jan;82(1):18–24 (40 ref.)
Insulin sensitizes a cultured rat osteogenic sarcoma cell line to hormones which activate adenylate cyclase. Hickman J, et al. **Calcif Tissue Int** 1990 Jun;46(6):401–5
Biochemical characterization of a virus-induced osteosarcoma-like osseous lesion in vitro. Schmidt J, et al. **Calcif Tissue Int** 1989 Oct;45(4):232–42
Giant-cell tumor of the sphenoid bone: case report and review of the literature. Kioumehr F, et al. **Can Assoc Radiol J** 1990 Jun;41(3):155–7 (9 ref.)
Small cell osteosarcoma. A clinicopathologic study of 27 cases. Ayala AG, et al. **Cancer** 1989 Nov 15;64(10):2162–73
The Istituto Rizzoli experience with small cell osteosarcoma. Bertoni F, et al. **Cancer** 1989 Dec 15;64(12):2591–9 (17 ref.)
Morphologic diversity of long bone adamantinoma. The concept of differentiated (regressing) adamantinoma and its relationship to osteofibrous dysplasia. Czerniak B, et al. **Cancer** 1989 Dec 1;64(11):2319–34
Fine needle aspiration cytology of chondroblastoma of bone. Fanning CV, et al. **Cancer** 1990 Apr 15;65(8):1847–63
Neuroectodermal tumor of bone. Evidence for neural differentiation in a cultured cell line. Isayama T, et al. **Cancer** 1990 Apr 15;65(8):1771–81
Sarcomas (other than Ewing's) of flat bones in children and adolescents. A clinicopathologic study. Kellie SJ, et al. **Cancer** 1990 Feb 15;65(4):1011–6
Low-grade intraosseous osteosarcoma. Kurt AM, et al. **Cancer** 1990 Mar 15;65(6):1418–28
Characterization of cells cultured from human giant-cell tumors of bone. Phenotypic relationship to the monocyte-macrophage and osteoclast. Komiya S, et al. **Clin Orthop** 1990 Sep;(258):304–9
Chondrosarcoma arising in an osteochondroma: an unusual cause of an abdominal mass. Robson AK, et al. **Eur J Surg Oncol** 1990 Feb;16(1):60–2
Leiomyosarcoma of the os calcis. Marymont JV, et al. **Foot Ankle** 1990 Feb;10(4):239–42
Primary benign and malignant osseous neoplasms of the foot. Murari TM, et al. **Foot Ankle** 1989 Oct;10(2):68–80
Nodular sclerosing type of Hodgkin's disease: report of a case with unusual sternal localization at onset [letter] Miano C, et al. **Haematologica** 1990 Jan-Feb;75(1):95–6
Parosteal osteogenic sarcoma of the hand. van der Walt JD, et al. **Histopathology** 1990 Jan;16(1):75–8
Chondroblastoma of bone. Kurt AM, et al. **Hum Pathol** 1989 Oct;20(10):965–76
Chondromyxoid fibroma of bone: thirty-six cases with clinicopathologic correlation. Zillmer DA, et al. **Hum Pathol** 1989 Oct;20(10):952–64
Fine needle aspiration cytology in the diagnosis of bone tumors. Ashokraj G, et al. **Indian J Cancer** 1989 Dec; 26(4):260–4
Malignant bone tumours in pregnancy (a report of two cases and review of literature). Sadat-Ali M, et al. **Indian J Cancer** 1989 Sep;26(3):151–5 (20 ref.)
Non-ossifying fibroma of the metacarpal bone (a case report). Kumar PV, et al. **Indian J Pathol Microbiol** 1987 Apr; 30(2):135–8
Magnetic resonance imaging in malignant bone tumours. Exner GU, et al. **Int Orthop** 1990;14(1):49–55
Fibrous metaphyseal defect. Ritschl P, et al. **Int Orthop** 1990; 14(2):205–11
Gastric mass [clinical conference] Soulen MC, et al. **Invest Radiol** 1990 Jul;25(7):865–7
Multiple and familial malignant fibrous histiocytoma of bone. A report of two cases. Finci R, et al. **J Bone Joint Surg [Am]** 1990 Feb;72(2):295–8
The effect of local extent of the tumor on prognosis in osteosarcoma. Spanier SS, et al. **J Bone Joint Surg [Am]** 1990 Jun;72(5):643–53
Cutaneous metastases of a giant cell tumor of bone: case report. Cerroni L, et al. **J Cutan Pathol** 1990 Feb; 17(1):59–63
Chondromyxoid fibroma of a metatarsal. Crisafulli JA, et al. **J Foot Surg** 1990 Mar-Apr;29(2):164–8
Osteoid osteoma: report of a case. Shader AF, et al. **J Foot Surg** 1989 Sep-Oct;28(5):438–41
Primary malignant bone tumors of the hand. Frassica FJ, et al. **J Hand Surg [Am]** 1989 Nov;14(6):1022–8
Chondrosarcoma of small bones of the hand arising from enchondroma. Nelson DL, et al. **J Hand Surg [Am]** 1990 Jul;15(4):655–9 (14 ref.)
Osteoclasts are present in the giant cell variant of malignant fibrous histiocytoma. Flanagan AM, et al. **J Pathol** 1989 Sep;159(1):53–7
Isolated CNS involvement in Ewing's sarcoma. Yu L, et al. **Med Pediatr Oncol** 1990;18(5):354–8
Primary malignant giant cell tumor of bone: "dedifferentiated" giant cell tumor. Meis JM, et al. **Mod Pathol** 1989 Sep;2(5):541–6
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 10-1990. A 15-year-old girl with multiple radiolucent bony defects and multiple pulmonary nodules. **N Engl J Med** 1990 Mar 8; 322(10):683–90
Staging systems for musculoskeletal neoplasms. Finn HA, et al. **Orthopedics** 1989 Oct;12(10):1365–71 (10 ref.)
A morphometric approach to the grading of chondroid tumours on fine-needle smears. Zeppa P, et al. **Pathol Res Pract** 1989 Nov;185(5):760–3
Clear cell chondrosarcoma: case report and ultrastructural study. Chan YF, et al. **Pathology** 1989 Apr;21(2):134–7
Test and teach. Number Sixty-two. Chondroblastoma of the scaphoid. Ng JP, et al. **Pathology** 1990 Jan;22(1):10, 49
Osteosarcoma: MR imaging after preoperative chemotherapy. Pan G, et al. **Radiology** 1990 Feb; 174(2):517–26
Malignant transformation in bone lipomas. Milgram JW. **Skeletal Radiol** 1990;19(5):347–52
Giant cell tumor of bone: a model for the in vitro human osteoclast characterization. Campanacci M, et al. **Tumori** 1989 Aug 31;75(4):389–95
Pigmented adenomatoid odontogenic tumour. Report of an undescribed case and review of the literature of pigmented intraosseous odontogenic lesions. Takeda Y. **Virchows Arch [A]** 1989;415(6):571–5 (18 ref.)
Spontaneous necrosis in osteosarcomas. von Hochstetter AR. **Virchows Arch [A]** 1990;417(1):5–8
[Cellular biological study of giant cell tumor of bone: a 10-year summary] Feng CH. **Chung Hua Wai Ko Tsa Chih** 1990 Feb;28(2):92–4, 126–7 contd (0 ref.) (Eng. Abstr.) **(Chi)**
[Multinucleated giant cells in cultured giant cell tumor of bone] Zhou L. **Chung Hua Wai Ko Tsa Chih** 1989 Nov; 27(11):689–91, 703 (Eng. Abstr.) **(Chi)**
[Multicentric bone chloroma disclosed by pleural cytology] Robaglia A, et al. **Arch Anat Cytol Pathol** 1990; 38(1-2):19–21 (10 ref.) (Eng. Abstr.) **(Fre)**
[Assessment of the grading of cartilaginous tumors of the long tubular bones from the radiologic and pathologic viewpoint] Dietlein M, et al. **Rontgenblatter** 1990 May; 43(5):174–80 (Eng. Abstr.) **(Ger)**
[Bilateral primary giant cell tumor (osteoclastoma) of the ribs] Wiemann B, et al. **Z Erkr Atmungsorgane** 1990; 174(2):155–60 (Eng. Abstr.) **(Ger)**
[The Balgrist Reference Center for Mesenchymal Tumors. The significance of a clinico-pathological tumor register] von Hochstetter AR. **Z Orthop** 1990 May-Jun;128(3):305–7 (Eng. Abstr.) **(Ger)**
[Review of 115 cases of osteoid osteoma] De Santis E, et al. **Arch Putti Chir Organi Mov** 1989;37(1):209–18 (Eng. Abstr.) **(Ita)**
[Evaluation of necrosis caused by preoperative chemotherapy in 9 cases of classic central osteosarcoma] Carrillo G, et al. **Patologica** 1989 Nov-Dec;81(1076):601–9 (Eng. Abstr.) **(Ita)**
[A case of lymphangiomas arising contiguously from the rib and thoracic spine] Hayashi K, et al. **Gan No Rinsho** 1989 Dec;35(15):1769–72 (Eng. Abstr.) **(Jpn)**
[Amylase-producing extramedullary plasmacytoma with multiple cutaneous metastasis following a solitary plasmacytoma of bone] Yamazaki T, et al. **Rinsho Ketsueki** 1990 Mar;31(3):391–5 (Eng. Abstr.) **(Jpn)**
[Comparative histopathologic analysis of osteogenic sarcomas before and after initial chemotherapy] Liebhart M. **Patol Pol** 1989;40(2):149–58 (Eng. Abstr.) **(Pol)**
[Benign fibrous histiocytoma of bone] Fedenko AN, et al. **Arkh Patol** 1989;51(8):74–7 (Eng. Abstr.) **(Rus)**
[Clear-cell chondrosarcoma of bone] Povišil C, et al. **Arkh Patol** 1990;52(5):55–8 (Eng. Abstr.) **(Rus)**
[Malignant transformation in bone cysts] Paloski S, et al. **Acta Chir Iugosl** 1989;36 Suppl 2:780–2 (Eng. Abstr.) **(Ser)**

PHYSIOPATHOLOGY

Subtalar arthralgia caused by juxtaarticular osteoid osteoma. Khurana JS, et al. **Clin Orthop** 1990 Mar;(252):205–8
[Bone tissue and cancer] Rossi JF. **Pathol Biol (Paris)** 1990 Jan;38(1):69–79 (754 ref.) (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

The use of postoperative irradiation for the prevention of heterotopic bone after total hip replacement with biologic

fixation (porous coated) prosthesis: an animal model. Konski A, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr; 18(4):861–5

PSYCHOLOGY

Approach to the medically ill borderline patient: a case study. Fitzgibbon ML, et al. **Psychol Rep** 1989 Dec;65(3 Pt 2):1091–6

RADIOGRAPHY

Metastases from malignant melanoma to the axial skeleton: a CT study of frequency and appearance. Patten RM, et al. **AJR Am J Roentgenol** 1990 Jul;155(1):109–12

Preoperative localization of osteoid osteoma: a new technique that uses CT. Steinberg GG, et al. **AJR Am J Roentgenol** 1990 Oct;155(4):883–5

Solitary cartilaginous exostosis of the ilium presenting as an abdominal mass. Lee FA. **Am J Dis Child** 1967 Aug; 114(2):195–7

Malignant schwannoma. A case report and review of the literature. Verhaven E, et al. **Arch Orthop Trauma Surg** 1989;108(6):394–6 (14 ref.)

Primary bone tumours of the pelvis in childhood—Ewing's sarcoma of the ilium, pubis and ischium (report of 30 cases). (Part I). Kozlowski K, et al. **Australas Radiol** 1989 Nov; 33(4):354–60

Rare, primary iliac, pubic and ischial tumours in children (report of 14 cases)—Part II. Kozlowski K, et al. **Australas Radiol** 1989 Nov;33(4):361–8

Importance of digital subtraction angiography in the imaging of locomotor tumors. Kolář J, et al. **Bildgebung** 1987–89; 56(3):124–8

Fatigue fractures of the femoral diaphysis in the skeletally immature simulating malignancy. Davies AM, et al. **Br J Radiol** 1989 Oct;62(742):893–6

Primary malignant fibrous histiocytoma of a metacarpal bone: a new localization. Dock W, et al. **Br J Radiol** 1989 Oct; 62(742):940–2

Hodgkin's disease in bone, with special reference to periosteal reaction. Granger W, et al. **Br J Radiol** 1967 Dec; 40(480):939–48 (14 ref.)

Sclerotic lesions of bone in myeloma. Langley GR, et al. **Can Med Assoc J** 1966 Apr 30;94(18):940–6

Ewing's sarcoma of metacarpal. A case report and review of literature. Mishra GK, et al. **Indian J Cancer** 1989 Sep; 26(3):189–93 (14 ref.)

Wrist mass in an 18-year-old. Choi RE, et al. **Indiana Med** 1990 Feb;83(2):112–3

Aneurysmal bone cysts in the hand. De Durante C, et al. **Ital J Orthop Traumatol** 1990 Mar;16(1):73–8

Osteoid osteoma of the metacarpus. A case report. Zanasi S, et al. **Ital J Orthop Traumatol** 1990 Mar;16(1):129–32

Semilunar osteoblastic metastases in breast carcinoma. A new radiological sign. Cochrane LB, et al. **J Belge Radiol** 1989 Dec;72(6):497–500

Benign giant cell tumour with metastases to bone and lung. One case studied over 20 years. Wray CC, et al. **J Bone Joint Surg [Br]** 1990 May;72(3):486–9

Hemangioendothelioma of bone: CT findings. Merine D, et al. **J Comput Assist Tomogr** 1989 Nov–Dec;13(6):1098–100

Secondary chondrosarcoma of the foot. Wu KK. **J Foot Surg** 1989 May–Jun;28(3):260–5

Bilateral giant cell tumour of the distal radius: a case report. Bottke CA, et al. **J Hand Surg [Br]** 1989 Aug;14(3):338–40

An unusual site of osteoid osteoma in the proximal phalanx of a finger. Chen SC, et al. **J Hand Surg [Br]** 1989 Aug; 14(3):341–4

Giant cell tumour of talus. Sen RK, et al. **J Indian Med Assoc** 1990 Jan;88(1):16–7

Osteoid osteoma of the acetabulum: two cases. Gille P, et al. **J Pediatr Orthop** 1990 May–Jun;10(3):416–8

Role of computed tomography scanning in the management of Ewing's sarcoma. Williams MP, et al. **Med Pediatr Oncol** 1989;17(5):414–7

Imaging the painful pelvis—a case for high technology. Haycock T, et al. **Radiogr Today** 1989 Nov;55(630):16–8

Continuity and change in orthopaedic radiology. Stoker D. **Radiogr Today** 1989 Oct;55(629):24–6

CT of malignant melanoma in the chest, abdomen, and musculoskeletal system. Fishman EK, et al. **Radiographics** 1990 Jul;10(4):603–20 (23 ref.)

From the archives of the AFIP. Giant cell tumor of the upper extremity. Moser RP Jr, et al. **Radiographics** 1990 Jan; 10(1):83–102

Radiologic concepts of lymphoma of bone. Edeiken-Monroe B, et al. **Radiol Clin North Am** 1990 Jul;28(4):841–64 (59 ref.)

Fluid-fluid level: a nonspecific finding in tumors of bone and soft tissue. Tsai JC, et al. **Radiology** 1990 Jun; 175(3):779–82

Giant cell tumour occurring in the clavicle: a report of two cases. Friedman B, et al. **Respir Med** 1989 Mar;83(2):145–8 (17 ref.)

Primary sternal tumours. Eng J, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(3):289–92

Case report 593: Hemangioma of sternum. Boker SM, et al. **Skeletal Radiol** 1990;19(1):77–8

Case report 619. Intraosseous lipoma of the sacrum. Ehara S, et al. **Skeletal Radiol** 1990;19(5):375–6

Case report 574. Periosteal osteoblastoma of rib. Gentry JF, et al. **Skeletal Radiol** 1989;18(7):551–5

Osteoid osteoma of the elbow. A review of six cases. Moser RP Jr, et al. **Skeletal Radiol** 1990;19(3):181–6

Case report 604: Osteofibrous dysplasia (ossifying fibroma) of tibia. Resnik CS, et al. **Skeletal Radiol** 1990;19(3):217–9

A case report of recurrent osteoblastoma of the rib presenting as painless progressive scoliosis. Dowell JK, et al. **Spine** 1990 Feb;15(2):141–2

Giant chondroma of the sternum mimicking a mediastinal mass. Fink G, et al. **Thorax** 1990 Aug;45(8):643–4

[Roentgenological and pathological diagnoses of primary osseous alveolar sarcoma—report of 3 cases] Li KY. **Chung Hua Chung Liu Tsa Chih** 1990 Jan;12(1):61–2 (Eng. Abstr.) **(Chi)**

[Chondrosarcoma: clinical and radiological analysis of 206 cases] Xu DY. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Jun;23(3):161–4 (Eng. Abstr.) **(Chi)**

[Pathologic and radiologic study of parosteal osteosarcoma. Report of 17 cases] Deng J. **Chung Hua I Hsueh Tsa Chih** 1989 Aug;69(8):450–2, 32 (Eng. Abstr.) **(Chi)**

[Arteriographic findings in bone tumors: experience with 170 cases] Hu YG. **Chung Hua Wai Ko Tsa Chih** 1990 Apr; 28(4):195–7, 251 (Eng. Abstr.) **(Chi)**

[Generalized lymphangiomatosis. 25-year follow-up of a case of lymphangiomatosis] Verstraeten AF, et al. **Acta Clin Belg** 1989;44(5):311–7 (Eng. Abstr.) **(Dut)**

[Osteoid osteoma of the semilunar bone. Apropos of a case. The value of x-ray computed tomography] Savornin C, et al. **Ann Chir Main** 1989;8(2):146–9 (Eng. Abstr.) **(Fre)**

[Value of x-ray computed tomography in osteoid osteoma] Vicens JL, et al. **Ann Radiol (Paris)** 1989;32(6):467–71 (Eng. Abstr.) **(Fre)**

[Iconographic rubric. Multicentric osteosarcoma] Ducou-Le Pointe H, et al. **Arch Fr Pediatr** 1989 Oct;46(8):605–6 **(Fre)**

[Diagnostic strategy in primary malignant bone tumors in children] Baars HG, et al. **Radiol Diagn (Berl)** 1989; 30(4):447–53 (Eng. Abstr.) **(Ger)**

[The strategy of new imaging procedures in the diagnosis of malignant bone processes] Köhler K, et al. **Radiol Diagn (Berl)** 1989;30(4):439–46 (Eng. Abstr.) **(Ger)**

[Computed tomographic findings in hemangiolipomatosis of the bones] Beck B, et al. **ROFO** 1989 Dec;151(6):749–51 **(Ger)**

[Computed tomographic differential diagnosis of primary pelvic osteo-, chondro- and Ewing's sarcomas] Heller M, et al. **ROFO** 1990 Aug;153(2):137–42 (Eng. Abstr.) **(Ger)**

[Current indications for angiography of tumors of the muscular and skeletal systems] Reuter M, et al. **ROFO** 1989 Nov;151(5):558–64 (Eng. Abstr.) **(Ger)**

[Computed tomography in malignant primary bone tumors] Kersjes W, et al. **Rontgenblatter** 1990 Apr;43(4):137–40 (Eng. Abstr.) **(Ger)**

[Case from general practice (145). Patient: Mr. X. S., born in 1960] Goetz S, et al. **Schweiz Rundsch Med Prax** 1989 Aug 22;78(34):912–4 **(Ger)**

[Diagnosis of a case of elbow-joint osteoid osteoma] Hayashi K, et al. **Rinsho Hoshasen** 1989 Jul;34(7):831–2 **(Jpn)**

[Osteoid osteoma of the calcaneus] Beliakova LI, et al. **Vestn Rentgenol Radiol** 1989 Nov–Dec;(6):76–8 **(Rus)**

[Errors and difficulties in the x-ray diagnosis of osteogenic sarcoma of the long tubular bones] Zvekotkina LS, et al. **Vestn Rentgenol Radiol** 1989 Nov–Dec;(6):5–11 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Prostatic specific antigen and the prediction of prognosis in metastatic prostatic cancer. Cooper EH, et al. **Cancer** 1990 Sep 1;66(5 Suppl):1025–8

Some limitations of the radioisotope bone scan in patients with metastatic prostatic cancer. A subanalysis of EORTC trial 30853. The EORTC Urological Group. Smith PH, et al. **Cancer** 1990 Sep 1;66(5 Suppl):1009–16

Interpretation of bone scans using a video display. A necessary step toward a filmless nuclear medicine department. Arnstein NB, et al. **Clin Nucl Med** 1990 Jun; 15(6):418–23

Metastatic prostate carcinoma mimicking Paget's disease on bone imaging. Fig LM, et al. **Clin Nucl Med** 1989 Oct; 14(10):777–8

The differential diagnosis of benign and malignant bony lesions in bone scanning. Using the ratio of radiouptake at different times. Guan SI, et al. **Clin Nucl Med** 1990 Jun; 15(6):424–7

Bone scintigraphy in polyostotic fibrous dysplasia resembling multiple bone metastases. Hardoff R, et al. **Clin Nucl Med** 1989 Dec;14(12):928–9

Tc-99m DTPA uptake in Paget's disease of the left ilium. Larcos G, et al. **Clin Nucl Med** 1990 Jan;15(1):22–4

The use of SPECT in the diagnosis of epiphyseal osteoid osteoma. Murray IP, et al. **Clin Nucl Med** 1989 Nov; 14(11):811–3

Bone scintigraphy in pleural metastases of osteogenic sarcoma. Palestro CJ, et al. **Clin Nucl Med** 1990 May; 15(5):346–7

F-18 fluorodeoxyglucose: its potential in differentiating between stress fracture and neoplasia. Paul R, et al. **Clin Nucl Med** 1989 Dec;14(12):906–8

Multicentric giant cell tumor of bone. Williams HT. **Clin Nucl Med** 1989 Aug;14(8):631–3

Experience with 7,604 bone scintigraphies at time of operation for breast cancer 1977–1987. Thomsen HS, et al. **Dan Med Bull** 1989 Oct;36(5):481–3

Scintigraphic appearance of uncommon soft-tissue osteogenic sarcoma metastases. Arrington ER, et al. **J Nucl Med** 1990 May;31(5):679–81

Nuclear medicine in monitoring response to cancer treatment. Front D, et al. **J Nucl Med** 1989 Oct;30(10):1731–6

Thallium-201 scintigraphy in bone sarcoma: comparison with gallium-67 and technetium-MDP in the evaluation of chemotherapeutic response. Ramanna L, et al. **J Nucl Med** 1990 May;31(5):567–72

Comparison of immunoscintigraphy and colloid scintigraphy of bone marrow [letter] Munz DL, et al. **Lancet** 1990 Jul 28;336(8709):258–9

Subtraction technique for contrast-enhanced MR images of musculoskeletal tumors. Hanna SL, et al. **Magn Reson Imaging** 1990;8(3):213–5

Bone lesions mimicking disseminated malignancy after remission of thoracic sarcoidosis. Jager J, et al. **Neth J Med** 1990 Apr;36(3–4):204–6

Role of thallium-201 in the diagnosis of solitary bone lesions. Elgazzar AH, et al. **Nucl Med Commun** 1989 Jul; 10(7):477–85

Consistency in nuclear medicine reporting—a pilot study using bone scans. McKillop JH, et al. **Nucl Med Commun** 1990 Mar;11(3):253–7

Localized breast Ca: are bone scans necessary? [letter] Apostol JV. **Oncology (Williston Park)** 1988 Feb;2(2):13

Scintigraphic and MRI studies in a patient with granulocytic sarcoma accompanied with CML and myelofibrosis. Caner BE, et al. **Radiat Med** 1989 Jul–Aug;7(4):165–8

B-cell immunoblastic sarcoma as a cause of a photopenic lesion on bone scintigraphy: an initial description. Hung GL, et al. **Radiat Med** 1989 Jul–Aug;7(4):186–8

Metastatic neuroblastoma: new abnormalities on bone scintigraphy may not indicate tumour recurrence. Hall-Craggs MA, et al. **Skeletal Radiol** 1990;19(1):33–6

Case report 621. Multiple myeloma (IgD) in a 28-year-old woman. Hermann G, et al. **Skeletal Radiol** 1990; 19(5):379–81

Scintigraphic evaluation of tumor regression during preoperative chemotherapy of osteosarcoma. Correlation of 99mTc-methylene diphosphonate parametric imaging with surgical histopathology. Knop J, et al. **Skeletal Radiol** 1990;19(3):165–72

[The problem of false positives in bone scintigraphy in patients with breast neoplasms. A follow-up at 10 years] Campostrini F, et al. **Radiol Med (Torino)** 1990 May; 79(5):539–43 (Eng. Abstr.) **(Ita)**

[Diagnosis of a case of desmoid using gallium-67 citrate] Kurosawa T, et al. **Rinsho Hoshasen** 1989 Jul;34(7):833–4 **(Jpn)**

[Value of bone gammagraphy and pain in the follow-up of carcinoma of the prostate] Ruiz Cerdá JL, et al. **Arch Esp Urol** 1989;42 Suppl 2:206–8 (Eng. Abstr.) **(Spa)**

RADIOTHERAPY

Samarium-153 EDTMP therapy of disseminated skeletal metastasis. Turner JH, et al. **Eur J Nucl Med** 1989; 15(12):784–95

The case of the twice-recurrent skull lesion. Levin KJ, et al. **Hosp Pract [Off]** 1990 Sep 15;25(9):61–2

Radiation treatment of osteoclastoma. Sharma U, et al. **Indian J Cancer** 1990 Mar;27(1):1–10

Radiation therapy in the treatment of difficult giant cell tumors. Schwartz LH, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):1085–8

Hepatocellular carcinoma with skeletal metastasis: management with intraarterial radioactive iodine. Cho YD, et al. **J Belge Radiol** 1989 Aug;72(4):267–71

"Systemic radioisotopic therapy of primary and metastatic bone cancer" [editorial; comment] Robinson RG. **J Nucl Med** 1990 Aug;31(8):1326–7 Comment on: J Nucl Med 1990 Aug;31(8):1316–25.

Radiotherapy enhances the toxicity of aminoglutethimide. Vanek N, et al. **Med Pediatr Oncol** 1990;18(2):162–4

Diagnosis and management of plasmacytomas. Wasserman TH. **Oncology (Williston Park)** 1987 Apr;1(2):37–41

The role of radiation therapy in the treatment of solitary plasmacytomas. Mayr NA, et al. **Radiother Oncol** 1990 Apr; 17(4):293–303

The effect of radiation therapy on von Willebrand factor in patients with angiosarcoma. Smith RE, et al. **Radiother Oncol** 1989 Dec;16(4):297–304

[Ewing's sarcoma—report of 18 cases] Gu BH. **Chung Hua Chung Liu Tsa Chih** 1989 Nov;11(6):452–4 (Eng. Abstr.) **(Chi)**

[Indications for and results of radiotherapy of plasmacytomas] Köst S. **Radiobiol Radiother (Berl)** 1990; 31(3):231–7 (Eng. Abstr.) **(Ger)**

[Radiation therapy in bone metastases from lung cancer] Katano S, et al. **Gan No Rinsho** 1989 Nov;35(14):1627–30 (Eng. Abstr.) **(Jpn)**

[Analysis of patients surviving for six months after irradiation of a bone metastasis] Ohara K, et al. **Gan No Rinsho** 1989 Nov;35(14):1655–9 (Eng. Abstr.) **(Jpn)**

[A multiinstitutional prospective randomized study of radiation therapy of bone metastasis. II. Prognostic factors] Teshima T, et al.

Nippon Igaku Hoshasen Gakkai Zasshi 1989 Apr 25; 49(4):439–44 (Eng. Abstr.) **(Jpn)**

[Sclerotic changes in bone tumors following radiation therapy] Monzen Y, et al. **Rinsho Hoshasen** 1990 Apr; 35(4):465–70 (Eng. Abstr.) **(Jpn)**

[Use of Co2–laser in the treatment of bone tumors in children] Prokopova LV, et al. **Klin Khir** 1990;(5):26–7 (Eng. Abstr.) **(Rus)**

[Dose fractionation in photon and neutron therapy in the combined treatment of osteogenic sarcoma] Musabaeva LI, et al. **Med Radiol (Mosk)** 1990 Apr;35(4):27–32 (Eng. Abstr.) **(Rus)**

[Treatment of disseminated breast cancer with combined irradiation of the hypophysis by protons and zone gamma irradiation of the skeleton] Monzul' GD, et al. **Vopr Onkol** 1990;36(4):427–33 (Eng. Abstr.) **(Rus)**

REHABILITATION

New advances and concepts in amputee management after treatment for bone and soft–tissue sarcomas. Lane JM, et al. **Clin Orthop** 1990 Jul;(256):22–8 (23 ref.)

[Rehabilitation in oncology] Fernandes MS, et al. **Acta Med Port** 1989 May–Jun;2(3):167–72 (26 ref.) (Eng. Abstr.) **(Por)**

[Orthopedic rehabilitation of children after combined treatment of malignant bone tumors] Berezhnoi AP, et al. **Ortop Travmatol Protez** 1990 Mar;(3):38–41 (Eng. Abstr.) **(Rus)**

SECONDARY

Significance of laboratory values in detection and follow–up of metastatic breast cancer. Kellokumpu–Lehtinen P, et al. **Acta Oncol** 1990;29(3):313–4

Ovarian carcinoma metastasis to the little finger. A case report. Turan I, et al. **Acta Orthop Scand** 1990 Apr; 61(2):185–6

Glioblastoma multiforme presenting as osteoblastic metastatic disease: case report and review of the literature. Myers T, et al. **AJNR** 1990 Jul–Aug;11(4):802–3 (11 ref.)

Arterial chemoinfusion and embolization of iliac metastasis from pancreatic islet cell carcinoma [letter; comment] Valette PJ, et al. **AJR Am J Roentgenol** 1989 Dec; 153(6):1318 Comment on: AJR Am J Roentgenol 1989 Feb;152(2):387–90.

Aggressive insulinoma with bone metastases. Hesdorffer CS, et al. **Am J Clin Oncol** 1989 Dec;12(6):498–501

Bone–only versus visceral–only metastatic pattern in breast cancer: analysis of 150 patients. A GOCS study. Grupo Oncológico Cooperativo del Sur. Perez JE, et al. **Am J Clin Oncol** 1990 Aug;13(4):294–8

Isoenzymes of alkaline and acid phosphatases as bones metastasis marker in breast cancer patients. Desoize B, et al. **Anticancer Res** 1989 Jul–Aug;9(4):1105–9

Metastatic retinoblastoma. Case report. Char D, et al. **Arch Ophthalmol** 1989 Nov;107(11):1570–1

The distribution of bone metastases as shown on isotope scanning: proposed modes of spread. Styles C. **Australas Radiol** 1989 Aug;33(3):226–8

Reduction in calcium excretion in women with breast cancer and bone metastases using the oral bisphosphonate pamidronate. Dodwell DJ, et al. **Br J Cancer** 1990 Jan; 61(1):123–5

An objective biochemical assessment of therapeutic response in metastatic breast cancer: a study with external review of clinical data. Williams MR, et al. **Br J Cancer** 1990 Jan; 61(1):126–32

Systemic metastasis from primary intracranial germinoma: a case report and literature review. Balsitis M, et al. **Br J Neurosurg** 1989;3(6):717–23 (12 ref.)

Spontaneous regression of multiple bone metastases in malignant melanoma. O'Connell ME, et al. **Br J Radiol** 1989 Dec;62(744):1095–100

Nasopharyngeal carcinoma: pattern of skeletal metastases. Sham JS, et al. **Br J Radiol** 1990 Mar;63(747):202–5

Nasopharyngeal carcinoma: the significance of neck node involvement in relation to the pattern of distant failure. Sham JS, et al. **Br J Radiol** 1990 Feb;63(746):108–13

Bone involvement in Hodgkin's disease. A survey of 201 cases. Horan FT. **Br J Surg** 1969 Apr;56(4):277–81

Prostatic cancer with bone metastases: serum alkaline phosphatase (SAP) as a predictor of response and the significance of the SAP "flare". Mackintosh J, et al. **Br J Urol** 1990 Jul;66(1):88–93

Megestrol acetate versus aminoglutethimide for metastatic breast cancer. Lundgren S, et al. **Breast Cancer Res Treat** 1989 Nov;14(2):201–6

Diffuse bony metastases at presentation in a child with glioblastoma multiforme. A case report. Gamis AS, et al. **Cancer** 1990 Jul 1;66(1):180–4

Hepatocellular carcinoma presenting as bone metastasis. Liaw CC, et al. **Cancer** 1989 Oct 15;64(8):1753–7

The palliation of osseous metastasis with 32P or 89Sr compared with external beam and hemibody irradiation: a historical perspective. Montebello JF, et al. **Cancer Invest** 1989;7(2):139–60 (105 ref.)

Osteocalcin as a biological marker in the therapeutic management of breast cancer bone metastases. Neri B, et al. **Cancer Invest** 1989;7(6):551–5

Osseous metastases from hepatocellular carcinoma: embolization for pain control. Nagata Y, et al. **Cardiovasc Intervent Radiol** 1989 May–Jun;12(3):149–53

High predictivity of galactosyl–hydroxylysine in urine as an indicator of bone metastases from breast cancer. Moro L, et al. **Clin Chem** 1990 May;36(5):772–4

Incidental bone metastasis seen on gastrointestinal bleeding scan with technetium–99m albumin colloid. Gore RL, et al. **Clin Nucl Med** 1990 May;15(5):348–9

Leuprolide therapy for prostate cancer. An association with scintigraphic "flare" on bone scan. Johns WD, et al. **Clin Nucl Med** 1990 Jul;15(7):485–7

Correlation of prostate–specific antigen and technetium–99m HMDP bone imaging. Shih WJ, et al. **Clin Nucl Med** 1989 Oct;14(10):750–5

Detection of metastatic thyroid carcinoma on renal dynamic study. Shoemaker DW, et al. **Clin Nucl Med** 1990 Mar; 15(3):193–4

Metastatic diaphyseal fractures of the shaft of the humerus. The structural strength evaluation of a new method of treatment with a segmental defect prosthesis. Chin HC, et al. **Clin Orthop** 1989 Nov;(248):231–9

Metastatic disease in long bones. A proposed scoring system for diagnosing impending pathologic fractures. Mirels H. **Clin Orthop** 1989 Dec;(249):256–64

Bone metastases from Ewing's sarcoma radiologically recapitulate the features of a primary Ewing's tumour. Plowman PN. **Clin Radiol** 1989 Sep;40(5):498–500

Fine–needle aspiration cytology diagnosis of a symptomatic bony metastasis from an occult hepatocellular carcinoma: a case report. Ng IO, et al. **Diagn Cytopathol** 1990; 6(2):127–9

En bloc resection for T3 bronchogenic carcinoma with chest wall invasion. Ricci C, et al. **Eur J Cardiothorac Surg** 1987; 1(1):23–8

Scintigraphic rib abnormality mimicking metastasis in a breast cancer patient. Esik O, et al. **Eur J Nucl Med** 1989; 15(10):676–7

Scintigraphy with nanocolloid Tc 99m in patients with small cell lung cancer, with special reference to bone marrow and hepatic metastasis. Widding A, et al. **Eur J Nucl Med** 1990;16(8–10):717–9

Indication, management and results of surgical therapy for pathological fractures in patients with bone metastases. Friedl W. **Eur J Surg Oncol** 1990 Aug;16(4):380–96

Bone metastases in carcinoma of the rectum: a clinical and pathological review. Talbot RW, et al. **Eur J Surg Oncol** 1989 Oct;15(5):449–52

Hyperparathyroidism in metastases of prostatic carcinoma: a biochemical, hormonal and histomorphometric study. Rico H, et al. **Eur Urol** 1990;17(1):35–9

Bone biopsy in solitary lesions on bone scan in genitourinary malignancy. Zungri E. **Eur Urol** 1990;17(4):293–5

Tc–99m–(V)–DMSA: the new sensitive and specific radiopharmaceutical for imaging metastases of medullary thyroid carcinomas? Becker W, et al. **Horm Metab Res Suppl** 1989;21:38–42

Palliative hemiskeletal irradiation for widespread metastatic prostate cancer: a comparison of single dose and fractionated regimens. Zelefsky MJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1281–5

Distant metastases following surgical treatment of cervical carcinoma. Foley M, et al. **Ir Med J** 1990 Jun;83(2):62–4

Metastatic basal cell carcinoma: response to chemotherapy. Bason MM, et al. **J Am Acad Dermatol** 1990 May;22(5 Pt 2):905–8

Renal cell carcinoma and osseous metastases. Case report and literature review. Goldman FD, et al. **J Am Podiatr Med Assoc** 1989 Dec;79(12):618–25 (40 ref.)

Emergency treatment with ketoconazole in disseminated intravascular coagulation due to metastatic prostatic carcinoma [published erratum appears in J Assoc Physicians India 1990 Mar;38(3):205] Bhadoria DP, et al. **J Assoc Physicians India** 1989 Dec;37(12):792–3

Prognosis for patients who have osteosarcoma with skip metastasis. Wuisman P, et al. **J Bone Joint Surg [Am]** 1990 Jan;72(1):60–8

Tumour DNA content and skeletal metastases in renal cell carcinoma. A preliminary report. Ljungberg B, et al. **J Bone Joint Surg [Br]** 1990 Jan;72(1):111–5

Radionuclide targeting of bone metastases: which efficacy? [letter] Leyvraz S, et al. **J Clin Oncol** 1990 Sep;8(9):1598–9

A phase I study of samarium–153 ethylenediaminetetramethylene phosphonate therapy for disseminated skeletal metastases. Turner JH, et al. **J Clin Oncol** 1989 Dec;7(12):1926–31

Extra–CNS metastases of glioblastoma: CT and MR studies. Trattnig S, et al. **J Comput Assist Tomogr** 1990 Mar–Apr; 14(2):294–6

MR imaging of transarticular skip metastases from distal femoral osteosarcoma. Wetzel LH, et al. **J Comput Assist Tomogr** 1990 Mar–Apr;14(2):315–7

Experimental bone and bone marrow metastasis in laboratory animals [letter; comment] Arguello F, et al. **J Natl Cancer Inst** 1990 Jun 20;82(12):1069–70 Comment on: J Natl Cancer Inst 1990 Mar 7;82(5):408–12.

Nude rat model for studying metastasis of human tumor cells to bone and bone marrow [see comments] Kjønniksen I, et al. **J Natl Cancer Inst** 1990 Mar 7;82(5):408–12 Comment in: J Natl Cancer Inst 1990 Jun 20;82(12):1069–70.

Human tumor bone metastasis model in athymic nude rats. Olden K. **J Natl Cancer Inst** 1990 Mar 7;82(5):340–1 (17 ref.)

Glioblastoma multiforme with bone metastase and cauda equina syndrome. Lampl Y, et al. **J Neurooncol** 1990 Apr; 8(2):167–72

Bone metastases of medulloblastoma in childhood; correlation with flow cytometric DNA analysis. Tomita T, et al. **J Neurooncol** 1990 Apr;8(2):113–20

Radioimmune imaging of bone marrow in patients with suspected bone metastases from primary breast cancer. Duncker CM, et al. **J Nucl Med** 1990 Sep;31(9):1450–5

Skeletal assessment in neuroblastoma—the pitfalls of iodine–123–MIBG scans [see comments] Gordon I, et al. **J Nucl Med** 1990 Feb;31(2):129–34 Comment in: J Nucl Med 1990 Feb;31(2):135.

Association between number and sites of new bone scan abnormalities and presence of skeletal metastases in patients with breast cancer. Jacobson AF, et al. **J Nucl Med** 1990 Apr;31(4):387–92

Clinical and clinicopathologic effects of samarium–153–EDTMP administered intravenously to normal beagle dogs [see comments] Lattimer JC, et al. **J Nucl Med** 1990 May;31(5):586–93 Comment in: J Nucl Med 1990 May;31(5):601–2.

Serum osteocalcin measurements in prostate carcinoma patients with skeletal deposits shown by bone scintigram: comparison with serum PSA/PAP measurements. Shih WJ, et al. **J Nucl Med** 1990 Sep;31(9):1486–9

Human pharmacokinetics of samarium–153 EDTMP in metastatic cancer. Singh A, et al. **J Nucl Med** 1989 Nov; 30(11):1814–8

Multifocal skeletal uptake of labeled leukocytes: infection versus tumor metastasis. Wahner–Roedler DL. **J Nucl Med** 1990 Sep;31(9):1543–7

Internally administered isotopes in the treatment of solid malignancy [editorial; comment] Willett CG. **J Nucl Med** 1990 May;31(5):601–2 Comment on: J Nucl Med 1990 May;31(5):586–93. Comment on: J Nucl Med 1990 May;31(5):594–600.

Central mucoepidermoid carcinoma of the jaw with distant metastasis: a case report and review of the literature. Lebsack JP, et al. **J Oral Maxillofac Surg** 1990 May; 48(5):518–22 (31 ref.)

Structural consequences of endosteal metastatic lesions in long bones. Hipp JA, et al. **J Orthop Res** 1989;7(6):828–37

Bone and liver imaging in regionally advanced melanoma. Salwen WA, et al. **J Surg Oncol** 1989 Dec;42(4):225–8

A case of rectal carcinoid with extensive sacral breakage. Noshiro H, et al. **Jpn J Surg** 1990 Jul;20(4):443–7

Sclerosing epitheloid angiosarcoma of bone and lung—intravascular sclerosing bronchioloalveolar tumor. Dörfler H, et al. **Klin Wochenschr** 1990 Apr 2;68(7):388–92

Bone metastasis as a non–stochastic process. Chigira M, et al. **Med Hypotheses** 1989 Aug;29(4):279–81 (42 ref.)

The development of skeletal metastases. Galasko CS. **Nippon Seikeigeka Gakkai Zasshi** 1989 May;63(5):667–76

Skeletal scintigraphy in carcinoma of the breast—a ten year retrospective study of 389 patients. Ahmed A, et al. **Nucl Med Commun** 1990 Jun;11(6):421–6

Pregnancy and thyroid carcinoma: a review of incidence, course, and prognosis. Hod M, et al. **Obstet Gynecol Surv** 1989 Nov;44(11):774–9 (54 ref.)

Randomized clinical trial comparing mitoxantrone with epirubicin and with doxorubicin, each combined with cyclophosphamide in the first–line treatment of patients with metastatic breast cancer. Heidemann E, et al. **Onkologie** 1990 Feb;13(1):24–7

Exuberant periosteal reaction in solitary skeletal metastases: a mimic of primary skeletal neoplasm. Pope TL Jr, et al. **Orthopedics** 1990 Feb;13(2):261–4

The treatment of metastatic thyroid disease. Lee KY, et al. **Otolaryngol Clin North Am** 1990 Jun;23(3):475–93 (49 ref.)

Ossifying metastasis in lymph nodes and other bones in osteosarcoma. Saha MM, et al. **Pediatr Radiol** 1989; 20(1–2):97

Cancer of the prostate—where are we now? Blandy J. **Practitioner** 1989 May 8;233(1468):636, 639

Quantitative bone scintigraphy in the survey of bone–seeking cancers. Grob JC, et al. **Prog Clin Biol Res** 1990;348:187–94

Operative treatment of bone metastases secondary to renal carcinoma. Katzner M, et al. **Prog Clin Biol Res** 1990; 348:151–68

Prostatic tumor (R3327) skeletal metastasis. Geldof AA, et al. **Prostate** 1990;16(4):279–90

Correlation between bone scans and serum levels of osteocalcin, prostate–specific antigen, and prostatic acid phosphatase in monitoring patients with disseminated cancer of the prostate. Tarle M, et al. **Prostate** 1989; 15(3):211–9

An integrated approach to the evaluation of metastatic bone disease. Gold RI, et al. **Radiol Clin North Am** 1990 Mar; 28(2):471–83 (29 ref.)

Bone scans with one or two new abnormalities in cancer patients with no known metastases: reliability of interpretation of initial correlative radiographs. Jacobson AF, et al. **Radiology** 1990 Feb;174(2):503–7

Bone scans with one or two new abnormalities in cancer patients with no known metastases: frequency and serial scintigraphic behavior of benign and malignant lesions. Jacobson AF, et al. **Radiology** 1990 Apr;175(1):229–32

Re–186(Sn) HEDP for treatment of painful osseous metastases: initial clinical experience in 20 patients with hormone–resistant prostate cancer. Maxon HR 3d, et al. **Radiology** 1990 Jul;176(1):155–9

Metastases to bone in medulloblastoma. A report of five cases. Vieco PT, et al. **Skeletal Radiol** 1989;18(6):445–9

Prognostic factors for patients with osseous metastasis: a multi-institutional prospective study. Teshima T, et al. **Strahlenther Onkol** 1990 Jun;166(6):387–91

Clinical and biologic behavior of bone metastases from differentiated thyroid carcinoma. Marcocci C, et al. **Surgery** 1989 Dec;106(6):960–6

Diffuse malignant melanoma of iris with metastases. Brown D, et al. **Surv Ophthalmol** 1990 Mar–Apr;34(5):357–64 (29 ref.)

Multiple tuberculous bone lesions simulating metastatic disease. Ormerod LP, et al. **Tubercle** 1989 Dec;70(4):305–7

Globular cytoplasmic inclusion bodies in a metastatic hepatocellular carcinoma of the iliac bone. Haratake J, et al. **Ultrastruct Pathol** 1990 May–Jun;14(3):283–8

Distribution of skeletal metastases in prostatic and lung cancer. Mechanisms of skeletal metastases. Morgan JW, et al. **Urology** 1990 Jul;36(1):31–4

Quantification of prostatic cancer metastatic disease using prostate-specific antigen. Vesey SG, et al. **Urology** 1990 Jun;35(6):483–6

Super bone scan in metastatic stomach cancer. Saphner T, et al. **Wis Med J** 1990 Apr;89(4):161–3

[Clinical value of radionuclide whole body bone imaging in the diagnosis of skeletal metastasis] Chen YQ. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):193–5 (Eng. Abstr.) (Chi)

[99mTc-MDP bolus in the treatment of bone metastasis] Meng ZX. **Chung Hua Chung Liu Tsa Chih** 1990 Mar; 12(2):135–7 (Eng. Abstr.) (Chi)

[Bone imaging in the detection of skeletal metastasis] Shi QX. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):196–8 (Eng. Abstr.) (Chi)

[Flare phenomenon: favorable or unfavorable?] Peters-Christodoulou MN, et al. **Ned Tijdschr Geneeskd** 1990 Jun 16;134(24):1161–3 (Dut)

[Bourneville's disease of the bones or metastasis? Apropos of a case] Hambye AS, et al. **Acta Clin Belg** 1989; 44(4):237–43 (Eng. Abstr.) (Fre)

[Bone localization of carcinoid tumors] Haettich B, et al. **Ann Med Interne (Paris)** 1989;140(5):383–6 (Fre)

[Bone metastases of breast cancer. Surgical treatment of 228 sites in the limbs] Katzner M, et al. **Chirurgie** 1989; 115(10):741–9; discussion 749–50 (Eng. Abstr.) (Fre)

[Phalangette metastases of cancer of the mouth. An uncommon mode of propagation] Vanel D, et al. **J Radiol** 1990 Mar;71(3):237, 244 (Eng. Abstr.) (Fre)

[Not value to the systematic study of different tumor markers for disclosing bone metastasis (letter)] Ravaud A. **Presse Med** 1989 Oct 14;18(33):1667 (Fre)

[Gonadorelin analogs combined with anti-androgens in the treatment of bone metastasis from prostate cancer. Can their use induce osteoporosis? (letter)] Simonin R, et al. **Presse Med** 1989 Dec 9;18(41):2023 (Fre)

[Bony metastases of a bronchial carcinoid tumor. A new form revealed by dorsal epidural inflammation] Bruno MC, et al. **Rev Rhum Mal Osteoartic** 1989 Jul–Sep;56(8–9):593–5 (Fre)

[Hypercalcemia and vital prognosis of cancers with bone metastases] Crouzet J, et al. **Rev Rhum Mal Osteoartic** 1990 Jan;57(1):1–3 (Fre)

[A rare form of epitheloid sarcoma of the foot with osteoarticular invasiveness] David-Chaussé J, et al. **Rev Rhum Mal Osteoartic** 1990 Feb;57(2):135–8 (18 ref.) (Fre)

[Bone manifestations disclosing Hodgkin's disease and non-Hodgkin's malignant lymphoma. Analysis of 11 cases] Gaudin P, et al. **Rev Rhum Mal Osteoartic** 1989 Nov; 56(11):745–51 (Eng. Abstr.) (Fre)

[Clinostatic syndrome of the lower limb. Apropos of 3 cases] Martin JC, et al. **Rev Rhum Mal Osteoartic** 1989 Nov; 56(11):771–4 (Fre)

[Metastatic mesenchymal chondrosarcoma] Alt U, et al. **Internist (Berl)** 1989 Nov;30(11):767–70 (Ger)

[Treatment of an extraneural metastasized medulloblastoma] Huber A, et al. **Klin Padiatr** 1990 May–Jun;202(3):186–7 (Eng. Abstr.) (Ger)

[A solitary metastasis in the trapezium bone] Lederer A, et al. **Radiologe** 1990 Feb;30(2):79–80 (Eng. Abstr.) (Ger)

[Bone marrow metastases of neuroblastoma: MRT in comparison with bone marrow cytology and mIBG scintigraphy] Benz-Bohm G, et al. **ROFO** 1990 May; 152(5):523–7 (Eng. Abstr.) (Ger)

[Detection of bone marrow involvement in breast cancer and malignant lymphoma using immunoscintigraphy of the hematopoietic bone marrow] Reske SN, et al. **ROFO** 1990 Jan;152(1):60–6 (Eng. Abstr.) (Ger)

[Can ultrasound detect skeletal metastases?] Doringer E, et al. **Ultraschall Med** 1990 Feb;11(1):29–32 (Eng. Abstr.) (Ger)

[Treatment and results of pathologic fractures. A collaborative study from 1965 to 1985 of 16 Austrian hospitals] Heinz T, et al. **Unfallchirurg** 1989 Oct; 92(10):477–85 (Eng. Abstr.) (Ger)

[Temporary arthrodesis of the hip joint with fixateur externe in osteolytic pelvic metastasis] Schüz W, et al. **Unfallchirurgie** 1990 Jun;16(3):154–7 (Eng. Abstr.) (Ger)

[Bone metastases of small cell bronchial cancer—a differential diagnosis of acute leukemia] Wolf H, et al. **Z Arztl Fortbild (Jena)** 1990;84(3):93–5 (Ger)

[The incidence of recurrence of intra- and extra-lesional operated metastases of long tubular bones] Windhager R, et al. **Z Orthop** 1989 Jul–Aug;127(4):402–5 (Eng. Abstr.) (Ger)

[Two cases of advanced gastric cancer with diffuse carcinomatosis of the bone marrow showing a widespread osteoplastic bone metastasis] Kato M, et al. **Gan No Rinsho** 1990 Mar;36(4):551–6 (Eng. Abstr.) (Jpn)

[A bone metastasis of hepatocellular carcinoma] Nishimori T, et al. **Gan No Rinsho** 1990 Jul;36(8):919–23 (Eng. Abstr.) (Jpn)

[Study of surgical resection of sternal metastasis from carcinoma of the breast] Takanami I, et al. **Gan No Rinsho** 1989 Dec;35(15):1735–8 (Eng. Abstr.) (Jpn)

[Relapsed stage I neuroblastoma successfully treated by allogeneic bone marrow transplantation in second remission: case report of a 7-year-old girl] Hanada R, et al. **Gan To Kagaku Ryoho** 1990 Sep;17(9):1937–9 (Eng. Abstr.) (Jpn)

[Results of tamoxifen-medroxyprogesterone acetate sequential therapy in 22 patients with recurrent breast cancer] Noguchi S, et al. **Gan To Kagaku Ryoho** 1989 Nov; 16(11):3555–8 (Eng. Abstr.) (Jpn)

[A case of disseminated breast cancer successfully treated with medroxyprogesterone acetate] Tsumura I, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 1):1509–12 (Eng. Abstr.) (Jpn)

[Local treatment of metastatic bone tumors] Watanabe H. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 2):790–2 (3 ref.) (Jpn)

[A case of malignant ectopic pheochromocytoma with bone metastasis] Araki T, et al. **Hinyokika Kiyo** 1989 Jun; 35(6):1005–7 (Eng. Abstr.) (Jpn)

[A case of non-functioning adrenal cortical carcinoma with pulmonary and bony metastases] Katsumi T, et al. **Hinyokika Kiyo** 1989 Nov;35(11):1893–5 (Eng. Abstr.) (Jpn)

[Studies on prognosis of prostate cancer with bone metastasis by using pretreatment bone scintigraphy] Kubota Y, et al. **Hinyokika Kiyo** 1989 Oct;35(10):1693–9 (Eng. Abstr.) (Jpn)

[Intermittent intravenous high-dose cyclophosphamide therapy for advanced prostatic cancer with distant metastasis] Kyakuno M, et al. **Hinyokika Kiyo** 1989 Nov; 35(11):1865–9 (Eng. Abstr.) (Jpn)

[Clinical study of renal cell carcinoma with bony metastasis: comparative study with lung metastasis] Onishi T, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1113–8 (Eng. Abstr.) (Jpn)

[Renal cancer with bone metastasis as initial symptom] Mikata N, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Mar 20; 25(3):679–85 (Eng. Abstr.) (Jpn)

[Clinical evaluation of serum osteocalcin in patients with bone metastasis of breast cancer] Suzuki S, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Oct 20;24(10):2386–93 (Eng. Abstr.) (Jpn)

[Correlation of vessel invasion and bone metastasis in prostatic adenocarcinoma. A clinico-pathological and immunohistochemical study of 33 cases of total prostatectomy] Hara M. **Nippon Hinyokika Gakkai Zasshi** 1989 Jul;80(7):1011–6 (Eng. Abstr.) (Jpn)

[Establishment of a model to evaluate inhibition of bone resorption induced by bladder tumor (MBT-2) in mice] Nishijima Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 May;81(5):694–700 (Eng. Abstr.) (Jpn)

[Renal accumulation of technetium-99m-labeled bone imaging agents in patients treated with cisplatin] Igari H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Aug 25; 49(8):1017–24 (Eng. Abstr.) (Jpn)

[Usefulness of 99mTc-PMT cholescintigraphy in diagnosis a case of bone metastasis in hepatocellular carcinoma] Inoue A, et al. **Rinsho Hoshasen** 1989 Aug;34(8):901–2 (Jpn)

[CT findings of bone metastasis] Nosaki T, et al. **Rinsho Hoshasen** 1989 Sep;34(9):991–7 (Eng. Abstr.) (Jpn)

[Symptom-relieving radiotherapy (letter)] Lote K. **Tidsskr Nor Laegeforen** 1990 Apr 30;110(11):1411 (Nor)

[Analysis of neoplasm metastases to the bone marrow in patients with lung cancer] Dzięcioł J, et al. **Pneumonol Pol** 1989 Apr;57(4):235–9 (Eng. Abstr.) (Pol)

[Implantation metastasis after trans-thoracic diagnostic puncture in peripheral cancer of the lung] Gudovskiĭ LM, et al. **Grud Serdechnososudistaia Khir** 1990;(5):78 (Rus)

[Dynamics of metastasis of breast cancer to the bones] Kutateladze TO, et al. **Sov Med** 1989;(11):16–9 (Eng. Abstr.) (Rus)

[Survival of patients with disseminated small cell cancer of the lungs] Orel NF, et al. **Sov Med** 1990;(2):79–81 (Rus)

[Metastases of a malignant chemodectoma of the neck to the bone] Gun'ko RI. **Vestn Rentgenol Radiol** 1989 Nov–Dec; (6):79–80 (Rus)

[Metastasis of an adenocarcinoma of unknown origin as a localizing factor of herpes zoster (letter)] Fonseca E, et al. **Med Clin (Barc)** 1989 May 27;92(20):797 (Spa)

[Multiple pilomatrixomas associated with myotonic dystrophy and medullary carcinoma of the thyroid] Ribera M, et al. **Med Cutan Ibero Lat Am** 1989;17(6):395–8 (Eng. Abstr.) (Spa)

SURGERY

Synchronous abdominal and transsacral approach for excision of sacrococcygeal chordoma. Michel LA, et al. **Acta Chir Belg** 1989 Nov–Dec;89(6):316–9

Possibilities of the use of biocompatible polymer rods for internal fixation and filling of the defects of bone tissue. Prantskyavichus S, et al. **Acta Orthop Belg** 1989;55(1):31–4

Reconstruction of the tibia by dual grafting. 3 cases of tumor resection. Swierstra BA, et al. **Acta Orthop Scand** 1990 Jun;61(3):266–8

Osteoid osteoma of the neck of the talus [letter; comment] McGuire MH. **Am J Sports Med** 1990 Mar–Apr;18(2):219 Comment on: Am J Sports Med 1989 Jul–Aug;17(4):584–8.

Management of sternal tumors [letter; comment] Yellin A, et al. **Ann Thorac Surg** 1990 May;49(5):852–3 Comment on: Ann Thorac Surg 1989 Sep;48(3):428–31.

The Tikhoff-Linberg procedure for bone tumors of the proximal humerus: the classical "extensive" technique versus a modified "transglenoid" resection. Capanna R, et al. **Arch Orthop Trauma Surg** 1990;109(2):63–7

Results of multidisciplinary limb salvage in 240 consecutive bone sarcomas. Delépine N, et al. **Biomed Pharmacother** 1990;44(4):217–24

Free vascularized fibular graft for the treatment of a massive long-bone defect. Mahaisavariya B, et al. **Bull Hosp Jt Dis Orthop Inst** 1990 Spring;50(1):11–9

Free patellar graft for the reconstruction of juxtaarticular defects in the treatment of giant-cell tumors. Fineschi G, et al. **Clin Orthop** 1990 Jul;(256):197–204

CO2 laser cauterization of giant-cell tumor margins. Kirby EJ, et al. **Clin Orthop** 1990 Apr;(253):231–9

Bone reconstruction after giant-cell tumor resection at the proximal end of the humerus with vascularized iliac crest graft. A report of three cases. Leung PC, et al. **Clin Orthop** 1989 Oct;(247):101–5

Chondroblastoma of the rib. A case report and review of the literature. Mayo-Smith W, et al. **Clin Orthop** 1990 Feb; (251):230–4 (18 ref.)

Pelvic allograft. A case report with a follow-up evaluation of 5.5 years. Mnaymneh W, et al. **Clin Orthop** 1990 Jun; (255):128–32

Recurrent osteoid osteoma. Case report with a ten-year asymptomatic interval. Regan MW, et al. **Clin Orthop** 1990 Apr;(253):221–4

Prosthetic replacement due to giant-cell tumor in the proximal humerus. A case report. Takagishi K, et al. **Clin Orthop** 1989 Oct;(247):106–10

Percutaneous removal of osteoid osteomas using CT control. Doyle T, et al. **Clin Radiol** 1989 Sep;40(5):514–7

Chest wall reconstruction after resection of primary malignant chest wall tumours. Eng J, et al. **Eur J Cardiothorac Surg** 1990;4(2):101–4

En bloc resection for T3 bronchogenic carcinoma with chest wall invasion. Ricci C, et al. **Eur J Cardiothorac Surg** 1987; 1(1):23–8

Ten years' experience in patients with osteogenic sarcoma in Finland. Elomaa I, et al. **Eur J Surg Oncol** 1990 Apr; 16(2):147–52

Upper extremity function after conservative interscapulo-thoracic tumor resection. Gebhart M, et al. **Eur J Surg Oncol** 1989 Dec;15(6):504–9

Surgical treatment of bone metastases of the peripheral skeleton—a review of 33 cases. Gebhart M, et al. **Eur J Surg Oncol** 1989 Dec;15(6):520–9

Radiotherapy prior to cortical allograft limb sparing in dogs with osteosarcoma: a dose response assay. Thrall DE, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1351–7

Temporary resection-arthrodesis of the knee using an intramedullary rod and bone cement. Capanna R, et al. **Int Orthop** 1989;13(4):253–8

Reconstruction of large skeletal defects by vascularized fibula transfer. Factors that influenced the outcome of union in 62 cases. de Boer HH, et al. **Int Orthop** 1990;14(2):121–8

Is bone graft necessary? Analysis of twenty cases of giant cell tumour of bone treated by curettage without graft. Waldram MA, et al. **Int Orthop** 1990;14(2):129–33

An extendable modular endoprosthetic system for bone tumour management in the leg. Verkerke GJ, et al. **J Biomed Eng** 1990 Mar;12(2):91–6

Study of soft tissue ingrowth into canine porous coated femoral implants designed for osteosarcomas management. LaBerge M, et al. **J Biomed Mater Res** 1990 Jul; 24(7):959–71

Osteoarticular allografts for reconstruction in the proximal part of the humerus after excision of a musculoskeletal tumor. Gebhardt MC, et al. **J Bone Joint Surg [Am]** 1990 Mar;72(3):334–45

Dual-fibular grafting for massive bone gaps in the lower extremity. Yadav SS. **J Bone Joint Surg [Am]** 1990 Apr; 72(4):486–94

Hindquarter amputation for tumours of the musculoskeletal system. Carter SR, et al. **J Bone Joint Surg [Br]** 1990 May; 72(3):490–3

Giant cell tumours of the proximal fibula. Farooque M, et al. **J Bone Joint Surg [Br]** 1990 Jul;72(4):723–4

The use of calcium hydroxyapatite ceramic in bone tumour surgery. Uchida A, et al. **J Bone Joint Surg [Br]** 1990 Mar; 72(2):298–302

Giant cell tumour around ankle. Agarwal RP, et al. **J Indian Med Assoc** 1989 Jul;87(7):159–60

Paraliiac ectopic bone complicating the removal of a bone graft for cervical disc surgery. Magliani VQ, et al.

J Neurosurg Sci 1989 Apr-Jun;33(2):207-9

Treatment of osteoid osteoma by computed tomography guided excision in the pediatric patient. Voto SJ, et al. J Pediatr Orthop 1990 Jul-Aug;10(4):510-3

Incidence of regional lymph node metastasis in operable osteogenic sarcoma. Caceres E, et al. Semin Surg Oncol 1990;6(4):231-3 (13 ref.)

Mandible and tongue-splitting approach for giant cell tumor of axis. Honma G, et al. Spine 1989 Nov;14(11):1204-10

Compression of the ulnar nerve in Guyon's canal by a giant cell tumor. Nucci F, et al. Zentralbl Neurochir 1989; 50(3-4):196-8

[Chondrosarcoma of the rib--a case report] Chang LY, et al. Chang Keng I Hsueh 1989 Jun 20;12(2):107-10 (Eng. Abstr.) (Chi)

[Application of vascularized fibular graft for deformity after long-bone tumor segment resection] Chen ZG. Chung Hua Wai Ko Tsa Chih 1990 Mar;28(3):164-6, 190 (Eng. Abstr.) (Chi)

[Synovial osteochondromatosis: several valuable clinical observations in 12 cases] Lu HS. Chung Hua Wai Ko Tsa Chih 1989 May;27(5):276-8, 317-8 (Eng. Abstr.) (Chi)

[Synovial chondromatosis] Chen ZX. Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1989 Aug; 11(4):265-9 (Eng. Abstr.) (Chi)

[Use of cement plugs in the care of giant cell bone tumors] Kofránek I, et al. Acta Chir Orthop Traumatol Cech 1990 Apr;57(2):151-60 (Eng. Abstr.) (Cze)

[The resection site in the treatment of giant cell bone tumors] Urban K, et al. Acta Chir Orthop Traumatol Cech 1989 Jul;56(4):343-9 (Eng. Abstr.) (Cze)

[Resection of bony tumors around the knee and lengthening of the stump by the Van Nes rotation plastic surgery technic] Gebhart M, et al. Acta Orthop Belg 1989; 55(1):26-30 (Eng. Abstr.) (Fre)

[Peroperative isotopic detection in the treatment of osteoid osteoma in children] Lacheretz M, et al. Chirurgie 1989; 115(7):413-6 (Eng. Abstr.) (Fre)

[Total or partial iliac reconstruction using allografts from the bone bank] Poitout D, et al. Int Orthop 1990;14(2):111-9 (Eng. Abstr.) (Fre)

[Difficulties of parietal repair after pubectomy (letter)] Haffaf Y, et al. J Chir (Paris) 1989 Nov;126(11):626 (Fre)

[The value of perforating cryopreserved massive bone allograft. Histologic data of an allograft removed after 27 months] Babin SR, et al. Rev Chir Orthop 1990;76(2):137-40 (Eng. Abstr.) (Fre)

[Benign chondroblastoma. A review of 30 cases] Corsat JP, et al. Rev Chir Orthop 1989;75(3):179-87 (37 ref.) (Eng. Abstr.) (Fre)

[Bone replacement-plasty with tricalcium phosphate ceramics in children] Pochon JP. Aktuel Probl Chir Orthop 1990;36:1-51 (Ger)

[Design of partial pelvic replacement with calculation of stresses on the pelvic bone using the finite element method] Wittler G, et al. Biomed Tech (Berlin) 1989 Dec; 34(12):301-7 (Eng. Abstr.) (Ger)

[Vascularized fibula transfer for preservation of limbs. A report of 21 cases] Steffens K, et al. Chirurg 1989 Nov; 60(11):811-4 (Ger)

[Osteosynthesis procedures in microsurgery] Giebel G, et al. Handchir Mikrochir Plast Chir 1989 Nov;21(6):310-4 (Eng. Abstr.) (Ger)

[Periosteal chondroma] Szendröi M, et al. Handchir Mikrochir Plast Chir 1990 Mar;22(2):99-102 (Eng. Abstr.) (Ger)

[Combination of cancellous bone grafts and free microvascular bone transplantation in large osseous defects] Zwipp H, et al. Handchir Mikrochir Plast Chir 1989 Sep; 21(5):235-45 (Eng. Abstr.) (Ger)

[Surgical aspects of bone tumors in children] Joppich I, et al. Monatsschr Kinderheilkd 1990 Feb;138(2):46-9 (15 ref.) (Eng. Abstr.) (Ger)

[Total prosthesis implantation with added pelvic osteosynthesis] Marchesi DG, et al. Orthopade 1989 Nov; 18(6):483-8 (Eng. Abstr.) (Ger)

[Adamantinoma of the fibula--follow-up study] Patzak HJ, et al. Unfallchirurgie 1990 Feb;16(1):47-9 (Eng. Abstr.) (Ger)

[Treatment of malignant pathologic fractures. Results of a retrospective study] Rosenberger J, et al. Unfallchirurgie 1989 Dec;15(6):279-84 (Eng. Abstr.) (Ger)

[Diagnosis of recurrence and therapy of recurrence with in situ bone cement filling in the treatment of giant cell tumor] Becker W. Z Orthop 1989 Jul-Aug;127(4):379-81 (Eng. Abstr.) (Ger)

[Are non-radical interventions in giant cell tumors justifiable?] Felmet G, et al. Z Orthop 1989 Jul-Aug; 127(4):396-7 (Eng. Abstr.) (Ger)

[Non-radical surgery of malignant pelvic tumors] Gradinger R, et al. Z Orthop 1989 Jul-Aug;127(4):420-3 (Eng. Abstr.) (Ger)

[Curettage of giant cell tumors with temporary implantation of bone cement] Härle A, et al. Z Orthop 1989 Jul-Aug; 127(4):382-6 (Eng. Abstr.) (Ger)

[Results following spongiosa transplantation in giant cell tumor of bone] Ritschl P, et al. Z Orthop 1989 Jul-Aug; 127(4):387-91 (Eng. Abstr.) (Ger)

[The incidence of recurrence in phenol treated and non-phenol treated bone cavities following intralesional resection of non-malignant bone tumors] Schiller C, et al. Z Orthop 1989 Jul-Aug;127(4):398-401 (Eng. Abstr.) (Ger)

[The role of a bone cement filling in intralesional tumor treatment] Willert HG, et al. Z Orthop 1989 Jul-Aug; 127(4):376-8 (Eng. Abstr.) (Ger)

[Local control in Ewing sarcoma. Comparative results following intralesional, marginal and tumor resection with healthy bone] Winkelmann W, et al. Z Orthop 1989 Jul-Aug;127(4):424-6 (Eng. Abstr.) (Ger)

[The deliberate intralesional tumor resection] Winkelmann W. Z Orthop 1989 Jul-Aug;127(4):418-9 (Eng. Abstr.) (Ger)

[Giant cell tumor of bone. An analysis of 69 cases] Wuisman P, et al. Z Orthop 1989 Jul-Aug;127(4):392-5 (Eng. Abstr.) (Ger)

[Aggressive giant cell tumor of the ileum with a benign course] Nakhostine VM, et al. Zentralbl Chir 1989; 114(18):1235-9 (Ger)

[Peripelvic tumors: approach and management] Said M, et al. Harefuah 1990 Jun 15;118(12):684-7 (Eng. Abstr.) (Heb)

[Limb-preserving resection operations in the management of bone tumors of the shoulder region] Gáspár L, et al. Magy Traumatol Orthop Helyreallito Sebesz 1989; 32(3):233-8 (Eng. Abstr.) (Hun)

[A case of solitary myeloma of the glenoid cavity. Notes on glenoidectomy] Pescatori G, et al. Arch Putti Chir Organi Mov 1989;37(2):433-40 (Eng. Abstr.) (Ita)

[Solitary metastasis of the appendicular bones: role of orthopedic surgery] Rosa MA, et al. Arch Putti Chir Organi Mov 1989;37(2):345-54 (Eng. Abstr.) (Ita)

[Surgical treatment of bone metastasis in advanced renal cell carcinoma] Nakazono M, et al. Gan No Rinsho 1990 Jun; 36(7):810-4 (Eng. Abstr.) (Jpn)

[The limb-salvage surgery in the treatment of patient with osteosarcoma] Takada N. Gan To Kagaku Ryoho 1990 Feb; 17(2):205-16 (Eng. Abstr.) (Jpn)

[A case of exostosis based on the left first rib] Koike R, et al. Kyobu Geka 1989 Oct;42(11):941-3 (Eng. Abstr.) (Jpn)

[Malignant fibrous histiocytoma of the rib: a case report of repetitive extensive resections and reconstruction of the chest wall] Nakajima J, et al. Nippon Kyobu Geka Gakkai Zasshi 1990 Jan;38(1):171-7 (31 ref.) (Eng. Abstr.) (Jpn)

[Neurosurgical aspects of the surgical treatment of tumors of the sacrum] Czernicki Z, et al. Neurol Neurochir Pol 1989 May-Jun;23(3):238-42 (Pol)

[Suppurative complications after organ-sparing surgery of bone tumors] Dadashev KhD. Khirurgiia (Mosk) 1990 Apr; (4):102-4 (Rus)

[Non-ossifying fibroma of the bone in children] Volkov MV. Khirurgiia (Mosk) 1989 Nov;(11):82-6 (Eng. Abstr.) (Rus)

[Comparative results of the treatment of patients with osteogenic sarcoma and chondrosarcoma of the extremities] Trishkin VA, et al. Vestn Khir 1989 May;142(5):43-5 (Rus)

THERAPY

Centralization of bone and soft tissue tumors. European Musculoskeletal Oncology Society [letter] Acta Orthop Scand 1989 Dec;60(6):731-2

Combination regional therapy for extremity sarcoma. A tricenter study. Wanebo HJ, et al. Arch Surg 1990 Mar; 125(3):355-9

Effect of perioperative transfusions on survival in osteosarcoma treated by multimodal therapy. Chesi R, et al. Cancer 1989 Oct 15;64(8):1727-37

Influence of chemotherapy on perioperative complications in limb salvage surgery for bone tumors. McDonald DJ, et al. Cancer 1990 Apr 1;65(7):1509-16

Advances and management of solid tumors in children. Nesbit ME Jr. Cancer 1990 Feb 1;65(3 Suppl):696-702 (43 ref.)

Adjuvant chemotherapy for osteosarcoma of the extremity. Long-term results of two consecutive prospective protocol studies. Pratt CB, et al. Cancer 1990 Feb 1;65(3):439-45

Soft tissue and bone sarcomas. Santoro A, et al. Cancer Chemother Biol Response Modif 1987;9:366-76 (59 ref.)

Soft tissue and bone sarcomas. Santoro A, et al. Cancer Chemother Biol Response Modif 1988;10:344-54 (55 ref.)

Centralised diagnosis and treatment of bone and soft tissue tumors [editorial] Chir Organi Mov 1990 Jan-Mar; 75(1):11-4 (Eng, Ita)

Percutaneous bone marrow grafting of delayed union and nonunion in cancer patients. Healey JH, et al. Clin Orthop 1990 Jul;(256):280-5

Malignant bone tumor management. 30 years of achievement. Sweetnam R. Clin Orthop 1989 Oct;(247):67-73 (20 ref.)

Extramedullary plasmacytomas and solitary plasma cell tumours of bone. Brinch L, et al. Eur J Haematol 1990 Feb;44(2):132-5

Ewing's sarcoma of the foot. Leeson MC, et al. Foot Ankle 1989 Dec;10(3):147-51

Ewing's sarcoma of the pelvis. Capanna R, et al. Int Orthop 1990;14(1):57-61

Centralized diagnosis and treatment of bone and soft tissue tumors. Campanacci M, et al. J Chemother 1989 Aug; 1(4):277-8

Ewing's sarcoma of the hand: localization and treatment. Euler E, et al. J Hand Surg [Am] 1990 Jul;15(4):659-62

Primary lymphoma of bone: experience of 39 cases at the Tata Memorial Hospital, India. Susnerwala SS, et al. J Surg Oncol 1990 Aug;44(4):229-33

Intensive combined modality therapy of small round cell and undifferentiated sarcomas in children and young adults: local control and patterns of failure. Bader JL, et al. Radiother Oncol 1989 Nov;16(3):189-201

[Maffuci's syndrome. Embolization and surgical excision] Bodemer C, et al. Ann Dermatol Venereol 1989; 116(11):868-9 (Fre)

[Bone sarcomas (letter)] J Radiol 1989 Nov;70(11):659-60 (Fre)

[The immunomodulating action of combined therapy together with local UHF hyperthermia in osteogenic sarcoma in children] Neprina GS, et al. Med Radiol (Mosk) 1989 Dec;34(12):39-44 (Eng. Abstr.) (Rus)

[Combined treatment of patients with osteogenic sarcoma using local UHF-hyperthermia] Bizer VA, et al. Ortop Travmatol Protez 1989 Jul;(7):28-30 (Eng. Abstr.) (Rus)

[Chemoradiotherapy of disseminated small-cell carcinoma of the lung] Bychkov MB, et al. Sov Med 1989;(6):89-91 (Rus)

[Treatment of osteogenic sarcoma in children] Pashkov Iu. Vopr Onkol 1989;35(10):1155-60 (68 ref.) (Rus)

ULTRASTRUCTURE

Contrast study on multinucleated giant cells in giant cell tumors of bone and other multinucleated cells. Zhou L, et al. Chin Med J [Engl] 1989 Aug;102(8):584-90

Light and electron microscopic examination of fine-needle aspirates in the preoperative diagnosis of osteogenic tumors: a study of 21 osteosarcomas and two osteoblastomas. Walaas L, et al. Diagn Cytopathol 1990;6(1):27-38

Ultrastructural and immunohistochemical study of epithelioid hemangioendothelioma of bone: coexpression of epithelial and endothelial markers. van Haelst UJ, et al. Ultrastruct Pathol 1990 Mar-Apr;14(2):141-9

[Ultrastructure of hemangio-endothelioma of the bone] Bi WC. Chung Hua Wai Ko Tsa Chih 1990 Feb;28(2):85-7, 126 (Eng. Abstr.) (Chi)

[Cytological study of giant cell bone tumors: a 10-year summary] Feng CH, et al. Chung Hua Wai Ko Tsa Chih 1990 Mar;28(3):184-6, conld (19 ref.) (Chi)

[Lectin histochemistry of bone cells and bone tumors] Illés T, et al. Morphol Igazsagugyi Orv Sz 1990 Apr;30(2):117-24 (Eng. Abstr.) (Hun)

URINE

Multiple myeloma arising from solitary plasmacytoma of bone. Ottó S, et al. Oncology 1990;47(1):84-6

[A case of hemangioendothelioma of the rib associated with hypocalciuria] Cortet B, et al. Rev Rhum Mal Osteoartic 1990 Mar;57(3):185-7 (Fre)

VETERINARY

Characterization of osteosarcoma cells from two sibling large-breed dogs. Norrdin RW, et al. Am J Vet Res 1989 Nov;50(11):1971-5

What is your diagnosis? Neoplasia of the right radius, probably osteosarcoma. Ansari MM, et al. J Am Vet Med Assoc 1989 Dec 1;195(11):1615-6

Bone scintigraphy in the initial evaluation of dogs with primary bone tumors. Berg J, et al. J Am Vet Med Assoc 1990 Mar 15;196(6):917-20

Extramedullary plasmacytoma and immunoglobulin-associated amyloidosis in a cat. Carothers MA, et al. J Am Vet Med Assoc 1989 Dec 1;195(11):1593-7

Single-phase methylene diphosphate bone scintigraphy in the diagnostic evaluation of dogs with osteosarcoma. Hahn KA, et al. J Am Vet Med Assoc 1990 May 1;196(9):1483-6

Preoperative measurement of canine primary bone tumors, using radiography and bone scintigraphy. Lamb CR, et al. J Am Vet Med Assoc 1990 May 1;196(9):1474-8

Limb-sparing treatment for osteosarcoma in dogs. LaRue SM, et al. J Am Vet Med Assoc 1989 Dec 15; 195(12):1734-44

Osteogenic sarcoma and myasthenia gravis in a dog. Moore AS, et al. J Am Vet Med Assoc 1990 Jul 15;197(2):226-7

Lymphosarcoma with disseminated skeletal involvement in a pup. Rogers KS, et al. J Am Vet Med Assoc 1989 Nov 1;195(9):1242-4

Radiographic bone surveys [letter] Straw RC, et al. J Am Vet Med Assoc 1989 Dec 1;195(11):1458

What is your diagnosis? Pathologic fracture and a mixed proliferative and destructive lesion involving the proximal portion of the right humerus. Walker MD, et al. J Am Vet Med Assoc 1989 Sep 15;195(6):795-6

Surgical treatment of tarsal sheath effusion associated with an exostosis on the calcaneus of a horse. Welch RD, et al. J Am Vet Med Assoc 1990 Jun 15;196(12):1992-4

Clinical and clinicopathologic response of canine bone tumor patients to treatment with samarium-153-EDTMP [see comments] Lattimer JC, et al. J Nucl Med 1990 Aug; 31(8):1316-25 Comment in: J Nucl Med 1990

Aug;31(8):1326–7.
Liposarcoma of bone marrow origin in a kudu (Tragelaphus strepsiceros). Raubenheimer EJ, et al. **J Wildl Dis** 1990 Apr;26(2):271–4
Peripheral neuropathy associated with osteosarcoma in a Japanese monkey. Yasuda H, et al. **Jikken Dobutsu** 1990 Apr;39(2):285–9
Tumours of the bone in C57BL/10J mice. Wadsworth PF. **Lab Anim** 1989 Oct;23(4):324–7
Erythroleukemia in a mouse. Frith CH, et al. **Lab Anim Sci** 1990 Jul;40(4):418–9
Management of canine appendicular osteosarcoma. Straw RC, et al. **Vet Clin North Am Small Anim Pract** 1990 Jul; 20(4):1141–61 (65 ref.)
Immunohistochemical and morphologic features of chordomas in ferrets (Mustela putorius furo). Herron AJ, et al. **Vet Pathol** 1990 Jul;27(4):284–6
Skeletal metastasis of a penile squamous cell carcinoma. Patterson LJ, et al. **Vet Rec** 1990 Jun 9;126(23):579–80
Orthopaedic problems in old dogs. Vaughan LC. **Vet Rec** 1990 Apr 21;126(16):379–88 (28 ref.)
Nuclear medical bone imaging and targeted radiography for evaluation of skeletal neoplasms in 23 dogs. Parchman MB, et al. **Vet Surg** 1989 Nov–Dec;18(6):454–8
[Probability of hereditary nature of bone tumors in dogs] Ponomar'kov VI, et al. **Vopr Onkol** 1989;35(12):1488–9 **(Rus)**

BONE PLATES

Reosteosynthesis of the tibial shaft. Part II. Changement of procedure after plate osteosynthesis. Rommens PM, et al. **Acta Chir Belg** 1989 Sep–Oct;89(5):287–92
Stress shielding reduced by a silicon plate–bone interface. A canine experiment. Korvick DL, et al. **Acta Orthop Scand** 1989 Oct;60(5):611–6
Stress shielding by rigid fixation studied in osteotomized rabbit tibiae. Läftman P, et al. **Acta Orthop Scand** 1989 Dec;60(6):718–22
Titanium miniplate fixation in free flap mandible reconstruction. Hidalgo DA. **Ann Plast Surg** 1989 Dec; 23(6):498–507
Use of maxillary miniplates and screw system in the treatment of hand fractures: a preliminary report. Thaller SR, et al. **Ann Plast Surg** 1989 Dec;23(6):508–10
Biological and clinical evaluation of the transmandibular implant. Arvier J, et al. **Aust Dent J** 1989 Dec;34(6):524–9
Monocortical non–compression miniplate osteosynthesis of mandibular angle fractures. Moore MH, et al. **Aust N Z J Surg** 1990 Oct;60(10):805–9
Bone-plates and screws of bioabsorbable poly (L–lactide)—an animal pilot study. Bos RR, et al. **Br J Oral Maxillofac Surg** 1989 Dec;27(6):467–76
The effects of small plate osteosynthesis on postoperative radiotherapy [see comments] Postlethwaite KR, et al. **Br J Oral Maxillofac Surg** 1989 Oct;27(5):375–8 Comment in: Br J Oral Maxillofac Surg 1990 Feb;28(1):67.
Small plate osteosynthesis [letter; comment] Schwartz HC. **Br J Oral Maxillofac Surg** 1990 Feb;28(1):67 Comment on: Br J Oral Maxillofac Surg 1989 Oct;27(5):375–8.
Biological considerations in osteosynthesis. McKibbin B. **Chirurgie** 1989;115(9):683–6
The fixation and prognosis of trochanteric fractures. A randomized prospective controlled trial. Bannister GC, et al. **Clin Orthop** 1990 May;(254):242–6
Conservative versus operative treatment of displaced noncomminuted tibial shaft fractures. A retrospective comparative study. den Outer AJ, et al. **Clin Orthop** 1990 Mar;(252):231–7
Treatment of subtrochanteric fractures of the femur treated with the 95 degrees angled blade plate [letter; comment] Miller ME. **Clin Orthop** 1989 Dec;(249):285–7 Comment on: Clin Orthop 1989 Jan;(238):122–30.
A comparative analysis of Ender's-rod and compression screw and side plate fixation of intertrochanteric fractures of the hip. Rao JP, et al. **Clin Orthop** 1990 Jul;(256):125–31
Medial external fixation with lateral plate internal fixation in metaphyseal tibia fractures. A report of eight cases associated with severe soft–tissue injury. Ries MD, et al. **Clin Orthop** 1990 Jul;(256):215–23
Implant failures in patients with proximal fractures of the femur treated with a sliding screw device. Mainds CC, et al. **Injury** 1989 Mar;20(2):98–100
Retrospective analysis of plate fixation of diaphyseal fractures of the forearm bones. Ross ER, et al. **Injury** 1989 Jul; 20(4):211–4
Biomechanical stability of four–part intertrochanteric fractures in cadaveric femurs fixed with a sliding screw–plate. Walsh ME, et al. **Injury** 1990 Mar;21(2):89–92
Bio–absorbable plates and screws for internal fixation of mandibular fractures. A study in six dogs. Bos RR, et al. **Int J Oral Maxillofac Surg** 1989 Dec;18(6):365–9
Stress shielding effect of rigid internal fixation plates on mandibular bone grafts. A photon absorption densitometry and quantitative computerized tomographic evaluation. Kennady MC, et al. **Int J Oral Maxillofac Surg** 1989 Oct; 18(5):307–10
Metal release from plates used in jaw fracture treatment. A pilot study. Moberg LE, et al. **Int J Oral Maxillofac Surg** 1989 Oct;18(5):311–4
One stage reduction and fusion for spondylolisthesis. Schöllner D. **Int Orthop** 1990;14(2):145–50
Osteosynthesis of the cervical spine with an anterior plate. Boccanera L, et al. **Ital J Orthop Traumatol** 1989 Sep; 15(3):287–94
Osteosynthesis of fractures of the femoral neck by nail–plate, screws and valgus osteotomy. Rotolo F, et al. **Ital J Orthop Traumatol** 1989 Sep;15(3):331–7
Refracture after removal of a condylar plate from the distal third of the femur. Böstman OM. **J Bone Joint Surg [Am]** 1990 Aug;72(7):1013–8
Complex non–union of the humeral diaphysis. Treatment with a medial approach, an anterior plate, and a vascularized fibular graft [published erratum appears in J Bone Joint Surg [Am] 1990 Sep;72(8):1270] Jupiter JB. **J Bone Joint Surg [Am]** 1990 Jun;72(5):701–7
Refracture of bones of the forearm after the removal of compression plates [letter; comment] Schweitzer G. **J Bone Joint Surg [Am]** 1990 Jan;72(1):152 Comment on: J Bone Joint Surg [Am] 1988 Oct;70(9):1372–6.
Carbon fibre composite bone plates. Development, evaluation and early clinical experience. Ali MS, et al. **J Bone Joint Surg [Br]** 1990 Jul;72(4):586–91
The stability of intertrochanteric fractures treated with a sliding screw–plate. Flores LA, et al. **J Bone Joint Surg [Br]** 1990 Jan;72(1):37–40
Removal of forearm plates. A review of the complications. Langkamer VG, et al. **J Bone Joint Surg [Br]** 1990 Jul; 72(4):601–4
Forearm fracture plates: to remove or not to remove. Labosky DA, et al. **J Hand Surg [Am]** 1990 Mar; 15(2):294–301
Prospective clinical evaluation of the use of compression plates and screws in the management of mandible fractures [see comments] Ardary WC. **J Oral Maxillofac Surg** 1989 Nov;47(11):1150–3 Comment in: J Oral Maxillofac Surg 1990 Jun;48(6):665.
Rigid plate stabilization to facilitate craniomaxillofacial osteotomies. Bach DE, et al. **J Oral Maxillofac Surg** 1990 Sep;48(9):1007–8
A comparative in vitro study of fixation of mandibular fractures with paraskeletal clamps or screw plates. Crofts CE, et al. **J Oral Maxillofac Surg** 1990 May;48(5):461–6; discussion 466–7
Small plate osteosynthesis for mandibular reconstruction following osteotomy for tumor resection. Postlethwaite KR, et al. **J Oral Maxillofac Surg** 1989 Oct;47(10):1102–5
Mechanical comparison of anterior spinal instrumentation in a burst fracture model [letter; comment] Casteleyn PP, et al. **J Orthop Trauma** 1989;3(4):362 Comment on: J Orthop Trauma 1988;2(3):195–201.
A biomechanical analysis of the sliding hip screw: the question of plate angle. Meislin RJ, et al. **J Orthop Trauma** 1990;4(2):130–6
Complex craniomaxillofacial trauma: evolving concepts in management. A trauma unit's experience—1989 Fraser B. Gurd lecture. Gruss JS. **J Trauma** 1990 Apr;30(4):377–83
Rigid internal fixation vs. traditional techniques for the treatment of mandible fractures. Hoffman WY, et al. **J Trauma** 1990 Aug;30(8):1032–5; discussion 1035–6
Ipsilateral hip and femoral shaft fractures treated with compression hip screw and long side–plate. Wu HJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 May; 6(5):251–6
Anterior cervical fusion and Caspar plate stabilization for cervical trauma. Caspar W, et al. **Neurosurgery** 1989 Oct; 25(4):491–502
The use of stabilization plates in the immediate repair of defects following mandibular resection. Murphy JB, et al. **Oral Surg Oral Med Oral Pathol** 1989 Oct;68(4):380–4
A biomechanical investigation of short segment spinal fixation for burst fractures with varying degrees of posterior disruption. Mann KA, et al. **Spine** 1990 Jun; 15(6):470–8
Supracondylar fracture of the femur. A method of avoiding the malalignment of the distal femur during internal fixation. Paccola CA. **Unfallchirurg** 1989 Aug;92(8):379–80
[Stress analysis following femoral shaft osteotomy fixed using various plates with different rigidities in a simulation test] Xu X. **Chung Hua I Hsueh Tsa Chih** 1990 Apr;70(4):186–90, 14 (Eng. Abstr.) **(Chi)**
[Ultrastructural investigation of experimental fracture healing: effect of fixation with plates of various materials] Qiu SJ. **Chung Hua Wai Ko Tsa Chih** 1990 Feb;28(2):88–91, 126 (Eng. Abstr.) **(Chi)**
[Use of bone plates in external osteosynthesis] Král J. **Acta Chir Orthop Traumatol Cech** 1989 Jul;56(4):328–37 (Eng. Abstr.) **(Cze)**
[Osteosynthesis of the greater trochanter using a plate and cables in total hip arthroplasties. Technic and complications apropos of 61 cases] Sabbagh MA, et al. **J Chir (Paris)** 1990 Apr;127(4):230–5 (Eng. Abstr.) **(Fre)**
[Osteosynthesis of thalamic fractures of the calcaneus using triangulation–fixed 1/4–tube plates. Preliminary results of 32 osteosyntheses] Saragaglia D, et al. **J Chir (Paris)** 1990 Mar;127(3):150–6 (Eng. Abstr.) **(Fre)**
[An internal premoulded plate for complex fractures of the lower end of the humerus. A complement of the external premoulded plate] Lortat–Jacob A, et al. **Rev Chir Orthop** 1989;75(5):347–9 (Eng. Abstr.) **(Fre)**
[The immediate management of fractures of the femoral trochanter using a plate with a support. Experimental basis, technic, results, indications] Balmat P, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989;82(3):182–6 (Eng. Abstr.) **(Fre)**
[Bone morphology following plate osteosynthesis as measured by axial tomography] Cordey J, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989;82(3):141–8 (Eng. Abstr.) **(Fre)**
[Plate arthrodesis with homologous bone transplant in the extremely destroyed wrist joint in the polyarthritis patient—technical contribution] Zacher J, et al. **Aktuel Probl Chir Orthop** 1989;37:95–101 **(Ger)**
[Plate osteosynthesis of forearm fractures in adults and adolescents. Long–term results and problems] Meissner A, et al. **Aktuel Traumatol** 1989 Oct;19(5):185–91 (Eng. Abstr.) **(Ger)**
[Early results with Zespol osteosyntheses of the leg] Schöffauer T, et al. **Beitr Orthop Traumatol** 1990 Jan; 37(1):22–7 (Eng. Abstr.) **(Ger)**
[Rivets for bone fractures] Laabs W, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:173–4 **(Ger)**
[Frontobasal osteoplastic orbitotomy in surgical treatment of intraorbital processes] Markakis E, et al. **Neurochirurgia (Stuttg)** 1990 May;33(3):73–7 (Eng. Abstr.) **(Ger)**
[Mandibular reconstruction with the titanium–hollow screw–reconstruction plate system (THORP)] Vuillemin T, et al. **Schweiz Monatsschr Zahnmed** 1990;100(6):701–8 (Eng. Abstr.) **(Ger)**
[Treatment possibility of a horizontal tibial fracture in performance athletes] Nakhostine M. **Schweiz Z Sportmed** 1989 Oct;37(3):173–6 (Eng. Abstr.) **(Ger)**
[The coxal end of the femur. An architecture following strict rules] Herzberg W, et al. **Unfallchirurg** 1990 Feb; 93(2):69–72 (Eng. Abstr.) **(Ger)**
[Tensile strength of plate osteosynthesis. Comparative biomechanical study of the original autocompression plate and a functional modification using the ZESPOL principle] Hopf T, et al. **Unfallchirurg** 1990 Mar;93(3):100–4 (Eng. Abstr.) **(Ger)**
[Results of plate osteosynthesis in comminuted fracture of the olecranon] König S, et al. **Unfallchirurg** 1990 May; 93(5):216–20 (Eng. Abstr.) **(Ger)**
[Extra–long plate osteosynthesis in femoral fractures] Schoots FJ, et al. **Unfallchirurg** 1989 Aug;92(8):373–8 (Eng. Abstr.) **(Ger)**
[Plate osteosynthesis in femoral shaft fractures] Kuner EH, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989; 82(4):243–51 (Eng. Abstr.) **(Ger)**
[Treatment of femoral and lower leg shaft fractures in adolescents] Meuli M, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989;82(4):227–35 (Eng. Abstr.) **(Ger)**
[Results of the treatment of femoral and tibial fractures following interlocking nailing and plate osteosynthesis. A comparative retrospective study] Asche G. **Zentralbl Chir** 1989;114(17):1146–54 (Eng. Abstr.) **(Ger)**
[Experience with the Champy plate in the management of fractures of the articular process] Katona J, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1990; 33(2):105–7 (Eng. Abstr.) **(Hun)**
[Treatment of scaphoido–trapezial arthrosis by arthrodesis using small–size Ender plates] Tóth K, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(4):315–8 (Eng. Abstr.) **(Hun)**
[Long–term results of the surgical treatment of diaphyseal double fractures of the forearm in adults with plate or intramedullary nailing] Gaudenzi A, et al. **Arch Putti Chir Organi Mov** 1989;37(2):407–16 (Eng. Abstr.) **(Ita)**
[A device for functional decompression of the hip joint in fractures of the acetabulum] Lentsner AA, et al. **Ortop Travmatol Protez** 1990 Apr;(4):44–6 **(Rus)**
[An intraosseous fixator] Ukhanov NIu. **Ortop Travmatol Protez** 1990 Jan;(1):35–6 **(Rus)**
[A device for the treatment of diaphyseal fracture] Ungbaev TE, et al. **Ortop Travmatol Protez** 1990 Jan;(1):32–4 **(Rus)**
[Functionally stable osteosynthesis in sequelae of injuries of the femoral diaphysis] Onoprienko GA, et al. **Sov Med** 1990;(2):104–6 **(Rus)**
[Osteosynthesis of the mandible using metal plates] Lazarovich LV, et al. **Stomatologiia (Mosk)** 1989 Nov–Dec; 68(6):25–6 (Eng. Abstr.) **(Rus)**
[A plate for supraosseous electromechanical osteosynthesis] Tkachenko SS, et al. **Voen Med Zh** 1989 Jul;(7):60 **(Rus)**
[A sliding screw and plate give best results in stable trochanteric hip fractures] Sernbo I, et al. **Lakartidningen** 1990 Jan 17;87(3):108–10 **(Swe)**

ADVERSE EFFECTS

Failed eruption of the permanent canine following open reduction of a mandibular fracture in a child. Nixon F, et al. **Br Dent J** 1990 Mar 10;168(5):204–5
Small plate osteosynthesis [letter] Postlethwaite KR. **Br J Oral Maxillofac Surg** 1990 Apr;28(2):138
Refractures after forearm plate removal. Rumball K, et al. **J Orthop Trauma** 1990;4(2):124–9
[Quantitative histologic study of early osteoporosis induced by plate fixation] Qiu SJ. **Chung Hua I Hsueh Tsa Chih** 1989 Sep;69(9):496–8, 36 (Eng. Abstr.) **(Chi)**

VETERINARY

Internal fixation of comminuted transverse scapular fracture in a foal. Bukowiecki CF, et al. **J Am Vet Med Assoc** 1989 Sep 15;195(6):781–3

Bacterial growth associated with metallic implants in dogs. Smith MM, et al. **J Am Vet Med Assoc** 1989 Sep 15; 195(6):765–7

Effects of plate luting on cortical vascularity and development of cortical porosity in canine femurs. Roush JK, et al. **Vet Surg** 1990 May–Jun;19(3):208–14

BONE REGENERATION

see related
CALLUS

Errors in bone remodeling: toward a unified theory of metabolic bone disease. Burr DB, et al. **Am J Anat** 1989 Oct;186(2):186–216 (249 ref.)

Osteogenesis in bone defects in rats: the effects of hydroxyapatite and demineralized bone matrix. Alper G, et al. **Am J Med Sci** 1989 Dec;298(6):371–6

Re: Ryan and Bieniewicz: regeneration of upper femur after subperiosteal resection [letter] Becker DW Jr. **Ann Plast Surg** 1986 Apr;16(4):362

Calvarial bone graft donor site: a histological study in a rabbit model. Thaller SR, et al. **Ann Plast Surg** 1989 Nov; 23(5):390–5

Segmental mandibular regeneration by distraction osteogenesis. An experimental study. Costantino PD, et al. **Arch Otolaryngol Head Neck Surg** 1990 May;116(5):535–45

Primary hyperparathyroidism: changes in trabecular bone remodeling following surgical treatment—evaluated by histomorphometric methods. Christiansen P, et al. **Bone** 1990;11(2):75–9

Spontaneous regeneration of the mandibular bone following hemimandibulectomy. Elbeshir EI. **Br J Oral Maxillofac Surg** 1990 Apr;28(2):128–30 (14 ref.)

Radiographic videodensitometry for quantitative monitoring of experimental bone healing. Kälebo P, et al. **Br J Radiol** 1989 Oct;62(742):883–9

Hydroxyapatite ceramics and the nature of the bone–ceramic interface. Ricci JL, et al. **Bull Hosp Jt Dis Orthop Inst** 1989 Fall;49(2):178–91 (42 ref.)

Early B-lymphocyte precursor cells in mouse bone marrow: subosteal localization of B220+ cells during postirradiation regeneration. Jacobsen K, et al. **Exp Hematol** 1990 May; 18(4):304–10

Regeneration of the caudal and pectoral fins of a bony fish, Gambusia (Haplochilus) schoelleri. Khalil SH, et al. **Folia Morphol (Praha)** 1989;37(2):208–12

Re-implantation of homologous, cultivated osteoblast-like cells for improvement of bone regeneration. An animal study. Lang H, et al. **Int J Oral Maxillofac Surg** 1989 Aug; 18(4):244–8

Treatment of periodontal furcation defects. Coronally positioned flaps versus dura mater membranes in class II defects. Garrett S, et al. **J Clin Periodontol** 1990 Mar; 17(3):179–85

Alveolar ridge augmentation in Macaca fascicularis using polysulfone with and without demineralized bone powder. Salama F, et al. **J Oral Maxillofac Surg** 1989 Nov; 47(11):1169–76

Bone ingrowth into the tibial component of a canine total condylar knee replacement prosthesis. Turner TM, et al. **J Orthop Res** 1989;7(6):893–901 (42 ref.)

Cancellous bone donor site regeneration. Montgomery DM, et al. **J Orthop Trauma** 1989;3(4):290–4

Biphasic calcium phosphate ceramic combined with fibrillar collagen with and without citric acid conditioning in the treatment of periodontal osseous defects. Nery EB, et al. **J Periodontol** 1990 Mar;61(3):166–72

Localized ridge augmentation in dogs: a pilot study using membranes and hydroxyapatite. Seibert J, et al. **J Periodontol** 1990 Mar;61(3):157–65

Cell and molecular strategies for massive bone repair/regeneration. Caplan AI. **Nippon Seikeigeka Gakkai Zasshi** 1989 May;63(5):692–9

The diagnostic value of subtraction radiography in the assessment of granular hydroxylapatite implants. Engelke W, et al. **Oral Surg Oral Med Oral Pathol** 1990 May; 69(5):636–41

Bone regeneration in a coralline hydroxyapatite implant. Holmes RE, et al. **Surg Forum** 1978;29:611–2

Tissue integration of A12O3-ceramic dental implants (Frialit)—a case report. Anneroth G, et al. **Swed Dent J** 1990;14(2):63–70

[The role of bone regeneration in post-surgical periodontal wound healing] Karring T. **Orthod Fr** 1986;57 Pt 2:435–42 (9 ref.) (Eng. Abstr.) (Fre)

[Prostaglandins—local regulators in bone?] Bartels T, et al. **Beitr Orthop Traumatol** 1989 Aug;36(8):345–9 (32 ref.) (Eng. Abstr.) (Ger)

[Stimulated osteogenesis in bone cysts] Löwicke G, et al. **Beitr Orthop Traumatol** 1989 Jul;36(7):297–302 (Eng. Abstr.) (Ger)

[The physiology of bone metabolism] Keck E. **Z Rheumatol** 1989;48 Suppl 1:3–14 (66 ref.) (Ger)

[Destructive and reparative processes after UHF and cryo-effect on bone regeneration in dogs] Plotnikov NA, et al. **Biull Eksp Biol Med** 1990 May;109(5):478–81 (Eng. Abstr.) (Rus)

[An evaluation of the reparative regeneration of maxillary defects based on neutron activation analysis data (experimental research)] Tairov UT, et al. **Stomatologiia (Mosk)** 1990 Jan–Feb;69(1):25–7 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Effects of fluoride on cortical bone remodeling in the growing domestic pig. Kragstrup J, et al. **Bone** 1989; 10(6):421–4

Effects of prostaglandin E2 on production of new cancellous bone in the axial skeleton of ovariectomized rats. Mori S, et al. **Bone** 1990;11(2):103–13

Calvarial bone regeneration using osteogenin [see comments] Hollinger J, et al. **J Oral Maxillofac Surg** 1989 Nov; 47(11):1182–6; discussion 1187 Comment in: J Oral Maxillofac Surg 1990 May;48(5):547.

ACP and Surgicel in bone hemostasis. A comparative experimental and histologic study. Mattsson T, et al. **Swed Dent J** 1990;14(2):57–62

[Effect of long-term administration of 25-hydroxycholecalciferol on the regeneration of compact and spongy bone tissue in dogs receiving prednisone] Durlik M. **Pol Arch Med Wewn** 1988 Apr;79(4):181–7 (Eng. Abstr.) (Pol)

[The effect of a biogenic paste containing hydroxyapatite on the dynamics of the bone integration of immediate implants] Nazarov SG, et al. **Stomatologiia (Mosk)** 1990 May–Jun;69(3):14–6 (Eng. Abstr.) (Rus)

[The healing of the bone erosions during therapy with gold preparations and D-penicillamine in rheumatoid arthritis patients] Kanevskaia MZ, et al. **Ter Arkh** 1990;62(5):36–8 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Dynamic study on iliac trabeculae of normal Chinese. Qiu MC, et al. **Chin Med J [Engl]** 1990 May;103(5):363–8

Bone regenerate formation in cortical bone during distraction lengthening. An experimental study. Delloye C, et al. **Clin Orthop** 1990 Jan;(250):34–42

Reaction of the circulatory system to injury and regeneration. Kelly PJ, et al. **Clin Orthop** 1990 May;(254):275–88 (61 ref.)

Biological aspects of repair osteogenesis in corticospongy homologous grafts. Greco F, et al. **Ital J Orthop Traumatol** 1989 Dec;15(4):491–9

The effects of drilling on revascularization and new bone formation in canine femoral heads with avascular necrosis: an initial study. Dahners LE, et al. **J Orthop Trauma** 1989; 3(4):309–12

Healing of maxillary and mandibular bone defects using a membrane technique. An experimental study in monkeys. Dahlin C, et al. **Scand J Plast Reconstr Surg Hand Surg** 1990;24(1):13–9

Bone ingrowth into porous coated canine total hip replacements. Quantification by backscattered scanning electron microscopy and image analysis. Jasty M, et al. **Scanning Microsc** 1989 Dec;3(4):1051–6; discussion 1056–7

[Standardized bone model for incorporation of bone, bone ceramics or other materials into the implant bed] Roesgen M, et al. **Aktuel Traumatol** 1990 Feb;20(1):37–43 (Eng. Abstr.) (Ger)

[Experimental study of the ossification of decalcified cortical bone] Szabó G, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(4):275–80 (Eng. Abstr.) (Hun)

[A low-frequency magnetic field and regeneration of bony tissue of the jaw: optimization of exposure parameters (experimental research)] Dudin AB. **Stomatologiia (Mosk)** 1990 Jan–Feb;69(1):22–4 (Eng. Abstr.) (Rus)

BONE RESORPTION

Errors in bone remodeling: toward a unified theory of metabolic bone disease. Burr DB, et al. **Am J Anat** 1989 Oct;186(2):186–216 (249 ref.)

Effects of epidermal growth factor on bone formation and resorption in vivo. Marie PJ, et al. **Am J Physiol** 1990 Feb; 258(2 Pt 1):E275–81

Adenylate cyclase blockers dissociate PTH-stimulated bone resorption from cAMP production. Reid IR, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):E708–14

The effect of fluoride on the patterns of adherence of osteoclasts cultured on and resorbing dentine: a 3-D assessment of vinculin-labelled cells using confocal optical microscopy. Taylor ML, et al. **Anat Embryol (Berl)** 1989; 180(5):427–35

Inhibition of osteoclastic bone resorption by mechanical stimulation in vitro. Klein-Nulend J, et al. **Arthritis Rheum** 1990 Jan;33(1):66–72

Resorption of intraspinal fragments of displaced bone graft following anterior spinal fusion. Hosking OR, et al. **Aust N Z J Surg** 1990 Feb;60(2):142–4

Inhibition of osteoclast proton transport by bafilomycin A1 abolishes bone resorption. Sundquist K, et al. **Biochem Biophys Res Commun** 1990 Apr 16;168(1):309–13

Osteoblast–osteoclast interaction in bone resorption. Preliminary results. Teti A, et al. **Boll Soc Ital Biol Sper** 1990 May;66(5):427–31

Variation of resorption rates in vivo of various bones in immature rats. Klein L, et al. **Bone Miner** 1990 Feb; 8(2):169–75

Simultaneous measurement of bone formation and resorption in vivo. Li XQ, et al. **Calcif Tissue Int** 1990 Apr;46(4):282–3

Cyclosporines: correlation of immunosuppressive activity and inhibition of bone resorption. Stewart PJ, et al. **Calcif Tissue Int** 1989 Oct;45(4):222–6

Soluble products of Staphylococcus aureus-stimulated blood mononuclear cells in enhancing polymorphonuclear leukocyte degradation of bone. Wang JH, et al. **Chin Med J [Engl]** 1990 Apr;103(4):326–30

Induction of bone resorbing activity by normal and rheumatoid arthritis T cells. Flescher E, et al. **Clin Immunol Immunopathol** 1990 Aug;56(2):210–8

Heterotopic new bone formation causes resorption of the inductive bone matrix. Nilsson OS, et al. **Clin Orthop** 1990 Aug;(257):280–5

Osteopetrosis in the rat: coexistence of reductions in osteocalcin and bone resorption. Lian JB, et al. **Endocrinology** 1990 Feb;126(2):955–62

Effects of prostaglandin F2 alpha on bone formation and resorption in cultured neonatal mouse calvariae: role of prostaglandin E2 production. Raisz LG, et al. **Endocrinology** 1990 Feb;126(2):1076–9

Effects of atrial natriuretic factor on cyclic nucleotides, bone resorption, collagen and deoxyribonucleic acid synthesis, and prostaglandin E2 production in fetal rat bone cultures. Vargas SJ, et al. **Endocrinology** 1989 Nov;125(5):2527–31

A short course of recombinant human growth hormone treatment stimulates osteoblasts and activates bone remodeling in normal human volunteers. Brixen K, et al. **J Bone Miner Res** 1990 Jun;5(6):609–18

Evaluation of the osteoclastic population in iliac crest biopsies from 36 normal subjects: a histoenzymologic and histomorphometric study. Palle S, et al. **J Bone Miner Res** 1989 Aug;4(4):501–6

Age and bone mass in premenopausal women. Rosenthal DI, et al. **J Bone Miner Res** 1989 Aug;4(4):533–8

The osteoclast functional antigen, implicated in the regulation of bone resorption, is biochemically related to the vitronectin receptor. Davies J, et al. **J Cell Biol** 1989 Oct; 109(4 Pt 1):1817–26

Continuously applied compressive pressure induces bone resorption by a mechanism involving prostaglandin E2 synthesis. Imamura K, et al. **J Cell Physiol** 1990 Aug; 144(2):222–8

Bisphosphonates directly inhibit the bone resorption activity of isolated avian osteoclasts in vitro. Carano A, et al. **J Clin Invest** 1990 Feb;85(2):456–61

Relationship of abnormalities in dental and skeletal development in the osteopetrotic (os) rabbit. Popoff SN, et al. **J Oral Pathol Med** 1990 Jan;19(1):5–12

A pharmacokinetic model in the rat and rabbit of the direct measurement of mature bone resorption in vivo with [3H]tetracycline. Li XQ, et al. **J Pharm Sci** 1989 Oct; 78(10):823–8

Amylinamide, bone conservation, and pancreatic beta cells. MacIntyre I. **Lancet** 1989 Oct 28;2(8670):1026–7

Effect of verapamil on bone resorption and formation in uremic rats. Chagnac A, et al. **Miner Electrolyte Metab** 1989;15(5):291–4

Osteopontin—a possible anchor of osteoclasts to bone. Reinholt FP, et al. **Proc Natl Acad Sci U S A** 1990 Jun; 87(12):4473–5

Calcium second messenger responses and hormone-stimulated bone resorption. Stern PH. **Prog Clin Biol Res** 1990;332:205–20 (35 ref.)

Local factors in bone remodeling. Mundy GR. **Recent Prog Horm Res** 1989;45:507–27; discussion 527–31 (81 ref.)

[The cellular base of adult bone remodelling] Baron R. **Orthod Fr** 1986;57 Pt 2:371–7 (18 ref.) (Eng. Abstr.) (Fre)

CHEMICALLY INDUCED

Prostaglandin E2 initially inhibits and then stimulates bone resorption in isolated rabbit osteoclast cultures. Okuda A, et al. **Bone Miner** 1989 Nov;7(3):255–66

Conditioned medium from ras oncogene-transformed NIH 3T3 cells induces bone resorption in vitro. Krieger NS, et al. **J Bone Miner Res** 1990 Feb;5(2):159–64

24- and 26-homo-1,25-dihydroxyvitamin D3 analogs: potencies on in vitro bone resorption differ from those reported for cell differentiation. Paulson SK, et al. **J Bone Miner Res** 1990 Feb;5(2):201–6

Role of bone and kidney in parathyroid hormone-related peptide-induced hypercalcemia in rats. Rizzoli R, et al. **J Bone Miner Res** 1989 Oct;4(5):759–65

Oxygen-derived free radicals stimulate osteoclastic bone resorption in rodent bone in vitro and in vivo. Garrett IR, et al. **J Clin Invest** 1990 Mar;85(3):632–9

Foreign body giant cell reaction related to placement of tetracycline-treated polylactic acid: report of 18 cases. Moore JW, et al. **J Oral Maxillofac Surg** 1990 Aug; 48(8):808–12

Appearance of osteoclasts by injections of lipopolysaccharides in rat periodontal tissue. Umezu A, et al. **J Periodont Res** 1989 Nov;24(6):378–83

Preventive effect of zinc against cadmium-induced bone resorption. Suzuki Y, et al. **Toxicology** 1990 May 14; 62(1):27–34

COMPLICATIONS

Serum antibodies and loss of periodontal bone in patients with rheumatoid arthritis. Tolo K, et al. **J Clin Periodontol** 1990 May;17(5):288–91

[Pathogenesis and treatment of juvenile periodontitis] Benedek E. **Fogorv Sz** 1988 May;81(5):129–35 (Eng. Abstr.) **(Hun)**

DIAGNOSIS

The evaluation of cortical bone remodeling with a new ultrasonic technique. Zimmerman MC, et al. **IEEE Trans Biomed Eng** 1990 May;37(5):433–41

[Psoriatic osteopathy] Hein G, et al. **Z Gesamte Inn Med** 1989 Nov 15;44(22):674–7 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Effect of calcitonin administration on young pig trabecular bone remodeling. de Vernejoul MC, et al. **Bone** 1990; 11(1):29–33

Comparison between the effects of forskolin and calcitonin on bone resorption and osteoclast morphology in vitro. Lerner UH, et al. **Bone** 1989;10(5):377–87

The application of plasma tartrate-resistant acid phosphatase to assess changes in bone resorption in response to artificial menopause and its treatment with estrogen or norethisterone. Stěpán JJ, et al. **Calcif Tissue Int** 1989 Nov; 45(5):273–80

Inhibition of bone resorption by alpha-difluoromethylornithine may not be mediated by polyamine depletion. Lucas RC, et al. **J Bone Miner Res** 1989 Dec;4(6):901–9

The effects of sodium fluoride on the resorptive activity of isolated osteoclasts. Okuda A, et al. **J Bone Miner Res** 1990 Mar;5 Suppl 1:S115–20

WR-2721 reduces bone loss after hindlimb tenotomy in rats. Shaker JL, et al. **J Bone Miner Res** 1989 Dec;4(6):885–90

The effect of fluoride on the resorption of dentine by osteoclasts in vitro. Taylor ML, et al. **J Bone Miner Res** 1990 Mar;5 Suppl 1:S121–30

Effect of a high dose of fluoride on resorbing osteoclasts in vivo. Lindskog S, et al. **Scand J Dent Res** 1989 Dec; 97(6):483–7

[Perspectives on therapy with diphosphonates in non-malignant diseases] Willvonseder R, et al. **Z Gerontol** 1990 Jan–Feb;23(1):39–42 (11 ref.) (Eng. Abstr.) **(Ger)**

[Establishment of a model to evaluate inhibition of bone resorption induced by bladder tumor (MBT-2) in mice] Nishijima Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 May;81(5):694–700 (Eng. Abstr.) **(Jpn)**

[Effect of long-term administration of 25-hydroxycholecalciferol on the regeneration of compact and spongy bone tissue in dogs receiving prednisone] Durlik M. **Pol Arch Med Wewn** 1988 Apr;79(4):181–7 (Eng. Abstr.) **(Pol)**

EPIDEMIOLOGY

The 'high risk' group in periodontitis. Jenkins WM, et al. **Br Dent J** 1989 Sep 9;167(5):168–71

Prevalence of incipient radiographic periodontal lesions in relation to ethnic background and dental care provisions in young adults. Albandar JM. **J Clin Periodontol** 1989 Nov;16(10):625–9

Prevalence of the 'combination syndrome' among denture patients. Shen K, et al. **J Prosthet Dent** 1989 Dec; 62(6):642–4

ETIOLOGY

Lower mobility and markers of bone resorption in the elderly. Lips P, et al. **Bone Miner** 1990 Apr;9(1):49–57

Prosthesis-associated pseudomembrane-induced bone resorption. Appel AM, et al. **Br J Rheumatol** 1990 Feb; 29(1):32–6

Rapid induction of localized bone resorption in the auditory bulla of the Mongolian gerbil, Meriones unguiculatus, by increased air pressure. Chole RA, et al. **Calcif Tissue Int** 1989 Nov;45(5):318–23

Comparison of the effects of amino-terminal synthetic parathyroid hormone-related peptide (PTHrP) of malignancy and parathyroid hormone on resorption of cultured fetal rat long bones. Raisz LG, et al. **Calcif Tissue Int** 1990 Apr;46(4):233–8

Exceptional case of bone resorption in an osteo-odonto-keratoprosthesis. A scanning electron microscopy and X-ray microanalysis study. Caiazza S, et al. **Cornea** 1990 Jan;9(1):23–7

Pathological changes related to long-term impaction of third molars. A radiographic study. Eliasson S, et al. **Int J Oral Maxillofac Surg** 1989 Aug;18(4):210–2

Dental and jaw changes in primary hyperoxaluria. Hedemark A, et al. **J Oral Pathol Med** 1989 Dec;18(10):586–9

Some predictors of radiographic alveolar bone height reduction over 6 years. Albandar JM. **J Periodont Res** 1990 May;25(3):186–92

Residual ridge changes under titanium plasma-sprayed screw implant systems. el Charkawi HG. **J Prosthet Dent** 1989 Nov;62(5):576–80

Relationships between mandibular and skeletal bone in an osteoporotic population. Kribbs PJ, et al. **J Prosthet Dent** 1989 Dec;62(6):703–7

Comparison of mandibular bone in normal and osteoporotic women. Kribbs PJ. **J Prosthet Dent** 1990 Feb;63(2):218–22

The interleukin concept and the periodontal diseases. Katz J, et al. **Med Hypotheses** 1989 Aug;29(4):251–4 (30 ref.)

Mechanisms of bone degradation in infection: a review of current hypotheses. Gillespie WJ, et al. **Orthopedics** 1990 Apr;13(4):407–10 (34 ref.)

Characteristics of a pathological process in the destroyed tympanic part of the facial canal in chronic otitis media with cholesteatoma. Djerić D, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(5):449–51

Case report 568: Total resorption of the lateral sesamoid secondary to Pseudomonas aeruginosa osteomyelitis. Conway WF, et al. **Skeletal Radiol** 1989;18(6):483–4

[New criteria for the characterization of facies leprosa] Freitas JA, et al. **Hansenol Int** 1986 Jan–Dec;11(1–2):7–23 (Eng. Abstr.) **(Por)**

[Erosive pathologies of the external auditory canal] Giróns Bonells J, et al. **Acta Otorrinolaringol Esp** 1988 Mar–Apr; 39(2):81–4 (17 ref.) (Eng. Abstr.) **(Spa)**

HISTORY

Continuing tooth eruption and alveolar crest height in an eighteenth-century population from Spitalfields, east London. Whittaker DK, et al. **Arch Oral Biol** 1990; 35(2):81–5

IMMUNOLOGY

Investigations on in vitro bone resorbing activity from athymic (nude) and euthymic mouse splenic leukocytes. McCauley LK, et al. **Bone** 1989;10(5):389–94

Neutrophil function, genotype and periodontal bone loss in the mouse. Gilbert AD, et al. **J Periodont Res** 1989 Nov; 24(6):412–4

Increased periodontal bone loss in temporarily B lymphocyte-deficient rats. Klausen B, et al. **J Periodont Res** 1989 Nov;24(6):384–90

[Bone resorption and cytokines: the role of IL-1 beta, TNF and lymphotoxin] Piattelli A, et al. **Minerva Stomatol** 1990 Jun;39(6):447–51 (39 ref.) (Eng. Abstr.) **(Ita)**

METABOLISM

Enhancement of human dental cyst PGI2 formation by platelet derived growth factor and its role in cyst growth and bone resorption. Nell A, et al. **Arch Oral Biol** 1989; 34(3):187–90

Induction of monocyte chemotaxis in devascularized rabbit bone. Sarkar MR, et al. **Arch Orthop Trauma Surg** 1990; 109(2):97–101

Cytosolic free calcium dependent regulation of osteoclast bone resorbing activity. Teti A, et al. **Boll Soc Ital Biol Sper** 1990 Jan;66(1):1–4

Effects of ethanol and acetaldehyde on collagen synthesis, prostaglandin release and resorption of fetal rat bone in organ culture. Hurley MM, et al. **Bone** 1990;11(1):47–51

Decreasing rates of bone resorption in growing rats in vivo: comparison of different types of bones. Li XQ, et al. **Bone** 1990;11(2):95–101

An acidic fibroblast growth factor stimulates DNA synthesis, inhibits collagen and alkaline phosphatase synthesis and induces resorption in bone. Shen V, et al. **Bone Miner** 1989 Nov;7(3):205–19

A systemic approach to the oral problem of mandibular resorption. Driessens FC, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Dec; 32(3):127–37 (104 ref.)

Cancellous bone resorption in the proximal ilium of the ovariectomized rat. Devlin H, et al. **Calcif Tissue Int** 1990 Jun;46(6):395–400

Comparison of the effects of oral and transdermal oestradiol administration on oestrogen metabolism, protein synthesis, gonadotrophin release, bone turnover and climacteric symptoms in postmenopausal women. Selby P, et al. **Clin Endocrinol (Oxf)** 1989 Mar;30(3):241–9

Matrix collagen of devitalized bone is resistant to osteoclastic bone resorption. Shimizu H, et al. **Connect Tissue Res** 1989; 20(1–4):169–75

Na+/H+ antiporter is the primary proton transport system used by osteoclasts during bone resorption. Hall TJ, et al. **J Cell Physiol** 1990 Feb;142(2):420–4

Age-dependent stimulation or inhibition of calcium release from bone cultures by 1 alpha, 25-dihydroxyvitamin D3. Goldhaber P, et al. **Mech Ageing Dev** 1989 Sep; 49(3):199–209 (34 ref.)

Effect of exercise on bone: permissive influence of estrogen and calcium. Dalsky GP. **Med Sci Sports Exerc** 1990 Jun; 22(3):281–5 (27 ref.)

[Local factors in bone repair] Bergmann P. **Rev Med Brux** 1989 Dec;10(10):419–23 (34 ref.) (Eng. Abstr.) **(Fre)**

MICROBIOLOGY

Pathogenic potential of Eubacterium yurii subspecies. Margaret BS, et al. **J Med Microbiol** 1990 Feb;31(2):103–8

PATHOLOGY

A small aneurysmal bone cyst restricted to the cortical bone of the femur resembling so-called subperiosteal giant cell tumor or subperiosteal osteoclasia. Okada K, et al. **Acta Pathol Jpn** 1989 Aug;39(8):539–44

Experimental study of the effect of prostaglandin administration on tooth movement—with particular emphasis on the relationship to the method of PGE1 administration. Lee WC. **Am J Orthod Dentofacial Orthop** 1990 Sep;98(3):231–41

Morphological relationships between osteoclasts and bone resorption surfaces on mouse parietal bones. Abe K, et al. **Arch Histol Cytol** 1990 Mar;53(1):95–102

Pathophysiological and therapeutic aspects of dentoalveolar resorption. Pierce A. **Aust Dent J** 1989 Oct;34(5):437–48

Electron microscopy of developing calvaria reveals images that suggest that osteoclasts engulf and destroy osteocytes during bone resorption. Elmardi AS, et al. **Calcif Tissue Int** 1990 Apr;46(4):239–45

Organization of osteoclast microfilaments during the attachment to bone surface in vitro. Lakkakorpi P, et al. **J Bone Miner Res** 1989 Dec;4(6):817–25

Bone resorption by isolated osteoclasts in living versus devitalized bone: differences in mode and extent and the effects of human recombinant tissue inhibitor of metalloproteinases. Shimizu H, et al. **J Bone Miner Res** 1990 Apr;5(4):411–8

Scores of plaque, bleeding, suppuration and probing depth to predict probing attachment loss. 5 years of observation following nonsurgical periodontal therapy. Badersten A, et al. **J Clin Periodontol** 1990 Feb;17(2):102–7

Diagnostic predictability of scores of plaque, bleeding, suppuration and probing depth for probing attachment loss. 3 1/2 years of observation following initial periodontal therapy. Claffey N, et al. **J Clin Periodontol** 1990 Feb; 17(2):108–14

One-wall proximal defects: pretreatment characteristics and bone response following flap curettage. Heins P, et al. **J Clin Periodontol** 1990 May;17(5):282–7

Alveolar bone loss of senescence-accelerated mouse (SAM). Sashima M, et al. **J Dent Res** 1990 Jan;69(1):82–6

Proximal bone loss adjacent to periodontally "hopeless" teeth with and without extraction. Machtei EE, et al. **J Periodontol** 1989 Sep;60(9):512–5

Fixation effects on membranous and endochondral onlay bone graft revascularization and bone deposition. Phillips JH, et al. **Plast Reconstr Surg** 1990 Jun;85(6):891–7

Two complementary methods of assessing periodontal bone level in rats. Klausen B, et al. **Scand J Dent Res** 1989 Dec; 97(6):494–9

Osteoclast features of cells that resorb demineralized and mineral-containing bone implants in rats. Bagi CM, et al. **Scanning Microsc** 1989 Sep;3(3):963–8; discussion 969–70

[Is there a correlation between Nordin's index and the areas of bone resorption measured by histomorphometry?] Kuntz JL, et al. **Rev Rhum Mal Osteoartic** 1990 Apr 25; 57(4):317–8 **(Fre)**

[Reattachment or new attachment in apical-marginal periodontal bone loss. A clinical-histological discussion] Lin LM, et al. **Zahn Mund Kieferheilkd** 1990;78(2):119–25 (34 ref.) (Eng. Abstr.) **(Ger)**

[Facial bone changes in Virchowian Hansen's disease] Freitas JA, et al. **Hansenol Int** 1986 Jan–Dec;11(1–2):24–43 (38 ref.) (Eng. Abstr.) **(Por)**

PHYSIOPATHOLOGY

A morphometric study of the effects of pressure on bone resorption in the middle ear of rats. Huang CC, et al. **Am J Otol** 1990 Jan;11(1):39–43

The effect of extracellular calcium elevation on morphology and function of isolated rat osteoclasts. Datta HK, et al. **Biosci Rep** 1989 Dec;9(6):747–51

Effect of glucocorticoids on the biologic activities of myeloma cells: inhibition of interleukin-1 beta osteoclast activating factor-induced bone resorption. Ishikawa H, et al. **Blood** 1990 Feb 1;75(3):715–20

Dietary salt affects biochemical markers of resorption and formation of bone in elderly women. McParland BE, et al. **BMJ** 1989 Sep 30;299(6703):834–5

Immunolocalization of beta 3 subunit of integrins in osteoclast membrane. Teti A, et al. **Boll Soc Ital Biol Sper** 1989 Nov; 65(11):1031–7

Simultaneous assessment of bone resorption and formation in cultures of 22-day fetal rat parietal bones: effects of parathyroid hormone and prostaglandin E2. Vargas SJ, et al. **Bone** 1990;11(1):61–5

Effects of clomiphene and tamoxifen in vivo on the bone-resorbing effects of parathyroid hormone and of high oral doses of calcitriol (1,25(OH)2D3) in rats with intact ovarian function consuming low calcium diet. Goulding A, et al. **Bone Miner** 1990 Mar;8(3):185–93

Interleukin 1 interacts synergistically with forskolin and isobutylmethylxanthine in stimulating bone resorption in organ culture. Dewhirst FE, et al. **Calcif Tissue Int** 1990 Jul;47(1):1–7

Optimal bone resorption by isolated rat osteoclasts requires chloride/bicarbonate exchange. Hall TJ, et al. **Calcif Tissue Int** 1989 Dec;45(6):378–80

Hyperostosis induced by the bisphosphonate (2-PEBP) in the oophorectomized rat. Movsowitz C, et al. **Calcif Tissue Int** 1990 Mar;46(3):195–9

Partial characterization of a parathyroid hormone-stimulated resorption factor(s) from osteoblast-like cells. Perry HM 3d, et al. **Endocrinology** 1989 Oct;125(4):2075–82

Trabecular bone remodeling and bone mineral density in the adult cat during chronic dietary acidification with ammonium chloride. Ching SV, et al.

J Bone Miner Res 1990 Jun;5(6):547–56

Bone remodeling in predialysis chronic renal failure: how does the choice of index for mineralizing surface influence the interpretation? Dahl E, et al. J Bone Miner Res 1989 Dec;4(6):845–52

Cancellous bone remodeling in type I (postmenopausal) osteoporosis: quantitative assessment of rates of formation, resorption, and bone loss at tissue and cellular levels. Eriksen EF, et al. J Bone Miner Res 1990 Apr;5(4):311–9

Bone changes occurring early after cessation of ovarian function in beagle dogs: a histomorphometric study employing sequential biopsies. Faugere MC, et al. J Bone Miner Res 1990 Mar;5(3):263–72

Relationship between interleukin-1 and prostaglandins in resorbing neonatal calvaria. Garrett IR, et al. J Bone Miner Res 1989 Oct;4(5):789–94

Second messengers in thrombin-stimulated bone resorption. Stern PH, et al. J Bone Miner Res 1990 May;5(5):443–9

A 6-year study on the pattern of periodontal disease progression. Albandar JM. J Clin Periodontol 1990 Aug; 17(7 Pt 1):467–71

Bacteroides gingivalis stimulates bone resorption via interleukin-1 production by mononuclear cells. The relative role for B. gingivalis endotoxin. Bom-van Noorloos AA, et al. J Clin Periodontol 1990 Aug;17(7 Pt 1):409–13

Carbonic anhydrase activity in fetal rat bone resorbing cells: inhibition by acetazolamide infusion. Hott M, et al. J Dev Physiol 1989 Nov;12(5):277–81

Calcitonin, prostaglandin E2, and dibutyryl cyclic adenosine 3',5'-monophosphate disperse the specific microfilament structure in resorbing osteoclasts. Lakkakorpi PT, et al. J Histochem Cytochem 1990 Oct;38(10):1487–93

Regulation of bone cell metabolism. Hagel-Bradway S, et al. J Oral Pathol Med 1989 Jul;18(6):344–51 (104 ref.)

Bone resorption in orthotopic and heterotopic bone of dichloromethylene bisphosphonate-treated rats. Nilsson OS, et al. J Orthop Res 1990 Mar;8(2):213–9

Patterns of alveolar bone loss in the assessment of periodontal treatment priorities. Papapanou PN. Swed Dent J Suppl 1989;66:1–45

[Osteoclastic activation factors] de Vernejoul MC, et al. Presse Med 1989 Oct 28;18(35):1729–31 (Fre)

[Prostaglandins—local regulators in bone?] Bartels T, et al. Beitr Orthop Traumatol 1989 Aug;36(8):345–9 (32 ref.) (Eng. Abstr.) (Ger)

[The physiology of bone metabolism] Keck E. Z Rheumatol 1989;48 Suppl 1:3–14 (66 ref.) (Ger)

[Physiopathology of the edentulous crest. Possibilities of the pharmacologic inhibition of pre- and post-operative bone resorption] Bucci E, et al. Minerva Stomatol 1989 Dec; 38(12):1239–46 (15 ref.) (Eng. Abstr.) (Ita)

PREVENTION & CONTROL

The effect of stannous and sodium fluoride on coronal caries, root caries and bone loss in rice rats. Beiraghi S, et al. Arch Oral Biol 1990;35(1):79–80

Tricalcium phosphate ceramic as immediate root implants for the maintenance of alveolar bone in partially edentulous mandibular jaws. A clinical study. Mathai JK, et al. Aust Dent J 1989 Oct;34(5):421–6

Prospective trial of ossein-hydroxyapatite compound in surgically induced postmenopausal women. Stěpán JJ, et al. Bone 1989;10(3):179–85

Gallium inhibits bone resorption by a direct effect on osteoclasts. Hall TJ, et al. Bone Miner 1990 Mar;8(3):211–6

The interrelationship between the root surface and alveolar bone of the replanted avulsed tooth after etching. Yang ZP, et al. Chung Hua I Hsueh Tsa Chih 1989 Nov; 44(5):298–303

Antiresorptive dose-response relationships across three generations of bisphosphonates. Sietsema WK, et al. Drugs Exp Clin Res 1989;15(9):389–96

Different inhibitory actions of immunomodulating agents and immunosuppressive agents on bone resorption of mouse calvaria. Sasagawa K, et al. Int J Immunopharmacol 1989; 11(8):953–9

NE-58095: a diphosphonate which prevents bone erosion and preserves joint architecture in experimental arthritis. Francis MD, et al. Int J Tissue React 1989;11(5):239–52

Altering the progression of human alveolar bone loss with the non-steroidal anti-inflammatory drug flurbiprofen. Williams RC, et al. J Periodontol 1989 Sep;60(9):485–90

[Periodontal considerations related to extractions] Bercy P. Rev Belge Med Dent 1989;44(4):79–86 (Eng. Abstr.) (Fre)

[Reaction of osseous tissue and the osteoclast population in rats to biphosphonates and vitamin D3 under conditions of hypokinesia] Gol'dovskaia MD, et al. Kosm Biol Aviakosm Med 1989 Aug-Sep;23(4):47–51 (Eng. Abstr.) (Rus)

RADIOGRAPHY

A review of the reliability of radiographic measurements in estimating alveolar bone changes. Benn DK. J Clin Periodontol 1990 Jan;17(1):14–21 (30 ref.)

Comparison between panoramic and posterior bitewing radiography in the diagnosis of periodontal bone loss. Akesson L, et al. J Dent 1989 Dec;17(6):266–71

Correction of density changes caused by methodological errors in CADIA. Steffensen B, et al. J Periodont Res 1989 Nov;24(6):402–8

Alveolar bone loss in patients with long-term supportive care [see comments] Layport CA, et al. J Periodontol 1990 Jul; 61(7):434–7 Comment in: J Periodontol 1990 Jul;61(7):459–61.

Interpretation of radiographic data on longitudinal loss of periodontal support [editorial; comment] Wennström JL. J Periodontol 1990 Jul;61(7):459–61 Comment on: J Periodontol 1990 Jul;61(7):434–7.

Solid adenoid cystic carcinoma of the maxilla. Cleveland D, et al. Oral Surg Oral Med Oral Pathol 1990 Apr;69(4):470–8

Symmetric midline mandibular radiolucency. Rees RT. Oral Surg Oral Med Oral Pathol 1989 Dec;68(6):797

The bipolar endoprosthesis and bone graft in the management of aseptic acetabular component loosening. Ochsner JL Jr, et al. Orthopedics 1990 Jan;13(1):45–9

[Radiographic study of bone resorption at the proximal end of the femur after total hip replacements] Miyake N. Nippon Seikeigeka Gakkai Zasshi 1989 Dec;63(12):1443–51 (Eng. Abstr.) (Jpn)

SURGERY

Ridge reconstruction with hydroxylapatite: potential and shortcomings. Mercier P. Can Dent Assoc J 1990 Jan; 56(1):47–50

Bipolar components for severe periacetabular bone loss around the failed total hip arthroplasty. Roberson JR, et al. Clin Orthop 1990 Feb;(251):113–8

Reduction of mandibular residual ridge after vestibuloplasty. A two-year follow-up study comparing the Edlan flap, mucosal and skin graft operations. Hillerup S, et al. Int J Oral Maxillofac Surg 1989 Oct;18(5):271–6

Reconstruction of the severely resorbed maxilla with bone grafting and osseointegrated implants: a preliminary report. Jensen J, et al. J Oral Maxillofac Surg 1990 Jan;48(1):27–32; discussion 33

The use of tissue expanders in the reconstruction of orofacial defects secondary to congenital rubella: case report. Lew D, et al. J Oral Maxillofac Surg 1989 Nov;47(11):1202–7

Extraoral placement of a superiosteal tissue expander for reconstruction with hydroxylapatite of the severely atrophic mandibular alveolar ridge. Schwartz HC, et al. J Oral Maxillofac Surg 1990 Feb;48(2):157–61

The effect of local doxycycline with and without tricalcium phosphate on the regenerative healing potential of periodontal osseous defects in dogs. Al-Ali W, et al. J Periodontol 1989 Oct;60(10):582–90

Comparison of decalcified freeze-dried bone allograft and porous particulate hydroxyapatite in human periodontal osseous defects. Bowen JA, et al. J Periodontol 1989 Dec; 60(12):647–54

A comparison of freeze-dried bone allograft and demineralized freeze-dried bone allograft in human periodontal osseous defects. Rummelhart JM, et al. J Periodontol 1989 Dec;60(12):655–63

Human clinical and histologic responses to the placement of HTR polymer particles in 11 intrabony lesions. Stahl SS, et al. J Periodontol 1990 May;61(5):269–74

Human freeze-dried dura mater allografts as a periodontal biological bandage. Zaner DJ, et al. J Periodontol 1989 Nov;60(11):617–23

[Observation on implants of porous hydroxyapatite granules in periodontal osseous defects] Hashimoto M. Kokubyo Gakkai Zasshi 1990 Mar;57(1):116–45 (Eng. Abstr.) (Jpn)

THERAPY

Treatment of sequestra, pseudarthroses, and defects in the long bones of children who have chronic hematogenous osteomyelitis. Daoud A, et al. J Bone Joint Surg [Am] 1989 Dec;71(10):1448–68

Biphasic calcium phosphate ceramic combined with fibrillar collagen with and without citric acid conditioning in the treatment of periodontal osseous defects. Nery EB, et al. J Periodontol 1990 Mar;61(3):166–72

URINE

Urinary excretion of pyridinium crosslinks: a new marker of bone resorption in metabolic bone disease. Uebelhart D, et al. Bone Miner 1990 Jan;8(1):87–96

Urinary total hydroxyproline measured by HPLC: comparison of spot and timed urine collections. Wilson PS, et al. Clin Chem 1990 Feb;36(2):388–9

VETERINARY

Morphology of the pubis and preauricular area in relation to parity and age at death in Macaca mulatta. Tague RG. Am J Phys Anthropol 1990 Aug;82(4):517–25

Histomorphometric comparison of measurements of trabecular bone remodeling in iliac crest biopsy sites and lumbar vertebrae in cats. Ching SV, et al. Am J Vet Res 1990 Mar;51(3):447–50

BONE SCREWS

Fixation of femoral neck fractures. Comparison of the Uppsala and von Bahr screws. Rehnberg L, et al. Acta Orthop Scand 1989 Oct;60(5):579–84

Stability of mandibular lengthening using bicortical screw fixation. Caskey RT, et al. Am J Orthod Dentofacial Orthop 1989 Oct;96(4):320–6

Nail versus screw fixation of femoral neck fractures. A 2-year radiological and clinical prospective study. Alberts KA, et al. Ann Chir Gynaecol 1989;78(4):298–303

Use of maxillary miniplates and screw system in the treatment of hand fractures: a preliminary report. Thaller SR, et al. Ann Plast Surg 1989 Dec;23(6):508–10

Herbert screw fixation of osteochondral fractures about the knee. Lewis PL, et al. Aust N Z J Surg 1990 Jul;60(7):511–3

Bone-plates and screws of bioabsorbable poly (L-lactide)—an animal pilot study. Bos RR, et al. Br J Oral Maxillofac Surg 1989 Dec;27(6):467–76

A histological study of stainless steel and titanium screws in bone. Millar BG, et al. Br J Oral Maxillofac Surg 1990 Apr;28(2):92–5

The fixation and prognosis of trochanteric fractures. A randomized prospective controlled trial. Bannister GC, et al. Clin Orthop 1990 May;(254):62–6

Analysis of the pull-out strength of screws and pegs used to secure tibial components following total knee arthroplasty. Finlay JB, et al. Clin Orthop 1989 Oct; (247):220–31

Femoral neck fractures. A biomechanical study of a new form of internal fixation using multiple telescoping variable length compression screws. Neustadt JB, et al. Clin Orthop 1989 Nov;(248):181–8

A comparative analysis of Ender's-rod and compression screw and side plate fixation of intertrochanteric fractures of the hip. Rao JP, et al. Clin Orthop 1990 Jul;(256):125–31

Unstable intertrochanteric/subtrochanteric fractures of the femur. Whitelaw GP, et al. Clin Orthop 1990 Mar; (252):238–45

Rib fracture healing after osteosynthesis with wire mesh titanium and screws: a histological study in sheep. Klein CP, et al. Eur Surg Res 1989;21(6):347–54

Metatarsal osteotomy using a double-threaded compression screw: an adjunct to revision forefoot surgery. Sammarco GJ, et al. Foot Ankle 1989 Dec;10(3):129–39

Intertrochanteric fractures of the femur: a prospective study comparing the use of the Küntscher-Y nail and a sliding hip screw. Davis TR, et al. Injury 1988 Nov;19(6):421–6

Implant failures in patients with proximal fractures of the femur treated with a sliding screw device. Mainds CC, et al. Injury 1989 Mar;20(2):98–100

Symptomatic non-union of the carpal scaphoid: Matti-Russe bone grafting versus Herbert screw fixation. Parkinson RW, et al. Injury 1989 May;20(3):164–6

Pretapped and self-tapping screws in the human midface. Torque measurements and bone screw interface. Bähr W. Int J Oral Maxillofac Surg 1990 Feb;19(1):51–3

Bio-absorbable plates and screws for internal fixation of mandibular fractures. A study in six dogs. Bos RR, et al. Int J Oral Maxillofac Surg 1989 Dec;18(6):365–9

Osteosynthesis of fractures of the femoral neck by nail-plate, screws and valgus osteotomy. Rotolo F, et al. Ital J Orthop Traumatol 1989 Sep;15(3):331–7

Hallux abducto valgus metatarsal head osteotomy with Herbert screw fixation. Parker RE, et al. J Am Podiatr Med Assoc 1990 May;80(5):271–4

Mechanical considerations for the syndesmosis screw. A cadaver study. Boden SD, et al. J Bone Joint Surg [Am] 1989 Dec;71(10):1548–55

Treatment of slipped capital femoral epiphysis with a cannulated-screw technique. Koval KJ, et al. J Bone Joint Surg [Am] 1989 Oct;71(9):1370–7

Acetabular anatomy and the transacetabular fixation of screws in total hip arthroplasty. Wasielewski RC, et al. J Bone Joint Surg [Am] 1990 Apr;72(4):501–8

The stability of intertrochanteric fractures treated with a sliding screw-plate. Flores LA, et al. J Bone Joint Surg [Br] 1990 Jan;72(1):37–40

The effects of pre-tapping on the miniscrew-bone interface in the midface. Bähr W. J Craniomaxillofac Surg 1989 Nov; 17(8):337–9

Tricorrectional bunionectomy with AO screw fixation. Boggs SI, et al. J Foot Surg 1989 May-Jun;28(3):185–90

Use of the cannulated bone screw in rearfoot surgery. Chieppa WA, et al. J Foot Surg 1989 Jul-Aug;28(4):333–4

Modified Austin bunionectomy with single screw fixation: a comparison study. Clancy JT, et al. J Foot Surg 1989 Jul-Aug;28(4):284–9

Arthrodesis of the hallux interphalangeal joint using a diagonally placed 2-mm. cortical bone screw. Frankel JP, et al. J Foot Surg 1989 Sep-Oct;28(5):466–70

Tailor's bunion: clinical evaluation and correction by distal metaphyseal osteotomy with cortical screw fixation. Frankel JP, et al. J Foot Surg 1989 May-Jun;28(3):237–43

Self-tapping screw fixation of the Austin osteotomy. Klein MS, et al. J Foot Surg 1990 Jan-Feb;29(1):52–4

The use of bone screws has become an important adjunct in lower extremity in fracture fixation [editorial] Reinherz RP. J Foot Surg 1990 Mar-Apr;29(2):103–4

Two modifications for insertion of the Herbert screw in the fractured scaphoid. Chun S, et al. J Hand Surg [Am] 1990 Jul;15(4):669–71

Retrograde Herbert screw fixation for treatment of proximal pole scaphoid nonunions. DeMaagd RL, et al. J Hand Surg [Am] 1989 Nov;14(6):996–1003

Anterior bone grafting and conventional lag screw fixation to treat scaphoid nonunions. Fernandez DL. J Hand Surg [Am] 1990 Jan;15(1):140–7

Experience with the Herbert screw in the treatment of scaphoid fractures [letter; comment] Herbert TJ.

J Hand Surg [Br] 1989 Nov;14(4):463 Comment on: J Hand Surg [Br] 1988 Nov;13(4):453–5.

Prospective clinical evaluation of the use of compression plates and screws in the management of mandible fractures [see comments] Ardary WC. **J Oral Maxillofac Surg** 1989 Nov;47(11):1150–3 Comment in: J Oral Maxillofac Surg 1990 Jun;48(6):665.

A comparative in vitro study of fixation of mandibular fractures with paraskeletal clamps or screw plates. Crofts CE, et al. **J Oral Maxillofac Surg** 1990 May;48(5):461–6; discussion 466–7

The effect of repetitive screw hole use on the retentive strength of pretapped and self-tapped screws. Foley WL, et al. **J Oral Maxillofac Surg** 1990 Mar;48(3):264–7

Stabilization of plating screws during placement for osseous surgery [letter] Orr DL 2d. **J Oral Maxillofac Surg** 1990 Mar;48(3):328

Stability of mandibular advancement after sagittal osteotomy with screw or wire fixation: a comparative study. Watzke IM, et al. **J Oral Maxillofac Surg** 1990 Feb;48(2):108–21; discussion 122–3

The placement of screws above the zygomaticofrontal suture. Zide MF, et al. **J Oral Maxillofac Surg** 1990 Aug; 48(8):813–6

The effect of radial preload on the implant–bone interface: a cadaveric study. Biliouris TL, et al. **J Orthop Trauma** 1989;3(4):323–32

Optimizing bone screw pullout force. DeCoster TA, et al. **J Orthop Trauma** 1990;4(2):169–74

A biomechanical analysis of the sliding hip screw: the question of plate angle. Meislin RJ, et al. **J Orthop Trauma** 1990;4(2):130–6

Dynamic condylar screw: a new device [letter; comment] Ort PJ. **J Orthop Trauma** 1990;4(1):105 Comment on: J Orthop Trauma 1989;3(2):124–32.

Subchondral screw fixation of cervical hip fractures: joint congruence studied with combined arthrography and tomography. Rehnberg L, et al. **J Orthop Trauma** 1989; 3(3):202–5

Biomechanics of Ender rods, compression screw, and Zickel nail in the fixation of stable subtrochanteric femur osteotomies. Wainer RA, et al. **J Orthop Trauma** 1990; 4(1):58–63

Ipsilateral hip and femoral shaft fractures treated with compression hip screw and long side–plate. Wu HJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 May; 6(5):251–6

The biomechanics of screws. Uhl RL. **Orthop Rev** 1989 Dec; 18(12):1302–7

Cantilever nasal bone grafting with miniscrew fixation [letter; comment] Gruss JS. **Plast Reconstr Surg** 1989 Dec; 84(6):1014–5 Comment on: Plast Reconstr Surg 1989 Apr;83(4):728–32.

Cantilever nasal bone grafting with miniscrew fixation [letter] Hoffman S. **Plast Reconstr Surg** 1990 Jan;85(1):149–50

Fixation effects on membranous and endochondral onlay bone graft revascularization and bone deposition. Phillips JH, et al. **Plast Reconstr Surg** 1990 Jun;85(6):891–7

Nasal bone graft miniscrew fixation [letter; comment] Sadove AM, et al. **Plast Reconstr Surg** 1989 Dec;84(6):1011–2 Comment on: Plast Reconstr Surg 1989 Apr;83(4):728–32.

Fractures of the odontoid process. Treatment with anterior screw fixation. Aebi M, et al. **Spine** 1989 Oct; 14(10):1065–70

Accuracy of pedicular screw placement in vivo. Gertzbein SD, et al. **Spine** 1990 Jan;15(1):11–4

Spinal pedicle fixation: reliability and validity of roentgenogram–based assessment and surgical factors on successful screw placement [letter; comment] Grob D, et al. **Spine** 1990 Mar;15(3):251 Comment on: Spine 1988 Sep;13(9):1012–8.

A biomechanical investigation of short segment spinal fixation for burst fractures with varying degrees of posterior disruption. Mann KA, et al. **Spine** 1990 Jun; 15(6):470–8

[Treatment of fractures of the carpal scaphoid with Herbert's bone screw. Review of 21 clinical cases] Recht J, et al. **Acta Orthop Belg** 1989;55(2):183–90 (Eng. Abstr.) **(Fre)**

[Bone contact of miniscrews with and without a pretapped thread] Bähr W, et al. **Aktuel Traumatol** 1989 Oct; 19(5):196–8 (Eng. Abstr.) **(Ger)**

[Metal implants of the coxal femur in the elderly patient should not be removed] Dannöhl C. **Aktuel Traumatol** 1989 Aug;19(4):180–2 **(Ger)**

[The dynamic hip screw in comparison with Ender nailing] Höntzsch D, et al. **Aktuel Traumatol** 1990 Feb;20(1):14–9 (Eng. Abstr.) **(Ger)**

[Bristow surgical treatment of shoulder dislocation] Kosermann W, et al. **Aktuel Traumatol** 1989 Oct; 19(5):209–11 (Eng. Abstr.) **(Ger)**

[Tibial plateau fractures—indications for and results of surgical and of functional–conservative therapy] Rohrbeck R, et al. **Beitr Orthop Traumatol** 1990 Mar;37(3):148–57 (Eng. Abstr.) **(Ger)**

[Early results with Zespol osteosyntheses of the leg] Schöffauer T, et al. **Beitr Orthop Traumatol** 1990 Jan; 37(1):22–7 (Eng. Abstr.) **(Ger)**

[Rivets for bone fractures] Laabs W, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:173–4 **(Ger)**

[Mandibular reconstruction with the titanium–hollow screw–reconstruction plate system (THORP)] Vuillemin T, et al. **Schweiz Monatsschr Zahnmed** 1990;100(6):701–8 (Eng. Abstr.) **(Ger)**

[Removal torques of small screws of steel and titanium with different surfaces] Eulenberger J, et al. **Unfallchirurg** 1990 Mar;93(3):96–9 (Eng. Abstr.) **(Ger)**

[Tensile strength of plate osteosynthesis. Comparative biomechanical study of the original autocompression plate and a functional modification using the ZESPOL principle] Hopf T, et al. **Unfallchirurg** 1990 Mar;93(3):100–4 (Eng. Abstr.) **(Ger)**

[Technical errors and early complications of osteosynthesis of pertrochanteric femoral fractures using the dynamic hip screw] Sperner G, et al. **Unfallchirurg** 1989 Dec; 92(12):571–6 (Eng. Abstr.) **(Ger)**

[Management of subtrochanteric femoral fractures with the dynamic condylar screw] Kunze K, et al. **Unfallchirurgie** 1990 Feb;16(1):8–11 (Eng. Abstr.) **(Ger)**

[Prevention of thromboembolism in para–articular femoral fractures of the hip—results of a prospective randomized study of heparin–DHE and ASS–DHE] Orthner E, et al. **Unfallchirurgie** 1990 Jun;16(3):128–38 (Eng. Abstr.) **(Ger)**

[Initial experiences with a new mounting system for AO external fixation] Wruhs O, et al. **Unfallchirurgie** 1989 Aug; 15(4):180–3 (Eng. Abstr.) **(Ger)**

[Decreasing risk by individualized timing of surgery of para–articular femoral fractures of the hip in the elderly] Zagrodnick J, et al. **Unfallchirurgie** 1990 Jun;16(3):139–43 (Eng. Abstr.) **(Ger)**

[The results of sagittal mandibular splitting with traction screw osteosynthesis in the surgical correction of progenia] Härtel J. **Zahn Mund Kieferheilkd** 1989;77(8):807–10 (Eng. Abstr.) **(Ger)**

[Open reduction and single screw fixation of acromioclavicular dislocation] Horer DI, et al. **Harefuah** 1989 Jul;117(1–2):5–9 (Eng. Abstr.) **(Heb)**

[A device for transosseous osteosynthesis of fracture of the proximal part of the femur] Cherkes–Zade DI, et al. **Ortop Travmatol Protez** 1990 Jan;(1):31–2 **(Rus)**

[Osteosynthesis using polyglycolide fixation devices] Dudko GEko PF, et al. **Ortop Travmatol Protez** 1989 Nov; (11):13–5 (Eng. Abstr.) **(Rus)**

[A device for osteosynthesis in fracture of the femur head] Izilov AI. **Ortop Travmatol Protez** 1989 Nov;(11):74–5 **(Rus)**

[A sliding screw and plate give best results in stable trochanteric hip fractures] Sernbo I, et al. **Lakartidningen** 1990 Jan 17;87(3):108–10 **(Swe)**

ADVERSE EFFECTS

Perforation of pelvic iliac artery by hip pins. Johnson E, et al. **Acta Orthop Scand** 1990 Aug;61(4):367–8

The relationship of the intrapelvic vasculature to the acetabulum. Implications in screw–fixation acetabular components. Kirkpatrick JS, et al. **Clin Orthop** 1990 Sep; (258):183–90

Impingement of vascular pedicles by external fixator pins. Mercer NS, et al. **Injury** 1989 Mar;20(2):114–6

Sliding hip screws: modes of failure. Simpson AH, et al. **Injury** 1989 Jul;20(4):227–31

Serious vascular complication of locked tibial nailing. Williamson DM, et al. **Injury** 1989 Sep;20(5):310–2

Rupture of extensor pollicis longus following fixation of a distal radius fracture. Wong–Chung J, et al. **Injury** 1989 Nov;20(6):375–6

Refracture after removal of a condylar plate from the distal third of the femur. Böstman OM. **J Bone Joint Surg [Am]** 1990 Aug;72(7):1013–8

Structures at risk from medially placed acetabular screws. Keating EM, et al. **J Bone Joint Surg [Am]** 1990 Apr; 72(4):509–11

Nerve damage from fixation screws [letter; comment] Meyer RA. **J Oral Maxillofac Surg** 1990 Jun;48(6):665 Comment on: J Oral Maxillofac Surg 1989 Nov;47(11):1150–3.

Radiological diagnosis of screw penetration of the hip joint in acetabular fracture reconstruction. Ebraheim NA, et al. **J Orthop Trauma** 1989;3(3):196–201

STANDARDS

Biomechanics of the interlocking nail. A study of the proximal interlock. Kinast C, et al. **Arch Orthop Trauma Surg** 1990;109(4):197–204

Intra–articular talar fractures: repair using the Herbert bone screw. Mallon WJ, et al. **Foot Ankle** 1989 Oct;10(2):88–92

Treatment of subtrochanteric femur fractures using the dynamic condylar screw. Sanders R, et al. **J Orthop Trauma** 1989;3(3):206–13

Treatment of supracondylar–intracondylar fractures of the femur using the dynamic condylar screw. Sanders R, et al. **J Orthop Trauma** 1989;3(3):214–22

Laboratory testing of bolts and screws in cancellous bone. Pratt WB, et al. **Orthop Rev** 1989 Oct;18(10):1073–7

Biomechanical analysis of pedicle screw instrumentation systems in a corpectomy model. Ashman RB, et al. **Spine** 1989 Dec;14(12):1398–405

Fatigue life improvement of nitrogen–ion–implanted pedicle screws. Liu YK, et al. **Spine** 1990 Apr;15(4):311–7

Experimental pullout testing and comparison of variables in transpedicular screw fixation. A biomechanical study. Skinner R, et al. **Spine** 1990 Mar;15(3):195–201

VETERINARY

Bacterial growth associated with metallic implants in dogs. Smith MM, et al. **J Am Vet Med Assoc** 1989 Sep 15; 195(6):765–7

BONE TRANSPLANTATION

Ventral spondylodesis: basic method in the treatment of cervical spine injuries. Pentelényi T, et al. **Acta Chir Hung** 1989;30(4):299–310

Effects of primary osteoplasty on facial growth in unilateral cleft lip and palate after ten years of follow–up. Müllerová Z, et al. **Acta Chir Plast** 1989;31(3):181–91

Acetabular bone stock reconstruction with frozen femoral head allografts and the use of a cementless screw cup in total hip revision surgery. A 5 years' clinical, radiologic and scintigraphic follow–up. Burssens P, et al. **Acta Orthop Belg** 1989;55(1):38–52

Cranial nasal bone grafts. Hallock GG. **Aesthetic Plast Surg** 1989 Fall;13(4):285–9

Antegrade curettement, bone grafting and pinning of osteochondritis dissecans in the skeletally mature knee. Anderson AF, et al. **Am J Sports Med** 1990 May–Jun; 18(3):254–61

The effect of an iliotibial tenodesis on intraarticular graft forces and knee joint motion. Engebretsen L, et al. **Am J Sports Med** 1990 Mar–Apr;18(2):169–76

Intraarticular reaction associated with the use of freeze–dried, ethylene oxide–sterilized bone–patella tendon–bone allografts in the reconstruction of the anterior cruciate ligament. Jackson DW, et al. **Am J Sports Med** 1990 Jan–Feb;18(1):1–10; discussion 10–1

Allograft ligament transplantation. A morphological and biochemical evaluation of a medial collateral ligament complex in a rabbit model. Sabiston P, et al. **Am J Sports Med** 1990 Mar–Apr;18(2):160–8

Microvascular approach to function and appearance of large orbital maxillary defects. Coleman JJ 3d. **Am J Surg** 1989 Oct;158(4):337–41

The iliac crest cartilaginous cap. Schendel SA, et al. **Ann Plast Surg** 1990 Jul;25(1):29–31

Surgical bone banking. Recommendations for setting up a program. Buckham KR. **AORN J** 1989 Oct;50(4):765–71, 773–7, 781–3

Incisional hernia through iliac crest defects. A report of three cases with a review of the literature. Hamad MM, et al. **Arch Orthop Trauma Surg** 1989;108(6):383–5 (12 ref.)

Utility of emission tomography in evaluation of mandibular bone grafts. Fig LM, et al. **Arch Otolaryngol Head Neck Surg** 1990 Feb;116(2):191–6

Facial contouring with outer–table calvarial bone. A 4–year experience. Powell NB, et al. **Arch Otolaryngol Head Neck Surg** 1989 Dec;115(12):1454–8

Demineralized bone. Implant resorption with long–term follow–up. Toriumi DM, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jun;116(6):676–80

Resorption of intraspinal fragments of displaced bone graft following anterior spinal fusion. Hosking OR, et al. **Aust N Z J Surg** 1990 Feb;60(2):142–4

Another bank: advance or challenge? [editorial] Nade S. **Aust N Z J Surg** 1990 Apr;60(4):241–2

Pyknodysostosis: case report with surgical correction of the facial deformity. Ilankovan V, et al. **Br J Oral Maxillofac Surg** 1990 Feb;28(1):39–42

The use of bone grafts for support and fixation in revision total hip arthroplasty. Einhorn TA, et al. **Bull Hosp Jt Dis Orthop Inst** 1989 Spring;49(1):10–20

Clinical application of autogenous mandibular bone grafts. Analysis of 166 cases. Hong M, et al. **Chin Med J [Engl]** 1989 Oct;102(10):791–4

The use of xenograft in young patients treated with Pemberton–Zanoli osteotomy. Donati D, et al. **Chir Organi Mov** 1990 Jan–Mar;75(1):59–65 **(Eng, Ita)**

Acetabular augmentation in primary and revision total hip arthroplasty with cementless prostheses. Convery FR, et al. **Clin Orthop** 1990 Mar;(252):167–75

Noncemented acetabular revision arthroplasty using allograft bone. Emerson RH Jr, et al. **Clin Orthop** 1989 Dec; (249):30–43

Regional programs for surgical bone banking. Kakaiya RM, et al. **Clin Orthop** 1990 Feb;(251):290–4

Acetabular salvage in revision total hip arthroplasty using the bipolar prosthesis. Murray WR. **Clin Orthop** 1990 Feb; (251):92–9

Posterolateral bone graft of the tibia. Simpson JM, et al. **Clin Orthop** 1990 Feb;(251):200–6

Osteonecrosis of the femoral head. Results of core decompression and grafting with and without electrical stimulation. Steinberg ME, et al. **Clin Orthop** 1989 Dec; (249):199–208

Five–year results of bipolar arthroplasty with bone grafts and reamed acetabula for osteoarthritis in young adults. Yamamuro T, et al. **Clin Orthop** 1990 Feb;(251):75–81

The influence of bone grafting age on dental abnormalities and alveolar bone height in patients with unilateral cleft lip and palate. Bratttström V, et al. **Eur J Orthod** 1989 Nov; 11(4):351–8 (19 ref.)

Radiographic changes of the revascularized femoral head. Rindell K, et al. **Eur J Radiol** 1990 Jan–Feb;10(1):9–14

Use of xenograft bone with aspirated bone marrow for treatment of cystic defect of the jaws. Horowitz I, et al. **Head Neck** 1989 Nov–Dec;11(6):516–23

Symptomatic non-union of the carpal scaphoid: Matti-Russe bone grafting versus Herbert screw fixation. Parkinson RW, et al. **Injury** 1989 May;20(3):164–6

Effect of autogenous bone grafts on healing following Le Fort I maxillary osteotomies. Frame JW, et al. **Int J Oral Maxillofac Surg** 1990 Jun;19(3):151–4

Radiotherapy prior to cortical allograft limb sparing in dogs with osteosarcoma: a dose response assay. Thrall DE, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1351–7

Radiographic measurements in protrusio acetabuli. Gates HS 3d, et al. **J Arthroplasty** 1989 Dec;4(4):347–51

Fractures of allografts. Frequency, treatment, and end-results. Berrey BH Jr, et al. **J Bone Joint Surg [Am]** 1990 Jul;72(6):825–33

Acetabular reconstruction with a bipolar prosthesis and morseled bone grafts. Brien WW, et al. **J Bone Joint Surg [Am]** 1990 Sep;72(8):1230–5

Bone-grafting in total hip arthroplasty for protrusio acetabuli. A follow-up note. Gates HS 3d, et al. **J Bone Joint Surg [Am]** 1990 Feb;72(2):248–51

Progression of kyphosis in tuberculosis of the spine treated by anterior arthrodesis. Rajasekaran S, et al. **J Bone Joint Surg [Am]** 1989 Oct;71(9):1314–23

The incorporation of tibial allografts in total knee arthroplasty. Wilde AH, et al. **J Bone Joint Surg [Am]** 1990 Jul;72(6):815–24

The fate of acetabular allografts after bipolar revision arthroplasty of the hip. A radiographic review. Wilson MG, et al. **J Bone Joint Surg [Am]** 1989 Dec;71(10):1469–79

Effect of postoperative radiation on the incorporation of tibial bone grafts in the rabbit. De Santis G, et al. **J Bone Joint Surg [Br]** 1990 Mar;72(2):309–11

Ligamentotaxis and bone grafting for comminuted fractures of the distal radius. Leung KS, et al. **J Bone Joint Surg [Br]** 1989 Nov;71(5):838–42

Femoral allografts in revision of hip replacement. Nelson IW, et al. **J Bone Joint Surg [Br]** 1990 Jan;72(1):151–2

An L-shaped bone graft for acetabular deficiency. Radojević B, et al. **J Bone Joint Surg [Br]** 1990 Jan;72(1):152–3

Early secondary bone grafting of alveolar cleft defects. A comparison between chin and rib grafts. Borstlap WA, et al. **J Craniomaxillofac Surg** 1990 Jul;18(5):201–5

Early secondary osteoplastic closure of the residual alveolar cleft in combination with orthodontic treatment. Freihofer HP, et al. **J Craniomaxillofac Surg** 1989 Dec;17 Suppl 1:26–7

Late secondary autogenous bone grafting in cleft patients comparing mandibular (ectomesenchymal) and iliac crest (mesenchymal) grafts. Koole R, et al. **J Craniomaxillofac Surg** 1989 Dec;17 Suppl 1:28–30

Orthodontic treatment in adults with cleft lip and palate. Ranta R. **J Craniomaxillofac Surg** 1989 Dec;17 Suppl 1:42–4

Cleft palate fistula repair. Improved results by the addition of bone. Schultz RC. **J Craniomaxillofac Surg** 1989 Dec; 17 Suppl 1:34–6

Autogenous rib graft for reconstruction of alveolar bone defects in cleft patients. Long-term follow-up results. Witsenburg B, et al. **J Craniomaxillofac Surg** 1990 Feb; 18(2):55–62

Keller arthroplasty with autogenous bone graft in the treatment of hallux limitus. Quinn M, et al. **J Foot Surg** 1990 May-Jun;29(3):284–91

The fate of failed bone graft surgery for scaphoid nonunions. Carrozzella JC, et al. **J Hand Surg [Am]** 1989 Sep; 14(5):800–6

Anterior bone grafting and conventional lag screw fixation to treat scaphoid nonunions. Fernandez DL. **J Hand Surg [Am]** 1990 Jan;15(1):140–7

Use of pronator quadratus bone flap in bony reconstruction around the wrist. Leung PC, et al. **J Hand Surg [Am]** 1990 Jul;15(4):637–40

Comparative study of the use of prefabricated bone tendon grafts and conventional tendon grafts in flexor tendon reconstruction. Singer D, et al. **J Hand Surg [Am]** 1989 Sep;14(5):830–6

Non-union of Colles' fracture: report of two cases. Harper WM, et al. **J Hand Surg [Br]** 1990 Feb;15(1):121–3

Foramen magnum meningioma: transoral resection with a bone baffle to prevent CSF leakage. Case report. Bonkowski JA, et al. **J Neurosurg** 1990 Mar;72(3):493–6

Vascularized fibular grafts for vertebral body replacement [letter; comment] Cybulski GR. **J Neurosurg** 1990 Mar; 72(3):519–20 Comment on: J Neurosurg 1989 Aug;71(2):283–6.

Restoration of mandibular continuity defects using combinations of hydroxylapatite and autogenous bone: microscopic observations. Cobb CM, et al. **J Oral Maxillofac Surg** 1990 Mar;48(3):268–75

Mechanical behavior of mandibular continuity defects reconstructed using combinations of hydroxylapatite and autogenous bone. Eick JD, et al. **J Oral Maxillofac Surg** 1990 Aug;48(8):823–30

Reconstruction of the severely resorbed maxilla with bone grafting and osseointegrated implants: a preliminary report. Jensen J, et al. **J Oral Maxillofac Surg** 1990 Jan;48(1):27–32; discussion 33

Costochondral grafting for posttraumatic temporomandibular joint reconstruction: a review of six cases. Nelson CL, et al. **J Oral Maxillofac Surg** 1989 Oct;47(10):1030–6; discussion 1037–8

Secondary reconstruction of the alveolar process after correction of mandibular discontinuity defects. Ohya T, et al. **J Oral Maxillofac Surg** 1990 Jan;48(1):34–7

The effect of radial preload on the implant-bone interface: a cadaveric study. Biliouris TL, et al. **J Orthop Trauma** 1989;3(4):323–32

Chemical sterilization of bacterially contaminated bone without destruction of osteogenic potential. Dahners LE, et al. **J Orthop Trauma** 1989;3(3):241–4

A custom-made prosthesis for the treatment of supracondylar femoral fractures after total knee arthroplasty: report of four cases. Madsen F, et al. **J Orthop Trauma** 1989; 3(4):332–7

Cancellous bone donor site regeneration. Montgomery DM, et al. **J Orthop Trauma** 1989;3(4):290–4

Morbidity at bone graft donor sites. Younger EM, et al. **J Orthop Trauma** 1989;3(3):192–5

Open bone graft epiphyseodesis for slipped capital femoral epiphysis. Ward WT, et al. **J Pediatr Orthop** 1990 Jan-Feb; 10(1):14–20

The use of collagen membrane barriers in conjunction with combined demineralized bone-collagen gel implants in human infrabony defects. Blumenthal N, et al. **J Periodontol** 1990 Jun;61(6):319–27

Comparison of decalcified freeze-dried bone allograft and porous particulate hydroxyapatite in human periodontal osseous defects. Bowen JA, et al. **J Periodontol** 1989 Dec; 60(12):647–54

Effect of various graft materials with tetracycline in localized juvenile periodontitis. Evans GH, et al. **J Periodontol** 1989 Sep;60(9):491–7

Comparative clinical study of porous hydroxyapatite and decalcified freeze-dried bone in human periodontal defects. Oreamuno S, et al. **J Periodontol** 1990 Jul;61(7):399–404

The quadratus femoris graft in old transcervical femoral fractures. Delima DF, et al. **J Postgrad Med** 1989 Jul; 35(3):152–6

The use of vascularized bone grafts in osseointegration. A clinical report. Tuminelli FJ. **J Prosthet Dent** 1989 Oct; 62(4):371–5

Treatment of chronic osteomyelitis complicating nonunion and segmental defects of the tibia with open cancellous bone graft, posterolateral bone graft, and soft-tissue transfer. Esterhai JL Jr, et al. **J Trauma** 1990 Jan; 30(1):49–54

Allogeneic (homograft) reconstruction of the mandible. Lowlicht RA, et al. **Laryngoscope** 1990 Aug;100(8):837–43

Immediate reconstruction of contaminated central craniofacial injuries with free autogenous grafts. Stanley RB Jr, et al. **Laryngoscope** 1989 Oct;99(10 Pt 1):1011–5

Reconstruction of tibial bone defects in tibial nonunion. Ward WG, et al. **Microsurgery** 1990;11(1):63–73 (66 ref.)

Functional mandibular reconstruction of patients with oral cancer. Buchbinder D, et al. **Oral Surg Oral Med Oral Pathol** 1989 Oct;68(4 Pt 2):499–503; discussion 503–4

Unusual complications of autogenous rib grafts. Hopper C. **Oral Surg Oral Med Oral Pathol** 1990 Jan;69(1):28–30

The bipolar endoprosthesis and bone graft in the management of aseptic acetabular component loosening. Ochsner JL Jr, et al. **Orthopedics** 1990 Jan;13(1):45–9

Fixation of bone grafts to the nasal dorsum [letter; comment] Iacobucci J, et al. **Plast Reconstr Surg** 1990 Jun;85(6):1002 Comment on: Plast Reconstr Surg 1989 Apr;83(4):728–32.

Fixation effects on membranous and endochondral onlay bone graft revascularization and bone deposition. Phillips JH, et al. **Plast Reconstr Surg** 1990 Jun;85(6):891–7

Vascularized periosteum associated with cancellous bone graft: an experimental study. Romana MC, et al. **Plast Reconstr Surg** 1990 Apr;85(4):587–92

Nasal bone graft miniscrew fixation [letter; comment] Sadove AM, et al. **Plast Reconstr Surg** 1989 Dec;84(6):1011–2 Comment on: Plast Reconstr Surg 1989 Apr;83(4):728–32.

Experimental transplantation of teeth to simulated maxillary alveolar clefts. Stenvik A, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(2):105–8

Case report 592: Bone graft donor site of tibia. Daffner RH. **Skeletal Radiol** 1990;19(1):73–5

Revascularization of femoral head ischemic necrosis with vascularized bone graft: a CT scan experimental study. González del Pino J, et al. **Skeletal Radiol** 1990; 19(3):197–202

Biomechanical evaluation of spinal fixation devices. Part III. Stability provided by six spinal fixation devices and interbody bone graft. Abumi K, et al. **Spine** 1989 Nov; 14(11):1249–55

Preparation of allogeneic cartilage and bone for grafting. Clark JL, et al. **Surg Forum** 1978;29:580–2

Bone formation by micro-revascularized periosteum compared with traditional bone grafts. Puckett C, et al. **Surg Forum** 1978;29:609–10

The ascending branch of the lateral circumflex femoral artery. A new supply for vascularized iliac transplantation. Xu DC, et al. **Surg Radiol Anat** 1989;11(4):263–4

Major mandibular reconstruction with vascularized bone graft. Tang YB, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Jan;89(1):34–40 (15 ref.)

Experimental allograft in spinal fusion in dogs. Tsuang YH, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Oct;88(10):989–94

[Repair of cranial defect using a revascularized free composite rib-anterior serratus myocutaneous flap—report of 4 cases] Tao ZL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Mar;6(1):24–6, 75 (Eng. Abstr.) (Chi)

[Free vascular pedicle iliac bone graft for reconstruction of mandibular defect with ECT scan monitor] Jiang PJ. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):199–200 (Eng. Abstr.) (Chi)

[An experimental study on ceramic xenogenic bone in reconstructing defects of the mandible in rabbits] Ma WG. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jul; 24(4):212–4, 255 (Eng. Abstr.) (Chi)

[Demineralized and freeze-dried human bone allografts in the treatment of periodontal osseous defects] Peng SY. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 May; 24(3):162–5, 191 (Eng. Abstr.) (Chi)

[Experimental study on the transplantation of demineralized bone and bone morphogenetic protein (BMP)] Zheng JL. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Mar; 24(2):78–81, 127 (Eng. Abstr.) (Chi)

[A central bone bank for bone transplantation] Veen MR, et al. **Ned Tijdschr Geneeskd** 1990 May 19;134(20):988–92 (32 ref.) (Dut)

[Revascularized bone grafts. Technics, indications and results] Schuind F, et al. **Acta Orthop Belg** 1989; 55(2):135–49 (Eng. Abstr.) (Fre)

[Osseous reconstruction in microsurgery of the middle ear] Gersdorff M, et al. **Acta Otorhinolaryngol Belg** 1989; 43(5):481–8 (Eng. Abstr.) (Fre)

[Total or partial iliac reconstruction using allografts from the bone bank] Poitout D, et al. **Int Orthop** 1990;14(2):111–9 (Eng. Abstr.) (Fre)

[Materials for osteo-dural reconstruction in the cranium. An update] George B, et al. **Neurochirurgie** 1989;35(3):145–51 (35 ref.) (Eng. Abstr.) (Fre)

[Use of vascularized bone grafts in surgery of the spine. Apropos of 6 cases] Métaizeau JP, et al. **Rev Chir Orthop** 1989;75(3):166–71 (Eng. Abstr.) (Fre)

[Lyophilized homologous bone grafts in middle ear surgery: new perspectives] Maisin JP, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(5):495–7 (Eng. Abstr.) (Fre)

[Our ideas for treatment of dislocated dysplastic hip in early childhood] Hein G, et al. **Beitr Orthop Traumatol** 1989 Jul; 36(7):313–7 (Eng. Abstr.) (Ger)

[Sarcoidosis of the hand] Dahm M, et al. **Chirurg** 1990 Jan; 61(1):81–3 (Ger)

[Combination of cancellous bone grafts and free microvascular bone transplantation in large osseous defects] Zwipp H, et al. **Handchir Mikrochir Plast Chir** 1989 Sep; 21(5):235–45 (Eng. Abstr.) (Ger)

[Revision arthroplasty of the hip joint with autologous and homologous cancellous bone] Morscher E, et al. **Orthopade** 1989 Sep;18(5):428–37 (Eng. Abstr.) (Ger)

[Autoclaved bone grafts in prosthesis replacement of the hip] Wagner M, et al. **Orthopade** 1989 Sep;18(5):463–7 (Eng. Abstr.) (Ger)

[Ultrasonic evaluation of homologous bone and cartilage transplants of the femoral condyles] Reimer P, et al. **ROFO** 1990 Jul;153(1):6–8 (Eng. Abstr.) (Ger)

[Personal experiences in the reconstruction of trauma-induced bone defects] Jahn R, et al. **Unfallchirurg** 1989 Oct;92(10):495–9 (Eng. Abstr.) (Ger)

[Bone banks in the FRG. Results of a survey] Jerosch J, et al. **Unfallchirurg** 1990 Jul;93(7):334–8 (Eng. Abstr.) (Ger)

[Fractured Monteggia pseudarthrosis. An unusual case] Kulenkampff HA, et al. **Unfallchirurg** 1990 Jan;93(1):32–4 (Eng. Abstr.) (Ger)

[Curettage of giant cell tumors with temporary implantation of bone cement] Härle A, et al. **Z Orthop** 1989 Jul-Aug; 127(4):382–6 (Eng. Abstr.) (Ger)

[Bone transplantation and AIDS] Müller RT. **Z Orthop** 1989 Jul-Aug;127(4):527–9 (Eng. Abstr.) (Ger)

[Results following spongiosa transplantation in giant cell tumor of bone] Ritschl P, et al. **Z Orthop** 1989 Jul-Aug; 127(4):387–91 (Eng. Abstr.) (Ger)

["Open sky" grafting of autoplastic spongy tissue in the treatment of chronic post-fracture osteomyelitis. Histological observations] Carugno C, et al. **Arch Putti Chir Organi Mov** 1989;37(1):173–7 (Eng. Abstr.) (Ita)

[Our experience in the treatment of idiopathic osteonecrosis of the femur head by évidement and filling with bone grafts] Marcacci M, et al. **Arch Putti Chir Organi Mov** 1989;37(1):179–86 (Eng. Abstr.) (Ita)

[Reconstruction of extensive mandibular defects with the use of Osteo-Mesh and a bone graft. A preliminary report] Losapio PL, et al. **Minerva Stomatol** 1989 Oct; 38(10):1059–63 (Eng. Abstr.) (Ita)

[Experimental study on secondary living bone graft—method of creating new donor by vascular bundle implantation to isolated bone] Yajima H, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 May;63(5):539–48 (Eng. Abstr.) (Jpn)

[Composite tissue (bone and ligaments) allografts in the reconstruction of the posterior element of the canine spine (preliminary report)] Yamaguchi T, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Aug;63(8):819–29 (Eng. Abstr.) (Jpn)

[Split rib cranioplasty] Kawakami K, et al. **No Shinkei Geka** 1989 Nov;17(11):1023–7 (Eng. Abstr.) (Jpn)

[National survey of total body irradiation for bone marrow transplantation with special reference to preparation regimen] Inoue T, et al. **Rinsho Hoshasen** 1990 Jan;

35(1):93–5 (Eng. Abstr.) (Jpn)
[Multi-flap osteoplastic trepanation of the skull] Rybakov GF. **Klin Khir** 1989;(12):55 (Rus)
[Incorporation of nonvascularized auto- and allotransplanted bone into the site of bone defects] Ercegan G, et al. **Acta Chir Iugosl** 1990;37 Suppl 1:29–33 (Eng. Abstr.) (Ser)
[Autologous spongious iliac bone graft in the treatment of ununited diaphyseal fractures of the long bones] Jovanović Z, et al. **Vojnosanit Pregl** 1989 May–Jun;46(3):175–8 (Eng. Abstr.) (Ser)

ADVERSE EFFECTS

Infection following cranial bone grafting—a need for caution? Lewis VL Jr, et al. **Ann Plast Surg** 1990 Mar; 24(3):276–8
Superior sagittal sinus laceration complicating an autogenous calvarial bone graft harvest: report of a case. Cannella DM, et al. **J Oral Maxillofac Surg** 1990 Jul;48(7):741–3
Allografting for traumatic intercalary femoral defects: a report of three cases. McAndrew MP, et al. **J Orthop Trauma** 1989;3(3):250–6
Lung disease following allogeneic marrow transplantation [editorial] [see comments] **Lancet** 1989 Dec 9; 2(8676):1368–9 Comment in: Lancet 1990 Jan 27;335(8683):237.
[Suppurative complications after organ-sparing surgery of bone tumors] Dadashev KhD. **Khirurgiia (Mosk)** 1990 Apr; (4):102–4 (Rus)
[Degenerative arthritis of the knee joint after allotransplantation of the joint surface without immunosuppression] Janjić D, et al. **Acta Chir Iugosl** 1990; 37 Suppl 1:35–9 (Eng. Abstr.) (Ser)

HISTORY

Bone transplantation. Schweiberer L, et al. **Arch Orthop Trauma Surg** 1990;109(1):1–8

INSTRUMENTATION

A method of tack fixation of tibial bone grafts in total knee arthroplasty. Krackow KA, et al. **J Arthroplasty** 1989 Dec; 4(4):371–3
An instrument for harvesting the outer table of the skull. Yoshimura Y, et al. **J Craniomaxillofac Surg** 1990 May; 18(4):179–81
How I do it: a simple and inexpensive method to collect bone chips. Theoharides AC, et al. **J Otolaryngol** 1989 Oct; 18(6):320–1
Transfer of free vascularized bone and skin–bone autografts: experiences in the application of external fixation apparatus. Grishin IG, et al. **J Reconstr Microsurg** 1990 Jan;6(1):1–11

METHODS

Cranioplasty with a frozen and autoclaved bone flap. Osawa M, et al. **Acta Neurochir (Wien)** 1990;102(1–2):38–41
Osteogenic enhancement of diaphyseal reconstruction. Comparison of bone grafts in the rabbit. Köhler P, et al. **Acta Orthop Scand** 1990 Feb;61(1):42–5
Reconstruction of the tibia by dual grafting. 3 cases of tumor resection. Swierstra BA, et al. **Acta Orthop Scand** 1990 Jun;61(3):266–8
Complex nasoethmoid–orbital and midfacial fractures: role of craniofacial surgical techniques and immediate bone grafting. Gruss JS. **Ann Plast Surg** 1986 Nov;17(5):377–90
Microvascular soft tissue reconstruction for acute tibial fractures—late complications and the role of bone grafting. Peat BG, et al. **Ann Plast Surg** 1990 Jun;24(6):517–20
The combined composite pectoralis major and minor osteomusculocutaneous flap. Serra JM, et al. **Ann Plast Surg** 1986 Oct;17(4):323–9
Segmental mandibular regeneration by distraction osteogenesis. An experimental study. Costantino PD, et al. **Arch Otolaryngol Head Neck Surg** 1990 May;116(5):535–45
New perspectives on lyophilized bone allografts. Maisin JP, et al. **Arch Otorhinolaryngol** 1989;246(5):283–5
An evaluation of calvarial and iliac donor sites in alveolar cleft grafting. Sadove AM, et al. **Cleft Palate J** 1990 Jul; 27(3):225–8; discussion 229
Biology of bone fusion. Prolo DJ. **Clin Neurosurg** 1990; 36:135–46 (52 ref.)
Pelvic allograft. A case report with a follow-up evaluation of 5.5 years. Mnaymneh W, et al. **Clin Orthop** 1990 Jun; (255):128–32
Inlay autogeneic bone grafting of tibial defects in primary total knee arthroplasty. Scuderi GR, et al. **Clin Orthop** 1989 Nov;(248):93–7
Twenty-five years' experience with lengthening of shortened lower extremities using cylindrical allografts. Wasserstein I. **Clin Orthop** 1990 Jan;(250):150–3
Femoral head autografting with total hip arthroplasty for lateral acetabular dysplasia. A 12-year experience. Wolfgang GL. **Clin Orthop** 1990 Jun;(255):173–85
Subtalar arthrodesis in children with cerebral palsy: results using iliac bone plug. Guttmann GG. **Foot Ankle** 1990 Feb; 10(4):206–10
The indications and techniques for autologous temporomandibular joint replacement. MacIntosh RB. **Fortschr Kiefer Gesichtschir** 1990;35:168–71
Late management of secondarily grafted clefts. Stoelinga PJ, et al. **Int J Oral Maxillofac Surg** 1990 Apr;19(2):97–102
Measurement of blood flow in rabbit bone transplants. Ogata K, et al. **Int Orthop** 1990;14(1):75–8
A bone grafting technique in reconstructive joint arthroplasty. Fipp GJ. **J Arthroplasty** 1989 Sep;4(3):285–7
Recalcitrant non-union of the scaphoid treated with a vascularized bone graft based on the ulnar artery. Guimberteau JC, et al. **J Bone Joint Surg [Am]** 1990 Jan; 72(1):88–97
Bone-patellar ligament-bone and fascia lata allografts for reconstruction of the anterior cruciate ligament. Noyes FR, et al. **J Bone Joint Surg [Am]** 1990 Sep;72(8):1125–36
Frozen musculoskeletal allografts. A study of the clinical incidence and causes of infection associated with their use. Tomford WW, et al. **J Bone Joint Surg [Am]** 1990 Sep; 72(8):1137–43
Dual-fibular grafting for massive bone gaps in the lower extremity. Yadav SS. **J Bone Joint Surg [Am]** 1990 Apr; 72(4):486–94
Salvage total hip reconstruction in patients with major acetabular bone deficiency using structural femoral head allografts. Jasty M, et al. **J Bone Joint Surg [Br]** 1990 Jan; 72(1):63–7
Mandibular reconstruction using electrically stimulated periosteum. Kamegai A, et al. **J Craniomaxillofac Surg** 1990 Jan;18(1):8–13
Vascularized parietal bone flaps. A new dimension in mandibular reconstruction. Munoz FI, et al. **J Craniomaxillofac Surg** 1990 May;18(4):158–63
New tactics in bone grafting. Wolfe SA, et al. **J Fla Med Assoc** 1989 Jul;76(7):622–5
Modified technique for harvesting bone from the ilium for grafting alveolar clefts. Abubaker AO, et al. **J Oral Maxillofac Surg** 1989 Nov;47(11):1230–1
Antral grafting for endosseous implants [letter; comment] Dietsh FF. **J Oral Maxillofac Surg** 1989 Nov;47(11):1241 Comment on: J Oral Maxillofac Surg 1989 Mar;47(3):238–42.
Cranial bone graft harvesting: a modified technique. Markowitz NR, et al. **J Oral Maxillofac Surg** 1989 Oct; 47(10):1113–5
Allogeneic bone for secondary alveolar cleft osteoplasty. Maxson BB, et al. **J Oral Maxillofac Surg** 1990 Sep; 48(9):933–41
Reconstruction of alveolar clefts with mandibular or iliac crest bone grafts: a comparative study. Sindet-Pedersen S, et al. **J Oral Maxillofac Surg** 1990 Jun;48(6):554–8; discussion 559–60
Reconstruction of mandibular discontinuity with autogenous iliac bone graft: report of 34 consecutive patients. Tidstrom KD, et al. **J Oral Maxillofac Surg** 1990 Apr;48(4):336–46; discussion 347
A technique for obtaining bone graft. Sanders R, et al. **J Orthop Trauma** 1989;3(4):287–9
Open bone graft epiphysiodesis for slipped capital femoral epiphysis [letter] Weiner DS. **J Pediatr Orthop** 1990 Sep–Oct;10(5):673–4
Histologic evaluation of new attachment apparatus formation in humans. Part II. Bowers GM, et al. **J Periodontol** 1989 Dec;60(12):675–82
Histologic evaluation of new attachment apparatus formation in humans. Part III. Bowers GM, et al. **J Periodontol** 1989 Dec;60(12):683–93
A comparison of freeze-dried bone allograft and demineralized freeze-dried bone allograft in human periodontal osseous defects. Rummelhart JM, et al. **J Periodontol** 1989 Dec;60(12):655–63
Human freeze-dried dura mater allografts as a periodontal biological bandage. Zaner DJ, et al. **J Periodontol** 1989 Nov;60(11):617–23
Role of free vascularized bone grafts in the experimentally-induced ischemic necrosis of the femoral head. González del Pino J, et al. **J Reconstr Microsurg** 1990 Apr;6(2):151–9
Refinement of the fibular osteocutaneous flap using tissue expansion. Hallock GG. **J Reconstr Microsurg** 1989 Oct; 5(4):317–22
The use of split metatarsal osteocutaneous free flaps in palatal and alveolar defects. Moghari A, et al. **J Reconstr Microsurg** 1989 Oct;5(4):307–10; discussion 311–2
Effects of vascularized bone graft on surrounding necrotic bone: an experimental study. Uchida Y, et al. **J Reconstr Microsurg** 1990 Apr;6(2):101–7; discussion 109, 111
Femoral reconstruction by vascularized bone transfer. Wood MB. **Microsurgery** 1990;11(1):74–9
The role of bone grafting in the treatment of delayed unions and nonunions of the tibia. Meister K, et al. **Orthop Rev** 1990 Mar;19(3):260–71 (53 ref.)
Tips of the trade #23. Simplified iliac crest cancellous grafting. O'Neill DB. **Orthop Rev** 1990 Apr;19(4):383–4
Alternatives in the selection of allograft bone. Skinner HB. **Orthopedics** 1990 Aug;13(8):843–6
Split calvarial grafts in maxillofacial reconstruction. Hunter D, et al. **Otolaryngol Head Neck Surg** 1990 Apr; 102(4):345–50
Cantilever nasal bone grafting with miniscrew fixation [letter; comment] Gruss JS. **Plast Reconstr Surg** 1989 Dec; 84(6):1014–5 Comment on: Plast Reconstr Surg 1989 Apr;83(4):728–32.
Craniofacial onlay bone grafting: a prospective evaluation of graft morphology, orientation, and embryonic origin. Hardesty RA, et al. **Plast Reconstr Surg** 1990 Jan; 85(1):5–14; discussion 15
Cantilever nasal bone grafting with miniscrew fixation [letter] Hoffman S. **Plast Reconstr Surg** 1990 Jan;85(1):149–50
The effect of rigid fixation on the survival of onlay bone grafts: an experimental study. Lin KY, et al. **Plast Reconstr Surg** 1990 Sep;86(3):449–56
Harvesting autogenous iliac bone grafts. A review of complications and techniques. Kurz LT, et al. **Spine** 1989 Dec;14(12):1324–31
Clinical significance of the free vascularized bone grafts in fractures with large bone defects and non-union. Takeuchi N, et al. **Tokai J Exp Clin Med** 1989 Mar;14(1):35–43
[Amalgamated and reinforced bone powder graft in the correction of the nasal ridge] Peynègre R, et al. **Ann Otolaryngol Chir Cervicofac** 1990;107(1):71–5 (Eng. Abstr.) (Fre)
[Massive bone grafts in children (apropos of 10 cases)] Kohler R, et al. **Pediatrie** 1990;45(4):267–73 (Eng. Abstr.) (Fre)
[Free musculo-osseous flaps in maxillofacial surgery] Philippart P, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(6):371–8 (Eng. Abstr.) (Fre)
[Plate arthrodesis with homologous bone transplant in the extremely destroyed wrist joint in the polyarthritis patient—technical contribution] Zacher J, et al. **Aktuel Probl Chir Orthop** 1989;37:95–101 (Ger)
[Vertebral body straightening with an internal fixator. The avoidance of the malpositioning of the bones in transpedicular spongiosaplasty] Amon K. **Aktuel Traumatol** 1990 Apr;20(2):62–3 (Ger)
[The need for spongiosa grafting in thoracolumbar vertebral body fractures] Klötzer R, et al. **Beitr Orthop Traumatol** 1990 Mar;37(3):157–60 (Eng. Abstr.) (Ger)
[Benign fibrous histiocytoma of bone] Schwesinger G, et al. **Beitr Orthop Traumatol** 1990 Jan;37(1):65–70 (Eng. Abstr.) (Ger)
[Allogeneic bone marrow transplantation in chronic myeloid leukemia. The results of HLA-identical transplants in the Federal Republic of Germany] Schmitz N. **Dtsch Med Wochenschr** 1990 Jun 15;115(24):923–9 (Eng. Abstr.) (Ger)
[Avascular and reanastomosed bone transfer. A histologic evaluation] Dielert E, et al. **Fortschr Kiefer Gesichtschir** 1990;35:93–6 (Ger)
[Morphologic aspects of endosseous healing of Tübingen implants in vascularized iliac crest] Donath K, et al. **Fortschr Kiefer Gesichtschir** 1990;35:82–5 (Ger)
[Reanastomosis of tissue transfer in therapy of mandibular osteoradionecrosis] Fischer-Brandies E, et al. **Fortschr Kiefer Gesichtschir** 1990;35:85–6 (Ger)
[Possibilities of microsurgical bone transplantation in the area of the jaw-face] Kärcher H, et al. **Fortschr Kiefer Gesichtschir** 1990;35:74–6 (Ger)
[Clinical studies of vascular pedicled iliac crest transplants following transplantation in mandibular defects] Kater W, et al. **Fortschr Kiefer Gesichtschir** 1990;35:76–9 (Ger)
[Microsurgical flap anastomosis for defect coverage in the orbital roof—indications and alternatives] Mohr C, et al. **Fortschr Kiefer Gesichtschir** 1990;35:90–3 (Ger)
[Plastic-reconstructive measures with free microvascular bone transplants in combination with implants] Neukam FW, et al. **Fortschr Kiefer Gesichtschir** 1990;35:79–82 (Ger)
[The scapula region as a potential donor area for microsurgical transplants] Pistner H, et al. **Fortschr Kiefer Gesichtschir** 1990;35:87–90 (Ger)
[Significance of microsurgical transplantation of iliac crest in tumor surgery and pre-prosthetic surgery] Riediger D. **Fortschr Kiefer Gesichtschir** 1990;35:71–4 (Ger)
[Microsurgical anastomosis of allogenic iliac crest transplants for bridging defects of the mandible] Schmelzeisen R, et al. **Fortschr Kiefer Gesichtschir** 1990;35:31–3 (Ger)
[Pedicled forearm flap, an alternative to microsurgical "Chinese flap"?] Schmitz HJ, et al. **Fortschr Kiefer Gesichtschir** 1990;35:150–2 (Ger)
[Preliminary treatment of the recipient site and healing of open spongiosa transplant in post-traumatic osteitis] Roth B, et al. **Helv Chir Acta** 1989 Dec;56(4):571–2 (Eng. Abstr.) (Ger)
[The possibilities of osteoplastic measures in mid-foot amputation and osteomyelitis of the tarsus] Gast W, et al. **Unfallchirurg** 1989 Oct;92(10):509–14 (Eng. Abstr.) (Ger)
[Reconstructive surgical procedures in scaphoid pseudarthrosis] Pechlaner S, et al. **Unfallchirurg** 1990 Apr; 93(4):150–6 (22 ref.) (Eng. Abstr.) (Ger)
[Expanded trans-pedicular spongiosa grafting—dorsal approach to filling of the intervertebral spaces with cancellous bone] Richter-Turtur M, et al. **Unfallchirurg** 1990 Aug;93(8):387–9 (Eng. Abstr.) (Ger)
[Bone transplantation—indications and technic] Contzen H. **Unfallchirurgie** 1989 Aug;15(4):184–8 (Eng. Abstr.) (Ger)
[Metal spongiosa endoprostheses for surgical revision of the hip joint] Lütten C, et al. **Z Orthop** 1990 Mar–Apr; 128(2):153–9 (Eng. Abstr.) (Ger)
[Modification of the Matti-Russe operation] Sántha E. **Magy Traumatol Orthop Helyreallito Sebesz** 1990; 33(1):44–5 (Eng. Abstr.) (Hun)
[Experimental study of the ossification of decalcified cortical bone] Szabó G, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(4):275–80 (Eng. Abstr.) (Hun)

[Radiographic course of inverted osteochondral graft using the Regnauld technic in the surgical treatment of hallux valgus] De Palma L, et al. **Arch Putti Chir Organi Mov** 1989;37(2):363–9 (Eng. Abstr.) **(Ita)**

[Auto- and homoplastic grafts in the treatment of osteolytic lesions] Marinò D, et al. **Chir Organi Mov** 1989 Jan–Jun; 74(1–2):7–11 (Eng. Abstr.) **(Ita)**

[Benign tumors of the mandible. The experience of reconstruction using immediate bone grafts] Turco C, et al. **Minerva Stomatol** 1990 Feb;39(2):101–8 (Eng. Abstr.) **(Ita)**

[Total hip replacement and acetabular bone grafting to acetabular dysplasia] Oonishi H, et al. **Nippon Seikeigeka Gakkai Zasshi** 1990 Apr;64(4):175–84 (Eng. Abstr.) **(Jpn)**

[Use of cancellous bone and periosteal transplants in primary and secondary cleft palate during a change in dentition] Nadolna–Gawrych E. **Ann Acad Med Stetin** 1989;35:99–113 (Eng. Abstr.) **(Pol)**

[Orthopedic rehabilitation of children after combined treatment of malignant bone tumors] Berezhnoĭ AP, et al. **Ortop Travmatol Protez** 1990 Mar;(3):38–41 (Eng. Abstr.) **(Rus)**

[Osteoplasty in wound infection] Boltrukevich SI, et al. **Ortop Travmatol Protez** 1989 Jul;(7):14–7 (Eng. Abstr.) **(Rus)**

[Surgical approach to the tibia in osteomyelitis] Kutin AA. **Ortop Travmatol Protez** 1990 Jan;(1):28–9 **(Rus)**

[Reconstruction of a free bone transplant in long bone defect after distraction] Larionov AA. **Ortop Travmatol Protez** 1989 Jul;(7):17–21 (Eng. Abstr.) **(Rus)**

[Experience with the clinical use of demineralized bone autografts in traumatology and orthopedics] Savel'ev VI, et al. **Ortop Travmatol Protez** 1989 Sep;(9):35–6 (Eng. Abstr.) **(Rus)**

[Correction of the defects of tubular bones with demineralized allogeneic transplants preserved by various methods] Stakheev IA, et al. **Ortop Travmatol Protez** 1990 Feb;(2):50–3 **(Rus)**

[Reconstructive operations in the supra–acetabular region of the dysplastic hip joint in children using a migrating osteo–muscular tissue complex] Tikhonenkov ES, et al. **Ortop Travmatol Protez** 1989 Oct;(10):23–7 (Eng. Abstr.) **(Rus)**

[Outcome of decompression operations in the treatment of Legg–Perthes disease] Timofeeva MI, et al. **Ortop Travmatol Protez** 1989 Oct;(10):40–4 (Eng. Abstr.) **(Rus)**

[An experimental validation of the use of various types of allografts for the replacement of mandibular defects] Nazarenko MIu, et al. **Stomatologiia (Mosk)** 1990 May–Jun; 69(3):19–23 (Eng. Abstr.) **(Rus)**

[Surgical treatment of pathologic dislocation and ankylosis of the hip joint using demineralized bone and cartilage cups in children] Andrianov VL, et al. **Vestn Khir** 1989 May; 142(5):88–9 **(Rus)**

[Pedicled osteo–cartilaginous autoplasty of defects of the femoral head] Marakusha IG, et al. **Vestn Khir** 1989 Dec; 144(12):65–8 **(Rus)**

[Surgical treatment of chronic hematogenic osteomyelitis and its sequelae in children] Mgoian GKh, et al. **Vestn Khir** 1990 Feb;144(2):81–5 (Eng. Abstr.) **(Rus)**

[Microsurgical plastic operations in the treatment of patients with cancer] Sidorov VB, et al. **Vestn Khir** 1990 Mar; 144(3):98–101 (Eng. Abstr.) **(Rus)**

[Combined treatment of post–traumatic osteomyelitis] Stamatin SI, et al. **Vestn Khir** 1990 Feb;144(2):133–5 **(Rus)**

[A method of obtaining autologous transplant from the ilial blade] Voronovich IR, et al. **Vestn Khir** 1990 Jan; 144(1):118–9 **(Rus)**

[Bone gammagraphy for evaluating free vascularized bone grafts in mandibular reconstruction] Serra JM, et al. **Rev Esp Fisiol** 1989;45 Suppl:323–8 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Recombinant murine interferon–gamma inhibits the fusion of mouse alveolar macrophages in vitro but stimulates the formation of osteoclastlike cells on implanted syngeneic bone particles in mice in vivo. Vignery A, et al. **J Bone Miner Res** 1990 Jun;5(6):637–44

Reimplantation of growth plate chondrocytes into growth plate defects in sheep. Foster BK, et al. **J Orthop Res** 1990 Jul;8(4):555–64

Osteoclast features of cells that resorb demineralized and mineral–containing bone implants in rats. Bagi CM, et al. **Scanning Microsc** 1989 Sep;3(3):963–8; discussion 969–70

The arterial supply of the clavicle. Knudsen FW, et al. **Surg Radiol Anat** 1989;11(3):211–4

Osseous wound healing with xenogeneic bone implants with a biodegradable carrier. Hollinger JO, et al. **Surgery** 1990 Jan;107(1):50–4

[The value of perforating cryopreserved massive bone allograft. Histologic data of an allograft removed after 27 months] Babin SR, et al. **Rev Chir Orthop** 1990;76(2):137–40 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Human cranial bone structure and the healing of cranial bone grafts: a study using backscattered electron imaging and confocal microscopy. Boyde A, et al. **Anat Embryol (Berl)** 1990;181(3):235–51

Osteointegration of bone graft in porous–coated total hip arthroplasty. Clarke HJ, et al. **Clin Orthop** 1990 Sep; (258):160–7

Biological aspects of repair osteogenesis in corticospongy homologous grafts. Greco F, et al. **Ital J Orthop Traumatol** 1989 Dec;15(4):491–9

Fluorescence in the tandem scanning microscope. Boyde A, et al. **J Microsc** 1990 Jan;157 (Pt 1):39–49

Blood flow evaluation of vascularized bone transfers in a canine model. Siegert JJ, et al. **J Orthop Res** 1990 Mar; 8(2):291–6

Growth and survival of vascularized and nonvascularized membranous bone: an experimental study. Bartlett SP, et al. **Plast Reconstr Surg** 1989 Nov;84(5):783–8

[Standardized bone model for incorporation of bone, bone ceramics or other materials into the implant bed] Roesgen M, et al. **Aktuel Traumatol** 1990 Feb;20(1):37–43 (Eng. Abstr.) **(Ger)**

[Estimation of the healing process of denatured orthotopic bone implants in an animal model. I. Measurements with polarization microscopy] Keller F, et al. **Anat Anz** 1990; 170(3–4):189–97 (Eng. Abstr.) **(Ger)**

[Vascular pedicled pelvic bone span. Value of digital subtraction angiography in pre– and postoperative diagnosis] Langer R, et al. **Digitale Bilddiagn** 1990 Mar; 10(1):25–9 (Eng. Abstr.) **(Ger)**

STANDARDS

Freeze–dried bank bone. Delloye C, et al. **Ital J Orthop Traumatol** 1989 Sep;15(3):343–52

VETERINARY

Osteostixis for incomplete cortical fracture of the third metacarpal bone. Results in 11 horses. Specht TE, et al. **Vet Surg** 1990 Jan–Feb;19(1):34–40

BONE TUBERCULOSIS see **TUBERCULOSIS, OSTEOARTICULAR**

BONE WIRES see under **ORTHOPEDIC FIXATION DEVICES**

BONGKREKIC ACID see under **ANTIBIOTICS**

BOOK ILLUSTRATION see **BOOKS, ILLUSTRATED**

BOOK REVIEWS

Criticism of review of book on divorce [letter] Mallinger KM. **Am J Psychiatry** 1990 May;147(5):683–4

How not to write a book review [letter] Shelley WB. **Arch Dermatol** 1989 Oct;125(10):1431

Pleasures and tribulations of a book reviewer [editorial] Vickers FN. **J Fla Med Assoc** 1989 Mar;76(3):301–2

BOOK SELECTION

The big search: streamlining the textbook selection process. Mahoney D, et al. **Am Ann Deaf** 1989 Jul;134(3):193–9

Selected list of books and journals in allied health sciences. Brandon AN, et al. **Bull Med Libr Assoc** 1990 Jul; 78(3):233–51

Journal deselection in a biomedical research library: a mediated mathematical approach. Hunt RK. **Bull Med Libr Assoc** 1990 Jan;78(1):45–8

Effect of a reading list on reading habits of general practitioners [letter] Sullivan FM, et al. **Fam Pract** 1990 Mar;7(1):74

BOOKPLATES

HISTORY

[Medical bookplates] Palivec V. **Cas Lek Cesk** 1990 Feb 2; 129(5):151–2 **(Cze)**

[Exlibris of famous dermatologists] Scholz A. **Hautarzt** 1990 Mar;41(3):178–81 (Eng. Abstr.) **(Ger)**

BOOKS

see related

BIBLIOTHERAPY

Which medical textbook to read? Emphasizing semantic structures. Bordage G, et al. **Acad Med** 1990 Sep;65(9 Suppl):S23–4

The big search: streamlining the textbook selection process. Mahoney D, et al. **Am Ann Deaf** 1989 Jul;134(3):193–9

Books of the year [published erratum appears in Am J Nurs 1990 Apr;90(4):36] Cushman MJ. **Am J Nurs** 1990 Jan; 90(1):70–9

Basic psychiatric literature as determined from the recommended reading lists of residency training programs. Woods JB, et al. **Am J Psychiatry** 1967 Aug;124(2):217–24

'The Early Diagnosis of the Acute Abdomen'. Dobson J. **Ann R Coll Surg Engl** 1972 Dec;51(6):404–6

A guide to textbooks for introductory medical school pathology courses. Group for Research in Pathology Education. Friedlander ER, et al. **Arch Pathol Lab Med** 1990 Jan;114(1):18–23

The orifice revisited: women in gynaecological texts. Koutroulis G. **Community Health Stud** 1990;14(1):73–84

Health literature for parents of children with cerebral palsy. Donovan TJ, et al. **Dev Med Child Neurol** 1989 Aug; 31(4):489–93

The well–read dietitian. Wellman NS. **J Am Diet Assoc** 1990 Jul;90(7):996–8

Diseases of the horse: the centennial of a great book. Loew FM. **J Am Vet Med Assoc** 1990 Jan 15;196(2):226–7

Effects of textual cue manipulation on student recall in an information mapped nutrition text. Tanenbaum BG, et al. **J Nurs Educ** 1990 May;29(5):219–24

Emergence of the literature of general practice [letter] Craddock D. **J R Coll Gen Pract** 1989 Aug;39(325):350

Watson–Jones, the book and the Third World. Wilson JN. **J R Soc Med** 1990 Jun;83(6):352–5

How to write your first book. Kapur N. **Med Teach** 1989; 11(3–4):271–7

Readability, interest, and coverage of ten introductory textbooks on mental retardation. Maddux CD, et al. **Ment Retard** 1990 Apr;28(2):115–8

Dryander of Marburg and the first textbook of neuroanatomy. Hanigan WC, et al. **Neurosurgery** 1990 Mar; 26(3):489–98

Media violence and suicide and homicide rates. Lester D. **Percept Mot Skills** 1989 Dec;69(3 Pt 1):894

A return to Conybeare. Dubb A. **S Afr Med J** 1990 Feb 3;77(3):152–3

The slow diffusion of the DNA paradigm into biology textbooks. Gaster B. **Trends Biochem Sci** 1990 Aug; 15(8):325–7

[The first Hungarian physiology textbook is 200 years old (Sámuel Rácz)] Monos E. **Orv Hetil** 1989 Dec 24; 130(52):2803–4 **(Hun)**

[Using electronic textbooks] Okada Y. **Rinsho Byori** 1990 Apr;Spec No 84:89–91 **(Jpn)**

[Norwegian professional literature for general practice. Requirements and expectations] Horgen E, et al. **Tidsskr Nor Laegeforen** 1990 May 20;110(13):1718–20 (Eng. Abstr.) **(Nor)**

[The treatise "Chzhe'n Tsziu Da Chen" as a literary and historical monument of traditional Chinese medicine] Falev AI. **Sov Zdravookhr** 1989;(7):62–4 **(Rus)**

[One of the first Soviet textbooks on the organization and tactics of medical service] Proniaev EN. **Voen Med Zh** 1989 Nov;(11):62–3 **(Rus)**

[140th anniversary of publishing of A.N. Pushkarev's work "Mental disorders in forensic–medical aspects"—the first Russian monograph on forensic psychiatry] Roĭtel'man AG. **Zh Nevropatol Psikhiatr** 1989;89(9):120–1 **(Rus)**

[The first Swedish textbook on general medicine. As a counter–effect against biochemical facts in hospitals. Symptoms and physical examination in focus] Karlsson Y. **Lakartidningen** 1989 Dec 13;86(50):4450–1 **(Swe)**

BOOKS, ILLUSTRATED

Reading illustrated science texts: a micro–computer based investigation of children's strategies. Reid DJ, et al. **Br J Educ Psychol** 1990 Feb;60 (Pt 1):76–87

HISTORY

[A million–fold discovery in the cellar vault of the Medical Society's library. The fate of rare books is revealed in a series of catalogs] Hagelin O, et al. **Lakartidningen** 1989 Nov 1;86(44):3781–4, 3787–8 **(Swe)**

BOOSTER IMMUNIZATION see **IMMUNIZATION, SECONDARY**

BORANES

Boron trifluoride–methanol complex as a non–depurinating detritylating agent in DNA synthesis. Mitchell MJ, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5321

DIAGNOSTIC USE

Studies of refractory carbides, nitrides, and borides as the thermionic emitters for electron microscopy. Yada K, et al. **J Electron Microsc Tech** 1989 Jul;12(3):252–61

PHARMACOLOGY

In vitro determination of uptake, retention, distribution, biological efficacy, and toxicity of boronated compounds for neutron capture therapy: a comparison of porphyrins with sulfhydryl boron hydrides. Fairchild RG, et al. **Cancer Res** 1990 Aug 15;50(16):4860–5

BORATES

PHARMACOLOGY

[Study on the effects of Dobells' solution] Song JH, et al. **Chung Hua Hu Li Tsa Chih** 1989 Aug;24(8):470–2 **(Chi)**

TOXICITY

The mutagenic activity of sodium perborate. Seiler JP. **Mutat Res** 1989 Oct;224(2):219–27

BORDER DISEASE see under **SHEEP DISEASES**

BORDERLINE PERSONALITY DISORDER

Borderline personality disorder in primary care. Nowlis DP. **J Fam Pract** 1990 Mar;30(3): 329–335 (31 ref.)

[Borderline adolescents under hospitalization conditions] Rákos P. **Cesk Psychiatr** 1989 Aug;85(4):226–33 (Eng. Abstr.) (Cze)

[Borderline and its classification] Scharbach H. **Ann Med Psychol (Paris)** 1989 May–Jun;147(3):387–90 (14 ref.) (Fre)

[Borderline levels of personality functioning] Stojnić J, et al. **Vojnosanit Pregl** 1990 Jan–Feb;47(1):48–50 (Ser)

BLOOD

Altered platelet alpha 2–adrenergic receptor binding sites in borderline personality disorder. Southwick SM, et al. **Am J Psychiatry** 1990 Aug;147(8):1014–7

CEREBROSPINAL FLUID

CSF metabolites in borderline personality disorder compared with normal controls. Gardner DL, et al. **Biol Psychiatry** 1990 Aug 1;28(3):247–54

COMPLICATIONS

Factitial leg ulcers associated with an unusual sleep disorder [letter; comment] Koblenzer CS. **Arch Dermatol** 1990 Mar; 126(3):396–7 Comment on: Arch Dermatol 1989 Aug;125(8):1115–8.

The prevalence of cyclothymia in borderline personality disorder. Levitt AJ, et al. **J Clin Psychiatry** 1990 Aug; 51(8):335–9

Associated diagnoses (comorbidity) in patients with borderline personality disorder. Prasad RB, et al. **Psychiatr J Univ Ott** 1990 Mar;15(1):22–7

Characteristics of psychosis in borderline personality disorder. Links PS, et al. **Psychopathology** 1989; 22(4):188–93

DIAGNOSIS

Discriminant analysis of items in the SCL–90 questionnaire in borderline patients and controls—a methodological study. Boleloucký Z, et al. **Act Nerv Super (Praha)** 1989 Jun;31(2):122–4

Schizophrenic and borderline patients: introjection, relationship to mother and symptoms. Ohman K, et al. **Acta Psychiatr Scand** 1990 May;81(5):488–96

Borderline children: a closer look at diagnosis and treatment. Wenning K. **Am J Orthopsychiatry** 1990 Apr;60(2):225–32

P.T. Barnum and the borderline personality disorder muddle [letter; comment] Alpher VS. **Am J Psychiatry** 1990 Apr; 147(4):540 Comment on: Am J Psychiatry 1989 Sep;146(9):1115–20.

Multiple personality disorder and borderline personality disorder [letter] Kirsten M. **Am J Psychiatry** 1990 Oct; 147(10):1386–7

Criticism of mnemonic device [letter; comment] Larson EW. **Am J Psychiatry** 1990 Jul;147(7):963–4 Comment on: Am J Psychiatry 1989 Nov;146(11):1517.

The borderline diagnosis in adolescents: symptoms and developmental history. Ludolph PS, et al. **Am J Psychiatry** 1990 Apr;147(4):470–6

Childhood sexual and physical abuse in adult patients with borderline personality disorder. Ogata SN, et al. **Am J Psychiatry** 1990 Aug;147(8):1008–13

Mnemonic device for criteria for borderline personality disorder [letter] [see comments] Powers AD, et al. **Am J Psychiatry** 1989 Nov;146(11):1517 Comment in: Am J Psychiatry 1990 Jul;147(7):963–4.

Borderline patients' view of their parents [letter] Wise TN, et al. **Am J Psychiatry** 1990 Aug;147(8):1104–5

Discriminating borderline personality disorder from other axis II disorders. Zanarini MC, et al. **Am J Psychiatry** 1990 Feb;147(2):161–7

Update on psychodynamic thinking regarding the diagnosis of the borderline patient. Goldstein WN. **Am J Psychother** 1989 Jul;43(3):321–42 (51 ref.)

Borderline personality disorder: a research challenge [editorial] Gardner DL, et al. **Biol Psychiatry** 1989 Nov; 26(7):655–8 (19 ref.)

Auditory P300 does not differentiate borderline personality disorder from schizotypal personality disorder. Kutcher SP, et al. **Biol Psychiatry** 1989 Dec;26(8):766–74

The delineation of schizophrenia from other psychiatric illnesses. Kazanetz EP. **Br J Psychiatry** 1989 Aug; 155:160–5

Borderline personality in Britain: a preliminary study. Bateman AW. **Compr Psychiatry** 1989 Sep–Oct; 30(5):385–90

Missed diagnosis? [letter; comment] Rathbun JM, et al. **Hosp Community Psychiatry** 1989 Oct;40(10):1076–7 Comment on: Hosp Community Psychiatry 1989 May;40(5):468–70.

Categorical versus dimensional status of borderline personality disorder. Trull TJ, et al. **J Abnorm Psychol** 1990 Feb;99(1):40–8

Sleep patterns in borderline personality disorder. Benson KL, et al. **J Affective Disord** 1990 Apr;18(4):267–73

Resolved: borderline personality exists in children under twelve. Affirmative. Kernberg PF. **J Am Acad Child Adolesc Psychiatry** 1990 May; 29(3):478–82; discussion 482

Borderline disorders of childhood: an overview. Petti TA, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May; 29(3):327–37 (90 ref.)

Resolved: borderline personality exists in children under twelve. Negative. Shapiro T. **J Am Acad Child Adolesc Psychiatry** 1990 May;29(3):480–2; discussion 482–3

Methodological variations in the use of the MMPI for diagnosis of borderline personality disorder among alcoholics. Horvath P, et al. **J Clin Psychol** 1990 Mar; 46(2):238–43

Narcissistic, antisocial, and noncomorbid subgroups of borderline disorder. Are they distinct entities by long–term clinical profile? McGlashan TH, et al. **Psychiatr Clin North Am** 1989 Sep;12(3):653–70

Narcissistic personality disorder. A validity study and comparison to borderline personality disorder. Plakun EM. **Psychiatr Clin North Am** 1989 Sep;12(3):603–20

Discriminating borderline from neurotic patients. A study with the Holtzman Inkblot Technique. Leichsenring F. **Psychopathology** 1990;23(1):21–6

Who are borderline patients? Richards CJ. **S D J Med** 1989 Oct;42(10):5–8 (120 ref.)

[The illness concept in adolescent psychiatry] Yamamoto A. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Jun; 42(6):321–32 (Eng. Abstr.) (Ger)

[Comments on the diagnostic principles of DSM–III exemplified by the borderline personality disorder] Titscher E, et al. **Psychother Psychosom Med Psychol** 1990 Feb; 40(2):64–9 (Eng. Abstr.) (Ger)

DRUG THERAPY

Pharmacotherapy of patients with borderline personality disorder. Teicher MH, et al. **Hosp Community Psychiatry** 1989 Sep;40(9):887–9 (7 ref.)

Comments on the pathogenesis and psychopharmacological management of the borderline disorder. Ostow M. **J Am Acad Psychoanal** 1990 Spring;18(1):145–51

Fluoxetine in borderline personality disorder. Norden MJ. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(6):885–93

Fluoxetine trial in borderline personality disorder. Cornelius JR, et al. **Psychopharmacol Bull** 1990;26(1):151–4

Pharmacotherapy of borderline personality disorder: a review. Gardner DL, et al. **Psychopharmacol Bull** 1989; 25(4):515–23 (43 ref.)

Phenelzine, imipramine, and placebo in borderline patients meeting criteria for atypical depression. Parsons B, et al. **Psychopharmacol Bull** 1989;25(4):524–34 (56 ref.)

The role of pharmacotherapy in the treatment of patients with borderline personality disorder. Stone MH. **Psychopharmacol Bull** 1989;25(4):564–71

Open assessment of the safety and efficacy of thioridazine in the treatment of patients with borderline personality disorder. Teicher MH, et al. **Psychopharmacol Bull** 1989; 25(4):535–49

ENZYMOLOGY

Low platelet monoamine oxidase activity in borderline personality disorder. Yehuda R, et al. **Psychiatry Res** 1989 Dec;30(3):265–73

HISTORY

The case of the Wolf–Man [letter; comment] Abrahamson D. **Am J Psychiatry** 1990 Jul;147(7):959–60 Comment on: Am J Psychiatry 1989 Nov;146(11):1394–403.

PSYCHOLOGY

Borderline personality disorder in adolescents: current concepts. Esman AH. **Adolesc Psychiatry** 1989;16:319–36 (55 ref.)

Physical and sexual abuse in adolescent girls with borderline personality disorder. Westen D, et al. **Am J Orthopsychiatry** 1990 Jan;60(1):55–66

Concept of interpersonal distance in borderline personality disorder [letter; comment] Akhtar S. **Am J Psychiatry** 1990 Feb;147(2):260–1 Comment on: Am J Psychiatry 1989 Sep;146(9):1115–20.

Borderline personality and multiple earrings: a possible correlation? [letter] Ali AH. **Am J Psychiatry** 1990 Sep; 147(9):1251

Substance use in borderline personality disorder. Dulit RA, et al. **Am J Psychiatry** 1990 Aug;147(8):1002–7

Patient–therapist sex [letter; comment] Feigon EA. **Am J Psychiatry** 1990 Jul;147(7):963 Comment on: Am J Psychiatry 1990 Jan;147(1):129–30.

The power of religion [letter] Lazarus A. **Am J Psychiatry** 1990 Oct;147(10):1390

Perceptions of parental bonding in borderline patients. Paris J, et al. **Am J Psychiatry** 1989 Nov;146(11):1498–9

Frequency and correlates of childhood sexual and physical abuse histories in adult female borderline inpatients. Shearer SL, et al. **Am J Psychiatry** 1990 Feb;147(2):214–6

Cognitive features of borderline personality disorder. Zanarini MC, et al. **Am J Psychiatry** 1990 Jan;147(1):57–63

Case study: the illustrative nightmare of a young borderline woman. O'Neill RM. **Am J Psychoanal** 1990 Mar;50(1):71–4

Cofactors in the commission of violent crimes: a self–psychology examination. Feldmann TB, et al. **Am J Psychother** 1990 Apr;44(2):172–9

Venesection as a rare form of self–mutilation. Margo GM, et al. **Am J Psychother** 1989 Jul;43(3):427–32

Exploring the meanings of substance abuse: an important dimension of early work with borderline patients. Southwick SM, et al. **Am J Psychother** 1990 Jan;44(1):61–7

Relationships among semantic differential change measures of splitting, self–fragmentation and object relations in borderline psychopathology. Greene LR. **Br J Med Psychol** 1990 Mar;63 (Pt 1):21–32

Borderline traits among community alcoholics and problem–drinkers: rural–urban differences. Tousignant M, et al. **Can J Psychiatry** 1989 Nov;34(8):796–9

DSM–III and DSM–III–R schizotypal symptoms in borderline personality disorder. Silk KR, et al. **Compr Psychiatry** 1990 Mar–Apr;31(2):103–10

Psychiatric labels [letter; comment] Halpern AL. **Hosp Community Psychiatry** 1989 Dec;40(12):1302–3 Comment on: Hosp Community Psychiatry 1989 Aug;40(8):815–9.

The autistic object: its relationship with narcissism in the transference and countertransference of neurotic and borderline patients. Mario Gomberoff J, et al. **Int J Psychoanal** 1990;71 (Pt 2):249–59

Object relations in borderline adolescents. Westen D, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May; 29(3):338–48

The "black hole" as the basic psychotic experience: some newer psychoanalytic and neuroscience perspectives on psychosis. Grotstein JS. **J Am Acad Psychoanal** 1990 Spring;18(1):29–46

The synthetic use of movement and verbal psychoanalytic psychotherapies. Ragan C, et al. **J Am Acad Psychoanal** 1990 Spring;18(1):115–30

Emptiness as defense in severe regressive states. LaFarge L. **J Am Psychoanal Assoc** 1989;37(4):965–95

Rorschach assessment of primitive defenses: a review. Lerner PM. **J Pers Assess** 1990 Spring;54(1–2):30–46 (53 ref.)

Object representations in descriptions of significant others: a methodological study. Marziali E, et al. **J Pers Assess** 1990 Spring;54(1–2):105–15

The nursing care challenge. Borderline patients. Piccinino S. **J Psychosoc Nurs Ment Health Serv** 1990 Apr;28(4):22–7

Female genital self–mutilation: case reports and literature review. Wise TN, et al. **J Sex Marital Ther** 1989 Winter; 15(4):269–74 (13 ref.)

Nightmares in crisis: clinical applications of lucid dreaming techniques. Brylowski A. **Psychiatr J Univ Ott** 1990 Jun; 15(2):79–84

Transference and the vicissitudes of medication use by borderline patients. Waldinger RJ, et al. **Psychiatry** 1989 Nov;52(4):416–27 (30 ref.)

Approach to the medically ill borderline patient: a case study. Fitzgibbon ML, et al. **Psychol Rep** 1989 Dec;65(3 Pt 2):1091–6

Prediction of change in borderline personality disorder. Goldberg SC. **Psychopharmacol Bull** 1989;25(4):550–5 (19 ref.)

[Transference and countertransference at a therapeutic community for young adult psychiatric patients] Brockmann J. **Psychother Psychosom Med Psychol** 1990 Jan;40(1):22–6 (Eng. Abstr.) (Ger)

[Aspects of object relations in borderline and neurotic patients: an empirical study using the Holtzman Inkblot technic] Leichsenring F. **Psychother Psychosom Med Psychol** 1989 Dec; 39(12):463–70 (Eng. Abstr.) (Ger)

[Primary and secondary process thinking in normal probands, neurotic and borderline patients] Leichsenring F, et al. **Z Psychosom Med Psychoanal** 1990;36(1):62–78 (Eng. Abstr.) (Ger)

REHABILITATION

[The concept of developmentally–induced structural ego disorders—a reference frame for working with extremely borderline patients?] Weber F. **Psychother Psychosom Med Psychol** 1989 Nov;39(11):390–6 (Eng. Abstr.) (Ger)

THERAPY

Dilemmas in the management of suicidal behavior in individuals with borderline personality disorder. Fine MA, et al. **Am J Psychother** 1990 Apr;44(2):160–71 (38 ref.)

Maintaining a balanced treatment approach with the borderline patient. Schaffer ND. **Br J Med Psychol** 1990 Mar;63 (Pt 1):11–9 (25 ref.)

The inpatient borderline adolescent in group therapy. Sugar M. **Child Psychiatry Hum Dev** 1990 Summer;20(4):235–41

The subacute hospital treatment of the borderline patient: III. Management of suicidal crisis by family intervention. Lansky MR. **Hillside J Clin Psychiatry** 1989;11(1):81–97

Critique of A. Alonso and J. S. Rutan "The Experience of Shame and the Restoration of Self–Respect in Group Psychotherapy" (January, 1988), and their rejoinder (July, 1988). Roth BE. **Int J Group Psychother** 1989 Oct; 39(4):543–5

On 'doing nothing' in the psychoanalytic treatment of the refractory borderline patient. Gabbard GO. **Int J Psychoanal** 1989;70 (Pt 3):527–34

Uses and limitations of Kohut's self psychology in the

treatment of borderline patients. Adler G. **J Am Psychoanal Assoc** 1989;37(3):761–85
Medication and transference in psychoanalytically oriented psychotherapy of the borderline patient. Brockman R. **Psychiatr Clin North Am** 1990 Jun;13(2):287–95
Long-term follow-up of narcissistic/borderline patients. Stone MH. **Psychiatr Clin North Am** 1989 Sep;12(3):621–41
Treatment of borderline patients: a pragmatic approach. Stone MH. **Psychiatr Clin North Am** 1990 Jun;13(2):265–85 (37 ref.)
Issues involved in combining drugs with psychotherapy for the borderline inpatient. Swenson CR, et al. **Psychiatr Clin North Am** 1990 Jun;13(2):297–306
The use of contracts in the inpatient treatment of the borderline personality disorder. Bloom H, et al. **Psychiatr Q** 1989 Winter;60(4):317–27
Managed care and the discharge dilemma. Lewin R, et al. **Psychiatry** 1990 May;53(2):116–21; discussion 122–6
[Inpatient psychiatric treatment of borderline patients] Pfitzer F, et al. **Nervenarzt** 1990 May;61(5):294–300 **(Ger)**
[Splitting and ambivalence. On the therapeutic dilemma in treating patients with early damage] Kobbé U. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Dec; 41(12):705–21 (96 ref.) (Eng. Abstr.) **(Ger)**

BORDETELLA

Clinical and pathological effects of the dermonecrotic toxin of Bordetella bronchiseptica and Pasteurella multocida in specific-pathogen-free piglets. Eliás B, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):677–88
Pneumonia in mice produced by cell-free extract of cultures of Bordetella parapertussis. Chen W, et al. **Res Vet Sci** 1990 Jan;48(1):18–22

ANALYSIS

Simplified procedure for purification of Bordetella bronchiseptica dermonecrotic toxin. Horiguchi Y, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1-3):39–43
Biochemical and immunological comparison of lipopolysaccharides from Bordetella species. Amano K, et al. **J Gen Microbiol** 1990 Mar;136 (Pt 3):481–7

DRUG EFFECTS

In vitro susceptibilities of Bordetella pertussis and Bordetella parapertussis to six new oral cephalosporins. Hoppe JE, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1442–3

ENZYMOLOGY

Bordetella adenylate cyclase is a virulence associated factor and an immunoprotective antigen. Guiso N, et al. **Microb Pathog** 1989 Nov;7(5):373–80

GENETICS

Cloning of the virulence regulatory (vir) locus of Bordetella pertussis and its expression in B. bronchiseptica. McGillivray DM, et al. **FEMS Microbiol Lett** 1989 Dec; 53(3):333–7
DNA hybridization for diagnosis of pertussis. Reizenstein E, et al. **Mol Cell Probes** 1990 Aug;4(4):299–306
Phase variants of Bordetella bronchiseptica arise by spontaneous deletions in the vir locus. Monack DM, et al. **Mol Microbiol** 1989 Dec;3(12):1719–28

IMMUNOLOGY

Identification of Bordetella avium antigens recognized after experimental inoculation in turkeys. Hellwig DH, et al. **Am J Vet Res** 1990 Aug;51(8):1188–91
Identification of a 68-kilodalton outer membrane protein as the major protective antigen of Bordetella bronchiseptica by using specific-pathogen-free piglets. Kobisch M, et al. **Infect Immun** 1990 Feb;58(2):352–7
Paradoxes of pertussis toxin. Wardlaw AC. **Int J Med Microbiol** 1990 May;273(1):1–4 (12 ref.)
[The differentiation of Bordetella (B.) bronchiseptica strains. 8. The protective behavior of B. bronchiseptica strains in mice in relation to the loss of K factors] Lüder O, et al. **Arch Exp Veterinarmed** 1989 Nov;43(6):877–83 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Indirect immunoperoxidase and immunofluorescence staining of Bordetella bronchiseptica in formalin-fixed, paraffin-embedded lung tissues of rabbits. Uzal FA, et al. **Zentralbl Veterinarmed [A]** 1990 Feb;37(1):1–7
[A coagglutination method in the identification of Bordetella genus microbes] Bakulina NA, et al. **Lab Delo** 1989; (7):68–70 (Eng. Abstr.) **(Rus)**

METABOLISM

Biological properties of lipopolysaccharides isolated from Bordetella. Watanabe M, et al. **Adv Exp Med Biol** 1990; 256:589–91
Biological properties of lipopolysaccharides from Bordetella species. Watanabe M, et al. **J Gen Microbiol** 1990 Mar;136 (Pt 3):489–93

PATHOGENICITY

Effects of exogenous agents on the action of Bordetella parapertussis heat-labile toxin on guinea pig skin. Endoh M, et al. **Infect Immun** 1990 May;58(5):1456–60
Pathogenesis in Bordetella species [letter; comment] Novotny P. **J Infect Dis** 1990 Mar;161(3):581–3 Comment on: J Infect Dis 1989 Feb;159(2):205–10.

PHYSIOLOGY

Adherence of Bordetella bronchiseptica and Pasteurella multocida to swine nasal ciliated epithelial cells in vitro. Chung WB, et al. **APMIS** 1990 May;98(5):453–61
Adherence of Bordetella bronchiseptica 276 to porcine trachea maintained in organ culture. Dugal F, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1523–9
Hydrophobic surface properties of Bordetella bronchiseptica X-mode cells and their possible role in adherence to porcine nasal mucosa. Ishikawa H, et al. **Can J Vet Res** 1990 Apr;54(2):296–8

BORDETELLA INFECTIONS

COMPLICATIONS

Bordetella bronchiseptica bronchitis in an immunosuppressed patient [letter] Meis JF, et al. **Eur J Clin Microbiol Infect Dis** 1990 May;9(5):366–7

ETIOLOGY

Interstitial pneumonia caused by Bordetella bronchiseptica in a heart transplant patient. Chauncey JB, et al. **Transplantation** 1990 Apr;49(4):817–9

MICROBIOLOGY

A new assay for invasion of HeLa 229 cells by Bordetella pertussis: effects of inhibitors, phenotypic modulation, and genetic alterations. Lee CK, et al. **Infect Immun** 1990 Aug; 58(8):2516–22
Lethal infection by Bordetella pertussis mutants in the infant mouse model. Weiss AA, et al. **Infect Immun** 1989 Dec; 57(12):3757–64
Pathogenesis in Bordetella species [letter; comment] Novotny P. **J Infect Dis** 1990 Mar;161(3):581–3 Comment on: J Infect Dis 1989 Feb;159(2):205–10.
Indirect immunoperoxidase and immunofluorescence staining of Bordetella bronchiseptica in formalin-fixed, paraffin-embedded lung tissues of rabbits. Uzal FA, et al. **Zentralbl Veterinarmed [A]** 1990 Feb;37(1):1–7

PREVENTION & CONTROL

Pertussis toxin analog with reduced enzymatic and biological activities is a protective immunogen. Kimura A, et al. **Infect Immun** 1990 Oct;58(10):3337–47

VETERINARY

Identification of Bordetella avium antigens recognized after experimental inoculation in turkeys. Hellwig DH, et al. **Am J Vet Res** 1990 Aug;51(8):1188–91
Identification of a 68-kilodalton outer membrane protein as the major protective antigen of Bordetella bronchiseptica by using specific-pathogen-free piglets. Kobisch M, et al. **Infect Immun** 1990 Feb;58(2):352–7
Pasteurella multocida and Bordetella bronchiseptica infections in rabbits. Deeb BJ, et al. **J Clin Microbiol** 1990 Jan;28(1):70–5
An attempt at embryo transfer as a means of controlling Bordetella bronchiseptica infection in the rabbit. Suzuki H, et al. **Jikken Dobutsu** 1990 Jul;39(3):397–400
Infection with and antibody response to Pasteurella multocida and Bordetella bronchiseptica in immature rabbits. Glass LS, et al. **Lab Anim Sci** 1989 Sep;39(5):406–10
Pneumonia in mice produced by cell-free extract of cultures of Bordetella parapertussis. Chen W, et al. **Res Vet Sci** 1990 Jan;48(1):18–22
[The differentiation of Bordetella (B.) bronchiseptica strains. 8. The protective behavior of B. bronchiseptica strains in mice in relation to the loss of K factors] Lüder O, et al. **Arch Exp Veterinarmed** 1989 Nov;43(6):877–83 (Eng. Abstr.) **(Ger)**
[Atrophic rhinitis of swine—a multifactorial disease?] Schöss P. **Berl Munch Tierarztl Wochenschr** 1989 Nov 1; 102(11):387–9 (24 ref.) (Eng. Abstr.) **(Ger)**

BORDETELLA PERTUSSIS

see related
PERTUSSIS TOXINS
PERTUSSIS VACCINE

ANALYSIS

Simple, efficient purification of filamentous hemagglutinin and pertussis toxin from Bordetella pertussis by hydrophobic and affinity interaction. Skelton SK, et al. **J Clin Microbiol** 1990 May;28(5):1062–5
Location of the three major agglutinogens of Bordetella pertussis by immuno-electronmicroscopy. Preston NW, et al. **J Med Microbiol** 1990 May;32(1):63–8
Preliminary X-ray crystallographic analysis of holotoxin from Bordetella pertussis. Raghavan M, et al. **J Mol Biol** 1990 Jun 5;213(3):411–4
Agglutinogens and fimbriae of Bordetella pertussis. Ashworth LA, et al. **Tokai J Exp Clin Med** 1988;13 Suppl:203–10

CLASSIFICATION

Serotyping Bordetella pertussis strains. Robinson A, et al. **Vaccine** 1989 Dec;7(6):491–4 (24 ref.)

DRUG EFFECTS

In vitro susceptibilities of Bordetella pertussis and Bordetella parapertussis to six new oral cephalosporins. Hoppe JE, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1442–3
Phorbol myristate acetate inhibits HeLa 229 invasion by Bordetella pertussis and other invasive bacterial pathogens. Ewanowich CA, et al. **Infect Immun** 1990 Oct; 58(10):3187–93
The vir locus affects the response of Bordetella pertussis to antibiotics: phenotypic tolerance and control of autolysis. Tuomanen E, et al. **J Infect Dis** 1990 Aug;162(2):560–3

ENZYMOLOGY

Bordetella pertussis adenylate cyclase inactivation by the host cell. Gilboa-Ron A, et al. **Biochem J** 1989 Aug 15; 262(1):25–31
Bordetella pertussis adenylate cyclase: purification and characterization of the toxic form of the enzyme. Rogel A, et al. **EMBO J** 1989 Sep;8(9):2755–60
Cloning and expression of mouse-brain calmodulin as an activator of Bordetella pertussis adenylate cyclase in Escherichia coli. Danchin A, et al. **Gene** 1989 Aug 1; 80(1):145–9
Synthesis and secretion of Bordetella pertussis adenylate cyclase as a 200-kilodalton protein. Bellalou J, et al. **Infect Immun** 1990 May;58(5):1195–200
Invasive adenylyl cyclase of Bordetella pertussis. Physical, catalytic, and toxic properties. Gentile F, et al. **J Biol Chem** 1990 Jun 25;265(18):10686–92
Adenylate cyclase toxin from Bordetella pertussis. Identification and purification of the holotoxin molecule. Hewlett EL, et al. **J Biol Chem** 1989 Nov 15; 264(32):19379–84
Rapid diagnosis of pertussis. Confer DL, et al. **Scand J Infect Dis** 1990;22(2):175–7
Bordetella pertussis adenylate cyclase: the gene and the protein. Glaser P, et al. **Tokai J Exp Clin Med** 1988;13 Suppl:239–52
Invasive adenylate cyclase toxin of Bordetella pertussis. Hanski E. **Trends Biochem Sci** 1989 Nov;14(11):459–63 (40 ref.)

GENETICS

Secretion of the Bordetella pertussis adenylate cyclase from Escherichia coli containing the hemolysin operon. Masure HR, et al. **Biochemistry** 1990 Jan 9;29(1):140–5
Virulence dependent and independent regulation of the Bordetella pertussis cya operon. Laoide BM, et al. **EMBO J** 1990 Apr;9(4):999–1005
Fimbrial phase variation in Bordetella pertussis: a novel mechanism for transcriptional regulation. Willems R, et al. **EMBO J** 1990 Sep;9(9):2803–9
Evidence for a DNA inversion system in Bordetella pertussis. Foxall PA, et al. **FEMS Microbiol Lett** 1990 May; 57(1-2):1–6
Cloning of the virulence regulatory (vir) locus of Bordetella pertussis and its expression in B. bronchiseptica. McGillivray DM, et al. **FEMS Microbiol Lett** 1989 Dec; 53(3):333–7
Structure of the Bordetella pertussis gene coding for the serotype 3 fimbrial subunit. Mooi FR, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1-3):327–31
Deletions affecting hemolytic and toxin activities of Bordetella pertussis adenylate cyclase. Bellalou J, et al. **Infect Immun** 1990 Oct;58(10):3242–7
Cloning, partial sequence, expression, and antigenic analysis of the filamentous hemagglutinin gene of Bordetella pertussis. Delisse-Gathoye AM, et al. **Infect Immun** 1990 Sep;58(9):2895–905
A new assay for invasion of HeLa 229 cells by Bordetella pertussis: effects of inhibitors, phenotypic modulation, and genetic alterations. Lee CK, et al. **Infect Immun** 1990 Aug; 58(8):2516–22
Murine antibody response to oral infection with live aroA recombinant Salmonella dublin vaccine strains expressing filamentous hemagglutinin antigen from Bordetella pertussis. Molina NC, et al. **Infect Immun** 1990 Aug; 58(8):2523–8
Construction and characterization in vivo of Bordetella pertussis aroA mutants. Roberts M, et al. **Infect Immun** 1990 Mar;58(3):732–9
Mutagenesis of Bordetella pertussis with transposon Tn5tac1: conditional expression of virulence-associated genes. Cookson BT, et al. **J Bacteriol** 1990 Apr;172(4):1681–7
Environmental regulation of expression of virulence determinants in Bordetella pertussis. Melton AR, et al. **J Bacteriol** 1989 Nov;171(11):6206–12
Analysis of Bordetella pertussis virulence gene regulation by use of transcriptional fusions in Escherichia coli. Miller JF, et al. **J Bacteriol** 1989 Nov;171(11):6345–8
The bvgA gene of Bordetella pertussis encodes a transcriptional activator required for coordinate regulation of several virulence genes. Roy CR, et al. **J Bacteriol** 1989 Nov;171(11):6338–44

Analysis of separate isolates of Bordetella pertussis repeated DNA sequences. McPheat WL, et al. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1515–20

DNA hybridization for diagnosis of pertussis. Reizenstein E, et al. **Mol Cell Probes** 1990 Aug;4(4):299–306

Genetic characterization of Bordetella pertussis filamentous haemagglutinin: a protein processed from an unusually large precursor. Domenighini M, et al. **Mol Microbiol** 1990 May;4(5):787–800

Analysis of the chromosomal location of two copies of a Bordetella pertussis insertion sequence. McPheat WL, et al. **Mol Microbiol** 1989 Jul;3(7):985–9

Engineering upstream transcriptional and translational signals of Bordetella pertussis serotype 2 fimbrial subunit protein for efficient expression in Escherichia coli: in vitro autoassembly of the expressed product into filamentous structures. Walker MJ, et al. **Mol Microbiol** 1990 Jan; 4(1):39–47

Nucleotide sequence of the fim3 gene from Bordetella pertussis and homology to fim2 and fimX gene products. Cuzzoni A, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1640

Nucleotide sequence of the recA gene of Bordetella pertussis. Favre D, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4243

A unique sequence of the Bordetella pertussis toxin operon. Loosmore SM, et al. **Nucleic Acids Res** 1989 Oct 25; 17(20):8365

Pertussis holotoxoid formed in vitro with a genetically deactivated S1 subunit. Bartley TD, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8353–7

Autogenous regulation of the Bordetella pertussis bvgABC operon. Roy CR, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3763–7

Positive transcriptional feedback at the bvg locus controls expression of virulence factors in Bordetella pertussis. Scarlato V, et al. **Proc Natl Acad Sci U S A** 1990 Sep; 87(17):6753–7

Molecular cloning and analysis of P. 69, a vir-controlled protein from Bordetella pertussis. Charles IG, et al. **Tokai J Exp Clin Med** 1988;13 Suppl:227–34

Bordetella pertussis pilin and pilin-like genes. de Ferra F, et al. **Tokai J Exp Clin Med** 1988;13 Suppl:235–8 (9 ref.)

The vir locus and phase-variation in Bordetella pertussis. Stibitz S, et al. **Tokai J Exp Clin Med** 1988;13 Suppl:223–6

GROWTH & DEVELOPMENT

Large-scale growth of Bordetella pertussis for production of extracellular toxin. Andorn N, et al. **Ann N Y Acad Sci** 1990;589:363–71

IMMUNOLOGY

Comparison of acellular and whole-cell pertussis-component DTP vaccines. A multicenter double-blind study in 4- to 6-year-old children. Morgan CM, et al. **Am J Dis Child** 1990 Jan;144(1):41–5

Class-specific antibodies to Bordetella pertussis, Haemophilus influenzae type b, Streptococcus pneumoniae and Neisseria meningitidis in human breast-milk and maternal-infant sera. Kassim OO, et al. **Ann Trop Paediatr** 1989 Dec;9(4):226–32

Purification and analysis of the antigenicity of a 69,000 Da protein from Bordetella pertussis. Gould-Kostka JL, et al. **FEMS Microbiol Lett** 1990 Feb;55(3):285–9

Bordetella pertussis filamentous hemagglutinin: evaluation as a protective antigen and colonization factor in a mouse respiratory infection model. Kimura A, et al. **Infect Immun** 1990 Jan;58(1):7–16

Characterization of genetically inactivated pertussis toxin mutants: candidates for a new vaccine against whooping cough. Nencioni L, et al. **Infect Immun** 1990 May; 58(5):1308–15

Variations in the carbohydrate regions of Bordetella pertussis lipopolysaccharides: electrophoretic, serological, and structural features. Caroff M, et al. **J Bacteriol** 1990 Feb; 172(2):1121–8

Preparation of filamentous hemagglutinin from Bordetella pertussis and assay for serum antibodies to filamentous hemagglutinin and pertussis toxin for clinical and public health laboratories. Wong KH, et al. **J Clin Microbiol** 1989 Dec;27(12):2805–10

Widespread silent transmission of pertussis in families: antibody correlates of infection and symptomatology [see comments] Long SS, et al. **J Infect Dis** 1990 Mar; 161(3):480–6 Comment in: J Infect Dis 1990 Mar;161(3):473–9.

Serologic diagnosis of pertussis: evaluation of pertussis toxin and other antigens in enzyme-linked immunosorbent assay. Mertsola J, et al. **J Infect Dis** 1990 May;161(5):966–71

Serum IgG, IgA, and IgM responses to pertussis toxin, filamentous hemagglutinin, and agglutinogens 2 and 3 after infection with Bordetella pertussis and immunization with whole-cell pertussis vaccine. Thomas MG, et al. **J Infect Dis** 1989 Nov;160(5):838–45

Natural history of pertussis antibody in the infant and effect on vaccine response [see comments] Van Savage J, et al. **J Infect Dis** 1990 Mar;161(3):487–92 Comment in: J Infect Dis 1990 Mar;161(3):473–9.

Antibodies to Bordetella pertussis adenylate cyclase are produced in man during pertussis infection and after vaccination. Farfel Z, et al. **J Med Microbiol** 1990 Jul; 32(3):173–7

Serum antibody response to B. pertussis Tn5 mutants, purified PT and FHA in two different mouse strains and passive protection in the murine intranasal infection model. Olander RM, et al. **Microb Pathog** 1990 Jan;8(1):37–45

Pertussis (whooping cough) toxin and Bordetella pertussis whole-cell antibody levels in a healthy New Zealand population. Lau RC. **N Z Med J** 1989 Oct 25; 102(878):560–2

Human T-cell immunity against Bordetella pertussis analyzed at clonal level. Tagliabue A, et al. **Tokai J Exp Clin Med** 1988;13 Suppl:253–7

Serospecific protection of mice against intranasal infection with Bordetella pertussis. Robinson A, et al. **Vaccine** 1989 Aug;7(4):321–4

[The relationships between antitoxic titers determined in a group of young people before and after booster ADT by the in vivo neutralization test. Comparative NT-PHAR evaluations] Durbacă S, et al. **Arch Roum Pathol Exp Microbiol** 1989 Apr-Jun; 48(2):135–46 (Eng. Abstr.) **(Fre)**

ISOLATION & PURIFICATION

A DNA hybridization test for detection of Bordetella in nasopharyngeal specimens. Reizenstein E, et al. **Mol Cell Probes** 1990 Jun;4(3):211–21

Specific identification of Bordetella pertussis by the polymerase chain reaction. Houard S, et al. **Res Microbiol** 1989 Sep;140(7):477–87

Structural and functional properties of a 69-kilodalton outer membrane protein of Bordetella pertussis. Brennan MJ, et al. **Tokai J Exp Clin Med** 1988;13 Suppl:211–5

[Comparison of cefsulodin and cephalexin as selective agents in agar for Bordetella pertussis] Hoppe JE, et al. **Immun Infekt** 1990 Apr;18(2):40–1 (Eng. Abstr.) **(Ger)**

[Isolation of hemolytic cultures of Bordetella pertussis intended for the production of acellular pertussis preparations and the characterization of their biological properties] Miriasova LV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jun;(6):15–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Isolation of a protein fraction from Bordetella pertussis that facilitates entry of the calmodulin-sensitive adenylate cyclase into animal cells. Donovan MG, et al. **Biochemistry** 1989 Oct 3;28(20):8124–9

Growth and siderophore production by Bordetella pertussis under iron-restricted conditions. Gorringe AR, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1-3):101–5

The effect of cyclodextrin on lipopolysaccharide production in cultures of Bordetella pertussis. Ibsen P, et al. **J Biol Stand** 1989 Oct;17(4):321–30

Subunit structure and enzymic activity of pertussis toxin. Burns DL. **Microbiol Sci** 1988 Sep;5(9):285–7 (28 ref.)

PATHOGENICITY

Adenylate cyclase toxin is critical for colonization and pertussis toxin is critical for lethal infection by Bordetella pertussis in infant mice. Goodwin MS, et al. **Infect Immun** 1990 Oct;58(10):3445–7

Lethal infection by Bordetella pertussis mutants in the infant mouse model. Weiss AA, et al. **Infect Immun** 1989 Dec; 57(12):3757–64

[Comparative pathomorphologic study of the toxic properties of a corpuscular pertussis vaccine and of a cell-free pertussis preparation] Grigor'eva LV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Aug;(8):52–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Pertussis and pertussis vaccine: 1990. Mortimer EA Jr. **Adv Pediatr Infect Dis** 1990;5:1–33 (114 ref.)

Recognition of a bacterial adhesion by an integrin: macrophage CR3 (alpha M beta 2, CD11b/CD18) binds filamentous hemagglutinin of Bordetella pertussis. Relman D, et al. **Cell** 1990 Jun 29;61(7):1375–82

Characterization of the protective capacity and immunogenicity of the 69-kD outer membrane protein of Bordetella pertussis. Shahin RD, et al. **J Exp Med** 1990 Jan 1;171(1):63–73

BORDETELLA PERTUSSIS TOXINS see **PERTUSSIS TOXINS**

BORIC ACIDS

Home collection of urine specimens—boric acid bottles or Dipslides? Jewkes FE, et al. **Arch Dis Child** 1990 Mar; 65(3):286–9

Tetrafluoroboric acid, a useful deprotecting reagent in peptide synthesis. Kiso Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Dec;37(12):3432–4

ADMINISTRATION & DOSAGE

An open multiple dose study of Optrex Eye Lotion in eye irritation due to hayfever. Clark MJ, et al. **Br J Clin Pract** 1989 Oct;43(10):357–9

ANALYSIS

[Spectrophotometric determination of boric acid by the curcumin method] Yoshida M, et al. **Nippon Hoigaku Zasshi** 1989 Dec;43(6):490–6 (Eng. Abstr.) **(Jpn)**

[Determination of boric acid in biological materials by curcuma paper] Yoshida M, et al. **Nippon Hoigaku Zasshi** 1989 Dec;43(6):497–501 (Eng. Abstr.) **(Jpn)**

PHARMACOKINETICS

Crystallographic analysis of the inhibition of porcine pancreatic elastase by a peptidyl boronic acid: structure of a reaction intermediate. Takahashi LH, et al. **Biochemistry** 1989 Sep 19;28(19):7610–7

PHARMACOLOGY

Growth inhibition of Candida albicans and other medically important yeasts by vaginal contraceptive products. Shubair M, et al. **Gynecol Obstet Invest** 1990;29(1):67–70

Do inert beta-lactamase inhibitors act as synergizers of beta-lactam antibiotics? Utility of boric and boronic acids. Amicosante G, et al. **J Chemother** 1989 Dec;1(6):394–8

Bacteriostatic and bactericidal actions of boric acid against bacteria and fungi commonly found in urine. Meers PD, et al. **J Clin Pathol** 1990 Jun;43(6):484–7

POISONING

Toxicology of selected pesticides, drugs, and chemicals. Boric acid. Kiesche-Nesselrodt A, et al. **Vet Clin North Am Small Anim Pract** 1990 Mar; 20(2):369–73 (12 ref.)

THERAPEUTIC USE

The relationship between certain blood constituents in cows with milk fever and the response following treatment with calcium borogluconate solutions. Fenwick DC. **Aust Vet J** 1990 Mar;67(3):102–4

Overprescribing [letter] Beevers DG. **BMJ** 1989 Nov 18; 299(6710):1284

[Treatment of deep wounds with loss of tissue. Value of a 3 percent boric acid solution] Blech MF, et al. **Presse Med** 1990 Jun 2;19(22):1050–2 (Eng. Abstr.) **(Fre)**

BORNA DISEASE

DIAGNOSIS

MRI in psychiatric patients with serum antibodies against Borna disease virus. Bechter K, et al. **Psychiatry Res** 1989 Sep;29(3):281–2

MICROBIOLOGY

Astrocytes and Schwann cells are virus-host cells in the nervous system of rats with Borna disease. Carbone KM, et al. **J Neuropathol Exp Neurol** 1989 Nov;48(6):631–44

Molecular insights into infections of the central nervous system. Lipkin WI, et al. **Res Publ Assoc Res Nerv Ment Dis** 1990;68:15–22 (38 ref.)

[The development of a purification method for Borna disease virus] von Rheinbaben F. **Berl Munch Tierarztl Wochenschr** 1990 Jul 1;103(7):236–9 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Learning deficiencies in Borna disease virus-infected but clinically healthy rats. Dittrich W, et al. **Biol Psychiatry** 1989 Dec;26(8):818–28

PREVENTION & CONTROL

Inhibition of immune-mediated meningoencephalitis in persistently Borna disease virus-infected rats by cyclosporine A. Stitz L, et al. **J Immunol** 1989 Dec 15; 143(12):4250–6

BORNA DISEASE VIRUS see under **VERTEBRATE VIRUSES, UNCLASSIFIED**

BORNANES

Structure and absolute configuration of (Z)-(+)-2-bromo-2-cycloundecenyl camphanate. Ito S, et al. **Acta Crystallogr C** 1988 Jan 15;44 (Pt 1):145–7

ANALYSIS

[Identification and determination of borneol in liyan gao by TLC and GC] Xie PD, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Jul;14(7):415–7, 446–7 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Biosynthesis of monoterpenes: stereochemistry of the coupled isomerization and cyclization of geranyl pyrophosphate to camphane and isocamphane monoterpenes. Croteau R, et al. **Arch Biochem Biophys** 1990 Mar;277(2):374–81

[Preparative separation of borneol and isoborneol in bingpian by dry-column chromatography] Wu CY, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Sep;20(3):327–30 (Eng. Abstr.) **(Chi)**

METABOLISM

Studies on the earthy-musty odours in natural water (IV). Mechanism of earthy-musty odour production of actinomycetes. Aoyama K. **J Appl Bacteriol** 1990 Apr; 68(4):405–10

PHARMACOKINETICS

[Study on transdermal absorption of borneol-salicylic acid eutectic mixture] Cui DX, et al. **Yao Hsueh Hsueh Pao** 1989;24(7):556–9 (Eng. Abstr.) **(Chi)**

THERAPEUTIC USE

[Therapeutic effects of borneol-walnut oil in the treatment of purulent otitis media] Liu SL.
Chung Hsi I Chieh Ho Tsa Chih 1990 Feb;10(2):93–5, 69 (Eng. Abstr.) **(Chi)**

BORNHOLM DISEASE see **PLEURODYNIA, EPIDEMIC**

BORNHOLM DISEASE VIRUS see **COXSACKIE B VIRUSES**

BORON

Studies of the neutron transport and shielding properties of locally developed shielding material: poly-boron. Bhuiyan SI, et al. **Health Phys** 1989 Nov;57(5):819–24

Boron neutron capture enhancement of 252Cf brachytherapy. Beach JL, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun; 18(6):1421–7

Transport calculations of the influence of physical factors on depth-dose distributions in boron neutron capture therapy. Matsumoto T. **Phys Med Biol** 1990 Jul;35(7):971–8

ADVERSE EFFECTS

[Morphometric characteristics of hepatocyte mitochondria during internal administration of boron-containing water] Korolev IuN, et al. **Biull Eksp Biol Med** 1990 May; 109(5):492–4 (Eng. Abstr.) **(Rus)**

ANALYSIS

Quantitative imaging of boron, calcium, magnesium, potassium, and sodium distributions in cultured cells with ion microscopy. Ausserer WA, et al. **Anal Chem** 1989 Dec 15;61(24):2690–5

A trial to improve the analysis of boron in biological materials. Yoshino K, et al. **Pigment Cell Res** 1989 Jul–Aug; 2(4):286–90

[Boron in dental hard tissues studied by 11B(p,alpha)8Be nuclear reaction] Torrisi L, et al. **Minerva Stomatol** 1989 Sep;38(9):935–40 (Eng. Abstr.) **(Ita)**

DEFICIENCY

Magnesium and methionine deprivation affect the response of rats to boron deprivation. Nielsen FH, et al.
Biol Trace Elem Res 1988 Sep–Dec;17:91–107

DIAGNOSTIC USE

Boron neutron capture therapy for malignant melanoma: an experimental approach. Larsson BS, et al.
Pigment Cell Res 1989 Jul–Aug;2(4):356–60

IMMUNOLOGY

Immunoreactivity of boronated antibodies. Pettersson ML, et al. **J Immunol Methods** 1990 Jan 24;126(1):95–102

METABOLISM

Changes in boron concentration during development and ageing of Drosophila and effect of dietary boron on life span. Massie HR, et al. **Mech Ageing Dev** 1990 Mar 31; 53(1):1–7

Review: biological effectiveness of thermal neutrons and 10B(n,alpha)7Li reaction on cultured cells. Fukuda H, et al. **Pigment Cell Res** 1989 Jul–Aug;2(4):333–6 (10 ref.)

RBEs of thermal neutron capture therapy and 10B(n, alpha)7 Li reaction on melanoma-bearing hamsters. Hiratsuka J, et al. **Pigment Cell Res** 1989 Jul–Aug;2(4):352–5

New thermal neutron capture therapy for malignant melanoma: melanogenesis-seeking 10B molecule-melanoma cell interaction from in vitro to first clinical trial. Mishima Y, et al. **Pigment Cell Res** 1989 Jul–Aug;2(4):226–34 (23 ref.)

PHARMACOLOGY

Dietary boron modified the effects of magnesium and molybdenum on mineral metabolism in the cholecalciferol-deficient chick. Hunt CD.
Biol Trace Elem Res 1989 Nov;22(2):201–20

Stereochemical and biochemical aspects of some organoboron complexes of sulphur donor ligands. Singh VP, et al. **J Inorg Biochem** 1990 Jul;39(3):237–45

The effects of boron hypolipidemic agents on LDL and HDL receptor binding and related enzyme activities of rat hepatocytes, aorta cells and human fibroblasts. Hall IH, et al. **Res Commun Chem Pathol Pharmacol** 1989 Sep; 65(3):297–317

THERAPEUTIC USE

Boron neutron capture therapy of cancer. Barth RF, et al. **Cancer Res** 1990 Feb 15;50(4):1061–70 (89 ref.)

In vitro determination of uptake, retention, distribution, biological efficacy, and toxicity of boronated compounds for neutron capture therapy: a comparison of porphyrins with sulfhydryl boron hydrides. Fairchild RG, et al. **Cancer Res** 1990 Aug 15;50(16):4860–5

Boron neutron capture therapy of a rat glioma. Clendenon NR, et al. **Neurosurgery** 1990 Jan;26(1):47–55

Optimization of boron and neutron delivery for neutron capture therapy. Fairchild RG, et al. **Pigment Cell Res** 1989 Jul–Aug;2(4):309–18

Neutron-induced gamma dose from a reactor beam filter for boron neutron capture therapy. Harrington BV.
Pigment Cell Res 1989 Jul–Aug;2(4):246–53

Preclinical and phase I studies of monoclonal antibodies in melanoma: application to boron neutron capture therapy of melanoma. Hersey P. **Pigment Cell Res** 1989 Jul–Aug; 2(4):264–72 (80 ref.)

Boronated monoclonal antibody 225.28S for potential use in neutron capture therapy of malignant melanoma. Tamat SR, et al. **Pigment Cell Res** 1989 Jul–Aug;2(4):278–80

Boron neutron capture therapy (BNCT) using fast neutrons: effects in two human tumor cell lines. Sauerwein W, et al. **Strahlenther Onkol** 1990 Jan;166(1):26–9

TOXICITY

Acute toxicity of boron, molybdenum, and selenium to fry of chinook salmon and coho salmon. Hamilton SJ, et al. **Arch Environ Contam Toxicol** 1990 May–Jun;19(3):366–73

Experimental acute inorganic boron toxicosis in the goat: effects on serum chemistry and CSF biogenic amines. Sisk DB, et al. **Vet Hum Toxicol** 1990 Jun;32(3):205–11

[Morphofunctional characteristics of the thyroid and a change in the level of thyroid hormones in the blood from the internal use of boron-containing waters] Korolev IuN, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 May–Jun; (3):28–31 (Eng. Abstr.) **(Rus)**

BORON COMPOUNDS

Structure of hexakis(N-methylimidazole-N')iron(II) tetraphenylborate dichloromethane solvate. Miller LL, et al. **Acta Crystallogr C** 1989 Mar 15;45 (Pt 3):527–9

High-performance liquid chromatography of proteins on deformed non-porous agarose beads. Fast boronate affinity chromatography of haemoglobin at neutral pH. Hjertén S, et al. **J Chromatogr** 1990 Feb 2;500:543–53

ANALYSIS

Determination of the concentration of complex boronated compounds in biological tissues by inductively coupled plasma atomic emission spectrometry. Tamat SR, et al. **Pigment Cell Res** 1989 Jul–Aug;2(4):281–5

BLOOD

Determination of cyclic butylboronate esters of some 1,2- and 2,3-diols in plasma by high-resolution gas chromatography/mass spectrometry. Giachetti C, et al. **Biomed Environ Mass Spectrom** 1989 Aug;18(8):592–7

Synthetic approaches to a carboranyl thiouracil. Wilson JG. **Pigment Cell Res** 1989 Jul–Aug;2(4):297–303

CHEMICAL SYNTHESIS

Boron neutron capture therapy: linkage of a boronated macromolecule to monoclonal antibodies directed against tumor-associated antigens. Alam F, et al. **J Med Chem** 1989 Oct;32(10):2326–30

METABOLISM

Enhancement of transmembrane proton conductivity of protonophores by membrane-permeant cations. Ahmed I, et al. **Biochim Biophys Acta** 1990 May 24;1024(2):298–306

Complex formation of p-boronophenylalanine with some monosaccharides. Mori Y, et al. **Pigment Cell Res** 1989 Jul–Aug;2(4):273–7

PHARMACOKINETICS

Selective delivery of boron by the melanin precursor analogue p-boronophenylalanine to tumors other than melanoma. Coderre JA, et al. **Cancer Res** 1990 Jan 1; 50(1):138–41

Uptake of a nido-carboranylporphyrin by human glioma xenografts in athymic nude mice and by syngeneic ovarian carcinomas in immunocompetent mice. Kahl SB, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7265–9

PHARMACOLOGY

Potentiation by the tetraphenylboron anion of the effects of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine and its pyridinium metabolite. Heikkila RE, et al. **J Neurochem** 1990 Mar;54(3):743–50

Relative biological effectiveness (RBE) of thermal neutron capture therapy of cultured B-16 melanoma cells preincubated with 10B-paraboronophenylalanine. Ichihashi M, et al. **Pigment Cell Res** 1989 Jul–Aug;2(4):325–9

Use of nude mice in experimental neutron capture therapy with 10B-BPA. Tamaoki N, et al. **Pigment Cell Res** 1989 Jul–Aug;2(4):343–4

Sublethal and potentially lethal damage repair on thermal neutron capture therapy. Utsumi H, et al.
Pigment Cell Res 1989 Jul–Aug;2(4):337–42

Negative surface charges provoke conformational change of membrane proteins and release of calcium from sarcoplasmic reticulum. Liu G, et al.
Prog Clin Biol Res 1990;327:779–84

THERAPEUTIC USE

Specific killing of human melanoma cells with an efficient 10B-compound on monoclonal antibodies. Komura A, et al. **Pigment Cell Res** 1989 Jul–Aug;2(4):259–63

TOXICITY

Neutron irradiation of human melanoma cells. Brown K, et al. **Pigment Cell Res** 1989 Jul–Aug;2(4):319–24

Acute and subacute toxicity of 10B-paraboronophenylalanine. Taniyama K, et al.
Pigment Cell Res 1989 Jul–Aug;2(4):291–6

BORONIC ACIDS

Analogues of carbamyl aspartate as inhibitors of dihydroorotase: preparation of boronic acid transition-state analogues and a zinc chelator carbamylhomocysteine. Kinder DH, et al. **J Med Chem** 1990 Feb;33(2):819–23

An affinity matrix for the purification of poly(ADP-ribose) glycohydrolase. Thomassin H, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4691–4

DIAGNOSTIC USE

Determination of glycated hemoglobins of cadaveric blood: a study involving the use of affinity chromatography with m-amino phenyl boronic acid. Kuroda N.
Nippon Hoigaku Zasshi 1990 Apr;44(2):115–25

PHARMACOLOGY

Induction and exacerbation of emphysema in hamsters with human neutrophil elastase inactivated reversibly by a peptide boronic acid. Stone PJ, et al.
Am Rev Respir Dis 1990 Jan;141(1):47–52

Inhibition of IgA1 proteinases from Neisseria gonorrhoeae and Hemophilus influenzae by peptide prolyl boronic acids. Bachovchin WW, et al. **J Biol Chem** 1990 Mar 5; 265(7):3738–43

Do inert beta-lactamase inhibitors act as synergizers of beta-lactam antibiotics? Utility of boric and boronic acids. Amicosante G, et al. **J Chemother** 1989 Dec;1(6):394–8

BORRELIA

GENETICS

N-terminal amino acid sequence of the Borrelia burgdorferi flagellin. Gassmann GS, et al. **FEMS Microbiol Lett** 1989 Jul 1;51(1):101–5

Expression of antigens from chromosomal and linear plasmid DNA of Borrelia coriaceae. Perng GC, et al.
Infect Immun 1990 Jun;58(6):1744–8

Juxtaposition of expressed variable antigen genes with a conserved telomere in the bacterium Borrelia hermsii. Kitten T, et al. **Proc Natl Acad Sci U S A** 1990 Aug; 87(16):6077–81

The molecular biology of Borrelia. Barbour AG.
Rev Infect Dis 1989 Sep–Oct;11 Suppl 6:S1470–4 (20 ref.)

IMMUNOLOGY

Expression of antigens from chromosomal and linear plasmid DNA of Borrelia coriaceae. Perng GC, et al.
Infect Immun 1990 Jun;58(6):1744–8

Interlaboratory and intralaboratory comparisons of indirect immunofluorescence assays for serodiagnosis of Lyme disease. Lane RS, et al. **J Clin Microbiol** 1990 Aug; 28(8):1774–9

Antigenic characteristics of Borrelia burgdorferi isolates from ixodid ticks in California. Lane RS, et al.
J Clin Microbiol 1989 Oct;27(10):2344–9

Cross-reaction with Borrelia burgdorferi antigen of sera from patients with human immunodeficiency virus infection, syphilis, and leptospirosis. Raoult D, et al.
J Clin Microbiol 1989 Oct;27(10):2152–5

The effect of storage of antigen-coated polystyrene microwells on the detection of antibodies against Borrelia burgdorferi by enzyme immunoassay (EIA). Viljanen MK, et al. **J Immunol Methods** 1989 Nov 13;124(1):137–41

[Occurrence of Borrelia antibodies in field hares (Lepus europaeus)] Sýkora J, et al.
Cesk Epidemiol Mikrobiol Imunol 1990 Mar;39(2):120–5 (Eng. Abstr.) **(Cze)**

[The occurrence of antibodies to Borrelia in dogs] Sýkora J, et al. **Vet Med (Praha)** 1990 Apr;35(4):251–6 (Eng. Abstr.) **(Cze)**

[Antibody formation dynamics in a patient with Central Asian tick-borne borreliosis] Kozlov SS.
Med Parazitol (Mosk) 1989 Nov–Dec;(6):26–7 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Primary lateral sclerosis [letter; comment] Fredrikson S, et

al. **Arch Neurol** 1989 Nov;46(11):1168 Comment on: Arch Neurol 1988 Dec;45(12):1304–7.

[Borrelia sp. in the common tick (Ixodes ricinus) from the Prague area] Pokorný P.
Cesk Epidemiol Mikrobiol Imunol 1990 Jan;39(1):32–8 (Eng. Abstr.) **(Cze)**

[Incidence of Borrelia in the common tick (Ixodes ricinus) in the area of the city of Brno] Pokorný P, et al.
Cesk Epidemiol Mikrobiol Imunol 1990 Jun;39(3):166–70 (Eng. Abstr.) **(Cze)**

[Lyme disease in Belgium: presence of the spirochete Borrelia burgdorferi in Ixodes ricinus ticks recovered from the Meuse River region] Bigaignon G, et al.
Rev Med Liege 1989 Aug 1–15;44(15–16):489–93 **(Fre)**

PATHOGENICITY

The severe combined immunodeficiency (scid) mouse. A laboratory model for the analysis of Lyme arthritis and carditis. Schaible UE, et al. **J Exp Med** 1989 Oct 1; 170(4):1427–32

Attenuation of Borrelia anserina by serial passage in liquid medium. Levine JF, et al. **Res Vet Sci** 1990 Jan;48(1):64–9

BORRELIA BURGDORFERI

see related
LYME DISEASE

ANALYSIS

Immunogenic integral membrane proteins of Borrelia burgdorferi are lipoproteins. Brandt ME, et al.
Infect Immun 1990 Apr;58(4):983–91

Biochemical and immunological characterization of the surface proteins of Borrelia burgdorferi. Luft BJ, et al.
Infect Immun 1989 Nov;57(11):3637–45

DRUG EFFECTS

In-vitro and in-vivo susceptibility of Borrelia burgdorferi to azithromycin. Johnson RC, et al.
J Antimicrob Chemother 1990 Jan;25 Suppl A:33–8

GENETICS

Restriction endonuclease analysis of four Borrelia burgdorferi strains. Cinco M, et al. **FEMS Microbiol Immunol** 1989 Dec;1(8–9):511–4

Borrelia burgdorferi contains repeated DNA sequences that are species specific and plasmid associated. Simpson WJ, et al. **Infect Immun** 1990 Apr;58(4):847–53

The Borrelia burgdorferi flagellum-associated 41-kilodalton antigen (flagellin): molecular cloning, expression, and amplification of the gene. Wallich R, et al.
Infect Immun 1990 Jun;58(6):1711–9

DNA and protein analyses of tick-derived isolates of Borrelia burgdorferi from California. LeFebvre RB, et al.
J Clin Microbiol 1990 Apr;28(4):700–7

Detection of Borrelia burgdorferi DNA by the polymerase chain reaction. Nielsen SL, et al. **Mol Cell Probes** 1990 Feb;4(1):73–9

Cloning and sequence analysis of linear plasmid telomeres of the bacterium Borrelia burgdorferi. Hinnebusch J, et al. **Mol Microbiol** 1990 May;4(5):811–20

Cloning and sequencing of the gene encoding the outer surface protein A (OspA) of a European Borrelia burgdorferi isolate. Wallich R, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8864

Linear chromosome of Borrelia burgdorferi. Baril C, et al. **Res Microbiol** 1989 Oct;140(8):507–16 (32 ref.)

Two genomic species in Borrelia burgdorferi. Postic D, et al. **Res Microbiol** 1990 May;141(4):465–75

GROWTH & DEVELOPMENT

Growth kinetics of the Lyme disease spirochete (Borrelia burgdorferi) in vector ticks (Ixodes dammini). Piesman J, et al. **Am J Trop Med Hyg** 1990 Apr;42(4):352–7

Survival of Borrelia burgdorferi in antibiotically treated patients with Lyme borreliosis. Preac-Mursic V, et al.
Infection 1989 Nov–Dec;17(6):355–9

Effects of bovine serum albumin on the ability of Barbour-Stoenner-Kelly medium to detect Borrelia burgdorferi. Callister SM, et al. **J Clin Microbiol** 1990 Feb; 28(2):363–5

Borrelia burgdorferi: survival in experimentally infected human blood processed for transfusion. Johnson SE, et al.
J Infect Dis 1990 Aug;162(2):557–9

Survival of Borrelia burgdorferi in different electroporation buffers. Sambri V, et al. **Microbiologica** 1990 Jan; 13(1):79–83

Survival of Borrelia burgdorferi in human blood stored under blood banking conditions. Nadelman RB, et al.
Transfusion 1990 May;30(4):298–301

[Borrelia burgdorferi-induced pseudolymphoma with pathogen cultivation in an HIV-1 positive patient] Bratzke B, et al. **Hautarzt** 1989 Aug;40(8):504–9 (Eng. Abstr.) **(Ger)**

[Borrelia burgdorferi, clinical aspects, cultivation and identification of the pathogen in erythema migrans in Berlin] Ott A, et al. **Z Hautkr** 1989 Aug 15;64(8):644–8 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Anti-tick antibodies: an epidemiologic tool in Lyme disease research. Schwartz BS, et al. **Am J Epidemiol** 1990 Jul; 132(1):58–66

Molecular mimicry and Lyme borreliosis: a shared antigenic determinant between Borrelia burgdorferi and human tissue. Aberer E, et al. **Ann Neurol** 1989 Dec;26(6):732–7

HTLV-I-associated myelopathy, tropical spastic paraparesis, and Borrelia burgdorferi [letter] Matsumuro K, et al.
Ann Neurol 1990 Mar;27(3):337

Serologic tests for antibody to Borrelia burgdorferi. Another Pandora's Box for medicine? [editorial; comment] Hedberg CW, et al. **Arch Intern Med** 1990 Apr;150(4):732–3 Comment on: Arch Intern Med 1990 Apr;150(4):761–3.

Immunologic reactivity against Borrelia burgdorferi in patients with motor neuron disease. Halperin JJ, et al.
Arch Neurol 1990 May;47(5):586–94

Prevalence of antibody indicating Lyme disease in farmers in Wigtownshire [published erratum appears in BMJ 1989 Nov 11;299(6709):1206] [see comments] Baird AG, et al. **BMJ** 1989 Sep 30;299(6703):836–7 Comment in: BMJ 1989 Nov 11;299(6709):1221.

Prevalence of antibody indicating Lyme disease in farmers in Wigtownshire [letter; comment] Baxter MA, et al.
BMJ 1989 Nov 11;299(6709):1221 Comment on: BMJ 1989 Sep 30;299(6703):836–7.

The relevance of elevated Borrelia burgdorferi titres in localized scleroderma. Garioch JJ, et al.
Clin Exp Dermatol 1989 Nov;14(6):439–41

Comparison of flagellum and sonicate antigens for serological diagnosis of Lyme borreliosis. Karlsson M, et al.
Eur J Clin Microbiol Infect Dis 1990 Mar;9(3):169–77

Prevalence of antibodies to Borrelia burgdorferi in forestry workers and blood donors from the same region in Switzerland. Nadal D, et al.
Eur J Clin Microbiol Infect Dis 1989 Nov;8(11):992–5

Characterization of Borrelia burgdorferi proteins reactive with antibodies in synovial fluid of a patient with Lyme arthritis. Mensi N, et al. **Infect Immun** 1990 Jul;58(7):2404–7

Antibody response in white-footed mice (Peromyscus leucopus) experimentally infected with the Lyme disease spirochete (Borrelia burgdorferi). Schwan TG, et al.
Infect Immun 1989 Nov;57(11):3445–51

Prevalence of Erythema migrans Borreliosis in blood donors. Schmidt R, et al. **Infusionstherapie** 1989 Dec;16(6):248–51

Reactivity of European and American isolates of Borrelia burgdorferi with different monoclonal antibodies by means of a microimmunoblot technique. Stanek G, et al.
Int J Med Microbiol 1990 Apr;272(4):426–36

Serologic survey for Borrelia burgdorferi antibody in horses referred to a mid-Atlantic veterinary teaching hospital. Bernard WV, et al. **J Am Vet Med Assoc** 1990 Apr 15; 196(8):1255–8

Testing for Borrelia burgdorferi [letter] Burgess EC, et al.
J Am Vet Med Assoc 1989 Oct 1;195(7):844, 846

Investigating cross-reactions between Leptospira and Borrelia [letter] Donoghue AR, et al.
J Am Vet Med Assoc 1989 Dec 1;195(11):1460, 1462

Class-specific and polyvalent enzyme-linked immunosorbent assays for detection of antibodies to Borrelia burgdorferi in equids. Magnarelli LA, et al. **J Am Vet Med Assoc** 1989 Nov 15;195(10):1365–8

Tick parasitism and antibodies to Borrelia burgdorferi in cats. Magnarelli LA, et al. **J Am Vet Med Assoc** 1990 Jul 1; 197(1):63–6

Persistence of antibodies to Borrelia burgdorferi in dogs of New York and Connecticut. Magnarelli LA, et al.
J Am Vet Med Assoc 1990 Apr 1;196(7):1064–8

Complement fixation test for the diagnosis of Lyme disease. Artsob H, et al. **J Clin Microbiol** 1990 Mar;28(3):637–8

Comparative evaluation of three products for the detection of Borrelia burgdorferi antibody in human serum. Fister RD, et al. **J Clin Microbiol** 1989 Dec;27(12):2834–7

Interlaboratory and intralaboratory comparisons of indirect immunofluorescence assays for serodiagnosis of Lyme disease. Lane RS, et al. **J Clin Microbiol** 1990 Aug; 28(8):1774–9

The 83-kilodalton antigen of Borrelia burgdorferi which stimulates immunoglobulin M (IgM) and IgG responses in infected hosts is expressed by a chromosomal gene. Lefebvre RB, et al. **J Clin Microbiol** 1990 Jul;28(7):1673–5

Serologic analyses of cottontail rabbits for antibodies to Borrelia burgdorferi. Magnarelli LA, et al.
J Clin Microbiol 1990 May;28(5):890–3

Cross-reactivity of nonspecific treponemal antibody in serologic tests for Lyme disease. Magnarelli LA, et al.
J Clin Microbiol 1990 Jun;28(6):1276–9

Reactivity of human Lyme borreliosis sera with a 39-kilodalton antigen specific to Borrelia burgdorferi. Simpson WJ, et al. **J Clin Microbiol** 1990 Jun;28(6):1329–37

Cross-antigenicity between the major surface proteins (ospA and ospB) and other proteins of Borrelia burgdorferi. Jiang W, et al. **J Immunol** 1990 Jan 1;144(1):284–9

False-positive IgM antibodies to Borrelia burgdorferi in indirect ELISA as a result of IgM rheumatoid factor [letter] Barka NE, et al. **J Infect Dis** 1990 Jun;161(6):1312

Oligoclonal Borrelia burgdorferi-specific IgG antibodies in cerebrospinal fluid in Lyme neuroborreliosis. Hansen K, et al. **J Infect Dis** 1990 Jun;161(6):1194–202

Detection of antibodies in late Lyme disease [letter] Nelson JA, et al. **J Infect Dis** 1990 May;161(5):1034–5

Evaluation of the intrathecal antibody response to Borrelia burgdorferi as a diagnostic test for Lyme neuroborreliosis. Steere AC, et al. **J Infect Dis** 1990 Jun;161(6):1203–9

An update on the serodiagnosis of canine Lyme borreliosis. Greene RT. **J Vet Intern Med** 1990 May–Jun;4(3):167–71 (51 ref.)

Diagnostic tests for Lyme disease [letter] **JAMA** 1990 Aug 8;264(6):692–3

Antibody testing in Lyme disease. A comparison of results in four laboratories [see comments] Schwartz BS, et al. **JAMA** 1989 Dec 22–29;262(24):3431–4 Comment in: JAMA 1989 Dec 22–29;262(24):3464–5.

Antibodies to Borrelia burgdorferi in Guillain-Barré syndrome [letter] López de Munain A, et al. **Lancet** 1990 May 12;335(8698):1168

Borrelia burgdorferi ELISA titres in children with recent mumps meningitis [letter] Millner MM, et al. **Lancet** 1990 Jul 14;336(8707):125–6

Sequestration of antibody to Borrelia burgdorferi in immune complexes in seronegative Lyme disease. Schutzer SE, et al. **Lancet** 1990 Feb 10;335(8685):312–5

Intrasynovial production of oligoclonal specific antibodies in Lyme arthritis [letter] Cruz MH, et al.
N Engl J Med 1990 Jun 28;322(26):1889–90

Immunology of Lyme disease. Sigal LH. **N J Med** 1990 Jul; 87(7):567–71 (57 ref.)

Immunoblot analysis of antibody binding to polypeptides of Borrelia burgdorferi in children with different clinical manifestations of Lyme disease. Nadal D, et al.
Pediatr Res 1989 Oct;26(4):377–82

Monoclonal antibodies specific for the outer surface protein A (OspA) of Borrelia burgdorferi prevent Lyme borreliosis in severe combined immunodeficiency (scid) mice. Schaible UE, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(10):3768–72

Immunologic aspects of Lyme borreliosis. Dattwyler RJ, et al. **Rev Infect Dis** 1989 Sep–Oct;11 Suppl 6:S1494–8 (41 ref.)

Immunodiagnosis of Lyme borreliosis. Dattwyler RJ, et al.
Rheum Dis Clin North Am 1989 Nov;15(4):727–34 (48 ref.)

Laboratory diagnosis of Lyme disease. Magnarelli LA.
Rheum Dis Clin North Am 1989 Nov;15(4):735–45 (72 ref.)

Frequencies of Borrelia burgdorferi-reactive T lymphocytes in Lyme arthritis. Neumann A, et al. **Rheumatol Int** 1989; 9(3–5):237–41

[Borrelia burgdorferi from Ixodes ricinus ticks on Ameland] Jongejan F, et al. **Tijdschr Diergeneeskd** 1989 Dec 1; 114(23):1195–7 (Eng. Abstr.) **(Dut)**

[Negativity of Borrelia burgdorferi serology in scleroderma en plaques] Lecerf V, et al. **Ann Dermatol Venereol** 1989; 116(8):539–42 (Eng. Abstr.) **(Fre)**

[Serodiagnosis of Lyme borreliosis: antibody titer and specificity in the IFT and western blot] Grellner W, et al. **Immun Infekt** 1989 Dec;17(6):189–94 (Eng. Abstr.) **(Ger)**

[Choriocapillaritis (so-called pigment epitheliitis) in Borrelia burgdorferi seroconversion] Bialasiewicz AA, et al.
Klin Monatsbl Augenheilkd 1990 Jun;196(6):481–3 (Eng. Abstr.) **(Ger)**

[The Borrelia titer in ENT diseases] Riechelmann H, et al.
Laryngorhinootologie 1990 Feb;69(2):65–9 (Eng. Abstr.) **(Ger)**

[ELISA for specifying oligoclonal bands of isoelectric focusing of cerebrospinal fluid in patients with neuroborreliosis and multiple sclerosis] Heller J, et al.
Nervenarzt 1990 Apr;61(4):248–9 **(Ger)**

[Clinical value of antibody titers to Borrelia burgdorferi and titer course in neurologic disease pictures] Mauch E, et al. **Nervenarzt** 1990 Feb;61(2):98–104 (Eng. Abstr.) **(Ger)**

[Epidemiology of Borrelia burgdorferi infection. Relation of the prevalence rate on determination by serologic procedures] Mautner VF, et al. **Nervenarzt** 1990 Feb; 61(2):94–7 (Eng. Abstr.) **(Ger)**

[Two cases of facial diplegia with elevated serum antibodies to Borrelia burgdorferi] Matsumuro K, et al.
Rinsho Shinkeigaku 1989 Sep;29(9):1152–5 (Eng. Abstr.) **(Jpn)**

[A case of "neuralgic amyotrophy" with elevated serum antibody titer against Borrelia burgdorferi] Nangaku M, et al. **Rinsho Shinkeigaku** 1990 Jan;30(1):84–7 (Eng. Abstr.) **(Jpn)**

[Encephalomyelitis with elevated serum antibody against Borrelia burgdorferi] Shimizu T, et al.
Rinsho Shinkeigaku 1990 Mar;30(3):314–6 (Eng. Abstr.) **(Jpn)**

[Multiple sclerosis or Lyme disease? a diagnosis problem of exclusion] García-Moncó JC, et al. **Med Clin (Barc)** 1990 May 12;94(18):685–8 (Eng. Abstr.) **(Spa)**

[Determination of antibodies against Borrelia burgdorferi in patients with morphea, lichen sclerosus et atrophicus and erythema chronicum migrans] Pinazo Canales I, et al.
Rev Clin Esp 1990 Apr;186(7):320–3 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Isolation of Borrelia burgdorferi from the blood of seven patients with Lyme disease. Nadelman RB, et al.
Am J Med 1990 Jan;88(1):21–6

Cultivation and characterization of spirochetes from cerebrospinal fluid of patients with Lyme borreliosis. Karlsson M, et al. **J Clin Microbiol** 1990 Mar;28(3):473–9

Detection of Borrelia burgdorferi using the polymerase chain reaction. Malloy DC, et al. **J Clin Microbiol** 1990 Jun; 28(6):1089–93

Detection of Borrelia burgdorferi infection in Ixodes dammini ticks with the polymerase chain reaction. Persing DH, et al. **J Clin Microbiol** 1990 Mar;28(3):566–72

Borrelia burgdorferi and Ixodes dammini prevalent in the greater Philadelphia area [letter] Anderson JF, et al. **J Infect Dis** 1990 Apr;161(4):811–2

Infected ticks feeding on persons in areas endemic for Lyme disease and Rocky Mountain spotted fever [letter] Magnarelli LA, et al. **J Infect Dis** 1989 Oct;160(4):729–30

A specific and sensitive assay for the Lyme disease spirochete Borrelia burgdorferi using the polymerase chain reaction. Rosa PA, et al. **J Infect Dis** 1989 Dec;160(6):1018–29

Intrinsic competence of three ixodid ticks (Acari) as vectors of the Lyme disease spirochete. Mather TN, et al. **J Med Entomol** 1990 Jul;27(4):646–50

Bird-feeding ticks transstadially transmit Borrelia burgdorferi that infect Syrian hamsters. Anderson JF, et al. **J Wildl Dis** 1990 Jan;26(1):1–10

Isolation of Borrelia burgdorferi from the myocardium of a patient with longstanding cardiomyopathy. Stanek G, et al. **N Engl J Med** 1990 Jan 25;322(4):249–52

Epizootiology of Borrelia in Ixodes tick vectors and reservoir hosts. Anderson JF. **Rev Infect Dis** 1989 Sep–Oct;11 Suppl 6:S1451–9 (116 ref.)

Aspects of the diagnosis of Lyme borreliosis. Karlsson M. **Scand J Infect Dis Suppl** 1990;67:1–59

Detection of Borrelia burgdorferi DNA in museum specimens of Ixodes dammini ticks. Persing DH, et al. **Science** 1990 Sep 21;249(4975):1420–3

[Microscopy procedures for direct pathogen detection in Lyme borreliosis] Thess G. **Z Gesamte Hyg** 1989 Oct; 35(10):604–6 (Eng. Abstr.) **(Ger)**

[Diagnosis of Lyme disease] Otani S. **Nippon Rinsho** 1990 Feb;48 Suppl:430–3 **(Jpn)**

[An evaluation of different methods for making vital preparations for the detection of Borrelia in ixodid ticks] Kovalevskiĭ IuV, et al. **Med Parazitol (Mosk)** 1990 Jan–Feb;(1):33–5 (Eng. Abstr.) **(Rus)**

[The infectiousness of Ixodes persulcatus ticks with the causative agents of Lyme disease and tick-borne encephalitis simultaneously] Korenberg EI, et al. **Parazitologiia** 1990 Mar–Apr;24(2):102–5 (Eng. Abstr.) **(Rus)**

[Infestation of ticks with Borrelia burgdorferi and Francisella tularensis in Slovakia] Kmety E, et al. **Bratisl Lek Listy** 1990 Apr;91(4):251–66 (Eng. Abstr.) **(Slo)**

METABOLISM

Isolation, preliminary chemical characterization, and biological activity of Borrelia burgdorferi peptidoglycan. Beck G, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):89–95

Characterization of the heat shock response and identification of heat shock protein antigens of Borrelia burgdorferi. Carreiro MM, et al. **Infect Immun** 1990 Jul;58(7):2186–91

Thermoregulation of protein synthesis in Borrelia burgdorferi. Cluss RG, et al. **Infect Immun** 1990 Apr; 58(4):1038–42

PATHOGENICITY

Susceptibility of laboratory rats to isolates of Borrelia burgdorferi from different geographic areas. Barthold SW, et al. **Am J Trop Med Hyg** 1990 Jun;42(6):596–600

Lyme borreliosis in laboratory animals: effect of host species and in vitro passage of Borrelia burgdorferi. Moody KD, et al. **Am J Trop Med Hyg** 1990 Jul;43(1):87–92

Could Borrelia burgdorferi be a causal agent of sarcoidosis? Jacob F. **Med Hypotheses** 1989 Dec;30(4):241–3

Analysis of supercoiled circular plasmids in infectious and non-infectious Borrelia burgdorferi. Simpson WJ, et al. **Microb Pathog** 1990 Feb;8(2):109–18

PHYSIOLOGY

Borrelia burgdorferi and Babesia microti: efficiency of transmission from reservoirs to vector ticks (Ixodes dammini). Mather TN, et al. **Exp Parasitol** 1990 Jan; 70(1):55–61

Interaction between Borrelia burgdorferi and endothelium in vitro. Szczepanski A, et al. **J Clin Invest** 1990 May; 85(5):1637–47

Borrelia burgdorferi in the central nervous system: experimental and clinical evidence for early invasion. Garcia-Monco JC, et al. **J Infect Dis** 1990 Jun; 161(6):1187–93

Pathophysiology of the Lyme disease spirochete, Borrelia burgdorferi, in ixodid ticks. Burgdorfer W, et al. **Rev Infect Dis** 1989 Sep–Oct;11 Suppl 6:S1442–50 (31 ref.)

Vector/host relationships of the Lyme disease spirochete, Borrelia burgdorferi. Burgdorfer W. **Rheum Dis Clin North Am** 1989 Nov;15(4):775–87 (67 ref.)

[Occurrence of Borrelia burgdorferi in Ixodes ricinus in The Netherlands] Nohlmans MK, et al. **Ned Tijdschr Geneeskd** 1990 Jul 7;134(27):1300–3 (Eng. Abstr.) **(Dut)**

ULTRASTRUCTURE

Characterization of a tick isolate of Borrelia burgdorferi that possesses a major low-molecular-weight surface protein. Kurashige S, et al. **J Clin Microbiol** 1990 Jun;28(6):1362–6

Detection of Borrelia in the synovial tissue from a patient with Lyme borreliosis by electron microscopy. Valešová M, et al. **J Rheumatol** 1989 Nov;16(11):1502–5

Structural features of Borrelia burgdorferi—the Lyme disease spirochete: silver staining for nucleic acids. Garon CF, et al. **Scanning Microsc Suppl** 1989;3:109–15

BORRELIA INFECTIONS

Meningoradiculitis and encephalomyelitis due to Borrelia burgdorferi: a follow-up study of 72 patients over 27 years. Krüger H, et al. **J Neurol** 1989 Sep;236(6):322–8

COMPLICATIONS

Peripheral facial palsy caused by the Borrelia spirochete. Bjerkhoel A, et al. **Acta Otolaryngol (Stockh)** 1989 Nov–Dec;108(5–6):424–30

Progressive facial hemiatrophy (Parry-Romberg syndrome) and borreliosis. Abele DC, et al. **J Am Acad Dermatol** 1990 Mar;22(3):531–3

Borrelia burgdorferi infection and Guillain-Barré syndrome [letter; comment] Mancardi GL, et al. **Lancet** 1989 Oct 21;2(8669):985–6 Comment on: Lancet 1989 Sep 23;2(8665):739.

Stroke in neuroborreliosis. May EF, et al. **Stroke** 1990 Aug; 21(8):1232–5 (14 ref.)

[Comments on the contribution by K.-J. Neumärker et al. Borrelia encephalitis and catatonia in adolescents. Nervenarzt (1989) 60:115–119 (letter)] Ackermann R. **Nervenarzt** 1989 Dec;60(12):765 **(Ger)**

DIAGNOSIS

Neuroborreliosis simulating a progressive stroke. Olsson JE, et al. **Acta Neurol Scand** 1990 May;81(5):471–4

Borrelia infection in children. Naglo AS, et al. **Acta Paediatr Scand** 1989 Nov;78(6):918–22

[Neuroborreliosis—not only Bannwarth's syndrome] Greve E, et al. **Ugeskr Laeger** 1989 Sep 18;151(38):2438–9 (Eng. Abstr.) **(Dan)**

[Antibody formation dynamics in a patient with Central Asian tick-borne borreliosis] Kozlov SS. **Med Parazitol (Mosk)** 1989 Nov–Dec;(6):26–7 (Eng. Abstr.) **(Rus)**

[Fibromyalgia is a syndrome not a diagnosis (letter)] Gamstorp I. **Nord Med** 1990;105(5):143 **(Swe)**

ETIOLOGY

[A case of neuroborreliosis in Västerbotten] Jonsbo F, et al. **Lakartidningen** 1989 Oct 25;86(43):3652 **(Swe)**

HISTORY

[The man behind the syndrome. Arvid Afzelius. The first to recognize the key symptom in tick-transmitted borreliosis] Asbrink E. **Lakartidningen** 1990 Jun 6; 87(23):2046–8 **(Swe)**

IMMUNOLOGY

Reactivity of human Lyme borreliosis sera with a 39-kilodalton antigen specific to Borrelia burgdorferi. Simpson WJ, et al. **J Clin Microbiol** 1990 Jun;28(6):1329–37

PATHOLOGY

Benign lymphocytic infiltration (Jessner-Kanof): another manifestation of borreliosis? Abele DC, et al. **J Am Acad Dermatol** 1989 Oct;21(4 Pt 1):795–7

TRANSMISSION

Epidemiology and clinical similarities of human spirochetal diseases. Schmid GP. **Rev Infect Dis** 1989 Sep–Oct;11 Suppl 6:S1460–9 (41 ref.)

VETERINARY

Serologic survey of selected zoonotic disease agents in black-tailed jack rabbits from western Texas. Henke SE, et al. **J Wildl Dis** 1990 Jan;26(1):107–11

Attenuation of Borrelia anserina by serial passage in liquid medium. Levine JF, et al. **Res Vet Sci** 1990 Jan;48(1):64–9

Sequential changes in tissue D-fructose-1,6-diphosphate aldolase activity in chickens experimentally infected with Borrelia anserina. Tiwari S, et al. **Vet Res Commun** 1989; 13(6):435–40

BOTANICAL INSECTICIDES see **INSECTICIDES, BOTANICAL**

BOTANY

see related
PLANTS

HISTORY

Botany and medicine [editorial] Aronson SM. **R I Med J** 1990 Mar;73(3):92

[The contribution of German professors to pharmaceutical chemistry and phytochemistry in the 19th and 20th centuries. 40. The history of pharmaceutical science] Friedrich C. **Pharmazie** 1989 Oct;44(10):720–2 (Eng. Abstr.) **(Ger)**

BOTRYTIS see **HYPHOMYCETES**

BOTTLE FEEDING

Determinants of milk flow through nipple units. Role of hole size and nipple thickness. Mathew OP. **Am J Dis Child** 1990 Feb;144(2):222–4

Early diet of preterm infants and development of allergic or atopic disease: randomised prospective study. Lucas A, et al. **BMJ** 1990 Mar 31;300(6728):837–40

Free samples of baby foods and feeding bottles [letter] Mathur GP. **Indian Pediatr** 1989 Aug;26(8):847

Modulation by human milk of IgG subclass response to hepatitis B vaccine in infants. Azzari C, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr;10(3):310–5

The accuracy of test weighing for preterm infants. Meier PP, et al. **J Pediatr Gastroenterol Nutr** 1990 Jan;10(1):62–5

Routine L-ascorbic acid supplementation does not alter iron, copper, and zinc balance in low-birth-weight infants fed a cows'-milk formula. Stack T, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr;10(3):351–6

Effect of the feeding practices on the establishment of bacterial interactions in the intestine of the newborn delivered by cesarean section. Bezirtzoglou E, et al. **J Perinat Med** 1990;18(2):139–43

Hazards of scoop measurements in infant feeding. Jeffs SG. **J R Coll Gen Pract** 1989 Mar;39(320):113

Breast-feeding problems in the first week postpartum. Kearney MH, et al. **Nurs Res** 1990 Mar–Apr;39(2):90–5

Infant feeding redux. Cone TE Jr. **Pediatrics** 1990 Sep; 86(3):473–4

Do the benefits of breastfeeding outweigh the risk of postnatal transmission of HIV via breastmilk? Kennedy KI, et al. **Trop Doct** 1990 Jan;20(1):25–9

[Methods of feeding and increase in the body weight of neonates] Guo XJ. **Chung Hua Hu Li Tsa Chih** 1990 Jan; 25(1):5–6 **(Chi)**

[Fecal sIgS and lysozyme excretion in breast feeding and formula feeding] Eschenburg G, et al. **Kinderarztl Prax** 1990 May;58(5):255–60 (Eng. Abstr.) **(Ger)**

[A comparative study of breast feeding and artificial infant feeding by ultrasonic scanning] Finadeeva EV, et al. **Stomatologiia (Mosk)** 1990 Mar–Apr;69(2):70–3 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Severity of nursing-bottle syndrome and feeding patterns in Kuwait. Babeely K, et al. **Community Dent Oral Epidemiol** 1989 Oct;17(5):237–9

Preventing baby bottle tooth decay in American Indian and Alaska native communities: a model for planning. Bruerd B, et al. **Public Health Rep** 1989 Nov–Dec;104(6):631–40

[Carotene jaundice in infants with "sugar nursing bottle syndrome"] Wetzel WE, et al. **Monatsschr Kinderheilkd** 1989 Oct;137(10):659–61 (11 ref.) (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

Milk flow and nipple hole size [letter] Schindler AM. **Am J Dis Child** 1990 Oct;144(10):1074–5

TRENDS

Determinants for breast feeding and bottle feeding in Botswana. Omondi LO, et al. **J Trop Pediatr** 1990 Feb; 36(1):28–33

Trends in infant feeding in Port Moresby. Primhak RA, et al. **P N G Med J** 1989 Jun;32(2):113–6

BOTULIN see **BOTULINUM TOXINS**

BOTULINUM TOXINS

C. botulinum neurotoxin types A and E: isolated light chain breaks down into two fragments. Comparison of their amino acid sequences with tetanus neurotoxin. DasGupta BR, et al. **Biochimie** 1989 Nov–Dec;71(11–12):1193–200

Botulinum neurotoxin type E fragmented with endoproteinase Lys-C reveals the site trypsin nicks and homology with tetanus neurotoxin. Giménez JA, et al. **Biochimie** 1990 Apr;72(4):213–7

Changes in the molecular topography of the light and heavy chains of type A botulinum neurotoxin following their separation. Singh BR, et al. **Biophys Chem** 1989 Nov; 34(3):259–67

The complete sequence of botulinum neurotoxin type A and comparison with other clostridial neurotoxins. Binz T, et al. **J Biol Chem** 1990 Jun 5;265(16):9153–8

Modification of carboxyl groups in botulinum neurotoxin types A and E. Woody MA, et al. **Toxicon** 1989; 27(10):1143–50

[Structure and function of botulinum toxin] Shuto B, et al. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(11):1342–50 (47 ref.) **(Jpn)**

ADMINISTRATION & DOSAGE

Characterization of the actions of botulinum neurotoxin type E at the rat neuromuscular junction. Molgó J, et al. **Acta Physiol Scand** 1989 Dec;137(4):497–501

Treatment of bruxism with botulinum toxin injections [letter] Van Zandijcke M, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):530

Treatment of blepharospasm with botulinum toxin. Kennedy

RH, et al. **Mayo Clin Proc** 1989 Sep;64(9):1085–90

Botulinum toxin injections for cervical dystonia. Jankovic J, et al. **Neurology** 1990 Feb;40(2):277–80

[Essential blepharospasm and botulinum toxin. An electrophysiologic study] Laskawi R, et al. **HNO** 1990 Jan; 38(1):29–32 (Eng. Abstr.) **(Ger)**

[Use of botulinum toxin in ophthalmology] Huber A. **Ther Umsch** 1990 Apr;47(4):320–8 (12 ref.) (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Anterior segment ischemia following vertical muscle transposition and botulinum toxin injection. Keech RV, et al. **Arch Ophthalmol** 1990 Feb;108(2):176

Acute angle-closure glaucoma following botulinum toxin injection for blepharospasm. Corridan P, et al. **Br J Ophthalmol** 1990 May;74(5):309–10

Polyradiculoneuritis following botulinum toxin therapy. Haug BA, et al. **J Neurol** 1990 Feb;237(1):62–3

Brachial plexopathy after botulinum toxin injections. Glanzman RL, et al. **Neurology** 1990 Jul;40(7):1143

Side effects of the use of botulinum toxin for treatment of benign essential blepharospasm and hemifacial spasm. Kalra HK, et al. **Ophthalmic Surg** 1990 May;21(5):335–8

ANALYSIS

Clostridium botulinum toxins. Hauschild AH. **Int J Food Microbiol** 1990 Mar;10(2):113–24 (99 ref.)

Botulinic toxin detection by counterimmunoelectrophoresis. Nuñez L, et al. **Int J Med Microbiol** 1990 Mar;272(3):290–3

An international outbreak of type E botulism due to uneviscerated fish. Telzak EE, et al. **J Infect Dis** 1990 Feb; 161(2):340–2

BIOSYNTHESIS

Growth and toxigenesis of C. botulinum type E in fishes packaged under modified atmospheres. Baker DA, et al. **Int J Food Microbiol** 1990 May;10(3–4):269–89

GENETICS

The complete amino acid sequence of the Clostridium botulinum type A neurotoxin, deduced by nucleotide sequence analysis of the encoding gene. Thompson DE, et al. **Eur J Biochem** 1990 Apr 20;189(1):73–81

Nucleotide sequence of Clostridium botulinum C1 neurotoxin. Hauser D, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4924

IMMUNOLOGY

Monoclonal antibody to type F Clostridium botulinum toxin. Ferreira JL, et al. **Appl Environ Microbiol** 1990 Mar; 56(3):808–11

ISOLATION & PURIFICATION

Botulinum type F neurotoxin. Large-scale purification and characterization of its binding to rat cerebrocortical synaptosomes. Wadsworth JD, et al. **Biochem J** 1990 May 15;268(1):123–8

Immunochemical identification of the ADP-ribosyltransferase in botulinum C1 neurotoxin as C3 exoenzyme-like molecule. Morii N, et al. **J Biochem (Tokyo)** 1990 May;107(5):769–75

Separation of toxic activity and ADP-ribosylation activity of botulinum neurotoxin D. Moriishi K, et al. **J Biol Chem** 1990 Sep 25;265(27):16614–6

[Type D and A Clostridium botulinum in necropsy samples from bovines with "mal de Aguapey"] Fernández RA, et al. **Rev Argent Microbiol** 1989 Apr–Jun;21(2):47–53 (Eng. Abstr.) **(Spa)**

METABOLISM

Sodium lactate delays toxin production by Clostridium botulinum in cook-in-bag turkey products. Maas MR, et al. **Appl Environ Microbiol** 1989 Sep;55(9):2226–9

Purification and characterization from bovine brain membranes of a GTP-binding protein with a Mr of 21,000, ADP-ribosylated by an ADP-ribosyltransferase contaminated in botulinum toxin type C1—identification as the rhoA gene product. Hoshijima M, et al. **Brain Res Mol Brain Res** 1990 Jan;7(1):9–16

Purification and characterization of a protease from Clostridium botulinum type A that nicks single-chain type A botulinum neurotoxin into the di-chain form. Dekleva ML, et al. **J Bacteriol** 1990 May;172(5):2498–503

ADP-ribosylation of nonmuscle actin by component I of botulinum C2 toxin inactivates the ability to interact with unmodified actin. Ohishi I, et al. **J Biochem (Tokyo)** 1990 Mar;107(3):420–5

ADP-ribosylation of actin by clostridial toxins. Aktories K, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1385–7 (37 ref.)

Botulinum ADP-ribosyltransferase C3: a new tool to study low molecular weight GTP-binding proteins. Aktories K, et al. **Trends Pharmacol Sci** 1989 Oct;10(10):415–8 (36 ref.)

PHARMACOLOGY

Hemagglutinating and binding properties of botulinum C2 toxin. Sugii S, et al. **Biochim Biophys Acta** 1990 May 16; 1034(2):176–9

Effect of botulinum toxin on extraocular muscle proprioception. Manni E, et al. **Doc Ophthalmol** 1989 Jun; 72(2):189–98

Ca2(+)-dependent noradrenaline release from permeabilised PC12 cells is blocked by botulinum neurotoxin A or its light chain. McInnes C, et al. **FEBS Lett** 1990 Feb 26; 261(2):323–6

The light chain but not the heavy chain of botulinum A toxin inhibits exocytosis from permeabilized adrenal chromaffin cells. Stecher B, et al. **FEBS Lett** 1989 Sep 25;255(2):391–4

Motor nerve sprouting in human orbicularis muscle after botulinum A injection. Holds JB, et al. **Invest Ophthalmol Vis Sci** 1990 May;31(5):964–7

Multiple domains of botulinum neurotoxin contribute to its inhibition of transmitter release in Aplysia neurons. Poulain B, et al. **J Biol Chem** 1989 Dec 25;264(36):21928–33

Early terminal and nodal sprouting of motor axons after botulinum toxin. Pamphlett R. **J Neurol Sci** 1989 Sep; 92(2–3):181–92

A study of synchronization of quantal transmitter release from mammalian motor endings by the use of botulinal toxins type A and D. Molgó J, et al. **J Physiol (Lond)** 1989 Apr;411:195–205

Response of the chick ciliary ganglion–iris neuromuscular preparation to botulinum neurotoxin. Lomneth R, et al. **Neurosci Lett** 1990 May 31;113(2):211–6

An antibody to neural cell adhesion molecule impairs motor nerve terminal sprouting in a mouse muscle locally paralysed with botulinum toxin. Booth CM, et al. **Neuroscience** 1990;35(1):85–91

Increase in reactive cholesterol in the presynaptic membrane of depolarized Torpedo synaptosomes: blockade by botulinum toxin type A. Egea G, et al. **Neuroscience** 1989; 31(2):521–7

Botulinal neurotoxins as tools in studies of synaptic mechanisms. Thesleff S. **Q J Exp Physiol** 1989 Dec; 74(7):1003–17 (72 ref.)

Botulinum C2 toxin treatment increases the G-actin pool in intact chicken cells: a model for the cytopathic action of actin-ADP-ribosylating toxins. Aktories K, et al. **Toxicon** 1989;27(9):989–93

POISONING

[Suppurative meningitis in a patient with severe botulinum toxin type B poisoning] Halota W, et al. **Wiad Lek** 1990 Apr 1;43(7):297–9 (Eng. Abstr.) **(Pol)**

STANDARDS

Dose standardisation of botulinum toxin [letter] Schantz EJ, et al. **Lancet** 1990 Feb 17;335(8686):421

THERAPEUTIC USE

Long-term treatment of involuntary facial spasms using botulinum toxin. Ruusuvaara P, et al. **Acta Ophthalmol (Copenh)** 1990 Jun;68(3):331–8

Botulinum toxin injections in the treatment of seventh nerve misdirection. Putterman AM. **Am J Ophthalmol** 1990 Aug 15;110(2):205–6

Botulinum treatment of strabismus following retinal detachment surgery. Scott AB. **Arch Ophthalmol** 1990 Apr; 108(4):509–10

Treatment of detrusor-sphincter dyssynergia with botulinum A toxin: a double-blind study. Dykstra DD, et al. **Arch Phys Med Rehabil** 1990 Jan;71(1):24–6

Botulinum toxin [editorial] Elston JS. **Aust N Z J Ophthalmol** 1989 Aug;17(3):209–10

Botulinum toxin [letter] Lee J. **Aust N Z J Ophthalmol** 1989 Aug;17(3):323–4

Early and late botulinum toxin treatment of acute sixth nerve palsy. Murray AD. **Aust N Z J Ophthalmol** 1989 Aug; 17(3):239–45

Botulinum toxin in treating spasticity. Das TK, et al. **Br J Clin Pract** 1989 Nov;43(11):401–3

Responsiveness of idiopathic spasmodic torticollis to botulinum A toxin injection. A critical evaluation of five cases. Maurri S, et al. **Clin Neurol Neurosurg** 1990; 92(2):165–8

The role of botulinum toxin in the management of sixth nerve palsy. Fitzsimons R, et al. **Eye** 1989;3 (Pt 4):391–400

Facial dystonia: clinical features, prognosis and pharmacology in 31 patients. Defazio G, et al. **Ital J Neurol Sci** 1989 Dec;10(6):553–60

Botulinum A toxin treatment for eyelid spasm, spasmodic torticollis and apraxia of eyelid opening. Defazio G, et al. **Ital J Neurol Sci** 1990 Jun;11(3):275–80

An investigation of the clinical use of botulinum toxin A as a postoperative adjustment procedure in the therapy of strabismus. McNeer KW. **J Pediatr Ophthalmol Strabismus** 1990 Jan–Feb;27(1):3–9

Treatment of idiopathic spasmodic torticollis with botulinum-A toxin: a pilot study of 19 patients. Lorentz IT, et al. **Med J Aust** 1990 May 21;152(10):528–30

Neurological application of botulinum toxin. Kumar P, et al. **Mo Med** 1989 Dec;86(12):815–7 (27 ref.)

Adductor laryngeal dystonia (spastic dysphonia): treatment with local injections of botulinum toxin (Botox). Brin MF, et al. **Mov Disord** 1989;4(4):287–96

Botulinum toxin therapy in hemifacial spasm: clinical and electrophysiologic studies. Geller BD, et al. **Muscle Nerve** 1989 Sep;12(9):716–22

Assessment: the clinical usefulness of botulinum toxin-A in treating neurologic disorders. Report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. **Neurology** 1990 Sep; 40(9):1332–6 (62 ref.)

Double-blind, placebo-controlled trial of botulinum toxin injections for the treatment of spasmodic torticollis. Greene P, et al. **Neurology** 1990 Aug;40(8):1213–8

Botulinum toxin in torticollis [letter; comment] Stell R, et al. **Neurology** 1989 Oct;39(10):1403–4 Comment on: Neurology 1989 Jan;39(1):80–4.

Spasmodic dysphonia: botulinum toxin injection after recurrent nerve surgery. Ludlow CL, et al. **Otolaryngol Head Neck Surg** 1990 Feb;102(2):122–31

Blepharospasm and botulinum toxin [letter] Gruber I. **Plast Reconstr Surg** 1989 Dec;84(6):1006

Effect of treatment with botulinum toxin on spasticity. Das TK, et al. **Postgrad Med J** 1989 Apr;65(762):208–10

Botulism. Cherington M. **Semin Neurol** 1990 Mar;10(1):27–31 (36 ref.)

Rabbit syndrome treated with botulin [letter] Truong DD, et al. **South Med J** 1990 Jul;83(7):854–5

Botulinum treatment of strabismus in children. Scott AB, et al. **Trans Am Ophthalmol Soc** 1990;87:174–80; discussion 180–4

[The use of botulinum toxin in endocrine exophthalmos] Roggenkämper P. **Bull Soc Belge Ophtalmol** 1988; 229:97–101 (Eng. Abstr.) **(Fre)**

[Treatment of spasmodic torticollis by local injections of botulinum toxin] Jedynak CP, et al. **Rev Neurol (Paris)** 1990;146(6–7):440–3 (Eng. Abstr.) **(Fre)**

[The treatment of blepharospasm with botulinum toxin A] Költringer P, et al. **Wien Klin Wochenschr** 1990 Jul 13; 102(14):403–7 (Eng. Abstr.) **(Ger)**

[Use of botulinum toxin in ophthalmology] Nemet P, et al. **Harefuah** 1989 Jul;117(1–2):9–10 (Eng. Abstr.) **(Heb)**

[Pharmacologic, surgical and infiltration of botulin toxin treatment in blepharospasm] Grandas F, et al. **Neurologia** 1989 Jul–Aug;4(6):194–9 (Eng. Abstr.) **(Spa)**

[Botulinum toxin in dystonia] Martí MJ, et al. **Neurologia** 1988 Mar–Apr;3(2):63–7 (43 ref.) **(Spa)**

TOXICITY

Comparison of the effects of botulinum toxin in adult and neonatal rats: neuromuscular blockade and toxicity. Bambrick LL, et al. **Can J Physiol Pharmacol** 1989 Aug; 67(8):879–82

Inhibition of transmitter release by botulinum neurotoxin A. Contribution of various fragments to the intoxication process. Poulain B, et al. **Eur J Biochem** 1989 Oct 20; 185(1):197–203

The binary toxin produced by Clostridium botulinum enters cells by receptor-mediated endocytosis to exert its pharmacologic effects. Simpson LI. **J Pharmacol Exp Ther** 1989 Dec;251(3):1223–8

Inhibition of the contraction of the isolated longitudinal muscle of the guinea-pig ileum by botulinum C2 toxin: evidence for a role of G/F-actin transition in smooth muscle contraction. Mauss S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Sep; 340(3):345–51

[Effect of botulinum toxin on the immune response] Morgunov IN, et al. **Mikrobiol Zh** 1985 Jul–Aug;47(4):76–9 (Eng. Abstr.) **(Rus)**

BOTULISM

see related
BOTULINUM TOXINS

Botulism: a potentially common problem. Shneerson JM. **Thorax** 1989 Nov;44(11):901–2 (12 ref.)

COMPLICATIONS

Tonic pupils as a result of botulism. Friedman DI, et al. **Am J Ophthalmol** 1990 Feb 15;109(2):236–7

Central nervous system involvement in infantile botulism [letter] Jones S, et al. **Lancet** 1990 Jan 27;335(8683):228

Improvement in bulbar weakness with guanoxan in type B botulism [letter] Neal KR, et al. **Lancet** 1990 May 26; 335(8700):1286–7

[Suppurative meningitis in a patient with severe botulinum toxin type B poisoning] Halota W, et al. **Wiad Lek** 1990 Apr 1;43(7):297–9 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

Infant botulism: case report and clinical update. Jagoda A, et al. **Am J Emerg Med** 1990 Jul;8(4):318–20

Histological examination of the central nervous system in the diagnosis of botulism. France MP. **J Comp Pathol** 1989 Jul;101(1):101–8

Botulism. Cherington M. **Semin Neurol** 1990 Mar;10(1):27–31 (36 ref.)

[A patient with botulism caused by Clostridium botulinum type B] Postma TJ, et al. **Ned Tijdschr Geneeskd** 1989 Oct 28;133(43):2137–40 (Eng. Abstr.) **(Dut)**

EPIDEMIOLOGY

Human botulism. Critchley EM, et al. **Br J Hosp Med** 1990 Apr;43(4):290–2

Botulism in Canada—summary for 1989. Dodds K, et al. **Can Dis Wkly Rep** 1990 May 12;16(19):89–90 **(Eng, Fre)**

Communicable disease report. April to June 1989. The PHLS

Communicable Disease Surveillance Centre. **Community Med** 1989 Nov;11(4):376–83

Foodborne botulism: an international outbreak. Slater PE, et al. **Int J Epidemiol** 1989 Sep;18(3):693–6

Botulism [published erratum appears in J Infect 1990 May;20(3):273] Dunbar EM. **J Infect** 1990 Jan;20(1):1–3 (8 ref.)

An international outbreak of type E botulism due to unevisceratied fish. Telzak EE, et al. **J Infect Dis** 1990 Feb; 161(2):340–2

Outbreak of botulism in north west England and Wales, June, 1989. Critchley EM, et al. **Lancet** 1989 Oct 7; 2(8667):849–53

ETIOLOGY

An outbreak of foodborne botulism associated with contaminated hazelnut yoghurt. O'Mahony M, et al. **Epidemiol Infect** 1990 Jun;104(3):389–95

Repeated type E botulism in an Alaskan Eskimo [letter] Beller M, et al. **N Engl J Med** 1990 Mar 22;322(12):855

MICROBIOLOGY

Botulism: a potentially common problem [letter] Slater PE. **Thorax** 1990 May;45(5):424

NURSING

Botulism: north to Alaska. Lancaster MJ. **Am J Nurs** 1990 Jan;90(1):60–2

PATHOLOGY

[Morphologic changes of the cranial nerves, spinal cord ganglia and roots in botulism] Parkhomenko IuG, et al. **Arkh Patol** 1989;51(10):45–50 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Recovery of the ventilatory and upper airway muscles and exercise performance after type A botulism. Wilcox PG, et al. **Chest** 1990 Sep;98(3):620–6

THERAPY

Slow recovery from severe foodborne botulism [letter] Colebatch JG, et al. **Lancet** 1989 Nov 18;2(8673):1216–7

[Type E botulism. Weaning from the respirator] Gozal Y, et al. **Cah Anesthesiol** 1990 Jan;38(1):35–7 **(Fre)**

VETERINARY

Rare form of botulism in horses reported [news] [published erratum appears in J Am Vet Med Assoc 1990 Mar 15;196(6):849] **J Am Vet Med Assoc** 1990 Feb 15;196(4):529

Suspected botulism in cattle associated with poultry litter. Hogg RA, et al. **Vet Rec** 1990 May 12;126(19):476–9

An outbreak of botulism in captive hamadryas baboons (Papio hamadryas). Lewis JC, et al. **Vet Rec** 1990 Mar 3;126(9):216–7

First case of type A botulism in zebu (Bos indicus). Schocken-Iturrino RP, et al. **Vet Rec** 1990 Mar 3; 126(9):217–8

[3 cases of Clostridium botulinum type C intoxication in the dog] Tjalsma EJ. **Tijdschr Diergeneeskd** 1990 Jun 1; 115(11):518–21 (Eng. Abstr.) **(Dut)**

[Type D and A Clostridium botulinum in necropsy samples from bovines with "mal de Aguapey"] Fernández RA, et al. **Rev Argent Microbiol** 1989 Apr–Jun;21(2):47–53 (Eng. Abstr.) **(Spa)**

BOUILLAUD'S DISEASE see **RHEUMATIC FEVER**

BOURNEVILLE'S DISEASE see **TUBEROUS SCLEROSIS**

BOUTONNEUSE FEVER

BLOOD

[Predictive value of neopterin in boutonneuse fever] Soriano V, et al. **Rev Clin Esp** 1989 Nov;185(8):396–8 (Eng. Abstr.) **(Spa)**

COMPLICATIONS

Subacute progressive sensory ataxic neuronopathy after Rickettsia conorii infection. Verbiest HB, et al. **Clin Neurol Neurosurg** 1990;92(1):81–5

Muscular damage in Mediterranean spotted fever [letter] Bella F, et al. **Eur J Clin Microbiol Infect Dis** 1989 Oct; 8(10):928–9

Transient histiocytic hemophagocytosis and pancytopenia in Mediterranean spotted fever. Berner Y, et al. **Isr J Med Sci** 1989 Nov;25(11):660–1

Acute renal failure and Mediterranean spotted fever. Donati D, et al. **Nephron** 1990;54(1):102–3

[Subacute meningoencephalitis caused by Rickettsia conorii (letter)] Molins A, et al. **Neurologia** 1988 May–Jun; 3(3):125–6 **(Spa)**

[Boutonneuse fever with lung involvement (letter)] Fernández Ballesteros A, et al. **Rev Clin Esp** 1990 Apr; 186(7):361–2 **(Spa)**

[Mixed cryoglobulinemia secondary to Mediterranean boutonneuse fever] Pérez Calvo JI, et al. **Rev Clin Esp** 1990 Feb;186(2):82–3 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Mediterranean spotted fever in children returning from France. Treadwell TL, et al. **Am J Dis Child** 1990 Sep; 144(9):1037–8

African tick typhus (Mediterranean spotted fever) in Australian travellers. Grove DI. **Australas J Dermatol** 1988; 29(3):141–5

Laboratory diagnosis of boutonneuse fever by enzyme-linked immunosorbent assay. Mansueto S, et al. **Trans R Soc Trop Med Hyg** 1989 Nov–Dec;83(6):855–7

[African tick fever: fever, exanthema and skin ulcer] Kager PA. **Ned Tijdschr Geneeskd** 1989 Sep 30;133(39):1930–1 **(Dut)**

DRUG THERAPY

[Mediterranean boutonneuse fever. Effects of the duration of the treatment using doxycycline (letter)] Yébenes Díaz G, et al. **Rev Clin Esp** 1990 Apr;186(6):309–10 **(Spa)**

EPIDEMIOLOGY

Mediterranean spotted fever in Salamanca, Spain. Epidemiological study in patients and serosurvey in animals and healthy human population. Herrero-Herrero JI, et al. **Acta Trop (Basel)** 1989 Oct;46(5–6):335–50

Mediterranean spotted fever in Lombardy: an epidemiological, clinical and laboratory study of 76 cases in the years 1977–1986. Tinelli M, et al. **Eur J Epidemiol** 1989 Dec;5(4):516–20

Seroprevalence of murine typhus and fièvre boutonneuse in certain human populations in Egypt. Botros BA, et al. **J Trop Med Hyg** 1989 Dec;92(6):373–8

PHYSIOPATHOLOGY

New trends in Mediterranean spotted fever. Segura-Porta F, et al. **Eur J Epidemiol** 1989 Dec;5(4):438–43 (41 ref.)

PREVENTION & CONTROL

A recombinant Rickettsia conorii vaccine protects guinea pigs from experimental boutonneuse fever and Rocky Mountain spotted fever. Vishwanath S, et al. **Infect Immun** 1990 Mar;58(3):646–53

VETERINARY

Seroprevalence of Rickettsia typhi and Rickettsia conorii infection among rodents and dogs in Egypt. Soliman AK, et al. **J Trop Med Hyg** 1989 Oct;92(5):345–9

BOVINE DIARRHEA VIRUS see under **PESTIVIRUSES**

BOVINE HERPESVIRUS 1 see **INFECTIOUS BOVINE RHINOTRACHEITIS VIRUS**

BOVINE KUNITZ PANCREATIC TRYPSIN INHIBITOR see **APROTININ**

BOVINE LEUKEMIA VIRUS see under **RETROVIRIDAE**

BOVINE PAPILLOMATOSIS VIRUS see under **PAPILLOMAVIRUSES**

BOVINE ULCERATIVE MAMMILLITIS VIRUS see under **HERPESVIRIDAE**

BOVINE VIRUS DIARRHEA-MUCOSAL DISEASE see under **CATTLE DISEASES**

BOWEN'S DISEASE see under **CARCINOMA, SQUAMOUS CELL**

BOXING

Boxing in the Army [letter] Wright DH. **J R Army Med Corps** 1990 Jun;136(2):123

Electromyographic activity of a muscular group in movements specific to boxing. Valentino B, et al. **J Sports Med Phys Fitness** 1990 Jun;30(2):160–2

The borrowed imagery of boxing [letter] Enzenauer RW. **JAMA** 1990 Sep 26;264(12):1531–2

Medicine vs. boxing. Havener WH. **Ohio Med** 1990 Jun; 86(6):427

[Cerebral trauma in boxing] Perez G. **Ann Chir** 1989; 43(9):703–6 **(Fre)**

[Two cases of spontaneous pneumomediastinum due to Xiao-lin Temple boxing vocal exercise] Yoneyama H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Jan; 28(1):151–5 (Eng. Abstr.) **(Jpn)**

INJURIES

Vestibular abnormalities in encephalopathia pugilistica. Krejčová H, et al. **Acta Otolaryngol Suppl (Stockh)** 1989; 468:209–10

Amateur boxing in Denmark. The effect of some preventive measures. Schmidt-Olsen S, et al. **Am J Sports Med** 1990 Jan–Feb;18(1):98–100

The occult aftermath of boxing. Roberts GW, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):373–8

Boxing in the army [letter; comment] **JAMA** 1989 Oct 20; 262(15):2089–90 Comment on: JAMA 1989 Mar 10;261(10):1463–6.

Neurological injuries in boxers: the use of tests [letter] Charnas L, et al. **JAMA** 1990 Sep 26;264(12):1532–3

Computed tomography and magnetic resonance imaging comparisons in boxers. Jordan BD, et al. **JAMA** 1990 Mar 23–30;263(12):1670–4

Boxing-related injuries in the U.S. Army [letter] de Rougemont RR. **Milit Med** 1989 Nov;154(11):581

Boxer's encephalopathy [letter; comment] Jordan BD. **Neurology** 1990 Apr;40(4):727 Comment on: Neurology 1989 Jul;39(7):991–2.

[Dislocation of the thumb saddle joint as a rare sports injury] Sim E. **Sportverletz Sportschaden** 1990 Jun;4(2):92–5 (Eng. Abstr.) **(Ger)**

[Sports medicine responsibilities in the boxing ring] Ulbrich P, et al. **Z Arztl Fortbild (Jena)** 1990;84(12):597–600 (13 ref.) **(Ger)**

[Boxing and the brain] García-Albea E. **Neurologia** 1990 Apr; 5(4):113–6 **(Spa)**

[Life-threatening intracranial hemorrhage caused by boxing and assaults] Nordström CH, et al. **Lakartidningen** 1990 Jan 31;87(5):301, 303–4 **(Swe)**

[Protection against blows must be put in the boxers' gloves!] Silfverakiöld B. **Lakartidningen** 1990 Mar 28;87(13):1036 **(Swe)**

BP VIRUSES see **ADENOVIRUSES, HUMAN**

BRACES

Brace effects on the unstable knee in 21 cases. A roentgen stereophotogrammetric comparison of three designs. Jonsson H, et al. **Acta Orthop Scand** 1990 Aug;61(4):313–8

Prognosis of brace-treated scoliosis. Comparison of the Boston and Milwaukee methods in 244 girls. Montgomery F, et al. **Acta Orthop Scand** 1989 Aug;60(4):383–5

Early knee mobilization after osteotomy for gonarthrosis. Odenbring S, et al. **Acta Orthop Scand** 1989 Dec; 60(6):699–702

Brace with a lateral pad for patellar pain. 2-year follow-up of 25 patients. Reikerås O. **Acta Orthop Scand** 1990 Aug; 61(4):319–20

Compatibility of cervical spine braces with MR imaging: a study of nine nonferrous devices. Clayman DA, et al. **AJNR** 1990 Mar–Apr;11(2):385–90

The effects on tooth position and maxillofacial vertical growth during treatment of scoliosis with the Milwaukee brace. Alexander RG. **Am J Orthod** 1966 Mar;52(3):161–89

The efficacy of a prophylactic knee brace to reduce knee injuries in football. A prospective, randomized study at West Point. Sitler M, et al. **Am J Sports Med** 1990 May–Jun;18(3):310–5

A reappraisal of braces and other mechanical aids in patients with spinal cord dysfunction: results of a follow-up study. Kaplan LI, et al. **Arch Phys Med Rehabil** 1966 Jul; 47(7):393–405

Energy cost of paraplegic locomotion using the ParaWalker—electrical stimulation "hybrid" orthosis. Nene AV, et al. **Arch Phys Med Rehabil** 1990 Feb;71(2):116–20

Conservative versus operative treatment of displaced noncomminuted tibial shaft fractures. A retrospective comparative study. den Outer AJ, et al. **Clin Orthop** 1990 Mar;(252):231–7

Back to basics with ProFlex. de Ruiter M. **Ergonomics** 1990 Mar;33(3):383–5

Non-operative management of acute grade III medial collateral ligament injury of the knee: a prospective study. Mok DW, et al. **Injury** 1989 Sep;20(5):277–80

Comparative study of functional bracing and plaster cast treatment of stable lateral malleolar fractures. Stuart PR, et al. **Injury** 1989 Nov;20(6):323–6

Maguelone plaster braces for the reduction of scoliotic curves: methods and results. Becchetti S, et al. **Ital J Orthop Traumatol** 1990 Mar;16(1):53–60

Management of diabetic plantar ulcers with a walking brace. A clinical trial. Black JR. **J Am Podiatr Med Assoc** 1990 Mar;80(3):156–7

Functional bracing for comminuted extra-articular fractures of the distal third of the humerus [published erratum appears in J Bone Joint Surg [Br] 1990 Jul;72(4):752] Sarmiento A, et al. **J Bone Joint Surg [Br]** 1990 Mar; 72(2):283–7

Cervical spine injuries in children. Evans DL, et al. **J Pediatr Orthop** 1989 Sep–Oct;9(5):563–8

Long-term follow-up of patients with adolescent idiopathic scoliosis treated conservatively: an analysis of the clinical value of progression. Montgomery F, et al. **J Pediatr Orthop** 1990 Jan–Feb;10(1):48–52

Halo application in the infant. Mubarak SJ, et al. **J Pediatr Orthop** 1989 Sep–Oct;9(5):612–4

Curve progression after treatment with the Wilmington brace for idiopathic scoliosis. Piazza MR, et al. **J Pediatr Orthop** 1990 Jan–Feb;10(1):39–43

Bracing those knees: how effective? [news] Cowart VS. **JAMA** 1990 Jan 12;263(2):201

American Academy of Pediatrics Committee on Sports Medicine: Knee brace use by athletes. **Pediatrics** 1990 Feb; 85(2):228

Shock absorbing material on the shoes of long leg braces for paraplegic walking. Bierling-Sørensen F, et al. **Prosthet Orthot Int** 1990 Apr;14(1):27–32

Lightweight modular orthosis. Engen T. **Prosthet Orthot Int** 1989 Dec;13(3):125–9

A single case study: myoelectrically controlled exoskeletal mobilizer for amyotrophic lateral sclerosis (ALS) patients. Sauter WF, et al. **Prosthet Orthot Int** 1989 Dec;13(3):145–8

Pulmonary function and gas exchange at rest and exercise in adolescent girls with mild idiopathic scoliosis during treatment with Boston thoracic brace. Refsum HE, et al. **Spine** 1990 May;15(5):420–3

The knee brace controversy. Montgomery DL, et al. **Sports Med** 1989 Nov;8(5):260–72 (73 ref.)

Quantitative evaluation of AFO use with myelomeningocele children. Thomas SE, et al. **Z Kinderchir** 1989 Dec;44 Suppl 1:38–40

[A distraction abduction apparatus for treatment of Calvé–Legg–Perthes disease] Dostál M, et al. **Acta Chir Orthop Traumatol Cech** 1989 Dec;56(6):516–21 (Eng. Abstr.) (Cze)

[Pavlik's harness in congenital hip dislocation before the first birthday] Touzet P, et al. **Acta Orthop Belg** 1990;56(1 (Pt A)):141–7 (Eng. Abstr.) (Fre)

[Early diagnosis and ambulatory treatment of congenital dislocation of the hip] Vaucher D, et al. **Rev Med Suisse Romande** 1990 Mar;110(3):265–70 (Fre)

[The abduction orthosis, a therapeutic variant in Perthes' disease] Stein V, et al. **Beitr Orthop Traumatol** 1990 Apr; 37(4):242–5 (Eng. Abstr.) (Ger)

[Sense and nonsense of knee orthosis] Blauth W, et al. **Unfallchirurg** 1990 May;93(5):221–7 (Eng. Abstr.) (Ger)

[Sarmiento function fracture treatment of the tibia] Young R, et al. **Unfallchirurg** 1989 Aug;92(8):394–8 (Eng. Abstr.) (Ger)

[Experiences with the early treatment of osteogenesis imperfecta] Slongo T, et al. **Z Kinderchir** 1989 Oct; 44(5):293–6 (Eng. Abstr.) (Ger)

[Indications and technic of conservative fracture treatment with a plastic arm splint with velcro straps (brace)] Barth A. **Zentralbl Chir** 1990;115(4):235–8 (Ger)

[Personal experience with the Sarmiento method in the treatment of diaphyseal fractures of the lower leg] Vlajnić Z, et al. **Med Arh** 1988;42(4):193–6 (Eng. Abstr.) (Scr)

ADVERSE EFFECTS

Acute pulmonary edema following removal of a spinal orthosis: an unusual complication of a halo vest. Kaplan SL, et al. **Arch Phys Med Rehabil** 1990 Mar;71(3):255–7

Signs of temporomandibular joint dysfunction in spinal cord injured patients wearing halo braces: a clinical report. Crum NA. **Phys Ther** 1990 Feb;70(2):132–7

STANDARDS

Test instrument for predicting the effect of rigid braces in cases with low back pain. Willner SW. **Prosthet Orthot Int** 1990 Apr;14(1):22–6

BRACHIAL ARTERY

In utero thrombosis and neonatal gangrene in an infant of a diabetic mother. Van Allen MI, et al. **Am J Med Genet** 1989 Jul;33(3):323–7

Comparison of brachial and radial arterial pressure monitoring in patients undergoing coronary artery bypass surgery. Bazaral MG, et al. **Anesthesiology** 1990 Jul; 73(1):38–45

Use of femoral artery guiding catheters via the left brachial artery for transluminal coronary angioplasty. Spaccavento LJ, et al. **Cathet Cardiovasc Diagn** 1990 Jul;20(3):182–4

Changes in plasma and whole blood lactate in response to arterial occlusion. Prentice A, et al. **Intensive Care Med** 1990;16(1):28–32

Brachioradial delay: a new clinical indicator of the severity of aortic stenosis [see comments] Leach RM, et al. **Lancet** 1990 May 19;335(8699):1199–201 Comment in: Lancet 1990 Jun 23;335(8704):1535.

Malignant brachial artery embolism. Lazarides M, et al. **Vasa** 1989;18(4):316–7

[The value of the transbrachial approach for arterial visualization using a 4–F catheter] Lederer W, et al. **ROFO** 1989 Dec;151(6):674–7 (Eng. Abstr.) (Ger)

[Selective ambulant transbrachial intra-arterial DSA of the supra-aortic arteries] Tomac B, et al. **ROFO** 1990 Feb; 152(2):191–5 (Eng. Abstr.) (Ger)

ABNORMALITIES

Arteriographic study of variant arterial anatomy of the upper extremities. Uglietta JP, et al. **Cardiovasc Intervent Radiol** 1989 May–Jun;12(3):145–8

ANATOMY & HISTOLOGY

Versatile fasciocutaneous flaps based on the medial septocutaneous vessels of the arm. Carriquiry CE. **Plast Reconstr Surg** 1990 Jul;86(1):103–9

INJURIES

False aneurysm of the brachial artery: an unusual complication following accidental puncture by a patient on home haemodialysis. Coen LD, et al. **Br J Clin Pract** 1990 May;44(5):202–3

Brachial artery damage following cardiac catheterisation. When to re-explore [published erratum appears in Eur J Vasc Surg 1990 Aug;4(4):following 442] Walton J, et al. **Eur J Vasc Surg** 1990 Jun;4(3):219–22

Brachial artery entrapment in closed elbow dislocation. Wilmshurst AD, et al. **Injury** 1989 Jul;20(4):240–1

A rare cause of brachial artery injury. Marquis GP, et al. **J Bone Joint Surg [Br]** 1990 Mar;72(2):319–20

Management of vascular injuries in displaced supracondylar humerus fractures without arteriography. Shaw BA, et al. **J Orthop Trauma** 1990;4(1):25–9

Surgical treatment of brachial artery injuries after cardiac catheterization. Kline RM Jr, et al. **J Vasc Surg** 1990 Jul; 12(1):20–4

PATHOLOGY

Cardiopulmonary baroreflex control of brachial artery diameter in sustained essential hypertension. London GM, et al. **J Hypertens** 1989 Nov;7(11):879–83

PHYSIOLOGY

Effect of beta adrenoceptors and thyroid hormones on velocity and acceleration of peripheral arterial flow in hyperthyroidism. Chemla D, et al. **Am J Cardiol** 1990 Feb 15;65(7):494–500

Continuous measurements of arterial flow in man during atrial and ventricular arrhythmias. Benchimol A, et al. **Am J Med** 1969 Jan;46(1):52–63

Brachial artery diameter changes associated with cardiopulmonary baroreflex activation in humans. London GM, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H773–7

Comparison between transcutaneous oximetry and ankle–brachial pressure ratio in predicting runoff and outcome in patients who undergo aortobifemoral bypass. Ameli FM, et al. **Can J Surg** 1989 Nov;32(6):428–32

Branchial blood flow distribution in the blue shark (Prionace glauca) and the leopard shark (Triakis semifasciata). Lai NC, et al. **Exp Biol** 1989;48(5):273–8

Computer simulation of blood flow in the human arm. Balar SD, et al. **J Biomech** 1989;22(6–7):691–7

Chronic progressive changes in brachial and carotid artery circulations under the combined effects of aging and hypertension. Nguyen PC, et al. **J Hypertens** 1990 May; 8(5):449–55

Comparison of Finapres non-invasive beat-to-beat finger blood pressure with intrabrachial artery pressure during and after bicycle ergometry. Idema RN, et al. **J Hypertens Suppl** 1989 Dec;7(6):S58–9

Doppler blood velocity waveforms and the relation to peripheral resistance in the brachial artery. Legarth J, et al. **J Ultrasound Med** 1990 Aug;9(8):449–53

PHYSIOPATHOLOGY

Flow-dependent vasodilation of brachial artery in essential hypertension. Laurent S, et al. **Am J Physiol** 1990 Apr; 258(4 Pt 2):H1004–11

Pulsatile flow and oscillating wall shear stress in the brachial artery of normotensive and hypertensive subjects. Simon AC, et al. **Cardiovasc Res** 1990 Feb;24(2):129–36

Blood flow through the brachial artery at different temperatures in patients with Raynaud's phenomenon. Savin E, et al. **Cor Vasa** 1989;31(4):299–305

Abnormal wall shear conditions in the brachial artery of hypertensive patients. Simon AC, et al. **J Hypertens** 1990 Feb;8(2):109–14

Comparison of selective internal iliac pharmaco-angiography, penile brachial index and duplex sonography with pulsed Doppler analysis for the evaluation of vasculogenic (arteriogenic) impotence. Mueller SC, et al. **J Urol** 1990 May;143(5):928–32

Brachioradial delay and severity of aortic stenosis [letter; comment] Caro CG, et al. **Lancet** 1990 Jun 23; 335(8704):1535 Comment on: Lancet 1990 May 19;335(8699):1199–201.

[Influence of the autonomic nervous system on the diameter and compliance of the brachial artery in normotensive subjects and hypertensive patients] London GM, et al. **Ann Cardiol Angeiol (Paris)** 1989 Dec 15;38(9 Pt 2):595–8 (Eng. Abstr.) (Fre)

[Comparison of humeral blood flow during rewarming and recooling of the hand in normal subjects or presenting Raynaud's phenomenon] Savin E, et al. **J Mal Vasc** 1989; 14(4):312–9 (Eng. Abstr.) (Fre)

RADIOGRAPHY

[Bilateral symmetrical obliteration syndrome of the subclavian–brachial system in the elderly female] Reichelt HG, et al. **Rontgenblatter** 1990 Aug;43(8):332–4 (Eng. Abstr.) (Ger)

SURGERY

Vein patch angioplasty for brachial arterial occlusion after cardiac catheterization. Mann JW 3d, et al. **Am Surg** 1990 Sep;56(9):520–2

Long-term follow-up of brachial artery ligation in children. Lally KP, et al. **Ann Surg** 1990 Aug;212(2):194–6

A simple technique for thromboembolectomy of the upper limb. Beckingham IJ, et al. **Eur J Vasc Surg** 1990 Apr; 4(2):173–7

Electrophysiologic evaluation for carpal tunnel syndrome in patients with angioaccess for haemodialysis. Radhakrishnan K, et al. **Int Urol Nephrol** 1989;21(4):425–7

Fibrous changes and presence of calcium in the vessel walls six months after end-to-end arterial anastomoses in growing dogs [letter] Geršak B. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):379–80

BRACHIAL–BASILAR INSUFFICIENCY SYNDROME see **SUBCLAVIAN STEAL SYNDROME**

BRACHIAL NEURALGIA see **CERVICO-BRACHIAL NEURALGIA**

BRACHIAL PLEXUS

Subclavian artery false aneurysm associated with brachial plexus palsy: a complication of parenteral drug addiction. O'Leary MR. **Am J Emerg Med** 1990 Mar;8(2):129–33 (52 ref.)

Long-term indwelling catheter for intermittent axillary plexus blocks with bupivacaine [letter; comment] Thomson S. **Anaesth Intensive Care** 1990 May;18(2):276–7 Comment on: Anaesth Intensive Care 1989 Aug;17(3):370–2.

A comparison of three methods of axillary brachial plexus anaesthesia. Baranowski AP, et al. **Anaesthesia** 1990 May; 45(5):362–5

Latency of brachial plexus block. The effect on onset time of warming local anaesthetic solutions. Heath PJ, et al. **Anaesthesia** 1990 Apr;45(4):297–301

Combined supraclavicular and elbow blocks [letter; comment] Lee E, et al. **Anaesthesia** 1990 Apr;45(4):337–8 Comment on: Anaesthesia 1989 Sep;44(9):747–9.

Continuous brachial plexus blockade. A technique that uses an axillary catheter to allow successful skin grafting. Randalls B. **Anaesthesia** 1990 Feb;45(2):143–4

Continuous brachial plexus blockade [letter] Sarma VJ. **Anaesthesia** 1990 Aug;45(8):695

Doppler-guided axillary block in a burn patient [letter] Kestenbaum AD, et al. **Anesthesiology** 1990 Sep;73(3):586–7

Continuous interscalene brachial plexus block during and after shoulder surgery. Haasio J, et al. **Ann Chir Gynaecol** 1990;79(2):103–7

Axillary block anaesthesia in acute and elective hand surgery: a report on 300 procedures. Rouholamin E, et al. **Ann R Coll Surg Engl** 1990 Mar;72(2):90–3

Interscalene brachial plexus blocks in the management of shoulder dislocations. Underhill TJ, et al. **Arch Emerg Med** 1989 Sep;6(3):199–204

Axillary brachial plexus block: method of choice? Brockway MS, et al. **Br J Anaesth** 1990 Feb;64(2):224–31 (35 ref.)

Prolonged brachial plexus block with 0.42% bupivacaine. Brockway MS, et al. **Br J Anaesth** 1989 Nov;63(5):604–5

Ultrasonographic study of the spread of local anaesthetic during axillary brachial plexus block. Ting PL, et al. **Br J Anaesth** 1989 Sep;63(3):326–9

The brachial plexus tension test of Elvey [letter; comment] Reilly PA, et al. **Br J Rheumatol** 1990 Jun;29(3):234–5 Comment on: Br J Rheumatol 1989 Dec;28(6):528–33.

Brachial plexus neuropathy in a gymnast associated with chicken pox. Kennedy M, et al. **Br J Sports Med** 1989 Dec;23(4):226

Unusual cause of thoracic outlet syndrome. McAllister RM, et al. **Br J Surg** 1989 Dec;76(12):1257–8

Sever–L'Episcopo transfers in obstetrical palsy: a retrospective review of twenty cases. Strecker WB, et al. **J Pediatr Orthop** 1990 Jul–Aug;10(4):442–4

The application of pulse oximeter for supraclavicular brachial block. Lin SY, et al. **Ma Tsui Hsueh Tsa Chi** 1990 Mar; 28(1):43–8

Brachial plexopathy after botulinum toxin injections. Glanzman RL, et al. **Neurology** 1990 Jul;40(7):1143

Recurrent isolated alternating phrenic nerve palsies: a variant of brachial neuritis? Gregory RP, et al. **Thorax** 1990 May; 45(5):420–1

[Local complications after axillary block anesthesia] Regnard PJ, et al. **Ann Chir Main Memb Super** 1990;9(1):59–64 (Eng. Abstr.) (Fre)

[Transient block of the brachial plexus after catheterization of the subclavian vein] García-Fages LC, et al. **Ann Fr Anesth Reanim** 1990;9(1):93–4 (Eng. Abstr.) (Fre)

[Axillary blockade of the brachial plexus using 60 ml prilocaine 0.5% vs. 40 ml prilocaine 1%. A clinical study of 144 patients carried out by the determination of the prilocaine concentration in the central venous blood and by the measurement of the subfascial pressure in the plexus following the injection] Jage J, et al. **Reg Anaesth** 1990 Jul;13(5):112–7 (Eng. Abstr.) (Ger)

[Plexus neuropathy: tumor infiltration or radiation damage] Ebner I, et al. **ROFO** 1990 Jun;152(6):662–6 (Eng. Abstr.) (Ger)

[Parascalene brachial plexus block] Maruyama M, et al. **Masui** 1989 Dec;38(12):1647–52 (Eng. Abstr.) (Jpn)

[Conduction anesthesia of the brachial plexus in surgery on the upper limbs] Berezovskaia ZB, et al. **Klin Khir** 1989; (12):61–2 (Rus)

[A method of treatment of humeroscapular periarthritis] Skorogladov AV, et al. **Sov Med** 1990;(6):102–5 (Rus)

[Continuous block of the brachial plexus with nerve stimulation. Intra and postoperative control in orthopedic surgery of the arm] de Andrés JA, et al. **Rev Esp Anestesiol Reanim** 1989 Jul–Aug;36(4):198–201 (Eng. Abstr.) (Spa)

ABNORMALITIES

[An abnormal course of the Th1-root of the brachial plexus

in connection with a variety of the anterior scalenus muscle] Fuss FK, et al. **Gegenbaurs Morphol Jahrb** 1989; 135(5):673–7 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

[Morphological characteristics of the posterior brachial cutaneous nerve—a consideration of the development of cutaneous nerves in man] Kasai T, et al. **Kaibogaku Zasshi** 1989 Aug;64(4):255–66 (Eng. Abstr.) **(Jpn)**

[A morphological study on the coracobrachialis muscle] Koizumi M. **Kaibogaku Zasshi** 1989 Feb;64(1):18–35 (Eng. Abstr.) **(Jpn)**

[Study on the intraneural topography of the brachial plexus] Yokoyama I. **Nippon Seikeigeka Gakkai Zasshi** 1989 Sep; 63(9):1085–102 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

[Localization of nerve fascicles with stimulation electrodes used for plexus anesthesia] Kitzenmaier P, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:107–8 **(Ger)**

[Topographical and anatomic substantiation of sheath block of the brachial plexus] Pashchuk AIu, et al. **Ortop Travmatol Protez** 1990 May;(5):13–7 (Eng. Abstr.) **(Rus)**

[Conduction blocks in the complex treatment of humeroscapular periarthritis] Skorogliadov AV, et al. **Ortop Travmatol Protez** 1990 May;(5):10–3 (Eng. Abstr.) **(Rus)**

INJURIES

Subpial spinal evoked potentials in patients undergoing junctional dorsal root entry zone coagulation for pain relief. Prestor B, et al. **Acta Neurochir (Wien)** 1989;101(1–2):56–62

Stretching of the brachial plexus in rabbits. Kawai H, et al. **Acta Orthop Scand** 1989 Dec;60(6):635–8

Acute brachial neuropathy in athletes. Hershman EB, et al. **Am J Sports Med** 1989 Sep–Oct;17(5):655–9

An arresting injury. Lambert MA. **Arch Emerg Med** 1989 Dec;6(4):270–3

Brachial plexus injury caused by electric current through the ulnar nerve. Case report and review of the literature. Suematsu N, et al. **Arch Orthop Trauma Surg** 1989; 108(6):400–2 (8 ref.)

Neck dissection injury of a brachial plexus anatomical variant. Gacek RR. **Arch Otolaryngol Head Neck Surg** 1990 Mar;116(3):356–8

Microsurgical treatment of brachial plexus irreversible avulsion. Gu YD, et al. **Chin Med J [Engl]** 1989 Jul; 102(7):545–8

Phrenic nerve transfer for treatment of root avulsion of the brachial plexus. Gu YD, et al. **Chin Med J [Engl]** 1990 Apr;103(4):267–70

Root avulsion of brachial plexus in infants and children. Zhang GM, et al. **Chin Med J [Engl]** 1990 May;103(5):424–7

Brachial plexus injuries. Hershman EB. **Clin Sports Med** 1990 Apr;9(2):311–29 (68 ref.)

Surgical management of brachial plexus birth injuries [letter; comment] Buck BC. **Dev Med Child Neurol** 1989 Oct; 31(5):691–2 Comment on: Dev Med Child Neurol 1988 Dec;30(6):824–8.

Management of fractures of the humerus in patients who have an injury of the ipsilateral brachial plexus. Brien WW, et al. **J Bone Joint Surg [Am]** 1990 Sep;72(8):1208–10

Transfer of the trapezius for flail shoulder after brachial plexus injury. Aziz W, et al. **J Bone Joint Surg [Br]** 1990 Jul;72(4):701–4

Posterior dislocation of the shoulder associated with obstetric brachial plexus palsy. Dunkerton MC. **J Bone Joint Surg [Br]** 1989 Nov;71(5):764–6 (5 ref.)

Brachial plexus lesions associated with dislocated shoulders. Travlos J, et al. **J Bone Joint Surg [Br]** 1990 Jan;72(1):68–71

Direct nerve crossing with the intercostal nerve to treat avulsion injuries of the brachial plexus. Nagano A, et al. **J Hand Surg [Am]** 1989 Nov;14(6):980–5

Nerve transposition for the restoration of elbow flexion following brachial plexus avulsion injuries. Friedman AH, et al. **J Neurosurg** 1990 Jan;72(1):59–64

Complete infraclavicular brachial plexus palsy with occlusion of axillary vessels following anterior dislocation of the shoulder joint. Volpin G, et al. **J Orthop Trauma** 1990; 4(2):121–3

Arthrodesis of the paralytic shoulder. White JI, et al. **J Pediatr Orthop** 1989 Nov–Dec;9(6):684–6

'Top cover neuropathy'—transient brachial plexopathy due to body armour. Bhatt BM. **J R Army Med Corps** 1990 Feb;136(1):53–4

Trekker's shoulder [letter] Rosario PG, et al. **N Engl J Med** 1990 May 31;322(22):1611

MR evaluation of brachial plexus injuries. Gupta RK, et al. **Neuroradiology** 1989;31(5):377–81

Conservative care [letter] DonTigny RL. **Phys Ther** 1990 May;70(5):324

Brachial plexus lesions in soldiers—the 'sandbag palsy'. A report of 5 cases. Goga IE, et al. **S Afr Med J** 1990 Jun 16;77(12):643–4

Reinnervation of avulsed brachial plexus using the spinal accessory nerve. Samardzic M, et al. **Surg Neurol** 1990 Jan; 33(1):7–11

Twenty-six early operations in brachial birth palsy. Alanen M, et al. **Z Kinderchir** 1990 Jun;45(3):136–9

[Cervical nerve root transfer from the healthy side in the treatment of brachial plexus root avulsion] Gu YD. **Chung Hua I Hsueh Tsa Chih** 1989 Oct;69(10):563–5, 38 (Eng. Abstr.) **(Chi)**

[Phrenic nerve transfer treating root avulsion of the brachial plexus] Gu YD. **Chung Hua Wai Ko Tsa Chih** 1989 Jul; 27(7):433–5, 447 (Eng. Abstr.) **(Chi)**

[Results of surgery of nerve trunks in the treatment of post-traumatic brachial plexus paralysis] Travers V, et al. **Ann Chir** 1989;43(7):547–61 (Eng. Abstr.) **(Fre)**

[Integrated concepts in the treatment of brachial plexus lesions] Berger A, et al. **Langenbecks Arch Chir** 1990; 375(2):125–8 **(Ger)**

[Traction injuries of the brachial plexus: radiologic diagnosis using myelo-CT and MR] Blum U, et al. **ROFO** 1989 Dec; 151(6):702–5 (Eng. Abstr.) **(Ger)**

[Isolated neuropraxy of the musculocutaneous nerve] Bálványossy P, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1990; 33(2):140–1 (Eng. Abstr.) **(Hun)**

[Surgical treatment of functional disorders of the hand in sequelae of birth injuries of the brachial plexus in children] Merkulov VN. **Ortop Travmatol Protez** 1989 Jul;(7):45–7 (Eng. Abstr.) **(Rus)**

[Transplantation of the latissimus dorsi muscle in Duchenne-Erb paralysis] Tarasenko SF, et al. **Vestn Khir** 1989 May;142(5):95–6 **(Rus)**

[Asymmetry of muscular electric excitability in injuries of the brachial plexus] Nikulina VA, et al. **Zh Nevropatol Psikhiatr** 1989;89(10):66–8 (Eng. Abstr.) **(Rus)**

[Destruction of the entry zone of the posterior roots combined with selective rhizotomy in pain syndromes due to a lesion of the brachial plexus] Dreval' ON, et al. **Zh Vopr Neirokhir** 1990 Jan–Feb;(1):19–22 (Eng. Abstr.) **(Rus)**

[Current problems of traumatic lesions of the peripheral nerves and the brachial and cervical plexuses] Ogleznev KIa. **Zh Vopr Neirokhir** 1989 Nov–Dec;(6):3–6 **(Rus)**

[The microsurgical treatment of traumatic lesions of the brachial plexus] Shevelev IN, et al. **Zh Vopr Neirokhir** 1989 Nov–Dec;(6):23–7 (Eng. Abstr.) **(Rus)**

[The rehabilitation of patients with an injury to the brachial plexus] Vodianov NM, et al. **Zh Vopr Neirokhir** 1989 Nov–Dec;(6):33–6 (Eng. Abstr.) **(Rus)**

[Microsurgical reconstruction of obstetric plexus injuries] Carlstedt T, et al. **Lakartidningen** 1990 May 9; 87(19):1669–73 **(Swe)**

PATHOLOGY

Comparison of the characteristics of infiltrates in skin and nerve granulomas of leprosy. Kumar V, et al. **Acta Leprol** 1989;7(1):19–24

PHYSIOLOGY

A study of upper limb pain and paraesthesiae following neck injury in motor vehicle accidents: assessment of the brachial plexus tension test of Elvey [see comments] Quintner JL. **Br J Rheumatol** 1989 Dec;28(6):528–33 Comment in: Br J Rheumatol 1990 Jun;29(3):234–5.

Effects of an ectopic hindlimb on the brachial motoneurons in Xenopus. Harrison PH. **Brain Res Dev Brain Res** 1989 Sep 1;49(1):134–9

PHYSIOPATHOLOGY

Congenital brachial palsy in the eastern province of Saudi Arabia. al-Rajeh S, et al. **J Child Neurol** 1990 Jan;5(1):35–8

Neuralgic amyotrophy with involvement of cranial nerves IX, X, XI and XII. Pierre PA, et al. **Muscle Nerve** 1990 Aug;13(8):704–7

Regional donor nerves in the reinnervation of brachial plexus palsy due to upper spinal roots avulsion. Samardzic M, et al. **Neurol Res** 1989 Sep;11(3):181–5

[Value of somatosensory evoked potentials in thoraco-brachial outlet syndrome] Brudon JR, et al. **J Mal Vasc** 1989;14(4):303–6 (Eng. Abstr.) **(Fre)**

RADIATION EFFECTS

Clinical and electrodiagnostic findings in breast cancer patients with radiation-induced brachial plexus neuropathy. Mondrup K, et al. **Acta Neurol Scand** 1990 Feb;81(2):153–8

Natural history of radiation-induced brachial plexopathy compared with surgically treated patients. Killer HE, et al. **J Neurol** 1990 Jul;237(4):247–50

[Post-radiation brachial plexus disease. Clinical and neurophysiological study] Esteban A, et al. **Arch Neurobiol (Madr)** 1990 Jan–Feb;53(1):23–32 (Eng. Abstr.) **(Spa)**

SURGERY

Pediatric microsurgery. Replantation, revascularization, and obstetric brachial plexus palsy. Shenaq SM, et al. **Clin Plast Surg** 1990 Jan;17(1):77–83 (41 ref.)

Improvement in motor function after brachial plexus surgery. Kanaya F, et al. **J Hand Surg [Am]** 1990 Jan;15(1):30–6

Muscle transfers in brachial plexus lesions. Berger A, et al. **J Reconstr Microsurg** 1990 Apr;6(2):113–6

Experimental investigation of cross-nerve transfers relating to repair of brachial plexus avulsion injuries. Battiston B, et al. **Microsurgery** 1990;11(2):91–4

Phrenic nerve transfer for brachial plexus motor neurotization. Gu YD, et al. **Microsurgery** 1989;10(4):287–9

Malignant schwannoma of brachial plexus presenting as spinal cord compression. Sharma BS, et al. **Neurochirurgia (Stuttg)** 1989 Nov;32(6):189–91

[Long-term results of treating injuries to the peripheral nerves of the upper extremity] Baczkowski B. **Chir Narzadow Ruchu Ortop Pol** 1989;54(2):145–9 (Eng. Abstr.) **(Pol)**

[The axillary surgical approach to the inferior primary trunk of the brachial plexus and to the subclavian artery in traumatic lesions] Ogleznev KIa, et al. **Zh Vopr Neirokhir** 1989 Nov–Dec;(6):28–31 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

[Transmission electron microscope observation of morbid nerve segments in neurocausalgia] Yan JG. **Chung Hua Wai Ko Tsa Chih** 1990 Feb;28(2):83–4, 126 (Eng. Abstr.) **(Chi)**

BRACHIOCEPHALIC TRUNK see **INNOMINATE ARTERY**

BRACHIOPODA see **INVERTEBRATES**

BRACHYTHERAPY

Three new primary pelvic carcinomas in a patient following radiotherapy for carcinoma of the cervix. Case report. Gatzen C, et al. **Acta Chir Scand** 1990 Feb;156(2):183–6

Pathological changes in cystic craniopharyngiomas following intracavital 90yttrium treatment. Szeifert GT, et al. **Acta Neurochir (Wien)** 1990;102(1–2):14–8

Prognosis of endometrial carcinoma stage I in two Swedish regions. A study with special regard to the effects of intracavitary irradiation with high dose-rate afterloading technique or with low dose-rate radium. Sorbe B, et al. **Acta Oncol** 1990;29(1):29–37

Preoperative intrauterine irradiation of endometrial carcinoma stage I. A clinical and radiographic evaluation of the bulb technique. Sorbe B, et al. **Acta Oncol** 1990; 29(2):217–27

Initial results of phase I/II interstitial thermoradiotherapy for primary advanced and local recurrent tumors. Phromratanapongse P, et al. **Am J Clin Oncol** 1990 Jun; 13(3):259–68 (40 ref.)

Interstitial radiotherapy for the treatment of advanced or recurrent vulvar and distal vaginal malignancy. Hoffman M, et al. **Am J Obstet Gynecol** 1990 May;162(5):1278–82

Cobalt-60 plaque radiotherapy vs enucleation for posterior uveal melanoma. Augsburger JJ, et al. **Am J Ophthalmol** 1990 May 15;109(5):585–92

Analysis of radiation failure after uveal melanoma brachytherapy. Char DH, et al. **Am J Ophthalmol** 1989 Dec 15;108(6):712–6

Iridium 192 implantation of squamous cell carcinomas of the oropharynx. Mazeron JJ, et al. **Am J Otolaryngol** 1989 Sep–Oct;10(5):317–21 (21 ref.)

Endocurietherapy in pediatric oncology. Cherlow JM, et al. **Am J Pediatr Hematol Oncol** 1990 Summer;12(2):155–9

Role of brachytherapy in the management of pulmonary and mediastinal malignancies. Lewis JW Jr, et al. **Ann Thorac Surg** 1990 May;49(5):728–32; discussion 732–3

Neodymium:YAG laser and brachytherapy in the management of inoperable bronchogenic carcinoma. Miller JI Jr, et al. **Ann Thorac Surg** 1990 Aug;50(2):190–5; discussion 195–6

Ferromagnetic hyperthermia and iodine 125 brachytherapy in the treatment of choroidal melanoma in a rabbit model. Mieler WF, et al. **Arch Ophthalmol** 1989 Oct;107(10):1524–8

Mouse model of brachytherapy in consort with enucleation for treatment of malignant intraocular melanoma. Niederkorn J, et al. **Arch Ophthalmol** 1990 Jun;108(6):865–8

Changes in height of choroidal melanomas after plaque therapy. Abramson DH, et al. **Br J Ophthalmol** 1990 Jun; 74(6):359–62

The use of small fraction numbers in high dose-rate gynaecological afterloading: some radiobiological considerations. Dale RG. **Br J Radiol** 1990 Apr; 63(748):290–4

The traceability of brachytherapy sources supplied by Amersham International [letter] Rossiter MJ. **Br J Radiol** 1990 Aug;63(752):663

Overview of interstitial therapy. Ash D. **Br J Radiol Suppl** 1988;22:79–82 (18 ref.)

Critical appraisal of experimental radiation modalities for malignant astrocytomas. Laperriere NJ. **Can J Neurol Sci** 1990 May;17(2):199–208 (91 ref.)

Soft tissue sarcoma. Integration of brachytherapy, resection, and external irradiation. Schray MF, et al. **Cancer** 1990 Aug 1;66(3):451–6 (15 ref.)

Effect of endobronchial radiation therapy on malignant bronchial obstruction. Mehta M, et al. **Chest** 1990 Mar; 97(3):662–5

Focal irradiation of perforating eye injuries. Chakravarthy U, et al. **Curr Eye Res** 1989 Dec;8(12):1241–50

Conservative management of tumors of the rectum by radiotherapy and local excision. Despretz J, et al. **Dis Colon Rectum** 1990 Feb;33(2):113–6

Normal-tissue tolerance in brachytherapy. Pierquin B, et al. **Front Radiat Ther Oncol** 1989;23:194–201 (14 ref.)

Influence of brachytherapy (192Ir afterloading) on cell-mediated immune reactions in patients with stage I endometrial cancer. Gerstner GJ, et al. **Gynecol Oncol** 1989 Nov;35(2):164–9

Effect of intracavitary radiotherapy on tumor-associated trypsin inhibitor (TATI) in patients with cervical and endometrial cancer. Lehtovirta P, et al. **Gynecol Oncol** 1990 Jul;38(1):110–3

Vaginal radiation brachytherapy to reduce central recurrence after radical hysterectomy for cervical carcinoma. Photopulos GJ, et al. **Gynecol Oncol** 1990 Aug;38(2):187–90

Interstitial brachytherapy and early tongue squamous cell carcinoma management. Lefebvre JL, et al. **Head Neck** 1990 May–Jun;12(3):232–6

Comment on 'Reducing Radiation from Brachytherapy Patients with a Cost-effective Bedshield' [letter; comment] Nelson CE. **Health Phys** 1990 Feb;58(2):219–20 Comment on: Health Phys 1989 Jun;56(6):939–41.

Effect of bedside shielding on air-kerma rates around gynecologic intracavitary brachytherapy patients containing 226Ra or 137Cs. Papin PJ, et al. **Health Phys** 1990 Apr;58(4):405–10

Pelvic lymphadenectomy and transperineal interstitial implantation of IR 192 combined with external beam radiotherapy for bulky stage C prostatic carcinoma. Brindle JS, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov; 17(5):1063–6

Carcinoma of the uterine cervix stage IB and early stage II. Prognostic value of the histological tumor regression after initial brachytherapy. Calais G, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1231–5

Is interstitial implantation essential for successful radiotherapeutic treatment of base of tongue carcinoma? Foote RL, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun; 18(6):1293–8

Tolerance of the liver to the effects of Yttrium-90 radiation. Gray BN, et al. **Int J Radiat Oncol Biol Phys** 1990 Mar; 18(3):619–23

Brachytherapy as part of the definitive management of squamous cancer of the base of tongue. Harrison LB, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1309–12

Radiobiological advantages of an immediate interstitial boost dose in conservative treatment of breast cancer. Krishnan EC, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb; 18(2):419–24

Dosimetric analysis in brachytherapy of carcinoma of the cervix. Krishnan L, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):965–70

Survival and quality of life after interstitial implantation of removable high-activity iodine-125 sources for the treatment of patients with recurrent malignant gliomas. Leibel SA, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec; 17(6):1129–39

External irradiation plus curietherapy boost in 108 base of tongue carcinomas. Lusinchi A, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1191–7

The relative biological effectiveness of photon radiation from encapsulated iodine-125, assessed in cells of human origin: I. Normal diploid fibroblasts. Marchese MJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1407–13

Effect of dose rate on local control and necrosis in the reirradiation of faucial arch squamous cell carcinomas with interstitial iridium 192 [letter] Mazeron JJ, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1275

Prognostic factors of local outcome for T1, T2 carcinomas of oral tongue treated by iridium 192 implantation. Mazeron JJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):281–5

Iridium-192 curietherapy for T1 and T2 epidermoid carcinomas of the floor of mouth. Mazeron JJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1299–306

Treatment of primary unresectable carcinoma of the pancreas with I-125 implantation. Peretz T, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):931–5

Dose-effect relation of interstitial low-dose-rate radiation (Ir192) in an animal tumor model. Ruifrok AC, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan;18(1):31–6

Analysis of preoperative intracavitary cesium application versus postoperative external beam radiation in stage I endometrial carcinoma. Sause WT, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1011–7

Interstitial thermoradiotherapy: thermal dosimetry and clinical results. Shimm DS, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb;18(2):383–7

Postoperative vaginal irradiation with high dose rate afterloading technique in endometrial carcinoma stage I. Sorbe BG, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb; 18(2):305–14

How essential is interstitial radiation therapy to curability of head and neck cancer? [editorial; comment] Wang CC. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1529–30; discussion 1535 Comment on: Int J Radiat Oncol Biol Phys 1990 Jun;18(6):1287–92.

A CT-based computerized treatment planning system for I-125 stereotactic brain implants. Weaver K, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb;18(2):445–54

Primary radiotherapy in the treatment of stage I and II oral tongue cancers: importance of the proportion of therapy delivered with interstitial therapy [see comments] Wendt CD, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun; 18(6):1287–92 Comment in: Int J Radiat Oncol Biol Phys 1990 Jun;18(6):1529–30; discussion 1535.

Metastatic maxillary sinus melanoma treated by local excision and brachytherapy. Elidan J, et al. **J Otolaryngol** 1989 Oct; 18(6):293–7 (24 ref.)

Role of brachytherapy in malignant melanoma: a preliminary report. Chadha M, et al. **J Surg Oncol** 1990 Apr;43(4):223–7

Brachytherapy in the treatment of solitary colorectal metastases to the liver. Donath D, et al. **J Surg Oncol** 1990 May;44(1):55–61

Effective palliation for inoperable esophageal cancer using intensive intracavitary radiation. Fleischman EH, et al. **J Surg Oncol** 1990 Aug;44(4):234–7

Selective internal radiation (SIR) therapy for treatment of liver metastases: measurement of response rate. Gray BN, et al. **J Surg Oncol** 1989 Nov;42(3):192–6

125iodine reimplantation for locally progressive prostatic carcinoma. Wallner KE, et al. **J Urol** 1990 Sep;144(3):704–6

Effects of gold and silver backings on the dose rate around an 125I seed. Cygler J, et al. **Med Phys** 1990 Mar–Apr; 17(2):172–8

Comments on "Radial dose distribution of 192Ir and 137Cs seed sources" [letter; comment] Meli JA, et al. **Med Phys** 1989 Sep–Oct;16(5):824–5 Comment on: Med Phys 1989 Mar–Apr;16(2):254–7.

Calculation of radiation doses in critical organs compared with in vivo dosimetry during brachytherapy of carcinoma of the uterine cervix. Rašovská O, et al. **Neoplasma** 1990; 37(2):205–11

Interstitial radiotherapy of malignant tumors of the vagina. Shpikalov VL, et al. **Neoplasma** 1989;36(6):729–37

Interstitial brachytherapy for malignant brain tumors: preliminary results. Bernstein M, et al. **Neurosurgery** 1990 Mar;26(3):371–9; discussion 379–80

Endobronchial brachytherapy helps lung cancer patients breathe easier [news] **Oncology (Williston Park)** 1988 Dec; 2(12):37

Uveal melanoma radiation. 125I brachytherapy versus helium ion irradiation. Char DH, et al. **Ophthalmology** 1989 Dec; 96(12):1708–15

Visualization of subcaudate tractotomy lesions by magnetic resonance imaging. Ebmeier KP, et al. **Psychiatry Res** 1989 Sep;29(3):291–2

Interstitial irradiation for carcinoma of tongue complicated by chronic renal failure undergoing hemodialysis—a case report. Hareyama M, et al. **Radiat Med** 1989 Jul–Aug; 7(4):193–6

Retreatment of recurrent pelvic tumors with iodine-125. Kumar PP, et al. **Radiat Med** 1989 May–Jun;7(3):150–9 (57 ref.)

Ocular melanoma: total dose and dose rate effects with Co-60 plaque therapy. Beitler JJ, et al. **Radiology** 1990 Jul; 176(1):275–8

Treatment of choroidal melanoma: MR imaging in the assessment of radioactive plaque position. Hanna SL, et al. **Radiology** 1990 Sep;176(3):851–3

Primary advanced and local recurrent head and neck tumors: effective management with interstitial thermal radiation therapy. Seegenschmiedt MH, et al. **Radiology** 1990 Jul; 176(1):267–74

Results of radiation therapy in carcinoma of the proximal bile duct (Klatskin tumor). González González D, et al. **Semin Liver Dis** 1990 May;10(2):131–41

Use of the omental J flap for better delivery of radiotherapy to the pelvis. Granai CO, et al. **Surg Gynecol Obstet** 1990 Jul;171(1):71–2

Dosimetry of high dose rate intracavitary radiation therapy using Co-60 and Ir-192 sources. Lin FJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Apr;88(4):381–6

Cobalt plaque radiotherapy versus enucleation for posterior uveal melanoma: comparison of survival by prognostic index groups. Augsburger JJ, et al. **Trans Am Ophthalmol Soc** 1990;87:348–59; discussion 359–61

Ultrasonically guided 125iodine seed implantation with external radiation in management of localized prostatic carcinoma. Iversen P, et al. **Urology** 1989 Oct;34(4):181–6

Disease-related effects of perioperative blood transfusions associated with 125I seed implantation for prostate carcinoma. Petersen JP, et al. **Urology** 1990 Aug; 36(2):103–6

Carcinoma of the pancreas and selectron brachytherapy. A technique for possible cure or prolonged palliation. Golby M, et al. **West Engl Med J** 1990 Mar;105(1):20–1

[Afterloading technique for carcinoma of the uterine cervix] Sun JH. **Chung Hua Chung Liu Tsa Chih** 1989 May; 11(3):211–2 (Eng. Abstr.) (Chi)

[Regression of cervix uteri neoplasms in combined radiotherapy using low dose gamma-neutron irradiation] Tačev T, et al. **Cesk Radiol** 1989 Aug;43(4):258–66 (Eng. Abstr.) (Cze)

[Curietherapy of epithelioma of the external ear. A series of 140 patients] Debois JM, et al. **Acta Otorhinolaryngol Belg** 1989;43(3):239–50 (Eng. Abstr.) (Dut)

[Evaluation of 100 melanomas of the choroid and ciliary body treated by application of ruthenium (RU 106 Rh 106)] Grange JD, et al. **Bull Soc Ophtalmol Fr** 1989 May; 89(5):679–82 (Eng. Abstr.) (Fre)

[Value of angiography in the surveillance of choroid melanoma treated by cobalt disk] Desjardins L, et al. **J Fr Ophtalmol** 1989;12(6–7):427–30 (Eng. Abstr.) (Fre)

[The role of beta-ray therapy in the treatment of choroidal and ciliary body melanomas] Grange JD, et al. **Ophtalmologie** 1989 Jun–Aug;3(3):175–9 (Eng. Abstr.) (Fre)

[Surgical treatment of radiogenic prostate-urethra-rectum fistula] Lang W, et al. **Chirurg** 1990 Apr;61(4):312–5 (Eng. Abstr.) (Ger)

[Endoluminal radiotherapy of high biliary tract carcinomas] Fromme M, et al. **Dtsch Med Wochenschr** 1990 Jun 29; 115(26):1026–30 (36 ref.) (Ger)

[Use of the internal mammary vessels (vasa thoracica interna) forirradiation of the parasternal region in breast cancer. 1] Androsov NS, et al. **Radiobiol Radiother (Berl)** 1989; 30(6):503–7 (Eng. Abstr.) (Ger)

[Assessment of the biological efficacy of fractionated HDR (high dose rate)-afterloading using the linear-quadratic equation] Glaser FH, et al. **Radiobiol Radiother (Berl)** 1989; 30(4):305–9 (Ger)

[Initial experiences with high-dosage afterloading short-term therapy combined with hyperthermia in non-operated cervix cancer] Schorcht J, et al. **Radiobiol Radiother (Berl)** 1989;30(4):386–90 (Eng. Abstr.) (Ger)

[Intracavitary afterloading-therapy of cervicofacial tumors—results and experiences to date] Strietzel M, et al. **Radiobiol Radiother (Berl)** 1989;30(6):509–13 (Eng. Abstr.) (Ger)

[Treatment results of 60-cobalt radiotherapy of epipharyngeal tumors 1978 to 1988] Todorov J, et al. **Radiobiol Radiother (Berl)** 1989;30(4):350–3 (Ger)

[On the contribution by B. Kimmig: "Radioiodine therapy and percutaneous radiotherapy of struma maligna"] Böttger I, et al. **Radiologe** 1989 Oct;29(10):533–5 (Ger)

[Radium contact irradiation of vocal cord carcinoma—a possible treatment method?] Balla M, et al. **Strahlenther Onkol** 1990 Feb;166(2):132–4 (Eng. Abstr.) (Ger)

[Results of percutaneous transluminal irradiation of biliary tract carcinoma with 192Iridium] Hendrickx P, et al. **Strahlenther Onkol** 1990 Jun;166(6):392–6 (Eng. Abstr.) (Ger)

[A rapid radiotherapy planning program in intracavitary afterloading therapy] Robrandt B, et al. **Strahlenther Onkol** 1990 Mar;166(3):227–34 (Eng. Abstr.) (Ger)

[Results of temporary interstitial iridium 192 implantation in head and neck tumors] Thiel HJ, et al. **Strahlenther Onkol** 1989 Nov;165(11):791–6 (Eng. Abstr.) (Ger)

[Surgery and postoperative radiotherapy in the treatment of stage I endometrial carcinoma] Latini P, et al. **Minerva Ginecol** 1990 Jan–Feb;42(1–2):1–5 (Eng. Abstr.) (Ita)

[High-dose gynecologic endocavitary brachytherapy. Technical and dosimetric aspects] Grillo Ruggieri F, et al. **Radiol Med (Torino)** 1989 Oct;78(4):373–9 (Eng. Abstr.) (Ita)

[Interstitial brachytherapy in malignant gliomas] Hoshino T. **Gan No Rinsho** 1989 Sep;35(11):1355–61 (28 ref.) (Eng. Abstr.) (Jpn)

[Interstitial radiotherapy of carcinoma of the tongue-comparison between Jacobson-Yamamoto grading and prognosis] Jingu K, et al. **Gan No Rinsho** 1989 Oct; 35(13):1587–90 (Eng. Abstr.) (Jpn)

[Brachytherapy of choroidal melanoma using radioactive gold grains—a case report] Kawamura T, et al. **Gan No Rinsho** 1990 Apr;36(5):663–8 (Eng. Abstr.) (Jpn)

[High-dose intracavitary brachytherapy of a recurrent cervical cancer following surgery] Kumagaya H, et al. **Gan No Rinsho** 1990 Jan;36(1):51–6 (Eng. Abstr.) (Jpn)

[Experimental studies on the combined effect of radiation and UFT: 2. fractionated treatments combining UFT and X ray radiation] Yamakawa M, et al. **Gan To Kagaku Ryoho** 1990 Jun;17(6):1173–9 (Eng. Abstr.) (Jpn)

[Clinical evaluation of high dose rate intra-cavitary irradiation in the treatment of uterine cervical cancer, combined with pepleomycin suppository in uterine cavity] Yamanashi S, et al. **Gan To Kagaku Ryoho** 1990 Feb; 17(2):245–51 (Eng. Abstr.) (Jpn)

[Brachytherapy of prostatic carcinoma, 60Co high dose rate, remote after-loading methods] Kosuda S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Apr 25; 50(4):429–31 (Eng. Abstr.) (Jpn)

[Current status and the future of brachytherapy (2)] Nishio M. **Rinsho Hoshasen** 1990 Feb;35(2):287–8 (Jpn)

[Influence of brachytherapy on the behavior of immunologic circulating complexes in the blood serum of patients with cervix cancer] Dziewulska-Bokiniec A, et al. **Nowotwory** 1989 Jul–Dec;39(3–4):171–5 (Eng. Abstr.) (Pol)

[Interstitial irradiation of malignant neoplasms of the female genitalia] Shpikalov VL, et al. **Med Radiol (Mosk)** 1989 Oct;34(10):41–4 (Eng. Abstr.) (Rus)

[Use of optimizing programs of dosimetric planning in radiotherapy of gynecologic cancer] Ushakova GA. **Vopr Onkol** 1990;36(3):355–9 (Eng. Abstr.) (Rus)

[Modern radiologic treatment of gynecologic carcinoma at the Institute of Radiology and Oncology] Bilenjki D. **Med Arh** 1985;39(2–3):73–6 (Eng. Abstr.) (Scr)

ADVERSE EFFECTS

Aneurysm, arachnoiditis and intrathecal Au (gold). Pence DM, et al. **Int J Radiat Oncol Biol Phys** 1990 May; 18(5):1001–4

Surgery versus brachytherapy complications [letter] Wierzbicki JG, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1275–7

Brain damage from 125I brachytherapy evaluated by MR imaging, a blood–brain barrier tracer, and light and electron microscopy in a rat model. Bernstein M, et al. **J Neurosurg** 1990 Oct;73(4):585–93

A simple device to protect against osteoradionecrosis induced by interstitial irradiation. Levendag PC, et al. **J Prosthet Dent** 1990 Jun;63(6):665–70

Radiation–induced prostatic sarcoma: a case report. Scully JM, et al. **J Urol** 1990 Sep;144(3):746–8

[Intracavitary high–dose–rate–afterloading–radiotherapy in the esophagus of the pig] Freund U, et al. **Strahlenther Onkol** 1989 Dec;165(12):852–4 (Eng. Abstr.) (Ger)

ECONOMICS

An analysis of personnel dose records which justifies the application of cost–benefit analysis techniques in the design of an afterloading facility and the use of controlled areas and systems of work within suite to control occupational exposure. Gifford D, et al. **Br J Radiol** 1990 Mar; 63(747):214–8

INSTRUMENTATION

Cylindrical forms of isodoses in gynaecological afterloading therapy: an atlas using the Buchler afterloading machine al–mc. Busch M 2d, et al. **Br J Radiol** 1990 Jul; 63(751):562–4

The treatment of uterine carcinoma using the Cathetron. Part III. Clinical considerations and preliminary reports on treatment results. Joslin CA, et al. **Br J Radiol** 1967 Dec; 40(480):895–904

The treatment of uterine carcinoma using the Cathetron. Part II. Physical measurements. Liversage WE, et al. **Br J Radiol** 1967 Dec;40(480):887–94

The treatment of uterine carcinoma using the Cathetron. Part I. Technique. O'Connell D, et al. **Br J Radiol** 1967 Dec; 40(480):882–7

Treatment of malignant biliary obstruction with a high–dose rate remote afterloading device using a 10 F nasobiliary tube. Urban MS, et al. **Gastrointest Endosc** 1990 May–Jun; 36(3):292–6

Interstitial 192Ir flexible catheter radiofrequency hyperthermia treatments of head and neck and recurrent pelvic carcinomas. Goffinet DR, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan;18(1):199–210

A thin I–125 seed eye plaque to treat intraocular tumors using an acrylic insert to precisely position the sources. Karolis C, et al. **Int J Radiat Oncol Biol Phys** 1990 May; 18(5):1209–13

Applicator for use of cesium–137 miniaturized tube sources in the treatment of uterine cervix cancer. Kumar PP, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1509–11

Treatment planning of template–guided stereotaxic brain implants. Lulu BA, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):951–5

Design of an afterloading vaginal applicator (MIRALVA). Perez CA, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun; 18(6):1503–8

The effect of applicator geometry on dose specification in cervical cancer. Potish RA. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1513–20

Dose calculation and measurements for a CT compatible version of the Fletcher applicator. Weeks KJ, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1191–8

The usefulness of ultrasonography in intracavitary radiotherapy using selectron applicators. Wong F, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):477–82

Design and dose distribution for rectal applicators for the high dose rate remote afterloading iridium–192 brachytherapy system. Kennedy DK, et al. **Med Dosim** 1989 Sep;14(3):209–18

Strontium–90 eye application. Sharma SC. **Med Dosim** 1989 Dec;14(4):229–30

Relative calibration of a well type isotope calibrator for brachytherapy sources. Wielopolski L, et al. **Med Dosim** 1990 Jun;15(2):67–9

The dosimetric properties of an intraoperative radiation therapy applicator system for a Mevatron–80. Nelson CE, et al. **Med Phys** 1989 Sep–Oct;16(5):794–9

Dose distribution around a 3.0–mm type 6702 I–125 seed. Scarbrough EC, et al. **Med Phys** 1990 May–Jun;17(3):460–3

Ultrasound for diagnosing and preventing malplacement of intrauterine tandems. Granai CO, et al. **Obstet Gynecol** 1990 Jan;75(1):110–3

A contact x–ray therapy unit for intracavitary irradiation. Birch MJ, et al. **Phys Med Biol** 1990 Feb;35(2):275–80

An afterloading brachytherapy device utilizing thermoplastic material. Kim TH, et al. **Radiother Oncol** 1989 Aug; 15(4):341–4

[High–frequency jet ventilation through a modified stomach tube in endobronchial 192 Iridium irradiation] Rieke H, et al. **Anaesthesist** 1989 Oct;38(10):549–52 (Eng. Abstr.) (Ger)

[A new procedure for rapid calculation and visualization of dose distributions] Brändle G, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:255–6 (Ger)

[Development and dosimetry of a 125 iodine applicator for brachytherapy of intraocular tumors] Alberti W, et al. **Fortschr Ophthalmol** 1990;87(2):201–5 (Eng. Abstr.) (Ger)

[Dosimetry of ruthenium applicators with an eye phantom and small volume thermoluminescence detectors] Muskalla K, et al. **Fortschr Ophthalmol** 1989;86(6):655–8 (Eng. Abstr.) (Ger)

[Plexiglass replicas for optimizing selection and site of ruthenium 106 applicators] Menapace R. **Klin Monatsbl Augenheilkd** 1990 Jan;196(1):40–2 (Eng. Abstr.) (Ger)

[Long–term follow–up of 52 endoluminal irradiated patients with central lung tumors] Huber RM, et al. **Pneumologie** 1990 Feb;44 Suppl 1:593–4 (Eng. Abstr.) (Ger)

[The use of glass fiber endoscopy in afterloading contact therapy] Strietzel M, et al. **Radiobiol Radiother (Berl)** 1989; 30(4):357–60 (Eng. Abstr.) (Ger)

[Uncertainties in the localization of radiation sources in brachytherapy] Leetz HK, et al. **Strahlenther Onkol** 1989 Nov;165(11):807–12 (Eng. Abstr.) (Ger)

[A new multi–channel LDR/MDR–afterloading–system (Inter–Pal–C38)] Thiel HJ, et al. **Strahlenther Onkol** 1989 Nov;165(11):802–6 (Eng. Abstr.) (Ger)

[Templates for curietherapy of the oral cavity and their dosimetric use] Pizzi G, et al. **Radiol Med (Torino)** 1989 Dec;78(6):620–5 (Eng. Abstr.) (Ita)

[Shielded 125I radiation sources in radiosurgery] Anikin VA. **Med Radiol (Mosk)** 1990 Jun;35(6):36–9 (56 ref.) (Rus)

[Intracavitary radiotherapy of uterine cancer under conditions of computerized planning and realization of therapeutic programs on the AGAT–VU apparatus] Titova VA, et al. **Med Radiol (Mosk)** 1989 Sep;34(9):38–49 (Rus)

[Means for administering radiation sources for interstitial radiation therapy] Zamiatin OA, et al. **Med Radiol (Mosk)** 1990 Jul;35(7):45–8 (Eng. Abstr.) (Rus)

[Evaluation of the precision of forming treatment dosage field of a rope intracavitary gamma therapy device] Zakharova EE, et al. **Med Tekh** 1990 May–Jun;(3):5–9 (Eng. Abstr.) (Rus)

METHODS

Intracavitary therapy with radioactive yttrium: results of animal experiments. Ulmer HU. **Acta Med Austriaca** 1989; 16(3–4):54–7

Relationship between kerma and treatment volume in intracavitary radiation therapy. Ragnhult I, et al. **Acta Oncol** 1990;29(3):307–12

Intracavitary irradiation of endometrial carcinoma using a high–intensity 60Co afterloading method. Sipilä P, et al. **Acta Oncol** 1989;28(4):601–5

Preoperative intracavitary irradiation of endometrial carcinoma stage I by a high dose rate afterloading technique. Sorbe B, et al. **Acta Oncol** 1989;28(4):577–82

Afterloading intracavitary radiation treatment of nasopharyngeal carcinoma. Description of a technique and preliminary treatment results. Teo P, et al. **Acta Oncol** 1989; 28(4):525–7

Interstitial thermoradiotherapy: review on technical and clinical aspects. Seegenschmiedt MH, et al. **Am J Clin Oncol** 1990 Aug;13(4):352–63 (97 ref.)

The precision reconstruction of radium implants. Hidalgo JU, et al. **Am J Roentgenol Radium Ther Nucl Med** 1967 Aug;100(4):852–7

A computer technique for intracavitary radium dosimetry. Lane FW Jr, et al. **Am J Roentgenol Radium Ther Nucl Med** 1967 Aug; 100(4):870–7

The radiation distributions around linear radium sources as measured with thermoluminescence dosimetry (TLD). Lin FM, et al. **Am J Roentgenol Radium Ther Nucl Med** 1967 Aug;100(4):863–9

A computer dosimetry system for radon seed implants. Rose JA, et al. **Am J Roentgenol Radium Ther Nucl Med** 1967 Aug;100(4):878–85

"Afterloading" dosimetry of interstitial radium implants. Spira J, et al. **Am J Roentgenol Radium Ther Nucl Med** 1967 Aug; 100(4):858–62

Implantation of iodine–125 seeds as a form of intraoperative brachytherapy. Sauerwein W, et al. **Ann Radiol (Paris)** 1989;32(6):515–22

Split–palate approach for gold grain implantation in nasopharyngeal carcinoma. Wei WI, et al. **Arch Otolaryngol Head Neck Surg** 1990 May;116(5):578–82

Magnetic resonance imaging of juxtapapillary plaques in cadaver eyes. Williams DF, et al. **Br J Ophthalmol** 1990 Jan;74(1):43–6

Intraluminal irradiation in oesophageal tumors using the high–dose–rate Microselectron [letter] Hay JH, et al. **Br J Radiol** 1990 Jul;63(751):583–4

Radionuclides in brachytherapy: radium and after. Trott NG. **Br J Radiol Suppl** 1987;21:1–54 (237 ref.)

Innovative techniques in radiation oncology. Clinical research programs to improve local and regional control in cancer. Brady LW, et al. **Cancer** 1990 Feb 1;65(3 Suppl):610–24

Stereotaxic irradiation of brain tumors. Larson DA, et al. **Cancer** 1990 Feb 1;65(3 Suppl):792–9 (82 ref.)

The treatment of squamous–cell carcinoma of the lower lip by rigid implants. Durrant KR, et al. **Clin Radiol** 1973 Oct; 24(4):502–5

Clinical observations on the time factor in interstitial radiotherapy using iridium–192. Pierquin B, et al. **Clin Radiol** 1973 Oct;24(4):506–9

Uterine thickness determination using real–time ultrasonography: a guide for intracavitary brachytherapy in the treatment of endometrial carcinoma. Chun M, et al. **Gynecol Oncol** 1990 Feb;36(2):176–80

An interactive treatment planning system for ophthalmic plaque radiotherapy. Astrahan MA, et al. **Int J Radiat Oncol Biol Phys** 1990 Mar;18(3):679–87

Boron neutron capture enhancement of 252Cf brachytherapy. Beach JL, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun; 18(6):1421–7

MR technique for localization and verification procedures in episcleral brachytherapy. Houdek PV, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):1111–4

Regeneration in cervix cancer after 252Cf neutron brachytherapy. Maruyama Y, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul;19(1):61–7

Interstitial curietherapy in the conservative treatment of anal and rectal cancers [see comments] Papillon J, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1161–9 Comment in: Int J Radiat Oncol Biol Phys 1989 Dec;17(6):1359–61.

Role of intracavitary cuff boost after adjuvant external irradiation in early endometrial carcinoma. Randall ME, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul;19(1):49–54

Endobronchial radiation therapy (EBRT) in the management of lung cancer. Roach M 3d, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1449–54

A CT–compatible version of the Fletcher system intracavitary applicator: clinical application and 3–dimensional treatment planning. Schoeppel SL, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):1103–9

Intermediate dose rate remote afterloading brachytherapy for intraluminal control of bronchogenic carcinoma. Speiser B, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1443–8

The source–skin distance measuring bridge: a method to avoid radiation teleangiectasia in the skin after interstitial therapy for breast cancer. Van Limbergen E, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1239–44

Dose calculations about shielded gynecological colpostats. Williamson JF. **Int J Radiat Oncol Biol Phys** 1990 Jul; 19(1):167–78

Iodine 125 interstitial irradiation for localized prostate cancer. Kumar PP, et al. **J Natl Med Assoc** 1990 Mar;82(3):181–93

Interstitial irradiation of cerebral gliomas in childhood by permanently implanted 125–iodine—preliminary results. Voges J, et al. **Klin Padiatr** 1990 Jul–Aug;202(4):270–4

An algorithm for generation of implant plans for high–dose–rate irradiators. Renner WD, et al. **Med Phys** 1990 Jan–Feb;17(1):35–40

Limited liver metastasis treated with interstitial radiation [news] **Oncology (Williston Park)** 1988 May;2(5):14

Radiobiological considerations of brachytherapy. Glicksman AS, et al. **Oncology (Williston Park)** 1988 Jan;2(1):25–32 (10 ref.)

Microselectron HDR—its use in oesophageal and bronchial work and how it affects the therapy radiographer. Farrell CJ. **Radiogr Today** 1989 Feb;55(621):16–8

Selective internal radiation therapy: validation of intraoperative dosimetry. Burton MA, et al. **Radiology** 1990 Apr;175(1):253–5

Intraoperative guidance for intrauterine procedures with transrectal sonography. Fleischer AC, et al. **Radiology** 1990 Aug;176(2):576–7

In–phantom calibration of Selectron–LDR sources. Meertens H. **Radiother Oncol** 1990 Apr;17(4):369–78

Cure of cervical cancer using 252Cf neutron brachytherapy. Maruyama Y, et al. **Strahlenther Onkol** 1990 May; 166(5):317–21

Ultrasound–guided implantation techniques in treatment of prostate cancer. Carter SS, et al. **Urol Clin North Am** 1989 Nov;16(4):751–62

Remote afterloading transurethral radiotherapy for prostatic cancer. Harada T, et al. **Urol Int** 1990;45(1):41–3

[Relationship between central recurrence and time–dose factors in patients with carcinoma of uterine cervix after radiotherapy] Gao JZ. **Chung Hua Chung Liu Tsa Chih** 1989 Sep;11(5):394–7 (Eng. Abstr.) (Chi)

[2 new treatment forms in lung tumors in the central airways; photodynamic therapy and brachytherapy] Sutedja G, et al. **Ned Tijdschr Geneeskd** 1990 Jun 30;134(26):1248–51 (25 ref.) (Dut)

[Value of interstitial irradiation of keloid scars by Iridium 192. Apropos of 46 cases] Bertiere MN, et al. **Ann Chir Plast Esthet** 1990;35(1):27–30 (Eng. Abstr.) (Fre)

[Results and indications of curietherapy of the eustachian tube with iridium 192 in chronic otitis in the adult] Desvaux P, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(6):275–80 (Eng. Abstr.) (Fre)

[Brief intracavitary radiation (137 cesium) of the prostatic site in localized cancer of the prostate: preliminary results after 9 years] Jichlinski P, et al. **Helv Chir Acta** 1989 Aug; 56(3):339–41 (Eng. Abstr.) (Fre)

[Radiosynoviorthesis of the elbow joint] Haase F. **Aktuel Probl Chir Orthop** 1989;37:44–5 (Ger)

[A new experimental method for the treatment of pelvic wall recurrencies of gynecological malignancies] Höckel M, et al. **Geburtshilfe Frauenheilkd** 1989 Nov;49(11):981–6 (32

ref.) (Eng. Abstr.) (Ger)
[Intravaginal brachytherapy in surgically treated uterine cancer] Umbach GE, et al. **Med Klin** 1990 Feb 15; 85(2):65–71 (98 ref.) (Eng. Abstr.) (Ger)
[Initial results of high-dose-rate afterloading treatment of tumors in the head and neck region] Brock A, et al. **Radiobiol Radiother (Berl)** 1989;30(6):515–20 (Eng. Abstr.) (Ger)
[CT-assisted manual afterloading using 198-gold seeds in intracerebral tumors] Glaser FH, et al. **Radiobiol Radiother (Berl)** 1989;30(4):378–83 (Ger)
[Brachytherapy of anorectal cancer] Moushmov M, et al. **Radiobiol Radiother (Berl)** 1989;30(4):320–3 (Eng. Abstr.) (Ger)
[Physics and dosimetry of afterloading therapy of hypopharyngeal cancer] Pohlmann S, et al. **Radiobiol Radiother (Berl)** 1989;30(4):361–2 (Ger)
[The therapy of endometrial carcinoma with the high-dose-rate selectron] Rattka P. **Radiobiol Radiother (Berl)** 1989;30(5):481–6 (Eng. Abstr.) (Ger)
[Recent possibilities in high-dose rate brachytherapy] Kneschaurek P. **Rontgenpraxis** 1989 Nov;42(11):392–7 (15 ref.) (Ger)
[Interstitial radiotherapy with 125I seeds in non-operable and non-radioiodine retaining local recurrences of differentiated and undifferentiated thyroid cancers] Kanitz W, et al. **Wien Klin Wochenschr** 1990 Apr 27;102(9):277–80 (Eng. Abstr.) (Ger)
[Adjuvant radioactive gold therapy of primary stage I c ovarian cancer] Schwarz R, et al. **Zentralbl Gynakol** 1989; 111(23):1538–41 (Eng. Abstr.) (Ger)
[Clinical application of high dose rate interstitial radiation therapy] Itami J. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jul 25;49(7):929–40 (Eng. Abstr.) (Jpn)
[Radiotherapy of carcinoma of the uterine cervix—high dose rate intracavitary irradiation using a linear source arrangement] Matsuoka Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Mar 25; 50(3):271–7 (Eng. Abstr.) (Jpn)
[Carcinoma of the uterine cervix treated with TAO low-dose rate intracavitary radiation] Horiuchi J, et al. **Rinsho Hoshasen** 1989 Nov;34(12):1483–6 (Eng. Abstr.) (Jpn)
[Radiosynoviorthese in the treatment of patients with rheumatoid arthritis] Drozdovskiĭ BIa, et al. **Med Radiol (Mosk)** 1990 Jul;35(7):6–9 (Eng. Abstr.) (Rus)
[The technology of preparation and experience in the clinical use of 252Cf sources] Vtiurin BM, et al. **Med Radiol (Mosk)** 1989 Sep;34(9):60–4 (Eng. Abstr.) (Rus)

NURSING

A stereotactic technique for volumetric interstitial implantation in the brain. Welsh D, et al. **J Neurosci Nurs** 1990 Aug;22(4):245–9

STANDARDS

A controlled study of efficacy of interstitial or external irradiation in a virus-induced brain-tumor model in rats [see comments] el-Hennawi Y, et al. **J Neurosurg** 1989 Dec; 71(6):898–902 Comment in: J Neurosurg 1990 Jun;72(6):983–4.
External vs. interstitial irradiation [letter; comment] Williams JA. **J Neurosurg** 1990 Jun;72(6):983–4 Comment on: J Neurosurg 1989 Dec;71(6):898–902.
[Evaluation of quality assurance program in high dose rate remote after-loading brachytherapy] Lin FJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Feb;89(2):139–43 (Eng. Abstr.) (Chi)

VETERINARY

Development of brachytherapy technique for nasal tumors in dogs. White R, et al. **Am J Vet Res** 1990 Aug; 51(8):1250–6

BRADYCARDIA

BLOOD

[Atrial natriuretic factor in cardiogenic shock, in hypovolemic shock and in the bradycardia-hypotension syndrome following acute myocardial infarction] Fontana F, et al. **G Ital Cardiol** 1989 Aug;19(8):686–93 (Eng. Abstr.) (Ita)

CHEMICALLY INDUCED

Bradycardia as a side-effect to oxybuprocaine. Christensen C. **Acta Anaesthesiol Scand** 1990 Feb;34(2):165–6
Bradycardia associated with vecuronium [letter] Fauvel NJ, et al. **Anaesthesia** 1989 Dec;44(12):1003
Near-fatal yew berry intoxication treated with external cardiac pacing and digoxin-specific FAB antibody fragments. Cummins RO, et al. **Ann Emerg Med** 1990 Jan; 19(1):38–43
Hypotension and bradycardia after intrathecal ketanserin and phentolamine in the rat. Dhasmana KM, et al. **Eur J Pharmacol** 1989 Sep 13;168(2):257–60
Symptomatic bradycardia complicating the use of intravenous dipyridamole for thallium-201 myocardial perfusion imaging. Pennell DJ, et al. **Int J Cardiol** 1990 May;27(2):272–4
Significance of heart rate response in shock due to aluminium phosphide poisoning. Chugh SN, et al. **J Assoc Physicians India** 1989 Nov;37(11):708–9
Lithium and propranolol: possible synergism? [letter; comment] Becker D. **J Clin Psychiatry** 1989 Dec;50(12):473 Comment on: J Clin Psychiatry 1987 Sep;48(9):371–2.
Carbamazepine-induced bradycardia-tachycardia syndrome with pharmacological analysis and concurrent ECG monitoring. Takayanagi K, et al. **J Electrocardiol** 1990 Jan; 23(1):85–8
Severe hypotension with bradycardia during renin inhibition with H142 in sodium deplete man. Webb DJ, et al. **J Hum Hypertens** 1989 Aug;3(4):227–32
Effects of ionic and nonionic contrast media on bradyarrhythmia during coronary angiography: a comparison of Renografin-76, Hypaque-76, and Isovue-370. Piao ZE, et al. **J Lab Clin Med** 1990 Jan; 115(1):122–7
Nifedipine induced bradycardia in a patient with autonomic neuropathy. al-Khafaji M, et al. **Jpn Heart J** 1989 Sep; 30(5):679–83
Severe bradycardia and hypotension following intraocular acetylcholine in a patient who previously tolerated the medication. Hagan JC 3d. **Mo Med** 1990 Apr;87(4):231–3
Transplacentally acquired caffeine and the occurrence of apnea, bradycardia, and periodic breathing in preterm infants: preliminary communication. McCulloch KM, et al. **Pediatr Pulmonol** 1989;7(2):66–70
Ozone-induced bradycardia and arrhythmia and their relation to sleep-wakefulness in rats. Arito H, et al. **Toxicol Lett** 1990 Jul;52(2):169–78
Treatment of systemic reactions to contrast media. Bush WH. **Urology** 1990 Feb;35(2):145–50 (33 ref.)
[Effect of Polfos on the bleeding time. III. Changes in various parameters of the circulatory system] Konopelko M, et al. **Med Pr** 1989;40(3):147–52 (Eng. Abstr.) (Pol)
[Bradycardia following reserpine injection requiring cardiac pacing] Grodzicki T, et al. **Wiad Lek** 1990 Feb 1–15; 43(3–4):153–5 (Eng. Abstr.) (Pol)

CLASSIFICATION

FHR terminology clarified [letter] Horne DC. **MCN** 1990 Jul–Aug;15(4):232–3

COMPLICATIONS

Bradycardia-dependent Kent bundle block [letter] Littmann L. **Am Heart J** 1989 Dec;118(6):1360
Bradycardia-mediated tachyarrhythmias in congenital heart disease and responses to chronic pacing at physiologic rates. Silka MJ, et al. **Am J Cardiol** 1990 Feb 15; 65(7):488–93
Torsades de pointes as a complication of bradyarrhythmias. Zlotikamien B, et al. **Isr J Med Sci** 1990 Feb;26(2):102–5
[Syncope of undetermined nature after electrophysiologic study. Usefulness of the head-up tilt test in the diagnosis of vaso-vagal origin and in the choice of treatment] Raviele A, et al. **G Ital Cardiol** 1990 Mar;20(3):185–94 (44 ref.) (Eng. Abstr.) (Ita)

DIAGNOSIS

Conservative management of fetal bigeminy arrhythmia leading to persistent bradycardia. Todros T, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Mar;34(3):211–5
Managing fetal bradycardia during second stage of labor. Roberts JE. **MCN** 1989 Nov–Dec;14(6):394–8
The diagnostic sensitivity of electrophysiologic testing in patients with syncope caused by transient bradycardia [see comments] Fujimura O, et al. **N Engl J Med** 1989 Dec 21;321(25):1703–7 Comment in: N Engl J Med 1990 May 10;322(19):1396–7.
Prospective pneumogram recordings in preterm infants with and without clinical apnea and bradycardia. McCulloch KM, et al. **Pediatr Pulmonol** 1990;8(1):33–9
[What is your diagnosis?] MAHAIM C. **Schweiz Rundsch Med Prax** 1989 Dec 19;78(51):1423–4 (Fre)
[What is your diagnosis?] Hoffmann A. **Schweiz Rundsch Med Prax** 1990 Aug 2;79(31–32):905–6 (Ger)
[Diagnosis and therapy of fetal brady-arrhythmia] Engelhardt W, et al. **Z Geburtshilfe Perinatol** 1990 Jul–Aug; 194(4):153–7 (Eng. Abstr.) (Ger)

DRUG THERAPY

Electrophysiologic effects of oral theophylline in sinus bradycardia. Alboni P, et al. **Am J Cardiol** 1990 Apr 15; 65(15):1037–9
Reflex bradycardia in facial surgery [letter; comment] Emmanuel ER, et al. **Br J Plast Surg** 1990 Jan;43(1):128 Comment on: Br J Plast Surg 1989 Sep;42(5):595–7.
Reflex bradycardia in facial surgery [see comments] Stott DG. **Br J Plast Surg** 1989 Sep;42(5):595–7 Comment in: Br J Plast Surg 1990 Jan;43(1):128.

EPIDEMIOLOGY

Relative bradycardia in patients with isolated penetrating abdominal trauma and isolated extremity trauma. Thompson D, et al. **Ann Emerg Med** 1990 Mar;19(3):268–75

ETIOLOGY

Reflex bradycardia and nodal escape rhythm in pheochromocytoma. Forde TP, et al. **Am Heart J** 1968 Sep;76(3):388–92
Usefulness of head-up tilt test in evaluating patients with syncope of unknown origin and negative electrophysiologic study. Raviele A, et al. **Am J Cardiol** 1990 Jun 1; 65(20):1322–7
Atrial standstill after treadmill exercise test and unique response to isoproterenol infusion in recurrent postexercise syncope. Tamura Y, et al. **Am J Cardiol** 1990 Feb 15; 65(7):533–5
An unusual complication of varicose vein surgery [letter] Brighouse D, et al. **Anaesthesia** 1990 Jan;45(1):68–9
Another cause for bradycardia during neurosurgery [letter] Joshi P, et al. **Anaesthesia** 1990 Feb;45(2):169–70
Recurrent bradycardia due to latent sick sinus syndrome [letter] Levy DM. **Anaesthesia** 1990 Jun;45(6):488–9
Craniotomy drains and bradycardias [letter] Stokes DN, et al. **Anaesthesia** 1990 Jun;45(6):495–6
Severe bradycardia and cardiac arrest [letter] van Heerden PV, et al. **Anaesthesia** 1990 Aug;45(8):685
Bradycardic responses to vagal stimulation and methacholine injection in sinoaortic denervated rats. Franchini KG, et al. **Braz J Med Biol Res** 1989;22(6):757–60
Reflex bradycardia during surgery. Doyle DJ, et al. **Can J Anaesth** 1990 Mar;37(2):219–22 (41 ref.)
Factors influencing the R-R interval during central venous injection in newborn swine. Oyston JP, et al. **Can J Anaesth** 1989 Sep;36(5):554–9
Severe bradycardia following electrical cardioversion for atrial tachyarrhythmias in patients with acute myocardial infarction. Mehta PM, et al. **Chest** 1990 Jan;97(1):241–2
The abilities of myelinated and non-myelinated aortic fibers on the brain ischemia-mediated reflex bradycardia in the rabbit. Matsumoto S. **Fukushima J Med Sci** 1988 Dec; 34(2):95–108
Bradycardia and syncope as manifestations of partial epilepsy. Constantin L, et al. **J Am Coll Cardiol** 1990 Mar 15; 15(4):900–5
Cardiac asystole: a manifestation of neurally mediated hypotension-bradycardia [see comments] Milstein S, et al. **J Am Coll Cardiol** 1989 Dec;14(7):1626–32 Comment in: J Am Coll Cardiol 1989 Dec;14(7):1633–4.
Neurally mediated hypotension and bradycardia: which nerves? How mediated? [editorial; comment] Rea RF. **J Am Coll Cardiol** 1989 Dec;14(7):1633–4 Comment on: J Am Coll Cardiol 1989 Dec;14(7):1626–32.
Symptomatic extreme bradycardia in obstructive jaundice [letter] Garg SC, et al. **J Assoc Physicians India** 1989 Oct; 37(10):675
Refractory bradycardia during retrograde pyelography and spinal anesthesia. Riskalla RF, et al. **J Clin Anesth** 1988; 1(1):36–8
Severe cardiac conduction abnormalities associated with atypical toxic shock syndrome. Rolston RD, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):89–92
A syndrome of hyperhidrosis, hypothermia, and bradycardia possibly due to central monoaminergic dysfunction. Arroyo HA, et al. **Neurology** 1990 Mar;40(3 Pt 1):556–7
[Fetal bradycardia caused by arrhythmia. Apropos of a case of blocked staggered atrial extrasystole] Col JY. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(6):777–84 (60 ref.) (Eng. Abstr.) (Fre)
[Change in cardiopulmonary function following surgery] Völkner E, et al. **Z Gesamte Inn Med** 1989 Nov 15; 44(22):662–4 (Eng. Abstr.) (Ger)
[Why is blind suction of the mouth cavity of the newborn infant immediately post partum not recommended? (letter)] Menzel K. **Zentralbl Gynakol** 1989;111(18):1272–3 (Ger)
[Sinus bradycardia in chronic neuroglycopenic syndrome. A case of "short intestine" syndrome] De Caro L, et al. **Boll Soc Ital Biol Sper** 1989 Jul;65(7):663–70 (Eng. Abstr.) (Ita)
[Intraoperative bradycardia in a case of Lown [correction of Long]-Ganong-Levine syndrome (letter)] Vaca Miguel JM, et al. **Rev Esp Anestesiol Reanim** 1989 Sep–Oct; 36(5):297 (Spa)

PHYSIOPATHOLOGY

Apnea, transient episodes of bradycardia, and periodic breathing in preterm infants. Hodgman JE, et al. **Am J Dis Child** 1990 Jan;144(1):54–7
Heart rate spectral analysis of fasting-induced bradycardia of cattle. Clabough DL, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1303–6
Cerebellar vermis: essential for classically conditioned bradycardia in the rat. Supple WF Jr, et al. **Brain Res** 1990 Feb 12;509(1):17–23
Chronic aortic regurgitation: a demonstration of the effect of bradycardia on left ventricular function. de la Rochelière R, et al. **Can J Cardiol** 1990 Jan–Feb;6(1):24–6
The effect of clothing on "diving bradycardia" in man during submersion in cold water. Tipton M. **Eur J Appl Physiol** 1989;59(5):360–4
Electrocardiac responses associated with the fear paralysis reflex in infant rabbits and rats. Relation to sudden infant death. Kaada B. **Funct Neurol** 1989 Oct–Dec;4(4):327–40
The effect of supranodose vagotomy on the hexamethonium-resistant bradycardia in the anaesthetized rabbit. McWilliam PN, et al. **J Auton Nerv Syst** 1990 Mar;

29(3):227–30
Assessing validity of infant monitor alarms with event recording. Weese-Mayer DE, et al. **J Pediatr** 1989 Nov; 115(5 Pt 1):702–8
Fetal bradycardia in labor. Roemer VM, et al. **J Perinat Med** 1989;17(3):237–43
First trimester bradycardia. A sign of impending fetal loss. Laboda LA, et al. **J Ultrasound Med** 1989 Oct;8(10):561–3
Activation of brainstem endorphinergic neurons causes cardiovascular depression and facilitates baroreflex bradycardia. Mastrianni JA, et al. **Neuroscience** 1989; 33(3):559–66
Apnoeic heart rate responses in humans. A review. Manley L. **Sports Med** 1990 May;9(5):286–310 (94 ref.)
[Central mechanisms of somatic afferent impulses in the blocking of vagus bradycardia in rabbits] Wang Q. **Sheng Li Ko Hsueh Chin Chan** 1989 Oct;20(4):350–3 **(Chi)**
[Anesthesia in high class athletes] Dominici L, et al. **Ann Fr Anesth Reanim** 1989;8(6):667–9 (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

Usefulness of disopyramide for prevention of upright tilt-induced hypotension-bradycardia. Milstein S, et al. **Am J Cardiol** 1990 Jun 1;65(20):1339–44

THERAPY

Choosing the pacemaker; a rational approach to the use of modern pacemaker technology. Morgan JM, et al. **Eur Heart J** 1990 Aug;11(8):753–64
Usefulness of transesophageal atrial pacing in hyperkalemia-induced impulse formation and conduction disturbances. Di Biase M, et al. **Int J Cardiol** 1989 Nov; 25(2):213–8
DDI pacing in the bradycardia-tachycardia syndrome. Bana G, et al. **PACE** 1990 Mar;13(3):264–70
Atrial standstill: an indication for rate responsive pacing. Solti F, et al. **PACE** 1990 Jul;13(7):830–2
Single-lead VDD pacing system. Varriale P, et al. **PACE** 1990 Jun;13(6):757–66
Role of transcutaneous pacing in the setting of a failing permanent pacemaker. Kissoon N, et al. **Pediatr Emerg Care** 1989 Sep;5(3):178–80
Panic disorder associated with permanent pacemaker implantation. Peters JC, et al. **Psychosomatics** 1990 Summer;31(3):345–7
[Comparison of rate adapted cardiac pacemakers—advantages and weaknesses] Zegelman M, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:60–1 **(Ger)**
[Nocturnal bradycardic arrhythmia in sleep related respiratory disorder—is cardiac pacemaker therapy indicated?] Köhler U, et al. **Internist (Berl)** 1989 Dec; 30(12):819–24 **(Ger)**
[Biological VA cross talk in an AAJ pacemaker] Burck G, et al. **Z Gesamte Inn Med** 1989 Aug 1;44(15):466–7 (Eng. Abstr.) **(Ger)**
[A new mechanical sensor for activity controlled and body position dependent frequency adaptive pacemaker stimulation] Alt E, et al. **Z Kardiol** 1990 Jun;79(6):408–16 (Eng. Abstr.) **(Ger)**
[Prerequisites for pacemaker electrodes for individual programming of a low stimulation impulse (comparison of an Elgiloy and a steroid-dependent pacemaker electrode)] Schuchert A, et al. **Z Kardiol** 1990 Jun;79(6):403–7 (Eng. Abstr.) **(Ger)**
[30 years cardiac pacemaker therapy: a status evaluation] Stangl K, et al. **Z Kardiol** 1990 Jun;79(6):383–95 (151 ref.) (Eng. Abstr.) **(Ger)**
[Cardiopulmonary stress: control of the function of frequency variable pacemaker systems] Treese N, et al. **Z Kardiol** 1990 Jun;79(6):396–402 (Eng. Abstr.) **(Ger)**
[Effectiveness of optimally timed atrial contraction in shock and bradyarrhythmia accompany right ventricular infarction] Ishikawa Y, et al. **Nippon Naika Gakkai Zasshi** 1989 Jul;78(7):974–5 **(Jpn)**
[Temporary pacing for bradycardia—indication, method and technique] Saitoh H, et al. **Nippon Rinsho** 1990 Feb; 48(2):288–93 **(Jpn)**
[Comparative evaluation of various methods of continuous electric stimulation of the heart in bradycardia] Drogaitsev AD. **Kardiologiia** 1990 Feb;30(2):5–11 (Eng. Abstr.) **(Rus)**

VETERINARY

Bradycardia in cattle deprived of food. McGuirk SM, et al. **J Am Vet Med Assoc** 1990 Mar 15;196(6):894–6

BRADYKININ

Probing the role of proline in peptide hormones. NMR studies of bradykinin and related peptides. London RE, et al. **Biochem Pharmacol** 1990 Jul 1;40(1):41–8
Pain and analgesia evaluated by the intraperitoneal bradykinin-evoked pain method in man. Lim RK, et al. **Clin Pharmacol Ther** 1967 Jul-Aug;8(4):521–42
Three-dimensional structure of bradykinin in SDS micelles. Study using nuclear magnetic resonance, distance geometry, and restrained molecular mechanics and dynamics. Lee SC, et al. **Int J Pept Protein Res** 1990 May; 35(5):367–77
High-field NMR and circular dichroism solvent-dependent conformational studies of the bradykinin C-terminal tetrapeptide Ser-Pro-Phe-Arg. Otter A, et al. **J Biomol Struct Dyn** 1988 Dec;6(3):609–25
Bradykinin receptors in isolated rat duodenum. Altinkurt O, et al. **Peptides** 1990 Jan-Feb;11(1):39–44

ADMINISTRATION & DOSAGE

[Effect of bradykinin on systemic and pulmonary hemodynamics in the human] Bönner G, et al. **Klin Wochenschr** 1989 Nov 3;67(21):1085–95 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Role of the mediators in pulmonary hyperreactivity: the cocktail interaction hypothesis. Omini C, et al. **Eur Respir J Suppl** 1989 Jun;6:493s–496s
[Significance of tachyphylaxis induced by repeated bradykinin inhalation in bronchial asthma] Polosa R, et al. **Medicina (Firenze)** 1989 Oct-Dec;9(4):422–4 (Eng. Abstr.) **(Ita)**

ANALOGS & DERIVATIVES

The effect of a bradykinin antagonist on vasodilatation in the cat and rabbit. Barton S, et al. **Adv Exp Med Biol** 1989; 247A:435–8
The effect of bradykinin and its fragments on the arachidonate cascade of brain microvessels. Gecse A, et al. **Adv Exp Med Biol** 1989;247A:249–54
Competitive antagonists of bradykinin: in vitro (jugular vein) and in vivo (blood pressure response) studies. Hoffmann H, et al. **Adv Exp Med Biol** 1989;247B:407–9
Bradykinin analog induce histamine release from human skin mast cells. Lawrence ID, et al. **Adv Exp Med Biol** 1989; 247A:225–9
Measurement of des-Phe8-Arg9-bradykinin by enzyme-immunoassay—a useful parameter of plasma kinin release. Majima M, et al. **Adv Exp Med Biol** 1989; 247B:331–5
A novel kinin, Met-Ile-Ser-bradykinin (Met-T-kinin) is released from T-kininogen by an acid proteinase of granulomatous tissues in rats. Sakamoto W, et al. **Adv Exp Med Biol** 1989;247B:103–8
The hypotensive response to des-Arg9-bradykinin increases during E. coli septicemia in the pig. Siebeck M, et al. **Adv Exp Med Biol** 1989;247B:389–93
Inhibition of human and rat tissue kallikreins by peptide analog antagonists of bradykinin. Spragg J, et al. **Adv Exp Med Biol** 1989;247B:277–81
Development of bradykinin antagonists: structure-activity relationships for new categories of antagonist sequences. Vavrek RJ, et al. **Adv Exp Med Biol** 1989;247B:395–400
Selective expression of des-Arg9-BK sensitive (B1) receptors in vivo and in vitro by angiotensin converting enzyme inhibitors. Whalley ET, et al. **Adv Exp Med Biol** 1989; 247A:185–9
Antagonism of the algesic action of bradykinin on the human blister base. Whalley ET, et al. **Adv Exp Med Biol** 1989; 247A:261–8
T-kinin in human ovarian carcinoma ascites. Wunderer G, et al. **Adv Exp Med Biol** 1989;247B:109–14
Effects on blood pressure of intracerebroventricular administration of a kinin antagonist. Yang XP, et al. **Adv Exp Med Biol** 1989;247A:439–45
Effects of kinins on cultured arterial smooth muscle. Dixon BS, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C299–308
Enhancement of sperm motility by bradykinin and kinin analogs. Miska W, et al. **Arch Androl** 1990;25(1):63–7
Effect of a kinin antagonist on renal function and haemodynamics during alterations in sodium balance in conscious normotensive rats. Madeddu P, et al. **Clin Sci** 1990 Feb;78(2):165–8
Isolation and biological activity of a novel kinin ([Thr6] bradykinin) from the turtle, Pseudemys scripta. Conlon JM, et al. **Endocrinology** 1990 Feb;126(2):985–91
Suppression of carrageenan-induced hyperalgesia, hyperthermia and edema by a bradykinin antagonist. Costello AH, et al. **Eur J Pharmacol** 1989 Nov 21; 171(2–3):259–63
Prostanoid involvement in the relaxation of in vitro mesenteric artery by bradykinin and des-Arg9-bradykinin. Nwator IA, et al. **Eur J Pharmacol** 1989 Oct 24; 170(1–2):29–33
[Hyp3]-bradykinin and [Hyp3]-Lys-bradykinin interact with B2-bradykinin receptors and stimulate inositol phosphate production in cultured human fibroblasts. Dengler R, et al. **FEBS Lett** 1990 Mar 12;262(1):111–4
Functional analysis of kinin antagonists. Lembeck F, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 6:S75–7
Hemodynamic effects of a kinin antagonist. Waeber B, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 6:S78–82
Characterization of Ile,Ser-bradykinin-induced changes in short-circuit current across rat colon. Tien XY, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):1063–7
[Structures and functions of kininogen and kinin hydroxyproline derivatives as multi-functional proteins] Kato H. **Rinsho Ketsueki** 1989 Oct;30(10):1690–3 (30 ref.) **(Jpn)**
[Conformation-activity relations of des-Arg9-bradykinin. I. Conformation of molecules in solution] Shenderovich MD. **Bioorg Khim** 1989 Sep;15(9):1173–84 (Eng. Abstr.) **(Rus)**

ANALYSIS

An enzyme-linked immunosorbent assay (ELISA) for kinins in tryptic digests. Anumula KR, et al. **Adv Exp Med Biol** 1989;247B:231–7
Enzyme-linked immunosorbent assays for kinins using high-affinity monoclonal kinin antibodies. Odya CE, et al. **Biochem Pharmacol** 1990 Jul 15;40(2):245–51

ANTAGONISTS & INHIBITORS

Effects of calcium and EDTA on rat skin capillary permeability and on its response to histamine, serotonin and bradykinin. Busch L, et al. **Acta Physiol Pharmacol Latinoam** 1989;39(3):227–34
The effect of a bradykinin antagonist on vasodilatation in the cat and rabbit. Barton S, et al. **Adv Exp Med Biol** 1989; 247A:435–8
Development of competitive antagonists of bradykinin. Stewart JM, et al. **Adv Exp Med Biol** 1989;247A:81–6 (13 ref.)
Effect of a bradykinin B2 antagonist on responses of intact and rubbed guinea-pig trachea in vitro. Bramley AM, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:786P
Demonstration of anti-bradykinin compounds in callus cultures of Mandevilla velutina. Calixto JB, et al. **Braz J Med Biol Res** 1989;22(10):1275–9
Effect of a kinin antagonist on renal function and haemodynamics during alterations in sodium balance in conscious normotensive rats. Madeddu P, et al. **Clin Sci** 1990 Feb;78(2):165–8
Suppression of carrageenan-induced hyperalgesia, hyperthermia and edema by a bradykinin antagonist. Costello AH, et al. **Eur J Pharmacol** 1989 Nov 21; 171(2–3):259–63
Reduction of infarct size by local angiotensin-converting enzyme inhibition is abolished by a bradykinin antagonist. Martorana PA, et al. **Eur J Pharmacol** 1990 Jul 3; 182(2):395–6
Inactivation of the vascular permeability-increasing activity of bradykinin by mycoplasmas. Shibata K, et al. **FEMS Microbiol Lett** 1989 Nov;53(1–2):149–52
Two classes of antagonist interact with receptors for the mitogenic neuropeptides bombesin, bradykinin, and vasopressin. Woll PJ, et al. **Growth Factors** 1988;1(1):75–83
Functional analysis of kinin antagonists. Lembeck F, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 6:S75–7

BIOSYNTHESIS

Relationship of Hageman factor activation to the formation of bradykinin in humans: a historical perspective. Kaplan AP. **Prog Clin Biol Res** 1989;297:311–23 (76 ref.)
Effect of a highly selective plasma-kallikrein synthetic inhibitor on contact activation relating to kinin generation, coagulation and fibrinolysis. Wanaka K, et al. **Thromb Res** 1990 Mar 15;57(6):889–95

BLOOD

A significant role of plasma kallikrein-kinin system in plasma exudation of rat carrageenin-induced pleurisy. Katori M, et al. **Adv Exp Med Biol** 1989;247A:137–44
Measurement of des-Phe8-Arg9-bradykinin by enzyme-immunoassay—a useful parameter of plasma kinin release. Majima M, et al. **Adv Exp Med Biol** 1989; 247B:331–5
The mechanism of degradation of bradykinin (lysyl-bradykinin) in human serum. Sheikh IA, et al. **Adv Exp Med Biol** 1989;247A:331–6
Studies on relation of bradykinin to ischemic brain edema in stroke-resistant spontaneously hypertensive rat. Kamiya T, et al. **Adv Neurol** 1990;52:543
Contact phase of blood coagulation is not activated in edema of high altitude. Bärtsch P, et al. **J Appl Physiol** 1989 Oct; 67(4):1336–40
Plasma bradykinin and prostaglandin metabolism and exercise testing in patients with silent myocardial ischemia compared with patients with painful myocardial ischemia. Kurita A, et al. **Jpn Circ J** 1989 Nov;53(11):1466–71
Study on pruritus in hemodialysis patients and the antipruritic effect of neurotropin: plasma levels of C3a, C5a, bradykinin and lipid peroxides. Yago H, et al. **Nippon Jinzo Gakkai Shi** 1989 Oct;31(10):1061–7
[The study of degradation of peptides in human plasma and serum by the ERIAD high pressure liquid chromatography-mass spectrometry method] Mirgorodskaia OA, et al. **Biokhimiia** 1989 Jul;54(7):1186–92 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Serial measurement of bradykinin and fibrinopeptide A of cerebrospinal fluid and plasma in patients with subarachnoid hemorrhage. Kasuya H, et al. **Adv Exp Med Biol** 1989;247B:611–5

CHEMICAL SYNTHESIS

Development of bradykinin antagonists: structure-activity relationships for new categories of antagonist sequences. Vavrek RJ, et al. **Adv Exp Med Biol** 1989;247B:395–400

DIAGNOSTIC USE

Recent studies on the rule of kinins in inflammatory diseases

of human airways. Proud D, et al. **Adv Exp Med Biol** 1989; 247A:117–23

IMMUNOLOGY

Further characterization of monoclonal antibodies against rat plasma kallikrein, rat low molecular weight kininogen and synthetic bradykinin. Bedi GS, et al. **Adv Exp Med Biol** 1989;247B:223–30

Contribution of histamine and prostanoids to bronchoconstriction provoked by inhaled bradykinin in atopic asthma. Polosa R, et al. **Allergy** 1990 Apr; 45(3):174–82

Bradykinin antibodies: new developments. Hilgenfeldt U, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 6:S17–9

[The production of specific antisera to bradykinin and their study by immunoenzyme analysis] Elistratova IA, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):727–9 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Quantification, isolation and structural determination of bradykinin and hydroxyprolyl–bradykinin in tumor ascites. Matsumura Y, et al. **Adv Exp Med Biol** 1989;247A:587–92

Bradykinin and kininogens in bovine milk. Wilson WE, et al. **J Biol Chem** 1989 Oct 25;264(30):17777–83

METABOLISM

Effects of sodium intake on urinary excretion and renal content of bradykinin and its metabolites in rats. Barabé J, et al. **Adv Exp Med Biol** 1989;247A:269–74

Specific binding sites for bradykinin and its degradation process in cultured rat vascular smooth muscle cells. Hirata Y, et al. **Adv Exp Med Biol** 1989;247A:415–20

Role of bradykinin generating and degrading systems in the vascular permeability response induced with kaolin in rats. Kumakura S, et al. **Adv Exp Med Biol** 1989;247B:541–6

Metabolism of bradykinin by multiple coexisting membrane-bound peptidases in lung: techniques for investigating the role of each peptidase using specific inhibitors. Orawski AT, et al. **Adv Exp Med Biol** 1989; 247B:355–64

An iodinatable photoaffinity probe based on the structure of kallidin. Webb M, et al. **Adv Exp Med Biol** 1989; 247A:409–14

Vascular effects of kinins in trout and bradykinin metabolism by perfused gill. Lipke DW, et al. **Am J Physiol** 1990 Feb; 258(2 Pt 2):R515–22

Bradykinin and respiratory mucous membranes. Analysis of bradykinin binding site distribution and secretory responses in vitro and in vivo. Baraniuk JN, et al. **Am Rev Respir Dis** 1990 Mar;141(3):706–14

A high-affinity bradykinin receptor in membranes from rat myometrium is coupled to pertussis toxin-sensitive G-proteins of the Gi family. Liebmann C, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):910–7

Bradykinin receptors undergo ligand-induced desensitization. Roberts RA, et al. **Biochemistry** 1990 Feb 27;29(8):1975–9

Bradykinin activation of primary afferent terminals in the neonate rat spinal cord in vitro. Dunn PM, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:827P

Enzymatic inactivation of bradykinin by rat brain neuronal perikarya. DelBel EA, et al. **Cell Mol Neurobiol** 1989 Sep; 9(3):379–400

Glucocorticoids suppress levels of immunoreactive bradykinin in inflamed tissue as evaluated by microdialysis probes. Hargreaves KM, et al. **Clin Pharmacol Ther** 1990 Aug;48(2):168–78

Human lung membrane-bound neutral metallo-endopeptidase-catalyzed hydrolysis of bradykinin. Zolfaghari R, et al. **Enzyme** 1989;42(3):160–73

Pseudomonas elastase acts as a virulence factor in burned hosts by Hageman factor-dependent activation of the host kinin cascade. Holder IA, et al. **Infect Immun** 1989 Nov; 57(11):3345–8

Guanine nucleotide regulation of B2 kinin receptors. Time-dependent formation of a guanine nucleotide-sensitive receptor state from which [3H]bradykinin dissociates slowly. Leeb-Lundberg LM, et al. **J Biol Chem** 1990 Jun 15;265(17):9621–7

Local inhibition of bradykinin degradation in ischemic hearts. Linz W, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 6:S99–109

Selectivity of converting-enzyme inhibitors for angiotensin I versus bradykinin hydrolysis reactions. Brooks RR, et al. **J Pharm Sci** 1990 May;79(5):384–8

Degradation of bradykinin and its metabolites by rat brain synaptic membranes. Orawski AT, et al. **Peptides** 1989 Sep–Oct;10(5):1063–73

[Interaction between bradykinin and enkephalins in rat dental pulp] Wei EQ, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Nov;10(6):500–3 (Eng. Abstr.) **(Chi)**

[Evidence for a glomerular receptor for bradykinin in rats. Effect of sodium intake on density and affinity of the receptor] Bascands JL, et al. **Arch Mal Coeur** 1989 Jul; 82(7):1219–22 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Diversity of kinin effects on transporting epithelia. Cuthbert AW, et al. **Adv Exp Med Biol** 1989;247A:105–11 (27 ref.)

Tonin and kallikrein-kinin system. Feitosa MH, et al. **Adv Exp Med Biol** 1989;247A:573–80

The effect of bradykinin and its fragments on the arachidonate cascade of brain microvessels. Gecse A, et al. **Adv Exp Med Biol** 1989;247A:249–54

Competitive antagonists of bradykinin: in vitro (jugular vein) and in vivo (blood pressure response) studies. Hoffmann H, et al. **Adv Exp Med Biol** 1989;247B:407–9

Bradykinin (BK) enhances diuresis and natriuresis in saline volume-expanded dogs. Honda K, et al. **Adv Exp Med Biol** 1989;247A:287–91

Dose-dependent effects of bradykinin infusion in postoperative patients. Jauch KW, et al. **Adv Exp Med Biol** 1989;247A:603–8

Mechanism of bradykinin-induced nociceptive response. Katori M, et al. **Adv Exp Med Biol** 1989;247A:255–9

Activation of calcium ion-dependent proteinases by bradykinin in dental pulp of the rat. Kudo T, et al. **Adv Exp Med Biol** 1989;247B:627–31

Bradykinin analog induce histamine release from human skin mast cells. Lawrence ID, et al. **Adv Exp Med Biol** 1989; 247A:225–9

The role of bradykinin on the effect of plasma kallikrein on platelet aggregation. Maeda NY, et al. **Adv Exp Med Biol** 1989;247B:623–6

Peptide hormones, cytosolic calcium and renal epithelial response. Morrison AR, et al. **Adv Exp Med Biol** 1989; 259:149–66 (79 ref.)

Effects of the kallikrein-kinin system on phasic coronary vasospasm in dogs. Ohde H, et al. **Adv Exp Med Biol** 1989; 247B:617–22

Different involvement of endothelium-derived relaxing factor and prostacyclin in vasodilator response to bradykinin in isolated dog blood vessels. Okamura T, et al. **Adv Exp Med Biol** 1989;247A:429–34

The hypotensive response to des-Arg9-bradykinin increases during E. coli septicemia in the pig. Siebeck M, et al. **Adv Exp Med Biol** 1989;247B:389–93

Inhibition of human and rat tissue kallikreins by peptide analog antagonists of bradykinin. Spragg J, et al. **Adv Exp Med Biol** 1989;247B:277–81

Angiotensin converting enzyme inhibitors, captopril and enalaprilat, augment bradykinin-induced prostacyclin synthesis in cultured rat vascular smooth muscle cells. Takeuchi K, et al. **Adv Exp Med Biol** 1989;247B:489–94

Effects of kinin on electrolytes transport and regulation of kininase activity in distal nephron segments of the rat. Tomita K, et al. **Adv Exp Med Biol** 1989;247A:97–104

Enhancement of proteinase activities by bradykinin in adrenal medulla of the rat. Wei EQ, et al. **Adv Exp Med Biol** 1989; 247B:633–8

Antagonism of the algesic action of bradykinin on the human blister base. Whalley ET, et al. **Adv Exp Med Biol** 1989; 247A:261–8

Effects on blood pressure of intracerebroventricular administration of a kinin antagonist. Yang XP, et al. **Adv Exp Med Biol** 1989;247A:439–45

Kinin receptors in smooth muscle and vascular effects in sodium depleted rats. Yasujima M, et al. **Adv Exp Med Biol** 1989;247B:411–7

Studies on the mechanism of the sedational state; "tranquilization" evoked by bradykinin or kallikrein in rats. Yazaki K. **Adv Exp Med Biol** 1989;247B:595–600

A pertussis toxin-sensitive G protein is required to induce histamine release from rat peritoneal mast cells by bradykinin. Bueb JL, et al. **Agents Actions** 1990 Apr; 30(1–2):98–101

Histamine secretion from mast cells stimulated with bradykinin. Lee PY, et al. **Agents Actions** 1990 Apr; 30(1–2):67–9

Modification by some antagonists of the shape changes of venous endothelial cells in response to inflammatory agents in vitro. Northover AM. **Agents Actions** 1990 Mar; 29(3–4):184–8

Ethanol effects on bradykinin-stimulated phosphoinositide hydrolysis in NG 108–15 neuroblastoma-glioma cells. Simonsson P, et al. **Alcohol** 1989 Nov–Dec;6(6):475–9

Isoproterenol, cAMP, and bradykinin stimulate diacylglycerol production in airway epithelium. Anderson MP, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):L294–300

Endothelial and smooth muscle cells hyperpolarized by bradykinin are not dye coupled. Bény JL. **Am J Physiol** 1990 Mar;258(3 Pt 2):H836–41

Effects of intracardiac bradykinin and capsaicin on spinal and spinoreticular neurons. Bolser DC, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1543–50

Effects of kinins on cultured arterial smooth muscle. Dixon BS, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C299–308

Bradykinin activates protein kinase C in cultured cortical collecting tubular cells. Dixon BS, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):F808–17

Changes of venous return and other hemodynamic parameters during bradykinin infusion. Emerson TE Jr. **Am J Physiol** 1967 Jun;212(6):1455–60

Effect of bradykinin and kininogens in isolated rat kidney vasoconstricted by angiotensin II. Gardes J, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1273–81

Bradykinin attenuates glucagon-induced leucine oxidation in humans. Hartl WH, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):E239–45

Similar responsiveness of smooth muscle of the canine basilar artery to EDRF and nitric oxide. Katusic ZS, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1235–9

Differences in endothelium-dependent cerebral dilation by bradykinin and acetylcholine. Kontos HA, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1261–6

Tissue origin of peptide-responsive eicosanoid production in rabbit intestine. Leduc LE, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):G879–86

Somatosensory inhibition of vagal baroreflex bradycardia: afferent nervous mechanisms. Nosaka S, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R829–38

Bradykinin stimulates airway epithelial Cl– secretion via two second messenger pathways. Smith JJ, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):L369–77

Interaction of ANP and bradykinin during endopeptidase 24.11 inhibition: renal effects. Smits GJ, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1417–24

Enhancement of sperm motility by bradykinin and kinin analogs. Miska W, et al. **Arch Androl** 1990;25(1):63–7

Coronary endothelium is responsive to bradykinin and arachidonate but not to acetylcholine. Harasawa Y, et al. **Arch Int Pharmacodyn Ther** 1989 Nov–Dec;302:196–208

Effects of bradykinin, GTP gamma S, R59022 and N-ethylmaleimide on inositol phosphate production in NG108–15 cells. Chiang CF, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):175–82

Stimulation of mono- and diacylglycerol lipase activities by bradykinin in neural cultures. Farooqui AA, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):1001–9

Long-term phorbol ester treatment dissociates phospholipase D activation from phosphoinositide hydrolysis and prostacyclin synthesis in endothelial cells stimulated with bradykinin. Martin TW, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):319–26

Angiotensin II and bradykinin stimulate phosphoinositide breakdown in intact rat kidney glomeruli but not in proximal tubules: glomerular response modulated by phorbol ester. Sekar MC, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):373–9

Neurotransmitter release from bradykinin-stimulated PC12 cells. Stimulation of cytosolic calcium and neurotransmitter release. Appell KC, et al. **Biochem J** 1989 Oct 1;263(1):11–8

Bradykinin and thrombin effects on polyphosphoinositide hydrolysis and prostacyclin production in endothelial cells. Bartha K, et al. **Biochem J** 1989 Oct 1;263(1):149–55

Effect of dual agonists on phosphoinositide pools in WRK-1 cells. Monaco ME, et al. **Biochem J** 1990 Aug 1; 269(3):633–7

Bradykinin action in the rat duodenum: Ca2(+)-dependent effects of bradykinin on the activity of particulate guanylate cyclase. Liebmann C, et al. **Biomed Biochim Acta** 1989; 48(8):597–600

Bradykinin stimulates prostaglandin E2 formation in isolated human osteoblast-like cells. Ljunggren O, et al. **Biosci Rep** 1990 Feb;10(1):121–6

Substance P and bradykinin hyperpolarize pig coronary artery endothelial cells in primary culture. Brunet PC, et al. **Blood Vessels** 1989;26(4):228–34

The effect of sulindac on dermal responses to bradykinin in normal subjects given an angiotensin converting enzyme inhibitor. Ferner RE, et al. **Br J Clin Pharmacol** 1990 Mar; 29(3):363–5

Mediation of bradykinin-induced contraction in canine veins via thromboxane/prostaglandin endoperoxide receptor activation. Aksoy MO, et al. **Br J Pharmacol** 1990 Mar; 99(3):461–6

The role of the epithelium in modulating the responses of guinea-pig trachea induced by bradykinin in vitro. Bramley AM, et al. **Br J Pharmacol** 1990 Apr;99(4):762–6

Bradykinin-induced depolarization of primary afferent nerve terminals in the neonatal rat spinal cord in vitro. Dunn PM, et al. **Br J Pharmacol** 1990 Jul;100(3):656–60

Multiple mechanisms in the motor responses of the guinea-pig isolated urinary bladder to bradykinin. Maggi CA, et al. **Br J Pharmacol** 1989 Oct;98(2):619–29

Selectivity of bradykinin analogues for receptors mediating contraction and relaxation of the rat duodenum. Paiva AC, et al. **Br J Pharmacol** 1989 Sep;98(1):206–10

Structure-activity studies on bradykinin and related peptides: agonists. Rhaleb NE, et al. **Br J Pharmacol** 1990 Mar; 99(3):445–8

Modulation of the vasodepressor actions of acetylcholine, bradykinin, substance P and endothelin in the rat by a specific inhibitor of nitric oxide formation. Whittle BJ, et al. **Br J Pharmacol** 1989 Oct;98(2):646–52

Modulation by neuropeptides of bradykinin-stimulated second messenger release in dorsal root ganglion neurons. Gammon CM, et al. **Brain Res** 1990 Jun 4;518(1–2):159–65

Responses of nociceptive VPL neurons to intracardiac injection of bradykinin in the cat. Horie H, et al. **Brain Res** 1990 May 14;516(1):161–4

Activation of a K+ conductance by bradykinin and by inositol-1,4,5-trisphosphate in rat glioma cells: involvement of intracellular and extracellular Ca2+. Reiser G, et al. **Brain Res** 1990 Jan 8;506(2):205–14

Bradykinin-induced changes in phosphoinositides, inositol phosphate production and intracellular free calcium in cultured bovine aortic endothelial cells. Myers DE, et al. **Cell Signal** 1989;1(4):335–43

Synergistic potentiation by captopril and propranolol of bradykinin-induced bronchoconstriction in the guinea-pig. Lau WA, et al. **Clin Exp Pharmacol Physiol** 1989 Nov; 16(11):849–57

Bradykinin has no acute effect on the response of forearm

blood flow to sympathetic stimulation in man. Cullen MJ, et al. **Clin Sci** 1990 Apr;78(4):399–401

Effect of bradykinin on feline gallbladder water transport and prostanoid formation. German D, et al. **Dig Dis Sci** 1989 Nov;34(11):1770–6

A comparison of the concentration–dependent actions of thyrotropin–releasing hormone, angiotensin II, bradykinin, and Lys–bradykinin on cytosolic free calcium dynamics in rat anterior pituitary cells: selective effects of dopamine. Kuan SI, et al. **Endocrinology** 1990 Oct;127(4):1841–8

Effect of captopril on skin blood flow following intradermal bradykinin measured by laser Doppler flowmetry. Li Kam Wa TC, et al. **Eur J Clin Pharmacol** 1989;37(5):471–5

Diacylglycerol in the synergy of bradykinin and thrombin stimulation of prostaglandin synthesis. Burch RM. **Eur J Pharmacol** 1989 Sep 1;168(1):39–42

Prostanoid production by rat aortic endothelial cells by bradykinin and histamine. Cole OF, et al. **Eur J Pharmacol** 1989 Oct 10;169(2–3):307–12

Vascular effects of topically applied bradykinin on the human nasal mucosa. Holmberg K, et al. **Eur J Pharmacol** 1990 Jan 3;175(1):35–41

Prostanoid involvement in the relaxation of in vitro mesenteric artery by bradykinin and des–Arg9–bradykinin. Nwator IA, et al. **Eur J Pharmacol** 1989 Oct 24; 170(1–2):29–33

Interleukin–1 potentiates bradykinin– and TNF alpha–induced PGE2 release. O'Neill LA, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):131–7

Mechanisms for activation and subsequent removal of cytosolic Ca2+ in bradykinin–stimulated neuronal and glial cell lines. Reiser G, et al. **Exp Cell Res** 1990 Jan; 186(1):47–53

Bradykinin inhibits a potassium M–like current in rat pheochromocytoma PC12 cells [published erratum appears in FEBS Lett 1990 Feb 12;261(1):217] Villarroel A, et al. **FEBS Lett** 1989 Sep 11;255(1):42–6

Histamine and bradykinin stimulate the phosphoinositide turnover in human umbilical vein endothelial cells via different G–proteins. Voyno–Yasenetskaya TA, et al. **FEBS Lett** 1989 Dec 18;259(1):67–70

Interactions between bradykinin and adrenolytic drugs on submaxillary gland secretion. Kroeger DC, et al. **Fed Proc** 1968 Jan–Feb;27(1):80–3

Structure–activity relationships in bradykinin analogues. Stewart JM. **Fed Proc** 1968 Jan–Feb;27(1):63–6

Bradykinin induces inositol 1,4,5–trisphosphate–dependent hyperpolarization in K+ M–current–deficient hybrid NL308 cells: comparison with NG108–15 neuroblastoma x glioma hybrid cells. Higashida H, et al. **GLIA** 1990; 3(1):1–12

Effects of kinins on glucose metabolism in vivo. Hartl WH, et al. **Horm Metab Res Suppl** 1990;22:79–84 (60 ref.)

The effects of bradykinin and the ischemic isolated rat heart. Tio RA, et al. **Horm Metab Res Suppl** 1990;22:85–9

Bradykinin potentiates LH–induced follicular rupture in the rat ovary perfused in vitro. Brännström M, et al. **Hum Reprod** 1989 Jul;4(5):475–81

Reversal of hyperreactivity to bradykinin in renal hypertensive rats. Camacho AA, et al. **Hypertension** 1990 Feb;15(2 Suppl):I140–3

Bradykinin produces pulmonary vasodilation in fetal lambs: role of prostaglandin production. Frantz E, et al. **J Appl Physiol** 1989 Oct;67(4):1512–7

Bradykinin transiently activates protein kinase C in Swiss 3T3 cells. Distinction from activation by bombesin and vasopressin. Issandou M, et al. **J Biol Chem** 1990 Jul 15; 265(20):11890–6

Membrane potential and Na(+)–K+ pump activity modulate resting and bradykinin–stimulated changes in cytosolic free calcium in cultured endothelial cells from bovine atria. Laskey RE, et al. **J Biol Chem** 1990 Feb 15;265(5):2613–9

Bradykinin–evoked acetylcholine release via inositol trisphosphate–dependent elevation in free calcium in neuroblastoma x glioma hybrid NG108–15 cells. Ogura A, et al. **J Biol Chem** 1990 Feb 25;265(6):3577–84

Hemodynamic effects of bradykinin on systemic and pulmonary circulation in healthy and hypertensive humans. Bönner G, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 6:S46–56

Regional vascular resistance and haemodynamics in the spontaneously hypertensive rat: the effects of bradykinin. Thomas GR, et al. **J Cardiovasc Pharmacol** 1990 Feb; 15(2):211–7

ras–transformation of MDCK cells alters responses to phorbol ester without altering responses to bradykinin. Slivka SR, et al. **J Cell Biochem** 1990 Feb;42(2):59–70

Bradykinin induces superoxide anion release from human endothelial cells. Holland JA, et al. **J Cell Physiol** 1990 Apr;143(1):21–5

Bradykinin sensitization of colony–stimulating factor–1–responsive murine marrow progenitors to prostaglandin E. A property of the amino–terminal tetrapeptide fragment. Moore RN, et al. **J Immunol** 1990 Jan 15;144(2):667–70

Bradykinin–induced potassium current in cultured bovine aortic endothelial cells. Colden–Stanfield M, et al. **J Membr Biol** 1990 Jul;116(3):227–38

Carbachol and bradykinin increase the production of diacylglycerol from sources other than inositol–containing phospholipids in PC12 cells. Horwitz J. **J Neurochem** 1990 Mar;54(3):983–91

Chemosensitivity of fine afferents from rat skin in vitro. Lang E, et al. **J Neurophysiol** 1990 Apr;63(4):887–901

Second messengers involved in the mechanism of action of bradykinin in sensory neurons in culture. Burgess GM, et al. **J Neurosci** 1989 Sep;9(9):3314–25

Bradykinin–induced bronchoconstriction in guinea pig in vivo: role of neural mechanisms. Ichinose M, et al. **J Pharmacol Exp Ther** 1990 May;253(2):594–9

Effect of bradykinin on opossum esophageal longitudinal smooth muscle: evidence for novel bradykinin receptors. Saha JK, et al. **J Pharmacol Exp Ther** 1990 Mar; 252(3):1012–20

Bradykinin stimulates the production of cyclic GMP via activation of B2 kinin receptors in cultured porcine aortic endothelial cells. Schini VB, et al. **J Pharmacol Exp Ther** 1990 Feb;252(2):581–5

Characterization of Ile,Ser–bradykinin–induced changes in short–circuit current across rat colon. Tien XY, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):1063–7

Local inhibition of converting enzyme and vascular responses to angiotensin and bradykinin in the human forearm. Benjamin N, et al. **J Physiol (Lond)** 1989 May;412:543–55

Bradykinin–evoked changes in cytosolic calcium and membrane currents in cultured bovine pulmonary artery endothelial cells. Cannell MB, et al. **J Physiol (Lond)** 1989 Dec;419:555–68

Participation of the kallikrein–kinin–receptor system in reflexes arising from neural afferents in the dog epicardium. Staszewska–Woolley J, et al. **J Physiol (Lond)** 1989 Dec; 419:33–44

Regulatory pathways for the stimulation of canine tracheal ciliary beat frequency by bradykinin. Wong LB, et al. **J Physiol (Lond)** 1990 Mar;422:421–31

Morphological studies of bradykinin–treatments on the rat trigeminal sensory neuron. Kudoh C, et al. **J Submicrosc Cytol Pathol** 1990 Jul;22(3):353–6

Endothelium dependent relaxation of human corpus cavernosum by bradykinin. Kimoto Y, et al. **J Urol** 1990 Oct;144(4):1015–7

Bradykinin–induced contractions of canine prostate and bladder: effect of angiotensin–converting enzyme inhibition. Steidle CP, et al. **J Urol** 1990 Aug;144(2 Pt 1):390–2

Effect of low–dose bradykinin on glucose metabolism and nitrogen balance in surgical patients. Hartl W, et al. **Lancet** 1990 Jan 13;335(8681):69–71

Microvascular effects of bradykinin in the isolated perfused guinea–pig hindbrain: method and characterization of a possible third type of bradykinin receptor. Cohen–Laroque ES, et al. **Microvasc Res** 1990 Jul;40(1):55–62

Regulation of tyrosine hydroxylase activity in pheochromocytoma PC–12 cells by bradykinin. Houchi H, et al. **Mol Pharmacol** 1990 Jan;37(1):104–10

Functional expression of B2 bradykinin receptors from Balb/c cell mRNA in Xenopus oocytes. Mahan LC, et al. **Mol Pharmacol** 1990 Jun;37(6):785–9

Effects of capsaicin, tachykinins, calcitonin gene–related peptide and bradykinin in the pig iris sphincter muscle. Geppetti P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Apr; 341(4):301–7

Differential G protein–mediated coupling of neurotransmitter receptors to Ca2+ channels in rat dorsal root ganglion neurons in vitro. Ewald DA, et al. **Neuron** 1989 Feb; 2(2):1185–93

Bradykinin facilitates the purinergic motor component of the rat bladder neurotransmission. Acevedo CG, et al. **Neurosci Lett** 1990 May 31;113(2):227–32

Carrageenan inflammation increases bradykinin sensitivity of rat cutaneous nociceptors. Kirchhoff C, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):206–10

The effects of bradykinin agonists and antagonists on visceral polymodal receptor activities. Mizumura K, et al. **Pain** 1990 Feb;40(2):221–7

Effects of bradykinin on PC–12 cell differentiation. Kozlowski MR, et al. **Peptides** 1989 Nov–Dec;10(6):1121–6

Bradykinin and inositol 1,4,5–trisphosphate–stimulated calcium release from intracellular stores in cultured bovine endothelial cells. Freay A, et al. **Pflugers Arch** 1989 Aug; 414(4):377–84

Sensitization of articular afferents to mechanical stimuli by bradykinin. Neugebauer V, et al. **Pflugers Arch** 1989 Dec; 415(3):330–5

Effects of some autacoids on breathing and perfusion flow in the isolated perfused rat lung. Ryrfeldt A, et al. **Pharmacol Toxicol** 1990 Apr;66(4):312–4

Prostanoid release from ex vivo perfused canine arteries and veins: effects of prolonged perfusion, intermittent perfusion, as well as exposure to exogenous arachidonic acid, thrombin and bradykinin. Brunkwall JS, et al. **Thromb Haemost** 1989 Nov 24;62(3):1034–9

New selective bradykinin receptor antagonists and bradykinin B2 receptor characterization. Regoli D, et al. **Trends Pharmacol Sci** 1990 Apr;11(4):156–61 (21 ref.)

[The effect of exogenous bradykinin on gastric motor function in an experimental model of ulcerative lesions of the antrum] Gorst VR. **Patol Fiziol Eksp Ter** 1989 Nov–Dec;(6):52–4 (Eng. Abstr.) **(Rus)**

[Kininogenesis and the effect of bradykinin on the level of blood plasma glucocorticoids in irradiated rats] Sukhanova GA. **Radiobiologia** 1990 Jan–Feb;30(1):127–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Kaolin–induced writhing in mice, a new model of possible bradykinin–induced pain for assessment of analgesic agents. Fujiyoshi T, et al. **Agents Actions** 1989 Jun;27(3–4):332–4

Bradykinin effects on phospholipid metabolism and its relation to arachidonic acid turnover in neuroblastoma x glioma hybrid cells (NG 108–15). Simonsson P, et al. **Cell Signal** 1989;1(6):587–98

Bradykinin contribution to renal blood flow effect of angiotensin converting enzyme inhibitor in the conscious sodium–restricted dog. Zimmerman BG, et al. **Circ Res** 1990 Jan;66(1):234–40

Modulation of adrenal chromaffin cell intracellular calcium by angiotensin, bradykinin and endothelin. Printz MP, et al. **Endocrinol Exp** 1990 Mar;24(1–2):55–61

Basic pharmacology of ACE–inhibitors with respect to ischaemic heart disease: prostaglandins and bradykinin. van Wijngaarden J, et al. **Eur Heart J** 1990 Apr;11 Suppl B:84–93 (92 ref.)

Inflammatory response and bradykinin. Greenbaum LM, et al. **Fed Proc** 1968 Jan–Feb;27(1):90–1

Bradykinin induces contractions of the human ovarian follicular wall in vitro. Hellberg P, et al. **Hum Reprod** 1990 May;5(4):387–90

Hypotensive effect of captopril. Role of bradykinin and prostaglandinlike substances. Pontieri V, et al. **Hypertension** 1990 Feb;15(2 Suppl):I55–8

Regulation of bradykinin action at the receptor level. Roscher AA, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 6:S39–43

Role of bradykinin in the regulation of blood pressure and renal blood flow in DOCA–salt hypertensive rats. Seino M, et al. **J Hypertens** 1990 May;8(5):411–6

The haemodynamic effects of two angiotensin converting enzyme inhibitors, enalaprilat and zofenoprilat, in the rat: evidence for the involvement of bradykinin. Tio RA, et al. **J Hypertens Suppl** 1989 Dec;7(6):S296–7

[Studies on the involvement of bradykinin in the formation of ischemic brain edema] Kamiya T. **Nippon Ika Daigaku Zasshi** 1990 Apr;57(2):180–91 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Bradykinin infusion in long term postoperative parenteral nutrition improves nitrogen balance and protein synthesis. Jauch KW, et al. **Adv Exp Med Biol** 1989;247A:581–5

Effects of endothelin on isolated ischaemic rat hearts during ramiprilat, bradykinin and indomethacin perfusion. Linz W, et al. **J Hypertens Suppl** 1989 Dec;7(6):S310–1

TOXICITY

Enhancement of infusion–induced brain edema by mediator compounds. Unterberg A, et al. **Adv Neurol** 1990;52:355–8

BRAIN

Scanning–electron–microscopic studies on the pathogenesis of exencephaly and cranioschisis induced in the rat after neural tube closure. Padmanabhan R. **Acta Anat (Basel)** 1990;138(2):97–110

Whole–brain learning. Preparing nurses for future challenges. Thomas KJ, et al. **AORN J** 1990 Jan;51(1):196–8, 200, 202–3

Heterotopic brain tissue in the orbit: case report. Elder JE, et al. **Br J Ophthalmol** 1989 Nov;73(11):928–31

Hospital's decision to pursue fetal transplantation upsets antiabortionists. Jones D. **Can Med Assoc J** 1990 Jun 1; 142(11):1274–5, 1277

Cryopreservation of human brain tissue. Robbins RJ, et al. **Exp Neurol** 1990 Mar;107(3):208–13

Expression of the human ETS–2 oncogene in normal fetal tissues and in the brain of a fetus with trisomy 21. Baffico M, et al. **Hum Genet** 1989 Oct;83(3):295–6

Heterotopic brain in the middle ear: CT findings. Klein MV, et al. **J Comput Assist Tomogr** 1989 Nov–Dec;13(6):1058–60

Iontophoretic injection of fluoro–gold and other fluorescent tracers. Schmued LC, et al. **J Histochem Cytochem** 1990 May;38(5):721–3

Heterotopic brain tissue: a rare cause of adult recurrent meningitis. Whittet HB, et al. **J Laryngol Otol** 1990 Apr; 104(4):328–30

Fusion of liposomes and rat brain microsomes examined by two assays. Corazzi L, et al. **J Membr Biol** 1989 Dec; 112(2):123–9

Unusual MRI appearance of diffuse subcortical heterotopia or "double cortex" in two children. Livingston JH, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):617–20

Neurosurgery in the decade of the brain. The 1990 AANS presidential address. Rhoton AL Jr. **J Neurosurg** 1990 Oct; 73(4):487–95

Cystic and solid heterotopic brain in the face and neck: a review and report of an unusual case. Hendrickson M, et al. **J Pediatr Surg** 1990 Jul;25(7):766–8 (12 ref.)

Cranial impalement injury. Maull KI. **J Tenn Med Assoc** 1989 Sep;82(9):481–2

Successful removal of an intracranial needle by an ophthalmologic magnet: case report. Ashkenazi E, et al. **J Trauma** 1990 Jan;30(1):114–5

Brain banks. Brahams D. **Lancet** 1990 Feb 3;335(8684):282–3

The possibility of a natural cure for death. Arenillas L. **Med Hypotheses** 1989 Oct;30(2):83–5

Brain research. Heading for the nineties [news] Anderson A. **Nature** 1990 Jul 26;346(6282):304
Human frontier program: Strasbourg office opens [news] Swinbanks D. **Nature** 1989 Nov 23;342(6248):334
Human Frontiers. Applications under review [news] Swinbanks D. **Nature** 1990 Feb 22;343(6260):684
Human Frontiers Program. Grant winners announced [news] Swinbanks D, et al. **Nature** 1990 Apr 12;344(6267):579
Brain-derived neurotrophic factor increases survival and differentiated functions of rat septal cholinergic neurons in culture. Alderson RF, et al. **Neuron** 1990 Sep; 5(3):297-306
A 3-D anthropomorphic brain phantom for ECT applications. Chang W, et al. **Nucl Med Commun** 1990 Jan; 11(1):11-6
Heterotropic brain tissue in the oropharynx. Report of a case. Momose F, et al. **Oral Surg Oral Med Oral Pathol** 1989 Dec;68(6):682-5 (22 ref.)
Nasal cerebral heterotopia: the so-called nasal glioma or sequestered encephalocele and its variants. Yeoh GP, et al. **Pediatr Pathol** 1989;9(5):531-49
Heterotopic brain tissue in the lung causing acute respiratory distress in an infant. Fuller C, et al. **Thorax** 1989 Dec; 44(12):1045-6 (10 ref.)
[A simple vibratome for brain slice] Xia JH, et al. **Sheng Li Hsueh Pao** 1989 Dec;41(6):608-10 (Eng. Abstr.) **(Chi)**
[Penetration of an orbital foreign body into the intracranial space] Vlková E, et al. **Cesk Oftalmol** 1989 Sep;45(5):372-4 (Eng. Abstr.) **(Cze)**
[Biologic validation of nosologic constructs] Resch F. **Z Kinder Jugendpsychiatr** 1989 Dec;17(4):231-41 (56 ref.) **(Ger)**
[Optimal perfusion criteria for deep hypothermic selective cerebral perfusion in patients with aortic aneurysm involving aortic arch] Matsuwaka R, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Apr;38(4):567-72 (Eng. Abstr.) **(Jpn)**
[Transgenic mice for brain research] Katsuki M. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1192-6 **(Jpn)**
[From the history of brain research] Holck P. **Tidsskr Nor Laegeforen** 1990 Jun 30;110(17):2199-203 (Eng. Abstr.) **(Nor)**
[Emergency craniocerebral hypothermia in the management of open mitral commissurotomy] Naumenko SE. **Anesteziol Reanimatol** 1990 May-Jun;(3):63-6 (Eng. Abstr.) **(Rus)**
[Effects of naphthenic acids on the training and synthesis of brain proteins in mice] Omarov IA. **Biull Eksp Biol Med** 1990 Jan;109(1):47-9 (Eng. Abstr.) **(Rus)**
[Changes in gene expression in the brain of rats with Zajdela's ascitic hepatoma] Shelepov VP, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):81-3 (Eng. Abstr.) **(Rus)**
[Effect of the endogenous peptide factor and vasopressin on the neurons of mollusks of different ages] Martynenko OA, et al. **Fiziol Zh** 1989 Nov-Dec;35(6):95-7 (Eng. Abstr.) **(Rus)**
[Control of anticoagulant therapy by using soluble thromboplastin] Galda AV, et al. **Lab Delo** 1989;(10):20-3 (Eng. Abstr.) **(Rus)**
[Effects of hyperbaric oxygenation in acute compression-dislocation syndrome in experimental animals] Isakov IuV, et al. **Zh Nevropatol Psikhiatr** 1989; 89(12):3-7 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Electron-microscopic studies on the pathogenesis of exencephaly and cranioschisis induced in the rat after neural tube closure: role of the neuroepithelium and choroid plexus. Padmanabhan R. **Acta Anat (Basel)** 1990; 137(1):5-18
Aprosencephaly: review of the literature and report of a case with cerebellar hypoplasia, pigmented epithelial cyst and Rathke's cleft cyst. Kim TS, et al. **Acta Neuropathol (Berl)** 1990;79(4):424-31
Apparent atypical callosal dysgenesis: analysis of MR findings in six cases and their relationship to holoprosencephaly. Barkovich AJ. **AJNR** 1990 Mar-Apr; 11(2):333-9
Aicardi syndrome: MR assessment of brain structure and myelination. Hall-Craggs MA, et al. **AJNR** 1990 May; 11(3):532-6
Revised classification of posterior fossa cysts and cystlike malformations based on the results of multiplanar MR imaging. Barkovich AJ, et al. **AJR Am J Roentgenol** 1989 Dec;153(6):1289-300
Sonography of facial features of alobar and semilobar holoprosencephaly. McGahan JP, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):143-8
Identification of the functional profilin gene, its localization to chromosome subband 17p13.3, and demonstration of its deletion in some patients with Miller-Dieker syndrome. Kwiatkowski DJ, et al. **Am J Hum Genet** 1990 Mar; 46(3):559-67
XK aprosencephaly may be a new mutation or a dominant genetic defect [letter] Benke PJ. **Am J Med Genet** 1989 Oct;34(2):250-1
Apparent Smith-Lemli-Opitz syndrome and Miller-Dieker syndrome in a family with segregating translocation t(7;17)(q34;p13.1). Berry R, et al. **Am J Med Genet** 1989 Nov;34(3):358-65
The central nervous system in the Apert syndrome. Cohen MM Jr, et al. **Am J Med Genet** 1990 Jan;35(1):36-45 (72 ref.)
Holoprosencephaly and cytogenetic findings: further information [letter; comment] Cohen MM Jr. **Am J Med Genet** 1989 Oct;34(2):265 Comment on: Am J Med Genet 1988 Aug;30(4):929-38.
Perspectives on holoprosencephaly: Part III. Spectra, distinctions, continuities, and discontinuities. Cohen MM Jr. **Am J Med Genet** 1989 Oct;34(2):271-88 (166 ref.)
Holoprosencephaly in an infant with a minute deletion of chromosome 21(q22.3). Estabrooks LL, et al. **Am J Med Genet** 1990 Jul;36(3):306-9
Prenatal detection of cyclopia associated with interstitial deletion of 2p. Grundy HO, et al. **Am J Med Genet** 1989 Oct;34(2):268-70
Could acrocallosal syndrome and Greig syndrome affect the same developmental gene? [letter] Hall JG. **Am J Med Genet** 1990 Jul;36(3):368
Acrocallosal syndrome. Hendriks HJ, et al. **Am J Med Genet** 1990 Mar;35(3):443-6
Agnathia-holoprosencephaly: a midline malformation association [letter] Hennekam RC. **Am J Med Genet** 1990 Aug;36(4):525
Holoprosencephaly: a developmental field defect. Johnson VP. **Am J Med Genet** 1989 Oct;34(2):258-64
Familial agnathia-holoprosencephaly caused by an inherited unbalanced translocation and not autosomal recessive inheritance [letter] Krassikoff N, et al. **Am J Med Genet** 1989 Oct;34(2):255-7
Lissencephaly, abnormal lymph nodes, and T-cell deficiency in one patient. Krawinkel MB, et al. **Am J Med Genet** 1989 Aug;33(4):436-43
Chromosome 7 abnormalities in parents of children with holoprosencephaly and hydronephrosis. Lurie IW, et al. **Am J Med Genet** 1990 Feb;35(2):286-8
Clinical, cytogenetic, and molecular approaches to the genetic heterogeneity of holoprosencephaly. Münke M. **Am J Med Genet** 1989 Oct;34(2):237-45 (119 ref.)
Agnathia, holoprosencephaly, and situs inversus [letter; comment] Robinson HB Jr, et al. **Am J Med Genet** 1989 Oct;34(2):266-7 Comment on: Am J Med Genet 1988 Mar;29(3):483-90.
Muscle-eye-brain disease and Walker-Warburg syndrome [letter; comment] Santavuori P, et al. **Am J Med Genet** 1990 Jul;36(3):371-4 Comment on: Am J Med Genet 1989 Feb;32(2):195-210.
Partial deletion of the long arm of chromosome 11 [del(11)(q23.3----qter)] with abnormal white matter. Wardinsky TD, et al. **Am J Med Genet** 1990 Jan;35(1):60-3
Holoprosencephaly and interstitial deletion of 2(p2101p2109). Wilson WG, et al. **Am J Med Genet** 1989 Oct;34(2):252-4
First-trimester diagnosis of exencephaly. Kennedy KA, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):461-3
Retinoblastoma associated with holoprosencephaly. Desai VN, et al. **Am J Ophthalmol** 1990 Mar 15;109(3):355-6
Temporary arrest of fetal movement with pancuronium bromide to enable antenatal magnetic resonance imaging of holoprosencephaly. Horvath L, et al. **Am J Perinatol** 1989 Oct;6(4):418-20
Roberts-SC phocomelia syndrome with exencephaly. Verloes A, et al. **Ann Genet** 1989;32(3):169-70
Opercular sign: significance beyond cerebral dysgenesis [letter; comment] Amir N, et al. **Ann Neurol** 1990 Feb; 27(2):213-4 Comment on: Ann Neurol 1989 Feb;25(2):196-9.
Developmental Foix-Chavany-Marie syndrome: polymicrogyria or macrogyria? [letter; comment] Becker PS. **Ann Neurol** 1990 Jun;27(6):693-4 Comment on: Ann Neurol 1989 Jun;25(6):547-54.
Magnetic resonance imaging and neurobehavioral correlates in schizencephaly. Aniskiewicz AS, et al. **Arch Neurol** 1990 Aug;47(8):911-6
Developmental brain abnormalities accompanied with the retarded production of S-100 beta protein in genetic polydactyly mice. Naruse I, et al. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):253-8
The use of magnetic resonance imaging for the diagnosis of fetal intracranial anomalies. Dinh DH, et al. **Childs Nerv Syst** 1990 Jun;6(4):212-5
Holoprosencephaly with Dandy-Walker cyst. Rare coexistence of two major malformations. Kurokawa Y, et al. **Childs Nerv Syst** 1990 Jan;6(1):51-3 (20 ref.)
Unilateral megalencephaly associated with neonatal high output cardiac failure. Walters BC, et al. **Childs Nerv Syst** 1990 May;6(3):123-5
CT manifestations of schizencephaly. Wang Y, et al. **Chin Med J [Engl]** 1990 Feb;103(2):156-9
Cranial sonography: congenital anomalies. Babcock DS. **Clin Diagn Ultrasound** 1989;24:1-24 (28 ref.)
Sonography of the fetal cranium. Pilu G, et al. **Clin Diagn Ultrasound** 1989;25:221-58 (158 ref.)
Terminal 7q deletion as a cause of holoprosencephaly [letter; comment] Masuno M, et al. **Clin Genet** 1990 Mar;37(3):238 Comment on: Clin Genet 1989 Oct;36(4):262-5.
Computed tomography (CT) and magnetic resonance (MR) imaging of heterotopic gray matter presenting with late-onset seizures. Mineura K, et al. **Comput Med Imaging Graph** 1990 May-Jun;14(3):217-20
Computed tomography of the head in children: experience with 1024 scans performed in an outpatient facility. Eelkema HH, et al. **Comput Tomogr** 1977;1(4):313-21
Demonstration of a little known cause of infantile epilepsy, occipital porencephaly, by computerized tomography (CT). Gastaut H, et al. **Comput Tomogr** 1977;1(4):323-30
Relevance of EEG to prognosis in hemimegalencephaly [letter; comment] Konkol RJ, et al. **Dev Med Child Neurol** 1989 Dec;31(6):827-8 Comment on: Dev Med Child Neurol 1989 Jun;31(3):377-83.
Hemimegalencephaly and intractable epilepsy: benefits of hemispherectomy. Vigevano F, et al. **Epilepsia** 1989 Nov-Dec;30(6):833-43
Holoprosencephaly and postaxial polydactyly with normal chromosomes. Another observation of a new malformation syndrome; a case report. Ramaekers PR, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jul-Aug; 36(1-2):161-5
Primitive megalencephaly in children: natural history, medium term prognosis with special reference to external hydrocephalus. Laubscher B, et al. **Eur J Pediatr** 1990 Apr; 149(7):502-7
Alobar holoprosencephaly, diabetes insipidus and coloboma without craniofacial abnormalities: a case report. Van Gool S, et al. **Eur J Pediatr** 1990 Jun;149(9):621-2
Lower limb movements and urologic function in fetuses with neural tube and other central nervous system defects. Warsof SL, et al. **Fetal Ther** 1988;3(3):129-34
Human chromosome 17 NotI linking clones and their use in long-range restriction mapping of the Miller-Dieker chromosome region (MDCR) in 17p13.3. Ledbetter SA, et al. **Genomics** 1990 Jun;7(2):264-9
Localization of the Miller-Dieker critical region is proximal to locus D17S34 (p144D6) in 17p13.3. Schwartz CE, et al. **Genomics** 1990 Aug;7(4):621-4
Antenatal sonographic diagnosis of exencephaly. Abu Musa A, et al. **Gynecol Obstet Invest** 1990;29(1):75-7
Isolated lissencephaly: report of four patients from two unrelated families. Pavone L, et al. **J Child Neurol** 1990 Jan;5(1):52-9
Hydrocephalus and porencephaly: prenatal diagnosis by ultrasonography and MR imaging. Tomá P, et al. **J Comput Assist Tomogr** 1990 Sep-Oct;14(5):843-5
Anatomical observations of holoprosencephaly in swine. Fisher KR, et al. **J Craniofac Genet Dev Biol** 1989; 9(2):135-46
Pathogenesis of exencephaly and cranioschisis induced in the rat after neural tube closure: role of the mesenchyme. Padmanabhan R. **J Craniofac Genet Dev Biol** 1989; 9(3):239-55
Single stage repair of the median cleft lip deformity in holoprosencephaly [see comments] Sadove AM, et al. **J Craniomaxillofac Surg** 1989 Nov;17(8):363-6 Comment in: J Craniomaxillofac Surg 1990 May;18(4):182-3.
Holoprosencephaly and polydactyly: a possible expression of the hydrolethalus syndrome. Bachman H, et al. **J Med Genet** 1990 Jan;27(1):50-2
Cranial hemihypertrophy and neurodevelopmental prognosis. Dean JC, et al. **J Med Genet** 1990 Mar;27(3):160-4
Central nervous system malformations in Mohr's syndrome. Reardon W, et al. **J Med Genet** 1989 Oct;26(10):659-63
Proteus syndrome: report of a case with severe brain impairment and fatal course. Rizzo R, et al. **J Med Genet** 1990 Jun;27(6):399-402
Unknown syndrome: pachygyria, joint contractures, and facial abnormalities. Winter RM, et al. **J Med Genet** 1989 Dec;26(12):788-9
Identical embryopathogenesis for exencephaly and myeloschisis: an experimental study. Oi S, et al. **J Neurosurg** 1990 Mar;72(3):450-7
Megalencephaly in thanatophoric dysplasia and in achondroplasia [letter; comment] Knisely AS. **J Pediatr** 1989 Dec;115(6):1026 Comment on: J Pediatr 1989 Jun;114(6):1004-6.
Fetal brain disruption sequence. Moore CA, et al. **J Pediatr** 1990 Mar;116(3):383-6
Contribution to the recognition of iniencephaly on the basis of a new case. Hrgovic Z, et al. **J Perinat Med** 1989; 17(5):375-9
Prenatal diagnosis of schizencephaly. Komarniski CA, et al. **J Ultrasound Med** 1990 May;9(5):305-7
Perinatal loss and neurological abnormalities among children of the atomic bomb. Nagasaki and Hiroshima revisited, 1949 to 1989 [see comments] Yamazaki JN, et al. **JAMA** 1990 Aug 1;264(5):605-9 Comment in: JAMA 1990 Aug 1;264(5):622-3.
Congenital cerebrospinal fluid-containing intracranial abnormalities: a sonographic classification. McGahan JP, et al. **JCU** 1988 Oct;16(8):531-44
Ito syndrome (hypomelanosis of Ito) as a cause of intractable epilepsy. Hara M, et al. **Jpn J Psychiatry Neurol** 1989 Sep; 43(3):487-9
Neuronal migration anomalies causing extensive ventricular indentation. Yasumori K, et al. **Neurosurgery** 1990 Mar; 26(3):504-7
Visual discrimination by rats with transplacentally induced micrencephaly. Rabe A, et al. **Neurotoxicol Teratol** 1990 Jul-Aug;12(4):399-403
Neuronal migration abnormalities can still be diagnosed by computed tomography! Buckley AR, et al. **Pediatr Neurosci** 1988;14(5):222-9
Cerebral and spinal MR-findings in patients with postrepair myelomeningocele. Just M, et al. **Pediatr Radiol** 1990;

20(4):262–6
Schizencephaly and septo–optic dysplasia: separate entities [letter; comment] Osborn RE. **Pediatr Radiol** 1989; 20(1–2):137 Comment on: Pediatr Radiol 1989;19(3):145–50.
Congenital brain anomalies associated with the hypoplastic left heart syndrome. Glauser TA, et al. **Pediatrics** 1990 Jun; 85(6):984–90
Schizencephaly: prenatal diagnosis by computed sonography and magnetic resonance imaging. Lituania M, et al. **Prenat Diagn** 1989 Sep;9(9):649–55
Ultrasound case study of holoprosencephaly. Clewes JS, et al. **Radiogr Today** 1988 Dec;54(619):42–3
Pachygyriclike changes: topographic appearance at MR imaging and CT and correlation with neurologic status. Titelbaum DS, et al. **Radiology** 1989 Dec;173(3):663–7
Disorders of midline structures: holoprosencephaly, absence of corpus callosum, and Chiari malformations. Byrd SE, et al. **Semin Ultrasound CT MR** 1988 Jun;9(3):201–15 (16 ref.)
Disorders of histogenesis: the neurocutaneous syndromes. Crawford SC, et al. **Semin Ultrasound CT MR** 1988 Jun; 9(3):247–67 (43 ref.)
Disorders of ventricles and CSF spaces. Fitz CR. **Semin Ultrasound CT MR** 1988 Jun;9(3):216–30 (39 ref.)
Disorders of migration and sulcation. Pollei SR, et al. **Semin Ultrasound CT MR** 1988 Jun;9(3):231–46 (32 ref.)
Proboscis lateralis: a case report. Antoniades K, et al. **Teratology** 1989 Sep;40(3):193–7
Perspectives on holoprosencephaly: Part I. Epidemiology, genetics, and syndromology. Cohen MM Jr. **Teratology** 1989 Sep;40(3):211–35 (184 ref.)
Comparison of the incidence of 5–azacytidine–induced exencephaly between MT/HokIdr and Slc:ICR mice. Matsuda M. **Teratology** 1990 Feb;41(2):147–54
Congenital and perinatal lesions. Lee BC. **Top Magn Reson Imaging** 1989 Dec;2(1):1–16 (73 ref.)
Dandy–Walker malformation in two calves. Jeffrey M, et al. **Vet Rec** 1990 May 19;126(20):499–501
Neurogenic diabetes insipidus in an initially healthy neonate. Smith BK, et al. **West J Med** 1989 Oct;151(4):460–1
Diprosopia in a cat. Camón J, et al. **Zentralbl Veterinarmed [A]** 1990 May;37(4):278–84
[Schizencephaly: report of one case] Chiu WW, et al. **Acta Paediatr Sin** 1989 May–Jun;30(3):208–11 (Eng. Abstr.) **(Chi)**
[CT manifestations of schizencephaly] Wang Y. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Oct;23(5):261–3 (Eng. Abstr.) **(Chi)**
[Colpocephaly: report of a case] Chou KS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Aug;88(8):847–9, 842 (Eng. Abstr.) **(Chi)**
[Neuronal heterotopia with hemidystonia] Hsien HH, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jun;88(6):643–5, 629 (Eng. Abstr.) **(Chi)**
[Craniorachischisis in conjoined "diprosopus" twins. Case report and review of the literature] Carles D, et al. **Ann Pathol** 1989;9(5):346–50 (36 ref.) (Eng. Abstr.) **(Fre)**
[Ocular manifestations of holoprosencephaly. Apropos of a case] Guilbert F, et al. **Bull Soc Ophtalmol Fr** 1988 Dec; 88(12):1479–81 (Eng. Abstr.) **(Fre)**
[Infantile spasms and lissencephaly. Apropos of 2 cases] Bouguerra L, et al. **Pediatrie** 1990;45(1):21–3 (18 ref.) (Eng. Abstr.) **(Fre)**
[Oculocerebrocutaneous syndrome or Delleman–Oorthuys syndrome] Lauras B, et al. **Pediatrie** 1990;45(3):193–6 (5 ref.) **(Fre)**
[Abnormalities of median cerebral structures associated with gonadotropic insufficiency (letter)] Rosenberg D, et al. **Presse Med** 1989 Sep 30;18(30):1483–4 **(Fre)**
[Lobar holoprosencephaly associated with heterotopic gray matter. A case disclosed in adulthood by epilepsy] Moulignier A, et al. **Rev Neurol (Paris)** 1990;146(1):51–4 (Eng. Abstr.) **(Fre)**
[Iniencephaly: prenatal and postnatal findings] Hammer F, et al. **Geburtshilfe Frauenheilkd** 1990 Jun;50(6):491–4 (Eng. Abstr.) **(Ger)**
[The Pena–Shokeir syndrome] Zeller R, et al. **Gynakol Rundsch** 1989;29(3):148–52 (Eng. Abstr.) **(Ger)**
[Schizencephaly] Lu JH, et al. **Klin Padiatr** 1990 Mar–Apr; 202(2):106–8 (Eng. Abstr.) **(Ger)**
[Magnetic resonance tomography of laminar heterotopia] Vahldiek G, et al. **ROFO** 1990 Apr;152(4):378–83 (Eng. Abstr.) **(Ger)**
[Cebocephaly: a severe cerebro–craniofacial malformation. Description of a case] Denaro A, et al. **Minerva Pediatr** 1990 Jan–Feb;42(1–2):35–40 (Eng. Abstr.) **(Ita)**
[Alobar holoprosencephaly. Prenatal diagnosis and autopsy findings in 2 cases] Ricotti GC, et al. **Pathologica** 1989 Nov–Dec;81(1076):635–42 (Eng. Abstr.) **(Ita)**
[MR in the evaluation of schizencephaly] Gualdi G, et al. **Radiol Med (Torino)** 1989 Oct;78(4):311–3 (Eng. Abstr.) **(Ita)**
[The role of magnetic resonance in the study of cerebrospinal malformations in childhood. An analysis of 51 clinical cases] Gualdi GF, et al. **Radiol Med (Torino)** 1990 May; 79(5):489–92 (Eng. Abstr.) **(Ita)**
[Ultrasonic diagnosis of congenital defects of brain development] Baérts V. **Pediatria** 1990;(4):78–84 **(Rus)**
[Fryns syndrome. Report of the first case in Spain] Rodríguez Gonzalez JT, et al. **An Esp Pediatr** 1990 Apr;32(4):363–4 **(Spa)**

ANATOMY & HISTOLOGY

Shape and structure of the avian brain an old problem revisited. Dubbeldam JL. **Acta Morphol Neerl Scand** 1989; 27(1–2):33–43 (23 ref.)
The sensory projections to the frontal association cortex in the dog. Stepniewska I, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(6):299–310
Imaging of MR–compatible intracerebral depth electrodes. Duckwiler GR, et al. **AJNR** 1990 Mar–Apr;11(2):353–4
Intracranial chemical–shift artifacts on MR images of the brain: observations and relation to sampling bandwidth. Smith AS, et al. **AJNR** 1990 Mar–Apr;11(2):303–11
The surgical anatomy and approaches to lesions of the lower basilar artery and vertebral artery union. Pensak ML, et al. **Am J Otol** 1989 Sep;10(5):351–7
Anatomical brain asymmetry in monkeys: frontal, temporoparietal, and limbic cortex in Macaca. Heilbroner PL, et al. **Am J Phys Anthropol** 1989 Oct;80(2):203–11
Gestation length, metabolic rate, and body and brain weights in primates: epigenetic effects. Little BB. **Am J Phys Anthropol** 1989 Oct;80(2):213–8
Sucrose space measurements in the rabbit central nervous system. Fenstermacher JD, et al. **Am J Physiol** 1967 Jun; 212(6):1268–72
The role of gender in studies of ventricle enlargement in schizophrenia: a predominantly male effect. Flaum M, et al. **Am J Psychiatry** 1990 Oct;147(10):1327–32
Plastination of stained sections of the human brain. Ulfig N, et al. **Anat Anz** 1990;170(5):309–12
Methods for measuring brain morphologic features on magnetic resonance images. Validation and normal aging. Jernigan TL, et al. **Arch Neurol** 1990 Jan;47(1):27–32
The morphological substrate of cerebral asymmetry: the problem of its measurement [letter; comment] Weis S, et al. **Arch Neurol** 1990 Apr;47(4):379–80 Comment on: Arch Neurol 1989 Mar;46(3):307–10.
A simple method for conversion of area ratio measurements of cerebral structures to volume estimates. Woods BT, et al. **Biol Psychiatry** 1989 Nov;26(7):748–52
Striatal afferents in the newt Triturus cristatus. Dubé L, et al. **Brain Behav Evol** 1990;35(4):212–26
Central projections of the nervus terminalis in four species of amphibians. Hofmann MH, et al. **Brain Behav Evol** 1989; 34(5):301–7
Distribution of catecholamine–synthesizing enzymes in goldfish brains: presumptive dopamine and norepinephrine neuronal organization. Hornby PJ, et al. **Brain Behav Evol** 1990;35(1):49–64
Nucleus prepositus neurons projecting to the oculomotor and trochlear nuclei in rabbits. Labandeira–Garcia JL, et al. **Brain Behav Evol** 1990;35(1):16–22
Volumetric comparison of auditory structures in the brains of European wild boars (Sus scrofa) and domestic pigs (Sus scrofa f. dom.). Plogmann D, et al. **Brain Behav Evol** 1990; 35(3):146–55
Regional brain morphometry and lissencephaly in the Sirenia. Reep RL, et al. **Brain Behav Evol** 1990;35(4):185–94
Manatee cerebral cortex: cytoarchitecture of the frontal region in Trichechus manatus latirostris. Reep RL, et al. **Brain Behav Evol** 1989;34(6):365–86
Relationships between cerebral indices for 'extra' cortical parts and ecological categories in anthropoids. Sawaguchi T. **Brain Behav Evol** 1989;34(5):281–93
Comparative analysis of vasotocin–like immunoreactivity in the brain of the turtle Pseudemys scripta elegans and the snake Python regius. Smeets WJ, et al. **Brain Behav Evol** 1990;35(2):65–84
Dependence and withdrawal following intracerebroventricular and systemic morphine administration: functional anatomy and behavior. Adams RE, et al. **Brain Res** 1990 Jun 4;518(1–2):6–10
Biocytin: a versatile anterograde neuroanatomical tract–tracing alternative. King MA, et al. **Brain Res** 1989 Sep 18;497(2):361–7
Projections of the dorsolateral anterior complex and adjacent thalamic nuclei upon the visual Wulst in the pigeon. Miceli D, et al. **Brain Res** 1990 Jun 4;518(1–2):317–23
Brain pathways of the chromatophore system in the squid Lolliguncula brevis. Novicki A, et al. **Brain Res** 1990 Jun 11;519(1–2):315–23
The brain slicer: anatomical precision for organotypic explant culture. Toran–Allerand CD. **Brain Res Bull** 1990 Jun; 24(6):865–8
Isthmo–optic connections in congenitally monophthalmic chicks. Malz CR, et al. **Cell Tissue Res** 1989 Sep; 257(3):649–52
Microsurgical anatomy of the transcallosal approach to the ventricular system, pineal region and basal ganglia. Schijman E. **Childs Nerv Syst** 1989 Aug;5(4):212–9
Behavioural and histological effects of low concentrations of intraventricular AF64A. Gower AJ, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):271–81
Projections to the rostral reticular thalamic nucleus in the rat. Cornwall J, et al. **Exp Brain Res** 1990;80(1):157–71
Magnetic resonance imaging of the rhesus monkey brain: use for stereotactic neurosurgery. Saunders RC, et al. **Exp Brain Res** 1990;81(2):443–6
Somatotopic organization and columnar structure of vibrissae representation in the rat ventrobasal complex. Sugitani M, et al. **Exp Brain Res** 1990;81(2):346–52
Afferent connections of the forebrain cholinergic projection neurons, with special reference to monoaminergic and peptidergic fibers. Zaborszky L. **Experientia Suppl** 1989; 57:12–32 (115 ref.)
Morphology of the brain of Sarotherodon mossambicus (Peters) and correlation with its habits. Kumari N, et al. **Folia Morphol (Praha)** 1989;37(3):253–6
Histophysiology of the saccus vasculosus of the Indian freshwater goby Glossogobius giuris Ham. (Teleostei). Saksena DN. **Folia Morphol (Praha)** 1989;37(3):249–52
Extrathalamic ascending projections to physiologically identified fields of the cat auditory cortex. Rouiller EM, et al. **Hear Res** 1989 Jul;40(3):233–46
The cerebrum and cerebellum of the fixed human brain: efficient and unbiased estimates of volumes and cortical surface areas. Henery CC, et al. **J Anat** 1989 Dec; 167:167–80
Patient realignment in magnetic resonance imaging of the head: an algorithm using mathematical morphology for feature extraction. Badran AK, et al. **J Biomed Eng** 1990 Mar;12(2):138–42
Central projections of C4–C8 dorsal root ganglia in the rat studied by anterograde transport of WGA–HRP. Arvidsson J, et al. **J Comp Neurol** 1990 Feb 15;292(3):349–62
Cellular localization of substance P– and neurokinin A–encoding preprotachykinin mRNA in the female rat brain. Harlan RE, et al. **J Comp Neurol** 1989 Sep 8; 287(2):179–212
Cytological and quantitative characteristics of four cerebral commissures in the rhesus monkey. Lamantia AS, et al. **J Comp Neurol** 1990 Jan 22;291(4):520–37
Organization of retinopetal axons in the optic nerve of the cichlid fish, Herotilapia multispinosa. Rusoff AC, et al. **J Comp Neurol** 1990 Apr 15;294(3):418–30
Functional organization of ascending and descending connections of the cochlear nucleus of horseshoe bats. Vater M, et al. **J Comp Neurol** 1990 Feb 15;292(3):373–95
Visual and electrosensory circuits of the diencephalon in mormyrids: an evolutionary perspective. Wullimann MF, et al. **J Comp Neurol** 1990 Jul 22;297(4):537–52
MR diffusion imaging of the human brain. Chien D, et al. **J Comput Assist Tomogr** 1990 Jul–Aug;14(4):514–20
Integrated 3D display of brain anatomy and intracranial vasculature in MR imaging. Ehricke HH, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):846–52
Three–dimensional alignment of functional and morphological tomograms. Pietrzyk U, et al. **J Comput Assist Tomogr** 1990 Jan–Feb;14(1):51–9
Cerebral asymmetry: MR planimetry of the human planum temporale. Steinmetz H, et al. **J Comput Assist Tomogr** 1989 Nov–Dec;13(6):996–1005
Brain variation and phylogenetic trends in elasmobranch fishes. Northcutt RG. **J Exp Zool Suppl** 1989;2:83–100 (69 ref.)
Heritability of brain size and surface features in rhesus macaques (Macaca mulatta). Cheverud JM, et al. **J Hered** 1990 Jan–Feb;81(1):51–7
Encephalization in tropical teleost fishes and comparison with their mode of life. Bauchot R, et al. **J Hirnforsch** 1989; 30(6):645–69
Dementia in schizophrenia. Magnetic resonance and clinical correlates. Rossi A, et al. **J Nerv Ment Dis** 1990 Aug; 178(8):521–4
Sexual maturity–dependent changes in neuronal morphology in the prepacemaker nucleus of adult weakly electric knifefish, Eigenmannia. Zupanc GK, et al. **J Neurosci** 1989 Nov;9(11):3816–27
Labelling neurons with fluorescent dyes administered via intravenous, subcutaneous or intraperitoneal route. Leong SK, et al. **J Neurosci Methods** 1990 Apr;32(1):15–23
Post–fixation horseradish peroxidase tracing in rat fetus and pups. van der Togt C, et al. **J Neurosci Methods** 1990 Jan; 31(1):65–73
An interpretation of Michelangelo's Creation of Adam based on neuroanatomy. Meshberger FL. **JAMA** 1990 Oct 10; 264(14):1837–41
Sonographic examination of the adult brain. Berland LL, et al. **JCU** 1988 Jun;16(5):337–45
Ultrasonography of fetal brain: some remarks with respect to the interpretation of the "cavum septi pellucidi". Thors F, et al. **JCU** 1990 Jun;18(5):411–4
Age related changes in weight and the concentrations of zinc and copper in the brain of the adult rat. Palm R, et al. **Lab Anim** 1990 Jul;24(3):240–5
Fast and precise T1 imaging using a TOMROP sequence. Brix G, et al. **Magn Reson Imaging** 1990;8(4):351–6
CSF flow artifact reduction using cardiac cycle ordered phase–encoding method. Cho MH, et al. **Magn Reson Imaging** 1990;8(4):395–405
Signal–to–noise ratio improvements in in vivo high resolution micro–volume selected spectroscopy. Crozier S, et al. **Magn Reson Imaging** 1990;8(3):277–83
Incidental magnetization transfer contrast in standard multislice imaging. Dixon WT, et al. **Magn Reson Imaging** 1990;8(4):417–22
One–dimensional chemical shift imaging of fluorinated neuroleptics in rat brain in vivo by 19F NMR rotating frame zeugmatography. Nakada T, et al. **Magn Reson Imaging** 1989 Sep–Oct;7(5):543–5
Measurement of regional cerebral blood flow in cat brain using intracarotid 2H2O and 2H NMR imaging. Detre JA, et al. **Magn Reson Med** 1990 May;14(2):389–95

Measurement of tissue blood flow using intravascular relaxation agents and magnetic resonance imaging. Gore JC, et al. **Magn Reson Med** 1990 May;14(2):242–8
Two-volume acquisition in image-guided proton spectroscopy. Hafner HP, et al. **Magn Reson Med** 1990 Jul;15(1):135–41
Localized 1H in vivo NMR spectroscopy of small-volume elements in human brain at 1.5 T. Jung WI, et al. **Magn Reson Med** 1990 Aug;15(2):320–6
Assessment of a superparamagnetic iron oxide (AMI-25) as a brain contrast agent. Kent TA, et al. **Magn Reson Med** 1990 Mar;13(3):434–43
Relaxometry of brain: why white matter appears bright in MRI. Koenig SH, et al. **Magn Reson Med** 1990 Jun; 14(3):482–95
Spin echo 31P spectroscopic imaging in the human brain. Maudsley AA, et al. **Magn Reson Med** 1990 May; 14(2):415–22
Single-shot localized echo-planar imaging (STEAM-EPI) at 4.7 tesla. Turner R, et al. **Magn Reson Med** 1990 May; 14(2):401–8
Neuroanatomical localization of cells containing gonadotropin-releasing hormone messenger ribonucleic acid in the primate brain by in situ hybridization histochemistry. Standish LJ, et al. **Mol Endocrinol** 1987 May;1(5):371–6
Method for preservation of water content during prolonged storage of cerebral tissue. Kaufmann AM, et al. **Neurol Res** 1990 Mar;12(1):57–9
Sites in the brain at which cholecystokinin octapeptide (CCK-8) acts to suppress feeding in rats: a mapping study. Schick RR, et al. **Neuropharmacology** 1990 Feb; 29(2):109–18
Evoked potential mapping of auditory and somatosensory cortices in the miniature swine. Andrews RJ, et al. **Neurosci Lett** 1990 Jun 22;114(1):27–31
Localization of lateral hypothalamic neurons projecting to the medial part of the parabrachial area of the rat. Touzani K, et al. **Neurosci Lett** 1990 Jun 22;114(1):17–21
Calbindin D-28k and parvalbumin in the rat nervous system. Celio MR. **Neuroscience** 1990;35(2):375–475
The basal forebrain projection to the region of the nuclei gemini in the rat; a combined light and electron microscopic study employing horseradish peroxidase, fluorescent tracers and Phaseolus vulgaris-leucoagglutinin. Heimer L, et al. **Neuroscience** 1990;34(3):707–31
Microsurgical anatomy of the cisternal course of the perforating branches of the posterior communicating artery. Vincentelli F, et al. **Neurosurgery** 1990 May; 26(5):824–31
Neural connectivity in the descending pain pathway. Sim LJ, et al. **NIDA Res Monogr** 1989;95:542–3
Volume-selective water-suppressed proton spectra of human brain and muscle in vivo. Bárány M, et al. **NMR Biomed** 1989 Jun;2(1):7–11
31P magnetic resonance spectroscopy of the normal human brain: approaches using four dimensional chemical shift imaging and phase mapping techniques. Coutts GA, et al. **NMR Biomed** 1989 Apr;1(4):190–7
The importance of the voxel size in clinical 1H spectroscopy of the human brain. Ernst T, et al. **NMR Biomed** 1989 Dec;2(5–6):216–24
Localized NMR spectroscopy in vivo. Progress and problems. Frahm J, et al. **NMR Biomed** 1989 Dec; 2(5–6):188–95
Clinical magnetic resonance spectroscopy of brain, heart, liver, kidney, and cancer. A quantitative approach. Weiner MW, et al. **NMR Biomed** 1989 Dec;2(5–6):290–7 (32 ref.)
A morphometric right-left comparison of the cat olfactory bulb. Hirano Y, et al. **Okajimas Folia Anat Jpn** 1989 Dec; 66(5):265–9
Adaptive responsiveness of time-dependent dopamine receptors after unilateral nigral 6-OHDA lesion: a quantitative autoradiographic study in the rat brain. Fornaretto MG, et al. **Pharmacol Res** 1989 Nov-Dec;21 Suppl 1:101–2
Brains of mole rats from Africa and North America. Pirlot P. **Prog Clin Biol Res** 1990;335:295–315
Stereotaxic atlas for the lizard Gallotia galloti. Del Corral JM, et al. **Prog Neurobiol** 1990;34(3):185–96 (18 ref.)
Race and brain weight: a note on J.P. Rushton's conclusions [see comments] Cernovsky ZZ. **Psychol Rep** 1990 Feb; 66(1):337–8 Comment in: Psychol Rep 1990 Apr;66(2):659–66.
Race, brain size, and intelligence: a reply to Cernovsky [comment] Rushton JP. **Psychol Rep** 1990 Apr;66(2):659–66 Comment on: Psychol Rep 1990 Feb;66(1):337–8.
P-31 MR spectroscopy of normal human brain and brain tumors. Hubesch B, et al. **Radiology** 1990 Feb;174(2):401–9
Variation of contrast between different brain tissues with an MR snapshot technique. Klose U, et al. **Radiology** 1990 Aug;176(2):578–81
The human brain: localized H-1 MR spectroscopy at 1.0 T. Sauter R, et al. **Radiology** 1990 Jul;176(1):221–4
The brain in healthy aged individuals: MR imaging. Wahlund LO, et al. **Radiology** 1990 Mar;174(3 Pt 1):675–9
Endocranial features of Australopithecus africanus revealed by 2- and 3-D computed tomography. Conroy GC, et al. **Science** 1990 Feb 16;247(4944):838–41
New maps of the human brain [news] Gibbons A. **Science** 1990 Jul 13;249(4965):122–3
Comparing brains. Harvey PH, et al. **Science** 1990 Jul 13; 249(4965):140–6 (62 ref.)
Magnetic resonance imaging of the brain in neonates. Dubowitz LM, et al. **Semin Perinatol** 1990 Jun;14(3):212–23
Normal and abnormal white matter maturation. Dietrich RB, et al. **Semin Ultrasound CT MR** 1988 Jun;9(3):192–200 (21 ref.)
[Quantitative analysis of the teleost brain: evolution and adaptation. 1. A comparative interspecies study.] Ridet JM, et al. **J Hirnforsch** 1990;31(1):51–63 (Eng. Abstr.) **(Fre)**
[In search of the lymphatic system of the central nervous system] Picard JD, et al. **J Mal Vasc** 1990;15(1):5–13 (21 ref.) (Eng. Abstr.) **(Fre)**
[Relationship between body mass, brain mass and craniometric parameters in the miniature pig Mini-Lewe] Seeger J, et al. **Gegenbaurs Morphol Jahrb** 1990; 136(3):269–78 (Eng. Abstr.) **(Ger)**
[A method of adjusting and evaluating MRT and SPECT tomograms for comparing cerebral morphology with cerebrovascular regulation] Kaiser HJ, et al. **Nuklearmedizin** 1990 Feb;29(1):13–8 (Eng. Abstr.) **(Ger)**
[Linear versus circular polarization of head coils: comparison on phantoms and in the clinic] Schratter M, et al. **ROFO** 1990 Jul;153(1):92–5 (Eng. Abstr.) **(Ger)**
[Cerebral white matter bundle measurements by magnetic resonance imaging] Yoshii F, et al. **Rinsho Shinkeigaku** 1989 Apr;29(4):513–6 (Eng. Abstr.) **(Jpn)**
[Seasonal changes in the brain and skull sizes of small mammals] Iaskin VA. **Zh Obshch Biol** 1989 Jul-Aug; 50(4):470–80 (Eng. Abstr.) **(Rus)**
[Morphological correlates and heredity in functional asymmetry of the cerebral hemispheres] Cerňáček J. **Bratisl Lek Listy** 1989 Nov;90(11):831–4 (Eng. Abstr.) **(Slo)**

BLOOD SUPPLY

Giant intracranial varix associated with venous angioma and intracerebral hemorrhage. Maiuri F, et al. **Acta Neurol (Napoli)** 1990 Jun;12(3):231–6
Delayed decrease in hemispheric cerebral blood flow during Wada test demonstrated by 99mTc-HMPAO single photon emission computer tomography. Ryding E, et al. **Acta Neurol Scand** 1989 Sep;80(3):248–54
Computerized three-dimensional reconstruction of the developing blood-brain barrier. Bertossi M, et al. **Acta Neuropathol (Berl)** 1989;79(1):48–51
Altered angioarchitecture in selected areas of brains with Alzheimer's disease. Fischer VW, et al. **Acta Neuropathol (Berl)** 1990;79(6):672–9
Ultracytochemical localisation of Na+, K(+)-ATPase in cerebral endothelium in acute hypertension. Nag S. **Acta Neuropathol (Berl)** 1990;80(1):7–11
Vascular glycosaminoglycans in periventricular leukoencephalopathy. Torack RM, et al. **Acta Neuropathol (Berl)** 1989;78(5):492–6
Acute effect of electroconvulsive therapy on brain perfusion assessed by Tc99m-hexamethylpropyleneamineoxim and single photon emission computed tomography. Bajc M, et al. **Acta Psychiatr Scand** 1989 Nov;80(5):421–6
Cerebral perfusion inhomogeneities in schizophrenia demonstrated with single photon emission computed tomography and Tc99m-hexamethylpropyleneamineoxim. Bajc M, et al. **Acta Psychiatr Scand** 1989 Nov;80(5):427–33
Features of the cerebral vascular pattern that predict vulnerability to perfusion or oxygenation deficiency: an anatomic study. Moody DM, et al. **AJNR** 1990 May; 11(3):431–9
Changes in brain microvasculature resulting from early postnatal alcohol exposure. Kelly SJ, et al. **Alcohol** 1990 Jan-Feb;7(1):43–7
Angiology of the brain of the baboon Papio ursinus, the vervet monkey Cercopithecus pygerithrus, and the bushbaby Galago senegalensis. Lake AR, et al. **Am J Anat** 1990 Mar;187(3):277–86
Tone regulates opposing endothelium-dependent and -independent forces: resistance brain vessels in vivo. Rosenblum WI, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H243–7
The pathology of human cerebral malaria. Aikawa M, et al. **Am J Trop Med Hyg** 1990 Aug;43(2 Pt 2):30–7 (17 ref.)
Reperfusion hyperoxia in brain after circulatory arrest in humans. Smith DS, et al. **Anesthesiology** 1990 Jul;73(1):12–9
Permeability of intracranial blood vessels to endogenous serum albumin. Heck AF. **Angiology** 1990 Mar;41(3):233–40
Cerebral vasculopathy associated with primary varicella infection. Caekebeke JF, et al. **Arch Neurol** 1990 Sep; 47(9):1033–5
Alzheimer's disease. Age at onset and single-photon emission computed tomographic patterns of regional cerebral blood flow. Jagust WJ, et al. **Arch Neurol** 1990 Jun;47(6):628–33
Casts of the vessels of the head and vertebral column. Tompsett D. **Br J Surg** 1967 Aug;54(8):719–23
Cerebral blood flow, blood volume and oxygen utilization. Normal values and effect of age. Leenders KL, et al. **Brain** 1990 Feb;113 (Pt 1):27–47 .
Cerebrovascular nerves in old rats show reduced accumulation of 5-hydroxytryptamine and loss of nerve fibres. Cowen T, et al. **Brain Res** 1990 Apr 16;513(2):237–43
Local and remote microvascular changes in excitotoxin-induced focal brain lesions. Iadecola C, et al. **Brain Res** 1989 Oct 30;501(1):188–93
Blood-brain barrier characteristic enzymatic properties in cultured brain capillary endothelial cells. Meyer J, et al. **Brain Res** 1990 Apr 30;514(2):305–9
A minimally invasive technique for multiple measurement of regional blood flow of the rat brain using radiolabeled microspheres. Nakai M, et al. **Brain Res** 1990 Jan 15; 507(1):168–71
Ultrastructure of intracellularly labeled trigeminal vascular convergence neurons. Potrebic S, et al. **Brain Res** 1990 Jan 22;507(2):317–20
Metabolism of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) by bovine brain microvessel endothelial cells. Scriba GK, et al. **Brain Res** 1989 Oct 30;501(1):175–8
Confocal laser microscopy to study microcirculation on the rat brain surface in vivo. Villringer A, et al. **Brain Res** 1989 Dec 11;504(1):159–60
Cerebral microvessel endothelium is producing endothelin. Yoshimoto S, et al. **Brain Res** 1990 Feb 5;508(2):283–5
Immunogold localization of basal laminar heparan sulfate proteoglycan in rat brain and retinal capillaries. Lin WL. **Brain Res Bull** 1990 Mar;24(3):533–6
Microangiopathy, the vascular basement membrane and Alzheimer's disease: a review. Perlmutter LS, et al. **Brain Res Bull** 1990 May;24(5):677–86 (87 ref.)
Sequential appearance of anionic domains in the developing blood-brain barrier. Vorbrodt AW, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1–2):31–7
Cerebral blood flow following hypertonic saline resuscitation in an experimental model of hemorrhagic shock and head injury. Gunnar W, et al. **Braz J Med Biol Res** 1989; 22(2):287–9
Fetal cerebral blood flow. Wladimiroff JW. **Clin Obstet Gynecol** 1989 Dec;32(4):710–8 (24 ref.)
Blood vessels of the scalp and brain. Sheldon JJ. **Clin Symp** 1990;42(3):3–36 (21 ref.)
Cerebral blood flow in mechanically ventilated, preterm neonates. Greisen G. **Dan Med Bull** 1990 Apr;37(2):124–31 (113 ref.)
Cerebral ischemia in spontaneously hypertensive rats with type 2 (noninsulin-dependent) diabetes mellitus, cerebral blood flow and tissue metabolism. Fujii K, et al. **Gerontology** 1989;35(2–3):78–87
Alpha- and beta-adrenergic receptors of noradrenergic innervation modulate the lower limits of cerebral and cerebellar blood flow autoregulation in spontaneously hypertensive rats. Shiokawa O, et al. **Gerontology** 1989; 35(2–3):106–12
Rat brain capillary endothelial cells express functional PDGF B-type receptors. Smits A, et al. **Growth Factors** 1989; 2(1):1–8
Morphologic plasticity and periodicity: porcine cerebral microvascular cells in culture. Robinson DH, et al. **In Vitro Cell Dev Biol** 1990 Feb;26(2):169–80
Rapid enhancement of cAMP accumulation in rat brain particulate fraction after ischaemia. Domańska-Janik K, et al. **Int J Tissue React** 1989;11(2):73–9
Insensitivity of tensile failure properties of human bridging veins to strain rate: implications in biomechanics of subdural hematoma. Lee MC, et al. **J Biomech** 1989; 22(6–7):537–42
The difference in vascular volume between cerebrum and cerebellum is in the pia mater. Holash JA, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):432–4
Effect of adenosine on total and regional cerebral blood flow of the newborn piglet. Laudignon N, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):392–8
Origins and pathways of choline acetyltransferase-positive parasympathetic nerve fibers to cerebral vessels in rat. Suzuki N, et al. **J Cereb Blood Flow Metab** 1990 May; 10(3):399–408
Activation of CD4+ lymphocytes by syngeneic brain microvascular smooth muscle cells. Fabry Z, et al. **J Immunol** 1990 Aug 15;145(4):1099–104
Eicosapentaenoic acid metabolism in brain microvessel endothelium: effect on prostaglandin formation. Yerram NR, et al. **J Lipid Res** 1989 Nov;30(11):1747–57
Development and evolution of the carotid circulation in geomyoid rodents in relationship to their craniomorphology. Brylski P. **J Morphol** 1990 Apr; 204(1):33–45
Bovine brain endothelial cells express tight junctions and monoamine oxidase activity in long-term culture. Méresse S, et al. **J Neurochem** 1989 Nov;53(5):1363–71
Sulfated glucuronyl paraglioboside in rat brain microvessels. Miyatani N, et al. **J Neurochem** 1990 Aug;55(2):577–82
Antigen presentation by brain microvessel smooth muscle and endothelium. Fabry Z, et al. **J Neuroimmunol** 1990 Jun;28(1):63–71
The inhibitory effect of tumor necrosis factor and interleukin-1 on Ia induction by interferon-gamma on endothelial cells from murine central nervous system microvessels. Tanaka M, et al. **J Neuroimmunol** 1990 May; 27(2–3):209–15
Cerebral blood flow and transient global amnesia [letter; comment] Croisile B, et al. **J Neurol Neurosurg Psychiatry** 1990 Apr;53(4):361 Comment on: J Neurol Neurosurg Psychiatry 1989 May;52(5):622–30.
Measurements of regional cerebral blood flow and cognitive performance in Alzheimer's disease. Montaldi D, et al. **J Neurol Neurosurg Psychiatry** 1990 Jan;53(1):33–8
Human cerebral endothelium: isolation and characterization of cells derived from microvessels of non-neoplastic and

malignant glial tissue. Costello P, et al. **J Neurooncol** 1990 Jun;8(3):231–43

Ultrastructural study of micro-blood vessels in human brain tumors and peritumoral tissue. Roy S, et al. **J Neurooncol** 1989 Sep;7(3):283–92

Vascular response to irradiation in malignant gliomas. Schiffer D, et al. **J Neurooncol** 1990 Feb;8(1):73–84

The blood-brain barrier. Gregoire N. **J Neuroradiol** 1989; 16(3):238–50 (15 ref.) (Eng, Fre)

Serial determinations of regional cerebral blood flow in the rat using simple chronically implanted platinum wire microelectrodes. Jackowski A, et al. **J Neurosci Methods** 1989 Nov;30(2):133–9

Relationship of early cerebral blood flow and metabolism to outcome in acute head injury. Jaggi JL, et al. **J Neurosurg** 1990 Feb;72(2):176–82

Thermal clearance for CBF determination [letter; comment] Wong TZ, et al. **J Neurosurg** 1990 Feb;72(2):310–1 Comment on: J Neurosurg 1989 Apr;70(4):592–8.

Stable xenon-enhanced CT measurement of cerebral blood flow in reversible focal ischemia in baboons. Yonas H, et al. **J Neurosurg** 1990 Aug;73(2):266–73

Quantitative iodine-123 IMP imaging of brain perfusion in schizophrenia. Cohen MB, et al. **J Nucl Med** 1989 Oct; 30(10):1616–20

Cerebral perfusion imaging with technetium-99m HM-PAO in brain death and severe central nervous system injury. Laurin NR, et al. **J Nucl Med** 1989 Oct;30(10):1627–35

Enhanced adrenergic response of the cerebral vasculature in alloxan-induced diabetic rats. Kurihara J, et al. **J Pharmacobiodyn** 1989 Nov;12(11):700–7

Cerebral perfusion pressure management in head injury. Rosner MJ, et al. **J Trauma** 1990 Aug;30(8):933–40; discussion 940–1

From the Alcohol, Drug Abuse, and Mental Health Administration. Goodwin FK. **JAMA** 1990 Mar 23–30; 263(12):1610

Prediction of brain blood flow using pulsed Doppler ultrasonography in newborn lambs. Martin CG, et al. **JCU** 1990 Jul–Aug;18(6):487–95

Coexistence of Alzheimer's amyloid precursor protein and amyloid protein in cerebral vessel walls. Tagliavini F, et al. **Lab Invest** 1990 Jun;62(6):761–7

Evaluation of membrane fluidity in cerebral microvasculature. Villacara A, et al. **Microcirc Endothelium Lymphatics** 1990 Feb;6(1):45–65

The presence of anionic sites in basement membranes of cerebral capillaries. Chakrabarti S, et al. **Microvasc Res** 1990 Jan;39(1):123–7

Fluid-phase endocytosis by primary cultures of bovine brain microvessel endothelial cell monolayers. Guillot FL, et al. **Microvasc Res** 1990 Jan;39(1):1–14

Brain protection. Frost EA. **Middle East J Anesthesiol** 1990 Feb;10(4):339–62 (115 ref.)

Pharmacological properties of voltage-dependent calcium channels in functional microvessels isolated from rat brain. Morel N, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Oct;340(4):442–51

Regional disparity in the vascular response to subarachnoid hemorrhage--relationship between alteration of the concentration of eicosanoids and electron microscopic findings. Nakamura S, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):181–6

Prognostic implications of hyperglycemia and reduced cerebral blood flow in childhood near-drowning. Ashwal S, et al. **Neurology** 1990 May;40(5):820–3

Cerebral blood flow variations in CNS lupus. Kushner MJ, et al. **Neurology** 1990 Jan;40(1):99–102

Effect of several vasoactive agents on guanylate cyclase activity in isolated rat brain microvessels. Homayoun P, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):273–8

Intracerebral arteriovenous fistulas associated with intraparenchymal varix in childhood: case reports. Barnwell SL, et al. **Neurosurgery** 1990 Jan;26(1):122–5

Pericyte degeneration and thickening of basement membranes of cerebral microvessels in complex partial seizures: electron microscopic study of surgically removed tissue. Liwnicz BH, et al. **Neurosurgery** 1990 Mar;26(3):409–20

Cerebral blood flow and edema in perinatal hypoxic-ischemic brain damage. Mujsce DJ, et al. **Pediatr Res** 1990 May; 27(5):450–3

The role of oxygen free radicals in postasphyxia cerebral hypoperfusion in newborn lambs. Rosenberg AA, et al. **Pediatr Res** 1989 Sep;26(3):215–9

Insulin binding to brain capillaries is reduced in genetically obese, hyperinsulinemic Zucker rats. Schwartz MW, et al. **Peptides** 1990 May–Jun;11(3):467–72

Expression of melatonin receptors in arteries involved in thermoregulation. Viswanathan M, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6200–3

Alterations in adrenergic receptors of frontal cortex and cerebral microvessels in Alzheimer's disease and aging. Kalaria RN, et al. **Prog Clin Biol Res** 1989;317:367–74

Regional cerebral blood flow in schizophrenia: repeated studies during a psychotic episode. Warkentin S, et al. **Psychiatry Res** 1990 Apr;35(1):27–38

Architecture of the medial smooth muscle of the arterial vessels in the normal human brain: a scanning electron-microscopic study. Shiraishi T, et al. **Scanning Microsc** 1990 Mar;4(1):191–9; discussion 199

Gender differences in regional cerebral blood flow. Gur RE, et al. **Schizophr Bull** 1990;16(2):247–54

Effect of hemodilution on regional cerebral blood flow during chronic hyperglycemia in rats. Duckrow RB. **Stroke** 1990 Jul;21(7):1072–6

Regional cerebral blood flow and distribution of [99mTc]ethyl cysteinate dimer in nonhuman primates. Orlandi C, et al. **Stroke** 1990 Jul;21(7):1059–63

Ultrastructural changes in cerebral pericytes and astrocytes of stroke-prone spontaneously hypertensive rats. Tagami M, et al. **Stroke** 1990 Jul;21(7):1064–71

Occlusion of major cerebral arteries: new concepts. Kassell NF, et al. **Surg Forum** 1978;29:527–9

A case of medullary venous malformations with an arterial component coexisting with arteriovenous malformations. Tomura N, et al. **Surg Neurol** 1990 Jan;33(1):37–42

Brain hypoperfusion post-resuscitation. Muir WW. **Vet Clin North Am Small Anim Pract** 1989 Nov; 19(6):1151–66 (56 ref.)

[Transplantation of the embryonic neocortex into the brain in rats: angioarchitecture of the graft 5 months after surgery] Němeček S, et al. **Cesk Neurol Neurochir** 1989 May;52(3):171–5 (Eng. Abstr.) (Cze)

[Percutaneous transluminal angioplasty of the branches of the aortic arch] Kováč J, et al. **Cesk Radiol** 1989 Aug; 43(4):218–25 (Eng. Abstr.) (Cze)

[Magnetic resonance angiography of the arteries supplying the brain] Peters PE, et al. **ROFO** 1990 May;152(5):528–33 (Eng. Abstr.) (Ger)

[Prostaglandin receptors and prostaglandin metabolism in the terminal circulation of the brain] Wasinger T. **Wien Klin Wochenschr** 1989 Dec 8;101(23):821–4 (Eng. Abstr.) (Ger)

[The presence of aluminum in cerebral vessels in Alzheimer's disease] Senitz D, et al. **Zentralbl Allg Pathol** 1990; 136(4):329–35 (Eng. Abstr.) (Ger)

[Comparison between PVHIS on the MRI and the permeability of brain blood vessels in elderly patients] Yamaguchi K, et al. **Nippon Ronen Igakkai Zasshi** 1989 Nov;26(6):624–9 (Eng. Abstr.) (Jpn)

[Role of perivascular phagocyte (FGP) of cerebral small blood vessel in cerebral edema] Mato M, et al. **No To Shinkei** 1989 Nov;41(11):1109–17 (Eng. Abstr.) (Jpn)

[Variability of the course of the posterior cerebral artery in humans] Michalczyk K. **Ann Acad Med Stetin** 1989; 35:23–36 (Eng. Abstr.) (Pol)

[Variability of the course of the anterior cerebral artery and its branches in humans] Mierzwa A. **Ann Acad Med Stetin** 1989;35:37–56 (Eng. Abstr.) (Pol)

[Vertebrobasilar ischemia--clinico-radiologic correlations] Domżał T, et al. **Neurol Neurochir Pol** 1989 May–Jun; 23(3):177–81 (Eng. Abstr.) (Pol)

[Electroencephalographic changes in reversible ischemic cerebral infarction] Klimowicz-Młodzik I, et al. **Neurol Neurochir Pol** 1988 Nov–Dec;22(6):500–6 (Eng. Abstr.) (Pol)

[Usefulness of determining the level of neuron-specific enolase (NSE) in the cerebrospinal fluid as a biochemical indicator of the extent of cerebral ischemic stroke. Experimental study of the rat model of stroke] Kotwica Z, et al. **Neurol Neurochir Pol** 1989 May–Jun;23(3):198–202 (Eng. Abstr.) (Pol)

[Nerve tissue protein S 100 level in the cerebrospinal fluid as an indicator of the extent of brain damage in cerebral ischemic stroke. Experimental study of a rat model of stroke] Kotwica Z, et al. **Neurol Neurochir Pol** 1989 May–Jun;23(3):203–7 (Eng. Abstr.) (Pol)

[Subarachnoid hemorrhage of unknown etiology] Marchel A, et al. **Neurol Neurochir Pol** 1989 Jul–Dec;23(4–6):337–42 (Eng. Abstr.) (Pol)

[Postmortem study of the cerebral vascular system by the method of vascular casts in patients with ischemic cerebral infarction] Stroińska-Kuś B. **Neurol Neurochir Pol** 1988 Nov–Dec;22(6):507–12 (Eng. Abstr.) (Pol)

[Age-related characteristics of cerebral blood vessels in the rat (morphometric study)] Levitman MKh, et al. **Arkh Anat Gistol Embriol** 1990 Jan;98(1):49–53 (Eng. Abstr.) (Rus)

[Receptor glomeruli and their ultrastructural organization in the arteries and pia mater of the brain and spinal cord of humans] Motavkin PA, et al. **Arkh Anat Gistol Embriol** 1989 Sep;97(9):14–9 (Eng. Abstr.) (Rus)

[Dynamic structure of blood flow in the smallest veins of the brain] Ivanov KP, et al. **Biull Eksp Biol Med** 1990 Jan;109(1):8–11 (Eng. Abstr.) (Rus)

[Leu-enkephalin localization in brain capillaries] Lomakin AV, et al. **Dokl Akad Nauk SSSR** 1990;310(5):1263–5 (Rus)

[Local blood flow of the brain and hip muscle during hypoxia in normo- and hypobaric conditions] Agafonov VP. **Fiziol Zh** 1990 Mar–Apr;36(2):95–9 (Eng. Abstr.) (Rus)

[The neurogenic mechanism of the regulation of cerebral circulation and the linking of blood flow-metabolism function] Mitagvariia NP. **Fiziol Zh SSSR** 1989 Nov; 75(11):1473–8 (20 ref.) (Eng. Abstr.) (Rus)

[The intercellular connection of axons-capillaries in the light of genetically determined resistance to emotional stress] Zhigadlo BA, et al. **Izv Akad Nauk SSSR [Biol]** 1990 May–Jun;(3):391–8 (Eng. Abstr.) (Rus)

[Mathematical model of intracranial blood-cerebrospinal fluid dynamics system applied to the study of extreme conditions] Grigorian SS, et al. **Kosm Biol Aviakosm Med** 1990 Mar–Apr;24(2):25–9 (Eng. Abstr.) (Rus)

[99mTc-hexamethylpropyleneamine oxime (HMPAO)--its diagnostic potentials for assessing the cerebral blood supply (a review)] Krotkov FF, et al. **Med Radiol (Mosk)** 1989 Nov;34(11):29–35 (58 ref.) (Rus)

[Characteristics of biochemical, electrophysiological and morphological changes in experimental cerebral ischemia] Barkhatova VP, et al. **Zh Nevropatol Psikhiatr** 1989; 89(7):95–100 (Eng. Abstr.) (Rus)

[Mechanisms of the therapeutic effect of hyperbaric oxygenation in minor differential pressure in stroke] Gusev EI, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):34–40 (Eng. Abstr.) (Rus)

[Radiocirculography in patients with cerebrovascular disorders] Ivanchev V, et al. **Zh Nevropatol Psikhiatr** 1990; 90(1):32–4 (Eng. Abstr.) (Rus)

[Mechanisms of the development of autonomic regulation disorders in neurogenic syncope in childhood] Kravtsov IuI, et al. **Zh Nevropatol Psikhiatr** 1989;89(11):37–43 (Eng. Abstr.) (Rus)

[Headache in autonomic-vascular dystonia] Kukhtevich II, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):24–7 (Eng. Abstr.) (Rus)

[Characteristics of intracerebral hemodynamics in occlusive diseases of major arteries of the brain] Pokrovskiĭ AV, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):7–11 (Eng. Abstr.) (Rus)

[The role of echopulsography in the detection of cerebrovascular pathology] Robule VKh. **Zh Nevropatol Psikhiatr** 1990;90(2):114–8 (Eng. Abstr.) (Rus)

[Psycho-autonomic correlations in patients with neuroses and in persons with risk factors of cerebrovascular disorders] Shutov AA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(11):18–22 (Eng. Abstr.) (Rus)

CYTOLOGY

Immunoreactive atrial natriuretic peptide in neuronal and glial cells of spontaneously hypertensive rat brain. Raizada MK, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):C109–14

Localization and quantitation of hexabrachion (tenascin) in skin, embryonic brain, tumors, and plasma. Lightner VA, et al. **Ann N Y Acad Sci** 1990;580:260–75

Afferent connections of the subthalamic nucleus: a combined retrograde and anterograde horseradish peroxidase study in the rat. Canteras NS, et al. **Brain Res** 1990 Apr 9; 513(1):43–59

Astrocytes cultured from specific brain regions differ in their expression of adrenergic binding sites. Ernsberger P, et al. **Brain Res** 1990 May 28;517(1–2):202–8

Dopamine- and dopa-immunoreactive neurons in the cat forebrain with reference to tyrosine hydroxylase-immunohistochemistry. Kitahama K, et al. **Brain Res** 1990 Jun 4;518(1–2):83–94

Morphological analysis of single astrocytes of the adult cat central nervous system visualized by HRP microinjection. Sasaki H, et al. **Brain Res** 1989 Nov 6;501(2):339–54

Activation and proliferation of the isolated microglia by colony stimulating factor-1 and possible involvement of protein kinase C. Sawada M, et al. **Brain Res** 1990 Feb 12;509(1):119–24

Preferential histochemical staining of protoplasmic and fibrous astrocytes in rat CNS with GFAP antibodies using different fixatives. Shehab SA, et al. **Brain Res** 1990 Jun 4;518(1–2):347–52

Immunocytochemical detection of 5'-bromodeoxyuridine incorporation in the central nervous system of the mouse. del Rio JA, et al. **Brain Res Dev Brain Res** 1989 Oct 1; 49(2):311–7

Early axonal differentiation in mouse CNS delineated by an antibody recognizing extracted neurofilaments. Edwards MA, et al. **Brain Res Dev Brain Res** 1989 Oct 1; 49(2):185–204

Selective growth of hippocampal neurites on cryostat sections of rat brain. Khan U, et al. **Brain Res Dev Brain Res** 1990 Jun 1;54(1):87–92

Differentiation potential of a monoclonal antibody-defined neural progenitor cell population isolated from prenatal rat brain by fluorescence-activated cell sorting. Liepelt U, et al. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):267–78

Primary dissociated cell culture of fetal rat central nervous tissue. I. Immunocytochemical and ultrastructural studies of cell development and synaptogenesis. Muraoka S, et al. **Brain Res Dev Brain Res** 1989 Sep 1;49(1):51–62

Primary dissociated cell culture of fetal rat central nervous tissue. II. Immunocytochemical and ultrastructural studies of myelinogenesis. Muraoka S, et al. **Brain Res Dev Brain Res** 1989 Sep 1;49(1):63–74

Estrogen stimulates the incorporation of new neurons into avian song nuclei during adolescence. Nordeen EJ, et al. **Brain Res Dev Brain Res** 1989 Sep 1;49(1):27–32

Evaluation of the effect of suramin on neural cell growth and N-CAM expression. Guo XJ, et al. **Cancer Res** 1990 Aug 15;50(16):5164–70

Concentration of membrane antigens by forward transport and trapping in neuronal growth cones. Sheetz MP, et al. **Cell** 1990 Apr 20;61(2):231–41

Lymphocyte migration into brain modelled in vitro: control by lymphocyte activation, cytokines, and antigen. Male D, et al. **Cell Immunol** 1990 Apr 15;127(1):1–11

Transplantation of the rat pineal organ to the brain: pinealocyte differentiation and innervation. Nonaka T, et

al. **Cell Tissue Res** 1990 May;260(2):273–8
Primary cultures of astrocytes from different brain areas of newborn rats and effects of basic fibroblast growth factor. Perraud F, et al. **Dev Neurosci** 1990;12(1):11–21
Effect of fluorodeoxyuridine on neurons and non–neuronal cells in cerebral explants. Oorschot DE. **Exp Brain Res** 1989;78(1):132–8
Identification of vestibular efferent neurons in the gerbil: histochemical and retrograde labelling. Perachio AA, et al. **Exp Brain Res** 1989;78(2):315–26
Association of cytoskeletal proteins with newly formed acetylcholine receptor aggregates induced by embryonic brain extract. Daniels MP, et al. **Exp Cell Res** 1990 Jan; 186(1):99–108
Identification of hypophysiotropic luteinizing hormone–releasing hormone (LHRH) neurons by combined retrograde labeling and immunocytochemistry. Merchenthaler I, et al. **Exp Clin Endocrinol** 1989 Sep; 94(1–2):133–40
Heat shock induces c–fos protein–like immunoreactivity in glial cells in adult rat brain. Dragunow M, et al. **Exp Neurol** 1989 Oct;106(1):105–9
Development of a monoclonal antibody against recombinant neuroendocrine 7B2 protein. van Duijnhoven HL, et al. **FEBS Lett** 1989 Sep 25;255(2):372–6
Region– and sex–related differences in maturation of astrocytes in dissociated cell cultures of embryonic rat brain. Beyer C, et al. **GLIA** 1990;3(1):55–64
Isolation and characterization of brain macrophages from the central nervous system of newborn and adult rats and of rats with experimental allergic encephalomyelitis. de Groot CJ, et al. **Immunobiology** 1989 Oct;179(4–5):314–27
Cerebral endothelial cell–derived laminin promotes the outgrowth of neurites in CNS neuronal cultures. Pákáski M, et al. **Int J Dev Neurosci** 1990;8(2):193–8
Interactions between human glioma cells and fetal rat brain aggregates studied in a chemically defined medium. Lund–Johansen M. **Invasion Metastasis** 1990;10(2):113–28
Stability of neuron and glial number in the abducens nerve nucleus of the ageing mouse brain. Sturrock RR. **J Anat** 1989 Oct;166:97–101
P29: a novel tyrosine–phosphorylated membrane protein present in small clear vesicles of neurons and endocrine cells. Baumert M, et al. **J Cell Biol** 1990 Apr;110(4):1285–94
Scrapie prion proteins accumulate in the cytoplasm of persistently infected cultured cells. Taraboulos A, et al. **J Cell Biol** 1990 Jun;110(6):2117–32
Cortical projection patterns of the medial septum–diagonal band complex. Gaykema RP, et al. **J Comp Neurol** 1990 Mar 1;293(1):103–24
Morphology of antennal motoneurons in the brains of two crickets, Gryllus bimaculatus and Gryllus campestris. Honegger HW, et al. **J Comp Neurol** 1990 Jan 8; 291(2):256–68
Neuronal localization of cholecystokinin mRNA in the rat brain by using in situ hybridization histochemistry. Ingram SM, et al. **J Comp Neurol** 1989 Sep 8;287(2):260–72
Organization of intrahippocampal projections originating from CA3 pyramidal cells in the rat. Ishizuka N, et al. **J Comp Neurol** 1990 May 22;295(4):580–623
Electron microscopic study of immunocytochemically labeled centrifugal fibers in the goldfish retina. Kawamata K, et al. **J Comp Neurol** 1990 Mar 22;293(4):655–64
Autoradiographic localization of progestin–concentrating cells in the brain of the zebra finch. Lubischer JL, et al. **J Comp Neurol** 1990 Jan 15;291(3):450–6
CNS connections with the median raphe nucleus: retrograde tracing with WGA–apoHRP–Gold complex in the rat. Marcinkiewicz M, et al. **J Comp Neurol** 1989 Nov 1; 289(1):11–35
Amygdaloid efferents through the stria terminalis in the rat give origin to zinc–containing boutons. Pérez–Clausell J, et al. **J Comp Neurol** 1989 Dec 8;290(2):201–12
Projections ascending from the spinal cord to the brain in petromyzontid and myxinoid agnathans. Ronan M, et al. **J Comp Neurol** 1990 Jan 22;291(4):491–508
Development of glial cells in the cerebral wall of ferrets: direct tracing of their transformation from radial glia into astrocytes. Voigt T. **J Comp Neurol** 1989 Nov 1; 289(1):74–88
A radiotracer for mapping cholinergic neurons of the brain. Jung YW, et al. **J Med Chem** 1990 Aug;33(8):2065–8
A quantitative approach to cytoarchitectonics: analysis of structural inhomogeneities in nervous tissue using an image analyser. Schleicher A, et al. **J Microsc** 1990 Mar;157 (Pt 3):367–81
Extraretinal photoreceptors in the brain of the crayfish Cherax destructor. Sandeman DC, et al. **J Neurobiol** 1990 Jun;21(4):619–29
Astrocytic orthogonal arrays of intramembranous particle assemblies are modulated by brain endothelial cells in vitro. Tao–Cheng JH, et al. **J Neurocytol** 1990 Apr;19(2):143–53
Lymphocyte infiltration into normal rat brain following hyperosmotic blood–brain barrier opening. Kajiwara K, et al. **J Neuroimmunol** 1990 May;27(2–3):133–40
Descending pathways to the cutaneous trunci muscle motoneuronal cell group in the cat. Holstege G, et al. **J Neurophysiol** 1989 Dec;62(6):1260–9
Cerebral white matter contains PDGF–responsive precursors to O2A cells. Grinspan JB, et al. **J Neurosci** 1990 Jun; 10(6):1866–73
Genesis and death of vocal control neurons during sexual differentiation in the zebra finch. Kirn JR, et al. **J Neurosci** 1989 Sep;9(9):3176–87
Neuronal subsets express multiple high–molecular–weight cell–surface glycoconjugates defined by monoclonal antibodies Cat–301 and VC1.1. Zaremba S, et al. **J Neurosci** 1990 Sep;10(9):2985–95
Long–term cultivation of cryopreserved human fetal brain cells in a chemically defined medium. Haselbacher G, et al. **J Neurosci Methods** 1989 Nov;30(2):121–31
A simple rapid method to slice biological specimens: an application for non–embedded and embedded Golgi–stained tissue. Kolodziejczyk E, et al. **J Neurosci Methods** 1990 Mar;31(3):183–6
A system for the reconstruction and analysis of dendritic fields. Lowndes M, et al. **J Neurosci Methods** 1990 Mar; 31(3):235–45
Supravital staining of murine brain with methylene blue according to the Cajal method: a simple and reliable preparation technique for embedding in paraffin. Müller T. **J Neurosci Methods** 1990 Jun;32(3):223–6
An easy method for impaling cells using the micromanipulation technique. Perez–Samartin AL, et al. **J Neurosci Methods** 1990 May;32(2):149–53
The relationship of expression of statin, the nuclear protein of nonproliferating cells, to the differentiation and cell cycle of astroglia in cultures and in situ. Fedoroff S, et al. **J Neurosci Res** 1990 May;26(1):1–15
Cultured microglial cells have a distinct pattern of membrane channels different from peritoneal macrophages. Kettenmann H, et al. **J Neurosci Res** 1990 Jul;26(3):278–87
Fibroblast growth factor stimulates the proliferation and differentiation of neural precursor cells in vitro. Murphy M, et al. **J Neurosci Res** 1990 Apr;25(4):463–75
Dual–label retrograde transport: CNS innervation of the mouse thymus distinct from other mediastinum viscera. Tollefson L, et al. **J Neurosci Res** 1990 Jan;25(1):20–8
Effects of recombinant human basic fibroblast growth factor and its modified protein CS23 on survival of primary cultured neurons from various regions of fetal rat brain. Abe K, et al. **Jpn J Pharmacol** 1990 Jun;53(2):221–7
Mast cells: the immune gate to the brain. Theoharides TC. **Life Sci** 1990;46(9):607–17 (149 ref.)
Localization of ganglioside GM1 with biotinylated choleragen. Asou H. **Methods Enzymol** 1990;184:405–8
Effects of phorbol ester on immunoreactive protein kinase C, insulin binding, and glucose uptake in astrocytic glial and neuronal cells from the brain. Mudd LM, et al. **Neurochem Res** 1990 Mar;15(3):273–8
Subunit structure and localization of dihydropyridine–sensitive calcium channels in mammalian brain, spinal cord, and retina. Ahlijanian MK, et al. **Neuron** 1990 Jun;4(6):819–32
Cell allocation in mammalian CNS formation: evidence from murine interspecies aggregation chimeras. Goldowitz D. **Neuron** 1989 Dec;3(6):705–13
Interleukin 3 as a trophic factor for central cholinergic neurons in vitro and in vivo. Kamegai M, et al. **Neuron** 1990 Mar;4(3):429–36
Type–2 astrocyte development in rat brain cultures is initiated by a CNTF–like protein produced by type–1 astrocytes. Lillien LE, et al. **Neuron** 1988 Aug;1(6):485–94
Glial and neuronal differentiation in the human fetal brain 9–23 weeks of gestation. Wilkinson M, et al. **Neuropathol Appl Neurobiol** 1990 Jun;16(3):193–204
Photoconversion of fluorescent retrograde tracers. Bentivoglio M, et al. **Neurosci Lett** 1990 May 31; 113(2):127–33
Ganglion cells and retinopetal fibers of the larval lamprey retina: an HRP ultrastructural study. De Miguel E, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):1–6
Immunophenotypic characterization of rat brain macrophages in culture. Graeber MB, et al. **Neurosci Lett** 1989 Sep 11;103(3):241–6
Immunocytochemical studies of centrifugal fiber in the goldfish retina. Ohtsuka T, et al. **Neurosci Res Suppl** 1989; 10:S141–50 (23 ref.)
Cellular localization of carnosine–like and anserine–like immunoreactivities in rodent and avian central nervous system. Biffo S, et al. **Neuroscience** 1990;35(3):637–51
Comparative characteristic of afferent inputs to the dorsal and ventral regions of the magnocellular part of the cat red nucleus. Pogossian VI, et al. **Neuroscience** 1990; 34(3):733–43
Interhemispheric connections differ between symmetrical and asymmetrical brain regions. Rosen GD, et al. **Neuroscience** 1989;33(3):525–33
Location of phosphotyrosine–containing proteins by immunocytochemistry in the rat forebrain corresponds to the distribution of the insulin receptor. Moss AM, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4453–7
Ultrastructural immunocytochemistry of the hypothalamic corticotropin releasing hormone synthesizing system. Anatomical basis of neuronal and humoral regulatory mechanisms. Liposits Z. **Prog Histochem Cytochem** 1990; 21(2):1–98
Modified Golgi method for whole rat brain. Greer ER, et al. **Stain Technol** 1990;65(3):155–7
Visual enhancement of myelinated tissues in the central nervous system of the rat using Sudan black B. Olson KR, et al. **Stain Technol** 1990;65(3):151–3
The use of cell lines in neurobiology. Lendahl U, et al. **Trends Neurosci** 1990 Apr;13(4):132–7 (59 ref.)
Triple staining of brain tissue for neuronal classification. Eggers R. **Z Mikrosk Anat Forsch** 1990;104(1):55–60
Local supravital staining with methylene blue as marking technique for neurons. Müller T. **Z Mikrosk Anat Forsch** 1989;103(6):967–70
[Collateral sprouting and formation of new synapses] Murakami F. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(4 Suppl):409–16 **(Jpn)**
[Brain–derived growth factors] Farbiszewski R. **Postepy Biochem** 1988;34(4):261–7 (47 ref.) **(Pol)**
[Transplantation of the nerve tissue into the brain of adult mice of mutant strain fidget] Polezhaev LV, et al. **Dokl Akad Nauk SSSR** 1989;309(2):470–3 **(Rus)**
[Identification of the cells in cultured embryonic tissue of the human brain using antibodies to glial fibrillary acidic protein] Vostrikov VM, et al. **Zh Nevropatol Psikhiatr** 1989; 89(7):12–5 (Eng. Abstr.) **(Rus)**

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Effect of N–ethylmaleimide treatment on naloxone binding in frog brain membranes. Zawilska J, et al. **Acta Biochim Biophys Hung** 1989;24(1–2):33–9
Transplacental effect of 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine (MPTP) on brain dopaminergic neurons in the mouse. An immunohistochemical study. Furune S, et al. **Acta Neuropathol (Berl)** 1989;79(3):279–85
Ovariectomy– and sex hormone–induced changes in the excitability of the CNS: an assessment by EEG paroxysmal activity and behaviour. Nikiforova AS, et al. **Acta Physiol Pharmacol Bulg** 1989;15(4):48–52
Centrally administered endothelin–1 produces lesions in the brain of the male rat. Fuxe K, et al. **Acta Physiol Scand** 1989 Sep;137(1):155–6
Opposite effects of centrally administered neuropeptide Y (NPY) on locomotor activity of spontaneously hypertensive (SH) and normal rats. Heilig M, et al. **Acta Physiol Scand** 1989 Oct;137(2):243–8
Neuroleptic–induced supersensitivity psychosis in patients with bipolar affective disorder. Steiner W, et al. **Acta Psychiatr Scand** 1990 May;81(5):437–40
Pharmacological data of the atypical neuroleptic compound melperone (Buronil). Christensson EG. **Acta Psychiatr Scand Suppl** 1989;352:7–15
An overview of the animal pharmacology of paroxetine. Johnson AM. **Acta Psychiatr Scand Suppl** 1989;350:14–20 (28 ref.)
Pharmacological effects of paroxetine after repeated administration to animals. Nelson DR, et al. **Acta Psychiatr Scand Suppl** 1989;350:21–3
Approaches for finding new types of antipsychotic compounds. Sedvall G. **Acta Psychiatr Scand Suppl** 1989; 352:16–23 (26 ref.)
Glycerol dehydrates traumatic and cold–lesioned brain edema as well as normal brain. Chen JL, et al. **Adv Neurol** 1990;52:550
Acceleration of rat brain beta–adrenoceptor subsensitivity following the coadministration of histamine receptor antagonists with imipramine. Alhaider AA, et al. **Agents Actions** 1989 Nov;28(3–4):153–8
Ethanol oral self–administration and rewarding brain stimulation. Bain GT, et al. **Alcohol** 1989 Nov–Dec; 6(6):499–503
A single day of alcohol exposure during the brain growth spurt induces brain weight restriction and cerebellar Purkinje cell loss. Goodlett CR, et al. **Alcohol** 1990 Mar–Apr;7(2):107–14
Effect of ethanol on brain catecholamines in rat lines developed for differential ethanol–induced motor impairment. Hellevuo K, et al. **Alcohol** 1990 Mar–Apr; 7(2):159–63
Dehydration: a new alcohol theory. Klemm WR. **Alcohol** 1990 Jan–Feb;7(1):49–59 (99 ref.)
Alcohol–induced poikilothermia, sleep and motor impairment: actions on brain of EGTA and verapamil. Paez X, et al. **Alcohol** 1989 Nov–Dec;6(6):489–98
Neuronal mechanisms of ethanol sensitivity. Kiianmaa K. **Alcohol Alcohol** 1990;25(2–3):257–62 (35 ref.)
Alteration in the function of cerebral neurotransmitter receptors during the establishment of alcohol dependence: neurochemical aspects. Kuriyama K, et al. **Alcohol Alcohol** 1990;25(2–3):239–49 (75 ref.)
Increased hypothermic responses to ethanol in rats selectively bred for cholinergic supersensitivity. Overstreet DH, et al. **Alcohol Alcohol** 1990;25(1):59–65
Interaction of ethanol and stress: research with experimental animals—an update. Pohorecky LA. **Alcohol Alcohol** 1990; 25(2–3):263–76 (95 ref.)
Reduction in ethanol preference following injection of centrally and peripherally acting antimuscarinic agents. Rezvani AH, et al. **Alcohol Alcohol** 1990;25(1):3–7
Substance P against ethanol–induced alterations in central mechanisms of feeding and escape in rabbits. Zilov VG, et al. **Alcohol Alcohol** 1989;24(6):513–8
Behavioral and subjective effects of ethanol: relationship to cerebral metabolism using PET. de Wit H, et al. **Alcohol Clin Exp Res** 1990 Jun;14(3):482–9
Corticotropin–releasing factor is altered in brains of animals with high preference for ethanol. George SR, et al. **Alcohol Clin Exp Res** 1990 Jun;14(3):425–9
Effects of prenatal ethanol and long–chain n–3 fatty acid supplementation on development in mice. 1. Body and brain

growth, sensorimotor development, and water T-maze reversal learning. Wainwright PE, et al. **Alcohol Clin Exp Res** 1990 Jun;14(3):405–12

Effects of prenatal ethanol and long-chain n-3 fatty acid supplementation on development in mice. 2. Fatty acid composition of brain membrane phospholipids. Wainwright PE, et al. **Alcohol Clin Exp Res** 1990 Jun;14(3):413–20

Prenatal exposure to ethanol alters the ontogeny of the beta-endorphin response to stress. Angelogianni P, et al. **Alcoholism (N Y)** 1989 Aug;13(4):564–71

Central effects of substance P and somatostatin in conscious, streptozotocin-treated rats. Tomlinson KC, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):R405–10

Central effects of angiotensins I and II in conscious streptozotocin-treated rats. Tomlinson KC, et al. **Am J Physiol** 1990 May;258(5 Pt 2):R1147–56

Progressive changes in electroencephalographic responses to nitrous oxide in humans: a possible acute drug tolerance. Avramov MN, et al. **Anesth Analg** 1990 Apr;70(4):369–74

Cholinesterase inhibitors and central activity [letter] Cozanitis DA. **Anesth Analg** 1990 Oct;71(4):441

Effects of sufentanil on cerebral circulation and metabolism in dogs. Milde LN, et al. **Anesth Analg** 1990 Feb; 70(2):138–46

The cerebral functional, metabolic, and hemodynamic effects of desflurane in dogs. Lutz LJ, et al. **Anesthesiology** 1990 Jul;73(1):125–31

The effect of magnesium sulfate administration on cerebral and cardiac toxicity of bupivacaine in dogs. Solomon D, et al. **Anesthesiology** 1990 Feb;72(2):341–6

The influence of halothane, isoflurane, and pentobarbital on cerebral plasma volume in hypocapnic and normocapnic rats. Weeks JB, et al. **Anesthesiology** 1990 Sep;73(3):461–6

Effects of epinephrine and norepinephrine on cerebral oxygen delivery and consumption during open-chest CPR. Lindner KH, et al. **Ann Emerg Med** 1990 Mar;19(3):249–54

Interleukin-2 effects in the central nervous system. Merrill JE. **Ann N Y Acad Sci** 1990;594:188–99

Cellular sources and effects of tumor necrosis factor-alpha on pituitary cells and in the central nervous system. Ricciardi-Castagnoli P, et al. **Ann N Y Acad Sci** 1990; 594:156–68

Central nervous system toxicity of biological response modifiers. Triozzi PL, et al. **Ann N Y Acad Sci** 1990; 594:347–54 (33 ref.)

Fluoxetine and side effects [letter] Baldessarini RJ, et al. **Arch Gen Psychiatry** 1990 Feb;47(2):191–2

Morphine-induced metabolic changes in human brain. Studies with positron emission tomography and [fluorine 18]fluorodeoxyglucose. London ED, et al. **Arch Gen Psychiatry** 1990 Jan;47(1):73–81

Reduced lipofuscin accumulation in senescent rat brain by long-term acetyl-L-carnitine treatment. Amenta F, et al. **Arch Gerontol Geriatr** 1989 Sep-Oct;9(2):147–53

The influence of sodium diethyldithiocarbamate on behavior and EEG in cats and rabbits. Trąbka J, et al. **Arch Immunol Ther Exp (Warsz)** 1971;19(5):567–76

Electroencephalographical analysis of acute drug intoxication—SS Bron solution-W. Tokunaga I, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1989 Dec;24(6):471–9

Handling-habituation prevents the effects of diazepam and alprazolam on brain serotonin levels in rats. Boix F, et al. **Behav Brain Res** 1990 Jan 22;36(3):209–15

Changes in exploratory behaviour of hamsters following treatment with 8-hydroxy-2-(di-n-propylamino)tetralin. Buhot MC, et al. **Behav Brain Res** 1989 Nov 1;35(2):163–79

Possible abuse potential of the NMDA antagonist MK-801. Corbett D. **Behav Brain Res** 1989 Sep 1;34(3):239–46

Post-trial NMDA receptor allosteric blockade differentially influences habituation of behavioral responses to novelty in the rat. Gironi Carnevale UA, et al. **Behav Brain Res** 1990 Jul 9;39(2):187–95

Modulation of tolerance to the GABAA agonist THIP by environmental cues. Jodogne C, et al. **Behav Brain Res** 1990 Jan 1;36(1-2):33–40

Antidepressant-like action of 8-OH-DPAT, a 5-HT1A agonist, in the learned helplessness paradigm: evidence for a postsynaptic mechanism. Martin P, et al. **Behav Brain Res** 1990 May 7;38(2):135–44

Protective effect of the calcium antagonist nimodipine on discrimination learning deficits and impaired retention behavior caused by prenatal nitrite exposure in rats. Nyakas C, et al. **Behav Brain Res** 1990 Apr 16;38(1):69–76

Behavioral analysis of the effects of benzodiazepine receptor ligands in the conditioned burying paradigm. Rohmer JG, et al. **Behav Brain Res** 1990 Apr 16;38(1):45–54

Chronic administration of SCH 23390 enhances spontaneous searching and locomotor activity of rats. An open field study. Smiałowski A. **Behav Brain Res** 1989 Oct 1; 35(1):41–4

The effects of p-chloroamphetamine, a depletor of brain serotonin, on the performance of rats in two types of positively reinforced complex spatial discrimination tasks. Altman HJ, et al. **Behav Neural Biol** 1989 Sep;52(2):131–44

Simple disturbance of the dam in the neonatal period can alter haloperidol-induced catalepsy in the adult offspring. Gallegos G, et al. **Behav Neural Biol** 1990 Mar;53(2):172–88

Dual action of post-training naloxone on memory. Izquierdo I, et al. **Behav Neural Biol** 1990 Jan;53(1):140–6

Benzodiazepine receptor ligand influences on acquisition: suggestion of an endogenous modulatory mechanism mediated by benzodiazepine receptors. Izquierdo I, et al. **Behav Neural Biol** 1990 Jul;54(1):27–41

Characterization of the cognitive effects of combined muscarinic and nicotinic blockade. Levin ED, et al. **Behav Neural Biol** 1990 Jan;53(1):103–12

Evaluation of the interaction between D1 and D2 receptors in a drug discrimination paradigm. Williams JE, et al. **Behav Neural Biol** 1990 May;53(3):378–92

Tolerance to the antinociceptive effect of morphine in spinally transected rats. Advokat C. **Behav Neurosci** 1989 Oct;103(5):1091–8

Stress-induced suppression of natural killer cell cytotoxicity in the rat: a naltrexone-insensitive paradigm. Ben-Eliyahu S, et al. **Behav Neurosci** 1990 Feb;104(1):235–8

The cholinergic agent physostigmine enhances short-term-memory-based performance in the developing rat. Castro CA, et al. **Behav Neurosci** 1990 Apr;104(2):390–3

Effects of dose, interdose interval, and drug-signal parameters on morphine analgesic tolerance: implications for current theories of tolerance. Dafters R, et al. **Behav Neurosci** 1989 Oct;103(5):1082–90

Pattern of [14C]2-deoxyglucose concentration associated with potentiation of reproductive behavior by prostaglandin E2. Diakow C, et al. **Behav Neurosci** 1989 Oct;103(5):1028–34

Diazepam modulation of stress-induced analgesia depends on the type of analgesia. Maier SF. **Behav Neurosci** 1990 Apr;104(2):339–47

Conditioning and experiential factors affecting the development of sensitization to apomorphine. Mattingly BA, et al. **Behav Neurosci** 1989 Dec;103(6):1311–7

Organizational changes in cholinergic activity and enhanced visuospatial memory as a function of choline administered prenatally or postnatally or both. Meck WH, et al. **Behav Neurosci** 1989 Dec;103(6):1234–41

Effects of combined lead and cadmium exposure: changes in schedule-controlled responding and in dopamine, serotonin, and their metabolites. Nation JR, et al. **Behav Neurosci** 1989 Oct;103(5):1108–14

Neonatal 6-hydroxydopamine alters the behavior of enriched-impoverished rats in a novel test environment. Saari MJ, et al. **Behav Neurosci** 1990 Jun;104(3):430–7

Visualization of interleukin-2-like molecules in MPP(+)-lesioned rat brain. Liang SM, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1312–8

Metabolic diversions in the oxidative metabolism of hepatic and neuronal systems of rat (Wistar strain) under induced benthiocarb stress. Babu GR, et al. **Biochem Int** 1989 Sep; 19(3):477–87

Effects in vitro of benthiocarb on the uptake of 45Ca by neonatal rat (Wistar strain) brain synaptosomes. Srinivas PN, et al. **Biochem Int** 1989 Sep;19(3):463–8

Delayed treatment with nerve growth factor (NGF) reverses ECMA-induced cholinergic lesions in rat brain reaggregate cultures. Atterwill CK, et al. **Biochem Pharmacol** 1990 Jun 15;39(12):2073–6

Inhibition of rat brain histamine-N-methyltransferase by 9-amino-1,2,3,4-tetrahydroacridine (THA). Cumming P, et al. **Biochem Pharmacol** 1990 Sep 15;40(6):1345–50

Characterization of 1-methyl-4-[4'-amino]phenyl-1,2,3,6-tetrahydropyridine toxicity in the mouse. Johannessen JN, et al. **Biochem Pharmacol** 1990 Aug 15;40(4):901–6

Actions of morphine on histamine dynamics in the mouse brain: a strain comparison. Licata SP, et al. **Biochem Pharmacol** 1990 Mar 1;39(5):978–81

Pharmacological significance of acetylcholinesterase inhibition by tetrahydroaminoacridine. Marquis JK. **Biochem Pharmacol** 1990 Sep 1;40(5):1071–6

What is the nature of mecamylamine's antagonism of the central effects of nicotine? Martin BR, et al. **Biochem Pharmacol** 1989 Oct 15;38(20):3391–7 (68 ref.)

Aprophit: an irreversible antagonist for muscarinic receptors. Newman AH, et al. **Biochem Pharmacol** 1990 Sep 15; 40(6):1357–64

Effect of mercuric chloride on the kinetics of cationic and substrate activation of the rat brain microsomal ATPase system. Rajanna B, et al. **Biochem Pharmacol** 1990 Jun 15; 39(12):1935–40

Influence of methylmalonate on the uptake of ketone bodies in vitro by the brain of young rats. Dutra JC, et al. **Biochem Soc Trans** 1990 Jun;18(3):421–2

Effect of phenylalanine, p-chlorophenylalanine and alpha-methylphenylalanine on glucose uptake in vitro by the brain of young rats. Rodrigues NR, et al. **Biochem Soc Trans** 1990 Jun;18(3):419

Effect of 2-deoxy-D-galactose on fucose incorporation into brain glycoproteins. Zamani MR, et al. **Biochem Soc Trans** 1990 Jun;18(3):417–8

Effects of maternal ethanol ingestion on the uptake of alpha-aminoisobutyric acid by fetal rat liver, lung and brain. Snyder AK, et al. **Biol Neonate** 1989;56(5):277–82

Lithium research: state of the art [editorial] Belmaker RH, et al. **Biol Psychiatry** 1990 Jun 15;27(12):1279–81

Lithium, brain, and RBC NMR parameter T-1 [letter] Garber HJ, et al. **Biol Psychiatry** 1989 Dec;26(8):854–6

Effects of age and gender on CNS serotonergic responsivity in normal adults. McBride PA, et al. **Biol Psychiatry** 1990 May 15;27(10):1143–55

REM sleep suppression by monoamine reuptake blockade: development of tolerance with repeated drug administration. Ross RJ, et al. **Biol Psychiatry** 1990 Aug 1;28(3):231–9

Cerebral effects of fentanyl in dogs. Milde LN, et al. **Br J Anaesth** 1989 Dec;63(6):710–5

Some effects of enflurane anaesthesia on biogenic monoamines in the brain and plasma of rats. Rosenberg PH, et al. **Br J Anaesth** 1974 Oct;46(10):708–13

Modification of central nervous system effects of laudanosine by inhalation anaesthetics. Shi WZ, et al. **Br J Anaesth** 1989 Nov;63(5):598–600

Neuronal lipopigment: a marker for cognitive impairment and long-term effects of psychotropic drugs [see comments] Dowson JH. **Br J Psychiatry** 1989 Jul;155:1–11 (85 ref.) Comment in: Br J Psychiatry 1989 Nov;155:715.

Short-term and long-term memory deficit following intracarotid Amytal injection: further support for the memory consolidation hypothesis. Rouleau I, et al. **Brain Cogn** 1989 Nov;11(2):167–85

Effect of injections of contrast media on regional uptake of (14C)-2-deoxyglucose by the rat brain. Cicciarello R, et al. **Brain Inj** 1990 Jan-Mar;4(1):71–6

Regionally specific alterations in the low-affinity GABAA receptor following perinatal exposure to diazepam. Gruen RJ, et al. **Brain Res** 1990 Apr 23;514(1):151–4

Prenatal exposure to nicotine impairs nervous system development at a dose which does not affect viability or growth. Navarro HA, et al. **Brain Res Bull** 1989 Sep; 23(3):187–92

Changes in brain monoamine levels and monoamine oxidase activity in the catfish, Clarias batrachus, during chronic treatments with mercurials. Kirubagaran R, et al. **Bull Environ Contam Toxicol** 1990 Jul;45(1):88–93

Anticonvulsant activity of di-n-propylacetate and brain monoamine metabolism in the rat. Abed WT. **Clin Exp Pharmacol Physiol** 1990 Jan;17(1):11–6

Pharmacology of amineptine: synthesis and updating. Garattini S, et al. **Clin Neuropharmacol** 1989;12 Suppl 2:S13–8 (17 ref.)

Drugs acting on sigma and phencyclidine receptors: a review of their nature, function, and possible therapeutic importance. Junien JL, et al. **Clin Neuropharmacol** 1989 Oct;12(5):353–74 (131 ref.)

Neurophysiological effects of recombinant interferon-gamma and -alpha in man. Born J, et al. **Clin Physiol Biochem** 1989;7(3-4):119–27

Effect of adafenoxate on different rat brain structures monoamine oxidase activity in vitro. Stancheva S, et al. **Comp Biochem Physiol [C]** 1989;94(1):41–4

Neuropsychological effect of lead in occupationally exposed workers: a critical review. Ehle AL, et al. **Crit Rev Toxicol** 1990;20(4):237–55 (38 ref.)

Effect of prenatal exposure to phencyclidine on the postnatal development of the cholinergic system in the rat. Howard SG, et al. **Dev Neurosci** 1990;12(3):204–9

Effects of prostaglandins and indomethacin on cerebral blood flow and cerebral oxygen consumption of conscious newborn piglets. Chemtob S, et al. **Dev Pharmacol Ther** 1990;14(1):1–14

Dopamine antagonists produce an age-dependent increase in the responding of the young chick. Zolman JF, et al. **Dev Psychobiol** 1990 Mar;23(2):141–55

Basis for the application of calcium antagonists in neurology. Florence, May 25–27, 1989. Proceedings. **Eur Neurol** 1990; 30 Suppl 2:1–41

Postnatal treatment of rats with beta-adrenergic agonists or antagonists influences differentiation of sexual brain functions. Jarzab B, et al. **Exp Clin Endocrinol** 1989 Sep; 94(1-2):61–72

Effect of insulin administered intracisternally on the glucose level of the blood and the cerebrospinal fluid in vagotomized dogs. Chowers I, et al. **Exp Neurol** 1966 Mar; 14(3):383–9

Teratological, neurochemical, and postnatal neurobehavioral assessment of METASYSTOX-R, an organophosphate pesticide in the rat. Clemens GR, et al. **Fundam Appl Toxicol** 1990 Jan;14(1):131–43

How chronically administered valproate increases chlordiazepoxide transfer through the blood-brain barrier. Riant P, et al. **Fundam Clin Pharmacol** 1990;4(1):105–14

Activators and inactivators of calcium channels: effects in the central nervous system [published erratum appears in Fundam Clin Pharmacol 1990;4(1):128] Spedding M, et al. **Fundam Clin Pharmacol** 1989;3 Suppl:3s–29s (185 ref.)

Stimulation of duodenal bicarbonate secretion in conscious rats by cerebral somatostatin-28. Role of neurohumoral pathways. Lenz HJ, et al. **Gastroenterology** 1990 Aug; 99(2):340–4

Effects of intracranial implants of dihydrotestosterone on the reproductive physiology and behavior of male guinea pigs. Butera PC, et al. **Horm Behav** 1989 Sep;23(3):424–31

Interaction of naltrexone with postnatal administration of testosterone and estrogen on neurobehavioral sexual differentiation in rats. McGivern RF, et al. **Horm Behav** 1990 Mar;24(1):20–39

Long term effect of lithium on brain regional catecholamine metabolism. Ghoshdastidar D, et al. **Indian J Exp Biol** 1990 May;28(5):444–50

Effect of lithium on regulation of two molecular forms of Na+,K(+)-ATPase in rat brain. Lakshmi GY. **Indian J Exp Biol** 1989 Oct;27(10):903–6

Effect of envenomation on enzymes of brain of albino rats. Sahu JK, et al. **Indian J Exp Biol** 1989 Sep;27(9):831–2

Neuropathology & pathogenesis of experimental fenfluramine toxicity in young rodents. Thakkar BK, et al.

Indian J Med Res 1990 Feb;92:54–65
Discrimination of mode of action of anxiolytics using an integrated computer data bank and Dynamic Brain Mapping (CNS effects of diazepam and lorazepam). Itil T, et al. **Int Clin Psychopharmacol** 1989 Oct;4(4):273–83
Physiological effects of acetyl–levo–carnitine in the central nervous system. Bodis–Wollner I.
Int J Clin Pharmacol Res 1990;10(1–2):109–14 (29 ref.)
The acute and chronic administrations of piracetam affect the movement–related brain macropotentials. Chiarenza GA, et al. **Int J Psychophysiol** 1990 Apr;8(3):223–34
Enhancement of the febrile responses of rats to endogenous pyrogen occurs within the OVLT region. Stitt JT, et al.
J Appl Physiol 1989 Nov;67(5):1740–6
Actions of avermectin B1a on the gamma–aminobutyric acidA receptor and chloride channels in rat brain. Abalis IM, et al. **J Biochem Toxicol** 1986 Mar;1(1):69–82
Effect of acetazolamide on brain intracellular pH [letter] Grieb P. **J Cereb Blood Flow Metab** 1990 Jul;10(4):588–9
The effects of dizocilpine maleate (MK–801), an antagonist of the N–methyl–D–aspartate receptor, on neurologic recovery and histopathology following complete cerebral ischemia in primates. Lanier WL, et al.
J Cereb Blood Flow Metab 1990 Mar;10(2):252–61
Regional neuroprotective effects of the NMDA receptor antagonist MK–801 (dizocilpine) in hypoglycemic brain damage. Papagapiou MP, et al.
J Cereb Blood Flow Metab 1990 Mar;10(2):270–6
Systematic studies on the effects of the NMDA receptor antagonist MK–801 on cerebral blood flow and responsivity, EEG, and blood–brain barrier following complete reversible cerebral ischemia. Stevens MK, et al.
J Cereb Blood Flow Metab 1990 Jan;10(1):77–88
Azapirones: history of development. Eison AS.
J Clin Psychopharmacol 1990 Jun;10(3 Suppl):2S–5S
Dopaminergic activity of the antimuscarinic antiparkinsonian agents. Modell JG, et al. **J Clin Psychopharmacol** 1989 Oct; 9(5):347–51 (88 ref.)
Neurochemistry and neurophysiology of buspirone and gepirone: interactions at presynaptic and postsynaptic 5–HT1A receptors. Yocca FD. **J Clin Psychopharmacol** 1990 Jun;10(3 Suppl):6S–12S (36 ref.)
Indomethacin antagonizes the ethanol–induced suppression of breathing activity but not the suppression of brain activity in the near–term fetal sheep. Smith GN, et al.
J Dev Physiol 1989 Aug;12(2):69–75
Calcium, phosphorus and aluminium concentrations in the central nervous system, liver and kidney of rabbits with experimental atherosclerosis: preventive effects of vinpocetine on the deposition of these elements. Yasui M, et al. **J Int Med Res** 1990 Mar–Apr;18(2):142–52
Rat maze performance after resuscitation with cross–linked hemoglobin solution. Przybelski RJ, et al.
J Lab Clin Med 1990 May;115(5):579–88
In vivo intracerebral microdialysis studies in rats of MPP+ analogues and related charged species. Rollema H, et al.
J Med Chem 1990 Aug;33(8):2221–30
Cholinotoxic effects of aluminum in rat brain. Gulya K, et al. **J Neurochem** 1990 Mar;54(3):1020–6
Neurochemistry and neurotoxicity of 3,4–methylenedioxymethamphetamine (MDMA, "ecstasy"). McKenna DJ, et al. **J Neurochem** 1990 Jan; 54(1):14–22 (64 ref.)
Effects of ammonia on brain energy metabolites—dose–dependent alterations [letter; comment] Matsuoka M, et al. **J Neurochem** 1990 Jul;55(1):354–5 Comment on: J Neurochem 1989 Jul;53(1):102–10.
Differential central nervous system responses following single and multiple recombinant interleukin–2 infusions. Ellison MD, et al. **J Neuroimmunol** 1990 Aug;28(3):249–60
Striatal dopamine D2 receptors in tardive dyskinesia: PET study. Blin J, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1248–52
Beta–N–methylamino–L–alanine. Chronic oral administration is not neurotoxic to mice. Perry TL, et al.
J Neurol Sci 1989 Dec;94(1–3):173–80
Enhancement of the efficacy of x–irradiation by pentobarbital in a rodent brain–tumor model. Olson JJ, et al.
J Neurosurg 1990 May;72(5):745–8
Cerebral radioprotection by pentobarbital: dose–response characteristics and association with GABA agonist activity. Olson JJ, et al. **J Neurosurg** 1990 May;72(5):749–58
Sex differences in cognitive processing in children treated with CNS prophylaxis for acute lymphoblastic leukemia. Waber DP, et al. **J Pediatr Psychol** 1990 Feb;15(1):105–22
Kinetic and dynamic components of increased benzodiazepine sensitivity in aging animals. Barnhill JG, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):1153–61
D1 receptors function to inhibit the activation of tuberoinfundibular dopamine neurons. Berry SA, et al.
J Pharmacol Exp Ther 1990 Aug;254(2):677–82
Effect of chronic administration of U–50,488H on tolerance to its pharmacological actions and on multiple opioid receptors in rat brain regions and spinal cord. Bhargava HN, et al. **J Pharmacol Exp Ther** 1989 Oct;251(1):21–6
Modification of brain and spinal cord dopamine D1 receptors labeled with [3H]SCH 23390 after morphine withdrawal from tolerant and physically dependent rats. Bhargava HN, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):901–7
Ca2(+)–evoked [3H]dopamine release from synaptosomes is dependent on neuronal type Ca2+ channels and is not mediated by acetylcholine, glutamate or aspartate release. Bowyer JF, et al. **J Pharmacol Exp Ther** 1990 Aug; 254(2):664–70
Inhibition of carbachol–induced inositol phosphate accumulation by phencyclidine, phencyclidine–like ligands and sigma agonists involves blockade of the muscarinic cholinergic receptor: a novel dioxadrol–preferring interaction. Brog JS, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):952–6
Benzodiazepine agonist and inverse agonist actions on GABAA receptor–operated chloride channels. I. Acute effects of ethanol. Buck KJ, et al.
J Pharmacol Exp Ther 1990 May;253(2):706–12
Benzodiazepine agonist and inverse agonist actions on GABAA receptor–operated chloride channels. II. Chronic effects of ethanol. Buck KJ, et al.
J Pharmacol Exp Ther 1990 May;253(2):713–9
Structure–activity profile of calcitonin gene–related peptide in peripheral and brain tissues. Evidence for receptor multiplicity. Dennis T, et al. **J Pharmacol Exp Ther** 1989 Nov;251(2):718–25
The interaction of amitriptyline, doxepin, imipramine and their N–methyl quaternary ammonium derivatives with subtypes of muscarinic receptors in brain and heart. Ehlert FJ, et al. **J Pharmacol Exp Ther** 1990 Apr;253(1):13–9
Site–specific enhancement of gamma–aminobutyric acid–mediated inhibition of neural activity by ethanol in the rat medial septal area. Givens BS, et al.
J Pharmacol Exp Ther 1990 Aug;254(2):528–38
Modulation of A10 dopamine neurons by gamma–aminobutyric acid agonists. Kalivas PW, et al.
J Pharmacol Exp Ther 1990 May;253(2):858–66
High affinity dextromethorphan binding sites in guinea pig brain. Effect of sigma ligands and other agents. Klein M, et al. **J Pharmacol Exp Ther** 1989 Oct;251(1):207–15
Chronic treatment with SCH 23390 and haloperidol: effects on dopaminergic and serotonergic mechanisms in rat brain. Lappalainen J, et al. **J Pharmacol Exp Ther** 1990 Feb; 252(2):845–52
Pharmacological evaluation of the antagonism of nicotine's central effects by mecamylamine and pempidine. Martin TJ, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):45–51
Effects of benzoyltropine and tropacocaine on several cholinergic processes in the rat brain. Meyer EM, et al.
J Pharmacol Exp Ther 1990 Aug;254(2):584–90
Kappa–opioid receptor–mediated antinociception in the rat. II. Supraspinal in addition to spinal sites of action. Millan MJ, et al. **J Pharmacol Exp Ther** 1989 Oct;251(1):342–50
Effects of prenatal nicotine exposure on development of central and peripheral cholinergic neurotransmitter systems. Evidence for cholinergic trophic influences in developing brain. Navarro HA, et al.
J Pharmacol Exp Ther 1989 Dec;251(3):894–900
Single and combined effects of desimipramine and lithium on serotonergic receptor number and second messenger function in rat brain. Newman ME, et al.
J Pharmacol Exp Ther 1990 Feb;252(2):826–31
Comparative behavioral, neurochemical and pharmacological activities of dihydropyridine calcium channel activating drugs. O'Neill SK, et al. **J Pharmacol Exp Ther** 1990 Jun; 253(3):905–12
Comparison of in vitro and in vivo models of drug transcytosis through the blood–brain barrier. Pardridge WM, et al. **J Pharmacol Exp Ther** 1990 May;253(2):884–91
Determination of the loci of action of phencyclidine on the CNS–pituitary–adrenal axis. Pechnick RN, et al.
J Pharmacol Exp Ther 1990 Jul;254(1):344–9
Napamezole, an alpha–2 adrenergic receptor antagonist and monoamine uptake inhibitor in vitro. Perrone MH, et al.
J Pharmacol Exp Ther 1990 Aug;254(2):471–5
In vivo assessment of napamezole, an alpha–2 adrenoceptor antagonist and monoamine re–uptake inhibitor. Perrone MH, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):476–83
Inhibition of rat brain glutamate receptors by philanthotoxin. Ragsdale D, et al. **J Pharmacol Exp Ther** 1989 Oct; 251(1):156–63
The anticonvulsant MK–801 interacts with peripheral and central nicotinic acetylcholine receptor ion channels. Ramoa AS, et al. **J Pharmacol Exp Ther** 1990 Jul; 254(1):71–82
Dihydropyridine calcium antagonists reduce the consumption of high–energy phosphates in the rat brain. A study using combined 31P/1H magnetic resonance spectroscopy and 31P saturation transfer. Rudin M, et al.
J Pharmacol Exp Ther 1989 Nov;251(2):700–6
5–HT2 receptor blockade by ICI 169,369 and other 5–HT2 antagonists modulates the effects of D–2 dopamine receptor blockade. Saller CF, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):1162–70
Effect of ouabain on the gamma–[3H]aminobutyric acid uptake and release in the absence of Ca(+)+ and K(+)–depolarization. Santos MS, et al.
J Pharmacol Exp Ther 1990 May;253(2):620–7
Adaptation of brain 5HT2 receptors after mianserin treatment: receptor sensitivity, not receptor binding, more accurately correlates with behavior. Smith RL, et al.
J Pharmacol Exp Ther 1990 Aug;254(2):484–8
Effect of microinjections of apamin into the A10 dopamine region of rats: a behavioral and neurochemical analysis. Steketee JD, et al. **J Pharmacol Exp Ther** 1990 Aug; 254(2):711–9
Ethanol inhibition of active 86Rb(+)–transport: evidence for enhancement by sodium or calcium influx. Swann AC.
J Pharmacol Exp Ther 1990 Sep;254(3):864–71
Functional modulation of cerebral gamma–aminobutyric acidA receptor/benzodiazepine receptor/chloride ion channel complex with ethyl beta–carboline–3–carboxylate: presence of independent binding site for ethyl beta–carboline–3–carboxylate. Taguchi J, et al.
J Pharmacol Exp Ther 1990 May;253(2):558–66
Interactions of noncompetitive inhibitors with nicotinic receptors in the rat brain. Takayama H, et al.
J Pharmacol Exp Ther 1989 Dec;251(3):1083–9
The role of central and autonomic neural mechanisms in the cardiovascular effects of cocaine in conscious squirrel monkeys. Tella SR, et al. **J Pharmacol Exp Ther** 1990 Feb; 252(2):491–9
Antidepressant actions on brain noradrenergic neurons. Valentino RJ, et al. **J Pharmacol Exp Ther** 1990 May; 253(2):833–40
Centrally active antimuscarinic analogs of oxotremorine selectively block physostigmine–induced hypertension, but not peripheral muscarinic vasodepression. Vargas HM, et al. **J Pharmacol Exp Ther** 1990 Apr;253(1):165–70
Effect of clonidine on myocardial cyclic GMP content in the mouse–activation of central and peripheral alpha adrenoceptors. Vulliemoz Y, et al.
J Pharmacol Exp Ther 1989 Dec;251(3):884–7
Effects of repeated fenfluramine administration on indices of monoamine function in rat brain: pharmacokinetic, dose response, regional specificity and time course data. Zaczek R, et al. **J Pharmacol Exp Ther** 1990 Apr;253(1):104–12
Inhibition of calmodulin–activated Ca2(–)–ATPase by endosulfan in rat brain. Srikanth NS, et al.
J Toxicol Environ Health 1989;28(4):473–81
Effects of bifemelane hydrochloride on various cholinergic markers in cortical and subcortical regions of aged rats. Egashira T, et al. **Jpn J Pharmacol** 1989 Oct;51(2):211–8
Centrally mediated inhibitory effect of 5–[2–(diethylamino)ethyl]amino–5,11–dihydro[1]benzoxepino[3,4– b]pyridine trihydrochloride (KW–5805) on gastric acid secretion in rats. Yano S, et al. **Jpn J Pharmacol** 1990 Feb;52(2):287–93
Neuroendocrinological effects of L–threo–3, 4–dihydroxyphenylserine (DOPS), a putative norepinephrine precursor, on healthy volunteers. Semba J, et al. **Jpn J Psychiatry Neurol** 1990 Mar;44(1):73–8
Studies on mechanisms of initiation and propagation of seizure activity following penicillin application. Yamauchi T, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):445–9
Influence of B vitamins on binding properties of serotonin receptors in the CNS of rats. Dakshinamurti K, et al.
Klin Wochenschr 1990 Jan 19;68(2):142–5
Influence of repeated vitamin B administration on the frequency pattern analysed from rat brain electrical activity (Tele–Stereo–EEG). Dimpfel W, et al. **Klin Wochenschr** 1990 Jan 19;68(2):136–41
The angiotensin I converting enzyme inhibitors, captopril and Wy–44,655 attenuate the consequences of cerebral ischemia in renovascular hypertensive rats. Capdeville C, et al. **Life Sci** 1990;47(6):539–46
Effects of clofibrate on the main regulatory enzymes of cholesterogenesis. Castillo M, et al. **Life Sci** 1990; 46(6):397–403
Effects of acute and chronic morphine on regional rat brain acetylcholine turnover rate. Cheney DL, et al. **Life Sci** 1974 Dec 1;15(11):1977–90
Interrelationships between plasma homovanillic acid and indices of dopamine turnover in multiple brain areas during haloperidol and saline administration. Csernansky JG, et al. **Life Sci** 1990;46(10):707–13
Effects of chronic lithium administration on brain weights, acetylcholinesterase activity and learning ability in rats. Gallo C, et al. **Life Sci** 1990;47(6):507–13
Inhibitory effects of neuropeptide Y (NPY) on CRF and stress–induced cecal motor response in rats. Jiménez M, et al. **Life Sci** 1990;47(3):205–11
Streptozotocin and alloxan produce alterations in rat brain monoamines independently of pancreatic beta cells destruction. Lacković Z, et al. **Life Sci** 1990;46(1):49–54
Do imipramine and dihydroergosine possess two components—one stimulating 5–HT1 and the other inhibiting 5–HT2 receptors? Peričić D, et al. **Life Sci** 1990; 46(19):1331–42
Species dependent dual modulation of the benzodiazepine/GABA receptor chloride channel by dihydroergosine. Peričić D, et al. **Life Sci** 1990; 47(6):491–502
Lack of antinociceptive cross–tolerance between intracerebroventricularly administered beta–endorphin and morphine or DPDPE in mice. Suh HH, et al. **Life Sci** 1990; 46(11):759–65
Differentiation of spinal and supraspinal opioid receptors by morphine tolerance. Yoburn BC, et al. **Life Sci** 1990; 46(5):343–50
Interactive effects of prenatal ethanol and N–3 fatty acid supplementation on brain development in mice. Wainwright PE, et al. **Lipids** 1989 Dec;24(12):989–97
Effects of several neuroleptics, antidepressants and monoamine uptake blockers on ATPase activity and related oxygen uptake in rat brain in vitro. Velasco–Martín A, et al. **Methods Find Exp Clin Pharmacol** 1989 Dec; 11(12):737–41
Potassium channel blockade by the B subunit of beta–bungarotoxin. Benishin CG. **Mol Pharmacol** 1990

Aug;38(2):164–9
Stereoselectivity and mode of inhibition of phosphoinositide–coupled excitatory amino acid receptors by 2–amino–3–phosphonopropionic acid. Schoepp DD, et al. **Mol Pharmacol** 1990 Aug;38(2):222–8
Inhibition of DNA repair synthesis in the rat by in vivo exposure to psychotropic drugs and reversal of the effect by co–administration with alpha–tocopherol. Srám RJ, et al. **Mutat Res** 1990 Aug;244(4):331–5
Ethanol and the nervous system [letter; comment] **N Engl J Med** 1990 Feb 8;322(6):407–8 Comment on: N Engl J Med 1989 Aug 17;321(7):442–54.
Central nervous system side effects of ganciclovir [letter] Davis CL, et al. **N Engl J Med** 1990 Mar 29;322(13):933–4
Effect of a noncompetitive antagonist (MK–801) of NMDA receptors on convulsions and brain amino acid level in E1 mice. Sato K, et al. **Neurochem Res** 1989 Aug;14(8):741–4
Reserpine–induced decrease in type I and II corticosteroid receptors in neuronal and lymphoid tissues of adrenalectomized rats. Lowy MT. **Neuroendocrinology** 1990 Feb;51(2):190–6
NGF induction of NGF receptor gene expression and cholinergic neuronal hypertrophy within the basal forebrain of the adult rat. Higgins GA, et al. **Neuron** 1989 Aug;3(2):247–56
Intracellular recording in avian brain of a nicotinic response that is insensitive to K–bungarotoxin. Sorenson EM, et al. **Neuron** 1990 Sep;5(3):307–15
Pharmacological effects of indeloxazine, a new cerebral activator, on brain functions distinct from other cerebral metabolic enhancers. Yamamoto M, et al. **Neuropharmacology** 1989 Dec;28(12):1291–7
Effects of the selective alpha 1–adrenoceptor blocker prazosin on EEG sleep and waking stages in the rat. Kleinlogel H. **Neuropsychobiology** 1989;21(2):100–3
An approach to the development of drugs for appetite disorders. Morley JE. **Neuropsychobiology** 1989;21(1):22–30 (92 ref.)
Is there a common dopaminergic basis of time perception and reaction time? Rammsayer T. **Neuropsychobiology** 1989;21(1):37–42
Cognitive models and cholinergic drugs. Rusted JM, et al. **Neuropsychobiology** 1989;21(1):31–6 (36 ref.)
Effects of chronic antidepressant and benzodiazepine treatment on corticotropin–releasing–factor receptors in rat brain and pituitary. Grigoriadis DE, et al. **Neuropsychopharmacology** 1989 Mar;2(1):53–60
Effects of repeated administration of soman on schedule–controlled behavior and brain in the rat. Hymowitz N, et al. **Neurotoxicol Teratol** 1990 Jan–Feb; 12(1):47–56
Secalonic acid D mycotoxin affects ontogeny of brain catecholamines and swimming in mice. St Omer VE, et al. **Neurotoxicol Teratol** 1990 Mar–Apr;12(2):85–90
Behavioral and neuroanatomical sequelae of prenatal naloxone administration in the rat. Shepanek NA, et al. **Neurotoxicol Teratol** 1989 Sep–Oct;11(5):441–6
Inhibition of calmodulin activated adenylate cyclase in rat brain by selected insecticides. Kodavanti PR, et al. **Neurotoxicology** 1989 Summer;10(2):219–28
Effect of chronic exposure to hexachlorophene on rat brain cell specific marker enzymes. Kung MP, et al. **Neurotoxicology** 1989 Summer;10(2):201–10
Effects of acrylamide and 2,5–hexanedione on brain mitochondrial respiration. Medrano CJ, et al. **Neurotoxicology** 1989 Summer;10(2):249–55
Behavioral pharmacology of PCP, NMDA and sigma receptors. Balster RL. **NIDA Res Monogr** 1989;95:270–4
In vivo binding of (+)–cis methylfentanyl at the opiate receptor complex and behavioral correlates: evidence for a novel mechanism of action. Band L, et al. **NIDA Res Monogr** 1989;95:554–5
Effects of morphine treatment on endogenous opioid biosynthesis. Bronstein D, et al. **NIDA Res Monogr** 1988; 90:256–65 (24 ref.)
Effects of D1 and D2 dopamine antagonists on heroin–trained drug discrimination. Corrigall WA, et al. **NIDA Res Monogr** 1989;95:499
The effects of 0.8 g.kg ethanol on cerebral metabolism and mood in normal volunteers. de Wit H, et al. **NIDA Res Monogr** 1989;95:450
Molecular mechanisms of drug reinforcement—current status. Dworkin S, et al. **NIDA Res Monogr** 1988;90:266–74 (27 ref.)
Pain modulation: opiates and chronic pain. Fields HL. **NIDA Res Monogr** 1989;95:92–101 (35 ref.)
MK–801 attenuates the methamphetamine induced decreased in tryptophan hydroxylase activity. Gibb JW, et al. **NIDA Res Monogr** 1989;95:511
Potential neurotoxic effects of self–administered cocaine on dopamine receptors. Goeders NE, et al. **NIDA Res Monogr** 1989;95:504–5
Neuronal actions of amphetamine in the rat brain. Groves PM, et al. **NIDA Res Monogr** 1989;94:127–45 (58 ref.)
Comparison of responses by neuropeptide systems in rat to the psychotropic drugs, methamphetamine, cocaine and PCP. Hanson GR, et al. **NIDA Res Monogr** 1989;95:348
Cocaine increases benzodiazepine receptors labeled in the mouse brain in vivo with [3H]Ro 15–1788. Jung ME, et al. **NIDA Res Monogr** 1989;95:512–3
Evidence for rapid development and loss of opioid tolerance to fentanyl in the rat. Kramer TH, et al. **NIDA Res Monogr** 1989;95:310–1
Cannabinoid modulation of cyclic AMP accumulation in synaptosomes. Little PJ, et al. **NIDA Res Monogr** 1989; 95:282–3
Comparison of the behavioral and neurochemical effects of 5,7–DHT, MDMA and D,L–fenfluramine. Lorens SA, et al. **NIDA Res Monogr** 1989;95:347
Cannabinoid action in the central nervous system. Martin B, et al. **NIDA Res Monogr** 1988;90:275–83 (30 ref.)
Structural requirements for nicotinic antagonists in the CNS. Martin TJ, et al. **NIDA Res Monogr** 1989;95:514–5
Kappa antagonist effects of buprenorphine in the rat drug–discrimination procedure. Negus SS, et al. **NIDA Res Monogr** 1989;95:518–9
The effects of phencyclidine on the pituitary–adrenal axis are centrally mediated in the rat. Pechnick RN, et al. **NIDA Res Monogr** 1989;95:526–7
Cerebral pathways activated by PCP–like compounds: relevance to neurotransmitters and their receptors. Piercey MF, et al. **NIDA Res Monogr** 1989;95:264–9 (8 ref.)
Excitatory amino acid antagonists as well as GABA agonists cause barbiturate–like anesthesia in rats. Richter JA, et al. **NIDA Res Monogr** 1989;95:534–5
Cocaine binding sites related to drug self–administration. Ritz MC, et al. **NIDA Res Monogr** 1989;95:239–46 (20 ref.)
Site–directed affinity ligands as tools to study the phenomenology and mechanisms of morphine–induced upregulation of opioid receptors. Rothman RB, et al. **NIDA Res Monogr** 1989;95:192–8
Discrimination of the benzodiazepine receptor antagonist Ro 15–1788 using the conditioned taste aversion procedure. Rowan GA, et al. **NIDA Res Monogr** 1989;95:536
The effects of capsaicin treatment on self–administration of amphetamine vapor in rats. Sharpe LG, et al. **NIDA Res Monogr** 1989;95:539
Neurobehavioral teratogenicity of gestational cocaine exposure. Spear LP, et al. **NIDA Res Monogr** 1989;95:232–8
Synthesis of exo and endo mecamylamine analogs for nicotinic antagonism in the CNS. Suchocki JA, et al. **NIDA Res Monogr** 1989;95:546–7
Structural and conformational aspects of the binding of aryl–alkyl amines to the phencyclidine binding site. Thurkauf A, et al. **NIDA Res Monogr** 1989;95:51–6
Changes in prodynorphin peptide content following treatment with morphine or amphetamine: possible role in mechanisms of action of drug of abuse. Trujillo KA, et al. **NIDA Res Monogr** 1989;95:550–1
Modulation of synaptosomal free intracellular calcium in naive and morphine–tolerant mice: correlation of calcium modulation in vitro and in vivo to tolerance development. Welch SP, et al. **NIDA Res Monogr** 1989;95:552–3
Clinical implications of PCP, NMDA and opiate receptors. Wilkins J. **NIDA Res Monogr** 1989;95:275–81 (20 ref.)
Actions of cocaine on central monoamine neurons: intracellular recordings in vitro. Williams J, et al. **NIDA Res Monogr** 1988;90:234–42
1989 Annual Report, evaluation of new compounds for opioid activity. Woods JH, et al. **NIDA Res Monogr** 1989; 95:632–79
Characterization of brain interactions with methylenedioxyamphetamine and methylenedioxymethamphetamine. Zaczek R, et al. **NIDA Res Monogr** 1989;94:223–39 (12 ref.)
Mechanisms of phencyclidine (PCP)–n–methyl–d–aspartate (NMDA) receptor interaction: implications for drug abuse research. Zukin SR, et al. **NIDA Res Monogr** 1989; 95:247–54 (39 ref.)
Central effect of the non–steroid anti–inflammatory agents, indomethacin, ibuprofen, and diclofenac, determined in C fibre–evoked activity in single neurones of the rat thalamus. Jurna I, et al. **Pain** 1990 Apr;41(1):71–80
Acute and long–lasting effects of peripheral injection of caerulein and CCK–8 on the central GABAergic system in mice. Nagahama H. **Peptides** 1989 Nov–Dec; 10(6):1247–51
Application of a brain–targeting chemical delivery system to 9–amino–1,2,3,4–tetrahydroacridine. Pop E, et al. **Pharm Res** 1990 Jun;7(6):658–64
Effects of amantadine on dopaminergic neurons in discrete regions of the rat brain. Toide K. **Pharm Res** 1990 Jun; 7(6):670–2
Tyrosine loading increases dopamine metabolite concentrations in the brain. Chance WT, et al. **Pharmacol Biochem Behav** 1990 Jan;35(1):195–9
Possible role of alpha–2 and alpha–1 adrenoceptors in the experimentally–induced depression of the central nervous system. Harsing LG Jr, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):927–32
Low dose tetrahydroaminoacridine (THA) improves cognitive function but does not affect brain acetylcholine in rats. Hodges H, et al. **Pharmacol Biochem Behav** 1990 Jun;36(2):291–8
The effect of amfonelic acid or nisoxetine in combination with morphine on brain–stimulation reward. Izenwasser S, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):983–6
Suppression of juvenile social behavior requires antagonism of central opioid systems. Jalowiec JE, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):697–700
The effects of amfonelic acid alone and in combination with naloxone on brain–stimulation reward. Knapp CM, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):977–82
Effects of (+–)3,4–methylenedioxymethamphetamine (MDMA) on brain dopaminergic activity in rats. Matthews RT, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):741–7
The effects of amphetamine and pilocarpine on the release of ascorbic and uric acid in several rat brain areas. Mueller K, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):871–6
Acute interactive pharmacologic effects of inhaled toluene and dichloromethane on rat brain electrophysiology. Rebert CS, et al. **Pharmacol Biochem Behav** 1990 Jun; 36(2):351–65
Interactions between RO 15–4513 and ethanol on brain self–stimulation and locomotor activity in rats. Schaefer GJ, et al. **Pharmacol Biochem Behav** 1989 Dec;34(4):785–90
Noradrenergic and serotonergic mediation of the locomotor and antinociceptive effects of clonidine in infant and adult rats. Smythe JW, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):413–8
Development of ethanol tolerance not altered by 6–OHDA lesions of dorsal bundle. Steketee JD, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):729–31
Similar behavioral and biochemical effects of long–term haloperidol and caerulein treatment in albino mice. Vasar E, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):855–9
Dose– and time–response effects of pantethine on open–field behavior, and on central neurotransmission in rats. Vécsei L, et al. **Pharmacol Biochem Behav** 1990 Jan;35(1):165–70
Mediation in the nucleus accumbens of the discriminative stimulus produced by cocaine. Wood DM, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):453–7
Effect of N–acetyl–cysteine, D–penicillamine and buthionine sulfoximine on glutathione levels and CNS oxygen toxicity in rats. Lalitha T, et al. **Pharmacol Toxicol** 1990 Jan; 66(1):56–61
Effects of phosphatidylserine administration of aged–related structural changes in the rat hippocampus and septal complex. Nunzi MG, et al. **Pharmacopsychiatry** 1989 Oct; 22 Suppl 2:125–8
The topography of MK–801–induced locomotor patterns in rats. Ford LM, et al. **Physiol Behav** 1989 Oct;46(4):755–8
Neuromodulatory role of serotonin in the anticonvulsant activity of 2–phenylbenzoate of 3–diethylamino–1–propanol.HCl (JAW–669). Leadbetter LM, et al. **Physiol Behav** 1989 Jul;46(1):35–7
Serotonin as a facilitatory neurotransmitter in the anticonvulsant activity of methaqualone. Leadbetter MI, et al. **Physiol Behav** 1989 Jul;46(1):105–6
Mechanisms of general anesthesia: brain regional responses to baclofen. Lewis JL, et al. **Physiol Behav** 1989 Jul; 46(1):3–8
Effect of leucine enkephalin on ethanol produced behavioral depression in the mouse. Messiha FS. **Physiol Behav** 1989 Jul;46(1):19–23
Vanadate stimulates in vivo glucose uptake in brain and arrests food intake and body weight gain in rats. Meyerovitch J, et al. **Physiol Behav** 1989 Jun;45(6):1113–6
Effects of central and peripheral neuropeptide Y on sodium and water excretion in the rat. Smyth DD, et al. **Physiol Behav** 1989 Jul;46(1):9–11
A novel N6–substituted adenosine isolated from mi huan jun (Armillaria mellea) as a cerebral–protecting compound. Watanabe N, et al. **Planta Med** 1990 Feb;56(1):48–52
Joint meeting of the Hungarian and Polish Pharmacological Societies on actual problems of neuro–psychopharmacology. Budapest, October 1–3, 1987. Proceedings. **Pol J Pharmacol Pharm** 1988 Nov–Dec; 40(6):561–708
Preliminary pharmacological evaluation of chelidonine in rodents. Jagiełło–Wójtowicz E, et al. **Pol J Pharmacol Pharm** 1989 Mar–Apr;41(2):125–31
Some central effects of opioid antagonists. Part I. Skorupska M, et al. **Pol J Pharmacol Pharm** 1989 Sep–Oct; 41(5):401–11
The effect of prolonged ethanol administration on central alpha 2–adrenoceptors sensitivity. Szmigielski A, et al. **Pol J Pharmacol Pharm** 1989 May–Jun;41(3):263–72
The central action of 1–(2–pyrimidinyl)–piperazine, an ipsapirone metabolite. Tatarczyńska E, et al. **Pol J Pharmacol Pharm** 1989 Jan–Feb;41(1):51–61
Influence of nicotine on the release of monoamines in the brain. Balfour DJ. **Prog Brain Res** 1989;79:165–72 (28 ref.)
Effect of nicotine on the release of acetylcholine and amino acids in the brain. Beani L, et al. **Prog Brain Res** 1989; 79:149–55
Neurochemical mechanisms underlying the neuroendocrine actions of nicotine: focus on the plasticity of central cholinergic nicotinic receptors. Fuxe K, et al. **Prog Brain Res** 1989;79:197–207 (28 ref.)
Regulation of brain nicotinic cholinergic recognition sites and prolactin release by nicotine. Kellar KJ, et al. **Prog Brain Res** 1989;79:209–16 (58 ref.)
Studies of protective actions of nicotine on neuronal and vascular functions in the brain of rats: comparison between sympathetic noradrenergic and mesostriatal dopaminergic fiber systems, and the effect of a dopamine agonist. Owman C, et al. **Prog Brain Res** 1989;79:267–76
Differential brain and peripheral nicotinic regulation of sympathoadrenal secretion. Van Loon GR, et al. **Prog Brain Res** 1989;79:217–23
Effects of ethanol on the brain beta–endorphin system in inbred strains of mice with variable preference for ethanol solutions: in vitro study. De Waele JP, et al. **Prog Clin Biol Res** 1990;328:315–8
Brain monoamines are involved in the sedative effects of

opiates and neuroleptics. Furst S. **Prog Clin Biol Res** 1990; 328:311–4

Multiple actions of THA on cholinergic neurotransmission in Alzheimer brains. Nordberg A, et al. **Prog Clin Biol Res** 1989;317:1169–78 (19 ref.)

Gamma-type endorphins and brain dopaminergic systems. van Ree JM, et al. **Prog Clin Biol Res** 1990;328:287–90

Neurotoxic properties of a serotonin oxidation product: possible role in Alzheimer's disease. Volicer L, et al. **Prog Clin Biol Res** 1989;317:453–65 (22 ref.)

Cytoprotective effect of iloprost on isolated cortical brain tissue grafts in rats. Palaoglu S, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Mar; 39(3):203–6

Abnormal neuroendocrine responsivity to acute i.v. clomipramine challenge in depressed patients. Golden RN, et al. **Psychiatry Res** 1990 Jan;31(1):39–47

The effect of pyritinol upon P300 topography. Maurer K, et al. **Psychiatry Res** 1989 Sep;29(3):413–5

Neuroregulatory effects of nicotine. Pomerleau OF, et al. **Psychoneuroendocrinology** 1989;14(6):407–23 (150 ref.)

Age-related increase in CNS sensitivity to benzodiazepines as assessed by task difficulty. Nikaido AM, et al. **Psychopharmacology (Berl)** 1990;100(1):90–7

Some effects of the opioid antagonist, naloxone, upon the rat's reactions to a heat stressor. Westbrook RF, et al. **Q J Exp Psychol [B]** 1990 Feb;42(1):1–40

Interactions of ethanol and nicotine at the receptor level. Collins AC. **Recent Dev Alcohol** 1990;8:221–31 (46 ref.)

Local cerebral blood flow following the intrastriatal administration of vasoactive intestinal peptide or peptide histidine isoleucine in the rat. Tuor UI, et al. **Regul Pept** 1990 May 21;28(3):255–64

The effect of 1,3 bis-(2-chloroethyl)-1-nitrosourea on rat brain glutathione status under conditions of normoxia and hyperoxia. Powell SR, et al. **Res Commun Chem Pathol Pharmacol** 1990 Mar; 67(3):361–74

Holothurin: an activator of bovine brain 3'-5' phosphodiesterase. Vig PJ, et al. **Res Commun Chem Pathol Pharmacol** 1990 Mar; 67(3):419–22

Neurotoxicity of prenatal carbon monoxide exposure. Fechter LD. **Res Rep Health Eff Inst** 1987 Sep;(12):3–22

Pharmacology of acute alcoholic intoxication. Fernández del Moral R, et al. **Rev Esp Fisiol** 1989;45 Suppl:337–46 (104 ref.)

Dopaminergic mechanisms in idiopathic and drug-induced psychoses. Lieberman JA, et al. **Schizophr Bull** 1990; 16(1):97–110 (130 ref.)

Prevention of ischemic-hypoxic brain injury and death in rabbits with fructose-1,6-diphosphate. Farias LA, et al. **Stroke** 1990 Apr;21(4):606–13

Effects of high-dose fenfluramine treatment on monoamine uptake sites in rat brain: assessment using quantitative autoradiography. Appel NM, et al. **Synapse** 1990;6(1):33–44

Investigation of behavioral and electrophysiological responses induced by selective stimulation of CCKB receptors by using a new highly potent CCK analog, BC 264. Dauge V, et al. **Synapse** 1990;6(1):73–80

Regulation of dopamine and serotonin synthesis by acute administration of cocaine. Galloway MP. **Synapse** 1990; 6(1):63–72

Neurobehavioral Teratology Society, fourteenth annual meeting. June 7–10, 1990, Victoria, British Columbia, Canada. Program and abstracts. **Teratology** 1990 May; 41(5):603–27

Critical period of brain development in learning caused by lead exposure in rats. Shigeta S, et al. **Tokai J Exp Clin Med** 1989 Apr;14(2):147–52

Effects of two pyrethroids, bioallethrin and deltamethrin, on subpopulations of muscarinic and nicotinic receptors in the neonatal mouse brain. Eriksson P, et al. **Toxicol Appl Pharmacol** 1990 Mar 1;102(3):456–63

Potentiation of malaoxon-induced convulsions by lithium: early neuronal injury, phosphoinositide signaling, and calcium. Hirvonen MR, et al. **Toxicol Appl Pharmacol** 1990 Jun 15;104(2):276–89

Placental and blood-brain barrier transfer following prenatal and postnatal exposures to neuroactive drugs: relationship with partition coefficient and behavioral teratogenesis. Watanabe T, et al. **Toxicol Appl Pharmacol** 1990 Aug; 105(1):66–77

Inhibition of rat brain microsomal Na+/K(+)-ATPase and ouabain binding by mercuric chloride. Chetty CS, et al. **Toxicol Lett** 1990 Mar;51(1):109–16

Regional brain cholinesterase activity in rats injected intraperitoneally with anastoxin-a(s) or paraoxon. Cook WO, et al. **Toxicol Lett** 1989 Oct;49(1):29–34

Effects of aluminum on brain lipid peroxidation. Fraga CG, et al. **Toxicol Lett** 1990 Apr;51(2):213–9

Long-term exposure of rats to perchloroethylene, with and without a post-exposure solvent-free recovery period: effects on brain lipids. Kyrklund T, et al. **Toxicol Lett** 1990 Aug;52(3):279–85

Influence of trichloroethylene treatment on phosphoinositides in rat brain. Subramoniam A, et al. **Toxicol Lett** 1989 Oct;49(1):55–60

Response of mouse brain to a single subcutaneous injection of the monofunctional sulfur mustard, butyl 2-chloroethyl sulfide (BCS)*. Elsayed NM, et al. **Toxicology** 1989 Sep; 58(1):11–20

Effects of subacute toluene exposure on neuronal and glial marker proteins in rat brain. Huang J, et al. **Toxicology** 1990 Apr 17;61(2):109–17

Lipid peroxidation and the metabolism of glutathione in rat liver and brain following ethylene oxide inhalation. Katoh T, et al. **Toxicology** 1989 Sep;58(1):1–9

The central nervous system may be involved in TCDD toxicity. Pohjanvirta R, et al. **Toxicology** 1989 Oct 2; 58(2):167–74

Cyclosporine central neurotoxicity following renal transplantation. Report of a case using magnetic resonance images. Scheinman SJ, et al. **Transplantation** 1990 Jan; 49(1):215–6

Evaluation of three midazolam-xylazine mixtures. Preliminary trials in dogs. Tranquilli WJ, et al. **Vet Surg** 1990 Mar-Apr;19(2):168–72

[Pharmacokinetic studies on the causes of increased neurotoxicity of lidocaine during heart surgery] Olthoff D, et al. **Anaesthesiol Reanim** 1989;14(4):207–14 (Eng. Abstr.) (Ger)

[The central nervous system arousing effects of ketamine are decreased by addition of midazolam. A post-anesthesia study of patients following maxillary surgery with spontaneous respiration] Freye E, et al. **Anasth Intensivther Notfallmed** 1989 Dec;24(6):368–72 (Eng. Abstr.) (Ger)

[Adenosine and methylxanthines in the central nervous system—on their significance for psychiatry and neurology] Erfurth A, et al. **Fortschr Neurol Psychiatr** 1990 Apr; 58(4):137–47 (155 ref.) (Eng. Abstr.) (Ger)

[Benzodiazepine antagonists in the treatment of heptic encephalopathy] Ferenci P, et al. **Leber Magen Darm** 1989 Dec;19(6):322–5 (11 ref.) (Eng. Abstr.) (Ger)

[The effect of formalin fixation on several properties of the brain] Frýdl V, et al. **Zentralbl Allg Pathol** 1989; 135(7):649–55 (Eng. Abstr.) (Ger)

[Electrophysiological findings after TRH-T administration to healthy volunteers] Bramanti P, et al. **Clin Ter** 1990 Mar 31;132(6):405–8 (Eng. Abstr.) (Ita)

[Patients with stroke treated with TRH-T. Evaluation of electric brain activity using traditional and computerized methods] Bramanti P, et al. **Clin Ter** 1990 Apr 15; 133(1):19–23 (Eng. Abstr.) (Ita)

[Bombesin, dermorphin, physalaemin and sauvagine: effects on superficial and depth EEG tracings in epileptic and non-epileptic rats] de Romanis F, et al. **Clin Ter** 1990 Apr 15;133(1):35–8 (Eng. Abstr.) (Ita)

[Studies on monoamine metabolism in the rat brain with overdosage of manganese] Kawata F. **Nippon Hoigaku Zasshi** 1990 Apr;44(2):137–46 (Eng. Abstr.) (Jpn)

[Effect of TRH and histidyl-proline diketopiperazine (cyclo(His-Pro) on catecholamine secretion] Miyamori C, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Nov 20; 65(11):1226–38 (Eng. Abstr.) (Jpn)

[Electroencephalographic study with buspirone, a novel nonbenzodiazepine anxiolytic, and its major metabolite, 1-(2-pyrimidinyl)piperazine (1-PP), in rabbits] Kawasaki H, et al. **Nippon Yakurigaku Zasshi** 1990 Mar;95(3):91–104 (Eng. Abstr.) (Jpn)

[Effect of ethanol on synaptosomal membrane potential in the rat brain] Oda-Kurio W, et al. **Nippon Yakurigaku Zasshi** 1989 Aug;94(2):119–22 (Eng. Abstr.) (Jpn)

[The effect of glycerol on regional cerebral blood flow, blood volume and oxygen metabolism] Ishikawa M, et al. **No Shinkei Geka** 1989 Jul;17(7):635–40 (Eng. Abstr.) (Jpn)

[The inhibitory effect of elastase on calcium increase in brain and spinal cord of rabbits with atherosclerosis induced by cholesterol-rich diet] Yasui M, et al. **No To Shinkei** 1989 Aug;41(8):781–7 (Eng. Abstr.) (Jpn)

[Adverse effects of non-steroidal anti-inflammatory agents on the central nervous system] Ostensen M. **Tidsskr Nor Laegeforen** 1990 Mar 10;110(7):856 (Nor)

[The central effect of calcium antagonists] Siembab D, et al. **Pol Tyg Lek** 1988 Dec 19-26;43(51-52):1676–8 (Pol)

[Central dopaminergic mechanisms and the effect of ethyl alcohol] Kostowski W, et al. **Psychiatr Pol** 1989 May-Jun; 23(3):200–8 (40 ref.) (Pol)

[Diazepam (Relanium)—current views on its action with special reference to developmental age] Brus R, et al. **Wiad Lek** 1990 Apr 15;43(8):336–42 (81 ref.) (Eng. Abstr.) (Pol)

[The effect of the functional status of the CNS in the postresuscitation period on restoration of the neurologic status in dogs following systemic circulatory arrest] Kirsanova AK. **Anesteziol Reanimatol** 1989 Sep-Oct; (5):65–9 (Eng. Abstr.) (Rus)

[Brain blood flow and cerebral metabolism during ataralgesia] Lubnin AIu, et al. **Anesteziol Reanimatol** 1990 Jan-Feb; (1):9–13 (Eng. Abstr.) (Rus)

[Interactions of GABA and Cl ionophore-binding subunits of GABA-benzodiazepine receptor complex in the brain of inbred mice] Blednov IuA, et al. **Biull Eksp Biol Med** 1990 Apr;109(4):385–7 (Eng. Abstr.) (Rus)

[Relations between anxiolytic effects of diazepam and changes in the EEG spectral power] Bogdanov NN, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):199–202 (Eng. Abstr.) (Rus)

[Dependence of the effects of tripeptide MIF and lithium chloride on the degree of supersensitivity of dopamine receptors of the brain] Bondarenko NA, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):196–9 (Eng. Abstr.) (Rus)

[Effects of neuropeptide Y on behavior and noradrenaline level in the brain] Borisova EV, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):132–5 (Eng. Abstr.) (Rus)

[Effects of thymosin and B-activin on lateralization of sensomotor control in rats] Dobrynin VP, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):139–42 (Eng. Abstr.) (Rus)

[Effects of weak solutions of aldehydes on EEG changes in rats] Khokhlov AV, et al. **Biull Eksp Biol Med** 1989 Oct;108(10):409–12 (Eng. Abstr.) (Rus)

[Contents of serotonin and 5-hydroxyindoleacetic acid in the rabbit brain after long-term administration of lithium oxybutyrate] Saratikov AS, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):54–6 (Eng. Abstr.) (Rus)

[Effect of the Ca ionophore A-23187 on the plasmatic and mitochondrial potentials of the brain synaptosomes in rats: fluorescence measurements] Tiniakova LR, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):678–80 (Eng. Abstr.) (Rus)

[Clinico-pharmacologic analysis of the neurotropic action of antidepressants] Aleksandrovskiĭ IuA, et al. **Farmakol Toksikol** 1989 Jul-Aug;52(4):119–24 (Rus)

[The effect of piracetam on lipid peroxidation in the rat brain] Benov L, et al. **Farmakol Toksikol** 1990 Mar-Apr; 53(2):24–7 (Eng. Abstr.) (Rus)

[A pharmacological analysis of the central monoaminergic mechanisms of the development of neurogenic stomach damage] Bul'on VV, et al. **Farmakol Toksikol** 1990 Mar-Apr;53(2):36–8 (Eng. Abstr.) (Rus)

[Energy metabolism characteristics of various sections of the rat brain under the action of ethanol and lithium carbonate] Korablev MV, et al. **Farmakol Toksikol** 1989 Sep-Oct; 52(5):83–6 (Eng. Abstr.) (Rus)

[The effect of antimigraine preparations on serotonin transport in the brain synaptosomes of rats] Pukhal'skaia TG, et al. **Farmakol Toksikol** 1989 Nov-Dec;52(6):39–43 (Eng. Abstr.) (Rus)

[A neurophysiological analysis of the serotoninergic effects of lithium oxybutyrate] Saratikov AS, et al. **Farmakol Toksikol** 1990 Mar-Apr;53(2):13–5 (Eng. Abstr.) (Rus)

[Effect of seduxen and aminazin on the interaction of the cerebral hemispheres in man] Egorov AIu. **Fiziol Cheloveka** 1989 May-Jun;15(3):128–34 (Rus)

[The effect of the delta-sleep peptide on the homocarnosine content of the brain in rats under the action of cold stress] Bondarenko TI, et al. **Fiziol Zh SSSR** 1989 Dec; 75(12):1788–90 (Rus)

[The age-related characteristics of the effect of vasopressin on the vascular smooth muscles of the human brain] Gurevich MI, et al. **Fiziol Zh SSSR** 1989 Nov; 75(11):1554–9 (Eng. Abstr.) (Rus)

[The effect of oxytocin on the activity of the brain serotoninergic systems in narcotic-dependent rats] Ibragimov RSh, et al. **Fiziol Zh SSSR** 1989 Oct; 75(10):1355–60 (Eng. Abstr.) (Rus)

[The brain catecholamine system in narcotic-dependent rats under the action of oxytocin] Ibragimov RSh, et al. **Fiziol Zh SSSR** 1989 Dec;75(12):1657–63 (Eng. Abstr.) (Rus)

[The role of the brain monoaminergic systems in the effects of tuftsin and its analog on animal emotional behavior] Semenova GP, et al. **Fiziol Zh SSSR** 1989 Jun;75(6):759–65 (Eng. Abstr.) (Rus)

[Mechanisms of the neurotoxic action of terpene derivatives] Talapin VI, et al. **Gig Tr Prof Zabol** 1990;(4):49–50 (Rus)

[Pyridoxal phosphate as an agent for normalizing the monoamine oxidase activity of the brain in radiation sickness] Nagiev ER, et al. **Med Radiol (Mosk)** 1990 Jun; 35(6):23–4 (Eng. Abstr.) (Rus)

[The effect of arginine vasopressin and its derivatives on the brain neurons of the edible snail] Osipenko ON. **Neirofiziologiia** 1990;22(3):368–73 (Eng. Abstr.) (Rus)

[Changes in the nature of the time concordance of the functional brain structures under the influence of bemitil] Bobkov IuG, et al. **Patol Fiziol Eksp Ter** 1990 Mar-Apr; (2):39–41 (Rus)

[The effect of L-DOPA on the accumulation of lipid peroxidation products in separate brain structures during irradiation] Babaev RA, et al. **Radiobiologiia** 1990 Jan-Feb; 30(1):57–61 (Eng. Abstr.) (Rus)

[Central effects of beta adrenergic receptor blockaders, obsidan and trasicor, in arterial hypertension] Kukes VG, et al. **Sov Med** 1989;(8):61–3 (Rus)

[Cytoskeletal regulation of the sensitivity of brain synaptosomes to the depolarizing action of veratrine] Rakovich AA, et al. **Tsitologiia** 1989 Aug;31(8):980–5 (Eng. Abstr.) (Rus)

[The effect of emotional stress and corticosterone on the activity of monoaminoxidase in the rat brain] Popova NK, et al. **Vopr Med Khim** 1989 Jul-Aug;35(4):114–9 (Eng. Abstr.) (Rus)

[GABA receptor complex and the mechanisms of action of various anticonvulsants (review of the literature)] Aksent'ev SB, et al. **Zh Nevropatol Psikhiatr** 1990; 90(1):136–46 (144 ref.) (Rus)

[Diagnosis of toxic lesions of the brain using computerized tomography] Bushev II, et al. **Zh Nevropatol Psikhiatr** 1990;90(2):107–9 (Eng. Abstr.) **(Rus)**

[Effect of nootropic agents on the brain bioelectrical activity and on the indices of neuromediator metabolism in the acute period of severe craniocerebral trauma] Madorskiĭ SV, et al. **Zh Vopr Neirokhir** 1989 May–Jun;(3):29–35 (Eng. Abstr.) **(Rus)**

[The characteristics of higher nervous activity and of the brain benzodiazepine system in rats subjected to ethanol exposure in the prenatal period] Kruglikov RI, et al. **Zh Vyssh Nerv Deiat** 1990 May–Jun;40(3):481–9 (Eng. Abstr.) **(Rus)**

[Serotonin excess in the brain modifies the effect of beta–endorphin and dalargin on the processes of learning and memory] Kruglikov RI, et al. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr;40(2):310–7 (Eng. Abstr.) **(Rus)**

[Changes in the brain electrical activity under the influence of beta–adrenoreceptor agonists and antagonists in rats during free behavior] Kurova NS, et al. **Zh Vyssh Nerv Deiat** 1989 Jul–Aug;39(4):761–3 **(Rus)**

[Difficulties of animal experiments in psychopharmacology. Punctual aspects of antidepressants] Brugger AJ, et al. **Rev Esp Fisiol** 1989;45 Suppl:245–54 (34 ref.) (Eng. Abstr.) **(Spa)**

[Neurologic side effects of mefloquine. Implications for prevention and self administration] Hellgren U, et al. **Lakartidningen** 1989 Dec 27;86(52):4592 **(Swe)**

[Mosquito repellents containing DEET can affect the central nervous system] Oredsson B, et al. **Lakartidningen** 1990 Aug 8;87(32–33):2495–6 **(Swe)**

EMBRYOLOGY

Aberrant differentiation of neuroepithelial cells in developing mouse brains subsequent to retinoic acid exposure in utero. Yasuda Y, et al. **Am J Anat** 1989 Nov;186(3):271–84

Central opioid modulation of fetal cardiovascular function: role of mu– and delta–receptors. Szeto HH, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1453–8

The human brain at stage 17, including the appearance of the future olfactory bulb and the first amygdaloid nuclei. Müller F, et al. **Anat Embryol (Berl)** 1989;180(4):353–69

Heparitinase treatment of rat embryos during cranial neurulation. Tuckett F, et al. **Anat Embryol (Berl)** 1989; 180(4):393–400

The development of the sulci and gyri of the bovine cerebral hemispheres. Louw GJ. **Anat Histol Embryol** 1989 Sep; 18(3):246–64

Morphogenesis of the frontal organ in Bufo bufo during development. Farnesi RM, et al. **Anat Rec** 1990 Jun; 227(2):264–70

Neural differentiation increases expression of Alzheimer amyloid protein precursor gene in murine embryonal carcinoma cells. Yoshikawa K, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):204–9

Ontogeny of androgen receptors in fetal guinea pig brain. Toyooka KR, et al. **Biol Reprod** 1989 Aug;41(2):204–12

Maternal abdominal pressure alters fetal cerebral blood flow. Vyas S, et al. **Br J Obstet Gynaecol** 1990 Aug;97(8):740–2

Growth hormone–releasing hormone and somatostatin influence neuronal expression in developing chick brain. II. Cholinergic neurons. Kentroti S, et al. **Brain Res** 1990 Apr 2;512(2):297–303

Detection of beta–nerve growth factor mRNA in the human fetal brain. Pizzuti A, et al. **Brain Res** 1990 Jun 4; 518(1–2):337–41

Expression of cellular retinoic acid binding protein in the developing nervous system of mouse embryo. Momoi M, et al. **Brain Res Dev Brain Res** 1990 Jul 1;54(2):161–7

The Wnt–1 (int–1) proto–oncogene is required for development of a large region of the mouse brain. McMahon AP, et al. **Cell** 1990 Sep 21;62(6):1073–85

Tyrosine phosphorylation of membrane–associated tubulin in nerve growth cones enriched in pp60c–src. Maness PF, et al. **Ciba Found Symp** 1990;150:57–69; discussion 69–78 (53 ref.)

Pluripotentiality of the 2–day–old avian germinative neuroepithelium. Alvarado–Mallart RM, et al. **Dev Biol** 1990 May;139(1):75–88

Neuronal lineages in chimeric mouse forebrain are segregated between compartments and in the rostrocaudal and radial planes. Fishell G, et al. **Dev Biol** 1990 Sep;141(1):70–83

The development of a simple scaffold of axon tracts in the brain of the embryonic zebrafish, Brachydanio rerio. Wilson SW, et al. **Development** 1990 Jan;108(1):121–45

Expression of steroid metabolizing enzymes by aggregating fetal brain cells in culture: a model for developmental regulation of the progesterone 5 alpha–reductase pathway. Barnea A, et al. **Endocrinology** 1990 Jul;127(1):500–2

Development of receptors for insulin and insulin–like growth factor–I in head and brain of chick embryos: autoradiographic localization. Bassas L, et al. **Endocrinology** 1989 Nov;125(5):2320–7

The impact of maternal serum on development of enolase activity in fetal rat brain cell culture. Shambaugh GE 3d, et al. **Exp Cell Res** 1990 Feb;186(2):210–7

Ras protein expression is developmentally regulated in embryonic chicken brain. Klinz FJ. **FEBS Lett** 1989 Nov 6;257(2):333–6

Pre– and postnatal aminopeptidase activities in the rat brain. De Gandarias JM, et al. **Int J Dev Biol** 1989 Dec; 33(4):491–3

Histochemical study of the differentiation of microglial cells in the developing human cerebral hemispheres. Fujimoto E, et al. **J Anat** 1989 Oct;166:253–64

Monoclonal antibody A2B5, which detects cell surface antigens, binds to ganglioside GT3 (II3 (NeuAc)3LacCer) and to its 9–O–acetylated derivative. Dubois C, et al. **J Biol Chem** 1990 Feb 15;265(5):2797–803

Localization during development of alternatively spliced forms of cytotactin mRNA by in situ hybridization. Prieto AL, et al. **J Cell Biol** 1990 Aug;111(2):685–98

Congenital hypothyroidism, as studied in rats. Crucial role of maternal thyroxine but not of 3,5,3'–triiodothyronine in the protection of the fetal brain. Calvo R, et al. **J Clin Invest** 1990 Sep;86(3):889–99

Effects of antipyrine on electrocortical state and regional blood flows in the mature sheep fetus. Reid DL, et al. **J Dev Physiol** 1989 Jan;11(1):11–4

Development of tolerance to ethanol–induced suppression of breathing movements and brain activity in the near–term fetal sheep during short–term maternal administration of ethanol. Smith GN, et al. **J Dev Physiol** 1989 Mar; 11(3):189–97

Preparation of fetal rat brains for light and electron microscopy. Aström KE, et al. **J Electron Microsc Tech** 1990 Aug;15(4):383–96

Maternal programming of the fetal brain dictates the response of juvenile Siberian hamsters to photoperiod: dissecting the information transfer system. Horton TH, et al. **J Exp Zool Suppl** 1990;4:200–2 (13 ref.)

Volumetric growth of the major brain divisions in fetal Macaca nemestrina. DeVito JL, et al. **J Hirnforsch** 1989; 30(4):479–87

Brain birth and personal identity. Jones DG. **J Med Ethics** 1989 Dec;15(4):173–8

Morphogenesis of the brain as studied by 3–D computer graphics simulation. Fujita S. **J Microsc** 1990 Mar;157 (Pt 3):259–69

Mapping of the presumptive brain regions in the neural plate of Xenopus laevis. Eagleson GW, et al. **J Neurobiol** 1990 Apr;21(3):427–40

Developmental maps of acetylcholinesterase and G4–antigen of the early chicken brain: long–distance tracts originate from AChE–producing cell bodies. Weikert T, et al. **J Neurobiol** 1990 Apr;21(3):482–98

Gene expression of tyrosine hydroxylase in the developing fetal brain. Coulon JF, et al. **J Neurochem** 1990 Oct; 55(4):1412–7

Characterization of opioid receptors in cultured neurons. Vaysse PJ, et al. **J Neurochem** 1990 Aug;55(2):624–31

Axonogenesis in the brain of zebrafish embryos. Chitnis AB, et al. **J Neurosci** 1990 Jun;10(6):1892–905

Selective and nonselective stimulation of central cholinergic and dopaminergic development in vitro by nerve growth factor, basic fibroblast growth factor, epidermal growth factor, insulin and the insulin–like growth factors I and II. Knusel B, et al. **J Neurosci** 1990 Feb;10(2):558–70

Effects of fetal alcohol exposure on brain 5 alpha–reductase/aromatase activity. Kelce WR, et al. **J Steroid Biochem** 1990 Jan;35(1):103–6

Cerebral resistance ratios [letter; comment] McDonald DG. **J Ultrasound Med** 1990 Mar;9(3):181 Comment on: J Ultrasound Med 1989 Apr;8(4):187–91.

Intrauterine fetal brain NMR spectroscopy: 1H and 31P studies in rats. Nakada T, et al. **Magn Reson Med** 1989 Nov;12(2):172–80

Developmental regulation of topoisomerase II sites and DNase I–hypersensitive sites in the chicken beta–globin locus. Reitman M, et al. **Mol Cell Biol** 1990 Jun; 10(6):2774–86

Ethanol alters astrocyte development: a study of critical periods using primary cultures. Guerri C, et al. **Neurochem Res** 1990 May;15(5):559–65

Comparisons of the nuclear uptake of [3H]–testosterone and its metabolites by the brains of male and female macaque fetuses at 122 days of gestation. Bonsall RW, et al. **Neuroendocrinology** 1990 Apr;51(4):474–80

Aromatase, 5–alpha–reductase, and androgen receptor levels in the fetal monkey brain during early development. Sholl SA, et al. **Neuroendocrinology** 1990 Jul;52(1):94–8

Differential expression of the neuronal acetylcholine receptor alpha 2 subunit gene during chick brain development. Daubas P, et al. **Neuron** 1990 Jul;5(1):49–60

Lipofection of cDNAs in the embryonic vertebrate central nervous system. Holt CE, et al. **Neuron** 1990 Feb; 4(2):203–14

The enrichment of a neuronal growth cone collapsing activity from embryonic chick brain. Raper JA, et al. **Neuron** 1990 Jan;4(1):21–9

Channel expression correlates with differentiation stage during the development of oligodendrocytes from their precursor cells in culture. Sontheimer H, et al. **Neuron** 1989 Feb;2(2):1135–45

Ontogeny of strychnine–insensitive [3H]glycine binding sites in rat forebrain. Shinohara K, et al. **Neurosci Lett** 1989 Nov 6;105(3):307–11

The developing chick isthmo–optic nucleus forms a transient efferent projection to the optic tectum. Wizenmann A, et al. **Neurosci Lett** 1990 Jun 8;113(3):241–6

Production and immunohistochemical characterization of primary cultures of human embryo brain cells. Kondratyev AD, et al. **Neuroscience** 1989;32(1):261–8

Two forms of the basic fibroblast growth factor receptor–like mRNA are expressed in the developing mouse brain. Reid HH, et al. **Proc Natl Acad Sci U S A** 1990 Feb; 87(4):1596–600

Developmental regulation of the rat insulin–like growth factor I receptor gene. Werner H, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7451–5

Evidence that cells expressing luteinizing hormone–releasing hormone mRNA in the mouse are derived from progenitor cells in the olfactory placode. Wray S, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):8132–6

Prenatal gonadal hormones and schizophrenia in men and women. Seeman MV. **Psychiatr J Univ Ottawa** 1989 Sep; 14(3):473–5 (33 ref.)

Magnetic resonance imaging of normal brain maturation. Dietrich RB. **Semin Perinatol** 1990 Jun;14(3):201–11

Cranial and orbital growth in Chinese fetuses. Hsieh FJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Nov–Dec; 88(11–12):1147–51

Ethylenethiourea: in vivo/in vitro comparisons of teratogenicity [letter; comment] Daston GP. **Teratology** 1990 Apr;41(4):475–8 Comment on: Teratology 1989 Mar;39(3):277–85.

Biochemical changes in the developing rat central nervous system due to hyperthermia. Rao GS, et al. **Teratology** 1990 Mar;41(3):327–32

Ontogenesis of the fetal nervous system: the onset of brain life. Korein J. **Transplant Proc** 1990 Jun;22(3):982–3

Development of the blood–brain barrier. Risau W, et al. **Trends Neurosci** 1990 May;13(5):174–8

Intrauterine growth rates of the west African dwarf goat and some foetal organs in relation to strategic feed supplementation during pregnancy. Osuagwuh AI, et al. **Zentralbl Veterinarmed** [A] 1990 Apr;37(3):198–204

[Quantitative and qualitative variations in the glycoproteins in the chick embryo brain] Pane G, et al. **Boll Soc Ital Biol Sper** 1989 Oct;65(10):931–8 (Eng. Abstr.) **(Ita)**

[Development of the human fetal brain: volumetric analysis of the component parts] Nakae Y, et al. **No To Hattatsu** 1989 Sep;21(5):434–9 (Eng. Abstr.) **(Jpn)**

[Brain differentiation and sex hormones] Arai Y. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(4 Suppl):426–33 **(Jpn)**

[Evolution and development of the central nervous system] Fujita S. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(4 Suppl):301–16 **(Jpn)**

[Mechanisms of embryonal formation of fissura calcarina in the human brain] Savel'ev SV. **Dokl Akad Nauk SSSR** 1989 Nov–Dec;309(1):204–7 **(Rus)**

ENZYMOLOGY

N–(3,4,5–trimethoxyphenylethyl)–aziridine––a mescaline derivative: interaction with cholinesterases in vitro. Patočka J, et al. **Act Nerv Super (Praha)** 1989 Jun; 31(2):132–3

Effect of intracerebral injection of chlorpromazine and diazepam on acid phosphatase activity in the mouse brain. Tanwar RK, et al. **Acta Anat (Basel)** 1990;138(2):121–7

Lys– and Tyr–arylamidase activities in serum and brain during the estrous cycle of the rat. de Gandarias JM, et al. **Acta Endocrinol (Copenh)** 1989 Nov;121(5):671–3

Neurochemical perspectives to the function of monoamine oxidase. Riederer P, et al. **Acta Neurol Scand Suppl** 1989; 126:41–5

Enzymes of purine nucleotide metabolism in mature cultures of rat brain neurons. Brosh S, et al. **Adv Exp Med Biol** 1989;253B:489–92

Regulation of the 63–kDa subunit–containing calmodulin–dependent cyclic nucleotide phosphodiesterase isozyme. Sharma RK, et al. **Adv Exp Med Biol** 1989; 255:397–408

The role of brain protein phosphatases 1 and 2A in the regulation of microtubule assembly. Yamamoto H, et al. **Adv Exp Med Biol** 1989;255:359–68

Involvement of angiotensin–converting enzyme (kininase II) in neuropeptide metabolism. Yokosawa H, et al. **Adv Exp Med Biol** 1989;247B:371–6

Stimulation by inositol trisphosphate and tetrakisphosphate of a protein phosphatase. Zwiller J, et al. **Adv Exp Med Biol** 1989;255:377–86

Alcohol and thiamine of the brain. Rindi G. **Alcohol Alcohol** 1989;24(6):493–5 (19 ref.)

Genetically determined alcohol preference and cyclic AMP binding proteins in mouse brain. Beeker KR, et al. **Alcoholism** 1990 Apr;14(2):158–64

Investigations of the role of protein kinase C in the acute sedative effects of ethanol. Deitrich RA, et al. **Alcoholism (N Y)** 1989 Dec;13(6):737–45

Immunocytochemistry of alcohol dehydrogenase in the rat central nervous system. Kerr JT, et al. **Alcoholism (N Y)** 1989 Dec;13(6):730–6

Human brain glyceraldehyde–3–phosphate dehydrogenase, succinic semialdehyde dehydrogenase and aldehyde dehydrogenase isozymes: substrate specificity and sensitivity to disulfiram. Ryzlak MT, et al. **Alcoholism (N Y)** 1989 Dec;13(6):755–61

Sodium affinity of brain Na(+)–K(+)–ATPase is dependent on isozyme and environment of the pump. Brodsky JL, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C803–11

Insulin activation of brain Na(+)–K(+)–ATPase is mediated

by alpha 2-form of enzyme. Brodsky JL. **Am J Physiol** 1990 May;258(5 Pt 1):C812-7

Na(+)-K(+)-ATPase gene expression during in vitro development of rat fetal forebrain. Corthésy-Theulaz I, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1062-9

Redox changes in cat brain cytochrome-c oxidase after blood-fluorocarbon exchange. Ferrari M, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1706-13

Depletion of tissue glutathione with diethyl maleate enhances hyperbaric oxygen toxicity. Weber CA, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):L308-12

Do activity-dependent changes in expression of regulatory proteins play a role in the progression of central nervous system neural degeneration? Kennedy MB. **Ann N Y Acad Sci** 1989;568:193-7

The protein kinase C family in the brain: heterogeneity and its implications. Kishimoto A, et al. **Ann N Y Acad Sci** 1989;568:181-6

Abnormalities of pyruvate dehydrogenase complex in brain disease. Sheu KF, et al. **Ann N Y Acad Sci** 1989;573:378-91

Neuronal dopa decarboxylase. Siow YL, et al. **Ann N Y Acad Sci** 1990;585:173-88 (99 ref.)

Non-Alzheimer-type pattern of brain cholineacetyltransferase reduction in dominantly inherited olivopontocerebellar atrophy. Kish SJ, et al. **Ann Neurol** 1989 Sep;26(3):362-7

Altered glucose metabolism in Alzheimer's disease [letter; comment] Sims NR. **Ann Neurol** 1990 Jun;27(6):691-3 Comment on: Ann Neurol 1989 Jul;26(1):91-4.

Inhibition of adenylate cyclase by polyadenylate. Bushfield M, et al. **Arch Biochem Biophys** 1990 Apr;278(1):88-98

A particle concentration fluorescence immunoassay for prostaglandin D synthase in the rat central nervous system. Islam F, et al. **Arch Biochem Biophys** 1990 Mar; 277(2):290-5

Studies on the subsite specificity of the rat brain puromycin-sensitive aminopeptidase. Johnson GD, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):305-9

Rat peptidylglycine alpha-amidating enzyme: the relation between activities at neutral and alkaline pH Values. Noguchi M, et al. **Arch Biochem Biophys** 1989 Dec; 275(2):505-13

Biotinidase in the porcine cerebrum. Oizumi J, et al. **Arch Biochem Biophys** 1990 May 1;278(2):381-5

Regulation of sulfotransferase activity by vitamin K in mouse brain. Sundaram KS, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):109-13

Asparagine-linked glycoprotein biosynthesis in rat brain: identification of glucosidase I, glucosidase II, and and endomannosidase (glucosyl mannosidase). Tulsiani DR, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):114-21

Isolation and characterization of the discrete N- and C-terminal halves of rat brain hexokinase: retention of full catalytic activity in the isolated C-terminal half. White TK, et al. **Arch Biochem Biophys** 1989 Nov 1;274(2):375-93

Binding of nucleoside triphosphates, inorganic phosphate, and other polyanionic ligands to the N-terminal region of rat brain hexokinase: relationship to regulation of hexokinase activity by antagonistic interactions between glucose 6-phosphate and inorganic phosphate. White TK, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):26-34

Differential scanning calorimetric study of rat brain hexokinase: domain structure and stability. White TK, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):510-7

Tetrameric structure of mitochondrially bound rat brain hexokinase: a crosslinking study. Xie G, et al. **Arch Biochem Biophys** 1990 Jan;276(1):285-93

Kinetic characterization and regulation of purified glutamine synthetase from brain of Clarias batrachus. Singh RA, et al. **Arch Int Physiol Biochim** 1990 Mar;98(1):95-101

Cholinergic enzyme systems in Parkinson's disease. McGeer PL, et al. **Arch Neurol** 1971 Sep;25(3):265-8

The interaction of aluminium with soluble protein kinase C from mouse brain. Katsuyama H, et al. **Arch Toxicol** 1989; 63(6):474-8

In vivo and in vitro regional differential sensitivity of neuropathy target esterase to di-n-butyl-2,2-dichlorovinyl phosphate. Moretto A, et al. **Arch Toxicol** 1989; 63(6):469-73

Purification of a novel eIF-2 alpha protein kinase from calf brain. Alcázar A, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1237-44

A rat brain cytosolic N-methyltransferase(s) activity converting phosphorylethanolamine into phosphorylcholine. Andriamampandry C, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):758-63

Gamma-glutamyl-transpeptidase (GGTP) and NA+K(+)-ATPase activities in different subpopulations of cloned cerebral endothelial cells: responses to glial stimulation. Bauer HC, et al. **Biochem Biophys Res Commun** 1990 Apr 16;168(1):358-63

Cytochrome P-450 dependent monooxygenases in neuronal and glial cells: inducibility and specificity. Dhawan A, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):441-7

Regional distribution of EDRF/NO-synthesizing enzyme(s) in rat brain. Förstermann U, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):727-32

Purification to homogeneity of GD3 synthase and partial purification of GM3 synthase from rat brain. Gu XB, et al. **Biochem Biophys Res Commun** 1990 Jan 15; 166(1):387-93

Enzymatic synthesis of N,N-dimethyl-sphingosine: demonstration of the sphingosine: N-methyltransferase in mouse brain. Igarashi Y, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1411-6

Regulation of protein disulfide isomerase gene expression in brain and liver during rat development. Mira E, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):421-5

Developmental changes in the activities of phospholipase c, 3-kinase, and 5-phosphatase in rat brain. Moon KH, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):370-4

Differential inhibition of protein kinase C subtypes. Pelosin JM, et al. **Biochem Biophys Res Commun** 1990 Jun 29; 169(3):1040-8

Characterization of a bovine brain magnesium-dependent phosphotyrosine protein phosphatase that is inhibited by micromolar concentrations of calcium. Singh TJ. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):621-7

Vitamin K and phosphate mediated enhancement of brain sulfotransferase activity. Sundaram KS, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):927-32

Peptidylglycine alpha-amidating reaction: evidence for a two-step mechanism involving a stable intermediate at neutral pH. Takahashi K, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):524-30

Translocation of phospholipase A2 from cytosol to membranes in rat brain induced by calcium ions. Yoshihara Y, et al. **Biochem Biophys Res Commun** 1990 Jul 31; 170(2):484-90

Purification of D-beta-hydroxybutyrate dehydrogenase from rat brain. Zhang WW, et al. **Biochem Cell Biol** 1990 Jun; 68(6):980-3

Rat brain insulin degrading enzyme in insulin and thyroid hormones imbalances. Azam M, et al. **Biochem Int** 1990; 21(2):321-9

Reduction of cyclic AMP phosphodiesterase activity of several subcellular fractions of rat brain after pretreatment with phospholipase C. Azila N, et al. **Biochem Int** 1989 Nov;19(5):1077-85

Reactive thiols in type II iodothyronine 5'-deiodinases: inactivation by iodoacetate. Goswami A, et al. **Biochem Int** 1989 Aug;19(2):361-8

Effects of partial hepatectomy on the enzymes of cerebral glutamate and branched-chain amino acid metabolism. Jessy J, et al. **Biochem Int** 1990;20(1):107-15

Differential regulation of malate dehydrogenase isoenzymes by estradiol in the brain of rats of various ages. Patnaik SK. **Biochem Int** 1990;20(3):633-9

Differential effects of hydrocortisone on alanine aminotransferase isoenzymes of the cerebral hemispheres and cerebellum of rats during growth, development, and senescence. Patnaik SK. **Biochem Int** 1990;21(1):175-84

Effects of lead on K(+)-para-nitrophenyl phosphatase activity and protection by thiol reagents. Rajanna B, et al. **Biochem Int** 1990;20(5):1011-8

Effect in vitro of benthiocarb on rat brain succinate dehydrogenase. Reddy GR, et al. **Biochem Int** 1990; 20(4):711-4

RNA polymerase I and II activities in different brain regions of young, adult, and old rats. Venugopal J, et al. **Biochem Int** 1989 Oct;19(4):787-92

Evidence for a synaptic plasma membrane associated adenylate kinase in the rat brain. Wong PC, et al. **Biochem Int** 1989 Oct;19(4):881-8

Phosphorylation of an inositol phosphate-stimulated protein phosphatase by protein kinase C. Zwiller J, et al. **Biochem Int** 1990;20(5):967-77

Purification and characterization of a rat brain aldehyde dehydrogenase able to metabolize gamma-aminobutyraldehyde to gamma-aminobutyric acid. Abe T, et al. **Biochem J** 1990 Jul 1;269(1):25-9

A novel metalloproteinase originally isolated from brain myelin membranes is present in many tissues. Chantry A, et al. **Biochem J** 1990 May 15;268(1):245-8

Identification of glycosylphosphatidylinositol-specific phospholipases C in mouse brain membranes. Fouchier F, et al. **Biochem J** 1990 Jul 15;269(2):321-7

A monoclonal antibody to bovine brain inositol monophosphatase. Immunoaffinity purification of the brain and kidney enzymes and evidence for their structural identity. Gee NS, et al. **Biochem J** 1989 Dec 15; 264(3):793-8

Hydrolysis of fucosyl-GM1 ganglioside by purified pellet-associated human brain and human liver alpha-L-fucosidases without activator proteins or detergents. Hopfer RL, et al. **Biochem J** 1990 Mar 1; 266(2):491-6

Kinetic characteristics of nitric oxide synthase from rat brain. Knowles RG, et al. **Biochem J** 1990 Jul 1;269(1):207-10

A simplified assay for the enzyme responsible for the attachment of myristic acid to the N-terminal glycine residue of proteins, myristoyl-CoA: glycylpeptide N-myristoyltransferase. McIlhinney RA, et al. **Biochem J** 1989 Oct 15;263(2):387-91

Human carboxypeptidase E. Isolation and characterization of the cDNA, sequence conservation, expression and processing in vitro. Manser E, et al. **Biochem J** 1990 Apr 15;267(2):517-25

Inhibition of adenylate cyclase in rat brain synaptosomal membranes by GTP and phenylisopropyladenosine is enhanced in hypothyroidism. Mazurkiewicz D, et al. **Biochem J** 1989 Nov 1;263(3):829-35

Lipoamidase (lipoyl-X hydrolase) from pig brain. Oizumi J, et al. **Biochem J** 1990 Mar 1;266(2):427-34

High activity of cytochrome P-450-linked aminopyrine N-demethylase in mouse brain microsomes, and associated sex-related difference. Ravindranath V, et al. **Biochem J** 1989 Aug 1;261(3):769-73

Properties of a microtubule-associated cofactor-independent protein kinase from pig brain. Scott CW, et al. **Biochem J** 1989 Oct 1;263(1):207-14

Rat brain inositol 1,4,5-trisphosphate 3-kinase. Ca2(+)-sensitivity, purification and antibody production. Takazawa K, et al. **Biochem J** 1990 May 15;268(1):213-7

Inhibition of ox brain glutamate dehydrogenase by perphenazine. Couée I, et al. **Biochem Pharmacol** 1990 Apr 1;39(7):1167-73

The inhibition of glutamate dehydrogenase by some antipsychotic drugs. Couée I, et al. **Biochem Pharmacol** 1990 Mar 1;39(5):827-32

NADPH cytochrome P-450 reductase in rat, mouse and human brain. Ravindranath V, et al. **Biochem Pharmacol** 1990 Mar 15;39(6):1013-8

Endopeptidase 24:11 activity in cerebral microvessels. Brownlees J, et al. **Biochem Soc Trans** 1990 Apr;18(2):277

Thermodynamic characteristics of brain monoamine oxidase in ethanol-tolerant mice. Morinan A. **Biochem Soc Trans** 1990 Jun;18(3):415-6

Two neutral dipeptidyl-aminopeptidase activities of guinea-pig brain. O'Connor B, et al. **Biochem Soc Trans** 1990 Apr;18(2):276

Cytochrome P-450 in the brain. Strömstedt M, et al. **Biochem Soc Trans** 1990 Feb;18(1):28-30

Kinetic studies with myo-inositol monophosphatase from bovine brain. Ganzhorn AJ, et al. **Biochemistry** 1990 Jun 26;29(25):6065-71

Characterization of particulate cyclic nucleotide phosphodiesterases from bovine brain: purification of a distinct cGMP-stimulated isoenzyme. Murashima S, et al. **Biochemistry** 1990 Jun 5;29(22):5285-92

Characterization of a Ca2(+)- and phospholipid-dependent ATPase reaction catalyzed by rat brain protein kinase C. O'Brian CA, et al. **Biochemistry** 1990 May 8;29(18):4278-82

Inhibition of NAD glycohydrolase and ADP-ribosyl transferases by carbocyclic analogues of oxidized nicotinamide adenine dinucleotide. Slama JT, et al. **Biochemistry** 1989 Sep 19;28(19):7688-94

Two active Na+/K+-ATPases of high affinity for ouabain in adult rat brain membranes. Berrebi-Bertrand I, et al. **Biochim Biophys Acta** 1990 Jan 29;1021(2):148-56

Purification and characterization of PLC-beta m, a muscarinic cholinergic regulated phospholipase C from rabbit brain membrane. Carter HR, et al. **Biochim Biophys Acta** 1990 Aug 13;1054(1):119-28

Activation of phospholipase C in rabbit brain membranes by carbachol in the presence of GTP gamma S; effects of biological detergents. Carter HR, et al. **Biochim Biophys Acta** 1990 Aug 13;1054(1):129-35

Regulation of the calcium-activated neutral proteinase (CANP) of bovine brain by myelin lipids. Chakrabarti AK, et al. **Biochim Biophys Acta** 1990 Apr 19;1038(2):195-8

Effect of lipid peroxidation on Na+,K(+)-ATPase, 5'-nucleotidase and CNPase in mouse brain myelin. Domanska-Janik K, et al. **Biochim Biophys Acta** 1990 May 16;1034(2):200-6

Substrate specificity for myelin basic protein-specific protein methylase I. Ghosh SK, et al. **Biochim Biophys Acta** 1990 Jun 19;1039(2):142-8

Resonance energy transfer between the active sites of creatine kinase from rabbit brain. Grossman SH. **Biochim Biophys Acta** 1990 Sep 3;1040(2):276-80

Studies of the immunohistochemical and biochemical localization of the cytochrome P-450scc-linked monooxygenase system in the adult rat brain. Iwahashi K, et al. **Biochim Biophys Acta** 1990 Aug 17;1035(2):182-9

Hexokinase redistribution in vivo. Laursen SE, et al. **Biochim Biophys Acta** 1990 Apr 23;1034(1):118-21

[32P]ATP synthesis in steady state from [32P]Pi and ADP by Na+/K(+)-ATPase from ox brain and pig kidney. Activation by K+. Plesner L, et al. **Biochim Biophys Acta** 1990 Sep 3;1040(2):167-74

Purification and properties of choline kinase from rat brain. Uchida T, et al. **Biochim Biophys Acta** 1990 Apr 17; 1043(3):281-8

Effects of the wasp venom peptide, mastoparan, on a phosphoinositide-specific phospholipase C purified from rabbit brain membranes. Wallace MA, et al. **Biochim Biophys Acta** 1989 Dec 18;1006(3):311-6

Is the subunit the minimal function unit of creatine kinase? Wang XC, et al. **Biochim Biophys Acta** 1990 Jul 6; 1039(3):313-7

Binding of inhibitors to the major glutathione S-transferase from bovine brain. Competitive binding between bilirubin and glutathione. Young PR, et al. **Biochim Biophys Acta** 1990 Mar 29;1038(1):114-8

Analysis of tandospirone (SM-3997) interactions with neurotransmitter receptor binding sites. Hamik A, et al. **Biol Psychiatry** 1990 Jul 15;28(2):99-109

Effect of pyridostigmine and syntostigmine pretreatment on the inhibition of acetylcholinesterases by o-pinacolyl-methylphosphonofluoridate. In vitro experiments with rat tissues. Patočka J. **Biomed Biochim Acta** 1989;48(9):715-20

Purification of the membrane protein enzyme lipoamidase by affinity chromatography. Oizumi J, et al. **Biomed Chromatogr** 1989 Nov;3(6):274-5

Target and nontarget actions of phenthoate and carbofuran: brain acetylcholinesterase, kidney iodide peroxidase, and blood thyroxine profiles in Channa punctatus. Guhathakurta S, et al. **Biomed Environ Sci** 1988 Jun; 1(1):59–63

Effects of diisopropylfluorophosphate on brain acetylcholinesterase, butyrylcholinesterase, and neurotoxic esterase in rats. Lim DK, et al. **Biomed Environ Sci** 1989 Sep;2(3):295–304

Beta-glucosidase activity in liver, spleen and brain in acute neuropathic Gaucher disease. Takahashi T, et al. **Brain Dev** 1990;12(2):202–5

Immunohistochemistry of superoxide dismutase-1 in developing human brain. Takashima S, et al. **Brain Dev** 1990;12(2):211–3

Right-left asymmetry of tyrosine hydroxylase in rat median eminence: influence of arterial baroreflex nerves. Alexander N, et al. **Brain Res** 1990 Jul 23;523(2):195–8

Immunocytochemical localization of aromatase in the brain. Balthazart J, et al. **Brain Res** 1990 Apr 30;514(2):327–33

Kindling induced changes in calmodulin kinase II immunoreactivity. Bronstein JM, et al. **Brain Res** 1990 Jul 30;524(1):49–53

Immunohistochemical localization of a brain isozyme of phospholipase C (PLC III) in astroglia in rat brain. Choi WC, et al. **Brain Res** 1989 Oct 9;499(1):193–7

Densitometric analysis of cytochrome oxidase in ischemic rat brain. Dimlich RV, et al. **Brain Res** 1990 May 21; 516(2):181–91

Direct inhibition of choline acetyltransferase activity by a monoclonal antibody raised against the plasma membrane of cholinergic nerve terminals. Eder-Colli L, et al. **Brain Res** 1989 Oct 23;500(1–2):90–8

Special properties of cholinesterases in the cerebral cortex of Alzheimer's disease. Geula C, et al. **Brain Res** 1989 Sep 25;498(1):185–9

Changes of salt intake and of (Na+K)-ATPase activity in brain after high dose treatment with deoxycorticosterone. Grillo C, et al. **Brain Res** 1989 Oct 16;499(2):225–33

Aberrant casein kinase II in Alzheimer's disease. Iimoto DS, et al. **Brain Res** 1990 Jan 22;507(2):273–80

Blockade of morphine-induced increases in brain tryptophan hydroxylase activity by systemic pretreatment with CCK-8: no reversal by vagotomy. Johannessen JN, et al. **Brain Res** 1989 Oct 16;499(2):357–62

Immunohistochemical demonstration of glutaminase in catecholaminergic and serotoninergic neurons of rat brain. Kaneko T, et al. **Brain Res** 1990 Jan 15;507(1):151–4

Autoradiographic mapping of a selective cyclic adenosine monophosphate phosphodiesterase in rat brain with the antidepressant [3H]rolipram. Kaulen P, et al. **Brain Res** 1989 Dec 4;503(2):229–45

Effects of acrylamide and N,N'-methylene-bis-acrylamide on creatine kinase activity. Matsuoka M, et al. **Brain Res** 1990 Jan 22;507(2):351–3

5 alpha-reductase activity in isolated and cultured neuronal and glial cells of the rat. Melcangi RC, et al. **Brain Res** 1990 May 21;516(2):229–36

Strain differences between albino and pigmented rats in monoamine-synthesizing enzyme activities of brain, retina and adrenal gland. Park DH, et al. **Brain Res** 1990 Feb 5;508(2):301–4

Acetylcholinesterase and Nissl staining in the same histological section. Shipley MT, et al. **Brain Res** 1989 Dec 18;504(2):347–53

Astrocytic localization of the immunoreactivity for protein kinase C isozyme (type III) in human brain. Todo T, et al. **Brain Res** 1990 May 28;517(1–2):351–3

Localization of lipoprotein lipase to discrete areas of the guinea pig brain. Vilaró S, et al. **Brain Res** 1990 Jan 8; 506(2):249–53

Sex- and age-related differences in the activity of testosterone-metabolizing enzymes in microdissected nuclei of the zebra finch brain. Vockel A, et al. **Brain Res** 1990 Mar 19;511(2):291–302

Age-related differences in soman toxicity and in blood and brain regional cholinesterase activity. Shih TM, et al. **Brain Res Bull** 1990 Mar;24(3):429–36

Developmental expression of calmodulin-dependent cyclic nucleotide phosphodiesterase in rat brain. Billingsley ML, et al. **Brain Res Dev Brain Res** 1990 May 1;53(2):253–63

Induction of 5'-deiodinase activity in rat astroglial cells by acidic fibroblast growth factor. Courtin F, et al. **Brain Res Dev Brain Res** 1990 May 1;53(2):237–42

Activation of myelin-associated cholesteryl ester hydrolase in developing rat brain. Ghosh S, et al. **Brain Res Dev Brain Res** 1990 Jun 1;54(1):147–9

Human brain glycogen phosphorylase: characterization of fetal cDNA and genomic sequences. Gelinas RP, et al. **Brain Res Mol Brain Res** 1989 Nov;6(2–3):177–85

The ontogeny and localization of glutamine synthetase gene expression in rat brain. Mearow KM, et al. **Brain Res Mol Brain Res** 1989 Dec;6(4):223–32

Distribution of messenger RNAs encoding the enzymes glutaminase, aspartate aminotransferase and glutamic acid decarboxylase in rat brain. Najlerahim A, et al. **Brain Res Mol Brain Res** 1990 May;7(4):317–33

Electrically stimulated rapid gene expression in the brain: ornithine decarboxylase and c-fos. Zawia NH, et al. **Brain Res Mol Brain Res** 1990 Apr;7(3):243–7

Cadmium inhibits brain calmodulin: in vitro and in vivo studies. Vig PJ, et al. **Bull Environ Contam Toxicol** 1989 Oct;43(4):541–7

Heterogeneity in response of different areas of rabbit brain to malathion. Vijayakumar TS, et al. **Bull Environ Contam Toxicol** 1990 May;44(5):721–8

Caprine beta-D-mannosidosis: characterization of a model lysosomal storage disorder. Pearce RD, et al. **Can J Vet Res** 1990 Jan;54(1):22–9

Serpin inhibitors of urokinase and thrombin in normal rat brain and the 9L brain tumor: evidence for elevated expression of protease nexin I-like inhibitor and a novel sodium dodecyl sulfate-activated tumor antithrombin. Rao JS, et al. **Cancer Res** 1990 Aug 15;50(16):5039–44

The structure of the asparagine-linked sugar chains of bovine brain ribonuclease. Katoh H, et al. **Carbohydr Res** 1990 Jan 15;195(2):273–93

The effects of X-irradiation, N-ethyl-N-nitrosourea or combined treatment on O6-alkylguanine-DNA alkyltransferase activity in fetal rat brain and liver and the induction of CNS tumours. Stammberger I, et al. **Carcinogenesis** 1990 Feb;11(2):219–22

Inhibition of purified p21ras farnesyl:protein transferase by Cys-AAX tetrapeptides. Reiss Y, et al. **Cell** 1990 Jul 13; 62(1):81–8

Subcellular distribution of soluble and membrane-bound Leu-, Arg- and Asp-beta-naphthylamide-hydrolysing activities in rat brain. Ramirez M, et al. **Cell Mol Biol** 1990; 36(2):175–9

Prenatal haloperidol alters the expression of DNA polymerases in brain regions of neonate rats. Castro R, et al. **Cell Mol Neurobiol** 1990 Jun;10(2):281–9

Enzymatic inactivation of bradykinin by rat brain neuronal perikarya. DelBel EA, et al. **Cell Mol Neurobiol** 1989 Sep; 9(3):379–400

Effective inhibition by pentobarbital of forskolin-stimulated adenylate cyclase activity in rat brain. Dan'ura T, et al. **Chem Pharm Bull (Tokyo)** 1989 Nov;37(11):3142–4

Inhibitory effects of ginsenoside Rg1 and Rb1 on rat brain microsomal Na+,K(+)-ATPase activity. Cao J, et al. **Chung Kuo Yao Li Hsueh Pao** 1990 Jan;11(1):10–4

Seizures in the Mongolian gerbil are related to a deficiency in cerebral glutamine synthetase. Laming PR, et al. **Comp Biochem Physiol [C]** 1989;94(2):399–404

Brain cholinergic enzymes and cortical EEG activity in young and old rats. Sirviö J, et al. **Comp Biochem Physiol [C]** 1989;94(1):277–83

Comparison of the mechanisms of action of insulin and triiodothyronine on the synthesis of cerebroside sulfotransferase in cultures of cells dissociated from brains of embryonic mice. Ferret-Sena V, et al. **Dev Neurosci** 1990;12(2):89–105

Substrate-affinity relationship of succinate dehydrogenase in brain of albino rat during dieldrin toxicity. Reddy GR, et al. **Ecotoxicol Environ Safety** 1989 Oct;18(2):141–4

The ltk receptor tyrosine kinase is expressed in pre-B lymphocytes and cerebral neurons and uses a non-AUG translational initiator. Bernards A, et al. **EMBO J** 1990 Jul;9(7):2279–87

Molecular cloning and expression of glycogen synthase kinase-3/factor A. Woodgett JR. **EMBO J** 1990 Aug; 9(8):2431–8

Expression of tyrosine hydroxylase in cultured brain cells: stimulation with an extractable pituitary cytotropic factor. Porter JC, et al. **Endocrinology** 1990 May;126(5):2474–81

Lipid peroxidation and glutathione peroxidase, glutathione reductase, superoxide dismutase, catalase, and glucose-6-phosphate dehydrogenase activities in FeCl3-induced epileptogenic foci in the rat brain. Singh R, et al. **Epilepsia** 1990 Jan-Feb;31(1):15–26

Differences in dopamine beta-hydroxylase immunoreactivity between the brains of genetically epilepsy-prone and Sprague-Dawley rats. Lauterborn JC, et al. **Epilepsy Res** 1989 Nov-Dec;4(3):161–76

Isolation and characterization of a phosphatidylinositol-glycan-anchor-specific phospholipase D from bovine brain. Hoener MC, et al. **Eur J Biochem** 1990 Jul 5;190(3):593–601

Mapping of glucose and glucose-6-phosphate binding sites on bovine brain hexokinase. A 1H- and 31P-NMR investigation. Jarori GK, et al. **Eur J Biochem** 1990 Feb 22;188(1):9–14

Purification and characterization of bovine brain type I phosphatidylinositol kinase. Morgan SJ, et al. **Eur J Biochem** 1990 Aug 17;191(3):761–7

Isolation of similar rolipram-inhibitable cyclic-AMP-specific phosphodiesterases from rat brain and heart. Némoz G, et al. **Eur J Biochem** 1989 Oct 1;184(3):511–20

Prolyl aminopeptidase from rat brain and kidney. Action on peptides and identification as leucyl aminopeptidase. Turzynski A, et al. **Eur J Biochem** 1990 Jul 5;190(3):509–15

Hypoxic risk in twins assessed by serum creatinine kinase brain isoenzyme measurement. Amato M, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jan-Feb; 34(1–2):73–8

Selective effects of [D-Ser2(O-t-butyl),Leu5]enkephalyl-Thr6 and [D-Ser2(O-t-butyl),Leu5]enkephalyl-Thr6 (O-t-butyl), two new enkephalin analogues, on neurotransmitter release and adenylate cyclase in rat brain slices. De Vries TJ, et al. **Eur J Pharmacol** 1989 Nov 7;170(3):137–43

Effects of lithium ex vivo on the GTP-mediated inhibition of calcium-stimulated adenylate cyclase activity in rat brain. Mørk A, et al. **Eur J Pharmacol** 1989 Sep 22; 168(3):347–54

Region specific regulation of glutamic acid decarboxylase mRNA expression by dopamine neurons in rat brain. Lindefors N, et al. **Exp Brain Res** 1989;77(3):611–20

Relationship of afferent inputs to the lattice of high NADPH-diaphorase activity in the mouse superior colliculus. Wallace MN, et al. **Exp Brain Res** 1989; 78(2):435–45

Effect of postnatal starvation on the 5 alpha-reductase activity of the brain and of the isolated myelin membranes. Melcangi RC, et al. **Exp Clin Endocrinol** 1989;94(3):253–61

Deficiency of kallikrein-like enzyme activities in cerebral tissue of patients with Alzheimer's disease. Aoyagi T, et al. **Experientia** 1990 Jan 15;46(1):94–7

Differential changes in Cu, Zn and Mn superoxide dismutase activity in developing rat brain and liver. Mariucci G, et al. **Experientia** 1990 Jul 15;46(7):753–5

Imaging of human brain creatine kinase activity in vivo [published erratum appears in FASEB J 1990 Mar;4(5):1525] Cadoux-Hudson TA, et al. **FASEB J** 1989 Dec;3(14):2660–6

Internal amino acid sequence analysis of the 80 kDa protein kinase C substrate from rat brain: relationship to the 87 kDa substrate from bovine brain. Erussalimsky JD, et al. **FEBS Lett** 1989 Sep 11;255(1):149–53

Localization of aldolase C mRNA in brain cells. Popovici T, et al. **FEBS Lett** 1990 Jul 30;268(1):189–93

Two different B-type creatine kinase subunits dimerize in a tissue-specific manner. Quest AF, et al. **FEBS Lett** 1990 Mar 26;262(2):299–304

Phosphorylation of chicken brain-type creatine kinase affects a physiologically important kinetic parameter and gives rise to protein microheterogeneity in vivo. Quest AF, et al. **FEBS Lett** 1990 Sep 3;269(2):457–64

Prolonged ischemia differently affects phospholipase C acting against phosphatidylinositol and phosphatidylinositol 4,5-bisphosphate in brain subsynaptosomal fraction. Strosznajder J. **FEBS Lett** 1989 Oct 23;257(1):110–2

Phosphorylation of the skeletal muscle AMP-deaminase by protein kinase C. Tovmasian EK, et al. **FEBS Lett** 1990 Jan 1;259(2):321–3

Developmental regulation of D-beta-hydroxybutyrate dehydrogenase in rat liver and brain. Zhang WW, et al. **FEBS Lett** 1989 Oct 9;256(1–2):71–4

Reduction of adrenochrome by rat liver and brain DT-diaphorase. Bindoli A, et al. **Free Radic Res Commun** 1990;8(4–6):295–8

Effects of N- and C-terminal fragments of substance P on ATPase and monoamine oxidase activities in rat brain. Wojtkowiak R, et al. **Gen Pharmacol** 1990;21(4):403–6

Localization of the muscle, liver, and brain glycogen phosphorylase genes on linkage maps of mouse chromosomes 19, 12, and 2, respectively. Glaser T, et al. **Genomics** 1989 Oct;5(3):510–21

Glutamine synthetase modulation in astrocyte cultures of different mouse brain areas. Khelil M, et al. **GLIA** 1990; 3(1):75–80

Immunohistochemical demonstration of glycogen phosphorylase in rat brain slices. Pfeiffer B, et al. **Histochemistry** 1990;94(1):73–80

Human brain sulphotransferase and glucuronyltransferase. Viani A, et al. **Hum Exp Toxicol** 1990 Mar;9(2):65–9

Effect of anaesthetic ether on lipid peroxidation and superoxide dismutase isozymes of young and adult rat brain. Awasthi S, et al. **Indian J Exp Biol** 1989 Jul;27(7):647–9

Role of liver and brain lysosomal and mitochondrial enzymes in development of delayed neuropathy in hens by 0,0-diisopropyl phosphorofluoridate. Dighe SK, et al. **Indian J Exp Biol** 1989 Sep;27(9):809–12

In vitro effect of lorazepam on Mg2+ and (Na+,K+) ATPases of human foetal brain. Saha UK, et al. **Indian J Exp Biol** 1989 Jan;27(1):44–6

Effects of aspirin and paracetamol on ATPases of human fetal brain: an in vitro study. Sarkar AK, et al. **Indian J Exp Biol** 1989 Sep;27(9):802–4

Effect of phospholipase C treatment on the activity of the particulate cyclic nucleotide phosphodiesterase of rat brain. Azila N, et al. **Int J Biochem** 1989;21(10):1157–9

Purification and properties of beta-N-acetylhexosaminidase A from pig brain. Garcia-Alonso J, et al. **Int J Biochem** 1990;22(6):645–51

Purification and properties of pyruvate kinase type M1 from bovine brain. Terlecki G. **Int J Biochem** 1989;21(9):1053–60

Epidermal growth factor treatment during early postnatal development: glutamine synthetase and glutamate decarboxylase activities in mouse brain. Condorelli D, et al. **Int J Dev Neurosci** 1990;8(1):1–8

The DNA-methylase reaction in evolution and differentiation. Cascio O, et al. **Ital J Biochem** 1990 May-Jun;39(3):164A–165A

Alterations in xenobiotic metabolizing enzymes in brain and liver of rats coexposed to endosulfan and malathion. Srikanth NS, et al. **J Appl Toxicol** 1990 Jun;10(3):157–60

Large-scale purification of bovine brain lactate dehydrogenase by affinity chromatography on immobilized colchicine. Kocha T, et al. **J Biochem (Tokyo)** 1990 Jan; 107(1):138–43

Biochemical and immunological studies on two distinct ganglioside-hydrolyzing sialidases from the particulate fraction of rat brain. Miyagi T, et al. **J Biochem (Tokyo)** 1990 May;107(5):787–93

Purification and characterization of membrane-bound

inositolpolyphosphate 5-phosphatase. Takimoto K, et al. **J Biochem (Tokyo)** 1989 Oct;106(4):684–90

2',3'-cyclic nucleotide-3'-phosphodiesterase in the central nervous system is fatty-acylated by thioester linkage. Agrawal HC, et al. **J Biol Chem** 1990 Jul 15; 265(20):11849–53

A distinct human testis and brain mu-class glutathione S-transferase. Molecular cloning and characterization of a form present even in individuals lacking hepatic type mu isoenzymes. Campbell E, et al. **J Biol Chem** 1990 Jun 5;265(16):9188–93

A novel metalloproteinase associated with brain myelin membranes. Isolation and characterization. Chantry A, et al. **J Biol Chem** 1989 Dec 25;264(36):21603–7

Differential metabolism of diradyl glycerol molecular subclasses and molecular species by rabbit brain diglyceride kinase. Ford DA, et al. **J Biol Chem** 1990 Jul 25; 265(21):12280–6

Molecular cloning of a third isoform of the calmodulin-sensitive plasma membrane Ca2+-transporting ATPase that is expressed predominantly in brain and skeletal muscle. Greeb J, et al. **J Biol Chem** 1989 Nov 5; 264(31):18569–76

Muscle creatine kinase isoenzyme expression in adult human brain. Hamburg RJ, et al. **J Biol Chem** 1990 Apr 15; 265(11):6403–9

Rat brain protein kinase C. Kinetic analysis of substrate dependence, allosteric regulation, and autophosphorylation. Hannun YA, et al. **J Biol Chem** 1990 Feb 15;265(5):2962–72

Synthetic inositol trisphosphate analogs and their effects on phosphatase, kinase, and the release of Ca2+. Hirata M, et al. **J Biol Chem** 1989 Dec 5;264(34):20303–8

Purification and characterization of membrane-bound and cytosolic forms of diacylglycerol kinase from rat brain. Kato M, et al. **J Biol Chem** 1990 Jan 15;265(2):794–800

Tyrosine residues in bovine phospholipase C-gamma phosphorylated by the epidermal growth factor receptor in vitro. Kim JW, et al. **J Biol Chem** 1990 Mar 5; 265(7):3940–3

Purification and properties of D-myo-inositol 1,4,5-trisphosphate 3-kinase from rat brain. Susceptibility to calpain. Lee SY, et al. **J Biol Chem** 1990 Jun 5; 265(16):9434–40

Two different RNA polymerase II initiation complexes can assemble on the rat brain creatine kinase promoter. Mitchell MT, et al. **J Biol Chem** 1990 May 15;265(14):8259–67

Clipsin, a chymotrypsin-like protease in rat brain which is irreversibly inhibited by alpha-1-antichymotrypsin. Nelson RB, et al. **J Biol Chem** 1990 Mar 5;265(7):3836–43

A new transient activator of phosphofructokinase during initiation of rapid glycolysis in brain. Ogush S, et al. **J Biol Chem** 1990 Jul 5;265(19):10943–9

Functional reassembly of the coated vesicle proton pump. Puopolo K, et al. **J Biol Chem** 1990 Sep 5;265(25):14836–41

Polyisoprenylation of Ras in vitro by a farnesyl-protein transferase. Schaber MD, et al. **J Biol Chem** 1990 Sep 5; 265(25):14701–4

Polyphosphoinositides produced by phosphatidylinositol 3-kinase are poor substrates for phospholipases C from rat liver and bovine brain. Serunian LA, et al. **J Biol Chem** 1989 Oct 25;264(30):17809–15

The Na,K-ATPase beta 2 subunit is expressed in rat brain and copurifies with Na,K-ATPase activity. Shyjan AW, et al. **J Biol Chem** 1990 Mar 25;265(9):5166–9

Alternative ribosomal initiation gives rise to chicken brain-type creatine kinase isoproteins with heterogeneous amino termini. Soldati T, et al. **J Biol Chem** 1990 Mar 15; 265(8):4498–506

Tissue-specific expression of four types of rat calmodulin-dependent protein kinase II mRNAs. Tobimatsu T, et al. **J Biol Chem** 1989 Oct 25; 264(30):17907–12

Mitochondrial creatine kinase from chicken brain. Purification, biophysical characterization, and generation of heterodimeric and heterooctameric molecules with subunits of other creatine kinase isoenzymes. Wyss M, et al. **J Biol Chem** 1990 Sep 15;265(26):15900–8

Purification of a novel type of calcium-activated neutral protease from rat brain. Possible involvement in production of the neuropeptide kyotorphin from calpastatin fragments. Yoshihara Y, et al. **J Biol Chem** 1990 Apr 5;265(10):5809–15

Angiotensin-converting enzyme in rat brain and extraneural tissues visualized by quantitative autoradiography using 3H-trandolaprilate. Bardelay C, et al. **J Cardiovasc Pharmacol** 1989 Oct;14(4):511–8

Inhibition of converting enzyme in brain tissue and cerebrospinal fluid of rats following chronic oral treatment with the converting enzyme inhibitors ramipril and Hoe 288. Gohlke P, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 4:S32–6

Preischemic hyperglycemia and postischemic alteration of rat brain pyruvate dehydrogenase activity. Lundgren J, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):536–41

Adenylate cyclase-cyclic AMP-phosphodiesterase system in microdissected brain areas of normotensive and spontaneously hypertensive rats. Bahner U, et al. **J Chem Neuroanat** 1989 Jan-Feb;2(1):45–55

The localization of histidine decarboxylase-immunoreactive cell bodies in the guinea-pig brain. Smits RP, et al. **J Chem Neuroanat** 1990 Mar-Apr;3(2):85–100

Expression of three (and a putative four) protein kinase C genes in brains of rat and rabbit. Young WS 3d. **J Chem Neuroanat** 1988 Jul-Aug;1(4):177–94

Distribution of calcium-activated protease calpain in the rat brain. Perlmutter LS, et al. **J Comp Neurol** 1990 Jun 8; 296(2):269–76

Tyrosine hydroxylase containing neurons lacking aromatic amino acid decarboxylase in the hamster brain. Vincent SR, et al. **J Comp Neurol** 1990 May 8;295(2):290–8

Effect of lead acetate administration on ATPases of brain and its mitochondrial and synaptosomal fractions in adult mice. Bansal MR, et al. **J Environ Pathol Toxicol Oncol** 1989 Dec;9(5–6):411–6

A therapeutic profile of metal chelators in the detoxication of methylmercury chloride inhibited acid and alkaline phosphatases in different areas of the central nervous system of rats. Vinay SD, et al. **J Environ Pathol Toxicol Oncol** 1989 Jul-Aug;9(4):351–9

Blood pressure elevation caused by inhibition of brain glutathione reductase. Murakami E, et al. **J Hypertens Suppl** 1989 Dec;7(6):S24–5

Purification and characterization of calmodulin-stimulated protein kinase II from two-day and adult chicken forebrain. Rostas JA, et al. **J Mol Neurosci** 1989;1(2):93–104

From moclobemide to Ro 19-6327 and Ro 41-1049: the development of a new class of reversible, selective MAO-A and MAO-B inhibitors. Da Prada M, et al. **J Neural Transm Suppl** 1990;29:279–92 (29 ref.)

Subcellular distribution of acetylcholinesterase in Alzheimer's disease: abnormal localization and solubilization. Nakamura S, et al. **J Neural Transm Suppl** 1990;30:13–23

The interactions of monoamine oxidase with some derivatives of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP). Sullivan JP, et al. **J Neural Transm Suppl** 1990;29:269–77

Effects of castration and testosterone treatment on the activity of testosterone-metabolizing enzymes in the brain of male and female zebra finches. Vockel A, et al. **J Neurobiol** 1990 Jul;21(5):808–25

In vivo translocation and down-regulation of protein kinase C following intraventricular administration of tetanus toxin. Aguilera J, et al. **J Neurochem** 1990 Jan;54(1):339–42

Selective complexing of acetylcholinesterase in brain by intravenously administered monoclonal antibody. Brimijoin S, et al. **J Neurochem** 1990 Jan;54(1):236–41

Developmental changes in the activity of enzymes of purine metabolism in rat neuronal cells in culture and in whole brain. Brosh S, et al. **J Neurochem** 1990 May;54(5):1776–81

Kinetics of carboxylmethylation of the charge isoforms of myelin basic protein by protein methyltransferase II. Caamaño CA, et al. **J Neurochem** 1989 Dec;53(6):1883–8

Evidence for a single protein kinase C-mediated phosphorylation site in rat brain protein B-50. Coggins PJ, et al. **J Neurochem** 1989 Dec;53(6):1895–901

Activation of glutamate dehydrogenase by leucine and its nonmetabolizable analogue in rat brain synaptosomes. Erecińska M, et al. **J Neurochem** 1990 Apr;54(4):1335–43

Biochemical study on the critical period for treatment of the mottled brindled mouse. Fujii T, et al. **J Neurochem** 1990 Sep;55(3):885–9

Regulation of Ca2+/calmodulin-dependent protein kinase II by brain gangliosides. Fukunaga K, et al. **J Neurochem** 1990 Jan;54(1):103–9

Separation of brain dolichol kinase from endogenous activating factors: evidence that phospholipid enhances the interaction between enzyme and dolichol. Genain CP, et al. **J Neurochem** 1990 Mar;54(3):855–62

Tissue distribution of human monoamine oxidase A and B mRNA. Grimsby J, et al. **J Neurochem** 1990 Oct; 55(4):1166–9

Calmodulin-binding proteins and calcium/calmodulin-regulated enzyme activities associated with brain actomyosin. Larson RE, et al. **J Neurochem** 1990 Apr;54(4):1288–94

Characterisation of a myristoyl CoA:glycylpeptide N-myristoyl transferase activity in rat brain: subcellular and regional distribution. McIlhinney RA, et al. **J Neurochem** 1990 Jan;54(1):110–7

Glutamate-dependent active-site labeling of brain glutamate decarboxylase. Martin DL, et al. **J Neurochem** 1990 Aug; 55(2):524–32

Glutamate dehydrogenase in cerebellar mutant mice: gene localization and enzyme activity in different tissues. Miret-Duvaux O, et al. **J Neurochem** 1990 Jan;54(1):23–9

An inhibitor of endopeptidase-24.15 blocks the degradation of intraventricularly administered dynorphins. Molineaux CJ, et al. **J Neurochem** 1990 Aug;55(2):611–8

Purification of a phosphatidylinositol 4-phosphate kinase from bovine brain membranes. Moritz A, et al. **J Neurochem** 1990 Jan;54(1):351–4

Degradation of thyrotropin-releasing hormone and luteinising hormone-releasing hormone by enzymes of brain tissue. O'Cuinn G, et al. **J Neurochem** 1990 Jan; 54(1):1–13 (132 ref.)

Localization of endo-oligopeptidase (EC 3.4.22.19) in the rat nervous tissue. Oliveira ES, et al. **J Neurochem** 1990 Oct; 55(4):1114–21

Purification of glycogen phosphorylase from bovine brain and immunocytochemical examination of rat glial primary cultures using monoclonal antibodies raised against this enzyme. Reinhart PH, et al. **J Neurochem** 1990 May; 54(5):1474–83

Specific antiserum and monoclonal antibodies against the taurine biosynthesis enzyme cysteine sulfinate decarboxylase: identity of brain and liver enzyme. Remy A, et al. **J Neurochem** 1990 Mar;54(3):870–9

Brain phospholipase A2 is activated after experimental closed head injury in the rat. Shohami E, et al. **J Neurochem** 1989 Nov;53(5):1541–6

Soluble and particulate forms of the organophosphorus neuropathy target esterase in hen sciatic nerve. Vilanova E, et al. **J Neurochem** 1990 Oct;55(4):1258–65

Dephosphorylation of tau factor by protein phosphatase 2A in synaptosomal cytosol fractions, and inhibition by aluminum. Yamamoto H, et al. **J Neurochem** 1990 Aug; 55(2):683–90

Immunohistochemical detection of phenol sulfotransferase-containing neurons in human brain. Zou JY, et al. **J Neurochem** 1990 Oct;55(4):1154–8

Postmortem changes in mitochondrial respiratory enzymes in brain and a preliminary observation in Parkinson's disease. Mizuno Y, et al. **J Neurol Sci** 1990 Apr;96(1):49–57

Brain regional analysis of NADH-cytochrome C reductase activity in Alzheimer's disease. Zubenko GS, et al. **J Neuropathol Exp Neurol** 1990 May;49(3):206–14

Histochemical visualization of neutral endopeptidase-24.11 (enkephalinase) activity in rat brain: cellular localization and codistribution with enkephalins in the globus pallidus. Back SA, et al. **J Neurosci** 1989 Dec;9(12):4439–55

In situ hybridization histochemistry of Ca2+/calmodulin-dependent protein kinase in developing rat brain. Burgin KE, et al. **J Neurosci** 1990 Jun; 10(6):1788–98

Brain cytochrome oxidase: purification, antibody production, and immunohistochemical/histochemical correlations in the CNS. Hevner RF, et al. **J Neurosci** 1989 Nov; 9(11):3884–98

Carboxypeptidase E (CPE): immunocytochemical localization in the rat central nervous system and pituitary gland. Lynch DR, et al. **J Neurosci** 1990 May;10(5):1592–9

Differential involvement of protein kinase C isozymes in Alzheimer's disease. Masliah E, et al. **J Neurosci** 1990 Jul; 10(7):2113–24

Choline oxidase chemiluminescent assay, after removal of eserine from medium, of acetylcholine released in vitro from brain slices. Prado MA, et al. **J Neurosci Methods** 1990 Mar;31(3):193–6

Neonatal hyperthyroidism in the rat produces an increase in the activity of microperoxisomal marker enzymes coincident with biochemical signs of accelerated myelination. Adamo AM, et al. **J Neurosci Res** 1990 Mar; 25(3):353–9

Glycerophosphorylcholine phosphocholine phosphodiesterase activity of rat brain myelin. Kanfer JN, et al. **J Neurosci Res** 1989 Oct;24(2):231–40

Developmental profile of glutamine synthetase in lines of mice bred for ethanol sensitivity. Sakellaridis N, et al. **J Neurosci Res** 1989 Nov;24(3):391–7

Partial amino acid sequence of calmodulin-independent bovine brain adenylate cyclase. Mirzoeva SF, et al. **J Protein Chem** 1989 Jun;8(3):402–4

On the mechanism of activation of protein kinase FA (an activating factor of ATP.Mg-dependent protein phosphatase) in brain myelin. Yang SD, et al. **J Protein Chem** 1990 Feb;9(1):75–82

Purification and characterization of a Mn2+/phospholipid-dependent protein phosphatase from pig brain membranes. Yu JS, et al. **J Protein Chem** 1989 Aug;8(4):499–517

Estrone sulfatase activity in rat brain and pituitary: effects of gonadectomy and the estrous cycle. Connolly PB, et al. **J Steroid Biochem** 1989 Nov;33(5):1013–8

Kinetic properties of the 5 alpha-reductase of testosterone in the purified myelin, in the subcortical white matter and in the cerebral cortex of the male rat brain. Poletti A, et al. **J Steroid Biochem** 1990 Jan;35(1):97–101

Elevated concentrations of brain-type glycogen phosphorylase in renal cell carcinoma. Takashi M, et al. **Jpn J Cancer Res** 1989 Oct;80(10):975–80

Distinct effects of phosphatidylethanol on three types of rat brain protein kinase C. Asaoka Y. **Kobe J Med Sci** 1989 Aug;35(4):229–37

Three distinct types of rat brain protein kinase C: their molecular heterogeneity and individual enzymological properties. Sekiguchi K. **Kobe J Med Sci** 1989 Jun; 35(3):177–94

Hypophysectomy decreases and growth hormone increases the turnover and mass of rat liver glutamine synthetase. Lin CK, et al. **Life Sci** 1989;45(25):2443–50

Extrapineal N-acetyltransferase activity in rat brain. Paul SM, et al. **Life Sci** 1974 Dec 15;15(12):2135–43

Halothane enhances the phosphorylation of H1 histone and rat brain cytoplasmic proteins by protein kinase C. Tsuchiya M, et al. **Life Sci** 1990;46(11):819–25

Delta 6 desaturase in brain and liver during development and aging. Bourre JM, et al. **Lipids** 1990 Jun;25(6):354–6

Alpha-oxidation of alpha-hydroxyfatty acids in rat brain. Possible involvement of an alpha-peroxylactone. Salim-Hanna M, et al. **Lipids** 1989 Aug;24(8):750–2

Age-dependent change in activities of lysosomal enzymes in rat brain. Nakamura Y, et al. **Mech Ageing Dev** 1989 Dec;50(3):215–25

Effect of age on the modification of brain polyunsaturated fatty acids and enzyme activities by fish oil diet in rats. Suzuki H, et al. **Mech Ageing Dev** 1989 Oct;50(1):17–25

Effects of thiamine deficiency on thiamine-dependent

enzymes in regions of the brain of pregnant rats and their offspring. Fournier H, et al. **Metab Brain Dis** 1990 Jun; 5(2):77–84

Modulation of adenylate cyclase activity by Ca2+, phospholipid–dependent protein kinase in rat brain striatum. Anand–Srivastava MB, et al. **Mol Cell Biochem** 1990 Jan 18;92(1):91–8

Demonstration of an endogenous activator for the Na+, K(+)–ATPase system. Das PK, et al. **Mol Cell Biochem** 1989 Nov 23–Dec 19;91(1–2):123–9

Digitalis receptor sugar binding site characteristics: a model based upon studies of Na+, K(+)–ATPase preparations with differing digitalis sensitivities. From AH, et al. **Mol Cell Biochem** 1990 May 10;94(2):157–65

Similarities and differences between human and rat hexokinases type I. Magnani M, et al. **Mol Cell Biochem** 1990 May 10;94(2):105–11

Brain and muscle creatine kinase genes contain common TA–rich recognition protein–binding regulatory elements. Horlick RA, et al. **Mol Cell Biol** 1990 Sep;10(9):4826–36

Activity profiles of enzymes that control the uracil incorporation into DNA during neuronal development. Focher F, et al. **Mutat Res** 1990 Mar;237(2):65–73

Mummified enzymes. [letter] Weser U, et al. **Nature** 1989 Oct 26;341(6244):696

Carnitine acetyltransferase activity is not changed with age in rat brain and human platelets. Moret C, et al. **Neurobiol Aging** 1990 Jan–Feb;11(1):57–9

Astrocytosis and cathepsin D activity in experimental measles encephalomyelitis. Bever CT Jr, et al. **Neurochem Res** 1990 Jul;15(7):667–71

Developmental changes of calpain and calpastatin in rabbit brain. Blomgren K, et al. **Neurochem Res** 1989 Nov; 14(11):1149–52

Histidine decarboxylase from rat and rabbit brain: partial purification and characterization. Chudomelka PJ, et al. **Neurochem Res** 1990 Jan;15(1):17–24

Enzymatic formation of prostaglandin F2 alpha in human brain. Hayashi H, et al. **Neurochem Res** 1990 Apr; 15(4):385–92

Role of heme oxygenase in heme–mediated inhibition of rat brain Na+–K+–ATPase: protection by tin–protoporphyrin. Levere RD, et al. **Neurochem Res** 1989 Sep;14(9):861–4

Lipid peroxidation as the mechanism of modification of brain 5'–nucleotidase activity in vitro. Mishra OP, et al. **Neurochem Res** 1990 Mar;15(3):237–42

Higher environmental temperature–induced change in synaptosomal acetylcholinesterase activity of brain regions. Mukhopadhyay S, et al. **Neurochem Res** 1990 Mar; 15(3):231–6

Change of tyrosine hydroxylase in the parkinsonian brain and in the brain of MPTP–treated mice as revealed by homospecific activity. Nagatsu T. **Neurochem Res** 1990 Apr;15(4):425–9

Effect of tissue specificity of brain soluble fractions on Na+, K(+)–ATPase activity. Rodríguez de Lores Arnaiz G. **Neurochem Res** 1990 Mar;15(3):289–94

Modulation of ATPase activities in the central nervous system by the S–100 proteins. Simonian A, et al. **Neurochem Res** 1989 Aug;14(8):761–4

Ultracytochemical study of Ca2+–ATPase activity in isolated, superoxide–treated rat brains. Futawatari K, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):369–76

Activity of some lysosomal enzymes and postnatal ontogenetic development of epileptic reactivity in rabbit brain. Hategan D, et al. **Neurol Psychiatr (Bucur)** 1989 Oct–Dec;27(4):305–13

Conserved and variable regions in the subunits of brain type II Ca2+/calmodulin–dependent protein kinase. Bulleit RF, et al. **Neuron** 1988 Mar;1(1):63–72

Distinct patterns of cAMP–dependent protein kinase gene expression in mouse brain. Cadd G, et al. **Neuron** 1989 Jul; 3(1):71–9

Sequences of autophosphorylation sites in neuronal type II CaM kinase that control Ca2(+)–independent activity. Miller SG, et al. **Neuron** 1988 Sep;1(7):593–604

Excitatory amino acids activate calpain I and induce structural protein breakdown in vivo. Siman R, et al. **Neuron** 1988 Jun;1(4):279–87

A study of glutamine synthetase in normal human brain and intracranial tumours. McCormick D, et al. **Neuropathol Appl Neurobiol** 1990 Jun;16(3):205–11

Immunocytochemical alpha–1–antichymotrypsin localization in the experimental brain tumors and at their periphery. Kroh H, et al. **Neuropatol Pol** 1989;27(3):449–55

Further characterization of the substrate specificity of a TRH hydrolysing pyroglutamate aminopeptidase from guinea–pig brain. Elmore MA, et al. **Neuropeptides** 1990 Jan;15(1):31–6

Localization of enkephalinase mRNA in rat brain by in situ hybridization: comparison with immunohistochemical localization of the protein. Wilcox JN, et al. **Neuropeptides** 1989 Aug–Sep;14(2):77–83

Modifying effect of estradiol and progesterone on epileptic activity of the rat brain. Gevorkyan ES, et al. **Neurosci Behav Physiol** 1989 Sep–Oct;19(5):412–5

Localization of alcohol– and aldehyde dehydrogenase in the human spinal cord and brain. Motavkin PA, et al. **Neurosci Behav Physiol** 1990 Jan–Feb;20(1):79–84

Aldehyde dehydrogenase activity in rat cerebral structures. Zimatkin SM. **Neurosci Behav Physiol** 1990 Mar–Apr; 20(2):98–102

Autoradiographic localization of mas proto–oncogene mRNA in adult rat brain using in situ hybridization. Bunnemann B, et al. **Neurosci Lett** 1990 Jul 3;114(2):147–53

Stress reduces in vivo inhibition of monoamine oxidase by phenelzine in rat brain. Clow A, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):331–4

Brain natriuretic peptide stimulates particulate guanylate cyclase activity in selected areas of the rat brain. Israel A, et al. **Neurosci Lett** 1990 Jun 22;114(1):107–12

Post–mortem stability of membrane–associated sialidase activity in brain. Leskawa KC, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):267–72

Differential effects of somatostatin on adenylate cyclase as functional correlate for different brain somatostatin receptor subpopulations. Markstein R, et al. **Neurosci Lett** 1989 Sep 25;104(1–2):13–8

The C57BL/10Bg sps/sps mouse: a mutant with absence–like seizures; neurochemical and behavioral correlates. Ortiz JG, et al. **Neurosci Lett** 1990 Jul 3;114(2):231–6

Increased neuropeptide–converting enzyme activities in cerebrospinal fluid of opiate–tolerant rats. Persson S, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):318–22

2',3'–cyclic nucleotide–3'–phosphodiesterase activity as an index of myelin in the post–mortem brains of patients with Alzheimer's disease. Reinikainen KJ, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):229–32

Regional distribution of ethanol–inducible cytochrome P450 IIE1 in the rat central nervous system. Hansson T, et al. **Neuroscience** 1990;34(2):451–63

Anti–oxidant enzymes in the brain of newborn piglets during ischemia followed by reperfusion. Mishra OP, et al. **Neuroscience** 1990;35(1):211–5

Effect of organic and inorganic mercuric salts on Na+K+ATPase in different cerebral fractions in control and intrauterine growth–retarded rats: alterations induced by serotonin. Chanez C, et al. **Neurotoxicology** 1990 Winter; 10(4):699–706

In vivo pharmacokinetics of aldose reductase inhibitors: 3–fluoro–3–deoxy–D–glucose NMR studies in rat brains. Kwee IL, et al. **NMR Biomed** 1989 Jun;2(1):44–6

Intensification and attenuation of morphine dependence by D–aspartic acid and PLG. Koyuncuoğlu H, et al. **Pharmacol Biochem Behav** 1990 Jan;35(1):47–50

Footshock affects heart and brain MAO and MAO inhibitory activity and open field behavior in rats. Lemoine AP, et al. **Pharmacol Biochem Behav** 1990 May;36(1):85–8

Differences in susceptibility of rat liver and brain sialidases to ethanol and gangliosides. Mathew J, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):797–803

Biochemical and pharmacological evidence for central cholinergic regulation of shock–induced aggression in rats. Ray A, et al. **Pharmacol Biochem Behav** 1989 Apr; 32(4):867–71

The effect of toluene exposure for up to 18 months (78 weeks) on the (Ca2+/Mg2+)ATPase and fluidity of synaptosomal membranes isolated from rat brain. Edelfors S, et al. **Pharmacol Toxicol** 1989 Aug;65(2):140–2

Increased methylation of chloroform extractable products and CTP: cholinephosphate cytidylyltransferase in brain membrane preparations from triethyltin–intoxicated rats. Mages F, et al. **Pharmacol Toxicol** 1989 Oct;65(4):302–5

Influence of ethanol on fetal brain cholinergic enzyme activities. Okonmah AD, et al. **Pharmacology** 1989; 39(6):367–72

Effects of prenatal alcohol on gamma–glutamyl transpeptidase in various brain regions. Reyes E, et al. **Physiol Behav** 1989 Jul;46(1):49–53

Preparation of 4–halo–3–hydroxyanthranilates and demonstration of their inhibition of 3–hydroxyanthranilate oxygenase activity in rat and human brain tissue. Todd WP, et al. **Prep Biochem** 1989;19(2):155–65

Enzymatically active lysosomal proteases are associated with amyloid deposits in Alzheimer brain. Cataldo AM, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3861–5

Ca2+/calmodulin sensitivity may be common to all forms of neural adenylate cyclase. Eliot LS, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9564–8

Immunocytochemical localization of the alpha subspecies of protein kinase C in rat brain. Ito A, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3195–9

Cloning of three human tyrosine phosphatases reveals a multigene family of receptor–linked protein–tyrosine–phosphatases expressed in brain. Kaplan R, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7000–4

Protein kinase C in Saccharomyces cerevisiae: comparison with the mammalian enzyme. Ogita K, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5011–5

Sequence analysis and DNA–protein interactions within the 5' flanking region of the Ca2+/calmodulin–dependent protein kinase II alpha–subunit gene. Sunyer T, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):278–82

Competitive inhibition of mouse brain gamma–aminobutyrate aminotransferase by ATP. Tunnicliff G, et al. **Proc Soc Exp Biol Med** 1989 Oct;192(1):11–5

Localization of neutral endopeptidase–24.11 (enkephalinase) to N–methyl–D–aspartate sensitive cell populations in the rat forebrain. Back SA, et al. **Prog Clin Biol Res** 1990; 328:199–202

Decrease in membrane–bound G4 form of acetylcholinesterase in postmortem Alzheimer brain. Schegg K.M, et al. **Prog Clin Biol Res** 1989;317:437–52

Inhibition of multiple molecular forms of human brain acetylcholinesterase by different types of inhibitors. Bajgar J, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1989;32(4):425–35

Brain type creatine kinase in relation to oxygen desaturation in the blood of children with congenital heart disease. Rossi RF, et al. **Scand J Thorac Cardiovasc Surg** 1990;24(1):75–7

The kinetics of Ins(1,4)P2 dephosphorylation by Ins(1,4)P2 1–phosphatase in bovine brain. Delvaux A, et al. **Second Messengers Phosphoproteins** 1988–89;12(5–6):281–8

Optimal parameters for the histochemical demonstration of acetylcholinesterase in plastic sections of rat brain. Williams LR, et al. **Stain Technol** 1989 Jul;64(4):175–80

Protease activity in brain, nerve, and muscle of hens given neuropathy–inducing organophosphates and a calcium channel blocker. el–Fawal HA, et al. **Toxicol Appl Pharmacol** 1990 Mar 15;103(1):133–42

Molecular determinants of the species–selective inhibition of brain acetylcholinesterase. Kemp JR, et al. **Toxicol Appl Pharmacol** 1990 Jun 15;104(2):246–58

Na+/K(+)–ATPase in rat brain and erythrocytes as a possible target and marker, respectively, for neurotoxicity: studies with chlordecone, organotins and mercury compounds. Maier WE, et al. **Toxicol Lett** 1990 Apr; 51(2):175–88

The effect of bone marrow–derived cells on lysosomal enzyme activity in the brain after marrow engraftment. Taylor RM, et al. **Transplant Proc** 1989 Oct;21(5):3822–3

The mechanism of protein kinase C activation. Huang KP. **Trends Neurosci** 1989 Nov;12(11):425–32 (98 ref.)

Triazophos poisoning in goslings. Quick MP, et al. **Vet Rec** 1990 Jul 14;127(2):40–1

[Development of Ca2(+)–calmodulin activated protein kinase II and cAMP activated protein kinase in the central nervous system] Wang X, et al. **Sheng Li Ko Hsueh Chin Chan** 1990 Jan;21(1):58–60 (18 ref.) **(Chi)**

[Partial purification of galactocerebroside sulfotransferase in the rat brain] Fressinaud C, et al. **C R Acad Sci [III]** 1990; 310(7):303–9 (Eng. Abstr.) **(Fre)**

[Neurochemical perspectives of the function of monoamine oxidases] Riederer P, et al. **Psychiatr Prax** 1989 Aug;16 Suppl 1:7–10 (21 ref.) (Eng. Abstr.) **(Ger)**

[Immunohistological localization of human aldolase A in human neoplastic and non–neoplastic tissues] Koshikawa N, et al. **Gan No Rinsho** 1990 Jul;36(8):871–4 (Eng. Abstr.) **(Jpn)**

[Basic characteristics of rat brain microsomal estradiol 2–hydroxylase] Tsukamoto T. **Nippon Naibunpi Gakkai Zasshi** 1990 Mar 20;66(3):159–67 (Eng. Abstr.) **(Jpn)**

[Xanthine oxidoreductase activity in rat brain tissue: the changes after decapitation] Oka H. **No To Shinkei** 1989 Jun;41(6):575–81 (Eng. Abstr.) **(Jpn)**

[3',5'–cyclic nucleotide phosphodiesterase from human brain] Bobruskin ID, et al. **Biokhimiia** 1989 Sep;54(9):1499–507 (Eng. Abstr.) **(Rus)**

[The effect of Cu2+, Zn2+ cations and biogenic amines on the nuclear poly(ADP–ribose) polymerase activity in the rat brain] Zaalishvili TM, et al. **Biokhimiia** 1990 Apr; 55(4):659–64 (Eng. Abstr.) **(Rus)**

[The heterogeneity of sorbitol dehydrogenase from the cytoplasm of mammalian brain cells] Sudovtsov VE, et al. **Biol Nauki** 1990;(2):35–41 (Eng. Abstr.) **(Rus)**

[Study of expression of Na+,K+–ATPase subunit genes in the human brain using cDNA libraries] Makarevich OI, et al. **Bioorg Khim** 1990 Jan;16(1):52–8 (Eng. Abstr.) **(Rus)**

[A comparative evaluation of the level of sphingomyelinase activity in liver cell nuclei and in the brain] Alesenko AV, et al. **Biull Eksp Biol Med** 1989 Sep;108(9):287–9 (Eng. Abstr.) **(Rus)**

[Effects of alpha tocopherol and free fatty acids on physical properties of lipid matrix and adenylate cyclase activity in rat brain synaptosomes] Gorbunov NV, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):153–5 (Eng. Abstr.) **(Rus)**

[Biochemical and functional changes during immunization of rats with angiotensin II] Komissarova EV, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):181–5 (Eng. Abstr.) **(Rus)**

[Study of xanthine oxidase activity in the brain tissue after administration of dalargin during myoplegia] Korotkina RN, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):145–6 (Eng. Abstr.) **(Rus)**

[Protein kinase C activity in the brain tissue of spontaneously hypertensive rats] Kravtsov GM, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):42–4 (Eng. Abstr.) **(Rus)**

[The relation of tryptophan hydroxylase activity in the brain and the manifestation of catalepsy in mice] Kulikov AV, et al. **Biull Eksp Biol Med** 1989 Sep;108(9):269–71 (Eng. Abstr.) **(Rus)**

[Age–related dynamics of energy metabolism enzymes of neurons and microvessels of the brain in spontaneously hypertensive rats] Sorokoumov VA, et al. **Biull Eksp Biol Med** 1990 May;109(5):512–4 (Eng. Abstr.) **(Rus)**

[Damage to the creatine phosphokinase of rat brain synaptosomes during molecular oxygen activation] Spiricheva NV, et al. **Biull Eksp Biol Med** 1989 Jun;

107(6):680–2 (Eng. Abstr.) (Rus)
[A catalytic component of calmodulin–independent adenylate cyclase from bovine brain. Amino acid sequence of a protein and nucleotide sequence of corresponding cDNA] Lipkin VM, et al. **Dokl Akad Nauk SSSR** 1989; 307(6):1502–6 (Rus)
[The role of poly(ADP–ribose) polymerase in the nerve tissue] Zaalishvili TM, et al. **Dokl Akad Nauk SSSR** 1989; 309(3):737–40 (Rus)
[Significance of diurnal fluctuations of transaminase activity in the organs of rats] Korkach VI, et al. **Gig Sanit** 1990 May;(5):78–80 (Rus)
[The effect of radioprotective preparations on the system of active transport. Mitochondrial ATPase] Gerasimenko IV, et al. **Radiobiologiia** 1990 May–Jun;30(3):420–2 (Eng. Abstr.) (Rus)
[Changes in lactate dehydrogenase activity in chicken tissues in hyperthyreosis in ontogenesis] Batkian GG, et al. **Ukr Biokhim Zh** 1989 Sep–Oct;61(5):51–4 (Eng. Abstr.) (Rus)
[Cathepsin H activity in the human brain and human brain neoplasms] Chernaia VI, et al. **Ukr Biokhim Zh** 1989 Sep–Oct;61(5):47–50 (Eng. Abstr.) (Rus)
[Features of temperature dependence of the Na+,K+–ATPase reaction in normal and tumorous brain tissue] Salum TT, et al. **Ukr Biokhim Zh** 1989 Jul–Aug; 61(4):65–9 (Eng. Abstr.) (Rus)
[Increase in 5'-nucleotidase and decrease in guanylate kinase activity in the brain and liver of irradiated rats] Savitskii IV. **Ukr Biokhim Zh** 1990 Mar–Apr;62(2):110–4 (Eng. Abstr.) (Rus)
[Lipid peroxidation and ATPase activity in synaptosomal and mitochondrial fractions of the brain in hypoxia] Dzhafarov AI, et al. **Vopr Med Khim** 1989 Jul–Aug;35(4):51–6 (Eng. Abstr.) (Rus)
[Properties of monoamine oxidase in the brain of mongolian gerbils during cerebral ischemia] Goroshinskaia IA, et al. **Vopr Med Khim** 1989 Sep–Oct;35(5):112–5 (Eng. Abstr.) (Rus)
[A comparative study of the interaction of the cholinesterase from the brain of the cabbage fly, the acetylcholinesterase from bovine erythrocytes and the butyrylcholinesterase from horse blood serum with organophosphorus inhibitors] Grigor'eva GM, et al. **Zh Evol Biokhim Fiziol** 1990 Mar–Apr;26(2):145–50 (Eng. Abstr.) (Rus)
[Angiotensin converting enzyme activity in parts of the brain, hypophysis and adrenal gland of rabbits one hour after posthemorrhagic hypotension] Hadžikarić N, et al. **Srp Arh Celok Lek** 1987 Apr;115(4):397–406 (Eng. Abstr.) (Scc)
[Angiotensin converting enzyme activity in the brain and plasma after acute hemorrhage] Filipović N, et al. **Med Arh** 1986;40(6):277–81 (Eng. Abstr.) (Ser)
[A fluorimetric method for the determination of brain aminopeptidases] Alba F, et al. **Arch Neurobiol (Madr)** 1989 Jul–Aug;52(4):169–73 (Eng. Abstr.) (Spa)
[Leucine aminopeptidase activity levels in various brain regions in the rat. Effect of the acute administration of lithium] de Gandarias JM, et al. **Arch Neurobiol (Madr)** 1989 Sep–Oct;52(5):221–4 (Eng. Abstr.) (Spa)
[Effect of the acute administration of lithium on various enzymatic activities of the brain] Gandarias JM, et al. **Rev Esp Fisiol** 1989;45 Suppl:29–33 (Eng. Abstr.) (Spa)

GROWTH & DEVELOPMENT

Neurobiochemical alterations in the brain of aging rats. Benešová O, et al. **Act Nerv Super (Praha)** 1989 Oct; 31(3):231–4
Behavioural teratogenic risk of perinatal administration of dexamethasone in combinations with phenoterol. Tejkalová H, et al. **Act Nerv Super (Praha)** 1989 Oct;31(3):226–7
T3 receptor occupancy and T3 levels in plasma and cytosol during rat brain development. Ferreiro B, et al. **Acta Endocrinol (Copenh)** 1990 Jul;123(1):95–9
Establishment of a monoclonal antibody against senile plaques and its application for immunohistological and immunoelectron microscopical studies in the brain of the elderly. Kawasaki H, et al. **Acta Neuropathol (Berl)** 1989; 79(1):44–7
Chronological observations of histological changes, cytochrome oxidase activity and copper level in the brain of the postnatal brindled mouse. Yoshimura N, et al. **Acta Pathol Jpn** 1990 Jun;40(6):383–90
Early experimental influences on serotonin pathways during brain development. Hernández J. **Adv Exp Med Biol** 1990; 265:261–7 (22 ref.)
Behavioral, cellular, and molecular biological studies of aged nonhuman primates. Price DL, et al. **Adv Neurol** 1990; 51:83–9 (42 ref.)
Alterations in gait following ethanol exposure during the brain growth spurt in rats. Meyer LS, et al. **Alcoholism (N Y)** 1990 Feb;14(1):23–7
Monodelphis domestica (grey short–tailed opossum): an accessible model for studies of early neocortical development. Saunders NR, et al. **Anat Embryol (Berl)** 1989;180(3):227–36
Neuronal development in vitamin B6 deficiency. Kirksey A, et al. **Ann N Y Acad Sci** 1990;585:202–18
Undernutrition during the brain growth period of the rat significantly delays the development of processes mediating Pavlovian trace conditioning. Rudy JW, et al. **Behav Neural Biol** 1990 May;53(3):307–20
Comparative neurotoxicity of cadmium in growing and adult rats after repeated administration. Gupta A, et al. **Biochem Int** 1990;21(1):97–105
Structure of chicken aldolase C mRNA and its expression in the liver and brain during development. Ono K, et al. **Biochem Int** 1990;20(5):921–9
Galactosylceramide sulfotransferase, arylsulfatase A and cerebroside sulfatase activity in different regions of developing rat brain. van der Pal RH, et al. **Biochim Biophys Acta** 1990 Mar 12;1043(1):91–6
The significance of early auditory stimulation [letter] Fisch L. **Br J Audiol** 1990 Apr;24(2):141–2
Brain growth patterns in four European cyprinid fish species (Cyprinidae, Teleostei): roach (Rutilus rutilus), bream (Abramis brama), common carp (Cyprinus carpio) and sabre carp (Pelecus cultratus). Brandstätter R, et al. **Brain Behav Evol** 1990;35(4):195–211
Life history of roach, Rutilus rutilus (Cyprinidae, Teleostei). A qualitative and quantitative study on the development of sensory brain areas. Brandstätter R, et al. **Brain Behav Evol** 1989;34(1):35–42
Redistribution of cerebral activity during childhood. Lou H, et al. **Brain Dev** 1990;12(3):301–5
Long–term effect of MPTP in the mouse brain in relation to aging: neurochemical and immunocytochemical analysis. Date I, et al. **Brain Res** 1990 Jun 11;519(1–2):266–76
Autoradiographic analysis of age–dependent changes in serotonin 5–HT2 receptors of the human brain postmortem. Gross–Isseroff R, et al. **Brain Res** 1990 Jun 11; 519(1–2):223–7
Spatial memory deficits in aged rats: contributions of the cholinergic system assessed by ChAT. Luine V, et al. **Brain Res** 1990 Jul 23;523(2):321–4
Sulfonylurea binding sites associated with ATP–regulated K+ channels in the central nervous system: autoradiographic analysis of their distribution and ontogenesis, and of their localization in mutant mice cerebellum. Mourre C, et al. **Brain Res** 1990 Jun 11; 519(1–2):29–43
Epidermal growth factor receptor expression in demented and aged human brain. Styren SD, et al. **Brain Res** 1990 Apr 2;512(2):347–52
Measurement of neuropeptides in the brain and spinal cord of Wobbler mouse: a model for motoneuron disease. Tang F, et al. **Brain Res** 1990 Jun 4;518(1–2):329–33
Long day lengths promote brain growth in meadow voles. Dark J, et al. **Brain Res Dev Brain Res** 1990 May 1; 53(2):264–9
Different rates of functional development in the two visual systems of the chicken revealed by [14C]2–deoxyglucose. Rogers LJ, et al. **Brain Res Dev Brain Res** 1989 Oct 1; 49(2):161–72
The challenge of causality: human nutrition, brain development and mental performance. Susser M. **Bull N Y Acad Med** 1989 Dec;65(10):1032–49; discussion 1085–8
Postnatal changes of cathepsin D activity in rat liver and brain. Dionyssiou–Asteriou A. **Cell Biochem Funct** 1990 Jul;8(3):141–5
Changes of soluble and membrane proteins of rat brain during pre– and postnatal development. Kirazov E, et al. **Cell Mol Biol** 1989;35(6):643–56
Neurodevelopmental models of mental illness [letter] Feinberg I. **Clin Genet** 1990 Jun;37(6):491–2
Comparison of plasticity in sensory and cognitive processing systems. Buchwald JS. **Clin Perinatol** 1990 Mar;17(1):57–66
Effects of complex experience on somatic growth and organ development in rats. Black JE, et al. **Dev Psychobiol** 1989 Nov;22(7):727–52 (89 ref.)
Artificial rearing of rat pups using rat milk. Moore E, et al. **Dev Psychobiol** 1990 Mar;23(2):169–78
Quantitative analysis of eye movements during REM–sleep in developing rats. Van Someren EJ, et al. **Dev Psychobiol** 1990 Jan;23(1):55–61
An 18–kd heparin–binding protein of developing brain that is distinct from fibroblast growth factors. Rauvala H. **EMBO J** 1989 Oct;8(10):2933–41
Comparison of age– and sex–related changes in cell nuclear estrogen–binding capacity and progestin receptor induction in the rat brain. Brown TJ, et al. **Endocrinology** 1990 Jun; 126(6):2965–72
The ontogeny of the rabbit brain glucose transporter. Sadiq F, et al. **Endocrinology** 1990 May;126(5):2417–24
Developmental expression of insulin–like growth factor–II receptor immunoreactivity in the rat central nervous system. Valentino KL, et al. **Endocrinology** 1990 Feb; 126(2):914–20
Ontogenesis of kappa–opioid receptors in rat brain using [3H]U–69593 as a binding ligand [published erratum appears in Eur J Pharmacol 1990 Apr 25;179(3):486] Kitchen I, et al. **Eur J Pharmacol** 1990 Jan 3;175(1):93–6
Hormone–dependent brain development and neuroendocrine prophylaxis. Dörner G. **Exp Clin Endocrinol** 1989 Sep; 94(1–2):4–22 (85 ref.)
Measurement of immunoreactive angiotensin II levels in microdissected brain nuclei from developing spontaneously hypertensive and Wistar Kyoto rats. Meyer JM, et al. **Exp Neurol** 1990 Feb;107(2):164–9
Boundaries during normal and abnormal brain development: in vivo and in vitro studies of glia and glycoconjugates. Steindler DA, et al. **Exp Neurol** 1990 Jul;109(1):35–56
Tissue–specific and differential expression of prothymosin alpha gene during rat development. Dosil M, et al. **FEBS Lett** 1990 Sep 3;269(2):373–6
Multiple GABAA receptor alpha subunit mRNAs revealed by developmental and regional expression in rat, chicken and human brain. Montpied P, et al. **FEBS Lett** 1989 Nov 20;258(1):94–8
Molecular cloning and predicted full–length amino acid sequence of the type I beta isozyme of cGMP–dependent protein kinase from human placenta. Tissue distribution and developmental changes in rat. Sandberg M, et al. **FEBS Lett** 1989 Sep 25;255(2):321–9
Cerebral ornithine decarboxylase levels following gestational exposure to cocaine. Bondy SC, et al. **Int J Dev Neurosci** 1990;8(3):337–41
Prenatal phenytoin exposure decreases neuronal membrane order in rat offspring hippocampus. Vorhees CV, et al. **Int J Dev Neurosci** 1990;8(3):283–8
Age–related changes in uptake and release on L–[3H]noradrenaline in brain slices of senescence accelerated mouse. Zhao XH, et al. **Int J Dev Neurosci** 1990;8(3):267–72
Hormones and brain development. Lancrajan I. **Int J Neurol** 1982–83;16–17:110–9 (44 ref.)
Effect of clonidine early in life on brain morphofunctional deficits induced by neonatal malnutrition in the rat. Soto–Moyano R, et al. **Int J Neurosci** 1989 Nov; 49(1–2):103–13
Isolation and characterization of extremely minor gangliosides, GM1b and GD1 alpha, in adult bovine brains as developmentally regulated antigens. Hirabayashi Y, et al. **J Biol Chem** 1990 May 15;265(14):8144–51
Relationship of c–erbA mRNA content to tissue triiodothyronine nuclear binding capacity and function in developing and adult rats. Strait KA, et al. **J Biol Chem** 1990 Jun 25;265(18):10514–21
Developmental expression of heme oxygenase isozymes in rat brain. Two HO–2 mRNAs are detected. Sun Y, et al. **J Biol Chem** 1990 May 15;265(14):8212–7
Tissue–specific expression, developmental regulation, and chromosomal mapping of the lecithin: cholesterol acyltransferase gene. Evidence for expression in brain and testes as well as liver. Warden CH, et al. **J Biol Chem** 1989 Dec 25;264(36):21573–81
Quantitative morphometric analysis of brain growth using magnetic resonance imaging. Schaefer GB, et al. **J Child Neurol** 1990 Apr;5(2):127–30
Fate of descending interneurons in the metamorphosing brain of an insect, the beetle Tenebrio molitor L. Breidbach O. **J Comp Neurol** 1989 Dec 8;290(2):289–309
Development of retinopetal projections in the cichlid fish, Herotilapia multispinosa. Rusoff AC, et al. **J Comp Neurol** 1990 Apr 15;294(3):431–42
Developmental expression of myelin proteolipid, basic protein, and 2',3'–cyclic nucleotide 3'–phosphodiesterase transcripts in different rat brain regions. Kanfer J, et al. **J Mol Neurosci** 1989;1(1):39–46
Phorbol ester binding sites in human brain: characterization, regional distribution, age–correlation, and alterations in Parkinson's disease. Nishino N, et al. **J Mol Neurosci** 1989; 1(1):19–26
Postnatal changes in muscarinic receptor subtype mRNAs in rat brain and heart. Pinkas–Kramarski R, et al. **J Mol Neurosci** 1989;1(4):209–13
Regulation of microtubule–associated protein 2 (MAP2) mRNA expression during rat brain development. Safaei R, et al. **J Mol Neurosci** 1989;1(3):189–98
Increased uric acid in the developing brain and spinal cord following cytomegalovirus infection. Boyes BE, et al. **J Neurochem** 1989 Dec;53(6):1719–23
Developmental regulation of microtubule–associated protein 2 expression in regions of mouse brain. Crandall JE, et al. **J Neurochem** 1989 Dec;53(6):1910–7
Changes in microtubule–associated protein MAP1B phosphorylation during rat brain development. Fischer I, et al. **J Neurochem** 1990 Jul;55(1):328–33
Development of monoaminergic neurotransmitters in fetal and postnatal rat brain: analysis by HPLC with electrochemical detection. Herregodts P, et al. **J Neurochem** 1990 Sep;55(3):774–9
Changes in the ceramide composition of rat forebrain gangliosides with age. Palestini P, et al. **J Neurochem** 1990 Jan;54(1):230–5
Characterization with antibodies of the gamma–aminobutyric acidA/benzodiazepine receptor complex during development of the rat brain. Vitorica J, et al. **J Neurochem** 1990 Jan;54(1):187–94
Functional imaging of brain maturation in humans using iodine–123 iodoamphetamine and SPECT. Rubinstein M, et al. **J Nucl Med** 1989 Dec;30(12):1982–5
Ubiquitin immunoreactive structures in normal human brains. Distribution and developmental aspects. Dickson DW, et al. **Lab Invest** 1990 Jul;63(1):87–99
Differential target dependence in the developing brain: implications for mental retardation. Ashwell KW. **Med Hypotheses** 1990 May;32(1):67–75 (53 ref.)
Development under the influence of cocaine. I. A comparison of the effects of daily cocaine treatment and resultant undernutrition on pregnancy and early growth in a large population of rats. Wiggins RC, et al. **Metab Brain Dis** 1990 Jun;5(2):85–99
Development under the influence of cocaine. II. Comparison of the effects of maternal cocaine and associated

undernutrition on brain myelin development in the offspring. Wiggins RC, et al. **Metab Brain Dis** 1990 Jun; 5(2):101–9

Differential expression of gamma-aminobutyric acidA receptor subunits. Garrett KM, et al. **Mol Pharmacol** 1990 May;37(5):652–7

A case of senile chorea. Friedman JH, et al. **Mov Disord** 1990;5(3):251–3

Age-related decrease in sympathetic sprouting is primarily due to decreased target receptivity: implications for understanding brain aging. Crutcher KA. **Neurobiol Aging** 1990 May–Jun;11(3):175–83

Antioxidant enzymatic systems in neuronal and glial cell–enriched fractions of rat brain during aging. Geremia E, et al. **Neurochem Res** 1990 Jul;15(7):719–23

NADPH:cytochrome P-450(c) reductase: biochemical characterization in rat brain and cultured neurons and evolution of activity during development. Ghersi-Egea JF, et al. **Neurochem Res** 1989 Sep;14(9):883–7

Regional changes in the concentrations of glutamate, glycine, taurine, and GABA in the vitamin B-6 deficient developing rat brain: association with neonatal seizures. Guilarte TR. **Neurochem Res** 1989 Sep;14(9):889–97

Calpain II activity and calpastatin content in brain regions of 3- and 24-month-old rats. Kenessey A, et al. **Neurochem Res** 1990 Mar;15(3):243–9

Assessment of growth in sudden infant death syndrome. Aranda FJ, et al. **Neuroepidemiology** 1990;9(2):95–105

Regional cerebral blood flow with age: changes in rCBF in childhood. Ogawa A, et al. **Neurol Res** 1989 Sep; 11(3):173–6

Aging and brain weight in Down's syndrome [letter] Solitare GB. **Neurology** 1990 Apr;40(4):729

A diverse set of developmentally regulated proteoglycans is expressed in the rat central nervous system. Herndon ME, et al. **Neuron** 1990 Jun;4(6):949–61

Developmentally regulated expression of specific tau sequences. Kosik KS, et al. **Neuron** 1989 Apr;2(4):1389–97

In situ localization of microtubule-associated protein mRNA in the developing and adult rat brain. Tucker RP, et al. **Neuron** 1989 Mar;2(3):1245–56

Cerebral preamyloid deposits and congophilic angiopathy in aged dogs. Giaccone G, et al. **Neurosci Lett** 1990 Jul 3; 114(2):178–83

Drug abuse and brain development. Proceedings of the Sixth International Neurotoxicology Conference. October 10–14, 1988, Little Rock, Arkansas. **Neurotoxicology** 1989 Fall; 10(3):305–634

Effects of gestational exposure to phencyclidine: distribution and neurochemical alterations in maternal and fetal brain. Ali SF, et al. **Neurotoxicology** 1989 Fall;10(3):383–92

Cellular aspects of brain development. Bayer SA. **Neurotoxicology** 1989 Fall;10(3):307–20 (33 ref.)

Genetic influences on brain growth restriction induced by development exposure to alcohol. Goodlett CR, et al. **Neurotoxicology** 1989 Fall;10(3):321–34

Effects of opiates on brain development. Hammer RP Jr, et al. **Neurotoxicology** 1989 Fall;10(3):475–83 (30 ref.)

Maternal beer drinking: offspring growth and brain myelination. Lancaster FE, et al. **Neurotoxicology** 1989 Fall;10(3):407–15

Assessment of chemically-induced alterations in brain development using assays of neuron- and glia-localized proteins. O'Callaghan JP, et al. **Neurotoxicology** 1989 Fall; 10(3):393–406

1H NMR study of cerebral development in the rat. Bates TE, et al. **NMR Biomed** 1989 Dec;2(5–6):225–9

Docosahexaenoic acid is the preferred dietary n-3 fatty acid for the development of the brain and retina. Anderson GJ, et al. **Pediatr Res** 1990 Jan;27(1):89–97

Undernutrition and overnutrition in the neonatal rat: long-term effects on noradrenergic pathways in brain regions. Seidler FJ, et al. **Pediatr Res** 1990 Feb;27(2):191–7

Differential expression of three gap junction proteins in developing and mature brain tissues. Dermietzel R, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10148–52

Molecular cloning and neurotrophic activities of a protein with structural similarities to nerve growth factor: developmental and topographical expression in the brain. Ernfors P, et al. **Proc Natl Acad Sci U S A** 1990 Jul; 87(14):5454–8

Altered levels of amyloid protein precursor transcripts in the basal forebrain of behaviorally impaired aged rats. Higgins GA, et al. **Proc Natl Acad Sci U S A** 1990 Apr; 87(8):3032–6

Growth and atrophy of neurons labeled at their birth in a song nucleus of the zebra finch. Konishi M, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3538–41

Posttranslational modification of class III beta-tubulin. Lee MK, et al. **Proc Natl Acad Sci U S A** 1990 Sep; 87(18):7195–9

The life cycle of the brain-pituitary-gonad-axis in teleosts. Schreibman MP, et al. **Prog Clin Biol Res** 1990;342:399–408 (22 ref.)

Synapse formation in the developing brain. Kalil RE. **Sci Am** 1989 Dec;261(6):76–9, 82–5

Neuroscientists track nerve development [news] Barinaga M. **Science** 1989 Nov 10;246(4931):756–7

Ontogenetic development of the brain of the platyhelminth Fasciola hepatica. Sukhdeo SC, et al. **Tissue Cell** 1990; 22(1):39–50

[Damage to the development of the rat brain by severe iodine deficiency and the protective effects of thyroid hormone] Hong M, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Aug; 28(8):454–6, 507 (Eng. Abstr.) **(Chi)**

[Maturational changes in cerebral blood flow and metabolism] Ogawa A, et al. **No To Shinkei** 1989 Sep; 41(9):843–50 (55 ref.) **(Jpn)**

[Functional characteristics of the mature and developing brain following neuroimmunization: an analysis of the short-term plasticity of the rat hypothalamus] Zubova OB, et al. **Zh Vyssh Nerv Deiat** 1989 Nov–Dec;39(6):1096–104 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Mast cells and multiple sclerosis: a light and electron microscopic study of mast cells in multiple sclerosis emphasizing staining procedures. Krüger PG, et al. **Acta Neurol Scand** 1990 Jan;81(1):31–6

Ferritin immunohistochemistry as a marker for microglia. Kaneko Y, et al. **Acta Neuropathol (Berl)** 1989;79(2):129–36

Cross-reactivity of monoclonal antibody Leu-19 with some neuroectodermal and other non-immune tissues. Nawrotzki R, et al. **Acta Neuropathol (Berl)** 1990;79(5):520–7

IgG contamination as a source of false positivity in brain-reactive antibodies. Kumar M, et al. **Alzheimer Dis Assoc Disord** 1989 Winter;3(4):230–1

Detection of HLA-DR on microglia in the human brain is a function of both clinical and technical factors. Mattiace LA, et al. **Am J Pathol** 1990 May;136(5):1101–14

Autoantibodies to brain lipids in schizophrenia. Pelonero AL, et al. **Am J Psychiatry** 1990 May;147(5):661–2

Convulsants induce interleukin-1 beta messenger RNA in rat brain. Minami M, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):832–7

Antibody reactivity to brain membrane proteins in serum from schizophrenic patients. Sundin U, et al. **Brain Behav Immun** 1989 Dec;3(4):345–58

Monoclonal antibodies to study the brain in schizophrenia. Honer WG, et al. **Brain Res** 1989 Oct 23;500(1–2):379–83

Patterns of immune rejection of mouse neocortex transplanted into neonatal rat brain, and effects of host immunosuppression. Marion DW, et al. **Brain Res** 1990 Jun 11;519(1–2):133–43

Functional brain asymmetry and murine systemic lupus erythematosus. Neveu PJ, et al. **Brain Res** 1989 Sep 25; 498(1):159–62

Reactive microglia express class I and class II major histocompatibility complex antigens in Alzheimer's disease. Tooyama I, et al. **Brain Res** 1990 Jul 23;523(2):273–80

Membrane channel protein abnormalities and autoantibodies in neurological disease. Kay MM, et al. **Brain Res Bull** 1990 Jan;24(1):105–11

Developmentally regulated epitopes on a neurofilament protein visualized by monoclonal antibodies. Thorey I, et al. **Brain Res Dev Brain Res** 1989 Oct 1;49(2):229–41

Immune system response in Alzheimer's disease. McGeer PL, et al. **Can J Neurol Sci** 1989 Nov;16(4 Suppl):516–27

Observation on anti-brain antibody in serum of 110 epileptics. Xie XK, et al. **Chin Med J [Engl]** 1990 Jan;103(1):71–5

Monoclonal antibodies identify three IgG Fc receptors in normal human central nervous system. Peress NS, et al. **Clin Immunol Immunopathol** 1989 Nov;53(2 Pt 1):268–80

The blood-brain barrier protects foreign antigens in the brain from immune attack. Pollack IF, et al. **Exp Neurol** 1990 May;108(2):114–21

Gastrin-cholecystokinin-like and neuroparsin-like immunoreactivities in the brain and retrocerebral neuroendocrine complex of the cockroach Blattella germanica. Tamarelle M, et al. **Histochemistry** 1990; 93(4):433–8

Fc receptor density, MHC antigen expression and superoxide production are increased in interferon-gamma-treated microglia isolated from adult rat brain. Woodroofe MN, et al. **Immunology** 1989 Nov;68(3):421–6

Autoimmune mechanisms in Parkinson's disease. Sandyk R. **Int J Neurosci** 1989 Oct;48(3–4):369–75

Brain-reactive antibodies and the AIDS dementia complex. Kumar M, et al. **J Acquir Immune Defic Syndr** 1989; 2(5):469–71

Antibody against the C-terminal portion of dystrophin crossreacts with the 400 kDa protein in the pia mater of dystrophin-deficient mdx mouse brain. Ishiura S, et al. **J Biochem (Tokyo)** 1990 Apr;107(4):510–3

Brain-associated small-cell lung cancer antigen (BASCA) is expressed in developing lung: an immunohistochemical and immunoelectron microscopic study. Fukayama M, et al. **J Histochem Cytochem** 1990 Jan;38(1):51–7

Investigations on auto-antibodies in Alzheimer's and Parkinson's diseases, using defined neuronal cultures. Dahlström A, et al. **J Neural Transm Suppl** 1990;29:195–206

Demyelination induced in aggregating brain cell cultures by a monoclonal antibody against myelin/oligodendrocyte glycoprotein. Kerlero de Rosbo N, et al. **J Neurochem** 1990 Aug;55(2):583–7

Lactose- and heparin-inhibitable agglutinin from human fetal brain. Mandal S, et al. **J Neurochem** 1990 Jan;54(1):288–93

New expression of myelomonocytic antigens by microglia and perivascular cells following lethal motor neuron injury. Graeber MB, et al. **J Neuroimmunol** 1990 May; 27(2–3):121–32

Wallerian degeneration induces Ia-antigen expression in the rat brain. Konno H, et al. **J Neuroimmunol** 1989 Dec; 25(2–3):151–9

Class II major histocompatibility complex (MHC) gene expression in the mouse brain is elevated in the autoimmune MRL/Mp-lpr/lpr strain. McIntyre KR, et al. **J Neuroimmunol** 1990 Jun;28(1):39–52

Characterization of brain-reactive autoantibodies in murine models of systemic lupus erythematosus. Narendran A, et al. **J Neuroimmunol** 1989 Sep;24(1–2):113–23

Mapping of the Alz 50 epitope in microtubule-associated proteins tau. Ksiezak-Reding H, et al. **J Neurosci Res** 1990 Mar;25(3):412–9

Immunolabeling of JC virus large T antigen in neonatal hamster brain before tumor formation. Ressetar HG, et al. **Lab Invest** 1990 Mar;62(3):287–96

Limited heterogeneity of rearranged T-cell receptor V alpha transcripts in brains of multiple sclerosis patients. Oksenberg JR, et al. **Nature** 1990 May 24;345(6273):344–6

Demonstrating immune-related antigens in Alzheimer's disease brain tissue. Rogers J, et al. **Neurobiol Aging** 1990 Jul–Aug;11(4):477–9

Antibody against myelin-associated inhibitor of neurite growth neutralizes nonpermissive substrate properties of CNS white matter. Caroni P, et al. **Neuron** 1988 Mar; 1(1):85–96

Spontaneous recovery from the encephalomyelitis in mice caused by street rabies virus. Jackson AC, et al. **Neuropathol Appl Neurobiol** 1989 Sep–Oct;15(5):459–75

Immunohistochemical analysis of brain macrophages in adrenoleukodystrophy. Boutin B, et al. **Neuropediatrics** 1989 Nov;20(4):202–6

Activation of the classical complement pathway in brain tissue of Alzheimer patients. McGeer PL, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):341–6

Sequence of a murine cDNA, pcp-4, that encodes the homolog of the rat brain-specific antigen PEP-19. Chen SL, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1304

Clinical and subclinical involvement of the central nervous system in systemic lupus erythematosus. Denburg JA. **Res Publ Assoc Res Nerv Ment Dis** 1990;68:171–8

The AIDS dementia complex and HIV-1 brain infection: a pathogenetic model of virus-immune interaction. Price RW, et al. **Res Publ Assoc Res Nerv Ment Dis** 1990; 68:269–90 (78 ref.)

Psychiatric perspectives of brain, behavior, and the immune system. Stein M, et al. **Res Publ Assoc Res Nerv Ment Dis** 1990;68:161–9 (32 ref.)

Grafting of fetal pancreata into neonatal rat brain. Huxlin KR, et al. **Transplantation** 1990 May;49(5):857–61

The role of MHC and non-MHC antigens in the rejection of intracerebral allogeneic neural grafts. Rao K, et al. **Transplantation** 1989 Dec;48(6):1018–21

[Interleukin-1 in the human brain] Presl J. **Cesk Gynekol** 1989 Aug;54(7):524–5 **(Cze)**

[Cerebral lateralization and immune response] Neveu PJ. **Encephale** 1989 Jul–Aug;15(4):405–8 (38 ref.) (Eng. Abstr.) **(Fre)**

[Detection of Leu-M1 immunoreactivity in brain tissue and brain tumors] Szymas J, et al. **Zentralbl Allg Pathol** 1990; 136(1–2):171–9 (Eng. Abstr.) **(Ger)**

[Experimental analysis of intracerebral natural resistance against H-2+ and H-2- lymphomas grafted into the brain] Yamasaki T, et al. **No Shinkei Geka** 1989 Aug;17(8):717–23 (Eng. Abstr.) **(Jpn)**

[The detection and quantitative analysis of viral antigens, infiltrating mononuclear cells, IFN-gamma, LT and IL-6 bearing cells in the frozen brain tissue sections from a patient with herpes simplex encephalitis by immunocytochemistry] Nakamura S, et al. **No To Shinkei** 1990 Apr;42(4):377–82 (Eng. Abstr.) **(Jpn)**

[Simultaneous in situ detection of viral antigens and RNA in brain tissues from a patient with herpes simplex encephalitis by immunocytochemistry and in situ hybridization] Nakamura S, et al. **No To Shinkei** 1989 Dec; 41(12):1177–84 (Eng. Abstr.) **(Jpn)**

[An autopsied case of manifesting chorea, serum antibody to brain proteins, neuronal degeneration in striatum and grumose degeneration in dentate nucleus] Ishikawa A, et al. **Rinsho Shinkeigaku** 1990 May;30(5):510–5 (Eng. Abstr.) **(Jpn)**

[Common antigenic structures of the nervous and immune systems] Losy J. **Neuropatol Pol** 1989;27(2):145–50 (Eng. Abstr.) **(Pol)**

[Paramembraneous microfilamentous structures of the synapses of rat cerebral cortex during sensitization by brain antigens] Ereniev SI, et al. **Biull Eksp Biol Med** 1989 Nov; 108(11):624–6 (Eng. Abstr.) **(Rus)**

[Indicators of the autoimmune component in newborn infants with pathology of the central nervous system] Ivanova OV, et al. **Pediatriia** 1989;(9):110 **(Rus)**

[Effects of sera from patients with amyotrophic lateral sclerosis on neural tissue in vivo and in vitro] Gannushkina IV, et al. **Zh Nevropatol Psikhiatr** 1990;90(2):35–8 (Eng. Abstr.) **(Rus)**

[Structural and cytochemical changes in cerebral cortical neurons of the offspring of neurosensitized female rats after prenatal administration of thymalin] Kazakova PB, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):114–7 (Eng. Abstr.) **(Rus)**

[Brain barriers and the problem of autoimmunity in neurology] Nadareishvili ZG, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):3–7 (Eng. Abstr.) **(Rus)**

[Antibodies to galactocerebrosides of the brain in the blood serum of children with neuroinfections] Taranova NP, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):27–31 (Eng. Abstr.) **(Rus)**

METABOLISM

The evaluation of nootropic drug effects in aging rats. Benešová O, et al. **Act Nerv Super (Praha)** 1990 Mar; 32(1):53–5

Biochemical pharmacological profile of migraine prophylactics of pizotifen type. Dlohožková N, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):300–1

The binding characteristics of 3H–terguride in various brain areas. Dobrovský K, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):274–5

Animal model of anxiety: effect of diazepam in the rats with cholinergic supersensitivity and reduced turnover–rate of brain norepinephrine. Golda V, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):297–9

Acetylosalicylic acid and calcium ions. Hrková V, et al. **Act Nerv Super (Praha)** 1989 Jun;31(2):133–4

Relationship between local brain glucose metabolism and maze patrolling in adult and aged rats. Jucker M, et al. **Act Nerv Super (Praha)** 1989 Oct;31(3):161–5

Pharmacokinetics of piracetam in plasma and brain. Lapka R, et al. **Act Nerv Super (Praha)** 1990 Mar;32(1):58–9

Clomipramine and clomipramine–analgesic combinations in rats: antinociceptive activity, behavioral changes, brain serotonin and noradrenaline. Opavský J, et al. **Act Nerv Super (Praha)** 1990 Jun;32(2):149–51

Pathogenic mechanism of alcohol withdrawal syndrome in CNS. II. Sklenovský A, et al. **Act Nerv Super (Praha)** 1989 Jun;31(2):129–31

Protective effect of nifedipine, cinnarizine and dilthiazem against stress elevation of nonesterified fatty acids in brain. Sklenovský A, et al. **Act Nerv Super (Praha)** 1990 Jun; 32(2):151–2

Stress–induced changes in brain level of biogenic amines modified by an indigenous drug. Upadhyay L, et al. **Act Nerv Super (Praha)** 1990 Jun;32(2):128–9

Continuous conjunctival oxygen tension (PcjO2) monitoring for assessment of cerebral oxygenation and metabolism during carotid artery surgery. Haljamäe H, et al. **Acta Anaesthesiol Scand** 1989 Oct;33(7):610–6

Immunohistochemical localization of calbindin–D28K in the brain of a cartilaginous fish, the dogfish (Scyliorhinus canicula L.). Rodriguez–Moldes I, et al. **Acta Anat (Basel)** 1990;137(4):293–302

Cation and guanine nucleotide effects on ligand binding properties of mu and delta opioid receptors in rat brain membranes. Benyhe S, et al. **Acta Biochim Biophys Hung** 1989;24(1–2):69–81

Cyclic AMP influences protein synthesis in larval brains of Drosophila melanogaster. Friedrich P, et al. **Acta Biochim Biophys Hung** 1989;24(1–2):61–8

Metabolic fuel and amino acid transport into the brain in experimental hypothyroidism. Mooradian AD. **Acta Endocrinol (Copenh)** 1990 Feb;122(2):156–62

[125I]melatonin binding sites in membrane preparations of quail brain: characteristics and diurnal variations. Yuan H, et al. **Acta Endocrinol (Copenh)** 1990 May;122(5):633–9

Phospholipid and ganglioside composition in rat cerebral cortex and cerebral white matter after chronic diazepam treatment. Vrbaški SR, et al. **Acta Med Iugosl** 1990; 44(3):197–204

Is it advisable to use sorbitans in the investigation of the brain mechanisms? Romaniuk A, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(5):249–54

Serotonin depletion with P–chlorophenylalanine in the cat: effects on carbachol–induced defensive behavior and regional brain amine content. Romaniuk A, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(4):130–40

Persistent metabolic sequelae of severe head injury in humans in vivo. Cadoux–Hudson TA, et al. **Acta Neurochir (Wien)** 1990;104(1–2):1–7

Cerebral circulation and metabolism in adults' moyamoya disease—PET study. Taki W, et al. **Acta Neurochir (Wien)** 1989;100(3–4):150–4

Uptake of adriamycin in tumour and surrounding brain tissue in patients with malignant gliomas. von Holst H, et al. **Acta Neurochir (Wien)** 1990;104(1–2):13–6

Epilepsy and the GABA–hypothesis a brief review and some examples. De Deyn PP, et al. **Acta Neurol Belg** 1990; 90(2):65–81 (70 ref.)

Regional glucose phosphorylation rate in rat brain during acute ethanol intoxication. Brøndsted HE, et al. **Acta Neurol Scand** 1990 Mar;81(3):229–32

Decreased myelin lipids in Alzheimer's disease and vascular dementia. Wallin A, et al. **Acta Neurol Scand** 1989 Oct; 80(4):319–23

Magnesium concentration in brains from multiple sclerosis patients. Yasui M, et al. **Acta Neurol Scand** 1990 Mar; 81(3):197–200

The mRNA encoding the scrapie agent protein is present in a variety of non–neuronal cells. Brown HR, et al. **Acta Neuropathol (Berl)** 1990;80(1):1–6

Ubiquitin and phosphorylated neurofilament epitopes in ballooned neurons of the extraocular muscle nuclei in a case of Werdnig–Hoffmann disease. Kato S, et al. **Acta Neuropathol (Berl)** 1990;80(3):334–7

Immunohistological study of senile brains by using a monoclonal antibody recognizing beta amyloid precursor protein: significance of granular deposits in relation with senile plaques. Takahashi H, et al. **Acta Neuropathol (Berl)** 1990;80(3):260–5

Topographic heterogeneity of amyloid B–protein epitopes in brains with various forms of neuronal ceroid lipofuscinoses suggesting defective processing of amyloid precursor protein. Wisniewski KE, et al. **Acta Neuropathol (Berl)** 1990;80(1):26–34

Lectin histochemistry in brains with juvenile form of neuronal ceroid–lipofuscinosis (Batten disease). Wisniewski KE, et al. **Acta Neuropathol (Berl)** 1990;80(3):274–9

Effects of drugs and fatty acids related to Reye syndrome on brain water content in rats. Katafuchi Y, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Apr;31(2):115–9

Heterogeneity, distribution and endogenous phosphate content of KCl–myosins prepared from different parts of human brain. Fazekas S, et al. **Acta Physiol Hung** 1989; 73(4):403–16

Post–mortem changes of neurotransmitter concentrations in the rat brain regions. Siddiqui A, et al. **Acta Physiol Hung** 1990;75(3):179–85

Mechanisms subserving brain water–electrolyte homeostasis. Szczepańska–Sadowska E. **Acta Physiol Pol** 1989 May–Jun; 40(3):301–18 (47 ref.)

The role of brain ECF sodium and angiotensin II in sodium appetite. Weisinger RS, et al. **Acta Physiol Pol** 1989 May–Jun;40(3):293–300 (31 ref.)

Physical exercise and brain monoamines: a review. Chaouloff F. **Acta Physiol Scand** 1989 Sep;137(1):1–13 (99 ref.)

On the cellular localization and distribution of the ganglioside GM1 in the rat brain as revealed by immunofluorescence histochemistry of cholera toxin binding sites. Fuxe K, et al. **Acta Physiol Scand** 1989 Dec;137(4):551–2

Localization of [125I]endothelin–1 and [125I]endothelin–3 binding sites in the rat brain. Fuxe K, et al. **Acta Physiol Scand** 1989 Dec;137(4):563–4

Intraventricular injection of neurotensin reduces the binding of dopamine D–2 receptors in the rat forebrain. von Euler G, et al. **Acta Physiol Scand** 1989 Oct;137(2):309–10

Regional distribution of serotonergic pre– and postsynaptic markers in human brain. Laruelle M, et al. **Acta Psychiatr Scand Suppl** 1989;350:56–9

Effects of single administration of scopolamine, physostigmine and their combination on biogenic amine levels in rat brain. Hrbek J, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;121:271–5

The effect of delta–9–tetrahydrocannabinol (delta–9–THC) on the release of nonesterified fatty acids in various brain structures. Sklenovský A, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;122:83–9

The effect of phospholipase A2 and cyclooxygenase inhibition on free fatty acids in the brain. Sklenovský A, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;121:253–60

Mechanism of psychotropic effect of toluene. Sklenovský A, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;121:261–6

In vivo metabolism and UTP–depleting action of 2–deoxy–2–fluoro–D–galactose. Grün BR, et al. **Adv Enzyme Regul** 1990;30:231–42

Ontogeny of the glucocorticoid receptor in the rat brain. Alexis MN, et al. **Adv Exp Med Biol** 1990;265:269–76 (27 ref.)

Development of NILE glycoprotein in chick brain. Batistatou A, et al. **Adv Exp Med Biol** 1990;265:141–6

Lesch–Nyhan syndrome: reduced amino acid concentrations in CSF and brain. Harkness RA. **Adv Exp Med Biol** 1989; 253A:159–63

Localization of the normal cellular src protein to the growth cone of differentiating neurons in brain and retina. Maness PF, et al. **Adv Exp Med Biol** 1990;265:117–25 (26 ref.)

Hypoxanthine accumulation and dopamine depletion in Lesch–Nyhan disease. Palmour RM, et al. **Adv Exp Med Biol** 1989;253A:165–72

Comparison between rat brain calbindin– and calretinin–immuno–reactivities. Résibois A, et al. **Adv Exp Med Biol** 1990;269:211–4

Regulation of the glial fibrillary acidic protein (GFAP) and of its encoding mRNA in the developing brain and in cultured astrocytes. Tardy M, et al. **Adv Exp Med Biol** 1990;265:41–52 (67 ref.)

Role for aluminum and silicon in the pathogenesis of senile plaques: studies in chronic renal dialysis. Edwardson JA, et al. **Adv Neurol** 1990;51:223–6

Effects of nicotinamide on choline and acetylcholine levels in rats. Jenden DJ, et al. **Adv Neurol** 1990;51:131–8

Neurochemical actions of "nootropic drugs". Pepeu G, et al. **Adv Neurol** 1990;51:247–52

Dietary choline: a limiting factor for the synthesis of acetylcholine by the brain. Wecker L. **Adv Neurol** 1990; 51:139–45 (45 ref.)

The role of ferritin and hemosiderin in the MR appearance of cerebral hemorrhage: a histopathologic biochemical study in rats. Thulborn KR, et al. **AJR Am J Roentgenol** 1990 May;154(5):1053–9

Ethanol may stimulate or inhibit (Na+ + K+)–ATPase, depending upon Na+ and K+ concentrations. Foster DM, et al. **Alcohol** 1989 Nov–Dec;6(6):437–43

Pyridoxal 5'–phosphate and pyridoxamine 5'–phosphate concentrations in blood and tissues of mice fed ethanol–containing liquid diets. Leibman D, et al. **Alcohol** 1990 Jan–Feb;7(1):61–8

Ethanol and inositol 1,4,5–trisphosphate mobilize calcium from rat brain microsomes. Machu T, et al. **Alcohol** 1989 Nov–Dec;6(6):431–6

Effects of thiamine deficiency on brain metabolism: implications for the pathogenesis of the Wernicke–Korsakoff syndrome. Butterworth RF. **Alcohol Alcohol** 1989;24(4):271–9 (47 ref.)

The effects of mercuric chloride on calmodulin–mediated Ca2+ transport in rat brain. Clifton GG, et al. **Am J Med Sci** 1990 Jan;299(1):26–31

Differential cholecystokinin gene expression in brain and gut of the fasted rat. Greenstein RJ, et al. **Am J Med Sci** 1990 Jan;299(1):32–7

The "normal" brain. "Abnormal" ubiquitinilated deposits highlight an age–related protein change. Pappolla MA, et al. **Am J Pathol** 1989 Oct;135(4):585–91

Astrocytes in Alzheimer's disease gray matter express alpha 1–antichymotrypsin mRNA. Pasternack JM, et al. **Am J Pathol** 1989 Nov;135(5):827–34

Immunoreactive A4 and gamma–trace peptide colocalization in amyloidotic arteriolar lesions in brains of patients with Alzheimer's disease. Vinters HV, et al. **Am J Pathol** 1990 Aug;137(2):233–40

Brain pH in acute isocapnic metabolic acidosis and hypoxia: a 31P–nuclear magnetic resonance study. Adler S, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):F34–40

Brain histamine regulates pressor responses to peripheral hyperosmolality. Akins VF, et al. **Am J Physiol** 1990 Sep; 259(3 Pt 2):R507–13

Binding of bumetanide to microsomes from optic ganglia of the squid, Loligo pealei. Altamirano AA, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C933–43

Distribution of atrial natriuretic peptide receptor subtypes in rat brain. Brown J, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):R1078–83

Autoradiographic localization of atrial and brain natriuretic peptide receptors in rat brain. Brown J, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R57–63

Cerebral blood flow and energy metabolism during stress. Bryan RM Jr. **Am J Physiol** 1990 Aug;259(2 Pt 2):H269–80 (97 ref.)

Relationship between energy expenditure and ion channel density in the turtle and rat brain. Edwards RA, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1354–8

Differential regulation of corticotropin–releasing hormone mRNA in rat brain. Frim DM, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):E686–92

D–[U–11C]glucose uptake and metabolism in the brain of insulin–dependent diabetic subjects. Gutniak M, et al. **Am J Physiol** 1990 May;258(5 Pt 1):E805–12

Characterization of the major brain osmolytes that accumulate in salt–loaded rats. Heilig CW, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):F1108–16

An in vivo examination of rat brain during sepsis with 31P–NMR spectroscopy. Hotchkiss RS, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):C1055–61

Effects of selenium deficiency on glutathione–induced protection from hyperbaric hyperoxia in rat. Jenkinson SG, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):L393–8

Cerebral metabolic and hormonal activations during hemorrhage in sinoaortic–denervated rats. Kadekaro M, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R305–12

Brain natriuretic peptide binding sites in rats: in vitro autoradiographic study. Konrad EM, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):E246–55

Effects of ischemia on brain blood flow and oxygen consumption of newborn pigs. Leffler CW, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):H1917–26

H2O2 effects on cerebral prostanoids and pial arteriolar diameter in piglets. Leffler CW, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1382–7

Brain glucoprivation and ketoprivation do not promote ingestion in the suckling rat pup. Leshem M, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):R365–75

Effect of Metrazol convulsions on 35S entry into cat central nervous system. Lorenzo AV, et al. **Am J Physiol** 1967 Jun;212(6):1277–87

Turnover of serotonin in brain of an anoxia–tolerant vertebrate, the crucian carp. Nilsson GE. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1308–12

Changes in turtle brain neurotransmitters and related substances during anoxia. Nilsson GE, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R376–84

Cerebral oxidative metabolism in lambs during perinatal period: relationship to electrocortical state. Richardson BS, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1251–7

Thyroxine transport from blood to brain via transthyretin synthesis in choroid plexus. Schreiber G, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):R338–45

Cerebrospinal fluid ionic regulation, cerebral blood flow, and glucose use during chronic metabolic alkalosis. Schröck H, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1220–7

Verapamil corrects abnormalities in norepinephrine metabolism of brain synaptosomes in CRF. Smogorzewski M, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):F1036–41

Turtles and rats: a biochemical comparison of anoxia–tolerant and anoxia–sensitive brains. Suarez RK, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1083–8

Effect of neurotensin on regional cerebral glucose utilization in cold water–restrained rats. Xing LP, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):G591–5

Acetazolamide as a control for CO2–induced panic [letter; comment] Klein DF, et al. **Am J Psychiatry** 1990 May; 147(5):677–8 Comment on: Am J Psychiatry 1989

Aug;146(8):996-1000.
Immunocytochemical analysis of the dopamine system in the brain and spinal cord of the European eel, Anguilla anguilla. Roberts BL, et al. **Anat Embryol (Berl)** 1989; 180(4):401-12
Distribution of neuropeptide Y in the prosencephalon of man and cotton-head tamarin (Saguinus oedipus): colocalization with somatostatin in neurons of striatum and amygdala. Schwartzberg M, et al. **Anat Embryol (Berl)** 1990; 181(2):157-66
Absence of abundant saturable binding sites for halothane or isoflurane in rabbit brain: inhaled anesthetics obey Henry's law. Lockhart SH, et al. **Anesth Analg** 1990 Jul; 71(1):70-2
Cerebrovascular and cerebral metabolic effects of N2O in unrestrained rats. Baughman VL, et al. **Anesthesiology** 1990 Aug;73(2):269-72
The effects of propofol anesthesia on local cerebral glucose utilization in the rat. Dam M, et al. **Anesthesiology** 1990 Sep;73(3):499-505
Brain lactate and neurologic outcome following incomplete ischemia in fasted, nonfasted, and glucose-loaded rats. Hoffman WE, et al. **Anesthesiology** 1990 Jun;72(6):1045-50
Regional cerebral blood flow and glucose utilization during hypothermia in newborn dogs. Palmer C, et al. **Anesthesiology** 1989 Nov;71(5):730-7
A comparison of brain glucose metabolism in diabetes as measured by positron emission tomography or by arteriovenous techniques. Grill V. **Ann Med** 1990 Jun; 22(3):171-6
Intracerebral synthesis of tumor necrosis factor-alpha and interleukin-6 in infectious meningitis. Frei K, et al. **Ann N Y Acad Sci** 1990;594:326-35
The role of gastric contractility and brain thyrotropin-releasing hormone in cold restraint-induced gastric mucosal injury. Garrick T. **Ann N Y Acad Sci** 1990; 597:51-70 (94 ref.)
The role of brain peptides in the pathogenesis of experimental stress gastric ulcers. Hernandez DE. **Ann N Y Acad Sci** 1990;597:28-35 (53 ref.)
Aging-related increases in voltage-sensitive, inactivating calcium currents in rat hippocampus. Implications for mechanisms of brain aging and Alzheimer's disease. Landfield PW, et al. **Ann N Y Acad Sci** 1989;568:95-105
Role of vitamin E in neural tissue. Muller DP, et al. **Ann N Y Acad Sci** 1989;570:146-55
Involvement of the brain noradrenaline system in emotional changes caused by stress in rats. Tanaka M, et al. **Ann N Y Acad Sci** 1990;597:159-74 (87 ref.)
Phosphorus magnetic resonance spectroscopy of patients with mitochondrial cytopathies demonstrates decreased levels of brain phosphocreatine. Eleff SM, et al. **Ann Neurol** 1990 Jun;27(6):626-30
Tau in situ hybridization in normal and Alzheimer brain: localization in the somatodendritic compartment. Kosik KS, et al. **Ann Neurol** 1989 Sep;26(3):352-61
DNA cytosine methylation in brain of patients with Alzheimer's disease. Schwob NG, et al. **Ann Neurol** 1990 Jul;28(1):91-4
Tourette's syndrome: a neurochemical analysis of postmortem cortical brain tissue. Singer HS, et al. **Ann Neurol** 1990 Apr;27(4):443-6
Positron emission tomography in manganese intoxication. Wolters EC, et al. **Ann Neurol** 1989 Nov;26(5):647-51
Interaction between caffeine intake and nutritional status on growing brains in newborn rats. Nakamoto T, et al. **Ann Nutr Metab** 1989;33(2):92-9 (33 ref.)
Measurement of changes in brain water in man by magnetic resonance imaging. Bell BA. **Ann R Coll Surg Engl** 1989 Nov;71(6):375-80
RNA and protein metabolism in the aging brain. Finch CE, et al. **Annu Rev Neurosci** 1990;13:75-88 (100 ref.)
Uptake and retention of mercury in the mouse brain. A comparison of exposure to mercury vapor and intravenous injection of mercuric salt. Berlin M, et al. **Arch Environ Health** 1966 Jan;12(1):33-42
Local cerebral glucose metabolic rates in obsessive-compulsive disorder. Patients treated with clomipramine. Benkelfat C, et al. **Arch Gen Psychiatry** 1990 Sep;47(9):840-8
Cocaine-induced reduction of glucose utilization in human brain. A study using positron emission tomography and [fluorine 18]-fluorodeoxyglucose. London ED, et al. **Arch Gen Psychiatry** 1990 Jun;47(6):567-74
Tyrosine content, influx and accumulation rate, and catecholamine biosynthesis measured in vivo, in the central nervous system and in peripheral organs of the young rat. Influence of neonatal hypo- and hyperthyroidism. Diarra A, et al. **Arch Int Physiol Biochim** 1989 Oct;97(5):317-32
Noradrenergic receptor binding during sleep-waking states in the rat. Tononi G, et al. **Arch Ital Biol** 1990 Jan; 128(1):67-76
Positron emission tomography study in progressive supranuclear palsy. Brain hypometabolic pattern and clinicometabolic correlations. Blin J, et al. **Arch Neurol** 1990 Jul;47(7):747-52
Brain glucose metabolism in postanoxic syndrome. Positron emission tomographic study. DeVolder AG, et al. **Arch Neurol** 1990 Feb;47(2):197-204
Longitudinal study of cerebral metabolic asymmetries and associated neuropsychological patterns in early dementia of the Alzheimer type. Haxby JV, et al. **Arch Neurol** 1990 Jul;47(7):753-60
On cerebral metabolism and aphasia [letter] Mark VW. **Arch Neurol** 1989 Dec;46(12):1271
Neurochemical correlates of major depression in primary dementia. Zubenko GS, et al. **Arch Neurol** 1990 Feb; 47(2):209-14
Regional alterations of brain biogenic amines and GABA/glutamate levels in rats following chronic lead exposure during neonatal development. Shailesh Kumar MV, et al. **Arch Toxicol** 1990;64(4):305-14
Alterations in the metabolism of serotonin and dopamine in the central nervous system of mice displaying a persistent dyskinesia due to crotononitrile or 2-pentenenitrile. Tanii H, et al. **Arch Toxicol** 1990;64(3):231-6
Distribution of three common chlorophenoxyacetic acid herbicides into the rat brain. Tyynelä K, et al. **Arch Toxicol** 1990;64(1):61-5
Effects of nilvadipine on cerebral circulation and metabolism in cats. Isozumi K, et al. **Arzneimittelforschung** 1990 Apr; 40(4):421-4
Cerebral tissue oxygen status and psychomotor performance during lower body negative pressure (LBNP). Glaister DH, et al. **Aviat Space Environ Med** 1990 Feb;61(2):99-105
Regulation of brain-specific transcription of the mouse myelin basic protein gene: function of the NFI-binding site in the distal promoter. Aoyama A, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):648-53
Cerebral oxygen utilization analyzed by the use of oxygen-17 and its nuclear magnetic resonance. Arai T, et al. **Biochem Biophys Res Commun** 1990 May 31;169(1):153-8
The brain-type glucose transporter mRNA is specifically expressed at the blood-brain barrier. Boado RJ, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):174-9
Activation of the phosphorothionate insecticide parathion by rat brain in situ. Chambers JE, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):327-33
Two angiotensin II binding sites in rat brain revealed using [125I]Sar1, Ile8-angiotensin II and selective nonpeptide antagonists. Chang RS, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):813-7
Sequence homology of a canine brain calcium-binding protein with calregulin and the human Ro/SS-A antigen. Collins JH, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):575-9
Identification of a novel inositol phosphate recognition site: specific [3H]inositol hexakisphosphate binding to brain regions and cerebellar membranes. Hawkins PT, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):819-27
Protein kinase C phosphorylates both the light chains and the head portion of the heavy chains of brain myosin. Ikeda N, et al. **Biochem Biophys Res Commun** 1990 Jun 29; 169(3):1191-7
Regional and subcellular distribution of cytochrome P-450-dependent drug metabolism in monkey brain: the olfactory bulb and the mitochondrial fraction have high levels of activity. Iscan M, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):858-63
Partial purification and characterization of GDP dissociation stimulator (GDS) for the rho proteins from bovine brain cytosol. Isomura M, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):652-9
Differential splicing of Alzheimer's disease amyloid A4 precursor RNA in rat tissues: PreA4(695) mRNA is predominantly produced in rat and human brain. Kang J, et al. **Biochem Biophys Res Commun** 1990 Feb 14; 166(3):1192-200
Alternative splicing of mouse brain 2',3'-cyclic-nucleotide 3'-phosphodiesterase mRNA. Kurihara T, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1074-81
Decapitation-induced changes in inositol phosphates in rat brain. Lin TN, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):1294-301
Monospecific antibodies against a synthetic peptide predicted from the alpha-3 nicotinic receptor cDNA inhibit binding of [3H]nicotine to rat brain nicotinic cholinergic receptor. Madhok TC, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):151-7
Abundance of endothelin-3 in rat intestine, pituitary gland and brain. Matsumoto H, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):74-80
Identification by sequence analysis of a second rat brain cDNA encoding the dopamine (D2) receptor. Miller JC, et al. **Biochem Biophys Res Commun** 1990 Jan 15; 166(1):109-12
Molecular identification of receptor for pituitary adenylate cyclase activating polypeptide. Ohtaki T, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):838-44
Coupling of adenosine A1 receptors to a G-protein in coated vesicles isolated from bovine brain: presence of pertussis and cholera toxin substrates. Ros M, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):770-6
Identification of Gly-Pro-Glu (GPE), the aminoterminal tripeptide of insulin-like growth factor 1 which is truncated in brain, as a novel neuroactive peptide. Sara VR, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):766-71
Enzymatic formation of nitrogen oxides from L-arginine in bovine brain cytosol. Schmidt HH, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):284-91
Human and canine gene homologs of porcine brain natriuretic peptide. Seilhamer JJ, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):650-8
Endothelin-3 is a novel neuropeptide: isolation and sequence determination of endothelin-1 and endothelin-3 in porcine brain. Shinmi O, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):587-93
Identification of a potentially neurotoxic pyridinium metabolite of haloperidol in rats. Subramanyam B, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):238-44
Phospholipase C activity reduces free magnesium concentration. Vink R. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):913-8
Decreases in brain protein synthesis elicited by moderate increases in plasma phenylalanine. Wall KM, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):1177-83
Regulation of protein kinase FA (a transmembrane signal of insulin and epidermal growth factor) in the brain. Yang SD, et al. **Biochem Biophys Res Commun** 1990 Jan 15; 166(1):267-72
Fatty acid release in incubations of serum with synaptosome and myelin subfractions of brain. Baker RR, et al. **Biochem Cell Biol** 1990 Jan;68(1):148-53
Modulation of insulin receptors and catecholamines in rat brain in hyperthyroidism and hypothyroidism. Azam M, et al. **Biochem Int** 1990;20(6):1141-8
Antioxidant capacity of allopurinol in biological systems. Fauré M, et al. **Biochem Int** 1990;21(2):357-66
Na(+)- and Cl(-)-dependent [3H]GABA binding to catfish brain particles. King SM, et al. **Biochem Int** 1990; 20(4):821-31
Effect of organophosphates on dopamine and muscarinic receptor binding in rat brain. Naseem SM. **Biochem Int** 1990;20(4):799-806
Calcium binding properties of the beta tubulin subunit from chicken erythrocytes. Serrano L, et al. **Biochem Int** 1989 Aug;19(2):235-46
Glutathione and gamma-glutamyl transpeptidase in the adult female rat brain after intraventricular injection of LHRH and somatostatin. Vali Pasha K, et al. **Biochem Int** 1990; 21(2):209-17
Brain chemiluminescence and oxidative stress in hyperthyroid rats. Adamo AM, et al. **Biochem J** 1989 Oct 1;263(1):273-7
Cerebral metabolism of acetate and glucose studied by 13C-n.m.r. spectroscopy. A technique for investigating metabolic compartmentation in the brain. Badar-Goffer RS, et al. **Biochem J** 1990 Feb 15;266(1):133-9
Liver tryptophan pyrrolase. A major determinant of the lower brain 5-hydroxytryptamine concentration in alcohol-preferring C57BL mice. Badawy AA, et al. **Biochem J** 1989 Dec 1;264(2):597-9
Myelin basic protein is affected by reduced synthesis of myelin proteolipid protein in the jimpy mouse. Fannon AM, et al. **Biochem J** 1990 May 15;268(1):105-10
A 15N-n.m.r. study of cerebral, hepatic and renal nitrogen metabolism in hyperammonaemic rats. Farrow NA, et al. **Biochem J** 1990 Sep 1;270(2):473-81
Detection by chemical cross-linking of bovine brain synapsin I self-association. Font B, et al. **Biochem J** 1989 Dec 15; 264(3):893-9
Manganese and calcium efflux kinetics in brain mitochondria. Relevance to manganese toxicity. Gavin CE, et al. **Biochem J** 1990 Mar 1;266(2):329-34
The occurrence and receptor specificity of endogenous opioid peptides within the pancreas and liver of the rat. Comparison with brain. Khawaja XZ, et al. **Biochem J** 1990 Apr 1;267(1):233-40
Metabolism of hexacosatetraenoic acid (C26:4,n-6) in immature rat brain. Robinson BS, et al. **Biochem J** 1990 Apr 15;267(2):561-4
How does displacement of albumin-bound tryptophan cause sustained increases in the free tryptophan concentration in plasma and 5-hydroxytryptamine synthesis in brain? Salter M, et al. **Biochem J** 1989 Aug 15;262(1):365-8
Solubilization and separation of inositol 1,3,4,5-tetrakisphosphate- and inositol 1,4,5-trisphosphate-binding proteins and metabolizing enzymes in rat brain. Theibert AB, et al. **Biochem J** 1990 Apr 15;267(2):441-5
Induction by 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine of lipid peroxidation in vivo in vitamin E deficient mice. Adams JD Jr, et al. **Biochem Pharmacol** 1990 Jan 1; 39(1):R5-8
Diffusion and absorption of (-)sulpiride and raclopride after intracerebral administration in the rat. Ahlenius S, et al. **Biochem Pharmacol** 1990 Jun 15;39(12):2066-9
Effects of isomers of hydroxyaporphines on dopamine metabolism in rat brain regions. Baldessarini RJ, et al. **Biochem Pharmacol** 1990 Aug 1;40(3):417-23
Interaction of amiloride and its analogues with adenosine A1 receptors in calf brain. Garritsen A, et al. **Biochem Pharmacol** 1990 Aug 15;40(4):827-34
Differential coupling between muscarinic receptors and G-proteins in regions of the rat brain. Ghodsi-Hovsepian S, et al. **Biochem Pharmacol** 1990 Apr 15;39(8):1385-91
Neurotensin(8-13): comparison of novel analogs for stimulation of cyclic GMP formation in neuroblastoma clone N1E-115 and receptor binding to human brain and intact N1E-115 cells. Gilbert JA, et al. **Biochem Pharmacol** 1989 Oct 1;38(19):3377-82
Effect of toluene on rat synaptosomal phospholipid methylation and membrane fluidity. LeBel CP, et al. **Biochem Pharmacol** 1989 Nov 15;38(22):4005-11
Effects of enflurane on 5-hydroxytryptamine transport in synaptosomes from rat brain. Martin DC, et al.

Biochem Pharmacol 1990 Jul 15;40(2):187–92
Comparative in vivo metabolism of 6–[18F]fluoro–L–dopa and [3H]L–dopa in rats. Melega WP, et al. **Biochem Pharmacol** 1990 Jun 15;39(12):1853–60
Lack of effect of chronic aspartame ingestion on aminergic receptors in rat brain. Reilly MA, et al. **Biochem Pharmacol** 1989 Dec 1;38(23):4339–41
Interactions between phencyclidine and nifedipine at 45Ca2(+)–uptake sites on mouse brain neurons. Rice KC, et al. **Biochem Pharmacol** 1990 Jun 1;39(11):1825–7
Further characterization of neurotensin binding in the rat brain: levocabastine–displaceable neurotensin binding sites are not histamine–H1 receptors. Schotte A, et al. **Biochem Pharmacol** 1989 Nov 1;38(21):3891–3
In vivo conversion of gamma–aminobutyric acid and 1,4–butanediol to gamma–hydroxybutyric acid in rat brain. Studies using stable isotopes. Snead OC 3d, et al. **Biochem Pharmacol** 1989 Dec 15;38(24):4375–80
Radioligand labeling of N–methyl–D–aspartic acid (NMDA) receptors by [3H](+–)–3–(2–carboxypiperazin–4–yl)propyl–1–phosphonic acid in brain synaptic membranes treated with Triton X–100. Yoneda Y, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):225–8
Brain microsomes bind ryanodine and contain ryanodine–sensitive calcium channels. Ashley RH. **Biochem Soc Trans** 1989 Dec;17(6):1102–3
Sudden infant death syndrome: pH and lactate in brain. Butterworth J, et al. **Biochem Soc Trans** 1990 Jun; 18(3):439–40
Comparison of purified D2–dopamine receptor from bovine brain and pituitary gland. Chazot PL, et al. **Biochem Soc Trans** 1990 Jun;18(3):432
Characterization of cysteine sulphinate transport by intact rat brain cerebrocortical synaptosome fractions. Grieve A, et al. **Biochem Soc Trans** 1990 Jun;18(3):426–7
Glutamic acid concentration in brains of patients with Alzheimer's disease. Lowe SL, et al. **Biochem Soc Trans** 1990 Jun;18(3):443–4
Inositol hexakisphosphate biosynthesis in mammalian brain: identification of a novel inositol pentakisphosphate kinase. Stanley AF, et al. **Biochem Soc Trans** 1990 Jun;18(3):460–1
5–Hydroxytryptamine and dopamine in pre–senile and senile Alzheimer–type dementia. Yates CM, et al. **Biochem Soc Trans** 1990 Jun;18(3):422–3
Expression of cDNAs encoding wild–type and mutant neuromodulins in Escherichia coli: comparison with the native protein from bovine brain. Au DC, et al. **Biochemistry** 1989 Oct 3;28(20):8142–8
Effect of guanine nucleotides on the hydrophobic interaction of tubulin. Hanssens I, et al. **Biochemistry** 1990 May 29; 29(21):5160–5
Role of the phospholipid environment in modulating the activity of the rat brain synaptic plasma membrane Ca2(+)–ATPase. Hermoni–Levine M, et al. **Biochemistry** 1990 May 22;29(20):4940–50
N–methyl–D–aspartate/phencyclidine receptor complex of rat forebrain: purification and biochemical characterization. Ikin AF, et al. **Biochemistry** 1990 Mar 6;29(9):2290–5
Spontaneous interbilayer transfer of hexosylceramides between phospholipid bilayers. Jones JD, et al. **Biochemistry** 1990 Apr 24;29(16):3892–7
Trifluoperazine binding to porcine brain calmodulin and skeletal muscle troponin C. Massom L, et al. **Biochemistry** 1990 Jan 23;29(3):671–81
Identification of cellular proteins binding to the scrapie prion protein. Oesch B, et al. **Biochemistry** 1990 Jun 19; 29(24):5848–55
Dendrotoxin–binding brain membrane protein displays a K+ channel activity that is stimulated by both cAMP–dependent and endogenous phosphorylations. Rehm H, et al. **Biochemistry** 1989 Jul 25;28(15):6455–60
High–affinity transport of L–glutamine by a plasma membrane preparation from rat brain. Roon RJ, et al. **Biochemistry** 1989 Oct 3;28(20):8083–7
Cross–linking of beta–bungarotoxin to chick brain membranes. Identification of subunits of a putative voltage–gated K+ channel. Schmidt RR, et al. **Biochemistry** 1989 Oct 17;28(21):8346–50
Effect of increasing amounts of dietary fish oil on brain and liver fatty composition. Bourre JM, et al. **Biochim Biophys Acta** 1990 Apr 2;1043(2):149–52
In vitro synthesis and transbilayer movement of phosphatidylethanolamine molecules labelled with different fatty acids in chick brain microsomes. Erhardt A, et al. **Biochim Biophys Acta** 1990 Jan 29;1021(2):126–32
Gangliosides in the human glioma cell line U–118 MG grown in culture or as xenografts in nude rats. Fredman P, et al. **Biochim Biophys Acta** 1990 Aug 6;1045(3):239–44
Developmental patterns in rat brain of phosphatidylinositol synthetic enzymes and phosphatidylinositol transfer protein. Nyquist DA, et al. **Biochim Biophys Acta** 1989 Dec 28;987(2):165–70
Incorporation of spin–labeled fatty acids into bovine brain clathrin coated vesicles. Privat JP, et al. **Biochim Biophys Acta** 1990 Apr 13;1023(2):274–82
Regulation of Ca2+ transport in brain mitochondria. II. The mechanism of the adenine nucleotides enhancement of Ca2+ uptake and retention. Rottenberg H, et al. **Biochim Biophys Acta** 1990 Mar 15;1016(1):87–98
Regulation of Ca2+ transport in brain mitochondria. I. The mechanism of spermine enhancement of Ca2+ uptake and retention. Rottenberg H, et al. **Biochim Biophys Acta** 1990 Mar 15;1016(1):77–86
Specific binding of vasculotropin to bovine brain capillary endothelial cells. Plouet J, et al. **Biochimie** 1990 Jan; 72(1):51–5
Effects of nitrous oxide inactivation of vitamin B12 and of methionine on folate coenzyme metabolism in rat liver, kidney, brain, small intestine and bone marrow. Horne DW. **Biofactors** 1989 Mar;2(1):65–8
Permeability of the normal rat brain, spinal cord and dorsal root ganglia microcirculations to immunoglobulins G. Azzi G, et al. **Biol Cell** 1990;68(1):31–6
Differential expression of 240 kDa ConA–binding glycoprotein in vitro and in vivo detected by immunochemical methods. Barakat I, et al. **Biol Cell** 1989; 66(3):317–26
Taurine in developing brain, liver and muscle in infants. Ghisolfi J, et al. **Biol Neonate** 1989;56(4):186–91
Maternal caffeine ingestion increases the tyrosine level in neonatal rat cerebrum. Tanaka H, et al. **Biol Neonate** 1990; 57(2):133–9
Sertoli cells, proximal convoluted tubules in the kidney, and neurons in the brain contain cyclic protein–2. Zabludoff SD, et al. **Biol Reprod** 1990 Jul;43(1):15–24
Effect of haloperidol withdrawal on somatostatin level and binding in rat brain. Perez–Oso E, et al. **Biosci Rep** 1990 Feb;10(1):15–22
Computer–aided mapping of specific neuronal populations in the human brain. Koh ET, et al. **Biotechniques** 1989 Jun; 7(6):596–602
Cerebral blood flow and metabolism during hypotension induced with sodium nitroprusside. Griffiths DP, et al. **Br J Anaesth** 1974 Sep;46(9):671–9
Changes in brain mitochondrial bioenergetics in protein–deficient rats. Olorunsogo OO. **Br J Exp Pathol** 1989 Dec;70(6):607–19
Muscle biopsy as an indicator for predicting mercury concentrations in the brain [letter] Nylander M, et al. **Br J Ind Med** 1990 Aug;47(8):575–6
Brain glutamate and gamma–aminobutyrate (GABA) metabolism in thiamin–deficient rats. Page MG, et al. **Br J Nutr** 1989 Sep;62(2):245–53
The modulation by chlormethiazole of the GABAA–receptor complex in rat brain. Cross AJ, et al. **Br J Pharmacol** 1989 Sep;98(1):284–90
Inositol phospholipid hydrolysis in human brain; adenosine inhibition of the response to histamine. Kendall DA, et al. **Br J Pharmacol** 1990 May;100(1):37–40
Brain 5–HT uptake sites, labelled with [3H]–paroxetine, in post–mortem samples from depressed suicide victims. Lawrence KM, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:812P
Possible therapeutic effect of naftidrofuryl oxalate on brain energy metabolism after microsphere–induced cerebral embolism. Miyake K, et al. **Br J Pharmacol** 1989 Oct; 98(2):389–96
The mechanism of tetrahydroaminoacridine–evoked release of endogenous 5–hydroxytryptamine and dopamine from rat brain tissue prisms. Robinson TN, et al. **Br J Pharmacol** 1989 Dec;98(4):1127–36
5–HT1D binding sites in porcine brain can be sub–divided by GR43175. Sumner MJ, et al. **Br J Pharmacol** 1989 Sep; 98(1):29–31
Fetal GM1–gangliosidosis: morphological and biochemical studies. Ida H, et al. **Brain Dev** 1989;11(6):394–8
Insulin–like growth factor 1 (IGF–1) receptors in the human brain: quantitative autoradiographic localization. Adem A, et al. **Brain Res** 1989 Dec 4;503(2):299–303
Enhanced extracellular dopamine level may be the fundamental neuropharmacological basis of cross–behavioral sensitization between methamphetamine and cocaine—an in vivo dialysis study in freely moving rats. Akimoto K, et al. **Brain Res** 1990 Jan 22;507(2):344–6
Evaluation of a 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine (MPTP)–treated C57 black mouse model for parkinsonism. Arai N, et al. **Brain Res** 1990 May 7;515(1–2):57–63
Demonstration of high– and low–affinity beta–adrenergic receptors in slide–mounted sections of rat and human brain. Arango V, et al. **Brain Res** 1990 May 14;516(1):113–21
VIP–mRNA is increased in hypertensive rats. Avidor R, et al. **Brain Res** 1989 Dec 4;503(2):304–7
alpha–Methyl–p–tyrosine pretreatment partially prevents methamphetamine–induced endogenous neurotoxin formation. Axt KJ, et al. **Brain Res** 1990 May 7; 515(1–2):269–76
Anatomical mapping of glucose transporter protein and pyruvate dehydrogenase in rat brain: an immunogold study. Bagley PR, et al. **Brain Res** 1989 Oct 16;499(2):214–24
Developmental neurotoxicity of ethanol: in vitro inhibition of muscarinic receptor–stimulated phosphoinositide metabolism in brain from neonatal but not adult rats. Balduini W, et al. **Brain Res** 1990 Apr 2;512(2):248–52
Distribution of estrogen receptors in the brain of the Japanese quail: an immunocytochemical study. Balthazart J, et al. **Brain Res** 1989 Nov 6;501(2):205–14
Cerebral intracellular pH regulation during hypercapnia in unanesthetized rats: a 31P nuclear magnetic resonance spectroscopy study. Barrere B, et al. **Brain Res** 1990 May 21;516(2):215–21
Cholinergic but not GABAergic neuronal markers are decreased in primary neuronal cultures treated with choline mustard. Baskey JC, et al. **Brain Res** 1990 Jun 11; 519(1–2):209–16
Morphine–induced alterations of local cerebral glucose utilization in the basal ganglia of rats. Beck T, et al. **Brain Res** 1989 Sep 18;497(2):205–13
Ablation of the region anterior and ventral to the third ventricle (AV3V region) in the rat does not abolish the release of oxytocin in response to systemic cholecystokinin. Blackburn RE, et al. **Brain Res** 1990 Jan 29;508(1):156–60
Effects of morphine treatment on pro–opiomelanocortin systems in rat brain. Bronstein DM, et al. **Brain Res** 1990 Jun 11;519(1–2):102–11
Binding of atrial and brain natriuretic peptides in brains of hypertensive rats. Brown J, et al. **Brain Res** 1990 Mar 26; 512(1):132–7
Corticotropin–releasing factor receptors in the rabbit brain visualized by in vitro autoradiography. Chai SY, et al. **Brain Res** 1990 Mar 26;512(1):60–9
Purification of the growth–associated protein GAP–43 by reversed phase chromatography: amino acid sequence analysis and cDNA identification. Changelian PS, et al. **Brain Res** 1990 Mar 5;510(2):259–68
Serotonin concentrations and turnover in brains of depressed suicides. Cheetham SC, et al. **Brain Res** 1989 Nov 20; 502(2):332–40
Global reduction in cerebral blood flow and metabolism elicited from intrinsic neurons of fastigial nucleus. Chida K, et al. **Brain Res** 1989 Oct 23;500(1–2):177–92
Progestins affect reproductive behavior and androgen receptor dynamics in male guinea pig brain. Connolly PB, et al. **Brain Res** 1989 Dec 4;503(2):312–6
Adaptation of the quantitative 2–[14C]deoxyglucose method for use in freely moving rats. Crane AM, et al. **Brain Res** 1989 Oct 9;499(1):87–92
Cerebral metabolic effects of sigma ligands in the rat. della Puppa A, et al. **Brain Res** 1989 Dec 29;505(2):283–90
The characterization and regional distribution of neuromedin N–like immunoreactivity in rat brain using a highly sensitive and specific radioimmunoassay. Comparison with the distribution of neurotensin. de Nadai F, et al. **Brain Res** 1989 Oct 23;500(1–2):193–8
Ethanol inhibits NMDA–induced increases in free intracellular Ca2+ in dissociated brain cells. Dildy JE, et al. **Brain Res** 1989 Oct 16;499(2):383–7
Characterization of oxytocin–binding sites in primary rat brain cell cultures. Di Scala–Guenot D, et al. **Brain Res** 1990 Jul 30;524(1):10–6
Catecholamine uptake sites in mouse brain: distribution determined by quantitative [3H]mazindol autoradiography. Donnan GA, et al. **Brain Res** 1989 Dec 11;504(1):64–71
Rolipram induces c–fos protein–like immunoreactivity in ependymal and glial–like cells in adult rat brain. Dragunow M, et al. **Brain Res** 1989 Nov 6;501(2):382–8
Monoamine deficiency in a transgenic (Hprt–) mouse model of Lesch–Nyhan syndrome. Dunnett SB, et al. **Brain Res** 1989 Nov 6;501(2):401–6
An autoradiographic study of the uptake and distribution of iron by the brain of the young rat. Dwork AJ, et al. **Brain Res** 1990 Jun 4;518(1–2):31–9
Effect of prenatal and neonatal chronic exposure to phenobarbital on central and peripheral benzodiazepine receptors. Fares F, et al. **Brain Res** 1990 Jan 1;506(1):115–9
Development of tolerance in brain mitochondria for calcium uptake following chronic ethanol ingestion. Farrar RP, et al. **Brain Res** 1989 Oct 23;500(1–2):374–8
Effects of long–term theophylline treatment on adenosine A1–receptors in rat brain: autoradiographic evidence for increased receptor number and altered coupling to G–proteins. Fastbom J, et al. **Brain Res** 1990 Jan 22; 507(2):195–9
Phosphorylation of Tau proteins: a major event during the process of neurofibrillary degeneration. A comparative study between Alzheimer's disease and Down's syndrome. Flament S, et al. **Brain Res** 1990 May 14;516(1):15–9
Time courses of behavioral and regional cerebral metabolic responses to different doses of meta–chlorophenylpiperazine in awake rats. Freo U, et al. **Brain Res** 1990 Mar 19;511(2):209–16
Induction of myelin–associated glycoprotein mRNA in experimental remyelination. Fujita N, et al. **Brain Res** 1990 Apr 9;513(1):152–5
Distribution of galanin–like immunoreactivity in the human brain. Gentleman SM, et al. **Brain Res** 1989 Dec 29; 505(2):311–5
Regional changes in brain dopamine and serotonin metabolism induced by conditioned circling in rats: effects of water deprivation, learning and individual differences in asymmetry. Glick SD, et al. **Brain Res** 1989 Dec 18; 504(2):231–7
Sphenopalatine ganglion stimulation increases regional cerebral blood flow independent of glucose utilization in the cat. Goadsby PJ. **Brain Res** 1990 Jan 1;506(1):145–8
Sodium–dependent D–aspartate 'binding' is not a measure of presynaptic neuronal uptake sites in an autoradiographic assay. Greenamyre JT, et al. **Brain Res** 1990 Mar 19; 511(2):310–8
c–pathway polysialogangliosides in the nervous tissue of vertebrates, reacting with the monoclonal antibody Q211. Greis C, et al. **Brain Res** 1990 May 28;517(1–2):105–10
Autoradiographic analysis of [3H]ketanserin binding in the human brain postmortem: effect of suicide. Gross–Isseroff R, et al. **Brain Res** 1990 Jan 22;507(2):208–15

Identification of MARPP (14–20), morphine- and cyclic AMP-regulated phosphoproteins of 14–20 kDa, as myelin basic proteins: evidence for their acute and chronic regulation by morphine in rat brain. Guitart X, et al. **Brain Res** 1990 May 14;516(1):57–65

Effects of prolonged administration of triazolam on adenosine A1 and A2 receptors in the brain of rats. Hawkins M, et al. **Brain Res** 1989 Dec 25;505(1):141–4

Application of potassium chloride to the brain surface induces the c-fos proto-oncogene: reversal by MK-801. Herrera DG, et al. **Brain Res** 1990 Feb 26;510(1):166–70

Behavioral, hormonal and neurochemical characteristics of aggressive alpha-mice. Hilakivi LA, et al. **Brain Res** 1989 Nov 13;502(1):158–66

A radiohistochemical measure of [3H]TCP binding to the activated NMDA-receptor-gated ion channel in rat brain. Hosford DA, et al. **Brain Res** 1990 May 21;516(2):192–200

Biochemical and behavioral evidence for muscarinic autoreceptors in the CNS. Hoss W, et al. **Brain Res** 1990 May 28;517(1–2):195–201

A retrograde transport method for mapping zinc-containing fiber systems in the brain. Howell GA, et al. **Brain Res** 1990 May 7;515(1–2):277–86

Neostigmine-induced hyperglycemia is mediated by central muscarinic receptor in fed rats. Iguchi A, et al. **Brain Res** 1990 Jan 22;507(2):295–300

Prenatal stress has long-term effects on brain opiate receptors. Insel TR, et al. **Brain Res** 1990 Mar 12; 511(1):93–7

Brain neuropeptide Y in the control of adrenocorticotropic hormone secretion in the dog. Inui A, et al. **Brain Res** 1990 Mar 5;510(2):211–5

Anomalous accumulation of tau and ubiquitin immunoreactivities in rat brain caused by protease inhibition and by normal aging: a clue to PHF pathogenesis? Ivy GO, et al. **Brain Res** 1989 Oct 2; 498(2):360–5

Metabolic action of N-methyl-D-aspartate in newborn rat brain ex vivo: 31p magnetic resonance spectroscopy. Jacquin T, et al. **Brain Res** 1989 Sep 18;497(2):296–304

Regional differences in the activation of synaptosomal mitochondrial Ca2+ uptake by spermine in rat brain. Jensen J, et al. **Brain Res** 1990 Jul 23;523(2):313–5

Corticosterone-dependent alterations in utilization of catecholamines in discrete areas of rat brain. Jhanwar-Uniyal M, et al. **Brain Res** 1989 Oct 23; 500(1–2):247–55

Estrogen effects on the tuberoinfundibular dopaminergic system in the female rat brain. Jones EE, et al. **Brain Res** 1990 Feb 26;510(1):84–91

Characterization of [125I]HEAT binding to alpha 1-receptors in human brain: assessment in aging and Alzheimer's disease. Kalaria RN. **Brain Res** 1989 Nov 6; 501(2):287–94

Binding of [3H]p-aminoclonidine to two sites, alpha 2-adrenoceptors and imidazoline binding sites: distribution of imidazoline binding sites in rat brain. Kamisaki Y, et al. **Brain Res** 1990 Apr 23;514(1):15–21

Allopurinol inhibits uric acid accumulation in the rat brain following focal cerebral ischemia. Kanemitsu H, et al. **Brain Res** 1989 Oct 16;499(2):367–70

Corticotropin-releasing factor immunoreactive neurons persist throughout the brain in Alzheimer's disease. Kelley M, et al. **Brain Res** 1989 Nov 6;501(2):392–6

D-, L- and DL-fenfluramine cause long-lasting depletions of serotonin in rat brain. Kleven MS, et al. **Brain Res** 1989 Dec 29;505(2):351–3

Regional changes of tissue pH and ATP content in rat brain following systemic administration of kainic acid. Kobayashi S, et al. **Brain Res** 1990 Apr 30;514(2):352–4

Effects of high-dose methamphetamine administration on serotonin uptake sites in rat brain measured using [3H]cyanoimipramine autoradiography. Kovachich GB, et al. **Brain Res** 1989 Dec 25;505(1):123–9

Distribution of glucocorticoid receptor-like immunoreactivity in the brain, and its relation to CRF and ACTH immunoreactivity in the hypothalamus of the japanese quail, Coturnix coturnix japonica. Kovács KJ, et al. **Brain Res** 1989 Dec 29;505(2):239–45

Metabolic alterations in discrete regions of the rat brain during development of spontaneous hypertension. Krukoff TL, et al. **Brain Res** 1989 Oct 9;499(1):1–6

Quantitative analysis of glutathione in rat central nervous system: comparison of GSH in infant brain with that in adult brain. Kudo H, et al. **Brain Res** 1990 Mar 19; 511(2):326–8

Effects of unilateral intrahippocampal injection of MK-801 upon local cerebral glucose utilisation in conscious rats. Kurumaji A, et al. **Brain Res** 1990 Jun 4;518(1–2):342–6

Effects of NMDA antagonists, MK-801 and CPP, upon local cerebral glucose use. Kurumaji A, et al. **Brain Res** 1989 Sep 4;496(1–2):268–84

Effect of D-fenfluramine on serotonin release in brains of anaesthetized rats. Laferrere B, et al. **Brain Res** 1989 Dec 18;504(2):258–63

Binding sites for [3H]AF-DX 116 and effect of AF-DX 116 on endogenous acetylcholine release from rat brain slices. Lapchak PA, et al. **Brain Res** 1989 Sep 4;496(1–2):285–94

Local cerebral glucose utilization following subacute and chronic diazepam pretreatment: differential tolerance. Laurie DJ, et al. **Brain Res** 1989 Dec 11;504(1):101–11

Obesity-prone and -resistant rats differ in their brain [3H]paraminoclonidine binding. Levin BE. **Brain Res** 1990 Mar 26;512(1):54–9

Cerebrovascular and metabolic perturbations in delayed heavy charged particle radiation injury. Lo EH, et al. **Brain Res** 1989 Dec 11;504(1):168–72

Central action of psychomotor stimulants on glucose utilization in extrapyramidal motor areas of the rat brain. London ED, et al. **Brain Res** 1990 Mar 26;512(1):155–8

Atrial natriuretic polypeptide attenuates central angiotensin II-induced catecholamine and ACTH secretion. Makino S, et al. **Brain Res** 1989 Oct 30;501(1):84–9

The effects of monoamine uptake inhibitors and methamphetamine on neostriatal 6-hydroxydopamine (6-OHDA) formation, short-term monoamine depletions and locomotor activity in the rat. Marek GJ, et al. **Brain Res** 1990 May 14;516(1):1–7

Cerebral glucose utilization during diazepam withdrawal in rats. Marietta CA, et al. **Brain Res** 1990 Mar 19; 511(2):192–6

Cerebral glucose utilization in rat brain during phenobarbital withdrawal. Marietta CA, et al. **Brain Res** 1989 Sep 4; 496(1–2):173–9

Neuropeptide Y receptor binding sites in human brain. Possible alteration in Alzheimer's disease. Martel JC, et al. **Brain Res** 1990 Jun 11;519(1–2):228–35

Age-related differences in the sensitivity of rats to a selective sigma ligand. Matsumoto RR, et al. **Brain Res** 1989 Dec 11;504(1):145–8

Localization of the mRNA for the 5-HT2 receptor by in situ hybridization histochemistry. Correlation with the distribution of receptor sites. Mengod G, et al. **Brain Res** 1990 Jul 30;524(1):139–43

Seizures decrease regional enzymatic hydrolysis of N-acetyl-aspartylglutamate in rat brain. Meyerhoff JL, et al. **Brain Res** 1989 Dec 25;505(1):130–4

Sites in the male primate brain at which testosterone acts as an androgen. Michael RP, et al. **Brain Res** 1989 Nov 13;502(1):11–20

CNS monoamines and their metabolites in canine narcolepsy: a replication study. Miller JD, et al. **Brain Res** 1990 Feb 12;509(1):169–71

Early developmental exposure to benzodiazepine ligands alters brain 31P-NMR spectra in young adult rats. Miranda R, et al. **Brain Res** 1990 Jan 1;506(1):85–92

Localization of L-glutamate binding sites in chick brain by quantitative autoradiography. Mitsacos A, et al. **Brain Res** 1990 Apr 16;513(2):348–52

Adaptation of in vitro rat brain protein synthesis to long-term ingestion of n-butanol. Muñoz R, et al. **Brain Res** 1990 May 28;517(1–2):330–2

Central pressor actions of neurokinin B: increases in neurokinin B contents in discrete nuclei in spontaneously hypertensive rats. Nagashima A, et al. **Brain Res** 1989 Oct 9;499(1):198–203

Anatomical distribution of LHRH-immunoreactive neurons in the human infant hypothalamus and extrahypothalamic regions. Najimi M, et al. **Brain Res** 1990 May 21; 516(2):280–91

Adenosinergic modulation of caffeine-induced c-fos mRNA expression in mouse brain. Nakajima T, et al. **Brain Res** 1989 Nov 6;501(2):307–14

Temperature-independent binding of [3H](+-)-3-(2-carboxypiperazin-4-yl)propyl-1-phosphonic acid in brain synaptic membranes treated by Triton X-100. Ogita K, et al. **Brain Res** 1990 May 7; 515(1–2):51–6

Autoradiographic distribution of [3H]hemicholinium-3 binding sites in human brain. Pascual J, et al. **Brain Res** 1989 Dec 29;505(2):306–10

The effect of the excitatory amino acid receptor antagonist dizocilipine maleate (MK-801) on hemispheric cerebral blood flow and metabolism in dogs: modification by prior complete cerebral ischemia. Perkins WJ, et al. **Brain Res** 1989 Sep 25;498(1):34–44

Regional effects of 6-hydroxydopamine (6-OHDA) on free radical scavengers in rat brain. Perumal AS, et al. **Brain Res** 1989 Dec 11;504(1):139–41

The distribution of changes in local cerebral energy metabolism associated with brain stimulation reward to the medial forebrain bundle of the rat. Porrino LJ, et al. **Brain Res** 1990 Mar 12;511(1):1–6

Regional changes in brain 5-HT1A serotonin receptors in the rat model of persistent spasmodic dyskinesias induced by iminodipropionitrile. Przedborski S, et al. **Brain Res** 1989 Dec 18;504(2):311–4

Xenobiotic metabolism in human brain--presence of cytochrome P-450 and associated mono-oxygenases. Ravindranath V, et al. **Brain Res** 1989 Sep 4;496(1–2):331–5

Age-dependent decline in human brain dopamine D1 and D2 receptors. Rinne JO, et al. **Brain Res** 1990 Feb 5; 508(2):349–52

Behavioral sensitization to amphetamine is dependent on corticosteroid receptor activation. Rivet JM, et al. **Brain Res** 1989 Sep 25;498(1):149–53

Circadian variations in local cerebral glucose utilization in freely moving rats. Room P, et al. **Brain Res** 1989 Dec 29;505(2):321–5

[3H]imipramine binding in discrete brain areas is affected by castration in male rats. Sandrini M, et al. **Brain Res** 1989 Sep 4;496(1–2):29–34

A cloned G protein-coupled protein with a distribution restricted to striatal medium-sized neurons. Possible relationship with D1 dopamine receptor. Schiffmann SN, et al. **Brain Res** 1990 Jun 11;519(1–2):333–7

Receptor occupancy by ritanserin and risperidone measured using ex vivo autoradiography. Schotte A, et al. **Brain Res** 1989 Oct 23;500(1–2):295–301

A novel heat-stable 205 kDa microtubule-associated protein is involved in the neural development of the rat brain. Shiomura Y, et al. **Brain Res** 1989 Nov 20;502(2):356–64

Cysteinyl-leukotriene production during limbic seizures triggered by kainic acid. Simmet T, et al. **Brain Res** 1990 May 7;515(1–2):79–86

Adrenal steroid type I and type II receptor binding: estimates of in vivo receptor number, occupancy, and activation with varying level of steroid. Spencer RL, et al. **Brain Res** 1990 Apr 23;514(1):37–48

The N-methyl-D-aspartate receptor complex in Alzheimer's disease: reduced regulation by glycine but not zinc. Steele JE, et al. **Brain Res** 1989 Oct 23;500(1–2):369–73

Gonadal steroids regulate oxytocin receptors but not vasopressin receptors in the brain of male and female rats. An autoradiographical study. Tribollet E, et al. **Brain Res** 1990 Mar 12;511(1):129–40

Analysis of wheat germ agglutinin (WGA), Phaseolus vulgaris leucoagglutinin (PHA-L), and lens culinaris agglutinin (LCA) binding to isolated rat neocortical membrane glycoproteins and to brain tissue sections. Trudrung P, et al. **Brain Res** 1989 Sep 18;497(2):399–401

Brain forskolin binding in mice dependent on and tolerant to ethanol. Valverius P, et al. **Brain Res** 1989 Nov 27; 503(1):38–43

The expression of phosphorylated and non-phosphorylated forms of MAP5 in the amphibian CNS. Viereck C, et al. **Brain Res** 1990 Feb 5;508(2):257–64

Adrenalectomy prevents the stress-induced decrease in in vivo [3H]Ro15-1788 binding to GABAA benzodiazepine receptors in the mouse. Weizman A, et al. **Brain Res** 1990 Jun 11;519(1–2):347–50

Immunoelectron microscopic localization of amyloid beta protein in the diffuse plaques of Alzheimer-type dementia. Yamaguchi H, et al. **Brain Res** 1990 Feb 5;508(2):320–4

LM and EM immunolocalization of the gap junctional protein connexin 43 in rat brain. Yamamoto T, et al. **Brain Res** 1990 Feb 5;508(2):313–9

Alterations in gonadotropin-releasing hormone immunoactivities in discrete brain areas of male goldfish during spawning behavior. Yu KL, et al. **Brain Res** 1990 Mar 26;512(1):89–94

Morphological, neurochemical, and behavioral characterizations associated with the combined treatment of diethyldithiocarbamate and 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine in mice. Yurek DM, et al. **Brain Res** 1989 Sep 18;497(2):250–9

Bidirectional transport of interleukin-1 alpha across the blood-brain barrier. Banks WA, et al. **Brain Res Bull** 1989 Dec;23(6):433–7

Passage of Tyr-MIF-1 from blood to brain. Barrera CM, et al. **Brain Res Bull** 1989 Dec;23(6):439–42

Possible origin of glutamatergic projections to the midbrain periaqueductal gray and deep layer of the superior colliculus of the rat. Beitz AJ. **Brain Res Bull** 1989 Jul–Aug; 23(1–2):25–35

Antigenic expression of cathepsin B in aged human brain. Bernstein HG, et al. **Brain Res Bull** 1990 Apr;24(4):543–9

Regional central serotonin-2 receptor binding and phosphoinositide turnover in rats with 5,7-dihydroxytryptamine lesions. Butler PD, et al. **Brain Res Bull** 1990 Jan;24(1):125–9

Post-mortem dopamine dynamics assessed by voltammetry and microdialysis. Gonzalez-Mora JL, et al. **Brain Res Bull** 1989 Oct-Nov;23(4–5):323–7

Brain spectrin(240/235A): a novel astrocyte specific spectrin isoform. Goodman SR, et al. **Brain Res Bull** 1989 Oct-Nov; 23(4–5):311–6

Central catecholaminergic responses in hypoxic moderation of spontaneous hypertension. Henley WN, et al. **Brain Res Bull** 1989 Jun;22(6):963–8

Evidence for a role of brain thyrotropin-releasing hormone (TRH) on stress gastric lesion formation in rats. Hernandez DE, et al. **Brain Res Bull** 1990 May;24(5):693–5

Magnetic resonance imaging studies of the brains of anesthetized rats treated with manganese chloride. London RE, et al. **Brain Res Bull** 1989 Sep;23(3):229–35

Development and characterization of a specific and sensitive radioimmunoassay for rat galanin: measurement in brain tissue, hypophyseal portal and peripheral serum. López FJ, et al. **Brain Res Bull** 1990 Mar;24(3):395–9

Allosteric modulation of t-[35S]butylbicyclophosphorothionate binding in rat brain by melatonin. Niles LP, et al. **Brain Res Bull** 1990 Apr; 24(4):635–8

Regional changes in brain 14C-2-deoxyglucose uptake after feeding-inducing intrahypothalamic norepinephrine injections. Nobrega JN, et al. **Brain Res Bull** 1990 Feb; 24(2):249–55

The role(s) of gangliosides in neural differentiation and repair: a perspective. Schengrund CL. **Brain Res Bull** 1990 Jan; 24(1):131–41 (133 ref.)

Absence of brain spectrin(240/235) in dendrites of mammalian brain. Zagon IS, et al. **Brain Res Bull** 1989 Jul–Aug;23(1–2):19–24

Fibroblast growth factor (FGF) levels in the developing rat brain. Caday CG, et al. **Brain Res Dev Brain Res** 1990

Mar 1;52(1-2):241-6
The effect of electrocortical state on cerebral carbohydrate metabolism in fetal sheep. Chao CR, et al. **Brain Res Dev Brain Res** 1989 Sep 1;49(1):1-5
Ontogenetic development of calmodulin mRNA in rat brain using in situ hybridization histochemistry. Cimino M, et al. **Brain Res Dev Brain Res** 1990 Jun 1;54(1):43-9
Effects of acute and chronic administration of Leu-enkephalin on cultured serotonergic neurons: evidence for opioids as inhibitory neuronal growth factors. Davila-Garcia MI, et al. **Brain Res Dev Brain Res** 1989 Sep 1;49(1):97-103
Ontogeny of mu-, delta- and kappa-opioid receptors mediating inhibition of neurotransmitter release and adenylate cyclase activity in rat brain. De Vries TJ, et al. **Brain Res Dev Brain Res** 1990 Jun 1;54(1):63-9
Ontogeny of estrogen binding sites in the brain of gray short-tailed opossums (Monodelphis domestica). Etgen AM, et al. **Brain Res Dev Brain Res** 1989 Sep 1;49(1):131-3
Hypoxia-ischemia induces heat shock protein-like (HSP72) immunoreactivity in neonatal rat brain. Ferriero DM, et al. **Brain Res Dev Brain Res** 1990 Apr 1;53(1):145-50
Age- and diabetes-associated alterations in regional brain norepinephrine concentrations and adrenergic receptor populations in C57BL/KsJ mice. Garris DR. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):161-6
Selective distribution of a novel tubulin in the developing and mature rat brain. Gossels JM, et al. **Brain Res Dev Brain Res** 1990 Apr 1;53(1):103-15
Effects of undernutrition on the serotonin neuron system in the developing brain: an immunohistochemical study. Ishimura K, et al. **Brain Res Dev Brain Res** 1989 Dec 1; 50(2):225-31
GABA-stimulated chloride uptake and enhancement by diazepam in synaptoneurosomes from rat brain during prenatal and postnatal development. Kellogg CK, et al. **Brain Res Dev Brain Res** 1989 Sep 1;49(1):87-95
Growth hormone-releasing hormone influences neuronal expression in the developing chick brain. I. Catecholaminergic neurons. Kentroti S, et al. **Brain Res Dev Brain Res** 1989 Oct 1;49(2):275-80
Developmental expression of the amyloid precursor protein, growth-associated protein 43, and somatostatin in normal and trisomy 16 mice. O'Hara BF, et al. **Brain Res Dev Brain Res** 1989 Oct 1;49(2):300-4
Developmental changes in serotonin levels in the chick spinal cord and brain. Okado N, et al. **Brain Res Dev Brain Res** 1989 Dec 1;50(2):217-23
Ontogeny of PCP and sigma receptors in rat brain. Paleos GA, et al. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):147-52
Changes in excitatory amino acid modulation of phosphoinositide metabolism during development. Palmer E, et al. **Brain Res Dev Brain Res** 1990 Jan 1;51(1):132-4
Consequences of chronic phenobarbital treatment on local cerebral glucose utilization in the developing rat. Pereira de Vasconcelos A, et al. **Brain Res Dev Brain Res** 1990 May 1;53(2):168-78
Developmental expression of neuronal calmodulin-binding proteins in rat brain. Polli JW, et al. **Brain Res Dev Brain Res** 1990 Apr 1;53(1):62-70
Differential recognition of a set of O-acetylated gangliosides by monoclonal antibodies RB13-2, D1.1, and JONES during rat brain development. Reinhardt-Maelicke S, et al. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):279-82
Changes in brain dopaminergic indices induced by perinatal exposure to cannabinoids in rats. Rodriguez de Fonseca F, et al. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):237-40
Ontogeny of mineralocorticoid (type 1) receptors in brain and pituitary: an in vivo autoradiographical study. Rosenfeld P, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1-2):57-62
Estrogen receptors in the rhesus monkey brain during fetal development. Sholl SA, et al. **Brain Res Dev Brain Res** 1989 Dec 1;50(2):189-96
Developmental immunohistochemistry of membrane proteins in the brain coded by a gene on human chromosome 21. Takashima S, et al. **Brain Res Dev Brain Res** 1990 May 1;53(2):295-8
Developmental expression of proenkephalin mRNA and peptides in rat striatum. Tecott LH, et al. **Brain Res Dev Brain Res** 1989 Sep 1;49(1):75-86
Quaking*jimpy double mutant mice: additional evidence for independence of primary deficits in jimpy. Billings-Gagliardi S, et al. **Brain Res Mol Brain Res** 1990 Apr;7(3):189-98
Distribution of carboxypeptidase H messenger RNA in rat brain using in situ hybridization histochemistry: implications for neuropeptide biosynthesis. Birch NP, et al. **Brain Res Mol Brain Res** 1990 Jan;7(1):53-9
Regional distribution of neuropeptide Y mRNA in postmortem human brain. Brené S, et al. **Brain Res Mol Brain Res** 1989 Dec;6(4):241-9
Regulation and selective expression of Ly-6A/E, a lymphocyte activation molecule, in the central nervous system. Cray C, et al. **Brain Res Mol Brain Res** 1990 Jun; 8(1):9-15
Intrasynaptosomal distribution of the ras, rho and smg-25A GTP-binding proteins in bovine brain. Kim S, et al. **Brain Res Mol Brain Res** 1989 Nov;6(2-3):167-76
Sensitive non-radioisotopic in situ hybridization histochemistry: demonstration of tyrosine hydroxylase gene expression in rat brain and adrenal. Kiyama H, et al. **Brain Res Mol Brain Res** 1990 Apr;7(3):213-9
Use of avidin-biotin subtractive hybridization to characterize mRNA common to neurons destroyed by the selective neurotoxicant trimethyltin. Krady JK, et al. **Brain Res Mol Brain Res** 1990 May;7(4):287-97
Expression of the gene encoding the beta-subunit of S-100 protein in the developing rat brain analyzed by in situ hybridization. Landry CF, et al. **Brain Res Mol Brain Res** 1989 Dec;6(4):251-62
Structural characterization of a brain-specific promoter region directing transcription of the rat prepro-gastrin-releasing peptide gene. Lebacq-Verheyden AM, et al. **Brain Res Mol Brain Res** 1990 Apr;7(3):235-41
Changes of proenkephalin and prodynorphin mRNAs and related peptides in rat brain during the development of deep prepyriform cortex kindling. Lee PH, et al. **Brain Res Mol Brain Res** 1989 Dec;6(4):263-73
Chromatin structure and gene expression in Alzheimer's disease. Lukiw WJ, et al. **Brain Res Mol Brain Res** 1990 Apr;7(3):227-33
Distinct regional expression of nicotinic acetylcholine receptor genes in chick brain. Morris BJ, et al. **Brain Res Mol Brain Res** 1990 May;7(4):305-15
Affinity purification of nicotinic acetylcholine receptor from rat brain. Nakayama H, et al. **Brain Res Mol Brain Res** 1990 Apr;7(3):221-6
Messenger RNA for glial fibrillary acidic protein is decreased in rat brain following acute and chronic corticosterone treatment. Nichols NR, et al. **Brain Res Mol Brain Res** 1990 Jan;7(1):1-7
Sequence and expression of the murine diazepam binding inhibitor. Owens GP, et al. **Brain Res Mol Brain Res** 1989 Nov;6(2-3):101-8
Serotonin receptors expressed in Xenopus oocytes by mRNA from brain mediate a closing of K+ membrane channels. Parker I, et al. **Brain Res Mol Brain Res** 1990 Jan;7(1):31-8
In situ hybridization for LHRH mRNA following estrogen treatment. Rothfeld J, et al. **Brain Res Mol Brain Res** 1989 Nov;6(2-3):121-5
Regional distribution of the messenger RNA coding for the neuropeptide cholecystokinin in the human brain examined by in situ hybridization. Savasta M, et al. **Brain Res Mol Brain Res** 1990 Feb;7(2):91-104
Distribution and cellular localization of DARPP-32 mRNA in rat brain. Schalling M, et al. **Brain Res Mol Brain Res** 1990 Feb;7(2):139-49
Expression and cellular localization of amyloid beta-protein precursor transcripts in normal human brain and in Alzheimer's disease. Spillantini MG, et al. **Brain Res Mol Brain Res** 1989 Nov;6(2-3):143-50
Alpha-latrotoxin triggers an increase of ionized calcium in Xenopus oocytes injected with rat brain mRNA. Umbach JA, et al. **Brain Res Mol Brain Res** 1990 Jun;8(1):31-6
The effect of acute haloperidol treatment on brain proneurotensin mRNA: in situ hybridization analyses using a novel fluorescence detection procedure. Williams FG, et al. **Brain Res Mol Brain Res** 1990 May;7(4):347-58
Topographic EEG in brain ischemia--correlation with blood flow and metabolism. Nagata K. **Brain Topogr** 1988 Winter; 1(2):97-106 (80 ref.)
Mouse brain Tau proteins: microheterogeneity and phosphorylation. Araujo HM, et al. **Braz J Med Biol Res** 1989;22(7):817-20
Effects of ACTH, epinephrine and Met-enkephalin on brain beta-endorphin-like immunoreactivity, and of ACTH, epinephrine, Met-enkephalin and naloxone on retention, in normal and in protein-malnourished rats. Perry ML, et al. **Braz J Med Biol Res** 1990;23(1):65-72
Spinal tetracaine decreases central nervous system metabolism during somatosensory stimulation in the rat. Cole DJ, et al. **Can J Anaesth** 1990 Mar;37(2):231-7
Cerebral oxygen consumption during sufentanil anesthesia: measurement by N2O uptake vs 133xenon clearance. Murkin JM, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S32
Regional cerebral glucose metabolism in Turner syndrome. Clark C, et al. **Can J Neurol Sci** 1990 May;17(2):140-4
Tacrine, a drug with therapeutic potential for dementia: post-mortem biochemical evidence. Francis PT, et al. **Can J Neurol Sci** 1989 Nov;16(4 Suppl):504-10 (96 ref.)
A reexamination of aluminum in Alzheimer's disease: analysis by energy dispersive X-ray microprobe and flameless atomic absorption spectrophotometry. Jacobs RW, et al. **Can J Neurol Sci** 1989 Nov;16(4 Suppl):498-503
18Fluorodeoxyglucose positron emission tomography studies in presumed Alzheimer cases, including 13 serial scans. McGeer EG, et al. **Can J Neurol Sci** 1990 Feb;17(1):1-11
Cortical glutaminase, beta-glucuronidase and glucose utilization in Alzheimer's disease. McGeer EG, et al. **Can J Neurol Sci** 1989 Nov;16(4 Suppl):511-5
New evidence for an active role of aluminum in Alzheimer's disease. McLachlan DR, et al. **Can J Neurol Sci** 1989 Nov; 16(4 Suppl):490-7 (65 ref.)
Altered gene expression in Alzheimer's disease brain tissue. May PC, et al. **Can J Neurol Sci** 1989 Nov;16(4 Suppl):473-6 (41 ref.)
Strategies for the identification of novel brain specific genes affected in Alzheimer disease. Walker DG, et al. **Can J Neurol Sci** 1989 Nov;16(4 Suppl):483-9 (47 ref.)
Selective inhibition of [3H]nitrendipine binding to brain and cardiac membranes by bacitracin. Smith JD, et al. **Can J Physiol Pharmacol** 1989 Dec;67(12):1591-5
Pharmacological characterization of the binding of [3H]bremazocine in guinea-pig brain: evidence for multiplicity of the kappa-opioid receptors. Tiberi M, et al. **Can J Physiol Pharmacol** 1989 Oct;67(10):1336-44
Physicochemical and pharmacokinetic parameters of seven lipophilic chlorambucil esters designed for brain penetration. Greig NH, et al. **Cancer Chemother Pharmacol** 1990;25(5):311-9
Brain uptake and anticancer activities of vincristine and vinblastine are restricted by their low cerebrovascular permeability and binding to plasma constituents in rat. Greig NH, et al. **Cancer Chemother Pharmacol** 1990; 26(4):263-8
Pharmacokinetics of chlorambucil-tertiary butyl ester, a lipophilic chlorambucil derivative that achieves and maintains high concentrations in brain. Greig NH, et al. **Cancer Chemother Pharmacol** 1990;25(5):320-5
Rate of buthionine sulfoximine entry into brain and xenotransplanted human gliomas. Fekete I, et al. **Cancer Res** 1990 Feb 15;50(4):1251-6
Ca2(+)-dependent binding of tamoxifen to calmodulin isolated from bovine brain. Lopes MC, et al. **Cancer Res** 1990 May 1;50(9):2753-8
Interaction of rhizoxin with bovine brain tubulin. Sullivan AS, et al. **Cancer Res** 1990 Jul 15;50(14):4277-80
Regulation of intracellular pH by a neuronal homolog of the erythrocyte anion exchanger. Kopito RR, et al. **Cell** 1989 Dec 1;59(5):927-37
Transgenic mice expressing hamster prion protein produce species-specific scrapie infectivity and amyloid plaques. Scott M, et al. **Cell** 1989 Dec 1;59(5):847-57
Presynaptic regulation of acetylcholine release in the CNS. Raiteri M, et al. **Cell Biol Int Rep** 1989 Dec;13(12):1109-18 (23 ref.)
Effect of Quin-2 on 45Ca2+ uptake mediated by Na+i/Ca2+o exchange and 45Ca2+ efflux in rat brain synaptosomes: a requirement for [Ca2+]i. Blanco P, et al. **Cell Calcium** 1990 Jan;11(1):25-33
Topography and ontogeny of the neurons expressing vasopressin, oxytocin, and somatostatin genes in the rat brain: an analysis using radioactive and biotinylated oligonucleotides. Bloch B, et al. **Cell Mol Neurobiol** 1990 Mar;10(1):99-112
The relative proportion of H1 degrees and A24 is reversed in oligodendrocytes during rat brain development. Di Liegro I, et al. **Cell Mol Neurobiol** 1990 Jun;10(2):267-74
Molecular neuropathology of Alzheimer's disease: in situ hybridization studies. Goedert M, et al. **Cell Mol Neurobiol** 1990 Mar;10(1):159-74 (51 ref.)
The use of in situ hybridization histochemistry for the study of neuropeptide gene expression in the human brain. Mengod G, et al. **Cell Mol Neurobiol** 1990 Mar; 10(1):113-26
Differential effects of chronic treatment with haloperidol and clozapine on the level of preprosomatostatin mRNA in the striatum, nucleus accumbens, and frontal cortex of the rat. Salin P, et al. **Cell Mol Neurobiol** 1990 Mar;10(1):127-44
High-performance liquid chromatographic analysis of monoamines and some of their gamma-glutamyl conjugates produced by the brain and other tissues of Helix aspersa (Gastropoda). Sloley BD, et al. **Cell Mol Neurobiol** 1990 Jun;10(2):175-92
Photoaffinity labeling of the receptor site for alpha-scorpion toxins on purified and reconstituted sodium channels by a new toxin derivative. Tejedor FJ, et al. **Cell Mol Neurobiol** 1990 Jun;10(2):257-65
Optimization of cRNA probe in situ hybridization methodology for localization of glucocorticoid receptor mRNA in rat brain: a detailed protocol. Whitfield HJ Jr, et al. **Cell Mol Neurobiol** 1990 Mar;10(1):145-57
Structural plugs at microtubule ends may regulate polymer dynamics in vitro. Azhar S, et al. **Cell Motil Cytoskeleton** 1990;15(3):156-61
Binding of microtubule-associated proteins (MAPs) to rat brain mitochondria: a comparative study of the binding of MAP2, its microtubule-binding and projection domains, and tau proteins. Jancsik V, et al. **Cell Motil Cytoskeleton** 1989;14(3):372-81
Immunochemical comparison of pertussis toxin substrates in brain and peripheral tissues. Kanaho Y, et al. **Cell Signal** 1989;1(6):553-60
System-specific distribution of zinc in the chick brain. A light- and electron-microscopic study using the Timm method. Faber H, et al. **Cell Tissue Res** 1989 Nov; 258(2):247-57
Immunocytochemical localization and immunochemical characterization of an insulin-related peptide in the insect Leucophaea maderae. Hansen GN, et al. **Cell Tissue Res** 1990 Feb;259(2):265-73
Cerebral acidosis in focal ischemia. Hakim AM, et al. **Cerebrovasc Brain Metab Rev** 1989 Summer;1(2):115-32 (117 ref.)
Double-label and conventional deoxyglucose methods: a practical guide for the user. Redies C, et al. **Cerebrovasc Brain Metab Rev** 1989 Winter;1(4):319-67 (153 ref.)
Autoradiographic assessment of pineal gland glucose utilization and capillary permeability in the unanesthetized rat. Cicciarello R, et al. **Childs Nerv Syst** 1990 Jun; 6(4):222-4
Cerebral energy metabolism in experimental canine hydrocephalus. Tamaki N, et al. **Childs Nerv Syst** 1990 May;6(3):172-8

Daily modifications of 3H-naloxone binding sites in the rat brain: a quantitative autoradiographic study. Giardino L, et al. **Chronobiol Int** 1989;6(3):203–16

Effects of ginseng root saponins on brain monoamines and serum corticosterone in heat-stressed mice. Yuan WX, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Nov;10(6):492–6

Hyaluronan and hyaluronectin in the nervous system. Delpech B, et al. **Ciba Found Symp** 1989;143:208–20; discussion 221–32, 281–5 (33 ref.)

The mas oncogene as a neural peptide receptor: expression, regulation and mechanism of action. Hanley MR, et al. **Ciba Found Symp** 1990;150:23–38; discussion 38–46 (53 ref.)

Failure of endotoxic shock to elicit superoxide anion production in pig brain. Deutschman CS, et al. **Circ Shock** 1990 Jun;31(2):149–58

Monitoring cerebral blood flow, oxygen, and glucose metabolism. Analysis of cerebral metabolic disorder in stroke and some therapeutic trials in human volunteers. Meyer JS, et al. **Circulation** 1967 Aug;36(2):197–211

Necropsy study of GABA/benzodiazepine receptor binding sites in brain tissue from chronic alcoholic patients. Kril JJ, et al. **Clin Exp Neurol** 1988;25:135–41

A method for examining turnover and synthesis of palmitate-containing brain lipids in vivo. Robinson PJ, et al. **Clin Exp Pharmacol Physiol** 1989 Sep;16(9):701–14

How bilirubin gets into the brain. Bratlid D. **Clin Perinatol** 1990 Jun;17(2):449–65 (91 ref.)

Assessing the risk of kernicterus using nuclear magnetic resonance. Palmer C, et al. **Clin Perinatol** 1990 Jun; 17(2):307–29

31P NMR studies of excised gray and white calf brain. Burt CT, et al. **Comp Biochem Physiol [B]** 1989;94(4):679–85

Measurement of monoamines and monoamine metabolites in various brain regions of six shark species. Howard SB, et al. **Comp Biochem Physiol [C]** 1989;94(2):493–8

Diurnal alterations of catecholamines, indoleamines and their metabolites in specific brain regions of the mouse. Huie JM, et al. **Comp Biochem Physiol [C]** 1989;94(2):575–9

Physiology and pharmacology of cerebral blood flow and metabolism. Prough DS, et al. **Crit Care Clin** 1989 Oct; 5(4):713–28 (89 ref.)

Method for the detection of tissue metabolite (H2(17)O) in brain by proton magnetic resonance imaging. Arai T, et al. **Crit Care Med** 1989 Dec;17(12):1333–4

Brain pH effects of NaHCO3 and Carbicarb in lactic acidosis. Kucera RR, et al. **Crit Care Med** 1989 Dec;17(12):1320–3

Brain metabolism in the critically ill. Siesjö BK, et al. **Crit Care Med** 1976 Nov–Dec;4(6):283–94 (89 ref.)

Local cerebral glucose utilization in septic rats. Soejima Y, et al. **Crit Care Med** 1990 Apr;18(4):423–7

Regulation of ascorbic acid concentration in embryonic chick brain. Wilson JX. **Dev Biol** 1990 Jun;139(2):292–8

Postnatal development of voltage-dependent calcium channels in the mouse brain disclosed by the Xenopus oocyte assay. Cohen RW, et al. **Dev Neurosci** 1990; 12(2):81–8

Specific N-linked oligosaccharides are required for oligodendroglial differentiation but probably not for astrocytic differentiation. Ishii S, et al. **Dev Neurosci** 1990; 12(1):46–60

Heterosis for brain cerebroside synthesis in mice. Sato C, et al. **Dev Neurosci** 1990;12(3):153–8

S-adenosylmethionine, S-adenosylhomocysteine and adenosine system. Age-dependent availability in rat brain. Sarda N, et al. **Dev Pharmacol Ther** 1989;13(2–4):104–12

Regional brain glucose metabolism and blood flow in streptozocin-induced diabetic rats. Jakobsen J, et al. **Diabetes** 1990 Apr;39(4):437–40

Importance of the renin-angiotensin-aldosterone system (RAS) in the physiology and pathology of hypertension. An overview. Ferrario CM. **Drugs** 1990;39 Suppl 2:1–8 (48 ref.)

Local cerebral metabolism during enflurane anesthesia: identification of epileptogenic foci. Myers RR, et al. **Electroencephalogr Clin Neurophysiol** 1979 Aug; 47(2):153–62

Differential brain expression of the Alzheimer's amyloid precursor protein. Anderson JP, et al. **EMBO J** 1989 Dec 1;8(12):3627–32

Members of the RCK potassium channel family are differentially expressed in the rat nervous system. Beckh S, et al. **EMBO J** 1990 Mar;9(3):777–82

Differential regulation of three sodium channel messenger RNAs in the rat central nervous system during development. Beckh S, et al. **EMBO J** 1989 Dec 1; 8(12):3611–6

Cloning and expression of a human voltage-gated potassium channel. A novel member of the RCK potassium channel family. Grupe A, et al. **EMBO J** 1990 Jun;9(6):1749–56

Regional distribution of brain-derived neurotrophic factor mRNA in the adult mouse brain. Hofer M, et al. **EMBO J** 1990 Aug;9(8):2459–64

Genetic ablation of a mouse gene expressed specifically in brain. Kingsley DM, et al. **EMBO J** 1990 Feb;9(2):395–9

Leucine zipper structure of the protein CRE-BP1 binding to the cyclic AMP response element in brain. Maekawa T, et al. **EMBO J** 1989 Jul;8(7):2023–8

Molecular basis of functional diversity of voltage-gated potassium channels in mammalian brain. Stühmer W, et al. **EMBO J** 1989 Nov;8(11):3235–44

Post-transcriptional events are responsible for low expression of myelin basic protein in myelin deficient mice: role of natural antisense RNA. Tosic M, et al. **EMBO J** 1990 Feb; 9(2):401–6

Heterogeneity between brain and pituitary corticotropin-releasing factor receptors is due to differential glycosylation. Grigoriadis DE, et al. **Endocrinology** 1989 Oct;125(4):1877–88

Regional induction of c-fos-like protein in rat brain after estradiol administration. Insel TR. **Endocrinology** 1990 Apr; 126(4):1849–53

Characterization of the receptors for peptide-YY and avian pancreatic polypeptide in chicken and pig brains. Inui A, et al. **Endocrinology** 1990 Aug;127(2):934–41

Adrenocorticotropin, vasoactive intestinal polypeptide, growth hormone-releasing factor, and dynorphin compete for common receptors in brain and adrenal. Li ZG, et al. **Endocrinology** 1990 Mar;126(3):1327–33

Characterization of insulin-like growth factor binding proteins produced in the rat central nervous system. Ocrant I, et al. **Endocrinology** 1990 Sep;127(3):1260–7

Beta-endorphin chimeric peptides: transport through the blood-brain barrier in vivo and cleavage of disulfide linkage by brain. Pardridge WM, et al. **Endocrinology** 1990 Feb;126(2):977–84

Binding characteristics of mineralocorticoid and glucocorticoid receptors in dog brain and pituitary. Reul JM, et al. **Endocrinology** 1990 Aug;127(2):907–15

Estrogen and progesterone regulate opiate receptor densities in multiple brain regions. Weiland NG, et al. **Endocrinology** 1990 Feb;126(2):804–8

Gonadotropin-releasing hormone messenger ribonucleic acid levels are unaltered with changes in the gonadal hormone milieu of the adult male rat. Wiemann JN, et al. **Endocrinology** 1990 Aug;127(2):523–32

Parenchymal changes related to plasma protein extravasation in experimental seizures. Sokrab TE, et al. **Epilepsia** 1990 Jan–Feb;31(1):1–8

Cerebral uptake of [14C]deoxyglucose during the entire seizure and the recovery period in an El mouse. Nakamoto Y, et al. **Epilepsy Res** 1990 Jan–Feb;5(1):43–8

Regional brain [3H]muscimol binding in kindled rat brain: a quantitative autoradiographic examination. Nobrega JN, et al. **Epilepsy Res** 1990 Jul;6(2):102–9

Differential prostaglandin formation induced by convulsions in the brain of mice susceptible (DBA/2J) and resistant (CFLP) to acoustic stimulation. Seregi A, et al. **Epilepsy Res** 1990 Mar;5(2):131–6

Folates: epileptogenic effects and enhancing effects on [3H]TBOB binding to the GABAA-receptor complex. Van Rijn CM, et al. **Epilepsy Res** 1990 Apr;5(3):199–208

Peptidergic control of cardiovascular function: the angiotensin paradigm. Ganten D. **Eur Heart J** 1990 Apr; 11 Suppl B:72–8 (48 ref.)

Characterisation and visualisation of [3H]dermorphin binding to mu opioid receptors in the rat brain. Combined high selectivity and affinity in a natural peptide agonist for the morphine (mu) receptor. Amiche M, et al. **Eur J Biochem** 1990 May 20;189(3):625–35

Purification and characterization of five different alpha subunits of guanine-nucleotide-binding proteins in bovine brain membranes. Their physiological properties concerning the activities of adenylate cyclase and atrial muscarinic K+ channels. Kobayashi I, et al. **Eur J Biochem** 1990 Jul 31;191(2):499–506

Protein kinase C inhibitor proteins. Purification from sheep brain and sequence similarity to lipocortins and 14-3-3 protein. Toker A, et al. **Eur J Biochem** 1990 Jul 31; 191(2):421–9

Kinetics and brain uptake of S 9795, a new xanthine derivate, in rats. Bianchi G, et al. **Eur J Drug Metab Pharmacokinet** 1989 Jul–Sep;14(3):201–8

Kinetic profiles of tianeptine and its MC5 metabolite in plasma, blood and brain after single and chronic intraperitoneal administration in the rat. Couet W, et al. **Eur J Drug Metab Pharmacokinet** 1990 Jan–Mar; 15(1):69–74

Interleukin 6 production in the central nervous system during experimental autoimmune encephalomyelitis. Gijbels K, et al. **Eur J Immunol** 1990 Jan;20(1):233–5

GABA preincubation of rat brain sections increases [3H]GABA binding to the GABAA receptor and compromises the modulatory interactions. Bristow DR, et al. **Eur J Pharmacol** 1989 Nov 28;173(1):65–73

Differential modulation of [3H]flunitrazepam binding in female rat brain by sex steroid hormones. Canonaco M, et al. **Eur J Pharmacol** 1989 Oct 24;170(1–2):95–9

c-fos induction by estrogen in specific rat brain areas. Cattaneo E, et al. **Eur J Pharmacol** 1990 Mar 13; 188(2–3):153–9

NMDA receptor activation induces nitric oxide synthesis from arginine in rat brain slices. Garthwaite J, et al. **Eur J Pharmacol** 1989 Oct 17;172(4–5):413–6

125I-endothelin-1 binding to brain and cardiac membranes from normotensive and spontaneously hypertensive rats. Gu XH, et al. **Eur J Pharmacol** 1990 Feb 27;177(3):205–9

Brain and spinal cord 5-HT2 receptors of morphine-tolerant-dependent and -abstinent rats. Gulati A, et al. **Eur J Pharmacol** 1989 Aug 22;167(2):185–92

3,4-Diaminopyridine-induced noradrenaline release from CNS tissue as a model for action potential-evoked transmitter release: effects of phorbol ester. Huang HY, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):115–23

Clorgyline displays high affinity for sigma binding sites in C57BL/6 mouse brain. Itzhak Y, et al. **Eur J Pharmacol** 1990 Jan 25;176(1):107–8

Ifenprodil potently interacts with [3H](+)-3-PPP-labeled sigma binding sites in guinea pig brain membranes. Karbon EW, et al. **Eur J Pharmacol** 1990 Feb 6;176(2):247–8

Non-benzodiazepine, Ag-dependent, brain-specific binding sites for [3H]beta-carboline-3-carboxylic acid ethyl ester. Korneyev AYa, et al. **Eur J Pharmacol** 1989 Dec 7; 173(2–3):201–5

Comparative neuroanatomical distribution of the kappa and mu opioid receptors in guinea pig brain sections. Lahti RA, et al. **Eur J Pharmacol** 1989 Aug 3;166(3):563–6

Haloperidol-sensitive (+)[3H]SKF-10,047 binding sites (sigma sites) exhibit a unique distribution in rat brain subcellular fractions. McCann DJ, et al. **Eur J Pharmacol** 1990 Apr 25;188(4–5):211–8

Caffeine inhibits forskolin-stimulated cyclic AMP accumulation in rat brain. Mante S, et al. **Eur J Pharmacol** 1990 Jan 10;175(2):203–5

Novel localizations of central- and peripheral-type cholecystokinin binding sites in Syrian hamster brain as determined by autoradiography. Miceli MO, et al. **Eur J Pharmacol** 1989 Oct 10;169(2–3):215–24

Correlation of brain levels of 9-amino-1,2,3,4-tetrahydroacridine (THA) with neurochemical and behavioral changes. Nielsen JA, et al. **Eur J Pharmacol** 1989 Nov 28;173(1):53–64

Effects of caffeine and doxapram perfusion on local cerebral glucose utilization in conscious rats. Schroeder H, et al. **Eur J Pharmacol** 1989 Aug 22;167(2):245–54

Eltoprazine, a drug which reduces aggressive behaviour, binds selectively to 5-HT1 receptor sites in the rat brain: an autoradiographic study. Sijbesma H, et al. **Eur J Pharmacol** 1990 Feb 20;177(1–2):55–66

Differentiation between rat brain and mouse vas deferens delta opioid receptors. Vaughn LK, et al. **Eur J Pharmacol** 1990 Feb 20;177(1–2):99–101

Norvaline2-TRH: binding to TRH receptors in rat brain homogenates. Vonhof S, et al. **Eur J Pharmacol** 1990 May 3;180(1):1–12

Glycine antagonist action of 1-aminocyclobutane-1-carboxylate (ACBC) in Xenopus oocytes injected with rat brain mRNA. Watson GB, et al. **Eur J Pharmacol** 1989 Aug 22;167(2):291–4

Effects of Hoe 065, a compound structurally related to inhibitors of angiotensin converting enzyme, on acetylcholine metabolism in rat brain. Wiemer G, et al. **Eur J Pharmacol** 1989 Jul 4;166(1):31–9

Calcium in the brain under physiological and pathological conditions. Siesjö BK. **Eur Neurol** 1990;30 Suppl 2:3–9; discussion 39–41 (58 ref.)

Longer term progesterone treatment induces changes of GABAA receptor levels in forebrain sites in the female hamster: quantitative autoradiography study. Canonaco M, et al. **Exp Brain Res** 1989;77(2):407–11

Alterations in brain monoamine neurotransmitter release at high pressure. Gilman SC, et al. **Exp Brain Res** 1989; 78(1):179–84

Sex differences in GABAA receptor binding in rat brain measured by an improved in vitro binding assay. Jüptner M, et al. **Exp Brain Res** 1990;81(2):297–302

Neuropeptide gene expression in brain is differentially regulated by midbrain dopamine neurons. Lindefors N, et al. **Exp Brain Res** 1990;80(3):489–500

Similarities between aberrant serotonergic fibers in the aged and 5,7-DHT denervated young adult rat brain. van Luijtelaar MG, et al. **Exp Brain Res** 1989;78(1):81–9

Suppressive effect of beta-endorphin and naloxone on the secretion of cortisol under stress conditions in sheep. Przekop F, et al. **Exp Clin Endocrinol** 1990 Apr;95(2):210–6

pp60c-src kinase expression in brain of adult rats in relation to age. Matocha MF, et al. **Exp Gerontol** 1990;25(1):47–54

Effect of Plasmodium yoelii infection on GABA metabolism of mouse brain. Sharma MC, et al. **Exp Mol Pathol** 1990 Apr;52(2):243–8

Effects of convulsive doses of penicillin on the metabolism of single neurons. Epstein MH, et al. **Exp Neurol** 1966 Jun; 15(2):172–9

Effects of ultrasonics on the release of material with acetylcholinelike activity from brain subcellular particles. Hosein EA, et al. **Exp Neurol** 1966 Jun;15(2):166–71

Effects of amygdaloid kindling on NMDA receptor function and regulation. Jones SM, et al. **Exp Neurol** 1989 Oct; 106(1):52–60

Localization of nerve growth factor receptor messenger RNA and protein in the adult rat brain. Koh S, et al. **Exp Neurol** 1989 Dec;106(3):209–21

Influence of early neonatal phenobarbital exposure on cerebral energy metabolism and behavior. Pereira de Vasconcelos A, et al. **Exp Neurol** 1990 May;108(2):176–87

Putrescine content and structural defects in isolated fractions of rat brain after reversible cerebral ischemia. Röhn G, et al. **Exp Neurol** 1990 Mar;107(3):249–55

Brain amino acid concentration changes during status epilepticus induced by lithium and pilocarpine. Walton NY, et al. **Exp Neurol** 1990 Apr;108(1):61–70

Albumin content in brain and CSF after intracarotid infusion of protamine sulfate: a longitudinal study. Westergren I, et al. **Exp Neurol** 1990 Feb;107(2):192–6

Localization of brain-derived neurotrophic factor mRNA to neurons in the brain by in situ hybridization. Wetmore C, et al. **Exp Neurol** 1990 Aug;109(2):141–52

Changes in brain thyrotropin-releasing hormone (TRH) of seizure-prone El mice. Yamashita K, et al. **Exp Neurol** 1990 Apr;108(1):71–5

Possible involvement of indolamines in the glycogenic effect of the convulsant methionine sulfoximine in rat brain. Hevor TK, et al. **Experientia** 1990 Jul 15;46(7):710–3

Maternal vitamin A restriction alters biochemical development of the brain in rats. Sharma HS, et al. **Experientia** 1990 Feb 15;46(2):208–11

Central nicotinic acetylcholine receptors in the chicken and Drosophila CNS: biochemical and molecular biology approaches. Betz H, et al. **Experientia Suppl** 1989;57:183–9

Topography of beta NGF receptor-positive and AChE-reactive neurons in the central nervous system. Raivich G, et al. **Experientia Suppl** 1989;57:50–8

Characterization of benzodiazepine receptors with fluorescent ligands. McCabe RT, et al. **FASEB J** 1990 Aug; 4(11):2934–40

Tetanus toxin-induced protein kinase C activation and elevated serotonin levels in the perinatal rat brain. Aguilera J, et al. **FEBS Lett** 1990 Apr 9;263(1):61–5

Rates of cholesterol, ubiquinone, dolichol and dolichyl-P biosynthesis in rat brain slices. Andersson M, et al. **FEBS Lett** 1990 Aug 20;269(1):15–8

2D COSY 1H NMR: a new tool for studying in situ brain metabolism in the living animal. Barrère B, et al. **FEBS Lett** 1990 May 21;264(2):198–202

Interaction of two brain annexins, CaBP33 and CaBP37, with membrane-skeleton proteins. Giambanco I, et al. **FEBS Lett** 1990 Jul 2;267(1):171–5

Purification of GTP-binding proteins from bovine brain membranes. Identification of heterogeneity of the alpha-subunit of Go proteins. Kobayashi I, et al. **FEBS Lett** 1989 Oct 23;257(1):177–80

Modulation of vertebrate brain Na+ and K+ channels by subtypes of protein kinase C. Lotan I, et al. **FEBS Lett** 1990 Jul 2;267(1):25–8

Botulinum ADP-ribosyltransferase activity as affected by detergents and phospholipids. Machama T, et al. **FEBS Lett** 1990 Apr 24;263(2):376–80

Functional expression and sites of gene transcription of a novel alpha subunit of the GABAA receptor in rat brain. Malherbe P, et al. **FEBS Lett** 1990 Jan 29;260(2):261–5

Brain-specific expression of transthyretin mRNA as revealed by cDNA cloning from brain. Motojima K, et al. **FEBS Lett** 1989 Nov 20;258(1):103–5

Messenger RNA encoding the D2 dopaminergic receptor detected by in situ hybridization histochemistry in rat brain. Najlerahim A, et al. **FEBS Lett** 1989 Sep 25;255(2):335–9

Two forms of the rat D2 dopamine receptor as revealed by the polymerase chain reaction. Rao DD, et al. **FEBS Lett** 1990 Apr 9;263(1):18–22

Antisera against an acetylcholine receptor alpha 3 fusion protein bind to ganglionic but not to brain nicotinic acetylcholine receptors. Schoepfer R, et al. **FEBS Lett** 1989 Nov 6;257(2):393–9

Regional expression of a MCD-peptide and dendrotoxin I-sensitive voltage-dependent potassium channel in rat brain. Séquier JM, et al. **FEBS Lett** 1990 Apr 9;263(1):163–5

Synapsin I from human brain. Phosphorylation by Ca2+, phospholipid-dependent protein kinase. Severin SE Jr, et al. **FEBS Lett** 1989 Dec 4;258(2):223–6

An antiserum to the extracellular domain of the Alzheimer amyloid precursor recognizes 70 and 88 kDa brain proteins. Simpson J, et al. **FEBS Lett** 1989 Nov 6;257(2):238–40

alpha-Bungarotoxin interacts with the rat brain tachykinin receptors. Utkin YuN, et al. **FEBS Lett** 1989 Sep 11; 255(1):111–5

A high ratio of chromogranin A to synaptin/synaptophysin is a common feature of brains in Alzheimer and Pick disease. Weiler R, et al. **FEBS Lett** 1990 Apr 24; 263(2):337–9

A novel membrane factor stimulates guanine nucleotide exchange reaction of ras proteins. West M, et al. **FEBS Lett** 1990 Jan 1;259(2):245–8

Accumulation of lipofuscin in the brain of the frog, Rana temporaria, subjected to treatment with ultrasound. Srebro Z, et al. **Folia Biol (Krakow)** 1989;37(3–4):209–12

Changes in GABA content of the brain and sensitivity to GABA-antagonists during and after repetitive treatment of rats with diphenilhydantoin. Kantarev N, et al. **Folia Med (Plovdiv)** 1988;30(3):24–8

Cerebral tryptophan metabolism in humans in relation to malignant pain. Ceccherelli F, et al. **Funct Neurol** 1989 Oct-Dec;4(4):341–53

Pharmacokinetics of metapramine and its demethylated metabolites in plasma and brain of mice. Bougerolle AM, et al. **Fundam Clin Pharmacol** 1989;3(5):515–25

Increased brain uptake of gamma-aminobutyric acid in a rabbit model of hepatic encephalopathy. Bassett ML, et al. **Gastroenterology** 1990 Mar;98(3):747–57

Immunohistochemical localization of corticotropin-releasing factor- and arginine vasotocin-like immunoreactivities in the brain and pituitary of the American bullfrog (Rana catesbeiana) during development and metamorphosis. Carr JA, et al. **Gen Comp Endocrinol** 1990 May;78(2):180–8

Phylogeny and ontogeny of gonadotropin-releasing hormone: comparison of guinea pig, rat, and a protochordate. Kelsall R, et al. **Gen Comp Endocrinol** 1990 Jun;78(3):479–94

Reduction of thyrotropin-releasing hormone concentrations in central nervous system of African lungfish during estivation. Kreider MS, et al. **Gen Comp Endocrinol** 1990 Mar;77(3):435–41

Immunoreactive luteinizing hormone-releasing hormone in the frog (Rana esculenta) brain: distribution pattern in the adult, seasonal changes, castration effects, and developmental aspects. Rastogi RK, et al. **Gen Comp Endocrinol** 1990 Jun;78(3):444–58

Neurons expressing thyrotropin-releasing hormone-like messenger ribonucleic acid are widely distributed in Xenopus laevis brain. Zoeller RT, et al. **Gen Comp Endocrinol** 1989 Oct;76(1):139–46

Increased methylation of chloroform extractable products in brain membrane preparations after propranolol injection to the rat. Benistant C, et al. **Gen Pharmacol** 1990;21(1):23–6

Age-related changes in rat brain muscarinic receptors and beta-adrenoreceptors. Popova JS, et al. **Gen Pharmacol** 1989;20(5):581–4

Changes in 5-HT1 receptors in different brain structures of rats with isolation syndrome. St. Popova J, et al. **Gen Pharmacol** 1990;21(2):223–5

Cloning and analysis of calbindin-D28K cDNA and its expression in the central nervous system. Lomri N, et al. **Gene** 1989 Aug 1;80(1):87–98

Effect of cold shock on age-related changes in the glucose uptake of brain slices of male garden lizard. Dash BD, et al. **Gerontology** 1989;35(2–3):95–9

Stability of cerebral blood flow and oxygen metabolism during normal aging. Itoh M, et al. **Gerontology** 1990; 36(1):43–8

Comparative immunohistochemical study of glial filament proteins (glial fibrillary acidic protein and vimentin) in goldfish, octopus, and snail. Cardone B, et al. **GLIA** 1990; 3(3):180–92

A functional parameter to study heterogeneity of glial cells in rat brain slices: cyclic guanosine monophosphate production in atrial natriuretic factor (ANF)-responsive cells. De Vente J, et al. **GLIA** 1990;3(1):43–54

Uptake, metabolism, and release of [3H]-histamine by glial cells in primary cultures of chicken cerebral hemispheres. Huszti Z, et al. **GLIA** 1990;3(3):159–68

Human chromogranin A-like immunoreactivity in the Bergmann glia of the rat brain. McAuliffe WG, et al. **GLIA** 1990;3(1):13–6

Phosphotyrosine antibodies specifically label ameboid microglia in vitro and ramified microglia in vivo. Tillotson ML, et al. **GLIA** 1989;2(6):412–9

Basic fibroblast growth factor (FGF) in the central nervous system: identification of specific loci of basic FGF expression in the rat brain. Emoto N, et al. **Growth Factors** 1989;2(1):21–9

Amino acid uptake and release in the guinea pig cochlear nucleus after inferior colliculus ablation. Bergman M, et al. **Hear Res** 1989 Nov;42(2–3):283–91

Changes in brain metabolism during hyperammonemia and acute liver failure: results of a comparative 1H-NMR spectroscopy and biochemical investigation. Bosman DK, et al. **Hepatology** 1990 Aug;12(2):281–90

Increased densities of peripheral-type benzodiazepine receptors in brain autopsy samples from cirrhotic patients with hepatic encephalopathy. Lavoie J, et al. **Hepatology** 1990 May;11(5):874–8

Detection and mapping of endogenous receptors for carrier-immobilized constituents of glycoconjugates (lectins) by labelled (neo)glycoproteins and by affinity chromatography in human adult mesencephalon, pons, medulla oblongata and cerebellum. Bardosi A, et al. **Histochemistry** 1990;94(3):285–91

In situ hybridization of semithin Epon sections with BrdU labelled oligonucleotide probes. Jirikowski GF, et al. **Histochemistry** 1990;94(2):187–90

Local cerebral glucose utilization in the autoimmune New Zealand black (NZB) mouse. Wree A, et al. **Histochemistry** 1989;92(4):343–8

Intracellular localization of cerium. A microanalytical study using an electron microprobe and ionic microanalysis. Berry JP, et al. **Hum Toxicol** 1989 Nov;8(6):511–20

Brain kinins are responsible for the pressor effect of intracerebroventricular captopril in spontaneously hypertensive rats [see comments] Madeddu P, et al. **Hypertension** 1990 Apr;15(4):407–12 Comment in: Hypertension 1990 Apr;15(4):413–4.

The brain kallikrein-kinin system. A possible role in blood pressure regulation [editorial; comment] Scicli AG, et al. **Hypertension** 1990 Apr;15(4):413–4 Comment on: Hypertension 1990 Apr;15(4):407–12.

Development of renovascular hypertension after central serotonin depletion. Trolliet MR, et al. **Hypertension** 1990 Feb;15(2 Suppl):I166–9

In vivo distribution of lithium in plasma and brain. Ghoshdastidar D, et al. **Indian J Exp Biol** 1989 Nov; 27(11):950–4

Effect of dexamethasone and reserpine on brain synaptosomal phosphorylation in lithium treated rats. Vatal M, et al. **Indian J Exp Biol** 1989 Apr;27(4):385–6

Identification of a domain in cytochrome C that displaces [3H]TCP binding from rat brain membrane receptors: synthesis of beta-neuroprotectin. O'Neill JB, et al. **Int J Biochem** 1990;22(4):335–9

Age-associated functional impairments of specific neurotransmitter systems: detection by pharmacological brain metabolism studies and criteria for design of human investigations. Soncrant TT. **Int J Clin Pharmacol Res** 1990;10(1–2):27–47 (57 ref.)

Calcium and calmodulin levels in late embryonic and early hatched Japanese quail brain. Alston-Mills B, et al. **Int J Dev Neurosci** 1990;8(2):187–92

Subcellular and regional distribution of casein kinase II and initiation factor 2 activities during rat brain development. Martín ME, et al. **Int J Dev Neurosci** 1990;8(1):47–54

A developmental study of soluble L1. Nybroe O, et al. **Int J Dev Neurosci** 1990;8(3):273–81

Neuronal localization of the nerve growth factor precursor-like immunoreactivity in the rat brain. Senut MC, et al. **Int J Dev Neurosci** 1990;8(1):65–80

ADP-ribosylation of proteins in brain regions of rats during postnatal development. Spina-Purrello V, et al. **Int J Dev Neurosci** 1990;8(2):167–74

In vitro studies of interactions between frequent and unique mRNAs and cytoplasmic factors from brain tissue of several species of wild timber voles of northern Eurasia, Clethrionomys glareolus, Clethrionomys frater and Clethrionomys gapperi: a new criticism to a modern molecular-genetic concept of biological evolution. Kuznetsov DA. **Int J Neurosci** 1989 Nov;49(1–2):43–59

Psychological stress and oxytocin treatment during pregnancy affect central norepinephrine, dopamine and serotonin in lactating rats. Muir JL, et al. **Int J Neurosci** 1989 Oct;48(3–4):191–203

Cholecystokinin analogues with high affinity and selectivity for brain membrane receptors. Hruby VJ, et al. **Int J Pept Protein Res** 1990 Jun;35(6):566–73

11C-labelling of dimethylphenethylamine in two different positions and biodistribution studies. Halldin C, et al. **Int J Rad Appl Instrum [A]** 1989;40(7):557–60

[125I]MIBG uptake and release in different regions of the rat brain. Baulieu JL, et al. **Int J Rad Appl Instrum [B]** 1990;17(5):511–4

Iodoethylspiperone, a new potential agent for exploration of central dopamine D2 receptors: synthesis and preliminary in vivo study. Chalon S, et al. **Int J Rad Appl Instrum [B]** 1990;17(4):389–95

Serotonergic denervation does not reduce brain uptake of n-isopropyl-p-[123I]iodoamphetamine in vivo. de Jong BM, et al. **Int J Rad Appl Instrum [B]** 1989;16(8):753–7

Synthesis and regional mouse brain distribution of [11C]nisoxetine, a norepinephrine uptake inhibitor. Haka MS, et al. **Int J Rad Appl Instrum [B]** 1989;16(8):771–4

Thiophenes as phenyl bio-isosteres: application in radiopharmaceutical design--I. Dopamine uptake antagonists. Kilbourn MR. **Int J Rad Appl Instrum [B]** 1989; 16(7):681–6

Radiopharmaceuticals for CNS receptor imaging with SPECT. Kung HF. **Int J Rad Appl Instrum [B]** 1990; 17(1):85–92 (84 ref.)

A molecular model involving the membrane bilayer in the binding of lipid soluble drugs to their receptors in heart and brain. Mason RP, et al. **Int J Rad Appl Instrum [B]** 1990;17(1):13–33

Exercise-induced hyperammonemia: peripheral and central effects. Banister EW, et al. **Int J Sports Med** 1990 May; 11 Suppl 2:S129–42 (180 ref.)

A communicational link between skeletal muscle, brain, and cells of the immune system. Parry-Billings M, et al. **Int J Sports Med** 1990 May;11 Suppl 2:S122–8 (49 ref.)

Neurobiology of zinc and zinc-containing neurons. Frederickson CJ. **Int Rev Neurobiol** 1989;31:145–238 (426 ref.)

Dopamine receptor subtypes and arousal. Ongini E, et al. **Int Rev Neurobiol** 1989;31:239–55 (63 ref.)

Regulation of brain atrial natriuretic peptide and angiotensin receptors: quantitative autoradiographic studies. Saavedra JM, et al. **Int Rev Neurobiol** 1989;31:257–96

Clinical MRS studies of the brain. Hubesch B, et al. **Invest Radiol** 1989 Dec;24(12):1039–42

Separation of lipids from lactate in experimental allergic encephalomyelitis by zero quantum NMR techniques. Richards TL. **Invest Radiol** 1989 Dec;24(12):955–7

Brain glutamate metabolism during hypoxia and peripheral chemodenervation. Hoop B, et al. **J Appl Physiol** 1990 Jul; 69(1):147–54

Effects of hypothermia on rat brain pHi and phosphate metabolite regulation by 31P-NMR. Johnson DC, et al. **J Appl Physiol** 1989 Dec;67(6):2527–34

Carbon monoxide-mediated brain lipid peroxidation in the rat. Thom SR. **J Appl Physiol** 1990 Mar;68(3):997–1003

Dose and time effects of combined exposure to lead and ethanol on lead body burden and some neuronal, hepatic and haematopoietic biochemical indices in the rat. Tandon SK, et al. **J Appl Toxicol** 1989 Oct;9(5):347–52

Metal inhibition of calmodulin activity in monkey brain. Vig PJ, et al. **J Appl Toxicol** 1989 Oct;9(5):313–6

Interaction of water-soluble form of apoproteolipid of bovine brain myelin with phospholipid vesicles. Jung JE, et al. **J Biochem (Tokyo)** 1990 Apr;107(4):530–4

Oxidative desulfuration of chlorpyrifos, chlorpyrifos-methyl, and leptophos by rat brain and liver. Chambers JE, et al. **J Biochem Toxicol** 1989 Fall;4(3):201–3

An examination of the oxidation of mercury vapor by rat brain homogenate. Sichak SP, et al. **J Biochem Toxicol** 1986 Mar;1(1):53–68

Identification of a crotoxin-binding protein in membranes from guinea pig brain by photoaffinity labeling. Hseu MJ, et al. **J Bioenerg Biomembr** 1990 Feb;22(1):39–50

Influence of cerebral ischemia and post-ischemic reperfusion

on mitochondrial oxidative phosphorylation. Kurup CK, et al. **J Bioenerg Biomembr** 1990 Feb;22(1):61–80

Primary structure of glycolipid transfer protein from pig brain. Abe A. **J Biol Chem** 1990 Jun 15;265(17):9634–7

Identification of a clathrin binding subunit in the HA2 adaptor protein complex. Ahle S, et al. **J Biol Chem** 1989 Nov 25;264(33):20089–93

A nuclear protein derived from brain cells stimulates transcription of the human neurotropic virus promoter, JCVE, in vitro. Ahmed S, et al. **J Biol Chem** 1990 Aug 15;265(23):13899–905

Carboxyl methylation and COOH-terminal processing of the brain G-protein gamma-subunit. Backlund PS Jr, et al. **J Biol Chem** 1990 Sep 15;265(26):15572–6

Differential processing of neurotensin/neuromedin N precursor(s) in canine brain and intestine. Carraway RE, et al. **J Biol Chem** 1990 May 25;265(15):8627–31

Distinct guanine nucleotide binding and release properties of the three Gi proteins. Carty DJ, et al. **J Biol Chem** 1990 Apr 15;265(11):6268–73

Gz, a guanine nucleotide-binding protein with unique biochemical properties. Casey PJ, et al. **J Biol Chem** 1990 Feb 5;265(4):2383–90

Cerebral metabolism of [1,2-13C2]acetate as detected by in vivo and in vitro 13C NMR. Cerdan S, et al. **J Biol Chem** 1990 Aug 5;265(22):12916–26

Neuronal tyrosine phosphorylation in growth cone glycoproteins. Cheng N, et al. **J Biol Chem** 1990 Feb 15; 265(5):2417–20

Phosphorylation of a neuronal-specific beta-tubulin isotype. Díaz-Nido J, et al. **J Biol Chem** 1990 Aug 15; 265(23):13949–54

Immunochemical characterization of brain synaptic membrane glutamate-binding proteins. Eaton MJ, et al. **J Biol Chem** 1990 Sep 25;265(27):16195–204

Metallothionein–vasopressin fusion gene expression in transgenic mice. Nephrogenic diabetes insipidus and brain transcripts localized to magnocellular neurons. Habener JF, et al. **J Biol Chem** 1989 Nov 5;264(31):18844–52

Phosphorylation of synapsin I at a novel site by proline-directed protein kinase. Hall FL, et al. **J Biol Chem** 1990 Apr 25;265(12):6944–8

G protein subunit interactions. Studies with biotinylated G protein subunits. Kohnken RE, et al. **J Biol Chem** 1989 Dec 5;264(34):20688–96

Developmental tissue expression and phylogenetic conservation of stathmin, a phosphoprotein associated with cell regulations. Koppel J, et al. **J Biol Chem** 1990 Mar 5;265(7):3703–7

Muscarinic acetylcholine receptors. Peptide sequencing identifies residues involved in antagonist binding and disulfide bond formation. Kurtenbach E, et al. **J Biol Chem** 1990 Aug 15;265(23):13702–8

Identification of a brain acetylcholine receptor alpha subunit able to bind alpha-bungarotoxin. McLane KE, et al. **J Biol Chem** 1990 Jun 15;265(17):9816–24

Disulfiram administration affects substance P-like immunoreactive and monoaminergic neural systems in rodent brain. Marchand JE, et al. **J Biol Chem** 1990 Jan 5;265(1):264–73

Localization and subcellular distribution of smg p25A, a ras p21-like GTP-binding protein, in rat brain. Mizoguchi A, et al. **J Biol Chem** 1990 Jul 15;265(20):11872–9

Amino acid sequence around the serine phosphorylated by casein kinase II in brain myosin heavy chain. Murakami N, et al. **J Biol Chem** 1990 Jan 15;265(2):1041–7

Preparation of biologically active 32P-labeled human relaxin. Displaceable binding to rat uterus, cervix, and brain. Osheroff PL, et al. **J Biol Chem** 1990 Jun 5; 265(16):9396–401

Glucose catabolism in brain. Intracellular localization of hexokinase. Parry DM, et al. **J Biol Chem** 1990 Jan 15; 265(2):1059–66

Purification and characterization from bovine brain cytosol of a protein that inhibits the dissociation of GDP from and the subsequent binding of GTP to smg p25A, a ras p21-like GTP-binding protein. Sasaki T, et al. **J Biol Chem** 1990 Feb 5;265(4):2333–7

An ATP-driven Cl- pump in the brain. Shiroya T, et al. **J Biol Chem** 1989 Oct 15;264(29):17416–21

Cholesterol is required for the reconstruction of the sodium- and chloride-coupled, gamma-aminobutyric acid transporter from rat brain. Shouffani A, et al. **J Biol Chem** 1990 Apr 15;265(11):6002–8

A membrane receptor for gangliosides is associated with central nervous system myelin. Tiemeyer M, et al. **J Biol Chem** 1990 Jul 15;265(20):11990–9

Cloning and functional analysis of a gene encoding a novel muscarinic acetylcholine receptor expressed in chick heart and brain. Tietje KM, et al. **J Biol Chem** 1990 Feb 15; 265(5):2828–34

Characterization of high affinity binding sites for charybdotoxin in synaptic plasma membranes from rat brain. Evidence for a direct association with an inactivating, voltage-dependent, potassium channel. Vázquez J, et al. **J Biol Chem** 1990 Sep 15;265(26):15564–71

Functional water channels are present in clathrin-coated vesicles from bovine kidney but not from brain. Verkman AS, et al. **J Biol Chem** 1989 Dec 5;264(34):20608–13

Nucleotide binding and cofactor activities of purified bovine brain and bacterially expressed ADP-ribosylation factor. Weiss O, et al. **J Biol Chem** 1989 Dec 15;264(35):21066–72

Purification and characterization from bovine brain cytosol of proteins that regulate the GDP/GTP exchange reaction of smg p21s, ras p21-like GTP-binding proteins. Yamamoto T, et al. **J Biol Chem** 1990 Sep 25; 265(27):16626–34

Discrimination between different types of low-level luminescence in mammalian cells: the biophysical radiation. Reiber H. **J Biolumin Chemilumin** 1989 Jul;4(1):245–8

In vitro depolymerization dynamics of brain endogenous microtubules. López LA, et al. **J Cell Biochem** 1990 Jul; 43(3):281–91

Binding properties of detergent-solubilized NCAM. Hall AK, et al. **J Cell Biol** 1990 Mar;110(3):817–24

Neurothelin: an inducible cell surface glycoprotein of blood-brain barrier-specific endothelial cells and distinct neurons. Schlosshauer B, et al. **J Cell Biol** 1990 Apr; 110(4):1261–74

XIV International Symposium on Cerebral Blood Flow and Metabolism. Bologna, Italy, 28th May-1st June 1989. Abstracts. **J Cereb Blood Flow Metab** 1989;9 Suppl 1:S1–756

Glycolysis-induced discordance between glucose metabolic rates measured with radiolabeled fluorodeoxyglucose and glucose. Ackermann RF, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):774–85

Models for in vivo kinetic interactions of dopamine D2-neuroreceptors and 3-(2'-[18F]fluoroethyl)spiperone examined with positron emission tomography. Bahn MM, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):840–9

Use of PET methods for measurement of cerebral energy metabolism and hemodynamics in cerebrovascular disease. Baron JC, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):723–42 (134 ref.)

Use of 19F NMR spectroscopy for measurement of cerebral blood flow: a comparative study using microspheres. Barranco D, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):886–91

3-(2'-[18F]fluoroethyl)spiperone: in vivo biochemical and kinetic characterization in rodents, nonhuman primates, and humans. Barrio JR, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):830–9

Extracellular pH in the rat brain during hypoglycemic coma and recovery. Bengtsson F, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):262–9

Positron emission tomographic measurements of cerebral glucose utilization using [1-11C]D-glucose. Blomqvist G, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):467–83

Stability of brain intracellular lactate and 31P-metabolite levels at reduced intracellular pH during prolonged hypercapnia in rats. Cohen Y, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):277–84

A new method to measure brain serotonin synthesis in vivo. I. Theory and basic data for a biological model. Diksic M, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):1–12

The flux from glucose to glutamate in the rat brain in vivo as determined by 1H-observed, 13C-edited NMR spectroscopy. Fitzpatrick SM, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):170–9

Comparison of [11C]diprenorphine and [11C]carfentanil binding to opiate receptors in humans by positron emission tomography. Frost JJ, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):484–92

In vitro pharmacological profile of 3-N-(2-fluoroethyl)spiperone. Goffinet AM, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):140–2

Effect of gamma-hydroxybutyrate on local and global glucose metabolism in the anesthetized cat brain. Haller C, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):493–8

Measurement of free intracellular and transfer RNA amino acid specific activity and protein synthesis in rat brain in vivo. Hargreaves-Wall KM, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):162–9

Effect of nimodipine on regional cerebral glucose metabolism in patients with acute ischemic stroke as measured by positron emission tomography. Heiss WD, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):127–32

Quantifying interictal metabolic activity in human temporal lobe epilepsy. Henry TR, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):748–57

Delayed increases in regional brain quinolinic acid follow transient ischemia in the gerbil. Heyes MP, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):660–7

Metabolic and hemodynamic activation of postischemic rat brain by cortical spreading depression. Kocher M. **J Cereb Blood Flow Metab** 1990 Jul;10(4):564–71

Use of [11C]aminocyclohexanecarboxylate for the measurement of amino acid uptake and distribution volume in human brain. Koeppe RA, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):727–39

Effects of MK-801 upon local cerebral glucose utilisation in conscious rats and in rats anaesthetised with halothane. Kurumaji A, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):786–94

Michaelis-Menten constraints improved cerebral glucose metabolism and regional lumped constant measurements with [18F]fluorodeoxyglucose. Kuwabara H, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):180–9

Why the deoxyglucose method has proven so useful in cerebral activation studies: the unappreciated prevalence of stimulation-induced glycolysis. Lear JL, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):911–3

Graphical analysis of reversible radioligand binding from time-activity measurements applied to [N-11C-methyl]-(-)-cocaine PET studies in human subjects. Logan J, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):740–7

Preferential metabolic activation of subcortical brain areas by acute administration of nicotine to rats. McNamara D, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):48–56

Characterization of cerebral energetics and brain pH by 31P spectroscopy after graded canine cardiac arrest and bypass reperfusion. Martin GB, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):221–6

The novel dihydronaphthyridine Ca2+ channel blocker CI-951 improves CBF, brain pHi, and EEG recovery in focal cerebral ischemia. Meyer FB, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):97–103

Postischemic canine cerebral blood flow appears to be determined by cerebral metabolic needs. Michenfelder JD, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):71–6

Cerebral blood flow, glucose utilization, regional glucose, and ATP content during the maturation period of delayed ischemic injury in gerbil brain. Mies G, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):638–45

Kinetics of deoxyglucose (DG) and fluorodeoxyglucose (FDG) metabolism in rat and ferret brain [letter] Miller AL, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):147–8

A new method to measure brain serotonin synthesis in vivo. II. A practical autoradiographic method tested in normal and lithium-treated rats. Nagahiro S, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):13–21

Kinetic model of 2-deoxyglucose metabolism using brain slices. Newman GC, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):510–26

Carbohydrate and energy metabolism during the evolution of hypoxic-ischemic brain damage in the immature rat. Palmer C, et al. **J Cereb Blood Flow Metab** 1990 Mar; 10(2):227–35

Ornithine decarboxylase activity and putrescine levels in reversible cerebral ischemia of Mongolian gerbils: effect of barbiturate. Paschen W, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):236–42

Refinement of the kinetic model of the deoxyglucose method [letter] Redies C. **J Cereb Blood Flow Metab** 1990 May; 10(3):435–8

A two-compartment description and kinetic procedure for measuring regional cerebral [11C]nomifensine uptake using positron emission tomography. Salmon E, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):307–16

Regional cerebral glucose metabolism is normal in young adults with Down syndrome. Schapiro MB, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):199–206

Sequential metabolic changes in rat brain following middle cerebral artery occlusion: a 2-deoxyglucose study. Shiraishi K, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):765–73

Deoxyglucose lumped constant estimated in a transplanted rat astrocytic glioma by the hexose utilization index. Spence AM, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):190–8

The lumped constant of the deoxyglucose method in hypoglycemia: effects of moderate hypoglycemia on local cerebral glucose utilization in the rat. Suda S, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):479–509

In vivo binding of spiperone and N-methylspiperone to dopaminergic and serotonergic sites in the rat brain: multiple modeling and implications for PET scanning. Swart JA, et al. **J Cereb Blood Flow Metab** 1990 May; 10(3):297–306

Quantification of dopamine D2 receptors by irreversible tracer binding in the living human brain: the model-dependent correction of metabolites [letter] Swart JA, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):906–8; discussion 908–10

Delayed onset of neurologic deterioration following anoxia/ischemia coincides with appearance of impaired brain mitochondrial respiration and decreased cytochrome oxidase activity. Wagner KR, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):417–23

The metabolic centroid method for PET brain image analysis [letter] Worsley KJ. **J Cereb Blood Flow Metab** 1990 May; 10(3):438–40

Brain eicosanoid formation following acute penetration injury as studied by in vivo microdialysis. Yergey JA, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):143–6

Influence of MK-801 on brain extracellular calcium and potassium activities in severe hypoglycemia. Zhang ET, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):136–9

Cellular and subcellular localization of an octadecaneuropeptide derived from diazepam binding inhibitor: immunohistochemical studies in the rat brain. Alho H, et al. **J Chem Neuroanat** 1989 Nov-Dec; 2(6):301–18

Autoradiographic mapping of galanin receptors in the monkey brain. Köhler C, et al. **J Chem Neuroanat** 1989 Sep-Oct;2(5):269–84

Distribution of the carbohydrate epitope 3-fucosyl-N-acetyl-lactosamine (FAL) in the adult human brain. Mai JK, et al. **J Chem Neuroanat** 1988 Sep-Oct; 1(5):255–85

GABAA receptor subtypes: autoradiographic comparison of GABA, benzodiazepine, and convulsant binding sites in the rat central nervous system. Olsen RW, et al. **J Chem Neuroanat** 1990 Jan-Feb;3(1):59–76

Postembedding immunogold labelling of fixed glutamate: an electron microscopic analysis of the relationship between

gold particle density and antigen concentration. Ottersen OP. **J Chem Neuroanat** 1989 Jan-Feb;2(1):57-66

Quantitative autoradiography of [3H]norharman [(3H]beta-carboline) binding sites in the rat brain. Pawlik M, et al. **J Chem Neuroanat** 1990 Jan-Feb;3(1):19-24

Regional distribution of muscarinic and nicotinic cholinergic receptor binding activities in the human brain. Perry EK, et al. **J Chem Neuroanat** 1989 Jul-Aug;2(4):189-99

Differential expression of ubiquitin within the rat brain: discretely localized increases following salt-loading. Schueler PA, et al. **J Chem Neuroanat** 1988 May-Jun; 1(3):165-75

New insights into the reptilian catecholaminergic systems as revealed by antibodies against the neurotransmitters and their synthetic enzymes. Smeets WJ, et al. **J Chem Neuroanat** 1990 Jan-Feb;3(1):25-43

Ontogeny of vasopressin and oxytocin binding sites in the brain of Wistar and Brattleboro rats as demonstrated by lightmicroscopical autoradiography. Snijdewint FG, et al. **J Chem Neuroanat** 1989 Jan-Feb;2(1):3-17

Cholinergic innervation and topographical organization of muscarinic binding sites in rat brain: a comparative autoradiographic study. Tonnaer JA, et al. **J Chem Neuroanat** 1988 Mar-Apr;1(2):95-110

Distribution and colocalization of delta sleep-inducing peptide and luteinizing hormone-releasing hormone in the aged human brain: an immunohistochemical study. Vallet PG, et al. **J Chem Neuroanat** 1990 May-Jun;3(3):207-14

Compromises between penetration of antisera and preservation of ultra structure in pre-embedding electron microscopic immunocytochemistry. Wouterlood FG, et al. **J Chem Neuroanat** 1988 Mar-Apr;1(2):65-80

High-performance liquid chromatographic determination of selected amino acids in rat brain by precolumn derivatization with phenylisothiocyanate. Gunawan S, et al. **J Chromatogr** 1990 Mar 9;503(1):177-87

Determination of pharmacological levels of harmane, harmine and harmaline in mammalian brain tissue, cerebrospinal fluid and plasma by high-performance liquid chromatography with fluorimetric detection. Moncrieff J. **J Chromatogr** 1989 Nov 24;496(2):269-78

Simultaneous determination of biogenic amines, their precursors and metabolites in a single brain of the cricket using high-performance liquid chromatography with amperometric detection. Nagao T, et al. **J Chromatogr** 1989 Nov 10;496(1):39-53

The uptake of tritiated diethylstilbestrol by the brain, pituitary gland, and genital tract of the fetal macaque: a combined chromatographic and autoradiographic study. Michael RP, et al. **J Clin Endocrinol Metab** 1990 Oct; 71(4):868-74

Effects of hypernatremia on organic brain osmoles. Lien YH, et al. **J Clin Invest** 1990 May;85(5):1427-35

Comparative neuroanatomy of the histaminergic system in the brain of the frog Xenopus laevis. Airaksinen MS, et al. **J Comp Neurol** 1990 Feb 15;292(3):412-23

Metabolic anatomy of brain: a comparison of regional capillary density, glucose metabolism, and enzyme activities. Borowsky IW, et al. **J Comp Neurol** 1989 Oct 15;288(3):401-13

Distribution of histaminergic neurons in the brain of the lamprey Lampetra fluviatilis as revealed by histamine-immunohistochemistry. Brodin L, et al. **J Comp Neurol** 1990 Feb 15;292(3):435-42

Seasonal changes in vasopressin in the brain of the garden dormouse (Eliomys quercinus L.). Hermes ML, et al. **J Comp Neurol** 1990 Mar 15;293(3):340-6

Immunohistochemical distribution and partial characterization of FLFQPQRFamidelike peptides in the central nervous system of rats. Kivipelto L, et al. **J Comp Neurol** 1989 Aug 8;286(2):269-87

Immunoreactivity in Limulus: III. Morphological and biochemical studies of FMRFamide-like immunoreactivity and colocalized substance P-like immunoreactivity in the brain and lateral eye. Lewandowski TJ, et al. **J Comp Neurol** 1989 Oct 1;288(1):136-53

Neuronal localisation of neuropeptide Y gene expression in rat brain. Morris BJ. **J Comp Neurol** 1989 Dec 15; 290(3):358-68

Anatomical substrates of cholinergic-autonomic regulation in the rat. Ruggiero DA, et al. **J Comp Neurol** 1990 Feb 1;292(1):1-53

Substance P antibody reveals homologous neurons with axon terminals among somata in the crayfish and crab brain. Sandeman RE, et al. **J Comp Neurol** 1990 Apr 22; 294(4):569-82

Catecholaminergic systems in the brain of a gymnotiform teleost fish: an immunohistochemical study. Sas E, et al. **J Comp Neurol** 1990 Feb 1;292(1):127-62

Distribution of substance P-like, leucine-enkephalin-like, and bombesine-like immunoreactivity and acetylcholinesterase activity in the visual system of salamanders. Schmidt A, et al. **J Comp Neurol** 1989 Oct 1;288(1):123-35

Distribution of androgen and estrogen receptor mRNA-containing cells in the rat brain: an in situ hybridization study. Simerly RB, et al. **J Comp Neurol** 1990 Apr 1;294(1):76-95

Distribution of 125I-neurotensin binding sites in human forebrain: comparison with the localization of acetylcholinesterase. Szigethy E, et al. **J Comp Neurol** 1990 Jul 22;297(4):487-98

Immunohistochemical localization and biochemical characterization of nerve growth factor receptor in adult rat brain. Yan Q, et al. **J Comp Neurol** 1989 Dec 22; 290(4):585-98

Polyglucosan bodies in the brain of the cat. Kamiya S, et al. **J Comp Pathol** 1989 Oct;101(3):263-7

Cerebral oxidative metabolism during sustained hypoxaemia in fetal sheep. Richardson BS, et al. **J Dev Physiol** 1989 Jan;11(1):37-43

Effect of maternal hypothyroxinaemia in the rat on brain biochemistry in adult progeny. Hadjzadeh M, et al. **J Endocrinol** 1990 Mar;124(3):387-96

Immunodetection of cathepsin D in neuritic plaques found in brains of patients with dementia of Alzheimer type. Bernstein HG, et al. **J Hirnforsch** 1989;30(5):613-8

Cholecystokinin (CCK)-like immunoreactivity in the brain of the little brown bat (Myotis lucifugus). Cotter JR, et al. **J Hirnforsch** 1990;31(1):87-97

SRIF-like immunoreactivity in the brain and pituitary of Tinca tinca (Cyprinidae, Teleostei). König B, et al. **J Hirnforsch** 1990;31(2):227-36

A rapid, sensitive histochemical stain for myelin in frozen brain sections. Schmued LC. **J Histochem Cytochem** 1990 May;38(5):717-20

The effect of plasma valine, isoleucine and leucine on the control of the flux through tyrosine- and tryptophan-hydroxylase in the brain. Hommes FA, et al. **J Inherited Metab Dis** 1990;13(2):151-5

The control of 5-hydroxytryptamine and dopamine synthesis in the brain: a theoretical approach. Hommes FA, et al. **J Inherited Metab Dis** 1990;13(1):37-57

Effects of glipizide on beta-endorphin concentration in the brain of genetically diabetic (db/db) mice. Belon JP, et al. **J Int Med Res** 1989 Sep-Oct;17(5):467-72

Brain targeting of anti-HIV nucleosides: synthesis and in vitro and in vivo studies of dihydropyridine derivatives of 3'-azido-2',3'-dideoxyuridine and 3'-azido-3'-deoxythymidine. Chu CK, et al. **J Med Chem** 1990 Aug;33(8):2188-92

Synthesis, brain uptake, and pharmacological properties of a glyceryl lipid containing GABA and the GABA-T inhibitor gamma-vinyl-GABA. Jacob JN, et al. **J Med Chem** 1990 Feb;33(2):733-6

(R)- and (S)-5,6,7,8-tetrahydro-1-hydroxy-N,N-dipropyl-9H-benzocycloheptен- 8-ylamine. Stereoselective interactions with 5-HT1A receptors in the brain. Liu Y, et al. **J Med Chem** 1989 Oct;32(10):2311-8

Substituted 5-amino-4,5,6,7-tetrahydroindazoles as partial ergoline structures with dopaminergic activity. McQuaid LA, et al. **J Med Chem** 1989 Oct;32(10):2388-96

Synthesis of (R)-(-)- and (S)-(+)-4-fluorodeprenyl and (R)-(-)- and (S)-(+)-[N-11C-methyl]-4-fluorodeprenyl and positron emission tomography studies in baboon brain. Plenevaux A, et al. **J Med Chem** 1990 Jul;33(7):2015-9

Resolved 6,7,8,9-tetrahydro-N,N-dimethyl-3H-benz[e]indol-8-amine: central dopamine and serotonin receptor stimulating properties. Wikström H, et al. **J Med Chem** 1989 Oct; 32(10):2273-6

Receptor autoradiography and 2-deoxyglucose techniques in neuroscience. Wiederhold KH, et al. **J Microsc** 1990 Mar;157 (Pt 3):335-47 (34 ref.)

The myelin proteins of the shark brain are similar to the myelin proteins of the mammalian peripheral nervous system. Saavedra RA, et al. **J Mol Evol** 1989 Aug; 29(2):149-56

Inositol 1,4,5-trisphosphate binding sites in the brain: regional distribution, characterization, and alterations in brains of patients with Parkinson's disease. Kitamura N, et al. **J Mol Neurosci** 1989;1(3):181-7

Multisite phosphorylation of microtubule-associated protein 2 (MAP-2) in rat brain: peptide mapping distinguishes between cyclic AMP-, calcium/calmodulin-, and calcium/phospholipid-regulated phosphorylation mechanisms. Walaas SI, et al. **J Mol Neurosci** 1989; 1(2):117-27

Protein phosphorylation systems in postmortem human brain. Walaas SI, et al. **J Mol Neurosci** 1989;1(2):105-16

Myelin protein expression in the myelin-deficient rat brain and cultured oligodendrocytes. Zeller NK, et al. **J Mol Neurosci** 1989;1(3):139-49

Binding characteristics of a series of dimeric tripeptide enkephalins for delta opiate receptors in rat brain and NG108-15 cells. Shimohigashi Y, et al. **J Mol Recognit** 1989 Nov;2(3):127-31

Quantitative autoradiographic distribution and pharmacological characterization of (3H)buspirone binding to sections from rat, bovine and marmoset brain. Brüning G, et al. **J Neural Transm** 1989;78(2):131-44

Alteration of 5-HT uptake by plasma fractions in the premenstrual syndrome. Ashby CR Jr, et al. **J Neural Transm Gen Sect** 1990;79(1-2):41-50

Regionally-specific alterations in mesotelencephalic dopamine synthesis in diabetic rats: association with precursor tyrosine. Bradberry CW, et al. **J Neural Transm Gen Sect** 1989;78(3):221-9

Autoradiographic localization of dopamine D 1 and D 2 receptors in the brain of several mammalian species. Camps M, et al. **J Neural Transm Gen Sect** 1990;80(2):105-27

3,4-Dihydroxyphenylethylamine, L-3,4-dihydroxyphenylalanine and 3,4,5-trihydroxyphenylalanine: oxidation and binding to membranes. A comparative study of a neurotransmitter, a precursor and a neurotransmitter candidate in primitive nervous systems. Carlberg M. **J Neural Transm Gen Sect** 1990;81(2):111-9

Excitatory sulphur amino acid-evoked neurotransmitter release from rat brain synaptosome fractions. Dunlop J, et al. **J Neural Transm Gen Sect** 1989;78(3):195-208

Specific decrease of high-affinity agonist states of alpha 2-adrenoceptors in the aging mouse brain. Gelbmann CM, et al. **J Neural Transm Gen Sect** 1990;79(1-2):131-6

Effects of centrally administered neuropeptide Y (NPY) and NPY13-36 on the brain monoaminergic systems of the rat. Heilig M, et al. **J Neural Transm Gen Sect** 1990; 79(3):193-208

Tyrosine hydroxylase, tryptophan hydroxylase, biopterin, and neopterin in the brain of anorexia nervosa. Hirata Y, et al. **J Neural Transm Gen Sect** 1990;80(2):145-50

Effect of an oral tryptophan/carbohydrate load on tryptophan, large neutral amino acid, and serotonin and 5-hydroxyindoleacetic acid levels in monkey brain. Leathwood PD, et al. **J Neural Transm Gen Sect** 1990; 79(1-2):25-34

Ontogeny of phorbol ester receptors in rat brain studied by in vitro autoradiography. Miyoshi R, et al. **J Neural Transm Gen Sect** 1990;81(1):41-51

Electroconvulsive treatment: effects on phospholipase C activity and GTP binding activity in rat brain. Nishida A, et al. **J Neural Transm Gen Sect** 1990;81(2):121-30

Urinary MHPG sulfate as a marker of central norepinephrine metabolism: a commentary. Peyrin L. **J Neural Transm Gen Sect** 1990;80(1):51-65 (69 ref.)

Melatonin binding sites in brain of the 2-day-old chicken: an autoradiographic localisation. Stehle J. **J Neural Transm Gen Sect** 1990;81(1):83-9

Influence of cysteamine and cysteine on open-field behaviour, and on brain concentrations of catecholamines, somatostatin, neuropeptide Y, and corticotropin releasing hormone in the rat. Vécsei L, et al. **J Neural Transm Gen Sect** 1989;78(3):209-20

The apparent autoxidation rate of catechols in dopamine-rich regions of human brains increases with the degree of depigmentation of substantia nigra. Fornstedt B, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(4):279-95

Biological model for the in vivo measurement of rate of serotonin synthesis in the brain. Diksic M, et al. **J Neural Transm Suppl** 1990;29:131-40

Disturbance of the 5-hydroxytryptamine metabolism in brains from patients with Alzheimer's dementia. Gottfries CG. **J Neural Transm Suppl** 1990;30:33-43 (27 ref.)

Oxidative stress: a role in the pathogenesis of Parkinson's disease. Götz ME, et al. **J Neural Transm Suppl** 1990; 29:241-9 (30 ref.)

Histamine inactivation in the brain: aspects of N-methylation. Huszti Z. **J Neural Transm Suppl** 1990;29:107-18

Cerebral serotonin in viral encephalitis. Lima L, et al. **J Neural Transm Suppl** 1990;29:141-51

Involvement of neuropeptide Y in neuroendocrine stress responses. Central and peripheral studies. Mormède P, et al. **J Neural Transm Suppl** 1990;29:65-75 (46 ref.)

The effects of aging on MAO activity and amino acid levels in rat brain. Strolin Benedetti M, et al. **J Neural Transm Suppl** 1990;29:259-68 (36 ref.)

Down-regulation of progestin receptors in guinea pig brain: new findings using an immunocytochemical technique. Blaustein JD, et al. **J Neurobiol** 1990 Jul;21(5):675-85

Sex differences in hormonal responses of vasopressin pathways in the rat brain. De Vries GJ, et al. **J Neurobiol** 1990 Jul;21(5):686-93

Inhibition of brain type A monoamine oxidase and 5-hydroxytryptamine uptake by two amphetamine metabolites, p-hydroxyamphetamine and p-hydroxynorephedrine. Arai Y, et al. **J Neurochem** 1990 Aug;55(2):403-8

Presence of 3-hydroxyanthranilic acid in rat tissues and evidence for its production from anthranilic acid in the brain. Baran H, et al. **J Neurochem** 1990 Sep;55(3):738-44

Identification and characterisation of 5-hydroxytryptamine 3 recognition sites in human brain tissue. Barnes JM, et al. **J Neurochem** 1989 Dec;53(6):1787-93

Regional distribution of alpha-[3H]amino-3-hydroxy-5-methylisoxazole-4-propionic acid binding sites in rat brain: effect of chemical modification of SH- groups in tissue sections. Baudry M, et al. **J Neurochem** 1990 May;54(5):1682-8

Permeability of the blood-brain barrier to the immunosuppressive cyclic peptide cyclosporin A. Begley DJ, et al. **J Neurochem** 1990 Oct;55(4):1222-30

Neuroleptic-induced supersensitivity and brain iron: I. Iron deficiency and neuroleptic-induced dopamine D2 receptor supersensitivity. Ben-Shachar D, et al. **J Neurochem** 1990 Apr;54(4):1136-41

Effect of ammonia on brain serotonin metabolism in relation to function in the portacaval shunted rat. Bergeron M, et al. **J Neurochem** 1990 Jul;55(1):222-9

Turnover rate of brain acetylcholine using HPLC separation of the transmitter. Bertrand N, et al. **J Neurochem** 1990 Jul;55(1):27-30

Cannabinoid receptors and modulation of cyclic AMP accumulation in the rat brain. Bidaut-Russell M, et al. **J Neurochem** 1990 Jul;55(1):21-6

Precursors for cholesterol synthesis (7-dehydrocholesterol, 7-dehydrodesmosterol, and desmosterol):

cholesterol/7-dehydrocholesterol ratio as an index of development and aging in PNS but not in CNS. Bourre JM, et al. J Neurochem 1990 Apr;54(4):1196-9
Regional central nervous system oligosaccharide storage in caprine beta-mannosidosis. Boyer PJ, et al. J Neurochem 1990 Aug;55(2):660-4
(R)-N-[4,4-bis(3-methyl-2-thienyl)but-3-en-1-yl]nipecotic acid binds with high affinity to the brain gamma-aminobutyric acid uptake carrier. Braestrup C, et al. J Neurochem 1990 Feb;54(2):639-47
Effects of the amnesic agent 2-deoxygalactose on incorporation of fucose into chick brain glycoproteins. Bullock S, et al. J Neurochem 1990 Jan;54(1):135-42
Postmortem human brain pH and lactate in sudden infant death syndrome. Butterworth J, et al. J Neurochem 1989 Nov;53(5):1494-9
Vesicular and ganglionic norepinephrine in the rat: progressive increase with age. Buu NT, et al. J Neurochem 1990 Feb;54(2):620-6
Glutamate uptake into synaptic vesicles: competitive inhibition by bromocriptine. Carlson MD, et al. J Neurochem 1989 Dec;53(6):1889-94
Identification of disialosyl paragloboside and O-acetyldisialosyl paragloboside in cerebellum and embryonic cerebrum. Chou DK, et al. J Neurochem 1990 May;54(5):1598-607
Imaging the dopamine uptake site with ex vivo [18F]GBR 13119 binding autoradiography in rat brain. Ciliax BJ, et al. J Neurochem 1990 Aug;55(2):619-23
Binding of the neuronal protein B-50, but not the metabolite B-60, to calmodulin. Coggins PJ, et al. J Neurochem 1990 Jan;54(1):274-7
[3H]nipecotic acid binding to gamma-aminobutyric acid uptake sites in postmortem human brain. Czudek C, et al. J Neurochem 1990 Jul;55(1):165-8
Effects of diltiazem on bioenergetics, K+ gradients, and free cytosolic Ca2+ levels in rat brain synaptosomes submitted to energy metabolism inhibition and depolarization. Dagani F, et al. J Neurochem 1989 Nov;53(5):1379-89
[3H]GBR 12935 binding to dopamine uptake sites in the human brain. De Keyser J, et al. J Neurochem 1989 Nov; 53(5):1400-4
[3H]1-methyl-4-phenyl-2,3-dihydropyridinium ion binding sites in mouse brain: pharmacological and biological characterization. Del Zompo M, et al. J Neurochem 1990 Jun;54(6):1905-10
Calcium movements mediated by proteolipid protein and nucleotides in liposomes prepared with the endogenous lipids from brain white matter. Díaz RS, et al. J Neurochem 1990 Oct;55(4):1304-9
Phosphorylation of microtubule proteins in rat brain at different developmental stages: comparison with that found in neuronal cultures. Díaz-Nido J, et al. J Neurochem 1990 Jan;54(1):211-22
Acid lability of metabolites of 2-deoxyglucose in rat brain: implications for estimates of kinetic parameters of deoxyglucose phosphorylation and transport between blood and brain. Dienel GA, et al. J Neurochem 1990 Apr; 54(4):1440-8
Comparison of transmitter amino acid levels in rat globus pallidus and neostriatum during hypoglycemia or after treatment with methionine sulfoximine or gamma-vinyl gamma-aminobutyric acid. Fonnum F, et al. J Neurochem 1990 Apr;54(4):1253-7
Neurotransmitter changes in guinea-pig brain regions following soman intoxication. Fosbraey P, et al. J Neurochem 1990 Jan;54(1):72-9
The large isoform of myelin-associated glycoprotein is scarcely expressed in the quaking mouse brain. Fujita N, et al. J Neurochem 1990 Sep;55(3):1056-9
Calmodulin involvement in stress- and corticosterone-induced down-regulation of cyclic AMP-generating systems in brain. Gannon MN, et al. J Neurochem 1990 Jul;55(1):276-84
Rapid stereoselective hydrolysis of (+)-cocaine in baboon plasma prevents its uptake in the brain: implications for behavioral studies. Gatley SJ, et al. J Neurochem 1990 Feb; 54(2):720-3
Thromboxane and prostacyclin levels in fetal rabbit brain and placenta after intrauterine partial ischemic episodes. Goldin E, et al. J Neurochem 1990 Feb;54(2):587-91
Bovine brain coated vesicles contain adenosine A1 receptors. Presence of adenylate cyclase coupled to the receptor. Gonzalez-Calero G, et al. J Neurochem 1990 Jul; 55(1):106-13
Modulation of histamine release in the rat brain by kappa-opioid receptors. Gulat-Marnay C, et al. J Neurochem 1990 Jul;55(1):47-53
Hypoxia-induced neurotransmitter deficits in neonatal rats are partially corrected by exogenous GM1 ganglioside. Hadjiconstantinou M, et al. J Neurochem 1990 Sep; 55(3):864-9
Novel regulatory role of phosphorylated clathrin light chain beta in bovine brain coated vesicles. Hanson VG, et al. J Neurochem 1990 Jan;54(1):46-50
Developmental and regional studies of the metabolism of inositol 1,4,5-trisphosphate in rat brain. Heacock AM, et al. J Neurochem 1990 Apr;54(4):1405-11
Brain and plasma quinolinic acid in profound insulin-induced hypoglycemia. Heyes MP, et al. J Neurochem 1990 Mar; 54(3):1027-33
Liver, brain, and heart metallothionein induction by stress. Hidalgo J, et al. J Neurochem 1990 Aug;55(2):651-4
Cholinergic deficit induced by ethylcholine aziridinium (AF64A) transiently affects somatostatin and neuropeptide Y levels in rat brain. Hörtnagl H, et al. J Neurochem 1990 May;54(5):1608-13
Solubilization and partial purification of alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid binding sites from rat brain. Hunter C, et al. J Neurochem 1990 Jan;54(1):118-25
Metabolic stability of 3-O-methyl-D-glucose in brain and other tissues. Jay TM, et al. J Neurochem 1990 Sep; 55(3):989-1000
Rat brain glutamic acid decarboxylase sequence deduced from a cloned cDNA. Julien JF, et al. J Neurochem 1990 Feb;54(2):703-5
Solubilization and characterization of sigma-receptors from guinea pig brain membranes. Kavanaugh MP, et al. J Neurochem 1989 Nov;53(5):1575-80
Binding of progesterone to nerve cell membranes of rat brain using progesterone conjugated to 125I-bovine serum albumin as a ligand. Ke FC, et al. J Neurochem 1990 Feb; 54(2):467-72
Small rises in plasma choline reverse the negative arteriovenous difference of brain choline. Klein J, et al. J Neurochem 1990 Oct;55(4):1231-6
Guanine nucleotide effects on 8-cyclopentyl-1,3-[3H]dipropylxanthine binding to membrane-bound and solubilized A1 adenosine receptors of rat brain. Klotz KN, et al. J Neurochem 1990 Jun; 54(6):1988-94
Temperature dependence of [3H]Ro 15-1788 binding to benzodiazepine receptors in human postmortem brain homogenates. Kopp J, et al. J Neurochem 1990 Oct; 55(4):1310-5
Simultaneous in vivo monitoring of cerebral deoxyglucose and deoxyglucose-6-phosphate by 13C[1H] nuclear magnetic resonances spectroscopy. Kotyk JJ, et al. J Neurochem 1989 Nov;53(5):1620-8
Immunological evidence for the requirement of sepiapterin reductase for tetrahydrobiopterin biosynthesis in brain. Levine RA, et al. J Neurochem 1990 Apr;54(4):1218-24
Effects of dietary n-3 fatty acids on the phospholipid molecular species of monkey brain. Lin DS, et al. J Neurochem 1990 Oct;55(4):1200-7
Plant-derived neurotoxic amino acids (beta-N-oxalylamino-L-alanine and beta-N-methylamino-L-alanine): effects on central monoamine neurons. Lindström H, et al. J Neurochem 1990 Sep;55(3):941-9
Use of inhibitors of gamma-aminobutyric acid (GABA) transaminase for the estimation of GABA turnover in various brain regions of rats: a reevaluation of aminooxyacetic acid. Löscher W, et al. J Neurochem 1989 Dec;53(6):1737-50
Effect of noncompetitive blockade of N-methyl-D-aspartate receptors on the neurochemical sequelae of experimental brain injury. McIntosh TK, et al. J Neurochem 1990 Oct; 55(4):1170-9
A novel and neurotoxic tetrahydroisoquinoline derivative in vivo: formation of 1,3-dimethyl-1,2,3,4-tetrahydroisoquinoline, a condensation product of amphetamines, in brains of rats under chronic ethanol treatment. Makino Y, et al. J Neurochem 1990 Sep;55(3):963-9
Dissociation of muscimol, SR 95531, and strychnine from GABAA and glycine receptors, respectively, suggests similar cooperative interactions. Maksay G. J Neurochem 1990 Jun;54(6):1961-6
Hyaluronate-binding proteins of murine brain. Marks MS, et al. J Neurochem 1990 Jan;54(1):171-80
Monoamine receptors in an animal model of affective disorder. Martin JV, et al. J Neurochem 1990 Oct; 55(4):1142-8
Immunity of fetal mice to prenatal administration of the dopaminergic neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine. Melamed E, et al. J Neurochem 1990 Oct;55(4):1427-31
A new enzymatic cycling technique for glutamate determination in brain microdialysates. Mitani A, et al. J Neurochem 1990 Feb;54(2):709-11
Cell-specific expression of the mouse glial fibrillary acidic protein gene: identification of the cis- and trans-acting promoter elements for astrocyte-specific expression. Miura M, et al. J Neurochem 1990 Oct;55(4):1180-8
Optimal duration of experimental period in measurement of local cerebral glucose utilization with the deoxyglucose method. Mori K, et al. J Neurochem 1990 Jan;54(1):307-19
Chronic cocaine treatment decreases levels of the G protein subunits Gi alpha and Go alpha in discrete regions of rat brain. Nestler EJ, et al. J Neurochem 1990 Sep; 55(3):1079-82
Autoradiographic characterization and localization of quisqualate binding sites in rat brain using the antagonist [3H]6-cyano-7-nitroquinoxaline-2,3-dione: comparison with (R,S)-[3H]alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid binding sites. Nielsen EO, et al. J Neurochem 1990 Feb;54(2):686-95
Heat shock RNA levels in brain and other tissues after hyperthermia and transient ischemia. Nowak TS Jr, et al. J Neurochem 1990 Feb;54(2):451-8
Differential calcium dependence between the release of endogenous dopamine and noradrenaline from rat brain synaptosomes. Okada M, et al. J Neurochem 1990 Jun; 54(6):1947-52
2'-Deoxycoformycin inhibition of adenosine deaminase in rat brain: in vivo and in vitro analysis of specificity, potency, and enzyme recovery. Padua R, et al. J Neurochem 1990 Apr;54(4):1169-78
Transport of tryptophan into brain from the circulating, albumin-bound pool in rats and in rabbits [see comments] Pardridge WM, et al. J Neurochem 1990 Mar;54(3):971-6 Comment in: J Neurochem 1990 Aug;55(2):722.
Characterization of [3H]hemicholinium-3 binding sites in human brain membranes: a marker for presynaptic cholinergic nerve terminals. Pascual J, et al. J Neurochem 1990 Mar;54(3):792-800
Selective loss of N-methyl-D-aspartate-sensitive L-[3H]glutamate binding sites in rat brain following portacaval anastomosis. Peterson C, et al. J Neurochem 1990 Aug;55(2):386-90
In vivo measurements of ethanol concentration in rabbit brain by 1H magnetic resonance spectroscopy. Petroff OA, et al. J Neurochem 1990 Apr;54(4):1188-95
Intracerebroventricular administration of L-buthionine sulfoximine: a method for depleting brain glutathione. Pileblad E, et al. J Neurochem 1989 Dec;53(6):1878-82
Poly- and monoclonal antibodies against recombinant rat brain calbindin D-28K were produced to map its selective distribution in the central nervous system. Pinol MR, et al. J Neurochem 1990 Jun;54(6):1827-33
In vivo binding to peripheral benzodiazepine binding sites in lesioned rat brain: comparison between [3H]PK11195 and [18F]PK14105 as markers for neuronal damage. Price GW, et al. J Neurochem 1990 Jul;55(1):175-85
Binding properties of the neural cell adhesion molecule to different components of the extracellular matrix. Probstmeier R, et al. J Neurochem 1989 Dec;53(6):1794-801
Gallium-67 as a potential marker for aluminium transport in rat brain: implications for Alzheimer's disease. Pullen RG, et al. J Neurochem 1990 Jul;55(1):251-9
(+)-[3H]MK-801 binding sites in postmortem human brain. Quarum ML, et al. J Neurochem 1990 Apr;54(4):1163-8
Interactions of phencyclidine receptor agonist MK-801 with dopaminergic system: regional studies in the rat. Rao TS, et al. J Neurochem 1990 Apr;54(4):1157-62
Postmortem degradation alters fluorographic labeling patterns and affinities of benzodiazepine binding proteins. Reichelt R, et al. J Neurochem 1989 Nov;53(5):1536-40
Effect of transient cerebral ischaemia and cardiac arrest on brain extracellular dopamine and serotonin as determined by in vivo dialysis in the rat. Sarna GS, et al. J Neurochem 1990 Sep;55(3):937-40
Effects of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine and 1-methyl-4-phenylpyridinium ion on ATP levels of mouse brain synaptosomes. Scotcher KP, et al. J Neurochem 1990 Apr;54(4):1295-301
Stimulation of inositol phospholipid hydrolysis by excitatory amino acids is enhanced in brain slices from vulnerable regions after transient global ischemia. Seren MS, et al. J Neurochem 1989 Dec;53(6):1700-5
Mitochondrial and peroxisomal beta-oxidation of stearic and lignoceric acids by rat brain. Singh H, et al. J Neurochem 1989 Dec;53(6):1711-8
Lipid compositions of different regions of the human brain during aging. Söderberg M, et al. J Neurochem 1990 Feb; 54(2):415-23
Further studies on the changes of chicken brain gangliosides during prenatal and postnatal life. Sonnino S, et al. J Neurochem 1990 May;54(5):1653-60
Uptake of kynurenine into rat brain slices. Speciale C, et al. J Neurochem 1990 Jan;54(1):156-63
Micronutrient homeostasis in mammalian brain and cerebrospinal fluid. Spector R. J Neurochem 1989 Dec; 53(6):1667-74 (58 ref.)
Evidence for delta-opioid binding and GTP-regulatory proteins in 5-day-old rat brain membranes. Szücs M, et al. J Neurochem 1990 Apr;54(4):1419-25
Epidermal growth factor enhances the expression of an endogenous lectin in aggregating fetal brain cell cultures. Tenot M, et al. J Neurochem 1989 Nov;53(5):1435-41
Characterization of 3'-phosphoadenosine 5'-phospho[35S]sulfate transport carrier from rat brain microsomes. Vargas F. J Neurochem 1990 Mar; 54(3):809-14
Effect of peroxide, sodium, and calcium on brain mitochondrial respiration in vitro: potential role in cerebral ischemia and reperfusion. Vlessis AA, et al. J Neurochem 1990 Apr;54(4):1412-8
Modification by cholecystokinin octapeptide of the binding of mu-, delta-, and kappa-opioid receptors. Wang XJ, et al. J Neurochem 1990 Oct;55(4):1379-82
Autoradiographic visualization of A1 adenosine receptors in rat brain with [3H]8-cyclopentyl-1,3-dipropylxanthine. Weber RG, et al. J Neurochem 1990 Apr;54(4):1344-53
Release of immunoreactive insulin from rat brain synaptosomes under depolarizing conditions. Wei LT, et al. J Neurochem 1990 May;54(5):1661-5
Ventricular cerebrospinal fluid monoamine transmitter and metabolite concentrations reflect human brain neurochemistry in autopsy cases. Wester P, et al. J Neurochem 1990 Apr;54(4):1148-56
Use of microdialysis for monitoring tyrosine hydroxylase activity in the brain of conscious rats. Westerink BH, et al. J Neurochem 1990 Feb;54(2):381-7

A comparison of the distribution of neurotransmitters in brain regions of the rat and guinea-pig using a chemiluminescent method and HPLC with electrochemical detection. Wetherell JR, et al. **J Neurochem** 1989 Nov;53(5):1519–26

Exogenous nerve growth factor increases the activity of high-affinity choline uptake and choline acetyltransferase in brain of Fisher 344 male rats. Williams LR, et al. **J Neurochem** 1990 Sep;55(3):1042–9

Regional variations in alpha 1-adrenergic receptor subtypes in rat brain. Wilson KM, et al. **J Neurochem** 1989 Dec; 53(6):1782–6

Agonist-selective protection of the opioid receptor-coupled G proteins from inactivation by 5'-p-fluorosulphonylbenzoyl guanosine. Wong YH, et al. **J Neurochem** 1990 Jan;54(1):39–45

Fructose 2,6-bisphosphate changes in rat brain during ischemia. Yamamoto M, et al. **J Neurochem** 1990 Feb; 54(2):592–7

Specific binding of [3H]pyrilamine to histamine H1 receptors in guinea pig brain in vivo: determination of binding parameters by a kinetic four-compartment model. Yanai K, et al. **J Neurochem** 1990 Aug;55(2):409–20

Interaction of strychnine-insensitive glycine binding with MK-801 binding in brain synaptic membranes. Yoneda Y, et al. **J Neurochem** 1990 Jul;55(1):237–44

Intrasynaptosomal sequestration of [3H]amphetamine and [3H]methylenedioxyamphetamine: characterization suggests the presence of a factor responsible for maintaining sequestration. Zaczek R, et al. **J Neurochem** 1990 Jan; 54(1):195–204

Affinity states of rat brain opioid receptors in different tissue preparations. Zajac JM, et al. **J Neurochem** 1990 Mar; 54(3):992–9

Kinetic analysis of leucine-enkephalin cellular uptake at the luminal side of the blood-brain barrier of an in situ perfused guinea-pig brain. Zlokovic BV, et al. **J Neurochem** 1989 Nov;53(5):1333–40

Possible relationship of brain cytoplasmic tetrodotoxin-sensitive protein to voltage-gated sodium channel shown by monoclonal antibody. Pinchuk GV, et al. **J Neuroimmunol** 1990 Feb;26(2):91–6

Monoclonal antibody to brain cytoplasmic tetrodotoxin-sensitive protein detects an epitope associated with lymphocytes and involved in lymphocyte activation. Pinchuk LN, et al. **J Neuroimmunol** 1990 Apr;27(1):71–8

Sequential PET studies in neuro-Behçet's syndrome. Mineura K, et al. **J Neurol** 1989 Sep;236(6):367–70

The quinolinic acid hypothesis in Huntington's chorea. Bruyn RP, et al. **J Neurol Sci** 1990 Jan;95(1):29–38 (52 ref.)

A quantitative assessment of somatostatin-like and neuropeptide Y-like immunostained cells in the frontal and temporal cortex of patients with Alzheimer's disease. Davies CA, et al. **J Neurol Sci** 1990 Apr;96(1):59–73

The intracerebral penetration of intraventricularly administered methotrexate: a quantitative autoradiographic study. Grossman SA, et al. **J Neurooncol** 1989 Nov; 7(4):319–28

Changes in brain energy and phospholipid metabolism during development and aging in the Fischer 344 rat. Pettegrew JW, et al. **J Neuropathol Exp Neurol** 1990 May;49(3):237–49

Effects of aging on nicotinic and muscarinic autoreceptor function in the rat brain: relationship to presynaptic cholinergic markers and binding sites. Araujo DM, et al. **J Neurosci** 1990 Sep;10(9):3069–78

Electroconvulsive shock differentially increases binding to alpha-1 adrenergic receptor subtypes in discrete regions of rat brain. Biendy JA, et al. **J Neurosci** 1990 Aug; 10(8):2580–6

Regional cerebral glucose utilization reveals widespread abnormalities in the motor system of the rat mutant dystonic. Brown LL, et al. **J Neurosci** 1989 Nov; 9(11):4033–41

Structure, expression, and some regulatory mechanisms of the rat preprotachykinin gene encoding substance P, neurokinin A, neuropeptide K, and neuropeptide gamma. Carter MS, et al. **J Neurosci** 1990 Jul;10(7):2203–14

Bilateral alterations in local cerebral glucose utilization following intranigral application of the GABAergic agonist muscimol. Dermon CR, et al. **J Neurosci** 1990 Sep; 10(9):2861–78

Localization and characterization of 35S-t-butylbicyclophosphorothionate binding in rat brain: an autoradiographic study. Edgar PP, et al. **J Neurosci** 1990 Feb;10(2):603–12

Differential expression of ARPP-16 and ARPP-19, two highly related cAMP-regulated phosphoproteins, one of which is specifically associated with dopamine-innervated brain regions. Girault JA, et al. **J Neurosci** 1990 Apr; 10(4):1124–33

Identification of morphine- and cyclic AMP-regulated phosphoproteins (MARPPs) in the locus coeruleus and other regions of rat brain: regulation by acute and chronic morphine. Guitart X, et al. **J Neurosci** 1989 Dec; 9(12):4371–87

Autoradiographical detection of cholecystokinin-A receptors in primate brain using 125I-Bolton Hunter CCK-8 and 3H-MK-329. Hill DR, et al. **J Neurosci** 1990 Apr; 10(4):1070–81

Alpha-internexin, a novel neuronal intermediate filament protein, precedes the low molecular weight neurofilament protein (NF-L) in the developing rat brain. Kaplan MP, et al. **J Neurosci** 1990 Aug;10(8):2735–48

ARPP-21, a cyclic AMP-regulated phosphoprotein enriched in dopamine-innervated brain regions. II. Molecular cloning and nucleotide sequence. Kurihara T, et al. **J Neurosci** 1989 Oct;9(10):3638–44

Carboxypeptidase E (enkephalin convertase): mRNA distribution in rat brain by in situ hybridization. MacCumber MW, et al. **J Neurosci** 1990 Aug;10(8):2850–60

Functional characteristics and sites of gene expression of the alpha 1, beta 1, gamma 2-isoform of the rat GABAA receptor. Malherbe P, et al. **J Neurosci** 1990 Jul; 10(7):2330–7

Localization of dopamine D2 receptor mRNA and D1 and D2 receptor binding in the rat brain and pituitary: an in situ hybridization-receptor autoradiographic analysis. Mansour A, et al. **J Neurosci** 1990 Aug;10(8):2587–600

Local cerebral glucose utilization in monkeys with hemiparkinsonism induced by intracarotid infusion of the neurotoxin MPTP. Palombo E, et al. **J Neurosci** 1990 Mar; 10(3):860–9

Immunocytochemical localization of the GABA transporter in rat brain. Radian R, et al. **J Neurosci** 1990 Apr; 10(4):1319–30

Phospholipase A2 and 3H-hemicholinium-3 binding sites in rat brain: a potential second-messenger role for fatty acids in the regulation of high-affinity choline uptake. Saltarelli MD, et al. **J Neurosci** 1990 Jan;10(1):62–72

Immunocytochemical localization of the neuron-specific form of the c-src gene product, pp60c-src(+), in rat brain. Sugrue MM, et al. **J Neurosci** 1990 Aug;10(8):2513–27

Chronic naltrexone treatment increases expression of preproenkephalin and preprotachykinin mRNA in discrete brain regions. Tempel A, et al. **J Neurosci** 1990 Mar; 10(3):741–7

Muscarinic receptor activation stimulates B-50/GAP43 phosphorylation in isolated nerve growth cones. Van Hooff CO, et al. **J Neurosci** 1989 Nov;9(11):3753–9

The adult rat olfactory system expresses microtubule-associated proteins found in the developing brain. Viereck C, et al. **J Neurosci** 1989 Oct;9(10):3547–57

Three-dimensional autoradiographic localization of quench-corrected glycine receptor specific activity in the mouse brain using 3H-strychnine as the ligand. White WF, et al. **J Neurosci** 1990 Mar;10(3):795–813

ARPP-21, a cyclic AMP-regulated phosphoprotein enriched in dopamine-innervated brain regions. I. Amino acid sequence of ARPP-21B from bovine caudate nucleus. Williams KR, et al. **J Neurosci** 1989 Oct;9(10):3631–7

Circadian fluctuations of period protein immunoreactivity in the CNS and the visual system of Drosophila. Zerr DM, et al. **J Neurosci** 1990 Aug;10(8):2749–62

The use of 3H standards in 125I autoradiography. Artymyshyn R, et al. **J Neurosci Methods** 1990 Jun; 32(3):185–92

Detection of zinc in isolated nerve terminals using a modified Timm's sulfide-silver method. Claiborne BJ, et al. **J Neurosci Methods** 1989 Oct;30(1):17–22

The use of c-fos as a metabolic marker in neuronal pathway tracing. Dragunow M, et al. **J Neurosci Methods** 1989 Sep; 29(3):261–5 (21 ref.)

Brain amino acid concentrations in rats killed by decapitation and microwave irradiation. Miller JM, et al. **J Neurosci Methods** 1990 Mar;31(3):187–92

Calibration of 125I-polymer standards with 125I-brain paste standards for use in quantitative receptor autoradiography. Nazarali AJ, et al. **J Neurosci Methods** 1989 Dec; 30(3):247–53

D-tartrate alters uptake of [3H]dopamine into brain synaptic vesicles. Reith ME, et al. **J Neurosci Methods** 1990 Feb; 31(2):133–6

A new system for computer-assisted quantitative receptor autoradiography. Segu L, et al. **J Neurosci Methods** 1990 Mar;31(3):197–205

Purification and polypeptide composition of corpora amylacea from aged human brain. Steyaert A, et al. **J Neurosci Methods** 1990 Jan;31(1):59–64

A rapid procedure for the analysis of phenylalanine in brain tissue utilizing electron-capture gas chromatography. Wong JT, et al. **J Neurosci Methods** 1990 May;32(2):105–9

New triple microbore cannula system for push-pull perfusion of brain nuclei of the rat. Zhang X, et al. **J Neurosci Methods** 1990 May;32(2):93–104

Activation of arginine metabolism to glutamate in rat brain synaptosomes in thioacetamide-induced hepatic encephalopathy: an adaptative response? Albrecht J, et al. **J Neurosci Res** 1990 Jan;25(1):125–30

Changes with aging in the levels of amino acids in rat CNS structural elements: III. Large neutral amino acids. Banay-Schwartz M, et al. **J Neurosci Res** 1990 Jun; 26(2):209–16

Changes with aging in the levels of amino acids in rat CNS structural elements: IV. Methionine and basic amino acids. Banay-Schwartz M, et al. **J Neurosci Res** 1990 Jun; 26(2):217–23

Purification of an endogenous 68 kD inhibitor of calcium-activated neutral proteinase (CANP) from bovine brain: immunoblot identification and characterization. Banik NL, et al. **J Neurosci Res** 1990 Jan;25(1):119–24

Changes on cerebral antioxidant enzymes, peroxidation, and the glutathione system of frogs after aging and catalase inhibition. Barja de Quiroga G, et al. **J Neurosci Res** 1990 Jul;26(3):370–6

Identification of GTP-binding proteins in myelin and oligodendrocyte membranes. Braun PE, et al. **J Neurosci Res** 1990 May;26(1):16–23

Expression of heat shock genes (hsp70) in the mammalian brain: distinguishing constitutively expressed and hyperthermia-inducible mRNA species. Brown IR, et al. **J Neurosci Res** 1990 Jan;25(1):14–9

Intravenous injection of [1-14C]arachidonate to examine regional brain lipid metabolism in unanesthetized rats. DeGeorge JJ, et al. **J Neurosci Res** 1989 Nov;24(3):413–23

Denervation and hyperinnervation in the nervous system of diabetic animals. II. Monoaminergic and peptidergic alterations in the diabetic encephalopathy. Di Giulio AM, et al. **J Neurosci Res** 1989 Nov;24(3):362–8

Transferrin gene expression and secretion by rat brain cells in vitro. Espinosa de los Monteros A, et al. **J Neurosci Res** 1990 Apr;25(4):576–80

Brain mitochondrial swelling induced by arachidonic acid and other long chain free fatty acids. Hillered L, et al. **J Neurosci Res** 1989 Oct;24(2):247–50

Developmental expression of glial fibrillary acidic protein mRNA in the rat brain analyzed by in situ hybridization. Landry CF, et al. **J Neurosci Res** 1990 Feb;25(2):194–203

Effect of lithium on tachykinins, calcitonin gene-related peptide, and neuropeptide Y in rat brain. Mathé AA, et al. **J Neurosci Res** 1990 Jun;26(2):233–7

In vivo labeling of phencyclidine (PCP) receptors with 3H-TCP in the mouse brain. Maurice T, et al. **J Neurosci Res** 1990 Jul;26(3):377–85

Quantitative brain autoradiography of [9,10-3H]palmitic acid incorporation into brain lipids. Noronha JG, et al. **J Neurosci Res** 1990 Jun;26(2):196–208

Expression of synaptophysin and neuron-specific enolase during neuronal differentiation in vitro: effects of dimethyl sulfoxide. Schilling K, et al. **J Neurosci Res** 1989 Nov; 24(3):347–54

Low-abundance 32-kilodalton nuclear protein specifically enriched in the central nervous system. Shelton KR, et al. **J Neurosci Res** 1990 Mar;25(3):287–94

Effect of repeated electroconvulsive treatment on regional concentrations of tachykinins, neurotensin, vasoactive intestinal polypeptide, neuropeptide Y, and galanin in rat brain. Stenfors C, et al. **J Neurosci Res** 1989 Nov; 24(3):445–50

Iron-dependent peroxidation of rat brain: a regional study. Subbarao KV, et al. **J Neurosci Res** 1990 Jun;26(2):224–32

125I-beta-nerve growth factor binding is reduced in rat brain after stress exposure. Taglialatela G, et al. **J Neurosci Res** 1990 Mar;25(3):331–5

Phospholipid-derived choline intermediates and acetylcholine synthesis in mouse brain synaptosomes. Yavin E, et al. **J Neurosci Res** 1989 Oct;24(2):241–6

Alterations in Na(+)-K(+)-ATPase activity and beta-endorphin content in acute ischemic brain with and without naloxone treatment. Furui T, et al. **J Neurosurg** 1990 Mar;72(3):458–62

The effect of steroids on gentamicin delivery to brain after blood-brain barrier disruption. Neuwelt EA, et al. **J Neurosurg** 1990 Jan;72(1):123–6

Cerebral blood flow and glucose metabolism in experimental brain edema. Sutton LN, et al. **J Neurosurg** 1989 Dec; 71(6):868–74

Anesthesia and cerebral coupling [letter] Tommasino C. **J Neurosurg** 1990 Oct;73(4):644–5

MIBG and adrenoceptors in rats [letter] Huguet F, et al. **J Nucl Med** 1990 Jul;31(7):1253

Temporal changes in accumulation of N-isopropyl-p-iodoamphetamine in human brain: relation to lung clearance. Yonekura Y, et al. **J Nucl Med** 1989 Dec;30(12):1977–81

Perinatal undernutrition affects brain modulatory capacity of beta-adrenergic receptors in adult rats. Keller EA, et al. **J Nutr** 1990 Mar;120(3):305–8

Effects of dietary fatty acid composition on macronutrient selection and synaptosomal fatty acid composition in rats. McGee CD, et al. **J Nutr** 1989 Nov;119(11):1561–8

Plasma and brain ammonia and amino acids in rats measured after feeding 75% casein or 28% egg white. Semon BA, et al. **J Nutr** 1989 Nov;119(11):1583–92

Alteration of FHR pattern and cerebral metabolic rate of glucose of the fetus measured by positron emission tomography during progress of acidemia. The significance of overshoot acceleration in FHR. Okamura K, et al. **J Perinat Med** 1989;17(4):289–95

The effect of monoamine depletors on metrazol induced convulsions and brain gamma-aminobutyric acid (GABA) contents in rats. Abed WT. **J Pharm Pharmacol** 1989 Nov; 41(11):807–8

Anaesthetic concentrations of enflurane and methoxyflurane in rat brain in-vivo and in-vitro. Bazil CW, et al. **J Pharm Pharmacol** 1989 Dec;41(12):835–9

Circadian phase dependent acute toxicity and pharmacokinetics of etidocaine in serum and brain of mice. Bruguerolle B, et al. **J Pharm Pharmacol** 1990 Mar; 42(3):201–2

Pipequaline transport from blood to brain and liver: role of plasma protein-bound drug. Essassi D, et al. **J Pharm Pharmacol** 1989 Sep;41(9):595–600

Ergometrine and 5-hydroxytryptamine binding sites in rat brain and myometrium. Hollingsworth M, et al. **J Pharm Pharmacol** 1989 Sep;41(9):637–8

Influence of plasma protein binding on the brain uptake of an antifungal agent, terbinafine, in rats. Machard B, et al.

J Pharm Pharmacol 1989 Oct;41(10):700–4
In-vivo radiolabelled oxiracetam binding to rat brain. Mennini T, et al. J Pharm Pharmacol 1990 Mar;42(3):171–4
Pharmacokinetics of amitriptyline and its demethylated metabolite in serum and specific brain regions of rats after acute and chronic administration of amitriptyline. Miyake K, et al. J Pharm Sci 1990 Apr;79(4):288–91
Improved anticonvulsant activity of phenytoin by a redox brain delivery system. II: Stability in buffers and biological materials. Murakami T, et al. J Pharm Sci 1989 Sep; 78(9):732–7
Improved anticonvulsant activity of phenytoin by a redox brain delivery system. III: Brain uptake and pharmacological effects. Shek E, et al. J Pharm Sci 1989 Oct;78(10):837–43
Racemization kinetics of enantiomeric oxazepams and stereoselective hydrolysis of enantiomeric oxazepam 3-acetates in rat liver microsomes and brain homogenate. Yang SK, et al. J Pharm Sci 1989 Oct;78(10):789–95
Synthesis of valproyl-2-pyrrolidinone and its evaluation as a cognitive drug with the ability to modulate acidic amino acids in the brain. Miyazaki C, et al. J Pharmacobiodyn 1990 Jan;13(1):70–5
Ischemia-induced changes in brain levels of monoamines and their metabolites of mice and rats: some protective effects of naftidrofuryl. Nakamuta H, et al. J Pharmacobiodyn 1989 Jul;12(7):429–36
Three binding sites of 125I-iodocyanopindolol, i.e. beta 1, beta 2-adrenergic and 5HT1B-serotonergic receptors in rat brain determined by the displacement and Scatchard analysis. Tsuchihashi H, et al. J Pharmacobiodyn 1989 Sep; 12(9):509–16
Estimating the rate of thiopental blood-brain equilibration using pseudo steady state serum concentrations. Maitre PO, et al. J Pharmacokinet Biopharm 1990 Jun;18(3):175–87
Uptake kinetics of 2',3'-dideoxyinosine into brain and cerebrospinal fluid of rats: intravenous infusion studies. Anderson BD, et al. J Pharmacol Exp Ther 1990 Apr; 253(1):113–8
Characterization of cholinergic muscarinic receptor-stimulated phosphoinositide metabolism in brain from immature rats. Balduini W, et al. J Pharmacol Exp Ther 1990 May;253(2):573–9
Diabetes-related changes in brain beta adrenoreceptors in rats as assessed by quantitative autoradiography: relationship to hypothalamic norepinephrine metabolism and pituitary-gonadal hormone secretion. Bitar MS, et al. J Pharmacol Exp Ther 1990 Sep;254(3):781–5
Ifenprodil and SL 82.0715 as cerebral antiischemic agents. III. Evidence for antagonistic effects at the polyamine modulatory site within the N-methyl-D-aspartate receptor complex. Carter CJ, et al. J Pharmacol Exp Ther 1990 May; 253(2):475–82
Biochemical and radiohistochemical analyses of alpha-2 adrenergic receptors in the kindling model of epilepsy. Chen LS, et al. J Pharmacol Exp Ther 1990 Jun; 253(3):1272–7
G-protein-linked serotonin receptors in mouse kidney exhibit identical properties to 5-HT1b receptors in brain. Ciaranello RD, et al. J Pharmacol Exp Ther 1990 Mar; 252(3):1347–54
Characterization of kappa opioid binding using dynorphin A1-13 and U69,593 in the rat brain. Devlin T, et al. J Pharmacol Exp Ther 1990 May;253(2):749–59
Binding interactions of convulsant and anticonvulsant gamma-butyrolactones and gamma-thiobutyrolactones with the picrotoxin receptor. Holland KD, et al. J Pharmacol Exp Ther 1990 Aug;254(2):578–83
Antidepressant binding sites in brain: autoradiographic comparison of [3H]paroxetine and [3H]imipramine localization and relationship to serotonin transporter. Hrdina PD, et al. J Pharmacol Exp Ther 1990 Jan; 252(1):410–8
Nonlinear relationship between benzodiazepine receptor occupancy and glucose metabolic response in the conscious mouse brain in vivo. Ishizuka H, et al. J Pharmacol Exp Ther 1989 Oct;251(1):362–7
[3H]CGS 21680, a selective A2 adenosine receptor agonist directly labels A2 receptors in rat brain. Jarvis MF, et al. J Pharmacol Exp Ther 1989 Dec;251(3):888–93
Neuropeptide processing in regional brain slices: effect of conformation and sequence. Li ZW, et al. J Pharmacol Exp Ther 1990 May;253(2):851–7
Effects of protein binding and experimental disease states on brain uptake of benzodiazepines in rats. Lin TH, et al. J Pharmacol Exp Ther 1990 Apr;253(1):45–50
Sodium-dependent isomerization of dopamine D-2 receptors characterized using [125I]epidepride, a high-affinity substituted benzamide ligand. Neve KA, et al. J Pharmacol Exp Ther 1990 Mar;252(3):1108–16
Affinity of drugs and peptides for U-69,593-sensitive and -insensitive kappa opiate binding sites: the U-69,593-insensitive site appears to be the beta endorphin-specific epsilon receptor. Nock B, et al. J Pharmacol Exp Ther 1990 Aug;254(2):412–9
The Na(+)-dependent release of endogenous dopamine and noradrenaline from rat brain synaptosomes. Okada M, et al. J Pharmacol Exp Ther 1990 Mar;252(3):1283–8
Interaction of chronic ethanol consumption and aging on brain muscarinic cholinergic receptors. Pietrzak ER, et al. J Pharmacol Exp Ther 1990 Feb;252(2):869–74
Compensatory activation of substance P biosynthesis by L-dihydroxyphenylalanine in striatonigral neurons of neonatal dopaminergic denervated rats. Sivam SP, et al. J Pharmacol Exp Ther 1990 Aug;254(2):433–9
Aging does not alter brain muscarinic receptor-mediated phosphoinositide hydrolysis and its inhibition by phorbol esters, tetrodotoxin and receptor desensitization. Surichamorn W, et al. J Pharmacol Exp Ther 1989 Nov; 251(2):543–9
Absorptive-mediated endocytosis of a dynorphin-like analgesic peptide, E-2078 into the blood-brain barrier. Terasaki T, et al. J Pharmacol Exp Ther 1989 Oct; 251(1):351–7
Measurement of cerebral glucose utilization from brain uptake of [14C]2-deoxyglucose and [3H]3-O-methylglucose in the mouse. Ito K, et al. J Pharmacol Methods 1990 Apr;23(2):129–40
Vasopressin receptor subtypes: autoradiographic localization of V1 vasopressin binding sites in rat brain and kidney. Fahrenholz F, et al. J Protein Chem 1989 Jun;8(3):370–2
GABA-gated chloride channels: regulation, structure and sites of gene expression in the brain. Möhler H. J Protein Chem 1989 Jun;8(3):349–52
A study on the rat brain receptors for tachykinins and muramyl peptides. Utkin YuN, et al. J Protein Chem 1989 Jun;8(3):368–70
A soluble TTX-sensitive channel does exist in bovine brain cytoplasm. Zhukareva VA, et al. J Protein Chem 1989 Jun; 8(3):391–3
Properties and distribution of binding sites for the mineralocorticoid receptor antagonist [3H]ZK 91587 in brain. Grillo C, et al. J Steroid Biochem 1990 Jan;35(1):11–5
Regulation of the gonadotropin-releasing hormone (GnRH) neuronal system: morphological aspects. Halász B, et al. J Steroid Biochem 1989 Oct;33(4B):663–8 (58 ref.)
Steroid synthesis in rat brain cell cultures. Jung-Testas I, et al. J Steroid Biochem 1989;34(1–6):511–9
Arachidonic acid as a possible modulator of estrogen, progestin, androgen, and glucocorticoid receptors in the central and peripheral tissues. Kato J. J Steroid Biochem 1989;34(1–6):219–27
Modulation by sex steroids of brain opioid receptors: implications for the control of gonadotropins and prolactin secretion. Martini L, et al. J Steroid Biochem 1989 Oct; 33(4B):673–81 (51 ref.)
Brain tissue pH, oxygen tension, and carbon dioxide tension in profoundly hypothermic cardiopulmonary bypass. Pulsatile assistance for circulatory arrest, low-flow perfusion, and moderate-flow perfusion. Watanabe T, et al. J Thorac Cardiovasc Surg 1990 Aug;100(2):274–80
Behavioral and neurochemical changes associated with chronic exposure to low-level concentration of pesticide mixtures. Boyd CA, et al. J Toxicol Environ Health 1990 Jul;30(3):209–21
The effect of radix Salviae miltiorrhizae on vasoactive intestinal peptide in cerebral ischemia: an animal experiment. Kuang PG, et al. J Tradit Chin Med 1989 Sep; 9(3):203–6
The effects of electroacupuncture on the regional changes of monoamine neurotransmitters in brain of rat with carbon tetrachloride-induced liver injury. Wang YJ, et al. J Tradit Chin Med 1982 Dec;2(4):261–5
Effects of phentolamine and propranolol on the changes of pain threshold and contents of MEK and LEK in rat brain after EA. Wang YJ, et al. J Tradit Chin Med 1989 Sep; 9(3):210–4
Alzheimer's disease. Nakamura S. Jpn J Med 1989 Nov-Dec; 28(6):793–5
Relationships between the effects of peripherally administered salmon calcitonin on calcaemia and brain biogenic amines. Gaggi R, et al. Jpn J Pharmacol 1989 Nov;51(3):309–20
Quantitative autoradiographic localization of the M1 and M2 subtypes of muscarinic acetylcholine receptors in the monkey brain. Miyoshi R, et al. Jpn J Pharmacol 1989 Oct;51(2):247–55
Detection and characterization of 3H-clonidine binding sites in coated vesicles isolated from bovine brain. Moroi K, et al. Jpn J Pharmacol 1989 Sep;51(1):128–31
Abnormal norepinephrine uptake and release in brain synaptosomes in chronic renal failure. Smogorzewski M, et al. Kidney Int 1989 Sep;36(3):458–65
Dopamine receptors on prefrontal neurons. Yano H, et al. Kurume Med J 1989;36(3):151–4
Defective gallium-transferrin binding in Alzheimer disease and Down syndrome: possible mechanism for accumulation of aluminium in brain [see comments] Farrar G, et al. Lancet 1990 Mar 31;335(8692):747–50 Comment in: Lancet 1990 Jun 2;335(8701):1348–50.
d-LSD binding to brain homogenates: possible relationship to serotonin receptors. Bennett JL, et al. Life Sci 1974 Dec 1;15(11):1935–44
Biosynthesis of brain 2-phenylethylamine: influence of decarboxylase inhibitors and D-amphetamine. Borison RL, et al. Life Sci 1974 Nov 15;15(10):1837–48
Regional cerebral glucose metabolic rate in human sleep assessed by positron emission tomography. Buchsbaum MS, et al. Life Sci 1989;45(15):1349–56
Ropizine concurrently enhances and inhibits [3H]dextromethorphan binding to different structures of the guinea pig brain: autoradiographic evidence for multiple binding sites. Canoll PD, et al. Life Sci 1990; 46(19):PL9–16
Iodobenzamide for in vivo exploration of central dopamine receptors: evaluation in animal models of supersensitivity. Chalon S, et al. Life Sci 1990;47(8):729–34
Morphine formation from codeine in rat brain: a possible mechanism of codeine analgesia. Chen ZR, et al. Life Sci 1990;46(15):1067–74
[3H]D-serine labels strychnine-insensitive glycine recognition sites of rat central nervous system. Danysz W, et al. Life Sci 1990;46(3):155–64
Phospholipid and glycolipid synthesis in brain structures of Brattleboro rats. Dishkelov A, et al. Life Sci 1989; 45(25):2401–4
Effect of 8-hydroxy-2-(di-n-propylamino)-tetralin on the tryptophan-induced increase in 5-hydroxytryptophan accumulation in rat brain. Fernstrom MH, et al. Life Sci 1990;47(4):283–9
Tissue-specific regulation of the concentration of calbindin D28K mRNA in the developing chicken. Ferrari S, et al. Life Sci 1989;45(14):1247–53
Effect of ICV pertussis toxin and N-ethylmaleimide on the levels of substance P and serotonin in brain and spinal cord of the rat. Garzón J, et al. Life Sci 1990;46(17):1217–22
Characteristics of central binding sites for [3H] DAMGO in spontaneously hypertensive rats. Gulati A, et al. Life Sci 1990;47(2):159–66
Caffeine and regional brain monoamine utilization in mice. Hadfield MG, et al. Life Sci 1989;45(26):2637–44
Regional brain monoamine levels and utilization in middle-aged rats. Hadfield MG, et al. Life Sci 1990; 46(4):295–9
Norcocaine: a pharmacologically active metabolite of cocaine found in brain. Hawks RL, et al. Life Sci 1974 Dec 15; 15(12):2189–95
In vitro and in vivo binding of (E)- and (Z)-N-(iodoallyl)spiperone to dopamine D2 and serotonin 5-HT2 neuroreceptors. Lever JR, et al. Life Sci 1990; 46(26):1967–76
Comparison of the effects of central and peripheral aluminum administration on regional 2-deoxy-D-glucose incorporation in the rat brain. Lipman JJ, et al. Life Sci 1989;45(21):1977–87
Microdialysis in the human brain: extracellular measurements in the thalamus of parkinsonian patients. Meyerson BA, et al. Life Sci 1990;46(4):301–8
Effect of gamma-aminobutyric acid on corticosterone secretion: involvement of the noradrenergic system. Míguez I, et al. Life Sci 1990;46(12):875–80
Histamine H2 receptors and cyclic AMP in brain. Nahorski SR, et al. Life Sci 1974 Dec 1;15(11):1887–94
Metabolism and brain accumulation of tetrahydroisoquinoline (TIQ) a possible parkinsonism inducing substance, in an animal model of a poor debrisoquine metabolizer. Ohta S, et al. Life Sci 1990;46(8):599–605
Kappa opioid receptors stimulate phosphoinositide turnover in rat brain. Periyasamy S, et al. Life Sci 1990;47(3):219–25
Impaired recovery of brain muscarinic receptor sites following an adaptive down-regulation induced by repeated administration of diisopropyl fluorophosphate in aged rats. Pintor A, et al. Life Sci 1990;46(14):1027–36
Measurement of acetylcholine turnover rate in discrete areas of rat brain. Racagni G, et al. Life Sci 1974 Dec 1; 15(11):1961–75
(+)-3-[123I]Iodo-MK-801: synthesis and characterization of binding to the N-methyl-D-aspartate receptor complex. Ransom RW, et al. Life Sci 1990;46(15):1103–10
Purification of L-[3H]nicotine eliminates low affinity binding. Romm E, et al. Life Sci 1990;46(13):935–43
The effect of cellular glucoprivation on skin temperature regulation in the rat. Simpkins JW, et al. Life Sci 1990; 47(2):107–15
Neonatal 6-hydroxydopamine treatment: noradrenaline levels and in vitro 3H-catecholamine synthesis in discrete brain regions of adult rats. Versteeg DH, et al. Life Sci 1974 Dec 15;15(12):2127–34
Comparison of [3H] phencyclidine ([3H] PCP) and [3H] N-[1-(2-thienyl) cyclohexyl] piperidine ([3H] TCP) binding properties to rat and human brain membranes. Vignon J, et al. Life Sci 1989;45(26):2547–55
Hemorphins, cytochrophins, and human beta-casomorphins bind to antiopiate (TYR-MIE-1) as well as opiate binding sites in rat brain. Zadina JE, et al. Life Sci 1990; 47(8):PL25–30
MRI gradient fields increase brain mannitol space. Garber HJ, et al. Magn Reson Imaging 1989 Nov-Dec;7(6):605–10
Functional cerebral imaging by susceptibility-contrast NMR. Belliveau JW, et al. Magn Reson Med 1990 Jun; 14(3):538–46
Cerebral metabolite dynamics during temporary complete ischemia in rats monitored by time-shared 1H and 31P NMR spectroscopy. Chang LH, et al. Magn Reson Med 1990 Jan;13(1):6–13
Improved quantification of in vivo 1H NMR spectra by optimization of signal acquisition and processing and by incorporation of prior knowledge into the spectral fitting. de Graaf AA, et al. Magn Reson Med 1990 Aug; 15(2):305–19
Design of a 13C (1H) RF probe for monitoring the in vivo metabolism of [1-13C]glucose in primate brain. Hammer BE, et al. Magn Reson Med 1990 Jan;13(1):1–5
Phospholipid bilayer contribution to 31P NMR spectra in vivo. Murphy EJ, et al. Magn Reson Med 1989 Nov; 12(2):282–9

Oxygenation-sensitive contrast in magnetic resonance image of rodent brain at high magnetic fields. Ogawa S, et al. **Magn Reson Med** 1990 Apr;14(1):68–78

In vivo 13C nuclear magnetic resonance investigations of choline metabolism in rabbit brain. Tunggal B, et al. **Magn Reson Med** 1990 Jan;13(1):90–102

Effects of high magnesium intake on central catecholamines in spontaneously hypertensive rat. Luthringer C, et al. **Magnes Res** 1988 Dec;1(3–4):163–7

Effect of age on kinetics and carbon monoxide binding to cytochrome oxidase in synaptic and non-synaptic brain mitochondria. Harmon HJ. **Mech Ageing Dev** 1990 Mar 31;53(1):35–48

Messenger RNA levels and methylation patterns of GAPDH and beta-actin genes in rat liver, spleen and brain in relation to aging. Slagboom PE, et al. **Mech Ageing Dev** 1990 Apr 30;53(3):243–57

Aromatic and branched-chain amino acids in autopsied brain tissue from cirrhotic patients with hepatic encephalopathy. Bergeron M, et al. **Metab Brain Dis** 1989 Sep;4(3):169–76

Ultra-high performance, solid-state, autoradiographic image digitization and analysis system. Lear JL, et al. **Metab Brain Dis** 1990 Jun;5(2):57–64

Evaluation of radiolabeled acetate and fluoroacetate as potential tracers of cerebral oxidative metabolism. Lear JL, et al. **Metab Brain Dis** 1990 Mar;5(1):45–56

Glucose metabolism and acidosis in the metabolic penumbra of rat brain. Peck KE, et al. **Metab Brain Dis** 1989 Dec; 4(4):261–72

Effect of momentary stress on brain energy metabolism in weanling mice: apparent use of lactate as cerebral metabolic fuel concomitant with a decrease in brain glucose utilization. Thurston JH, et al. **Metab Brain Dis** 1989 Sep; 4(3):177–86

Determination of RNA content in postischemic gerbil brain by in situ hybridization. Xie YX, et al. **Metab Brain Dis** 1989 Dec;4(4):239–51

Substrate availability other than glucose in the brain during euglycemia and insulin-induced hypoglycemia in dogs. Avogaro A, et al. **Metabolism** 1990 Jan;39(1):46–50

Distribution of somatostatin receptors in normal and tumor tissue. Reubi JC, et al. **Metabolism** 1990 Sep;39(9 Suppl 2):78–81 (33 ref.)

Somatostatin regulation by cytokines. Scarborough DE. **Metabolism** 1990 Sep;39(9 Suppl 2):108–11 (37 ref.)

Identification of calmodulin-binding proteins. Billingsley ML, et al. **Methods Enzymol** 1990;184:451–67

Glycolipid transfer protein from pig brain. Sasaki T, et al. **Methods Enzymol** 1989;179:559–66

Effects of phospholipases, proteases and neuraminidase on gamma-hydroxybutyrate binding sites. Hechler V, et al. **Mol Cell Biochem** 1990 Mar 5;93(1):87–94

A cDNA for a human cyclic AMP response element-binding protein which is distinct from CREB and expressed preferentially in brain. Kara CJ, et al. **Mol Cell Biol** 1990 Apr;10(4):1347–57

Three novel brain tropomyosin isoforms are expressed from the rat alpha-tropomyosin gene through the use of alternative promoters and alternative RNA processing. Lees-Miller JP, et al. **Mol Cell Biol** 1990 Apr;10(4):1729–42

Reconstitution of an insulin signaling pathway in Xenopus laevis oocytes: coexpression of a mammalian insulin receptor and three different mammalian hexose transporters. Vera JC, et al. **Mol Cell Biol** 1990 Feb; 10(2):743–51

Diurnal variations in melatonin binding sites in the hamster brain: impact of melatonin. Anis Y, et al. **Mol Cell Endocrinol** 1989 Dec;67(2–3):121–9

Expression of erbA alpha and beta mRNAs in regions of adult rat brain. Cook CB, et al. **Mol Cell Endocrinol** 1990 Mar 26;70(1):13–20

Characterization of thyroid hormone transport in synaptosomes from rat brain. Kastellakis A, et al. **Mol Cell Endocrinol** 1989 Dec;67(2–3):231–41

Experimental subarachnoid hemorrhage. Lipid peroxidation and Na+,K(+)-ATPase in different rat brain areas. Marzatico F, et al. **Mol Chem Neuropathol** 1989 Oct; 11(2):99–107

Dolichol alters GABA uptake and high affinity binding of agonist to rat brain synaptic plasma membranes. Strosznajder J, et al. **Mol Chem Neuropathol** 1989 Oct; 11(2):77–86

VIP: molecular biology and neurobiological function. Gozes I, et al. **Mol Neurobiol** 1989 Winter;3(4):201–36 (277 ref.)

Protein synthesis and processing in cytoplasmic microdomains beneath postsynaptic sites on CNS neurons. A mechanism for establishing and maintaining a mosaic postsynaptic receptive surface. Steward O, et al. **Mol Neurobiol** 1988 Winter;2(4):227–61 (71 ref.)

p-[125I]iodoclonidine, a novel radiolabeled agonist for studying central alpha 2-adrenergic receptors. Baron BM, et al. **Mol Pharmacol** 1990 Sep;38(3):348–56

Multiple distinct subunits of the gamma-aminobutyric acid-A receptor protein show different ligand-binding affinities. Bureau M, et al. **Mol Pharmacol** 1990 Apr;37(4):497–502

Solubilization of active somatostatin receptors from rat brain. He HT, et al. **Mol Pharmacol** 1990 May;37(5):614–21

Effects of sulfhydryl-modifying reagents, 3-nitro-2-pyridinesulfenyl compounds, on the coupling between inhibitory receptors and GTP-binding proteins Gi/Go in rat brain membranes. Kitamura Y, et al. **Mol Pharmacol** 1990 Aug;38(2):184–91

Dermorphin interaction with rat brain opioid receptors: involvement of hydrophobic sites in the binding domain. Lazarus LH, et al. **Mol Pharmacol** 1990 Jun;37(6):886–92

Fluorescent and biotin probes for dopamine receptors: D1 and D2 receptor affinity and selectivity. Madras BK, et al. **Mol Pharmacol** 1990 Jun;37(6):833–9

Specific binding sites for inositolhexakisphosphate in brain and anterior pituitary. Nicoletti F, et al. **Mol Pharmacol** 1990 May;37(5):689–93

Direct inhibition of inositol-1,4,5-trisphosphate-induced Ca2+ release from brain microsomes by K+ channel blockers. Palade P, et al. **Mol Pharmacol** 1989 Oct; 36(4):664–72

Pharmacologic differentiation between inositol-1,4,5-trisphosphate-induced Ca2+ release and Ca2+- or caffeine-induced Ca2+ release from intracellular membrane systems. Palade P, et al. **Mol Pharmacol** 1989 Oct;36(4):673–80

Ifenprodil is a novel type of N-methyl-D-aspartate receptor antagonist: interaction with polyamines. Reynolds IJ, et al. **Mol Pharmacol** 1989 Nov;36(5):758–65

gamma-Aminobutyric acidA receptor regulation in culture: altered allosteric interactions following prolonged exposure to benzodiazepines, barbiturates, and methylxanthines. Roca DJ, et al. **Mol Pharmacol** 1990 May;37(5):710–9

Cyclic cholecystokinin analogues that are highly selective for rat and guinea pig central cholecystokinin receptors. Rodriguez M, et al. **Mol Pharmacol** 1990 Sep;38(3):333–41

Selectivity for binding of peptide analogs to vascular receptors for vasoactive intestinal peptide. Rorstad OP, et al. **Mol Pharmacol** 1990 Jun;37(6):971–7

The psychotomimetic drug phencyclidine labels two high affinity binding sites in guinea pig brain: evidence for N-methyl-D-aspartate-coupled and dopamine reuptake carrier-associated phencyclidine binding sites. Rothman RB, et al. **Mol Pharmacol** 1989 Dec;36(6):887–96

Rat brain dendrotoxin receptors associated with voltage-gated potassium channels: dendrotoxin binding and receptor solubilization. Sorensen RG, et al. **Mol Pharmacol** 1989 Nov;36(5):689–98

Serotonin depletion unmasks serotonergic component of [3H]dihydroalprenolol binding in rat brain. Stockmeier CA, et al. **Mol Pharmacol** 1989 Dec;36(6):903–11

Na(+)-Ca2+ exchange activity in central nerve endings. I. Ionic conditions that discriminate 45Ca2+ uptake through the exchanger from that occurring through voltage-operated Ca2+ channels. Taglialatela M, et al. **Mol Pharmacol** 1990 Sep;38(3):385–92

Identification and structural characterization of alpha 1-adrenergic receptor subtypes. Terman BI, et al. **Mol Pharmacol** 1990 Apr;37(4):526–34

Binding of selective antagonists to four muscarinic receptors (M1 to M4) in rat forebrain. Waelbroeck M, et al. **Mol Pharmacol** 1990 Aug;38(2):267–73

Effects of polyamines on the binding of [3H]MK-801 to the N-methyl-D-aspartate receptor: pharmacological evidence for the existence of a polyamine recognition site. Williams K, et al. **Mol Pharmacol** 1989 Oct;36(4):575–81

Pertussis toxin inhibits norepinephrine-stimulated inositol phosphate formation in primary brain cell cultures. Wilson KM, et al. **Mol Pharmacol** 1990 Aug;38(2):274–81

The metabolic anatomy of Parkinson's disease: complementary [18F]fluorodeoxyglucose and [18F]fluorodopa positron emission tomographic studies. Eidelberg D, et al. **Mov Disord** 1990;5(3):203–13

Correlation between the anaesthetic effect of halothane and saturable binding in brain. Evers AS, et al. **Nature** 1989 Oct 26;341(6244):766

Segmental and developmental regulation of a presumptive T-cell oncogene in the central nervous system. Greenberg JM, et al. **Nature** 1990 Mar 8;344(6262):158–60

Halothane and anaesthesia [letter] Yeh HJ, et al. **Nature** 1990 Jul 19;346(6281):227

Characteristics of endothelin-1 and endothelin-3 stimulation of phosphoinositide breakdown differ between regions of guinea-pig and rat brain. Crawford ML, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Mar; 341(3):268–71

Aging associated changes in serotoninergic and dopaminergic pre- and postsynaptic neurochemical markers in the rat brain. Gozlan H, et al. **Neurobiol Aging** 1990 Jul–Aug; 11(4):437–49

Neurochemical, endocrine and immunological responses to stress in young and old Fischer 344 male rats. Lorens SA, et al. **Neurobiol Aging** 1990 Mar–Apr;11(2):139–50

Age-related decline in rat striatal dopamine metabolism is regionally homogeneous. Marshall JF, et al. **Neurobiol Aging** 1990 Mar–Apr;11(2):131–7

Aging-related changes in brain metabolism are altered by early developmental exposure to diazepam. Miranda R, et al. **Neurobiol Aging** 1990 Mar–Apr;11(2):117–22

Omegaconotoxin binding decreases in aged rat brain. Moresco RM, et al. **Neurobiol Aging** 1990 Jul–Aug; 11(4):433–6

Genetic studies support a neuronal origin for the beta amyloid polypeptide. Neve RL. **Neurobiol Aging** 1989 Sep–Oct; 10(5):400–2; discussion 412–4

Calpain and calpastatin in normal and Alzheimer-degenerated human brain tissue. Nilsson E, et al. **Neurobiol Aging** 1990 Jul–Aug;11(4):425–31

Abstracts of the thirty-first annual meeting of the Japanese Neurochemical Society. Sendai, October 26–28, 1988. Abstracts. **Neurochem Res** 1989 Aug;14(8):771–809

Diazepam binding inhibitor (DBI) processing: immunohistochemical studies in the rat brain. Alho H, et al. **Neurochem Res** 1990 Feb;15(2):209–16

G protein dependent alterations in [125I]iodocyanopindolol and +/- cyanopindolol binding at 5-HT1B binding sites in rat brain membranes [published erratum appears in Neurochem Res 1989 Dec;14(12):1245] Ariani K, et al. **Neurochem Res** 1989 Sep;14(9):835–43

Effect of gabaculine on metabolism and release of gamma-aminobutyric acid in synaptosomes. Asakura T, et al. **Neurochem Res** 1990 Mar;15(3):295–300

DBI (diazepam binding inhibitor): the precursor of a family of endogenous modulators of GABAA receptor function. History, perspectives, and clinical implications. Barbaccia ML, et al. **Neurochem Res** 1990 Feb;15(2):161–8 (48 ref.)

Changes of amino acid gradients in brain tissues induced by microwave irradiation and other means. Baxter CF, et al. **Neurochem Res** 1989 Sep;14(9):909–13

Influence of aging and drug treatment on the bioenergetics of hypoxic brain. Benzi G, et al. **Neurochem Res** 1990 Jul; 15(7):659–65

Monoamines and metabolites in autopsied brain tissue from cirrhotic patients with hepatic encephalopathy. Bergeron M, et al. **Neurochem Res** 1989 Sep;14(9):853–9

In vivo utilization of D(-)-3-hydroxybutyrate by chick brain and spinal cord. Caamaño GJ, et al. **Neurochem Res** 1990 May;15(5):529–33

Determination of monoamines in rat brain regions after chronic administration of lithium. Casado M, et al. **Neurochem Res** 1989 Sep;14(9):905–8

Uptakes of iodide and chloride by primary cultures of mouse astrocytes and neurons. Chow SY, et al. **Neurochem Res** 1989 Oct;14(10):963–9

The effect of partial noradrenergic denervation on corticosterone secretion in the rat. Daniels WM, et al. **Neurochem Res** 1989 Dec;14(12):1187–90

Monoamine and amino acid content in brain regions of Brattleboro rats. Dawson R Jr, et al. **Neurochem Res** 1990 Jul;15(7):755–61

Regional distribution of potassium, calcium, and six trace elements in normal human brain. Duflou H, et al. **Neurochem Res** 1989 Nov;14(11):1099–112

Widespread alterations in central noradrenaline, dopamine, and serotonin systems in the Brattleboro rat not related to the local absence of vasopressin. Feenstra MG, et al. **Neurochem Res** 1990 Mar;15(3):283–8

Relationship of GABAa receptor heterogeneity to regional differences in drug response. Gallager DW, et al. **Neurochem Res** 1990 Feb;15(2):113–8 (38 ref.)

The effects of sho-saiko-to-go-keishi-ka-shakuyaku-to (TJ-960) on ischemia-induced changes of brain acetylcholine and monoamine levels in gerbils. Haba K, et al. **Neurochem Res** 1990 May;15(5):487–93

Folate interactions with cerebral G proteins. Hartley DM, et al. **Neurochem Res** 1990 Jul;15(7):681–6

The effect of castanospermine on the synthesis of synaptic glycoproteins by rat brain slices. Howes S, et al. **Neurochem Res** 1990 Mar;15(3):257–63

Chronic lithium treatment and status epilepticus induced by lithium and pilocarpine cause selective changes of amino acid concentrations in rat brain regions. Jope RS, et al. **Neurochem Res** 1989 Sep;14(9):829–34

Modulation of phosphoinositide metabolism in rat brain slices by excitatory amino acids, arachidonic acid, and GABA. Li XH, et al. **Neurochem Res** 1990 Jul;15(7):725–38

Vitamin E concentrations in human brain of patients with Alzheimer's disease, fetuses with Down's syndrome, centenarians, and controls. Metcalfe T, et al. **Neurochem Res** 1989 Dec;14(12):1209–12

Selective regional distribution of tubulin induced in cerebrum by hyperammonemia. Miñana MD, et al. **Neurochem Res** 1989 Dec;14(12):1241–3

Early developmental exposure to benzodiazepine ligands alters brain levels of thiobarbituric acid-reactive products in young adult rats. Miranda RC, et al. **Neurochem Res** 1989 Nov;14(11):1119–27

Metabolism of exogenous galactosylceramide in the twitcher mouse brain. Mitsuo K, et al. **Neurochem Res** 1989 Dec; 14(12):1191–4

GABAA-receptors: structural requirements and sites of gene expression in mammalian brain. Mohler H, et al. **Neurochem Res** 1990 Feb;15(2):199–207 (66 ref.)

Developmental and regional alteration of methionine enkephalin-like immunoreactivity in seizure-susceptible E1 mouse brain. Onishi H, et al. **Neurochem Res** 1990 Jan; 15(1):83–7

Brain asymmetry in phospholipid polar head group metabolism: parallel in vivo and in vitro studies. Pediconi MF, et al. **Neurochem Res** 1990 Jan;15(1):25–32

Induction of cerebroside synthesis in oligodendroglia. Poduslo SE, et al. **Neurochem Res** 1990 Jul;15(7):739–42

Changes in cerebral inositol-1-phosphate concentrations in LiCl-treated rats: regional and strain differences. Savolainen KM, et al. **Neurochem Res** 1990 May; 15(5):541–5

In vivo rates of protein synthesis in brain, muscle, and liver of five vertebrate species. Sayegh JF, et al. **Neurochem Res** 1989 Nov;14(11):1165–8

Queuine is incorporated into brain transfer RNA. Siard TJ, et al. **Neurochem Res** 1989 Nov;14(11):1159–64

Amino acid neurotransmitter alterations in three sublines of

Rb mice differing by their susceptibility to audiogenic seizures. Simler S, et al. **Neurochem Res** 1990 Jul; 15(7):687–93

Stimulation of phosphoinositide degradation and phosphatidylinositol-4-phosphate phosphorylation by GTP exclusively in plasma membrane of rat brain. Strosznajder J, et al. **Neurochem Res** 1989 Aug;14(8):717–23

Intramyelinic conversion of cerebrosides into acylgalactosylceramides. Theret N, et al. **Neurochem Res** 1989 Dec;14(12):1235–40

Modulation of Mn2+ accumulation in cultured rat neuronal and astroglial cells. Tholey G, et al. **Neurochem Res** 1990 Jul;15(7):751–4

A review of the in vitro and in vivo neurochemical characterization of the NMDA/PCP/glycine/ion channel receptor macrocomplex. Wood PL, et al. **Neurochem Res** 1990 Feb;15(2):217–30 (175 ref.)

The effect of isatin (tribulin) on metabolism of indoles in the rat brain and pineal: in vitro and in vivo studies. Yuwiler A. **Neurochem Res** 1990 Jan;15(1):95–100

Atrial natriuretic peptides in brain nuclei of rats with inherited diabetes insipidus (Brattleboro rats). Bahner U, et al. **Neuroendocrinology** 1990 Jun;51(6):721–7

Anti-opioid receptor antibody recognition of a binding site on brain and leukocyte opioid receptors. Carr DJ, et al. **Neuroendocrinology** 1990 May;51(5):552–60

Glucocorticoid and mineralocorticoid receptor mRNA expression in rat brain. Chao HM, et al. **Neuroendocrinology** 1989 Oct;50(4):365–71

Estrogen plus progesterone increases progestin receptor immunoreactivity in the brain of ovariectomized guinea pigs. DonCarlos LL, et al. **Neuroendocrinology** 1989 Dec; 50(6):613–23

Effects of treatment with estradiol and parental experience on the number and distribution of estrogen-binding neurons in the ovariectomized mouse brain. Koch M. **Neuroendocrinology** 1990 May;51(5):505–14

Corticosteroid receptors and glucocorticoid content in microdissected brain regions: correlative aspects. Magariños AM, et al. **Neuroendocrinology** 1989 Dec; 50(6):673–8

Regulation of high-affinity GABAa receptors in specific brain regions by ovarian hormones. Schumacher M, et al. **Neuroendocrinology** 1989 Sep;50(3):315–20

Diurnal rhythmicity of beta-1- and beta-2-adrenergic receptors in ovariectomized, ovariectomized estradiol-treated and proestrous rats. Weiland NG, et al. **Neuroendocrinology** 1989 Dec;50(6):655–62

Angiotensin II receptor binding in the rat hypothalamus and circumventricular organs during dietary sodium deprivation. Yamada H, et al. **Neuroendocrinology** 1989 Oct;50(4):469–75

Regional cerebral blood flow and oxygen metabolism in normal pressure hydrocephalus after subarachnoid hemorrhage. Ishikawa M, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):382–8

Immunohistochemical localization of prostaglandin F2 alpha in reperfused gerbil brain. Nakagomi T, et al. **Neurol Med Chir (Tokyo)** 1990 Apr;30(4):223–8

Liposomes as carriers of cisplatin into the central nervous system--experiments with 9L gliomas in rats. Shibata S, et al. **Neurol Med Chir (Tokyo)** 1990 Apr;30(4):242–5

RNA synthesis and processing in the gerbil brain after transient hindbrain ischaemia. Matsumoto K, et al. **Neurol Res** 1990 Mar;12(1):45–8

Effect of pulsed electromagnetic fields on calcium tissue changes in focal ischaemia. Rappaport ZH, et al. **Neurol Res** 1990 Jun;12(2):95–8

General and dramatic glial reaction in Alzheimer brains. Delacourte A. **Neurology** 1990 Jan;40(1):33–7

Regional cerebral glucose transport and utilization in Alzheimer's disease. Friedland RP, et al. **Neurology** 1989 Nov;39(11):1427–34

Positron emission tomography in neuropsychiatric lupus erythematosus. Stoppe G, et al. **Neurology** 1990 Feb; 40(2):304–8

Brain-derived neurotrophic factor increases survival and differentiated functions of rat septal cholinergic neurons in culture. Alderson RF, et al. **Neuron** 1990 Sep; 5(3):297–306

The neuronal mineralocorticoid receptor as a mediator of glucocorticoid response. Arriza JL, et al. **Neuron** 1988 Nov; 1(9):887–900

A rat brain Na+ channel alpha subunit with novel gating properties. Auld VJ, et al. **Neuron** 1988 Aug;1(6):449–61

Electrophysiology of a chick neuronal nicotinic acetylcholine receptor expressed in Xenopus oocytes after cDNA injection. Ballivet M, et al. **Neuron** 1988 Nov;1(9):847–52

Immunocytochemical localization of the precursor protein for beta-amyloid in the rat central nervous system. Card JP, et al. **Neuron** 1988 Nov;1(9):835–46

Probes for rare mRNAs reveal distributed cell subsets in canary brain. Clayton DF, et al. **Neuron** 1988 May; 1(3):249–61

Glucagon gene regulatory region directs oncoprotein expression to neurons and pancreatic alpha cells. Efrat S, et al. **Neuron** 1988 Sep;1(7):605–13

A novel alpha subunit in rat brain GABAA receptors. Khrestchatisky M, et al. **Neuron** 1989 Dec;3(6):745–53

A brain-specific transcription activator. Korner M, et al. **Neuron** 1989 Nov;3(5):563–72

Structure and developmental expression of the nerve growth factor receptor in the chicken central nervous system. Large TH, et al. **Neuron** 1989 Feb;2(2):1123–34

Neuron-specific expression of the rat brain type II sodium channel gene is directed by upstream regulatory elements. Maue RA, et al. **Neuron** 1990 Feb;4(2):223–31

The Alzheimer amyloid precursor-related transcript lacking the beta/A4 sequence is specifically increased in Alzheimer's disease brain. Neve RL, et al. **Neuron** 1990 Sep;5(3):329–38

Expression of the Alzheimer amyloid precursor gene transcripts in the human brain. Neve RL, et al. **Neuron** 1988 Oct;1(8):669–77

Cloning of human GAP-43: growth association and ischemic resurgence. Ng SC, et al. **Neuron** 1988 Apr;1(2):133–9

Specific neuronal expression of human NGF receptors in the basal forebrain and cerebellum of transgenic mice. Patil N, et al. **Neuron** 1990 Mar;4(3):437–47

At least two mRNA species contribute to the properties of rat brain A-type potassium channels expressed in Xenopus oocytes. Rudy B, et al. **Neuron** 1988 Oct;1(8):649–58

Brain alpha-bungarotoxin binding protein cDNAs and MAbs reveal subtypes of this branch of the ligand-gated ion channel gene superfamily. Schoepfer R, et al. **Neuron** 1990 Jul;5(1):35–48

The NGF-inducible SCG10 mRNA encodes a novel membrane-bound protein present in growth cones and abundant in developing neurons. Stein R, et al. **Neuron** 1988 Aug;1(6):463–76

Distinct GABAA receptor alpha subunit mRNAs show differential patterns of expression in bovine brain. Wisden W, et al. **Neuron** 1988 Dec;1(10):937–47

Do lipid changes influence the density of aging human brain myelin. Niebrój-Dobosz I, et al. **Neuropatol Pol** 1989; 27(3):427–36

Influence of experimental acute hypoxia on myelin proteins. Wender M, et al. **Neuropatol Pol** 1989;27(2):169–75

Selectivity of various opioid peptides towards delta-, kappa; and mu-opioid receptors mediating presynaptic inhibition of neurotransmitter release in the brain. Mulder AH, et al. **Neuropeptides** 1989 Aug-Sep;14(2):99–104

Somatostatin, neuropeptide Y, GABA and cholinergic enzymes in brain of pentylenetetrazol-kindled rats. Pitkänen A, et al. **Neuropeptides** 1989 Oct;14(3):197–207

Comparison of binding assay and biological activity on a NK-1 system with new selective agonists. Tousignant C, et al. **Neuropeptides** 1989 Nov-Dec;14(4):275–83 (29 ref.)

Changes in multiple opioid receptors in regions of the brain in rats treated chronically with thyroxine. Bhargava HN, et al. **Neuropharmacology** 1989 Sep;28(9):955–60

Lack of significant changes in mu, delta opioid binding sites and neutral endopeptidase EC 3.4.24.11 in the brain and spinal cord of arthritic rats. Delay-Goyet P, et al. **Neuropharmacology** 1989 Dec;28(12):1341–8

Opposite changes in turnover of noradrenaline and dopamine in the CNS of ethanol-dependent mice. Eisenhofer G, et al. **Neuropharmacology** 1990 Jan;29(1):37–45

Dependence on gamma-aminobutyric acid of pyrethroid and 4'-chlorodiazepam modulation of the binding of t-[35S]butylbicyclophosphorothionate in piscine brain. Eshleman AJ, et al. **Neuropharmacology** 1990 Jul; 29(7):641–8

Tianeptine stimulates uptake of 5-hydroxytryptamine in vivo in the rat brain. Fattaccini CM, et al. **Neuropharmacology** 1990 Jan;29(1):1–8

Reduction of in vivo binding of [3H]paroxetine in mouse brain by 3,4-methylenedioxymethamphetamine. Hashimoto K, et al. **Neuropharmacology** 1990 Jul;29(7):633–9

Halothane inhibits 5-hydroxytryptamine uptake by synaptosomes from rat brain. Martin DC, et al. **Neuropharmacology** 1990 Jan;29(1):9–16

Modifications of the permeability of the blood-brain barrier and local cerebral metabolism in pentobarbital- and ketamine-anaesthetized rats. Saija A, et al. **Neuropharmacology** 1989 Sep;28(9):997–1002

Effects of chronic treatment with haloperidol and bromocriptine on the processing of beta-endorphin to gamma- and alpha-endorphin in discrete regions of the rat pituitary gland and brain. Sweep CG, et al. **Neuropharmacology** 1990 Jan;29(1):61–8

The GABAA receptor complex in hepatic encephalopathy. Autoradiographic evidence for the presence of elevated levels of a benzodiazepine receptor ligand. Basile AS, et al. **Neuropsychopharmacology** 1990 Feb;3(1):61–71

Lysergic acid diethylamide (LSD) administration selectively downregulates serotonin2 receptors in rat brain. Buckholtz NS, et al. **Neuropsychopharmacology** 1990 Apr;3(2):137–48

Evidence for common alterations in cerebral glucose metabolism in major affective disorders and schizophrenia. Cohen RM, et al. **Neuropsychopharmacology** 1989 Dec; 2(4):241–54

Characterization of the inducible serotonin-sensitive dihydroalprenolol binding sites with low affinity for isoproterenol. Gillespie DD, et al. **Neuropsychopharmacology** 1989 Dec;2(4):265–71

Cerebral glucose metabolic rates in obsessive compulsive disorder. Nordahl TE, et al. **Neuropsychopharmacology** 1989 Mar;2(1):23–8

Cerebral glucose metabolic differences in patients with panic disorder. Nordahl TE, et al. **Neuropsychopharmacology** 1990 Aug;3(4):261–72

Influence of active immunization of rats with conjugated serotonin-protein antigen on the content of biogenic amines in the brain and on behavioral responses. Basharova LA, et al. **Neurosci Behav Physiol** 1990 Mar-Apr;20(2):109–13

Receptor binding of corticosterone by various brain structures in extreme states of the organism. Dudina TV. **Neurosci Behav Physiol** 1989 Jul-Aug;19(4):337–40

Indices of free-radical oxidation of lipids and antiradical protection of the brain--neurochemical correlates of development of the general adaptation syndrome. Gulyaeva NV, et al. **Neurosci Behav Physiol** 1989 Sep-Oct; 19(5):376–82

Increased levels of lipid peroxides in aged rat brain as revealed by direct assay of peroxide values. Ando S, et al. **Neurosci Lett** 1990 May 31;113(2):199–204

Depolarization regulates selectively the expression of different opioid receptors: a decreased number of kappa receptors in chronically activated guinea pig brain cell cultures. Barg J, et al. **Neurosci Lett** 1990 Mar 26; 111(1-2):222–7

Anatomical distribution of galanin-like immunoreactivity in the brain and pituitary of teleost fishes. Batten TF, et al. **Neurosci Lett** 1990 Mar 26;111(1-2):12–7

CGP 31358 binds to a site on the NMDA receptor that is coupled to both the transmitter recognition site and the channel domain. Baud J, et al. **Neurosci Lett** 1989 Dec 15;107(1-3):184–8

Cellular distribution of omega 3 (peripheral type benzodiazepine) binding sites in the normal and ischaemic rat brain: an autoradiographic study with the photoaffinity ligand [3H]PK 14105. Benavides J, et al. **Neurosci Lett** 1990 Jun 22;114(1):32–8

Increase of GABA-stimulated diazepam binding after lipid methylation in membrane preparations from rat brain. Benistant C, et al. **Neurosci Lett** 1990 Mar 2; 110(1-2):137–42

Presence of neuropeptide messenger RNAs in neuronal processes. Bloch B, et al. **Neurosci Lett** 1990 Feb 16; 109(3):259–64

Neonatal stress and long-term modulation of GABA receptors in rat brain. Bolden SW, et al. **Neurosci Lett** 1990 Apr 6;111(3):258–62

Accumulated glutamate levels in the synaptic vesicle are not maintained in the absence of active transport. Carlson MD, et al. **Neurosci Lett** 1990 Mar 14;110(3):325–30

L-[3H]glutamate labels the metabotropic excitatory amino acid receptor in rodent brain. Cha JH, et al. **Neurosci Lett** 1990 May 18;113(1):78–83

Isatin and tribulin concentrations are increased in rabbit brain but not liver following pentylenetetrazole administration. Clow A, et al. **Neurosci Lett** 1989 Dec 15;107(1-3):327–30

Autoradiography of angiotensin-converting enzyme in fixed and unfixed rat brain using the specific enzyme inhibitor [125I]351A or a polyclonal antibody and [125I]staphylococcal protein A. Correa FM, et al. **Neurosci Lett** 1990 Mar 14;110(3):244–8

Nicotine protects against mu-opioid receptor antagonism by beta-funaltrexamine: evidence for nicotine-induced release of endogenous opioids in brain. Davenport KE, et al. **Neurosci Lett** 1990 May 18;113(1):40–6

Melatonin counteracts the 5-aminolevulinic acid-induced rise of rat forebrain tryptophan and serotonin concentrations at night. Daya S, et al. **Neurosci Lett** 1990 Jun 22;114(1):113–6

Acute treatment with clozapine blocks D1 dopamine receptor binding in discrete brain areas of the male rat. Fuxe K, et al. **Neurosci Lett** 1989 Nov 20;106(1-2):169–74

Regional distribution of 3-O-methyl-DOPA in the cortex and subcortical structures in the rat: effect of aging. Godefroy F, et al. **Neurosci Lett** 1990 May 4; 112(2-3):307–12

Analysis of a neuronal antigen (Hu) expression in the developing rat brain detected by autoantibodies from patients with paraneoplastic encephalomyelitis. Graus F, et al. **Neurosci Lett** 1990 Apr 20;112(1):14–8

Trans-gamma-hydroxycrotonic acid binding sites in brain: evidence for a subpopulation of gamma-hydroxybutyrate sites. Hechler V, et al. **Neurosci Lett** 1990 Mar 2; 110(1-2):204–9

Functional difference in monoamine transmitters in the behaviorally abnormal mouse mutant (wriggle mouse sagami). Ishikawa K, et al. **Neurosci Lett** 1989 Sep 11; 103(3):343–8

Beta-protein immunoreactivity in brains of patients with neuronal ceroid lipofuscinosis: ultrastructural and biochemical demonstration. Kitaguchi T, et al. **Neurosci Lett** 1990 May 4;112(2-3):155–60

The effect of repeated treatment with brofaromine, moclobemide and deprenyl on alpha 1-adrenergic and dopaminergic receptors in the rat brain. Klimek V, et al. **Neurosci Lett** 1990 Jan 1;108(1-2):189–94

Inhibition of neuronal 5-HT uptake by ketamine, but not halothane, involves disruption of substrate recognition by the transporter. Martin DC, et al. **Neurosci Lett** 1990 Apr 20;112(1):99–103

Metabolic activation of the fetal rat brain. Morimoto A, et al. **Neurosci Lett** 1990 Mar 26;111(1-2):34–8

MPTP toxicity in the mouse brain and vitamin E. Odunze IN, et al. **Neurosci Lett** 1990 Jan 22;108(3):346–9

Effects of a M1 muscarinic receptor agonist on the central cholinergic system, evaluated by brain microdialysis. Ogane N, et al. **Neurosci Lett** 1990 Jun 22;114(1):95–100

Plasticity of brain muscarinic receptors in aging rats: the adaptative response to scopolamine and ethanol treatment.

Pietrzak ER, et al. **Neurosci Lett** 1989 Oct 9;104(3):331–5

Autoradiographic evidence of [3H]neurotensin binding changes in discrete regions of brain in the rat model of persistent spasmodic dyskinesia induced by iminodipropionitrile. Przedborski S, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):335–40

Increased spectrin proteolysis in the brindled mouse brain. Seubert P, et al. **Neurosci Lett** 1990 Jan 22;108(3):303–8

Rapid chemical sampling of endogenous species from brain slice preparations. Shiekhattar R, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):189–94

A histochemical study of glutamate receptor in rat brain using biotinyl spider toxin. Shimazaki K, et al. **Neurosci Lett** 1990 Jun 22;114(1):1–4

Immunoprecipitation of bovine brain membranes enriched in M1 and M2 muscarinic receptors with monoclonal antibody 10C7. Silva WI, et al. **Neurosci Lett** 1990 May 18;113(1):89–94

Influence of stress on phosphoinositides in rat brain. Subramoniam A, et al. **Neurosci Lett** 1990 Feb 16; 109(3):331–4

Disturbed brain purine metabolism results in a gross opening of the blood–brain barrier in newborn piglets following experimental pneumothorax. Temesvári P, et al. **Neurosci Lett** 1990 May 31;113(2):163–8

Localization of m5 muscarinic receptor mRNA in rat brain examined by in situ hybridization histochemistry. Vilaró MT, et al. **Neurosci Lett** 1990 Jul 3;114(2):154–9

Brain autoradiographic study in the golden hamster after intracarotid injection of [14C]melatonin. Vitte PA, et al. **Neurosci Lett** 1990 Mar 2;110(1–2):1–5

MPTP, MPDP+ and MPP+ cause decreases in dopamine content in mouse brain slices. Wilson JA, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):213–8

Purification of neurocatin, a neuroregulatory factor from brain. Yee DK, et al. **Neurosci Lett** 1990 Jul 3;114(2):213–9

Glycosaminoglycan–related epitopes surrounding different subsets of mammalian central neurons. Fujita SC, et al. **Neurosci Res** 1989 Nov;7(2):117–30

Characterization of binding sites for spider toxin, [3H]NSTX–3, in the rat brain. Ino H, et al. **Neurosci Res** 1990 Apr;8(1):29–39

Autoradiographic localization of [125I]–endothelin–1 binding sites in rat brain. Koseki C, et al. **Neurosci Res** 1989 Aug; 6(6):581–5

Alpha 1–antichymotrypsin is present together with the beta–protein in monkey brain amyloid deposits. Abraham CR, et al. **Neuroscience** 1989;32(3):715–20

Effect of kainate–induced seizures on tissue trace element concentrations in the rat. Carl GF, et al. **Neuroscience** 1989; 33(1):223–7

Immunohistochemical colocalization of delta sleep–inducing peptide and luteinizing hormone–releasing hormone in rabbit brain neurons. Charnay Y, et al. **Neuroscience** 1989; 31(2):495–505

Distribution and kinetics of GABAB binding sites in rat central nervous system: a quantitative autoradiographic study. Chu DC, et al. **Neuroscience** 1990;34(2):341–57

Altered cellular distribution of iron in the central nervous system of myelin deficient rats. Connor JR, et al. **Neuroscience** 1990;34(1):265–71

Quantitative autoradiography of the rat brain vesicular monoamine transporter using the binding of [3H]dihydrotetrabenazine and 7–amino–8–[125I]iodoketanserin. Darchen F, et al. **Neuroscience** 1989;33(2):341–9

Regional differences in the effect of guanine nucleotides on agonist and antagonist binding to adenosine A1–receptors in rat brain, as revealed by autoradiography. Fastbom J, et al. **Neuroscience** 1990;34(3):759–69

Immunocytochemical demonstration of opioid receptors in selected rat brain areas and neuroblastoma x glioma hybrid (NG108–15) cells using a monoclonal anti–idiotypic antibody. Hassan AH, et al. **Neuroscience** 1989;32(1):269–78

Autoradiographic localization of binding sites for vasoactive intestinal peptide and angiotensin II on neurons and astrocytes of cultured rat central nervous system. Hösli E, et al. **Neuroscience** 1989;31(2):463–70

Clonidine attenuates increased brain glucose metabolism during naloxone–precipitated morphine withdrawal. Kimes AS, et al. **Neuroscience** 1990;34(3):633–44

Characterization and regional distribution of strychnine–insensitive [3H]glycine binding sites in rat brain by quantitative receptor autoradiography. McDonald JW, et al. **Neuroscience** 1990;35(3):653–68

Microdialysis of extracellular endogenous opioid peptides from rat brain in vivo. Maidment NT, et al. **Neuroscience** 1989;33(3):549–57

Distribution of alpha latrotoxin receptor in the rat brain by quantitative autoradiography: comparison with the nerve terminal protein, synapsin I. Malgaroli A, et al. **Neuroscience** 1989;32(2):393–404

The distribution and cellular localization of the serotonin 1C receptor mRNA in the rodent brain examined by in situ hybridization histochemistry. Comparison with receptor binding distribution. Mengod G, et al. **Neuroscience** 1990; 35(3):577–91

Tail pinch–induced changes in the turnover and release of dopamine and 5–hydroxytryptamine in different brain regions of the rat. Pei Q, et al. **Neuroscience** 1990; 35(1):133–8

Selective irreversible blockade of 5–hydroxytryptamine1A and 5–hydroxytryptamine1C receptor binding sites in the rat brain by 8–MeO–2'–chloro–PAT: a quantitative autoradiographic study. Radja F, et al. **Neuroscience** 1989; 31(3):723–33

Distribution of the omega–conotoxin receptor in rat brain. An autoradiographic mapping. Takemura M, et al. **Neuroscience** 1989;32(2):405–16

5–hydroxytryptamine3 receptors in the human brain: autoradiographic visualization using [3H]ICS 205–930. Waeber C, et al. **Neuroscience** 1989;31(2):393–400

A developmentally regulated axonal glycoprotein (7–8D2 antigen) with a restricted distribution in mature rat brain. Woodhams PL, et al. **Neuroscience** 1989;32(2):417–34

Comparison of lindane, bicyclophosphate and picrotoxin binding to the putative chloride channel sites in rat brain and Torpedo electric organ. Thompson RG, et al. **Neurotoxicol Teratol** 1990 Jan–Feb;12(1):57–63

Regional changes in brain 2–14C–deoxyglucose uptake induced by convulsant and non–convulsant doses of lindane. Sanfeliu C, et al. **Neurotoxicology** 1990 Winter; 10(4):727–42

Mercury level and histochemical distribution in a human brain with Minamata disease following a long–term clinical course of twenty–six years. Takeuchi T, et al. **Neurotoxicology** 1990 Winter;10(4):651–7

Irreversible affinity ligands for mu opioid receptors. Bidlack JM, et al. **NIDA Res Monogr** 1989;95:296

Bidirectional effects of opioids in motivational processes and the involvement of D1 dopamine receptors. Herz A. **NIDA Res Monogr** 1988;90:17–26 (24 ref.)

Ligands for imaging opioid receptors in conscious humans by positron emission tomography (PET). Newman A, et al. **NIDA Res Monogr** 1988;90:117–21 (14 ref.)

Characterization of NMDA–coupled and dopoamine reuptake carrier coupled [3H]–TCP binding sites in guinea pig brain. Reid AA, et al. **NIDA Res Monogr** 1989;95:530–1

Cation requirement for GTP regulation of [125I]b–endorphin binding to Mu and sigma opioid receptors. Selley DE, et al. **NIDA Res Monogr** 1989;95:537–8

Autoradiographic localization of 3H–dextromethorphan binding sites differs from NMDA. Tortella FC, et al. **NIDA Res Monogr** 1989;95:548–9

Effects of carbamate, BPMC, on the central cholinergic functions and behavior of mice. Kobayashi H, et al. **Nippon Juigaku Zasshi** 1989 Aug;51(4):789–95

In vivo 19F nuclear magnetic resonance spectroscopy of trifluorinated neuroleptics in the rat. Albert K, et al. **NMR Biomed** 1990 Jun;3(3):120–3

NMR study on [1–13C]glucose metabolism in the rat brain during hypoxia. Fujiwara N, et al. **NMR Biomed** 1989 Sep; 2(3):104–11

Effects of repeated ischemia on cerebral blood flow and brain energy metabolism. Laptook AR, et al. **NMR Biomed** 1988 Apr;1(2):74–9

Characteristics of the binding of N–isopropyl–p–[125I]iodoamphetamine in the rat brain synaptosomal membranes. Mori H, et al. **Nucl Med Commun** 1990 Apr;11(4):327–31

Sequence of a rat brain cDNA encoding an alpha–1B adrenergic receptor. Voigt MM, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1053

Pathomechanisms of the cerebral and myocardial glucose metabolism. Knapp WH. **Nuklearmedizin** 1990 Mar; 29(2):77–8

Reverse triiodothyronine nuclear binding in rat brain. Kobayashi A, et al. **Osaka City Med J** 1990 May; 36(1):29–35

Effects of phenylephrine and dopamine on cerebral blood flow, blood volume, and oxygenation in young rabbits. Koyama K, et al. **Pediatr Neurol** 1990 Mar–Apr;6(2):87–90

Rett syndrome: biogenic amines and metabolites in postmortem brain. Lekman A, et al. **Pediatr Neurol** 1989 Nov–Dec;5(6):357–62

Regional cerebral glucose metabolism differs in adult and rigid juvenile forms of Huntington disease. Matthews PM, et al. **Pediatr Neurol** 1989 Nov–Dec;5(6):353–6

Proton NMR observation of phenylalanine and an aromatic metabolite in the rabbit brain in vivo. Avison MJ, et al. **Pediatr Res** 1990 Jun;27(6):566–70

Blood flow distribution and brain metabolism during tolazoline–induced hypotension in newborn dogs. Balsan MJ, et al. **Pediatr Res** 1990 Aug;28(2):111–5

Utilization of D–beta–hydroxybutyrate and oleate as alternate energy fuels in brain cell cultures of newborn mice after hypoxia at different glucose concentrations. Bossi E, et al. **Pediatr Res** 1989 Nov;26(5):478–81

The effects of bilirubin on brain energy metabolism during hyperosmolar opening of the blood–brain barrier: an in vivo study using 31P nuclear magnetic resonance spectroscopy. Ives NK, et al. **Pediatr Res** 1989 Oct;26(4):356–61

Cerebral energy metabolism and oxygen state during hypoxia in neonate and adult dogs. Nioka S, et al. **Pediatr Res** 1990 Jul;28(1):54–62

The effect of blood glucose concentration on postasphyxia cerebral hemodynamics in newborn lambs. Rosenberg AA, et al. **Pediatr Res** 1990 May;27(5):454–9

Effect of extracorporeal membrane oxygenation on cerebral blood flow and cerebral oxygen metabolism in newborn sheep. Short BL, et al. **Pediatr Res** 1990 Jul;28(1):50–3

myo–inositol: a newly identified nonnitrogenous osmoregulatory molecule in mammalian brain. Thurston JH, et al. **Pediatr Res** 1989 Nov;26(5):482–5

Regional cerebral glucose utilization in the immature rat: effect of hypoxia–ischemia. Vannucci RC, et al. **Pediatr Res** 1989 Sep;26(3):208–14

Differential regional distribution and release of two forms of gonadotropin–releasing hormone in the chicken brain. Katz IA, et al. **Peptides** 1990 May–Jun;11(3):443–50

Substance P modulation of DAMGO binding in the brain of CXBK and Swiss–Webster mice. Krumins SA, et al. **Peptides** 1990 Mar–Apr;11(2):281–5

Degradation of bradykinin and its metabolites by rat brain synaptic membranes. Orawski AT, et al. **Peptides** 1989 Sep–Oct;10(5):1063–73

Interaction of endogenous opioid peptides and other drugs with four kappa opioid binding sites in guinea pig brain. Rothman RB, et al. **Peptides** 1990 Mar–Apr;11(2):311–31

Differential processing of the neurotensin/neuromedin N precursor in the mouse. Shaw C, et al. **Peptides** 1990 Mar–Apr;11(2):227–35

alpha–Methyl–p–tyrosine partially attenuates p–chloroamphetamine–induced 5–hydroxytryptamine depletions in the rat brain. Axt KJ, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):995–7

The binding of 3H–(3–MeHis2) thyrotropin releasing hormone to brain and pituitary membranes of morphine tolerant–dependent and abstinent rats. Bhargava HN, et al. **Pharmacol Biochem Behav** 1989 Sep;34(1):7–12

Experience affects cortical but not subcortical polyamines. Ferchmin PA, et al. **Pharmacol Biochem Behav** 1990 Jan; 35(1):255–8

Mitochondrial protein synthesis may be involved in long–term memory formation. Fride E, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):873–8

Perinatal diazepam exposure: alterations in exploratory behavior and mesolimbic dopamine turnover. Gruen RJ, et al. **Pharmacol Biochem Behav** 1990 May;36(1):169–75

GABA turnover in the brain of rat lines developed for differential ethanol–induced motor impairment. Hellevuo K, et al. **Pharmacol Biochem Behav** 1989 Dec;34(4):905–9

Effects of uric acid and caffeine on A1 adenosine receptor binding in developing rat brain. Hunter RE, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):791–5

Effects of 24–hr fasting on methamphetamine– and apomorphine–induced locomotor activities, and on monoamine metabolism in mouse corpus striatum and nucleus accumbens. Itoh T, et al. **Pharmacol Biochem Behav** 1990 Feb;35(2):391–6

Analysis of serotonin, dopamine and their metabolites in the caudate putamen, the suprachiasmatic nucleus and the median raphe nucleus of euthermic and torpid deermice, Peromyscus maniculatus. Lin LH, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):309–14

N–modified fluorophenyltropane analogs of cocaine with high affinity for cocaine receptors. Madras BK, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):949–53

Variation of nicotinic binding sites among inbred strains. Marks MJ, et al. **Pharmacol Biochem Behav** 1989 Jul; 33(3):679–89

The effects of strychnine on the regulation of voltage–dependent calcium channels by dihydropyridines in brain and heart. O'Neill SK, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):833–40

Maternal stress increases fetal brain and neonatal cerebral cortex 5–hydroxytryptamine synthesis in rats: a possible mechanism by which stress influences brain development. Peters DA. **Pharmacol Biochem Behav** 1990 Apr; 35(4):943–7

Central– and peripheral–type benzodiazepine receptors: similar regulation by stress and GABA receptor agonists. Rägo L, et al. **Pharmacol Biochem Behav** 1989 Apr; 32(4):879–83

Unilateral dopamine depletion causes bilateral deficits in conditioned rotation in rats. Richards JB, et al. **Pharmacol Biochem Behav** 1990 Jun;36(2):217–23

Effects of opiate agonists and an antagonist on food intake and brain neurotransmitters in normophagic and obese "cafeteria" rats. Robert JJ, et al. **Pharmacol Biochem Behav** 1989 Nov;34(3):577–83

MDMA transiently alters biogenic amines and metabolites in mouse brain and heart. Steele TD, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):223–7

Effects of the putative anxiolytic SM–3997 on central monoaminergic systems. Tatsuno T, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):1049–55

Behavioral and biochemical correlates of chronic administration of quipazine. Valencia–Flores M, et al. **Pharmacol Biochem Behav** 1990 Jun;36(2):299–304

On the development of behavioral tolerance to organophosphates. I: Behavioral and biochemical aspects. van Dongen CJ, et al. **Pharmacol Biochem Behav** 1989 Nov; 34(3):473–81

Correlation between cocaine–induced locomotion and cocaine disposition in the brain among four inbred strains of mice. Wiener HL, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):699–701

Binding affinity profile of somatostatin (SS–14) to rat CNS receptors. Barone D, et al. **Pharmacol Res** 1989 Nov–Dec; 21 Suppl 1:77–8

In situ hybridization histochemistry as a tool to study gene expression and its regulation in the central nervous system. Cimino M, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 2:67–77 (43 ref.)

Effect of NO2 on lipids and lipid peroxidation in the CNS

of the guinea-pig. Farahani H, et al. **Pharmacol Toxicol** 1990 Feb;66(2):146-9

Brain and plasma kinetics of the opioid 11C-hydromorphone in two macaque species. Hartvig P, et al. **Pharmacol Toxicol** 1989 Sep;65(3):214-6

The effect of ethanol on 35S-TBPS binding to mouse brain membranes in the presence of chloride. Liljequist S, et al. **Pharmacol Toxicol** 1989 Nov;65(5):362-7

Kinetics of methyl mercury in blood and brain during chronic exposure in the monkey Macaca fascicularis. Stinson CH, et al. **Pharmacol Toxicol** 1989 Sep;65(3):223-30

Heterogeneous distribution of mianserin in rat brain during chronic continuous infusion. Kurata K, et al. **Pharmacology** 1989;39(5):285-90

Brain entry and direct central pharmacological effects of the nootropic drug oxiracetam. Oxiracetam: brain entry and pharmacological effects. Ponzio F, et al. **Pharmacopsychiatry** 1989 Oct;22 Suppl 2:111-5

Extra-hypothalamic dopamine is not involved in the effects of hyperprolactinemia on male copulatory behavior. Doherty PC, et al. **Physiol Behav** 1989 Jun;45(6):1101-5

Role of prefeedings, plasma amino acid ratios and brain serotonin levels in carbohydrate and protein selection. Holder MD, et al. **Physiol Behav** 1990 Jan;47(1):113-9

High affinity binding of the calcium channel blocker, (+)-[methyl-3H]PN200-110(3HPN) in rat brain. Magill SB, et al. **Physiol Behav** 1989 Jul;46(1):101-4

Participation of the CNS in the control of FFA mobilization during fasting in rabbits. Paschoalini MA, et al. **Physiol Behav** 1990 Mar;47(3):461-5

The effect of PGE in multiple experimental models. II. Effect on steady-state levels of plasma and brain amino acids and transmitters. Waymack JP, et al. **Physiol Behav** 1989 Jun; 45(6):1201-5

Functional comparison of neurotransmitter receptor subtypes in mammalian central nervous system. Nicoll RA, et al. **Physiol Rev** 1990 Apr;70(2):513-65 (526 ref.)

Relationship between hormones and brain water content measured by 1H magnetic resonance spectroscopy during simulated weightlessness in man. Maurice N, et al. **Physiologist** 1990 Feb;33(1 Suppl):S104-5

Direct visualization and cellular localization of D1 and D2 dopamine receptors in rat forebrain by use of fluorescent ligands. Ariano MA, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8570-4

Permeability of the murine blood-brain barrier to some octapeptide analogs of somatostatin. Banks WA, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6762-6

Brain concentrations of benzodiazepines are elevated in an animal model of hepatic encephalopathy. Basile AS, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5263-7

Expression of c-Fos immunoreactivity in transmitter-characterized neurons after stress. Ceccatelli S, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9569-73

gamma-Preprotachykinin-(72-92)-peptide amide: an endogenous preprotachykinin I gene-derived peptide that preferentially binds to neurokinin-2 receptors [published erratum appears in Proc Natl Acad Sci U S A 1990 Apr;87(8):3253] Dam TV, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):246-50

Dextrorphan binds to opioid receptors in guinea-pig brain membranes and is an antagonist at opioid receptors in myenteric plexus. Goldstein A, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1629-32

Cannabinoid receptor localization in brain. Herkenham M, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1932-6

Two pharmacologically distinct sodium- and chloride-coupled high-affinity gamma-aminobutyric acid transporters are present in plasma membrane vesicles and reconstituted preparations from rat brain. Kanner BI, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2550-4

Dopamine receptor gene expression by enkephalin neurons in rat forebrain. Le Moine C, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):230-4

Use of nonradioactive 2-deoxyglucose to study compartmentation of brain glucose metabolism and rapid regional changes in rate. McDougal DB Jr, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1357-61

Distribution of D2 dopamine receptor mRNA in rat brain. Meador-Woodruff JH, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7625-8

Localization of the mRNA for the dopamine D2 receptor in the rat brain by in situ hybridization histochemistry. Mengod G, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(21):8560-4

Astrocyte cultures derived from human brain tissue express angiotensinogen mRNA. Milsted A, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5720-3

Distribution of saposin proteins (sphingolipid activator proteins) in lysosomal storage and other diseases. Morimoto S, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3493-7

Octyl glucoside extracts GTP-binding regulatory proteins from rat brain "synaptoneurosomes" as large, polydisperse structures devoid of beta gamma complexes and sensitive to disaggregation by guanine nucleotides. Nakamura S, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6413-7

Reversible and irreversible labeling and autoradiographic localization of the cerebral histamine H2 receptor using [125I]iodinated probes. Ruat M, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1658-62

Rat brain expresses a heterogeneous family of calcium channels. Snutch TP, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3391-5

Localization of the receptor site for alpha-scorpion toxins by antibody mapping: implications for sodium channel topology. Thomsen WJ, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10161-5

ATP-induced loss of Alz-50 immunoreactivity with the A68 proteins from Alzheimer brain is mediated by ubiquitin. Vincent IJ, et al. **Proc Natl Acad Sci U S A** 1990 Jun; 87(12):4840-4

Protease nexin-1, an antithrombin with neurite outgrowth activity, is reduced in Alzheimer disease. Wagner SL, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8284-8

Expression of muscarinic acetylcholine and dopamine receptor mRNAs in rat basal ganglia. Weiner DM, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7050-4

Parathyroid hormone-related peptide gene is expressed in the mammalian central nervous system. Weir EC, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):108-12

Isolation, partial amino acid sequence, and immunohistochemical localization of a brain-specific calcium-binding protein. Winsky L, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10139-43

Abnormal processing of multiple proteins in Alzheimer disease. Zhang H, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):8045-9

An analogue of thyrotropin-releasing hormone, DN1417, decreases naloxone binding in the rat brain. Mori M, et al. **Proc Soc Exp Biol Med** 1989 Oct;192(1):6-10

Mapping of brain nicotinic receptors by autoradiographic techniques and the effect of experimental lesions. Clarke PB. **Prog Brain Res** 1989;79:65-71 (50 ref.)

Chronic nicotine exposure and brain nicotinic receptors--influence of genetic factors. Collins AC, et al. **Prog Brain Res** 1989;79:137-46

Attempts to visualize nicotinic receptors in the brain of monkey and man by positron emission tomography. Nybäck H, et al. **Prog Brain Res** 1989;79:313-9

Alpha 1-antichymotrypsin in brain aging and disease. Abraham CR, et al. **Prog Clin Biol Res** 1989;317:1037-48 (22 ref.)

Effects of electrical stimulation in the periaqueductal gray on POMC peptides and mRNA in the rat brain. Bronstein D, et al. **Prog Clin Biol Res** 1990;328:219-22

Aromatization and estrogen action in brain. Callard G, et al. **Prog Clin Biol Res** 1990;342:105-11 (23 ref.)

Autoradiographic localization of [3H]dextromethorphan (DM) in guinea pig brain: allosteric enhancement by ropizine. Canoll PD, et al. **Prog Clin Biol Res** 1990; 328:171-4

Effect of metabolic rate on the occurrence of periodic breathing. Cherniack NS, et al. **Prog Clin Biol Res** 1990; 345:167-74; discussion 175-6

PrPSc in scrapie-infected hamster brain is spatially and temporally related to histopathology and infectivity titer. De Armond SJ, et al. **Prog Clin Biol Res** 1989;317:601-18 (22 ref.)

Abnormalities of the glucose transporter at the blood-brain barrier and in brain in Alzheimer's disease. Kalaria RN, et al. **Prog Clin Biol Res** 1989;317:415-21

[3H] beta-funaltrexamine ([3H] beta-FNA) binds irreversibly to mu opioid receptors in the rat brain: autoradiographic study. Liu-Chen LY, et al. **Prog Clin Biol Res** 1990; 328:61-4

Selectivity profile of nor-binaltorphimine and ICI-197,067 in guinea pig brain. Magnan J, et al. **Prog Clin Biol Res** 1990;328:73-6

Evidence for four opioid kappa binding sites in guinea pig brain. Rothman RB, et al. **Prog Clin Biol Res** 1990;328:9-12

Multiple proteins are abnormally processed in Alzheimer disease. Sternberger LA, et al. **Prog Clin Biol Res** 1989; 317:763-8 (30 ref.)

Binding sites for non-opioid gamma-type endorphins in brain structures of the mesocorticolimbic feedback circuit. Wiegant VM, et al. **Prog Clin Biol Res** 1990;328:29-32

Calcium-binding proteins in avian and mammalian central nervous system: localization, development and possible functions. Braun K. **Prog Histochem Cytochem** 1990; 21(1):1-64 (267 ref.)

Imaging of energy metabolites (ATP, glucose and lactate) in tissue sections: a bioluminescent technique. Paschen W. **Prog Histochem Cytochem** 1990;20(4):1-122

Opioid peptides and receptors. Localization, interactions and relationships to other molecules in the rodent brain, especially the hippocampal formation. Stengaard-Pedersen K. **Prog Histochem Cytochem** 1989;20(3):1-119 (393 ref.)

Neurophysiological and biochemical changes evoked by valproic acid in the central nervous system. Cotariu D, et al. **Prog Neurobiol** 1990;34(4):343-54 (175 ref.)

In situ hybridization histochemistry and the study of gene expression in the human brain. Harrison PJ, et al. **Prog Neurobiol** 1990;34(4):271-312 (491 ref.)

Role of glial cells in the regulation of the brain ion microenvironment. Walz W. **Prog Neurobiol** 1989; 33(4):309-33 (131 ref.)

Inhibition of 3H-thymidine incorporation into the DNA of developing rat brain by amphetamine treatment. Bendek G, et al. **Prog Neuropsychopharmacol** 1979;3(5-6):555-8

Nootropic drugs and brain cholinergic mechanisms. Pepeu G, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13 Suppl:S77-88 (60 ref.)

Regional distribution of the serotonin transport complex in human brain, identified with 3H-paroxetine, 3H-citalopram and 3H-imipramine. Plenge P, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(1):61-72

Biochemical aspects of suicidal behavior. Traskman-Bendz L, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13 Suppl:S35-44

Opposite effect of adrenalectomy on rat brain prostaglandin synthesis in basal conditions and in response to insulin or 2-deoxy-glucose. Weidenfeld J, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Dec; 38(3):173-6

Binding and functional properties of doxazosin in the human prostate adenoma and canine brain. Lepor H, et al. **Prostate** 1990;16(1):29-38

Corticotropin-releasing factor (CRF) and interleukin-1 (IL-1) receptors in the brain-pituitary-immune axis. De Souza EB, et al. **Psychopharmacol Bull** 1989;25(3):299-305

Influence of dose and route of administration on the kinetics of fluoxetine and its metabolite norfluoxetine in the rat. Caccia S, et al. **Psychopharmacology (Berl)** 1990; 100(4):509-14

[3H] sertraline binding to rat brain membranes. Koe BK, et al. **Psychopharmacology (Berl)** 1990;100(4):470-6

Detection of benzodiazepine receptor occupancy in the human brain by positron emission tomography. Shinotoh H, et al. **Psychopharmacology (Berlin)** 1989;99(2):202-7

Effect of cervical spinal cord stimulation (cSCS) on cerebral glucose metabolism and blood flow in a vegetative patient assessed by positron emission tomography (PET) and single photon emission computed tomography (SPECT). Momose T, et al. **Radiat Med** 1989 Sep-Oct;7(5):243-6

Role of iron and ferritin in MR imaging of the brain: a study in primates at different field strengths. Bizzi A, et al. **Radiology** 1990 Oct;177(1):59-65

AIDS dementia complex: brain high-energy phosphate metabolite deficits. Bottomley PA, et al. **Radiology** 1990 Aug;176(2):407-11

Glycolysis: link between PET and proton MR spectroscopic studies of the brain. Lear JL. **Radiology** 1990 Feb; 174(2):328-30

Age-dependent changes in localized proton and phosphorus MR spectroscopy of the brain. van der Knaap MS, et al. **Radiology** 1990 Aug;176(2):509-15

Regional distribution of somatostatin receptor affinity states in rat brain: effects of divalent cations and GTP. Moyse E, et al. **Regul Pept** 1989 Dec;26(3):225-34

Pronounced increases in brain levels of calcitonin gene-related peptide after kainic acid induced seizures. Saria A, et al. **Regul Pept** 1989 Dec;26(3):215-23

Receptor binding of somatostatin-14 and somatostatin-28 in rat brain: differential modulation by nucleotides and ions. Srikant CB, et al. **Regul Pept** 1990 Feb 4;27(2):181-94

Differential interaction of guanabenz with receptor binding sites in rat brain and kidney. Gould RJ, et al. **Res Commun Chem Pathol Pharmacol** 1989 Oct;66(1):3-19

Possible catabolism of paraquat in mouse brain microsomes. Hara S, et al. **Res Commun Chem Pathol Pharmacol** 1989 Oct;66(1):159-62

Brain 5-HT1 and 5-HT2 binding sites following portacaval shunt in the rat. Bengtsson F, et al. **Res Exp Med (Berl)** 1989;189(4):249-56

O2 effect on composition of chick embryonic heart and brain. Asson-Batres MA, et al. **Respir Physiol** 1989 Jul; 77(1):101-9

Elevated brain lactate accumulation and increased neurologic deficit are associated with modest hyperglycemia in global brain ischemia. Natale JE, et al. **Resuscitation** 1990 Jun; 19(3):271-89

Accelerated synthesis and release of angiotensin II in the rat brain during electroacupuncture tolerance. Wang KW, et al. **Sci China [B]** 1990 Jun;33(6):686-93

Posttranslational glutamylation of alpha-tubulin. Eddé B, et al. **Science** 1990 Jan 5;247(4938):83-5

Autoradiographic imaging of phosphoinositide turnover in the brain. Hwang PM, et al. **Science** 1990 Aug 17; 249(4970):802-4

A family of AMPA-selective glutamate receptors. Keinänen K, et al. **Science** 1990 Aug 3;249(4968):556-60

Marijuana receptor gene cloned [news] Marx J. **Science** 1990 Aug 10;249(4969):624-6

Regulation of proenkephalin by Fos and Jun. Sonnenberg JL, et al. **Science** 1989 Dec 22;246(4937):1622-5

Genetic differences in the ethanol sensitivity of GABAA receptors expressed in Xenopus oocytes. Wafford KA, et al. **Science** 1990 Jul 20;249(4966):291-3

Depression of energy metabolism in distant brain structures: studies with positron emission tomography in stroke patients. Baron JC. **Semin Neurol** 1989 Dec;9(4):281-5 (44 ref.)

Cerebral perfusion and oxygen uptake studies in patients with intracranial tumors. Beaney RP. **Semin Neurol** 1989 Dec; 9(4):377-87 (20 ref.)

In vivo multinuclear magnetic resonance spectroscopy investigations of cerebral development and metabolic encephalopathy using neonatal animal models. Corbett RJ. **Semin Perinatol** 1990 Jun;14(3):258-71 (99 ref.)

31P nuclear magnetic resonance spectroscopy in the human neonatal brain. Delivoria-Papadopoulos M, et al. **Semin Perinatol** 1990 Jun;14(3):248-57 (45 ref.)

Neonatal seizure: magnetic resonance spectroscopic findings. Young RSK, et al. **Semin Perinatol** 1990 Jun;14(3):238-47 (42 ref.)

Effect of steroids on edema and sodium uptake of the brain during focal ischemia in rats. Betz AL, et al. **Stroke** 1990 Aug;21(8):1199–204

Reduction of hyperthermic ischemic acidosis by a conditioning event in cats. Chopp M, et al. **Stroke** 1989 Oct;20(10):1357–60

Relationship between plasma glucose, brain lactate, and intracellular pH during cerebral ischemia in gerbils. Combs DJ, et al. **Stroke** 1990 Jun;21(6):936–42

Increased cerebral lactate output to cerebral venous blood after forebrain ischemia in rats. Frerichs KU, et al. **Stroke** 1990 Apr;21(4):614–7

Cerebral blood flow and metabolism in normotensive and hypertensive patients with transient neurologic deficits. Fujii K, et al. **Stroke** 1990 Feb;21(2):283–90

Calcium–calmodulin binding in ischemic rat neurons after calcium channel blocker therapy. Grotta JC, et al. **Stroke** 1990 Jun;21(6):948–52

Endogenous platelet activating factor does not modulate blood flow and metabolism in normal rat brain. Kochanek PM, et al. **Stroke** 1990 Mar;21(3):459–62

Effect of plasma glucose concentration on cerebral metabolism during partial ischemia in neonatal piglets. Laptook AR, et al. **Stroke** 1990 Mar;21(3):435–40

Effect of MCI–186 on ischemia–induced changes in monoamine metabolism in rat brain. Oishi R, et al. **Stroke** 1989 Nov;20(11):1557–64

Hypercarbia depresses cerebral oxygen consumption during cardiopulmonary bypass. Prough DS, et al. **Stroke** 1990 Aug;21(8):1162–6

Free radicals in central nervous system ischemia. Schmidley JW. **Stroke** 1990 Jul;21(7):1086–90 (30 ref.)

Impairment of metabolic recovery with increasing periods of middle cerebral artery occlusion in rats. Selman WR, et al. **Stroke** 1990 Mar;21(3):467–71

Effects of hypoxia–ischemia and MK–801 treatment on the binding of a phencyclidine analogue in the developing rat brain. Silverstein FS, et al. **Stroke** 1990 Feb;21(2):310–5

Mapping cocaine binding sites in human and baboon brain in vivo. Fowler JS, et al. **Synapse** 1989;4(4):371–7

1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine–induced neurotoxicity in the rat: characterization and age–dependent effects. Jarvis MF, et al. **Synapse** 1990; 5(2):104–12

Apparent absence of serotonin1B receptors in biopsied and post–mortem human brain. Martial J, et al. **Synapse** 1989; 4(3):203–9

Acute effects of alprazolam and adinazolam on the concentrations of corticotropin–releasing factor in the rat brain. Owens MJ, et al. **Synapse** 1989;4(3):196–202

Anatomical localization of calmodulin mRNA in the rat brain with cloned cDNA and synthetic oligonucleotide probes. Roberts–Lewis JM, et al. **Synapse** 1990;5(3):247–54

G protein mRNA expression in immunohistochemically identified dopaminergic and noradrenergic neurons in the rat brain. Vincent SR, et al. **Synapse** 1990;6(1):23–32

Autoradiographic quantification of serotonin1A receptors in rat brain following antidepressant drug treatment. Welner SA, et al. **Synapse** 1989;4(4):347–52

Influence of maternal dietary zinc intake on in vitro tubulin polymerization in fetal rat brain. Oteiza PI, et al. **Teratology** 1990 Jan;41(1):97–104

Effect of gamma aminobutyric acid on the carbon dioxide rebreathing response of normal subjects: a study using vigabatrin. Fennerty AG, et al. **Thorax** 1990 Jan;45(1):42–4

A new quantitative method for measuring oxygen extraction fraction by positron emission tomography: theory and simulation studies. Takagi S, et al. **Tokai J Exp Clin Med** 1989 Apr;14(2):117–30

Localization of mercury in CNS of the rat. II. Intraperitoneal injection of methylmercuric chloride (CH_3HgCl) and mercuric chloride ($HgCl_2$). Møller–Madsen B. **Toxicol Appl Pharmacol** 1990 Apr;103(2):303–23

Triadimefon, a triazole fungicide, induces stereotyped behavior and alters monoamine metabolism in rats. Walker QD, et al. **Toxicol Appl Pharmacol** 1990 Mar 1; 102(3):474–85

Ototoxic and nephrotoxic drugs inhibit agonist–induced inositol phosphate formation in rat brain synaptoneurosomes. Guiramand J, et al. **Toxicol Lett** 1990 May;51(3):331–8

Brain phenylalanine and tyrosine levels and hepatic encephalopathy induced by CCl_4 in rats. Yamamoto H. **Toxicology** 1990 Apr 30;61(3):241–7

Severe hypotension in disseminated colon cancer due to a possible decreased dopamine brain content: a case report. Lissoni P, et al. **Tumori** 1990 Aug 31;76(4):398–9

HPLC–determination of apomorphine in a mormyrid fish, gnathonemus petersii. Noe A, et al. **Z Naturforsch [C]** 1989 Nov–Dec;44(11–12):917–9

[Relationship between the content of central substance P and the analgesic effect of electroacupuncture in rats] Li HL, et al. **Chen Tzu Yen Chiu** 1989;14(3):370–4 (Eng. Abstr.) **(Chi)**

[Effects of electroacupuncture at different hours on leucine–enkephalin contents in rat brain regions] Wang YJ, et al. **Chen Tzu Yen Chiu** 1989;14(4):420–3 (Eng. Abstr.) **(Chi)**

[Effects of intraperitoneal injection of naloxone on the analgesic effect and the changes of brain catecholamine contents induced by electroacupuncture in rats] Wang YJ, et al. **Chen Tzu Yen Chiu** 1989;14(3):348–51 (Eng. Abstr.) **(Chi)**

[Effect of chang chun dan on noradrenaline levels of the brain and plasma in aged rats] Cheng LY. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Sep;9(9):552–3, 517 (Eng. Abstr.) **(Chi)**

[Influence of congenital hypothyroidism on the developing rat brain and improvement after thyroid replacement therapy] Chen Y. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Oct; 22(5):285–8, 318 (Eng. Abstr.) **(Chi)**

[Effects of hand electroacupuncture on the mean value of cAMP content and Na(+)-K(+)-ATPase activity in the tissue of various areas of the rat brain] Ding Q. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1990 Apr; 23(2):72–4, 125 (Eng. Abstr.) **(Chi)**

[Molecular basis of pharmacological action of irreversible opioid receptor agonist alpha–CAO] Liu JS. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Oct; 11(5):353–7 (Eng. Abstr.) **(Chi)**

[Irreversible action of the opioid agonist alpha–CAM and its reaction with SH groups at opioid receptor binding sites] Li JG, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar; 10(2):97–100 (Eng. Abstr.) **(Chi)**

[Changes of adrenoceptor density in heart and brain and the reactivity of isolated pulmonary artery ring in atherosclerotic rabbit] Zeng GY, et al. **Chung Kuo Yao Li Hsueh Pao** 1990 Jan;11(1):18–21 (Eng. Abstr.) **(Chi)**

[Preliminary studies on the relationship between the blood pressure and renin–angiotensin system in brain and blood vessels in SHRSP] Ding H, et al. **Sheng Li Hsueh Pao** 1990 Feb;42(1):61–7 (Eng. Abstr.) **(Chi)**

[Effect of electroacupuncture on electroconvulsive shock—an autoradiographic study for opioid receptors] He XP, et al. **Sheng Li Hsueh Pao** 1990 Apr;42(2):149–54 (Eng. Abstr.) **(Chi)**

[Brain energy metabolism of cerebral ischemic mice and the effects of some drugs] Feng YP, et al. **Yao Hsueh Hsueh Pao** 1989;24(2):89–94 (Eng. Abstr.) **(Chi)**

[Effects of diazepam on the rat open field behavior and high K+ induced release of monoamine neurotransmitters from brain slices] Yang XM, et al. **Yao Hsueh Hsueh Pao** 1989 Jan;24(1):5–10 (Eng. Abstr.) **(Chi)**

[The effect of ascorbic acid administration on its levels in the brain tissue in intact and hypoxic 18–day–old rats] Schreiber M, et al. **Sb Lek** 1990 Mar;92(2–3):85–8 (Eng. Abstr.) **(Cze)**

[cAMP in the brain of young and adult rats adapted to repeated high altitude hypoxia of 7000 m.] Trojan S, et al. **Sb Lek** 1990 Mar;92(2–3):89–91 (Eng. Abstr.) **(Cze)**

[Alzheimer's disease: imaging with NMR] Soetaert G, et al. **Acta Neurol Belg** 1989 May–Oct;89(3–4):246–8 **(Dut)**

[The use of radionuclides, specifically positron–emission tomography, in the determination of the blood circulation and metabolism of the brain. Application in experimental cerebral embolism] Weyne J, et al. **Verh K Acad Geneeskd Belg** 1989;51(4):315–76 (55 ref.) (Eng. Abstr.) **(Dut)**

[AIDS and sleep disorders: effect of gp120 on cerebral glucose metabolism] Raymon LP, et al. **C R Soc Biol (Paris)** 1989;183(5):407–18 (Eng. Abstr.) **(Fre)**

[Effect of MAO inhibitors on impeding synaptosomal withdrawal and on dopamine metabolism in rat and human brain] Tóthfalusi L, et al. **Acta Pharm Hung** 1989;59 Suppl 1:75–9 **(Hun)**

[Effects of modulation of the redox system on endogenous lipoperoxidation in the rat central nervous system] Calabrese V, et al. **Boll Soc Ital Biol Sper** 1989 Oct; 65(10):917–21 (Eng. Abstr.) **(Ita)**

[MCNU delivery into malignant brain tumor and normal brain tissue by intravenous or intraarterial infusion] Miyagami M, et al. **Gan To Kagaku Ryoho** 1990 Feb; 17(2):275–80 (Eng. Abstr.) **(Jpn)**

[Etoposide delivery to malignant brain tumors by induced hypertension with angiotensin II] Ogasawara H, et al. **Gan To Kagaku Ryoho** 1990 May;17(5):1033–8 (Eng. Abstr.) **(Jpn)**

[Dynamic changes of some neuropeptide in Japanese monkey (Macaca fuscata) brain during early development] Oshima K. **Jikken Dobutsu** 1990 Apr;39(2):155–63 (7 ref.) **(Jpn)**

[Non–invasive assessment of mitochondrial function in rat brain during and after hemorrhagic shock] Tamura M, et al. **Kokyu To Junkan** 1990 Feb;38(2):165–71 (Eng. Abstr.) **(Jpn)**

[Monoamine metabolism after transient global ischemia. Mechanism of delayed postischemic hypoperfusion] Maruki C. **Neurol Med Chir (Tokyo)** 1989 Dec;29(12):1093–100 (Eng. Abstr.) **(Jpn)**

[The Chronological changes in the cerebral blood flow and cerebral metabolic rate for glucose in the ischemic rabbit brain] Tenjin H, et al. **Neurol Med Chir (Tokyo)** 1989 Dec; 29(12):1085–92 (Eng. Abstr.) **(Jpn)**

[The effect of the dosage and route of manganese administration on manganese concentration in rat brain] Kabata H, et al. **Nippon Eiseigaku Zasshi** 1989 Jun; 44(2):667–72 (Eng. Abstr.) **(Jpn)**

[Alteration of regional calcium and energy metabolism in ischemic neuronal injury] Kobayashi S. **Nippon Geka Hokan** 1989 Jan 1;58(1):43–58 (Eng. Abstr.) **(Jpn)**

[Changes in muscarinic cholinergic receptor and choline acetyltransferase in experimental ischemic brain] Mizobuchi H. **Nippon Geka Hokan** 1989 Jan 1;58(1):93–106 (Eng. Abstr.) **(Jpn)**

[Changes in muscarinic cholinergic receptors and cholinergic neurons in experimental hydrocephalic rat brain] Sakamoto T. **Nippon Geka Hokan** 1989 Jan 1;58(1):80–92 (Eng. Abstr.) **(Jpn)**

[The distribution of toluene in the brain and its effects on the brain catecholamines in acute toluene poisoning] Kiriu T, et al. **Nippon Hoigaku Zasshi** 1990 Feb;44(1):25–33 (Eng. Abstr.) **(Jpn)**

[Studies of metabolic changes during and following cerebral ischemia in gerbils by in vivo multi nuclear magnetic resonance spectroscopy] Igarashi H. **Nippon Ika Daigaku Zasshi** 1989 Aug;56(4):339–48 (Eng. Abstr.) **(Jpn)**

[The effect of vitamin A on leukotriene production in the ischemic rat brain] Katsura K. **Nippon Ika Daigaku Zasshi** 1989 Dec;56(6):592–601 (Eng. Abstr.) **(Jpn)**

[Pulsatile assistance for profoundly hypothermic circulatory arrest, low–flow perfusion, and moderate–flow perfusion: comparative study of brain tissue pH, PO_2, and PCO_2] Watanabe T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Dec;37(12):2449–55 (Eng. Abstr.) **(Jpn)**

[Tissue distribution and physiologic role of atrial natriuretic peptide and brain natriuretic peptide] Matsuo H, et al. **Nippon Rinsho** 1990 May;48(5):1016–22 **(Jpn)**

[Recent studies of cerebral metabolism by nuclear magnetic resonance spectroscopy] Naritomi H, et al. **Nippon Rinsho** 1990 Jun;48(6):1351–8 (13 ref.) **(Jpn)**

[Molecular aspects of the hypothalamic hormones—brief review on the regulation and the function of CRH, TRH, GH–RH and LH–RH] Nishikawa T, et al. **Nippon Rinsho** 1990 May;48(5):1053–60 (17 ref.) **(Jpn)**

[The role of arachidonate cascade related compounds in the central nervous system] Watanabe Y, et al. **Nippon Rinsho** 1990 Jun;48(6):1134–42 **(Jpn)**

[Nerve tissue distribution and physiologic role of endogenous opioid peptides and their receptors—POMC–, proenkephalin A, proenkephalin B– derived opioid peptides and kyotorphin] Yamada T, et al. **Nippon Rinsho** 1990 May; 48(5):1042–52 **(Jpn)**

[Nerve tissue distribution and physiologic role of vasopressin, oxytocin and their receptors] Yamaji T. **Nippon Rinsho** 1990 May;48(5):1031–6 **(Jpn)**

[Regional distribution and function of brain renin angiotensin system] Yoshimi H. **Nippon Rinsho** 1990 May;48(5):1023–30 **(Jpn)**

[The role of oxygen free radicals in the aging of the brain] Mizuno Y. **Nippon Ronen Igakkai Zasshi** 1990 Mar; 27(2):182–7 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Brain aging and Parkinson's disease] Nagatsu T. **Nippon Ronen Igakkai Zasshi** 1990 Mar;27(2):115–22 (30 ref.) **(Jpn)**

[Behavioral characteristics associated with acoustic stimulation and the neurochemical alterations of monoaminergic systems in rat brain at the steady state of repeated methamphetamine administration] Akita H, et al. **Nippon Yakurigaku Zasshi** 1990 Jun;95(6):327–33 (Eng. Abstr.) **(Jpn)**

[Differential effects of isoflurane and nitrous oxide on cerebral blood flow, metabolism and electrocorticogram after incomplete cerebral ischemia in the rat] Ishikawa T, et al. **Nippon Yakurigaku Zasshi** 1989 Jul;94(1):73–80 (Eng. Abstr.) **(Jpn)**

[Prognostic estimation of cerebral arterio–venous difference of oxygen content (c–AVDO2) on severe head injury patients] Takeuchi T. **No Shinkei Geka** 1989 Dec; 17(12):1119–24 (Eng. Abstr.) **(Jpn)**

[Effects of neonatal hypothyroidism on brain development: analysis of brain metabolites using high resolution phosphorus and proton magnetic resonance (NMR) spectroscopy] Sugie H, et al. **No To Hattatsu** 1990 Mar; 22(2):166–72 (Eng. Abstr.) **(Jpn)**

[Cerebral blood flow and oxygen metabolism in Rett syndrome] Yoshikawa H, et al. **No To Hattatsu** 1990 May; 22(3):216–22 (Eng. Abstr.) **(Jpn)**

[Involvements of neuropeptides in pentylenetetrazol–induced convulsion in rats and effects of TRH and ceruletide on the convulsion] Hashiguchi S, et al. **No To Shinkei** 1990 Jan;42(1):73–8 (Eng. Abstr.) **(Jpn)**

[Changes in local cerebral glucose utilization, DC potential and extracellular potassium in various degree of experimental cerebral contusion] Kubota M, et al. **No To Shinkei** 1989 Aug;41(8):799–805 (Eng. Abstr.) **(Jpn)**

[Extracellular purine catabolites and tissue nucleotides and purine catabolites during progression and recovery of ischemia] Masana Y, et al. **No To Shinkei** 1989 Jul; 41(7):687–93 (Eng. Abstr.) **(Jpn)**

[Effect of stimulation of the medullary reticular formation on brain water content in cold injured brain] Ogawa T. **No To Shinkei** 1990 Mar;42(3):261–8 (Eng. Abstr.) **(Jpn)**

[Iron deposition in the brain of a case of the special type of hepatocerebral encephalopathy] Saito A, et al. **No To Shinkei** 1989 May;41(5):493–9 (Eng. Abstr.) **(Jpn)**

[Influence of superior cervical ganglion on cerebral hemodynamics—measurements of cerebral blood flow and metabolism during superior cervical ganglionectomy in

patients with moyamoya disease] Sato H, et al. **No To Shinkei** 1990 Feb;42(2):203–8 (Eng. Abstr.) **(Jpn)**

[Regional cerebral blood flow and oxygen consumption during normal human sleep] Takahashi K. **No To Shinkei** 1989 Sep;41(9):919–25 (Eng. Abstr.) **(Jpn)**

[Ischemia–induced neurotrophic activity detected in the peri–infarcted brain tissue] Yamada K, et al. **No To Shinkei** 1989 Jun;41(6):611–6 (Eng. Abstr.) **(Jpn)**

[Glycolytic activity and fructose 2, 6–bisphosphate changes in rat brain during ischemia] Yamamoto M. **No To Shinkei** 1990 Apr;42(4):405–11 (Eng. Abstr.) **(Jpn)**

[Tissue pH and energy metabolism in cerebral embolization model of rat] Yamane K, et al. **No To Shinkei** 1990 Feb; 42(2):167–73 (Eng. Abstr.) **(Jpn)**

[Measurements of cerebral blood flow and metabolism in patients with Alzheimer's disease] Kitamura S, et al. **Rinsho Byori** 1990 May;38(5):494–8 (Eng. Abstr.) **(Jpn)**

[Cerebral glucose metabolism in dementia (PET–FDG study)] Hatazawa J, et al. **Rinsho Hoshasen** 1989 Oct; 34(11):1343–8 (Eng. Abstr.) **(Jpn)**

[Cerebral blood flow and oxygen metabolism in ischemic cerebrovascular disease; embolic occlusion and thrombotic occlusion] Higano S, et al. **Rinsho Hoshasen** 1989 Jun; 34(6):683–90 (Eng. Abstr.) **(Jpn)**

[The kinesiological, chemical and pathological analysis in pulsed magnetic stimulation to the brain] Mano Y, et al. **Rinsho Shinkeigaku** 1989 Aug;29(8):982–8 (Eng. Abstr.) **(Jpn)**

[An Alzheimer's disease case showing recurrent subcortical hemorrhage: an autopsy findings with immunohistochemical studies of cerebral amyloid deposits] Maruyama K, et al. **Rinsho Shinkeigaku** 1989 Jul; 29(7):936–9 (Eng. Abstr.) **(Jpn)**

[Central acetylcholinergic systems in the normal aged and in the patient with Alzheimer–type dementia (ATD)] Ogawa N. **Rinsho Shinkeigaku** 1989 Dec;29(12):1529–31 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Changes in cyclic–AMP levels in the brain of rat administered methylmercury chloride] Sano K, et al. **Sangyo Igaku** 1989 Nov;31(6):434–5 **(Jpn)**

[Psychosine: a "toxin" produced in the brain—its mechanism of action] Igisu H. **Sangyo Ika Daigaku Zasshi** 1989 Dec 1;11(4):487–93 (24 ref.) (Eng. Abstr.) **(Jpn)**

[Role of nerve growth factor in CNS] Hatanaka H. **Seikagaku** 1989 Nov;61(11):1351–65 (57 ref.) **(Jpn)**

[Structure and function of brain myosin] Matsumura S. **Seikagaku** 1990 May;62(5):348–52 **(Jpn)**

[New topics of Alzheimer's disease research] Tomonaga M. **Seikagaku** 1989 May;61(5):385–9 **(Jpn)**

[The neurochemistry of schizophrenia] **Seishin Shinkeigaku Zasshi** 1989;91(8):585–9 **(Jpn)**

[Neurochemistry of kindling] Akiyama K, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1206–13 **(Jpn)**

[Structure and function of GABA receptor in the brain] Kuriyama K, et al. **Tanpakushitsu Kakusan Koso** 1990 Jun; 35(8):1455–64 (52 ref.) **(Jpn)**

[Protein phosphorylation in the brain] Miyamoto E, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1054–63 **(Jpn)**

[Biochemistry of Alzheimer's disease] Mori H, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1353–61 **(Jpn)**

[Abnormal proteins in the brain in Alzheimer's disease] Nukina N, et al. **Tanpakushitsu Kakusan Koso** 1989 Sep; 34(12 Suppl):1725–32 **(Jpn)**

[Energy metabolism and neuronal activity in brain slice—effect of deprivation of oxygen and glucose] Okada Y. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1137–50 **(Jpn)**

[Brain specific protein—genetic aspect] Takahashi Y, et al. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(4 Suppl):646–54 **(Jpn)**

[Changes in cerebral level of monoamines by Japanese encephalitis virus infection] Yamashita Y, et al. **Uirusu** 1989 Jun;39(1):47–54 (Eng. Abstr.) **(Jpn)**

[Piperidine in the brain: its neurobiological significance] Kasé Y, et al. **Yakubutsu Seishin Kodo** 1989 Sep;9(3):257–71 (77 ref.) (Eng. Abstr.) **(Jpn)**

[Relationship between pharmacological action of phencyclidine and serotonin–2 receptor] Nabeshima T. **Yakubutsu Seishin Kodo** 1989 Sep;9(3):301–10 **(Jpn)**

[Multiple [3H]8–hydroxy–2–(di–n–propylamino)–tetralin binding sites in rat brain: modulation by GTP and cations] Yokota N, et al. **Yakubutsu Seishin Kodo** 1989 Jun; 9(2):197–206 (Eng. Abstr.) **(Jpn)**

[Can the brain be protected during ischemia?] Karlsson BR, et al. **Tidsskr Nor Laegeforen** 1989 Sep 20;109(26):2642 **(Nor)**

[New aspects of the pathogenesis of ischemic brain damage. Possible involvement of excitatory amino acids] Ottersen OP, et al. **Tidsskr Nor Laegeforen** 1989 Sep 20; 109(26):2674–7 (Eng. Abstr.) **(Nor)**

[Physiological principles of imipramine pharmacokinetics] Szymura–Oleksiak J. **Folia Med Cracov** 1989; 30(3–4):103–21 (Eng. Abstr.) **(Pol)**

[Migration of Al(OH)3 in the bodies of experimental animals] Aleksandrowicz J, et al. **Med Dosw Mikrobiol** 1989; 41(2):135–40 (Eng. Abstr.) **(Pol)**

[Current views and studies of brain edema] Szymaś J. **Neurol Neurochir Pol** 1989 May–Jun;23(3):231–7 (30 ref.) **(Pol)**

[Benzodiazepine receptor in the central nervous system and its natural and synthetic agonists and antagonists. Clinical uses] Feldman R. **Pol Arch Med Wewn** 1988 May; 79(5):283–7 (26 ref.) **(Pol)**

[Protein kinases of the central nervous system in ontogenesis] Sanecka–Obacz M. **Postepy Biochem** 1989;35(3):347–62 (137 ref.) **(Pol)**

[The role of adenosine cyclic monophosphate (c–AMP) in the pathogenesis of epilepsy and the mechanism of the action of anti–epileptic drugs] Szczechowski L, et al. **Wiad Lek** 1989 Jul 1–15;42(13–15):881–3 (28 ref.) (Eng. Abstr.) **(Pol)**

[Calcium transport in brain synaptosomes during depolarization. The role of potential–dependent channels and Na+/Ca2+ metabolism] Konev SV, et al. **Biokhimiia** 1989 Jul;54(7):1150–62 (Eng. Abstr.) **(Rus)**

[Ca2+– and inositol–1,4,5–triphosphate induced release of Ca2+ in the microsomal fraction of the rat brain] Men'shikova EV, et al. **Biokhimiia** 1989 Jul;54(7):1059–65 (Eng. Abstr.) **(Rus)**

[Tachykinin receptors in the rat brain bind alpha–bungarotoxin] Utkin IuN, et al. **Bioorg Khim** 1989 Aug;15(8):1030–6 (Eng. Abstr.) **(Rus)**

[Changes in the content of neuromediator amino acids in the brain of mice with a convulsive syndrome induced by the hyperactivation of CNS cholinergic structures] Astrov VV, et al. **Biull Eksp Biol Med** 1990 Mar;109(3):268–9 (Eng. Abstr.) **(Rus)**

[Distribution of neurospecific cardioactive protein–hormone complex in the rat body during experimental myocardial ischemia] Gabrielian SK, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):147–8 (Eng. Abstr.) **(Rus)**

[Activation of endogenous lipid peroxidation in the brain in oxidation stress caused by administration of iron and its prevention by vitamin E] Kaĭnova GM, et al. **Biull Eksp Biol Med** 1990 Jan;109(1):35–7 (Eng. Abstr.) **(Rus)**

[Changes in protein metabolism in brain neurons during the withdrawal syndrome in chronically alcoholized rats (histo–autoradiographic and interferometric research)] Kazakova PB, et al. **Biull Eksp Biol Med** 1990 Mar; 109(3):244–6 (Eng. Abstr.) **(Rus)**

[Free brain amino acids in rats variously tolerant to alcohol] Ostrovskiĭ SIu, et al. **Biull Eksp Biol Med** 1990 Mar; 109(3):264–6 (Eng. Abstr.) **(Rus)**

[Binding of monoclonal antibodies to cerebral cytoplasmic tetrodotoxin–sensitive protein to human lymphocytes] Pinchuk GV, et al. **Biull Eksp Biol Med** 1989 Aug; 108(8):174–7 (Eng. Abstr.) **(Rus)**

[Dimethyl sulfoxide as a corrector of disorders of cerebral hemodynamics, oxygen and carbohydrate metabolism of the brain and lipid peroxidation in the early period after intracerebral hemorrhage] Plotnikov MB, et al. **Biull Eksp Biol Med** 1990 Apr;109(4):357–9 (Eng. Abstr.) **(Rus)**

[Modification of selective adsorption of muscarinic antagonists in cerebral membranes during chlorophos poisoning] Predtechenskiĭ MB, et al. **Biull Eksp Biol Med** 1989 Oct;108(10):459–61 (Eng. Abstr.) **(Rus)**

[Steadiness of oxygen tension in the fetal brain during changes in maternal oxygenation] Raguzin AV, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):12–4 (Eng. Abstr.) **(Rus)**

[The asymmetry of the free amino acid pool in sections of the rat brain] Rakhimov RN, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):676–8 (Eng. Abstr.) **(Rus)**

[Inhibition by local anesthetics and barbiturates of the active transport of H+ in the synaptic vesicle membranes of the brain] Shukalova TF, et al. **Biull Eksp Biol Med** 1989 Aug; 108(8):185–8 (Eng. Abstr.) **(Rus)**

[Noradrenaline regulates the degree of methylation of DNA in the brain] Khanbabian MV, et al. **Dokl Akad Nauk SSSR** 1989 Jul–Aug;307(1):253–6 **(Rus)**

[DNA replication in brain cell nuclei of adult rats following transplantation of embryonal nerve tissue] Kleshchinov VN. **Dokl Akad Nauk SSSR** 1989;309(2):468–70 **(Rus)**

[Correction of lipid peroxidation in stress with the peptide bioregulator thymopentin] Deviatkina TA, et al. **Fiziol Zh** 1989 Sep–Oct;35(5):14–8 (Eng. Abstr.) **(Rus)**

[Changes in neutral peptide hydrolase levels in the blood and catecholamine levels in the tissues during adaptation to high altitude hypoxia] Ivashkevich AA, et al. **Fiziol Zh** 1989 Sep–Oct;35(5):59–64 (Eng. Abstr.) **(Rus)**

[Identification of catecholamines in the rat brain and mollusk tissues using semithin slices and retrograde staining] Prudnikov IM, et al. **Fiziol Zh** 1989 Nov–Dec;35(6):98–100 (Eng. Abstr.) **(Rus)**

[Study of the restoration and balance of thiamine in the tissues of albino mice in alcoholic intoxication] Rozanov AIa, et al. **Fiziol Zh** 1990 Jan–Feb;36(1):66–70 (Eng. Abstr.) **(Rus)**

[Disorders of oxygen supply and tissue metabolism and their correction in rats with experimental rickets] Shkiriak–Nizhnik ZA, et al. **Fiziol Zh** 1990 Mar–Apr; 36(2):25–31 (Eng. Abstr.) **(Rus)**

[Physiologic importance of glucosamine] Zupanets IA, et al. **Fiziol Zh** 1990 Mar–Apr;36(2):115–20 (45 ref.) (Eng. Abstr.) **(Rus)**

[The blood circulation and oxygen tension in the brain of waking and narcotized rabbits during head–down tilt exposure] Beketov AI, et al. **Fiziol Zh SSSR** 1989 Nov; 75(11):1548–53 (Eng. Abstr.) **(Rus)**

[Effect of noise of moderate intensity on the functional status of the sympathetic–adrenal system] Oleshkevich LA, et al. **Gig Sanit** 1989 Dec;(12):93–5 **(Rus)**

[Differences in serotonin receptor types I and II binding in the brain regions of rats with 2 types of hereditary arterial hypertension] Piianzin AI, et al. **Kardiologiia** 1990 Mar; 30(3):87–90 (Eng. Abstr.) **(Rus)**

[Endogenous ethanol in the blood and tissues of rats with hypobaric hypoxia] Tarasov IuA, et al. **Kosm Biol Aviakosm Med** 1989 Nov–Dec;23(6):47–51 (Eng. Abstr.) **(Rus)**

[The catecholamine level in the brain of rats with hereditary stress–induced arterial hypertension] Gordienko NI. **Patol Fiziol Eksp Ter** 1990 May–Jun;(3):38–40 (Eng. Abstr.) **(Rus)**

[Mechanisms of action of ethanol on carbohydrate–energy metabolism in the brain] Panchenko LF, et al. **Patol Fiziol Eksp Ter** 1989 May–Jun;(3):83–8 (53 ref.) **(Rus)**

[Testosterone metabolism in discrete areas of the brain in rat fetuses] Reznikov AG, et al. **Probl Endokrinol (Mosk)** 1990 May–Jun;36(3):57–61 (Eng. Abstr.) **(Rus)**

[Possibilities for the histochemical study of the nuclei of normal brain cells and in pathology] Krimer LS, et al. **Tsitologiia** 1989 Sep;31(9):995–1004 (124 ref.) (Eng. Abstr.) **(Rus)**

[Characteristics of concanavalin A–binding neurospecific glycoproteins from various regions of the rat brain during experimental neurosis] Berezin VA, et al. **Ukr Biokhim Zh** 1989 Nov–Dec;61(6):81–4 (Eng. Abstr.) **(Rus)**

[An increase in the brain homocarnosine level during alcohol intoxication] Kukharenko RI, et al. **Ukr Biokhim Zh** 1990 Jan–Feb;62(1):92–4 (Eng. Abstr.) **(Rus)**

[Binding of latrotoxin to synaptosomes and synaptic membranes of the rat brain] Lishko VK, et al. **Ukr Biokhim Zh** 1989 Nov–Dec;61(6):22–7 (Eng. Abstr.) **(Rus)**

[Formation of p–tyramine from dopamine bound to synaptic receptors of the rat brain in vitro] Podgornaia EK, et al. **Ukr Biokhim Zh** 1989 Nov–Dec;61(6):27–31 (Eng. Abstr.) **(Rus)**

[The effect of ATP on the malate regulation of oxidative phosphorylation in brain mitochondria] Samartsev VN. **Ukr Biokhim Zh** 1990 Mar–Apr;62(2):104–6 (Eng. Abstr.) **(Rus)**

[The effect of high molecular weight interferon inducers (dsRNA) on virus adsorption] Bakunts KA, et al. **Vopr Med Khim** 1990 Mar–Apr;36(2):35–7 (Eng. Abstr.) **(Rus)**

[Prevention with inderal of post–resuscitation impairment of metabolism in heart and brain tissues] Dolgikh VT. **Vopr Med Khim** 1990 Jan–Feb;36(1):75–8 (Eng. Abstr.) **(Rus)**

[Changes in the levels of somatotropin and cyclic nucleotides and the state of protein metabolism in the brain and myocardium during stress as well as in myocardial necrosis following stress] Iakushev VS, et al. **Vopr Med Khim** 1990 Jan–Feb;36(1):19–23 (Eng. Abstr.) **(Rus)**

[Energy metabolism in the brain during experimental hemorrhagic shock] Loginova MP, et al. **Vopr Med Khim** 1990 May–Jun;36(3):20–4 (Eng. Abstr.) **(Rus)**

[Metabolism of glycolipids in the rat brain during acute and chronic ethanol administration] Selevich MI. **Vopr Med Khim** 1989 Sep–Oct;35(5):75–8 (Eng. Abstr.) **(Rus)**

[Age–related characteristics of the regional distribution of total water in the human brain] Petrenko AG. **Vrach Delo** 1989 Sep;(9):88–90 (Eng. Abstr.) **(Rus)**

[The hypometabolic action of a 1– to 10–kD fraction from the brain tissues of the Yakut horse (letter)] Akhremenko AK, et al. **Zh Evol Biokhim Fiziol** 1989 Nov–Dec; 25(6):786–7 **(Rus)**

[The lipid peroxidation system in the retina and brain of rats during early postnatal ontogeny] Efimova MG. **Zh Evol Biokhim Fiziol** 1990 Jan–Feb;26(1):130–3 (Eng. Abstr.) **(Rus)**

[The brain catecholamines during domestication of the silver fox Vulpes fulvus] Nikulina EM. **Zh Evol Biokhim Fiziol** 1990 Mar–Apr;26(2):156–60 (Eng. Abstr.) **(Rus)**

[Catecholamine metabolism in essential tremor] Barkhatova VP, et al. **Zh Nevropatol Psikhiatr** 1990;90(3):10–4 (Eng. Abstr.) **(Rus)**

[Changes in energy metabolism in the brain in experimental cerebral ischemia of different degree of severity (nuclear magnetic resonance–spectroscopic study)] Gannushkina IV, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):3–6 (Eng. Abstr.) **(Rus)**

[Ca2+–phospholipid–dependent phosphorylation of cytosol and membrane proteins of the brain in light craniocerebral trauma] Kucherenko SN, et al. **Zh Nevropatol Psikhiatr** 1989;89(12):11–4 (Eng. Abstr.) **(Rus)**

[Analysis of trace elements of the brain and liver tissues in Wilson's disease] Mzhel'skaia TI, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):69–73 (Eng. Abstr.) **(Rus)**

[The role of biologically active substances in the control of pain syndrome (review of the literature)] Puzin MN, et al. **Zh Nevropatol Psikhiatr** 1989;89(11):129–35 (59 ref.) **(Rus)**

[The effect of ethanol on gamma-aminobutyric acid in the brain] Lašťánová M, et al. **Bratisl Lek Listy** 1989 Dec; 90(12):875–84 (Eng. Abstr.) **(Slo)**

[The effect of allopurinol on the synthesis of adenine nucleotides and ribonucleic acid from inosine via a salvage pathway in the brain of rats] Pecháň I, et al. **Cesk Neurol Neurochir** 1989 Oct;52(6):378–83 (Eng. Abstr.) **(Slo)**

[Metabolism of purine nucleotides in the central nervous system in patients with phosphoribosylpyrophosphate synthetase hyperactivity and neurosensory deafness] López Jiménez M, et al. **Neurologia** 1990 Jan;5(1):14–7 (Eng. Abstr.) **(Spa)**

[The effect of starvation during an early postnatal period on carbohydrate metabolism in the swine brain] Snityns'kyĭ VV. **Ukr Biokhim Zh** 1990 Jan–Feb;62(1):55–9 (Eng. Abstr.) **(Ukr)**

MICROBIOLOGY

Observation on the presence of Listeria monocytogenes in axons. Otter A, et al. **Acta Microbiol Hung** 1989; 36(2–3):125–31

Third Northern Lights Neuroscience Symposium on Virus and the Brain. 14th annual meeting of the Scandinavian Society of Neuropathology. Reykjavík, Iceland, June 1–2, 1989. Abstracts. **Acta Neurol Scand** 1990 Mar;81(3):255–86

Coxsackie B antigen in the central nervous system of a patient with fatal acute encephalitis: immunohistochemical studies of formalin-fixed paraffin-embedded tissue. Kamei S, et al. **Acta Neuropathol (Berl)** 1990;80(2):216–21 (24 ref.)

A rapid method for in situ hybridization for viral DNA in brain biopsies from patients with AIDS. Houff SA, et al. **AIDS** 1989 Dec;3(12):843–5

HSV (type 1) infection of the trigeminal complex. LaVail JH, et al. **Brain Res** 1990 Apr 30;514(2):181–8

Virus replication and ultrastructural changes after induction of encephalitis in mice by measles virus. Wear DJ, et al. **Exp Mol Pathol** 1968 Dec;9(3):405–17

Use of immunocytochemistry and biotinylated in situ hybridisation for detecting measles virus in central nervous system tissue. McQuaid S, et al. **J Clin Pathol** 1990 Apr; 43(4):329–33

Molecular and biological characterization of a herpes simplex virus type 1 (HSV-1) neuroinvasiveness gene. Izumi KM, et al. **J Exp Med** 1990 Aug 1;172(2):487–96

The nucleocapsid protein of vesicular stomatitis virus isolated from the brains of nude mice is responsible for abated viral RNA synthesis at the normal body temperature of mice. Doll SC, et al. **J Gen Virol** 1990 Jan;71 (Pt 1):29–36

The JH2604 deletion variant of herpes simplex virus type 2 (HG52) fails to produce necrotizing encephalitis following intracranial inoculation of mice. Taha MY, et al. **J Gen Virol** 1990 Jul;71 (Pt 7):1597–601

Infection of brain cells by diverse human immunodeficiency virus isolates: role of CD4 as receptor. Weber J, et al. **J Gen Virol** 1989 Oct;70 (Pt 10):2653–60

Resistance of scrapie infectivity to steam autoclaving after formaldehyde fixation and limited survival after ashing at 360 degrees C: practical and theoretical implications. Brown P, et al. **J Infect Dis** 1990 Mar;161(3):467–72

Entry of neurotropic arboviruses into the central nervous system: an in vitro study using mouse brain endothelium. Dropulić B, et al. **J Infect Dis** 1990 Apr;161(4):685–91

Borrelia burgdorferi in the central nervous system: experimental and clinical evidence for early invasion. Garcia-Monco JC, et al. **J Infect Dis** 1990 Jun; 161(6):1187–93

Organ-specific modification of the dose-response relationship of scrapie infectivity. Robinson MM, et al. **J Infect Dis** 1990 Apr;161(4):783–6

Detection of JC virus DNA by polymerase chain reaction in patients with progressive multifocal leukoencephalopathy. Telenti A, et al. **J Infect Dis** 1990 Oct;162(4):858–61

Recombinant interferon-gamma applied to the brain ventricular system protects rats against pseudorabies. Schijns V, et al. **J Neuroimmunol** 1990 Jun;28(1):1–7

Inhibition of the transport of rabies virus in the central nervous system. Ceccaldi PE, et al. **J Neuropathol Exp Neurol** 1989 Nov;48(6):620–30

Herpes simplex virus (HSV) DNA in microglial nodular brainstem encephalitis. Schmidbauer M, et al. **J Neuropathol Exp Neurol** 1989 Nov;48(6):645–52

Identification of interferon-resistant subpopulations in several strains of measles virus: positive selection by growth of the virus in brain tissue. Carrigan DR, et al. **J Virol** 1990 Apr;64(4):1606–15

Neuroattenuated bunyavirus variant: derivation, characterization, and revertant clones. Endres MJ, et al. **J Virol** 1990 May;64(5):1927–33

Antibody-induced restriction of viral gene expression in measles encephalitis in rats. Liebert UG, et al. **J Virol** 1990 Feb;64(2):706–13

Selective spread of herpes simplex virus in the central nervous system after ocular inoculation. Margolis TP, et al. **J Virol** 1989 Nov;63(11):4756–61

Pathogenesis of encephalitis induced in newborn mice by virulent and avirulent strains of Sindbis virus. Sherman LA, et al. **J Virol** 1990 May;64(5):2041–6

Continuous delivery of colchicine in the rat brain with osmotic pumps for inhibition of rabies virus transport. Ceccaldi PE, et al. **J Virol Methods** 1990 Apr;28(1):79–83

From the National Institutes of Health. Raub W. **JAMA** 1990 Feb 2;263(5):628

Spread of herpes simplex virus type 1 in the central nervous system during experimentally reactivated encephalitis. Stroop WG, et al. **Microb Pathog** 1990 Feb;8(2):119–34

A simple and effective method for inactivating virus infectivity in formalin-fixed tissue samples from patients with Creutzfeldt-Jakob disease. Brown P, et al. **Neurology** 1990 Jun;40(6):887–90

A Creutzfeldt-Jakob disease agent (Echigo-1 strain) recovered from brain tissue showing the 'panencephalopathic type' disease. Mori S, et al. **Neurology** 1989 Oct;39(10):1337–42

Phenolized formalin may not inactivate Creutzfeldt-Jakob disease infectivity [letter] Taylor DM. **Neuropathol Appl Neurobiol** 1989 Nov–Dec;15(6):585–6

Conservation of infectivity in purified fibrillary extracts of scrapie-infected hamster brain after sequential enzymatic digestion or polyacrylamide gel electrophoresis. Brown P, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7240–4

Isolates of human immunodeficiency virus type 1 from the brain may constitute a special group of the AIDS virus. Cheng-Mayer C, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8575–9

Wnt-3, a gene activated by proviral insertion in mouse mammary tumors, is homologous to int-1/Wnt-1 and is normally expressed in mouse embryos and adult brain. Roelink H, et al. **Proc Natl Acad Sci U S A** 1990 Jun; 87(12):4519–23

Specific tropism of HIV-1 for microglial cells in primary human brain cultures. Watkins BA, et al. **Science** 1990 Aug 3;249(4968):549–53

Immune cell tropisms of attenuated MHV3 viruses isolated from brains of chronically infected mice. Lamontagne L, et al. **Viral Immunol** 1990 Spring;3(1):1–8

Replication of H1N1 influenza viruses in cultured mouse embryo brain cells: virus strain and cell differentiation affect synthesis of proteins encoded in RNA segments 7 and 8 and efficiency of mRNA splicing. Bradshaw GL, et al. **Virology** 1990 Jun;176(2):390–402

Specific infection of central nervous system white matter by a variant of gross murine leukemia virus. Simonian NA, et al. **Virology** 1990 Jul;177(1):384–7

Evaluation of five different methods for routine diagnosis of rabies. Zimmer K, et al. **Zentralbl Veterinarmed [B]** 1990 Jul;37(5):392–400

[The development of a purification method for Borna disease virus] von Rheinbaben F. **Berl Munch Tierarztl Wochenschr** 1990 Jul 1;103(7):236–9 (Eng. Abstr.) **(Ger)**

PARASITOLOGY

Ultrastructural immunocytochemistry of the intact tissue cyst of Toxoplasma in the brains of mice with congenital toxoplasmosis. Sims TA, et al. **Ann Trop Med Parasitol** 1990 Apr;84(2):141–7

Immunoelectron microscopy for Toxoplasma antigen in association with intact tissue cysts in mouse brain. Sims TA, et al. **Ann Trop Med Parasitol** 1989 Dec;83(6):639–41

Praziquantel treatment of porcine brain and muscle Taenia solium cysticercosis. 1. Radiological, physiological and histopathological studies. Flisser A, et al. **Parasitol Res** 1990;76(3):263–9

Identification of the dominant cyst antigens of Toxoplasma gondii. Woodison G, et al. **Parasitology** 1990 Jun;100 Pt 3:389–92

PATHOLOGY

Prediction of the interaction effects Ar+ laser-brain tumours by study of the photoacoustic spectroscopy of cerebral oncotypes. De Tommasi A, et al. **Acta Neurochir (Wien)** 1990;104(1–2):27–9

Contribution of stereotactic brain biopsies to the diagnosis in several cases of dementia. Waltregny A, et al. **Acta Neurol Belg** 1989 May–Oct;89(3–4):161–7

Magnetic resonance imaging of the brain in patients with acute monosymptomatic optic neuritis. Frederiksen JL, et al. **Acta Neurol Scand** 1989 Dec;80(6):512–7

Macrophage histology in paraffin-embedded multiple sclerosis plaques is demonstrated by the monoclonal pan-macrophage marker HAM-56: correlation with chronicity of the lesion. Adams CW, et al. **Acta Neuropathol (Berl)** 1990;80(2):208–11

Occurrence of diffuse amyloid deposits in the presubicular parvopyramidal layer in Alzheimer's disease. Akiyama H, et al. **Acta Neuropathol (Berl)** 1990;79(5):537–44

A reversible component of cerebral injury as identified by the histochemical stain 2,3,5-triphenyltetrazolium chloride (TTC). Cole DJ, et al. **Acta Neuropathol (Berl)** 1990; 80(2):152–5

Correlation between microscopical changes and Tau 64 and 69 biochemical detection in senile dementia of the Alzheimer type. Tau 64 and 69 are reliable markers of the neurofibrillary degeneration. Flament S, et al. **Acta Neuropathol (Berl)** 1990;80(2):212–5

Massive neuronal destruction in human immunodeficiency virus (HIV) encephalitis. A clinico-pathological study of a pediatric case. Giangaspero F, et al. **Acta Neuropathol (Berl)** 1989;78(6):662–5

Morphological characteristics of senile plaques in familial Alzheimer's disease. Iseki E, et al. **Acta Neuropathol (Berl)** 1990;80(3):227–32

Appearance of tubulovesicular structures in experimental Creutzfeldt-Jakob disease and scrapie precedes the onset of clinical disease. Liberski PP, et al. **Acta Neuropathol (Berl)** 1990;79(4):349–54

Non-Hodgkin's lymphoma involving the brain. Diagnostic usefulness of stereotactic needle biopsy in combination with paraffin-section immunohistochemistry. Nakamine H, et al. **Acta Neuropathol (Berl)** 1989;78(5):462–71

Axonal swellings in the corticospinal tracts in amyotrophic lateral sclerosis. Okamoto K, et al. **Acta Neuropathol (Berl)** 1990;80(2):222–6

Comparison of three silver stains for demonstrating neurofibrillary tangles and neuritic plaques in brain tissue stored for long periods. Wilcock GK, et al. **Acta Neuropathol (Berl)** 1990;79(5):566–8

Magnetic resonance imaging in Alzheimer's disease, multi-infarct dementia, alcoholic dementia and Korsakoff's psychosis. Besson JA, et al. **Acta Psychiatr Scand** 1989 Nov; 80(5):451–8

Computed tomography scans and negative symptoms in schizophrenia: chronic schizophrenics with negative symptoms and nonenlarged lateral ventricles. Serban G, et al. **Acta Psychiatr Scand** 1990 May;81(5):441–7

Subcortical pathology of Alzheimer's disease. Brun A, et al. **Adv Neurol** 1990;51:73–7

Principles of nuclear magnetic resonance as applied to brain imaging. Clasen RA. **Adv Neurol** 1990;52:511–24 (15 ref.)

Binswanger's disease or artifact: a clinical, neuroimaging, and pathological study of periventricular white matter changes in Alzheimer's disease. Morris JC, et al. **Adv Neurol** 1990; 51:47–52

Cerebral atrophy after severe head injury. Tomita H, et al. **Adv Neurol** 1990;52:553

MR signal abnormalities in memory disorder and dementia. Bowen BC, et al. **AJNR** 1990 Mar–Apr;11(2):283–90

Canavan disease: CT and MR imaging of the brain. Brismar J, et al. **AJNR** 1990 Jul–Aug;11(4):805–10

Malignant hyperphenylalaninemia: CT and MR of the brain. Brismar J, et al. **AJNR** 1990 Jan–Feb;11(1):135–8

MR evaluation of brain iron in children with cerebral infarction. Cross PA, et al. **AJNR** 1990 Mar–Apr; 11(2):341–8

Lyme disease of the CNS: MR imaging findings in 14 cases. Fernandez RE, et al. **AJNR** 1990 May;11(3):479–81

MR of intracranial epidermoid tumors: correlation of in vivo imaging with in vitro 13C spectroscopy. Horowitz BL, et al. **AJNR** 1990 Mar–Apr;11(2):299–302

Leukoaraiosis: correlation of MR and CT findings with blood flow, atrophy, and cognition. Kobari M, et al. **AJNR** 1990 Mar–Apr;11(2):273–81

Leukoencephalopathy in cerebral amyloid angiopathy: MR imaging in four cases. Loes DJ, et al. **AJNR** 1990 May; 11(3):485–8

MR findings in patients with subacute necrotizing encephalomyelopathy (Leigh syndrome): correlation with biochemical defect. Medina L, et al. **AJNR** 1990 Mar–Apr; 11(2):379–84

MR imaging of the brain in patients with mucopolysaccharidosis. Murata R, et al. **AJNR** 1989 Nov–Dec;10(6):1165–70

Brain atrophy in 18 patients with Down syndrome: a CT study. Pearlson GD, et al. **AJNR** 1990 Jul–Aug;11(4):811–6

Biopsy-confirmed CNS Lyme disease: MR appearance at 1.5 T. Rafto SE, et al. **AJNR** 1990 May;11(3):482–4

Recurrent medulloblastoma: frequency of tumor enhancement on Gd-DTPA MR imaging. Rollins N, et al. **AJNR** 1990 May;11(3):583–7

MR imaging of the brain in five members of a family with Pelizaeus-Merzbacher disease. Silverstein AM, et al. **AJNR** 1990 May;11(3):495–9

MR imaging of leukoencephalopathy associated with Navajo neuropathy. Williams KD, et al. **AJNR** 1990 Mar–Apr; 11(2):400–2

MR signal abnormalities in memory disorder and dementia. Bowen BC, et al. **AJR Am J Roentgenol** 1990 Jun; 154(6):1285–92

Gd-DTPA-enhanced MR imaging of the brain in patients with meningitis: comparison with CT. Chang KH, et al. **AJR Am J Roentgenol** 1990 Apr;154(4):809–16

Gd-DTPA-enhanced cranial MR imaging in children: initial clinical experience and recommendations for its use. Elster AD, et al. **AJR Am J Roentgenol** 1989 Dec;153(6):1265–8

Intracranial chemical-shift artifacts on MR images of the brain: observations and relation to sampling bandwidth. Smith AS, et al. **AJR Am J Roentgenol** 1990 Jun; 154(6):1275–83

Neuropathology of alcoholism. Harper CG, et al. **Alcohol Alcohol** 1990;25(2–3):207–16 (90 ref.)

Magnetic resonance imaging of the brain in alcoholics: cerebral atrophy, lifetime alcohol consumption, and cognitive deficits. Chick JD, et al. **Alcoholism (N Y)** 1989 Aug;13(4):512–8

An analysis of postmortem brain samples from 32 alcoholic and nonalcoholic individuals for protein III, a neuronal phosphoprotein [published erratum appears in Alcoholism (N Y) 1990 Feb;14(1):126] Grebb JA, et al. **Alcoholism (N Y)** 1989 Oct;13(5):673–9

MRI study of brain changes with short-term abstinence from alcohol. Zipursky RB, et al. **Alcoholism (N Y)** 1989 Oct; 13(5):664–6

Clinical pathologic conference. Tricuspid atresia with surgical intervention. Clasen RA, et al. **Am Heart J** 1966 Apr;71(4):542–8

Magnetic resonance imaging of the brain in infants and children before and after cardiac surgery. A prospective study. McConnell JR, et al. **Am J Dis Child** 1990 Mar; 144(3):374–8

Familial renal hypophosphatemia, minor facial anomalies, intracerebral calcifications, and non-rachitic bone changes: apparently new syndrome? Chitayat D, et al. **Am J Med Genet** 1990 Mar;35(3):406–14

Magnetic resonance in Bell's palsy. Jonsson L, et al. **Am J Otol** 1990 May;11(3):153–6

Imaging case of the month. Cerebral ventricular dilation and diaphragmatic elevation in congenital myotonic dystrophy. Caglar MK, et al. **Am J Perinatol** 1990 Apr;7(2):198–9

Symptomatic hyponatremia in rats: effect of treatment on mortality and brain lesions [letter; comment] Sterns RH, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1475–7 Comment on: Am J Physiol 1989 Jul;257(1 Pt 2):F18–22.

Subcortical hyperintensity on magnetic resonance imaging: a comparison of normal and depressed elderly subjects. Coffey CE, et al. **Am J Psychiatry** 1990 Feb;147(2):187–9

Neuropathological findings in patients with clinical diagnoses of probable Alzheimer's disease. Risse SC, et al. **Am J Psychiatry** 1990 Feb;147(2):168–72

Continuous alfentanil infusion for stereotactic brain biopsy [letter] Janczur EA, et al. **Anesth Analg** 1990 Sep; 71(3):312–3

Calcium, excitotoxins, and neuronal death in the brain. Siesjö BK, et al. **Ann N Y Acad Sci** 1989;568:234–51 (104 ref.)

Significance of the open opercular sign [letter; comment] Amit R, et al. **Ann Neurol** 1990 Feb;27(2):214 Comment on: Ann Neurol 1989 Feb;25(2):196–9.

Neuropathological distinction between Parkinson's dementia and Parkinson's plus Alzheimer's disease. de la Monte SM, et al. **Ann Neurol** 1989 Sep;26(3):309–20

A case of adult-onset dementia with argyrophilic grains. Itagaki S, et al. **Ann Neurol** 1989 Nov;26(5):685–9

Pathogenesis of ring-haemorrhage in cerebral malaria. Oo MM, et al. **Ann Trop Med Parasitol** 1989 Oct;83(5):555–7

Cerebral ultrasound and neurological impairment: telling the future. Levene MI. **Arch Dis Child** 1990 May;65(5):469–71 (15 ref.)

Magnetic resonance imaging of the brain in schizophrenia. The pathophysiologic significance of structural abnormalities. Andreasen NC, et al. **Arch Gen Psychiatry** 1990 Jan;47(1):35–44

Magnetic resonance imaging and the severity of dementia in older adults. Bondareff W, et al. **Arch Gen Psychiatry** 1990 Jan;47(1):47–51

Schizophrenia as an anomaly of development of cerebral asymmetry. A postmortem study and a proposal concerning the genetic basis of the disease. Crow TJ, et al. **Arch Gen Psychiatry** 1989 Dec;46(12):1145–50

Subcortical abnormalities detected in bipolar affective disorder using magnetic resonance imaging. Clinical and neuropsychological significance. Dupont RM, et al. **Arch Gen Psychiatry** 1990 Jan;47(1):55–9

Preservation of normal cognitive functioning in elderly subjects with extensive white-matter lesions of long duration. Fein G, et al. **Arch Gen Psychiatry** 1990 Mar; 47(3):220–3

The model of allergic encephalomyelitis of nonacute, phase course. Blaszczyk B, et al. **Arch Immunol Ther Exp (Warsz)** 1989;37(3–4):449–58

Magnetic resonance imaging and neurobehavioral correlates in schizencephaly. Aniskiewicz AS, et al. **Arch Neurol** 1990 Aug;47(8):911–6

A new sign of neurofibromatosis on magnetic resonance imaging of children. Goldstein SM, et al. **Arch Neurol** 1989 Nov;46(11):1222–4

Magnetic resonance imaging in Parkinson's disease. Huber SJ, et al. **Arch Neurol** 1990 Jul;47(7):735–7

Brain morphology in developmental dyslexia and attention deficit disorder/hyperactivity. Hynd GW, et al. **Arch Neurol** 1990 Aug;47(8):919–26

Neuropathologic correlates of leuko-araiosis [published erratum appears in Arch Neurol 1990 Mar;47(3):281] Janota I, et al. **Arch Neurol** 1989 Oct;46(10):1124–8

Anomalous brain morphology on magnetic resonance images in Williams syndrome and Down syndrome. Jernigan TL, et al. **Arch Neurol** 1990 May;47(5):529–33

Cognition and white matter changes on magnetic resonance imaging in dementia. Kertesz A, et al. **Arch Neurol** 1990 Apr;47(4):387–91

Magnetic resonance imaging findings in HIV cognitive impairment. Kieburtz KD, et al. **Arch Neurol** 1990 Jun; 47(6):643–5

Focal cerebral infarctions associated with perivascular tumor infiltrates in carcinomatous leptomeningeal metastases. Klein P, et al. **Arch Neurol** 1989 Oct;46(10):1149–52

Leuko-araiosis, cerebral atrophy, and cerebral perfusion in normal aging. Kobari M, et al. **Arch Neurol** 1990 Feb; 47(2):161–5

Periventricular and white matter magnetic resonance imaging hyperintensities do not differ between Alzheimer's disease and normal aging. Leys D, et al. **Arch Neurol** 1990 May; 47(5):524–7

Neoplastic angioendotheliomatosis. Raroque HG Jr, et al. **Arch Neurol** 1990 Aug;47(8):929–30

Pink spots of Hedley-Whyte in formaldehyde-fixed brains. The subject revisited. Mitchell MA, et al. **Arch Pathol Lab Med** 1990 May;114(5):485–7

Neurobehavioral and magnetic resonance imaging findings in two cases of decompression sickness. Levin HS, et al. **Aviat Space Environ Med** 1989 Dec;60(12):1204–10

Basic fibroblast growth factor in Alzheimer's disease. Stopa EG, et al. **Biochem Biophys Res Commun** 1990 Sep 14; 171(2):690–6

Cerebral white matter disease in late-onset paranoid psychosis. Breitner JC, et al. **Biol Psychiatry** 1990 Aug 1;28(3):266–74

Leukoaraiosis in asymptomatic adult offspring of individuals with Alzheimer's disease. Coffman JA, et al. **Biol Psychiatry** 1990 Jun 1;27(11):1244–8

Brain T1 measured by magnetic resonance imaging in bulimia. Hoffman GW, et al. **Biol Psychiatry** 1990 Jan 1; 27(1):116–9

Ventricle-to-brain ratio in schizophrenia: a controlled follow-up study. Kemali D, et al. **Biol Psychiatry** 1989 Nov;26(7):756–9

A preliminary magnetic resonance imaging study of ECT-treated depressed patients. Pande AC, et al. **Biol Psychiatry** 1990 Jan 1;27(1):102–4

Molecular forms of acetylcholinesterase in subcortical areas of normal and Alzheimer disease brain. Siek GC, et al. **Biol Psychiatry** 1990 Mar 15;27(6):573–80

Alzheimer's disease: neuropathological and etiological data. Hauw JJ, et al. **Biomed Pharmacother** 1989;43(7):469–82 (121 ref.)

Neuropathology of HIV infection in haemophiliacs: comparative necropsy study. Esiri MM, et al. **BMJ** 1989 Nov 25;299(6711):1312–5

Patterns of disease activity in multiple sclerosis: clinical and magnetic resonance imaging study [see comments] Thompson AJ, et al. **BMJ** 1990 Mar 10;300(6725):631–4 Comment in: BMJ 1990 May 12;300(6734):1272.

Patterns of disease activity in multiple sclerosis [letter; comment] Truyen L, et al. **BMJ** 1990 May 12; 300(6734):1272 Comment on: BMJ 1990 Mar 10;300(6725):631–4.

Cerebral mass lesions in patients with AIDS [letter] Whittle IR. **BMJ** 1990 Aug 18–25;301(6748):386

Effects of ethanol on the NMR characteristics of rat brain. Acute administration, dependency, and long-term effects. Besson JA, et al. **Br J Psychiatry** 1989 Dec;155:818–21

Altered magnetic resonance white-matter T1 values in patients with affective disorder. Dolan RJ, et al. **Br J Psychiatry** 1990 Jul;157:107–10

Brain white-matter lesions and psychosis. Miller BL, et al. **Br J Psychiatry** 1989 Jul;155:73–8

Time course of cerebra; magnetic resonance changes after electroconvulsive therapy. Scott AI, et al. **Br J Psychiatry** 1990 Apr;156:551–3

A current view of the type II syndrome: age of onset, intellectual impairment, and the meaning of structural changes in the brain. Crow TJ. **Br J Psychiatry Suppl** 1989 Nov;(7):15–20 (45 ref.)

Evidence for the 5-HT hypothesis of suicide. A review of post-mortem studies. Mann JJ, et al. **Br J Psychiatry Suppl** 1989 Dec;(8):7–14 (60 ref.)

Neuronal loss and neuronal atrophy. Computer simulation in connection with Alzheimer's disease. Duyckaerts C, et al. **Brain Res** 1989 Dec 11;504(1):94–100

Biochemical and immunocytochemical changes in glial fibrillary acidic protein after stab wounds. Hozumi I, et al. **Brain Res** 1990 Jul 30;524(1):64–71

The spontaneously epileptic rat (SER), a zitter*tremor double mutant rat: histopathological findings in the central nervous system. Inui T, et al. **Brain Res** 1990 May 28; 517(1–2):123–33

Microangiopathy and the colocalization of heparan sulfate proteoglycan with amyloid in senile plaques of Alzheimer's disease. Perlmutter LS, et al. **Brain Res** 1990 Jan 29; 508(1):13–9

Histological and ultrastructural evidence that D-amphetamine causes degeneration in neostriatum and frontal cortex of rats. Ryan LJ, et al. **Brain Res** 1990 Jun 4;518(1–2):67–77

Pretreatment with the NMDA antagonist dextrorphan reduces cerebral injury following transient focal ischemia in rabbits. Steinberg GK, et al. **Brain Res** 1989 Sep 18; 497(2):382–6

Selective axonal and terminal degeneration in the chicken brainstem and cerebellum following exposure to bis(1-methylethyl)phosphorofluoridate (DFP). Tanaka D Jr, et al. **Brain Res** 1990 Jun 11;519(1–2):200–8

The acute histopathology of MPTP in the mouse CNS. Adams JD Jr, et al. **Brain Res Bull** 1989 Jul–Aug; 23(1–2):1–17

Luteinizing hormone-releasing hormone (LHRH)-expressing cells do not migrate normally in an inherited hypogonadal (Kallmann) syndrome. Schwanzel-Fukuda M, et al. **Brain Res Mol Brain Res** 1989 Dec;6(4):311–26

Quantitative neuropathology. **Can Med Assoc J** 1968 Sep 14;99(10):504–5

Binucleated neurons in the human brain. Zang X. **Chin Med J [Engl]** 1989 May;102(5):378–81

Histological description of tomographic images of Taenia solium cysticerci in pig brains [see comments] de Aluja AS, et al. **Clin Imaging** 1989 Dec;13(4):292–8 Comment in: Clin Imaging 1989 Dec;13(4):333.

Human immunodeficiency virus within the brains of children with AIDS. Wiley CA, et al. **Clin Neuropathol** 1990 Jan–Feb;9(1):1–6

Rapid correction of hyponatraemia with urea may protect against brain damage in rats. Van Reeth O, et al. **Clin Sci** 1989 Sep;77(3):351–5

CT findings in fungal opportunistic pneumonias: body and brain involvement. Potente G. **Comput Med Imaging Graph** 1989 Sep–Oct;13(5):423–8

Automatic detection of white matter lesions in magnetic resonance brain images. Kapouleas I. **Comput Methods Programs Biomed** 1990 May;32(1):17–35

Absence of rabies encephalitis in a raccoon with concurrent rabies and canine distemper infections. Hamir AN, et al. **Cornell Vet** 1990 Apr;80(2):197–201

The effects of 5% carbon dioxide on the quantitative analysis of long-term pathology of the brain after surface hypothermia. Ohmi M, et al. **Cryobiology** 1990 Feb; 27(1):31–41

Imaging of the brain in children. Ball WS Jr. **Curr Opin Radiol** 1989 Dec;1(4):529–38 (24 ref.)

Technologic advances in computed tomography and magnetic resonance imaging in the central nervous system. Simon JH. **Curr Opin Radiol** 1990 Aug;2(4):518–25 (25 ref.)

Relationship of cranial ultrasonography, visual and auditory evoked responses with neurodevelopmental outcome. Beverley DW, et al. **Dev Med Child Neurol** 1990 Mar; 32(3):210–22

Myelination patterns on magnetic resonance of children with developmental delay. Harbord MG, et al. **Dev Med Child Neurol** 1990 Apr;32(4):295–303

Late childhood changes in brain morphology observable with MRI. Jernigan TL, et al. **Dev Med Child Neurol** 1990 May; 32(5):379–85

Magnetic resonance imaging of inflammatory and demyelinating white-matter diseases of childhood. Miller DH, et al. **Dev Med Child Neurol** 1990 Feb;32(2):97–107

Neonatal excitotoxic brain injury. Physiologic, metabolic, and pathologic findings. Young RS, et al. **Dev Neurosci** 1990;12(3):210–20

EEG and pathologic findings in patients undergoing brain biopsy for suspected encephalitis. Brick JF, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jul;76(1):86–9

Central nervous system magnetic resonance imaging findings in amyotrophic lateral sclerosis. Iwasaki Y, et al. **Eur Arch Psychiatry Neurol Sci** 1989;239(2):125–6

Benzodiazepine receptors increase in post-mortem brain of chronic schizophrenics. Kiuchi Y, et al. **Eur Arch Psychiatry Neurol Sci** 1989;239(2):71–8

Brain quinolinic acid in Alzheimer's dementia. Sofic E, et al. **Eur Arch Psychiatry Neurol Sci** 1989;239(3):177–9

Brain histology, blood-brain barrier and brain water after normothermic and hypothermic cardiopulmonary bypass in pigs. Laursen H, et al. **Eur J Cardiothorac Surg** 1989; 3(6):539–43

Neuropathologic study of lacunae and cribriform cavities of the brain. Mancardi GL. **Eur Neurol** 1989;29 Suppl 2:16–9

A comparative light and electron microscopic study of rabies and Hart Park virus encephalitis. Jenson AB, et al. **Exp Mol Pathol** 1967 Aug;7(1):1–10

Correlation between carotid blood flow and brain atrophy in patients with multi-infarct dementia. Yamashita K, et al. **Gerontology** 1989;35(4):192–7

Patterns of gliosis in Alzheimer's disease and aging cerebrum. Beach TG, et al. **GLIA** 1989;2(6):420–36

Investigation of dysmyelinogenesis in caprine beta-mannosidosis: in vitro characterization of oligodendrocytes. Boyer PJ, et al. **GLIA** 1990;3(3):222–7

Cluster headache: MRI studies of the cavernous sinus and the base of the brain. Sjaastad O, et al. **Headache** 1990 May;30(6):350–1

White matter changes in dementia of Alzheimer's type: the difference in vulnerability between cell compartments. Englund E, et al. **Histopathology** 1990 May;16(5):433–9

Brain histomorphology in protein deprived rhesus monkeys with fatal malarial infection. Tatke M, et al. **Indian J Med Res** 1989 Nov;89:404–10

The effects of intrauterine growth retardation on the development of neuroglia in fetal guinea pigs. An immunohistochemical and an ultrastructural study. Nitsos I, et al. **Int J Dev Neurosci** 1990;8(3):233–44

Lepromatous leprosy and dementia [letter] Mohamed KN. **Int J Lepr Other Mycobact Dis** 1990 Jun;58(2):381–2

A case of "crossed aphasia" in which the integrity of the left hemisphere is assessed by MRI. Faglia L, et al. **Ital J Neurol Sci** 1990 Feb;11(1):51–5

Magnetic resonance imaging and neuropsychological findings in human immunodeficiency virus infection. Levin HS, et al. **J Acquir Immune Defic Syndr** 1990;3(8):757–62

Incidental white matter hyperintensities on magnetic resonance imaging in HIV-1 infection. Multicenter AIDS Cohort Study. McArthur JC, et al. **J Acquir Immune Defic Syndr** 1990;3(3):252–9

Juvenile Pearson syndrome. Blaw ME, et al. **J Child Neurol** 1990 Jul;5(3):187–90

Transcranial Doppler sonography in children. Bode H, et al. **J Child Neurol** 1989;4 Suppl:S68–76 (45 ref.)

Magnetic resonance imaging of the brain in the linear sebaceous nevus syndrome [letter] Carter BS, et al. **J Child Neurol** 1990 Jan;5(1):68–9

Macrocephaly is not always due to hydrocephalus. Strassburg HM. **J Child Neurol** 1989;4 Suppl:S32–40 (11 ref.)
Brain–imaging approaches in psychiatry: early developmental considerations. Morihisa JM. **J Clin Psychiatry** 1990 Jan; 51 Suppl:44–6 (25 ref.)
Marek's disease virus–induced transient paralysis in chickens: demonstration of vasogenic brain oedema by an immunohistochemical method. Swayne DE, et al. **J Comp Pathol** 1989 Nov;101(4):451–62
MR imaging of CNS relapse of Whipple disease. Davion T, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):815–7
Myelin disorders of childhood: correlation of MR findings and severity of neurological impairment. Dietrich RB, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):693–8
Follow–up MR studies in Hallervorden–Spatz disease. Gallucci M, et al. **J Comput Assist Tomogr** 1990 Jan–Feb; 14(1):118–20
MR imaging of brain maturation in normal and developmentally handicapped children. Martin E, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):685–92
Mottled MR appearance of a hyperacute intracerebral hemorrhage at 0.5 T. Mascalchi M, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):818–20
Proton MR spectroscopy in herpes simplex encephalitis: assessment of neuronal loss. Menon DK, et al. **J Comput Assist Tomogr** 1990 May–Jun;14(3):449–52
High intensity areas on noncontrast T1–weighted MR images in cerebral infarction [published erratum appears in J Comput Assist Tomogr 1990 Sep–Oct;14(5):863] Nabatame H, et al. **J Comput Assist Tomogr** 1990 Jul–Aug;14(4):521–6
Clinical experience with routine Gd–DTPA administration for MR imaging of the brain. Schwaighofer BW, et al. **J Comput Assist Tomogr** 1990 Jan–Feb;14(1):11–7
Cranial MR in phenylketonuria. Shaw DW, et al. **J Comput Assist Tomogr** 1990 May–Jun;14(3):458–60
Brain CT and MR findings in hyperphenylalaninemia due to dihydropteridine reductase deficiency (variant of phenylketonuria). Sugita R, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):699–703
Neurosarcoidosis: gadolinium–enhanced MR imaging. Williams DW 3d, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):704–7
Neuropsychological deficits and morphological MRI brain scan abnormalities in apparently healthy non–encephalopathic patients with cirrhosis. A controlled study. Moore JW, et al. **J Hepatol** 1989 Nov;9(3):319–25
Nuclear magnetic resonance brain study in a case of Wilson disease. Longhi R, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:386–8
Immunohistochemical demonstration of GM2–ganglioside in the central nervous system of a 19–week–old fetus of Tay–Sachs disease. Taniike M, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:372–4
Neurological deterioration in adult phenylketonuria. Villasana D, et al. **J Inherited Metab Dis** 1989;12(4):451–7
Light and electron microscopic examination of amyloid–rich primitive plaques: comparison with diffuse plaques. Ikeda K, et al. **J Neurol** 1990 Apr;237(2):88–93
Neuropsychological assessment in patients with relapsing–remitting multiple sclerosis and mild functional impairment: correlation with magnetic resonance imaging. Anzola GP, et al. **J Neurol Neurosurg Psychiatry** 1990 Feb; 53(2):142–5
Idiopathic granulomatous meningitis. Bakheit AM, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1286–9
Magnetic resonance imaging of the brain and spinal cord in cerebrotendinous xanthomatosis. Bencze KS, et al. **J Neurol Neurosurg Psychiatry** 1990 Feb;53(2):166–7
Changes within the "normal" cerebral white matter of multiple sclerosis patients during acute attacks and during high–dose cortisone therapy assessed by means of quantitative MRI. Brainin M, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1355–9
An empirical model for analysing and interpreting ventricular measures. Clark C, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):411–5
Magnetic resonance imaging in dementia of Parkinson's disease. Huber SJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1221–7
Neuroleptic malignant syndrome: a case report with post–mortem brain and muscle pathology [see comments] Jones EM, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug; 52(8):1006–9 Comment in: J Neurol Neurosurg Psychiatry 1990 Mar;53(3):271.
Diffuse Lewy body disease: correlative neuropathology using anti–ubiquitin immunocytochemistry. Lennox G, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1236–47
Magnetic resonance imaging studies in multiple sclerosis twins. Uitdehaag BM, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1417–9
Total manifestations of amyotrophic lateral sclerosis. ALS in the totally locked–in state. Hayashi H, et al. **J Neurol Sci** 1989 Oct;93(1):19–35
Progressive cytochrome c oxidase deficiency in a case of Leigh's encephalomyelopathy. Koga Y, et al. **J Neurol Sci** 1990 Jan;95(1):63–76
Dominantly inherited olivopontocerebellar atrophy from eastern Cuba. Clinical, neuropathological, and biochemical findings. Orozco G, et al. **J Neurol Sci** 1989 Oct;93(1):37–50
Senile dementia of Lewy body type. A clinically and neuropathologically distinct form of Lewy body dementia in the elderly. Perry RH, et al. **J Neurol Sci** 1990 Feb; 95(2):119–39
Kearns–Sayre syndrome: different amounts of deleted mitochondrial DNA are present in several autoptic tissues. Ponzetto C, et al. **J Neurol Sci** 1990 May;96(2–3):207–10
Improved correlation of magnetic resonance imaging (MRI) with clinical status in multiple sclerosis (MS) by use of an extensive standardized imaging–protocol. Truyen L, et al. **J Neurol Sci** 1990 May;96(2–3):173–82
Subacute dementia with necrotising encephalitis selectively involving the fornix and splenium. Retrograde development of Alzheimer's neurofibrillar tangles in the subiculum. Yamamoto T, et al. **J Neurol Sci** 1990 May; 96(2–3):159–72
Multiple sulfatase deficiency: clinical, neuropathological, ultrastructural and biochemical studies. Guerra WF, et al. **J Neuropathol Exp Neurol** 1990 Jul;49(4):406–23 (67 ref.)
Vacuolization, incubation period and survival time analyses in three mouse genotypes injected stereotactically in three brain regions with the 22L scrapie strain. Kim YS, et al. **J Neuropathol Exp Neurol** 1990 Mar;49(2):106–13
Neuropathological diagnosis of Alzheimer disease [see comments] Wisniewski HM, et al. **J Neuropathol Exp Neurol** 1989 Nov;48(6):606–9 Comment in: J Neuropathol Exp Neurol 1990 Mar;49(2):188–90.
Imaging of epileptic lesions in adults. The three–dimensional approach. Fredy D. **J Neuroradiol** 1989 Dec;16(4):265–72 **(Eng, Fre)**
Protective effects of the glutamate antagonist MK–801 on pyrithiamine–induced lesions and amino acid changes in rat brain. Langlais PJ, et al. **J Neurosci** 1990 May; 10(5):1664–74
A method for the relative quantification of lipofuscin based on a computer image analysis system. Casanova MF, et al. **J Neurosci Methods** 1989 Oct;30(1):11–5
Brain damage from 125I brachytherapy evaluated by MR imaging, a blood–brain barrier tracer, and light and electron microscopy in a rat model. Bernstein M, et al. **J Neurosurg** 1990 Oct;73(4):585–93
Whipple's disease presenting with isolated neurological symptoms. Case report. Brown AP, et al. **J Neurosurg** 1990 Oct;73(4):623–7
Synaptic reorganization within the human central nervous system following injury [see comments] Grady MS, et al. **J Neurosurg** 1989 Oct;71(4):534–7 Comment in: J Neurosurg 1990 May;72(5):835.
Three–dimensional magnetic resonance images of the brain: application to neurosurgical planning. Hu XP, et al. **J Neurosurg** 1990 Mar;72(3):433–40
Murine intracerebral interleukin–2 injection: pathological and immunological effects. Yamasaki T, et al. **J Neurosurg** 1989 Nov;71(5 Pt 1):732–40
Changes in brain maturation detected by magnetic resonance imaging in congenital hypothyroidism. Alves C, et al. **J Pediatr** 1989 Oct;115(4):600–3
White matter necrosis in very low birth weight infants: neuropathologic and ultrasonographic findings in infants surviving six days or longer. Paneth N, et al. **J Pediatr** 1990 Jun;116(6):975–84 (32 ref.)
Intracranial lesions in dogs with hemangiosarcoma. Waters DJ, et al. **J Vet Intern Med** 1989 Oct–Dec;3(4):222–30
Genetic mapping of the ability of Theiler's virus to persist and demyelinate. McAllister A, et al. **J Virol** 1990 Sep; 64(9):4252–7
Noncystic "increased" periventricular echogenicity and other mild cranial sonographic abnormalities: predictors of outcome in low birth weight infants. Goldstein RB, et al. **JCU** 1989 Oct;17(8):553–62
Magnetic resonance imaging in complex partial seizures. Furune S, et al. **Jpn J Psychiatry Neurol** 1989 Sep; 43(3):361–7
Histopathological study on a case of idiocy—morphological mechanism of idiocy appearance. Kuramoto R, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):221–6
Further postmortem examination of a case of familial ataxia with cerebrospinal fluid abnormality: an electron microscopic study of the intracytoplasmic eosinophilic inclusion bodies in the central nervous system. Nakamura I, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):227–39
Epileptogenic focus and MRI—the study of MRI and EEG of no relation to epileptogenic focus. Uetsuhara K, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):389–92
Diagnosis of Creutzfeldt–Jakob disease by electron microscopy [letter] Narang HK, et al. **Lancet** 1990 Mar 17;335(8690):663–4
Dementia in a punch–drunk wife [letter] Roberts GW, et al. **Lancet** 1990 Apr 14;335(8694):918–9
A sheep model for MPTP induced Parkinson–like symptoms. Hammock BD, et al. **Life Sci** 1989;45(17):1601–8
Magnetic resonance imaging in the central nervous system: comparison with computed tomography. Bradley WG Jr. **Magn Reson Annu** 1986;:81–122 (88 ref.)
Tissue characterization of brain tumors during and after pion radiation therapy. Boesiger P, et al. **Magn Reson Imaging** 1990;8(4):491–7
MRI evaluation of AIDS–related encephalopathy: toxoplasmosis vs. lymphoma. Kupfer MC, et al. **Magn Reson Imaging** 1990;8(1):51–7
Spin–lock techniques and CPMG imaging sequences: a critical appraisal of T1ρ contrast at 0.15 T. Mulkern RV, et al. **Magn Reson Imaging** 1989 Sep–Oct;7(5):437–44
Proton magnetic resonance spectroscopy of human brain in vivo in the evaluation of multiple sclerosis: assessment of the load of disease. Arnold DL, et al. **Magn Reson Med** 1990 Apr;14(1):154–9
Evidence of limited repair of brain damage in a patient with alcohol–tobacco amblyopia [letter] Sivyer G. **Med J Aust** 1989 Nov 6;151(9):541
Fasting prior to transient cerebral ischemia reduces delayed neuronal necrosis. Marie C, et al. **Metab Brain Dis** 1990 Jun;5(2):65–75
Relationship between brain imaging findings in schizophrenia and psychopathology. A review of the literature relating to positive and negative symptoms. Marks RC, et al. **Mod Probl Pharmacopsychiatry** 1990;24:89–123 (90 ref.)
Abnormalities in the brain and schizophrenia [letter] **N Engl J Med** 1990 Aug 23;323(8):545–8
Schizophrenia and the brain [editorial; comment] Mesulam MM. **N Engl J Med** 1990 Mar 22;322(12):842–5 Comment on: N Engl J Med 1990 Mar 22;322(12):789–94.
Anatomical abnormalities in the brains of monozygotic twins discordant for schizophrenia [published erratum appears in N Engl J Med 1990 May 31;322(22):1616] [see comments] Suddath RL, et al. **N Engl J Med** 1990 Mar 22; 322(12):789–94 Comment in: N Engl J Med 1990 Mar 22;322(12):842–5.
Neurofibrillary degeneration and neuronal loss in Alzheimer's disease. Bondareff W, et al. **Neurobiol Aging** 1989 Nov–Dec;10(6):709–15
Alzheimer's disease is a degenerative disorder. Katzman R. **Neurobiol Aging** 1989 Sep–Oct;10(5):581–2; discussion 588–90
Reliability of simple cytological methods in brain tumour biopsy diagnosis. Mennel HD, et al. **Neurochirurgia (Stuttg)** 1989 Sep;32(5):129–34
Magnetic resonance imaging evaluation of learning difficulties and incoordination in neurofibromatosis. Dunn DW, et al. **Neurofibromatosis** 1989;2(1):1–5
Hemimegalencephaly, hemifacial hypertrophy and intracranial lipoma: a variant of neurofibromatosis. Ross GW, et al. **Neurofibromatosis** 1989;2(2):69–77 (37 ref.)
Histopathology of cystic cavities in the cerebral white matter of HTX rats with inherited hydrocephalus. Yoshida Y, et al. **Neurol Med Chir (Tokyo)** 1990 Apr;30(4):229–33
MRI detects cerebral involvement in neurologically asymptomatic patients with adrenoleukodystrophy. Aubourg P, et al. **Neurology** 1989 Dec;39(12):1619–21
Serial study of gadolinium–DTPA MRI enhancement in multiple sclerosis. Bastianello S, et al. **Neurology** 1990 Apr; 40(4):591–5
Lewy body variant [letter; comment] Dickson DW. **Neurology** 1990 Jul;40(7):1147–50 Comment on: Neurology 1990 Jan;40(1):1–8.
Evolution of brain MRI abnormalities in limbic encephalitis. Dirr LY, et al. **Neurology** 1990 Aug;40(8):1304–6
Vertical ocular motor apraxia. Ebner R, et al. **Neurology** 1990 Apr;40(4):712–3
Central lesions in chronic inflammatory demyelinating polyneuropathy: an MRI study. Feasby TE, et al. **Neurology** 1990 Mar;40(3 Pt 1):476–8
White matter dementia in chronic toluene abuse. Filley CM, et al. **Neurology** 1990 Mar;40(3 Pt 1):532–4
Migraine associated with focal cerebral edema, cerebrospinal fluid pleocytosis, and progressive cerebellar ataxia: MRI documentation. Goldstein JM, et al. **Neurology** 1990 Aug; 40(8):1284–7
Primary lateral sclerosis in a child. Grunnet ML, et al. **Neurology** 1989 Nov;39(11):1530–2
The Lewy body variant of Alzheimer's disease: a clinical and pathologic entity [see comments] Hansen L, et al. **Neurology** 1990 Jan;40(1):1–8 Comment in: Neurology 1990 Jul;40(7):1147–50.
Cerebral amyloid angiopathy: diagnosis by MRI and brain biopsy. Hendricks HT, et al. **Neurology** 1990 Aug; 40(8):1308–10
Clinical significance of MRI white matter lesions in the elderly [see comments] Hunt AL, et al. **Neurology** 1989 Nov;39(11):1470–4 Comment in: Neurology 1990 Jun;40(6):1011–2.
Dementia lacking distinctive histologic features: a common non–Alzheimer degenerative dementia. Knopman DS, et al. **Neurology** 1990 Feb;40(2):251–6
Clinicopathologic correlations of cranial magnetic resonance imaging of periventricular white matter. Leifer D, et al. **Neurology** 1990 Jun;40(6):911–8
Astrocytes and the plaques of Alzheimer's disease. Mandybur TI, et al. **Neurology** 1990 Apr;40(4):635–9
White matter in the elderly [letter] Nolan KA, et al. **Neurology** 1990 Sep;40(9):1480
Aging and brain weight in Down's syndrome [letter; comment] Pearlson GD, et al. **Neurology** 1989 Oct; 39(10):1407–8 Comment on: Neurology 1987 Aug;37(8):1424–7.
Congenital absence of the corticospinal fibers: pathologic and clinical observations. Roessmann U, et al. **Neurology** 1990 Mar;40(3 Pt 1):538–41
Immunochemical evidence that fragments of phosphorylated MAP5 (MAP1B) are bound to neurofibrillary tangles in Alzheimer's disease. Hasegawa M, et al. **Neuron** 1990 Jun; 4(6):909–18
Comparison of seven staining methods for senile plaques and neurofibrillary tangles in a prospective series of 15 elderly patients. Lamy C, et al. **Neuropathol Appl Neurobiol** 1989 Nov–Dec;15(6):563–78
A morphological analysis of senile plaques in the brains of

non-demented persons of different ages using silver, immunocytochemical and lectin histochemical staining techniques. Mann DM, et al. **Neuropathol Appl Neurobiol** 1990 Feb;16(1):17-25

Notes from the graveyard: neuropathology and schizophrenia. Roberts GW, et al. **Neuropathol Appl Neurobiol** 1990 Feb;16(1):3-16 (61 ref.)

Unusual development of polyoma virus in the brains of two patients with the acquired immune deficiency syndrome (AIDS). Scaravilli F, et al. **Neuropathol Appl Neurobiol** 1989 Sep-Oct;15(5):407-18

Second Dorothy S. Russell memorial lecture. The neuropathology of Alzheimer's disease--issues in need of resolution. Tomlinson BE. **Neuropathol Appl Neurobiol** 1989 Nov-Dec;15(6):491-512 (64 ref.)

Ultrastructure of the sarcomatous component in gliosarcomas. Papierz W, et al. **Neuropatol Pol** 1989; 27(2):255-68

Congenital muscular dystrophy with cerebral involvement--report of a case of "occidental type cerebromuscular dystrophy"? Topaloglu H, et al. **Neuropediatrics** 1990 Feb;21(1):53-4

Cerebral atrophy and vigilance performance in patients with anorexia nervosa and bulimia nervosa. Laessle RG, et al. **Neuropsychobiology** 1989;21(4):187-91

Serial imaging of Menkes disease. Ichihashi K, et al. **Neuroradiology** 1990;32(1):56-9

Serial computed tomography findings in Creutzfeldt-Jakob disease. Schlenska GK, et al. **Neuroradiology** 1989; 31(4):303-6

Morphological diagnosis of vascular and senile dementia (the importance of cerebral congophilic angiopathy). Geinisman RV, et al. **Neurosci Behav Physiol** 1989 Nov-Dec; 19(6):488-93

An attempt to cause the selective loss of the cholinergic neurons in the basal forebrain of the rat: a new animal model of Alzheimer's disease. Kudo Y, et al. **Neurosci Lett** 1989 Jul 31;102(2-3):125-30

Magnesium reduces N-methyl-D-aspartate (NMDA)-mediated brain injury in perinatal rats. McDonald JW, et al. **Neurosci Lett** 1990 Feb 5; 109(1-2):234-8

Effect of glycine and glycine receptor antagonists on NMDA-induced brain injury. Uckele JE, et al. **Neurosci Lett** 1989 Dec 15;107(1-3):279-83

Maintenance of local cerebral blood flow after acute neuronal death: possible role of non-neuronal cells. Iadecola C, et al. **Neuroscience** 1990;35(3):559-75

Histopathology and image analysis of brain lesions in ovine scrapie in Japan. Onodera T, et al. **Nippon Juigaku Zasshi** 1990 Apr;52(2):439-42

Electrophysiological and pathological study in a dog with seizure. Uzuka Y, et al. **Nippon Juigaku Zasshi** 1989 Oct; 51(5):1055-8

Forebrain ischemia studied using magnetic resonance imaging and spectroscopy. Saunders JK, et al. **NMR Biomed** 1989 Dec;2(5-6):312-6

Purple acid phosphatase of human brain macrophages in AIDS encephalopathy. Schindelmeiser J, et al. **Pathol Res Pract** 1989 Aug;185(2):184-6

Infantile multiple sclerosis with extensive white matter lesions. Maeda Y, et al. **Pediatr Neurol** 1989 Sep-Oct; 5(5):317-9

Unusual brain MRI findings in a patient with hypomelanosis of Ito. Bhushan V, et al. **Pediatr Radiol** 1989;20(1-2):104-6

Hypothalamic-pituitary dwarfism: comparison between MR imaging and CT findings. Maghnie M, et al. **Pediatr Radiol** 1990;20(4):229-35

The response of the cerebral hemisphere of the rat to injury. II. The neonatal rat. Maxwell WL, et al. **Philos Trans R Soc Lond [Biol]** 1990 Jun 26; 328(1250):501-13

The response of the cerebral hemisphere of the rat to injury. I. The mature rat. Maxwell WL, et al. **Philos Trans R Soc Lond [Biol]** 1990 Jun 26; 328(1250):479-500

Cerebral beta-endorphin levels in a woman with Prader-Labhart-Willi syndrome. Pasi A, et al. **Physiol Behav** 1989 Jul;46(1):17-8

Brain interleukin 1 and S-100 immunoreactivity are elevated in Down syndrome and Alzheimer disease. Griffin WS, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7611-5

Hypothesis: microtubules, a key to Alzheimer disease. Matsuyama SS, et al. **Proc Natl Acad Sci U S A** 1989 Oct; 86(20):8152-6

Different configurational states of beta-amyloid and their distributions relative to plaques and tangles in Alzheimer disease. Spillantini MG, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3947-51

Dementia with non-hereditary cystatin C angiopathy. Benedikz E, et al. **Prog Clin Biol Res** 1989;317:517-22

The molecular pathology of scrapie and the biological basis of lesion targeting. Fraser H, et al. **Prog Clin Biol Res** 1989; 317:637-44 (8 ref.)

A study of the morphology and distribution of amyloid beta protein immunoreactive plaque and related lesions in the brains of Alzheimer's disease and adult Down's syndrome. Ikeda S, et al. **Prog Clin Biol Res** 1989;317:313-23

Alzheimer type dementia: diffuse type of senile plaques demonstrated by beta protein immunostaining. Yamaguchi H, et al. **Prog Clin Biol Res** 1989;317:467-74

The First International Symposium on Imaging the Brain in Psychiatry and Related Fields. Würzburg, May, 1988. **Psychiatry Res** 1989 Sep;29(3):239-465

Platelet glutathione peroxidase and monoamine oxidase activity in schizophrenics with CT scan abnormalities: relation to psychosocial variables. Buckman TD, et al. **Psychiatry Res** 1990 Jan;31(1):1-14

PET-deoxyglucose, CT, and neuropathology of age-related white matter pathology in normals and Alzheimer's patients. de Leon MJ, et al. **Psychiatry Res** 1989 Sep; 29(3):359-60

Images and imaginings from computerized brains. Freeman WJ, et al. **Psychiatry Res** 1989 Sep;29(3):239-45

The ventricle-brain ratio (VBR) in functional psychoses: an admixture analysis. Harvey I, et al. **Psychiatry Res** 1990 Apr;35(1):61-9

Laminar neuropathology in Alzheimer's disease by a modified Gallyas impregnation. Heinsen H, et al. **Psychiatry Res** 1989 Sep;29(3):463-5

Intracranial CSF volumetry in alcoholics: studies with MRI and CT. Mann K, et al. **Psychiatry Res** 1989 Sep; 29(3):277-9

Asymmetrical distribution of beta-endorphin in cerebral hemispheres of suicides: preliminary data. Scarone S, et al. **Psychiatry Res** 1990 May;32(2):159-66

Midsagittal cortical pathomorphology of schizophrenia: a magnetic resonance imaging study. Uematsu M, et al. **Psychiatry Res** 1989 Oct;30(1):11-20

Dyslexia and brain morphology. Hynd GW, et al. **Psychol Bull** 1989 Nov;106(3):447-82 (175 ref.)

Schizophrenia and the brain: a prospective clinico-neuropathological study. Bruton CJ, et al. **Psychol Med** 1990 May;20(2):285-304

The role of nerve growth factor in Alzheimer's disease. Everall IP, et al. **Psychol Med** 1990 May;20(2):249-51

The ventricular-brain ratio (VBR) in functional psychoses: the relationship of lateral ventricular and total intracranial area. Harvey I, et al. **Psychol Med** 1990 Feb;20(1):55-62

Improvement of T2-weighted images of central nervous system by motion artifact suppression technique (MAST). Iwasaki S, et al. **Radiat Med** 1990 Jan-Feb;8(1):13-6

Acquired immunodeficiency syndrome: correlation of radiologic and pathologic findings in the brain. Balakrishnan J, et al. **Radiographics** 1990 Mar;10(2):201-15

Encephalitis caused by human immunodeficiency virus: CT and MR imaging manifestations with clinical and pathologic correlation. Chrysikopoulos HS, et al. **Radiology** 1990 Apr;175(1):185-91

Gadodiamide injection: nonionic gadolinium chelate for MR imaging of the brain and spine--phase II-III clinical trial. Greco A, et al. **Radiology** 1990 Aug;176(2):451-6

Extracorporeal membrane oxygenation in infants: angiographic and parenchymal evaluation of the brain with MR imaging. Lewin JS, et al. **Radiology** 1989 Nov; 173(2):361-5

Olivopontocerebellar atrophy: MR diagnosis and relationship to multisystem atrophy. Savoiardo M, et al. **Radiology** 1990 Mar;174(3 Pt 1):693-6

Multimodality imaging of brain structures for stereotactic surgery. Zhang J, et al. **Radiology** 1990 May;175(2):435-41

Sexual dimorphism, brain morphology, and schizophrenia. Lewine RR, et al. **Schizophr Bull** 1990;16(2):195-203

Gender differences in schizophrenia on MRI brain scans. Nasrallah HA, et al. **Schizophr Bull** 1990;16(2):205-10

Relation of neuronal APP-751/APP-695 mRNA ratio and neuritic plaque density in Alzheimer's disease. Johnson SA, et al. **Science** 1990 May 18;248(4957):854-7

Some black holes have hair. Goldblatt D. **Semin Neurol** 1989 Dec;9(4):394-8

MR in brain formation and malformation. **Semin Ultrasound CT MR** 1988 Jun;9(3): 183-267

Techniques and methods in pediatric magnetic resonance imaging. Barkovich AJ. **Semin Ultrasound CT MR** 1988 Jun;9(3):186-91 (7 ref.)

Osler's brain and related mental matters. Rodin AE, et al. **South Med J** 1990 Feb;83(2):207-12

Frontal white matter lesions and dementia in lacunar infarction. Fukuda H, et al. **Stroke** 1990 Aug;21(8):1143-9

Neuropathologic consequences of internal carotid artery occlusion and hemorrhagic hypotension in baboons. Graham DI, et al. **Stroke** 1990 Mar;21(3):428-34

Corticofugal axonal degeneration in rats after middle cerebral artery occlusion. Iizuka H, et al. **Stroke** 1989 Oct; 20(10):1396-402

Reversible middle cerebral artery embolization in dogs without intracranial surgery [see comments] Purdy PD, et al. **Stroke** 1989 Oct;20(10):1368-76 Comment in: Stroke 1990 Apr;21(4):679-80.

A radiologic study of dynamic processes in lacunar dementia. Tanaka Y, et al. **Stroke** 1989 Nov;20(11):1488-93

Interface between the meningioma and the brain on magnetic resonance imaging. Nakasu S, et al. **Surg Neurol** 1990 Feb; 33(2):105-16

Nonneoplastic disease of the brain. **Top Magn Reson Imaging** 1989 Dec;2(1):1-75

Lessons from magnetic resonance imaging in multiple sclerosis. McDonald WI, et al. **Trends Neurosci** 1989 Oct; 12(10):376-9 (36 ref.)

Bovine spongiform encephalopathy: detection and quantitation of fibrils, fibril protein (PrP) and vacuolation in brain. Scott AC, et al. **Vet Microbiol** 1990 Jun; 23(1-4):295-304

[Pathologic changes in the brain in burned children with septicemia and epileptiform convulsion--report of 5 autopsies] Yin JB. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Mar;6(1):27-8, 75 (Eng. Abstr.) **(Chi)**

[Clinical application of CT stereotactic device in biopsy of brain lesions] Liu XG. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Oct; 23(5):257-60 (Eng. Abstr.) **(Chi)**

[Incidence and distribution of cerebral amyloid angiopathy] Wang YS. **Chung Hua I Hsueh Tsa Chih** 1989 Jun; 69(6):338-40 **(Chi)**

[Experimental study of behavior and cerebral morphology of rat pups generated by fluorotic female rat] Liu WX. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Dec;18(4):290-2 (Eng. Abstr.) **(Chi)**

[The primary and secondary pathological changes in the brain in patients with epidemic hemorrhagic fever] Liu YF. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Dec;18(4):244-6 (Eng. Abstr.) **(Chi)**

[Virus-induced subacute spongiform encephalopathy (Creutzfeldt-Jakob disease): a report of 10 cases with clinico-pathologic study] Guo YP. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Oct; 22(5):289-93, 318-9 (Eng. Abstr.) **(Chi)**

[Aging of the brain, Alzheimer's disease and the most frequent vascular dementias] Koukolík F. **Cesk Neurol Neurochir** 1990 Jan;53(1):1-11 (68 ref.) **(Cze)**

[Diagnosis of the most frequent causes of dementia] Koukolík F. **Cesk Patol** 1989 Aug;25(3):167-72 (Eng. Abstr.) **(Cze)**

[Is leuko-araiosis in Alzheimer's disease, in Parkinson's disease and in healthy elderly persons the result of Wallerian degeneration?] Leys D, et al. **Acta Neurol Belg** 1989 May-Oct;89(3-4):249-52 **(Dut)**

[Miller-Fisher syndrome. Presence of high signal foci in the cerebral white substance visible with magnetic resonance imaging (letter)] Decroix JP, et al. **Ann Med Interne (Paris)** 1989;140(7):644-5 **(Fre)**

[Muscle and brain biopsy in a case of mitochondrial encephalomyopathy. Demonstration of a mitochondrial vasculopathy] Coquet M, et al. **Ann Pathol** 1990;10(3):181-6 (Eng. Abstr.) **(Fre)**

[Wilson's disease. X-ray CT and MRI aspects of the brain in a case before treatment] Duchateau C, et al. **J Radiol** 1990 Mar;71(3):229-31 (Eng. Abstr.) **(Fre)**

[Contribution of magnetic resonance imaging in 100 cases of refractory partial epilepsy with normal CT scans] Convers P, et al. **Rev Neurol (Paris)** 1990;146(5):330-7 (56 ref.) (Eng. Abstr.) **(Fre)**

[Cerebral necrosis found 13 years after irradiation of osteosarcoma of the cranial vault] Delattre JY, et al. **Rev Neurol (Paris)** 1990;146(5):364-7 (15 ref.) (Eng. Abstr.) **(Fre)**

[Conference at the Salpêtrière. November 1988. Progressive dementia and generalized epilepsy in a young woman] Loiseau P, et al. **Rev Neurol (Paris)** 1990;146(5):383-9 **(Fre)**

[Hypothesis: multinucleated giant cells in AIDS neuropathology] van Hemel K. **Rev Neurol (Paris)** 1989; 145(11):802-5 (21 ref.) (Eng. Abstr.) **(Fre)**

[Neurohistological study of the dendrites of lamina V-pyramidal neurons of the rat following recovery from postnatal malnutrition] Schönheit B, et al. **J Hirnforsch** 1989;30(4):385-97 (Eng. Abstr.) **(Ger)**

[The brains of the Vogt collection (letter)] Bogerts B. **Nervenarzt** 1990 May;61(5):315-6 **(Ger)**

[The significance of stereotaxic brain biopsy in atypical multiple sclerosis] Braus DF, et al. **Nervenarzt** 1989 Nov; 60(11):700-5 (Eng. Abstr.) **(Ger)**

[Comments on the contribution by D. F. Braus et al. Significance of stereotaxic brain biopsy in atypical multiple sclerosis (letter)] Feiden W, et al. **Nervenarzt** 1990 Jun; 61(6):379-81 **(Ger)**

[Comments on the contribution by W. Weihe, A. Manke, W. Gowin, G. Mariss and F. L. Welter. The prognostic significance of lacunar lesions in magnetic resonance tomography in multiple sclerosis] Rüttinger H, et al. **Nervenarzt** 1989 Nov;60(11):713-4 **(Ger)**

[Neuropsychiatric and neuropathologic findings in an adult case of cri-du-chat syndrome (Lejeune syndrome, crying cat syndrome)] Fehlow P, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Dec; 41(12):741-5 (Eng. Abstr.) **(Ger)**

[Magnetic resonance tomography of adrenoleukodystrophy] Henkes H, et al. **Rontgenblatter** 1990 Jan;43(1):7-10 (Eng. Abstr.) **(Ger)**

[MRI and the diagnosis of multiple sclerosis] Lyrer P, et al. **Schweiz Med Wochenschr** 1989 Dec 23;119(51):1849-53 (Eng. Abstr.) **(Ger)**

[Nervous system pathology in AIDS: results of a collaborative autopsy study from Switzerland] Lang W, et al. **Schweiz Rundsch Med Prax** 1990 May 2;79(18):562-8 (48 ref.) (Eng. Abstr.) **(Ger)**

[Multiple sclerosis: correlation between clinically suspected locations and ascertained lesions in MRI] Lyrer P, et al. **Schweiz Rundsch Med Prax** 1989 Sep 5;78(36):960-3 (Eng. Abstr.) **(Ger)**

[Autoradiography determination of the GABA(A) receptor density in the brain of rats with portacaval shunt] Rössle M, et al. **Z Gastroenterol** 1990 Mar;28(3):142-6 (Eng. Abstr.) **(Ger)**

[The effect of large-faced cerebral meningeal fibroses on the development of hemispheric volume. Experimental and morphometric studies of swine brains] Pollak KH, et al. **Zentralbl Allg Pathol** 1990;136(3):255–64 (Eng. Abstr.) **(Ger)**

[Cerebral atrophy: an emerging complication in uremic patients] Savazzi GM, et al. **Ann Ital Med Int** 1987 Oct–Dec;2(4):299–307 (29 ref.) (Eng. Abstr.) **(Ita)**

[A morphologic study of extrapulmonary multisystemic lesions in neonatal respiratory syndrome] Maresi E, et al. **Pathologica** 1990 Jan–Feb;82(1077):1–32 (Eng. Abstr.) **(Ita)**

[Complication of irradiation in brain tumors] Ono Y, et al. **Gan No Rinsho** 1989 Sep;35(11):1347–53 (Eng. Abstr.) **(Jpn)**

[Autopsy cases of glioblastoma multiforme: treatment results of high-dose fractionated radiation therapy and CT scan findings] Tamura M, et al. **Gan No Rinsho** 1989 Sep; 35(11):1339–46 (Eng. Abstr.) **(Jpn)**

[Aging of brain] Otomo E. **Kokubyo Gakkai Zasshi** 1989 Jun; 56(2):215–21 (0 ref.) **(Jpn)**

[Cerebral cysticercosis presenting as a solitary cyst. Diagnosis and treatment with CT-guided stereotactic biopsy—case report] Hashimoto T, et al. **Neurol Med Chir (Tokyo)** 1989 Jun;29(6):520–4 (22 ref.) (Eng. Abstr.) **(Jpn)**

[Artifacts in magnetic resonance imaging of the head] Iwama T, et al. **Neurol Med Chir (Tokyo)** 1989 Aug;29(8):701–6 (Eng. Abstr.) **(Jpn)**

[Histological study on possibility of senile dementia diagnosis in forensic autopsy cases] Kubo S, et al. **Nippon Hoigaku Zasshi** 1990 Feb;44(1):18–24 (Eng. Abstr.) **(Jpn)**

[Diffuse bilateral periventricular hyperintensity of unknown origin on MRI spin-echo sequence. Cognitive function and regional cerebral blood flow] Lee S. **Nippon Ika Daigaku Zasshi** 1990 Jun;57(3):244–52 (Eng. Abstr.) **(Jpn)**

[Alzheimer's disease] Hirai S. **Nippon Naika Gakkai Zasshi** 1990 Apr 10;79(4):502–7 **(Jpn)**

[Human T-cell lymphotrophic virus-type I associated myelopathy with diffuse lesions in cerebral white matter by computed tomography and magnetic resonance imaging] Natori N. **Nippon Naika Gakkai Zasshi** 1989 Jul; 78(7):980–1 **(Jpn)**

[A report of two cases with recurrent cranial neuritis showing multiple cerebral white matter lesions in MRI-CT] Takashima H, et al. **Nippon Naika Gakkai Zasshi** 1989 Sep; 78(9):1329–32 **(Jpn)**

[Pathogenesis and pathology of Alzheimer's disease] Tomonaga M. **Nippon Naika Gakkai Zasshi** 1989 Nov; 78(11):1576–80 **(Jpn)**

[An autopsy case of Alzheimer's disease associated with Parkinson's disease, compared to 2 autopsy cases of diffuse Lewy body disease] Hirunagi N, et al. **Nippon Ronen Igakkai Zasshi** 1990 Mar;27(2):214–9 (Eng. Abstr.) **(Jpn)**

[Histological atlas of brain tumors (12): Metastatic brain tumors] Nomura K. **No Shinkei Geka** 1990 May; 18(5):407–11 (14 ref.) **(Jpn)**

[Magnetic resonance imaging of intracranial lesions of tuberous sclerosis] Shimoizumi H, et al. **No To Hattatsu** 1989 Jul;21(4):334–9 (Eng. Abstr.) **(Jpn)**

[A case of Fukuyama type congenital muscular dystrophy—cranial MRI findings prior to the onset of neuromuscular signs] Takanashi J, et al. **No To Hattatsu** 1989 Nov;21(6):588–9 **(Jpn)**

[MR imaging in infantile spasms] Yasujima M, et al. **No To Hattatsu** 1989 Nov;21(6):537–42 (Eng. Abstr.) **(Jpn)**

[The MR evaluation of normal children and disorders of neuronal migration and myelination] Miyamachi K, et al. **No To Shinkei** 1990 Feb;42(2):183–8 (Eng. Abstr.) **(Jpn)**

[Acute encephalopathy with symmetrical, widespread, edematous and necrotic lesions—an autopsy case report] Mizuguchi M, et al. **No To Shinkei** 1989 Aug;41(8):789–94 (Eng. Abstr.) **(Jpn)**

[Exo-focal neuronal death in the rat brain] Nagasawa H, et al. **No To Shinkei** 1990 Feb;42(2):137–43 (Eng. Abstr.) **(Jpn)**

[Cerebrovascular dementia; correlation of computed and histopathologic findings] Mitsuyama Y. **Rinsho Hoshasen** 1989 Oct;34(11):1307–15 (Eng. Abstr.) **(Jpn)**

[Silent stroke and advance in neuroimaging] Okada Y, et al. **Rinsho Hoshasen** 1989 Jun;34(6):641–6 (Eng. Abstr.) **(Jpn)**

[MR imaging of the brain in Wilson's disease] Uchino A, et al. **Rinsho Hoshasen** 1989 Oct;34(11):1413–6 (Eng. Abstr.) **(Jpn)**

[A case of familial juvenile Alzheimer's disease with apallic state at the relatively early stage and various neurological features—a clinicopathological study] Fukutani Y, et al. **Rinsho Shinkeigaku** 1989 May;29(5):633–8 (Eng. Abstr.) **(Jpn)**

[A case of adrenomyeloneuropathy with localized cerebral white matter degeneration] Kanda F, et al. **Rinsho Shinkeigaku** 1989 Apr;29(4):483–7 (Eng. Abstr.) **(Jpn)**

[Adrenoleukodystrophy with high signal intensity areas in bilateral pyramidal tracts from internal capsule through medullary pyramids on MRI] Kitagawa Y, et al. **Rinsho Shinkeigaku** 1989 May;29(5):606–11 (Eng. Abstr.) **(Jpn)**

[Cognitive function, cerebral blood flow and brain atrophy in olivo-ponto-cerebellar atrophy] Kobayashi S, et al. **Rinsho Shinkeigaku** 1990 Feb;30(2):157–63 (Eng. Abstr.) **(Jpn)**

[A case of "interval" form of acute carbon monoxide poisoning—brain MRI and therapeutic effect of hyperbaric oxygenation] Kodama K, et al. **Rinsho Shinkeigaku** 1990 Apr;30(4):420–6 (Eng. Abstr.) **(Jpn)**

[A case of demyelinating disease showing a peculiar honeycomb-like and lamellar structure on magnetic resonance imaging] Miyata K, et al. **Rinsho Shinkeigaku** 1990 Apr;30(4):402–6 (Eng. Abstr.) **(Jpn)**

[Multi-focal delayed neuronal damage after transient regional ischemia—mechanism of vascular dementia] Nagasawa H, et al. **Rinsho Shinkeigaku** 1990 Apr;30(4):396–401 (Eng. Abstr.) **(Jpn)**

[An autopsy case of multiple system atrophy with many senile plaques] Ohshima T, et al. **Rinsho Shinkeigaku** 1989 Nov; 29(11):1401–6 (Eng. Abstr.) **(Jpn)**

[An autopsy case of panencephalopathic type of Creutzfeldt-Jakob disease: an early clinical sign documented by magnetic resonance imaging] Okiyama R, et al. **Rinsho Shinkeigaku** 1989 Aug;29(8):1048–51 (Eng. Abstr.) **(Jpn)**

[Cerebral white matter bundle alterations in patients with dementia of Alzheimer type and patients with multi-infarct dementia—magnetic resonance imaging study] Yoshii F, et al. **Rinsho Shinkeigaku** 1990 Jan;30(1):110–2 (Eng. Abstr.) **(Jpn)**

[Aging of the Brain] Tomonaga M. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1119–27 **(Jpn)**

[Topography and structure of secondary brain damage in edema associated with supratentorial foci of encephalomalacia] Szpakowa GM. **Neuropatol Pol** 1989; 27(2):177–98 (Eng. Abstr.) **(Pol)**

[Clinico-morphologic correlations in cerebral infarction after recurrent hemorrhage] Tarnowska-Dziduszko E, et al. **Neuropatol Pol** 1989;27(3):411–25 (Eng. Abstr.) **(Pol)**

[Blood serotonin level and selected aromatic amino acids in the serum, liver tissue and brain of deceased persons with encephalopathy and hepatic coma in viral hepatitis and liver cirrhosis] Szpakowicz T, et al. **Pol Arch Med Wewn** 1988 Jun;79(6):314–8 (Eng. Abstr.) **(Pol)**

[Ultrasonographic examination of the brain. Characteristics of various types of pathological changes] Góraj B, et al. **Pol Przegl Radiol** 1988 Nov–Dec;52(6):256–60 (Eng. Abstr.) **(Pol)**

[Value of echoencephalography in the diagnosis of periventricular leukomalacia in children and the prognosis of their development] Ozerova OE, et al. **Akush Ginekol (Mosk)** 1989 Sep;(9):59–62 (Eng. Abstr.) **(Rus)**

[Reactions of cellular structures of the brain of laboratory animals in oxygen deficiency] Kvitnitskiĭ-Ryzhov IuN, et al. **Arkh Anat Gistol Embriol** 1990 Feb;98(2):12–8 (Eng. Abstr.) **(Rus)**

[The pathomorphological changes in the brain and internal organs in experimental influenza infection in mice] Semenov SP, et al. **Arkh Patol** 1990;52(5):50–5 (Eng. Abstr.) **(Rus)**

[Use of fluorescent carbocyanine dyes in the study of the organization of the pathways in autopsy material of the human brain] Belichenko PV. **Biull Eksp Biol Med** 1990 May;109(5):500–1 (Eng. Abstr.) **(Rus)**

[Morphofunctional changes in brain neurons during emotional stress] Belova TI, et al. **Vestn Akad Med Nauk SSSR** 1990;(2):11–3 (Eng. Abstr.) **(Rus)**

[Ultrasonic study of the brain in the diagnosis of meningoencephalitis in young children] Kal'naia TV, et al. **Vestn Rentgenol Radiol** 1989 Sep–Oct;(5):25–33 (Eng. Abstr.) **(Rus)**

[Neurosonography of the brain in infectious toxicoses in infants] Berestov AI, et al. **Zh Nevropatol Psikhiatr** 1989; 89(8):9–11 (Eng. Abstr.) **(Rus)**

[Clinico-anatomic characteristics of cysticercosis of the brain] Boĭko IuG, et al. **Zh Nevropatol Psikhiatr** 1989; 89(7):36–8 (Eng. Abstr.) **(Rus)**

[Ultrasonic scanning of the brain in newborn infants (review of the literature)] Neizhko LIu. **Zh Nevropatol Psikhiatr** 1989;89(8):132–6 (49 ref.) **(Rus)**

[Ultrastructural characteristics of embryonic brain cells in the offspring of alcoholic mothers] Solonskiĭ AV, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):41–5 (Eng. Abstr.) **(Rus)**

[Diagnostic importance the B-mode ultrasonic examination of the intracranial space in childhood] Santa M, et al. **Cesk Neurol Neurochir** 1989 Sep;52(5):289–93 **(Slo)**

PHYSIOLOGY

Visual-motor performance in minimal brain dysfunction and normal children. Cakirpaloglu P, et al. **Act Nerv Super (Praha)** 1990 Mar;32(1):79–80

Brain potentials and errors in the course of the one-dimensional tracking task. Indra M, et al. **Act Nerv Super (Praha)** 1989 Jun;31(2):148–9

Changes in bioelectrical brain activity related to programming of saccadic eye movements. Jagla F, et al. **Act Nerv Super (Praha)** 1989 Jun;31(2):142–3

Temporal mechanisms in the organization of brain/mind activity. Pöppel E. **Act Nerv Super (Praha)** 1990 Mar; 32(1):76–7

EEG frequency spectrum and the saturation with thyroid hormones. Sulc J, et al. **Act Nerv Super (Praha)** 1990 Mar; 32(1):74

Heterogeneity of the histological features along the course of the facial vein of the desert camel (Camelus dromedarius): relevance to brain cooling. Bou-Resli MN, et al. **Acta Morphol Neerl Scand** 1988–89;26(4):249–54

Neuroendocrinological aspects of neurosurgery. Proceedings of the Third Advanced Seminar in Neurosurgical Research. Venice, April 30–May 1, 1987. **Acta Neurochir Suppl (Wien)** 1990;47:1–128

Central control of circadian and ultradian neuroendocrine rhythms. Assenmacher I. **Acta Neurochir Suppl (Wien)** 1990;47:38–41 (26 ref.)

Vasopressin and oxytocin localization and putative functions in the brain. Buijs RM. **Acta Neurochir Suppl (Wien)** 1990; 47:86–9 (36 ref.)

Central neuroendocrine control of the brain water, electrolyte, and volume homeostasis. Dóczi T, et al. **Acta Neurochir Suppl (Wien)** 1990;47:122–6 (52 ref.)

Neurohormonal communication in the brain. Vincent JD, et al. **Acta Neurochir Suppl (Wien)** 1990;47:16–37 (170 ref.)

Cerebral blood flow and metabolism in sleep. Sawaya R, et al. **Acta Neurol Scand** 1989 Dec;80(6):481–91 (49 ref.)

Normal pattern of the cerebral function monitor trace in term and preterm neonates. Thornberg E, et al. **Acta Paediatr Scand** 1990 Jan;79(1):20–5

The development of ion regulation in mammalian brain extracellular fluid. Jones HC, et al. **Acta Physiol Scand Suppl** 1989;582:48

Brain structures participating in mental simulation of motor behavior: a neuropsychological interpretation. Decety J, et al. **Acta Psychol (Amst)** 1990 Feb;73(1):13–34 (100 ref.)

Magnetic source imaging: a future in CNS evaluation? [comment] Quencer RM. **AJNR** 1990 Jul–Aug;11(4):717–8 Comment on: AJNR 1990 Jul–Aug;11(4):713–6.

Oral self-administration of ethanol and not experimenter-administered ethanol facilitates rewarding electrical brain stimulation. Moolten M, et al. **Alcohol** 1990 May–Jun;7(3):221–5 (23 ref.)

ECG changes resulting from cerebral stimulation. III. Action of diphenylhydantoin on arrhythmias. Hockman CH, et al. **Am Heart J** 1967 Aug;74(2):256–60

Ontogenetic development of the ophthalmic rete in relation to brain cooling in chickens and pigeons. Arad Z, et al. **Am J Anat** 1990 Jan;187(1):98–103

Nutrition status and brain function in aging. Tucker DM, et al. **Am J Clin Nutr** 1990 Jul;52(1):93–102

The gonadal function of the brain [editorial] Kaplan SA. **Am J Dis Child** 1966 Jul;112(1):1–2

Brain mechanisms underlying motor skill learning in the rat. Thompson R, et al. **Am J Phys Med Rehabil** 1990 Aug; 69(4):191–7

Characterization of feeding behavior induced by central injection of GRF. Dickson PR, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):R651–7

Spinal noradrenergic pathways and pressor responses to central angiotensin II. Elghozi JL, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):H240–6

Facial vessels of desert camel (Camelus dromedarius): role in brain cooling. Elkhawad AO, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):R602–7

Level of satiety: in vitro energy metabolism in brain during hypophagic and hyperphagic body weight recovery. Kasser TR, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1322–7

Central administration of atrial peptide decreases sympathetic outflow in rats. Schultz HD, et al. **Am J Physiol** 1990 May; 258(5 Pt 2):R1250–6

Centrally administered ANF promotes appearance of a circulating sodium pump inhibitor. Songu-Mize E, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1655–9

Sex differences in central adrenergic control of vasopressin release. Stone JD, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1040–5

The effects of intravenous succinylcholine on cerebral function and muscle afferent activity following complete ischemia in halothane-anesthetized dogs. Lanier WL, et al. **Anesthesiology** 1990 Sep;73(3):485–90

Absence of abundant binding sites for anesthetics in rabbit brain: an in vivo NMR study. Lockhart SH, et al. **Anesthesiology** 1990 Sep;73(3):455–60

Experimental determination of the force required for insertion of a thermoseed into deep brain tissues. Molloy JA, et al. **Ann Biomed Eng** 1990;18(3):299–313

Seventh Joint Soviet-Italian Meeting on Neuropharmacology. Copanello (Catanzaro) Italy, September 19–21, 1988. Proceedings. **Ann Ist Super Sanita** 1990;26(1):1–106

Neurobiology of stress ulcers. **Ann N Y Acad Sci** 1990; 597:1–298

Hippocampal zinc thionein and pyridoxal phosphate modulate synaptic functions. Ebadi M, et al. **Ann N Y Acad Sci** 1990;585:189–201 (37 ref.)

On the role of neuropeptide Y in information handling in the central nervous system in normal and physiopathological states. Focus on volume transmission and neuropeptide Y/alpha 2 receptor interactions. Fuxe K, et al. **Ann N Y Acad Sci** 1990;579:28–67 (79 ref.)

Brain sites where bombesin and corticotropin-releasing factor influence gastric secretions. Gunion MW, et al. **Ann N Y Acad Sci** 1990;597:92–113

Microdialysis studies of brain norepinephrine, serotonin, and dopamine release during ingestive behavior. Theoretical and clinical implications. Hoebel BG, et al. **Ann N Y Acad Sci** 1989;575:171–91; discussion 192–3 (114 ref.)

Central neurotensin protects the mucosa by a prostaglandin-mediated mechanism and inhibits gastric acid secretion in the rat. Kauffman GL, et al. **Ann N Y Acad Sci** 1990;597:175–90

Nonradioactive detection of vasopressin and somatostatin mRNA with digoxigenin-labeled oligonucleotide probes. Lewis ME, et al. **Ann N Y Acad Sci** 1990;579:246–53

Orosensory self-stimulation by sucrose involves brain dopaminergic mechanisms. Schneider LH. **Ann N Y Acad Sci** 1989;575:307–19; discussion 319–20 (45 ref.)

Brain regulation of gastric acid secretion by peptides. Sites and mechanisms of action. Taché Y, et al. **Ann N Y Acad Sci** 1990;597:128–45 (113 ref.)

Net production of cerebrospinal fluid is decreased by SCH-23390. Boyson SJ, et al. **Ann Neurol** 1990 Jun; 27(6):631–5

The mechanical mind. Barlow H. **Annu Rev Neurosci** 1990; 13:15–24

Hebbian synapses: biophysical mechanisms and algorithms. Brown TH, et al. **Annu Rev Neurosci** 1990;13:475–511 (177 ref.)

Biological foundations of language: clues from sign language. Poizner H, et al. **Annu Rev Neurosci** 1990;13:283–307 (43 ref.)

The attention system of the human brain. Posner MI, et al. **Annu Rev Neurosci** 1990;13:25–42 (72 ref.)

Interactions between the brain and the immune system. Ader R, et al. **Annu Rev Pharmacol Toxicol** 1990;30:561–602 (326 ref.)

Human learning and memory: connections and dissociations. Hintzman DL. **Annu Rev Psychol** 1990;41:109–39 (100 ref.)

Vagal afferents and EEG rhythms in the SI area in anesthetized cats: similarities between responses to electrical and chemical (phenyldiguanide) stimulations. Balzamo E, et al. **Arch Int Physiol Biochim** 1989 Dec; 97(6):483–92

Growth factors for neuronal survival and process regeneration. Implications in the mammalian central nervous system [published erratum appears in Arch Neurol 1990 Jan;47(1):46] Lipton SA. **Arch Neurol** 1989 Nov; 46(11):1241–8 (109 ref.)

Cerebrogenic cardiac arrhythmias. Cerebral electrocardiographic influences and their role in sudden death. Oppenheimer SM, et al. **Arch Neurol** 1990 May; 47(5):513–9 (104 ref.)

Localization of auditory response sources using magnetoencephalography and magnetic resonance imaging. Papanicolaou AC, et al. **Arch Neurol** 1990 Jan;47(1):33–7

Neurotransmitters in the brain. Gottfries CG. **Arzneimittelforschung** 1989 Aug;39(8A):1025–9; discussion 1029–30 (27 ref.)

Probing brain function with acoustic stimuli. Musiek FE. **ASHA** 1989 Aug;31(8):100–106, 55 (30 ref.)

Reinforced alternation performance is impaired by muscarinic but not by nicotinic receptor blockade in rats. Clarke PB, et al. **Behav Brain Res** 1990 Jan 22;36(3):203–7

Activation of the noradrenergic system facilitates an attentional shift in the rat. Devauges V, et al. **Behav Brain Res** 1990 Jun 18;39(1):19–28

Rats with anxious or non-anxious type of exploratory behaviour differ in their brain CCK-8 and benzodiazepine receptor characteristics. Harro J, et al. **Behav Brain Res** 1990 Jun 18;39(1):63–71

Classical conditioning of the eyeblink reflex in the decerebrate-decerebellate rabbit. Kelly TM, et al. **Behav Brain Res** 1990 Apr 16;38(1):7–18

Conditioned orienting (alpha) and delayed behavioral and evoked neural responses during classical conditioning. Korhonen T, et al. **Behav Brain Res** 1989 Sep 1; 34(3):179–97

Quantitative analysis of recovery curves. Krauth J. **Behav Brain Res** 1990 Jul 9;39(2):167–85

Forebrain monoamines and associative learning: III. The US pre-exposure effect. Rickert EJ, et al. **Behav Brain Res** 1989 Nov 1;35(2):147–52

Light input and the reversal of functional lateralization in the chicken brain. Rogers LJ. **Behav Brain Res** 1990 May 28;38(3):211–21

Sleep and EEG slow-wave activity in the domestic cat: effect of sleep deprivation. Tobler I, et al. **Behav Brain Res** 1990 Mar 5;37(2):109–18

Age-dependent plasticity in the dopaminergic control of sensorimotor development. Weihmuller FB, et al. **Behav Brain Res** 1989 Nov 1;35(2):95–109

Behavioral characterization of intracranial self-stimulation from mesolimbic, mesocortical, nigrostriatal, hypothalamic and extra-hypothalamic sites in the non-inbred CD-1 mouse strain. Zacharko RM, et al. **Behav Brain Res** 1990 Jan 22;36(3):251–81

Interaction between catecholaminergic and opioid systems in an active avoidance task. Bennett MC, et al. **Behav Neural Biol** 1990 Mar;53(2):258–68

Reinforcing properties of ejaculation in the male rat: role of opioids and dopamine. Agmo A, et al. **Behav Neurosci** 1990 Feb;104(1):177–82

Ontogeny of noradrenergic effects on ultrasonic vocalizations in rat pups. Kehoe P, et al. **Behav Neurosci** 1989 Oct; 103(5):1099–107

Behavioral and neural characteristics of short-latency and long-latency conditioned responses in cats. Korhonen T, et al. **Behav Neurosci** 1989 Oct;103(5):944–55

Role of supraspinal systems in environmentally induced antinociception: effect of spinalization and decerebration on brief shock-induced and long shock-induced antinociception. Meagher MW, et al. **Behav Neurosci** 1990 Apr;104(2):328–38

Dependence of adrenalectomy-induced sodium appetite on the action of angiotensin II in the brain of the rat. Sakai RR, et al. **Behav Neurosci** 1990 Feb;104(1):167–76

2-[3H]deoxyglucose uptake patterns in rats exploring a six-arm radial tunnel maze: differences between experienced and nonexperienced rats. Sarter M, et al. **Behav Neurosci** 1989 Dec;103(6):1217–25

Complex maze performance in rats: effects of noradrenergic depletion and cholinergic blockade. Spangler EL, et al. **Behav Neurosci** 1990 Jun;104(3):410–7

Failure of adenosine analogues to affect N-type voltage sensitive Ca2+ channels in chicken brain synaptosomes. Lundy PM, et al. **Biochem Pharmacol** 1990 Aug 1; 40(3):651–4

Evidence of chaotic dynamics underlying the human alpha-rhythm electroencephalogram. Soong AC, et al. **Biol Cybern** 1989;62(1):55–62

Reticular activation and the dynamics of neuronal networks. Wright JJ. **Biol Cybern** 1990;62(4):289–98

Autoregression models of EEG. Results compared with expectations for a multilinear near-equilibrium biophysical process. Wright JJ, et al. **Biol Cybern** 1990;62(3):201–10

Skin conductance response after 6-hydroxydopamine lesion of central noradrenaline system in cats. Yamamoto K, et al. **Biol Psychiatry** 1990 Jul 15;28(2):151–60

Electrical stimulations of the basal forebrain and the nucleus cuneiformis differently modulate behavioural activation of freely moving rat. Bringmann A, et al. **Biomed Biochim Acta** 1989;48(10):781–91

Visually evoked potentials are differently modulated by the basal forebrain and the nucleus cuneiformis of freely moving rat. Bringmann A, et al. **Biomed Biochim Acta** 1989; 48(10):793–806

Temporal encoding for the control of saccades. Westine DM, et al. **Biomed Sci Instrum** 1990;26:175–80

Selecting the smoothing parameter for estimation of slowly changing evoked potential signals. Raz J, et al. **Biometrics** 1989 Sep;45(3):745–62

Towards an artificial brain. Conrad M, et al. **Biosystems** 1989; 23(2–3):175–215; discussion 216–8

Brain organization in infants: electrical activity mapping. Duffy FH, et al. **Birth Defects** 1989;25(6):33–46

EEG and unit activity: quantification and interrelationship. Bronzino JD. **Boll Soc Ital Biol Sper** 1988 Dec;64(12 Suppl):65–71 (8 ref.)

Stereological location of electroencephalographic activity. Butler SR. **Boll Soc Ital Biol Sper** 1988 Dec;64(12 Suppl):87–100 (18 ref.)

The resting EEG: an useful monitor of brain function in experimental aging research. Giaquinto S, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12 Suppl):109–28 (37 ref.)

CNS growth factors. Logan A. **Br J Hosp Med** 1990 Jun; 43(6):428–37 (71 ref.)

Clinical studies of cranial and spinal compliance and the craniospinal flow of cerebrospinal fluid. Magnaes B. **Br J Neurosurg** 1989;3(6):659–68

Epidural temperature and possible intracerebral temperature gradients in man. Mellergård P, et al. **Br J Neurosurg** 1990; 4(1):31–8

Microionophoretic study with milacemide, a glycine precursor, on mammalian central nervous system cells. Godfraind JM. **Br J Pharmacol** 1990 May;100(1):119–25

Sodium pentobarbitone enhances responses of thalamic relay neurones to GABA in rat brain slices. Sykes TC, et al. **Br J Pharmacol** 1989 Aug;97(4):1059–66

The benefits of physiological psychology. Boddy J. **Br J Psychol** 1989 Nov;80 (Pt 4):479–98 (120 ref.)

Effect of stunning on spontaneous physical activity and evoked activity in the brain. Gregory NG, et al. **Br Poult Sci** 1990 Mar;31(1):215–20

Evidence that the long-latency stretch responses of the human wrist extensor muscle involve a transcerebral pathway. Goodin DS, et al. **Brain** 1990 Aug;113 (Pt 4):1075–91

2-Deoxyglucose uptake following visual stimulation in squamate reptiles. Allen EE, et al. **Brain Behav Evol** 1989; 34(5):299–300

An allometric analysis of the frequency of hippocampal theta: the significance of brain metabolic rate. Blumberg MS. **Brain Behav Evol** 1989;34(6):351–6

Asymmetrical transfer of training between hands: implications for interhemispheric communication in normal brain. Parlow SE, et al. **Brain Cogn** 1989 Sep;11(1):98–113

Historical contributions of Chinese scholars to the study of the human brain. Zhu YX. **Brain Cogn** 1989 Sep;11(1):133–8

Inhibiting carbonic anhydrase in brain tissue increases the respiratory response to rebreathing CO2. Adams JM, et al. **Brain Res** 1990 Jun 11;519(1–2):23–8

Sexual dimorphism in the avian brain is not limited to the song system of songbirds: a morphometric analysis of the brain of the quail (Coturnix japonica). Adkins-Regan E, et al. **Brain Res** 1990 Apr 30;514(2):320–6

Serotonin-induced inward current in rat facial motoneurons: evidence for mediation by G proteins but not protein kinase C. Aghajanian GK. **Brain Res** 1990 Jul 30;524(1):171–4

Differential modulation of monoamine levels and turnover rates by estrogen and/or androgen in hypothalamic and vocal control nuclei of male zebra finches. Barclay SR, et al. **Brain Res** 1990 Jul 23;523(2):251–62

Androgen-dependent vasopressinergic neurons are involved in social recognition in rats. Bluthe RM, et al. **Brain Res** 1990 Jun 11;519(1–2):150–7

Peripheral administration of a long-chain fatty alcohol promotes septal cholinergic neurons survival after fimbria-fornix transection. Borg J, et al. **Brain Res** 1990 Jun 4;518(1–2):295–8

Rostral and caudal ventricular infusion of antibodies to dynorphin A(1–17) and dynorphin A(1–8): effects on electrically-elicited feeding in the rat. Carr KD, et al. **Brain Res** 1990 Jan 22;507(2):289–94

Interaction between the serotonin and dopamine systems in humans: preliminary findings. Castrogiovanni P, et al. **Brain Res** 1989 Dec 11;504(1):129–31

The nucleus basalis is involved in brain modulation of the immune system in rats. Cherkaoui J, et al. **Brain Res** 1990 May 21;516(2):345–8

Inhibitory effect of stimulation of the anterior pretectal nucleus on the jaw-opening reflex. Chiang CY, et al. **Brain Res** 1989 Sep 18;497(2):325–33

Long-term potentiation in slices from subcortically deafferented hippocampi. Czéh G, et al. **Brain Res** 1990 Jun 4;518(1–2):279–82

Modulation of memory processing by neuropeptide Y varies with brain injection site. Flood JF, et al. **Brain Res** 1989 Nov 27;503(1):73–82

Involvement of N-methyl-D-aspartate (NMDA) receptors in respiratory rhythmogenesis. Foutz AS, et al. **Brain Res** 1989 Oct 23;500(1–2):199–208

Glucocorticoids potentiate the dipsogenic action of angiotensin II. Ganesan R, et al. **Brain Res** 1989 Oct 9; 499(1):121–30

Time resolved 3-dimensional recording of redox ratio during spreading depression in gerbil brain. Haselgrove JC, et al. **Brain Res** 1990 Jan 1;506(1):109–14

Attention and eye movement related activation of neurons in the dorsal prelunate gyrus (area DP). Li CY, et al. **Brain Res** 1989 Sep 4;496(1–2):307–13

Involvement of histaminergic neurons in arousal mechanisms demonstrated with H3-receptor ligands in the cat. Lin JS, et al. **Brain Res** 1990 Jul 23;523(2):325–30

Cerebral glucose utilization during sleep-wake cycle in man determined by positron emission tomography and [18F]2-fluoro-2-deoxy-D-glucose method. Maquet P, et al. **Brain Res** 1990 Apr 9;513(1):136–43

A competitive inhibitor of kainic acid binding from the goldfish nervous tissue. Migani P. **Brain Res** 1990 Jun 4; 518(1–2):179–85

Relationship of calcium and adenylate cyclase messenger systems in rat brain synaptosomes. Okada M, et al. **Brain Res** 1989 Oct 30;501(1):23–31

Preservation of integrative function in a perfused guinea pig brain. Richerson GB, et al. **Brain Res** 1990 May 28; 517(1–2):7–18

The interaction of acetylcholinergic and serotonergic neural systems on performance in a continuous non-matching to sample task. Sakurai Y, et al. **Brain Res** 1990 Jun 11; 519(1–2):118–21

Destruction of the hamster serotonergic system by 5,7-DHT: effects on circadian rhythm phase, entrainment and response to triazolam. Smale L, et al. **Brain Res** 1990 May 7;515(1–2):9–19

Pharmacological characterization of the behavioural syndrome induced by the NK-3 tachykinin agonist senktide in rodents: evidence for mediation by endogenous 5-HT. Stoessl AJ, et al. **Brain Res** 1990 May 28;517(1–2):111–6

Somatostatin depresses GABA receptor-mediated inhibition in the rat dorsolateral septal nucleus. Twery MJ, et al. **Brain Res** 1990 Jun 11;519(1–2):277–86

Somatostatin hyperpolarizes neurons and inhibits spontaneous activity in the rat dorsolateral septal nucleus. Twery MJ, et al. **Brain Res** 1989 Sep 18;497(2):315–24

Rat organum vasculosum laminae terminalis in vitro: responses to changes in sodium concentration. Vivas L, et al. **Brain Res** 1990 Jun 11;519(1–2):294–300

Neurobiologic effects of bright artificial light. Dilsaver SC. **Brain Res Brain Res Rev** 1989 Oct-Dec;14(4):311–33

GABA receptors: are cellular differences reflected in function? Matsumoto RR. **Brain Res Brain Res Rev** 1989 Jul-Sep;14(3):203–25 (264 ref.)

Effect of amantadine on motility of reserpinized mice as a function of brain biogenic amines and mouse strains. Messiha FS. **Brain Res Bull** 1989 Oct-Nov;23(4–5):267–71

The functional significance of neonatal 5,7-dihydroxytryptamine lesions in the rat: response to selective 5-HT1A and 5-HT2,1C agonists. Pranzatelli MR, et al. **Brain Res Bull** 1990 Jun;24(6):747–53

Paradoxical sleep-promoting effects of brain extract from paradoxical sleep-deprived rats. Wetzel W, et al. **Brain Res Bull** 1990 Jun;24(6):743–6

Are specific proteins implicated in the learning process of

imprinting? Brown MW, et al.
Brain Res Dev Brain Res 1990 Mar 1;52(1-2):294-7
Sexual dimorphism in brain weight of meadow voles: role of gonadal hormones. Whaling CS, et al.
Brain Res Dev Brain Res 1990 May 1;53(2):270-5
Intracerebral dipole sources of EEG FFT power maps. Lehmann D, et al. **Brain Topogr** 1989 Fall-Winter; 2(1-2):155-64
EEG asymmetries may be affected by cranial and brain parenchymal asymmetries. Myslobodsky MS, et al. **Brain Topogr** 1989 Summer;1(4):221-8
Bilateral alpha distribution and anatomic brain asymmetries. Myslobodsky MS, et al. **Brain Topogr** 1989 Summer; 1(4):229-35
Neuromagnetic investigation of synchronized spontaneous activity. Narici L, et al. **Brain Topogr** 1989 Fall-Winter; 2(1-2):19-30
Dynamics of brain electrical activity. Rapp PE, et al. **Brain Topogr** 1989 Fall-Winter;2(1-2):99-118
Probability mapping: power and coherence analyses of cognitive processes. Rappelsberger P, et al. **Brain Topogr** 1988 Fall;1(1):46-54
Neuromagnetic functional localization: principles, state of the art, and perspectives. Romani GL, et al. **Brain Topogr** 1988 Fall;1(1):5-21 (108 ref.)
Functional imaging of brain responses to repetitive sensory stimulation: sources estimated from EEG and SPECT. Weinberg H, et al. **Brain Topogr** 1989 Fall-Winter; 2(1-2):171-80
Advances in neuromagnetic instrumentation and studies of spontaneous brain activity. Williamson SJ, et al. **Brain Topogr** 1989 Fall-Winter;2(1-2):129-39
Pressor responses of clonidine injected into some prosencephalic areas of conscious rats. Colombari E, et al. **Braz J Med Biol Res** 1989;22(6):769-71
Evidence for a dopaminergic mechanism for the diuretic and natriuretic action of centrally administered atrial natriuretic factor. Israel A, et al. **Cell Mol Neurobiol** 1989 Sep; 9(3):369-78
Platelet-activating factor--key mediator in neuroinjury? Frerichs KU, et al. **Cerebrovasc Brain Metab Rev** 1990 Summer;2(2):148-60 (54 ref.)
Differential cardiovascular effects of centrally administered vasopressin in conscious Long Evans and Brattleboro rats. Harland D, et al. **Circ Res** 1989 Oct;65(4):925-33
Central beta-adrenergic mechanisms may modulate ischemic ventricular fibrillation in pigs. Parker GW, et al. **Circ Res** 1990 Feb;66(2):259-70
Minimum cortical processing time. Deshmukh VD. **Clin Electroencephalogr** 1990 Jan;21(1):12-3
Ingestion of carbohydrates varying in complexity produce differential brain responses. Fishbein DH, et al. **Clin Electroencephalogr** 1990 Jan;21(1):5-11
Further studies on the noradrenergic and the renin-angiotensin systems in the brain of the rat. Kurnjek ML, et al. **Clin Exp Hypertens [A]** 1990;12(4):631-45
Central infusion of aldosterone increases blood pressure by mechanisms independent of Na retention. Peysner K, et al. **Clin Exp Hypertens [A]** 1990;12(3):399-414
Peripheral and central mechanisms of baroreflex resetting. Chapleau MW, et al. **Clin Exp Pharmacol Physiol Suppl** 1989;15:31-43 (46 ref.)
Impedance changes during evoked nervous activity in human subjects: implications for the application of applied potential tomography (APT) to imaging neuronal discharge. Holder DS. **Clin Phys Physiol Meas** 1989 Aug; 10(3):267-74
Response of the human brain to a hypercapnic acid load in vivo. Cadoux-Hudson TA, et al. **Clin Sci** 1990 Jul;79(1):1-3
Multivariate Box-Cox transformations with applications to neurometric data. Biscay Lirio R, et al. **Comput Biol Med** 1989;19(4):263-7 (21 ref.)
Interhemispheric interaction: how do the hemispheres divide and conquer a task? Banich MT, et al. **Cortex** 1990 Mar; 26(1):77-94
Asymmetries in face perception: component processes, face specificity and expertise effects. Rhodes G, et al. **Cortex** 1990 Mar;26(1):13-32
Hemispheric memory for surrealistic versus realistic paintings. Zaidel DW, et al. **Cortex** 1989 Dec;25(4):617-41 (34 ref.)
Hemispheric differences in odour recognition. Zucco GM, et al. **Cortex** 1989 Dec;25(4):607-15
Cerebral physiologic monitoring. Rogers AT, et al. **Crit Care Clin** 1989 Oct;5(4):845-61 (65 ref.)
Regulation of rat ileal water absorption by central alpha 2 adrenergic receptors. Fogel R, et al. **Dig Dis Sci** 1990 Jun; 35(6):737-42
Neurobiology of brain-gut interactions. Implications for ulcer disease. Hernandez DE. **Dig Dis Sci** 1989 Dec; 34(12):1809-16 (110 ref.)
Endorectal cerebral evoked potentials [letter; comment] Meunier PD. **Dig Dis Sci** 1990 Apr;35(4):539-40 Comment on: Dig Dis Sci 1989 Feb;34(2):202-5.
Abstracts of the XIIth International Congress of Electroencephalography and Clinical Neurophysiology. Rio de Janeiro, Brazil, January 14-19, 1990. **Electroencephalogr Clin Neurophysiol** 1990 Jan; 75(1):S1-165
Dutch Society for EEG and Clinical Neurophysiology. Utrecht, 7 October 1989. **Electroencephalogr Clin Neurophysiol** 1990 Apr; 75(4):33P-34P
Evoked potentials. Brain stimulation. **Electroencephalogr Clin Neurophysiol** 1989 Nov-Dec; 74(6):401-85
Rocky Mountain Conference on Modern Clinical Neurophysiology, Western EEG Society, Eastern EEG Association, European Alpine EEG Group joint meeting. Park City, UT, 29 January-3 February 1989. Abstracts. **Electroencephalogr Clin Neurophysiol** 1990 Feb; 75(2):4P-10P
Effects of mnemonic strategy manipulation in a Von Restorff paradigm. Fabiani M, et al. **Electroencephalogr Clin Neurophysiol** 1990 Feb;75(2):22-35
Brain electrical field measurements unaffected by linked earlobes reference. Gonzalez Andino SL, et al. **Electroencephalogr Clin Neurophysiol** 1990 Mar; 75(3):155-60
Cerebral potentials preceding unilateral and simultaneous bilateral finger movements. Kristeva R, et al. **Electroencephalogr Clin Neurophysiol** 1979 Aug; 47(2):229-38
Observations on the passive electrical properties of the envelopes of cat brain. Rayport M, et al. **Electroencephalogr Clin Neurophysiol** 1966 May;20(5):513-9
Reinnervation of peripheral nerve grafts by spinal cord fibres tested by transcranial brain stimulation. Terzis JK, et al. **Electromyogr Clin Neurophysiol** 1989 Nov-Dec; 29(7-8):417-23
Melatonin signal transduction in hamster brain: inhibition of adenylyl cyclase by a pertussis toxin-sensitive G protein. Carlson LL, et al. **Endocrinology** 1989 Nov;125(5):2670-6
Regulation of rat brain/HepG2 glucose transporter gene expression by phorbol esters in primary cultures of neuronal and astrocytic glial cells. Mudd LM, et al. **Endocrinology** 1990 Jan;126(1):545-9
Differential central effects of mineralocorticoid and glucocorticoid agonists and antagonists on blood pressure. van den Berg DT, et al. **Endocrinology** 1990 Jan; 126(1):118-24
Centrally induced feline emotional behavior and limbic kindling. Hiyoshi T, et al. **Epilepsia** 1990 May-Jun; 31(3):259-69
Opiate dependence alters central reward of nalbuphine or pentazocine plus tripelennamine. Huston-Lyons D, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):153-7
GBR 12909 reverses the SCH 23390 inhibition of rewarding effects of brain stimulation. Rompré PP, et al. **Eur J Pharmacol** 1990 Jun 21;182(1):181-4
Source localization of two evoked magnetic field components using two alternative procedures. Papanicolaou AC, et al. **Exp Brain Res** 1990;80(1):44-8
Ascending and descending projections to medullary reticular formation sites which activate deep lumbar back muscles in the rat. Robbins A, et al. **Exp Brain Res** 1990; 80(3):463-74
Visual response properties of pretectal units in the nucleus of the optic tract of the opossum. Volchan E, et al. **Exp Brain Res** 1989;78(2):380-6
Electroencephalographic activity of the isolated hemicerebrum of the cat. Berlucchi G. **Exp Neurol** 1966 Jun;15(2):220-8
Pallidal and entopeduncular intracellular responses to striatal, cortical, thalamic, and sensory inputs. Levine MS, et al. **Exp Neurol** 1974 Sep;44(3):448-60
Classical eyeblink conditioning in the bilaterally hemispherectomized cat. Norman RJ, et al. **Exp Neurol** 1974 Sep;44(3):363-80
Central melatonin receptors: implications for a mode of action. Morgan PJ, et al. **Experientia** 1989 Oct 15; 45(10):955-65 (91 ref.)
Central cholinergic synaptic transmission. **Experientia Suppl** 1989;57:1-321
Presynaptic cholinergic action in the hippocampus. Segal M, et al. **Experientia Suppl** 1989;57:88-96
Nicotine receptors in the mammalian brain. Luetje CW, et al. **FASEB J** 1990 Jul;4(10):2753-60 (78 ref.)
Abusive stimulation of excitatory amino acid receptors: a strategy to limit neurotoxicity. Manev H, et al. **FASEB J** 1990 Jul;4(10):2789-97 (46 ref.)
Cerebral motor potentials in voluntary movements. Baykoushev S, et al. **Folia Med (Plovdiv)** 1989;31(1):16-9
Ascorbate- and hemoglobin-dependent brain chemiluminescence. Prat AG, et al. **Free Radic Biol Med** 1990;8(4):319-25
Psychology without brain. Sanvito WL. **Funct Neurol** 1989 Jul-Sep;4(3):225-8
Neuromagnetism: a new approach for localizing brain function. Tepley N. **Funct Neurol** 1989 Oct-Dec;4(4):321-5 (19 ref.)
Neuropeptide Y: localization in the central nervous system and neuroendocrine functions. Danger JM, et al. **Fundam Clin Pharmacol** 1990;4(3):307-40 (156 ref.)
Oral prostaglandin E analogues induce intestinal migrating motor complexes after a meal in dogs. Evidence for a central mechanism. Staumont G, et al. **Gastroenterology** 1990 Apr;98(4):888-93
Central nervous system action of peptides to influence gastrointestinal motor function. Taché Y, et al. **Gastroenterology** 1990 Feb;98(2):517-28 (132 ref.)
Central neurotensin inhibits gastric acid secretion: an adrenergic mechanism in rats. Zhang L, et al. **Gastroenterology** 1989 Nov;97(5):1130-4
The spatial metric of brain underlying the temporal metric of EEG and thought. Weiss V. **Gegenbaurs Morphol Jahrb** 1990;136(1):79-87 (49 ref.)
A putative neuroendocrine factor that stimulates glycogen mobilization in isolated glycogen cells from the marine mussel Mytilus edulis. Robbins I, et al. **Gen Comp Endocrinol** 1990 Jul;79(1):123-9
First International Capri Conference on Brain and Female Reproductive Function: Basic and Clinical Aspects. Abstracts. Capri (Italy), May 25th-30th, 1987. **Gynecol Endocrinol** 1987;1 Suppl 1:1-116
Vasoactive intestinal polypeptide-like immunoreactivity during reproduction in doves: influence of experience and number of offspring. Cloues R, et al. **Horm Behav** 1990 Jun;24(2):215-31
Neuroendocrine, behavioral, and morphological changes associated with the termination of the reproductive period in a natural population of male rough-skinned newts (Taricha granulosa). Deviche P, et al. **Horm Behav** 1990 Jun;24(2):284-300
Cognition and connectionism. Kassirer JP, et al. **Hosp Pract [Off]** 1990 Feb 15;25(2):15, 23-6
Central role for vasopressin in cardiovascular regulation and the pathogenesis of hypertension. Berecek KH, et al. **Hypertension** 1990 Sep;16(3):213-24 (118 ref.)
Effect of gender in centrally induced angiotensin II hypertension in dogs. Doursout MF, et al. **Hypertension** 1990 Feb;15(2 Suppl):I117-20
Pathways of angiotensin formation and function in the brain. Ferrario CM, et al. **Hypertension** 1990 Feb;15(2 Suppl):I13-9 (42 ref.)
Vasoconstriction during volume expansion is independent of central control. Hinojosa-Laborde C, et al. **Hypertension** 1990 Jun;15(6 Pt 2):712-7
On the numerical accuracy of the boundary element method. Meijs JW, et al. **IEEE Trans Biomed Eng** 1989 Oct; 36(10):1038-49
On the assembly mechanism of neurofilaments. Tokutake S. **Int J Biochem** 1990;22(1):1-6 (32 ref.)
Peroxidative stress and cerebral aging. Fariello RG. **Int J Clin Pharmacol Res** 1990;10(1-2):49-51 (14 ref.)
A proposed strategy for international collaborative research in brain aging and Alzheimer's disease. Khachaturian ZS, et al. **Int J Clin Pharmacol Res** 1990;10(1-2):3-5
Neuroendocrine aspects of cerebral aging. McEwen BS, et al. **Int J Clin Pharmacol Res** 1990;10(1-2):7-14 (48 ref.)
Cerebral blood flow response to the tissue temperature in tumour and brain tissues. Satoh T, et al. **Int J Hyperthermia** 1989 Nov-Dec;5(6):683-96
On the application of molecular cloning to developmental neurobiology. Schrier BK, et al. **Int J Neurol** 1982-83; 16-17:46-60
Neuropeptides induce directional asymmetry in brain and spinal cord: facts and hypotheses. Bakalkin GYa. **Int J Neurosci** 1989 Sep;48(1-2):105-24 (110 ref.)
Orchestration of multiple codes in developing readers: an alternative model of lexical access. Berninger VW. **Int J Neurosci** 1989 Sep;48(1-2):85-104
EEG mapping including patients with normal and altered states of hypnotic consciousness under the parameter of posthypnosis. Bick CH. **Int J Neurosci** 1989 Jul; 47(1-2):15-30
An EEG-mapping study of "laughing": coherence and brain dominances. Bick CH. **Int J Neurosci** 1989 Jul; 47(1-2):31-40
The use of the Morris Water Maze in the study of memory and learning. Brandeis R, et al. **Int J Neurosci** 1989 Sep; 48(1-2):29-69 (72 ref.)
Conjugate lateral eye movements: a second look. Charlton S, et al. **Int J Neurosci** 1989 Sep;48(1-2):1-18 (130 ref.)
Ultradian rhythms of right and left hemisphere function. Gordon HW, et al. **Int J Neurosci** 1989 Jul;47(1-2):57-65
Brain activity and blood flow velocity changes: a transcranial Doppler study. Harders AG, et al. **Int J Neurosci** 1989 Jul;47(1-2):91-102
Ultradian rhythms in cerebral laterality tested by a verbal dichotic listening paradigm. Meier-Koll A. **Int J Neurosci** 1989 Jul;47(1-2):115-24
Hemispheric asymmetry and the processing of harmonies in music. Preisler A, et al. **Int J Neurosci** 1989 Jul; 47(1-2):131-40
Does brain electrical activity react to music? Ramos J, et al. **Int J Neurosci** 1989 Aug;47(3-4):351-7
Connectionism and an inescapable defect. Stowell H. **Int J Neurosci** 1989 Aug;47(3-4):309-15
Field model of consciousness: EEG coherence changes as indicators of field effects. Travis FT, et al. **Int J Neurosci** 1989 Dec;49(3-4):203-11
Human cerebral dominance and significance of a subconscious sensor for detecting auditory signals. Tsunoda T. **Int J Neurosci** 1989 Jul;47(1-2):149-58
Complementary functions of the two brain hemispheres: comparisons with earlier conceptions and implications for individual and society. Zeier H. **Int J Neurosci** 1989 Jul; 47(1-2):175-9
Psychophysiological micromapping of the human brain. Bechtereva NP, et al. **Int J Psychophysiol** 1989 Nov; 8(2):107-35
Dynamics of central nervous activation during motor imagination. Beyer L, et al. **Int J Psychophysiol** 1990 Jul; 9(1):75-80
Event-related potential evidence of semantic mismatch in

a 'same–different' reaction time task. Czigler I, et al. **Int J Psychophysiol** 1989 Nov;8(2):185–7

ERP study of the development of the holistic and analytic modes of processing between 6 and 8 years. Robaey P, et al. **Int J Psychophysiol** 1989 Nov;8(2):145–53

Electrophysiological characterization of contact sites in brain mitochondria [published erratum appears in J Biol Chem 1990 Jul 5;265(19):11405] Moran O, et al. **J Biol Chem** 1990 Jan 15;265(2):908–13

The renin–angiotensin system: importance in physiology and pathology. Ferrario CM. **J Cardiovasc Pharmacol** 1990;15 Suppl 3:S1–5 (28 ref.)

J1–160 and J1–180 are oligodendrocyte–secreted nonpermissive substrates for cell adhesion. Pesheva P, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1765–78

Enhanced expression of an exocrine pancreatic protein in Alzheimer's disease and the developing human brain. de la Monte SM, et al. **J Clin Invest** 1990 Sep;86(3):1004–13

Brain stimulation revisited. Cracco JB, et al. **J Clin Neurophysiol** 1990 Jan;7(1):3–15

Mechanisms of sleep control. Siegel JM. **J Clin Neurophysiol** 1990 Jan;7(1):49–65 (100 ref.)

Regeneration of the neurohemal terminals for identified cerebral neurosecretory cells in an insect. Agui N, et al. **J Comp Neurol** 1989 Nov 8;289(2):337–47

Organization of the histaminergic system in the brain of the turtle Chinemys reevesii. Inagaki N, et al. **J Comp Neurol** 1990 Jul 1;297(1):132–44

Capsaicin–induced neuronal degeneration in the brain and retina of preweanling rats. Ritter S, et al. **J Comp Neurol** 1990 Jun 15;296(3):447–61

Ultrasound sensitive neurons in the cricket brain. Brodfuehrer PD, et al. **J Comp Physiol [A]** 1990 Mar;166(5):651–62

Distinct mechanisms of modulation in a neuronal oscillator generate different social signals in the electric fish Hypopomus. Kawasaki M, et al. **J Comp Physiol [A]** 1989 Oct;165(6):731–41

Central angiotensin II stimulates arteriolar vasomotion in conscious hamsters. Rettig R, et al. **J Comp Physiol [B]** 1989;159(5):577–82

Relationship between fetal electrocorticographic changes and umbilical blood flow in the near–term sheep fetus. Slotten P, et al. **J Dev Physiol** 1989 Jan;11(1):19–23

Information processing in the taste system of primates. Rolls ET. **J Exp Biol** 1989 Sep;146:141–64 (70 ref.)

The neural encoding of the location of targets for saccadic eye movements. Sparks DL. **J Exp Biol** 1989 Sep; 146:195–207 (41 ref.)

A subpopulation of cerebral B cluster neurones of Aplysia californica is involved in defensive head withdrawal but not appetitive head movements. Teyke T, et al. **J Exp Biol** 1989 Nov;147:1–20

Nonmammalian vertebrate models in studies of brain–steroid interactions. Callard G, et al. **J Exp Zool Suppl** 1990;4:6–16 (71 ref.)

Recent findings on the development of dimorphic anatomy in the avian song system. DeVoogd TJ. **J Exp Zool Suppl** 1990;4:183–6

Brain corticosteroid receptors and regulation of arterial blood pressure. van den Berg DT, et al. **J Hypertens Suppl** 1989 Dec;7(6):S202–3

Different regulation of serotonin receptors following adrenal hormone imbalance in the rat hippocampus and hypothalamus. Martire M, et al. **J Neural Transm** 1989; 78(2):109–20

Oxaprotiline enantiomers given repeatedly and brain alpha–adrenoceptors. Maj J, et al. **J Neural Transm Gen Sect** 1990;80(3):213–23

Conditioning of morphine–induced locomotor activity and stereotyped behaviour in rats. Walter S, et al. **J Neural Transm Gen Sect** 1989;78(3):231–47

Role of excitatory amino acid neurotransmission in synaptic plasticity and pathology. An integrative hypothesis concerning the pathogenesis and evolutionary advantages of schizophrenia–related genes. Etienne P, et al. **J Neural Transm Suppl** 1990;29:39–48 (59 ref.)

Some effects of CNS cholinergic neurons on memory. Goto T, et al. **J Neural Transm Suppl** 1990;30:1–11

Are separable aromatase systems involved in hormonal regulation of the male brain? Hutchison JB, et al. **J Neurobiol** 1990 Jul;21(5):743–59

Addition of song–related neurons in swamp sparrows coincides with memorization, not production, of learned songs. Nordeen KW, et al. **J Neurobiol** 1989 Oct; 20(7):651–61

Role of postnatal androgens in sexual differentiation of the lordosis–inhibiting effect of central injections of cholecystokinin. Ulibarri C, et al. **J Neurobiol** 1990 Jul; 21(5):796–807

Molecular cloning of microtubule–associated protein 1 (MAP1A) and microtubule–associated protein 5 (MAP1B): identification of distinct genes and their differential expression in developing brain. Garner CC, et al. **J Neurochem** 1990 Jul;55(1):146–54

Neurotensin regulation of endogenous acetylcholine release from rat cerebral cortex: effect of quinolinic acid lesions of the basal forebrain. Lapchak PA, et al. **J Neurochem** 1990 Oct;55(4):1397–403

Suppression of clinical weakness in experimental autoimmune encephalomyelitis associated with weight changes, and post–decapitation convulsions after intracisternal–ventricular administration of 6–hydroxydopamine. Konkol RJ, et al. **J Neuroimmunol** 1990 Jan;26(1):25–34

Evidence for the involvement of the central adrenergic system in the febrile response induced by interleukin–1 in rats. Ovadia H, et al. **J Neuroimmunol** 1989 Dec; 25(2–3):109–16

Second meeting of the European Neurological Society. 30 June–5 July 1990 Brighton, UK. Abstracts. **J Neurol** 1990 Jul;237 Suppl 1:S1–115

Central motor conduction time to bulbocavernosus muscle: evaluation by magnetic brain stimulation and testing of bulbocavernosus reflex. Dressler D, et al. **J Neurol** 1990 Jul;237(4):239–41

The brain in aged elephants [letter; comment] Cole G, et al. **J Neuropathol Exp Neurol** 1990 Mar;49(2):190–2 Comment on: J Neuropathol Exp Neurol 1988 Nov;47(6):629–41.

Suppressive control of the crustacean pyloric network by a pair of identified interneurons. I. Modulation of the motor pattern. Cazalets JR, et al. **J Neurosci** 1990 Feb; 10(2):448–57

Suppressive control of the crustacean pyloric network by a pair of identified interneurons. II. Modulation of neuronal properties. Cazalets JR, et al. **J Neurosci** 1990 Feb; 10(2):458–68

Neural circuits mediating visual flight control in flies. II. Separation of two control systems by microsurgical brain lesions. Hausen K, et al. **J Neurosci** 1990 Jan;10(1):351–60

Neuromodulation of the crab pyloric central pattern generator by serotonergic/cholinergic proprioceptive afferents. Katz PS, et al. **J Neurosci** 1990 May; 10(5):1495–512

14C–2–deoxyglucose uptake in the ground squirrel brain during entrance to and arousal from hibernation. Kilduff TS, et al. **J Neurosci** 1990 Jul;10(7):2463–75

Retinal graft–mediated pupillary responses in rats: restoration of a reflex function in the mature mammalian brain. Klassen H, et al. **J Neurosci** 1990 Feb;10(2):578–87

Identified serotonergic neurons LCB1 and RCB1 in the cerebral ganglia of Aplysia produce presynaptic facilitation of siphon sensory neurons. Mackey SL, et al. **J Neurosci** 1989 Dec;9(12):4227–35

Construction of a protoglomerular template by olfactory axons initiates the formation of olfactory glomeruli in the insect brain. Oland LA, et al. **J Neurosci** 1990 Jul; 10(7):2096–112

Brain pathways for learned and unlearned vocalizations differ in zebra finches. Simpson HB, et al. **J Neurosci** 1990 May; 10(5):1541–56

Distinct patterns of expression of two VAMP genes within the rat brain. Trimble WS, et al. **J Neurosci** 1990 Apr; 10(4):1380–7

Delayed, frequency–specific inhibition in the cochlear nuclei of mice: a mechanism for monaural echo suppression. Wickesberg RE, et al. **J Neurosci** 1990 Jun;10(6):1762–8

Investigation of multiple simultaneously active brain sources in the electroencephalogram. Baumgartner C, et al. **J Neurosci Methods** 1989 Nov;30(2):175–84

Measuring threshold of reinforcing brain stimulation by the method of constant stimuli. Buscher W, et al. **J Neurosci Methods** 1990 Mar;31(3):225–34

Development of a computer program classifying rat sleep stages. Itowi N, et al. **J Neurosci Methods** 1990 Feb; 31(2):137–43

A multiwire microelectrode for single unit recording in deep brain structures. Jaeger D, et al. **J Neurosci Methods** 1990 May;32(2):143–8

New method of transplanting purified glial cells into the brain. Montgomery CT, et al. **J Neurosci Methods** 1990 May;32(2):135–41

Psychophysical methods for study of sensory–motor behavior using a food–carrying (hoarding) task in rodents. Whishaw IQ, et al. **J Neurosci Methods** 1990 May;32(2):123–33

Behavioral effects of 8–OH–DPAT: studies using the Microtaxic ventricular injector. Wieland S, et al. **J Neurosci Methods** 1989 Nov;30(2):151–9

Distribution of movement–related cortical potential upon jaw–biting in humans. Tanaka Y, et al. **J Nihon Univ Sch Dent** 1989 Sep;31(3):518–25

Approach–withdrawal and cerebral asymmetry: emotional expression and brain physiology. I. Davidson RJ, et al. **J Pers Soc Psychol** 1990 Feb;58(2):330–41

Electrophysiological evidence for interhemispheric transmission of visual information in man. Berardi N, et al. **J Physiol (Lond)** 1989 Apr;411:207–25

Cerebral regulation of renal sodium excretion in sheep infused intravenously with hypertonic NaCl. Chodobski A, et al. **J Physiol (Lond)** 1989 Nov;418:273–91

Task–dependent changes in the size of response to magnetic brain stimulation in human first dorsal interosseous muscle. Datta AK, et al. **J Physiol (Lond)** 1989 Nov;418:13–23

Some effects of advanced aging on the visual–language processing capacity of the left and right hemispheres: evidence from unilateral tachistoscopic viewing. Rastatter MP, et al. **J Speech Hear Res** 1990 Mar;33(1):134–40

Gamma distribution model describes maturational curves for delta wave amplitude, cortical metabolic rate and synaptic density. Feinberg I, et al. **J Theor Biol** 1990 Jan 23; 142(2):149–61

The effect of propranolol on the cerebral electrical response to deep hypothermia and total circulatory arrest in lambs. Azariades M, et al. **J Thorac Cardiovasc Surg** 1990 Jun; 99(6):1030–6; discussion 1036–7

Intermittent hypothermic asanguineous cerebral perfusion (cerebroplegia) protects the brain during prolonged circulatory arrest. A phosphorus 31 nuclear magnetic resonance study. Robbins RC, et al. **J Thorac Cardiovasc Surg** 1990 May;99(5):878–84

A new technique for assessing the efferent innervation of the human striated urethral sphincter. Eardley I, et al. **J Urol** 1990 Oct;144(4):948–51

Biomagnetometry provides a new compass for exploring the brain and heart [news] Skolnick A. **JAMA** 1990 Feb 2; 263(5):623, 627

Direct evidence indicating that a GABA–mimetic stimulates acid secretion through central mechanisms. Hara N, et al. **Jpn J Pharmacol** 1990 Jun;53(2):271–4

The relation between EEG and mental development following cardiac surgery performed under simple deep hypothermia in children. Iwamoto I, et al. **Jpn J Surg** 1990 Mar;20(2):158–62

Substrate dependency of neurite outgrowth from adult human chromaffin cells. Inhibitory effects of human brain tissue. Flaris N, et al. **Lab Invest** 1990 Apr;62(4):493–7

Effects of the selective kappa opioid antagonist, nor–binaltorphimine, on electrically–elicited feeding in the rat. Carr KD, et al. **Life Sci** 1989;45(19):1787–92

Distribution of kappa opioid receptors in the brain of young and old male rats. Maggi R, et al. **Life Sci** 1989; 45(22):2085–92

Interhemispheric regulation of dopaminergic ascending systems. Rodriguez M, et al. **Life Sci** 1990;47(5):377–84

Serotonin involvement in analgesia induced by transcranial electrostimulation. Warner R, et al. **Life Sci** 1990; 46(16):1131–8

Alternative pathways for drainage of cerebrospinal fluid in the canine brain. Leeds SE, et al. **Lymphology** 1989 Sep; 22(3):144–6

Changes of mouse brain gangliosides during aging from young adult until senescence. Ohsawa T. **Mech Ageing Dev** 1989 Nov;50(2):169–77

Interactions between non–symmetric mechanical vector forces in the body and the autonomic nervous system: basic requirements for any mechanical technique to engender long–term improvements in autonomic function as well as in the functional efficiency of the respiratory, cardiovascular, and brain systems. Kullok S, et al. **Med Hypotheses** 1990 Feb;31(2):91–7 (38 ref.)

Riley–Day syndrome, brain stimulation and the genetic engineering of a world without pain. Mancini LS. **Med Hypotheses** 1990 Mar;31(3):201–7 (13 ref.)

Atrial natriuretic factor in central nervous system regulatory mechanisms: effect of experimental alterations in water and salt homeostasis and blood pressure. Palkovits M, et al. **Miner Electrolyte Metab** 1990;16(1):42–7

Identification of a novel neuronal C–SRC exon expressed in human brain. Pyper JM, et al. **Mol Cell Biol** 1990 May; 10(5):2035–40

Effect of the lipid environment on the differential affinity of purified cerebral and atrial muscarinic acetylcholine receptors for pirenzepine. Berstein G, et al. **Mol Pharmacol** 1989 Oct;36(4):601–7

Regulation of muscarinic receptor subtypes and their responsiveness in rat brain following chronic atropine administration. Lee W, et al. **Mol Pharmacol** 1989 Nov; 36(5):749–57

Central 5–hydroxytryptamine receptor–linked protein kinase C translocation: a functional postsynaptic signal transduction system. Wang HY, et al. **Mol Pharmacol** 1990 Jan;37(1):75–9

Brain, behavior, and immunity: an interactive system. Rubinow DR. **Monogr Natl Cancer Inst** 1990;(10):79–82 (34 ref.)

High altitude and the central nervous system [letter] **N Engl J Med** 1990 Jun 21;322(25):1821–2

Does the brain know the physics of specular reflection? Blake A, et al. **Nature** 1990 Jan 11;343(6254):165–8

Sensory–motor control: listening to the voice within [news; comment] Grinnell AD. **Nature** 1989 Oct 12; 341(6242):488–9 Comment on: Nature 1989 Oct 12;341(6242):526–32.

A possible neuronal basis for Doppler–shift compensation in echo–locating horseshoe bats [see comments] Metzner W. **Nature** 1989 Oct 12;341(6242):529–32 Comment in: Nature 1989 Oct 12;341(6242):488–9.

Neurophysiological and behavioral development in birds: song learning as a model system. Clayton N, et al. **Naturwissenschaften** 1990 Mar;77(3):123–7 (42 ref.)

Neurotrophic factors: can the degenerating brain be induced to heal itself? [editorial] Bartus RT. **Neurobiol Aging** 1989 Sep–Oct;10(5):513

Age and fitness effects on EEG, ERPs, visual sensitivity, and cognition. Dustman RE, et al. **Neurobiol Aging** 1990 May–Jun;11(3):193–200

Age–related alteration in excitatory amino acid neurotransmission in rat brain. Najlerahim A, et al. **Neurobiol Aging** 1990 Mar–Apr;11(2):155–8

Learning–induced change in neural activity during acquisition and consolidation of a passive avoidance response in the rat. Doyle E, et al. **Neurochem Res** 1990 May;15(5):551–8

Analysis of neural dynamics and memory organization. Anishetty R, et al. **Neurol Res** 1989 Dec;11(4):233–7

B–waves in healthy persons. Mautner–Huppert D, et al.

Neurol Res 1989 Dec;11(4):194–6
Brain tissue elasticity and CSF elastance. Walsh EK, et al. Neurol Res 1990 Jun;12(2):123–7
Localizing the site of magnetic brain stimulation in humans. Epstein CM, et al. Neurology 1990 Apr;40(4):666–70
Differential G protein–mediated coupling of neurotransmitter receptors to Ca2+ channels in rat dorsal root ganglion neurons in vitro. Ewald DA, et al. Neuron 1989 Feb; 2(2):1185–93
Developmental changes in the cellular composition of a brain nucleus involved with song learning in zebra finches. Korsia S, et al. Neuron 1989 Oct;3(4):451–60
A family of calcium–dependent potassium channels from rat brain. Reinhart PH, et al. Neuron 1989 Jan;2(1):1031–41
Cloning and expression of cDNA and genomic clones encoding three delayed rectifier potassium channels in rat brain. Swanson R, et al. Neuron 1990 Jun;4(6):929–39
Evidence for a physiological role of nerve growth factor in the central nervous system of neonatal rats. Vantini G, et al. Neuron 1989 Sep;3(3):267–73
Pyroglutamyl peptidase II inhibition specifically increases recovery of TRH released from rat brain slices. Charli JL, et al. Neuropeptides 1989 Oct;14(3):191–6
Comparison of isomers of ketamine on catalepsy in the rat and electrical activity of the brain and behavior in the cat. Benthuysen JL, et al. Neuropharmacology 1989 Oct; 28(10):1003–9
Dissociation of the attentional and motivational effects of pimozide on the threshold for rewarding brain stimulation. Bird M, et al. Neuropsychopharmacology 1990 Feb; 3(1):33–40
Effect of zopiclone and midazolam on sleep and EEG spectra in a phase–advanced sleep schedule. Trachsel L, et al. Neuropsychopharmacology 1990 Feb;3(1):11–8
MR imaging of the various stages of normal myelination during the first year of life. van der Knaap MS, et al. Neuroradiology 1990;31(6):459–70
Influence of morphine on behavioral effects of pharmacological stimulation of cholinergic structures of the cat brain. Shugalev NP. Neurosci Behav Physiol 1990 Jan–Feb;20(1):32–3
The neural basis of reward and reinforcement: a conference in honour of Peter M. Milner. November 18–21, 1988. Proceedings. Neurosci Biobehav Rev 1989 Summer–Fall; 13(2–3):59–186
Sexual motivation: a neural and behavioural analysis of the mechanisms underlying appetitive and copulatory responses of male rats. Everitt BJ. Neurosci Biobehav Rev 1990 Summer;14(2):217–32 (97 ref.)
Subtypes of dopamine receptors involved in the mechanism of reinforcement. Nakajima S. Neurosci Biobehav Rev 1989 Summer–Fall;13(2–3):123–8 (46 ref.)
Neurochemical correlates of brain–stimulation reward measured by ex vivo and in vivo analyses. Phillips AG, et al. Neurosci Biobehav Rev 1989 Summer–Fall; 13(2–3):99–104 (30 ref.)
Toward a cellular analysis of intracranial self–stimulation: contributions of collision studies. Shizgal P. Neurosci Biobehav Rev 1989 Summer–Fall;13(2–3):81–90 (56 ref.)
Reward or reinforcement: what's the difference? White NM. Neurosci Biobehav Rev 1989 Summer–Fall;13(2–3):181–6 (93 ref.)
Opiate reward: sites and substrates. Wise RA. Neurosci Biobehav Rev 1989 Summer–Fall;13(2–3):129–33 (81 ref.)
Responses of regional cerebral blood flow following focal electrical stimulation of the nucleus basalis of Meynert and the medial septum using the [14C]iodoantipyrine method in rats. Adachi T, et al. Neurosci Lett 1990 May 4; 112(2–3):263–8
Spermine and philanthotoxin potentiate excitatory amino acid responses of Xenopus oocytes injected with rat and chick brain RNA. Brackley P, et al. Neurosci Lett 1990 Jun 22; 114(1):51–6
NMDA antagonists interact with 5–HT–stimulated phosphatidylinositol metabolism and impair passive avoidance retention in the rat. Gandolfi O, et al. Neurosci Lett 1990 Jun 8;113(3):304–8
Brain membrane fluidity and lipid peroxidation in Alzheimer's disease. Hajimohammadreza I, et al. Neurosci Lett 1990 May 4;112(2–3):333–7
Do event–related potentials to infrequent decrements in duration of auditory stimuli demonstrate a memory trace in man? Näätänen R, et al. Neurosci Lett 1989 Dec 15; 107(1–3):347–52
Neuroanatomical substrates regulating rat conflict behavior evidenced by brain lesioning. Yamashita K, et al. Neurosci Lett 1989 Sep 25;104(1–2):195–200
Abstracts of the eighth national meeting of the Brain Research Association. Bristol, U.K., 26–28 March 1990. Neurosci Lett Suppl 1990;38:S1–139
Kuniomi Ishimori and the first discovery of sleep–inducing substances in the brain. Kubota K. Neurosci Res 1989 Aug; 6(6):497–518
Abstracts of the thirteenth annual meeting of the Japan Neuroscience Society. Niigata, Japan, October 2–4, 1989. Neurosci Res Suppl 1990;11:S1–147
Paired–pulse facilitation in the nucleus accumbens following stimulation of subicular inputs in the rat. Boeijinga PH, et al. Neuroscience 1990;35(2):301–11
GABAA receptor–mediated chloride flux in brain homogenates from rat lines with differing innate alcohol sensitivities. Korpi ER, et al. Neuroscience 1989; 32(2):387–92
Locomotor recovery in spinal–transected lamprey: regenerated spinal coordinating neurons and mechanosensory inputs couple locomotor activity across a spinal lesion. McClellan AD. Neuroscience 1990; 35(3):675–85
Enhanced dopamine receptor activation in accumbens and frontal cortex has opposite effects on medial forebrain bundle self–stimulation. Olds ME. Neuroscience 1990; 35(2):313–25
Microglia in retinae transplanted to the central nervous system. Perry VH, et al. Neuroscience 1989;31(2):453–62
Magnetic mu rhythm in man. Tiihonen J, et al. Neuroscience 1989;32(3):793–800
The effects of anesthesia on osmotic blood–brain barrier disruption. Gumerlock MK, et al. Neurosurgery 1990 Feb; 26(2):268–77
Deep brain stimulation for control of intractable pain in humans, present and future: a ten–year follow–up. Kumar K, et al. Neurosurgery 1990 May;26(5):774–81; discussion 781–2
Imaging of brain tissue pH and metabolites. A new approach for the validation of volume–selective NMR spectroscopy. Höhn–Berlage M, et al. NMR Biomed 1989 Dec; 2(5–6):240–5 (17 ref.)
Thoughts about spinal actions and cerebral reflections in movement. Pool GM. Paraplegia 1989 Oct;27(5):340–4
Brain neuron gene expression in the organization of innate and acquired behaviors. Sudakov KV. Pavlov J Biol Sci 1989 Oct–Dec;24(4):127–32
Neurokinin A is a specific and precocious inhibitor of water intake in neonatal rats. Perfumi M, et al. Peptides 1990 Mar–Apr;11(2):339–44
Effects of a brain–enhanced chemical delivery system for estradiol on body weight and food intake in intact and ovariectomized rats. Simpkins JW, et al. Pharm Res 1989 Jul;6(7):592–600
Pretreatment with an irreversible muscarinic agonist affects responses to apomorphine. Crocker AD, et al. Pharmacol Biochem Behav 1990 Mar;35(3):511–6
Acute effects of inhaled dichloromethane on the EEG and sensory–evoked potentials of Fischer–344 rats. Rebert CS, et al. Pharmacol Biochem Behav 1989 Nov;34(3):619–29
Effects of p–chlorophenylalanine and scopolamine on retention of habits in rats. Vanderwolf CH, et al. Pharmacol Biochem Behav 1990 Apr;35(4):847–53
Neuronotrophic factors in cellular functional and cognitive repair of adult brain. Varon S, et al. Pharmacopsychiatry 1989 Oct;22 Suppl 2:120–4 (30 ref.)
Monte Carlo simulation of extracellular diffusion in brain tissues. Lipinski HG. Phys Med Biol 1990 Mar;35(3):441–7
Cholinergic regulation of sexual behavior in female hamsters. Dohanich GP, et al. Physiol Behav 1990 Jan;47(1):127–31
Sleep, brain activation and cognition. Dujardin K, et al. Physiol Behav 1990 Jun;47(6):1271–8 (176 ref.)
Histamine in brain may have no role for histaminergic control of food–related drinking in the rat. Kraly FS, et al. Physiol Behav 1990 Jan;47(1):5–9
Behavioral and electrophysiological effects of crustacean neurohormone on freely moving cats. Martínez–Gómez M, et al. Physiol Behav 1989 Dec;46(6):983–92
Efflux of 5–HIAA from 5–HT neurons: a membrane potential–dependent process. Miyamoto JK, et al. Physiol Behav 1990 Apr;47(4):767–72
Forebrain norepinephrine involvement in selective attention and neophobia. Steketee JD, et al. Physiol Behav 1989 Oct; 46(4):577–83
Effects of space flight on dendrites of the neurons of the rat's brain. Belichenko PV, et al. Physiologist 1990 Feb;33(1 Suppl):S12–5
Stresses in the brain mass and in the peripheral fluids under Gz acceleration. Study of a simple model. Liebaert P, et al. Physiologist 1990 Feb;33(1 Suppl):S145–6
Down–regulation of voltage–dependent sodium channels initiated by sodium influx in developing neurons. Dargent B, et al. Proc Natl Acad Sci U S A 1990 Aug;87(15):5907–11
Central nervous system neurons migrate on astroglial fibers from heterotypic brain regions in vitro. Gasser UE, et al. Proc Natl Acad Sci U S A 1990 Jun;87(12):4543–7
Luteinizing hormone–releasing hormone neurons express Fos protein during the proestrous surge of luteinizing hormone. Lee WS, et al. Proc Natl Acad Sci U S A 1990 Jul; 87(13):5163–7
Funnel–web spider venom and a toxin fraction block calcium current expressed from rat brain mRNA in Xenopus oocytes. Lin JW, et al. Proc Natl Acad Sci U S A 1990 Jun;87(12):4538–42
A mechanism for the Hebb and the anti–Hebb processes underlying learning and memory. Lisman J. Proc Natl Acad Sci U S A 1989 Dec;86(23):9574–8
K+ channel openers activate brain sulfonylurea–sensitive K+ channels and block neurosecretion. Schmid–Antomarchi H, et al. Proc Natl Acad Sci U S A 1990 May;87(9):3489–92
Inhibition of inactivation of single sodium channels by a site–directed antibody. Vassilev P, et al. Proc Natl Acad Sci U S A 1989 Oct;86(20):8147–51
Connections of the IMHV in the domestic chick Gallus domesticus. Bradley PM, et al. Proc R Soc Lond [Biol] 1990 Jun 22;240(1299):493–502
Local circuitry in the IMHV of the domestic chick (Gallus domesticus). Bradley PM, et al. Proc R Soc Lond [Biol] 1990 Jun 22;240(1299):479–92
A unitary hypothesis of mind–brain interaction in the cerebral cortex. Eccles J. Proc R Soc Lond [Biol] 1990 Jun 22; 240(1299):433–51
The Ferrier lecture, 1989. Outlooks for blindsight: explicit methodologies for implicit processes. Weiskrantz L. Proc R Soc Lond [Biol] 1990 Apr 23;239(1296):247–78 (69 ref.)
Understanding the brain through the hippocampus. The hippocampal region as a model for studying brain structure and function. Dedicated to Professor Theodor W. Blackstad on the occasion of his 65th anniversary. Prog Brain Res 1990;83:1–457
Axon sprouting in the rodent and Alzheimer's disease brain: a reactivation of developmental mechanisms? Cotman CW, et al. Prog Brain Res 1990;83:427–34 (43 ref.)
Growth factors and growth factor receptors in the hippocampus. Role in plasticity and response to injury. Nieto–Sampedro M, et al. Prog Brain Res 1990;83:341–55 (128 ref.)
Neural basis of sound pattern recognition in anurans. Feng AS, et al. Prog Neurobiol 1990;34(4):313–29 (70 ref.)
Human EEG and odor response. Lorig TS. Prog Neurobiol 1989;33(5–6):387–98 (57 ref.)
The search for the hypnogenic center. Mendelson WB. Prog Neuropsychopharmacol Biol Psychiatry 1990; 14(1):1–12 (54 ref.)
Human neuroethology of emotion. Ploog D. Prog Neuropsychopharmacol Biol Psychiatry 1989;13 Suppl:S15–22 (11 ref.)
Brain neuropeptides: tachykinins, neuropeptide Y, neurotensin and vasoactive intestinal polypeptide in the rat brain: modifications by ECT and indomethacin. Theodorsson E, et al. Prog Neuropsychopharmacol Biol Psychiatry 1990; 14(3):387–407
Digital brain atlas for structure localization in CT combined with EEG mapping. von Keyserlingk DG, et al. Psychiatry Res 1989 Sep;29(3):461–2
On the neuropsychology of dreams. Miller L. Psychoanal Rev 1989 Fall;76(3):375–401 (65 ref.)
Intensity dependence of perceived duration: data, theories, and neural integration. Nisly SJ, et al. Psychol Bull 1989 Nov;106(3):483–96 (55 ref.)
A functional theory of the McCollough effect. Dodwell PC, et al. Psychol Rev 1990 Jan;97(1):78–89 (90 ref.)
Dizocilpine (MK–801), ketamine and phencyclidine: low doses affect brain field potentials in the freely moving rat in the same way as activation of dopaminergic transmission. Dimpfel W, et al. Psychopharmacology (Berl) 1990; 101(3):317–23
The cerebral laterality of mental image generation in normal subjects. Biggins CA, et al. Psychophysiology 1990 Jan; 27(1):57–67
Patch clamp techniques used for studying synaptic transmission in slices of mammalian brain. Sakmann B, et al. Q J Exp Physiol 1989 Dec;74(7):1107–18
Multichannel biomagnetic system for study of electrical activity in the brain and heart. Schneider S, et al. Radiology 1990 Sep;176(3):825–30
Vision and the brain—the organization of the central visual system. New York, December 4–5, 1987. Proceedings. Res Publ Assoc Res Nerv Ment Dis 1990;67:1–347
Nervous system–immune system interactions. Chelmicka–Schorr E, et al. Res Publ Assoc Res Nerv Ment Dis 1990;68:67–90 (149 ref.)
Brain cooling and respiratory heat exchange in camels during rest and exercise. Schroter RC, et al. Respir Physiol 1989 Oct;78(1):95–105
The persistence of a respiratory 'personality' into stage IV sleep in man. Shea SA, et al. Respir Physiol 1990 Apr; 80(1):33–44
Brain resuscitation. Bircher NG. Resuscitation 1989;18 Suppl:S1–11 (49 ref.)
What the brain tells the eye. Barlow RB Jr. Sci Am 1990 Apr;262(4):90–5
Is the brain's mind a computer program? Searle Jr. Sci Am 1990 Jan;262(1):26–31
Biosonar and neural computation in bats. Suga N. Sci Am 1990 Jun;262(6):60–8
Developmental studies of electrical properties in cultured rat brain neurons. Wang HW, et al. Sci China [B] 1990 Jan; 33(1):35–43
Effect of simulated weightlessness on the response characteristics of human brain. Wei JH, et al. Sci China [B] 1989 Nov;32(11):1329–41
Birth of projection neurons in adult avian brain may be related to perceptual or motor learning. Alvarez–Buylla A, et al. Science 1990 Sep 21;249(4975):1444–6
Neuroscience models the brain [news] [published erratum appears in Science 1990 Mar 16;247(4948):1281] Barinaga M. Science 1990 Feb 2;247(4942):524–6
The mind revealed? [news] Barinaga M. Science 1990 Aug 24;249(4971):856–8
Functional properties of rat brain sodium channels expressed in a somatic cell line. Scheuer T, et al. Science 1990 Feb 16;247(4944):854–8
Magnetic transcranial brain stimulation: painless evaluation of central motor pathways. Normal values and clinical application in spinal cord diagnostics: upper extremities.

Dvořák J, et al. **Spine** 1990 Mar;15(3):155–60

Topographical analysis of subcortical vertex-like activities evoked by ipsi- and contralateral multimodal sensory stimulation in man. Velasco M, et al. **Stereotact Funct Neurosurg** 1989;53(3):178–96

Dopamine agonists at repeated "autoreceptor-selective" doses: effects upon the sensitivity of A10 dopamine autoreceptors. Jeziorski M, et al. **Synapse** 1989;4(4):267–80

Statistical analysis of dose-response curves in extracellular electrophysiological studies of single neurons. Pitts DK, et al. **Synapse** 1990;5(4):281–93

Neural edelmanism [letter] **Trends Neurosci** 1990 Jan; 13(1):11–4

Language, modality and the brain. Bellugi U, et al. **Trends Neurosci** 1989 Oct;12(10):380–8 (36 ref.)

The neural basis of mental imagery. Farah MJ. **Trends Neurosci** 1989 Oct;12(10):395–9 (39 ref.)

Glucose-regulated potassium channels are sweet news for neurobiologists [news] Miller RJ. **Trends Neurosci** 1990 Jun;13(6):197–9 (24 ref.)

Neural mechanisms involved in cardiovascular control during affective behaviour. Spyer KM. **Trends Neurosci** 1989 Dec;12(12):506–13 (32 ref.)

Compensations after lesions of central dopaminergic neurons: some clinical and basic implications. Zigmond MJ, et al. **Trends Neurosci** 1990 Jul;13(7):290–6 (40 ref.)

Behavioral drug actions and brain lateralization. Izquierdo I. **Trends Pharmacol Sci** 1989 Sep;10(9):344–5 (11 ref.)

Acetylcholine release is modulated by different opioid receptor types in different brain regions and species. Izquierdo I. **Trends Pharmacol Sci** 1990 May;11(5):179–80 (12 ref.)

Central nervous mechanisms of host defense responses. Federation of American Societies for Experimental Biology. New Orleans, Louisiana, March 1989. Proceedings. **Yale J Biol Med** 1990 Mar–Apr;63(2):85–182

[The endogenous opiate and nonopiate analgesic system] Zhang CC. **Chen Tzu Yen Chiu** 1989;14(3):306–14 (Eng. Abstr.) **(Chi)**

[The afferent pathway of the septal nuclei on participation in acupuncture analgesia] Zheng PM, et al. **Chen Tzu Yen Chiu** 1989;14(3):323–7 (Eng. Abstr.) **(Chi)**

[A microcomputer processing system of evoked potentials of brain slices and applied examples] Xie XP, et al. **Sheng Li Hsueh Pao** 1990 Feb;42(1):97–103 (Eng. Abstr.) **(Chi)**

[The nervous system and protein kinase C] Pei YQ. **Sheng Li Ko Hsueh Chin Chan** 1990 Apr;21(2):148–52 (37 ref.) **(Chi)**

[Neuropsychological observations and clinical neurology] Vander Eecken H. **Verh K Acad Geneeskd Belg** 1990; 52(1):5–29 (60 ref.) (Eng. Abstr.) **(Dut)**

[Monitoring of cerebral function. Limits and values] Roujas F, et al. **Agressologie** 1989 Nov–Dec;30(11–12):597–9 (Eng. Abstr.) **(Fre)**

[Nature, origin and role of fatty acids of the nervous system: an essential fatty acid, an alpha-linolenic acid, changing the structure and the cerebral function] Bourre JM. **Bull Acad Natl Med** 1989 Dec;173(9):1137–48; discussion 1148–51 (18 ref.) (Eng. Abstr.) **(Fre)**

[Effect of transcranial electrical stimulation on sleep in rats] Lendais I, et al. **C R Soc Biol (Paris)** 1989;183(4):329–36 (Eng. Abstr.) **(Fre)**

[Sensory information processing during general anesthesia. The effect of propofol and ketamine on mid-latency auditory evoked potentials] Schwender D, et al. **Anaesthesist** 1989 Dec;38(12):664–72 (Eng. Abstr.) **(Ger)**

[The study of the central motor conduction time to the leg: normal findings and methodologic observations] Claus D, et al. **EEG EMG** 1989 Sep;20(3):165–70 (Eng. Abstr.) **(Ger)**

[Electromagnetic stimulation of the nervous system. I. Normal values in the central nervous system and a comparison with electric stimulation] Ludolph AC, et al. **EEG EMG** 1989 Sep;20(3):153–8 (Eng. Abstr.) **(Ger)**

[Psychiatry and the history of the localization of psychological functions] Harrington A. **Nervenarzt** 1989 Oct;60(10):603–11 (Eng. Abstr.) **(Ger)**

[Taste] Langhans W. **Schweiz Arch Tierheilkd** 1989; 131(9):521–35 (120 ref.) (Eng. Abstr.) **(Ger)**

[Central nervous appetite regulation: mechanisms and significance for the development of obesity] Lehnert H, et al. **Z Ernahrungswiss** 1990 Mar;29(1):2–12 (42 ref.) (Eng. Abstr.) **(Ger)**

[The significance of slow brain potentials for the estimation of activation processes in activities at the video-screen model workplace] Freude G, et al. **Z Gesamte Hyg** 1990 Jul;36(7):365–8 (Eng. Abstr.) **(Ger)**

[Neural modulation of immune system] Hori T. **Fukuoka Igaku Zasshi** 1989 Dec;80(12):503–9 (19 ref.) **(Jpn)**

[Chemical neuroanatomy] Tohyama M. **Nippon Rinsho** 1990 May;48(5):908–21 **(Jpn)**

[The neural organization of the olfactory pathways] Motokizawa F, et al. **Nippon Seirigaku Zasshi** 1989; 51(11):345–62 (100 ref.) **(Jpn)**

[An application of autoregressive model to pattern discrimination of brain electrical activity mapping] Ogawa T, et al. **No To Hattatsu** 1989 Jul;21(4):340–7 (Eng. Abstr.) **(Jpn)**

[Biochemicals and their functions in the brain—glucose, and amino acid and amine neurotransmitters] Kashiwamata S, et al. **No To Shinkei** 1989 Sep;41(9):851–61 (67 ref.) **(Jpn)**

[Imaging brain function with autoradiography and positron emission tomography] Kato M, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1182–91 **(Jpn)**

[Does food affect brain functions?] Okuyama H. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(3):275–9 **(Jpn)**

[Integrative control function of the brain in peripheral metabolism] Shimazu T. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1100–10 **(Jpn)**

[The theory of current fields induced by scalp electrodes] Gutman A, et al. **Biofizika** 1990 Jan–Feb;35(1):128–31 (Eng. Abstr.) **(Rus)**

[Calculation of parameters of neuronal network model on the basis of analysis of power spectra of rat brain biopotentials] Medvedev AV, et al. **Biofizika** 1989 Nov–Dec;34(6):1028–30 (Eng. Abstr.) **(Rus)**

[Input and output channels of quantum biocomputers] Minina SV, et al. **Biofizika** 1990 Jan–Feb;35(1):132–6 (Eng. Abstr.) **(Rus)**

[Role of Cl-ionophore subunit in the functioning of GABA-benzodiazepine receptors] Blednov IuA, et al. **Biull Eksp Biol Med** 1989 Nov;108(11):567–9 (Eng. Abstr.) **(Rus)**

[Effects of peptide factors from right and left brain hemispheres of rats on amplitude-time characteristics of projective and interhemispheric evoked responses] Dobrynin VP, et al. **Biull Eksp Biol Med** 1989 Jul; 108(7):5–7 (Eng. Abstr.) **(Rus)**

[Inter-hemisphere asymmetry in perception of volume (a study using holoscopic tachistoscopy)] Deglin VL, et al. **Dokl Akad Nauk SSSR** 1989;308(6):1500–2 **(Rus)**

[Changes in the redox potential of the brain structures in the rat during paradoxical sleep] Shvets-Téneta-Gurii TB, et al. **Dokl Akad Nauk SSSR** 1989;309(5):1256–9 **(Rus)**

[Participation of opioids and opioid receptors in antinociception at various levels of the nervous system] Herz A, et al. **Farmakol Toksikol** 1989 May–Jun;52(3):5–12 (Eng. Abstr.) **(Rus)**

[The role of central monoamine neurons in regulating voluntary ethanol consumption] Kiiianmaa K. **Farmakol Toksikol** 1989 Sep–Oct;52(5):4–10 (41 ref.) (Eng. Abstr.) **(Rus)**

[Brain potentials during intellectual operations of varying degrees of complexity] Ivanitskiĭ AM. **Fiziol Cheloveka** 1989 May–Jun;15(3):11–8 **(Rus)**

[An automated system for collecting and storing multiparameter and multichannel electrophysiological information for the study of long-term ongoing processes in the brain] Klimenko VM, et al. **Fiziol Cheloveka** 1989 Nov–Dec;15(6):152–4 **(Rus)**

[Cerebral organization of perception and memory: a hypothesis on the programmed activity] Kropotov IuD. **Fiziol Cheloveka** 1989 May–Jun;15(3):19–27 **(Rus)**

[An electrophysiological study of the functional organization of the human brain in directed attention. 1. The adult norm] Machinskiĭ NO, et al. **Fiziol Cheloveka** 1990 Mar–Apr; 16(2):5–16 **(Rus)**

[Interrelation between physiologically significant events in distantly located neuronal populations of the human brain] Medvedev SV, et al. **Fiziol Cheloveka** 1989 May–Jun; 15(3):93–9 **(Rus)**

[Experimental neuropsychology and its importance in the study of the human brain] Simonov PV. **Fiziol Cheloveka** 1989 May–Jun;15(3):3–10 **(Rus)**

[Hemispheric asymmetry during teaching of discrimination of visual stimuli of two classes] Udalova GP, et al. **Fiziol Cheloveka** 1989 May–Jun;15(3):104–12 **(Rus)**

[Insulin and the central nervous system] Ma'nkovskiĭ BN. **Fiziol Zh** 1989 Nov–Dec;35(6):110–7 (89 ref.) (Eng. Abstr.) **(Rus)**

[The dynamics of superslow oscillations in multineuronal activity and bioelectrical potentials of the cat brain during unreinforced photic stimulation] Lavrov VV. **Fiziol Zh SSSR** 1989 Jul;75(7):890–8 (Eng. Abstr.) **(Rus)**

[A method for studying neuronal thermosensitivity in co-incubated slices of different sections of the brain] Vasilenko VIu, et al. **Fiziol Zh SSSR** 1989 Sep; 75(9):1279–82 **(Rus)**

[New possibilities for the electrical impedance method of evaluating brain tissue status] Vorob'ev MV, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1630–4 **(Rus)**

[The effect of whole-body vibration on the electrical activity and oxidative metabolism in different brain structures] Minasian SM, et al. **Gig Tr Prof Zabol** 1989;(12):22–6 (Eng. Abstr.) **(Rus)**

[Work capacity and space-time organization of cerebral biopotentials in operators against a background of rhythmic light interference] Petrenko ET. **Kosm Biol Aviakosm Med** 1989 Aug–Sep;23(4):23–6 (Eng. Abstr.) **(Rus)**

[Ultrasonic devices for continuous study of non-electric processes in the human cranial cavity] Simonov LG, et al. **Kosm Biol Aviakosm Med** 1989 Aug–Sep;23(4):86–8 **(Rus)**

[The effect of stimulation of the central gray substance on the neuronal activity of the trigeminal nerve nucleus] Abzianidze EV, et al. **Neirofiziologiia** 1990;22(3):381–7 (Eng. Abstr.) **(Rus)**

[The effect of transcranial electrostimulation of the opioid structures of the brain on peripheral nerve regeneration in the rat] Akoev GN, et al. **Neirofiziologiia** 1990;22(1):76–9 (Eng. Abstr.) **(Rus)**

[The effect of the joint stimulation of the central grey substance and substantia nigra on the low- and high-threshold startle reflexes in anesthetized rats] Karpukhina MV, et al. **Neirofiziologiia** 1990;22(2):276–9 (Eng. Abstr.) **(Rus)**

[Synaptically evoked spreading cortical depression in short-term high-frequency electrical stimulation of the rat brain] Koroleva VI. **Neirofiziologiia** 1989;21(6):789–96 (Eng. Abstr.) **(Rus)**

[A spectral analysis and mathematical modelling of the brain electrical activity in normal rats and in genetically conditioned convulsibility] Medvedev AV, et al. **Neirofiziologiia** 1990;22(2):184–93 (Eng. Abstr.) **(Rus)**

[Effect of induction of antibodies to serotonin on alcohol consumption and the status of the brain mediator system in rats with various degrees of alcohol motivation] Bobkova NB, et al. **Patol Fiziol Eksp Ter** 1989 May–Jun;(3):31–6 (Eng. Abstr.) **(Rus)**

[The dependence of follicle-stimulating hormone secretion on the level of sex hormone receptors in the hypophysis and on the activity of the CNS catecholaminergic systems] Babichev VN, et al. **Probl Endokrinol (Mosk)** 1990 May–Jun;36(3):53–7 (Eng. Abstr.) **(Rus)**

[The central control of vestibular system reactions] Raĭtses VS, et al. **Usp Fiziol Nauk** 1990 Apr–Jun;21(2):56–70 (74 ref.) **(Rus)**

[Emergency correction of traumatic mitral valve insufficiency under craniocerebral hypothermia] Valyka EN, et al. **Vestn Khir** 1989 Oct;143(10):73–6 (Eng. Abstr.) **(Rus)**

[Dopaminergic mechanisms of brain aging (a review of the literature)] Man'kovskiĭ NB, et al. **Vrach Delo** 1989 Sep; (9):83–8 (53 ref.) **(Rus)**

[The mechanisms of the influence of the anterior and posterior hypothalamus on the electrical activity of the large hemispheres of the forebrain and on autonomic reactions in hens] Baklavadzhian OG, et al. **Zh Evol Biokhim Fiziol** 1990 Mar–Apr;26(2):186–92 (Eng. Abstr.) **(Rus)**

[A method for performing separate impedance measurement of the brain and biological objects] Sergienko TM. **Zh Vopr Neirokhir** 1989 May–Jun;(3):47–9 **(Rus)**

[Impedance measurement in neurosurgical practice] Sergienko TM, et al. **Zh Vopr Neirokhir** 1989 Jul–Aug; (4):34–7 (Eng. Abstr.) **(Rus)**

[Interrelations of the emotionally positive and negative areas of the brain in the edible snail] Balaban PM, et al. **Zh Vyssh Nerv Deiat** 1990 Jan–Feb;40(1):125–34 (Eng. Abstr.) **(Rus)**

[The potentials of spectral-correlative methods for analyzing total brain electrical activity exemplified by a study of the electrosubcorticograms of dogs] Feshchenko VA. **Zh Vyssh Nerv Deiat** 1989 May–Jun;39(3):567–79 (Eng. Abstr.) **(Rus)**

[Changes in the space-time organization of the bioelectrical activity of the human brain on completing the solution of a mental task] Kirol VN, et al. **Zh Vyssh Nerv Deiat** 1989 May–Jun;39(3):421–30 (Eng. Abstr.) **(Rus)**

[An analysis of the statistical characteristics of the total brain biopotentials in rats] Kiseleva NV, et al. **Zh Vyssh Nerv Deiat** 1989 Jul–Aug;39(4):783–8 **(Rus)**

[The interaction of the serotonin and dopaminergic systems of the brain in the mechanisms of latent inhibition in rats] Loskutova LV, et al. **Zh Vyssh Nerv Deiat** 1989 Jul–Aug; 39(4):714–20 (Eng. Abstr.) **(Rus)**

[Serotonin receptors in the brain of animals selected for their domesticated type of behavior] Maslova GB, et al. **Zh Vyssh Nerv Deiat** 1989 Jul–Aug;39(4):627–32 (Eng. Abstr.) **(Rus)**

[Coherent analysis of the electrical activity of the rabbit brain during the formation of a motor polarization dominant] Rusinova EV, et al. **Zh Vyssh Nerv Deiat** 1989 May–Jun; 39(3):520–6 (Eng. Abstr.) **(Rus)**

[Changes in the level of oxygen tension in different brain structures of rats in positive and negative emotional states] Sarkisova KIu. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr; 40(2):351–61 (Eng. Abstr.) **(Rus)**

[Changes in the oxygen tension level in different brain structures of rats in the waking-sleep cycle] Sarkisova KIu, et al. **Zh Vyssh Nerv Deiat** 1990 May–Jun;40(3):524–34 (Eng. Abstr.) **(Rus)**

[The brain catecholamine systems in the regulation of dominance] Serova LI, et al. **Zh Vyssh Nerv Deiat** 1990 May–Jun;40(3):490–6 (Eng. Abstr.) **(Rus)**

[Neuronal correlates of the activation of the brain-reinforcing system in dogs] Vartanian GA, et al. **Zh Vyssh Nerv Deiat** 1989 May–Jun;39(3):449–57 (Eng. Abstr.) **(Rus)**

[Electrical activity of the visual cortex under conditions of altered monoamine levels in the brain of animals] Vorob'ev VV, et al. **Zh Vyssh Nerv Deiat** 1990 Jan–Feb;40(1):119–24 (Eng. Abstr.) **(Rus)**

[Electroencephalographic maturation in preterm newborn infants] Doménech E, et al. **An Esp Pediatr** 1989 Sep; 31(3):221–8 (Eng. Abstr.) **(Spa)**

[Effects of high-frequency ventilation on the intracranial pressure and cerebral elastance in dogs] Mateos Burguillo P, et al. **An Esp Pediatr** 1989 Jun;30(6):463–7 (Eng. Abstr.) **(Spa)**

[Usefulness of positron-emission tomography in the study

of the central nervous system] Arquè Bertrán JM, et al. **Med Clin (Barc)** 1990 Apr 28;94(16):633–6 (44 ref.) **(Spa)**

[Attention: analysis and clinical implications] Cabanyes Truffino J, et al. **Med Clin (Barc)** 1990 May 5;94(17):672–6 (50 ref.) **(Spa)**

PHYSIOPATHOLOGY

The effect of isofloxythepine in EEG. Hynek K, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):261

The EEG time series parametrization method in the study of nociception. Blinowska KJ, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(4):193–206

Effects of a weak diffuse–brain–stimulation on insomniacs with vibration syndrome. Seno H, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(5):289–94

Central nervous system control of fluid balance: physiology and pathology. Lightman S. **Acta Neurochir Suppl (Wien)** 1990;47:90–4 (19 ref.)

Continuous recording of middle cerebral artery blood velocity in clinical neurosurgery. Lundar T, et al. **Acta Neurochir (Wien)** 1990;102(3–4):85–90

The effects of an extradural expanding lesion on regional intracranial pressure, blood flow, somatosensory conduction and brain herniation: an experimental study in baboons. Nitta M, et al. **Acta Neurochir (Wien)** 1990; 104(1–2):30–7

Selective neuronal vulnerability following transient cerebral ischemia in the gerbil: distribution and time course. Araki T, et al. **Acta Neurol Scand** 1989 Dec;80(6):548–53

Adult–onset centronuclear myopathy: evidence against a neurogenic pathology. Baradello A, et al. **Acta Neurol Scand** 1989 Aug;80(2):162–6

Immediate neurological effects of diving to a depth of 360 metres. Todnem K, et al. **Acta Neurol Scand** 1989 Oct; 80(4):333–40

Brain dopaminergic mechanisms in Parkinson's disease evaluated by positron emission tomography. Aquilonius SM, et al. **Acta Neurol Scand Suppl** 1989;126:55–9

Electrophysiological changes in the feline brain during 45 minutes occlusion and 3 hours recirculation of the middle cerebral artery. Bereczki D, et al. **Acta Physiol Hung** 1990; 75(2):155–63

Serotonin function in affective disorders. Grahame–Smith DG. **Acta Psychiatr Scand Suppl** 1989;350:7–12 (20 ref.)

Does kallikrein improve the brain function in dementia? Ishizuka Y, et al. **Adv Exp Med Biol** 1989;247B:601–6

Decreased angiotensin II receptors in subfornical organ of spontaneously hypertensive rats after chronic antihypertensive treatment with enalapril. Nazarali AJ, et al. **Am J Hypertens** 1990 Jan;3(1):59–61

Ion leakage is reduced during anoxia in turtle brain: a potential survival strategy. Chih CP, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1562–4

Energy metabolism, ion homeostasis, and evoked potentials in anoxic turtle brain. Chih CP, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R854–60

Extracellular pH and suppression of electrical activity during anoxia in turtle and rat brain. Feng ZC, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R205–10

Early establishment of cerebral dysfunction after portacaval shunting. Mans AM, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):E104–10

Hypoglycemia and cerebral autoregulation in anesthetized dogs. Sieber FE, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1714–21

Development in rats of the brain–pituitary–adrenal response to hypoglycemia in vivo and in vitro. Widmaier EP. **Am J Physiol** 1989 Nov;257(5 Pt 1):E757–63

Psychobiology and the brain–mind relationship [letter] Levy E. **Am J Psychiatry** 1990 Apr;147(4):537–8

Prediction of neurological damage after cardiopulmonary bypass surgery. Use of the cerebral function analysing monitor. Nevin M, et al. **Anaesthesia** 1989 Sep;44(9):725–9

Neurobiology of pyridoxine. Dakshinamurti K, et al. **Ann N Y Acad Sci** 1990;585:128–44 (45 ref.)

Nutrient imbalances in depressive disorders. Possible brain mechanisms. Wurtman RJ, et al. **Ann N Y Acad Sci** 1989; 575:75–82; discussion 82–5

Mechanisms of seasonal cycles of behavior. Nelson RJ, et al. **Annu Rev Psychol** 1990;41:81–108 (160 ref.)

Sensorimotor gating and schizophrenia. Human and animal model studies. Braff DL, et al. **Arch Gen Psychiatry** 1990 Feb;47(2):181–8 (62 ref.)

P3 in schizophrenia is affected by stimulus modality, response requirements, medication status, and negative symptoms. Pfefferbaum A, et al. **Arch Gen Psychiatry** 1989 Nov; 46(11):1035–44

Blood pressure and functional aspects of the aging brain. Parnetti L, et al. **Arch Gerontol Geriatr** 1989 Sep–Oct; 9(2):155–61

EEG–spectra parameters distinguish pathophysiological and pharmacological influences on the EEG in treated schizophrenics. Westphal KP, et al. **Arch Ital Biol** 1990 Jan;128(1):55–66

Pathophysiologic mechanisms underlying spatial disorientation in patients with Alzheimer's disease [letter; comment] Barr WB, et al. **Arch Neurol** 1990 Jun; 47(6):618–9 Comment on: Arch Neurol 1989 Apr;46(4):391–4.

Quantitative multiple sclerosis plaque assessment with magnetic resonance imaging. Its correlation with clinical parameters, evoked potentials, and intra–blood–brain barrier IgG synthesis. Baumhefner RW, et al. **Arch Neurol** 1990 Jan;47(1):19–26

Relation of EEG alpha background to cognitive function, brain atrophy, and cerebral metabolism in Down's syndrome. Age–specific changes. Devinsky O, et al. **Arch Neurol** 1990 Jan;47(1):58–62

Effects of a vasoactive drug (nylidrin HCl) on the response of the electroencephalogram to hyperventilation. Korein J, et al. **Arch Neurol** 1966 Feb;14(2):202–7

Patterns of task–related slow brain potentials in dyslexia. Landwehrmeyer B, et al. **Arch Neurol** 1990 Jul;47(7):791–7

Immature pattern of brain activity in Rett syndrome. Nielsen JB, et al. **Arch Neurol** 1990 Sep;47(9):982–6

The central sites of the autonomic nervous system may also be disturbed in some cases with acute pandysautonomia [letter] Okada F, et al. **Arch Neurol** 1990 Feb;47(2):127–8

Probe–evoked potential findings following unilateral left–hemisphere lesions in children. Papanicolaou AC, et al. **Arch Neurol** 1990 May;47(5):562–6

Laterality of performance in fingertapping rate and grip strength by hemisphere of stroke and gender. Robinson LM, et al. **Arch Phys Med Rehabil** 1990 Aug;71(9):695–8

Noninvasive assessment of cranial blood circulation in the fetus. Lingman G, et al. **Biol Neonate** 1989;56(3):129–35

The concept of the unconscious [editorial] Epstein AW. **Biol Psychiatry** 1990 Jun 1;27(11):1185–7

Neuronal misconnections and psychiatric disorder. Is there a link? [see comments] Goodman R. **Br J Psychiatry** 1989 Mar;154:292–9 (55 ref.) Comment in: Br J Psychiatry 1989 Jul;155:129–30.

The near–death experience [letter; comment] Jansen KL. **Br J Psychiatry** 1989 Jun;154:883–4 Comment on: Br J Psychiatry 1988 Nov;153:607–17.

Monozygotic twins with obsessive–compulsive disorder. Kim SW, et al. **Br J Psychiatry** 1990 Mar;156:435–8

Neural mechanisms of negative symptoms. Andreasen NC. **Br J Psychiatry Suppl** 1989 Nov;(7):93–8 (53 ref.)

The dynamics of complex biological psychosocial systems. Four fundamental psycho–biological mediators in the long–term evolution of schizophrenia. Ciompi L. **Br J Psychiatry Suppl** 1989 Jul;(5):15–21 (53 ref.)

Central serotonin and impulsive aggression. Coccaro EF. **Br J Psychiatry Suppl** 1989 Dec;(8):52–62 (110 ref.)

Dopaminergic balance and subtypes of schizophrenia. Dávila R, et al. **Br J Psychiatry Suppl** 1989 May;(4):57–60 (26 ref.)

A new conception of the relationship between psychological coping mechanisms and biological stress buffering systems. Friedhoff AJ, et al. **Br J Psychiatry Suppl** 1989 May; (4):61–6 (15 ref.)

Is there a relationship between serotonin receptor subtypes and selectivity of response in specific psychiatric illnesses? Montgomery SA, et al. **Br J Psychiatry Suppl** 1989 Dec; (8):63–9 (40 ref.)

Obsessive–compulsive disorder as a 5–HT subsystem–related behavioural disorder. Murphy DL, et al. **Br J Psychiatry Suppl** 1989 Dec;(8):15–24 (80 ref.)

Furtive incursions into bicameral minds. Integrative and coordinating role of subcortical structures. Sergent J. **Brain** 1990 Apr;113 (Pt 2):537–68

Evoked potentials in the Rett syndrome. Kálmánchey R. **Brain Dev** 1990;12(1):73–6

Correlation of electroencephalogram, respiration and movement in the Rett syndrome. Kerr A, et al. **Brain Dev** 1990;12(1):61–8

Further EEG observations in children with the Rett syndrome. Niedermeyer E, et al. **Brain Dev** 1990;12(1):53–4

Neurophysiological findings in the Rett syndrome [letter; comment] Nigro MA, et al. **Brain Dev** 1989;11(6):437 Comment on: Brain Dev 1989;11(2):102–9.

Sex equality in intrahemispheric language organization. Kertesz A, et al. **Brain Lang** 1989 Oct;37(3):401–8

The effect of carbon dioxide on the diameter of brain capillaries. Atkinson JL, et al. **Brain Res** 1990 May 28; 517(1–2):333–40

Adrenal demedullation blocks and brain norepinephrine depletion potentiates the hyperglycemic response to a variety of stressors. Bialik RJ, et al. **Brain Res** 1989 Nov 13;502(1):88–98

Participation of different brain regions in the anti–narcotic withdrawal action of clonidine in the dependent rat. Buccafusco JJ. **Brain Res** 1990 Apr 9;513(1):8–14

Kinematic properties of voluntary postural sway in patients with unilateral primary hemispheric lesions. Di Fabio RP, et al. **Brain Res** 1990 Apr 16;513(2):248–54

Near–infrared optical responses in feline brain and skeletal muscle tissues during respiratory acid–base imbalance. Hampson NB, et al. **Brain Res** 1990 Jun 11;519(1–2):249–54

Audiogenic seizures evoked in DBA/2 mice induce c–fos oncogene expression into subcortical auditory nuclei. Le Gal La Salle G, et al. **Brain Res** 1990 Jun 4;518(1–2):308–12

Level of ischemia and brain functions in the Mongolian gerbil in vivo. Mayevsky A. **Brain Res** 1990 Jul 30;524(1):1–9

Is Alzheimer's disease an anterograde degeneration, originating in the brainstem, and disrupting metabolic and functional interactions between neurons and glial cells? Hertz L. **Brain Res Brain Res Rev** 1989 Oct–Dec; 14(4):335–53 (219 ref.)

MK801 prevents quinolinic acid–induced behavioral deficits and neurotoxicity in the striatum. Giordano M, et al. **Brain Res Bull** 1990 Mar;24(3):313–9

Anatomical mapping of tetrahydropapaveroline–reactive sites in brain mediating suppression of alcohol drinking in the rat. Privette TH, et al. **Brain Res Bull** 1989 Jun; 22(6):1039–48

Is anisomycin–induced amnesia for a passive avoidance task in chicks the result of state–dependent learning? Lee DW, et al. **Brain Res Dev Brain Res** 1989 Oct 1;49(2):179–84

In vivo hyperthermia induces expression of HSP70 mRNA in brain regions controlling the neuroendocrine response to stress. Blake MJ, et al. **Brain Res Mol Brain Res** 1990 Jun;8(1):89–92

The origin of the vomiting response: a neuroanatomical hypothesis. Lawes IN. **Can J Physiol Pharmacol** 1990 Feb; 68(2):254–9 (58 ref.)

Triphasic waves in endocarditis. Ghanem Q, et al. **Clin Electroencephalogr** 1990 Jan;21(1):37–41

Unreactive EEG: pattern in locked–in syndrome. Jacome DE, et al. **Clin Electroencephalogr** 1990 Jan;21(1):31–6

Spindle coma: observations and thoughts. Nogueira de Melo A, et al. **Clin Electroencephalogr** 1990 Jul;21(3):151–61

Somatosensory evoked potentials, electroencephalography and CT scans in the assessment of the neurological sequelae of decompression sickness. Yiannikas C, et al. **Clin Exp Neurol** 1988;25:91–6

The role of the right hemisphere in recovery from aphasia. Two case studies. Basso A, et al. **Cortex** 1989 Dec; 25(4):555–66

Brain and behaviour [editorial] Bax M. **Dev Med Child Neurol** 1989 Dec;31(6):707–8

Electrophysiological effects of fenfluramine or combined vitamin B6 and magnesium on children with autistic behaviour. Martineau J, et al. **Dev Med Child Neurol** 1989 Dec;31(6):721–7

A neurophysiological study of children with reading, writing and spelling difficulties. Pinkerton F, et al. **Dev Med Child Neurol** 1989 Oct;31(5):569–81

Endogenous opioids may protect the perinatal brain in hypoxia. Lou HC, et al. **Dev Pharmacol Ther** 1989; 13(2–4):129–33

Differential effects of human and pork insulin–induced hypoglycemia on neuronal functions in humans. Kern W, et al. **Diabetes** 1990 Sep;39(9):1091–8

Neurophysiological changes during insulin–induced hypoglycaemia and in the recovery period following glucose infusion in type 1 (insulin–dependent) diabetes mellitus and in normal man. Tallroth G, et al. **Diabetologia** 1990 May;33(5):319–23

Neuromagnetic field modeling of multiple brain regions producing interictal spikes in human epilepsy. Barth DS, et al. **Electroencephalogr Clin Neurophysiol** 1989 Nov; 73(5):389–402

Neuromagnetic topography of photoconvulsive response in man. Ricci GB, et al. **Electroencephalogr Clin Neurophysiol** 1990 Feb;75(2):1–12

Electrical stimulation of the human brain in epilepsy. Bernier GP, et al. **Epilepsia** 1990 Sep–Oct;31(5):513–20

Trisomy 12p syndrome: a chromosomal disorder associated with generalized 3–Hz spike and wave discharges. Guerrini R, et al. **Epilepsia** 1990 Sep–Oct;31(5):557–66

'Eating epilepsy'—a reappraisal. Senanayake N. **Epilepsy Res** 1990 Jan–Feb;5(1):74–9

Multidisciplinary analysis of patients with extratemporal complex partial seizures. I. Intertest agreement. Swartz BE, et al. **Epilepsy Res** 1990 Jan–Feb;5(1):61–73

A progressive sequence of electroencephalographic changes during generalized convulsive status epilepticus. Treiman DM, et al. **Epilepsy Res** 1990 Jan–Feb;5(1):49–60

"Whole brain" politics and brain laterality research. Harrington A, et al. **Eur Arch Psychiatry Neurol Sci** 1989; 239(3):141–3

Impairment of cerebral function following cardiac and other major surgery. Treasure T, et al. **Eur J Cardiothorac Surg** 1989;3(3):216–21

Sensory evoked potentials in Creutzfeldt–Jakob disease. Aguglia U, et al. **Eur Neurol** 1990;30(3):157–61

Basic mechanisms of focal epilepsies. Jefferys JG. **Exp Physiol** 1990 Mar;75(2):127–62 (237 ref.)

Disorder of the inhibitory glycine receptor: inherited myoclonus in Poll Hereford calves. Gundlach AL. **FASEB J** 1990 Jul;4(10):2761–6 (39 ref.)

Is the neuronal basis of Alzheimer's disease cholinergic or glutamatergic? Palmer AM, et al. **FASEB J** 1990 Jul; 4(10):2745–52 (40 ref.)

Biomagnetic measurements of the brain activity of preeclamptic pregnant women using a superconducting quantum interference device. Anninos P, et al. **Int J Gynaecol Obstet** 1989 Dec;30(4):325–8

Hemisphere asymmetry of alpha burst frequency of occurrence variations in depression. Cazard P. **Int J Neurosci** 1989 Jul;47(1–2):181–91

The relationship between neuropsychological and late component evoked potential measures in chronic alcoholics. Patterson BW, et al. **Int J Neurosci** 1989 Dec; 49(3–4):319–27

Treatment– and task–induced changes in interhemispheric EEG. Schwarz–Ottersbach E, et al. **Int J Neurosci** 1989 Jul;47(1–2):141–8

Incidence and evolution of the hemineglect disorder in chronic patients with unilateral right brain damage. Zoccolotti P, et al. **Int J Neurosci** 1989 Aug;47(3–4):209–16

Hemisphere asymmetry of alpha burst sequential organization in depression. Cazard P, et al. **Int J Psychophysiol** 1989

Nov;8(2):169–83
Evoked potentials and psychopathy: a commentary on Raine [comment] Howard R. **Int J Psychophysiol** 1989 Sep; 8(1):23–7 (22 ref.) Comment on: Int J Psychophysiol 1989 Sep;8(1):1–16.
Psychopathy and P3 amplitude: a commentary on Raine [comment] Jutai JW. **Int J Psychophysiol** 1989 Sep; 8(1):17–22 (32 ref.) Comment on: Int J Psychophysiol 1989 Sep;8(1):1–16.
Feedback EEG in the detection of subclinical hepatic encephalopathy: a preliminary report. McLaughlin TJ, et al. **Int J Psychophysiol** 1989 Nov;8(2):137–43
Evoked potential models of psychopathy: a critical evaluation. Raine A. **Int J Psychophysiol** 1989 Sep; 8(1):29–34 (30 ref.)
Evoked potentials and psychopathy [see comments] Raine A. **Int J Psychophysiol** 1989 Sep;8(1):1–16 (77 ref.) Comment in: Int J Psychophysiol 1989 Sep;8(1):17–22. Comment in: Int J Psychophysiol 1989 Sep;8(1):23–27.
Effect of acute respiratory acidosis on multimodality sensory evoked potentials of Long–Evans rats. Rebert CS, et al. **Int J Psychophysiol** 1989 Nov;8(2):155–68
Multivariate EEG power spectral analysis in acute schizophrenics. Schellenberg R, et al. **Int J Psychophysiol** 1989 Sep;8(1):85–91
Neurophysiological study in chronic GM2 gangliosidosis (hexosaminidase A and B deficiency), with motor neuron disease phenotype. Mondelli M, et al. **Ital J Neurol Sci** 1989 Aug;10(4):433–9
Mild cerebral hypothermia during and after cardiac arrest improves neurologic outcome in dogs. Leonov Y, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):57–70
Brain damage in a new hemorrhagic shock model in the rat using long–term recovery. Yamauchi Y, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):207–12
Optokinetic nystagmus. A clinical review. David NJ. **J Clin Neuro Ophthalmol** 1989 Dec;9(4):258–66 (26 ref.)
Neurodevelopmental status of infants and young children treated for brain tumors with preirradiation chemotherapy. Mulhern RK, et al. **J Clin Oncol** 1989 Nov;7(11):1660–6
The neuropsychology of schizophrenic speech. Barr WB, et al. **J Commun Disord** 1989 Oct;22(5):327–49 (70 ref.)
Human immunodeficiency virus–type 1 (HIV–1) and the brain. Grant I, et al. **J Consult Clin Psychol** 1990 Feb; 58(1):22–30 (53 ref.)
Paroxysmal intracranial hypertension and oculoauriculovertebral dysplasia [letter] Hennekam RC, et al. **J Genet Hum** 1989 Dec;37(4–5):437–8
Biological abnormalities in late–life depression. Alexopoulos GS. **J Geriatr Psychiatry** 1989;22(1):25–34 (37 ref.)
The neural basis of the deficit syndrome of schizophrenia. Kirkpatrick B, et al. **J Nerv Ment Dis** 1990 Sep; 178(9):545–55 (129 ref.)
An exploration of central dysregulation of erectile function as a contributing cause of diabetic impotence. Nofzinger EA, et al. **J Nerv Ment Dis** 1990 Feb;178(2):90–5
Activation of epileptic foci by transcranial magnetic stimulation: effects on secretion of prolactin and luteinizing hormone. Hufnagel A, et al. **J Neurol** 1990 Jul;237(4):242–6
High–frequency components in epileptiform EEG. Huang CM, et al. **J Neurosci Methods** 1989 Dec;30(3):197–201
Impaired capillary perfusion and brain edema following experimental subarachnoid hemorrhage: a morphometric study. Johshita H, et al. **J Neurosurg** 1990 Sep;73(3):410–7
Brain shift, level of consciousness, and restoration of consciousness in patients with acute intracranial hematoma. Ross DA, et al. **J Neurosurg** 1989 Oct;71(4):498–502
Attenuation of decompressive hypoperfusion and cerebral edema by superoxide dismutase. Schettini A, et al. **J Neurosurg** 1989 Oct;71(4):578–87
Spontaneous tone of cerebral parenchymal arterioles: a role in cerebral hyperemic phenomena. Takayasu M, et al. **J Neurosurg** 1989 Nov;71(5 Pt 1):711–7
Electrophysiologic studies, computed tomography, and neurologic outcome in acute bacterial meningitis. Pike MG, et al. **J Pediatr** 1990 May;116(5):702–6
Brain regions involved in the development of acute phase responses accompanying fever in rabbits. Morimoto A, et al. **J Physiol (Lond)** 1989 Sep;416:645–57
The role of the brain in physical disease. Folklore, normal science, or paradigm shift? [editorial; comment] Williams RB. **JAMA** 1990 Apr 11;263(14):1971–2 Comment on: JAMA 1990 Apr 11;263(14):1929–35.
Basic mechanism of epileptogenicity—consideration from studies of acute kindling. Jibiki I, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):451–3 (9 ref.)
Psychosis of epilepsy—an approach to a biological basis for postictal and interictal psychoses. Sato M. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):405–10 (28 ref.)
Quantitative autoradiographic study of benzodiazepine receptors: comparative study between normal ddY mouse and El mouse. Shirasaka Y, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):563–4
The seizure mechanisms of an epileptic mutant animal. Suzuki J, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):455–7
The effect of hypertension and its treatment on cerebral cell volume regulation during hypernatremic dehydration. Trachtman H, et al. **Life Sci** 1990;46(16):1139–44
Stimulus–activated changes in brain tissue temperature in the anesthetized rat. LaManna JC, et al. **Metab Brain Dis** 1989 Dec;4(4):225–37
Neurochemical and neural mechanisms of positive and negative symptoms in schizophrenia. Pickar D, et al. **Mod Probl Pharmacopsychiatry** 1990;24:124–51 (119 ref.)
Ethanol withdrawal seizures produce increased c–fos mRNA in mouse brain. Dave JR, et al. **Mol Pharmacol** 1990 Mar; 37(3):367–71
The cost to the central nervous system of climbing to extremely high altitude. Hornbein TF, et al. **N Engl J Med** 1989 Dec 21;321(25):1714–9
Spatial representation of words in the brain implied by studies of a unilateral neglect patient [see comments] Caramazza A, et al. **Nature** 1990 Jul 19;346(6281):267–9 Comment in: Nature 1990 Jul 19;346(6281):217–8.
Symmetrical and asymmetrical changes in brain tissue with age as measured on CT scans. Sandor T, et al. **Neurobiol Aging** 1990 Jan–Feb;11(1):21–7
Increased brain water content in pseudotumour cerebri measured by magnetic resonance imaging of brain water self diffusion. Sørensen PS, et al. **Neurol Res** 1989 Sep; 11(3):160–4
The circadian rhythm of typical absence seizures—the frequency and duration of paroxysmal discharges. Nagao H, et al. **Neuropediatrics** 1990 May;21(2):79–82
Rett syndrome: an EEG study in 52 girls. Robb SA, et al. **Neuropediatrics** 1989 Nov;20(4):192–5
Characteristics of motor potentials on impairment of the function of subcortical human brain motor structures. Troshina EM. **Neurosci Behav Physiol** 1990 Jan–Feb; 20(1):12–8
TCP binding: a tool for studying NMDA receptor–mediated neurotransmission in kindling. Bonhaus DW, et al. **Neurosci Biobehav Rev** 1989 Winter;13(4):261–7 (42 ref.)
Stepwise progression of kindling: perspectives from the kindling antagonism model. Burchfiel JL, et al. **Neurosci Biobehav Rev** 1989 Winter;13(4):289–99 (44 ref.)
Experimental approach to individual vulnerability to psychostimulant addiction. Deminiere JM, et al. **Neurosci Biobehav Rev** 1989 Summer–Fall;13(2–3):141–7 (54 ref.)
Opponent process theory of motivation: neurobiological evidence from studies of opiate dependence. Koob GF, et al. **Neurosci Biobehav Rev** 1989 Summer–Fall; 13(2–3):135–40 (40 ref.)
Seizure–triggering mechanisms in the kindling model of epilepsy: collapse of GABA–mediated inhibition and activation of NMDA receptors. Morimoto K. **Neurosci Biobehav Rev** 1989 Winter;13(4):253–60 (33 ref.)
Dipole–tracing of abnormal slow brain potentials after cerebral stroke—EEG, PET, MRI correlations. Nakajima Y, et al. **Neurosci Lett** 1990 Apr 20;112(1):59–64
Effect of LiCl pretreatment on cholinomimetic–induced seizures and seizure–induced brain edema in rats. Terry JB, et al. **Neurosci Lett** 1990 Jun 22;114(1):123–7
Behavioural deficits and serotonin depletion in adult rats after transient infant nasal viral infection. Mohammed AK, et al. **Neuroscience** 1990;35(2):355–63
Brain mapping techniques to maximize resection, safety, and seizure control in children with brain tumors. Berger MS, et al. **Neurosurgery** 1989 Nov;25(5):786–92
The use of electroencephalography and brain protection during operation for basilar aneurysms. Muizelaar JP. **Neurosurgery** 1989 Dec;25(6):899–903
Central post–stroke pain—somatosensory evoked potentials in relation to location of the lesion and sensory signs. Holmgren H, et al. **Pain** 1990 Jan;40(1):43–52
Neurotoxicologic evaluation of rats after 13 weeks of inhalation exposure to dichloromethane or carbon monoxide. Mattsson JL, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):671–81
Evoked potential changes from 13 weeks of simulated toluene abuse in rats. Mattsson JL, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):683–9
Stress adaptation and hypersensitivity in 5–HT neuronal systems after repeated foot shock. Ohi K, et al. **Pharmacol Biochem Behav** 1989 Nov;34(3):603–8
Regulatory changes in presynaptic cholinergic function assessed in rapid autopsy material from patients with Alzheimer disease: implications for etiology and therapy. Slotkin TA, et al. **Proc Natl Acad Sci U S A** 1990 Apr; 87(7):2452–5
Hippocampal plasticity in normal aging and decreased plasticity in Alzheimer's disease. Flood DG, et al. **Prog Brain Res** 1990;83:435–43 (67 ref.)
Ventilatory control in sleep apnea: a search for brain neurochemical defects. Sullivan CE, et al. **Prog Clin Biol Res** 1990;345:325–34; discussion 335–6
Event–related potentials in schizophrenia. Straumanis JJ. **Psychiatr Med** 1990;8(1):53–72 (107 ref.)
Attention deficit disorder and allergy: a neurochemical model of the relation between the illnesses. Marshall P. **Psychol Bull** 1989 Nov;106(3):434–46 (110 ref.)
Are gender differences in schizophrenia reflected in brain event–related potentials? Josiassen RC, et al. **Schizophr Bull** 1990;16(2):229–46
Blink rates in schizophrenia. Karson CN, et al. **Schizophr Bull** 1990;16(2):345–54 (80 ref.)
Some pathophysiological aspects of experimental autoimmune encephalomyelitis. Honegger CG, et al. **Schweiz Rundsch Med Prax** 1989 Sep 5;78(36):964–6
Sick of work. Air Force researcher has new idea about nausea. Erickson D. **Sci Am** 1990 Jun;262(6):84, 86
Insights from broken brains [news] Palca J. **Science** 1990 May 18;248(4957):812–4
Effect of strokes on musical ability and performance. Hachinski VC. **Semin Neurol** 1989 Jun;9(2):159–62 (37 ref.)
Anesthetic modulation of cerebral hemodynamic and evoked responses to transient middle cerebral artery occlusion in cats. Helfaer MA, et al. **Stroke** 1990 May;21(5):795–800
Preservation of brain temperature during ischemia in rats. Minamisawa H, et al. **Stroke** 1990 May;21(5):758–64
Hypothermia protects brain function in acute carbon monoxide poisoning. Sutariya B, et al. **Vet Hum Toxicol** 1989 Oct;31(5):436–41
Comparison of neck dislocation and percussion of the head on visual evoked responses in the chicken's brain. Gregory NG, et al. **Vet Rec** 1990 Jun 9;126(23):570–2
Brain bioelectric activity in aging. Kuznetsova SM, et al. **Z Gerontol** 1989 Sep–Oct;22(5):222–7 (50 ref.)
[An electric T test topographic map study of the brain in uremia] Song JH, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Oct;69(10):576–7, 40 (Eng. Abstr.) **(Chi)**
[Research on models of epilepsy and its mechanism] Wu DZ, et al. **Sheng Li Ko Hsueh Chin Chan** 1989 Jul;20(3):250–4 (40 ref.) **(Chi)**
[Brain function monitoring] Zettler H, et al. **Anaesthesiol Reanim** 1990;15(3):151–9 (29 ref.) (Eng. Abstr.) **(Ger)**
[Cognitive processes in unconscious patients? A brain mapping study of the P300 potential] Reuter BM, et al. **Arch Psychol (Frankf)** 1989;141(3):155–73 (Eng. Abstr.) **(Ger)**
[New electrophysiological findings on the incidence of brain involvement in clinically and neurologically asymptomatic HIV infections] Arendt G, et al. **EEG EMG** 1989 Dec; 20(4):280–7 (Eng. Abstr.) **(Ger)**
[High–resolution eye movement recording in the assessment of neurologic complications in HIV–1 infection] Currie J, et al. **EEG EMG** 1989 Dec;20(4):273–9 (Eng. Abstr.) **(Ger)**
[Visual motor coordination of AIDS patients, HIV–positive asymptomatic probands and healthy persons during video–tracking] Hansen ML, et al. **EEG EMG** 1989 Dec; 20(4):267–72 (Eng. Abstr.) **(Ger)**
[Neurophysiological studies in HIV infection (editorial)] Henkes H, et al. **EEG EMG** 1989 Dec;20(4):233 **(Ger)**
[Polygraphic sleep data in AIDS patients] Kubicki S, et al. **EEG EMG** 1989 Dec;20(4):288–94 (Eng. Abstr.) **(Ger)**
[Neurophysiologic principles and clinical value of post–convulsive serum prolactin determination in epileptic seizure] Bauer J, et al. **Fortschr Neurol Psychiatr** 1989 Nov; 57(11):457–68 (89 ref.) (Eng. Abstr.) **(Ger)**
[Amino acids as activating neurotransmitters] Rommelspacher H. **Nervenarzt** 1990 Jan;61(1):61–3 (4 ref.) **(Ger)**
[The deafferentation concept] Wiegand H. **Neurochirurgia (Stuttg)** 1990 Jul;33(4):97–9 (22 ref.) (Eng. Abstr.) **(Ger)**
[Visual perception and its disorders] Ruf–Bächtiger L. **Schweiz Rundsch Med Prax** 1989 Nov 21;78(47):1313–8 (Eng. Abstr.) **(Ger)**
[Focal epilepsy: generation and spreading mechanisms in experimental conditions] Pockberger H. **Wien Klin Wochenschr** 1990 Mar 30;102(7):201–5 (6 ref.) (Eng. Abstr.) **(Ger)**
[Age as a risk factor for the development of dementias? Consideration of changes in cerebral glucose metabolism with increasing age] Hoyer S. **Z Gerontol** 1989 Jul–Aug; 22(4):206–11 (82 ref.) (Eng. Abstr.) **(Ger)**
[Constitutional peculiarities of the bioelectric activity of the brain] Kusnezowa SM, et al. **Z Gerontol** 1990 Jan–Feb; 23(1):56–8 (Eng. Abstr.) **(Ger)**
[The effects of post–ischemic delayed hypoperfusion on the process of recovery of brain function] Dote K. **Masui** 1990 Apr;39(4):442–9 (Eng. Abstr.) **(Jpn)**
[Changes in canine conjunctival and cerebral oxygen tension during hemorrhagic hypotension] Kikuta Y. **Masui** 1989 Nov;38(11):1421–6 (Eng. Abstr.) **(Jpn)**
[Early pathophysiological findings in experimental concussion in rabbits] Sugiura M, et al. **Neurol Med Chir (Tokyo)** 1989 Oct;29(10):877–84 (Eng. Abstr.) **(Jpn)**
[Delayed neuronal dysfunction after recirculation of cerebral ischemia] Yamagata S, et al. **No Shinkei Geka** 1989 Sep; 17(9):821–6 (Eng. Abstr.) **(Jpn)**
[Usefulness and limitation of clinical electroencephalography: from the clinical standpoint] Okada K. **Rinsho Byori** 1990 Jun;38(6):657–63 (Eng. Abstr.) **(Jpn)**
[The epilepsy mutant] Suzuki J, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1214–26 **(Jpn)**
[Neuropeptides and the hypotheses regarding schizophrenic psychoses] Slowik S. **Psychiatr Pol** 1988 Nov–Dec; 22(6):483–90 (35 ref.) **(Pol)**
[Risk factors of central nervous system damage in the perinatal period] Dobzhan'ska A, et al. **Akush Ginekol (Mosk)** 1990 Jan;(1):8–9 **(Rus)**
[The relationship of the electrical reactions of the brain to lipid peroxidation processes in pathological aging] Fokin VF, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):682–4 (Eng. Abstr.) **(Rus)**
[Morphological and histochemical analysis of central effects of angiotensin–II after experience of emotional stress] Ishchenko AG. **Biull Eksp Biol Med** 1990 May;109(5):494–7 (Eng. Abstr.) **(Rus)**
[Effects of lateralized electric stimulation of the brain on

audiogenic convulsive attack in rats] Konovalov VF, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):17–8 (Eng. Abstr.) **(Rus)**

[Effects of delta sleep–inducing peptide on the intercentral integration during experimental epilepsy] Popova NS, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):147–50 (Eng. Abstr.) **(Rus)**

[The effect of hyperthermia on the M–cholinoreceptors of the brain synaptosomes in the rat] Shalymov BK, et al. **Dokl Akad Nauk SSSR** 1990;311(2):509–12 **(Rus)**

[Changes in the level of the permanent potential of the deep brain structures in rabbits with a Brown–Pearce carcinoma] Prokopovich SK, et al. **Eksp Onkol** 1990;12(2):79–81 (Eng. Abstr.) **(Rus)**

[The functional dynamics of the brain during transcranial electroanalgesia] Lomarev MP. **Fiziol Cheloveka** 1989 Nov–Dec;15(6):24–33 **(Rus)**

[The neurophysiological correlates of the system of supraspinal regulation of muscle tonus in parkinsonism] Lomarev MP, et al. **Fiziol Cheloveka** 1990 Mar–Apr; 16(2):149–51 **(Rus)**

[The effect of chronic alcoholic intoxication on the bioelectrical activity of the human brain] Duplenko PIu. **Fiziol Zh** 1989 Jul–Aug;35(4):74–80 (Eng. Abstr.) **(Rus)**

[Ways to optimize the cerebral circulation during extreme actions on the brain] Gaidar BV, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1568–75 (Eng. Abstr.) **(Rus)**

[Methods of studying intracranial blood and cerebrospinal fluid circulation in chronic experimental decompression sickness] Korolev AB. **Kosm Biol Aviakosm Med** 1990 Jan–Feb;24(1):47–9 **(Rus)**

[Functional state of various organs in patients after replantation an revascularization of large segments of the extremities] Kiprenskiĭ IuV, et al. **Ortop Travmatol Protez** 1989 Nov;(11):35–9 (Eng. Abstr.) **(Rus)**

[Age–related features of the functional state of the brain in patients with circulatory encephalopathy] Man'kovskiĭ NB, et al. **Vestn Akad Med Nauk SSSR** 1990;(1):46–8 (Eng. Abstr.) **(Rus)**

[Anesthesiologic procedures based on the use of transcranial electric stimulation of the antinociceptive system in surgery of the lungs] Katsnel'son IaS, et al. **Vestn Khir** 1989 Nov; 143(11):106–7 **(Rus)**

[Study of evoked potentials in patients with arteriosclerotic and senile dementia] Bogdanov AS, et al. **Zh Nevropatol Psikhiatr** 1990;90(3):110–3 (Eng. Abstr.) **(Rus)**

[Encephaloradiothermometry in the diagnosis of early stages of cerebrovascular insufficiency] Gustov AV, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):27–31 (Eng. Abstr.) **(Rus)**

[Significance of the activating and deactivating mechanisms of the brain in autonomic regulation] Solov'eva AD, et al. **Zh Nevropatol Psikhiatr** 1989;89(10):26–9 (Eng. Abstr.) **(Rus)**

[Neurophysiologic and pathomorphologic characteristics of the development of alcoholism (experimental study)] Vorob'eva TM, et al. **Zh Nevropatol Psikhiatr** 1990; 90(2):77–84 (Eng. Abstr.) **(Rus)**

[The dynamics of the superslow potential fluctuations in the decaminute range after intracranial operations] Khil'ko VA, et al. **Zh Vopr Neirokhir** 1990 Mar–Apr;(2):33–4 (Eng. Abstr.) **(Rus)**

[The relation of psychological characteristics of alcoholics and indices of discrete omega measurement] Grinenko AIa, et al. **Zh Vyssh Nerv Deiat** 1989 Nov–Dec;39(6):1014–7 (Eng. Abstr.) **(Rus)**

[Thermal asymmetry of the rat brain in catalepsy] Petrova EV, et al. **Zh Vyssh Nerv Deiat** 1989 Nov–Dec;39(6):1160–2 **(Rus)**

[The reflection of emotional tension in the spatial synchronization of the biopotentials in the human brain] Rusalova MN. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr; 40(2):254–62 (Eng. Abstr.) **(Rus)**

[The locked–in patient and the characteristics of the electrical activity of his brain] Rusinov VS, et al. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr;40(2):218–29 (Eng. Abstr.) **(Rus)**

[Handedness, cerebral dysfunction and dyslexia] Céspedes A, et al. **Rev Chil Pediatr** 1989 Jan–Feb;60(1):18–23 (Eng. Abstr.) **(Spa)**

[Neurophysiologic bases and neuropsychological approach to the study of infantile hyperactivity] Polaino–Lorente A, et al. **Rev Esp Fisiol** 1989;45 Suppl:255–63 (63 ref.) (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Treatment of small cell lung cancer. Two–drug versus four–drug chemotherapy and loco–regional irradiation with or without prophylactic cranial irradiation. Niiranen A, et al. **Acta Oncol** 1989;28(4):501–5

Neurotoxicity in lymphoblastic leukaemia: comparison of oral and intramuscular methotrexate and two doses of radiation. Chessells JM, et al. **Arch Dis Child** 1990 Apr;65(4):416–22

Diagnosis of delayed cerebral radiation necrosis following proton beam therapy. Kaufman M, et al. **Arch Neurol** 1990 Apr;47(4):474–6

Reaction of neoplasm and brain to laser. Rosomoff HL, et al. **Arch Neurol** 1966 Feb;14(2):143–8

Clinical radiation tolerance of brain, spinal cord, and peripheral nerves. Laboratory and patient data as clinical guides. Griem ML. **Front Radiat Ther Oncol** 1989; 23:367–89 (143 ref.)

The effect of prenatal radiation exposure on the developing human brain. Mole RH. **Int J Radiat Biol** 1990 Apr; 57(4):647–63 (35 ref.)

Late effects in mouse heart after 60Co gamma–irradiation of the brain: an ultrastructural study. Yang VC, et al. **Int J Radiat Biol** 1990 Jun;57(6):1225–41

An animal model of prophylactic cranial irradiation: histologic effects at acute, early and delayed stages. Mildenberger M, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1051–60

Fetal hypothalamic transplants into brain irradiated rats: graft morphometry and host behavioral responses. Pearlman SH, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):293–300

Is prophylactic cranial irradiation indicated in small–cell lung cancer? Fleck JF, et al. **J Clin Oncol** 1990 Feb;8(2):209–14 (32 ref.)

Late neurological complications after prophylactic cranial irradiation in patients with small–cell lung cancer: the Toronto experience. Lishner M, et al. **J Clin Oncol** 1990 Feb;8(2):215–21

Brain irradiation and systemic chemotherapy for small–cell lung cancer: dangerous liaisons? Turrisi AT. **J Clin Oncol** 1990 Feb;8(2):196–9

The effects of irradiation on major histocompatibility complex expression and lymphocytic infiltration in the normal rat brain and the 9L gliosarcoma brain tumor model. Wen P, et al. **J Neuroimmunol** 1990 May; 27(2–3):239–44

Reduction in radiation–induced brain injury by use of pentobarbital or lidocaine protection. Oldfield EH, et al. **J Neurosurg** 1990 May;72(5):737–44

Sex differences in cognitive processing in children treated with CNS prophylaxis for acute lymphoblastic leukemia. Waber DP, et al. **J Pediatr Psychol** 1990 Feb;15(1):105–22

The role of prophylactic cranial irradiation in regionally advanced non–small cell lung cancer. A Southwest Oncology Group Study. Rusch VW, et al. **J Thorac Cardiovasc Surg** 1989 Oct;98(4):535–9

Organization of DNA in cerebellar neurons of ageing unirradiated and irradiated rats. Jaberaboansari A, et al. **Mech Ageing Dev** 1989 Dec;50(3):257–76

Radiation–induced brain damage in children—histological analysis of sequential tissue changes in 34 autopsy cases. Oi S, et al. **Neurol Med Chir (Tokyo)** 1990 Jan;30(1):36–42

Ionizing radiation and the developing brain. Schull WJ, et al. **Neurotoxicol Teratol** 1990 May–Jun;12(3):249–60 (75 ref.)

Prenatal radiation risk to the brain. Cockerham LG, et al. **Neurotoxicology** 1989 Fall;10(3):467–74 (48 ref.)

Microwave induced stimulation of 32Pi incorporation into phosphoinositides of rat brain synaptosomes. Gandhi CR, et al. **Radiat Environ Biophys** 1989;28(3):223–34

Differential effects of chronic ingestion of tritiated water on prenatal brain development. Zamenhof S. **Radiat Res** 1990 Apr;122(1):101–3

Radiosurgery and the double logistic product formula. Flickinger JC, et al. **Radiother Oncol** 1990 Mar; 17(3):229–37

[Erythema multiforme induced by the combination of phenytoin and cerebral irradiation] Giroud M, et al. **Therapie** 1990 Jan–Feb;45(1):23–5 (Eng. Abstr.) **(Fre)**

[EEG findings in ALL patients 10 years following irradiation and cytostatic therapy] König R, et al. **Klin Padiatr** 1990 May–Jun;202(3):153–6 (Eng. Abstr.) **(Ger)**

[Radiation–induced brain atrophy] Asai A, et al. **Gan No Rinsho** 1989 Sep;35(11):1325–9 (15 ref.) (Eng. Abstr.) **(Jpn)**

[Histopathology of radiation injury of the brain with special reference to intraoperative radiotherapy] Funata N, et al. **Gan No Rinsho** 1989 Sep;35(11):1213–8 (Eng. Abstr.) **(Jpn)**

[Radiotherapy of malignant glioma—prospective randomized clinical study of whole brain vs local irradiation] Kita M, et al. **Gan No Rinsho** 1989 Sep;35(11):1289–94 (Eng. Abstr.) **(Jpn)**

[Histophysiology of tissue basophils of the cerebral dura mater after laser irradiation] Chertok VM, et al. **Biull Eksp Biol Med** 1989 Oct;108(10):493–5 (Eng. Abstr.) **(Rus)**

[Effect of chronic effect of the electrostatic field on various biochemical indicators of the tissues] Romodanova EA, et al. **Fiziol Zh** 1990 May–Jun;36(3):30–4 (Eng. Abstr.) **(Rus)**

[Informative value of various biochemical indicators in the evaluation of the effects on the body of variable magnetic and electric fields of low and industrial frequencies] Kolodub FA. **Gig Sanit** 1989 Oct;(10):87–9 **(Rus)**

[Study of the effect of microwave radiation on the nervous system (results of the Soviet–American Research Project)] Mitchel KL, et al. **Gig Sanit** 1989 Oct;(10):70–3 **(Rus)**

[Functional status of the developing body as a criterion of hygienic standardization of electromagnetic fields of 2750 MHz] Po'lka NS. **Gig Sanit** 1989 Oct;(10):36–9 (Eng. Abstr.) **(Rus)**

[Status of the monoaminergic systems and enzymes of energy metabolism in rats exposed to electrostatic fields of 120 kV/m in a chronic experiment] Portnov FG, et al. **Gig Sanit** 1989 Oct;(10):89–90 **(Rus)**

[The effect of L–DOPA on the accumulation of lipid peroxidation products in separate brain structures during irradiation] Babaev RA, et al. **Radiobiologiia** 1990 Jan–Feb; 30(1):57–61 (Eng. Abstr.) **(Rus)**

[Postradiation changes in the activity of membrane–bound nerve tissue enzymes] Beridze MG, et al. **Radiobiologiia** 1989 Sep–Oct;29(5):601–4 (Eng. Abstr.) **(Rus)**

[Postradiation changes to the systems of active ion transport in the CNS. The content of adenine nucleotides as an index of the energy support for transport] Dvoretskii AI, et al. **Radiobiologiia** 1990 Jan–Feb;30(1):50–3 (Eng. Abstr.) **(Rus)**

[Dynamics of the pathomorphological changes in the rat brain in relation to the dose of gamma irradiation] Fedorov VP. **Radiobiologiia** 1990 May–Jun;30(3):378–84 (Eng. Abstr.) **(Rus)**

[The effect of a superhigh dose of ionizing radiation on the content of catecholamine mediators in different areas of the rat brain] Goncharenko EN, et al. **Radiobiologiia** 1989 Sep–Oct;29(5):709–11 (Eng. Abstr.) **(Rus)**

[The effect of ionizing radiation at superhigh dosages on the ATP content in the rat brain] Kormer ZS, et al. **Radiobiologiia** 1990 Jan–Feb;30(1):46–9 (Eng. Abstr.) **(Rus)**

[The effect of high energy irradiation on the membrane potential and impulse activity of neurons in the brain of Helix pomatia] Luk'ianov AN, et al. **Radiobiologiia** 1989 Sep–Oct;29(5):621–4 (Eng. Abstr.) **(Rus)**

[The radiomodifying action of ATP and ADP on membrane–bound enzymes] Nadareishvili KSh, et al. **Radiobiologiia** 1989 Sep–Oct;29(5):648–51 (Eng. Abstr.) **(Rus)**

[The CNS syndrome. The characteristics of the intermediate filaments of the rat brain] Nedzvetskiĭ VS, et al. **Radiobiologiia** 1990 Mar–Apr;30(2):243–6 (Eng. Abstr.) **(Rus)**

[The three–dimensional structure of presynaptic mitochondria in a factorial experiment involving irradiation of the brain with a low–intensity laser] Rusakov DA. **Radiobiologiia** 1990 May–Jun;30(3):358–63 (Eng. Abstr.) **(Rus)**

[Cumulated biological effects of microwaves and their reflection in behavior, work capacity, growth of body mass and state of brain neurons] Suvorov NB, et al. **Radiobiologiia** 1989 Sep–Oct;29(5):660–6 (Eng. Abstr.) **(Rus)**

[Mediator processes in the brain structures in the late periods after external and combined exposure to ionizing radiation] Talts MIu, et al. **Radiobiologiia** 1990 Mar–Apr;30(2):276–9 (Eng. Abstr.) **(Rus)**

[The brain phospholipids following the irradiation of animals at a high dosage] Vladimirov VG, et al. **Radiobiologiia** 1990 Jan–Feb;30(1):40–5 (Eng. Abstr.) **(Rus)**

[The effect of the x–ray irradiation of rats on the NAD–pyrophosphorylase and poly(ADP–ribose)polymerase activities of brain nuclei and on the NAD content in nerve tissue] Zaalishvili TM, et al. **Radiobiologiia** 1990 Jan–Feb;30(1):36–9 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

White matter low attenuation on computed tomography in Alzheimer's disease and vascular dementia—diagnostic and pathogenetic aspects. Wallin A, et al. **Acta Neurol Scand** 1989 Dec;80(6):518–23

108 cases of hemiplegia caused by stroke: the relationship between CT scan results, clinical findings and the effect of acupuncture treatment. Chen YM, et al. **Acupunct Electrother Res** 1990;15(1):9–17

Application of dynamic computed tomography scan and computed tomography densitometry in the evaluation of brain volume enlargement. Czernicki Z, et al. **Adv Neurol** 1990;52:529–32

Use of acetazolamide–challenge xenon CT in the assessment of cerebral blood flow dynamics in patients with arteriovenous malformations. Tarr RW, et al. **AJNR** 1990 May;11(3):441–8

Ventricular abnormalities in affective disorder: clinical and demographic correlates. Andreasen NC, et al. **Am J Psychiatry** 1990 Jul;147(7):893–900

Genetic and perinatal determinants of structural brain deficits in schizophrenia. Cannon TD, et al. **Arch Gen Psychiatry** 1989 Oct;46(10):883–9

Hereditary cerebral hemorrhage with amyloidosis–Dutch type. Clinical and computed tomographic analysis of 24 cases. Haan J, et al. **Arch Neurol** 1990 Jun;47(6):649–53

Lower body (vascular) parkinsonism [letter; comment] Jankovic J. **Arch Neurol** 1990 Jul;47(7):728 Comment on: Arch Neurol 1989 Dec;46(12):1292–6.

Brain white–matter changes in the elderly prone to falling [see comments] Masdeu JC, et al. **Arch Neurol** 1989 Dec; 46(12):1292–6 Comment in: Arch Neurol 1990 Jul;47(7):728.

The Scottish First Episode Schizophrenia Study. VI. Computerised tomography brain scans in patients and controls. MacDonald HL, et al. **Br J Psychiatry** 1989 Apr; 154:492–8

Mood disorders after stroke and their relation to lesion location. A CT scan study. House A, et al. **Brain** 1990 Aug;113 (Pt 4):1113–29

Head scan appearances and cognitive function in renal failure. Baker LR, et al. **Clin Nephrol** 1989 Nov;32(5):242–8

Age–related changes in cerebral white matter measured by computed cranial tomography. Fukuda H, et al.

Comput Med Imaging Graph 1990 Jan–Feb;14(1):79–84

Cerebral computed tomography in a stage IV ethylene glycol intoxication. Chung PK, et al. **Conn Med** 1989 Sep; 53(9):513–4

Reaction to contrast media in contrast-enhanced CT of the brain. A comparative investigation of non-ionic ultravist and ionic urografin-meglumin. Jensen PR, et al. **Eur J Radiol** 1989 Aug;9(3):144–6

Leuko-araiosis: definition and clinical correlates—an overview. Prencipe M, et al. **Eur Neurol** 1989;29 Suppl 2:27–9 (15 ref.)

An evaluation of cranial CT scanning in clinical psychiatry. Colohan H, et al. **Ir J Med Sci** 1989 Jul;158(7):178–81

Leuko-araiosis: a reappraisal. I. CT studies. Inzitari D, et al. **Ital J Neurol Sci** 1990 Jun;11(3):241–8 (59 ref.)

Neurologic, computed cranial tomographic, and magnetic resonance imaging abnormalities in patients with small-cell lung cancer: further follow-up of 6- to 13-year survivors. Johnson BE, et al. **J Clin Oncol** 1990 Jan;8(1):48–56

Appearing and disappearing CT scan abnormalities in epilepsy in India—an enigma. Bansal BC, et al. **J Neurol Neurosurg Psychiatry** 1989 Oct;52(10):1185–7

Postoperative CT contrast enhancement following lobectomy for epilepsy. Laohaprasit V, et al. **J Neurosurg** 1990 Sep; 73(3):392–5

Neuroradiologists find 'gentler' angiography excellent for diagnosis, kinder to patients [news] Randall T. **JAMA** 1990 Apr 11;263(14):1890–1, 1895

Critical analysis of the use of computer-assisted transverse axial tomography to study human brain in aging and dementia of the Alzheimer type. DeCarli C, et al. **Neurology** 1990 Jun;40(6):872–83 (111 ref.)

Serial quantitative CT analysis of brain morphometrics in adult Down's syndrome at different ages. Schapiro MB, et al. **Neurology** 1989 Oct;39(10):1349–53

Computed tomography of the brain in eclampsia. Milliez J, et al. **Obstet Gynecol** 1990 Jun;75(6):975–80

Unusual CT image of a cerebral hydatid cyst. González-Ruiz CA, et al. **Pediatr Radiol** 1990;20(4):283–4

Computed tomographic (CT) scans in cerebral palsy (CP). Kolawole TM, et al. **Pediatr Radiol** 1989;20(1–2):23–7

Hypothalamic-pituitary dwarfism: comparison between MR imaging and CT findings. Maghnie M, et al. **Pediatr Radiol** 1990;20(4):229–35

The role of noise in the measurement of cerebral blood flow and partition coefficient using xenon-enhanced computed tomography. Bews J, et al. **Phys Med Biol** 1990 Jul; 35(7):937–45

Quantitative computed tomography of the brain with xenon enhancement: a phantom study with the GE9800 scanner. Lee TY, et al. **Phys Med Biol** 1990 Jul;35(7):925–35

Confusional state and cerebral infarcts. García-Albea E. **Postgrad Med J** 1989 May;65(763):286–90

Portal films and their use in quality assurance—cranial irradiation. Walls C. **Radiogr Today** 1990 Jun;56(637):15–8

Computed tomography in suspected bacterial meningitis. Allen DM. **Singapore Med J** 1990 Jun;31(3):196–7

Cranial computed tomography and magnetic resonance tomography in cerebrovascular occlusive disease. Becker H. **Thorac Cardiovasc Surg** 1989 Aug;37(4):238–42

High alcohol consumption, liver toxic drugs and brain damage—a population study. Mützell S, et al. **Ups J Med Sci** 1989;94(3):305–15

[CT brain scanning in the diagnosis and localisation of cerebral schistosomiasis] Mao SC, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(2):115–8 (Eng. Abstr.) **(Chi)**

[Postoperative computed tomography: study of 10 cases on reactive ring-enhancement in brain] Xiao JH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Sep;20(3):338–41 (Eng. Abstr.) **(Chi)**

[The most frequent localization of cerebral ischemia attacks. III. Status lacunaris cerebri] Kalvach P, et al. **Cas Lek Cesk** 1989 Sep 22;128(39):1224–9 (Eng. Abstr.) **(Cze)**

[Wilson's disease in a Saudi Arabian female patient. Rapid changes in cerebral x-ray computed tomography] Awada A, et al. **Rev Neurol (Paris)** 1990;146(4):306–7 (Eng. Abstr.) **(Fre)**

[Problems in CT diagnosis of the aging brain] Kohlmeyer K. **Radiologe** 1989 Dec;29(12):584–91 (51 ref.) (Eng. Abstr.) **(Ger)**

[Histopathologically verified cerebral CT findings in AIDS] Tosch U, et al. **ROFO** 1990 Feb;152(2):196–9 (Eng. Abstr.) **(Ger)**

[Anesthesia for cerebral computerized tomography in pediatrics] Colarossi G, et al. **Minerva Anestesiol** 1989 Apr; 55(4):159–60 (Eng. Abstr.) **(Ita)**

[Computerized tomography of the skull in children with lymphoblastic leukemia treated with prophylactic cranial radiation] Masotti A, et al. **Pediatr Med Chir** 1989 May–Jun;11(3):325–8 (Eng. Abstr.) **(Ita)**

[Post-mortem observation of glioma and/or brain tissue compared to C-T scan findings after irradiation] Nakamura N, et al. **Gan No Rinsho** 1989 Sep;35(11):1313–23 (Eng. Abstr.) **(Jpn)**

[Brain tumors associated with hemorrhage from tumors as their first manifestation] Otsuka S, et al. **Nippon Geka Hokan** 1989 Jan 1;58(1):147–54 (Eng. Abstr.) **(Jpn)**

[RGSS-IDJ and its application to cranial computed tomography] Ikeda M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Apr 25; 49(4):445–53 (Eng. Abstr.) **(Jpn)**

[Peculiar computed tomographic images after intracranial use of microfibrillar collagen hemostat: report of three cases] Gondo G, et al. **No Shinkei Geka** 1989 Nov;17(11):1067–71 (Eng. Abstr.) **(Jpn)**

[Neuronavigator] Watanabe E. **No Shinkei Geka** 1989 Dec; 17(12):1097–103 **(Jpn)**

[Computed tomographic study of children with microcephaly] Ito M, et al. **No To Hattatsu** 1989 Sep; 21(5):440–4 (Eng. Abstr.) **(Jpn)**

[Progression of CT scan findings in Rett syndrome] Suzuki H, et al. **No To Hattatsu** 1989 Jul;21(4):321–6 (Eng. Abstr.) **(Jpn)**

[A quantitative evaluation of brain computerized tomography in children using color image analyzer] Yamatani M, et al. **No To Shinkei** 1989 Nov;41(11):1097–101 (Eng. Abstr.) **(Jpn)**

[Value of roentgen pictures in epilepsy] Czochańska J, et al. **Neurol Neurochir Pol** 1989 Jan;23(1):84 **(Pol)**

[Radiological and ultrasonographic examinations in Wilson's disease] Kryst T, et al. **Pol Przegl Radiol** 1988 Nov–Dec; 52(6):249–52 (Eng. Abstr.) **(Pol)**

[Computerized tomography of the head in patients with epilepsy] Pakszys W, et al. **Pol Tyg Lek** 1989 Jan 30; 44(5):124–7 (Eng. Abstr.) **(Pol)**

[The course of bipolar disorder, effectiveness of drug therapy and the status of the central nervous system studied by computerized tomography] Pużyński S, et al. **Psychiatr Pol** 1988 Nov–Dec;22(6):413–9 (Eng. Abstr.) **(Pol)**

[Computerized tomography in the evaluation of the central nervous system of patients with bipolar disorder] Pużyński S, et al. **Psychiatr Pol** 1988 Nov–Dec;22(6):420–5 (Eng. Abstr.) **(Pol)**

[Diagnosis of senile dementia using the method of computerized tomography] Medvedev AV, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):85–91 (Eng. Abstr.) **(Rus)**

[Study of the morphological characteristics of the brain in patients with schizophrenia by the method of computerized tomography] Vovin RIa, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):52–5 (Eng. Abstr.) **(Rus)**

[Utilization of findings from computerized tomography of the brain in psychiatric diagnosis] Perković T. **Liječ Vjesn** 1989 Aug;111(8):291–5 (Eng. Abstr.) **(Scr)**

[An unusual CT image of an ischemic focus] Mihale J, et al. **Cesk Neurol Neurochir** 1990 May;53(3):188–90 (Eng. Abstr.) **(Slo)**

RADIONUCLIDE IMAGING

Slowly progressive aphasia syndrome. A positron emission tomographic study. Salmon E, et al. **Acta Neurol Belg** 1989 May–Oct;89(3–4):242–5

Positron emission tomography in degenerative dementias. Salmon E, et al. **Acta Neurol Belg** 1989 May–Oct; 89(3–4):150–5

Cerebral muscarinic receptors in primary degenerative dementia as evaluated by SPECT with iodine-123-labeled QNB. Weinberger DR, et al. **Adv Neurol** 1990;51:147–50

Double tracer autoradiographic method for sequential evaluation of regional cerebral perfusion. Matsuda H, et al. **Am J Physiol Imaging** 1989;4(4):131–5

Cerebral blood flow, oxygen and glucose metabolism with PET in progressive supranuclear palsy. Otsuka M, et al. **Ann Nucl Med** 1989 Nov;3(3):111–8

Measurement of regional cerebral blood flow and accentuation of the primary auditory cortex with single photon emission computed tomography. Schadel A, et al. **Arch Otorhinolaryngol** 1989;246(4):205–9

Single-photon emission computerised tomography (SPECT) in schizophrenia. Hawton K, et al. **Br J Psychiatry** 1990 Mar;156:425–7

Radioiodinated phenoxyacetic acid derivatives as potential brain imaging agents. I. Efficient synthesis via trimethylsilyl intermediates. Ohmomo Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Sep;37(9):2276–81

Radioiodinated phenoxyacetic acid derivatives as potential brain imaging agents. II. Structure-biodistribution relationship. Ohmomo Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Sep;37(9):2282–6

Possible extension of spect cerebral imaging in the investigation of epilepsy using radioiodinated benzodiazepines. Maddalena DJ, et al. **Clin Exp Neurol** 1989;26:151–9

Factors influencing the yield of cranial CT scanning in a private neurological practice. Reutens DC, et al. **Clin Exp Neurol** 1989;26:169–75

The hollow skull: a sign of brain death in Tc-99m HM-PAO brain scintigraphy. Abdel-Dayem HM, et al. **Clin Nucl Med** 1989 Dec;14(12):912–6

Cerebral perfusion changes in schizophrenic patients using Tc-99m hexamethylpropylene amineoxime (HMPAO). Abdel-Dayem HM, et al. **Clin Nucl Med** 1990 Jul; 15(7):468–72

Brain SPECT imaging with Tc-99m HM-PAO in Creutzfeld-Jakob disease. Cohen D, et al. **Clin Nucl Med** 1989 Nov;14(11):808–10

Tc-99m HMPAO SPECT of the brain in the neonate. Fockele DS, et al. **Clin Nucl Med** 1990 Mar;15(3):175–7

False-negative radionuclide cisternography in massive communicating hydrocephalus: value of the vertex view and CT correlation. Kir KM, et al. **Clin Nucl Med** 1989 Nov;14(11):819–22

Tc-99m HMPAO brain perfusion tomography atlas using a high resolution SPECT system. Matsuda H, et al. **Clin Nucl Med** 1990 Jun;15(6):428–31

Role of fast data acquisition method with Tc-99m HMPAO brain SPECT in patients with acute stroke. Oshima M, et al. **Clin Nucl Med** 1990 Mar;15(3):172–4

Iodoamphetamine-123 brain imaging demonstrating cortical deactivation in a patient with progressive supranuclear palsy. Timmons JH, et al. **Clin Nucl Med** 1989 Nov; 14(11):841–2

Cerebral perfusion imaging. Morrison CF, et al. **Curr Opin Radiol** 1989 Dec;1(4):468–74 (21 ref.)

Advances in radiopharmaceuticals for brain imaging with single-photon emission computed tomography. Volkert WA, et al. **Curr Opin Radiol** 1990 Aug;2(4):536–8 (34 ref.)

Applications of functional SPECT brain imaging in clinical practice. Scheff A. **Del Med J** 1989 Sep;61(9):463–4

Maps of receptor binding parameters in the human brain—a kinetic analysis of PET measurements. Blomqvist G, et al. **Eur J Nucl Med** 1990;16(4–6):257–65

A computerized adjustable brain atlas. Bohm C, et al. **Eur J Nucl Med** 1989;15(11):687–9

Nuclear medicine to image applied pathophysiology: evaluation of reserves by emission computerized tomography. Buell U, et al. **Eur J Nucl Med** 1990; 16(3):129–35 (81 ref.)

Quantification of the whole-body distribution of PET radiopharmaceuticals, applied to 3-N-([18F]fluoroethyl)spiperone [corrected; erratum to be published] Herzog H, et al. **Eur J Nucl Med** 1990; 16(2):77–83

Brain perfusion with intracarotid injection of 99mTc-HM-PAO in partial epilepsy during amobarbital testing. Hietala SO, et al. **Eur J Nucl Med** 1990; 16(8–10):683–7

A preliminary evaluation of the Scanditronix PC2048-15B brain scanner. Holte S, et al. **Eur J Nucl Med** 1989; 15(11):719–21

Single photon emission computed tomography (SPECT) using N-isopropyl-p-(123I) iodoamphetamine (IMP) in the evaluation of patients with epileptic seizures. Kawamura M, et al. **Eur J Nucl Med** 1990;16(4–6):285–92

In vivo metabolism and kinetics of 99mTc-HMPAO. Lucignani G, et al. **Eur J Nucl Med** 1990;16(4–6):249–55

Reproducibility of cerebral glucose utilization measured by PET and the [18F]-2-fluoro-2-deoxy-d-glucose method in resting, healthy human subjects. Maquet P, et al. **Eur J Nucl Med** 1990;16(4–6):267–73

Online brain attenuation correction in PET: towards a fully automated data handling in a clinical environment. Michel C, et al. **Eur J Nucl Med** 1989;15(11):712–8

N-isopropyl-p-123I-amphetamine single photon emission computer tomography in motor neuron disease. Ludolph AC, et al. **Eur Neurol** 1989;29(5):255–60

Synthesis of radiofluorinated analogs of m-tyrosine as potential L-dopa tracers via direct reaction with acetylhypofluorite. DeJesus OT, et al. **Int J Rad Appl Instrum [A]** 1990;41(5):433–7

Synthesis of omega-[18F]fluoroalkyl analogs of YM-09151-2 for the measurement of D2-dopamine receptors with PET. Hatano K, et al. **Int J Rad Appl Instrum [A]** 1990; 41(6):551–5

Radiosynthesis of high effective specific-activity [123I]SCH 23982 for dopamine D-1 receptor-based SPECT imaging. Moerlein SM, et al. **Int J Rad Appl Instrum [A]** 1990; 41(4):381–5

3-(2'-[18F]fluoroethyl)spiperone, a potent dopamine antagonist: synthesis, structural analysis and in-vivo utilization in humans. Satyamurthy N, et al. **Int J Rad Appl Instrum [A]** 1990;41(2):113–29

Technetium-99m dithiocarbamates as potential brain agents: evaluation of aliphatic and amine-containing analogues. Ballinger JR, et al. **Int J Rad Appl Instrum [B]** 1989; 16(7):721–5

Imaging benzodiazepine receptors in the human brain by single photon emission computed tomography (SPECT). Höll K, et al. **Int J Rad Appl Instrum [B]** 1989;16(8):759–63

Biodistribution, dosimetry, metabolism and monkey PET studies of [18F]GBR 13119. Imaging the dopamine uptake system in vivo. Kilbourn MR, et al. **Int J Rad Appl Instrum [B]** 1989;16(6):569–76

Synthesis and in vivo characterization of D-(+)-(N1-[11C]methyl)-2-Br-LSD: a radioligand for positron emission tomographic studies of serotonin 5-HT2 receptors. Lever JR, et al. **Int J Rad Appl Instrum [B]** 1989;16(7):697–704

Synthesis, characterization and biodistribution of neutral and lipid-soluble 99mTc-PAT-HM and 99mTc-TMR for brain imaging. Mach RH, et al. **Int J Rad Appl Instrum [B]** 1989; 16(8):829–37

Synthesis of [11C]sodium thiocyanate for in vivo studies of anion kinetics using positron emission tomography (PET). Stone-Elander S, et al. **Int J Rad Appl Instrum [B]** 1989; 16(7):741–6

Human brain and spinal cord scan after intracerebroventricular administration of iodine-123 morphine. Tafani JA, et al. **Int J Rad Appl Instrum [B]** 1989;16(5):505–9

Radiolabeled agents for SPECT imaging of brain perfusion. Walovitch RC, et al. **Int J Rad Appl Instrum [B]** 1990;

17(1):77–83 (56 ref.)
The relationship between global and local changes in PET scans. Friston KJ, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):458–66
A determination of the regional brain/blood partition coefficient of water using dynamic positron emission tomography. Iida H, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):874–85
Accuracy and precision of the computerized brain atlas programme for localization and quantification in positron emission tomography. Seitz RJ, et al.
J Cereb Blood Flow Metab 1990 Jul;10(4):443–57
Evaluation of the 11CO2 positron emission tomographic method for measuring brain pH. II. Quantitative pH mapping in patients with ischemic cerebrovascular diseases. Senda M, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):859–73
Reduced regional cerebral metabolic rate for glucose at the terminal stage in a case of late infantile neuronal ceroid lipofuscinosis. Fueki N, et al. **J Child Neurol** 1990 Apr; 5(2):98–100
Brain imaging as a tool in establishing a theory of brain pathology in obsessive compulsive disorder. Baxter LR. **J Clin Psychiatry** 1990 Feb;51 Suppl:22–5; discussion 26
PET imaging in obsessive compulsive disorder with and without depression. Baxter LR Jr, et al.
J Clin Psychiatry 1990 Apr;51 Suppl:61–9; discussion 70 (46 ref.)
Anatomical localization for PET using MR imaging. Meltzer CC, et al. **J Comput Assist Tomogr** 1990 May–Jun; 14(3):418–26
Cerebral metabolic pattern in young adult Down's syndrome subjects: altered intercorrelations between regional rates of glucose utilization. Horwitz B, et al.
J Ment Defic Res 1990 Jun;34 (Pt 3):237–52
Positron emission tomography—a new technique for studies of the central nervous system. Eriksson L, et al.
J Microsc 1990 Mar;157 (Pt 3):305–33 (62 ref.)
Cerebral diaschisis in patients with malignant glioma. Rozental JM, et al. **J Neurooncol** 1990 Apr;8(2):153–61
Radiopharmaceutical factors in the variable quality of [99mTc]HM-PAO images of the brain. Ballinger JR, et al. **J Nucl Med** 1990 Jan;31(1):118–22
In vitro and in vivo evaluation of iodine-123-Ro 16-0154: a new imaging agent for SPECT investigations of benzodiazepine receptors. Beer HF, et al. **J Nucl Med** 1990 Jun;31(6):1007–14
Pediatric brain imaging with technetium-99m-HM-PAO and SPECT [letter; comment] Costa DC, et al. **J Nucl Med** 1989 Nov;30(11):1917 Comment on: J Nucl Med 1989 Jan;30(1):15–24.
Regional brain blood flow in congenital dysphasia: studies with technetium-99m HM-PAO SPECT. Denays R, et al. **J Nucl Med** 1989 Nov;30(11):1825–9
Brain perfusion SPECT using an annular single crystal camera: initial clinical experience. Holman BL, et al.
J Nucl Med 1990 Sep;31(9):1456–61
Correlation methods for the centering, rotation, and alignment of functional brain images [see comments] Junck L, et al. **J Nucl Med** 1990 Jul;31(7):1220–6 Comment in: J Nucl Med 1990 Jul:31(7):1227–9.
A new apparatus for brain imaging: four-head rotating gamma camera single-photon emission computed tomograph [see comments] Kimura K, et al.
J Nucl Med 1990 May;31(5):603–9 Comment in: J Nucl Med 1990 May;31(5):628–31.
In vivo SPECT imaging of CNS D-2 dopamine receptors: initial studies with iodine-123-IBZM in humans. Kung HF, et al. **J Nucl Med** 1990 May;31(5):573–9
The characterization of IBF as a new selective dopamine D-2 receptor imaging agent. Kung MP, et al.
J Nucl Med 1990 May;31(5):648–54
Characterization of technetium-99m-L,L-ECD for brain perfusion imaging, Part 2: Biodistribution and brain imaging in humans. Léveillé J, et al. **J Nucl Med** 1989 Nov; 30(11):1902–10
Evaluation of a potential generator-produced PET tracer for cerebral perfusion imaging: single-pass cerebral extraction measurements and imaging with radiolabeled Cu-PTSM. Mathias CJ, et al. **J Nucl Med** 1990 Mar; 31(3):351–9
Focal high uptake of HM-PAO in brain perfusion studies: a clue in the diagnosis of encephalitis [clinical conference] Meyer MA. **J Nucl Med** 1990 Jun;31(6):1094–8
A neutral lipophilic technetium-99m complex for regional cerebral blood flow imaging. Narra RK, et al.
J Nucl Med 1990 Aug;31(8):1370–7
Corruption of brain SPECT studies caused by error in uniformity correction algorithm [letter] O'Connor MK.
J Nucl Med 1990 May;31(5):700–1
The utility of cerebral blood flow imaging in patients with the unique syndrome of progressive dementia with motor neuron disease. Ohnishi T, et al. **J Nucl Med** 1990 May; 31(5):688–91
HIPDM-SPECT brain imaging in the presurgical evaluation of patients with intractable seizures. Shen W, et al.
J Nucl Med 1990 Aug;31(8):1280–4
Lacrimal gland dosimetry for the brain imaging agent technetium-99m-HMPAO. Villanueva-Meyer J, et al.
J Nucl Med 1990 Jul;31(7):1237–9
Scientific highlights 1990: the universe within. Wagner HN Jr. **J Nucl Med** 1990 Aug;31(8):17A–26A (0 ref.)
Characterization of technetium-99m-L,L-ECD for brain perfusion imaging, Part 1: Pharmacology of technetium-99m ECD in nonhuman primates. Walovitch RC, et al. **J Nucl Med** 1989 Nov;30(11):1892–901
Positron emission tomography in epilepsy: correlative study. Hosokawa S, et al. **Jpn J Psychiatry Neurol** 1989 Sep; 43(3):349–53
Enhancing "idling" neurons [letter; comment] [see comments] Macleod MA, et al. **Lancet** 1990 Apr 7; 335(8693):860–1 Comment on: Lancet 1990 Mar 3;335(8688):542. Comment in: Lancet 1990 May 19;335(8699):1217.
Intracellular localization of 99Tcm-d,l-HMPAO and 201Tl-DDC in rat brain. Costa DC, et al.
Nucl Med Commun 1989 Jul;10(7):459–66
Brain perfusion defect size in SPECT predicts outcome in cerebral infarction [published erratum appears in Nucl Med Commun 1990 Apr;11(4):318] Launes J, et al.
Nucl Med Commun 1989 Dec;10(12):891–900
Principles and mechanisms of receptor studies. Herzog H. **Nuklearmedizin** 1990 Mar;29(2):81
Feasibility of simultaneous and sequentially administered dual tracer protocols for measurement of regional cerebral haematocrit using positron emission tomography. Kearfott KJ. **Phys Med Biol** 1990 Feb;35(2):249–58
Acute effects of ethanol on regional brain glucose metabolism and transport. Volkow ND, et al. **Psychiatry Res** 1990 Apr; 35(1):39–48
The optimum Butterworth-Wiener filter for I-123 IMP brain SPECT. Honda N, et al. **Radiat Med** 1989 May–Jun; 7(3):124–8
A new method for brain functional study using Tc-99m HMPAO SPECT. Momose T, et al. **Radiat Med** 1989 Mar–Apr;7(2):82–7
A new approach to brain imaging. Davidson J.
Radiogr Today 1989 Mar;55(622):19
Cerebral palsy: initial experience with Tc-99m HMPAO SPECT of the brain. Denays R, et al. **Radiology** 1990 Apr; 175(1):111–6
Cerebral abnormalities in cocaine abusers: demonstration by SPECT perfusion brain scintigraphy. Work in progress. Tumeh SS, et al. **Radiology** 1990 Sep;176(3):821–4
Clinical evaluation of a high-resolution (2.6-mm) positron emission tomography. Valk PE, et al. **Radiology** 1990 Sep; 176(3):783–90
New technetium 99m-labeled brain perfusion imaging agents. Kung HF. **Semin Nucl Med** 1990 Apr;20(2):150–8 (71 ref.)
Mapping muscarinic receptors in human and baboon brain using [N-11C-methyl]-benztropine. Dewey SL, et al.
Synapse 1990;5(3):213–23
Thalamic syndrome and cortical hypoperfusion on technetium-99m HM-PAO brain SPECT. Lee MS, et al.
Yonsei Med J 1989;30(2):151–7
[SPECT of the brain using 99mTc-HMPAO in patients with cerebrovascular disease: a comparison with CT. A report of 100 cases] Just A, et al. **ROFO** 1989 Nov;151(5):611–5 (Eng. Abstr.) **(Ger)**
[Clinical evaluation of Parkinson's disease using 123I-IMP SPECT] Hayashi H, et al. **Kaku Igaku** 1989 Nov; 26(11):1405–15 (Eng. Abstr.) **(Jpn)**
[Compartment analysis of 123I-IMP brain SPECT] Higano S, et al. **Kaku Igaku** 1990 Jan;27(1):51–4 (Eng. Abstr.) **(Jpn)**
[Development of the most suitable collimator system for Xe-133 inhalation rCBF SPECT and its performance] Komatani A, et al. **Kaku Igaku** 1990 Feb;27(2):173–7 **(Jpn)**
[Brain perfusion SPECT imaging before and during the acetazolamide test using 99mTc-HMPAO] Matsuda H, et al. **Kaku Igaku** 1990 May;27(5):485–92 (Eng. Abstr.) **(Jpn)**
[Evaluation of image quality and lesion detectability on I-123 IMP brain SPECT] Minoshima S, et al. **Kaku Igaku** 1990 Apr;27(4):323–32 (Eng. Abstr.) **(Jpn)**
[N-isopropyl I-123 p-iodoamphetamine (IMP) brain SPECT in Alzheimer's disease] Momose T, et al. **Kaku Igaku** 1989 Sep;26(9):1177–92 (Eng. Abstr.) **(Jpn)**
[The usefulness of single photon emission computed tomography using N-isopropyl-p-[123I]-iodoamphetamine and 99mTc-hexamethylpropyleneamine oxime in patients with moyamoya disease] Morita K, et al. **Kaku Igaku** 1990 Jan;27(1):69–80 **(Jpn)**
[The relationship between N-isopropyl-p-[123I]iodoamphetamine accumulation in the brain and its dynamics in other organs] Satoh M, et al. **Kaku Igaku** 1989 May;26(5):581–9 (Eng. Abstr.) **(Jpn)**
[Evaluation of cerebral hemodynamics by 123I-IMP in cerebral AVMs before and after operation by using SPECT] Toyama H, et al. **Kaku Igaku** 1989 Dec; 26(12):1479–86 (Eng. Abstr.) **(Jpn)**
[SPECT measurement of cerebral hemodynamics in transient ischemic attack patients—evaluation of pathogenesis and detection of misery perfusion] Toyama H, et al.
Kaku Igaku 1989 Dec;26(12):1487–92 (Eng. Abstr.) **(Jpn)**
[A fast technique to estimate local cerebral blood flow and partition coefficient using dynamic PET of H(2)15O: a new approach to weighted integration method based on time integration of Kety-Schmidt equation] Yokoi T, et al.
Kaku Igaku 1990 Mar;27(3):273–7 (Eng. Abstr.) **(Jpn)**
[Studies of cerebral blood flow and metabolism in patients with senile dementia of the Alzheimer's type and diagnostic evaluation of the dementing illnesses by positron emission tomography] Sakamoto S. **Nippon Ika Daigaku Zasshi** 1990 Jun;57(3):222–34 (Eng. Abstr.) **(Jpn)**
[3-dimensional imaging of regional cerebral blood flow by means of emission computed tomography] Higano S, et al. **Nippon Rinsho** 1990 Jul;48(7):1591–8 (6 ref.) **(Jpn)**
[Cerebral blood flow of the non-affected brain in patients with malignant brain tumors as studied by SPECT; with special reference to adverse effects of radiochemotherapy] Araki Y, et al. **No Shinkei Geka** 1990 Jul;18(7):601–8 (Eng. Abstr.) **(Jpn)**
[Usefulness of single-photon emission-computed tomography with hyperventilation for the diagnosis of moyamoya disease] Hamano S, et al. **No To Hattatsu** 1990 Jul; 22(4):401–3 **(Jpn)**
[Single photon emission computed tomography of the brain in Sturge-Weber syndrome using N-isopropyl-p-[123I] iodoamphetamine—a comparative study with X-ray computed tomography] Horita H, et al. **No To Hattatsu** 1990 Jul;22(4):341–8 (Eng. Abstr.) **(Jpn)**
[Vascular responses in cerebrovascular "Moyamoya" disease—evaluated by positron emission tomography] Tomura N, et al. **No To Shinkei** 1989 Sep;41(9):895–904 (Eng. Abstr.) **(Jpn)**
[Clinical application of brain perfusion SPECT imaging to dementia] Matsuda H. **Rinsho Hoshasen** 1989 Oct; 34(11):1327–35 (Eng. Abstr.) **(Jpn)**
[PET study on cerebral hemodynamics in internal carotid artery occlusion—the pathogenesis of watershed infarction] Yamauchi H, et al. **Rinsho Shinkeigaku** 1990 May; 30(5):492–8 (Eng. Abstr.) **(Jpn)**
[99mTc-hexamethylpropyleneamine oxime (HMPAO)—its diagnostic potentials for assessing the cerebral blood supply (a review)] Krotkov FF, et al. **Med Radiol (Mosk)** 1989 Nov;34(11):29–35 (58 ref.) **(Rus)**
[Radioanatomy of cerebral perfusion in single-photon emission-computed tomography using 99mTc-labelled amines] Liass FM, et al. **Med Radiol (Mosk)** 1989 Dec; 34(12):3–7 (Eng. Abstr.) **(Rus)**

SECRETION

Tumor growth-inhibitory glycoprotein secreted from the mouse brain at terminal stage of the ontogeny: molecular homogeneity and requirement of the retained protein conformation for exhibition of the cytotoxic action. Miwa N, et al. **Biochim Biophys Acta** 1990 Jun 20;1034(3):309–17
Secretion of nerve growth factor in cultures of glial cells and neurons derived from different regions of the mouse brain. Houlgatte R, et al. **J Neurosci Res** 1989 Oct; 24(2):143–52
Release by U-50,488H of [3H]serotonin from brain slices and spinal cord synaptosomes of U-50,488H-tolerant and nontolerant mice. Ho BY, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):8–12
Effects of pituitary beta-endorphin secretagogues on the concentration of beta-endorphin in rat cerebrospinal fluid: evidence for a role of vasopressin in the regulation of brain beta-endorphin release. Barna I, et al.
Neuroendocrinology 1990 Jan;51(1):104–10
Regional differences in opioid receptor-mediated inhibition of dopamine and acetylcholine release in the rat brain. Heijna MH, et al. **Prog Clin Biol Res** 1990;328:299–302
Opiate receptor-mediated inhibition of acetylcholine release from mammalian brain: tissue- and species-dependence. Lapchak PA, et al. **Prog Clin Biol Res** 1990;328:347–50

SURGERY

A simple self-retaining cerebral retractor. Technical note. Suzuki S, et al. **Acta Neurochir (Wien)** 1989;100(1–2):87–8
Another cause for bradycardia during neurosurgery [letter] Joshi P, et al. **Anaesthesia** 1990 Feb;45(2):169–70
Labetalol and esmolol in the control of hypertension after intracranial surgery. Muzzi DA, et al. **Anesth Analg** 1990 Jan;70(1):68–71
Recovery from hypothermic surgery. Loewy A.
Arch Otolaryngol 1967 Nov;86(5):579–83
An unusual intracerebral foreign body associated with eye trauma. Lawson D, et al. **Aust N Z J Ophthalmol** 1990 May;18(2):221–3
Modified hemispherectomy for epilepsy: early results in 10 cases [see comments] Beardsworth ED, et al.
Br J Neurosurg 1988;2(1):73–84 Comment in: Br J Neurosurg 1989;3(1):137.
Modified hemispherectomy for epilepsy: early results in 10 cases [letter; comment] Maroun FB, et al.
Br J Neurosurg 1989;3(1):137 Comment on: Br J Neurosurg 1988;2(1):73–84.
Intra-operative brain swelling [editorial] Reilly PL.
Br J Neurosurg 1990;4(1):3–4
A new system for cutting brain tissue preserving vessels: water jet cutting. Terzis AJ, et al. **Br J Neurosurg** 1989; 3(3):361–6
Pathophysiological mechanisms and results of stereotactic treatment of generalized epilepsy. Cchenkeli SA, et al.
Bratisl Lek Listy 1989 Aug;90(8):560–5 **(Eng, Slo)**
Hospitals offer brain surgery without scalpels. Souhrada L.
Hospitals 1989 Oct 20;63(20):36, 38
Two techniques for excision of brain and spinal canal [letter; comment] Gutierrez MC, et al. **Hum Pathol** 1989 Dec; 20(12):1224–5 Comment on: Hum Pathol 1988

Dec;19(12):1372–5.
Management of cerebral hemispherectomy in children. Brian JE Jr, et al. **J Clin Anesth** 1990 Mar–Apr;2(2):91–5
Cumulative index, Volumes 51–70. July 1979 through June 1989. **J Neurosurg** 1989 Nov;71(5 Pt 2):1–344
The Decade of the Brain: an era of promise for neurosurgery and a call to action. Goldstein M. **J Neurosurg** 1990 Jul; 73(1):1–2
Autologous transplantation of the superior cervical ganglion into the brain of parkinsonian monkeys. Nakai M, et al. **J Neurosurg** 1990 Jan;72(1):91–5
The "thousand-hands Kannon" universal headframe. Technical note. Tamaki N, et al. **J Neurosurg** 1989 Dec; 71(6):945–6
Stereotactic resection of intra-axial cerebral lesions in partial epilepsy [see comments] Cascino GD, et al.
Mayo Clin Proc 1990 Aug;65(8):1053–60 Comment in: Mayo Clin Proc 1990 Aug;65(8):1150–1.
Stereotactic surgical treatment of epilepsy [editorial; comment] Grossman RG. **Mayo Clin Proc** 1990 Aug; 65(8):1150–1 Comment on: Mayo Clin Proc 1990 Aug;65(8):1053–60.
Pediatric neuroanesthesia. Newfield P. **Minerva Anestesiol** 1989 Apr;55(4):137–43 (41 ref.)
Surgery for epilepsy.
Natl Inst Health Consensus Dev Conf Consensus Statement 1990 Mar 19–21;8(2):1–20 (0 ref.)
The dawn of brain surgery in Japan: history prior to World War II. Uematsu S. **Neurosurgery** 1990 Jan;26(1):162–72
Surgery for intractable epilepsy: issues and outcome. Duchowny MS. **Pediatrics** 1989 Nov;84(5):886–94 (89 ref.)
Meninges: benign postoperative enhancement on MR images. Burke JW, et al. **Radiology** 1990 Jan;174(1):99–102
Brain resection for exposure of deep extracerebral and paraventricular lesions. Heros RC. **Surg Neurol** 1990 Sep; 34(3):188–95
Dementia following brain grafting [letter; comment] Madrazo I, et al. **Transplantation** 1990 May;49(5):1026–7 Comment on: Transplantation 1989 Aug;48(2):348.
[Nursing care of patients with central hyperpyrexia] Wang LQ. **Chung Hua Hu Li Tsa Chih** 1989 Dec;24(12):716–7 **(Chi)**
[Nursing care of transplantation of fetal nigra, adrenal medullary tissue for parkinsonism] Yuan C.
Chung Hua Hu Li Tsa Chih 1990 Mar;25(3):123–4 **(Chi)**
[Regeneration of auto- and isografts of submandibular glands in the brain of laboratory mice. I. Morphologic evaluation of the healed graft using light microscopy] Pospíšilová B, et al.
Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1989;32(4):413–34 (Eng. Abstr.) **(Cze)**
[Heparin in neurosurgery. 10th Seminar on Neuro-anesthesia-resuscitation. (1). Paris Créteil, 3–4 November 1988] **Agressologie** 1989 May;30(6):333–66 **(Fre)**
[A survey on thromboprophylactic methods in brain surgery] Abhay K, et al. **Agressologie** 1989 May;30(6):339–42 (Eng. Abstr.) **(Fre)**
[Thromboembolism in neurosurgery] Lepresle E, et al. **Agressologie** 1989 May;30(6):333–5 (18 ref.) (Eng. Abstr.) **(Fre)**
[Clinical incidence of thromboembolism in neurosurgery] Stoiber HP, et al. **Agressologie** 1989 May;30(6):355–6 (Eng. Abstr.) **(Fre)**
[Air embolism in the sitting position. Oxygen/nitrogen versus oxygen/laughing gas] Knüttgen D, et al. **Anaesthesist** 1989 Sep;38(9):490–7 (Eng. Abstr.) **(Ger)**
[5th Italian-French meeting on neuroanesthesia and resuscitation. Turin, 1–3 June 1988. 2. Pediatric neuroanesthesia and resuscitation. Proceedings]
Minerva Anestesiol 1989 Apr;55(4):135–207 **(Ita, Fre)**
[Common problems for the neurosurgeon and the anesthesiologist in pediatric neurosurgery] Lombard GF, et al. **Minerva Anestesiol** 1989 Apr;55(4):145–8 (15 ref.) (Eng. Abstr.) **(Ita)**
[Enteral nutrition in the critical neurosurgical patient. Effectiveness and tolerance of a prepared liquid diet] Ravelli V, et al. **Minerva Anestesiol** 1989 Apr;55(4):199–201 (Eng. Abstr.) **(Ita)**
[Clinical use of prostaglandin E1 during intracranial surgery] Kito T, et al. **Masui** 1990 May;39(5):600–4 (Eng. Abstr.) **(Jpn)**
[Effects of controlled hypotension induced by prostaglandin E1 on the cerebral blood flow] Sha K, et al. **Masui** 1990 Feb;39(2):138–43 (Eng. Abstr.) **(Jpn)**
[Transplantation of neuronal cells in the mammalian brain] Yuasa S, et al. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(4 Suppl):389–98 **(Jpn)**
[The late results of marking a surgical wound of the brain with tantalum powder] Grigor'ev VV, et al. **Arkh Patol** 1990;52(2):55–9 (Eng. Abstr.) **(Rus)**
[Stereotaxic operations in the treatment of patients with infantile cerebral palsy] Laponogov OA, et al.
Vrach Delo 1989 Aug;(8):98–9 (Eng. Abstr.) **(Rus)**
[Validation of the use of the CO2 laser in operations on the brain] Babichenko EI, et al. **Zh Vopr Neirokhir** 1989 Nov–Dec;(6):50–4 (Eng. Abstr.) **(Rus)**
[The experimental and clinical use of gelatin sponges with kanamycin and gentamycin for the prevention and treatment of suppurative complications in neurosurgery] Kharitonova KI, et al. **Zh Vopr Neirokhir** 1990 May–Jun; (3):9–11 (Eng. Abstr.) **(Rus)**
[Our experience with 2220 stereotaxic operations] Laponogov OA, et al. **Zh Vopr Neirokhir** 1990 Jan–Feb; (1):17–9 (Eng. Abstr.) **(Rus)**
[The prevention of the intracranial hypertension due to general anesthesia during operations on the brain] Stolkarts IZ, et al. **Zh Vopr Neirokhir** 1990 May–Jun;(3):24–7 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

Intracortical grafts of embryonic basal forebrain tissue restore low voltage fast activity in rats with basal forebrain lesions. Vanderwolf CH, et al. **Exp Brain Res** 1990;81(2):426–32
Electrophysiologic effects of ethanol in human brain xenografts in oculo: antagonism by Ro15–4513. Palmer MR, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):1100–6

ULTRASTRUCTURE

White matter ultrastructural pathology of experimental Creutzfeldt–Jakob disease in mice. Liberski PP, et al.
Acta Neuropathol (Berl) 1989;79(1):1–9
Electron micrograph of diffuse plaques. Initial stage of senile plaque formation in the Alzheimer brain. Yamaguchi H, et al. **Am J Pathol** 1989 Oct;135(4):593–7
Preparation of brain microsomes with cytochrome P450 activity using calcium aggregation method. Ravindranath V, et al. **Anal Biochem** 1990 Jun;187(2):310–3
Combined staining of acidophilic inclusion bodies and lipofuscin granules. Ulfig N. **Anat Anz** 1990;171(1):35–8
Localization of glycine and beta-adrenergic receptors in the rat brain. Tohyama M, et al. **Arch Histol Cytol** 1989;52 Suppl:39–48
Controlled hypotension during anesthesia for otologic operations. An ultrastructural study of the brain in an experimental animal model. Manolidis LS, et al.
Arch Otorhinolaryngol 1989;246(4):190–4
How do microtubules interact in vitro with purified subcellular organelles? [letter] Leterrier JF, et al.
Biochem J 1990 Jul 15;269(2):556–8
Interaction of microtubules and microtubule-associated proteins (MAPs) with rat brain mitochondria [letter] Rendon A, et al. **Biochem J** 1990 Jul 15;269(2):555–6
Effect of maitotoxin on cytosolic Ca2+ levels and membrane potential in purified rat brain synaptosomes. Taglialatela M, et al. **Biochim Biophys Acta** 1990 Jul 9;1026(1):126–32
Trisomy 7 and sex chromosome loss in human brain tissue. Heim S, et al. **Cytogenet Cell Genet** 1989;52(3–4):136–8
Diabetes-related changes in chromatin structure of brain, liver, and intestinal epithelium. Hartnell JM, et al.
Diabetes 1990 Mar;39(3):348–53
Effects of muscarinic receptor agonists and antagonists on alpha 2-adrenoceptors in rat brain. Hollingsworth PJ, et al. **Eur J Pharmacol** 1989 Sep 13;168(2):159–67
Direct autoradiographic localization of adenosine A2 receptors in the rat brain using the A2-selective agonist, [3H]CGS 21680. Jarvis MF, et al. **Eur J Pharmacol** 1989 Sep 13;168(2):243–6
Morphological and molecular organization of the brain postsynaptic densities. Rysak M, et al.
Folia Morphol (Warsz) 1988;47(1–4):3–12
Ultrastructural changes of mouse brain neurons infected with Japanese encephalitis virus. Hase T, et al.
Int J Exp Pathol 1990 Aug;71(4):493–505
Ultrastructural neuropathologic features of bovine spongiform encephalopathy. Liberski PP.
J Am Vet Med Assoc 1990 May 15;196(10):1682
Analysis of 100–180-kDa phosphoproteins in clathrin-coated vesicles from bovine brain. Morris SA, et al.
J Biol Chem 1990 Feb 25;265(6):3354–7
Brain dynein crossbridges microtubules into bundles. Amos LA. **J Cell Sci** 1989 May;93 (Pt 1):19–28
The response of noradrenergic axons to systemically administered DSP-4 in the rat: an immunohistochemical study using antibodies to noradrenaline and dopamine-beta-hydroxylase. Fritschy JM, et al.
J Chem Neuroanat 1990 Jul–Aug;3(4):309–21
Trauma-induced Golgi-like staining of neurons: a new approach to neuronal organization and response to injury. van den Pol AN, et al. **J Comp Neurol** 1990 Jun 22; 296(4):654–73
Serial ultrastructural studies of scrapie in hamsters. Liberski PP, et al. **J Comp Pathol** 1989 Nov;101(4):429–42
Neuropil vacuolation in brain: a reproducible histological processing artefact. Wells GA, et al. **J Comp Pathol** 1989 Nov;101(4):355–62
Ultrastructural description of glutamate-, aspartate-, taurine-, and glycine-like immunoreactive terminals from five rat brain regions. Clements JR, et al.
J Electron Microsc Tech 1990 May;15(1):49–66 (160 ref.)
Ultrastructural identification of neuropeptides in the central nervous system. Maley BE. **J Electron Microsc Tech** 1990 May;15(1):67–80 (107 ref.)
GABAergic synapses in the brain identified with antisera to GABA and its synthesizing enzyme, glutamate decarboxylase. Ribak CE, et al.
J Electron Microsc Tech 1990 May;15(1):34–48 (70 ref.)
Rapid isolation of metabolically active mitochondria from rat brain and subregions using Percoll density gradient centrifugation. Sims NR. **J Neurochem** 1990 Aug; 55(2):698–707
Purification and solubilization of paired helical filaments from Alzheimer brains. Vogelsang GD, et al. **J Neurochem** 1990 Jan;54(1):148–55
Developmental alterations in membrane organization of rat subpial astrocytes. Gotow T, et al. **J Neurocytol** 1989 Dec; 18(6):731–47
An improved method for Lowicryl K4M electron microscopic embedding of brain tissue. Kiss JZ.
J Neurosci Methods 1989 Oct;30(1):29–32
Applicability of fixed brain slice for ultrastructural study. Lin CS. **J Neurosci Methods** 1990 May;32(2):117–21
A method permitting precise trimming of resin-embedded tissue for ultrathin sectioning in pre-embedding immunoelectronmicroscopy. Valentijn JA, et al.
J Neurosci Methods 1989 Oct;30(1):55–8
Immunohistochemical demonstration of mitochondria in routinely processed tissue using a monoclonal antibody. Paulus W, et al. **J Pathol** 1990 Apr;160(4):321–8
Collagenous structures present in brain contain epitopes shared by collagen and microtubule-associated protein tau. Montejo de Garcini E, et al. **J Struct Biol** 1990 Mar; 103(1):34–9
Antimitotic action of griseofulvin does not involve disruption of microtubules. Grisham LM, et al. **Nature** 1973 Aug 3; 244(5414):294–6
5.HT1 receptors in the vertebrate brain. Regional distribution examined by autoradiography. Waeber C, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Nov; 340(5):486–94
5-HT1D receptors in guinea-pig and pigeon brain. Radioligand binding and biochemical studies. Waeber C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Nov; 340(5):479–85
Analysis of polyadenylated RNA from brain synaptosomes and mitochondria. Corbatón V, et al. **Neurochem Res** 1990 Jul;15(7):711–7
Analysis and separation of synaptosomal membrane proteins. Ishioka N, et al. **Neurochem Res** 1990 May;15(5):475–81
Inhibition of mitochondrial respiration by 1,2,3,4-tetrahydroisoquinoline-like endogenous alkaloids in mouse brain. Suzuki K, et al. **Neurochem Res** 1990 Jul; 15(7):705–10
Ultrastructure of the sarcomatous component in gliosarcomas. Papierz W, et al. **Neuropatol Pol** 1989; 27(2):255–68
The neuronal response to injury as visualized by immunostaining of class III beta-tubulin in the rat. Geisert EE Jr, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):137–41
Mesodiencephalic and cerebellar terminals terminate upon the same dendritic spines in the glomeruli of the cat and rat inferior olive: an ultrastructural study using a combination of [3H]leucine and wheat germ agglutinin coupled horseradish peroxidase anterograde tracing. de Zeeuw CI, et al. **Neuroscience** 1990;34(3):645–55
Congo red staining on 1 micron de-plasticized sections for detection of lesions in Alzheimer's disease and related disorders. Snow AD, et al. **Prog Clin Biol Res** 1989; 317:383–91
Trends in confocal microscopy. Wilson T.
Trends Neurosci 1989 Dec;12(12):486–93 (13 ref.)
[Morphological study of Omsk hemorrhagic fever (OHF) virus with the electron microscope] Cheng Z.
Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1989 Dec; 11(6):417–20 (Eng. Abstr.) **(Chi)**
[Ultrastructural observation of acute cerebral ischemia pathological changes after carotid ligation in rats] Guo Y.
Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1990 Apr; 12(2):150–2 (Eng. Abstr.) **(Chi)**
[Cerebral morphological changes in degenerative dementia] Flament-Durand J, et al. **Acta Neurol Belg** 1989 May–Oct; 89(3–4):179–85 **(Fre)**
[Ultrastructural aspects of Parkinson disease] de Mattos JP, et al. **Arq Neuropsiquiatr** 1989 Dec;47(4):430–7 (Eng. Abstr.) **(Por)**
[Results of intracerebral inoculation of the cerebrospinal fluid of patients with Parkinson disease in experimental animals] De Mattos JP, et al. **Arq Neuropsiquiatr** 1990 Mar; 48(1):21–5 (Eng. Abstr.) **(Por)**
[Neuromorphologic aspects of experimental herpetic infection] Mikhailenko AA, et al.
Arkh Anat Gistol Embriol 1989 Oct;97(10):31–6 (Eng. Abstr.) **(Rus)**
[Uridine-induced ultrastructural changes in different formations of the brain] Karkishchenko NN, et al.
Biull Eksp Biol Med 1990 Jan;109(1):86–9 (Eng. Abstr.) **(Rus)**
[Changes in the membrane structure of the brain microsomes in cats with electrodes implanted in the inner ear] Daĭniak BA, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Sep–Oct; (5):763–6 (Eng. Abstr.) **(Rus)**
[Reactive changes in the morphology of the glial cells of the central nervous system in tissue culture] Svanidze IK, et al. **Tsitologiia** 1989 Aug;31(8):923–7 (Eng. Abstr.) **(Rus)**
[The morphofunctional organization of aminergic systems and their role in cerebral motor activity] Limanskiĭ IuP. **Usp Fiziol Nauk** 1990 Apr–Jun;21(2):3–17 (97 ref.) **(Rus)**
[Ultrastructural manifestations of blood–tissue barrier reactions to acute hypoxia in old animals] Stupina AS, et al. **Vestn Akad Med Nauk SSSR** 1990;(1):15–9 (Eng. Abstr.) **(Rus)**
[Mitochondrial encephalomyopathy. 2 cases with Kearns–Sayre syndrome] Sánchez JC, et al. **Neurologia** 1986 Jul–Aug;1(4):150–3 (Eng. Abstr.) **(Spa)**

BRAIN ABSCESS

Brucella melitensis cerebellar abscess [letter] Ayala-Gaytán JJ, et al. **J Infect Dis** 1989 Oct;160(4):730-2

Cerebral sparganosis. Case report. Mitchell A, et al. **J Neurosurg** 1990 Jul;73(1):147-50 (11 ref.)

[A cerebral abscess due to Listeria monocytogenes in a 15-month-old infant] Mancini J, et al. **Ann Pediatr (Paris)** 1990 May;37(5):299-302 (13 ref.) (Eng. Abstr.) (Fre)

[Brain abscess] Custović K, et al. **Med Arh** 1988; 42(5-6):269-75 (Eng. Abstr.) (Scr)

COMPLICATIONS

Spontaneous haemorrhage in a cerebellar abscess: a unique complication. Jamjoom AB, et al. **Br J Neurosurg** 1990; 4(3):231-5

Cerebral phaeohyphomycosis caused by Chaetomium globosum in a renal transplant recipient. Anandi V, et al. **J Clin Microbiol** 1989 Oct;27(10):2226-9

Parkinsonian symptoms in a patient with AIDS and cerebral toxoplasmosis [letter] Carrazana EJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1445-7

Persistent periodic hiccups following brain abscess: a case report. Jansen PH, et al. **J Neurol Neurosurg Psychiatry** 1990 Jan;53(1):83-4

Parkinsonism secondary to bilateral striatal fungal abscesses [published erratum appears in Mov Disord 1990;5(3):268] Adler CH, et al. **Mov Disord** 1989;4(4):333-7

Neonatal brain abscess with intracystic hemorrhage--case report. Nakagawa Y, et al. **Neurol Med Chir (Tokyo)** 1989 Sep;29(9):861-3

Brain abscess as a cause of infant hydrocephalus. Case report. Sulla I, et al. **Zentralbl Neurochir** 1989;50(3-4):199-200

[Brain abscess complicated by suppurative meningitis in a patient with cyanotic heart defect. A case report] Gańczak M, et al. **Neurol Neurochir Pol** 1989 Jan;23(1):68-71 (Eng. Abstr.) (Pol)

[Tuberculous cerebral abscess and acquired immunodeficiency syndrome (letter)] Trilla A, et al. **Med Clin (Barc)** 1989 Sep 9;93(6):236 (Spa)

DIAGNOSIS

Brain abscess mimicking brain tumor. Lau DW, et al. **Heart Lung** 1989 Nov;18(6):634-7

Cerebral botryomycosis: case study. Gillock CB, et al. **J Infect Dis** 1990 Sep;162(3):765-7

Intrasellar abscess simulating a pituitary tumour. Leramo OB, et al. **West Indian Med J** 1989 Sep;38(3):171-5

[Inflammatory diseases of the central nervous system. Meningitis--meningoencephalitis--abscess] von Albert HH. **Fortschr Med** 1989 Dec 20;107(36):777-80 (Eng. Abstr.) (Ger)

[Diagnosis of hypophyseal abscess using MRI and high resolution CT] Dickob M, et al. **Neurochirurgia (Stuttg)** 1989 Nov;32(6):184-6 (Eng. Abstr.) (Ger)

[Brain abscesses of unknown etiology] Zderkiewicz E, et al. **Neurol Neurochir Pol** 1988 Nov-Dec;22(6):537-42 (Eng. Abstr.) (Pol)

[Difficulties in the diagnosis of intracranial expansive processes coexisting with sinusitis and otitis] Kruk-Zagajewska A, et al. **Otolaryngol Pol** 1989; 43(5-6):376-80 (Eng. Abstr.) (Pol)

[Difficulties in the diagnosis of brain abscess at an infectious disease hospital] Lisukova TE, et al. **Ter Arkh** 1989; 61(11):28-31 (Rus)

[Specific features of rhino-sinusogenic brain abscesses in adults and children] Blagoveshchenskaia NS, et al. **Vestn Otorinolaringol** 1989 Jul-Aug;(4):37-42 (Eng. Abstr.) (Rus)

DRUG THERAPY

Treatment of experimental brain abscess. 2. Effects of combinations of hyaluronidase with antibiotics and dexamethasone. Paşaoğlu A, et al. **Acta Neurochir (Wien)** 1989;100(1-2):79-83

Mucor cerebral abscess associated with intravenous drug abuse. Fong KM, et al. **Aust N Z J Med** 1990 Feb; 20(1):74-7

Use of cefotaxime in brain abscess [letter] Donald FE, et al. **Br J Neurosurg** 1988;2(4):539-40

The bacteriology and chemotherapy of acute pyogenic brain abscess. Gortvai P, et al. **Br J Neurosurg** 1987;1(2):189-203

Multiple brain abscesses: treatment by a conservative approach--a case report. Sandermann J, et al. **Br J Neurosurg** 1987;1(2):185-8

Nocardial cerebral abscess cured with imipenem/amikacin and enucleation. Krone A, et al. **Neurosurg Rev** 1989; 12(4):333-40 (62 ref.)

Treatment of multiple brain abscesses caused by Bacillus cereus. Jenson HB, et al. **Pediatr Infect Dis J** 1989 Nov; 8(11):795-8

[Optimal length of antibiotic therapy in aspirated cerebral abscess] Lepresle E, et al. **Presse Med** 1990 Mar 10; 19(9):405-6 (Eng. Abstr.) (Fre)

[Treatment with metronidazole of brain abscesses (letter)] Zurro Hernández FJ, et al. **Neurologia** 1988 Jan-Feb; 3(1):37-9 (Spa)

EPIDEMIOLOGY

Brain abscess in Saudi Arabia. Ibrahim AW, et al. **Neurosurg Rev** 1990;13(2):103-7 (13 ref.)

ETIOLOGY

Salmonella meningitis complicated with subdural empyema, brain abscess and purpura fulminans: report of one case. Hou JW, et al. **Acta Paediatr Sin** 1989 Nov-Dec; 30(6):408-13

Streptococcus bovis brain abscess associated with an occult colonic villous adenoma. Emiliani VJ, et al. **Am J Gastroenterol** 1990 Jan;85(1):78-80 (9 ref.)

Central nervous system infection after endoscopic injection sclerotherapy. Wang WM, et al. **Am J Gastroenterol** 1990 Jul;85(7):865-7

Intracranial abscesses secondary to nasal, sinus, and orbital infections in adults and children. Maniglia AJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Dec;115(12):1424-9

Not so rare complications of pulmonary AVMs letter; comment] Hartnell GG. **Br J Hosp Med** 1990 Mar;43(3):184 Comment on: Br J Hosp Med 1989 Oct;42(4):316-7.

Otogenic brain abscess with pneumocephalus. Candan S, et al. **Infection** 1990 May-Jun;18(3):191-2

Intracranial suppuration [editorial] Yeolekar ME. **J Assoc Physicians India** 1989 Jun;37(6):363-4

Risks of developing an otogenic intracranial abscess. Nunez DA, et al. **J Laryngol Otol** 1990 Jun;104(6):468-72

Parietal lobe abscess after routine periodontal recall therapy. Report of a case. Andersen WC, et al. **J Periodontol** 1990 Apr;61(4):243-7

Brain abscess due to Nocardia. Talwar P, et al. **Mycopathologia** 1989 Oct;108(1):21-3

Multiple cerebral and pulmonary arteriovenous malformations in association with brain and subcutaneous abscesses: a possible variant of hereditary hemorrhagic telangiectasia--case report. Kawaguchi T, et al. **Neurol Med Chir (Tokyo)** 1990 Apr;30(4):272-6

Sterile abscesses in glioma patients treated by intraparenchymal injection of lymphokine-activated killer cells and recombinant interleukin-2: case reports. Atkinson LL, et al. **Neurosurgery** 1989 Nov;25(5):805-10

Brain abscess after dilatation of esophageal stricture. Lui TN, et al. **Pediatr Neurosci** 1988;14(5):250-3 (15 ref.)

Intracranial abscess complicating diverticulitis with CT scan mimicking primary glioma. Dixon AR, et al. **Postgrad Med J** 1989 Aug;65(766):565-7

A new model for experimental brain abscess in rats and mice. Winn HR, et al. **Surg Forum** 1978;29:500-2

[Brain abscess after sclerotherapy of esophageal varices (letter)] Boutet D, et al. **Presse Med** 1990 Mar 3;19(8):380 (Fre)

[Bronchial infection and brain abscess caused by Pasteurella multocida] Martin F, et al. **Rev Pneumol Clin** 1989; 45(3):134-6 (Eng. Abstr.) (Fre)

[Rhinocerebral mycoses caused by Mucoraceae species (mucormycosis). Case report and literature review] Rasse M, et al. **Wien Klin Wochenschr** 1990 Jul 13;102(14):395-403 (53 ref.) (Eng. Abstr.) (Ger)

[An interesting case: Inflammatory cerebral complications after Crutchfield-extension] Prothmann KH, et al. **Zentralbl Chir** 1989;114(15):1025-30 (Ger)

[Brain abscess following intracerebral hematoma] Kurihara H, et al. **No Shinkei Geka** 1989 Nov;17(11):1037-40 (Eng. Abstr.) (Jpn)

[2 cases of brain abscess as a complication of direct cranial traction] Koszewski W. **Chir Narzadow Ruchu Ortop Pol** 1989;54(3):249-51 (Eng. Abstr.) (Pol)

[A case of favorable outcome of conservative treatment of acute otogenic cerebellar abscess] Buczek M, et al. **Neurol Neurochir Pol** 1989 Mar-Apr;23(2):153-6 (Eng. Abstr.) (Pol)

[Congenital cardiopathy and cerebral abscess] Paixão A, et al. **Acta Med Port** 1989 Mar-Apr;2(2):73-6 (23 ref.) (Eng. Abstr.) (Por)

[Clinical aspects of otogenic abscesses of cerebral hemispheres] Garshin MI. **Vestn Otorinolaringol** 1990 Jan-Feb;(1):4-8 (Rus)

[Acute suppurative otitis media complicated by extradural abscess, thrombosis of the sigmoid sinus and diffuse purulent meningoencephalitis] Ibragimov GT, et al. **Vestn Otorinolaringol** 1989 Sep-Oct;(5):71-3 (Rus)

[Otogenic abscess of the occipital lobe] Mukhitdinov ShM. **Vestn Otorinolaringol** 1990 Jan-Feb;(1):76-7 (Rus)

[Multiple rhinogenic intracranial complications with favorable outcome] Smirnov NM. **Vestn Otorinolaringol** 1990 Jan-Feb;(1):77-8 (Rus)

[The role of the immune system in the development of rhinosinusogenous intracranial complications (abscess, arachnoiditis)] Blagoveshchenskaia NS, et al. **Zh Vopr Neirokhir** 1989 Jul-Aug;(4):6-10 (Eng. Abstr.) (Rus)

[Acute exacerbation of chronic otitis and endocranial complications] Besarović R, et al. **Med Arh** 1986; 40(3):115-7 (Eng. Abstr.) (Scr)

[Nocardiosis: clinical observations apropos of 9 cases] Fontaneda López D, et al. **Rev Clin Esp** 1989 Dec; 185(9):454-8 (Eng. Abstr.) (Spa)

METABOLISM

Penetration of ceftazidime into intracranial abscess [letter; comment] Donald FE, et al. **J Antimicrob Chemother** 1990 Feb;25(2):297 Comment on: J Antimicrob Chemother 1989 Sep;24(3):431-6.

Penetration of ceftazidime into intracranial abscess [see comments] Green HT, et al. **J Antimicrob Chemother** 1989 Sep;24(3):431-6 Comment in: J Antimicrob Chemother 1990 Feb;25(2):297.

[Diffusion of ceftriaxone into the human brain] Dorche G, et al. **Pathol Biol (Paris)** 1990 Jun;38(6):638-42 (Eng. Abstr.) (Fre)

MICROBIOLOGY

Listeria brain abscess associated with steroid therapy: successful non-surgical treatment. Leung R, et al. **Clin Exp Neurol** 1987;24:181-6 (20 ref.)

Cerebral phaeohyphomycosis caused by Xylohypha bantiana. Heney C, et al. **Eur J Clin Microbiol Infect Dis** 1989 Nov; 8(11):984-8 (32 ref.)

Anaerobic bacteria in brain abscess, a review; observation of 18 consecutive cases. Narayan K, et al. **Indian J Pathol Microbiol** 1989 Jan;32(1):57-61 (12 ref.)

Bacteriological analysis of pyogenic infections of the brain. Szuwart U, et al. **Neurosurg Rev** 1990;13(2):113-8

Successful medical treatment of listerial brain abscess. Updike WS, et al. **West J Med** 1990 Mar;152(3):298-301

[Pansinusitis, brain abscess and subdural empyema caused by an unusual microorganism: Edwardsiella tarda (letter)] Jiménez-Mejías ME, et al. **Rev Clin Esp** 1990 Jan; 186(1):46-7 (Spa)

[Brain abscess bacteriology and antibiotic sensitivity] Celik E, et al. **Mikrobiyol Bul** 1989 Jan;23(1):12-22 (Eng. Abstr.) (Tur)

PATHOLOGY

Cerebral nocardiosis--clinical and pathological findings in three patients. Herkes GK, et al. **Aust N Z J Med** 1989 Oct;19(5):475-8

Multiple brain abscesses from isolated cerebral mucormycosis. Escobar A, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):431-3

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 16-1990. A 57-year-old woman with a thalamic lesion and pulmonary arteriovenous fistulas. **N Engl J Med** 1990 Apr 19;322(16):1139-48

[Intracranial complications of inflammatory ear diseases] Pospiech J, et al. **HNO** 1990 Feb;38(2):63-6 (Eng. Abstr.) (Ger)

RADIOGRAPHY

Radiological cases of the month. Pulmonary arteriovenous malformation presenting with brain abscess. Dove AM, et al. **Am J Dis Child** 1990 Sep;144(9):1045-7

CT scanning in the management of intracranial abscess: a review of 100 cases. Miller ES, et al. **Br J Neurosurg** 1988; 2(4):439-46

Comparative study of brain abscess by computed tomography and magnetic resonance imaging: report of two cases. Saleh J, et al. **Br J Neurosurg** 1988;2(4):517-22

CT scan in cerebral abscess [letter] Nair RP, et al. **J Assoc Physicians India** 1989 Jul;37(7):482-3

Unusually large calcified brain abscess: CT findings. Nitta H, et al. **J Comput Assist Tomogr** 1990 May-Jun; 14(3):485-6

Tuberculous brain infection located in an old cerebral infarct: CT changes with successful conservative therapy. Shintani S, et al. **Neuroradiology** 1990;32(2):156-9

Film panel cases Society of Pediatric Radiology. Haemophilus aphrophilus. **Pediatr Radiol** 1990;20(5):373-4

Nocardia infection in patients with liver transplants or chronic liver disease: radiologic findings. Raby N, et al. **Radiology** 1990 Mar;174(3 Pt 1):713-6

[Diagnosis of brain abscess using computer tomography] Seidl Z. **Cas Lek Cesk** 1990 Apr 27;129(17):526-8 (Eng. Abstr.) (Cze)

[Evaluation of the sequelae of suppurative meningitis and meningoencephalitis by computerized tomography] Michowicz A, et al. **Przegl Epidemiol** 1989;43(3):295-300 (Eng. Abstr.) (Pol)

RADIONUCLIDE IMAGING

Ringlike uptake of [18F]FDG in brain abscess: a PET study. Sasaki M, et al. **J Comput Assist Tomogr** 1990 May-Jun; 14(3):486-7

Indium-111-granulocyte scintigraphy in brain abscess diagnosis: limitations and pitfalls. Schmidt KG, et al. **J Nucl Med** 1990 Jul;31(7):1121-7

[The importance of 111-indium marked leukocyte scintigraphy in inflammatory intracranial processes] Lange M, et al. **Neurochirurgia (Stuttg)** 1989 Sep;32(5):150-3 (Eng. Abstr.) (Ger)

SURGERY

Management of brain abscesses in children and adolescents. Wright RL, et al. **Am J Dis Child** 1967 Aug;114(2):113-22

Successful drainage of an extradural abscess in 1667: Prince Rupert's trephination. Martin G. **Br J Neurosurg** 1989; 3(2):211-6

Experience with 'open evacuation of pus' in the treatment of intracerebral abscess. Maurice-Williams RS. **Br J Neurosurg** 1987;1(3):343-51

The case for excision in the treatment of brain abscess. Taylor JC. **Br J Neurosurg** 1987;1(2):173-8 (17 ref.)

Posterior fossa abscesses. A review of 33 cases. Unnikrishnan M, et al. **J Assoc Physicians India** 1989 Jun;37(6):376–8
Management of focal intracranial infections: is medical treatment better than surgery? Leys D, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):472–5
Early postoperative seizures after posterior fossa surgery. Lee ST, et al. **J Neurosurg** 1990 Oct;73(4):541–4
Pediatric cerebral abscess. Moss SD, et al. **Pediatr Neurosci** 1988;14(6):291–6
Tuberculous abscess of the brain stem. Prakash B, et al. **Surg Neurol** 1989 Dec;32(6):445–8
Post-traumatic brain abscess with Clostridium perfringens. Martens F, et al. **Zentralbl Neurochir** 1989;50(3–4):203–5
The surgical treatment of intracranial abscesses today. Papo I, et al. **Zentralbl Neurochir** 1989;50(1):34–8
[Results of treatment of brain abscesses at a neurosurgery facility in Olomouc 1953–1988] Kala M, et al. **Cesk Neurol Neurochir** 1990 May;53(3):191–5 (Eng. Abstr.) **(Cze)**

THERAPY

Cerebral abscess [letter] Gibbs JR. **Br J Neurosurg** 1987; 1(4):522–3
Treatment of brain abscess. Donald FE. **J Antimicrob Chemother** 1990 Mar;25(3):310–2 (30 ref.)
Cure of a man with solitary abscess of the brain-stem. Fujino H, et al. **J Neurol** 1990 Jul;237(4):265–6
[Emergency stereotaxic cerebral punctures] Cordoliani YS, et al. **J Radiol** 1989 Aug–Sep;70(8–9):465–70 (14 ref.) (Eng. Abstr.) **(Fre)**
[Treatment in a patient with multiple brain abscesses] Sulla I, et al. **Rozhl Chir** 1989 Oct;68(10):637–9 (Eng. Abstr.) **(Slo)**

BRAIN CHEMISTRY

In vivo analysis of extracellular proteins in rat brains with a newly developed intracerebral microdialysis probe. Nakamura M, et al. **Acta Med Okayama** 1990 Feb;44(1):1–8
In situ hybridization of peptide mRNAs on vibratome sections. Réthelyi M, et al. **Acta Morphol Hung** 1989; 37(1–2):55–63
Vasopressin and oxytocin localization and putative functions in the brain. Buijs RM. **Acta Neurochir Suppl (Wien)** 1990; 47:86–9 (36 ref.)
Alzheimer's disease: biological diagnosis. Ebinger G, et al. **Acta Neurol Belg** 1989 May–Oct;89(3–4):132–4
Alterations in polyadenylic acid–containing messenger RNA synthesis of brain polysomes after seizures of seizure-susceptible E1 mice. Yamagami S, et al. **Acta Neurol Scand** 1989 Oct;80(4):327–32
Naturally occurring canine distemper virus encephalitis: distribution and expression of viral polypeptides in nervous tissues. Baumgärtner W, et al. **Acta Neuropathol (Berl)** 1989; 78(5):504–12
Correlation between microscopical changes and Tau 64 and 69 biochemical detection in senile dementia of the Alzheimer type. Tau 64 and 69 are reliable markers of the neurofibrillary degeneration. Flament S, et al. **Acta Neuropathol (Berl)** 1990;80(2):212–5
Rapid increase of prostaglandin F2-alpha in neurons after subarachnoid hemorrhage in rats: an immunohistochemical study. Ogawa H, et al. **Acta Neuropathol (Berl)** 1989; 78(6):621–8
Somatostatin and cognitive functions: behavioral, neurochemical and molecular biology studies. Florio T, et al. **Acta Physiol Hung** 1990;75 Suppl:107–8
Demonstration of different regional distributions of calcineurin subunits using monoclonal antibodies. Matsui H, et al. **Adv Exp Med Biol** 1989;255:369–75
Calbindin-D28 in mammalian brain, retina, and endocrine pancreas: immunohistochemical comparison with calretinin. Pochet R, et al. **Adv Exp Med Biol** 1989; 255:435–43
An osmotic gradient in ischemic brain edema. Hatashita S, et al. **Adv Neurol** 1990;52:85–92
Chronological alterations of regional cerebral blood flow, glucose utilization, and edema formation after focal ischemia in hypertensive and normotensive rats. Significance of hypertension. Hatashita T, et al. **Adv Neurol** 1990;52:29–37
Quantitative analysis of experimental peritumoral edema in cats. Hossmann KA, et al. **Adv Neurol** 1990;52:449–58
Imaging of water distribution in the rat brain by activation autoradiography. Kogure K, et al. **Adv Neurol** 1990;52:81–4
Comparative studies of edema produced by fluid percussion injury with lateral and central modes of injury in cats. Marmarou A, et al. **Adv Neurol** 1990;52:233–6
Uncoupling of blood flow and glucose metabolism in the neighboring postischemic edematous brain area. Nagasawa H, et al. **Adv Neurol** 1990;52:63–71
Rapid solute transport throughout the brain via paravascular fluid pathways. Rennels ML, et al. **Adv Neurol** 1990; 52:431–9
Epidural pressure and cerebral metabolism in rat internal carotid artery occlusion by silicone cylinder embolus. Takeda T, et al. **Adv Neurol** 1990;52:547
Continuous monitoring of brain ethanol levels by intracerebral microdialysis. Ferraro TN, et al. **Alcohol** 1990 Mar–Apr;7(2):129–32
High branched-chain alpha-keto acid intake, branched-chain alpha-keto acid dehydrogenase activity, and plasma and brain amino acid and plasma keto acid concentrations in rats. Crowell PL, et al. **Am J Clin Nutr** 1990 Aug; 52(2):313–9
Brain synaptosomal, liver, plasma, and red blood cell lipids in piglets fed exclusively on a vegetable-oil–containing formula with and without fish-oil supplements. Foote KD, et al. **Am J Clin Nutr** 1990 Jun;51(6):1001–6
Brain neurotransmitter changes in three patients who had a fatal hyperthermia syndrome. Kish SJ, et al. **Am J Psychiatry** 1990 Oct;147(10):1358–63
Detection of 3,4-dihydroxyphenylglycolaldehyde in human brain by high-performance liquid chromatography. Burke WJ, et al. **Anal Biochem** 1989 Jul;180(1):79–84
Isolation and sequence analysis of proteins from mouse forebrain using two-dimensional gel electrophoresis coupled to high-pressure liquid extrusion. DeWald DB, et al. **Anal Biochem** 1989 Aug 1;180(2):340–8
Selective purification of microtubule-associated proteins 1 and 2 from rat brain using poly(L-aspartic acid). Fujii T, et al. **Anal Biochem** 1990 Feb 1;184(2):268–73
Lowry protein assay containing sodium dodecyl sulfate in microtiter plates for protein determinations on fractions from brain tissue. Harrington CR. **Anal Biochem** 1990 May 1;186(2):285–7
Measurement of 2-deoxyglucose and 2-deoxyglucose 6-phosphate in tissues. Manchester JK, et al. **Anal Biochem** 1990 Feb 15;185(1):118–24
A method for the measurement of S-adenosylmethionine in small volume samples of cerebrospinal fluid or brain using high-performance liquid chromatography-electrochemistry. Surtees R, et al. **Anal Biochem** 1989 Sep;181(2):331–5
Measurement of kynurenic acid in mammalian brain extracts and cerebrospinal fluid by high-performance liquid chromatography with fluorometric and coulometric electrode array detection. Swartz KJ, et al. **Anal Biochem** 1990 Mar;185(2):363–76
The effects of transient hyperglycemia on brain glucose in rats anesthetized with halothane. Weglinski MR, et al. **Anesthesiology** 1990 Aug;73(2):291–6
Responsiveness of brain muscarinic acetylcholine receptors in aged rats. Michalek H, et al. **Ann Ist Super Sanita** 1990; 26(1):61–8
Pronase does not reduce the protein content of Hirt supernatant of normal mouse brain. Le Q Darcel C. **Ann Rech Vet** 1990;21(1):75–9
Neurochemical measurements in the brains of mice infected with Trypanosoma brucei brucei (TREU 667). Amole B, et al. **Ann Trop Med Parasitol** 1989 Jun;83(3):225–32
Cholesterol distribution in rat liver and brain mitochondria as determined by stopped-flow kinetics with filipin. Crémel G, et al. **Arch Biochem Biophys** 1990 Apr;278(1):142–7
Further studies on the gangliosidic nature of the cholinergic-specific antigen, Chol-1. Giuliani A, et al. **Arch Biochem Biophys** 1990 Jul;280(1):211–6
Increased concentration of aluminium in the brain of a parenterally fed preterm infant. Bishop NJ, et al. **Arch Dis Child** 1989 Sep;64(9):1316–7
Brain–gut–skin peptides: an update overview. Renda T, et al. **Arch Histol Cytol** 1989;52 Suppl:317–23 (32 ref.)
Calcium binding proteins in the brain. Celio MR. **Arch Ital Anat Embriol** 1989 Jul–Sep;94(3):227–36 (36 ref.)
Distribution and molecular forms of brain natriuretic peptide in the central nervous system, heart and peripheral tissue of rat. Aburaya M, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):880–7
Isolation of two novel adenosine binding proteins from bovine brain. Bembenek ME. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):702–8
Isolation of NPY-25 (neuropeptide Y[12–36]), a potent inhibitor of calmodulin, from porcine brain. Kitamura K, et al. **Biochem Biophys Res Commun** 1990 Jun 29; 169(3):1164–71
Visualization of interleukin-2-like molecules in MPP(+)-lesioned rat brain. Liang SM, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1312–8
N-terminally extended form of C-type natriuretic peptide (CNP-53) identified in porcine brain. Minamino N, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):973–9
Detection of 2H-1,4-thiazine-5,6-dihydro-3-carboxylic acid (aminoethylcysteine ketimine) in the bovine brain. Nardini M, et al. **Biochem Biophys Res Commun** 1990 Feb 14; 166(3):1251–6
Developmental and differential expression of beta amyloid protein precursor mRNAs in mouse brain. Ohyagi Y, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):54–60
C-type natriuretic peptide (CNP): a new member of natriuretic peptide family identified in porcine brain. Sudoh T, et al. **Biochem Biophys Res Commun** 1990 Apr 30; 168(2):863–70
Amino acid sequence and relative biological activity of a natriuretic peptide isolated from eel brain. Takei Y, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):883–91
Tissue-specific expression of three types of beta-protein precursor mRNA: enhancement of protease inhibitor-harboring types in Alzheimer's disease brain. Tanaka S, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1406–14
Properties of kinesin isolated from human prostatic DU 145 tumor cells and bovine brain. Stearns ME, et al. **Biochem Cell Biol** 1990 Feb;68(2):436–40
Unusual properties of a cold-labile fraction of Atlantic cod (Gadus morhua) brain microtubules. Strömberg E, et al. **Biochem Cell Biol** 1989 Nov–Dec;67(11–12):791–800
Multiple forms of calpastatin in pig brain. Takano E, et al. **Biochem Int** 1989 Sep;19(3):633–43
Molecular species composition of the major phospholipids in brain and retina from rainbow trout (Salmo gairdneri). Occurrence of high levels of di-(n-3)polyunsaturated fatty acid species. Bell MV, et al. **Biochem J** 1989 Dec 15; 264(3):909–15
Translocation of the brain-type glucose transporter largely accounts for insulin stimulation of glucose transport in BC3H-1 myocytes. Calderhead DM, et al. **Biochem J** 1990 Aug 1;269(3):597–601
Unique molecular species of phosphatidylcholine containing very-long-chain (C24–C38) polyenoic fatty acids in rat brain. Robinson BS, et al. **Biochem J** 1990 Feb 1; 265(3):763–7
Serotonin- and catecholamine-related substances in the brain of ornithine transcarbamylase-deficient Sparse-fur mice in the hyperammonemic state: comparison of two procedures for obtaining brain extract, decapitation and microwave irradiation. Inoue I, et al. **Biochem Med Metab Biol** 1989 Dec;42(3):232–9
Functional changes of brain mitochondria during experimental hepatic encephalopathy. Díaz-Muñoz M, et al. **Biochem Pharmacol** 1989 Nov 1;38(21):3835–41
Determination of brain concentrations of 8-hydroxy-2-(di-n-propylamino)tetralin by liquid chromatography with electrochemical detection. Perry KW, et al. **Biochem Pharmacol** 1989 Oct 1;38(19):3169–73
Occurrence of 'natural' diazepam in human brain. Unseld E, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):210–2
Pyroglutamylpeptide amides in rat central nervous system: possible new class of neurotransmitter. del Rio-Garcia J, et al. **Biochem Soc Trans** 1990 Jun;18(3):434–5
Characterization of beta-adrenoceptors in synaptoneurosomes from rat brain: [3H]dihydroalprenolol versus [3H]CGP 12177. Guyard A, et al. **Biochem Soc Trans** 1990 Jun;18(3):423–4
Purification and reconstitution of the sodium- and potassium-coupled glutamate transport glycoprotein from rat brain. Danbolt NC, et al. **Biochemistry** 1990 Jul 17; 29(28):6734–40
Asymmetric extraction of membrane lipids by CHAPS. Banerjee P, et al. **Biochim Biophys Acta** 1990 Jun 14; 1044(3):305–14
Identification and localization of low-molecular-mass GTP-binding proteins associated with synaptic vesicles and other membranes. Matsuoka I, et al. **Biochim Biophys Acta** 1990 Jul 9;1026(1):99–104
Qualitative and quantitative comparison of brain proteins in Alzheimer's disease. Buee L, et al. **Biol Chem Hoppe Seyler** 1989 Nov;370(11):1229–34
High affinity binding of rat brain cathepsin B to purified rat/bovine cerebral mannose 6-phosphate receptors. Chi LM, et al. **Biol Chem Hoppe Seyler** 1990 May;371 Suppl:259–64
Effect of latent iron deficiency on metal levels of rat brain regions. Shukla A, et al. **Biol Trace Elem Res** 1989 Nov; 22(2):141–52
Gallium distribution in several human brain areas. Speziali M, et al. **Biol Trace Elem Res** 1989 Oct;22(1):9–15
Metabolization of a retention-improving dosage of methylglucamine orotate in rat brain. Staak S, et al. **Biomed Biochim Acta** 1990;49(4):257–62
A high performance liquid chromatography/electrochemical assay for glutamatergic neurotransmitters in the rat brain. Harsing LG Jr, et al. **Biomed Chromatogr** 1989 Jul; 3(4):183–5
Confirmation of the enantiomers of 1-methyl-1,2,3,4-tetrahydroisoquinoline in the mouse brain and foods applying gas chromatography/mass spectrometry with negative ion chemical ionization. Makino Y, et al. **Biomed Environ Mass Spectrom** 1990 Jul; 19(7):415–9
Sight and insight: brain dopamine receptor occupancy by neuroleptics visualised in living schizophrenic patients by positron emission tomography. Waddington JL. **Br J Psychiatry** 1989 Apr;154:433–6 (32 ref.)
Hyperthermia-induced seizures with a servo system: neurophysiological roles of age, temperature elevation rate and regional GABA content in the rat. Morimoto T, et al. **Brain Dev** 1990;12(3):279–83
Localization of interleukin-2 immunoreactivity and interleukin-2 receptors in the rat brain: interaction with the cholinergic system. Araujo DM, et al. **Brain Res** 1989 Oct 2;498(2):257–66
Neuropeptide content and connectivity of the rat claustrum. Eiden LE, et al. **Brain Res** 1990 Jul 23;523(2):245–50
Distribution of monoamines and metabolites in rabbit neostriatum, hippocampus and cortex. Reader TA, et al. **Brain Res Bull** 1989 Sep;23(3):237–47
Thymosin beta 10 levels in developing human brain and its regulation by retinoic acid in the HTB-10 neuroblastoma. Hall AK, et al. **Brain Res Mol Brain Res** 1990 Jul; 8(2):129–35
Localization of the NGFI-A protein in the rat brain. Mack K, et al. **Brain Res Mol Brain Res** 1990 Jul;8(2):177–80
Striatal preprotachykinin and preproenkephalin mRNA levels and the levels of nigral substance P and pallidal Met5-enkephalin depend on corticostriatal axons that use the excitatory amino acid neurotransmitters aspartate and

glutamate: quantitative radioimmunocytochemical and in situ hybridization evidence. Somers DL, et al. **Brain Res Mol Brain Res** 1990 Jul;8(2):143–58

A GTPase-activating protein for rhoB p20, a ras p21-like GTP-binding protein--partial purification, characterization and subcellular distribution in rat brain. Yamamoto J, et al. **Brain Res Mol Brain Res** 1990 Jul; 8(2):105–11

Brain lactic acidosis and synaptic function. Walz W, et al. **Can J Physiol Pharmacol** 1990 Feb;68(2):164–9

The trkB tyrosine protein kinase gene codes for a second neurogenic receptor that lacks the catalytic kinase domain. Klein R, et al. **Cell** 1990 May 18;61(4):647–56

The use of quantitative immunocytochemistry (QICC) to measure calbindin D28k-like immunoreactivity in the rat brain. Davenport AP, et al. **Cell Mol Biol** 1990;36(1):1–11

Changes of soluble and membrane proteins of rat brain during pre- and postnatal development. Kirazov E, et al. **Cell Mol Biol** 1989;35(6):643–56

Receptor autoradiographic analysis of insulin-like growth factor-I (IGF-I) binding sites in rat forebrain and pituitary gland. Matsuo K, et al. **Cell Mol Neurobiol** 1989 Sep; 9(3):357–67

Binding sites for brain trace amines. Nguyen TV, et al. **Cell Mol Neurobiol** 1989 Sep;9(3):297–311 (59 ref.)

An autoradiographic study of alpha 1-adrenergic receptors in the brain of the Japanese quail (Coturnix coturnix japonica). Balthazart J, et al. **Cell Tissue Res** 1989 Dec; 258(3):563–8

Identification of opioid-binding materials of rat brain. Fujioka T, et al. **Chem Pharm Bull (Tokyo)** 1990 Jan; 38(1):168–71

Active opioid binding protein from rat brain--a glycoprotein containing alpha-methyl-D-mannoside residues. Wang F, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Nov;10(6):481–4

Atrial natriuretic factor content of brain nuclei in deoxycorticosterone acetate-salt hypertension in the rat. Geiger H, et al. **Clin Sci** 1989 Nov;77(5):529–34

Avian gonadotropin-releasing hormones I and II in brain and other tissues in turkey hens. Millam JR, et al. **Comp Biochem Physiol [A]** 1989;94(4):771–6

Measurement of optical path length for cerebral near-infrared spectroscopy in newborn infants. Wyatt JS, et al. **Dev Neurosci** 1990;12(2):140–4

An 18-kd heparin-binding protein of developing brain that is distinct from fibroblast growth factors. Rauvala H. **EMBO J** 1989 Oct;8(10):2933–41

Neuraxin, a novel putative structural protein of the rat central nervous system that is immunologically related to microtubule-associated protein 5. Rienitz A, et al. **EMBO J** 1989 Oct;8(10):2879–88

Localization of different releasing hormone immunoreactive (LH-IR) neurons and their projections in central nervous system of birds. A mini-review. Mess B, et al. **Endocrinol Exp** 1989 Dec;23(4):305–20 (27 ref.)

Immunoreactive 7B2 concentrations in rats with various endocrine conditions. Suzuki H, et al. **Endocrinol Jpn** 1989 Jun;36(3):449–57

Comparison of brain and pituitary immunoreactive prolactin by peptide mapping and lectin affinity chromatography. DeVito WJ. **Endocrinology** 1989 Nov;125(5):2439–44

Preparation of monoclonal antibodies against brain natriuretic peptide and their application to radioimmunoassay and passive immunization. Itoh H, et al. **Endocrinology** 1990 Sep;127(3):1292–300

Solubilization and purification of melatonin receptors from lizard brain. Rivkees SA, et al. **Endocrinology** 1990 Sep; 127(3):1206–14

Effects of whole-body vibration stress on substance P- and neurotensin-like immunoreactivity in the rat brain. Nakamura H, et al. **Environ Res** 1990 Aug;52(2):155–63

Quinolinic acid concentrations in brain and cerebrospinal fluid of patients with intractable complex partial seizures. Heyes MP, et al. **Epilepsia** 1990 Mar-Apr;31(2):172–7

Effect of phenobarbital on carbamazepine and its major metabolites in serum, different brain areas, and urine after acute and chronic administration to rats. Mendez-Alvarez E, et al. **Epilepsia** 1990 Mar-Apr;31(2):202–10

Fatty-acid-binding protein from bovine brain. Amino acid sequence and some properties. Schoentgen F, et al. **Eur J Biochem** 1989 Oct 20;185(1):35–40

The distribution of bromine content of dibromodulcitol in the central nervous system of patients with malignant gliomas. Sziklai IL, et al. **Eur J Cancer** 1990 Feb; 26(2):79–82

Brain histology, blood-brain barrier and brain water after normothermic and hypothermic cardiopulmonary bypass in pigs. Laursen H, et al. **Eur J Cardiothorac Surg** 1989; 3(6):539–43

Brain myosin assembly: characterization of aggregation-competent fragments by antibodies. Barylko B, et al. **Eur J Cell Biol** 1989 Oct;50(1):41–7

Blot overlay identification of microtubule-binding peptides from bovine brain. Rozdzial MM, et al. **Eur J Cell Biol** 1990 Jun;52(1):27–35

Estimation of the in vivo effect of cyclooxygenase inhibitors on prostaglandin E2 levels in mouse brain. Ferrari RA, et al. **Eur J Pharmacol** 1990 Apr 10;179(1-2):25–34

Direct measurement of muscarinic agents in the central nervous system of mice using ex vivo binding. Freedman SB, et al. **Eur J Pharmacol** 1989 Dec 19;174(2-3):253–60

Ethacrynic acid-induced convulsions and brain noradrenaline in mice. Inoue M, et al. **Eur J Pharmacol** 1990 Apr 10;179(1-2):221–3

Evidence for direct interactions between the NMDA and glycine recognition sites in brain. Kaplita PV, et al. **Eur J Pharmacol** 1990 Mar 13;188(2-3):175–9

Specific binding of [3H]spermidine to membranes of rat brain. Mantione CR, et al. **Eur J Pharmacol** 1990 May 16; 180(2-3):393–4

An endogenous modulator of N-methyl-D-aspartate receptor-coupled glycine receptors. Marvizón JC, et al. **Eur J Pharmacol** 1990 Jan 23;188(1):23–32

Neurotransmitter and receptor alterations in the rat persistent dyskinesia model induced by iminodipropionitrile. Ogawa N, et al. **Eur Neurol** 1990;30 Suppl 1:31–40

Levels of carnitines in brain and other tissues of rats of different ages: effect of acetyl-L-carnitine administration. Maccari F, et al. **Exp Gerontol** 1990;25(2):127–34

Characterization of rat brain NCAM mRNA using DNA oligonucleotide probes. Andersson AM, et al. **FEBS Lett** 1990 Apr 24;263(2):385–8

Characterization of N-cadherin mRNA in chicken brain and heart by means of oligonucleotide probes. Dalseg AM, et al. **FEBS Lett** 1990 Mar 26;262(2):234–6

Two novel brain proteins, CaBP33 and CaBP37, are calcium-dependent phospholipid- and membrane-binding proteins. Donato R, et al. **FEBS Lett** 1990 Mar 12; 262(1):72–6

Identification of alpha 2- and alpha 3-subunits of the GABAA-benzodiazepine receptor complex purified from the brains of young rats. Fuchs K, et al. **FEBS Lett** 1990 Feb 12;261(1):52–4

The gamma subunit of brain G-proteins is methyl esterified at a C-terminal cysteine. Fung BK, et al. **FEBS Lett** 1990 Jan 29;260(2):313–7

Characterization of four G0-type proteins purified from bovine brain membranes. Inanobe A, et al. **FEBS Lett** 1990 Apr 24;263(2):369–72

Isolation and sequence determination of human brain natriuretic peptide in human atrium. Kambayashi Y, et al. **FEBS Lett** 1990 Jan 1;259(2):341–5

Sheep neuropeptide Y. A third structural type of a highly conserved peptide. Sillard R, et al. **FEBS Lett** 1989 Dec 4;258(2):263–5

Morphological and molecular organization of the brain postsynaptic densities. Rysak M, et al. **Folia Morphol (Warsz)** 1988;47(1-4):3–12

Calcitonin gene-related peptide in neural tissues: a phylogenetic study. Kline LW, et al. **Gen Comp Endocrinol** 1989 Dec;76(3):408–13

Evidence of a growth hormone-releasing hormone-like molecule in salmon brain, Oncorhynchus keta and O. kisutch. Parker DB, et al. **Gen Comp Endocrinol** 1990 Jul; 79(1):95–102

Insulin-like immunoreactivity in the brain of two hagfishes, Eptatretus stouti and Myxine glutinosa [published erratum appears in Gen Comp Endocrinol 1990 May;78(2):328–9] Thorndyke MC, et al. **Gen Comp Endocrinol** 1989 Dec; 76(3):371–81

Behavioral and genetic interrelationships between locomotor activity and brain biogenic amines. Messiha FS, et al. **Gen Pharmacol** 1990;21(4):459–64

Differential distribution of muscarinic receptor subtypes and their regulation by G-protein in rat brain. Wei JW, et al. **Gen Pharmacol** 1990;21(4):471–6

Low brain magnesium in migraine. Ramadan NM, et al. **Headache** 1989 Oct;29(9):590–3

cGMP immunocytochemistry in aorta, kidney, retina and brain tissues of the rat after perfusion with nitroprusside. Berkelmans HS, et al. **Histochemistry** 1989;93(2):143–8

Regional differences in the distribution of endogenous receptors for carbohydrate constituents of cellular glycoconjugates, especially lectins, in cortex, hippocampus, basal ganglia and thalamus of adult human brain. Gabius HJ, et al. **Histochemistry** 1990;93(6):581–92

A demonstration of the advantages of immunostaining in the quantification of amyloid plaque deposits. Gentleman SM, et al. **Histochemistry** 1989;92(4):355–8

A synthetic oligonucleotide probe encoding for atrial natriuretic peptide detects specific mRNA transcripts in rat heart but not brain using in situ hybridization histochemistry. Sutin EL, et al. **Histochemistry** 1990; 93(5):519–23

Phospholipid composition of myelin and synaptosomal proteolipid from vertebrate brain. Denisova NA. **Int J Biochem** 1990;22(5):439–42

Soluble heparin-binding lectins from human brain: purification, specificity and relationship to an heparin-binding growth factor. Eloumami H, et al. **Int J Biochem** 1990;22(5):539–44

Effect of clonidine early in life on brain morphofunctional deficits induced by neonatal malnutrition in the rat. Soto-Moyano R, et al. **Int J Neurosci** 1989 Nov; 49(1-2):103–13

Attempts to detect evidence of scrapie-associated protein in bovine tissue-derived products. DiMartino A. **J Am Vet Med Assoc** 1990 May 15;196(10):1685–6

A nortriptyline death with unusually high tissue concentrations. Rohrig TP, et al. **J Anal Toxicol** 1989 Sep-Oct;13(5):303–4

Rapid analysis of nutritionally important free amino acids in serum and organs (liver, brain, and heart) by liquid chromatography of precolumn phenylisothiocyanate derivatives. Sarwar G, et al. **J Assoc Off Anal Chem** 1990 May-Jun;73(3):470–5

Identical properties of aldosterone and corticosterone binders and their presence in rat brain and kidney. Tashima Y, et al. **J Biochem (Tokyo)** 1989 Sep;106(3):446–54

Characterization of ganglioside GM4 lactones isolated from the whale brain. Terabayashi T, et al. **J Biochem (Tokyo)** 1990 Jun;107(6):868–71

Solubilization and partial purification of 3-((+-)-2-carboxypiperazine-4-yl)-[1,2-3H]propyl-1-phosphonic acid recognition proteins from rat brain synaptic membranes. Cunningham MD, et al. **J Biol Chem** 1990 May 15;265(14):7768–78

Monoclonal antibody A2B5, which detects cell surface antigens, binds to ganglioside GT3 (II3 (NeuAc)3LacCer) and to its 9-O-acetylated derivative. Dubois C, et al. **J Biol Chem** 1990 Feb 15;265(5):2797–803

Isolation and characterization of extremely minor gangliosides, GM1b and GD1 alpha, in adult bovine brains as developmentally regulated antigens. Hirabayashi Y, et al. **J Biol Chem** 1990 May 15;265(14):8144–51

Analysis of 100-180-kDa phosphoproteins in clathrin-coated vesicles from bovine brain. Morris SA, et al. **J Biol Chem** 1990 Feb 25;265(6):3354–7

Purification and characterization from bovine brain cytosol of a novel regulatory protein inhibiting the dissociation of GDP from and the subsequent binding of GTP to rhoB p20, a ras p21-like GTP-binding protein. Ueda T, et al. **J Biol Chem** 1990 Jun 5;265(16):9373–80

Auxilin, a newly identified clathrin-associated protein in coated vesicles from bovine brain. Ahle S, et al. **J Cell Biol** 1990 Jul;111(1):19–29

A Ca2(+)-sensitive glycoprotein, GP90, associated with the cytoskeleton from brain and gizzard. Moss DJ, et al. **J Cell Sci** 1989 May;93 (Pt 1):85–94

The distribution of cholecystokinin receptors in the vertebrate brain: species differences studied by receptor autoradiography. Dietl MM, et al. **J Chem Neuroanat** 1989 May-Jun;2(3):149–61

Distribution of dopamine-immunoreactive neuronal perikarya and fibres in the brain of a teleost, Gasterosteus aculeatus L. comparison with tyrosine hydroxylase- and dopamine-beta-hydroxylase-immunoreactive neurons. Ekström P, et al. **J Chem Neuroanat** 1990 Jul-Aug; 3(4):233–60

Distribution of serotonin-immunoreactive neurons in the brain of sockeye salmon fry. Ekström P, et al. **J Chem Neuroanat** 1989 Jul-Aug;2(4):201–13

Topography of the oxytocin receptor system in rat brain: an autoradiographical study with a selective radioiodinated oxytocin antagonist. Elands J, et al. **J Chem Neuroanat** 1988 Nov-Dec;1(6):293–302

Autoradiographic analysis of benzodiazepine receptors in mutant mice with cerebellar defects. Kahle G, et al. **J Chem Neuroanat** 1990 Jul-Aug;3(4):261–70

A monoclonal antibody directed against CLIP (ACTH 18–39). Anatomical distribution of immunoreactivity in the rat brain and hypophysis with quantification of the hypothalamic cell group. Léger L, et al. **J Chem Neuroanat** 1990 Jul-Aug;3(4):297–308

Comparison of the distribution of D-1 and D-2 dopamine receptors in the rat brain. Wamsley JK, et al. **J Chem Neuroanat** 1989 May-Jun;2(3):119–37

High-performance liquid chromatographic assay of k-opioid selective benzeneacetamide derivatives (U50488, U69593 and PD117302) in rat plasma and brain. Bianchi G. **J Chromatogr** 1989 Jul 21;491(2):481–7

Application and validation of an ion-exchange high-performance liquid chromatographic method for measuring adenine nucleotides, creatine and creatine phosphate in mouse brain. Carter AJ, et al. **J Chromatogr** 1990 Apr 27;527(1):31–9

Determination of paraquat in rat brain using ion-pair solid-phase extraction and reversed-phase high-performance liquid chromatography with ultraviolet detection. Corasaniti MT, et al. **J Chromatogr** 1990 Apr 27;527(1):189–95

Electron-impact ionization detection of scopolamine by gas chromatography-mass spectrometry in rat plasma and brain. Deutsch J, et al. **J Chromatogr** 1990 Jun 29; 528(2):325–31

Rapid method based on reversed-phase high-performance liquid chromatography for purification of human myelin basic protein and its thrombic and endoproteinase Lys-C peptides. Giegerich G, et al. **J Chromatogr** 1990 Jun 8; 528(1):79–90

Measurement of methionine enkephalin and leucine enkephalin in rat brain regions by high-performance liquid chromatography with coulometric electrochemical detection. Kim C, et al. **J Chromatogr** 1989 Sep 29; 494:67–76

Isolation of mammalian brain tubulin by amino-activated gel chromatography. Lacey E, et al. **J Chromatogr** 1990 Jan 26;525(1):71–84

Simple high-performance liquid chromatographic method with electrochemical detection for the determination of indoleamines in tissue and plasma. Martin F, et al. **J Chromatogr** 1989 Jun 30;491(1):221–5

Ultra-rapid assay of brain gamma-aminobutyric acid by liquid chromatography with electrochemical detection [letter] Murai S, et al. **J Chromatogr** 1989 Dec 29;497:363–6

Detection of tetrahydroisoquinoline in parkinsonian brain as

an endogenous amine by use of gas chromatography–mass spectrometry. Niwa T, et al. **J Chromatogr** 1989 Jul 21; 491(2):397–403

Determination of sulfide in brain tissue and rumen fluid by ion–interaction reversed–phase high–performance liquid chromatography. Savage JC, et al. **J Chromatogr** 1990 Apr 6;526(2):540–5

Purification of myelin–associated glycoprotein from calf brain using high–performance liquid chromatography. Shimamura M, et al. **J Chromatogr** 1990 Apr 6;526(2):535–9

Rapid and simple method for the determination of nimustine hydrochloride in human blood and brain by high–performance liquid chromatography. Tatsuhara T, et al. **J Chromatogr** 1990 Apr 6;526(2):507–14

Autoradiographic localization of progestin–concentrating cells in the brain of the zebra finch. Lubischer JL, et al. **J Comp Neurol** 1990 Jan 15;291(3):450–6

Prodynorphin peptide distribution in the forebrain of the Syrian hamster and rat: a comparative study with antisera against dynorphin A, dynorphin B, and the C–terminus of the prodynorphin precursor molecule. Neal CR Jr, et al. **J Comp Neurol** 1989 Oct 15;288(3):353–86

An immunohistochemical study of the topography and cellular localization of three neural proteins in the sheep nervous system. Jeffrey M, et al. **J Comp Pathol** 1990 Jul; 103(1):23–35

Biochemical study of prolactin binding sites in Xenopus laevis brain and choroid plexus. Muccioli G, et al. **J Exp Zool** 1990 Mar;253(3):311–8

Products of cells from gliomas: VIII. Multiple–well immunoperoxidase assay of immunoreactivity of primary hybridoma supernatants with human glioma and brain tissue and cultured glioma cells. McKeever PE, et al. **J Histochem Cytochem** 1990 Jun;38(6):815–22

Regional brain concentrations of calcitonin gene–related peptide in spontaneously hypertensive and normotensive Wistar–Kyoto rats. Lewis SJ, et al. **J Hypertens** 1990 Apr; 8(4):315–9

Identification of intact dolichol–linked oligosaccharides in the brains of patients with ceroid–lipofuscinosis (Batten's disease). Hall NA, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:379–82

Highly sensitive enzyme immunoassay for bovine chromogranin A: application for studies of regional distribution in bovine central nervous system. Kawakubo A, et al. **J Mol Neurosci** 1989;1(4):215–23

Use of 1,2–bis(2–amino–5–fluorophenoxy)ethane–N,N,N',N'–tetraacetic acid (5FBAPTA) in the measurement of free intracellular calcium in the brain by 19F–nuclear magnetic resonance spectroscopy. Badar–Goffer RS, et al. **J Neurochem** 1990 Sep;55(3):878–84

Decreased ferritin levels in brain in Parkinson's disease. Dexter DT, et al. **J Neurochem** 1990 Jul;55(1):16–20

An improved HPLC–electrochemical detection method for measuring brain levels of 5–S–cysteinyldopamine, 5–S–cysteinyl–3,4–dihydroxyphenylalanine, and 5–S–cysteinyl–3,4–dihydroxyphenylacetic acid. Fornstedt B, et al. **J Neurochem** 1990 Feb;54(2):578–86

Sensitive radioimmunoassays for histamine and tele–methylhistamine in the brain. Garbarg M, et al. **J Neurochem** 1989 Dec;53(6):1724–30

Effect of long–lasting diabetes mellitus on rat and human brain monoamines. Lacković Z, et al. **J Neurochem** 1990 Jan;54(1):143–7

Quantitation and characterization of peptides from the C–terminal flanking region of rat and bovine preprotachykinins. McGregor GP, et al. **J Neurochem** 1989 Dec;53(6):1871–7

Shark myelin basic protein: amino acid sequence, secondary structure, and self–association. Milne TJ, et al. **J Neurochem** 1990 Sep;55(3):950–5

Isolation of glutamyltaurine from bovine brains and proof of its gamma–linkage by the B/E linked scan SIMS technique. Nakamura K, et al. **J Neurochem** 1990 Sep; 55(3):1064–6

Analysis of carnosine, homocarnosine, and other histidyl derivatives in rat brain. O'Dowd JJ, et al. **J Neurochem** 1990 Aug;55(2):446–52

Molecular characterization of GP50: a neuron–specific, synaptic–enriched glycoprotein. Paladino T, et al. **J Neurochem** 1989 Dec;53(6):1902–9

Oligosaccharide–related epitope specific for a brain–specific glycoprotein, 1D4 antigen. Sano S, et al. **J Neurochem** 1990 Oct;55(4):1252–7

Characterization of annexins in mammalian brain. Woolgar JA, et al. **J Neurochem** 1990 Jan;54(1):62–71

Reactive gliosis in the brains of Lewis rats with experimental allergic encephalomyelitis. Cammer W, et al. **J Neuroimmunol** 1990 May;27(2–3):111–20

Light and electron microscopic examination of amyloid–rich primitive plaques: comparison with diffuse plaques. Ikeda K, et al. **J Neurol** 1990 Apr;237(2):88–93

Novel localization of a G protein, Gz–alpha, in neurons of brain and retina. Hinton DR, et al. **J Neurosci** 1990 Aug; 10(8):2763–70

1B1075: a brain– and pituitary–specific mRNA that encodes a novel chromogranin/secretogranin–like component of intracellular vesicles. Ottiger HP, et al. **J Neurosci** 1990 Sep;10(9):3135–47

Localization of the MARCKS (87 kDa) protein, a major specific substrate for protein kinase C, in rat brain. Ouimet CC, et al. **J Neurosci** 1990 May;10(5):1683–98

Neuromedin B and gastrin–releasing peptide mRNAs are differentially distributed in the rat nervous system. Wada E, et al. **J Neurosci** 1990 Sep;10(9):2917–30

Neuron–specific expression of high–molecular–weight clathrin light chain. Wong DH, et al. **J Neurosci** 1990 Sep; 10(9):3025–31

Brain amino acid concentrations in rats killed by decapitation and microwave irradiation. Miller JM, et al. **J Neurosci Methods** 1990 Mar;31(3):187–92

Design of a microprocessor–controlled thermoregulated chamber for perfusing in vitro mammalian brain preparations. Mühlethaler M, et al. **J Neurosci Methods** 1990 Mar;31(3):215–23

A rapid procedure for the analysis of phenylalanine in brain tissue utilizing electron–capture gas chromatography. Wong JT, et al. **J Neurosci Methods** 1990 May;32(2):105–9

Neuron–specific splicing of C–SRC RNA in human brain. Pyper JM, et al. **J Neurosci Res** 1989 Sep;24(1):89–96

Localized 31P magnetic resonance spectroscopy of large pediatric brain tumors. Sutton LN, et al. **J Neurosurg** 1990 Jan;72(1):65–70

Changes in the components and content of biological water in the brain of experimental hydrocephalic rabbits. Tamaki N, et al. **J Neurosurg** 1990 Aug;73(2):274–8 (34 ref.)

Dietary disproportions of amino acids in the rat: effects on food intake, plasma and brain amino acids and brain serotonin. Tackman JM, et al. **J Nutr** 1990 May; 120(5):521–33

hCGRP8–37, a calcitonin gene–related peptide antagonist revealing calcitonin gene–related peptide receptor heterogeneity in brain and periphery. Dennis T, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):123–8

Analogs of somatostatin selectively label distinct subtypes of somatostatin receptors in rat brain. Raynor K, et al. **J Pharmacol Exp Ther** 1989 Nov;251(2):510–7

Intracerebral microdialysis: II. Mathematical studies of diffusion kinetics. Amberg G, et al. **J Pharmacol Methods** 1989 Nov;22(3):157–83

Simultaneous determination of lactate, pyruvate, and ascorbate in microdialysis samples from rat brain, blood, fat, and muscle using high–performance liquid chromatography. Hallström A, et al. **J Pharmacol Methods** 1989 Sep;22(2):113–24

Intracerebral microdialysis: I. Experimental studies of diffusion kinetics. Lindefors N, et al. **J Pharmacol Methods** 1989 Nov;22(3):141–56

Very rapid and simple assay of taurine in the brain within two minutes by high–performance liquid chromatography with electrochemical detection. Murai S, et al. **J Pharmacol Methods** 1990 May;23(3):195–202

Purification and properties of brain neuroleptic–binding proteins. Sartania NA, et al. **J Protein Chem** 1989 Jun; 8(3):339–40

Isolation of argiopinin–binding protein from bovine brain. Volkova TM, et al. **J Protein Chem** 1989 Jun;8(3):322–4

Measurement of ethanol in the human brain using NMR spectroscopy. Hanstock CC, et al. **J Stud Alcohol** 1990 Mar; 51(2):104–7

Better living through brain chemistry? [letter; comment] **JAMA** 1989 Nov 17;262(19):2681–2 Comment on: JAMA 1989 Aug 4;262(5):625–6.

Specialized localization of P–glycoprotein recognized by MRK 16 monoclonal antibody in endothelial cells of the brain and the spinal cord. Sugawara I, et al. **Jpn J Cancer Res** 1990 Aug;81(8):727–30

Age related changes in weight and the concentrations of zinc and copper in the brain of the adult rat. Palm R, et al. **Lab Anim** 1990 Jul;24(3):240–5

The effects of age and sex on seven elements of Sprague–Dawley rat organs. Uchino E, et al. **Lab Anim** 1990 Jul;24(3):253–64

In vivo assessment of N–acetylaspartate in brain in spongy degeneration (Canavan's disease) by proton spectroscopy [letter] Grodd W, et al. **Lancet** 1990 Aug 18; 336(8712):437–8

"Natural" benzodiazepines in man [letter; comment] Klotz U. **Lancet** 1990 Apr 14;335(8694):922 Comment on: Lancet 1990 Feb 17;335(8686):413.

Brain muscarinic receptors in Alzheimer's and Parkinson's diseases [letter] Lange KW, et al. **Lancet** 1989 Nov 25; 2(8674):1279

Increased brain 3–hydroxykynurenine in Huntington's disease [comment] Reynolds GP, et al. **Lancet** 1989 Oct 21; 2(8669):979–80 Comment on: Lancet 1988 Dec 10;2(8624):1373.

Simultaneous measurement of tetrahydrobiopterin (THBP) and biogenic amines by liquid chromatography with electrochemical detection. Tani Y, et al. **Life Sci** 1990; 46(5):373–8

Improved quantification of in vivo 1H NMR spectra by optimization of signal acquisition and processing and by incorporation of prior knowledge into the spectral fitting. de Graaf AA, et al. **Magn Reson Med** 1990 Aug; 15(2):305–19

High–resolution NMR spectroscopy of cerebral white matter in multiple sclerosis. Sappey–Marinier D. **Magn Reson Med** 1990 Aug;15(2):229–39

Solubilization and partial purification of S–adenosyl–L–homocysteine binding proteins from the rat brain. Fonlupt P, et al. **Membr Biochem** 1987–88; 7(4):219–30

Regulation of somatostatin and growth hormone–releasing hormone gene expression in the rat brain. Zeitler P, et al. **Metabolism** 1990 Sep;39(9 Suppl 2):46–9 (24 ref.)

Genetic evidence for alpha 2–adrenergic receptor subtypes in rat brain, heart and adrenal gland. Duda T, et al. **Mol Cell Biochem** 1990 Jan 18;92(1):69–75

The ras–like protein p25rab3A is partially cytosolic and is expressed only in neural tissue. Burstein E, et al. **Mol Cell Biol** 1989 Nov;9(11):4807–11

Insulin and insulin–like growth factor receptors in the nervous system. Adamo M, et al. **Mol Neurobiol** 1989 Spring–Summer;3(1–2):71–100 (180 ref.)

Glycoprotein nature of dopamine D1 receptors in the brain and parathyroid gland. Jarvie KR, et al. **Mol Pharmacol** 1989 Oct;36(4):566–74

Brain GABA levels in asymptomatic Huntington's disease [letter] Reynolds GP, et al. **N Engl J Med** 1990 Sep 6; 323(10):682

Cortical beta–amyloid [letter] Behrouz N, et al. **Nature** 1990 Apr 5;344(6266):497

Neuroscience. A finger on brain receptors [news] Stevens CF. **Nature** 1989 Dec 7;342(6250):620–1

Sequence and expression of a frog brain complementary DNA encoding a kainate–binding protein. Wada K, et al. **Nature** 1989 Dec 7;342(6250):684–9

Aging and brain cholinergic muscarinic receptor subtypes: an autoradiographic study in the rat. Biegon A, et al. **Neurobiol Aging** 1989 Jul–Aug;10(4):305–10 (32 ref.)

Abstracts of communications of the Japanese Neurochemical Society. Sapporo, Hokkaido, September 27–29, 1989. **Neurochem Res** 1990 Mar;15(3):321–67

Abstracts of the thirty–first annual meeting of the Japanese Neurochemical Society. Sendai, October 26–28, 1988. Abstracts. **Neurochem Res** 1989 Aug;14(8):771–809

Analysis of polyadenylated RNA from brain synaptosomes and mitochondria. Corbatón V, et al. **Neurochem Res** 1990 Jul;15(7):711–7

Lipid profile of rat myelin subfractions. Di Biase A, et al. **Neurochem Res** 1990 May;15(5):519–22

Amino–terminal sequences of a novel heparin–binding protein from human, bovine, rat, and chick brain: high interspecies homology. Huber D, et al. **Neurochem Res** 1990 Apr;15(4):435–9

The gonadotropin–releasing hormone neuronal system of the male Djungarian hamster: distribution from the olfactory tubercle to the medial basal hypothalamus. Yellon SM, et al. **Neuroendocrinology** 1990 Feb;51(2):219–25

Severe deficiency of docosahexaenoic acid in peroxisomal disorders: a defect of delta 4 desaturation? Martínez M. **Neurology** 1990 Aug;40(8):1292–8

Immunohistochemical localization of prion protein in spongiform encephalopathies and normal brain tissue. Piccardo P, et al. **Neurology** 1990 Mar;40(3 Pt 1):518–22

Cell and fiber–type distribution of dystrophin. Hoffman EP, et al. **Neuron** 1988 Jul;1(5):411–20

Molecular cloning of SC1: a putative brain extracellular matrix glycoprotein showing partial similarity to osteonectin/BM40/SPARC [published erratum appears in Neuron 1990 Mar;4(3):477] Johnston IG, et al. **Neuron** 1990 Jan;4(1):165–76

Differential expression of amyloid precursor protein mRNAs in cases of Alzheimer's disease and in aged nonhuman primates. Koo EH, et al. **Neuron** 1990 Jan;4(1):97–104

Immunocytochemical localization of the endogenous benzodiazepine ligand octadecaneuropeptide (ODN) in the rat brain. Tonon MC, et al. **Neuropeptides** 1990 Jan; 15(1):17–24

[3H]5–hydroxytryptamine binding sites in postmortem human brain. Cheetham SC, et al. **Neuropharmacology** 1989 Oct; 28(10):1055–60

A study of diazepam binding inhibitor (DBI) processing products in human cerebrospinal fluid and in postmortem human brain. Guarneri P, et al. **Neuropharmacology** 1990 May;29(5):419–28

Conflict behavior and dynamics of monoamines of various brain nuclei in rats. Sakurai–Yamashita Y, et al. **Neuropharmacology** 1989 Oct;28(10):1067–73

Biogenic amines distribution in the brain of nervous and normal pointer dogs. A genetic animal model of anxiety. Gurguis GN, et al. **Neuropsychopharmacology** 1990 Aug; 3(4):297–303

Distribution of N–acetylaspartate, N–acetylaspartylglutamate, free glutamate and aspartate following complete mesencephalic transection in rat neuraxis. D'Arcangelo P, et al. **Neurosci Lett** 1990 Jun 22; 114(1):82–8

Neuropeptide Y expression in rat brain: effects of adrenalectomy. Dean RG, et al. **Neurosci Lett** 1990 Jul 13;114(3):339–44

Localization of preprogalanin mRNA in rat brain: in situ hybridization study with a synthetic oligonucleotide probe. Gundlach AL, et al. **Neurosci Lett** 1990 Jul 13;114(3):241–7

Regional distribution of metabotropic glutamate response in the rat brain using Xenopus oocytes. Horikoshi T, et al. **Neurosci Lett** 1989 Nov 6;105(3):340–3

Regional differences in connexin32 and connexin43 messenger RNAs in rat brain. Naus CC, et al. **Neurosci Lett** 1990 Apr 6;111(3):297–302

Polyclonal anti–propylbenzilylcholine mustard antibodies selectively recognize labeled muscarinic receptors from rabbit brain. Strang PF, et al. **Neurosci Lett** 1989 Sep 25; 104(1–2):201–8

Purification of neurocatin, a neuroregulatory factor from

brain. Yee DK, et al. **Neurosci Lett** 1990 Jul 3;114(2):213–9

Absolute quantitation of neonatal brain spectra acquired with surface coil localization. Cady EB, et al. **NMR Biomed** 1989 Dec;2(5–6):305–11

Nucleotide sequences of cDNAs alpha and gamma enolase mRNAs from mouse brain. Kaghad M, et al. **Nucleic Acids Res** 1990 Jun 25;18(12):3638

Opiocortin and catecholamine input to CRF–immunoreactive neurons in rat forebrain. Hornby PJ, et al. **Peptides** 1989 Nov–Dec;10(6):1139–46

Chromatographic and immunological evidence for mammalian GnRH and chicken GnRH II in eel (Anguilla anguilla) brain and pituitary. King JA, et al. **Peptides** 1990 May–Jun;11(3):507–14

Characterization of aPY–like peptides in anglerfish brain using a novel radioimmunoassay for aPY–Gly. Milgram SL, et al. **Peptides** 1989 Sep–Oct;10(5):1013–7

Distribution of angiotensin II receptors in the brain of nonhuman primates. Millan MA, et al. **Peptides** 1990 Mar–Apr;11(2):243–53

Comparison of synenkephalin and methionine enkephalin immunocytochemistry in rat brain. Song DD, et al. **Peptides** 1989 Nov–Dec;10(6):1239–46

Proopiomelanocortin (POMC)–related peptides in the brain of the rainbow trout, Salmo gairdneri. Vallarino M, et al. **Peptides** 1989 Nov–Dec;10(6):1223–30

Effect of isolation on brain monoamines and the behavior of mice in tests of exploration, locomotion, anxiety and behavioral 'despair'. Hilakivi LA, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):371–4

Analysis of serotonin, dopamine and their metabolites in the caudate putamen, the suprachiasmatic nucleus and the median raphe nucleus of euthermic and torpid deermice, Peromyscus maniculatus. Lin LH, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):309–14

Variation of nicotinic binding sites among inbred strains. Marks MJ, et al. **Pharmacol Biochem Behav** 1989 Jul; 33(3):679–89

Strain comparison of nicotine–induced seizure sensitivity and nicotinic receptors. Miner LL, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):469–75

Brain benzodiazepine receptors in fathead minnows and the behavioral response to alarm pheromone. Rehnberg BG, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):435–42

Multiple neurochemical and behavioral consequences of stressors: implications for depression. Anisman H, et al. **Pharmacol Ther** 1990;46(1):119–36 (132 ref.)

Regional distribution of the opioid receptor agonist N–(methyl–11C)pethidine in the brain of the rhesus monkey studied with positron emission tomography. Hartvig P, et al. **Pharmacol Toxicol** 1990 Jan;66(1):37–40

Neurochemical correlates of suicidal behavior: involvement of serotonergic and non–serotonergic systems. Mann JJ, et al. **Pharmacol Toxicol** 1990;66 Suppl 3:37–60 (78 ref.)

Neurochemical substrates of human aging and dementia. Mohr E, et al. **Pharmacopsychiatry** 1990 Feb;23 Suppl 2:53–5 (29 ref.)

Isolation, partial amino acid sequence, and immunohistochemical localization of a brain–specific calcium–binding protein. Winsky L, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10139–43

Brain G protein gamma subunits contain an all–trans–geranylgeranylcysteine methyl ester at their carboxyl termini. Yamane HK, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5868–72

N–[3H]methylcarbamylcholine binding sites in the rat and human brain: relationship to functional nicotinic autoreceptors and alterations in Alzheimer's disease. Araujo DM, et al. **Prog Brain Res** 1989;79:345–52 (49 ref.)

The cholinergic receptor system of the human brain: neurochemical and pharmacological aspects in aging and Alzheimer. Giacobini E, et al. **Prog Brain Res** 1989; 79:335–43 (41 ref.)

Galanin in the cholinergic basal forebrain: histochemical, autoradiographic and in vivo studies. Melander T, et al. **Prog Brain Res** 1989;79:85–91 (44 ref.)

Alpha–bungarotoxin receptors in the CNS. Morley BJ. **Prog Brain Res** 1989;79:101–8

Bovine spongiform encephalopathy: a scrapie–like disease of British cattle. Hope J, et al. **Prog Clin Biol Res** 1989; 317:659–67

Purification of solubilized opioid binding sites from rat brain by photoaffinity labeling and affinity chromatography using specific delta–opioid antagonist exorphin analogs. Loukas S, et al. **Prog Clin Biol Res** 1990;328:97–100

Nerve growth factor receptor expressing human basal forebrain neurons: pathologic alterations in Alzheimer's and Parkinson's disease. Mufson EJ, et al. **Prog Clin Biol Res** 1989;317:401–14

Immunocytochemical study of alpha 1–antichymotrypsin in the senescent cerebral amyloid. Shoji M, et al. **Prog Clin Biol Res** 1989;317:1049–59

Gene expression and mental disease. Harrison PJ, et al. **Psychol Med** 1989 Nov;19(4):813–9 (52 ref.)

Post–mortem neurochemistry of schizophrenia. Reynolds GP. **Psychol Med** 1988 Nov;18(4):793–7 (38 ref.)

Neurochemical studies of violent and nonviolent suicide. Mann JJ, et al. **Psychopharmacol Bull** 1989;25(3):407–13 (48 ref.)

T2 values in the human brain: comparison with quantitative assays of iron and ferritin. Chen JC, et al. **Radiology** 1989 Nov;173(2):521–6

Systemic administration of kainic acid produces elevations in TRH in rat central nervous system. Kreider MS, et al. **Regul Pept** 1990 Mar 27;28(1):83–93

Alterations in deoxyribonucleic acid and proteins in cerebral tissues from fetuses subject to alcohol in utero. López de Ochoa JA, et al. **Rev Esp Fisiol** 1989;45 Suppl:35–42

Effects of sound on fetal cerebral glucose utilization. Granier–Deferre C, et al. **Semin Perinatol** 1989 Oct; 13(5):371–9 (59 ref.)

Pregnenolone, dehydroepiandrosterone, and their sulfate and fatty acid esters in the rat brain. Jo DH, et al. **Steroids** 1989 Sep;54(3):287–97

Changes in the concentrations of cerebral proteins following occlusion of the middle cerebral artery in rats. Inuzuka T, et al. **Stroke** 1990 Jun;21(6):917–22

Consensus meeting agrees distribution of 5–HT3 receptors in mammalian hindbrain. Pratt GD, et al. **Trends Pharmacol Sci** 1990 Apr;11(4):135–7

[A molecular biology technique for the brain—preparation of genomic DNA from the brain] Chen J. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Dec; 22(6):346–8, 382–3 (Eng. Abstr.) **(Chi)**

[Observations on substance P in the brain and spinal cord in schizophrenia] Wu YS. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Aug; 22(4):231–2, 254 (Eng. Abstr.) **(Chi)**

[Isolation, purification and characterization of porcine brain calmodulin] Yan JC, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Sep;20(3):235–8 (Eng. Abstr.) **(Chi)**

[Somatostatin and seizures] Liang WL, et al. **Sheng Li Ko Hsueh Chin Chan** 1990 Apr;21(2):164–6 (25 ref.) **(Chi)**

[Brain dialysis technique and its application in neurochemical studies] Wang CF, et al. **Sheng Li Ko Hsueh Chin Chan** 1990 Jan;21(1):49–53 (37 ref.) **(Chi)**

[Sodium conductin of the human brain: purification and functional characterization] Materne–De Rycker C. **Bull Mem Acad R Med Belg** 1989;144(8–9):426–33 (Eng. Abstr.) **(Fre)**

[The presence of aluminum in cerebral vessels in Alzheimer's disease] Senitz D, et al. **Zentralbl Allg Pathol** 1990; 136(4):329–35 (Eng. Abstr.) **(Ger)**

[Quantitative and qualitative variations in the glycoproteins in the chick embryo brain] Pane G, et al. **Boll Soc Ital Biol Sper** 1989 Oct;65(10):931–8 (Eng. Abstr.) **(Ita)**

[New quantitative method for non–invasive monitoring of tissue blood oxygenation by near infrared spectrophotometry] Tamura M, et al. **Kokyu To Junkan** 1989 Sep;37(9):997–1002 (Eng. Abstr.) **(Jpn)**

[A study on PP family peptide receptor: I. The distribution of peptide YY (PYY) receptor in the brain] Oya M, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Nov 20; 65(11):1270–7 (Eng. Abstr.) **(Jpn)**

[Biochemicals and their functions in the brain—glucose, and amino acid and amine neurotransmitters] Kashiwamata S, et al. **No To Shinkei** 1989 Sep;41(9):851–61 (67 ref.) **(Jpn)**

[A semiquantitative study on Alzheimer neurofibrillary tangles demonstrated immunohistochemically with anti–tau antibodies, in the brains of non–demented and demented old people] Kuzuhara S, et al. **No To Shinkei** 1989 May; 41(5):465–70 (Eng. Abstr.) **(Jpn)**

[Simultaneous in situ detection of viral antigens and RNA in brain tissues from a patient with herpes simplex encephalitis by immunocytochemistry and in situ hybridization] Nakamura S, et al. **No To Shinkei** 1989 Dec; 41(12):1177–84 (Eng. Abstr.) **(Jpn)**

[Lipids in the nervous system] Ando S. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(4 Suppl):527–34 **(Jpn)**

[Study of the receptor for black widow spider neurotoxin. I. Characteristics of membrane–bound and solubilized receptors from the bovine brain] Petrenko AG, et al. **Bioorg Khim** 1990 Feb;16(2):149–57 (Eng. Abstr.) **(Rus)**

[Study of the receptor for black widow spider neurotoxin. II. Isolation and characteristics of the receptor from bovine brain membranes] Petrenko AG, et al. **Bioorg Khim** 1990 Feb;16(2):158–65 (Eng. Abstr.) **(Rus)**

[Analysis of the mechanism of the stress–protective action of delta sleep–inducing peptide] Iukhananov RIu, et al. **Biull Eksp Biol Med** 1990 Jan;109(1):46–7 (Eng. Abstr.) **(Rus)**

[5–HT1 receptors in rats with amnesia] Molodsova GF, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):51–2 (Eng. Abstr.) **(Rus)**

[The effect of RNA from the brain of immunized mice on the specific immune response] Abramov VV, et al. **Dokl Akad Nauk SSSR** 1990;311(1):243–5 **(Rus)**

[Leu–enkephalin localization in brain capillaries] Lomakin AV, et al. **Dokl Akad Nauk SSSR** 1990;310(5):1263–5 **(Rus)**

[Cloning of cDNA fragment of human brain kainate receptor] Smirnova TM, et al. **Dokl Akad Nauk SSSR** 1989; 309(3):745–8 **(Rus)**

[Characteristics of the composition of fluorescent lipopigments of the liver and brain in rats of various ages] Paranich AV, et al. **Fiziol Zh** 1989 Sep–Oct;35(5):37–42 (Eng. Abstr.) **(Rus)**

[Various types of structural organization of L1 transcripts in the rat brain] Akulichev AV, et al. **Genetika** 1989 Sep; 25(9):1699–702 (Eng. Abstr.) **(Rus)**

[Analysis of sequences from human brain cDNA gene bank which are functionally active in nervous tissue and tumor cells] Slominskiĭ PA, et al. **Genetika** 1989 Nov; 25(11):1925–36 (Eng. Abstr.) **(Rus)**

[High molecular weight transcript of the homologous to the LINE sequence in polysome poly(A)—RNA in the rat brain] Akulichev AV, et al. **Mol Biol (Mosk)** 1990 May–Jun;24(3):678–84 (Eng. Abstr.) **(Rus)**

[Tissue thromboplastin in the human brain] Baĭkiev RF, et al. **Ukr Biokhim Zh** 1989 Nov–Dec;61(6):14–22 (Eng. Abstr.) **(Rus)**

[Brain glycolipids in experimental brain edema] Karagezian KG, et al. **Vopr Med Khim** 1990 Jan–Feb;36(1):50–1 (Eng. Abstr.) **(Rus)**

[The noradrenaline content and the alpha 2–adrenoreceptor count in the brain of brown rats selected for the absence of aggressive behavior in relation to man] Shishkina GT, et al. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr;40(2):326–30 (Eng. Abstr.) **(Rus)**

[Changes in the brain content of the gonadotropin releasing hormone (GnRH) in caribe colorado, Pygocentrus notatus, during the reproductive cycle] Marcano D, et al. **Acta Cient Venez** 1989;40(1):24–8 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

The action of angiotensin II on the arachidonate cascade of brain microvessels. Gecse A, et al. **Acta Physiol Hung** 1990;75 Suppl:129–30

The effect of angiotensin I and III on the arachidonate cascade of brain microvessels. Zádori J, et al. **Acta Physiol Hung** 1990;75 Suppl:303–4

Effect of angiotensin II on the Vogel conflict paradigm and on the content of dopamine and noradrenaline in rat brain. Georgiev V, et al. **Acta Physiol Pharmacol Bulg** 1990; 16(1):32–7

Lack of direct interaction of metamyzole with the brain opiate receptors of rats. Popova Y, et al. **Acta Physiol Pharmacol Bulg** 1989;15(3):55–8

Indole–pyruvic acid increases 5–hydroxyindoleacetic acid levels in the cerebrospinal fluid and frontoparietal cortex of the rat: a microdialysis study. Ruggeri M, et al. **Acta Physiol Scand** 1990 Jan;138(1):97–8

Phosphocreatine as a possible modulator of the adenylate pool. Ronca G, et al. **Adv Exp Med Biol** 1989;253B:99–106

Effect of dexamethasone on neurotransmitter amines in a rat glioma model. Chang CC, et al. **Adv Neurol** 1990;52:483–9

Effects of a 21–aminosteroid (U–74006F) on cerebral metabolites and edema after severe experimental head trauma. Dimlich RV, et al. **Adv Neurol** 1990;52:365–75

Effect of timing and dose of the hyperosmotic agent glycerol on experimental ischemic brain edema and metabolites. Kashiwagi F, et al. **Adv Neurol** 1990;52:541

Role of arachidonic acid metabolism on ischemic brain edema and metabolism. Katayama Y, et al. **Adv Neurol** 1990; 52:105–8

Effect of the calcium entry blocker nimodipine on the metabolism of nucleic acids in rat brain ischemia. Kostron H, et al. **Adv Neurol** 1990;52:133–9

Effects of fluosol–DA on brain edema, energy metabolites, and tissue oxygen content in acute cerebral ischemia. Memezawa H, et al. **Adv Neurol** 1990;52:109–18

A selective role for brain histamine in prolactin release induced by opiates. Netti C, et al. **Agents Actions** 1990 Apr; 30(1–2):223–5

The effect of pentobarbital and ether anesthesia on rat brain PGD2 content. Amano N, et al. **Agressologie** 1989 Sep; 30(8):473–5

Chronic ethanol and pentobarbital administration in the rat: effects on GABAA receptor function and expression in brain. Morrow AL, et al. **Alcohol** 1990 May–Jun; 7(3):237–44

Effects of acute barbiturate administration, tolerance and dependence on brain GABA system: comparison to alcohol and benzodiazepines. Yu S, et al. **Alcohol** 1990 May–Jun; 7(3):261–72 (157 ref.)

Low doses of ethanol reduce neurotensin levels in discrete brain regions from LS/Ibg and SS/Ibg mice. Erwin VG, et al. **Alcoholism (N Y)** 1990 Feb;14(1):42–7

Effect of a vegetable oil formula rich in linoleic acid on tissue fatty acid accretion in the brain, liver, plasma, and erythrocytes of infant piglets. Hrboticky N, et al. **Am J Clin Nutr** 1990 Feb;51(2):173–82

Acetazolamide as a control for CO2–induced panic [letter; comment] Klein DF, et al. **Am J Psychiatry** 1990 May; 147(5):677–8 Comment on: Am J Psychiatry 1989 Aug;146(8):996–1000.

Effects of sodium dichloroacetate dose. Brain metabolites associated with cerebral ischemia. Dimlich RV, et al. **Ann Emerg Med** 1989 Nov;18(11):1172–80

Voluntary alcohol drinking increases brain dopamine metabolism in rats. Colombo G, et al. **Ann Ist Super Sanita** 1990;26(1):95–8

Cognitive deficiency induced by the acute stress in rats: a possible role of brain catecholaminergic systems. Rayevsky KS, et al. **Ann Ist Super Sanita** 1990;26(1):25–9

Microdialysis studies of brain norepinephrine, serotonin, and dopamine release during ingestive behavior. Theoretical and clinical implications. Hoebel BG, et al. **Ann N Y Acad Sci** 1989;575:171–91; discussion 192–3 (114 ref.)

Mouse strain-dependent effect of amantadine on motility and brain biogenic amines. Messiha FS.
Arch Int Pharmacodyn Ther 1989 Nov-Dec;302:74-85

Effects of pantethine, cysteamine and pantothenic acid on open-field behavior and brain catecholamines in rats. Vécsei L, et al. **Arch Int Pharmacodyn Ther** 1989 Jul-Aug; 300:14-21

Effects of ascorbic acid on the mouse embryo and on cyclophosphamide-induced cephalic DNA strand breaks in vivo. Pillans PI, et al. **Arch Toxicol** 1990;64(5):423-5

Distribution of pp'DDT in certain brain regions of rats treated with diazinon. Matin MA, et al.
Arh Hig Rada Toksikol 1988 Dec;39(4):365-9

Neurochemical studies with the potential antipsychotic compound
trans-5-Chloro-2-methyl-2,3,3a,12b-tetrahydro-1H-dibenz[2,3:6,7]oxepino[4,5-c]pyrrolidine maleate. De Boer T, et al. **Arzneimittelforschung** 1990 May;40(5):550-4

Low-affinity gamma-aminobutyric acid transport in rat brain. Mabjeesh NJ, et al. **Biochemistry** 1989 Sep 19; 28(19):7694-9

Aluminum, a neurotoxin which affects diverse metabolic reactions. Joshi JG. **Biofactors** 1990 Jul;2(3):163-9 (47 ref.)

The 2-chloroadenosine inhibition of histamine-induced inositol phosphates accumulation in mouse brain and calcium ions. Alexander SP, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:832P

Alpha 2-adrenoceptor subtypes and imidazoline-like binding sites in the rat brain. Brown CM, et al.
Br J Pharmacol 1990 Apr;99(4):803-9

The effects of Ca2+ antagonists and hydralazine on central 5-hydroxytryptamine biochemistry and function in rats and mice. Green AR, et al. **Br J Pharmacol** 1990 Jan;99(1):41-6

Chronic diazepam treatment in rats causes long-lasting changes in central [3H]-5-hydroxytryptamine and [14C]-gamma-aminobutyric acid release. Hitchcott PK, et al. **Br J Pharmacol** 1990 Jan;99(1):11-2

Chronic lithium treatment enhances inositol polyphosphate formation in mouse brain in vivo. Whitworth P, et al.
Br J Pharmacol 1989 Dec;98 Suppl:834P

Endocrine and neurochemical actions of cocaine. Di Paolo T, et al. **Can J Physiol Pharmacol** 1989 Sep;67(9):1177-81 (41 ref.)

Tetrabutylammonium induces a voltage-dependent block of kainate current in Xenopus oocytes injected with rat brain mRNA. Randle JC. **Can J Physiol Pharmacol** 1990 Aug; 68(8):1069-78

Various levels of maternal caffeine ingestion during gestation affects biochemical parameters of fetal rat brain differently. Yazdani M, et al. **Dev Pharmacol Ther** 1990;14(1):52-61

Doxofylline in rat brain in relation to locomotor activity. Cravanzola C, et al. **Drug Metab Dispos** 1989 Jul-Aug; 17(4):437-40

Effect of acetyl-L-carnitine treatment on the density of muscarinic receptors in the brain of methylazoxymethanol-microencephalic rats. Albertini P, et al. **Drugs Exp Clin Res** 1989;15(9):421-7

Effect of acetyl-L-carnitine treatment on brain ribonucleic acid levels in methylazoxymethanol-microencephalic rats. Albertini P, et al. **Drugs Exp Clin Res** 1989;15(9):429-34

Ionic imbalances in the CNS of neonate rat during induced benthiocarb stress. Srinivas PN, et al.
Ecotoxicol Environ Safety 1990 Feb;19(1):89-92

Histamine H3 receptor binding sites in rat brain membranes: modulations by guanine nucleotides and divalent cations. Arrang JM, et al. **Eur J Pharmacol** 1990 Apr 25; 188(4-5):219-27

Effects of acute nicotine and mecamylamine administration on somatostatin concentration and binding in the rat brain. Barrios V, et al. **Eur J Pharmacol** 1990 Apr 25; 179(3):263-70

Neurochemical effects of an acute treatment with 4-methylaminorex: a new stimulant of abuse. Bunker CF, et al. **Eur J Pharmacol** 1990 May 3;180(1):103-11

Retrograde axonal transport of neurotensin in the rat brain. Castel MN, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):353-4

Effects of the novel antidepressant S-adenosyl-methionine on alpha 1- and beta-adrenoceptors in rat brain. Cohen BM, et al. **Eur J Pharmacol** 1989 Nov 7;170(3):201-7

Cerebral histamine levels are unaffected by MPTP administration in the mouse. Cumming P, et al.
Eur J Pharmacol 1989 Jul 18;166(2):299-301

Evidence for a relationship between B-50 (GAP-43) and [3H]noradrenaline release in rat brain synaptosomes. Dekker LV, et al. **Eur J Pharmacol** 1990 Mar 13; 188(2-3):113-22

Beta-adrenoceptors in human brain labelled with [3H]dihydroalprenolol and [3H]CGP 12177. De Paermentier F, et al. **Eur J Pharmacol** 1989 Aug 29; 167(3):397-405

Effects of calcium antagonists on biogenic amines in discrete brain areas. Gaggi R, et al. **Eur J Pharmacol** 1990 Jun 8; 181(3):187-97

Antagonist properties of 1-(2-pyrimidinyl)piperazine at presynaptic alpha 2-adrenoceptors in the rat brain. Gobbi M, et al. **Eur J Pharmacol** 1990 May 3;180(1):183-6

Demonstration of alpha 1A- and alpha 1B-adrenoceptor binding sites in human brain tissue. Gross G, et al.
Eur J Pharmacol 1989 Oct 10;169(2-3):325-8

Long-term diazepam treatment produces changes in cholecystokinin receptor binding in rat brain. Harro J, et al. **Eur J Pharmacol** 1990 May 3;180(1):77-83

High-affinity [3H]6-nitroquipazine binding sites in rat brain. Hashimoto K, et al. **Eur J Pharmacol** 1990 May 16; 180(2-3):273-81

Clonidine-induced hypoactivity and mydriasis in mice are respectively mediated via pre- and postsynaptic alpha 2-adrenoceptors in the brain. Heal DJ, et al.
Eur J Pharmacol 1989 Oct 24;170(1-2):19-28

Comparison of the behavioral and biochemical effects of the NMDA receptor antagonists, MK-801 and phencyclidine. Hiramatsu M, et al. **Eur J Pharmacol** 1989 Aug 3; 166(3):359-66

In vivo neurochemical profile of dopamine uptake inhibitors and releasers in rat caudate-putamen. Hurd YL, et al.
Eur J Pharmacol 1989 Jul 18;166(2):251-60

Regional brain distribution of [18F]GBR 13119, a dopamine uptake inhibitor, in CD-1 and C57BL/6 mice. Kilbourn MR, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):331-4

Rapid development of brain beta-adrenoceptor down-regulation induced by phenelzine: subcellular studies. Koshikawa N, et al. **Eur J Pharmacol** 1989 Oct 24;170(1-2):101-4

Effects of chronic SCH 23390 treatment on dopamine autoreceptor function in rat brain. Lappalainen J, et al.
Eur J Pharmacol 1990 Apr 25;179(3):315-21

Effect of apomorphine on oxytocin concentrations in different brain areas and plasma of male rats. Melis MR, et al. **Eur J Pharmacol** 1990 Jun 21;182(1):101-7

Regionally specific effects of acute and chronic nicotine on rates of catecholamine and 5-hydroxytryptamine synthesis in rat brain. Mitchell SN, et al. **Eur J Pharmacol** 1989 Aug 29;167(3):311-22

Nicotine-induced catecholamine synthesis after lesions to the dorsal or ventral noradrenergic bundle. Mitchell SN, et al. **Eur J Pharmacol** 1990 Apr 25;179(3):383-91

S-adenosyl-L-methionine restores prolactin receptors in the aged rabbit brain. Muccioli G, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):223-30

Correlation of brain levels of
9-amino-1,2,3,4-tetrahydroacridine (THA) with neurochemical and behavioral changes. Nielsen JA, et al.
Eur J Pharmacol 1989 Nov 28;173(1):53-64

Brain dialysis and dopamine: does the extracellular concentration of dopamine reflect synaptic release? Pani L, et al. **Eur J Pharmacol** 1990 May 3;180(1):85-90

Regional variations in binding capacities at mu-, delta- and kappa-opioid sites in membrane suspensions from rabbit brain. Petrillo P, et al. **Eur J Pharmacol** 1989 Jul 18; 166(2):213-7

The neuropeptide, Org 5878
(desenkephalin-gamma-endorphin, DE gamma E), affects local cerebral glucose utilization in freely moving rats. Room P, et al. **Eur J Pharmacol** 1989 Nov 14;171(1):69-78

Effect of thromboxane synthetase inhibitor on cerebral circulation and metabolism during experimental cerebral ischemia in spontaneously hypertensive rats. Sadoshima S, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):75-83

The effects of phorbol esters on choline phospholipid hydrolysis in heart and brain. Sandmann J, et al.
Eur J Pharmacol 1990 Mar 13;188(2-3):89-95

Elevations of local cerebral glucose utilization by the beta-carboline ZK 93426. Sarter M. **Eur J Pharmacol** 1990 Feb 27;177(3):155-62

Comparison of gene expression of the dopamine D-2 receptor and DARPP-32 in rat brain, pituitary and adrenal gland. Schalling M, et al. **Eur J Pharmacol** 1990 Apr 25; 188(4-5):277-81

Mu opiate receptors are selectively labelled by [3H]carfentanil in human and rat brain. Titeler M, et al.
Eur J Pharmacol 1989 Aug 22;167(2):221-8

Effects of cholinergic drugs on extracellular levels of acetylcholine and choline in rat cortex, hippocampus and striatum studied by brain dialysis. Toide K, et al.
Eur J Pharmacol 1989 Dec 7;173(2-3):133-41

Effects of chronic exposure to ethanol alone and in combination with desipramine on beta-adrenoceptors of rat brain. Turkka J, et al. **Eur J Pharmacol** 1990 Feb 27; 177(3):171-9

Antipsychotic substances and dopamine in the rat brain; behavioral studies reveal distinct dopamine receptor systems. Van Ree JM, et al. **Eur J Pharmacol** 1989 Aug 3;166(3):441-52

The (S)-isomer of [3H]zacopride labels 5-HT3 receptors with high affinity in rat brain. Waeber C, et al.
Eur J Pharmacol 1990 Jun 8;181(3):283-7

Selective activation of oscillatory currents by trans-ACPD in rat brain mRNA-injected Xenopus oocytes and their blockade by NMDA. Watson GB, et al.
Eur J Pharmacol 1990 Apr 25;179(3):479-81

Chronic phenobarbital administration affects GABA and benzodiazepine receptors in the brain and periphery. Weizman A, et al. **Eur J Pharmacol** 1989 Oct 10; 169(2-3):235-40

Resolution of central sites involved in picrotoxin-induced vagal activation and vasopressin release. Wible JH Jr, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):215-24

Effects of lithium on alterations of pharmacokinetics of imipramine and on the related changes of monoamines in rat brain. Yoshida T, et al. **Eur J Pharmacol** 1989 Dec 7;173(2-3):143-9

Central neurochemical effects of dihydropyridine calcium antagonists. Huguet F. **Fundam Clin Pharmacol** 1989;3 Suppl:31s-46s (102 ref.)

Time-related changes in serum perphenazine, striatal 3H-spiperone binding and regional brain acid metabolites of dopamine and 5-hydroxy-tryptamine after a single dose of perphenazine. Mjörndal T, et al.
Fundam Clin Pharmacol 1990;4(2):213-22

Interaction of cholecystokinin and diazepam: effects on brain monoamines. Rybarczyk MC, et al.
Fundam Clin Pharmacol 1990;4(2):245-53

Chemical stress and GABAergic central system. Acosta GB, et al. **Gen Pharmacol** 1990;21(4):517-20

Changes in brain biogenic monoamines induced by the nootropic drugs adafenoxate and meclofenoxate and by citicholine (experiments on rats). Petkov VD, et al.
Gen Pharmacol 1990;21(1):71-5

Effect of methyl methacrylate on selected lipids in rat brain and sciatic nerve. Husain R, et al. **Ind Health** 1989; 27(3):121-4

Lipid composition of brain regions during chronic maternal alcohol treatment and withdrawal in the rat. Lalitha T, et al. **Indian J Biochem Biophys** 1989 Aug;26(4):259-61

Effect of piracetam, a nootropic agent, on rat brain monoamines and prostaglandins. Bhattacharya SK, et al.
Indian J Exp Biol 1989 Mar;27(3):261-4

DFP induced changes in acetylcholinesterase activity and glycogen level in certain brain regions of mice. Husain K, et al. **Indian J Physiol Pharmacol** 1989 Oct-Dec;33(4):250-2

Brain biogenic amine levels after methanol administration: possible mechanism of action on central monoaminergic neurons in discrete areas of brain in Wistar rat. Jeganathan PS, et al. **Indian J Physiol Pharmacol** 1989 Jul-Sep; 33(3):151-6

Changes in brain calcium content and CA(++)-ATPase activity in potassium embelate treated rats. Johri RK, et al. **Indian J Physiol Pharmacol** 1989 Oct-Dec;33(4):273-4

In vitro and in vivo modulation of cholinergic muscarinic receptors in rat lymphocytes and brain by cholinergic agents. Costa LG, et al. **Int J Immunopharmacol** 1990; 12(1):67-75

Long term actions of d-fenfluramine in two rat models of obesity. I Sustained reductions in body weight and adiposity without depletion of brain serotonin. Carlton J, et al. **Int J Obes** 1989;13(6):825-47

Chronic treatment of rats with SCH-23390 or raclopride does not affect the concentrations of DARPP-32 or its mRNA in dopamine-innervated brain regions. Grebb JA, et al.
J Neurochem 1990 Jul;55(1):204-7

Route of delivery of phenylalanine influences its effect on short-term food intake in adult male rats. Bialik RJ, et al. **J Nutr** 1989 Oct;119(10):1519-27

Decreased 5-hydroxytryptamine turnover in striatum and other brain regions after administration of 5-methoxy-3-(di-n-propylamino)chroman to rats. Fuller RW, et al. **J Pharm Pharmacol** 1989 Nov;41(11):805-6

Brain tyrosine increases after treating with prodrugs: comparison with tyrosine. Topall G, et al.
J Pharm Pharmacol 1989 Nov;41(11):789-91

Neurochemical effects of amphetamine metabolites on central dopaminergic and serotonergic systems. Matsuda LA, et al. **J Pharmacol Exp Ther** 1989 Dec;251(3):901-8

CI-943, a potential antipsychotic agent. II. Neurochemical effects. Pugsley TA, et al. **J Pharmacol Exp Ther** 1989 Oct;251(1):113-22

Effect of Tris, HEPES, and TES buffers on binding at mu-, delta-, and kappa-opioid sites in guinea pig brain. Paterson SJ, et al. **J Pharmacol Methods** 1990 Jul;23(4):275-83

Time-courses of the appearance/disappearance of nuclear androgen + receptor complexes in the brain and adenohypophysis following testosterone administration/withdrawal to castrated male rats: relationships with gonadotropin secretion. Krey LC, et al.
J Steroid Biochem 1990 Mar;35(3-4):403-8

Hypertonic saline resuscitation of head injury: effects on cerebral water content. Wisner DH, et al. **J Trauma** 1990 Jan;30(1):75-8

Effects of methamphetamine on regional cerebral glucose utilization in rats with unilateral lesion of substantia nigra. Gomita Y, et al. **Jpn J Pharmacol** 1990 Jul;53(3):414-8

Identification of hypoxanthine and inosine in brain dialyzable fraction as stimulators for growth of porcine aortic endothelial cells in response to fibroblast growth factor in either dialyzed serum media or low serum media. Hayashi Y, et al. **Jpn J Pharmacol** 1990 May;53(1):1-9

Effects of WEB 1881 FU, a novel nootropic, on cholinergic and adrenergic receptors in the rat brain: action on M1-muscarinic receptors. Kitamura Y, et al.
Jpn J Pharmacol 1990 Apr;52(4):597-607

S-adenosyl-L-methionine ameliorates reduced local cerebral glucose utilization following brain ischemia in the rat. Kobayashi K, et al. **Jpn J Pharmacol** 1990 Jan;52(1):141-8

Brain glutathione and the anti-hypoxic effect of glutathione depletors in mice. Masukawa T, et al. **Jpn J Pharmacol** 1989 Sep;51(1):125-7

Effects of protein-modifying reagents on brain tryptamine binding sites: possible involvement of a thiol group in temperature-induced high-affinity [3H]tryptamine binding sites. Serikyaku S, et al. **Jpn J Pharmacol** 1990 Jan; 52(1):51-7

Autoradiographic evidence for the interaction of SM-3997 with 5-HT1A receptors in the rat brain. Tanaka H, et al.
Jpn J Pharmacol 1990 Mar;52(3):504-7

Characteristics of 125I-iodocyanopindolol binding to beta-adrenergic and serotonin-1B receptors of rat brain:

selectivity of beta-adrenergic agents. Tsuchihashi H, et al. **Jpn J Pharmacol** 1990 Feb;52(2):195-200

Effect of anticholinergic drugs on striatal acetylcholine release and motor activity in freely moving rats studied by brain microdialysis. Watanabe H, et al. **Jpn J Pharmacol** 1989 Sep;51(1):75-82

Identification of four brain areas each enriched in a unique muscarinic receptor subtype. Hoss W, et al. **Life Sci** 1990; 46(15):1051-8

Effects of anticonvulsants and gamma-aminobutyric acid (GABA)-mimetic drugs on immunoreactive somatostatin and GABA contents in the rat brain. Nagaki S, et al. **Life Sci** 1990;46(22):1587-95

Antidepressants and brain neurochemistry. Richelson E. **Mayo Clin Proc** 1990 Sep;65(9):1227-36 (48 ref.)

Effect of age on the modification of brain polyunsaturated fatty acids and enzyme activities by fish oil diet in rats. Suzuki H, et al. **Mech Ageing Dev** 1989 Oct;50(1):17-25

Chronic nicotine treatment increases dopamine levels and reduces dopamine utilization in substantia nigra and in surviving forebrain dopamine nerve terminal systems after a partial di-mesencephalic hemitransection. Fuxe K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Mar; 341(3):171-81

Brain M3 muscarinic receptors are involved in the ACTH-induced reversal of hemorrhagic shock. Guarini S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jul; 342(1):36-9

Kinetic properties of the in vivo accumulation of 3H-(-)-N-n-propylnorapomorphine in mouse brain. Ross SB, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jul; 340(1):13-20

Kinetic properties of the accumulation of 3H-raclopride in the mouse brain in vivo. Ross SB, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jul; 340(1):6-12

The putatively antipsychotic agent amperozide produces behavioural stimulation in the rat. A behavioural and biochemical characterization. Waters N, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Aug; 340(2):161-9

The effects of anesthetics on the concentrations of cholecystokinin octapeptide sulfate-like immunoreactivity in rat brain regions. Kushima Y, et al. **Neuropeptides** 1989 Nov-Dec;14(4):225-30

Genetic regulation of dihydropyridine-sensitive calcium channels in brain may determine susceptibility to physical dependence on alcohol. Brennan CH, et al. **Neuropharmacology** 1990 May;29(5):429-32

Depletion of catecholamines in the brain of rats differentially affects stimulation of locomotor activity by caffeine, D-amphetamine, and methylphenidate. Finn IB, et al. **Neuropharmacology** 1990 Jul;29(7):625-31

The acute effect on levels of catecholamines and metabolites in brain, of a single dose of MPTP in 8 strains of mice. Hoskins JA, et al. **Neuropharmacology** 1989 Dec; 28(12):1389-97

Effect of chronic caffeine administration on monoamine and monoamine metabolite concentrations in rat brain. Kirch DG, et al. **Neuropharmacology** 1990 Jun;29(6):599-602

Interactions of taurine with GABAB binding sites in mouse brain. Kontro P, et al. **Neuropharmacology** 1990 Mar; 29(3):243-7

Chronic administration of benzodiazepines--V. Rapid onset of behavioral and neurochemical alterations after discontinuation of alprazolam. Lopez F, et al. **Neuropharmacology** 1990 Mar;29(3):237-41

The cholinesterase inhibitor soman increases inositol trisphosphate in rat brain. Mobley PL. **Neuropharmacology** 1990 Feb;29(2):189-91

Strychnine-insensitive binding of [3H]glycine to synaptic membranes in rat brain, treated with Triton X-100. Ogita K, et al. **Neuropharmacology** 1989 Nov;28(11):1263-70

Neuropharmacological characterization of 1-aminocyclopropane-1-carboxylate and 1-aminocyclobutane-1-carboxylate, ligands of the N-methyl-D-aspartate-associated glycine receptor. Rao TS, et al. **Neuropharmacology** 1990 Mar;29(3):305-9

Sites in the brain at which cholecystokinin octapeptide (CCK-8) acts to suppress feeding in rats: a mapping study. Schick RR, et al. **Neuropharmacology** 1990 Feb; 29(2):109-18

In vivo effects of sumatriptan (GR 43175) on extracellular levels of 5-HT in the guinea pig. Sleight AJ, et al. **Neuropharmacology** 1990 Jun;29(6):511-3

Modulation of mu, delta and kappa opioid receptors in rat brain by metal ions and histidine. Tejwani GA, et al. **Neuropharmacology** 1990 May;29(5):445-52

Effects of methylenedioxymethamphetamine on local cerebral glucose utilization in the rat. Wilkerson G, et al. **Neuropharmacology** 1989 Oct;28(10):1129-38

Aluminum induces the in vitro aggregation of bovine brain cytoskeletal proteins. Díaz-Nido J, et al. **Neurosci Lett** 1990 Mar 2;110(1-2):221-6

Ammonia causes a drop in intracellular pH in metabolizing cortical brain slices. A [31P]- and [1H]nuclear magnetic resonance study. Brooks KJ, et al. **Neuroscience** 1989; 33(1):185-92

Postnatal function following prenatal reserpine exposure in rats: neurobehavioral toxicity. Buelke-Sam J, et al. **Neurotoxicol Teratol** 1989 Sep-Oct;11(5):515-22

Evidence that exposure to methyl mercury during gestation induces behavioral and neurochemical changes in offspring of rats. Cagiano R, et al. **Neurotoxicol Teratol** 1990 Jan-Feb;12(1):23-8

Effects of chronic delta-9-tetrahydrocannabinol (THC) administration on neurotransmitter concentrations and receptor binding in the rat brain. Ali SF, et al. **Neurotoxicology** 1989 Fall;10(3):491-500

Effects of gestational exposure to phencyclidine: distribution and neurochemical alterations in maternal and fetal brain. Ali SF, et al. **Neurotoxicology** 1989 Fall;10(3):383-92

Influence of inducers and inhibitors on the metabolism in vitro and neurochemical effects in vivo of MDMA. Gollamudi R, et al. **Neurotoxicology** 1989 Fall;10(3):455-66

Behavioral and neurochemical effects of orally administered MDMA in the rodent and nonhuman primate. Slikker W Jr, et al. **Neurotoxicology** 1989 Fall;10(3):529-42

Neurochemical mechanisms involved in behavioral effects of amphetamines and related designer drugs. Gold LH, et al. **NIDA Res Monogr** 1989;94:101-26 (75 ref.)

Effects of amphetamine analogs on central nervous system neuropeptide systems. Hanson GR, et al. **NIDA Res Monogr** 1989;94:259-69

Structural requirements for galanin interaction with receptors from pancreatic beta cells and from brain tissue of the rat. Lagny-Pourmir I, et al. **Peptides** 1989 Jul-Aug; 10(4):757-61

Profile of in vitro binding affinities of neuroleptics at different rat brain receptors: cluster analysis comparison with pharmacological and clinical profiles. Testa R, et al. **Pharm Res** 1989 Jul;6(7):571-7

alpha-Methyl-p-tyrosine partially attenuates p-chloroamphetamine-induced 5-hydroxytryptamine depletions in the rat brain. Axt KJ, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):995-7

Long-term central 5-HT depletions resulting from repeated administration of MDMA enhances the effects of single administration of MDMA on schedule-controlled behavior of rats. Li AA, et al. **Pharmacol Biochem Behav** 1989 Jul; 33(3):641-8

Effects of caerulein and cholecystokinin-octapeptide on acetylcholine and choline contents in the brains of intact and vagotomized mice. Miyate H. **Pharmacol Biochem Behav** 1990 Jan;35(1):143-9

The effect of chronic atropine administration on mouse motility and on ACh levels in the central nervous system. Molinengo L, et al. **Pharmacol Biochem Behav** 1989 Apr; 32(4):1075-7

Chronic thioridazine treatment differently affects DA receptors in striatum and in mesolimbo-cortical systems. Piazza PV, et al. **Pharmacol Biochem Behav** 1990 Apr; 35(4):937-42

Infusion of NMDA into the nucleus basalis of Meynert, frontal cortex or lateral ventricle in rats: effect on memory and cholinergic brain neurochemistry. Santucci AC, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):485-8

Neurochemical effects of prenatal haloperidol exposure. Scalzo FM, et al. **Pharmacol Biochem Behav** 1989 Dec; 34(4):721-5

Effects of hemivibrissotomy in the rat: time-dependent asymmetries in turning and biogenic amines induced by apomorphine. Schwarting RK, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):989-94

Development of ethanol tolerance not altered by 6-OHDA lesions of dorsal bundle. Steketee JD, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):729-31

Milacemide increases 5-hydroxytryptamine and dopamine levels in rat brain--possible mechanisms of milacemide antimyoclonic property in the p,p'-DDT-induced myoclonus. Truong DD, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):993-1001

Peripheral and central opioid activity in the analgesic potency of morphine in rats. Catti T, et al. **Pharmacol Res** 1989 Nov-Dec;21 Suppl 1:37-8

Neurochemical mechanisms of neurotensin-induced miosis. Cavaliere S, et al. **Pharmacol Res** 1989 Nov-Dec;21 Suppl 1:49-50

Fipexide improvement of cognitive functions in rat: behavioural and neurochemical studies. Marino A, et al. **Pharmacol Res** 1990 Mar-Apr;22(2):179-87

Behavioral and neurochemical alterations caused by chronic L-dopa treatment in the rat. Oggero L, et al. **Pharmacol Res** 1989 Nov-Dec;21 Suppl 1:99-100

Effect of opioid antagonists on acetylcholine release from guinea-pig brain slices: influence of peptidase inhibition. Siniscalchi A, et al. **Pharmacol Res** 1990 Jul-Aug; 22(4):493-501

Changes in urinary output after depletion of cerebral acetylcholine stores in the rat. Trimarchi GR, et al. **Pharmacol Res** 1989 Nov-Dec;21 Suppl 1:29-30

Neurochemical correlates of affective disorders and their treatment. A satellite symposium affiliated to the XVIth C.I.N.P. Congress. August 21-24, 1988. **Pharmacol Toxicol** 1990;66 Suppl 3:1-159

Recent neurochemical and pharmacological aspects of pathogenesis and therapy of affective psychoses. Emrich HM, et al. **Pharmacol Toxicol** 1990;66 Suppl 3:5-12 (20 ref.)

Effect of isopropanol on rat brain monoamine levels. Gorkal AR, et al. **Pharmacol Toxicol** 1989 Nov;65(5):390-2

Neurophysiological and behavioural effects of combined exposure to 2,5-hexanedione and acetone or ethanol in rats. Ladefoged O, et al. **Pharmacol Toxicol** 1989 Nov; 65(5):372-5

Comparison of the effects of the novel antipsychotic agent remoxipride on dopamine and noradrenaline turnover in the rat brain. Magnusson O, et al. **Pharmacol Toxicol** 1989 Oct;65(4):295-8

Effect of amperozide on the synthesis and turnover of monoamines in rat brain. Pettersson G, et al. **Pharmacol Toxicol** 1990;66 Suppl 1:40-4

Effects of tin-porphyrins on developmental changes in hepatic cytochrome P450 content, selected P450-dependent drug-metabolizing enzyme activities and brain glutathione levels in the newborn rat. Drummond GS, et al. **Pharmacology** 1989;39(5):273-84

Biochemical strategies in the search for cognition enhancers. Briley M. **Pharmacopsychiatry** 1990 Feb;23 Suppl 2:75-80 (61 ref.)

Biochemical models for cognition enhancers. Costall B, et al. **Pharmacopsychiatry** 1990 Feb;23 Suppl 2:85-8; discussion 89 (18 ref.)

The relationship between the behavioral effects of cognition-enhancing drugs and brain acetylcholine. Nootropic drugs and brain acetylcholine. Pepeu G, et al. **Pharmacopsychiatry** 1989 Oct;22 Suppl 2:116-9

Effect of stobadine and vitamin E on the ischemic reperfused brain tissue. Horáková L, et al. **Pharmazie** 1990 Mar; 45(3):223-4

The effect of PGE in multiple experimental models. II. Effect on steady-state levels of plasma and brain amino acids and transmitters. Waymack JP, et al. **Physiol Behav** 1989 Jun; 45(6):1201-5

Substituted ergolines: potential antipsychotics with unique profile. II. Neurochemical characterization. Auth F, et al. **Pol J Pharmacol Pharm** 1988 Nov-Dec;40(6):603-11

Effect of ethanol and diazepam given to pregnant rats on the behavior and catecholamine content in the brain of offspring. Felińska W, et al. **Pol J Pharmacol Pharm** 1989 May-Jun;41(3):223-5

Effects of ipsapirone on the level of 5-hydroxytryptamine and 5-hydroxyindoleacetic acid in some regions of the rat brain. Golembiowska K. **Pol J Pharmacol Pharm** 1989 Jan-Feb;41(1):33-9

Effect of fluphenazine on the footshock-induced opioid analgesia and leu-enkephalin concentration in the rat brain. Kowalski J, et al. **Pol J Pharmacol Pharm** 1988 Nov-Dec; 40(6):621-5

Neurochemical correlates of differences in responses to psychotropic drugs. I. Apomorphine and morphine effects on locomotor activity of C57/BL and Balb/C mice. Marona-Lewicka D, et al. **Pol J Pharmacol Pharm** 1989 Sep-Oct;41(5):431-8

Leu-enkephalin content in rat brain during prolonged treatment with imipramine or amitriptyline. Obuchowicz E, et al. **Pol J Pharmacol Pharm** 1988 Nov-Dec; 40(6):635-41

Effect of MAO inhibitors on the uptake and metabolism of dopamine in rat and human brain. Tekes K, et al. **Pol J Pharmacol Pharm** 1988 Nov-Dec;40(6):653-8

Catecholamine levels in the brain and adrenals of rats poisoned with triphenyltin (Brestan 60). Zieliński W, et al. **Pol J Pharmacol Pharm** 1989 Jan-Feb;41(1):7-14

Effect of verapamil on CRF-induced abnormalities in phospholipid contents of brain synaptosomes. Islam A, et al. **Proc Soc Exp Biol Med** 1990 May;194(1):16-20

The effects of drugs on the processes regulating the functional activity of brain monoamines. Grahame-Smith DG. **Prog Neuropsychopharmacol** 1979;3(1-3):15-23 (22 ref.)

Leukotriene and prostaglandin production in rat brain synaptosomes treated with phospholipase A2 neurotoxins and enzymes. Yates SL, et al. **Prostaglandins** 1990 Apr; 39(4):425-38

Regional distribution of progesterone and 5 alpha-pregnane-3,20-dione in rat brain during progesterone-induced "anesthesia". Bixo M, et al. **Psychoneuroendocrinology** 1990;15(2):159-62

Effects of insulin on brain serotonin in the young rat: influence of thyroid status. Orosco M, et al. **Psychoneuroendocrinology** 1989;14(4):321-6

The effect of repeated administration of antidepressant drugs on the thyrotropin-releasing hormone (TRH) content of rat brain structures. Przegalinski E, et al. **Psychoneuroendocrinology** 1990;15(2):147-53

Partial brain dopamine D2 receptor agonists in the treatment of schizophrenia. Coward D, et al. **Psychopharmacol Bull** 1989;25(3):393-7 (13 ref.)

Brain 5-HT and inhibition of aggressive behavior in animals: 5-HIAA and receptor subtypes. Miczek KA, et al. **Psychopharmacol Bull** 1989;25(3):399-403 (30 ref.)

Histamine H3 receptors in the brain: potent and selective ligands. Schwartz JC, et al. **Psychopharmacol Ser** 1989; 7:10-9 (15 ref.)

Smoking-associated changes in the serotonergic systems of discrete regions of human brain. Benwell ME, et al. **Psychopharmacology (Berl)** 1990;102(1):68-72

DSP-4-induced depletion of brain norepinephrine produces opposite effects on exploratory behavior 3 and 14 days after treatment. Berridge CW, et al. **Psychopharmacology (Berl)** 1990;100(4):504-8

Effect of diazepam on behaviour and associated changes in ascorbate concentration in rat brain areas: striatum, n. accumbens and hippocampus. Boutelle MG, et al. **Psychopharmacology (Berl)** 1990;100(2):230-6

Effects of chronic administration of ondansetron (GR38032F), a selective 5-HT3 receptor antagonist, on monoamine metabolism in mesolimbic and nigrostriatal dopaminergic neurons and on striatal D2-receptor binding. Koulu M, et al. **Psychopharmacology (Berl)** 1990; 101(2):168-71

Break-points on a progressive ratio schedule reinforced by intravenous cocaine increase following depletion of forebrain serotonin. Loh EA, et al. **Psychopharmacology (Berl)** 1990;101(2):262-6

Changes in GABA content and turnover in discrete regions of rat brain after systemic administration of caerulein. Nakamura K, et al. **Psychopharmacology (Berl)** 1990; 101(1):73-6

Chronic corticosterone administration modulates nicotine sensitivity and brain nicotinic receptor binding in C3H mice. Pauly JR, et al. **Psychopharmacology (Berl)** 1990; 101(3):310-6

Effects of repeated injection of sublethal doses of soman on behavior and on brain acetylcholine and choline concentrations in the rat. Shih TM, et al. **Psychopharmacology (Berl)** 1990;101(4):489-96

Biochemical and pharmacological characterization of somatostatin receptors in rat brain. Sato H, et al. **Res Commun Chem Pathol Pharmacol** 1989 Nov; 66(2):203-18

Neurotoxicity of 1,1,1-trichloroethane questioned [letter; comment] Verschuuren HG, et al. **Scand J Work Environ Health** 1990 Apr;16(2):144-6 Comment on: Scand J Work Environ Health 1989 Oct;13(5):453-8.

Low level lead neurotoxicity in a pregnant guinea pigs model: neuroglial enzyme activities and brain trace metal concentrations. Sierra EM, et al. **Toxicology** 1989 Nov; 59(1):81-96

Neurochemical interactions of cocaine with dopaminergic systems. Galloway MP. **Trends Pharmacol Sci** 1988 Dec; 9(12):451-4

[Effects of cerebral GABA level on learning and memory] Zhang SS, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Jan; 10(1):10-2 (Eng. Abstr.) **(Chi)**

[The effects of propofol (Diprivan) on cerebral circulation, intracranial pressure and cerebral metabolism in cranial trauma] Lelausque JN, et al. **Ann Fr Anesth Reanim** 1989; 8 Suppl:R87 **(Fre)**

[The effect of a peptide-containing extract of the right hemispheric cortex on the recovery of conditioned reflex activity and on the level of neuromediators in the brain structures of rats after a unilateral frontal lobectomy] Romanova GA, et al. **Patol Fiziol Eksp Ter** 1990 May-Jun; (3):8-11 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Kainate and quisqualate binding sites are co-purified from Xenopus central nervous system. Ambrosini A, et al. **Biochem Soc Trans** 1990 Jun;18(3):401-2

Dystrophin and dystrophin-like proteins in muscle and brain of normal and mdx mice. Clerk A, et al. **Biochem Soc Trans** 1990 Jun;18(3):388-9

Small molecular weight GTP-binding proteins and signal transduction. Yamamoto K, et al. **Clin Chim Acta** 1989 Dec 15;185(3):347-55

ANP concentrations of atria, plasma and brain in Dahl S (DS) and Dahl R (DR) rats. John AE, et al. **Clin Exp Hypertens [A]** 1990;12(2):191-204

Atrial natriuretic factor in central nervous system regulatory mechanisms: effect of experimental alterations in water and salt homeostasis and blood pressure. Palkovits M, et al. **Endocrinol Exp** 1990 Mar;24(1-2):87-95

Detection of Met-enkephalin and Leu-enkephalin in the brain of the hagfish, Eptatretus stouti, and the lamprey, Petromyzon marinus. Dores RM, et al. **Gen Comp Endocrinol** 1990 Mar;77(3):489-99

Isolation and identification of a peptide from rat brain which inhibits [3H]TCP binding. Jaffe H, et al. **Int J Biochem** 1990;22(3):239-45

Conservation of a cytoplasmic carboxy-terminal domain of connexin 43, a gap junctional protein, in mammal heart and brain. el Aoumari A, et al. **J Membr Biol** 1990 May; 115(3):229-40

Chemical characterization of neuroendocrine targets for progesterone in the female rat brain and pituitary. Fox SR, et al. **Neuroendocrinology** 1990 Mar;51(3):276-83

Influence of thyroid hormone on the concentration of galanin in the rat brain and pituitary. Hooi SC, et al. **Neuroendocrinology** 1990 Mar;51(3):351-6

RADIATION EFFECTS

Neuropeptides in brain: effects of microwave irradiation and decapitation. Mathè AA, et al. **Life Sci** 1990;46(4):287-93

BRAIN CONCUSSION

COMPLICATIONS

Posttraumatic parathyroid crisis and severe hypercalcemia treated with intravenous bisphosphonate (APD). Case report. Canivet JL, et al. **Acta Anaesthesiol Belg** 1990; 41(1):47-50

Neuropsychological assessment and brain imaging technologies in evaluation of the sequelae of blunt head injury. Shores A, et al. **Aust N Z J Psychiatry** 1990 Mar; 24(1):133-8

The structure of head-injured patients' neurobehavioural complaints: a preliminary study [see comments] Hinkeldey NS, et al. **Brain Inj** 1990 Apr-Jun;4(2):115-33 Comment in: Brain Inj 1990 Apr-Jun;4(2):111-4.

Linguistic status following closed head injury in children: a follow-up study. Jordan FM, et al. **Brain Inj** 1990 Apr-Jun;4(2):147-54

Effect of clonidine on post-traumatic memory deficits. McIntyre FL, et al. **Brain Inj** 1990 Apr-Jun;4(2):209-11

Psychological sequelae of closed head injury: time to redress the imbalance [comment] Ponsford JL. **Brain Inj** 1990 Apr-Jun;4(2):111-4 Comment on: Brain Inj 1990 Apr-Jun;4(2):115-33.

Reading assessment post head injury: how valid is it? Rand MB, et al. **Brain Inj** 1990 Apr-Jun;4(2):155-60

Split body and self: an unusual case of misidentification. Silva JA, et al. **Can J Psychiatry** 1989 Oct;34(7):728-30

Vertebrobasilar occlusion complicating nonpenetrating craniocervical trauma in a child. Pitter JH, et al. **J Child Neurol** 1990 Jul;5(3):219-23 (28 ref.)

Word fluency generation skills of head-injured patients in an acute trauma center. Gruen AK, et al. **J Commun Disord** 1990 Jun;23(3):163-70

DIAGNOSIS

Memory deficit after closed head injury. Levin HS. **J Clin Exp Neuropsychol** 1990 Jan;12(1):129-53 (75 ref.)

Neuropsychological function in adolescents sustaining mild closed head injury. Bassett SS, et al. **J Pediatr Psychol** 1990 Apr;15(2):225-36

[MRI of brainstem contusion] Okada T, et al. **Nippon Geka Hokan** 1989 Jan 1;58(1):134-9 (Eng. Abstr.) **(Jpn)**

[MR imaging of traumatic cerebellar dysfunction] Fumeya H, et al. **No Shinkei Geka** 1990 Mar;18(3):279-83 (Eng. Abstr.) **(Jpn)**

[Deontological aspects of the diagnosis and treatment of patients with a history of brain concussion] Telengator AIa. **Klin Med (Mosk)** 1990 Jan;68(1):53-5 (Eng. Abstr.) **(Rus)**

[Clinico-encephalographic correlations in children with mild cranio-cerebral injuries] Maiorova NF, et al. **Pediatriia** 1990;(3):42-7 **(Rus)**

[Vestibular symptoms and syndromes in the diagnosis of brain concussion] Filippova NP, et al. **Sov Med** 1989;(6):100-2 **(Rus)**

[Clinico-morphologic characteristics of brain contusion in patients of various age groups] Romodanov AP, et al. **Zh Vopr Neirokhir** 1990 Jan-Feb;(1):33-6 (Eng. Abstr.) **(Rus)**

[The diagnosis of mild craniocerebral injury] Rudenko VA, et al. **Zh Vopr Neirokhir** 1990 Mar-Apr;(2):7-9 **(Rus)**

DRUG THERAPY

Comparison of two ester prodrugs of methylprednisolone on early neurologic recovery in a murine closed head injury model. Hall ED, et al. **J Neurotrauma** 1989 Fall;6(3):163-8

ETIOLOGY

Impact-induced intracranial pressure caused by an accelerated motion of the head or by skull deformation; an experimental study using physical models of the head and neck, and ones of the skull. Fujiwara S, et al. **Forensic Sci Int** 1989 Oct-Nov;43(2):159-69

Post-concussional symptoms following minor head injury. Lowdon IM, et al. **Injury** 1989 Jul;20(4):193-4

METABOLISM

Changes in cortical extracellular levels of energy-related metabolites and amino acids following concussive brain injury in rats. Nilsson P, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):631-7

PATHOLOGY

The occult aftermath of boxing. Roberts GW, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):373-8

PHYSIOPATHOLOGY

The ataxic subgroup: a discrete outcome after traumatic brain injury. Mysiw WJ, et al. **Brain Inj** 1990 Jul-Sep;4(3):247-55

Neuropsychological deficits in symptomatic minor head injury patients after concussion and mild concussion. Leininger BE, et al. **J Neurol Neurosurg Psychiatry** 1990 Apr;53(4):293-6

Positron emission tomographic studies on cerebral hemodynamics in patients with cerebral contusion. Tenjin H, et al. **Neurosurgery** 1990 Jun;26(6):971-9

Physiological response patterns to cognitive testing in adults with closed head injuries. Lehrer PM, et al. **Psychophysiology** 1989 Nov;26(6):668-75

[Early pathophysiological findings in experimental concussion in rabbits] Sugiura M, et al. **Neurol Med Chir (Tokyo)** 1989 Oct;29(10):877-84 (Eng. Abstr.) **(Jpn)**

[Changes in local cerebral glucose utilization, DC potential and extracellular potassium in various degree of experimental cerebral contusion] Kubota M, et al. **No To Shinkei** 1989 Aug;41(8):799-805 (Eng. Abstr.) **(Jpn)**

[Brain stem auditory evoked potentials in the early period after a brain concussion] Bruk BM, et al. **Zh Vopr Neirokhir** 1990 May-Jun;(3):16-7 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Predicting cognitive recovery from closed head-injury in children and adolescents. Tompkins CA, et al. **Brain Cogn** 1990 May;13(1):86-97

Does severe traumatic closed head injury impair sense of humour? Braun CM, et al. **Brain Inj** 1989 Oct-Dec; 3(4):345-54

The recall of prose as a function of importance following closed head injury. Haut MW, et al. **Brain Inj** 1990 Jul-Sep; 4(3):281-8

Performance of closed head-injured children on a naming task. Jordan FM, et al. **Brain Inj** 1990 Jan-Mar;4(1):27-32

Psychosocial sequelae of closed head injury: effects on the marital relationship. Peters LC, et al. **Brain Inj** 1990 Jan-Mar;4(1):39-47

Psychiatric disorders following closed head injury: an overview of biopsychosocial factors in their etiology and management. Slagle DA. **Int J Psychiatry Med** 1990; 20(1):1-35 (201 ref.)

Facilitation of memory performance through induced semantic processing in survivors of severe closed-head injury. Goldstein FC, et al. **J Clin Exp Neuropsychol** 1990 Mar;12(2):286-300

Effects of closed-head injury on attentional processes: an information-processing stage analysis. Shum DH, et al. **J Clin Exp Neuropsychol** 1990 Mar;12(2):247-64

[Characteristics of higher nervous activity in patients after mild craniocerebral trauma] Polishchuk NE, et al. **Vrach Delo** 1990 Jan;(1):93-4 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Characteristics of regional cerebral blood flow in patients with concussion. Pogacnik T. **Psychiatry Res** 1989 Sep; 29(3):313-6

REHABILITATION

The effectiveness of coma arousal intervention. Pierce JP, et al. **Brain Inj** 1990 Apr-Jun;4(2):191-7

Effects of mild, moderate and severe closed head injury on long-term vocational status. Stambrook M, et al. **Brain Inj** 1990 Apr-Jun;4(2):183-90

Tinker toy test performance and vocational outcome in patients with closed-head injuries. Bayless JD, et al. **J Clin Exp Neuropsychol** 1989 Dec;11(6):913-7

Effects of training in use of executive strategies on a verbal memory problem resulting from closed head injury. Lawson MJ, et al. **J Clin Exp Neuropsychol** 1989 Dec; 11(6):842-54

THERAPY

[Psychotherapy of patients with a history of brain concussion] Telengator AIa. **Vrach Delo** 1990 Jan;(1):95-7 (Eng. Abstr.) **(Rus)**

VETERINARY

Comparison of neck dislocation and percussion of the head on visual evoked responses in the chicken's brain. Gregory NG, et al. **Vet Rec** 1990 Jun 9;126(23):570-2

BRAIN DAMAGE, CHRONIC

Neural plasticity and recovery of function. **Can J Psychol** 1990 Jun;44(2):113-310

BLOOD

[Incidence of pathologic ammonia concentrations in the plasma in children with seizure disorders treated with Convulsofin/Convulex and other anticonvulsants in comparison with children with brain damage and healthy children] Wiedemann G, et al. **Kinderarztl Prax** 1990 Jan; 58(1):21-7 (Eng. Abstr.) **(Ger)**

CHEMICALLY INDUCED

Computerized tomography and neuropsychological assessment in long-term high-dose heroin addicts. Strang J, et al. **Br J Addict** 1989 Sep;84(9):1011-9

COMPLICATIONS

Does brain dysfunction increased children's vulnerability to environmental stress? Breslau N. **Arch Gen Psychiatry** 1990 Jan;47(1):15-20

The effects of cisapride on gastro-oesophageal reflux in children with and without neurological disorders. Brueton MJ, et al. **Dev Med Child Neurol** 1990 Jul;32(7):629-32

The behavioural treatment of nocturnal enuresis in a severely brain-damaged client. Papworth MA. **J Behav Ther Exp Psychiatry** 1989 Sep;20(3):265-8

[Are the lesions responsible for prosopagnosia always bilateral?] Michel F, et al. **Rev Neurol (Paris)** 1989; 145(11):764-70 (Eng. Abstr.) **(Fre)**

[Myositis ossificans circumscripta following unusual brain injury] Rothmeier J, et al. **Fortschr Med** 1990 Jul 20; 108(21):415-6 (Eng. Abstr.) **(Ger)**

[Reversible cor pulmonale in central disorder of respiratory

regulation] Trowitzsch E, et al. **Monatsschr Kinderheilkd** 1989 Nov;137(11):733–6 (Eng. Abstr.) (Ger)

CONGENITAL

Antenatal origin of neurologic damage in newborn infants. II. Multiple gestations. Bejar R, et al. **Am J Obstet Gynecol** 1990 May;162(5):1230–6

Outcome in children with symptomatic congenital cytomegalovirus infection. Bale JF Jr, et al. **J Child Neurol** 1990 Apr;5(2):131–6

DIAGNOSIS

Magnetic resonance imaging in clinical psychiatry. Sachdev P. **Acta Psychiatr Scand** 1990 Apr;81(4):378–85

Neuropsychological assessment and brain imaging technologies in evaluation of the sequelae of blunt head injury. Shores A, et al. **Aust N Z J Psychiatry** 1990 Mar; 24(1):133–8

Selective improvement in cognitive test scores of extremely low birthweight infants aged between 2 and 5 years. Kitchen WH, et al. **Aust Paediatr J** 1989 Oct;25(5):288–91

Mood changes after right–hemisphere lesions. Starkstein SE, et al. **Br J Psychiatry** 1989 Jul;155:79–85

Vocal acoustic correlates of flat affect in schizophrenia. Similarity to Parkinson's disease and right hemisphere disease and contrast with depression. Alpert M, et al. **Br J Psychiatry Suppl** 1989 May;(4):51–6

Neuropsychological assessment of brain damage: discriminative validity of the McCarron–Dial System. Dial JG, et al. **Brain Inj** 1990 Jul–Sep;4(3):239–46

Unexpected recovery of functional communication following a prolonged period of mutism post–head injury. Jordan FM, et al. **Brain Inj** 1990 Jan–Mar;4(1):101–8

Linguistic status following closed head injury in children: a follow–up study. Jordan FM, et al. **Brain Inj** 1990 Apr–Jun;4(2):147–54

Review of tests of standing balance abilities. Newton R. **Brain Inj** 1989 Oct–Dec;3(4):335–43 (25 ref.)

Reading assessment post head injury: how valid is it? Rand MB, et al. **Brain Inj** 1990 Apr–Jun;4(2):155–60

Neurodevelopmental outcome, growth and health of extremely low–birthweight survivors: how soon can we tell? Astbury J, et al. **Dev Med Child Neurol** 1990 Jul; 32(7):582–9

Cranial sonography and neurological examination of extremely preterm infants. Bozynski MA, et al. **Dev Med Child Neurol** 1990 Jul;32(7):575–81

Late childhood changes in brain morphology observable with MRI. Jernigan TL, et al. **Dev Med Child Neurol** 1990 May; 32(5):379–85

Behaviour problems and developmental status of 3–month–old infants in relation to organic and psychosocial risks. Esser G, et al. **Eur Arch Psychiatry Neurol Sci** 1990; 239(6):384–90

Foix–Chavany–Marie–syndrome—neurological, neuropsychological, CT, MRI, and SPECT findings in a case progressive for more than 10 years. Lang C, et al. **Eur Arch Psychiatry Neurol Sci** 1989;239(3):188–93

Early neurological abnormalities following coronary artery bypass surgery. A prospective study. Strenge H, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(4):277–81

Diagnostic and prognostic value of CT brain scan in term neonates with moderate and severe birth asphyxia. Khare MD, et al. **Indian Pediatr** 1990 Mar;27(3):267–71

Reliability of subtle (soft) neurological signs in children. Vitiello B, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Sep;28(5):749–53

Refining the forced–choice method for the detection of malingering. Hiscock M, et al. **J Clin Exp Neuropsychol** 1989 Dec;11(6):967–74

Empirical test of the Inglis and Lawson hypothesis about sex differences in WAIS and WAIS–R brain–damage studies. Kaufman AS, et al. **J Clin Exp Neuropsychol** 1990 Mar;12(2):281–5

Memory deficit after closed head injury. Levin HS. **J Clin Exp Neuropsychol** 1990 Jan;12(1):129–53 (75 ref.)

Luria Memory Words Test and Wechsler Memory Scale: comparison of utility in discriminating neurologically impaired from controls. Altepeter TS, et al. **J Clin Psychol** 1990 Mar;46(2):190–3

Confirmatory factor analytic models of the WAIS–R for neuropsychiatric patients. Fowler PC, et al. **J Clin Psychol** 1990 May;46(3):324–33

Factors related to speed of assembling blocks without boundary frames after trials with the frames. Lansdell H. **J Clin Psychol** 1990 May;46(3):316–23

A comparison of language deficits in learning–disabled, head–injured, and nondisabled young adults: results from an abbreviated Aphasia Screening Test. O'Donnell JP, et al. **J Clin Psychol** 1990 May;46(3):310–5

Critique of a Doppelt–type short form of the WAIS–R. Silverstein AB. **J Clin Psychol** 1990 May;46(3):333–9

Development and breakdown of written language. Friedland J. **J Commun Disord** 1990 Jun;23(3):171–86 (60 ref.)

Word fluency generation skills of head–injured patients in an acute trauma center. Gruen AK, et al. **J Commun Disord** 1990 Jun;23(3):163–70

The relation between integration, sequence of information, short–term memory, and Token Test performance of aphasic subjects. Wold AH, et al. **J Commun Disord** 1990 Feb;23(1):31–59

Soft neurological signs and impulsivity in children. Vitiello B, et al. **J Dev Behav Pediatr** 1990 Jun;11(3):112–5

Neuro–developmental study of profoundly mentally handicapped children in hospital care. Minns RA, et al. **J Ment Defic Res** 1989 Dec;33 (Pt 6):439–54

Two techniques for the assessment of line bisection in visuo–spatial neglect: a single case study. Halligan PW, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov; 52(11):1300–2

Neuropsychological function in adolescents sustaining mild closed head injury. Bassett SS, et al. **J Pediatr Psychol** 1990 Apr;15(2):225–36

Concurrent validation of Hutt's Bender Gestalt screening method for schizophrenia, depression, and brain damage. Lownsdale WS, et al. **J Pers Assess** 1989 Winter; 53(4):832–6

Neuropsychological test performance and employment status in patients referred for assessment. Heinrichs RW. **Percept Mot Skills** 1989 Dec;69(3 Pt 1):899–902

Mini–mental state examination and brain age quotient—short form: relationship and demographic correlates. Horton AM Jr, et al. **Percept Mot Skills** 1989 Dec;69(3 Pt 2):1177–8

Neuropsychological false positives in litigation: trail making test findings. Lees–Haley PR, et al. **Percept Mot Skills** 1990 Jun;70(3 Pt 2):1379–82

The need for specialists in biologically–based brain diseases. Peschel R, et al. **Percept Mot Skills** 1990 Apr;70(2):624–6

Study of WAIS–R, Quick Test and PPVT IQS for neuropsychiatric patients. Price DR, et al. **Percept Mot Skills** 1990 Jun;70(3 Pt 2):1320–2

Brain electrical activity mapping: clinical applications. Duffy FH. **Psychiatry Res** 1989 Sep;29(3):379–84

[Diagnostic value of the early auditory evoked potentials in acute cranio–cerebral trauma in children] Küttner K, et al. **Kinderarztl Prax** 1990 Jan;58(1):37–43 (Eng. Abstr.) (Ger)

[Severe encephalopathy in Schönlein–Henoch purpura (case report)] Fösel S, et al. **Klin Padiatr** 1990 Mar–Apr; 202(2):109–11 (Eng. Abstr.) (Ger)

[Diagnostic guidelines in cerebral organic psychosyndromes] Wetterling T. **Off Gesundheitswes** 1989 Aug–Sep; 51(8–9):451–2 (Ger)

[Diagnosis and training of basic cognitive performance in children with encephalopathy–typical behavior] Stender S. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Nov; 41(11):685–92 (Eng. Abstr.) (Ger)

[Transcranial Doppler sonography in children. 2. Clinical uses] Bode H. **Ultraschall Med** 1989 Oct;10(5):237–44 (Eng. Abstr.) (Ger)

DRUG THERAPY

ACTH 4–9 analog can retard spatial alternation learning in brain damaged and normal rats. McDaniel WF, et al. **Behav Neural Biol** 1989 Sep;52(2):271–8

ECONOMICS

Medical liability and neurologically impaired infants: a special approach to handling claims. Uehlin TL. **J Med Assoc Ga** 1990 Mar;79(3):171–3

EPIDEMIOLOGY

Hospitalized head–injured patients in Maryland: incidence and severity of injuries. MacKenzie EJ, et al. **Md Med J** 1989 Sep;38(9):725–32

ETIOLOGY

The probable mechanisms of brain damage and epilepsy in febrile convulsions, Singapore syndrome and Reye's syndrome. Aiyathurai EJ, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Jun;31(3):245–58 (55 ref.)

The genesis of alcoholic brain tissue injury. Pratt OE, et al. **Alcohol Alcohol** 1990;25(2–3):217–30 (84 ref.)

Do repeated courses of ECT cause brain damage detectable by MRI? [letter; comment] Scott AI, et al. **Am J Psychiatry** 1990 Mar;147(3):371–2 Comment on: Am J Psychiatry 1988 Jun;145(6):701–6.

Does hyperbilirubinemia damage the brain of healthy full–term infants? Newman TB, et al. **Clin Perinatol** 1990 Jun;17(2):331–58 (59 ref.)

Cerebrovascular disease and secondary mania [clinical conference] Wilson D, et al. **Gen Hosp Psychiatry** 1990 Jul;12(4):271–5

Birth asphyxia and neurodevelopmental outcome. Deorari AK, et al. **Indian Pediatr** 1989 Aug;26(8):793–9

A population–based study of mild mental handicap in children: preliminary analysis of obstetric associations. Rao JM. **J Ment Defic Res** 1990 Feb;34 (Pt 1):59–65

Vasoparalysis associated with brain damage in asphyxiated term infants. Pryds O, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):119–25

Safety of pertussis vaccine [letter; comment] **Lancet** 1990 Mar 17;335(8690):655–6 Comment on: Lancet 1990 Feb 17;335(8686):397–9.

Pertussis vaccine litigation. Brahams D. **Lancet** 1990 Apr 14;335(8694):905–6

Stern–Tanner disease: a radical cure [letter] Lipson AH. **Med J Aust** 1990 Apr 16;152(8):444

Placental examination can help determine cause of brain damage in neonates. Williams LJ, et al. **Tex Med** 1990 Jan; 86(1):33–8

Pertussis vaccines and permanent brain damage [letter] Griffith AH. **Vaccine** 1989 Dec;7(6):489–90

[Cerebral trauma in boxing] Perez G. **Ann Chir** 1989; 43(9):703–6 (Fre)

[Unconsciousness—coma—apallic syndrome. 1: Diagnosis and differential diagnosis] von Albert HH. **Fortschr Med** 1990 Jan 30;108(3):45–6 (Ger)

[School achievement following hemolytic disease in the newborn] Rösler HD, et al. **Padiatr Grenzgeb** 1990; 29(1):3–11 (Eng. Abstr.) (Ger)

[Side effects of preventive triple immunization—25 years experiences] Dittmann S, et al. **Z Arztl Fortbild (Jena)** 1990; 84(8):355–6 (Ger)

[New aspects of the pathogenesis of ischemic brain damage. Possible involvement of excitatory amino acids] Ottersen OP, et al. **Tidsskr Nor Laegeforen** 1989 Sep 20; 109(26):2674–7 (Eng. Abstr.) (Nor)

[A relentless equation (letter)] Fortuna A. **Rev Esp Anestesiol Reanim** 1989 Nov–Dec;36(6):362–3 (Spa)

GENETICS

Leukoaraiosis in asymptomatic adult offspring of individuals with Alzheimer's disease. Coffman JA, et al. **Biol Psychiatry** 1990 Jun 1;27(11):1244–8

[Biotinidase deficiency—a progressive metabolic disease in children with seizures and ataxia] Anger H, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Mar; 42(3):163–6 (Eng. Abstr.) (Ger)

MORTALITY

[Intensified prehospital treatment of heart arrest increases the number of survivors with good cerebral function] Nielsen JR, et al. **Ugeskr Laeger** 1990 Jun 25;152(26):1901–4 (Eng. Abstr.) (Dan)

NURSING

Psychological responses in aphasia: theoretical considerations and nursing implications. Keller C, et al. **J Neurosci Nurs** 1989 Oct;21(5):290–4 (24 ref.)

["The nursing care case". Costs of nursing treatment] Falck I, et al. **Z Gerontol** 1989 Jul–Aug;22(4):184–8 (Eng. Abstr.) (Ger)

PATHOLOGY

Behavior disorders in mentally retarded persons, the dually diagnosed: factors of pathogenesis. Towbin A. **J Clin Psychol** 1989 Nov;45(6):910–8 (32 ref.)

The occult aftermath of boxing. Roberts GW, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):373–8

A case of hypoxic brain damage consequent to ligature strangulation. Kubo S, et al. **Nippon Hoigaku Zasshi** 1989 Apr;43(2):186–90

PHYSIOPATHOLOGY

Neuronal misconnections and psychiatric disorder. Is there a link? [see comments] Goodman R. **Br J Psychiatry** 1989 Mar;154:292–9 (55 ref.) Comment in: Br J Psychiatry 1989 Jul;155:129–30.

Brain white–matter lesions and psychosis [letter] Merriam AE, et al. **Br J Psychiatry** 1989 Dec;155:868–9

Neuronal misconceptions [letter; comment] Nimgaonkar VL. **Br J Psychiatry** 1989 Jul;155:129–30 Comment on: Br J Psychiatry 1989 Mar;154:292–9.

Influence of response modality on perceptual awareness of contralesional visual stimuli. Bisiach E, et al. **Brain** 1989 Dec;112 (Pt 6):1627–36

Lesion localization in acquired deficits of emotional expression and comprehension. Cancelliere AE, et al. **Brain Cogn** 1990 Jul;13(2):133–47

The neuropsychology of visual image generation: data, method, and theory. Sergent J. **Brain Cogn** 1990 May; 13(1):98–129 (68 ref.)

Computer analysis of cortical evoked potentials following severe head injury. Alter I, et al. **Brain Inj** 1990 Jan–Mar; 4(1):19–26

The ataxic subgroup: a discrete outcome after traumatic brain injury. Mysiw WJ, et al. **Brain Inj** 1990 Jul–Sep;4(3):247–55

Fluency of conversational speech in children with unilateral brain lesions. Aram DM, et al. **Brain Lang** 1990 Jan; 38(1):105–21

The relation between oral movement control and speech. Kimura D, et al. **Brain Lang** 1989 Nov;37(4):565–90

The corpus callosum and cerebral speech lateralization. Lassonde M, et al. **Brain Lang** 1990 Feb;38(2):195–206

Disruption of semantic influence on writing following a left prefrontal lesion. Rapcsak SZ, et al. **Brain Lang** 1990 Feb; 38(2):334–44

Bilingual language processing after a lesion in the left thalamic and temporal regions. A case report with early childhood onset. van Lieshout P, et al. **Brain Lang** 1990 Feb;38(2):173–94

Biological and psychosocial factors in recovery from brain damage in humans. Bach–y–Rita P, et al. **Can J Psychol** 1990 Jun;44(2):148–65

Norepinephrine and brain damage: alpha noradrenergic pharmacology alters functional recovery after cortical trauma. Feeney DM, et al. **Can J Psychol** 1990 Jun;

44(2):233–52
Brain plasticity after damage. Isaacson RL. **Clin Perinatol** 1990 Mar;17(1):67–75
Re-evaluating the effect of unilateral brain damage on simple reaction time to auditory stimulation. Bub D, et al. **Cortex** 1990 Jun;26(2):227–37
Skull asymmetries bear no relation to the occurrence of apraxia. A clinical and CT-scan study in patients with unilateral brain damage. Faglioni P, et al. **Cortex** 1989 Sep; 25(3):449–59
Anorectal manometric anomalies in seven patients with frontal lobe brain damage. Weber J, et al. **Dig Dis Sci** 1990 Feb;35(2):225–30
Dichotic listening in a child with a cerebral lesion: the "paradoxical" ipsilateral ear deficit [letter; comment] Bergman M. **Ear Hear** 1990 Feb;11(1):2–4 Comment on: Ear Hear 1989 Jun;10(3):167–72.
Perception-response speed and driving capabilities of brain-damaged and older drivers. Korteling JE. **Hum Factors** 1990 Feb;32(1):95–108
Effects of age, brain damage, and task complexity on the sensitivity of reaction time to the delay between the warning signal and the stimulus. Bruyer R, et al. **Int J Neurosci** 1989 Nov;49(1–2):87–93
Clinical applications of the Matching Familiar Figures Test: impulsivity vs. unilateral neglect. Caplan B, et al. **J Clin Psychol** 1990 Jan;46(1):60–7
Component mechanisms underlying the processing of hierarchically organized patterns: inferences from patients with unilateral cortical lesions. Lamb MR, et al. **J Exp Psychol [Learn Mem Cogn]** 1990 May;16(3):471–83
Mood disorders following stroke: new findings and future directions. Robinson RG, et al. **J Geriatr Psychiatry** 1989; 22(1):1–15
A cerebral hemisphere influence on cutaneous vasomotor reflexes in humans. Herbaut AG, et al. **J Neurol Neurosurg Psychiatry** 1990 Feb;53(2):118–20
Rejection behaviour: a human homologue of the abnormal behaviour of Denny-Brown and Chambers' monkey with bilateral parietal ablation. Mori E, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1260–6
Brainstem auditory and somatosensory evoked potentials in neuro-Behçet's syndrome. Nakamura Y, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):191–200
Hypergraphia in temporal lobe epilepsy—compared with stroke of the right cerebral hemisphere. Okamura T, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):524–5
Spatial representation of words in the brain implied by studies of a unilateral neglect patient [see comments] Caramazza A, et al. **Nature** 1990 Jul 19;346(6281):267–9 Comment in: Nature 1990 Jul 19;346(6281):217–8.
Impaired verbal reasoning and constructional apraxia in subjects with right hemisphere damage. Benowitz LI, et al. **Neuropsychologia** 1990;28(3):231–41
Identification and discrimination disorders in auditory perception: a report on two cases. Eustache F, et al. **Neuropsychologia** 1990;28(3):257–70
The role of the left hippocampal region in the acquisition and retention of story content. Frisk V, et al. **Neuropsychologia** 1990;28(4):349–59
Source memory impairment in patients with frontal lobe lesions. Janowsky JS, et al. **Neuropsychologia** 1989; 27(8):1043–56
Components of neglect from right-hemisphere damage: an analysis of line bisection. Reuter-Lorenz PA, et al. **Neuropsychologia** 1990;28(4):327–33
Double disconnection effects resulting from infiltrating tumors. Sidtis JJ, et al. **Neuropsychologia** 1989; 27(11–12):1415–20
Perseveration in memory for figures after frontal lobe lesion. Vilkki J. **Neuropsychologia** 1989;27(8):1101–4
Failure to acquire an inhibitory task following seizure-induced brain damage. Harrigan T, et al. **Percept Mot Skills** 1990 Feb;70(1):268–70
Physiological response patterns to cognitive testing in adults with closed head injuries. Lehrer PM, et al. **Psychophysiology** 1989 Nov;26(6):668–75
[Clinical aspects and mechanisms of visual-spatial neglect] Gainotti G, et al. **Rev Neurol (Paris)** 1989;145(8–9):626–34 (61 ref.) (Eng. Abstr.) **(Fre)**
[Biomagnetism of fetal cerebral function in EPH gestosis] Anastasiadis P, et al. **Arch Gynecol Obstet** 1989; 245(1–4):234–6 **(Ger)**
[Disorders of learning and memory in focal cerebral tissue lesions] von Cramon D, et al. **Fortschr Neurol Psychiatr** 1989 Dec;57(12):544–50 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Discrimination of normal and at-risk preschool children on the basis of neurological tests. Huttenlocher PR, et al. **Dev Med Child Neurol** 1990 May;32(5):394–402
Early identification of developmentally disabled and at-risk preschool children. Kochanek TT, et al. **Except Child** 1990 Apr;56(6):528–38
Calcium antagonists for reduction of brain damage in stroke. Sauter A, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S43–7

PSYCHOLOGY

Visuospatial impairment in depression: a controlled ECT study. Rossi A, et al. **Acta Psychiatr Scand** 1990 Mar; 81(3):245–9
Kleine-Levin syndrome 15 years later. Chiu HF, et al. **Aust N Z J Psychiatry** 1989 Sep;23(3):425–7
Cognitive function in diabetes mellitus: the effects of duration of illness and glycaemic control. Prescott JH, et al. **Br J Clin Psychol** 1990 May;29 (Pt 2):167–75
Listeria and psychiatric syndromes [letter] Duncan JM. **Br J Psychiatry** 1989 Jun;154:887
Perceiver and poser asymmetries in processing facial emotion. Borod JC, et al. **Brain Cogn** 1990 Jul;13(2):167–77
Short-term memory of aphasics in comparing token stimuli. Meier E, et al. **Brain Cogn** 1990 Mar;12(2):161–81
Beyond scripts: a note on the capacity of right hemisphere-damaged patients to process social and emotional content. Ostrove JM, et al. **Brain Cogn** 1990 Jan; 12(1):144–54
Predicting cognitive recovery from closed head-injury in children and adolescents. Tompkins CA, et al. **Brain Cogn** 1990 May;13(1):86–97
Impaired shifting of attention in Balint's syndrome. Verfaellie M, et al. **Brain Cogn** 1990 Mar;12(2):195–204
Recognition memory for emotional facial expressions in patients with focal cerebral lesions. Weddell RA. **Brain Cogn** 1989 Sep;11(1):1–17
Implicit access to semantic information. Young AW, et al. **Brain Cogn** 1989 Nov;11(2):186–209
Self-rating versus neuropsychological performance of moderate versus severe head-injured patients. Allen CC, et al. **Brain Inj** 1990 Jan-Mar;4(1):7–17
Does severe traumatic closed head injury impair sense of humour? Braun CM, et al. **Brain Inj** 1989 Oct-Dec; 3(4):345–54
MMPI correlates among post-acute TBI patients. Burke JM, et al. **Brain Inj** 1990 Jul-Sep;4(3):223–31
Coping and family functions after closed head injury. Frank RG, et al. **Brain Inj** 1990 Jul-Sep;4(3):289–95
Performance of closed head-injured children on a naming task. Jordan FM, et al. **Brain Inj** 1990 Jan-Mar;4(1):27–32
Psychosocial sequelae of closed head injury: effects on the marital relationship. Peters LC, et al. **Brain Inj** 1990 Jan-Mar;4(1):39–47
Impaired activation of the phonological lexicon: effects upon oral reading. Friedman RB, et al. **Brain Lang** 1990 Feb; 38(2):278–97
Narrative comprehension in adults with right and left hemisphere brain-damage: theme organization. Hough MS. **Brain Lang** 1990 Feb;38(2):253–77
The effects of right hemisphere damage on the pragmatic interpretation of conversational remarks. Kaplan JA, et al. **Brain Lang** 1990 Feb;38(2):315–33
Kinematic analysis of limb movements in neuropsychological research: subtle deficits and recovery of function. Goodale MA, et al. **Can J Psychol** 1990 Jun;44(2):180–95 (46 ref.)
Using FACS vs. communication scores to measure spontaneous facial expression of emotion in brain-damaged patients: a reply to Mammucari et al. (1988). Buck R. **Cortex** 1990 Jun;26(2):275–80; discussion 281–9
Posed emotional expression in unilateral brain damaged patients. Caltagirone C, et al. **Cortex** 1989 Dec;25(4):653–63
Where do semantic errors come from? Caramazza A, et al. **Cortex** 1990 Mar;26(1):95–122
The influence of semantic and perceptual factors on lexical comprehension in aphasic and right brain-damaged patients. Chieffi S, et al. **Cortex** 1989 Dec;25(4):591–8
Right hemisphere specialization for mental rotation in normals and brain damaged subjects. Ditunno PL, et al. **Cortex** 1990 Jun;26(2):177–88
Space exploration with and without the aid of vision in hemisphere-damaged patients. Gentilini M, et al. **Cortex** 1989 Dec;25(4):643–51
Specific cognitive dysfunction in children with epileptic mothers. Gaily E, et al. **Dev Med Child Neurol** 1990 May; 32(5):403–14
The abilities of very low-birthweight children and their classroom controls. Smith AE, et al. **Dev Med Child Neurol** 1990 Jul;32(7):590–601
Facilitation of memory performance through induced semantic processing in survivors of severe closed-head injury. Goldstein FC, et al. **J Clin Exp Neuropsychol** 1990 Mar;12(2):286–300
Coding and recall of categorized material in aphasics. Gutbrod K, et al. **J Clin Exp Neuropsychol** 1989 Dec; 11(6):821–41
Is neglect (only) lateral? A quadrant analysis of line cancellation. Halligan PW, et al. **J Clin Exp Neuropsychol** 1989 Dec;11(6):793–8
IQ patterns in affective disorder, lateralized and diffuse brain damage. Kluger A, et al. **J Clin Exp Neuropsychol** 1990 Mar;12(2):182–94
Assessment of musical processing in brain-damaged patients: implications for laterality of music. Prior M, et al. **J Clin Exp Neuropsychol** 1990 Mar;12(2):301–12
Presidents Test performance in varieties of diffuse and unilateral cerebral disease. Roberts RJ, et al. **J Clin Exp Neuropsychol** 1990 Mar;12(2):195–208
Toward a cognitive neuropsychology of awareness: implicit knowledge and anosognosia. Schacter DL. **J Clin Exp Neuropsychol** 1990 Jan;12(1):155–78 (95 ref.)
Effects of closed-head injury on attentional processes: an information-processing stage analysis. Shum DH, et al. **J Clin Exp Neuropsychol** 1990 Mar;12(2):247–64
The development and validation of a test battery for detecting and monitoring everyday memory problems. Wilson B, et al. **J Clin Exp Neuropsychol** 1989 Dec; 11(6):855–70
Trauma-induced weight loss and cognitive deficits among former prisoners of war. Sutker PB, et al. **J Consult Clin Psychol** 1990 Jun;58(3):323–8
The effects of intraventricular hemorrhage on functional communication skills in preterm toddlers. Landry SH, et al. **J Dev Behav Pediatr** 1989 Dec;10(6):299–306
Contralateral and ipsilateral disorders of visual attention in patients with unilateral brain damage. Gainotti G, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):422–6
Unilateral visual neglect overcome by cues implicit in stimulus arrays. Kartsounis LD, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1253–9
The effects of developmental factors on IQ in hemiplegic children. Banich MT, et al. **Neuropsychologia** 1990; 28(1):35–47
Appreciation of metaphoric alternative word meanings by left and right brain-damaged patients. Brownell HH, et al. **Neuropsychologia** 1990;28(4):375–83
Frames of reference for allocating attention to space: evidence from the neglect syndrome. Farah MJ, et al. **Neuropsychologia** 1990;28(4):335–47
Enhancement of word completion priming in amnesics by cueing with previously novel associates. Mayes AR, et al. **Neuropsychologia** 1989;27(8):1057–72
Anomia for facial expressions: evidence for a category specific visual-verbal disconnection syndrome. Rapcsak SZ, et al. **Neuropsychologia** 1989;27(8):1031–41
Digit span and visual neglect: a puzzling relationship. Robertson IH. **Neuropsychologia** 1990;28(2):217–22
Voluntary emotional facial expressions in patients with focal cerebral lesions. Weddell RA, et al. **Neuropsychologia** 1990; 28(1):49–60
Outcome for preschoolers of very low birthweight: sociocultural and environmental influences. Pfeiffer SI, et al. **Percept Mot Skills** 1990 Jun;70(3 Pt 2):1367–78
The ventricular-brain ratio (VBR) in functional psychoses: the relationship of lateral ventricular and total intracranial area. Harvey I, et al. **Psychol Med** 1990 Feb;20(1):55–62
Obstetric complications in schizophrenia and the validity of maternal recall. O'Callaghan E, et al. **Psychol Med** 1990 Feb;20(1):89–94
Imitation, recall, and imitativeness in children with low intelligence of organic and familial etiology. Yando R, et al. **Res Dev Disabil** 1989;10(4):383–97
Concept formation in non-verbal categorization tasks in brain-damaged patients with and without aphasia. Hjelmquist EK. **Scand J Psychol** 1989;30(4):243–54
[Intelligence structure of hyperkinetic children: comparative study of 2,229 profiles of the Hamburg Wechsler Intelligence Test for Children] Lempp R, et al. **Prax Kinderpsychol Kinderpsychiatr** 1990 Mar;39(3):80–7 (Eng. Abstr.) **(Ger)**
[Is there a "temporal psychosyndrome (Landolt)"?] Lange E, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Mar; 42(3):151–6 (Eng. Abstr.) **(Ger)**
[Coping with illness in the early phase of severe neurologic diseases. A contribution of music therapy to psychological management in selected neurologic disease pictures] Jochims S. **Psychother Psychosom Med Psychol** 1990 Mar-Apr;40(3–4):115–22 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Computed tomography of the brains of children with cortical visual impairment. Flodmark O, et al. **Dev Med Child Neurol** 1990 Jul;32(7):611–20
[Computerized tomography in epilepsy in children] Hauser E, et al. **Wien Klin Wochenschr** 1990 Mar 30;102(7):210–2 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

Cerebral involvement in systemic lupus erythematosus (SLE): comparison of positron emission tomography (PET) with other imaging methods. Meyer GJ, et al. **Psychiatry Res** 1989 Sep;29(3):367–8

REHABILITATION

Driving safety after brain damage: follow-up of twenty-two patients with matched controls. Katz RT, et al. **Arch Phys Med Rehabil** 1990 Feb;71(2):133–7
Dance/movement therapy in head injury rehabilitation. Berrol C. **Brain Inj** 1990 Jul-Sep;4(3):257–65
Defining outcome [comment] Brooks N. **Brain Inj** 1989 Oct-Dec;3(4):325–9 Comment on: Brain Inj 1989 Oct-Dec;3(4):355–68. Comment on: Brain Inj 1989 Oct-Dec;3(4):369–85.
The Neurobehavioural Rating Scale: replication in an acute, inpatient rehabilitation setting. Corrigan JD, et al. **Brain Inj** 1990 Jul-Sep;4(3):215–22
Treating urinary incontinence in a head-injured adult. Garcia JG, et al. **Brain Inj** 1990 Apr-Jun;4(2):203–7
Comparing patient perspectives of disability and treatment effects with quality of participation in a post-acute brain injury rehabilitation programme. Heilbronner RL, et al. **Brain Inj** 1989 Oct-Dec;3(4):387–95
Model systems of treatment for alcohol abuse following traumatic brain injury [comment] Kreutzer JS, et al. **Brain Inj** 1990 Jan-Mar;4(1):1–5 Comment on: Brain Inj

1990 Jan-Mar;4(1):77-86.
A comprehensive alcohol abuse treatment programme for persons with traumatic brain injury [see comments] Langley MJ, et al. **Brain Inj** 1990 Jan-Mar;4(1):77-86 (50 ref.) Comment in: Brain Inj 1990 Jan-Mar;4(1):1-5.
Return to work (RTW) after head injury. McMordie WR, et al. **Brain Inj** 1990 Jan-Mar;4(1):57-69
Services for severely head-injured patients in north London and environs. Murphy LD, et al. **Brain Inj** 1990 Jan-Mar; 4(1):95-100
Driving after a severe head injury. Priddy DA, et al. **Brain Inj** 1990 Jul-Sep;4(3):267-72
Return to work after rehabilitation following traumatic brain injury. Rao N, et al. **Brain Inj** 1990 Jan-Mar;4(1):49-56
Family-staff conflict in the rehabilitation setting: causes, consequences, and implications. Shaw LR, et al. **Brain Inj** 1990 Jan-Mar;4(1):87-93 (49 ref.)
Visual imagery as a cognitive means of compensation for brain injury. Stern JM, et al. **Brain Inj** 1989 Oct-Dec; 3(4):413-9
European initiative to develop services for the rehabilitation of brain-injured patients. Truelle JL, et al. **Brain Inj** 1990 Jul-Sep;4(3):305-6
Head injury, an empirical study: describing long-term productivity and independent living outcome [see comments] Vogenthaler DR, et al. **Brain Inj** 1989 Oct-Dec; 3(4):355-68 Comment in: Brain Inj 1989 Oct-Dec;3(4):325-9.
Head injury, a multivariate study: predicting long-term productivity and independent living outcome [see comments] Vogenthaler DR, et al. **Brain Inj** 1989 Oct-Dec; 3(4):369-85 Comment in: Brain Inj 1989 Oct-Dec;3(4):325-9.
Employment outcomes of persons following traumatic brain injury: pre-injury, post-injury, and supported employment. Wehman P, et al. **Brain Inj** 1989 Oct-Dec;3(4):397-412
Employment outcomes of persons following traumatic brain injury. Zasler ND. **Brain Inj** 1989 Oct-Dec;3(4):331-3
A comparison of four memory strategies with traumatically brain-injured clients. Zencius A, et al. **Brain Inj** 1990 Jan-Mar;4(1):33-8
Aphasia in left-handers. Comparison of aphasia profiles and language recovery in non-right-handed and matched right-handed patients. Basso A, et al. **Brain Lang** 1990 Feb; 38(2):233-52
Faith, hope, and love: nontraditional therapy in recovery from serious head injury, a personal account. Linge FR. **Can J Psychol** 1990 Jun;44(2):116-29
Management of disruptive behaviour in the brain-damaged patient using selective reinforcement. Andrewes D. **J Behav Ther Exp Psychiatry** 1989 Sep;20(3):261-4
Tinker toy test performance and vocational outcome in patients with closed-head injuries. Bayless JD, et al. **J Clin Exp Neuropsychol** 1989 Dec;11(6):913-7
Effects of training in use of executive strategies on a verbal memory problem resulting from closed head injury. Lawson MJ, et al. **J Clin Exp Neuropsychol** 1989 Dec; 11(6):842-54
Training use of compensatory memory books: a three stage behavioral approach. Sohlberg MM, et al. **J Clin Exp Neuropsychol** 1989 Dec;11(6):871-91
Psychology of computers: XIV. Cognitive rehabilitation through computer games. Larose S, et al. **Percept Mot Skills** 1989 Dec;69(3 Pt 1):851-8
Vocational neuropsychological requirements of U.S. occupations. Lees-Haley PR. **Percept Mot Skills** 1990 Jun; 70(3 Pt 2):1383-6
Conductive education--magic or myth? Lonton AP, et al. **Z Kinderchir** 1989 Dec;44 Suppl 1:21-3
[Luria's principles for rehabilitation of patients with brain damage] Christensen AL. **Nord Med** 1989;104(11):278-9 (Eng. Abstr.) **(Dan)**
[Perceptual impairment] Asplund K, et al. **Nord Med** 1989; 104(11):276-7, 304 (Eng. Abstr.) **(Swe)**
[Rehabilitation of patients with brain damage--a challenge for health services (editorial)] Jarho L. **Nord Med** 1989; 104(11):274-5 **(Swe)**

THERAPY

Interdisciplinary approaches to brain damage. Ad Hoc Committee on Interprofessional Relationships with Neuropsychology of the American Speech-Language-Hearing Association and Representatives of the Division of Clinical Neuropsychology (Division 40) of the American Psychological Association. **ASHA** 1990 Apr;32(4 Suppl 2):3
New perspectives in the treatment of hypoxic and ischemic brain damage: effect of gangliosides. Rotondo G, et al. **Aviat Space Environ Med** 1990 Feb;61(2):162-4 (20 ref.)
Psychotherapy in cases of brain damage: a possible mission. Stern MJ, et al. **Brain Inj** 1990 Jul-Sep;4(3):297-304
[Unconsciousness--coma--apallic syndrome. 2: Principles of therapy] von Albert HH. **Fortschr Med** 1990 Feb 10; 108(4):67-8 **(Ger)**

BRAIN DEATH

Brain stem death and organ donation [letter; comment] **BMJ** 1989 Nov 11;299(6709):1218 Comment on: BMJ 1989 Oct 21;299(6706):1009-10.
Brain stem death and organ donation [letter] **BMJ** 1989 Dec 2;299(6712):1398-9
Brain stem death and organ donation [see comments] Bodenham A, et al. **BMJ** 1989 Oct 21;299(6706):1009-10 Comment in: BMJ 1989 Nov 11;299(6709):1218.
How can we get more donors? [editorial] [see comments] Rudge C. **Br J Hosp Med** 1989 Sep;42(3):171 Comment in: Br J Hosp Med 1989 Nov;42(5):426. Comment in: Br J Hosp Med 1990 Jan;43(1):80.
Development of policies on brain death, care of the hopelessly ill, and do not resuscitate. Orlowski JP. **Cleve Clin J Med** 1990 Jan-Feb;57(1):25-9
Policy statements: do not resuscitate, care of the hopelessly ill, and brain death. Rogers LR, et al. **Cleve Clin J Med** 1990 Jan-Feb;57(1):29-34
The new act regulating organ retrieval for transplantation in Belgium. Toussaint C. **Contrib Nephrol** 1989;71:141-4
Bretylium intoxication resembling clinical brain death--or did it? [letter] Dobb G. **Crit Care Med** 1990 Aug; 18(8):901-2
Danish ethics council rejects brain death as the criterion of death [see comments] Rix BA. **J Med Ethics** 1990 Mar; 16(1):5-7; discussion 8-13 Comment in: J Med Ethics 1990 Mar;16(1):3-4.
Organ donor management and organ outcome: a 6-year review from a Level I trauma center. Nygaard CE, et al. **J Trauma** 1990 Jun;30(6):728-32
'Brain death' [letter; comment] **JAMA** 1989 Nov 24; 262(20):2834-5 Comment on: JAMA 1989 Apr 21;261(15):2246.
'Brain death' and organ retrieval [letter; comment] **JAMA** 1989 Nov 24;262(20):2835-7 Comment on: JAMA 1989 Apr 21;261(15):2205-10.
Sudden neurologic death after intrathecal methotrexate. Shore T, et al. **Med Pediatr Oncol** 1990;18(2):159-61
Ethical issues in brain death and multiorgan transplantation. Bernat JL. **Neurol Clin** 1989 Nov;7(4):715-28
Brain death--an American viewpoint. Walker AE. **Neurosurg Rev** 1989;12 Suppl 1:259-64
Long-term renal preservation after brain death maintained with vasopressin and epinephrine. Kinoshita Y, et al. **Transpl Int** 1990 May;3(1):15-8
Organ transplantation in Japan--present status and problems. Ota K. **Transpl Int** 1989 Aug;2(2):61-7 (14 ref.)
Arginine vasopressin versus desmopressin for the treatment of diabetes insipidus in the brain dead organ donor. Debelak L, et al. **Transplant Proc** 1990 Apr;22(2):351-2
A very personal transplantation narrative. McIntyre S. **Transplant Proc** 1990 Jun;22(3):953-4
Current practices of determining brain death in potential organ donors. Norton DJ, et al. **Transplant Proc** 1990 Apr; 22(2):308-10
Donation: a personal experience. Schnettler R. **Transplant Proc** 1990 Jun;22(3):952
Brain death and organ donation: a two-year experience in ICU, Westmead Hospital. Smith F, et al. **Transplant Proc** 1989 Oct;21(5):3828-9
Better renal function with naloxone treatment following hemorrhage and brain death. Toledo-Pereyra LH, et al. **Transplant Proc** 1990 Apr;22(2):462-3
Effects of vasopressin and catecholamines on the maintenance of circulatory stability in brain-dead patients. Iwai A, et al. **Transplantation** 1989 Oct;48(4):613-7
[The criteria for brain death are ethically correct] Dahlerup B. **Ugeskr Laeger** 1989 Sep 25;151(39):2531-2 **(Dan)**
[Brain death criteria and organ transplantation] Gøtrik JK. **Ugeskr Laeger** 1989 Oct 16;151(42):2747-8 **(Dan)**
[Brain death (editorial)] Yonemasu Y. **No Shinkei Geka** 1989 Oct;17(10):899-900 **(Jpn)**

BLOOD

Hormonal changes in brain dead patients [see comments] Powner DJ, et al. **Crit Care Med** 1990 Jul;18(7):702-8 Comment in: Crit Care Med 1990 Jul;18(7):785-6.
Serum vasopressin (AVP) levels in polyuric brain-dead organ donors. Hohenegger M, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(4):267-9

DIAGNOSIS

The brain-stem and 40 Hz middle latency auditory evoked potentials in brain death. Firsching R. **Acta Neurochir (Wien)** 1989;101(1-2):52-5
Guillain-Barré syndrome mimicking brainstem death. Coad NR, et al. **Anaesthesia** 1990 Jun;45(6):456-7
Perioperative management of the multiorgan donor. Robertson KM, et al. **Anesth Analg** 1990 May;70(5):546-56 (73 ref.)
Evaluation of pulsed Doppler common carotid blood flow as a noninvasive method for brain death diagnosis: a prospective study. Payen DM, et al. **Anesthesiology** 1990 Feb;72(2):222-9
Dilated pupils and brain death [letter; comment] Bleck TP. **Ann Intern Med** 1990 Apr 15;112(8):632-3 Comment on: Ann Intern Med 1990 Jan 15;112(2):113-9.
Criteria for diagnosing brain stem death. O'Brien MD. **BMJ** 1990 Jul 14;301(6743):108-9
Brain death and the persistent vegetative state: similarities and contrasts. Young B, et al. **Can J Neurol Sci** 1989 Nov; 16(4):388-93 (61 ref.)
Transplantation of organs from newborns with anencephaly. Bioethics Committee, Canadian Paediatric Society [see comments] **Can Med Assoc J** 1990 Apr 1;142(7):715-7 Comment in: Can Med Assoc J 1990 Jul 1;143(1):12-3.
Bretylium intoxication resembling clinical brain death [letter; comment] Moore JK, et al. **Crit Care Med** 1990 Mar; 18(3):347 Comment on: Crit Care Med 1989 Feb;17(2):194-5.
Loss of brainstem acoustic evoked potentials with spontaneous breathing in a patient with supratentorial lesion. Biniek R, et al. **Eur Neurol** 1990;30(1):38-41
Reliability of electroencephalogram in the diagnosis of brain death. Buchner H, et al. **Eur Neurol** 1990;30(3):138-41
The heart, the gut, and brain death in Japan [news] Akatsu H. **Hastings Cent Rep** 1990 Mar-Apr;20(2):2
Care of the multiple organ donor. Bodenham A, et al. **Intensive Care Med** 1989;15(6):340-8 (56 ref.)
Death [editorial; comment] Gillon R. **J Med Ethics** 1990 Mar; 16(1):3-4 Comment on: J Med Ethics 1990 Mar;16(1):5-7; discussion 8-13.
Short latency evoked potentials: new criteria for brain death? Facco E, et al. **J Neurol Neurosurg Psychiatry** 1990 Apr; 53(4):351-3
Establishing brain death in South Carolina: a clinician's guide. George MS, et al. **J S C Med Assoc** 1990 Jul;86(7):385-8 (19 ref.)
Diagnosis of brain death and donor management [editorial] Qureshi H. **JPMA** 1990 Mar;40(3):57-8
Demonstrating brain death [letter] Tibballs J. **Med J Aust** 1990 Aug 20;153(4):233
Ethical issues in the use of anencephalic infants as organ donors. Shinnar S, et al. **Neurol Clin** 1989 Nov;7(4):729-43
The role of transcranial Doppler in confirming brain death: sensitivity, specificity, and suggestions for performance and interpretation. Petty GW, et al. **Neurology** 1990 Feb; 40(2):300-3
Transcranial Doppler in brain death [letter] Wallasch TM, et al. **Neurology** 1990 Sep;40(9):1476
Serial recording of median nerve stimulated somatosensory evoked potentials in brain death. Buchner H, et al. **Neurosurg Rev** 1989;12 Suppl 1:349-52
Brain death from infratentorial lesions: clinical neurophysiological and transcranial Doppler ultrasound findings. Ferbert A, et al. **Neurosurg Rev** 1989;12 Suppl 1:340-7 (15 ref.)
Brain death criteria: third generation. Frowein RA, et al. **Neurosurg Rev** 1989;12 Suppl 1:276-81
Is TC-Doppler sonography a useful method for the determination of brain death? Gawlowski J, et al. **Neurosurg Rev** 1989;12 Suppl 1:307-10
Atraumatic estimation of blood flow arrest in the diagnosis of cerebral death with the transcranial Doppler investigation technique. Harders A. **Neurosurg Rev** 1989; 12 Suppl 1:298-301
Trials of clinical evaluation for impending brain death. Kawahara N, et al. **Neurosurg Rev** 1989;12 Suppl 1:363-8
Multimodality evoked potentials and EEG in brain death. Clinical experiences and animal investigations. Nau HE, et al. **Neurosurg Rev** 1989;12 Suppl 1:357-62
Intracranial pressure: a reliable criterion of brain death? Richard KE, et al. **Neurosurg Rev** 1989;12 Suppl 1:287-97
Value of the transcranial Doppler ultrasound technique (ICD) for the determination of brain death. Ries F, et al. **Neurosurg Rev** 1989;12 Suppl 1:302-6
Brain stem auditory evoked potentials monitoring in the diagnosis of brain death--clinical application and reliability. Shiogai R, et al. **Neurosurg Rev** 1989;12 Suppl 1:328-39
New Japanese criteria of brain death. Brain Death Study Group. Takeuchi K, et al. **Neurosurg Rev** 1989;12 Suppl 1:265-75
Brain death--an American viewpoint. Walker AE. **Neurosurg Rev** 1989;12 Suppl 1:259-64
Transcranial Doppler determination of brain death [letter] Dernbach PD. **Neurosurgery** 1989 Nov;25(5):847
Confirmation of brain death utilizing thyrotropin-releasing hormone stimulation test [letter] Imberti R, et al. **Neurosurgery** 1990 Jul;27(1):167
Fetal brain death: the definition of a fetal heart rate pattern and its clinical consequences. Nijhuis JG, et al. **Obstet Gynecol Surv** 1990 Apr;45(4):229-32 (13 ref.)
Brain death in infants: sensitivity and specificity of current criteria. Kohrman MH, et al. **Pediatr Neurol** 1990 Jan-Feb; 6(1):47-50
Brain death in the newborn [letter; comment] Clark FI, et al. **Pediatrics** 1990 Jun;85(6):1126-7 Comment on: Pediatrics 1989 Sep;84(3):429-37.
[Brain death] Albinus S. **Ugeskr Laeger** 1989 Sep 18; 151(38):2454-7 **(Dan)**
[Death--a process or an event? (letter)] Jørgensen EO. **Ugeskr Laeger** 1990 Jan 8;152(2):113-4 **(Dan)**
[Practical use of the brain death diagnosis] Sørensen EJ, et al. **Ugeskr Laeger** 1990 Mar 19;152(12):805-6 (Eng. Abstr.) **(Dan)**
[Evolution of the conditions for EEG recording in the diagnosis of brain death] Levy-Alcover MA, et al. **Neurophysiol Clin** 1989 Aug;19(4):271-8 (Eng. Abstr.) **(Fre)**
[Brain death, death of the cerebral cortex or personal death? On the current discussion of brain-oriented determination of death] Kurthen M, et al. **Med Klin** 1989 Oct 15; 84(10):483-7 (23 ref.) **(Ger)**
[Brain death in the child. Review of 12 cases] Pérez Navero JL, et al. **An Esp Pediatr** 1989 Nov;31(5):443-8 (Eng. Abstr.) **(Spa)**

LEGISLATION & JURISPRUDENCE

Minnesota enacts a brain death law. Cranford RE. **Minn Med** 1989 Dec;72(12):717–20

Who can determine death? Kirk K. **Ohio Med** 1990 Aug; 86(8):590–2, 594

The definition of death: the Japanese attitude and experience. Bai K. **Transplant Proc** 1990 Jun;22(3):991–2

The persistent vegetative state. Ivan LP. **Transplant Proc** 1990 Jun;22(3):993–4

Brain death: anencephalics and aborted fetuses. May WF. **Transplant Proc** 1990 Jun;22(3):985–8

The anencephalic neonate and brain death: an international review of medical, ethical, and legal issues. Rothenberg LS. **Transplant Proc** 1990 Jun;22(3):1037–9 (66 ref.)

Brain–related criteria for the beginning and end of life. Wikler D. **Transplant Proc** 1990 Jun;22(3):989–90

[Criteria and diagnosis of brain death] Roosen K, et al. **Versicherungsmedizin** 1990 Aug 1;42(4):110–2 (Eng. Abstr.) **(Ger)**

[The significance of anticipating suspected brain death for the accusation of failure to treat according to Section 323c of the Federal Penal Code] Berg S, et al. **Z Rechtsmed** 1990;103(4):279–90 (Eng. Abstr.) **(Ger)**

METABOLISM

Endocrine function after brain death [editorial; comment] Zaloga GP. **Crit Care Med** 1990 Jul;18(7):785–6 Comment on: Crit Care Med 1990 Jul;18(7):702–8.

[Electrolyte disorders in brain dead organ donors and early functional development of the transplanted kidney] Teplan V, et al. **Cas Lek Cesk** 1989 Jul 28;128(31):970–3 (Eng. Abstr.) **(Cze)**

PATHOLOGY

Clinical and pathological changes of the heart in brain death maintained with vasopressin and epinephrine. Kinoshita Y, et al. **Pathol Res Pract** 1990 Feb;186(1):173–9

PHYSIOPATHOLOGY

Do brainstem auditory evoked potentials detect the actual cessation of cerebral functions in brain dead patients? Barelli A, et al. **Crit Care Med** 1990 Mar;18(3):322–3

Usefulness of EEG in the evaluation of brain death in children: the pros. Moshé SL. **Electroencephalogr Clin Neurophysiol** 1989 Oct;73(4):272–5 (19 ref.)

Usefulness of EEG in the evaluation of brain death in children: the cons. Schneider S. **Electroencephalogr Clin Neurophysiol** 1989 Oct;73(4):276–8 (21 ref.)

Evoked potentials in non–traumatic brain death. Haupt WF. **Neurosurg Rev** 1989;12 Suppl 1:369–74

Brain stem auditory evoked potentials (BAEP) monitoring in brain death. Lumenta CB, et al. **Neurosurg Rev** 1989;12 Suppl 1:317–21

Heart rate variability and the reaction of heart rate to atropine in brain dead patients. Siemens P, et al. **Neurosurg Rev** 1989;12 Suppl 1:282–4

Brain death secondary to arteriovenous hemangioma of the forearm. Hamvas A, et al. **Pediatr Neurol** 1990 Jan–Feb; 6(1):63–4

Influence of dopamine on the liver assessed by changes in arterial ketone body ratio in brain–dead dogs. Okamoto R, et al. **Surgery** 1990 Jan;107(1):36–42

Pituitary function in brain–dead patients [letter] Novitzky D, et al. **Transplantation** 1989 Dec;48(6):1078–9

[Hemodynamic, coagulation and glycoregulation changes induced by brain death] Masson F, et al. **Ann Fr Anesth Reanim** 1990;9(2):115–22 (Eng. Abstr.) **(Fre)**

[Spinal myoclonus in association with brain death] Fujimoto K, et al. **Rinsho Shinkeigaku** 1989 Nov;29(11):1417–9 (Eng. Abstr.) **(Jpn)**

[Role of the brain stem in normal and pathologic conditions of the body] Smirnov VA. **Klin Med (Mosk)** 1989 Dec; 67(12):22–6 (22 ref.) **(Rus)**

RADIOGRAPHY

Intravenous digital subtraction angiography. A criteria of brain death. Van Bunnen Y, et al. **Ann Radiol (Paris)** 1989; 32(4):279–81

[Analysis of angiographical findings in patients with severe brain disorders progressing to brain death] Kouji H, et al. **No To Shinkei** 1989 Jul;41(7):727–35 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

The hollow skull: a sign of brain death in Tc–99m HM–PAO brain scintigraphy. Abdel–Dayem HM, et al. **Clin Nucl Med** 1989 Dec;14(12):912–6

Cerebral perfusion imaging with technetium–99m HM–PAO in brain death and severe central nervous system injury. Laurin NR, et al. **J Nucl Med** 1989 Oct;30(10):1627–35

Hepatic uptake of technetium–99m HM–PAO in a fetus. Maguire C, et al. **J Nucl Med** 1990 Feb;31(2):237–9

Clinical use of technetium–99m HM–PAO for determination of brain death. Reid RH, et al. **J Nucl Med** 1989 Oct; 30(10):1621–6

Determination of brain death in children with 123I–IMP and Tc–99m HMPAO. Galaske RG, et al. **Psychiatry Res** 1989 Sep;29(3):343–5

Scintigraphic evaluation of brain death with 99mTc–d,l–hexamethyl–propyleneamine oxime (HMPAO). Takehara Y, et al. **Radioisotopes** 1989 Aug;38(8):335–8

BRAIN DISEASES

Neuroendocrinological aspects of neurosurgery. Proceedings of the Third Advanced Seminar in Neurosurgical Research. Venice, April 30–May 1, 1987. **Acta Neurochir Suppl (Wien)** 1990;47:1–128

The 'H' in hemorrhagic shock and encephalopathy syndrome should be 'hyperpyrexia' [editorial; comment] Corrigan JJ Jr. **Am J Dis Child** 1990 Oct;144(10):1077 Comment on: Am J Dis Child 1990 Oct;144(10):1079–82.

Symposium on Cytoadherence and Cerebral Malaria. Honolulu, HI, 10 December 1989. Proceedings. **Am J Trop Med Hyg** 1990 Aug;43(2 Pt 2):1–41

Neurocysticercosis in Panama: preliminary epidemiologic study in the Azuero region. Gracia F, et al. **Am J Trop Med Hyg** 1990 Jan;42(1):67–9

Cerebral cysticercosis [editorial; comment] Deck MD. **Clin Imaging** 1989 Dec;13(4):333 Comment on: Clin Imaging 1989 Dec;13(4):292–8.

Scientific meeting of The Netherlands Society of Neurology. Amsterdam, 22nd of April 1989. Abstracts. **Clin Neurol Neurosurg** 1989;91(4):371–4

Scientific meeting of the Flemish Society of Neuro–Psychiatry. Kortrijk, 15th April 1989. Abstracts. **Clin Neurol Neurosurg** 1989;91(4):368–70

Abstracts. French–German joint meeting for neuropathology. Frankfurt/Main, October 19–21, 1989. **Clin Neuropathol** 1989 Sep–Oct;8(5):219–56

Impact of encephalopathy on mortality in the sepsis syndrome. The Veterans Administration Systemic Sepsis Cooperative Study Group. Sprung CL, et al. **Crit Care Med** 1990 Aug;18(8):801–6

Appearance of intracranial tuberculoma during therapy of tuberculous meningitis [letter] Kumar R, et al. **Indian Pediatr** 1989 Dec;26(12):1263–5

Proceedings of the eighteenth annual International Neuropsychological Society meeting. February 14–17, 1990, Kissimmee, Florida. **J Clin Exp Neuropsychol** 1990 Jan;12(1):1–109

International Neuropsychological Society. Program and abstracts. 13th European conference. July 4–7, 1990, Innsbruck, Austria. **J Clin Exp Neuropsychol** 1990 Jun; 12(3):373–426

Second meeting of the European Neurological Society. 30 June–5 July 1990 Brighton, UK. Abstracts. **J Neurol** 1990 Jul;237 Suppl 1:S1–115

Cerebral hypoxia: some new approaches and unanswered questions. Choi DW. **J Neurosci** 1990 Aug;10(8):2493–501 (136 ref.)

Ontogenesis of colloid cysts [letter] Kondziolka D. **J Neurosurg** 1990 Aug;73(2):312

Intracranial epidermoid cysts. Howng SL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 Feb;6(2):81–7

Delusional bovine spongiform encephalopathy [letter] Lovestone S. **Lancet** 1990 Sep 1;336(8714):565

The decade of the brain. Goldstein M. **Neurology** 1990 Feb; 40(2):321

The 1990s—decade of the brain: the need for a national priority [editorial] Rosenberg RN, et al. **Neurology** 1990 Feb;40(2):322

Proceedings of the seventy–eighth meeting of the British Neuropathological Society. Edinburgh, 13–14 July 1989. **Neuropathol Appl Neurobiol** 1989 Nov–Dec;15(6):587–603

Abstracts of the eighth national meeting of the Brain Research Association. Bristol, U.K., 26–28 March 1990. **Neurosci Lett Suppl** 1990;38:S1–139

Abstracts of the thirteenth annual meeting of the Japan Neuroscience Society. Niigata, Japan, October 2–4, 1989. **Neurosci Res Suppl** 1990;11:S1–147

Hemorrhagic shock and encephalopathy: is it really a new entity? Conway EE Jr, et al. **Pediatr Emerg Care** 1990 Jun; 6(2):131–4

Intracranial space–occupying lesions in the elderly. Chakravorty N. **Practitioner** 1989 Nov 22; 233(1479):1529–32

The decade of the brain: challenge and opportunities in stroke research [editorial] Goldstein M. **Stroke** 1990 Mar; 21(3):373–4

[Intracranial arachnoid cyst: report of 23 cases] Cao GX. **Chung Hua Wai Ko Tsa Chih** 1989 Jul;27(7):426–7, 446 (Eng. Abstr.) **(Chi)**

[Developmental cysts in the area of the quadrigeminal plate in children] Pařízek J, et al. **Cesk Neurol Neurochir** 1989 May;52(3):212–7 (Eng. Abstr.) **(Cze)**

[143d meeting of the Swiss Neurology Society. 2–3 June 1989, Porrentruy. Abstracts] **Schweiz Arch Neurol Psychiatr** 1990;141(1):31–55 **(Ger)**

[Excitatory amino acid and their involvement in pathological processes in the brain] Susel Z. **Harefuah** 1990 Mar 15; 118(6):354–8 (38 ref.) **(Heb)**

[5th Italian–French meeting on neuroanesthesia and resuscitation. Turin, 1–3 June 1988. 2. Pediatric neuroanesthesia and resuscitation. Proceedings] **Minerva Anestesiol** 1989 Apr;55(4):135–207 **(Ita, Fre)**

[Annual conference on neurology. Sinaia, 3–4 June 1988. Abstracts] **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1989 Apr–Jun;34(2):81–148 **(Rum)**

[8th National Congress on Neurology. Valencia, 30 May–2 June 1990. Abstracts] **Neurologia** 1990 May;5(5):167–84 **(Spa)**

BLOOD

Specificity of hypoglycaemia for cerebral malaria in children. Kawo NG, et al. **Lancet** 1990 Aug 25;336(8713):454–7

Influence of vasopressin level on osmotic pressure and sodium concentration in plasma and cerebrospinal fluid in patients with intracranial lesions. Miura M, et al. **Neurol Med Chir (Tokyo)** 1989 Sep;29(9):806–10

[Dynamics of blood serotonin contents in acute disorders of cerebral circulation and circulatory encephalopathy] Khrapova EV, et al. **Sov Med** 1989;(7):17–20 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Beta–2–microglobulin in the cerebrospinal fluid of patients with infections of the central nervous system. Petersłund NA, et al. **Acta Neurol Scand** 1989 Dec;80(6):579–83

Cerebrospinal fluid proteins and free amino acids in patients with solvent induced chronic toxic encephalopathy and healthy controls. Moen BE, et al. **Br J Ind Med** 1990 Apr; 47(4):277–80

CSF beta–endorphins in childhood neuropsychiatric disorders. Gillberg C, et al. **Brain Dev** 1990;12(1):88–92

Antigens, antibodies and immune complexes in cerebrospinal fluid of patients with cerebral gnathostomiasis. Tuntipopipat S, et al. **Southeast Asian J Trop Med Public Health** 1989 Sep; 20(3):439–46

[Study on the concentration of 5–hydroxyindoleacetic acid (5–HIAA) in the lumbar cerebrospinal fluid (CSF) in neurological diseases] Fukuda H, et al. **Rinsho Shinkeigaku** 1989 Sep;29(9):1192–4 (Eng. Abstr.) **(Jpn)**

[Alpha–2 macroglobulin from cerebrospinal fluid in neurosurgical diseases] Vasil'eva TG, et al. **Vopr Med Khim** 1989 Nov–Dec;35(6):48–51 (Eng. Abstr.) **(Rus)**

[Cyclic adenosine monophosphate in the cerebrospinal fluid of patients with brain trauma and diseases] Skorniakov VI, et al. **Zh Vopr Neirokhir** 1989 Jul–Aug;(4):37–40 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Granuloma caused by oxidized cellulose following craniotomy. Ito H, et al. **Acta Neurochir (Wien)** 1989; 100(1–2):70–3

Methotrexate–related multifocal axonopathy. Report of an autopsy case. Shibutani M, et al. **Acta Neuropathol (Berl)** 1989;79(3):333–5

Alcohol–induced neuronal loss in developing rats: increased brain damage with binge exposure. Bonthius DJ, et al. **Alcoholism (N Y)** 1990 Feb;14(1):107–18

Carbon disulfide exposure and neurotoxic sequelae among viscose rayon workers. Aaserud O, et al. **Am J Ind Med** 1990;18(1):25–37

Cerebrospinal fluid aluminum levels following deferoxamine. Ellenberg R, et al. **Am J Kidney Dis** 1990 Aug;16(2):157–9

Bismuth absorption and myoclonic encephalopathy during bismuth subsalicylate therapy. Mendelowitz PC, et al. **Ann Intern Med** 1990 Jan 15;112(2):140–1

Neurologic consequences of cocaine use. Rowbotham MC, et al. **Annu Rev Med** 1990;41:417–22 (35 ref.)

Long–term follow up of workers exposed to solvents. Edling C, et al. **Br J Ind Med** 1990 Feb;47(2):75–82

Urinary organic acids in elderly Japanese patients with ketosis and encephalopathy who have taken panto–yl–gamma–aminobutyrate, calcium salt (calcium hopantenate, HOPA). Nakanishi T, et al. **Clin Chim Acta** 1990 Apr 13;188(1):85–90

Changes in excitability of CA1 pyramidal neurons in slices prepared from AlCl3–treated rabbits. Franceschetti S, et al. **Epilepsy Res** 1990 May–Jun;6(1):39–48

Ifosfamide encephalopathy: a reappraisal. Watkin SW, et al. **Eur J Cancer Clin Oncol** 1989 Sep;25(9):1303–10

Systemic treatments with GM1 ganglioside reduce quinolinic acid–induced striatal lesions in the rat. Lombardi G, et al. **Eur J Pharmacol** 1989 Dec 12;174(1):123–5

Quantitative assessment of neuroprotection against NMDA–induced brain injury. McDonald JW, et al. **Exp Neurol** 1989 Dec;106(3):289–96

Bismuth induced encephalopathy caused by tri potassium dicitrato bismuthate in a patient with chronic renal failure. Playford RJ, et al. **Gut** 1990 Mar;31(3):359–60

Lest we become smug. Kassirer JP, et al. **Hosp Pract [Off]** 1990 Jul 15;25(7):33–5, 39, 47

Acute aluminemic encephalopathy in chronic renal failure: the citrate factor. Bakir AA. **Int J Artif Organs** 1989 Dec; 12(12):741–3

Carbon monoxide poisoning: clinical, neurophysiological, and brain imaging observations in acute disease and follow–up. Vieregge P, et al. **J Neurol** 1989 Dec;236(8):478–81

Ifosfamide encephalopathy. Danesh MM, et al. **J Toxicol Clin Toxicol** 1989;27(4–5):293–8

Clinical manifestations of childhood lead poisoning. Veerula GR, et al. **J Trop Med Hyg** 1990 Jun;93(3):170–7

Severe acute encephalopathy following inadvertent intrathecal doxorubicin administration. Aricó M, et al. **Med Pediatr Oncol** 1990;18(3):261–3

"Reversible encephalopathy and seizure. . ." by Hurwitz et al., 1988 [letter; comment] Todd GC, et al. **Med Pediatr Oncol** 1990;18(3):228–30 Comment on: Med Pediatr Oncol 1988;16(3):216–9.

Cyclosporine–related central nervous system toxicity in cardiac transplantation [letter] Hughes RL. **N Engl J Med** 1990 Aug 9;323(6):420–1

An outbreak of toxic encephalopathy caused by eating mussels contaminated with domoic acid. Perl TM, et al. **N Engl J Med** 1990 Jun 21;322(25):1775–80

Exacerbation of aluminium encephalopathy after treatment with desferrioxamine [letter] Lillevang ST, et al. **Nephrol Dial Transplant** 1989;4(7):676

Cefotaxime–induced encephalopathy in an uremic patient [letter; comment] Pascual J, et al. **Nephron** 1990;54(1):92 Comment on: Nephron 1988;48(3):237.

HA–966 (1–hydroxy–3–aminopyrrolidone–2) selectively reduces N–methyl–D–aspartate (NMDA)–mediated brain damage. McDonald JW, et al. **Neurosci Lett** 1989 Sep 25; 104(1–2):167–70

Neurotoxic behavioral effects of Lake Ontario salmon diets in rats. Hertzler DR. **Neurotoxicol Teratol** 1990 Mar–Apr; 12(2):139–43

Fatal encephalopathy with ifosfamide/mesna. Verdeguer A, et al. **Pediatr Hematol Oncol** 1989;6(4):383–5

Aluminium and the human brain. Hughes T. **Practitioner** 1989 Jun 22;233(1471):920–3

Drug–induced neurological disorders. Dickey W, et al. **Prog Neurobiol** 1990;34(4):331–42 (143 ref.)

Methylazoxymethanol (MAM)–induced brain lesion and oral dyskinesia in rats. Johansson P. **Psychopharmacology (Berl)** 1990;100(1):72–6

Aluminium encephalopathy: clinical and immunological features. Garrett PJ, et al. **Q J Med** 1988 Oct; 68(258):775–83

Neurotoxicity of 1,1,1–trichloroethane questioned [letter; comment] Verschuuren HG, et al. **Scand J Work Environ Health** 1990 Apr;16(2):144–6 Comment on: Scand J Work Environ Health 1989 Oct;13(5):453–8.

The effect of D–penicillamine in the developing rat cerebellum. Yurdakök M, et al. **Turk J Pediatr** 1989 Apr–Jun;31(2):137–43

[Postoperative encephalopathy: lithium and its dangers] Biron R, et al. **Can Anesthesiol** 1990 Jan;38(1):39–41 (Fre)

[Association of polyneuritis–encephalopathy. Role of bromoform] Falcy M, et al. **J Toxicol Clin Exp** 1989 Nov–Dec;9(6):413–6 (Fre)

[Acute encephalopathy during lithium–neuroleptic combined treatment (letter)] Biarez O, et al. **Therapie** 1989 Jul–Aug; 44(4):303–4 (Fre)

[Toxic encephalopathy as an occupational disease] Triebig G. **Dtsch Med Wochenschr** 1990 Aug 24;115(34):1287–90 (33 ref.) (Ger)

[Current views on the pathological changes in the nervous system of persons chronically exposed to organic solvents] Polakowska B. **Wiad Lek** 1989 Aug 15–Sep 15; 42(16–18):970–4 (41 ref.) (Eng. Abstr.) (Pol)

[An electroencephalographic study of characteristics of the functional state of the central nervous system in workers of chlorophos producing industry] Povorinskiĭ AG, et al. **Gig Tr Prof Zabol** 1990;(3):28–31 (Rus)

[Diagnosis of toxic lesions of the brain using computerized tomography] Bushev II, et al. **Zh Nevropatol Psikhiatr** 1990;90(2):107–9 (Eng. Abstr.) (Rus)

[Myoclonic encephalopathy caused by bismuth (letter)] Nogué Xarau S, et al. **Rev Clin Esp** 1990 Feb;186(3):145 (Spa)

[Pattern of solvent consumption and neuropsychological damage associated with their use] Sosa R, et al. **Salud Publica Mex** 1989 Sep–Oct;31(5):634–41 (Eng. Abstr.) (Spa)

CLASSIFICATION

[Prognostic classification of cerebral cysticercosis. Therapeutic implications] Estañol B, et al. **Gac Med Mex** 1989 Mar–Apr;125(3–4):105–11 (Spa)

COMPLICATIONS

Fahr's disease in postthyroidectomy hypoparathyroidism. A case report. Rachele MG, et al. **Acta Neurol (Napoli)** 1989 Oct;11(5):360–4

Mitochondrial encephalomyopathies. Scarlato G, et al. **Acta Neurol (Napoli)** 1989 Oct;11(5):322–9

Mitochondrial encephalomyopathy with lactic acidosis and stroke–like episodes with special reference to the mechanism of cerebral manifestations. Seyama K, et al. **Acta Neurol Scand** 1989 Dec;80(6):561–8

Aprosencephaly: review of the literature and report of a case with cerebellar hypoplasia, pigmented epithelial cyst and Rathke's cleft cyst. Kim TS, et al. **Acta Neuropathol (Berl)** 1990;79(4):424–31

Hemorrhagic shock and encephalopathy syndrome: Report of two cases. Chiu NC, et al. **Acta Paediatr Sin** 1989 Mar–Apr;30(2):118–22

Complicated hereditary spastic paraparesis with cerebral white matter lesions. Gutmann DH, et al. **Am J Med Genet** 1990 Jun;36(2):251–7

Rhinocerebral mucormycosis: management and survival after carotid occlusion. Galetta SL, et al. **Ann Neurol** 1990 Jul; 28(1):103–7

Divisional oculomotor nerve paresis caused by intrinsic brainstem disease. Ksiazek SM, et al. **Ann Neurol** 1989 Dec; 26(6):714–8

The early risk of multiple sclerosis following isolated acute syndromes of the brainstem and spinal cord. Miller DH, et al. **Ann Neurol** 1989 Nov;26(5):635–9

Dementia in hereditary cerebral hemorrhage with amyloidosis–Dutch type. Haan J, et al. **Arch Neurol** 1990 Sep;47(9):965–7

Painful shoulder in the hemiplegic and unilateral neglect. Poulin de Courval L, et al. **Arch Phys Med Rehabil** 1990 Aug;71(9):673–8

Cerebral mass lesions in patients with AIDS [clinical conference] Montgomery H, et al. **BMJ** 1990 Jul 28; 301(6745):226–8

Malaria presenting as atypical depression [letter] Prakash MV, et al. **Br J Psychiatry** 1990 Apr;156:594–5

Directional hypokinesia and hemispatial inattention in neglect. Coslett HB, et al. **Brain** 1990 Apr;113 (Pt 2):475–86

A mitochondrial encephalomyopathy with specific deficiencies of two respiratory chain polypeptides and a circulating autoantibody to a mitochondrial matrix protein. Schapira AH, et al. **Brain** 1990 Apr;113 (Pt 2):419–32

Breathing disorders in males with acquired encephalopathy. Cirignotta F, et al. **Brain Dev** 1990;12(1):69–72

Bobble–head doll syndrome associated with the III ventricular cyst. Three cases in children 7 years after CVP or CVA shunting. Pařízek J, et al. **Childs Nerv Syst** 1989 Aug;5(4):241–5 (25 ref.)

Leptomeningeal cyst of the orbit presenting with pulsatile exophthalmos. Abernethy LJ, et al. **Clin Radiol** 1989 Sep; 40(5):531–2

When right goes left: an investigation of line bisection in a case of visual neglect. Marshall JC, et al. **Cortex** 1989 Sep;25(3):503–15

Hyperprolinaemia type I and white matter disease: coincidence or causal relationship? Steinlin M, et al. **Eur J Pediatr** 1989 Oct;149(1):40–2

The treatment of spastic planovalgus foot deformity in the neurologically impaired adult. Young S, et al. **Foot Ankle** 1990 Jun;10(6):317–24

Ataxic hemiparesis syndrome [letter] Kaur K, et al. **J Assoc Physicians India** 1989 Sep;37(9):614–5

Neurocysticercosis: an unusual presentation [letter] Saha P, et al. **J Assoc Physicians India** 1990 Feb;38(2):188–9

Neuro–ophthalmic findings in acquired immunodeficiency syndrome. Mansour AM. **J Clin Neuro Ophthalmol** 1990 Sep;10(3):167–74

Chronic progressive spinobulbar spasticity with disturbance of voluntary eyelid closure. Report of a case with special reference to MRI and electrophysiological findings. Nishimura M, et al. **J Neurol Sci** 1990 May;96(2–3):183–90

Pleiotropic molecular defects in energy–transducing complexes in mitochondrial encephalomyopathy (MELAS). Yoneda M, et al. **J Neurol Sci** 1989 Sep; 92(2–3):143–58

Joint hypermobility in patients with cerebrotendinous xanthomatosis [letter] Sukenik S, et al. **J Rheumatol** 1989 Dec;16(12):1611–2

Ring or disc–like enhancing lesions in partial epilepsy in India. Kumar R, et al. **J Trop Pediatr** 1990 Jun;36(3):131–4

Adult xanthogranulomatous intracranial lesion involving familial hypercholesterolemia. Yamada H, et al. **Jpn J Med** 1989 Nov–Dec;28(6):757–61 (16 ref.)

Three cases with secondary generalized epilepsy caused by frontal organic lesion. Yamashita S, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):485–6

"Rubral" tremor due to midbrain Toxoplasma abscess. Koppel BS, et al. **Mov Disord** 1990;5(3):254–6

Diffuse Lewy body disease with dementia and oculomotor dysfunction. Lewis AJ, et al. **Mov Disord** 1990;5(2):143–7

Congophilic angiopathy [clinical conference] **N Y State J Med** 1990 Feb;90(2):64–8

Ventriculomegaly in neurofibromatosis–1. Association with Chiari type I malformation. Afifi AK, et al. **Neurofibromatosis** 1988;1(5–6):299–305

Aqueductal stenosis in neurofibromatosis. Riviello JJ Jr, et al. **Neurofibromatosis** 1988;1(5–6):312–7 (29 ref.)

Mitochondrial encephalomyopathy (MELAS) with mental disorder. CT, MRI and SPECT findings. Suzuki T, et al. **Neuroradiology** 1990;32(1):74–6

Post–traumatic subdural hygroma as a complication of arachnoid cysts of the middle fossa. Kulali A, et al. **Neurosurg Rev** 1989;12 Suppl 1:508–13

Neonatal encephalopathy: an indicator of early sexual maturation in girls. Robertson CM, et al. **Pediatr Neurol** 1990 Mar–Apr;6(2):102–8

Hypotonia, congenital nystagmus, and abnormal auditory brainstem response. Wang PJ, et al. **Pediatr Neurol** 1989 Nov–Dec;5(6):381–3 (11 ref.)

Hypoglycaemia in Sudanese children with cerebral malaria [letter] Atabani GS, et al. **Postgrad Med J** 1990 Apr; 66(774):326–7

Subarachnoid haemorrhage in Plasmodium falciparum malaria. Murugavel K, et al. **Postgrad Med J** 1989 Apr; 65(762):236–7

Comparative studies with MRI, SPECT, and CT in patients with epilepsy of unknown origin. Berlit P, et al. **Psychiatry Res** 1989 Sep;29(3):459–60

Cerebral nocardiosis in immunosuppressed patients: five cases. Barnicoat MJ, et al. **Q J Med** 1989 Aug; 72(268):689–98

Leukoaraiosis and dementia [letter] Sacquegna T, et al. **Stroke** 1990 Mar;21(3):502

Category–related recognition defects as a clue to the neural substrates of knowledge. Damasio AR. **Trends Neurosci** 1990 Mar;13(3):95–8 (18 ref.)

[The association of nephronophthisis, tapeto–retinal degeneration, encephalopathy and vermian agenesis] Buissonnière R, et al. **Ann Pediatr (Paris)** 1989 Sep; 36(7):482 (Fre)

[Recurrent frontal syndrome and epilepsy (letter)] Billette de Villemeur T, et al. **Arch Fr Pediatr** 1990 Mar;47(3):227 (Fre)

[Homonymous lateral quadranopsia disclosing cerebral toxoplasmosis in a patient with AIDS] Girard B, et al. **Bull Soc Ophtalmol Fr** 1989 Dec;89(12):1373–8 (12 ref.) (Eng. Abstr.) (Fre)

[Epilepsy and bilateral occipital calcifications: 3 cases] Giroud M, et al. **Rev Neurol (Paris)** 1990;146(4):288–92 (22 ref.) (Eng. Abstr.) (Fre)

[Unilateral paralysis of saccades caused by pontine tuberculoma] Masson C, et al. **Rev Neurol (Paris)** 1989; 145(8–9):652–5 (9 ref.) (Eng. Abstr.) (Fre)

[Initial epileptic crisis after the age of 60: etiology, clinical aspects and EEG] Henny C, et al. **Schweiz Med Wochenschr** 1990 May 26;120(21):787–92 (Eng. Abstr.) (Fre)

[Epilepsy and degenerative diseases in children: diagnostic and genetic problems] Bouguerra L, et al. **Tunis Med** 1990 Apr;68(4):305–8 (Eng. Abstr.) (Fre)

[Cerebral toxoplasmosis in AIDS: apropos of a case] Jemni L, et al. **Tunis Med** 1990 Jan;68(1):51–4 (Eng. Abstr.) (Fre)

[Unconsciousness—coma—apallic syndrome. 1: Diagnosis and differential diagnosis] von Albert HH. **Fortschr Med** 1990 Jan 30;108(3):45–6 (Ger)

[Value and status of neurologic, serologic, internal medicine and orthopedic studies in routine diagnosis of sudden deafness] Wissen–Siegert I, et al. **Laryngorhinootologie** 1990 Mar;69(3):140–4 (Eng. Abstr.) (Ger)

[Non–epileptic impaired consciousness in neurologic diseases] Hess CW. **Schweiz Rundsch Med Prax** 1989 Jul 18; 78(29–30):808–11 (15 ref.) (Eng. Abstr.) (Ger)

[A case from practice (152). Intermittent cerebrospinal fluid flow obstruction caused by colloid cysts in the foramen of Monro area] Lahiguera S. **Schweiz Rundsch Med Prax** 1989 Nov 7;78(45):1267–8 (Ger)

[Non–neuroectodermal epithelial cyst in the middle cranial fossa associated with unilateral exophthalmos] Inayama T, et al. **Nippon Ganka Gakkai Zasshi** 1990 Apr;94(4):432–40 (Eng. Abstr.) (Jpn)

[Early hearing screening for brain impairment baby—Crib–O–Gram] Yoshimi K. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Sep;92(9):1436–44 (Eng. Abstr.) (Jpn)

[Non–ketotic hyperosmolar diabetic coma in neurosurgical cases; review of 7 cases] Matsumura A, et al. **No Shinkei Geka** 1990 Jan;18(1):33–8 (26 ref.) (Eng. Abstr.) (Jpn)

[Pseudoperipheral ulnar nerve palsy with porencephaly] Nara T, et al. **No To Hattatsu** 1989 Sep;21(5):501–3 (Jpn)

[A case of miliary tuberculosis with intracranial tuberculoma] Suda H, et al. **Rinsho Hoshasen** 1989 Sep;34(9):1015–8 (Eng. Abstr.) (Jpn)

[Study of directional preponderance in central disorders of the vestibular system] Kaźmierczak H. **Otolaryngol Pol** 1989;43(3):195–200 (Eng. Abstr.) (Pol)

[Neurocysticercosis. I. Clinical and laboratory course of 151 cases] Takayanagui OM. **Arq Neuropsiquiatr** 1990 Mar; 48(1):1–10 (Eng. Abstr.) (Por)

[Ischemic infarction in a patient with echinococcosis of the heart and brain] Borisenko VV, et al. **Klin Med (Mosk)** 1990 Apr;68(4):122–4 (Rus)

[The effect of protein enpit and retabolil on the physical development of young children, patients with prenatal hypotrophy and encephalopathies] Aleksandrova NI, et al. **Vopr Pitan** 1989 Jul–Aug;(4):46–50 (Eng. Abstr.) (Rus)

[Hemispheric asymmetry and the problem of typology of schizophrenia (a review)] Kalinin VV. **Zh Nevropatol Psikhiatr** 1989;89(12):101–10 (101 ref.) (Rus)

[Criteria for the diagnosis of epilepsy caused by cerebral cysticercosis in a population of recruits] Umićević P, et al. **Vojnosanit Pregl** 1989 Nov–Dec;46(6):420–7 (Eng. Abstr.) (Scr)

[The stretch reflex response in the abductor pollicis brevis muscle in persons with organic and probably functionally conditioned central motor impairment (electromyographic study)] Lisý L. **Cesk Neurol Neurochir** 1990 May; 53(3):181–7 (Eng. Abstr.) (Slo)

[Opportunistic infections of the central nervous system in patients with AIDS] Ricart C, et al. **Arch Neurobiol (Madr)** 1989;52 Suppl 1:108–20 (66 ref.) (Eng. Abstr.) (Spa)

[Granuloma in cerebral parenchyma. A human model for the study of epilepsy] Sotelo–Morales J, et al. **Gac Med Mex** 1989 Jan–Feb;125(1–2):31–5; discussion 36 (Spa)

[Cerebral infarct in a young adult, as the presenting form of myeloencephalopathic syndrome with lactic acidosis and cerebral ischemia] Arboix A, et al. **Med Clin (Barc)** 1990

Mar 31;94(12):457–60 (Eng. Abstr.) (Spa)
[Cerebral tuberculoma. Study of 7 cases and review of the literature] Guisado F, et al. **Neurologia** 1987 Jan–Feb; 2(1):23–9 (40 ref.) (Eng. Abstr.) (Spa)
[Myoclonus as a manifestation of respiratory encephalopathy] Parajuá JL, et al. **Neurologia** 1989 Sep;4(7):253–5 (Eng. Abstr.) (Spa)
[Cerebral toxoplasmosis with acquired immunodeficiency syndrome (AIDS) in 2 young former heroin addicts] Urcola J, et al. **Neurologia** 1987 Jan–Feb;2(1):34–7 (Eng. Abstr.) (Spa)
[Toxoplasmosis of the central nervous system in immunodepressed patients. Our experience] Barquero Jiménez MS, et al. **Rev Clin Esp** 1990 Feb;186(3):112–5 (Eng. Abstr.) (Spa)

CONGENITAL

A disorder of axonal development, necrotizing myopathy, cardiomyopathy, and cataracts: a new familial disease. Lyon G, et al. **Ann Neurol** 1990 Feb;27(2):193–9
Ultrasonographical and morphological examination of subependymal cystic lesions in maturely born infants. Mito T, et al. **Neuropediatrics** 1989 Nov;20(4):211–4
Teratogenic potential of two neurotropic drugs, haloperidol and dextromoramide, tested on mouse embryos. Jurand A, et al. **Teratology** 1990 Jul;42(1):45–54
[Cerebral gigantism (Sotos' syndrome). Considerations on the definitive body height] Sarriá Chueca A, et al. **An Esp Pediatr** 1990 Feb;32(2):179–82 (Spa)

DIAGNOSIS

Magnetic resonance imaging of the intracranial epidermoid. Ishikawa M, et al. **Acta Neurochir (Wien)** 1989; 101(3–4):108–11
The predictive value of a normal ultrasound scan in the preterm baby—a meta-analysis. Ng PC, et al. **Acta Paediatr Scand** 1990 Mar;79(3):286–91
Cerebral complications detected by EEG-monitoring during neonatal intensive care. Hellström-Westas L, et al. **Acta Paediatr Scand Suppl** 1989;360:83–6
Purine metabolites as measures of birth asphyxia and predictors of brain damage. Ruth VJ, et al. **Adv Exp Med Biol** 1989;253A:339–44
Unilateral megalencephaly: correlation of MR imaging and pathologic characteristics. Barkovich AJ, et al. **AJNR** 1990 May;11(3):523–31
The value of fast gradient-echo MR sequences in the evaluation of brain disease. Steinberg PM, et al. **AJNR** 1990 Jan–Feb;11(1):59–67
MR imaging of leukoencephalopathy associated with Navajo neuropathy. Williams KD, et al. **AJNR** 1990 Mar–Apr; 11(2):400–2
Revised classification of posterior fossa cysts and cystlike malformations based on the results of multiplanar MR imaging. Barkovich AJ, et al. **AJR Am J Roentgenol** 1989 Dec;153(6):1289–300
MR findings in methotrexate-induced CNS abnormalities. Ebner F, et al. **AJR Am J Roentgenol** 1989 Dec; 153(6):1283–8
Diagnostic steps of dementia in the commentary by C.G. Gottfries [letter; comment] Jain KK, et al. **Alzheimer Dis Assoc Disord** 1989 Winter;3(4):228–30 Comment on: Alzheimer Dis Assoc Disord 1988;2(1):16–28.
Hemorrhagic shock and encephalopathy. Clinical definition of a catastrophic syndrome in infants [see comments] Chaves-Carballo E, et al. **Am J Dis Child** 1990 Oct; 144(10):1079–82 Comment in: Am J Dis Child 1990 Oct;144(10):1077.
Late disappearance of fetal choroid plexus cyst: case report and review of the literature. Lodeiro JG, et al. **Am J Perinatol** 1989 Oct;6(4):450–2 (6 ref.)
Advances in nuclear imaging. Gelfand MJ. **Ann Emerg Med** 1989 Dec;18(12):1310–4 (33 ref.)
Colloid cyst of the third ventricle. Read EJ Jr. **Ann Emerg Med** 1990 Sep;19(9):1060–2
Preservation of normal cognitive functioning in elderly subjects with extensive white-matter lesions of long duration. Fein G, et al. **Arch Gen Psychiatry** 1990 Mar; 47(3):220–3
Leuko-araiosis on magnetic resonance imaging and speed of mental processing. Junqué C, et al. **Arch Neurol** 1990 Feb;47(2):151–6
The importance of the electrocardiogram in ambulatory electroencephalographic recordings. Nousiainen U, et al. **Arch Neurol** 1989 Nov;46(11):1171–4
Intracranial epidermoid tumors. A continuing diagnostic challenge. Panagopoulos KP, et al. **Arch Neurol** 1990 Jul; 47(7):813–6
Comparison of magnetic resonance imaging and computed tomography in suspected lesions in the posterior cranial fossa. Teasdale GM, et al. **BMJ** 1989 Aug 5; 299(6695):349–55
Intracerebral epithelial cyst: immunohistological diagnosis and endoneurosurgical treatment. Clark WC, et al. **Br J Neurosurg** 1989;3(4):507–12
Cerebral gumma. Madsen FF, et al. **Br J Neurosurg** 1987; 1(4):509–13
Computer-directed stereotactic biopsy of intrinsic brain stem lesions. Thomas DG, et al. **Br J Neurosurg** 1988;2(2):235–40
Technical basis for magnetic resonance images. Passerini A, et al. **Childs Nerv Syst** 1990 Jan;6(1):33–6
Clinical diagnoses and EEG interpretation. Williams GW, et al. **Cleve Clin J Med** 1990 Jul–Aug;57(5):437–40
Rhinocerebral mucormycosis: a case report with magnetic resonance imaging findings. McDevitt GR Jr, et al. **Clin Imaging** 1989 Dec;13(4):317–20
Role of magnetic resonance (MR) in the diagnosis and management of intracranial tuberculomas. Gupta RK, et al. **Clin Radiol** 1990 Feb;41(2):120–7
The role of MR imaging in the diagnosis of infections of the central nervous system. Zimmerman RD, et al. **Curr Clin Top Infect Dis** 1989;10:82–108 (24 ref.)
Neuroradiology. **Curr Opin Radiol** 1990 Feb;2(1):145–64
Imaging of the brain in children. Ball WS Jr. **Curr Opin Radiol** 1989 Dec;1(4):529–38 (24 ref.)
Imaging of aging, degenerative, and demyelinating diseases. Davis PC. **Curr Opin Radiol** 1990 Feb;2(1):26–33 (29 ref.)
Neuroimaging in various stages of human immunodeficiency virus infection. Post MJ. **Curr Opin Radiol** 1990 Feb; 2(1):73–9 (23 ref.)
Dandy-Walker syndrome and agenesis of the cerebellar vermis: diagnostic problems and genetic counselling. Bordarier C, et al. **Dev Med Child Neurol** 1990 Apr; 32(4):285–94 (69 ref.)
Ophthalmic findings in infants of very low birthweight. Gibson NA, et al. **Dev Med Child Neurol** 1990 Jan; 32(1):7–13
Rhino-orbital cerebral mucormycosis. Karam F, et al. **Ear Nose Throat J** 1990 Mar;69(3):187, 191–3
Brainstem auditory evoked potential abnormalities and magnetic resonance imaging in posterior fossa lesions. Scaioli V, et al. **Eur Neurol** 1989;29(5):246–54
A case of calcification of the subcortical nuclei (a clinical, electrophysiological and X-ray observation). Zahariev Z, et al. **Folia Med (Plovdiv)** 1988;30(1):18–22
Antigenic analysis of Cysticercus cellulosae by crossed immunoelectrophoresis & its role in immune diagnosis of neurocysticercosis. Katti MK, et al. **Indian J Med Res** 1990 Jan;91:39–43
Ultrasonic evaluation of complicated meningitis. Kapoor R, et al. **Indian Pediatr** 1989 Aug;26(8):804–8
Detection of brain damage: neuropsychological assessment in a Spanish speaking population. Ostrosky-Solis F, et al. **Int J Neurosci** 1989 Dec;49(3–4):141–9
Cranial and spinal tumors with meningitic onset. Lunardi P, et al. **Ital J Neurol Sci** 1990 Apr;11(2):145–51 (73 ref.)
Neuroimaging in child and adolescent psychiatry. Kuperman S, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Mar; 29(2):159–72 (96 ref.)
Cerebral malaria in pregnancy. Arya TV, et al. **J Assoc Physicians India** 1989 Sep;37(9):592–3
Cerebral malaria by Plasmodium vivax [letter] Mishra VN, et al. **J Assoc Physicians India** 1989 Jun;37(6):411
Transcranial Doppler sonography in children. Bode H, et al. **J Child Neurol** 1989;4 Suppl:S68–76 (45 ref.)
Intracranial duplex Doppler: practical uses in pediatric neurology and neurosurgery. Chadduck WM, et al. **J Child Neurol** 1989;4 Suppl:S77–86 (16 ref.)
Perioperative sonography. Chadduck WM. **J Child Neurol** 1989;4 Suppl:S91–100 (11 ref.)
Antenatal diagnosis of fetal intracranial anomalies. Fadel HE. **J Child Neurol** 1989;4 Suppl:S107–12
Imaging through the posterior fontanelle. Maertens P. **J Child Neurol** 1989;4 Suppl:S62–7
Macrocephaly is not always due to hydrocephalus. Strassburg HM. **J Child Neurol** 1989;4 Suppl:S32–40 (11 ref.)
MR imaging of CNS relapse of Whipple disease. Davion T, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):815–7
Intracranial Aspergillus granuloma simulating meningioma on MR imaging. Gupta R, et al. **J Comput Assist Tomogr** 1990 May–Jun;14(3):467–9
Field strength in neuro-MR imaging: a comparison of 0.5 T and 1.5 T. Jack CR Jr, et al. **J Comput Assist Tomogr** 1990 Jul–Aug;14(4):505–13
Craniospinal enterogenous cyst: MR findings. Kak VK, et al. **J Comput Assist Tomogr** 1990 May–Jun;14(3):470–2
Cysticercosis mimicking brain neoplasm: MR and CT appearance. Michael AS, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):708–11
Neurosarcoidosis: gadolinium-enhanced MR imaging. Williams DW 3d, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):704–7
Porencephalic cyst in pycnodysostosis. Figueiredo J, et al. **J Med Genet** 1989 Dec;26(12):782–4
Marchiafava-Bignami disease with recovery diagnosed by CT and MRI: demyelination affects several CNS structures. Baron R, et al. **J Neurol** 1989 Sep;236(6):364–6
Giant aneurysm causing frontal lobe syndrome. Bokemeyer C, et al. **J Neurol** 1990 Feb;237(1):47–50
Diagnostic value of the optic fundus in cerebral angiitis [letter] Ohtake T, et al. **J Neurol** 1989 Dec;236(8):490–1
MRI study of Baló's concentric sclerosis before and after immunosuppressive therapy. Spiegel M, et al. **J Neurol** 1989 Dec;236(8):487–8
An empirical model for analysing and interpreting ventricular measures. Clark C, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):411–5
Type IIa hyperlipoproteinemia masquerading as cerebrotendinous xanthomatosis. Ijichi S, et al. **J Neurol Sci** 1989 Dec;94(1–3):101–5
A comparative study on ventriculographic and computerized tomography-guided determinations of brain targets in functional stereotaxis. Hariz MI, et al. **J Neurosurg** 1990 Oct;73(4):565–71
Neurosonographic features of periventricular echodensities associated with cerebral palsy in preterm infants. Pidcock FS, et al. **J Pediatr** 1990 Mar;116(3):417–22
Cystic brain lesions in a Haitian man. Fleet WF 3d, et al. **J Tenn Med Assoc** 1990 Aug;83(8):400–1, 403
Neuroradiologists find 'gentler' angiography excellent for diagnosis, kinder to patients [news] Randall T. **JAMA** 1990 Apr 11;263(14):1890–1, 1895
Sonographic examination of the adult brain. Berland LL, et al. **JCU** 1988 Jun;16(5):337–45
Cerebral malaria: what is unarousable coma? [letter] [see comments] Leaver RJ, et al. **Lancet** 1990 Jan 6; 335(8680):44–5 Comment in: Lancet 1990 Feb 24;335(8687):472.
Magnetic resonance imaging of the posterior fossa. Bydder GM. **Magn Reson Annu** 1985;:1–26 (38 ref.)
Lesions involving the fourth ventricle evaluated by CT and MR: a comparative study. Barloon TJ, et al. **Magn Reson Imaging** 1989 Nov–Dec;7(6):635–42
The prospective evaluation of Gd-DTPA in 225 consecutive cranial cases: adverse reactions and diagnostic value. Carollo BR, et al. **Magn Reson Imaging** 1990;8(4):381–93
MR imaging of degenerative disorders of brainstem and cerebellum. Gallucci M, et al. **Magn Reson Imaging** 1990; 8(2):117–22
Treatment-related central nervous system toxicity: MR imaging evaluation with CT and clinical correlation. Hazuka MB, et al. **Magn Reson Imaging** 1989 Nov–Dec; 7(6):669–76
MRI evaluation of AIDS-related encephalopathy: toxoplasmosis vs. lymphoma. Kupfer MC, et al. **Magn Reson Imaging** 1990;8(1):51–7
The clinical features of cerebral malaria in children. Molyneux ME. **Med Trop (Mars)** 1990 Jan–Mar;50(1):65–8
Beware the addled brain. Wilbur KM. **N C Med J** 1990 Aug; 51(8):401–4
Epidermoid of the quadrigeminal cistern—case report. Maeda Y, et al. **Neurol Med Chir (Tokyo)** 1990 Jan;30(1):59–62
Tuberculoma of the cerebellum—case report. Miyajima M, et al. **Neurol Med Chir (Tokyo)** 1990 Jan;30(1):74–6
Symptomatic Rathke's cleft cyst simulating arachnoid cyst—case report. Onda K, et al. **Neurol Med Chir (Tokyo)** 1989 Nov;29(11):1039–43 (15 ref.)
Cerebral calcifications [letter] Gomez CR. **Neurology** 1989 Nov;39(11):1558
MRI in the elderly [letter; comment] Mangone CA, et al. **Neurology** 1990 Jun;40(6):1011–2 Comment on: Neurology 1989 Nov;39(11):1470–4.
Does transcranial Doppler have any clinical value? Norris JW. **Neurology** 1990 Feb;40(2):329–31
Computerized EEG frequency analysis: sensitivity and specificity in patients with focal lesions [see comments] Oken BS, et al. **Neurology** 1989 Oct;39(10):1281–7 Comment in: Neurology 1990 Jun;40(6):1008.
Neurologic involvement in toxemia of pregnancy: reversible MRI lesions. Raroque HG Jr, et al. **Neurology** 1990 Jan; 40(1):167–9
Arachnoiditis ossificans with arachnoid cyst after cranial tuberculous meningitis. Van Paesschen W, et al. **Neurology** 1990 Apr;40(4):714–6
Fluctuating MR images with mitochondrial encephalopathy, lactic acidosis, stroke-like syndrome (MELAS). Abe K, et al. **Neuroradiology** 1990;32(1):77
Aspergillosis of the sphenoid sinus with cavernous sinus syndrome. Fujiwara S, et al. **Neuroradiology** 1989;31(5):443
Magnetic resonance imaging in MELAS syndrome. Rosen L, et al. **Neuroradiology** 1990;32(2):168–71
Intracranial tuberculoma: MR imaging. Salgado P, et al. **Neuroradiology** 1989;31(4):299–302
Unusual MR manifestations of neurocysticercosis. Suh DC, et al. **Neuroradiology** 1989;31(5):396–402
Magnetic resonance evaluation of severe neurological disorders in eclampsia. Vandenplas O, et al. **Neuroradiology** 1990;32(1):47–9
Epidermoid tumors of Meckel's cave: case report and review of the literature. Miyazawa N, et al. **Neurosurgery** 1989 Dec;25(6):951–5 (14 ref.)
Hyperperfusion syndrome after carotid endarterectomy: a transcranial Doppler evaluation. Powers AD, et al. **Neurosurgery** 1990 Jan;26(1):56–9; discussion 59–60
Characteristics of incidental pineal cysts on magnetic resonance imaging. Sandhu JS, et al. **Neurosurgery** 1989 Oct;25(4):636–9; discussion 640
Cat-scratch encephalopathy presenting as status epilepticus and lymphadenitis. Yagupsky P, et al. **Pediatr Emerg Care** 1990 Mar;6(1):43–5
Neurologic sequelae and MRI in low-birth weight patients. Sugita K, et al. **Pediatr Neurol** 1989 Nov–Dec;5(6):365–9
How to identify and manage brain hemorrhage. Weisberg LA. **Postgrad Med** 1990 Sep 1;88(3):169–75 (17 ref.)
Diffuse Lewy body disease: an important differential diagnosis in dementia with extrapyramidal features. Lennox G, et al. **Prog Clin Biol Res** 1989;317:121–30
MRI and CT in diencephalic lesions. Becker T, et al. **Psychiatry Res** 1989 Sep;29(3):285–6
Potentialities and prospects of neuromagnetic imaging: mapping of time and frequency domains of magnetic activity of the brain. Hoke M, et al. **Psychiatry Res** 1989 Sep;29(3):369–74
Acquired immunodeficiency syndrome: correlation of radiologic and pathologic findings in the brain.

Balakrishnan J, et al. **Radiographics** 1990 Mar;10(2):201–15
Cranial MR imaging with Gd–DTPA in neonates and young infants: preliminary experience. Elster AD. **Radiology** 1990 Jul;176(1):225–30
Neurologic manifestations of Lyme disease, the new "great imitator". Pachner AR. **Rev Infect Dis** 1989 Sep–Oct;11 Suppl 6:S1482–6 (15 ref.)
Diagnosis of cerebral toxoplasmosis in association with AIDS using the polymerase chain reaction. Holliman RE, et al. **Scand J Infect Dis** 1990;22(2):243–4
Neuroimaging: 1990. Lukin R. **Semin Roentgenol** 1989 Oct; 24(4):218–30 (47 ref.)
MR in brain formation and malformation. **Semin Ultrasound CT MR** 1988 Jun;9(3): 183–267
Techniques and methods in pediatric magnetic resonance imaging. Barkovich AJ. **Semin Ultrasound CT MR** 1988 Jun;9(3):186–91 (7 ref.)
Nonneoplastic disease of the brain. **Top Magn Reson Imaging** 1989 Dec;2(1):1–75
White matter diseases. Edwards MK, et al. **Top Magn Reson Imaging** 1989 Dec;2(1):41–8 (23 ref.)
Infectious diseases of the brain. McGeachie RE, et al. **Top Magn Reson Imaging** 1989 Dec;2(1):25–40 (70 ref.)
CT-scan or two-dimensional echoencephalography in neonatal intracranial pathology? Santa M, et al. **Zentralbl Neurochir** 1989;50(2):78–83
[Correlation of Doppler echocardiography and EEG findings in stenotic processes in the carotid arteries] Spaček M, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1989;32(5):605–9 (Eng. Abstr.) (Cze)
[Current developments in the imaging of the brain (letter)] **Ned Tijdschr Geneeskd** 1990 May 19;134(20):1013–4 (Dut)
[The EEG in neurological practice; shifts in the diagnosis (letter)] **Ned Tijdschr Geneeskd** 1989 Dec 16;133(50):2521–7 (Dut)
[The EEG in neurology practice; shifts in diagnosis] Posthumus Meyjes FE, et al. **Ned Tijdschr Geneeskd** 1989 Oct 7;133(40):1970–4 (34 ref.) (Dut)
[Intracranial tuberculoma, a special space-occupying process] Theunissen PH, et al. **Ned Tijdschr Geneeskd** 1989 Nov 25;133(47):2330–3 (Eng. Abstr.) (Dut)
[Current developments in imaging of the brain] Thijssen HO, et al. **Ned Tijdschr Geneeskd** 1990 Mar 17;134(11):519–21 (Dut)
[Intracranial tuberculoma, a special space-occupying process (letter)] van Zuiden M. **Ned Tijdschr Geneeskd** 1990 Jan 13;134(2):88 (Dut)
[Cerebral aspergilloma. Review of the literature apropos of a case] Fardoun R, et al. **Neurochirurgie** 1990;36(1):45–51 (42 ref.) (Eng. Abstr.) (Fre)
[Cerebral aspergillotic granuloma. Apropos of a case and a review of the literature] Kchir N, et al. **Neurochirurgie** 1990;36(2):132–6 (20 ref.) (Eng. Abstr.) (Fre)
["Bell clappers" with "ophthalmologic alarm". Apropos of 2 cases of colloid cysts of the 3d ventricle] Pon A, et al. **Ophtalmologie** 1989 Jun–Aug;3(3):244–7 (Eng. Abstr.) (Fre)
[Central nervous system involvement in systemic lupus erythematosus] Stoppe G, et al. **Dtsch Med Wochenschr** 1990 Mar 16;115(11):426–31 (70 ref.) (Ger)
[Role of electroencephalography in the neurological diagnosis of HIV] Enzensberger W, et al. **EEG EMG** 1989 Dec;20(4):234–7 (Eng. Abstr.) (Ger)
[EEG and SPECT in cerebral manifestations of AIDS] Henkes H, et al. **EEG EMG** 1989 Dec;20(4):248–56 (Eng. Abstr.) (Ger)
[EEG findings during the course of HIV infection] Schnurbus R, et al. **EEG EMG** 1989 Dec;20(4):238–42 (Eng. Abstr.) (Ger)
[Neurosarcoidosis. Comparative analysis of the clinical profile based on 537 cases from the world literature up to 1963 and from 1976–1988] Mende D, et al. **Fortschr Neurol Psychiatr** 1990 Jan;58(1):7–18 (237 ref.) (Eng. Abstr.) (Ger)
[Borrelia burgdorferi infection with bilateral optic neuritis and intracerebral demyelinization lesions] Bialasiewicz AA, et al. **Klin Monatsbl Augenheilkd** 1989 Aug;195(2):91–4 (Eng. Abstr.) (Ger)
[Isolated sarcoidosis of the central nervous system. A case report] Griebnitz E, et al. **Nervenarzt** 1990 Feb;61(2):112–5 (Ger)
[Intracranial tuberculomas. Diagnosis by CT and MRI] Kaendler S, et al. **Nervenarzt** 1989 Sep;60(9):565–71 (Ger)
[EEG and evoked potential mapping] Zwiener U, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Feb;42(2):65–78 (24 ref.) (Eng. Abstr.) (Ger)
[The importance of magnetic resonance tomography in the diagnosis of cerebral infections] Glathe S, et al. **ROFO** 1989 Sep;151(3):342–7 (Eng. Abstr.) (Ger)
[Intracranial calcification—how much more information can be obtained by MR than CT?] Uhlenbrock D, et al. **ROFO** 1990 Jul;153(1):22–8 (Eng. Abstr.) (Ger)
[Intraoperative ultrasound imaging in neurosurgery] Gaab MR. **Ultraschall Med** 1990 Apr;11(2):62–71 (20 ref.) (Eng. Abstr.) (Ger)
[Transcranial sonography and duplex sonography in children with cysts and tumors of the cranial base] Schöning M, et al. **Ultraschall Med** 1989 Oct;10(5):245–9 (Eng. Abstr.) (Ger)
[Neurologic symptoms and their topical classification in neurosarcoidosis: studies in patients with pulmonary sarcoidosis] Hässler F, et al. **Z Arztl Fortbild (Jena)** 1990; 84(11):543–5 (Ger)
[Ultrasonic examination of the brain (through an opening in the skull)] Barta M, et al. **Orv Hetil** 1989 Oct 15; 130(42):2259–62 (Eng. Abstr.) (Hun)
[Cerebral and renal aspergillosis in a patient with orthotopic heart transplant: diagnosis, treatment and follow-up] Boriani G, et al. **Cardiologia** 1989 Sep;34(9):807–11 (Eng. Abstr.) (Ita)
[Study of the SNC using MRI in a case of Lowe's syndrome] Gabrielli O, et al. **Pathologica** 1989 Nov–Dec; 81(1076):643–5 (Eng. Abstr.) (Ita)
[Diagnostic definition of cerebral lesions in a case of AIDS: importance of the use of magnetic resonance] Tinelli M, et al. **Recenti Prog Med** 1990 May;81(5):327–8 (Eng. Abstr.) (Ita)
[Cerebral cysticercosis presenting as a solitary cyst. Diagnosis and treatment with CT-guided stereotactic biopsy—case report] Hashimoto T, et al. **Neurol Med Chir (Tokyo)** 1989 Jun;29(6):520–4 (22 ref.) (Eng. Abstr.) (Jpn)
[Porencephaly. Case report] Matsumae M, et al. **Neurol Med Chir (Tokyo)** 1989 Apr;29(4):347–51 (Eng. Abstr.) (Jpn)
[Cerebral cysticercosis: a case report with special reference to CT and MRI findings] Kamii H, et al. **No Shinkei Geka** 1989 Oct;17(10):959–64 (Eng. Abstr.) (Jpn)
[A case of foreign-body granuloma] Koga H, et al. **No Shinkei Geka** 1990 Jun;18(6):547–50 (20 ref.) (Eng. Abstr.) (Jpn)
[A case of tuberculous encephalopathy with multiple intracranial tuberculomas] Yokoyama T, et al. **Rinsho Shinkeigaku** 1989 May;29(5):622–5 (Eng. Abstr.) (Jpn)
[Ultrasonographic examination of the brain. Characteristics of various types of pathological changes] Góraj B, et al. **Pol Przegl Radiol** 1988 Nov–Dec;52(6):256–60 (Eng. Abstr.) (Pol)
[A case of Wilson's disease studied using magnetic resonance: a new approach?] Valença A, et al. **Acta Med Port** 1989 Mar–Apr;2(2):89–92 (Eng. Abstr.) (Por)
[Cranial computed tomography aspects in neurocysticercosis in childhood] Guerreiro MM, et al. **Arq Neuropsiquiatr** 1989 Jun;47(2):153–8 (Eng. Abstr.) (Por)
[Clinico-laboratory criteria of cerebrovascular disorders in newborn infants] Barashnev IuI, et al. **Akush Ginekol (Mosk)** 1990 Jan;(1):29–31 (Rus)
[Diagnostic value of echoencephalography in various types of intracranial pathology in newborn infants] Ozerova OE. **Akush Ginekol (Mosk)** 1990 Jan;(1):31–6 (Rus)
[Symptoms of the lesions of the gastrointestinal tract in diseases of the central nervous system] Buklina SB, et al. **Khirurgiia (Mosk)** 1990 Mar;(3):105–6 (Rus)
[Ultrasonic scanning of the brain in newborn infants (review of the literature)] Neizhko LIu. **Zh Nevropatol Psikhiatr** 1989;89(8):132–6 (49 ref.) (Rus)
[Causes of errors in psychiatric expert testimony in adolescence] Prokopenko LA, et al. **Zh Nevropatol Psikhiatr** 1989;89(8):108–12 (Eng. Abstr.) (Rus)
[Diagnostic importance the B-mode ultrasonic examination of the intracranial space in childhood] Santa M, et al. **Cesk Neurol Neurochir** 1989 Sep;52(5):289–93 (Slo)
[The EEG, CAT and alcoholism] Conde López V, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1990 Jan–Feb;18(1):7–25 (54 ref.) (Eng. Abstr.) (Spa)
[Diagnostic value of cranial computerized tomography in pediatric practice] Pedrola Guixe D, et al. **An Esp Pediatr** 1989 Dec;31(6):537–41 (Eng. Abstr.) (Spa)
[Ultrasonic diagnosis of the brain of newborn infants is a good aid for identifying high risk groups] Gäddlin PO, et al. **Lakartidningen** 1989 Nov 22;86(47):4129–30, 4133 (Swe)
[Magnetic resonance tomography in psychiatry—clear benefits for health care services] Wahlund LO, et al. **Lakartidningen** 1989 Nov 15;86(46):3991–4 (Eng. Abstr.) (Swe)
[Computer tomography at county hospitals means more rapid diagnoses for patients] Wihlborg O, et al. **Lakartidningen** 1990 Apr 25;87(17):1450, 1455 (Swe)

DRUG THERAPY

Effect of praziquantel on the eggs of Schistosoma mansoni, with a note on the implications for managing central nervous system schistosomiasis. Richards F Jr, et al. **Ann Trop Med Parasitol** 1989 Oct;83(5):465–72
Neurocysticercosis. Short course of treatment with albendazole. Alarcón F, et al. **Arch Neurol** 1989 Nov; 46(11):1231–6
Non-surgical treatment of tuberculomas of the brain. Choudhury AR. **Br J Neurosurg** 1989;3(6):643–53
Persistent CSF leucocytosis associated with intrathecal gentamycin. Lee TK, et al. **Br J Neurosurg** 1989;3(4):517–9
Vasodilators and hypertensive encephalopathy following scorpion envenomation in children. Sofer S, et al. **Chest** 1990 Jan;97(1):118–20
Basis for the application of calcium antagonists in neurology. Florence, May 25–27, 1989. Proceedings. **Eur Neurol** 1990; 30 Suppl 2:1–41
Drugs to treat age-related neurodegenerative problems. The final frontier of medical science? Bartus RT. **J Am Geriatr Soc** 1990 Jun;38(6):680–95 (99 ref.)
Failure of praziquantel and albendazole in neurocysticercosis [letter] Gupta R, et al. **J Assoc Physicians India** 1990 Apr; 38(4):313–4
Low-dose alternate-day pyrimethamine for maintenance therapy in cerebral toxoplasmosis complicating AIDS [letter] Bhatti N, et al. **J Infect** 1990 Jul;21(1):119–20
Comparison of therapeutic regimen of anticysticercal drugs for parenchymal brain cysticercosis. Sotelo J, et al. **J Neurol** 1990 Apr;237(2):69–72
Chloroquine-resistant malaria in Jos, Nigeria. Okeahialam BN, et al. **J Trop Med Hyg** 1989 Oct;92(5):365–6
Noninvasive drug delivery to the brain. Brewster ME. **Neurobiol Aging** 1989 Sep–Oct;10(5):638–9; discussion 648–50
Novel drug delivery systems: opportunities and caveats. Drachman DA. **Neurobiol Aging** 1989 Sep–Oct;10(5):632–3; discussion 648–50
Direct comparisons of CNS directed therapies are needed. Gash DM. **Neurobiol Aging** 1989 Sep–Oct;10(5):645–6; discussion 648–50
Novel CNS-directed drug delivery systems in Alzheimer's disease and other neurological disorders. Harbaugh RE. **Neurobiol Aging** 1989 Sep–Oct;10(5):623–9 (68 ref.)
Site-specific drug delivery to CNS: old and new. Hollister LE. **Neurobiol Aging** 1989 Sep–Oct;10(5):631; discussion 648–50
New directions in CNS drug delivery. Langer R, et al. **Neurobiol Aging** 1989 Sep–Oct;10(5):642–4; discussion 648–50
Sustained and controlled release of neuroactive substances in the CNS by encapsulation into implantable polymers. Peterson GM. **Neurobiol Aging** 1989 Sep–Oct;10(5):639–40; discussion 648–50
The use of hollow polymer fibers for the delivery of bioactive molecules to the brain. Springer JE. **Neurobiol Aging** 1989 Sep–Oct;10(5):640–1; discussion 648–50
Delivery of neuroactive compounds to the brain: potential utility of genetically modified cells. Tuszynski MH, et al. **Neurobiol Aging** 1989 Sep–Oct;10(5):644–5; discussion 648–50
Fructose-added glycerol (Glyceol) for therapy of elevated intracranial pressure: analysis of the side effects of long-term administration in a multi-institutional trial. Tsubokawa T, et al. **Neurol Res** 1989 Dec;11(4):249–52
Problems in the management of falciparum malaria. Currier JS, et al. **Rev Infect Dis** 1989 Nov–Dec;11(6):988–95
Rapid and complete resolution of giant cysticercal cysts after administration of praziquantel. A report of 4 cases. Joubert J, et al. **S Afr Med J** 1990 Feb 3;77(3):154–7
Treatment of neurocysticercosis. Joubert J, et al. **S Afr Med J** 1990 Jan 6;77(1):27–30
Treatment of neurocysticercosis with praziquantel [letter] Moodley M. **S Afr Med J** 1990 Aug 4;78(3):170–1
Neurocysticercosis [editorial] Thomsson AJ. **S Afr Med J** 1990 Feb 3;77(3):119–20
Folate supplements and the treatment of cerebral toxoplasmosis [letter; comment] Holliman RE. **Scand J Infect Dis** 1989;21(4):475–6 Comment on: Scand J Infect Dis 1988;20(6):685–6.
Mannitol therapy in perinatal hypoxic-ischemic brain damage in rats. Mujsce DJ, et al. **Stroke** 1990 Aug;21(8):1210–4
Neurocysticercosis: treatment with albendazole and dextrochloropheniramine [see comments] Agapejev S, et al. **Trans R Soc Trop Med Hyg** 1989 May–Jun;83(3):377–83 Comment in: Trans R Soc Trop Med Hyg 1990 Jan–Feb;84(1):174.
Neurocysticercosis: treatment with albendazole [letter; comment] Horton J. **Trans R Soc Trop Med Hyg** 1990 Jan–Feb;84(1):174 Comment on: Trans R Soc Trop Med Hyg 1989 May–Jun;83(3):377–83.
Clinical studies on treatment of cerebral malaria with artemether and mefloquine. Shwe T, et al. **Trans R Soc Trop Med Hyg** 1989 Jul–Aug;83(4):489
[The central effect of calcium antagonists] Siembab D, et al. **Pol Tyg Lek** 1988 Dec 19–26;43(51–52):1676–8 (Pol)
[Neurocysticercosis and praziquantel: long-term development in 100 patients] Spina-França A, et al. **Arq Neuropsiquiatr** 1989 Dec;47(4):444–8 (Eng. Abstr.) (Por)
[Neurocysticercosis. II. Evaluation of treatment with praziquantel] Takayanagui OM. **Arq Neuropsiquiatr** 1990 Mar;48(1):11–5 (Eng. Abstr.) (Por)
[Cerebral toxoplasmosis in patients with AIDS] Altés J, et al. **Arch Neurobiol (Madr)** 1989;52 Suppl 1:121–6 (Eng. Abstr.) (Spa)
[Pharmacologic and therapeutic advancements in neurology] Martínez-Lage JM. **Neurologia** 1986 Jan–Feb;1(1):28–35 (55 ref.) (Spa)

EMBRYOLOGY

Primitive motor patterns and stereotyped movements. A comparison of findings in early childhood and in the apallic syndrome. Aichner F, et al. **Int J Neurol** 1982–83; 16–17:21–9

ENZYMOLOGY

Tyrosine hydroxylase-immunoreactive neurons in the temporal lobe in complex partial seizures. Zhu ZQ, et al.

Ann Neurol 1990 May;27(5):564–72

Increases in aspartate aminotransferase and creatine kinase in hemorrhagic shock and encephalopathy syndrome [letter] Bonham JR, et al. **Clin Chem** 1989 Nov; 35(11):2253–4

Ubiquitin carboxyl-terminal hydrolase (PGP 9.5) is selectively present in ubiquitinated inclusion bodies characteristic of human neurodegenerative diseases. Lowe J, et al. **J Pathol** 1990 Jun;161(2):153–60

Studies of neuron-specific enolase levels in serum and cerebrospinal fluid of children with neurological diseases. Ko FJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 Mar;6(3):137–43

Measurement of serum alkaline phosphatase isozyme I in brain-damaged patients. Yamashita M, et al. **Neurol Med Chir (Tokyo)** 1989 Nov;29(11):995–8

[A case of MELAS (mitochondrial myopathy, encephalopathy, lactic acidosis and stroke-like episodes) with progressive cytochrome c oxidase deficiency] Sumi K, et al. **Rinsho Shinkeigaku** 1989 Jul;29(7):901–8 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Mixed solvent exposure and cerebral symptoms among active and retired workers. An epidemiological investigation of 3387 men aged 53–75 years. Hein HO, et al. **Acta Neurol Scand** 1990 Feb;81(2):97–102

Frequency of neurosurgical disorders in the U.K. **Br J Neurosurg** 1988;2(2):281–3

Concern about bovine spongiform encephalopathy [letter] Howard R, et al. **Lancet** 1990 Aug 4;336(8710):316

Neurocysticercosis—two Australian cases. McDowell D, et al. **Med J Aust** 1990 Feb 19;152(4):217–8

HIV and cerebral malaria. Leaver RJ, et al. **Trans R Soc Trop Med Hyg** 1990 Mar-Apr;84(2):201

[Frequency of neurocysticercosis at a hospital in Madrid (1980–1989)] Chinchilla N, et al. **Arch Neurobiol (Madr)** 1989 Nov-Dec;52(6):287–94 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Infected ventriculostomy: bacteriology and treatment. Ohrström JK, et al. **Acta Neurochir (Wien)** 1989; 100(1-2):67–9

Rhinocerebral mucormycosis and internal carotid artery thrombosis in a previously healthy patient. Quattrocolo G, et al. **Acta Neurol Belg** 1990;90(1):20–6

Bilateral cortical calcifications with benign clinical course: an unusual case of Sturge-Weber syndrome? Narbone MC, et al. **Acta Neurol (Napoli)** 1989 Dec;11(6):423–7

Tc-scan in HIV-infected patients. Neuroradiological aspects and clinical implications. Rossi F, et al. **Acta Neurol (Napoli)** 1990 Feb;12(1):28–31

EEG and CT abnormalities in xeroderma pigmentosum. Mimaki T, et al. **Acta Neurol Scand** 1989 Aug;80(2):136–41

Human immunodeficiency virus (HIV) envelope and core proteins in CNS tissues of patients with the acquired immune deficiency syndrome (AIDS). Budka H. **Acta Neuropathol (Berl)** 1990;79(6):611–9

Leptomeningeal cyst and vacuum extraction. Vanhaesebrouck PJ, et al. **Acta Paediatr Scand** 1990 Feb; 79(2):232–3

Cerebral necrosis simulating an intraparenchymal tumor. Nelson DR, et al. **AJNR** 1990 Jan-Feb;11(1):211–2

Cerebral toxoplasmosis in patients with AIDS. Rossitch E Jr, et al. **Am Fam Physician** 1990 Mar;41(3):867–73 (31 ref.)

Carcinoid tumor presenting as central nervous system symptoms. Case report and review of the literature. Hussein AM, et al. **Am J Clin Oncol** 1990 Jun;13(3):251–5 (30 ref.)

Neurologic sequelae of open-heart surgery in children. An 'irritating question'. Ferry PC. **Am J Dis Child** 1990 Mar; 144(3):369–73

Magnetic resonance imaging of the brain in infants and children before and after cardiac surgery. A prospective study. McConnell JR, et al. **Am J Dis Child** 1990 Mar; 144(3):374–8

Neurologic complications of alcoholism [clinical conference] **Am J Med** 1969 Jan;46(1):118–29

Cerebral malaria in children: clinical implications of cytoadherence. Molyneux ME. **Am J Trop Med Hyg** 1990 Aug;43(2 Pt 2):38–41 (20 ref.)

Prediction of neurological damage after cardiopulmonary bypass surgery. Use of the cerebral function analysing monitor. Nevin M, et al. **Anaesthesia** 1989 Sep;44(9):725–9

Pupillary signs during cardiac surgery. Their use in the prediction of major cerebral deficit following cardiopulmonary bypass [see comments] Woodall NM, et al. **Anaesthesia** 1989 Nov;44(11):885–8 Comment in: Anaesthesia 1990 May;45(5):410.

Fatal central diabetes mellitus and insipidus resulting from untreated hyponatremia: a new syndrome [see comments] Fraser CL, et al. **Ann Intern Med** 1990 Jan 15;112(2):113–9 Comment in: Ann Intern Med 1990 Apr 15;112(8):632–3. Comment in: Ann Intern Med 1990 May 1;112(9):716–7. Comment in: Ann Intern Med 1990 Jul 1;113(1):84–6.

Brain injury after ischemia and trauma. The role of vitamin E. Yoshida S. **Ann N Y Acad Sci** 1989;570:219–36 (38 ref.)

Nephrogenic diabetes insipidus and intracerebral calcification. Schofer O, et al. **Arch Dis Child** 1990 Aug; 65(8):885–7

Extensive brain calcification and progressive dysarthria and dysphagia associated with chronic hypoparathyroidism. Cheek JC, et al. **Arch Neurol** 1990 Sep;47(9):1038–9

Aluminum transfer as glutamate complex through blood-brain barrier. Possible implication in dialysis encephalopathy. Deloncle R, et al. **Biol Trace Elem Res** 1990 Apr;25(1):39–45

May preclinical markers of brain infection by HIV be detected? A cognitive, CSF and neuroradiological investigation. Franciolini B, et al. **Boll Soc Ital Biol Sper** 1989 Oct;65(10):983–8

Fulminating encephalopathy associated with Shigella flexneri. Akl KF, et al. **Br J Clin Pract** 1989 Aug; 43(8):305–6

Multiple neurological lesions due to vertebrobasilar dolichoectasia. Jamjoom AB, et al. **Br J Neurosurg** 1990; 4(2):147–54

Complications due to prolonged ventricular fluid pressure recording. Sundbärg G, et al. **Br J Neurosurg** 1988; 2(4):485–95

Radiological colpocephaly: a congenital malformation or the result of intrauterine and perinatal brain damage. Landman J, et al. **Brain Dev** 1989;11(5):313–6

Transient focal leukoencephalopathy following intraventricular methotrexate and cytarabine. A complication of the Ommaya reservoir: case report and review of the literature. Colamaria V, et al. **Childs Nerv Syst** 1990 Jun;6(4):231–5 (19 ref.)

Technical aspects of quantification of aluminum. Chan S, et al. **Clin Lab Med** 1990 Jun;10(2):423–33 (26 ref.)

Relationship of intrapartum and delivery room events to long-term neurologic outcome. Nelson KB. **Clin Perinatol** 1989 Dec;16(4):995–1007 (55 ref.)

CNS effects of sepsis. Bowton DL. **Crit Care Clin** 1989 Oct; 5(4):785–92 (42 ref.)

Essential amino acid-induced adult hyperammonemic encephalopathy and hypophosphatemia. Lamiell JJ, et al. **Crit Care Med** 1990 Apr;18(4):451–2

Serum CK-BB activity in the preterm infant and outcome at two and four years of age. den Ouden L, et al. **Dev Med Child Neurol** 1990 Jun;32(6):509–14

Long-term impairments of brain and auditory functions of children recovered from purulent meningitis. Jiang ZD, et al. **Dev Med Child Neurol** 1990 Jun;32(6):473–80

Variability and stereotypy of spontaneous motility as a predictor of neurological development of preterm infants. Touwen BC. **Dev Med Child Neurol** 1990 Jun;32(6):501–8

Do visual evoked potentials detect neural damage in children treated for cancer? Verity CM, et al. **Dev Med Child Neurol** 1990 Jun;32(6):481–92

Intracerebral crises during treatment of diabetic ketoacidosis. Rosenbloom AL. **Diabetes Care** 1990 Jan;13(1):22–33

Neurological complications associated with sickle cell anaemia: an experience at the Aga Khan Hospital, Nairobi. Nantulya FN. **East Afr Med J** 1989 Oct;66(10):669–77

Biotin-responsive infantile encephalopathy: EEG-polygraphic study of a case. Colamaria V, et al. **Epilepsia** 1989 Sep-Oct;30(5):573–8

A case of mitochondrial myopathy, encephalopathy and lactic acidosis due to cytochrome c oxidase deficiency with neurogenic muscular changes. Jinnai K, et al. **Eur Neurol** 1990;30(1):56–60

Closed head injury sequelae: changing concepts. Speed WG 3d. **Headache** 1989 Nov;29(10):643–7 (18 ref.)

Acute encephalopathy associated with measles [published erratum appears in Indian J Pediatr 1989 Nov-Dec;56(6):781] Kumar R, et al. **Indian J Pediatr** 1989 May-Jun;56(3):349–54

Porencephaly—a potentially avoidable complication of neonatal meningitis. Gambhir A, et al. **Indian Pediatr** 1989 May;26(5):489–92

Cerebral hydatid cyst. Taneja LN, et al. **Indian Pediatr** 1989 Oct;26(10):1040–2

Disseminated tuberculosis of the central nervous system responsive to rifabutin. Riva M, et al. **Ital J Neurol Sci** 1990 Apr;11(2):163–9

Neurologic disorders associated with HIV infections. Gabuzda DH. **J Am Acad Dermatol** 1990 Jun;22(6 Pt 2):1232–6 (20 ref.)

Xanthoma disseminatum with progressive involvement of the central nervous and hepatobiliary systems. Knobler RM, et al. **J Am Acad Dermatol** 1990 Aug;23(2 Pt 2):341–6

Astrocytic acidosis in hyperglycemic and complete ischemia. Kraig RP, et al. **J Cereb Blood Flow Metab** 1990 Jan; 10(1):104–14

Late neurological complications after prophylactic cranial irradiation in patients with small-cell lung cancer: the Toronto experience. Lishner M, et al. **J Clin Oncol** 1990 Feb;8(2):215–21

The association of Shiga toxin and other cytotoxins with the neurologic manifestations of shigellosis. Ashkenazi S, et al. **J Infect Dis** 1990 May;161(5):961–5

Fatal necrotizing encephalopathy complicating treatment of malignant gliomas with intra-arterial BCNU and irradiation: a pathological study. Rosenblum MK, et al. **J Neurooncol** 1989 Sep;7(3):269–81

Pertussis vaccine and injury to the brain. Golden GS. **J Pediatr** 1990 Jun;116(6):854–61 (48 ref.)

'Pertussis vaccine encephalopathy': it is time to recognize it as the myth that it is [editorial] [published erratum appears in JAMA 1990 Apr 25;263(16):2182] [comment] Cherry JD. **JAMA** 1990 Mar 23-30;263(12):1679–80 Comment on: JAMA 1990 Mar 23-30;263(12):1641–5.

Risk of seizures and encephalopathy after immunization with the diphtheria-tetanus-pertussis vaccine [see comments] Griffin MR, et al. **JAMA** 1990 Mar 23-30;263(12):1641–5 Comment in: JAMA 1990 Mar 23-30;263(12):1679–80.

Marchiafava-Bignami disease: consecutive observation at acute stage by magnetic resonance imaging and computerized tomography. Ikeda A, et al. **Jpn J Med** 1989 Nov-Dec;28(6):740–3

Neuro-Behçet's disease: report of three cases with a review of the literature. Su SL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 Mar; 6(3):155–62 (16 ref.)

Central nervous system involvement in infantile botulism [letter] Jones S, et al. **Lancet** 1990 Jan 27;335(8683):228

Neurological deterioration in young adults with phenylketonuria. Thompson AJ, et al. **Lancet** 1990 Sep 8; 336(8715):602–5

Cerebral dysfunction after cardiopulmonary bypass—report of one case. Wang YP, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Sep;27(3):287–91

Adolescents with closed head injury. Neuropsychological consequences. Rusonis ES. **Med Clin North Am** 1990 Sep; 74(5):1311–9 (26 ref.)

Central nervous system and Langerhans' cell histiocytosis [clinical conference] Hayward J, et al. **Med Pediatr Oncol** 1990;18(4):325–8

Intraventricular cryptococcal granulomas—case report. Aoki N. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):251–4 (17 ref.)

Neonatal neurological dysfunction in a cohort of very preterm and/or very low birthweight infants—relation to other perinatal factors and outcome at 2 years. den Ouden L, et al. **Neuropediatrics** 1990 May;21(2):66–71

Intraosseous location of posterior fossa posttraumatic leptomeningeal cyst. Demonstration by computerized tomography. Palaoglu S, et al. **Neuroradiology** 1990; 32(1):78

Causes of infections in penetrating head wounds in the Iran-Iraq War. Aarabi B. **Neurosurgery** 1989 Dec; 25(6):923–6

Subarachnoid-pleural and subarachnoid-mediastinal fistulae. Pollack II, et al. **Neurosurgery** 1990 Mar;26(3):519–25 (38 ref.)

Signs, symptoms, and significance of paraneoplastic neurological syndromes. Hildebrand J. **Oncology (Williston Park)** 1989 Oct;3(10):57–61; discussion 65–6, 68 (22 ref.)

Cerebral calcifications in a neonate with candidiasis. Goldsmith LS, et al. **Pediatr Infect Dis J** 1990 Jun; 9(6):451–3

Role of endogenous excitatory amino acid neurotransmitters in the pathogenesis and evolution of acute brain injury. Simon RP. **Pediatr Infect Dis J** 1989 Dec;8(12):913–5 (37 ref.)

Brain calcification in hypoxic-ischemic lesions: an autopsy review. Ansari MQ, et al. **Pediatr Neurol** 1990 Mar-Apr; 6(2):94–101

Destructive encephalopathy in incontinentia pigmenti: a primary disorder? Shuper A, et al. **Pediatr Neurol** 1990 Mar-Apr;6(2):137–40

Megalencephaly secondary to occlusion and stenosis of sigmoid sinuses. Talwar D, et al. **Pediatr Neurol** 1990 Jan-Feb;6(1):51–3

Acquired neuropathologic lesions associated with the hypoplastic left heart syndrome. Glauser TA, et al. **Pediatrics** 1990 Jun;85(6):991–1000

Normal brain tissue response to photodynamic therapy: histology, vascular permeability and specific gravity. Dereski MO, et al. **Photochem Photobiol** 1989 Nov; 50(5):653–7

An analysis of factors predisposing to neurological injury in patients undergoing coronary bypass operations. Shaw PJ, et al. **Q J Med** 1989 Jul;72(267):633–46

Neurological complication of Mycoplasma pneumoniae infection. Ong EL, et al. **Respir Med** 1989 Sep;83(5):441–2

Neurologic manifestations of child abuse. Benzel EC, et al. **South Med J** 1989 Nov;82(11):1347–51

Chronic cerebral intracellular alkalosis following forebrain ischemic insult in rats. Chopp M, et al. **Stroke** 1990 Mar; 21(3):463–6

Pontine and extrapontine myelinolysis following liver transplantation. Relationship to serum sodium. Wszolek ZK, et al. **Transplantation** 1989 Dec;48(6):1006–12

Pertussis vaccine and severe acute neurological illnesses. Response to a recent review by members of the NCES team. Miller DC, et al. **Vaccine** 1989 Dec;7(6):487–9

Cultured human brain capillary endothelial cells are permissive for infection by human cytomegalovirus. Lathey JL, et al. **Virology** 1990 May;176(1):266–73

Intracranial tuberculoma developing during therapy for tuberculous meningitis. Malone JL, et al. **West J Med** 1990 Feb;152(2):188–90

[Acute pancytopenia induced by pyrimethamine during treatment of cerebral toxoplasmosis associated with AIDS. Role of dihydrofolate reductase inhibitors] Boudes P, et al. **Ann Med Interne (Paris)** 1990;141(2):183–6 (Eng. Abstr.) **(Fre)**

[2 familial cases of homocystinuria one of which revealed by fatal hypertensive encephalopathy] Pousse H, et al. **Ann Pediatr (Paris)** 1990 Mar;37(3):189–92 (Eng. Abstr.) **(Fre)**

[Ectopic parathyroid adenoma disclosed by cortical blindness and hypercalcemic encephalopathy] Bord G, et al. **Bull Soc Ophtalmol Fr** 1988 Dec;88(12):1451–4, 1457–9

(Eng. Abstr.) (Fre)
[Treatment of post-hemorrhagic hepatic encephalopathy in patients with cirrhosis] Doffoël M, et al. **Gastroenterol Clin Biol** 1990;14(1 (Pt 2)):29B-33B (41 ref.) (Fre)
[Isolated cerebral calcifications after prophylactic treatment of cerebromeningeal involvement of acute lymphoblastic leukemia: relation of psycho-intellectual sequelae] Rejou F, et al. **Pediatrie** 1989;44(5):405-11 (Eng. Abstr.) (Fre)
[Diabetes insipidus in a case of Behçet's disease with neurologic manifestations (letter)] Hamza M, et al. **Presse Med** 1989 Oct 28;18(35):1755 (Fre)
[Lymphomatoid granuiomatosis with a neurologic manifestation (letter)] Kelkel E, et al. **Presse Med** 1989 Oct 14;18(33):1664 (Fre)
[Neurologic manifestations of atrophic polychondritis (letter)] Netter JM, et al. **Presse Med** 1989 Oct 7; 18(31):1525-6 (Fre)
[Loss of psychic self-activation] Laplane D. **Rev Neurol (Paris)** 1990;146(6-7):397-404 (32 ref.) (Eng. Abstr.) (Fre)
[Cerebral functional disorders after mountain climbing at extreme altitudes] Huber M, et al. **Dtsch Med Wochenschr** 1990 Apr 27;115(17):679 (Ger)
[Sequelae of alcoholism. Neurologic diseases caused by chronic alcohol consumption] Diener HC. **Med Monatsschr Pharm** 1990 Feb;13(2):38-40 (Ger)
[Cerebral involvement in Whipple's disease] Niederstadt T, et al. **ROFO** 1990 Mar;152(3):336-9 (Eng. Abstr.) (Ger)
[Cerebral toxoplasmosis in subjects with acquired immunodeficiency syndrome] Orefice G, et al. **Riv Neurol** 1989 May-Jun;59(3):89-93 (Eng. Abstr.) (Ita)
[Arteriovenous malformation associated with cyst. Case report] Takifuji K, et al. **Neurol Med Chir (Tokyo)** 1989 Apr;29(4):338-41 (12 ref.) (Eng. Abstr.) (Jpn)
[A case report of multiple intracranial tuberculoma associated with miliary tuberculosis and review of the literature] Kamai K, et al. **No To Shinkei** 1989 Dec;41(12):1245-50 (Eng. Abstr.) (Jpn)
[A case of delayed postanoxic encephalopathy with bilateral lesions of the corpus striatum] Yoshida T. **Seishin Shinkeigaku Zasshi** 1989;91(5):303-17 (Eng. Abstr.) (Jpn)
[Slit-ventricle syndrome in the treatment of hydrocephalus in children] Mandat K, et al. **Neurol Neurochir Pol** 1989 Jan;23(1):52-7 (21 ref.) (Pol)
[Gliosis of the brain in Recklinghausen's neurofibromatosis] Konstantinov GS. **Arkh Patol** 1989;51(12):64-6 (Eng. Abstr.) (Rus)
[Lesions of the central nervous system in systemic lupus erythematosus in the computerized-tomographic image] Ivanova MM, et al. **Klin Med (Mosk)** 1989 Dec;67(12):93-7 (Eng. Abstr.) (Rus)
[The postresuscitation changes in the permeability of the hemato-encephalic barrier and their possible pathogenetic significance] Gannushkina IV, et al. **Patol Fiziol Eksp Ter** 1990 May-Jun;(3):13-6 (Eng. Abstr.) (Rus)
[Neurologic manifestations of HIV infection in an infant] Echeverría Lecuona J, et al. **An Esp Pediatr** 1990 Jan; 32(1):88-9 (Spa)
[Prognostic factors of neurosensory sequelae in extremely premature infants] Rosell Arnold E, et al. **An Esp Pediatr** 1990 Mar;32(3):197-201 (Eng. Abstr.) (Spa)
[Hypercalcemic encephalopathy. Initial manifestation of sarcoidosis (letter)] Rivera Civico JM, et al. **Med Clin (Barc)** 1989 Sep 16;93(7):279 (Spa)
[Thrombotic thrombocytopenic purpura: neurologic aspects] Fernández O, et al. **Neurologia** 1987 Sep-Oct;2(5):235-9 (Eng. Abstr.) (Spa)
[Boxing and the brain] García-Albea E. **Neurologia** 1990 Apr; 5(4):113-6 (Spa)

GENETICS

Deletion mutants are functionally dominant over wild-type mitochondrial genomes in skeletal muscle fiber segments in mitochondrial disease. Shoubridge EA, et al. **Cell** 1990 Jul 13;62(1):43-9
Importance of hereditary disease at a Neuropsychiatric Institute in Mexico City. Alonso ME, et al. **Genet Epidemiol** 1989;6(5):589-95
Edematous changes in the central nervous system of zitter rats with genetic spongiform encephalopathy. Gomi H, et al. **J Neuropathol Exp Neurol** 1990 May;49(3):250-9
Hereditary cerebral hemorrhage with amyloidosis--Dutch type. Tc-99m HM-PAO single photon emission computed tomography. Haan J, et al. **Neuroradiology** 1990;32(2):142-5
Genetic influences on brain growth restriction induced by development exposure to alcohol. Goodlett CR, et al. **Neurotoxicology** 1989 Fall;10(3):321-34
[Cerebrotendinous xanthomatosis. Apropos of a case using magnetic resonance study of the brain and nerve biopsy (letter)] Amiel H, et al. **Ann Med Interne (Paris)** 1989; 140(6):525-7 (Fre)
[Hereditary amyloid angiopathy--clinical and genetic aspects] Geltner D. **Harefuah** 1990 Jan 15;118(2):95-7 (32 ref.) (Heb)
[Analysis of the metacarpophalangeal pattern profile in a male with cerebral gigantism (Sotos syndrome)] Oliván Gonzalvo G, et al. **An Esp Pediatr** 1990 May;32(5):455-6 (Spa)
[Multicystic encephalomalacia in twin pregnancies] Sans Fito A, et al. **An Esp Pediatr** 1990 Feb;32(2):163-6 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Tumor-necrosis factor and other cytokines in cerebral malaria: experimental and clinical data. Grau GE, et al. **Immunol Rev** 1989 Dec;112:49-70 (77 ref.)
Antibodies to the metacestode of Taenia solium in the saliva from patients with neurocysticercosis. Acosta E. **J Clin Lab Anal** 1990;4(2):90-4
Assessment of human natural killer and lymphokine-activated killer cell cytotoxicity against Toxoplasma gondii trophozoites and brain cysts. Dannemann BR, et al. **J Immunol** 1989 Oct 15; 143(8):2684-91
Immunoglobulin light chain patterns in the cerebrospinal fluid. A study with special reference to the occurrence of free light chains in cerebrospinal fluid with and without oligoclonal immunoglobulin G. Gallo P, et al. **J Neurol Sci** 1989 Dec;94(1-3):241-53
Herpes simplex virus type I infection of the CNS induces major histocompatibility complex antigen expression on rat microglia. Weinstein DL, et al. **J Neurosci Res** 1990 May; 26(1):55-65
Autoimmune etiology for cranial dystonia [letter] Nilaver G, et al. **Mov Disord** 1990;5(2):179-80
Complement-activated oligodendroglia: a new pathogenic entity identified by immunostaining with antibodies to human complement proteins C3d and C4d. Yamada T, et al. **Neurosci Lett** 1990 May 4;112(2-3):161-6
Cerebral lesions in mice infected with Plasmodium berghei are the result of an immunopathological reaction. Schetters T, et al. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:103-4
[Indicators of the autoimmune component in newborn infants with pathology of the central nervous system] Ivanova OV, et al. **Pediatriia** 1989;(9):110 (Rus)
[A method of determining the infectious titer of the agent causing amyotrophic leukospongiosis] Votiakov VI, et al. **Vopr Virusol** 1989 May-Jun;34(3):369-74 (Rus)
[Brain barriers and the problem of autoimmunity in neurology] Nadareishvili ZG, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):3-7 (Eng. Abstr.) (Rus)
[Integrity of the blood-brain barrier and intrathecal synthesis of IgG in parenchymatous and subarachnoid cerebral cysticercosis] Estañol Vidal B, et al. **Rev Invest Clin** 1989 Oct-Dec;41(4):327-30 (Eng. Abstr.) (Spa)

METABOLISM

Transport of calcium and other metals across the blood-brain barrier: mechanisms and implications for neurodegenerative disorders. Smith QR. **Adv Neurol** 1990;51:217-22 (41 ref.)
Choline metabolism in cholinergic neurons: implications for the pathogenesis of neurodegenerative diseases. Wurtman RJ, et al. **Adv Neurol** 1990;51:117-25 (27 ref.)
Immunohistochemical study of cerebral amyloid angiopathy. III. Widespread Alzheimer A4 peptide in cerebral microvessel walls colocalizes with gamma trace in patients with leukoencephalopathy. Vinters HV, et al. **Ann Neurol** 1990 Jul;28(1):34-42
Brain damage and recovery in hyperphenylalaninemic rats. Burri R, et al. **Dev Neurosci** 1990;12(2):116-25
Calcium in the brain under physiological and pathological conditions. Siesjö BK. **Eur Neurol** 1990;30 Suppl 2:3-9; discussion 39-41 (58 ref.)
Clinical MRS studies of the brain. Hubesch B, et al. **Invest Radiol** 1989 Dec;24(12):1039-42
Transient hypoxia alters striatal catecholamine metabolism in immature brain: an in vivo microdialysis study. Gordon K, et al. **J Neurochem** 1990 Feb;54(2):605-11
Mitochondrial encephalomyopathy with pilovacuolar inclusion or phenocopy with mitochondrial artefact? Paulus W, et al. **J Neurol** 1989 Sep;236(6):361-3
Distribution of the protease inhibitor alpha 1-antichymotrypsin in cerebral and systemic amyloid. Picken MM, et al. **J Neuropathol Exp Neurol** 1990 Jan; 49(1):41-8
Denervation and hyperinnervation in the nervous system of diabetic animals: III. Functional alterations of G proteins in diabetic encephalopathy. Abbracchio MP, et al. **J Neurosci Res** 1989 Dec;24(4):517-23
High-resolution NMR spectroscopy of cerebral white matter in multiple sclerosis. Sappey-Marinier D. **Magn Reson Med** 1990 Aug;15(2):229-39
Positron emission tomography in neuropsychiatric lupus erythematosus. Stoppe G, et al. **Neurology** 1990 Feb; 40(2):304-8
Endothelin-triggered brain damage under hypoglycemia evidenced by real-time monitoring of dopamine release from rat striatal slices. Kataoka Y, et al. **Neurosci Lett** 1989 Dec 15;107(1-3):75-80
A study of serum antidiuretic hormone and atrial natriuretic peptide levels in a series of patients with intracranial disease and hyponatremia. Weinand ME, et al. **Neurosurgery** 1989 Nov;25(5):781-5
In vivo multinuclear magnetic resonance spectroscopy investigations of cerebral development and metabolic encephalopathy using neonatal animal models. Corbett RJ. **Semin Perinatol** 1990 Jun;14(3):258-71 (99 ref.)
[Pulmonary encephalopathy and disturbance in amino acids metabolism] Xu Y, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Mar;28(3):156-9, 186-7 (Eng. Abstr.) (Chi)

MICROBIOLOGY

Electroencephalography in tetanus. Luisto M, et al. **Acta Neurol Scand** 1989 Aug;80(2):157-61
Bovine spongiform encephalopathy [letter] **BMJ** 1990 Apr 7;300(6729):943-4
Multiple cerebral hydatid cysts: report of two cases. Iplikçioğlu AC, et al. **Br J Neurosurg** 1989;3(2):217-9
Cerebral amyloid in mice with Creutzfeldt-Jakob disease is influenced by the strain of the infectious agent. Kitamoto T, et al. **Brain Res** 1990 Jan 29;508(1):165-7
Fantasy of a "virus" from the inorganic world: pathogenesis of cerebral amyloidoses by polymer nucleating agents and/or "viruses". Gajdusek DC. **Hamatol Bluttransfus** 1989;32:481-99 (171 ref.)
Selective spread of herpes simplex virus in the central nervous system after ocular inoculation. Margolis TP, et al. **J Virol** 1989 Nov;63(11):4756-61
Cerebral granuloma and meningitis caused by Candida albicans: useful monitoring of mannan antigen in cerebrospinal fluid. Ikeda K, et al. **Neurosurgery** 1990 May; 26(5):860-3
Cerebral aspergillosis after burr-hole surgery for chronic subdural hematoma: case report. Morioka T, et al. **Neurosurgery** 1990 Feb;26(2):332-5
Identification of the major genetic determinant for neurovirulence of tick-borne orbiviruses. Nuttall PA, et al. **Virology** 1989 Oct;172(2):428-34
[Rhinocerebral mucormycosis. Apropos of a case] Escalante Avila A, et al. **Acta Otorrinolaringol Esp** 1989 Jan-Feb; 40(1):51-2 (Eng. Abstr.) (Spa)
[Rhinocerebral mucormycosis] García Fernández E, et al. **Acta Otorrinolaringol Esp** 1989 Jan-Feb;40(1):53-5 (Eng. Abstr.) (Spa)

MORTALITY

Cerebral malaria. Factors affecting outcome of treatment in a suboptimal clinical setting. Endeshaw Y, et al. **J Trop Med Hyg** 1990 Feb;93(1):44-7

PARASITOLOGY

Disseminated human neurocysticercosis. A morphologic analysis of two cases. Thomas JA, et al. **Acta Neuropathol (Berl)** 1989;78(6):594-604
AIDS and Chagas' disease with central nervous system tumor-like lesion. Del Castillo M, et al. **Am J Med** 1990 Jun;88(6):693-4
Molecular studies related to the pathogenesis of cerebral malaria. Howard RJ, et al. **Blood** 1989 Dec;74(8):2603-18 (108 ref.)
Naegleria australiensis ssp. italica: experimental study in mice. Scaglia M, et al. **Exp Parasitol** 1989 Oct;69(3):294-9
Reply from authors. Praziquantel in neurocysticercosis [letter] Misra SC, et al. **J Assoc Physicians India** 1989 May; 37(5):352-3
Clinical features and prognostic indicators in paediatric cerebral malaria: a study of 131 comatose Malawian children [see comments] Molyneux ME, et al. **Q J Med** 1989 May;71(265):441-59 Comment in: Q J Med 1989 May;71(265):369-71.
Cerebral malaria [editorial; comment] Warrell DA. **Q J Med** 1989 May;71(265):369-71 Comment on: Q J Med 1989 May;71(265):441-59.
Racemose cysticercosis treated with praziquantel. Baily GG, et al. **Trans R Soc Trop Med Hyg** 1989 Jan-Feb;83(1):95-6
[Growth of a cerebral hydatid cyst evaluated by CT study] Arboix A, et al. **Neurologia** 1988 Jan-Feb;3(1):31-4 (Eng. Abstr.) (Spa)

PATHOLOGY

A case of late onset striatonigral degeneration. Przedborski S, et al. **Acta Neurol Belg** 1989 Jan-Feb;89(1):29-37
Meeting on mitochondrial pathology in neuromuscular diseases. Naples, January 26, 1989. Proceedings. **Acta Neurol (Napoli)** 1989 Oct;11(5):297-368 (Eng, Ita)
Second Northern Lights Neuroscience Symposium on the Pathology of Alzheimer's Disease. Hanasaari, Espoo, Finland, June 17-19, 1988. Abstracts. **Acta Neurol Scand** 1989 Aug;80(2):170-92
Golgi-like demonstration of "dark" neurons with an argyrophil III method for experimental neuropathology. Gallyas F, et al. **Acta Neuropathol (Berl)** 1990;79(6):620-8
Inhomogeneity of the putaminal lesion in striatonigral degeneration. Goto S, et al. **Acta Neuropathol (Berl)** 1990; 80(2):204-7
Immunohistochemical visualization of afferent nerve terminals in human globus pallidus and its alteration in neostriatal neurodegenerative disorders. Goto S, et al. **Acta Neuropathol (Berl)** 1989;78(5):543-50
Ultracytochemical localization of Ca2+-ATPase activity in reactive astrocytes. Kawai K, et al. **Acta Neuropathol (Berl)** 1989;78(5):449-54
Loss of neurons in the frontal cortex in AIDS brains. Ketzler S, et al. **Acta Neuropathol (Berl)** 1990;80(1):92-4
Cytomegalovirus (CMV) disease of the brain in AIDS and connatal infection: a comparative study by histology, immunocytochemistry and in situ DNA hybridization

[published erratum appears in Acta Neuropathol (Berl) 1990;79(5):579] Schmidbauer M, et al. **Acta Neuropathol (Berl)** 1989;79(3):286–93

Involvement of extraocular muscle in mitochondrial encephalomyopathy. Takeda S, et al. **Acta Neuropathol (Berl)** 1990;80(2):118–22

Susceptibility of brain cells to murine cytomegalovirus infection in the developing mouse brain. Tsutsui Y, et al. **Acta Neuropathol (Berl)** 1989;79(3):262–70

Magnetic resonance imaging of the brain and brain–stem in elderly patients with dizziness. Day JJ, et al. **Age Ageing** 1990 Mar;19(2):144–50

Colloid cysts of the third ventricle: correlation of MR and CT findings with histology and chemical analysis. Maeder PP, et al. **AJNR** 1990 May;11(3):575–81

The pathology of human cerebral malaria. Aikawa M, et al. **Am J Trop Med Hyg** 1990 Aug;43(2 Pt 2):30–7 (17 ref.)

Is conjunctival biopsy useful for diagnosis of neuroaxonal dystrophy? [letter] Crisci C, et al. **Ann Neurol** 1989 Nov; 26(5):691

Pathogenesis of ring–haemorrhage in cerebral malaria. Oo MM, et al. **Ann Trop Med Parasitol** 1989 Oct;83(5):555–7

Osmotic stress, osmotic myelinolysis, and oligodendrocyte topography. Riggs JE, et al. **Arch Pathol Lab Med** 1989 Dec;113(12):1386–8

Neuropathology of HIV infection in haemophiliacs: comparative necropsy study. Esiri MM, et al. **BMJ** 1989 Nov 25;299(6711):1312–5

A low cost system for performing CT stereotaxic brain biopsy. Bell BA, et al. **Br J Neurosurg** 1989;3(5):561–8

Xanthogranuloma of the choroid plexus of lateral ventricle, presenting with parosmia and parageusia. Rutherfoord GS, et al. **Br J Neurosurg** 1987;1(2):285–8

Mapping of brainstem lesions by the combined use of tests of visually–induced eye movements. Kato I, et al. **Brain** 1990 Aug;113 (Pt 4):921–35

Myelination as a parameter of normal and retarded brain maturation. Dambska M, et al. **Brain Dev** 1990;12(2):214–20

Quantitative neuropathology. **Can Med Assoc J** 1968 Sep 14;99(10):504–5

Idiopathic familial cerebrovascular ferrocalcinosis. Zhang XZ, et al. **Chin Med J [Engl]** 1989 Jun;102(6):453–6

Posterior cortical atrophy. Delamont RS, et al. **Clin Exp Neurol** 1989;26:225–7

Histological description of tomographic images of Taenia solium cysticerci in pig brains [see comments] de Aluja AS, et al. **Clin Imaging** 1989 Dec;13(4):292–8 Comment in: Clin Imaging 1989 Dec;13(4):333.

Unsuspected cerebral Toxocara infection in a fire victim. Nelson J, et al. **Clin Neuropathol** 1990 Mar–Apr;9(2):106–8

Mental retardation syndrome with renal concentration deficiency and intracerebral calcification. Schofer O, et al. **Eur J Pediatr** 1990 Apr;149(7):470–4

Cerebral glycogenosis, alpha particle type: morphologic and biochemical observations in an infant. Towfighi J, et al. **Hum Pathol** 1989 Dec;20(12):1210–5

Brain histomorphology in protein deprived rhesus monkeys with fatal malarial infection. Tatke M, et al. **Indian J Med Res** 1989 Nov;89:404–10

Incidental white matter hyperintensities on magnetic resonance imaging in HIV–1 infection. Multicenter AIDS Cohort Study. McArthur JC, et al. **J Acquir Immune Defic Syndr** 1990;3(3):252–9

Cerebral aspergillosis in liver transplantation. Boon AP, et al. **J Clin Pathol** 1990 Feb;43(2):114–8

Neurocysticercosis with rare presentations. Mandal DK, et al. **J Indian Med Assoc** 1989 Jun;87(6):142–4

Eye involvement in cerebral malaria [letter] Mahdi AA, et al. **J Infect Dis** 1989 Dec;160(6):1092–3

Pathologic findings in brains of patients with focal epileptic seizures who had a craniotomy procedure. Wee AS, et al. **J Miss State Med Assoc** 1990 Jul;31(7):219–21

Diffuse Lewy body disease in Japan. Kosaka K. **J Neurol** 1990 Jun;237(3):197–204 (61 ref.)

Amyloidosis of the nervous system. Glenner GG, et al. **J Neurol Sci** 1989 Dec;94(1–3):1–28 (164 ref.)

Intracerebral distribution of mitochondrial abnormalities in 21 cases of infantile spongy dystrophy. Paulus W, et al. **J Neurol Sci** 1990 Jan;95(1):49–62

Hippocampal damage associated with prolonged glucocorticoid exposure in primates. Sapolsky RM, et al. **J Neurosci** 1990 Sep;10(9):2897–902

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 20–1990. A 16–year–old boy with a lesion of the left frontal lobe. **N Engl J Med** 1990 May 17;322(20):1446–58

Histopathology of cystic cavities in the cerebral white matter of HTX rats with inherited hydrocephalus. Yoshida Y, et al. **Neurol Med Chir (Tokyo)** 1990 Apr;30(4):229–33

Neurocysticercosis [letter; comment] **Neurology** 1990 Mar; 40(3 Pt 1):563–4 Comment on: Neurology 1989 May;39(5):739–41.

Cortical–basal ganglionic degeneration. Riley DE, et al. **Neurology** 1990 Aug;40(8):1203–12

Intracranial calcified deposits in neurofibromatosis type 2. A CT study of 11 cases. Mayfrank L, et al. **Neuroradiology** 1990;32(1):33–7 (14 ref.)

Primary intracerebral plasma cell granuloma: a light, immunocytochemical, and ultrastructural study of one case. Figarella–Branger D, et al. **Neurosurgery** 1990 Jul; 27(1):142–7 (30 ref.)

31P magnetic resonance spectroscopy of the human paediatric liver. Iles RA, et al. **NMR Biomed** 1990 Apr; 3(2):90–4

Brain MR in patients with Langerhans cell histiocytosis: findings and enhancement with Gd–DTPA. Rosenfield NS, et al. **Pediatr Radiol** 1990;20(6):433–6

Human cortical neuronal cell line: establishment from a patient with unilateral megalencephaly. Ronnett GV, et al. **Science** 1990 May 4;248(4955):603–5

Plasma cell granuloma of the brain. Gochman GA, et al. **Surg Neurol** 1990 May;33(5):347–52

[Muscle and brain biopsy in a case of mitochondrial encephalomyopathy. Demonstration of a mitochondrial vasculopathy] Coquet M, et al. **Ann Pathol** 1990;10(3):181–6 (Eng. Abstr.) **(Fre)**

[Isolated involvement of the central nervous system in cysticercosis. Anatomo–clinical study of a case] Hoffman P, et al. **Ann Pathol** 1990;10(2):122–5 (Eng. Abstr.) **(Fre)**

[Malignant transformation of an intracranial epidermoid cyst] Michenet P, et al. **Ann Pathol** 1989;9(5):360–2 (Eng. Abstr.) **(Fre)**

[Electron microscopic changes in the central nervous system in experimental lymphogenous encephalopathy. III. The changes revealed by electron optics in the central nervous system in pantothenic acid/pyridoxine deficiency] Joó F, et al. **Angiologica** 1967;4(5):271–8 **(Ger)**

[Diffuse primary non–Hodgkin's lymphoma of the central nervous system] Heye N, et al. **Nervenarzt** 1990 Feb; 61(2):116–9 **(Ger)**

[CT–guided puncture biopsies of cystic processes in the cerebral and spinal areas] Molsen HP, et al. **Radiol Diagn (Berl)** 1989;30(3):300–6 (Eng. Abstr.) **(Ger)**

[Changes in dendrites in disease and aging] Frýdl V, et al. **ZFA** 1989 Nov–Dec;44(6):345–52, 358 (48 ref.) (Eng. Abstr.) **(Ger)**

[Neuropathology of the acquired immunodeficiency syndrome] Casadei GP, et al. **Pathologica** 1989 Sep–Oct; 81(1075):481–98 (Eng. Abstr.) **(Ita)**

[Mitochondrial encephalomyopathy] Scarlato G, et al. **Recenti Prog Med** 1989 Dec;80(12):665–72 (Eng. Abstr.) **(Ita)**

[The cause of paradoxical growth of intracranial tuberculomas during anti–tuberculous chemotherapy] Niimi A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Nov;27(11):1300–8 (37 ref.) (Eng. Abstr.) **(Jpn)**

[Histological diagnosis of brain tumors: (9) Dermoid, epidermoid] Kobayashi T. **No Shinkei Geka** 1990 Feb; 18(2):115–20 (21 ref.) **(Jpn)**

[Acute encephalopathy with symmetrical, widespread, edematous and necrotic lesions—an autopsy case report] Mizuguchi M, et al. **No To Shinkei** 1989 Aug;41(8):789–94 (Eng. Abstr.) **(Jpn)**

[Multicystic encephalomalacia in an adult—a case report] Sunada Y, et al. **Rinsho Shinkeigaku** 1989 Oct;29(10):1261–4 (Eng. Abstr.) **(Jpn)**

[Morphological changes in experimental amyotrophic leukospongiosis] Duboĭskaia GP, et al. **Arkh Patol** 1989; 51(8):57–61 (Eng. Abstr.) **(Rus)**

[The hypothalamus in neurosurgical patients (pathologo–anatomic and clinico–electroencephalographic correlations)] Medvedev IuA, et al. **Arkh Patol** 1989; 51(6):37–43 (Eng. Abstr.) **(Rus)**

[Features of senile cerebral amyloidosis] Sekamova SM, et al. **Arkh Patol** 1989;51(9):42–8 (Eng. Abstr.) **(Rus)**

[Sarcoidosis with involvement of the brain matter and meninges] Kalinichev GA, et al. **Sov Med** 1990;(4):115–8 **(Rus)**

[Encephalopathy of the acquired immunodeficiency syndrome (AIDS) in childhood. A clinicopathological study] Ferrer I, et al. **Neurologia** 1987 Jul–Aug;2(4):180–6 (Eng. Abstr.) **(Spa)**

[Aphasia of deep localization] Saggese JA, et al. **Neurologia** 1989 Sep;4(7):233–7 (Eng. Abstr.) **(Spa)**

[Growth of cerebral hydatid cysts (letter)] Vaquero J, et al. **Neurologia** 1988 Jul–Aug;3(4):167 **(Spa)**

PHYSIOPATHOLOGY

The effects of an extradural expanding lesion on regional intracranial pressure, blood flow, somatosensory conduction and brain herniation: an experimental study in baboons. Nitta M, et al. **Acta Neurochir (Wien)** 1990; 104(1–2):30–7

Kluver–Bucy syndrome. A case report. Fragassi NA, et al. **Acta Neurol (Napoli)** 1990 Apr;12(2):138–42

Intellectual impairment with regional cerebral dysfunction after low neonatal cerebral blood flow. Lou HC, et al. **Acta Paediatr Scand Suppl** 1989;360:72–82

The effect of mild hyperthermia and hypothermia on brain damage following 5, 10, and 15 minutes of forebrain ischemia. Minamisawa H, et al. **Ann Neurol** 1990 Jul; 28(1):26–33

Unilateral brain–stem lesions [letter; comment] Anderson DC. **Arch Neurol** 1990 Jan;47(1):11 Comment on: Arch Neurol 1989 Mar;46(3):295–9.

Hypothermia in a case of hypothalamic infarction and sarcoidosis. Branch EF, et al. **Arch Neurol** 1971 Sep; 25(3):245–55

Regional cerebral blood flow in patients with leuko–araiosis and atherosclerotic carotid artery disease. Herholz K, et al. **Arch Neurol** 1990 Apr;47(4):392–6

Probe–evoked potential findings following unilateral left–hemisphere lesions in children. Papanicolaou AC, et al. **Arch Neurol** 1990 May;47(5):562–6

Evoked potential studies in mitochondrial encephalomyopathy. Tsuji S, et al. **Arch Neurol** 1990 Apr; 47(4):465–7

Non–epileptic myoclonus and mitochondrial encephalomyopathy. Cukiert A, et al. **Arq Neuropsiquiatr** 1989 Sep;47(3):346–51

Psychiatry and the frontal lobes. Russell JD, et al. **Aust N Z J Psychiatry** 1990 Mar;24(1):113–32 (142 ref.)

CNS growth factors. Logan A. **Br J Hosp Med** 1990 Jun; 43(6):428–37 (71 ref.)

EEG findings in chlor–alkali workers subjected to low long term exposure to mercury vapour. Piikivi L, et al. **Br J Ind Med** 1989 Jun;46(6):370–5

Premotor cortex and conditional motor learning in man. Halsband U, et al. **Brain** 1990 Feb;113 (Pt 1):207–22

Visuospatial processes of line bisection and the mechanisms underlying unilateral spatial neglect. Ishiai S, et al. **Brain** 1989 Dec;112 (Pt 6):1485–502

Cerebral control of directed visual attention and orienting saccades. Nagel–Leiby S, et al. **Brain** 1990 Feb;113 (Pt 1):237–76

Effects of brainstem lesions on the masseter inhibitory reflex. Functional mechanisms of reflex pathways. Ongerboer de Visser BW, et al. **Brain** 1990 Jun;113 (Pt 3):781–92

Processing of local and global musical information by unilateral brain–damaged patients. Peretz I. **Brain** 1990 Aug;113 (Pt 4):1185–205

Furtive incursions into bicameral minds. Integrative and coordinating role of subcortical structures. Sergent J. **Brain** 1990 Apr;113 (Pt 2):537–68

Auditory brainstem responses in patients with neonatal hyperbilirubinemia and bilirubin encephalopathy. Hung KL. **Brain Dev** 1989;11(5):297–301

Muscle–eye–brain disease (MEB) [letter; comment] Merton WL, et al. **Brain Dev** 1990;12(2):274 Comment on: Brain Dev 1989;11(3):147–53.

Ibotenic acid–induced nigral lesion and limbic seizure in cats. Tanaka T, et al. **Brain Res** 1989 Oct 2;498(2):215–20

Isolated angiitis of the central nervous system in childhood. Matsell DG, et al. **Can J Neurol Sci** 1990 May;17(2):151–4

Ventral brain–stem compression from a subarachnoid ependymal cyst. Warf BC, et al. **Childs Nerv Syst** 1990 Jun;6(4):225–7

Technical and clinical aspects of topographic brain mapping. Hooshmand H, et al. **Clin Electroencephalogr** 1989 Oct; 20(4):235–47

Electroencephalographic abnormalities in patients with normal contrast computerised axial tomography brain scans. Synek VM, et al. **Clin Exp Neurol** 1987;24:159–67

Temporary remission of left hemianesthesia after vestibular stimulation. A sensory neglect phenomenon. Vallar G, et al. **Cortex** 1990 Mar;26(1):123–31

Plateau waves due to carbon dioxide production in a patient with hypoxic encephalopathy [letter] Gando S, et al. **Crit Care Med** 1989 Oct;17(10):1083–4

Preliminary observations on cerebral malaria in Nigerian children. Ikpatt NW, et al. **East Afr Med J** 1990 May; 67(5):341–7

Rocky Mountain Conference on Modern Clinical Neurophysiology, Western EEG Society, Eastern EEG Association, European Alpine EEG Group joint meeting. Park City, UT, 29 January–3 February 1989. Abstracts. **Electroencephalogr Clin Neurophysiol** 1990 Feb; 75(2):4P–10P

Abstracts of the XIIth International Congress of Electroencephalography and Clinical Neurophysiology. Rio de Janeiro, Brazil, January 14–19, 1990. **Electroencephalogr Clin Neurophysiol** 1990 Jan; 75(1):S1–165

Dutch Society for EEG and Clinical Neurophysiology. Utrecht, 7 October 1989. **Electroencephalogr Clin Neurophysiol** 1990 Apr; 75(4):33P–34P

The EEG Society. London, 2–3 February 1990. Abstracts. **Electroencephalogr Clin Neurophysiol** 1990 Aug; 76(2):28P–32P

Western EEG Society, annual meeting. Santa Monica, CA, 15–16 February 1990. Abstracts. **Electroencephalogr Clin Neurophysiol** 1990 Aug; 76(2):33P–36P

Deficits of thermal sensation in patients with unilateral cerebral lesions. Adams RW, et al. **Electroencephalogr Clin Neurophysiol** 1989 Nov; 73(5):443–52

Pathways of descending influence on H reflex during sleep. Shimizu A, et al. **Electroencephalogr Clin Neurophysiol** 1966 Apr;20(4):337–47

"Whole brain" politics and brain laterality research. Harrington A, et al. **Eur Arch Psychiatry Neurol Sci** 1989; 239(3):141–3

Effects of profound sensorineural loss on gerbilline auditory encephalopathy. Moore HC, et al. **Hear Res** 1990 May; 45(3):253–64

Auditory brain stem response and electrically elicited blink reflex in handicapped children. Tanaka J, et al. **J Child Neurol** 1990 Jan;5(1):40–4

Periodic EEG patterns: classification, clinical correlation, and pathophysiology. Brenner RP, et al. **J Clin Neurophysiol** 1990 Apr;7(2):249–67 (73 ref.)

Unusual EEG patterns. Westmoreland BF, et al. **J Clin Neurophysiol** 1990 Apr;7(2):209–28 (65 ref.)

Intracranial tuberculoma. Dao DA, et al. **J Ky Med Assoc** 1990 Mar;88(3):121-4

Cerebrotendinous xanthomatosis: clinical, electrophysiological and nerve biopsy findings, and response to treatment with chenodeoxycholic acid. Donaghy M, et al. **J Neurol** 1990 Jun;237(3):216-9 (20 ref.)

Extensive cerebral calcification and retinal changes in pseudohypoparathyroidism. Ellie E, et al. **J Neurol** 1989 Oct;236(7):432-4

Crying and laughing after brain damage: a confused nomenclature [letter] Allman P. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1439-40

Circadian rhythms in the body temperatures of intensive care patients with brain lesions. Dauch WA, et al. **J Neurol Neurosurg Psychiatry** 1990 Apr;53(4):345-7

Late onset cerebello-pontomesencephalic degeneration. al-Din AS, et al. **J Neurol Sci** 1989 Nov;93(2-3):323-31

Changes in striatal dopamine neurotransmission assessed with microdialysis following recovery from a bilateral 6-OHDA lesion: variation as a function of lesion size. Castañeda E, et al. **J Neurosci** 1990 Jun;10(6):1847-54

The effect of a brain lesion on bone healing. Spencer RF, et al. **J Orthop Res** 1990 Sep;8(5):646-50

Epileptic seizures in a patient with mitochondrial myopathy, encephalopathy, lactic acidosis and strokelike episodes (MELAS). Hori A, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):536-7

Continued administration of GM1 ganglioside is required to maintain recovery from neuroleptic-induced sensorimotor deficits in MPTP-treated mice. Weihmuller FB, et al. **Life Sci** 1989;45(25):2495-502

Broca's area aphasias: aphasia after lesions including the frontal operculum. Alexander MP, et al. **Neurology** 1990 Feb;40(2):353-62

Prolonged postictal encephalopathy. Biton V, et al. **Neurology** 1990 Jun;40(6):963-6

The pretectal syndrome: 206 patients. Keane JR. **Neurology** 1990 Apr;40(4):684-90

Cerebral blood flow variations in CNS lupus. Kushner MJ, et al. **Neurology** 1990 Jan;40(1):99-102

Cerebral hemispheric localization of smooth pursuit asymmetry. Morrow MJ, et al. **Neurology** 1990 Feb; 40(2):284-92

Detection of early abnormalities in the mucopolysaccharidoses by the use of visual and brainstem auditory evoked potentials. Perretti A, et al. **Neuropediatrics** 1990 May;21(2):83-6

Experimental study of continuous cerebral blood flow monitoring by the temperature-controlled thermoelectrical tissue blood flow meter. Sakamoto T, et al. **Neurosurg Rev** 1989;12 Suppl 1:377-81

Slit-like ventricles and intracranial pressure [letter; comment] Rapoport A, et al. **Neurosurgery** 1989 Oct;25(4):667 Comment on: Neurosurgery 1988 Mar;22(3):594-5.

Raised intracranial pressure. Clezy JK. **P N G Med J** 1989 Dec;32(4):287-90

Acetazolamide effect on cerebellar blood flow in crossed cerebral-cerebellar diaschisis. Bogsrud TV, et al. **Stroke** 1990 Jan;21(1):52-5

Auditory evoked brainstem potentials in acute posterior fossa mass lesions. MacKay A, et al. **Surg Forum** 1978;29:523-5

Compensations after lesions of central dopaminergic neurons: some clinical and basic implications. Zigmond MJ, et al. **Trends Neurosci** 1990 Jul;13(7):290-6 (40 ref.)

[Arguments for cerebral dysfunction in obsessive-compulsive disorder. A review and synthesis of the literature] Hantouche E, et al. **Encephale** 1990 Jan-Feb;16(1):23-30 (66 ref.) (Eng. Abstr.) (Fre)

[Anomalies in early somatosensory evoked potentials in brain stem lesions (study of 64 cases)] Convers P, et al. **Neurophysiol Clin** 1989 Dec;19(6):443-68 (Eng. Abstr.) (Fre)

[The physiopathology of supranuclear structures in oculomotor disorders] Striano S, et al. **Acta Neurol (Napoli)** 1990 Apr;12(2):151-71 (53 ref.) (Eng. Abstr.) (Ita)

[Pathophysiologic nature of dissociative states of the brain stem in lesions of the midbrain and the bridge of Varolius] Borshchagovskiĭ ML, et al. **Fiziol Cheloveka** 1989 Sep-Oct; 15(5):32-41 (Rus)

[Role of the brain stem in normal and pathologic conditions of the body] Smirnov VA. **Klin Med (Mosk)** 1989 Dec; 67(12):22-6 (22 ref.) (Rus)

[Characteristics of the vestibulo-vascular interaction in patients with chronic hypertensive encephalopathy] Luchikhin LA, et al. **Vestn Otorinolaringol** 1990 Mar-Apr; (2):30-4 (Eng. Abstr.) (Rus)

[Equilibrium function in patients with chronic encephalopathy as an indicator of compensation level in cerebral circulation insufficiency] Luchikhin LA, et al. **Vestn Otorinolaringol** 1990 Jan-Feb;(1):14-7 (Eng. Abstr.) (Rus)

[The characteristics of absorption in the small intestine of young infants with hypotrophy and encephalopathy undergoing protein-anabolic therapy] Aleksandrova NI, et al. **Vopr Pitan** 1990 Jan-Feb;(1):33-6 (Eng. Abstr.) (Rus)

[The dynamics of the superslow potential fluctuations in the decaminute range after intracranial operations] Khil'ko VA, et al. **Zh Vopr Neirokhir** 1990 Mar-Apr;(2):33-4 (Eng. Abstr.) (Rus)

[Usefulness of positron-emission tomography in the study of the central nervous system] Arquè Bertrán JM, et al. **Med Clin (Barc)** 1990 Apr 28;94(16):633-6 (44 ref.) (Spa)

PREVENTION & CONTROL

Treating hyponatremia: what is all the controversy about? Berl T. **Ann Intern Med** 1990 Sep 15;113(6):417-9 (33 ref.)

Effect of intraoperative intervention on neurological outcome based on electroencephalographic monitoring during cardiopulmonary bypass. Arom KV, et al. **Ann Thorac Surg** 1989 Oct;48(4):476-83

Ketamine, phencyclidine, and MK-801 protect against kainic acid-induced seizure-related brain damage. Clifford DB, et al. **Epilepsia** 1990 Jul-Aug;31(4):382-90

Carotid surgery under cervical block anesthesia. A simple method of heart and brain protection in high risk patients. Bergeron P, et al. **Int Angiol** 1989 Apr-Jun;8(2):70-80

Prevention of postischemic hyperthermia prevents ischemic injury of CA1 neurons in gerbils. Kuroiwa T, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):550-6

Thiopental sodium by single bolus dose compared to infusion for cerebral protection during cardiopulmonary bypass [see comments] Metz S, et al. **J Clin Anesth** 1990 Jul-Aug; 2(4):226-31 Comment in: J Clin Anesth 1990 Jul-Aug;2(4):221-5.

Reduction in radiation-induced brain injury by use of pentobarbital or lidocaine protection. Oldfield EH, et al. **J Neurosurg** 1990 May;72(5):737-44

Primate study suggests pentobarbital may help protect the brain during radiation therapy [news] Skolnick A. **JAMA** 1990 Aug 1;264(5):557, 561

Ifosfamide by continuous infusion to prevent encephalopathy [letter] Cerny T, et al. **Lancet** 1990 Jan 20;335(8682):175

Acetyl-homocysteine thiolactone protects against some neurotoxic effects of thallium. Hasan M, et al. **Neurotoxicology** 1989 Summer;10(2):257-61

Cerebrospinal fluid lactic dehydrogenase activity in children with acute lymphoblastic leukemia treated for cranial prophylaxis. Caglar MK, et al. **Paediatr Indones** 1989 May-Jun;29(5-6):112-5

Some neurological aspects of reanimatology. Negovsky VA. **Resuscitation** 1990 Jun;19(3):189-97

[The experimental and clinical use of gelatin sponges with kanamycin and gentamycin for the prevention and treatment of suppurative complications in neurosurgery] Kharitonova KI, et al. **Zh Vopr Neirokhir** 1990 May-Jun; (3):9-11 (Eng. Abstr.) (Rus)

PSYCHOLOGY

Autism: current understanding and management. Le Couteur A. **Br J Hosp Med** 1990 Jun;43(6):448-52 (75 ref.)

An unusual case of perseveration sparing body-related tasks. Denes G, et al. **Cortex** 1990 Jun;26(2):269-73

Visual neglect for far and near extra-personal space in humans. Pizzamiglio L, et al. **Cortex** 1989 Sep;25(3):471-7

A model state-level approach to family survival for caregivers of brain-impaired adults. Friss L. **Gerontologist** 1990 Feb;30(1):121-5

Neuropsychological deficits and violent behavior in incarcerated schizophrenics. Adams JJ, et al. **J Nerv Ment Dis** 1990 Apr;178(4):253-6

[A comparative study of memory using WMS-R in cases with brain damage and normal subjects] Zhang LY, et al. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Jun; 22(3):174-6, backcover (Eng. Abstr.) (Chi)

[Neuropsychological findings in children with Gilles de la Tourette syndrome] Lanser JB, et al. **Ned Tijdschr Geneeskd** 1989 Dec 16;133(50):2515-7 (Eng. Abstr.) (Dut)

[Psychopathology in early and compulsive reading] Lachal C. **Psychiatr Enfant** 1989;32(1):55-122 (33 ref.) (Eng. Abstr.) (Fre)

[The right cerebral hemisphere] Landis T, et al. **Schweiz Med Wochenschr** 1990 Mar 31;120(13):433-9 (23 ref.) (Eng. Abstr.) (Ger)

["My hand" sign associated with tactile extinction in two patients with callosal lesion] Satomi K, et al. **Rinsho Shinkeigaku** 1989 May;29(5):626-32 (Eng. Abstr.) (Jpn)

[Treatment of attack-like forms of schizophrenia in patients with residual cerebral organic insufficiency] Avrutskiĭ GIa, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):105-10 (Eng. Abstr.) (Rus)

[Characteristics of premorbid conditions in drug addicts] Genallo SP. **Zh Nevropatol Psikhiatr** 1990;90(2):42-7 (Eng. Abstr.) (Rus)

[Clinico-pathogenetic aspects of hypochondriac conditions of exogenous-organic nature and their treatment] Golodets RG, et al. **Zh Nevropatol Psikhiatr** 1990;90(2):84-9 (Eng. Abstr.) (Rus)

[Clinico-physiological analysis of psychogenic (hysterical) sensorimotor disorders] Molla-zade AN, et al. **Zh Nevropatol Psikhiatr** 1989;89(11):26-30 (Eng. Abstr.) (Rus)

[Variants of the clinical dynamics of neuroses and neurosis-like conditions of the residual-organic origin in children of pre- pubertal age] Podkorytov VS, et al. **Zh Nevropatol Psikhiatr** 1989;89(11):31-3 (Eng. Abstr.) (Rus)

[Neuropsychological study of memory in the complex clinical, psychological and neurophysiologic examination of children with schizophrenia] Simernitskaia EG, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):101-5 (Eng. Abstr.) (Rus)

[Prognostic criteria of depression] Voĭtsekh VF. **Zh Nevropatol Psikhiatr** 1990;90(4):71-5 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Organic disorders in children with epileptic seizures. Coe CJ, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Jun; 31(3):267-72

CT of intracranial cryptococcosis. Popovich MJ, et al. **AJNR** 1990 Jan-Feb;11(1):139-42

CT of intracranial cryptococcosis. Popovich MJ, et al. **AJR Am J Roentgenol** 1990 Mar;154(3):603-6

Puncture porencephaly. Pathogenesis and prevention. Salmon JH. **Am J Dis Child** 1967 Jul;114(1):72-9

Accuracy and interobserver variation in the interpretation of computed tomography in solitary brain lesions. Heimans JJ, et al. **Arch Neurol** 1990 May;47(5):520-3

Neuroradiological manifestations of the acquired immune deficiency syndrome. Loneragan R, et al. **Australas Radiol** 1990 Feb;34(1):32-9

An unusual CT appearance in multiple sclerosis. Puvaneswary M, et al. **Australas Radiol** 1989 Aug; 33(3):276-8

Epidermoid cyst of the fourth ventricle. Bret P, et al. **Br J Neurosurg** 1988;2(1):109-13

Chronic intracerebral haematoma. Lainez Andres JM, et al. **Br J Neurosurg** 1989;3(4):513-6

Spontaneous disappearance of a single large cerebral cysticercus cyst [letter] Rajshekhar V, et al. **Br J Neurosurg** 1990;4(2):161-3

Third ventricular tuberculoma: a case report. Singh JP, et al. **Br J Neurosurg** 1988;2(1):93-6

Differential diagnosis of supratentorial cystic intracranial lesions by CT-scanning. Verhagen IT, et al. **Br J Neurosurg** 1987;1(4):447-54

Focal brain lesions on computed tomography in patients with acquired immune deficiency syndrome. Harrison PB, et al. **Can Assoc Radiol J** 1990 Apr;41(2):83-6

Computed tomography of the head in children: experience with 1024 scans performed in an outpatient facility. Eelkema HH, et al. **Comput Tomogr** 1977;1(4):313-21

Leuko-araiosis: definition and clinical correlates--an overview. Prencipe M, et al. **Eur Neurol** 1989;29 Suppl 2:27-9 (15 ref.)

Clinical experience with ioversol 320 in cranial computed tomographic scanning. Sartor K, et al. **Invest Radiol** 1989 Jun;24 Suppl 1:S29-32

The efficacy and clinical impact of brain imaging in neurologically symptomatic AIDS patients: a prospective CT/MRI study. Levy RM, et al. **J Acquir Immune Defic Syndr** 1990;3(5):461-71

Prolonged symptomatology in brain tuberculoma [letter] Girija AS. **J Assoc Physicians India** 1989 Sep;37(9):618

Multifocal intracranial tumoral lesions: neuroimaging and differential diagnosis with non-oncologic pathology. Dierckx IM, et al. **J Belge Radiol** 1990 Jan;73(1):7-14

CT features of cellulosae and racemosus neurocysticercosis. Rodacki MA, et al. **J Comput Assist Tomogr** 1989 Nov-Dec;13(6):1013-6

Intracranial tuberculomas. Malhotra M, et al. **J Indian Med Assoc** 1989 Sep;87(9):213-6

CT diagnosis of cerebral cysticercosis. Bhoopat W, et al. **J Med Assoc Thai** 1989 Dec;72(12):673-81

CT findings in different stages of HIV infection: a prospective study. Möller AA, et al. **J Neurol** 1990 Apr;237(2):94-7

Appearing and disappearing CT scan abnormalities in epilepsy in India--an enigma. Bansal BC, et al. **J Neurol Neurosurg Psychiatry** 1989 Oct;52(10):1185-7

Disappearing brain lesions, psychosis and epilepsy: a report of two cases. Feinstein A, et al. **J Neurol Neurosurg Psychiatry** 1990 Mar;53(3):244-6

Intracerebral myiasis from Hypoderma bovis larva in a child. Case report. Kaleliogˇlu M, et al. **J Neurosurg** 1989 Dec; 71(6):929-31

Lead lines in young infants with acute lead encephalopathy: a reliable diagnostic test. Woolf DA, et al. **J Trop Pediatr** 1990 Apr;36(2):90-3

Neuropsychologic and CT examinations in leukemic patients surviving 10 or more years. Schuler D, et al. **Med Pediatr Oncol** 1990;18(2):123-5

Occipital lobe ependymal cyst--case report. Takeuchi T, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):417-23 (45 ref.)

Unusual CT image of a cerebral hydatid cyst. González-Ruiz CA, et al. **Pediatr Radiol** 1990;20(4):283-4

Cerebral infarct in patients with hemorrhagic shock and encephalopathy syndrome. Zureikat GY, et al. **Pediatr Radiol** 1990;20(5):301-3

Pathognomonic intracranial calcification. Kreel L. **Postgrad Med J** 1989 Jul;65(765):476-7

Computed tomography-guided and stereotactic techniques in the diagnosis and treatment of cerebral tuberculoma. Blaauw G, et al. **Surg Neurol** 1990 Sep;34(3):179-83

Multiple primary hydatid cysts of the brain. Paşaoğlu A, et al. **Turk J Pediatr** 1989 Jan-Mar;31(1):57-61

Computerized tomography findings of the posterior fossa in children: etiology and clinical correlation. Renda Y, et al. **Turk J Pediatr** 1989 Apr-Jun;31(2):103-12

High alcohol consumption, liver toxic drugs and brain

damage—a population study. Mützell S, et al. **Ups J Med Sci** 1989;94(3):305–15

[CT brain scanning in the diagnosis and localisation of cerebral schistosomiasis] Mao SC, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(2):115–8 (Eng. Abstr.) **(Chi)**

[Computed tomography aspects of cerebral toxoplasmosis in AIDS] Wery D, et al. **J Belge Radiol** 1990 Jun;73(3):162–72 (Eng. Abstr.) **(Fre)**

[Histopathologically verified cerebral CT findings in AIDS] Tosch U, et al. **ROFO** 1990 Feb;152(2):196–9 (Eng. Abstr.) **(Ger)**

[Computerized tomography in epilepsy in children] Hauser E, et al. **Wien Klin Wochenschr** 1990 Mar 30;102(7):210–2 (Eng. Abstr.) **(Ger)**

[A case of cerebral cysticercosis: cyst growth is confirmed by CT scan during 6 years of follow-up] Terada K, et al. **No Shinkei Geka** 1990 Apr;18(4):391–5 (24 ref.) (Eng. Abstr.) **(Jpn)**

[Analysis of angiographical findings in patients with severe brain disorders progressing to brain death] Kouji H, et al. **No To Shinkei** 1989 Jul;41(7):727–35 (Eng. Abstr.) **(Jpn)**

[Intracranial arachnoid cysts—incidence, clinical aspects and indications for surgery] Konjhodžić F, et al. **Med Arh** 1985; 39(2–3):61–4 (Eng. Abstr.) **(Scr)**

RADIONUCLIDE IMAGING

Positron emission tomography using pyruvate-1-11C in two cases of mitochondrial encephalomyopathy. Toyoda M, et al. **Ann Nucl Med** 1989 Jul;3(2):103–9

Thallium-201 accumulation in cerebral candidiasis: unexpected finding on SPECT. Tonami N, et al. **Clin Nucl Med** 1990 Jun;15(6):397–400

Positron-emission tomography in neuropsychiatric disorders. Wegener WA, et al. **Curr Opin Radiol** 1989 Dec;1(4):475–84 (39 ref.)

Single-photon emission computed tomography of brain perfusion: analysis of 60 paediatric cases. Iivanainen M, et al. **Dev Med Child Neurol** 1990 Jan;32(1):63–8

PET and MR imaging in a neuro-Behçet syndrome. Wildhagen K, et al. **Eur J Nucl Med** 1989;15(11):764–6

Positron emission tomography (PET): a unique approach for the imaging of in vivo metabolism. Loken MK, et al. **Nebr Med J** 1989 Nov;74(11):333–9 (16 ref.)

Increased accumulation of N-isopropyl-p-(123I)-iodoamphetamine in two cases with mitochondrial encephalomyopathy with lactic acidosis and strokelike episodes (MELAS). Morita K, et al. **Neuroradiology** 1989;31(4):358–61

PET and SPECT to achieve diagnostic impact. Buell U. **Nuklearmedizin** 1990 Mar;29(2):71–6 (30 ref.)

A new approach to brain imaging. Davidson J. **Radiogr Today** 1989 Mar;55(622):19

Clinical evaluation of a high-resolution (2.6-mm) positron emission tomography. Valk PE, et al. **Radiology** 1990 Sep; 176(3):783–90

Positron emission tomographic studies of the subcortical degenerations and dystonia. Brooks DJ. **Semin Neurol** 1989 Dec;9(4):351–9 (42 ref.)

[Nuclear medicine in neurology] Léveillé J, et al. **Union Med Can** 1990 Jul–Aug;119(4):168–72 (13 ref.) **(Fre)**

[PET and SPECT in the diagnosis of coronary heart disease, brain diseases and malignant tumors. Symposium. 21 October 1989, Aachen] **Nuklearmedizin** 1990 Mar; 29(2):71–84 **(Ger)**

[Use of fluorodeoxyglucose PET in the diagnosis of central nervous system lupus erythematosus and a comparison with CT and MRI] Stoppe G, et al. **Nuklearmedizin** 1989 Oct; 28(5):187–92 (Eng. Abstr.) **(Ger)**

[Assessment of cerebral blood flow in intracerebral hematoma using IMP-SPECT] Okizuka H, et al. **Kaku Igaku** 1989 Dec;26(12):1531–6 (Eng. Abstr.) **(Jpn)**

[Clinical significance of I-123 IMP brain SPECT in children with brain diseases] Takishima T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Mar 25; 50(3):278–85 (Eng. Abstr.) **(Jpn)**

RADIOTHERAPY

Stereotactic radiosurgery. Perry AM, et al. **Australas Phys Eng Sci Med** 1989 Dec;12(4):233–40

Estimation of complications for linear accelerator radiosurgery with the integrated logistic formula. Flickinger JC, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul;19(1):143–8

Physics of gamma knife approach on convergent beams in stereotactic radiosurgery. Wu A, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):941–9

A patient rotator for stereotactic radiosurgery. McGinley PH, et al. **Phys Med Biol** 1990 May;35(5):649–57

Gamma knife radiosurgery: current status and review. Goodman ML. **South Med J** 1990 May;83(5):551–4 (28 ref.)

[Stereoradiotherapy of small brain lesions] Schlienger M, et al. **Ann Med Interne (Paris)** 1989;140(5):362–4 (Eng. Abstr.) **(Fre)**

REHABILITATION

Citation of studies [letter] Andrews AW, et al. **Phys Ther** 1989 Dec;69(12):1117–8

[Organization of the activities of a department for rehabilitation treatment at a polyclinic] Khrapylina LP, et al. **Sov Zdravookhr** 1990;(1):15–8 (Eng. Abstr.) **(Rus)**

SURGERY

The lateral position—dependant occipital approach—to pineal and medial occipitoparietal lesions. Technical note. Stone JL, et al. **Acta Neurochir (Wien)** 1990;102(3–4):133–6

Surgical techniques in the management of colloid cysts of the third ventricle. Symon L, et al. **Adv Tech Stand Neurosurg** 1990;17:121–57 (34 ref.)

Early postoperative seizures in neurosurgical patients administered atracurium and isoflurane. Beemer GH, et al. **Anaesth Intensive Care** 1989 Nov;17(4):504–9

A simple and accurate aiming-device for the surgical approach of small superficial brain lesions. de Backere AC. **Br J Neurosurg** 1989;3(3):327–31

Long-term follow-up of the surgical treatment of intracranial coenurosis. Pau A, et al. **Br J Neurosurg** 1990;4(1):39–43

Scalp infiltration with bupivacaine in paediatric brain surgery. Hartley E, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S129

Slit ventricle syndrome after cyst-peritoneal shunting for the treatment of intracranial arachnoid cyst. Aoki N, et al. **Childs Nerv Syst** 1990 Jan;6(1):41–3

Intraoperative subdural hematoma in a patient with arachnoid cyst in the middle cranial fossa. Aoki N, et al. **Childs Nerv Syst** 1990 Jan;6(1):44–6

Unusual complication of peritoneal drainage: migration of a shunt in the subdural space [letter] Thauvoy C. **Childs Nerv Syst** 1989 Oct;5(5):279

Perioperative management of intracranial catastrophes. Young WL, et al. **Crit Care Clin** 1989 Oct;5(4):821–44 (81 ref.)

Cumulative index, Volumes 51–70. July 1979 through June 1989. **J Neurosurg** 1989 Nov;71(5 Pt 2):1–344

Open and closed transcerebellar approaches to pontine lesions [letter; comment] Sánchez Juan J. **J Neurosurg** 1989 Nov;71(5 Pt 1):795–6 Comment on: J Neurosurg 1989 Feb;70(2):195–200.

Spontaneous intracerebral haematomas: surgical versus conservative treatment based on Glascow Coma Scale score and computer tomography data. Sakas DE, et al. **J Neurosurg Sci** 1989 Apr–Jun;33(2):165–72

Combining CNS transplantation and gene transfer. Breakefield XO. **Neurobiol Aging** 1989 Sep–Oct; 10(5):647–8; discussion 648–50

Perseveration in memory for figures after frontal lobe lesion. Vilkki J. **Neuropsychologia** 1989;27(8):1101–4

Surgical treatment of patients with midline arachnoid cysts. Lange M, et al. **Neurosurg Rev** 1990;13(1):35–9

Operative treatment of intracranial epidermoid cysts and cholesterol granulomas: report of 21 cases. Altschuler EM, et al. **Neurosurgery** 1990 Apr;26(4):606–13; discussion 614

Cerebral venous and sagittal sinus thrombosis after transcallosal removal of a colloid cyst of the third ventricle: case report. Garrido E, et al. **Neurosurgery** 1990 Mar; 26(3):540–2

Transcranial Doppler monitoring of cerebral blood velocity during craniotomy. Giller CA. **Neurosurgery** 1989 Nov; 25(5):769–76

Symptomatic arachnoid cyst at the clivus drained stereotactically through the vertex. Iacono RP, et al. **Neurosurgery** 1990 Jul;27(1):130–3

Suprasellar arachnoid cysts: management by cyst wall resection. Jones RF, et al. **Neurosurgery** 1989 Oct; 25(4):554–61

Cerebral revascularization: a review. Onesti ST, et al. **Neurosurgery** 1989 Oct;25(4):618–28; discussion 628–9 (229 ref.)

Microsurgery of midbrain lesions. Pendl G, et al. **Neurosurgery** 1990 Apr;26(4):641–8

Malfunction of cerebrospinal fluid shunt [letter] Schmidt JH 3d. **Neurosurgery** 1990 Jul;27(1):168

Stereotactic surgery in children. Pattisapu JV, et al. **Pediatr Neurosci** 1989;15(2):62–5

Stereotactic decompression of a prepontine arachnoid cyst with resolution of precocious puberty. Sweasey TA, et al. **Pediatr Neurosci** 1989;15(1):44–7

Nonsurgical management of increased intracranial pressure. Stone JL. **Semin Neurol** 1989 Sep;9(3):218–24 (48 ref.)

Cerebral sparganosis mansoni. Report of two cases. Yamashita K, et al. **Surg Neurol** 1990 Jan;33(1):28–34 (18 ref.)

[Cryptococcal granuloma of the brain. Report of 7 cases] Li ND. **Chung Hua Wai Ko Tsa Chih** 1989 Aug;27(8):472–3, 509 (Eng. Abstr.) **(Chi)**

[Heparin in neurosurgery. 10th Seminar on Neuro-anesthesia-resuscitation. (1). Paris Créteil, 3–4 November 1988] **Agressologie** 1989 May;30(6):333–66 **(Fre)**

[Clinical tolerance of CY 216 (Fraxiparin) in the prevention of thromboembolic accidents after neurosurgery] Paoletti C, et al. **Agressologie** 1989 May;30(6):363–6 (Eng. Abstr.) **(Fre)**

[Hydatid cyst of the brain. Apropos of a series of 14 cases] Hamdi A, et al. **Ann Chir** 1990;44(3):226–30 (Eng. Abstr.) **(Fre)**

[Cerebral perfusion pressure in acute blood pressure decrease with hyperosmolar sorbitol in anesthesia conditions] Panning B, et al. **Neurochirurgia (Stuttg)** 1990 Mar; 33(2):37–41 (Eng. Abstr.) **(Ger)**

[CT/MRI correlated stereometry with ultrasound in brain surgery] Zweifel HJ, et al. **Ultraschall Med** 1990 Apr; 11(2):72–5 (Eng. Abstr.) **(Ger)**

[EEG findings following cerebral surgery] Pittasch D, et al. **Zentralbl Neurochir** 1989;50(2):118–21 (Eng. Abstr.) **(Ger)**

[A rare complication in the suppression of a porto-systemic shunt in disabling encephalopathy] Fronda GR, et al. **Chir Ital** 1988 Dec;40(6):369–76 (Eng. Abstr.) **(Ita)**

[Anesthesiologic considerations in 83 cases of surgery of the posterior cranial fossa in children] Arbinolo MA, et al. **Minerva Anestesiol** 1989 Apr;55(4):183–8 (Eng. Abstr.) **(Ita)**

[A new apparatus using the Micro Ultra-Sonic Aspirator (MUSA) system for microneurosurgery] Iseki H, et al. **No Shinkei Geka** 1989 Sep;17(9):833–9 (Eng. Abstr.) **(Jpn)**

[Post-operative blood pressure management by nitroglycerin in the field of neurosurgery] Kamiya K, et al. **No Shinkei Geka** 1989 Jun;17(6):521–4 (Eng. Abstr.) **(Jpn)**

[Pulmonary embolism as a complication in neurosurgical patients] Meguro K, et al. **No Shinkei Geka** 1989 Jun; 17(6):533–7 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of intracranial arachnoid cysts] Bidziński J, et al. **Neurol Neurochir Pol** 1989 Jul–Dec;23(4–6):322–31 (Eng. Abstr.) **(Pol)**

[Surgical treatment of cerebral echinococcosis using the Dowling technic] Mirčevski M. **Acta Chir Iugosl** 1989;36 Suppl 2:617–21 **(Scr)**

THERAPY

Abstracts of the seventh annual Stowin Medical Conference—Endovascular interventional neuroradiology. Scarsdale, NY, July 10–12, 1989. **AJNR** 1990 Jan–Feb; 11(1):217–228

Neurologic critical care. **Crit Care Clin** 1989 Oct;5(4):713–904

Role of dialysable solutes in the mediation of uremic encephalopathy in the rat. Lipman JJ, et al. **Kidney Int** 1990 Mar;37(3):892–900

Nonlinear magnetic stereotaxis: three-dimensional, in vivo remote magnetic manipulation of a small object in canine brain. Grady MS, et al. **Med Phys** 1990 May–Jun; 17(3):405–15

Neurovascular lesions and endovascular therapy: the role of MR. Jabour BA, et al. **Neuroradiology** 1989;31(4):341–5

[Adult cerebral malaria. Actual experience of the Infectious Diseases Intensive Care Department at the Claude Bernard Hospital] Clair B, et al. **Med Trop (Mars)** 1990 Jan–Mar; 50(1):69–73 (Eng. Abstr.) **(Fre)**

[Treatment of colloid cysts of the third ventricle by cerebrospinal fluid shunt] Hattab N, et al. **Neurochirurgie** 1990;36(2):129–31 (Eng. Abstr.) **(Fre)**

[Colloid cysts of the third cerebral ventricle. Computed x-ray tomography, MRI and stereotaxic puncture. Apropos of 9 cases] Peragut JC, et al. **Neurochirurgie** 1990;36(2):122–8 (Eng. Abstr.) **(Fre)**

[Enteral feeding of hospitalized neurologic patients: analysis of complications and nutritional results] Quintanilha AG, et al. **Rev Paul Med** 1989 May–Jun;107(3):159–66 (Eng. Abstr.) **(Por)**

VETERINARY

Factors associated with the development of equine degenerative myeloencephalopathy. Dill SG, et al. **Am J Vet Res** 1990 Aug;51(8):1300–5

Neurocysticercosis in a dog [letter] Rogers SE, et al. **Ann Soc Belg Med Trop** 1989 Dec;69(4):337–8

Cerebral trypanosomiasis in naturally-infected cattle in the Lambwe Valley, south Nyanza, Kenya. Wellde BT, et al. **Ann Trop Med Parasitol** 1989 Aug;83 Suppl 1:151–60

Multifocal encephalopathy in Limousin calves. Harper PA, et al. **Aust Vet J** 1990 Mar;67(3):111–2

Bovine spongiform encephalopathy and biological products for human use. Report of an informal meeting held at NIBSC on 16 May 1988. Minor P. **Biologicals** 1990 Jan; 18(1):77–80

Cerebrospinal fluid studies in normal cows and cases of bovine spongiform encephalopathy. Scott PR, et al. **Br Vet J** 1990 Jan–Feb;146(1):88–90

Proceedings of an International Roundtable on Bovine Spongiform Encephalopathy. **J Am Vet Med Assoc** 1990 May 15;196(10):1673–90 (0 ref.)

Recommendations for initiation of research studies on bovine spongiform encephalopathy. Gibbs CJ. **J Am Vet Med Assoc** 1990 May 15;196(10):1687–8

Experimentally induced bovine spongiform encephalopathy in cattle in Mission, Tex, and the control of scrapie. Hourrigan JL. **J Am Vet Med Assoc** 1990 May 15; 196(10):1678–9

Detection of bovine spongiform encephalopathy in the United Kingdom. Kimberlin RH. **J Am Vet Med Assoc** 1990 May 15;196(10):1675–6

Ultrastructural neuropathologic features of bovine spongiform encephalopathy. Liberski PP. **J Am Vet Med Assoc** 1990 May 15;196(10):1682

Bovine spongiform encephalopathy in the United States. Marsh RF. **J Am Vet Med Assoc** 1990 May 15;196(10):1677

Bovine spongiform encephalopathy in a cow in the United Kingdom. Scott PR, et al. **J Am Vet Med Assoc** 1989 Dec 15;195(12):1745–7

Epidemiology and current status of bovine spongiform encephalopathy in the United Kingdom. Wilesmith JW.

J Am Vet Med Assoc 1990 May 15;196(10):1674–5
Neuroaxonal dystrophy associated with vitamin E deficiency in two Haflinger horses. Baumgärtner W, et al. J Comp Pathol 1990 Jul;103(1):114–9
Bovine spongiform encephalopathy: the need for knowledge, balance, patience, and action. Bradley R. J Pathol 1990 Apr;160(4):283–5 (12 ref.)
Two cases of renal encephalopathy in the woodchuck (Marmota monax). Anderson WI, et al. Lab Anim Sci 1990 Jan;40(1):86–8
BSE in perspective [editorial] Lancet 1990 May 26; 335(8700):1252–3
Bovine spongiform encephalopathy [letter] Meldrum KC. Lancet 1990 Mar 31;335(8692):797
Frankness needed [editorial] Nature 1990 Jun 21; 345(6277):648
Mad cows and the minister [editorial] Nature 1990 May 24; 345(6273):277–8
BSE: spongiform encephalopathy found in cat [news] Aldhous P. Nature 1990 May 17;345(6272):194
BSE. Britain not alone in its predicament? [news] Aldhous P. Nature 1990 Apr 26;344(6269):805
BSE. No madness in UK policy [news] Aldhous P. Nature 1990 Jul 19;346(6281):211
BSE compensation [news] Aldhous P. Nature 1990 Mar 1; 344(6261):5
Antelopes die of "mad cow" disease [news] Aldhous P. Nature 1990 Mar 15;344(6263):183
Ministerial madness avoided [news] Aldhous P. Nature 1990 Jun 14;345(6276):566
New fears on transmission [news] Aldhous P. Nature 1990 May 24;345(6273):280
The unexpected export? [news] Coles P. Nature 1990 Jun 14;345(6276):566
Bovine spongiform encephalopathy. Taking stock of the issues [news] Kimberlin RH. Nature 1990 Jun 28; 345(6278):763–4
Looking for a link [letter; comment] Morse SS. Nature 1990 Mar 22;344(6264):297 Comment on: Nature 1990 Jan 18;343(6255):196.
BSE gene-linked? [letter] Sparrow OH. Nature 1990 Aug 23;346(6286):694
Link between scrapie and BSE? [letter] Westaway D, et al. Nature 1990 Jul 12;346(6280):113
Amyloid angiopathy with cerebral hemorrhage and senile plaque in aged dogs. Uchida K, et al. Nippon Juigaku Zasshi 1990 Jun;52(3):605–11
Spongiform encephalopathy. Duchen L. Practitioner 1989 Oct 22;233(1477):1407, 1409–10
Oravske kuru. A human dementia raises the stakes in mad cow disease [news] Beardsley T. Sci Am 1990 Aug; 263(2):24–6
Tainted feed, mad cows. Could a British cattle disease infect U.S. herds? [news] Beardsley TM. Sci Am 1990 May; 262(5):34
Virus-like agent blamed for mad cow disease [news] [published erratum appears in Science 1990 Mar 9;247(4947):1167] Cherfas J. Science 1990 Feb 2; 247(4942):523
Intracranial dysfunctions: stupor and coma. Dayrell-Hart B, et al. Vet Clin North Am Small Anim Pract 1989 Nov; 19(6):1209–22 (14 ref.)
Bovine spongiform encephalopathy: detection and quantitation of fibrils, fibril protein (PrP) and vacuolation in brain. Scott AC, et al. Vet Microbiol 1990 Jun; 23(1–4):295–304
Bovine spongiform encephalopathy [news] Vet Rec 1990 Feb 17;126(7):170–1
Government rejects compensation demand [news] Vet Rec 1990 Jan 20;126(3):50
Multidisciplinary team dismisses BSE 'threat' [news] Vet Rec 1990 Jun 23;126(25):612–3
Commons committee 'satisfied' with MAFF's handling of the BSE issue [news] Vet Rec 1990 Jul 21;127(3):50–1
Is BSE a new disease? [letter] Vet Rec 1990 Jun 9;126(23):585
Transmission of encephalopathies [letter] Vet Rec 1990 Mar 10;126(10):248
Bovine spongiform encephalopathy [letter] Vet Rec 1990 Jun 23;126(25):628–9
Bovine spongiform encephalopathy [letter] Vet Rec 1990 Jun 16;126(24):608
Tyrrell report spells out priorities for BSE research [news] Vet Rec 1990 Jan 20;126(3):48
Spongiform encephalopathy in a cat [letter] Vet Rec 1990 May 19;126(20):513
MPs to look at government handling of BSE [news] Vet Rec 1990 May 26;126(21):516
Investigation begins into cat encephalopathy case [news] Vet Rec 1990 May 19;126(20):492
Dietary transmission of bovine spongiform encephalopathy to mice. Barlow RM, et al. Vet Rec 1990 Feb 3;126(5):111–2
Is BSE simply scrapie in cattle? [letter] Barlow RM, et al. Vet Rec 1990 Mar 24;126(12):295
Bovine spongiform encephalopathy/scrapie [letter] Barr M. Vet Rec 1990 Jul 7;127(1):23
Zoo animal BSE [letter] Benbow GM. Vet Rec 1990 Apr 28;126(17):441
BSE in Oman [letter] Carolan DJ, et al. Vet Rec 1990 Jan 27;126(4):92
BSE, scrapie and laboratory models [letter] Chandler RL. Vet Rec 1990 Mar 3;126(9):223–4
Guidance for veterinary surgeons handling BSE cases [letter] Cooke M. Vet Rec 1990 Mar 3;126(9):223
Preliminary evidence of the experimental transmissibility of bovine spongiform encephalopathy to cattle. Dawson M, et al. Vet Rec 1990 Feb 3;126(5):112–3
Outbreak of acute coenuriasis in adult sheep in Ireland. Doherty ML, et al. Vet Rec 1989 Aug 19;125(8):185
Is BSE a new disease? [letter] Eddy RG. Vet Rec 1990 May 26;126(21):537
Caesarean sections on BSE cows [letter] Eddy RG. Vet Rec 1990 Jan 27;126(4):92
Spongiform encephalopathy in an eland [letter] Fleetwood AJ, et al. Vet Rec 1990 Apr 21;126(16):408–9
Caesarean sections on BSE cows [letter] Forbes AB. Vet Rec 1990 Feb 10;126(6):150
Inheritance of BSE [letter; comment] Fraser H. Vet Rec 1990 Jan 27;126(4):92 Comment on: Vet Rec 1990 Jan 6;126(1):5–8.
BSE risks [letter] Fussell MH. Vet Rec 1990 May 26; 126(21):537
Spongiform encephalopathy in an eland [letter] Gibson PH. Vet Rec 1990 May 12;126(19):489–90
Neurological problem in young sheep [letter] Jeffrey M, et al. Vet Rec 1990 Apr 21;126(16):408
BSE diagnosis [letter] Palmer AC. Vet Rec 1990 May 26; 126(21):537
Aujeszky's disease in a cow [see comments] Power EP, et al. Vet Rec 1990 Jan 6;126(1):13–5 Comment in: Vet Rec 1990 Mar 3;126(9):226.
Bovine encephalitis herpesvirus [letter; comment] Studdert MJ. Vet Rec 1990 Jan 6;126(1):21–2 Comment on: Vet Rec 1989 Jun 24;124(25):666–7.
Bovine spongiform encephalopathy and human health. Taylor DM. Vet Rec 1989 Oct 14;125(16):413–5 (61 ref.)
Incidence of BSE [letter] Taylor KC. Vet Rec 1990 May 19;126(20):513
Bovine spongiform encephalopathy: diagnostic significance of vacuolar changes in selected nuclei of the medulla oblongata. Wells GA, et al. Vet Rec 1989 Nov 18; 125(21):521–4
Inheritance of BSE [letter] Wijeratne WV, et al. Vet Rec 1990 Feb 17;126(7):176
A study of the inheritance of susceptibility to bovine spongiform encephalopathy [see comments] Wijeratne WV, et al. Vet Rec 1990 Jan 6;126(1):5–8 Comment in: Vet Rec 1990 Jan 27;126(4):92.
[The Veterinary Service Board. BSE (bovine spongiform encephalopathy)] Tijdschr Diergeneeskd 1990 Jun 15; 115(12):603–4 (Dut)
[Bovine spongiform encephalopathy (BSE), a review] Schreuder BE, et al. Tijdschr Diergeneeskd 1990 Jun 1; 115(11):507–17 (36 ref.) (Eng. Abstr.) (Dut)
[Can the mad cow disease hit Sweden? Can it be transmitted to humans by meat?] Karlsson Y. Lakartidningen 1990 Jul 11;87(28–29):2361–4 (Swe)

BRAIN DISEASES, METABOLIC

[Leigh's syndrome] Lerman-Sagie T, et al. Harefuah 1989 Jul;117(1–2):17–8 (Eng. Abstr.) (Heb)

BLOOD

Hypocarnitinaemia in Menkes disease [letter] Kamoun P, et al. Eur J Pediatr 1989 Aug;148(8):788

CHEMICALLY INDUCED

[Clinical and biochemical studies in a case of acute encephalopathy associated with calcium hopanthenate administration] Kajita M, et al. No To Hattatsu 1990 May; 22(3):267–73 (14 ref.) (Eng. Abstr.) (Jpn)

COMPLICATIONS

Enamel defects in a case of Menkes' syndrome. Pallotta R, et al. Acta Stomatol Belg 1989 Jun;86(1):33–6
Case of cerebrotendinous xanthomatosis. I: Unusual ophthalmic features. Morgan SJ, et al. Br J Ophthalmol 1989 Dec;73(12):1011–4
Peripheral neuropathy in Leigh's disease. Jacobs JM, et al. Brain 1990 Apr;113 (Pt 2):447–62
Acute respiratory failure precipitated by general anesthesia in Leigh's syndrome. Grattan-Smith PJ, et al. J Child Neurol 1990 Apr;5(2):137–41
Feeding problems and lactic acidosis in a 10-week-old boy [clinical conference] Robinson J, et al. Pediatr Neurosci 1989;15(1):28–35
[A case of cerebrotendinous xanthomatosis with convulsive seizures] Matsumuro K, et al. Rinsho Shinkeigaku 1990 Feb; 30(2):207–9 (10 ref.) (Eng. Abstr.) (Jpn)
[Current views and studies of brain edema] Szymaś J. Neurol Neurochir Pol 1989 May-Jun;23(3):231–7 (30 ref.) (Pol)

DIAGNOSIS

CT and MR imaging of Canavan disease. McAdams HP, et al. AJNR 1990 Mar-Apr;11(2):397–9
MR findings in patients with subacute necrotizing encephalomyelopathy (Leigh syndrome): correlation with biochemical defect. Medina L, et al. AJNR 1990 Mar-Apr; 11(2):379–84
MR findings in patients with subacute necrotizing encephalomyelopathy (Leigh syndrome): correlation with biochemical defect. Medina L, et al. AJR Am J Roentgenol 1990 Jun;154(6):1269–74
Computed tomography and magnetic resonance imaging of the brain in Hurler's disease. Afifi AK, et al. J Child Neurol 1990 Jul;5(3):235–41 (20 ref.)
Mutations of the mitochondrial DNA: the contribution of DNA techniques to the diagnosis of mitochondrial encephalomyopathies. Gerbitz KD, et al. J Clin Chem Clin Biochem 1990 Apr;28(4):241–50
Acute metabolic encephalopathy: a review of causes, mechanisms and treatment. Surtees R, et al. J Inherited Metab Dis 1989;12 Suppl 1:42–54 (46 ref.)
Magnetic resonance imaging of the brain and spinal cord in cerebrotendinous xanthomatosis. Bencze KS, et al. J Neurol Neurosurg Psychiatry 1990 Feb;53(2):166–7
Cerebrotendinous xanthomatosis: clinical and MRI study (a case report). Fiorelli M, et al. J Neurol Neurosurg Psychiatry 1990 Jan;53(1):76–8
Copper diseases [letter; comment] Brewer GJ, et al. Neurology 1990 Apr;40(4):725 Comment on: Neurology 1988 Sep;38(9):1493–5.
Serial imaging of Menkes disease. Ichihashi K, et al. Neuroradiology 1990;32(1):56–9
[Mitochondrial encephalomyopathy. Report of a case] Chen Q. Chung Hua Shen Ching Ching Shen Ko Tsa Chih 1990 Feb;23(1):38–40, 63 (Eng. Abstr.) (Chi)
[Homocarnosine of the amniotic fluid as an indicator of fetal cerebral lesions] Iurovskiĭ SL, et al. Akush Ginekol (Mosk) 1989 Sep;(9):45–7 (Eng. Abstr.) (Rus)

DRUG THERAPY

Copper histidinate therapy in Menkes' disease: prevention of progressive neurodegeneration. Sherwood G, et al. J Inherited Metab Dis 1989;12 Suppl 2:393–6
Biochemical study on the critical period for treatment of the mottled brindled mouse. Fujii T, et al. J Neurochem 1990 Sep;55(3):885–9
Effects of chelators on copper therapy of macular mouse, a model animal of Menkes' kinky disease. Tanaka K, et al. Res Commun Chem Pathol Pharmacol 1990 Aug; 69(2):217–27

EMBRYOLOGY

Effects of oral copper administration to pregnant heterozygous brindled mice on fetal viability and copper levels. Kasama T, et al. J Nutr Sci Vitaminol (Tokyo) 1989 Dec;35(6):627–38

ENZYMOLOGY

Abnormalities of pyruvate dehydrogenase complex in brain disease. Sheu KF, et al. Ann N Y Acad Sci 1989;573:378–91
Cytochrome c oxidase deficiency in subacute necrotizing encephalopathy (Leigh syndrome). Hayasaka K, et al. J Inherited Metab Dis 1989;12(3):247–56
Progressive cytochrome c oxidase deficiency in a case of Leigh's encephalomyelopathy. Koga Y, et al. J Neurol Sci 1990 Jan;95(1):63–76
Complex I (reduced nicotinamide-adenine dinucleotide-coenzyme Q reductase) deficiency in two patients with probable Leigh syndrome. Fujii T, et al. J Pediatr 1990 Jan;116(1):84–7
Markedly reduced activity of lysyl oxidase in skin and aorta from a patient with Menkes' disease showing unusually severe connective tissue manifestations. Royce PM, et al. Pediatr Res 1990 Aug;28(2):137–41
[Kearns-Sayre syndrome: mitochondrial encephalomyopathy caused by deficiency of the respiratory chain] Desnuelle C, et al. Rev Neurol (Paris) 1989;145(12):842–50 (Eng. Abstr.) (Fre)
[Mitochondrial encephalomyopathy (focal cytochrome c oxidase deficiency) with transient episodes of muscle weakness and elevation of serum creatine kinase activity] Ohno M, et al. Rinsho Shinkeigaku 1990 Mar;30(3):317–9 (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

[Has Menckes' disease disappeared? Clinical picture and postnatal diagnosis] Tønnesen T, et al. Ugeskr Laeger 1989 Nov 6;151(45):2975–7 (Eng. Abstr.) (Dan)

ETIOLOGY

Encephalopathy from hyponatremia [letter; comment] Ann Intern Med 1990 Jul 1;113(1):84–6 Comment on: Ann Intern Med 1990 Jan 15;112(2):113–9.
Congenital lactic acidosis due to a defect of pyruvate dehydrogenase complex (E1). Clinical, biochemical, nerve biopsy study and effect of therapy. Federico A, et al. Eur Neurol 1990;30(3):123–7
Mental retardation—a clinician's approach to the diagnosis of aminoacidopathies. Phadke MA, et al. Indian Pediatr 1989 Sep;26(9):921–7 (15 ref.)
[A case of multiple brain calcifications associated with hypoparathyroidism] Delplace PO, et al. J Belge Radiol 1989 Aug;72(4):263–6 (Eng. Abstr.) (Fre)
[Respiratory chain diseases in infancy. Clinical presentation and diagnosis] García Silva MT, et al. An Esp Pediatr 1989 Nov;31(5):421–30 (71 ref.) (Eng. Abstr.) (Spa)

GENETICS

Fumarase deficiency is an autosomal recessive

encephalopathy affecting both the mitochondrial and the cytosolic enzymes. Gellera C, et al. **Neurology** 1990 Mar; 40(3 Pt 1):495–9

[Mitochondrial encephalomyopathies] Serratrice G, et al. **Presse Med** 1990 Apr 7;19(14):645–7 **(Fre)**

[Biotinidase deficiency—a progressive metabolic disease in children with seizures and ataxia] Anger H, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Mar; 42(3):163–6 (Eng. Abstr.) **(Ger)**

[Menkes syndrome: study of 2 new cases (published erratum appears in An Esp Pediatr 1989 Dec;31(6):608)] Olivares López JL, et al. **An Esp Pediatr** 1989 Oct;31(4):380–4 (19 ref.) (Eng. Abstr.) **(Spa)**

HISTORY

[Paul Divry. The discovery of cerebral amyloidosis] Reznik M. **Acta Neurol Belg** 1989 May–Oct;89(3–4):168–78 **(Fre)**

METABOLISM

Septic encephalopathy. Evidence for altered phenylalanine metabolism and comparison with hepatic encephalopathy. Mizock BA, et al. **Arch Intern Med** 1990 Feb;150(2):443–9

The relationship of excess copper accumulation by fibroblasts from the brindled mouse model of Menkes disease to the primary defect. Waldrop GL, et al. **Biochem J** 1990 Apr 15;267(2):417–22

Effects of dietary copper deficiency on male offspring of heterozygous brindled mice. Prohaska JR. **Br J Nutr** 1989 Jul;62(1):177–84

Decreased blood flow and oxygen metabolism in the cerebellum, brain stem and thalamus in a case with Menkes kinky hair disease. Yoshikawa H, et al. **Brain Dev** 1989; 11(6):426–9

Copper deficiency in the mitochondria of cultured skin fibroblasts from patients with Menkes syndrome. Kodama H, et al. **J Inherited Metab Dis** 1989;12(4):386–9

Muscle cell cultures in Menkes' disease: copper accumulation in myotubes. van den Berg GJ, et al. **J Inherited Metab Dis** 1990;13(2):207–11

A comparative immunocytochemical study of human cerebellar cortex in X-chromosome-linked copper malabsorption (Menkes' kinky hair disease) and granule cell type cerebellar degeneration. Goto S, et al. **Neuropathol Appl Neurobiol** 1989 Sep–Oct;15(5):419–31

Hepatic copper metabolism in a mouse model for Menkes' kinky hair syndrome. Castillo RO, et al. **Pediatr Res** 1990 May;27(5):492–6

[Menkes' kinky hair disease: report of one case] Lo YS, et al. **Acta Paediatr Sin** 1989 May–Jun;30(3):196–201 (Eng. Abstr.) **(Chi)**

[Leigh's syndrome] Sunohara N. **Nippon Rinsho** 1990 Jul; 48(7):1568–72 **(Jpn)**

PATHOLOGY

Woolly hair nevus. Reda AM, et al. **J Am Acad Dermatol** 1990 Feb;22(2 Pt 2):377–80

Menkes disease—an autopsy case with metal analysis of hair. Moon HR, et al. **J Korean Med Sci** 1987 Mar;2(1):75–83

Intracerebral distribution of mitochondrial abnormalities in 21 cases of infantile spongy dystrophy. Paulus W, et al. **J Neurol Sci** 1990 Jan;95(1):49–62

Light and electron microscopic retinal findings in Leigh's disease. Kremer I, et al. **Ophthalmologica** 1989; 199(2–3):106–10

Brainstem lesion revealed by MRI in a case of Leigh's disease with respiratory failure. Martin E, et al. **Pediatr Radiol** 1990;20(5):349–50

Mitochondrial encephalomyopathies. Lombes A, et al. **Rev Neurol (Paris)** 1989;145(10):671–89 (149 ref.)

Membranocystic lesion in the brain in cerebrotendinous xanthomatosis. Histochemical and ultrastructural study with evidence of its ceroid nature. Elleder M, et al. **Virchows Arch [B]** 1989;57(6):367–74

PHYSIOPATHOLOGY

Vitamin C treatment in Menkes' disease: failure to affect biochemical and clinical parameters. de Groot CJ, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:389–92

[Triphasic waves in dementia syndromes] Primavera A, et al. **Riv Neurol** 1989 Jul–Aug;59(4):146–9 (Eng. Abstr.) **(Ita)**

PSYCHOLOGY

Seeing either the forest or the trees: dissociation in visuospatial processing. Bihrle AM, et al. **Brain Cogn** 1989 Sep;11(1):37–49

RADIOGRAPHY

Respiratory insufficiency following chloral hydrate sedation in two children with Leigh disease (subacute necrotizing encephalomyelopathy). Greenberg SB, et al. **Pediatr Radiol** 1990;20(4):287–8

THERAPY

Neonatal hemodialysis: effective therapy for the encephalopathy of inborn errors of metabolism. Rutledge SL, et al. **J Pediatr** 1990 Jan;116(1):125–8

[Usefulness of continuous peritoneal dialysis (CPD) in the management of metabolic encephalopathy in adult type citrullinemia] Kitai K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Oct;86(10):2469–73 **(Jpn)**

BRAIN DYSFUNCTION, MINIMAL see **ATTENTION DEFICIT DISORDER WITH HYPERACTIVITY**

BRAIN EDEMA

Brain edema. Pathogenesis, imaging, and therapy. **Adv Neurol** 1990;52:1–561

Correction factors for gravimetric measurement of peritumoural oedema in man. Bell BA, et al. **Br J Neurosurg** 1987;1(4):441–6

CHEMICALLY INDUCED

Vasopressin-induced brain edema is mediated by the V1 receptor. Rosenberg GA, et al. **Adv Neurol** 1990;52:149–54

Enhancement of infusion-induced brain edema by mediator compounds. Unterberg A, et al. **Adv Neurol** 1990;52:355–8

Acute cerebral oedema induced by methotrexate [letter] Enevoldson TP. **BMJ** 1989 Aug 19;299(6697):516

Delayed postoperative neurological deterioration from prolonged sodium nitroprusside administration. Case report. Ram Z, et al. **J Neurosurg** 1989 Oct;71(4):605–7

Effect of propentofylline on the biochemical lesion of the rat brain in aluminium-induced neurotoxicity. Stefanovich V, et al. **Metab Brain Dis** 1990 Mar;5(1):7–17

Acetazolamide inhibits the recovery from triethyl tin intoxication: putative role of carbonic anhydrase in dehydration of central myelin. Yanagisawa K, et al. **Neurochem Res** 1990 May;15(5):483–6

Calcium dependency of N-methyl-D-aspartate toxicity in slices from the immature rat hippocampus. Ellrén K, et al. **Neuroscience** 1989;32(2):371–9

[Generalized brain edema and cerebral infarct in ergotamine abuse: imaging by computerized tomography, magnetic resonance tomography and angiography] Toedt C, et al. **Digitale Bilddiagn** 1989 Sep;9(3):107–9 (Eng. Abstr.) **(Ger)**

CLASSIFICATION

Brain edema: a classification based on blood-brain barrier integrity. Betz AL, et al. **Cerebrovasc Brain Metab Rev** 1989 Summer;1(2):133–54 (193 ref.)

COMPLICATIONS

Contribution of brainstem edema to neurophysiologic deterioration in the cat infusion edema model. Marmarou A, et al. **Adv Neurol** 1990;52:351–4

Relation between intracranial pressure, computed tomographic lesion, and neuropsychological outcome. Uzzell BP, et al. **Adv Neurol** 1990;52:269–74

Galactosaemia with fatal cerebral oedema. Perelmuter B, et al. **J Inherited Metab Dis** 1989;12(4):489–90

DIAGNOSIS

Perifocal abnormal signal intensity area in magnetic resonance imaging in meningiomas. Tsuyumu M, et al. **Adv Neurol** 1990;52:559

Migraine associated with focal cerebral edema, cerebrospinal fluid pleocytosis, and progressive cerebellar ataxia: MRI documentation. Goldstein JM, et al. **Neurology** 1990 Aug; 40(8):1284–7

Magnetic resonance studies on the development of ischemic edema in an early period after occlusion of middle cerebral artery in a rat. Kotwica Z, et al. **Radiol Diagn (Berl)** 1989; 30(3):307–11

[Computerized tomography and electroencephalography findings in post-traumatic brain edema] Meier U, et al. **Zentralbl Neurochir** 1989;50(1):42–4 (Eng. Abstr.) **(Ger)**

[Enzymologic characteristics of the course of brain edema in patients with meningococcal meningoencephalitis] Radzivil GG, et al. **Ter Arkh** 1989;61(11):18–23 **(Rus)**

[Neurosonography of the brain in infectious toxicoses in infants] Berestov AI, et al. **Zh Nevropatol Psikhiatr** 1989; 89(8):9–11 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Pentoxifylline does not reduce cerebral ischemic edema in hypertensive rats. Johansson BB, et al. **Acta Neurol Scand** 1989 Sep;80(3):259–62

Effect of cytidine diphosphate choline on ultraviolet-induced brain edema. Cervós-Navarro J, et al. **Adv Neurol** 1990; 52:421–9

Glycerol dehydrates traumatic and cold-lesioned brain edema as well as normal brain. Chen JL, et al. **Adv Neurol** 1990;52:550

Effect of superoxide dismutase in rabbits with peritumoral edema. Ikeda Y, et al. **Adv Neurol** 1990;52:441–7

Effect of superoxide dismutase in cats with cold-induced edema. Ikeda Y, et al. **Adv Neurol** 1990;52:203–10

Effect of timing and dose of the hyperosmotic agent glycerol on experimental ischemic brain edema and metabolites. Kashiwagi F, et al. **Adv Neurol** 1990;52:541

Calcium entry blocker effects on ischemic brain damage after severe head injury. Kostron H, et al. **Adv Neurol** 1990; 52:552

Clinical study of mannitol and glycerol on raised intracranial pressure and on their rebound phenomenon. Node Y, et al. **Adv Neurol** 1990;52:359–63

Effects of intraventricular noradrenaline on vasogenic edema. Noguchi Y, et al. **Adv Neurol** 1990;52:549

Effect of glycerol on ischemic edema evaluated by somatosensory evoked potentials. Suga S, et al. **Adv Neurol** 1990;52:185–94

Effects of calcium channel blockers on ischemic brain edema in rats. Wang JY, et al. **Adv Neurol** 1990;52:540

Mannitol in neonatal cerebral oedema. Adhikari M, et al. **Brain Dev** 1990;12(3):349–51

Glucocorticoids in acute stroke [letter] Gohel D. **J Assoc Physicians India** 1989 Dec;37(12):799–800

Hyponatremia-induced brain edema in guinea pigs is reduced by treatment with the novel anion transport inhibitor L-644,711. Trachtman H, et al. **Life Sci** 1989;45(22):2141–7

The effects of intraventricular administration of norepinephrine on vasogenic edema. Noguchi Y, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):568–72

Dexamethasone treatment attenuates the development of ischaemic brain oedema in gerbils. Dux E, et al. **Neuroscience** 1990;34(1):203–7

Effect of atrial natriuretic peptide on ischemic brain edema: changes in brain water and electrolytes. Nakao N, et al. **Neurosurgery** 1990 Jul;27(1):39–43; discussion 43–4

Experimental neoplastic spinal cord compression: effect of ketamine and MK-801 on edema and prostaglandins. Siegal T, et al. **Neurosurgery** 1990 Jun;26(6):963–6

Effect of furosemide, bumetanide and mannitol on intracranial pressure in experimental brain edema of the rat. Plangger C, et al. **Zentralbl Neurochir** 1989; 50(3–4):142–4

[Dose- and time-dependent dexamethasone effects in cold lesion-induced brain edema in the rat. Experimental research accompanying the German Ultrahigh Dexamethasone Head Injury Study (GUDHIS)] Deisenroth K, et al. **Neurochirurgia (Stuttg)** 1990 Jan; 33(1):1–7 (Eng. Abstr.) **(Ger)**

[Steroid therapy in subarachnoid hemorrhage] Karnik R, et al. **Wien Klin Wochenschr** 1990 Jan 5;102(1):1–4 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

MRI quantitation of edema in focal cerebral ischemia in cats: correlation with cytochrome aa3 oxidation state. Kline RA, et al. **Magn Reson Med** 1990 Feb;13(2):319–23

EPIDEMIOLOGY

The risk of intracranial complications in pediatric head injury. Results of multivariate analysis. Chan KH, et al. **Childs Nerv Syst** 1990 Jan;6(1):27–9

ETIOLOGY

Cerebral oedema complicating diabetic ketoacidosis. McAloon J, et al. **Acta Paediatr Scand** 1990 Jan;79(1):115–7

Brain edema after an experimental missile wound. Carey ME, et al. **Adv Neurol** 1990;52:301–5

Pathogenesis of vasogenic edema in focal cerebral ischemia. Role of superoxide radicals. Chan PH, et al. **Adv Neurol** 1990;52:177–83

Chronological alterations of regional cerebral blood flow, glucose utilization, and edema formation after focal ischemia in hypertensive and normotensive rats. Significance of hypertension. Hatashita T, et al. **Adv Neurol** 1990;52:29–37

Studies on relation of bradykinin to ischemic brain edema in stroke-resistant spontaneously hypertensive rat. Kamiya T, et al. **Adv Neurol** 1990;52:543

Brain edema in experimental superior sagittal sinus occlusion. Kannuki S, et al. **Adv Neurol** 1990;52:546

Intravenous glutamate enhances edema formation after a freezing lesion. Kempski O, et al. **Adv Neurol** 1990; 52:219–23

Hydrostatic pressure versus osmotic pressure in the development of vasogenic brain edema induced by cold injury. Kuroiwa T, et al. **Adv Neurol** 1990;52:11–9

Relation between epileptic activities and edema formation after cryogenic injury in the rabbit. Loiseau H, et al. **Adv Neurol** 1990;52:257–67

Comparative studies of edema produced by fluid percussion injury with lateral and central modes of injury in cats. Marmarou A, et al. **Adv Neurol** 1990;52:233–6

Cumulative effect of repeated ischemia on brain edema in the gerbil. Biochemical and physiological correlates of repeated ischemic insults. Nowak TS Jr, et al. **Adv Neurol** 1990;52:1–9

Peritumoral brain edema. A keynote address. Reulen HJ, et al. **Adv Neurol** 1990;52:307–15 (25 ref.)

Relation between macrophage infiltrates and peritumoral edema. Shinonaga M, et al. **Adv Neurol** 1990;52:475–81

Effect of experimental blunt head injury on acute regional cerebral blood flow and edema. Tornheim PA, et al. **Adv Neurol** 1990;52:377–84

Mental dysfunction in water intoxication brain edema. Yamaguchi M, et al. **Adv Neurol** 1990;52:561

Morbidity and mortality due to cerebral edema complicating the treatment of severe leptospiral infection. Davenport A, et al. **Am J Kidney Dis** 1990 Aug;16(2):160–5

Prolonged reduction in colloid oncotic pressure does not increase brain edema following cryogenic injury in rabbits. Kaieda R, et al. **Anesthesiology** 1989 Oct;71(4):554–60

A comparison of the effects of halothane, isoflurane, and pentobarbital anesthesia on intracranial pressure and cerebral edema formation following brain injury in rabbits. Kaieda R, et al. **Anesthesiology** 1989 Oct;71(4):571–9

Intra-operative brain swelling [editorial] Reilly PL. **Br J Neurosurg** 1990;4(1):3–4

Mechanisms of tumor-associated edema: a review. Del Maestro RF, et al. **Can J Neurol Sci** 1990 May;17(2):177–83 (67 ref.)

Influence of thermal stress and various agents on the brain edema formation in rats following a cryogenic brain lesion. Lin LS, et al. **Chin J Physiol** 1989;32(1):41–7

Cerebral oedema complicating diabetic ketoacidosis. Greene SA, et al. **Dev Med Child Neurol** 1990 Jul;32(7):633–8

Intracerebral crises during treatment of diabetic ketoacidosis. Rosenbloom AL. **Diabetes Care** 1990 Jan;13(1):22–33

Hyperoxia during reperfusion is a factor in reperfusion injury [letter; comment] Mickel HS. **Free Radic Biol Med** 1990; 8(3):269 Comment on: Free Radic Biol Med 1989;6(1):61–2.

Vasogenic brain edema in focal 4-aminopyridine seizures: the role of neuronal hyperactivity. Mihály A, et al. **J Hirnforsch** 1990;31(1):77–86

Brain edema following an experimental missile wound to the brain. Carey ME, et al. **J Neurotrauma** 1990 Spring; 7(1):13–20

Treating hyponatremia: damned if we do and damned if we don't [clinical conference] Berl T. **Kidney Int** 1990 Mar; 37(3):1006–18 (113 ref.)

Cerebral oedema in diabetic ketoacidosis in children [letter] Bello FA, et al. **Lancet** 1990 Jul 7;336(8706):64

Polish-Georgian cooperative studies on cerebral circulatory disorders [editorial] **Neuropatol Pol** 1989;27(1):1–2

Does pH reduction contribute to postischemic brain edema development? Mchedlishvili G, et al. **Neuropatol Pol** 1989; 27(1):71–6

Studies of dry weight of cortical neurons under conditions of osmotic brain edema development in rabbits. Museridze DP, et al. **Neuropatol Pol** 1989;27(1):77–84

Disturbed cerebrospinal fluid circulation after subarachnoid hemorrhage and acute aneurysm surgery. Auer LM, et al. **Neurosurgery** 1990 May;26(5):804–8; discussion 808–9

Metabolic and hemodynamic aspects of peritumoral low-density areas in human brain tumor. Hino A, et al. **Neurosurgery** 1990 Apr;26(4):615–21

Brain edema, intracranial pressure and cerebral blood flow in bacterial meningitis. Tauber MG. **Pediatr Infect Dis J** 1989 Dec;8(12):915–7

Cerebral blood flow and edema in perinatal hypoxic-ischemic brain damage. Mujsce DJ, et al. **Pediatr Res** 1990 May; 27(5):450–3

Ischemic brain edema as a complication of decompensated hypovolemic shock. Kozhura VL, et al. **Resuscitation** 1990 Apr;19(2):89–101

Brain edema and cerebrovascular permeability during cerebral ischemia in rats. Hatashita S, et al. **Stroke** 1990 Apr;21(4):582–8

Time course of early brain edema following reversible forebrain ischemia in rats. Mellergård P, et al. **Stroke** 1989 Nov;20(11):1565–70

Dialysis disequilibrium syndrome [letter; comment] Levin R. **West J Med** 1990 Jan;152(1):77 Comment on: West J Med 1989 Jul;151(1):52–5.

[A case of delayed post-anoxic encephalopathy after acute carbon monoxide poisoning] Ernotte D, et al. **Acta Neurol Belg** 1989 Mar-Apr;89(2):67–70 (Eng. Abstr.) **(Fre)**

[Reversible cerebral lesions in eclampsia. Clinical and x-ray computed tomographic study] Vandermarcq P, et al. **J Radiol** 1989 Aug-Sep;70(8–9):503–6 (25 ref.) (Eng. Abstr.) **(Fre)**

[Characterization and pharmacological effect on brain damage as a result of cold injury.] Funk KF, et al. **Biomed Biochim Acta** 1990;49(1):91–5 (Eng. Abstr.) **(Ger)**

[Studies on the involvement of bradykinin in the formation of ischemic brain edema] Kamiya T. **Nippon Ika Daigaku Zasshi** 1990 Apr;57(2):180–91 (Eng. Abstr.) **(Jpn)**

[Brain ischemia and brain edema] Kogure K, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1254–71 **(Jpn)**

[Current views and studies of brain edema] Szymaś J. **Neurol Neurochir Pol** 1989 May-Jun;23(3):231–7 (30 ref.) **(Pol)**

[The significance of sialic acids and changes in the noncellular structures of the vascular walls in the development of brain edema in meningoencephalitis] Barshtein IuA, et al. **Vrach Delo** 1989 Oct;(10):118–22 (Eng. Abstr.) **(Rus)**

[Effects of sera from patients with amyotrophic lateral sclerosis on neural tissue in vivo and in vitro] Gannushkina IV, et al. **Zh Nevropatol Psikhiatr** 1990;90(2):35–8 (Eng. Abstr.) **(Rus)**

[Edema and secondary hemorrhage during the postoperative period in patients with surgery for intracranial meningioma] Bajtajić V, et al. **Vojnosanit Pregl** 1989 Jul-Aug; 46(4):277–81 **(Scr)**

[Neuropathological findings in patients subjected to orthotopic liver transplantation] Galofré E, et al. **Neurologia** 1988 Mar-Apr;3(2):77–9 (Eng. Abstr.) **(Spa)**

METABOLISM

The importance of protein content in the oedema fluid for the resolution of brain oedema. Groeger U, et al. **Acta Neurochir (Wien)** 1989;101(3–4):134–40

Blood-to-brain sodium transport in ischemic brain edema. Betz AL, et al. **Adv Neurol** 1990;52:73–80

Effect of dexamethasone on neurotransmitter amines in a rat glioma model. Chang CC, et al. **Adv Neurol** 1990;52:483–9

Effects of a 21-aminosteroid (U-74006F) on cerebral metabolites and edema after severe experimental head trauma. Dimlich RV, et al. **Adv Neurol** 1990;52:365–75

Importance of protein content in the edema fluid for the resolution of brain edema. Gröger U, et al. **Adv Neurol** 1990;52:215–8

Quantitative analysis of experimental peritumoral edema in cats. Hossmann KA, et al. **Adv Neurol** 1990;52:449–58

Proton-nuclear magnetic resonance relaxation times in brain edema. Kamman RL, et al. **Adv Neurol** 1990;52:401–5

Role of arachidonic acid metabolism on ischemic brain edema and metabolism. Katayama Y, et al. **Adv Neurol** 1990; 52:105–8

Imaging of water distribution in the rat brain by activation autoradiography. Kogure K, et al. **Adv Neurol** 1990;52:81–4

Ischemic cerebral edema. 5-Hydroxytryptamine receptors and the physical state of synaptosomal membranes. Kumami K, et al. **Adv Neurol** 1990;52:47–56 (58 ref.)

Dexamethasone effects on the distribution of water and albumin in cold-injury cerebral edema. Nakata H, et al. **Adv Neurol** 1990;52:335–42

Clearance of infusion edema fluid at high and low levels of intracranial pressure. Shima K, et al. **Adv Neurol** 1990; 52:285–7

Role of leukotrienes as mediator compounds in brain edema. Unterberg A, et al. **Adv Neurol** 1990;52:211–4

Measurement of changes in brain water in man by magnetic resonance imaging. Bell BA. **Ann R Coll Surg Engl** 1989 Nov;71(6):375–80

Ammonia-induced swelling of rat cerebral cortical slices: implications for the pathogenesis of brain edema in acute hepatic failure. Ganz R, et al. **Metab Brain Dis** 1989 Sep; 4(3):213–23

Neurotransmitter amines in brain edema of a rat glioma model. Chang CC. **Neurol Med Chir (Tokyo)** 1989 Mar; 29(3):187–91

Oxygen-free radicals in traumatic brain oedema. Ikeda Y, et al. **Neurol Res** 1989 Dec;11(4):213–6

Role of leukocytes and 5-lipoxygenase products in induction of cerebral edema [letter; comment] Bednar MM. **Neurosurgery** 1990 Feb;26(2):360–1 Comment on: Neurosurgery 1989 Sep;25(3):369–72.

The molecular basis of brain injury and brain edema: the role of oxygen free radicals. Ikeda Y, et al. **Neurosurgery** 1990 Jul;27(1):1–11 (164 ref.)

Taurine and osmoregulation. III. Taurine deficiency protects against cerebral edema during acute hyponatremia. Trachtman H, et al. **Pediatr Res** 1990 Jan;27(1):85–8

[Capillary permeability factor produced by C 6 glioma cells: role in peritumoral brain edema and possible mechanism of glucocorticoid action] Ohnishi T, et al. **No To Shinkei** 1989 Nov;41(11):1141–7 (Eng. Abstr.) **(Jpn)**

[Brain glycolipids in experimental brain edema] Karagezian KG, et al. **Vopr Med Khim** 1990 Jan-Feb;36(1):50–1 (Eng. Abstr.) **(Rus)**

MORTALITY

Fatal ischaemic brain oedema after unsuccessful thrombolysis. Overgaard K, et al. **Neurol Res** 1990 Jun; 12(2):81–2

PATHOLOGY

Morphological estimation of brain extracellular fluid dynamics in cold-induced edema from the aspect of cerebrospinal fluid-extracellular fluid communication. Hattori H, et al. **Acta Pathol Jpn** 1990 May;40(5):314–21

Proton relaxation in acute and subacute ischemic brain edema. Boisvert DP, et al. **Adv Neurol** 1990;52:407–13

Quantitative magnetic resonance imaging assessment of mannitol's effect on peritumoral brain edema. Boisvert DP, et al. **Adv Neurol** 1990;52:560

Magnetic resonance imaging of human cerebral edema. Clasen RA. **Adv Neurol** 1990;52:491–509

In vivo characterization of infusion edema by magnetic resonance imaging. Fatouros PP, et al. **Adv Neurol** 1990; 52:533–7

Evaluation of brain edema using magnetic resonance proton relaxation times. Fu Y, et al. **Adv Neurol** 1990;52:165–76

Morphological changes in acute cerebral ischemia after occlusion and reperfusion in the rat. Nakagawa Y, et al. **Adv Neurol** 1990;52:21–7

Electron microscopic study of perivascular structure associated with experimentally induced brain edema in cats. Ohata K, et al. **Adv Neurol** 1990;52:237–46

Mechanisms of astroglial swelling in focal cerebral ischemia. Shigeno T, et al. **Adv Neurol** 1990;52:545

Brain edema and the blood brain barrier in galactosamine-induced fulminant hepatic failure rats. An animal model for evaluation of liver support systems. Dixit V, et al. **ASAIO Trans** 1990 Jan-Mar;36(1):21–7

Marek's disease virus-induced transient paralysis in chickens: demonstration of vasogenic brain oedema by an immunohistochemical method. Swayne DE, et al. **J Comp Pathol** 1989 Nov;101(4):451–62

[Topography of hypoxia-induced cerebral extravasations] Kirschbaum M, et al. **Arch Gynecol Obstet** 1989; 245(1–4):348–50 **(Ger)**

[Evolution of venous cerebral infarction and brain edema—an experimental study of sagittal sinus obstruction] Kannuki S, et al. **No To Shinkei** 1989 Dec;41(12):1225–31 (Eng. Abstr.) **(Jpn)**

[Role of perivascular phagocyte (FGP) of cerebral small blood vessel in cerebral edema] Mato M, et al. **No To Shinkei** 1989 Nov;41(11):1109–17 (Eng. Abstr.) **(Jpn)**

[Acute encephalopathy with symmetrical, widespread, edematous and necrotic lesions--an autopsy case report] Mizuguchi M, et al. **No To Shinkei** 1989 Aug;41(8):789–94 (Eng. Abstr.) **(Jpn)**

[Topography and structure of secondary brain damage in edema associated with supratentorial foci of encephalomalacia] Szpakowa GM. **Neuropatol Pol** 1989; 27(2):177–98 (Eng. Abstr.) **(Pol)**

PHYSIOPATHOLOGY

Focal cerebral edema impedes convective fluid/tracer movement through paravascular pathways in cat brain. Blaumanis OR, et al. **Adv Neurol** 1990;52:385–9

Effect of halothane on ischemic brain edema. Cahn R, et al. **Adv Neurol** 1990;52:93–6

Brain edema, autoregulation, and calcium antagonism. An experimental study with nimodipine. Gaab MR, et al. **Adv Neurol** 1990;52:391–400

Oxygen tension, oxygen metabolism, and microcirculation in vasogenic brain edema. Gaab MR, et al. **Adv Neurol** 1990;52:247–56

Role of blood-brain barrier permeability in focal ischemic brain edema. Hatashita S, et al. **Adv Neurol** 1990;52:327–33

An osmotic gradient in ischemic brain edema. Hatashita S, et al. **Adv Neurol** 1990;52:85–92

A computed tomography study on formation, propagation, and resolution of edema fluid in metastatic brain tumors. Ito U, et al. **Adv Neurol** 1990;52:459–68

Role of adrenergic activity in ischemic brain edema. Kobayashi H, et al. **Adv Neurol** 1990;52:127–32

Vasogenic component of ischemic brain edema in experimental focal ischemia. Kuroiwa T, et al. **Adv Neurol** 1990;52:548

Uncoupling of blood flow and glucose metabolism in the neighboring postischemic edematous brain area. Nagasawa H, et al. **Adv Neurol** 1990;52:63–71

A mathematical model for vasogenic brain edema. Nagashima T, et al. **Adv Neurol** 1990;52:317–26

Effect of blood-brain barrier disruption on the permeability of peritumoral edema. Sato S, et al. **Adv Neurol** 1990;52:555

Is postischemic hypoperfusion related to brain edema? Schürer L, et al. **Adv Neurol** 1990;52:155–64

Effects of dexamethasone on blood flow and volume of perfused microvessels in traumatic brain edema. Tajima A, et al. **Adv Neurol** 1990;52:343–50

Hypertension and hemodilution during cerebral ischemia reduce brain injury and edema. Cole DJ, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H211–7

Facilitated growth of transplanted raphe cells in hydrocephalic interstitial edema. Ogawa H, et al. **Brain Res Bull** 1990 Jun;24(6):769–74

Impaired capillary perfusion and brain edema following experimental subarachnoid hemorrhage: a morphometric study. Johshita H, et al. **J Neurosurg** 1990 Sep;73(3):410–7

Capillary permeability factor secreted by malignant brain tumor. Role in peritumoral brain edema and possible mechanism for anti-edema effect of glucocorticoids. Ohnishi T, et al. **J Neurosurg** 1990 Feb;72(2):245–51

Cerebral blood flow and glucose metabolism in experimental brain edema. Sutton LN, et al. **J Neurosurg** 1989 Dec; 71(6):868–74

A two-dimensional, finite element analysis of vasogenic brain edema. Nagashima T, et al. **Neurol Med Chir (Tokyo)** 1990 Jan;30(1):1–9

Effect of LiCl pretreatment on cholinomimetic-induced seizures and seizure-induced brain edema in rats. Terry JB, et al. **Neurosci Lett** 1990 Jun 22;114(1):123–7

The pathophysiology of experimental brain edema. Hossmann KA. **Neurosurg Rev** 1989;12(4):263–80 (55 ref.)

The effects of brain edema on intracranial pressure in focal cerebral ischemia. An experimental study in a rat using magnetic resonance imaging. Kotwica Z, et al. **Zentralbl Neurochir** 1989;50(2):68–71

[The effects of disturbance of cerebral venous drainage on focal cerebral blood flow and ischemic cerebral edema] Yura S, et al. **No To Shinkei** 1990 Mar;42(3):269–75 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Pharmacokinetics of glucosteroids in severe head injury. Experimental studies in rat brain after cold lesion. Kostron H, et al. **Adv Neurol** 1990;52:289–94

Dose-response relation for dexamethasone in cold lesion-induced brain edema in rats. Meinig G, et al. **Adv Neurol** 1990;52:295–300

Effects of fluosol-DA on brain edema, energy metabolites, and tissue oxygen content in acute cerebral ischemia. Memezawa H, et al. **Adv Neurol** 1990;52:109–18

High-dose dexamethasone given long before cerebral ischemia does not ameliorate edema formation. Mima T, et al. **Adv Neurol** 1990;52:544

Effect of glycerol on the hemodynamics of acutely induced ischemic area in the cerebral cortex of cats. Ohta K, et al. **Adv Neurol** 1990;52:275–84

Cerebral protection during reperfusion with superoxide dismutase in focal cerebral ischemia. Pereira BM, et al. **Adv Neurol** 1990;52:97–103

Indomethacin attenuates early postischemic vasogenic edema and cerebral injury. Ting P. **Adv Neurol** 1990;52:119–26

Protective effects of superoxide dismutase on acute reperfusion injury of gerbil brain. Uyama O, et al. **Free Radic Biol Med** 1990;8(3):265–8

Dimethylthiourea reduces ischemic brain edema without affecting cerebral blood flow. Martz D, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):352–7

Attenuation of decompressive hypoperfusion and cerebral edema by superoxide dismutase. Schettini A, et al. **J Neurosurg** 1989 Oct;71(4):578–87

Iron depletion or chelation reduces ischemia/reperfusion-induced edema in gerbil brains. Patt A, et al. **J Pediatr Surg** 1990 Feb;25(2):224–7; discussion 227–8

Effect of nimodipine on ischemia-induced brain edema and mortality in a novel transient middle cerebral artery occlusion model. Hara H, et al. **Jpn J Pharmacol** 1990 Jun; 53(2):247–53

Effects of crystalloid and colloid infusions on intracranial pressure [letter; comment] Todd M, et al. **Neurosurgery** 1990 Mar;26(3):546–8 Comment on: Neurosurgery 1989 Aug;25(2):173–8; discussion 178–9.

Effect of steroids on edema and sodium uptake of the brain during focal ischemia in rats. Betz AL, et al. **Stroke** 1990 Aug;21(8):1199–204

Effect of uridine 5'-diphosphate on cryogenic brain edema in rabbits. Yoshida S, et al. **Stroke** 1989 Dec;20(12):1694–9

[Effect of calcium antagonist nimodipine and induced hypertension on cerebral vessel reactivities, cerebral blood flow, cerebral edema and infarction in cats with one hour middle-cerebral-artery occlusion] Sakaki T, et al. **No Shinkei Geka** 1990 May;18(5):423–30 (Eng. Abstr.) **(Jpn)**

[Protective action of thyroliberin and its synthetic analog (PR-546) in craniocerebral trauma] Gurskaia IE, et al. **Biull Eksp Biol Med** 1990 May;109(5):432–4 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Application of dynamic computed tomography scan and computed tomography densitometry in the evaluation of brain volume enlargement. Czernicki Z, et al. **Adv Neurol** 1990;52:529–32

Reversal sign on CT: effect of anoxic/ischemic cerebral injury in children. Han BK, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):361–8

Does "black" brain mean doom? Computed tomography in the prediction of outcome in children with severe head injuries: "benign" vs "malignant" brain swelling. Whyte KM, et al. **Australas Radiol** 1989 Nov;33(4):344–7

Computed tomographic findings in brain swelling. Weisberg L, et al. **Comput Med Imaging Graph** 1990 Jul–Aug; 14(4):263–8

Computed tomographic changes of the brain in toxaemia of pregnancy. Kolawole TM, et al. **Eur J Radiol** 1990 Jul–Aug;11(1):46–53 (17 ref.)

Symmetrical 'vasogenic' brain oedema. Kreel L. **Postgrad Med J** 1989 Mar;65(761):161–2

[Evaluation of the sequelae of suppurative meningitis and meningoencephalitis by computerized tomography] Michowicz A, et al. **Przegl Epidemiol** 1989;43(3):295–300 (Eng. Abstr.) **(Pol)**

SURGERY

Treatment of right hemispheric cerebral infarction by hemicraniectomy. Delashaw JB, et al. **Stroke** 1990 Jun; 21(6):874–81

[The value of large pressure-relieving trepanation in treatment of refractory brain edema. Animal experiment studies, initial clinical results] Burkert W, et al. **Zentralbl Neurochir** 1989;50(2):106–8 (Eng. Abstr.) **(Ger)**

THERAPY

Rapid management of intracranial hypertension to reverse transtentorial herniation. Verderber L, et al. **J Tenn Med Assoc** 1990 Mar;83(3):119–23

[The current state of the problem of treating brain edema and swelling] Kvitnitskiĭ-Ryzhov IuN, et al. **Zh Vopr Neirokhir** 1989 Jul–Aug;(4):40–7 (125 ref.) **(Rus)**

BRAIN ELECTRICAL ACTIVITY MAPPING see **BRAIN MAPPING**

BRAIN INJURIES

Traumatic brain injury: a silent epidemic [editorial] Goldstein M. **Ann Neurol** 1990 Mar;27(3):327

Traumatic brain injury: required reading [letter; comment] **ASHA** 1989 Nov;31(11):5 Comment on: ASHA 1989 Aug;31(8):87–8.

[Cranial injury in children] Campisi M, et al. **Minerva Anestesiol** 1989 Apr;55(4):173–5 (Eng. Abstr.) **(Ita)**

[Skullbase-penetrating injuries caused by umbrella tips: case reports] Tokitsu M, et al. **No Shinkei Geka** 1990 Feb; 18(2):189–92 (13 ref.) (Eng. Abstr.) **(Jpn)**

[Severe cranio-encephalic trauma. Prognosis factors and results in 142 cases] Vilalta J, et al. **Neurologia** 1986 Nov–Dec;1(6):241–5 (Eng. Abstr.) **(Spa)**

BLOOD

Head injury: clonidine decreases plasma catecholamines. Payen D, et al. **Crit Care Med** 1990 Apr;18(4):392–5

The secretion of human growth hormone stimulated by human growth hormone releasing factor following severe cranio-cerebral trauma. Gottardis M, et al. **Intensive Care Med** 1990;16(3):163–6

Biochemical markers in the acute stage of head injury—aldosterone and CK-BB. Takahashi H, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):192–5

[The role of lipids in middle molecular weight fractions as a feature of the pathological process] Promyslov MSh, et al. **Vopr Med Khim** 1989 Jul–Aug;35(4):105–7 (Eng. Abstr.) **(Rus)**

[Disordered phosphorus metabolism and its correction in the acute period of severe craniocerebral trauma] Pas'ko SA, et al. **Zh Vopr Neirokhir** 1990 May–Jun;(3):14–6 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Creatine kinase (CK-BB) determination in cerebrospinal fluid after acute experimental head injury. Anagnostopoulos DI, et al. **Br J Neurosurg** 1988;2(2):169–72

S-100 protein and neuron-specific enolase in CSF after experimental traumatic or focal ischemic brain damage. Hårdemark HG, et al. **J Neurosurg** 1989 Nov;71(5 Pt 1):727–31

Beta-endorphin in cerebrospinal fluid and serum after severe head injury. Zimmerman RS, et al. **Neurosurgery** 1990 May; 26(5):764–70

[Cyclic adenosine monophosphate in the cerebrospinal fluid of patients with brain trauma and diseases] Skorniakov VI, et al. **Zh Vopr Neirokhir** 1989 Jul–Aug;(4):37–40 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Neonatal ultrasound casebook. Antenatal brain injury and maternal cocaine use. Sims ME, et al. **J Perinatol** 1989 Sep;9(3):349–50

COMPLICATIONS

Sequential changes of auditory brain stem responses in relation to intracranial and cerebral perfusion pressure and initiation of secondary brain stem damage. Kawahara N, et al. **Acta Neurochir (Wien)** 1989;100(3–4):142–9

Head injuries complicated by chest trauma. A review of 50 consecutive patients. Kotwica Z, et al. **Acta Neurochir (Wien)** 1990;103(3–4):109–11

Post-traumatic intradiploic pseudomeningocele in children. Mahapatra AK, et al. **Acta Neurochir (Wien)** 1989; 100(3–4):120–6

Chronological evaluation of acute traumatic intracerebral haematoma. Yamaki T, et al. **Acta Neurochir (Wien)** 1990; 103(3–4):112–5

Vestibular abnormalities in encephalopathia pugilistica. Krejčová H, et al. **Acta Otolaryngol Suppl (Stockh)** 1989; 468:209–10

Brain edema after an experimental missile wound. Carey ME, et al. **Adv Neurol** 1990;52:301–5

Glycerol dehydrates traumatic and cold-lesioned brain edema as well as normal brain. Chen JL, et al. **Adv Neurol** 1990;52:550

Effects of a 21-aminosteroid (U-74006F) on cerebral metabolites and edema after severe experimental head trauma. Dimlich RV, et al. **Adv Neurol** 1990;52:365–75

Effect of superoxide dismutase in cats with cold-induced edema. Ikeda Y, et al. **Adv Neurol** 1990;52:203–10

Intravenous glutamate enhances edema formation after a freezing lesion. Kempski O, et al. **Adv Neurol** 1990; 52:219–23

Hydrostatic pressure versus osmotic pressure in the development of vasogenic brain edema induced by cold injury. Kuroiwa T, et al. **Adv Neurol** 1990;52:11–9

Relation between epileptic activities and edema formation after cryogenic injury in the rabbit. Loiseau H, et al. **Adv Neurol** 1990;52:257–67

Comparative studies of edema produced by fluid percussion injury with lateral and central modes of injury in cats. Marmarou A, et al. **Adv Neurol** 1990;52:233–6

Dose-response relation for dexamethasone in cold lesion-induced brain edema in rats. Meinig G, et al. **Adv Neurol** 1990;52:295–300

Posttraumatic cerebral infarction diagnosed by CT: prevalence, origin, and outcome. Mirvis SE, et al. **AJR Am J Roentgenol** 1990 Jun;154(6):1293–8

Lithium carbonate for aggressive behavior or affective instability in ten brain-injured patients. Glenn MB, et al. **Am J Phys Med Rehabil** 1989 Oct;68(5):221–6

Peripheral nerve lesions in traumatic brain-injured patients [letter; comment] Moskowitz E. **Am J Phys Med Rehabil** 1989 Oct;68(5):256 Comment on: Am J Phys Med Rehabil 1989 Feb;68(1):15–7.

Extending the indications for cerebral protection. Sconzo JM, et al. **Anesth Analg** 1990 Oct;71(4):434–9

Prolonged reduction in colloid oncotic pressure does not increase brain edema following cryogenic injury in rabbits. Kaieda R, et al. **Anesthesiology** 1989 Oct;71(4):554–60

A comparison of the effects of halothane, isoflurane, and pentobarbital anesthesia on intracranial pressure and cerebral edema formation following brain injury in rabbits. Kaieda R, et al. **Anesthesiology** 1989 Oct;71(4):571–9

Brain injury after ischemia and trauma. The role of vitamin E. Yoshida S. **Ann N Y Acad Sci** 1989;570:219–36 (38 ref.)

Mania after brain injury: neuroradiological and metabolic findings. Starkstein SE, et al. **Ann Neurol** 1990 Jun; 27(6):652–9

Relationship between admission hyperglycemia and neurologic outcome of severely brain-injured patients. Young B, et al. **Ann Surg** 1989 Oct;210(4):466–72; discussion 472–3

The efficacy of cognitive rehabilitation in patients with traumatic brain injury. Volpe BT, et al. **Arch Neurol** 1990 Feb;47(2):220–2 (39 ref.)

Brain injury obscured by chronic pain: a preliminary report. Anderson JM, et al. **Arch Phys Med Rehabil** 1990 Aug; 71(9):703–8

Rehabilitation inpatient screening of early cognitive recovery. Barry P, et al. **Arch Phys Med Rehabil** 1989 Dec; 70(13):902–6

Accelerated speech in dysarthria after acquired brain injury: acoustic correlates. Ziegler W, et al. **Br J Disord Commun** 1988 Dec;23(3):215–28

Vertebral artery occlusion associated with closed head injury: report of three cases. Bishara SN, et al. **Br J Neurosurg** 1989;3(4):495–501

Traumatic epidural haematomas of the posterior fossa: 20 new cases and a review of the literature since 1961. Holzschuh M, et al. **Br J Neurosurg** 1989;3(2):171–80 (41 ref.)

Acute isodense extradural haematoma [see comments] May PL, et al. **Br J Neurosurg** 1989;3(2):221–4 Comment in: Br J Neurosurg 1990;4(2):161.

The autonomic dysfunction syndrome: aetiology and treatment. Rossitch E Jr, et al. **Br J Neurosurg** 1988; 2(4):471–8 (11 ref.)

An uncommon cause of fever in a brain injured patient. Aboulafia AJ, et al. **Brain Inj** 1990 Jul–Sep;4(3):307–9

Neuropsychological assessment of brain damage: discriminative validity of the McCarron-Dial System. Dial JG, et al. **Brain Inj** 1990 Jul–Sep;4(3):239–46

Relationship of new-onset systemic hypertension and normal pressure hydrocephalus. Mysiw WJ, et al. **Brain Inj** 1990 Jul–Sep;4(3):233–8

Managing hypersexual disorders in brain-injured clients. Zencius A, et al. **Brain Inj** 1990 Apr–Jun;4(2):175–81

Traumatic isolated intracerebral hemorrhage in children. Kang JK, et al. **Childs Nerv Syst** 1989 Oct;5(5):303–6

Extracerebral complications of head injury. Bloomfield EL. **Crit Care Clin** 1989 Oct;5(4):881–92 (43 ref.)

Effectiveness of the kinetic treatment table for preventing and treating pulmonary complications in severely head-injured patients. Clemmer TP, et al. **Crit Care Med** 1990 Jun;18(6):614–7

Epilepsy in brain-injured children. Aicardi J. **Dev Med Child Neurol** 1990 Mar;32(3):191–202 (97 ref.)

The Grice extra-articular subtalar arthrodesis in the treatment of spastic hindfoot valgus deformity. Drvaric DM, et al. **Dev Med Child Neurol** 1989 Oct;31(5):665–9

Migraine, epilepsy, post-traumatic syndromes, and spreading depression. Gordon N. **Dev Med Child Neurol** 1989 Oct; 31(5):682–6 (28 ref.)

Closed head injury sequelae: changing concepts. Speed WG 3d. **Headache** 1989 Nov;29(10):643–7 (18 ref.)

Pulmonary complications in the patient with acute head injury: neurogenic pulmonary edema. Dettbarn CL, et al. **Heart Lung** 1989 Nov;18(6):583–9 (67 ref.)

Posttraumatic cerebellar syndrome: response to l-tryptophan. Sandyk R, et al. **Int J Neurosci** 1989 Aug;47(3–4):301–2

Post-traumatic extrapyramidal syndrome: case report. Della Sala S, et al. **Ital J Neurol Sci** 1990 Feb;11(1):65–9

The behavioural treatment of nocturnal enuresis in a severely brain-damaged client. Papworth MA. **J Behav Ther Exp Psychiatry** 1989 Sep;20(3):265–8

Acquired aprosodia in children. Bell WL, et al. **J Child Neurol** 1990 Jan;5(1):19–26

Traumatic laceration of pericallosal artery resulting in interhemispheric subdural hematoma: a case report. Gartman JJ Jr, et al. **J Emerg Med** 1989 Nov–Dec; 7(6):603–10 (25 ref.)

Usefulness of exploratory burr holes in the management of severe head injury. Natarajan M, et al. **J Indian Med Assoc** 1989 Nov;87(11):256–8

Akathisia following traumatic brain injury: treatment with bromocriptine [letter] Stewart JT. **J Neurol Neurosurg Psychiatry** 1989 Oct;52(10):1200–1

Beam-walking in rats: studies towards developing an animal model of functional recovery after brain injury. Goldstein LB, et al. **J Neurosci Methods** 1990 Feb;31(2):101–7

Posttraumatic narcolepsy: the complete syndrome with tissue typing. Case report. Good JL, et al. **J Neurosurg** 1989 Nov; 71(5 Pt 1):765–7

Severe traumatic brain injury [letter] Jennett B, et al.

J Neurosurg 1990 Sep;73(3):479–80

Cranial nerve palsy as a delayed complication of attempted infanticide by insertion of a stylet through the fontanel. Case report. Notermans NC, et al. J Neurosurg 1990 May; 72(5):818–20

Brain edema following an experimental missile wound to the brain. Carey ME, et al. J Neurotrauma 1990 Spring; 7(1):13–20

Expressive language recovery in severely brain-injured children and adolescents. Campbell TF, et al. J Speech Hear Disord 1990 Aug;55(3):567–81

Two cases of epilepsia partialis continua associated with head trauma. Nobuhara K, et al. Jpn J Psychiatry Neurol 1989 Sep;43(3):526–7

Evidence for etiologic heterogeneity in Alzheimer's disease. Bird TD, et al. Neurobiol Aging 1989 Sep–Oct;10(5):432–4; discussion 446–8

Interventions in polytrauma in the Kingdom of Saudi Arabia. A study of 310 polytraumatised patients. Beeko A, et al. Neurosurg Rev 1989;12 Suppl 1:17–21

Early post-traumatic intracranial hematoma. Frowein RA, et al. Neurosurg Rev 1989;12 Suppl 1:184–7

Post-traumatic intention tremor—clinical features and CT findings. Iwadate Y, et al. Neurosurg Rev 1989;12 Suppl 1:500–7

Two types of delayed traumatic intracerebral hematoma: differential forms of treatment. Katayama Y, et al. Neurosurg Rev 1989;12 Suppl 1:231–6

Trials of clinical evaluation for impending brain death. Kawahara N, et al. Neurosurg Rev 1989;12 Suppl 1:363–8

Post-traumatic subdural hygroma as a complication of arachnoid cysts of the middle fossa. Kulali A, et al. Neurosurg Rev 1989;12 Suppl 1:508–13

Delayed diagnosis and treatment in traumatic intracranial hemorrhage. Lim DP. Neurosurg Rev 1989;12 Suppl 1:237–42

Delayed post-traumatic intracerebral bleeding. Delayed post-traumatic apoplexy: "Spätapoplexie". Nanassis K, et al. Neurosurg Rev 1989;12 Suppl 1:243–51 (9 ref.)

Spontaneous resolution of acute extradural hematoma—study of twenty-five selected cases. Pozzati E, et al. Neurosurg Rev 1989;12 Suppl 1:188–9

A peculiar intracerebral hemorrhage: the gliding contusion, its relationship to diffuse brain damage. Sganzerla EP, et al. Neurosurg Rev 1989;12 Suppl 1:215–8

Delayed traumatic intracranial hematomas—clinical study of seven years. Sprick C, et al. Neurosurg Rev 1989;12 Suppl 1:228–30

Repeated early CT examinations in traumatic intracranial hematomas and in closed head injuries. Stammler U, et al. Neurosurg Rev 1989;12 Suppl 1:159–68

Acute intracranial pneumocephalus: prognosis and management—a retrospective analysis of 101 cases. Steudel WI, et al. Neurosurg Rev 1989;12 Suppl 1:125–36

Atypical extradural hematomas: progressive expanding process. Vaz A, et al. Neurosurg Rev 1989;12 Suppl 1:196–7

Chronological evaluation of the occurrence and growth of the traumatic intracerebral hematoma. Yamaki T, et al. Neurosurg Rev 1989;12 Suppl 1:149–52

Study of those cases which showed rapid deterioration within a few hours after head injury—importance of follow-up CT scans at an early stage. Yoshimizu N, et al. Neurosurg Rev 1989;12 Suppl 1:175–7

Delayed post-traumatic apoplexy. Zülch KJ. Neurosurg Rev 1989;12 Suppl 1:252–5

Causes of infections in penetrating head wounds in the Iran–Iraq War. Aarabi B. Neurosurgery 1989 Dec; 25(6):923–6

Magnetic resonance imaging of a fat embolism of the brain: case report. Saito A, et al. Neurosurgery 1990 May; 26(5):882–4; discussion 884–5

Late posttraumatic meningitis with concealed CSF otorrhea. Lui TN, et al. Pediatr Neurosci 1989;15(2):85–7

Efficacy of barbiturates in the treatment of resistant intracranial hypertension in severely head-injured children. Pittman T, et al. Pediatr Neurosci 1989;15(1):13–7

Rehabilitative neurosurgery: posttraumatic syndromes. Richardson RR. Stereotact Funct Neurosurg 1989; 53(2):105–12

[Ocular complications caused by cranial trauma] Cantani A. Ann Pediatr (Paris) 1989 Sep;36(7):483 (Fre)

[Prognosis of cranial trauma] Cloup M. Ann Pediatr (Paris) 1989 Sep;36(7):484 (Fre)

[Post-traumatic subdural hygroma: diagnostic conditions and therapeutic attitude in Gabon] Loembe PM, et al. J Chir (Paris) 1989 Aug–Sep;126(8–9):456–60 (Eng. Abstr.) (Fre)

[Optic nerve damage following craniocerebral trauma. A critical analysis of trans-ethmoid decompression of the optic nerve] Schröder M, et al. Laryngorhinootologie 1989 Oct;68(10):534–8 (Eng. Abstr.) (Ger)

[Magnetic resonance tomography (1.5 T) of traumatic extracerebral hematomas] Petersen D, et al. Radiologe 1989 Sep;29(9):416–22 (Eng. Abstr.) (Ger)

[The significance of anticipating suspected brain death for the accusation of failure to treat according to Section 323c of the Federal Penal Code] Berg S, et al. Z Rechtsmed 1990;103(4):279–90 (Eng. Abstr.) (Ger)

[Diffuse traumatic cerebral injuries in children] Sganzerla EP, et al. Minerva Anestesiol 1989 Apr;55(4):177–81 (Eng. Abstr.) (Ita)

[Barbiturate therapy in traumatic cerebral vascular disease: report of two cases] Yanaka K, et al. No Shinkei Geka 1989 Dec;17(12):1153–7 (Eng. Abstr.) (Jpn)

[Study of directional preponderance in central disorders of the vestibular system] Kaźmierczak H. Otolaryngol Pol 1989;43(3):195–200 (Eng. Abstr.) (Pol)

[Conservative treatment of patients after cranio-cerebral injuries] Lebkowski W, et al. Pol Tyg Lek 1989 Jan 30; 44(5):107–8, 111 (Pol)

[Conservative treatment of post-traumatic intracerebellar hematoma] Buczek M, et al. Wiad Lek 1989 Apr 30; 42(8):550–5 (Eng. Abstr.) (Pol)

[Pathogenesis and prevention of pneumonia in patients with severe craniocerebral trauma] Korotkevich AG, et al. Anesteziol Reanimatol 1990 May–Jun;(3):50–3 (Eng. Abstr.) (Rus)

[Correction of immunity disorder developing after craniocerebral trauma] Romodanov AP, et al. Biull Eksp Biol Med 1989 Aug;108(8):231–3 (Eng. Abstr.) (Rus)

[Diagnosis and surgical treatment of traumatic hematomas of the posterior cranial fossa] Pedachenko EG, et al. Klin Khir 1989;(12):17–9 (Eng. Abstr.) (Rus)

[Neurologic analysis of several forms of acromegaly] Erokhina LG, et al. Sov Med 1989;(7):81–4 (Rus)

[Vestibular syndrome in cerebral angiodystonia] Kukhtevich II, et al. Sov Med 1989;(7):84–7 (Rus)

[Difficulties of differential diagnosis in traumatic and aneurysmal intracranial hemorrhages] Spiridonova VD. Sov Med 1989;(12):114–7 (Rus)

[Reaction of short-latency brain stem evoked potentials to acoustic stimulation and electroencephalography in post-traumatic epilepsy] Avakian GN, et al. Zh Nevropatol Psikhiatr 1989;89(9):65–8 (Eng. Abstr.) (Rus)

[Acute traumatic intracranial hematoma in children] Okladnikov GI, et al. Zh Nevropatol Psikhiatr 1989; 89(8):53–5 (Eng. Abstr.) (Rus)

[The ultraviolet irradiation of autologous blood and endolymphatic antibiotic therapy in treating pneumonia in patients with craniocerebral trauma] Kibirev AB, et al. Zh Vopr Neirokhir 1990 May–Jun;(3):11–4 (Eng. Abstr.) (Rus)

[Psychotherapy of patients with a history of craniocerebral trauma] Morozov AM. Zh Vopr Neirokhir 1989 Sep–Oct; (5):41–3 (Eng. Abstr.) (Rus)

[Bilateral traumatic subdural hematomas] Pedachenko GA, et al. Zh Vopr Neirokhir 1990 May–Jun;(3):6–9 (Eng. Abstr.) (Rus)

[Craniocerebral trauma and stroke] Pedachenko GA, et al. Zh Vopr Neirokhir 1989 Sep–Oct;(5):39–41 (Eng. Abstr.) (Rus)

[Posttraumatic hydrocephalus (a review of the literature)] Saade Elu. Zh Vopr Neirokhir 1989 Jul–Aug;(4):52–5 (65 ref.) (Rus)

[Diagnosis of traumatic intracranial hematoma—analysis of methods and organizational problems] Samardžić M, et al. Acta Chir Iugosl 1989;36 Suppl 2:718–20 (Scr)

[The post-traumatic organic psychosyndrome and work capacity evaluation] Gavranović M, et al. Med Arh 1984; 38(6):275–8 (Eng. Abstr.) (Scr)

[Transient global amnesia following slight cranial injury (letter)] Moral A, et al. Neurologia 1988 May–Jun; 3(3):124–5 (Spa)

[Deep venous thrombosis related to cranioencephalic injury] Yáñez Baña RM, et al. Neurologia 1989 Sep;4(7):256–9 (Eng. Abstr.) (Spa)

CONGENITAL

Brain damage in monozygous twins. Larroche JC, et al. Biol Neonate 1990;57(5):261–78

DIAGNOSIS

Shaken baby syndrome. Spaide RF, et al. Am Fam Physician 1990 Apr;41(4):1145–52 (39 ref.)

Radiological case of the month. Basal ganglia injury after cardiopulmonary arrest: clinical and magnetic resonance imaging correlation. Jacobs MB, et al. Am J Dis Child 1990 Aug;144(8):937–8

Retinal hemorrhage predicts neurologic injury in the shaken baby syndrome. Wilkinson WS, et al. Arch Ophthalmol 1989 Oct;107(10):1472–4

Cerebral arterial vasospasm following severe head injury: a transcranial Doppler study. Compton JS, et al. Br J Neurosurg 1987;1(4):435–9

Unexpected recovery of functional communication following a prolonged period of mutism post-head injury. Jordan FM, et al. Brain Inj 1990 Jan–Mar;4(1):101–8

Review of tests of standing balance abilities. Newton R. Brain Inj 1989 Oct–Dec;3(4):335–43 (25 ref.)

Simulation of brain damage: assessment and decision rules. Wasyliw OE, et al. Bull Am Acad Psychiatry Law 1989; 17(4):373–86

Early prediction of outcome from cerebral trauma by somatosensory evoked potentials. Judson JA, et al. Crit Care Med 1990 Apr;18(4):363–8

Recent developments in the imaging of neuraxis trauma. Cohen W. Curr Opin Radiol 1990 Feb;2(1):34–9 (15 ref.)

Head injuries in the pediatric population. Bruce DA. Curr Probl Pediatr 1990 Feb;20(2):61–107 (76 ref.)

A comparison of language deficits in learning-disabled, head-injured, and nondisabled young adults: results from an abbreviated Aphasia Screening Test. O'Donnell JP, et al. J Clin Psychol 1990 May;46(3):310–5

Neurological injuries in boxers: the use of tests [letter] Charnas L, et al. JAMA 1990 Sep 26;264(12):1532–3

Significance of transcranial Doppler sonography in cerebral injury: influence of hemodynamic changes on therapeutic management. Gawlowski J, et al. Neurosurg Rev 1989;12 Suppl 1:386–8

1H NMR of plasma for detecting cancer. The effect of trauma on linewidths. Sutherland G, et al. NMR Biomed 1989 Jul; 2(2):66–9

Shaken baby syndrome diagnosed by magnetic resonance imaging. Levin AV, et al. Pediatr Emerg Care 1989 Sep; 5(3):181–6 (32 ref.)

An unusual syndrome of pediatric brainstem trauma. Galyon DD, et al. Pediatr Neurosci 1988;14(5):272–6

Nonaccidental craniocerebral trauma (child abuse): MR imaging [editorial] Ball WS Jr. Radiology 1989 Dec; 173(3):609–10

Head injury in child abuse: evaluation with MR imaging. Sato Y, et al. Radiology 1989 Dec;173(3):653–7

Neuroimaging: 1990. Lukin R. Semin Roentgenol 1989 Oct; 24(4):218–30 (47 ref.)

Intraoperative ultrasound imaging of the entire brain through unilateral exploratory burr holes after severe head injury: technical note. Andrews BT, et al. Surg Neurol 1990 Apr; 33(4):291–4

Head trauma. Ahmadi J, et al. Top Magn Reson Imaging 1989 Dec;2(1):17–24 (15 ref.)

[Cerebral blood flow velocity. A prognostic factor following severe craniocerebral trauma?] Sanker P, et al. Aktuel Traumatol 1990 Jun;20(3):152–6 (Eng. Abstr.) (Ger)

[Diagnostic value of the early auditory evoked potentials in acute cranio-cerebral trauma in children] Küttner K, et al. Kinderarztl Prax 1990 Jan;58(1):37–43 (Eng. Abstr.) (Ger)

[Ultrasonic studies of craniocerebral injuries in infants] Schwalbe J, et al. Z Kinderchir 1989 Dec;44(6):330–5 (Eng. Abstr.) (Ger)

[Computerized tomography and electroencephalography findings in post-traumatic brain edema] Meier U, et al. Zentralbl Neurochir 1989;50(1):42–4 (Eng. Abstr.) (Ger)

[Ultrasonics in the study of periencephalic post-traumatic effusions in the newborn and suckling infants] Magnano GM, et al. Radiol Med (Torino) 1989 Nov;78(5):492–5 (Eng. Abstr.) (Ita)

[Significance of magnetic resonance imaging in diffuse axonal injury] Yokota H, et al. No Shinkei Geka 1989 Dec; 17(12):1133–8 (Eng. Abstr.) (Jpn)

[Creatine kinase isoenzymes in the diagnosis of acute cranio-cerebral trauma] Skorniakov VI, et al. Lab Delo 1989;(7):13–5 (Eng. Abstr.) (Rus)

[Neuro-ultrasonography in the assessment of perinatal lesions of the brain in high-risk children at birth and at 3 months of age] Nikulin LA, et al. Pediatriia 1989;(10):46–50 (Eng. Abstr.) (Rus)

[The variation pulsometric and electrocardiographic indices of patients with mild craniocerebral trauma] Nasalik BG. Vrach Delo 1990 May;(5):80–2 (Eng. Abstr.) (Rus)

[The electrocardiogram of patients with mild craniocerebral trauma] Polishchuk NE, et al. Vrach Delo 1989 Dec; (12):78–81 (Eng. Abstr.) (Rus)

[The diagnosis and method of surgical treatment in dislocation of the brain under the falx cerebri in craniocerebral trauma] Krylov VV, et al. Zh Vopr Neirokhir 1990 May–Jun;(3):3–6 (Eng. Abstr.) (Rus)

[Current aspects of the diagnosis and combined treatment of closed craniocerebral trauma in the acute period] Romodanov AP. Zh Vopr Neirokhir 1989 Sep–Oct;(5):35–8 (Rus)

[Craniocerebral trauma and district hospitals (letter)] Barraquer Bordas L. Med Clin (Barc) 1989 May 27; 92(20):796 (Spa)

DRUG THERAPY

Pharmacokinetics of glucosteroids in severe head injury. Experimental studies in rat brain after cold lesion. Kostron H, et al. Adv Neurol 1990;52:289–94

Dexamethasone and the serious head injury. Jooma R. Br J Neurosurg 1987;1(4):400–3

Amantadine: a new clinical profile for traumatic brain injury. Gualtieri T, et al. Clin Neuropharmacol 1989 Aug; 12(4):258–70 (50 ref.)

A controlled study of Dextran 40: effect on cerebral blood flow and metabolic rates in acute head trauma. Artru F, et al. Intensive Care Med 1989;15(8):499–504

The effects of dihydroergotamine in patients with head injury and raised intracranial pressure. Grände PO. Intensive Care Med 1989;15(8):523–7

The incidence of seizures during tricyclic antidepressant drug treatment in a brain-injured population. Wroblewski BA, et al. J Clin Psychopharmacol 1990 Apr;10(2):124–8

Possible protective effect of endogenous opioids in traumatic brain injury. Hayes RL, et al. J Neurosurg 1990 Feb; 72(2):252–61

[Consciousness-restoring effect of angong-niuhuang pills in craniopathy] Wang YH. Chung Hsi I Chieh Ho Tsa Chih 1989 Dec;9(12):726–7, 708–9 (Eng. Abstr.) (Chi)

[Current views on steroid hormones in the treatment of brain

injuries] Zhou LF. **Chung Hua Wai Ko Tsa Chih** 1989 Jul; 27(7):441–2 (20 ref.) **(Chi)**

[Effect of naloxone on experimental head injury in cats] Zhu C. **Chung Hua Wai Ko Tsa Chih** 1989 Aug;27(8):498–500, 511 (Eng. Abstr.) **(Chi)**

[Protective action of thyroliberin and its synthetic analog (PR–546) in craniocerebral trauma] Gurskaia IE, et al. **Biull Eksp Biol Med** 1990 May;109(5):432–4 (Eng. Abstr.) **(Rus)**

[Effect of nootropic agents on the brain bioelectrical activity and on the indices of neuromediator metabolism in the acute period of severe craniocerebral trauma] Madorskii SV, et al. **Zh Vopr Neirokhir** 1989 May–Jun;(3):29–35 (Eng. Abstr.) **(Rus)**

[High–dose barbiturates in severe cranio–encephalic trauma] Net Castel A. **Neurologia** 1988 Nov–Dec;3(6):209–10 **(Spa)**

ECONOMICS

Never the same [editorial] [see comments] Demichelis A. **ASHA** 1989 Aug;31(8):87–8 Comment in: ASHA 1989 Nov;31(11):5.

Brain injury and reimbursement issues. McCarty JP. **ASHA** 1989 Aug;31(8):89–90

ENZYMOLOGY

Creatine–kinase–BB after severe head–injury as an index of prognosis in relation to nature of trauma and patients age. Niedeggen A, et al. **Acta Neurochir (Wien)** 1989; 101(3–4):117–20

Clinical application of a new enzyme–linked assay for the estimation of brain–specific creatine kinase in head injured patients. Curley P, et al. **Br J Neurosurg** 1989;3(6):655–8

Estimation of brain lesion size based on quantifying CK–BB release [letter] Delanghe J, et al. **Clin Chem** 1990 Feb; 36(2):404–5

EPIDEMIOLOGY

Incidence of impact trauma with cranial injuries ascribed to shaking. Alexander R, et al. **Am J Dis Child** 1990 Jun; 144(6):724–6

Brain injuries among infants, children, adolescents, and young adults. Kraus JF, et al. **Am J Dis Child** 1990 Jun; 144(6):684–91

Outcome of craniocerebral trauma in infants and children. Cardia E, et al. **Childs Nerv Syst** 1990 Jan;6(1):23–6

The risk of intracranial complications in pediatric head injury. Results of multivariate analysis. Chan KH, et al. **Childs Nerv Syst** 1990 Jan;6(1):27–9

Hospitalized head–injured patients in Maryland: incidence and severity of injuries. MacKenzie EJ, et al. **Md Med J** 1989 Sep;38(9):725–32

Neurotraumatological survey in northern Israel. I. Annual and seasonal variations. Levi L, et al. **Neuroepidemiology** 1989;8(6):316–21

The outcome of head injury: the Saudi experience. Ibrahim AW, et al. **Neurol Med Chir (Tokyo)** 1989 Sep;29(9):816–9

A prospective clinical and epidemiological study of head injuries in northern Italy: the commune of Ravenna. Servadei F, et al. **Neurosurg Rev** 1989;12 Suppl 1:429–35

The outcome of severe head injuries in children. Shigemori M, et al. **Neurosurg Rev** 1989;12 Suppl 1:436–40

[Epidemiology and course of craniocerebral injuries in children in Cantabria] Vázquez–Barquero A, et al. **Neurologia** 1990 May;5(5):155–9 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Neurobehavioral findings in whiplash patients with long–lasting symptoms. Olsnes BT. **Acta Neurol Scand** 1989 Dec;80(6):584–8

Oxidants and the central nervous system: some fundamental questions. Is oxidant damage relevant to Parkinson's disease, Alzheimer's disease, traumatic injury or stroke? Halliwell B. **Acta Neurol Scand Suppl** 1989;126:23–33 (81 ref.)

Serial abuse in children who are shaken. Alexander R, et al. **Am J Dis Child** 1990 Jan;144(1):58–60

Severe brain damage following general anaesthesia. Paraskevaides EC. **Br J Clin Pract** 1989 Nov;43(11):414

Motorcycling and head injury: admissions to a regional head injury unit. McGhee CN, et al. **Br J Neurosurg** 1987; 1(2):271–5

Horse riding and head injury: admissions to a regional head injury unit. McGhee CN, et al. **Br J Neurosurg** 1987; 1(1):131–5

Chronic subdural hematoma. Another babywalker–stairs related injury. DiMario FJ Jr. **Clin Pediatr (Phila)** 1990 Jul;29(7):405–8

Multiple uterine rupture and crushing injury of the fetal skull after blunt maternal trauma. A case report. Landers DF, et al. **J Reprod Med** 1989 Dec;34(12):988–93

Spinal unit long term inpatient management of patients with severe neurological deficit. Griffiths ER. **Paraplegia** 1989 Oct;27(5):350–3

Experimental biology of cerebral hypoxia–ischemia: relation to perinatal brain damage. Vannucci RC. **Pediatr Res** 1990 Apr;27(4 Pt 1):317–26 (100 ref.)

Cerebral dysfunction following extracorporeal circulation for aortocoronary bypass surgery: no differences in neuropsychological outcome after pulsatile versus nonpulsatile flow. Henze T, et al. **Thorac Cardiovasc Surg** 1990 Apr;38(2):65–8

[Cerebral trauma in boxing] Perez G. **Ann Chir** 1989; 43(9):703–6 **(Fre)**

[Head and brain injuries in bicyclists] Levi L, et al. **Harefuah** 1990 May 15;118(10):575–6 (Eng. Abstr.) **(Heb)**

[Morphofunctional characteristics of the cells of the APUD system of the adrenal glands and the duodenum in the cerebral form of acute radiation sickness] Vlasov PA, et al. **Radiobiologiia** 1989 Nov–Dec;29(6):794–7 (Eng. Abstr.) **(Rus)**

[Craniocerebral injuries in relation to general skiing injuries] Arnautović K, et al. **Med Arh** 1988;42(5–6):303–6 (Eng. Abstr.) **(Scr)**

[Boxing and the brain] García–Albea E. **Neurologia** 1990 Apr; 5(4):113–6 **(Spa)**

[Half of all severe neurotrauma is related to alcohol] Mellergård P, et al. **Lakartidningen** 1990 Apr 18; 87(16):1348–51 **(Swe)**

[Life–threatening intracranial hemorrhage caused by boxing and assaults] Nordström CH, et al. **Lakartidningen** 1990 Jan 31;87(5):301, 303–4 **(Swe)**

HISTORY

[Neurotraumatology in ancient Egypt] Metzel E. **Neurochirurgia (Stuttg)** 1990 May;33(3):78–80 **(Ger)**

IMMUNOLOGY

Suppression of cellular immune activity following severe head injury. Quattrocchi KB, et al. **J Neurotrauma** 1990 Summer;7(2):77–87

Humoral immunodeficiency syndrome in patients with severe head injury? Maerker–Alzer G, et al. **Neurosurg Rev** 1989; 12 Suppl 1:420–8

[Endogenous colony formation in closed craniocerebral trauma in mice] Lobzhanidze AA, et al. **Biull Eksp Biol Med** 1989 Oct;108(10):482–4 (Eng. Abstr.) **(Rus)**

[The immunologic aspects of inflammatory complications in combined maxillofacial and craniocerebral trauma] Zuev VP, et al. **Stomatologiia (Mosk)** 1989 Nov–Dec;68(6):18–20 (Eng. Abstr.) **(Rus)**

METABOLISM

Persistent metabolic sequelae of severe head injury in humans in vivo. Cadoux–Hudson TA, et al. **Acta Neurochir (Wien)** 1990;104(1–2):1–7

Transferrin receptors in injured brain. Orita T, et al. **Acta Neuropathol (Berl)** 1990;79(6):686–8

Positron emission tomography study of 11C–acetoacetate uptake in a freezing lesion in cat brain, as correlated with 11C–tyrosine and 18F–fluorodeoxyglucose uptake, and with proton magnetic resonance imaging. Go KG, et al. **Adv Neurol** 1990;52:525–8

The effect of M1 muscarinic blockade on behavior and physiological responses following traumatic brain injury in the rat. Robinson SE, et al. **Brain Res** 1990 Mar 12; 511(1):141–8

The effects of morphine and traumatic brain injury on central cholinergic neurons. Robinson SE, et al. **Brain Res** 1989 Nov 27;503(1):32–7

The effect of acetylcholine depletion on behavior following traumatic brain injury. Robinson SE, et al. **Brain Res** 1990 Feb 12;509(1):41–6

Free radicals and CNS injury. Hall ED. **Crit Care Clin** 1989 Oct;5(4):793–805 (66 ref.)

Induction of c–fos mRNA and protein in neurons and glia after traumatic brain injury: pharmacological characterization. Dragunow M, et al. **Exp Neurol** 1990 Mar; 107(3):236–48

Partial pressure of oxygen in brain and peripheral nerve during damaging electrical stimulation. McCreery DB, et al. **J Biomed Eng** 1990 Jul;12(4):309–15

The effect of pentobarbital and isoflurane on glucose metabolism in thermally injured rat brain. Archer DP, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):624–30

Brain eicosanoid formation following acute penetration injury as studied by in vivo microdialysis. Yergey JA, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):143–6

Neurochemical approaches to the amelioration of brain injury. Pappius HM. **J Neural Transm Suppl** 1990;29:49–56 (31 ref.)

Effect of noncompetitive blockade of N–methyl–D–aspartate receptors on the neurochemical sequelae of experimental brain injury. McIntosh TK, et al. **J Neurochem** 1990 Oct; 55(4):1170–9

Glial fibrillary acidic protein messenger RNA and glutamine synthetase activity after nervous system injury. Condorelli DF, et al. **J Neurosci Res** 1990 Jun;26(2):251–7

Effects of the N–methyl–D–aspartate receptor blocker MK–801 on neurologic function after experimental brain injury. Mcintosh TK, et al. **J Neurotrauma** 1989 Winter; 6(4):247–59

Mitochondrial metabolism following traumatic brain injury in rats. Vink R, et al. **J Neurotrauma** 1990 Spring;7(1):21–7

Accumulation of calcium in the brain following head trauma. Shapira Y, et al. **Neurol Res** 1989 Sep;11(3):169–72

Laminin–like antigen in rat CNS neurons: distribution and changes upon brain injury and nerve growth factor treatment. Hagg T, et al. **Neuron** 1989 Dec;3(6):721–32

MK–801, an antagonist of NMDA receptors, inhibits injury–induced c–fos protein accumulation in rat brain. Dragunow M, et al. **Neurosci Lett** 1990 Feb 5; 109(1–2):128–33

Trauma–induced increase of extracellular ascorbate in rat cerebral cortex. Hillered L, et al. **Neurosci Lett** 1990 Jun 8;113(3):328–32

Choline acetyltransferase activity and [3H]vesamicol binding in the temporal cortex of patients with Alzheimer's disease, Parkinson's disease, and rats with basal forebrain lesions. Ruberg M, et al. **Neuroscience** 1990;35(2):327–33

Changes of local cerebral glucose utilization, DC potential and extracellular potassium concentration in experimental head injury of varying severity. Kubota M, et al. **Neurosurg Rev** 1989;12 Suppl 1:393–9

Creatin–kinase–BB in blood after severe head injury. Niedeggen A, et al. **Neurosurg Rev** 1989;12 Suppl 1:412–5

A study of changes in plasma aldosterone in patients with acute head injury. Node Y, et al. **Neurosurg Rev** 1989;12 Suppl 1:389–92

Hypermetabolic state following experimental head injury. Sunami K, et al. **Neurosurg Rev** 1989;12 Suppl 1:400–11

The molecular basis of brain injury and brain edema: the role of oxygen free radicals. Ikeda Y, et al. **Neurosurgery** 1990 Jul;27(1):1–11 (164 ref.)

Intraventricular norepinephrine facilitates motor recovery following sensorimotor cortex injury. Boyeson MG, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):497–501

Expression of microtubule–associated protein 2 by reactive astrocytes. Geisert EE Jr, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3967–71

[Ca2+–phospholipid–dependent phosphorylation of cytosol and membrane proteins of the brain in light craniocerebral trauma] Kucherenko SN, et al. **Zh Nevropatol Psikhiatr** 1989;89(12):11–4 (Eng. Abstr.) **(Rus)**

[The level of middle molecules in endogenous intoxication in neurosurgical patients] Amcheslavskii VG, et al. **Zh Vopr Neirokhir** 1989 May–Jun;(3):36–9 (Eng. Abstr.) **(Rus)**

MORTALITY

Effect of indomethacin pretreatment on acute mortality in experimental brain injury. Kim HJ, et al. **J Neurosurg** 1989 Oct;71(4):565–72

Epidemiology and pathology of traumatic deaths occurring at a Level I Trauma Center in a regionalized system: the importance of secondary brain injury. Shackford SR, et al. **J Trauma** 1989 Oct;29(10):1392–7

Multiple injuries: coma and abdominal injury. Disselbeck T, et al. **Neurosurg Rev** 1989;12 Suppl 1:42–6

Head injuries in elderly patients. Miller JD, et al. **Neurosurg Rev** 1989;12 Suppl 1:441–5

Priority of intervention in multiple injuries. Wienand P, et al. **Neurosurg Rev** 1989;12 Suppl 1:32–6

[Fatal accidents of motorcycle riders. Comparison of the craniocervical injury picture before and following introduction of the legally sanctioned protective helmet rule] Tributsch W, et al. **Beitr Gerichtl Med** 1989;47:625–30 (Eng. Abstr.) **(Ger)**

[Incidence and severity of cranial, thoracic and abdominal injuries in polytrauma of grade III severity] Gastinger I, et al. **Zentralbl Chir** 1990;115(4):201–8 (Eng. Abstr.) **(Ger)**

[Statistical and medico–legal investigations on traumatic intracranial injuries (except traffic accidents) on which judicial autopsies conducted] Ito Y, et al. **Igaku Kenkyu** 1989 Jul;59(2):73–82 (Eng. Abstr.) **(Jpn)**

NURSING

Cerebral injuries and intracranial hemorrhages as a result of trauma. Ammons AM. **Nurs Clin North Am** 1990 Mar; 25(1):23–33 (29 ref.)

PATHOLOGY

Diffuse axonal injury after severe head trauma. A clinico–pathological study. Sahuquillo J, et al. **Acta Neurochir (Wien)** 1989;101(3–4):149–58

Biochemical and immunocytochemical changes in glial fibrillary acidic protein after stab wounds. Hozumi I, et al. **Brain Res** 1990 Jul 30;524(1):64–71

Glia maturation factor–beta promotes the appearance of large neurofilament–rich neurons in injured rat brains. Lim R, et al. **Brain Res** 1989 Dec 11;504(1):154–8

Replica casting of the skull base. Palmer GJ, et al. **J Forensic Sci Soc** 1989 Nov–Dec;29(6):407–12

Blunt injuries of the extracranial internal carotid artery. Höllerhage HG, et al. **Neurosurg Rev** 1989;12 Suppl 1:514–8

The response of the cerebral hemisphere of the rat to injury. I. The mature rat. Maxwell WL, et al. **Philos Trans R Soc Lond [Biol]** 1990 Jun 26; 328(1250):479–500

The response of the cerebral hemisphere of the rat to injury. II. The neonatal rat. Maxwell WL, et al. **Philos Trans R Soc Lond [Biol]** 1990 Jun 26; 328(1250):501–13

[Unusual suicides with chain saws] Härtel V, et al. **Arch Kriminol** 1989 Nov–Dec;184(5–6):168–74 (Eng. Abstr.) **(Ger)**

[Unusual circumstances in the discovery of a cadaver. Autopsy and results of findings] Rabl W, et al. **Arch Kriminol** 1990 Mar–Apr;185(3–4):93–8 (Eng. Abstr.)

(Ger)

[Accidental fall-induced craniocerebral injury] Hein PM, et al. **Beitr Gerichtl Med** 1989;47:447-50 (Eng. Abstr.) (Ger)

[Short-stop ammunition] Eisenmenger W, et al. **Z Rechtsmed** 1989;103(2):137-45 (Eng. Abstr.) (Ger)

[Formation of a "crow's foot pattern" in the smoke residue in homicide by forehead gunshot injury] Hochmeister M, et al. **Z Rechtsmed** 1989;102(8):545-8 (Eng. Abstr.) (Ger)

[A heat gelatinized subdural hematoma in a burned cadaver as an indication of a vital accident] Ritter C. **Z Rechtsmed** 1990;103(3):227-30 (Eng. Abstr.) (Ger)

[Reorganization of the cortico-spinal tract after unilateral lesions of the neocortex] Obukhova GP, et al. **Biull Eksp Biol Med** 1989 Nov;108(11):626-8 (Eng. Abstr.) (Rus)

[The effect of a neurotransplant of embryonal tissue on reactive processes during brain trauma in rats] Loseva EV, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jul-Aug;(4):605-9 (Eng. Abstr.) (Rus)

[The clinico-morphological basis for a diagnosis of diffuse axonal brain damage in head trauma] Romodanovskiĭ PO, et al. **Sud Med Ekspert** 1990 Apr-Jun;33(2):12-5 (Eng. Abstr.) (Rus)

[The morphological characteristics of the brain injuries in acceleration trauma depending on the conditions of its occurrence] Sosedko Iul. **Sud Med Ekspert** 1990 Apr-Jun; 33(2):8-11 (Eng. Abstr.) (Rus)

[Current problems in the neuropathology of craniocerebral trauma (a review of the literature)] Lapshinov IuP. **Zh Vopr Neirokhir** 1989 Jul-Aug;(4):47-51 (86 ref.) (Rus)

PHYSIOPATHOLOGY

Observations on intracranial dynamics during respiratory physiotherapy in unconscious neurosurgical patients. Ersson U, et al. **Acta Anaesthesiol Scand** 1990 Feb; 34(2):99-103

The stress response in subarachnoid haemorrhage and head injury. Neil-Dwyer G, et al. **Acta Neurochir Suppl (Wien)** 1990;47:102-10 (14 ref.)

Soccer injuries to the brain. A neurologic and electroencephalographic study of former players. Tysvaer AT, et al. **Acta Neurol Scand** 1989 Aug;80(2):151-6

Effect of experimental blunt head injury on acute regional cerebral blood flow and edema. Tornheim PA, et al. **Adv Neurol** 1990;52:377-84

Alcohol intoxication blunts sympatho-adrenal activation following brain injury. Woolf PD, et al. **Alcoholism** 1990 Apr;14(2):205-9

Hypertension and hemodilution during cerebral ischemia reduce brain injury and edema. Cole DJ, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H211-7

Effects of propofol on cerebral hemodynamics and metabolism in patients with brain trauma. Pinaud M, et al. **Anesthesiology** 1990 Sep;73(3):404-9

Vestibular stimulation after head injury: effect on reaction times and motor speech parameters [see comments] Engberg A. **Arch Phys Med Rehabil** 1989 Dec; 70(13):893-901 Comment in: Arch Phys Med Rehabil 1990 May;71(6):441.

CNS growth factors. Logan A. **Br J Hosp Med** 1990 Jun; 43(6):428-37 (71 ref.)

An investigation into the effect of traumatically produced cerebrospinal fluid fistulae on the passage of Augmentin across the blood-brain barrier. Lyons AJ. **Br J Oral Maxillofac Surg** 1990 Feb;28(1):8-11

Computer analysis of cortical evoked potentials following severe head injury. Alter I, et al. **Brain Inj** 1990 Jan-Mar; 4(1):19-26

Effect of steroid therapy in experimental head trauma. Spillert CR, et al. **Brain Inj** 1990 Apr-Jun;4(2):199-201

Clonidine impairs recovery of beam-walking after a sensorimotor cortex lesion in the rat. Goldstein LB, et al. **Brain Res** 1990 Feb 5;508(2):305-9

Severe head trauma: pathophysiology and management. Butterworth JF, et al. **Crit Care Clin** 1989 Oct;5(4):807-20 (52 ref.)

Preservation of consciousness in a decerebrating head injured patient. Mahapatra AK, et al. **J Assoc Physicians India** 1990 Apr;38(4):305-6

Physical model simulations of brain injury in the primate. Margulies SS, et al. **J Biomech** 1990;23(8):823-36

Altered responses to cutaneous stimuli in the second somatosensory cortex following lesions of the postcentral gyrus in infant and juvenile macaques. Burton H, et al. **J Comp Neurol** 1990 Jan 15;291(3):395-414

Dichotic listening and manual performance in relation to magnetic resonance imaging after closed head injury. Levin HS, et al. **J Neurol Neurosurg Psychiatry** 1989 Oct; 52(10):1162-9

The role of mononuclear phagocytes in wound healing after traumatic injury to adult mammalian brain. Giulian D, et al. **J Neurosci** 1989 Dec;9(12):4416-29

Neuropsychological outcome in children with gunshot wounds to the brain. Amling JK, et al. **J Neurosci Nurs** 1990 Feb;22(1):13-8

Platelet-activating factor and progressive brain damage following focal brain injury. Frerichs KU, et al. **J Neurosurg** 1990 Aug;73(2):223-33

Outcome in 134 patients with prolonged posttraumatic unawareness. Part 2: Functional outcome of 72 patients recovering consciousness. Groswasser Z, et al. **J Neurosurg** 1990 Jan;72(1):81-4

Outcome in 134 patients with prolonged posttraumatic unawareness. Part 1: Parameters determining late recovery of consciousness. Sazbon L, et al. **J Neurosurg** 1990 Jan; 72(1):75-80

Characterization of axonal injury produced by controlled cortical impact. Lighthall JW, et al. **J Neurotrauma** 1990 Summer;7(2):65-76

Stimulation of the medullary reticular formation in cold-injured brain. Nagao S, et al. **J Neurotrauma** 1989 Winter;6(4):279-87

The effects of lesions on autogenetic inhibition in the decerebrate cat. Iles JF, et al. **J Physiol (Lond)** 1989 Dec; 419:611-25

Role of aggressive intracranial pressure control in management of pediatric craniocerebral gunshot wounds with unfavorable features. Sarnaik AP, et al. **J Trauma** 1989 Oct;29(10):1434-7

The effects of aortic crossclamping and resuscitation on intracranial pressure, cerebral blood flow, and cerebral water content in a model of focal brain injury and hemorrhagic shock. Shackford SR, et al. **J Trauma** 1990 Jul;30(7):768-74; discussion 774-5

Spreading depression following experimental head injury in the rat. Sunami K, et al. **Neurol Med Chir (Tokyo)** 1989 Nov;29(11):975-80

Noninvasive study of critical thresholds of intracranial pressure and cerebral perfusion pressure for cerebral circulation and brain function. Shigemori M, et al. **Neurol Res** 1989 Sep;11(3):165-8

Perceptual and premotor factors of unilateral neglect. Bisiach E, et al. **Neurology** 1990 Aug;40(8):1278-81

N-methyl-D-aspartate receptors mediate activation of the c-fos proto-oncogene in a model of brain injury. Herrera DG, et al. **Neuroscience** 1990;35(2):273-81

Coma and spinal injury. Alcantara LA, et al. **Neurosurg Rev** 1989;12 Suppl 1:47-50

Multiple injuries: follow-up. auf der Haar K, et al. **Neurosurg Rev** 1989;12 Suppl 1:139-42

Cardiovascular and metabolic responses to severe head injury. Clifton GL, et al. **Neurosurg Rev** 1989;12 Suppl 1:465-73

Chronic vegetative state after severe head injury: clinical study; electrophysiological investigations and CT scan in 15 cases. Danze F, et al. **Neurosurg Rev** 1989;12 Suppl 1:477-99

Multimodality evoked potentials and early prognosis in comatose patients. Firsching R, et al. **Neurosurg Rev** 1990; 13(2):141-6 (27 ref.)

Patients with severe head trauma who talk and deteriorate. Isayama K, et al. **Neurosurg Rev** 1989;12 Suppl 1:446-50

Diffuse axonal injury in severe head trauma. Kobayashi S, et al. **Neurosurg Rev** 1989;12 Suppl 1:451-7

Evoked potentials in post-traumatic coma. Lorenz M, et al. **Neurosurg Rev** 1989;12 Suppl 1:322-7

Early management and priorities of polytraumatised patients with intracranial lesions. Martens F, et al. **Neurosurg Rev** 1989;12 Suppl 1:12-6

Anaesthesiological considerations in head injury. Mellinghoff H, et al. **Neurosurg Rev** 1989;12 Suppl 1:22-31 (36 ref.)

Clinical significance of the serial somatosensory evoked potentials in patients with severe head injuries. Node Y, et al. **Neurosurg Rev** 1989;12 Suppl 1:353-6

Intracranial pressure: a reliable criterion of brain death? Richard KE, et al. **Neurosurg Rev** 1989;12 Suppl 1:287-97

Significance of intracranial pressure for the outcome of patients with multiple injuries. Richard KE, et al. **Neurosurg Rev** 1989;12 Suppl 1:63-72

Clinico-radiological study of post-traumatic diffuse lesions. Its relevance in multiple injuries. Tomei G, et al. **Neurosurg Rev** 1989;12 Suppl 1:73-8

The cerebral perfusion pressure. Problems of measurement and treatment after head injury. Trost HA. **Neurosurg Rev** 1989;12 Suppl 1:382-5

A clinical evaluation of the Camino subdural screw and ventricular monitoring kits. Chambers IR, et al. **Neurosurgery** 1990 Mar;26(3):421-3

Somatosensory and auditory brain stem conduction after head injury: a comparison with clinical features in prediction of outcome. Lindsay K, et al. **Neurosurgery** 1990 Feb; 26(2):278-85

Effects of crystalloid and colloid infusions on intracranial pressure [letter; comment] Todd M, et al. **Neurosurgery** 1990 Mar;26(3):546-8 Comment on: Neurosurgery 1989 Aug;25(2):173-8; discussion 178-9.

Evaluation of posttraumatic cerebral blood flow velocities by transcranial Doppler ultrasonography. Weber M, et al. **Neurosurgery** 1990 Jul;27(1):106-12

Failure to transfer a digging response to a detour problem in young rats with lesions to the "general learning system". Thompson R, et al. **Physiol Behav** 1989 Jun;45(6):1235-41

Insights from broken brains [news] Palca J. **Science** 1990 May 18;248(4957):812-4

Hemodynamic sequelae of intracranial hypertension in man: final data from Vietnam. Meyer GA, et al. **Surg Forum** 1978;29:502-4

Intracranial pressure response to stable xenon inhalation in patients with head injury. Darby JM, et al. **Surg Neurol** 1989 Nov;32(5):343-5

Cause and importance of donor neurogenic myocardial injury in cardiac transplantation. Okereke OU, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1034-5

[Short latency somatosensory evoked potentials and brainstem auditory evoked potentials in patients with head trauma] Liu C. **Chung Hua I Hsueh Tsa Chih** 1990 May; 70(5):255-7, 70 (Eng. Abstr.) (Chi)

[Are calorimetric changes in brain injury a prognostic factor?] Verdy S. **Agressologie** 1990 Jan;31(1):70-3 (Eng. Abstr.) (Fre)

[Energy metabolism and craniocerebral injury] Chiolero RL, et al. **Ann Fr Anesth Reanim** 1990;9(2):169-75 (43 ref.) (Eng. Abstr.) (Fre)

[Brain function monitoring] Zettler H, et al. **Anaesthesiol Reanim** 1990;15(3):151-9 (29 ref.) (Eng. Abstr.) (Ger)

[Diurnal rhythm of O2 uptake and the effect of intensive therapy interventions in patients with craniocerebral injuries with and without barbiturate therapy] Weyland W, et al. **Beitr Infusionther** 1990;25:241-58 (Ger)

[Chiasma lesion following severe craniocerebral trauma. Clinical, functional and neuroradiologic characteristics exemplified by a rare case] Dette TM, et al. **Fortschr Ophthalmol** 1989;86(6):676-8 (Eng. Abstr.) (Ger)

[Modified epidural intracranial measurement of cerebrospinal fluid pressure] Mohsenipour I. **Zentralbl Neurochir** 1989; 50(1):24-6 (Eng. Abstr.) (Ger)

[The discriminant function of an early prognostic index in the monitoring of cranial trauma] Camerini G, et al. **Boll Soc Ital Biol Sper** 1989 Jul;65(7):655-61 (Eng. Abstr.) (Ita)

[The role of stimulation of the medullary reticular formation on intracranial pressure in cold injured brain] Nagao S, et al. **No Shinkei Geka** 1990 Feb;18(2):153-9 (Eng. Abstr.) (Jpn)

[Effect of stimulation of the medullary reticular formation on brain water content in cold injured brain] Ogawa T. **No To Shinkei** 1990 Mar;42(3):261-8 (Eng. Abstr.) (Jpn)

[Pathophysiologic nature of dissociative states of the brain stem in lesions of the midbrain and the bridge of Varolius] Borshchagovskiĭ ML, et al. **Fiziol Cheloveka** 1989 Sep-Oct; 15(5):32-41 (Rus)

[The cortical reactivity of the cerebral hemispheres in craniocerebral trauma] Lyskov EB. **Fiziol Cheloveka** 1989 Sep-Oct;15(5):166-8 (Rus)

[Various characteristics of hemodynamics in pelvic injuries associated with cranio-cerebral trauma] Babosha VA, et al. **Ortop Travmatol Protez** 1989 Nov;(11):25-8 (Eng. Abstr.) (Rus)

[Parameters of cellular adaptation in newborn infants in health and in perinatal injuries of the CNS] Bankova VV, et al. **Pediatriia** 1989;(10):14-8 (Eng. Abstr.) (Rus)

[Status of the endocrine system in cranio-cerebral trauma] Medvedev IuA, et al. **Sov Med** 1989;(11):76-80 (Rus)

[Characteristics of the course of psoriasis in World War II disabled veterans with a history of craniocerebral trauma] Anton'ev AA, et al. **Vestn Dermatol Venerol** 1989;(6):35-9 (Eng. Abstr.) (Rus)

[Disordered systemic hemodynamics in the acute period of craniocerebral trauma complicated by pneumonia] Kibirev AB, et al. **Vrach Delo** 1990 May;(5):78-80 (Eng. Abstr.) (Rus)

[Indications for the long-term continuous follow-up of intracranial pressure in severe craniocerebral trauma] Mukhametzhanov Kh, et al. **Zh Vopr Neirokhir** 1990 May-Jun;(3):17-9 (Eng. Abstr.) (Rus)

[The dynamic changes in the regional volumetric cerebral blood flow and local vascular reactivity in acute craniocerebral trauma in animals with alloxan diabetes] Romodanov AP, et al. **Zh Vopr Neirokhir** 1990 May-Jun; (3):19-22 (Eng. Abstr.) (Rus)

[The microcirculatory bed and the blood rheological properties in the acute period of severe craniocerebral trauma] Valeev EK, et al. **Zh Vopr Neirokhir** 1989 May-Jun;(3):24-8 (Eng. Abstr.) (Rus)

[Evaluation of post-traumatic coma using evoked potentials (published erratum appears in Rev Esp Anestesiol Reanim 1990 Mar-Apr;37(2):66)] Vilalta J, et al. **Rev Esp Anestesiol Reanim** 1989 Sep-Oct;36(5):255-9 (Eng. Abstr.) (Spa)

PREVENTION & CONTROL

Head injuries due to motorcycle accidents: crash helmets and alcoholism. Diemath HE. **Neurosurg Rev** 1989;12 Suppl 1:458-64

Reduction of perinatal hypoxic-ischemic brain damage with allopurinol. Palmer C, et al. **Pediatr Res** 1990 Apr;27(4 Pt 1):332-6

Brain injury in the premature infant: is it preventable? Volpe JJ. **Pediatr Res** 1990 Jun;27(6 Suppl):S28-33 (59 ref.)

PSYCHOLOGY

Multiple personality disorder: diagnosis after a traumatic brain injury. Sandel ME, et al. **Arch Phys Med Rehabil** 1990 Jun;71(7):523-5

Self-rating versus neuropsychological performance of moderate versus severe head-injured patients. Allen CC, et al. **Brain Inj** 1990 Jan-Mar;4(1):7-17

MMPI correlates among post-acute TBI patients. Burke JM, et al. **Brain Inj** 1990 Jul-Sep;4(3):223-31

Coping and family functions after closed head injury. Frank

RG, et al. **Brain Inj** 1990 Jul-Sep;4(3):289-95
Work, love, and play after brain injury. Prigatano GP. **Bull Menninger Clin** 1989 Sep;53(5):414-31
A positive approach to the treatment of aggressive brain injured clients. Burke WH, et al. **Int J Rehabil Res** 1988; 11(3):235-41
Psychosocial outcome for the survivors of severe blunt head injury: the results from a consecutive series of 100 patients. Tate RL, et al. **J Neurol Neurosurg Psychiatry** 1989 Oct; 52(10):1128-34
Penetrating head injury in young adulthood exacerbates cognitive decline in later years. Corkin S, et al. **J Neurosci** 1989 Nov;9(11):3876-83
Neuropsychological results versus prognosis factors—64 patients with diffuse brain injuries. Sichez-Auclair N, et al. **Neurosurg Rev** 1989;12 Suppl 1:474-6
The concept of self in the context of crisis: a study of families of the severely brain-injured. Mwaria CB. **Soc Sci Med** 1990;30(8):889-93

RADIOGRAPHY

Relationship between CT attenuation changes and post-traumatic CSF-CKBB-activity after severe head injury in man. Rabow L, et al. **Acta Neurochir (Wien)** 1989; 100(3-4):155-7
Delayed nonhemorrhagic encephalopathy following mild head trauma. Case report. Ram Z, et al. **J Neurosurg** 1989 Oct;71(4):608-10
Computed tomography and magnetic resonance imaging comparisons in boxers. Jordan BD, et al. **JAMA** 1990 Mar 23-30;263(12):1670-4
Forensic application of angiography on injured brain. Fujikura T, et al. **Med Sci Law** 1990 Apr;30(2):127-32
The timing of CT. Foroglou G, et al. **Neurosurg Rev** 1989; 12 Suppl 1:169-74
Traumatic intracerebral hematomas in infancy. McLaurin RL, et al. **Neurosurg Rev** 1989;12 Suppl 1:219-24
CT findings and outcome in head injuries—effects of aging. Yamaura A, et al. **Neurosurg Rev** 1989;12 Suppl 1:178-83
Traumatic pseudoaneurysm of the cervical carotid artery: the value of arteriography. Applegate LJ, et al. **Neurosurgery** 1990 Feb;26(2):312-5
The value of computed tomographic scans in patients with low-risk head injuries. Stein SC, et al. **Neurosurgery** 1990 Apr;26(4):638-40
[Is routine radiography of the skull after light head injuries necessary? (letter)] Villaume C. **Ugeskr Laeger** 1990 Jul 30;152(31):2253-4 **(Dan)**
[Value of computerized tomography to locate metal particles in forensic autopsies (letter)] Rodat O, et al. **Presse Med** 1990 Jun 30;19(26):1240 **(Fre)**
[Forensic medicine roentgen studies in gunshot wounds of the skull] Metter D, et al. **Beitr Gerichtl Med** 1989;47:473-7 (Eng. Abstr.) **(Ger)**
[The value of orienting thoracic CT as compared to thoracic plain film in patients with severe multiple trauma] Bähren W, et al. **Rontgenpraxis** 1990 May;43(5):164-9 **(Ger)**
[Erroneous laterality marking in CT of the head. A case report] Warnke JP, et al. **Zentralbl Neurochir** 1989; 50(3-4):190-2 (Eng. Abstr.) **(Ger)**
[Routine roentgen examination of the skull in head injuries] Csonka C, et al. **Orv Hetil** 1989 Nov 26;130(48):2583-5 (Eng. Abstr.) **(Hun)**
[X-ray diagnosis of birth injuries of the skull and spine in children (lecture)] Mikhailov MK. **Vestn Rentgenol Radiol** 1989 Sep-Oct;(5):68-73 (12 ref.) **(Rus)**
[Diffuse axonal damages to the brain (the clinical picture, diagnosis and outcome)] Potapov AA, et al. **Zh Vopr Neirokhir** 1990 Mar-Apr;(2):3-7 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Cerebral perfusion imaging with technetium-99m HMPAO following cerebral trauma. Initial experience. Reid RH, et al. **Clin Nucl Med** 1990 Jun;15(6):383-8
Cerebral perfusion imaging with technetium-99m HM-PAO in brain death and severe central nervous system injury. Laurin NR, et al. **J Nucl Med** 1989 Oct;30(10):1627-35
Clinical use of technetium-99m HM-PAO for determination of brain death. Reid RH, et al. **J Nucl Med** 1989 Oct; 30(10):1621-6
Cranio-facial trauma and cerebral SPECT studies using N-isopropyl-iodo-amphetamine (123I). Ducours JL, et al. **Nucl Med Commun** 1990 May;11(5):361-7

REHABILITATION

Occupational therapy intervention with an adolescent with brain injury and behavioral disorders. Davidson DA. **Am J Occup Ther** 1990 Feb;44(2):168-71
Demonstrating the effectiveness of occupational therapy after severe brain trauma. Giles GM. **Am J Occup Ther** 1989 Sep;43(9):613-5
A critical analysis of occupational therapy approaches for perceptual deficits in adults with brain injury. Neistadt ME. **Am J Occup Ther** 1990 Apr;44(4):299-304 (41 ref.)
Visual perception of objects: an approach to assessment and intervention. Toglia JP. **Am J Occup Ther** 1989 Sep; 43(9):587-95
Acquired limb loss in patients with traumatic brain injury. Stone LR, et al. **Am J Phys Med Rehabil** 1990 Jun; 69(3):135-9
Rehabilitation of head injured children. Hall DM, et al. **Arch Dis Child** 1990 May;65(5):553-6 (27 ref.)
Posttraumatic epilepsy [letter] Davidoff G. **Arch Phys Med Rehabil** 1990 Aug;71(9):711
Aerobic and neuromuscular training: effect on the capacity, efficiency, and fatigability of patients with traumatic brain injuries. Jankowski LW, et al. **Arch Phys Med Rehabil** 1990 Jun;71(7):500-4
Microcomputer-based rehabilitation for unilateral left visual neglect: a randomized controlled trial. Robertson IH, et al. **Arch Phys Med Rehabil** 1990 Aug;71(9):663-8
The trauma of brain injury. **ASHA** 1989 Aug;31(8):83-5
Head injury rehabilitation: 4 years' experience in Edinburgh. Pentland B, et al. **Br J Neurosurg** 1988;2(1):61-5
Dance/movement therapy in head injury rehabilitation. Berrol C. **Brain Inj** 1990 Jul-Sep;4(3):257-65
Intensity of rehabilitation and length of stay. Blackerby WF. **Brain Inj** 1990 Apr-Jun;4(2):167-73
Defining outcome [comment] Brooks N. **Brain Inj** 1989 Oct-Dec;3(4):325-9 Comment on: Brain Inj 1989 Oct-Dec;3(4):355-68. Comment on: Brain Inj 1989 Oct-Dec;3(4):369-85.
The Neurobehavioural Rating Scale: replication in an acute, inpatient rehabilitation setting. Corrigan JD, et al. **Brain Inj** 1990 Jul-Sep;4(3):215-22
Treating urinary incontinence in a head-injured adult. Garcia JG, et al. **Brain Inj** 1990 Apr-Jun;4(2):203-7
Polytrauma associated with traumatic brain injury: incidence, nature and impact on rehabilitation outcome. Groswasser Z, et al. **Brain Inj** 1990 Apr-Jun;4(2):161-6
Comparing patient perspectives of disability and treatment effects with quality of participation in a post-acute brain injury rehabilitation programme. Heilbronner RL, et al. **Brain Inj** 1989 Oct-Dec;3(4):387-95
Model systems of treatment for alcohol abuse following traumatic brain injury [comment] Kreutzer JS, et al. **Brain Inj** 1990 Jan-Mar;4(1):1-5 Comment on: Brain Inj 1990 Jan-Mar;4(1):77-86.
A comprehensive alcohol abuse treatment programme for persons with traumatic brain injury [see comments] Langley MJ, et al. **Brain Inj** 1990 Jan-Mar;4(1):77-86 (50 ref.) Comment in: Brain Inj 1990 Jan-Mar;4(1):1-5.
Return to work (RTW) after head injury. McMordie WR, et al. **Brain Inj** 1990 Jan-Mar;4(1):57-69
Coma arousal procedure: a therapeutic intervention in the treatment of head injury. Mitchell S, et al. **Brain Inj** 1990 Jul-Sep;4(3):273-9
Services for severely head-injured patients in north London and environs. Murphy LD, et al. **Brain Inj** 1990 Jan-Mar; 4(1):95-100
Driving after a severe head injury. Priddy DA, et al. **Brain Inj** 1990 Jul-Sep;4(3):267-72
Return to work after rehabilitation following traumatic brain injury. Rao N, et al. **Brain Inj** 1990 Jan-Mar;4(1):49-56
Family-staff conflict in the rehabilitation setting: causes, consequences, and implications. Shaw LR, et al. **Brain Inj** 1990 Jan-Mar;4(1):87-93 (49 ref.)
Visual imagery as a cognitive means of compensation for brain injury. Stern JM, et al. **Brain Inj** 1989 Oct-Dec; 3(4):413-9
European initiative to develop services for the rehabilitation of brain-injured patients. Truelle JL, et al. **Brain Inj** 1990 Jul-Sep;4(3):305-6
Head injury, a multivariate study: predicting long-term productivity and independent living outcome [see comments] Vogenthaler DR, et al. **Brain Inj** 1989 Oct-Dec; 3(4):369-85 Comment in: Brain Inj 1989 Oct-Dec;3(4):325-9.
Head injury, an empirical study: describing long-term productivity and independent living outcome [see comments] Vogenthaler DR, et al. **Brain Inj** 1989 Oct-Dec; 3(4):355-68 Comment in: Brain Inj 1989 Oct-Dec;3(4):325-9.
Employment outcomes of persons following traumatic brain injury: pre-injury, post-injury, and supported employment. Wehman P, et al. **Brain Inj** 1989 Oct-Dec;3(4):397-412
Employment outcomes of persons following traumatic brain injury. Zasler ND. **Brain Inj** 1989 Oct-Dec;3(4):331-3
A comparison of four memory strategies with traumatically brain-injured clients. Zencius A, et al. **Brain Inj** 1990 Jan-Mar;4(1):33-8
Faith, hope, and love: nontraditional therapy in recovery from serious head injury, a personal account. Linge FR. **Can J Psychol** 1990 Jun;44(2):116-29
Long-term care after severe injury of the brain [editorial] **Injury** 1989 Jan;20(1):3
Employment after severe head injury: do the Manpower Services Commission schemes help? Johnson R. **Injury** 1989 Jan;20(1):5-9
Effect of supported employment on the vocational outcomes of persons with traumatic brain injury. Wehman P, et al. **J Appl Behav Anal** 1989 Winter;22(4):395-405
Training use of compensatory memory books: a three stage behavioral approach. Sohlberg MM, et al. **J Clin Exp Neuropsychol** 1989 Dec;11(6):871-91
Traumatic brain injury: improving functional recovery. Morgan AS. **J Natl Med Assoc** 1989 Nov;81(11):1133-7 (23 ref.)
Brain injured patients: comorbidities and ancillary medical requirements. Parkerson JB Jr, et al. **Md Med J** 1990 Mar; 39(3):259-62
Improved clinical outcome with early rehabilitation. Gobiet W. **Neurosurg Rev** 1989;12 Suppl 1:143-6
Vocational neuropsychological requirements of U.S. occupations. Lees-Haley PR. **Percept Mot Skills** 1990 Jun; 70(3 Pt 2):1383-6
Sexuality within the head-injury rehabilitation setting: a staff's perspective. Hough S. **Psychol Rep** 1989 Dec;65(3 Pt 1):745-6
[Rehabilitation of polytraumatized brain-injured patients] Zangger P. **Ther Umsch** 1989 Jul;46(7):455-9 (10 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

Unusual penetrating craniocerebral injury. Kala M, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;121:341-4
Subtemporal decompression: radiological observations and current surgical experience. Alexander E, et al. **Br J Neurosurg** 1987;1(4):427-33
A head injury polemic [editorial] Cummins B. **Br J Neurosurg** 1987;1(1):6-8
Closed head injuries: where does delay occur in the process of transfer to neurosurgical care? Marsh H, et al. **Br J Neurosurg** 1989;3(1):13-9
Intracortical grafts of embryonic basal forebrain tissue restore low voltage fast activity in rats with basal forebrain lesions. Vanderwolf CH, et al. **Exp Brain Res** 1990;81(2):426-32
Airgun injuries of the brain. Jamjoom AB, et al. **Injury** 1989 Nov;20(6):344-6
Penetrating craniocerebral injuries in the Israeli involvement in the Lebanese conflict, 1982-1985. Analysis of a less aggressive surgical approach. Brandvold B, et al. **J Neurosurg** 1990 Jan;72(1):15-21 (23 ref.)
A new 1.9-mu wavelength laser for neurosurgery. Steichen JD, et al. **J Neurosurg** 1990 Oct;73(4):611-4
Relationship of suturing of the dura to cerebrospinal fluid fistulas [letter] Ameen AA. **Neurosurgery** 1990 Aug; 27(2):334
Nonsurgical management of increased intracranial pressure. Stone JL. **Semin Neurol** 1989 Sep;9(3):218-24 (48 ref.)
[Treatment of electric burn of the skull complicated with brain injury] Long DC. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Dec;1(4):294-6 **(Chi)**
[Repair of cranial defect using a revascularized free composite rib-anterior serratus myocutaneous flap—report of 4 cases] Tao ZL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Mar;6(1):24-6, 75 (Eng. Abstr.) **(Chi)**
[Neurologic complications in mid-face fractures] Bonkowsky VM, et al. **Laryngorhinootologie** 1989 Oct;68(10):539-42 (Eng. Abstr.) **(Ger)**
[Concomitant vertebral trauma in patients with craniocerebral injuries. 34 consecutive patients over 3 years] Moskopp D, et al. **Unfallchirurg** 1990 Mar; 93(3):120-6 (Eng. Abstr.) **(Ger)**
[Acute post-traumatic subdural hematoma in advanced age] Gabl M, et al. **Unfallchirurgie** 1989 Dec;15(6):273-8 (Eng. Abstr.) **(Ger)**
[Penetrating head injuries caused by animal anesthesia guns] Sulla I, et al. **Zentralbl Chir** 1990;115(4):219-22 (Eng. Abstr.) **(Ger)**
[The value of large pressure-relieving trepanation in treatment of refractory brain edema. Animal experiment studies, initial clinical results] Burkert W, et al. **Zentralbl Neurochir** 1989;50(2):106-8 (Eng. Abstr.) **(Ger)**
[Gunshot neck wounds penetrating the oral cavity and pharynx, associated with cranio-cerebral injuries] Fiu Imagomedov UG, et al. **Vestn Khir** 1989 Aug; 144(8):80-1 **(Rus)**
[Surgical treatment of patients with cranio-cerebral trauma and the role of neurological symptoms in the prognosis of its outcomes] Mamadaliev AM, et al. **Vestn Khir** 1989 May;142(5):68-72 (Eng. Abstr.) **(Rus)**
[Surgery in severe closed craniocerebral injury and the immediate treatment results] Virozub ID, et al. **Zh Vopr Neirokhir** 1989 Nov-Dec;(6):55-8 **(Rus)**
[An aggressive surgical approach in comatose patients. Analysis of data from a newly created neurotraumatology department] Simunović VJ, et al. **Med Arh** 1988;42(3):113-8 (Eng. Abstr.) **(Scr)**

THERAPY

Predictive value of the Glasgow Coma Scale for tracheotomy in head-injured patients. Lanza DC, et al. **Ann Otol Rhinol Laryngol** 1990 Jan;99(1):38-41
Management of patients with head injuries [letter] Brooks SC. **BMJ** 1990 Mar 31;300(6728):876
Management of children with head trauma. Emergency Paediatrics Section, Canadian Paediatric Society. **Can Med Assoc J** 1990 May 1;142(9):949-52 (13 ref.)
Neurologic critical care. **Crit Care Clin** 1989 Oct;5(4):713-904
Group therapy with moderately neurologically damaged patients. Forssmann-Falck R, et al. **Health Soc Work** 1989 Nov;14(4):235-43
Cranial gunshot wounds [see comments] Kanoff RB, et al. **J Am Osteopath Assoc** 1990 Jun;90(6):515-8 Comment in: J Am Osteopath Assoc 1990 Jun;90(6):504.
Psychoanalytic psychotherapy with brain-injured adult psychiatric patients. Lewis L, et al. **J Nerv Ment Dis** 1990 Feb;178(2):69-77 (28 ref.)
Combined effect of respirator-induced ventilation and

superoxide dismutase in experimental brain injury. Levasseur JE, et al. **J Neurosurg** 1989 Oct;71(4):573–7
Hypertonic saline resuscitation of head injury: effects on cerebral water content. Wisner DH, et al. **J Trauma** 1990 Jan;30(1):75–8
Early complications of airway management in head-injured patients. Lanza DC, et al. **Laryngoscope** 1990 Sep; 100(9):958–61
The benefits of early jejunal hyperalimentation in the head-injured patient. Grahm TW, et al. **Neurosurgery** 1989 Nov;25(5):729–35
Hyperbaric oxygen in the treatment of elevated intracranial pressure after head injury. Brown JA, et al. **Pediatr Neurosci** 1988;14(6):286–90
Non-surgical treatment in severely head-injured patients with rised intracranial pressure. Lehkowski W. **Zentralbl Neurochir** 1989;50(3–4):129–31 (29 ref.)
[Emergency care by the practitioner facing a head injury and a spinal injury] Gaitzsch J, et al. **Rev Med Suisse Romande** 1989 Sep;109(9):761–4 **(Fre)**
[Recent trends in management of penetrating craniocerebral injuries] Levi L, et al. **Harefuah** 1989 Nov 15;117(10):312–4 (16 ref.) **(Heb)**
[Role of total parenteral nutrition in determining liver insufficiency in patients with cranial injuries. Glucose vs glucose + lipids] Zagara G, et al. **Minerva Anestesiol** 1989 Dec;55(12):509–12 (Eng. Abstr.) **(Ita)**
[Results of treatment of severe craniocerebral injuries in an interdisciplinary intensive therapy unit] Maciejewski D, et al. **Wiad Lek** 1989 Jun 15;42(12):805–10 (Eng. Abstr.) **(Pol)**
[Effects of hyperbaric oxygenation in acute compression-dislocation syndrome in experimental animals] Isakov IuV, et al. **Zh Nevropatol Psikhiatr** 1989; 89(12):5–7 (Eng. Abstr.) **(Rus)**
[The combined therapy of patients with severe craniocerebral injury] Gadzhiev MR. **Zh Vopr Neirokhir** 1990 Mar–Apr; (2):10–2 (Eng. Abstr.) **(Rus)**
[Treatment of severe cranio-encephalic traumas] Sahuquillo Barris J, et al. **Neurologia** 1988 Nov–Dec;3(6):226–36 (103 ref.) **(Spa)**
[Brain injuries require more effective care] Pontén U, et al. **Lakartidningen** 1990 Apr 25;87(17):1441–2, 1447 **(Swe)**

BRAIN MAPPING

Metabolic activation of efferent pathways from the rat area postrema. Gross PM, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):R788–97
Clinical value of topographic mapping and quantified neurophysiology. Duffy FH. **Arch Neurol** 1989 Oct; 46(10):1133–4
Brain mapping. Hachinski V. **Arch Neurol** 1989 Oct; 46(10):1136
Uses and abuses of brain mapping. Nuwer MR. **Arch Neurol** 1989 Oct;46(10):1134–6
Electrophysiological evidence for an L-shaped interhemispheric connection in the cat. Cukiert A, et al. **Arq Neuropsiquiatr** 1989 Dec;47(4):381–4
Localization of laryngeal motoneurons in the medulla oblongata of guinea pigs. Nahm I, et al. **Auris Nasus Larynx** 1989;16(2):117–26
Functional subdivisions of the rat somatic sensorimotor cortex. Barth TM, et al. **Behav Brain Res** 1990 Jun 18; 39(1):73–95
Mapping of brainstem lesions by the combined use of tests of visually-induced eye movements. Kato I, et al. **Brain** 1990 Aug;113 (Pt 4):921–35
A quantitative study of dendrite complexity in selected areas of the human cerebral cortex. Scheibel A, et al. **Brain Cogn** 1990 Jan;12(1):85–101
Methods for separating temporally overlapping sources of neuroelectric data. Achim A, et al. **Brain Topogr** 1988 Fall; 1(1):22–8
Facts and artifacts in brain electrical activity mapping. Coburn KL, et al. **Brain Topogr** 1988 Fall;1(1):37–45
Comments on quantified neurophysiology—problems and advantages. Duffy FH. **Brain Topogr** 1989 Spring; 1(3):153–5
Analysis of scalp voltage asymmetries using Hotelling's T2 methodology. Faux SF, et al. **Brain Topogr** 1990 Spring; 2(3):237–45
Dynamic functional topography of cognitive tasks. Gevins A. **Brain Topogr** 1989 Fall–Winter;2(1–2):37–56
Brain mapping or spatial analysis? Harner RN. **Brain Topogr** 1988 Winter;1(2):73–5
Phase space topography and the Lyapunov exponent of electrocorticograms in partial seizures. Iasemidis LD, et al. **Brain Topogr** 1990 Spring;2(3):187–201
The normal scalp topography of the middle latency auditory evoked potential Pa component following monaural click stimulation. Jacobson GP, et al. **Brain Topogr** 1988 Fall; 1(1):29–36
Computerized electroencephalography in the evaluation of early dementia. Jordan SE, et al. **Brain Topogr** 1989 Summer;1(4):271–82
Localization of multiple dipoles: mathematical programming approaches. Pool KD, et al. **Brain Topogr** 1989 Summer; 1(4):247–55
Probability mapping: power and coherence analyses of cognitive processes. Rappelsberger P, et al. **Brain Topogr** 1988 Fall;1(1):46–54
Brain mapping analysis in patients with hepatic encephalopathy. Sagalés T, et al. **Brain Topogr** 1990 Spring; 2(3):221–8
Magnetoencephalographic comparison of cortical sensorimotor extrema evoked by flexion of index finger and thumb. Sullivan GW, et al. **Brain Topogr** 1989 Summer; 1(4):257–62
Topographic mapping of EEG and evoked potentials in psychiatry: delusions, illusions, and realities. Torello MW. **Brain Topogr** 1989 Spring;1(3):157–74 (129 ref.)
Hemi-field pattern visual evoked potentials: a comparison of display and analysis techniques. Towle VL, et al. **Brain Topogr** 1989 Summer;1(4):263–70
Waves earlier than P3 are more informative in putative subcortical dementias: a study with mapping and neuropsychological techniques. Verma NP, et al. **Brain Topogr** 1989 Spring;1(3):183–91
Stability of source estimates in rolandic spikes. Wong PK. **Brain Topogr** 1989 Fall–Winter;2(1–2):31–6
Absence of responses to microstimulation at the hand-face border in baboon primary motor cortex. Samulack DD, et al. **Can J Neurol Sci** 1990 Feb;17(1):24–9
Clinical utility of quantified EEG (qEEG) with mapping [letter] **Clin Electroencephalogr** 1990 Jul;21(3):VII–X
Technical and clinical aspects of topographic brain mapping. Hooshmand H, et al. **Clin Electroencephalogr** 1989 Oct; 20(4):235–47
Brain mapping in migraine. Hughes JR, et al. **Clin Electroencephalogr** 1990 Jan;21(1):14–24
Computer-analyzed EEG (CEEG) and dynamic brain mapping in AIDS and HIV related syndrome: a pilot study. Itil TM, et al. **Clin Electroencephalogr** 1990 Jul;21(3):140–4
Brain electrical activity mapping of monocular P100 reveals another type of uncrossed asymmetry. Verma NP, et al. **Clin Electroencephalogr** 1989 Oct;20(4):254–8
The topography of the P1 component of the flash visual evoked response. Hobley AJ, et al. **Doc Ophthalmol** 1989 Oct;73(2):119–25
Human middle-latency auditory evoked potentials: vertex and temporal components. Cacace AT, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jan–Feb; 77(1):6–18
Emulation of somatosensory evoked potential (SEP) components with the 3-shell head model and the problem of 'ghost potential fields' when using an average reference in brain mapping. Desmedt JE, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jul–Aug; 77(4):243–58
Preservation of P300 event-related potential topographic asymmetries in schizophrenia with use of either linked-ear or nose reference sites. Faux SF, et al. **Electroencephalogr Clin Neurophysiol** 1990 May; 75(5):378–91
Estimation of facial central motor delay by electrical stimulation of the motor cortex of the dog. Haghighi SS, et al. **Electroencephalogr Clin Neurophysiol** 1990 Feb; 75(2):82–7
Maps of somatosensory evoked potentials (SEPs) to mechanical (tapping) stimuli: comparison with P14, N20, P22, N30 of electrically elicited SEPs. Onofrj M, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jul–Aug; 77(4):314–9
Bit-mapped somatosensory evoked potentials and muscular reflex responses in man: comparative analysis in different experimental protocols. Rossini PM, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jul–Aug; 77(4):266–75
Wave form decomposition of 'giant SEP' and its computer model for scalp topography. Shibasaki H, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jul–Aug; 77(4):286–94
The intracranial topography of the P3 event-related potential elicited during auditory oddball. Smith ME, et al. **Electroencephalogr Clin Neurophysiol** 1990 Sep; 76(3):235–48
Inadequacy of the average reference for the topographic mapping of focal enhancements of brain potentials. Tomberg C, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jul–Aug;77(4):259–65
Origin of scalp far-field N18 of SSEPs in response to median nerve stimulation. Urasaki E, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jan–Feb; 77(1):39–51
Complementary global maps for orientation coding in upper and lower layers of the monkey's foveal striate cortex. Bauer R, et al. **Exp Brain Res** 1989;76(3):503–9
Projections from inferior temporal cortex to prefrontal cortex via the uncinate fascicle in rhesus monkeys. Ungerleider LG, et al. **Exp Brain Res** 1989;76(3):473–84
Physiological changes in the somatosensory forepaw cerebral cortex of adult raccoons following lesions of a single cortical digit representation. Doetsch GS, et al. **Exp Neurol** 1990 May;108(2):162–75
Topographical EEG differences between schizophrenic patients and controls during neuropsychological functional activation. Gruzelier J, et al. **Int J Psychophysiol** 1990 Apr; 8(3):275–82
Event-related desynchronization, ERD-mapping and hemispheric differences for words and numbers. Klimesch W, et al. **Int J Psychophysiol** 1990 Apr;8(3):297–308
Ear dominance and laterality of cortical activation identified by event-related desynchronization mapping. Schulter G, et al. **Int J Psychophysiol** 1990 Apr;8(3):283–95
Digit-muscle responses evoked from multiple intracortical foci in monkey precentral motor cortex. Sato KC, et al. **J Neurophysiol** 1989 Oct;62(4):959–70
The projection from medial geniculate to field AI in cat: organization in the isofrequency dimension. Brandner S, et al. **J Neurosci** 1990 Jan;10(1):50–61
Age-dependent differences in reorganization of primary somatosensory cortex following low thoracic (T12) spinal cord transection in cats. McKinley PA, et al. **J Neurosci** 1990 May;10(5):1429–43
Multiple electrosensory maps in the medulla of weakly electric gymnotiform fish. I. Physiological differences. Shumway CA. **J Neurosci** 1989 Dec;9(12):4388–99
Multiple electrosensory maps in the medulla of weakly electric gymnotiform fish. II. Anatomical differences. Shumway CA. **J Neurosci** 1989 Dec;9(12):4400–15
Correlation of motor cortex brain mapping data with magnetic resonance imaging. Berger MS, et al. **J Neurosurg** 1990 Mar;72(3):383–7
Anatomy, physiology, and pathology of epilepsy. Meldrum BS. **Lancet** 1990 Jul 28;336(8709):231–4 (30 ref.)
EEG mapping: current status and future prospects. Pfurtscheller G. **Med Prog Technol** 1988–89;14(2):89–97
Contribution of EEG mapping to diagnosis setting in a supratentorial damage. Psatta DM, et al. **Neurol Psychiatr (Bucur)** 1990 Apr–Jun;28(2):87–96
Topographic EEG brain mapping in cerebrovascular disease and dementia. Lechner H, et al. **Neurologija** 1989;38(1):3–10
Cerebral hemispheric localization of smooth pursuit asymmetry. Morrow MJ, et al. **Neurology** 1990 Feb; 40(2):284–92
EEG topographic mapping and frequency analysis: techniques and studies in clinical setting. Nuwer MR. **Semin Neurol** 1990 Jun;10(2):166–77 (32 ref.)
Topographical analysis of subcortical vertex-like activities evoked by ipsi- and contralateral multimodal sensory stimulation in man. Velasco M, et al. **Stereotact Funct Neurosurg** 1989;53(3):178–96
Posterior column sensory mapping. Itani AL, et al. **Surg Forum** 1978;29:497–9
The geometry of the topographic map in striate cortex. Johnston A. **Vision Res** 1989;29(11):1493–500
[An electric T test topographic map study of the brain in uremia] Song JH, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Oct;69(10):576–7, 40 (Eng. Abstr.) **(Chi)**
[An investigation of the multi-channel VEP topography by full field stimulation in functional amblyopia of children] Zhao KX. **Chung Hua Yen Ko Tsa Chih** 1990 Mar; 26(2):68–72 (Eng. Abstr.) **(Chi)**
[The diagnosis of dementia: current neurophysiological studies and brain mapping] De Wit P. **Acta Neurol Belg** 1989 May–Oct;89(3–4):141–9 **(Dut)**
[Demonstration by brain mapping of cortical neutralization in functional amblyopia] Orssaud C, et al. **Bull Soc Ophtalmol Fr** 1989 Mar;89(3):375–8 **(Fre)**
[Value of cerebral mapping in the study of amblyopia] Orssaud C, et al. **J Fr Ophtalmol** 1989;12(2):111–8 (Eng. Abstr.) **(Fre)**
[Cognitive processes in unconscious patients? A brain mapping study of the P300 potential] Reuter BM, et al. **Arch Psychol (Frankf)** 1989;141(3):155–73 (Eng. Abstr.) **(Ger)**
[Mapping of EEG and evoked potentials: an aid in the clinical decision process? Comments on the article by R. Verleger] Maurer K, et al. **EEG EMG** 1989 Sep;20(3):136–8 **(Ger)**
[Comments on the analysis of the P300 components using brain mapping] Verleger R. **EEG EMG** 1989 Sep; 20(3):133–5 (Eng. Abstr.) **(Ger)**
[A study on restriction of the areas working in speech function—application of multivariate analysis of aphasia test data and of lesions on CT images, by composing a "restricted-aphasia-lesion-map"] Araki Y. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Dec 25; 49(12):1534–43 (Eng. Abstr.) **(Jpn)**
[Systems organization of the electrical activity of the brain in recognizing a visual image based on data from the mapping of interconnection indices] Monakhov KK, et al. **Zh Vyssh Nerv Deiat** 1990 Jan–Feb;40(1):23–8 (Eng. Abstr.) **(Rus)**
[Brain mapping studies in dyslexia] García de León M, et al. **Arch Neurobiol (Madr)** 1989 Sep–Oct;52(5):228–33 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

Brain stimulation revisited. Cracco JB, et al. **J Clin Neurophysiol** 1990 Jan;7(1):3–15
Composed dynamic topography for spike and sharp wave. Kowada M, et al. **Jpn J Psychiatry Neurol** 1989 Sep; 43(3):369–72
A microcomputer used for spectral power EEG mapping based on source derivation. Psatta DM, et al. **Neurol Psychiatr (Bucur)** 1990 Apr–Jun;28(2):79–86
Finding the base of the brain. Slotnick BM, et al. **Physiol Behav** 1990 Apr;47(4):777–8
P300 evoked by an auditory and a visual paradigm and a semantic task. Dierks T, et al. **Psychiatry Res** 1989 Sep; 29(3):439–41
Brain mapping of EEG in autogenic training (AT). Dierks T, et al. **Psychiatry Res** 1989 Sep;29(3):433–4
Brain electrical activity mapping: clinical applications. Duffy FH. **Psychiatry Res** 1989 Sep;29(3):379–84

EEG mapping in a child with Rett syndrome. Faienza C, et al. **Psychiatry Res** 1989 Sep;29(3):425–6

Topographic brain mapping and evaluation of dyslexic children. Flynn JM, et al. **Psychiatry Res** 1989 Sep; 29(3):407–8

Brain electrical activity mapping in different stages of SDAT. Fuenfgeld EW. **Psychiatry Res** 1989 Sep;29(3):411–2

Pathological cerebral blood blow and corpus callosum abnormalities in schizophrenia: relations to EEG mapping and PET data. Guenther W, et al. **Psychiatry Res** 1989 Sep;29(3):453–5

Topographic EEG and flash visual evoked potentials in elderly subjects, depressed patients, and demented patients. Guidi M, et al. **Psychiatry Res** 1989 Sep;29(3):403–6

Staging in dementia of the Alzheimer type: topography of electrical brain activity reflects the severity of the disease. Ihl R, et al. **Psychiatry Res** 1989 Sep;29(3):399–401

Electrical brain activity and cerebral blood flow in dementia of the Alzheimer type. Ihl R, et al. **Psychiatry Res** 1989 Sep;29(3):449–52

Schizophrenia–like psychosis associated with an arachnoid cyst visualized by mapping of EEG and P300. Lanczik M, et al. **Psychiatry Res** 1989 Sep;29(3):421–3

Computerized electroencephalographic topography (CET) during sleep: topographic hypnograms. Maurer K, et al. **Psychiatry Res** 1989 Sep;29(3):435–8

Functional brain imaging (mapping of EEG) in relation to psychopathologic changes in schizophrenia. Mueller T, et al. **Psychiatry Res** 1989 Sep;29(3):419–20

Gilles de la Tourette syndrome: EEG and mapping. Neufeld MY, et al. **Psychiatry Res** 1989 Sep;29(3):427

Topographic mapping of pharmaco–EEG before and after application of phosphatidylserine. Rupprecht R, et al. **Psychiatry Res** 1989 Sep;29(3):417–8

Brain electrical activity topographical maps produced in response to olfactory and chemosensory stimulation. Van Toller S, et al. **Psychiatry Res** 1989 Sep;29(3):429–30

Digital brain atlas for structure localization in CT combined with EEG mapping. von Keyserlingk DG, et al. **Psychiatry Res** 1989 Sep;29(3):461–2

[EEG and evoked potential mapping] Zwiener U, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Feb;42(2):65–78 (24 ref.) (Eng. Abstr.) **(Ger)**

[Benign Rolandic epilepsy in children. Topographic EEG analysis] Graf M, et al. **Wien Klin Wochenschr** 1990 Mar 30;102(7):206–10 (Eng. Abstr.) **(Ger)**

[Focal epilepsy: generation and spreading mechanisms in experimental conditions] Pockberger H. **Wien Klin Wochenschr** 1990 Mar 30;102(7):201–5 (6 ref.) (Eng. Abstr.) **(Ger)**

METHODS

Computerized topographic brain mapping during carotid endarterectomy. Elmore JR, et al. **Arch Surg** 1990 Jun; 125(6):734–7; discussion 738

Computer–aided mapping of specific neuronal populations in the human brain. Koh ET, et al. **Biotechniques** 1989 Jun; 7(6):596–602

Stereological location of electroencephalographic activity. Butler SR. **Boll Soc Ital Biol Sper** 1988 Dec;64(12 Suppl):87–100 (18 ref.)

An appraisal of some lesioning methods applied to the posterior hypothalamus in rats. Hinrichsen CF, et al. **Brain Behav Evol** 1989;34(3):151–63

Evidence for sublaminar organization of the cells of origin of the geniculo–striate pathway in the cat: a novel method for cortical deposition of HRP. Bowling DB. **Brain Res** 1989 Nov 13;502(1):180–6

Inter– and intra–individual probability maps in EEG cartography by use of nonparametric Fisher tests. Etévenon P, et al. **Brain Topogr** 1989 Fall–Winter;2(1–2):81–9

Application of singular value decomposition to topographic analysis of flash–evoked potentials. Harner RN, et al. **Brain Topogr** 1989 Fall–Winter;2(1–2):91–8

Topographic distribution of the 40 Hz auditory evoked–related potential in normal and aged subjects. Johnson BW, et al. **Brain Topogr** 1988 Winter;1(2):117–21

Topographic mapping of the EEG: an examination of accuracy and precision. Koles ZJ, et al. **Brain Topogr** 1988 Winter;1(2):87–95

Multichannel intracranial recording device using a color imaging brain mapping system. Kraus N, et al. **Brain Topogr** 1988 Fall;1(1):61–4

The view of an EEG–EP mapper. Lehmann D. **Brain Topogr** 1988 Winter;1(2):77–8

Intracerebral dipole sources of EEG FFT power maps. Lehmann D, et al. **Brain Topogr** 1989 Fall–Winter; 2(1–2):155–64

Topographic EEG in brain ischemia—correlation with blood flow and metabolism. Nagata K. **Brain Topogr** 1988 Winter; 1(2):97–106 (80 ref.)

Topographic EEG mapping in cerebrovascular disease. Nagata K. **Brain Topogr** 1989 Fall–Winter;2(1–2):119–28

Estimation of large scale neocortical source activity with EEG surface Laplacians. Nunez PL. **Brain Topogr** 1989 Fall–Winter;2(1–2):141–54

Spatiotemporal analysis of alpha frequency components with the ERD technique. Pfurtscheller G. **Brain Topogr** 1989 Fall–Winter;2(1–2):3–8

The reference problem and mapping of coherence: a simulation study. Rappelsberger P. **Brain Topogr** 1989 Fall–Winter;2(1–2):63–72

Data reduction of multichannel fields: global field power and principal component analysis. Skrandies W. **Brain Topogr** 1989 Fall–Winter;2(1–2):73–80

Time range analysis of evoked potential fields. Skrandies W. **Brain Topogr** 1988 Winter;1(2):107–16

Functional imaging of brain responses to repetitive sensory stimulation: sources estimated from EEG and SPECT. Weinberg H, et al. **Brain Topogr** 1989 Fall–Winter; 2(1–2):171–80

EEG mapping applications in psychiatric disorders. Williamson PC, et al. **Can J Psychiatry** 1989 Oct; 34(7):680–6 (86 ref.)

Topographic mapping of the EEG in premature infants and neonates. Hughes JR, et al. **Clin Electroencephalogr** 1989 Oct;20(4):228–34

Topographic mapping of cerebral blood flow and behavior. Trivedi SS, et al. **Comput Biol Med** 1989;19(4):219–29

Segments of event–related potential map series reveal landscape changes with visual attention and subjective contours. Brandeis D, et al. **Electroencephalogr Clin Neurophysiol** 1989 Dec; 73(6):507–19

Intracerebral dipole source localization for FFT power maps. Lehmann D, et al. **Electroencephalogr Clin Neurophysiol** 1990 Sep;76(3):271–6

Maps of receptor binding parameters in the human brain—a kinetic analysis of PET measurements. Blomqvist G, et al. **Eur J Nucl Med** 1990;16(4–6):257–65

Spatial distribution of modalities and receptive fields in sensorimotor cortex of awake cats. Slimp JC, et al. **Exp Neurol** 1990 Jan;107(1):78–96

Neurosurgical applications for intraoperative stimulation. Ronner SF. **Int Anesthesiol Clin** 1990 Summer;28(3):174–9 (33 ref.)

Discrimination of mode of action of anxiolytics using an integrated computer data bank and Dynamic Brain Mapping (CNS effects of diazepam and lorazepam). Itil T, et al. **Int Clin Psychopharmacol** 1989 Oct;4(4):273–83

Crossed aphasia in a patient with complex partial seizures: evidence from intracarotid amobarbital testing, functional cortical mapping, and neuropsychological assessment. Loring DW, et al. **J Clin Exp Neuropsychol** 1990 Mar; 12(2):340–54

Cortical reorganization in deaf children. Wolff AB, et al. **J Clin Exp Neuropsychol** 1990 Mar;12(2):209–21

Correlation of brain mapping and MR imaging [letter] Levesque MF. **J Neurosurg** 1990 Sep;73(3):474

Cerebral correlates of imagining colours, faces and a map—I. SPECT of regional cerebral blood flow. Goldenberg G, et al. **Neuropsychologia** 1989;27(11–12):1315–28

Methods of spatial interpolation applied to EEG mapping. Hinrichs H, et al. **Psychiatry Res** 1989 Sep;29(3):431–2

Brain electrical mapping of cognitive functions for psychiatry: functional micro–states. Lehmann D. **Psychiatry Res** 1989 Sep;29(3):385–6

EEG brain mapping in gerontopsychopharmacology: on protective properties of pyritinol against hypoxic hypoxidosis. Saletu B, et al. **Psychiatry Res** 1989 Sep; 29(3):387–90

New maps of the human brain [news] Gibbons A. **Science** 1990 Jul 13;249(4965):122–3

Functional brain mapping with positron emission tomography. Fox PT. **Semin Neurol** 1989 Dec;9(4):323–9 (30 ref.)

[An analysis of the structure of the potential field of the cerebral cortex] Mel'nikov EV, et al. **Fiziol Cheloveka** 1990 Jan–Feb;16(1):5–12 **(Rus)**

STANDARDS

[Recommendations of the Deutsche EEG–Gesellschaft for the mapping of EEG parameters (EEG and EP mapping) (published erratum appears in EEG EMG 1989 Dec;20(4):309)] Herrmann WM, et al. **EEG EMG** 1989 Sep; 20(3):125–32 **(Ger)**

STATISTICS & NUMERICAL DATA

Inter– versus intra–subject variance in topographic mapping of the electroencephalogram. Kohrman MH, et al. **Clin Electroencephalogr** 1989 Oct;20(4):248–53

BRAIN NEOPLASMS

Hormonal modulation of brain tumour growth: a cell culture study. Gibelli N, et al. **Acta Neurochir (Wien)** 1989; 101(3–4):129–33

Primary leptomeningeal gliomatosis with predominant involvement of the spinal cord. Heye N, et al. **Acta Neurochir (Wien)** 1990;102(3–4):145–8

Muscle weakness, seizures, coma, and death in a 33–year–old man with acquired immunodeficiency syndrome [clinical conference] **Am J Med** 1990 Feb;88(2):169–76

Systemic metastasis from primary intracranial germinoma: a case report and literature review. Balsitis M, et al. **Br J Neurosurg** 1989;3(6):717–23 (12 ref.)

Primary intracranial rhabdomyosarcoma: report of two cases. Tomei G, et al. **Childs Nerv Syst** 1989 Aug;5(4):246–9

A survey of 790 cases of astrocytoma. Xue QC, et al. **Clin Neurol Neurosurg** 1990;92(1):27–33

Extracranial skeletal metastasis from a pinealoblastoma. A case report and review of the literature. Jacobs JJ, et al. **Clin Orthop** 1989 Oct;(247):256–60 (22 ref.)

Intradural spinal metastases in pediatric patients with primary intracranial neoplasms: Gd–DTPA enhanced MR vs CT myelography. Blews DE, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):730–5

An ependymoma involving the pituitary fossa [letter] Winer JB, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec; 52(12):1443–4

Intracranial C6 glioma model in adult Wistar–Furth rats [letter] Cohen JD, et al. **J Neurooncol** 1990 Feb;8(1):95–6

Medulloblastomas in childhood: postsurgical evaluation with myelography and cerebrospinal fluid cytology. Flannery AM, et al. **J Neurooncol** 1990 Apr;8(2):149–51

Glioblastoma multiforme with bone metastase and cauda equina syndrome. Lampl Y, et al. **J Neurooncol** 1990 Apr; 8(2):167–72

Bone metastases of medulloblastoma in childhood; correlation with flow cytometric DNA analysis. Tomita T, et al. **J Neurooncol** 1990 Apr;8(2):113–20

Spontaneous resolution of multiple hemangiomas of the brain. Case report. Abe M, et al. **J Neurosurg** 1990 Sep; 73(3):448–52

Correlation of clinical and pathological features in surgically treated craniopharyngiomas. Adamson TE, et al. **J Neurosurg** 1990 Jul;73(1):12–7

Primary central nervous system lymphoma. O'Neill BP, et al. **Mayo Clin Proc** 1989 Aug;64(8):1005–20 (87 ref.)

Turcot's syndrome with intestinal lymphoma in a child: an unusual case of triple tumor. Aricó M, et al. **Med Pediatr Oncol** 1990;18(3):252–5

Multiple oligodendroglioma—case report. Ogasawara H, et al. **Neurol Med Chir (Tokyo)** 1990 Feb;30(2):127–31 (29 ref.)

Metastatic anaplastic oligodendroglioma. Macdonald DR, et al. **Neurology** 1989 Dec;39(12):1593–6 (32 ref.)

Neuroradiologic findings in leptomeningeal carcinomatosis: the value interest of gadolinium–enhanced MRI. Rodesch G, et al. **Neuroradiology** 1990;32(1):26–32

A footnote to our article on retinoblastoma [letter] Cornelius AS. **Oncology (Williston Park)** 1989 Oct;3(10):17

Lumbosacral metastasis of intracranial germinoma. Nakamura T, et al. **Spine** 1990 Apr;15(4):336–8

[Hemangioblastoma of the central nervous system] Xu QW, et al. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Aug;22(4):249–51 (24 ref.) **(Chi)**

[Gliosarcoma with multiple extracranial metastases. Case report] Matsuyama J, et al. **Neurol Med Chir (Tokyo)** 1989 Oct;29(10):938–43 (Eng. Abstr.) **(Jpn)**

[Brain tumors in children] Lundar T, et al. **Tidsskr Nor Laegeforen** 1990 May 30;110(14):1809–11 (Eng. Abstr.) **(Nor)**

[A rare case of epiphyseal tumor in a 2.5–year–old child] Osokina IV. **Pediatriia** 1989;(11):93–6 **(Rus)**

[Granulocytic sarcoma of the central nervous system] Bautista J, et al. **Neurologia** 1988 Nov–Dec;3(6):237–40 (Eng. Abstr.) **(Spa)**

[Role of stereotaxic examination in the diagnosis and treatment of tumors of the brain in children] Moringlane JR, et al. **Neurologia** 1987 Sep–Oct;2(5):202–10 (Eng. Abstr.) **(Spa)**

ANALYSIS

Effect of dexamethasone on neurotransmitter amines in a rat glioma model. Chang CC, et al. **Adv Neurol** 1990;52:483–9

Characterization of a protein product of human malignant glial tumors that induces microvascular permeability. Criscuolo GR, et al. **Adv Neurol** 1990;52:469–74

Sex steroids in human brain tumors and breast cancer. von Schoultz E, et al. **Cancer** 1990 Feb 15;65(4):949–52

Immunohistochemical recognition of ethylnitrosourea induced rat brain microtumors by anti–Leu 7 monoclonal antibody. Galloway PG, et al. **Cancer Lett** 1990 Mar; 49(3):243–8

Differential spectrum of expression of neural cell adhesion molecule isoforms and L1 adhesion molecules on human neuroectodermal tumors. Figarella–Branger DF, et al. **Cancer Res** 1990 Oct 1;50(19):6364–70

Two–dimensional electrophoretic analysis of nuclear proteins from human tumors. Menzel A, et al. **Electrophoresis** 1989 Aug–Sep;10(8–9):554–62

The distribution of bromine content of dibromodulcitol in the central nervous system of patients with malignant gliomas. Sziklai IL, et al. **Eur J Cancer** 1990 Feb; 26(2):79–82

Synaptophysin: a sensitive and specific marker for ganglion cells in central nervous system neoplasms. Miller DC, et al. **Hum Pathol** 1990 Jan;21(1):93–8

Localized 31P magnetic resonance spectroscopy of large pediatric brain tumors. Sutton LN, et al. **J Neurosurg** 1990 Jan;72(1):65–70

Tropomyosin isoform expression in normal and neoplastic astrocytes. Galloway PG, et al. **Lab Invest** 1990 Feb; 62(2):163–70

Arginine vasopressin in Cushing's disease. Wittert GA, et al. **Lancet** 1990 Apr 28;335(8696):991–4

Sigma and opioid receptors in human brain tumors. Thomas GE, et al. **Life Sci** 1990;46(18):1279–86

Pre–operative localized in vivo proton spectroscopy in cerebral tumors at 4.0 Tesla—first results. Langkowski JH, et al. **Magn Reson Imaging** 1989 Sep–Oct;7(5):547–55

Investigation of the expression of epidermal growth factor receptor and blood group A antigen in 110 human gliomas. Jones NR, et al. **Neuropathol Appl Neurobiol** 1990 Jun; 16(3):185–92

Localization and characterization of endothelin receptors in human gliomas: a growth factor? Kurihara M, et al. **Neurosurgery** 1990 Aug;27(2):275–81

Hydra head activator–like immunoreactivity in human brain astrocytomas grade III–IV and the surrounding brain tissue. Ekman R, et al. **Peptides** 1990 Mar–Apr;11(2):271–5

Crystals in an oligodendroglioma: an optical, histochemical, and ultrastructural study. Sarasa JL, et al. **Ultrastruct Pathol** 1990 Mar–Apr;14(2):151–9

Transferrin receptor expression in tumours of the human nervous system: relation to tumour type, grading and tumour growth fraction. Prior R, et al. **Virchows Arch [A]** 1990;416(6):491–6

[A quantitative study on nucleolar organizer regions in astrocytoma] Li Q. **Chung Hua I Hsueh Tsa Chih** 1990 Mar;70(3):146–7 **(Chi)**

[Ultrastructural localization of ferritin in glioma] Yang P. **Chung Hua I Hsueh Tsa Chih** 1989 May;69(5):274–5, 20 (Eng. Abstr.) **(Chi)**

[Estrogen receptors in patients with brain tumors] Sun KH. **Chung Hua Wai Ko Tsa Chih** 1989 May;27(5):299–300, 318 (Eng. Abstr.) **(Chi)**

[Behavior of estrogen and progesterone receptors in intracranial meningioma] Oddi G, et al. **Pathologica** 1989 Sep–Oct;81(1075):515–22 (Eng. Abstr.) **(Ita)**

[Expression of insulin–like growth factor I receptors in human brain tumors: comparison with epidermal growth factor receptor by using quantitative autoradiography] Kurihara M, et al. **No To Shinkei** 1989 Jul;41(7):719–25 (Eng. Abstr.) **(Jpn)**

[DAPI–DNA cytofluorometric study of glioma cells—application of DAPI–DNA cytofluorometry to paraffin embedded archival glioma tissue for nuclear DNA content analysis] Nagashima R. **No To Shinkei** 1990 Apr; 42(4):352–9 (Eng. Abstr.) **(Jpn)**

[Immunohistochemical study of c–myc oncogene product in human brain tumors] Nakajima Y, et al. **No To Shinkei** 1989 Jun;41(6):617–21 (Eng. Abstr.) **(Jpn)**

BLOOD

Haemostatic abnormalities in brain tumours. Singh VP, et al. **Acta Neurochir (Wien)** 1990;102(3–4):103–7

Decreased phenytoin levels in patients receiving chemotherapy. Grossman SA, et al. **Am J Med** 1989 Nov; 87(5):505–10 (26 ref.)

Influence of vasopressin level on osmotic pressure and sodium concentration in plasma and cerebrospinal fluid in patients with intracranial lesions. Miura M, et al. **Neurol Med Chir (Tokyo)** 1989 Sep;29(9):806–10

[The role of lipids in middle molecular weight fractions as a feature of the pathological process] Promyslov MSh, et al. **Vopr Med Khim** 1989 Jul–Aug;35(4):105–7 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Selective enhancement of intratumoural blood flow in malignant gliomas: experimental study in rats by intracarotid administration of adenosine or adenosine triphosphate. Baba T, et al. **Acta Neurochir (Wien)** 1989; 101(1–2):66–74

Glomeruloid blood vessels in ethylnitrosourea–induced rat gliomas. Histological and immunohistochemical studies. Yoshida Y, et al. **Acta Neuropathol (Berl)** 1989;79(3):240–7

Distant angiogenesis in a patient with glioblastoma multiforme. Romberger CF, et al. **Clin Neuropathol** 1990 Mar–Apr;9(2):97–100

Human cerebral endothelium: isolation and characterization of cells derived from microvessels of non–neoplastic and malignant glial tissue. Costello P, et al. **J Neurooncol** 1990 Jun;8(3):231–43

Ultrastructural study of micro–blood vessels in human brain tumors and peritumoral tissue. Roy S, et al. **J Neurooncol** 1989 Sep;7(3):283–92

Vascular response to irradiation in malignant gliomas. Schiffer D, et al. **J Neurooncol** 1990 Feb;8(1):73–84

Temporal effects of dexamethasone on blood–to–brain and blood–to–tumor transport of 14C–alpha–aminoisobutyric acid in rat C6 glioma. Shapiro WR, et al. **J Neurooncol** 1990 Jun;8(3):197–204

Modification of tumor blood flow and enhancement of therapeutic effect of ACNU on experimental rat gliomas with angiotensin II. Tokuda K, et al. **J Neurooncol** 1990 Jun;8(3):205–12

Selective enhancement of intratumoral blood flow in malignant gliomas using intra–arterial adenosine triphosphate. Baba T, et al. **J Neurosurg** 1990 Jun; 72(6):907–11

Selective opening of the blood–tumor barrier by intracarotid infusion of leukotriene C4. Black KL, et al. **J Neurosurg** 1990 Jun;72(6):912–6

Rapid in situ cellular kinetics of intracerebral tumor angiogenesis using a monoclonal antibody to bromodeoxyuridine. Brien SE, et al. **Neurosurgery** 1989 Nov;25(5):715–9

Permeability of blood vessels in experimental gliomas: uptake of 99mTc–glucoheptonate and alteration in blood–brain barrier as determined by cytochemistry and electron microscopy. Nir I, et al. **Neurosurgery** 1989 Oct; 25(4):523–31; discussion 531–2

[Differences in microvasculature between ethylnitrosourea–induced brain tumor and transplanted 9L cell brain tumor in the rat] Jinnouchi T, et al. **Neurol Med Chir (Tokyo)** 1989 Dec;29(12):1065–9 (Eng. Abstr.) **(Jpn)**

[Ultrastructure of capillary permeability in malignant lymphoma] Ochi A, et al. **No Shinkei Geka** 1989 Dec; 17(12):1139–43 (Eng. Abstr.) **(Jpn)**

CEREBROSPINAL FLUID

Detection of central nervous system involvement in patients with leukemia or non–Hodgkin's lymphoma by immunological marker analysis of cerebrospinal fluid cells. Hooijkaas H, et al. **Cancer Treat Res** 1988;38:149–71 (170 ref.)

Brain tumors: detection of B–cell stimulatory factor–2/interleukin–6 in the absence of oligoclonal bands of immunoglobulins. Leppert D, et al. **J Neuroimmunol** 1989 Oct;24(3):259–64

A new rat brain tumor model: glioma disseminated via the cerebral spinal fluid pathways. Rewers AB, et al. **J Neurooncol** 1990 Jun;8(3):213–9

Symptomatic cerebrospinal fluid dissemination of cerebral glioblastoma. Computed tomographic findings in 11 cases. Onda K, et al. **Neuroradiology** 1990;32(2):146–50

[Cytological findings of the cerebrospinal fluid at diagnosis of acute lymphocytic leukemia in children—effect of remission induction chemotherapy] Kinumaki H, et al. **Rinsho Ketsueki** 1989 Oct;30(10):1763–8 (Eng. Abstr.) **(Jpn)**

CHEMICALLY INDUCED

Exposure to barbiturates in utero and during childhood risk of intracranial and spinal cord tumors. Goldhaber MK, et al. **Cancer Res** 1990 Aug 1;50(15):4600–3

Diaplacental induction by ethylnitrosourea of tumours at the pial border of the central nervous system in (T X HT)F1 mice. Schmahl W, et al. **Carcinogenesis** 1990 Aug; 11(8):1313–22

Cell–specific brain tumour induction in neural transplants: evidence for multistep carcinogenesis in the nervous system. Kleihues P, et al. **IARC Sci Publ** 1989;(96):121–9

Chemical induction of brain tumors in rats by nitrosoureas: molecular biology and neuropathology. Bilzer T, et al. **Neurotoxicol Teratol** 1989 Nov–Dec;11(6):551–6 (37 ref.)

[Results of the exposure to ethylene oxide with special reference to its carcinogenic and hematotoxic effects] Rucińska M, et al. **Med Pr** 1989;40(6):381–9 (40 ref.) (Eng. Abstr.) **(Pol)**

CLASSIFICATION

Brain tumors of childhood: nosological and diagnostic problems. Schiffer D, et al. **Childs Nerv Syst** 1989 Aug; 5(4):220–9

Immunophenotyping of childhood astrocytomas with a library of monoclonal antibodies. Bodey B, et al. **Int J Cancer** 1990 Jun 15;45(6):1079–87

Intraobserver reproducibility in assigning brain tumors to classes in the World Health Organization diagnostic scheme. The Childhood Brain Tumor Consortium. **J Neurooncol** 1989 Sep;7(3):211–24

A cluster classification for histologic diagnoses of CNS tumors in an epidemiologic study. Armstrong DD, et al. **Neuroepidemiology** 1990;9(1):2–16

Classification of gliomas and medulloblastomas using the new TNM system for cerebral tumors. Szuwart U, et al. **Neurosurg Rev** 1989;12(3):233–8

[Prognostic value of grading systems in cerebral arteriovenous malformations] Höllerhage HG, et al. **Neurochirurgia (Stuttg)** 1990 May;33(3):59–64 (Eng. Abstr.) **(Ger)**

[Grading of brain tumors using computer–assisted analysis of CT images and anamnestic data] Michalik S, et al. **Radiol Diagn (Berl)** 1989;30(3):294–9 (Eng. Abstr.) **(Ger)**

[Brain tumors: classification and clinical aspects] Battistella PA, et al. **Pediatr Med Chir** 1990 Jan–Feb;12(1):33–9 (89 ref.) (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Influence of surgery and antiepileptic drugs on seizures symptomatic of cerebral tumours. Franceschetti S, et al. **Acta Neurochir (Wien)** 1990;103(1–2):47–51

Giant intracranial varix associated with venous angioma and intracerebral hemorrhage. Maiuri F, et al. **Acta Neurol (Napoli)** 1990 Jun;12(3):231–6

Hippocampal neuronal density in temporal lobe epilepsy with and without gliomas. Kim JH, et al. **Acta Neuropathol (Berl)** 1990;80(1):41–5

Quantitative magnetic resonance imaging assessment of mannitol's effect on peritumoral brain edema. Boisvert DP, et al. **Adv Neurol** 1990;52:560

Quantitative analysis of experimental peritumoral edema in cats. Hossmann KA, et al. **Adv Neurol** 1990;52:449–58

Effect of superoxide dismutase in rabbits with peritumoral edema. Ikeda Y, et al. **Adv Neurol** 1990;52:441–7

Peritumoral brain edema. A keynote address. Reulen HJ, et al. **Adv Neurol** 1990;52:307–15 (25 ref.)

High–intensity basal ganglia lesions on T1–weighted MR images in neurofibromatosis. Mirowitz SA, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):369–73

Intracranial angioblastic meningioma and an aged appearance in a woman with Rubinstein–Taybi syndrome. Bilir BM, et al. **Am J Med Genet Suppl** 1990;6:69–72

Intermittent pupillary dilatation associated with astrocytoma. Berreen JP, et al. **Am J Ophthalmol** 1990 Feb 15; 109(2):237–9

Temporal lobe tumor manifested by localized dysgeusia. el–Deiry A, et al. **Ann Otol Rhinol Laryngol** 1990 Jul;99(7 Pt 1):586–7

Indolent glioma: a cause of epilepsy. Lee TK, et al. **Arch Dis Child** 1989 Dec;64(12):1666–71

Ictal tremor. Harrington RB, et al. **Arch Neurol** 1966 Feb; 14(2):184–9

Lipoma of the midbrain. Post–mortem finding in a patient with breast cancer. Gouvea VM, et al. **Arq Neuropsiquiatr** 1989 Sep;47(3):371–4

Hyperventilation—an unusual manifestation of frontal lobe tumour. Mohamed EE, et al. **Br J Clin Pract** 1990 May; 44(5):201–2

Haemangioma of the skull base producing basilar impression. Rajshekhar V, et al. **Br J Neurosurg** 1989;3(2):229–33

Diencephalic syndrome of emaciation in an adult associated with a suprasellar craniopharyngioma—a case report. Sharma RR, et al. **Br J Neurosurg** 1990;4(1):77–80

Psychiatric manifestations of frontal lobe tumours. Ron MA. **Br J Psychiatry** 1989 Dec;155:735–8

Anterior tumour of the corpus callosum with atypical depression. Tanaghow A, et al. **Br J Psychiatry** 1989 Dec; 155:854–6

Mechanisms of tumor–associated edema: a review. Del Maestro RF, et al. **Can J Neurol Sci** 1990 May;17(2):177–83 (67 ref.)

Cerebral fluid overproduction in the absence of tumor or villous hypertrophy of the choroid plexus. Casey KF, et al. **Childs Nerv Syst** 1989 Oct;5(5):332–4

Medulloblastoma in childhood: progressive intellectual deterioration. Hoppe–Hirsch E, et al. **Childs Nerv Syst** 1990 Mar;6(2):60–5

Cerebral Hodgkin's disease and progressive multifocal leucoencephalopathy. Williamson PJ, et al. **Clin Lab Haematol** 1989;11(3):281–5

Visual involvement in primary non–Hodgkin's lymphomas. Maiuri F. **Clin Neurol Neurosurg** 1990;92(2):119–24

Lipomas of the mesencephalic tectum and rostral pons associated with sleep apnea syndrome. Sheridan F, et al. **Clin Neuropathol** 1990 May–Jun;9(3):152–6

Functional brain imaging in cavernous hemangioma: demonstration of the anatomic lesion as the seizure focus. Timmons JH, et al. **Clin Nucl Med** 1989 Sep;14(9):696–7

Glioblastoma associated with multiple sclerosis: coincidence or induction? Aarli JA, et al. **Eur Neurol** 1989;29(6):312–6 (24 ref.)

Prune belly syndrome with intracranial angiomatous malformation [letter] Suri S, et al. **Indian Pediatr** 1989 Sep; 26(9):961–2

Progressive cranial polyneuropathy caused by primary central nervous system melanoma. Fish LA, et al. **J Clin Neuro Ophthalmol** 1990 Mar;10(1):41–4

Epstein–Barr virus polymorphic B–cell lymphoma associated with leukemia and with congenital immunodeficiencies [see comments] Joncas JH, et al. **J Clin Oncol** 1990 Mar; 8(3):378–84 Comment in: J Clin Oncol 1990 Mar;8(3):371–3.

Trigeminal neuralgia associated with contralateral intracranial tumour: a false localising sign caused by vascular compression? Report of two cases [letter] Michelucci R, et al. **J Neurol Neurosurg Psychiatry** 1989 Oct;52(10):1202–3

Singing in the brain: a new form of complex partial seizure? [letter] Vidailhet M, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1306

Favorable prognosis for brainstem gliomas in neurofibromatosis. Milstein JM, et al. **J Neurooncol** 1989 Nov;7(4):367–71

Cerebral diaschisis in patients with malignant glioma. Rozental JM, et al. **J Neurooncol** 1990 Apr;8(2):153–61

Epilepsy and brain tumours in children. Hirsch JF. **J Neuroradiol** 1989 Dec;16(4):292–300 **(Eng, Fre)**

Arteriovenous malformation and glioma: coexistent or sequential? Case report. Goodkin R, et al. **J Neurosurg** 1990 May;72(5):798–805 (21 ref.)

Three cases with secondary generalized epilepsy caused by frontal organic lesion. Yamashita S, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):485–6

Long–term sequelae after pediatric brain tumors: their effect on disability and quality of life. Lannering B, et al. **Med Pediatr Oncol** 1990;18(4):304–10

Klinefelter's syndrome and primary central nervous system lymphoma. Liang R, et al. **Med Pediatr Oncol** 1990; 18(3):236–9 (13 ref.)

Brain tumors in children with von Recklinghausen neurofibromatosis. Hochstrasser H, et al. **Neurofibromatosis** 1988;1(4):233–9

Neurotransmitter amines in brain edema of a rat glioma model. Chang CC. **Neurol Med Chir (Tokyo)** 1989 Mar; 29(3):187–91

Intracerebral hemorrhage from a peripheral aneurysm associated with an astrocytoma—case report. Kadota Y, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):241–4

Nodding attacks (infantile spasms) associated with temporal lobe astrocytoma—case report. Morimoto K, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):610–3

Nonfamilial turcot syndrome presenting with astrocytoma—case report. Takayama H, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):606–9

Medullary venous malformation with an arterial component associated with a ruptured aneurysm—case report. Tashiro Y, et al. **Neurol Med Chir (Tokyo)** 1989 Sep;29(9):857–60 (16 ref.)

Intracerebral hemorrhage due to venous thrombosis in venous angioma—case report. Yamamoto M, et al. **Neurol Med Chir (Tokyo)** 1989 Nov;29(11):1044–6

Speech automatisms [letter] Arlt G, et al. **Neurology** 1990 Aug;40(8):1320

Corpus callosum lipoma with frontal encephalocele. Rao AS, et al. **Neuroradiology** 1990;32(1):50–2

Amnesia due to bilateral hippocampal glioblastoma. MRI finding. Shimauchi M, et al. **Neuroradiology** 1989; 31(5):430–2

The risk and efficacy of anticoagulant therapy in the treatment of thromboembolic complications in patients with primary malignant brain tumors. Altschuler E, et al. **Neurosurgery** 1990 Jul;27(1):74–6; discussion 77

An unusual cause for trigeminal neuralgia: contralateral meningioma of the posterior fossa. Haddad FS, et al. **Neurosurgery** 1990 Jun;26(6):1033–8 (27 ref.)

Metabolic and hemodynamic aspects of peritumoral low-density areas in human brain tumor. Hino A, et al. **Neurosurgery** 1990 Apr;26(4):615–21

Cerebrospinal fluid fistula secondary to ecchordosis physaliphora. Macdonald RL, et al. **Neurosurgery** 1990 Mar;26(3):515–8; discussion 518–9

Benign brain stem lesions in pediatric patients with neurofibromatosis: case reports. Raffel C, et al. **Neurosurgery** 1989 Dec;25(6):959–64

Balo's concentric sclerosis: a variant of multiple sclerosis associated with oligodendroglioma. Shankar SK, et al. **Neurosurgery** 1989 Dec;25(6):982–6

Extrusion of a Raimondi peritoneal catheter from the thigh. Turner MS, et al. **Neurosurgery** 1989 Nov;25(5):833–4; discussion 835

Epidermoid tumor presenting with trigeminal neuralgia and ipsilateral hemifacial spasm: a case report. Otsuka S, et al. **Nippon Geka Hokan** 1989 Mar 1;58(2):245–9 (9 ref.)

Intracranial tumors and West syndrome. Ruggieri V, et al. **Pediatr Neurol** 1989 Sep–Oct;5(5):327–9

Primary cerebral lymphoma presenting with cranial diabetes insipidus. Patrick AW, et al. **Postgrad Med J** 1989 Oct; 65(768):771–2

Arachnoid cyst with complicating intracystic and subdural haemorrhage. Olsen NK, et al. **Rontgenblatter** 1990 Apr; 43(4):166–8

Cerebral tumours presenting with psychiatric symptoms. Ko SM, et al. **Singapore Med J** 1989 Jun;30(3):282–4

Deep vein thrombophlebitis and pulmonary embolism in patients with malignant gliomas. Muchmore JH, et al. **South Med J** 1989 Nov;82(11):1352–6

Intracranial granulocytic sarcoma in postpolycythemia myeloid metaplasia. Roy EP 3d, et al. **South Med J** 1989 Dec;82(12):1564–7

Chemical meningitis in ruptured intracranial dermoid. Case report and review of the literature. Lunardi P, et al. **Surg Neurol** 1989 Dec;32(6):449–52 (27 ref.)

Cavernous angioma with encapsulated intracerebral hematoma: report of two cases. Monma S, et al. **Surg Neurol** 1990 Oct;34(4):245–9

Association of intracranial meningioma with arteriovenous malformation. Soria E, et al. **Surg Neurol** 1990 Aug; 34(2):111–7 (31 ref.)

Brain tumors associated with intracranial vascular anomalies. Brzeziński J, et al. **Zentralbl Neurochir** 1989;50(3–4):201–2

[Tumor epilepsy. Apropos of a case of temporal astrocytoma] Berquin P, et al. **Ann Pediatr (Paris)** 1989 Sep;36(7):461–3 (Eng. Abstr.) **(Fre)**

[The association of gastric polyposis and cerebral tumor (letter)] Labayle D, et al. **Gastroenterol Clin Biol** 1990; 14(2):188–9 **(Fre)**

[External ventricular drainage in surgery of the posterior fossa in children (30 cases)] Gutknecht JL, et al. **Minerva Anestesiol** 1989 Apr;55(4):189–91 **(Fre)**

[Hydrocephalus and brainstem tumor of late manifestation] Vighetto A, et al. **Rev Neurol (Paris)** 1989;145(12):863–6 (Eng. Abstr.) **(Fre)**

[Anorexia nervosa, epileptic seizures and schizophreniform psychosis in temporo-basal angioma] Trabert W, et al. **Nervenarzt** 1990 Jan;61(1):57–60 **(Ger)**

[A case of intracranial chondroma presenting with pontine hemorrhage] Furui T, et al. **No Shinkei Geka** 1990 Jun; 18(6):543–6 (33 ref.) (Eng. Abstr.) **(Jpn)**

[A case of primary malignant lymphoma of the brain associated with acute hydrocephalus] Kondoh T, et al. **No Shinkei Geka** 1989 Jul;17(7):683–6 (Eng. Abstr.) **(Jpn)**

[A case of intrasellar and suprasellar meningioma with hypopituitarism] Nagao S, et al. **No Shinkei Geka** 1990 Jul; 18(7):637–42 (13 ref.) (Eng. Abstr.) **(Jpn)**

[CT appearances in a neonate presenting with seizures; a neoplastic lesion or hemorrhagic infarction? (letter)] Aoki N. **No To Hattatsu** 1990 Mar;22(2):191–2 **(Jpn)**

[Suspected germ cell tumor in bilateral basal ganglia with progressive dystonia] Nakamura M, et al. **No To Hattatsu** 1990 May;22(3):284–9 (Eng. Abstr.) **(Jpn)**

[Case report: hemiballism due to a putaminal cavernous hemangioma] Hidaka M, et al. **No To Shinkei** 1989 Nov; 41(11):1135–9 (Eng. Abstr.) **(Jpn)**

[A case of Maffucci's syndrome with brain-stem tumor] Sato K, et al. **No To Shinkei** 1989 Jun;41(6):631–4 (Eng. Abstr.) **(Jpn)**

[Convulsive seizures and heterotopic gray matter; report of two cases] Higuchi T, et al. **Rinsho Hoshasen** 1990 Jun; 35(6):725–8 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Multiple cerebral venous angiomas associated with mixed pial and dural arteriovenous malformation] Tanohata K, et al. **Rinsho Hoshasen** 1989 Jun;34(6):731–4 (Eng. Abstr.) **(Jpn)**

[Wallenberg's syndrome caused by a brain tumor—a case report and literature review] Hanyu H, et al. **Rinsho Shinkeigaku** 1990 Mar;30(3):324–6 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Russel's syndrome: diencephalic tumor in a child] Da Motta LA, et al. **Arq Neuropsiquiatr** 1990 Mar;48(1):107–12 (Eng. Abstr.) **(Por)**

[Neurologic analysis of several forms of acromegaly] Erokhina LG, et al. **Sov Med** 1989;(7):81–4 **(Rus)**

[Alcohol and neoplasms of the brain] Krasik ED, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):38–40 (Eng. Abstr.) **(Rus)**

[Tongue paralysis of neoplastic origin] Marco M, et al. **Neurologia** 1989 Oct;4(8):277–81 (Eng. Abstr.) **(Spa)**

[Psychiatric manifestations as the presenting form of primary cerebral tumor (letter)] Fornés L, et al. **Rev Clin Esp** 1990 Mar;186(4):194–5 **(Spa)**

CONGENITAL

Congenital brain tumors: a review of 45 cases. Buetow PC, et al. **AJNR** 1990 Jul–Aug;11(4):793–9 (59 ref.)

Congenital brain tumors: a review of 45 cases. Buetow PC, et al. **AJR Am J Roentgenol** 1990 Sep;155(3):587–93

Congenital brain tumors in Japan (ISPN Cooperative Study): specific clinical features in neonates. Oi S, et al. **Childs Nerv Syst** 1990 Mar;6(2):86–91

Congenital choroid plexus papilloma and giant nevomelanocytic nevus: report of a case. McCune AB, et al. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):849–51

Congenital anaplastic astrocytoma [letter] Schober R, et al. **J Neurosurg** 1990 Jan;72(1):155–6

Congenital brain tumours: diagnostic and therapeutic approach. With a report of 3 cases. Albert FK, et al. **Zentralbl Neurochir** 1989;50(2):101–5

[Brain tumors in infants] Issakainen J, et al. **Klin Padiatr** 1990 Mar–Apr;202(2):94–8 (Eng. Abstr.) **(Ger)**

[A neonate with tuberous sclerosis and a brain tumor] Hayashi Y, et al. **No To Hattatsu** 1989 Sep;21(5):497–9 **(Jpn)**

DIAGNOSIS

Neonatal intracerebral teratoma. Ishikawa T, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Aug;31(4):496–9

Intracranial malignant rhabdoid tumor: report of one case. Chi YW, et al. **Acta Paediatr Sin** 1989 Sep–Oct;30(5):316–22

In vivo 1H spectroscopy of the human brain at 1.5 tesla. Preliminary experience at a clinical installation. Henriksen O, et al. **Acta Radiol** 1990 Mar;31(2):181–6

CT and MR findings in patients with chordomas of the petrous apex. Brown RV, et al. **AJNR** 1990 Jan–Feb; 11(1):121–4

MR of intracranial epidermoid tumors: correlation of in vivo imaging with in vitro 13C spectroscopy. Horowitz BL, et al. **AJNR** 1990 Mar–Apr;11(2):299–302

Glioblastoma multiforme: MR imaging at 1.5 and 9.4 T after injection of polylysine-DTPA-Gd in rats. Kornguth S, et al. **AJNR** 1990 Mar–Apr;11(2):313–8

MR imaging of pineocytoma: report of two cases. Nakagawa H, et al. **AJNR** 1990 Jan–Feb;11(1):195–8

Cerebral necrosis simulating an intraparenchymal tumor. Nelson DR, et al. **AJNR** 1990 Jan–Feb;11(1):211–2

Gadopentetate-dimeglumine-enhanced MR imaging of gliomatosis cerebri: appearance mimicking leptomeningeal tumor dissemination. Rippe DJ, et al. **AJNR** 1990 Jul–Aug; 11(4):800–1

Recurrent medulloblastoma: frequency of tumor enhancement on Gd-DTPA MR imaging. Rollins N, et al. **AJNR** 1990 May;11(3):583–7

MR imaging of pineal tumors. Tien RD, et al. **AJNR** 1990 May;11(3):557–65

Intracranial ganglioglioma: MR imaging [letter] Algra PR, et al. **AJR Am J Roentgenol** 1990 Oct;155(4):899–900

Intracranial gangliogliomas: MR, CT, and clinical findings in 18 patients. Castillo M, et al. **AJR Am J Roentgenol** 1990 Mar;154(3):607–12

Primary cerebral neuroblastoma: CT and MR findings in 12 cases. Davis PC, et al. **AJR Am J Roentgenol** 1990 Apr; 154(4):831–6

Gd-DTPA-enhanced cranial MR imaging in children: initial clinical experience and recommendations for its use. Elster AD, et al. **AJR Am J Roentgenol** 1989 Dec;153(6):1265–8

Agenesis and lipoma of the corpus callosum: MR findings [letter] Hua CL. **AJR Am J Roentgenol** 1990 Jun; 154(6):1348

Intracranial ependymoma and subependymoma: MR manifestations. Spoto GP, et al. **AJR Am J Roentgenol** 1990 Apr;154(4):837–45

MR imaging of pineal tumors. Tien RD, et al. **AJR Am J Roentgenol** 1990 Jul;155(1):143–51

Pathogenesis of intracranial lipoma: an MR study in 42 patients. Truwit CL, et al. **AJR Am J Roentgenol** 1990 Oct;155(4):855–64; discussion 865 (28 ref.)

Intracranial teratoma: prolonged neonatal survival after prenatal diagnosis. Dolkart LA, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):768–9

Unmasking of a cerebral tumour? [letter] Hodgson CA. **Anaesthesia** 1990 Aug;45(8):693–4

Conversion disorder. Camouflage for brain lesions in two cases. Jones JB, et al. **Arch Intern Med** 1990 Jun; 150(6):1343–5

Cerebral lymphoma and central hyperventilation [letter; comment] Plum F. **Arch Neurol** 1990 Jan;47(1):10–1 Comment on: Arch Neurol 1989 May;46(5):510–2.

Primary hepatic lymphoma presenting as intravascular lymphomatosis. Kayano H, et al. **Arch Pathol Lab Med** 1990 Jun;114(6):580–4 (41 ref.)

The diagnosis of ruptured intracranial dermoid cysts. Jamjoom AB, et al. **Br J Neurosurg** 1989;3(5):609–12

Primary cerebral lymphoma presenting as steroid-responsive chiasmal syndrome. Maiuri F. **Br J Neurosurg** 1987; 1(4):499–502

Primary cerebral T-cell lymphoma: a case report. Ng HK, et al. **Br J Neurosurg** 1988;2(4):523–8

Spinal cord astrocytoma with intracranial spread: detection by magnetic resonance imaging. Saleh J, et al. **Br J Neurosurg** 1987;1(4):503–8

Parasellar chondroma: a case report. Takizawa H, et al. **Br J Neurosurg** 1987;1(1):147–51 (19 ref.)

Computer-directed stereotactic biopsy of intrinsic brain stem lesions. Thomas DG, et al. **Br J Neurosurg** 1988;2(2):235–40

A magnetic resonance imaging contrast agent differentiates between the vascular properties of fetal striatal tissue transplants and gliomas in rat brain in vivo. Norman AB, et al. **Brain Res** 1989 Nov 27;503(1):156–9

Correlation of CT and MR with impedance monitoring and histopathology in stereotactic biopsies. Gorecki J, et al. **Can J Neurol Sci** 1990 May;17(2):184–9

Cerebral cavernous angioma in children. Fortuna A, et al. **Childs Nerv Syst** 1989 Aug;5(4):201–7 (49 ref.)

Headache in children with brain tumors. Rossi LN, et al. **Childs Nerv Syst** 1989 Oct;5(5):307–9

Germ cell tumors of the thalamus and the basal ganglia. Tamaki N, et al. **Childs Nerv Syst** 1990 Jan;6(1):3–7 (36 ref.)

Therapeutic approach of posterior fossa tumours in adults. A retrospective study. Claesen P, et al. **Clin Neurol Neurosurg** 1990;92(2):99–104

The conservative management of primary gliomas of the brain. Laws ER Jr. **Clin Neurosurg** 1990;36:367–74 (10 ref.)

Magnetic resonance imaging of intracranial epidermoid tumours [letter; comment] Hadley DM, et al. **Clin Radiol** 1989 Nov;40(6):654–5 Comment on: Clin Radiol 1989 May;40(3):282–5.

A small temporal lobe glioma detected only by magnetic resonance imaging. Yanaka K, et al. **Clin Radiol** 1989 Sep; 40(5):528–9

Imaging of intracranial neoplasms. Russell EJ. **Curr Opin Radiol** 1990 Feb;2(1):4–17 (44 ref.)

Diagnostic significance of motor evoked potentials in space-occupying lesions of the brain stem and spinal cord. Zentner J, et al. **Eur Arch Psychiatry Neurol Sci** 1990; 239(5):285–9

Pilomotor epilepsy. Scoppetta C, et al. **Funct Neurol** 1989 Jul–Sep;4(3):283–6 (12 ref.)

Brain abscess mimicking brain tumor. Lau DW, et al. **Heart Lung** 1989 Nov;18(6):634–7

Some recent advances in neuro-oncology with particular reference to newer techniques for diagnosis and prognostication. Roy S, et al. **Indian J Pathol Microbiol** 1990 Apr;33(2):195–209 (125 ref.)

A preliminary study of brain gliomas with H17E2 monoclonal antibody: immunoscintigraphy and pharmacokinetics. Skarlos DV, et al. **Int J Biol Markers** 1989 Jul–Sep;4(3):135–41

Clinical NMR spectroscopy of tumors. Current status and future directions. Glickson JD. **Invest Radiol** 1989 Dec; 24(12):1011–6 (26 ref.)

MRI and CT evaluation of brain in neurofibromatosis. Case report. Carella A, et al. **Ital J Neurol Sci** 1989 Dec; 10(6):569–73

Cranial and spinal tumors with meningitic onset. Lunardi P, et al. **Ital J Neurol Sci** 1990 Apr;11(2):145–51 (73 ref.)

A case of intracranial chordoma investigated by MRI and CT studies. Decrop E, et al. **J Belge Radiol** 1989 Dec; 72(6):485–8

Trilateral retinoblastoma. Shields JA, et al. **J Clin Neuro Ophthalmol** 1989 Sep;9(3):222–3

MR findings in childhood gangliogliomas. Benitez WI, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):712–6

Proton MR spectroscopy of intracranial tumours: in vivo and in vitro studies. Gill SS, et al. **J Comput Assist Tomogr** 1990 Jul–Aug;14(4):497–504

Cysticercosis mimicking brain neoplasm: MR and CT appearance. Michael AS, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):708–11

Heterogeneity of cerebral cavernous hemangiomas diagnosed by MR imaging. Rapacki TF, et al. **J Comput Assist Tomogr** 1990 Jan–Feb;14(1):18–25

Clinical experience with routine Gd-DTPA administration for MR imaging of the brain. Schwaighofer BW, et al. **J Comput Assist Tomogr** 1990 Jan–Feb;14(1):11–7

Cystic schwannoma mimicking a brain stem tumor: MR features. Sigal R, et al. **J Comput Assist Tomogr** 1990 Jul–Aug;14(4):662–4

Periventricular involvement in CNS lymphomatoid granulomatosis: MR demonstration. Smith AS, et al. **J Comput Assist Tomogr** 1990 Mar–Apr;14(2):291–3

Idiopathic thrombocytopenic purpura mimicking intracranial tumour. Ramani A, et al. **J Indian Med Assoc** 1989 Oct; 87(10):239–40

Atypical presentation of cerebral lymphoma with the result of a bromide partition test suggesting tuberculous meningitis [letter] Ball S, et al. **J Infect** 1990 Jan;20(1):91–2

Unusual MRI appearance of diffuse subcortical heterotopia or "double cortex" in two children. Livingston JH, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):617–20

Contribution of MRI to the diagnosis and post–therapeutic monitoring of brain stem tumours. Carsin M, et al. **J Neuroradiol** 1990 Jan;17(1):50–9 **(Eng, Fre)**

Imaging of irradiated brain tumours. Value of magnetic resonance imaging. Castel JC, et al. **J Neuroradiol** 1989; 16(2):81–132 (94 ref.) **(Eng, Fre)**

Diagnostic yield in CT–guided stereotactic biopsy of gliomas. Greene GM, et al. **J Neurosurg** 1989 Oct;71(4):494–7

Correlation of intraoperative ultrasound tumor volumes and margins with preoperative computerized tomography scans. An intraoperative method to enhance tumor resection. LeRoux PD, et al. **J Neurosurg** 1989 Nov;71(5 Pt 1):691–8

Correlation of brain mapping and MR imaging [letter] Levesque MF. **J Neurosurg** 1990 Sep;73(3):474

Role of the intraoperative real–time sonography in the tumours of the pineal region and third ventricle. Guiducci G, et al. **J Neurosurg Sci** 1989 Jul–Sep;33(3):259–62

Systematic evaluation of primary brain tumors [comment] Gruber ML, et al. **J Nucl Med** 1990 Jun;31(6):969–71 Comment on: J Nucl Med 1990 Jun;31(6):965–9.

Positron emission tomography of fluorine–18–deoxyglucose and image–guided phosphorus–31 magnetic resonance spectroscopy in brain tumors. Heiss WD, et al. **J Nucl Med** 1990 Mar;31(3):302–10

Photophobia, epiphora, and torticollis: a masquerade syndrome. Marmor MA, et al. **J Pediatr Ophthalmol Strabismus** 1990 Jul–Aug;27(4):202–4

Lipoma and agenesis of the corpus callosum with associated choroid plexus lipomas. In utero diagnosis. Mulligan G, et al. **J Ultrasound Med** 1989 Oct;8(10):583–8 (20 ref.)

PAL–E, monoclonal antibody with immunoreactivity for endothelium specific to brain tumours [letter] Leenstra S, et al. **Lancet** 1990 Mar 17;335(8690):671

Central vocal cord paralysis and paresis presenting as laryngeal stridor in children. Ross DA, et al. **Laryngoscope** 1990 Jan;100(1):10–3

Fibronectin concentration in cerebrospinal fluid reflects early central nervous system involvement in children with acute lymphoblastic leukemia. Koskiniemi M, et al. **Leuk Res** 1990;14(5):449–52

Magnetic resonance imaging for pediatric diagnosis. Brasch RC. **Magn Reson Annu** 1987;:179–201 (32 ref.)

Magnetic resonance imaging of the sella and temporal bone. Daniels DL, et al. **Magn Reson Annu** 1987;:1–47 (28 ref.)

Magnetic resonance imaging of cerebral neoplasms. Zimmerman RA. **Magn Reson Annu** 1985;:113–47 (38 ref.)

Proton relaxation enhancement in experimental brain tumors—in vivo NMR study of manganese(III)TPPS in rat brain gliomas. Bockhorst K, et al. **Magn Reson Imaging** 1990;8(4):499–504

Volumetric measurement of canine gliomas using MRI. Galloway RL Jr, et al. **Magn Reson Imaging** 1990; 8(2):161–5

MRI evaluation of AIDS–related encephalopathy: toxoplasmosis vs. lymphoma. Kupfer MC, et al. **Magn Reson Imaging** 1990;8(1):51–7

MRI characterization of 9L–glioma in rat brain at 4.7 Tesla. Rajan SS, et al. **Magn Reson Imaging** 1990;8(2):185–90

A new method for characterization of low grade gliomas using ultra low field magnetic resonance imaging. Wahlund LO, et al. **Magn Reson Imaging** 1989 Nov–Dec; 7(6):599–603

Two–volume acquisition in image–guided proton spectroscopy. Hafner HP, et al. **Magn Reson Med** 1990 Jul;15(1):135–41

In vivo 31P and 2H NMR [corrected] studies of rat brain tumor pH and blood flow during acute hyperglycemia: differential effects between subcutaneous and intracerebral locations [published erratum appears in Magn Reson Med 1990 Jan;13(1):175] Ross BD, et al. **Magn Reson Med** 1989 Nov;12(2):219–34

Potentials of quantitative image–localized human 31P nuclear magnetic resonance spectroscopy in the clinical evaluation of intracranial tumors. den Hollander JA, et al. **Magn Reson Q** 1989 Apr;5(2):152–68 (51 ref.)

Lessons from neurologic practice. An unusual cause of progressive spastic paraparesis. Rozear MP. **N C Med J** 1990 Apr;51(4):140–1

Investigative studies in von Hippel–Lindau disease. Michels VV. **Neurofibromatosis** 1988;1(3):159–63

Diffusely infiltrating brainstem gliomas: a report of the diagnostic difficulties in 2 cases. Wilson WB, et al. **Neurology** 1990 Aug;40(8):1237–41

A gemistocytic astrocytoma demonstrated high intensity on MR images. Protein hydration layer. Abe K, et al. **Neuroradiology** 1990;32(2):166–7

Cerebral vascular malformations: applications of magnetic resonance imaging to differential diagnosis. Imakita S, et al. **Neuroradiology** 1989;31(4):320–5

Giant invasive intracerebral dermoid tumor with subependymoma–like reaction: case report. Fenstermaker RA, et al. **Neurosurgery** 1989 Oct;25(4):646–8

Suprasellar ectopic pituitary adenoma: case report and review of the literature. Matsumura A, et al. **Neurosurgery** 1990 Apr;26(4):681–5 (26 ref.)

Cavernous angioma of the cavernous sinus: case report. Sepehrnia A, et al. **Neurosurgery** 1990 Jul;27(1):151–4; discussion 154–5 (15 ref.)

Negative neuron–specific enolase immunostain in intracranial germinomas: a finding against the existence of a tumor of pineal parenchymal–cell origin with histological features of germinoma? [letter] Vaquero J, et al. **Neurosurgery** 1990 Jul;27(1):169

Neuronal migration anomalies causing extensive ventricular indentation. Yasumori K, et al. **Neurosurgery** 1990 Mar; 26(3):504–7

Brain metabolites as 1H NMR markers of neuronal and glial disorders. Gill SS, et al. **NMR Biomed** 1989 Dec; 2(5–6):196–200

Amplification or obfuscation: is localization improving our clinical understanding of phosphorus metabolism? Ross B, et al. **NMR Biomed** 1989 Dec;2(5–6):340–5 (21 ref.)

Carbohydrate metabolism of the rat C6 glioma. An in vivo 13C and in vitro 1H magnetic resonance spectroscopy study. Ross BD, et al. **NMR Biomed** 1988 Feb;1(1):20–6

1H NMR of plasma for detecting cancer. The effect of trauma on linewidths. Sutherland G, et al. **NMR Biomed** 1989 Jul; 2(2):66–9

Oligodendroglioma—a case presentation. Raciti–Daurio C, et al. **Optom Vis Sci** 1990 Jan;67(1):56–8

Intracranial abscess complicating diverticulitis with CT scan mimicking primary glioma. Dixon AR, et al. **Postgrad Med J** 1989 Aug;65(766):565–7

Prenatal diagnosis of fetal glioblastoma multiforme. Geraghty AV, et al. **Prenat Diagn** 1989 Sep;9(9):613–6

MRI and CT in diencephalic lesions. Becker T, et al. **Psychiatry Res** 1989 Sep;29(3):285–6

Advantages of magnetoencephalography (AC and DC) in focal and generalized brain activity. Schüler P, et al. **Psychiatry Res** 1989 Sep;29(3):377

Gd–DTPA administered MR imaging of intracranial mass lesions: a comparison with CT and precontrast MR. Mihara F, et al. **Radiat Med** 1989 Sep–Oct;7(5):227–35

CT and MR appearance of multiple intracranial lesions associated with suprasellar dermoid cyst. Yamada S, et al. **Radiat Med** 1989 Nov–Dec;7(6):261–4

Acquired immunodeficiency syndrome: correlation of radiologic and pathologic findings in the brain. Balakrishnan J, et al. **Radiographics** 1990 Mar;10(2):201–15

Case of the day. Mixed oligodendroglioma. Vezina JL, et al. **Radiographics** 1990 Mar;10(2):364–5

P–31 MR spectroscopy of normal human brain and brain tumors. Hubesch B, et al. **Radiology** 1990 Feb;174(2):401–9

Metabolic imaging of patients with intracranial tumors: H–1 MR spectroscopic imaging and PET. Luyten PR, et al. **Radiology** 1990 Sep;176(3):791–9

Intracranial vascular lesions: optimization and clinical evaluation of three–dimensional time–of–flight MR angiography. Marchal G, et al. **Radiology** 1990 May; 175(2):443–8

The human brain: localized H–1 MR spectroscopy at 1.0 T. Sauter R, et al. **Radiology** 1990 Jul;176(1):221–4

Occult cerebrovascular malformations: follow–up with MR imaging. Sigal R, et al. **Radiology** 1990 Sep;176(3):815–9

MRI brain tumors, Part I. **Semin Roentgenol** 1990 Apr; 25(2):130–217

MRI brain tumors, Part II. **Semin Roentgenol** 1990 Jul; 25(3):221–78

Adult infratentorial tumors. Bilaniuk LT. **Semin Roentgenol** 1990 Apr;25(2):155–73

Neuroimaging: 1990. Lukin R. **Semin Roentgenol** 1989 Oct; 24(4):218–30 (47 ref.)

Brain stem tumors. Smith RR. **Semin Roentgenol** 1990 Jul; 25(3):249–62

Imaging of intrasellar, suprasellar, and parasellar tumors. Zimmerman RA. **Semin Roentgenol** 1990 Apr;25(2):174–97 (43 ref.)

Disorders of histogenesis: the neurocutaneous syndromes. Crawford SC, et al. **Semin Ultrasound CT MR** 1988 Jun; 9(3):247–67 (43 ref.)

The radiologic role in diagnosis, staging, and follow–up of neoplasia of the brain, spine, and head and neck. Harnsberger HR, et al. **Semin Ultrasound CT MR** 1989 Dec;10(6):431–52 (83 ref.)

Disorders of migration and sulcation. Pollei SR, et al. **Semin Ultrasound CT MR** 1988 Jun;9(3):231–46 (32 ref.)

Malignant lymphoma presenting as a chronic subdural hematoma. Reyes MG, et al. **Surg Neurol** 1990 Jan; 33(1):35–6

Huge pineal teratoma mimicking a dermoid cyst. Case report. Wakai S, et al. **Surg Neurol** 1989 Nov;32(5):372–6

T1 and T2 relaxation times on gadolinium–diethylenetriaminepentaacetic acid enhanced magnetic resonance images of brain tumors. Yamada S, et al. **Tohoku J Exp Med** 1990 Feb;160(2):145–8

Imaging techniques. Brant–Zawadzki M. **Top Magn Reson Imaging** 1989 Mar;1(2):1–5

Infratentorial neoplasms, including the internal auditory canal and cerebellopontine angle regions. Hasso AN. **Top Magn Reson Imaging** 1989 Mar;1(2):37–51

Paramagnetic contrast agents in the evaluation of brain neoplasms. Hinshaw DB Jr, et al. **Top Magn Reson Imaging** 1989 Mar;1(2):79–93

Neuroradiological findings in cavernous hemangioma. An analysis of 15 cases. Ferrante L, et al. **Zentralbl Neurochir** 1989;50(3–4):184–7

Lipoma of the cerebral peduncle. Case report. Kobayashi H, et al. **Zentralbl Neurochir** 1989;50(3–4):166–7

[Primary tumors of the central nervous system from material of the Department of Pathological Anatomy—Plovdiv, 1975–1984] Zaprianov Z, et al. **Eksp Med Morfol** 1989; 28(4):1–5 (Eng. Abstr.) **(Bul)**

[Tumor in the region of foramen magnum] Liu QK. **Chung Hua Chung Liu Tsa Chih** 1989 Mar;11(2):148–50 (Eng. Abstr.) **(Chi)**

[Brain and spinal tumors: magnetic resonance imaging using gadolinium–diethylenetriamine pentaacetic acid (Gd–DTPA)] Fang YX. **Chung Hua I Hsueh Tsa Chih** 1989 Jun;69(6):305–7, 22 (Eng. Abstr.) **(Chi)**

[Beta 2–microglobulin and tumors of the central nervous system] Hrazdirová V, et al. **Cesk Neurol Neurochir** 1990 Jan;53(1):17–21 (Eng. Abstr.) **(Cze)**

[Intracranial tuberculoma, a special space–occupying process (letter)] van Zuiden M. **Ned Tijdschr Geneeskd** 1990 Jan 13;134(2):88 **(Dut)**

[Tumors of the pineal region: MRI aspects. Apropos of 20 cases] Lagrange C, et al. **Ann Radiol (Paris)** 1989; 32(4):251–8 (Eng. Abstr.) **(Fre)**

[Radiological and magnetic resonance aspects in cerebral venous angioma] Vandermarcq P, et al. **J Radiol** 1989 Nov; 70(11):601–8 (27 ref.) (Eng. Abstr.) **(Fre)**

[Value of the early diagnosis of cerebral metastasis in non–small cell lung cancers (letter)] Demange L, et al. **Presse Med** 1989 Oct 7;18(31):1523 **(Fre)**

[Gadolinium–DTPA in the study of intracranial tumors in the adult] Grégoire N, et al. **Rev Neurol (Paris)** 1990; 146(2):133–43 (Eng. Abstr.) **(Fre)**

[Intracerebral cavernous angioma] Weber M, et al. **Rev Neurol (Paris)** 1989;145(6–7):429–36 (Eng. Abstr.) **(Fre)**

[A combination of generalized neurofibromatosis (Recklinghausen disease) and agenesis of the corpus callosum] Toedt C, et al. **Digitale Bilddiagn** 1989 Sep; 9(3):105–6 (Eng. Abstr.) **(Ger)**

[Symptoms and diagnosis of tumors of the central nervous system in children] John K. **Kinderarztl Prax** 1990 Mar; 58(3):119–24 (9 ref.) (Eng. Abstr.) **(Ger)**

[A supratentorial hemangioblastoma] Layer G, et al. **Radiologe** 1990 May;30(5):245–9 (22 ref.) (Eng. Abstr.) **(Ger)**

[How certain is the diagnosis of intracerebral tumor bleeding in magnetic resonance tomography?] Forsting M, et al. **ROFO** 1989 Sep;151(3):356–9 (Eng. Abstr.) **(Ger)**

[Optimization of gadolinium–DTPA dose: an inter–individual study of patients with intracranial tumors] Schubeus P, et al. **ROFO** 1990 Jul;153(1):29–35 (Eng. Abstr.) **(Ger)**

[Contrast medium assisted nuclear magnetic resonance tomography. Signal intensity of gliomatous tumors] Agnoli AL, et al. **Rontgenblatter** 1990 Aug;43(8):335–40 (Eng. Abstr.) **(Ger)**

[Nuclear magnetic resonance tomography follow–up in rapidly progressing central neurofibromatosis] Forsting M, et al. **Rontgenblatter** 1990 Feb;43(2):46–9 (Eng. Abstr.) **(Ger)**

[Transcranial sonography and duplex sonography in children with cysts and tumors of the cranial base] Schöning M, et al. **Ultraschall Med** 1989 Oct;10(5):245–9 (Eng. Abstr.) **(Ger)**

[Brainstem acoustic evoked potential (BEAP) in children with posterior fossa tumors] Kálmánchey R, et al. **Orv Hetil** 1990 Mar 18;131(11):563–4, 567–70 (Eng. Abstr.) **(Hun)**

[Differential diagnosis of multiple gliomas, multicentric gliomas and the other main endocranial multifocal lesions. Presentation of a case] Salvati M, et al. **G Ital Oncol** 1989 Oct–Dec;9(4):135–40 (Eng. Abstr.) **(Ita)**

[Diagnostic approach to extra–renal pheochromocytoma] Abeatici S, et al. **Minerva Chir** 1990 Apr 30;45(8):577–80 (7 ref.) (Eng. Abstr.) **(Ita)**

[Magnetic resonance in brain tumors: a classification based on signal behavior in multiple echo sequences] Vaghi MA, et al. **Radiol Med (Torino)** 1989 Dec;78(6):564–77 (Eng. Abstr.) **(Ita)**

[Neuroradiological image analysis and prognostic factors of malignant gliomas in the cerebral hemisphere of adults] Miyagami M, et al. **Gan No Rinsho** 1989 Sep;35(11):1277–88 (Eng. Abstr.) **(Jpn)**

[A case of intracranial osteochondroma: its MR images] Hatayama T, et al. **No Shinkei Geka** 1989 Nov; 17(11):1063–6 (Eng. Abstr.) **(Jpn)**

[Phosphorus–31 MR spectroscopy of brain tumors] Miyamachi K, et al. **No Shinkei Geka** 1990 Jun;18(6):533–7 (Eng. Abstr.) **(Jpn)**

[Clinical diagnosis of gliomatosis cerebri by radioimages] Ueki K, et al. **No Shinkei Geka** 1990 Jan;18(1):89–93 (Eng. Abstr.) **(Jpn)**

[A case of primary intracranial malignant melanoma with characteristic magnetic resonance imaging] Yamashita H, et al. **No Shinkei Geka** 1989 Sep;17(9):887–91 (Eng. Abstr.) **(Jpn)**

[Primary intracranial T cell type malignant lymphoma: a case report] Yoshino K, et al. **No Shinkei Geka** 1989 Nov; 17(11):1047–50 (Eng. Abstr.) **(Jpn)**

[Diagnostic value of neuron specific enolase (NSE) in the cerebrospinal fluid of malignant brain tumor with intrathecal metastasis] Miyagami M, et al. **No To Shinkei** 1989 Oct;41(10):1021–7 (Eng. Abstr.) **(Jpn)**

[Application of crush cytology preparation for rapid diagnosis of brain tumors] Sawada T, et al. **Rinsho Byori** 1990 Jul;38(7):830–4 (Eng. Abstr.) **(Jpn)**

[MR findings of metastatic brain tumors] Tsuchiya K, et al. **Rinsho Hoshasen** 1989 Oct;34(11):1371–6 (Eng. Abstr.) **(Jpn)**

[Intracranial lipoma; MR imaging] Uchino A, et al. **Rinsho Hoshasen** 1989 Dec;34(13):1591–6 (Eng. Abstr.) **(Jpn)**

[Difficulties in the diagnosis of intracranial expansive processes coexisting with sinusitis and otitis] Kruk-Zagajewska A, et al. **Otolaryngol Pol** 1989; 43(5–6):376–80 (Eng. Abstr.) **(Pol)**

[Multifocal oligodendroglioma. A case report] Szymaś J, et al. **Patol Pol** 1989;40(1):129–34 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Chemotherapy for malignant gliomas of the brain: a review of ten-years experience. Paoletti P, et al. **Acta Neurochir (Wien)** 1990;103(1–2):35–46

Steroid-induced disappearance of primary central nervous system lymphoma. Clinical, neuroradiological and pathological findings. Filla A, et al. **Acta Neurol (Napoli)** 1989 Dec;11(6):400–7

Preirradiation chemotherapy of supratentorial malignant primary brain tumors with intracarotid cis-platinum (CDDP) and i.v. BCNU. A phase II trial. Recht L, et al. **Am J Clin Oncol** 1990 Apr;13(2):125–31

Decreased phenytoin level after carboplatin treatment [letter] Dofferhoff AS, et al. **Am J Med** 1990 Aug;89(2):247–8

Successful chemotherapy for newly diagnosed aggressive oligodendroglioma. Macdonald DR, et al. **Ann Neurol** 1990 May;27(5):573–4

Effect of MX2, a new morpholino anthracycline, against experimental brain tumors. Izumoto S, et al. **Anticancer Res** 1990 May–Jun;10(3):735–9

Comparison of in vitro cloning assays for drug sensitivity testing of human brain tumours. Berens ME, et al. **Br J Neurosurg** 1988;2(2):227–34

Reevaluation of procarbazine for the treatment of recurrent malignant central nervous system tumors. Rodriguez LA, et al. **Cancer** 1989 Dec 15;64(12):2420–3 (17 ref.)

Adjuvant intraarterial chemotherapy with nimustine in the management of World Health Organization Grade IV gliomas of the brain. Experience at the Department of Neurosurgery of Düsseldorf University. Roosen N, et al. **Cancer** 1989 Nov 15;64(10):1984–94

Brain uptake and anticancer activities of vincristine and vinblastine are restricted by their low cerebrovascular permeability and binding to plasma constituents in rat. Greig NH, et al. **Cancer Chemother Pharmacol** 1990; 26(4):263–8

Chemotherapy by fotemustine in cerebral metastases of disseminated malignant melanoma. Jacquillat C, et al. **Cancer Chemother Pharmacol** 1990;25(4):263–6

Complete remission of brain metastases of ovarian cancer following high-dose carboplatin: a case report and pharmacokinetic study. Vlasveld LT, et al. **Cancer Chemother Pharmacol** 1990;25(5):382–3

Modalities of cisplatin administration to brain tumors [editorial; comment] Hochberg FH. **Cancer Invest** 1989; 7(6):611–2 Comment on: Cancer Invest 1989;7(6):571–9.

Modalities of cisplatin administration to brain tumors [see comments] Shani J, et al. **Cancer Invest** 1989;7(6):571–9 (60 ref.) Comment in: Cancer Invest 1989;7(6):611–2.

Photoradiation therapy of brain tumours. Kaye AH. **Ciba Found Symp** 1989;146:209–21; discussion 221–4 (26 ref.)

An example of the role of the animal model in investigating new techniques [letter] Cosolo WC, et al. **Eur J Cancer Clin Oncol** 1989 Oct;25(10):1511–2

BFM group treatment results in relapsed childhood acute lymphoblastic leukemia. Henze G, et al. **Hamatol Bluttransfus** 1990;33:619–26

Inhibitory effects of 9-(2-phosphonylmethoxyethyl)adenine and 3'-azido-2',3'-dideoxythymidine on tumor development in mice inoculated intracerebrally with Moloney murine sarcoma virus. Balzarini J, et al. **Int J Cancer** 1990 Mar 15;45(3):486–9

Differential response to 1,3-bis (2-chloroethyl)-1-nitrosourea in drug-resistant and -sensitive 9L rat brain tumor cells pretreated with alpha-difluoromethylornithine and 6-thioguanine. Hunter KJ, et al. **Int J Cancer** 1989 Oct 15;44(4):658–60

Intra-cerebral ventricular infusion of 5-iodo-2-deoxyuridine (IUDR) as a radiosensitizer in the treatment of a rat glioma. Deutsch M, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul; 19(1):85–7

Superiority of post-radiotherapy adjuvant chemotherapy with CCNU, procarbazine, and vincristine (PCV) over BCNU for anaplastic gliomas: NCOG 6G61 final report. Levin VA, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb; 18(2):321–4

Phase I evaluation of diaziquone in childhood cancer. A Pediatric Oncology Group study. Falletta JM, et al. **Invest New Drugs** 1990 May;8(2):167–70

Resolution of small cell lung cancer intracranial metastases with standard dose chemotherapy. Kearns F, et al. **Ir J Med Sci** 1989 Dec;158(12):308–9

Preirradiation cisplatin and etoposide in the treatment of high-risk medulloblastoma and other malignant embryonal tumors of the central nervous system: a phase II study. Kovnar EH, et al. **J Clin Oncol** 1990 Feb;8(2):330–6 (34 ref.)

Combined treatment of anaplastic astrocytoma (grade 3–4) with diacetyl-dianhydro-galactitol (DADAG). Afra D, et al. **J Neurooncol** 1990 Feb;8(1):85–91

VP-16, vincristine and procarbazine with radiation therapy for treatment of malignant brain tumors. Hellman RM, et al. **J Neurooncol** 1990 Apr;8(2):163–6

Investigation of an inhibitor of lipid peroxidation U74006F on tumor growth and protein extravasation in the C6 astrocytoma spheroid implantation glioma model. Megyesi JF, et al. **J Neurooncol** 1990 Apr;8(2):133–7

Treatment of malignant recurrent glioma by intra-arterial, infra-ophthalmic infusion of HECNU 1-(2-chloroethyl)-1-nitroso-3-(2-hydroxyethyl) urea. A phase II study. Poisson M, et al. **J Neurooncol** 1990 Jun; 8(3):255–62

Sensitivity of human malignant intracranial tumors against MCNU in vitro in comparison to ACNU and BCNU. Tonn JC, et al. **J Neurooncol** 1990 Feb;8(1):41–5

Intra-arterial BCNU in the treatment of recurrent medulloblastoma. Watne K, et al. **J Neurooncol** 1990 Apr; 8(2):139–43

Intravenous BCNU and AZQ in patients with recurrent malignant gliomas. Yung WK, et al. **J Neurooncol** 1989 Sep;7(3):237–40

Use of verapamil to enhance the antiproliferative activity of BCNU in human glioma cells: an in vitro and in vivo study. Bowles AP Jr, et al. **J Neurosurg** 1990 Aug; 73(2):248–53

Amplification and expression of a multidrug resistance gene in human glioma cell lines. Matsumoto T, et al. **J Neurosurg** 1990 Jan;72(1):96–101

Postoperative chemotherapy for primary intracranial germ cell tumor. Castañeda VL, et al. **Med Pediatr Oncol** 1990; 18(4):299–303

In vitro chemosensitivity testing and its clinical application in human gliomas. Yung WK. **Neurosurg Rev** 1989; 12(3):197–203 (47 ref.)

Summary of the Eighth International conference on Brain Tumor Research and Therapy. Rosenblum ML, et al. **Neurosurgery** 1990 May;26(5):886–7

Neurotoxicity of local administration of two nitrosoureas in malignant gliomas. Yamashima T, et al. **Neurosurgery** 1990 May;26(5):794–9

Does chemotherapy really help patients with CNS gliomas? [letter] **Oncology (Williston Park)** 1988 Sep;2(9):14, 16–7

More on the question of chemotherapy for CNS glioma [letter] Ransohoff J. **Oncology (Williston Park)** 1987 Dec; 1(10):19

Does chemotherapy benefit the patient with a central nervous system glioma? Rodriguez LA, et al. **Oncology (Williston Park)** 1987 Nov;1(9):29–36, 40–1 (47 ref.)

Optimal use of the Ommaya reservoir in clinical oncology. Sundaresan N, et al. **Oncology (Williston Park)** 1989 Dec; 3(12):15–22; discussion 23 (23 ref.)

[Internal carotid arterial BCNU perfusion in the treatment of cerebral glioma] Wu ZL. **Chung Hua Wai Ko Tsa Chih** 1989 Jul;27(7):421–3, 446 (Eng. Abstr.) **(Chi)**

[Chemotherapy of brain tumors in children] Chastagner P, et al. **Arch Fr Pediatr** 1990 Feb;47(2):147–54 (90 ref.) (Eng. Abstr.) **(Fre)**

[Medical treatment of inoperable malignant glioma. Non-superselective intra-arterial chemotherapy with HECNU followed by conventional radiotherapy] Chiras J, et al. **Rev Neurol (Paris)** 1989;145(12):829–37 (Eng. Abstr.) **(Fre)**

[Chemotherapy of cerebral metastasis of lung cancer] Thomas P, et al. **Rev Pneumol Clin** 1990;46(1):5–9 (Eng. Abstr.) **(Fre)**

[Possible role of 06-methylguanine-DNA-transferase in the response of patients with primary tumor of the brain to chemotherapy using chloro-ethyl-nitroso-urea: results of a current study] Arena G, et al. **Boll Soc Ital Biol Sper** 1990 May;66(5):495–8 (Eng. Abstr.) **(Ita)**

[Intra-arterial infusion of high dose methotrexate therapy in recurrent gliomas] Hayashi A, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 1):1461–6 (Eng. Abstr.) **(Jpn)**

[Chemotherapy with ACNU and radiation therapy in malignant glioma in cerebral hemisphere of adult] Miyagami M, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 1):1447–53 (Eng. Abstr.) **(Jpn)**

[Combined chemotherapy of CDDP and etoposide in intracranial germinomas] Mizuno M, et al. **Gan To Kagaku Ryoho** 1989 Oct;16(10):3457–60 (Eng. Abstr.) **(Jpn)**

[Ultrastructural study of capillary permeability of liposome-encapsulated cisplatin in an experimental rat brain tumor model] Shibata S, et al. **Neurol Med Chir (Tokyo)** 1989 Aug;29(8):696–700 (Eng. Abstr.) **(Jpn)**

[Intracranial fibrosarcoma fifteen years after radiotherapy in bilateral retinoblastomas: effect of combined chemotherapy with cisplatin and VP-16] Mizuno M, et al. **No Shinkei Geka** 1989 Jul;17(7):653–7 (Eng. Abstr.) **(Jpn)**

[A case of recurrence of a metastatic brain tumor which disappeared due to chemotherapy only] Sato K, et al. **No Shinkei Geka** 1990 Jan;18(1):63–6 (Eng. Abstr.) **(Jpn)**

[Chemotherapy of brain tumors] García del Muro Solans J, et al. **Neurologia** 1988 Jan–Feb;3(1):19–25 (55 ref.) **(Spa)**

EMBRYOLOGY

Intracranial malignant teratoma diagnosed in a fetus—case report. Daita G, et al. **Neurol Med Chir (Tokyo)** 1989 Nov; 29(11):1026–9

ENZYMOLOGY

Linkage between O6-methylguanine-DNA methyltransferase (O6-MT) activity and cellular resistance to antitumour nitrosoureas in cultured rat brain tumour cell strains. Mineura K, et al. **Acta Neurochir (Wien)** 1990; 103(1–2):62–6

Tyrosine hydroxylase-immunoreactive neurons in the temporal lobe in complex partial seizures. Zhu ZQ, et al. **Ann Neurol** 1990 May;27(5):564–72

The pyruvate kinase isoenzyme shift in human gliomas: a potential marker in the treatment of gliomas. Van Veelen CW, et al. **Br J Neurosurg** 1988;2(2):257–63

Xanthine oxidase levels in human brain tumors. Kökoglu E, et al. **Cancer Lett** 1990 Apr 30;50(3):179–81

Serpin inhibitors of urokinase and thrombin in normal rat brain and the 9L brain tumor: evidence for elevated expression of protease nexin I-like inhibitor and a novel sodium dodecyl sulfate-activated tumor antithrombin. Rao JS, et al. **Cancer Res** 1990 Aug 15;50(16):5039–44

Phosphorylation of pyruvate kinase type K in human gliomas by a cyclic adenosine 5'-monophosphate-independent protein kinase. Weernink PA, et al. **Cancer Res** 1990 Aug 1;50(15):4604–10

Response of malignant glioma cell lines to activation and inhibition of protein kinase C-mediated pathways. Pollack IF, et al. **J Neurosurg** 1990 Jul;73(1):98–105

A study of glutamine synthetase in normal human brain and intracranial tumours. McCormick D, et al. **Neuropathol Appl Neurobiol** 1990 Jun;16(3):205–11

Immunocytochemical alpha-1-antichymotrypsin localization in the experimental brain tumors and at their periphery. Kroh H, et al. **Neuropatol Pol** 1989;27(3):449–55

[The fibrinolytic tissue activity of various brain tumors] Hindersin P, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Feb;42(2):79–84 (Eng. Abstr.) **(Ger)**

[Cathepsin H activity in the human brain and human brain neoplasms] Chernaia VI, et al. **Ukr Biokhim Zh** 1989 Sep-Oct;61(5):47–50 (Eng. Abstr.) **(Rus)**

[Features of temperature dependence of the Na+,K+-ATPase reaction in normal and tumorous brain tissue] Salum TT, et al. **Ukr Biokhim Zh** 1989 Jul–Aug; 61(4):65–9 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Parental occupation and intracranial neoplasms of childhood: results of a case-control interview study. Wilkins JR 3d, et al. **Am J Epidemiol** 1990 Aug;132(2):275–92

An analysis of occupational risks for brain cancer. Brownson RC, et al. **Am J Public Health** 1990 Feb;80(2):169–72

An epidemiological survey of primary tumours of the brain and spinal cord in South East Wales. Cole GC, et al. **Br J Neurosurg** 1989;3(4):487–93

Brain tumors in childhood and adolescence in west Sweden 1970–1984. Epidemiology and survival. Lannering B, et al. **Cancer** 1990 Aug 1;66(3):604–9

Hemispheric cerebral tumors in children. Long-term prognosis concerning survival rate and quality of life—considerations on a series of 64 cases operated upon. Balestrini MR, et al. **Childs Nerv Syst** 1990 May;6(3):143–7

Potential risk factors for brain tumors in children. An analysis of 200 cases. Giuffrè R, et al. **Childs Nerv Syst** 1990 Jan; 6(1):8–12

Risk of CNS relapse after systemic relapse of childhood acute lymphoblastic leukemia. Fengler R, et al. **Hamatol Bluttransfus** 1990;33:511–5

Serum cholesterol and primary brain tumours: a case-control study. Neugut AI, et al. **Int J Epidemiol** 1989 Dec; 18(4):798–801

Central nervous system tumors among Koreans—a statistical study on 697 cases. Chi JG, et al. **J Korean Med Sci** 1989 Jun;4(2):77–90

Nonoccupational risk indicators of glioblastoma in adults. Hochberg F, et al. **J Neurooncol** 1990 Feb;8(1):55–60

Brain tumour trends [letter; comment] **Lancet** 1989 Nov 25; 2(8674):1272–3 Comment on: Lancet 1989 Oct 14;2(8668):917.

Trends in brain cancer [letter] [see comments] Levi F, et al. **Lancet** 1989 Oct 14;2(8668):917 Comment in: Lancet 1989 Nov 25;2(8674):1272–3.

Case-control study of neuroepithelial tumors in Rochester, Minnesota, 1950–1977. Codd MB, et al. **Neuroepidemiology** 1990;9(1):17–26

Descriptive epidemiology of malignant brain tumors in the Swiss Canton of Vaud. Levi F, et al. **Neuroepidemiology** 1990;9(3):135–42

Descriptive epidemiology of primary tumors of the brain, cranial nerves and cranial meninges in Los Angeles County. Preston-Martin S. **Neuroepidemiology** 1989;8(6):283–95

[Spatial identification of an excess of cerebral tumors in a highly industrialized small area: results of a case-control study] Biggeri A, et al. **Epidemiol Prev** 1989 Jun; 11(39):35–40 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Primary CNS lymphoma in AIDS. A clinical and pathological case report. Paolino E, et al. **Acta Neurol (Napoli)** 1990 Apr;12(2):122–31

Myeloblastoma of the brain [letter] Simpson TA Jr, et al. **Acta Neuropathol (Berl)** 1990;79(4):464

Demystifying malformations [comment] Rorke LB. **AJNR** 1990 Jul–Aug;11(4):675 Comment on: AJNR 1990 Jul–Aug;11(4):665–74.

Pathogenesis of intracranial lipoma: an MR study in 42 patients [see comments] Truwit CL, et al. **AJNR** 1990 Jul–Aug;11(4):665–74 Comment in: AJNR 1990 Jul–Aug;11(4):675.

Magnetic field exposure from electric appliances and childhood cancer [see comments] Savitz DA, et al. **Am J Epidemiol** 1990 May;131(5):763–73 Comment in: Am J Epidemiol 1990 May;131(5):774–5.

Gestational and familial risk factors for childhood astrocytoma: results of a case-control study. Kuijten RR, et al. **Cancer Res** 1990 May 1;50(9):2608–12

Risk factors for gliomas and meningiomas in males in Los Angeles County. Preston-Martin S, et al. **Cancer Res** 1989 Nov 1;49(21):6137–43

The effects of X-irradiation, N-ethyl-N-nitrosourea or combined treatment on O6-alkylguanine-DNA alkyltransferase activity in fetal rat brain and liver and the induction of CNS tumours. Stammberger I, et al. **Carcinogenesis** 1990 Feb;11(2):219–22

Lymphomatoid granulomatosis versus lymphoma of the brain and central nervous system in the acquired immunodeficiency syndrome [letter] Ioachim HL. **Hum Pathol** 1989 Dec;20(12):1222–4

Incidence of leukaemia and brain tumours in Finnish workers exposed to ELF magnetic fields. Juutilainen J, et al. **Int Arch Occup Environ Health** 1990;62(4):289–93

CNS tumor induction by radiotherapy: a report of four new cases and estimate of dose required. Cavin LW, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb;18(2):399–406

Brain and salivary gland tumors related to prior dental radiography: implications for current practice. Preston-Martin S, et al. **J Am Dent Assoc** 1990 Feb; 120(2):151–8 (84 ref.)

Gliomas following low-dose irradiation to the head report of three cases. Soffer D, et al. **J Neurooncol** 1990 Feb; 8(1):67–72

Radiation-induced gliomas [letter; comment] Pompili A. **J Neurosurg** 1990 Feb;72(2):311–2 Comment on: J Neurosurg 1989 Jul;71(1):77–82.

Occupational risks for brain cancer: a New Zealand Cancer Registry-based study. Reif JS, et al. **J Occup Med** 1989 Oct;31(10):863–7

Immunolabeling of JC virus large T antigen in neonatal hamster brain before tumor formation. Ressetar HG, et al. **Lab Invest** 1990 Mar;62(3):287–96

Brain tumor as a second malignant neoplasm following neuroblastoma stage IV S. Ben-Arush MW, et al. **Med Pediatr Oncol** 1990;18(3):240–5 (20 ref.)

Risk factors for tumors of the brain and cranial meninges in Seventh-Day Adventists. Mills PK, et al. **Neuroepidemiology** 1989;8(5):266–75

De novo astrocytoma following immunosuppression in neurofibromatosis. Wijdicks EF, et al. **Neurology** 1990 Sep; 40(9):1467–8

Should all patients with CNS lymphomas be tested for HIV? [letter] Mathur BP. **Oncology (Williston Park)** 1987 Dec; 1(10):39

Brain metastasis of unknown origin. Chee CP. **Singapore Med J** 1990 Feb;31(1):48–50

[Cerebrospinal fluid eosinophilia preceding central nervous system leukemia] Law KL, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Apr;43(4):273–6 (Eng. Abstr.) **(Chi)**

[Primary cerebral lymphoma in subjects with platelets seropositive for HIV] Catania S, et al. **Riv Eur Sci Med Farmacol** 1988 Dec;10(6):499–501 (Eng. Abstr.) **(Ita)**

[Ruptured cerebral aneurysm followed by primary intracranial malignant lymphoma: case report] Nishigaya K, et al. **No Shinkei Geka** 1990 Apr;18(4):367–72 (Eng. Abstr.) **(Jpn)**

[Malignant astrocytoma following radiotherapy in pituitary adenoma: case report] Suda Y, et al. **No Shinkei Geka** 1989 Aug;17(8):783–8 (34 ref.) (Eng. Abstr.) **(Jpn)**

[The role of leukemic conversion in the development of lymphoma infiltration of the nervous system] Nowacki P, et al. **Patol Pol** 1989;40(1):99–107 (Eng. Abstr.) **(Pol)**

[Cerebral astrocytoma secondary to radiation of a meningioma] Gelabert González M, et al. **Neurologia** 1988 Mar–Apr;3(2):68–70 (19 ref.) (Eng. Abstr.) **(Spa)**

GENETICS

Primary malignant lymphoma of the brain: demonstration of immunoglobulin gene rearrangements in four cases by the Southern blot hybridization technique. Kumanishi T, et al. **Acta Neuropathol (Berl)** 1989;79(1):23–6

S1-nuclease enhancement of the ethidium bromide binding assay of drug-induced DNA interstrand crosslinking in human brain tumor cells. Sriram R, et al. **Anal Biochem** 1990 Jun;187(2):345–8

Familial glioma: a report of glioblastoma in identical twins and oligo-astrocytoma in siblings. Hardman PD, et al. **Br J Neurosurg** 1989;3(6):709–15 (17 ref.)

Amplification of the epidermal growth factor receptor gene in biopsy specimens from human intracranial tumours. Helseth E, et al. **Br J Neurosurg** 1988;2(2):217–25

Familial subependymomas. Honan WP, et al. **Br J Neurosurg** 1987;1(3):317–21

DNA-determination in the clinical management of patients with meningioma or haemangioblastoma. Mathiesen T, et al. **Br J Neurosurg** 1989;3(5):575–81

Oncogenes and neuro-oncology. Whittle IR. **Br J Neurosurg** 1989;3(1):3–11 (55 ref.)

Differential amplification of the TGF-alpha gene in human gliomas. Yung WK, et al. **Cancer Commun** 1990;2(6):201–5

Cytogenetics of human brain tumors. Bigner SH, et al. **Cancer Genet Cytogenet** 1990 Jul 15;47(2):141–54 (78 ref.)

Trisomy for chromosome 1q in a pontine astrocytoma. Sawyer JR, et al. **Cancer Genet Cytogenet** 1990 Jul 1; 47(1):101–6

The cellular myb oncogene is amplified, rearranged and activated in human glioblastoma cell lines. Welter C, et al. **Cancer Lett** 1990 Jun 30;52(1):57–62

Allelotype of human malignant astrocytoma. Fults D, et al. **Cancer Res** 1990 Sep 15;50(18):5784–9

Reduction to homozygosity and gene amplification in central nervous system primitive neuroectodermal tumors of childhood. Raffel C, et al. **Cancer Res** 1990 Feb 1; 50(3):587–91

Oncogene amplification in pediatric brain tumors. Wasson JC, et al. **Cancer Res** 1990 May 15;50(10):2987–90

Tumour induction in fetal brain transplants exposed to the viral oncogenes polyoma middle T and v-src. Wiestler OD, et al. **IARC Sci Publ** 1989;(96):267–74

Cytogenetic abnormalities in human ependymomas. Stratton MR, et al. **Int J Cancer** 1989 Oct 15;44(4):579–81

Major structural alterations of the c-sis gene are not observed in a series of tumors of the human central nervous system. Press RD, et al. **J Neurooncol** 1989 Nov;7(4):345–56

Gene transfer into brain tumor cell lines: reporter gene expression using various cellular and viral promoters. Oellig C, et al. **J Neurosci Res** 1990 Jul;26(3):390–6

Enhanced expression of the sis and c-myc oncogenes in human meningiomas. Kazumoto K, et al. **J Neurosurg** 1990 May;72(5):786–91

Occasionally-occurring familial brain tumours (OFBT). Reports of cases and review of the literature. Acqui M, et al. **J Neurosurg Sci** 1989 Jul–Sep;33(3):263–9

Familial frontal lobe oligodendroglioma. Case report. Ferraresi S, et al. **J Neurosurg Sci** 1989 Oct–Dec; 33(4):317–8

A deletion mutation within the ligand binding domain is responsible for activation of epidermal growth factor receptor gene in human brain tumors. Yamazaki H, et al. **Jpn J Cancer Res** 1990 Aug;81(8):773–9

Cytogenetics and molecular genetics: their status and role in understanding the behavior of central nervous system neoplasms. Bigner SH, et al. **Monogr Pathol** 1990;(32):30–40 (48 ref.)

DNA in human glioblastomas. A flow-fluorescence cytometrical examination of 96 tumors. Spaar FW, et al. **Neurosurg Rev** 1990;13(2):123–39

Multiparameter flow cytometric analysis of neoplasms of the central nervous system: correlation of nuclear antigen p105 and DNA content with clinical behavior. Appley AJ, et al. **Neurosurgery** 1990 Jul;27(1):83–96

Cytokine gene expression by human gliomas. Lichtor T, et al. **Neurosurgery** 1990 May;26(5):788–92; discussion 792–3

SBLA syndrome revisited. Lynch HT, et al. **Oncology** 1990; 47(1):75–9

Ependymomas in two sisters and a maternal male cousin with mosaicism with monosomy 22 in tumour. Savard ML, et al. **Pediatr Neurosci** 1989;15(2):80–4 (41 ref.)

Gene expression of fibroblast growth factors in human gliomas and meningiomas: demonstration of cellular source of basic fibroblast growth factor mRNA and peptide in tumor tissues. Takahashi JA, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5710–4

Chromosome aberrations in patients treated with telecobalt therapy for glioblastoma. Léonard A, et al. **Strahlenther Onkol** 1990 Jul;166(7):466–9

Familial medulloblastoma in siblings: report in one family and review of the literature. Hung KL, et al. **Surg Neurol** 1990 May;33(5):341–6 (22 ref.)

[Amplification, rearrangement and over-expression of c-fos gene in human primary brain tumors] Wen Y, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Sep;20(3):243–5 (Eng. Abstr.) **(Chi)**

[The concept of suppressor genes in the molecular biology of central nervous system tumors] el-Azouzi M, et al. **Neurochirurgie** 1989;35(4):201–8 (48 ref.) (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

A correlation between serum immunosuppressive acidic protein and altered immunocompetence in patients with brain tumours. Kikuchi K, et al. **Acta Neurochir (Wien)** 1990;103(1–2):52–61

Cross-reactivity of monoclonal antibody Leu-19 with some neuroectodermal and other non-immune tissues. Nawrotzki R, et al. **Acta Neuropathol (Berl)** 1990;79(5):520–7

An immunohistochemical analysis of T cells in primary B cell malignant lymphoma of the brain. Nishiyama A, et al. **Acta Neuropathol (Berl)** 1989;79(1):27–9

Lectin histochemistry of human gliomas. Wang XC, et al. **Acta Neuropathol (Berl)** 1989;79(2):176–82

Immunobiology of brain tumors. Sawamura Y, et al. **Adv Tech Stand Neurosurg** 1990;17:3–64 (323 ref.)

In vivo localisation of radiolabelled monoclonal antibody in human gliomas. Behnke J, et al. **Br J Neurosurg** 1988; 2(2):193–7

The localisation of radiolabelled murine monoclonal antibody 81C6 and its Fab fragment in human glioma xenografts in athymic mice [published erratum appears in Br J Neurosurg 1988;2(4):548] Colapinto EV, et al. **Br J Neurosurg** 1988;2(2):179–91

Interleukin-2-activated lymphocytes from brain tumor patients. A comparison of two preparations generated in vitro. Kruse CA, et al. **Cancer** 1989 Oct 15;64(8):1629–37

Inability of mitogen-activated lymphocytes obtained from patients with malignant primary intracranial tumors to express high affinity interleukin 2 receptors. Elliott LH, et al. **J Clin Invest** 1990 Jul;86(1):80–6

Phagocytosis by neoplastic astrocytes. Shuangshoti S, et al. **J Med Assoc Thai** 1989 Aug;72(8):458–64

Immunology of central nervous system tumors. de Micco C. **J Neuroimmunol** 1989 Dec;25(2–3):93–108 (195 ref.)

Immunophenotypic profile of CNS lymphoma: a review of eighteen cases. Bashir R, et al. **J Neurooncol** 1989 Sep; 7(3):249–54

S-antigen and rod-opsin immunoreactions in midline brain neoplasms of transgenic mice: similarities to pineal cell tumors and certain medulloblastomas in man. Korf HW, et al. **J Neuropathol Exp Neurol** 1990 Jul;49(4):424–37

Effects of human recombinant interferon-gamma on immunological parameters in brain tumor patients—report of two cases. Kamikaseda K, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):217–22

Monoclonal antibodies in neuro-oncology. Stavrou D. **Neurosurg Rev** 1990;13(1):7–18 (47 ref.)

Tumor localization of human brain malignant glioma xenograft in nude mice with a radiolabeled monoclonal antibody. Lee WH, et al. **Neurosurgery** 1990 Mar; 26(3):381–90

[Histologic distribution of anti-glioma monoclonal antibody SZ-39 in human xenograft brain tumors] Yang WL. **Chung Hua Chung Liu Tsa Chih** 1989 Mar;11(2):82–4 (Eng. Abstr.) **(Chi)**

[Detection of Leu-M1 immunoreactivity in brain tissue and brain tumors] Szymas J, et al. **Zentralbl Allg Pathol** 1990; 136(1–2):171–9 (Eng. Abstr.) **(Ger)**

[High yielding culture of LAK cells by the concentration rotary tissue culture system and its clinical application] Park KC, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Oct 20;24(10):2349–54 (Eng. Abstr.) **(Jpn)**

[Analysis of activated lymphocytes and antigen-present macrophage in human brain tumors using double immunofluorescence staining] Kunishio K, et al. **No To Shinkei** 1989 Dec;41(12):1195–201 (Eng. Abstr.) **(Jpn)**

[Indium-labelled monoclonal antibodies for diagnosis of malignant glioma in vivo?] Bergh J, et al. **Lakartidningen** 1990 Feb 7;87(6):373–5 **(Swe)**

METABOLISM

Uptake of adriamycin in tumour and surrounding brain tissue in patients with malignant gliomas. von Holst H, et al. **Acta Neurochir (Wien)** 1990;104(1–2):13–6

Localization of basic fibroblast growth factor, a mitogen and angiogenic factor, in human brain tumors. Paulus W, et al. **Acta Neuropathol (Berl)** 1990;79(4):418–23

Melanotic ependymoma and subependymoma. Rosenblum MK, et al. **Am J Surg Pathol** 1990 Aug;14(8):729–36

Benzodiazepine receptors and diazepam-binding inhibitor in human cerebral tumors. Ferrarese C, et al. **Ann Neurol** 1989 Oct;26(4):564–8

Glucose uptake by gliomas after treatment. A positron emission tomographic study. Rozental JM, et al. **Arch Neurol** 1989 Dec;46(12):1302–7

Expression of the neural cell adhesion molecule in human brain tumours. Patel K, et al. **Biochem Soc Trans** 1990 Apr; 18(2):264

Human primary brain tumour metabolism in vivo: a phosphorus magnetic resonance spectroscopy study. Cadoux-Hudson TA, et al. **Br J Cancer** 1989 Sep; 60(3):430–6

Epidermal growth factor binding in intracranial neoplasms: preliminary biochemical and clinicopathological findings. Whittle IR, et al. **Br J Neurosurg** 1988;2(2):211–5

Peripheral-type benzodiazepine receptors in human glioblastomas: pharmacologic characterization and photoaffinity labeling of ligand recognition site. Broaddus WC, et al. **Brain Res** 1990 Jun 4;518(1–2):199–208

Specific high-affinity binding of peripheral benzodiazepine receptor ligands to brain tumors in rat and man. Black KL, et al. **Cancer** 1990 Jan 1;65(1):93–7

Sex steroid receptors in intracranial tumors. Romić Stojković R, et al. **Cancer** 1990 May 1;65(9):1968–70

Blood–brain barrier permeability of human gliomas as determined by quantitation of cytoplasmic vesicles of the capillary endothelium and scintigraphic findings. Kohn S, et al. **Cancer Invest** 1989;7(4):313–21

Selective delivery of boron by the melanin precursor analogue p–boronophenylalanine to tumors other than melanoma. Coderre JA, et al. **Cancer Res** 1990 Jan 1; 50(1):138–41

Rate of buthionine sulfoximine entry into brain and xenotransplanted human gliomas. Fekete I, et al. **Cancer Res** 1990 Feb 15;50(4):1251–6

Specific uptake of the auger electron–emitting thymidine analogue 5–[123I/125I]iodo–2'–deoxyuridine in rat brain tumors: diagnostic and therapeutic implications in humans. Kassis AI, et al. **Cancer Res** 1990 Aug 15;50(16):5199–203

Purine metabolism of human glioblastoma in vivo. Pillwein K, et al. **Cancer Res** 1990 Mar 1;50(5):1576–9

Low density lipoprotein receptor activity in human intracranial tumors and its relation to the cholesterol requirement. Rudling MJ, et al. **Cancer Res** 1990 Feb 1; 50(3):483–7

Monoclonal antibody and F(ab')2 fragment delivery to tumor in patients with glioma: comparison of intracarotid and intravenous administration. Zalutsky MR, et al. **Cancer Res** 1990 Jul 1;50(13):4105–10

Cell proliferation and polyamine metabolism in 9L cells treated with (2R,5R)–6–heptyne–2,5–diamine or alpha–difluoromethylornithine. Milam KM, et al. **Cell Tissue Kinet** 1989 May;22(3):269–77

Protein gene product (PGP) 9.5 as a reliable marker in primitive neuroectodermal tumours—an immunohistochemical study of 21 childhood cases. Harris MD, et al. **Histopathology** 1990 Mar;16(3):271–7

Early metabolic changes following chemotherapy of human gliomas in vivo demonstrated by phosphorus magnetic resonance spectroscopy. Arnold DL, et al. **Invest Radiol** 1989 Dec;24(12):958–61

Imaging peripheral benzodiazepine receptors in brain tumors in rats: in vitro binding characteristics. Ikezaki K, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):580–7

Model for drug uptake by brain tumors: effects of osmotic treatment and of diffusion in brain. Robinson PJ, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):153–61

Deoxyglucose lumped constant estimated in a transplanted rat astrocytic glioma by the hexose utilization index. Spence AM, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):190–8

Insulin–like growth factor–I receptors in human glial tumors. Merrill MJ, et al. **J Clin Endocrinol Metab** 1990 Jul; 71(1):199–209

Identification and characterization of cysteinyl–leukotriene formation in tissue slices from human intracranial tumors: evidence for their biosynthesis under in vivo conditions. Simmet T, et al. **J Neurochem** 1990 Jun;54(6):2091–9

Distribution of collagen type IV in brain tumors: an immunohistochemical study. Ogawa K, et al. **J Neurooncol** 1989 Nov;7(4):357–66

Radioimmunoassay of glioma–associated antigen in cerebrospinal fluid and its usefulness for the diagnosis and monitoring of human glioma. Yoshida J, et al. **J Neurooncol** 1990 Feb;8(1):23–31

Effect of hyperosmotic blood–brain barrier disruption on transcapillary transport in canine brain tumors. Groothuis DR, et al. **J Neurosurg** 1990 Mar;72(3):441–9

Epidermal growth factor receptors on ependymomas and other brain tumors. Hall WA, et al. **J Neurosurg** 1990 Apr; 72(4):641–6

Quantitative analysis of glutathione in human brain tumors. Kudo H, et al. **J Neurosurg** 1990 Apr;72(4):610–5

Immunohistochemical demonstration of DNA polymerase alpha in human brain–tumor cells. Kunishio K, et al. **J Neurosurg** 1990 Feb;72(2):268–72

Transferrin receptor in normal and neoplastic brain tissue: implications for brain–tumor immunotherapy. Recht L, et al. **J Neurosurg** 1990 Jun;72(6):941–5

18F–fluoro–2'–deoxyuridine as a tracer of nucleic acid metabolism in brain tumors. Tsurumi Y, et al. **J Neurosurg** 1990 Jan;72(1):110–3

The disposition of TCNU (tauromustine) in human malignant glioma: pharmacokinetic studies and clinical implications. Whittle IR, et al. **J Neurosurg** 1990 May;72(5):721–5

Diphtheria toxin effects on brain–tumor xenografts. Implications for protein–based brain–tumor chemotherapy. Wrobel CJ, et al. **J Neurosurg** 1990 Jun;72(6):946–50

Quantitative evaluation of L–[methyl–C–11] methionine uptake in tumor using positron emission tomography. Hatazawa J, et al. **J Nucl Med** 1989 Nov;30(11):1809–13

Detection of metabolic heterogeneity of human intracranial tumors in vivo by 1H NMR spectroscopic imaging. Segebarth CM, et al. **Magn Reson Med** 1990 Jan; 13(1):62–76

Liposomes as carriers of cisplatin into the central nervous system—experiments with 9L gliomas in rats. Shibata S, et al. **Neurol Med Chir (Tokyo)** 1990 Apr;30(4):242–5

Anticopper treatment inhibits pseudopodial protrusion and the invasive spread of 9L gliosarcoma cells in the rat brain. Brem S, et al. **Neurosurgery** 1990 Mar;26(3):391–6

Early effects of intra–arterial chemotherapy in patients with brain tumours studied with PET: preliminary results. Langen KJ, et al. **Nucl Med Commun** 1989 Nov; 10(11):779–90

Positron emission tomographic measurement of blood–to–brain and blood–to–tumour transport of 82Rb. II: Clinical data and validation of technique. Dhawan V, et al. **Phys Med Biol** 1989 Dec;34(12):1785–94

Cerebral perfusion and oxygen uptake studies in patients with intracranial tumors. Beaney RP. **Semin Neurol** 1989 Dec; 9(4):377–87 (20 ref.)

Metabolic imaging of human brain tumors. Wilson CB. **Semin Neurol** 1989 Dec;9(4):388–93 (43 ref.)

[Diffusion of ceftriaxone into the human brain] Dorche G, et al. **Pathol Biol (Paris)** 1990 Jun;38(6):638–42 (Eng. Abstr.) **(Fre)**

[Metabolic studies of gliomas with positron emission tomography and phosphorus 31 MR spectroscopy in diagnosis and treatment planning] Jeske J, et al. **Onkologie** 1989 Aug;12 Suppl 1:42–5 (Eng. Abstr.) **(Ger)**

[MCNU delivery into malignant brain tumor and normal brain tissue by intravenous or intraarterial infusion] Miyagami M, et al. **Gan To Kagaku Ryoho** 1990 Feb; 17(2):275–80 (Eng. Abstr.) **(Jpn)**

[Etoposide delivery to malignant brain tumors by induced hypertension with angiotensin II] Ogasawara H, et al. **Gan To Kagaku Ryoho** 1990 May;17(5):1033–8 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetics of neocarzinostatin in patients with malignant glioma. Quantitative analysis of tissue concentration] Otsuka T, et al. **Neurol Med Chir (Tokyo)** 1989 Jun;29(6):471–5 (Eng. Abstr.) **(Jpn)**

[Prognostic significance of regional blood flow, blood volume, oxygen extraction fraction, and metabolic rates of oxygen and glucose as measured by positron emission tomography in patients with gliomas] Mineura K, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Dec 20;24(11):2556–62 (Eng. Abstr.) **(Jpn)**

[Growth factors produced by rat glioma cells: activities of transforming growth factors] Kanno H, et al. **No To Shinkei** 1989 Sep;41(9):905–9 (Eng. Abstr.) **(Jpn)**

[Expression of insulin–like growth factor I (IGF–I) and epidermal growth factor (EGF) receptors in primary non–glial human brain tumors] Kurihara M, et al. **No To Shinkei** 1989 Nov;41(11):1127–33 (Eng. Abstr.) **(Jpn)**

[Capillary permeability factor produced by C 6 glioma cells: role in peritumoral brain edema and possible mechanism of glucocorticoid action] Ohnishi T, et al. **No To Shinkei** 1989 Nov;41(11):1141–7 (Eng. Abstr.) **(Jpn)**

[Melatonin secretion in intracranial tumor] Yamada N, et al. **No To Shinkei** 1990 Feb;42(2):121–9 (Eng. Abstr.) **(Jpn)**

[The level of middle molecules in endogenous intoxication in neurosurgical patients] Amcheslavskiĭ VG, et al. **Zh Vopr Neirokhir** 1989 May–Jun;(3):36–9 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Demonstration of Epstein–Barr virus in primary brain lymphoma by in situ DNA hybridisation in paraffin wax embedded tissue. Murphy JK, et al. **J Clin Pathol** 1990 Mar;43(3):220–3

MORTALITY

Brain cancer mortality at a manufacturer of aerospace electromechanical systems. Park RM, et al. **Am J Ind Med** 1990;17(5):537–52

Selection bias in clinical trials of anaplastic glioma. Winger MJ, et al. **Ann Neurol** 1989 Oct;26(4):531–4

Primary intracranial lymphomas. Raco A, et al. **Clin Neurol Neurosurg** 1990;92(2):125–30

A survey of signs, symptoms and symptom control in 30 terminally ill children. Hunt AM. **Dev Med Child Neurol** 1990 Apr;32(4):341–6

Prognosis of initial CNS involvement in acute lymphoblastic leukemia childhood. Dörffel W, et al. **Hamatol Bluttransfus** 1990;33:494–9

Correlation of in vitro bromodeoxyuridine labeling index and DNA aneuploidy with survival or recurrence in brain–tumor patients. Nishizaki T, et al. **J Neurosurg** 1990 Sep;73(3):396–400

Improved survival with surgical treatment of both primary lung cancer and brain metastases [letter] Andrews RJ, et al. **Lancet** 1989 Dec 16;2(8677):1460–1

Primary central nervous system lymphoma: analysis of prognostic variables and patterns of treatment failure. Michalski JM, et al. **Radiology** 1990 Sep;176(3):855–60

[Should a cancer of the bronchi be surgically treated after excision of a cerebral metastasis?] Degreef JM, et al. **Rev Mal Respir** 1989;6(5):429–34 (Eng. Abstr.) **(Fre)**

[The role of inflammatory infiltrate as a prognostic criterion in cerebral metastases. Preliminary results] Bucciero A, et al. **Minerva Med** 1990 Mar;81(3):139–46 (Eng. Abstr.) **(Ita)**

[Analysis of therapeutic factors related to survival rate for malignant glioma patients—report from Brain Tumor Registry in Japan, Vol. 6, 1987] Nomura K. **Gan No Rinsho** 1989 Sep;35(11):1219–25 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Use of monoclonal antibodies to glial fibrillary acidic protein in the cytologic diagnosis of brain tumors. Chen Y, et al. **Acta Cytol** 1989 Nov–Dec;33(6):922–8

Early stages of development of rat brain tumors induced by JC virus: a sequential histological and immunohistochemical study. Horie Y, et al. **Acta Med Okayama** 1989 Oct;43(5):271–9

Prediction of the interaction effects Ar+ laser–brain tumours by study of the photoacoustic spectroscopy of cerebral oncotypes. De Tommasi A, et al. **Acta Neurochir (Wien)** 1990;104(1–2):27–9

Supratentorial astrocytic tumours of childhood: a clinicopathologic study of 41 cases. Nishio S, et al. **Acta Neurochir (Wien)** 1989;101(1–2):3–8

An immunohistochemical study of the primitive and maturing elements of human cerebral medulloepitheliomas. Caccamo DV, et al. **Acta Neuropathol (Berl)** 1989;79(3):248–54

Rosenthal fibres: an immunohistochemical, ultrastructural and immunoelectron microscopic study. Dinda AK, et al. **Acta Neuropathol (Berl)** 1990;79(4):456–60

Gliosarcoma: an immunohistochemical study. Grant JW, et al. **Acta Neuropathol (Berl)** 1989;79(3):305–9

Histopathological features of recurrent pleomorphic xanthoastrocytomas: further corroboration of the glial nature of this neoplasm. A study of 3 cases. Kepes JJ, et al. **Acta Neuropathol (Berl)** 1989;78(6):585–93

Argyrophilic nucleolar organizer region proteins (Ag–NORs) in human brain tumors: relations with grade of malignancy and proliferation indices. Maier H, et al. **Acta Neuropathol (Berl)** 1990;80(2):156–62

Monocyte subpopulations in human gliomas: expression of Fc and complement receptors and correlation with tumor proliferation. Morimura T, et al. **Acta Neuropathol (Berl)** 1990;80(3):287–94

The astroblastoma and its possible cytogenic relationship to the tanycyte. An electron microscopic, immunohistochemical, tissue– and organ–culture study. Rubinstein LJ, et al. **Acta Neuropathol (Berl)** 1989; 78(5):472–83

Patterns of differentiation in central neurocytoma. An immunohistochemical study of eleven biopsies. von Deimling A, et al. **Acta Neuropathol (Berl)** 1990;79(5):473–9

Multicentric astrocytomas of the optic chiasm, brain stem and spinal cord. Matsumoto T, et al. **Acta Pathol Jpn** 1989 Oct;39(10):664–9

Astrocytoma with granular cell tumor–like changes. Report of a case with histochemical and ultrastructural characterization of granular cells. Nakamura T, et al. **Acta Pathol Jpn** 1990 Mar;40(3):206–11 (25 ref.)

Glioma cell influence on cerebral endothelial cell Na(+)–K(+)–ATPase. Beck DW, et al. **Adv Neurol** 1990; 52:415–20

Relation between macrophage infiltrates and peritumoral edema. Shinonaga M, et al. **Adv Neurol** 1990;52:475–81

Ionic concentration of shifting fluid during glutamate–induced swelling of cultured glioma cells estimated by the cytocrit technique. Tomita M, et al. **Adv Neurol** 1990;52:558

Perifocal abnormal signal intensity area in magnetic resonance imaging in meningiomas. Tsuyumu M, et al. **Adv Neurol** 1990;52:559

Intracranial ganglioglioma: MR, CT, and clinical findings in 18 patients. Castillo M, et al. **AJNR** 1990 Jan–Feb; 11(1):109–14

Primary cerebral neuroblastoma: CT and MR findings in 12 cases. Davis PC, et al. **AJNR** 1990 Jan–Feb;11(1):115–20

Glioblastoma multiforme presenting as osteoblastic metastatic disease: case report and review of the literature. Myers T, et al. **AJNR** 1990 Jul–Aug;11(4):802–3 (11 ref.)

Intracranial ependymoma and subependymoma: MR manifestations. Spoto GP, et al. **AJNR** 1990 Jan–Feb; 11(1):83–91

Richter's syndrome presenting as primary central nervous system lymphoma. Transformation of an identical clone. Bayliss KM, et al. **Am J Clin Pathol** 1990 Jan;93(1):117–23

Assessment of histogenesis and proliferative potential in cytologic specimens of human brain tumors. Value of immunocytochemistry and nucleolar organizer regions. Plate KH, et al. **Anal Quant Cytol Histol** 1990 Jun; 12(3):157–64

Intracerebral mesenchymal chondrosarcoma. Parker JR, et al. **Ann Clin Lab Sci** 1989 Nov–Dec;19(6):401–7

Antigenic heterogeneity of human brain tumors defined by monoclonal antibodies. Stavrou D, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1489–96

Rounding of cultured human carcinoid tumor cells by forskolin. Tsugawa M, et al. **Anticancer Res** 1990 Jan–Feb; 10(1):63–6

Differentiation in medulloblastomas: immunohistochemical study of twenty–one cases. Aguilar D, et al. **Appl Pathol** 1989;7(5):277–84

Primary cerebral lymphoma: presentation of eight cases and review of the literature. Boadle DJ, et al. **Aust N Z J Med** 1989 Dec;19(6):682–6 (45 ref.)

A simple system for image directed stereotaxis. Dervin JE, et al. **Br J Neurosurg** 1989;3(5):569–74

Differentiation in medulloblastomas and other primitive neuroectodermal tumours. Sime PJ, et al. **Br J Neurosurg** 1989;3(1):89–100

Experience in 300 cases of CT–directed stereotactic surgery for lesion biopsy and aspiration of haematoma. Thomas DG, et al. **Br J Neurosurg** 1989;3(3):321–5

Diffuse cerebrospinal gliomatosis: clinical and radiological findings. Zaman K, et al. **Br J Neurosurg** 1988;2(3):415–8

An immunohistochemical study of papillary tumors in the

central nervous system. Ang LC, et al. **Cancer** 1990 Jun 15;65(12):2712–9

Desmoplastic cerebral astrocytoma of infancy. Light microscopy, immunocytochemistry, and ultrastructure. de Chadarévian JP, et al. **Cancer** 1990 Jul 1;66(1):173–9

Prognostic implications of glial fibrillary acidic protein containing cell types in oligodendrogliomas. Kros JM, et al. **Cancer** 1990 Sep 15;66(6):1204–12

Gliosarcoma of the posterior fossa with features of a malignant fibrous histiocytoma. Ng HK, et al. **Cancer** 1990 Mar 1;65(5):1161–6

Primary cerebral ganglioneurocytoma in an adult. Nishio S, et al. **Cancer** 1990 Jul 15;66(2):358–62

Differential drug sensitivity conferred by growth status detected in a mixed population of cycling and noncycling cells. Barcellos-Hoff MH, et al. **Cancer Res** 1990 Jun 15; 50(12):3551–5

Effect of N1,N14-bis(ethyl)homospermine on the growth of U-87 MG and SF-126 human brain tumor cells. Basu HS, et al. **Cancer Res** 1990 Jun 1;50(11):3137–40

Effect of alpha-difluoromethylornithine on 1,3-bis(2-chloroethyl)-1-nitrosourea and cis-diamminedichloroplatinum(II) cytotoxicity, DNA interstrand cross-linking, and growth in human brain tumor cell lines in vitro. Hunter KJ, et al. **Cancer Res** 1990 May 1;50(9):2769–72

Studies on cancer dissemination. Rosso R, et al. **Cancer Res** 1967 Jul;27(7):1225–31

Primary intracranial neoplasms in the first year of life. Asai A, et al. **Childs Nerv Syst** 1989 Aug;5(4):230–3

Intracranial tumors during the 1st year of life [published erratum appears in Childs Nerv Syst 1990 May;6(3):184] Galassi E, et al. **Childs Nerv Syst** 1989 Oct;5(5):288–98

Immunohistochemistry in childhood brain tumors: what are the facts? Gullotta F. **Childs Nerv Syst** 1990 May; 6(3):118–22

Congenital cerebral primitive neuroectodermal tumor with astrocytic differentiation and extracranial metastases. Yu IT, et al. **Childs Nerv Syst** 1990 May;6(3):179–82

Calcification in oligodendroglioma. Chen WY, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Mar;45(3):143–6

Central nervous system involvement in haematological malignancies. Sheehan T, et al. **Clin Lab Haematol** 1989; 11(4):331–8

Immunohistochemical demonstration of the KI-67-antigen in paraffin-embedded tumor biopsies. Böker DK, et al. **Clin Neuropathol** 1990 Jan-Feb;9(1):51–4

Malignant intracerebral granular cell tumor reacts positively with anti-alpha-1-antichymotrypsin and the MB2 antibody: a clue to the histogenesis of the brain granular cell? Claassen U, et al. **Clin Neuropathol** 1990 Mar-Apr; 9(2):82–8

Primary intracerebral Hodgkin's disease: a case report. Sickler GK, et al. **Clin Neuropathol** 1990 May-Jun; 9(3):143–7

Cerebral multiple glio-vascular dysplasias—a case report. Testa D, et al. **Clin Neuropathol** 1990 Mar-Apr;9(2):66–8

Central nervous system acute promyelocytic leukaemia: a report of three cases. Marra R, et al. **Haematologia (Budap)** 1989;22(3):195–9

Morphologic and immunophenotypic characterization of primary brain lymphomas using paraffin-embedded tissue. Murphy JK, et al. **Histopathology** 1989 Nov;15(5):449–60

Primary cerebral rhabdomyosarcoma. Bhatia S, et al. **Indian J Pediatr** 1989 Jan-Feb;56(1):151–4

Subarachnoid hemorrhage—an unusual presentation of cerebral tumour in children. Sharma SC. **Indian Pediatr** 1989 Jun;26(6):598–9

Malignant lymphoma of the central nervous system in Japan: histologic and immunohistologic studies. Aozasa K, et al. **Int J Cancer** 1990 Apr 15;45(4):632–6

Interactions between human glioma cells and fetal rat brain aggregates studied in a chemically defined medium. Lund-Johansen M. **Invasion Metastasis** 1990;10(2):113–28

Pinealoblastoma metastatic to the optic nerve. Hertle RW, et al. **J Clin Neuro Ophthalmol** 1990 Jun;10(2):95–9

Cerebral lymphomas: review of 70 cases. Adams JH, et al. **J Clin Pathol** 1990 Jul;43(7):544–7

Mycosis fungoides with CNS involvement: neuropsychiatric manifestations and complications of treatment with intrathecal methotrexate and whole-brain irradiation. Lindae ML, et al. **J Dermatol Surg Oncol** 1990 Jun; 16(6):550–3

Pontine tumour with central neurogenic hyperventilation [letter] Salvesen R. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1441–2

Supratentorial meningeal spread from brainstem glioma. Vries EP, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug; 52(8):1011–3

Rapid estimation of the proliferating index of brain tumours. Detta A, et al. **J Neurooncol** 1990 Jun;8(3):245–53

Cell kinetic investigations in brain tumors studied by serial stereotactic biopsy. Franzini A, et al. **J Neurooncol** 1989 Nov;7(4):373–9

Assessment of the experimental model of transplanted C6 glioblastoma in Wistar rats. San-Galli F, et al. **J Neurooncol** 1989 Sep;7(3):299–304

Superficial location of malignant glioma with heavily lipidized (foamy) tumor cells: a case report. Tanaka K, et al. **J Neurooncol** 1989 Sep;7(3):293–7

Nuclear parameters as prognostic indicators in glioblastoma patients. McKeever PE, et al. **J Neuropathol Exp Neurol** 1990 Jan;49(1):71–8

Cell kinetics of rat 9L brain tumors determined by double labeling with iodo- and bromodeoxyuridine. Asai A, et al. **J Neurosurg** 1990 Aug;73(2):254–8

Multicellular tumor spheroids from human gliomas maintained in organ culture. Bjerkvig R, et al. **J Neurosurg** 1990 Mar;72(3):463–75

Invasion of human brain tumors in vitro: relationship to clinical evolution. de Ridder L, et al. **J Neurosurg** 1990 Apr;72(4):589–93

Characterization of lymphoid cells isolated from human gliomas. Farmer JP, et al. **J Neurosurg** 1989 Oct; 71(4):528–33

Silver colloid staining technique for analysis of glioma malignancy. Kajiwara K, et al. **J Neurosurg** 1990 Jul; 73(1):113–7

Multifocal glioblastoma with liver metastases in the absence of surgery. Case report. Leifer D, et al. **J Neurosurg** 1989 Nov;71(5 Pt 1):772–6

Successful laboratory growth and analysis of CUSA-obtained medulloblastoma samples. Technical note. Oakes WJ, et al. **J Neurosurg** 1990 May;72(5):821–3

Implantation metastasis of pineoblastoma after stereotactic biopsy. Case report. Rosenfeld JV, et al. **J Neurosurg** 1990 Aug;73(2):287–90

Immunohistochemical study of natural killer cells in tumor-infiltrating lymphocytes of primary intracranial germinomas. Vaquero J, et al. **J Neurosurg** 1990 Apr; 72(4):616–8

Papillary pineocytoma. Case report. Vaquero J, et al. **J Neurosurg** 1990 Jul;73(1):135–7

Brain ganglioglioma with large extension to subarachnoid space. García Salazar FJ, et al. **J Neurosurg Sci** 1990 Jan-Mar;34(1):61–3

Simultaneous multiple brain tumors of different histological nature. Report of two cases. Rotondo M, et al. **J Neurosurg Sci** 1990 Jan-Mar;34(1):57–60

Cavernous angiomas of the central nervous system. Villani RM, et al. **J Neurosurg Sci** 1989 Jul-Sep;33(3):229–52 (242 ref.)

Radiation-associated cerebral gliomas. A report of two cases and review of the literature. Zampieri P, et al. **J Neurosurg Sci** 1989 Jul-Sep;33(3):271–9 (59 ref.)

Gliosarcoma: a histologic and immunohistochemical reaffirmation. Meis JM, et al. **Mod Pathol** 1990 Jan; 3(1):19–24

Multiple focal nodular hyperplasia of the liver associated with vascular malformations of various organs and neoplasia of the brain: a new syndrome. Wanless IR, et al. **Mod Pathol** 1989 Sep;2(5):456–62

Morphologic correlates in gliomas: where do we stand? Burger PC. **Monogr Pathol** 1990;(32):16–29 (41 ref.)

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 26–1990. A 68-year-old man with a right hemiparesis, abulia, and multiple intracerebral hemorrhages. **N Engl J Med** 1990 Jun 28; 322(26):1866–78

Reliability of simple cytological methods in brain tumour biopsy diagnosis. Mennel HD, et al. **Neurochirurgia (Stuttg)** 1989 Sep;32(5):129–34

Malignant glial tumours: prognostic value of quantitative microscopy. Scarpelli M, et al. **Neurochirurgia (Stuttg)** 1989 Sep;32(5):135–40

Encephalocraniocutaneous lipomatosis. Report of two cases and a review of the literature. Bamforth JS, et al. **Neurofibromatosis** 1989;2(3):166–73 (21 ref.)

Hemimegalencephaly, hemifacial hypertrophy and intracranial lipoma: a variant of neurofibromatosis. Ross GW, et al. **Neurofibromatosis** 1989;2(2):69–77 (37 ref.)

Coexistence of intracranial meningioma and primary malignant lymphoma—case report. Kuroiwa T, et al. **Neurol Med Chir (Tokyo)** 1990 Apr;30(4):268–71

Lipoma in the cerebellopontine angle—case report. Nishizawa S, et al. **Neurol Med Chir (Tokyo)** 1990 Feb; 30(2):137–42 (23 ref.)

A new neurosurgical ventriculoscope—technical note. Oka K, et al. **Neurol Med Chir (Tokyo)** 1990 Jan;30(1):77–9

Spinal metastases of intracranial ependymomas. Four case reports and review of the literature. Ernestus RI, et al. **Neurosurg Rev** 1990;13(2):147–54 (42 ref.)

Intraventricular neurocytoma: a clinical and pathological study of three cases and review of the literature. Barbosa MD, et al. **Neurosurgery** 1990 Jun;26(6):1045–54 (21 ref.)

C6 glioma cell invasion and migration of rat brain after neural homografting: ultrastructure. Bernstein JJ, et al. **Neurosurgery** 1990 Apr;26(4):622–8

Relationship of invasiveness to proliferating activity and to cytoskeletal protein production in human neuroepithelial tumors maintained in an organ culture system: use of human cortex and dura as supporting matrices. Ibayashi N, et al. **Neurosurgery** 1990 Apr;26(4):629–37

Tumors of the lateral ventricular wall, especially the septum pellucidum: clinical presentation and variations in pathological features. Nishio S, et al. **Neurosurgery** 1990 Aug;27(2):224–30

Cerebral glioblastoma with cerebrospinal fluid dissemination: a clinicopathological study of 14 cases examined by complete autopsy. Onda K, et al. **Neurosurgery** 1989 Oct; 25(4):533–40

Corpus callosotomy for refractory seizures in a patient with cortical heterotopia: case report. Stearns M, et al. **Neurosurgery** 1989 Oct;25(4):633–5; discussion 635–6

Histological changes in glioblastoma after intratumoral injection of autologous lymphocytes and human lymphoblastoid interferon. Vaquero J, et al. **Neurosurgery** 1990 Aug;27(2):235–9

Influence of 5-azacytidine on differentiation and growth in rat nervous system tumor cell lines. Stark M, et al. **Neurotoxicol Teratol** 1989 Nov-Dec;11(6):557–61

Cell-kinetic characteristics of human brain tumors. Assietti R, et al. **Oncology** 1990;47(4):344–51

Establishment and characterization of human glioblastoma cell lines in vitro and their xenografts in nude mice. Fischer H, et al. **Onkologie** 1989 Aug;12(4):169–74

Intracerebral granular cell tumor. Case report. Gambini C, et al. **Pathologica** 1990 Jan-Feb;82(1077):83–8

Growth factors in the tumorigenicity of a brain tumor cell line. Whelan HT, et al. **Pediatr Neurol** 1989 Sep-Oct; 5(5):271–9

Inhibitory effects of carotenoids and retinoids on the in vitro growth of rat C-6 glioma cells. Wang CJ, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Jul;13(3):176–83

Gap junctional intercellular communication (GJIC) in rat glioma cells--characterizations to detect inhibitors of metabolic cooperation. Lin ZX, et al. **Sci China [B]** 1990 Apr;33(4):435–43

Cerebral lymphoma in childhood: a diagnostic dilemma. Pappert EJ, et al. **South Med J** 1989 Oct;82(10):1294–8 (33 ref.)

Correlation between nucleolar organizer region staining and Ki-67 immunostaining in human gliomas. Hara A, et al. **Surg Neurol** 1990 May;33(5):320–4

The proliferative activity of neurilemomas. Lee KS, et al. **Surg Neurol** 1989 Dec;32(6):427–33

Brain neoplasms. **Top Magn Reson Imaging** 1989 Mar; 1(2):1–93

Pathology of brain neoplasms. Bird CR, et al. **Top Magn Reson Imaging** 1989 Mar;1(2):6–15

Trilateral retinoblastoma in transgenic mice. O'Brien JM, et al. **Trans Am Ophthalmol Soc** 1990;87:301–22; discussion 322–6

"Anemone" cell (villiform) tumor of the brain. Deck JH, et al. **Ultrastruct Pathol** 1990 Jan-Feb;14(1):87–94

Diagnosis of primary cerebral lymphoma with particular reference to CT-guided stereotactic biopsy. Feiden W, et al. **Virchows Arch [A]** 1990;417(1):21–8

Clear cell ependymoma. A histological variant with diagnostic implications. Kawano N, et al. **Virchows Arch [A]** 1989;415(5):467–72

[Establishment of a malignant astrocytoma cell line TJ-8510 and its characterization] Zhong Y. **Chung Hua Chung Liu Tsa Chih** 1990 Jan;12(1):18–20 (Eng. Abstr.) **(Chi)**

[Secondary brain tumor in a boy with acute lymphoblastic leukemia] Balcárková H, et al. **Cesk Pediatr** 1989 Nov; 44(11):677–8 **(Cze)**

[Histogenesis of subependymal glioma in Bourneville's tuberous sclerosis] Bancel B, et al. **Ann Pathol** 1990; 10(2):109–16 (Eng. Abstr.) **(Fre)**

[Malignant transformation of an intracranial epidermoid cyst] Michenet P, et al. **Ann Pathol** 1989;9(5):360–2 (Eng. Abstr.) **(Fre)**

[Cellular kinetics of cerebral glioma: study of the proliferative activity using monoclonal antibody Ki 67. Apropos of 60 cases] Parent M, et al. **Arch Anat Cytol Pathol** 1990; 38(3):81–5 (Eng. Abstr.) **(Fre)**

[Large-cell intravascular malignant lymphoma] Croisile B, et al. **Rev Neurol (Paris)** 1990;146(3):184–90 (71 ref.) (Eng. Abstr.) **(Fre)**

[Metastatic glioblastoma with transverse myelitis symptoms. Histologic and immunohistochemical analyses] Knüpffer J, et al. **Pathologe** 1989 Sep;10(5):294–9 **(Ger)**

[The question of medullomyoblastoma] Patt S, et al. **Zentralbl Allg Pathol** 1989;135(5):445–55 (Eng. Abstr.) **(Ger)**

[CNS involvement in neurofibromatosis. A postmortem study] Schreiber D, et al. **Zentralbl Allg Pathol** 1990; 136(1-2):67–76 (Eng. Abstr.) **(Ger)**

[Extra-gonadal germ-cell tumors] Baranyay F, et al. **Morphol Igazsagugyi Orv Sz** 1989 Jul;29(3):195–203 (41 ref.) (Eng. Abstr.) **(Hun)**

[Imprint cytology of intracranial tumors] Bozóky B, et al. **Morphol Igazsagugyi Orv Sz** 1989 Oct;29(4):292–6 (Eng. Abstr.) **(Hun)**

[Qualitative and quantitative histochemical evaluation of the dehydrogenase activity in human glioblastoma cells treated with beta-interferon] Nano R, et al. **Boll Soc Ital Biol Sper** 1990 Mar;66(3):279–85 (Eng. Abstr.) **(Ita)**

[Tumors of the central nervous system induced by ionizing radiation. Update on their pathology and presentation of a case] Salvati M, et al. **G Ital Oncol** 1990 Jan-Jun; 10(1-2):15–8 (Eng. Abstr.) **(Ita)**

[Primary teratocarcinoma of the pineal region] Masini T, et al. **Pathologica** 1989 Sep-Oct;81(1075):559–66 (Eng. Abstr.) **(Ita)**

[Meningeal gliomatosis—clinical features and results of treatment] Arita N, et al. **Gan No Rinsho** 1989 Sep; 35(11):1308–12 (Eng. Abstr.) **(Jpn)**

[Problems entailed in the definition and pathology of anaplastic astrocytoma] Ishida Y, et al. **Gan No Rinsho** 1989 Sep;35(11):1205–12 (Eng. Abstr.) **(Jpn)**

[Regrowth patterns of glioma—cases of glioma regrew away from the original tumor] Kuratsu J, et al.

Gan No Rinsho 1989 Sep;35(11):1255–60 (Eng. Abstr.) (Jpn)
[Regrowth pattern of glioblastoma multiforme after radiotherapy] Nagashima T, et al. Gan No Rinsho 1989 Sep;35(11):1272–6 (Eng. Abstr.) (Jpn)
[A clinicopathological study of the spinal leptomeningeal dissemination from cerebral malignant gliomas without a recurrence of the primary lesions] Nakagawa K, et al. Gan No Rinsho 1990 Jan;36(1):57–65 (Eng. Abstr.) (Jpn)
[Post-mortem observation of glioma and/or brain tissue compared to C–T scan findings after irradiation] Nakamura N, et al. Gan No Rinsho 1989 Sep;35(11):1313–23 (Eng. Abstr.) (Jpn)
[Chemotherapy responsiveness of brain tumors in subrenal capsule assay] Miyamachi K. Hokkaido Igaku Zasshi 1990 Jan;65(1):41–9 (Eng. Abstr.) (Jpn)
[Molecular-pathology analysis of regulatory region and transformation in JC virus] Takebayashi K. Hokkaido Igaku Zasshi 1989 Jul;64(4):431–9 (Eng. Abstr.) (Jpn)
[Enhancement of the effect of X-irradiation against cultured human glioblastoma cells by pretreatment with ACNU] Mashiyama S, et al. Neurol Med Chir (Tokyo) 1989 Dec; 29(12):1070–7 (Eng. Abstr.) (Jpn)
[Primitive neuroectodermal tumor with peritoneal metastasis through a ventriculoperitoneal shunt. Case report] Yamamoto Y, et al. Neurol Med Chir (Tokyo) 1989 Dec; 29(12):1137–43 (16 ref.) (Eng. Abstr.) (Jpn)
[Brain tumors associated with hemorrhage from tumors as their first manifestation] Otsuka S, et al. Nippon Geka Hokan 1989 Jan 1;58(1):147–54 (Eng. Abstr.) (Jpn)
[MR three-dimensional Fourier transform imaging at 0.5 T: neurosurgical application] Itoh K. Nippon Rinsho 1990 Apr; 48(4):846–53 (8 ref.) (Jpn)
[An autopsy case of primary intracranial squamous cell carcinoma] Ebisudani D, et al. No Shinkei Geka 1990 Feb; 18(2):193–8 (17 ref.) (Eng. Abstr.) (Jpn)
[Malignancy of brain tumors] Ito H, et al. No Shinkei Geka 1990 Jul;18(7):595–9 (31 ref.) (Jpn)
[An autopsy case of cerebral astrocytoma associated with multiple myeloma] Kato I, et al. No Shinkei Geka 1989 Sep;17(9):877–81 (Eng. Abstr.) (Jpn)
[Histological diagnosis of brain tumors: (9) Dermoid, epidermoid] Kobayashi T. No Shinkei Geka 1990 Feb; 18(2):115–20 (21 ref.) (Jpn)
[Intracranial invasion of neuroendocrine carcinoma: a case report] Manome Y, et al. No Shinkei Geka 1990 May; 18(5):483–7 (Eng. Abstr.) (Jpn)
[Histological diagnosis of brain tumors: (5). Schwannoma, Neurilemmoma] Nishio S, et al. No Shinkei Geka 1989 Jun; 17(6):509–13 (Jpn)
[An intracranial collision tumor composed of intrasellar gangliocytoma and pituitary adenoma] Tajika Y, et al. No Shinkei Geka 1989 Dec;17(12):1181–6 (28 ref.) (Eng. Abstr.) (Jpn)
[Histological diagnosis of brain tumors (13): Chordoma] Taomoto K. No Shinkei Geka 1990 Jun;18(6):499–506 (38 ref.) (Jpn)
[A case of hemangioblastoma with subarachnoid dissemination] Tohyama T, et al. No Shinkei Geka 1990 Jan;18(1):83–8 (Eng. Abstr.) (Jpn)
[Histological diagnosis of brain tumors: (11). Hemangioblastoma] Washiyama K, et al. No Shinkei Geka 1990 Apr;18(4):323–8 (40 ref.) (Jpn)
[An autopsy case of primary intracranial malignant lymphoma showing extracranial disseminations] Aimoto Y, et al. No To Shinkei 1990 Apr;42(4):333–7 (Eng. Abstr.) (Jpn)
[Experimental brain tumor in adult mongrel cat] Kabuto M, et al. No To Shinkei 1990 Apr;42(4):339–43 (Eng. Abstr.) (Jpn)
[Histological study of malignant cerebral granular cell tumor] Kawano H, et al. No To Shinkei 1989 Oct;41(10):955–60 (Eng. Abstr.) (Jpn)
[Immunohistochemical study on Rosenthal fibers in gliomas using anti-GFAP and anti-ubiquitin antibodies] Kobayashi S, et al. No To Shinkei 1990 Jan;42(1):59–64 (Eng. Abstr.) (Jpn)
[Chemotherapeutic strategy in rat brain tumor cells resistant to ACNU using an in vitro colony formation assay] Mineura K, et al. No To Shinkei 1989 Sep;41(9):927–32 (Eng. Abstr.) (Jpn)
[On the origin of intracranial teratomas] Wakai S. No To Shinkei 1989 Oct;41(10):947–53 (Eng. Abstr.) (Jpn)
[A case of cerebral venous angioma; effectiveness of MRI for confirmation of its hemorrhagic change] Nakanishi Y, et al. Rinsho Hoshasen 1990 Apr;35(4):505–8 (Eng. Abstr.) (Jpn)
[Systemic hemangiomatosis combined with multiple primary neoplasms] Egorov VP. Arkh Patol 1990;52(3):61–4 (Eng. Abstr.) (Rus)
[Intracranial cavernous angiomas] Matsko DE. Arkh Patol 1990;52(5):27–32 (Eng. Abstr.) (Rus)
[An intracerebral cystic cavernous angioma] Matsko DE, et al. Zh Vopr Neirokhir 1989 Sep–Oct;(5):59–61 (Rus)
[Macrocystic cerebral astrocytoma] Antić B, et al. Vojnosanit Pregl 1990 Mar–Apr;47(2):132–4 (Scr)
[Differential immunohistochemical characteristics of meningiomas and other neoplasms of the central nervous system] Pérez-Bacete MJ, et al. Arch Neurobiol (Madr) 1989 Nov–Dec;52(6):265–72 (Eng. Abstr.) (Spa)
[Leukoerythroblastic syndrome secondary to extraneural metastases of a glioma (letter)] Santín M, et al. Med Clin (Barc) 1989 Sep 16;93(7):278–9 (Spa)
[Malignant astrocytic glioma of the brain in adults: histologic criteria determining its classification, diagnosis and prognosis] Arráez MA, et al. Neurologia 1989 Nov; 4(9):311–5 (Eng. Abstr.) (Spa)
[Multicentric glioma: importance of stereotaxic biopsy in the diagnosis of multiple cerebral lesions] García T, et al. Neurologia 1987 Mar–Apr;2(2):81–5 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Effect of blood-brain barrier disruption on the permeability of peritumoral edema. Sato S, et al. Adv Neurol 1990;52:555
The effect of nitrous oxide and halothane upon the intracranial pressure in hypocapnic patients with intracranial disorders. Misfeldt BB, et al. Br J Anaesth 1974 Nov;46(11):853–8
The development of an animal model of glioma for use in experimental neuro-oncology. Bradford R, et al. Br J Neurosurg 1989;3(2):197–210
Quantitative EEG abnormalities and asymmetries in patients with intracranial tumors. Dolisi C, et al. Electroencephalogr Clin Neurophysiol 1990 Jul;76(1):13–8
Triphasic waves and cerebral tumors. Aguglia U, et al. Eur Neurol 1990;30(1):1–5
The evaluation of sellar region tumours with pattern visual evoked potentials. Sartucci F, et al. Funct Neurol 1989 Oct–Dec;4(4):379–86
Cerebral blood flow response to the tissue temperature in tumour and brain tissues. Satoh T, et al. Int J Hyperthermia 1989 Nov–Dec;5(6):683–96
Vascular pressures and cortical blood flow in cavernous angioma of the brain. Little JR, et al. J Neurosurg 1990 Oct;73(4):555–9
Response of malignant glioma cell lines to epidermal growth factor and platelet-derived growth factor in a serum-free medium. Pollack IF, et al. J Neurosurg 1990 Jul; 73(1):106–12
Measurement of cerebral blood flow, cerebral blood volume, and cerebral capillary permeability in glioma-bearing rats. Aizawa S, et al. Neurol Med Chir (Tokyo) 1990 Feb; 30(2):113–8
The pyramidal tract. Davidoff RA. Neurology 1990 Feb; 40(2):332–9 (140 ref.)
Topographic disorientation—a case report. Bottini G, et al. Neuropsychologia 1990;28(3):309–12
Establishment and characterization of human glioblastoma cell lines in vitro and their xenografts in nude mice. Fischer H, et al. Onkologie 1989 Aug;12(4):169–74
[A study of reaction time in 120 patients with brain tumor, traumatic intracranial hematoma, cerebrovascular disease and epilepsy] Wang X. Chung Hua Shen Ching Ching Shen Ko Tsa Chih 1989 Dec; 22(6):331–4, 381 (Eng. Abstr.) (Chi)
[Monitoring of intracranial pressure in patients with brain tumors. Clinical study of the A wave mechanism] Kagawa J. Neurol Med Chir (Tokyo) 1989 Jun;29(6):476–83 (Eng. Abstr.) (Jpn)
[Cerebral blood flow of the non-affected brain in patients with malignant brain tumors as studied by SPECT; with special reference to adverse effects of radiochemotherapy] Araki Y, et al. No Shinkei Geka 1990 Jul;18(7):601–8 (Eng. Abstr.) (Jpn)
[Analysis of regional blood flow, blood volume, oxygen and glucose metabolism in heterogeneous parts of untreated high grade gliomas using positron emission tomography (PET)] Sasajima T, et al. No Shinkei Geka 1989 Nov; 17(11):1005–13 (Eng. Abstr.) (Jpn)
[A study on the vascular permeability of brain tumors using dynamic CT] Terada T, et al. No Shinkei Geka 1989 Sep; 17(9):841–8 (Eng. Abstr.) (Jpn)

PREVENTION & CONTROL

CNS minimal disease therapy in childhood leukaemia: the place for irradiation. Eden OB. Br J Cancer 1990 Jul; 62(1):6–7
Minimal neuropsychological sequelae following prophylactic treatment of the central nervous system in adult leukaemia and lymphoma. Tucker J, et al. Br J Cancer 1989 Nov; 60(5):775–80
Central nervous system relapses after bone marrow transplantation for acute lymphoblastic leukemia in remission. Ganem G, et al. Cancer 1989 Nov 1; 64(9):1796–804
Delayed central nervous system (CNS) radiation in childhood CNS acute lymphoblastic leukemia. Results of a pilot trial. Mandell LR, et al. Cancer 1990 Aug 1;66(3):447–50
Effective prevention of central nervous system leukemia with intrathecal methotrexate and intrathecal methotrexate, cytosine arabinoside, and hydrocortisone in childhood acute lymphocytic leukemia. Aur RJ, et al. Hamatol Bluttransfus 1990;33:504–10
Central nervous system relapse prevention in 1165 standard-risk children with acute lymphoblastic leukemia in five BFM trials. Bührer C, et al. Hamatol Bluttransfus 1990;33:500–3 (11 ref.)
A linear quadratic analysis of differing fractionation schemes for prophylactic cranial irradiation [letter] Krosnick SH, et al. J Clin Oncol 1990 Sep;8(9):1599–600
Minimizing and measuring lens dose when giving cranial irradiation. Woo SY, et al. Radiother Oncol 1989 Nov; 16(3):183–8
[Computerized tomography of the skull in children with lymphoblastic leukemia treated with prophylactic cranial radiation] Masotti A, et al. Pediatr Med Chir 1989 May–Jun;11(3):325–8 (Eng. Abstr.) (Ita)

PSYCHOLOGY

Neuropsychological impairments associated with lesions caused by tumor or stroke. Anderson SW, et al. Arch Neurol 1990 Apr;47(4):397–405
Effect of chronic stress on ENU-induced tumors. Sotelo J, et al. Biol Psychiatry 1989 Nov;26(7):690–4
Psychiatric presentation of a venous angioma of the frontal lobe. Nagaratnam N, et al. Br J Clin Pract 1990 Jan; 44(1):34–5
Speed-accuracy optimization in acquisition of figures after focal cerebral lesion. Vilkki J, et al. Cortex 1989 Sep; 25(3):363–9
Personality changes associated with thalamic infiltration. Gutmann DH, et al. J Neurooncol 1990 Jun;8(3):263–7
[Neglect—the frequently neglected syndrome of neglect] Schnider A, et al. Schweiz Med Wochenschr 1989 Nov 11; 119(45):1583–90 (Eng. Abstr.) (Ger)
[Psychological and neurologic long-term consequences of brain tumors in children. A pilot study] Fossen A, et al. Tidsskr Nor Laegeforen 1989 Nov 30;109(33):3406–8 (Eng. Abstr.) (Nor)

RADIOGRAPHY

CT of pineal tumors and intracranial germ-cell tumors. Chang T, et al. AJR Am J Roentgenol 1989 Dec; 153(6):1269–74
Investigation of cocaine-related seizures showing unsuspected brain tumors [letter] Seaman M, et al. Ann Emerg Med 1990 Jun;19(6):733–4
Correlative imaging of sphenoid dysplasia accompanying neurofibromatosis. Harkens K, et al. Ann Otol Rhinol Laryngol 1990 Feb;99(2 Pt 1):137–41
Digital subtraction angiography (DSA): a neurosurgical perspective. Butler P. Br J Neurosurg 1987;1(3):323–33
Periventricular enhancement: a non-pathognomonic sign of intracerebral tumours. Murray PA, et al. Br J Radiol 1989 Dec;62(744):1075–8
Computed tomographic findings of nasopharyngeal carcinoma with skull base and intracranial involvement. Miura T, et al. Cancer 1990 Jan 1;65(1):29–37
A case of parasellar meningioma mimicking cluster headache. Hannerz J. Cephalalgia 1989 Dec;9(4):265–9
Recurrent low-grade glioma in children with special reference to computed tomography findings and pathological changes. Morota N, et al. Childs Nerv Syst 1990 May;6(3):155–60
Dynamic CT scan of intracranial tumors. Wu EH, et al. Chin Med J [Engl] 1989 Jun;102(6):449–52
Lipoma of the sylvian region. Maiuri F, et al. Clin Neurol Neurosurg 1989;91(4):321–3 (23 ref.)
Correlation of computed tomography and postmortem findings of a diffuse astrocytoma: a case report. Carter DJ, et al. Comput Med Imaging Graph 1989 Nov-Dec; 13(6):491–4
Computed tomography of tumors of the pineal region. Kleefield J, et al. Comput Tomogr 1977;1(3):257–65
A middle fossa arachnoid cyst in association with a suprasellar dermoid cyst. Chhang WH, et al. Indian Pediatr 1989 Aug;26(8):833–5
Digital tumor fluoroscopy (DTF)—a new direct imaging system in the therapy planning for brain tumors. Herbst M, et al. Int J Radiat Oncol Biol Phys 1990 Jan; 18(1):221–31
Unusual radiological presentation of a primary CNS lymphoma. Ferraresi S, et al. Ital J Neurol Sci 1989 Dec; 10(6):583–6
Thalamic glioma. An unusual presentation. Bhansali A, et al. J Assoc Physicians India 1990 Mar;38(3):232–3
Multifocal intracranial tumoral lesions: neuroimaging and differential diagnosis with non-oncologic pathology. Dierckx IM, et al. J Belge Radiol 1990 Jan;73(1):7–14
Primary malignant rhabdoid tumor of the brain: CT characteristics. Ho PS, et al. J Comput Assist Tomogr 1990 May–Jun;14(3):461–3
Intracerebral extension of nasal dermoid cyst: CT appearance. Uglietta JP, et al. J Comput Assist Tomogr 1989 Nov–Dec;13(6):1061–4
Postoperative contrast enhancement in brain tumors and intracerebral hematomas: CT study. Wakai S, et al. J Comput Assist Tomogr 1990 Mar–Apr;14(2):267–71
Computed tomography in the diagnosis of central nervous system lymphomas. Issaragrisil R, et al. J Med Assoc Thai 1989 Oct;72(10):553–61
Computerized tomography brain scan tumor volume determinations. Sensitivity as an objective criterion of response to therapy. Mahaley MS Jr, et al. J Neurosurg 1990 Jun;72(6):872–8
"Primary" leptomeningeal dissemination of medulloblastoma. Report of an unusual case. Ferrara M, et al. J Neurosurg Sci 1989 Apr–Jun;33(2):219–23
Dermoid cyst of the scalp: intracranial extension. Crawford R. J Pediatr Surg 1990 Mar;25(3):294–5
Cerebellar malignant glioma after radiation therapy for

suprasellar germinoma—case report. Tamura T, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):223–9 (55 ref.)

Subependymoma of the septum pellucidum radiologically indistinguishable from cavernous angioma—case report. Yamasaki T, et al. **Neurol Med Chir (Tokyo)** 1989 Nov; 29(11):1020–5 (24 ref.)

Calcification in cerebral non-Hodgkin's lymphoma: CT demonstration. Yamada I, et al. **Neuroradiology** 1989; 31(4):372

Intracranial cavernous angioma in the dura. Isla A, et al. **Neurosurgery** 1989 Oct;25(4):657–9

Cerebral gliosarcomas: correlation of computed tomographic findings, surgical aspect, pathological features, and prognosis. Maiuri F, et al. **Neurosurgery** 1990 Feb; 26(2):261–7

Computed tomography aided, stereotactic localisation of intracranial lesions. Menhinick S. **Radiogr Today** 1989 Feb; 55(621):13–5

Central nervous system lymphoma. Zimmerman RA. **Radiol Clin North Am** 1990 Jul;28(4):697–721 (41 ref.)

Primary oligodendroglioma of the lateral ventricle. Lee KS, et al. **South Med J** 1990 Feb;83(2):254–5 (20 ref.)

Giant cell reparative granuloma of the skull base mimicking an intracranial tumor. Case report and review of the literature. Ciappetta P, et al. **Surg Neurol** 1990 Jan; 33(1):52–6

[Diagnostic evaluation of coronal CT scan in skull and brain diseases] Deng KH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Jun;20(2):214–6 (Eng. Abstr.) **(Chi)**

[Postoperative computed tomography: study of 10 cases on reactive ring-enhancement in brain] Xiao JH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Sep;20(3):338–41 (Eng. Abstr.) **(Chi)**

[But the CT was normal, wasn't it?] Brouwer OF, et al. **Ned Tijdschr Geneeskd** 1990 Jun 30;134(26):1241–4 **(Dut)**

[The association of 2 histologically different neuroepithelial tumors] Friard T, et al. **Ann Radiol (Paris)** 1989; 32(7–8):586–9 (Eng. Abstr.) **(Fre)**

[A primary immunocytoma of the CNS simulating a butterfly glioblastoma of the corpus callosum] Zwaan M, et al. **ROFO** 1990 Jan;152(1):118–9 **(Ger)**

[A CT localization frame—an improved method for preoperative localization of intracranial processes] Harms L, et al. **Zentralbl Neurochir** 1989;50(1):16–7 (Eng. Abstr.) **(Ger)**

[Preliminary evaluation of diagnostic usefulness of digital subtraction angiography (DSA) in the diagnosis of brain diseases] Selmaj K, et al. **Neurol Neurochir Pol** 1989 Mar–Apr;23(2):111–7 (Eng. Abstr.) **(Pol)**

[Angiographic criteria for the morphologic and locational classification of angiomas] Slaković S. **Med Arh** 1986; 40(5):217–20 (Eng. Abstr.) **(Scr)**

[Venous angiomas of the brain. Retrospective study of angiograms and clinical material] Mihale J, et al. **Cesk Neurol Neurochir** 1990 Jan;53(1):39–42 (Eng. Abstr.) **(Slo)**

[False negatives on CAT scans in astrocytomas (letter)] Alfaro A, et al. **Neurologia** 1988 Jul–Aug;3(4):164 **(Spa)**

[False negative results in computerized tomography. Negative scanner in astrocytomas] Gómez Perún J, et al. **Neurologia** 1987 Sep–Oct;2(5):240–3 (Eng. Abstr.) **(Spa)**

[Neurofibromatosis and tumors of the central nervous system (CNS)] Pascual-Castroviejo I, et al. **Neurologia** 1986 Jan–Feb;1(1):6–10 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

The accumulation of 11C-methionine in cerebral glioma patients studied with PET. Kameyama M, et al. **Acta Neurochir (Wien)** 1990;104(1–2):8–12

PET imaging of human gliomas with ligands for the peripheral benzodiazepine binding site. Junck L, et al. **Ann Neurol** 1989 Dec;26(6):752–8

In vivo imaging and treatment of human brain tumours utilizing the radiolabelled monoclonal antibody MUC 2–63. Bergh J, et al. **Anticancer Res** 1990 May–Jun;10(3):655–60

Intravenous 99mTc HM-PAO radionuclide angiography as an adjunct to SPECT assessment of cerebral disease. Bartolini A, et al. **Comput Med Imaging Graph** 1990 Mar–Apr;14(2):91–5

An evaluation of 99mTc-HMPAO uptake in cerebral gliomas—a comparison with X-ray CT. Irvine AT, et al. **Eur J Nucl Med** 1990;16(4–6):293–8

A determination of the regional brain/blood partition coefficient of water using dynamic positron emission tomography. Iida H, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):874–85

Radioimaging of human glioma xenografts with 123I labeled monoclonal antibody G-22 against glioma-associated antigen. Yoshida J, et al. **J Neurooncol** 1990 Jun;8(3):221–9

Nuclear medicine in monitoring response to cancer treatment. Front D, et al. **J Nucl Med** 1989 Oct;30(10):1731–6

Antibody guided diagnosis and therapy of brain gliomas using radiolabeled monoclonal antibodies against epidermal growth factor receptor and placental alkaline phosphatase. Kalofonos HP, et al. **J Nucl Med** 1989 Oct;30(10):1636–45

Thallium-201 SPECT imaging of brain tumors: methods and results [see comments] Kim KT, et al. **J Nucl Med** 1990 Jun;31(6):965–9 Comment in: J Nucl Med 1990 Jun;31(6):969–71.

SPECT studies of brain tumors with L-3-[123I] iodo-alpha-methyl tyrosine: comparison with PET, 124IMT and first clinical results. Langen KJ, et al. **J Nucl Med** 1990 Mar;31(3):281–6

[11C]L-methionine uptake in gliomas. Derlon JM, et al. **Neurosurgery** 1989 Nov;25(5):720–8

Three-dimensional comparison of peripheral benzodiazepine binding and histological findings in rat brain tumor. Ikezaki K, et al. **Neurosurgery** 1990 Jul;27(1):78–82

Radioimaging of human malignant gliomas using indium-labelled monoclonal antibodies. Bergh J, et al. **Nucl Med Commun** 1990 Jun;11(6):437–44

PET and SPECT in brain tumors. Biersack HJ, et al. **Nuklearmedizin** 1990 Mar;29(2):82

Two-phase [11C]L-methionine PET in childhood brain tumors. O'Tuama LA, et al. **Pediatr Neurol** 1990 May–Jun; 6(3):163–70

Cerebral blood flow measurements with HMPAO- and HIPDM-SPECT in brain tumors: basic rCBF studies. Maier-Hauff K, et al. **Psychiatry Res** 1989 Sep;29(3):341–2

[Scintigraphic detection of pheochromocytoma metastases. Morphologic control apropos of a case] Thibaut I, et al. **Ann Pathol** 1989;9(4):271–4 (Eng. Abstr.) **(Fre)**

[Thallium-201 imaging of brain tumors using single photon emission CT] Araki Y, et al. **Kaku Igaku** 1989 Nov; 26(11):1363–9 (Eng. Abstr.) **(Jpn)**

[Value of 11C-methionine and PET in the diagnosis of low grade gliomas] Shishido F, et al. **Kaku Igaku** 1990 Apr; 27(4):293–302 (Eng. Abstr.) **(Jpn)**

[Single-photon emission-computed tomography with the Testascan multidetector gamma tomograph in neurologic practice] Liass FM, et al. **Med Radiol (Mosk)** 1990 Jun; 35(6):3–8 (Eng. Abstr.) **(Rus)**

RADIOTHERAPY

"Rubral" tremor following radiation of a pineal region vascular hamartoma. Pomeranz S, et al. **Acta Neurochir (Wien)** 1990;103(1–2):79–81

Radiation-induced cerebral aneurysms. Scodary DJ, et al. **Acta Neurochir (Wien)** 1990;102(3–4):141–4

Fractionated proton radiation therapy of cranial and intracranial tumors. Austin-Seymour M, et al. **Am J Clin Oncol** 1990 Aug;13(4):327–30

Hyperfractionated radiotherapy for children with brainstem gliomas: a pilot study using 7,200 cGy. Packer RJ, et al. **Ann Neurol** 1990 Feb;27(2):167–73

Application of intraoperative radiation therapy to refractory cancers. Abe M, et al. **Ann Radiol (Paris)** 1989;32(6):493–4

Reaction of neoplasm and brain to laser. Rosomoff HL, et al. **Arch Neurol** 1966 Feb;14(2):143–8

Spinal seeding in cranial germinoma [letter] Brada M, et al. **Br J Cancer** 1990 Feb;61(2):339–40

Back to the future—radiotherapy in high grade gliomas. Brada M. **Br J Cancer** 1989 Jul;60(1):1–4 (48 ref.)

Neoplastic meningitis from a pineal tumour treated by antibody-guided irradiation via the intrathecal route. Coakham HB, et al. **Br J Neurosurg** 1988;2(2):199–209

Stereotactic LINAC radiosurgery. Hitchcock E, et al. **Br J Neurosurg** 1989;3(3):305–12

Critical appraisal of experimental radiation modalities for malignant astrocytomas. Laperriere NJ. **Can J Neurol Sci** 1990 May;17(2):199–208 (91 ref.)

Stereotaxic irradiation of brain tumors. Larson DA, et al. **Cancer** 1990 Feb 1;65(3 Suppl):792–9 (82 ref.)

Low-grade cerebral astrocytomas. Survival and quality of life after radiation therapy. North CA, et al. **Cancer** 1990 Jul 1;66(1):6–14

Improved survival rate in primary intracranial lymphoma treated by high-dose radiation and systemic vincristine-doxorubicin-cyclophosphamide-prednisolone chemotherapy. Shibamoto Y, et al. **Cancer** 1990 May 1; 65(9):1907–12

Boron neutron capture therapy of cancer. Barth RF, et al. **Cancer Res** 1990 Feb 15;50(4):1061–70 (89 ref.)

Dosimetric model for antibody targeted radionuclide therapy of tumor cells in cerebrospinal fluid. Millar WT, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):1043s–1048s

Radiation treatment of brain tumors: concepts and strategies. Marks JE. **Crit Rev Neurobiol** 1989;5(2):93–112 (72 ref.)

Do visual evoked potentials detect neural damage in children treated for cancer? Verity CM, et al. **Dev Med Child Neurol** 1990 Jun;32(6):481–92

Iodine-125-labeled anti-epidermal growth factor receptor-425 in the treatment of glioblastoma multiforme. A pilot study. Brady LW, et al. **Front Radiat Ther Oncol** 1990;24:151–60; discussion 161–5

In vitro radiation responses of human intracranial meningiomas & their modifications by 2-deoxy-D-glucose. Dwarakanath BS, et al. **Indian J Med Res** 1990 Jun; 92:183–8

In honor of Dr. H. Julian G. Bloom. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):715–811

Boron neutron capture enhancement of 252Cf brachytherapy. Beach JL, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun; 18(6):1421–7

The treatment and long-term prognosis of children with intracranial tumors: a study of 610 cases, 1950–1981. Bloom HJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr; 18(4):723–45

Management of primary cerebral lymphoma with initial chemotherapy: preliminary results and comparison with patients treated with radiotherapy alone. Brada M, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):787–92

Radiation therapy for intracranial germinoma: the case for limited volume treatment. Dattoli MJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):429–33

Pineal and CNS germ cell tumors: Royal Marsden Hospital experience 1962–1987. Dearnaley DP, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):773–81

Energy linked modifications of the radiation response in a human cerebral glioma cell line. Dwarkanath BS, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):1033–40

MRI treatment planning for CNS neoplasm: graphic display of target volume using boxed cursor. Fortier GA, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul;19(1):179–82

Intra-arterial bromodeoxyuridine radiosensitization of malignant gliomas. Hegarty TJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):421–8

The influence of extent and local management on the outcome of radiotherapy for brain metastases. Hoskin PJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul;19(1):111–5

Long-term psychological effects in children treated for intracranial tumors. Jannoun L, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):747–53

Combination of radiation therapy and intracranial bleomycin in the 9L rat brain tumor model. Kimler BF, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1115–21

Radiation Therapy Oncology Group (RTOG) survival data on anaplastic astrocytomas of the brain: does a more aggressive form of treatment adversely impact survival? [see comments] Laramore GE, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1351–6 Comment in: Int J Radiat Oncol Biol Phys 1989 Dec;17(6):1357–8.

Neutron radiotherapy for high grade gliomas: the search for the elusive therapeutic window [comment] Laramore GE. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):493–5 (14 ref.) Comment on: Int J Radiat Oncol Biol Phys 1990 Aug;19(2):409–16.

Survival and quality of life after interstitial implantation of removable high-activity iodine-125 sources for the treatment of patients with recurrent malignant gliomas. Leibel SA, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec; 17(6):1129–39

Chemoradiation in brain tumors: assets vs. adverse effects [editorial; comment] Levin VA. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1357–8 Comment on: Int J Radiat Oncol Biol Phys 1989 Dec;17(6):1351–6.

Shielding requirements on-site loading and acceptance testing on the Leksell gamma knife. Maitz AH, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb;18(2):469–76

Univariate and multivariate statistical analysis of high-grade gliomas: the relationship of radiation dose and other prognostic factors. Miller PJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):275–80

Failure of accelerated neutron therapy to control high grade astrocytomas. Saroja KR, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1295–7

Radiotherapy for high grade gliomas. Sheline GE. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):793–803 (53 ref.)

Radiotherapeutic considerations in the treatment of hemangioblastomas of the central nervous system. Smalley SR, et al. **Int J Radiat Oncol Biol Phys** 1990 May; 18(5):1165–71

A CT-based computerized treatment planning system for I-125 stereotactic brain implants. Weaver K, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb;18(2):445–54

Low grade glioma of the cerebral hemispheres in adults: a retrospective analysis of 88 cases. Whitton AC, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):783–6

Radiosurgery for malignant brain tumors [editorial; comment] Gutin PH, et al. **J Clin Oncol** 1990 Apr; 8(4):571–3 Comment on: J Clin Oncol 1990 Apr;8(4):576–82.

Ototoxicity of preradiation cisplatin for children with central nervous system tumors. Kretschmar CS, et al. **J Clin Oncol** 1990 Jul;8(7):1191–8

The treatment of recurrent brain metastases with stereotactic radiosurgery [see comments] Loeffler JS, et al. **J Clin Oncol** 1990 Apr;8(4):576–82 Comment in: J Clin Oncol 1990 Apr;8(4):571–3.

The effects of irradiation on major histocompatibility complex expression and lymphocytic infiltration in the normal rat brain and the 9L gliosarcoma brain tumor model. Wen P, et al. **J Neuroimmunol** 1990 May; 27(2–3):239–44

Focal brain radiotherapy [editorial] Plowman PN. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):541

Postoperative radiotherapy and radiotherapy combined with CCNU chemotherapy for treatment of brain gliomas [comment] Krouwer D, et al. **J Neurooncol** 1990 Apr; 8(2):189–91 Comment on: J Neurooncol 1988 Nov;6(3):285–91.

Postoperative radiotherapy and radiotherapy combined with CCNU chemotherapy for treatment of brain gliomas [letter] Trojanowski T, et al. **J Neurooncol** 1990 Feb;8(1):93–4

Primary central nervous system lymphomas: natural history and response to radiation therapy in 55 patients with acquired immunodeficiency syndrome. Baumgartner JE, et al. **J Neurosurg** 1990 Aug;73(2):206–11

A controlled study of efficacy of interstitial or external irradiation in a virus-induced brain-tumor model in rats [see comments] el-Hennawi Y, et al. **J Neurosurg** 1989 Dec; 71(6):898–902 Comment in: J Neurosurg 1990

Jun;72(6):983–4.
The long-term side effects of radiation therapy for benign brain tumors in adults. al-Mefty O, et al. **J Neurosurg** 1990 Oct;73(4):502–12 (163 ref.)
Enhancement of the efficacy of x-irradiation by pentobarbital in a rodent brain–tumor model. Olson JJ, et al. **J Neurosurg** 1990 May;72(5):745–8
External vs. interstitial irradiation [letter; comment] Williams JA. **J Neurosurg** 1990 Jun;72(6):983–4 Comment on: J Neurosurg 1989 Dec;71(6):898–902.
Interstitial irradiation of cerebral gliomas in childhood by permanently implanted 125-iodine—preliminary results. Voges J, et al. **Klin Padiatr** 1990 Jul–Aug;202(4):270–4
Tissue characterization of brain tumors during and after pion radiation therapy. Boesiger P, et al. **Magn Reson Imaging** 1990;8(4):491–7
Epithermal neutron capture therapy: a new modality for the treatment of glioblastoma and melanoma metastatic to the brain. Allen BJ. **Med J Aust** 1990 Sep 3;153(5):296–8
Controversy in the management of optic pathway gliomas. 29 patients treated with radiation therapy at Baylor College of Medicine from 1967 through 1987. Easley JD, et al. **Neurofibromatosis** 1988;1(4):248–51
Radiation-induced brain damage in children—histological analysis of sequential tissue changes in 34 autopsy cases. Oi S, et al. **Neurol Med Chir (Tokyo)** 1990 Jan;30(1):36–42
The role of radiation therapy following resection of single brain metastasis from melanoma. Hagen NA, et al. **Neurology** 1990 Jan;40(1):158–60
Stevens-Johnson syndrome in a patient receiving cranial irradiation and carbamazepine. Khé HX, et al. **Neurology** 1990 Jul;40(7):1144–5
Interstitial brachytherapy for malignant brain tumors: preliminary results. Bernstein M, et al. **Neurosurgery** 1990 Mar;26(3):371–9; discussion 379–80
Boron neutron capture therapy of a rat glioma. Clendenon NR, et al. **Neurosurgery** 1990 Jan;26(1):47–55
Selective uptake of hematoporphyrin derivative into human cerebral glioma. Hill JS, et al. **Neurosurgery** 1990 Feb; 26(2):248–54
Gamma knife surgery for recurrent solitary metastasis of a cerebral hypernephroma: case report. Lindquist C. **Neurosurgery** 1989 Nov;25(5):802–4
L-buthionine-sulfoximine-mediated radiosensitization in experimental interstitial radiotherapy of intracerebral D-54 MG glioma xenografts in athymic mice. Lippitz BE, et al. **Neurosurgery** 1990 Feb;26(2):255–60
On the efficacy of radiotherapy for lymphomas in AIDS patients [letter] Lampenfeld M. **Oncology (Williston Park)** 1987 Oct;1(8):52
The role of stereotactic radiosurgery in the management of intracranial tumors. Loeffler JS, et al. **Oncology (Williston Park)** 1990 Mar;4(3):21–31; discussion 32, 37, 41
A case of ocular reticulum cell sarcoma responded to radiation therapy. Ohishi Y, et al. **Ophthalmologica** 1989; 199(2–3):111–5
Role of stereotactic radiosurgery with a linear accelerator in treatment of intracranial arteriovenous malformations and tumors in children. Loeffler JS, et al. **Pediatrics** 1990 May;85(5):774–82
An equivalent thermal neutron fluence detector for boron neutron capture therapy. Blue TE, et al. **Phys Med Biol** 1989 Sep;34(9):1301–7
Cerebral metastases: value of reirradiation in selected patients. Cooper JS, et al. **Radiology** 1990 Mar;174(3 Pt 1):883–5
Small-field stereotactic external-beam radiation therapy of intracranial lesions: fractionated treatment with a fixed-halo immobilization device. Schwade JG, et al. **Radiology** 1990 Aug;176(2):563–5
Radiotherapy for tumours of the pineal region and suprasellar germinomas. Glanzmann C, et al. **Radiother Oncol** 1989 Sep;16(1):31–40
Pion therapy at TRIUMF. Treatment results for astrocytoma grades 3 and 4: a pilot study. Goodman GB, et al. **Radiother Oncol** 1990 Jan;17(1):21–8
Anaplastic astrocytoma and glioblastoma: pion irradiation with the dynamic conformation technique at the Swiss Institute for Nuclear Research (SIN). Greiner R, et al. **Radiother Oncol** 1990 Jan;17(1):37–46
A non-invasive method for fractionated stereotactic irradiation of brain tumors with linear accelerator. Hariz MI, et al. **Radiother Oncol** 1990 Jan;17(1):57–72
Stereotactic radiosurgery of the brain using a standard linear accelerator: a study of early and late effects. Loeffler JS, et al. **Radiother Oncol** 1990 Apr;17(4):311–21
Radiotherapy for tumours of the pineal region and suprasellar germinomas (by Glanzmann and Seelentag) [letter] Neuwelt EA. **Radiother Oncol** 1989 Sep;16(1):79–80
Prognostic factors in patients with brain metastases from lung carcinoma: preliminary result of the second trial. Chatani M, et al. **Strahlenther Onkol** 1990 Aug;166(8):562–7
Combined radiosurgery and external radiotherapy of intracranial germinomas. Casentini L, et al. **Surg Neurol** 1990 Aug;34(2):79–86
Stereotactic radiosurgery of small intracranial tumors: neuropathological correlation in three patients. Thompson BG, et al. **Surg Neurol** 1990 Feb;33(2):96–104
[CT-assisted manual afterloading using 198-gold seeds in intracerebral tumors] Glaser FH, et al. **Radiobiol Radiother (Berl)** 1989;30(4):378–83 (Ger)
[Fast response of an olfactory meningioma to radiotherapy] Gademann G, et al. **ROFO** 1990 Jul;153(1):109–10 (Ger)
[Use of 3-dimensional magnetic resonance tomography for radiation planning of circumscribed brain tumors] Atzinger A, et al. **Rontgenpraxis** 1989 Oct;42(10):351–3 (Ger)
[Palliative radiotherapy of brain metastases of solid tumors: experiences with high doses] Glanzmann C. **Strahlenther Onkol** 1990 Feb;166(2):119–24 (Eng. Abstr.) (Ger)
[A simple method for MRI-assisted radiotherapy planning in brain tumors] Just M, et al. **Strahlenther Onkol** 1990 Feb;166(2):143–6 (Eng. Abstr.) (Ger)
[The value of fractionated afterloading therapy in the treatment of inoperable malignant brain tumor] Sparenberg A, et al. **Strahlenther Onkol** 1990 Apr;166(4):251–5 (Eng. Abstr.) (Ger)
[Interstitial brachytherapy in malignant gliomas] Hoshino T. **Gan No Rinsho** 1989 Sep;35(11):1355–61 (28 ref.) (Eng. Abstr.) (Jpn)
[Accelerated fractionation in malignant gliomas] Kanehira C, et al. **Gan No Rinsho** 1989 Sep;35(11):1363–8 (Eng. Abstr.) (Jpn)
[Analysis of PO2 in brain tumor and effectiveness of PFC (perfluorochemicals) to increase intratumoral PO2, blood flow and its clinical use] Kayama T, et al. **Gan No Rinsho** 1989 Oct;35(13):1548–53 (38 ref.) (Eng. Abstr.) (Jpn)
[Radiotherapy of malignant glioma—prospective randomized clinical study of whole brain vs local irradiation] Kita M, et al. **Gan No Rinsho** 1989 Sep;35(11):1289–94 (Eng. Abstr.) (Jpn)
[Chemical modifiers in radiotherapy] Nagashima T, et al. **Gan No Rinsho** 1989 Sep;35(11):1369–71 (21 ref.) (Eng. Abstr.) (Jpn)
[Complication of irradiation in brain tumors] Ono Y, et al. **Gan No Rinsho** 1989 Sep;35(11):1347–53 (Eng. Abstr.) (Jpn)
[Results of conventional radiothe. apy in malignant gliomas:] Shibamoto Y, et al. **Gan No Rinsho** 1989 Sep;35(11):1240–6 (Eng. Abstr.) (Jpn)
[Progressive mental deterioration after radiotherapy in adult patients with brain tumors] Takeda N, et al. **Gan No Rinsho** 1989 Sep;35(11):1330–8 (Eng. Abstr.) (Jpn)
[Autopsy cases of glioblastoma multiforme: treatment results of high-dose fractionated radiation therapy and CT scan findings] Tamura M, et al. **Gan No Rinsho** 1989 Sep; 35(11):1339–46 (Eng. Abstr.) (Jpn)
[Current status of radiation therapy in the treatment of malignant glioma:] Tanaka Y, et al. **Gan No Rinsho** 1989 Sep;35(11):1233–9 (Eng. Abstr.) (Jpn)
[The study of 201Tl, 123I-IMP-SPECT before and after radiation therapy of brain tumor] Arai M, et al. **Kaku Igaku** 1990 Mar;27(3):279–83 (Eng. Abstr.) (Jpn)
[Intraoperative radiation therapy for malignant glioma] Sakai N, et al. **Neurol Med Chir (Tokyo)** 1989 Apr;29(4):312–8 (Eng. Abstr.) (Jpn)
[A case of double primary malignancy of intracranial germinoma and thymoma controlled by radiotherapy] Okumura T, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Apr 20;25(4):821–5 (Eng. Abstr.) (Jpn)
[Radiation therapy and diagnosis of primary malignant lymphoma of the brain] Ishino Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 May 25; 50(5):519–26 (Eng. Abstr.) (Jpn)
[Delayed effects of radiation of patients with germ-cell tumor, with special to cerebral blood flow] Sakai N, et al. **No To Shinkei** 1990 Feb;42(2):161–6 (Eng. Abstr.) (Jpn)
[Results of adjuvant radiotherapy in patients with highly differentiated cerebral astrocytoma after non-radical surgery] Gliński B. **Nowotwory** 1989 Jul–Dec;39(3–4):191–5 (Eng. Abstr.) (Pol)
[Radiation and combined treatment of anaplastic neuroepithelial neoplasms] Ragalshene VN, et al. **Med Radiol (Mosk)** 1989 Dec;34(12):30–6 (Eng. Abstr.) (Rus)
[The radiation therapy of experimental brain tumors by using the radiosensitizing preparation xanthobin (8-bromocaffeine)] Vartanian LP, et al. **Med Radiol (Mosk)** 1989 Nov;34(11):82–3 (Rus)
[Dynamics of neurological symptoms during immediate and long-term periods after radiotherapy of patients with brain metastases of malignant tumors] Shcherbenko OI, et al. **Zh Nevropatol Psikhiatr** 1989;89(12):36–8 (Eng. Abstr.) (Rus)
[Radiotherapy planning in malignant cerebral tumors using computer tomography] Kostić-Radović F, et al. **Med Arh** 1985;39(6):257–60 (Eng. Abstr.) (Scr)

REHABILITATION

[Many-year survival after surgical treatment of glioblastoma multiforme. Report of 2 cases] Zaręba A, et al. **Neurol Neurochir Pol** 1989 Jul–Dec;23(4–6):368–72 (Eng. Abstr.) (Pol)

SECONDARY

Meningeal carcinomatosis as the presenting manifestation of tumors of unknown origin. Ringenberg QS, et al. **Acta Cytol** 1990 Jul–Aug;34(4):590–2
Invasion of the cavernous sinus by medial sphenoid meningioma—"radical" surgery and recurrence. Kleinpeter G, et al. **Acta Neurochir (Wien)** 1990;103(3–4):87–91
Immunohistochemical study of IOT-10 natural killer cells in brain metastases. Vaquero J, et al. **Acta Neurochir (Wien)** 1990;104(1–2):17–20
Choroid plexus carcinoma—report of a case with metastases within the central nervous system. Bennedbaek O, et al. **Acta Oncol** 1990;29(2):241–3 (32 ref.)
A computed tomography study on formation, propagation, and resolution of edema fluid in metastatic brain tumors. Ito U, et al. **Adv Neurol** 1990;52:459–68
Neuroimaging of disseminated germ cell neoplasms. Mathews VP, et al. **AJNR** 1990 Mar–Apr;11(2):319–24
Detection of brain metastases: comparison of contrast-enhanced MR with unenhanced MR and enhanced CT. Sze G, et al. **AJNR** 1990 Jul–Aug; 11(4):785–91
Neuroimaging of disseminated germ cell neoplasms. Mathews VP, et al. **AJR Am J Roentgenol** 1990 Jun;154(6):1299–304
Cerebral metastases in pleural mesothelioma [letter; comment] Huncharek M, et al. **Am J Clin Oncol** 1990 Apr; 13(2):180–1 Comment on: Am J Clin Oncol 1989 Jun;12(3):222–8.
A hyperdense intracranial metastatic carcinoid tumor. Gordon DL, et al. **Am J Med** 1990 Mar;88(3):314–6
Regional growth of different human melanomas as metastases in the brain of nude mice. Schackert G, et al. **Am J Pathol** 1990 Jan;136(1):95–102
Presumed choroidal metastasis of Merkel cell carcinoma. Small KW, et al. **Ann Ophthalmol** 1990 May;22(5):187–90
The response of cerebral metastases in small cell lung cancer to systemic chemotherapy. Twelves CJ, et al. **Br J Cancer** 1990 Jan;61(1):147–50
Monoclonal antibody immunophenotyping of solitary cerebral metastases with unknown primary sites. Clark WC, et al. **Br J Neurosurg** 1989;3(5):591–5
Single brain metastasis of non-small cell lung carcinoma. Study of survival among 54 patients. Demange L, et al. **Br J Neurosurg** 1989;3(1):81–7
Subdural haematoma caused by metastatic dural carcinomatosis. Jamjoom AB, et al. **Br J Neurosurg** 1987; 1(3):385–8
Metastatic carcinoid tumour of the CNS from two different primary sites. Saleh J, et al. **Br J Neurosurg** 1987;1(2):281–4
Comparison of spin echo T1-weighted and FLASH 90 degrees gadolinium-enhanced magnetic resonance imaging in the detection of cerebral metastases. Cherryman G, et al. **Br J Radiol** 1990 Sep;63(753):712–5
The role of the histologic subclassification of tumor cells in patients with small cell carcinoma of the lung and central nervous system metastases. Twijnstra A, et al. **Cancer** 1990 Apr 15;65(8):1812–5
Palliative radio-chemotherapy with ifosfamide and BCNU for breast cancer patients with cerebral metastases. A 5-year experience. Lange OF, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S78–80
Progression of chromosome abnormalities after radiation therapy in a patient with Askin's tumor. Sawyer JR, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):89–94
Genetic origin of a trophoblastic choriocarcinoma. Chaganti RS, et al. **Cancer Res** 1990 Oct 1;50(19):6330–3
Brain metastases in patients with limited small cell lung cancer achieving complete remission. Correlation with TNM staging. Ichinose Y, et al. **Chest** 1989 Dec; 96(6):1332–5
Cerebral deposits of carcinoid tumour. Butler EG, et al. **Clin Exp Neurol** 1989;26:213–7
Merkel cell carcinoma. Long term survival in a patient with proven brain metastasis and presumed choroid metastasis. Alexander E 3d, et al. **Clin Neurol Neurosurg** 1989; 91(4):317–20
Leptomeningeal plasmacytosis. Case report and considerations on treatment. Schiphof PR, et al. **Clin Neurol Neurosurg** 1989;91(4):355–9 (34 ref.)
Intracerebral uptake of Tc-99m labeled antimelanoma antibodies. Schaling DF, et al. **Clin Nucl Med** 1990 Jan; 15(1):32–3
Secondary tumors of the brain (a review). Wilson CB, et al. **Dis Nerv Syst** 1967 Jul;28(7 Pt 1):433–40
Creatine kinase-BB in the cerebrospinal fluid as a marker of CNS metastases and leptomeningeal carcinomatosis in patients with breast cancer. Bach F, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1703–9
Brain metastases in epithelial ovarian carcinoma; two case reports. Piura B, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jul–Aug; 36(1–2):203–8 (11 ref.)
Assessing resectability of lung cancer: the role of computed tomography of the mediastinum, upper abdomen and head. Lähde S, et al. **Eur J Radiol** 1990 Jan–Feb;10(1):48–55
Fatal cerebral herniation from brain metastasis following fiberoptic endoscopy [letter] Mohandas KM, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):587–8
Cerebral metastasis of endometrial carcinoma. Brezinka C, et al. **Gynecol Oncol** 1990 Aug;38(2):278–81
Intracerebral choriocarcinoma. Jones WB, et al. **Gynecol Oncol** 1990 Aug;38(2):234–43
Secondary central nervous system involvement by non-Hodgkin's lymphoma: the risk factors. Liang R, et al. **Hematol Oncol** 1990 May–Jun;8(3):141–5
Unique patterns of brain metastasis produced by different human carcinomas in athymic nude mice. Schackert G,

et al. **Int J Cancer** 1989 Nov 15;44(5):892–7

Relapse in the central nervous system in melanoma patients successfully treated with biomodulators. Mitchell MS. **J Clin Oncol** 1989 Nov;7(11):1701–9

Long-term survival of lung cancer with brain metastasis. Amornmarn R, et al. **J Fla Med Assoc** 1990 Jul;77(7):659–62

Fatal pontine metastasis: clinical, CT, MRI and pathological correlates. Zachariah SB, et al. **J Fla Med Assoc** 1989 May; 76(5):457–60

CT findings of brain metastases. Khanjanasthiti P, et al. **J Med Assoc Thai** 1989 Jul;72(7):361–70

Metastatic testicular cancer and extragonadal germ cell tumor presenting with neurological symptoms. Borge N, et al. **J Neurooncol** 1990 Apr;8(2):145–8

Plasma carcinoembryonic antigen as an indicator of cerebral metastases. Eden EA, et al. **J Neurooncol** 1990 Jun; 8(3):281–7

Small cell carcinoma of the large intestine presenting as central nervous systems signs and symptoms. Two case reports with literature review. Hussein AM, et al. **J Neurooncol** 1990 Jun;8(3):269–74 (17 ref.)

Adoptive immunotherapy of intracerebral metastases in mice. McCutcheon IE, et al. **J Neurosurg** 1990 Jan;72(1):102–9

Cardiac myxoma metastasizing to the brain. Case report. Ng HK, et al. **J Neurosurg** 1990 Feb;72(2):295–8 (26 ref.)

Metastatic intracranial carcinoid with immunohistochemical observation. Case report. Ozawa T, et al. **J Neurosurg** 1990 Jul;73(1):130–4

Cerebral metastasis from angiosarcoma of the heart. Case report. Vaquero J, et al. **J Neurosurg** 1990 Oct;73(4):633–5

Leiomyosarcoma metastatic to the brain with prolonged survival. Vaquero J, et al. **J Neurosurg Sci** 1989 Jul–Sep; 33(3):291–2

Scintigraphic appearance of uncommon soft-tissue osteogenic sarcoma metastases. Arrington ER, et al. **J Nucl Med** 1990 May;31(5):679–81

Increased accumulation of N-isopropyl-(I-123)p-iodoamphetamine in bronchial carcinoid tumor. Nishizawa S, et al. **J Nucl Med** 1990 Feb; 31(2):240–2

Presentation of malignant pleural mesothelioma with cerebral metastases. McNaughton WM, et al. **J R Soc Med** 1990 Jul;83(7):466–7

The role of prophylactic cranial irradiation in regionally advanced non-small cell lung cancer. A Southwest Oncology Group Study. Rusch VW, et al. **J Thorac Cardiovasc Surg** 1989 Oct;98(4):535–9

Long-term survival after brain metastases from tracheal carcinoma. Ichinose Y, et al. **Jpn J Clin Oncol** 1990 Mar; 20(1):107–9

Cerebral metastasis presenting as migraine with aura [letter] Pepin EP. **Lancet** 1990 Jul 14;336(8707):127–8

Surgery in bronchial carcinoma with metastasis. Hasse J. **Lung** 1990;168 Suppl:1145–52

Surgery for single brain metastasis [letter; comment] Macdonald DR, et al. **N Engl J Med** 1990 Jul 12; 323(2):132–3 Comment on: N Engl J Med 1990 Feb 22;322(8):494–500.

A randomized trial of surgery in the treatment of single metastases to the brain [see comments] Patchell RA, et al. **N Engl J Med** 1990 Feb 22;322(8):494–500 Comment in: N Engl J Med 1990 Feb 22;322(8):544–5. Comment in: N Engl J Med 1990 Jul 12;323(2):132–3.

Surgery for metastases to the brain [editorial: comment] Posner JB. **N Engl J Med** 1990 Feb 22;322(8):544–5 Comment on: N Engl J Med 1990 Feb 22;322(8):494–500.

Spontaneous epidural hematoma secondary to dural metastasis from an ovarian carcinoma—case report. Anegawa S, et al. **Neurol Med Chir (Tokyo)** 1989 Sep; 29(9):854–6

Computed tomography and magnetic resonance imaging of nonhemorrhagic, metastatic melanoma of the brain—case report. Uozumi A, et al. **Neurol Med Chir (Tokyo)** 1990 Feb;30(2):143–6 (25 ref.)

Brain metastasis from transitional cell carcinoma of the bladder—case report. Wakisaka S, et al. **Neurol Med Chir (Tokyo)** 1990 Mar;30(3):188–90

Intracranial metastasis of a spinal cord astrocytoma—case report. Yamagami T, et al. **Neurol Med Chir (Tokyo)** 1990 Jan;30(1):69–73 (21 ref.)

Imaging of brain metastases. Comparison of computerized tomography (CT) and magnetic resonance imaging (MRI). Taphoorn MJ, et al. **Neuroradiology** 1989;31(5):391–5

Testicular germ cell tumor with pineal metastases. Delahunt B, et al. **Neurosurgery** 1990 Apr;26(4):688–91

Pheochromocytoma presenting as a skull metastasis with massive extracranial and intracranial extension. Grabel JC, et al. **Neurosurgery** 1990 Jul;27(1):134–6; discussion 136–7

Brain metastasis from malignant fibrous histiocytoma of the heart: case report. Itoyama Y, et al. **Neurosurgery** 1990 Apr;26(4):692–5 (30 ref.)

Brain metastasis from nonseminomatous germ cell tumors of the testis: case report and review of the role of surgery. Jelsma RK, et al. **Neurosurgery** 1989 Nov;25(5):814–9

Metastatic small cell carcinoma to the pineal body: case report. Kashiwagi S, et al. **Neurosurgery** 1989 Nov; 25(5):810–3

Calcified metastatic brain tumor. Tashiro Y, et al. **Neurosurgery** 1990 Jun;26(6):1065–70 (34 ref.)

Intracranial and orbital metastasis of hepatocellular carcinoma: report of two cases. Wakisaka S, et al. **Neurosurgery** 1990 May;26(5):863–6

A case of concomitant association of duodenal carcinoma and jejunal carcinoma with cerebral metastasis. Miyamoto M, et al. **Nippon Geka Hokan** 1989 Jul 1;58(4):360–7

Clinical features and treatment outcome of patients with epithelial carcinoma of the ovary metastatic to the central nervous system. Plaxe SC, et al. **Obstet Gynecol** 1990 Feb; 75(2):278–81

Local recurrence and intracerebral spread of squamous cell carcinoma of the scalp. Stern HS, et al. **Plast Reconstr Surg** 1990 Feb;85(2):284–8

Solitary cerebral metastasis from a papillary carcinoma of the thyroid. Goolden AW, et al. **Postgrad Med J** 1990 Feb; 66(772):127–9

Cerebral metastases: value of reirradiation in selected patients. Cooper JS, et al. **Radiology** 1990 Mar;174(3 Pt 1):883–5

Metastatic brain tumours in Northern Ireland: a retrospective review in a closed community with emphasis on short term quality of life. Chee CP, et al. **Singapore Med J** 1989 Dec; 30(6):546–9

Diffuse meningeal thickening associated with pleural mesothelioma [letter] Huncharek M, et al. **Thorax** 1990 Jul; 45(7):571

Metastatic brain neoplasms. Hinshaw DB Jr, et al. **Top Magn Reson Imaging** 1989 Mar;1(2):69–78

[Clinical analysis of metastatic carcinoma of the brain. Report of 234 cases] Huang JM. **Chung Hua Wai Ko Tsa Chih** 1989 Oct;27(10):620–2, 639–40 (Eng. Abstr.) **(Chi)**

[Paranoid symptoms caused by brain metastasis (letter)] Lund M. **Ugeskr Laeger** 1990 May 14;152(20):1462–3 **(Dan)**

[Paranoid symptoms caused by cerebral metastasis] Rasmussen NA, et al. **Ugeskr Laeger** 1990 Mar 5; 152(10):682 (Eng. Abstr.) **(Dan)**

[Cerebral metastasis disclosing thyroid cancer (letter)] Villette L, et al. **Ann Med Interne (Paris)** 1990;141(2):196–7 **(Fre)**

[The value of MRI in a case of cerebro-meningeal miliary carcinomatosis of melanotic origin] Marsot-Dupuch K, et al. **Ann Radiol (Paris)** 1989;32(4):293–7 (Eng. Abstr.) **(Fre)**

[Rupture of neoplastic intracranial aneurysm caused by metastatic uterine choriocarcinoma] Steimle R, et al. **Chirurgie** 1989;115(6):393–6; discussion 396–7 (30 ref.) (Eng. Abstr.) **(Fre)**

[Brain metastases: diagnostic and therapeutic strategy] Trillet V, et al. **Presse Med** 1989 Sep 30;18(30):1471–5 (24 ref.) (Eng. Abstr.) **(Fre)**

[Should a cancer of the bronchi be surgically treated after excision of a cerebral metastasis?] Degreef JM, et al. **Rev Mal Respir** 1989;6(5):429–34 (Eng. Abstr.) **(Fre)**

[Rhythmical myoclonus and tremor at rest disclosing mesencephalic metastasis] Rousseaux M, et al. **Rev Neurol (Paris)** 1990;146(4):283–7 (Eng. Abstr.) **(Fre)**

[Operation for brain metastases in the elderly patient] Schneider T. **Klin Wochenschr** 1990 Jun 5;68(11):576–80 (Eng. Abstr.) **(Ger)**

[Magnetic resonance tomography of cerebral metastases. The problem of an efficient sequence] Scharf J, et al. **Radiologe** 1990 May;30(5):242–4 **(Ger)**

[The role of inflammatory infiltrate as a prognostic criterion in cerebral metastases. Preliminary results] Bucciero A, et al. **Minerva Med** 1990 Mar;81(3):139–46 (Eng. Abstr.) **(Ita)**

[Nephroblastoma with prevalent rhabdomyosarcomatous component. Description of a case with early cerebral metastasis] Bolla G, et al. **Pediatr Med Chir** 1990 Jan–Feb; 12(1):87–90 (Eng. Abstr.) **(Ita)**

[Prognostic factors in patients with brain metastases from lung carcinoma] Chatani M, et al. **Gan No Rinsho** 1989 Oct;35(13):1596–601 (Eng. Abstr.) **(Jpn)**

[Brain metastases from carcinomas of the digestive organs—a comparative study with those from pulmonary carcinomas] Wakisaka S, et al. **Gan No Rinsho** 1989 Nov;35(14):1645–9 (Eng. Abstr.) **(Jpn)**

[Metastases to the brain—prognosis and surgical indications] Hayakawa T, et al. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 2):761–7 (Eng. Abstr.) **(Jpn)**

[A case of complete remission in brain metastasis from lung adenocarcinoma with EAP (etoposide, adriamycin, cisplatin)] Matsumoto S, et al. **Gan To Kagaku Ryoho** 1990 Sep;17(9):1933–6 (Eng. Abstr.) **(Jpn)**

[Metastatic brain tumors—recent trends] Takakura K. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 2):768–70 (0 ref.) **(Jpn)**

[Evaluation of recurrent metastatic brain tumor of lung cancer origin] Kitaoka K, et al. **Neurol Med Chir (Tokyo)** 1989 Oct;29(10):895–901 (Eng. Abstr.) **(Jpn)**

[Metastatic malignant lymphoma of the skull with extradural and extracranial extension. Case report] Yuki K, et al. **Neurol Med Chir (Tokyo)** 1989 Aug;29(8):762–6 (Eng. Abstr.) **(Jpn)**

[Histological atlas of brain tumors (12): Metastatic brain tumors] Nomura K. **No Shinkei Geka** 1990 May; 18(5):407–11 (14 ref.) **(Jpn)**

[A very rare autopsy case of metastatic brain tumor originating from ureteral cancer] Sakuma S, et al. **No Shinkei Geka** 1989 Sep;17(9):883–6 (Eng. Abstr.) **(Jpn)**

[Coexistence of multiple metastatic brain tumors from thyroid carcinoma and cerebral aneurysms] Yamamoto F, et al. **No Shinkei Geka** 1990 Apr;18(4):361–5 (Eng. Abstr.) **(Jpn)**

[Metastatic brain tumor in the elderly] Kawahata N, et al. **Rinsho Shinkeigaku** 1989 Sep;29(9):1106–9 (Eng. Abstr.) **(Jpn)**

[Malignant fibrous histiocytoma of the neck with metastases to the brain] Grigor'ev BA, et al. **Arkh Patol** 1989; 51(10):67–70 (Eng. Abstr.) **(Rus)**

[Intracranial hemorrhage in metastasis of hypernephroma] Gubskiĭ LV, et al. **Sov Med** 1990;(4):121–2 **(Rus)**

[Dementia caused by miliary cerebral metastasis of a hepatocarcinoma] Fontán A, et al. **Med Clin (Barc)** 1989 Oct 14;93(11):421–3 (Eng. Abstr.) **(Spa)**

[A 61-year-old male with headache, coffee-ground vomit, disorientation and dysarthria (clinical conference)] Rubiés-Prat J, et al. **Med Clin (Barc)** 1989 Nov 11; 93(15):588–95 **(Spa)**

[Surgical treatment of unique cerebral metastasis: survival factors] Fandiño J, et al. **Rev Clin Esp** 1990 Apr; 186(7):316–9 (Eng. Abstr.) **(Spa)**

[Cerebral recurrence in non-Hodgkin's lymphoma (letter)] García Alfonso P, et al. **Rev Clin Esp** 1990 Apr; 186(6):304–5 **(Spa)**

SECRETION

Precocious puberty in a seven-year-old boy due to human chorionic gonadotropin producing pineal tumor detected by nuclear magnetic resonance computed tomographic scanning. Takahashi H, et al. **Acta Paediatr Jpn Overseas Ed** 1990 Feb;32(1):88–93

Secretion of alpha 2-macroglobulin, alpha 2-antiplasmin, and plasminogen activator inhibitor-1 by glioblastoma multiforme in primary organ culture. Keohane ME, et al. **J Neurosurg** 1990 Aug;73(2):234–41

Capillary permeability factor secreted by malignant brain tumor. Role in peritumoral brain edema and possible mechanism for anti-edema effect of glucocorticoids. Ohnishi T, et al. **J Neurosurg** 1990 Feb;72(2):245–51

SURGERY

The effects of propofol on intracranial pressure and cerebral perfusion pressure in patients with brain tumors. Van Hemelrijck J, et al. **Acta Anaesthesiol Belg** 1989; 40(2):95–100

Per- and postoperative changes in the arterio-venous oxygen content difference (AVDO2) in patients subjected to craniotomy for cerebral tumours. Asmussen J, et al. **Acta Neurochir (Wien)** 1989;101(1–2):9–17

Long-term survival after removal of primary intracranial malignant melanoma. Case report. Nakagawa H, et al. **Acta Neurochir (Wien)** 1989;101(1–2):84–8

Stereotactic craniotomy and intraoperative lesion localisation using the Brown-Robert-Wells frame. Technical note. Sabin HI, et al. **Acta Neurochir (Wien)** 1990;102(3–4):137–40

The lateral position—dependant occipital approach—to pineal and medial occipitoparietal lesions. Technical note. Stone JL, et al. **Acta Neurochir (Wien)** 1990;102(3–4):133–6

Melanotic ganglioglioma of the pineal region. Hunt SJ, et al. **Acta Neuropathol (Berl)** 1989;79(2):222–5

Indications for surgery in the management of gliomas. Cohadon F. **Adv Tech Stand Neurosurg** 1990;17:189–234 (213 ref.)

Control of bleeding in extended skull base surgery. Leonetti JP, et al. **Am J Otol** 1990 Jul;11(4):254–9

Prognostic factors and management of intracranial ependymomas. Papadopoulos DP, et al. **Anticancer Res** 1990 May–Jun;10(3):689–92

The surgical management of intracranial tumours. Lye RH. **Br J Hosp Med** 1990 Jan;43(1):56–61 (39 ref.)

Nucleus caudalis DREZ for facial pain due to cancer [letter; comment] **Br J Neurosurg** 1990;4(1):81–2 Comment on: Br J Neurosurg 1989;3(1):45–9.

Computerised tomography guided preoperative localisation of small intracranial lesions. Chan KH, et al. **Br J Neurosurg** 1989;3(1):127–30

Stereotactic excision of deeply seated intracranial mass lesions. Hitchcock ER, et al. **Br J Neurosurg** 1989; 3(3):313–20

Primary melanoma of the dura mater. Macfarlane R, et al. **Br J Neurosurg** 1989;3(2):235–8

Intracranial epidermoid tumours: thirty-seven years of diagnosis and treatment. Zhou LF. **Br J Neurosurg** 1990; 4(3):211–6

Treatment of CNS neoplasms in childhood by the Pediatric Oncology Group. Cohen ME, et al. **Brain Dev** 1989; 11(6):360–7 (35 ref.)

Left occipital lobectomy and the preangular anatomy of reading. Greenblatt SH. **Brain Lang** 1990 May;38(4):576–95

Scalp infiltration with bupivacaine in paediatric brain surgery. Hartley E, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S129

Total intravenous anesthesia during intracranial surgery. Continuous propofol infusion in combination with either fentanyl or sufentanil. Jansen GF, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S128

Narcotic infusions facilitate emergence following neurosurgery: a double blind comparison of fentanyl and alfentanil infusions. Mutch WA, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S30

Surgery of large retrochiasmatic craniopharyngiomas in children. Ammirati M, et al. **Childs Nerv Syst** 1990 Jan; 6(1):13–7

Surgical treatment of intracranial dermoid and epidermoid

cysts in children. Fornari M, et al. **Childs Nerv Syst** 1990 Mar;6(2):66–70

Stereotactic location and delimitation of brain tumors in children. Longatti P, et al. **Childs Nerv Syst** 1989 Aug; 5(4):250–1

Intracranial ependymomas in children. Undjian S, et al. **Childs Nerv Syst** 1990 May;6(3):131–4

Mesencephalic haematoma, successful surgical evacuation. Case report. Jain VK, et al. **Clin Neurol Neurosurg** 1990; 92(2):159–63

Aggressive surgery for malignant supratentorial gliomas. Ciric I, et al. **Clin Neurosurg** 1990;36:375–83

Analysis of patterns of care of brain tumor patients in the United States: a study of the Brain Tumor Section of the AANS and the CNS and the Commission on Cancer of the ACS. Mahaley MS Jr, et al. **Clin Neurosurg** 1990; 36:347–52

Radical surgery for low-grade glioma. Salcman M. **Clin Neurosurg** 1990;36:353–66 (47 ref.)

Relief of seizures from a predominantly posterior temporal tumor with anterior temporal lobectomy. Sperling MR, et al. **Epilepsia** 1989 Sep–Oct;30(5):559–63

Surgical therapy in lung cancer with single brain metastasis. Torre M, et al. **Eur J Cardiothorac Surg** 1988;2(5):336–9

Monitoring of flash visual evoked potentials during neurosurgical operations. Cedzich C, et al. **Int Anesthesiol Clin** 1990 Summer;28(3):165–9 (29 ref.)

Patterns of second recurrence of malignant astrocytomas. Massey V, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb; 18(2):395–8

Intracranial granulocytic sarcoma (chloroma) in a nonleukemic patient. Yoon DH, et al. **J Korean Med Sci** 1987 Sep;2(3):173–8

The influence of the extent of surgery on the neurological function and survival in malignant glioma. A retrospective analysis in 243 patients. Vecht CJ, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):466–71

A stereotactic technique for volumetric interstitial implantation in the brain. Welsh D, et al. **J Neurosci Nurs** 1990 Aug;22(4):245–9

Mutism after posterior fossa surgery in children. Report of three cases. Ferrante L, et al. **J Neurosurg** 1990 Jun; 72(6):959–63 (12 ref.)

Transsphenoidal approach to infrasellar tumors involving the cavernous sinus. Hashimoto N, et al. **J Neurosurg** 1990 Oct; 73(4):513–7

Early postoperative seizures after posterior fossa surgery. Lee ST, et al. **J Neurosurg** 1990 Oct;73(4):541–4

Intracranial pressure monitoring in the posterior fossa: a preliminary report [see comments] Rosenwasser RH, et al. **J Neurosurg** 1989 Oct;71(4):503–5 Comment in: J Neurosurg 1990 May;72(5):832–3.

The subtemporal and preauricular infratemporal approach to intradural structures ventral to the brain stem. Sen CN, et al. **J Neurosurg** 1990 Sep;73(3):345–54

Control of extraneural metastasis of a primary intracranial nongerminomatous germ-cell tumor. Case report. Watterson J, et al. **J Neurosurg** 1989 Oct;71(4):601–4

Supratentorial anaplastic gliomas in adults. The prognostic importance of extent of resection and prior low-grade glioma. Winger MJ, et al. **J Neurosurg** 1989 Oct; 71(4):487–93

Total removal of craniopharyngiomas. Approaches and long-term results in 144 patients. Yaşargil MG, et al. **J Neurosurg** 1990 Jul;73(1):3–11

Management of nonsmall cell lung carcinoma with solitary brain metastasis. Read RC, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 2):884–90; discussion 890–1

The use of ultrasonic aspirator, Sonocut, for removal of brain tumours. Analysis of 26 consecutive cases. Kourtopoulos H, et al. **Neurochirurgia (Stuttg)** 1989 Sep;32(5):154–6

Intracranial chondrosarcoma—case report. Miyamori T, et al. **Neurol Med Chir (Tokyo)** 1990 Apr;30(4):263–7

Central neurocytoma—case report. Tamiya T, et al. **Neurol Med Chir (Tokyo)** 1990 Mar;30(3):178–83 (12 ref.)

Postoperative subarachnoid hemorrhage from an intracranial aneurysm after craniotomy for astrocytoma—case report. Yamada H, et al. **Neurol Med Chir (Tokyo)** 1989 Sep; 29(9):846–9 (15 ref.)

Perseveration in memory for figures after frontal lobe lesion. Vilkki J. **Neuropsychologia** 1989;27(8):1101–4

Subjective ordering, short-term memory, and the frontal lobes. Wiegersma S, et al. **Neuropsychologia** 1990;28(1):95–8

Surgical treatment of intramedullary tumors (spinal cord and medulla oblongata). Analysis of 16 cases. Ahyai A, et al. **Neurosurg Rev** 1990;13(1):45–52

Unusually long survival time after resection and irradiation of a brain metastasis from osteosarcoma. Niedeggen A, et al. **Neurosurg Rev** 1990;13(3):247–52

Loss of vision after transsphenoidal surgery. Barrow DL, et al. **Neurosurgery** 1990 Jul;27(1):60–8

Brain mapping techniques to maximize resection, safety, and seizure control in children with brain tumors. Berger MS, et al. **Neurosurgery** 1989 Nov;25(5):786–92

Multiple meningiomas of the fourth ventricle in infancy: case report. Díaz P, et al. **Neurosurgery** 1990 Jun;26(6):1057–60

Surgical removal of pontomesencephalic cavernous hemangiomas. Fahlbusch R, et al. **Neurosurgery** 1990 Mar; 26(3):449–56; discussion 456–7

The use of the potassium titanyl phosphate (KTP) laser in neurosurgery. Gamache FW Jr, et al. **Neurosurgery** 1990 Jun;26(6):1010–3; discussion 1013–4

Malignant teratoma of the cerebellopontine angle: case report. Iplikçioğlú AC, et al. **Neurosurgery** 1990 Jul; 27(1):137–9

Stereotactic craniotomy: methods and results using the Brown–Roberts–Wells stereotactic frame. Moore MR, et al. **Neurosurgery** 1989 Oct;25(4):572–7; discussion 577–8

Intraoperative localization of a cervicomedullary glioma from the killed end potential: illustrative case. Morioka T, et al. **Neurosurgery** 1990 Jun;26(6):1038–41

Management of cerebral astrocytomas in the adult [letter] [published erratum appears in Neurosurgery 1990 Jul;27(1):169] [comment] Nurick S. **Neurosurgery** 1990 Feb; 26(2):359–60 Comment on: Neurosurgery 1989 May;24(5):686–92.

Stereotactic guiding tube for open-system endoscopy: a new approach for the stereotactic endoscopic resection of intra-axial brain tumors. Otsuki T, et al. **Neurosurgery** 1990 Aug;27(2):326–30

Microsurgery of midbrain lesions. Pendl G, et al. **Neurosurgery** 1990 Apr;26(4):641–8

Laser-assisted microsurgical extirpation of a brain stem cavernoma: case report. Seifert V, et al. **Neurosurgery** 1989 Dec;25(6):986–90

An extreme lateral approach to intradural lesions of the cervical spine and foramen magnum. Sen CN, et al. **Neurosurgery** 1990 Aug;27(2):197–204

Adenoid cystic carcinoma with intracranial extension: report of three cases. Wakisaka S, et al. **Neurosurgery** 1990 Jun; 26(6):1060–5

Cranial base surgery center develops new surgical approaches [news] **Oncology (Williston Park)** 1988 Oct; 2(10):51

Stereotactic techniques in the management of cerebral neoplasms. Hirschfeld A. **Oncology (Williston Park)** 1989 Feb;3(2):25–32; discussion 32, 37–8, 40 (35 ref.)

Surgical management of brain metastases: how aggressive should we be? Moser RP, et al. **Oncology (Williston Park)** 1989 Jun;3(6):123–7; discussion 128, 134 (12 ref.)

Surgical resection of malignant brain tumors: who benefits? Salcman M. **Oncology (Williston Park)** 1988 Aug; 2(8):47–56, 59–60, 63

Stereotactic surgery in children. Pattisapu JV, et al. **Pediatr Neurosci** 1989;15(2):62–5

Management of craniopharyngiomas in children. Tomita T. **Pediatr Neurosci** 1988;14(4):204–11 (58 ref.)

Lymphocyte, T-cell, glycoprotein, and skin test responses to therapy of brain tumors. Meeker WR Jr, et al. **Surg Forum** 1978;29:520–2

Electromagnetic field focusing system in clinical neurosurgery—preliminary report. Patil A, et al. **Surg Neurol** 1990 Aug;34(2):94–100

Schwannomas of the falx. Vaquero J, et al. **Surg Neurol** 1990 Sep;34(3):160–3

Two surgically cured cases of subependymoma with emphasis on magnetic resonance imaging. Yamasaki T, et al. **Surg Neurol** 1990 May;33(5):329–35

Surgical treatment of brain metastases from renal cell carcinoma. Badalament RA, et al. **Urology** 1990 Aug; 36(2):112–7

Efficiency of the radio-chemo-surgical. Treatment in cerebral astrocytomas. Constantinovici A, et al. **Zentralbl Neurochir** 1989;50(2):109–14

[Surgical treatment of thalamic tumors] Xu WL. **Chung Hua Wai Ko Tsa Chih** 1989 Aug;27(8):468–9, 508–9 (Eng. Abstr.) **(Chi)**

[Stereotaxic technics with an open skull in the treatment of space-occupying brain lesions] Hirsch JF, et al. **Neurochirurgie** 1989;35(3):164–8 (Eng. Abstr.) **(Fre)**

[Total intravenous anesthesia using propofol and alfentanil in comparison with balanced anesthesia in neurosurgery] Van Aken H, et al. **Anasth Intensivther Notfallmed** 1990 Feb;25(1):54–8 (Eng. Abstr.) **(Ger)**

[Motor speech disorder after removal of a glioblastoma in the left hemisphere: Cortical disorder or apraxia?] Saltuari L, et al. **Folia Phoniatr (Basel)** 1989;41(6):292–6 (Eng. Abstr.) **(Ger)**

[Microsurgical resection of small brain tumor processes with stereotactic control] Kolenda H, et al. **Neurochirurgia (Stuttg)** 1989 Sep;32(5):141–5 (Eng. Abstr.) **(Ger)**

[Is extracranial metastatic malignant glioma iatrogenic?] Megele R, et al. **Neurochirurgia (Stuttg)** 1989 Sep; 32(5):157–9 (Eng. Abstr.) **(Ger)**

[Use of the laser in neurosurgery] Synowitz HJ, et al. **Z Arztl Fortbild (Jena)** 1990;84(6):267–71 **(Ger)**

[Surgical treatment of brain stem tumors] Konovalov AN. **Zentralbl Neurochir** 1989;50(2):72–4 (Eng. Abstr.) **(Ger)**

[New evaluation possibilities of therapeutic results in gliomas using computerized tomography] Kruminja GA. **Zentralbl Neurochir** 1989;50(1):48–54 (Eng. Abstr.) **(Ger)**

[Neuro-ophthalmologic findings following cerebral tumor excision in relation to topography and morphology] Pittasch D, et al. **Zentralbl Neurochir** 1989;50(2):75–7 (Eng. Abstr.) **(Ger)**

[EEG findings following cerebral surgery] Pittasch D, et al. **Zentralbl Neurochir** 1989;50(2):118–21 (Eng. Abstr.) **(Ger)**

[Ultrasonic examination of the brain (through an opening in the skull)] Barta M, et al. **Orv Hetil** 1989 Oct 15; 130(42):2259–62 (Eng. Abstr.) **(Hun)**

[The effect of craniotomy on lymphocyte subpopulations] Hori Y, et al. **Masui** 1990 Jan;39(1):75–80 (Eng. Abstr.) **(Jpn)**

[A case of ectopic large pituitary adenoma] Iwai Y, et al. **No Shinkei Geka** 1990 Jan;18(1):71–5 (15 ref.) (Eng. Abstr.) **(Jpn)**

[A case of embryonal carcinoma arising in the basal ganglia of the cerebrum] Maeda Y, et al. **No Shinkei Geka** 1990 Jul;18(7):675–80 (21 ref.) (Eng. Abstr.) **(Jpn)**

[A case of surgical excision of intracerebral cavernous angioma in a patient with thrombasthenia] Miyagawa Y, et al. **No Shinkei Geka** 1990 Feb;18(2):205–8 (Eng. Abstr.) **(Jpn)**

[Occipital transtentorial approach for pineal tumors by lateral-semiprone position] Tanaka R. **No Shinkei Geka** 1990 May;18(5):413–22 (28 ref.) **(Jpn)**

[Progress in the treatment of brain tumors in children] Magnoes B. **Tidsskr Nor Laegeforen** 1990 May 30; 110(14):1808 **(Nor)**

[Postoperative radiotherapy of glial tumors of the central nervous system] Kukolewska-Machnicka J, et al. **Neurol Neurochir Pol** 1989 Mar–Apr;23(2):128–31 (Eng. Abstr.) **(Pol)**

[Intraoperative intracranial hypotension syndrome] Kopliński A, et al. **Wiad Lek** 1989 Apr 1;42(7):470–2 (Eng. Abstr.) **(Pol)**

[Auditory evoked potentials in the monitoring of 15 laser microsurgeries of the brain stem] Pimenta LH, et al. **Arq Neuropsiquiatr** 1989 Dec;47(4):438–43 (Eng. Abstr.) **(Por)**

[Expansive mass of the posterior region of the 3d ventricle (tumors of the pineal region)] Spotti AR, et al. **Arq Neuropsiquiatr** 1989 Dec;47(4):491–5 (Eng. Abstr.) **(Por)**

[Turcot syndrome: a report of 2 cases] Vellutini EA, et al. **Arq Neuropsiquiatr** 1990 Mar;48(1):102–6 (Eng. Abstr.) **(Por)**

THERAPY

Induced hyperthermia in brain tissue: comparison between contact Nd:YAG laser system and automatically controlled high frequency current. Nowak G, et al. **Acta Neurochir (Wien)** 1990;102(1–2):76–81

Experimental determination of the force required for insertion of a thermoseed into deep brain tissues. Molloy JA, et al. **Ann Biomed Eng** 1990;18(3):299–313

Low-grade glioma. To treat or not to treat? Cairncross JG, et al. **Arch Neurol** 1989 Nov;46(11):1238–9

The treatment of low-grade glioma. Hachinski V. **Arch Neurol** 1989 Nov;46(11):1239

Adjuvant treatment of malignant brain tumours. Kaye AH. **Aust N Z J Surg** 1989 Nov;59(11):831–3 (10 ref.)

Endocrine disorders following treatment of childhood brain tumours. Livesey EA, et al. **Br J Cancer** 1990 Apr; 61(4):622–5

Non-surgical therapy for malignant brain tumours. Moseley RP, et al. **Br J Hosp Med** 1990 Jun;43(6):453–8

Photodynamic therapy of malignant brain tumours: a phase I/II trial. Kostron H, et al. **Br J Neurosurg** 1988;2(2):241–8

Photodynamic therapy of malignant brain tumours. Muller PJ, et al. **Can J Neurol Sci** 1990 May;17(2):193–8

Recurrent intracranial ependymomas in children. Survival, patterns of failure, and prognostic factors. Goldwein JW, et al. **Cancer** 1990 Aug 1;66(3):557–63

Malignant astrocytic gliomas in children. Marchese MJ, et al. **Cancer** 1990 Jun 15;65(12):2771–8

Advances and management of solid tumors in children. Nesbit ME Jr. **Cancer** 1990 Feb 1;65(3 Suppl):696–702 (43 ref.)

Primary lymphoma of the central nervous system. An unresolved therapeutic problem. Socié G, et al. **Cancer** 1990 Jan 15;65(2):322–6

Brain tumors. Malkin MG, et al. **Cancer Chemother Biol Response Modif** 1987;9:377–89 (40 ref.)

Brain tumors. Malkin MG, et al. **Cancer Chemother Biol Response Modif** 1988;10:355–75 (30 ref.)

Radioimmunotherapy of intracerebral human glioma xenografts with 131I-labeled F(ab')2 fragments of monoclonal antibody Mel-14. Colapinto EV, et al. **Cancer Res** 1990 Mar 15;50(6):1822–7

Comparison of cellular immunotherapies and anti-CD3 in the treatment of MCA-38-LD experimental hepatic metastases in C57BL/6 mice. Gallinger S, et al. **Cancer Res** 1990 Apr 15;50(8):2476–80

Adoptive immunotherapy of a rat glioma using lymphokine-activated killer cells and interleukin 2. Tzeng JJ, et al. **Cancer Res** 1990 Jul 15;50(14):4338–43

Primary lymphoma of the central nervous system. Fernandes P, et al. **Indian J Pediatr** 1989 Sep–Oct;56(5):663–6

Accuracy and precision of computer-simulated tissue temperatures in individual human intracranial tumours treated with interstitial hyperthermia. DeFord JA, et al. **Int J Hyperthermia** 1990 Jul–Aug;6(4):755–69

Studies on high grade cerebral gliomas. Bleehen NM. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):811–3 (13 ref.)

Key problems in the management of children with brain tumors. D'Angio GJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):805–10 (43 ref.)

Pineal region germinomas in childhood treatment considerations. Jenkin D, et al. **Int J Radiat Oncol Biol Phys** 1990 Mar;18(3):541–5

Chemotherapy and brain tumors: a reply to Levin [letter] Laramore GE. **Int J Radiat Oncol Biol Phys** 1990 Jan; 18(1):268–9

Treatment planning of template-guided stereotaxic brain implants. Lulu BA, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):951–5

Mucocutaneous complications of intraarterial 5-bromodeoxyuridine and radiation. McCuaig CC, et al. **J Am Acad Dermatol** 1989 Dec;21(6):1235–40

Phase II trial of Serratia marcescens extract in recurrent malignant astrocytoma. Jaeckle KA, et al. **J Clin Oncol** 1990 Aug;8(8):1408–18

Neurodevelopmental status of infants and young children treated for brain tumors with preirradiation chemotherapy. Mulhern RK, et al. **J Clin Oncol** 1989 Nov;7(11):1660–6

Massive orbital and intracranial teratoma in the newborn: a case report. Neiger R, et al. **J Med Assoc Ga** 1989 Dec; 78(12):811–3

Proposals for evaluation of toxic effects associated with treatment of gliomas: a call for action [letter] Choucair AK. **J Natl Cancer Inst** 1990 Mar 21;82(6):531–2

Intralesional immunotherapy of brain tumors with combined Corynebacterium parvum and recombinant interleukin-2 in mice. Conley FK, et al. **J Natl Cancer Inst** 1990 Aug 15;82(16):1340–4

New approaches tried in treating brain tumors [news] McIntosh H. **J Natl Cancer Inst** 1989 Nov 1;81(21):1602–4

A New York neurosurgeon turns to multi-modality therapy to treat brain cancer [news] Mahaney FX Jr. **J Natl Cancer Inst** 1990 Jun 6;82(11):900–1

The combined use of radiation therapy and lonidamine in the treatment of brain metastases. DeAngelis LM, et al. **J Neurooncol** 1989 Sep;7(3):241–7

Fatal necrotizing encephalopathy complicating treatment of malignant gliomas with intra-arterial BCNU and irradiation: a pathological study. Rosenblum MK, et al. **J Neurooncol** 1989 Sep;7(3):269–81

Irradiation and CCNU in glioma therapy [letter; comment] McDermott M, et al. **J Neurosurg** 1989 Nov;71(5 Pt 1):791–3 Comment on: J Neurosurg 1989 Jan;70(1):18–23.

National survey of patterns of care for brain-tumor patients. Mahaley MS Jr, et al. **J Neurosurg** 1989 Dec;71(6):826–36

Systemic beta-interferon therapy for recurrent gliomas: a brief report. Mahaley MS Jr, et al. **J Neurosurg** 1989 Nov; 71(5 Pt 1):639–41

Hyperthermia catheter implantation and therapy in the brain. Technical note. Marchosky JA, et al. **J Neurosurg** 1990 Jun;72(6):975–9

Blood-brain barrier disruption in brain-tumor therapy [letter] Rapoport SI. **J Neurosurg** 1990 Sep;73(3):475–7

Potential usefulness of a cultured glioma cell line induced by Rous sarcoma virus in B10.A mouse as an immunotherapy model. Sakamoto K, et al. **Jpn J Exp Med** 1989 Oct;59(5):173–80

Preliminary trial of specific targeting therapy against malignant glioma. Nitta T, et al. **Lancet** 1990 Feb 17; 335(8686):368–71

Sterile sorting of Leu-11a-positive cells (NK cells) using flow cytometry and the antineoplastic effects on brain tumors. Fujiwara H, et al. **Life Sci** 1989;45(22):2103–7

Modern treatment of brain tumors. Brem H. **Md Med J** 1990 Apr;39(4):351–4

Malignant astrocytoma in South Australia: treatment and case survival. North B, et al. **Med J Aust** 1990 Sep 3; 153(5):250–4

Hyperthermia treatment of brain tumors. Marchosky JA, et al. **Mo Med** 1990 Jan;87(1):29–33

Effect of combined treatment with magnetic induction hyperthermia and chemotherapy in a rabbit brain tumor model. Tanaka T, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):377–81

Primary CNS lymphoma: combined treatment with chemotherapy and radiotherapy. DeAngelis LM, et al. **Neurology** 1990 Jan;40(1):80–6

Treatment of malignant gliomas with surgery, intra-arterial infusions of 1-(2-hydroxyethyl)chloroethylnitrosourea, and radiation therapy: a phase II study. Fauchon F, et al. **Neurosurgery** 1990 Aug;27(2):231–4

Effect of intracerebrally injected Corynebacterium parvum on the development and growth of metastatic brain tumor in mice. Kennedy JD, et al. **Neurosurgery** 1989 Nov; 25(5):709–14

Primary CNS lymphoma: managing patients with spontaneous and AIDS-related disease. Deangelis LM, et al. **Oncology (Williston Park)** 1987 Aug;1(6):52–62 (39 ref.)

Radiation vs surgery for brain metastases [letter] Kadin MR. **Oncology (Williston Park)** 1990 Feb;4(2):19

The ocular effects of intracarotid bromodeoxyuridine and radiation therapy in the treatment of malignant glioma. Vander JF, et al. **Ophthalmology** 1990 Mar;97(3):352–7

Pork in a medical wrapping [news] Crawford M. **Science** 1990 Apr 13;248(4952):156

Intracerebral malignant lymphoma with fluctuating regression and spatial evolution. Yamasaki T, et al. **Surg Neurol** 1990 Oct;34(4):235–44

[Difference in the therapeutic efficacy between anaplastic astrocytoma and glioblastoma multiforme types] Kiya K, et al. **Gan No Rinsho** 1990 Jun;36(7):777–81 (Eng. Abstr.) **(Jpn)**

[Randomized study of initial treatment with radiation.MCNU or radiation.MCNU.interferon-beta for malignant glioma. Hiroshima Brain Tumor Study Group] Kiya K, et al. **Gan To Kagaku Ryoho** 1990 Feb;17(2):221–6 (Eng. Abstr.) **(Jpn)**

[Cystic pineocytoma successfully treated with synchronized chemoradiotherapy. Case report] Nakatsukasa M, et al. **Neurol Med Chir (Tokyo)** 1989 Apr;29(4):333–7 (Eng. Abstr.) **(Jpn)**

[Combined postoperative radiotherapy and chemotherapy for malignant gliomas] Aida T, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 May 20;25(5):952–9 (Eng. Abstr.) **(Jpn)**

[Efficacy and adverse effects of beta-interferon in the treatment of malignant glioma] Oda Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Oct 20;24(10):2411–7 (Eng. Abstr.) **(Jpn)**

[High yielding culture of LAK cells by the concentration rotary tissue culture system and its clinical application] Park KC, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Oct 20;24(10):2349–54 (Eng. Abstr.) **(Jpn)**

[Induction of LAK cells and CTL in patients with brain tumor and research of its clinical application] Moriki A. **Nippon Geka Hokan** 1989 Jan 1;58(1):107–18 (Eng. Abstr.) **(Jpn)**

[A novel experimental approach to immunotherapy against malignant brain tumor with the mouse IFN-gamma gene transfer] Nishihara K. **Nippon Geka Hokan** 1989 Jan 1; 58(1):18–42 (Eng. Abstr.) **(Jpn)**

[Hyperthermia of metastatic brain tumor with implant heating system: a preliminary clinical results] Kida Y, et al. **No Shinkei Geka** 1990 Jun;18(6):521–6 (Eng. Abstr.) **(Jpn)**

[Interstitial hyperthermia of malignant brain tumors using implant heating system (IHS)] Kobayashi T, et al. **No Shinkei Geka** 1990 Mar;18(3):247–52 (Eng. Abstr.) **(Jpn)**

[Radiochemotherapy-related changes in the brain parenchyma of glioma patients evaluated repeatedly by C15O2, C15O, 15O2, and 18F-fluorodeoxyglucose (FDG) PET] Mineura K, et al. **No Shinkei Geka** 1989 Oct; 17(10):945–52 (Eng. Abstr.) **(Jpn)**

[Disseminated necrotizing leukoencephalopathy accompanied with multiple calcium deposits following antineoplastic and radiation therapy in a case of intracranial germ cell tumor: computerized tomographical study] Shimura T, et al. **No Shinkei Geka** 1989 Jun;17(6):573–7 (Eng. Abstr.) **(Jpn)**

[Histopathologic changes and tumor cell kinetics after hyperthermia and/or radiation therapy in a rat glioma model: bromodeoxyuridine (BUdR) labelling index] Tamura M, et al. **No Shinkei Geka** 1989 Jun;17(6):555–9 (Eng. Abstr.) **(Jpn)**

[High dose chemotherapy in malignant gliomas using autologous bone marrow transplantation and GM-CSF: granulocyte-macrophage colony stimulating factors] Yamashita J, et al. **No Shinkei Geka** 1990 Apr;18(4):329–38 (71 ref.) **(Jpn)**

[The effect of local injection of interferon against human malignant glioma transplanted into nude mice and the mechanism of its effect] Hori T, et al. **No To Shinkei** 1989 Sep;41(9):911–7 (Eng. Abstr.) **(Jpn)**

[A trial of ACNU and radiation therapy with sensitizing agents for malignant gliomas] Kawano H, et al. **No To Shinkei** 1989 Nov;41(11):1071–5 (Eng. Abstr.) **(Jpn)**

[Adoptive immunotherapy in patients with medulloblastoma by LAK cells] Shimizu K, et al. **No To Shinkei** 1989 Oct; 41(10):991–5 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Ultrastructure of capillary walls in human brain tumors. Shibata S. **Acta Neuropathol (Berl)** 1989;78(6):561–71

A case of cerebral composite ganglioneuroblastoma: an immunohistochemical and ultrastructural study. Takahashi M, et al. **Acta Neuropathol (Berl)** 1990;80(1):98–102

Cerebral medulloepithelioma--electron microscopy and immunohistochemistry. Troost D, et al. **Acta Neuropathol (Berl)** 1990;80(1):103–7

A sequential ultrastructural and histoautoradiographic study of early neoplastic lesions in ethylnitrosourea-induced rat glioma. Ikeda T, et al. **Acta Pathol Jpn** 1989 Aug; 39(8):487–95

Pineocytoma with neuronal differentiation--case report. Fukushima T, et al. **Neurol Med Chir (Tokyo)** 1990 Jan; 30(1):63–8 (24 ref.)

Peculiar changes in Rosenthal fibres in an atypical astrocytoma. Radner H, et al. **Neuropathol Appl Neurobiol** 1990 Apr;16(2):171–7

Ultrastructure of the sarcomatous component in gliosarcomas. Papierz W, et al. **Neuropatol Pol** 1989; 27(2):255–68

[Presacral extramedullary ependymoblastoma. Optic, ultrastructural and immunohistochemical study] Alonso Martín MJ, et al. **An Esp Pediatr** 1990 Feb;32(2):186–8 **(Spa)**

VETERINARY

Identification of gonadal steroid receptors in meningiomas from dogs and cats. Speciale J, et al. **Am J Vet Res** 1990 May;51(5):833–5

Electroencephalographic and histopathologic correlations in eight dogs with intracranial mass lesions. Steiss JE, et al. **Am J Vet Res** 1990 Aug;51(8):1286–91

Anaesthesia and central nervous system disease in small animals. Part II: Anaesthetic management for specific diseases and procedures. Court MH, et al. **Br Vet J** 1990 Jul-Aug;146(4):296–308 (47 ref.)

Intracranial schwannoma in a horse. Williamson LH, et al. **Cornell Vet** 1990 Apr;80(2):135–41

Spontaneous occurrence and chemical induction of neurogenic tumors in rats--influence of host factors and specificity of chemical structure. Maekawa A, et al. **Crit Rev Toxicol** 1990;20(4):287–310 (145 ref.)

Gemistocytic astrocytoma in a one-month-old llama. Garlick DS, et al. **J Am Vet Med Assoc** 1990 Jun 15;196(12):2009–10

Malignant jugulotympanic paraganglioma in a dog. Cooley AJ, et al. **J Comp Pathol** 1990 May;102(4):375–83

Melanotic hamartoma of the hind brain in a riding horse. Mair TS, et al. **J Comp Pathol** 1990 Feb;102(2):239–43

Diffuse cerebral and leptomeningeal astrocytoma in dogs: MR features. Kraft SL, et al. **J Comput Assist Tomogr** 1990 Jul-Aug;14(4):555–60

Intracranial lesions in dogs with hemangiosarcoma. Waters DJ, et al. **J Vet Intern Med** 1989 Oct-Dec;3(4):222–30

BRAIN REVASCULARIZATION see **CEREBRAL REVASCULARIZATION**

BRAIN STEM

Surgical implantation and biocompatibility of central nervous system auditory prostheses. Niparko JK, et al. **Ann Otol Rhinol Laryngol** 1989 Dec;98(12 Pt 1):965–70

Brain stem encephalitis due to herpes simplex virus. Robb L, et al. **Aust Paediatr J** 1989 Aug;25(4):246–7

Effects of brainstem lesions on the masseter inhibitory reflex. Functional mechanisms of reflex pathways. Ongerboer de Visser BW, et al. **Brain** 1990 Jun;113 (Pt 3):781–92

Electrically evoked auditory brain stem responses (EABR) and middle latency responses (EMLR) obtained from patients with the nucleus multichannel cochlear implant. Shallop JK, et al. **Ear Hear** 1990 Feb;11(1):5–15

Brainstem evoked potentials for scoliosis surgery: a reliable method allowing use of halogenated anesthetic agents. Abel MF, et al. **J Pediatr Orthop** 1990 Mar-Apr;10(2):208–13

Effects of click rate and electrode orientation on threshold of the auditory brainstem response. Sininger YS, et al. **J Speech Hear Res** 1989 Dec;32(4):880–6

Central vocal cord paralysis and paresis presenting as laryngeal stridor in children. Ross DA, et al. **Laryngoscope** 1990 Jan;100(1):10–3

Infratentorial intratumoral hemorrhage. Reichenthal E, et al. **Mt Sinai J Med** 1989 Sep;56(4):309–14 (29 ref.)

Transtentorial brain herniation in the monkey: analysis of brain stem auditory and somatosensory evoked potentials. Stone JL, et al. **Neurosurgery** 1990 Jan;26(1):26–31

Magnetic resonance imaging of medial medullary infarction. Sawada H, et al. **Stroke** 1990 Jun;21(6):963–6

[Subacute brainstem hematoma. A surgically treated case] Cambon H, et al. **Rev Neurol (Paris)** 1990;146(4):312–4 (17 ref.) (Eng. Abstr.) **(Fre)**

[A case of Maffucci's syndrome with brain-stem tumor] Sato K, et al. **No To Shinkei** 1989 Jun;41(6):631–4 (Eng. Abstr.) **(Jpn)**

[Millard-Gubler syndrome in a young man after hemorrhage from arteriovenous hemangioma to the brain stem] Gardela G, et al. **Neurol Neurochir Pol** 1989 Mar-Apr;23(2):149–52 (Eng. Abstr.) **(Pol)**

[Tumors of the brain stem: anatomo-pathologic study of 35 necropsy cases] Lancellotti CL, et al. **Arq Neuropsiquiatr** 1989 Sep;47(3):313–9 (Eng. Abstr.) **(Por)**

[Neurologic analysis of several forms of acromegaly] Erokhina LG, et al. **Sov Med** 1989;(7):81–4 **(Rus)**

[Progressive multifocal leukoencephalopathy associated with leukopenia of unknown (iatrogenic?) origin] Gómez Beldarrain M, et al. **Neurologia** 1990 Jan;5(1):29–32 (Eng. Abstr.) **(Spa)**

ABNORMALITIES

Anaesthesia in an infant with Joubert's syndrome. Matthews NC. **Anaesthesia** 1989 Nov;44(11):920–1

MR demonstration of cryptic vascular malformation producing a palatal myoclonus--a case report. Han SH, et al. **J Korean Med Sci** 1989 Sep;4(3):139–41

Dandy-Walker malformation in a Japanese black calf. Madarame H, et al. **Vet Pathol** 1990 Jul;27(4):296–8

ANALYSIS

Presence of dopamine-immunoreactive cell bodies in the catecholaminergic group A15 of the sheep brain. Tillet Y, et al. **Histochemistry** 1990;93(3):327–33

Myelin-associated glycoprotein (MAG) and rat brain-specific 1B236 protein: mapping of epitopes and demonstration of immunological identity. Noronha AB, et al. **J Mol Neurosci** 1989;1(3):159–70

Immunohistochemical evidence for GABAergic cell bodies in the medial nucleus of the trapezoid body and in the lateral vestibular nucleus in the guinea pig brainstem. Dupont J, et al. **Neurosci Lett** 1990 Apr 6;111(3):263–8

Distribution of serotonin immunoreactive neurons in the

brainstem of the hamster, guinea pig, rabbit, and rat. Duann YH, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Jul; 13(3):218–29

ANATOMY & HISTOLOGY

Gd–DTPA–enhanced MR images: accentuation of vascular pulsation artifacts and correction by using gradient–moment nulling (MAST). Richardson DN, et al. **AJNR** 1990 Jan–Feb;11(1):209–10

Descending connections from the brainstem to the spinal cord in the electric fish Eigenmannia. Quantitative description based on retrograde horseradish peroxidase and fluorescent–dye transport. Behrend K, et al. **Brain Behav Evol** 1990;35(4):227–39

The brainstem origin of enkephalin– and substance–P–like immunoreactive axons in the spinal cord of the North American opossum. Cassini P, et al. **Brain Behav Evol** 1989; 34(4):212–22

Projections from the sacculus to the cochlear nuclei in the Mongolian gerbil. Kevetter GA, et al. **Brain Behav Evol** 1989;34(4):193–200

Nuclear terminations of corticoreticular fiber systems in rats. Newman DB, et al. **Brain Behav Evol** 1989;34(4):223–64

The time course of retrograde transsynaptic transport of tetanus toxin fragment C in the oculomotor system of the rabbit after injection into extraocular eye muscles. Horn AK, et al. **Exp Brain Res** 1990;81(2):353–62

Central origins of preganglionic fibers to the sphenopalatine ganglion in the rat. A fluorescent retrograde tracer study with special reference to its relation to central catecholaminergic systems. Suzuki N, et al. **J Auton Nerv Syst** 1990 Jun;30(2):101–9

Axonal trajectories and terminations of on– and off–cells in the cat lower brainstem. Mason P, et al. **J Comp Neurol** 1989 Oct 8;288(2):185–207

Incertal projections from the brainstem and cerebellum: a horseradish peroxidase study in the cat. Aguirre JA, et al. **J Hirnforsch** 1989;30(4):449–55

Demonstration of extensive brainstem projections to medial and lateral thalamus and hypothalamus in the rat. Carstens E, et al. **Neuroscience** 1990;35(3):609–26

Changes in nucleus tractus spinalis nervi trigemini after temporary occlusion of aorta thoracica in dog. Sulla I, et al. **Zentralbl Neurochir** 1989;50(1):9–11

[Standardization of the anatomic study of the brain stem in x–ray computed tomography and magnetic resonance imaging] Rumeau C, et al. **Ann Radiol (Paris)** 1990; 33(1):13–21 (Eng. Abstr.) **(Fre)**

[MR measurement of normal brainstem cerebellum and corpus callosum on midsagittal section] Kogame S, et al. **Rinsho Hoshasen** 1989 Oct;34(11):1383–7 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

Fibromuscular dysplasia of the basilar artery: a case with brain stem stroke. Saygi S, et al. **Angiology** 1990 Aug; 41(8):658–61 (12 ref.)

Isolated inferior oblique paresis from brain–stem infarction. Perspective on oculomotor fascicular organization in the ventral midbrain tegmentum. Castro O, et al. **Arch Neurol** 1990 Feb;47(2):235–7 (17 ref.)

Rete mirabile medullae: vascular specialization of the avian brain stem. Freedman SL, et al. **Brain Res Bull** 1990 Jun; 24(6):735–8

The effects of experimental brain–stem ischaemia on brain–stem auditory evoked potentials in primates. Baik MW, et al. **Electroencephalogr Clin Neurophysiol** 1990 May; 75(5):433–43

Blood flow changes in chicken brain stem auditory nuclei following cochlea removal. Richardson BE, et al. **Hear Res** 1990 Jun;46(1–2):53–61

Vertebrobasilar occlusion complicating nonpenetrating craniocervical trauma in a child. Pitter JH, et al. **J Child Neurol** 1990 Jul;5(3):219–23 (28 ref.)

Bilateral trochlear nerve palsies from a brainstem hematoma. Tachibana H, et al. **J Clin Neuro Ophthalmol** 1990 Mar; 10(1):35–7

Diagnosis and treatment of vascular brain–stem malformations. Kashiwagi S, et al. **J Neurosurg** 1990 Jan; 72(1):27–34

Relationship between abnormal respiratory control and perinatal brainstem and cerebellar infarctions [see comments] Takashima S, et al. **Pediatr Neurol** 1989 Jul–Aug;5(4):211–5 Comment in: Pediatr Neurol 1990 Mar–Apr;6(2):141.

Cerebellar venous angioma associated with angiographically occult brain stem vascular malformation. Report of two cases. Abe M, et al. **Surg Neurol** 1990 Jun;33(6):400–3

Moebius syndrome: animal model—human correlations and evidence for a brainstem vascular etiology. Lipson AH, et al. **Teratology** 1989 Oct;40(4):339–50 (102 ref.)

[Transcranial Doppler exploration of the brain stem vascularization in neurological pathology] Pendefunda L, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Oct–Dec; 93(4):663–9 (Eng. Abstr.) **(Fre)**

[Temporal arteritis with scalp and tongue necrosis and brain stem infarct] Höring E, et al. **Med Klin** 1990 Mar;85 Suppl 1:159–60, 170 **(Ger)**

[Brainstem infarcts presented medial longitudinal fasciculus (MLF) syndrome and cerebellar ataxia—report of three cases] Sakakibara S, et al. **Rinsho Shinkeigaku** 1990 May; 30(5):533–9 (22 ref.) (Eng. Abstr.) **(Jpn)**

[Comparison between the clinical and magnetic resonance findings in infarctions of the brain stem] Castillo J, et al. **Neurologia** 1988 Nov–Dec;3(6):211–6 (Eng. Abstr.) **(Spa)**

CYTOLOGY

Lower brainstem afferents to the cat posterior hypothalamus: a double–labeling study. Sakai K, et al. **Brain Res Bull** 1990 Mar;24(3):437–55

Neuron–glia interactions: effect of serotonin on the astroglial expression of GFAP and of its encoding message. Le Prince G, et al. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):295–8

Projections from the medial agranular cortex to brain stem visuomotor centers in rats. Stuesse SL, et al. **Exp Brain Res** 1990;80(3):532–44

Cytoarchitectonic organisation of the abducens nucleus in the pigeon (Columbia livia). Cabrera B, et al. **J Anat** 1989 Oct;166:203–11

Distribution of locus coeruleus axons within the rat brainstem demonstrated by Phaseolus vulgaris leucoagglutinin anterograde tracing in combination with dopamine–beta–hydroxylase immunofluorescence. Fritschy JM, et al. **J Comp Neurol** 1990 Mar 22;293(4):616–31

Efferent projections of the subthalamic nucleus in the squirrel monkey as studied by the PHA–L anterograde tracing method. Smith Y, et al. **J Comp Neurol** 1990 Apr 8; 294(2):306–23

Brainstem afferents to the intralaminar nuclei of the cat thalamus studied by the horseradish peroxidase method. Niimi K, et al. **J Hirnforsch** 1990;31(1):107–22

Diaphragmatic and external intercostal muscle control during vomiting: behavior of inspiratory bulbospinal neurons. Miller AD, et al. **J Neurophysiol** 1990 Jan;63(1):31–6

Isolation, culture, and characterization of adult rat oligodendrocytes. Vick RS, et al. **J Neurosci Res** 1990 Apr; 25(4):524–34

The effects of aging on neuron number in the rat superior olivary complex. Casey MA. **Neurobiol Aging** 1990 Jul–Aug;11(4):391–4

Mauthner cells maintain their lumbar projection in adult frog. Davis GR Jr, et al. **Neurosci Lett** 1990 May 31; 113(2):139–43

A discrete projection of the sacculus and lagena to a distinct brainstem nucleus in a catfish. Fritzsch B, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):7–11

Cytochrome oxidase activity in retinas transplanted to the brainstem in rats. Jen LS, et al. **Neurosci Lett** 1989 Nov 6;105(3):275–80

A direct catecholaminergic projection from the brainstem to the neurohypophysis of the rat. Garten LL, et al. **Neuroscience** 1989;33(1):149–55

Subicular projections to the hypothalamus and brainstem: some novel aspects revealed in the rat by the anterograde Phaseolus vulgaris leukoagglutinin (PHA–L) tracing method. Köhler C. **Prog Brain Res** 1990;83:59–69

[The connections of the mammillary complex and the hypothalamotegmental section with the stem in the lizard brain] Belekhova MG. **Neirofiziologiia** 1990;22(1):114–23 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effects of high dietary sulfur on brain functions using evoked potentials technique. Olkowski AA, et al. **Can J Vet Res** 1990 Jan;54(1):113–8

Chronic effects of phenytoin on brain–stem auditory evoked potentials in man. Chan YW, et al. **Electroencephalogr Clin Neurophysiol** 1990 Mar–Apr; 77(2):119–26

Modulatory effects of adenosine on baroreflex activation in the brainstem of normotensive rats. Mosqueda–Garcia R, et al. **Eur J Pharmacol** 1989 Dec 12;174(1):119–22

Brainstem sites differentially sensitive to beta–endorphin and morphine for analgesia and release of met–enkephalin in anesthetized rats. Tseng LL, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):930–7

Central effects of the neurotropic mycotoxin fumitremorgin A in the rabbit. (II). Effects on the brain stem. Nishiyama M, et al. **Jpn J Pharmacol** 1990 Feb;52(2):201–8

The effects of chloralose on the brainstem auditory evoked potential of the rat. Shaw NA. **Neuropharmacology** 1990 Jun;29(6):561–5

Prenatal cocaine exposure in the Long–Evans rat: III. Developmental effects on the brainstem auditory–evoked potential. Church MW, et al. **Neurotoxicol Teratol** 1990 Jul–Aug;12(4):345–51

Influence of dietary magnesium on the amplitude of wave V of the auditory brainstem response. Cevette MJ, et al. **Otolaryngol Head Neck Surg** 1989 Nov;101(5):537–41

Effects of combined superoxide dismutase and deferoxamine on recovery of brainstem auditory evoked potentials and EEG after asphyxial cardiac arrest in dogs. Cerchiari EL, et al. **Resuscitation** 1990 Jan;19(1):25–40

[Modification of the cerebral electrical activity of the rabbit by micro–injections of monoamine precursors into bulbar and pontine sleep–producing structures] Ledebur IX, et al. **Electroencephalogr Clin Neurophysiol** 1966 Apr; 20(4):370–81 (Eng. Abstr.) **(Fre)**

[Acoustically evoked brain stem potentials in acute alcoholic intoxication] Klemm B, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Feb;42(2):102–6 (Eng. Abstr.) **(Ger)**

EMBRYOLOGY

Patterns of functional innervation in the auditory nuclei of the chick brainstem following early unilateral removal of the otocyst. Ansselin AD, et al. **Brain Res Dev Brain Res** 1990 Jul 1;54(2):177–86

The ontogeny of specific retrograde transport of nerve growth factor by motoneurons of the brainstem and spinal cord. Wayne DB, et al. **Dev Biol** 1990 Apr;138(2):484–98

ENZYMOLOGY

Detection of a highly ouabain sensitive isoform of rat brainstem Na,K–ATPase. Blanco G, et al. **Biochim Biophys Acta** 1990 Aug 10;1027(1):1–7

Fluorescent histochemical localization of neutral endopeptidase–24.11 (enkephalinase) in the rat brainstem. Back SA, et al. **J Comp Neurol** 1990 Jun 1;296(1):130–58

Phosphatidate phosphohydrolase in purified rat brain myelin. Vaswani KK, et al. **J Neurosci Res** 1989 Nov;24(3):431–6

Tryptophan hydroxylase activity in hypothalamus and brainstem of neonatal and adult rats treated with hydrocortisone or parachlorophenylalanine. Park DH, et al. **Neurosci Res** 1989 Oct;7(1):76–80

Demonstration of monoamine oxidase–A and –B in the human brainstem by a histochemical technique. Konradi C, et al. **Neuroscience** 1989;33(2):383–400

GROWTH & DEVELOPMENT

Noradrenergic alterations in the brain stem of adult rats after a model perinatal insult. Burešová M, et al. **Act Nerv Super (Praha)** 1989 Oct;31(3):229–31

The postnatal growth of motoneurons at three levels of the cat neuraxis. Cameron WE, et al. **Neurosci Lett** 1989 Oct 9;104(3):274–80

Monoclonal antibody R2D5 reveals midsagittal radial glial system in postnatally developing and adult brainstem. Mori K, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5489–93

INJURIES

The ataxic subgroup: a discrete outcome after traumatic brain injury. Mysiw WJ, et al. **Brain Inj** 1990 Jul–Sep;4(3):247–55

Pontomedullary tears and other gross brainstem injuries after vehicular accidents. Simpson DA, et al. **J Trauma** 1989 Nov;29(11):1519–25

Production of generalized learning deficit and permanent growth stunting by bilateral brain stem lesions. Mosier HD, et al. **Pediatr Res** 1990 Feb;27(2):181–5

Penile erections in a patient with nearly total absence of REM: a follow–up study. Lavie P. **Sleep** 1990 Jun; 13(3):276–8

[MRI of brainstem contusion] Okada T, et al. **Nippon Geka Hokan** 1989 Jan 1;58(1):134–9 (Eng. Abstr.) **(Jpn)**

METABOLISM

The influence of angiotensin II on catecholamine synthesis in neuronal cultures from rat brain. MacLean MR, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):492–7

Decreased blood flow and oxygen metabolism in the cerebellum, brain stem and thalamus in a case with Menkes kinky hair disease. Yoshikawa H, et al. **Brain Dev** 1989; 11(6):426–9

Loss of brainstem serotonin– and substance P–containing neurons in Parkinson's disease. Halliday GM, et al. **Brain Res** 1990 Feb 26;510(1):104–7

Localization of oxytocin binding sites in the human brainstem and upper spinal cord: an autoradiographic study. Loup F, et al. **Brain Res** 1989 Oct 23;500(1–2):223–30

Xenobiotic metabolism in human brain—presence of cytochrome P–450 and associated mono–oxygenases. Ravindranath V, et al. **Brain Res** 1989 Sep 4;496(1–2):331–5

Differences in lipid composition between isolated growth cones from the forebrain and those from the brainstem in the fetal rat. Igarashi M, et al. **Brain Res Dev Brain Res** 1990 Jan 1;51(1):1–9

Brainstem serotonergic hyperinnervation modifies behavioral supersensitivity to 5–hydroxytryptophan in the rat. Pranzatelli MR, et al. **Brain Res Dev Brain Res** 1989 Nov 1;50(1):89–99

Localization of GABAA–receptor alpha 1 subunit mRNA–containing neurons in the lower brainstem of the rat. Hironaka T, et al. **Brain Res Mol Brain Res** 1990 May; 7(4):335–45

Trigeminal nerve section induces Fos–like immunoreactivity (FLI) in brainstem and decreases FLI in sensory cortex. Sharp FR, et al. **Brain Res Mol Brain Res** 1989 Nov; 6(2–3):217–20

Hypotension decreases GABA levels in brainstem regions of the rat. Kubo T, et al. **Clin Exp Hypertens [A]** 1990; 12(3):317–24

Developmental characteristics in the daily rhythm of serotonin concentration within rabbit brainstem regions. Gingras JL, et al. **Dev Pharmacol Ther** 1990;14(4):245–53

Chronic dexmedetomidine, a selective alpha 2–agonist, decreases serotonin but not noradrenaline turnover in rat brainstem nuclei. Koulu M, et al. **Eur J Pharmacol** 1990 Feb 6;176(2):151–7

Demonstration of muscarinic acetylcholine receptor–like immunoreactivity in the rat forebrain and upper brainstem. van der Zee EA, et al. **Histochemistry** 1989;92(6):475–85

Increased brainstem angiotensin–I levels in chronic 2 KIC

hypertensive rats. Lall SB, et al. **Indian J Med Res** 1990 Feb;92:43–7

Immunocytochemical study of S–100 positive glial cells in the brainstem and spinal cord of the rat embryo. Gomez LA, et al. **Int J Dev Neurosci** 1990;8(1):55–64

Hypoxia and ion activities within the brain stem of newborn rabbits. Trippenbach T, et al. **J Appl Physiol** 1990 Jun; 68(6):2494–503

Localization of neuroactive substances in the rat parabigeminal nucleus: an immunohistochemical study. Wang YQ, et al. **J Chem Neuroanat** 1988 Jul–Aug; 1(4):195–204

Expression of c–fos–like protein as a marker for neuronal activity following noxious stimulation in the rat. Bullitt E. **J Comp Neurol** 1990 Jun 22;296(4):517–30

Distribution of GABAergic neurons and terminals in the auditory system of the barn owl. Carr CE, et al. **J Comp Neurol** 1989 Aug 8;286(2):190–207

Distribution of corticotropin–releasing factor in the cerebellum and precerebellar nuclei of the cat. Cummings SL. **J Comp Neurol** 1989 Nov 22;289(4):657–75

Differential distribution of serotoninergic inputs on the goldfish Mauthner cell. Gotow T, et al. **J Comp Neurol** 1990 Feb 8;292(2):255–68

Three–dimensional distribution of 3H–naloxone binding to opiate receptors in the human fetal and infant brainstem. Kinney HC, et al. **J Comp Neurol** 1990 Jan 1;291(1):55–78

Postnatal development of preproenkephalin mRNA containing neurons in the rat lower brainstem. Morita Y, et al. **J Comp Neurol** 1990 Feb 8;292(2):193–213

Origins and terminations of bulbospinal axons that contain serotonin and either enkephalin or substance–P in the North American opossum. Reddy VK, et al. **J Comp Neurol** 1990 Apr 1;294(1):96–108

Catecholamine–containing neurons in the sheep brainstem and diencephalon: immunohistochemical study with tyrosine hydroxylase (TH) and dopamine–beta–hydroxylase (DBH) antibodies. Tillet Y, et al. **J Comp Neurol** 1989 Dec 1;290(1):69–104

GABAergic neurons in brainstem auditory nuclei of the chick: distribution, morphology, and connectivity. von Bartheld CS, et al. **J Comp Neurol** 1989 Sep 22; 287(4):470–83

Development of daily variations in methionine enkephalin within rabbit brainstem regions. Gingras JL, et al. **J Dev Physiol** 1989 Jun;11(6):335–41

Multiple forms of pancreatic polypeptide–related compounds in the lamprey CNS: partial characterization and immunohistochemical localization in the brain stem and spinal cord. Brodin L, et al. **J Neurosci** 1989 Oct; 9(10):3428–42

Topographical distribution of 5–HT3 receptor recognition sites in the ferret brain stem. Barnes JM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jul; 342(1):17–21

Ontogeny of plasma, CSF and brainstem ACTH in piglets: effects of hypoxia and anesthesia. Moss IR, et al. **Neuroendocrinology** 1990 May;51(5):586–91

Identification and distribution of 5–HT3 recognition sites within the human brainstem. Barnes JM, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):80–6

Enhancement of acetylcholine release during paradoxical sleep in the dorsal tegmental field of the cat brain stem. Kodama T, et al. **Neurosci Lett** 1990 Jul 13;114(3):277–82

Selective retrograde labeling of primary vagal afferent cell–bodies after injection of [3H]D–aspartate into the rat nucleus tractus solitarii. Schaffar N, et al. **Neurosci Lett** 1990 Jul 13;114(3):253–8

Alterations in brainstem alpha 2 adrenoreceptor activity in pyridoxine–deficient rat model of hypertension. Viswanathan M, et al. **Neurosci Lett** 1990 Mar 26; 111(1–2):201–5

GABA and glycine as putative transmitters in subcortical pathways to the pontine nuclei. A combined immunocytochemical and retrograde tracing study in the cat with some observations in the rat. Aas JE, et al. **Neuroscience** 1990;34(1):149–62

Glutaminase–like immunoreactivity in the lower brainstem and cerebellum of the adult rat. Kaneko T, et al. **Neuroscience** 1989;32(1):79–98

Distribution of nerve growth factor receptor–like immunoreactivity in the adult rat central nervous system. Effect of colchicine and correlation with the cholinergic system—II. Brainstem, cerebellum and spinal cord. Pioro EP, et al. **Neuroscience** 1990;34(1):89–110

Stress–induced increases in brainstem amino acid levels are prevented by chronic sodium hydrosulfide treatment. Warenycia MW, et al. **Neurotoxicology** 1990 Spring; 11(1):93–7

Subsensitivity to the cough–depressant effects of opioid and nonopioid antitussives in morphine–dependent rats: relationship to central serotonin function [published erratum appears in Pharmacol Biochem Behav 1990 May;36(1):215] Kamei J, et al. **Pharmacol Biochem Behav** 1989 Nov;34(3):595–8

Coexistence of corticotropin releasing factor and enkephalin in cerebellar afferent systems. Cummings S, et al. **Synapse** 1990;5(3):167–74

MICROBIOLOGY

Herpes simplex virus (HSV) DNA in microglial nodular brainstem encephalitis. Schmidbauer M, et al. **J Neuropathol Exp Neurol** 1989 Nov;48(6):645–52

PATHOLOGY

Multicentric astrocytomas of the optic chiasm, brain stem and spinal cord. Matsumoto T, et al. **Acta Pathol Jpn** 1989 Oct;39(10):664–9

Magnetic resonance imaging of the brain and brain–stem in elderly patients with dizziness. Day JJ, et al. **Age Ageing** 1990 Mar;19(2):144–50

Magnetic resonance in Bell's palsy. Jonsson L, et al. **Am J Otol** 1990 May;11(3):153–6

Neuropathology of immunohistochemically identified brainstem neurons in Parkinson's disease. Halliday GM, et al. **Ann Neurol** 1990 Apr;27(4):373–85

Cerebral cortex and brainstem involvement in Marinesco–Sjögren syndrome [letter] Katafuchi Y, et al. **Ann Neurol** 1990 Apr;27(4):448–9

Computer–directed stereotactic biopsy of intrinsic brain stem lesions. Thomas DG, et al. **Br J Neurosurg** 1988;2(2):235–40

Mapping of brainstem lesions by the combined use of tests of visually–induced eye movements. Kato I, et al. **Brain** 1990 Aug;113 (Pt 4):921–35

Selective axonal and terminal degeneration in the chicken brainstem and cerebellum following exposure to bis(1–methylethyl)phosphorofluoridate (DFP). Tanaka D Jr, et al. **Brain Res** 1990 Jun 11;519(1–2):200–8

Apneustic breathing. A characteristic feature of brainstem compression in achondroplasia? Mador MJ, et al. **Chest** 1990 Apr;97(4):877–83

Reactive astrocytes and macrophages in the brain stem of SIDS victims? Eleven age– and sex–matched SIDS and control cases. Oehmichen M, et al. **Clin Neuropathol** 1989 Nov–Dec;8(6):276–83

Central nervous system magnetic resonance imaging findings in neuro–Behçet syndrome. Iwasaki Y, et al. **Comput Med Imaging Graph** 1990 Jan–Feb;14(1):85–7

Infant mortality, microglial nodules and parotid CMV–type inclusions. Variend S. **Early Hum Dev** 1990 Jan;21(1):31–40

Changes in excitability of CA1 pyramidal neurons in slices prepared from AlCl3–treated rabbits. Franceschetti S, et al. **Epilepsy Res** 1990 May–Jun;6(1):39–48

Lesion detection in MS patients with and without clinical brainstem disorders: magnetic resonance imaging and brainstem auditory evoked potentials compared. Capra R, et al. **Eur Neurol** 1989;29(6):317–22

Acute haemorrhagic leucoencephalitis of brainstem and cerebellum. Sharma SC, et al. **Indian J Pathol Microbiol** 1990 Apr;33(2):185–7

Cystic schwannoma mimicking a brain stem tumor: MR features. Sigal R, et al. **J Comput Assist Tomogr** 1990 Jul–Aug;14(4):662–4

Combined HIV–CMV encephalitis presenting with brainstem signs. Fuller GN, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug;52(8):975–9 (31 ref.)

Progressive encephalomyelitis with rigidity: a case report with magnetic resonance imaging findings. McCombe PA, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec; 52(12):1429–31

Supratentorial meningeal spread from brainstem glioma. Vries EP, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug; 52(8):1011–3

Contribution of MRI to the diagnosis and post–therapeutic monitoring of brain stem tumours. Carsin M, et al. **J Neuroradiol** 1990 Jan;17(1):50–9 **(Eng, Fre)**

MR imaging of degenerative disorders of brainstem and cerebellum. Gallucci M, et al. **Magn Reson Imaging** 1990; 8(2):117–22

Corticofugal projections to the motor nuclei of the brainstem and spinal cord in humans [published erratum appears in Neurology 1990 May;40(5):828] Iwatsubo T, et al. **Neurology** 1990 Feb;40(2):309–12

Diffusely infiltrating brainstem gliomas: a report of the diagnostic difficulties in 2 cases. Wilson WB, et al. **Neurology** 1990 Aug;40(8):1237–41

Benign brain stem lesions in pediatric patients with neurofibromatosis: case reports. Raffel C, et al. **Neurosurgery** 1989 Dec;25(6):959–64

Symptomatic primary human immunodeficiency virus infection of the brain stem in a child. Raphael SA, et al. **Pediatr Infect Dis J** 1989 Sep;8(9):654–6

Resolving MRI lesions in lupus erythematosus selectively involving the brainstem. McAbee GN, et al. **Pediatr Neurol** 1990 May–Jun;6(3):186–9

An unusual syndrome of pediatric brainstem trauma. Galyon DD, et al. **Pediatr Neurosci** 1988;14(5):272–6

Brainstem lesion revealed by MRI in a case of Leigh's disease with respiratory failure. Martin E, et al. **Pediatr Radiol** 1990;20(5):349–50

Beta–endorphin in the brainstem and the cerebellum of the human infant: regional levels' profile assessed with immunoaffinity chromatography and solid phase radioimmunoassay. Pasi A, et al. **Physiol Behav** 1989 Jul; 46(1):13–6

Wallerian degeneration of the corticospinal tract in the brain stem: MR imaging. Uchino A, et al. **Radiat Med** 1989 Mar–Apr;7(2):74–8

Epidermoid cyst traversing the pons into the fourth ventricle. Case report. Iihara K, et al. **Surg Neurol** 1989 Nov; 32(5):377–81

[Hydrocephalus and brainstem tumor of late manifestation] Vighetto A, et al. **Rev Neurol (Paris)** 1989;145(12):863–6 (Eng. Abstr.) **(Fre)**

[Assessment of central disorders of the statoacusticus nerve using high resolution imaging procedures (PET and MRI)] Morgenstern C, et al. **Laryngorhinootologie** 1990 Jan; 69(1):41–4 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Development of auditory brainstem evoked response in normal Chinese children. Hung KL. **Acta Paediatr Sin** 1989 Jan–Feb;30(1):23–9

Brainstem auditory evoked potentials (BAEPs), pathology of wave IV. Ciganek L, et al. **Acta Physiol Hung** 1990; 75(3):187–93

Brain stem auditory–evoked potentials in different strains of rodents. Chen TJ, et al. **Acta Physiol Scand** 1990 Apr; 138(4):529–38

Effect of the localization of recording electrode on the auditory brain stem responses in healthy subjects. Petřek J, et al. **Acta Univ Palacki Olomuc Fac Med** 1989; 122:143–57

Vagal interactions on brain stem neurons receiving input from the proximal stomach in cats. Barber WD, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):G321–7

Bombesin changes excitability of rat brain stem neurons sensitive to gastric distension. Ewart WR, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):G841–7

Auditory brain stem responses to bone–conducted tones in infants. Stapells DR, et al. **Ann Otol Rhinol Laryngol** 1989 Dec;98(12 Pt 1):941–9

Preoperative and postoperative auditory brain–stem response results for patients with eighth–nerve tumors. Bauch CD, et al. **Arch Otolaryngol Head Neck Surg** 1990 Sep; 116(9):1026–9

A preliminary report on the use of auditory brain–stem response audiometry and the timing of tympanotomy with pressure equalization tube insertion in cleft palate neonates. Pickard RE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Oct;115(10):1253

Brainstem auditory–evoked response in the rat. Normative studies, with observations concerning the effects of ossicular disruption. Burkard R, et al. **Audiology** 1990; 29(3):146–62

Effect of stimulus parameters on auditory brainstem response spectral analysis. Malinoff RL, et al. **Audiology** 1990; 29(1):21–8

The relationship between the amygdala and bed nucleus of the stria terminalis in the cat: an evoked potential and single cell study. Adamec R. **Behav Neural Biol** 1989 Nov; 52(3):295–320

Electrical stimulation of brainstem nuclei: elicitation, modification, and conditioning of the rabbit nictitating membrane response. Nowak AJ, et al. **Behav Neurosci** 1990 Feb;104(1):4–10

Associative factors in tolerance to analgesia produced by electrical stimulation in the brainstem. Paul D, et al. **Behav Neurosci** 1990 Feb;104(1):207–16

Neural network implementation of a three–phase model of respiratory rhythm generation. Botros SM, et al. **Biol Cybern** 1990;63(2):143–53

Dietary zinc deficiency has no effect on auditory brainstem responses in the rat. Wensink J, et al. **Biol Trace Elem Res** 1989 Oct;22(1):55–62

Myelination as a parameter of normal and retarded brain maturation. Dambska M, et al. **Brain Dev** 1990;12(2):214–20

Membrane resistance increase induced in thalamic neurons by stimulation of brainstem cholinergic afferents. Deschênes M, et al. **Brain Res** 1990 Apr 16;513(2):339–42

Action potential duration increases as body temperature decreases during hibernation. Krilowicz BL, et al. **Brain Res** 1989 Sep 25;498(1):73–80

Specific alterations in cardiovascular function and in glucose utilisation within lower brainstem nuclei following intracisternal neuropeptide Y in the conscious rat. Macrae IM, et al. **Brain Res** 1990 May 7;515(1–2):99–103

Site–specific postural and locomotor changes evoked in awake, freely moving intact cats by stimulating the brainstem. Mori S, et al. **Brain Res** 1989 Dec 25; 505(1):66–74

Electrical properties of facial motoneurons in brainstem slices from guinea pig. Nishimura Y, et al. **Brain Res** 1989 Nov 13;502(1):127–42

The motor output of the Mauthner cell, a reticulospinal command neuron. Nissanov J, et al. **Brain Res** 1990 May 28;517(1–2):88–98

Sneeze–evoking region within the brainstem. Nonaka S, et al. **Brain Res** 1990 Mar 19;511(2):265–70

The role of spinal and brainstem adenosine receptors in the modulation of the volume–evoked micturition reflex in the unanesthetized rat. Sosnowski M, et al. **Brain Res** 1990 May 7;515(1–2):207–13

Tonotopic features of speech–evoked activity in primate auditory cortex. Steinschneider M, et al. **Brain Res** 1990 Jun 11;519(1–2):158–68

A general role for serotonin in the control of behavior: studies with intracerebral 5,7–dihydroxytryptamine. Vanderwolf CH. **Brain Res** 1989 Dec 18;504(2):192–8

Effect of subcutaneous formalin treatment on responses to bulboreticular nociceptive neurons in the rat. Pertovaara A, et al. **Brain Res Bull** 1989 Dec;23(6):457–62

Catecholaminergic projections to tuberoinfundibular neurones of the paraventricular nucleus: II. Effects of stimulation of the ventral noradrenergic ascending bundle: evidence for cotransmission. Saphier D, et al.

Brain Res Bull 1989 Dec;23(6):397–404

Catecholaminergic projections to tuberoinfundibular neurones of the paraventricular nucleus: I. Effects of stimulation of A1, A2, A6 and C2 cell groups. Saphier D. **Brain Res Bull** 1989 Dec;23(6):389–95

Projections of two separate cortical areas for rhythmical jaw movements in the rat. Zhang GX, et al. **Brain Res Bull** 1990 Feb;24(2):221–30

Auditory brainstem of the ferret: maturation of the brainstem auditory evoked response. Morey AL, et al.
Brain Res Dev Brain Res 1990 Mar 1;52(1–2):279–88

Statistical dependence among the wave latencies of the auditory brain stem response. Griffiths SK, et al.
Ear Hear 1989 Oct;10(5):299–303

Effect of broadband noise on the human brain stem auditory evoked response. Hecox KE, et al. **Ear Hear** 1989 Dec; 10(6):346–53

Directionality in the interpretation of clinical auditory brain stem response measures. Sklare DA. **Ear Hear** 1990 Feb; 11(1):29–30

Transient elevation of threshold of the neonatal auditory brain stem response. Stockard JE, et al. **Ear Hear** 1990 Feb;11(1):21–8

Interaural attenuation using etymotic ER-3A insert earphones in auditory brain stem response testing. Van Campen LE, et al. **Ear Hear** 1990 Feb;11(1):66–9

Cross-correlation and latency compensation analysis of click-evoked and frequency-following brain-stem responses in man. Galbraith GC, et al.
Electroencephalogr Clin Neurophysiol 1990 Jul–Aug; 77(4):295–308

Alcohol and the auditory brain-stem response, brain temperature, and blood alcohol curves: explanation of a paradox. Lee JA, et al.
Electroencephalogr Clin Neurophysiol 1990 Sep–Oct; 77(5):362–75

Auditory brain-stem responses in the rat brain isolated from the body trunk and maintained via cross-circulation. Nishimura Y, et al.
Electroencephalogr Clin Neurophysiol 1990 Jul–Aug; 77(4):320–2

Brain-stem auditory evoked potentials in squirrel monkey (Saimiri sciureus). Pineda JA, et al.
Electroencephalogr Clin Neurophysiol 1989 Dec; 73(6):532–43

Cochlear potentials and auditory evoked potentials in the caiman (Caiman crocodilus (L.)). Smolders JW, et al.
Electroencephalogr Clin Neurophysiol 1990 Feb; 75(2):97–104

Brain-stem auditory evoked response: normative values in children. Thivierge J, et al.
Electroencephalogr Clin Neurophysiol 1990 Jul–Aug; 77(4):309–13

Combined effect of click rate and stimulus polarity on BAEP latencies. Cassvan A, et al.
Electromyogr Clin Neurophysiol 1989 Nov–Dec; 29(7–8):453–8

The brainstem auditory evoked potential: effects of high frequency filtering. Shaw NA.
Electromyogr Clin Neurophysiol 1990 Apr–May; 30(3):159–63

Auditory brainstem response thresholds in a mouse mutant with selective outer hair cell loss. Schrott A, et al.
Eur Arch Otorhinolaryngol 1990;247(1):8–11

Eye movements evoked by microstimulations in the brainstem of the alert cat. Godaux E, et al.
Exp Brain Res 1989;77(1):94–102

Modulation of spinal reflexes by pyramidal tract stimulation in an in vitro brainstem-spinal cord preparation from the hamster. Keifer J, et al. **Exp Brain Res** 1989;78(3):633–40

Quantitative comparison of frequency representation in the auditory brainstem nuclei of the gerbil, Pachyuromys duprasi. Müller M. **Exp Brain Res** 1990;81(1):140–9

Neural control of vocalization in bats: mapping of brainstem areas with electrical microstimulation eliciting species-specific echolocation calls in the rufous horseshoe bat. Schuller G, et al. **Exp Brain Res** 1990;79(1):192–206

Central auditory conduction time in the rat. Shaw NA.
Exp Brain Res 1990;79(1):217–20

Characteristics of brainstem-evoked stimulus-bound respiration rate in anesthetized cats. Hyde JE, et al.
Exp Neurol 1966 Mar;14(3):396–407

Location of an acoustic window in dolphins. Popov VV, et al. **Experientia** 1990 Jan 15;46(1):53–6

Correlations between various measures of head size and auditory brainstem response latencies. Chambers RD, et al. **Hear Res** 1989 Sep;41(2–3):179–87

Auditory brainstem responses to tonal stimuli in young and aging rats. Cooper WA Jr, et al. **Hear Res** 1990 Jan; 43(2–3):171–9

Mutant golden hamsters with an abnormal outer hair cell stereociliary arrangement. Fujita H. **Hear Res** 1990 Feb; 44(1):63–9

Effects of click polarity on auditory brain-stem potentials: a three-channel Lissajous' trajectory study. Pratt H, et al. **Hear Res** 1989 Nov;42(2–3):119–27

Three-channel Lissajous' trajectories of auditory brainstem evoked potentials: contribution of fast and slow components to planar segment formation. Pratt H, et al. **Hear Res** 1990 Jan;43(2–3):159–70

Angiotensin II as a modulator of baroreceptor reflexes in the brainstem of conscious rats. Michelini LC, et al.
Hypertension 1990 Feb;15(2 Suppl):I45–50

Brainstem auditory evoked potentials (BAEPs) in pregnant women. Tandon OP, et al. **Indian J Physiol Pharmacol** 1990 Jan;34(1):42–4

An evaluation of hearing maturation by means of auditory brainstem response in very low birthweight and preterm newborns. Samani F, et al.
Int J Pediatr Otorhinolaryngol 1990 Jun;19(2):121–7

A comparison of maximum length and Legendre sequences for the derivation of brain-stem auditory-evoked responses at rapid rates of stimulation. Burkard R, et al.
J Acoust Soc Am 1990 Apr;87(4):1656–64

Brain-stem auditory-evoked responses elicited by maximum length sequences: effect of simulous masking noise. Burkard R, et al. **J Acoust Soc Am** 1990 Apr;87(4):1665–72

Electrophysiological evidence for the critical band in humans: middle-latency responses. Burrows DL, et al.
J Acoust Soc Am 1990 Jul;88(1):180–4

Neural responses to auditory temporal patterns. Robin DA, et al. **J Acoust Soc Am** 1990 Apr;87(4):1673–82

Effect of intrathecal amino acid receptor antagonists on basal blood pressure and pressor responses to brainstem stimulation in normotensive and hypertensive rats. Mills E, et al. **J Cardiovasc Pharmacol** 1990 Jun;15(6):877–83

Brainstem facial-motor pathways from two distinct groups of stapedius motoneurons in the cat. Guinan JJ Jr, et al.
J Comp Neurol 1989 Sep 1;287(1):134–44

Brainstem afferents to the oculomotor omnipause neurons in monkey. Langer TP, et al. **J Comp Neurol** 1990 May 15;295(3):413–27

Auditory brain stem responses in characterization of dolphin hearing. Popov VV, et al. **J Comp Physiol [A]** 1990 Feb; 166(3):385–93

Afferent regulation of neurons in the brain stem auditory system. Rubel EW, et al. **J Neurobiol** 1990 Jan;21(1):169–96 (62 ref.)

Voltage behavior along the irregular dendritic structure of morphologically and physiologically characterized vagal motoneurons in the guinea pig. Nitzan R, et al.
J Neurophysiol 1990 Feb;63(2):333–46

Behavioral inspiratory inhibition: inactivated and activated respiratory cells. Orem J. **J Neurophysiol** 1989 Nov; 62(5):1069–78

Visual-response properties of neurons in turtle basal optic nucleus in vitro. Rosenberg AF, et al. **J Neurophysiol** 1990 May;63(5):1033–45

The tegmental pedunculopontine nucleus: a brain-stem output of the limbic system critical for the conditioned place preferences produced by morphine and amphetamine. Bechara A, et al. **J Neurosci** 1989 Oct;9(10):3400–9

Locomotion evoked by stimulation of the brain stem in the Atlantic stingray, Dasyatis sabina. Livingston CA, et al.
J Neurosci 1990 Jan;10(1):194–204

Membrane properties and discharge characteristics of guinea pig dorsal cochlear nucleus neurons studied in vitro. Manis PB. **J Neurosci** 1990 Jul;10(7):2338–51

Prolonged enhancement of anterior thalamic synaptic responsiveness by stimulation of a brain-stem cholinergic group. Paré D, et al. **J Neurosci** 1990 Jan;10(1):20–33

Neuronal activities in brain-stem cholinergic nuclei related to tonic activation processes in thalamocortical systems. Steriade M, et al. **J Neurosci** 1990 Aug;10(8):2541–59

Administration of testosterone attenuates neuronal loss following axotomy in the brain-stem motor nuclei of female rats. Yu WH. **J Neurosci** 1989 Nov;9(11):3908–14

Long term recordings in the cat motor cortex: unit activity and field potentials from sensory and brain stem stimulation as a means of identifying electrode position. Palmer CI.
J Neurosci Methods 1990 Feb;31(2):163–81

Behavioral changes correlated with brain-stem auditory evoked responses in term infants with moderate hyperbilirubinemia. Vohr BR, et al. **J Pediatr** 1990 Aug; 117(2 Pt 1):288–91

Serotonin-mediated inhibitory postsynaptic potential in guinea-pig prepositus hypoglossi and feedback inhibition by serotonin. Bobker DH, et al. **J Physiol (Lond)** 1990 Mar; 422:447–62

A Na+-activated K+ current in cultured brain stem neurones from chicks. Dryer SE, et al.
J Physiol (Lond) 1989 Mar;410:283–96

Desynchronized respiratory rhythms and their interactions in cats with split brain stems. Eldridge FL, et al.
J Physiol (Lond) 1989 Mar;410:513–32

Multiple-site optical monitoring of neural activity evoked by vagus nerve stimulation in the embryonic chick brain stem. Kamino K, et al. **J Physiol (Lond)** 1989 Feb; 409:263–83

The bifrequency binaural interaction component of the auditory brainstem response. Fowler CG.
J Speech Hear Res 1989 Dec;32(4):767–72

Neural substrates for reflex salivation induced by taste, mechanical, and thermal stimulation of the oral region in decerebrate rats. Matsuo R, et al. **Jpn J Physiol** 1989; 39(3):349–57

Contribution of postural muscle tone to full expression of posture and locomotor movements: multi-faceted analyses of its setting brainstem-spinal cord mechanisms in the cat. Mori S. **Jpn J Physiol** 1989;39(6):785–809 (63 ref.)

Laryngeal brainstem evoked response: a developmental study. Lalakea ML, et al. **Laryngoscope** 1990 Mar; 100(3):294–301

Forebrain influences on brainstem and spinal mechanisms of copulatory behavior: a current perspective on Frank Beach's contribution. Rose JD. **Neurosci Biobehav Rev** 1990 Summer;14(2):207–15 (30 ref.)

Differential effects of serotonin on respiratory activity of hypoglossal and cervical motoneurons: an in vitro study on the newborn rat. Monteau R, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):127–32

Neuronal activity of identified posterior hypothalamic neurons projecting to the brainstem peribrachial area of the cat. Paré D, et al. **Neurosci Lett** 1989 Dec 15; 107(1–3):145–50

Comparison between spino-bulbo-spinal and propriospinal reflexes in thalamic cats during stepping. Shimamura M, et al. **Neurosci Res** 1990 Feb;7(4):358–68

Quantal transmission at Mauthner axon target synapses in the goldfish brainstem. Hackett JT, et al. **Neuroscience** 1989;32(1):49–64

Nicotine-induced conditioned taste aversions are enhanced in rats with lesions of the area postrema. Ossenkopp KP, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):625–30

Different classes of glutamate receptors mediate distinct behaviors in a single brainstem nucleus. Dye J, et al.
Proc Natl Acad Sci U S A 1989 Nov;86(22):8993–7

Brainstem control of response modes in neurons of the cat's lateral geniculate nucleus. Uhlrich DJ, et al.
Proc Natl Acad Sci U S A 1990 Apr;87(7):2560–3

A physiologically-based model of the brain stem generator of sympathetic nerve discharge. Gebber GL, et al.
Prog Brain Res 1989;81:131–9

Half-sine stimuli and wave I of the ABR [letter; comment] Debruyne F. **Scand Audiol** 1989;18(3):160 Comment on: Scand Audiol 1988;17(3):131–6.

Low-level 0.5 and 1 kHz auditory brainstem responses. A search for the low-frequency point in the two-point ABR audiogram. Fjermedal O, et al. **Scand Audiol** 1989; 18(3):177–83

Homo- and anti-phasic stimulation in ABR. Rawool VW, et al. **Scand Audiol** 1990;19(1):9–15

[The mechanism involved in the central pressor effects of angiotensin II] Zhou Q, et al.
Sheng Li Ko Hsueh Chin Chan 1989 Oct;20(4):313–7 (29 ref.) **(Chi)**

[Evoked potentials of the brain stem in normal and pathologic conditions: experience with 692 adult subjects] Burdo S.
Acta Otorhinolaryngol Ital 1989;9 Suppl 24:1–36 (165 ref.) (Eng. Abstr.) **(Ita)**

[Changes induced by auditive monoaural and binaural fatigue in TTS and the auditory brainstem response latency] Tanzariello A, et al. **Med Lav** 1989 Nov–Dec;80(6):512–6 (Eng. Abstr.) **(Ita)**

[The influence of click polarity and stimulation rate on the auditory evoked response in relation to age] Tarantino V, et al. **Pediatr Med Chir** 1989 Sep–Oct;11(5):523–7 (Eng. Abstr.) **(Ita)**

[Inter-individual variability of mean latencies in the dynamic topography of short latency visual evoked potentials and the origin of brainstem potentials evaluated by the dipole tracing method in normal subjects] Semba H.
Nippon Ganka Gakkai Zasshi 1989 Oct;93(10):1009–16 (Eng. Abstr.) **(Jpn)**

[Visual scoring in the auditory brainstem response first report: judging the presence or absence of a response] Aoki K.
Nippon Jibiinkoka Gakkai Kaiho 1990 Jan;93(1):50–60 (Eng. Abstr.) **(Jpn)**

[Estimation of surviving auditory nerve by electrically evoked auditory brainstem response (FABR)—comparison between extra-cochlear stimulation and intra-cochlear stimulation] Hatsushika S, et al.
Nippon Jibiinkoka Gakkai Kaiho 1989 Jul;92(7):1005–11 (Eng. Abstr.) **(Jpn)**

[Frequency specificity of ABR evaluated by tuning curves] Horiuchi Y. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Nov; 92(11):1895–910 (Eng. Abstr.) **(Jpn)**

[An experimental study on the auditory brainstem response to electrical stimulation of the cochlea] Saito H.
Nippon Jibiinkoka Gakkai Kaiho 1990 Jan;93(1):93–104 (Eng. Abstr.) **(Jpn)**

[A study on three components of auditory evoked brainstem response] Yokoyama J. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Nov;92(11):1911–24 (Eng. Abstr.) **(Jpn)**

[The pathways necessary for eliciting walking by stimulation of the locomotor area of the brain stem] Kazennikov OV, et al. **Fiziol Zh SSSR** 1990 Jan;76(1):26–32 (Eng. Abstr.) **(Rus)**

[The participation of the inhibitory locomotor system of the brain stem in regulating pain sensitivity] Milelkovskiĭ BIu, et al. **Fiziol Zh SSSR** 1989 Aug;75(8):1051–6 (Eng. Abstr.) **(Rus)**

[The effect of brain stem structures on the formation of defensive behavior in animals] Milelkovskiĭ BIu, et al.
Fiziol Zh SSSR 1990 Jan;76(1):12–7 (Eng. Abstr.) **(Rus)**

[The central neurophysiological mechanisms in the regulation of inhibition] Milelkovskiĭ BIu, et al. **Fiziol Zh SSSR** 1990 Mar;76(3):289–94 (Eng. Abstr.) **(Rus)**

[Role of the brain stem in normal and pathologic conditions of the body] Smirnov VA. **Klin Med (Mosk)** 1989 Dec; 67(12):22–6 (22 ref.) **(Rus)**

[2 types of neuronal reactions of the medulla oblongata to microstimulation of the locomotor and inhibitory points of the brain stem] Selionov VA, et al. **Neirofiziologiia** 1990; 22(2):257–66 (Eng. Abstr.) **(Rus)**

[Brainstem auditory evoked potentials (BAEP) in the rabbit.

Normal patterns] Bartual J, et al.
Acta Otorrinolaringol Esp 1989 Jan–Feb;40(1):17–21 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

The brain–stem and 40 Hz middle latency auditory evoked potentials in brain death. Firsching R.
Acta Neurochir (Wien) 1989;101(1–2):52–5

Sequential changes of auditory brain stem responses in relation to intracranial and cerebral perfusion pressure and initiation of secondary brain stem damage. Kawahara N, et al. **Acta Neurochir (Wien)** 1989;100(3–4):142–9

Lesch–Nyhan syndrome with delayed onset of self–mutilation: hyperactivity of interneurons at the brainstem and blink reflex. Hatanaka T, et al.
Acta Neurol Scand 1990 Feb;81(2):184–7

Acquired pendular oscillation after brain–stem hemorrhage. Itoh Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1989; 468:205–8

Auditory brainstem response in patients with a history of kernicterus. Hung KL, et al. **Acta Paediatr Sin** 1988 Jul–Aug;29(4):229–34

Contribution of brainstem edema to neurophysiologic deterioration in the cat infusion edema model. Marmarou A, et al. **Adv Neurol** 1990;52:351–4

Divisional oculomotor nerve paresis caused by intrinsic brainstem disease. Ksiazek SM, et al. **Ann Neurol** 1989 Dec; 26(6):714–8

The early risk of multiple sclerosis following isolated acute syndromes of the brainstem and spinal cord. Miller DH, et al. **Ann Neurol** 1989 Nov;26(5):635–9

Unilateral brain–stem lesions [letter; comment] Anderson DC. **Arch Neurol** 1990 Jan;47(1):11 Comment on: Arch Neurol 1989 Mar;46(3):295–9.

Brainstem auditory evoked potential studies in patients with tinnitus and/or vertigo. Cassvan A, et al.
Arch Phys Med Rehabil 1990 Jul;71(8):583–6

Cerebral evoked potentials in human chronic Chagas' disease. Genovese OM, et al. **Arq Neuropsiquiatr** 1989 Sep; 47(3):274–8

Age effect in speech audiometry and in brainstem electric response audiometry. Debruyne F, et al. **Audiology** 1989; 28(5):258–61

Auditory brainstem evoked potentials peak identification by finite impulse response digital filters. Pratt H, et al.
Audiology 1989;28(5):272–83

Auditory brainstem response in hyperbilirubinemic rat: Part I. Kuriyama M, et al. **Biol Neonate** 1990;58(1):32–40

EEG and brainstem auditory evoked response potentials in adult male drug abusers with self–reported histories of aggressive behavior. Fishbein DH, et al. **Biol Psychiatry** 1989 Oct;26(6):595–611

Brainstem auditory–evoked responses with and without sedation in autism and Down's syndrome. Sersen EA, et al. **Biol Psychiatry** 1990 Apr 15;27(8):834–40

BAEPs in infantile spasms [letter] Curatolo P, et al.
Brain Dev 1989;11(5):347–8

Auditory brainstem responses in patients with neonatal hyperbilirubinemia and bilirubin encephalopathy. Hung KL. **Brain Dev** 1989;11(5):297–301

Brainstem auditory evoked potentials in receptive developmental language disorder. Akshoomoff N, et al.
Brain Lang 1989 Oct;37(3):409–18

The integrity of the ventral noradrenergic bundle (VNAB) is not necessary for a normal neuroendocrine stress response. Castagné V, et al. **Brain Res** 1990 Mar 19; 511(2):349–52

Is Alzheimer's disease an anterograde degeneration, originating in the brainstem, and disrupting metabolic and functional interactions between neurons and glial cells? Hertz L. **Brain Res Brain Res Rev** 1989 Oct–Dec; 14(4):335–53 (219 ref.)

Monitoring of brain stem function during posterior fossa surgery. Manninen PH, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S23

Ventral brain–stem compression from a subarachnoid ependymal cyst. Warf BC, et al. **Childs Nerv Syst** 1990 Jun;6(4):225–7

Auditory evoked potentials in vertebrobasilar transient ischemic attacks. Drake ME Jr, et al.
Clin Electroencephalogr 1990 Apr;21(2):96–100

Brainstem auditory evoked responses in partial and generalized seizures. Phillips B, et al.
Clin Electroencephalogr 1990 Jul;21(3):135–9

Long–term impairments of brain and auditory functions of children recovered from purulent meningitis. Jiang ZD, et al. **Dev Med Child Neurol** 1990 Jun;32(6):473–80

The effect of tinnitus on ABR latencies. Ikner CL, et al.
Ear Hear 1990 Feb;11(1):16–20

Electrophysiologic studies on locked–in patients: heterogeneity of findings. Towle VL, et al.
Electroencephalogr Clin Neurophysiol 1989 Nov; 73(5):419–26

Evidence for a norepinephrine–dependent brain–stem substrate in the development of kindling antagonism. Applegate CD, et al. **Epilepsy Res** 1990 May–Jun; 6(1):23–32

Reduced GABA–mediated chloride flux in entorhinal cortex–kindled rat brains. Sneddon WB, et al.
Epilepsy Res 1990 May–Jun;6(1):18–22

Diagnostic significance of motor evoked potentials in space–occupying lesions of the brain stem and spinal cord. Zentner J, et al. **Eur Arch Psychiatry Neurol Sci** 1990; 239(5):285–9

Loss of brainstem acoustic evoked potentials with spontaneous breathing in a patient with supratentorial lesion. Biniek R, et al. **Eur Neurol** 1990;30(1):38–41

Brainstem auditory evoked potential abnormalities and magnetic resonance imaging in posterior fossa lesions. Scaioli V, et al. **Eur Neurol** 1989;29(5):246–54

Brainstem mediation of prefrontal stimulus–produced hypotension. Hardy SG, et al. **Exp Brain Res** 1990; 79(2):393–9

Brainstem auditory evoked potentials in migraine—evidence of increased side differences during the pain–free interval. Schlake HP, et al. **Headache** 1990 Feb;30(3):129–32

Noise and hypoxia induced temporary threshold shifts in rats studied by ABR. Attias J, et al. **Hear Res** 1990 May; 45(3):247–52

Brain stem evoked response audiometry in neonates. Mandal AK, et al. **Indian Pediatr** 1989 Jun;26(6):566–70

Central and peripheral nervous system effects of hand–arm vibrating tool operation. A study of brainstem auditory–evoked potential and peripheral nerve conduction. Murata K, et al.
Int Arch Occup Environ Health 1990;62(3):183–7

Sensorial substitution using sound–vibratory stimuli on the teeth: a new approach to the rehabilitation of the profoundly deaf. Galera–García C, et al. **Int J Neurosci** 1989 Nov;49(1–2):61–70

Brainstem auditory evoked potentials in patients with multi–infarct dementia and dementia of the Alzheimer type. Tachibana H, et al. **Int J Neurosci** 1989 Oct;48(3–4):325–31

Cervical sympathetic and phrenic nerve responses to progressive brain hypoxia. Wasicko MJ, et al.
J Appl Physiol 1990 Jan;68(1):53–8

Auditory brain stem response and electrically elicited blink reflex in handicapped children. Tanaka J, et al.
J Child Neurol 1990 Jan;5(1):40–4

Photo–evoked eyelid microvibration in neonates with hyperosmolality. Yasuhara A, et al. **J Child Neurol** 1990 Jul;5(3):191–4

Acoustic neuroma and the contralateral ear: recovery of auditory brainstem response abnormalities after surgery. Deans JA, et al. **J Laryngol Otol** 1990 Jul;104(7):565–9

Contralateral auditory brainstem response abnormalities in acoustic neuroma. Moffat DA, et al. **J Laryngol Otol** 1989 Sep;103(9):835–8

Brainstem auditory evoked potentials in Wilson's disease. Butinar D, et al. **J Neurol Sci** 1990 Feb;95(2):163–9

Bickerstaff brainstem encephalitis. A grave non–demyelinating disease with benign prognosis. Yaqub BA, et al. **J Neurol Sci** 1990 Apr;96(1):29–40

Brainstem auditory and somatosensory evoked potentials in neuro–Behçet's syndrome. Nakamura Y, et al.
Jpn J Psychiatry Neurol 1989 Jun;43(2):191–200

Alterations of brain stem auditory evoked potentials in hypothermia. Chen TJ, et al.
Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1990 Mar; 6(3):108–17

Vestibular and other balance disorders in multiple sclerosis. Differential diagnosis of disequilibrium and topognostic localization. Herrera WG. **Neurol Clin** 1990 May; 8(2):407–20 (22 ref.)

Hearing loss from the acoustic artifact of the coil used in extracranial magnetic stimulation. Counter SA, et al.
Neurology 1990 Aug;40(8):1159–62

The pretectal syndrome: 206 patients. Keane JR.
Neurology 1990 Apr;40(4):684–90

Somatosensory and auditory brain stem conduction after head injury: a comparison with clinical features in prediction of outcome. Lindsay K, et al. **Neurosurgery** 1990 Feb; 26(2):278–85

Abnormal wave forms of auditory brainstem response (ABR) in two dogs. Uzuka Y, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):1083–6

Frequency–specific auditory brainstem response analysis of young normal, aged normal and aged alcohol–addicted rats. Anniko M, et al. **ORL J Otorhinolaryngol Relat Spec** 1989; 51(5):285–9

Hypotonia, congenital nystagmus, and abnormal auditory brainstem response. Wang PJ, et al. **Pediatr Neurol** 1989 Nov–Dec;5(6):381–3 (11 ref.)

Altered brainstem sensory processing as assessed by reflex modification procedures in infants at risk for apnea. Anday EK, et al. **Pediatr Res** 1989 Dec;26(6):576–82

Neural mechanisms in the genesis of sleep apnea. Pack AI, et al. **Prog Clin Biol Res** 1990;345:177–88; discussion 189–90

Neurological complication of Mycoplasma pneumoniae infection. Ong EL, et al. **Respir Med** 1989 Sep;83(5):441–2

Auditory evoked brainstem potentials in acute posterior fossa mass lesions. MacKay A, et al. **Surg Forum** 1978;29:523–5

The effects of thiamin on the neurophysiological alterations induced by lead. Kim JS, et al. **Vet Hum Toxicol** 1990 Apr; 32(2):101–5

[Auditory brainstem response in the aged and elderly] Guo YC, et al. **Chung Hua Erh Bi Yen Hou Ko Tsa Chih** 1990; 25(1):9–11, 62 (Eng. Abstr.) **(Chi)**

[Electrophysiological studies of acute anoxic hypoxia] Hsu CC, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Dec;5(12):670–5 (Eng. Abstr.) **(Chi)**

[Brainstem auditory evoked potentials in head injury patients] Pan CH, et al.
Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1989 Oct; 5(10):569–77 (Eng. Abstr.) **(Chi)**

[Anomalies in early somatosensory evoked potentials in brain stem lesions (study of 64 cases)] Convers P, et al.
Neurophysiol Clin 1989 Dec;19(6):443–68 (Eng. Abstr.) **(Fre)**

[Contribution of the EEG and evoked potentials in the prognosis of post–anoxic comas in children] Parain D, et al. **Neurophysiol Clin** 1989 Dec;19(6):489–94 (Eng. Abstr.) **(Fre)**

[Diagnostic value of the early auditory evoked potentials in acute cranio–cerebral trauma in children] Küttner K, et al. **Kinderarztl Prax** 1990 Jan;58(1):37–43 (Eng. Abstr.) **(Ger)**

[Acoustically evoked brain stem potentials in infants at risk for SIDS with and without aminophylline therapy] Reiterer F, et al. **Klin Padiatr** 1989 Sep–Oct;201(5):382–6 (Eng. Abstr.) **(Ger)**

[Effect of binaural conductive hearing loss on maturation of acoustically evoked potentials (auditory brain stem response, middle latency response) in guinea pigs] Walger M, et al. **Laryngorhinootologie** 1989 Nov;68(11):626–31 (Eng. Abstr.) **(Ger)**

[Acoustically evoked brain stem potentials in chronic alcoholism and withdrawal] Fichtel U, et al.
Psychiatr Neurol Med Psychol (Leipz) 1989 Nov; 41(11):660–3 (Eng. Abstr.) **(Ger)**

[Brain stem dysfunction in Arnold–Chiari II syndrome] Holschneider AM, et al. **Z Kinderchir** 1990 Apr;45(2):67–71 (Eng. Abstr.) **(Ger)**

[Evoked acoustic responses in the brain stem of subjects with facial hemispasm and megabasilar anomaly] Sicurella L, et al. **Riv Neurol** 1989 Jul–Aug;59(4):142–5 (Eng. Abstr.) **(Ita)**

[Intra–operative monitoring with ABR during neurovascular decompression for VIIth and VIIIth cranial nerves: a warning sign for surgeons] Sugiyama K, et al.
No Shinkei Geka 1989 Jun;17(6):545–53 (Eng. Abstr.) **(Jpn)**

[Neurological and pathophysiological analyses of patients with absent auditory brainstem evoked response] Sawaishi Y, et al. **No To Hattatsu** 1990 May;22(3):223–9 (Eng. Abstr.) **(Jpn)**

[Auditory brainstem response in dead on arrival cases] Baba S, et al. **No To Shinkei** 1989 Jul;41(7):737–41 (Eng. Abstr.) **(Jpn)**

[Pathophysiologic nature of dissociative states of the brain stem in lesions of the midbrain and the bridge of Varolius] Borshchagovskiĭ ML, et al. **Fiziol Cheloveka** 1989 Sep–Oct; 15(5):32–41 **(Rus)**

[Reaction of short–latency brain stem evoked potentials to acoustic stimulation and electroencephalography in post–traumatic epilepsy] Avakian GN, et al.
Zh Nevropatol Psikhiatr 1989;89(9):65–8 (Eng. Abstr.) **(Rus)**

[Short–latency brain stem evoked potentials to acoustic stimulation in psychogenic disturbances] Litvishchenko IuF, et al. **Zh Nevropatol Psikhiatr** 1990;90(5):86–9 (Eng. Abstr.) **(Rus)**

[Brain stem auditory evoked potentials in the early period after a brain concussion] Bruk BM, et al.
Zh Vopr Neirokhir 1990 May–Jun;(3):16–7 (Eng. Abstr.) **(Rus)**

[Auditory evoked potentials of the brain stem in the study of tinnitus] Garcia Bartual E, et al.
Acta Otorrinolaringol Esp 1989 Jul–Aug;40(4):285–9 (Eng. Abstr.) **(Spa)**

[Follow–up and evaluation by means of brain stem evoked potentials of a pediatric population diagnosed as having had fetal distress] López Moya JJ, et al.
Acta Otorrinolaringol Esp 1989 Jan–Feb;40(1):1–12 (Eng. Abstr.) **(Spa)**

[Flunitrazepam: a cause of coma with brainstem dysfunction simulating structural damage (letter)] Ascensión A, et al.
Rev Clin Esp 1989 Nov;185(7):379 **(Spa)**

RADIOGRAPHY

A clinical analysis of 32 brainstem haemorrhages; with special reference to surviving but severely disabled cases. Komiyama M, et al. **Acta Neurochir (Wien)** 1989; 101(1–2):46–51

CT brainstem abnormalities in the differential diagnosis of Huntington's disease. Masucci EF, et al.
Comput Med Imaging Graph 1990 May–Jun;14(3):205–12

Non–familial degenerative disease and atrophy of brainstem and cerebellum. Clinical and CT data in 47 patients. Staal A, et al. **J Neurol Sci** 1990 Mar;95(3):259–69

SURGERY

Reappearance of brain–stem auditory evoked potentials after surgical treatment of a brain–stem hemorrhage: contributions to the question of wave generation. Zanette G, et al. **Electroencephalogr Clin Neurophysiol** 1990 Mar–Apr;77(2):140–4

Surgical management of hematomas of the brain stem. Konovalov AN, et al. **J Neurosurg** 1990 Aug;73(2):181–6

Tuberculous abscess of the brain stem. Prakash B, et al.
Surg Neurol 1989 Dec;32(6):445–8

[Surgical treatment of brain stem tumors] Konovalov AN.
Zentralbl Neurochir 1989;50(2):72–4 (Eng. Abstr.) **(Ger)**

TRANSPLANTATION

Immunohistochemical studies on the development of tyrosine hydroxylase- and serotonin-immunoreactive neurons in fetal dorsal raphe tissue transplanted into the anterior eye chamber of adult rats. Tanabe T, et al. **Arch Histol Cytol** 1989 Dec;52(5):553–61

Rearrangement of serotonin-immunoreactive fibers in the denervated rat suprachiasmatic nucleus after transplantation of fetal raphe tissue. Ueda S, et al. **Cell Tissue Res** 1990 May;260(3):617–20

Reafferentation of the subcortically denervated hippocampus as a model for transplant-induced functional recovery in the CNS. Björklund A, et al. **Prog Brain Res** 1990; 83:411–26 (64 ref.)

ULTRASTRUCTURE

Ultrastructure of primary afferent fibres and terminals expressing alpha-galactose extended oligosaccharides in the spinal cord and brainstem of the rat. Alvarez FJ, et al. **J Neurocytol** 1989 Oct;18(5):631–45

Intracytoplasmic neuronal inclusions in woodchuck brain stem. Pierce V, et al. **J Wildl Dis** 1990 Jan;26(1):62–6

Ultrastructural features of neurons in the C57BL/6J mouse anteroventral cochlear nucleus: young mice versus old mice with chronic presbycusis. Briner W, et al. **Neurobiol Aging** 1989 Jul–Aug;10(4):295–303 (29 ref.)

[Ultrastructural analysis of the cerebrospinal fluid in patients with Parkinson disease] De Mattos JP, et al. **Arq Neuropsiquiatr** 1990 Mar;48(1):16–20 (Eng. Abstr.) **(Por)**

BRAINWASHING see **PERSUASIVE COMMUNICATION**

BRANCH RETINAL ARTERY OCCLUSION see **RETINAL ARTERY OCCLUSION**

BRANCHED-CHAIN KETOACIDURIA see **MAPLE SYRUP URINE DISEASE**

BRANCHIAL CYST see **BRANCHIOMA**

BRANCHIAL REGION

The levator veli palatini muscle arises from the second branchial arch: a hypothesis. Dellon AL. **Ann Plast Surg** 1989 Oct;23(4):317–9

[Facial malformations and asymmetries caused by the first and second branchial arch syndrome] Van den Eynde H, et al. **Acta Stomatol Belg** 1989 Jun;86(1):49–65 (Eng. Abstr.) **(Dut)**

ABNORMALITIES

Anomalies of the first branchial cleft. Aronsohn RS, et al. **Arch Otolaryngol** 1976 Dec;102(12):737–40

First and second branchial syndrome. Sessions DG, et al. **Arch Otolaryngol** 1972 Dec;96(6):579–83

First branchial cleft anomaly: a report of case. Takimoto T, et al. **Auris Nasus Larynx** 1989;16(3):151–5

First branchial cleft sinus. Wagle MB, et al. **Br J Plast Surg** 1966 Jul;19(3):226–8

Thyroglossal duct and second branchial cleft anomalies in adults. Androulakis M, et al. **Ear Nose Throat J** 1990 May; 69(5):318–22

Congenital midline cervical cleft. Bergevin MA, et al. **Pediatr Pathol** 1989;9(6):731–9

Experimental craniofacial malformations induced by retinoids and resembling branchial arch syndromes. Granström G, et al. **Scand J Plast Reconstr Surg Hand Surg** 1990; 24(1):3–12

[High-resolution computed tomography in the diagnosis of branchial otodysplasias. A report on 10 cases (15 ears)] Gugliantini P, et al. **Radiol Med (Torino)** 1989 Dec; 78(6):593–602 (Eng. Abstr.) **(Ita)**

EMBRYOLOGY

[The branchial region and its proper role in the morphogenesis of the neck] Guerrier Y. **Acta Otorhinolaryngol Belg** 1989;43(5):551–8 (Eng. Abstr.) **(Fre)**

BRANCHIOMA

Branchiogenic cyst of larynx. Chawla RK, et al. **Indian J Chest Dis Allied Sci** 1989 Apr–Jun;31(2):133–5

Fourth branchial pouch sinus: principles of diagnosis and management. Godin MS, et al. **Laryngoscope** 1990 Feb; 100(2 Pt 1):174–8 (16 ref.)

So-called branchiogenic carcinoma is actually cystic metastases in the neck from a tonsillar primary. Micheau C, et al. **Laryngoscope** 1990 Aug;100(8):878–83

[Primary or secondary malignant tumors of tonsillar cysts. Apropos of a case of occult papillary cancer of the thyroid disclosed by intracystic metastasis] Rodier JF, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(7):485–9 (30 ref.) (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Infection in branchial cysts. Fleming WB. **Aust N Z J Surg** 1988 Jun;58(6):481–3

Pyogenic thyroiditis due to branchial pouch sinus. Katz R, et al. **Isr J Med Sci** 1989 Nov;25(11):641–4

CONGENITAL

Unusual patterns of congenital neck masses in children. Sonnino RE, et al. **J Pediatr Surg** 1989 Oct;24(10):966–9

[Branchial cyst and fistula of the first branchial cleft. Apropos of a case] Sprem N, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(6):342–4 (14 ref.) (Eng. Abstr.) **(Fre)**

[An unusual lateral cervico-facial fistula] Skevas A, et al. **Laryngorhinootologie** 1989 Aug;68(8):475–7 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Pharyngeal cleft sinuses and cysts, and other benign neck lesions. Friedberg J. **Pediatr Clin North Am** 1989 Dec; 36(6):1451–69 (18 ref.)

Branchial cysts presenting as neck infections. Mellis M, et al. **Va Med** 1990 Jun;117(6):259–60

[Sonographic diagnosis and differential diagnosis of neck cysts] Koch T, et al. **HNO** 1989 Aug;37(8):323–8 (Eng. Abstr.) **(Ger)**

[A unicameral aneurysmal bone cyst of the cervical spine. The differential diagnosis of a lateral cervical cyst] Dietlein M, et al. **ROFO** 1990 Jun;152(6):732–3 **(Ger)**

ETIOLOGY

Aetiology of branchial cysts. Chionh EH, et al. **Aust N Z J Surg** 1989 Dec;59(12):949–51

Benign cervical lymphoepithelial cyst: report of cases. Skouteris CA, et al. **J Oral Maxillofac Surg** 1989 Oct; 47(10):1106–12 (27 ref.)

GENETICS

Dominant branchial cleft syndrome with characteristics of both branchio-oto-renal and branchio-oculo-facial syndrome. Legius E, et al. **Clin Genet** 1990 May; 37(5):347–50

PATHOLOGY

Benign cysts of the parotid gland. Antoniadis K, et al. **Int J Oral Maxillofac Surg** 1990 Jun;19(3):139–40 (22 ref.)

Pharyngeal cyst arising from second branchial cleft. Takimoto T, et al. **J Laryngol Otol** 1989 Oct;103(10):964–5

Mucoepidermoid carcinoma arising in a lymphoepithelial cyst—report of a case and review of the literature on branchiogenic carcinoma. Misonou J, et al. **Jpn J Surg** 1989 Jul;19(4):474–9 (17 ref.)

Lateral cervical cysts: a review of 42 cases. Titchener GW, et al. **N Z Med J** 1989 Oct 11;102(877):536–7

Branchial cleft fistula with heterotopic salivary gland tissue in the lower neck. Takimoto T, et al. **ORL J Otorhinolaryngol Relat Spec** 1990;52(4):265–8

[Cysts and fistulas of the 1st cleft. Apropos of 5 cases] Ennouri A, et al. **Rev Stomatol Chir Maxillofac** 1990; 91(3):240–4 (22 ref.) (Eng. Abstr.) **(Fre)**

[Cysts and fistulas of the lateral neck. Apropos of 18 cases with a review of the literature] Ennouri A, et al. **Rev Stomatol Chir Maxillofac** 1990;91(4):286–90 (14 ref.) (Eng. Abstr.) **(Fre)**

RADIOGRAPHY

Clinical radiology quiz. Branchial cleft cyst. Som PM. **Am J Otolaryngol** 1989 Nov–Dec;10(6):430–1

Diagnosis and differential diagnosis of branchial cleft cysts by CT scan. Coppens F, et al. **J Belge Radiol** 1990 Jun; 73(3):189–96

[Lateral fistulas of the neck] Ferrando Valls F, et al. **Acta Otorrinolaringol Esp** 1989 Jul–Aug;40(4):297–303 (Eng. Abstr.) **(Spa)**

SURGERY

Per-oral excision of a branchial cyst. Dilkes MG, et al. **J Laryngol Otol** 1990 Feb;104(2):143–4

Congenital midline cervical cleft with subcutaneous fibrous cord. Fincher SG, et al. **Otolaryngol Head Neck Surg** 1989 Sep;101(3):399–401

A new technique for the excision of the first branchial cleft fistula—turn-inside-out method of the fistula. Ohkawa H, et al. **Z Kinderchir** 1990 Feb;45(1):56–8

[Congenital fistula of the 4th pharyngeal pouch and cleft] Chatzimanolis E, et al. **HNO** 1990 Jun;38(6):217–9 (Eng. Abstr.) **(Ger)**

[Duplication of the auditory canal. A vestige of the 1st branchial cleft] Strutz J, et al. **Laryngorhinootologie** 1989 Dec;68(12):694–7 (Eng. Abstr.) **(Ger)**

[Neck masses in childhood. Surgical experience in 154 cases] Spinelli C, et al. **Minerva Pediatr** 1990 May;42(5):169–72 (Eng. Abstr.) **(Ita)**

BRANHAMELLA CATARRHALIS

Treatment of Branhamella catarrhalis infections. Davies BI, et al. **J Antimicrob Chemother** 1990 Jan;25(1):1–4 (49 ref.)

[Nosocomial pulmonary infections caused by Branhamella catarrhalis in intensive care units] Denamur E, et al. **Agressologie** 1989 May;30(5):251–3 (Eng. Abstr.) **(Fre)**

[A review of four cases of Branhamella catarrhalis bacteremia in children] Challier P, et al. **Ann Pediatr (Paris)** 1990 Jan; 37(1):44–7 (Eng. Abstr.) **(Fre)**

ANALYSIS

Studies of the outer membrane proteins of Branhamella catarrhalis. Murphy TF. **Am J Med** 1990 May 14; 88(5A):41S–45S (33 ref.)

CLASSIFICATION

Esterase electrophoresis: a molecular tool for studying the epidemiology of Branhamella catarrhalis nosocomial infection. Picard B, et al. **Epidemiol Infect** 1989 Dec; 103(3):547–54

Serological typing of Branhamella catarrhalis strains on the basis of lipopolysaccharide antigens. Vaneechoutte M, et al. **J Clin Microbiol** 1990 Feb;28(2):182–7

DRUG EFFECTS

Antibiotic susceptibilities and drug resistance in Moraxella (Branhamella) catarrhalis. Wallace RJ Jr, et al. **Am J Med** 1990 May 14;88(5A):46S–50S (50 ref.)

Tetracycline and erythromycin resistance among clinical isolates of Branhamella catarrhalis. Brown BA, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1631–3

The comparative activity of lomefloxacin (SC-47111, NY-198) and other orally absorbable agents against Haemophilus influenzae and Branhamella catarrhalis. Forward KR, et al. **Diagn Microbiol Infect Dis** 1989 Sep–Oct;12(5):437–40

In vitro activity of tosufloxacin (A-60969) and clarithromycin (A-56268, TE-031) against resistant Haemophilus influenzae, Streptococcus pneumoniae and Branhamella catarrhalis isolates. Bryan JP, et al. **Eur J Clin Microbiol Infect Dis** 1990 May;9(5):361–5

A note on susceptibility of Branhamella catarrhalis to heavy metals. Riley TV, et al. **J Appl Bacteriol** 1989 Aug; 67(2):185–9

In-vitro activity of ampicillin/sulbactam and other antibiotics against clinical isolates of Haemophilus sp. and Branhamella catarrhalis. Stefani S, et al. **J Chemother** 1990 Feb; 2(1):26–30

Effect of ampicillin, cefmetazole and minocycline on the adherence of Branhamella catarrhalis to pharyngeal epithelial cells. Ahmed K, et al. **Tohoku J Exp Med** 1990 May;161(1):1–7

[In vitro effect of cefixime against 200 strains of Branhamella catarrhalis. Comparison with cefotaxime] Chardon H, et al. **Presse Med** 1989 Oct 11;18(32):1556–9 (19 ref.) (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

BRO beta-lactamases of Branhamella catarrhalis and Moraxella subgenus Moraxella, including evidence for chromosomal beta-lactamase transfer by conjugation in B. catarrhalis, M. nonliquefaciens, and M. lacunata. Wallace RJ Jr, et al. **Antimicrob Agents Chemother** 1989 Nov; 33(11):1845–54

GENETICS

Branhamella catarrhalis: phenotypic characteristics. Doern GV. **Am J Med** 1990 May 14;88(5A):33S–35S (27 ref.)

A comparison of serum bactericidal activity and phenotypic characteristics of bacteremic, pneumonia-causing strains, and colonizing strains of Branhamella catarrhalis. Jordan KL, et al. **Am J Med** 1990 May 14;88(5A):28S–32S

GROWTH & DEVELOPMENT

Presence of Branhamella catarrhalis alters the survival of Streptococcus pneumoniae and Haemophilus influenzae in middle ear effusion: an in vitro study. Stenfors LE, et al. **J Laryngol Otol** 1989 Nov;103(11):1030–3

Interaction between Streptococcus pneumoniae and Branhamella catarrhalis obtained from double-colonized, healthy nasopharynx and double-infected, diseased middle ear cavity. Stenfors LE, et al. **Scand J Infect Dis** 1989; 21(4):397–401

IMMUNOLOGY

Antibodies against Streptococcus pneumoniae, Haemophilus influenzae and Branhamella catarrhalis in middle ear effusion during early phase of acute otitis media. Karjalainen H, et al. **Acta Otolaryngol (Stockh)** 1990 Jan–Feb;109(1–2):111–8

Antibody response to P-protein in patients with Branhamella catarrhalis infections. Chi DS, et al. **Am J Med** 1990 May 14;88(5A):25S–27S

An enzyme-linked immunosorbent assay for the determination of human IgG subclass antibodies directed against Branhamella catarrhalis. Goldblatt D, et al. **J Immunol Methods** 1990 Apr 17;128(2):219–25

ISOLATION & PURIFICATION

Occurrence of middle ear pathogens in the nasopharynx of young individuals. A quantitative study in four age groups. Stenfors LE, et al. **Acta Otolaryngol (Stockh)** 1990 Jan–Feb; 109(1–2):142–8

Moraxella (Branhamella) catarrhalis bacteremia. A case report and literature review. Wallace MR, et al. **Arch Intern Med** 1990 Jun;150(6):1332–4 (46 ref.)

Rapid identification of Branhamella catarrhalis. A

comparison of five rapid methods. Louie M, et al. **Diagn Microbiol Infect Dis** 1990 May-Jun;13(3):205-8

Superoxol and aminopeptidase tests for identification of pathogenic Neisseria species and Moraxella (Branhamella) catarrhalis. Pérez JL, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jun;9(6):421-4

Evaluation of Bacto TB hydrolysis reagent (Tween 80) for the identification of Branhamella catarrhalis. Weiner M, et al. **J Clin Microbiol** 1990 Jan;28(1):126-7

Shunt-associated ventriculitis caused by Branhamella catarrhalis [letter] Cooke RP, et al. **J Hosp Infect** 1990 Feb;15(2):197-8

Branhamella catarrhalis as a cause of acute purulent pericarditis [letter] Kostiala AA, et al. **J Infect** 1989 Nov; 19(3):291-2

On Branhamella catarrhalis pneumonia. Hefferon MD, et al. **Pediatr Pulmonol** 1990;8(3):212-3

Branhamella catarrhalis pneumonia with bacteremia. Choo PW, et al. **South Med J** 1989 Oct;82(10):1317-8

PATHOGENICITY

Respiratory tract infections due to Branhamella catarrhalis and Neisseria species. McGowan JE Jr. **Curr Clin Top Infect Dis** 1987;8:181-203 (143 ref.)

Effect of age on adherence of Branhamella catarrhalis to buccal epithelial cells. Carr B, et al. **Gerontology** 1989; 35(2-3):127-9

The significance of Branhamella catarrhalis in bronchopulmonary infection--a case-control study. Yuen KY, et al. **J Infect** 1989 Nov;19(3):251-6

Branhamella catarrhalis bronchopulmonary isolates in PICU patients. Kasian GF, et al. **Pediatr Pulmonol** 1989; 7(3):128-32

Branhamella catarrhalis pneumonia: report of 4 cases. Yen MY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jun; 88(6):610-6

[Infections caused by Branhamella catarrhalis] Ejlertsen T, et al. **Ugeskr Laeger** 1990 Feb 12;152(7):475-7 (Eng. Abstr.) **(Dan)**

[Branhamella catarrhalis--a pathogen or an innocent bystander (editorial)] Izareli S, et al. **Harefuah** 1989 Jul; 117(1-2):35-7 **(Heb)**

ULTRASTRUCTURE

Pili (fimbriae) of Branhamella species. Marrs CF, et al. **Am J Med** 1990 May 14;88(5A):36S-40S (53 ref.)

BRASSICA

Detection and isolation of pentachlorophenol in oil samples associated with the Spanish toxic oil syndrome. Guitart R, et al. **Bull Environ Contam Toxicol** 1990 Aug;45(2):181-8

Reduction in mammary tumorigenesis in the rat by cabbage and cabbage residue. Bresnick E, et al. **Carcinogenesis** 1990 Jul;11(7):1159-63

Goiter, iodine, and cabbage. Farrar GE Jr. **Clin Ther** 1990 Mar-Apr;12(2):191-2

Glutathione S-transferase subunit induction patterns of Brussels sprouts, allyl isothiocyanate and goitrin in rat liver and small intestinal mucosa: a new approach for the identification of inducing xenobiotics. Bogaards JJ, et al. **Food Chem Toxicol** 1990 Feb;28(2):81-8

Late cases of toxic oil syndrome: evidence that the aetiological agent persisted in oil stored for up to one year. Posada de la Paz M, et al. **Food Chem Toxicol** 1989 Aug; 27(8):517-21

Reconstitution of rapeseed high molecular weight protein from isolated subunits. Bhushan R, et al. **Int J Pept Protein Res** 1990 Apr;35(4):310-4

Modified method of phytic acid analysis in rapeseed. Mothes R, et al. **Nahrung** 1990;34(1):99-101

Cadmium deposition and hepatic microsomal activity in mice fed Swiss chard grown on municipal incinerator refuse ash. Stoewsand GS, et al. **Sci Total Environ** 1990 May 15; 94(3):253-9

High levels of plasma FVIII and vWF in the toxic epidemic syndrome patients. López-Fernández MF, et al. **Thromb Haemost** 1989 Sep 29;62(2):690-3

[Personal experiences with naturopathy. Spices as medicine. 2: Mustard oil drugs] Zimmermann W. **Fortschr Med** 1990 May 20;108(15):20-2 **(Ger)**

[Biological properties of vegetable oils containing linolenic acid (18:3 omega 3)] Iazeva LI, et al. **Vopr Pitan** 1989 May-Jun;(3):49-53 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Oil seed rape and equine respiratory disease [letter] Hackett IJ. **Vet Rec** 1990 Jul 14;127(2):46

ANALYSIS

Hydrogen ion titration of 12 S rape seed protein and partial N-terminal sequence of one of it's subunits. Bhushan R, et al. **Biochem Int** 1989 Oct;19(4):835-43

The occurrence of aflatoxins in mustard and mustard products. Sahay SS, et al. **Food Addit Contam** 1990 Jul-Aug;7(4):509-13

Structural studies on native and chemically modified storage proteins from rapeseed (Brassica napus L.) and related plant proteins. Schwenke KD. **Nahrung** 1990;34(3):225-40 (59 ref.)

[Effect of the variety and size of fresh and frozen brussels sprouts on the vitamin C level] Kmiecik W, et al. **Rocz Panstw Zakl Hig** 1989;40(3):215-22 (Eng. Abstr.) **(Pol)**

[Changes in the levels of nitrates and nitrites in vegetables and vegetable products and vitamin C in white sauerkraut] Nabrzyski M, et al. **Rocz Panstw Zakl Hig** 1989; 40(3):198-207 (Eng. Abstr.) **(Pol)**

ENZYMOLOGY

Translational or post-translational processes affect differentially the accumulation of isocitrate lyase and malate synthase proteins and enzyme activities in embryos and seedlings of Brassica napus. Ettinger WF, et al. **Arch Biochem Biophys** 1990 Aug 15;281(1):139-43

An improved method for the purification of myrosinase and its physicochemical characterization. Pessina A, et al. **Arch Biochem Biophys** 1990 Aug 1;280(2):383-9

Identification of high levels of type I and type 2A protein phosphatases in higher plants. MacKintosh C, et al. **Biochem J** 1989 Aug 15;262(1):335-9

Lipase from Brassica napus L. discriminates against cis-4 and cis-6 unsaturated fatty acids and secondary and tertiary alcohols. Hills MJ, et al. **Biochim Biophys Acta** 1990 Feb 6;1042(2):237-40

Immunological detection of NADH-specific enoyl-ACP reductase from rape seed (Brassica napus)--induction, relationship of alpha and beta polypeptides, mRNA translation and interaction with ACP. Slabas AR, et al. **Biochim Biophys Acta** 1990 Jun 19;1039(2):181-8

Cabbage seed protease inhibitor: a slow, tight-binding inhibitor of trypsin with activity toward thrombin, activated Stuart factor (factor Xa), activated Hageman factor (factor XIIa), and plasmin. Carter TH, et al. **Blood** 1990 Jan 1;75(1):108-15

GENETICS

The molecular genetics of self-incompatibility in Brassica. Nasrallah JB, et al. **Annu Rev Genet** 1989;23:121-39 (64 ref.)

Mutational analysis of pistil structure and development of Arabidopsis thaliana. Okada K, et al. **Cell Differ Dev** 1989 Oct;28(1):27-37

Isolation and characterisation of satellite DNA from Brassica juncea (L.) Czern. Reddy AS, et al. **Indian J Biochem Biophys** 1989 Jun;26(3):131-5

Characterization of a cDNA clone encoding a Brassica napus 12 S protein (cruciferin) subunit. Relationship between precursors and mature chains. Rödin J, et al. **J Biol Chem** 1990 Feb 15;265(5):2720-3

Expression of the 2S albumin from Bertholletia excelsa in Brassica napus. Guerche P, et al. **Mol Gen Genet** 1990 May; 221(3):306-14

A cDNA encoding an S-locus specific glycoprotein from Brassica oleracea plants containing the S5 self-incompatibility allele. Scutt CP, et al. **Mol Gen Genet** 1990 Feb;220(3):409-13

Isolation, expression and phylogenetic inheritance of an acetolactate synthase gene from Brassica napus. Wiersma PA, et al. **Mol Gen Genet** 1989 Nov;219(3):413-20

Relationship of a putative receptor protein kinase from maize to the S-locus glycoproteins of Brassica. Walker JC, et al. **Nature** 1990 Jun 21;345(6277):743-6

A Brassica napus gene encoding 5-enolpyruvylshikimate-3-phosphate synthase. Gasser CS, et al. **Nucleic Acids Res** 1990 May 11;18(9):2821

Nucleotide sequence and expression of a new Arabidopsis U2 snRNA gene. Marshallsay C, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5280

Nucleotide sequence of the chloroplast psbI and trnS-GCU genes from mustard (Sinapis alba). Neuhaus H, et al. **Nucleic Acids Res** 1990 Jan 25;18(2):368

Nucleotide sequence of the mustard chloroplast genes trnH and rps19'. Nickelsen J, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1051

Nucleotide sequence of the 18S-25S spacer region from mustard DNA. Rathgeber J, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7522

Nucleotide sequence of the intergenic spacer and the 18S ribosomal RNA gene from mustard (Sinapis alba). Rathgeber J, et al. **Nucleic Acids Res** 1990 Mar 11; 18(5):1288

[Primary structure of the leading sequence of 16S rRNA gene in Brassica napus chloroplast] Gao JG, et al. **I Chuan Hsueh Pao** 1989;16(2):89-96 (Eng. Abstr.) **(Chi)**

GROWTH & DEVELOPMENT

Phytogrowth-inhibitory and antibacterial activities of 2,5-dihydroxy-1,4-dithiane and its derivatives. Inamori Y, et al. **Chem Pharm Bull (Tokyo)** 1990 Jan;38(1):243-5

IMMUNOLOGY

Purification and characterization of an allergen of mustard seed. Domínguez J, et al. **Ann Allergy** 1990 Apr;64(4):352-7

Oilseed rape as a potent antigen [letter] Parratt D, et al. **Lancet** 1990 Jan 13;335(8681):121-2

Epitope mapping of the major allergen from yellow mustard seeds, Sin a I. Menéndez-Arias L, et al. **Mol Immunol** 1990 Feb;27(2):143-50

METABOLISM

Net appearance of amino acids in portal blood during the digestion of casein or rapeseed proteins in the pig. Galibois I, et al. **Can J Physiol Pharmacol** 1989 Nov;67(11):1409-17

Biologically active ether lipids. Biotransformation of rac-1(3)-O-alkylglycerols in cell suspension cultures of rape and semisynthesis of 1-O-alkyl-2-palmitoyl-sn-glycero-3-phospho-(N-palmitoyl)ethanolamines, potent antitumor agents. Apte SS, et al. **FEBS Lett** 1990 Jun 4;265(1-2):104-6

MICROBIOLOGY

Susceptibility of Brassica species to cauliflower mosaic virus infection is related to a specific stage in the virus multiplication cycle. Saunders K, et al. **J Gen Virol** 1990 Aug;71 (Pt 8):1641-7

Tie cauliflower mosaic virus open reading frame VII product can be expressed in Saccharomyces cerevisiae but is not detected in infected plants. Wurch T, et al. **J Virol** 1990 Jun;64(6):2594-8

Segregation of cauliflower mosaic virus symptom genetic determinants. Stratford R, et al. **Virology** 1989 Oct; 172(2):451-9

PHYSIOLOGY

Host regulation of the cauliflower mosaic virus multiplication cycle. Covey SN, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1633-7

POISONING

Acute organophosphorus food poisoning caused by contaminated green leafy vegetables. Goh KT, et al. **Arch Environ Health** 1990 May-Jun;45(3):180-4

Oilseed rape and equine respiratory disease [letter] Dixon PM, et al. **Vet Rec** 1990 Jun 9;126(23):585

BRDU see **BROMODEOXYURIDINE**

BREAD

Glycemic response to food [letter; comment] Thompson DB. **Am J Clin Nutr** 1989 Dec;50(6):1474 Comment on: Am J Clin Nutr 1989 Apr;49(4):658-66.

Effect of EDTA on the bioavailability to rats of fortification iron used in Egyptian balady bread. Whittaker P, et al. **Br J Nutr** 1990 May;63(3):587-95

Isolation of fungi from local bread of Chhindwara. Rai MK, et al. **Indian J Pathol Microbiol** 1990 Apr;33(2):179-81

[Changes in the tryptophan content during the technological manufacturing processes of several wheat flour products] Horvatić M, et al. **Z Ernahrungswiss** 1989 Dec;28(4):319-26 (Eng. Abstr.) **(Ger)**

[Temporary disability among workers in bread-baking plants] Anshukov VK, et al. **Sov Zdravookhr** 1990;(2):39-43 (Eng. Abstr.) **(Rus)**

[The effect of lysine-enriched bread on the formation of N-nitrosamines from their precursors in the stomach of dogs] Zhukova GF, et al. **Vopr Pitan** 1990 Mar-Apr; (2):63-5 (Eng. Abstr.) **(Rus)**

ANALYSIS

[A new type of bread enriches with dietary fibers] Grigorashvili GZ, et al. **Vopr Pitan** 1989 May-Jun; (3):69-70 **(Rus)**

[Comparative characteristics of the quality of baked goods processes according to varying technology] Shaikhova GI, et al. **Vopr Pitan** 1989 May-Jun;(3):67-8 **(Rus)**

STANDARDS

Survival and growth of Bacillus cereus in Egyptian bread and its effect on bread staling. Rizk IR, et al. **Nahrung** 1989;33(9):839-44

BREAKBONE FEVER VIRUS see **DENGUE VIRUS**

BREAST

see related
LACTATION
MASTECTOMY

Corpus alienum mammae. Basse P, et al. **Acta Chir Plast** 1989;31(2):126-7

Progressive systemic sclerosis complicated by severe hypertension: reversal after silicone implant removal. Gutiérrez FJ, et al. **Am J Med** 1990 Sep;89(3):390-2

Nipple-areola transposition by the superolateral-rotation pedicle technique in reduction mammaplasty: surgical description. Blomqvist G, et al. **Ann Plast Surg** 1990 Jun; 24(6):475-80

Types of collagen in breast capsules. Marshall WR, et al. **Ann Plast Surg** 1989 Nov;23(5):401-5

Psychological preparation of the patient for breast reconstruction. Matheson G, et al. **Ann Plast Surg** 1990 Mar;24(3):238-47

Capsule around silicone implants in diabetic rats: histological and biochemical study. Peled IJ, et al. **Ann Plast Surg** 1986 Oct;17(4):288-91

LHRH analogue for treatment of recurrent and refractory mastalgia. Hamed H, et al. **Ann R Coll Surg Engl** 1990 Jul;72(4):221-4

A randomised controlled trial of medroxyprogesterone acetate in mastalgia. Maddox PR, et al. **Ann R Coll Surg Engl** 1990 Mar;72(2):71–6

A randomised controlled trial of medroxyprogesterone acetate in mastalgia [letter] Serewel A, et al. **Ann R Coll Surg Engl** 1990 Jul;72(4):273

Retinoic acid treatment of nipple hyperkeratosis [letter] Pérez-Izquierdo JM, et al. **Arch Dermatol** 1990 May; 126(5):687–8

Cystosarcoma phyllodes arising synchronously in right breast and bilateral axillary ectopic breast tissue. Saleh HA, et al. **Arch Pathol Lab Med** 1990 Jun;114(6):624–6

Practice of breast self-examination and the treatment of primary breast cancer. Shugg D, et al. **Aust N Z J Surg** 1990 Jun;60(6):455–62

Mammography and breast pain. Brew MD, et al. **Australas Radiol** 1989 Nov;33(4):335–6

'Oral medicine in practice: angular cheilitis' [letter; comment] Fieldhouse J. **Br Dent J** 1989 Sep 23;167(6):186 Comment on: Br Dent J 1989 Jul 8;167(1):15–8.

Results from a seven-year programme of breast self-examination in 89,010 women. Locker AP, et al. **Br J Cancer** 1989 Sep;60(3):401–5

Controlled trial of the prolactin inhibitor bromocriptine (Parlodel) in the treatment of severe cyclical mastalgia. Nazli K, et al. **Br J Clin Pract** 1989 Sep;43(9):322–7

A simple technique for removing a silastic gel-filled breast implant through the axillary approach. Matti BA, et al. **Br J Plast Surg** 1989 Sep;42(5):613–4

Non-cyclical mastalgia: an improved classification and treatment. Maddox PR, et al. **Br J Surg** 1989 Sep; 76(9):901–4

Breast self-examination. Baines CJ. **Cancer** 1989 Dec 15;64(12 Suppl):2661–3

The importance of clinical breast examination. McGinnis LS. **Cancer** 1989 Dec 15;64(12 Suppl):2657–60

Factors relating to frequency of breast self-examination among low-income Mexican American women. Implications for nursing practice. Gonzalez JT. **Cancer Nurs** 1990 Jun;13(3):134–42

Factors related to practice of breast self-examination in rural women. Gray ME. **Cancer Nurs** 1990 Apr;13(2):100–7

Factors influencing black women's breast self-examination practice. Nemcek MA. **Cancer Nurs** 1989 Dec;12(6):339–43

Physician breast examination and breast self-examination. Isaacs JH. **Clin Obstet Gynecol** 1989 Dec;32(4):761–7

Breast. **Curr Opin Radiol** 1989 Aug;1(2):233–6

Breast stimulation in late pregnancy. Effect on prostaglandin secretion. Shalev E, et al. **Gynecol Obstet Invest** 1990; 29(2):125–7

Basal cell carcinoma of the nipple. Report of two cases. Cain RJ, et al. **J Am Acad Dermatol** 1990 Feb;22(2 Pt 1):207–10 (12 ref.)

The effects of social demand on breast self-examination self-report. Beach DL, et al. **J Behav Med** 1990 Apr; 13(2):195–205

Expression of c-myc, c-Ha-ras1, and c-erbB-2 proto-oncogenes in normal and malignant human breast epithelial cells. Benz CC, et al. **J Natl Cancer Inst** 1989 Nov 15;81(22):1704–9

Early detection of breast cancer [see comments] Nettles-Carlson B. **J Obstet Gynecol Neonatal Nurs** 1989 Sep-Oct;18(5):373–81 (36 ref.) Comment in: J Obstet Gynecol Neonatal Nurs 1990 Jan-Feb;19(1):13.

Self-confidence as a critical factor in breast self-examination. Olson RL, et al. **J Obstet Gynecol Neonatal Nurs** 1989 Nov-Dec;18(6):476–81

The influence of nipple stimulation at term on the duration of pregnancy. Kadar N, et al. **J Perinatol** 1990 Jun; 10(2):164–6

Breast self examination [letter; comment] **J R Coll Gen Pract** 1989 Sep;39(326):389 Comment on: J R Coll Gen Pract 1989 May;39(322):180–1.

Nipple stimulation for labor augmentation. Stein JL, et al. **J Reprod Med** 1990 Jul;35(7):710–4

Life-saving patient education: breast self-examination. Harrison LL. **MCN** 1989 Sep-Oct;14(5):315

The relationship between medical students' locus of control and promotion of breast self-examination. Smith IK, et al. **Med Educ** 1990 Mar;24(2):164–70

Breast self-examination and breast examination by a health care provider: prevalence and predictors of screening in a randomly selected sample of Australian women. Redman S, et al. **Med J Aust** 1990 Jun 18;152(12):640–5

Development of an anthropomorphic breast phantom. Caldwell CB, et al. **Med Phys** 1990 Mar-Apr;17(2):273–80

Predicting breast self-examination using the theory of reasoned action. Lierman LM, et al. **Nurs Res** 1990 Mar-Apr;39(2):97–101

Primary adenocarcinoma of the breast arising in the vulva. Rose PG, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):537–9 (8 ref.)

How can I detect a tumor in spite of breast implants? [letter] Dickey JC. **Oncology (Williston Park)** 1989 Jan;3(1):15

Management of breast pain and nodularity. Maddox PR, et al. **World J Surg** 1989 Nov-Dec;13(6):699–705 (37 ref.)

[Physical examination in screening for breast cancer: who benefits?] Huguenin M, et al. **Schweiz Med Wochenschr** 1990 Jan 27;120(4):98–104 (Eng. Abstr.) **(Fre)**

[Evaluation of the early screening for breast cancer using self examination] Sethom F, et al. **Tunis Med** 1990 Jan; 68(1):13–7 (Eng. Abstr.) **(Fre)**

[Artistic representation of the female breast as an attribute of femininity and fertility and also the origin of life force and wisdom] Kirchhoff H. **Geburtshilfe Frauenheilkd** 1990 Mar;50(3):234–43 (Eng. Abstr.) **(Ger)**

[Value of the annual physical examination of the breast for early detection of breast cancer] Kloskowski S, et al. **Z Arztl Fortbild (Jena)** 1990;84(9):453–7 **(Ger)**

[Lactating mammary tissue in a mature cystic teratoma of the ovary] Tsubura A, et al. **Gan No Rinsho** 1990 Mar; 36(4):532–6 (14 ref.) (Eng. Abstr.) **(Jpn)**

[The organization of breast self-examination among women in the Estonian SSR] Tekkel MIu, et al. **Vopr Onkol** 1990; 36(2):206–10 (Eng. Abstr.) **(Rus)**

[Fibroadenoma on an ectopic breast (letter)] Plaza JA, et al. **Rev Clin Esp** 1990 Feb;186(3):147 **(Spa)**

ABNORMALITIES

Renal anomalies in familial polythelia [letter; comment] Leung AK, et al. **Am J Dis Child** 1990 Jun;144(6):619–20 Comment on: Am J Dis Child 1989 Aug;143(8):883.

Dry skin and extranumerary areolae [letter] Freire-Maia N, et al. **Am J Med Genet** 1990 Jan;35(1):141

Surgical treatment of congenital breast asymmetry. Smith DJ Jr, et al. **Ann Plast Surg** 1986 Aug;17(2):92–101

Infected breast reconstruction associated with Poland's syndrome. Stewart CA, et al. **Clin Nucl Med** 1990 Jan; 15(1):43–5

Minor morphological aberrations in children with isolated urinary tract malformations. Méhes K, et al. **Eur J Pediatr** 1990 Mar;149(6):399–402

Parry-Romberg syndrome in association with contralateral Poland syndrome. Dintiman BJ, et al. **J Am Acad Dermatol** 1990 Feb;22(2 Pt 2):371–3

Becker's melanosis and associated abnormalities [letter] Patrizi AL, et al. **Pediatr Dermatol** 1989 Sep;6(3):259

[Minor symptoms in family practice: swelling in the axilla during pregnancy and puerperium (letter)] Heineman MJ. **Ned Tijdschr Geneeskd** 1989 Jul 8;133(27):1376 **(Dut)**

ANALYSIS

Breast carcinoma with positive results for melanoma marker (HMB-45). HMB-45 immunoreactivity in normal and neoplastic breast. Bonetti F, et al. **Am J Clin Pathol** 1989 Oct;92(4):491–5

Quantitative DNA patterns in human preneoplastic breast lesions. Teplitz RL, et al. **Anal Quant Cytol Histol** 1990 Apr;12(2):98–102

Steroids in normal and neoplastic breast tissues. Thijssen JH, et al. **Ann N Y Acad Sci** 1990;595:222–6

Effect of sampling site on retinol, carotenoid, tocopherol, and tocotrienol concentration of adipose tissue of human breast with cancer. Rautalahti M, et al. **Ann Nutr Metab** 1990;34(1):37–41

Patterns of expression of tumor markers on non-transformed human mammary epithelial cells cultured in vitro. Karsten U, et al. **Arch Geschwulstforsch** 1990;60(2):103–8

Epidermal growth factor receptor and oestrogen receptors in the non-malignant part of the cancerous breast. Barker S, et al. **Br J Cancer** 1989 Nov;60(5):673–7

Distribution of estrogen and progesterone receptors in healthy tissue adjacent to breast lesions at various stages—immunohistochemical study of 107 cases. Jacquemier JD, et al. **Breast Cancer Res Treat** 1990 Feb; 15(2):109–17

Distribution of oncofetal fibronectin in human mammary tumors: immunofluorescence study on histological sections. Loridon-Rosa B, et al. **Cancer Res** 1990 Mar 1; 50(5):1608–12

Automated quantitation of immunocytochemically localized estrogen receptors in human breast cancer. McClelland RA, et al. **Cancer Res** 1990 Jun 15;50(12):3545–50

Oestrogen and progesterone receptors in men with bilateral or unilateral pubertal macromastia. Lee KO, et al. **Clin Endocrinol (Oxf)** 1990 Jan;32(1):101–5

Tenascin distribution in the normal human breast is altered during the menstrual cycle and in carcinoma. Ferguson JE, et al. **Differentiation** 1990 Feb;42(3):199–207

Endogenous oestrogens and androgens in normal and malignant endometrial and mammary tissues. Thijssen JH, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1953–9

The expression of the neu oncogene product in breast lesions and in normal fetal and adult human tissues. De Potter CR, et al. **Histopathology** 1989 Oct;15(4):351–62

Characterization, in some human breast cancer cell lines, of gastrin-releasing peptide-like receptors which are absent in normal breast epithelial cells. Giacchetti S, et al. **Int J Cancer** 1990 Aug 15;46(2):293–8

Endothelin messenger RNA and receptors are differentially expressed in cultured human breast epithelial and stromal cells. Baley PA, et al. **J Clin Invest** 1990 Apr;85(4):1320–3

Calcium in breast biopsy specimens [editorial] **Lancet** 1990 Mar 31;335(8692):763–4

Relaxin in breast tissue [letter] Mazoujian G, et al. **Lancet** 1990 Feb 3;335(8684):298–9

Preoperative immunocytochemical analysis of the estradiol receptor in nonpalpable human breast tumors. Azavedo E, et al. **Oncology** 1990;47(4):318–21

Pre-operative tumour marker levels in patients with breast cancer and their prognosis. van Dalen A. **Tumour Biol** 1990; 11(4):189–95

[Correlation with mammography and estrogen receptors in breast neoplasms] Lorenzetti G, et al. **G Ital Oncol** 1990 Jan-Jun;10(1-2):41–6 (Eng. Abstr.) **(Ita)**

[The relationship between the receptor status and the mammographic picture in operable breast cancer] Ventrella V, et al. **Radiol Med (Torino)** 1990 May;79(5):483–8 (Eng. Abstr.) **(Ita)**

ANATOMY & HISTOLOGY

A relationship between neonatal breast size and cord blood testosterone level. Francis GL, et al. **Ann Clin Lab Sci** 1990 Jul-Aug;20(4):239–44

The physiological basis of milk secretion. Neville MC. **Ann N Y Acad Sci** 1990;586:1–11 (34 ref.)

Cyclic changes in composition and volume of the breast during the menstrual cycle, measured by magnetic resonance imaging. Fowler PA, et al. **Br J Obstet Gynaecol** 1990 Jul;97(7):595–602

Spin locking for magnetic resonance imaging with application to human breast. Santyr GE, et al. **Magn Reson Med** 1989 Oct;12(1):25–37

Hormonal replacement therapy: mammographic manifestations. Berkowitz JE, et al. **Radiology** 1990 Jan; 174(1):199–201

Ultrasound of the breast. **Semin Ultrasound CT MR** 1989 Apr;10(2):82–176

Breast sonography: technique, equipment, and normal anatomy. Bassett LW, et al. **Semin Ultrasound CT MR** 1989 Apr;10(2):82–9 (21 ref.)

[Lymphatic drainage of the breast] Pupović M. **Acta Chir Iugosl** 1989;36 Suppl 1:314–6 **(Scr)**

BLOOD SUPPLY

CT anatomy of the internal mammary vessels: importance in planning percutaneous transthoracic procedures. Glassberg RM, et al. **AJR Am J Roentgenol** 1990 Aug; 155(2):397–400

Mondor's disease secondary to intravenous drug abuse. Cooper RA. **Arch Surg** 1990 Jun;125(6):807–8

Detection of breast cancer by measuring areolar blood flow—a pilot study. Nitzan M, et al. **Clin Phys Physiol Meas** 1989 Nov;10(4):337–41

Granulomatous angiopanniculitis of the breast. Wargotz ES, et al. **Hum Pathol** 1989 Nov;20(11):1084–8

Mondor's disease associated with metastatic lung cancer in the breast. Courtney SP, et al. **Postgrad Med J** 1989 Oct; 65(768):779–80

[Use of the internal mammary vessels (vasa thoracica interna) forirradiation of the parasternal region in breast cancer. 1] Androsov NS, et al. **Radiobiol Radiother (Berl)** 1989; 30(6):503–7 (Eng. Abstr.) **(Ger)**

[Blood flow in the operating field during controlled hypotension by nitroglycerin, trimetaphan and prostaglandin E1] Uno T, et al. **Masui** 1990 Feb;39(2):144–7 (Eng. Abstr.) **(Jpn)**

[Mondor's disease of the breast] Veselý F, et al. **Cesk Gynekol** 1989 Nov;54(9):688–90 **(Slo)**

CYTOLOGY

Normal breast cells in culture. Effect of estrogens, progestins, and antiestrogens. Mauvais-Jarvis P, et al. **Ann N Y Acad Sci** 1990;595:117–29

Fibronectin: a discrimination marker between small invasive carcinomas and benign proliferative lesions of the breast. Christensen L. **APMIS** 1990 Jul;98(7):615–23

Immunohistochemical study of beta- and kappa-casein in the human breast and breast carcinomas, using monoclonal antibodies. Earl HM, et al. **Cancer Res** 1989 Nov 1; 49(21):6070–6

Flow cytometric detection of multifocal DNA aneuploid cell populations in mastectomy specimens containing a primary breast carcinoma. van Dam PA, et al. **Cytometry** 1990; 11(2):300–7

Isolation of simian virus 40-transformed human mammary epithelial stem cell lines that can differentiate to myoepithelial-like cells in culture and in vivo. Rudland PS, et al. **Dev Biol** 1989 Nov;136(1):167–80

Fine-needle aspiration cytology of breast masses in pregnant and lactating women. Finley JL, et al. **Diagn Cytopathol** 1989;5(3):255–9

The significance of atypical apocrine cells in fine-needle aspirates of the breast. Johnson TL, et al. **Diagn Cytopathol** 1989;5(3):248–54

Regulation of vimentin expression in cultured human mammary epithelial cells. Mørk C, et al. **Differentiation** 1990 Apr;43(2):146–56

Genotoxic effects of five polycyclic aromatic hydrocarbons in human and rat mammary epithelial cells. Mane SS, et al. **Environ Mol Mutagen** 1990;15(2):78–82

Calcium-mediated modulation of microtubule assembly in human breast epithelial cells. Ochieng J, et al. **In Vitro Cell Dev Biol** 1990 Apr;26(4):318–24

Differentiation of simian virus 40 transformed human mammary epithelial stem cell lines to myoepithelial-like cells is associated with increased expression of viral large T antigen. Rudland PS, et al. **J Cell Physiol** 1990 Mar; 142(3):657–65

Stem cells in mammary gland differentiation and cancer. Rudland PS, et al. **J Cell Sci Suppl** 1988;10:95–114 (106 ref.)

Mechanisms of normal and malignant breast epithelial growth regulation. Lippman ME, et al. **J Steroid Biochem** 1989;

34(1-6):107-21 (234 ref.)
Suppression of tumor-forming ability and related traits in MCF-7 human breast cancer cells by fusion with immortal mammary epithelial cells. Zajchowski DA, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2314-8
Mitogenic regulation of normal and malignant breast epithelium. Lippman ME, et al. **Yale J Biol Med** 1989 Sep-Oct;62(5):459-80 (232 ref.)
[Antiestrogens and normal human breast cell proliferation] Mauvais-Jarvis P, et al. **Ann Endocrinol (Paris)** 1989; 50(3):181-8 (34 ref.) (Eng. Abstr.) (Fre)
[The in vivo effect of the local administration of progesterone on the mitotic activity of human ductal breast tissue. Results of a pilot study] Barrat J, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(3):269-74 (Eng. Abstr.) (Fre)

DRUG EFFECTS

Premature thelarche: a possible adverse effect of cimetidine treatment. Bosman JM, et al. **Eur J Pediatr** 1990 May; 149(8):534-5
Oral contraceptive use influences resting breast proliferation. Anderson TJ, et al. **Hum Pathol** 1989 Dec;20(12):1139-44
Proliferative stimuli in the normal breast: estrogens or progestins? [editorial] McCarty KS Jr. **Hum Pathol** 1989 Dec;20(12):1137-8
A possible mechanism for increased breast cell proliferation by progestins through increased reductive 17 beta-hydroxysteroid dehydrogenase activity. Coldham NG, et al. **Int J Cancer** 1990 Jan 15;45(1):174-8
Effects of progestins and menstrual cycle on fatty acid synthetase and progesterone receptor in human mammary glands. Joyeux C, et al. **J Clin Endocrinol Metab** 1990 May; 70(5):1438-44
Macromastia in a woman treated with penicillamine and oral contraceptives. A case report. Rose BI, et al. **J Reprod Med** 1990 Jan;35(1):43-5
[Histomorphology of the female breast in the human following long-term Testoviron therapy] Merkel KH, et al. **Pathologe** 1990 Mar;11(2):117-9 (Ger)
[Effects of long-term administration of androgens on the breast in transsexual women] Godano A, et al. **Arch Ital Urol Nefrol Androl** 1990 Mar;62(1):121-3 (Eng. Abstr.) (Ita)

ENZYMOLOGY

Differential expression of glutathione S-transferase, glutathione peroxidase and glutathione reductase in normal and malignant human breast tissues. Singh SV, et al. **Cancer Lett** 1990 May 15;51(1):43-8
Casein kinase II is elevated in solid human tumours and rapidly proliferating non-neoplastic tissue. Münstermann U, et al. **Eur J Biochem** 1990 Apr 30;189(2):251-7

GROWTH & DEVELOPMENT

Peripubertal human breast development. Monaghan P, et al. **Anat Rec** 1990 Apr;226(4):501-8
Developmental regulation of mammary-derived growth inhibitor expression in bovine mammary tissue. Kurtz A, et al. **J Cell Biol** 1990 May;110(5):1779-89
Natural history of premature thelarche in Olmsted County, Minnesota, 1940 to 1984. Van Winter JT, et al. **J Pediatr** 1990 Feb;116(2):278-80
Mechanisms of hormone and cytotoxic drug interactions in the development and treatment of breast cancer. Clarke R, et al. **Prog Clin Biol Res** 1990;322:243-78 (216 ref.)

IMMUNOLOGY

Characterization and distribution in normal and tumoral human tissues of breast cancer-associated antigen defined by monoclonal antibody 7B10. Pancino GF, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):7078-85
Use of monoclonal antibodies to human breast-tumor-associated antigens in the diagnosis of fine-needle aspirates of breast nodules: results of a multicenter study. Natali PG, et al. **Int J Cancer** 1990 Jan 15;45(1):12-5
Characterization of monoclonal antibodies reactive with normal resting, lactating and neoplastic human breast. Skilton RA, et al. **Tumour Biol** 1990;11(1-2):20-38

INJURIES

Rupture of mammary silicone prosthesis after rape attempt. Hansen BJ, et al. **Acta Chir Plast** 1989;31(3):148-9

METABOLISM

Immunohistochemical distribution of type IV collagenase in normal, benign, and malignant breast tissue. Monteagudo C, et al. **Am J Pathol** 1990 Mar;136(3):585-92
Metabolism of 17 beta-estradiol and the adrenal-derived estrogen 5-androstene-3 beta,17 beta-diol (hermaphrodiol) in human mammary cell lines. Adams JB, et al. **Ann N Y Acad Sci** 1990;595:93-105
Regulation of estrogen concentrations in human breast tissues. James VH, et al. **Ann N Y Acad Sci** 1990;595:227-35 (23 ref.)
Pathways of hormone metabolism in normal and nonneoplastic breast tissue. Miller WR. **Ann N Y Acad Sci** 1990;586:53-9 (37 ref.)
Metabolic biotransformation of estradiol in human mammary explant cultures. Telang NT, et al. **Ann N Y Acad Sci** 1990; 586:70-8
Uptake and metabolism of estradiol by normal and abnormal breast tissues. Thijssen JH, et al. **Ann N Y Acad Sci** 1990; 586:252-8
Analysis of the estrogen receptor gene structure in human breast cancer. Koh EH, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1841-5
Calcium oxalate crystals in breast biopsies. An overlooked form of microcalcification associated with benign breast disease. Radi MJ. **Arch Pathol Lab Med** 1989 Dec; 113(12):1367-9
Distribution of doxorubicin to normal breast and tumour tissue in patients undergoing mastectomy. Stallard S, et al. **Cancer Chemother Pharmacol** 1990;25(4):286-90
Tropomyosins of human mammary epithelial cells: consistent defects of expression in mammary carcinoma cell lines. Bhattacharya B, et al. **Cancer Res** 1990 Apr 1;50(7):2105-12
Estrogen receptor gene methylation in human breast tumors. Falette NS, et al. **Cancer Res** 1990 Jul 1;50(13):3974-8
Breast uptake of technetium-99m MDP during radionuclide angiography. Aksut S, et al. **Clin Nucl Med** 1990 Jul; 15(7):517-8
Transforming growth factor-alpha messenger RNA localization in the developing adult rat and human mammary gland by in situ hybridization. Liscia DS, et al. **Dev Biol** 1990 Jul;140(1):123-31
Effect of insulin on growth and expression of smooth muscle isoactin in human breast gland myoepithelial cells in a chemically defined culture system. Petersen OW, et al. **Eur J Cell Biol** 1989 Dec;50(2):500-9
Correlation of proliferative activity in breast tissue using PCNA/cyclin [letter] Battersby S, et al. **Hum Pathol** 1990 Jul;21(7):781
Highly specific sites of prolactin binding in benign and malignant breast tissue. Agarwal PK, et al. **Indian J Exp Biol** 1989 Dec;27(12):1035-8
Conversion to estriol in "normal", benign and malignant human breast tissues. Seshadri R, et al. **J Cancer Res Clin Oncol** 1990;116(3):271-4
Modulation of extracellular-matrix synthesized by cultured stromal cells from normal human breast tissue by epidermal growth factor. Baley P, et al. **J Cell Biochem** 1990 Jun; 43(2):111-25
Keratin expression in human mammary epithelial cells cultured from normal and malignant tissue: relation to in vivo phenotypes and influence of medium. Taylor-Papadimitriou J, et al. **J Cell Sci** 1989 Nov;94 (Pt 3):403-13
Complete nucleotide sequence of human mammary gland lactoferrin. Rey MW, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5288
Histologic changes and silicone concentrations in human breast tissue surrounding silicone breast prostheses. Thomsen JL, et al. **Plast Reconstr Surg** 1990 Jan; 85(1):38-41
[Breast feeding and protein metabolism] Villalpando S, et al. **Bol Med Hosp Infant Mex** 1990 Mar;47(3):181-5 (34 ref.) (Eng. Abstr.) (Spa)

MICROBIOLOGY

Atypical tuberculosis discovered in a breast nodule [letter] Murat P, et al. **Can J Surg** 1990 Jun;33(3):173
The nonpuerperal breast infection: aerobic and anaerobic microbial recovery from acute and chronic disease. Edmiston CE Jr, et al. **J Infect Dis** 1990 Sep;162(3):695-9

PARASITOLOGY

Cysticercosis of the breast. Alagaratnam TT, et al. **Am J Trop Med Hyg** 1988 May;38(3):601-2

PATHOLOGY

Positive predictive value of fine needle aspiration cytology of breast lesions. Ciatto S, et al. **Acta Cytol** 1989 Nov-Dec; 33(6):894-8
An unusual extramedullary relapse of acute nonlymphocytic leukemia after allogeneic bone marrow transplantation. Kelch BP, et al. **Am J Clin Oncol** 1990 Jun;13(3):238-43
Mammographic and gross pathologic analysis of breast needle localization specimens. Use of a tissue analysis device. Alberhasky MT. **Am J Clin Pathol** 1989 Oct;92(4):452-7
A rapid technique for accurately localizing microcalcifications in breast biopsy specimens. Gauvin GP, et al. **Am J Clin Pathol** 1990 Apr;93(4):557-60
Use of the von Kossa stain in identifying occult calcifications in breast biopsies. Symonds DA. **Am J Clin Pathol** 1990 Jul;94(1):44-8
Syringomatous tumor of the nipple. Ward BE, et al. **Am J Clin Pathol** 1989 Nov;92(5):692-6
Determinants of breast self-examination after a benign biopsy. Janz NK, et al. **Am J Prev Med** 1990 Mar-Apr; 6(2):84-92
Neoplastic involvement of nipple-areolar complex in invasive breast cancer. Santini D, et al. **Am J Surg** 1989 Nov; 158(5):399-403
Breast blocks [letter; comment] Frankel K. **Am J Surg Pathol** 1990 Apr;14(4):399-400 Comment on: Am J Surg Pathol 1989 Jun;13(6):505-12.
Fibroadenomatoid hyperplasia of the male breast. Nielsen BB. **Am J Surg Pathol** 1990 Aug;14(8):774-7
How thoroughly should needle localization breast biopsies be sampled for microscopic examination? A prospective mammographic/pathologic correlative study. Owings DV, et al. **Am J Surg Pathol** 1990 Jun;14(6):578-83
Calcium oxalate crystals in breast biopsies. The missing microcalcifications. Tornos C, et al. **Am J Surg Pathol** 1990 Oct;14(10):961-8
Prospective evaluation of the role of fine-needle aspiration biopsy in the diagnosis and management of patients with palpable solid breast lesions. Gelabert HA, et al. **Am Surg** 1990 Apr;56(4):263-7 (23 ref.)
Breast biopsy. Changing patterns during a five-year period. Lay SF, et al. **Am Surg** 1990 Feb;56(2):79-85
Wire-guided biopsies of nonpalpable breast lesions. Ahovuo J, et al. **Ann Chir Gynaecol** 1990;79(2):82-4
Biochemistry of breast cyst fluid. An approach to understanding intercellular communication in the terminal duct lobular units. Dogliotti L, et al. **Ann N Y Acad Sci** 1990;586:17-28
Effect of long-term administration of androgens on breast tissues of female-to-male transsexuals. Sapino A, et al. **Ann N Y Acad Sci** 1990;586:143-5
Significance of apocrine metaplasia in mammary carcinogenesis. A preliminary morphological and immunohistochemical study. Tóth J, et al. **Ann N Y Acad Sci** 1990;586:238-51
Classification of mastectomy deformity. Pacik PT. **Ann Plast Surg** 1986 Jan;16(1):49-59
Further applications of Archimedes' principle in the correction of asymmetrical breasts. Schultz RC, et al. **Ann Plast Surg** 1986 Feb;16(2):98-101
Drainage or suture of the cavity after breast biopsy [see comments] Law NW, et al. **Ann R Coll Surg Engl** 1990 Jan;72(1):11-3 Comment in: Ann R Coll Surg Engl 1990 May;72(3):213.
The clinical management of a normal contralateral breast in patients with lobular breast cancer. Baker RR, et al. **Ann Surg** 1989 Oct;210(4):444-7; discussion 447-8
Mammographic and palpation findings in the irradiated spared breast. Vuorela AL, et al. **Anticancer Res** 1989 Jul-Aug;9(4):1217-21
Fine needle aspiration cytology of the breast: a statistical evaluation of accuracy based on 1,080 cases. Coscia Porrazzi L, et al. **Appl Pathol** 1989;7(6):333-7
Breast masses in young women. Ferguson CM, et al. **Arch Surg** 1989 Nov;124(11):1338-41
Mammographic second opinions prior to biopsy of nonpalpable breast lesions. Hall FM. **Arch Surg** 1990 Mar; 125(3):298-9
Node negative breast cancer [letter; comment] Grogono J. **BMJ** 1990 Mar 3;300(6724):612 Comment on: BMJ 1990 Feb 10;300(6721):346-8.
Current findings in the pathological evaluation of breast reduction specimens. Cruz NI, et al. **Bol Asoc Med P R** 1989 Oct;81(10):387-9
Galactocele of the breast: radiologic and ultrasonographic findings. Salvador R, et al. **Br J Radiol** 1990 Feb; 63(746):140-2
Paget's disease without a palpable mass in the breast. Aktan AO, et al. **Br J Surg** 1990 Feb;77(2):226-7
Fine-wire localization and biopsy of non-palpable breast lesions. Tresadern JC, et al. **Br J Surg** 1990 Mar;77(3):320-2
A case of bilateral bloody discharge from the breast [letter] Challis GB, et al. **Breast Cancer Res Treat** 1990 Jan; 15(1):55-6
Factors associated with obtaining nipple aspirate fluid: analysis of 1428 women and literature review. Wrensch MR, et al. **Breast Cancer Res Treat** 1990 Jan;15(1):39-51 (29 ref.)
Topographic criteria in the diagnosis of tumor emboli in intramammary lymphatics. Orbo A, et al. **Cancer** 1990 Sep 1;66(5):972-7
Anatomic markers of human premalignancy and risk of breast cancer. Page DL, et al. **Cancer** 1990 Sep 15;66(6 Suppl):1326-35 (44 ref.)
The breast biopsy. Scanlon EF. **Cancer** 1989 Dec 15;64(12 Suppl):2671-3
A comparison of the results of long-term follow-up for atypical intraductal hyperplasia and intraductal hyperplasia of the breast. Tavassoli FA, et al. **Cancer** 1990 Feb 1; 65(3):518-29
Evidence of lipid peroxidation in premenopausal women with mammographic dysplasia. Boyd NF, et al. **Cancer Lett** 1990 Apr 9;50(1):31-7
Differential tumorigenicity of two autologous human breast carcinoma cell lines, HMT-3909S1 and HMT-3909S8, established in serum-free medium. Petersen OW, et al. **Cancer Res** 1990 Feb 15;50(4):1257-70
Axillary fibrosis or recurrent tumour. An MRI study in breast cancer. Moore NR, et al. **Clin Radiol** 1990 Jul;42(1):42-6
The significance of atypical apocrine cells in fine-needle aspirates of the breast. Johnson TL, et al. **Diagn Cytopathol** 1989;5(3):248-54
Male breast lesions: gynecomastia and its distinction from carcinoma by aspiration biopsy cytology. Russin VL, et al. **Diagn Cytopathol** 1989;5(3):243-7
Virginal breast hypertrophy at puberty; a case report. Sagot P, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Mar; 34(3):289-92
Rarities in breast pathology. Bilateral Paget's disease of the breast—a case report. Fernandes FJ, et al. **Eur J Surg Oncol** 1990 Apr;16(2):172-4
Histological changes in breast tissue that characterize recent

pregnancy. Battersby S, et al. **Histopathology** 1989 Oct; 15(4):415–9

Attenuated cells in breast stroma: the missing lymphatic system of the breast. Hartveit E. **Histopathology** 1990 Jun; 16(6):533–43

The effects of hormonal and chemotherapy on tumoral and nonneoplastic breast tissue. Kennedy S, et al. **Hum Pathol** 1990 Feb;21(2):192–8

Role of fine needle aspiration cytology in the diagnosis of breast lumps and its histopathological correlation. Sreenivas M, et al. **Indian J Pathol Microbiol** 1989 Apr;32(2):133–7

Successful breast feeding with retracted nipples [letter] Padalkar J. **Indian Pediatr** 1989 Oct;26(10):1065–6

Current methods for biopsy and treatment of potentially curable breast cancer. Leis HP Jr. **Int Surg** 1990 Jan–Mar; 75(1):1–7 (48 ref.)

Virginal breast hypertrophy. Griffith JR. **J Adolesc Health Care** 1989 Sep;10(5):423–32 (55 ref.)

Alcian blue: reliable rapid method for marking resection margins [letter] Birch PJ, et al. **J Clin Pathol** 1990 Jul; 43(7):608–9

Radiation and other pathological changes in breast tissue after conservation treatment for carcinoma. Girling AC, et al. **J Clin Pathol** 1990 Feb;43(2):152–6

Rapid reporting on fine needle aspiration of breast lumps in outpatients. Zuk JA, et al. **J Clin Pathol** 1989 Sep; 42(9):906–11

Gd-DTPA enhanced MR imaging of the breast in patients with postoperative scarring and silicon implants. Heywang SH, et al. **J Comput Assist Tomogr** 1990 May–Jun; 14(3):348–56

Bilateral breast masses and bloody nipple discharge in a 4-year-old boy. Miller JD, et al. **J Pediatr** 1990 May; 116(5):744–7

Subcuticular skin closure following minor breast biopsy: Prolene is superior to polydioxanone (PDS) [letter; comment] **J R Coll Surg Edinb** 1990 Apr;35(2):131–2 Comment on: J R Coll Surg Edinb 1989 Jun;34(3):128–9.

An ultrastructural evaluation of cell heterogeneity in invasive ductal carcinomas of the human breast. I. An in vivo study. Pucci-Minafra I, et al. **J Submicrosc Cytol Pathol** 1989 Jul; 21(3):475–88

Correlation between mammography and the pathology of nonpalpable breast lesions. Albert MP, et al. **J Surg Oncol** 1990 May;44(1):44–6

An alternative approach to nonpalpable breast biopsies. Reid SE Jr, et al. **J Surg Oncol** 1990 Jun;44(2):93–6

Primary multifocal angiosarcoma of the breast. Sonographic evaluation with pathologic correlation. Tassin GB, et al. **J Ultrasound Med** 1990 Aug;9(8):481–3

Sampling grossly benign breast biopsy specimens [letter] [published erratum appears in Lancet 1989 Dec 2;2(8675):1350] Schnitt SJ, et al. **Lancet** 1989 Oct 28; 2(8670):1038

Retrospective analysis of breast histology and indication for surgical intervention [letter] Schröcksnadel H, et al. **Lancet** 1990 Sep 15;336(8716):693

Magnetic resonance imaging of the breast. el Yousef SJ, et al. **Magn Reson Annu** 1986;:177–95

Parathyroid hormone-related protein and hypercalcemia secondary to massive mammary hyperplasia [letter] Khosla S, et al. **N Engl J Med** 1990 Apr 19;322(16):1157

Mammary hypertrophy is not associated with increased estrogen receptors. Jabs AD, et al. **Plast Reconstr Surg** 1990 Jul;86(1):64–6

Gigantic mammary hyperplasia in pregnancy associated with pseudohyperparathyroidism. Jackson IT, et al. **Plast Reconstr Surg** 1989 Nov;84(5):806–10

Nipple-areola necrosis after subcutaneous mastectomy [letter; comment] Maillard GF. **Plast Reconstr Surg** 1990 Jun; 85(6):1002 Comment on: Plast Reconstr Surg 1989 Aug;84(2):258–64; discussion 265–6.

Aesthetic results following partial mastectomy and radiation therapy. Matory WE Jr, et al. **Plast Reconstr Surg** 1990 May;85(5):739–46

Fine-needle aspiration biopsy. When is it most beneficial? Peterson IM, et al. **Postgrad Med** 1990 Sep 1;88(3):119–22, 124, 126

Premenstrual syndrome and premenstrual breast pain (cyclical mastalgia): disorders of essential fatty acid (EFA) metabolism. Horrobin DF, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Sep; 37(4):255–61 (49 ref.)

Needle localisation of occult breast lesions. Cairns CA. **Radiogr Today** 1989 Feb;55(621):21–3

Localising non-palpable lesions within the breast using the needle and wire technique. Hodgson J. **Radiogr Today** 1989 Apr;55(623):13–6

Mammographic and histologic correlations of microcalcifications. de Paredes ES, et al. **Radiographics** 1990 Jul;10(4):577–89

Radial sclerosing lesion of the breast: mammographic features. Adler DD, et al. **Radiology** 1990 Sep;176(3):737–40

Radiographically guided fine-needle aspiration of nonpalpable breast lesions. Helvie MA, et al. **Radiology** 1990 Mar;174(3 Pt 1):657–61

Asymmetric breast tissue [letter; comment] Homer MJ, et al. **Radiology** 1989 Nov;173(2):577–8 Comment on: Radiology 1989 Jun;171(3):639–43.

Differentiation of radial scar from scirrhous carcinoma of the breast: mammographic-pathologic correlation. Mitnick JS, et al. **Radiology** 1989 Dec;173(3):697–700

Stereotactic breast biopsy with a biopsy gun [see comments] Parker SH, et al. **Radiology** 1990 Sep;176(3):741–7 Comment in: Radiology 1990 Sep;176(3):615–6.

Paraffin tissue block radiography: adjunct to breast specimen radiography. Rebner M, et al. **Radiology** 1989 Dec; 173(3):695–6

Mammographic changes associated with postmenopausal hormone replacement therapy: a longitudinal study. Stomper PC, et al. **Radiology** 1990 Feb;174(2):487–90

Cosmetic evaluation of breast conserving treatment for mammary cancer. 1. Proposal of a quantitative scoring system. Van Limbergen E, et al. **Radiother Oncol** 1989 Nov; 16(3):159–67

Ultrasound of benign breast conditions. Adler DD. **Semin Ultrasound CT MR** 1989 Apr;10(2):106–18 (17 ref.)

Interventional breast ultrasonography. D'Orsi CJ, et al. **Semin Ultrasound CT MR** 1989 Apr;10(2):132–8 (19 ref.)

The role of ultrasound in a breast imaging center. Feig SA. **Semin Ultrasound CT MR** 1989 Apr;10(2):90–105 (65 ref.)

Sonography of malignant breast disease. Jackson VP. **Semin Ultrasound CT MR** 1989 Apr;10(2):119–31 (50 ref.)

Mammography was lacking and fear of radiation-induced cancer [letter] Mendelson EB. **Semin Ultrasound CT MR** 1989 Apr;10(2):81

Imaging the post-surgical breast. Mendelson EB. **Semin Ultrasound CT MR** 1989 Apr;10(2):154–70 (22 ref.)

Breast pathology synopsis. Tobon H, et al. **Semin Ultrasound CT MR** 1989 Apr;10(2):139–53 (24 ref.)

Immediate postexcision mammography for occult noncalcified breast lesions. Pastakia B, et al. **South Med J** 1990 Jan;83(1):30–3

The role of Tru-Cut needle biopsy in the diagnosis of carcinoma of the breast. Cusick JD, et al. **Surg Gynecol Obstet** 1990 May;170(5):407–10 (26 ref.)

Needle-localized biopsy of the breast. Griffen MM, et al. **Surg Gynecol Obstet** 1990 Feb;170(2):145–8

Ultrasonically guided biopsy of nonpalpable lesions of the breast by the spot method. Ueno E, et al. **Surg Gynecol Obstet** 1990 Feb;170(2):153–5

Coagulopathy and warfarin-associated breast necrosis in a patient with a primary brain tumor. Heaton RB, et al. **Surg Neurol** 1990 Jun;33(6):395–9

Clinical performance of a cone/annular array ultrasound breast scanner. Fishell EK, et al. **Ultrasound Med Biol** 1990; 16(4):361–74

Sclerosing adenosis. Preece PE. **World J Surg** 1989 Nov-Dec;13(6):721–5

[Reduction mammoplasty with a J-shaped scar (the Jean-Sauveur Elbaz technic). Review of 125 cases] Baux S, et al. **Ann Chir Plast Esthet** 1990;35(2):123–7 (Eng. Abstr.) **(Fre)**

[Macroscopic study of surgical breast specimens. A modern approach] Bogomoletz WV, et al. **Ann Pathol** 1990; 10(2):130–4 (24 ref.) (Eng. Abstr.) **(Fre)**

[Nipple discharge without palpable tumor. Apropos of 46 cases] Levèque J, et al. **Rev Fr Gynecol Obstet** 1990 May; 85(5):329–35 (15 ref.) (Eng. Abstr.) **(Fre)**

[Leiomyoma of the breast in the male] Winkler S, et al. **Dermatol Monatsschr** 1989;175(9):588–90 (Eng. Abstr.) **(Ger)**

[Computer-assisted tissue analysis for cancer detection in breast ultrasound—significance of reference values] Heywang SW, et al. **Digitale Bilddiagn** 1989 Dec; 9(4):127–34 (Eng. Abstr.) **(Ger)**

[Pregnancy-induced gigantomastia] Knitza R, et al. **Geburtshilfe Frauenheilkd** 1989 Oct;49(10):915–6 (Eng. Abstr.) **(Ger)**

[A case of macromastia in pregnancy] Luschin-Ebengreuth G, et al. **Gynakol Rundsch** 1989;29 Suppl 2:335–7 **(Ger)**

[Localization of radiologically detected, non-palpable breast changes] Bollmann R. **Pathologe** 1990 May;11(3):195 **(Ger)**

[Localization of nonpalpable breast lesions in intraoperative rapid-section diagnosis using a new procedure] Bollmann R, et al. **ROFO** 1990 Jul;153(1):73–5 (Eng. Abstr.) **(Ger)**

[Multiple nodules in asymptomatic lobular panniculitis] Hergan K, et al. **ROFO** 1989 Oct;151(4):504–5 **(Ger)**

[A new multislice measurement sequence for the complete dynamic MR examination of the larger organs: application to the breast] Kaiser WA, et al. **ROFO** 1990 May; 152(5):577–82 (Eng. Abstr.) **(Ger)**

[A proposal for 1st-level studies of breast diseases: the clinical thermo- and echographic examination] Beltrame A, et al. **Minerva Med** 1989 Aug;80(8):917–22 **(Ita)**

[Diagnosis and therapy of inflammatory breast lesions by FNA] Catania S, et al. **Minerva Med** 1989 Aug;80(8):927–31 **(Ita)**

[Accurate diagnosis by mammary echotomography] Ferrari P, et al. **Minerva Med** 1990 Mar;81(3 Suppl):5–12 (Eng. Abstr.) **(Ita)**

[Color Doppler in the echographic evaluation of breast nodules] Bergonzi M, et al. **Radiol Med (Torino)** 1990 Mar; 79(3):178–81 (Eng. Abstr.) **(Ita)**

[The role of color Doppler echography in the diagnosis of breast tumors] Campi R, et al. **Radiol Med (Torino)** 1990 Mar;79(3):182–4 (Eng. Abstr.) **(Ita)**

[The clinical utility of stereotaxic x-ray guided cytological biopsy in nonpalpable neoplastic pathology of the breast] Giuseppetti GM, et al. **Radiol Med (Torino)** 1990 Mar; 79(3):185–8 (Eng. Abstr.) **(Ita)**

[High-risk focal breast lesions in echography and mammography] Gozzi G, et al. **Radiol Med (Torino)** 1989 Dec;78(6):603–6 (Eng. Abstr.) **(Ita)**

[A comparative evaluation of the centering precision performed with 2 different stereotaxic instruments in nonpalpable breast lesions] Minonzio G, et al. **Radiol Med (Torino)** 1990 Mar;79(3):189–90 (Eng. Abstr.) **(Ita)**

[Mammary fibroadenoma showing osseous metaplasia: a case report] Nishida Y, et al. **Gan No Rinsho** 1989 Oct; 35(12):1461–5 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Study of conservative treatment of breast cancer in view of the spread of primary lesion] Haga S, et al. **Nippon Geka Gakkai Zasshi** 1990 Mar;91(3):411–8 (Eng. Abstr.) **(Jpn)**

[Comparative study of nuclear DNA content between fine needle aspirates and paraffin-embedded tissue samples of breast cancer: preliminary report] Kurihara T, et al. **Nippon Geka Gakkai Zasshi** 1990 Mar;91(3):438 **(Jpn)**

[Morphological study on aspiration cytology of breast cancer—relationship to prognosis and malignancy grade: preliminary report] Miyauchi M, et al. **Nippon Geka Gakkai Zasshi** 1989 Oct;90(10):1815 **(Jpn)**

[Waiting lists and reality. Revision of the waiting list for reduction of breast hyperplasia in health region 1] Kveim MH, et al. **Tidsskr Nor Laegeforen** 1990 May 30; 110(14):1864–5 (Eng. Abstr.) **(Nor)**

[Characteristics of the surgical treatment of nodular forms of dyshormonal hyperplasia of the breast] Batalina LD. **Khirurgiia (Mosk)** 1990 Apr;(4):28–30 (Eng. Abstr.) **(Rus)**

[Factors determining prognosis in stage T1.2NoMo breast cancer] Shkrob OS, et al. **Khirurgiia (Mosk)** 1990 Apr; (4):23–8 (Eng. Abstr.) **(Rus)**

[Pathomorphosis of breast cancer after radiotherapy and thermoradiotherapy] Abrosimov AIu, et al. **Med Radiol (Mosk)** 1990 Apr;35(4):32–4 (Eng. Abstr.) **(Rus)**

[A mathematical analysis of immunologic indicators in dyshormonal dysplasia and breast cancer] Zhalgasbaeva GT, et al. **Vopr Onkol** 1989;35(10):1198–203 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effect of nipple stimulation on uterine activity and on plasma levels of oxytocin in full term, healthy, pregnant women. Christensson K, et al. **Acta Obstet Gynecol Scand** 1989; 68(3):205–10

Breast appearance and function after breast conserving surgery and radiotherapy. Hamilton CS, et al. **Acta Oncol** 1990;29(3):291–5

Prolactin and plasma prostaglandin metabolite levels in patients undergoing nipple stimulation contraction stress tests. Rijhsinghani AG, et al. **Am J Perinatol** 1990 Jan; 7(1):43–5

Instrumentation system for breast engorgement evaluation. Ferris CD. **Biomed Sci Instrum** 1990;26:227–9

The chronopathology of breast pre-cancer. Simpson HW, et al. **Chronobiologia** 1989 Oct–Dec;16(4):365–72

Effect of naloxone on neurohypophyseal peptide responses to breast feeding and breast stimulation in man. Johnson MR, et al. **Clin Endocrinol (Oxf)** 1990 Jul;33(1):81–6

Expression of the transforming growth factor-alpha/epidermal growth factor receptor pathway in normal human breast epithelial cells. Bates SE, et al. **Endocrinology** 1990 Jan;126(1):596–607

Comparison of the nipple stimulation and exogenous oxytocin contraction stress tests. A randomized, prospective study. Rosenzweig BA, et al. **J Reprod Med** 1989 Dec; 34(12):950–4

Breast modifications during the menstrual cycle. Drife JO. **Suppl Int J Gynecol Obstet** 1989;1:19–24 (41 ref.)

[Experiences with breast stimulation for labor induction] Schröcksnadel H, et al. **Geburtshilfe Frauenheilkd** 1990 Jul; 50(7):569–71 (Eng. Abstr.) **(Ger)**

[Breast stimulation for labor induction in a stress test] Meyer L, et al. **Gynakol Rundsch** 1989;29(4):193–9 (Eng. Abstr.) **(Ger)**

[Value of endogenous uterine contraction stress test by breast nipple stimulation] Strowitzki T, et al. **Z Geburtshilfe Perinatol** 1990 Jan–Feb;194(1):36–9 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Thermography in the follow-up of breast cancer patients after breast-conserving treatment by tumorectomy and radiation therapy. Ulmer HU, et al. **Cancer** 1990 Jun 15; 65(12):2676–80

RADIATION EFFECTS

Breast hypoplasia following irradiation of the female breast in infancy and early childhood. Fürst CJ, et al. **Acta Oncol** 1989;28(4):519–23

Normal-tissue tolerance in the irradiation of female breast. Pierquin B, et al. **Front Radiat Ther Oncol** 1989;23:341–8

Technique for breast irradiation using custom blocks conforming to the chest wall contour. Hartsell WF, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul;19(1):189–95

Radiation exposure to patients receiving routine scoliosis radiography measured at depth in an anthropomorphic phantom. Dutkowsky JP, et al. **J Pediatr Orthop** 1990 Jul–Aug;10(4):532–4

The sonographic appearance of the irradiated breast. Calkins AR, et al. **JCU** 1988 Jul-Aug;16(6):409-15

Mortality from breast cancer after irradiation during fluoroscopic examinations in patients being treated for tuberculosis. Miller AB, et al. **N Engl J Med** 1989 Nov 9;321(19):1285-9

AAPM tutorial. Patient dose in mammography. Rothenberg LN. **Radiographics** 1990 Jul;10(4):739-46

Scatter dose from tangential breast irradiation to the uninvolved breast. Muller-Runkel R, et al. **Radiology** 1990 Jun;175(3):873-6

[Prevention of lactation mastitis by the use of low-intensity laser irradiation] Kovalev MI. **Akush Ginekol (Mosk)** 1990 Feb;(2):57-61 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Diffuse uptake of osteotropic radionuclide in the breast secondary to superior vena caval obstruction. Swayne LC, et al. **Clin Nucl Med** 1990 Feb;15(2):110-1

Gallium-67 detection of intramammary injection sites secondary to intravenous drug abuse. Swayne LC. **Clin Nucl Med** 1989 Sep;14(9):693-4

Visualization of breast tissue by technetium-99m labeled dextran in chronic cystic mastitis. Yang KT, et al. **Clin Nucl Med** 1989 Oct;14(10):772-3

Internal mammarial lymphoscintigraphy with SPECT after ultrasound-guided injection of 99mTc-dextran. Unlü M, et al. **Nuklearmedizin** 1990 Feb;29(1):35-9

SECRETION

Group-specific component in neonatal breast secretion: relationship to the cellular content. Pittard WB 3d, et al. **Biol Neonate** 1990;57(5):279-83

Nipple discharge in children and adolescents: an irritating cause. Casteels-Van Daele M, et al. **Clin Pediatr (Phila)** 1990 Jan;29(1):53

Usefulness of galactography for minimal noninvasive ductal carcinoma of the breast. Nishida M, et al. **Nippon Geka Hokan** 1989 Mar 1;58(2):250-6

Management of nipple discharge. Leis HP Jr. **World J Surg** 1989 Nov-Dec;13(6):736-42 (27 ref.)

[Galactography in the study of the secreting breast] Ragaglini G, et al. **Minerva Med** 1990 Jun;81(6):439-50 (Eng. Abstr.) **(Ita)**

[Differential diagnosis of nipple discharge] Martyniuk VV, et al. **Vestn Khir** 1990 Feb;144(2):140-2 (Eng. Abstr.) **(Rus)**

SURGERY

Breast reconstruction following mastectomy. Tepavicharova P. **Acta Chir Plast** 1990;32(2):89-98

A twelve year experience with reduction mammoplasty and abdominoplasty. Baran NK, et al. **Aesthetic Plast Surg** 1989 Fall;13(4):251-66

A new periareolar mammaplasty: the "round block" technique. Benelli L. **Aesthetic Plast Surg** 1990 Spring; 14(2):93-100

Long-term results of polyurethane-covered prostheses. Bruck HG. **Aesthetic Plast Surg** 1990 Spring;14(2):85-6

Analysis of 60 cases of simultaneous mammaplasty and abdominoplasty. Cardoso de Castro C, et al. **Aesthetic Plast Surg** 1990 Winter;14(1):35-41

Inverted nipple: the new method of correction. Crestinu JM. **Aesthetic Plast Surg** 1989 Summer;13(3):189-97

Mammaplasty: shape, volume, and scar size. de Pina DP. **Aesthetic Plast Surg** 1990 Winter;14(1):27-33

Correction of abnormally high nipples after reduction mammaplasty. Elsahy NI. **Aesthetic Plast Surg** 1990 Winter; 14(1):21-6

Occult breast carcinoma in patients undergoing reduction mammaplasty. Gottlieb JR, et al. **Aesthetic Plast Surg** 1989 Fall;13(4):279-83

Aesthetic refinements in prophylactic mastectomy with immediate reconstruction. Jarrett JR. **Aesthetic Plast Surg** 1990 Spring;14(2):87-92

Mastopexy: modification of periwinkle shell operation. Ten years of experience. Krupp S. **Aesthetic Plast Surg** 1990 Winter;14(1):9-14 (47 ref.)

Psychological aspects of breast surgery. Losken HW. **Aesthetic Plast Surg** 1990 Spring;14(2):107-9

The principles of the up-to-date breast reduction [published erratum appears in Aesthetic Plast Surg 1990 Spring;14(2):164] Meyer R. **Aesthetic Plast Surg** 1990 Winter;14(1):1-7 (17 ref.)

Fifteen years of mammography in cosmetic surgery of the breast. Perras C. **Aesthetic Plast Surg** 1990 Spring; 14(2):81-4

Augmenting the narrow-based breast: the unfurling technique to prevent the double-bubble deformity. Puckett CL, et al. **Aesthetic Plast Surg** 1990 Winter;14(1):15-9

Breast reduction and mastopexy, an old love story: B technique update. Regnault P. **Aesthetic Plast Surg** 1990 Spring;14(2):101-6

Mammography of the augmented breast [letter] Hall FM, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):1098-9

Collapse of a breast implant after mammography [letter] Hawes DR. **AJR Am J Roentgenol** 1990 Jun;154(6):1345-6

Infection following breast reconstruction. Armstrong RW, et al. **Ann Plast Surg** 1989 Oct;23(4):284-8

The influence of silicone bleed on capsule contracture. Caffee HH. **Ann Plast Surg** 1986 Oct;17(4):284-7

Textured silicone and capsule contracture. Caffee HH. **Ann Plast Surg** 1990 Mar;24(3):197-9

Capsule calcification following mammaplasty: a survey [letter] Cocke WM Jr. **Ann Plast Surg** 1986 Jun;16(6):541

The role of mammography in detecting breast cancer in augmented breasts. Grace GT, et al. **Ann Plast Surg** 1990 Aug;25(2):119-23

Polyurethane nipple prosthesis. Hallock GG. **Ann Plast Surg** 1990 Jan;24(1):80-5

Breast reduction in the male-to-female transsexual. Kaczynski A, et al. **Ann Plast Surg** 1989 Oct;23(4):323-6

Nipple centralization for the correction of breast deformity from segmental mastectomy. Kroll SS, et al. **Ann Plast Surg** 1990 Mar;24(3):271-4; discussion 275

Lesion of the long thoracic nerve during transaxillary breast augmentation: an unusual complication. Laban E, et al. **Ann Plast Surg** 1990 May;24(5):445-6

Amelioration of capsular contracture by motion restriction. Marshall WR. **Ann Plast Surg** 1986 Mar;16(3):211-9

Re: Letterman and Schurter: a sitting position for mammaplasty with general anesthesia [letter; comment] Matarasso A, et al. **Ann Plast Surg** 1989 Nov;23(5):464-5 Comment on: Ann Plast Surg 1988 Jun;20(6):522-6.

The fate of soluble steroids within breast prostheses in humans. Morykwas MJ, et al. **Ann Plast Surg** 1990 May; 24(5):427-30

Early experience with high thoracic epidural anesthesia in outpatient submuscular breast augmentation. Nesmith RL, et al. **Ann Plast Surg** 1990 Apr;24(4):299-302; discussion 302-3

A technique for valve placement in breast reconstruction using tissue expanders. Paul MD. **Ann Plast Surg** 1990 Apr; 24(4):378-9

Surgical treatment of congenital breast asymmetry. Smith DJ Jr, et al. **Ann Plast Surg** 1986 Aug;17(2):92-101

Prolactin secretion in women after plastic breast augmentation and reduction. Soules MR, et al. **Ann Plast Surg** 1986 Oct;17(4):335-8

Intraluminal cyclosporine A reduces capsular thickness around silicone implants in rats. Stark GB, et al. **Ann Plast Surg** 1990 Feb;24(2):156-61

Correction of mammary ptosis with glandular atrophy. Staub S, et al. **Ann Plast Surg** 1986 Sep;17(3):216-20

Reconstruction of a pendulous breast utilizing a shaped expander. Versaci AD. **Ann Plast Surg** 1989 Dec; 23(6):469-78

Breast reconstruction by tissue expansion for congenital and burn deformities. Versaci AD, et al. **Ann Plast Surg** 1986 Jan;16(1):20-31

Salvage of the exposed breast implant. Weber J Jr, et al. **Ann Plast Surg** 1986 Feb;16(2):106-10

Drainage or suture of the cavity after breast biopsy [letter; comment] **Ann R Coll Surg Engl** 1990 May;72(3):213 Comment on: Ann R Coll Surg Engl 1990 Jan;72(1):11-3.

Mastectomy and breast reconstruction preserving the nipple. Bishop CC, et al. **Ann R Coll Surg Engl** 1990 Mar;72(2):87-9

Delayed reconstruction of the breast after mastectomy. Ward CM. **Ann R Coll Surg Engl** 1989 May;71(3):182-6 (22 ref.)

Scleroderma following augmentation mammoplasty. Report of a case and review of the literature [see comments] Sahn EE, et al. **Arch Dermatol** 1990 Sep;126(9):1198-202 (27 ref.) Comment in: Arch Dermatol 1990 Sep;126(9):1220-2.

Augmentation mammoplasty and scleroderma. Is there an association? [comment] Varga J, et al. **Arch Dermatol** 1990 Sep;126(9):1220-2 Comment on: Arch Dermatol 1990 Sep;126(9):1198-202.

Capsular contracture after breast reconstruction with tissue expansion. Holmes JD. **Br J Plast Surg** 1989 Sep; 42(5):591-4

Lactation as a complication of aesthetic breast surgery successfully treated with bromocriptine. Rothkopf DM, et al. **Br J Plast Surg** 1990 May;43(3):373-5

Outcome of surgery for non-palpable mammographic abnormalities. Aitken RJ, et al. **Br J Surg** 1990 Jun; 77(6):673-6

Breast reconstruction after mastectomy. Recent advances. Bostwick J 3d. **Cancer** 1990 Sep 15;66(6 Suppl):1402-11 (37 ref.)

Radiation therapy after breast augmentation or reconstruction in early or recurrent breast cancer. Ryu J, et al. **Cancer** 1990 Sep 1;66(5):844-7

Breast conservation techniques for early breast cancer. Habibollahi F, et al. **Cancer Treat Rev** 1989 Sep; 16(3):177-91 (70 ref.)

Thoracic outlet syndrome caused by a latissimus dorsi flap for breast reconstruction. Rubio PA, et al. **Chest** 1990 Feb; 97(2):494-5

Reactions at silicone-injected sites on the face associated with silicone breast implant "inflammation" or "rejection". Fisher AA. **Cutis** 1990 Jun;45(6):393-5

Breast reconstruction after mastectomy. Bushnell SS. **Hematol Oncol Clin North Am** 1989 Dec;3(4):709-25 (57 ref.)

Silicone breast implants—is there cause for concern? Van Natta BW, et al. **Indiana Med** 1990 Mar;83(3):184-5 (5 ref.)

Irradiation of prosthetically augmented breasts: a retrospective study on toxicity and cosmetic results. Halpern J, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan; 18(1):189-91

Breast reconstruction after mastectomy. Ganske J. **Iowa Med** 1989 Aug;79(8):381-4

Nondestructive investigations on ninety-seven surgically excised mammary prostheses. Rolland C, et al. **J Biomed Mater Res** 1989 Dec;23(A3 Suppl):285-98

Aesthetic breast surgery. Truppman ES, et al. **J Fla Med Assoc** 1989 Jul;76(7):609-12 (0 ref.)

Subcuticular skin closure following minor breast biopsy: Prolene is superior to polydioxanone (PDS) [see comments] Aitken RJ, et al. **J R Coll Surg Edinb** 1989 Jun;34(3):128-9 Comment in: J R Coll Surg Edinb 1990 Apr;35(2):131-2.

Appraisal of breast reconstruction with the tissue expansion technique. Thompson AM, et al. **J R Coll Surg Edinb** 1990 Feb;35(1):4-6

The use of tissue expansion for immediate breast reconstruction after mastectomy. Russell IS, et al. **Med J Aust** 1990 Jun 18;152(12):632-5

Antibiotic prophylaxis for herniorrhaphy and breast surgery [letter] **N Engl J Med** 1990 Jun 28;322(26):1884-6

Perioperative antibiotic prophylaxis for herniorrhaphy and breast surgery. Platt R, et al. **N Engl J Med** 1990 Jan 18; 322(3):153-60

The current approach to breast reconstruction. Dowden RV. **Oncology (Williston Park)** 1987 Dec;1(10):29-38

Breast reconstruction: questions on timing and patient selection [letter] Schreiber DP. **Oncology (Williston Park)** 1988 Jul;2(7):12, 14

The dog-ear in areolar reconstruction [letter] Achauer BM. **Plast Reconstr Surg** 1990 Apr;85(4):647-8

The diagnosis of ruptured breast implants. Andersen B, et al. **Plast Reconstr Surg** 1989 Dec;84(6):903-7

Free TRAM flap for breast reconstruction [letter] Arnez ZM. **Plast Reconstr Surg** 1989 Dec;84(6):1009-10

Nipple-areola location in breast reconstruction: a simplified approach [letter] Barnett A. **Plast Reconstr Surg** 1990 Feb; 85(2):319-20

Transaxillary subpectoral augmentation in the ptotic breast: augmentation by disruption of the extended pectoral fascia and parenchymal sweep. Barnett A. **Plast Reconstr Surg** 1990 Jul;86(1):76-83

Quantitative assessment of postoperative breast massage. Becker H, et al. **Plast Reconstr Surg** 1990 Aug;86(2):355-6

A new technique for reconstructing Montgomery's tubercles. Becker H, et al. **Plast Reconstr Surg** 1990 Jul;86(1):147-8

Augmentation mammaplasty: a comparative analysis. Biggs TM, et al. **Plast Reconstr Surg** 1990 Mar;85(3):368-72

Breast reduction with short L scar. Bozola AR. **Plast Reconstr Surg** 1990 May;85(5):728-38

Inserting the polyurethane-covered breast implant [letter] Buckspan RJ. **Plast Reconstr Surg** 1989 Nov;84(5):858-9

A direct surgical approach to correct the inverted nipple. Chandler PJ Jr, et al. **Plast Reconstr Surg** 1990 Aug; 86(2):352-4

Measurement of capsular contracture: the conventional breast implant and the Pittsburgh implant. Cherup LL, et al. **Plast Reconstr Surg** 1989 Dec;84(6):893-901; discussion 902

Autologous blood transfusions and plastic surgery: comments concerning "other" "elective" procedures [letter; comment] Courtiss EH. **Plast Reconstr Surg** 1990 Jul; 86(1):163-6 Comment on: Plast Reconstr Surg 1989 Oct;84(4):662-4.

Vertical incision for reducing moderate mammary hypertrophy in adolescents [letter] de Almeida AR. **Plast Reconstr Surg** 1990 Jan;85(1):155

The immediate breast reconstruction [letter; comment] Dowden RV. **Plast Reconstr Surg** 1989 Dec;84(6):1015-6 Comment on: Plast Reconstr Surg 1989 May;83(5):845-51.

Expandable breast implant reconstruction of Tikhoff-Linberg shoulder deformity. Dowden RV, et al. **Plast Reconstr Surg** 1990 Jan;85(1):112-5

The lateral transverse thigh free flap: an alternative for autogenous-tissue breast reconstruction. Elliott LF, et al. **Plast Reconstr Surg** 1990 Feb;85(2):169-78; discussion 179-81

Reconstructing the breast mound employing a secondary island omental skin flap. Erol OO, et al. **Plast Reconstr Surg** 1990 Sep;86(3):510-8

Smooth versus rough mammary prostheses [letter; comment] Ersek RA. **Plast Reconstr Surg** 1990 Jun;85(6):999-1000 Comment on: Plast Reconstr Surg 1989 Sep;84(3):449-57.

Physiologic tissue gel equivalent [letter] Ersek RA, et al. **Plast Reconstr Surg** 1990 Sep;86(3):611

How good are our breast reconstructions? [editorial] Goldwyn RM. **Plast Reconstr Surg** 1990 Sep;86(3):548-9

Use of a modified abdominal binder to prevent postoperative superior displacement of submusculofascial breast implants and expanders [letter] Golembe EV, et al. **Plast Reconstr Surg** 1990 Aug;86(2):382-3

Capsular contracture after breast reconstruction with silicone-gel and saline-filled implants: a 6-year follow-up. Gylbert L, et al. **Plast Reconstr Surg** 1990 Mar;85(3):373-7

Preoperative antibiotics and capsular contracture in augmentation mammaplasty. Gylbert L, et al. **Plast Reconstr Surg** 1990 Aug;86(2):260-7; discussion 268-9

Comparative evaluation of textured-surface implants in humans [letter] Hamas RS. **Plast Reconstr Surg** 1990 Jun; 85(6):998-9

Extensive experience with polyurethane breast implants [letter] Hoefflin SM. **Plast Reconstr Surg** 1990 Jul; 86(1):166-7

Breast and subscapular pain following submuscular placement of breast prostheses. Huang TT. **Plast Reconstr Surg** 1990 Aug;86(2):275-80

Complications of TRAM flap breast reconstruction in obese patients. Kroll SS, et al. **Plast Reconstr Surg** 1989 Dec;

84(6):886–92

The pure posterior pedicle procedure for breast reduction. Levet Y. **Plast Reconstr Surg** 1990 Jul;86(1):67–75

Breast implants and air flight [letter] Lovich SF, et al. **Plast Reconstr Surg** 1990 Jul;86(1):172

Treatment of breast contractures with open capsulotomy and replacement of gel prostheses with polyurethane–covered implants. Melmed EP. **Plast Reconstr Surg** 1990 Aug; 86(2):270–4

Galactorrhea after reduction mammaplasty [letter; comment] Menéndez–Graiño F, et al. **Plast Reconstr Surg** 1990 Apr; 85(4):645–6 Comment on: Plast Reconstr Surg 1989 Mar;83(3):580.

Autologous blood transfusion in reduction mammaplasty [letter; comment] Metz PS. **Plast Reconstr Surg** 1990 Jun; 85(6):1003–4 Comment on: Plast Reconstr Surg 1989 Oct;84(4):662–4.

TRAM flap safety optimized with intraoperative Doppler. Michelow BJ, et al. **Plast Reconstr Surg** 1990 Jul; 86(1):143–6

Complications of autografting fat obtained by liposuction [letter] Montañana Vizcaino J, et al. **Plast Reconstr Surg** 1990 Apr;85(4):638–9

The inferior gluteal free flap in breast reconstruction. Paletta CE, et al. **Plast Reconstr Surg** 1989 Dec;84(6):875–83; discussion 884–5

Breast capsulopexy for capsular ptosis after augmentation mammaplasty. Parsa FD. **Plast Reconstr Surg** 1990 May; 85(5):809–12

Long–term use of polyurethane breast prostheses: a 14–year experience. Pennisi VR. **Plast Reconstr Surg** 1990 Aug; 86(2):368–71

Seroma after latissimus dorsi myocutaneous flap for breast reconstruction [letter; comment] Reddick LP. **Plast Reconstr Surg** 1990 May;85(5):826 Comment on: Plast Reconstr Surg 1989 May;83(5):925–6.

Surgilube for easy insertion of polyurethane–covered prostheses [letter; comment] Schlesinger SL. **Plast Reconstr Surg** 1989 Dec;84(6):1006–7 Comment on: Plast Reconstr Surg 1988 Apr;81(4):643–4.

Immediate postmastectomy reconstruction: choices and concerns [letter; comment] Seitchik MW. **Plast Reconstr Surg** 1989 Dec;84(6):1005–6 Comment on: Plast Reconstr Surg 1989 May;83(5):828–41; discussion 842–4.

Breast carcinoma found in association with reduction mammaplasty [letter; comment] Snyderman RK. **Plast Reconstr Surg** 1990 Jan;85(1):153–4 Comment on: Plast Reconstr Surg 1989 Jun;83(6):1042–4.

Galactorrhea after reduction mammaplasty [letter; comment] Song IC, et al. **Plast Reconstr Surg** 1989 Nov;84(5):857 Comment on: Plast Reconstr Surg 1989 Mar;83(3):580.

Guidelines in concentric mastopexy. Spear SL, et al. **Plast Reconstr Surg** 1990 Jun;85(6):961–6

Immediate breast reconstruction with deepithelialized TRAM flaps: techniques for improving breast reconstruction. Toth BA, et al. **Plast Reconstr Surg** 1990 Jun;85(6):967–70

Superomedial pedicle technique of reduction mammaplasty [letter; comment] van der Meulen JC. **Plast Reconstr Surg** 1989 Dec;84(6):1005 Comment on: Plast Reconstr Surg 1989 Mar;83(3):471–80.

Ultrasound mammography for the diagnosis of a ruptured breast implant [letter] van Wingerden JJ, et al. **Plast Reconstr Surg** 1990 Aug;86(2):383

Circumferential reduction of areolar size [letter] Wexler MR. **Plast Reconstr Surg** 1990 Aug;86(2):379–81

Positioning techniques for the augmented breast. Brower TD. **Radiol Technol** 1990 Jan–Feb;61(3):209–11

Breast cancer: mammographic and sonographic findings after augmentation mammaplasty. Leibman AJ, et al. **Radiology** 1990 Jan;174(1):195–8

Nonpalpable lesions in the augmented breast: preoperative localization. Robertson CL, et al. **Radiology** 1989 Dec; 173(3):873–4

Problems with the transverse rectus abdominis myocutaneous island flap in breast reconstruction. Mackay DR, et al. **S Afr Med J** 1989 Dec 16;76(12):654–6

Scleroderma after silicone augmentation mammoplasty. A report of 2 cases. Marik PE, et al. **S Afr Med J** 1990 Feb 17;77(4):212–3

Results of subglandular breast augmentation using a new classification method—18–year follow–up. Gylbert L, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(2):133–6

Constant compression caliper for objective measurement of breast capsular contracture. Gylbert L, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(2):137–42

Applanation tonometry for the evaluation of breast compressibility. Gylbert LO. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(3):223–9

The effect on the preoperative symptoms and the late results of Skoog's reduction mammaplasty. A follow–up study on 149 patients. Kinell I, et al. **Scand J Plast Reconstr Surg Hand Surg** 1990;24(1):61–5

Treatment of severe developmental asymmetry of the female breast. Rintala AE, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(3):231–5

Perioperative systemic antibiotics for prophylaxis of infections in breast surgery: sulbactam/ampicillin versus mezlocillin/oxacillin. Engel K, et al. **Suppl Int J Gynecol Obstet** 1989;2:29–34

The Kiricuta procedure in reconstructive surgical treatment of the breast. Lopez JF, et al. **Surg Gynecol Obstet** 1990 Mar;170(3):209–11

Mycobacterium fortuitum mastitis following augmentation mammaplasty: report of a case. Juang YC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Mar;88(3):278–81

Current concepts in breast reconstruction after mastectomy. Kroll SS. **Tex Med** 1989 Sep;85(9):40–4 (7 ref.)

Aesthetic surgery for benign disorders of the breast. Carlson G, et al. **World J Surg** 1989 Nov–Dec;13(6):761–4 (25 ref.)

Noncosmetic operations for benign breast disease. Hadfield GJ. **World J Surg** 1989 Nov–Dec;13(6):757–60

[Short–acting anesthesia in cosmetic surgery of the breasts] Ivanova–Stoilova Ts, et al. **Khirurgiia (Sofiia)** 1989; 42(4):50–3 (Eng. Abstr.) **(Bul)**

[One–step breast reconstruction] Tepavicharova P, et al. **Khirurgiia (Sofiia)** 1989;42(3):37–41 (Eng. Abstr.) **(Bul)**

[Complications and adverse results in corrective mammoplasty] Tepavicharova P. **Khirurgiia (Sofiia)** 1989; 42(3):8–13 (Eng. Abstr.) **(Bul)**

[Plastic surgery of scar deformity of the breast following burns] Cao HP. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):241–2 **(Chi)**

[Mammoplasty with m. rectus abdominis of the same side (report of 2 cases)] Chen YH, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):227–8 **(Chi)**

[Subcutaneous excision of cystic hyperplasia of breast with concurrent reconstruction. Report of 7 cases] Gao SL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Sep;5(3):201–2 **(Chi)**

[Reduction mammoplasty utilizing an inferior pedicle flap with no perpendicular scar] Han JQ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Mar;2(1):33–4, 75 (Eng. Abstr.) **(Chi)**

[Preliminary experiences of reduction mammaplasty by the bipedicle horizontal flap] Leng YC. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Jun;2(2):113–4, 155–6 (Eng. Abstr.) **(Chi)**

[Reduction mammoplasty using a modified "B" shape method] Rong GH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Mar;6(1):10–1, 73 (Eng. Abstr.) **(Chi)**

[A reduction mammaplasty operation for Oriental females] Song RY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Mar;5(1):1–3, 74 (Eng. Abstr.) **(Chi)**

[Augmentation mammoplasty and an improved method of silastic gel breast prosthesis implantation through an areolar incision] Song RY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Mar;6(1):2–5, 72 (Eng. Abstr.) **(Chi)**

[Augmentation mammoplasty with prosthesis implantation via an axillary incision] Song YG. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Mar;6(1):6–7, 72 (Eng. Abstr.) **(Chi)**

[Reductive mammoplasty by upper flaps with nipple and areola transposition] Sun GC. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):243–4 **(Chi)**

[The use of Chinese–made silicon gel capsules in mammoplasty] Yang PY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Dec;3(4):259–61 **(Chi)**

[The vertical double–pedicle method (Mckissock's) for reduction mammoplasty. Report of 10 cases] Zheng JW. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Mar;6(1):8–9, 72–3 (Eng. Abstr.) **(Chi)**

[Reconstruction of the breast by silicon rubber prosthesis implantation immediately after subcutaneous mastectomy—report of 7 cases] Zhou SJ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):245–6, 248, 315 (Eng. Abstr.) **(Chi)**

[Nursing care of augmentation mammaplasty] Zhao SJ. **Chung Hua Hu Li Tsa Chih** 1990 Jan;25(1):19–20 **(Chi)**

[Breast repair using a silicone gel–filled prosthesis. Report of 21 cases] Zhuang QP. **Chung Hua Wai Ko Tsa Chih** 1989 Oct;27(10):617–9, 639 (Eng. Abstr.) **(Chi)**

[The anticardiolipin syndrome after plastic surgery of the breasts] Alušík S, et al. **Rozhl Chir** 1990 Apr;69(4):298–301 (Eng. Abstr.) **(Cze)**

[Silicone breast implants] Nielsen M, et al. **Ugeskr Laeger** 1989 Dec 18;151(51):3470–3 (28 ref.) (Eng. Abstr.) **(Dan)**

[Prepubertal gigantomastia treated by mastectomy with an implant] Ellouz M, et al. **Ann Chir Plast Esthet** 1990; 35(2):157–9 (Eng. Abstr.) **(Fre)**

[A permanent expanding prosthesis and the latest refinements in breast reconstructive surgery] Flageul G, et al. **Ann Chir Plast Esthet** 1989;34(6):489–92 (Eng. Abstr.) **(Fre)**

[Breast reconstruction using skin expansion after radiotherapy: limitations of the procedure. Apropos of 10 cases] Gary–Bobo A, et al. **Ann Chir Plast Esthet** 1989; 34(5):427–31 (Eng. Abstr.) **(Fre)**

[Simultaneous, external abdomen and breast plastic surgery...Is it very sensible?] Réal JP, et al. **Ann Chir Plast Esthet** 1989;34(5):443–5 **(Fre)**

[Technical analysis of reduction mammaplasty. A personal method] Simons G, et al. **Ann Chir Plast Esthet** 1990; 35(1):7–16 (Eng. Abstr.) **(Fre)**

[The price of a lost breast increases. Apropos of a new civil case establishing compensation for a breast removed by error] Soutoul JH, et al. **Rev Fr Gynecol Obstet** 1989 Jul–Sep;84(7–9):609–12 **(Fre)**

[Breast reconstruction: a viewpoint] Krupp S, et al. **Rev Med Suisse Romande** 1990 Jul;110(7):607–12 **(Fre)**

[Breast reconstruction] Meredith P. **Rev Med Suisse Romande** 1990 Apr;110(4):319–24 **(Fre)**

[Esthetic plastic surgery in cancer of the female breast] Weitzel H, et al. **Arch Gynecol Obstet** 1989;245(1–4):709–12 **(Ger)**

[Breast reconstruction only by implant of a silicone gel prosthesis, possibly following tissue stretching by an expander] Biemer E. **Chirurg** 1989 Sep;60(9):611–3 **(Ger)**

[Reconstruction of the skin–soft tissue surface by pedicled myocutaneous latissimus flap] Biemer E, et al. **Chirurg** 1989 Sep;60(9):614–5 **(Ger)**

[Breast reconstruction using a free upper myocutaneous gluteal flap with microvascular anastomoses] Biemer E, et al. **Chirurg** 1989 Sep;60(9):625–6 **(Ger)**

[Indications and technic of transverse pedicled rectus flaps] Bohmert H. **Chirurg** 1989 Sep;60(9):620–1 **(Ger)**

[Indications and technic of the contralateral thoraco–epigastric flap] Bohmert H. **Chirurg** 1989 Sep; 60(9):618–9 **(Ger)**

[The concept of mastectomy: indications and timing of reconstruction] Bohmert H. **Chirurg** 1989 Sep;60(9):608–10 **(Ger)**

[Specialty commentary on fee regulations. EBM (BMA/E–GO) 1987. I. Surgery of the body surface no. 2100–2180] Fritz K, et al. **Chirurg** 1989 Oct;60(10):suppl 152–8 **(Ger)**

[Breast reconstruction using an upper abdominal sliding flap] Lemperle G, et al. **Chirurg** 1989 Sep;60(9):616–7 **(Ger)**

[Various possibilities of nipple reconstruction] Lemperle G, et al. **Chirurg** 1989 Sep;60(9):627–30 **(Ger)**

[Breast reconstruction with the vertical and transverse musculocutaneous rectus abdominis flap] Mühlbauer W, et al. **Chirurg** 1989 Sep;60(9):622–4 **(Ger)**

[Possibilities of reconstruction following mastectomy] Schmidt–Tintemann U. **Chirurg** 1989 Sep;60(9):607 **(Ger)**

[Breast feeding following breast reduction–plasty and mastopexy?] Deutinger M, et al. **Geburtshilfe Frauenheilkd** 1990 Mar;50(3):220–2 (Eng. Abstr.) **(Ger)**

[Surgical aspects of breast–saving therapy of breast cancer—segment resection with simultaneous breast reconstruction] Lang N, et al. **Gynakol Rundsch** 1989;29 Suppl 2:219–22 **(Ger)**

[Breast–saving cancer surgery from plastic surgery and reconstructive viewpoints] Schönegg WD, et al. **Gynakol Rundsch** 1989;29 Suppl 2:226–8 **(Ger)**

[Mammaplasty. A component of the combined therapy program in the treatment of malignant breast diseases] Pohl G. **Zentralbl Chir** 1990;115(5):265–73 (Eng. Abstr.) **(Ger)**

[Primary reconstruction in breast–saving cancer surgery] Schoenegg WD, et al. **Zentralbl Gynakol** 1990;112(7):411–9 (Eng. Abstr.) **(Ger)**

[Reconstruction of the breast after radical mastectomy in cancer. Reconstruction of the breast volume] Elia L, et al. **Minerva Chir** 1989 Jul 31;44(13–14):1717–20 (18 ref.) (Eng. Abstr.) **(Ita)**

[Conservative surgery and esthetic rehabilitation of carcinoma of the breast] Elia L, et al. **Minerva Chir** 1989 Sep 30;44(18):2005–11 (19 ref.) (Eng. Abstr.) **(Ita)**

[Filling materials in the repair and esthetic surgery of the breast. Historical notes] Elia L, et al. **Minerva Chir** 1989 Sep 30;44(18):2013–6 (Eng. Abstr.) **(Ita)**

[Direct post–mastectomy reconstruction with skin expansion. Technical notes] Monti M, et al. **Minerva Chir** 1989 Nov 30;44(22):2321–7 (Eng. Abstr.) **(Ita)**

[Experiences of breast reconstruction following mastectomy in cases of cancer and evaluation of psychological aspects of the patients] Bando M. **Gan To Kagaku Ryoho** 1990 Apr; 17(4 Pt 2):804–10 (Eng. Abstr.) **(Jpn)**

[Patient acceptance of immediate breast reconstruction] Yamamoto H. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 2):810–2 **(Jpn)**

[Breast reconstruction after mastectomy. Critical analysis of 240 cases] Carramaschi F, et al. **AMB Rev Assoc Med Bras** 1989 Jan–Feb;35(1):15–9 (Eng. Abstr.) **(Por)**

[Most patients attitude is positive to a new, reconstructed nipple in connection with mastectomy] Perbeck L, et al. **Lakartidningen** 1990 Feb 7;87(6):383, 385–6 **(Swe)**

ULTRASTRUCTURE

Ultrastructural and immunocytochemical characterization of an immortalized human breast epithelial cell line, MCF–10. Tait L, et al. **Cancer Res** 1990 Sep 15;50(18):6087–94

Prognostic value of nucleolar morphometric variables in cytological breast cancer specimens. van Diest PJ, et al. **J Clin Pathol** 1990 Feb;43(2):157–9

Anchoring fibrils and type VII collagen in human breast. Eyden BP, et al. **J Submicrosc Cytol Pathol** 1990 Jul; 22(3):477–9

An ultrastructural study of benign and malignant breast epithelial cells. A search for tonofilaments. Kotańska KM, et al. **J Submicrosc Cytol Pathol** 1989 Jul;21(3):469–74

BREAST DISEASES

Breast disorders in nursing mothers. Olsen CG, et al.

Am Fam Physician 1990 May;41(5):1509–16
Hydatid cyst presenting as a breast lump. Radhi JM, et al. Can J Surg 1990 Feb;33(1):29–30
Education on breast disease in an obstetrics and gynecology training program: a multidisciplinary approach. Rosa C, et al. Obstet Gynecol 1990 Apr;75(4):716–9
Benign breast disease in the postmenopausal woman. Devitt JE. World J Surg 1989 Nov–Dec;13(6):731–5 (28 ref.)

BLOOD

Serum oestradiol in women with and without breast disease [published erratum appears in Br J Cancer 1990 Aug;62(2):336] Bennett IC, et al. Br J Cancer 1990 Jan; 61(1):142–6
Prolactin secretion and dehydroepiandrosterone sulphate plasma levels in women with benign breast disease. Parlati E, et al. J Endocrinol Invest 1989 Sep;12(8):549–52
[Determining binding proteins of progesterones in patients with breast diseases] Kunze M, et al. Zentralbl Gynakol 1989;111(16):1113–20 (Eng. Abstr.) (Ger)

CLASSIFICATION

ANDI—a clinicopathological basis for the classification and understanding of benign breast disorders. Hughes LE. Horm Res 1989;32 Suppl 1:5–9

COMPLICATIONS

Calcium oxalate crystals in breast biopsies. An overlooked form of microcalcification associated with benign breast disease. Radi MJ. Arch Pathol Lab Med 1989 Dec; 113(12):1367–9
Long–term follow–up of women who underwent biopsy for benign breast lesion [letter] Berrino F. Cancer 1990 Mar 1;65(5):1261–2
[Cancer of the male breast with atypical ductal hyperplasia and contralateral gynecomastia] Turi V, et al. Minerva Chir 1990 Feb;45(3–4):203–5 (11 ref.) (Eng. Abstr.) (Ita)
[Study on follow–up of patients with biopsy–proven breast disease] Kojima O, et al. Nippon Geka Gakkai Zasshi 1989 Sep;90(9):1399–402 (Eng. Abstr.) (Jpn)
[Echinococcosis of the breast and liver] Prokopenko OP. Vestn Rentgenol Radiol 1989 Jul–Aug;(4):88–9 (Rus)

DIAGNOSIS

Surgical management of breast disease in an obstetrics and gynecology group. Hall JA, et al. Am J Obstet Gynecol 1990 Jun;162(6):1526–30; discussion 1530–4
A cytological study of mammary disease. Webb AJ. Ann R Coll Surg Engl 1975 Apr;56(4):181–91
Accuracy of combined clinical–mammographic–cytologic diagnosis of dominant breast masses. A prospective study. Butler JA, et al. Arch Surg 1990 Jul;125(7):893–5; discussion 896
Monoclonal antibodies 323/A3 and Ca1 identify a paracrine function of breast carcinoma on adjacent benign histological components. Courtney SP, et al. Br J Cancer Suppl 1990 Jul;10:92–5
Evaluation and management of breast abnormalities. Winchester DP. Cancer 1990 Sep 15;66(6 Suppl):1345–7 (6 ref.)
Breast biopsy techniques. Herbst AL. Clin Obstet Gynecol 1989 Dec;32(4):800–6 (9 ref.)
The value of ultrasound examination in diagnosing breast disease. Dempsey PJ. Curr Opin Radiol 1989 Aug; 1(2):188–92 (29 ref.)
Needle localization and biopsy of mammographic abnormalities. Flynn MB, et al. J Ky Med Assoc 1990 Feb; 88(2):71–5
Detection of proliferative breast disease by four–quadrant, fine–needle aspiration. Ward JH, et al. J Natl Cancer Inst 1990 Jun 6;82(11):964–6
The non–palpable, radiographically suspicious breast lesion: an analysis of 101 cases. Perre CI, et al. Neth J Surg 1990 Jun;42(3):69–71
Immunohistochemistry in the differential diagnosis of breast diseases. Palmer JO, et al. Pathol Annu 1990;25 Pt 2:287–315 (146 ref.)
Silicone granulomas: detection by ultrasonography [letter] Herzog P. Plast Reconstr Surg 1989 Nov;84(5):856–7
Breast masses. In–office evaluation with diagnostic triad. Hindle WH. Postgrad Med 1990 Aug;88(2):85–7, 90–4
Cardiac failure mimicking advanced breast carcinoma. Duncan G, et al. Practitioner 1989 Nov 8;233(1478):1436, 1439
Breast disease: tissue characterization with Gd–DTPA enhancement profiles. Stack JP, et al. Radiology 1990 Feb; 174(2):491–4
Breast ductography—its role in the diagnosis of breast disease. Reid AW, et al. Scott Med J 1989 Aug;34(4):497–9
Benign lesions that mimic malignant tumors. Semin Diagn Pathol 1990 May;7(2):89–155
Ultrasound of benign breast conditions. Adler DD. Semin Ultrasound CT MR 1989 Apr;10(2):106–18 (17 ref.)
The role of ultrasound in a breast imaging center. Feig SA. Semin Ultrasound CT MR 1989 Apr;10(2):90–105 (65 ref.)
Techniques and results of aspiration cytology for diagnosis of benign and malignant diseases of the breast. Wilkinson EJ, et al. Surg Clin North Am 1990 Aug;70(4):801–13
Global breast attenuation:control group and benign breast diseases. Berger G, et al. Ultrason Imaging 1990 Jan; 12(1):47–57
Clinical performance of a cone/annular array ultrasound breast scanner. Fishell EK, et al. Ultrasound Med Biol 1990; 16(4):361–74
The use of ultrasound in benign breast disorders. Guyer PB. World J Surg 1989 Nov–Dec;13(6):692–8 (51 ref.)
[Tuberculosis of the breast] Iarŭmov N, et al. Khirurgiia (Sofiia) 1990;43(2):72–4 (Bul)
[Breast hematoma and cytosteatonecrosis. Apropos of 55 cases] Gollentz B, et al. J Radiol 1990 Jan;71(1):33–43 (Eng. Abstr.) (Fre)
[Place of mammary ultrasonography in breast diseases] Grumbach Y, et al. Rev Fr Gynecol Obstet 1989 Oct; 84(10):673–83 (21 ref.) (Eng. Abstr.) (Fre)
[Diagnosis of benign breast diseases. Clinical aspects] Junkermann H. Gynakologe 1989 Aug;22(4):226–9 (15 ref.) (Ger)
[Senology—a word becomes a concept] Kubista E. Wien Klin Wochenschr 1990 Aug 3;102(15):426–32 (Eng. Abstr.) (Ger)
[A proposal for 1st–level studies of breast diseases: the clinical thermo– and echographic examination] Beltrame A, et al. Minerva Med 1989 Aug;80(8):917–22 (Ita)
[Sclerosing adenosis and infiltrating epitheliosis of the breast. Radiohistopathologic correlations and differential diagnosis of carcinoma] Gardellin G, et al. Radiol Med (Torino) 1989 Oct;78(4):335–8 (Eng. Abstr.) (Ita)
[MR characterization of breast pathology using inversion recovery sequence] Testa A, et al. Radiol Med (Torino) 1989 Oct;78(4):329–34 (Eng. Abstr.) (Ita)
[Diagnosis of mammary gland diseases using microwave thermography: a study on adjunctive diagnostic methods in relation to different factors in breast diseases] Maeda T. Nippon Geka Gakkai Zasshi 1990 May;91(5):622–30 (Eng. Abstr.) (Jpn)
[State of the mammary glands in hypergonadotropic amenorrhea] Burdina LM, et al. Akush Ginekol (Mosk) 1990 Apr;(4):47–50 (Eng. Abstr.) (Rus)
[Clinical use of echotomography with target aspiration biopsy and urgent cytological examination] Bogin IuN, et al. Klin Med (Mosk) 1990 Feb;68(2):94–7 (Eng. Abstr.) (Rus)
[Differential diagnosis of nipple discharge] Martyniuk VV, et al. Vestn Khir 1990 Feb;144(2):140–2 (Eng. Abstr.) (Rus)
[Bloody discharge from the breast] Breberina M, et al. Acta Chir Iugosl 1989;36 Suppl 1:296–8 (Scr)
[Directed ultrasonography in the diagnosis of abscesses and cysts of the breast] Antalík J. Cesk Radiol 1989 Oct; 43(5):309–17 (Eng. Abstr.) (Slo)

DRUG THERAPY

Control of postpartum breast engorgement with oral contraceptives. II. Booker DE, et al. Am J Obstet Gynecol 1970 Sep 15;108(2):240–2
Management of cyclical breast pain. Gateley CA, et al. Br J Hosp Med 1990 May;43(5):330–2
The management of mastalgia in the UK. Maddox PR. Horm Res 1989;32 Suppl 1:21–7 (42 ref.)
European multicentre trial of bromocriptine in cyclical mastalgia. Mansel RE, et al. Lancet 1990 Jan 27; 335(8683):190–3
[Tamoxifen in the treatment of mastalgia] Presl J. Cesk Gynekol 1989 Jul;54(6):466–7 (Cze)

ECONOMICS

Benign breast disease: the cost of the service and the cost to the patient. Baum M. World J Surg 1989 Nov–Dec; 13(6):669–73

ENZYMOLOGY

Expression of the progestin–induced fatty acid synthetase in benign mastopathies and breast cancer as measured by RNA in situ hybridization. Chalbos D, et al. J Natl Cancer Inst 1990 Apr 4;82(7):602–6

EPIDEMIOLOGY

Clinico–statistico–epidemiologic survey on benign and malignant breast diseases among patients hospitalized at a gynecologic department. Pasquinucci C, et al. Eur J Gynaecol Oncol 1983;4(3):220–3
Changes in diagnostic pattern in breast pathology [letter] Linell F, et al. Lancet 1990 Jun 9;335(8702):1402
Benign breast disorders in nonwestern populations: Part I—Benign breast disorders in Chinese women. Alagaratnam TT, et al. World J Surg 1989 Nov–Dec;13(6):743–5
Benign breast disorders in nonwestern populations: Part III—Benign breast disorders in northern Nigeria. Onukak EE, et al. World J Surg 1989 Nov–Dec;13(6):750–2
Benign breast disorders in nonwestern populations: Part II—Benign breast disorders in India. Shukla HS, et al. World J Surg 1989 Nov–Dec;13(6):746–9

ETIOLOGY

Calcifications in the breast in Filaria loa infection. Novak R. Acta Radiol 1989 Sep–Oct;30(5):507–8
Calcifications of the breast probably due to Loa loa. Carme B, et al. Am J Trop Med Hyg 1990 Jan;42(1):65–6
Delayed breast abscesses after lumpectomy and radiation therapy. Keidan RD, et al. Am Surg 1990 Jul;56(7):440–4
A case–control study of diet and benign proliferative epithelial disorders of the breast. Rohan TE, et al. Cancer Res 1990 Jun 1;50(11):3176–81
Inframammary, intertriginous, and decubital erosions due to etretinate. Shelley ED, et al. Cutis 1990 Feb;45(2):111–3
Fat necrosis of the breast: an unusual complication of lumpectomy and radiotherapy in breast cancer. Review of literature and report of four new cases. el–Deeb NA. Eur J Surg Oncol 1990 Jun;16(3):248–50 (5 ref.)
Collagenous spherulosis. A comment on its histogenesis. Michal M, et al. Pathol Res Pract 1990 Jun;186(3):365–70
The endocrine basis of benign breast disorders. Dogliotti L, et al. World J Surg 1989 Nov–Dec;13(6):674–9 (61 ref.)
Nonendocrine theories of the etiology of benign breast disease. Minton JP, et al. World J Surg 1989 Nov–Dec; 13(6):680–4 (20 ref.)
[Pain and itching of the right breast following a fall on the right side of the thorax (clinical conference)] Rufli T, et al. Schweiz Med Wochenschr 1989 Sep 9;119(36):1224–30 (Ger)
[Lymphadenosis benigna cutis of the mammary areola: Lyme borreliosis?] Trevisan G, et al. G Ital Dermatol Venereol 1989 May;124(5):221–4 (Eng. Abstr.) (Ita)
[Breast diseases in patients with hyperandrogenism] Volobuev AI, et al. Akush Ginekol (Mosk) 1990 Apr; (4):50–3 (Eng. Abstr.) (Rus)

GENETICS

DNA ploidy in breast lesions. A comparative study using two commercial image analysis systems and flow cytometry. Wilbur DC, et al. Anal Quant Cytol Histol 1990 Feb;12(1):28–34

IMMUNOLOGY

Lymphocytic mastopathy, a 'new' autoimmune disease? [editorial] Mills SE. Am J Clin Pathol 1990 Jun;93(6):834–5
Analysis of the tumour–associated antigen TAG–12 by monoclonal antibody 7A9 in normal, benign and malignant mammary tissues. Werner M, et al. Virchows Arch [A] 1990; 416(5):411–6

METABOLISM

Steroid receptors in benign mastectomy tissue. Netto GJ, et al. Am J Clin Pathol 1990 Jul;94(1):14–7
neu oncogene protein and epidermal growth factor receptor are independently expressed in benign and malignant breast tissues. Tsutsumi Y, et al. Hum Pathol 1990 Jul;21(7):750–8

MICROBIOLOGY

Breast abscesses [letter; comment] Dixon JM. Br J Surg 1989 Jun;76(6):655 Comment on: Br J Surg 1989 Jan;76(1):103.
Mobiluncus species and other anaerobic bacteria in non–puerperal breast abscesses. Sturm AW. Eur J Clin Microbiol Infect Dis 1989 Sep;8(9):789–92
Duplication of enhancer sequences in human papillomavirus 6 from condylomas of the mamilla. Kulke R, et al. Virology 1989 Nov;173(1):284–90

PARASITOLOGY

Cysticercosis of the breast. Alagaratnam TT, et al. Am J Trop Med Hyg 1988 May;38(3):601–2
A breast mass caused by gnathostomiasis: brief report of a case. Tesjaroen S, et al. Southeast Asian J Trop Med Public Health 1990 Mar; 21(1):151–3

PATHOLOGY

The value of needle aspiration cytology of the breast, with an emphasis on the diagnosis of breast disease in young women below the age of 30. Gupta RK, et al. Acta Cytol 1990 Mar–Apr;34(2):165–8
Minimal–volume excision of nonpalpable breast lesions. Gallagher WJ, et al. AJR Am J Roentgenol 1989 Nov; 153(5):957–61
Stereotactic fine–needle aspiration biopsy for nonpalpable breast lesions [comment] Jackson VP, et al. AJR Am J Roentgenol 1990 Jun;154(6):1196–7 Comment on: AJR Am J Roentgenol 1990 Jun;154(6):1191–5.
A new device for evaluation of biopsy specimens of occult breast–lesions. Lindfors KK, et al. AJR Am J Roentgenol 1990 Feb;154(2):261–3
Stereotactic fine–needle aspiration for cytologic diagnosis of nonpalpable breast lesions [see comments] Löfgren M, et al. AJR Am J Roentgenol 1990 Jun;154(6):1191–5 Comment in: AJR Am J Roentgenol 1990 Jun;154(6):1196–7.
A rapid technique for accurately localizing microcalcifications in breast biopsy specimens. Gauvin GP, et al. Am J Clin Pathol 1990 Apr;93(4):557–60
Lymphocytic mastopathy. An autoimmune disease of the breast? Schwartz IS, et al. Am J Clin Pathol 1990 Jun; 93(6):725–30
Method already in use [letter; comment] Stay EJ, et al. Am J Clin Pathol 1990 May;93(5):721 Comment on: Am J Clin Pathol 1989 Jul;92(1):86–8.
Use of the von Kossa stain in identifying occult calcifications in breast biopsies. Symonds DA. Am J Clin Pathol 1990 Jul;94(1):44–8

How thoroughly should needle localization breast biopsies be sampled for microscopic examination? A prospective mammographic/pathologic correlative study. Owings DV, et al. **Am J Surg Pathol** 1990 Jun;14(6):578–83

Epitheliosis of the breast. An immunohistochemical characterization and comparison to malignant intraductal proliferations of the breast. Raju U, et al. **Am J Surg Pathol** 1990 Oct;14(10):939–47

Fibronectin: a discrimination marker between small invasive carcinomas and benign proliferative lesions of the breast. Christensen L. **APMIS** 1990 Jul;98(7):615–23

Vasculitis of the breast. Case report and literature review. Orbo A, et al. **APMIS** 1989 Nov;97(11):1003–6 (19 ref.)

Autopsy studies of the occurrence of cancerous, atypical and benign epithelial lesions in the female breast. Nielsen M. **APMIS Suppl** 1989;10:1–56 (291 ref.)

Melanosis of the areola [letter] Pittis JD, et al. **Arch Dermatol** 1990 Apr;126(4):542–3

Giant cell arteritis of the breast. A unique syndrome. Susmano A, et al. **Arch Intern Med** 1990 Apr;150(4):900–4 (21 ref.)

Breast biopsy for calcifications in nonpalpable breast lesions. A prospective study. Franceschi D, et al. **Arch Surg** 1990 Feb;125(2):170–3

Galactocele of the breast: radiologic and ultrasonographic findings. Salvador R, et al. **Br J Radiol** 1990 Feb; 63(746):140–2

Panniculopathy and fibrosclerosis of the female breast and thigh. Curri SB, et al. **Clin Dermatol** 1989 Oct–Dec; 7(4):107–19 (41 ref.)

Clear cell metaplasia of the breast [letter; comment] Bussolati G. **Histopathology** 1990 Mar;16(3):316 Comment on: Histopathology 1989 Jul;15(1):85–92.

Weddellite calcification in the breast: eighteen cases with implications for breast cancer screening. Going JJ, et al. **Histopathology** 1990 Feb;16(2):119–24

Granulomatous angiopanniculitis of the breast. Wargotz ES, et al. **Hum Pathol** 1989 Nov;20(11):1084–8

Rapid reporting on fine needle aspiration of breast lumps in outpatients. Zuk JA, et al. **J Clin Pathol** 1989 Sep; 42(9):906–11

Bilateral breast masses and bloody nipple discharge in a 4-year-old boy. Miller JD, et al. **J Pediatr** 1990 May; 116(5):744–7

Myoepithelial cells in the differential diagnosis of complex benign and malignant breast lesions: an immunohistochemical study. Gottlieb C, et al. **Mod Pathol** 1990 Mar;3(2):135–40

Sarcoidosis of the breast coexisting with mammary carcinoma. Shah AK, et al. **N Y State J Med** 1990 Jun; 90(6):331–3

Benign breast lesions that mimic malignant tumors: analysis of five distinct lesions. Weidner N. **Semin Diagn Pathol** 1990 May;7(2):90–101 (36 ref.)

Ultrasound of the breast. **Semin Ultrasound CT MR** 1989 Apr;10(2):82–176

Interventional breast ultrasonography. D'Orsi CJ, et al. **Semin Ultrasound CT MR** 1989 Apr;10(2):132–8 (19 ref.)

Breast pathology synopsis. Tobon H, et al. **Semin Ultrasound CT MR** 1989 Apr;10(2):139–53 (24 ref.)

Giant cell arteritis of the breast—a case report. Kim KH, et al. **Yonsei Med J** 1990 Mar;31(1):80–4 (33 ref.)

[Bilateral spontaneous pseudo-tumoral cytosteatonecrosis of the breast. Apropos of 2 cases in men] Wiel Masson D, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(6):756–60 (23 ref.) (Eng. Abstr.) **(Fre)**

[Unusual primary cutaneous localized amyloidosis] Schulte C, et al. **Hautarzt** 1990 Jul;41(7):394–7 (Eng. Abstr.) **(Ger)**

[Sonography in breast diagnosis] Strasser K, et al. **Radiologe** 1990 Mar;30(3):130–4 (Eng. Abstr.) **(Ger)**

[Multiple nodules in asymptomatic lobular panniculitis] Hergan K, et al. **ROFO** 1989 Oct;151(4):504–5 **(Ger)**

[Osteosis and calcinosis in scleroderma circumscripta linearis] Nagy E, et al. **Z Hautkr** 1990 Feb;65(2):190–2 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Endocrinology of benign breast disease in relation to the severity of radiological dysplasia. Junkermann H, et al. **Horm Res** 1989;32 Suppl 1:10–4

RADIOGRAPHY

Diagnosis of breast calcifications: comparison of contact, magnified, and television-enhanced images. Kimme-Smith C, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):963–7

Chromogalactography preceding ductal-lobular unit excision for nipple discharge—with special reference to diagnostic galactography and histology. Grillo M, et al. **Ann Chir Gynaecol** 1990;79(1):6–9

Galactography with contrast and dye—a two stage radiological/surgical approach to serous or bloody nipple discharge. Osborne J. **Australas Radiol** 1989 Aug; 33(3):266–9

Benign breast change [letter; comment] Samuel E. **Clin Radiol** 1990 Mar;41(3):218 Comment on: Clin Radiol 1989 Jul;40(4):374–9.

Mammography in symptomatic and asymptomatic patients. Stomper PC, et al. **Hematol Oncol Clin North Am** 1989 Dec;3(4):611–40 (56 ref.)

Computer-aided diagnosis in chest radiology. MacMahon H, et al. **J Thorac Imaging** 1990 Jan;5(1):67–76

Biopsy of occult breast lesions. Analysis of 1261 abnormalities. Meyer JE, et al. **JAMA** 1990 May 2; 263(17):2341–3

The misuse of mammography [letter] **Med J Aust** 1990 Feb 19;152(4):220–1

The effect of breast implants on the radiographic detection of microcalcification and soft-tissue masses. Gumucio CA, et al. **Plast Reconstr Surg** 1989 Nov;84(5):772–8; discussion 779–82

Mammographic and histologic correlations of microcalcifications. de Paredes ES, et al. **Radiographics** 1990 Jul;10(4):577–89

Radiological evaluation of benign breast disorders. Gravelle IH, et al. **World J Surg** 1989 Nov–Dec;13(6):685–91 (13 ref.)

[Investigation on calcifications in the breast] Xu JG. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Aug; 23(4):198–200 (Eng. Abstr.) **(Chi)**

[Subclinical lesions of the breast. Stereotactic localization and biopsy-excision] Lafaye C, et al. **Ann Radiol (Paris)** 1989; 32(5):400–9 (32 ref.) (Eng. Abstr.) **(Fre)**

[Borderline lesions of the breast: clinical and radiological study of 20 cases] Weber J, et al. **J Belge Radiol** 1990 Mar; 73(2):89–96 (Eng. Abstr.) **(Fre)**

[The value of preoperative location of microcalcifications without palpable breast tumors] Salmon RJ, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(3):333–6 (Eng. Abstr.) **(Fre)**

[The oblique projection in the radiologic study of the breast] Mancuso S, et al. **Minerva Ginecol** 1989 Jul;41(7):325–8 (Eng. Abstr.) **(Ita)**

[Galactography in the study of the secreting breast] Ragaglini G, et al. **Minerva Med** 1990 Jun;81(6):439–50 (Eng. Abstr.) **(Ita)**

RADIOTHERAPY

[Prevention of lactation mastitis by the use of low-intensity laser irradiation] Kovalev MI. **Akush Ginekol (Mosk)** 1990 Feb;(2):57–61 (Eng. Abstr.) **(Rus)**

SURGERY

The correction of breast ptosis with the expander mammary prosthesis. Becker H, et al. **Ann Plast Surg** 1990 Jun; 24(6):489–97

Surgical correction of breast deformities following long-lasting complications of polyurethane-covered implants. Berrino P, et al. **Ann Plast Surg** 1990 Jun; 24(6):481–8

Nipple-areola transposition by the superolateral-rotation pedicle technique in reduction mammaplasty: surgical description. Blomqvist G, et al. **Ann Plast Surg** 1990 Jun; 24(6):475–80

Correction of mammary ptosis with glandular atrophy. Staub S, et al. **Ann Plast Surg** 1986 Sep;17(3):216–20

Outcome of surgery for non-palpable mammographic abnormalities. Aitken RJ, et al. **Br J Surg** 1990 Jun; 77(6):673–6

Calcifectomy for ductal carcinoma in situ [letter; comment] Shetty MR. **Br J Surg** 1989 Jun;76(6):655 Comment on: Br J Surg 1989 Feb;76(2):185–6.

Macromastia in adolescence. Corriveau S, et al. **Clin Plast Surg** 1990 Jan;17(1):151–60 (33 ref.)

Primary closure of lactational breast abscess. Khanna YK, et al. **J Indian Med Assoc** 1989 May;87(5):118–20

Breast capsulopexy for capsular ptosis after augmentation mammaplasty. Parsa FD. **Plast Reconstr Surg** 1990 May; 85(5):809–12

General surgery. Taylor I. **Postgrad Med J** 1990 May; 66(775):339–55 (174 ref.)

Immediate postexcision mammography for occult noncalcified breast lesions. Pastakia B, et al. **South Med J** 1990 Jan;83(1):30–3

Aesthetic surgery for benign disorders of the breast. Carlson G, et al. **World J Surg** 1989 Nov–Dec;13(6):761–4 (25 ref.)

Noncosmetic operations for benign breast disease. Hadfield GJ. **World J Surg** 1989 Nov–Dec;13(6):757–60

[Complications and adverse results in corrective mammoplasty] Tepavicharova P. **Khirurgiia (Sofiia)** 1989; 42(3):8–13 (Eng. Abstr.) **(Bul)**

[Reduction mammoplasty using a modified "B" shape method] Rong GH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Mar;6(1):10–1, 73 (Eng. Abstr.) **(Chi)**

[Reduction mammoplasty with a J-shaped scar (the Jean-Sauveur Elbaz technic). Review of 125 cases] Baux S, et al. **Ann Chir Plast Esthet** 1990;35(2):123–7 (Eng. Abstr.) **(Fre)**

[Follow-up study of benign breast diseases] Enmoto K, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep;90(9):1403–5 (Eng. Abstr.) **(Jpn)**

[Cryotherapy of breast fistulas] Shamanov AKh, et al. **Klin Khir** 1989;(12):54 **(Rus)**

THERAPY

Ultrasonically guided percutaneous drainage of breast abscesses. Karstrup S, et al. **Acta Radiol** 1990 Mar; 31(2):157–9

Hormonal and non-hormonal medical therapy of benign breast disease. von Fournier D, et al. **Horm Res** 1989;32 Suppl 1:28–31

Bloody nipple discharge during pregnancy: a rationale for conservative treatment. Lafreniere R. **J Surg Oncol** 1990 Apr;43(4):228–30

Management of nipple discharge. Leis HP Jr. **World J Surg** 1989 Nov–Dec;13(6):736–42 (27 ref.)

Management of breast pain and nodularity. Maddox PR, et al. **World J Surg** 1989 Nov–Dec;13(6):699–705 (37 ref.)

URINE

The urinary dehydroepiandrosterone, androsterone and etiocholanolone excretion of healthy women and women with benign and malignant breast disease. Ivanović S, et al. **J Clin Pharm Ther** 1990 Jun;15(3):213–9

BREAST DYSPLASIA see **FIBROCYSTIC DISEASE OF BREAST**

BREAST FEEDING

see related
MILK, HUMAN

Breast feeding: its social, clinical and biological aspects. **Acta Paediatr Jpn Overseas Ed** 1989 Aug;31(4):367–461

Protection and promotion of breastfeeding. Anand RK. **Acta Paediatr Jpn Overseas Ed** 1989 Aug;31(4):381–90

Socio-cultural aspects of breast-feeding in an affluent society. Arneil GC. **Acta Paediatr Jpn Overseas Ed** 1989 Aug;31(4):373–6

Breast-feeding practices in rural Karnataka (India) with special reference to lactation failure. Benakappa DG, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Aug;31(4):391–8

Breast-feeding and fertility in Macau. da Silva P, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Aug;31(4):399–403

Maternal health, breast-feeding and infant nutrition in Australian aborigines. Gracey M. **Acta Paediatr Jpn Overseas Ed** 1989 Aug;31(4):377–80

Milk-borne transmission of HTLV-I as a major route in the endemic cycle. Hino S. **Acta Paediatr Jpn Overseas Ed** 1989 Aug;31(4):428–35

Promoting breast-feeding—a successful regional project in Japan. Kobayashi M. **Acta Paediatr Jpn Overseas Ed** 1989 Aug;31(4):404–10

Support and variation, the needs of the breast-feeding woman. Raphael D. **Acta Paediatr Jpn Overseas Ed** 1989 Aug;31(4):369–72

Breast-feeding from the viewpoint of maternal and child health education. Yanai B. **Acta Paediatr Jpn Overseas Ed** 1989 Aug;31(4):411–6

Nicotine and cotinine concentrations in the nursing mother and her infant. Dahlström A, et al. **Acta Paediatr Scand** 1990 Feb;79(2):142–7

Fecal alpha 1-antitrypsin in breast-fed infants is derived from human milk and is not indicative of enteric protein loss. Davidson LA, et al. **Acta Paediatr Scand** 1990 Feb; 79(2):137–41

The link between infant mortality and birth rates—the importance of breastfeeding as a common factor. Hanson LA, et al. **Acta Paediatr Scand** 1990 May;79(5):481–9 (45 ref.)

The promotion of breastfeeding and maternal attitudes. Koctürk T, et al. **Acta Paediatr Scand** 1989 Nov; 78(6):817–23 (41 ref.)

Breast-milk calcium concentrations during prolonged lactation in British and rural Gambian mothers. Laskey MA, et al. **Acta Paediatr Scand** 1990 May;79(5):507–12

Immunity related to exposition and bacterial colonization of the infant. Hanson LA, et al. **Acta Paediatr Scand Suppl** 1990;365:38–45

Trends in infant feeding in Sweden during the 20th century. Söderhjelm L, et al. **Acta Paediatr Scand Suppl** 1990; 365:5–6

Insertional pain and other IUD insertion-related rare events for breastfeeding and non-breastfeeding women—a decade's experience in developing countries. Chi IC, et al. **Adv Contracept** 1989 Jun;5(2):101–19

HIV and infant feeding practices: epidemiological implications for sub-Saharan African countries. Nicoll A, et al. **AIDS** 1990 Jul;4(7):661–5

Breast feeding and atopic dermatitis. Björkstén B. **Allergy** 1989;44 Suppl 9:129–34 (38 ref.)

Breast disorders in nursing mothers. Olsen CG, et al. **Am Fam Physician** 1990 May;41(5):1509–16

Vitamin B-6 supplementation and breast milk [letter; comment] Borschel MW, et al. **Am J Clin Nutr** 1990 Jun; 51(6):1116–7 Comment on: Am J Clin Nutr 1989 Nov;50(5):1050–8.

Energy utilization of breast-fed and formula-fed infants. Butte NF, et al. **Am J Clin Nutr** 1990 Mar;51(3):350–8

Infant growth and breast-feeding [letter; comment] Dewey KG, et al. **Am J Clin Nutr** 1989 Nov;50(5):1116–8 Comment on: Am J Clin Nutr 1989 Apr;49(4):599–607.

Who is breast-feeding? Implications of associated social and biomedical variables for research on the consequences of method of infant feeding. Ford K, et al. **Am J Clin Nutr** 1990 Sep;52(3):451–6

Weaning foods cannot replace breast milk as sources of long-chain polyunsaturated fatty acids. Jackson KA, et al. **Am J Clin Nutr** 1989 Nov;50(5):980–2

Incidence and duration of breast-feeding in Mexican-American infants, 1970–1982. John AM, et al. **Am J Clin Nutr** 1989 Oct;50(4):868–74

Cholesterol and its precursors in human milk during

prolonged exclusive breast-feeding. Kallio MJ, et al. **Am J Clin Nutr** 1989 Oct;50(4):782–5
Growth in breast-fed infants [letter; comment] Mackerras D. **Am J Clin Nutr** 1990 May;51(5):892–3 Comment on: Am J Clin Nutr 1989 Apr;49(4):599–607.
The effect of postpartum lactation counseling on the duration of breast-feeding in low-income women. Grossman LK, et al. **Am J Dis Child** 1990 Apr;144(4):471–4
Hypophosphatemia in breast-fed low-birth-weight infants following initial hospital discharge. Hall RT, et al. **Am J Dis Child** 1989 Oct;143(10):1191–5
Current recommendations for breast-feeding in cystic fibrosis centers. Luder E, et al. **Am J Dis Child** 1990 Oct; 144(10):1153–6
Breast feeding and the risk of severe cholera in rural Bangladeshi children. Clemens JD, et al. **Am J Epidemiol** 1990 Mar;131(3):400–11
Do mothers overestimate breast feeding duration? An example of recall bias from a study in southern Brazil. Huttly SR, et al. **Am J Epidemiol** 1990 Sep;132(3):572–5
Breast feeding protects infants in Indonesia against illness and weight loss due to illness. Launer LJ, et al. **Am J Epidemiol** 1990 Feb;131(2):322–31
Breastfeeding patterns in Puerto Rico. Becerra JE, et al. **Am J Public Health** 1990 Jun;80(6):694–7
Infant formula promotion and the health sector in the Philippines. Popkin BM, et al. **Am J Public Health** 1990 Jan;80(1):74–5
Infant feeding practices: an evaluation of the impact of a health education course. Shoham-Yakubovich I, et al. **Am J Public Health** 1990 Jun;80(6):732–4
Enzyme immunoassay of lactoferrin in newborn term infants: reference values and influence of diet. Scott PH. **Ann Clin Biochem** 1989 Sep;26 (Pt 5):407–11
Diet and faecal flora in the newborn: breast milk and infant formula. Balmer SE, et al. **Arch Dis Child** 1989 Dec; 64(12):1672–7
Decline in breast feeding. Emery JL, et al. **Arch Dis Child** 1990 Apr;65(4 Spec No):369–72
Caesarean section and duration of breast feeding among Brazilians. Victora CG, et al. **Arch Dis Child** 1990 Jun; 65(6):632–4
Breast feeding practices and maternal employment. Monga D, et al. **Asia Oceania J Obstet Gynaecol** 1989 Dec; 15(4):339–42
Breastfeeding: attitudes and knowledge of health professionals. Lowe T. **Aust Fam Physician** 1990 Mar; 19(3):392, 395–6, 398
Breast feeding and HIV infection [letter; comment] Biddulph J. **Aust Paediatr J** 1989 Oct;25(5):303–4 Comment on: Aust Paediatr J 1988 Dec;24(6):326–9.
Sexual behaviour in pregnancy, after childbirth and during breast-feeding. Alder EM. **Baillieres Clin Obstet Gynaecol** 1989 Dec;3(4):805–21 (61 ref.)
Instrumentation system for breast engorgement evaluation. Ferris CD. **Biomed Sci Instrum** 1990;26:227–9
Mothers with HIV [editorial] [see comments] Bradbeer CS. **BMJ** 1989 Sep 30;299(6703):806–7 Comment in: BMJ 1989 Nov 11;299(6709):1219.
Attitudes to breast feeding [letter] Clarke P. **BMJ** 1989 Aug 19;299(6697):518
Protective effect of breast feeding against infection. Howie PW, et al. **BMJ** 1990 Jan 6;300(6716):11–6
Mothers with HIV [letter; comment] Jelliffe DB, et al. **BMJ** 1989 Nov 11;299(6709):1219 Comment on: BMJ 1989 Sep 30;299(6703):806–7.
Early diet of preterm infants and development of allergic or atopic disease: randomised prospective study. Lucas A, et al. **BMJ** 1990 Mar 31;300(6728):837–40
Breast feeding and lower respiratory tract illness in the first year of life. Group Health Medical Associates. Wright AL, et al. **BMJ** 1989 Oct 14;299(6705):946–9
Another AIDS controversy [news] **Br J Clin Pract** 1990 Jan; 44(1):12
Symptomatic zinc deficiency in breast-fed premature infants. Munro CS, et al. **Br J Dermatol** 1989 Dec;121(6):773–8
Plasma beta-endorphin concentrations during suckling in lactating women. Franceschini R, et al. **Br J Obstet Gynaecol** 1989 Jun;96(6):711–3
Haemodynamic effects of breast-feeding. Robson SC, et al. **Br J Obstet Gynaecol** 1989 Sep;96(9):1106–8
A simplified methodology for the community-based assessment of breast-feeding and amenorrhoea in Mexico. Danko RA, et al. **Bull World Health Organ** 1990; 68(2):223–30
Impact of the Brazilian national breast-feeding programme on mothers in greater São Paulo. Rea MF, et al. **Bull World Health Organ** 1990;68(3):365–71
Size heterogeneity of immunoreactive prolactin in hyperprolactinaemic serum following stimulation with TRH and insulin hypoglycaemia, and suckling in postpartum period. Soong YK. **Chung Hua I Hsueh Tsa Chih** 1990 Feb;45(2):103–10
Effect of naloxone on neurohypophyseal peptide responses to breast feeding and breast stimulation in man. Johnson MR, et al. **Clin Endocrinol (Oxf)** 1990 Jul;33(1):81–6
Recovery from foetal hypothyroidism: evidence for the safety of breast-feeding while taking propylthiouracil. Momotani N, et al. **Clin Endocrinol (Oxf)** 1989 Nov; 31(5):591–5
Twins: family adjustment, parenting, and infant feeding in the fourth trimester. Neifert M, et al. **Clin Obstet Gynecol** 1990 Mar;33(1):102–13 (36 ref.)
Breast-feeding of term infants. Three-hour vs. four-hour non-demand. A randomized controlled reappraisal of hospital-based feeding schedules. Gale R, et al. **Clin Pediatr (Phila)** 1989 Oct;28(10):458–60
The infant feeding decision in low and upper income women. Grossman LK, et al. **Clin Pediatr (Phila)** 1990 Jan; 29(1):30–7
Duration of breast-feeding patterns established in the hospital. Influencing factors. Results from a national survey. Ryan AS, et al. **Clin Pediatr (Phila)** 1990 Feb; 29(2):99–107
Severe cow's milk induced colitis in an exclusively breast-fed neonate. Case report and clinical review of cow's milk allergy. Wilson NW, et al. **Clin Pediatr (Phila)** 1990 Feb; 29(2):77–80 (24 ref.)
To what extent does breastfeeding explain birth-interval effects on early childhood mortality? Retherford RD, et al. **Demography** 1989 Aug;26(3):439–50
Relationships between nursing patterns, supplementary food intake and breast-milk intake in a rural Thai population. Drewett RF, et al. **Early Hum Dev** 1989 Sep;20(1):13–23
Breast-feeding in a Danish alternative birth center compared with the obstetrical ward. Skibsted L, et al. **Early Hum Dev** 1990 Feb;21(2):115–24
Short-term effects of early suckling and touch of the nipple on maternal behaviour. Widström AM, et al. **Early Hum Dev** 1990 Mar;21(3):153–63
The fat content of suckled breast milk: a new approach to its assessment. Woodward DR, et al. **Early Hum Dev** 1989 Dec;20(3–4):183–9
Erosion of a resource [editorial] Awori A. **East Afr Med J** 1989 Nov;66(11):705–6
Breastmilk yield and infant nutrition in relation to early infant growth in Njoro, Kenya. Kigutha HN, et al. **East Afr Med J** 1989 Nov;66(11):707–14
Incidence of Campylobacter infection in infants in western Algeria and the possible protective role of breast feeding. Mégraud F, et al. **Epidemiol Infect** 1990 Aug;105(1):73–8
Breastfeeding improves survival, but not nutritional status, of 12–35 months old children in rural Bangladesh. Briend A, et al. **Eur J Clin Nutr** 1989 Sep;43(9):603–8
Effect of suckling and diurnal influences on the concentrations of taurine and other free amino acids in milk. Shubat PJ, et al. **Eur J Clin Nutr** 1989 Oct;43(10):675–80
Drug utilization in breast-feeding women. A survey in Oslo. Matheson I, et al. **Eur J Clin Pharmacol** 1990;38(5):453–9
Decrease in neonatal suckled milk volume in diabetic women. Miyake A, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Oct;33(1):49–53
Breast feeding practices in Jalandhar [letter] Gupta A. **Indian J Pediatr** 1989 Nov-Dec;56(6):781
Knowledge and attitude among child development project officers towards breast feeding. Kapil U, et al. **Indian J Pediatr** 1989 Nov-Dec;56(6):771–4
Factors influencing prevalence of breastfeeding in a resettlement colony of New Delhi. Kumar S, et al. **Indian J Pediatr** 1989 May-Jun;56(3):385–91
Breast feeding practices in a resettlement colony and its implications for promotional activities. Kumar S, et al. **Indian J Pediatr** 1989 Mar-Apr;56(2):239–42
Ear infection and infant feeding practices. Narayanan I, et al. **Indian J Pediatr** 1989 May-Jun;56(3):399–402
Some aspects of feeding and weaning practices in an urban slum community. Ray G, et al. **Indian J Public Health** 1988 Oct-Dec;32(4):207–8
Breast feeding in cesarean babies. Datta T. **Indian Pediatr** 1990 Jan;27(1):86–7
Factors influencing breastfeeding behaviour. Jeeson UC, et al. **Indian Pediatr** 1989 Oct;26(10):997–1002
Knowledge attitude towards breast-feeding amongst auxiliary nurse midwives in rural Delhi. Kapil U, et al. **Indian Pediatr** 1989 Oct;26(10):1003–6
Successful breast feeding with retracted nipples [letter] Padalkar J. **Indian Pediatr** 1989 Oct;26(10):1065–6
Breast milk secretion [letter; comment] Rao MV. **Indian Pediatr** 1989 May;26(5):516–7 Comment on: Indian Pediatr 1988 Jun;25(6):582.
Advantages of breast feeding—knowledge among paramedical health personnel and mothers. Singhal PK, et al. **Indian Pediatr** 1989 May;26(5):492–5
Breast feeding and drugs in human milk. Sureka UP, et al. **Indian Pediatr** 1989 Apr;26(4):373–8 (18 ref.)
Proceedings of the Interagency Workshop on Health Care Practices Related to Breastfeeding. December 7–9, 1988. Washington, DC. **Int J Gynaecol Obstet** 1990;31 Suppl 1:1–191
Technical Working Group A report: breastfeeding promotion and support in hospitals and maternity care institutions. **Int J Gynaecol Obstet** 1990;31 Suppl 1:139–40; discussion 143–4
Protecting, promoting and supporting breastfeeding: the special role of maternity services. A joint WHO/UNICEF statement. **Int J Gynaecol Obstet** 1990;31 Suppl 1:171–83
Technical Working Group B report: government and donor support for breastfeeding promotion in hospitals and maternity care institutions. **Int J Gynaecol Obstet** 1990;31 Suppl 1:141–2; discussion 143–4
Technical Working Group C report: breastfeeding promotion in health and health-related programs. **Int J Gynaecol Obstet** 1990;31 Suppl 1:145–6; discussion 149–51
Technical Working Group D report: government and donor support for breastfeeding in health and health-related programs. **Int J Gynaecol Obstet** 1990;31 Suppl 1:147–8; discussion 149–51
Recommendations on breastfeeding promotion among pediatricians. Anand RK. **Int J Gynaecol Obstet** 1990;31 Suppl 1:51–5; discussion 67–8
Breastfeeding promotion: training of mid-level and outreach health workers. Armstrong HC. **Int J Gynaecol Obstet** 1990;31 Suppl 1:91–103; discussion 111–3
The commitment to breastfeeding. Brady NC. **Int J Gynaecol Obstet** 1990;31 Suppl 1:5–6
One country's story: the PROALMA program in Honduras. Canahuati J. **Int J Gynaecol Obstet** 1990;31 Suppl 1:17–24
The "kangaroo-mother" method: evaluation of an alternative model for the care of low birth weight newborns in developing countries. Colonna F, et al. **Int J Gynaecol Obstet** 1990 Apr;31(4):335–9
A midwife's view of the history of modern breastfeeding practices. Fisher C. **Int J Gynaecol Obstet** 1990;31 Suppl 1:47–50; discussion 67–8
Breastfeeding and growth monitoring. Greaves JP, et al. **Int J Gynaecol Obstet** 1990;31 Suppl 1:121–3; discussion 135–7
Supporting breastfeeding: what governments and health workers can do—European experiences. Helsing E. **Int J Gynaecol Obstet** 1990;31 Suppl 1:69–76; discussion 77
Breastfeeding as an intervention within diarrheal diseases control programs: WHO/CDD activities. Hogan R, et al. **Int J Gynaecol Obstet** 1990;31 Suppl 1:115–9; discussion 135–7
Breastfeeding and return to ovulation in Bangkok. Israngkura B, et al. **Int J Gynaecol Obstet** 1989 Dec;30(4):335–42
Breastfeeding promotion in family planning programs. Jennings VH. **Int J Gynaecol Obstet** 1990;31 Suppl 1:131–3
Breastfeeding and health care services. Jolly R. **Int J Gynaecol Obstet** 1990;31 Suppl 1:7–9
The mothers' support group role in the health care system. Kyenkya-Isabirye M, et al. **Int J Gynaecol Obstet** 1990;31 Suppl 1:85–90; discussion 111–3
Food supplementation programs and breastfeeding practices. Marchione TJ. **Int J Gynaecol Obstet** 1990;31 Suppl 1:125–30
Breastfeeding promotion: feeding the low birth weight infant. Musoke RN. **Int J Gynaecol Obstet** 1990;31 Suppl 1:57–9; discussion 67–8
Professional education and training for trainers. Naylor A. **Int J Gynaecol Obstet** 1990;31 Suppl 1:25–7; discussion 43–5
The use of mass media to promote breastfeeding. Parlato MB. **Int J Gynaecol Obstet** 1990;31 Suppl 1:105–10; discussion 111–3
The effect of breastfeeding promotion on the infertile postpartum period. Perez A. **Int J Gynaecol Obstet** 1990; 31 Suppl 1:29–30; discussion 43–5
The Brazilian National Breastfeeding Program: a success story. Rea MF. **Int J Gynaecol Obstet** 1990;31 Suppl 1:79–82; discussion 83–4
The need for action. Savage F. **Int J Gynaecol Obstet** 1990; 31 Suppl 1:11–5
Breastfeeding promotion efforts: why some do not work. Stokamer CL. **Int J Gynaecol Obstet** 1990;31 Suppl 1:61–5; discussion 67–8
Breastfeeding trends and the breastfeeding promotion program in the Philippines. Williamson NE. **Int J Gynaecol Obstet** 1990;31 Suppl 1:35–41; discussion 43–5
Sequential and simultaneous breast pumping: a comparison. Auerbach KG. **Int J Nurs Stud** 1990;27(3):257–65
Determinants of early infant weaning: a multivariate approach. Lindenberg CS, et al. **Int J Nurs Stud** 1990; 27(1):35–41
The effect of early post-partum mother-infant contact and breast-feeding promotion on the incidence and continuation of breast-feeding. Lindenberg CS, et al. **Int J Nurs Stud** 1990;27(3):179–86
Initiating breastfeeding: a world survey of the timing of postpartum breastfeeding. Morse JM, et al. **Int J Nurs Stud** 1990;27(3):303–13 (152 ref.)
Persistence in breastfeeding: a phenomenological investigation. Bottorff JL. **J Adv Nurs** 1990 Feb;15(2):201–9
Transient symptomatic zinc deficiency in a full-term breast-fed infant. Lee MG, et al. **J Am Acad Dermatol** 1990 Aug;23(2 Pt 2):375–9
Breast and soy-formula feedings in early infancy and the prevalence of autoimmune thyroid disease in children. Fort P, et al. **J Am Coll Nutr** 1990 Apr;9(2):164–7
DPG urges RDs to speak out on infant formula marketing practices [letter] Bayerl CT. **J Am Diet Assoc** 1990 Apr; 90(4):506
Infant feeding decisions among pregnant women from a WIC population in Georgia. Black RF, et al. **J Am Diet Assoc** 1990 Feb;90(2):255–9
Hypernatremia in breast-fed infants due to elevated breast milk sodium. Peters JM. **J Am Osteopath Assoc** 1989 Sep; 89(9):1165–70
Post-partum events and fertility control in Kinshasa, Zaïre. Bertrand JT, et al. **J Biosoc Sci** 1990 Apr;22(2):197–211
The effect of initiation of child supplementation on resumption of post-partum menstruation. Jones RE. **J Biosoc Sci** 1990 Apr;22(2):173–89

Fertility change in Costa Rica 1960–84: analysis of retrospective lifetime reproductive histories. Rosero–Bixby L, et al. **J Biosoc Sci** 1989 Oct;21(4):419–32

The recovery of fertility during breast–feeding in Assiut, Egypt. Shaaban MM, et al. **J Biosoc Sci** 1990 Jan; 22(1):19–32

Pregnancy, breast feeding, and oral contraceptives and the risk of epithelial ovarian cancer. Gwinn ML, et al. **J Clin Epidemiol** 1990;43(6):559–68

The independent associations of parity, age at first full term pregnancy, and duration of breastfeeding with the risk of breast cancer. Cancer and Steroid Hormone Study Group. Layde PM, et al. **J Clin Epidemiol** 1989;42(10):963–73

Excretion of fluoxetine in human breast milk [letter] Isenberg KE. **J Clin Psychiatry** 1990 Apr;51(4):169

Maternal diet and atopic eczema [letter] Badrinath P. **J Epidemiol Community Health** 1990 Jun;44(2):174

Blood–streaked stools in two breast–fed siblings. Klein E, et al. **J Fam Pract** 1990 Jun;30(6):713–4

Primary closure of lactational breast abscess. Khanna YK, et al. **J Indian Med Assoc** 1989 May;87(5):118–20

Infant feeding practices in the urban slum of Karad in west Maharashtra. Somaiya PA, et al. **J Indian Med Assoc** 1990 Jan;88(1):13–5

Effect of breast–feeding on oral rhesus rotavirus vaccine seroconversion: a metaanalysis. Pichichero ME. **J Infect Dis** 1990 Sep;162(3):753–5

The management of breast feeding among infants with phenylketonuria. McCabe L, et al. **J Inherited Metab Dis** 1989;12(4):467–74

Assisting the employed breastfeeding mother. Auerbach KG. **J Nurse Midwifery** 1990 Jan–Feb;35(1):26–34 (48 ref.)

Breastfeeding. Toward resolution of the unsatisfying birth experience. Laufer AB. **J Nurse Midwifery** 1990 Jan–Feb; 35(1):42–5 (17 ref.)

Long–term breastfeeding. The secret bond. Wrigley EA, et al. **J Nurse Midwifery** 1990 Jan–Feb;35(1):35–41

Candidiasis in the breastfeeding mother and infant. Johnstone HA, et al. **J Obstet Gynecol Neonatal Nurs** 1990 Mar–Apr; 19(2):171–3

Intending to breastfeed and work. Morse JM, et al. **J Obstet Gynecol Neonatal Nurs** 1989 Nov–Dec; 18(6):493–500

The infant's contribution to breastfeeding. Shrago L, et al. **J Obstet Gynecol Neonatal Nurs** 1990 May–Jun; 19(3):209–15

Bases of weaning recommendations. Barness LA. **J Pediatr** 1990 Aug;117(2 Pt 2):S84–5

Vitamin D and the breast–fed baby [letter] Forbes GB. **J Pediatr** 1989 Oct;115(4):657

Energy intakes of human milk–fed infants during the first year. Garza C, et al. **J Pediatr** 1990 Aug;117(2 Pt 2):S124–31

Apparent vertical transmission of human immunodeficiency virus type 1 by breast–feeding in Zambia. Hira SK, et al. **J Pediatr** 1990 Sep;117(3):421–4

Effect of yeast lactase enzyme on "colic" in infants fed human milk. Miller JJ, et al. **J Pediatr** 1990 Aug;117(2 Pt 1):261–3

Plasma amino acid concentrations in term infants fed human milk, a whey–predominant formula, or a whey hydrolysate formula. Rigo J, et al. **J Pediatr** 1989 Nov;115(5 Pt 1):752–5

Protection of breast–fed infants against Campylobacter diarrhea by antibodies in human milk. Ruiz–Palacios GM, et al. **J Pediatr** 1990 May;116(5):707–13

Vitamin K deficiency in breast–fed infants [letter; comment] Sann L, et al. **J Pediatr** 1989 Dec;115(6):1025–6 Comment on: J Pediatr 1989 Apr;114(4 Pt 1):602–5.

Modulation by human milk of IgG subclass response to hepatitis B vaccine in infants. Azzari C, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr;10(3):310–5

Breast milk jaundice [comment] Hamosh M. **J Pediatr Gastroenterol Nutr** 1990 Aug;11(2):145–7 (32 ref.) Comment on: J Pediatr Gastroenterol Nutr 1990 Aug;11(2):205–10.

A noninvasive method for determining patterns of milk intake in the breast–fed infant. Lau C, et al. **J Pediatr Gastroenterol Nutr** 1989 Nov;9(4):481–7

Cow's milk protein–induced colitis in the breast–fed infant. Pittschieler K. **J Pediatr Gastroenterol Nutr** 1990 May; 10(4):548–9

Effect of the feeding practices on the establishment of bacterial interactions in the intestine of the newborn delivered by cesarean section. Bezirtzoglou E, et al. **J Perinat Med** 1990;18(2):139–43

Neonatal metabolic casebook. Hypernatremia and breast feeding. Marino R, et al. **J Perinatol** 1989 Dec;9(4):451–3

Infant feeding pattern and weaning practices in Kuwait. Amine EK, et al. **J R Soc Health** 1989 Oct;109(5):178–80

Breastfeeding and breast milk jaundice. Leung AK, et al. **J R Soc Health** 1989 Dec;109(6):213–7 (59 ref.)

Best start: breastfeeding for healthy mothers, healthy babies—a new model for breastfeeding promotion. Bryant C, et al. **J Tenn Med Assoc** 1989 Dec;82(12):642–3

Innovative approaches to the promotion of breastfeeding. Lazarov M, et al. **J Tenn Med Assoc** 1989 Sep;82(9):486–7

World–wide breast feeding programmes—consideration of key components [editorial] Jelliffe DB, et al. **J Trop Pediatr** 1989 Aug;35(4):144–6

Breast feeding in an urban district in Shanghai, People's Republic of China. A descriptive study of feeding patterns and hospital practices as they relate to breastfeeding. Meehan KF. **J Trop Pediatr** 1990 Apr;36(2):75–9

Postnatal weight gain of exclusively breast fed preterm African infants. Muhudhia SO, et al. **J Trop Pediatr** 1989 Oct;35(5):241–4

Determinants for breast feeding and bottle feeding in Botswana. Omondi LO, et al. **J Trop Pediatr** 1990 Feb; 36(1):28–33

Breast feeding of infants between 0–6 months old in 20 provinces, municipalities and autonomous regions in the People's Republic of China. National Coordinating Working Group for Breastfeeding Surveillance. Yun YP, et al. **J Trop Pediatr** 1989 Dec;35(6):277–80

Fluoride supplementation of the breast–fed infant [letter] **JAMA** 1990 Apr 25;263(16):2179

Cholesterol levels and the breast–feeding mom [letter] Jensen RG, et al. **JAMA** 1989 Oct 20;262(15):2092–3

Necrotizing enterocolitis: feeding in endemic and epidemic periods. Zabielski PB, et al. **JPEN J Parenter Enteral Nutr** 1989 Sep–Oct;13(5):520–4

Nestlé accused of false AIDS claim [news] **Lancet** 1989 Nov 25;2(8674):1289

Management of epilepsy during pregnancy and lactation. Brodie MJ. **Lancet** 1990 Aug 18;336(8712):426–7

Preliminary study of breastfeeding and bacterial adhesion to uroepithelial cells. Coppa GV, et al. **Lancet** 1990 Mar 10; 335(8689):569–71

Neonatal hyperbilirubinaemia [letter] Gemelli M, et al. **Lancet** 1990 Jan 20;335(8682):179

Risk of ovulation during lactation. Gray RH, et al. **Lancet** 1990 Jan 6;335(8680):25–9

Coeliac disease [letter] Logan RF. **Lancet** 1990 Sep 8; 336(8715):633

Effect of breast–feeding on antibody response to conjugate vaccine. Pabst HF, et al. **Lancet** 1990 Aug 4; 336(8710):269–70

Breastfeeding and urinary tract infection [letter; comment] Pisacane A, et al. **Lancet** 1990 Jul 7;336(8706):50 Comment on: Lancet 1990 May 12;335(8698):1127–8.

Do changes in pattern of breast usage alter the baby's nutrient intake? Woolridge MW, et al. **Lancet** 1990 Aug 18; 336(8712):395–7

The cocaine threat [letter; comment] Brown F. **MCN** 1989 Sep–Oct;14(5):308 Comment on: MCN 1989 Jan–Feb;14(1):27–31.

A device for supplementing breast–feeding. Edgehouse L, et al. **MCN** 1990 Jan–Feb;15(1):34–5

Breast milk and drugs [letter; comment] Font LM. **MCN** 1989 Sep–Oct;14(5):308, 316 Comment on: MCN 1989 Jan–Feb;14(1):27–31.

Networking to implement effective health care. Harter C, et al. **MCN** 1989 Nov–Dec;14(6):387, 390, 392

Reminders for building confidence in breast–feeding moms. Heffern D. **MCN** 1990 Jul–Aug;15(4):267

Case report and review of literature: hypernatremia in breast–fed infants. Heldrich FJ, et al. **Md Med J** 1990 May; 39(5):475–8 (16 ref.)

Suckling and milk production [letter] Mobbs EJ. **Med J Aust** 1990 Jun 4;152(11):616

Maternal use of alcohol and breast–fed infants [letter; comment] Lindmark B. **N Engl J Med** 1990 Feb 1; 322(5):338–9 Comment on: N Engl J Med 1989 Aug 17;321(7):425–30.

The extent of breast feeding in Dunedin 1974–83. Msuya JM, et al. **N Z Med J** 1990 Feb 28;103(884):68–70

Breast–feeding problems in the first week postpartum. Kearney MH, et al. **Nurs Res** 1990 Mar–Apr;39(2):90–5

Urbanization and breastfeeding in the Philippines. **Nutr Rev** 1989 Aug;47(8):254–5

Breast–feeding and the potential for human immunodeficiency virus transmission. Seltzer V, et al. **Obstet Gynecol** 1990 Apr;75(4):713–5

Long–term breast feeding linked to lower incidence of breast cancer among Chinese women [news] **Oncology (Williston Park)** 1988 Nov;2(11):23

Drinking and smoking at 3 months postpartum by lactation history. Little RE, et al. **Paediatr Perinat Epidemiol** 1990 Jul;4(3):290–302

Drugs and chemicals: exposure of the nursing mother. Berlin CM Jr. **Pediatr Clin North Am** 1989 Oct;36(5):1089–97 (8 ref.)

Breastfeeding problems presenting to the emergency department: diagnosis and management. Newman J. **Pediatr Emerg Care** 1989 Sep;5(3):198–201 (18 ref.)

Oral rehydration and breast–feeding [letter; comment] Newman J. **Pediatr Infect Dis J** 1990 Feb;9(2):147 Comment on: Pediatr Infect Dis J 1989 Aug;8(8):564–9.

Characterization of carbohydrate fermentation in feces of formula–fed and breast–fed infants. Lifschitz CH, et al. **Pediatr Res** 1990 Feb;27(2):165–9

Breast–feeding. Lawrence RA. **Pediatr Rev** 1989 Dec; 11(6):163–71 (0 ref.)

Inadequate breast feeding and jaundice [letter; comment] **Pediatrics** 1990 May;85(5):892–4 Comment on: Pediatrics 1989 Nov;84(5):773–8.

American Academy of Pediatrics Committee on Drugs: Transfer of drugs and other chemicals into human milk [published erratum appears in Pediatrics 1990 May;85(5):847] [see comments] **Pediatrics** 1989 Nov; 84(5):924–36 (262 ref.) Comment in: Pediatrics 1990 Jul;86(1):147–8. Comment in: Pediatrics 1990 Jul;86(1):149–50.

The influence of perinatal instruction about breast–feeding on neonatal weight loss. Avoa A, et al. **Pediatrics** 1990 Aug;86(2):313–5

Infant feeding redux. Cone TE Jr. **Pediatrics** 1990 Sep; 86(3):473–4

Jaundice, terminating breast–feeding, and the vulnerable child [see comments] Kemper K, et al. **Pediatrics** 1989 Nov; 84(5):773–8 Comment in: Pediatrics 1990 May;85(5):892–4.

Plasma aluminum measurements in term infants fed human milk or a soy–based infant formula. Litov RE, et al. **Pediatrics** 1989 Dec;84(6):1105–7

Information on nicotine abuse [letter] Moore JC Jr. **Pediatrics** 1990 Aug;86(2):329–30

Relationship between infant feeding and infectious illness: a prospective study of infants during the first year of life. Rubin DH, et al. **Pediatrics** 1990 Apr;85(4):464–71

I.B.C.L.C. The International Board of Lactation Consultant Examiners, Inc. [letter] Tanis AL, et al. **Pediatrics** 1990 Jul;86(1):149

Breast–feeding frequency during the first 24 hours after birth in full–term neonates. Yamauchi Y, et al. **Pediatrics** 1990 Aug;86(2):171–5

Measuring short–term rates of milk synthesis in breast–feeding mothers. Arthur PG, et al. **Q J Exp Physiol** 1989 Jul;74(4):419–28

Report on Health and Social Subjects. 32. Present day practice in infant feeding: third report. Report of a working party of the Panel on Child Nutrition Committee on Medical Aspects of Food Policy. **Rep Health Soc Subj (Lond)** 1988;32:1–66

Breast–feeding on demand [letter] Jolly NE. **S Afr Med J** 1989 Oct 21;76(8):450

Factors influencing breast–feeding in an urban community. Ransome OJ, et al. **S Afr Med J** 1989 Oct 21;76(8):431–3

Current trends in infant feeding. van der Elst CW, et al. **S Afr Med J** 1989 Oct 21;76(8):434–7

Prevalence of caries and salivary levels of mutans streptococci in 5–year–old children in relation to duration of breast feeding. Alaluusua S, et al. **Scand J Dent Res** 1990 Jun;98(3):193–6

The treatment of breast engorgement with Serrapeptase (Danzen): a randomised double–blind controlled trial. Kee WH, et al. **Singapore Med J** 1989 Feb;30(1):48–54

A disavowal and criticisms of 'Breastfeeding Trends in Singapore'. Counsilman JJ. **Soc Sci Med** 1989;29(5):685–7

Breast feeding promotion in an urban and a rural Jamaican hospital. Cunningham WE, et al. **Soc Sci Med** 1990; 30(3):341–8

Breast–feeding in the modern health sector in Indonesia: the mother's perspective. Hull V, et al. **Soc Sci Med** 1990; 30(5):625–33

The place of the clock in pediatric advice: rationales, cultural themes, and impediments to breastfeeding. Millard AV. **Soc Sci Med** 1990;31(2):211–21 (92 ref.)

Breast feeding and bottle feeding controversies in the developing world: evidence from a study in four countries. Winikoff B, et al. **Soc Sci Med** 1989;29(7):859–68

Infant feeding practices in Thailand: an update from the 1987 Demographic and Health Survey. Chayovan N, et al. **Stud Fam Plann** 1990 Jan–Feb;21(1):40–50

The effects of breastfeeding and birth spacing on child survival in China. Tu P. **Stud Fam Plann** 1989 Nov–Dec; 20(6 Pt 1):332–42

Breastfeeding practices in the developing world. Chiang Mai Lactation Project. **Suppl Int J Gynecol Obstet** 1989; 1:129–32

Determinants of lactational amenorrhea. Díaz S. **Suppl Int J Gynecol Obstet** 1989;1:83–9

The physiology of lactation. Glasier A. **Suppl Int J Gynecol Obstet** 1989;1:11–2

Breastfeeding trends and patterns. Williamson NE. **Suppl Int J Gynecol Obstet** 1989;1:145–52 (23 ref.)

Effect of acenocoumarine on the breast–fed infant. Fondevila CG, et al. **Thromb Res** 1989 Oct 1;56(1):29–36

Do the benefits of breastfeeding outweigh the risk of postnatal transmission of HIV via breastmilk? Kennedy KI, et al. **Trop Doct** 1990 Jan;20(1):25–9

[Factors influencing lactation and breast–feeding] Han SG, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Jul;24(4):243–5 (20 ref.) **(Chi)**

[Methods of feeding and increase in the body weight of neonates] Guo XJ. **Chung Hua Hu Li Tsa Chih** 1990 Jan; 25(1):5–6 **(Chi)**

[An epidemiological survey follow–up study on infant breast–feeding. III. Multiple stepwise regression analysis to factors affecting human milk amount] Han SG. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Aug; 10(4):231–4 (Eng. Abstr.) **(Chi)**

[Risk assessment of factors related to lactation of breast–feeding women by multichotomous logistic regression with stepwise procedure] Yu SL. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 May; 23(3):150–2 (Eng. Abstr.) **(Chi)**

[Is breastfeeding and maternal milk nutrition always superior?] Vízek K, et al. **Cesk Gynekol** 1989 Jul; 54(6):469–72 **(Cze)**

[Results of a study of breastfeeding by pediatric and health education workers 1983–1987] Svobodová A. **Cesk Zdrav** 1989 Aug;37(8–9):363–71 (Eng. Abstr.) **(Cze)**

[Factors influencing the choice of breast feeding by mothers. Results of a survey at public maternity hospitals] Guigue L, et al. **Pediatrie** 1989;44(1):53–8 (Eng. Abstr.) **(Fre)**

[Hospital practices and duration of breast feeding:

meta-analysis] Bernard-Bonnin AC, et al. **Rev Epidemiol Sante Publique** 1989;37(3):217-25 (Eng. Abstr.) (Fre)

[Evaluation of the effects of a support campaign on exclusive breast feeding at 1 month] Macquart-Moulin G, et al. **Rev Epidemiol Sante Publique** 1990;38(3):201-9 (Eng. Abstr.) (Fre)

[Characteristics of the menstrual cycles during the postpartum period without breast feeding according to the nature of the first period: ovulatory or anovulatory] Frey R, et al. **Rev Fr Gynecol Obstet** 1989 Nov;84(11):753-8 (Eng. Abstr.) (Fre)

[HIV transmission by breast feeding (news)] Gürtler L. **Fortschr Med** 1989 Nov 20;107(33):10 (Ger)

[Breast feeding following breast reduction-plasty and mastopexy?] Deutinger M, et al. **Geburtshilfe Frauenheilkd** 1990 Mar;50(3):220-2 (Eng. Abstr.) (Ger)

[Consequences of the composition of breast milk for the nutrition of underweight newborn infants. II. Lipids and lactose] Boehm G, et al. **Kinderarztl Prax** 1989 Sep; 57(9):443-50 (Eng. Abstr.) (Ger)

[Fecal sIgS and lysozyme excretion in breast feeding and formula feeding] Eschenburg G, et al. **Kinderarztl Prax** 1990 May;58(5):255-60 (Eng. Abstr.) (Ger)

[Preventing iron deficiency in breast-fed infants by suitable supplementary food. A prospective, controlled study] Bergmann R, et al. **Monatsschr Kinderheilkd** 1989 Dec; 137(12):775-9 (Eng. Abstr.) (Ger)

[Breast feeding instructions for mothers] Knoop U, et al. **Monatsschr Kinderheilkd** 1990 Jul;138(7):406-9 (Ger)

[An unusual late manifestation of hemorrhage caused by vitamin K deficiency] Ries M, et al. **Monatsschr Kinderheilkd** 1989 Nov;137(11):741-2 (Eng. Abstr.) (Ger)

[Use and value of common European lactation-promoting medicinal plants (galactagogues)] Brückner C. **Padiatr Grenzgeb** 1989;28(6):403-10 (45 ref.) (Eng. Abstr.) (Ger)

[The Nutrition Commission of the Austrian Society of Pediatrics. Nutrition in the 1st days of life] Haschke F. **Padiatr Padol** 1989;24(3):189-94 (Ger)

[The biology of the 3d month and its importance for infant care] Svejcar J. **Padiatr Padol** 1989;24(4):269-77 (16 ref.) (Ger)

[Does sodium hydroxide soda help in oral candidiasis?] Dahm C. **Wien Med Wochenschr** 1989 Aug 31;139(15-16):360 (Eng. Abstr.) (Ger)

[Mother's milk and the prevention of allergic diseases--critical review] Bahir A, et al. **Harefuah** 1990 Jan 1;118(1):36-9 (23 ref.) (Heb)

[Prolonged breastfeeding: too much of a good thing (editorial)] Berant M. **Harefuah** 1989 May 1;116(9):492-3 (Heb)

[Low-fat milk as a cause of infantile colic and failure-to-thrive in the breast-fed baby (editorial)] Dinari G, et al. **Harefuah** 1989 Dec 15;117(12):464-6 (Heb)

[Latent vitamin K deficiency in breast-fed infants] Goldschmidt B, et al. **Orv Hetil** 1990 Feb 4;131(5):235-8 (35 ref.) (Eng. Abstr.) (Hun)

[Can breast feeding prevent atopic dermatitis? Epidemiologic study of 144 cases] Monego A, et al. **Minerva Pediatr** 1989 May;41(5):223-7 (59 ref.) (Eng. Abstr.) (Ita)

[Epidemiologic data on breast feeding in Florence and the province. Survey carried out in 1364 children born between 1985 and 1987] Calzolari C, et al. **Pediatr Med Chir** 1989 Nov-Dec;11(6):653-6 (Eng. Abstr.) (Ita)

[Incidence and duration of breast feeding in the city of Sassari from 1976 to 1987] Spano B, et al. **Pediatr Med Chir** 1989 Jul-Aug;11(4):435-40 (Eng. Abstr.) (Ita)

[Analysis of newborn nutrition in obstetric-neonatal hospital departments] Mikiel-Kostyra K. **Wiad Lek** 1990 Feb 1-15; 43(3-4):122-6 (Eng. Abstr.) (Pol)

[Duration of breast feeding in an urban area of São Paulo, Brazil] Issler H, et al. **Bol Of Sanit Panam** 1989 Jun; 106(6):513-22 (Eng. Abstr.) (Por)

[Effect of early initiation of breast feeding and the individualized feeding system on lactation] Nikitina EB, et al. **Akush Ginekol (Mosk)** 1990 Mar;(3):56-8 (Eng. Abstr.) (Rus)

[Action of microbe-antagonists on bacilli and corynebacteria of the skin of the breast in nursing women] Reznik SR, et al. **Mikrobiol Zh** 1989 May-Jun;51(3):43-7 (Eng. Abstr.) (Rus)

[Characteristics of nutrition of pregnant and breast-feeding women] Zakrevskiĭ AA, et al. **Pediatriia** 1989;(10):65-9 (Rus)

[A method of complex treatment of secondary hypogalactia] Zeĭts RI, et al. **Pediatriia** 1990;(1):97-8 (Rus)

[A comparative study of breast feeding and artificial infant feeding by ultrasonic scanning] Finadeeva EV, et al. **Stomatologiia (Mosk)** 1990 Mar-Apr;69(2):70-3 (Eng. Abstr.) (Rus)

[The entry of food antigens into breast milk] Fateeva EM, et al. **Vopr Pitan** 1989 Sep-Oct;(5):10-6 (58 ref.) (Rus)

[The vitamin D allowance of premature infants and their phosphorus-calcium metabolic status with different types of feeding and rickets prevention] Shakirova EM, et al. **Vopr Pitan** 1990 Mar-Apr;(2):37-41 (Eng. Abstr.) (Rus)

[HIV transmission from child to mother during breast feeding] Pokrovskiĭ VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Mar;(3):23-6 (Eng. Abstr.) (Rus)

[The effect of different types of infant nutrition on indicators of lipid metabolism in 1-to-4-year-old children] Hromadová M, et al. **Cesk Pediatr** 1989 Oct;44(10):580-3 (Eng. Abstr.) (Slo)

[Prevalence of breast feeding and its relation to cardiovascular risk factors in the pediatric population of Fuenlabrada] Cobaleda Rodrigo A, et al. **An Esp Pediatr** 1989 Oct;31(4):350-5 (32 ref.) (Eng. Abstr.) (Spa)

[Effect of different kinds of feeding on morbidity during the first year of life] García Llop LA, et al. **An Esp Pediatr** 1989 Jun;30(6):483-7 (Eng. Abstr.) (Spa)

[Prospective study of the prevalence of iron deficiency in breast-fed infants in Cantabria, its relation to the introduction of cow's milk and psychomotor development] González de Aledo Linos A, et al. **An Esp Pediatr** 1990 Jan;32(1):24-7 (29 ref.) (Eng. Abstr.) (Spa)

[Factors affecting the duration of maternal breast-feeding in a cohort of urban mothers studied longitudinally] Ruiz FJ, et al. **Bol Med Hosp Infant Mex** 1989 Nov;46(11):705-8 (Eng. Abstr.) (Spa)

[Breast feeding habits in marginated neighborhoods in Guadalajara] Santos-Torres I, et al. **Bol Med Hosp Infant Mex** 1990 May;47(5):318-23 (Eng. Abstr.) (Spa)

[Biological importance of breast feeding (letter)] Vega Franco L. **Bol Med Hosp Infant Mex** 1989 Nov; 46(11):743-4 (Spa)

[Breast feeding and protein metabolism] Villalpando S, et al. **Bol Med Hosp Infant Mex** 1990 Mar;47(3):181-5 (34 ref.) (Eng. Abstr.) (Spa)

[Amenorrhea, anovulation and infertility associated with breast feeding in a selected group of urban women] Díaz S, et al. **Rev Chil Obstet Ginecol** 1987;52(5):320-6 (Eng. Abstr.) (Spa)

[Surveillance of breast feeding (editorial)] Mardones F. **Rev Chil Pediatr** 1988 Nov-Dec;59(6):347-8 (Spa)

[Some recent determinants of breast feeding in Chile] Mardones F, et al. **Rev Chil Pediatr** 1989 Jan-Feb; 60(1):54-62 (66 ref.) (Eng. Abstr.) (Spa)

[Lactation and weaning patterns in Mexico. 1986 National Health Survey (corrected and republished with original paging, article originally printed in Salud Publica Mex 1989 Nov-Dec;31(6):725-34)] Gómez Dantés H, et al. **Salud Publica Mex** 1990 Mar-Apr;32(2):725-34 (Eng. Abstr.) (Spa)

[HIV seropositive women can breast feed their children] Bendtsen P. **Lakartidningen** 1990 Jul 11;87(28-29):2339 (Swe)

BREAST NEOPLASMS

Paget's disease of the nipple. A continuing enigma. Osther PJ, et al. **Acta Chir Scand** 1990 May;156(5):343-52 (67 ref.)

Papers from the Third Scandinavian Breast Cancer Symposium. June 2-4, 1988, Orenäs Castle, Sweden. **Acta Oncol** 1989;28(6):833-929

The detection and treatment of early breast cancer. Frykberg ER, et al. **Adv Surg** 1990;23:119-94 (449 ref.)

Bone-only versus visceral-only metastatic pattern in breast cancer: analysis of 150 patients. A GOCS study. Grupo Oncológico Cooperativo del Sur. Perez JE, et al. **Am J Clin Oncol** 1990 Aug;13(4):294-8

Macroscopic characteristics of pleural metastases arising from the breast and observed by diagnostic thoracoscopy. Cantó-Armengod A. **Am Rev Respir Dis** 1990 Sep; 142(3):616-8

Carcinoma of the breast. Atkins H. **Ann R Coll Surg Engl** 1966 Mar;38(3):133-53

Dumbbell metastatic cystosarcoma phyllodes of the heart and lung. Fleisher AG, et al. **Ann Thorac Surg** 1990 Feb; 49(2):309-11

The use of monoclonal antibody anticytokeratins for detecting lymph node micrometastases from breast carcinoma [letter; comment] Pelosi G. **Arch Pathol Lab Med** 1990 May;114(5):450-1 Comment on: Arch Pathol Lab Med 1989 Jul;113(7):786-9.

Metastatic breast carcinoma of the orbit. Jacobs M, et al. **Aust N Z J Ophthalmol** 1989 Nov;17(4):357-61

The distribution of bone metastases as shown on isotope scanning: proposed modes of spread. Styles C. **Australas Radiol** 1989 Aug;33(3):226-8

Chest X-ray survey in the follow-up of breast cancer patients. Ciatto S, et al. **Br J Cancer** 1989 Jul;60(1):102-3

Subdural haematoma caused by metastatic dural carcinomatosis. Jamjoom AB, et al. **Br J Neurosurg** 1987; 1(3):385-8

Metastatic carcinoma to the pituitary gland. McCormick PC, et al. **Br J Neurosurg** 1989;3(1):71-9

American Cancer Society National Conference on Breast Cancer. Chicago, Illinois, July 19-21, 1989. Proceedings. **Cancer** 1990 Sep 15;66(6 Suppl):1309-448

New diagnostic, staging, and therapeutic aspects of early breast cancer. Cady B. **Cancer** 1990 Feb 1;65(3 Suppl):634-47 (70 ref.)

Nutrition and breast cancer. Kritchevsky D. **Cancer** 1990 Sep 15;66(6 Suppl):1321-5 (78 ref.)

Primary care provider needs in breast cancer. Long D, et al. **Cancer** 1989 Dec 15;64(12 Suppl):2692-3

Digital dermatoglyphics in mammary cancer [letter; comment] Gamel JW. **Cancer Invest** 1989;7(3):301-2 Comment on: Cancer Invest 1988;6(1):15-27.

Breast cancer and the gynecologist. **Clin Obstet Gynecol** 1989 Dec;32(4):749-869

The pattern of vertebral involvement in metastatic vertebral breast cancer. Asdourian PL, et al. **Clin Orthop** 1990 Jan; (250):164-70

The role of computed tomography in the investigation of recurrent axillary disease in patients with carcinoma of the breast. Olliff JF, et al. **Clin Radiol** 1990 Jan;41(1):31-3

Experience with 7,604 bone scintigraphies at time of operation for breast cancer 1977-1987. Thomsen HS, et al. **Dan Med Bull** 1989 Oct;36(5):481-3

Breast cancer. Hutchins LF, et al. **Dis Mon** 1990 Feb; 36(2):63-125 (215 ref.)

Metastases to the endometrium from breast carcinoma. Ben-Baruch G, et al. **Eur J Gynaecol Oncol** 1990;11(1):61-6

Four case reports presenting new acquisitions on the association between breast and endometrial carcinoma. Atlante G, et al. **Gynecol Oncol** 1990 Jun;37(3):378-80

Legal pitfalls in the diagnosis and management of breast cancer. Henderson IC, et al. **Hematol Oncol Clin North Am** 1989 Dec;3(4):823-42 (9 ref.)

Breast cancer [editorial] Alberts ME. **Iowa Med** 1989 Aug; 79(8):385

Semilunar osteoblastic metastases in breast carcinoma. A new radiological sign. Cochrane LB, et al. **J Belge Radiol** 1989 Dec;72(6):497-500

Women's knowledge and beliefs about breast cancer risk factors, symptoms, detection methods, and treatments. Darrow SL, et al. **J Cancer Educ** 1987;2(3):165-76

Late recurrence of breast cancer presenting with esophageal dysmotility. Isaacs P, et al. **J Clin Gastroenterol** 1989 Oct; 11(5):588-90

Breast carcinoma metastatic to the gallbladder [see comments] Rubin A, et al. **J Clin Pathol** 1989 Nov; 42(11):1223-4 Comment in: J Clin Pathol 1990 Apr;43(4):350.

Detection of hepatic metastases in breast cancer: the role of nonenhanced and enhanced CT scanning. DuBrow RA, et al. **J Comput Assist Tomogr** 1990 May-Jun;14(3):366-9

Plasma carcinoembryonic antigen as an indicator of cerebral metastases. Eden EA, et al. **J Neurooncol** 1990 Jun; 8(3):281-7

Radioimmune imaging of bone marrow in patients with suspected bone metastases from primary breast cancer. Duncker CM, et al. **J Nucl Med** 1990 Sep;31(9):1450-5

Association between number and sites of new bone scan abnormalities and presence of skeletal metastases in patients with breast cancer. Jacobson AF, et al. **J Nucl Med** 1990 Apr;31(4):387-92

Carcinoid tumour of the male breast. Gill IS. **J R Soc Med** 1990 Jun;83(6):401

Juvenile adenofibromas. A case report. Beckmann CR, et al. **J Reprod Med** 1990 Apr;35(4):422-4

Angiosarcoma of the breast with report of unusual site of first metastasis. Baum JK, et al. **J Surg Oncol** 1990 Feb; 43(2):125-30 (18 ref.)

Continuing supervision of staff--a necessity. Avery JK. **J Tenn Med Assoc** 1990 Feb;83(2):84

Breast carcinoma metastatic to the uvea. Catalano RA, et al. **JAMA** 1990 Aug 22-29;264(8):1032

Cancer invasion and metastases [clinical conference] Liotta LA, et al. **JAMA** 1990 Feb 23;263(8):1123-6 (27 ref.)

Cell culture of human metastatic breast carcinomas: a review. Pettengill OS, et al. **Mol Biother** 1989;1(3):122-32 (77 ref.)

Case records of the Massachusetts general Hospital. Weekly clinicopathological exercises. Case 31-1990. A 42-year-old woman with dyspnea and diffuse interstitial pulmonary disease. **N Engl J Med** 1990 Aug 2;323(5):327-34

Synchronous vertebral decompression and posterior stabilization in the treatment of spinal malignancy. Johnston FG, et al. **Neurosurgery** 1989 Dec;25(6):872-6

Three-drug therapy plus marrow transplants effective against metastatic breast Ca [news] **Oncology (Williston Park)** 1988 Oct;2(10):38

Noninvasive breast cancer: Part 1. Ductal carcinoma in situ--incidence, presentation, guidelines to treatment. Swain SM. **Oncology (Williston Park)** 1989 Mar;3(3):25-31; discussion 40, 42, 44 passim (0 ref.)

Noninvasive breast cancer: Part 2. Lobular carcinoma in situ--incidence, presentation, guidelines to treatment. Swain SM. **Oncology (Williston Park)** 1989 Mar;3(3):35-40; discussion 40, 42, 44 passim (80 ref.)

Does pain always mean the presence of metastatic disease in an oncology patient? A case study. Hargest E. **Radiogr Today** 1990 May;56(636):11-3

Superficial chest wall recurrences of breast cancer: prognostic treatment factors for combined radiation therapy and hyperthermia. Seegenschmiedt HM, et al. **Radiology** 1989 Nov;173(2):551-8

Detection of recurrence: a critical assessment of existing methods and programs. Jungi WF, et al. **Recent Results Cancer Res** 1989;115:83-91 (38 ref.)

Giant fibro-adenomas in black and Indian adolescents. Naidu AG, et al. **S Afr J Surg** 1989 Dec;27(5):171-2 (15 ref.)

Phyllode tumours of the breast. A review of 21 cases. van Zyl JA, et al. **S Afr J Surg** 1989 Dec;27(5):168-70 (17 ref.)

Breast cancer and pregnancy. Gallenberg MM, et al. **Semin Oncol** 1989 Oct;16(5):369-76 (57 ref.)

Breast cancer: strategies for the 1990s. I. **Surg Clin North Am** 1990 Aug;70(4):739-983

How to organize a multidisciplinary clinic for the management of breast cancer. Durant JR. **Surg Clin North Am** 1990 Aug;70(4):977–83

Lobular carcinoma in situ. Pathology and treatment. Gump FE. **Surg Clin North Am** 1990 Aug;70(4):873–83

Cardiac involvement in metastatic breast cancer. Volk MJ, et al. **Wis Med J** 1990 Feb;89(2):56–60

Fibroadenoma. Dent DM, et al. **World J Surg** 1989 Nov–Dec; 13(6):706–10 (42 ref.)

[Cystosarcoma phyllodes] Pačovský Z, et al. **Rozhl Chir** 1990 Jan;69(1):46–51 (Eng. Abstr.) **(Cze)**

[Breast carcinoma in situ. Diagnostic and therapeutic aspects with special reference to growth patterns] Blichert-Toft M, et al. **Ugeskr Laeger** 1990 Jun 18;152(25):1803–6 (30 ref.) (Eng. Abstr.) **(Dan)**

[Dysphagia due to 'mediastinal carcinomatosis', a late sequela of breast carcinoma] Huisman AM, et al. **Ned Tijdschr Geneeskd** 1989 Oct 21;133(42):2087–8 (Eng. Abstr.) **(Dut)**

[Deglutition disorders caused by mediastinal carcinomatosis, a late sequela of breast carcinoma (letter)] Hüpscher DN. **Ned Tijdschr Geneeskd** 1990 Mar 3;134(9):456 **(Dut)**

[Metastasis of breast cancer in frontal meningioma] Fabaron F, et al. **Ann Radiol (Paris)** 1990;33(1):48–50 (9 ref.) (Eng. Abstr.) **(Fre)**

[Bone metastases of breast cancer. Surgical treatment of 228 sites in the limbs] Katzner M, et al. **Chirurgie** 1989; 115(10):741–9; discussion 749–50 (Eng. Abstr.) **(Fre)**

[Sensitivity and specificity of CEA, Ca 15-3 and MCA levels in visceral breast carcinoma metastasis] Delbrück H, et al. **Strahlenther Onkol** 1990 Jul;166(7):457–9 (Eng. Abstr.) **(Ger)**

[Male breast cancer] Roisman I, et al. **Harefuah** 1989 Aug; 117(3–4):68–74 (53 ref.) **(Heb)**

[Breast cancer and pregnancy] Roizman I, et al. **Harefuah** 1989 Dec 15;117(12):441–5 (42 ref.) **(Heb)**

[Temporal bone metastasis of adenocarcinoma of the breast: personal observations and a review of the literature] Piantanida R, et al. **Acta Otorhinolaryngol Ital** 1989 Jul–Aug;9(4):421–6 (14 ref.) (Eng. Abstr.) **(Ita)**

[Bilateral carcinoma of the breast] Tarquini A, et al. **Minerva Chir** 1989 Jul 31;44(13–14):1713–6 (14 ref.) (Eng. Abstr.) **(Ita)**

[Two cases of tubular adenoma of the breast] Kurebayashi J, et al. **Gan No Rinsho** 1990 Feb;36(2):176–80 (12 ref.) (Eng. Abstr.) **(Jpn)**

[High risk groups of breast cancer] Tominaga S. **Gan No Rinsho** 1989 May;Spec No:212–9 **(Jpn)**

[Requirements for the randomized trial of i.a. vs. i.v. administration to reveal the impact of hepatic arterial infusion on survival in the treatment of liver metastases] Arai Y, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1674–7 (Eng. Abstr.) **(Jpn)**

[Human breast cancer cells under serum-free culture. Its hormone-dependency and application to the primary culture] Urazumi K. **Nippon Geka Gakkai Zasshi** 1990 Jun; 91(6):718–28 (Eng. Abstr.) **(Jpn)**

[Metastatic neoplasms of the eye] Sporny S, et al. **Klin Oczna** 1989 Apr;91(4):102–4 (Eng. Abstr.) **(Pol)**

[Breast cancer in the pregnancy-puerperal cycle] Petti DA, et al. **Rev Paul Med** 1989 May–Jun;107(3):139–43 (Eng. Abstr.) **(Por)**

[Primary multiple cancer of the large intestine associated with extraintestinal tumors] Komov DV, et al. **Sov Med** 1989; (8):87–91 **(Rus)**

[Drug therapy of pulmonary metastases of breast cancer] Voznyĭ EK, et al. **Sov Med** 1990;(5):110–4 **(Rus)**

[Use of a personal computer for storage and statistical processing of information on patients with breast cancer] Adamian AT, et al. **Vopr Onkol** 1989;35(10):1232–8 (Eng. Abstr.) **(Rus)**

[Tuberculosis and malignancies of the breast] Dimnik R, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:319–22 **(Scr)**

[Cystosarcoma phyllodes of the breast] Soša I, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:302–3 **(Scr)**

[Breast carcinoma in men] Zigić B, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:293–6 (Eng. Abstr.) **(Scr)**

ANALYSIS

The use of fine needle aspirates in the evaluation of progesterone receptor content in breast cancer. Lozowski M, et al. **Acta Cytol** 1990 Jan–Feb;34(1):27–30

Estrogen and progesterone receptor analyses in more than 4,000 human breast cancer samples. A study with special reference to age at diagnosis and stability of analyses. Southern Swedish Breast Cancer Study Group. Fernö M, et al. **Acta Oncol** 1990;29(2):129–35

Nuclear DNA content, histological grade, and clinical course in patients with nonpalpable mammographically detected breast adenocarcinomas. Azavedo E, et al. **Am J Clin Oncol** 1990 Feb;13(1):23–7

A prospective comparison of DNA quantitation by image and flow cytometry. Bauer TW, et al. **Am J Clin Pathol** 1990 Mar;93(3):322–6

Automated immunohistochemical estrogen receptor in fixed embedded breast carcinomas. Comparison with manual immunohistochemistry on frozen tissues. Cohen C, et al. **Am J Clin Pathol** 1989 Nov;92(5):669–72

Immunocytochemical detection of progesterone receptor in breast carcinoma. Comparison of two monoclonal antibodies. Isola JJ, et al. **Am J Clin Pathol** 1990 Mar; 93(3):378–82

Comparative assessment of proliferation and DNA content in breast carcinoma by image analysis and flow cytometry. Dawson AE, et al. **Am J Pathol** 1990 May;136(5):1115–24

Subcellular distribution of estrogen receptor and progesterone receptor with and without specific ligand. Press MF, et al. **Am J Pathol** 1989 Nov;135(5):857–64

Identification of a unique biological tumor marker in human breast cyst fluid and breast cancer tissue. Tapper D, et al. **Am J Surg** 1990 May;159(5):473–8

Estrogen receptors in ductal carcinoma in situ of breast. Malafa M, et al. **Am Surg** 1990 Jul;56(7):436–9

Assessment of hormone receptors in breast carcinoma by immunocytochemistry and image analysis. II. Estrogen receptors. Colley M, et al. **Anal Quant Cytol Histol** 1989 Oct;11(5):307–14

Assessment of hormone receptors in breast carcinoma by immunocytochemistry and image analysis. I. Progesterone receptors. Kommoss F, et al. **Anal Quant Cytol Histol** 1989 Oct;11(5):298–306

Quantitative DNA patterns in human preneoplastic breast lesions. Teplitz RL, et al. **Anal Quant Cytol Histol** 1990 Apr;12(2):98–102

Reproducibility and comparison of quantitative DNA histogram features obtained with a scanning microdensitometer and a flow cytometer in breast cancers. Uyterlinde AM, et al. **Anal Quant Cytol Histol** 1989 Oct; 11(5):353–60

Two-color multiparametric method for flow cytometric DNA analysis of carcinomas using staining for cytokeratin and leukocyte-common antigen. Zarbo RJ, et al. **Anal Quant Cytol Histol** 1989 Dec;11(6):391–402

Hydroxyapatite assay to measure epidermal growth factor receptor in human primary breast tumors. Benraad TJ, et al. **Ann Clin Biochem** 1990 May;27 (Pt 3):272–3

Steroid patterns of benign breast disease. Castagnetta L, et al. **Ann N Y Acad Sci** 1990;586:121–36

The immunopathology of gross cystic disease fluid proteins. Mazoujian G, et al. **Ann N Y Acad Sci** 1990;586:188–97

Steroids in normal and neoplastic breast tissues. Thijssen JH, et al. **Ann N Y Acad Sci** 1990;595:222–6

High levels of c-myc protein in human breast tumours determined by a sensitive ELISA technique. Spandidos DA, et al. **Anticancer Res** 1989 Jul–Aug;9(4):821–6

Immunocytochemical analysis of estrogen receptors in human breast carcinomas. Evaluation of 130 cases and review of the literature regarding concordance with biochemical assay and clinical relevance. Allred DC, et al. **Arch Surg** 1990 Jan;125(1):107–13 (62 ref.)

Value of measuring hormone receptor levels of regional metastatic carcinoma of the breast. Butler JA, et al. **Arch Surg** 1989 Oct;124(10):1131–4; discussion 1134–5

The use of fine-needle aspirates of breast cancers to evaluate hormone-receptor status. Lundy J, et al. **Arch Surg** 1990 Feb;125(2):174–6

Improved detection of metastases to lymph nodes and estrogen receptor determination. Schurman SH, et al. **Arch Surg** 1990 Feb;125(2):179–82

Phospholipids are visible in 31P n.m.r. spectra of human breast tumours. Lowry M, et al. **Biochem Soc Trans** 1989 Dec;17(6):1053–4

Revised amino acid sequence of pancreatic spasmolytic polypeptide exhibits greater similarity with an inducible pS2 peptide found in a human breast cancer cell line. Rose K, et al. **Biochim Biophys Acta** 1989 Oct 19;998(3):297–300

Multidimensional chromatographic separation of estrogen receptors. Raubenheimer J, et al. **Biomed Chromatogr** 1989 Nov;3(6):255–61

Transcripts for transforming growth factors in human breast cancer: clinical correlates. Barrett-Lee P, et al. **Br J Cancer** 1990 Apr;61(4):612–7

Does the oestrogen receptor concentration of a breast cancer change during systemic therapy? Hawkins RA, et al. **Br J Cancer** 1990 Jun;61(6):877–80

Expression of the oestrogen regulated pNR-2 mRNA in human breast cancer: relation to oestrogen receptor mRNA levels and response to tamoxifen therapy. Henry JA, et al. **Br J Cancer** 1990 Jan;61(1):32–8

N-6 polyunsaturated fatty acids in human breast carcinoma phosphatidylethanolamine and early relapse. Lanson M, et al. **Br J Cancer** 1990 May;61(5):776–8

c-myc oncogene product expression and prognosis in operable breast cancer. Locker AP, et al. **Br J Cancer** 1989 Nov;60(5):669–72

DNA flow cytometry of breast cancer fine needle aspirates [letter; comment] Remvikos Y. **Br J Cancer** 1990 Feb; 61(2):343–4 Comment on: Br J Cancer 1989 May;59(5):688–91.

Detection of P24 protein in human breast cancer: influence of receptor status and oestrogen exposure. Seymour L, et al. **Br J Cancer** 1990 Jun;61(6):886–90

High progesterone receptor concentration in a variant of the ZR-75-1 human breast cancer cell line adapted to growth in oestrogen free conditions. van den Berg HW, et al. **Br J Cancer** 1990 Apr;61(4):504–7

An evaluation of immunoreactivity for c-erbB-2 protein as a marker of poor short-term prognosis in breast cancer. Walker RA, et al. **Br J Cancer** 1989 Sep;60(3):426–9

Progesterone receptor determination in human breast tumors by immunocytochemical and biochemical techniques. Cappelletti V, et al. **Breast Cancer Res Treat** 1989 Nov; 14(2):217–25

Corticotropin-releasing hormone, luteinizing hormone-releasing hormone, growth hormone-releasing hormone, and somatostatin-like immunoreactivities in biopsies from breast cancer patients. Ciocca DR, et al. **Breast Cancer Res Treat** 1990 May;15(3):175–84

Prognostic value of epidermal growth factor receptor in node-positive breast cancer. Grimaux M, et al. **Breast Cancer Res Treat** 1989 Oct;14(1):77–90

Distribution of estrogen and progesterone receptors in healthy tissue adjacent to breast lesions at various stages—immunohistochemical study of 107 cases. Jacquemier JD, et al. **Breast Cancer Res Treat** 1990 Feb; 15(2):109–17

Comparison of immunocytochemical and biochemical assays for estrogen receptor in fine needle aspirates and histologic sections from breast carcinomas. Katz RL, et al. **Breast Cancer Res Treat** 1990 May;15(3):191–203

Polypeptide composition of normal and neoplastic human breast tissues and cells analyzed by two-dimensional gel electrophoresis. Maloney TM, et al. **Breast Cancer Res Treat** 1989 Dec;14(3):337–48

Steroid-hormone receptors in nonpalpable and more advanced stages of breast cancer. A contribution to the biology and natural history of carcinoma of the female breast. Tinnemans JG, et al. **Cancer** 1990 Sep 15; 66(6):1165–7

Sex steroids in human brain tumors and breast cancer. von Schoultz E, et al. **Cancer** 1990 Feb 15;65(4):949–52

Epidermal growth factor receptors and prognosis in breast cancer. Sainsbury R. **Cancer Invest** 1990;8(2):251–2

Prognostic value of estrogen and progesterone receptors measured by enzyme immunoassays in human breast tumor cytosols. Foekens JA, et al. **Cancer Res** 1989 Nov 1; 49(21):5823–8

Seasonal change in the concentration of progesterone receptor in breast cancer. Holdaway IM, et al. **Cancer Res** 1990 Sep 15;50(18):5883–6

DNA in situ sensitivity to denaturation as a marker of human breast tumors. Kunicka JE, et al. **Cancer Res** 1989 Nov 15;49(22):6347–51

Improved measurement of androgen receptors in human breast cancer. Lea OA, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):7162–7

Distribution of oncofetal fibronectin in human mammary tumors: immunofluorescence study on histological sections. Loridon-Rosa B, et al. **Cancer Res** 1990 Mar 1; 50(5):1608–12

Automated quantitation of immunocytochemically localized estrogen receptors in human breast cancer. McClelland RA, et al. **Cancer Res** 1990 Jun 15;50(12):3545–50

Characterization of the estrogen receptor in two antiestrogen-resistant cell lines, LY2 and T47D. Mullick A, et al. **Cancer Res** 1990 Jan 15;50(2):333–8

Association of the 323/A3 surface glycoprotein with tumor characteristics and behavior in human breast cancer. Tandon AK, et al. **Cancer Res** 1990 Jun 1;50(11):3317–21

Estrogen and progesterone receptor assays, by the EIA method (Abbott), of low-speed supernates of breast-cancer homogenates. Hähnel R, et al. **Clin Chem** 1989 Nov; 35(11):2226–7

Influence of O.C.T. embedding compound on determinations of estrogen and progestin receptors in breast cancer. Pasic R, et al. **Clin Chem** 1989 Dec;35(12):2317–9

Flow cytometric analysis of DNA content and keratins by using CK7, CK8, CK18, CK19, and KL1 monoclonal antibodies in benign and malignant human breast tumors. Ferrero M, et al. **Cytometry** 1990;11(6):716–24

Immunocytochemical analysis of receptors for estrogen and progesterone in fine-needle aspirates from human breast carcinomas. Skoog L, et al. **Diagn Cytopathol** 1990; 6(2):95–8

Tenascin distribution in the normal human breast is altered during the menstrual cycle and in carcinoma. Ferguson JE, et al. **Differentiation** 1990 Feb;42(3):199–207

Specific polypeptide differences in normal versus malignant breast tissue by two-dimensional electrophoresis. Wirth PJ. **Electrophoresis** 1989 Aug–Sep;10(8–9):543–54

The prognostic value of immunohistochemical estrogen receptor analysis in paraffin-embedded and frozen sections versus that of steroid-binding assays. Andersen J, et al. **Eur J Cancer** 1990 Apr;26(4):442–9

Epidermal growth factor receptor in human breast cancer: correlation with cytosolic and nuclear ER receptors and with biological and histological tumor characteristics. Bolufer P, et al. **Eur J Cancer** 1990 Mar;26(3):283–90

Immunocytochemical detection of progesterone receptor by monoclonal KD-68 antibody in operable breast cancer: correlations with biochemical assay, pathological features and cell proliferative rate. Bevilacqua P, et al. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1595–602

Localization of a nonintercalative DNA binding antitumour drug in mitochondria: relationship to multidrug resistance. Liley DT, et al. **Eur J Cancer Clin Oncol** 1989 Sep; 25(9):1287–93

Estrogen receptor analyses in breast cancer: comparison of monoclonal immunohistochemical and biochemical methods. Søndergaard G, et al. **Eur J Cancer Clin Oncol** 1989 Oct;25(10):1425–9

Endogenous oestrogens and androgens in normal and malignant endometrial and mammary tissues. Thijssen JH, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1953–9

Estrogen receptor in breast cancer; its relation to mean

nuclear area, age and lymph node status. Maehle BO, et al. **Eur J Surg Oncol** 1989 Oct;15(5):463–8

Estrogen–receptor–negative breast cancer tissue is chemosensitive in vitro compared with estrogen–receptor–positive tissue. Maehara Y, et al. **Eur Surg Res** 1990;22(1):50–5

The expression of the neu oncogene product in breast lesions and in normal fetal and adult human tissues. De Potter CR, et al. **Histopathology** 1989 Oct;15(4):351–62

Immunohistochemical localization of sex hormone–binding globulin in normal and neoplastic breast tissue. Sinnecker G, et al. **Horm Metab Res** 1990 Jan;22(1):47–50

The neu–oncogene protein as a predictive factor for haematogenous metastases in breast cancer patients. De Potter CR, et al. **Int J Cancer** 1990 Jan 15;45(1):55–8

Characterization, in some human breast cancer cell lines, of gastrin–releasing peptide–like receptors which are absent in normal breast epithelial cells. Giacchetti S, et al. **Int J Cancer** 1990 Aug 15;46(2):293–8

A simplified immuno–enzymetric assay of the epidermal growth factor receptor in breast tumors: evaluation in 282 cases. Grimaux M, et al. **Int J Cancer** 1990 Feb 15; 45(2):255–62

c–erbB2 expression in correlation to other biological parameters of breast cancer. Marx D, et al. **J Cancer Res Clin Oncol** 1990;116(1):15–20

Phospholipids and fatty acids in breast cancer tissue. Punnonen K, et al. **J Cancer Res Clin Oncol** 1989; 115(6):575–8

Functional beta–adrenergic receptors in breast cancer cells. Vandewalle B, et al. **J Cancer Res Clin Oncol** 1990; 116(3):303–6

Simultaneous quantification of oestrogen and progesterone receptors by a ligand binding assay in frozen sections. Vollmer G, et al. **J Clin Chem Clin Biochem** 1989 Dec; 27(12):953–9

Imprint cytology in immunocytochemical analysis of oestrogen and progesterone receptors of breast carcinoma. Helin HJ, et al. **J Clin Pathol** 1989 Oct;42(10):1043–5

Expression of epidermal growth factor receptor in breast carcinoma. Lewis S, et al. **J Clin Pathol** 1990 May; 43(5):385–9

Assessment of oestrogen receptor content of breast carcinoma by immunohistochemical techniques on fixed and frozen tissue and by biochemical ligand binding assay. Paterson DA, et al. **J Clin Pathol** 1990 Jan;43(1):46–51

Immunohistological study of oestrogen receptors in breast carcinomas that are biochemically receptor negative. Shousha S, et al. **J Clin Pathol** 1990 Mar;43(3):239–42

Oestrogen receptors in mucinous carcinoma of the breast: an immunohistological study using paraffin wax sections. Shousha S, et al. **J Clin Pathol** 1989 Sep;42(9):902–5

Demonstration of progesterone receptors in paraffin wax sections of breast carcinoma. Soomro S, et al. **J Clin Pathol** 1990 Aug;43(8):671–4

Quantitation of oncogene products by computer–assisted image analysis and flow cytometry. Czerniak B, et al. **J Histochem Cytochem** 1990 Apr;38(4):463–6

Synthesis and structure–affinity of a series of 7 alpha–undecylestradiol derivatives: a potential vector for therapy and imaging of estrogen–receptor–positive cancers. DaSilva JN, et al. **J Med Chem** 1990 Jan;33(1):430–4

Sensitive detection of estrogen receptor RNA by polymerase chain reaction assay [see comments] Fuqua SA, et al. **J Natl Cancer Inst** 1990 May 16;82(10):858–61 Comment in: J Natl Cancer Inst 1990 May 16;82(10):806–7.

NCL–CB11, a new monoclonal antibody recognizing the internal domain of the c–erbB–2 oncogene protein effective for use on formalin–fixed, paraffin–embedded tissue. Corbett IP, et al. **J Pathol** 1990 May;161(1):15–25

Immunohistochemical distribution of c–erbB–2 in in situ breast carcinoma—a detailed morphological analysis. Ramachandra S, et al. **J Pathol** 1990 May;161(1):7–14

Oestrogen receptor staining of paraffin–embedded breast carcinomas following short fixation in formalin: a comparison with cytosolic and frozen section receptor analyses. Raymond WA, et al. **J Pathol** 1990 Apr; 160(4):295–303

Electrophoretic analysis of large molecular weight forms of the estrogen receptor in MCF–7 human breast cancer cells. Gabriel BW, et al. **J Steroid Biochem** 1989 Oct; 33(4A):547–55

Epidermal growth factor receptors in human breast and endometrial carcinomas. Llorens MA, et al. **J Steroid Biochem** 1989;34(1–6):505–9

Imprint immunocytochemistry of estrogen receptors in breast carcinoma. Moriya T, et al. **Jpn J Clin Oncol** 1990 Jun; 20(2):159–63

The discrepancy between immunocytochemical and biochemical assay of estrogen receptor in breast cancer patients treated by endocrine therapy. Toi M, et al. **Jpn J Surg** 1989 Nov;19(6):768–72

Calcium in breast biopsy specimens [editorial] **Lancet** 1990 Mar 31;335(8692):763–4

Relaxin in breast tissue [letter] Mazoujian G, et al. **Lancet** 1990 Feb 3;335(8684):298–9

Psychosocial correlates of oestrogen and progesterone receptors in breast cancer [see comments] Razavi D, et al. **Lancet** 1990 Apr 21;335(8695):931–3 Comment in: Lancet 1990 Jun 9;335(8702):1407–8. Comment in: Lancet 1990 Jun 9;335(8702):1408.

Oestrogen receptors and prognosis in breast cancer. Hähnel R. **Med J Aust** 1989 Sep 18;151(6):306–8 (16 ref.)

Florid papillomatosis of the nipple: immunohistochemical and flow cytometric analysis of two cases. Myers JL, et al. **Mod Pathol** 1990 May;3(3):288–93

Preoperative immunocytochemical analysis of the estradiol receptor in nonpalpable human breast tumors. Azavedo E, et al. **Oncology** 1990;47(4):318–21

Immunocytochemical determination of epidermal growth factor receptor with monoclonal EGFR1 antibody in primary breast cancer patients. Bevilacqua P, et al. **Oncology** 1990;47(4):313–7

Intratumoral variation of estrogen and progesterone receptors in breast cancer: relationship with histopathological characteristics of the tumor. Jarque F, et al. **Oncology** 1990;47(1):9–13

Cathepsin D test helps identify breast cancers likely to recur [news] **Oncology (Williston Park)** 1990 Mar;4(3):109

Expression of epidermal growth factor receptor in human breast carcinoma and its correlation with morphological and biological features of tumour aggressiveness. Betta PG, et al. **Pathologica** 1989 Jul–Aug;81(1074):425–31

Estrogen receptor immunocytochemical assay on cytologic material from primary and metastatic breast cancer. Greenberg ML, et al. **Pathology** 1989 Apr;21(2):93–9

Long–term prognostic implications of sex–steroid receptors in human cancer. McCarty KS Jr, et al. **Prog Clin Biol Res** 1990;322:279–93

Relationship between mammographic features and hormone receptor content in patients with breast cancer. Ainge GR, et al. **South Med J** 1989 Dec;82(12):1506–11 (19 ref.)

Gastrin–releasing peptide–, calcitonin gene–related peptide–, and calcitonin–like immunoreactivity in human breast cyst fluid and gastrin–releasing peptide–like immunoreactivity in human breast carcinoma cell lines. Weber CJ, et al. **Surgery** 1989 Dec;106(6):1134–9; discussion 1139–40

A comparative study of the localization of plasminogen and apolipoprotein(a) in human carcinomas. Correc P, et al. **Thromb Res** 1990 May 1;58(3):213–20

Characterization of laboratory working standard for quality control of immunometric and radiometric estrogen receptor assays. Clinical evaluation on breast cancer biopsies. Italian Committee for Hormone Receptor Assays Standardization. Piffanelli A, et al. **Tumori** 1989 Dec 31;75(6):550–6

Pre–operative tumour marker levels in patients with breast cancer and their prognosis. van Dalen A. **Tumour Biol** 1990; 11(4):189–95

Immunohistochemical studies on oncogene products (c–erbB–2, EGFR, c–myc) and estrogen receptor in benign and malignant breast lesions. With special reference to their prognostic significance in carcinoma. Tauchi K, et al. **Virchows Arch [A]** 1989;416(1):65–73

Analysis of the tumour–associated antigen TAG–12 by monoclonal antibody 7A9 in normal, benign and malignant mammary tissues. Werner M, et al. **Virchows Arch [A]** 1990; 416(5):411–6

[Estrogen receptors in breast cancer in women] Dimitrov G. **Khirurgiia (Sofiia)** 1990;43(2):25–9 (Eng. Abstr.) **(Bul)**

[Prognostic significance of progesterone receptor in breast cancer] He LW. **Chung Hua Chung Liu Tsa Chih** 1989 Mar; 11(2):121–3 (Eng. Abstr.) **(Chi)**

[Angiogenesis activity of tissues and cells of different malignancies] Jiang ZG. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):165–7 (Eng. Abstr.) **(Chi)**

[Correlation of steroid hormone receptors (SR) with clinical and pathological features of human breast cancer] Wu Q. **Chung–hua Ping Li Hsueh Tsa Chih** 1989 Dec;18(4):247–9 (Eng. Abstr.) **(Chi)**

[Cathepsin D: an independent prognostic factor in cancer of the breast] Romain S, et al. **Bull Cancer (Paris)** 1990; 77(5):439–47 (Eng. Abstr.) **(Fre)**

[Determination of EGF receptors (epidermal growth factor) in the placenta and breast tumors] Lyonnais J, et al. **Pathol Biol (Paris)** 1989 Sep;37(7):803–8 (Eng. Abstr.) **(Fre)**

[Expression of p21ras in tumors of breast] Catozzi L, et al. **Boll Soc Ital Biol Sper** 1988 Oct;64(10):945–52 (Eng. Abstr.) **(Ita)**

[Correlation with mammography and estrogen receptors in breast neoplasms] Lorenzetti G, et al. **G Ital Oncol** 1990 Jan–Jun;10(1–2):41–6 (Eng. Abstr.) **(Ita)**

[Medullary carcinoma of the breast. Co–expression of keratin intermediate filaments and protein S–100 in tumor cells] Puzzo L, et al. **Pathologica** 1989 Jul–Aug;81(1074):433–9 (Eng. Abstr.) **(Ita)**

[The relationship between the receptor status and the mammographic picture in operable breast cancer] Ventrella V, et al. **Radiol Med (Torino)** 1990 May;79(5):483–8 (Eng. Abstr.) **(Ita)**

[A study of the number of binding sites of estrogen receptors as a malignancy factor in primary breast cancer] Nihei M, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Aug 20; 24(8):1585–91 (Eng. Abstr.) **(Jpn)**

[Estrogen receptor status and expression of carbohydrate antigens in breast cancer] Sowa M, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jun 20;24(6):1296–304 (Eng. Abstr.) **(Jpn)**

[Hydroxyproline in breast cancer] Iida T. **Nippon Geka Gakkai Zasshi** 1989 Jun;90(6):914–9 (Eng. Abstr.) **(Jpn)**

[The receptor status between in primary tumor and in its involved regional node referring to estrogen receptor and epidermal growth factor receptor in human breast cancer: preliminary report] Mori T, et al. **Nippon Geka Gakkai Zasshi** 1989 Oct;90(10):1820 **(Jpn)**

[Clinical significance of measurement of nuclear DNA content in breast cancer] Nishi T, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep;90(9):1559–63 (Eng. Abstr.) **(Jpn)**

[Steroid hormone receptors in breast cancer] Nomura Y. **Rinsho Byori** 1990 Jan;38(1):26–30 (Eng. Abstr.) **(Jpn)**

[Study of DNA content using a flow cytometry method and steroid hormone receptors in breast cancer] Zubrikhina GN, et al. **Vopr Onkol** 1989;35(10):1179–86 (Eng. Abstr.) **(Rus)**

[Prolactin receptors and breast cancer] Basilio E, et al. **Rev Esp Fisiol** 1990 Mar;46(1):57–8 (Eng. Abstr.) **(Spa)**

[Receptors for epidermal growth factor in breast cancer] Bolufer–Gilabert P, et al. **Rev Esp Fisiol** 1990 Mar; 46(1):103–8 (Eng. Abstr.) **(Spa)**

BLOOD

Plasma estrone and estrone sulphate in breast cancer patients treated with the aromatase inhibitor CGS 16949A. Klepp R, et al. **Acta Oncol** 1990;29(4):469–71

Melatonin and steroid–dependent carcinomas. Oosthuizen JM, et al. **Andrologia** 1989 Sep–Oct;21(5):429–31

Review of GCDFP–15. An apocrine marker protein. Haagensen DE Jr, et al. **Ann N Y Acad Sci** 1990;586:161–73 (42 ref.)

Clinical evaluation of new serum tumor markers CA M26 and CA M29 in patients with primary breast cancer. Eskelinen M, et al. **Anticancer Res** 1990 Jul–Aug; 10(4):959–62

Circulating tumor markers in breast cancer (review). Jotti GS, et al. **Anticancer Res** 1990 Jan–Feb;10(1):253–8 (37 ref.)

Increased plasma prolactin levels in a group of men with breast cancer—a preliminary study. Olsson H, et al. **Anticancer Res** 1990 Jan–Feb;10(1):59–62

Evaluation of serum sialic acid, heat stable alkaline phosphatase and fucose as markers of breast carcinoma. Patel PS, et al. **Anticancer Res** 1990 Jul–Aug;10(4):1071–4

The use of human monoclonal antibody to detect serum antigen in patients with breast cancer. Strelkauskas AJ, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1863–8

Diminished corticosterone levels in nude mice implanted with MCF–7 or ZR–75–1 human breast tumor cells. Lehrer S, et al. **Arch Gynecol Obstet** 1989;245(1–4):704–7

Factors affecting MSA levels in normal women and women with breast cancer. Smart YC, et al. **Aust N Z J Surg** 1989 Oct;59(10):805–9

Prolactin response to dopamine and valproate administration in breast cancer patients. Stalldecker GB, et al. **Biomed Pharmacother** 1989;43(4):301–6

Tissue–type plasminogen activator in plasma from breast cancer patients determined by enzyme–linked immunosorbent assay. Grøndahl–Hansen J, et al. **Br J Cancer** 1990 Mar;61(3):412–4

Oestrogen binding and risk factors for breast cancer. Ingram DM, et al. **Br J Cancer** 1990 Feb;61(2):303–7

Alterations in the production rate and the metabolism of oestrone and oestrone sulphate in breast cancer patients treated with aminoglutethimide. Lønning PE, et al. **Br J Cancer** 1989 Jul;60(1):107–11

Polymorphic epithelial mucin from the sera of advanced breast cancer patients—isolation and partial characterisation. O'Sullivan C, et al. **Br J Cancer** 1990 Jun; 61(6):801–8

Procoagulant activity of human tumours: existence of Xa and thrombin–like activities. Sarode R, et al. **Br J Cancer** 1990 Jan;61(1):29–31

Serum human alpha–lactalbumin as a marker for breast cancer. Thean ET, et al. **Br J Cancer** 1990 May;61(5):773–5

Decreased production of soluble interleukin 2 receptor by phytohaemagglutinin–stimulated peripheral blood mononuclear cells in patients with breast cancer after adjuvant therapy. Zielinski CC, et al. **Br J Cancer** 1989 Nov;60(5):712–4

Combined endocrine effects of LHRH agonist (Zoladex) and tamoxifen (Nolvadex) therapy in premenopausal women with breast cancer. Robertson JF, et al. **Br J Surg** 1989 Dec;76(12):1262–5

Plasma prolactin as an indicator of disease progression in advanced breast cancer. Bhatavdekar JM, et al. **Cancer** 1990 May 1;65(9):2028–32

Circulating tumor marker levels in advanced breast carcinoma correlate with the extent of metastatic disease. Colomer R, et al. **Cancer** 1989 Oct 15;64(8):1674–81

Relationship between vitamin E and polyunsaturated fatty acids in breast cancer. Nutritional and metabolic aspects. Gerber M, et al. **Cancer** 1989 Dec 1;64(11):2347–53

Autologous bone marrow transplantation and factor XII, factor VII, and protein C deficiencies. Report of a new association and its possible relationship to endothelial cell injury. Kaufman PA, et al. **Cancer** 1990 Aug 1;66(3):515–21

Comparative pharmacokinetics of escalating doses of doxorubicin in patients with metastatic breast cancer. Bronchud MH, et al. **Cancer Chemother Pharmacol** 1990; 25(6):435–9

Detection of polymorphic epithelial mucins in the serum of systemic breast cancer patients using the monoclonal antibody, NCRC–11. Price MR, et al. **Cancer Immunol Immunother** 1990;31(5):269–72

Individual and combined usefulness of lipid associated sialic acid, mucoid proteins and hexoses as tumor markers in breast carcinoma. Patel PS, et al. **Cancer Lett** 1990 Jun 15;51(3):203–8

Plasma retinol level reduction by the synthetic retinoid fenretinide: a one year follow-up study of breast cancer patients. Formelli F, et al. **Cancer Res** 1989 Nov 1; 49(21):6149–52

Evaluation of sialic acid concentrations in serum for the diagnosis and staging of breast cancer. Riley WM, et al. **Clin Chem** 1990 Jan;36(1):161–2

Potency and selectivity of the non-steroidal aromatase inhibitor CGS 16949A in postmenopausal breast cancer patients. Dowsett M, et al. **Clin Endocrinol (Oxf)** 1990 May; 32(5):623–34

Changes in fibrinolysis in patients with localized tumors. Mannucci PM, et al. **Eur J Cancer** 1990 Feb;26(2):83–7

Serum interleukin 2 (IL-2) levels and prolactin bioactive/radioimmunoassay ratios of women at risk for breast cancer. Gala RR, et al. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1603–5

Early presence of activated ('exhausted') platelets in malignant tumors (breast adenocarcinoma and malignant melanoma). Mannucci PM, et al.
Eur J Cancer Clin Oncol 1989 Oct;25(10):1413–7

Heterogeneity of circulating hematopoietic progenitors in cancer patients treated with high-dose cyclophosphamide and recombinant human granulocyte macrophage colony stimulating factor (rhGM-CSF). Siena S, et al.
Haematologica 1990 Jan-Feb;75 Suppl 1:6–10

Coagulation disturbances in cancer of the breast and colon measured with specific monoclonal antibody enzyme immunoassay for fibrin-fibrinogen degradation products. McCulloch P, et al. **Haemostasis** 1990;20(2):73–80

Circulating tumor markers in breast cancer. Tondini C, et al. **Hematol Oncol Clin North Am** 1989 Dec;3(4):653–74 (109 ref.)

The pineal gland and breast cancer: serum levels of melatonin in patients with mammary tumors and their relation to clinical characteristics. Barni S, et al.
Int J Biol Markers 1989 Jul-Sep;4(3):157–62

Comparison of prolactin, CA 15-3 and TPA in breast carcinomas. Bhatavdekar JM, et al. **Int J Biol Markers** 1989 Jul-Sep;4(3):150–6

Serum hyaluronan (hyaluronic acid) in breast cancer patients. Delpech B, et al. **Int J Cancer** 1990 Sep 15;46(3):388–90

Serum vitamins A and E, beta-carotene, and selenium in patients with breast cancer. Basu TK, et al.
J Am Coll Nutr 1989 Dec;8(6):524–9

Serum osteocalcin levels in breast cancer patients. Pietschmann P, et al. **J Cancer Res Clin Oncol** 1989; 115(5):456–8

Evidence of association between plasma high-density lipoprotein cholesterol and risk factors for breast cancer. Boyd NF, et al. **J Natl Cancer Inst** 1990 Mar 21;82(6):460–8

Postprandial levels of prolactin and gut hormones in breast cancer patients: association with stage of disease, but not dietary fat [see comments] Goettler DM, et al.
J Natl Cancer Inst 1990 Jan 3;82(1):22–9 Comment in: J Natl Cancer Inst 1990 Jul 4;82(13):1155–7.

Effects of tamoxifen therapy on lipid and lipoprotein levels in postmenopausal patients with node-negative breast cancer [see comments] Love RR, et al.
J Natl Cancer Inst 1990 Aug 15;82(16):1327–32 Comment in: J Natl Cancer Inst 1990 Aug 15;82(16):1310–1.

Lack of diurnal variation in plasma levels of androstenedione, testosterone, estrone and estradiol in postmenopausal women. Lønning PE, et al. **J Steroid Biochem** 1989; 34(1–6):551–3

Hormonal effects of toremifene in breast cancer patients. Számel I, et al. **J Steroid Biochem** 1990 Jun 22;36(3):243–7

Role of blood groups as prognostic factors in primary breast cancer. Costantini M, et al. **Oncology** 1990;47(4):308–12

Plasma glutamate—a prognostic marker of cancer and of other immunodeficiency syndromes? Ollenschläger G, et al. **Scand J Clin Lab Invest** 1989 Dec;49(8):773–7

Inhibition of peripheral aromatization in postmenopausal women with breast cancer. Barone RM, et al.
Surg Forum 1978;29:172–4

Fibrin(ogen) peptides in early breast cancer [letter; comment] Mannucci PM, et al. **Thromb Haemost** 1989 Sep 29; 62(2):819 Comment on: Thromb Haemost 1989 Apr 25;61(2):318–21.

The role of diet history and biologic assays in the study of "diet and breast cancer". Gerber M, et al. **Tumori** 1990 Aug 31;76(4):321–30

Is tissue polypeptide antigen still a useful tumor marker in breast carcinoma? Comparison with CA15.3 and MCA. Gion M, et al. **Tumori** 1990 Aug 31;76(4):360–4

[Immunologic characteristics of serum CuZn-superoxide dismutase in cancer patients] Shen WM.
Chung Hua I Hsueh Tsa Chih 1989 May;69(5):286–7 **(Chi)**

[Decreased plasma zinc levels in metastatic breast cancer] Holtkamp W, et al. **Onkologie** 1990 Jun;13(3):207–9 (Eng. Abstr.) **(Ger)**

[Studies of the relevance of the tumor marker neopterin for therapeutic decisions and follow-up of breast cancer] Hacker I, et al. **Radiobiol Radiother (Berl)** 1989;30(6):521–6 (Eng. Abstr.) **(Ger)**

[Clinical evaluation of serum osteocalcin in patients with bone metastasis of breast cancer] Suzuki S, et al.
Nippon Gan Chiryo Gakkai Shi 1989 Oct 20;24(10):2386–93 (Eng. Abstr.) **(Jpn)**

[Sex hormone-binding globulin in breast cancer] Suminaga Y, et al. **Nippon Geka Gakkai Zasshi** 1990 Jul;91(7):875–82 (Eng. Abstr.) **(Jpn)**

[Concentration of selected sex hormones and SHBG in the serum of women with breast cancer treated with antiestrogens and (or) cytostatic agents]
Grodecka-Gazdecka S, et al. **Nowotwory** 1990 Jan-Mar; 40(1):5–11 (Eng. Abstr.) **(Pol)**

[The effect of autoplasma of patients with breast cancer on the functional activity of natural killer cells and adhering mononuclear cells in peripheral blood in vitro] Andrianov IG, et al. **Eksp Onkol** 1989;11(5):64–6 (Eng. Abstr.) **(Rus)**

[Ability of the lymphocytes in the peripheral blood of oncologic patients to repair DNA] Nikiforova NA, et al. **Med Radiol (Mosk)** 1990 Mar;35(3):25–7 (Eng. Abstr.) **(Rus)**

[Hemostatic changes in post-mastectomy edema of the arm in patients with breast cancer] Pronin VI, et al.
Sov Med 1990;(2):112–6 **(Rus)**

[Hormonal and immunological changes in breast cancers with different growth rates] Balmukhanov SB, et al.
Vopr Onkol 1989;35(11):1319–22 (Eng. Abstr.) **(Rus)**

[alpha 1-proteinase inhibitor in breast cancer] Demidov VP, et al. **Vopr Onkol** 1990;36(1):23–9 (Eng. Abstr.) **(Rus)**

[The hormonal status indices and the risk of breast cancer] Zaridze DG, et al. **Vopr Onkol** 1990;36(7):817–22 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Creatine kinase-BB in the cerebrospinal fluid as a marker of CNS metastases and leptomeningeal carcinomatosis in patients with breast cancer. Bach F, et al.
Eur J Cancer Clin Oncol 1989 Dec;25(12):1703–9

CHEMICALLY INDUCED

Oral contraceptives and breast cancer. A review. Olsson H.
Acta Oncol 1989;28(6):849–63 (160 ref.)

Re: "Breast cancer before age 45 and oral contraceptive use: new findings" [letter; comment] **Am J Epidemiol** 1989 Dec; 130(6):1254–7 Comment on: Am J Epidemiol 1989 Feb;129(2):269–80.

Diazepam use in relation to breast cancer: results from two case-control studies. Kaufman DW, et al.
Am J Epidemiol 1990 Mar;131(3):483–90

The cancer question: an overview of recent epidemiologic and retrospective data. Henderson BE.
Am J Obstet Gynecol 1989 Dec;161(6 Pt 2):1859–64 (60 ref.)

Cellular ras protooncogene expression in human mammary explant cultures. A potential marker for chemical carcinogenesis. Telang NT, et al. **Ann N Y Acad Sci** 1990; 586:230–7

Depot medroxyprogesterone and risk of breast cancer [letter; comment] Gray RH. **BMJ** 1989 Oct 28;299(6707):1099 Comment on: BMJ 1989 Sep 23;299(6702):759–62.

Depot medroxyprogesterone (Depo-Provera) and risk of breast cancer [see comments] Paul C, et al. **BMJ** 1989 Sep 23;299(6702):759–62 Comment in: BMJ 1989 Oct 28;299(6707):1099.

Breast cancer and combined oral contraceptives: results from a multinational study. The WHO Collaborative Study of Neoplasia and Steroid Contraceptives. **Br J Cancer** 1990 Jan;61(1):110–9

Oral contraceptives and breast cancer. Chilvers CE, et al. **Br J Cancer** 1990 Jan;61(1):1–4 (33 ref.)

Oral contraceptives and breast cancer: results from an expanded case-control study. Stanford JL, et al.
Br J Cancer 1989 Sep;60(3):375–81

Hormone-replacement therapy and the risk of breast cancer. Hulka BS. **CA** 1990 Sep-Oct;40(5):289–96 (34 ref.)

Long-term follow-up of women who underwent biopsy for benign breast lesion [letter] Berrino F. **Cancer** 1990 Mar 1;65(5):1261–2

Breast cancer and combined oral contraceptives: an Italian case-control study. La Vecchia C, et al.
Eur J Cancer Clin Oncol 1989 Nov;25(11):1613–8

Hormone replacement therapy in women treated for breast cancer. Stoll BA. **Eur J Cancer Clin Oncol** 1989 Dec; 25(12):1909–13 (35 ref.)

Oral contraceptives and breast cancer risk: a case-control study. Harris RE, et al. **Int J Epidemiol** 1990 Jun; 19(2):240–6

Oral contraceptive use and premenopausal breast cancer in Sweden and Norway: possible effects of different pattern of use. Lund E, et al. **Int J Epidemiol** 1989 Sep;18(3):527–32

Oral contraceptive use and breast cancer risk in young women: subgroup analyses. UK National Case-Control Study Group. **Lancet** 1990 Jun 23;335(8704):1507–9

Oral contraceptives, breast cancer, and lactation [letter; comment] Harlap S, et al. **Lancet** 1989 Nov 11; 2(8672):1163–4 Comment on: Lancet 1989 May 6;1(8645):973–82.

Hormone replacement therapy and breast cancer [letter] [see comments] Studd J. **Lancet** 1989 Nov 11;2(8672):1164 Comment in: Lancet 1990 Feb 3;335(8684):297–8.

Risk for malignant tumors after oral contraceptive use: is it related to organ size while taking the pill? Olsson H.
Med Oncol Tumor Pharmacother 1990;7(1):61–4 (62 ref.)

Breast cancer and estrogen replacement [letter] [published erratum appears in N Engl J Med 1990 Mar 1;322(9):643] [comment] **N Engl J Med** 1990 Jan 18;322(3):201–4 Comment on: N Engl J Med 1989 Aug 3;321(5):293–7.

Depot medroxyprogesterone and breast cancer [letter] Day BJ, et al. **N Z Med J** 1990 Jul 11;103(893):327–8

Medroxyprogesterone (Depo Provera) and breast cancer [letter] McCowan L. **N Z Med J** 1990 May 9; 103(889):225–6

Oral contraceptives and breast cancer: a case-control study with hospital and community controls. Schildkraut JM, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 1):395–402

[Breast carcinoma and the pill: a puzzle with missing pieces] van Leeuwen FE. **Ned Tijdschr Geneeskd** 1989 Nov 18; 133(46):2300–3 (11 ref.) **(Dut)**

[The pill and cancer of the breast] Gest J.
Bull Cancer (Paris) 1990;77(1):1–3 **(Fre)**

[Increased risk of breast cancer following estrogen substitution after all? Hormone substitution in peri- and postmenopause—Swedish studies] von Werder K.
Fortschr Med 1989 Nov 30;107(34):723–4 **(Ger)**

[Use of oral contraceptives in East Germany by middle-aged females] Hirsch U, et al. **Geburtshilfe Frauenheilkd** 1990 Jul;50(7):538–41 (Eng. Abstr.) **(Ger)**

[Oral contraceptives and cancer] Ludwig H.
Schweiz Rundsch Med Prax 1989 Nov 14;78(46):1273–5 **(Ger)**

[Does estrogen treatment cause breast cancer?] Fortun B.
Tidsskr Nor Laegeforen 1989 Sep 10;109(25):2586 **(Nor)**

[Contradictory views at meeting of experts: support for the hypothesis on increased risk of breast cancer after prolonged use of oral contraceptives] Odlind V, et al.
Lakartidningen 1989 Nov 22;86(47):4144, 4146, 4149 **(Swe)**

[Prolonged or early use of oral contraceptives—which one is the greatest risk for the development of breast cancer?] Olsson H, et al. **Lakartidningen** 1989 Dec 20;86(51):4509–11 **(Swe)**

CLASSIFICATION

Mucinous carcinoma of the breast: further characterization of its three subtypes. Coady AT, et al. **Histopathology** 1989 Dec;15(6):617–26

[Prognostic evaluation of breast cancer through molecular diagnosis] González de la Rivera FT.
An R Acad Nac Med (Madr) 1989;106(3):387–410 **(Spa)**

COMPLICATIONS

Tension hydrothorax and shock in a patient with a malignant pleural effusion. Negus RA, et al. **Am J Emerg Med** 1990 May;8(3):205–7

Infertility and breast cancer: a population-based case-control study. Gammon MD, et al. **Am J Epidemiol** 1990 Oct; 132(4):708–16

Figurate and bullous eruption in association with breast carcinoma. Watsky KL, et al. **Arch Dermatol** 1990 May; 126(5):649–52 (16 ref.)

Lipoma of the midbrain. Post-mortem finding in a patient with breast cancer. Gouvea VM, et al.
Arq Neuropsiquiatr 1989 Sep;47(3):371–4

Symptomatic hypocalcaemia associated with metastatic invasion of the parathyroid glands. Goddard CJ, et al.
Br J Hosp Med 1990 Jan;43(1):72

Comparison of intracavitary bleomycin and talc for control of pleural effusions secondary to carcinoma of the breast. Hamed H, et al. **Br J Surg** 1989 Dec;76(12):1265–7

Amelioration of postmenopausal primary hyperparathyroidism during adjuvant tamoxifen for breast cancer. Kristensen B, et al. **Cancer** 1989 Nov 1;64(9):1965–7

Massive left atrial thrombus: a possible paraneoplastic complication of breast carcinoma. Wrisley D, et al.
Clin Cardiol 1989 Oct;12(10):607–8

Usefulness of a hysteroscopic follow-up on patients with breast cancer in pre- and post-menopausal age. Gaglione R, et al. **Eur J Gynaecol Oncol** 1989;10(6):421–4

Sweet's syndrome and chronic lymphocytic leukemia associated with scirrhous breast cancer. A case report. Visani G, et al. **Haematologica** 1990 Mar-Apr;75(2):173–5

Congenital factor XIII deficiency with multiple benign breast tumours and successful pregnancy with substitutive therapy. A case report. Boda Z, et al. **Haemostasis** 1989; 19(6):348–52

Placental site trophoblastic tumor associated with immature ovarian teratoma. Stetler-Stevenson W, et al.
Int J Gynaecol Obstet 1990 Jul;32(3):275–9

Functional hyposplenism in a patient with advanced breast cancer. Pavlotsky F, et al. **Isr J Med Sci** 1989 Oct; 25(10):589–91

Response to retreatment of malignant hypercalcemia with the bisphosphonate AHPrBP (APD): respective role of kidney and bone. Thiebaud D, et al. **J Bone Miner Res** 1990 Mar;5(3):221–6

Plasma and CSF tryptophan in cancer anorexia. Cangiano C, et al. **J Neural Transm Gen Sect** 1990;81(3):225–33

Synchrony of malignant lymphoma and breast cancer. Stierer M, et al. **JAMA** 1990 Jun 6;263(21):2922–3

Articles praised [letter] Kaplan M. **Oncol Nurs Forum** 1990 Jul-Aug;17(4):483–4

Treatment of cancer anorexia with megestrol acetate: impact on quality of life. Tchekmedyian NS, et al.
Oncology (Williston Park) 1990 May;4(5):185–92; discussion

194
Management of hypercalcemia in breast cancer. Theriault RL. **Oncology (Williston Park)** 1990 Feb;4(2):43–6; discussion 50 (42 ref.)
Breast cancer in a patient with gynecomastia. Fodor PB. **Plast Reconstr Surg** 1989 Dec;84(6):976–9
Autosympathectomy: a late complication of metastatic breast disease [letter] Barker SG, et al. **Postgrad Med J** 1989 Dec; 65(770):958
Alexithymia and breast cancer. Survey of 200 women undergoing mammography. Todarello O, et al. **Psychother Psychosom** 1989;51(1):51–5
Prolonged remission of lymphangitis carcinomatosis from breast cancer [letter] Bourke S, et al. **Respir Med** 1989 Mar; 83(2):169
Male breast cancer in a renal transplant patient. Fischer DB. **Transplantation** 1990 Aug;50(2):325
Erythrocytosis caused by an erythropoietin–producing breast adenocarcinoma. Bohnen RF, et al. **West J Med** 1990 Apr; 152(4):417–8
[Pain in the arm in breast carcinoma] Vecht CJ. **Ned Tijdschr Geneeskd** 1990 Feb 17;134(7):313–6 **(Dut)**
[Cancer of the male breast with atypical ductal hyperplasia and contralateral gynecomastia] Turi V, et al. **Minerva Chir** 1990 Feb;45(3–4):203–5 (11 ref.) (Eng. Abstr.) **(Ita)**
[Intrapleural administration of CDDP against malignant pleural effusions in breast cancer] Kikuchi K, et al. **Gan To Kagaku Ryoho** 1990 Sep;17(9):1905–8 (Eng. Abstr.) **(Jpn)**
[Hypertransferrinemia and monoclonal immunoglobulinemia (IgM), with breast cancer] Chiyoda S. **Nippon Naika Gakkai Zasshi** 1989 Nov;78(11):1597–8 **(Jpn)**
[Pleural effusion of neoplastic origin] Rybus L, et al. **Pol Arch Med Wewn** 1989 Aug–Sep;82(2–3):117–25 (38 ref.) **(Pol)**
[The correction of dyslipidemia in breast cancer patients] Sterniuk IuM, et al. **Vrach Delo** 1989 Nov;(11):86–8 (Eng. Abstr.) **(Rus)**
[Paraneoplastic thrombosis of the upper longitudinal sinus, chronic disseminated intravascular coagulation and mental neuropathy in a female patient with carcinoma of the breast (letter)] Kulisevsky J, et al. **Neurologia** 1986 Jan–Feb; 1(1):45–7 **(Spa)**
[Microangiopathic hemolytic anemia associated with breast cancer (letter)] Yuste R, et al. **Rev Clin Esp** 1990 Jan; 186(1):45–6 **(Spa)**

DIAGNOSIS

Aspiration cytology of tubular breast carcinoma. Bondeson L, et al. **Acta Cytol** 1990 Jan–Feb;34(1):15–20
Fine needle aspiration biopsy of intramammary neurilemoma. Fisher PE, et al. **Acta Cytol** 1990 Jan–Feb;34(1):35–7
Fine needle aspiration cytology of lactating adenoma of the breast. A comparative light microscopic and morphometric study. Grenko RT, et al. **Acta Cytol** 1990 Jan–Feb; 34(1):21–6
Nipple discharge cytology in mass screening for breast cancer. Takeda T, et al. **Acta Cytol** 1990 Mar–Apr; 34(2):161–4
Occult breast carcinoma in patients undergoing reduction mammaplasty. Gottlieb JR, et al. **Aesthetic Plast Surg** 1989 Fall;13(4):279–83
Optical spectroscopy (INVOS) is unreliable in detecting breast cancer. Bosanko CM, et al. **AJR Am J Roentgenol** 1990 Jul;155(1):43–7
Differentiation of benign and malignant local tumor recurrence after lumpectomy. Dershaw DD, et al. **AJR Am J Roentgenol** 1990 Jul;155(1):35–8
AgNOR and Ki–67 in breast lesions. Tham KT, et al. **Am J Clin Pathol** 1989 Oct;92(4):518–20 (26 ref.)
Breast cancer detection: experience in a suburban community. Goodno JA Jr. **Am J Obstet Gynecol** 1990 Jun; 162(6):1393–6; discussion 1396–7
Determinants of breast self–examination after a benign biopsy. Janz NK, et al. **Am J Prev Med** 1990 Mar–Apr; 6(2):84–92
Validity and reliability of a breast cancer knowledge test. McCance KL, et al. **Am J Prev Med** 1990 Mar–Apr; 6(2):93–8
Late–stage diagnosis of breast cancer in women of lower socioeconomic status: public health implications. Farley TA, et al. **Am J Public Health** 1989 Nov;79(11):1508–12
Breast cancer screening legislation in the United States. Thompson GB, et al. **Am J Public Health** 1989 Nov; 79(11):1541–3
The use of state–of–the–art mammography in the detection of nonpalpable breast carcinoma. Kaplan C, et al. **Am Surg** 1990 Jan;56(1):40–2
Breast biopsy. Changing patterns during a five–year period. Lay SF, et al. **Am Surg** 1990 Feb;56(2):79–85
Ultrasonographic detection of metastatic axillary lymph nodes in breast cancer. Mustonen P, et al. **Ann Chir Gynaecol** 1990;79(1):15–8
An evaluation of the preoperative diagnosis and management of cystosarcoma phyllodes. Umpleby HC, et al. **Ann R Coll Surg Engl** 1989 Sep;71(5):285–8
A cytological study of mammary disease. Webb AJ. **Ann R Coll Surg Engl** 1975 Apr;56(4):181–91
The clinical management of a normal contralateral breast in patients with lobular breast cancer. Baker RR, et al. **Ann Surg** 1989 Oct;210(4):444–7; discussion 447–8
Isoenzymes of alkaline and acid phosphatases as bones metastasis marker in breast cancer patients. Desoize B, et al. **Anticancer Res** 1989 Jul–Aug;9(4):1105–9
New prognostic indicators in resectable breast cancer (review). Jotti GS. **Anticancer Res** 1989 Jul–Aug; 9(4):1227–32 (60 ref.)
Diagnosing borderline breast cancer (BBC): a public health view—rational for WHO's involvement in a joint OECI/WHO project. Dobrossy L. **Arch Geschwulstforsch** 1990;60(3):227–9
Immunohistochemical detection of progesterone receptor in formalin–fixed and paraffin–embedded breast cancer tissue using a monoclonal antibody. Scharl A, et al. **Arch Gynecol Obstet** 1990;247(2):63–71
The rate of mitosis in cystosarcoma phyllodes (phyllodes tumor, WHO) of the breast. An analysis of 47 cases. Zahner J, et al. **Arch Gynecol Obstet** 1989;246(3):153–7
Expression of ras p21 in mammary and extramammary Paget's disease. Mori O, et al. **Arch Pathol Lab Med** 1990 Aug;114(8):858–61
Accuracy of combined clinical–mammographic–cytologic diagnosis of dominant breast masses. A prospective study. Butler JA, et al. **Arch Surg** 1990 Jul;125(7):893–5; discussion 896
Mammographic second opinions prior to biopsy of nonpalpable breast lesions. Hall FM. **Arch Surg** 1990 Mar; 125(3):298–9
Changing patterns in the presentation of breast cancer over 25 years. Bennett IC, et al. **Aust N Z J Surg** 1990 Sep; 60(9):665–71
The diagnosis of impalpable breast carcinomas [editorial; comment] Bennett RC. **Aust N Z J Surg** 1990 May; 60(5):323–4 Comment on: Aust N Z J Surg 1990 May;60(5):337–40.
Practice of breast self–examination and the treatment of primary breast cancer. Shugg D, et al. **Aust N Z J Surg** 1990 Jun;60(6):455–62
Season of initial discovery of tumour as an independent variable predicting survival in breast cancer. Mason BH, et al. **Br J Cancer** 1990 Jan;61(1):137–41
Monoclonal antibodies 323/A3 and Ca1 identify a paracrine function of breast carcinoma on adjacent benign histological components. Courtney SP, et al. **Br J Cancer Suppl** 1990 Jul;10:92–5
Tumour–associated upregulation of the IL–4 receptor complex. Mat I, et al. **Br J Cancer Suppl** 1990 Jul;10:96–8
A screened breast cancer. Thomas P. **Br J Hosp Med** 1990 May;43(5):390–1
Use of thermography in the differential diagnosis of phylloides tumour. Pierart J, et al. **Br J Surg** 1990 Jul; 77(7):783–4
Diagnostic ability of different human milk fat globule antigens in breast cancer. Ceriani RL, et al. **Breast Cancer Res Treat** 1990 May;15(3):161–74
Inter– and intraobserver variability in the histopathological diagnosis of medullary carcinoma of the breast, and its prognostic implications. Pedersen L, et al. **Breast Cancer Res Treat** 1989 Oct;14(1):91–9
Magnetic resonance imaging and carcinoma of the breast. Cook PG, et al. **Bristol Med Chir J** 1989 May;104(2):42
Preoperative localisation of impalpable breast lesions. Reidy JF. **Bristol Med Chir J** 1989 May;104(2):43–5
Results of fine–wire localization breast biopsies at the Cancer Control Agency of British Columbia. Clay MG. **Can J Surg** 1990 Feb;33(1):17–9
General Motors Cancer Research Foundation/American Cancer Society. Workshop on early breast cancer detection. Hilton Head Island, South Carolina, February 2–4, 1989. Proceedings. **Cancer** 1989 Dec 15;64(12 Suppl):2639–717
Lightscanning versus mammography for the detection of breast cancer in screening and clinical practice. A Swedish multicenter study. Alveryd A, et al. **Cancer** 1990 Apr 15; 65(8):1671–7
Breast self–examination. Baines CJ. **Cancer** 1989 Dec 15;64(12 Suppl):2661–3
Motivating women to participate in breast cancer detection. Brown HG. **Cancer** 1989 Dec 15;64(12 Suppl):2690–1
Community programs. Breast cancer detection awareness. Fink DJ. **Cancer** 1989 Dec 15;64(12 Suppl):2674–81
Progress in early breast cancer detection. Henson DE, et al. **Cancer** 1990 May 1;65(9 Suppl):2155–8
Vexed surgeons, perplexed patients, and breast cancers which may not be cancer. Ketcham AS, et al. **Cancer** 1990 Feb 1;65(3):387–93 (37 ref.)
The importance of clinical breast examination. McGinnis LS. **Cancer** 1989 Dec 15;64(12 Suppl):2657–60
Cost issues. McGivney WT, et al. **Cancer** 1989 Dec 15;64(12 Suppl):2696–7
Detecting early breast cancer. Experience in a community hospital. Margolin FR. **Cancer** 1989 Dec 15;64(12 Suppl):2702–5
Review of evidence on the early detection and treatment of breast cancer. Morrison AS. **Cancer** 1989 Dec 15;64(12 Suppl):2651–6
The breast biopsy. Scanlon EF. **Cancer** 1989 Dec 15;64(12 Suppl):2671–3
Requirements for quality breast cancer detection. Schweitzer R, et al. **Cancer** 1989 Dec 15;64(12 Suppl):2706
Report on the International Workshop on Information Systems in Breast Cancer Detection. Shapiro S. **Cancer** 1989 Dec 15;64(12 Suppl):2645–50
Organizing systems for breast cancer detection. Shapiro S, et al. **Cancer** 1989 Dec 15;64(12 Suppl):2698
Breast cancer diagnosis and prognosis in women augmented with silicone gel–filled implants. Silverstein MJ, et al. **Cancer** 1990 Jul 1;66(1):97–101
The Health Insurance Plan of New York Study. Clinical aspects. Strax P. **Cancer** 1989 Dec 15;64(12 Suppl):2641–4
Factors to be considered in organizing systems for breast cancer detection. Strax P. **Cancer** 1989 Dec 15;64(12 Suppl):2699–701
Liability issues. Sutherland C, et al. **Cancer** 1989 Dec 15;64(12 Suppl):2694–5
Racial differences in the early detection of breast cancer in metropolitan Detroit, 1978 to 1987. Swanson GM, et al. **Cancer** 1990 Sep 15;66(6):1297–301
Inflammatory symptoms in breast cancer. Correlations with growth rate, clinicopathologic variables, and evolution. Tabbane F, et al. **Cancer** 1989 Nov 15;64(10):2081–9
Cost effectiveness in program delivery. Thompson RS, et al. **Cancer** 1989 Dec 15;64(12 Suppl):2682–9
Evaluation and management of breast abnormalities. Winchester DP. **Cancer** 1990 Sep 15;66(6 Suppl):1345–7 (6 ref.)
Association between high concentrations of Mr 52,000 cathepsin D and poor prognosis in primary human breast cancer. Thorpe SM, et al. **Cancer Res** 1989 Nov 1; 49(21):6008–14
The diagnosis of breast pre–cancer by the chronobra—I. Background review. Simpson HW, et al. **Chronobiol Int** 1989;6(4):355–69 (28 ref.)
The diagnosis of breast pre–cancer by the chronobra—II. The breast pre–cancer test. Simpson HW, et al. **Chronobiol Int** 1989;6(4):371–93
Breast biopsy techniques. Herbst AL. **Clin Obstet Gynecol** 1989 Dec;32(4):800–6 (9 ref.)
Physician breast examination and breast self–examination. Isaacs JH. **Clin Obstet Gynecol** 1989 Dec;32(4):761–7
Detection of breast cancer by measuring areolar blood flow—a pilot study. Nitzan M, et al. **Clin Phys Physiol Meas** 1989 Nov;10(4):337–41
Starting from scratch—some problems with Forrest. Breast scoring system [letter] **Clin Radiol** 1990 Jun;41(6):439–40
Pathogenesis, diagnosis, and treatment of breast cancer. Duda RB. **Compr Ther** 1990 Jan;16(1):43–52 (42 ref.)
An expert system for early detection of cancer of the breast. Morio S, et al. **Comput Biol Med** 1989;19(5):295–305
Paget's disease or erosive adenomatosis of the nipple? [letter; comment] Piérard G. **Dermatologica** 1990;180(1):55 Comment on: Dermatologica 1989;179(1):42–4.
Male breast lesions: gynecomastia and its distinction from carcinoma by aspiration biopsy cytology. Russin VL, et al. **Diagn Cytopathol** 1989;5(3):243–7
Fatal breast rhabdomyosarcoma in a 15 year old primigravida. Altomare DF, et al. **Eur J Gynaecol Oncol** 1990;11(2):149–51
Breast self examination survey carried out at a cancer prevention center serving a province. Galletto L, et al. **Eur J Gynaecol Oncol** 1983;4(3):237–40
Intraductal breast papilloma in adolescent. Case report. Onnis GL, et al. **Eur J Gynaecol Oncol** 1983;4(3):211–3
A logit model to evaluate the performance of diagnosis of solid palpable breast tumours. Janssens GK, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jan–Feb; 34(1–2):157–65
In situ ductal carcinoma of the breast—analysis of clinical presentation and outcome in 156 consecutive cases. Ciatto S, et al. **Eur J Surg Oncol** 1990 Jun;16(3):220–4
Reassessment of transillumination light scanning for the diagnosis of breast cancer. **Health Technol Assess Rep** 1988; (2):1–7 (24 ref.)
Diagnosis and therapy of breast cancer. **Hematol Oncol Clin North Am** 1989 Dec;3(4):559–842
Immunohistology is valuable in distinguishing between Paget's disease, Bowen's disease and superficial spreading malignant melanoma. Reed W, et al. **Histopathology** 1990 Jun;16(6):583–8
Role of fine needle aspiration cytology in the diagnosis of breast lumps and its histopathological correlation. Sreenivas M, et al. **Indian J Pathol Microbiol** 1989 Apr;32(2):133–7
Comparison of CA 15–3 and CEA in diagnosis and monitoring of breast cancer. Safi F, et al. **Int J Biol Markers** 1989 Oct–Dec;4(4):207–14
Use of monoclonal antibodies to human breast–tumor–associated antigens in the diagnosis of fine–needle aspirates of breast nodules: results of a multicenter study. Natali PG, et al. **Int J Cancer** 1990 Jan 15;45(1):12–5
Fatty acid composition of phospholipids in erythrocyte membranes and risk of breast cancer. Zaridze DG, et al. **Int J Cancer** 1990 May 15;45(5):807–10
Diagnosing breast cancer. Young DC. **Iowa Med** 1989 Aug; 79(8):368–9
Breast cancer metastatic to the lung. Amir J, et al. **J Arkansas Med Soc** 1990 Jan;86(8):320–1
Breast metastasis from lung carcinoma. Van Steen A, et al. **J Belge Radiol** 1989 Dec;72(6):534–5
Cystosarcoma phyllodes. Van Steen A, et al. **J Belge Radiol** 1989 Dec;72(6):536–7
Breast cancer examination experience of medical students and residents. Kennedy BJ, et al. **J Cancer Educ** 1988;3(4):243–5
Early detection of breast cancer: compromise guidelines for

a primary care setting. Spenser T, et al. **J Cancer Educ** 1989;4(2):121–3

Computer assisted diagnosis of fine needle aspirate of the breast. Heathfield HA, et al. **J Clin Pathol** 1990 Feb; 43(2):168–70

Thermography in screening for breast cancer. Williams KL, et al. **J Epidemiol Community Health** 1990 Jun;44(2):112–3

Needle localization and biopsy of mammographic abnormalities. Flynn MB, et al. **J Ky Med Assoc** 1990 Feb; 88(2):71–5

New surveys show use of mammography rising [news] Vanchieri C. **J Natl Cancer Inst** 1990 Sep 19;82(18):1451–3

Breast cancer in the young. Dugue G, et al. **J Natl Med Assoc** 1989 Nov;81(11):1184, 1187–8 (16 ref.)

Directed breast biopsies. Vanhooser R, et al. **J Okla State Med Assoc** 1989 Sep;82(9):459–62

Breast self examination [letter; comment] **J R Coll Gen Pract** 1989 Sep;39(326):389 Comment on: J R Coll Gen Pract 1989 May;39(322):180–1.

Breast self examination: should we discourage it? [editorial] [see comments] Mant D. **J R Coll Gen Pract** 1989 May; 39(322):180–1 Comment in: J R Coll Gen Pract 1989 Sep;39(326):389.

Breast self examination [letter; comment] Wilson P. **J R Coll Gen Pract** 1989 Jan;39(318):35 Comment on: J R Coll Gen Pract 1988 Oct;38(315):470.

After surgery for breast cancer: which mode of surveillance? Tate JJ, et al. **J R Soc Med** 1989 Dec;82(12):737–8

Changing breast biopsy concepts. Leis HP Jr. **J S C Med Assoc** 1990 May;86(5):281–2

Functional estrogen receptors as biochemical marker for the detection of hormone–dependent breast cancer. Vij U, et al. **J Surg Oncol** 1990 Jan;43(1):13–8

Sonographic features of breast hamartomas. Adler DD, et al. **J Ultrasound Med** 1990 Feb;9(2):85–90

Primary multifocal angiosarcoma of the breast. Sonographic evaluation with pathologic correlation. Tassin GB, et al. **J Ultrasound Med** 1990 Aug;9(8):481–3

Screening mammography: a missed clinical opportunity? Results of the NCI Breast Cancer Screening Consortium and National Health Interview Survey Studies. **JAMA** 1990 Jul 4;264(1):54–8

From the National Institutes of Health. Raub W. **JAMA** 1990 Mar 2;263(9):1189

An immunohistological study of breast cancer—with special reference to the expression of carbohydrate antigens and estrogen receptor status. Sowa M, et al. **Jpn J Surg** 1990 May;20(3):252–9

Mucin–like cancer–associated antigen (MCA) compared with CA 15–3 in advanced breast cancer. Steger GG, et al. **Klin Wochenschr** 1989 Aug 17;67(16):813–7

False alarms of breast cancer [see comments] Devitt JE. **Lancet** 1989 Nov 25;2(8674):1257–8 Comment in: Lancet 1990 Jan 13;335(8681):107. Comment in: Lancet 1990 Feb 3;335(8684):299.

False alarms of breast cancer [letter; comment] Hehir DJ, et al. **Lancet** 1990 Jan 13;335(8681):107 Comment on: Lancet 1989 Nov 25;2(8674):1257–8.

Magnetic resonance imaging of the breast. el Yousef SJ, et al. **Magn Reson Annu** 1986;:177–95

Is the detection of fucose cancer markers by 2D 1H NMR unequivocal? Phillips PS, et al. **Magn Reson Med** 1990 Jul; 15(1):1–7

Imaging of the breast: techniques and results. Gisvold JJ. **Mayo Clin Proc** 1990 Jan;65(1):56–66 (61 ref.)

Inflammatory carcinoma of the breast: Part I. Elias EG. **Md Med J** 1989 Dec;38(12):1069

The diagnosis of breast cancer: a clinical and mammographic comparison. Day PJ, et al. **Med J Aust** 1990 Jun 18; 152(12):635–9

Assessing the risk of recurrence in breast cancer [editorial: comment] Ingle JN. **N Engl J Med** 1990 Feb 1; 322(5):329–31 Comment on: N Engl J Med 1990 Feb 1;322(5):297–302.

Indicators of prognosis in node–negative breast cancer. Sigurdsson H, et al. **N Engl J Med** 1990 Apr 12; 322(15):1045–53

Cytological diagnosis of breast cancer. Rangwala AF, et al. **N J Med** 1989 Nov;86(11):859–65

Occult breast cancer in two community hospitals in New York State. Hena MA, et al. **N Y State J Med** 1989 Nov; 89(11):612–3

The role of community hospitals in the detection of occult breast cancer. Rodes ND. **N Y State J Med** 1989 Nov; 89(11):602–3

Cystic hypersecretory breast carcinoma. An unusual breast cancer. Adams GD, et al. **Nebr Med J** 1990 May; 75(5):104–8

Diagnosis and management of esophageal metastases. Frank AR. **Nebr Med J** 1990 Jul;75(7):171–5

Granular cell tumor of the breast. Baeten CG, et al. **Neth J Surg** 1989 Oct;41(5):111–3

The non–palpable, radiographically suspicious breast lesion: an analysis of 101 cases. Perre CI, et al. **Neth J Surg** 1990 Jun;42(3):69–71

Image localized 31P magnetic resonance spectroscopy of the human liver. Glazer GM, et al. **NMR Biomed** 1989 Apr; 1(4):184–9

Breast density cited as independent cancer risk factor [news] **Oncology (Williston Park)** 1989 Sep;3(9):139

How can I detect a tumor in spite of breast implants? [letter] Dickey JC. **Oncology (Williston Park)** 1989 Jan;3(1):15

Radiologists and mammography: practice makes perfect [news] Ominsky SH, et al. **Oncology (Williston Park)** 1990 Jul;4(7):40, 42

New applications of monoclonal antibodies to the diagnosis and prognosis of breast cancer. Ellis GK, et al. **Pathol Annu** 1990;25 Pt 2:193–235 (249 ref.)

Immunohistochemistry in the differential diagnosis of breast diseases. Palmer JO, et al. **Pathol Annu** 1990;25 Pt 2:287–315 (146 ref.)

Prognostic significance of morphological parameters and flow cytometric DNA analysis in carcinoma of the breast. Visscher DW, et al. **Pathol Annu** 1990;25 Pt 1:171–210 (88 ref.)

Breast carcinoma found in association with reduction mammaplasty [letter; comment] Snyderman RK. **Plast Reconstr Surg** 1990 Jan;85(1):153–4 Comment on: Plast Reconstr Surg 1989 Jun;83(6):1042–4.

Early breast cancer detection. Banerjee A. **Practitioner** 1989 Jul 8;233(1472):972

Cardiac failure mimicking advanced breast carcinoma. Duncan G, et al. **Practitioner** 1989 Nov 8;233(1478):1436, 1439

Factors associated with repeat adherence to breast cancer screening. Lerman C, et al. **Prev Med** 1990 May; 19(3):279–90

A community–wide program in breast self–examination training and maintenance. Worden JK, et al. **Prev Med** 1990 May;19(3):254–69

Breast cancer diagnosis by laser transmission photo–scanning with spectro–analysis (report 4). He P, et al. **Radiat Med** 1990 Jan–Feb;8(1):1–5

Laser transmission photo–scanner: clinical application in breast tumor detection (report 3). Kaneko M, et al. **Radiat Med** 1989 Jul–Aug;7(4):173–5

Construction of a laser transmission photo–scanner: pre–clinical investigation (report 2). Kaneko M, et al. **Radiat Med** 1989 May–Jun;7(3):129–34

Color Doppler signals from breast tumors. Work in progress. Cosgrove DO, et al. **Radiology** 1990 Jul;176(1):175–80

Acceptability of periodic follow–up as an alternative to biopsy for mammographically detected lesions interpreted as probably benign [letter] Jackson FI. **Radiology** 1989 Nov; 173(2):580–1

Breast cancer: mammographic and sonographic findings after augmentation mammoplasty. Leibman AJ, et al. **Radiology** 1990 Jan;174(1):195–8

Paraffin tissue block radiography: adjunct to breast specimen radiography. Rebner M, et al. **Radiology** 1989 Dec; 173(3):695–6

Breast disease: tissue characterization with Gd–DTPA enhancement profiles. Stack JP, et al. **Radiology** 1990 Feb; 174(2):491–4

Benign lesions that mimic malignant tumors. **Semin Diagn Pathol** 1990 May;7(2):89–155

Computed tomography, duplex Doppler ultrasound, and magnetic resonance imaging in evaluating the breast. Bohm–Velez M, et al. **Semin Ultrasound CT MR** 1989 Apr; 10(2):171–6 (18 ref.)

The role of ultrasound in a breast imaging center. Feig SA. **Semin Ultrasound CT MR** 1989 Apr;10(2):90–105 (65 ref.)

Sonography of malignant breast disease. Jackson VP. **Semin Ultrasound CT MR** 1989 Apr;10(2):119–31 (50 ref.)

Mammography was lacking and fear of radiation–induced cancer [letter] Mendelson EB. **Semin Ultrasound CT MR** 1989 Apr;10(2):81

Techniques for obtaining the diagnosis of malignant breast lesions. Ellis LM, et al. **Surg Clin North Am** 1990 Aug; 70(4):815–30

Techniques and results of aspiration cytology for diagnosis of benign and malignant diseases of the breast. Wilkinson EJ, et al. **Surg Clin North Am** 1990 Aug;70(4):801–13

Immunoperoxidase staining for tumor markers in patients with carcinoma of the breast. Cox CE, et al. **Surg Forum** 1978;29:160–2

Breast cancer screening in an urban population in northern Italy. Alghisi A, et al. **Tumori** 1990 Feb 28;76(1):22–5

The role of fine needle aspiration cytology in the differential diagnosis of suspected breast cancer local recurrences. Ciatto S, et al. **Tumori** 1990 Jun 30;76(3):225–6

Prognostic impact of early detection of contralateral primary breast cancer. Ciatto S, et al. **Tumori** 1990 Aug 31; 76(4):370–3

Observer variation in mammary thermography: results of a teaching file test carried out in four different centers. Mustacchi G, et al. **Tumori** 1990 Feb 28;76(1):29–31

Practice of early diagnosis of breast and uterine cervix cancer in a northern Italian town. Segnan N, et al. **Tumori** 1990 Jun 30;76(3):227–33

Elevated serum tumour markers and systemic disease [letter; comment] van Dalen A. **Tumour Biol** 1989;10(6):330–1 Comment on: Tumour Biol 1989;10(2):103–8.

Preliminary results for shear wave speed of sound and attenuation coefficients from excised specimens of human breast tissue. Burke TM, et al. **Ultrason Imaging** 1990 Apr; 12(2):99–118

[Tuberculosis of the breast misdiagnosed as breast cancer] Zhang BN. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Oct;12(5):290–1, 319 (Eng. Abstr.) **(Chi)**

[Diagnostic activity in general practice. 3. Diagnosis of breast diseases] Iversen V, et al. **Ugeskr Laeger** 1990 Jan 22; 152(4):222–4 (Eng. Abstr.) **(Dan)**

[Informations on oncologic epicrises contained in medical records] Mainz J, et al. **Ugeskr Laeger** 1989 Oct 30; 151(44):2877–9 (Eng. Abstr.) **(Dan)**

[Patient related diagnostic delay in breast tumor. A prospective study] Poulsen TD, et al. **Ugeskr Laeger** 1990 Apr 30;152(18):1301–3 (Eng. Abstr.) **(Dan)**

[Breast carcinoma in women younger than 30 years] Go PM, et al. **Ned Tijdschr Geneeskd** 1990 Apr 28;134(17):860–2 (Eng. Abstr.) **(Dut)**

[Mammographic screening confirmation of breast cancer biological characteristics—a flow cytometric study] Kallioniemi OP, et al. **Duodecim** 1989;105(18):1532–8 **(Fin)**

[Apropos of a verbal communication. Clinical diagnosis of breast cancer. Proposal for treatment. Apropos of the communication by P.A. Goumot, J. Reynier, P. Bousser, F. Vilde and R. Villet. Session of 18 October 1989 (comment)] Verhaeghe M. **Chirurgie** 1989;115(7):480–1 Comment on: Chirurgie 1989;115(7):424–31. **(Fre)**

[Breast tumor with myoepithelial cells. Apropos of a case report] Brasseur P, et al. **J Belge Radiol** 1990 Jun; 73(3):197–200 (Eng. Abstr.) **(Fre)**

[Breast plasmacytoma. Apropos of a case. Review of the literature] Flageat J, et al. **J Radiol** 1989 Aug–Sep; 70(8–9):497–501 (7 ref.) (Eng. Abstr.) **(Fre)**

[Screening for breast cancer and attitude upon discovery of a lesion] Delaloye JF. **Rev Med Suisse Romande** 1990 Apr; 110(4):303–5 **(Fre)**

[The value of tumor markers CA 15–3 and CEA in breast cancer] Buck I, et al. **Arch Gynecol Obstet** 1989; 245(1–4):674–7 (Eng. Abstr.) **(Ger)**

[The clinical significance of prognostic factors in breast cancer] Giese E, et al. **Arch Gynecol Obstet** 1989; 245(1–4):670–2 **(Ger)**

[Breast sonographic imaging and evaluation of microcalcifications] Leucht W, et al. **Arch Gynecol Obstet** 1989;245(1–4):684–7 **(Ger)**

[Sonographic detection of metastases of the spleen and splenic hilus in patients with ovarian cancer and breast cancer] Pohl J, et al. **Arch Gynecol Obstet** 1989; 245(1–4):491–2 **(Ger)**

[Classification and texture attributed 3D reconstruction of breast tumors from ultrasound image sequences] Grotepass J, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:138–9 **(Ger)**

[Computer–assisted tissue analysis for cancer detection in breast ultrasound—significance of reference values] Heywang SW, et al. **Digitale Bilddiagn** 1989 Dec; 9(4):127–34 (Eng. Abstr.) **(Ger)**

[Pre– and post–therapeutic serum concentrations of mucin–like carcinoma–associated antigen in patients with breast cancer] Fuith LC, et al. **Gynakol Rundsch** 1989;29 Suppl 2:397–9 **(Ger)**

[Possibilities of ultrasound diagnosis] Hackelöer BJ, et al. **Gynakologe** 1989 Aug;22(4):238–41 **(Ger)**

[Diagnosis of benign breast diseases. Clinical aspects] Junkermann H. **Gynakologe** 1989 Aug;22(4):226–9 (15 ref.) **(Ger)**

[Thermography in the diagnosis of benign breast diseases] Lauth G, et al. **Gynakologe** 1989 Aug;22(4):242–5 **(Ger)**

[Mucin–like carcinoma–associated antigen: sensitivity and specificity in metastatic breast cancer] Ammon A, et al. **Onkologie** 1990 Jun;13(3):210–4 (Eng. Abstr.) **(Ger)**

[Tumor markers in breast cancer: on the diagnostic value of serum determinations in clinical freedom from tumor and manifest disease] Günczler P, et al. **Onkologie** 1989 Oct;12(5):209–14 (Eng. Abstr.) **(Ger)**

[A comparison of mammographic, sonographic and histologic parameters in breast cancer] Steffin C. **Radiol Diagn (Berl)** 1990;31(3):221–9 (Eng. Abstr.) **(Ger)**

[Diagnosis of an angiosarcoma of the mammary glands] Schwarz E, et al. **ROFO** 1989 Oct;151(4):502–3 **(Ger)**

[Senology—a word becomes a concept] Kubista E. **Wien Klin Wochenschr** 1990 Aug 3;102(15):426–32 (Eng. Abstr.) **(Ger)**

[Initial experiences with CA–15–3 determination in the serum of patients with breast cancer] Bartel U, et al. **Zentralbl Gynakol** 1989;111(21):1417–24 (Eng. Abstr.) **(Ger)**

[Mammary tuberculosis mimicking breast cancer] Wishnitzer R, et al. **Harefuah** 1989 Aug;117(3–4):64–5 (Eng. Abstr.) **(Heb)**

[Remarks on the psychological and cultural problems encountered in self–palpation for the early diagnosis of breast neoplasms] Consiglio GC, et al. **Minerva Ginecol** 1989 Dec;41(12):619–23 (Eng. Abstr.) **(Ita)**

[Assessment of CEA values in patients with malignant neoplasms] Alkilani M, et al. **Minerva Med** 1989 Aug; 80(8):923–5 **(Ita)**

[The multicentricity of minimal breast cancer. The observations and therapeutic implications apropos 30 cases] Cervi GC, et al. **Minerva Med** 1989 Aug;80(8):895–9 **(Ita)**

[A report of 2 cases of fibroadenoma phyllodes] Ferrari P, et al. **Minerva Med** 1990 Mar;81(3 Suppl):107–9 (Eng. Abstr.) **(Ita)**

[Inflammatory carcinoma of the breast. Our experience] Punzo C, et al. **Minerva Med** 1989 Aug;80(8):907–11 **(Ita)**

[Sensitivity of mammography and fine–needle aspiration cytology in the diagnosis of breast cancer] Ciarmiello G, et al. **Pathologica** 1990 Mar–Apr;82(1078):155–60 (Eng. Abstr.) **(Ita)**

[Color Doppler in the echographic evaluation of breast

nodules] Bergonzi M, et al. **Radiol Med (Torino)** 1990 Mar; 79(3):178–81 (Eng. Abstr.) **(Ita)**

[Intramammary lymph node localization of malignant non-Hodgkin's lymphoma. Description of a case] Caimi F, et al. **Radiol Med (Torino)** 1989 Sep;78(3):266–8 **(Ita)**

[The role of color Doppler echography in the diagnosis of breast tumors] Campi R, et al. **Radiol Med (Torino)** 1990 Mar;79(3):182–4 (Eng. Abstr.) **(Ita)**

[Sclerosing adenosis and infiltrating epitheliosis of the breast. Radiohistopathologic correlations and differential diagnosis of carcinoma] Gardellin G, et al. **Radiol Med (Torino)** 1989 Oct;78(4):335–8 (Eng. Abstr.) **(Ita)**

[The clinical utility of stereotaxic x-ray guided cytological biopsy in nonpalpable neoplastic pathology of the breast] Giuseppetti GM, et al. **Radiol Med (Torino)** 1990 Mar; 79(3):185–8 (Eng. Abstr.) **(Ita)**

[Role of ultrasonics in the diagnosis of subclinical carcinoma of the breast] Giuseppetti GM, et al. **Radiol Med (Torino)** 1989 Oct;78(4):339–42 (Eng. Abstr.) **(Ita)**

[High-risk focal breast lesions in echography and mammography] Gozzi G, et al. **Radiol Med (Torino)** 1989 Dec;78(6):603–6 (Eng. Abstr.) **(Ita)**

[A comparative evaluation of the centering precision performed with 2 different stereotaxic instruments in nonpalpable breast lesions] Minonzio G, et al. **Radiol Med (Torino)** 1990 Mar;79(3):189–90 (Eng. Abstr.) **(Ita)**

[Infarctions in fibroadenomas of the breast during pregnancy—a case report and a review of the literature] Ohwada S, et al. **Gan No Rinsho** 1990 Feb;36(2):181–6 (Eng. Abstr.) **(Jpn)**

[Role of cancer thermography for detection of breast cancer] Yokoe T, et al. **Gan No Rinsho** 1990 Jul;36(8):885–9 (Eng. Abstr.) **(Jpn)**

[A clinicopathological study on carcinoembryonic antigen in breast cancer] Asagoe T, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Apr 20;25(4):793–8 (Eng. Abstr.) **(Jpn)**

[Study on carbohydrate antigen NCC-ST-439 in breast cancer] Suzuki S, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 May 20;25(5):1019–26 (Eng. Abstr.) **(Jpn)**

[Occult carcinoma of the breast presenting as an axillary node enlargement] Murai H, et al. **Nippon Geka Gakkai Zasshi** 1989 Dec;90(12):2015–20 (Eng. Abstr.) **(Jpn)**

[Clinical significance of CA 15-3 assay as a tumor marker] Goto M, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:967–70 **(Jpn)**

[Breast tumor—a diagnostic challenge] Røkke O, et al. **Tidsskr Nor Laegeforen** 1990 Mar 10;110(7):819–22 (Eng. Abstr.) **(Nor)**

[Early (minimal) breast cancer and possibilities of its detection] Badowski A, et al. **Wiad Lek** 1989 May 1; 42(9):622–31 **(Pol)**

[Neurilemmoma of the breast] Bialik AIa, et al. **Khirurgiia (Mosk)** 1990 Apr;(4):122–3 **(Rus)**

[Giant sarcoma of the breast] Kushelev AE. **Khirurgiia (Mosk)** 1990 Apr;(4):123 **(Rus)**

[Comparative evaluation of thermographic and radiothermometric methods of examination during mass screening of women with dyshormonal hyperplasia of the breast] Terent'ev IG, et al. **Khirurgiia (Mosk)** 1990 Apr; (4):30–2 (Eng. Abstr.) **(Rus)**

[Thermography with glucose loading in the examination of women at high risk of developing breast cancer] Gabuniia RI, et al. **Med Radiol (Mosk)** 1990 Feb;35(2):20–2 (Eng. Abstr.) **(Rus)**

[Errors in the diagnosis of breast cancer] Demidov VP, et al. **Sov Med** 1989;(11):95–9 **(Rus)**

[Cost-effective and early detection of oncologic pathology] Zmeul VK, et al. **Sov Zdravookhr** 1990;(3):56–9 (Eng. Abstr.) **(Rus)**

[Differential diagnosis of nipple discharge] Martyniuk VV, et al. **Vestn Khir** 1990 Feb;144(2):140–2 (Eng. Abstr.) **(Rus)**

[Differential diagnosis of breast tumors with limited growth] Rozhkova NI, et al. **Vestn Rentgenol Radiol** 1989 Jul–Aug; (4):50–3 (Eng. Abstr.) **(Rus)**

[Criteria for selecting patients with breast cancer for organ-saving operations] Demidov VP, et al. **Vopr Onkol** 1990;36(5):529–35 (Eng. Abstr.) **(Rus)**

[Quantitative characterization of nuclear polymorphism of the epithelial cells in fibroadenomatosis and cancer of the breast] Ganina KP, et al. **Vopr Onkol** 1989;35(12):1444–9 (Eng. Abstr.) **(Rus)**

[Active thermography in the diagnosis of breast cancer] Mazurin VIa, et al. **Vopr Onkol** 1989;35(10):1229–31 (Eng. Abstr.) **(Rus)**

[The importance of thermography in the diagnosis of oncologic diseases] Bilynskii BT, et al. **Vrach Delo** 1990 Mar;(3):95–7 **(Rus)**

[Contact thermography in the differential diagnosis of benign tumors and cancer of the breast] Geshelin SA, et al. **Vrach Delo** 1989 Aug;(8):103–5 (Eng. Abstr.) **(Rus)**

[The significance of puncture biopsy and cytological diagnosis in the early detection and treatment of carcinoma of the breast] Nikolov J, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:325–8 (Eng. Abstr.) **(Scr)**

[The importance of systematic examinations in women for the detection of breast cancer] Mušanović M, et al. **Med Arh** 1987;41(4):185–7 (Eng. Abstr.) **(Scr)**

[Diagnosis of breast cancer done at health care centers—a medical records study on quality] Olofsson L. **Lakartidningen** 1989 Oct 11;86(41):3455–6 **(Swe)**

DRUG THERAPY

Treatment of advanced breast cancer. Research frontiers and direction of progress. The 1989 Nordic Post Graduate Seminar. Riksgransen, Sweden, 23–26 April 1989. Proceedings. **Acta Oncol** 1990;29(3):323–400

Weekly oral idarubicin in postmenopausal women with advanced breast cancer. A phase II study. Bastholt L, et al. **Acta Oncol** 1990;29(2):143–6

How to improve cytotoxic therapy in advanced breast cancer. Bastholt L, et al. **Acta Oncol** 1990;29(3):349–55 (37 ref.)

Oral idarubicin in the treatment of advanced breast cancer. Bastholt L, et al. **Acta Oncol** 1989;28(6):893–7

Advanced breast cancer. A randomised trial of epidoxorubicin at two different dosages and two administration systems. Ebbs SR, et al. **Acta Oncol** 1989; 28(6):887–92

Weekly anthracycline in the treatment of advanced breast cancer. Gundersen S, et al. **Acta Oncol** 1989;28(6):883–5

Reversible nail loss after cancer chemotherapy. Kumar L, et al. **Acta Oncol** 1990;29(4):471

New endocrine drugs for treatment of advanced breast cancer. Lønning PE. **Acta Oncol** 1990;29(3):379–86 (71 ref.)

Oral high-dose progestins as treatment for advanced breast cancer. Lundgren S, et al. **Acta Oncol** 1989;28(6):811–6

New cytotoxic drugs in treatment of breast cancer. Mouridsen HT. **Acta Oncol** 1990;29(3):343–7 (51 ref.)

Weekly doxorubicin in the treatment of metastatic breast carcinoma. Nylén U, et al. **Acta Oncol** 1989;28(4):515–7

Systemic therapy of metastatic breast cancer. Rose C. **Acta Oncol** 1990;29(3):361–5

Drug sensitivity testing of human breast cancer. Tveit KM, et al. **Acta Oncol** 1990;29(3):335–8 (11 ref.)

Continuous intravenous infusion of 5-fluorouracil in the treatment of refractory breast cancer. Chang AY, et al. **Am J Clin Oncol** 1989 Oct;12(5):453–5

Neoadjuvant chemotherapy or chemotherapy and endocrine therapy in locally advanced breast carcinoma. A prospective, randomized study. Cocconi G, et al. **Am J Clin Oncol** 1990 Jun;13(3):226–32

Long-term complete remission of stage IV breast cancer after high-dose chemotherapy and autologous bone marrow transplantation. Dunphy FR 2d, et al. **Am J Clin Oncol** 1990 Aug;13(4):364–6

Combination chemotherapy with oral etoposide plus intravenous cyclophosphamide in liver metastases of breast cancer. Estape J, et al. **Am J Clin Oncol** 1990 Apr; 13(2):98–100

120 hours simultaneous infusion of cisplatin and fluorouracil in metastatic breast cancer. Fernández Hidalgo O, et al. **Am J Clin Oncol** 1989 Oct;12(5):397–401

Randomized trial of doxorubicin alone or combined with vincristine and mitomycin C in women with metastatic breast cancer. Ingle JN, et al. **Am J Clin Oncol** 1989 Dec; 12(6):474–80

Evaluation of trilostane plus hydrocortisone in women with metastatic breast cancer and prior hormonal therapy exposure. Ingle JN, et al. **Am J Clin Oncol** 1990 Apr; 13(2):93–7

Esorubicin (4'-deoxydoxorubicin, NSC 267469) in advanced breast cancer. A phase II study of the CALGB. Muss HB, et al. **Am J Clin Oncol** 1990 Jun;13(3):233–7

Effective control of CMF-related emesis with high-dose dexamethasone: results of a double-blind crossover trial with metoclopramide and placebo. Pollera CF, et al. **Am J Clin Oncol** 1989 Dec;12(6):524–9

Impact of administration-related factors on outcome of adjuvant chemotherapy for primary breast cancer. Pronzato P, et al. **Am J Clin Oncol** 1989 Dec;12(6):481–5

Mitoxantrone—a useful palliative therapy in advanced breast cancer. Robertson JF, et al. **Am J Clin Oncol** 1989 Oct; 12(5):393–6

Arterial thrombosis associated with adjuvant chemotherapy for breast carcinoma: a Cancer and Leukemia Group B Study. Wall JG, et al. **Am J Med** 1989 Nov;87(5):501–4

Validity of the clinical alert on breast cancer. Spratt JS, et al. **Am J Surg** 1990 Feb;159(2):195–8 (26 ref.)

Effect of preoperative chemotherapy on mastectomy for locally advanced breast cancer. Danforth DN Jr, et al. **Am Surg** 1990 Jan;56(1):6–11

Systemic therapy in patients with node-negative breast cancer. A commentary based on two National Surgical Adjuvant Breast and Bowel Project (NSABP) clinical trials. Fisher B, et al. **Ann Intern Med** 1989 Nov 1; 111(9):703–12

Estrogen deprivation in breast cancer. Clinical, experimental, and biological aspects. Nicholson RI, et al. **Ann N Y Acad Sci** 1990;595:316–27

Ocular toxicity of tamoxifen. Gerner EW. **Ann Ophthalmol** 1989 Nov;21(11):420–3

Growth-inhibitory effects of epidermal growth factor on human breast cancer and carcinoma of the esophagus transplanted into nude mice. Murayama Y. **Ann Surg** 1990 Mar;211(3):263–8

Growth modulation effects of synthetic steroids on rat prostatic adenocarcinoma and human breast adenocarcinoma cells in vitro. Mickey DD, et al. **Anticancer Drug Des** 1990 May;5(2):221–35

A pharmacological rationale for neoadjuvant chemotherapy with adriamycin in locally advanced breast cancer. Gasparini G, et al. **Anticancer Res** 1990 Jan–Feb; 10(1):193–6

Tumor-inhibiting potential of ZK 112.993, a new progesterone antagonist, in hormone-sensitive, experimental rodent and human mammary tumors. Schneider MR, et al. **Anticancer Res** 1990 May–Jun; 10(3):683–7

Advanced breast cancer: response to somatostatin. Stolfi R, et al. **Anticancer Res** 1990 Jan–Feb;10(1):203–4

Tamoxifen use, oestrogen binding and serum lipids in postmenopausal women with breast cancer. Ingram D. **Aust N Z J Surg** 1990 Sep;60(9):673–5

Sequential alternating medroxyprogesterone acetate and epirubicin in the treatment of advanced breast cancer. Smith JA, et al. **Aust N Z J Surg** 1989 Nov;59(11):869–72

New endocrine approaches to breast cancer. Howell A, et al. **Baillieres Clin Endocrinol Metab** 1990 Mar;4(1):67–84 (104 ref.)

Chemotherapy-induced changes in the energetics of human breast cancer cells; 31P- and 13C-NMR studies. Neeman M, et al. **Biochim Biophys Acta** 1990 May 2;1052(2):255–63

A randomized controlled study of (2"R)-4'-O-tetrahydropyranyladriamycin and adriamycin in combination with cyclophosphamide and 5-fluorouracil in the treatment of advanced and recurrent breast cancer. Clinical Study Group of THP for Breast Cancer in Japan. Tominaga T, et al. **Biomed Pharmacother** 1989;43(4):271–8

A quality-of-life-oriented endpoint for comparing therapies. Gelber RD, et al. **Biometrics** 1989 Sep;45(3):781–95

Prednisolone enhancement of primary endocrine anticancer treatment: a possible anti-angiogenic effect [letter; comment] Beranek JT. **Br J Cancer** 1989 Jul;60(1):149 Comment on: Br J Cancer 1988 Nov;58(5):626–30.

The use of granulocyte colony-stimulating factor to increase the intensity of treatment with doxorubicin in patients with advanced breast and ovarian cancer. Bronchud MH, et al. **Br J Cancer** 1989 Jul;60(1):121–5

Bone mineral density after adjuvant chemotherapy for premenopausal breast cancer. Bruning PF, et al. **Br J Cancer** 1990 Feb;61(2):308–10

Dose-intense weekly cyclophosphamide, methotrexate, 5-fluorouracil, vincristine and prednisolone (CMFP) in advanced breast cancer. Cebon JS, et al. **Br J Cancer** 1990 Jan;61(1):133–6

Use of luteinising hormone-releasing hormone agonist (leuprorelin) in advanced post-menopausal breast cancer: clinical and endocrine effects. Crighton IL, et al. **Br J Cancer** 1989 Oct;60(4):644–8

Dose intensity in cancer chemotherapy. Dodwell DJ, et al. **Br J Cancer** 1990 Jun;61(6):789–94 (42 ref.)

Adjuvant chemotherapy for early breast cancer. Henderson IC. **Br J Cancer** 1990 May;61(5):652–4 (25 ref.)

A pilot study of quinidine and epirubicin in the treatment of advanced breast cancer. Jones RD, et al. **Br J Cancer** 1990 Jul;62(1):133–5

A limited sampling procedure for estimating adriamycin pharmacokinetics in cancer patients. Launay MC, et al. **Br J Cancer** 1989 Jul;60(1):89–92

Treatment of breast cancer with aromatase inhibitors—current status and future prospects. Lønning PE, et al. **Br J Cancer** 1989 Jul;60(1):5–8 (62 ref.)

West Midlands Oncology Association trials of adjuvant chemotherapy in operable breast cancer: results after a median follow-up of 7 years. I. Patients with involved axillary lymph nodes. Morrison JM, et al. **Br J Cancer** 1989 Dec;60(6):911–8

West Midlands Oncology Association trials of adjuvant chemotherapy in operable breast cancer: results after a median follow-up of 7 years. II. Patients without involved axillary lymph nodes. Morrison JM, et al. **Br J Cancer** 1989 Dec;60(6):919–24

Phase I/II study of the anti-oestrogen zindoxifene (D16726) in the treatment of advanced breast cancer. A Cancer Research Campaign Phase I/II Clinical Trials Committee study. Stein RC, et al. **Br J Cancer** 1990 Mar;61(3):451–3

Weekly epirubicin for breast cancer with liver metastases and abnormal liver biochemistry. Twelves CJ, et al. **Br J Cancer** 1989 Dec;60(6):938–41

Tamoxifen—the story so far. Fraser SC, et al. **Br J Clin Pract** 1989 Oct;43(10):380–2 (14 ref.)

Mitoxantrone use in breast cancer patients with elevated bilirubin. Chlebowski RT, et al. **Breast Cancer Res Treat** 1989 Dec;14(3):267–74

Adjuvant systemic therapy: state of the art, 1989. Henderson IC. **Breast Cancer Res Treat** 1989 Oct;14(1):3–22 (51 ref.)

Long-term adjuvant tamoxifen therapy for breast cancer. Jordan VC. **Breast Cancer Res Treat** 1990 May; 15(3):125–36 (106 ref.)

Megestrol acetate versus aminoglutethimide for metastatic breast cancer. Lundgren S, et al. **Breast Cancer Res Treat** 1989 Nov;14(2):201–6

Megestrol acetate in breast cancer—a panel discussion. McGuire WL, et al. **Breast Cancer Res Treat** 1989 Oct; 14(1):33–8

Endocrine effects of combined somatostatin analog and bromocriptine therapy in women with advanced breast cancer. Manni A, et al. **Breast Cancer Res Treat** 1989 Dec; 14(3):289–98

Prognostic factors in locally advanced noninflammatory breast cancer. Long-term results following primary

chemotherapy. Valagussa P, et al. **Breast Cancer Res Treat** 1990 May;15(3):137–47

Immunohistochemical estrogen receptor determination in paraffin-embedded tissue. Prediction of response to hormonal treatment in advanced breast cancer. Andersen J, et al. **Cancer** 1989 Nov 1;64(9):1901–8

High risk of therapy-related leukemia and preleukemia after therapy with prednimustine, methotrexate, 5-fluorouracil, mitoxantrone, and tamoxifen for advanced breast cancer. Andersson M, et al. **Cancer** 1990 Jun 1;65(11):2460–4

Breast cancer adjuvant therapy. Carbone PP. **Cancer** 1990 Sep 15;66(6 Suppl):1378–86 (22 ref.)

Combination chemotherapy and high-dose cyclophosphamide intensification for poor prognosis breast cancer. A Southwest Oncology Group Study. Ellis GK, et al. **Cancer** 1989 Dec 15;64(12):2409–15

Opportunities in clinical trials. Adjuvant breast cancer. Friedman MA, et al. **Cancer** 1990 Sep 15;66(6 Suppl):1412–5

Tamoxifen for breast cancer: associated endometrial cancer [editorial] Gusberg SB. **Cancer** 1990 Apr 1;65(7):1463–4

Evaluation of antitumor activity in a human breast tumor/nude mouse model with a special emphasis on treatment dose. Inaba M, et al. **Cancer** 1989 Oct 15; 64(8):1577–82

The Duke AFM Program. Intensive induction chemotherapy for metastatic breast cancer. Jones RB, et al. **Cancer** 1990 Aug 1;66(3):431–6

Effect of methenolone enanthate (NSC–64967) in advanced cancer of the breast. Kennedy BJ, et al. **Cancer** 1968 Feb; 21(2):197–201

Evaluation of the continuous infusion of etoposide plus cisplatin in metastatic breast cancer. A collaborative North Central Cancer Treatment Group/Mayo Clinic phase II study. Krook JE, et al. **Cancer** 1990 Feb 1;65(3):418–21

A phase I trial of CGS 16949A. A new aromatase inhibitor. Lipton A, et al. **Cancer** 1990 Mar 15;65(6):1279–85

A prospective randomized trial of doxorubicin versus idarubicin in the treatment of advanced breast cancer. Lopez M, et al. **Cancer** 1989 Dec 15;64(12):2431–6

Results of initial doxorubicin, 5-fluorouracil, and cyclophosphamide combination chemotherapy for inflammatory carcinoma of the breast. Maloisel F, et al. **Cancer** 1990 Feb 15;65(4):851–5

Phase II study of doxorubicin plus ifosfamide/mesna in patients with advanced breast cancer. Millward MJ, et al. **Cancer** 1990 Jun 1;65(11):2421–5

Inability of medroxyprogesterone acetate to down regulate estrogen receptor level in human breast cancer. Noguchi S, et al. **Cancer** 1990 Mar 15;65(6):1375–9

Role of adjuvant chemotherapy in male breast cancer. Patel HZ 2d, et al. **Cancer** 1989 Oct 15;64(8):1583–5

Endocrine versus endocrine plus five-drug chemotherapy in postmenopausal women with stage II estrogen receptor-positive breast cancer. Pearson OH, et al. **Cancer** 1989 Nov 1;64(9):1819–23

Response to second-line hormone treatment for advanced breast cancer. Predictive value of ploidy determination. Seymour L, et al. **Cancer** 1990 Jun 15;65(12):2720–4

Reduced cardiotoxicity of doxorubicin by a 6-hour infusion regimen. A prospective randomized evaluation. Shapira J, et al. **Cancer** 1990 Feb 15;65(4):870–3

Intraarterial induction chemotherapy in locally advanced stage III breast cancer. Stephens FO. **Cancer** 1990 Aug 15;66(4):645–50

Pregnancy and offspring after adjuvant chemotherapy in breast cancer patients. Sutton R, et al. **Cancer** 1990 Feb 15;65(4):847–50

Adjuvant chemohormonal therapy with cyclophosphamide, methotrexate, 5-fluorouracil, and prednisone (CMFP) or CMFP plus tamoxifen compared with CMF for premenopausal breast cancer patients. An Eastern Cooperative Oncology Group trial. Tormey DC, et al. **Cancer** 1990 Jan 15;65(2):200–6

Ifosfamide + mitoxantrone in advanced breast cancer previously treated with anthracyclines. Bellmunt J, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S81–4

Phase II study of teniposide in advanced breast cancer. Boas J, et al. **Cancer Chemother Pharmacol** 1990;25(6):463–4

Ifosfamide, methotrexate, and 5-fluorouracil: effective combination in resistant breast cancer. Gad-el-Mawla N, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S85–6

Treatment of metastatic breast cancer with the combination of ifosfamide, epirubicin and 5-fluorouracil. Ghavamzadeh A. **Cancer Chemother Pharmacol** 1990;26 Suppl:S66–8

Epirubicin and ifosfamide in patients with refractory breast cancer and other metastatic solid tumours. Hoffmann W, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S69–70

A phase II study of intensive-dose epirubicin/verapamil as induction therapy followed by intensive-dose ifosfamide for advanced breast cancer. Langenbuch T, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S93–6

Ifosfamide/etoposide and mesna uroprotection in advanced breast cancer. Manegold C, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S87–90

Phase II study of mitoxantrone for liver metastases from breast cancer. O'Reilly SM, et al. **Cancer Chemother Pharmacol** 1989;25(1):73–4

Experience of the Belgian Society of Medical Oncology with single-administration 5 g/m2 ifosfamide with mesna as second- or third-line therapy in advanced breast cancer. Paridaens R, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S63–5

4'-O-tetrahydropyranyl-doxorubicin in advanced breast cancer: a phase II study. Samonigg H, et al. **Cancer Chemother Pharmacol** 1990;26(4):293–6

High-dose ifosfamide and mesna in advanced breast cancer. A phase II study. Sanchiz F, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S91–2

Ifosfamide combination chemotherapy in advanced breast cancer. Schmid H, et al. **Cancer Chemother Pharmacol** 1990; 26 Suppl:S71–3

Distribution of doxorubicin to normal breast and tumour tissue in patients undergoing mastectomy. Stallard S, et al. **Cancer Chemother Pharmacol** 1990;25(4):286–90

Treatment of advanced breast cancer in postmenopausal women with 4-hydroxyandrostenedione. Stein RC, et al. **Cancer Chemother Pharmacol** 1990;26(1):75–8

Toxicity of intra-arterial doxorubicin in locally advanced breast cancer. Twelves CJ, et al. **Cancer Chemother Pharmacol** 1990;25(6):459–62

Pharmacokinetics of toremifene and its metabolites in patients with advanced breast cancer. Wiebe VJ, et al. **Cancer Chemother Pharmacol** 1990;25(4):247–51

Chromosomal differences between acute nonlymphocytic leukemia in patients with prior solid tumors and prior hematologic malignancies. A study of 14 cases with prior breast cancer. Mamuris Z, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):43–50

The immunological status of breast cancer patients during treatment with a new antiestrogen, toremifene. Valavaara R, et al. **Cancer Immunol Immunother** 1990;31(6):381–6

Low-dose aminoglutethimide plus steroid replacement in advanced breast cancer patients resistant to conventional therapies. Crivellari D, et al. **Cancer Invest** 1989;7(2):113–6

A phase I trial of toremifene, a new antiestrogen. Hamm JT. **Cancer Invest** 1990;8(2):273–4

Osteocalcin as a biological marker in the therapeutic management of breast cancer bone metastases. Neri B, et al. **Cancer Invest** 1989;7(6):551–5

Phase II experience with toremifene in the treatment of ER-positive breast cancer of postmenopausal women. Valavaara R. **Cancer Invest** 1990;8(2):275–6

A response in advanced post-menopausal breast cancer during treatment with the luteinising hormone releasing hormone agonist—Zoladex. Cassano A, et al. **Cancer Lett** 1989 Nov 30;48(2):123–4

Progestin action and progesterone receptors in breast cancer. Chamness GC. **Cancer Res** 1989 Dec 15;49(24 Pt 1):7176–9

Leukemia following chemotherapy for breast cancer. Curtis RE, et al. **Cancer Res** 1990 May 1;50(9):2741–6

Effects of 2-deoxyglucose on drug-sensitive and drug-resistant human breast cancer cells: toxicity and magnetic resonance spectroscopy studies of metabolism. Kaplan O, et al. **Cancer Res** 1990 Feb 1;50(3):544–51

Development of antiestrogens and their use in breast cancer: eighth Cain memorial award lecture. Lerner LJ, et al. **Cancer Res** 1990 Jul 15;50(14):4177–89 (165 ref.)

Effect of treatment with 4-hydroxyandrostenedione on the peripheral conversion of androstenedione to estrone and in vitro tumor aromatase activity in postmenopausal women with breast cancer. Reed MJ, et al. **Cancer Res** 1990 Jan 1;50(1):193–6

Preliminary correlations of clinical outcome with in vitro chemosensitivity of second passage human breast cancer cells. Smith HS, et al. **Cancer Res** 1990 May 15; 50(10):2943–8

Preliminary study of the treatment of advanced breast cancer in postmenopausal women with the aromatase inhibitor CGS 16949A. Stein RC, et al. **Cancer Res** 1990 Mar 1; 50(5):1381–4

Induction, accumulation, and persistence of sister chromatid exchanges in women with breast cancer receiving cyclophosphamide, adriamycin, and 5-fluorouracil chemotherapy. Tucker JD, et al. **Cancer Res** 1990 Aug 15;50(16):4951–6

Endocrine therapies in breast and prostate cancer. **Cancer Treat Res** 1988;39:1–156

Aromatase inhibitors as new endocrine therapy for breast cancer. Brodie AM, et al. **Cancer Treat Res** 1988;39:51–65 (62 ref.)

Progestational agents in the treatment of breast cancer. Carpenter JT Jr. **Cancer Treat Res** 1988;39:147–56 (62 ref.)

Luteinizing hormone-releasing hormone agonists in the treatment of breast cancer. Harvey HA. **Cancer Treat Res** 1988;39:39–49 (27 ref.)

Antiestrogen therapy for breast cancer: current strategies and future prospects. Jordan VC, et al. **Cancer Treat Res** 1988; 39:97–110 (82 ref.)

Clinical use of aromatase inhibitors in the treatment of breast cancer. Manni A, et al. **Cancer Treat Res** 1988;39:67–81 (67 ref.)

Preclinical studies and antitumor mechanism of action of LHRH analogues. Nicholson RI, et al. **Cancer Treat Res** 1988;39:1–23 (147 ref.)

Effects of estrogens and antiestrogens on cell proliferation: implications for the treatment of breast cancer. Osborne CK. **Cancer Treat Res** 1988;39:111–29 (47 ref.)

Dual-energy CT-scan quantification of recalcification in osteolyses of the vertebral body due to mammary carcinomas in the course of antineoplastic treatment. Crone-Münzebrock W, et al. **Clin Exp Metastasis** 1990 Mar-Apr;8(2):173–9

Adjuvant chemotherapy and endocrine therapy for node-positive and node-negative breast carcinoma. Albain KS. **Clin Obstet Gynecol** 1989 Dec;32(4):835–57 (61 ref.)

Chemotherapy outreach: a team approach. Nemecek A, et al. **Dimens Health Serv** 1990 Mar;67(2):29–31, 35

Evaluation of ventricular function by echocardiography and radionuclide angiography in patients treated with mitoxantrone. Villani F, et al. **Drugs Exp Clin Res** 1989; 15(10):501–6

Endocrine treatment of breast cancer in women. Santen RJ, et al. **Endocr Rev** 1990 May;11(2):221–65 (282 ref.)

Weekly Adriamycin vs. 4-epidoxorubicin every second week in advanced breast cancer. A randomized trial. The Norwegian Breast Cancer Group. Gundersen S, et al. **Eur J Cancer** 1990 Jan;26(1):45–8

Antineoplastic effect of erbstatin on human mammary and esophageal tumors in athymic nude mice. Toi M, et al. **Eur J Cancer** 1990;26(6):722–4

TAT-59, a new triphenylethylene derivative with antitumor activity against hormone-dependent tumors. Toko T, et al. **Eur J Cancer** 1990 Mar;26(3):397–404

A randomized comparison of megestrol acetate (MA) and medroxyprogesterone acetate (MPA) in patients with advanced breast cancer. Willemse PH, et al. **Eur J Cancer** 1990 Mar;26(3):337–43

Norethisterone acetate as secondary endocrine treatment in advanced breast cancer. da Luz RJ, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1879–80

A controlled study of the ocular effects of tamoxifen in conventional dosage in the treatment of breast carcinoma. Longstaff S, et al. **Eur J Cancer Clin Oncol** 1989 Dec; 25(12):1805–8

Primary medical therapy for operable breast cancer. Mansi JL, et al. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1623–7

Combined tamoxifen and anabolic steroid as primary treatment for breast carcinoma in the elderly. Pain JA, et al. **Eur J Surg Oncol** 1990 Jun;16(3):225–8

Combination chemotherapy and radiation for stage IV breast cancer during pregnancy. Willemse PH, et al. **Gynecol Oncol** 1990 Feb;36(2):281–4

High-dose cyclophosphamide in patients with operable breast cancer: recombinant human GM-CSF ameliorates drug-induced leukopenia and thrombocytopenia. Bregni M, et al. **Haematologica** 1990 Jan-Feb;75 Suppl 1:95–8

Systemic therapy in resectable breast cancer. Bonadonna G, et al. **Hematol Oncol Clin North Am** 1989 Dec;3(4):727–42 (37 ref.)

The use of chemotherapy in metastatic breast cancer. Garber JE, et al. **Hematol Oncol Clin North Am** 1989 Dec; 3(4):807–21 (78 ref.)

Proceedings of the International Symposium on Endocrine Therapy. Monaco, November 19–21, 1988. **Horm Res** 1989; 32 Suppl 1:1–271

Breast cancer—which treatment? Baum M. **Horm Res** 1989; 32 Suppl 1:183–4

Endocrinology of Zoladex in postmenopausal women. Dowsett M, et al. **Horm Res** 1989;32 Suppl 1:209–12

Zoladex: therapeutic effects in postmenopausal breast cancer. Harris AL, et al. **Horm Res** 1989;32 Suppl 1:213–6; discussion 217

The relationship between age and the effect of adjuvant therapies in women with primary breast cancer. Howell A. **Horm Res** 1989;32 Suppl 1:231–7

LHRH analogues in early breast cancer. Jonat W. **Horm Res** 1989;32 Suppl 1:223–5

Zoladex in the treatment of premenopausal metastatic breast cancer patients. Kaufmann M. **Horm Res** 1989;32 Suppl 1:202–5

Adjuvant hormonal therapy: whom to treat. Mouridsen HT. **Horm Res** 1989;32 Suppl 1:169–72

Review of the endocrine actions of luteinising hormone-releasing hormone analogues in premenopausal women with breast cancer. Nicholson RI, et al. **Horm Res** 1989;32 Suppl 1:198–201

Treatment of stage I breast cancer: the NSABP experience. Redmond C, et al. **Horm Res** 1989;32 Suppl 1:175–80

Zoladex in advanced breast cancer. Robertson JF, et al. **Horm Res** 1989;32 Suppl 1:206–8

Endocrine management of advanced breast cancer. Rose C, et al. **Horm Res** 1989;32 Suppl 1:189–96; discussion 197 (52 ref.)

Management of advanced breast cancer. Rubens RD. **Horm Res** 1989;32 Suppl 1:185–7; discussion 187–8

Breast cancer—which patients? Stewart HJ. **Horm Res** 1989; 32 Suppl 1:181–2

A comparison of two and three years of adjuvant tamoxifen. Wolmark N, et al. **Horm Res** 1989;32 Suppl 1:166–8

Immunohistochemical analysis of P-glycoprotein expression correlated with chemotherapy resistance in locally advanced breast cancer [see comments] Ro J, et al. **Hum Pathol** 1990 Aug;21(8):787–91 Comment in: Hum Pathol 1990 Aug;21(8):785–6.

Adjuvant therapy for node-negative breast cancer: a proactive view. Glick JH. **Important Adv Oncol** 1990; :183–97 (45 ref.)

Adjuvant therapy for node-negative breast cancer: a cautious interpretation. Henderson IC. **Important Adv Oncol** 1990; :199–216 (64 ref.)

Hormone and cytotoxic drug responsiveness of cultured human breast cancer cells resistant to specific hormones. Coldham NG, et al. **Int J Cancer** 1990 Apr 15;45(4):712–8

Epirubicin high-dose therapy in advanced breast cancer: preliminary clinical data. Epirubicin as a single agent in

breast cancer. Neri B, et al.
Int J Clin Pharmacol Ther Toxicol 1989 Aug;27(8):388–91
Phase I clinical trial of doxorubicin and iproplatin combination chemotherapy in patients with breast cancer. Casper ES, et al. **Invest New Drugs** 1989 Jul;7(2–3):189–93
Phase II evaluation of gallium nitrate by continuous infusion in breast cancer. Jabboury K, et al. **Invest New Drugs** 1989 Jul;7(2–3):225–9
Phase II trials with flavone acetic acid (NCS. 347512, LM975) in patients with advanced carcinoma of the breast, colon, head and neck and melanoma. Kaye SB, et al.
Invest New Drugs 1990;8 Suppl 1:S95–9
Phase II trial of PCNU in breast carcinoma. Rubins JM, et al. **Invest New Drugs** 1989 Jul;7(2–3):239–41
Pirarubicin (4'-o-tetrahydropyranil-adriamycin) for treatment of advanced breast cancer. A Clinical Phase II study. Scheithauer W, et al. **Invest New Drugs** 1990 May; 8(2):207–10
Elliptinium: phase II study in advanced measurable breast cancer. Treat J, et al. **Invest New Drugs** 1989 Jul; 7(2–3):231–4
The role of adjuvant therapy in the management of node negative breast cancer. Young V, et al. **Ir Med J** 1990 Mar;83(1):34–5
Rationale for combining tamoxifen and interferon in the treatment of advanced breast cancer. Porzsolt F, et al.
J Cancer Res Clin Oncol 1989;115(5):465–9
Anthracycline–carboplatin combination in metastatic breast cancer. Thürlimann B, et al. **J Cancer Res Clin Oncol** 1990; 116(1):13–4
Need for new adjuvant chemotherapy schedules in breast carcinoma [letter] Derman U. **J Chemother** 1990 Jun; 2(3):203–4
5–Fluorouracil and dipyridamole in metastatic breast cancer: a pilot study. Zaniboni A, et al. **J Chemother** 1989 Aug; 1(4):266–8
The emerging role of 5–fluorouracil and leucovorin in the treatment of advanced breast cancer. A review. Zaniboni A. **J Chemother** 1989 Oct;1(5):330–7 (34 ref.)
Analysis of dose intensity in doxorubicin–containing adjuvant chemotherapy in stage II and III breast carcinoma. Ang PT, et al. **J Clin Oncol** 1989 Nov;7(11):1677–84
Chemotherapy versus tamoxifen versus chemotherapy plus tamoxifen in node–positive, estrogen receptor–positive breast cancer patients: results of a multicentric Italian study. Breast Cancer Adjuvant Chemo–Hormone Therapy Cooperative Group. Boccardo F, et al. **J Clin Oncol** 1990 Aug;8(8):1310–20
Weight change in women treated with adjuvant therapy or observed following mastectomy for node–positive breast cancer. Camoriano JK, et al. **J Clin Oncol** 1990 Aug; 8(8):1327–34
Adjuvant systemic therapy for breast cancer in the elderly: competing causes of mortality. International Breast Cancer Study Group. Castiglione M, et al. **J Clin Oncol** 1990 Mar; 8(3):519–26
Treatment of estrogen receptor–negative or hormonally refractory breast cancer with double high–dose chemotherapy intensification and bone marrow support. Dunphy FR, et al. **J Clin Oncol** 1990 Jul;8(7):1207–16
Adjuvant trial of 12 cycles of CMFPT followed by observation or continuous tamoxifen versus four cycles of CMFPT in postmenopausal women with breast cancer: an Eastern Cooperative Oncology Group phase III study [published erratum appears in J Clin Oncol 1990 Sep;8(9):1603] Falkson HC, et al. **J Clin Oncol** 1990 Apr; 8(4):599–607
Effect of patients' expectations of benefit with standard breast cancer adjuvant chemotherapy on participation in a randomized clinical trial: a clinical vignette study. Fetting JH, et al. **J Clin Oncol** 1990 Sep;8(9):1476–82
Postoperative chemotherapy and tamoxifen compared with tamoxifen alone in the treatment of positive–node breast cancer patients aged 50 years and older with tumors responsive to tamoxifen: results from the National Surgical Adjuvant Breast and Bowel Project B–16. Fisher B, et al.
J Clin Oncol 1990 Jun;8(6):1005–18
Two months of doxorubicin–cyclophosphamide with and without interval reinduction therapy compared with 6 months of cyclophosphamide, methotrexate, and fluorouracil in positive–node breast cancer patients with tamoxifen–nonresponsive tumors: results from the National Surgical Adjuvant Breast and Bowel Project B–15. Fisher B, et al. **J Clin Oncol** 1990 Sep;8(9):1483–96
Long–term adjuvant tamoxifen in early breast cancer: effect on bone mineral density in postmenopausal women. Fornander T, et al. **J Clin Oncol** 1990 Jun;8(6):1019–24
Recombinant human granulocyte–macrophage colony–stimulating factor reduces hematologic toxicity and widens clinical applicability of high–dose cyclophosphamide treatment in breast cancer and non–Hodgkin's lymphoma [see comments] Gianni AM, et al. **J Clin Oncol** 1990 May;8(5):768–78 Comment in: J Clin Oncol 1990 May;8(5):761–4.
Phase I trial of murine monoclonal antibody L6 in breast, colon, ovarian, and lung cancer. Goodman GE, et al.
J Clin Oncol 1990 Jun;8(6):1083–92
The missing era of breast cancer chemotherapy [letter; comment] Greenspan EM. **J Clin Oncol** 1990 Mar;8(3):565 Comment on: J Clin Oncol 1989 Oct;7(10):1380–97.
Small differences, big implications. Henderson IC.
J Clin Oncol 1990 Aug;8(8):1297–300 (16 ref.)
Aromatase inhibition with 4–hydroxyandrostenedione in the treatment of postmenopausal patients with advanced breast cancer: a phase II study. Höffken K, et al.
J Clin Oncol 1990 May;8(5):875–80
The forgotten group at risk for breast cancer [letter] Jordan VC. **J Clin Oncol** 1990 Aug;8(8):1445–6
A randomized trial comparing 12 weeks versus 36 weeks of adjuvant chemotherapy in stage II breast cancer. Levine MN, et al. **J Clin Oncol** 1990 Jul;8(7):1217–25
High–dose consolidation therapy with autologous stem cell rescue in stage IV breast cancer. Williams SF, et al.
J Clin Oncol 1989 Dec;7(12):1824–30
Sixteen–week dose–intense chemotherapy in the adjuvant treatment of breast cancer [see comments] Abeloff MD, et al. **J Natl Cancer Inst** 1990 Apr 4;82(7):570–4 Comment in: J Natl Cancer Inst 1990 Apr 4;82(7):542–3. Comment in: J Natl Cancer Inst 1990 Jul 18;82(14):1220–1.
Primary chemotherapy to avoid mastectomy in tumors with diameters of three centimeters or more. Bonadonna G, et al. **J Natl Cancer Inst** 1990 Oct 3;82(19):1539–45
Dose–intense adjuvant treatment of high–risk breast cancer [editorial; comment] Bonadonna G, et al.
J Natl Cancer Inst 1990 Apr 4;82(7):542–3 Comment on: J Natl Cancer Inst 1990 Apr 4;82(7):570–4.
Sixteen–week, dose–intense chemotherapy in adjuvant treatment of breast cancer [letter; comment] Buzdar AU, et al. **J Natl Cancer Inst** 1990 Jul 18;82(14):1220–1 Comment on: J Natl Cancer Inst 1990 Apr 4;82(7):570–4.
Primary chemotherapy can avoid mastectomy, but there is more to it than that. DeVita VT Jr.
J Natl Cancer Inst 1990 Oct 3;82(19):1522–4 (22 ref.)
Node–negative breast cancer: tamoxifen and chemosuppression. Jordan VC. **J Natl Cancer Inst** 1990 Jun 20;82(12):1068–9
Differential effects of estrogen and antiestrogen on in vitro clonogenic growth of human breast cancers in soft agar. Nomura Y, et al. **J Natl Cancer Inst** 1990 Jul 4; 82(13):1146–9
Anti–laminin receptor antibody targeting of liposomes with encapsulated doxorubicin to human breast cancer cells in vitro. Rahman A, et al. **J Natl Cancer Inst** 1989 Dec 6; 81(23):1794–800
Antiestrogens proving their potential [news] Smigel K.
J Natl Cancer Inst 1990 Jan 17;82(2):87–8
Tamoxifen with or without chemotherapy? [news] Smigel K. **J Natl Cancer Inst** 1990 Jun 20;82(12):1003–4
Cystic ovarian necrosis complicating tamoxifen therapy for breast cancer in a premenopausal woman. A case report. Jolles CJ, et al. **J Reprod Med** 1990 Mar;35(3):299–300
The role of endocrine therapy in primary breast cancer. Baum M. **J Steroid Biochem** 1990 Jun 22;36(3):187–9
Response to toremifene (Fc–1157a) therapy in tamoxifen failed patients with breast cancer. Preliminary communication. Ebbs SR, et al. **J Steroid Biochem** 1990 Jun 22;36(3):239
The effects of sequential treatment with ethynyloestradiol and medroxyprogesterone acetate on oestrogen and progestogen receptors in breast cancer. Ghilchik M, et al.
J Steroid Biochem 1989;34(1–6):403–5
Toremifene, a new antiestrogenic compound in the treatment of metastatic mammary cancer. A phase II study. Gundersen S. **J Steroid Biochem** 1990 Jun 22;36(3):233–4
Effect of toremifene in breast cancer patients. Preliminary communication. Hindy I, et al. **J Steroid Biochem** 1990 Jun 22;36(3):225–6
Alterations in the urine excretion of estrogen metabolites in breast cancer women treated with aminoglutethimide. Lønning PE, et al. **J Steroid Biochem** 1989 Oct; 33(4A):565–71
Postmenopausal estrogen synthesis and metabolism: alterations caused by aromatase inhibitors used for the treatment of breast cancer. Lønning PE, et al.
J Steroid Biochem 1990 Mar;35(3–4):355–66 (152 ref.)
Influence of progestins on serum hormone levels in postmenopausal women with advanced breast cancer—II. A differential effect of megestrol acetate and medroxyprogesterone acetate on serum estrone sulfate and sex hormone binding globulin. Lundgren S, et al.
J Steroid Biochem 1990 Jun;36(1–2):105–9
Influence of progestins on serum hormone levels in postmenopausal women with advanced breast cancer—I. General findings. Lundgren S, et al. **J Steroid Biochem** 1990 Jun;36(1–2):99–104
Phase II clinical study of toremifene in patients with metastatic breast cancer. Preliminary communication. Modig H, et al. **J Steroid Biochem** 1990 Jun 22;36(3):235–6
Phase II clinical study of high–dose toremifene in patients with advanced breast cancer. Modig H, et al.
J Steroid Biochem 1990 Jun 22;36(3):237–8
Gn–RH agonists in breast and gynaecologic cancer treatment. Nicholson RI, et al. **J Steroid Biochem** 1989 Oct; 33(4B):801–4 (28 ref.)
Treatment of advanced breast cancer with 20 mg toremifene, a phase II study. Preliminary communication. Pyrhönen S, et al. **J Steroid Biochem** 1990 Jun 22;36(3):227–8
Safety and efficacy of toremifene in breast cancer patients. A phase II study. Valavaara R, et al.
J Steroid Biochem 1990 Jun 22;36(3):229–31
Are we positive about node negative breast cancer? Donegan WL. **J Surg Oncol** 1990 Apr;43(4):199–202
Antitumor activity and pharmacokinetics of a morpholino–anthracycline derivative (KRN8602) against human breast carcinoma xenografts serially transplanted into nude mice. Kubota T, et al. **Jpn J Cancer Res** 1990 Aug;81(8):827–33
The effect of adjuvant therapy with or without tamoxifen on the endocrine function of patients with breast cancer. Yasumura T, et al. **Jpn J Surg** 1990 Jul;20(4):369–75
Breast cancer and hormone replacement therapy [letter; comment] **Lancet** 1990 Feb 3;335(8684):297–8 Comment on: Lancet 1989 Nov 11;2(8672):1164.
Pentoxifylline and wellbeing in patients with cancer [letter] Dezube BJ, et al. **Lancet** 1990 Mar 17;335(8690):662
Duration of chemotherapy in advanced breast carcinoma [letter; comment] Glaholm J, et al. **Lancet** 1990 Apr 28; 335(8696):1033 Comment on: Lancet 1990 Jan 27;335(8683):186–90.
Adjuvant chemo–endocrine therapy in postmenopausal women with breast cancer and axillary–node metastases [letter; comment] Goldhirsch A, et al. **Lancet** 1990 May 5;335(8697):1099–100 Comment on: Lancet 1990 Mar 3;335(8688):541.
Comparison of short–term and continuous chemotherapy (mitozantrone) for advanced breast cancer [see comments] Harris AL, et al. **Lancet** 1990 Jan 27;335(8683):186–90 Comment in: Lancet 1990 Apr 7;335(8693):853–4. Comment in: Lancet 1990 Apr 28;335(8696):1033.
Adjuvant tamoxifen in postmenopausal stage II breast cancer five years on [letter] [see comments] Mikl J, et al.
Lancet 1990 Mar 3;335(8688):541 Comment in: Lancet 1990 May 5;335(8697):1099–100.
Short–term continuous infusion of mitozantrone for advanced breast cancer [letter; comment] Mulder NH, et al.
Lancet 1990 Apr 7;335(8693):853–4 Comment on: Lancet 1990 Jan 27;335(8683):186–90.
Inflammatory carcinoma of the breast: Part II. Elias EG.
Md Med J 1990 Jan;39(1):13–4
Adjuvant chemotherapy of early breast cancer.
Med Lett Drugs Ther 1990 May 18;32(818):49–50
Diethylstilbestrol revisited in advanced breast cancer management. Boyer MJ, et al. **Med Pediatr Oncol** 1990; 18(4):317–20
Acute leukemia after adjuvant chemotherapy for breast cancer. Gabrail NY. **Mo Med** 1989 Oct;86(10):689–90
P–glycoprotein–independent mechanism of resistance to VP–16 in multidrug–resistant tumor cell lines: pharmacokinetic and photoaffinity labeling studies. Politi PM, et al. **Mol Pharmacol** 1990 Jun;37(6):790–6
Endometrial carcinoma in five patients with breast cancer on tamoxifen therapy. Mathew A, et al.
N Y State J Med 1990 Apr;90(4):207–8
Mitoxantrone, methotrexate and chlorambucil in metastatic breast cancer, a combination with relatively low subjective toxicity. Burghouts JT. **Neth J Med** 1990 Feb;36(1–2):43–5
Mitoxantrone, methotrexate, and 5–fluorouracil (MMF) in hormone–refractory advanced breast cancer. Nortier JW, et al. **Neth J Med** 1989 Dec;35(5–6):225–31
The anticancer effect of antineoplaston A–10 on human breast cancer serially transplanted to athymic mice. Hashimoto K, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Jan 20;25(1):1–5
High–dose 4'–epiadriamycin for treatment of breast cancer refractory to standard dose anthracycline chemotherapy: achievement of second responses. Bezwoda WR, et al.
Oncology 1990;47(1):4–8
Elliptinium acetate in metastatic breast cancer—a phase II study. Buzdar AU, et al. **Oncology** 1990;47(2):101–4
Doxorubicin and etoposide in the treatment of advanced measurable breast cancer. Giaccone G, et al. **Oncology** 1990;47(2):105–8
Salvage chemotherapy for breast cancer patients treated with adjuvant adriamycin–containing regimen. Kosmidis PA, et al. **Oncology** 1990;47(1):1–3
Phase II study of pirarubicin (THP–adriamycin) in metastatic breast cancer patients. Lenk H, et al. **Oncology** 1990; 47(2):97–100
Vindesine and mitomycin C in metastatic breast cancer. A Southeastern Cancer Study Group Trial. Lyss AP, et al.
Oncology 1989;46(6):357–9
Tamoxifen approved for premenopausal women with advanced breast cancer [news]
Oncology (Williston Park) 1989 Jun;3(6):44
Four studies support adjuvant treatment of women with node–negative breast cancer. **Oncology (Williston Park)** 1989 Apr;3(4):125–8, 133–4, 136 passim
Patterns of care: how American oncologists are treating stage II breast cancer. **Oncology (Williston Park)** 1987 Mar; 1(1):54, 56
Adjuvant chemotherapy of breast cancer—the Consensus Development Conference revisited. Abeloff MD, et al.
Oncology (Williston Park) 1988 Apr;2(4):21–6, 29–33 (33 ref.)
Clinical trials referral resource. Adjuvant therapy of breast cancer. Cheson BD. **Oncology (Williston Park)** 1989 Jun; 3(6):70–1, 74–5, 78
Clinical trials referral resource. Advanced breast cancer. Cheson BD. **Oncology (Williston Park)** 1989 Jul;3(7):113–4, 121–3
Role of tamoxifen in the long–term treatment and prevention of breast cancer. Jordan VC. **Oncology (Williston Park)** 1988 Sep;2(9):19–28
A promising regimen for stage IIIB breast cancer [letter] Madajewicz S. **Oncology (Williston Park)** 1987 Sep;1(7):17
When is adjuvant treatment of stage IIIA breast cancer

recommended? [letter] Siemers R. **Oncology (Williston Park)** 1987 Dec;1(10):39

Systemic therapy of locally advanced breast cancer: review and guidelines. Swain SM, et al. **Oncology (Williston Park)** 1989 Jan;3(1):21–8; discussion 28–30, 34 (50 ref.)

Bioavailability of cyclophosphamide in the CMF regimen. Gheuens E, et al. **Onkologie** 1990 Jun;13(3):203–6

Vindesine–epirubicin versus vindesine–mitoxantrone in metastatic breast cancer. Hausmaninger H, et al. **Onkologie** 1989 Oct;12(5):225–9

Randomized clinical trial comparing mitoxantrone with epirubicin and with doxorubicin, each combined with cyclophosphamide in the first-line treatment of patients with metastatic breast cancer. Heidemann E, et al. **Onkologie** 1990 Feb;13(1):24–7

Phase II study of pirarubicin in metastatic breast cancer. Kleeberg UR, et al. **Onkologie** 1990 Jun;13(3):175–9

Adjuvant systemic therapy for breast cancer. Love N, et al. **Postgrad Med** 1989 Oct;86(5):197–201, 204–6 (16 ref.)

Tamoxifen and breast cancer: indications and response. Hughes R, et al. **Practitioner** 1989 Jun 8;233(1470):810, 813, 815

Antiestrogens as chemopreventive agents in breast cancer: promise and issues in evaluation. Love RR. **Prev Med** 1989 Sep;18(5):661–71 (77 ref.)

Using a population-based cancer registry for recruitment in a pilot cancer control study. Newcomb PA, et al. **Prev Med** 1990 Jan;19(1):61–5

The kinetics of human granulopoiesis following treatment with granulocyte colony-stimulating factor in vivo. Lord BI, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(23):9499–503

Mechanisms of hormone and cytotoxic drug interactions in the development and treatment of breast cancer. Clarke R, et al. **Prog Clin Biol Res** 1990;322:243–78 (216 ref.)

Recent developments in aromatase inhibition as a potential treatment for oestrogen-dependent breast cancer. Banting L, et al. **Prog Med Chem** 1989;26:253–98 (218 ref.)

Adjuvant therapy of primary breast cancer. **Recent Results Cancer Res** 1989;115:1–292

The role of adjuvant endocrine therapy in primary breast cancer. Baum M, et al. **Recent Results Cancer Res** 1989; 115:136–43

The Milan experience with adjuvant chemotherapy in premenopausal breast cancer. Bonadonna G, et al. **Recent Results Cancer Res** 1989;115:113–7

Adjuvant chemotherapy for node-negative breast cancer patients. Bonadonna G, et al. **Recent Results Cancer Res** 1989;115:175–9 (23 ref.)

Adjuvant therapies in breast cancer and quality of life: a critical review of the TWiST concept. Brunner KW. **Recent Results Cancer Res** 1989;115:239–43

Dose response for adjuvant chemotherapy of breast cancer: experimental and clinical considerations. Frei E 3d. **Recent Results Cancer Res** 1989;115:25–7

Randomized perioperative therapy in operable breast cancer: the Ludwig Trial V. Goldhirsch A, et al. **Recent Results Cancer Res** 1989;115:43–53

Adjuvant chemo-endocrine therapy or endocrine therapy alone for postmenopausal patients: Ludwig Studies III and IV. Goldhirsch A, et al. **Recent Results Cancer Res** 1989; 115:153–62

New information on drug resistance: implications for the adjuvant treatment of breast cancer. Goldie JH. **Recent Results Cancer Res** 1989;115:8–16 (22 ref.)

Is there a role for perioperative adjuvant cytotoxic therapy in the treatment of early breast cancer? Houghton J, et al. **Recent Results Cancer Res** 1989;115:54–61 (10 ref.)

Correlation of dose intensity and prognosis in adjuvant chemotherapy: an extended controversy. Hryniuk WM. **Recent Results Cancer Res** 1989;115:17–24

Chemo- or endocrine adjuvant therapy alone or combined in postmenopausal patients (GABG Trial 1). Jonat W, et al. **Recent Results Cancer Res** 1989;115:163–9

Adjuvant chemo- and endocrine therapy alone or in combination in premenopausal patients (GABG Trial 1). Kaufmann M, et al. **Recent Results Cancer Res** 1989; 115:118–25

How to improve adjuvant treatment results in postmenopausal patients. Mouridsen HT. **Recent Results Cancer Res** 1989;115:144–52

Experimental basis and clinical reality of preoperative (neoadjuvant) chemotherapy in breast cancer. Ragaz J, et al. **Recent Results Cancer Res** 1989;115:28–35

Behavioral side effects of adjuvant chemotherapy. Redd WH, et al. **Recent Results Cancer Res** 1989;115:272–8

Randomized multicenter 2 x 2-factorial design study of chemo/endocrine therapy in operable, node-positive breast cancer (protocol 2). Scheurlen H. **Recent Results Cancer Res** 1989;115:226–35

Endocrine effects of adjuvant chemotherapy in premenopausal women: suggestions for the future. Tormey DC. **Recent Results Cancer Res** 1989;115:106–12

Lethal anuria complicating high dose ifosfamide chemotherapy in a breast cancer patient with an impaired renal function. Richard V, et al. **Rev Med Brux** 1990 Mar; 11(3):64–7

High-dose thiotepa alone and in combination regimens with bone marrow support. Antman K, et al. **Semin Oncol** 1990 Feb;17(1 Suppl 3):33–8

Mechanisms of drug resistance in breast cancer. Dalton WS. **Semin Oncol** 1990 Aug;17(4 Suppl 7):37–9 (10 ref.)

Basic principles in the use of adjuvant therapy. Henderson IC. **Semin Oncol** 1990 Aug;17(4 Suppl 7):40–4 (15 ref.)

Recent advances in the management of lung and breast cancer. Future directions. Salmon SE. **Semin Oncol** 1990 Aug;17(4 Suppl 7):50–2

Salvage therapy for metastatic disease. Sedlacek SM. **Semin Oncol** 1990 Aug;17(4 Suppl 7):45–9 (15 ref.)

Preclinical studies relating to the use of thiotepa in the high-dose setting alone and in combination. Teicher BA, et al. **Semin Oncol** 1990 Feb;17(1 Suppl 3):18–32

Current status of endocrine treatment of carcinoma of the breast. Buzdar AU. **Semin Surg Oncol** 1990;6(2):77–82 (60 ref.)

Endocrine therapy monitored by hormone cytological examination in advanced female breast cancer. Iglódi F. **Ther Hung** 1989;37(4):205–8

A pleiotropic response associated with resistance of breast cancer cells to antineoplastic drugs and hormonal agents. Vickers PP, et al. **Trends Pharmacol Sci** 1988 Dec; 9(12):443–5 (33 ref.)

Exacerbation of metastatic disease shortly after administration of tamoxifen in ER negative advanced breast carcinoma. A case report. Cocconi G, et al. **Tumori** 1989 Dec 31;75(6):566–9

Cisplatin and mitomycin C in advanced chemotherapy-refractory breast cancer. Crivellari D, et al. **Tumori** 1990 Jun 30;76(3):234–7

Mitoxantrone (M) and vinblastine (V) in the treatment of advanced breast cancer. Cruciani G, et al. **Tumori** 1990 Apr 30;76(2):196–8

Sequential alternate administration of tamoxifen and medroxyprogesterone acetate in advanced breast cancer: clinical-biological randomized study. De Lena M, et al. **Tumori** 1990 Apr 30;76(2):190–5

Etoposide and mitomycin-C in pretreated metastatic breast cancer. Menichetti ET, et al. **Tumori** 1989 Oct 31; 75(5):473–4

Acute non lymphoid leukemia following CMF treatment as adjuvant therapy in positive node breast cancer. Case report. Zampa G, et al. **Tumori** 1990 Apr 30;76(2):182–3

[Mitoxantrone containing multi-drug chemotherapy in the management of malignancies. Collaborative Group for Clinical Trial of Mitoxantrone] **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):300–3 (Eng. Abstr.) **(Chi)**

[Phase II clinical trial on mitoxantrone] Gao HR. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):204–6 (Eng. Abstr.) **(Chi)**

[Preoperative intensive chemotherapy of operable breast cancer] Zhang B. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):228–30 (Eng. Abstr.) **(Chi)**

[The development of an original drug—a shining example for the decade] Sundquist H. **Duodecim** 1989; 105(17):1484–7 **(Fin)**

[Radiotherapy with neoadjuvant chemotherapy] Baillet F, et al. **Ann Med Interne (Paris)** 1989;140(5):349–52 (Eng. Abstr.) **(Fre)**

[Preoperative chemotherapy in breast cancer. Results based on the size of the tumor and multiple foci (95 patients) (letter)] Tran TM, et al. **Ann Med Interne (Paris)** 1989; 140(7):647–8 **(Fre)**

[Intravenous adriamycin in ambulatory patients: value of an optimal planification of sampling times combined with a Bayesian evaluation of pharmacokinetic parameters] Launay MC, et al. **Bull Cancer (Paris)** 1989;76(8):903–4 **(Fre)**

[Evaluation of mitoxantrone in 1989] Coiffier B. **Pathol Biol (Paris)** 1989 Nov;37(9):1007–8 **(Fre)**

[Breast cancer: chemotherapy as salvage after failure of locoregional treatment by exclusive radiotherapy (letter)] Le Cesne A, et al. **Presse Med** 1989 Sep 16;18(28):1392 **(Fre)**

[Relay chemotherapy using continuous perfusion of cisplatin and fluoro-uracil in advanced cancer of the breast. Analysis of a series of 50 cases] Chauvergne J, et al. **Rev Fr Gynecol Obstet** 1990 Apr;85(4):211–9 (Eng. Abstr.) **(Fre)**

[Adjuvant treatment of breast cancer—routine in every case?] Seematter RJ. **Rev Med Suisse Romande** 1990 Apr; 110(4):311–3 **(Fre)**

[Therapeutic results and toxic side effects of the combination cytostasan, adriamycin and vincristine as second-line therapy of metastatic breast cancer] Brockmann B, et al. **Arch Geschwulstforsch** 1989;59(5):341–6 (Eng. Abstr.) **(Ger)**

[Hormones in gynecologic oncology] Maass H. **Arch Gynecol Obstet** 1989;245(1–4):466–73 **(Ger)**

[Zoladex as a depot GnRH agonist in premenopausal metastatic breast cancer] Schmid H, et al. **Arch Gynecol Obstet** 1989;245(1–4):741–3 **(Ger)**

[Adjuvant chemotherapy of breast cancer with the CMFV protocol] Merkle E, et al. **Geburtshilfe Frauenheilkd** 1990 Mar;50(3):215–9 (Eng. Abstr.) **(Ger)**

[The peripheral hormone level in premenopausal patients with benign breast changes and their modification by various hormone therapies] Bohnet HG, et al. **Gynakologe** 1989 Aug;22(4):255–61 (44 ref.) **(Ger)**

[Danazol therapy in benign breast diseases] Goebel R, et al. **Gynakologe** 1989 Aug;22(4):262–70 (21 ref.) **(Ger)**

[Mechanism of action of danazol, personal clinical experiences and guidelines for the treatment of benign breast diseases] Schindler AE, et al. **Gynakologe** 1989 Aug; 22(4):271–3 (27 ref.) **(Ger)**

[Pneumo- and cardiotoxic side effects following combination chemotherapy with epirubicin and ifosfamide] Franzen D, et al. **Med Klin** 1990 Mar;85 Suppl 1:133–6, 170 **(Ger)**

[Adjuvant therapy also in node-negative breast cancer?] Barth JA. **Zentralbl Gynakol** 1990;112(2):57–9 **(Ger)**

[Local treatment of malignant pleural effusion in gynecologic tumors] Seitzer D, et al. **Zentralbl Gynakol** 1990; 112(9):567–76 (Eng. Abstr.) **(Ger)**

[Luteinizing hormone-releasing hormone agonists for treatment of breast cancer] Gez E, et al. **Harefuah** 1990 Jun 1;118(11):655–8 (31 ref.) **(Heb)**

[Therapeutic use of a gonadotropin releasing hormone analogue in breast cancer] Kahán Z, et al. **Orv Hetil** 1990 May 13;131(19):1033–6 (32 ref.) (Eng. Abstr.) **(Hun)**

[LHRH-analogues: clinical results in ovarian and breast cancer] Sismondi P, et al. **Minerva Ginecol** 1990 Jun; 42(6):227–37 (48 ref.) (Eng. Abstr.) **(Ita)**

[The use of LHRH analogs in gynecologic oncology] Sismondi P, et al. **Minerva Ginecol** 1990 May;42(5):177–86 (84 ref.) (Eng. Abstr.) **(Ita)**

[Phase I study of FK 435] Abe O, et al. **Gan No Rinsho** 1990 Jul;36(8):903–13 (Eng. Abstr.) **(Jpn)**

[Phase I clinical study of MX2 (KRN 8602)] Majima H. **Gan To Kagaku Ryoho** 1990 Mar;17(3 Pt 1):359–64 (Eng. Abstr.) **(Jpn)**

[Intra-arterial infusion chemotherapeutic effect of stage III breast cancer by survival rates] Masuoka H, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1678–81 (Eng. Abstr.) **(Jpn)**

[Results of tamoxifen-medroxyprogesterone acetate sequential therapy in 22 patients with recurrent breast cancer] Noguchi S, et al. **Gan To Kagaku Ryoho** 1989 Nov; 16(11):3555–8 (Eng. Abstr.) **(Jpn)**

[Efficacy of Cepharanthin for preventing leukopenia and thrombocytopenia induced by chemotherapy in breast cancer patient—prospective randomized study] Suzuki S, et al. **Gan To Kagaku Ryoho** 1990 Jun;17(6):1195–200 (Eng. Abstr.) **(Jpn)**

[Clinical results of UFT granule of enteric coating (UFT E granule). Osaka UFT E Granule Study Group] Taguchi T. **Gan To Kagaku Ryoho** 1990 Jul;17(7):1295–301 (Eng. Abstr.) **(Jpn)**

[A long-term follow-up study of intra-arterial infusion chemotherapy in locally advanced breast cancer] Takatsuka Y, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1682–6 (Eng. Abstr.) **(Jpn)**

[The effect of cepharanthin on adjuvant chemotherapy induced bone marrow suppression in patients with breast cancer] Tsukikawa S, et al. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 1):645–8 (Eng. Abstr.) **(Jpn)**

[A case of disseminated breast cancer successfully treated with medroxyprogesterone acetate] Tsumura I, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 1):1509–12 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of estramustine phosphate in the treatment of patients with advanced breast cancers] Wada T, et al. **Gan To Kagaku Ryoho** 1990 Sep;17(9):1901–4 (Eng. Abstr.) **(Jpn)**

[Experimental study of the effect of combined treatment of UFT with CDDP on human solid tumor-xenografts in nude mice] Yamada Y, et al. **Gan To Kagaku Ryoho** 1990 Jul;17(7):1327–31 (Eng. Abstr.) **(Jpn)**

[Enhancement of antitumor activity of mitomycin C against human breast carcinoma xenografts by pretreatment with KM 2210] Yamamoto T, et al. **Gan To Kagaku Ryoho** 1990 Jan;17(1):109–14 (Eng. Abstr.) **(Jpn)**

[Combination therapy with 5'DFUR and MPA as a second line treatment for advanced/recurrent breast cancer] Koyama H, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Mar 20;25(3):655–61 (Eng. Abstr.) **(Jpn)**

[Influence of endocrine therapy on the proliferation of estrogen (ER) positive cells and ER negative cells of human breast cancer (MCF-7)] Noguchi M, et al. **Nippon Geka Gakkai Zasshi** 1989 May;90(5):780–5 (Eng. Abstr.) **(Jpn)**

[Antitumor effect of alpha-difluoromethylornithine (DFMO) changes in ornithine decarboxylase (ODC) activity and polyamine (PA) levels in human tumor transplanted into nude mice] Umemoto S. **Nippon Geka Gakkai Zasshi** 1989 May;90(5):650–60 (Eng. Abstr.) **(Jpn)**

[Locally advanced breast cancer—primary treatment with tamoxifen] Melsom H, et al. **Tidsskr Nor Laegeforen** 1990 May 30;110(14):1815–6 (Eng. Abstr.) **(Nor)**

[Antiestrogens in the treatment of advanced breast cancer] Płużańska A, et al. **Pol Tyg Lek** 1989 Feb 13–20; 44(7–8):191–4 (Eng. Abstr.) **(Pol)**

[Possibility of 4'-epiadriamycin treatment of patients with malignant neoplasms and coexistent heart diseases with implanted pacemaker] Pawlicki M, et al. **Wiad Lek** 1990 Apr 1;43(7):281–4 (Eng. Abstr.) **(Pol)**

[Comparative evaluation of the cardiotoxic effects of antineoplastic antibiotics adriamycin and pharmorubicin] Valvere VIu, et al. **Kardiologiia** 1989 Sep;29(9):64–7 (Eng. Abstr.) **(Rus)**

[Hormonal control of disseminated breast cancer] Voznyl EK, et al. **Sov Med** 1990;(6):94–7 **(Rus)**

[Chemotherapy of disseminated forms of breast cancer using platinum derivatives] Gorbunova VA, et al. **Vopr Onkol** 1990;36(4):455–7 (Eng. Abstr.) **(Rus)**

[Possibilities and perspectives of adjuvant chemotherapy in

malignant tumors] Tanneberger S. **Vopr Onkol** 1989; 35(8):899–904 **(Rus)**

[The cellular sensitivity of the primary tumor and its metastases in breast cancer patients to cytostatics, interferon and tumor necrosis factor] Vorontsova AL, et al. **Vopr Onkol** 1989;35(11):1315–8 (Eng. Abstr.) **(Rus)**

[Chemotherapy of cancer of the breast] de la Garza Salazar JG. **Ginecol Obstet Mex** 1977 Oct;42(252):237–45 (4 ref.) (Eng. Abstr.) **(Spa)**

ECONOMICS

Per capita income in breast cancer patients. Walker AP, et al. **J Natl Med Assoc** 1989 Oct;81(10):1065–8

ENZYMOLOGY

Demonstration of cysteine proteinase inhibitors ACPI and NCPI in breast cancer and in cell lines MCF-7 and ZR-75-1. Kolář Z, et al.
Acta Univ Palacki Olomuc Fac Med 1989;122:137–42

Isolation and characterization of a novel dihydrofolate formylating enzyme from human MCF-7 breast cancer cells. Drake JC, et al. **Biochem Pharmacol** 1990 Feb 1; 39(3):615–8

Resistance to hydrogen peroxide associated with altered catalase mRNA stability in MCF7 breast cancer cells. Akman SA, et al. **Biochim Biophys Acta** 1989 Sep 21; 1009(1):70–4

Analysis by DNA polymerase alpha activity of human breast tumour proliferation and the effect of endocrine therapy. Coldham NG, et al. **Br J Cancer** 1990 Aug;62(2):263–6

Expression of glutathione S-transferase B1, B2, Mu and Pi in breast cancers and their relationship to oestrogen receptor status. Howie AF, et al. **Br J Cancer** 1989 Dec; 60(6):834–7

Prognostic significance of the estrogen-regulated protein, cathepsin D, in breast cancer. An immunohistochemical study. Henry JA, et al. **Cancer** 1990 Jan 15;65(2):265–71

Differential expression of glutathione S-transferase, glutathione peroxidase and glutathione reductase in normal and malignant human breast tissues. Singh SV, et al. **Cancer Lett** 1990 May 15;51(1):43–8

Aromatase inhibition by an enzyme-activated irreversible inhibitor in human carcinoma cell cultures. Brueggemeier RW, et al. **Cancer Res** 1990 Jun 15;50(12):3652–6

Cathepsin D in breast cancer cells can digest extracellular matrix in large acidic vesicles. Montcourrier P, et al. **Cancer Res** 1990 Sep 15;50(18):6045–54

Sex steroid hormone modulation of NADPH pathways in MCF-7 cells. Thomas M, et al. **Cancer Res** 1990 Feb 15; 50(4):1195–200

Regulation of ornithine decarboxylase gene expression in MCF-7 breast cancer cells by antiestrogens. Thomas T, et al. **Cancer Res** 1989 Nov 1;49(21):5852–7

Potency and specificity of CGS-16949A as an aromatase inhibitor. Santen RJ, et al. **Endocr Res** 1990;16(1):77–91

Casein kinase II is elevated in solid human tumours and rapidly proliferating non-neoplastic tissue. Münstermann U, et al. **Eur J Biochem** 1990 Apr 30;189(2):251–7

Cathepsin D assay in primary breast cancer and lymph nodes: relationship with c-myc, c-erb-B-2 and int-2 oncogene amplification and node invasiveness. Brouillet JP, et al. **Eur J Cancer** 1990 Apr;26(4):437–41

Expression of the progestin-induced fatty acid synthetase in benign mastopathies and breast cancer as measured by RNA in situ hybridization. Chalbos D, et al. **J Natl Cancer Inst** 1990 Apr 4;82(7):602–6

The effect of medroxyprogesterone acetate on aromatase and DNA polymerase alpha activities in breast tumours. Purohit A, et al. **J Steroid Biochem** 1989;34(1–6):443–6

Overexpression and hormonal regulation of pro-cathepsin D in mammary and endometrial cancer. Rochefort H, et al. **J Steroid Biochem** 1989;34(1–6):177–82

Urokinase-type plasminogen activator antigen and early relapse in breast cancer [letter] Jänicke F, et al. **Lancet** 1989 Oct 28;2(8670):1049

Cathepsin D: an independent prognostic factor for metastasis of breast cancer. Spyratos F, et al. **Lancet** 1989 Nov 11; 2(8672):1115–8

Cathepsin D in breast cancer [letter; comment] Pietras RJ, et al. **N Engl J Med** 1990 Jun 7;322(23):1673–4 Comment on: N Engl J Med 1990 Feb 1;322(5):297–302.

Regulation of fatty acid synthetase by progesterone in normal and tumoral human mammary glands. Chalbos D, et al. **Rev Esp Fisiol** 1990 Mar;46(1):43–6 (15 ref.)

Regulation, clinical and biological significance of cathepsin D in breast cancer. García M, et al. **Rev Esp Fisiol** 1990 Mar;46(1):39–41 (15 ref.)

Positive correlation of serum uridine diphosphate-galactosyltransferase levels with breast carcinoma. Paone JF, et al. **Surg Forum** 1978;29:158–60

[An uncommon form of thymidine kinase in breast cancers] Madec-Baron A, et al. **C R Acad Sci [III]** 1989; 309(17):669–73 (Eng. Abstr.) **(Fre)**

[Demonstration of pyrimidine nucleoside phosphorylases in breast cancer] Malette P, et al. **C R Soc Biol (Paris)** 1989; 183(2):101–7 (Eng. Abstr.) **(Fre)**

[A study of the proliferative activity of DNA polymerase alpha immunoreactivity in breast cancer] Nishimura R, et al. **Gan No Rinsho** 1989 Oct;35(12):1417–20 (Eng. Abstr.) **(Jpn)**

[Estrogen dependent plasminogen activator in breast cancer cells; experimental and clinical studies] Yamashita J, et al. **Nippon Geka Gakkai Zasshi** 1989 Nov;90(11):1932–8 (Eng. Abstr.) **(Jpn)**

[Activity of adenosine and thymidine metabolism enzymes in the blood of cancer patients of various ages] Borzenko BG. **Ukr Biokhim Zh** 1990 Jan-Feb;62(1):39–43 (Eng. Abstr.) **(Rus)**

[Aromatase activity in lymphocytes of cancer patients and healthy subjects] Bershtein LM, et al. **Vopr Onkol** 1990; 36(4):438–40 (Eng. Abstr.) **(Rus)**

[Activity of the enzymes of DNA metabolism in the blood of patients with breast cancer] Borzenko BG, et al. **Vopr Onkol** 1990;36(1):17–23 (Eng. Abstr.) **(Rus)**

[Activity of the proteolytic system in patients with breast cancer] Geshelin SA, et al. **Vopr Onkol** 1989;35(10):1191–8 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Validity of breast cancer registration from one hospital into the Swedish National Cancer Registry 1961–1970. Garne JP, et al. **Acta Oncol** 1990;29(2):125–8

Breast carcinoma in young women previously treated for Hodgkin disease. Cook KL, et al.
AJR Am J Roentgenol 1990 Jul;155(1):39–42

Increased incidence of carcinoma of the breast associated with abdominal adiposity in postmenopausal women. Folsom AR, et al. **Am J Epidemiol** 1990 May; 131(5):794–803

Social class and the black/white crossover in the age-specific incidence of breast cancer: a study linking census-derived data to population-based registry records. Krieger N. **Am J Epidemiol** 1990 May;131(5):804–14

Lactation and risk of breast cancer in a cohort of US women. London SJ, et al. **Am J Epidemiol** 1990 Jul;132(1):17–26

Re: "Potential for bias in case-control studies of oral contraceptives and breast cancer" [letter; comment] Lund E. **Am J Epidemiol** 1989 Nov;130(5):1066–8 Comment on: Am J Epidemiol 1988 Feb;127(2):205–12.

Re: "Multiple births and maternal risk of breast cancer" [letter; comment] Murphy M, et al. **Am J Epidemiol** 1990 Jul;132(1):199–201 Comment on: Am J Epidemiol 1989 May;129(5):865–73.

A case-control study of alcoholic beverage consumption and breast cancer. Rosenberg L, et al. **Am J Epidemiol** 1990 Jan;131(1):6–14

Letters on epidemiologic research methods [letter]
Am J Public Health 1990 May;80(5):622–4

Nulliparity, decade of first birth, and breast cancer in Connecticut cohorts, 1855 to 1945: an ecological study. Hahn RA, et al. **Am J Public Health** 1989 Nov; 79(11):1503–7

Factors associated with risk of breast cancer and persistence of symptoms in women with breast problems. Eskelinen M, et al. **Ann Chir Gynaecol** 1990;79(1):10–4

Body fat distribution and risk for breast cancer [letter; comment] Sönnichsen AC, et al. **Ann Intern Med** 1990 Jun 1;112(11):882 Comment on: Ann Intern Med 1990 Feb 1;12(3):182–6.

Mammography screening for breast cancer: first year results from Helsinki and surroundings. Pamilo M, et al.
Ann Med 1989 Aug;21(4):277–9

Cohort study of women affected by gross cystic disease. Correlation between cationic and hormonal composition of breast cyst fluid and the risk of breast cancer. Naldoni C, et al. **Ann N Y Acad Sci** 1990;586:272–5

The epidemiology of breast cyst disease in two British populations and the incidence of breast cancer in these groups. Skidmore FD. **Ann N Y Acad Sci** 1990;586:276–83

Breast cancer in Papua New Guinea: a survey of 10 years. SenGupta SK, et al. **Aust N Z J Surg** 1990 Jan;60(1):41–4

Prognostic factors in recurrent breast cancer: relationships to site of recurrence, disease-free interval, female sex steroid receptors, ploidy and histological malignancy grading. Blanco G, et al. **Br J Cancer** 1990 Jul;62(1):142–6

Rising incidence of breast cancer among young women in Sweden. Ranstam J, et al. **Br J Cancer** 1990 Jan;61(1):120–2

Coffee consumption and the risk of breast cancer. A prospective study of 14,593 Norwegian women. Vatten LJ, et al. **Br J Cancer** 1990 Aug;62(2):267–70

Racial and age differences in multiple primary cancers after breast cancer: a population-based analysis. Schwartz AG, et al. **Breast Cancer Res Treat** 1989 Nov;14(2):245–54

The Avon Breast Screening Programme. Davies Z.
Bristol Med Chir J 1989 May;104(2):33–4

Carcinoma of the breast, the National Screening Programme [editorial] Webb AJ. **Bristol Med Chir J** 1989 May;104(2):31

Trends in breast cancer incidence in greater Bombay: an epidemiological assessment. Yeole BB, et al.
Bull World Health Organ 1990;68(2):245–9

A case-control study of dietary and nondietary risk factors for breast cancer in Shanghai. Yu SZ, et al.
Cancer Res 1990 Aug 15;50(16):5017–21

What can a woman do about her risk of dying of breast cancer? Henderson IC. **Curr Probl Cancer** 1990 Jul-Aug; 14(4):161–230 (225 ref.)

Multiple primary cancers of the breast, endometrium and ovary. Ewertz M, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1927–32 (22 ref.)

Reproductive factors and cancers of the breast, ovary and endometrium. Franceschi S. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1933–43 (87 ref.)

Nutritional factors and cancers of the breast, endometrium and ovary. La Vecchia C. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1945–51 (61 ref.)

Alcohol and breast cancer: update from an Italian case-control study. La Vecchia C, et al.
Eur J Cancer Clin Oncol 1989 Dec;25(12):1711–7

Cancers of the breast, endometrium and ovary: geographic correlations. Parkin DM. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1917–25 (29 ref.)

The role of exogenous hormones in the epidemiology of breast, ovarian and endometrial cancer. van Leeuwen FE, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1961–72 (117 ref.)

Risk factors of female cancers in Ragusa population (Sicily). 2. Breast cancer. Cusimano R, et al. **Eur J Epidemiol** 1989 Dec;5(4):497–506

Clinico-statistico-epidemiologic survey on benign and malignant breast diseases among patients hospitalized at a gynecologic department. Pasquinucci C, et al.
Eur J Gynaecol Oncol 1983;4(3):220–3

Breast cancer stage, social class and the impact of screening. Roberts MM, et al. **Eur J Surg Oncol** 1990 Feb;16(1):18–21

Bivariate survival models for analysis of genetic and environmental effects in twins. Thomas DC, et al.
Genet Epidemiol 1990;7(2):121–35

Breast cancer and pregnancy. Titcomb CL.
Hawaii Med J 1990 Jan;49(1):18, 20–2, 24 (15 ref.)

Some endocrine characteristics of early menarche, a risk factor for breast cancer, are preserved into adulthood. Apter D, et al. **Int J Cancer** 1989 Nov 15;44(5):783–7

Urinary estrogens and male-to-female breast cancer ratios. Bernstein L, et al. **Int J Cancer** 1989 Nov 15;44(5):954–6

A case-control study of diet and breast cancer in Argentina. Iscovich JM, et al. **Int J Cancer** 1989 Nov 15;44(5):770–6

Risk factors for male breast cancer: a Franco-Swiss case-control study. Lenfant-Pejovic MH, et al.
Int J Cancer 1990 Apr 15;45(4):661–5

Oral contraceptives and risk of breast cancer. Paul C, et al.
Int J Cancer 1990 Sep 15;46(3):366–73

Frequency of meat and fish intake and risk of breast cancer in a prospective study of 14,500 Norwegian women. Vatten LJ, et al. **Int J Cancer** 1990 Jul 15;46(1):12–5

Relationship of mammographic parenchymal patterns with breast cancer risk factors and risk of breast cancer in a prospective study. de Stavola BL, et al.
Int J Epidemiol 1990 Jun;19(2):247–54

Dietary exposures and other factors of possible prognostic significance in relation to tumour size and nodal involvement in early-stage breast cancer. Hebert JR, et al. **Int J Epidemiol** 1989 Sep;18(3):518–26

Hospital visitor-companions as a source of controls for case-control studies in the Philippines. Ngelangel CA.
Int J Epidemiol 1989;18(4 Suppl 2):S50–3

Reproductive patterns and cancer incidence in women: a population-based correlation study in the USSR. Remennick LI. **Int J Epidemiol** 1989 Sep;18(3):498–510

What will it take to reduce the incidence of breast cancer? [editorial] Allen TW. **J Am Osteopath Assoc** 1990 Jan; 90(1):24, 26

Risk factors for breast cancer according to age at diagnosis in a French case-control study. Bouchardy C, et al.
J Clin Epidemiol 1990;43(3):267–75

Stage-shift cancer screening model. Connor RJ, et al.
J Clin Epidemiol 1989;42(11):1083–95

The independent associations of parity, age at first full term pregnancy, and duration of breastfeeding with the risk of breast cancer. Cancer and Steroid Hormone Study Group. Layde PM, et al. **J Clin Epidemiol** 1989;42(10):963–73

Characteristics of reproductive life and risk of breast cancer in a case-control study of young nulliparous women. Lê MG, et al. **J Clin Epidemiol** 1989;42(12):1227–33

The validity of different control groups in a case-control study. Oral contraceptive use and breast cancer in young women. Lund E. **J Clin Epidemiol** 1989;42(10):987–93

Identification of high risk groups for breast cancer by means of logistic models. Negri E, et al. **J Clin Epidemiol** 1990; 43(5):413–8

The epidemiology of mass breast cancer screening—a plea for a valid measure of benefit [see comments] Schmidt JG. **J Clin Epidemiol** 1990;43(3):215–25 (47 ref.) Comment in: J Clin Epidemiol 1990;43(3):227–34; discussion 235–9.

A dissent from Dr Schmidt's appraisal of evidence on breast cancer screening [comment] Shapiro S.
J Clin Epidemiol 1990;43(3):227–34; discussion 235–9 Comment on: J Clin Epidemiol 1990;43(3):215–25.

ACR accredited suburban mammography center. Three year results. Braman DM, et al. **J Fla Med Assoc** 1989 Dec; 76(12):1031–4 (18 ref.)

Breast cancer and idiopathic galactorrhea. Rothenberg RE, et al. **J Med Assoc Ga** 1990 Jun;79(6):363–5

Body fat distribution and breast cancer in the Framingham Study. Ballard-Barbash R, et al. **J Natl Cancer Inst** 1990 Feb 21;82(4):286–90

Rising incidence of breast cancer: relationship to stage and receptor status. Glass AG, et al. **J Natl Cancer Inst** 1990 Apr 18;82(8):693–6

Breast cancer incidence is on the rise—but why? [news] Newman PA. **J Natl Cancer Inst** 1990 Jun 20; 82(12):998–1000

Evaluation of the increase in breast cancer incidence in relation to mammography use. White E, et al.
J Natl Cancer Inst 1990 Oct 3;82(19):1546–52

Breast cancer as seen in King Fahd University Hospital,

Al-Khobar, 1983-1986. Anim JT, et al. **J R Coll Surg Edinb** 1989 Aug;34(4):201-4

Alcohol consumption and cancers of hormone-related organs in females. Kato I, et al. **Jpn J Clin Oncol** 1989 Sep; 19(3):202-7

Changes in diagnostic pattern in breast pathology [letter] Linell F, et al. **Lancet** 1990 Jun 9;335(8702):1402

Breast cancer at Hiroshima and Nagasaki. Rosen P. **Med Hypotheses** 1990 Mar;31(3):209-10

Breast cancer incidence among women in Missouri. Implications for cancer control. Chang JC, et al. **Mo Med** 1989 Dec;86(12):809-14

Mammography and breast cancer [letter] Dady PJ. **N Z Med J** 1990 Jun 27;103(892):304-5

Differential misclassification bias and dietary recall for the distant past using a food frequency questionnaire. Hislop TG, et al. **Nutr Cancer** 1990;13(4):223-33

Mammography utilization in relation to stage at diagnosis for breast cancer: the Kaiser Permanente experience in a large pre-paid health plan. Hiatt RA, et al. **Prog Clin Biol Res** 1990;339:227-38

An overview of female breast cancer. Horm JW. **Prog Clin Biol Res** 1990;339:217-26 (12 ref.)

Time trends and international geographic variations related to diet and cancer. Zaridze DG. **Prog Clin Biol Res** 1990; 346:21-34 (15 ref.)

Breast cancer in Rhode Island. **R I Med J** 1989 Oct; 72(10):375

Mammographic parenchymal patterns and breast cancer risk. A case control study of a population-based screening experience. Ciatto S, et al. **Radiol Med (Torino)** 1990 Apr; 79(4):346-8

Estimation of radiation risk from screening mammography: recent trends and comparison with expected benefits. Feig SA, et al. **Radiology** 1990 Mar;174(3 Pt 1):638-47

Multiple primary thyroid and breast cancer in Israel, 1960-1976. Stein M, et al. **S Afr Med J** 1989 Dec 16; 76(12):664-6

Projected impact of the trend toward delayed childbearing on breast cancer incidence in the Saarland/FRG. Brenner H, et al. **Soz Praventivmed** 1990;35(1):1-4

Breast cancer in West Indian women in Trinidad. Raju GC, et al. **Trop Geogr Med** 1989 Jul;41(3):257-60

Risk of breast cancer, diet and internal migrations in northern Italy. Toniolo P, et al. **Tumori** 1989 Oct 31;75(5):406-9

Breast cancer detection error [letter] Larson PA. **Wis Med J** 1989 Dec;88(12):8

Bilateral breast carcinoma: 28 years' experience. Gülay H, et al. **World J Surg** 1990 Jul-Aug;14(4):529-33; discussion 534

[Breast cancer in southeast North Brabant and in North Limburg; trends in incidence and earlier diagnosis in an unscreened female population, 1975-1986] Coebergh JW, et al. **Ned Tijdschr Geneeskd** 1990 Apr 14;134(15):760-5 (Eng. Abstr.) **(Dut)**

[Breast cancer in The Netherlands (letter)] Kuijpens JL. **Ned Tijdschr Geneeskd** 1990 Apr 14;134(15):780-1 **(Dut)**

[Breast cancer in southeast Noord Brabant and in Noord Limburg; incidence and advancement of the diagnosis in a non-screened female population, 1975-1986 (letter)] Peer PG. **Ned Tijdschr Geneeskd** 1990 Aug 11;134(32):1565-6 **(Dut)**

[A survey of the epidemiology of breast cancer in The Netherlands] van Bon-Martens MJ, et al. **Ned Tijdschr Geneeskd** 1990 Feb 10;134(6):287-91 (Eng. Abstr.) **(Dut)**

[Observed effects of the mass screening program for breast cancer in Nijmegen in 1975-1986] van Bon-Martens MJ, et al. **Ned Tijdschr Geneeskd** 1990 Feb 10;134(6):291-5 (Eng. Abstr.) **(Dut)**

[Gynecological cancers in Madagascar (observed by the Laboratory of Pathological Anatomy of the Pasteur Institute of Madagascar 1954-1987)] Coulanges P, et al. **Arch Inst Pasteur Madagascar** 1989;56(1):243-9 **(Fre)**

[Cancer of the breast in Cote-d'Or (1982-1987). The Burgundian register of gynecologic diseases] Chaplain G, et al. **Bull Cancer (Paris)** 1990;77(1):5-14 (Eng. Abstr.) **(Fre)**

[Relative frequency of breast cancer in men in Brazzaville] Gombe-Mbalawa C, et al. **Bull Cancer (Paris)** 1989; 76(9):1039-40 **(Fre)**

[Breast cancer: morbidity and mortality in Austria. Descriptive epidemiology 1983-1987] Gerstner GJ, et al. **Dtsch Med Wochenschr** 1990 May 11;115(19):730-4 (Eng. Abstr.) **(Ger)**

[Epidemiology of breast cancer in Austria 1983-1987] Gerstner GJ, et al. **Gynakol Rundsch** 1989;29 Suppl 2:236-40 **(Ger)**

[Breast cancer: developments since 1963] Paterok EM, et al. **Gynakol Rundsch** 1989;29 Suppl 2:393-7 **(Ger)**

[Epidemiology of breast cancer] Ebeling K. **Zentralbl Gynakol** 1990;112(5):253-62 (25 ref.) (Eng. Abstr.) **(Ger)**

[Malignant neoplasms of the breast and female genital organs in East Germany in 1985. Statistical data of the National Cancer Register] Mehnert WH, et al. **Zentralbl Gynakol** 1989;111(13):857-63 (Eng. Abstr.) **(Ger)**

[Carcinoma of the male breast in the province of Alessandria. Clinico-pathologic aspects of an 8-years' case load] Betta PG, et al. **G Ital Oncol** 1990 Jan-Jun;10(1-2):47-52 (26 ref.) (Eng. Abstr.) **(Ita)**

[Bilateral carcinoma of the breast. Our experience] De Leo G, et al. **Minerva Med** 1989 Aug;80(8):901-5 **(Ita)**

[A case control study of breast cancer, mammary cyst and dietary, drinking or smoking habit in Japan] Kikuchi S, et al. **Gan No Rinsho** 1990 Feb;Spec No:365-9 (Eng. Abstr.) **(Jpn)**

[Hospital epidemiology--a comparative case control study of breast and cervical cancers] Tajima K, et al. **Gan No Rinsho** 1990 Feb;Spec No:351-64 (Eng. Abstr.) **(Jpn)**

[Natural history of breast cancer among Japanese and Caucasian females] Makita M, et al. **Gan To Kagaku Ryoho** 1990 Jul;17(7):1239-43 (17 ref.) (Eng. Abstr.) **(Jpn)**

[Study on follow-up of patients with biopsy-proven breast disease] Kojima O, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep;90(9):1399-402 (Eng. Abstr.) **(Jpn)**

[Multiple primary cancers associated with gynecologic malignancies] Shinohara M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jun;42(6):561-6 (29 ref.) (Eng. Abstr.) **(Jpn)**

[The morbidity risk for breast cancer in persons treated by collapse therapy for tuberculosis] Tekkel MIu. **Probl Tuberk** 1989;(12):61-3 **(Rus)**

[Breast cancer at present and 30 years ago] Berzin SA, et al. **Vopr Onkol** 1990;36(1):69-72 (Eng. Abstr.) **(Rus)**

[Breast cancer in Kazakhstan] Serova NN, et al. **Vopr Onkol** 1990;36(3):291-5 **(Rus)**

[The joint action of ionizing radiation and other risk factors on breast cancer morbidity] Tekkel MIu. **Vopr Onkol** 1989; 35(11):1379-81 **(Rus)**

ETHNOLOGY

Cervix and breast cancer incidence in immigrant Caribbean women. Fruchter RG, et al. **Am J Public Health** 1990 Jun; 80(6):722-4

Results of treatment of stage I-III breast cancer in black Americans. The Cook County Hospital experience, 1973-1987. Briele HA Jr, et al. **Cancer** 1990 Mar 1; 65(5):1062-71

ETIOLOGY

An unusual extramedullary relapse of acute nonlymphocytic leukemia after allogeneic bone marrow transplantation. Kelch BP, et al. **Am J Clin Oncol** 1990 Jun;13(3):238-43

Alcohol consumption and the risk of breast cancer. Chu SY, et al. **Am J Epidemiol** 1989 Nov;130(5):867-77

Cigarette smoking and the risk of breast cancer. Chu SY, et al. **Am J Epidemiol** 1990 Feb;131(2):244-53

Body size and breast cancer risk assessed in women participating in the Breast Cancer Detection Demonstration Project. Swanson CA, et al. **Am J Epidemiol** 1989 Dec; 130(6):1133-41

Breast cancer risk and participation in mammographic screening. Taplin S, et al. **Am J Public Health** 1989 Nov; 79(11):1494-8

Aetiology of breast cancer: towards unifying concepts and primary prevention? [editorial] Adami HO. **Ann Chir Gynaecol** 1990;79(1):3-5

Abdominal obesity and breast cancer risk [published erratum appears in Ann Intern Med 1990 May 15;112(10):798] [see comments] Schapira DV, et al. **Ann Intern Med** 1990 Feb 1;112(3):182-6 Comment in: Ann Intern Med 1990 Jun 1;112(11):882.

Biochemistry of breast cyst fluid: correlation with breast cancer risk. **Ann N Y Acad Sci** 1990;586:1-294

Menopause and the risk of breast cancer. Brinton LA. **Ann N Y Acad Sci** 1990;592:357-62; discussion 390-4 (28 ref.)

Follow-up studies of patients with categorized breast cysts. Methodological issues. Bruzzi P, et al. **Ann N Y Acad Sci** 1990;586:43-8

Risk of cancer of the breast after legal abortion during first trimester: a Swedish register study. Harris BM, et al. **BMJ** 1989 Dec 9;299(6713):1430-2

Short term increase in risk of breast cancer associated with full term pregnancy. Williams EM, et al. **BMJ** 1990 Mar 3;300(6724):578-9

Absence of association between reproductive variables and the risk of breast cancer in young women in Sweden and Norway. Adami HO, et al. **Br J Cancer** 1990 Jul; 62(1):122-6

Alcohol, cigarette smoking and breast cancer. Meara J, et al. **Br J Cancer** 1989 Jul;60(1):70-3

Body height and risk of breast cancer. A prospective study of 23,831 Norwegian women. Vatten LJ, et al. **Br J Cancer** 1990 Jun;61(6):881-5

Bilateral breast cancer after cured Hodgkin's disease. Anderson N, et al. **Cancer** 1990 Jan 15;65(2):221-3

Angiosarcoma arising in an irradiated breast. A case report and review of the literature. Givens SS, et al. **Cancer** 1989 Dec 1;64(11):2214-6 (14 ref.)

Invasive breast cancer risk in women with sclerosing adenosis. Jensen RA, et al. **Cancer** 1989 Nov 15; 64(10):1977-83

Associations between data for male lung cancer and female breast cancer within five countries. Williams FL, et al. **Cancer** 1989 Oct 15;64(8):1764-8

Evidence of lipid peroxidation in premenopausal women with mammographic dysplasia. Boyd NF, et al. **Cancer Lett** 1990 Apr 9;50(1):31-7

Association of change in body mass with breast cancer. Ballard-Barbash R, et al. **Cancer Res** 1990 Apr 1; 50(7):2152-5

Radiosensitivity of skin fibroblasts from atomic bomb survivors with and without breast cancer. Ban S, et al. **Cancer Res** 1990 Jul 1;50(13):4050-5

Relationship of serum levels of dehydroepiandrosterone and dehydroepiandrosterone sulfate to the risk of developing postmenopausal breast cancer. Gordon GB, et al. **Cancer Res** 1990 Jul 1;50(13):3859-62

Total serum cholesterol and triglycerides and risk of breast cancer: a prospective study of 24,329 Norwegian women. Vatten LJ, et al. **Cancer Res** 1990 Apr 15;50(8):2341-6

Risk of breast cancer subsequent to proven gross cystic disease. Ciatto S, et al. **Eur J Cancer** 1990;26(5):555-7

Endogenous and exogenous endocrine factors. Henderson BE. **Hematol Oncol Clin North Am** 1989 Dec;3(4):577-98 (96 ref.)

Diet and the risk of breast cancer. London S, et al. **Hematol Oncol Clin North Am** 1989 Dec;3(4):559-76 (72 ref.)

Age at first and second births and breast cancer risk in biparous women. Negri E, et al. **Int J Cancer** 1990 Mar 15;45(3):428-30

Anthropometric variables and risk of breast cancer. Parazzini F, et al. **Int J Cancer** 1990 Mar 15;45(3):397-402

Dietary fiber, beta-carotene and breast cancer: results from a case-control study. Van 't Veer P, et al. **Int J Cancer** 1990 May 15;45(5):825-8

Body mass index and risk of breast cancer. A prospective study of 23,826 Norwegian women. Vatten LJ, et al. **Int J Cancer** 1990 Mar 15;45(3):440-4

Dietary fat and the risk of breast cancer. Van't Veer P, et al. **Int J Epidemiol** 1990 Mar;19(1):12-8

Alcohol dose, frequency and age at first exposure in relation to the risk of breast cancer. van't Veer P, et al. **Int J Epidemiol** 1989 Sep;18(3):511-7

Projecting breast cancer probabilities [letter; comment] **J Natl Cancer Inst** 1990 May 16;82(10):879-82 Comment on: J Natl Cancer Inst 1989 Dec 20;81(24):1879-86.

Projecting individualized probabilities of developing breast cancer for white females who are being examined annually [see comments] Gail MH, et al. **J Natl Cancer Inst** 1989 Dec 20;81(24):1879-86 Comment in: J Natl Cancer Inst 1989 Dec 20;81(24):1854-5. Comment in: J Natl Cancer Inst 1990 May 16;82(10):879-82.

Summary report of the sixth symposium on cancer registries and epidemiology in the Pacific Basin. Henderson BE. **J Natl Cancer Inst** 1990 Jul 18;82(14):1186-90

Dietary factors and risk of breast cancer: combined analysis of 12 case-control studies. Howe GR, et al. **J Natl Cancer Inst** 1990 Apr 4;82(7):561-9

Prospective study of smoking and the risk of breast cancer. London SJ, et al. **J Natl Cancer Inst** 1989 Nov 1; 81(21):1625-31

Estimating the long-term probability of developing breast cancer [editorial; comment] Pickle LW, et al. **J Natl Cancer Inst** 1989 Dec 20;81(24):1854-5 Comment on: J Natl Cancer Inst 1989 Dec 20;81(24):1879-86.

Breast carcinoma around a silicone prosthesis--back to basics. Fraser S, et al. **J R Coll Surg Edinb** 1989 Jun; 34(3):164

Acute and late effects of A-bomb radiation studied in a group of young girls with a defined condition at the time of bombing. Kamada N, et al. **J Radiat Res (Tokyo)** 1989 Sep; 30(3):218-25

The dietary fat-breast cancer hypothesis: is it really alive? [letter; comment] **JAMA** 1990 Jan 12;263(2):237-8 Comment on: JAMA 1989 Jun 9;261(22):3284-7.

Relative weight, height and risk of breast cancer [letter; comment] Albanes D, et al. **JAMA** 1990 Jun 20; 263(23):3148 Comment on: JAMA 1989 Nov 24;262(20):2853-8.

A prospective study of selenium status and breast cancer risk. Hunter DJ, et al. **JAMA** 1990 Sep 5;264(9):1128-31

Prospective study of relative weight, height, and risk of breast cancer [see comments] London SJ, et al. **JAMA** 1989 Nov 24;262(20):2853-8 Comment in: JAMA 1990 Jun 20;263(23):3148.

Anthropometric indicators of breast cancer risk in Japanese women in Fukuoka. Kyogoku S, et al. **Jpn J Cancer Res** 1990 Aug;81(8):731-7

Comparative study of human and rat mammary tumorigenesis. Russo J, et al. **Lab Invest** 1990 Mar; 62(3):244-78 (214 ref.)

Does breast cancer originate in utero? [letter; comment] **Lancet** 1990 Jun 30;335(8705):1604 Comment on: Lancet 1990 Apr 21;335(8695):939-40.

Alcohol and cancer [see comments] **Lancet** 1990 Mar 17; 335(8690):634-5 (22 ref.) Comment in: Lancet 1990 May 19;335(8699):1216.

Alcohol and breast cancer [letter; comment] Lowenfels AB. **Lancet** 1990 May 19;335(8699):1216 Comment on: Lancet 1990 Mar 17;335(8690):634-5.

Hypothesis: does breast cancer originate in utero? [see comments] Trichopoulos D. **Lancet** 1990 Apr 21; 335(8695):939-40 (35 ref.) Comment in: Lancet 1990 Jun 30;335(8705):1604.

The risk of breast cancer after irradiation of the thymus in infancy. Hildreth NG, et al. **N Engl J Med** 1989 Nov 9; 321(19):1281-4

Radiation as a risk factor for cancer of the breast [letter] Nusbaum NJ. **N Engl J Med** 1990 Mar 29;322(13):937

Comparative study of breast cancer risk factors in Estonia and Slovakia. East-European Study Group of Breast Cancer Epidemiology. **Neoplasma** 1990;37(1):97–104

Season of birth and laterality of breast cancer. Albrecht SA, et al. **Nurs Res** 1990 Mar–Apr;39(2):118–20 (21 ref.)

Estradiol binding to plasma proteins after changing to a low-fat diet. Ingram D, et al. **Nutr Cancer** 1989; 12(4):327–32

Dietary fiber and breast cancer. Rose DP. **Nutr Cancer** 1990; 13(1–2):1–8 (32 ref.)

Cancer of the opposite breast: what risk from radiation therapy? [letter] **Oncology (Williston Park)** 1989 Apr; 3(4):22–5

Fibrocystic disease and breast cancer [letter] Zentz EL. **Postgrad Med** 1990 Mar;87(4):33

Carcinoma of the breast associated with polyethylene strip augmentation. Roberts JP, et al. **Postgrad Med J** 1990 May; 66(775):373–4

The hazards of using ionising radiation for non-malignant conditions—a case study. Morton T. **Radiogr Today** 1989 Mar;55(622):14–5

Estimation of radiation risk from screening mammography [letter] Koch RL. **Radiology** 1990 Sep;176(3):877

Mechanisms of growth control in normal and malignant breast epithelium. Lippman ME, et al. **Recent Prog Horm Res** 1989;45:383–435; discussion 435–40 (459 ref.)

Reproductive factors and breast cancer: an overview. La Vecchia C, et al. **Soz Praventivmed** 1989;34(3):101–7 (31 ref.)

Epidemiology and natural history of breast cancer. Implications for the body weight-breast cancer controversy. Morabia A, et al. **Surg Clin North Am** 1990 Aug;70(4):739–52 (80 ref.)

Some further consideration on the role of oral contraceptives in breast carcinogenesis. La Vecchia C, et al. **Tumori** 1990 Jun 30;76(3):220–4

Mitogenic regulation of normal and malignant breast epithelium. Lippman ME, et al. **Yale J Biol Med** 1989 Sep–Oct;62(5):459–80 (232 ref.)

[Breast cancer following breast prosthesis and irradiation in childhood] Ricbourg B, et al. **Ann Chir Plast Esthet** 1990; 35(2):151–6 (24 ref.) (Eng. Abstr.) **(Fre)**

[The present state of knowledge on the problem of the relation between diabetes mellitus and breast cancer] Kopp S. **Arch Geschwulstforsch** 1989;59(5):367–73 (42 ref.) (Eng. Abstr.) **(Ger)**

[The regulation mechanism of tumor growth. Estrogen dependence of breast carcinoma] Ammon A, et al. **Dtsch Med Wochenschr** 1989 Nov 10;114(45):1760–4 (33 ref.) **(Ger)**

[Risk of breast cancer] Thür L. **Z Lymphol** 1989 Dec; 13(2):74–82 (83 ref.) (Eng. Abstr.) **(Ger)**

[Risk factors for breast cancer. Do epidemiologic findings provide a basis for primary prevention?] Kvåle G, et al. **Tidsskr Nor Laegeforen** 1990 Jan 20;110(2):232–5 (43 ref.) (Eng. Abstr.) **(Nor)**

[Risk factors of the development of breast cancer and the indicators of the reproductive history of women] Levshin VF, et al. **Sov Med** 1989;(6):111–3 **(Rus)**

GENETICS

Oncogenes and tumor growth factors in breast cancer. A minireview. Ernberg IT. **Acta Oncol** 1990;29(3):331–4 (25 ref.)

Flow cytometry DNA ploidy and number of cell populations in the primary breast cancer and their correlation to the prognosis. Ewers SB, et al. **Acta Oncol** 1989;28(6):913–8

Chromosome analysis of in situ breast cancer. Nielsen KV, et al. **Acta Oncol** 1989;28(6):919–22

Prognostic indicators in node-negative breast cancer. Norman A, et al. **Am J Clin Oncol** 1990 Jun;13(3):269–70

Strategies for the analysis of oncogene overexpression. Studies of the neu oncogene in breast carcinoma [see comments] Naber SP, et al. **Am J Clin Pathol** 1990 Aug; 94(2):125–36 Comment in: Am J Clin Pathol 1990 Aug;94(2):240–1.

Age at onset as an indicator of familial risk of breast cancer [see comments] Claus EB, et al. **Am J Epidemiol** 1990 Jun; 131(6):961–72 Comment in: Am J Epidemiol 1990 Jun;131(6):984–6.

Early age at breast cancer onset—a genetic and oncologic perspective [comment] Lynch HT, et al. **Am J Epidemiol** 1990 Jun;131(6):984–6 Comment on: Am J Epidemiol 1990 Jun;131(6):961–72. Comment on: Am J Epidemiol 1990 Jun;131(6):973–83.

The association of age and familial risk in a case-control study of breast cancer [see comments] Mettlin C, et al. **Am J Epidemiol** 1990 Jun;131(6):973–83 Comment in: Am J Epidemiol 1990 Jun;131(6):984–6.

Exclusion of the retinoblastoma gene and chromosome 13q as the site of a primary lesion for human breast cancer. Bowcock AM, et al. **Am J Hum Genet** 1990 Jan;46(1):12–7

Estimating the power of linkage analysis in hereditary breast cancer. Narod SA, et al. **Am J Hum Genet** 1990 Feb; 46(2):266–72

HER-2/neu oncogene expression and proliferation in breast cancers. Bacus SS, et al. **Am J Pathol** 1990 Jul; 137(1):103–11

Chromogranin A and B gene expression in carcinomas of the breast. Correlation of immunocytochemical, immunoblot, and hybridization analyses. Pagani A, et al. **Am J Pathol** 1990 Feb;136(2):319–27

DNA ploidy in breast lesions. A comparative study using two commercial image analysis systems and flow cytometry. Wilbur DC, et al. **Anal Quant Cytol Histol** 1990 Feb;12(1):28–34

Using age of onset to distinguish between subforms of breast cancer. Claus EB, et al. **Ann Hum Genet** 1990 May;54 (Pt 2):169–77

Progestin-induced fatty acid synthetase in breast cancer. From molecular biology to clinical applications. Chalbos D, et al. **Ann N Y Acad Sci** 1990;595:67–73 (22 ref.)

Analysis of the estrogen receptor gene structure in human breast cancer. Koh EH, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1841–5

The human breast carcinoma cell line SW 613-S: an experimental system to study tumor heterogeneity in relation to c-myc amplification, growth factor production and other markers (review). Lavialle C, et al. **Anticancer Res** 1989 Sep–Oct;9(5):1265–79 (102 ref.)

Tumorigenicity assay of the human mammary carcinoma cell line MCF-7. Marics I, et al. **Anticancer Res** 1989 Nov–Dec; 9(6):1627–31

Hormone-sensitive gene expression in breast tumours. Wysocki SJ, et al. **Anticancer Res** 1990 Jan–Feb;10(1):185–8

A positive family history of breast cancer. Does it effect diminish with age? Roseman DL, et al. **Arch Intern Med** 1990 Jan;150(1):191–4

HER-2/neu oncogene expression and DNA ploidy analysis in breast cancer. Bacus SS, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):164–9

Amplification of the c-erb B-2 oncogene and prognosis of breast adenocarcinoma. Heintz NH, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):160–3

The family history and cancer control. Hereditary breast cancer. Lynch HT. **Arch Surg** 1990 Feb;125(2):151–2

Breast cancer cytogenetics and beyond. Hainsworth PJ, et al. **Aust N Z J Surg** 1990 May;60(5):327–36 (119 ref.)

Sequence analysis of the 5' region of the human DF3 breast carcinoma-associated antigen gene. Abe M, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):644–9

Estrogen receptor gene amplification is found in some estrogen receptor-positive human breast tumors. Nembrot M, et al. **Biochem Biophys Res Commun** 1990 Jan 30; 166(2):601–7

Multiple protein forms of the human breast tumor-associated epithelial membrane antigen (EMA) are generated by alternative splicing and induced by hormonal stimulation. Williams CJ, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1331–8

Correlation of erbB-2 gene amplification with low levels of estrogen and/or progesterone receptors in primary breast cancer: do erbB-2 products delineate hormone-independent tumors? Roux-Dosseto M, et al. **Biomed Pharmacother** 1989;43(9):641–9 (38 ref.)

Transforming growth factors in human breast cancer. Salomon DS, et al. **Biomed Pharmacother** 1989;43(9):661–7

Transforming growth factor-alpha and human cancer. Yeh J, et al. **Biomed Pharmacother** 1989;43(9):651–9 (49 ref.)

Breast cancer and a proto-oncogene. Barnes DM. **BMJ** 1989 Oct 28;299(6707):1061–2 (17 ref.)

Establishment and characterisation of a new tumorigenic cell line with a normal karyotype derived from a human breast adenocarcinoma. Gioanni J, et al. **Br J Cancer** 1990 Jul; 62(1):8–13

Expression of mdr1 and gst-pi in human breast tumours: comparison to in vitro chemosensitivity. Keith WN, et al. **Br J Cancer** 1990 May;61(5):712–6

C-erbB2 mRNA expression in human breast tumours: comparison with c-erbB2 DNA amplification and correlation with prognosis. Parkes HC, et al. **Br J Cancer** 1990 Jan;61(1):39–45

c-erbB-2/c-erbA co-amplification indicative of lymph node metastasis, and c-myc amplification of high tumour grade, in human breast carcinoma. Tavassoli M, et al. **Br J Cancer** 1989 Oct;60(4):505–10

p53 gene mRNA expression and chromosome 17p allele loss in breast cancer. Thompson AM, et al. **Br J Cancer** 1990 Jan;61(1):74–8

Gene expression in oestrogen-dependent human breast cancer xenograft tumours. Thompson AM, et al. **Br J Cancer** 1990 Jul;62(1):78–84

Host heterogeneity in female breast cancer: possible significance for pathophysiology, therapy, and prevention. Cohen P. **Breast Cancer Res Treat** 1990 May;15(3):205–12

Mammography and hereditary breast cancer [letter] Lynch HT, et al. **Breast Cancer Res Treat** 1990 Jan;15(1):53

Clinical/genetic features in hereditary breast cancer. Lynch HT, et al. **Breast Cancer Res Treat** 1990 Feb;15(2):63–71

Genomic DNA analysis of the estrogen receptor gene in breast cancer. Parl FF, et al. **Breast Cancer Res Treat** 1989 Oct;14(1):57–64

Heritability of breast cancer and its role in pre-menopausal cases. Sluijter FJ, et al. **Breast Cancer Res Treat** 1989 Oct; 14(1):39–41

Familial male breast carcinoma. Demeter JG, et al. **Cancer** 1990 May 15;65(10):2342–3

Is DNA ploidy an independent prognostic indicator in infiltrative node-negative breast adenocarcinoma? Keyhani-Rofagha S, et al. **Cancer** 1990 Apr 1;65(7):1577–82

Prognostic significance of flow cytometric DNA analysis in node-negative breast cancer patients. Lewis WE. **Cancer** 1990 May 15;65(10):2315–20

Molecular, biochemical, and cellular biology of human breast cancer. Smith HS. **Cancer Cells** 1990 Apr;2(4):123–5

Concerning antisense inhibition of the multiple drug resistance gene. Jaroszewski JW, et al. **Cancer Commun** 1990;2(8):287–94

Cytogenetics of breast cancer. Geleick D, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):217–29

Double minute chromosomes in the leukocytes of a young girl with breast carcinoma. Madhavi R, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):203–7

A cytogenetic study of male breast cancer. Mitchell EL. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):107–12

Two identical active X chromosomes in human mammary carcinoma cells. Wang N, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):271–80

Studies of the HER-2/neu proto-oncogene in human breast cancer. Slamon DJ. **Cancer Invest** 1990;8(2):253

Point mutation at codon 12 of the Ki-ras gene in a primary breast carcinoma and the MDA-MB-134 human mammary carcinoma cell line. Prosperi MT, et al. **Cancer Lett** 1990 May 30;51(2):169–74

Antioxidant and xenobiotic-metabolizing enzyme gene expression in doxorubicin-resistant MCF-7 breast cancer cells. Akman SA, et al. **Cancer Res** 1990 Mar 1; 50(5):1397–402

HER-2/neu amplification predicts poor survival in node-positive breast cancer. Borg A, et al. **Cancer Res** 1990 Jul 15;50(14):4332–7

Insulin-like growth factor receptor expression and function in human breast cancer. Cullen KJ, et al. **Cancer Res** 1990 Jan 1;50(1):48–53

UCLA colloquium. New insights into breast cancer: the molecular biochemical and cellular biology of breast cancer. Dickson RB, et al. **Cancer Res** 1990 Jul 15; 50(14):4446–7 (0 ref.)

Epidermal growth factor gene expression in human breast cancer biopsy samples: relationship to estrogen and progesterone receptor gene expression. Dotzlaw H, et al. **Cancer Res** 1990 Jul 15;50(14):4204–8

Genetic alterations of c-myc, c-erbB-2, and c-Ha-ras protooncogenes and clinical associations in human breast carcinomas. Garcia I, et al. **Cancer Res** 1989 Dec 1; 49(23):6675–9

T47DCO cells, genetically unstable and containing estrogen receptor mutations, are a model for the progression of breast cancers to hormone resistance. Graham ML 2d, et al. **Cancer Res** 1990 Oct 1;50(19):6208–17

Elastin gene expression in elastotic human breast cancers and epithelial cell lines. Krishnan R, et al. **Cancer Res** 1990 Apr 1;50(7):2164–71

Workshop on linkage studies of hereditary breast cancer. Lenoir GM, et al. **Cancer Res** 1990 Jul 15;50(14):4448–9 (7 ref.)

Cloning of estrogen-responsive messenger RNAs in the T-47D human breast cancer cell line. Manning DL, et al. **Cancer Res** 1990 Jul 1;50(13):4098–104

Frequent alteration of the DF3 tumor-associated antigen gene in primary human breast carcinomas. Merlo GR, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):6966–71

Analysis of the int-1, int-2, c-myc, and neu oncogenes in human breast carcinomas. Meyers SL, et al. **Cancer Res** 1990 Sep 15;50(18):5911–8

Hormonal modulation of HER-2/neu protooncogene messenger ribonucleic acid and p185 protein expression in human breast cancer cell lines. Read LD, et al. **Cancer Res** 1990 Jul 1;50(13):3947–51

c-erbB-2 amplification in node-negative human breast cancer. Ro JS, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):6941–4

Analysis of c-erbB-2 expression in breast carcinomas with clinical follow-up. Thor AD, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):7147–52

Amplification of the proto-oncogenes int-2, c-erb B-2 and c-myc in human breast cancer. Machotka SV, et al. **Clin Chim Acta** 1989 Oct 16;184(3):207–17

Epidemiology and risk factors. Lynch HT, et al. **Clin Obstet Gynecol** 1989 Dec;32(4):750–60 (31 ref.)

Loss of heterozygosity on 17p in human breast carcinomas: defining the smallest common region of deletion. Devilee P, et al. **Cytogenet Cell Genet** 1990;53(1):52–4

Effect of sonication on paraffin-embedded tissue preparation for DNA flow cytometry. Gonchoroff NJ, et al. **Cytometry** 1990;11(5):642–6

Analysis of c-erbB-2 protein expression in conjunction with DNA content using multiparameter flow cytometry. Kelsten ML, et al. **Cytometry** 1990;11(4):522–32

Partition of protein and DNA during cytokinesis in human breast cancer cell lines. Sennerstam R, et al. **Cytometry** 1990;11(2):292–9

Breast cancer and the MNSs blood groups. Phipps RF, et al. **Dis Markers** 1989 Oct–Dec;7(4):253–6

hSP, the domain-duplicated homolog of pS2 protein, is co-expressed with pS2 in stomach but not in breast carcinoma. Tomasetto C, et al. **EMBO J** 1990 Feb; 9(2):407–14

Malignancies in families of women with medullary, tubular and invasive ductal breast cancer. Bürki N, et al. **Eur J Cancer** 1990 Mar;26(3):295–303

Gene amplification on chromosome band 11q13 and oestrogen receptor status in breast cancer. Fantl V, et al. **Eur J Cancer** 1990 Apr;26(4):423–9

New developments in the molecular biology of breast cancer.

Gullick WJ. **Eur J Cancer** 1990 Apr;26(4):509–10 (13 ref.)

Serum bioactive lactogenic hormone levels in women with familial breast cancer and their relatives. Anderson E, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1719–25

Static and flow cytometric DNA analysis compared to histologic prognostic factors in a cohort of stage T2 breast cancer. Arnerlöv C, et al. **Eur J Surg Oncol** 1990 Jun; 16(3):200–8

A difference in the regulation of mRNA expression between the phenotypic and the embryonic alkaline phosphatase genes in human cancer cells. Penhallow RC, et al. **Exp Cell Res** 1990 Jun;188(2):279–85

Expression of genes coding for pS2, c-erbB2, estrogen receptor and the H23 breast tumor-associated antigen. A comparative analysis in breast cancer. Zaretsky JZ, et al. **FEBS Lett** 1990 Jun 4;265(1–2):46–50

Genetic epidemiology of bilateral breast cancer: a linkage analysis using the affected-pedigree-member method. Haile RW, et al. **Genet Epidemiol** 1990;7(1):47–55

At least four different chromosomal regions are involved in loss of heterozygosity in human breast carcinoma. Devilee P, et al. **Genomics** 1989 Oct;5(3):554–60

Rare HRAS alleles and susceptibility to human breast cancer. Hall JM, et al. **Genomics** 1990 Jan;6(1):188–91

Oncogene organisation and expression: prediction in breast cancer. Varley JM, et al. **Horm Res** 1989;32 Suppl 1:250–3

Loss of heterozygosity of the L-myc oncogene in human breast tumors. Bieche I, et al. **Hum Genet** 1990 Jun; 85(1):101–5

Sex chromatin in female breast tumour. Arora B, et al. **Indian J Pathol Microbiol** 1989 Jan;32(1):40–5

DNA ploidy with relation to histology in tumours of breast and rectum. De M, et al. **Indian J Pathol Microbiol** 1989 Jan;32(1):50–6

Prognostic significance of DNA-ploidy in a series of 690 primary breast cancer patients. Beerman H, et al. **Int J Cancer** 1990 Jan 15;45(1):34–9

The locus of the polymorphic epithelial mucin (PEM) tumour antigen on chromosome 1q21 shows a high frequency of alteration in primary human breast tumours. Gendler SJ, et al. **Int J Cancer** 1990 Mar 15;45(3):431–5

Effect of gamma interferon on HLA class-I and -II transcription and protein expression in human breast adenocarcinoma cell lines. Jabrane-Ferrat N, et al. **Int J Cancer** 1990 Jun 15;45(6):1169–76

Complete primary structure of the human estrogen-responsive gene (pS2) product. Mori K, et al. **J Biochem (Tokyo)** 1990 Jan;107(1):73–6

Transcriptional regulation of DF3 gene expression in human MCF-7 breast carcinoma cells. Abe M, et al. **J Cell Physiol** 1990 May;143(2):226–31

Identification of factors associated with high breast cancer risk in the mothers of children with soft tissue sarcoma [see comments] Birch JM, et al. **J Clin Oncol** 1990 Apr; 8(4):583–90 Comment in: J Clin Oncol 1990 Apr;8(4):574–5.

The value of studying cancer families [editorial; comment] Garber JE, et al. **J Clin Oncol** 1990 Apr;8(4):574–5 Comment on: J Clin Oncol 1990 Apr;8(4):583–90.

Presence of two members of c-erbA receptor gene family (c-erbA beta and c-erbA2) in smallest region of somatic homozygosity on chromosome 3p21–p25 in human breast carcinoma [see comments] Ali IU, et al. **J Natl Cancer Inst** 1989 Dec 6;81(23):1815–20 Comment in: J Natl Cancer Inst 1989 Dec 6;81(23):1764–5.

Expression of c-myc, c-Ha-ras1, and c-erbB-2 proto-oncogenes in normal and malignant human breast epithelial cells. Benz CC, et al. **J Natl Cancer Inst** 1989 Nov 15;81(22):1704–9

Mutations in human breast cancer: an overview. Callahan R, et al. **J Natl Cancer Inst** 1989 Dec 6;81(23):1780–6 (101 ref.)

Correlation of L-myc genotypes to metastasis of gastric cancer and breast cancer [letter] Ishizaki K, et al. **J Natl Cancer Inst** 1990 Feb 7;82(3):238–9

Loss of heterozygosity in breast cancer: cause or effect? [editorial; comment] [see comments] McGuire WL, et al. **J Natl Cancer Inst** 1989 Dec 6;81(23):1764–5 Comment on: J Natl Cancer Inst 1989 Dec 6;81(23):1815–20. Comment in: J Natl Cancer Inst 1990 May 2;82(9):793–5.

Stochastic model for interpreting the data on loss of heterozygosity in breast cancer [letter; comment] Smith HS. **J Natl Cancer Inst** 1990 May 2;82(9):793–5 Comment on: J Natl Cancer Inst 1989 Dec 6;81(23):1764–5.

The Li-Fraumeni cancer family syndrome. Birch JM. **J Pathol** 1990 May;161(1):1–2 (10 ref.)

Stromal neoplasms of the breast: a comparative flow cytometric study. El-Naggar AK, et al. **J Surg Oncol** 1990 Jul;44(3):151–6

c-erbB-2 and c-erbA-1 (ear-1) gene amplification and c-erbB-2 protein expression in Japanese breast cancers: their relationship to the histology and other disease parameters. Uehara T, et al. **Jpn J Cancer Res** 1990 Jun-Jul; 81(6–7):620–4

Association of elevated expression of the c-erbB-2 protein with spread of breast cancer. Yamada Y, et al. **Jpn J Cancer Res** 1989 Dec;80(12):1192–8

Nuclear DNA content in breast carcinoma with special reference to the parameters of malignant potentiality. Suehiro S, et al. **Jpn J Surg** 1990 Jan;20(1):115–8

Multiparametric deoxyribonucleic acid and cell cycle analysis of breast carcinomas by flow cytometry. Clinicopathologic correlations. Visscher DW, et al. **Lab Invest** 1990 Mar; 62(3):370–8

Evidence implicating at least two genes on chromosome 17p in breast carcinogenesis. Coles C, et al. **Lancet** 1990 Sep 29;336(8718):761–3

Oestrogen receptor B-region polymorphism and spontaneous abortion in women with breast cancer. Lehrer S, et al. **Lancet** 1990 Mar 17;335(8690):622–4

Identification of a cDNA encoding a long form of prolactin receptor in human hepatoma and breast cancer cells. Boutin JM, et al. **Mol Endocrinol** 1989 Sep;3(9):1455–61

Role of an estrogen receptor-dependent mechanism in the regulation of estrogen receptor mRNA in MCF-7 cells. Saceda M, et al. **Mol Endocrinol** 1989 Nov;3(11):1782–7

Genotoxic effects of radiotherapy and chemotherapy on the circulating lymphocytes of breast cancer patients. I. Chromosome aberrations induced in vivo. Rigaud O, et al. **Mutat Res** 1990 Sep;242(1):17–23

Genotoxic effects of radiotherapy and chemotherapy on the circulating lymphocytes of breast cancer patients. II. Alteration of DNA repair and chromosome radiosensitivity. Rigaud O, et al. **Mutat Res** 1990 Sep; 242(1):25–35

cDNA sequence coding for a translationally controlled human tumor protein. Gross B, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8367

Nucleotide sequence of a human oncogene active in tumors of secretory epithelium. Lane MA, et al. **Nucleic Acids Res** 1990 May 25;18(10):3068

Proto-oncogene amplification and human breast tumor phenotype. Adnane J, et al. **Oncogene** 1989 Nov; 4(11):1389–95

Inhibition of c-erbB-2 oncogene expression by estrogens in human breast cancer cells. Dati C, et al. **Oncogene** 1990 Jul;5(7):1001–6

Strong association between c-myb and oestrogen-receptor expression in human breast cancer. Guérin M, et al. **Oncogene** 1990 Jan;5(1):131–5

Absence of activating transmembrane mutations in the c-erbB-2 proto-oncogene in human breast cancer. Lemoine NR, et al. **Oncogene** 1990 Feb;5(2):237–9

BCL-1 participates in the 11q13 amplification found in breast cancer. Theillet C, et al. **Oncogene** 1990 Jan;5(1):147–9

SBLA syndrome revisited. Lynch HT, et al. **Oncology** 1990; 47(1):75–9

Oncogene may be an important prognostic factor in breast cancer and ovarian cancer [news] **Oncology (Williston Park)** 1989 Jun;3(6):148

Isolation and characterization of ERBB3, a third member of the ERBB/epidermal growth factor receptor family: evidence for overexpression in a subset of human mammary tumors. Kraus MH, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9193–7

A paradigm for oncogene complementation in human breast cancer. Roux-Dosseto M, et al. **Res Virol** 1989 Nov-Dec; 140(6):571–91

Heterogeneity and natural history of hereditary breast cancer. Surgical implications. Lynch HT, et al. **Surg Clin North Am** 1990 Aug;70(4):753–74 (66 ref.)

Flow cytometry and prognostic implications in patients with solid tumors. Williams NN, et al. **Surg Gynecol Obstet** 1990 Sep;171(3):257–66 (107 ref.)

Genomic alterations in human breast cancer: a review. Mariani-Costantini R, et al. **Tumori** 1989 Aug 31; 75(4):311–20 (102 ref.)

[Oncogenes and anti-oncogenes in breast cancer] Birnbaum D, et al. **Bull Cancer (Paris)** 1989;76(7):677–87 (60 ref.) (Eng. Abstr.) **(Fre)**

[Oncogene organization and expression in breast cancer exemplified by proto-oncogene c-erb B2] Friedrichs K, et al. **Arch Gynecol Obstet** 1989;245(1–4):658–60 **(Ger)**

[Breast cancer and oncogenes] Toyoshima K. **Gan No Rinsho** 1989 May;Spec No:199–203 (6 ref.) **(Jpn)**

[Prognostic significance of nuclear DNA content in breast cancer] Nishi T, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Mar 20;25(3):569–77 (Eng. Abstr.) **(Jpn)**

[Molecular nature of oncogene HRAS1 damage in human breast carcinoma: G——T transversion in codon 12 of one allele during deletion of other allele] Kniazev PG, et al. **Bioorg Khim** 1990 Mar;16(3):419–23 (Eng. Abstr.) **(Rus)**

[Aneuploid and diploid neoplasms of the breast and their relation to the prognosis of the disease] Bogatyrev VN. **Lab Delo** 1989;(11):54–6 (Eng. Abstr.) **(Rus)**

[Clinico-genetic analysis of the incidence of neoplasms] Kazubskaia TP, et al. **Sov Med** 1989;(6):16–9 (Eng. Abstr.) **(Rus)**

HISTORY

Lister oration. Breast cancer: 121 years on. Forrest AP. **J R Coll Surg Edinb** 1989 Oct;34(5):239–48

[Treatment of breast cancer—description of the surgical technics and instruments in the Instituzioni Chirurgiche di Lorenzo Heistero, Venice, 1752] Bogdanović S. **Acta Chir Iugosl** 1989;36 Suppl 1:303–6 **(Ser)**

IMMUNOLOGY

Effects of adjuvant chemotherapy on specific and non-specific immune mechanisms. Zielinski CC, et al. **Acta Med Austriaca** 1990;17(1):11–4

Cell reaction to concanavalin A in cancer patients. Knejzlíková H, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;123:123–30

Prognostic significance of selected histochemical and immunohistochemical markers in breast cancer. Petříková J, et al. **Acta Univ Palacki Olomuc Fac Med** 1989; 123:137–45

Antibodies to retroviruses of types C and D in female patients with benign and malignant mammary tumours. Malivanova TF, et al. **Acta Virol (Praha)** 1990 Feb;34(1):19–26

Breast carcinoma kinetics. Argyrophilic nucleolar organizer region counts correlate with Ki67 scores. Dervan PA, et al. **Am J Clin Pathol** 1989 Oct;92(4):401–7

CA-549: immunohistochemistry and serum levels in breast carcinoma and other neoplasms. Shurbaji MS, et al. **Ann Clin Lab Sci** 1989 Nov-Dec;19(6):408–14

Production of immunohistochemical reactivity of mouse anti-epithelial monoclonal antibodies raised against human breast cancer cells. Plessers L, et al. **Anticancer Res** 1990 Jan-Feb;10(1):271–7

Recombinant gamma interferon provokes resistance of human breast cancer cells to spontaneous and IL-2 activated non-MHC restricted cytotoxicity. Jabrane-Ferrat N, et al. **Br J Cancer** 1990 Apr;61(4):558–62

C595—a monoclonal antibody against the protein core of human urinary epithelial mucin commonly expressed in breast carcinomas. Price MR, et al. **Br J Cancer** 1990 May; 61(5):681–6

Lacking prognostic significance of beta 2-microglobulin, MHC class I and class II antigen expression in breast carcinomas. Wintzer HO, et al. **Br J Cancer** 1990 Aug; 62(2):289–95

Recombinant alpha-2b-interferon enhances the circulating levels of a 90-kilodalton (K) tumor-associated antigen in patients with gynecologic and breast malignancies. Scambia G, et al. **Cancer** 1990 Mar 15;65(6):1325–8

Mucins in breast cancer: recent immunological advances. McKenzie IF, et al. **Cancer Cells** 1990 Mar;2(3):75–8 (37 ref.)

Human tumor and normal tissue reactivity of the anti-(breast cancer) monoclonal antibody BA-Br-3 and its similarity to the anti-(epithelial membrane antigen) monoclonal antibody E29. Liao SK, et al. **Cancer Immunol Immunother** 1990;31(2):65–75

Prognostically significant skin window reactivity to breast cancer: influence of adjuvant therapy with retinol and tocopherol. Black MM, et al. **Cancer Invest** 1990;8(2):277–8

Cloning and sequencing of a complementary DNA encoding a Mr 70,000 human breast epithelial mucin-associated antigen. Larocca D, et al. **Cancer Res** 1990 Sep 15; 50(18):5925–30

Characterization and distribution in normal and tumoral human tissues of breast cancer-associated antigen defined by monoclonal antibody 7B10. Pancino GF, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):7078–85

Nonlinearity of measurements of a tumor marker for breast cancer [letter] Cooper EH, et al. **Clin Chem** 1990 Feb; 36(2):408–9

Serial measurements of Ca antigen in sera from patients with advanced malignant breast disease. Searle F, et al. **Clin Chim Acta** 1990 Jan 31;186(3):351–8

A transcribed gene, containing a variable number of tandem repeats, codes for a human epithelial tumor antigen. cDNA cloning, expression of the transfected gene and over-expression in breast cancer tissue. Hareuveni M, et al. **Eur J Biochem** 1990 May 20;189(3):475–86

Human epithelial tumor antigen cDNA sequences. Differential splicing may generate multiple protein forms. Wreschner DH, et al. **Eur J Biochem** 1990 May 20; 189(3):463–73

CA-15.3, TPA and MCA as markers for breast cancer. Barak M, et al. **Eur J Cancer** 1990;26(5):577–80

A comparison between pregnancy-associated alpha 2-glycoprotein (alpha 2-PAG), carcino-embryonic antigen (CEA), CA-125, and CA-15-3 as tumor markers in breast cancer. Bersinger NA, et al. **Eur J Gynaecol Oncol** 1990; 11(2):135–9

Natural killer activity in patients with breast cancer. Bonilla F, et al. **Eur J Gynaecol Oncol** 1990;11(2):103–9

Biochemical and histological characterization of antigens preferentially expressed on the surface and cytoplasm of breast carcinoma cells identified by monoclonal antibodies against the human milk fat globule. Peterson JA, et al. **Hybridoma** 1990 Jun;9(3):221–35

Monoclonal antibodies reactive with mucin expressed in breast cancer. Xing PX, et al. **Immunol Cell Biol** 1989 Jun; 67 (Pt 3):183–95

Cell-mediated immune responses—prognostic indicators of survival from breast cancer. Cannon GB, et al. **Int J Cancer** 1989 Dec 15;44(6):995–9

Correlation of HLA-D/Ii antigen expression in breast carcinoma with local lymphohistiocytic infiltration reveals considerable dysregulation in a subset of tumors. Koretz K, et al. **Int J Cancer** 1989 Nov 15;44(5):816–22

Alterations of pineal gland and of T lymphocyte subsets in metastatic cancer patients: preliminary results. Lissoni P, et al. **J Biol Regul Homeost Agents** 1989 Oct-Dec; 3(4):181–3

Serum level of cryptic tumor antigens in breast cancer patients as determined by two monoclonal antibodies (M85/F36) and its comparison with CA 15-3. Chu TM, et al. **J Clin Lab Anal** 1989;3(5):267–72

Modulation of MHC gene expression in human breast carcinoma cells by hormones. Teh M, et al.

J Immunogenet 1989 Aug-Oct;16(4-5):397-405
Ultrastructural localization of milk fat globule membrane antigens in human breast carcinomas. Corcoran D, et al. J Pathol 1990 Jun;161(2):161-6
S100 protein in human mammary tissue--immunoreactivity in breast carcinoma, including Paget's disease of the nipple, and value as a marker of myoepithelial cells. Gillett CE, et al. J Pathol 1990 Jan;160(1):19-24
Carcinoma of breast presenting as gastric cancer: diagnosis by immunoperoxidase staining patterns. Finch PJ, et al. J R Coll Surg Edinb 1989 Aug;34(4):225-6
Observation of activity of IL-2 produced by mononuclear cells in tumor draining lymph-node. Fang JM, et al. J Tongji Med Univ 1989;9(2):91-4
Identification of a human T cell clone with the cytotoxic T lymphocyte and natural killer-like cytotoxic function against autologous mammary carcinoma and K562 line. Sato T, et al. Jpn J Cancer Res 1989 Jul;80(7):655-61
Evaluation of dot-immunobinding assay for carcinoembryonic antigen determination in nipple discharge as an adjunct in the diagnosis of early breast cancer. Research Group for Carcinoembryonic Antigen in Nipple Discharge. Mori T, et al. Jpn J Clin Oncol 1989 Dec;19(4):373-9
The analysis of lymphocyte surface receptors recognized by wheat germ agglutinin for negative regulation of immune responses in cancer patients. Yamaguchi Y, et al. Jpn J Surg 1990 Jan;20(1):51-5
In vitro interrelations between axillary lymph nodes and breast carcinomas from patients immunostimulated before surgery. Kiricuţă I, et al. Morphol Embryol (Bucur) 1989 Apr-Jun;35(2):129-37
The squamous cell carcinoma tumor marker in mammary carcinoma: comparison of polyclonal versus monoclonal antibody-based assays. Wobbes T, et al. Oncology 1990; 47(1):14-8
Leukocyte migration inhibition response to breast cancer antigens and to mouse mammary tumor virus in women with primary breast cancer. Fukuda M, et al. Surg Forum 1978;29:167-9
MCA, a monoclonal-antibody-defined breast-tumor-associated antigen and its relation to CA 15.3. Bieglmayer C, et al. Tumour Biol 1989;10(5):232-42
Monoclonal antibodies reactive with the breast carcinoma-associated mucin core protein repeat sequence peptide also recognise the ovarian carcinoma-associated sebaceous gland antigen. Layton GT, et al. Tumour Biol 1990;11(5):274-86
Characterization of monoclonal antibodies reactive with normal resting, lactating and neoplastic human breast. Skilton RA, et al. Tumour Biol 1990;11(1-2):20-38
[Immunomodulation by leukocytolysis. On the significance of lectin-polysaccharide complexes] Heine H. Onkologie 1989 Jun;12 Suppl 3:5-8 (Eng. Abstr.) (Ger)
[Comparison of tumor-associated cellular and nonspecific humoral immune parameters in immunologic monitoring of breast cancer] Mallmann P, et al. Onkologie 1989 Jun; 12 Suppl 3:9-14 (Eng. Abstr.) (Ger)
[Anti-idiotypes against human monoclonal antibodies which recognize breast cancer associated antigens] Gendler Y, et al. Harefuah 1990 Mar 1;118(5):279-81 (41 ref.) (Heb)
[Relationship of breast cancer and HLA in Japanese females] Yokoe T, et al. Gan No Rinsho 1990 Jan;36(1):29-33 (Eng. Abstr.) (Jpn)
[Comparative study between carcinoembryonic antigen (CEA) in breast cancer tilsue and morphological regional immunoreaction: preliminary report] Asagoe T, et al. Nippon Geka Gakkai Zasshi 1990 Apr;91(4):534 (Jpn)
[Immunohistochemical study on HLA expression of human breast cancer] Nakazawa T, et al. Nippon Geka Gakkai Zasshi 1990 Apr;91(4):508-14 (Eng. Abstr.) (Jpn)
[Ultrastructural study of carcinoembryonic antigen (CEA) using the peroxidase-antiperoxidase (PAP) complex technic in patients with breast cancer] Grzanka A, et al. Patol Pol 1989;40(3):325-33 (Eng. Abstr.) (Pol)
[The expression of leukocytic and related antigens on the cells of human breast cancer cells] Tupitsyn NN, et al. Eksp Onkol 1990;12(2):54-8 (Eng. Abstr.) (Rus)
[Immunomodulating activity of natural killers in patients with breast tumors using vasopressin and interleukin 2 in vitro] Andrianov IG, et al. Vopr Onkol 1989;35(10):1186-91 (Eng. Abstr.) (Rus)
[A mathematical analysis of immunologic indicators in dyshormonal dysplasia and breast cancer] Zhalgasbaeva GT, et al. Vopr Onkol 1989;35(10):1198-203 (Eng. Abstr.) (Rus)

METABOLISM

Hormones are ambiguous risk factors for breast cancer. Bulbrook RD, et al. Acta Oncol 1989;28(6):841-7 (33 ref.)
The significance of hormone receptors to predict the endocrine responsiveness of human breast cancer. Rutqvist LE. Acta Oncol 1990;29(3):371-7 (46 ref.)
Steroid receptor levels in breast cancer. Relationships with age and menopausal status. Wilking N, et al. Acta Oncol 1989;28(6):807-10
Effect of some sugars on the growth and differentiation of MCF-7 cells: I. Detection of glycosylative changes using lectin histochemistry. Kolář Z, et al. Acta Univ Palacki Olomuc Fac Med 1989;122:113-20
Lectin histochemistry in the estradiol stimulated and nonstimulated MCF-7 cells. Kolář Z, et al. Acta Univ Palacki Olomuc Fac Med 1989;122:121-6
Steroid receptors in benign mastectomy tissue. Netto GJ, et al. Am J Clin Pathol 1990 Jul;94(1):14-7
Heterogeneity of estrogen receptor in primary breast carcinoma evaluated by computed image analysis [letter; comment] Simony J, et al. Am J Clin Pathol 1989 Oct; 92(4):559 Comment on: Am J Clin Pathol 1988 Sep;90(3):233-9.
Selenium in diet, blood, and toenails in relation to breast cancer: a case-control study. van 't Veer P, et al. Am J Epidemiol 1990 Jun;131(6):987-94
Vimentin is preferentially expressed in human breast carcinomas with low estrogen receptor and high Ki-67 growth fraction. Domagala W, et al. Am J Pathol 1990 Jan;136(1):219-27
Immunohistochemical distribution of type IV collagenase in normal, benign, and malignant breast tissue. Monteagudo C, et al. Am J Pathol 1990 Mar;136(3):585-92
Potent antagonism between estrogens and androgens on GCDFP-15 expression and cell growth in the ZR-75-1 human breast cancer cells. Labrie F, et al. Ann N Y Acad Sci 1990;586:174-87
Metabolism and biologic response of estrogen sulfates in hormone-dependent and hormone-independent mammary cancer cell lines. Effect of antiestrogens. Pasqualini JR, et al. Ann N Y Acad Sci 1990;595:106-16
Metabolic biotransformation of estradiol in human mammary explant cultures. Telang NT, et al. Ann N Y Acad Sci 1990; 586:70-8
Uptake and metabolism of estradiol by normal and abnormal breast tissues. Thijssen JH, et al. Ann N Y Acad Sci 1990; 586:252-8
Effect of sampling site on retinol, carotenoid, tocopherol, and tocotrienol concentration of adipose tissue of human breast with cancer. Rautalahti M, et al. Ann Nutr Metab 1990;34(1):37-41
DNA distribution pattern and comparison of quantitative data in breast tumours. Megyesi J, et al. Arch Geschwulstforsch 1990;60(3):217-22
The respective 27 kDa and 28 kDa protein kinase C substrates in vascular endothelial and MCF-7 cells are most probably heat shock proteins. Darbon JM, et al. Biochem Biophys Res Commun 1990 Apr 30;168(2):527-36
The effect of gossypol and 6-aminonicotinamide on tumor cell metabolism: a 31P-magnetic resonance spectroscopic study. Keniry MA, et al. Biochem Biophys Res Commun 1989 Oct 31;164(2):947-53
Studies on plasminogen activator inhibitor 1 levels in human breast cancer. Reilly D, et al. Biochem Soc Trans 1990 Apr; 18(2):354-5
Enhanced production of tissue-type plasminogen activator by estradiol in a novel type variant of human breast cancer MCF-7 cell line. Mizoguchi H, et al. Biochim Biophys Acta 1990 May 22;1052(3):475-82
Epidermal growth factor receptor and oestrogen receptors in the non-malignant part of the cancerous breast. Barker S, et al. Br J Cancer 1989 Nov;60(5):673-7
Hormone levels in older women: a study of post-menopausal breast cancer patients and healthy population controls. Bernstein L, et al. Br J Cancer 1990 Feb;61(2):298-302
Tamoxifen metabolism: pharmacokinetic and in vitro study. Etienne MC, et al. Br J Cancer 1989 Jul;60(1):30-5
Discordant results between radioligand and immunohistochemical assays for steroid receptors in breast carcinoma. Helin H, et al. Br J Cancer 1990 Jul; 62(1):109-12
Cyclic AMP binding proteins and prognosis in breast cancer. Miller WR, et al. Br J Cancer 1990 Feb;61(2):263-6
Different methylation of oestrogen receptor DNA in human breast carcinomas with and without oestrogen receptor. Piva R, et al. Br J Cancer 1990 Feb;61(2):270-5
P-glycoprotein expression in treated and untreated human breast cancer. Schneider J, et al. Br J Cancer 1989 Dec; 60(6):815-8
Role of transforming growth factor-alpha-related peptides in the autocrine/paracrine control of experimental breast cancer growth in vitro by estradiol, prolactin, and progesterone. Manni A, et al. Breast Cancer Res Treat 1990 Feb;15(2):73-83
Histone acetylation decreased by estradiol in the MCF-7 human mammary cancer cell line. Pasqualini JR, et al. Breast Cancer Res Treat 1989 Oct;14(1):101-5
Tissue ferritin concentration and prognosis in carcinoma of the breast. Weinstein RE, et al. Breast Cancer Res Treat 1989 Dec;14(3):349-53
Epidermal growth factor receptors and breast cancer. Farndon JR, et al. Bristol Med Chir J 1989 May;104(2):51-2
Tumor marker kinetics in the monitoring of breast cancer. Kiang DT, et al. Cancer 1990 Jan 15;65(2):193-9
A clinical evaluation of nuclear estrogen receptors combined with cytosolic estrogen and progesterone receptors in breast cancer. Loven D, et al. Cancer 1990 Jul 15; 66(2):341-6
Cell kinetics and hormonal receptor status in inflammatory breast carcinoma. Comparison with locally advanced disease. Paradiso A, et al. Cancer 1989 Nov 1;64(9):1922-7
Relationship between epidermal growth factor receptor status and various prognostic factors in human breast cancer. Toi M, et al. Cancer 1990 May 1;65(9):1980-4
Aminoglutethimide enzyme induction: pharmacological and endocrinological implications. Lønning PE. Cancer Chemother Pharmacol 1990;26(4):241-4
Human breast carcinoma cell levels of MDR-1 (P-glycoprotein) transcripts correlate in vivo inversely and reciprocally with tumor progesterone receptor content. Kacinski BM, et al. Cancer Commun 1989;1(1):1-6
Variations in lymphokine generation by individual lymph nodes draining human malignant tumors. Wen DR, et al. Cancer Immunol Immunother 1989;30(5):277-82
Evaluation of arylmethylaminopropanediols by a novel in vitro pharmacodynamic assay: correlation with antitumor activity in vivo. Adams DJ, et al. Cancer Res 1990 Jun 15;50(12):3663-9
Interaction of methotrexate polyglutamates and dihydrofolate during leucovorin rescue in a human breast cancer cell line (MCF-7). Allegra CJ, et al. Cancer Res 1990 Jun 15; 50(12):3574-8
Differential regulation of expression of three transforming growth factor beta species in human breast cancer cell lines by estradiol. Arrick BA, et al. Cancer Res 1990 Jan 15; 50(2):299-303
Tropomyosins of human mammary epithelial cells: consistent defects of expression in mammary carcinoma cell lines. Bhattacharya B, et al. Cancer Res 1990 Apr 1;50(7):2105-12
Regulation of the cytidine phospholipid pathways in human cancer cells and effects of 1-beta-D-arabinofuranosylcytosine: a noninvasive 31P nuclear magnetic resonance study. Daly PF, et al. Cancer Res 1990 Feb 1;50(3):552-7
Estrogen receptor gene methylation in human breast tumors. Falette NS, et al. Cancer Res 1990 Jul 1;50(13):3974-8
Prognostic value of receptors for insulin-like growth factor 1, somatostatin, and epidermal growth factor in human breast cancer. Foekens JA, et al. Cancer Res 1989 Dec 15;49(24 Pt 1):7002-9
Retinoid modulation of estradiol-stimulated growth and of protein synthesis and secretion in human breast carcinoma cells. Fontana JA, et al. Cancer Res 1990 Apr 1; 50(7):1997-2002
Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin and related compounds on the occupied nuclear estrogen receptor in MCF-7 human breast cancer cells. Harris M, et al. Cancer Res 1990 Jun 15;50(12):3579-84
Opposite effects of tamoxifen on in vitro protein kinase C activity and endogenous protein phosphorylation in intact MCF-7 cells. Issandou M, et al. Cancer Res 1990 Sep 15; 50(18):5845-50
Inhibition of estradiol uptake and transforming growth factor alpha secretion in human breast cancer cell line MCF-7 by an alkyl-lysophospholipid. Kosano H, et al. Cancer Res 1990 Jun 1;50(11):3172-5
Methyl p-hydroxyphenyllactate and nuclear type II binding sites in malignant cells: metabolic fate and mammary tumor growth. Markaverich BM, et al. Cancer Res 1990 Mar 1; 50(5):1470-8
Activation of inositol phospholipid signaling and Ca2+ efflux in human breast cancer cells by bombesin. Patel KV, et al. Cancer Res 1990 Jan 15;50(2):235-9
Use of immunotoxins in combination to inhibit clonogenic growth of human breast carcinoma cells. Yu YH, et al. Cancer Res 1990 Jun 1;50(11):3231-8
Role of oxygen free radical formation in the mechanism of menogaril resistance in multidrug resistant tumor cells. Sinha BK, et al. Chem Biol Interact 1990;76(1):89-99
Biochemical markers as prognostic indices in breast cancer. Duffy MJ. Clin Chem 1990 Feb;36(2):188-91 (36 ref.)
Quantitative imaging of immunocytochemical (PAP) estrogen receptor staining patterns in breast cancer sections. Sklarew RJ, et al. Cytometry 1990;11(3):359-78
Multihormonal regulation of the progesterone receptor in MCF-7 human breast cancer cells: interrelationships among insulin/insulin-like growth factor-I, serum, and estrogen [published erratum appears in Endocrinology 1990 Jan;126(6):3217] Katzenellenbogen BS, et al. Endocrinology 1990 Feb;126(2):891-8
Regulation of antitrypsin and antichymotrypsin synthesis by MCF-7 breast cancer cell sublines. Tamir S, et al. Endocrinology 1990 Sep;127(3):1319-28
Interactions between growth factor secretion and polyamines in MCF-7 breast cancer cells. Cohen FJ, et al. Eur J Cancer 1990;26(5):603-8
Lack of binding of gestodene to estrogen receptor in human breast cancer tissue. Pollow K, et al. Eur J Cancer 1990; 26(5):608-10
In vivo and in vitro effects of the antifungal agent miconazole on estrogen biosynthesis in human breast cancer. Yamamoto T, et al. Eur J Cancer Clin Oncol 1989 Oct; 25(10):1493-7
Direct adhesion to type I and homotrimer collagens by breast carcinoma and embryonic epithelial cells in culture: a comparative study. Ghersi G, et al. Eur J Cell Biol 1989 Dec;50(2):279-84
Recycling of tumor necrosis factor-alpha receptor in MCF-7 cells. Vuk-Pavlović S, et al. FASEB J 1989 Dec; 3(14):2633-40
NMR studies of the lipid metabolism of T47D human breast cancer spheroids. Ronen SM, et al. FEBS Lett 1990 Jun 18;266(1-2):147-9
Redox cycling in MCF-7 human breast cancer cells by antitumor agents based on mitozantrone. Fisher GR, et al. Free Radic Res Commun 1989;7(3-6):221-6
Oestrogen receptors in benign epithelial lesions and intraduct

carcinomas of the breast: an immunohistological study. Giri DD, et al. **Histopathology** 1989 Dec;15(6):575–84

An immunohistochemical study of the presence of c-erbB-2 protein in Paget's disease of the nipple. Lammie GA, et al. **Histopathology** 1989 Nov;15(5):505–14

Beta-2-microglobulin expression in relation to amplification of oncogenes and prognosis in breast carcinoma. Tsuda H, et al. **Histopathology** 1990 May;16(5):500–2

Breast cancers with extremely high oestrogen receptor protein status. Wong SY, et al. **Histopathology** 1990 Feb; 16(2):125–32

Correlation of proliferative activity in breast tissue using PCNA/cyclin [letter] Battersby S, et al. **Hum Pathol** 1990 Jul;21(7):781

neu oncogene protein and epidermal growth factor receptor are independently expressed in benign and malignant breast tissues. Tsutsumi Y, et al. **Hum Pathol** 1990 Jul;21(7):750–8

Covalent binding of 17 beta-estradiol and retinoic acid to proteins in the human breast cancer cell line MCF-7. Takahashi N, et al. **In Vitro Cell Dev Biol** 1989 Dec; 25(12):1199–200

Highly specific sites of prolactin binding in benign and malignant breast tissue. Agarwal PK, et al. **Indian J Exp Biol** 1989 Dec;27(12):1035–8

Somatostatin receptor incidence and distribution in breast cancer using receptor autoradiography: relationship to EGF receptors. Reubi JC, et al. **Int J Cancer** 1990 Sep 15;46(3):416–20

Hormone sensitivity in vitro and in vivo of v-ras-transfected MCF-7 cell derivatives. Van Roy F, et al. **Int J Cancer** 1990 Sep 15;46(3):522–32

Milk proteins and mammary cancer: a review. Laurence DJ. **Invest Cell Pathol** 1978 Jan-Mar;1(1):5–22 (180 ref.)

Induction of 2'-5' oligoadenylate synthetase and activation of ribonuclease in tamoxifen treated human breast cancer cell lines. Viano I, et al. **J Biol Regul Homeost Agents** 1989 Oct-Dec;3(4):167–74

Conversion to estriol in "normal", benign and malignant human breast tissues. Seshadri R, et al. **J Cancer Res Clin Oncol** 1990;116(3):271–4

Interaction of growth factors during progression towards steroid independence in T-47-D human breast cancer cells. Daly RJ, et al. **J Cell Biochem** 1990 Jul;43(3):199–211

Modulation of transforming growth factor alpha-dependent expression of epidermal growth factor receptor gene by transforming growth factor beta, triiodothyronine, and retinoic acid. Fernandez-Pol JA, et al. **J Cell Biochem** 1989 Nov;41(3):159–70

19th annual UCLA symposium: Molecular, biochemical and cellular biology of human breast cancer. Abstracts. **J Cell Biochem Suppl** 1990;14B:317–47

Keratin expression in human mammary epithelial cells cultured from normal and malignant tissue: relation to in vivo phenotypes and influence of medium. Taylor-Papadimitriou J, et al. **J Cell Sci** 1989 Nov;94 (Pt 3):403–13

Insulin-like growth factor binding proteins in human breast cancer cells: relationship to hIGFBP-2 and hIGFBP-3. De Leon DD, et al. **J Clin Endocrinol Metab** 1990 Aug; 71(2):530–2

Prognostic value of prostaglandin F2 alpha concentrations in breast carcinoma. van Dam PA, et al. **J Clin Pathol** 1989 Oct;42(10):1046–8

Receptors, growth factors and steroid insensitivity of tumours. King RJ. **J Endocrinol** 1990 Feb;124(2):179–81 (30 ref.)

Insulin-like growth factor-I and its autocrine role in growth of MCF-7 human breast cancer cells in culture. Freed KA, et al. **J Mol Endocrinol** 1989 Nov;3(3):183–90

Gastrointestinal peptide hormones and breast cancer [letter; comment] Hill P, et al. **J Natl Cancer Inst** 1990 Jul 4; 82(13):1155–7 Comment on: J Natl Cancer Inst 1990 Jan 3;82(1):22–9.

Relationships of estrogen to breast cancer, of diet to breast cancer, and of diet to estradiol metabolism [editorial] Longcope C. **J Natl Cancer Inst** 1990 Jun 6;82(11):896–7

Relationship of progesterone-receptor positivity in malignant breast tumors to reproductive status of women at tumor initiation--results from patients with possible radiation-induced tumors [letter] Olsson H, et al. **J Natl Cancer Inst** 1990 Mar 21;82(6):529–31

Formation of glucuronides of estradiol-17 beta by human mammary cancer cells. Adams JB, et al. **J Steroid Biochem** 1989 Nov;33(5):1023–5

Expression of hydroxysteroid sulphotransferase is related to estrogen receptor status in human mammary cancer. Adams JB, et al. **J Steroid Biochem** 1989 Oct;33(4A):637–42

Progestins and androgens stimulate lipid accumulation in T47D breast cancer cells via their own receptors. Chambon M, et al. **J Steroid Biochem** 1989 Nov;33(5):915–22

Immunological and physiological analysis of human breast cancer progesterone receptor heterogeneity, following KCl dissociation and size exclusion chromatography. Goussard J, et al. **J Steroid Biochem** 1989 Dec;33(6):1063–72

Estrone sulfate and sulfatase activity in human breast cancer and endometrial cancer. Naitoh K, et al. **J Steroid Biochem** 1989 Dec;33(6):1049–54

Wide spectrum of steroids serving as substrates for the formation of lipoidal derivatives in ZR-75-1 human breast cancer cells. Poulin R, et al. **J Steroid Biochem** 1990 Feb; 35(2):237–47

Antitumor activity and pharmacokinetics of a morpholino-anthracycline derivative (KRN8602) against human breast carcinoma xenografts serially transplanted into nude mice. Kubota T, et al. **Jpn J Cancer Res** 1990 Aug;81(8):827–33

Immunohistochemical study on overexpression of c-erbB-2 protein in human breast cancer: its correlation with gene amplification and long-term survival of patients. Tsuda H, et al. **Jpn J Cancer Res** 1990 Apr;81(4):327–32

In vitro sensitivity test of breast cancer cells to hormonal agents in a radionucleotide-incorporation assay. Watanabe T, et al. **Jpn J Cancer Res** 1990 May;81(5):536–43

Parathyroid hormone-related protein and transforming growth factor activities in an extract from a breast cancer associated with humoral hypercalcemia of malignancy. Nagata N, et al. **Jpn J Clin Oncol** 1989 Dec;19(4):353–9

Changes in the hormone receptors of human breast carcinoma xenografts in nude mice by treatment with cytotoxic agents. Koh J, et al. **Jpn J Surg** 1990 Jan;20(1):89–96

Thymidine labeling index in breast tumors. Lee HD, et al. **Jpn J Surg** 1990 Mar;20(2):180–5

Growth fractions of breast cancer in relation to epidermal growth factor receptor and estrogen receptor. Toi M, et al. **Jpn J Surg** 1990 May;20(3):327–30

Oestrogen receptor and oestrogen regulated proteins in human breast cancer: a review. Henry JA, et al. **Keio J Med** 1989 Sep;38(3):241–61 (106 ref.)

Studies of the metabolism of human breast cancer spheroids by NMR. Ronen S, et al. **Magn Reson Med** 1989 Nov; 12(2):274–81

Correlation between laminin and type IV collagen distribution in breast carcinomas, and estrogen receptors expression, lymph node and vascular involvement. Charpin C, et al. **Med Oncol Tumor Pharmacother** 1990;7(1):43–54

Prognostic significance of cytokeratin-positive breast cancer metastases. Sedmak DD, et al. **Mod Pathol** 1989 Sep; 2(5):516–20

Catechol estrogen formation in MCF-7 cell culture and effects of bromoestrogen inhibitors. Brueggemeier RW, et al. **Mol Cell Endocrinol** 1989 Jul;64(2):161–7

Insulin and epidermal growth factor stimulate phosphorylation of p185HER-2 in the breast carcinoma cell line, BT474. Lin YZ, et al. **Mol Cell Endocrinol** 1990 Mar 5;69(2-3):111–9

Differential regulation of cathepsin D by sex steroids in mammary cancer and uterine cells. Touitou I, et al. **Mol Cell Endocrinol** 1989 Oct;66(2):231–8

Direct effects of estrogen on c-fos and c-myc protooncogene expression and cellular proliferation in human breast cancer cells. van der Burg B, et al. **Mol Cell Endocrinol** 1989 Jul; 64(2):223–8

A proxy approach to the determination of total caloric intake for use in cancer epidemiology. Toporoff E, et al. **Nutr Cancer** 1990;13(1-2):35–49

Tumor trapping of 5-fluorouracil: in vivo 19F NMR spectroscopic pharmacokinetics in tumor-bearing humans and rabbits. Wolf W, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):492–6

Estrogens, receptors and cancer: the scientific contributions of Elwood Jensen. DeSombre ER. **Prog Clin Biol Res** 1990; 322:17–29

Hypocalcemia and an inappropriate endocrine response in osteoblastic metastatic breast cancer. Bouvier DP. **South Med J** 1989 Dec;82(12):1574–6 (9 ref.)

Long-chain fatty acid esters of 5-androstene-3 beta, 17 beta-diol: composition and turnover in human mammary cancer cells in culture. Martyn P, et al. **Steroids** 1989 Aug; 54(2):245–55

Oxygen consumption levels in breast cancer: an indicator of estrogen receptor values. Bronn DG, et al. **Surg Forum** 1978;29:174–6

Effects of the beta-isomer of hexachlorocyclohexane on estrogen-sensitive human mammary tumor cells. Coosen R, et al. **Toxicol Appl Pharmacol** 1989 Nov;101(2):310–8

Hormones in male breast cancer. Ballerini P, et al. **Tumori** 1990 Feb 28;76(1):26–8

Iron and neoplasia: ferritin and hemosiderin in tumor cells. Iancu TC. **Ultrastruct Pathol** 1989 Sep-Dec;13(5-6):573–84

Immunocytochemical reactivity of breast cancer tissue with antibodies to neuron-specific enolase and an adenocarcinoma-associated glycolipid antigen. Ingelman-Sundberg H, et al. **Virchows Arch [A]** 1989; 415(6):539–44

Mucoepidermoid mammary carcinoma. Immunohistochemical and biochemical analyses of intermediate filaments. Lüchtrath H, et al. **Virchows Arch [A]** 1989;416(2):105–13

Estrogen regulation of protein synthesis and cell growth in human breast cancer. Cullen KJ, et al. **Vitam Horm** 1989; 45:127–72 (228 ref.)

[Immunogold and immunofluorescence localization of epidermal growth factor receptors on MCF-7 human breast cancer cells] Zhang XM. **Chung-hua Ping Li Hsueh Tsa Chih** 1990 Jun;19(2):106–8 (Eng. Abstr.) **(Chi)**

[Fixation of fluorescent estrone derivative on human breast cancer cells. Correlation with age, menopause status and histopathology] Baltali E, et al. **Bull Cancer (Paris)** 1990; 77(4):363–9 (Eng. Abstr.) **(Fre)**

[Intracellular localization of halogenated drugs or molecules in cultured tumor cells. A study using ionic microscopy associated with an imaging processing system] Berry JP, et al. **Bull Cancer (Paris)** 1989;76(8):829–30 **(Fre)**

[Biological action of the antiestrogen ICI 164.384 in the MCF-7 mammary cancer cell line] Gelly C, et al. **Pathol Biol (Paris)** 1989 Sep;37(7):824–6 (Eng. Abstr.) **(Fre)**

[An immunohistochemical investigation of estrogen receptor in human breast cancer] Hori M, et al. **Gan No Rinsho** 1990 Feb;36(2):143–7 (Eng. Abstr.) **(Jpn)**

[Breast cancer and its hormonal dependency] Matsumoto K, et al. **Gan No Rinsho** 1989 May;Spec No:204–11 (19 ref.) **(Jpn)**

[The study of 5-FU levels and pyrimidine nucleoside phosphorylase (PyNPase) activity in human breast cancer tissue after administration of 5'-deoxy-5-fluorouridine (5'-DFUR)] Yayoi E, et al. **Gan To Kagaku Ryoho** 1990 Jul;17(7):1371–4 **(Jpn)**

[Local production of estrogen via aromatase and estrone sulfatase in breast cancer tissue] Utsumi T. **Nippon Geka Gakkai Zasshi** 1989 Jun;90(6):920–7 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Recurrent papillomas of the nipple associated with human papillomavirus 41. Kowalzick L, et al. **Br J Dermatol** 1990 Jun;122(6):757–62

Viral reactivation as a cause of unexplained fever in patients with progressive metastatic breast cancer. Rasoul-Rockenschaub S, et al. **Cancer Immunol Immunother** 1990;31(3):191–5

Viral involvement in breast cancer. Leinster SJ. **Horm Res** 1989;32 Suppl 1:266–9

[Retroviruses and breast cancer] Litvinov SV. **Vopr Virusol** 1990 Jan-Feb;35(1):8–13 (76 ref.) **(Rus)**

MORTALITY

Long-term survival in male breast cancer. Leivonen MK, et al. **Ann Chir Gynaecol** 1989;78(2):146–8

The importance of DNA flow cytometry in node-negative breast cancer. Winchester DJ, et al. **Arch Surg** 1990 Jul; 125(7):886–9

Deat''s from cancer in women [letter] Purkiss ME. **BMJ** 1989 Aug 26;299(6698):569

A prognostic score in histological node negative breast cancer. Chevallier B, et al. **Br J Cancer** 1990 Mar; 61(3):436–40

A retrospective study of breast carcinoma: causes of death and pattern of metastases. Parham DM, et al. **Br J Cancer** 1989 Sep;60(3):394–6

Mortality by laterality of the primary tumour among 55,000 breast cancer patients from the Swedish Cancer Registry. Rutqvist LE, et al. **Br J Cancer** 1990 Jun;61(6):866–8

The effect of pre-morbid height and weight on the survival of breast cancer patients. Tretli S, et al. **Br J Cancer** 1990 Aug;62(2):299–303

Tissue carcinoembryonic antigen in the prognosis of early invasive breast cancer. Hegg R, et al. **Breast Cancer Res Treat** 1990 May;15(3):213–6

Season of tumour detection influences factors predicting survival of patients with breast cancer. Mason BH, et al. **Breast Cancer Res Treat** 1990 Jan;15(1):27–37

Does delay in diagnosis of breast cancer affect survival? Neave LM, et al. **Breast Cancer Res Treat** 1990 Feb; 15(2):103–8

Survival effect of systemic therapy on patients developing metastatic breast carcinoma. Rouesse J, et al. **Breast Cancer Res Treat** 1990 Jan;15(1):13–20

Pathologic findings from the National Surgical Adjuvant Breast and Bowel Projects (NSABP). Prognostic discriminants for 8-year survival for node-negative invasive breast cancer patients. Fisher ER, et al. **Cancer** 1990 May 1;65(9 Suppl):2121–8

Social class as a prognostic factor in breast cancer survival. Karjalainen S, et al. **Cancer** 1990 Aug 15;66(4):819–26

Factors influencing black women's breast self-examination practice. Nemcek MA. **Cancer Nurs** 1989 Dec;12(6):339–43

Prediction of relapse and survival in breast cancer patients by pS2 protein status. Foekens JA, et al. **Cancer Res** 1990 Jul 1;50(13):3832–7

Independent prognostic value of laminin receptor expression in breast cancer survival. Marques LA, et al. **Cancer Res** 1990 Mar 1;50(5):1479–83

Mortality patterns of breast cancer patients [letter; comment] **Clin Radiol** 1990 Feb;41(2):144–5 Comment on: Clin Radiol 1989 Mar;40(2):204–8.

Shadows over screening mammography dispersed [letter] Mathiesen T, et al. **Clin Radiol** 1990 Jul;42(1):67–8

Prognostic factors in primary breast cancer. Reiss M. **Conn Med** 1989 Oct;53(10):565–71 (52 ref.)

How to use prognostic factors in axillary node-negative breast cancer patients. McGuire WL, et al. **J Natl Cancer Inst** 1990 Jun 20;82(12):1006–15 (162 ref.)

Bristol Cancer Help Centre [letter] **Lancet** 1990 Sep 22; 336(8717):743–4

Survival of patients with breast cancer attending Bristol Cancer Help Centre. Bagenal FS, et al. **Lancet** 1990 Sep 8;336(8715):606–10

Urokinase plasminogen activator and prognosis in breast cancer [letter] Duffy MJ, et al. **Lancet** 1990 Jan 13; 335(8681):108

Bristol Cancer Help Centre [letter] Sheard TA. **Lancet** 1990 Sep 15;336(8716):683

Mortality from breast cancer after irradiation during

fluoroscopic examinations in patients being treated for tuberculosis. Miller AB, et al. **N Engl J Med** 1989 Nov 9;321(19):1285–9

Cathepsin D and prognosis in breast cancer [see comments] Tandon AK, et al. **N Engl J Med** 1990 Feb 1;322(5):297–302 Comment in: N Engl J Med 1990 Feb 1;322(5):329–31. Comment in: N Engl J Med 1990 Jun 7;322(23):1673–4.

A state–by–state report from the CDC on deaths from breast cancer [news] **Oncology (Williston Park)** 1989 Nov; 3(11):132

Clinical trials of dietary interventions to enhance cancer survival. Wynder EL, et al. **Prog Clin Biol Res** 1990; 346:217–29 (55 ref.)

Significant survival benefit of node–negative breast cancer patients treated with adjuvant chemotherapy: seven–year results. Jakesz R, et al. **Recent Results Cancer Res** 1989; 115:180–5

Application of the theory of finite mixtures for the estimation of 'cure' rates of treated cancer patients. Gordon NH. **Stat Med** 1990 Apr;9(4):397–407

Factors influencing survival and prognosis in early breast carcinoma (T1N0M0–T1N1M0). Assessment of 644 patients with median follow–up of 18 years. Rosen PP, et al. **Surg Clin North Am** 1990 Aug;70(4):937–62

Prognosis of nonpalpable infiltrating carcinoma of the breast. Ciatto S, et al. **Surg Gynecol Obstet** 1990 Jan;170(1):61–4

Breast cancer survival and perioperative blood transfusion. Crowe JP, et al. **Surgery** 1989 Nov;106(5):836–41

Prognostic factors determining survival in breast cancer patients presenting with metastatic disease. Jubelirer SJ, et al. **W V Med J** 1990 Jan;86(1):7–9

[Malignant neoplasms of the breast and female genital organs and carcinoma in situ of the uterine cervix in East Germany 1986. Statistical data of the national cancer register] Mehnert WH, et al. **Zentralbl Gynakol** 1990;112(7):395–401 (Eng. Abstr.) **(Ger)**

[Effect of administration of hormonal contraceptives on prognostic factors in breast cancer] Schönborn I, et al. **Zentralbl Gynakol** 1990;112(5):263–6 (Eng. Abstr.) **(Ger)**

[The WE project: mammography significantly decreases breast cancer mortality] Tabár L, et al. **Lakartidningen** 1990 Jan 10;87(1–2):36–9 **(Swe)**

NURSING

The nurse's role in mammography screening. Nielsen BB. **Cancer Nurs** 1989 Oct;12(5):271–5

Breast–cancer screening in Pensacola, Florida [letter; comment] Kirkpatrick JP. **J Obstet Gynecol Neonatal Nurs** 1990 Jan–Feb;19(1):13 Comment on: J Obstet Gynecol Neonatal Nurs 1989 Sep–Oct;18(5):373–81.

Life–saving patient education: breast self–examination. Harrison LL. **MCN** 1989 Sep–Oct;14(5):315

Advances in breast cancer. Implications for nursing care. Nielsen BB, et al. **Nurs Clin North Am** 1990 Jun; 25(2):365–75 (28 ref.)

PATHOLOGY

In situ carcinomas of the female breast. Diagnostic and therapeutic aspects with special reference to histological growth patterns. Clinical review. Blichert–Toft M, et al. **Acta Chir Scand** 1990 Feb;156(2):113–9 (38 ref.)

Out–patient surgical biopsy for nonpalpable breast lesions. Technique, results and consequences. Jacobsen U, et al. **Acta Chir Scand** 1989 Jun–Jul;155(6–7):313–6

The value of needle aspiration cytology of the breast, with an emphasis on the diagnosis of breast disease in young women below the age of 30. Gupta RK, et al. **Acta Cytol** 1990 Mar–Apr;34(2):165–8

Carcinocythemia. Report of two cases, one simulating a Burkitt lymphoma. Lugassy G, et al. **Acta Cytol** 1990 Mar–Apr;34(2):265–8

Metastatic breast carcinoma in pleural fluid. Correlation of morphology with estrogen receptor activity and morphology of the primary carcinoma. Wiley EL, et al. **Acta Cytol** 1990 Mar–Apr;34(2):169–74

Cytophotometric estimation of cell proliferation in breast cancer. Correlation to the clinical course during long–term follow–up. Hatschek T, et al. **Acta Oncol** 1989;28(6):801–6

Body size and menopausal status in relation to the pattern of spread in recurrent breast cancer. Kamby C, et al. **Acta Oncol** 1989;28(6):795–9

Significance of laboratory values in detection and follow–up of metastatic breast cancer. Kellokumpu–Lehtinen P, et al. **Acta Oncol** 1990;29(3):313–4

Relationship between the extent of intraductal component and that of the invasive component in ductal carcinomas of the breast. Ichihara S, et al. **Acta Pathol Jpn** 1989 Dec; 39(12):786–94

Glycogen–rich clear cell carcinoma of the breast. An autopsy case. Okamoto T. **Acta Pathol Jpn** 1989 Jul;39(7):469–72

Secretory carcinoma coexistent with mucinous carcinoma in the breast. Report of a case. Tamura G, et al. **Acta Pathol Jpn** 1989 Sep;39(9):593–8

Stereotactic fine–needle aspiration for cytologic diagnosis of nonpalpable breast lesions [see comments] Löfgren M, et al. **AJR Am J Roentgenol** 1990 Jun;154(6):1191–5 Comment in: AJR Am J Roentgenol 1990 Jun;154(6):1196–7.

Now there are two effective conservation approaches for patients with stage I and II breast cancer: how pathological assessment of inked resection margins can provide valuable information for the radiation oncologist. Pezner RD, et al. **Am J Clin Oncol** 1990 Apr;13(2):175–9 (22 ref.)

Nonmammary malignant neoplasms in patients with stage I (T1N0M0) and stage II (T1N1M0) breast carcinoma. A long–term follow–up study. Rosen PP, et al. **Am J Clin Oncol** 1989 Oct;12(5):369–74

Mammographic and gross pathologic analysis of breast needle localization specimens. Use of a tissue analysis device. Alberhasky MT. **Am J Clin Pathol** 1989 Oct;92(4):452–7

Cellularity in breast carcinoma [see comments] Ambros RA, et al. **Am J Clin Pathol** 1990 Jan;93(1):98–100 Comment in: Am J Clin Pathol 1990 Jul;94(1):121.

Pleomorphic adenoma (benign mixed tumor) of the breast. An immunohistochemical, flow cytometric, and ultrastructural study and review of the literature. Ballance WA, et al. **Am J Clin Pathol** 1990 Jun;93(6):795–801 (40 ref.)

Pleomorphic adenoma of the breast. Chen KT. **Am J Clin Pathol** 1990 Jun;93(6):792–4

The continuing evolution of our understanding of juvenile papillomatosis of the breast [editorial; comment] Dehner LP. **Am J Clin Pathol** 1990 May;93(5):713 Comment on: Am J Clin Pathol 1990 May;93(5):599–603.

Signet ring cell sinus histiocytosis. A previously unrecognized histologic condition mimicking metastatic adenocarcinoma in lymph nodes. Gould E, et al. **Am J Clin Pathol** 1989 Oct;92(4):509–12

Detection of breast carcinoma cells in human bone marrow using fluorescence–activated cell sorting and conventional cytology. Leslie DS, et al. **Am J Clin Pathol** 1990 Jul; 94(1):8–13

Demonstration of two ovarian tumor–associated antigens in primary and metastatic breast, gastric, and colonic tumors. McGuckin MA, et al. **Am J Clin Pathol** 1990 Aug; 94(2):137–41

DNA content and proliferative activity of cystosarcoma phyllodes of the breast. Potential prognostic significance. el–Naggar AK, et al. **Am J Clin Pathol** 1990 Apr; 93(4):480–5

Juvenile papillomatosis of the breast. A follow–up study of 41 patients having biopsies before 1979 [see comments] Rosen PP, et al. **Am J Clin Pathol** 1990 May;93(5):599–603 Comment in: Am J Clin Pathol 1990 May;93(5):713.

Method already in use [letter; comment] Stay EJ, et al. **Am J Clin Pathol** 1990 May;93(5):721 Comment on: Am J Clin Pathol 1989 Jul;92(1):86–8.

Nuclear DNA content as a prognostic factor in T1–2N0 breast cancer. Toikkanen S, et al. **Am J Clin Pathol** 1990 Apr;93(4):471–9

Breast carcinoma cellularity and estrogen receptors [letter; comment] van Netten JP. **Am J Clin Pathol** 1990 Jul; 94(1):121 Comment on: Am J Clin Pathol 1990 Jan;93(1):98–100.

Comparative features of ductal carcinoma in situ and infiltrating ductal carcinoma of the breast on fine–needle aspiration biopsy. Wang HH, et al. **Am J Clin Pathol** 1989 Dec;92(6):736–40

Diet and histologic types of benign breast disease defined by subsequent risk of breast cancer. Hislop TG, et al. **Am J Epidemiol** 1990 Feb;131(2):263–70

Biological grading of breast cancer using antibodies to proliferating cells and other markers. Bacus SS, et al. **Am J Pathol** 1989 Nov;135(5):783–92

Neoplastic involvement of nipple–areolar complex in invasive breast cancer. Santini D, et al. **Am J Surg** 1989 Nov; 158(5):399–403

Prognosis in infiltrating lobular carcinoma. An analysis of "classical" and variant tumors. DiCostanzo D, et al. **Am J Surg Pathol** 1990 Jan;14(1):12–23

Benign mixed tumors (pleomorphic adenomas) of the breast. Moran CA, et al. **Am J Surg Pathol** 1990 Oct;14(10):913–21

Fibroadenomatoid hyperplasia of the male breast. Nielsen BB. **Am J Surg Pathol** 1990 Aug;14(8):774–7

Anti–estradiol immunoperoxidase labeling of nuclei, not cytoplasm, in paraffin sections, determines estrogen receptor status of breast cancer. O'Keane JC, et al. **Am J Surg Pathol** 1990 Feb;14(2):121–7

How thoroughly should needle localization breast biopsies be sampled for microscopic examination? A prospective mammographic/pathologic correlative study. Owings DV, et al. **Am J Surg Pathol** 1990 Jun;14(6):578–83

Epitheliosis of the breast. An immunohistochemical characterization and comparison to malignant intraductal proliferations of the breast. Raju U, et al. **Am J Surg Pathol** 1990 Oct;14(10):939–47

Immunohistochemical staining with monoclonal Ab B72.3 in benign and malignant breast disease. Tavassoli FA, et al. **Am J Surg Pathol** 1990 Feb;14(2):128–33

Carcinoma of the breast: pathological criteria as an aid in treatment. Finney GG Jr, et al. **Am Surg** 1975 Jan;41(1):1–3

Prospective evaluation of the role of fine–needle aspiration biopsy in the diagnosis and management of patients with palpable solid breast lesions. Gelabert HA, et al. **Am Surg** 1990 Apr;56(4):263–7 (23 ref.)

Relationship between computerized morphonuclear image analysis and histopathologic grading of breast cancer. Larsimont D, et al. **Anal Quant Cytol Histol** 1989 Dec; 11(6):433–9

Wire–guided biopsies of nonpalpable breast lesions. Ahovuo J, et al. **Ann Chir Gynaecol** 1990;79(2):82–4

Lymphoma of the breast. Eskelinen M, et al. **Ann Chir Gynaecol** 1989;78(2):149–52

Some limitations on studies about the relation between gross cystic disease and risk of subsequent breast cancer. Bodian CA. **Ann N Y Acad Sci** 1990;586:259–65

Relationship of benign breast disease to breast cancer. Brinton LA. **Ann N Y Acad Sci** 1990;586:266–71

Steroid hormones and growth factors in breast cancer. Leake R, et al. **Ann N Y Acad Sci** 1990;595:236–41 (16 ref.)

Significance of apocrine metaplasia in mammary carcinogenesis. A preliminary morphological and immunohistochemical study. Tóth J, et al. **Ann N Y Acad Sci** 1990;586:238–51

Natural history of in situ breast cancer in a defined population. Temple WJ, et al. **Ann Surg** 1989 Nov; 210(5):653–7

Nuclear DNA content and nuclear atypia. Relation to survival in patients with breast adenocarcinoma and serious ovarian tumors. Erhardt K, et al. **Anticancer Res** 1989 Sep–Oct;9(5):1325–30

Immunohistochemical staining of human breast cancer with a new tumour marker MCA: relation to axillary lymph node involvement, metastasis, and survival. Eskelinen M, et al. **Anticancer Res** 1990 May–Jun;10(3):591–6

Characterization of node–negative breast cancer by clinico–pathologic and biologic factors. Gasparini G, et al. **Anticancer Res** 1990 Jan–Feb;10(1):205–8

Bone marrow micrometastases detected by a monoclonal antibody in patients with breast cancer. Giai M, et al. **Anticancer Res** 1990 Jan–Feb;10(1):119–21

Serum albumin as a modulator on growth of the human breast cancer cell line, MCF–7. Laursen I, et al. **Anticancer Res** 1990 Mar–Apr;10(2A):343–51

Cell kinetics (SAMBA 200) of estradiol stimulated long–term phenol red withdrawn cultured breast cancer cells. Revillion F, et al. **Anticancer Res** 1990 Jul–Aug; 10(4):1067–70

ras, c–myc and c–erbB–2 oncoproteins in human breast cancer. Spandidos DA, et al. **Anticancer Res** 1989 Sep–Oct; 9(5):1385–93

Fibronectin: a discrimination marker between small invasive carcinomas and benign proliferative lesions of the breast. Christensen L. **APMIS** 1990 Jul;98(7):615–23

Autopsy studies of the occurrence of cancerous, atypical and benign epithelial lesions in the female breast. Nielsen M. **APMIS Suppl** 1989;10:1–56 (291 ref.)

Relationship between progesterone receptor, axillary node status and productive fibrosis in ductal infiltrating carcinoma of the breast. Giani C, et al. **Appl Pathol** 1989; 7(4):225–32

Leiomyoma of the breast. Lauwers G, et al. **Arch Anat Cytol Pathol** 1990;38(3):108–10

Oncocytic carcinoma of the male breast. Costa MJ, et al. **Arch Pathol Lab Med** 1989 Dec;113(12):1396–9

Interpretation of diagnostic cytology with likelihood ratios. Giard RW, et al. **Arch Pathol Lab Med** 1990 Aug; 114(8):852–4

Flow cytometric S fraction as a predictor of clinical outcome in cystosarcoma phyllodes. Palko MJ, et al. **Arch Pathol Lab Med** 1990 Sep;114(9):949–52

Cystosarcoma phyllodes arising synchronously in right breast and bilateral axillary ectopic breast tissue. Saleh HA, et al. **Arch Pathol Lab Med** 1990 Jun;114(6):624–6

Patterns of human tumor–infiltrating lymphocytes in 120 human cancers. Balch CM, et al. **Arch Surg** 1990 Feb; 125(2):200–5

Predictors of local recurrence following conservative breast surgery and radiation therapy. The influence of tumor size. Eberlein TJ, et al. **Arch Surg** 1990 Jun;125(6):771–5; discussion 775–7

Breast masses in young women. Ferguson CM, et al. **Arch Surg** 1989 Nov;124(11):1338–41

Breast biopsy for calcifications in nonpalpable breast lesions. A prospective study. Franceschi D, et al. **Arch Surg** 1990 Feb;125(2):170–3

Medullary carcinoma of the breast. Overdiagnosis of a prognostically favorable neoplasm. Rubens JR, et al. **Arch Surg** 1990 May;125(5):601–4

The management of metastases to eye and orbit from carcinoma of the breast. Burmeister BH, et al. **Aust N Z J Ophthalmol** 1990 May;18(2):187–90

Bilateral angiosarcoma of the breast: an overview. Kumar A, et al. **Aust N Z J Surg** 1990 May;60(5):341–5

Mechanisms of growth regulation of human breast cancer. Wakeling AE. **Baillieres Clin Endocrinol Metab** 1990 Mar; 4(1):51–66 (109 ref.)

Stimulation of growth of human breast cancer cell lines in culture by linoleic acid [published erratum appears in Biochem Biophys Res Commun 1989 Dec 29;165(3):1443] Rose DP, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):277–83

The anti–proliferative properties of 4–benzylphenoxy ethanamine derivatives are mediated by the anti–estrogen binding site (ABS), whereas the anti–estrogenic effects of trifluopromazine are not. Poirot M, et al. **Biochem Pharmacol** 1990 Aug 1;40(3):425–9

Node negative breast cancer [letter; comment] Blamey RW, et al. **BMJ** 1990 Apr 28;300(6732):1137–8 Comment on: BMJ 1990 Feb 10;300(6721):346–8.

Node negative breast cancer [letter; comment] Grogono J. **BMJ** 1990 Mar 3;300(6724):612 Comment on: BMJ 1990 Feb 10;300(6721):346–8.

Node negative breast cancer [see comments] O'Reilly SM, et al. **BMJ** 1990 Feb 10;300(6721):346–8 (31 ref.) Comment

in: BMJ 1990 Mar 3;300(6724):612. Comment in: BMJ 1990 Mar 17;300(6726):749. Comment in: BMJ 1990 Apr 28;300(6732):1137–8.

Node negative breast cancer [letter] O'Reilly SM, et al. **BMJ** 1990 May 26;300(6736):1399–400

Effect of hormonal manipulation and doxorubicin administration on cell cycle kinetics of human breast cancer cells. Bontenbal M, et al. **Br J Cancer** 1989 Nov; 60(5):688–92

Invasive lobular carcinomas of the breast—the prognosis of histopathological subtypes. du Toit RS, et al. **Br J Cancer** 1989 Oct;60(4):605–9

Response of breast carcinoma to endocrine therapy predicted using immunostained pelleted fine needle aspirates. Heyderman E, et al. **Br J Cancer** 1989 Oct;60(4):630–3

An assessment of extensive intraductal component as a risk factor for local recurrence after breast-conserving therapy. Jacquemier J, et al. **Br J Cancer** 1990 Jun;61(6):873–6

DNA index, S-phase fraction, histological grade and prognosis in breast cancer. O'Reilly SM, et al. **Br J Cancer** 1990 May;61(5):671–4

The prognostic significance of nuclear DNA content in invasive breast cancer—a study with long-term follow-up. Toikkanen S, et al. **Br J Cancer** 1989 Nov;60(5):693–700

Breast within a breast: a review of breast hamartomas. Paraskevopoulos JA, et al. **Br J Clin Pract** 1990 Jan; 44(1):30–2 (28 ref.)

Metastatic breast carcinoma in the pelvis. Taylor WG, et al. **Br J Clin Pract** 1990 May;44(5):205–6

Paget's disease without a palpable mass in the breast. Aktan AO, et al. **Br J Surg** 1990 Feb;77(2):226–7

Evaluation of the prognostic value of triple node biopsy in early breast cancer. Du Toit RS, et al. **Br J Surg** 1990 Feb;77(2):163–7

Flow cytometric and histological analysis of ductal carcinoma in situ of the breast. Locker AP, et al. **Br J Surg** 1990 May;77(5):564–7

Lipids in breast carcinogenesis [see comments] Pritchard GA, et al. **Br J Surg** 1989 Oct;76(10):1069–73 Comment in: Br J Surg 1990 Mar;77(3):353–4.

Fine-wire localization and biopsy of non-palpable breast lesions. Tresadern JC, et al. **Br J Surg** 1990 Mar;77(3):320–2

Comments on NCI alert on node-negative breast cancer [letter] Blamey RW, et al. **Breast Cancer Res Treat** 1989 Nov;14(2):225

Correlation of growth fraction by Ki-67 immunohistochemistry with histologic factors and hormone receptors in operable breast carcinoma. Gasparini G, et al. **Breast Cancer Res Treat** 1989 Dec;14(3):329–36

Cytometric and histopathologic features of tumors detected in a randomized mammography screening program: correlation and relative prognostic influence. Hatschek T, et al. **Breast Cancer Res Treat** 1990 May;15(3):149–60

Influence of S-phase fraction on metastatic pattern and post-recurrence survival in a randomized mammography screening trial. Hatschek T, et al. **Breast Cancer Res Treat** 1989 Dec;14(3):321–7

Nuclear characteristics as indicators of prognosis in node negative breast cancer patients. le Doussal V, et al. **Breast Cancer Res Treat** 1989 Nov;14(2):207–16

Immunohistochemical staining of bone marrow biopsies for detection of occult metastasis in breast cancer. Mathieu MC, et al. **Breast Cancer Res Treat** 1990 Jan;15(1):21–6

Antiestrogenic properties of keoxifene, trans-4-hydroxytamoxifen, and ICI 164384, a new steroidal antiestrogen, in ZR-75-1 human breast cancer cells. Poulin R, et al. **Breast Cancer Res Treat** 1989 Oct;14(1):65–76

Growth kinetics of four human breast carcinomas grown in nude mice. Spang-Thomsen M, et al. **Breast Cancer Res Treat** 1989 Nov;14(2):235–43

Determining the degree of malignancy of individual cases of mammary carcinoma on the basis of clinical, morphological and biochemical parameters. Mangakis N, et al. **Bull Cancer (Paris)** 1990;77(3):235–42

Argyrophilic breast carcinoma, single metastasis to the pituitary gland. Paulus P, et al. **Bull Cancer (Paris)** 1990; 77(4):377–84

The male breast and malignant neoplasms. Diagnosis by aspiration biopsy cytology. Bhagat P, et al. **Cancer** 1990 May 15;65(10):2338–41

Mammary ovarian metastases with stroma cell hyperplasia and postmenopausal virilization. Caron P, et al. **Cancer** 1990 Sep 15;66(6):1221–4

Comprehensive management of disseminated breast cancer. Henderson IC, et al. **Cancer** 1990 Sep 15;66(6 Suppl):1439–48 (36 ref.)

Medullary carcinoma of the breast. An unusual cytologic finding in cyst fluid aspirates. Howell LP, et al. **Cancer** 1990 Jan 15;65(2):277–82

Evaluation of cell proliferation in breast carcinoma. Comparison of Ki-67 immunohistochemical study, DNA flow cytometric analysis, and mitotic count. Isola JJ, et al. **Cancer** 1990 Mar 1;65(5):1180–4

DNA index and S-phase fraction and their combination as prognostic factors in operable ductal breast carcinoma. Joensuu H, et al. **Cancer** 1990 Jul 15;66(2):331–40

Risk factors for breast recurrence in premenopausal and postmenopausal patients with ductal cancers treated by conservation therapy. Kurtz JM, et al. **Cancer** 1990 Apr 15;65(8):1867–78

Prognostic value of histologic grade nuclear components of Scarff-Bloom-Richardson (SBR). An improved score modification based on a multivariate analysis of 1262 invasive ductal breast carcinomas. Le Doussal V, et al. **Cancer** 1989 Nov 1;64(9):1914–21

The relation of flow cytometry to clinical and biologic characteristics in women with node negative primary breast cancer. Muss HB, et al. **Cancer** 1989 Nov 1;64(9):1894–900

Topographic criteria in the diagnosis of tumor emboli in intramammary lymphatics. Orbo A, et al. **Cancer** 1990 Sep 1;66(5):972–7

Anatomic markers of human premalignancy and risk of breast cancer. Page DL, et al. **Cancer** 1990 Sep 15;66(6 Suppl):1326–35 (44 ref.)

Breast sarcoma. A clinicopathologic review of 25 cases. Pollard SG, et al. **Cancer** 1990 Sep 1;66(5):941–4

The biology of metastatic breast cancer. Price JE. **Cancer** 1990 Sep 15;66(6 Suppl):1313–20 (70 ref.)

Carcinoembryonic antigen immunocytochemistry in primary breast cancer. Robertson JF, et al. **Cancer** 1989 Oct 15; 64(8):1638–45

Node-negative minimal invasive breast cancer patients are not candidates for routine systemic adjuvant therapy. Rosner D, et al. **Cancer** 1990 Jul 15;66(2):199–205

The American Society Workshop on the Management of Limited Breast Cancer. Introduction. Scanlon EF, et al. **Cancer** 1990 May 1;65(9):2103–4

A comparison of the results of long-term follow-up for atypical intraductal hyperplasia and intraductal hyperplasia of the breast. Tavassoli FA, et al. **Cancer** 1990 Feb 1; 65(3):518–29

Correlation between histologic grade of malignancy and copy number of c-erbB-2 gene in breast carcinoma. A retrospective an...ysis of 176 cases. Tsuda H, et al. **Cancer** 1990 Apr 15;65(8):1794–800

Metaplastic carcinomas of the breast. IV. Squamous cell carcinoma of ductal origin. Wargotz ES, et al. **Cancer** 1990 Jan 15;65(2):272–6

In vitro sensitivity testing of human breast cancer cells to hormones and chemotherapeutic agents. Emerman JT, et al. **Cancer Chemother Pharmacol** 1990;26(4):245–9

Effects of the pineal hormone melatonin on the anchorage-independent growth of human breast cancer cells (MCF-7) in a clonogenic culture system. Cos S, et al. **Cancer Lett** 1990 Apr 20;50(2):115–9

Biological response of the anti-estrogen ICI 164,384 in human hormone-dependent and hormone-independent mammary cancer cell lines. Pasqualini JR, et al. **Cancer Lett** 1990 Apr 20;50(2):133–9

Estrogens are not required for prolactin induced growth of MCF-7 human breast cancer cells. Vonderhaar BK. **Cancer Lett** 1989 Sep 15;47(1-2):105–10

Studies of human breast cancer metastasis using nude mice. Price JE, et al. **Cancer Metastasis Rev** 1990 Feb;8(4):285–97 (86 ref.)

Selective elimination of breast cancer cells from human bone marrow using an antibody-Pseudomonas exotoxin A conjugate. Bjorn MJ, et al. **Cancer Res** 1990 Sep 15; 50(18):5992–6

Cellular and molecular events in loss of estrogen sensitivity in ZR-75-1 and T-47-D human breast cancer cells. Daly RJ, et al. **Cancer Res** 1990 Sep 15;50(18):5868–75

Immunohistochemical study of beta- and kappa-casein in the human breast and breast carcinomas, using monoclonal antibodies. Earl HM, et al. **Cancer Res** 1989 Nov 1; 49(21):6070–6

Retinoic acid inhibition of human breast carcinoma proliferation is accompanied by inhibition of the synthesis of a Mr 39,000 protein. Fontana JA, et al. **Cancer Res** 1990 Apr 1;50(7):1977–82

In vitro assessment of the effects of granulocyte-macrophage colony-stimulating factor on primary human tumors and derived lines. Foulke RS, et al. **Cancer Res** 1990 Oct 1; 50(19):6264–7 (20 ref.)

Mechanisms of estrogen action on the proliferation of MCF-7 human breast cancer cells in an improved culture medium. Furuya Y, et al. **Cancer Res** 1989 Dec 1;49(23):6670–4

Estradiol sensitivity test using contact-sensitive plates of confluent BALB/c 3T3 cell monolayers. Matsuoka H, et al. **Cancer Res** 1990 Apr 1;50(7):2113–8

Preservation of steroid hormone receptors in organ cultures of human breast carcinomas. Mira-y-Lopez R, et al. **Cancer Res** 1990 Jan 1;50(1):78–83

Differential tumorigenicity of two autologous human breast carcinoma cell lines, HMT-3909S1 and HMT-3909S8, established in serum-free medium. Petersen OW, et al. **Cancer Res** 1990 Feb 15;50(4):1257–70

Tumorigenicity and metastasis of human breast carcinoma cell lines in nude mice. Price JE, et al. **Cancer Res** 1990 Feb 1;50(3):717–21

Monoclonal antibodies against native ant denatured forms of estrogen-induced breast cancer protein (BCEI/pS2) obtained by expression in Escherichia coli. Prud'homme JF, et al. **Cancer Res** 1990 Apr 15;50(8):2390–6

Re: Larry Norton, a Gompertzian model of human breast cancer growth [letter; comment] Retsky M, et al. **Cancer Res** 1989 Nov 15;49(22):6443–4 Comment on: Cancer Res 1988 Dec 15;48(24 Pt 1):7067–71.

Isolation and characterization of a spontaneously immortalized human breast epithelial cell line, MCF-10. Soule HD, et al. **Cancer Res** 1990 Sep 15;50(18):6075–86

ICI 164,384, a pure antagonist of estrogen-stimulated MCF-7 cell proliferation and invasiveness. Thompson EW, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):6929–34

Flow cytometric analysis of human breast tumors and assessment of in vitro chemosensitivity by clonogenic assays. Huot J, et al. **Cell Biol Toxicol** 1990 Jan;6(1):81–94

Malignant Cystosarcoma phyllodes: report of two cases. Obafunwa JO, et al. **Cent Afr J Med** 1989 Oct;35(10):510–3

Technique and interpretation of breast aspiration cytology. Walloch J. **Clin Obstet Gynecol** 1989 Dec;32(4):786–99 (27 ref.)

Cytology of impalpable breast lesions [letter; comment] Field S. **Clin Radiol** 1990 Apr;41(4):291 Comment on: Clin Radiol 1989 Jul;40(4):380–2.

Axillary fibrosis or recurrent tumour. An MRI study in breast cancer. Moore NR, et al. **Clin Radiol** 1990 Jul;42(1):42–6

Multiple cutaneous metastases from breast carcinoma. Tianco EA, et al. **Cutis** 1990 Mar;45(3):171–5

Flow cytometric detection of multifocal DNA aneuploid cell populations in mastectomy specimens containing a primary breast carcinoma. van Dam PA, et al. **Cytometry** 1990; 11(2):300–7

The significance of atypical apocrine cells in fine-needle aspirates of the breast. Johnson TL, et al. **Diagn Cytopathol** 1989;5(3):248–54

Metaplastic carcinoma of the breast—diagnosis by aspiration biopsy cytology: report of two cases and literature review. Kline TS, et al. **Diagn Cytopathol** 1990;6(1):63–7 (16 ref.)

Tissue imprints in surgical pathology: a rapid intraoperative diagnostic aid. Scopa CD, et al. **Diagn Cytopathol** 1990; 6(1):5–8

Metastatic metaplastic carcinoma of the breast: diagnosis by bronchial brush cytology. Selvaggi SM, et al. **Diagn Cytopathol** 1989;5(4):396–9

Fine-needle aspiration cytology of granulocytic sarcoma and myeloid metaplasia. Silverman JF, et al. **Diagn Cytopathol** 1990;6(2):106–11

Ductal carcinoma-in-situ of the breast: fine-needle aspiration cytology of 12 cases. Sneige N, et al. **Diagn Cytopathol** 1989;5(4):371–7

Adhesion, growth and cytoskeletal characteristics of 8701-BC breast carcinoma cells cultured in the presence of type V collagen. Luparello C, et al. **Eur J Cancer** 1990 Mar;26(3):231–40

Liver metastases from breast cancer: the relationship between clinical, biochemical and pathological features and survival. O'Reilly SM, et al. **Eur J Cancer** 1990;26(5):574–7

Short- and long-term estrogen deprivation of T47D human breast cancer cells in culture. Murphy CS, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1777–88

Growth-inhibitory and growth-stimulatory effects of epidermal growth factor on human breast cancer cell line, MDA.MB.436: dependence on culture conditions. Nelson J, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1851–5

Correlation of proliferative activity with pathological features in breast carcinoma. Betta PG, et al. **Eur J Gynaecol Oncol** 1989;10(6):433–7

A prospective study of cytological prognosis in breast cancer: the cytological grading. Stosiek U, et al. **Eur J Gynaecol Oncol** 1983;4(3):192–7

Small sized phyllodes tumor of the breast. Bartoli C, et al. **Eur J Surg Oncol** 1990 Jun;16(3):215–9

Gastro-intestinal metastases as first clinical manifestation of the dissemination of a breast cancer. Clavien PA, et al. **Eur J Surg Oncol** 1990 Apr;16(2):121–6

Rarities in breast pathology. Bilateral Paget's disease of the breast—a case report. Fernandes FJ, et al. **Eur J Surg Oncol** 1990 Apr;16(2):172–4

Extent of metastatic axillary involvement in 1446 cases of breast cancer. Veronesi U, et al. **Eur J Surg Oncol** 1990 Apr;16(2):127–33

The effect of 1.25 dihydroxyvitamin D3 on binding and internalization of epidermal growth factor in cultures cells. Studies on BT-20 cells using quantitative electron microscope autoradiography. Frappart L, et al. **Exp Cell Res** 1989 Oct;184(2):329–41

Increased secretory activity and estradiol receptor expression are among other relevant aspects of MCF-7 human breast tumor cell growth which are expressed only in the absence of serum. Medrano EE, et al. **Exp Cell Res** 1990 May; 188(1):2–9

Correlation between Scharf-Bloom index and stromal modifications in the breast cancer. Raica M. **Folia Morphol (Warsz)** 1988;47(1-4):173–8

Prognostic factors in breast cancer. Merkel DE, et al. **Hematol Oncol Clin North Am** 1989 Dec;3(4):641–52 (60 ref.)

Weddellite calcification in the breast: eighteen cases with implications for breast cancer screening. Going JJ, et al. **Histopathology** 1990 Feb;16(2):119–24

Mucoid carcinoma of the breast with choriocarcinoma in its metastases. Green DM. **Histopathology** 1990 May; 16(5):504–6

Attenuated cells in breast stroma: the missing lymphatic system of the breast. Hartveit E. **Histopathology** 1990 Jun; 16(6):533–43

Spindle cell carcinoma of the breast. Raju GC, et al. **Histopathology** 1990 May;16(5):497–9

Squamous cell carcinoma with prominent myxoid stroma. Foschini MP, et al. **Hum Pathol** 1990 Aug;21(8):859–65

The effects of hormonal and chemotherapy on tumoral and nonneoplastic breast tissue. Kennedy S, et al. **Hum Pathol** 1990 Feb;21(2):192–8

The importance of confirmation of positive fine needle aspiration biopsies [letter] Kern WH. **Hum Pathol** 1989

Nov;20(11):1133
In situ and infiltrating lobular carcinoma of the male breast. Nance KV, et al. **Hum Pathol** 1989 Dec;20(12):1220–2
Occult breast carcinoma presenting with axillary lymph node metastases: a follow-up study of 48 patients. Rosen PP, et al. **Hum Pathol** 1990 May;21(5):518–23
Infiltrating cribriform carcinoma of the breast: a distinctive clinicopathologic entity. Venabie JG, et al. **Hum Pathol** 1990 Mar;21(3):333–8
Fibrosarcoma breast. A case report. Wani NA, et al. **Indian J Cancer** 1989 Dec;26(4):265–9
Primary squamous cell carcinoma of breast (a case report). Chakraborty P, et al. **Indian J Pathol Microbiol** 1987 Apr; 30(2):163–6
Serum leucine aminopeptidase estimation: a sensitive prognostic indicator of invasiveness in breast carcinoma. Gupta SK, et al. **Indian J Pathol Microbiol** 1989 Oct; 32(4):301–5
Angiosarcoma of the breast—a case report. Venkataramana G, et al. **Indian J Pathol Microbiol** 1989 Oct;32(4):321–3
The use of a genotypic marker to demonstrate clonal dominance during the growth and metastasis of a human breast carcinoma in nude mice. Price JE, et al. **Int J Cancer** 1990 May 15;45(5):968–71
Further evaluation of the prognostic value of morphometric and flow cytometric parameters in breast-cancer patients with long follow-up. Uyterlinde AM, et al. **Int J Cancer** 1990 Jan 15;45(1):1–7
Radiosensitivity and PLDR in primary cultures of human normal and malignant mammary and prostate cells. Gould MN, et al. **Int J Radiat Biol** 1989 Nov;56(5):561–5
Radiation studies on sensitivity and repair of human mammary epithelial cells. Yang TC, et al. **Int J Radiat Biol** 1989 Nov;56(5):605–9
Can the clinical and mammographic findings at presentation predict the presence of an extensive intraductal component in early stage breast cancer? Healey EA, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1217–21
Basal cell carcinoma of the nipple. Report of two cases. Cain RJ, et al. **J Am Acad Dermatol** 1990 Feb;22(2 Pt 1):207–10 (12 ref.)
Pigmented Paget's disease of the male breast. Ho TC, et al. **J Am Acad Dermatol** 1990 Aug;23(2 Pt 2):338–41
Breast involvement in acute lymphoblastic leukaemia. Sagar TG, et al. **J Assoc Physicians India** 1989 Nov;37(11):718–9
Inhibition of epidermal growth factor/transforming growth factor-alpha-stimulated cell growth by a synthetic peptide. Eppstein DA, et al. **J Cell Physiol** 1989 Nov;141(2):420–30
Transforming growth factors type beta 1 and beta 2 are equipotent growth inhibitors of human breast cancer cell lines. Zugmaier G, et al. **J Cell Physiol** 1989 Nov; 141(2):353–61
Stem cells in mammary gland differentiation and cancer. Rudland PS, et al. **J Cell Sci Suppl** 1988;10:95–114 (106 ref.)
Blockade of the type I somatomedin receptor inhibits growth of human breast cancer cells in athymic mice. Arteaga CL, et al. **J Clin Invest** 1989 Nov;84(5):1418–23
Prognostic assessment in node-negative breast cancer patients [comment] Holland R, et al. **J Clin Oncol** 1990 Sep;8(9):1451–3 Comment on: J Clin Oncol 1990 Sep;8(9):1457–65.
The presence of an extensive intraductal component following a limited excision correlates with prominent residual disease in the remainder of the breast. Holland R, et al. **J Clin Oncol** 1990 Jan;8(1):113–8
Prognostic significance of peritumoral lymphatic and blood vessel invasion in node-negative carcinoma of the breast [see comments] Lee AK, et al. **J Clin Oncol** 1990 Sep; 8(9):1457–65 Comment in: J Clin Oncol 1990 Sep;8(9):1451–3.
Pathologic findings from the National Surgical Adjuvant Breast and Bowel Project: prognostic significance of erbB-2 protein overexpression in primary breast cancer. Paik S, et al. **J Clin Oncol** 1990 Jan;8(1):103–12
3H-thymidine-labeling index as a prognostic indicator in node-positive breast cancer. Silvestrini R, et al. **J Clin Oncol** 1990 Aug;8(8):1321–6
Breast carcinoma cellularity and its relation to oestrogen receptor content. Parham DM, et al. **J Clin Pathol** 1989 Nov;42(11):1166–8
Nucleolar organiser regions: new prognostic variable in breast carcinomas. Sivridis E, et al. **J Clin Pathol** 1990 May;43(5):390–2
Cellularity and oestrogen receptor content in breast cancer microsamples [letter] van Netten JP, et al. **J Clin Pathol** 1990 Aug;43(8):698–9
Metastatic breast carcinoma mimicking granular cell tumor. Franzblau MJ, et al. **J Cutan Pathol** 1989 Aug;16(4):218–21
Paget's disease of the male breast—report of a case and histopathologic study. Sano Y, et al. **J Dermatol** 1989 Jun; 16(3):237–41
Interleukin 6 decreases cell-cell association and increases motility of ductal breast carcinoma cells. Tamm I, et al. **J Exp Med** 1989 Nov 1;170(5):1649–69
The presence of a type IV collagen skeleton associated with periductal elastosis in breast cancer. Verhoeven D, et al. **J Histochem Cytochem** 1990 Feb;38(2):245–55
Syringomatous adenoma of nipple—a case report. Hwang TS, et al. **J Korean Med Sci** 1987 Dec;2(4):263–5
Histologic grading and subfactor analysis as prognostic parameters in patients with breast cancer [letter] Stierer M, et al. **J Natl Cancer Inst** 1990 Sep 19;82(18):1510
An observation of DNA ploidy, histological grade, and immunoreactivity for tumour-related antigens in primary and metastatic breast carcinoma. Hitchcock A, et al. **J Pathol** 1989 Oct;159(2):129–34
Quantitative immunohistochemical analysis of mononuclear infiltrates in breast carcinomas—correlation with tumour differentiation. Naukkarinen A, et al. **J Pathol** 1990 Mar; 160(3):217–22
Cystosarcoma phyllodes. Deodhar SD, et al. **J Postgrad Med** 1989 Apr;35(2):98–103 (13 ref.)
Fine needle aspiration cytology as part of a three stage diagnostic approach to breast lumps in a District general hospital. Spalding TJ, et al. **J R Nav Med Serv** 1989 Spring; 75(1):5–9
Recurrence of node-negative breast cancer in patients treated in a community hospital. Hahneman BM, et al. **J S C Med Assoc** 1989 Dec;85(12):560–4
Epidermal growth factor receptors in breast cancer: association with early relapse and death, poor response to hormones and interactions with neu. Harris AL, et al. **J Steroid Biochem** 1989;34(1–6):123–31
Immune-deficient animals to study "hormone-dependent" breast and endometrial cancer. Jordan VC, et al. **J Steroid Biochem** 1989;34(1–6):169–76
Approaches to studying the role of growth factors in the progression of breast tumours from the steroid sensitive to insensitive state. King RJ, et al. **J Steroid Biochem** 1989; 34(1–6):133–8 (24 ref.)
Mechanisms of normal and malignant breast epithelial growth regulation. Lippman ME, et al. **J Steroid Biochem** 1989; 34(1–6):107–21 (234 ref.)
Prognostic factors for recurrence and survival in axillary node-negative breast cancer. McGuire WL, et al. **J Steroid Biochem** 1989;34(1–6):145–8 (21 ref.)
Phyllodes tumor of the breast: a clinicopathologic study of 34 cases. Kario K, et al. **J Surg Oncol** 1990 Sep;45(1):46–51
Cancer of the male breast. Morimoto T, et al. **J Surg Oncol** 1990 Jul;44(3):180–4
Multicentric adult secretory breast carcinoma: DNA flow cytometric findings, prognostic features, and review of the world literature. Richard G, et al. **J Surg Oncol** 1990 Aug; 44(4):238–44 (18 ref.)
Hamartoma of the breast. Riveros M, et al. **J Surg Oncol** 1989 Nov;42(3):197–200
Tumor growth rate and prognosis of breast cancer mainly detected by mass screening. Kuroishi T, et al. **Jpn J Cancer Res** 1990 May;81(5):454–62 (22 ref.)
Effects of growth factors and hormones on growth and morphological differentiation of human breast epithelial cells within collagen gel in serum-free medium. Takahashi K, et al. **Jpn J Cancer Res** 1990 Jan;81(1):52–7
A rare case of asynchronous bilateral B-cell lymphoma of the breast. Fukutomi T, et al. **Jpn J Clin Oncol** 1989 Dec; 19(4):391–6
Argyrophilic carcinoma "carcinoid tumor" of the breast: case report with electron microscopic and immunohistochemical investigations. Kurosumi M, et al. **Jpn J Clin Oncol** 1989 Dec;19(4):397–401
Karyometric and DNA content analyses of cancer cells in stage III breast cancer with reference to prognosis. Tamura G, et al. **Jpn J Clin Oncol** 1990 Mar;20(1):78–82
The general rules for clinical and pathological recording of breast cancer. Japanese Breast Cancer Society. **Jpn J Surg** 1989 Sep;19(5):612–32
Carcinoma arising in fibroadenoma of the breast—a case report and review of the literature. Fukuda M, et al. **Jpn J Surg** 1989 Sep;19(5):593–6
Human breast carcinoma (ZR-75-1) serially transplanted into nude mice—with reference to estradiol dependency and sensitivity to tamoxifen. Kubota T, et al. **Jpn J Surg** 1989 Jul;19(4):446–51
Lymph node metastasis within the pectoralis major muscle in breast cancer—a case report. Mochinaga N, et al. **Jpn J Surg** 1990 Mar;20(2):221–4
Cancer cell emboli in the pectoral lymphatics of patients with breast cancer. Nakao K, et al. **Jpn J Surg** 1989 Jul; 19(4):392–7
The acceptable delay between biopsy and radical mastectomy in breast cancer patients. Toi M, et al. **Jpn J Surg** 1989 Nov;19(6):679–83
An autopsy case of breast carcinoma with prominent lipid-secretions in the metastatic foci. Akagi Y, et al. **Kurume Med J** 1989;36(2):59–65
Prognostic importance of occult axillary lymph node micrometastases from breast cancers. International (Ludwig) Breast Cancer Study Group. **Lancet** 1990 Jun 30;335(8705):1565–8 (18 ref.)
Occult axillary lymph-node micrometastases in breast cancer [letter] **Lancet** 1990 Aug 18;336(8712):434–5
Extent, distribution, and mammographic/histological correlations of breast ductal carcinoma in situ. Holland R, et al. **Lancet** 1990 Mar 3;335(8688):519–22
Occult axillary lymph-node micrometastases in breast cancer [letter] Neville AM, et al. **Lancet** 1990 Sep 22;336(8717):759
Sampling grossly benign breast biopsy specimens [letter] [published erratum appears in Lancet 1989 Dec 2;2(8675):1350] Schnitt SJ, et al. **Lancet** 1989 Oct 28; 2(8670):1038
Retrospective analysis of breast histology and indication for surgical intervention [letter] Schröcksnadel H, et al. **Lancet** 1990 Sep 15;336(8716):693
Infiltrating ductal carcinoma of the breast in South Australia. Implications of trends in tumour diameter, nodal status and case-survival rates for cancer control. Bonett A, et al. **Med J Aust** 1990 Jan 1;152(1):19–23
Apocrine adenoma of the breast: report of a case with investigation of lectin binding patterns in apocrine breast lesions. Baddoura FK, et al. **Mod Pathol** 1990 May; 3(3):373–6
Tumor immunophenotype: comparison between primary neoplasm and its metastases. Esteban JM, et al. **Mod Pathol** 1990 Mar;3(2):192–7
Myoepithelial cells in the differential diagnosis of complex benign and malignant breast lesions: an immunohistochemical study. Gottlieb C, et al. **Mod Pathol** 1990 Mar;3(2):135–40
Assessment of proliferative rate of breast cancer by Ki-67 monoclonal antibody. Marchetti E, et al. **Mod Pathol** 1990 Jan;3(1):31–5
Papillary neoplasia of the breast: immunohistochemically defined myoepithelial cells in the diagnosis of benign and malignant papillary breast neoplasms. Raju UB, et al. **Mod Pathol** 1989 Nov;2(6):569–76
Anti-epidermal growth factor receptor antibodies inhibit the autocrine-stimulated growth of MDA-468 human breast cancer cells. Ennis BW, et al. **Mol Endocrinol** 1989 Nov; 3(11):1830–8
Insulin-like growth factor-II (IGF-II): a potential autocrine/paracrine growth factor for human breast cancer acting via the IGF-I receptor. Osborne CK, et al. **Mol Endocrinol** 1989 Nov;3(11):1701–9
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 51-1989. A 72-year-old woman with bronchospasm and a pleural effusion after treatment of breast carcinoma. **N Engl J Med** 1989 Dec 21;321(25):1738–49
Sarcoidosis of the breast coexisting with mammary carcinoma. Shah AK, et al. **N Y State J Med** 1990 Jun; 90(6):331–3
Tumor size and prognosis of breast cancer with negative axillary nodes. Ciatto S, et al. **Neoplasma** 1990;37(2):179–84
Breast lesions in generalized neurofibromatosis: breast cancer and cystosarcoma phylloides. el-Zawahry MD, et al. **Neurofibromatosis** 1989;2(2):121–4
Skeletal scintigraphy in carcinoma of the breast—a ten year retrospective study of 389 patients. Ahmed A, et al. **Nucl Med Commun** 1990 Jun;11(6):421–6
Selective isolation of human breast carcinoma cells resistant to the growth-inhibitory effects of retinol. Halter SA, et al. **Nutr Cancer** 1990;14(1):43–56
Genetic and immunochemical analysis of mutant p53 in human breast cancer cell lines. Bartek J, et al. **Oncogene** 1990 Jun;5(6):893–9
p185neu is phosphorylated on tyrosine in human primary breast tumors which overexpress neu/erbB-2. Wildenhain Y, et al. **Oncogene** 1990 Jun;5(6):879–83
Follow-up of breast cancer patients. Kindler M, et al. **Oncology** 1989;46(6):360–5
Biological effects of adrenal androgens on MCF-7 and BT-20 human breast cancer cells. Najid A, et al. **Oncology** 1990; 47(3):269–74
Influence of hormones on proliferation of ER-positive cells and ER-negative cells of human breast cancer (MCF-7). Noguchi M, et al. **Oncology** 1990;47(1):19–24
Two studies show advantages for fine needle aspiration biopsy of the breast [news] **Oncology (Williston Park)** 1990 Apr;4(4):20
Localized breast Ca: are bone scans necessary? [letter] Apostol JV. **Oncology (Williston Park)** 1988 Feb;2(2):13
Metastatic carcinoma of the ethmoid sinus. Nelson EG, et al. **Otolaryngol Head Neck Surg** 1990 Jul;103(1):120–3 (11 ref.)
The myofibroblast in breast disease. Ahmed A. **Pathol Annu** 1990;25 Pt 2:237–86 (91 ref.)
The Multicenter Morphometric Mammary Carcinoma Project (MMMCP). A nationwide prospective study on reproducibility and prognostic power of routine quantitative assessments in The Netherlands. Baak JP, et al. **Pathol Res Pract** 1989 Nov;185(5):664–70
Data processing and analysis in the Multicenter Morphometric Mammary Carcinoma Project (MMMCP). Baak JP, et al. **Pathol Res Pract** 1989 Nov;185(5):657–63
Stromal changes in early invasive breast carcinoma. An immunohistochemical, histoenzymological and ultrastructural study. Chomette G, et al. **Pathol Res Pract** 1990 Feb;186(1):70–9
The flow-cytometric analysis of DNA content and S-phase fraction (SPF) of human breast cancer. Eskelinen M, et al. **Pathol Res Pract** 1989 Nov;185(5):694–7
Quantitative aspects in defining prognostic factors of breast cancer. Komitowski D, et al. **Pathol Res Pract** 1989 Nov; 185(5):621–4
Grading and prognosis of invasive ductal mammary carcinoma by nuclear image analysis in tissue sections. Kunze KD, et al. **Pathol Res Pract** 1989 Nov;185(5):689–93
Quantitative evaluation of morphological parameters for infiltrating ductal breast cancer prognosis. Mariuzzi GM, et al. **Pathol Res Pract** 1989 Nov;185(5):698–700
Alveolar variant of infiltrating lobular carcinoma of the breast with stromal osteoclast-like giant cells. Pettinato G, et al. **Pathol Res Pract** 1989 Sep;185(3):388–94; discussion 394–6
Left and right sided breast cancer. Tulinius H, et al.

Pathol Res Pract 1990 Feb;186(1):92–4

Comparison of light microscopic grading and morphometric features in cytological breast cancer specimens. van Diest PJ, et al. **Pathol Res Pract** 1989 Nov;185(5):612–6

Nucleolar organizer regions and Ki–67 immunostaining in ductal breast cancer: a comparative study. Canepa M, et al. **Pathologica** 1990 Mar–Apr;82(1078):125–32

Prognostic parameters in breast cancer. Leong AS, et al. **Pathology** 1989 Jul;21(3):169–75 (86 ref.)

Rapid assay for the in vitro chemosensitivity testing of human breast tumours. Control of assay conditions and quality assurance. Oude Elferink RF, et al. **Pharm Weekbl [Sci]** 1989 Oct 20;11(5):155–60

Fibroblast–mediated acceleration of human epithelial tumor growth in vivo. Camps JL, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):75–9

Suppression of tumor–forming ability and related traits in MCF–7 human breast cancer cells by fusion with immortal mammary epithelial cells. Zajchowski DA, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2314–8

Localising non–palpable lesions within the breast using the needle and wire technique. Hodgson J. **Radiogr Today** 1989 Apr;55(623):13–6

Radiographically guided fine–needle aspiration of nonpalpable breast lesions. Helvie MA, et al. **Radiology** 1990 Mar;174(3 Pt 1):657–61

Stereotactic breast biopsy with a biopsy gun [see comments] Parker SH, et al. **Radiology** 1990 Sep;176(3):741–7 Comment in: Radiology 1990 Sep;176(3):615–6.

Presentation of axillary lymphadenopathy without detectable breast primary (T0 N1b breast cancer): experience at Institut Curie. Campana F, et al. **Radiother Oncol** 1989 Aug; 15(4):321–5

Time course and prognosis of mammary failure following breast–conserving therapy. Kurtz JM, et al. **Recent Results Cancer Res** 1989;115:77–82

Prognosis in breast cancer. McGuire WL, et al. **Recent Results Cancer Res** 1989;115:170–4 (8 ref.)

Benign breast lesions that mimic malignant tumors: analysis of five distinct lesions. Weidner N. **Semin Diagn Pathol** 1990 May;7(2):90–101 (36 ref.)

Imaging the post–surgical breast. Mendelson EB. **Semin Ultrasound CT MR** 1989 Apr;10(2):154–70 (22 ref.)

Breast pathology synopsis. Tobon H, et al. **Semin Ultrasound CT MR** 1989 Apr;10(2):139–53 (24 ref.)

A case of granulocytic sarcoma of the breast and review of the literature. Chua ET. **Singapore Med J** 1989 Jun; 30(3):311–2 (14 ref.)

Duct carcinoma in situ. Pathology and treatment. Lagios MD. **Surg Clin North Am** 1990 Aug;70(4):853–71

Premalignant conditions and markers of elevated risk in the breast and their management. Page DL, et al. **Surg Clin North Am** 1990 Aug;70(4):831–51

The role of Tru–Cut needle biopsy in the diagnosis of carcinoma of the breast. Cusick JD, et al. **Surg Gynecol Obstet** 1990 May;170(5):407–10 (26 ref.)

Needle–localized biopsy of the breast. Griffen MM, et al. **Surg Gynecol Obstet** 1990 Feb;170(2):145–8

Ultrasonically guided biopsy of nonpalpable lesions of the breast by the spot method. Ueno E, et al. **Surg Gynecol Obstet** 1990 Feb;170(2):153–5

Contralateral breast carcinoma: an assessment of risk and prognosis in stage I (T1N0M0) and stage II (T1N1M0) patients with 20–year follow–up. Rosen PP, et al. **Surgery** 1989 Nov;106(5):904–10

Schistosomal ova in a female breast. Nkanza NK. **Trop Geogr Med** 1989 Oct;41(4):365–7

Immunohistochemical investigation of axillary lymph nodes for micrometastases in patients with breast cancer using E29. Cavaliere A, et al. **Tumori** 1989 Dec 31;75(6):563–5

A metastatic breast cancer with an unusual lymphoma–like presentation. Cerrotta A, et al. **Tumori** 1990 Jun 30; 76(3):296–8

Ki–67 labeling index in breast cancer. Crispino S, et al. **Tumori** 1989 Dec 31;75(6):557–62

In situ and microinvasive carcinoma with squamoid differentiation arising in a phyllodes tumor: report of a case. de Rosa G, et al. **Tumori** 1989 Oct 31;75(5):514–7 (20 ref.)

Spindle cell tumor of the breast. Carneiro F, et al. **Ultrastruct Pathol** 1989 Sep–Dec;13(5–6):593–8

Diagnostic value of silver–stained interphasic nucleolar organizer regions in breast tumors. Derenzini M, et al. **Ultrastruct Pathol** 1990 May–Jun;14(3):233–45

An epithelial and spindle cell breast tumour of myoepithelial origin. An immunohistochemical and ultrastructural study. Enghardt MH, et al. **Virchows Arch [A]** 1989;416(2):177–84

Nerve sheath myxoma of the breast. A light and electron microscopic, histochemical and immunohistochemical study. Wee A, et al. **Virchows Arch [A]** 1989;416(2):163–7

Fine needle aspiration biopsy in the diagnosis of breast cancer. McDonald AH, et al. **West Indian Med J** 1990 Jun;39(2):71–3

Carcinoma of the breast in children. Eskelinen M, et al. **Z Kinderchir** 1990 Feb;45(1):52–5

[Pathologic analysis of lobular carcinoma of the breast—report of 36 cases] Qian H. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):278–81 (Eng. Abstr.) **(Chi)**

[Changes of membrane polarity of MCF–7 cells in sub–multilayer culture] Zou ZZ. **Shih Yen Sheng Wu Hsueh Pao** 1989 Sep;22(3):287–95 (Eng. Abstr.) **(Chi)**

[Mediastinal liposarcoma appearing 10 years after an adenocarcinoma of the breast (letter)] Quint L, et al. **Ann Med Interne (Paris)** 1989;140(7):649 **(Fre)**

[Macroscopic study of surgical breast specimens. A modern approach] Bogomoletz WV, et al. **Ann Pathol** 1990; 10(2):130–4 (24 ref.) (Eng. Abstr.) **(Fre)**

[Cell markers, hormone receptors and proliferation index in breast cancers. Role of immunodetection, image analysis and flow cytometry] Charpin C, et al. **Ann Pathol** 1989; 9(5):308–30 (251 ref.) **(Fre)**

[Growth fraction (Ki67), ploidy balance and proliferation index in tumors of the urogenital tract and breast] Charpin C, et al. **Ann Pathol** 1989;9(5):331–9 (Eng. Abstr.) **(Fre)**

[Detection of micrometastases in excised regional lymph nodes in cancer of the breast. Systematic use of KL1 anticytokeratin monoclonal antibodies in a prospective series of 120 T2 N– patients] Noel P, et al. **Ann Pathol** 1989;9(4):265–70 (Eng. Abstr.) **(Fre)**

[Primary malignant non–Hodgkin's lymphoma of the breast. A study of 5 cases] Trojani M, et al. **Ann Pathol** 1990; 10(1):28–33 (Eng. Abstr.) **(Fre)**

[Cancer of the breast and ultrasonographic nodule of the liver] Carrere M, et al. **Ann Radiol (Paris)** 1989; 32(7–8):575–8 (Eng. Abstr.) **(Fre)**

[Cytologic diagnosis of breast angiosarcoma] Parsi B, et al. **Arch Anat Cytol Pathol** 1989;37(5–6):231–4 (Eng. Abstr.) **(Fre)**

[Primary non–Hodgkin's malignant lymphoma of the breast. Anatomopathologic diagnosis of 14 cases] Prévot S, et al. **Bull Cancer (Paris)** 1990;77(2):123–36 (45 ref.) (Eng. Abstr.) **(Fre)**

[Esophageal metastases from cancer of the breast. Apropos of a case (letter)] Taghy A, et al. **J Chir (Paris)** 1990 Jan; 127(1):38 **(Fre)**

[Primary fibroblastic tumor of the breast. Review of the literature apropos of a case of desmoid tumor of the breast posing nosologic problems with a low–grade fibrosarcoma] Afifi A, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990; 19(3):309–14 (34 ref.) (Eng. Abstr.) **(Fre)**

[Impalpable breast abnormalities. Contribution of cytologic puncture under stereotaxic guidance. Apropos of 159 cases] Travade A, et al. **J Radiol** 1989 Aug–Sep;70(8–9):443–6 (7 ref.) (Eng. Abstr.) **(Fre)**

[Isolated rise of CA 15–3 marker revealing an ovarian metastasis of breast cancer (letter)] Levy V, et al. **Presse Med** 1990 May 19;19(20):967–8 **(Fre)**

[Lobular carcinoma in situ of the breast] Chapron C, et al. **Rev Fr Gynecol Obstet** 1990 Mar;85(3):174–81 (78 ref.) (Eng. Abstr.) **(Fre)**

[Phyllodes breast tumors] Michaud P, et al. **Rev Fr Gynecol Obstet** 1989 Dec;84(12):944–9 (Eng. Abstr.) **(Fre)**

[Breast cancer: the pathologist's viewpoint] Genton CY. **Rev Med Suisse Romande** 1990 Apr;110(4):307–10 **(Fre)**

[Metastasis to the pituitary stalk in a case of breast cancer] Delattre JY, et al. **Rev Neurol (Paris)** 1990;146(6–7):455–6 (12 ref.) (Eng. Abstr.) **(Fre)**

[Simultaneous bilateral forms of breast cancer] Lanaspa A, et al. **Schweiz Rundsch Med Prax** 1989 Aug 22;78(34):905–9 (44 ref.) (Eng. Abstr.) **(Fre)**

[A retrospective determination of the validity of various methods of early detection of recurrence and metastasis of breast cancer] Kindler M, et al. **Arch Geschwulstforsch** 1989;59(4):289–97 (Eng. Abstr.) **(Ger)**

[Cell cycle specific expression of the HER–2/NEU oncogene in breast cancer cell lines] Ehrhart E, et al. **Arch Gynecol Obstet** 1989;245(1–4):656–8 **(Ger)**

[Immunologic studies of bone marrow aspirations in breast cancer patients at the time of primary therapy] Forell–Engelken G, et al. **Arch Gynecol Obstet** 1989; 245(1–4):722–4 **(Ger)**

[The value of fine–needle biopsy before histologic evaluation of breast findings] Jung H, et al. **Arch Gynecol Obstet** 1989; 245(1–4):690–4 **(Ger)**

[Cell cycle and catamnesis in breast cancer. Cytophotometric studies] Krug H. **Arch Gynecol Obstet** 1989;245(1–4):651–4 (Eng. Abstr.) **(Ger)**

[Immunocytochemical estrogen receptor determination in metastatic breast cancer] Kübler HC, et al. **Arch Gynecol Obstet** 1989;245(1–4):702–4 **(Ger)**

[Leiomyoma of the breast in the male] Winkler S, et al. **Dermatol Monatsschr** 1989;175(9):588–90 (Eng. Abstr.) **(Ger)**

[Long–term study of the significance of hormone receptors as prognostic factors in breast cancer] Merkle E, et al. **Geburtshilfe Frauenheilkd** 1990 Jul;50(7):528–32 (Eng. Abstr.) **(Ger)**

[Interpretation of the estrogen receptor content of breast cancer] Tuczek HV, et al. **Geburtshilfe Frauenheilkd** 1990 Apr;50(4):314–8 (Eng. Abstr.) **(Ger)**

[Cell receptors and proliferation markers in breast cancer] Czerwenka KF, et al. **Gynakol Rundsch** 1989;29 Suppl 2:400–1 **(Ger)**

[Micrometastases in axillary lymph nodes in breast cancer] Ronay G, et al. **Gynakol Rundsch** 1989;29 Suppl 2:234–6 **(Ger)**

[Micrometastases in bone marrow at the time of primary treatment of breast cancer: a new prognostic criterion?] Untch M, et al. **Gynakol Rundsch** 1989;29 Suppl 2:231–3 **(Ger)**

[Pathology, systematic aspects and classification of benign breast diseases] Bässler R, et al. **Gynakologe** 1989 Aug; 22(4):216–25 (46 ref.) **(Ger)**

[Leptomeningeal carcinosis—new diagnostic possibilities by tumor cell marking with monoclonal antibodies] Pfadenhauer K, et al. **Nervenarzt** 1990 Apr;61(4):228–30 **(Ger)**

[Localization of radiologically detected, non–palpable breast changes] Bollmann R. **Pathologe** 1990 May;11(3):195 **(Ger)**

[Immunohistochemical studies of the differential diagnosis of papillary tumors of the breast] Katzer B, et al. **Pathologe** 1990 Jul;11(4):201–7 **(Ger)**

[Progesterone receptors in breast cancer. Comparison of immunohistochemical with biochemical receptor analysis. Relation between hormone receptor content and growth fraction (Ki–67)] Ronay G, et al. **Pathologe** 1990 Jan; 11(1):4–9 **(Ger)**

[Immunohistochemical detection of estrogen and progesterone receptors in paraffin sections] Snijders M, et al. **Pathologe** 1990 Jul;11(4):236–9 **(Ger)**

[Immunohistochemical detection of progesterone receptors in breast cancer. Comparison of antibodies mPR1 and PR–ICA] Weikel W, et al. **Pathologe** 1990 Mar;11(2):85–8 **(Ger)**

[Differential breast diagnosis using CW–Doppler ultrasound] Madjar H, et al. **Radiologe** 1990 Apr;30(4):193–7 (Eng. Abstr.) **(Ger)**

[Magnetic resonance tomography of cerebral metastases. The problem of an efficient sequence] Scharf J, et al. **Radiologe** 1990 May;30(5):242–4 **(Ger)**

[Sonography in breast diagnosis] Strasser K, et al. **Radiologe** 1990 Mar;30(3):130–4 (Eng. Abstr.) **(Ger)**

[The value of sonography in the pathologic evaluation of solid breast tumors] Ludwig D, et al. **ROFO** 1989 Dec; 151(6):681–7 (Eng. Abstr.) **(Ger)**

[Morphological breast diagnosis in daily practice] Hollinger A. **Schweiz Rundsch Med Prax** 1990 Apr 17;79(16):495–7 (Eng. Abstr.) **(Ger)**

[Grading, staging, DNA content and prognosis of invasive ductal breast cancer] Theissig F, et al. **Zentralbl Chir** 1990; 115(7):433–9 (Eng. Abstr.) **(Ger)**

[Detection of steroid hormone receptors in patients with mastopathies and fibroadenomas] Meissner J, et al. **Zentralbl Gynakol** 1989;111(23):1562–6 (Eng. Abstr.) **(Ger)**

[Malignant transformation of fibroadenoma of the breast] Rohde E. **Zentralbl Gynakol** 1989;111(24):1629–31 (Eng. Abstr.) **(Ger)**

[Comment on the contribution by Ursula Geissler: "The non–puerperal secreting breast"] Wunderlich M. **Zentralbl Gynakol** 1989;111(24):1610–2 **(Ger)**

[Internal mammary lymphoscintigraphy in breast cancer] Rajtár M, et al. **Orv Hetil** 1990 Mar 18;131(11):583–7 (28 ref.) (Eng. Abstr.) **(Hun)**

[Nuclear morphometry and estrogen receptors in infiltrating ductal carcinoma of the breast] Giardina C, et al. **Boll Soc Ital Biol Sper** 1990 Feb;66(2):135–41 (Eng. Abstr.) **(Ita)**

[Secretory carcinoma of the breast: clinicotherapeutic considerations and a review of the literature] Arcidiaco M, et al. **Chir Ital** 1988 Dec;40(6):392–9 (8 ref.) (Eng. Abstr.) **(Ita)**

[Breast and skin localization of non–Hodgkin's lymphoma. Description of a clinical case] Ricevuti G, et al. **Medicina (Firenze)** 1989 Jul–Sep;9(3):283–6 (Eng. Abstr.) **(Ita)**

[Phyllodes tumors of the breast. Clinico–statistical data from the division of Obstetrics and Gynecology of the S. Giacomo Hospital for the years 1981–1985] Maranghi V, et al. **Minerva Ginecol** 1989 Apr;41(4):177–82 (40 ref.) (Eng. Abstr.) **(Ita)**

[Carcinoma of the breast at autopsy: could the age factor be a significant determinant in the process of metastasis?] Bussani R, et al. **Pathologica** 1989 Jul–Aug;81(1074):411–20 (Eng. Abstr.) **(Ita)**

[Nodular sclerosing adenosis (adenosis tumor) of the breast. An immunohistologic study particularly in reference to the relationship with radial cicatrix and to the differential diagnosis with tubular carcinoma] Lanzafame S. **Pathologica** 1989 May–Jun;81(1073):251–66 (Eng. Abstr.) **(Ita)**

[Comedocarcinoma: a tumor histotype to be reevaluated] Bongiorni G, et al. **Radiol Med (Torino)** 1990 Jun; 79(6):590–2 (Eng. Abstr.) **(Ita)**

[Ten cases of an apocrine carcinoma of the breast and a review of cases in the Japanese literature] Aoyagi H, et al. **Gan No Rinsho** 1990 May;36(6):681–90 (50 ref.) (Eng. Abstr.) **(Jpn)**

[A case of stromal sarcoma of the breast] Asagoe T, et al. **Gan No Rinsho** 1989 Dec;35(15):1781–4 (Eng. Abstr.) **(Jpn)**

[Breast carcinoma metastasis to perineal neurofibroma] Kita H, et al. **Gan No Rinsho** 1990 Jul;36(8):924–8 (Eng. Abstr.) **(Jpn)**

[Study of breast cancers during pregnancy and lactation] Makita M, et al. **Gan No Rinsho** 1990 Jan;36(1):39–44 (Eng. Abstr.) **(Jpn)**

[Mammary fibroadenoma showing osseous metaplasia: a case report] Nishida Y, et al. **Gan No Rinsho** 1989 Oct; 35(12):1461–5 (21 ref.) (Eng. Abstr.) **(Jpn)**

[A case–control study of the etiologic factors of a multiple primary cancer following a prior first breast cancer]

Okamoto N, et al. **Gan No Rinsho** 1990 Apr;36(5):598–603 (Eng. Abstr.) **(Jpn)**

[Breast carcinoma with features of osteosarcoma—a light and electron microscopic and immunohistochemical study] Suzuki T, et al. **Gan No Rinsho** 1989 Oct;35(12):1453–60 (Eng. Abstr.) **(Jpn)**

[Study of surgical resection of sternal metastasis from carcinoma of the breast] Takanami I, et al. **Gan No Rinsho** 1989 Dec;35(15):1735–8 (Eng. Abstr.) **(Jpn)**

[Clinical efficacy of ifosfamide for liver metastasis of breast cancer] Funahashi H, et al. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 1):689–92 (Eng. Abstr.) **(Jpn)**

[A case of pleural effusion secondary to breast carcinoma responding to treatment based upon thoracoscopic findings] Hirai T, et al. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 1):685–8 (Eng. Abstr.) **(Jpn)**

[A case of breast cancer with multiple metastases to the lung and bone responding well to cisplatin and vindesine] Itoh H, et al. **Gan To Kagaku Ryoho** 1989 Nov;16(11):3631–4 (Eng. Abstr.) **(Jpn)**

[Growth control of breast cancer in relation to hormones] Tominaga T, et al. **Gan To Kagaku Ryoho** 1989 Dec; 16(12):3685–90 (25 ref.) (Eng. Abstr.) **(Jpn)**

[Analysis of prognostic factors of node negative breast cancer] Yoshimoto M, et al. **Gan To Kagaku Ryoho** 1990 Jan;17(1):7–14 (Eng. Abstr.) **(Jpn)**

[Primary osteogenic sarcoma of the breast. Report of a case] Hosoi M, et al. **Nippon Geka Gakkai Zasshi** 1989 Aug; 90(8):1262–5 (23 ref.) (Eng. Abstr.) **(Jpn)**

[Comparative study of nuclear DNA content between fine needle aspirates and paraffin-embedded tissue samples of breast cancer: preliminary report] Kurihara T, et al. **Nippon Geka Gakkai Zasshi** 1990 Mar;91(3):438 **(Jpn)**

[Morphological study on aspiration cytology of breast cancer—relationship to prognosis and malignancy grade: preliminary report] Miyauchi M, et al. **Nippon Geka Gakkai Zasshi** 1989 Oct;90(10):1815 **(Jpn)**

[CD33-positive acute lymphoblastic leukemia with breast tumor and cavernous sinus tumor] Ishida T, et al. **Rinsho Ketsueki** 1989 Dec;30(12):2194–8 (Eng. Abstr.) **(Jpn)**

[Evaluation of the efficacy of cytodiagnosis in patients with breast cancer] Kordek R, et al. **Nowotwory** 1989 Jul–Dec; 39(3–4):152–6 (Eng. Abstr.) **(Pol)**

[Papillary carcinoma of the male breast] de Araújo PM, et al. **Acta Med Port** 1989 Aug–Oct;2(4–5):221–3 (Eng. Abstr.) **(Por)**

[Dermatologic drill biopsy (punch): diagnostic procedures in advanced carcinoma of the breast] Petti DA, et al. **Rev Paul Med** 1989 Jan–Feb;107(1):53–6 (Eng. Abstr.) **(Por)**

[Adenocystic cancer of the breast (clinico-morphologic characteristics)] Ermilova VD, et al. **Arkh Patol** 1989; 51(6):72–5 (Eng. Abstr.) **(Rus)**

[Mucinous carcinoma of the breast (clinico-morphological characteristics)] Ermilova VD, et al. **Arkh Patol** 1989; 51(7):38–44 (Eng. Abstr.) **(Rus)**

[A 2-component tumor of the breast with carcinoid syndrome] Serezhin BS. **Arkh Patol** 1989;51(11):66–70 (Eng. Abstr.) **(Rus)**

[Micrometastases of the axillary lymph nodes in breast cancer. An immunohistochemical study] Ronay G, et al. **Pathologe** 1989 Sep;10(5):289–93 **(Rus)**

[Papillary cancer of the breast (clinico-morphological aspects)] Ermilova VD, et al. **Sov Med** 1990;(4):26–8 (Eng. Abstr.) **(Rus)**

[Dynamics of metastasis of breast cancer to the bones] Kutateladze TO, et al. **Sov Med** 1989;(11):16–9 (Eng. Abstr.) **(Rus)**

[Squamous cell breast cancer] Ermilova VD, et al. **Vopr Onkol** 1989;35(9):1040–4 (Eng. Abstr.) **(Rus)**

[Mixed metaplastic cancer of the breast] Ermilova VD, et al. **Vopr Onkol** 1989;35(8):928–31 (Eng. Abstr.) **(Rus)**

[Mast cell infiltration of the stroma and free heparin in the blood in breast cancer] Koshkina LI, et al. **Vopr Onkol** 1989;35(10):1175–9 (Eng. Abstr.) **(Rus)**

[Bilateral malignancy of the breast] Ilić N, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:290–3 (Eng. Abstr.) **(Scr)**

[Minimal breast cancer] Kraljević LJ, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:298–301 **(Scr)**

[Epididymal metastasis of cancer of the breast] Carnero Bueno J, et al. **Actas Urol Esp** 1990 Mar–Apr;14(2):150–1 (Eng. Abstr.) **(Spa)**

[Is fibrocystic disease precancerous?] De León Antoni E. **Bol Asoc Med P R** 1989 Nov;81(11):451–4 (11 ref.) (Eng. Abstr.) **(Spa)**

[Aponeurotic fibromatosis of the breast (extra-abdominal desmoid). Report of 2 cases. Histologic and endocrinologic aspects] Rivadeneyra Hinojosa J, et al. **Ginecol Obstet Mex** 1977 Aug;42(250):133–7 (Eng. Abstr.) **(Spa)**

[Fibroadenoma on an ectopic breast (letter)] Plaza JA, et al. **Rev Clin Esp** 1990 Feb;186(3):147 **(Spa)**

[Hormone dependence in breast and prostate tumor cell lines] Olea N, et al. **Rev Esp Fisiol** 1990 Mar;46(1):83–7 (18 ref.) (Eng. Abstr.) **(Spa)**

[Adenolipoma of the breast. A clinical case] Arraztoa J, et al. **Rev Med Chil** 1988 Dec;116(12):1295–7 (Eng. Abstr.) **(Spa)**

[Is biopsy necessary in cytologically proven breast cancer?] Rydén S. **Lakartidningen** 1990 Mar 28;87(13):1040 **(Swe)**

PHYSIOPATHOLOGY

Thyroid function in breast cancer. Myhill J, et al. **Acta Endocrinol (Copenh)** 1966 Feb;51(2):290–300

Regulation of human breast cancer by secreted growth factors. Cullen KJ, et al. **Acta Oncol** 1989;28(6):835–9 (27 ref.)

Natural history of breast cancer. Pontén J. **Acta Oncol** 1990; 29(3):325–9 (18 ref.)

Interactions between estrogens, androgens, progestins, and glucocorticoids in ZR-75-1 human breast cancer cells. Labrie F, et al. **Ann N Y Acad Sci** 1990;595:130–48

Transforming growth factor beta (TGF-beta) reverses phorbol diester resistance of a breast adenocarcinoma (MCF-7) subline. Guerrin M, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):687–94

Body weight and breast cancer [letter; comment] Hug V. **Br J Cancer** 1989 Dec;60(6):968–9 Comment on: Br J Cancer 1988 Nov;58(5):631–4.

Compared effects of GnRH analogs and 4-hydroxytamoxifen on growth and steroid receptors in antiestrogen sensitive and resistant MCF-7 breast cancer cell sublines. Néri C, et al. **Breast Cancer Res Treat** 1990 Feb;15(2):85–93

Autocrine and paracrine growth regulation of breast cancer: clinical implications. Osborne CK, et al. **Breast Cancer Res Treat** 1990 Jan;15(1):3–11 (35 ref.)

Surface detection of circadian rhythm in 32P content of cancer of the breast. Stoll BA, et al. **Cancer** 1968 Feb; 21(2):193–6

Cardiovascular autonomic function in anthracycline-treated breast cancer patients. Viniegra M, et al. **Cancer Chemother Pharmacol** 1990;26(3):227–31

Tumor-proliferative activity, progesterone receptor status, estrogen receptor level, and clinical outcome of estrogen receptor-positive advanced breast cancer. Paradiso A, et al. **Cancer Res** 1990 May 15;50(10):2958–62

P-glycoprotein in breast cancer. Merkel DE, et al. **Cancer Treat Res** 1989;48:97–105 (49 ref.)

The chronopathology of breast pre-cancer. Simpson HW, et al. **Chronobiologia** 1989 Oct–Dec;16(4):365–72

Measurement of the electrical bio-impedance of breast tumors. Morimoto T, et al. **Eur Surg Res** 1990;22(2):86–92

Progression from steroid-responsive to unresponsive state in breast cancer. King RJ. **Horm Res** 1989;32 Suppl 1:254–6 (21 ref.)

Cell proliferative indices and DNA content as prognostic factors in primary breast cancer. Osborne CK. **Horm Res** 1989;32 Suppl 1:238–41

Regulation of breast cancer cells by hormones and growth factors: effects on proliferation and basement membrane invasiveness. Thompson EW, et al. **Horm Res** 1989;32 Suppl 1:242–9 (144 ref.)

Progesterone receptor regulation by retinoic acid in the human breast cancer cell line T-47D. Clarke CL, et al. **J Biol Chem** 1990 Jul 25;265(21):12694–700

Weight gain in breast cancer patients: a problem? [news] Smigel K. **J Natl Cancer Inst** 1990 Mar 7;82(5):348–50

Importance of estrogen sulfates in breast cancer. Pasqualini JR, et al. **J Steroid Biochem** 1989;34(1-6):155–63 (50 ref.)

Dormancy and breast cancer. Meltzer A. **J Surg Oncol** 1990 Mar;43(3):181–8 (36 ref.)

The growth promoting effect of transforming growth factor-alpha in human breast cancer cell lines. Kuranami M, et al. **Jpn J Clin Oncol** 1989 Dec;19(4):360–6

The effects of estrogen on human breast carcinomas serially transplanted into nude mice. Fukutomi T, et al. **Jpn J Surg** 1989 Nov;19(6):718–25

Progestin inhibition of progesterone receptor gene expression in human breast cancer cells. Alexander IE, et al. **Mol Endocrinol** 1989 Sep;3(9):1377–86

Effects of aerobic interval training on cancer patients' functional capacity. MacVicar MG, et al. **Nurs Res** 1989 Nov-Dec;38(6):348–51

Pineal gland and tumor cell kinetics: serum levels of melatonin in relation to Ki-67 labeling rate in breast cancer. Lissoni P, et al. **Oncology** 1990;47(3):275–7

Measuring and reducing fatigue among cancer patients [news] **Oncology (Williston Park)** 1988 Oct;2(10):52

Quality of life measurement—breast cancer. **Oncology (Williston Park)** 1990 Jul;4(7):63–5

Growth regulation of breast cancer. Lippman M. **Prog Clin Biol Res** 1989;320:111–9 (5 ref.)

[Diabetes mellitus and breast cancer. A retrospective follow-up study] Unterburger P, et al. **Onkologie** 1990 Feb; 13(1):17–20 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

The Nottingham breast self-examination project. Blamey RW, et al. **Acta Oncol** 1989;28(6):869–71

Chemoprevention of breast cancer. Powles TJ, et al. **Acta Oncol** 1989;28(6):865–7 (23 ref.)

Breast cancer screening in women over age 50. A critical appraisal. Peeters PH, et al. **Acta Radiol** 1990 May; 31(3):225–31 (93 ref.)

HTLV-I and HIV-1 infection in patients with lymphadenopathy syndrome detected during routine breast screening at a tumor prevention center. Manzari V, et al. **AIDS Res Hum Retroviruses** 1990 Mar;6(3):417–21

Canadian National Breast Screening Study: assessment of technical quality by external review. Baines CJ, et al. **AJR Am J Roentgenol** 1990 Oct;155(4):743–7; discussion 748–9

Computerized follow-up of abnormalities detected at mammography screening. Monticciolo DL, et al. **AJR Am J Roentgenol** 1990 Oct;155(4):751–3

How to increase mammographic screening [editorial] Wolosin RJ, et al. **Am Fam Physician** 1989 Nov;40(5):96–7

Screening mammography for women 50 years of age and older: practices and trends, 1987. Anda RF, et al. **Am J Prev Med** 1990 May–Jun;6(3):123–9

Significance of increased efforts to gain participation in screening for breast cancer. Fink R, et al. **Am J Prev Med** 1990 Jan–Feb;6(1):34–41

How best to teach women breast self-examination. A randomized controlled trial. Fletcher SW, et al. **Ann Intern Med** 1990 May 15;112(10):772–9

Screening for breast cancer [letter; comment] McGuire LB. **Ann Intern Med** 1989 Nov 15;111(10):858–9 Comment on: Ann Intern Med 1989 Sep 1;111(5):389–99.

Mammography screening for breast cancer. Forrest AP, et al. **Annu Rev Med** 1990;41:117–32 (59 ref.)

Strategies toward the primary prevention of cancer. Lucy Wortham James clinical research award lecture. Wynder EL. **Arch Surg** 1990 Feb;125(2):163–9 (80 ref.)

Place and training of the surgeon in breast cancer screening [letter] [published erratum appears in Aust N Z J Surg 1990 Mar;60(3):218] [comment] Langlands AO. **Aust N Z J Surg** 1989 Oct;59(10):768–9 Comment on: Aust N Z J Surg 1989 Apr;59(4):303–6.

Breast screening [letter] [see comments] **BMJ** 1989 Dec 16; 299(6714):1529–30 Comment in: BMJ 1990 Feb 3;300(6720):332–3.

Breast screening: a response to Dr Maureen Roberts [letter; comment] **BMJ** 1989 Nov 25;299(6711):1336–8 Comment on: BMJ 1989 Nov 4;299(6708):1153–5.

Breast screening [letter; comment] **BMJ** 1990 Feb 3; 300(6720):332–3 Comment on: BMJ 1989 Dec 16;299(6714):1529–30.

Breast cancer screening and the primary care team. Austoker J. **BMJ** 1990 Jun 23;300(6740):1631–4

Breast screening: time for a rethink? [see comments] Roberts MM. **BMJ** 1989 Nov 4;299(6708):1153–5 Comment in: BMJ 1989 Nov 25;299(6711):1336–8.

Breast cancer screening: its impact on clinical medicine. de Koning HJ, et al. **Br J Cancer** 1990 Feb;61(2):292–7

Treatment of screen detected ductal carcinoma in situ: a silver lining within a grey cloud? [editorial] Fentiman IS. **Br J Cancer** 1990 Jun;61(6):795–6

The endocrine prevention of breast cancer. Fentiman IS. **Br J Cancer** 1989 Jul;60(1):12–4 (21 ref.)

Results from a seven-year programme of breast self-examination in 89,010 women. Locker AP, et al. **Br J Cancer** 1989 Sep;60(3):401–5

LHRH agonists and the prevention of breast and ovarian cancer. Pike MC, et al. **Br J Cancer** 1989 Jul;60(1):142–8

A pilot trial to evaluate the acute toxicity and feasibility of tamoxifen for prevention of breast cancer. Powles TJ, et al. **Br J Cancer** 1989 Jul;60(1):126–31

Screening for breast cancer [letter; comment] MacDonald AF. **Br J Radiol** 1990 Feb;63(746):150–1 Comment on: Br J Radiol 1989 Aug;62(740):695–704.

Chemoprevention of breast cancer. Powles TJ, et al. **Breast Cancer Res Treat** 1989 Oct;14(1):23–31

Evaluation of periodic breast cancer screening with mammography: methodology and early observations. 1966 [classical article] Shapiro S, et al. **CA** 1990 Mar–Apr; 40(2):111–25

Mammography screening by family physicians [letter] Rapoport D. **Can Med Assoc J** 1989 Nov 15;141(10):1029, 1032

Changes in breast self-examination behavior achieved by 89,835 participants in the Canadian National Breast Screening Study. Baines CJ, et al. **Cancer** 1990 Aug 1; 66(3):570–6

Women's attitudes to screening after participation in the National Breast Screening Study. A questionnaire survey. Baines CJ, et al. **Cancer** 1990 Apr 1;65(7):1663–9

Screening mammography. Medical legal considerations. Brenner RJ. **Cancer** 1990 Sep 15;66(6 Suppl):1348–50 (11 ref.)

Breast cancer control. Challenge or chimera. Holleb AI. **Cancer** 1990 Sep 15;66(6 Suppl):1309–12

The control of breast cancer. A World Health Organization perspective. Koroltchouk V, et al. **Cancer** 1990 Jun 15; 65(12):2803–10 (37 ref.)

Issues in mammography. McLelland R, et al. **Cancer** 1990 Sep 15;66(6 Suppl):1341–4 (34 ref.)

Medical and legal implications of screening and follow-up procedures for breast cancer. Spratt JS, et al. **Cancer** 1990 Sep 15;66(6 Suppl):1351–62 (56 ref.)

Detection of breast cancer. Strax P. **Cancer** 1990 Sep 15;66(6 Suppl):1336–40

Revisions in the risk-based Breast Cancer Screening Program at Group Health Cooperative. Taplin SH, et al. **Cancer** 1990 Aug 15;66(4):812–8

Starting from scratch—some problems with Forrest [editorial] Guyer PB. **Clin Radiol** 1990 Jan;41(1):1–2

Starting from scratch—some problems with Forrest [letter] O'Doherty A, et al. **Clin Radiol** 1990 Aug;42(2):143

Mammography screening—reasons for recall and the influence of experience on recall in the Finnish system. Pamilo M, et al. **Clin Radiol** 1990 Jun;41(6):384–7

Use of a cancer register for monitoring and evaluating a breast cancer screening programme. Bull A, et al. **Community Med** 1989 Aug;11(3):220–4

The effect of partial noncompliance on the power of a clinical trial. Freedman LS. **Controlled Clin Trials** 1990 Jun; 11(3):157–68 (23 ref.)

Analysis of the costs of a large prevention trial. Urban N, et al. **Controlled Clin Trials** 1990 Apr;11(2):129–46

The Madison meetings. Costa A, et al. **Eur J Cancer** 1990; 26(6):656–7 (5 ref.)

Breast cancer prevention with tamoxifen. The role of tamoxifen in the prevention of breast cancer. Fentiman IS. **Eur J Cancer** 1990;26(6):655–6 (16 ref.)

Prevention of breast cancer with tamoxifen—an update on the Royal Marsden Hospital pilot programme. Powles TJ, et al. **Eur J Cancer** 1990;26(6):680–4

Mediterranean diet and cancer. Berrino F, et al. **Eur J Clin Nutr** 1989;43 Suppl 2:49–55 (58 ref.)

Baseline screening mammography with one versus two views. Anttinen I, et al. **Eur J Radiol** 1989 Nov;9(4):241–3

Breast cancer screening. Holmberg L. **Eur J Surg Oncol** 1989 Oct;15(5):397–9

Implications of preventive health behaviour for cervical and breast cancer screening programmes: a review. Bowling A. **Fam Pract** 1989 Sep;6(3):224–31 (97 ref.)

Use of risk factors in counseling patients. Love SM. **Hematol Oncol Clin North Am** 1989 Dec;3(4):599–610 (26 ref.)

Pathology and breast screening. Elston CW, et al. **Histopathology** 1990 Feb;16(2):109–18 (53 ref.)

Early indicators of efficacy of breast cancer screening programmes. Results of the Florence District Programme. Paci E, et al. **Int J Cancer** 1990 Aug 15;46(2):198–202

A model-based analysis of the HIP project for breast cancer screening. van Oortmarssen GJ, et al. **Int J Cancer** 1990 Aug 15;46(2):207–13

Improving mammography recommendation: a nurse-initiated intervention. Foley EC, et al. **J Am Board Fam Pract** 1990 Apr–Jun;3(2):87–92

Changes in food patterns during a low-fat dietary intervention in women. Gorbach SL, et al. **J Am Diet Assoc** 1990 Jun;90(6):802–9

The effects of social demand on breast self-examination self-report. Beach DL, et al. **J Behav Med** 1990 Apr; 13(2):195–205

Promoting mammography appointment making. Mayer JA, et al. **J Behav Med** 1989 Dec;12(6):605–11

Motivational factors for participation in breast cancer screening. Frazier TG, et al. **J Cancer Educ** 1990;5(1):51–4

The planning, execution, and evaluation of a breast cancer detection awareness program. Wilkes E, et al. **J Cancer Educ** 1988;3(4):247–55

Referral policy and positive predictive value of call for surgical biopsy in the Florence Breast Cancer Screening Program. Ciatto S, et al. **J Clin Epidemiol** 1990;43(5):419–23

Will a breast screening programme change the workload and referral practice of general practitioners? Ashby J, et al. **J Epidemiol Community Health** 1990 Mar;44(1):36–8

Time interval since last test in a breast cancer screening programme: a case-control study in Italy. Palli D, et al. **J Epidemiol Community Health** 1989 Sep;43(3):241–8

The Swedish two county trial of mammographic screening for breast cancer: recent results and calculation of benefit. Tabar L, et al. **J Epidemiol Community Health** 1989 Jun; 43(2):107–14

Risk factors for breast cancer by mode of diagnosis: some results from a breast cancer screening study. Whitehead J, et al. **J Epidemiol Community Health** 1989 Jun; 43(2):115–20

Screening mammography in the Tampa Bay area: current status and implications for the next decade [see comments] Clark RA, et al. **J Fla Med Assoc** 1989 May;76(5):449–53 Comment in: J Fla Med Assoc 1989 May;76(5):437–8.

Screening mammography: the best buy for women [editorial; comment] Kerman HD. **J Fla Med Assoc** 1989 May; 76(5):437–8 Comment on: J Fla Med Assoc 1989 May;76(5):449–53.

Breast Cancer Screening Project in Northeast Florida. Paryani SB, et al. **J Fla Med Assoc** 1990 Jan;77(1):29–31

A study of breast cancer screening: laurel County. Fletcher ME, et al. **J Ky Med Assoc** 1990 Jul;88(7):343–4

Screening and breast cancer incidence. Forrest AP. **J Natl Cancer Inst** 1990 Oct 3;82(19):1525–6

Prospects for antiestrogen chemoprevention of breast cancer. Love RR. **J Natl Cancer Inst** 1990 Jan 3;82(1):18–21

Impact of mammographic screening on breast cancer diagnosis [letter] McWhorter WP, et al. **J Natl Cancer Inst** 1990 Jan 17;82(2):153

Subcommittee hears testimony on breast and cervical cancer screening bill [news] Steele JA. **J Natl Cancer Inst** 1990 Jun 6;82(11):906

Hypertension, pregnancy, and risk of breast cancer. Thompson WD, et al. **J Natl Cancer Inst** 1989 Oct 18; 81(20):1571–4

Breast cancer getting attention in Congress [news] Vanchieri C. **J Natl Cancer Inst** 1990 Jan 3;82(1):11–2

House legislators sponsor new breast cancer bills [news] Vanchieri C. **J Natl Cancer Inst** 1989 Nov 1;81(21):1609–10

Early detection of breast cancer [see comments] Nettles-Carlson B. **J Obstet Gynecol Neonatal Nurs** 1989 Sep–Oct;18(5):373–81 (36 ref.) Comment in: J Obstet Gynecol Neonatal Nurs 1990 Jan–Feb;19(1):13.

Results of mammographic localization of occult breast cancer at a teaching community hospital. Greene FL, et al. **J S C Med Assoc** 1990 Mar;86(3):155–7

Mass screening for breast cancer: comparison of the clinical stages and prognosis of breast cancer detected by mass screening and in out-patient clinics. Ota J, et al. **Jpn J Cancer Res** 1989 Nov;80(11):1028–34

Tamoxifen and oestrogen replacement [letter; comment] **Lancet** 1990 Jul 7;336(8706):48 Comment on: Lancet 1990 Jun 9;335(8702):1397.

Edinburgh trial of screening for breast cancer [letter; comment] **Lancet** 1990 Apr 21;335(8695):968–9 Comment on: Lancet 1990 Feb 3;335(8684):241–6.

Edinburgh trial of screening for breast cancer [letter; comment] Nicholson S, et al. **Lancet** 1990 May 26; 335(8700):1290–1 Comment on: Lancet 1990 Feb 3;335(8684):241–6.

Screening for breast cancer [letter] O'Doherty AJ, et al. **Lancet** 1990 Feb 3;335(8684):296

Edinburgh trial of screening for breast cancer: mortality at seven years [see comments] Roberts MM, et al. **Lancet** 1990 Feb 3;335(8684):241–6 Comment in: Lancet 1990 Apr 21;335(8695):968–9. Comment in: Lancet 1990 May 26;335(8700):1290–1.

Tamoxifen to prevent breast cancer [letter] [see comments] Spicer D, et al. **Lancet** 1990 Jun 9;335(8702):1397 Comment in: Lancet 1990 Jul 7;336(8706):48.

Consensus statement on progestin use in postmenopausal women. Utian WH. **Maturitas** 1989 Sep;11(3):175–7 (0 ref.)

Boosting recruitment to breast screening programmes [letter] Cockburn J, et al. **Med J Aust** 1990 Mar 19;152(6):332

Encouraging attendance at screening mammography: knowledge, attitudes and intentions of general practitioners. Cockburn J, et al. **Med J Aust** 1989 Oct 2;151(7):391–6

Counting the costs of mammography screening: first year results from the Sydney study [published erratum appears in Med J Aust 1990 Jun 18;152(12):674] Gerard K, et al. **Med J Aust** 1990 May 7;152(9):466, 469–71

Whither screening mammography in Australia? Establishing a satisfactory basis for funding. Joseph DJ, et al. **Med J Aust** 1990 May 21;152(10):545–6

The United Kingdom national breast screening programme: implications for pathology departments. Elston CW. **Med Lab Sci** 1989 Jul;46(3):223–9 (23 ref.)

Transillumination imaging performance: a time-of-flight imaging system. Hebden JC, et al. **Med Phys** 1990 May–Jun;17(3):351–6

Screening for breast cancer: are physicians doing enough? [comment] Gemson DH. **N Y State J Med** 1990 Jun; 90(6):285–7 Comment on: N Y State J Med 1990 Jun;90(6):288–92.

Breast cancer screening. Changing physician practices and specialty variation [see comments] Lane DS, et al. **N Y State J Med** 1990 Jun;90(6):288–92 Comment in: N Y State J Med 1990 Jun;90(6):285–7.

Mammography and breast cancer [letter] [see comments] Pomare EW, et al. **N Z Med J** 1990 Apr 25;103(888):192 Comment in: N Z Med J 1990 Jun 13;103(891):280–1.

Medical teaching mission in India. Hirsh RN. **Ohio Med** 1990 Jun;86(6):445–7

Long-term breast feeding linked to lower incidence of breast cancer among Chinese women [news] **Oncology (Williston Park)** 1988 Nov;2(11):23

Corporate sponsored mammography [news] **Oncology (Williston Park)** 1990 Apr;4(4):19

NCI's transition plan for participants in women's health trial [news] **Oncology (Williston Park)** 1988 Dec;2(12):36

Counseling women at high risk for breast cancer. Stefanek ME. **Oncology (Williston Park)** 1990 Jan;4(1):27–33; discussion 34, 37–8 (8 ref.)

Breast cancer screening and early diagnosis. Measures that save lives. Robinson DS, et al. **Postgrad Med** 1989 Oct; 86(5):164–7, 170–2

Feasibility of a randomized trial of a low-fat diet for the prevention of breast cancer: dietary compliance in the Women's Health Trial Vanguard Study. Henderson MM, et al. **Prev Med** 1990 Mar;19(2):115–33

The feasibility of testing experimentally the dietary fat–breast cancer hypothesis. Boyd NF, et al. **Prog Clin Biol Res** 1990; 346:231–41 (32 ref.)

Current status: evaluation of dietary fat reduction as secondary breast cancer prevention. The Nutrition Adjuvant Study. Chlebowski RT, et al. **Prog Clin Biol Res** 1990;339:201–9

Breast cancer risk status as a predictor for breast cancer screening behaviors. Chrvala CA. **Prog Clin Biol Res** 1990; 339:239–51

A comparison in attitudes toward cancer control research between family practice residents (FPR) and primary care practitioners (PCP). Guy J, et al. **Prog Clin Biol Res** 1990; 339:391–9

An evaluation of BSE frequency and quality and their relationship to breast lump detection. Mahloch J, et al. **Prog Clin Biol Res** 1990;339:269–80

Implementation and evaluation of a worksite breast self-examination training program. Paskett ED, et al. **Prog Clin Biol Res** 1990;339:281–302

Cancer control responses to the breast cancer challenge. Rimer B. **Prog Clin Biol Res** 1990;339:213–5

Gonadotropin hormone releasing hormone agonists [GnRHA] and prevention of familial breast cancer. Spicer D, et al. **Prog Clin Biol Res** 1990;339:193–9 (16 ref.)

Effects of a news event on breast cancer screening survey responses. Stoddard AM, et al. **Prog Clin Biol Res** 1990; 339:259–68

Screening for breast cancer and adjuvant therapy for early breast cancer. Swain S. **Prog Clin Biol Res** 1989;320:101–10 (17 ref.)

Breast cancer screening: perceptions and experience of primary care physicians, radiologists and women. Zapka JG, et al. **Prog Clin Biol Res** 1990;339:253–7

Mobile breast screening: factors affecting uptake, efforts to increase response and acceptability. Haiart DC, et al. **Public Health** 1990 Jul;104(4):239–47

Detroit's avoidable mortality project: breast cancer control for inner-city women. Burack RC, et al. **Public Health Rep** 1989 Nov–Dec;104(6):527–35

An urban community-based cancer prevention screening and health education intervention in Chicago. Lacey LP, et al. **Public Health Rep** 1989 Nov–Dec;104(6):536–41

The radiographer's role in an early detection programme for breast cancer. Caseldine J. **Radiogr Today** 1988 Dec; 54(619):36–7

Quality assurance in Trent Regional Health Authority's breast screening programme. Thornhill P. **Radiogr Today** 1990 Apr;56(635):11–3

Improving the adherence of urban women to mammography guidelines: strategies for radiologists. Fox SA, et al. **Radiology** 1990 Jan;174(1):203–6

Control of breast cancer through screening mammography. Tabár L. **Radiology** 1990 Mar;174(3 Pt 1):655–6 (18 ref.)

A pilot study of attendance for breast cancer screening. Eardley A, et al. **Soc Sci Med** 1990;30(6):693–9

Participation in breast screening programs: a review. Vernon SW, et al. **Soc Sci Med** 1990;30(10):1107–18 (107 ref.)

Breast self-examination: a new training method. Abramson DJ. **South Med J** 1990 Sep;83(9):1005–8

Patient-initiated mobile mammography: analysis of the patients and the problems. Rubin E, et al. **South Med J** 1990 Feb;83(2):178–84

Effect of mass screening mammography on staging of carcinoma of the breast in women. Robertson FM, et al. **Surg Gynecol Obstet** 1990 Jul;171(1):55–8

A reappraisal of prophylactic mastectomy. Wapnir IL, et al. **Surg Gynecol Obstet** 1990 Aug;171(2):171–84 (168 ref.)

Breast cancer detected by screening: the importance of long-term follow-up. Lopez MJ, et al. **Surgery** 1989 Oct; 106(4):590–4; discussion 594–5

Rome women's screening study: knowledge, attitudes and practices of women regarding screening for breast and cervical cancer. Perucci CA, et al. **Tumori** 1990 Aug 31; 76(4):365–9

Breast cancer risk factors and screening: United States, 1987. Dawson DA, et al. **Vital Health Stat [10]** 1990 Jan; (172):iii–iv, 1–60

Breast cancer screening—an alternative viewpoint. Rodgers A. **West Engl Med J** 1990 Mar;105(1):22–3 (30 ref.)

Breast cancer detection awareness project in Wisconsin: 1987–1988. Richards MJ, et al. **Wis Med J** 1989 Sep; 88(9):7–9

[The interval carcinoma in periodic breast screening, a new concept] Wobbes T, et al. **Ned Tijdschr Geneeskd** 1989 Nov 11;133(45):2209–12 **(Dut)**

[Consensus conference of the French Society of Senology and Breast Pathology. Detection of breast cancer] Piana L, et al. **J Radiol** 1990 Jan;71(1):65 (0 ref.) **(Fre)**

[Physical examination in screening for breast cancer: who benefits?] Huguenin M, et al. **Schweiz Med Wochenschr** 1990 Jan 27;120(4):98–104 (Eng. Abstr.) **(Fre)**

[Evaluation of the early screening for breast cancer using self examination] Sethom F, et al. **Tunis Med** 1990 Jan; 68(1):13–7 (Eng. Abstr.) **(Fre)**

[Value of the annual physical examination of the breast for early detection of breast cancer] Kloskowski S, et al. **Z Arztl Fortbild (Jena)** 1990;84(9):453–7 **(Ger)**

[The significance of MDR (mammo digital-radiography) in breast cancer mass screening] Kido C. **Gan No Rinsho** 1989 May;Spec No:220–6 **(Jpn)**

[Mass screening for breast cancer in Gunma prefecture—the results for 8 years and future problems] Ishida T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Oct 20;24(10):2400–10 (Eng. Abstr.) **(Jpn)**

[An overview of breast cancer mass screening in Japan] Watanabe H, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Jan 20;25(1):103–11 (Eng. Abstr.) **(Jpn)**

[Diagnostic imaging for breast cancer] Kido C. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Oct 25; 49(10):1227–35 (Eng. Abstr.) **(Jpn)**

[Breast cancer screening 1988] Buraczewski J. **Nowotwory** 1989 Jul–Dec;39(3–4):196–202 (22 ref.) (Eng. Abstr.) **(Pol)**

[Preliminary evaluation of the effectiveness of the screening examinations for breast cancer. Results of the examinations of women working at industrial plants in the Ochota district] Gębczyńska-Michalik M, et al. **Nowotwory** 1989 Apr–Jun;39(2):83–9 (Eng. Abstr.) **(Pol)**

[Preliminary estimation of the efficacy of breast cancer screening. Results of examinations performed among students and staff members in high schools] Liszek A, et al. **Nowotwory** 1989 Jan–Mar;39(1):12–8 (Eng. Abstr.) **(Pol)**

[The organization of breast self-examination among women in the Estonian SSR] Tekkel MIu, et al. **Vopr Onkol** 1990; 36(2):206–10 (Eng. Abstr.) **(Rus)**

[Tamoxifen is effective in preventing breast cancer but the optimal length of treatment is not yet known] Nordenskjöld B, et al. **Lakartidningen** 1990 Jan 24;87(4):186 **(Swe)**

PSYCHOLOGY

Measurement of quality of life in advanced breast cancer. Baum M, et al. **Acta Oncol** 1990;29(3):391–5 (51 ref.)

The impact of media coverage of Nancy Reagan's experience on breast cancer screening. Lane DS, et al. **Am J Public Health** 1989 Nov;79(11):1551–2

Breast cancer screening by mammography: utilization and associated factors. Zapka JG, et al. **Am J Public Health** 1989 Nov;79(11):1499–502

The relationship between psychosocial factors and breast cancer: some unexpected results. Edwards JR, et al. **Behav Med** 1990 Spring;16(1):5–14

Psychiatric morbidity associated with screening for breast cancer. Ellman R, et al. **Br J Cancer** 1989 Nov;60(5):781–4

Liaison psychiatry in a breast cancer unit. Dean C, et al. **Br J Psychiatry** 1989 Jul;155:98–100 (14 ref.)

Facilitating emotional coping during treatment. Spiegel D. **Cancer** 1990 Sep 15;66(6 Suppl):1422–6 (50 ref.)

The process of recovery from breast cancer for younger and older patients. Changes during the first year. Vinokur AD, et al. **Cancer** 1990 Mar 1;65(5):1242–54

Informational and psychosocial needs of women choosing conservative surgery/primary radiation for early stage breast cancer. Cawley M, et al. **Cancer Nurs** 1990 Apr; 13(2):90–4

Perceptions of postmastectomy patients. Part II. Social support and attitudes towards mastectomy. Feather BL, et al. **Cancer Nurs** 1989 Oct;12(5):301–9

The impact of breast cancer on patients and husbands. Northouse LL. **Cancer Nurs** 1989 Oct;12(5):276–84

A framework for studying functional status after diagnosis of breast cancer. Tulman L, et al. **Cancer Nurs** 1990 Apr; 13(2):95–9

Integrating research with practice: the psychosocial impact of breast cancer. Roberts CS, et al. **Health Soc Work** 1989 Nov;14(4):261–8

Rating depression and anxiety after mastectomy: observer versus self-rating scales. Grandi S, et al. **Int J Psychiatry Med** 1990;20(2):163–71

The patients perception of her breast following radiation and limited surgery. McCormick B, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1299–302

The best kind of support. Meggison B. **Iowa Med** 1989 Aug; 79(8):373–4

Breast cancer: one woman's perspective. Schulze J. **Iowa Med** 1989 Aug;79(8):370–2

Coping with palliative chemotherapy. Payne SA. **J Adv Nurs** 1990 Jun;15(6):652–8

Attitudes of cancer: psychometric properties of fighting spirit and denial. Nelson DV, et al. **J Behav Med** 1989 Aug; 12(4):341–55

Assessing the quality of life—a study in newly-diagnosed breast cancer patients. Ganz PA, et al. **J Clin Epidemiol** 1990;43(1):75–86

Ratings of the importance of quality of life variables: therapeutic implications for patients with metastatic breast cancer. Sutherland HJ, et al. **J Clin Epidemiol** 1990; 43(7):661–6

Self-confidence as a critical factor in breast self-examination. Olson RL, et al. **J Obstet Gynecol Neonatal Nurs** 1989 Nov-Dec;18(6):476–81

Do psychological factors predict survival in breast cancer? Dean C, et al. **J Psychosom Res** 1989;33(5):561–9

A piece of my mind. An elemental education. Elliott MA. **JAMA** 1990 Aug 22–29;264(8):1051

Receptor status and psychological adjustment of breast cancer patients [letter] **Lancet** 1990 Jul 7;336(8706):47–8

Psychological response to breast cancer and 15-year outcome [letter] Greer S, et al. **Lancet** 1990 Jan 6;335(8680):49–50

Psychological correlates of hormone receptor status in breast cancer [letter; comment] Ramirez AJ, et al. **Lancet** 1990 Jun 9;335(8702):1408 Comment on: Lancet 1990 Apr 21;335(8695):931–3.

Psychosocial adjustment after treatment for early breast cancer. Fallowfield LJ. **Oncology (Williston Park)** 1990 Apr;4(4):89–97; discussion 97–8, 100

Breast cancer counselling. Tait A. **Practitioner** 1989 Oct 22; 233(1477):1404–5

Threat and loss in breast cancer. Deadman JM, et al. **Psychol Med** 1989 Aug;19(3):677–81

Perceived social support and tumor estrogen/progesterone receptor status as predictors of natural killer cell activity in breast cancer patients. Levy SM, et al. **Psychosom Med** 1990 Jan-Feb;52(1):73–85

Critical review of quality of life: psychosocial aspects of adjuvant therapy in breast cancer. Hürny C. **Recent Results Cancer Res** 1989;115:279–82

Coping and survival in patients with primary breast cancer: a critical analysis of current research strategies and proposal of a new approach integrating biomedical, psychological, and social variables. Hürny C, et al. **Recent Results Cancer Res** 1989;115:255–71

Social support for women during chronic illness: the relationship among sources and types to adjustment. Primomo J, et al. **Res Nurs Health** 1990 Jun;13(3):153–61

The psychological consequences of the surgical treatment of cancer of the breast. Maguire P. **Surg Annu** 1990; 22:77–91 (25 ref.)

[Affective disturbances in patients with breast cancer] Liu Z, et al. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Dec; 22(6):363–5, 383–4 (Eng. Abstr.) **(Chi)**

[Psychologic reactions of patients at the announcement of a treatment plan for cancer of the breast. Apropos of 6 exemplary case reports] Dilhuydy JM, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(8):1017–23 (Eng. Abstr.) **(Fre)**

[Psychosocial factors of preserving health? Prospective studies of breast cancer, bronchial cancer and fibrocystic mastopathy] Wirsching M, et al. **Psychother Psychosom Med Psychol** 1990 Feb;40(2):70–5 (Eng. Abstr.) **(Ger)**

[Adjustment, stress and coping with stress in breast cancer. Results of single case studies] Wittig R. **Z Klin Psychol Psychopathol Psychother** 1989;37(3):303–16 (Eng. Abstr.) **(Ger)**

[Breast cancer and mental adjustment. A pilot study] Tjemsland L, et al. **Tidsskr Nor Laegeforen** 1989 Sep 20; 109(26):2685–7 (Eng. Abstr.) **(Nor)**

[Psychopathologic aspects of cancer in gynecology. Cancer of the breast] Matías Polo J, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1990 Jan-Feb;18(1):54–61 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Fifteen years of mammography in cosmetic surgery of the breast. Perras C. **Aesthetic Plast Surg** 1990 Spring; 14(2):81–4

Carcinoma mimicked by the sternal insertion of the pectoral muscle. Britton CA, et al. **AJR Am J Roentgenol** 1989 Nov; 153(5):955–6

The relationship of mammographic microcalcification to histologic malignancy: radiologic-pathologic correlation. Homer MJ, et al. **AJR Am J Roentgenol** 1989 Dec; 153(6):1187–9

Breast mass simulation on a mammogram [letter] Jackson FI. **AJR Am J Roentgenol** 1990 Apr;154(4):900

Breast diagnostics in clinical gynecology [letter] Cross RW. **Am J Obstet Gynecol** 1990 Aug;163(2):686–7

Breast disease programs and mammography training [letter] Dodd GD, et al. **Am J Obstet Gynecol** 1990 Aug; 163(2):689–91

The role of mammography in detecting breast cancer in augmented breasts. Grace GT, et al. **Ann Plast Surg** 1990 Aug;25(2):119–23

Early experience with needle localization and biopsy of mammographic lesions [see comments] Bird D, et al. **Aust N Z J Surg** 1990 May;60(5):337–40 Comment in: Aust N Z J Surg 1990 May;60(5):323–4.

Mammography and breast pain. Brew MD, et al. **Australas Radiol** 1989 Nov;33(4):335–6

Evaluation of the mammographic lesion. Osborne JM, et al. **Australas Radiol** 1989 Nov;33(4):320–7

The quality mammographic image. A review of its components. Rickard MT. **Australas Radiol** 1989 Nov; 33(4):328–34

Ductal adenoma of the breast mammographic appearances and pathological correlation. Moskovic E, et al. **Br J Radiol** 1989 Nov;62(743):1021–3

Practical aspects of mammography. Boggis CR. **Bristol Med Chir J** 1989 May;104(2):35–41

Nonpalpable breast masses: radiologic predictability of malignancy. Hermann G, et al. **Can Assoc Radiol J** 1990 Jun;41(3):130–2

Practical aspects of mammographic-pathological correlation: experience with needle localization. Samuels T, et al. **Can Assoc Radiol J** 1990 Jun;41(3):127–9

Reducing deaths from breast cancer in Canada [letter; comment] Simor IS, et al. **Can Med Assoc J** 1990 Feb 15; 142(4):285–7 Comment on: Can Med Assoc J 1989 Aug 1;141(3):199–201.

Quality assurance in mammography. Dodd GD. **Cancer** 1989 Dec 15;64(12 Suppl):2707–9

Cost reduction in mammography. Dodd GD. **Cancer** 1989 Dec 15;64(12 Suppl):2667–70

Requirements for quality breast cancer detection. Technical quality control. Hendrick RE. **Cancer** 1989 Dec 15;64(12 Suppl):2710–7

Challenges and progress with mammography. McLelland R. **Cancer** 1989 Dec 15;64(12 Suppl):2664–6

Breast imaging. A critical aspect of breast conserving treatment. Sadowsky NL, et al. **Cancer** 1990 May 1;65(9 Suppl):2113–8 (29 ref.)

Mammography. Cooper RA. **Clin Obstet Gynecol** 1989 Dec; 32(4):768–85 (29 ref.)

The accuracy of mammographic diagnosis in surgically occult breast lesions. Moskovic E, et al. **Clin Radiol** 1990 May;41(5):344–6

Evaluation of diagnostic tests [letter] Reidy J. **Clin Radiol** 1990 Jun;41(6):439

Preoperative localization of nonpalpable breast lesions. Kopans DB. **Curr Opin Radiol** 1989 Aug;1(2):200–2

Early detection of breast cancer by mammography screening. Moskowitz M. **Curr Opin Radiol** 1989 Aug;1(2):193–9 (6 ref.)

The limited value of routine chest X-ray in the follow-up of stage II breast cancer. Løgager VB, et al. **Eur J Cancer** 1990;26(5):553–5

Mammography in symptomatic and asymptomatic patients. Stomper PC, et al. **Hematol Oncol Clin North Am** 1989 Dec;3(4):611–40 (56 ref.)

Mammographic detection of breast cancer in women under the age of 35. Jeffries DO, et al. **Invest Radiol** 1990 Jan; 25(1):67–71

Breast screening [letter; comment] Nossaman NJ. **J Am Board Fam Pract** 1990 Apr-Jun;3(2):140–1 Comment on: J Am Board Fam Pract 1990 Jan-Mar;3(1):26–34.

Breast screening practices among primary physicians: reality and potential [see comments] Rimer BK, et al. **J Am Board Fam Pract** 1990 Jan-Mar;3(1):26–34 Comment in: J Am Board Fam Pract 1990 Apr-Jun;3(2):140–1.

AMWA endorses uniform mammography screening. Guinan M. **J Am Med Wom Assoc** 1990 Jan-Feb;45(1):28

A review of mammography. Rasmussen EP, et al. **J Med Assoc Ga** 1990 Jun;79(6):359–61

Leaders increase activity after mammography summit [news] Vanchieri C, et al. **J Natl Cancer Inst** 1990 Jan 3;82(1):12–3

Mammography: a critical evaluation of its role in breast cancer screening, especially in developing countries. Miller AB. **J Public Health Policy** 1989 Winter;10(4):486–98

Biopsy of occult breast lesions. Analysis of 1261 abnormalities. Meyer JE, et al. **JAMA** 1990 May 2; 263(17):2341–3

Computed radiography for breast cancer. Yamada T, et al. **Jpn J Clin Oncol** 1990 Jun;20(2):164–8

False alarms of breast cancer [letter; comment] Garstin WI, et al. **Lancet** 1990 Feb 3;335(8684):299 Comment on: Lancet 1989 Nov 25;2(8674):1257–8.

The price of a false-negative result of mammography and an overenthusiastic lay press [letter; comment] Sillar B, et al. **Med J Aust** 1989 Oct 2;151(7):418 Comment on: Med J Aust 1989 Jun 5;150(11):664.

The misuse of mammography in the management of breast cancer revisited. Walker QJ, et al. **Med J Aust** 1989 Nov 6;151(9):509–12

Mammography and breast cancer [comment] **N Z Med J** 1990 Jun 13;103(891):280–1 Comment on: N Z Med J 1990 Apr 25;103(888):192.

Usefulness of galactography for minimal noninvasive ductal carcinoma of the breast. Nishida M, et al. **Nippon Geka Hokan** 1989 Mar 1;58(2):250–6

Characterisation of mammographic parenchymal pattern by fractal dimension. Caldwell CB, et al. **Phys Med Biol** 1990 Feb;35(2):235–47

The effect of breast implants on the radiographic detection of microcalcification and soft-tissue masses. Gumucio CA, et al. **Plast Reconstr Surg** 1989 Nov;84(5):772–8; discussion 779–82

Mammography and the primary care management of breast lumps. Banerjee A, et al. **Practitioner** 1989 May 8; 233(1468):652–5

Needle localisation of occult breast lesions. Cairns CA. **Radiogr Today** 1989 Feb;55(621):21–3

The Welbeck memorial lecture 1988. Radiology and breast cancer. Forrest P. **Radiogr Today** 1989 May;55(624):13–20

Male breast cancer—a case study. Kent W. **Radiogr Today** 1988 Oct;54(617):39–40

Mammographic and histologic correlations of microcalcifications. de Paredes ES, et al. **Radiographics** 1990 Jul;10(4):577–89

Lymphoma of the breast. Paulus DD. **Radiol Clin North Am** 1990 Jul;28(4):833–40

Radial sclerosing lesion of the breast: mammographic features. Adler DD, et al. **Radiology** 1990 Sep;176(3):737–40

Carcinoma within fibroadenomas: mammographic features. Baker KS, et al. **Radiology** 1990 Aug;176(2):371–4

When is it malpractice to miss breast cancer on mammograms? [letter] Hall FM. **Radiology** 1990 Sep; 176(3):876

Differentiation of radial scar from scirrhous carcinoma of the breast: mammographic-pathologic correlation. Mitnick JS, et al. **Radiology** 1989 Dec;173(3):697–700

Nonpalpable lesions in the augmented breast: preoperative localization. Robertson CL, et al. **Radiology** 1989 Dec; 173(3):873–4

Breast cancers in women 35 years of age and younger: mammographic findings. Shaw de Paredes E, et al. **Radiology** 1990 Oct;177(1):117–9

Breast masses: mammographic evaluation. Sickles EA. **Radiology** 1989 Nov;173(2):297–303 (38 ref.)

Ductal carcinoma in situ: atypical mammographic appearances [letter; comment] Sullivan DC. **Radiology** 1990 Apr;175(1):285 Comment on: Radiology 1989 Sep;172(3):661–6.

Invasive lobular carcinoma. Mammographic pattern. Adler OB, et al. **ROFO** 1990 Apr;152(4):460–2

American Cancer Society's Breast Cancer Detection Awareness Program: the 1988 middle Tennessee experience. Kaufman AJ, et al. **South Med J** 1990 Jun; 83(6):618–20

Mammography and breast cancer screening. Bassett LW, et al. **Surg Clin North Am** 1990 Aug;70(4):775–800 (118 ref.)

Mammographic features of intracystic papillary lesions. Estabrook A, et al. **Surg Gynecol Obstet** 1990 Feb; 170(2):113–6

The role of mammography on breast cancer patients in a hospital setting. Lee KP, et al. **Yonsei Med J** 1990 Mar; 31(1):49–52

[A correlative study of sex hormonal receptor status and mammographic appearance in primary breast cancer] He ZY. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Dec; 23(6):350–3 (Eng. Abstr.) **(Chi)**

[Investigation on calcifications in the breast] Xu JG. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Aug; 23(4):198–200 (Eng. Abstr.) **(Chi)**

[Mammographic screening for breast cancer—a cost–benefit analysis] Erichsen GG. **Nord Med** 1990;105(2):64–6 (Eng. Abstr.) **(Dan)**

[Subclinical lesions of the breast. Stereotactic localization and biopsy–excision] Lafaye C, et al. **Ann Radiol (Paris)** 1989; 32(5):400–9 (32 ref.) (Eng. Abstr.) **(Fre)**

[Subclinical identification of cancer of the breast. Radiologic progress, proposition for treatment (see comments)] Goumot PA, et al. **Chirurgie** 1989;115(7):424–31 (Eng. Abstr.) Comment in: Chirurgie 1989;115(7):480–1. **(Fre)**

[Numerical revolution in breast imaging] Castro A, et al. **Pathol Biol (Paris)** 1989 Nov;37(9):1009–11 **(Fre)**

[Assessment of non–palpable mammographic changes of the breast] Diergarten K, et al. **Arch Gynecol Obstet** 1989; 245(1–4):681–3 **(Ger)**

[Preoperative marking of non–palpable breast findings with the hole screen tube] Schröcksnadel H, et al. **Gynakol Rundsch** 1989;29 Suppl 2:228–30 **(Ger)**

[The mammographic image of benign breast diseases] Friedrich M. **Gynakologe** 1989 Aug;22(4):230–7 (28 ref.) **(Ger)**

[Two morphologically different manifestations of a non–Hodgkin's lymphoma in the breast] Decho T, et al. **Rontgenblatter** 1989 Nov;42(11):465–6 (Eng. Abstr.) **(Ger)**

[Localization by needle insertion of occult breast carcinomas. An evaluation of the method via acquired experience] Asteria CR, et al. **Minerva Med** 1989 Aug;80(8):893 **(Ita)**

[Galactography in the study of the secreting breast] Ragaglini G, et al. **Minerva Med** 1990 Jun;81(6):439–50 (Eng. Abstr.) **(Ita)**

[Phyllodes tumor of the breast] Santangelo A, et al. **Minerva Med** 1989 Aug;80(8):913–5 **(Ita)**

[Risk–benefit analysis for mass screening of breast cancer utilizing mammography as a screening test] Iinuma TA, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Sep 25; 49(9):1091–5 (Eng. Abstr.) **(Jpn)**

[A study of image processing condition of mammography using FCR (Fuji Computed Radiography)] Nakata M. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Apr 25; 49(4):454–67 (Eng. Abstr.) **(Jpn)**

[A study of image processing in CR mammography; gradation processing] Muramatsu Y, et al. **Rinsho Hoshasen** 1990 Feb;35(2):271–6 (Eng. Abstr.) **(Jpn)**

[Breast cancer—a diagnostic challenge (letter)] Skyberg K, et al. **Tidsskr Nor Laegeforen** 1990 Apr 30;110(11):1410–1 **(Nor)**

[Current possibilities of x–ray diagnosis in breast cancer] Arablinskiĭ VM, et al. **Sov Med** 1989;(8):74–7 **(Rus)**

[Macroaggregated calcifications in cancer of the breast] Ostrovskaia IM, et al. **Vestn Rentgenol Radiol** 1989 Jul–Aug;(4):39–44 (Eng. Abstr.) **(Rus)**

[Clinical x–ray and morphological changes in breast carcinomas during radiothermotherapy] Pugachev VF, et al. **Vopr Onkol** 1989;35(11):1352–4 (Eng. Abstr.) **(Rus)**

[A woman with a palpable breast mass] García Pérez M, et al. **Rev Clin Esp** 1989 Jul–Aug;185(3):162–3 **(Spa)**

RADIONUCLIDE IMAGING

Immunolymphoscintigraphy with 99mTc–labeled monoclonal antibody (BW 431/26) reacting with carcinoembryonic antigen in breast cancer. Kairemo KJ. **Cancer Res** 1990 Feb 1;50(3 Suppl):949s–954s

Breast tumor radioimmunodetection with a 111In–labeled monoclonal antibody (MA5) against a mucin–like antigen. Major PP, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):927s–931s

Uptake of technetium–99m sulfur colloid by a breast carcinoma. Calandra JD, et al. **Clin Nucl Med** 1990 Jun; 15(6):432–3

Apparent left ventricular aneurysm due to unilateral secretion of Tc–99m pertechnetate in a nursing mother with breast cancer. Cassidy DB, et al. **Clin Nucl Med** 1990 Apr; 15(4):264–5

Thallium–201 single photon emission computed tomograms of double cancers: lung and breast. Tonami N, et al. **Clin Nucl Med** 1989 Aug;14(8):594–6

Scintigraphic rib abnormality mimicking metastasis in a breast cancer patient. Esik O, et al. **Eur J Nucl Med** 1989; 15(10):676–7

Breast cancer imaging with mouse monoclonal antibodies. Major P, et al. **Eur J Nucl Med** 1989;15(10):655–60

Target tissue uptake selectivity of three fluorine–substituted progestins: potential imaging agents for receptor–positive breast tumors. Pomper MG, et al. **Int J Rad Appl Instrum [B]** 1990;17(3):309–19

Imaging of breast cancer with [18F]fluorodeoxyglucose and positron emission tomography. Kubota K, et al. **J Comput Assist Tomogr** 1989 Nov–Dec;13(6):1097–8

The synthesis of E–17 alpha–[131I]iodo–vinyl oestradiol and evaluation of its use as a radiotracer for oestrogen receptor positive breast tumours. Symes EK, et al. **J Steroid Biochem** 1990 May;35(6):641–6

Breast cancer imaging with radioiodinated oestradiol [letter] Schober O, et al. **Lancet** 1990 Jun 23;335(8704):1522

201Tl scintigraphy in the staging of lung cancer, breast cancer and lymphoma. Sehweil AM, et al. **Nucl Med Commun** 1990 Apr;11(4):263–9

Internal mammarial lymphoscintig.aphy with SPECT after ultrasound–guided injection of 99mTc–dextran. Unlü M, et al. **Nuklearmedizin** 1990 Feb;29(1):35–9

New PET technique improves detection of estrogen status of breast cancers [news] **Oncology (Williston Park)** 1989 Nov;3(11):80

Monoclonal antibodies reactive with human breast or ovarian carcinoma: in vivo applications. Thor AD, et al. **Semin Nucl Med** 1989 Oct;19(4):295–308 (136 ref.)

[Detection of bone marrow involvement in breast cancer and malignant lymphoma using immunoscintigraphy of the hematopoietic bone marrow] Reske SN, et al. **ROFO** 1990 Jan;152(1):60–6 (Eng. Abstr.) **(Ger)**

[The problem of false positives in bone scintigraphy in patients with breast neoplasms. A follow–up at 10 years] Campostrini F, et al. **Radiol Med (Torino)** 1990 May; 79(5):539–43 (Eng. Abstr.) **(Ita)**

[Development of Tc–99m labeled activated carbon microspheres and clinical application] Saeki T, et al. **Nippon Geka Gakkai Zasshi** 1990 Jun;91(6):729–40 (Eng. Abstr.) **(Jpn)**

[Usefulness of scintigraphy of the parasternal lymph nodes using 99mTc–NANOCOLL for planning supplementary radiotherapy in patients with breast cancer] Jabłkowski W, et al. **Pol Przegl Radiol** 1988 Nov–Dec;52(6):274–8 (Eng. Abstr.) **(Pol)**

[Parasternal lymphoscintigraphy in planning the radiation therapy of breast cancer] Bykov SA, et al. **Med Radiol (Mosk)** 1990 Jul;35(7):13–7 (Eng. Abstr.) **(Rus)**

[The importance of lymphoscintigraphy in breast cancer] Kanaev SV, et al. **Vopr Onkol** 1989;35(11):1310–4 (Eng. Abstr.) **(Rus)**

RADIOTHERAPY

Clinical and electrodiagnostic findings in breast cancer patients with radiation–induced brachial plexus neuropathy. Mondrup K, et al. **Acta Neurol Scand** 1990 Feb;81(2):153–8

The effect of thoracic irradiation for cancer of the breast on ventilation, perfusion and pulmonary permeability. A one–year follow–up. Groth S, et al. **Acta Oncol** 1989; 28(5):671–8

Breast appearance and function after breast conserving surgery and radiotherapy. Hamilton CS, et al. **Acta Oncol** 1990;29(3):291–5

Now there are two effective conservation approaches for patients with stage I and II breast cancer: how pathological assessment of inked resection margins can provide valuable information for the radiation oncologist. Pezner RD, et al. **Am J Clin Oncol** 1990 Apr;13(2):175–9 (22 ref.)

Intraoperative electron beam therapy and external photon beam therapy with lumpectomy as primary treatment for early breast cancer. Dobelbower RR, et al. **Ann Radiol (Paris)** 1989;32(6):497–501 (37 ref.)

Mammographic and palpation findings in the irradiated spared breast. Vuorela AL, et al. **Anticancer Res** 1989 Jul–Aug;9(4):1217–21

Acne in an irradiated area [letter; comment] Held JL. **Arch Dermatol** 1990 Jan;126(1):120 Comment on: Arch Dermatol 1989 Jul;125(7):1005.

Cosmesis and local control after irradiation in women treated conservatively for breast cancer. Steeves RA, et al. **Arch Surg** 1989 Dec;124(12):1369–73

Radiotherapy for ductal carcinoma in situ detected by screening. Hamilton CR, et al. **BMJ** 1990 Jul 28; 301(6745):224–5

Post–irradiation morphoea [letter; comment] Verbov J. **Br J Dermatol** 1989 Dec;121(6):819–20 Comment on: Br J Dermatol 1989 Jun;120(6):831–5.

Aplastic anaemia following successful treatment of malignant epithelial tumours with radiation and/or chemotherapy. Lishner M, et al. **Br J Haematol** 1989 Nov;73(3):416–7

A localized hypersensitivity reaction to co–trimoxazole in a previously irradiated field simuiating a recall phenomenon [letter] Atahan IL, et al. **Br J Radiol** 1989 Dec; 62(744):1107–8

Modulation in the radiosensitivity of MCF–7 human breast carcinoma cells by 17B–estradiol and tamoxifen. Wazer DE, et al. **Br J Radiol** 1989 Dec;62(744):1079–83

Radiation therapy as primary treatment of cancer of the breast. Pierquin B, et al. **Br J Radiol Suppl** 1988;22:67–76 (19 ref.)

Breast cancer and the radiation oncologist: a personal comment. Goodman S. **Bristol Med Chir J** 1989 May; 104(2):53

Immunosuppression in irradiated breast cancer patients: in vitro effect of cyclooxygenase inhibitors. Wasserman J, et al. **Bull N Y Acad Med** 1989 Jan;65(1):36–44

Radiation exposures received by patients during simulation for breast radiotherapy [letter] McParland BJ, et al. **Can Assoc Radiol J** 1990 Jun;41(3):163–4

Conservative surgery and radiotherapy for early breast cancer. Harris JR, et al. **Cancer** 1990 Sep 15;66(6 Suppl):1427–38 (62 ref.)

Radiation oncology. Levitt SH. **Cancer** 1990 May 1;65(9 Suppl):2119–20

Intraoperative Ir–192 implantation for early breast cancer. Techniques and results. Mansfield CM. **Cancer** 1990 Jul 1;66(1):1–5

Primary therapy for limited breast cancer. Radiation therapy techniques. Marcial VA. **Cancer** 1990 May 1;65(9 Suppl):2159–64 (17 ref.)

Randomized trial of adjuvant tamoxifen combined with postoperative radiation therapy or adjuvant chemotherapy in postmenopausal breast cancer. Rutqvist LE, et al. **Cancer** 1990 Jul 1;66(1):89–96

Radiation therapy after breast augmentation or reconstruction in early or recurrent breast cancer. Ryu J, et al. **Cancer** 1990 Sep 1;66(5):844–7

The impact of mammography on the patterns of patients referred for definitive breast irradiation [published erratum appears in Cancer 1990 Jun 1;65(11):2464] Solin LJ, et al. **Cancer** 1990 Mar 1;65(5):1085–9

The detection of local recurrence after definitive irradiation for early stage carcinoma of the breast. An analysis of the results of breast biopsies performed in previously irradiated breasts. Solin LJ, et al. **Cancer** 1990 Jun 1;65(11):2497–502

Effects of smoking and irradiated volume on inflammatory response in the lung of irradiated breast cancer patients evaluated with bronchoalveolar lavage. Bjermer L, et al. **Cancer Res** 1990 Apr 1;50(7):2027–30

Scintigraphic, spirometric, and roentgenologic effects of radiotherapy on normal lung tissue. Short–term observations in 14 consecutive patients with breast cancer. Botterman J, et al. **Chest** 1990 Jan;97(1):97–102

Carcinoma of the breast. Local prognosis after radiotherapy using air wedges for chest wall irradiation. el–Ghamrawi KA, et al. **Clin Radiol** 1973 Oct;24(4):510–6

Local control of operable breast cancer after radiotherapy alone. Van Limbergen E, et al. **Eur J Cancer** 1990; 26(6):674–9

Multicentric primaries and residual tumor masses following wide excision in breast cancer: a basis for irradiation. Müller A, et al. **Eur J Gynaecol Oncol** 1989;10(5):310–8

Today and tomorrow: radiochemistry for radioimmunotherapy of breast cancer. DeNardo SJ, et al. **Front Radiat Ther Oncol** 1990;24:142–50; discussion 161–5

Normal–tissue tolerance in the irradiation of female breast. Pierquin B, et al. **Front Radiat Ther Oncol** 1989;23:341–8

Influence of local radiotherapy of breast cancer patients on the frequency of cytotoxic T lymphocyte precursor cells. Berger M, et al. **Immunobiology** 1990 Feb;180(2–3):261–71

Early and late normal–tissue injury after postmastectomy radiotherapy alone or combined with chemotherapy. Bentzen SM, et al. **Int J Radiat Biol** 1989 Nov;56(5):711–5

Does smoking protect against radiation–induced pneumonitis? Franzén L, et al. **Int J Radiat Biol** 1989 Nov; 56(5):721–4

Can simulation measurements be used to predict the irradiated lung volume in the tangential fields in patients treated for breast cancer? Bornstein BA, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan;18(1):181–7

Three–dimensional photon dose distributions with and without lung corrections for tangential breast intact treatments. Chin LM, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1327–35

Locally advanced breast cancer treated with neutron beams: long–term follow–up in 28 patients. Halpern J, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):825–31

Irradiation of prosthetically augmented breasts: a retrospective study on toxicity and cosmetic results. Halpern J, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan; 18(1):189–91

Technique for breast irradiation using custom blocks conforming to the chest wall contour. Hartsell WF, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul;19(1):189–95

Radiobiological advantages of an immediate interstitial boost dose in conservative treatment of breast cancer. Krishnan EC, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb; 18(2):419–24

Collagen vascular disease and irradiation [letter] Matthews RH. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):1123–4

A technique for treating local breast cancer using a single set–up point and asymmetric collimation. Rosenow UF, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul;19(1):183–8

Influence of radiation therapy on the lung–tissue in breast cancer patients: CT–assessed density changes and associated symptoms. Rotstein S, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan;18(1):173–80

The source–skin distance measuring bridge: a method to avoid radiation teleangiectasia in the skin after interstitial therapy for breast cancer. Van Limbergen E, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1239–44

Radiation and other pathological changes in breast tissue after conservation treatment for carcinoma. Girling AC, et al. **J Clin Pathol** 1990 Feb;43(2):152–6

Preventive effect of inosine of leukopenia induced by radiotherapy in breast cancer patients. Skulchan V, et al. **J Med Assoc Thai** 1989 Sep;72(9):506–9

Natural history of radiation–induced brachial plexopathy compared with surgically treated patients. Killer HE, et al. **J Neurol** 1990 Jul;237(4):247–50

[125I]iodotamoxifen cytotoxicity in cultured human (MCF–7) breast cancer cells. McLaughlin WH, et al. **J Steroid Biochem** 1989 Oct;33(4A):515–9

The sonographic appearance of the irradiated breast. Calkins AR, et al. **JCU** 1988 Jul–Aug;16(6):409–15

Achieving uniform dose with the use of a custom tissue compensator and a leveled beam for tangential breast fields. Asbury L, et al. **Med Dosim** 1989 Sep;14(3):161–71

First place 1989 Alpha Cradle Award winner. Positioning and immobilization device for patients receiving radiation therapy for carcinoma of the breast. Bentel GC.

Med Dosim 1990 Mar;15(1):3–6
A modification of the HS3 thoracic Alpha Cradle for breast/chestwall patients. Buscher M. Med Dosim 1990 Mar;15(1):19–20
Alpha Cradles in breast cancer treatment: easy immobilization for the potentially difficult breast set up. Hook S, et al. Med Dosim 1990 Mar;15(1):21–4
Design and production of customized field shaping devices for electron arc therapy. Leavitt DD, et al. Med Dosim 1990 Mar;15(1):25–31
The tangential breast match plane: practical problems and solutions. Norris M. Med Dosim 1989 Sep;14(3):189–92
A simple method for reducing ovarian dose during megavoltage irradiation of the breast. Pennington EC, et al. Med Dosim 1989 Dec;14(4):269–72
Equal surface dose compensation. Spicka JI, et al. Med Dosim 1989 Dec;14(4):287–90
Breast irradiation for recurrence in a patient with a silicone implant [letter] Liskow A. Oncology (Williston Park) 1988 May;2(5):58
Role of radiation therapy for locally advanced and inflammatory carcinoma of the breast. Perez CA, et al. Oncology (Williston Park) 1987 Mar;1(1):81–94 (60 ref.)
Breast carcinoma en cuirasse: pathophysiology and rotational subtotal skin electron beam therapy (SSEBT), a new technique. Kumar PP, et al. Radiat Med 1989 Mar–Apr; 7(2):95–104
In vitro radiosensitivity of human diploid fibroblasts derived from women with unusually sensitive clinical responses to definitive radiation therapy for breast cancer. Loeffler JS, et al. Radiat Res 1990 Feb;121(2):227–31
Stress reduction with radiotherapy breast patients. McLean M. Radiogr Today 1989 Dec;55(631):11–3
Use of CT scanning to optimise the localisation procedure for breast radiotherapy. Rattray G. Radiogr Today 1989 Jul;55(626):11–5
Tumorectomy and radiation therapy in early breast cancer: a report on 392 patients. Dubois JB, et al. Radiology 1990 Jun;175(3):867–71
Scatter dose from tangential breast irradiation to the uninvolved breast. Muller-Runkel R, et al. Radiology 1990 Jun;175(3):873–6
Fractionation sensitivity and latency of telangiectasia after postmastectomy radiotherapy: a graded-response analysis. Bentzen SM, et al. Radiother Oncol 1990 Jun;18(2):95–106
Breast conserving treatment of Paget's disease. Bulens P, et al. Radiother Oncol 1990 Apr;17(4):305–9
Locally advanced breast cancer (by Martijn et al.) [editorial] Van den Bogaert W. Radiother Oncol 1989 Sep;16(1):73
Cosmetic evaluation of breast conserving treatment for mammary cancer. 2. A quantitative analysis of the influence of radiation dose, fractionation schedules and surgical treatment techniques on cosmetic results. Van Limbergen E, et al. Radiother Oncol 1989 Dec;16(4):253–67
Overview of adjuvant radiotherapy for breast cancer. Cuzick J. Recent Results Cancer Res 1989;115:220–5
Radiation therapy in prevention and salvage of local relapse: its prognostic implication. Hünig R, et al. Recent Results Cancer Res 1989;115:62–8
Breast-conserving surgery and the role of adjuvant radiotherapy: a review. Wallgren A. Recent Results Cancer Res 1989;115:191–6 (21 ref.)
[Morbidity of surgical treatment for advanced cancer of the breast after irradiation] Guenier C, et al. Ann Chir 1990; 44(5):392–5 (Eng. Abstr.) (Fre)
[Breast reconstruction using skin expansion after radiotherapy: limitations of the procedure. Apropos of 10 cases] Gary-Bobo A, et al. Ann Chir Plast Esthet 1989; 34(5):427–31 (Eng. Abstr.) (Fre)
[Adjuvant radiotherapy following tumorectomy of breast cancer] Mirimanoff RO. Rev Med Suisse Romande 1990 Jul;110(7):613–7 (Fre)
[Metastases of malignant extra-ocular tumors to the choroid. Diagnosis and fractionated radiotherapy] Sassmannshausen J, et al. Fortschr Ophthalmol 1990;87(1):69–73 (Eng. Abstr.) (Ger)
[Use of the internal mammary vessels (vasa thoracica interna) forirradiation of the parasternal region in breast cancer. 1] Androsov NS, et al. Radiobiol Radiother (Berl) 1989; 30(6):503–7 (Eng. Abstr.) (Ger)
[3-D-irradiation planning based on the TOMOSCAN CX (Philips) computed tomograph. I. Principles of the CT-irradiation planning program. II. CT-irradiation planning for after-irradiation of breast cancer] Tabbert E, et al. Radiobiol Radiother (Berl) 1990;31(2):101–17 (Eng. Abstr.) (Ger)
[Radiogenic lung reactions following radiotherapy of breast cancer] Winkler C, et al. Radiobiol Radiother (Berl) 1989; 30(4):310–2 (Ger)
[The value of computed tomography in the early detection of pulmonary changes following postoperative electron beam irradiation in breast cancer] Steidle B. Rontgenpraxis 1990 May;43(5):177–81 (Ger)
[Secondary malignomas following radiotherapy of breast carcinoma: a case report] Waller M, et al. Strahlenther Onkol 1990 Feb;166(2):140–2 (Eng. Abstr.) (Ger)
[The value of lung perfusion scintigraphy in radiation pneumonitis in comparison with the diffusing capacity DLCO] Fröhlich D, et al. Z Erkr Atmungsorgane 1989; 173(2):170–3 (Eng. Abstr.) (Ger)
[The role of radiotherapy in the multimodal treatment of locally advanced breast carcinoma] Guenzi M, et al. Radiol Med (Torino) 1990 May;79(5):534–8 (Eng. Abstr.) (Ita)
[Radiotherapy of the breast after conservative surgery for primary carcinoma. Irradiation technic with matched fields] Latini P, et al. Radiol Med (Torino) 1989 Nov; 78(5):435–40 (Eng. Abstr.) (Ita)
[Therapeutic efficacy of pre-operative radiotherapy on breast carcinoma: in special reference to its abscopal effect on metastatic lymph-nodes] Konoeda K. Nippon Gan Chiryo Gakkai Shi 1990 Jun 20;25(6):1204–14 (Eng. Abstr.) (Jpn)
[Therapeutic efficacy of postoperative irradiation on carcinoma of the breast] Mikuriya S, et al. Nippon Gan Chiryo Gakkai Shi 1990 Jun 20;25(6):1215–20 (Eng. Abstr.) (Jpn)
[Use of electrons in radiotherapy. 11-year experience of the Cracow Branch of the Center of Oncology] Reinfuss M, et al. Nowotwory 1989 Apr-Jun;39(2):116–20 (Eng. Abstr.) (Pol)
[Use of the greater omentum in the treatment of post-radiation necrosis of the whole thickness of the chest wall] Nagadowska M, et al. Pol Tyg Lek 1989 Jan 9–16; 44(2–3):53–4 (Eng. Abstr.) (Pol)
[Pathomorphosis of breast cancer after radiotherapy and thermoradiotherapy] Abrosimov AIu, et al. Med Radiol (Mosk) 1990 Apr;35(4):32–4 (Eng. Abstr.) (Rus)
[Treatment of disseminated breast cancer with combined irradiation of the hypophysis by protons and zone gamma irradiation of the skeleton] Monzul' GD, et al. Vopr Onkol 1990;36(4):427–33 (Eng. Abstr.) (Rus)
[Role of ionizing radiation in the treatment of carcinoma of the breast] de la Huerta Sánchez R. Ginecol Obstet Mex 1977 Oct;42(252):229–35 (7 ref.) (Eng. Abstr.) (Spa)
[Current role of radiotherapy in cancer of the breast] Biete Solá A. Med Clin (Barc) 1989 Nov 18;93(16):616–24 (156 ref.) (Spa)

REHABILITATION

Achievements of physical therapy in patients after modified radical mastectomy compared with quadrantectomy, axillary dissection, and radiation for carcinoma of the breast. Gutman H, et al. Arch Surg 1990 Mar;125(3):389–91
Two decades of reach to recovery: a tribute to the volunteers [editorial] Holleb AI. CA 1990 Jan-Feb;40(1):5–7
Appraisal of breast reconstruction with the tissue expansion technique. Thompson AM, et al. J R Coll Surg Edinb 1990 Feb;35(1):4–6
Rehabilitation of patients with primary breast cancer: assessing the impact of adjuvant therapy. Ganz PA, et al. Recent Results Cancer Res 1989;115:244–54
[Rehabilitation in oncology] Fernandes MS, et al. Acta Med Port 1989 May-Jun;2(3):167–72 (26 ref.) (Eng. Abstr.) (Por)
[Physiologic hygiene characteristics of job placement following the radical treatment of breast cancer] Gundareva ID. Gig Tr Prof Zabol 1989;(10):31–3 (Eng. Abstr.) (Rus)
[Social significance of improving the quality of life of patients with breast cancer during posthospital stage] Demin EV. Sov Med 1990;(4):107–11 (Rus)
[Occupational therapy in the rehabilitation of patients with breast cancer] Demin EV, et al. Sov Med 1989;(6):118–9 (Rus)
[Role of health resort treatment in the rehabilitation of patients radically treated for breast cancer] Goeva EE. Sov Med 1989;(7):96–8 (Rus)
[New textile compressive articles with specific therapeutic properties to be used in the rehabilitation of patients after radical treatment of breast cancer] Pronin VI, et al. Sov Med 1990;(6):98–100 (Rus)
[Rehabilitative treatment in the early posthospital period of patients undergoing radical surgery of breast cancer] Fokeeva NV. Vopr Kurortol Fizioter Lech Fiz Kult 1989 Sep-Oct;(5):35–8 (Rus)
[The problems of the work rehabilitation of breast cancer patients after radical treatment] Demin EV. Vopr Onkol 1989;35(11):1365–70 (Eng. Abstr.) (Rus)
[Quality of life of cancer patients: a method for evaluating physical, social and psychological adaptation of women with cancer of the breast and uterine body] Dëmin EV, et al. Vopr Onkol 1990;36(3):360–4 (Eng. Abstr.) (Rus)

SECONDARY

Cytology and immunocytochemistry of bilateral breast metastases from prostatic cancer. Report of a case. Schmitt FC, et al. Acta Cytol 1989 Nov-Dec;33(6):899–902
Bilateral breast tumours in acute lymphatic leukemia. Schröcksnadel H, et al. Arch Gynecol Obstet 1990; 247(1):43–5
Hypernephroma presenting as a lump in the breast. Masters A. Aust N Z J Surg 1990 Apr;60(4):305–6
Semiparametric Marshall-Olkin models applied to the occurrence of metastases at multiple sites after breast cancer. Klein JP, et al. Biometrics 1989 Dec;45(4):1073–86
Flow cytometric analysis of cell surface carbohydrates in metastatic human breast cancer. Alam SM, et al. Br J Cancer 1990 Aug;62(2):238–42
Ovarian carcinoma metastatic to breast: a case report and review of the literature. Loredo DS, et al. Gynecol Oncol 1990 Jun;37(3):432–6 (18 ref.)
Metastatic adenocarcinoma of the cervix presenting as an inflammatory breast lesion. Ward R, et al. Gynecol Oncol 1989 Dec;35(3):399–405
Carcinoma of the uterine cervix metastatic to breast—report of a case. Singh K, et al. Indian J Med Sci 1990 Jan; 44(1):5–7
Isolated breast metastases from gastrointestinal carcinomas: report of two cases. Alexander HR, et al. J Surg Oncol 1989 Dec;42(4):264–6
Metastases to the breast from extramammary malignancies. Amichetti M, et al. Oncology 1990;47(3):257–60
Breast cancer: management of the opposite breast. Moffat FL, et al. Oncology (Williston Park) 1988 Nov;2(11):25–30, 33
Mondor's disease associated with metastatic lung cancer in the breast. Courtney SP, et al. Postgrad Med J 1989 Oct; 65(768):779–80
[Immunohistochemical diagnosis of a case of metastatic prostate cancer to breast] Gotoh A, et al. Nippon Hinyokika Gakkai Zasshi 1989 Dec;80(12):1828–31 (16 ref.) (Eng. Abstr.) (Jpn)
[A rare metastasis of an ovarian tumor] Bialik AIa, et al. Klin Khir 1990;(5):47 (Rus)
[Metastatic renal carcinoma of the breast. Presentation of 2 cases diagnosed by fine-needle aspiration puncture] Sáenz de Santamaria Morales FJ, et al. Arch Esp Urol 1990 Jan-Feb;43(1):75–7 (Eng. Abstr.) (Spa)
[An infrequent form of metastasis of carcinoma of the prostate] Zabala Egurrola JA, et al. Arch Esp Urol 1989 Oct;42(8):796–8 (Eng. Abstr.) (Spa)

SECRETION

Is apocrine differentiation in breast carcinoma of prognostic significance? Bundred NJ, et al. Br J Cancer 1990 Jul; 62(1):113–7
Regulation of progesterone-binding breast cyst protein GCDFP-24 secretion by estrogens and androgens in human breast cancer cells: a new marker of steroid action in breast cancer. Simard J, et al. Endocrinology 1990 Jun; 126(6):3223–31
Regulation of epidermal growth factor receptor by progestins and glucocorticoids in human breast cancer cell lines. Ewing TM, et al. Int J Cancer 1989 Oct 15;44(4):744–52
In vitro and in vivo release of soluble erbB-2 protein from human carcinoma cells. Mori S, et al. Jpn J Cancer Res 1990 May;81(5):489–94
Enhanced expression and secretion of an epithelial membrane antigen (MA5) in a human mucinous breast tumor line (BT549). Williams CJ, et al. Tumour Biol 1990;11(3):145–57
[Hormonal regulation of GCDFP-15 secretion in breast tumors. Study of cultured cells] Boutteville C, et al. Bull Cancer (Paris) 1989;76(8):805–11 (Eng. Abstr.) (Fre)

SURGERY

Appraisal of myocutaneous flapping for treatment of postmastectomy lymphedema. Case report. Kambayashi J, et al. Acta Chir Scand 1990 Feb;156(2):175–7
Results of breast conserving treatment of breast cancer. Hamilton CS, et al. Acta Oncol 1990;29(2):137–42
Breast appearance and function after breast conserving surgery and radiotherapy. Hamilton CS, et al. Acta Oncol 1990;29(3):291–5
Aesthetic refinements in prophylactic mastectomy with immediate reconstruction. Jarrett JR. Aesthetic Plast Surg 1990 Spring;14(2):87–92
Recurrence after lumpectomy for comedo-type intraductal carcinoma of the breast. Baird RM, et al. Am J Surg 1990 May;159(5):479–81
Alternatives in the surgical management of in situ breast cancer. A meta-analysis of outcome. Bradley SJ, et al. Am Surg 1990 Jul;56(7):428–32
Pregnancy after breast reconstruction with a transverse rectus abdominis musculocutaneous flap. Lawrence WT, et al. Ann Plast Surg 1986 Apr;16(4):354–5
The primary management of breast cancer: is breast conservation feasible for all patients? Barr LC, et al. Ann R Coll Surg Engl 1989 Nov;71(6):390–3
Mastectomy and breast reconstruction preserving the nipple. Bishop CC, et al. Ann R Coll Surg Engl 1990 Mar;72(2):87–9
When radiotherapy offers no more: the surgical management of advanced breast malignancy. Sanders R, et al. Ann R Coll Surg Engl 1989 Nov;71(6):349–53
Survival following locoregional recurrence after breast conservation therapy for cancer. Stotter A, et al. Ann Surg 1990 Aug;212(2):166–72
Occult breast cancer presenting with axillary metastases. Updated management. Baron PL, et al. Arch Surg 1990 Feb;125(2):210–4
Segmental mastectomy without radiotherapy for T1 and small T2 breast carcinomas. Moffat FL, et al. Arch Surg 1990 Mar;125(3):364–9
Surgery for nonpalpable breast lesions. Papatestas AE, et al. Arch Surg 1990 Mar;125(3):399–402
Level I and II axillary dissection in the treatment of early-stage breast cancer. An analysis of 259 consecutive patients. Siegel BM, et al. Arch Surg 1990 Sep;125(9):1144–7
Recruitment to a prospective breast conservation trial: why are so few patients randomised? Jack WJ, et al. BMJ 1990

Jul 14;301(6743):83–5
The 1989 Walter Hubert lecture. Does biological understanding influence surgical practice? Blamey R. **Br J Cancer** 1989 Sep;60(3):271–4 (16 ref.)
Duct carcinoma in situ: predictors of local recurrence and progression in patients treated by surgery alone. Price P, et al. **Br J Cancer** 1990 Jun;61(6):869–72
The use of tissue expanders in immediate breast reconstruction following mastectomy for cancer. Schuster RH, et al. **Br J Plast Surg** 1990 Jul;43(4):413–8
Assessment of surgical excision during breast conservation surgery by intraoperative two–dimensional specimen radiology. Aitken RJ, et al. **Br J Surg** 1990 Mar;77(3):322–3
Cystosarcoma phylloides. Dyer NH, et al. **Br J Surg** 1966 May;53(5):450–5 (19 ref.)
Painful lymphatic occlusion following axillary lymph node surgery. Marcus RT, et al. **Br J Surg** 1990 Jun;77(6):683
Wide local excision as the sole primary treatment in elderly patients with carcinoma of the breast [see comments] Reed MW, et al. **Br J Surg** 1989 Sep;76(9):898–900 Comment in: Br J Surg 1990 Apr;77(4):476.
Calcifectomy for ductal carcinoma in situ [letter; comment] Shetty MR. **Br J Surg** 1989 Jun;76(6):655 Comment on: Br J Surg 1989 Feb;76(2):185–6.
Conservative surgery for early breast cancer results from a district hospital. May RE, et al. **Bristol Med Chir J** 1989 May;104(2):47–50
Successful estrogen therapy for post–adrenalectomy relapses of breast cancer. Devitt JE, et al. **Can Med Assoc J** 1966 Apr 30;94(18):929–32
Breast reconstruction after mastectomy. Recent advances. Bostwick J 3d. **Cancer** 1990 Sep 15;66(6 Suppl):1402–11 (37 ref.)
Evaluation of the worth of corynebacterium parvum in conjunction with chemotherapy as adjuvant treatment for primary breast cancer. Eight–year results from the National Surgical Adjuvant Breast and Bowel Project B–10. Fisher B, et al. **Cancer** 1990 Jul 15;66(2):220–7
Conservative surgery and radiotherapy for early breast cancer. Harris JR, et al. **Cancer** 1990 Sep 15;66(6 Suppl):1427–38 (62 ref.)
Primary therapy for limited breast cancer. Surgical techniques. Kinne DW. **Cancer** 1990 May 1;65(9 Suppl):2129–31 (10 ref.)
Surgical management of stage I and stage II breast cancer. Kinne DW. **Cancer** 1990 Sep 15;66(6 Suppl):1373–7 (30 ref.)
Thermography in the follow–up of breast cancer patients after breast–conserving treatment by tumorectomy and radiation therapy. Ulmer HU, et al. **Cancer** 1990 Jun 15; 65(12):2676–80
Surgical management of stages 0, I, and IIA breast cancer. Winchester DP, et al. **Cancer** 1990 May 1;65(9 Suppl):2105–7
Factors women take into account when deciding upon type of surgery for breast cancer. Ward S, et al. **Cancer Nurs** 1989 Dec;12(6):344–51
Developing a test of knowledge of surgical options for breast cancer. Ward S, et al. **Cancer Nurs** 1990 Jun;13(3):191–6
Breast conservation techniques for early breast cancer. Habibollahi F, et al. **Cancer Treat Rev** 1989 Sep; 16(3):177–91 (70 ref.)
Factors influencing local recurrence of cancer after partial mastectomy [see comments] Crile G Jr, et al. **Cleve Clin J Med** 1990 Mar–Apr;57(2):143–6 Comment in: Cleve Clin J Med 1990 Mar–Apr;57(2):176–7.
Conservative operations for breast cancer: current issues and controversies [editorial; comment] Hermann RE. **Cleve Clin J Med** 1990 Mar–Apr;57(2):176–7 Comment on: Cleve Clin J Med 1990 Mar–Apr;57(2):143–6.
Breast reconstruction following a mastectomy for carcinoma of the breast. Briggs RM. **Clin Obstet Gynecol** 1989 Dec; 32(4):858–69 (12 ref.)
Indications and technique of breast conservation surgery in the treatment of breast carcinoma. Folk FA. **Clin Obstet Gynecol** 1989 Dec;32(4):807–18
Breast conservation therapy: the radiation oncologist's perspective. Kuske RR. **Clin Obstet Gynecol** 1989 Dec; 32(4):819–29 (38 ref.)
Surgical techniques of the modified radical mastectomy for the treatment of breast cancer. Lee RA, et al. **Clin Obstet Gynecol** 1989 Dec;32(4):830–4
The basis for surgical decisions in the management of in situ breast cancer. Yeatman TJ, et al. **Compr Ther** 1990 May; 16(5):12–7 (32 ref.)
Quadrantectomy versus lumpectomy for small size breast cancer. Veronesi U, et al. **Eur J Cancer** 1990;26(6):671–3
Breast conservation is the treatment of choice in small breast cancer: long–term results of a randomized trial. Veronesi U, et al. **Eur J Cancer** 1990;26(6):668–70
Locoregional recurrences after 649 modified radical mastectomies: incidence and significance. Andry G, et al. **Eur J Surg Oncol** 1989 Dec;15(6):476–85
Reconstructive options after cancer surgery of the breast. Lejour M. **Eur J Surg Oncol** 1989 Dec;15(6):496–503 (56 ref.)
Axillary dissection in breast cancer revisited. Mattheiem W, et al. **Eur J Surg Oncol** 1989 Dec;15(6):490–5
Muscular atrophy from nervous damage [letter] Muscolino G. **Eur J Surg Oncol** 1989 Oct;15(5):469
Surgical implications of population screening for mammary carcinoma. Wobbes T. **Eur J Surg Oncol** 1990 Feb; 16(1):15–7 (9 ref.)
Local therapy of invasive disease. Boyages J, et al. **Hematol Oncol Clin North Am** 1989 Dec;3(4):675–90 (73 ref.)
Therapy of in situ cancer. Recht A, et al. **Hematol Oncol Clin North Am** 1989 Dec;3(4):691–708 (71 ref.)
Breast conserving surgery and definitive irradiation for early stage breast cancer. Hallahan DE, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1211–6
The prognosis of patients who become pregnant after mastectomy for breast cancer. Ariel IM, et al. **Int Surg** 1989 Jul–Sep;74(3):185–7
Malignant fibrous histiocytoma of the breast. Iellin A, et al. **Int Surg** 1990 Jan–Mar;75(1):63–6 (22 ref.)
Current methods for biopsy and treatment of potentially curable breast cancer. Leis HP Jr. **Int Surg** 1990 Jan–Mar; 75(1):1–7 (48 ref.)
Breast cancer and regional lymph node dissections. Noguchi M, et al. **Int Surg** 1989 Jul–Sep;74(3):180–4
The surgical management of breast cancer. Noguchi M, et al. **Int Surg** 1990 Jan–Mar;75(1):8–14 (34 ref.)
Why are local recurrences after breast–conserving therapy more frequent in younger patients? Kurtz JM, et al. **J Clin Oncol** 1990 Apr;8(4):591–8
A case of Stewart–Treves syndrome. Lee SB, et al. **J Korean Med Sci** 1988 Jun;3(2):83–8
Concerns about adjuvant chemotherapy for breast cancer. Mueller CB. **J Med Assoc Ga** 1990 Jun;79(6):385–7
Conservative surgery and definitive radiation therapy for early breast cancer. Phillips TW, et al. **J Med Assoc Ga** 1990 Jun;79(6):355–7
Sector resection with or without postoperative radiotherapy for stage I breast cancer: a randomized trial. Uppsala–Orebro Breast Cancer Study Group [see comments] **J Natl Cancer Inst** 1990 Feb 21;82(4):277–82 Comment in: J Natl Cancer Inst 1990 Feb;82(4):250–1.
Consensus on treatment of early stage breast cancer: less surgery, more research [news] Smigel K. **J Natl Cancer Inst** 1990 Jul 18;82(14):1180–1 (0 ref.)
The gynecologist's role in the treatment of breast carcinoma. White CD. **J Reprod Med** 1990 Mar;35(3):232–4
Impact of screening mammography and change in surgeons' attitudes on the pattern of primary care of breast cancer at a community hospital. Goldsweig HG, et al. **J Surg Oncol** 1990 Sep;45(1):10–3
Analysis of prognostic factors in 568 patients treated for breast cancer by surgery. Muller AG, et al. **J Surg Oncol** 1989 Oct;42(2):126–31
The operative management of intraductal papilloma of the breast. Abe R. **Jpn J Surg** 1990 Mar;20(2):240–5
A new method of modified radical mastectomy for breast cancer. Murayama Y, et al. **Jpn J Surg** 1989 Nov; 19(6):684–90
The acceptable delay between biopsy and radical mastectomy in breast cancer patients. Toi M, et al. **Jpn J Surg** 1989 Nov;19(6):679–83
Menstrual effect on surgical cure of breast cancer [letter; comment] **Lancet** 1989 Dec 2;2(8675):1343–4 Comment on: Lancet 1989 Oct 21;2(8669):949–52.
Menstrual influence on surgical cure of breast cancer [letter] Hrushesky WJ, et al. **Lancet** 1990 Apr 21;335(8695):984
Menstrual influence on surgical cure of breast cancer [published erratum appears in Lancet 1989 Nov 25;2(8674):1290] [see comments] Hrushesky WJ, et al. **Lancet** 1989 Oct 21;2(8669):949–52 Comment in: Lancet 1989 Dec 2;2(8675):1343–4.
Management of primary, operable breast cancer in Victoria [see comments] Hill DJ, et al. **Med J Aust** 1990 Jan 15; 152(2):67–72 Comment in: Med J Aust 1990 Jan 15;152(2):59–60.
Pituitary metastases. Chiang MF, et al. **Neurochirurgia (Stuttg)** 1990 Jul;33(4):127–31 (35 ref.)
The role of surgery in the combined treatment of locally advanced breast cancer. Canavese G, et al. **Oncology** 1989; 46(6):353–6
The current approach to breast reconstruction. Dowden RV. **Oncology (Williston Park)** 1987 Dec;1(10):29–38
What role for oophorectomy in this patient? [letter] Kaul R. **Oncology (Williston Park)** 1987 Dec;1(10):39
Recommendations for the surgical management of advanced breast cancer. Wilson RE. **Oncology (Williston Park)** 1987 May;1(3):21–6 (17 ref.)
Tamoxifen equivalent to oophorectomy in advanced breast Ca [letter] Yonemoto RE. **Oncology (Williston Park)** 1989 Feb;3(2):17–8
Aesthetic results following partial mastectomy and radiation therapy. Matory WE Jr, et al. **Plast Reconstr Surg** 1990 May;85(5):739–46
Depression after surgery for breast cancer. Comparison of mastectomy and lumpectomy. van Heeringen C, et al. **Psychother Psychosom** 1989;51(4):175–9
New trends in breast cancer surgery. Veronesi U. **Recent Results Cancer Res** 1989;115:197–202
Playing the numbers. Wallich P. **Sci Am** 1990 Feb;262(2):23–4
Treatment of breast cancer by radical surgery: a personal experience of 653 patients with minimal follow–up of 10 years. Caceres E, et al. **Semin Surg Oncol** 1990;6(4):207–17
Omental transposition flap and split skin graft for locally advanced breast carcinoma. Lee SH, et al. **Singapore Med J** 1990 Jun;31(3):217–20
Preservation surgery for malignant disease: why it works. Evans RA. **South Med J** 1989 Dec;82(12):1534–7 (43 ref.)
Prognostic factors for local recurrence in patients with limited surgery and irradiation of breast cancer. Stadler B, et al. **Strahlenther Onkol** 1990 Jul;166(7):453–6
Factors influencing cosmetic outcome of conservative surgery and radiotherapy for breast cancer. Triedman SA, et al. **Surg Clin North Am** 1990 Aug;70(4):901–16 (41 ref.)
Surgical treatment of the elderly patient with gynecologic cancer. Kirschner CV, et al. **Surg Gynecol Obstet** 1990 May;170(5):379–84
The Kiricuta procedure in reconstructive surgical treatment of the breast. Lopez JF, et al. **Surg Gynecol Obstet** 1990 Mar;170(3):209–11
Treatment options and recurrence potential for cystosarcoma phyllodes. Palmer ML, et al. **Surg Gynecol Obstet** 1990 Mar;170(3):193–6
Axillary lymph node dissection: differences in goals and techniques when treating melanoma and breast cancer [editorial; comment] Balch CM. **Surgery** 1990 Jul; 108(1):118–9 Comment on: Surgery 1990 Jul;108(1):10–7.
Cystosarcoma phylloides in an adolescent female. Senocak ME, et al. **Z Kinderchir** 1989 Aug;44(4):253–4
[Lobular carcinoma in situ—what is the best treatment] Meyer TS, et al. **S Afr J Surg** 1990 Jun;28(2):66–7 (Eng. Abstr.) **(Afr)**
[Paget's disease of the nipple] Zhang BN. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):216–8 (Eng. Abstr.) **(Chi)**
[Treatment selection for stage I breast cancer—report of 412 cases] Zhou P. **Chung Hua Chung Liu Tsa Chih** 1989 Nov; 11(6):471–3 (Eng. Abstr.) **(Chi)**
[Attitudes of medical students to randomization or free choice in breast cancer surgery and a suggestion for a new study design] Gøtzsche PC. **Ugeskr Laeger** 1989 Oct 16; 151(42):2719–21 (Eng. Abstr.) **(Dan)**
[Surgical technic in breast cancer (letter)] Kiil J, et al. **Ugeskr Laeger** 1989 Sep 11;151(37):2381 **(Dan)**
[Hamartoma of the breast] Claeys L, et al. **Acta Chir Belg** 1990 May–Jun;90(3):106–11 (29 ref.) (Eng. Abstr.) **(Dut)**
[Flare phenomenon: favorable or unfavorable?] Peters–Christodoulou MN, et al. **Ned Tijdschr Geneeskd** 1990 Jun 16;134(24):1161–3 **(Dut)**
[Local recurrence following breast–conserving therapy in breast carcinoma] van Dongen JA, et al. **Ned Tijdschr Geneeskd** 1989 Dec 30;133(52):2595–8 (24 ref.) **(Dut)**
[Postoperative pyoderma gangrenosum and cancer of the breast. Apropos of a case] Baruch J, et al. **Ann Chir Plast Esthet** 1990;35(1):73–5 (Eng. Abstr.) **(Fre)**
[Should removal of the ovaries be considered in the treatment of breast cancer in 1989? (letter)] May–Levin F, et al. **Bull Cancer (Paris)** 1989;76(8):813–5 **(Fre)**
[Postoperative pyoderma gangrenosum and cancer of the breast. Apropos of a case] Baruch J, et al. **Chirurgie** 1989; 115(2):142–5 (Eng. Abstr.) **(Fre)**
[Locoregional recurrence of breast cancer. Long–term course of 49 cases treated by excision and omentoplasty] Calderoli H, et al. **Chirurgie** 1989;115(10):767–71 (Eng. Abstr.) **(Fre)**
[Long–term results of mastectomy in surgically treatble cancers at the Institut Curie from 1960 to 1973] Berthoux L, et al. **J Chir (Paris)** 1990 Jan;127(1):1–5 (Eng. Abstr.) **(Fre)**
[Wadding of the axilla in the conservative treatment of cancer of the breast. Prevention of lymphocele] Hamy A, et al. **J Chir (Paris)** 1990 Feb;127(2):99–102 (Eng. Abstr.) **(Fre)**
[Lymph node clearing in cancer of the breast. Final results of a national survey] Salvat J. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(8):1055–62 (Eng. Abstr.) **(Fre)**
[The treatment of carcinoma in situ of the breast] Raudrant D, et al. **Rev Fr Gynecol Obstet** 1990 Feb;85(2):91–6 (21 ref.) (Eng. Abstr.) **(Fre)**
[Operable breast cancer without axillary node involvement: current therapeutic concepts] Piccart MJ. **Rev Med Brux** 1989 Dec;10(10):424–31 (37 ref.) (Eng. Abstr.) **(Fre)**
[Breast reconstruction: a viewpoint] Krupp S, et al. **Rev Med Suisse Romande** 1990 Jul;110(7):607–12 **(Fre)**
[Breast reconstruction] Meredith P. **Rev Med Suisse Romande** 1990 Apr;110(4):319–24 **(Fre)**
[Surgery of breast cancer] Schroeder R. **Rev Med Suisse Romande** 1990 Apr;110(4):315–7 **(Fre)**
[Esthetic plastic surgery in cancer of the female breast] Weitzel H, et al. **Arch Gynecol Obstet** 1989;245(1–4):709–12 **(Ger)**
[Comment on the contribution by K. Jaeger: Axillary lymph node excision in breast cancer. Chirurg (1989) 60: 153] Baumeister RG. **Chirurg** 1990 Jan;61(1):87 **(Ger)**
[Breast reconstruction using a free upper myocutaneous gluteal flap with microvascular anastomoses] Biemer E, et al. **Chirurg** 1989 Sep;60(9):625–6 **(Ger)**
[Breast reconstruction only by implant of a silicone gel prosthesis, possibly following tissue stretching by an expander] Biemer E. **Chirurg** 1989 Sep;60(9):611–3 **(Ger)**
[Reconstruction of the skin–soft tissue surface by pedicled myocutaneous latissimus flap] Biemer E, et al. **Chirurg** 1989 Sep;60(9):614–5 **(Ger)**
[The concept of mastectomy: indications and timing of reconstruction] Bohmert H. **Chirurg** 1989 Sep;60(9):608–10

(Ger)
[Indications and technic of transverse pedicled rectus flaps] Bohmert H. **Chirurg** 1989 Sep;60(9):620–1 (Ger)
[Indications and technic of the contralateral thoraco-epigastric flap] Bohmert H. **Chirurg** 1989 Sep; 60(9):618–9 (Ger)
[Significance of sonography of the breast for surgical treatment of breast cancer] Ernst R, et al. **Chirurg** 1990 Jul;61(7):518–25 (Eng. Abstr.) (Ger)
[Specialty commentary on fee regulations. EBM (BMA/E–GO) 1987. I. Surgery of the body surface no. 2100–2180] Fritz K, et al. **Chirurg** 1989 Oct;60(10):suppl 152–8 (Ger)
[Breast reconstruction using an upper abdominal sliding flap] Lemperle G, et al. **Chirurg** 1989 Sep;60(9):616–7 (Ger)
[Various possibilities of nippic reconstruction] Lemperle G, et al. **Chirurg** 1989 Sep;60(9):627–30 (Ger)
[Breast reconstruction with the vertical and transverse musculocutaneous rectus abdominis flap] Mühlbauer W, et al. **Chirurg** 1989 Sep;60(9):622–4 (Ger)
[Quality of life following surgery of breast cancer] Schafmayer A, et al. **Chirurg** 1989 Jul;60(7):458–63 (Ger)
[Possibilities of reconstruction following mastectomy] Schmidt–Tintemann U. **Chirurg** 1989 Sep;60(9):607 (Ger)
[Seroma formation and drainage technic following mastectomy] Menton M, et al. **Fortschr Med** 1990 Jun 20; 108(18):350–2 (Eng. Abstr.) (Ger)
[Modifications of limited breast surgery for breast carcinoma as shown in studies] Sauer H. **Fortschr Med** 1989 Dec 10; 107(35):752 (Ger)
[Breast cancer in the male. A long–term follow–up study of 55 patients] Teleky B, et al. **Fortschr Med** 1990 Mar 30;108(9):184–6 (Eng. Abstr.) (Ger)
[Surgery limited to the breast for breast carcinoma] Veronesi U. **Fortschr Med** 1989 Dec 10;107(35):748–51 (5 ref.) (Eng. Abstr.) (Ger)
[The extent of radical axillary lymph node excision] Müller A, et al. **Geburtshilfe Frauenheilkd** 1990 Jul;50(7):524–7 (Eng. Abstr.) (Ger)
[Breast–saving therapy of breast cancer, experiences up to now with the Würzburg method in 141 patients] Caffier H, et al. **Gynakol Rundsch** 1989;29 Suppl 2:223–5 (Ger)
[Experience with quadrant resection of breast cancer. 10 years' results at the 2d University Gynecologic Clinic in Vienna] Dadak C. **Gynakol Rundsch** 1989;29 Suppl 2:211–8 (Ger)
[Axillary lymph node excision in breast cancer] Kubista E. **Gynakol Rundsch** 1989;29 Suppl 3:16–20 (Eng. Abstr.) (Ger)
[Ablative versus conservative therapy of breast cancer] Kubista E. **Gynakol Rundsch** 1989;29 Suppl 2:205–10 (7 ref.) (Ger)
[Surgical aspects of breast–saving therapy of breast cancer—segment resection with simultaneous breast reconstruction] Lang N, et al. **Gynakol Rundsch** 1989;29 Suppl 2:219–22 (Ger)
[Breast cancer: a diagnostic or therapeutic problem?] Schmid J. **Gynakol Rundsch** 1989;29 Suppl 1:29–34 (Ger)
[Breast–saving cancer surgery from plastic surgery and reconstructive viewpoints] Schönegg WD, et al. **Gynakol Rundsch** 1989;29 Suppl 2:226–8 (Ger)
[Breast–saving therapy of primary breast cancer. Results of the Zurich University Gynecologic Clinic] Steiner RA, et al. **Gynakol Rundsch** 1989;29 Suppl 1:35–43 (Ger)
[Breast cancer in the male—a retrospective analysis of 15 cases] Stierer M, et al. **Onkologie** 1990 Apr;13(2):128–31 (Eng. Abstr.) (Ger)
[Hemodynamic and respiratory changes in cervical peridural anesthesia] Santanché G, et al. **Reg Anaesth** 1989 Nov; 12(6):110–6 (Eng. Abstr.) (Ger)
[Ablative versus conservative treatment of breast cancer] Kubista E. **Ther Umsch** 1989 Dec;46(12):905–11 (7 ref.) (Eng. Abstr.) (Ger)
[Occurrence of 3 primary carcinomas within 26 months] Petru G, et al. **Wien Med Wochenschr** 1990 Apr 30; 140(8):212–3 (Eng. Abstr.) (Ger)
[The incidence of recurrence of intra– and extra–lesional operated metastases of long tubular bones] Windhager R, et al. **Z Orthop** 1989 Jul–Aug;127(4):402–5 (Eng. Abstr.) (Ger)
[Prognosis and treatment of advanced breast cancer from the surgical viewpoint] Mayer M, et al. **Zentralbl Chir** 1990; 115(7):441–7 (Eng. Abstr.) (Ger)
[Mammaplasty. A component of the combined therapy program in the treatment of malignant breast diseases] Pohl G. **Zentralbl Chir** 1990;115(5):265–73 (Eng. Abstr.) (Ger)
[Ablative hormone therapy and chemotherapy of metastatic breast cancer] Kasch R, et al. **Zentralbl Gynakol** 1989; 111(23):1584–7 (Eng. Abstr.) (Ger)
[Primary reconstruction in breast–saving cancer surgery] Schoenegg WD, et al. **Zentralbl Gynakol** 1990;112(7):411–9 (Eng. Abstr.) (Ger)
[Questions to the editors. Treatment of eccentric breast cancers] Weitzel H. **Zentralbl Gynakol** 1989;111(21):1455–7 (Ger)
[Partial or total resection for breast cancer—role of the patient in the decision (editorial)] Reiss R. **Harefuah** 1990 Jan 1;118(1):48–50 (Heb)
[Carcinoma of the breast and conservative surgical therapy. Current approaches and presentation of a personal case series] Baldi F, et al. **Minerva Chir** 1989 Oct 31; 44(20):2181–4 (Eng. Abstr.) (Ita)
[Reconstruction of the breast after radical mastectomy in cancer. Reconstruction of the breast volume] Elia L, et al. **Minerva Chir** 1989 Jul 31;44(13–14):1717–20 (18 ref.) (Eng. Abstr.) (Ita)
[Conservative surgery and esthetic rehabilitation of carcinoma of the breast] Elia L, et al. **Minerva Chir** 1989 Sep 30;44(18):2005–11 (19 ref.) (Eng. Abstr.) (Ita)
[Gigantic fibroadenoma of the breast in an adolescent. Description of a clinical case] Gentile C, et al. **Minerva Chir** 1989 Nov 30;44(22):2357–9 (Eng. Abstr.) (Ita)
[Reconstruction of the thoracic wall using a Marlex sandwich. Presentation of a clinical case] Paolini A, et al. **Minerva Chir** 1989 Sep 30;44(18):2037–41 (11 ref.) (Eng. Abstr.) (Ita)
[Modified radical mastectomy in breast cancer] Kasumi F. **Gan No Rinsho** 1989 May;Spec No:227–35 (Jpn)
[Experiences of breast reconstruction following mastectomy in cases of cancer and evaluation of psychological aspects of the patients] Bando M. **Gan To Kagaku Ryoho** 1990 Apr; 17(4 Pt 2):804–10 (Eng. Abstr.) (Jpn)
[Breast preserving surgery] Enomoto K. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 2):732–6 (7 ref.) (Eng. Abstr.) (Jpn)
[The trend of surgery for breast cancer in USA] Nemoto T. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 2):711–5 (Eng. Abstr.) (Jpn)
[Evaluation and problems of segmental mastectomy of breast cancer from the viewpoint of quality of life] Senoo T. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 2):737–40 (7 ref.) (Jpn)
[Patient acceptance of immediate breast reconstruction] Yamamoto H. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 2):810–2 (Jpn)
[Aspects of parasternal lymphnode dissection in radical mastectomy for breast cancer] Tanaka M, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 May 20;25(5):960–4 (Eng. Abstr.) (Jpn)
[Extended radical mastectomy using preoperative local injection of activated carbon particle adsorbing aclarubicin (ACR–CH)] Asaga T, et al. **Nippon Geka Gakkai Zasshi** 1990 Mar;91(3):313–9 (Eng. Abstr.) (Jpn)
[A case of quadruple cancer composed of the breast, kidney, liver and uterus carcinomas] Haba Y, et al. **Nippon Geka Gakkai Zasshi** 1990 May;91(5):649–51 (Eng. Abstr.) (Jpn)
[Study of conservative treatment of breast cancer in view of the spread of primary lesion] Haga S, et al. **Nippon Geka Gakkai Zasshi** 1990 Mar;91(3):411–8 (Eng. Abstr.) (Jpn)
[Histopathological study on the safety of conservative breast surgery in terms of the degree of axillary dissection for breast cancer] Haga S, et al. **Nippon Geka Gakkai Zasshi** 1989 Jun;90(6):907–13 (Eng. Abstr.) (Jpn)
[Recent trends in breast cancer surgery in Japan] Izuo M, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep;90(9):1298–301 (Eng. Abstr.) (Jpn)
[Surgical treatment for intraductal proliferative lesions] Kimijima I, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep; 90(9):1406–9 (Eng. Abstr.) (Jpn)
[A multivariate analysis of en bloc extended radical mastectomy versus conventional radical mastectomy in operable breast cancer] Noguchi M, et al. **Nippon Geka Gakkai Zasshi** 1990 Jul;91(7):883–8 (Eng. Abstr.) (Jpn)
[Availability of DDAVP in hemostasis control for the breast tumor resection in a patient with thrombasthenia (type II)] Ohishi K, et al. **Rinsho Ketsueki** 1990 Apr;31(4):468–73 (Eng. Abstr.) (Jpn)
[Breast–preserving surgery in breast cancer. Experiences from Haukeland Hospital 1983–1988] Aas T, et al. **Nord Med** 1990;105(4):109–12 (Eng. Abstr.) (Nor)
[Breast conserving surgery in breast cancer. Experiences from the Haukeland Hospital 1983–88] Aas T, et al. **Tidsskr Nor Laegeforen** 1990 Jan 20;110(2):196–200 (Eng. Abstr.) (Nor)
[Breast conserving surgery—a good treatment of breast cancer?] Kåresen R. **Tidsskr Nor Laegeforen** 1990 Jan 20; 110(2):185–6 (Nor)
[Malignant mixed tumor of the breast] Stefanowa–Urbaniak A, et al. **Wiad Lek** 1989 Jul 1–15;42(13–15):916–8 (Pol)
[Axillary dissection in cancer of the breast: a conservative approach] Faria SL, et al. **Rev Paul Med** 1989 Mar–Apr; 107(2):75–82 (Eng. Abstr.) (Por)
[Pain syndrome in cancer patients after lung and breast surgery] Beliaev DG. **Anesteziol Reanimatol** 1989 May–Jun;(3):41–3 (Eng. Abstr.) (Rus)
[Comparative study of the cytotoxic effects of anthracycline antibiotics on heterotransplants of human breast cancer cultivated in diffusion chambers in vivo] Krutova TV, et al. **Antibiot Khimioter** 1989 Nov;34(11):849–52 (Eng. Abstr.) (Rus)
[Patey's radical mastectomy in combined treatment of breast cancer] Datsenko VS, et al. **Khirurgiia (Mosk)** 1989 Dec; (12):81–5 (Eng. Abstr.) (Rus)
[Modified mastectomy] Firsova PP, et al. **Khirurgiia (Mosk)** 1990 Apr;(4):105–6 (Rus)
[Radical mastectomy technics] Pronin VI, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):52–5 (Eng. Abstr.) (Rus)
[Factors determining prognosis in stage T1.2NoMo breast cancer] Shkrob OS, et al. **Khirurgiia (Mosk)** 1990 Apr; (4):23–8 (Eng. Abstr.) (Rus)
[Treatment of breast cancer in middle–aged and elderly menopausal women] Suspitsyn IuV, et al. **Sov Med** 1990; (3):72–6 (Rus)
[A method of mastectomy with preservation of the greater pectoral muscle] Tseĭlikman EG, et al. **Vestn Khir** 1990 Feb;144(2):97–9 (Rus)
[Evaluation of radical lymphadenectomy in breast cancer] Lytkin GV, et al. **Vopr Onkol** 1989;35(8):932–9 (Eng. Abstr.) (Rus)
[Heparin prophylaxis of thrombohemorrhagic complications in surgical interventions in cancer patients] Nadiradze ISh. **Vopr Onkol** 1989;35(8):974–9 (Eng. Abstr.) (Rus)
[Sparing and organ–saving operations in breast cancer] Semiglazov VF, et al. **Vopr Onkol** 1990;36(5):535–9 (Eng. Abstr.) (Rus)
[The efficacy of economic operations in breast cancer] Vishniakova VV. **Vopr Onkol** 1990;36(5):540–5 (Eng. Abstr.) (Rus)
[Advanced breast cancer, surgical treatment] Duraković E, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:323–5 (Scr)
[Surgical treatment of malignant breast tumors] Ignjatović D, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:277–81 (Scr)
[Problems with breast cancer in the aged] Ivančević N, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:284–6 (Scr)
[Second–look operations in malignancies of the breast] Majdevac M, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:288–90 (Eng. Abstr.) (Scr)
[Rehabilitation of malignant diseases of the breast] Matejić TS, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:309–10 (Scr)
[20 years' results in the surgical treatment of breast malignancy] Stojanović B, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:306–8 (Scr)
[Personal experience in the conservative treatment of breast carcinoma] Tomin R, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:286–7 (Scr)
[Use of the latissimus dorsi flap in the reconstruction of defects after surgical treatment of breast tumors] Višnjić M, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:312–4 (Scr)
[Personal experience with the surgical treatment of carcinoma of the breast] Vujović V, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:311–2 (Scr)
[Characteristics and results of treatment of breast carcinoma at the surgical department of the Dr. Nika Labović Medical Center in Ivangrad] Babović R, et al. **Med Arh** 1989; 43(4–6):261–3 (Eng. Abstr.) (Scr)
[Value of various surgical methods in the treatment of cancer of the breast] Sánchez Basurto C. **Ginecol Obstet Mex** 1977 Oct;42(252):219–27 (31 ref.) (Eng. Abstr.) (Spa)
[Post–surgical adjuvant treatment of breast cancer (published erratum appears in Rev Clin Esp 1990 Apr;186(6):following 312)] Román JM, et al. **Rev Clin Esp** 1990 Jan;186(1):1–4 (25 ref.) (Spa)
[Conservative treatment of operable breast cancer. Analysis of 215 cases] Ferreyra H, et al. **Rev Fac Cien Med Univ Nac Cordoba** 1988;46(1):30, 33–4 (Eng. Abstr.) (Spa)

THERAPY

Sequelae of axillary dissection vs. axillary sampling with or without irradiation for breast cancer. A randomized trial. Borup Christensen S, et al. **Acta Chir Scand** 1989 Oct; 155(10):515–9
The Cancer Research Campaign trials of adjuvant therapy for early breast cancer. Baum M, et al. **Acta Oncol** 1989; 28(6):907–12
The treatment of in situ breast cancer. Fentiman IS. **Acta Oncol** 1989;28(6):923–6 (31 ref.)
The design of advanced breast cancer trials. New approaches. Fraser SC, et al. **Acta Oncol** 1990;29(3):397–400 (13 ref.)
Sector resection with and without radiotherapy in early breast cancer. Presentation of two ongoing prospective multicenter studies in Sweden. Uppsala/Örebro Breast Cancer Study Group. Holmberg L. **Acta Oncol** 1989; 28(6):927–9 (19 ref.)
Perioperative adjuvant chemotherapy in breast cancer. The Scandinavian Adjuvant Chemotherapy Study 1. Kjellgren K, et al. **Acta Oncol** 1989;28(6):899–901
How to improve endocrine therapy of breast cancer. Kvinnsland S. **Acta Oncol** 1990;29(3):387–9 (17 ref.)
Prolonged adjuvant chemotherapy in breast cancer. The Scandinavian Adjuvant Chemotherapy Study 2. Nissen–Meyer R, et al. **Acta Oncol** 1989;28(6):903–6
Endocrine therapy of breast cancer. A background. Nordenskjöld B. **Acta Oncol** 1990;29(3):367–9 (4 ref.)
Long–term follow–up of sickness periods in breast cancer patients primarily treated with surgery and radiotherapy or surgery only. Rotstein S, et al. **Acta Oncol** 1989; 28(6):817–22
Clinical trials in locally advanced breast cancer. Wallgren A. **Acta Oncol** 1990;29(3):357–60 (19 ref.)
Left internal mammary artery occlusion after mastectomy and radiotherapy. Hanet C, et al. **Am J Cardiol** 1990 Apr 15;65(15):1044–5
"Clinical alert" revisited. Cady B. **Am J Clin Oncol** 1989 Dec;12(6):541–2
Subspecialty of gynecologic oncology proposed to manage breast disease [letter; comment] Kelley JL. **Am J Obstet Gynecol** 1990 Jun;162(6):1638 Comment on:

Am J Obstet Gynecol 1989 Aug;161(2):267–70.

Delayed breast abscesses after lumpectomy and radiation therapy. Keidan RD, et al. **Am Surg** 1990 Jul;56(7):440–4

Current status of treatment for breast cancer. Levi JA, et al. **Ann Acad Med Singapore** 1990 Mar;19(2):281–5 (42 ref.)

Breast-conserving therapy for macroscopically multiple cancers. Kurtz JM, et al. **Ann Surg** 1990 Jul;212(1):38–44

Conservative treatment of early breast cancer. Long-term results of 1232 cases treated with quadrantectomy, axillary dissection, and radiotherapy. Veronesi U, et al. **Ann Surg** 1990 Mar;211(3):250–9

Adjuvant systemic treatment of resectable breast cancer: eleven years results of a monoinstitutional chemo-hormone-immunotherapy trial. Rosso R, et al. **Anticancer Res** 1989 Jul–Aug;9(4):1153–6

Combined therapy for inflammatory breast cancer. Donegan WL, et al. **Arch Surg** 1990 May;125(5):578–82

Conservative surgery with radiation therapy in clinical stage I and II breast cancer. Results of a 20-year experience. Haffty BG, et al. **Arch Surg** 1989 Nov;124(11):1266–70

Treatment of locally recurrent breast carcinoma. Probstfeld MR, et al. **Arch Surg** 1989 Oct;124(10):1127–9; discussion 1130

The surgeon and adjuvant therapy for breast cancer. Kitchen PR. **Aust N Z J Surg** 1989 Oct;59(10):761–5 (37 ref.)

Adjuvant therapy for breast cancer. Langlands AO, et al. **Aust N Z J Surg** 1989 Oct;59(10):767–8

Node negative breast cancer [letter; comment] Leslie MD, et al. **BMJ** 1990 Mar 17;300(6726):749 Comment on: BMJ 1990 Feb 10;300(6721):346–8.

Heat sensitivity and thermotolerance in vitro of human breast carcinoma, malignant melanoma and squamous cell carcinoma of the head and neck. Rofstad EK. **Br J Cancer** 1990 Jan;61(1):22–8

An objective biochemical assessment of therapeutic response in metastatic breast cancer: a study with external review of clinical data. Williams MR, et al. **Br J Cancer** 1990 Jan; 61(1):126–32

Factors influencing local recurrence after excision and radiotherapy for primary breast cancer. Locker AP, et al. **Br J Surg** 1989 Sep;76(9):890–4

Treatment of carcinoma of the breast [letter; comment] Nicholsan S, et al. **Br J Surg** 1990 Apr;77(4):476 Comment on: Br J Surg 1989 Sep;76(9):898–900.

Selection of patients for breast conservation [editorial] Young AE. **Br J Surg** 1989 Sep;76(9):885

12th annual San Antonio Breast Cancer Symposium. December 7–9, 1988. Abstracts. **Breast Cancer Res Treat** 1989 Oct;14(1):107–32

Inhibition of hormone-dependent and independent breast cancer cell growth in vivo and in vitro with the antiestrogen toremifene and recombinant human interferon-alpha 2. Robinson SP, et al. **Breast Cancer Res Treat** 1990 Feb;15(2):95–101

Breast compliance: a new method for evaluation of cosmetic outcome after conservative treatment of early breast cancer. Tsouskas LI, et al. **Breast Cancer Res Treat** 1990 May;15(3):185–90

Systemic adjuvant therapy for node-negative breast cancer [letter; comment] Geggie PH. **Can Med Assoc J** 1989 Nov 15;141(10):1029 Comment on: Can Med Assoc J 1989 Sep 1;141(5):381–7.

Breast cancer no longer sole preserve of surgeons, MD says [published erratum appears in Can Med Assoc J 1990 Jan 15;142(2):101] Waugh D. **Can Med Assoc J** 1989 Dec 1; 141(11):1172–3

The American Cancer Society Workshop on Management of Limited Breast Cancer. Naples, Florida, September 11–12, 1989. **Cancer** 1990 May 1;65(9 Suppl):2103–64

Is chemotherapy effective in reducing the local failure rate in patients with operable breast cancer? Buzdar AU, et al. **Cancer** 1990 Feb 1;65(3):394–9

Adjuvant systemic therapy. Carbone PP, et al. **Cancer** 1990 May 1;65(9 Suppl):2108–9

Adjuvant therapy of stage II breast cancer. Carbone PP. **Cancer** 1990 May 1;65(9 Suppl):2148–54 (28 ref.)

Superficial microwave-induced hyperthermia in the treatment of chest wall recurrences in breast cancer. DuBois JB, et al. **Cancer** 1990 Sep 1;66(5):848–52

Adjuvant systemic therapy for patients with node-negative tumors. Henderson IC, et al. **Cancer** 1990 May 1;65(9 Suppl):2132–47 (56 ref.)

Comprehensive management of locally advanced breast cancer. Hortobagyi GN. **Cancer** 1990 Sep 15;66(6 Suppl):1387–91 (49 ref.)

The role of the pathologist in breast cancer management. Hutter RV. **Cancer** 1990 Sep 15;66(6 Suppl):1363–72 (72 ref.)

Results of neoadjuvant chemotherapy and radiation therapy in the breast-conserving treatment of 250 patients with all stages of infiltrative breast cancer. Jacquillat C, et al. **Cancer** 1990 Jul 1;66(1):119–29

Symptoms and rehabilitation needs of patients with early stage breast cancer during primary therapy. Knobf MT. **Cancer** 1990 Sep 15;66(6 Suppl):1392–401 (92 ref.)

Impact of radiation therapy and/or chemotherapy on the risk for a second malignancy after breast cancer. Lavey RS, et al. **Cancer** 1990 Sep 1;66(5):874–81

Quality of life issues in patients with disseminated breast cancer. McEvoy MD, et al. **Cancer** 1990 Sep 15;66(6 Suppl):1416–21 (41 ref.)

Progress in the treatment of early breast cancer. Scanlon EF. **Cancer** 1990 May 1;65(9 Suppl):2110–2 (15 ref.)

The American Society Workshop on the Management of Limited Breast Cancer. Introduction. Scanlon EF, et al. **Cancer** 1990 May 1;65(9):2103–4

Intraductal carcinoma of the breast (208 cases). Clinical factors influencing treatment choice. Silverstein MJ, et al. **Cancer** 1990 Jul 1;66(1):102–8

Predicting the rate and extent of locoregional failure after breast conservation therapy for early breast cancer. Stotter AT, et al. **Cancer** 1989 Dec 1;64(11):2217–25

Endocrine therapy of human breast cancer cells: the role of secreted polypeptide growth factors. Brünner N, et al. **Cancer Cells** 1989 Nov;1(3):81–6 (71 ref.)

Breast cancer. Hartmann LC, et al. **Cancer Chemother Biol Response Modif** 1988;10:313–32 (117 ref.)

Breast cancer. Loprinzi CL, et al. **Cancer Chemother Biol Response Modif** 1987;9:338–57 (195 ref.)

Palliative chemo-radiotherapy with ifosfamide and epirubicin as first-line treatment for high-risk metastatic breast cancer. Results of a prospective multicenter trial. Lange OF, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S74–7

Palliative radio-chemotherapy with ifosfamide and BCNU for breast cancer patients with cerebral metastases. A 5-year experience. Lange OF, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S78–80

DNA flow cytometry and other prognostic factors in breast cancer. McGuire WL. **Cancer Invest** 1990;8(2):245–6

Effect of dietary fat and monoclonal antibody therapy on the growth of human mammary adenocarcinoma MX-1 grafted in athymic mice. Gabor H, et al. **Cancer Lett** 1990 Jul 31;52(3):173–8

Phase I clinical trial of interleukin 2 and alpha-interferon: toxicity and immunologic effects. Budd GT, et al. **Cancer Res** 1989 Nov 15;49(22):6432–6

Evaluation of monoclonal antibody DF3 conjugated with ricin as a specific immunotoxin for in vitro purging of human bone marrow. Tondini C, et al. **Cancer Res** 1990 Feb 15;50(4):1170–5

Milestones in the treatment of breast cancer. Sesto ME. **Cleve Clin J Med** 1990 May;57(3):219–20

Mammography in the pre-operative assessment and post-operative surveillance of patients treated by excision and radiotherapy for primary breast cancer. Locker AP, et al. **Clin Radiol** 1990 Jun;41(6):388–91

Breast conservation and management of early breast cancer. Yarnold JR. **Eur J Cancer** 1990;26(6):653–5 (20 ref.)

Conservative treatment of early breast cancer: prognostic value of the ductal in situ component and other pathological variables on local control and survival. Long-term results. Zafrani B, et al. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1645–50

Local postoperative morbidity following pre-operative irradiation in locally advanced breast cancer. Badr el Din A, et al. **Eur J Surg Oncol** 1989 Dec;15(6):486–9

Fat necrosis of the breast: an unusual complication of lumpectomy and radiotherapy in breast cancer. Review of literature and report of four new cases. el-Deeb NA. **Eur J Surg Oncol** 1990 Jun;16(3):248–50 (5 ref.)

Serum ferritin as a marker of therapeutic response in stage III and IV breast cancer. Williams MR, et al. **Eur J Surg Oncol** 1990 Feb;16(1):22–7

Diagnosis and therapy of breast cancer. **Hematol Oncol Clin North Am** 1989 Dec;3(4):559–842

Principles of therapy in advanced breast cancer. Ingle JN. **Hematol Oncol Clin North Am** 1989 Dec;3(4):743–63 (53 ref.)

The use of endocrine therapy. Pritchard KI, et al. **Hematol Oncol Clin North Am** 1989 Dec;3(4):765–805 (328 ref.)

Cancer Research Campaign Adjuvant Breast Trial for patients under 50. Baum M, et al. **Horm Res** 1989;32 Suppl 1:226–9; discussion 230

Therapy in premenopausal women with advanced, oestrogen positive or/and progesterone positive breast cancer: surgical oophorectomy versus the LHRH analogue, Zoladex. Robert NJ, et al. **Horm Res** 1989;32 Suppl 1:221–2

A multi-centre randomised study to compare the effects of ovarian ablation with Zoladex depot in pre- and perimenopausal patients with advanced breast cancer. Tyrrell C. **Horm Res** 1989;32 Suppl 1:218–20

Clinical results of thermoradiotherapy for locally advanced and/or recurrent breast cancer—comparison of results with radiotherapy alone. Masunaga S, et al. **Int J Hyperthermia** 1990 May-Jun;6(3):487–97

The prognostic significance of late local recurrence after breast-conserving therapy. Kurtz JM, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan;18(1):87–93

The role of limited surgery with irradiation in primary treatment of ductal in situ breast cancer. Stotter AT, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb;18(2):283–7

The therapeutic effect of OK-432-combined adoptive immunotherapy against liver metastases from breast cancer. Okino T, et al. **J Cancer Res Clin Oncol** 1990; 116(2):197–202

Compliance of physicians and patients with a consensus protocol for treatment of advanced breast cancer. Porzsolt F, et al. **J Cancer Res Clin Oncol** 1989;115(6):564–70

Difficulties in physical functioning reported by middle-aged and elderly women with breast cancer: a case-control comparison. Satariano WA, et al. **J Gerontol** 1990 Jan; 45(1):M3–11

Determinants of primary therapy of early stage breast cancer. Ferguson CM, et al. **J Med Assoc Ga** 1990 Jun;79(6):351–4

It's too soon to know [editorial; comment] Hellman S. **J Natl Cancer Inst** 1990 Feb 21;82(4):250–1 Comment on: J Natl Cancer Inst 1990 Feb 21;82(4):277–82.

Experts agree to disagree on adjuvant therapy for breast cancer [news] Smigel K. **J Natl Cancer Inst** 1990 Apr 18; 82(8):640–1

Cosmetic results of early breast carcinoma treated with wide local excision, external beam radiotherapy and iridium-192 boost. Davidson NG, et al. **J R Coll Surg Edinb** 1990 Jun; 35(3):175–7

Fish oil enhancement of 131I-conjugated anti-human milk fat globule monoclonal antibody experimental radioimmunotherapy of breast cancer. Blank EW, et al. **J Steroid Biochem** 1989;34(1–6):149–53

Postmastectomy locally recurrent breast cancer. Humphrey LJ, et al. **J Surg Oncol** 1990 Feb;43(2):88–91

Adjuvant chemotherapy and scar irradiation in breast cancer. Içli F, et al. **J Surg Oncol** 1990 Aug;44(4):252–5

Observations on Indian node-negative breast cancer patients: a multivariate analysis. Vyas JJ, et al. **J Surg Oncol** 1989 Dec;42(4):256–63

The effect of recombinant interleukin 2 in combination with mitomycin C on advanced cancer. Akiyoshi T, et al. **Jpn J Surg** 1990 May;20(3):365–8

Psychosocial intervention and the natural history of cancer [editorial] **Lancet** 1989 Oct 14;2(8668):901

Treatment of breast cancer in elderly patients [letter] Goldhirsch A, et al. **Lancet** 1990 Sep 1;336(8714):564

Advertising for medical research funds [letter] Nicholson S. **Lancet** 1990 May 26;335(8700):1285

Successful pre-embryo donation in ovarian failure after treatment for breast carcinoma [letter] Sauer MV, et al. **Lancet** 1990 Mar 24;335(8691):723

Psychological support for cancer patients [letter] Spiegel D, et al. **Lancet** 1989 Dec 16;2(8677):1447

Effect of psychosocial treatment on survival of patients with metastatic breast cancer [see comments] Spiegel D, et al. **Lancet** 1989 Oct 14;2(8668):888–91 Comment in: Lancet 1989 Nov 18;2(8673):1209–10.

Treatment modality and quality differences for black and white breast-cancer patients treated in community hospitals. Diehr P, et al. **Med Care** 1989 Oct;27(10):942–58

Framing effects [letter; comment] Elstein AS. **Med Decis Making** 1990 Apr–Jun;10(2):148 Comment on: Med Decis Making 1989 Oct–Dec;9(4):262–71.

Effects of outcome framing on treatment decisions in the real world: impact of framing on adjuvant breast cancer decisions [see comments] Siminoff LA, et al. **Med Decis Making** 1989 Oct–Dec;9(4):262–71 Comment in: Med Decis Making 1990 Apr–Jun;10(2):148.

Clinical trials in breast cancer in Australia and New Zealand. Australian-New Zealand Breast Cancer Trials Group. Coates A, et al. **Med J Aust** 1990 Jun 4;152(11):601–2, 605–6 (19 ref.)

Managing breast cancer—then, now and the future [editorial; comment] Ingram D, et al. **Med J Aust** 1990 Jan 15; 152(2):59–60 Comment on: Med J Aust 1990 Jan 15;152(2):67–72.

Intraductal noninvasive breast cancer: a comparison of three local treatments. Fowble B. **Oncology (Williston Park)** 1989 Jun;3(6):51–8; discussion 63–4, 66, 69 (47 ref.)

Impact of cancer on quality of life: a partner's perspective. Mankin D. **Oncology (Williston Park)** 1990 May;4(5):202–3; discussion 208

Selection of patients with early-stage breast cancer for conservative surgery and radiation. Recht A, et al. **Oncology (Williston Park)** 1990 Feb;4(2):23–30; discussion 31–2 (38 ref.)

What role for concurrent chemohormonal therapy in breast cancer? Sheth SP, et al. **Oncology (Williston Park)** 1987 Oct;1(8):19–27 (30 ref.)

Management of breast and prostate cancer: how does quality of life enter the equation? Tannock IF. **Oncology (Williston Park)** 1990 May;4(5):149–56; discussion 171 (23 ref.)

Primary localized breast cancer. Treatment options and informed choices. Schwade JG, et al. **Postgrad Med** 1989 Oct;86(5):181–4, 188, 191–2 (12 ref.)

Breast cancer and laser photoradiation therapy: an in vitro model for autologous bone marrow purging. Gulliya KS, et al. **Prog Clin Biol Res** 1990;333:103–7

Immunopharmacologic purging of breast cancer from bone marrow for autologous bone marrow transplantation. Shpall EJ, et al. **Prog Clin Biol Res** 1990;333:321–35; discussion 336

Psychological effects of breast-conserving cancer treatment and mastectomy. Margolis G, et al. **Psychosomatics** 1990 Winter;31(1):33–9

Local effect of hyperthermia for superficial and shallow-seated tumors. Tsukiyama I, et al. **Radiat Med** 1990 Jan–Feb;8(1):22–8

Treatment options in early breast cancer. Krishnan L, et al. **Radiographics** 1989 Nov;9(6):1067–79 (24 ref.)

Early breast cancer: detection of recurrence after conservative surgery and radiation therapy. Hassell PR, et al. **Radiology** 1990 Sep;176(3):731–5

Stage I and II breast carcinoma: treatment with limited surgery and radiation therapy versus mastectomy. Komaki

R, et al. **Radiology** 1990 Jan;174(1):255–7
Cutaneous angiosarcoma of the breast 7 years after lumpectomy and radiation therapy. Rubin E, et al. **Radiology** 1990 Jan;174(1):258–60
Locally advanced breast cancer: radiotherapy alone versus surgery and radiotherapy. Martijn H, et al. **Radiother Oncol** 1989 Sep;16(1):23–9
Cosmetic evaluation of breast conserving treatment for mammary cancer. 1. Proposal of a quantitative scoring system. Van Limbergen E, et al. **Radiother Oncol** 1989 Nov; 16(3):159–67
Factors associated with local recurrence as a first site of failure following the conservative treatment of early breast cancer. Boyages J, et al. **Recent Results Cancer Res** 1989; 115:92–102
Methods for assessing treatment efficacy in trials for adjuvant therapy for breast cancer. Gelber RD, et al. **Recent Results Cancer Res** 1989;115:211–9
Critical review: methodology of adjuvant trials and interpretation of results. Gelber RD. **Recent Results Cancer Res** 1989;115:236–8
Adjuvant therapy of primary breast cancer. Closing summary and outlook. Glick JH. **Recent Results Cancer Res** 1989; 115:283–92 (2 ref.)
Neoadjuvant chemotherapy in the conservative management of breast cancer: a study of 252 patients. Jacquillat C, et al. **Recent Results Cancer Res** 1989;115:36–42
Critical review of adjuvant therapy in premenopausal patients. Mouridsen HT. **Recent Results Cancer Res** 1989; 115:132–5
Adjuvant immunotherapy in node-negative patients: results of a Scandinavian study. Nissen-Meyer R, et al. **Recent Results Cancer Res** 1989;115:186–90
Therapy of early breast cancer: preliminary results of the German Breast Cancer Study. Sauer R, et al. **Recent Results Cancer Res** 1989;115:203–10
Scottish adjuvant breast cancer trials: results in pre-menopausal patients. Stewart HJ. **Recent Results Cancer Res** 1989;115:126–31
Patterns of treatment failure—implications for new treatment approaches. Tattersall MH. **Recent Results Cancer Res** 1989;115:1–7
Critical review of problems of rational follow-up and salvage therapy. Tormey DC. **Recent Results Cancer Res** 1989; 115:103–5
Salvage treatments in relapsing resectable breast cancer. Valagussa P, et al. **Recent Results Cancer Res** 1989; 115:69–76
Can psychotherapy delay cancer deaths? [news] Barinaga M. **Science** 1989 Oct 27;246(4929):448–9
Breast cancer therapies weighed [news] Holden C. **Science** 1990 Jun 29;248(4963):1602
Recent advances in the management of lung and breast cancer. Proceedings of a symposium. January 26 and 27, 1990, Tucson, AZ. **Semin Oncol** 1990 Aug;17(4 Suppl 7):1–52
Conservation breast treatment: a viable option locally. Chua ET, et al. **Singapore Med J** 1989 Feb;30(1):66–71
The contralateral breast in ipsilateral breast carcinoma. Hoffman E. **South Med J** 1990 Sep;83(9):1009–15 (64 ref.)
Unusual lesions and their management. Baker RR. **Surg Clin North Am** 1990 Aug;70(4):963–75
Physician-patient communication about breast cancer. A challenge for the 1990s. Schain WS. **Surg Clin North Am** 1990 Aug;70(4):917–36
Monitoring of hormonal therapy in patients with metastatic breast carcinoma by plasma marker protein profiles. Haagensen DE Jr, et al. **Surg Forum** 1978;29:162–4
Increased survival in mice with C3H breast adenocarcinoma after tumor excision and vitamin A supplementation. Rettura G, et al. **Surg Forum** 1978;29:170–2
Interim results of treatment of breast cancer with breast conservation for all patients [letter; comment] Moore JK. **Surgery** 1989 Nov;106(5):934 Comment on: Surgery 1987 Apr;101(4):395–9.
Tumor recurrence after liver transplantation followed by high-dose cyclophosphamide, total body irradiation, and autologous bone marrow transplantation for treatment of metastatic liver disease. Margreiter R, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2403–4
Trends in patterns of care for breast cancer in Italy (1979–1987). Grilli R, et al. **Tumori** 1990 Apr 30;76(2):184–9
Breast cancer in situ: a retrospective review of 23 cases with a minimum of 10-year followup. Jubelirer SJ. **W V Med J** 1990 Apr;86(4):141–4
[Tumor recurrence in the salvaged breast; a second chance?] Roukema JA, et al. **Ned Tijdschr Geneeskd** 1989 Dec 30; 133(52):2593–5 **(Dut)**
[Mammoplasty combined with irradiation: conservative treatment of breast cancer localized in the lower quadrant] Clough KB, et al. **Ann Chir Plast Esthet** 1990;35(2):117–22 (Eng. Abstr.) **(Fre)**
[Pregnancy after treated cancer of the breast. Results of a case-control] Mignot L. **Pathol Biol (Paris)** 1989 Nov; 37(9):1002 **(Fre)**
[Multidisciplinary consultation for breast cancer. Testing and treatment plan] Aeberhard P, et al. **Rev Med Suisse Romande** 1990 Apr;110(4):325–6 **(Fre)**
[Overview of forms of therapy of benign breast diseases] von Fournier D, et al. **Gynakologe** 1989 Aug;22(4):246–54 (35 ref.) **(Ger)**
[Additional treatment with Esberitox N in patients with chemo-radiotherapy treatment of advanced breast cancer] Bendel R, et al. **Onkologie** 1989 Jun;12 Suppl 3:32–8 (Eng. Abstr.) **(Ger)**
[Breast-sparing therapy in carcinoma of the breast. Indications and consequences. Results of a multidisciplinary consensus meeting] Hellriegel KP. **Onkologie** 1990 Jun; 13(3):227–30 **(Ger)**
[Better evaluability of post-therapeutic mammograms using a double-exposure technic. A prospective perception study] Salomonowitz E, et al. **ROFO** 1990 May; 152(5):574–6 (Eng. Abstr.) **(Ger)**
[Should early stage node-negative breast cancer patients receive adjuvant therapy?] Cohen Y. **Harefuah** 1989 Aug; 117(3–4):100–2 **(Heb)**
[Hormonal treatment of breast tumor] Garcia Giralt E, et al. **Clin Ter** 1990 Feb 28;132(4):217–27 (5 ref.) **(Ita)**
[Use of orgotein in the treatment of reactive damage to the use of high-energy radiation] Grio R, et al. **Minerva Ginecol** 1989 Aug;41(8):413–5 (Eng. Abstr.) **(Ita)**
[Quadrantectomy and tumorectomy followed by radiotherapy in early tumors of the breast] Felci U, et al. **Radiol Med (Torino)** 1990 Jan–Feb;79(1–2):87–91 (Eng. Abstr.) **(Ita)**
[Experimental and clinical studies on intrapleural instillations of interleukin-2 (IL-2) in patients with malignant pleural effusion] Suzuki H. **Nippon Geka Gakkai Zasshi** 1989 Nov; 90(11):1922–31 (Eng. Abstr.) **(Jpn)**
[Analysis of early treatment results in patients with locally advanced breast cancer] Fijuth J, et al. **Nowotwory** 1990 Jan–Mar;40(1):40–7 (Eng. Abstr.) **(Pol)**
[Treatment of breast cancer] Montoro AF. **Rev Paul Med** 1989 May–Jun;107(3):181–2 **(Por)**
[The role of interferon in anti-tumor resistance] Vorontsova AL. **Eksp Onkol** 1989;11(6):49–54 (33 ref.) (Eng. Abstr.) **(Rus)**
[Errors in the treatment of breast cancer] Demidov VP, et al. **Khirurgiia (Mosk)** 1990 Apr;(4):90–5 **(Rus)**
[Pathomorphosis of breast cancer after radiotherapy and thermoradiotherapy] Abrosimov AIu, et al. **Med Radiol (Mosk)** 1990 Apr;35(4):32–4 (Eng. Abstr.) **(Rus)**
[Immunologic indices of the blood and interstitial fluid in the evaluation of the treatment of secondary edemas of the upper extremities] Kuz'mina EG, et al. **Med Radiol (Mosk)** 1990 May;35(5):18–21 (Eng. Abstr.) **(Rus)**
[Surgical, radiation and drug treatment of breast cancer] Pereslegin IA, et al. **Med Radiol (Mosk)** 1990 Jun; 35(6):39–44 (66 ref.) **(Rus)**
[Cooperative studies on the treatment of breast neoplasms, stage I, IIA, IIB and IIIB] Demidov VP, et al. **Sov Med** 1990;(4):103–7 **(Rus)**
[Current possibilities of conservative treatment of breast cancer] Nivinskaia MM, et al. **Sov Med** 1989;(11):99–101 **(Rus)**
[Long-term results of treating breast cancer] Murasheva EMK, et al. **Vopr Onkol** 1989;35(10):1255 **(Rus)**
[Treatment of breast cancer 1978–1987] Avžner J, et al. **Acta Chir Iugosl** 1989;36 Suppl 1:281–3 **(Slv)**
[Progress in the hormonal treatment of advanced cancer of the breast] Rivadeneyra J. **Ginecol Obstet Mex** 1977 Oct; 42(252):247–9 (4 ref.) (Eng. Abstr.) **(Spa)**
[Evaluation of the therapeutic practices in cancer of the breast. General background] Torres Trujillo R. **Ginecol Obstet Mex** 1977 Oct;42(252):215–8 (11 ref.) (Eng. Abstr.) **(Spa)**
[Conservative treatment of cancer of the breast (editorial)] Fernández-Cid A. **Med Clin (Barc)** 1989 Nov 18; 93(16):611–2 **(Spa)**

ULTRASTRUCTURE

Primary recurrent leiomyosarcoma of the breast. Case report with ultrastructural and immunohistochemical study and review of the literature. Arista-Nasr J, et al. **Am J Clin Pathol** 1989 Oct;92(4):500–5 (27 ref.)
Morphological changes induced by epidermal growth factor and estradiol on CG5 human breast cancer cell line: a scanning electron microscopy study. Ferrandina G, et al. **Anticancer Res** 1990 Jul–Aug;10(4):991–4
A comparative study of nuclear morphometric features of intraduct carcinoma and ductal epitheliosis of the breast. Delides GS, et al. **Arch Geschwulstforsch** 1990;60(3):231–3
Cystosarcoma phyiloides of the breast and its mimics. An immunohistochemical and ultrastructural study. Auger M, et al. **Arch Pathol Lab Med** 1989 Nov;113(11):1231–5
Quantitative features of chromatin structure in the prognosis of breast cancer. Komitowski D, et al. **Cancer** 1990 Jun 15;65(12):2725–30
P-glycoprotein and progesterone receptor in human breast cancer. McGuire WL. **Cancer Cells** 1990 Jan;2(1):27–9 (13 ref.)
Determination of apical membrane polarity in mammary epithelial cell cultures: the role of cell–cell, cell–substratum, and membrane–cytoskeleton interactions. Parry G, et al. **Exp Cell Res** 1990 Jun;188(2):302–11
Measurement of estrogen and progesterone receptors in human breast tumors: enzyme immunoassay versus binding assay. Holmes FA, et al. **J Clin Oncol** 1990 Jun;8(6):1025–35
Ultrastructural analysis of fine needle aspirates from benign breast lesions. Ferguson DJ, et al. **J Clin Pathol** 1990 Jan; 43(1):22–6
Prognostic value of nucleolar morphometric variables in cytological breast cancer specimens. van Diest PJ, et al. **J Clin Pathol** 1990 Feb;43(2):157–9
An ultrastructural study of benign and malignant breast epithelial cells. A search for tonofilaments. Kotańska KM, et al. **J Submicrosc Cytol Pathol** 1989 Jul;21(3):469–74
An ultrastructural evaluation of cell heterogeneity in invasive ductal carcinomas of the human breast. I. An in vivo study. Pucci-Minafra I, et al. **J Submicrosc Cytol Pathol** 1989 Jul; 21(3):475–88
An ultrastructural evaluation of cell heterogeneity in invasive ductal carcinomas of the human breast. II. An in vitro study. Pucci-Minafra I, et al. **J Submicrosc Cytol Pathol** 1989 Jul;21(3):489–99
In situ distribution of oncogene products and growth factor receptors in breast carcinoma: c-erbB-2 oncoprotein, EGFr, and PDGFr-beta-subunit. Kommoss F, et al. **Mol Cell Probes** 1990 Feb;4(1):11–23
Immunohistochemical detection of estrogen receptors in paraffin sections from primary and metastatic breast cancer. Brunn Rasmussen B, et al. **Pathol Res Pract** 1989 Dec; 185(6):856–9
Freeze-fracture morphometry on normal and cancer breast tissues. Losa GA. **Pathol Res Pract** 1989 Nov;185(5):572–8
Ultrastructural features of neuroendocrine differentiated carcinomas of the breast. Capella C, et al. **Ultrastruct Pathol** 1990 Jul–Aug;14(4):321–34
Nucleolar grading of breast cancer. Comparative studies on frequency and localization of nucleoli and histology, stage, hormonal receptor status and lectin histochemistry. Helpap B. **Virchows Arch [A]** 1989;415(6):501–8
[Ductal carcinoma of the breast. Electron microscopic study] Mroczka B, et al. **Patol Pol** 1989;40(2):171–9 (Eng. Abstr.) **(Pol)**

URINE

Reduction in calcium excretion in women with breast cancer and bone metastases using the oral bisphosphonate pamidronate. Dodwell DJ, et al. **Br J Cancer** 1990 Jan; 61(1):123–5
A Mr 43,000 epidermal growth factor-related protein purified from the urine of breast cancer patients. Eckert K, et al. **Cancer Res** 1990 Feb 1;50(3):642–7
High predictivity of galactosyl-hydroxylysine in urine as an indicator of bone metastases from breast cancer. Moro L, et al. **Clin Chem** 1990 May;36(5):772–4
The urinary dehydroepiandrosterone, androsterone and etiocholanolone excretion of healthy women and women with benign and malignant breast disease. Ivanović S, et al. **J Clin Pharm Ther** 1990 Jun;15(3):213–9
6-sulphatoxymelatonin production in breast cancer patients. Skene DJ, et al. **J Pineal Res** 1990;8(3):269–76
Diet and urinary estrogen profile in premenopausal omnivorous and vegetarian women and in premenopausal women with breast cancer. Adlercreutz H, et al. **J Steroid Biochem** 1989;34(1–6):527–30

BREATH TESTS

see related
RESPIRATION

The application of learning theory to driving confidence: the effect of age and the impact of random breath testing. Job RF. **Accid Anal Prev** 1990 Apr;22(2):97–107
High breath hydrogen baselines: a new diagnostic parameter? [letter] Joseph F Jr, et al. **Acta Paediatr Scand** 1989 Sep; 78(5):775–6
Carbon monoxide assessment of smoking in chronic obstructive pulmonary disease. Crowley TJ, et al. **Addict Behav** 1989;14(5):493–502
The effect of cigarette smoking on breath and whole blood-associated acetaldehyde. McLaughlin SD, et al. **Alcohol** 1990 Jul–Aug;7(4):285–7
Elevated concentrations of acetone and unidentified compounds in the breath of alcohol abusers. Phillips M, et al. **Alcoholism (N Y)** 1989 Aug;13(4):523–6
Breath hydrogen excretion in the premature neonate. Cheu HW, et al. **Am J Dis Child** 1990 Feb;144(2):197–202
Breath hydrogen in preterm infants [letter; comment] Stevenson DK. **Am J Dis Child** 1989 Nov;143(11):1262–3 Comment on: Am J Dis Child 1989 Feb;143(2):156–9.
14C-urea breath test for the detection of Helicobacter pylori. Veldhuyzen van Zanten SJ, et al. **Am J Gastroenterol** 1990 Apr;85(4):399–403
Prevention of TUR syndrome by detection of trace ethanol in the expired breath. Hahn RG. **Anaesthesia** 1990 Jul; 45(7):577–81
Breath hydrogen excretion in infants with colic [letter] Miller JJ, et al. **Arch Dis Child** 1990 Feb;65(2):248
Partition ratio of acetaldehyde between blood and breath after ethanol consumption. Fukunaga T, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1989 Oct;24(5):405–16
Porous-layer open-tubular gas chromatography in combination with an ion trap detector to assess volatile metabolites in human breath. Ghoos Y, et al. **Biomed Environ Mass Spectrom** 1989 Aug;18(8):613–6
Automated non-invasive measurement of cardiac output by the carbon dioxide rebreathing method: comparisons with dye dilution and thermodilution. Russell AE, et al. **Br Heart J** 1990 Mar;63(3):195–9
CHF, rales, and the Dco [editorial; comment] Clausen JL. **Chest** 1990 Sep;98(3):523–4 Comment on: Chest 1990

Sep;98(3):550–3.
Evaluation of an alveolar carbon monoxide analysis method. Lavoie R, et al. **Clin Chem** 1990 Jan;36(1):160
The erythromycin breath test as a predictor of cyclosporine blood levels. Watkins PB, et al. **Clin Pharmacol Ther** 1990 Aug;48(2):120–9
Small bowel transit time measured by hydrogen breath test in patients with anorexia nervosa. Hirakawa M, et al. **Dig Dis Sci** 1990 Jun;35(6):733–6
[14C]urea breath test for diagnosis of Helicobacter pylori. Ormand JE, et al. **Dig Dis Sci** 1990 Jul;35(7):879–84
Lack of interference by sorbitol with aminopyrine breath test. Ramin VC, et al. **Eur J Clin Pharmacol** 1990;38(1):87–9
Breath alkanes as an index of lipid peroxidation. Van Gossum A, et al. **Eur Respir J** 1989 Sep;2(8):787–91 (35 ref.)
Breath alcohol test precision: an in vivo vs. in vitro evaluation. Gullberg RG. **Forensic Sci Int** 1989 Dec; 43(3):247–55
Glucose–H2 breath test for small intestine bacterial overgrowth [letter; comment] Corazza G, et al. **Gastroenterology** 1990 Jan;98(1):253–4 Comment on: Gastroenterology 1988 Oct;95(4):982–8.
The diagnosis of small bowel bacterial overgrowth. Reliability of jejunal culture and inadequacy of breath hydrogen testing. Corazza GR, et al. **Gastroenterology** 1990 Feb;98(2):302–9
Breath hydrogen testing in patients with partial gastric resection [letter] Kilander A, et al. **Gastroenterology** 1990 Aug;99(2):603–4
Bile salt deconjugation breath tests [letter] King CE, et al. **Gastroenterology** 1978 Jul;75(1):166
14C–urea breath test for C pylori [letter; comment] **Gut** 1989 Nov;30(11):1656–7 Comment on: Gut 1989 Jun;30(6):798–803.
Breath hydrogen response to lactulose in healthy subjects: relationship to methane producing status. Cloarec D, et al. **Gut** 1990 Mar;31(3):300–4
13CO2 breath test to measure the hydrolysis of various starch formulations in healthy subjects. Hiele M, et al. **Gut** 1990 Feb;31(2):175–8
Assessment of mitochondrial function in vivo with a breath test utilizing alpha–ketoisocaproic acid. Michaletz PA, et al. **Hepatology** 1989 Nov;10(5):829–32
Toluene in alveolar air during controlled exposure to constant and to varying concentrations. Baelum J. **Int Arch Occup Environ Health** 1990;62(1):59–64
Methane production in patients with colorectal carcinoma. Kashtan H, et al. **Isr J Med Sci** 1989 Nov;25(11):614–6
Incorrect overestimates of blood alcohol concentration from breath test results [letter] Simpson G. **J Anal Toxicol** 1990 Jul–Aug;14(4):263–4
Medicolegal alcohol determination: comparison and consequences of breath and blood analysis. Simpson G. **J Anal Toxicol** 1989 Nov–Dec;13(6):361–6
Does the expired carbon dioxide waveform suggest endobronchial intubation? Mokriski BK, et al. **J Clin Anesth** 1990 Mar–Apr;2(2):140–1
Applying a data acquisition system to the analysis of breath alcohol profiles. Gullberg RG. **J Forensic Sci Soc** 1989 Nov–Dec;29(6):397–405
The 14CO2 urea breath test for Helicobacter pylori infection [letter] Conti–Nibali S, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug;11(2):284–5
Breath methane production in children with constipation and encopresis. Fiedorek SC, et al. **J Pediatr Gastroenterol Nutr** 1990 May;10(4):473–7
A carbon–13 breath test to characterize glucose absorption and utilization in children [letter; comment] Hiele M, et al. **J Pediatr Gastroenterol Nutr** 1989 Nov;9(4):540–1 Comment on: J Pediatr Gastroenterol Nutr 1988 Nov–Dec;7(6):842–7.
The deconjugation ability of bacteria isolated from the jejunal fluids in the blind loop syndrome with high 14CO2 excretion—using the breath analysis technique and thin–layer chromatography. Shindo K, et al. **Life Sci** 1989; 45(24):2275–83
Predictive value of the single–breath nitrogen test for hospitalization due to respiratory disease. Vestbo J, et al. **Lung** 1990;168(2):93–101
"Random breath tests" [editorial; comment] Havard J. **Med J Aust** 1990 Mar 19;152(6):282 Comment on: Med J Aust 1990 Mar 19;152(6):284–6.
Publicity, police resources and the effectiveness of random breath testing [see comments] McCaul KA, et al. **Med J Aust** 1990 Mar 19;152(6):284–6 Comment in: Med J Aust 1990 Mar 19;152(6):282.
Aminopyrine breath test in alcoholic cirrhosis. Urbain D, et al. **Nucl Med Commun** 1990 Apr;11(4):289–93
Effects of puff number and puff spacing on carbon monoxide exposure from commercial brand cigarettes. Weinhold LL, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):853–8
Metabolic interaction between endogenous methanol and exogenous ethanol studied in human volunteers by analysis of breath. Jones AW, et al. **Pharmacol Toxicol** 1990 Jan; 66(1):62–5
The effects of chronic obstructive airways disease on the ability to drive and to use a roadside alcolmeter. Briggs JE, et al. **Respir Med** 1990 Jan;84(1):43–6
How reliable are the 14C–urea breath test and specific serology for the detection of gastric Campylobacter? Husebye E, et al. **Scand J Gastroenterol** 1990 Jul; 25(7):725–30
Bacterial contamination of the small bowel evaluated by breath tests, 75Se–labelled homocholic–tauro acid, and scanning electron microscopy. Suhr O, et al. **Scand J Gastroenterol** 1990 Aug;25(8):841–52
Detecting Campylobacter pylori with the 13C– and 14C–urea breath test. Rauws EA. **Scand J Gastroenterol Suppl** 1989; 160:25–6
Rapid estimation of carboxyhemoglobin by breath sampling in an emergency setting. Kurt TL, et al. **Vet Hum Toxicol** 1990 Jun;32(3):227–9
[Indices of lipid peroxidation in the condensate of exhaled air—a simple and objective method of estimating injuries to the pulmonary surfactant system] Khyshiktuev BS, et al. **Lab Delo** 1990;(5):18–22 (Eng. Abstr.) **(Rus)**
[The diagnostic potentials of studying the condensate of expired air] Iakovleva OA. **Ter Arkh** 1990;62(3):102–7 (48 ref.) (Eng. Abstr.) **(Rus)**
[Correlation of the size of the residual volume measured by whole body plethysmography and the single breath helium dilution method] Popović–Grle S, et al. **Plucne Bolesti** 1989 Jan–Jun;41(1–2):78–82 (Eng. Abstr.) **(Scr)**

INSTRUMENTATION

Comparison of three sampling and analytical methods for measuring m–xylene in expired air of exposed humans. Glaser RA, et al. **Am Ind Hyg Assoc J** 1990 Mar; 51(3):139–50
Capnometry in emergency medicine. Sanders AB. **Ann Emerg Med** 1989 Dec;18(12):1287–90
Effectiveness of using end tidal carbon dioxide concentration to monitor cardiopulmonary resuscitation [see comments] Higgins D, et al. **BMJ** 1990 Mar 3;300(6724):581 Comment in: BMJ 1990 Apr 14;300(6730):1012–3.
Time constant related distortion in side–stream capnography. Doyle DJ. **Can J Anaesth** 1990 May;37(4 Pt 2):S70
A differential paramagnetic sensor for breath–by–breath oximetry. Meriläinen PT. **J Clin Monit** 1990 Jan;6(1):65–73
Accurate measurement of blood alcohol concentration with isothermal rebreathing. Ohlsson J, et al. **J Stud Alcohol** 1990 Jan;51(1):6–13
The effect of respiratory aerosol inhalers and nasal sprays on breath alcohol testing devices used in Great Britain. Gomm PJ, et al. **Med Sci Law** 1990 Jul;30(3):203–6
[Use of breath alcohol analysis in France] Fleck K, et al. **Blutalkohol** 1989 Nov;26(6):376–80 (Eng. Abstr.) **(Ger)**
[Modification of Alcomat breath alcohol measurements by various substances of routine use (mouthwash, perfume, after–shave lotion etc.] Grüner O, et al. **Blutalkohol** 1990 Mar;27(2):119–30 (Eng. Abstr.) **(Ger)**
[General practice trial with breath alcohol analysis] Schoknecht G. **Blutalkohol** 1990 May;27(3):145–53 (Eng. Abstr.) **(Ger)**
[Influence of breath volume on alcohol analysis] Schoknecht G, et al. **Blutalkohol** 1990 Mar;27(2):83–94 (Eng. Abstr.) **(Ger)**
[A system for respiratory flow proportional sampling] Bytel H, et al. **Z Gesamte Hyg** 1989 Jul;35(7):426–8 (Eng. Abstr.) **(Ger)**

METHODS

Using a weighted mean to compute the values of simulator solution standards. Gullberg RG. **J Anal Toxicol** 1990 May–Jun;14(3):196–8
Display of the alveolar plateau of single–breath tests in "dilution index" format. Van Liew HD, et al. **J Appl Physiol** 1989 Oct;67(4):1699–703
The 14C–urea breath–test for the detection of gastric Campylobacter pylori infection. Surveyor I, et al. **Med J Aust** 1989 Oct 16;151(8):435–9
[13C–urea breath test as a non–invasive method for the detection of Helicobacter (Campylobacter) pylori] Cooreman M, et al. **Dtsch Med Wochenschr** 1990 Mar 9; 115(10):367–71 (Eng. Abstr.) **(Ger)**
[Studies of dialysis patients using the 14C aminophenazone breath test] Heinrich HG, et al. **Gastroenterol J** 1989; 49(2):76–8 (Eng. Abstr.) **(Ger)**
[The H2–lactulose breath test in the diagnosis of intestinal transit time] Wilberg S, et al. **Leber Magen Darm** 1990 May; 20(3):129–37 (Eng. Abstr.) **(Ger)**
[Effect of chronic alcohol drinking and liver cirrhosis on oro–cecal transit time (H2 breath test)] Hüppe D, et al. **Z Gastroenterol** 1989 Oct;27(10):624–8 (Eng. Abstr.) **(Ger)**
[The role of capnographic studies in present–day medicine] Karaś Z, et al. **Wiad Lek** 1989 Aug 15–Sep 15; 42(16–18):960–2 (23 ref.) **(Pol)**
[Measurement of pulmonary transfer factor using the CO rebreathing method of gas mixtures] Zimič D, et al. **Plucne Bolesti** 1989 Jul–Dec;41(3–4):199–204 (Eng. Abstr.) **(Scr)**

STANDARDS

Abstinence from smoking and expired–air carbon monoxide levels: lactose intolerance as a possible source of error [see comments] McNeill AD, et al. **Am J Public Health** 1990 Sep;80(9):1114–5 Comment in: Am J Public Health 1990 Sep;80(9):1040–1.
The response of the Intoxilyzer 4011AS–A to a number of possible interfering substances. Cowan JM Jr, et al. **J Forensic Sci** 1990 Jul;35(4):797–812
Local dental anaesthesia and evidential breath testing: the effect of injection of local anaesthetic on lip seal. Pearson GJ, et al. **Med Sci Law** 1989 Oct;29(4):298–302

VETERINARY

Repeated noninvasive measurement of gastrointestinal transit in rats. Enck P, et al. **Physiol Behav** 1989 Oct;46(4):633–7

BREATHALYZER TESTS see **BREATH TESTS**

BREATHING EXERCISES

Subjective effects of several stress management strategies: with reference to attention. Pekala RJ, et al. **Behav Med** 1990 Spring;16(1):39–43
Integrating music in breathing training and relaxation: I. Background, rationale, and relevant elements. Fried R. **Biofeedback Self Regul** 1990 Jun;15(2):161–9 (21 ref.)
Integrating music in breathing training and relaxation: II. Applications. Fried R. **Biofeedback Self Regul** 1990 Jun; 15(2):171–7
Long–term treatment of chronic bronchitis with positive expiratory pressure mask and chest physiotherapy. Christensen EF, et al. **Chest** 1990 Mar;97(3):645–50
Clinical intervention in chronic respiratory failure. Martin JG. **Chest** 1990 Mar;97(3 Suppl):105S–109S (42 ref.)
Heart rate response to breath–holding during supramaximal exercise. Ahn B, et al. **Eur J Appl Physiol** 1989; 59(1–2):146–51
Exercise training in patients with chronic airways obstruction. Gimenez M. **Eur Respir J Suppl** 1989 Jul; 7:611s–617s (45 ref.)
Inspiratory muscle training in COPD patients. Grassino A. **Eur Respir J Suppl** 1989 Jul;7:581s–586s (33 ref.)
Relationship between the perception of breathlessness and inspiratory resistive loading: report on a clinical trial. Patessio A, et al. **Eur Respir J Suppl** 1989 Jul;7:587s–591s
The value of self–administered peri–operative physiotherapy. Crawford BL, et al. **Ir J Med Sci** 1990 Feb;159(2):51–2
Effect of incentive breathing on lung functions in chronic obstructive pulmonary disease (COPD). Tiwary RS, et al. **J Assoc Physicians India** 1989 Nov;37(11):689–91
Effect of yoga breathing exercises (pranayama) on airway reactivity in subjects with asthma. Singh V, et al. **Lancet** 1990 Jun 9;335(8702):1381–3
Target–flow inspiratory muscle training at home and during pulmonary rehabilitation in COPD patients with a ventilatory limitation during exercise. Dekhuijzen PN, et al. **Lung** 1990;168 Suppl:502–8
The role of chest physiotherapy in mucus hypersecretion. Pavia D. **Lung** 1990;168 Suppl:614–21 (55 ref.)
Breathing to relax. Killmer RE. **Semin Neurol** 1989 Jun; 9(2):115–6
[Short–term curative effects of daoyin–tuna qigong therapy in 103 cases of chronic atrophic gastritis] Feng YZ. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Dec;9(12):728–30, 709 (Eng. Abstr.) **(Chi)**
[Effect of qigong on sympathetico–adrenomedullary function in patients with liver yang exuberance hypertension] Li W, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1990 May; 10(5):283–5, 261 (Eng. Abstr.) **(Chi)**
[Effect of qigong exercise on the blood level of monoamine neuro–transmitters in patients with chronic diseases] Liu B, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1990 Apr; 10(4):203–5, 195 (Eng. Abstr.) **(Chi)**
[Biological effect of qigong waiqi—a preliminary report of the anti–injurious effect of waiqi on ozone toxicity] Lu YC. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Dec;9(12):734–6, 710 (Eng. Abstr.) **(Chi)**
[Influence of qigong therapy upon serum HDL–C in hypertensive patients] Wang CX, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Sep;9(9):543–4, 516 (Eng. Abstr.) **(Chi)**
[Experience in the treatment of vasomotor rhinitis using the method of voluntary arrest of deep breathing] Psakhis BI, et al. **Vestn Otorinolaringol** 1989 Sep–Oct;(5):35–8 **(Rus)**

ADVERSE EFFECTS

Clinical phenomenology of mental disorders caused by Qigong exercise. Shan HH, et al. **Chin Med J [Engl]** 1989 Jun;102(6):445–8

BREECH PRESENTATION

Vaginal breech delivery: a five–year prospective evaluation of a protocol using computed tomographic pelvimetry. Christian SS, et al. **Am J Obstet Gynecol** 1990 Sep; 163(3):848–55
Ultrasonography and external cephalic version at term. Donald WL, et al. **Am J Obstet Gynecol** 1990 Jun; 162(6):1542–5; discussion 1545–7
The efficacy of external cephalic version and its impact on the breech experience. Hanss JW Jr. **Am J Obstet Gynecol** 1990 Jun;162(6):1459–63; discussion 1463–4
Prevalence of breech presentation by gestational age. Hill LM. **Am J Perinatol** 1990 Jan;7(1):92–3
The influence of maternal height, obstetrical conjugate and fetal birth–weight in the management of patients with breech presentation. Mahmood TA. **Aust N Z J Obstet Gynaecol** 1990 Feb;30(1):10–4
Symphysiotomy for the trapped aftercoming parts of the breech: a review of the literature and a plea for its use.

Menticoglou SM. **Aust N Z J Obstet Gynaecol** 1990 Feb; 30(1):1–9 (100 ref.)

The intrapartum management of the breech presentation. Gimovsky ML, et al. **Clin Perinatol** 1989 Dec;16(4):975–86 (42 ref.)

Outcome of term breech presentation. Mahomed K, et al. **East Afr Med J** 1989 Dec;66(12):819–23

Breech delivery of infants weighing more than 2000 grams: a case controlled retrospective analysis of 751 patients. Mahomed K, et al. **Int J Gynaecol Obstet** 1990 Jun; 32(2):111–5

Breech delivery in a Middle East hospital. Vaclavinkova V. **Int J Gynaecol Obstet** 1989 Nov;30(3):241–4

Fetal outcome in term frank breech primipara delivered vaginally and by elective cesarean section. Wisestanakorn W, et al. **J Med Assoc Thai** 1990 Feb;73 Suppl 1:47–51

Delivery of breech presentation infants at term. An analysis of 304 breech-deliveries. Mecke H, et al. **J Perinat Med** 1989;17(2):121–6 (22 ref.)

Pregnancies with growth-retarded twins in breech–vertex presentation at increased risk for entanglement during delivery. Rydhström H, et al. **J Perinat Med** 1990; 18(1):45–50

Delivery of the low birthweight and the very low birthweight breech: cesarean section or vaginal delivery? Suidan JS, et al. **J Perinat Med** 1989;17(2):145–9

Influence of presentation on neonatal outcome of vaginally delivered low birthweight infants. A matched pair analysis. Davidson S, et al. **J Perinatol** 1990 Mar;10(1):38–42

Vaginal birth after cesarean delivery. Trial of labor in women with breech presentation. Sarno APJr, et al. **J Reprod Med** 1989 Oct;34(10):831–3

413 cases of abnormal fetal position corrected by auricular plaster therapy. Qin GF, et al. **J Tradit Chin Med** 1989 Dec;9(4):235–7

Reliability of fetal buttock blood sampling in assessing the acid–base balance of the breech fetus. Brady K, et al. **Obstet Gynecol** 1989 Dec;74(6):886–8

Morbidity among breech infants according to method of delivery. Croughan-Minihane MS, et al. **Obstet Gynecol** 1990 May;75(5):821–5

A prospective randomised controlled trial of external cephalic version comparing two methods of uterine tocolysis with a non-tocolysis group. Tan GW, et al. **Singapore Med J** 1989 Apr;30(2):155–8

Testicular injury in breech delivery: possible implications. Tiwary CM. **Urology** 1989 Oct;34(4):210–2

[A 1-year study of the management of fetal breech presentation by monitoring follow-up during second-stage labor instead of using external version, x-ray pelvimetry and ultrasonic assessment of fetal weight] Elmahaishi MS, et al. **Akush Ginekol (Sofiia)** 1989;28(5):22–4 (Eng. Abstr.) **(Bul)**

[The Zavanelli maneuver: use during breech retention of the head in the birth canal. Apropos of a case] Fernandez H, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(4):483–5 (Eng. Abstr.) **(Fre)**

[The contemporary history of breech delivery] Dubois J, et al. **Rev Fr Gynecol Obstet** 1990 May;85(5):336–41 (Eng. Abstr.) **(Fre)**

[Prognostic factors in delivery with breech presentation. Apropos of 357 single-fetus pregnancies at term] Rosenau L, et al. **Rev Fr Gynecol Obstet** 1990 May;85(5):271–81 (Eng. Abstr.) **(Fre)**

[Cesarean section versus vaginal delivery of breech presentation in primiparous patients] Stiglbauer M, et al. **Gynakol Rundsch** 1989;29 Suppl 2:319–20 **(Ger)**

[Cesarean section in breech presentation—for safety reasons or fear of complications?] Künzel W. **Gynakologe** 1989 Aug; 22(4):205–10 (20 ref.) **(Ger)**

[Retrospective analysis of 663 breech deliveries during the years 1976 to 1985] Lellé RJ, et al. **Z Geburtshilfe Perinatol** 1989 Nov–Dec;193(6):268–75 (Eng. Abstr.) **(Ger)**

[The validity of parameters in neonatal diagnosis and fetal monitoring of breech deliveries. 2. Problems in fetal monitoring in the breech position—a proposal for a standardized biochemical diagnosis] Bellée H, et al. **Zentralbl Gynakol** 1989;111(19):1300–7 (Eng. Abstr.) **(Ger)**

[The validity of parameters in neonatal diagnosis and fetal monitoring of breech deliveries. 1. Neonatal status after breech delivery] Hommel U, et al. **Zentralbl Gynakol** 1989; 111(19):1293–9 (Eng. Abstr.) **(Ger)**

[Umbilical blood-gas status at cesarean section for breech presentation: a comparison with vertex presentation] Haruta M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Oct;41(10):1530–6 (Eng. Abstr.) **(Jpn)**

[The breech partogram] Poljak B, et al. **Jugosl Ginekol Perinatol** 1989 May–Aug;29(3–4):103–6 (Eng. Abstr.) **(Ser)**

[Breech presentation in multiple pregnancy] Maksimović J, et al. **Med Pregl** 1989;42(3–4):141–4 (Eng. Abstr.) **(Ser)**

BREEDING

The ovariectomized ewe: its contribution to controlled breeding. Moore NW. **Aust J Biol Sci** 1988;41(1):15–22 (65 ref.)

Ovulation in the merino ewe in the breeding and anoestrous seasons. Pearce DT, et al. **Aust J Biol Sci** 1988;41(1):23–6

The proposed use of melatonin in controlled sheep breeding. Poulton AL. **Aust J Biol Sci** 1988;41(1):87–96 (45 ref.)

Controlled sheep breeding: update 1980–1985. Robinson TJ. **Aust J Biol Sci** 1988;41(1):1–13 (29 ref.)

The development of a new breed of sheep in Colombia. Scott HM, et al. **Br Vet J** 1990 Mar–Apr;146(2):106–12

Comparisons of endocrinological and testis parameters in 18-month-old Ile de France and Romanov rams. Hochereau-de Reviers MT, et al. **Domest Anim Endocrinol** 1990 Jan;7(1):63–73

Characterization of transgenic livestock production. Pinkert CA, et al. **Domest Anim Endocrinol** 1990 Jan;7(1):1–18 (127 ref.)

The effects of pregnant mare serum gonadotropin on follicular development, mating and pregnancy in mink. Wehrenberg WB, et al. **Domest Anim Endocrinol** 1989 Oct; 6(4):371–8

Variation in conformation of Swedish warmblood horses and conformational characteristics of élite sport horses. Holmström M, et al. **Equine Vet J** 1990 May;22(3):186–93

DNA fingerprints applied to gene introgression in breeding programs. Hillel J, et al. **Genetics** 1990 Mar;124(3):783–9

Likelihood estimation of quantitative genetic parameters when selection occurs: models and problems. Gianola D, et al. **Genome** 1989;31(2):768–77

Summary report on animal breeding strategies workshop. Smith C. **Genome** 1989;31(2):1090–1

Plasma prolactin concentrations in breeding pied flycatchers (Ficedula hypoleuca) with an experimentally prolonged brooding period. Silverin B, et al. **Horm Behav** 1990 Mar; 24(1):104–13

Colonization of Anopheles occidentalis and Anopheles hermsi. Fujioka KK, et al. **J Am Mosq Control Assoc** 1990 Jun;6(2):330

Cemetery vase breeding of dengue vectors in Manila, Republic of the Philippines. Schultz GW. **J Am Mosq Control Assoc** 1989 Dec;5(4):508–13

Muscular hypertrophy in beef cattle: déjà vu. Ott RS. **J Am Vet Med Assoc** 1990 Feb 1;196(3):413–5 (21 ref.)

Genetic parameters for ewe productivity traits in the Columbia, Suffolk and Targhee breeds. Abdulkhaliq AM, et al. **J Anim Sci** 1989 Dec;67(12):3250–7

Comparison of production characteristics from birth through slaughter of calves sired by Angus, Charolais or Piedmontese bulls. Baker JF, et al. **J Anim Sci** 1990 Jun; 68(6):1562–8

Selection line x diet interactions for two lines of pigs fed 12 or 24% protein diets. Bereskin B, et al. **J Anim Sci** 1990 Apr;68(4):944–59

Evaluation of production and reproduction of sheep, goat and alpaca genotypes in the Small Ruminant Collaborative Research Support Program. Bradford GE, et al. **J Anim Sci** 1989 Nov;67(11):3058–67

Heritability estimates of calving date in Hereford cattle maintained on range under natural mating. Buddenberg BJ, et al. **J Anim Sci** 1990 Jan;68(1):70–4

Factors affecting productivity of Rambouillet ewes mated to ram lambs. Bunge R, et al. **J Anim Sci** 1990 Aug; 68(8):2253–62

Breed means for average daily gain, feed conversion and intake of beef bulls during postweaning feedlot performance tests. Chewning JJ, et al. **J Anim Sci** 1990 Jun;68(6):1500–4

Lifetime production of 1/4 and 1/2 Finnsheep ewes from Rambouillet, Targhee and Columbia dams as affected by natural attrition. Ercanbrack SK, et al. **J Anim Sci** 1989 Dec;67(12):3258–65

The use of elite nucleus units in beef cattle breeding. Gearheart WW, et al. **J Anim Sci** 1990 May;68(5):1229–36

Influence of single or multiple sires and serving capacity on mating behavior of beef bulls. Godfrey RW, et al. **J Anim Sci** 1989 Nov;67(11):2897–903

Effects of breed and wintering diet on heifer postweaning growth and development. Granger AL, et al. **J Anim Sci** 1990 Feb;68(2):304–16

Use of animal breeds and breeding to overcome the incidence of grass tetany: a review. Greene LW, et al. **J Anim Sci** 1989 Dec;67(12):3463–9 (35 ref.)

Adapting best linear unbiased prediction (BLUP) for timely genetic evaluation: I. Progeny traits in a single contemporary group for each sex. Harris DL, et al. **J Anim Sci** 1989 Dec;67(12):3209–22

Crossbreeding among British and continental European dual-purpose breeds in the coastal Pacific Northwest. Hohenboken WD, et al. **J Anim Sci** 1989 Nov;67(11):2841–7

Effects of percentage Brahman and Angus breeding, age-season of feeding and slaughter end point on feedlot performance and carcass characteristics. Huffman RD, et al. **J Anim Sci** 1990 Aug;68(8):2243–52

Effects of percentage Brahman and Angus breeding, age-season of feeding and slaughter end point on meat palatability and muscle characteristics. Johnson DD, et al. **J Anim Sci** 1990 Jul;68(7):1980–6

Performance of crosses among Hereford, Angus and Simmental cattle with different levels of Simmental breeding: V. Calf production, milk production and reproduction of three- to eight-year-old dams. Kress DD, et al. **J Anim Sci** 1990 Jul;68(7):1910–21

Mass selection for increased 70-day weight in a closed line of Landrace pigs. Kuhlers DL, et al. **J Anim Sci** 1990 Aug; 68(8):2271–8

Adapting best linear unbiased prediction (BLUP) for timely genetic evaluation: II. Progeny traits in multiple contemporary groups within a herd. Lofgren DL, et al. **J Anim Sci** 1989 Dec;67(12):3223–42

Comparison of crossbred cows containing various proportions of Brahman in spring or fall calving systems. I. Productivity as two-year-olds. McCarter MN, et al. **J Anim Sci** 1990 Jun;68(6):1547–52

Effects of breed, parity, day of lactation and number of kits on milk production of rabbits. McNitt JI, et al. **J Anim Sci** 1990 Jun;68(6):1505–12

Growth of crossbred progeny of polled Hereford sires divergently selected for yearling weight and maternal ability. Mahrt GS, et al. **J Anim Sci** 1990 Jul;68(7):1889–98

Contributions of ovum cytoplasm, uterine environment and postnatal environment to maternal effects in beef cattle. Maurer RR, et al. **J Anim Sci** 1990 Aug;68(8):2319–32

Breeding performance of beef bulls assigned to two-sire cow groups on pasture. Neville WE Jr, et al. **J Anim Sci** 1989 Nov;67(11):2848–53

Biological type effects on gestation length, calving traits and calf growth rate. Reynolds WL, et al. **J Anim Sci** 1990 Mar;68(3):630–9

Production characters of straightbred, F1 and F2 cows: birth and weaning characters of terminal-cross calves. Sacco RE, et al. **J Anim Sci** 1989 Aug;67(8):1972–9

Ovulation rate, lambing rate, litter size and embryo survival of Rambouillet sheep selected for high and low reproductive rate. Schoenian SG, et al. **J Anim Sci** 1990 Aug;68(8):2263–70

Breed effects on crossbred cow-calf performance. Setshwaelo LL, et al. **J Anim Sci** 1990 Jun;68(6):1577–87

Using plant breeding and genetics to overcome the incidence of grass tetany. Sleper DA, et al. **J Anim Sci** 1989 Dec; 67(12):3456–62 (29 ref.)

Relationships of sire scrotal circumference to offspring reproduction and growth. Smith BA, et al. **J Anim Sci** 1989 Nov;67(11):2881–5

Effect of selection for growth traits on age and weight at puberty in bovine females. Wolfe MW, et al. **J Anim Sci** 1990 Jun;68(6):1595–602

Estimation of genetic parameters for milk and fat yields of dairy cattle in Spain and the United States. Carabaño MJ, et al. **J Dairy Sci** 1989 Nov;72(11):3013–22

Threshold model analysis of dystocia in dairy cattle when progeny information is limited. Clutter AC, et al. **J Dairy Sci** 1989 Dec;72(12):3264–72

Estimation of repeatability of calving ease in Canadian Holsteins. Klassen DJ, et al. **J Dairy Sci** 1990 Jan; 73(1):205–12

Efficiency of feed utilization in Holsteins selected for yield. Legates JE. **J Dairy Sci** 1990 Jun;73(6):1533–6

Estimation of genetic parameters for production and reproduction in Finnish Ayrshire cattle. Mäntysaari E, et al. **J Dairy Sci** 1989 Sep;72(9):2375–86

Prediction of transmitting abilities for Holstein type traits. Vanraden PM, et al. **J Dairy Sci** 1990 Jan;73(1):191–7

Photomanipulation of sexual maturation and breeding cycle of the steppe polecat (Mustela eversmanni) and other techniques for more rapid propagation of the species. Mead RA, et al. **J Exp Zool** 1990 Aug;255(2):232–8

Artificial insemination in fox breeding. Fougner JA. **J Reprod Fertil Suppl** 1989;39:317–23

Influence of selection for egg production and Marek's disease resistance on the incidence of endogenous viral genes in White Leghorns. Kuhnlein U, et al. **Poult Sci** 1989 Sep; 68(9):1161–7

Effects of dietary aflatoxin in aflatoxin-resistant and control lines of chickens. Manning RO, et al. **Poult Sci** 1990 Jun; 69(6):922–8

Plasma cholesterol responses to the adrenocorticotropic hormone in Japanese quail following eighteen generations of divergent selection. Marks HL, et al. **Poult Sci** 1990 Feb;69(2):205–8

Production traits and alloantigen systems in lines of chickens selected for high or low antibody responses to sheep erythrocytes. Martin A, et al. **Poult Sci** 1990 Jun; 69(6):871–8

Cryopreservation of semen from unique lines of chicken germ plasm. Tajima A, et al. **Poult Sci** 1990 Jun;69(6):999–1002

Seasonal breeding in two marsupials, the bandicoot Isoodon macrourus and the possum Trichosurus vulpecula. Gemmell RT. **Prog Clin Biol Res** 1990;342:627–31 (18 ref.)

Phenotypic variation in bovine alpha-mannosidosis. Healy PJ, et al. **Res Vet Sci** 1990 Jul;49(1):82–4

Spermatogenesis in Bali cattle (Bos sondaicus) and hybrids with Bos indicus and Bos taurus. McCool CJ. **Res Vet Sci** 1990 May;48(3):288–94

Cynomolgus monkeys [letter; comment] Rosenberg DP. **Science** 1990 Jun 22;248(4962):1473 Comment on: Science 1990 Mar 30;247(4950):1538.

Productivity of crossbred cattle on smallholder farms in southern Malawi. Agyemang K, et al. **Trop Anim Health Prod** 1990 Feb;22(1):9–16

Growth pattern of desi (indigenous) and crossbred chicks under rural scavenging conditions. Sazzad MH, et al. **Trop Anim Health Prod** 1989 Nov;21(4):280

Mpwapwa cattle: an Indo-Euro-African synthesis. Syrstad O. **Trop Anim Health Prod** 1990 Feb;22(1):17–22

Growth of Mashona cattle on range in Zimbabwe. II. Estimates of genetic parameters and predicted response to selection. Tawonezvi HP. **Trop Anim Health Prod** 1989 Aug;21(3):170–4

Genetic and environmental factors associated with nematode

infection of dairy goats in northwestern France. Richard S, et al. **Vet Parasitol** 1990 Jul;36(3–4):237–43

Dystocia in nine British breeds of cattle and its relationship to the dimensions of the dam and calf [see comments] Schwabe AE, et al. **Vet Rec** 1989 Dec 23–30; 125(26–27):636–9 Comment in: Vet Rec 1990 Feb 17;126(7):176.

Timing the mating of dogs on the basis of blood progesterone concentration. van Haaften B, et al. **Vet Rec** 1989 Nov 18;125(21):524–6

Puppy farms [letter] Wilkins DB. **Vet Rec** 1990 Feb 3; 126(5):122

[Studies on the application of restrained selection in wheat breeding] Zhang ZF. **I Chuan Hsueh Pao** 1988;15(1):15–20 (Eng. Abstr.) **(Chi)**

[Study of the possibility of breeding serologically negative animals from a breeding farm infected with serotype 2 Actinobacillus pleuropneumoniae] Hunneman WA, et al. **Tijdschr Diergeneeskd** 1989 Oct 15;114(20):1039–45 (Eng. Abstr.) **(Dut)**

[Management of reproduction in large dairy herds under Moroccan conditions. III. Resumption of heat and anestrus after natural insemination] Lakhdissi H, et al. **Rev Elev Med Vet Pays Trop** 1989;42(2):261–6 (Eng. Abstr.) **(Fre)**

[The adaptation of the morphometric parameters of fat cell size for the purposes of animal science research. 2. Cellularity of subcutaneous adipose tissue of different swine breeds influenced by graduated feed levels and in relation to metabolic data and parameters of body fat degeneration] Sturm G, et al. **Berl Munch Tierarztl Wochenschr** 1990 Apr 1;103(4):112–7 (Eng. Abstr.) **(Ger)**

[Genetic behavioral aspects of agricultural animals] Buchenauer D. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun; 97(6):247–9 (Eng. Abstr.) **(Ger)**

[Behavior of dogs] Feddersen-Petersen D. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun;97(6):231–6 (Eng. Abstr.) **(Ger)**

[In vitro parameters for the comprehension of the immunocompetence of chickens of different lines. 2. Testing an immunocompetent parameter as a selection criterion in the chicken] Kahl D, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Sep;96(8):416–9 (Eng. Abstr.) **(Ger)**

[Minimum health and sexual requirements for breeding stallions] Merkt H, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Oct;96(9):459–64 (12 ref.) (Eng. Abstr.) **(Ger)**

[Analysis of several years of breeding hygiene work in swine] Elze K. **Tierarztl Prax** 1989;17(4):372–7 (Eng. Abstr.) **(Ger)**

[Breeding of cataract rat strain (ICRF/Kmu//Yg)] Kato S, et al. **Jikken Dobutsu** 1990 Apr;39(2):295–8 (Eng. Abstr.) **(Jpn)**

[Characteristics of the immune status of female cattle breeders with chlamydia infections] Felzulla MF, et al. **Gig Tr Prof Zabol** 1989;(11):24–6 (Eng. Abstr.) **(Rus)**

ECONOMICS

Feed intake, weaning weight and net returns comparisons for four breeding systems. Armstrong SL, et al. **J Anim Sci** 1990 Jul;68(7):1848–56

Influence of variations in biological and economical parameters on beef production net returns. Armstrong SL, et al. **J Anim Sci** 1990 Jul;68(7):1857–66

Puppy farms [letter] Jackson F. **Vet Rec** 1990 Feb 17; 126(7):175

HISTORY

[Contributions on breeding published by the Insemination Association of Neustadt-on-the-Aisch, Inc., and the "Dr. Dr. h.c. Karl Eibl" Foundation] Kräusslich K. **DTW Dtsch Tierarztl Wochenschr** 1990 Jul;97(7):297–9 **(Ger)**

LEGISLATION & JURISPRUDENCE

Curbing vicious dogs: breeds hounded by proposed ordinances [news] Kahler S. **J Am Vet Med Assoc** 1990 May 1;196(9):1358–9, 1365

Puppy farms [letter] Jackson F. **Vet Rec** 1990 Jan 20;126(3):69

[Raising fighting dogs] Wegner W. **DTW Dtsch Tierarztl Wochenschr** 1990 Apr;97(4):168–71 (Eng. Abstr.) **(Ger)**

METHODS

Crossbreeding as a tool for genetic improvement of chickens in suboptimum environments. Katule AM. **Beitr Trop Landwirtsch Veterinarmed** 1990;28(3):325–35

Restriction fragment length polymorphism: a recent approach in plant breeding. Pethe V, et al. **Indian J Biochem Biophys** 1989 Oct;26(5):285–8 (28 ref.)

Financial comparison of three testing strategies for detection of estrus in dairy cattle. Mohammed HO, et al. **J Am Vet Med Assoc** 1990 Mar 15;196(6):865–9

Multiple ovulation and embryo manipulation in the improvement of beef cattle: relative theoretical rates of genetic change. Gearheart WW, et al. **J Anim Sci** 1989 Nov;67(11):2863–71

Twinning in cattle: I. Foundation animals and genetic and environmental effects on twinning rate. Gregory KE, et al. **J Anim Sci** 1990 Jul;68(7):1867–76

Two-, three- and four-breed rotational crossbreeding of beef cattle: reproductive traits. Williams AR, et al. **J Anim Sci** 1990 Jun;68(6):1536–46

Effect of variability in response to superovulation on donor cow selection differentials in nucleus breeding schemes. Keller DS, et al. **J Dairy Sci** 1990 Feb;73(2):549–54

Environmental regulation of reproduction in an opportunistic breeder: the musk shrew (Insectivora: Suncus murinus). Wayne NL, et al. **Prog Clin Biol Res** 1990;342:668–72

[Errors in service management as the cause of reproductive failure on 2 pig-breeding farms] Groenland GJ. **Tijdschr Diergeneeskd** 1990 May 1;115(9):410–2 (Eng. Abstr.) **(Dut)**

[New waves in rice breeding through molecular technics] Samejima M. **Tanpakushitsu Kakusan Koso** 1989 Nov; 34(14):1879–83 **(Jpn)**

[The mass rearing of the mermithid nematode Romanomermis culicivorax] Vladimirova VV, et al. **Med Parazitol (Mosk)** 1990 Jan–Feb;(1):9–11 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

Variation in frequency in breeding of Anopheles gambiae s.l. and its relationship with in-door adult mosquito density in various localities in Accra, Ghana. Chinery WA. **East Afr Med J** 1990 May;67(5):328–35

[Study on BLUP with reduced animal model in evaluation of performance tested males] Gong BY. **I Chuan Hsueh Pao** 1989;16(2):125–39 (Eng. Abstr.) **(Chi)**

BRENNER TUMOR

Giant Brenner tumor. Case report. Hoffman M, et al. **J Fla Med Assoc** 1989 Sep;76(9):772–3

DIAGNOSIS

Bilateral Brenner tumor. Conforti S, et al. **Eur J Gynaecol Oncol** 1989;10(6):438–41

PATHOLOGY

Neoplasms arising in ectopic ovaries: a case of Brenner tumor in an accessory ovary. Heller DS, et al. **Int J Gynecol Pathol** 1990;9(2):185–9 (16 ref.)

[Brenner tumor. Apropos of 3 recent cases] Balouet P, et al. **Rev Fr Gynecol Obstet** 1990 Apr;85(4):263–6 (Eng. Abstr.) **(Fre)**

[Neoplastic associations of Brenner tumor. Apropos of a case associated with adenocarcinoma of the sigmoid] Belloni AR, et al. **Pathologica** 1990 Jan–Feb;82(1077):101–8 (34 ref.) (Eng. Abstr.) **(Ita)**

SURGERY

Borderline ovarian tumors: a review of treatment. Chambers JT. **Yale J Biol Med** 1989 Jul–Aug;62(4):351–65 (43 ref.)

BRETYLIUM COMPOUNDS

ADVERSE EFFECTS

Oral bretylium tosylate use during pregnancy and subsequent breastfeeding: a case report. Gutgesell M, et al. **Am J Perinatol** 1990 Apr;7(2):144–5

BLOOD

Influence of the ion-pair-formation of bretylium and hexylsalicylic acid on their blood plasma levels in dogs. Härtl A, et al. **Pharmazie** 1990 Apr;45(4):295

PHARMACOKINETICS

Influence of the ion-pair-formation on the pharmacokinetic properties of drugs. Part 5: Influence of ion-pair-formation on elimination of bretylium and hexylsalicylic acid in rats. Neubert R, et al. **Pharmazie** 1989 Sep;44(9):630–1

PHARMACOLOGY

Selective abolition of adrenergic vasoconstrictor responses in skin by local iontophoresis of bretylium. Kellogg DL Jr, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1599–606

The residual spatial abilities of hippocampally lesioned rats can be enhanced by peripheral sympathetic-adrenal interventions. Maier DL, et al. **Behav Neural Biol** 1990 Jan;53(1):123–32

The differential response of normal and ischaemic Purkinje fibres to clofilium, d-sotalol and bretylium. Gough WB, et al. **Cardiovasc Res** 1989 Jun;23(6):554–9

Cerebroventricular calcitonin gene-related peptide inhibits rat duodenal bicarbonate secretion by release of norepinephrine and vasopressin. Lenz HJ, et al. **J Clin Invest** 1990 Jan;85(1):25–32

POISONING

Bretylium intoxication resembling clinical brain death—or did it? [letter] Dobb G. **Crit Care Med** 1990 Aug; 18(8):901–2

Bretylium intoxication resembling clinical brain death [letter; comment] Moore JK, et al. **Crit Care Med** 1990 Mar; 18(3):347 Comment on: Crit Care Med 1989 Feb;17(2):194–5.

THERAPEUTIC USE

A recommendation for reduced lidocaine dosage during intravenous regional bretylium treatment of reflex sympathetic dystrophy [letter; comment] Hanowell LH, et al. **Anesthesiology** 1989 Nov;71(5):811–2 Comment on: Anesthesiology 1988 Jan;68(1):137–40.

Role of intravenous regional bretylium in reflex sympathetic dystrophy [letter] Manchikanti L. **Anesthesiology** 1990 Sep; 73(3):585–6

BRETYLIUM TOSYLATE see under **BRETYLIUM COMPOUNDS**

BREVIBACTERIUM

Corynephage Cog, a virulent bacteriophage of Corynebacterium glutamicum, and its relationship to phi GA1, an inducible phage particle from Brevibacterium flavum. Sonnen H, et al. **J Gen Virol** 1990 Aug;71 (Pt 8):1629–33

ENZYMOLOGY

Purification and properties of the beta-glucosidase from a nitrile hydratase-producing Brevibacterium sp. strain R312. Legras JL, et al. **J Basic Microbiol** 1989;29(10):655–69

GENETICS

Characterization of phi GA1, an inducible phage particle from Brevibacterium flavum. Sonnen H, et al. **J Gen Microbiol** 1990 Mar;136 (Pt 3):567–71

[Cloning and structural-functional analysis in Escherichia coli of genes of glutamate-producing corynebacteria controlling biosynthesis of amino acids of aspartic acid series] Beskrovnaia OIu, et al. **Genetika** 1990 Mar; 26(3):412–7 (Eng. Abstr.) **(Rus)**

METABOLISM

Dioxygenolytic cleavage of aryl ether bonds: 1,10-dihydro-1,10-dihydroxyfluoren-9-one, a novel arene dihydrodiol as evidence for angular dioxygenation of dibenzofuran. Engesser KH, et al. **FEMS Microbiol Lett** 1989 Nov;53(1–2):205–9

Production of hydrogen sulphide in milkfat-coated microcapsules containing Brevibacterium linens and cysteine. Kim SC, et al. **J Microencapsul** 1989 Oct–Dec; 6(4):501–13

BRIDGED COMPOUNDS

The structures of different diastereomers of bicyclo[2.2.1]hept-5-en-2-yl phenyl sulfoxide. Ji X, et al. **Acta Crystallogr B** 1989 Feb 1;45 (Pt 1):93–9

Structure of 5-hydroxy-5-phenyl-7-azatricyclo[7.4.0.02,7]trideca-2,9 (1), 10,12-tetraen-8-one by the consistent electron density approach. Bhat TN, et al. **Acta Crystallogr C** 1990 Jan 15; 46 (Pt 1):116–9

Dendrobine support studies. The structure of a novel 3-azatricyclo[6.2.1.0(4,11)]-undecane derivative. Lynch VM, et al. **Acta Crystallogr C** 1990 Jun 15;46 (Pt 6):1155–7

Structure of the ABC ring subunit of 3-hydroxy-2-oxodendrobine. Lynch VM, et al. **Acta Crystallogr C** 1990 Jun 15;46 (Pt 6):1159–61

Determination of reduced, oxidized, and protein-bound glutathione in human plasma with precolumn derivatization with monobromobimane and liquid chromatography. Svardal AM, et al. **Anal Biochem** 1990 Feb 1;184(2):338–46

Sequential extraction—spectrofluorometric determination of lead and cadmium using cryptands. Gomis DB, et al. **Analyst** 1990 Jan;115(1):89–91

Computer-aided molecular modeling of a thromboxane receptor antagonist S-145 and its related compounds. Ezumi K, et al. **J Med Chem** 1990 Apr;33(4):1117–22

[Hydrophobic constant values (delta RM0) of functional groups. I. Comparative study of delta RM0 values determined in open (TLC) and closed (OPTLC) chromatographic systems] Vámos J, et al. **Acta Pharm Hung** 1989 Sep;59(5):217–29 (Eng. Abstr.) **(Hun)**

ANALYSIS

Structure of 1,4-cubanediyldiammonium bis(trinitromethanide). Ammon HL, et al. **Acta Crystallogr C** 1990 Feb 15;46 (Pt 2):295–8

ANTAGONISTS & INHIBITORS

R 50 595, a selective non-competitive antagonist of cisapride, BRL 24924 and 5-hydroxytryptamine on the guinea-pig ileum. Van den Brink HW, et al. **Eur J Pharmacol** 1990 May 31;181(1–2):119–25

CHEMICAL SYNTHESIS

Metal-ion-governed molecular recognition: extent of intramolecular stack formation in mixed-ligand—copper(II) complexes containing a heteroaromatic N base and an adenosine monophosphate (2'AMP, 3'AMP, or 5'AMP). A structuring effect of the

metal–ion bridge. Massoud SS, et al. **Eur J Biochem** 1990 Jan 26;187(2):387–93

Amides of 1,3,3–trimethyl–n–[(2–pyridyl)methyl]–2–oxabicyclo [2.2.2]octan–6–amine with depressant and antiarrhythmic activities. Mariani E, et al. **Farmaco** 1989 May;44(5):503–10

Stereospecific synthesis and antiviral properties of different enantiomerically pure carbocyclic 2'–deoxyribonucleoside analogues derived from common chiral pools: (+)–(1R,5S)– and (–)–(1S,5R)–2–oxabicyclo[3.3.0]oct–6–en–3–one. Béres J, et al. **J Med Chem** 1990 May;33(5):1353–60

Synthesis and in vitro activity of stereoisomers of a novel thromboxane receptor antagonist, (+–)–(5Z)–7–[3–endo–[(phenylsulfonyl)amino]bicyclo [2.2.1]hept–2–exo–yl]heptenoic acid. Ohtani M, et al. **J Med Chem** 1990 Mar;33(3):1027–31

[The synthesis and pharmacological activities of analogs of erycibe alkaloid II] He HM, et al. **Yao Hsueh Hsueh Pao** 1989;24(5):335–40 (Eng. Abstr.) **(Chi)**

[Studies on synthesis of baogongteng A—a new myotic agent] Xiang Z, et al. **Yao Hsueh Hsueh Pao** 1989; 24(2):105–9 (Eng. Abstr.) **(Chi)**

[Synthesis, stereochemistry and analgesic action of 3,7–diazabicyclo[3.3.1] nonan–9–ones and 1,3–diazaadamantan–6–ones] Samhammer A, et al. **Arch Pharm (Weinheim)** 1989 Sep;322(9):551–5 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

[3H]S–145 and [125I]I–S–145–OH: new radioligands for platelet thromboxane A2 receptor with low nonspecific binding and high binding affinity for various receptor preparations. Ushikubi F, et al. **Eicosanoids** 1989;2(1):21–7

ISOLATION & PURIFICATION

Elimination of contaminant Kryptofix 2.2.2 in the routine production of 2–[18F]fluoro–2–deoxy–D–glucose. Moerlein SM, et al. **Int J Rad Appl Instrum [A]** 1989; 40(9):741–3

METABOLISM

I–BOP, the most potent radiolabelled agonist for the TXA2/PGH2 receptor. Morinelli TA, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1990; 20:102–9

The action of stress and anxiolytic and anxiogenic benzodiazepine receptors ligands on [35S] T–butylbicyclophosphorothionate binding in the rat cerebral cortex. Concas A, et al. **Ann Ist Super Sanita** 1990; 26(1):19–24

Metabolism of a thromboxane A2 antagonist in isolated rat hepatocytes. Higaki J, et al. **Biomed Environ Mass Spectrom** 1989 Dec;18(12):1057–62

[35S]TBPS binding sites are decreased in the colliculi of mice with a genetic predisposition to bicuculline–induced seizures. Peris J, et al. **Brain Res** 1989 Dec 4;503(2):288–95

Dramatic increase in nigral t–[35S]butylbicyclophosphorothionate binding sites elicited by the degeneration of the striato–nigral GABAergic pathway: reversal by diazepam. Sanna E, et al. **Brain Res** 1989 Oct 30;501(1):144–9

Allosteric modulation of t–[35S]butylbicyclophosphorothionate binding in rat brain by melatonin. Niles LP, et al. **Brain Res Bull** 1990 Apr; 24(4):635–8

Folates: epileptogenic effects and enhancing effects on [3H]TBOB binding to the GABAA–receptor complex. Van Rijn CM, et al. **Epilepsy Res** 1990 Apr;5(3):199–208

Antagonism of [3H]zacopride binding to 5–HT3 recognition sites by its (R) and (S) enantiomers. Pinkus LM, et al. **Eur J Pharmacol** 1990 Apr 10;179(1–2):231–5

Association of [3H]zacopride with 5–HT3 binding sites. Pinkus LM, et al. **Eur J Pharmacol** 1989 Sep 22; 168(3):355–62

Binding of the cage convulsant, [3H]TBOB, to sites linked to the GABAA receptor complex. Van Rijn CM, et al. **Eur J Pharmacol** 1990 Apr 25;179(3):419–25

GABAA receptor subtypes: autoradiographic comparison of GABA, benzodiazepine, and convulsant binding sites in the rat central nervous system. Olsen RW, et al. **J Chem Neuroanat** 1990 Jan–Feb;3(1):59–76

Development of benzodiazepine and picrotoxin (t–butylbicyclophosphorothionate) binding sites in rat cerebellar granule cells in culture. Squires RF, et al. **J Neurochem** 1990 Feb;54(2):473–8

Localization and characterization of 35S–t–butylbicyclophosphorothionate binding in rat brain: an autoradiographic study. Edgar PP, et al. **J Neurosci** 1990 Feb;10(2):603–12

[3H]zacopride binding to 5–hydroxytryptamine3 sites on partially purified rabbit enteric neuronal membranes. Gordon JC, et al. **J Pharmacol Exp Ther** 1989 Dec; 251(3):962–8

Nerve growth factor induces 5–HT3 recognition sites in rat pheochromocytoma (PC12) cells. Gordon JC, et al. **Life Sci** 1990;46(20):1435–42

Dependence on gamma–aminobutyric acid of pyrethroid and 4'–chlorodiazepam modulation of the binding of t–[35S]butylbicyclophosphorothionate in piscine brain. Eshleman AJ, et al. **Neuropharmacology** 1990 Jul; 29(7):641–8

Binding of umespirone to the sigma receptor: evidence for multiple affinity states. Itzhak Y, et al. **Neuropharmacology** 1990 Feb;29(2):181–4

Diazepam enhances bicuculline–induced increase of t–[35S]butylbicyclophosphorothionate binding in unwashed membrane preparations from rat cerebral cortex. Concas A, et al. **Neurosci Lett** 1990 Apr 20;112(1):87–91

Comparison of lindane, bicyclophosphate and picrotoxin binding to the putative chloride channel sites in rat brain and Torpedo electric organ. Thompson RG, et al. **Neurotoxicol Teratol** 1990 Jan–Feb;12(1):57–63

Metabolic conversion of cyoctol during skin passage in humans. de Zeeuw RA, et al. **Pharm Res** 1990 Jun; 7(6):638–43

A potent and long–lasting ligand, azabicyclononane (P–7521). Chi ZQ, et al. **Prog Clin Biol Res** 1990;328:1–4

PHARMACOKINETICS

Pharmacokinetics of ramipril in hypertensive patients with renal insufficiency. Schunkert H, et al. **Eur J Clin Pharmacol** 1989;37(3):249–56

PHARMACOLOGY

Tedisamil inactivates transient outward K+ current in rat ventricular myocytes. Dukes ID, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1746–9

DNA damage and sequence specificity of DNA binding of the new anti–cancer agent 1,4–bis(2'–chloroethyl)–1,4–diazabicyclo–[2.2.1] heptane dimaleate (Dabis maleate) [published erratum appears in Br J Cancer 1990 Jul;62(1):172] Broggini M, et al. **Br J Cancer** 1990 Feb;61(2):285–9

Pharmacodynamic, pharmacokinetic and humoral effects of oral zabicipril, an angiotensin converting enzyme inhibitor in normotensive man. MacDonald NJ, et al. **Br J Clin Pharmacol** 1990 Jul;30(1):107–13

A double–blind dose ranging study of BRL 24924 and metoclopramide on lower oesophageal sphincter pressure in healthy volunteers. Robertson CS, et al. **Br J Clin Pharmacol** 1989 Sep;28(3):323–7

Selective anti–platelet aggregation synergism between a prostacyclin–mimetic, RS93427 and the nitrodilators sodium nitroprusside and glyceryl trinitrate. Willis AL, et al. **Br J Pharmacol** 1989 Dec;98(4):1296–302

P–7521—a new irreversible opioid ligand. Jin WQ, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 May;10(3):205–10

High salt diet ameliorates effects of angiotensin converting enzyme inhibition in spontaneously hypertensive streptozotocin diabetic rats. Jackson B, et al. **Clin Exp Pharmacol Physiol** 1990 Mar;17(3):229–34

Ramipril reduces albuminuria in diabetic rats fed a high protein diet. O'Brien RC, et al. **Clin Exp Pharmacol Physiol** 1989 Aug;16(8):675–80

Ramipril. A review of its pharmacological properties and therapeutic efficacy in cardiovascular disorders. Todd PA, et al. **Drugs** 1990 Jan;39(1):110–35 (112 ref.)

Human pharmacology of renzapride: a new gastrokinetic benzamide without dopamine antagonist properties. Staniforth DH, et al. **Eur J Clin Pharmacol** 1990; 38(2):161–4

Effects of the novel compound, Hoe 065, upon impaired learning and memory in rodents. Hock FJ, et al. **Eur J Pharmacol** 1989 Nov 14;171(1):79–85

Antagonistic actions of S–145 on vascular and platelet thromboxane A2 receptors. Mihara S, et al. **Eur J Pharmacol** 1989 Nov 21;171(2–3):179–87

Emetic activity of zacopride in ferrets and its antagonism by pharmacological agents. Sancilio LF, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):303–6

The (S)–isomer of [3H]zacopride labels 5–HT3 receptors with high affinity in rat brain. Waeber C, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):283–7

Effects of Hoe 065, a compound structurally related to inhibitors of angiotensin converting enzyme, on acetylcholine metabolism in rat brain. Wiemer G, et al. **Eur J Pharmacol** 1989 Jul 4;166(1):31–9

Inhibition of converting enzyme in brain tissue and cerebrospinal fluid of rats following chronic oral treatment with the converting enzyme inhibitors ramipril and Hoe 288. Gohlke P, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 4:S32–6

Synthesis of some 3–(1–azabicyclo[2.2.2]octyl) 3–amino–2–hydroxy–2–phenylpropionates: profile of antimuscarinic efficacy and selectivity. Audia VH, et al. **J Med Chem** 1990 Jan;33(1):307–10

Synthesis of thromboxane receptor antagonists with bicyclo[3.1.0]hexane ring systems. Kamata S, et al. **J Med Chem** 1990 Jan;33(1):229–39

Assessment of the in vivo and in vitro opioid activity of bridged hexahydroaporphine and isoquinoline molecules. Roche VF, et al. **J Med Chem** 1990 Jan;33(1):245–8

Synthesis and serotonin binding site studies of some conformationally restricted indolylethylamine analogues based on 2–amino–3–(3'–indolyl)bicyclo[2.2.2]octane. Schlecht MF, et al. **J Med Chem** 1990 Jan;33(1):386–94

Synthesis of a new class of 2,3–dihydro–2–oxo–1H–benzimidazole–1–carboxylic acid derivatives as highly potent 5–HT3 receptor antagonists. Turconi M, et al. **J Med Chem** 1990 Aug;33(8):2101–8

Cytotoxic macrolides from a cultured marine dinoflagellate of the genus Amphidinium. Kobayashi J, et al. **J Nat Prod** 1989 Sep–Oct;52(5):1036–41

AY–31,906, a novel high ceiling diuretic: characterization of its relative potassium–sparing actions in rats and dogs. Ackerman DM, et al. **J Pharmacol Exp Ther** 1989 Dec; 251(3):1113–9

LY277359 maleate: a potent and selective 5–HT3 receptor antagonist without gastroprokinetic activity. Cohen ML, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):350–5

Tedisamil blocks the transient and delayed rectifier K+ currents in mammalian cardiac and glial cells. Dukes ID, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):560–9

Effects of zacopride and BMY25801 (batanopride) on radiation–induced emesis and locomotor behavior in the ferret. King GL, et al. **J Pharmacol Exp Ther** 1990 Jun; 253(3):1026–33

Activation and blockade of the acetylcholine receptor–ion channel by the agonists (+)–anatoxin–a, the N–methyl derivative and the enantiomer. Kofuji P, et al. **J Pharmacol Exp Ther** 1990 Feb;252(2):517–25

Basement membrane biosynthesis as a target to tumor therapy. Maragoudakis ME, et al. **J Pharmacol Exp Ther** 1990 Feb;252(2):753–7

Characterization of an 125I–labeled thromboxane A2/prostaglandin H2 receptor agonist. Morinelli TA, et al. **J Pharmacol Exp Ther** 1989 Nov;251(2):557–62

Inhibition of c–fos transcription and phosphorylation of the serum response factor by an inhibitor of phospholipase C–type reactions. Schalasta G, et al. **Mol Cell Biol** 1990 Oct;10(10):5558–61

Electrophysiological study of tert–butylbicyclophosphorothionate–induced block of spontaneous chloride channels. Hamann M, et al. **Mol Pharmacol** 1990 Apr;37(4):578–82

The effect of ramipril, a new angiotensin–converting enzyme inhibitor on cortical nephron flow and effective renal plasma flow in patients with essential hypertension. al–Nahhas AM, et al. **Nephron** 1990;54(1):47–52

Block by a putative antiarrhythmic agent of a calcium–dependent potassium channel in cultured hippocampal neurons. McLarnon JG. **Neurosci Lett** 1990 May 4:112(2–3):210–5

Antiviral xanthate causes conformational changes in simian virus 40 DNA and chromatin. Waldeck W. **Oncology** 1990; 47(2):191–8

The effect of ethanol on 35S–TBPS binding to mouse brain membranes in the presence of chloride. Liljequist S, et al. **Pharmacol Toxicol** 1989 Nov;65(5):362–7

Absence of interaction between ramipril, a new ACE–inhibitor, and phenprocoumon, an anticoagulant agent. Verho M, et al. **Pharmatherapeutica** 1989;5(6):392–9

[P–8502—a new mu selective opioid receptor ligand] Ge BL, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Jan;10(1):13–6 (Eng. Abstr.) **(Chi)**

[Pharmacological actions of S–145, a novel thromboxane A2 antagonist, in various smooth muscles] Otani K, et al. **Nippon Yakurigaku Zasshi** 1989 Nov;94(5):319–28 (Eng. Abstr.) **(Jpn)**

[Synthesis of derivatives of 2,4–bis(arylmethino)–8–butyl–8–azabicyclo[3.2.1]octan–3–one] Gutkowska B, et al. **Acta Pol Pharm** 1989;46(3):212–8 (Eng. Abstr.) **(Pol)**

[The anticoagulant and antisclerotic effects of isopropoxygermatrane and methylethyl(silatrane–1–ylmethyl)sulfonium iodide] Rasulov MM, et al. **Biull Eksp Biol Med** 1989 Dec; 108(12):692–4 (Eng. Abstr.) **(Rus)**

[The mechanism of membranotropic action of 1–ethoxysilatrane] Rasulov MM, et al. **Dokl Akad Nauk SSSR** 1989;306(6):1479–82 **(Rus)**

[Anticoagulant and antiatherosclerotic effects of 1–ethoxysilatrane] Rasulov MM, et al. **Dokl Akad Nauk SSSR** 1990;310(5):1256–9 **(Rus)**

[Mutagenic effects of newly synthesized pesticides in the bacterial testing system] Rusina OIu, et al. **Gig Sanit** 1990 Mar;(3):59–60 **(Rus)**

[1–Ethoxysilatrane: ulcerostatic effect and its possible mechanisms] Kuznetsov IG, et al. **Vopr Med Khim** 1990 Mar–Apr;36(2):24–7 (Eng. Abstr.) **(Rus)**

POISONING

[Distribution of chostaquick in the rat body after different ways of intake] Girenko DB, et al. **Gig Sanit** 1990 Jan; (1):57–9 **(Rus)**

THERAPEUTIC USE

Significance of kallikrein–kinin and renin–angiotensin systems in the hypotensive mechanism of angiotensin–I converting enzyme inhibitors in essential hypertensives. Iimura O, et al. **Adv Exp Med Biol** 1989;247A:39–48

Metabolic effects of ramipril treatment in hypertensive subjects with non–insulin–dependent diabetes mellitus. Janka HU, et al. **Arzneimittelforschung** 1990 Apr; 40(4):432–5

Protective actions of a new potent thromboxane receptor antagonist in arachidonate induced sudden death. Liao P, et al. **Eicosanoids** 1989;2(1):33–7

Global and regional hemodynamic effects of ramipril in congestive heart failure. Crozier IG, et al. **J Cardiovasc Pharmacol** 1989 Nov;14(5):688–93

The renin–angiotensin system and ramipril, a new converting

enzyme inhibitor. Vasmant D, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 4:S46–52

RG 12915: a potent 5–hydroxytryptamine–3 antagonist that is an orally effective inhibitor of cytotoxic drug–induced emesis in the ferret and dog. Fitzpatrick LR, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):450–5

Protective effects of the specific thromboxane receptor antagonist (+)–S145Na in splanchnic artery occlusion shock in rats. Furlan LE, et al. **J Pharmacol Exp Ther** 1990 May;253(2):525–9

ACE inhibitors after myocardial infarction [letter; comment] Hall AS, et al. **Lancet** 1989 Dec 23–30;2(8678–8679):1527 Comment on: Lancet 1989 Nov 11;2(8672):1133–4.

The effects of bisaramil on experimental arrhythmias. Paróczai M, et al. **Pharmacol Res** 1990 Jul–Aug; 22(4):463–80

[Acute effects of the angiotensin converting enzyme inhibitor ramipril in patients with coronary heart disease] Unterberg C, et al. **Med Klin** 1990 Feb 15;85(2):78–81 (Eng. Abstr.) **(Ger)**

[Atranes: their ulcerostatic effect and its possible mechanisms] Kuznetsov IG, et al. **Izv Akad Nauk SSSR [Biol]** 1990 Jan–Feb;(1):67–74 (Eng. Abstr.) **(Rus)**

[Immunological effects of captopril and ramipril in patients with hypertension] Vil'chinskaia MIu, et al. **Klin Med (Mosk)** 1990 Feb;68(2):61–4 (Eng. Abstr.) **(Rus)**

[Changes in the periodontium in prolonged hypodynamia and the use of biphosphanates and silatrane for the purpose of their prevention] Volozhin AI, et al. **Patol Fiziol Eksp Ter** 1989 May–Jun;(3):72–5 (Eng. Abstr.) **(Rus)**

TOXICITY

Emesis and defecations induced by the 5–hydroxytryptamine (5–HT3) receptor antagonist zacopride in the ferret. King GL. **J Pharmacol Exp Ther** 1990 Jun;253(3):1034–41

gamma–Aminobutyric acid antagonism produced by an organophosphate–containing combustion product. Higgins GM, et al. **Toxicol Appl Pharmacol** 1990 Aug;105(1):103–12

Hypopigmentation in dogs treated with an inhibitor of platelet aggregation. Walsh KM, et al. **Toxicol Pathol** 1989; 17(3):549–53

BRIGHT DISEASE see **GLOMERULONEPHRITIS**

BRILL–SYMMERS DISEASE see **LYMPHOMA, GIANT FOLLICULAR**

BRILL'S DISEASE see under **TYPHUS, EPIDEMIC LOUSE–BORNE**

BRINE SHRIMP see **ARTEMIA**

BRINOLASE see under **PEPTIDE HYDROLASES**

BRIQUET SYNDROME see **SOMATOFORM DISORDERS**

BROAD BETA DISEASE see **HYPERLIPOPROTEINEMIA TYPE III**

BROAD LIGAMENT see under **ADNEXA UTERI**

BROCA AREA see **FRONTAL LOBE**

BROCK'S SYNDROME see **MIDDLE LOBE SYNDROME**

BROCRESINE see under **CRESOLS**

BROMATES see under **BROMINE**

BROMAZEPAM see under **BENZODIAZEPINE TRANQUILIZERS**

BROMCHLORTRIFLUORETHANE see **HALOTHANE**

BROMCRESOL GREEN see under **CRESOLS**

BROMCRESOL PURPLE see under **CRESOLS**

BROMELAINS

Diversity in the available repertoire of murine antibodies reactive with bromelain–treated isologous erythrocytes. Conger JD, et al. **J Immunol** 1989 Dec 15;143(12):4044–52

ANALYSIS

Conformational studies on the N–linked carbohydrate chain of bromelain. Bouwstra JB, et al. **Eur J Biochem** 1990 May 31;190(1):113–22

METABOLISM

Differences in substrate specificities for cysteine proteinases used in blood group serology, and the use of bromelain in a two–phase inhibitor technique. Ogasawara K, et al. **Vox Sang** 1989;57(1):72–6

PHARMACOLOGY

Ultrastructure and some biological properties of influenza A virus. IV. Effect of proteolytic enzymes on viral particle. Chomik M, et al. **Arch Immunol Ther Exp (Warsz)** 1988; 36(5):555–66

Growth acceleration of Ehrlich ascites tumor cells treated by proteinase in vitro. Adamietz IA, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1837–41

On the pharmacology of bromelain: an update with special regard to animal studies on dose–dependent effects. Lotz–Winter H. **Planta Med** 1990 Jun;56(3):249–53 (27 ref.)

BROMELINS see **BROMELAINS**

BROMHEXINE

[Interaction between polyethylene films and brombexine HCl in solid dosage form. II. Effects of moisture property on the sorption of the drug] Kukita T, et al. **Yakugaku Zasshi** 1990 Feb;110(2):127–32 (Eng. Abstr.) **(Jpn)**

[Interaction between polyethylene films and bromhexine HCl in solid dosage forms. I. Effects of moisture contents in the solid dosage forms on the sorption of the drug] Kukita T, et al. **Yakugaku Zasshi** 1989 Dec;109(12):943–8 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Percutaneous intracavitary treatment of a giant aspergilloma [letter] Lee KS, et al. **AJR Am J Roentgenol** 1990 Jun; 154(6):1346

ANALOGS & DERIVATIVES

Failure of ambroxol to influence the allergen induced bronchial constriction in sensitized guinea pigs. Becher G, et al. **Biomed Biochim Acta** 1989;48(8):589–92

Steady–state bioavailability and pharmacokinetics of ambroxol and clenbuterol administered alone and combined in a new oral formulation. Couet W, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Sep;27(9):467–72

[Ambroxol versus betamethasone for the promotion of antepartum lung maturity in pathological pregnancies] Heytmanek G, et al. **Wien Klin Wochenschr** 1990 Aug 3; 102(15):443–8 (Eng. Abstr.) **(Ger)**

[Combination of oral bacterial vaccines and antibiotics in acute recurrent respiratory infections] Lauriello G, et al. **Clin Ter** 1990 Apr 30;133(2):87–90 (Eng. Abstr.) **(Ita)**

[Prophylaxis and treatment of bronchopulmonary complications with ambroxol administered by infusion in elderly patients undergoing surgery] Bavaro P, et al. **G Chir** 1989 Oct;10(10):605–9 (Eng. Abstr.) **(Ita)**

[Effect of ambroxol on surfactant lipids in patients after resection of pulmonary tissue] Jabłonka S, et al. **Pneumonol Pol** 1989 Jun;57(6):357–62 (Eng. Abstr.) **(Pol)**

[Effectiveness of lasolvan and bromhexine in chronic nonspecific lung diseases] Solopov VN, et al. **Sov Med** 1989;(6):82–4 **(Rus)**

[Incorporation of a stimulant of synthesis and secretion of a pulmonary surfactant (ambroxol) into the treatment of otitis serosa] Bautista Calero del Castillo J, et al. **Acta Otorrinolaringol Esp** 1988 Jan–Feb;39(1):61–4 (Eng. Abstr.) **(Spa)**

PHARMACOLOGY

The effect of bromhexine hydrochloride on the viscoelastic properties of mucus from the mini–pig. Martin GP, et al. **Eur Respir J** 1990 Apr;3(4):392–6

Effect of bromhexine on nasal mucus clearance in chronic maxillary sinusitis. Goel H, et al. **Indian J Chest Dis Allied Sci** 1989 Jan–Mar;31(1):33–6

[Effects of inhaled bromhexine on the bronchomotor tone in rats and guinea pigs] Misawa M, et al. **Nippon Yakurigaku Zasshi** 1989 Aug;94(2):123–8 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Italian multicenter study on the treatment of chronic obstructive lung disease with bromhexine. A double–blind placebo–controlled trial. Valenti S, et al. **Respiration** 1989; 56(1–2):11–5

A follow–up study of the progress of keratoconjunctivitis sicca and response to treatment in primary Sjögren's syndrome. Kriegbaum NJ, et al. **Scand J Rheumatol** 1989; 18(4):193–6

[Effectiveness of lasolvan and bromhexine in chronic nonspecific lung diseases] Solopov VN, et al. **Sov Med** 1989;(6):82–4 **(Rus)**

[The existence of sinusitis in rabbits and the use of bromhexine as a mucolytic nose drop in the treatment of sinusitis] Koyuncu M, et al. **Mikrobiyol Bul** 1989 Apr; 23(2):133–44 (Eng. Abstr.) **(Tur)**

BROMIDES

ADMINISTRATION & DOSAGE

Pseudomonas folliculitis: an outbreak associated with bromine–based disinfectants—British Columbia. Penn C, et al. **Can Dis Wkly Rep** 1990 Feb 17;16(7):31–3 **(Eng, Fre)**

[The use of iodobromine water on patients with periodontitis at a health resort] Egorov LV. **Stomatologiia (Mosk)** 1990 May–Jun;69(3):34–5 (Eng. Abstr.) **(Rus)**

BLOOD

Measurement of extracellular water volume by bromide ion chromatography. Wong WW, et al. **Am J Clin Nutr** 1989 Dec;50(6):1290–4

Determination of nitrite, sulphate, bromide and nitrate in human serum by ion chromatography. Michigami Y, et al. **Analyst** 1989 Oct;114(10):1201–5

Bromide interference: is less really better? [see comments] Emancipator K, et al. **Clin Chem** 1990 Aug;36(8 Pt 1):1470–3 Comment in: Clin Chem 1990 Aug;36(8 Pt 1):1399–403.

DIAGNOSTIC USE

Strontium and bromide as tracers in X–ray microanalysis of biological tissue. Wroblewski J, et al. **Scanning Microsc** 1989 Sep;3(3):861–4

HISTORY

This and that: on artificial fats and the first effective treatment for fits. Max B. **Trends Pharmacol Sci** 1990 Jun;11(6):225–9

METABOLISM

High mobility group proteins 1 and 2 bind preferentially to brominated poly(dG–dC).poly(dG–dC) in the Z–DNA conformation but not to other types of Z–DNA. Christen T, et al. **FEBS Lett** 1990 Jul 2;267(1):139–41

Compound I formation is a partially rate–limiting process in chloroperoxidase–catalyzed bromination reactions. Libby RD, et al. **J Biol Chem** 1990 Sep 5;265(25):14808–11

Analysis of anion conductance in frog skin. Nagel W, et al. **Pflugers Arch** 1990 Apr;416(1–2):53–61

PHARMACOLOGY

Inhibition by sodium bromide of synaptic potentiation and calcium accumulation in the superior cervical ganglion of rat. Párducz A, et al. **Acta Biol Hung** 1989;40(3):221–8

[The cellular mechanisms of the physiological action of iodobromide mineral waters] Serov SI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1990 Jan–Feb; (1):36–40 (Eng. Abstr.) **(Rus)**

[Mechanisms of the action of hypertonic solutions on the ionic permeability of human skin] Tereshin SIu, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jul–Aug;(4):14–8 (Eng. Abstr.) **(Rus)**

POISONING

Hyperchloremia and the incidence of bromism in 1990 [comment] Bowers GN Jr, et al. **Clin Chem** 1990 Aug;36(8 Pt 1):1399–403 Comment on: Clin Chem 1990 Aug;36(8 Pt 1):1470–3.

Biological exposure monitoring of methyl bromide workers by determination of hemoglobin adducts. Iwasaki K, et al. **Ind Health** 1989;27(4):181–3

Bromide intoxication secondary to pyridostigmine bromide therapy [see comments] Rothenberg DM, et al. **JAMA** 1990 Feb 23;263(8):1121–2 Comment in: JAMA 1990 Jul 25;264(4):454–5.

THERAPEUTIC USE

Bromide therapy for pediatric seizure disorder intractable to other antiepileptic drugs. Woody RC. **J Child Neurol** 1990 Jan;5(1):65–7

Medical management of recurrent seizures in dogs and cats [letter] Sisson A. **J Vet Intern Med** 1990 May–Jun;4(3):181

BROMINATED HYDROCARBONS see **HYDROCARBONS, BROMINATED**

BROMINE

Bromination, no–carrier–added radiobromination and simultaneously–occurring chlorination by chloramine T. Suehiro M, et al. **Int J Rad Appl Instrum [A]** 1990; 41(5):439–47

Z helix–coil transition of d(C–Br8G–C–G–C–Br8G) studied by CD, 1H–NMR and IR spectroscopies. Taboury JA, et al. **J Biomol Struct Dyn** 1985 Jun;2(6):1185–203

ANALYSIS

Determination of iodine and bromine in plasma and urine by inductively coupled plasma mass spectrometry. Allain P, et al. **Analyst** 1990 Jun;115(6):813–5

The distribution of bromine content of dibromodulcitol in the central nervous system of patients with malignant gliomas. Sziklai IL, et al. **Eur J Cancer** 1990 Feb; 26(2):79–82

[Determination of bromide ions in total blood, plasma and urine by ion chromatography with amperometric detection] Abuku S, et al. **Nippon Eiseigaku Zasshi** 1989 Dec; 44(5):945–52 (Eng. Abstr.) **(Jpn)**

METABOLISM

Antibody recognition of common epitopes on Z–DNA and native DNA brominated under high salt. Hasan R, et al. **Biochem Int** 1990;20(6):1077–88

Effects of nucleotide bromination on the stabilities of Z–RNA and Z–DNA: a molecular mechanics/thermodynamic perturbation study. Ross WS, et al. **Biopolymers** 1989 Nov;

28(11):1939–57

PHARMACOLOGY

Effects of sodium bromate and nitrogen mustard on endocochlear DC potential and electrical resistance of the cochlear partition in normal and kanamycin–treated guinea pigs. Asakuma S, et al. **Surg Forum** 1978;29:573–5

POISONING

Bromate intoxication: hairdressers' anuria. Kutom A, et al. **Am J Kidney Dis** 1990 Jan;15(1):84–5

Treatment of bromate poisoning [letter; comment] Warshaw BL. **J Pediatr** 1989 Oct;115(4):660–1 Comment on: J Pediatr 1989 May;114(5):891–4.

Confusion from pyridostigmine bromide: was there bromide intoxication? [letter; comment] Senecal PE, et al. **JAMA** 1990 Jul 25;264(4):454–5 Comment on: JAMA 1990 Feb 23;263(8):1121–2.

[Reversible dementia syndrome due to chronic bromide poisoning caused by drugs (letter)] Habib M, et al. **Presse Med** 1989 Oct 7;18(31):1528 **(Fre)**

BROMINE RADIOISOTOPES

Bromination, no–carrier–added radiobromination and simultaneously–occurring chlorination by chloramine T. Suehiro M, et al. **Int J Rad Appl Instrum [A]** 1990; 41(5):439–47

DIAGNOSTIC USE

Comparison of the distribution of bromine–77–bromovinyl steroidal and triphenylethylene estrogens in the immature rat. DeSombre ER, et al. **J Nucl Med** 1990 Sep; 31(9):1534–42

THERAPEUTIC USE

Receptor–directed radiotherapy: a new approach to therapy of steroid receptor positive cancers. DeSombre ER, et al. **Prog Clin Biol Res** 1990;322:295–309 (22 ref.)

BROMISOVALUM see under **UREA**

8–BROMO–CAMP see **8–BROMO CYCLIC ADENOSINE MONOPHOSPHATE**

8–BROMO CYCLIC ADENOSINE MONOPHOSPHATE

ANALOGS & DERIVATIVES

Changes in diacylglycerol and membrane associated protein kinase C activity reflect the growth status of xenografted human mammary carcinoma treated with 8–Cl–cAMP. Parandoosh Z, et al. **Cancer Lett** 1990 Mar;49(3):195–200

8–Chloro–cAMP inhibits transforming growth factor alpha transformation of mammary epithelial cells by restoration of the normal mRNA patterns for cAMP–dependent protein kinase regulatory subunit isoforms which show disruption upon transformation. Ciardiello F, et al. **J Biol Chem** 1990 Jan 15;265(2):1016–20

PHARMACOLOGY

Heterogeneity of cAMP effect on endosomal proton transport. Gurich RW, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):F777–84

Serum–induced proliferation of rabbit aortic smooth muscle cells from the contractile state is inhibited by 8–Br–cAMP but not 8–Br–cGMP. Southgate K, et al. **Atherosclerosis** 1990 May;82(1–2):113–23

IL1 induces proliferation and IL6 mRNA expression in a human astrocytoma cell line: positive and negative modulation by chorela toxin and cAMP. Kasahara T, et al. **Biochem Biophys Res Commun** 1990 Mar 30; 167(3):1242–8

8–Bromo–cyclic GMP inhibits the calcium channel current in embryonic chick ventricular myocytes. Wahler GM, et al. **Can J Physiol Pharmacol** 1990 Apr;68(4):531–4

Inactivation of pertussis toxin–sensitive guanyl nucleotide–binding protein increase parathyroid hormone receptors and reverse agonist–induced receptor down–regulation in ROS 17/2.8 cells. Abou–Samra AB, et al. **Endocrinology** 1989 Nov;125(5):2594–9

Plasmids encoding PKI(1–31), a specific inhibitor of cAMP–stimulated gene expression, inhibit the basal transcriptional activity of some but not all cAMP–regulated DNA response elements in JEG–3 cells. Grove JR, et al. **J Biol Chem** 1989 Nov 25;264(33):19506–13

Inhibition of the signaling pathways for macrophage proliferation by cyclic AMP. Lack of effect on early responses to colony stimulating factor–1. Vairo G, et al. **J Biol Chem** 1990 Feb 15;265(5):2692–701

Inhibition of bicarbonate absorption by peptide hormones and cyclic adenosine monophosphate in rat medullary thick ascending limb. Good DW. **J Clin Invest** 1990 Apr; 85(4):1006–13

Plasmodium falciparum gametocyte formation in vitro: its stimulation by phorbol diesters and by 8–bromo cyclic adenosine monophosphate. Trager W, et al. **J Protozool** 1989 Sep–Oct;36(5):451–4

Inhibition by the protein kinase inhibitors, isoquinolinesulfonamides, of fluid accumulation induced by Escherichia coli heat–stable enterotoxin, 8–bromo–cGMP and 8–bromo–cAMP in suckling mice. Hirayama T, et al. **Microb Pathog** 1989 Oct;7(4):255–61

Induction of differentiation in v–Ha–ras–transformed MDCK cells by prostaglandin E2 and 8–bromo–cyclic AMP is associated with a decrease in steady–state level of inositol 1,4,5–trisphosphate. Wu YY, et al. **Mol Cell Biol** 1990 Jan; 10(1):57–67

Cyclic nucleotide regulation of plasminogen activator and plasminogen activator–inhibitor messenger RNAs in rat hepatoma cells. Heaton JH, et al. **Mol Endocrinol** 1990 Jan; 4(1):171–8

Effects of either forskolin, the 1,9–dideoxy derivative of forskolin, or 8–bromocyclic AMP on cyclic AMP and melatonin production in the Syrian hamster pineal gland in organ culture. Santana C, et al. **Neurosci Lett** 1989 Sep 11;103(3):338–42

Mediation of primary afferent peripheral hyperalgesia by the cAMP second messenger system. Taiwo YO, et al. **Neuroscience** 1989;32(3):577–80

cAMP regulates P450scc gene expression by a cycloheximide–insensitive mechanism in cultured mouse Leydig MA–10 cells. Mellon SH, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7775–9

Conditions that alter intracellular cAMP levels affect expression of the cAMP phosphodiesterase gene in Dictyostelium. Riley BB, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4746–50

BROMOBENZENES

ADMINISTRATION & DOSAGE

Bromfenac, acetaminophen, and placebo in orthopedic postoperative pain. McQuay HJ, et al. **Clin Pharmacol Ther** 1990 Jun;47(6):760–6

METABOLISM

Bromobenzene metabolism in vivo and in vitro. The mechanism of 4–bromocatechol formation. Miller NE, et al. **Drug Metab Dispos** 1990 May–Jun;18(3):304–8

PHARMACOLOGY

Microheterogeneity of biliverdin reductase in rat liver and spleen: selective suppression of enzyme variants in liver by bromobenzene. Huang TJ, et al. **Arch Biochem Biophys** 1989 Nov 1;274(2):617–25

The effect of prostaglandin synthetase inhibitors on human preovulatory follicular fluid prostaglandin, thromboxane, and leukotriene concentrations. Priddy AR, et al. **J Clin Endocrinol Metab** 1990 Jul;71(1):235–42

Bromfenac, a new nonsteroidal anti–inflammatory drug: relationship between the anti–inflammatory and analgesic activity and plasma drug levels in rodents. Nolan JC, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):104–8

Bromobenzene–mediated alteration in activity and electrophoretic pattern of biliverdin reductase variants in rat kidney. Huang TJ, et al. **Mol Pharmacol** 1990 Jan; 37(1):25–9

TOXICITY

Activation and toxicity of bromobenzene in nasal tissue in mice. Brittebo EV, et al. **Arch Toxicol** 1990;64(1):54–60

Species differences in short term toxicity from inhalation exposure to bromobenzene. Dahl JE, et al. **Arch Toxicol** 1990;64(5):370–6

Decabromodiphenyl oxide. **IARC Monogr Eval Carcinog Risks Hum** 1990;48:73–84 (35 ref.)

The role of acinar zone 3 hepatocytes in bile formation: influence of bromobenzene treatment on bile formation in the rat. Dionne S, et al. **Liver** 1990 Apr;10(2):85–93

BROMOBENZOATES

METABOLISM

Degradation of 2–bromobenzoic acid by a strain of Pseudomonas aeruginosa. Higson FK, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1615–9

BROMOCRIPTINE

ADMINISTRATION & DOSAGE

Bromocriptine as initial therapy in elderly parkinsonian patients. The Bromocriptine Multicentre Trial Group. **Age Ageing** 1990 Jan;19(1):62–7

Porcine stress syndrome: an animal model for the neuroleptic malignant syndrome? Keck PE Jr, et al. **Biol Psychiatry** 1990 Jul 1;28(1):58–62

Lactation inhibition by a single injection of a new depot–bromocriptine. Kremer JA, et al. **Br J Obstet Gynaecol** 1990 Jun;97(6):527–32

The combination therapy with bromocriptine and cyproheptadine in patients with acromegaly. Hanew K, et al. **Endocrinol Jpn** 1989 Jun;36(3):429–38

Comparison of four different dosages of injectable bromocriptine retard for puerperal ablactation. Duthie SJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Mar; 34(3):223–8

Long–term treatment with a new repeatable injectable form of bromocriptine, Parlodel LAR, in patients with tumorous hyperprolactinemia. Ciccarelli E, et al. **Fertil Steril** 1989 Dec;52(6):930–5

Rapid improvement of visual defects with parenteral depot–bromocriptine in a patient with a non–functioning pituitary adenoma. García–Luna PP, et al. **Horm Res** 1989; 32(5–6):183–7

[Long–term bromocriptine treatment of giant prolactinoma: report of a case] Mashio Y, et al. **Nippon Naika Gakkai Zasshi** 1989 Dec;78(12):1785–6 **(Jpn)**

ADVERSE EFFECTS

Postpartum cardiovascular complications after bromocriptine and cocaine use. Bakht FR, et al. **Am J Obstet Gynecol** 1990 Apr;162(4):1065–6

Bromocriptine–associated retroperitoneal fibrosis presenting with testicular retraction. Murphy F, et al. **Br J Urol** 1989 Sep;64(3):318–9

Possible cocaine predisposition to adverse cerebrovascular and cardiovascular sequelae of bromocriptine administered postpartum. Miller LG, et al. **J Clin Pharmacol** 1989 Sep; 29(9):781–5

The behavioral toxicity of bromocriptine in patients with psychiatric illness. Perovich RM, et al. **J Clin Psychopharmacol** 1989 Dec;9(6):417–22

Puerperal psychosis following ablaction with bromocriptine. Iffy L, et al. **Med Law** 1989;8(2):171–4

Bromocriptine–induced hypothermia. Pfeiffer RF. **Neurology** 1990 Feb;40(2):383

Bromocriptine mesylate for lactation suppression: a risk for postpartum hypertension? Watson DL, et al. **Obstet Gynecol** 1989 Oct;74(4):573–6

Cerebrospinal fluid rhinorrhea occurring in long–term bromocriptine treatment for macroprolactinomas. Bronstein MD, et al. **Surg Neurol** 1989 Nov;32(5):346–9

CSF rhinorrhea after dopamine agonist treatment for invasive macroprolactinoma [letter] Hildebrandt G. **Surg Neurol** 1990 Aug;34(2):133

[Bromocriptine and pulmonary responses] Kinnunen E, et al. **Duodecim** 1989;105(19):1614–7 **(Fin)**

[Anasarca during treatment with bromocriptine (letter)] Thomas P, et al. **Presse Med** 1989 Sep 23;18(29):1440 **(Fre)**

[Pleural effusion induced by bromocriptine] Diot E, et al. **Rev Mal Respir** 1990;7(2):175–7 (Eng. Abstr.) **(Fre)**

[Reversible retroperitoneal fibrosis after prolonged treatment with bromocriptine: apropos of 2 cases (letter)] Dupuis J, et al. **Rev Med Interne** 1990 Mar–Apr;11(2):183 **(Fre)**

[Bromocriptine–associated postpartum psychotic exacerbation] Durst R, et al. **Harefuah** 1990 Feb 15; 118(4):203–4 (Eng. Abstr.) **(Heb)**

[Acute myocardial infarction probably induced by the oral administration of bromocriptine: a case report] Hara M, et al. **J Cardiol** 1989 Jun;19(2):609–14 (Eng. Abstr.) **(Jpn)**

[A case of bromocriptine–induced interstitial pneumonitis in an iron factory worker exposed to sand dust] Itoh H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Oct; 27(10):1221–5 (Eng. Abstr.) **(Jpn)**

[A case of toxic psychosis caused by bromocriptine] Jimeno Valdés A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Nov–Dec;17(6):386–90 (19 ref.) (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

Bromocriptine blood levels after the concomitant administration of levodopa, amantadine and biperiden in Parkinson's disease. Rabey JM, et al. **Acta Neurol Scand** 1990 May;81(5):411–5

The influence of levodopa in the pharmacokinetics of bromocriptine in Parkinson's disease. Rabey JM, et al. **Clin Neuropharmacol** 1989 Oct;12(5):440–7

Pharmacokinetic evaluation of erythromycin and caffeine administered with bromocriptine. Nelson MV, et al. **Clin Pharmacol Ther** 1990 Jun;47(6):694–7

PHARMACOLOGY

Effect of suppression of prolactin on gonadal function in immature male hamsters. Rao AJ, et al. **Andrologia** 1989 Sep–Oct;21(5):498–501

Bromocriptine alters hormone rhythms and lipid metabolism in swine. Cincotta AH, et al. **Ann Nutr Metab** 1989; 33(6):305–14

A comparison of the ocular hypotensive effect of 0.025% bromocriptine and 0.25% timolol eye drops in normal human volunteers. al–Sereiti MR, et al. **Br J Clin Pharmacol** 1989 Oct;28(4):443–7

Changes of blood flow in oestrogen–induced hyperplastic anterior pituitary lobe following bromocriptine administration. Kemeny AA, et al. **Br J Neurosurg** 1987; 1(2):243–50

Bromocriptine–induced rotation: characterization using a striatal efferent lesion in the mouse. Mandel RJ, et al. **Brain Res Bull** 1990 Feb;24(2):175–80

Plasma and pituitary thyroid–stimulating hormone and their responses to bromocriptine in the Japanese strains of hypertensive and normotensive rats and the F2 generation of the hybrid. Tan BK, et al. **Clin Exp Hypertens [A]** 1990;

12(3):355–64
Changes in saline and water intakes in bromocriptine–treated genetically hypertensive and normotensive rats. Tan BK, et al. **Clin Exp Pharmacol Physiol** 1990 Feb;17(2):129–33
Plasma and pituitary thyroid–stimulating hormone levels in bromocriptine–treated New Zealand genetically hypertensive and normotensive rats. Tan BK, et al. **Clin Exp Pharmacol Physiol** 1990 Jun;17(6):439–43
Bromocriptine microcapsules inhibit ornithine decarboxylase activity induced by Freund's complete adjuvant in lymphoid tissues of male rats. Neidhart M. **Endocrinology** 1989 Dec;125(6):2846–52
Modification of morphine–induced analgesia, tolerance and dependence by bromocriptine. Gomaa AA, et al. **Eur J Pharmacol** 1989 Nov 7;170(3):129–35
A comparison among the effectiveness of growth hormone suppression in active acromegaly of bromocriptine and long acting somatostatin analogue (SMS 201–995). Popović V, et al. **Exp Clin Endocrinol** 1990 Apr;95(2):251–7
Effects of prolactin and androgens on seminal vesicular lipids of castrated mature bonnet monkeys Macaca radiata. Arunakaran J, et al. **Indian J Exp Biol** 1989 Apr; 27(4):329–33
Bromocriptine–induced reduction of body fat in pigs. Southern LL, et al. **J Anim Sci** 1990 Apr;68(4):931–6
Cardiovascular effects of bromocriptine in rats: role of peripheral adrenergic and dopaminergic receptors. Roquebert J, et al. **J Auton Pharmacol** 1990 Apr;10(2):85–96
Bromocriptine increasingly suppresses the in vitro gonadotropin and alpha–subunit release from pituitary adenomas during long term culture. Kwekkeboom DJ, et al. **J Clin Endocrinol Metab** 1990 Sep;71(3):718–24
Bromocriptine reduces rat thyrotropin beta–subunit mRNA stability. Levy A, et al. **J Endocrinol Invest** 1990 Jan; 13(1):49–53
The influence of transient hyperprolactinemia on hormonal parameters, oocyte recovery, and fertilization rates in in vitro fertilization. Gonen Y, et al. **J In Vitro Fert Embryo Transf** 1989 Jun;6(3):155–9
Glutamate uptake into synaptic vesicles: competitive inhibition by bromocriptine. Carlson MD, et al. **J Neurochem** 1989 Dec;53(6):1889–94
Bromocriptine–induced decrease in blood pressure in conscious spontaneously hypertensive rats: evidence for a peripheral site of action. van den Buuse M, et al. **J Pharm Pharmacol** 1989 Sep;41(9):644–6
Reductions of body fat stores and total plasma cholesterol and triglyceride concentrations in several species by bromocriptine treatment. Cincotta AH, et al. **Life Sci** 1989; 45(23):2247–54
Effects of chronic treatment with haloperidol and bromocriptine on the processing of beta–endorphin to gamma– and alpha–endorphin in discrete regions of the rat pituitary gland and brain. Sweep CG, et al. **Neuropharmacology** 1990 Jan;29(1):61–8
Bromocriptine antagonizes behavioral effects of cocaine in the rat. Campbell A, et al. **Neuropsychopharmacology** 1989 Sep;2(3):209–24
Bromocriptine produces decreases in cocaine self–administration in the rat. Hubner CB, et al. **Neuropsychopharmacology** 1990 Apr;3(2):101–8
Influence of metoclopramide and bromocriptine upon the growth of human and murine neuroblastoma cells. Busse E, et al. **Oncology** 1990;47(2):199–205
Effects of bromocriptine pretreatment on subjective and physiological responses to i.v. cocaine. Kumor K, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):829–37
Effects of bromocriptine and desipramine on behavior maintained by cocaine or food presentation in rhesus monkeys. Kleven MS, et al. **Psychopharmacology (Berl)** 1990;101(2):208–13
Free–choice responding for ethanol versus water in alcohol preferring (P) and unselected Wistar rats is differentially modified by naloxone, bromocriptine, and methysergide. Weiss F, et al. **Psychopharmacology (Berl)** 1990; 101(2):178–86
Bromocriptine self–administration and bromocriptine–reinstatement of cocaine–trained and heroin–trained lever pressing in rats. Wise RA, et al. **Psychopharmacology (Berl)** 1990;100(3):355–60
Bromocriptine induces climbing behaviour: possible D–1 or D–2 dopamine receptor involvement. Zarrindast MR, et al. **Psychopharmacology (Berl)** 1990;100(2):275–80
Effects of bromocriptine at parturition in the tammar wallaby, Macropus eugenii. Fletcher TP, et al. **Reprod Fertil Dev** 1990;2(1):79–88
Effect of bromocriptine and progesterone on the length of the ovarian cycle in 4– and 5–day estrous cyclic rats. Sánchez–Criado JE, et al. **Rev Esp Fisiol** 1989 Sep; 45(3):235–8
Ultrastructure of pituitary folliculo–stellate cells of lactating rat during treatment with 2–bromo–alpha–ergocriptine. Sbarbati A, et al. **Tissue Cell** 1989;21(6):841–7
Hysterectomy during the luteal period in dogs chronically treated with bromocriptine. Okkens AC, et al. **Vet Q** 1989 Oct;11(4):254–6
[Effect of bromocriptine and bromocriptine combined with prolactin on the proliferation of thymocytes in young rats] Aboussaouira T, et al. **C R Acad Sci [III]** 1989;309(8):281–7 (Eng. Abstr.) **(Fre)**
[The effect of prolactin and bromocriptine on testicular incretory function] Gladkova AI. **Farmakol Toksikol** 1989 Sep–Oct;52(5):107–15 (103 ref.) (Eng. Abstr.) **(Rus)**
[Pathogenic aspects of duodenal ulcers by cysteamine. Role of the Brunner glands] Laudanno OM, et al. **Acta Gastroenterol Latinoam** 1988;18(3):187–94 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Parlodel LAR in the treatment of macroprolactinomas. Kocijancic A, et al. **Acta Endocrinol (Copenh)** 1990 Feb; 122(2):272–6
Long–term bromocriptine treatment of de novo patients with Parkinson's disease. A seven–year follow–up. Bergamasco B, et al. **Acta Neurol Scand** 1990 May;81(5):383–7
Hachimijiogan treatment is effective in the management of infertile women with hyperprolactinemia or bromocriptine–resistant hyperprolactinemia. Usuki S, et al. **Am J Chin Med** 1989;17(3–4):225–41
Acromegaly first diagnosed in pregnancy: the role of bromocriptine therapy. Yap AS, et al. **Am J Obstet Gynecol** 1990 Aug;163(2):477–8
Visual function improvement in patients with macroprolactinomas treated with bromocriptine. Lesser RL, et al. **Am J Ophthalmol** 1990 May 15;109(5):535–43
Treatment of hyperprolactinemia in major depression [letter] Holroyd S, et al. **Am J Psychiatry** 1990 Jun;147(6):810
Bromocriptine as an adjuvant to cyclosporine immunosuppression after heart transplantation. Carrier M, et al. **Ann Thorac Surg** 1990 Jan;49(1):129–32
Treatment of tardive dyskinesia with bromocriptine. A test of the receptor modification strategy. Lieberman JA, et al. **Arch Gen Psychiatry** 1989 Oct;46(10):908–13
Outcome of treatment with bromocriptine in patients with hyperprolactinaemia. al–Suleiman SA, et al. **Aust N Z J Obstet Gynaecol** 1989 May;29(2):176–9
Controlled trial of the prolactin inhibitor bromocriptine (Parlodel) in the treatment of severe cyclical mastalgia. Nazli K, et al. **Br J Clin Pract** 1989 Sep;43(9):322–7
Bromocriptine in the Rett syndrome. Zappella M, et al. **Brain Dev** 1990;12(2):221–5
A double blind trial of bromocriptine in the Rett syndrome. Zappella M. **Brain Dev** 1990;12(1):148–50
Endocrine effects of combined somatostatin analog and bromocriptine therapy in women with advanced breast cancer. Manni A, et al. **Breast Cancer Res Treat** 1989 Dec; 14(3):289–98
Differential response to aminergic stimuli and biological behavior of growth hormone secreting pituitary adenomas. Fanghanel G, et al. **Can J Neurol Sci** 1990 Feb;17(1):78–82
Results of primary treatment with bromocriptine of prolactinomas with extrasellar extension. van 't Verlaat JW, et al. **Can J Neurol Sci** 1990 Feb;17(1):71–3
Attenuating effect of bromocriptine on cysteamine anticarcinogenesis of stomach cancers induced by N–methyl–N'–nitro–N–nitrosoguanidine. Tatsuta M, et al. **Cancer Res** 1990 Sep 1;50(17):5308–11
Thyrotropin–and prolactin–secreting pituitary tumor dissociated hormonal response to bromocriptine. Jap TS, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Mar;45(3):191–5
Perifusion studies of bromocriptine–treated and untreated macroprolactinomas: effects of dopamine, bromocriptine and TRH. Bevan JS, et al. **Clin Endocrinol (Oxf)** 1989 Jun; 30(6):667–80
A double–blind study comparing a new non–ergot, long–acting dopamine agonist, CV 205–502, with bromocriptine in women with hyperprolactinaemia. Homburg R, et al. **Clin Endocrinol (Oxf)** 1990 May; 32(5):565–71
Effect of CV 205–502 in hyperprolactinaemic patients intolerant of bromocriptine. Newman CB, et al. **Clin Endocrinol (Oxf)** 1989 Oct;31(4):391–400
Bromocriptine therapy for non–functioning pituitary adenoma. van Schaardenburg D, et al. **Clin Endocrinol (Oxf)** 1989 May;30(5):475–84
The effect of cyproheptadine and/or bromocriptine on plasma ACTH levels in patients cured of Cushing's disease by bilateral adrenalectomy. Whitehead HM, et al. **Clin Endocrinol (Oxf)** 1990 Feb;32(2):193–201
The addition of bromocriptine to long–term dopa therapy in Parkinson's disease. Selby G. **Clin Exp Neurol** 1989; 26:129–39
Down–regulation of autoantibody levels of cyclosporine and bromocriptine treatment in patients with uveitis. Blank M, et al. **Clin Immunol Immunopathol** 1990 Jan;54(1):87–97
On the relative importance of D–1 vs. D–2 dopaminergic receptors in the control of audiogenic seizures in ethanol withdrawn rats. Trzaskowska E, et al. **Drug Alcohol Depend** 1989 Dec;24(3):265–7
Long–term double masked trial of early treatment with L–dopa plus bromocriptine versus L–dopa alone in Parkinson's disease. Interim results. Bakheit AM, et al. **Eur Neurol** 1990;30(2):108–11
Third interim report of the nationwide collaborative study on the long–term effects of bromocriptine in the treatment of parkinsonian patients. Nakanishi T, et al. **Eur Neurol** 1990;30 Suppl 1:3–8
Hypersecretion of gonadotropins by a pituitary adenoma: pituitary dynamic studies and treatment with bromocriptine in one patient. Comtois R, et al. **Fertil Steril** 1989 Oct; 52(4):569–73
Bromocriptine inhibition of anesthesia–induced hyperprolactinemia: effect on serum and follicular fluid hormones, oocyte fertilization, and embryo cleavage rates during in vitro fertilization. Sopelak VM, et al. **Fertil Steril** 1989 Oct;52(4):627–32
Dopamine might not be involved in the pathogenesis of polycystic ovary syndrome. Ferriani RA, et al. **Gynecol Endocrinol** 1989 Dec;3(4):317–27
Neuroleptic malignant syndrome improved by bromocriptine. Kunju PA, et al. **J Assoc Physicians India** 1990 May; 38(5):358–9
A randomized study of SMS 201–995 versus bromocriptine treatment in acromegaly: clinical and biochemical effects. Halse J, et al. **J Clin Endocrinol Metab** 1990 May; 70(5):1254–61
Psychiatric applications of bromocriptine therapy. Sitland–Marken PA, et al. **J Clin Psychiatry** 1990 Feb; 51(2):68–82 (142 ref.)
Acromegaly and primary amenorrhea: ovulation and pregnancy induced by SMS 201–995 and bromocriptine [letter] Montini M, et al. **J Endocrinol Invest** 1990 Feb; 13(2):193
Akathisia following traumatic brain injury: treatment with bromocriptine [letter] Stewart JT. **J Neurol Neurosurg Psychiatry** 1989 Oct;52(10):1200–1
Management of prolactinoma. **Lancet** 1990 Sep 15; 336(8716):661 (12 ref.)
European multicentre trial of bromocriptine in cyclical mastalgia. Mansel RE, et al. **Lancet** 1990 Jan 27; 335(8683):190–3
A laboratory procedure for evaluation of pharmacotherapy for cocaine dependence. Kranzler H, et al. **NIDA Res Monogr** 1989;95:324–5
Bromocriptine plus suboptimal cyclosporine treatment abrogates acute rejection of rat cardiac allografts. Di Stefano R, et al. **Transplant Proc** 1990 Aug;22(4):2015–6
[Treatment of prolactinoma] Nadalon S, et al. **Rev Med Interne** 1990 Mar–Apr;11(2):172–80 (72 ref.) (Eng. Abstr.) **(Fre)**
[The treatment of Parkinson disease using the combination bromocriptine and levodopa] Dufresne JJ. **Rev Med Suisse Romande** 1990 Jun;110(6):559–64 **(Fre)**
[Comparison of bromocriptine and levodopa as first line treatment of Parkinson's disease: results of a 3–year prospective randomized study] Montastruc JL, et al. **Rev Neurol (Paris)** 1990;146(2):144–7 (Eng. Abstr.) **(Fre)**
[Bromocriptine: a new therapy concept in the treatment of chronic recurrent uveitis?] Zierhut M, et al. **Klin Monatsbl Augenheilkd** 1989 Oct;195(4):221–5 (Eng. Abstr.) **(Ger)**
[Treatment of prolactin–secreting pituitary tumors with bromocriptine] Katzir D, et al. **Harefuah** 1990 Feb 1; 118(3):141–5 (Eng. Abstr.) **(Heb)**
[Comprehensive approach to clinical background and effect of bromocriptine administration in patients with endocrinological polycystic ovarian disease] Aisaka K, et al. **Nippon Naibunpi Gakkai Zasshi** 1990 Feb 20; 66(2):101–12 (Eng. Abstr.) **(Jpn)**
[Studies of the effect of bromocriptine on the serum prolactin, aldosterone and cortisol levels and plasma renin activity in patients with essential hypertension] Hudziak G, et al. **Pol Arch Med Wewn** 1988 Jul;80(1):9–16 (Eng. Abstr.) **(Pol)**
[The characteristics of the hormonal interrelationships in a pregnancy stimulated with parlodel] Ovsiannikov TV, et al. **Akush Ginekol (Mosk)** 1989 Dec;(12):8–11 (Eng. Abstr.) **(Rus)**
[Clinico–diagnostic indicators and late results of the treatment of infertility in hyperprolactinemia] Ovsiannikova TV, et al. **Akush Ginekol (Mosk)** 1989 Oct; (10):46–9 (Eng. Abstr.) **(Rus)**
[The results of using parlodel in hyperprolactinemia] Mel'nichenko GA, et al. **Probl Endokrinol (Mosk)** 1990 May–Jun;36(3):29–33 (Eng. Abstr.) **(Rus)**
[Zinc and parlodel: the treatment potentials for retardation of growth and sexual development in nephropathies in adolescents] Kukhtevich AV, et al. **Ter Arkh** 1989; 61(10):106–12 (Eng. Abstr.) **(Rus)**
[Treatment of macroprolactinomas with delayed bromocriptine. Effectiveness of a single intramuscular injection] García–Luna PP, et al. **Med Clin (Barc)** 1990 Feb 3;94(4):126–9 (Eng. Abstr.) **(Spa)**
[Hyperprolactinemia. Reproductive consequences] Austin KL. **Rev Med Panama** 1989 Sep;14(3):121–7 (Eng. Abstr.) **(Spa)**

TOXICITY

Evaluation of the teratogenic potential of the dopamine agonist bromocriptine in rats. Narburgh LJ, et al. **Toxicol Lett** 1990 Feb;50(2–3):189–94

BROMOCRYPTIN see **BROMOCRIPTINE**

BROMODEOXYCYTIDINE see under **DEOXYCYTIDINE**

BROMODEOXYURIDINE

High–resolution detection of newly synthesized DNA by anti–bromodeoxyuridine antibodies identifies specific chromatin domains. Mazzotti G, et al. **J Histochem Cytochem** 1990 Jan;38(1):13–22
BrdUrd labeling of S–phase cells in testes and small intestine of mice, using microwave irradiation for immunogold–silver staining: an immunocytochemical study. Thoolen B. **J Histochem Cytochem** 1990 Feb;

38(2):267-73
Determination of plasma cell labelling index with bromodeoxyuridine using a double immunoenzymatic technique. Ffrench M, et al. **Stain Technol** 1990;65(1):31-6
Localization of healing tracheal wounds using bromodeoxyuridine immunohistochemistry. McDowell EM, et al. **Stain Technol** 1990;65(1):25-9
S-phase evaluation with bromodeoxyuridine in lymphocytes from cattle infected with bovine leukemia virus (BLV). Tazzari PL, et al. **Zentralbl Veterinarmed [B]** 1989 Nov; 36(9):691-8
[Cell kinetic study of urogenital tumors utilizing in vitro BrdU-labelling method and anti-BrdU monoclonal antibody] Shimabukuro T, et al. **Hinyokika Kiyo** 1989 Aug; 35(8):1285-90 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

The dependence of halogenated pyrimidine incorporation and radiosensitization on the duration of drug exposure. Lawrence TS, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1393-8

ADVERSE EFFECTS

Mucocutaneous complications of intraarterial 5-bromodeoxyuridine and radiation. McCuaig CC, et al. **J Am Acad Dermatol** 1989 Dec;21(6):1235-40
The ocular effects of intracarotid bromodeoxyuridine and radiation therapy in the treatment of malignant glioma. Vander JF, et al. **Ophthalmology** 1990 Mar;97(3):352-7

ANALOGS & DERIVATIVES

Antiherpes virus activity and effect on deoxyribonucleoside triphosphate pools of (E)-5-(2-bromovinyl)-2'-deoxycytidine in combination with deaminase inhibitors. Aduma PJ, et al. **Antiviral Res** 1990 Mar;13(3):111-25
Selective inhibition of thymidine kinase isoenzymes by (E)-5-(2-bromovinyl)-2-deoxyuridine. Armstrong B, et al. **Biochem Soc Trans** 1990 Apr;18(2):270
Potent inhibitory effects of the 5'-triphosphates of (E)-5-(2-bromovinyl)-2'-deoxyuridine and (E)-5-(2-bromovinyl)-1-beta-D-arabinofuranosyluracil on DNA polymerase gamma. Ono K, et al. **Eur J Biochem** 1990 Jul 5;190(3):463-7
Cyclization-activated prodrugs. Basic esters of 5-bromo-2'-deoxyuridine. Saari WS, et al. **J Med Chem** 1990 Sep;33(9):2590-5
Optimal treatment regimens for 5'-deoxy-5-fluorouridine, with or without (E)-5-(2-bromovinyl)-2'-deoxyuridine, against various tumors in mice. Iigo M, et al. **Jpn J Cancer Res** 1990 Apr;81(4):431-5
Carbocyclic 5-iodo-2'-deoxyuridine (C-IDU) and carbocyclic (E)-5-(2-bromovinyl)-2'-deoxyuridine (C-BVDU) as unique examples of chiral molecules where the two enantiomeric forms are biologically active: interaction of the (+)- and (-)-enantiomers of C-IDU and C-BVDU with the thymidine kinase of herpes simplex virus type 1. Balzarini J, et al. **Mol Pharmacol** 1990 Mar; 37(3):395-401

ANALYSIS

Flow cytometric determination with bromodeoxyuridine/DNA assay of sensitivity of S-phase cells to cytosine arabinoside in childhood acute lymphoblastic leukemia. Katano N, et al. **Am J Pediatr Hematol Oncol** 1989 Winter;11(4):411-6
A non-radioactive method to detect RNA or DNA using an oligonucleotide probe with bromodeoxyuridine free ends, a monoclonal antibody against bromodeoxyuridine and immunogold silver staining. Scippo ML, et al. **Arch Int Physiol Biochim** 1989 Jun;97(3):279-84
A reproducible technique combining tritiated thymidine autoradiography with immunodetection of bromodeoxyuridine for double labelling studies of cell proliferation in paraffin sections of tissues. Hume WJ. **Cell Tissue Kinet** 1990 May;23(3):161-8
Simultaneous flow cytometric detection of cellular c-myc protein, incorporated bromodeoxyuridine, and DNA. Rosette CD, et al. **Cytometry** 1990;11(4):547-51
Intracellular localization of drugs in cultured tumor cells by ion microscopy and image processing. Berry JP, et al. **Histochemistry** 1990;93(4):397-400
Improved bromodeoxyuridine/DNA analysis by anti-BudR monoclonal antibody versus right angle light scatter. Vitale M, et al. **Histochemistry** 1989;93(1):9-11
Immunohistochemical staining of bromodeoxyuridine-labelled cells in the mouse embryo. Cottell DC, et al. **J Microsc** 1989 Dec;156 (Pt 3):363-9
[In-vitro incorporation of BUDR by the prostate and by human urothelium and immunohistological detection in plastic-encased sections] Bonnet P, et al. **Acta Urol Belg** 1989;57(4):817-29 (Eng. Abstr.) **(Fre)**

BLOOD

High-performance liquid chromatographic determination of 5-bromodeoxyuridine in human plasma. Montaldo PG, et al. **J Chromatogr** 1989 Jun 30;491(1):129-38

DIAGNOSTIC USE

Bromodeoxyuridine labeling study of intracranial meningiomas: proliferative potential and recurrence. Lee KS, et al. **Acta Neuropathol (Berl)** 1990;80(3):311-7
Development of the rat meninx: experimental study using bromodeoxyuridine. Kamiryo T, et al. **Anat Rec** 1990 Jun; 227(2):207-10
Bromodeoxyuridine labeling studies on the proliferation of intestinal mucosal mast cells in normal and athymic rats. Arizono N, et al. **APMIS** 1990 Apr;98(4):369-76
Estimation of growth fraction in situ in human bladder cancer with bromodeoxyuridine labelling. Nemoto R, et al. **Br J Urol** 1990 Jan;65(1):27-31
Immunocytochemical detection of 5'-bromodeoxyuridine incorporation in the central nervous system of the mouse. del Rio JA, et al. **Brain Res Dev Brain Res** 1989 Oct 1; 49(2):311-7
Proliferative activity of early gastric cancer measured by in vitro and in vivo bromodeoxyuridine labeling. Kamata T, et al. **Cancer** 1989 Oct 15;64(8):1665-8
S-phase fraction of human prostate adenocarcinoma studied with in vivo bromodeoxyuridine labeling. Nemoto R, et al. **Cancer** 1990 Aug 1;66(3):509-14
Differential drug sensitivity conferred by growth status detected in a mixed population of cycling and noncycling cells. Barcellos-Hoff MH, et al. **Cancer Res** 1990 Jun 15; 50(12):3551-5
Double labelling of tissue combining tritiated thymidine autoradiography with immunodetection of bromodeoxyuridine: the autoradiographic significance of inhibition of thymidine incorporation into DNA by bromodeoxyuridine given simultaneously. Hume WJ, et al. **Cell Tissue Kinet** 1989 Sep;22(5):393-9
Rapid in vitro bromodeoxyuridine labeling method for monitoring of therapy response in solid human tumors. Hemmer J. **Cytometry** 1990;11(5):603-9
Detection of S cells and evaluation of DNA denaturation protocols by image cytometry of fluorescent BrdUrd labelling. Humbert C, et al. **Cytometry** 1990;11(4):481-9
Evaluation of immunocytochemical detection methods of incorporated bromodeoxyuridine in hybridomas. Williams LS, et al. **Cytometry** 1990;11(4):490-7
In vitro bromodeoxyuridine labelling of squamous cell carcinomas of the oral cavity. Hemmer J. **Eur J Cancer** 1990 Feb;26(2):113-5
Mixed lymphocyte reactions evaluated by means of bromodeoxyuridine incorporation. Bontadini A, et al. **Haematologica** 1990 Jan-Feb;75(1):7-11
Bromodeoxyuridine (BrdUrd) immunohistochemistry in undecalcified plastic-embedded tissue. Elimination of the DNA denaturation step. Apte SS, et al. **Histochemistry** 1990;93(6):631-5
Immunocytochemical determination of ploidy class-dependent bromodeoxyuridine incorporation in rat liver parenchymal cells after partial hepatectomy. Frederiks WM, et al. **Histochemistry** 1990;93(6):627-30
Labelling index of gynaecological tumours assessed by bromodeoxyuridine staining in vitro using flow cytometry and histochemistry. Gasinska A, et al. **Int J Radiat Biol** 1989 Nov;56(5):793-6
In vivo bromodeoxyuridine labelling in human tumour xenografts. Parkins CS, et al. **Int J Radiat Biol** 1989 Nov; 56(5):787-91
Cell proliferation in the repairing adult insect central nervous system: incorporation of the thymidine analogue 5-bromo-2-deoxyuridine in vivo. Smith PJ, et al. **J Cell Sci** 1990 Apr;95 (Pt 4):599-604
Correlation of in vitro bromodeoxyuridine labeling index and DNA aneuploidy with survival or recurrence in brain-tumor patients. Nishizaki T, et al. **J Neurosurg** 1990 Sep;73(3):396-400
5-bromodeoxyuridine (BUdR) quenching of acridine orange fluorescence distinguishes cycling and non-cycling normal and malignant bone marrow cells in vitro. Maddox AM, et al. **Leuk Res** 1989;13(9):781-90
A pulse BrdU method for SCE. Aghamohammadi SZ, et al. **Mutat Res** 1989 Oct;216(5):259-66
Rapid in situ cellular kinetics of intracerebral tumor angiogenesis using a monoclonal antibody to bromodeoxyuridine. Brien SE, et al. **Neurosurgery** 1989 Nov;25(5):715-9
Cell-kinetic characteristics of human brain tumors. Assietti R, et al. **Oncology** 1990;47(4):344-51
Pancreatic beta cell proliferation in rabbits demonstrated by bromodeoxyuridine labeling. Davidson PM, et al. **Pancreas** 1989;4(5):594-600
Immunohistochemical detection of DNA replication in mouse uterine cells by bromodeoxyuridine labeling of wax- and resin-embedded tissue sections. Hanazono M, et al. **Stain Technol** 1990;65(3):139-49
[A ten-year observation of malignant changes in a hyperplastic polyp of the stomach--a cellular kinetic study using bromodeoxyuridine (BrdU)] Mitsufuji S, et al. **Gan No Rinsho** 1990 Aug;36(9):1035-41 (Eng. Abstr.) **(Jpn)**
[The degree of malignancy in lung adenocarcinoma and related factors-- nuclear DNA content and bromodeoxyuridine labeling index] Shimosato Y, et al. **Gan No Rinsho** 1989 May;Spec No:183-8 **(Jpn)**
[Effect of adriamycin on cell cycle by bromodeoxyuridine-labeling method] Tenjin T, et al. **Gan To Kagaku Ryoho** 1989 Dec;16(12):3781-6 (Eng. Abstr.) **(Jpn)**
[Nourishment of the hepatocellular carcinoma via portal blood flow--from the analysis of the tumor cell kinetics using 5-bromo-2'-deoxyuridine: preliminary report] Goseki N, et al. **Nippon Geka Gakkai Zasshi** 1989 Aug; 90(8):1282 **(Jpn)**
[Bromodeoxyuridine labeling index in gastric cancer] Kamata T, et al. **Nippon Geka Gakkai Zasshi** 1989 Oct; 90(10):1718-21 (Eng. Abstr.) **(Jpn)**
[Malignancy in gastric cancer, with special reference to the distribution of BrdU-labelled cells] Kamata T, et al. **Nippon Geka Gakkai Zasshi** 1990 Mar;91(3):335-9 (Eng. Abstr.) **(Jpn)**
[Proliferative activity as a marker for lymph node metastases on early gastric cancers--in vitro bromodeoxyuridine labeling for clinical use] Ohyama S, et al. **Nippon Geka Gakkai Zasshi** 1990 Mar;91(3):354-9 (Eng. Abstr.) **(Jpn)**
[Lymphocyte blastoid transformation test in patients with gastric carcinoma by BrdU monoclonal antibody: preliminary report] Takeshita M, et al. **Nippon Geka Gakkai Zasshi** 1989 Aug;90(8):1283 **(Jpn)**
[Cell kinetic study in generating hair tissues in using anti-bromodeoxyuridine monoclonal antibody] Tezuka M. **Nippon Hifuka Gakkai Zasshi** 1990 Feb;100(2):153-61 (Eng. Abstr.) **(Jpn)**
[S-phase cells of human bladder tumors by in vivo bromodeoxyuridine labeling] Ohyama C, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):524-31 (Eng. Abstr.) **(Jpn)**
[Cell kinetics of experimental pancreatic cancers in Syrian golden hamsters using intraperitoneal continuous bromodeoxyuridine infusion] Yamazaki K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Apr;87(4):1084 **(Jpn)**
[Histopathologic changes and tumor cell kinetics after hyperthermia and/or radiation therapy in a rat glioma model: bromodeoxyuridine (BUdR) labelling index] Tamura M, et al. **No Shinkei Geka** 1989 Jun;17(6):555-9 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Immunocytochemical detection of S-phase cells in normal and neoplastic cervical epithelium by anti-BrdU monoclonal antibody. Fukuda K, et al. **Anal Quant Cytol Histol** 1990 Apr;12(2):135-8
Cytokinetic investigation of lung tumors using the anti-bromodeoxyuridine (BUdR) monoclonal antibody method: comparison with DNA flow cytometric data. Teodori L, et al. **Int J Cancer** 1990 Jun 15;45(6):995-1001
In vitro immunohistochemical localization of S-phase cells by a monoclonal antibody to bromodeoxyuridine. Lee SS, et al. **J Korean Med Sci** 1989 Dec;4(4):193-201
[Flow cytometric cell cycle analysis using a monoclonal antibody to bromodeoxyuridine on gastric cancers] Ohyama S, et al. **Nippon Geka Gakkai Zasshi** 1989 Nov; 90(11):1848-54 (Eng. Abstr.) **(Jpn)**
[The immunohistochemical evaluation of kinetic and functional activity on gastric cancer using anti-BrdU and anti-CEA antibody: preliminary report] Sekihara T, et al. **Nippon Geka Gakkai Zasshi** 1989 Dec;90(12):2051 **(Jpn)**
[Proliferating patterns of basal cell carcinoma--immunohistological study by means of anti-BrdU monoclonal antibody] Yoshimura K, et al. **Nippon Hifuka Gakkai Zasshi** 1990 Apr;100(5):575-80 (Eng. Abstr.) **(Jpn)**
[Evaluation of turnover of olfactory epithelium in mice by using anti-BrdU monoclonal antibody] Kimura Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1990 Feb;93(2):165-70 (Eng. Abstr.) **(Jpn)**

METABOLISM

Comparative study of proportion of S-phase cells in ascites and pleural effusions in ovarian carcinoma using antibromodeoxyuridine monoclonal antibody and DNA flow-cytometry. Sahni K, et al. **Acta Oncol** 1989; 28(5):705-8
An enzyme-linked immunosorbent assay for bromodeoxyuridine incorporation using fixed microcultures. Muir D, et al. **Anal Biochem** 1990 Mar; 185(2):377-82
Prognostic value of S-phase fraction and DNA ploidy studied with in vivo administration of bromodeoxyuridine on human gastric cancers. Ohyama S, et al. **Cancer** 1990 Jan 1;65(1):116-21
Tracer dose and availability time of thymidine and bromodeoxyuridine: application of bromodeoxyuridine in cell kinetic studies. Böswald M, et al. **Cell Tissue Kinet** 1990 May;23(3):169-81
Double labelling of cells with tritiated thymidine and bromodeoxyuridine reveals a circadian rhythm-dependent variation in duration of DNA synthesis and S phase flux rates in rodent oral epithelium. Hume WJ, et al. **Cell Tissue Kinet** 1990 Jul;23(4):313-23
BrdU pulse/reverse staining protocols for investigating chromosome replication. Aghamohammadi SZ, et al. **Chromosoma** 1990 Apr;99(1):76-82
Thermal denaturation of DNA for immunochemical staining of incorporated bromodeoxyuridine (BrdUrd): critical factors that affect the amount of fluorescence and the shape of BrdUrd/DNA histogram. Hoy CA, et al. **Cytometry** 1989 Nov;10(6):718-25
In vivo bromodeoxyuridine incorporation in normal mouse

kidney: immunohistochemical detection and measurement of labelling indices. Robertson H, et al. **Histochem J** 1990 Apr;22(4):209–14

Effect of tulipin on cell cycle progression analyzed by BrdUrd incorporation. Vitale M, et al. **Histochemistry** 1990; 93(3):229–31

Use of the micronucleus assay for the selective detection of radiosensitivity in BUdR–unincorporated cells after pulse–labelling of exponentially growing tumour cells. Masunaga S, et al. **Int J Radiat Biol** 1990 Aug;58(2):303–11

Immunohistological optimization of detection of bromodeoxyuridine–labeled cells in decalcified tissue. Hume WJ, et al. **J Histochem Cytochem** 1990 Apr; 38(4):509–13

DNA synthesis in excised tobacco leaves after bromodeoxyuridine incorporation: immunohistochemical detection in semi–thin spurr sections. Stroobants C, et al. **J Histochem Cytochem** 1990 May;38(5):641–7

Nucleolar organizer regions in hepatocarcinogenesis induced by N–2–fluorenylacetamide in rats: comparison with bromodeoxyuridine immunohistochemistry. Tanaka T, et al. **Jpn J Cancer Res** 1989 Nov;80(11):1047–51

Detection of BrdU in the regenerating bone marrow cells of a patient with AML. Raza A, et al. **Leuk Res** 1989; 13(12):1055–9

Radiosensitization of Chinese hamster V79 cells by bromodeoxyuridine substitution of thymidine: enhancement of radiation–induced toxicity and DNA strand break production by monofilar and bifilar substitution. Ling LL, et al. **Radiat Res** 1990 Jan;121(1):76–82

[Intracellular localization of halogenated drugs or molecules in cultured tumor cells. A study using ionic microscopy associated with an imaging processing system] Berry JP, et al. **Bull Cancer (Paris)** 1989;76(8):829–30 **(Fre)**

PHARMACOKINETICS

Improved methods for the determination of 5–bromo–2–deoxyuridine labelling index in clones and colonies growing in plasma clots. Di Nucci GD, et al. **Basic Appl Histochem** 1990;34(1):71–7

Bromodeoxyuridine incorporation into DNA of human leukemia cells is not concentration dependent. Powell BL, et al. **Cytometry** 1990;11(3):438–41

Fine–structural aspects of bromodeoxyuridine incorporation in sister chromatid differentiation and replication banding. Jack EM, et al. **J Cell Sci** 1989 Oct;94 (Pt 2):287–97

Steady–state arterial and hepatic venous plasma concentrations of 5–bromo–2'–deoxyuridine and 5–iodo–2'–deoxyuridine in animals—drugs which are subject to both splanchnic and extra–splanchnic elimination. Wagner JG, et al. **Sel Cancer Ther** 1989 Winter; 5(4):193–203

PHARMACOLOGY

c–myc down regulation and precommitment in HL–60 cells due to bromodeoxyuridine. Yen A, et al. **Cancer Res** 1990 Mar 1;50(5):1411–20

Different patterns of glycolipid antigens are expressed following differentiation of TERA–2 human embryonal carcinoma cells induced by retinoic acid, hexamethylene bisacetamide (HMBA) or bromodeoxyuridine (BUdR). Andrews PW, et al. **Differentiation** 1990 Apr;43(2):131–8

Effect of thymidine analogs on tyrosinase activity and mRNA accumulation in mouse melanoma cells. Kidson SH, et al. **Exp Cell Res** 1990 May;188(1):36–41

Uracil–DNA glycosylase causes 5–bromodeoxyuridine photosensitization in Escherichia coli K–12. Yamamoto Y, et al. **J Bacteriol** 1990 Sep;172(9):5278–85

The use of E. coli exonuclease III to generate single stranded DNA in BrdUrd cell–cycle analysis permits simultaneous detection of cell surface antigens. Bayer JA, et al. **J Immunol Methods** 1990 Aug 28;132(1):13–24

Influence of treatment to sacrifice time and the presence of BrdUrd on chemically–induced aberration rates in mouse marrow cells. McFee AF, et al. **Mutat Res** 1990 May; 241(1):95–108

Bromodeoxyuridine (BrdU) template and thymidine pool effects on high frequencies of sister–chromatid exchange (SCE) in Bloom syndrome cells and a mutant cell line (AsHa) originated from ataxia telangiectasia. Shiraishi Y, et al. **Mutat Res** 1990 Jun;230(2):177–86

The action of caffeine on X–irradiated HeLa cells. X. Depressed recovery from potentially lethal damage in cells containing 5–bromodeoxyuridine. Labanowska J, et al. **Radiat Res** 1990 Aug;123(2):228–31

The effect of single versus double–strand substitution on halogenated pyrimidine–induced radiosensitization and DNA strand breakage in human tumor cells. Lawrence TS, et al. **Radiat Res** 1990 Aug;123(2):192–8

[The UV sensitivity of the bromodeoxyuridine–substituted chromosomes in the Chinese hamster] Antoshchina MM, et al. **Radiobiologiia** 1990 Mar–Apr;30(2):261–3 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Response of human HT–29 colorectal tumor cells to extended exposure to bromodeoxyuridine. Maybaum J, et al. **Cancer Chemother Pharmacol** 1989;25(1):45–50

Radiobiology and clinical application of halogenated pyrimidine radiosensitizers. Mitchell JB, et al. **Int J Radiat Biol** 1989 Nov;56(5):827–36 (36 ref.)

Intra–arterial bromodeoxyuridine radiosensitization of malignant gliomas. Hegarty TJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):421–8

TOXICITY

Study of the mechanisms of BUdR–induced cleft palate in the mouse. Bannigan JG, et al. **Teratology** 1990 Jul; 42(1):79–89

[The carcinogenic effect of 5–bromodeoxyuridine and its amplification by x–rays in rats] Anisimov VN, et al. **Eksp Onkol** 1989;11(5):14–6 (Eng. Abstr.) **(Rus)**

2–BROMOERGOCRYPTINE see **BROMOCRIPTINE**

2–BROMOLYSERGIC ACID DIETHYLAMIDE see under **LYSERGIC ACID DIETHYLAMIDE**

BROMOSUCCINIMIDE see under **SUCCINIMIDES**

BROMOTRICHLOROMETHANE see under **CHLOROFORM**

BROMOURACIL

Analysis of chromosome replication by a BrdU antibody technique. Vogel W, et al. **Chromosoma** 1989 Nov; 98(5):335–41

Structural and dynamic properties of a bromouracil–adenine base pair in DNA studied by proton NMR. Fazakerley GV, et al. **J Biomol Struct Dyn** 1987 Dec;5(3):639–50

[Conformational analysis of 5–substituted uracil] Stepan'ian SG, et al. **Biofizika** 1989 Sep–Oct;34(5):753–7 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

The effect of histidine on the structure and antitumor activity of metal–5–halouracil complexes. Singh UP, et al. **J Inorg Biochem** 1989 Dec;37(4):325–39

BROMOURACIL DEOXYRIBOSIDE see **BROMODEOXYURIDINE**

BROMPHENIRAMINE see under **PYRIDINES**

BROMPHENOL BLUE see under **PHENOLS**

BROMSULPHALEIN see **SULFOBROMOPHTHALEIN**

BROMTHYMOL BLUE see under **THYMOL**

BRONCHI

Diagnostic difficulties of foreign body aspiration in children. Losek JD. **Am J Emerg Med** 1990 Jul;8(4):348–50 (17 ref.)

How do you use a double–lumen endobrochial tube? Cooper KL, et al. **Am J Nurs** 1989 Nov;89(11):1503–6

Use of fiberoptic bronchoscopy to retrieve bronchial foreign bodies in adults. Lan RS, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1734–7

Extraction of foreign bodies with fiberoptic bronchoscopy in mechanically ventilated patients [letter] Verea–Hernando H, et al. **Am Rev Respir Dis** 1990 Jul;142(1):258

Bronchial cuff pressures of double–lumen tubes [published erratum appears in Anesth Analg 1990 Jun;70(6):670 Brodsky JB, et al. **Anesth Analg** 1989 Nov;69(5):608–10

Bronchial cuff pressure of endobronchial double–lumen tubes [letter] Neto PP. **Anesth Analg** 1990 Aug;71(2):209

Proper lateralization of left–sided double–lumen tubes [letter] Neustein SM, et al. **Anesthesiology** 1989 Dec;71(6):996

Bronchoalveolar lavage for pneumocystis pneumonia in HIV–infected children. Mattey JE, et al. **Ann Allergy** 1990 Apr;64(4):393–7

Tracheobronchial foreign bodies in adults. Limper AH, et al. **Ann Intern Med** 1990 Apr 15;112(8):604–9

Tracheobronchial foreign bodies [letter] Whitlock WL, et al. **Ann Intern Med** 1990 Sep 15;113(6):482–3

Bronchial foreign bodies: an uncommon way of entry. Aprigliano F. **Ann Otol Rhinol Laryngol** 1990 Sep;99(9 Pt 1):695–7

The Bristol Children's Hospital experience of tracheobronchial foreign bodies 1977–87. Hamilton AH, et al. **Bristol Med Chir J** 1989 Aug;104(3):72–4

Endobronchial intubation in dogs. Chang PC, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S44

Endobronchial epithelial papilloma associated with a foreign body. Greene JG, et al. **Chest** 1990 Jan;97(1):229–30

Selective bronchial suctioning [letter] Kubota Y, et al. **Chest** 1990 May;97(5):1279

Drug–induced bronchospasm. Meeker DP, et al. **Clin Chest Med** 1990 Mar;11(1):163–75 (120 ref.)

Polyvinylchloride tracheotomy tubes as foreign bodies in the tracheobronchial tree. Murty PS, et al. **Ear Nose Throat J** 1990 Feb;69(2):124–5

Occult coiled drinking straw aspiration. Kollef MH, et al. **Heart Lung** 1990 Jan;19(1):24–6

Acute bronchial obstruction: an experimental rabbit model study. Puhakka HJ, et al. **Int J Pediatr Otorhinolaryngol** 1989 Dec;18(2):107–18

Does the expired carbon dioxide waveform suggest endobronchial intubation? Mokriski BK, et al. **J Clin Anesth** 1990 Mar–Apr;2(2):140–1

Silver tracheostomy tube obturator in the tracheobronchial tree. Nicolaides AR. **J Laryngol Otol** 1990 May;104(5):437

The role of bronchial musculature. Buckley CJ. **Lancet** 1989 Oct 7;2(8667):836–7

Selective intubation in the neonatal intensive care unit. Stankiewicz JA, et al. **Laryngoscope** 1989 Oct;99(10 Pt 1):1099–100

Tracheobronchial aspiration of foreign bodies in children: a study of 94 cases. Steen KH, et al. **Laryngoscope** 1990 May;100(5):525–30

All that wheezes. Muth D, et al. **Pediatr Emerg Care** 1990 Jun;6(2):110–2

Management of unilateral pulmonary cystic emphysema with selective bronchial intubation and high frequency jet ventilation in two infants. Chua RN, et al. **Pediatr Pulmonol** 1990;9(2):121–4

Pneumomediastinum caused by foreign body aspiration in children. Burton EM, et al. **Pediatr Radiol** 1989; 20(1–2):45–7

How accurate is chest radiography in the diagnosis of tracheobronchial foreign bodies in children? Svedström E, et al. **Pediatr Radiol** 1989;19(8):520–2

Nearly fatal partial obstruction of the upper airway. Garvin JM. **Postgrad Med** 1990 Feb 1;87(2):81, 84

Fractured silver tracheostomy tube: a case report and literature review. Majid AA. **Singapore Med J** 1989 Dec; 30(6):602–4 (8 ref.)

Sustained–release endobronchial carcinogenic implants. Shors EC, et al. **Surg Forum** 1978;29:205–7

Studies on the peptide core of human bronchial mucus glycoprotein. Gerard C, et al. **Symp Soc Exp Biol** 1989; 43:221–30 (10 ref.)

Needle inhalation and ingestion: a cultural hazard in Oman. al Delamie T, et al. **Trop Doct** 1990 Apr;20(2):93–4

Respiratory distress in a cat [letter] Ellis C. **Vet Rec** 1989 Sep 23;125(13):357

[Rescue and nursing care of 70 cases with a foreign body in the respiratory tract] Xu JP, et al. **Chung Hua Hu Li Tsa Chih** 1989 Nov;24(11):653–4 **(Chi)**

[Foreign bodies in the esophagus and respiratory tract] Paulin R, et al. **Can Med Assoc J** 1968 Sep 14;99(10):496–502 **(Fre)**

[A specific tracheobronchial endoprosthesis] Dumon JF. **Rev Mal Respir** 1990;7(3):223–9 (Eng. Abstr.) **(Fre)**

[Bronchial obstruction caused by incorrect positioning of a temperature probe] Döring B, et al. **Anaesthesist** 1989 Nov; 38(11):631–2 (Eng. Abstr.) **(Ger)**

[X–ray signs of foreign body aspiration in children] Steen KH, et al. **Radiologe** 1990 Jul;30(7):324–7 (27 ref.) (Eng. Abstr.) **(Ger)**

[Regional lung ventilation in the differential diagnosis of aspiration of roentgenologically non–detectable foreign bodies] Simeček C, et al. **Z Erkr Atmungsorgane** 1990; 174(2):137–42 (Eng. Abstr.) **(Ger)**

[Extraction without forceps of tracheo–bronchial foreign bodies in children] Hofmann U, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:29 **(Ger)**

[Respiratory insufficiency in the infant—foreign body aspiration!] Rupprecht H, et al. **Zentralbl Chir** 1990; 115(3):171–2 **(Ger)**

[Three cases of bronchial foreign bodies which required thoracotomy] Tanaka F, et al. **Kyobu Geka** 1990 Jun; 43(6):471–4 (Eng. Abstr.) **(Jpn)**

[Evaluation of endobronchial foreign bodies by 99mTc–MAA pulmonary perfusion scintigraphy] Itoh S, et al. **Rinsho Hoshasen** 1990 Jul;35(7):855–9 (Eng. Abstr.) **(Jpn)**

[Two cases of foreign bodies in the bronchi] Kaczorowska K. **Pneumonol Pol** 1989 Oct–Dec;57(10–12):504–8 (Eng. Abstr.) **(Pol)**

[Foreign bodies in the tracheobronchial tree of adults] Bednarski Z. **Wiad Lek** 1989 Apr 30;42(8):498–502 (Eng. Abstr.) **(Pol)**

[Structural and functional characteristics of the lower tracheobronchial lymph nodes in the rat after administration of dimethyl sulfate] Sharova EE. **Arkh Anat Gistol Embriol** 1990 Mar;98(3):52–8 (Eng. Abstr.) **(Rus)**

[Diagnostic and therapeutic bronchoscopy in long–term presence of foreign bodies in the bronchi] Chernekhovskaia NE, et al. **Grud Serdechnososudistaia Khir** 1990;(2):52–7 (Eng. Abstr.) **(Rus)**

[Surgical removal of foreign bodies of the bronchi in children] Reisvikh VP, et al. **Klin Khir** 1990;(6):61 **(Rus)**

[Long–term presence of foreign bodies in the tracheobronchial tree] Nesterko AO, et al. **Klin Med (Mosk)** 1989 Dec;67(12):112–7 **(Rus)**

[Diagnostic difficulties in chronic obstruction of the trachea and main bronchi simulating bronchial asthma] Ovcharenko SI, et al. **Klin Med (Mosk)** 1990 May;68(5):65–8 (Eng. Abstr.) **(Rus)**

[Value of bronchoscopy in the diagnosis and treatment of foreign bodies of the trachea and bronchi] Sotnikov VN, et al. **Klin Med (Mosk)** 1990 May;68(5):49–52 (Eng. Abstr.) **(Rus)**

[Foreign body in the intermediate bronchus simulating infiltrative pulmonary tuberculosis] Agaev FF, et al. **Probl Tuberk** 1990;(4):74 **(Rus)**

[Foreign bodies of the respiratory tract in children] Kukuruza IuP, et al. **Vestn Khir** 1990 Mar;144(3):82–4 **(Rus)**

[Conservative treatment of postoperative defects of the

bronchial stump and of bronchoalveolar fistulae] Levashev IuN, et al. **Vestn Khir** 1989 Oct;143(10):76–80 (Eng. Abstr.) **(Rus)**

[Surgical atelectasis of the lung after trans–sternal trans–pericardial occlusion of the main bronchus] Naumov VN, et al. **Vestn Khir** 1989 May;142(5):46–7 **(Rus)**

[A foreign body in the respiratory tract—a diagnostic problem at Christmas time] Spandow O, et al. **Lakartidningen** 1989 Dec 20;86(51):4528–9 **(Swe)**

ABNORMALITIES

Aberrant bronchi and cardiovascular anomalies. Evans JA. **Am J Med Genet** 1990 Jan;35(1):46–54 (47 ref.)

Presence of a tracheal bronchus in ponies. Ghoshal NG. **Anat Anz** 1989;168(5):419–21

Treatment of severe bronchomalacia with expanding endobronchial stents. Mair EA, et al. **Arch Otolaryngol Head Neck Surg** 1990 Sep;116(9):1087–90

Airway anomalies in newborn infants: detection by tracheoscopy via endotracheal tube. Deres M, et al. **Biol Neonate** 1990;58(1):50–3

Persistent middle lobe abnormality in an East African male. Gradwohl SE, et al. **Chest** 1989 Nov;96(5):1182–3

Localized tracheomalacia or bronchomalacia in children with intractable cough. Wood RE. **J Pediatr** 1990 Mar; 116(3):404–6

Congenital bronchopulmonary malformations. Diagnostic and therapeutic considerations. Bailey PV, et al. **J Thorac Cardiovasc Surg** 1990 Apr;99(4):597–602; discussion 602–3

Congenital ciliary aplasia in two siblings. A primitive disregulation of ciliogenesis? Richard S, et al. **Pathol Res Pract** 1989 Aug;185(2):181–3

Serial section–reconstruction of anomalous tracheobronchial branching patterns from CT scan images: bridging bronchus associated with sling left pulmonary artery. Wells TR, et al. **Pediatr Radiol** 1990;20(6):444–6

The role of developmental disorders in chronic recurrent respiratory diseases in infants. Székely E. **Z Kinderchir** 1988 Sep;43 Suppl 1:13–4

[Bronchial atresia of additive anomalous bronchus] Nomura Y, et al. **Rinsho Hoshasen** 1990 Jul;35(7):875–8 (Eng. Abstr.) **(Jpn)**

[Branching defects and mucosal diverticulosis of the bronchi in children as factors predisposing to the development of chronic inflammatory processes in the lungs] Esipova IK, et al. **Arkh Patol** 1990;52(2):6–10 (Eng. Abstr.) **(Rus)**

[A familial case of excessive plication of the bronchial mucosa as a cause of an obstructive syndrome in early childhood] Orlov AV, et al. **Ter Arkh** 1990;62(4):133 **(Rus)**

[Congenital esophageal stenosis caused by tracheobronchial remnants] Cano Novillo I, et al. **An Esp Pediatr** 1990 Feb; 32(2):171–3 **(Spa)**

[Tracheobronchomegaly (Mounier–Kuhn syndrome) associated with anomalous outlet of the right upper bronchus (letter)] Fuentes Rodríguez R, et al. **Rev Esp Anestesiol Reanim** 1989 Nov–Dec;36(6):363–4 **(Spa)**

ANALYSIS

Neutral and acidic human tracheobronchial mucin. Isolation and characterization of core protein. Bhattacharyya SN, et al. **Inflammation** 1990 Aug;14(4):355–73

Distribution of substance P receptors in rabbit airways, functional and autoradiographic studies. Black J, et al. **J Pharmacol Exp Ther** 1990 Apr;253(1):381–6

Characterization of human tracheobronchial mucin glycoproteins. Rose MC. **Methods Enzymol** 1989;179:3–17

Chemical structure of phospholipids in the lungs and airways of sheep. Barrow RE. **Respir Physiol** 1990 Jan;79(1):1–8

Identification of human tracheo–bronchial mucin precursors. Perini JM, et al. **Symp Soc Exp Biol** 1989;43:37–41

Macromolecular and lipid constituents of bronchial epithelial mucus. Reid LM, et al. **Symp Soc Exp Biol** 1989;43:201–19 (44 ref.)

Concentrations of cefixime in bronchial mucosa and sputum after three oral multiple dose regimens. Baldwin DR, et al. **Thorax** 1990 May;45(5):401–2

ANATOMY & HISTOLOGY

Distribution of smooth muscles along the bronchial tree. A morphometric study of ordinary autopsy lungs. Ebina M, et al. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1322–6

Airway size and structure in the normal fetal and infant lung and the effect of premature delivery and artificial ventilation. Hislop AA, et al. **Am Rev Respir Dis** 1989 Dec; 140(6):1717–26

Corrigendum for bronchial diameters [letter] Brodsky JB, et al. **Anesth Analg** 1990 Jun;70(6):670

Anatomy and physiology of collateral respiratory pathways. Delaunois L. **Eur Respir J** 1989 Oct;2(9):893–904 (80 ref.)

Structural characterization of bronchial mucosal biopsies from healthy volunteers: a light and electron microscopical study. Söderberg M, et al. **Eur Respir J** 1990 Mar; 3(3):261–6

Diameters, generations, and orders of branches in the bronchial tree. Horsfield K. **J Appl Physiol** 1990 Feb; 68(2):457–61

Changes in airway length after unilateral pneumonectomy in weanling ferrets. Kirchner KK, et al. **J Appl Physiol** 1990 Jan;68(1):187–92

Growth of the ferret tracheobronchial tree. Oldham MJ, et al. **Lab Anim Sci** 1990 Mar;40(2):186–91

Model systems for learning pediatric flexible bronchoscopy. Wood RE, et al. **Pediatr Pulmonol** 1990;8(3):168–71

[Morphology of the small airways] Morgenroth K. **Wien Med Wochenschr Suppl** 1989;104:suppl 8–14 **(Ger)**

[Thin–section computed tomography of the bronchi; 2. Right upper lobe and left upper division] Matsuoka Y, et al. **Rinsho Hoshasen** 1990 Feb;35(2):265–70 (Eng. Abstr.) **(Jpn)**

[Macro– and microscopic characteristics of the glands of the human trachea and main bronchi in postnatal ontogenesis] Sapin MR, et al. **Arkh Anat Gistol Embriol** 1989 Aug; 97(8):41–6 (Eng. Abstr.) **(Rus)**

[Quantitative analysis of the bronchial tree structure in dogs and polar foxes] Shishkin GS, et al. **Arkh Anat Gistol Embriol** 1989 Aug;97(8):47–9 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Capsaicin and histamine antagonist–sensitive mechanisms in the immediate allergic reaction of pig airways. Alving K, et al. **Acta Physiol Scand** 1990 Jan;138(1):49–60

Bronchial circulation in high altitudes. Zapata–Ortiz V, et al. **Am J Physiol** 1967 Jun;212(6):1464–8

Increase of alveolar pressure reduces systemic–to–pulmonary bronchial blood flow in humans. Agostoni P, et al. **Chest** 1989 Nov;96(5):1081–5

A method for evaluating the bronchial circulation. Preliminary observations. Chiles C, et al. **Invest Radiol** 1990 Jan;25(1):52–7

Mechanism for increase in tracheobronchial blood flow induced by hyperventilation of dry air in dogs. Baile EM, et al. **J Appl Physiol** 1990 Jan;68(1):105–12

Metabolic and pharmacokinetic activity of the isolated sheep bronchial circulation. Grantham CJ, et al. **J Appl Physiol** 1989 Sep;67(3):1041–7

Bronchial circulation in pulmonary artery occlusion and reperfusion. Kowalski TF, et al. **J Appl Physiol** 1990 Jan; 68(1):125–9

Tracheobronchial perfusion during exercise in ponies. Manohar M. **J Appl Physiol** 1990 May;68(5):2182–5

Inflation of antishock trousers increases bronchial response to methacholine in healthy subjects. Regnard J, et al. **J Appl Physiol** 1990 Apr;68(4):1528–33

Response of bronchial vasculature to local or systemic hypoxia and hypercapnia [letter; comment] Syabbalo NC. **J Appl Physiol** 1989 Dec;67(6):2639–40 Comment on: J Appl Physiol 1988 Oct;65(4):1627–33.

Hypothesis: exercise–induced asthma as a vascular phenomenon [see comments] McFadden ER Jr. **Lancet** 1990 Apr 14;335(8694):880–3 (38 ref.) Comment in: Lancet 1990 Jun 9;335(8702):1410–2.

Bronchial blood flow and microvascular permeability in the pathophysiology of asthma. Dinh Xuan AT. **Med Hypotheses** 1990 Jul;32(3):207–9

Advanced intravascular bronchioloalveolar tumour and review of reports in Japan. Shirakusa T, et al. **Respir Med** 1989 Mar;83(2):127–32 (21 ref.)

Vascular lesions in the biopsied bronchus of patients with sarcoidosis changes of the endothelial cells in aggregation of eosinophils. Mochizuki I, et al. **Sarcoidosis** 1990 Mar; 7(1):35–41

Corrosion cast studies of the bronchial arteries. Viamonte M Jr, et al. **Surg Radiol Anat** 1989;11(3):215–9

Significance of measurements of bronchial mucosal blood flow for the monitoring of acute rejection of transplanted lungs. Takao M, et al. **Transplantation** 1990 Aug; 50(2):345–8

[Vasomotility of the bronchial circulation in cardiac failure] Cabanes L, et al. **Arch Mal Coeur** 1990 Mar;83 Spec No 2:59–62 (Eng. Abstr.) **(Fre)**

[Positive alveolar pressure reduces bronchial systemic–to–pulmonary blood flow in man] Agostoni PG, et al. **Cardiologia** 1989 Jul;34(7):593–8 (Eng. Abstr.) **(Ita)**

[Preoperative therapeutic embolization for massive hemoptysis from bronchial collaterals in tetralogy of Fallot—a case report successfully treated by total correction] Suzuki Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Mar;38(3):472–6 (Eng. Abstr.) **(Jpn)**

[The role of the system of bronchial arteries in pathology] Esipov AS. **Arkh Patol** 1989;51(9):91–4 (39 ref.) (Eng. Abstr.) **(Rus)**

CYTOLOGY

Ultrastructural architecture of pulmonary small–granule cell clusters in adult Syrian golden hamster. Pearsall AD. **Am J Anat** 1989 Oct;186(2):173–85

Giant mitochondria distinct from enlarged mitochondria in secretory and ciliated cells of gerbil trachea and bronchioles. Spicer SS, et al. **Am J Anat** 1990 Jul; 188(3):269–81

Lymphocytes in the lung: should we continue to exalt only BALT? Berman JS. **Am J Respir Cell Mol Biol** 1990 Aug; 3(2):101–2 (14 ref.)

Cell kinetics of normal adult hamster bronchial epithelium in the steady state. Breuer R, et al. **Am J Respir Cell Mol Biol** 1990 Jan;2(1):51–8

Heterogeneous ultrastructure of human bronchial mast cells: morphometric subdivision of cell types and evidence for a degranulation gradient. Heard BE, et al. **Am J Respir Cell Mol Biol** 1990 Jul;3(1):71–8

Is the bronchus–associated lymphoid tissue (BALT) an integral structure of the lung in normal mammals, including humans? Pabst R, et al. **Am J Respir Cell Mol Biol** 1990 Aug;3(2):131–5

Human tracheobronchial submucosal gland cells in culture. Sommerhoff CP, et al. **Am J Respir Cell Mol Biol** 1990 Jan;2(1):41–50

Pulmonary macrophages can stimulate cell growth of bovine bronchial epithelial cells [see comments] Takizawa H, et al. **Am J Respir Cell Mol Biol** 1990 Mar;2(3):245–55 Comment in: Am J Respir Cell Mol Biol 1990 Mar;2(3):233–4.

Cytologic and bacteriologic evaluation of tracheobronchial aspirates from clinically normal foals. Crane SA, et al. **Am J Vet Res** 1989 Dec;50(12):2042–8

Fractional processing of sequential bronchoalveolar lavage to separate bronchial and alveolar samples. Rennard SI, et al. **Am Rev Respir Dis** 1990 Jan;141(1):208–17

Phylogenetic aspects of the neuroepithelial bodies. Rogers DC. **Arch Histol Cytol** 1989;52 Suppl:397–402 (44 ref.)

Suppression of tumorigenicity of a human lung carcinoma line by nontumorigenic bronchial epithelial cells in somatic cell hybrids. Kaighn ME, et al. **Cancer Res** 1990 Mar 15; 50(6):1890–6

Metabolism of 2–acetylaminofluorene by Clara cells, type II cells and alveolar macrophages isolated from rabbit lung, and use of a new chamber incubation mutagenicity test system. Aune T, et al. **Cell Biol Toxicol** 1985 Jun; 1(3):109–22

Ellagic acid toxicity and interaction with benzo[a]pyrene and benzo[a]pyrene 7,8–dihydrodiol in human bronchial epithelial cells. Teel RW, et al. **Cell Biol Toxicol** 1986 Mar; 2(1):53–62

Pathways of differentiation of airway epithelial cells. Nettesheim P, et al. **Environ Health Perspect** 1990 Apr; 85:317–29

Response of cultured human airway epithelial cells to X–rays and energetic alpha–particles. Yang TC, et al. **Int J Radiat Biol** 1990 Sep;58(3):509–17

Growth–associated modifications of low–molecular–weight thiols and protein sulfhydryls in human bronchial fibroblasts. Atzori L, et al. **J Cell Physiol** 1990 Apr; 143(1):165–71

Effects of vitamin A on growth and differentiation of human tracheobronchial epithelial cell cultures in serum–free medium. Chopra DP, et al. **J Cell Sci** 1989 May;93 (Pt 1):133–42

Growth and differentiation of human distal airway epithelial cells in culture. Effects of small amounts of serum in defined medium. Kitamura H, et al. **Lab Invest** 1990 Sep;63(3):420–8

Acrylonitrile–induced sister–chromatid exchanges and DNA single–strand breaks in adult human bronchial epithelial cells. Chang CM, et al. **Mutat Res** 1990 Aug;241(4):355–60

Intercellular communication in bronchial epithelial cells: review of evidence for a possible role in lung carcinogenesis. Albright CD, et al. **Toxicol Pathol** 1990; 18(2):324–41; discussion 341–3 (213 ref.)

[Muco–ciliary clearance] Blasi A, et al. **Ann Ital Med Int** 1986 Mar;1(1):66–74 (16 ref.) (Eng. Abstr.) **(Ita)**

[The clinical significance of Creola body in the sputum of asthmatic patients] Isohima K, et al. **Arerugi** 1989 Jul; 38(7):542–8 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Effect of ketanserin, a new blocking agent of the 5–HT2 receptor, on airway responsiveness in asthma. Cazzola M, et al. **Allergy** 1990 Feb;45(2):151–3

Protease inhibitors potentiate smooth muscle relaxation induced by vasoactive intestinal peptide in isolated human bronchi. Tam EK, et al. **Am J Respir Cell Mol Biol** 1990 May;2(5):449–52

Terfenadine modifies airway narrowing induced by the inhalation of nonisotonic aerosols in subjects with asthma. Finney MJ, et al. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1151–7

The influence of aerosol retention and pattern of deposition on bronchial responsiveness to atropine and methacholine in humans. Gillett MK, et al. **Am Rev Respir Dis** 1989 Dec; 140(6):1727–33

Oxygen radicals produce airway constriction and hyperresponsiveness in anesthetized cats. Katsumata U, et al. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1158–61

The effect of an increase in inhaled allergen dose after rimiterol hydrobromide on the occurrence and magnitude of the late asthmatic response and the associated change in nonspecific bronchial responsiveness. Lai CK, et al. **Am Rev Respir Dis** 1989 Oct;140(4):917–23

Morphologic changes in the airways induced by recurrent exposure of acetylcholine in the guinea pig. Nagai A, et al. **Am Rev Respir Dis** 1990 Jul;142(1):172–6

Normal airway responsiveness to methacholine in cardiac asthma. Seibert AF, et al. **Am Rev Respir Dis** 1989 Dec; 140(6):1805–6

Inhibition of leukotriene D4–induced bronchoconstriction in normal subjects by the oral LTD4 receptor antagonist ICI 204,219. Smith LJ, et al. **Am Rev Respir Dis** 1990 Apr;141(4 Pt 1):988–92

Acute topical steroid administration blocks mast cell increase and the late asthmatic response of the canine peripheral

airways. Turner CR, et al. **Am Rev Respir Dis** 1990 Feb; 141(2):421–7

Effects of inhaled PAF in humans on circulating and bronchoalveolar lavage fluid neutrophils. Relationship to bronchoconstriction and changes in airway responsiveness. Wardlaw AJ, et al. **Am Rev Respir Dis** 1990 Feb; 141(2):386–92

Antagonism of histamine-induced bronchoconstriction [letter; comment] Jones JG. **Anesthesiology** 1990 Jun; 72(6):1103 Comment on: Anesthesiology 1989 Nov;71(5):723–9.

Effect of nisoldipine (BAY k 5552) on methacholine-induced bronchoconstriction in patients with nonspecific bronchial hyperreactivity. Verdiani P, et al. **Ann Allergy** 1989 Dec; 63(6 Pt 1):498–502

Mechanisms involved in neurokinin-induced bronchoconstriction. Joos GF, et al. **Arch Int Pharmacodyn Ther** 1990 Jan–Feb;303:132–46 (68 ref.)

Synergistic mechanisms in the adenosine- and neuropeptide-induced bronchoconstriction. Pauwels R, et al. **Arch Int Pharmacodyn Ther** 1990 Jan–Feb;303:113–21

Bronchodilator effect of atrial natriuretic peptide in asthma [published erratum appears in BMJ 1990 Jan 6;300(6716):24] Hulks G, et al. **BMJ** 1989 Oct 28;299(6707):1081–2

Paradoxical bronchoconstriction in wheezing infants after nebulised preservative free iso-osmolar ipratropium bromide [see comments] O'Callaghan C, et al. **BMJ** 1989 Dec 9;299(6713):1433–4 Comment in: BMJ 1990 Feb 10;300(6721):397–8.

Paradoxical bronchoconstriction in wheezing infants after nebulized ipratropium bromide [letter; comment] Van Bever HP, et al. **BMJ** 1990 Feb 10;300(6721):397–8 Comment on: BMJ 1989 Dec 9;299(6713):1433–4.

Effects of ketamine on isolated human bronchial preparations. Gateau O, et al. **Br J Anaesth** 1989 Dec;63(6):692–5

Effect of formoterol, a long-lasting beta 2-adrenoceptor agonist, against methacholine-induced bronchoconstriction. Nix A, et al. **Br J Clin Pharmacol** 1990 Mar;29(3):321–4

Mechanism of the potentiation of neurally-induced bronchoconstriction by gallamine in the guinea-pig. Del Monte M, et al. **Br J Pharmacol** 1990 Mar;99(3):582–6

Effect of cromakalim on bronchoconstriction evoked by cholinergic nerve stimulation in guinea-pig isolated trachea. McCaig DJ, et al. **Br J Pharmacol** 1989 Oct; 98(2):662–8

Neuropeptide Y modulates non-adrenergic, non-cholinergic neural bronchoconstriction in vivo and in vitro. Stretton CD, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:781P

Angiotensin converting enzyme inhibitors potentiate the bronchoconstriction induced by substance P in the guinea-pig. Subissi A, et al. **Br J Pharmacol** 1990 Jul; 100(3):502–6

Ascorbic acid prevents ozone-induced bronchial hyperreactivity in guinea-pigs. Yeadon M, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:790P

Effects of timolol, indomethacin, and MK-571 on bronchoconstriction to infused leukotriene D4 in guinea pigs. Masson P, et al. **Can J Physiol Pharmacol** 1990 Jul; 68(7):783–90

Effects of aplysiatoxin and debromoaplysiatoxin on growth and differentiation of normal human bronchial epithelial cells. Willey JC, et al. **Cell Biol Toxicol** 1984 Oct; 1(1):145–54

Innervation of lower airways and neuropeptide effects on bronchial and vascular tone in the pig. Martling CR, et al. **Cell Tissue Res** 1990 May;260(2):223–33

Attenuating effect of a thromboxane synthetase inhibitor (OKY-046) on bronchial responsiveness to methacholine is specific to bronchial asthma. Fujimura M, et al. **Chest** 1990 Sep;98(3):656–60

Airways responses to ipratropium bromide do not vary with time in asthmatic subjects. Studies of interindividual and intraindividual variation of bronchodilatation and protection against histamine-induced bronchoconstriction. Ihre E, et al. **Chest** 1990 Jan;97(1):46–51

The effect of caffeine on exercise-induced bronchoconstriction. Kivity S, et al. **Chest** 1990 May; 97(5):1083–5

Bronchopulmonary effects of endothelin. Lagente V, et al. **Clin Exp Allergy** 1990 Jul;20(4):343–8 (56 ref.)

Effect of vasopressin on bronchial reactivity to histamine. Knox AJ, et al. **Clin Sci** 1989 Nov;77(5):467–71

Contrasting bronchoalveolar leukocyte responses in rats inhaling coal mine dust, quartz, or titanium dioxide: effects of coal rank, airborne mass concentration, and cessation of exposure. Donaldson K, et al. **Environ Res** 1990 Jun; 52(1):62–76

The effect of angiotensin converting enzyme inhibitors (ACE-I) and selective beta 1-antagonists on bronchial reactivity and the cough reflex in man. Uzubalis RI, et al. **Eur J Clin Pharmacol** 1989;37(5):467–70

Ganglion-blocking agents enhance neurally mediated bronchoconstriction in the guinea-pig: possible role of sensory neuropeptides. Del Monte M, et al. **Eur J Pharmacol** 1990 May 16;180(2–3):239–45

Enhancement of pharmacologically induced bronchoconstriction by Ro 5–4864. Marano G, et al. **Eur J Pharmacol** 1990 Apr 10;179(1–2):237–40

The action of platelet activating factor and its antagonism by WEB 2086 on human isolated airways. Johnson PR, et al. **Eur Respir J** 1990 Jan;3(1):55–60

Effect of oral N-acetylcysteine (NAC) on volume and albumin content of respiratory tract fluid but not on epithelial secretory cell number in "smoking" rats. Robinson N, et al. **Eur Respir J** 1990 Mar;3(3):304–10

Failure of aerosolized endothelin (ET-1) to induce bronchial hyperreactivity in the guinea pig. Lagente V, et al. **Fundam Clin Pharmacol** 1990;4(3):275–80

Bronchial provocation testing of sodium iso-nonanoyl oxybenzene sulphonate. Ferguson H, et al. **Hum Exp Toxicol** 1990 Mar;9(2):83–9

Effects of azelastine on vagal neuroeffector transmission in canine and human airway smooth muscle. Aizawa H, et al. **J Allergy Clin Immunol** 1990 Aug;86(2):171–6

Metabisulfite oral challenge: incidence of adverse responses in chronic childhood asthma and its relationship with bronchial hyperreactivity. Boner AL, et al. **J Allergy Clin Immunol** 1990 Feb;85(2):479–83

Effects of SK&F 104353, a leukotriene receptor antagonist, on the bronchial responses to histamine in subjects with asthma: a comparative study with terfenadine. Dinh Xuan AT, et al. **J Allergy Clin Immunol** 1990 May;85(5):865–71

Effects of oral cetirizine, a selective H1 antagonist, on allergen- and exercise-induced bronchoconstriction in subjects with asthma. Gong H Jr, et al. **J Allergy Clin Immunol** 1990 Mar;85(3):632–41

A double-blind, randomized study of sodium cromoglycate versus placebo in patients with cystic fibrosis and bronchial hyperreactivity. Sivan Y, et al. **J Allergy Clin Immunol** 1990 Mar;85(3):649–54

Nonadrenergic bronchodilation in adult and young guinea pigs. Clerici C, et al. **J Appl Physiol** 1989 Nov;67(5):1764–9

Virus induces airway hyperresponsiveness to tachykinins: role of neutral endopeptidase. Dusser DJ, et al. **J Appl Physiol** 1989 Oct;67(4):1504–11

Effects of ozone on cyclooxygenase metabolites in the baboon tracheobronchial tree. Fouke JM, et al. **J Appl Physiol** 1990 Jul;69(1):245–50

Hypocapnia does not alter collateral ventilation in sheep. Hudak BB, et al. **J Appl Physiol** 1990 Feb;68(2):503–7

Inhaled PAF fails to induce airway hyperresponsiveness to methacholine in normal human subjects. Lai CK, et al. **J Appl Physiol** 1990 Mar;68(3):919–26

Oxygen radicals in capsaicin-induced bronchoconstriction. Lai YL. **J Appl Physiol** 1990 Feb;68(2):568–73

Capsaicin-induced bronchodilation in mild asthmatic subjects: possible role of nonadrenergic inhibitory system. Lammers JW, et al. **J Appl Physiol** 1989 Aug;67(2):856–61

Electromechanical effects of endothelin on ferret bronchial and tracheal smooth muscle. Lee HK, et al. **J Appl Physiol** 1990 Jan;68(1):417–20

Calcium chelators induce bronchoconstriction in the canine lung periphery. Lindeman KS, et al. **J Appl Physiol** 1990 Mar;68(3):1114–20

A muscarinic agonist inhibits reflex bronchoconstriction in normal but not in asthmatic subjects. Minette PA, et al. **J Appl Physiol** 1989 Dec;67(6):2461–5

Tachykinins mediate hypocapnia-induced bronchoconstriction in guinea pigs. Reynolds AM, et al. **J Appl Physiol** 1989 Dec;67(6):2454–60

Degradative enzymes modulate airway responses to intravenous neurokinins A and B. Shore SA, et al. **J Appl Physiol** 1989 Dec;67(6):2504–11

Effects of increasing doses of beta-agonists on airway and parenchymal hysteresis. Wang YT, et al. **J Appl Physiol** 1990 Jan;68(1):363–8

Pulmonary function in the elderly: response to theophylline bronchodilation. Chandler MH, et al. **J Clin Pharmacol** 1990 Apr;30(4):330–5

In vitro and in vivo bronchorelaxant effect in guinea pigs of "joshina"—a herbal polypharmaceutical. Kheterpal K, et al. **J Ethnopharmacol** 1989 Sep;26(2):183–7

An examination of the influence of the epithelium on contractile responses to peptidoleukotrienes and blockade by ICI 204,219 in isolated guinea pig trachea and human intralobar airways. Buckner CK, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):77–85

Effects of the methyl xanthine S 9795 on isolated bronchi of the dog. Busk MF, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):1045–53

Bradykinin-induced bronchoconstriction in guinea pig in vivo: role of neural mechanisms. Ichinose M, et al. **J Pharmacol Exp Ther** 1990 May;253(2):594–9

A potassium channel activator modulates both excitatory noncholinergic and cholinergic neurotransmission in guinea pig airways. Ichinose M, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1207–12

Metabolic activation and bronchiolar Clara cell necrosis from naphthalene in the isolated perfused mouse lung. Kanekal S, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):428–37

Airway opioid receptors mediate inhibition of cough and reflex bronchoconstriction in guinea pigs. Karlsson JA, et al. **J Pharmacol Exp Ther** 1990 Feb;252(2):863–8

Early and late tracheobronchial plasma exudation by platelet-activating factor administered to the airway mucosal surface in guinea pigs: effects of WEB 2086 and enprofylline. O'Donnell SR, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):65–70

Pharmacologic studies on the differential influence of inhibitors of neutral endopeptidase on nonadrenergic, noncholinergic contractile responses of the guinea pig isolated hilar bronchus to transmural electrical stimulation and exogenously applied tachykinins. Warner EA, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):824–30

Histamine and methacholine aerosol bronchial challenge in awake guinea pigs. Wiester MJ, et al. **J Pharmacol Exp Ther** 1990 Apr;253(1):27–33

Inhibitory effect of the newly synthesized pyridazinone derivative NZ-107 on bronchoconstriction induced by slow reacting substance of anaphylaxis in the guinea pig. Hibi M, et al. **Jpn J Pharmacol** 1989 Nov;51(3):411–9

Immunopharmacological studies on TBX, a new antiallergic drug (3). Inhibitory effects on histamine release from lung fragments and bronchoconstriction in guinea pigs. Yanagihara Y, et al. **Jpn J Pharmacol** 1989 Sep;51(1):83–92

A new method for determining bronchospasmolytic drug effects in vagotomized guinea pigs. Dzimiri N, et al. **Methods Find Exp Clin Pharmacol** 1990 Apr;12(3):185–8

In vitro studies of aldehyde effects related to human respiratory carcinogenesis. Grafström RC. **Mutat Res** 1990 May;238(3):175–84

Bronchial hyperresponsiveness in cardiac failure [letter] **N Engl J Med** 1989 Dec 21;321(25):1756–8

Effect of inhaled furosemide on bronchial responsiveness to methacholine [letter; comment] Fujimura M, et al. **N Engl J Med** 1990 Mar 29;322(13):935–6 Comment on: N Engl J Med 1989 Oct 19;321(16):1069–73.

Suppression of PAF-induced bronchoconstriction in the guinea-pig by oxatomide: mechanism of action. Nijkamp FP, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jul; 340(1):111–8

Role of cholinergic, vagal reflexes on the bronchoconstrictor responses to histamine during carbon dioxide inhalation in conscious guinea-pigs. Chapman RW, et al. **Pharmacol Res** 1990 Mar–Apr;22(2):133–41

Effect of amiloride on human bronchial ciliary activity in vitro. Di Benedetto G, et al. **Respiration** 1990;57(1):37–9

Effects of thiazinamium chloride on human isolated bronchial muscle preparations. Labat C, et al. **Respiration** 1989; 55(4):220–6

Effect of inhaled leukotriene B4 alone and in combination with prostaglandin D2 on bronchial responsiveness to histamine in normal subjects [letter; comment] Adachi M, et al. **Thorax** 1990 Feb;45(2):158 Comment on: Thorax 1989 Jun;44(6):491–5.

Role of histamine release in hypertonic saline induced bronchoconstriction [see comments] O'Hickey SP, et al. **Thorax** 1989 Aug;44(8):650–3 Comment in: Thorax 1990 Jan;45(1):78.

Effect of inhaled frusemide on the early response to antigen and subsequent change in airway reactivity in atopic patients. Verdiani P, et al. **Thorax** 1990 May;45(5):377–81

Comparison of bronchodilator responses and deposition patterns of salbutamol inhaled from a pressurised metered dose inhaler, as a dry powder, and as a nebulised solution. Zainudin BM, et al. **Thorax** 1990 Jun;45(6):469–73

Neurokinin A-induced bronchial hyperresponsiveness to methacholine in Japanese monkeys. Tamura G, et al. **Tohoku J Exp Med** 1989 Sep;159(1):69–73

Development of a tracheal implant xenograft model to expose human bronchial epithelial cells to toxic gases. Everitt JI, et al. **Toxicol Pathol** 1989;17(3):465–73

[Measurement of the effect of a bronchodilator agent] Fitting JW. **Schweiz Rundsch Med Prax** 1990 May 29;79(22):688–90 (Eng. Abstr.) **(Fre)**

[Effect of repeated nicotine administration on mucus secretion, bronchodilation and circulatory variables: inhibitory effect of autonomic antagonists] Lang M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:558–60 (Eng. Abstr.) **(Ger)**

[Inhalation of a precursor analogue of vasoactive intestinal polypeptide (Leu17 VIP-Gly-Lys) protects ascaris-induced bronchoconstriction in dog] Hamada M, et al. **Arerugi** 1989 Dec;38(12):1347–53 (Eng. Abstr.) **(Jpn)**

[Effect of a new selective alpha 2 adrenergic blocker, midaglizole, on isolated airway smooth muscle] Mizobe M. **Arerugi** 1990 Jan;39(1):36–41 (Eng. Abstr.) **(Jpn)**

[Thromboxane A2 could be involved in bronchial hyperresponsiveness to methacholine in asthmatic subjects but not in bronchitic subjects] Fujimura M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Jan;28(1):121–5 (Eng. Abstr.) **(Jpn)**

[Contribution of the vagal nerve on histamine-induced bronchoconstriction in guinea-pigs] Inoue H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb;28(2):344–9 (Eng. Abstr.) **(Jpn)**

[The effect of leukotriene C4/D4 receptor antagonist (ONO-1078) and thromboxane A2 synthetase inhibitor (OKY-046) on airway hyperresponsiveness induced by ozone exposure in guinea pigs] Okazawa A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb;28(2):293–9 (Eng. Abstr.) **(Jpn)**

[The role of cyclooxygenase products on bronchial responsiveness to methacholine in patients with sino-bronchial syndrome] Sakamoto S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Oct; 27(10):1163–7 (Eng. Abstr.) **(Jpn)**

[Airway responsiveness measured by body plethysmograph connecting a circuit of an inhalation system of serially concentrated bronchoconstrictant] Uno-Komase Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Dec; 27(12):1460–6 (Eng. Abstr.) **(Jpn)**

[Anti-allergic effects of

(E)-3-[p-(1H-imidazol-1-ylmethyl)phenyl]-2-propenoic acid (OKY-046), a specific thromboxane (TX) A2 synthetase inhibitor: effect of OKY-046 on II-IV type allergic reactions] Kikuchi S, et al. **Nippon Yakurigaku Zasshi** 1990 Mar;95(3):131-7 (Eng. Abstr.) **(Jpn)**

[Anti-allergic effects of (E)-3-[p-(1H-imidazol-1-ylmethyl) phenyl]-2-propenoic acid (OKY-046), a specific thromboxane (TX) A2 synthetase inhibitor: effects on type I allergic reactions] Takehana Y, et al. **Nippon Yakurigaku Zasshi** 1990 Mar;95(3):121-30 (Eng. Abstr.) **(Jpn)**

[Study of the effect of salbutamol inhalation on the function of small airways in patients with chronic bronchitis without ventilatory disorders using simple spirographic tests] Niepsuj G, et al. **Pneumonol Pol** 1989 Mar;57(3):177-82 (Eng. Abstr.) **(Pol)**

[Influence of pirenzepine on bronchial reactivity evaluated by the methacholine provocation test in a double-blind study of patients with bronchial asthma] Rutkowski R, et al. **Pneumonol Pol** 1989 Oct-Dec;57(10-12):477-81 (Eng. Abstr.) **(Pol)**

[Effect of cimetidine and ranitidine on bronchial reactivity in patients with asthma] Hofman J, et al. **Pol Tyg Lek** 1989 Jul 3;44(27):639-41 (Eng. Abstr.) **(Pol)**

[Function of external respiration in workers dealing with chemical substances irritating the respiratory tract] Penknovich AA, et al. **Gig Tr Prof Zabol** 1990;(5):19-21 (Eng. Abstr.) **(Rus)**

[Hemosorption in the treatment of aspirin-induced bronchial asthma] Didkovskil NA,, et al. **Klin Med (Mosk)** 1989 Dec; 67(12):40-4 (Eng. Abstr.) **(Rus)**

[A device for inserting a catheter into the trachea and bronchi for conducting endobronchial therapy] Provotorov VM, et al. **Med Tekh** 1990 Mar-Apr;(2):34-6 (Eng. Abstr.) **(Rus)**

[Use of berotec electrophoresis in the treatment of children with bronchial asthma] Bespal'ko NN, et al. **Pediatriia** 1990; (1):77-80 **(Rus)**

[The clinico-functional effectiveness of calcium antagonists in correcting the bronchial hyperreactivity of bronchial asthma patients] Fedoseev GB, et al. **Ter Arkh** 1990; 62(1):63-6 (Eng. Abstr.) **(Rus)**

[Bronchomotor effects of cardioselective beta 1-adrenoblockaders in patients with bronchial asthma] Sinopal'nikov AI, et al. **Ter Arkh** 1989;61(8):43-6 (Eng. Abstr.) **(Rus)**

[Differential diagnosis possibilities of the bronchodilation test in the classification of bronchial asthma according to type] Hamzagić H. **Med Arh** 1984;38(4):163-6 (Eng. Abstr.) **(Scr)**

[Comparison of bronchial reactivity to prostaglandin F2 alpha and histamine] Ninković M, et al. **Vojnosanit Pregl** 1989 Jul-Aug;46(4):253-5 (Eng. Abstr.) **(Scr)**

EMBRYOLOGY

Secretory differentiation of human fetal bronchial epithelial cells in culture. A study by histochemistry and electron microscopy. Brockmeyer C, et al. **Exp Pathol** 1990; 39(1):11-7

ENZYMOLOGY

The imbalance between granulocyte neutral proteases and antiproteases in bronchial secretions from patients with cystic fibrosis. Suter S. **Antibiot Chemother** 1989;42:158-68 (47 ref.)

Immunocytochemical demonstration of quantitative differences in the distribution of lysozyme in human airway secretory granule phenotypes. Hinnrasky J, et al. **Biol Cell** 1990;68(3):239-43

Cytochrome P-450 monooxygenase, epoxide hydrolase and flavin monooxygenase activities in Clara cells and alveolar type II cells isolated from rabbit. Devereux TR, et al. **Cell Biol Toxicol** 1985 Jan;1(2):57-65

Beta-lactamase activity in bronchial sputum and treatment failure against penicillin-sensitive bacteria in pulmonary infections. Bingen E, et al. **J Antimicrob Chemother** 1989 Oct;24(4):622-4

IMMUNOLOGY

Normal bronchial mucus contains high levels of cancer-associated antigens, CA125, CA19-9, and carcinoembryonic antigen. Matsuoka Y, et al. **Cancer** 1990 Feb 1;65(3):506-10

The epithelium overlying rabbit bronchus-associated lymphoid tissue does not express the secretory component of immunoglobulin A. Gehrke I, et al. **Cell Tissue Res** 1990 Feb;259(2):397-9

The relationship between atopy and non-specific bronchial responsiveness. Grainger DN, et al. **Clin Exp Allergy** 1990 Mar;20(2):181-7

The effect of cyclosporine on expression of class II major histocompatibility complex antigens on bronchoalveolar cells and peripheral blood mononuclear cells. Chang SC, et al. **Immunol Lett** 1990 Feb;23(4):299-303

Bronchial sensitization in guinea pigs following ingestion of ovalbumin. Riedel F, et al. **Int Arch Allergy Appl Immunol** 1989;90(4):395-9

Effect of seasonal exposure to pollen on specific bronchial sensitivity in allergic patients. Crimi E, et al. **J Allergy Clin Immunol** 1990 Jun;85(6):1014-9

Longitudinal changes in atopy during a 4-year period: relation to bronchial hyperresponsiveness and respiratory symptoms in a population sample of Australian schoolchildren. Peat JK, et al. **J Allergy Clin Immunol** 1990 Jan;85(1 Pt 1):65-74

Repeated antigen inhalation results in a prolonged airway eosinophilia and airway hyperresponsiveness in primates. Gundel RH, et al. **J Appl Physiol** 1990 Feb;68(2):779-86

Localization of endothelin-like immunoreactivity in airway epithelium of rats and mice. Rozengurt N, et al. **J Pathol** 1990 Jan;160(1):5-8

Prematurity and maternal bronchial hyperresponsiveness. Riedel F, et al. **J Perinat Med** 1989;17(2):151-5

Strain differences in guinea pigs' bronchial sensitivity to acetylcholine. Mikami H, et al. **Jikken Dobutsu** 1990 Jan; 39(1):49-54

Lymphocytes and bronchial hyperresponsiveness. Van Oosterhout AJ, et al. **Life Sci** 1990;46(18):1255-64 (48 ref.)

Effects of a bacterial extract on local immunity of the lung in patients with chronic bronchitis. Emmerich B, et al. **Lung** 1990;168 Suppl:726-31

The immunological component of the cellular inflammatory infiltrate in bronchiectasis. Silva JR, et al. **Thorax** 1989 Aug;44(8):668-73

Class II antigen expression on bronchial epithelium in rat lung allografts is prevented by cyclosporine treatment. Romaniuk A, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):218-9

[The inhibitory effect of oxatomide, an anti-allergic agent, on eosinophil-mediated and eosinophilic cell line-mediated natural cytotoxicity against bronchial epithelial cells] Chihara J, et al. **Arerugi** 1989 Oct;38(10):1180-4 (Eng. Abstr.) **(Jpn)**

[Inhibition of antigen-induced late asthmatic response and bronchial hyperresponsiveness by cyclosporin A] Fukuda T, et al. **Arerugi** 1990 May;39(5):483-7 (Eng. Abstr.) **(Jpn)**

[Relationship between bronchial hypersensitivity and hereditary factors in respiratory tract allergic diseases: bronchial asthma and nasal allergy] Kiya T. **Arerugi** 1990 May;39(5):465-75 (Eng. Abstr.) **(Jpn)**

[Effect of allergy on airway reactivity in children with obstructive bronchitis] Koczyńska-Nowacka K. **Pediatr Pol** 1989 May;64(5):288-94 (Eng. Abstr.) **(Pol)**

[Is bronchial hypersensitivity in early childhood genetically determined?] Gutkowski P, et al. **Pneumonol Pol** 1990 Apr-May;58(4-5):181-4 (Eng. Abstr.) **(Pol)**

[Late phase of allergic reaction] Espinola N, et al. **Pol Arch Med Wewn** 1989 Apr;81(4):247-53 **(Pol)**

[The role of respiratory tract infections in the pathogenesis of bronchial asthma] Dworski R. **Pol Tyg Lek** 1989 Jan 9-16;44(2-3):69-72 (64 ref.) **(Pol)**

[Immunomorphological determination of secretory immunoglobulin A in the bronchial mucous membrane in chronic bronchitis] Lutsenko MT, et al. **Arkh Patol** 1989; 51(7):59-63 (Eng. Abstr.) **(Rus)**

[Immunomorphological characteristics of the bronchi and broncho- pulmonary lymphatic system after sensitization of rats with coal allergen] Shkutin AE, et al. **Gig Tr Prof Zabol** 1989;(8):48-50 **(Rus)**

[Relation of bronchial asthma and allergic bronchopulmonary aspergillosis] Alekseev VG, et al. **Klin Med (Mosk)** 1989 Dec;67(12):53-6 (Eng. Abstr.) **(Rus)**

[Gerontological aspects of bronchial asthma] Fedoseev GB, et al. **Sov Med** 1989;(10):71-4 **(Rus)**

INJURIES

Tears of the trachea and main bronchi caused by blunt trauma: radiologic findings [see comments] Unger JM, et al. **AJR Am J Roentgenol** 1989 Dec;153(6):1175-80 Comment in: AJR Am J Roentgenol 1990 May;154(5):1122-3.

Airway fire during co2 laser surgery using a Xomed Laser endotracheal tube. Sosis MB. **Anesthesiology** 1990 Apr; 72(4):747-9

Delayed diagnosis of rupture of the main bronchus. Niskanen R, et al. **Ann Chir Gynaecol** 1989;78(4):332-3

Traumatic ruptured bronchus and injury of major thoracic vessels. Katz RI, et al. **Ann Thorac Surg** 1967 Mar; 3(3):235-8

Tracheobronchial rupture due to blunt chest trauma: a follow-up study. Taskinen SO, et al. **Ann Thorac Surg** 1989 Dec;48(6):846-9

Bronchial rupture associated with flail chest treated by external traction. Duffy BL, et al. **Br J Anaesth** 1974 Sep; 46(9):697-8

A classic image of complete right main bronchus avulsion. Petterson C, et al. **Chest** 1989 Dec;96(6):1415-7

Intraspinal air: an unusual manifestation of blunt chest trauma. Scialdone CJ, et al. **Clin Imaging** 1990 Mar; 14(1):59-60

Type I rupture of the bronchus. Losty P, et al. **Ir J Med Sci** 1990 Mar;159(3):80-1

Endobronchial rupture from endotracheal reintubation with an endotracheal tube guide. Seitz PA, et al. **J Clin Anesth** 1989;1(3):214-7

Acquired symptomatic bronchial stenosis in infants: successful management using an argon laser. Azizkhan RG, et al. **J Pediatr Surg** 1990 Jan;25(1):19-24

Late surgical repair of a traumatic total stenosis of a left bronchus by free cartilage graft. Gallardo AF, et al. **J Pediatr Surg** 1989 Nov;24(11):1128-31

Iatrogenic perforation of the bronchus intermedius in a 1,100-g neonate. Holcomb GW 3d, et al. **J Pediatr Surg** 1989 Nov;24(11):1132-4

Acute tracheobronchial injury. Flynn AE, et al. **J Trauma** 1989 Oct;29(10):1326-30

Soft tissue effects of the holmium-YSGG laser in the canine trachea. Shapshay SM, et al. **Otolaryngol Head Neck Surg** 1990 Mar;102(3):251-6

Flexible fiberoptic bronchoscopy does not alter airway responsiveness. Söderberg M, et al. **Respiration** 1989; 56(3-4):182-8

[Nursing care of traumatic disruption of the bronchus tracheal] Chen YY. **Chung Hua Hu Li Tsa Chih** 1990 Jan; 25(1):17-8 **(Chi)**

[Reconstructive surgery in tracheobronchial injuries] Engelmann C, et al. **Zentralbl Chir** 1989;114(19):1269-77 (Eng. Abstr.) **(Ger)**

[A case of complete disruption of right truncus intermedius treated by operation] Sueda T, et al. **Kyobu Geka** 1989 Nov;42(12):1021-4; discussion 1024 (Eng. Abstr.) **(Jpn)**

[Endoscopic laser removal of cicatricial stenoses of the trachea and bronchi in children] Gerasin VA, et al. **Pediatriia** 1990;(3):96-7 **(Rus)**

[Long-term presence of a foreign body in the trachea and the right bronchus] Matveenko VA, et al. **Vestn Khir** 1989 Apr;142(4):40 **(Rus)**

INNERVATION

Immunohistochemical localization of peptide-containing nerves in human airways: age-related changes. Hislop AA, et al. **Am J Respir Cell Mol Biol** 1990 Sep;3(3):191-8

Regional differences in the motor and inflammatory responses to capsaicin in guinea pig airways. Correlation with content and release of substance P-like immunoreactivity. Manzini S, et al. **Am Rev Respir Dis** 1989 Oct;140(4):936-41

Effect of nonadrenergic noncholinergic inhibitory nerve stimulation on the allergic reaction in cat airways. Miura M, et al. **Am Rev Respir Dis** 1990 Jan;141(1):29-32

Cholinergic bronchomotor tone in COPD. Estimates of its amount in comparison with that in normal subjects. Gross NJ, et al. **Chest** 1989 Nov;96(5):984-7

Nicotinic agonist modulation of feline bronchomotor tone. Thompson DC, et al. **Clin Exp Pharmacol Physiol** 1990 Feb;17(2):83-97

Morphology of presumptive rapidly adapting receptors in the rat bronchus. Kappagoda CT, et al. **J Anat** 1990 Feb; 168:265-76

Origin and colocalization of CGRP- and SP-reactive nerves in cat airway epithelium. Dey RD, et al. **J Appl Physiol** 1990 Feb;68(2):770-8

Bronchial nerves in chronic obstructive airways disease: a preliminary report. Edwards C. **J Pathol** 1989 Dec; 159(4):287-91

Relative bronchodilatory responsiveness attributable to sympathetic and parasympathetic activity in bronchial asthma. Jindal SK, et al. **Respiration** 1989;56(1-2):16-21

[An adult case of congenital esophagobronchial fistula accompanied with bronchial branch of the vagal nerve] Date H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Apr;38(4):677-80 (Eng. Abstr.) **(Jpn)**

[The relative amount of slow-adapting stretch receptors in the trachea, extrapulmonary bronchi and lungs of the cat] Zhdanov VA, et al. **Fiziol Zh SSSR** 1989 Jul;75(7):955-62 (Eng. Abstr.) **(Rus)**

METABOLISM

Platelet activating factor and tracheobronchial respiratory glycoconjugate release in feline and human explants: involvement of the lipoxygenase pathway. Lundgren JD, et al. **Agents Actions** 1990 Jun;30(3-4):329-37

Respiratory tract penetration of ciprofloxacin. Reid TM, et al. **Am J Med** 1989 Nov 30;87(5A):60S-61S

Interactive effects of O3, cytochalasin D, and vinblastine on transepithelial transport and cytoskeleton in rat airways. Bhalla DK, et al. **Am J Respir Cell Mol Biol** 1990 Aug; 3(2):119-29

Lectin cytochemistry reveals differences between hamster trachea and bronchus in the composition of epithelial surface glycoconjugates and in the response of secretory cells to neutrophil elastase. Christensen TG, et al. **Am J Respir Cell Mol Biol** 1990 Jul;3(1):61-9

Specific binding of endothelin on human bronchial smooth muscle cells in culture and secretion of endothelin-like material from bronchial epithelial cells. Mattoli S, et al. **Am J Respir Cell Mol Biol** 1990 Aug;3(2):145-51

Release of 15-hydroxyeicosatetraenoic acid (15-HETE) and prostaglandin E2 (PGE2) by cultured human bronchial epithelial cells. Salari H, et al. **Am J Respir Cell Mol Biol** 1989 Sep;1(3):245-50

Ciliated hepatic foregut cyst. A mucus histochemical, immunohistochemical, and ultrastructural study in three cases in comparison with normal bronchi and intrahepatic bile ducts. Terada T, et al. **Am J Surg Pathol** 1990 Apr; 14(4):356-63

Receptors in asthmatic airways. Goldie RG. **Am Rev Respir Dis** 1990 Mar;141(3 Pt 2):S151-6 (50 ref.)

Phosphorylation-dependent regulation of apical membrane chloride channels in normal and cystic fibrosis airway epithelium. Welsh MJ, et al. **Ann N Y Acad Sci** 1989; 574:44-51

Concentrations of oral lomefloxacin in serum and bronchial mucosa. Baldwin DR, et al.
Antimicrob Agents Chemother 1990 Jun;34(6):1017–9
Lectin histochemistry of normal bronchopulmonary tissues and common forms of bronchogenic carcinoma. Alvarez–Fernandez E, et al. **Arch Pathol Lab Med** 1990 May;114(5):475–81
Mucus glycoproteins from 'normal' human tracheobronchial secretion. Thornton DJ, et al. **Biochem J** 1990 Jan 1; 265(1):179–86
Concentrations of temafloxacin in serum and bronchial mucosa. Baldwin DR, et al.
Eur J Clin Microbiol Infect Dis 1990 Jun;9(6):432–4
Evidence for the involvement of prostaglandins in modulation of acetylcholine release from canine bronchial tissue. Deckers IA, et al. **Eur J Pharmacol** 1989 Aug 29; 167(3):415–8
Receptors for neurokinins in human bronchus and urinary bladder are of the NK–2 type. Dion S, et al.
Eur J Pharmacol 1990 Mar 20;178(2):215–9
Exogenous mineral particles in the human bronchial mucosa and lung parenchyma. I. Nonsmokers in the general population. Churg A, et al. **Exp Lung Res** 1990 May–Jun; 16(3):159–75
Tritiated thymidine–labeled bronchioloalveolar cells and radiation dose following inhalation of plutonium in rats. Sanders CL, et al. **Exp Lung Res** 1989 Sep;15(5):755–69
A method for studying expectorant action in the mouse by measurement of tracheobronchial phenol red secretion. Coppi G, et al. **Farmaco** 1989 May;44(5):541–5
Cefepime concentrations in bronchial mucosa and serum following a single 2 gram intravenous dose. Chadha D, et al. **J Antimicrob Chemother** 1990 Jun;25(6):959–63
Contracture and change in membrane potential produced by sodium removal in the dog trachea and bronchiole. Ito Y, et al. **J Appl Physiol** 1989 Nov;67(5):2078–86
Eicosanoid release from human bronchial epithelial cells upon exposure to toluene diisocyanate in vitro. Mattoli S, et al. **J Cell Physiol** 1990 Feb;142(2):379–85
Biochemical changes in airways after antigen inhalation. Satake T, et al. **Jpn J Med** 1989 Jul–Aug;28(4):542–4
Gene transfer by lipofection in rabbit and human secretory epithelial cells. Lu L, et al. **Pflugers Arch** 1989 Nov; 415(2):198–203
[Bronchopulmonary penetration of ciprofloxacin] Loos U, et al. **Pneumologie** 1990 Feb;44 Suppl 1:312–3 (Eng. Abstr.) **(Ger)**
[Permeability changes in bronchiolo–alveolar epithelium] Kanazawa M. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 May;27(5):556–60 (Eng. Abstr.) **(Jpn)**
[The role of eosinophils in bronchial asthma] Pałczyński C, et al. **Pol Arch Med Wewn** 1988 Jun;79(6):332–7 (38 ref.) **(Pol)**
[Degree of mineralization of pulmonary, tracheal and bronchial tissues in healthy persons of different age] Levinskiĭ IaA, et al. **Arkh Anat Gistol Embriol** 1990 Apr; 98(4):71–5 (Eng. Abstr.) **(Rus)**
[The role of microelements in the pathogenesis and clinical course of bronchial asthma] Fedoseev GB, et al.
Klin Med (Mosk) 1989 Dec;67(12):44–8 **(Rus)**

MICROBIOLOGY

Endobronchial inoculation of various doses of Haemophilus (Actinobacillus) pleuropneumoniae in pigs. van Leengoed LA, et al. **Am J Vet Res** 1989 Dec;50(12):2054–9
Isolation of Sporosarcina ureae from a bronchial biopsy in a child with cystic fibrosis [letter] Chomarat M, et al.
Eur J Clin Microbiol Infect Dis 1990 Apr;9(4):302–3
Characterization of the Pseudomonas aeruginosa pilus adhesin: confirmation that the pilin structural protein subunit contains a human epithelial cell–binding domain. Irvin RT, et al. **Infect Immun** 1989 Dec;57(12):3720–6
Organ tropism of Sendai virus in mice: proteolytic activation of the fusion glycoprotein in mouse organs and budding site at the bronchial epithelium. Tashiro M, et al.
J Virol 1990 Aug;64(8):3627–34
[Diagnostic usefulness of transbronchial aspiration and bronchial lavage for pulmonary tuberculosis] Watanabe K, et al. **Kekkaku** 1990 Mar;65(3):227–30 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

The effect of 100% oxygen on the propagation of tracheobronchial injury during high–frequency and conventional mechanical ventilation. Wiswell TE, et al.
Am J Dis Child 1990 May;144(5):560–4
Chrysotile asbestos inhalation induces tritiated thymidine incorporation by epithelial cells of distal bronchioles. McGavran PD, et al. **Am J Respir Cell Mol Biol** 1989 Sep; 1(3):231–5
Small airway dimensions in smokers with obstruction to airflow. Bosken CH, et al. **Am Rev Respir Dis** 1990 Sep; 142(3):563–70
The requirement for platelets in allergen–induced late asthmatic airway obstruction. Eosinophil infiltration and heightened airway responsiveness in allergic rabbits. Coyle AJ, et al. **Am Rev Respir Dis** 1990 Sep;142(3):587–93
Mucosal inflammation in asthma. Djukanović R, et al.
Am Rev Respir Dis 1990 Aug;142(2):434–57 (377 ref.)
Hyperreactive site in the airway tree of asthmatic patients revealed by thickening of bronchial muscles. A morphometric study. Ebina M, et al.
Am Rev Respir Dis 1990 May;141(5 Pt 1):1327–32
Intraluminal airway inflammation in chronic bronchitis. Characterization and correlation with clinical parameters. Thompson AB, et al. **Am Rev Respir Dis** 1989 Dec; 140(6):1527–37
Quantitative study of the early effects of tracheotomy and endotracheal intubation on the rabbit tracheobronchial tree. Squire R, et al. **Ann Otol Rhinol Laryngol** 1990 Jan; 99(1):62–8
Potential role of dendritic cells in bronchiolitis obliterans in heart–lung transplantation. Yousem SA, et al.
Ann Thorac Surg 1990 Mar;49(3):424–8
Effect of corticosteroids on deterioration of endobronchial tuberculosis during chemotherapy. Chan HS, et al.
Chest 1989 Nov;96(5):1195–6
Inflammatory markers in bronchoalveolar lavage and in bronchial biopsy in asthma during remission. Foresi A, et al. **Chest** 1990 Sep;98(3):528–35
Pneumothorax following transbronchial biopsy. Low diagnostic yield with routine chest roentgenograms. Frazier WD, et al. **Chest** 1990 Mar;97(3):539–40
Bronchoalveolar lavage and morphology of the airways after cessation of exposure in asthmatic subjects sensitized to toluene diisocyanate. Paggiaro P, et al. **Chest** 1990 Sep; 98(3):536–42
Cytologic diagnosis of pulmonary Hodgkin's disease via endobronchial brush preparation. Rubin AH, et al.
Chest 1989 Oct;96(4):948–9
Ciliary orientation in the "immotile cilia" syndrome. Rautiainen M, et al. **Eur Arch Otorhinolaryngol** 1990; 247(2):100–3
Bronchial brushing and biopsy: a comparative evaluation in diagnosing visible bronchial lesions. Saita S, et al.
Eur J Cardiothorac Surg 1990;4(5):270–2
The changes in airways structure associated with reduced forced expiratory volume in one second. Matsuba K, et al. **Eur Respir J** 1989 Oct;2(9):834–9
Alpha 1–protease inhibitor moderates human neutrophil elastase–induced emphysema and secretory cell metaplasia in hamsters. Stone PJ, et al. **Eur Respir J** 1990 Jun; 3(6):673–8
Regional difference in airway epithelial response to neutrophil elastase: tracheal secretory cells discharge and recover in hamsters that develop bronchial secretory–cell metaplasia. Christensen TG, et al. **Exp Lung Res** 1989 Dec; 15(6):943–59
Reversibility of biochemical and cytological alterations in broncho–alveolar lavagate upon cessation of dust exposure. Creutzenberg O, et al. **Exp Pathol** 1989;37(1–4):243–7
Differential effects of cigarette smoke condensate and its fractions on cultured normal and malignant human bronchial epithelial cells. Miyashita M, et al.
Exp Pathol 1990;38(1):19–29
Detection of human papillomavirus DNA in squamous bronchial metaplasia and squamous cell carcinomas of the lung by in situ hybridization using biotinylated probes in paraffin–embedded specimens. Béjui–Thivolet F, et al.
Hum Pathol 1990 Jan;21(1):111–6
Cytological evaluation of tracheo bronchial mucus membrane during anesthesia. Hardas UD, et al.
Indian J Pathol Microbiol 1987 Apr;30(2):197–200
Histological study of mast cells in the actively sensitized guinea pig lung and after challenge: effect of a corticosteroid. Bachelet CM, et al.
Int Arch Allergy Appl Immunol 1990;91(2):171–4
Bronchial micronuclei as a marker of an early stage of carcinogenesis in the human tracheobronchial epithelium. Lippman SM, et al. **Int J Cancer** 1990 May 15;45(5):811–5
Bronchial gland duct ectasia in fatal bronchial asthma: association with interstitial emphysema. Cluroe A, et al.
J Clin Pathol 1989 Oct;42(10):1026–31
Recombinant human secretory leukocyte–protease inhibitor: in vitro properties, and amelioration of human neutrophil elastase–induced emphysema and secretory cell metaplasia in the hamster. Lucey EC, et al. **J Lab Clin Med** 1990 Feb;115(2):224–32
Detection of extrinsic bronchial compression during foreign body removal by pulse oximetry. Morrissey MS, et al.
J Laryngol Otol 1990 Jan;104(1):50–1
Tracheobronchial and pulmonary histopathology following conventional and high–frequency jet ventilation. Naglie RA, et al. **J Perinatol** 1990 Mar;10(1):46–51
Pulmonary infiltrates after heart–lung transplantation: evaluation by serial transbronchial biopsies. Starnes VA, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 2):945–50
Evaluation of heart–lung transplant recipients with prospective, serial transbronchial biopsies and pulmonary function studies. Starnes VA, et al.
J Thorac Cardiovasc Surg 1989 Nov;98(5 Pt 1):683–90
Histological changes in the airway after antigen inhalation challenge in asthma. Makino S. **Jpn J Med** 1989 Jul–Aug; 28(4):538–41 (10 ref.)
Extracellular matrix in preneoplastic lesions and early cancer of the lung. Fisseler–Eckhoff A, et al. **Pathol Res Pract** 1990 Feb;186(1):95–101
Abnormal patterns of pulmonary neuroendocrine cells in victims of sudden infant death syndrome. Gillan JE, et al.
Pediatrics 1989 Nov;84(5):828–34
Different high–frequency ventilator strategies: effect on the propagation of tracheobronchial histopathologic changes. Wiswell TE, et al. **Pediatrics** 1990 Jan;85(1):70–8
Long–term follow–up of classical bronchial carcinoid tumors. Clinicopathologic observations. Warren WH, et al.
Scand J Thorac Cardiovasc Surg 1990;24(2):125–30
The biphasic spirogram: a clue to unilateral narrowing of a mainstem bronchus. Gascoigne AD, et al. **Thorax** 1990 Aug;45(8):637–8
Morphological integrity of the bronchial epithelium in mild asthma. Lozewicz S, et al. **Thorax** 1990 Jan;45(1):12–5
Bronchoscopic and bronchographic findings in 12 patients with sarcoidosis and severe or progressive airways obstruction. Udwadia ZF, et al. **Thorax** 1990 Apr; 45(4):272–5
Bronchoscopy findings in invasive pulmonary aspergillosis. Verea–Hernando H, et al. **Thorax** 1989 Oct;44(10):822–3
Relation between small airways disease and parenchymal destruction in surgical lung specimens. Willems LN, et al. **Thorax** 1990 Feb;45(2):89–94
[Histopathological study of the tracheo–bronchial tissue and lung parenchyma of dogs with severe steam burns of the respiratory tract within 14 days after the injuries] Li YP, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Mar;2(1):57–9, 77–8 (Eng. Abstr.) **(Chi)**
[Histopathological and ultrastructural changes of canine tracheo–bronchi and lung parenchyma after smoke inhalation injury] Shi JQ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Mar;5(1):47–50, 78 (Eng. Abstr.) **(Chi)**
[Unusual metaplasia of the deer lung] Rang HH.
Tierarztl Prax 1990 Jun;18(3):243–4 (Eng. Abstr.) **(Ger)**
[Short scientific report. Vitamin C lessens superoxide anion(O_2)–induced bronchial constriction] Becher G, et al.
Z Erkr Atmungsorgane 1989;173(1):100–4 (Eng. Abstr.) **(Ger)**
[Changes in the tracheobronchial tree of children with esophageal atresia] Holzki J. **Z Kinderchir** 1988 Sep;43 Suppl 1:27 **(Ger)**
[Importance of bronchial biopsy in the histologic typing of cancer of the lung. Case study contribution (1980–1987)] Vecchio L, et al. **Minerva Chir** 1989 Jul 31; 44(13–14):1735–8 (Eng. Abstr.) **(Ita)**
[Relationship between presence of Creola bodies and airway hyperresponsiveness in patients with bronchial asthma] Motojima S, et al. **Arerugi** 1990 Apr;39(4):377–83 (Eng. Abstr.) **(Jpn)**
[A study on the changes in the tracheo–bronchial mucosa after esophagectomy for esophageal cancer; with special reference to the influence of neck and upper mediastinal lymph node dissections] Kusano C, et al.
Nippon Geka Gakkai Zasshi 1989 Nov;90(11):1866–72 (Eng. Abstr.) **(Jpn)**
[Distribution of epithelial cells in respiratory bronchioles, with special reference to influence of cigarette smoking] Kawakami M. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 May;27(5):546–9 (Eng. Abstr.) **(Jpn)**
[Bronchiolo–fiberscopic, histological and ultrastructural studies of peripheral lung tissues in bronchial asthma patients] Kawanami O, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 Aug; 27(8):925–32 (Eng. Abstr.) **(Jpn)**
[Membranous bronchiole diseases in patients without chronic air–flow limitation] Matsuba K, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 Jul;27(7):803–10 (Eng. Abstr.) **(Jpn)**
[Histological changes in the airways after antigen inhalation challenge in asthma] Makino S.
Nippon Naika Gakkai Zasshi 1989 Sep;78(9):1264–8 **(Jpn)**
[The changes in airway structure associated with reduced FEV1] Matsuba K, et al. **Rinsho Byori** 1990 Apr; 38(4):411–4 (Eng. Abstr.) **(Jpn)**
[The efficacy of transbronchial puncture in sarcoidosis] Cucu P, et al. **Rev Ig [Pneumoftiziol]** 1989 Jul–Sep;38(3):285–7 **(Rum)**
[Morphologic diagnosis of sarcoidosis by transbronchial puncture] Galbenu P, et al. **Rev Ig [Pneumoftiziol]** 1989 Jul–Sep;38(3):245–51 **(Rum)**
[The first experience with using autologous macrophages in the complex treatment of patients with destructive pulmonary tuberculosis] Chuchalin AG, et al.
Klin Med (Mosk) 1990 May;68(5):77–81 (Eng. Abstr.) **(Rus)**
[Changes in the bronchial tree under the influence of pelotherapy in patients with pulmonary tuberculosis] Strelis AK, et al. **Probl Tuberk** 1989;(9):16–8 (Eng. Abstr.) **(Rus)**
[The whole–mount method in the quantitative study of mucoid elements in the human bronchial tree] Cerkez V, et al. **Med Arh** 1986;40(6):325–9 (Eng. Abstr.) **(Scr)**
[Cytomorphologic changes in bronchial epithelial cells in a patient exposed to an aerosol of the organophosphorus insecticide, Ekalux 25 (quinalphos), 0,0–diethyl–0–quinoxaline–2–phosphorothioate] Pongrac I, et al. **Plucne Bolesti** 1989 Jan–Jun;41(1–2):39–41 (Eng. Abstr.) **(Scr)**

PHYSIOLOGY

Neurokinin receptors mediating substance P–induced contraction in adult rabbit airways. Cook JA, et al.
Am J Physiol 1990 Feb;258(2 Pt 1):L99–106
Kinetics of cellular influx and histamine release in normal human bronchi. Cooper JA Jr, et al. **Am J Physiol** 1989

Oct;257(4 Pt 1):L277–83
Lowering Po2 induces epithelium-dependent relaxation in isolated canine bronchi. Gao YS, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):C1034–7
Hydrogen peroxide-induced potentiation of contractile responses in isolated rat airways. Szarek JL, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):L232–7
Relaxation of canine airway smooth muscle by the heparin preservative benzyl alcohol. Tamaoki J, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):L355–60
Bronchial epithelial cells respond to insulin and insulin-like growth factor-I as a chemoattractant. Shoji S, et al. **Am J Respir Cell Mol Biol** 1990 Jun;2(6):553–7
Bronchial epithelial cells produce lung fibroblast chemotactic factor: fibronectin. Shoji S, et al. **Am J Respir Cell Mol Biol** 1989 Jul;1(1):13–20
Response of equine airway smooth muscle to acetylcholine and electrical stimulation in vitro. Mason DE, et al. **Am J Vet Res** 1989 Sep;50(9):1499–504
Bronchoalveolar lavage cell and mediator responses to hyperpnea-induced bronchoconstriction in the guinea pig. Ingenito EP, et al. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1162–6
Lung fibroblasts produce growth stimulatory activity for bronchial epithelial cells. Shoji S, et al. **Am Rev Respir Dis** 1990 Feb;141(2):433–9
Bronchial epithelial cells produce chemotactic activity for bronchial epithelial cells. Possible role for fibronectin in airway repair. Shoji S, et al. **Am Rev Respir Dis** 1990 Jan; 141(1):218–25
Dexamethasone isonicotinate inhibits dual and late asthmatic reactions but not the increase of airway responsiveness induced by toluene diisocyanate in sensitized subjects. Tossin L, et al. **Ann Allergy** 1989 Oct;63(4):292–6
Simulation of airway closure during forced vital capacity. Elad D, et al. **Ann Biomed Eng** 1989;17(6):617–31
Effect of omental, intercostal, and internal mammary artery pedicle wraps on bronchial healing. Turrentine MW, et al. **Ann Thorac Surg** 1990 Apr;49(4):574–8; discussion 579
Mucociliary clearance rates. Deposition and clearance in the tracheobronchial tree of rats. Spritzer AA, et al. **Arch Environ Health** 1967 Jul;15(1):39–47
Bronchial responsiveness after human heart–lung transplantation. Glanville AR, et al. **Chest** 1990 Jun; 97(6):1360–6
Airflow-generated sound in a hollow canine airway cast. Kraman SS, et al. **Chest** 1990 Feb;97(2):461–6
Baseline airway caliber. A confounder in interpreting bronchoconstriction and bronchodilatation [editorial] Paré PD, et al. **Chest** 1989 Nov;96(5):964–5
Removal of guinea pig bronchial and tracheal epithelium potentiates the contractions to leukotrienes and histamine. Prié S, et al. **Eicosanoids** 1990;3(1):29–37
Potent thromboxane-mediated in vitro bronchoconstrictor effect of endothelin in the guinea-pig. Battistini B, et al. **Eur J Pharmacol** 1990 Mar 13;178(1):141–2
Histamine H3-receptors modulate nonadrenergic noncholinergic neural bronchoconstriction in guinea-pig in vivo. Ichinose M, et al. **Eur J Pharmacol** 1989 Dec 12; 174(1):49–55
Endotoxin-induced plasma exudation in guinea-pig airways in vivo and the effect of neutrophil depletion. Evans TW, et al. **Eur Respir J** 1990 Mar;3(3):299–303
Products of neutrophils and eosinophils increase the responsiveness of human isolated bronchial tissue. Hallahan AR, et al. **Eur Respir J** 1990 May;3(5):554–8
Adenosine potentiates neurally- and histamine-induced contraction of canine airway smooth muscle. Sakai N, et al. **Int Arch Allergy Appl Immunol** 1989;90(3):280–4
Role of purinergic system in tracheobronchial reactivity of healthy and bronchopathic subjects. Susanna V, et al. **Int J Tissue React** 1990;12(1):59–65
Sensitization alters contractile responses and calcium influx in human airway smooth muscle. Black JL, et al. **J Allergy Clin Immunol** 1989 Oct;84(4 Pt 1):440–7
Blood gas changes during and after nonspecific airway challenge in asthmatic and normal subjects. Dal Negro R, et al. **J Appl Physiol** 1989 Dec;67(6):2627–30
Insensitivity of maximum expiratory flow to bronchodilation in normal dogs. Eng J, et al. **J Appl Physiol** 1990 May; 68(5):2006–12
Hyperosmotic-induced bronchoconstriction in the canine lung periphery. Freed AN, et al. **J Appl Physiol** 1989 Dec; 67(6):2571–8
Mechanical modulation of pressure-volume characteristics of contracted canine airways in vitro. Gunst SJ, et al. **J Appl Physiol** 1990 May;68(5):2223–9
Diameters, generations, and orders of branches in the bronchial tree. Horsfield K. **J Appl Physiol** 1990 Feb; 68(2):457–61
Histamine H3-receptors inhibit neurogenic microvascular leakage in airways. Ichinose M, et al. **J Appl Physiol** 1990 Jan;68(1):21–5
Contractile properties of bronchial smooth muscle with and without cartilage. Jiang H, et al. **J Appl Physiol** 1990 Jul; 69(1):120–6
Response to acetylcholine and myosin content of isolated canine airways. Mapp CE, et al. **J Appl Physiol** 1989 Oct; 67(4):1331–5
Effect of exercise, hyperpnea, and bronchoconstriction on plasma atrial natriuretic peptide. Rubinstein I, et al. **J Appl Physiol** 1989 Dec;67(6):2565–70
Contraction of smooth muscle of pig airway tissues from before birth to maturity. Sparrow MP, et al. **J Appl Physiol** 1990 Feb;68(2):468–77
Immunoblockade by a specific tachykinin antiserum of the non-cholinergic contractile responses in the guinea-pig isolated bronchus. Maggi CA, et al. **J Auton Pharmacol** 1990 Jun;10(3):173–9
Role of bronchial musculature [letter] Warren J. **Lancet** 1989 Nov 11;2(8672):1159
Evidence for thromboxane receptor mediated contraction of guinea-pig and human airways in vitro by prostaglandin (PG) D2, 9 alpha,11 beta-PGF2 and PGF2 alpha. Featherstone RL, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 May; 341(5):439–43
Electromechanical effects of endothelin in ferret bronchial and tracheal smooth muscle. Lee HK, et al. **Prog Clin Biol Res** 1990;327:683–5
Pre-junctional inhibitory action of prostaglandin E2 on excitatory neuro-effector transmission in the human bronchus. Ito I, et al. **Prostaglandins** 1990 Jun;39(6):639–55
[Bronchomotility and growth] Harf A. **Arch Int Physiol Biochim** 1990 Jun;98(3):A121–3 (7 ref.) **(Fre)**
[Tracheobronchial muscle tonus and its reflex control] Jammes Y. **Arch Int Physiol Biochim** 1989 Aug; 97(4):A15–35 (53 ref.) (Eng. Abstr.) **(Fre)**
[Bronchial peptidergic control and concepts of neurogenic inflammation] Popin E, et al. **Rev Pneumol Clin** 1989; 45(4):141–3 **(Fre)**
[Neuropeptides and respiratory diseases: prospects in the treatment of asthma] Underner M, et al. **Rev Pneumol Clin** 1989;45(4):144–51 (Eng. Abstr.) **(Fre)**
[Motility of the bronchi] Savoy J. **Schweiz Rundsch Med Prax** 1990 May 29;79(22):685–7 (26 ref.) (Eng. Abstr.) **(Fre)**
[Effect of deep inspiration on maximum expiratory flow (Vmax) depends on basal bronchomotor tone in young healthy females] Fujimura M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Jan; 28(1):105–12 (Eng. Abstr.) **(Jpn)**
[Changes in laryngeal resistance and bronchial tonus] González-Barón S, et al. **Rev Esp Fisiol** 1989;45 Suppl:191–6 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Is hyperreactivity correlated with the degree of airway inflammation. Matthys H, et al. **Agents Actions Suppl** 1989; 28:225–31
The long-term effects of nedocromil sodium and beclomethasone dipropionate on bronchial responsiveness to methacholine in nonatopic asthmatic subjects. Bel EH, et al. **Am Rev Respir Dis** 1990 Jan;141(1):21–8
Bronchial responsiveness, atopy, smoking, and chronic obstructive pulmonary disease [editorial] Burrows B, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1515–7
Airway hyperresponsiveness. Relevance of random population data to clinical usefulness [comment] Cockcroft DW, et al. **Am Rev Respir Dis** 1990 Sep;142(3):497–500 Comment on: Am Rev Respir Dis 1990 Sep;142(3):549–54.
The effect of two months of treatment with inhaled budesonide on bronchial responsiveness to histamine and house-dust mite antigen in asthmatic children. De Baets FM, et al. **Am Rev Respir Dis** 1990 Sep;142(3):581–6
The presence of airway reactivity before the development of asthma. Hopp RJ, et al. **Am Rev Respir Dis** 1990 Jan; 141(1):2–8
Methacholine airway responsiveness decreases during exercise in asthmatic subjects. Inman MD, et al. **Am Rev Respir Dis** 1990 Jun;141(6):1414–7
Contribution of upper airways to antigen-induced late airway obstructive responses in guinea pigs. Johns K, et al. **Am Rev Respir Dis** 1990 Jul;142(1):138–42
Tracheobronchial clearance in patients with bilateral diaphragmatic weakness. Mier A, et al. **Am Rev Respir Dis** 1990 Sep;142(3):545–8
Increase in luminal mast cell and epithelial damage may account for increased airway responsiveness after viral infection in dogs. Miura M, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1738–44
Effect of inhaled furosemide on metabisulfite- and methacholine-induced bronchoconstriction and nasal potential difference in asthmatic subjects. Nichol GM, et al. **Am Rev Respir Dis** 1990 Sep;142(3):576–80
Smoking, atopy, and methacholine airway responsiveness among middle-aged and elderly men. The Normative Aging Study. O'Connor GT, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1520–6
The interrelationship among bronchial hyperresponsiveness, the diagnosis of asthma, and asthma symptoms [see comments] Pattemore PK, et al. **Am Rev Respir Dis** 1990 Sep;142(3):549–54 Comment in: Am Rev Respir Dis 1990 Sep;142(3):497–500.
The effect of endotoxin inhalation on airway responsiveness and cellular influx in rats. Pauwels RA, et al. **Am Rev Respir Dis** 1990 Mar;141(3):540–5
In vivo exposure to hyperoxia increases airway responsiveness in rats. Demonstration in vivo and in vitro. Szarek JL. **Am Rev Respir Dis** 1989 Oct;140(4):942–7
NHLBI Workshop Summary. Models of airway hyperresponsiveness. Wanner A, et al. **Am Rev Respir Dis** 1990 Jan;141(1):253–7
Effect of mild hypoxemia on bronchial responsiveness. Alberts WM, et al. **Ann Allergy** 1990 Sep;65(3):189–93
Relationship between recurrent croup and airway hyperreactivity. Litmanovitch M, et al. **Ann Allergy** 1990 Sep;65(3):239–41
A hypothesis linking bronchial hyperreactivity and airway inflammation: implications for therapy. Macklem PT. **Ann Allergy** 1990 Feb;64(2 Pt 1):113–6 (17 ref.)
Measurement of bronchial hyperreactivity in infants and preschool children using a new method. Murakami G, et al. **Ann Allergy** 1990 Apr;64(4):383–7
Bronchial reactivity and atopy in asthma discordant monozygotic twins. Svartengren M, et al. **Ann Allergy** 1990 Feb;64(2 Pt 1):124–8
Effect of inhaled triamcinolone on bronchial hyperreactivity and airways obstruction in asthma. Zu Wallack RL, et al. **Ann Allergy** 1990 Feb;64(2 Pt 2):207–12
Mechanisms of purine-induced bronchoconstriction in asthma. Holgate ST, et al. **Arch Int Pharmacodyn Ther** 1990 Jan–Feb;303:122–31 (42 ref.)
The effect of the circadian rhythm of vagal activity on bronchomotor tone in asthma. Morrison JF, et al. **Br J Clin Pharmacol** 1989 Nov;28(5):545–9
Esophageal acid perfusion, airway function, and symptoms in asthmatic patients with marked bronchial hyperreactivity. Ekström T, et al. **Chest** 1989 Nov; 96(5):995–8
Bronchial hyperresponsiveness in asthmatic children. Correlation with macrophages and eosinophils in broncholavage fluid. Ferguson AC, et al. **Chest** 1989 Nov; 96(5):988–91
Effect of platelet-activating factor inhalation on nonspecific bronchial reactivity in man. Hopp RJ, et al. **Chest** 1989 Nov;96(5):1070–2
The relationship between conductance and functional residual capacity during drug-induced bronchoconstriction. Popa V, et al. **Chest** 1990 Apr; 97(4):831–9
Bronchial hyperresponsiveness in patients with chronic congestive heart failure. Sasaki F, et al. **Chest** 1990 Mar; 97(3):534–8
Airway hyperresponsiveness. Mechanisms in experimental models. Sheppard D. **Chest** 1989 Nov;96(5):1165–8 (21 ref.)
Association of MS Pi phenotype with airway hyperresponsiveness. Townley RG, et al. **Chest** 1990 Sep; 98(3):594–9
Pathophysiology of chronic obstructive pulmonary disease. Thurlbeck WM. **Clin Chest Med** 1990 Sep;11(3):389–403 (78 ref.)
The effect of trifluoperazine on bronchial responsiveness in asthma. Bowden JJ, et al. **Clin Exp Pharmacol Physiol** 1988 Jun;15(6):457–63
Bronchial reactivity in patients with chronic renal failure undergoing haemodialysis. Ferrer A, et al. **Eur Respir J** 1990 Apr;3(4):387–91
No effect of oral high frequency oscillation combined with forced expiration manoeuvres on tracheobronchial clearance in chronic bronchitis. van Hengstum M, et al. **Eur Respir J** 1990 Jan;3(1):14–8
Bronchial epithelium and asthma. Allegra L, et al. **Eur Respir J Suppl** 1989 Jun;6:460s–468s (106 ref.)
Acid-induced esophagobronchial-cardiac reflexes in humans. Wright RA, et al. **Gastroenterology** 1990 Jul;99(1):71–3
Airway hyperresponsiveness in asthma. Cockcroft DW. **Hosp Pract [Off]** 1990 Jan 15;25(1):111–8, 121, 125–9 (10 ref.)
The relationship between plasma histamine concentrations and bronchial obstruction to antigen challenge in allergic rhinitis. Busse WW, et al. **J Allergy Clin Immunol** 1989 Nov;84(5 Pt 1):658–66
Histamine and leukotrienes release in bronchoalveolar fluid during plicatic acid-induced bronchoconstriction. Chan-Yeung M, et al. **J Allergy Clin Immunol** 1989 Nov; 84(5 Pt 1):762–8
The relationships between atopy, bronchial hyperresponsiveness, and a family history of asthma: a cross-sectional study of migrant Tokelauan children in New Zealand. Crane J, et al. **J Allergy Clin Immunol** 1989 Nov;84(5 Pt 1):768–72
Persistence of increased nonspecific bronchial reactivity in allergic children and adolescents. Davé NK, et al. **J Allergy Clin Immunol** 1990 Aug;86(2):147–53
Long-term effect of ipratropium bromide and fenoterol on the bronchial hyperresponsiveness to histamine in children with asthma. Raes M, et al. **J Allergy Clin Immunol** 1989 Dec;84(6 Pt 1):874–9
The inhibitory actions of azelastine hydrochloride on the early and late bronchoconstrictor responses to inhaled allergen in atopic asthma. Rafferty P, et al. **J Allergy Clin Immunol** 1989 Nov;84(5 Pt 1):649–57
Influence of tidal volume on histamine-induced bronchoconstriction in guinea pigs. Benichou M, et al. **J Appl Physiol** 1990 Apr;68(4):1634–9
Effects of changes in osmolarity on isolated human airways. Jongejan RC, et al. **J Appl Physiol** 1990 Apr;68(4):1568–75
Capsaicin-induced bronchoconstriction and neuropeptide release in guinea pig perfused lungs. Kröll F, et al. **J Appl Physiol** 1990 Apr;68(4):1679–87
Airways responsiveness determined by consecutive histamine challenges in asymptomatic asthmatics. Küng M, et al. **J Appl Physiol** 1989 Dec;67(6):2622–6
Increased leukotriene E4 excretion during antigen-induced

bronchoconstriction in allergic sheep. Tagari P, et al. **J Appl Physiol** 1990 Apr;68(4):1321–7

Late-phase pulmonary reactions. Lemanske RF Jr. **J Asthma** 1990;27(2):69–80; discussion 65–7 (33 ref.)

Chemiluminescence of bronchoalveolar lavage cells as an indicator of leukocyte activation in rats with a hyperreactive bronchus. Linssen M, et al. **J Biolumin Chemilumin** 1990 Jan-Mar;5(1):65–9

The effect of substance P on the antigen-induced bronchoconstriction in guinea pigs. Nagai H, et al. **J Pharmacobiodyn** 1990 Mar;13(3):195–9

Relationship between airways responsiveness and the development of chronic obstructive pulmonary disease. Dosman JA, et al. **Med Clin North Am** 1990 May; 74(3):561–9 (41 ref.)

Mucosal permeability and smooth muscle function in asthma. Hogg JC. **Med Clin North Am** 1990 May;74(3):731–40 (37 ref.)

Assessment of bronchial responsiveness as a guide to prognosis and therapy in asthma. Woolcock AJ, et al. **Med Clin North Am** 1990 May;74(3):753–65 (42 ref.)

Observations on sputum production in patients with variable airflow obstruction; implications for the diagnosis of asthma and chronic bronchitis. Openshaw PJ, et al. **Respir Med** 1989 Jan;83(1):25–31

Effect of ascorbic acid on increased bronchial responsiveness during upper airway infection. Bucca C, et al. **Respiration** 1989;55(4):214–9

Pattern of airway response to allergen extract of Phleum pratensis in asthmatic patients during and outside the pollen season. Paggiaro PL, et al. **Respiration** 1990;57(1):51–6

Does the outcome of the tidal breathing and dosimeter methods of assessing bronchial responsiveness in children with asthma depend on age? Birnie D, et al. **Thorax** 1990 Mar;45(3):199–202

Circadian change in bronchial responsiveness and airflow obstruction in asthmatic children. van Aalderen WM, et al. **Thorax** 1989 Oct;44(10):803–7

[Epidemiology of bronchial asthma and bronchial hyperreactivity] Vondra V, et al. **Cas Lek Cesk** 1990 Jun 8;129(23):714–8 (Eng. Abstr.) **(Cze)**

[Repercussions of propofol and combinations with alfentanyl on the bronchial reactivity in asthmatics] Bilbault P, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R274 **(Fre)**

[Sulfidopeptide leukotrienes and asthma] Dinh Xuan AT, et al. **Rev Mal Respir** 1989;6(6):483–91 (100 ref.) (Eng. Abstr.) **(Fre)**

[Current data on non-specific bronchial hyperreactivity] Lockhart A. **Rev Mal Respir** 1989;6(6):501–6 (73 ref.) (Eng. Abstr.) **(Fre)**

[Blood gases and the small airways] Harnoncourt K. **Wien Med Wochenschr Suppl** 1989;104:suppl 16–8 **(Ger)**

[Expiratory bronchial collapse--a specific aspect of pulmonary emphysema?] Huppmann M, et al. **Wien Med Wochenschr Suppl** 1989;104:suppl 28–30 **(Ger)**

[Bronchial hypersensitivity] Mue S. **Arerugi** 1989 Oct; 38(10):1129–35 (18 ref.) **(Jpn)**

[The relationship between bronchial hypersensitivity and the prognosis of bronchial asthma] Watanabe H. **Arerugi** 1989 Dec;38(12):1327–33 (Eng. Abstr.) **(Jpn)**

[A study of bronchial sensitivity and bronchial reactivity using Astograph and transcutaneous oxygen tension in asthmatic children. The problems of simultaneous measurement] Ichinose H, et al. **Nippon Ika Daigaku Zasshi** 1989 Oct;56(5):488–93 (Eng. Abstr.) **(Jpn)**

[Functional status of the bronchial tree in infants with gastroesophageal reflux] Gutkowski P, et al. **Pediatr Pol** 1989 Jun;64(6):401–6 (Eng. Abstr.) **(Pol)**

[Effect of hemodialysis on the functional status of small airways and partial pressure of oxygen and carbon dioxide in the blood of patients with chronic uremia] Grzeszczak W, et al. **Pneumonol Pol** 1989 Mar;57(3):165–9 (Eng. Abstr.) **(Pol)**

[Spirographic studies and measurement of airflow resistance in evaluation of bronchial hyperreactivity in children with asthma] Latoś T, et al. **Pneumonol Pol** 1990 Feb–Mar; 58(2–3):107–11 (Eng. Abstr.) **(Pol)**

[Hyperreactivity of the bronchial tree in patients with hay fever before and after immunotherapy] Wrzyszcz M, et al. **Pol Tyg Lek** 1989 Jul 3;44(27):635–7 (Eng. Abstr.) **(Pol)**

[Possible pleurogenic route in the development of bronchiectasis in children] Klimanov VV, et al. **Grud Serdechnososudistaia Khir** 1990;(5):44–7 (Eng. Abstr.) **(Rus)**

[Clinico-functional characteristics of atopic bronchial asthma in children] Kotsaga VE, et al. **Pediatriia** 1990;(5):19–22 (Eng. Abstr.) **(Rus)**

[Nonspecific bronchial reactivity in children with bronchial asthma and chronic and recurrent bronchopulmonary pathology] Orlov AV. **Pediatriia** 1989;(12):83 **(Rus)**

[Metabolic aspects of bronchial hyperreactivity to physical exertion in bronchial asthma] Amatuni VG, et al. **Sov Med** 1989;(12):3–6 (Eng. Abstr.) **(Rus)**

[The evaluation of nonspecific bronchial hyperreactivity in diseases with an asthmatic reaction] Hamzagić H, et al. **Med Arh** 1989;43(2–3):113–6 (Eng. Abstr.) **(Scr)**

[Mechanisms of bronchial hyperreactivity] Bánovčin P, et al. **Cesk Pediatr** 1989 Aug;44(8):473–5 **(Slo)**

[Bronchial hyperreactivity or broncho obstructive hyper response] Girardi-Briere G. **Bol Med Hosp Infant Mex** 1990 Apr;47(4):282–4 (6 ref.) (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

[Study of the mucociliary transport rate in evaluating the effectiveness of the treatment of suppurative endobronchitis by CO2 laser] Shesterina MV, et al. **Probl Tuberk** 1990; (4):3–7 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Bronchoscintigraphic visualization of the acute effect of tobacco exposure and terbutaline on mucociliary clearance in smokers. Mortensen J, et al. **Eur Respir J** 1989 Sep; 2(8):721–6

Variability of tracheobronchial clearance in healthy non-smoking subjects. van Hengstum M, et al. **Respiration** 1989;56(1–2):94–102 (21 ref.)

SECRETION

Erythromycin inhibits respiratory glycoconjugate secretion from human airways in vitro. Goswami SK, et al. **Am Rev Respir Dis** 1990 Jan;141(1):72–8

Effects of tachykinins on mucus secretion in human bronchi in vitro. Rogers DF, et al. **Eur J Pharmacol** 1989 Dec 19; 174(2–3):283–6

Platelet-activating factor stimulates secretion of respiratory glycoconjugate from human airways in culture. Goswami SK, et al. **J Allergy Clin Immunol** 1989 Nov;84(5 Pt 1):726–34

The effect of cotton bract extract on respiratory glycoconjugate secretion from human airways in vitro. Marom Z, et al. **J Allergy Clin Immunol** 1989 Nov;84(5 Pt 1):710–7

Removal of excessive bronchial secretions by asymmetric high-frequency oscillations. Freitag L, et al. **J Appl Physiol** 1989 Aug;67(2):614–9

Effect of ultrasonic nebulization of Miraclid on the proteolytic activity in tracheobronchial secretions of rats. Kosugi T, et al. **Laryngoscope** 1989 Dec;99(12):1281–5

[Anomalies of mucus and bronchial pathology in adults] Polu JM, et al. **Rev Mal Respir** 1989;6(6):493–9 (38 ref.) (Eng. Abstr.) **(Fre)**

[Changes in protease inhibitor balance of the bronchoalveolar secretion in children with inflammatory lung diseases] Bogadel'nikov IV, et al. **Pediatriia** 1990;(3):17–20 (Eng. Abstr.) **(Rus)**

[Value of cytological examination of bronchial and nasal contents in the diagnosis and evaluation of the effectiveness of antibacterial therapy of recurrent bronchitis in children] Gruzintseva OE, et al. **Pediatriia** 1990;(5):109–10 **(Rus)**

SURGERY

Successful surgical management of bronchial dehiscence after single-lung transplantation. Kirk AJ, et al. **Ann Thorac Surg** 1990 Jan;49(1):147–9

Bilateral bronchial anastomosis in double lung and heart-lung transplantations. Noirclerc MJ, et al. **Eur J Cardiothorac Surg** 1990;4(6):314–7

Conservative and bronchoplastic resection for bronchial carcinoid tumours. Toledo J, et al. **Eur J Cardiothorac Surg** 1989;3(4):288–91

Extensive resection of the distal trachea and bilateral bronchi for the tumor arising from the carina: a successful reconstruction of the carina. Tsugawa C, et al. **J Pediatr Surg** 1990 Jul;25(7):788–9

Evaluation of a bronchial anastomosis by laser Doppler velocimetry. Inui K, et al. **J Thorac Cardiovasc Surg** 1990 Apr;99(4):614–9

Lung cancer: reconstruction of the trachea and bronchus. Deslauriers J. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep; 37 Suppl:53–5

Bronchoplastic procedures in the treatment of endobronchial carcinoid tumors. Salminen US, et al. **Scand J Thorac Cardiovasc Surg** 1990;24(1):27–32

Sero-fatty fringes of the pericardium: anatomical and radiological preoperative assessment of their availability for the protection of bronchial sutures. Riquet M, et al. **Surg Radiol Anat** 1990;12(2):153–4

Application of laser Doppler velocimetry to lung transplantation. Yokomise H, et al. **Transplantation** 1989 Oct;48(4):550–4

[Tracheo-bronchoplasty: a report of 99 cases] Yan Y. **Chung Hua Wai Ko Tsa Chih** 1989 Apr;27(4):220–2, 253–4 (Eng. Abstr.) **(Chi)**

[Reduction of operative risk by HFJV in endobronchial cryotherapy] Dewachter P, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R267 **(Fre)**

[Surgery of primary bronchial cancer. Different types of excisions: technical problems, follow-up results--status of pneumonectomies extended to the carina and bronchial resection-anastomoses] Levasseur P, et al. **Helv Chir Acta** 1990 Jan;56(5):711–7 (Eng. Abstr.) **(Fre)**

[Bronchial sleeve resection at the level of the segmental bronchus for benign bronchial adenoma] Meyer G, et al. **Chirurg** 1990 Jan;61(1):63–7 **(Ger)**

[Extra-pleural approaches in the management of bronchial stump insufficiency following pneumonectomy] Hoffmann E, et al. **Langenbecks Arch Chir** 1990;375(1):46–50 (Eng. Abstr.) **(Ger)**

[Stapler and manual bronchial anastomosis--results of a consecutive trial series] Junginger T, et al. **Langenbecks Arch Chir** 1989;374(6):323–8 (Eng. Abstr.) **(Ger)**

[Manual and stapler bronchial anastomosis (editorial)] Vogt-Moykopf I. **Langenbecks Arch Chir** 1989; 374(6):321–2 **(Ger)**

[Bronchoplastic surgery in bronchial cancer] Baroš B, et al. **Pneumologie** 1990 Feb;44 Suppl 1:591–2 (Eng. Abstr.) **(Ger)**

[Surgical treatment of chronic bronchial foreign bodies and its complications] Plate H, et al. **Zentralbl Chir** 1989; 114(19):1278–80 (Eng. Abstr.) **(Ger)**

[Bronchoplegic phenomena caused by vagal denervation. Experimental study] Bazzocchi R, et al. **Ann Ital Chir** 1989 Jul-Aug;60(4):303–7; discussion 307–8 (Eng. Abstr.) **(Ita)**

[Tracheobronchial reconstruction of malignant tumors] Ishihara T, et al. **Kyobu Geka** 1989 Jul;42(8 Suppl):708–11 (Eng. Abstr.) **(Jpn)**

[Tracheobroncho plasty: anastomotic technique with encircled placement of sutures] Nakamoto K, et al. **Kyobu Geka** 1990 Mar;43(3):197–201 (Eng. Abstr.) **(Jpn)**

[Omentum in the management of thoracic surgery: especially its application to tracheobronchial surgery] Shibata K, et al. **Kyobu Geka** 1989 Dec;42(13):1078–83 (Eng. Abstr.) **(Jpn)**

[Problems of the surgery of the trachea and bronchus and establishment of their safety] Tomita T, et al. **Kyobu Geka** 1989 Jul;42(8 Suppl):712–7 (7 ref.) (Eng. Abstr.) **(Jpn)**

[Reconstructive surgery in respiratory tract diseases] **Nippon Kyobu Geka Gakkai Zasshi** 1988 May;36(5):789–801 **(Jpn)**

[Successful re-reconstruction for complete disruption of the right main bronchus by blunt chest trauma] Koizumi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jan; 38(1):165–70 (Eng. Abstr.) **(Jpn)**

[Primary myobronchoplasty after pneumonectomy for diffuse gangrene of the lung in anaerobic empyema] Grigor'ev EG, et al. **Grud Serdechnososudistaia Khir** 1990;(3):75–6 **(Rus)**

[Isolation of the bronchi with intraoperative packing in children with bronchiectasis] Stepanov EA, et al. **Grud Serdechnososudistaia Khir** 1990;(1):52–5 (Eng. Abstr.) **(Rus)**

[Plastic surgery of bronchial stump using dura mater after pneumonectomy in patients with lung cancer] Tevit BM, et al. **Grud Serdechnososudistaia Khir** 1990;(5):51–3 (Eng. Abstr.) **(Rus)**

[Endoscopic occlusion of the bronchial stump in bronchial insufficiency] Vagner EA, et al. **Grud Serdechnososudistaia Khir** 1990;(2):46–9 (Eng. Abstr.) **(Rus)**

[Biochemical characteristics of exudates after pulmonectomy and pleuro-pulmonectomy in patients with pulmonary tuberculosis and different course of postoperative period] Kaminskaia GO, et al. **Grudn Khir** 1989 Nov-Dec;(6):69–74 (Eng. Abstr.) **(Rus)**

[Circular resection of the left primary bronchus with the application of a tracheobronchial anastomosis via the transsternal-pericardial approach] Kariev TM, et al. **Grudn Khir** 1989 Sep-Oct;(5):93–4 **(Rus)**

[Endoscopic laser surgery of the trachea and bronchi] Rusakov MA, et al. **Grudn Khir** 1989 Sep-Oct;(5):48–53 (Eng. Abstr.) **(Rus)**

[Arrest of massive pulmonary hemorrhage by endobronchial laser photocoagulation] Gerasin VA, et al. **Khirurgiia (Mosk)** 1990 Apr;(4):124 **(Rus)**

[Late results of surgical treatment of bronchiectasis in children] Mavliutova MG, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):69–72 (Eng. Abstr.) **(Rus)**

[A method of managing the bronchial stump after surgical and combined treatment of patients with cancer of the lung] Trakhtenberg AKh, et al. **Khirurgiia (Mosk)** 1990 Apr; (4):15–8 (Eng. Abstr.) **(Rus)**

[Reconstructive operations in tumors of the bronchi in patients over 60 years of age] Sokur PP. **Klin Khir** 1989; (10):36–8 (Eng. Abstr.) **(Rus)**

[Postoperative complications and immediate results of reconstructive-plastic surgery of the trachea and bronchi] Giller BM, et al. **Probl Tuberk** 1990;(2):35–8 (Eng. Abstr.) **(Rus)**

[A method of hermetic sealing of the bronchial stump following resection of the lungs in patients with tuberculosis] Putilin AA, et al. **Probl Tuberk** 1990;(5):5–9 (Eng. Abstr.) **(Rus)**

[Surgical treatment of unilateral pulmonary emphysema--MacLeod's syndrome] Vishnevskiĭ AA, et al. **Vestn Khir** 1990 Jan;144(1):49–51 **(Rus)**

TRANSPLANTATION

[Detection of keratin mRNA and human origin of xenotransplanted human tracheobronchial epithelium by in situ hybridization] Obara T. **Hokkaido Igaku Zasshi** 1989 Nov;64(6):695–704 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Bronchial epithelial inflammation in children with chronic cough after early lower respiratory tract illness. Heino M, et al. **Am Rev Respir Dis** 1990 Feb;141(2):428–32

Bronchial biopsies in asthma. An ultrastructural, quantitative study and correlation with hyperreactivity. Jeffery PK, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1745–53

Structural changes in airways of rats exposed to nitrogen dioxide intermittently for seven days. Comparison between major bronchi and terminal bronchioles. Kawakami M, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1754–62

Cytodifferentiation of two epithelial populations of the respiratory bronchiole during fetal lung development in the rhesus monkey. Tyler NK, et al. **Anat Rec** 1989 Dec; 225(4):297–309

Electron microscopic observations of bronchial epithelium. II. Filosomes. Frasca JM, et al. **Exp Mol Pathol** 1967 Aug; 7(1):92–104

Electron microscopic observations of the bronchial epithelium of dogs. I. Control dogs. Frasca JM, et al. **Exp Mol Pathol** 1968 Dec;9(3):363–79

Electron microscopic observations of the bronchial epithelium of dogs. II. Smoking dogs. Frasca JM, et al. **Exp Mol Pathol** 1968 Dec;9(3):380–99

Ultrastructural changes in rat Clara cells induced by bis(4–amino–3–methylcyclohexyl)methane. Ohshima S, et al. **J Toxicol Environ Health** 1989;28(2):249–55

The ciliary necklace—a transmission electron microscopic study using tannic acid–containing fixation. Torikata C. **J Ultrastruct Mol Struct Res** 1988 Nov–Dec;101(2–3):210–4

Canine distemper virus infection in lesser pandas (Ailurus fulgens). Kotani T, et al. **Nippon Juigaku Zasshi** 1989 Dec; 51(6):1263–6

Acquired ciliary defects in bronchial epithelium of patients with chronic bronchitis. Trevisani L, et al. **Respiration** 1990;57(1):6–13

A stereoscopic scanning electron microscope study of pulmonary hypoplasia in chondrodystrophic mice. Hepworth WB, et al. **Scanning Microsc** 1989 Dec; 3(4):1117–33; discussion 1133–4

[Interspecies differences in the reactivity of smooth tracheobronchial muscles] Cermáková M, et al. **Cas Lek Cesk** 1990 Feb 16;129(7):208–10 (Eng. Abstr.) (Cze)

[Development and ultrastructure of the neuromuscular junction in bronchial smooth muscle tissue] Zashikhin AL. **Arkh Anat Gistol Embriol** 1989 Jul;97(7):80–5 (Eng. Abstr.) (Rus)

[The ultrastructure of the ciliary epithelium in patients with the Zivert–Kartagener syndrome, bronchiectasis and cystic hypoplasia of the lungs] Lisochkin BG, et al. **Arkh Patol** 1989;51(10):10–7 (Eng. Abstr.) (Rus)

[Variants of the ultrastructure of bronchial ciliary cells] Bolkov AK, et al. **Probl Tuberk** 1989;(8):61–4 (Eng. Abstr.) (Rus)

BRONCHIAL ARTERIES

Left main–stem bronchial stenosis complicating bronchial artery embolization. Girard P, et al. **Chest** 1990 May; 97(5):1246–8

Recurrent bleeding after arterial embolization in patients with hemoptysis [see comments] Katoh O, et al. **Chest** 1990 Mar; 97(3):541–6 Comment in: Chest 1990 Mar;97(3):515–6.

Transcatheter bronchial artery embolization in the multimodality management of massive hemoptysis. Metzdorff MT, et al. **Chest** 1990 Jun;97(6):1494–6

When does bronchial arterial embolization fail to control hemoptysis? [editorial; comment] Nath H. **Chest** 1990 Mar; 97(3):515–6 Comment on: Chest 1990 Mar;97(3):541–6.

Bronchial artery embolization for severe hemoptysis in cystic fibrosis. Sweezey NB, et al. **Chest** 1990 Jun;97(6):1322–6

Bronchial artery embolization to control hemoptysis in cystic fibrosis. Cohen AM, et al. **Radiology** 1990 May;175(2):401–5

[Two cases of primary racemose hemangioma of the bronchial artery] Nakagawa Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Dec; 27(12):1515–20 (12 ref.) (Eng. Abstr.) (Jpn)

[Hemangioma of the bronchial arteries as a primary cause of middle lobe atelectasis] Inoue Y, et al. **Rinsho Hoshasen** 1990 Mar;35(3):397–8 (Jpn)

ABNORMALITIES

Coronary to bronchial artery anastomosis with bronchial steal syndrome demonstrated by thallium–201 myocardial tomoscintigraphy. Stefas L, et al. **Eur Heart J** 1990 Mar; 11(3):275–9

[A case of bilateral multiple pulmonary arteriovenous fistula associated with bronchial artery to pulmonary vein fistula] Kikuchi J, et al. **Nippon Naika Gakkai Zasshi** 1989 Oct; 78(10):1457–61 (19 ref.) (Jpn)

ANATOMY & HISTOLOGY

Direct revascularization of bronchial arteries for lung transplantation: an anatomical study. Schreinemakers HH, et al. **Ann Thorac Surg** 1990 Jan;49(1):44–53; discussion 53–4 (21 ref.)

Corrosion cast studies of the bronchial arteries. Viamonte M Jr, et al. **Surg Radiol Anat** 1989;11(3):215–9

[Clinical investigation of the branching formation of the bronchial arteries in the Japanese] Suzuki K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Aug 25; 49(8):979–85 (Eng. Abstr.) (Jpn)

[Incidence and clinical significance of the esophageal branches originating from the bronchial artery] Suzuki K, et al. **Rinsho Hoshasen** 1990 Feb;35(2):157–63 (Eng. Abstr.) (Jpn)

[Morphological consideration of the bronchial arteries and its interventional angiography] Takahashi D, et al. **Rinsho Hoshasen** 1990 Jul;35(7):833–7 (22 ref.) (Eng. Abstr.) (Jpn)

DRUG EFFECTS

Effect of histamine on human bronchial arteries in vitro. Liu SF, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jul; 342(1):90–3

INNERVATION

Adrenergic and cholinergic responsiveness of isolated canine bronchial arteries. O'Rourke ST, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H156–61

PATHOLOGY

Distribution of arterial lesions and collateral pathways in the pulmonary hypertension of congenital heart disease: a computer aided reconstruction study. Yaginuma G, et al. **Thorax** 1990 Aug;45(8):586–90

PHYSIOLOGY

Pulmonary shunting by the bronchial artery in the anaesthetized horse. Gleed RD, et al. **Exp Physiol** 1990 Jan;75(1):115–8

Effect of sensory neuropeptides on canine bronchial and pulmonary vessels in vitro. McCormack DG, et al. **Life Sci** 1989;45(25):2405–12

[The preserving effects of bronchial arteries and pulmonary nerves at radical esophagectomy on cardio–respiratory functions in dogs] Shima I. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Nov; 37(11):2305–17 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Bronchial artery ligation modifies pulmonary edema after exposure to smoke with acrolein. Hales CA, et al. **J Appl Physiol** 1989 Sep;67(3):1001–6

RADIOGRAPHY

Recurrent cryptogenic hemoptysis associated with bronchial artery–pulmonary artery anastomoses and cystic lung disease. Panos RJ, et al. **Am J Med** 1989 Dec;87(6):683–6

Computed tomography of bronchial artery aneurysm with erosion into the esophagus. Shaer AH, et al. **J Comput Assist Tomogr** 1989 Nov–Dec;13(6):1069–71

[Localized dilatation of the bronchi. A misunderstood etiology of coronaro–bronchial fistula] Abergel E, et al. **Arch Mal Coeur** 1990 Feb;83(2):271–4 (Eng. Abstr.) (Fre)

BRONCHIAL ASTHMA see **ASTHMA**

BRONCHIAL CYST see **BRONCHOGENIC CYST**

BRONCHIAL DISEASES

Tracheobronchopathia osteochondroplastica. Nienhuis DM, et al. **Ann Otol Rhinol Laryngol** 1990 Sep;99(9 Pt 1):689–94

BLOOD

[Free and total thyroid hormone levels after parenteral administration of iodine contrast media] Barańska H, et al. **Pol Tyg Lek** 1989 Aug 7–14;44(32–33):749–50 (Eng. Abstr.) (Pol)

CHEMICALLY INDUCED

Mechanisms of occupational airways diseases induced by exposure to organic and inorganic chemicals. O'Neil CE. **Am J Med Sci** 1990 Apr;299(4):265–75 (97 ref.)

Acid fog–induced bronchoconstriction. The role of hydroxymethanesulfonic acid. Aris R, et al. **Am Rev Respir Dis** 1990 Mar;141(3):546–51

Failure of aerosolized endothelin (ET–1) to induce bronchial hyperreactivity in the guinea pig. Lagente V, et al. **Fundam Clin Pharmacol** 1990;4(3):275–80

Angiotensin–converting enzyme inhibitors and their influence on inflammation, bronchial reactivity and cough. A research review. Lindgren BR, et al. **Med Toxicol Adverse Drug Exp** 1989 Sep–Oct;4(5):369–80 (172 ref.)

Tracheobronchial calcification: an observation in three children after mitral valve replacement and warfarin sodium therapy. Taybi H, et al. **Radiology** 1990 Sep; 176(3):728–30

[Bronchial manifestation of drug–induced complications] Hugues FC, et al. **Ann Med Interne (Paris)** 1989; 140(7):585–8 (Eng. Abstr.) (Fre)

COMPLICATIONS

Upper lobe collapse due to endobronchial sarcoidosis [letter] Witko J, et al. **AJR Am J Roentgenol** 1990 Apr;154(4):897–8

Bronchial hyperresponsiveness in atopic dermatitis. Corbo GM, et al. **Allergy** 1989 Nov;44(8):595–8

Distal airway bronchomalacia resulting in severe obstructive airway physiology. Lavins BJ, et al. **Chest** 1990 Feb; 97(2):489–91

Sarcoidosis presenting with an acute Guillain–Barré syndrome. Miller R, et al. **Postgrad Med J** 1989 Oct; 65(768):765–7 (18 ref.)

Postirradiation pulmonary fibrosis complicated by aspergilloma and bronchocentric granulomatosis. Makker H, et al. **Thorax** 1989 Aug;44(8):676–7

Relation between small airways disease and parenchymal destruction in surgical lung specimens. Willems LN, et al. **Thorax** 1990 Feb;45(2):89–94

[ORL diseases in children and bronchopulmonary diseases during infancy (letter)] Liard R, et al. **Arch Fr Pediatr** 1989 Nov;46(9):704–5 (Fre)

[Hemoptysis with an unusual etiology] D'Odemont JP, et al. **Rev Mal Respir** 1989;6(4):391–2 (Fre)

[Bronchial infection and brain abscess caused by Pasteurella multocida] Martin F, et al. **Rev Pneumol Clin** 1989; 45(3):134–6 (Eng. Abstr.) (Fre)

[A thoracic aortic aneurysm with respiratory failure caused by the mechanisms of stenosis of the left bronchus and ipsilateral pulmonary artery—report of a case and review of the literature] Saitoh T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Dec;37(12):2553–7 (Eng. Abstr.) (Jpn)

[Combined bronchopulmonary and gastroduodenal diseases] Struchkov IuV, et al. **Grud Serdechnososudistaia Khir** 1990; (3):37–40 (Eng. Abstr.) (Rus)

CONGENITAL

[Tracheobronchomegaly (Mounier–Kuhn syndrome) associated with anomalous outlet of the right upper bronchus (letter)] Fuentes Rodríguez R, et al. **Rev Esp Anestesiol Reanim** 1989 Nov–Dec;36(6):363–4 (Spa)

DIAGNOSIS

Bronchopulmonary amyloidosis—multiple tissue involvement and long follow–up. Young WA. **Aust N Z J Med** 1989 Oct;19(5):463–5

Broncholithiasis: present clinical spectrum. Galdermans D, et al. **Respir Med** 1990 Mar;84(2):155–6

Evaluating bronchial hyperreactivity tests in epidemiology. Criscione S, et al. **Riv Eur Sci Med Farmacol** 1989 Feb; 11(1):21–4

Airway lesions presenting with a normal chest X–ray. Lee CH, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 May; 88(5):498–502

[Endobronchial tuberculosis simulating cancer] Astoul P, et al. **Rev Mal Respir** 1990;7(2):163–5 (Eng. Abstr.) (Fre)

[Tracheobronchopathia osteochondroplastica] Potthoff HJ, et al. **Dtsch Med Wochenschr** 1990 Jul 6;115(27):1059–62 (Eng. Abstr.) (Ger)

[Bronchoscopy in childhood—implications for anesthesia] Zander J, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:8–9 (Ger)

[Secondary prevention in chronic obstructive bronchopneumopathies] Bercea O, et al. **Rev Ig [Pneumoftiziol]** 1989 Jan–Mar;38(1):9–14 (20 ref.) (Rum)

[Long–term presence of foreign bodies in the tracheobronchial tree] Nesterko AO, et al. **Klin Med (Mosk)** 1989 Dec;67(12):112–7 (Rus)

[The dynamics of the bronchial system lesions in patients with pulmonary tuberculosis] Dolgina AG. **Probl Tuberk** 1989;(12):29–31 (Eng. Abstr.) (Rus)

DRUG THERAPY

Strategies and perspectives in treatment of respiratory infections. Neijens HJ. **Acta Paediatr Scand Suppl** 1989; 363:66–72; discussion 72–3 (48 ref.)

[Comparative study of 2 dosage regimens of cefixime in the treatment of otorhinolaryngeal or bronchial infections] Boudignat O, et al. **Presse Med** 1989 Oct 11;18(32):1622–5 (Eng. Abstr.) (Fre)

[The effect of erythromycin treatment on natural killer (NK) cell activity in patients with chronic lower respiratory tract infections] Mikasa K, et al. **Kansenshogaku Zasshi** 1989 Aug;63(8):811–5 (Eng. Abstr.) (Jpn)

[The clinical pharmacology of drugs for the therapy of the broncho–obstructive syndrome] Zaĭtsev AA, et al. **Farmakol Toksikol** 1990 May–Jun;53(3):80–3 (21 ref.) (Eng. Abstr.) (Rus)

ETIOLOGY

Tracheobronchial tuberculous ulceration. Report of 2 cases. Breysem Y, et al. **Acta Clin Belg** 1990;45(1):38–41

Endobronchial infection in cystic fibrosis. Smith AL, et al. **Acta Paediatr Scand Suppl** 1989;363:31–6 (8 ref.)

Pulmonary aspergillosis with bronchocentric granulomas. Nagata N, et al. **Am J Surg Pathol** 1990 May;14(5):485–8

Left main bronchial–esophageal fistula: a complication of bronchial artery embolization. Munk PL, et al. **Cardiovasc Intervent Radiol** 1990 Apr–May;13(2):95–7

Left main–stem bronchial stenosis complicating bronchial artery embolization. Girard P, et al. **Chest** 1990 May; 97(5):1246–8

Airway obstruction caused by Aspergillus tracheobronchitis in an immunocompromised patient. Hall J, et al. **Crit Care Med** 1990 May;18(5):575–6

Stenosis of left mainstem bronchus in a case of cicatricial pemphigoid. Müller LC, et al. **Eur J Cardiothorac Surg** 1988;2(4):284–6

Abnormalities of the bony thorax causing tracheobronchial

compression. Andrews TM, et al.
Int J Pediatr Otorhinolaryngol 1990 Jun;19(2):139–44 (9 ref.)

Acquired symptomatic bronchial stenosis in infants: successful management using an argon laser. Azizkhan RG, et al. **J Pediatr Surg** 1990 Jan;25(1):19–24

Mineralogical analysis of sputum lith from an apparently healthy subject. Goto Y, et al. **Jpn J Med** 1989 Nov–Dec; 28(6):731–5

Endobronchial tuberculosis manifested as obstructive airway disease in a 4–month–old infant. Abdulla F, et al.
South Med J 1990 Jun;83(6):715–7 (11 ref.)

[Emergency tracheobronchoscopy in children with burns] Richard P, et al. **Ann Otolaryngol Chir Cervicofac** 1990; 107(3):195–9 (Eng. Abstr.) **(Fre)**

[Investigation of two cases of a clinically unknown large cell carcinoma of the lung involved with severe stenosis of the bilateral main bronchi] Umeki S, et al. **Gan No Rinsho** 1989 Oct;35(12):1432–8 (Eng. Abstr.) **(Jpn)**

[A familial case of excessive plication of the bronchial mucosa as a cause of an obstructive syndrome in early childhood] Orlov AV, et al. **Ter Arkh** 1990;62(4):133 **(Rus)**

[Bronchial obstruction secondary to necrotizing tracheobronchitis in the neonatal period. Apropos of a case] Negreira Cepeda S, et al. **An Esp Pediatr** 1989 Dec; 31(6):599–600 **(Spa)**

[Endobronchial involvement as a symptom of tuberculosis in AIDS (letter)] Glez Anglada MI, et al.
Rev Clin Esp 1990 Jan;186(1):44–5 **(Spa)**

GENETICS

Abnormal distribution of cystic fibrosis delta F508 allele in adults with chronic bronchial hypersecretion [letter] Dumur V, et al. **Lancet** 1990 Jun 2;335(8701):1340

IMMUNOLOGY

Host response to Pseudomonas aeruginosa. Döring G.
Acta Paediatr Scand Suppl 1989;363:37–9; discussion 40 (16 ref.)

METABOLISM

[The role of cyclooxygenase products on bronchial responsiveness to methacholine in patients with sino–bronchial syndrome] Sakamoto S, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 Oct; 27(10):1163–7 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

The significance of Branhamella catarrhalis in bronchopulmonary infection—a case–control study. Yuen KY, et al. **J Infect** 1989 Nov;19(3):251–6

Clinical study on bacteria detected in the upper and lower respiratory tracts in patients with sinobronchial syndrome. Matsunaga T, et al. **Rhinology** 1989 Sep;27(3):169–78

PATHOLOGY

Severe tracheobronchomalacia associated with laryngeal cleft. Mitchell DB, et al. **Int J Pediatr Otorhinolaryngol** 1989 Dec;18(2):181–5

Congenital ciliary aplasia in two siblings. A primitive disregulation of ciliogenesis? Richard S, et al.
Pathol Res Pract 1989 Aug;185(2):181–3

The biphasic spirogram: a clue to unilateral narrowing of a mainstem bronchus. Gascoigne AD, et al. **Thorax** 1990 Aug;45(8):637–8

Bronchoscopic and bronchographic findings in 12 patients with sarcoidosis and severe or progressive airways obstruction. Udwadia ZF, et al. **Thorax** 1990 Apr; 45(4):272–5

[Tracheobronchial sites of Wegener's granulomatosis] Doré P, et al. **Rev Med Interne** 1989 Jul–Aug;10(4):331–7 (34 ref.) **(Fre)**

[Membranous bronchiole diseases in patients without chronic air–flow limitation] Matsuba K, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 Jul;27(7):803–10 (Eng. Abstr.) **(Jpn)**

[Branching defects and mucosal diverticulosis of the bronchi in children as factors predisposing to the development of chronic inflammatory processes in the lungs] Esipova IK, et al. **Arkh Patol** 1990;52(2):6–10 (Eng. Abstr.) **(Rus)**

[Endobronchial tuberculosis (letter)] Caminero Luna JA, et al. **Med Clin (Barc)** 1990 Feb 3;94(4):155 **(Spa)**

PHYSIOPATHOLOGY

Mucosal oedema and airway hyperreactivity. Bucca C, et al. **Eur Respir J Suppl** 1989 Jun;6:520s–522s (17 ref.)

Airway pressure–volume curve estimated by flow interruption during forced expiration. Ohya N, et al.
J Appl Physiol 1989 Dec;67(6):2631–8

[Anomalies of mucus and bronchial pathology in adults] Polu JM, et al. **Rev Mal Respir** 1989;6(6):493–9 (38 ref.) (Eng. Abstr.) **(Fre)**

[Clinical aspects of peripheral airway diseases in chronic obstructive pulmonary disease] Sasaki H.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 May; 27(5):550–5 (Eng. Abstr.) **(Jpn)**

[The relation of severe obstructive disorders to ventilation found in young patients with bronchitis and bronchopulmonary diseases in childhood] Dutu S, et al. **Rev Ig [Pneumoftiziol]** 1989 Apr–Jun;38(2):127–36 (Eng. Abstr.) **(Rum)**

[The effect of bronchofibroscopy on the mechanics of breathing during disorders of bronchial patency in the postoperative period] Bondarenko AV, et al.
Anesteziol Reanimatol 1989 Sep–Oct;(5):58–62 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

The anterior wall stripe of the left lower lobe bronchus on the lateral chest radiograph: CT correlative study. Lang EV, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):33–9

[Delayed diagnosis of bronchial foreign body] Bagi P, et al. **Ugeskr Laeger** 1990 Jul 30;152(31):2247 (Eng. Abstr.) **(Dan)**

[Tracheo–bronchopathia chondro–osteoplastica. X–ray computed tomographic signs] Giron J, et al. **J Radiol** 1989; 70(4):299–305 (17 ref.) (Eng. Abstr.) **(Fre)**

[Measurement of the posterior wall of the intermediate bronchus. Diagnostic value] Revert A, et al. **J Radiol** 1990 Feb;71(2):97–101 (Eng. Abstr.) **(Fre)**

[Mediastinal and bronchovascular amyloidosis. An unusual x–ray morphologic finding] Biggemann M, et al.
Radiologe 1990 Jul;30(7):344–6 (Eng. Abstr.) **(Ger)**

[Compression syndrome of the left main bronchus] Schwartze D, et al. **Z Erkr Atmungsorgane** 1990;174(3):219–23 (Eng. Abstr.) **(Ger)**

[Bronchography in children. Methodologic, statistical and functional findings] Castello D, et al. **Minerva Pediatr** 1989 Aug;41(8):405–12 (Eng. Abstr.) **(Ita)**

[Studies of CT images of bronchial tuberculosis, in reference to its pathogenesis] Katagiri S, et al. **Rinsho Hoshasen** 1990 Feb;35(2):209–15 (Eng. Abstr.) **(Jpn)**

[CT findings of the benign tracheobronchial lesions with calcification] Ohkubo Y, et al. **Rinsho Hoshasen** 1990 Jul; 35(7):839–46 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Reverse radioaerosol/radioperfusion distribution in pulmonary endobronchial obstruction. Fuentes RT, et al. **Clin Nucl Med** 1990 Apr;15(4):217–21

REHABILITATION

[The characteristics and results of rehabilitative treatment in patients with acute protracted and recurrent diseases of the bronchi and lungs at a specialized department] Potashov DA, et al. **Ter Arkh** 1989;61(8):37–40 **(Rus)**

SURGERY

Tracheobronchial obstructions in infants and children. Experience with 45 cases. deLorimier AA, et al.
Ann Surg 1990 Sep;212(3):277–89

Malignant tracheobronchial obstruction [letter; comment] Gaer JA, et al. **Ann Thorac Surg** 1990 Jun;49(6):1027 Comment on: Ann Thorac Surg 1989 Oct;48(4):463–4.

Successful surgical management of bronchial dehiscence after single–lung transplantation. Kirk AJ, et al.
Ann Thorac Surg 1990 Jan;49(1):147–9

New approach to the surgical treatment of Swyer–James–MacLeod syndrome. Vishnevsky AA, et al.
Ann Thorac Surg 1990 Jul;50(1):103–4

Role of aortopexy in the management of primary tracheomalacia and tracheobronchomalacia. Malone PS, et al. **Arch Dis Child** 1990 Apr;65(4):438–40

Laser application in the tracheobronchial tree. Duncavage JA, et al. **Otolaryngol Clin North Am** 1990 Feb;23(1):67–75 (12 ref.)

Broncholithiasis: bronchoscopic vs. surgical management. Igoe D, et al. **Respir Med** 1990 Mar;84(2):163–5

[The CO2 laser in the tracheobronchial pathology of children] Garabedian EN, et al. **Ann Pediatr (Paris)** 1989 Nov;36(9):600–2 **(Fre)**

[Recommendations apropos of contraindications and precautions in the use of bronchial cryotherapy with a flexible catheter [letter]] Blanc–Jouvan F, et al.
Rev Mal Respir 1989;6(5):479 **(Fre)**

[Experimental study of bronchomalacia] Hanawa K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 May;37(5):869–70 **(Jpn)**

[Use of lasers in bronchology] Pirożyński M.
Pneumonol Pol 1989 Jul–Sep;57(7–9):393–6 **(Pol)**

[Further studies on the occurrence of mycoses in the bronchial stump and bronchial anastomosis or trachea] Zajączkowska J, et al. **Pneumonol Pol** 1989 Feb; 57(2):104–13 (Eng. Abstr.) **(Pol)**

[Endoscopic electro– and laser surgery in diseases of the trachea and bronchi] Rusakov MA, et al.
Grud Serdechnososudistaia Khir 1990;(1):58–62 (Eng. Abstr.) **(Rus)**

[Treatment of obstructive tracheobronchial disease with the Yag–Nd laser: 400 procedures in a 4–year experience] Díaz Jiménez JP, et al. **Med Clin (Barc)** 1989 Sep 16;93(7):244–8 (Eng. Abstr.) **(Spa)**

THERAPY

Nonsurgical intervention in the resolution of acquired neonatal bronchial stenosis. Lenoir P, et al.
Am J Perinatol 1990 Jul;7(3):290–2

Right pneumonectomy syndrome in infancy treated with an expandable prosthesis. Rasch DK, et al.
Ann Thorac Surg 1990 Jul;50(1):127–9

Endobronchial stenting for anastomotic stenosis after sleeve resection. Tsang V, et al. **Ann Thorac Surg** 1989 Oct; 48(4):568–71

A dedicated tracheobronchial stent [see comments] Dumon JF. **Chest** 1990 Feb;97(2):328–32 Comment in: Chest 1990 Feb;97(2):260–1.

Treatment of an infant with tracheobronchomalacia at home with a lightweight, high–humidity, continuous positive airway pressure system. Weigle CG. **Crit Care Med** 1990 Aug;18(8):892–4

Use of expandable metal stents in the treatment of bronchial obstruction. Simonds AK, et al. **Thorax** 1989 Aug; 44(8):680–1

[Stent implantation as a palliative measure in an inoperable bronchial tumor. Initial experiences with an endoscopically implanted stent (published erratum appears in Radiologe 1989 Nov;29(11):576)] Beck A, et al. **Radiologe** 1989 Aug; 29(8):399–405 (Eng. Abstr.) **(Ger)**

[Anesthesia problems in pediatric bronchoscopy] Hagemann H, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:9–10 **(Ger)**

[Indications for bronchologic study in children and adolescents] Uekötter J. **Z Kinderchir** 1988 Sep;43 Suppl 1:28 **(Ger)**

[Laser destruction of a broncholith of the middle–lobe bronchus] Gerasin VA, et al.
Grud Serdechnososudistaia Khir 1990;(5):77–8 **(Rus)**

[Experience in the treatment of expiratory stenosis of the trachea and main bronchi] Aliev MA, et al. **Grudn Khir** 1989 Nov–Dec;(6):66–9 (Eng. Abstr.) **(Rus)**

[Removal of a large broncholith using laser and basket instrumentation] Gerasin VA, et al. **Sov Med** 1990;(3):111–2 **(Rus)**

VETERINARY

Occurrence of a canine distemper–like disease in aquarium seals. Nunoya T, et al. **Nippon Juigaku Zasshi** 1990 Jun; 52(3):469–77

Chronic lung disease in old dogs and cats. Ford RB.
Vet Rec 1990 Apr 21;126(16):399–402

[Unusual metaplasia of the deer lung] Rang HH.
Tierarztl Prax 1990 Jun;18(3):243–4 (Eng. Abstr.) **(Ger)**

BRONCHIAL FISTULA

Endoscopic diagnosis and treatment of postoperative bronchopleural fistula. York EL, et al. **Chest** 1990 Jun; 97(6):1390–2

COMPLICATIONS

Fatal hemoptysis: aortobronchial fistula as a preventable cause of death. Wheeler AP, et al. **Crit Care Med** 1989 Nov;17(11):1228–30

Tracheal agenesis with bronchoesophageal fistulas—a case report. Nakada K, et al. **Jpn J Surg** 1989 Jul;19(4):494–7

Aortobronchial fistula: an uncommon cause of haemoptysis. Riancho JA, et al. **Postgrad Med J** 1989 Mar;65(761):171–3

Squamous cell carcinoma of the pleura following bronchopleural fistula. Prabhakar G, et al. **Thorax** 1989 Dec;44(12):1053–4

[Problems in treating chronic empyema with fistula] Wada H, et al. **Bull Chest Dis Res Inst Kyoto Univ** 1988 Mar; 21(1–2):33–6 (Eng. Abstr.) **(Jpn)**

[A pancreatico–bronchial fistula with right hydropneumothorax] Yamaguchi T, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 May; 27(5):620–4 (Eng. Abstr.) **(Jpn)**

[Pulmonary sequestration with esophagobronchial fistula. Presentation of 2 cases and a review of the literature] Eizaguirre I, et al. **An Esp Pediatr** 1989 Sep;31(3):297–301 (35 ref.) (Eng. Abstr.) **(Spa)**

CONGENITAL

Congenital bronchoesophageal fistula. Risher WH, et al.
Ann Thorac Surg 1990 Mar;49(3):500–5 (16 ref.)

Bronchoesophageal fistula with an esophageal web. Turrentine MW, et al. **Ann Thorac Surg** 1990 Sep; 50(3):473–5

Congenital bronchobiliary fistula in adults. Yamaguchi M, et al. **South Med J** 1990 Jul;83(7):851–2

[An adult case of congenital esophagobronchial fistula accompanied with bronchial branch of the vagal nerve] Date H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Apr;38(4):677–80 (Eng. Abstr.) **(Jpn)**

[Congenital esophagobronchial fistula communicated to esophageal diverticulum, report of a case] Yamamoto H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Feb; 38(2):318–23 (9 ref.) (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Diagnosis of gastrobronchial fistula by measurement of bronchial secretion pH. Case report and literature review. Joseph JT, et al. **Chest** 1989 Oct;96(4):935–6 (4 ref.)

ETIOLOGY

Spontaneous pneumopericardium: case report and review of the literature. Katzir D, et al. **Cardiology** 1989;76(4):305–8 (16 ref.)

Venobronchial fistula: a complication associated with central venous catheterization for chemotherapy. Beauregard JF, et al. **Cathet Cardiovasc Diagn** 1990 Jan;19(1):49–52

Catheter complications [letter; comment] Kimmel RD, et al. **Chest** 1990 May;97(5):1271-2 Comment on: Chest 1988 Dec;94(6):1221-4.

Bronchoesophageal fistula in small cell lung cancer [letter] Koval JC, et al. **Chest** 1990 Aug;98(2):512-3

Gastrobronchial fistula. Chong WK, et al. **Clin Radiol** 1990 Feb;41(2):141-2

Faecoptysis as the presenting symptom of colonic carcinoma. Winocour PH, et al. **J R Soc Med** 1989 Jul;82(7):441

Bronchoesophageal fistula in adults: congenital or acquired? [letter; comment] Weissberg D, et al. **J Thorac Cardiovasc Surg** 1990 Apr;99(4):756-7 Comment on: J Thorac Cardiovasc Surg 1989 Feb;97(2):320-1.

Aortobronchial fistula as a complication of surgery for correction of congenital aortic anomalies. Garnick A, et al. **Radiology** 1990 May;175(2):347-8

[Localized dilatation of the bronchi. A misunderstood etiology of coronaro-bronchial fistula] Abergel E, et al. **Arch Mal Coeur** 1990 Feb;83(2):271-4 (Eng. Abstr.) (Fre)

[A surgical etiology of respiratory distress in necrotizing pancreatitis: pancreato-bronchial fistula. 3 cases] Fekete F, et al. **Chirurgie** 1989;115(2):106-12; discussion 113 (23 ref.) (Eng. Abstr.) (Fre)

[Bronchial fistula caused by Pott's abscesses. Report of 3 cases] Auregan G, et al. **Rev Pneumol Clin** 1989;45(4):175-8 (Eng. Abstr.) (Fre)

[Non-tumoral and acquired esophago-tracheo-bronchial fistulas in adults: 7 cases] Mouelhi M, et al. **Tunis Med** 1989 May;67(5):345-50 (Eng. Abstr.) (Fre)

[An aorto-bronchial fistula following prosthetic replacement of the descending aorta. A comparison of diagnostic possibilities] Deider S, et al. **ROFO** 1989 Dec;151(6):735-7 (Ger)

[Esophago-bronchial fistula originating in an esophageal diverticulum] Vámosi-Nagy I, et al. **Orv Hetil** 1989 Nov 5;130(45):2429-30 (Eng. Abstr.) (Hun)

[Bronchopleural fistula after pulmonary resection of lung cancer] Akaogi E, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Mar;38(3):353-7 (Eng. Abstr.) (Jpn)

[Fistulization in xanthogranulomatous pyelonephritis. Presentation of 6 clinical cases and review of the literature (corrected and republished article originally printed in Actas Urol Esp 1989 Jul-Aug;13(4):243-6)] Calvo Quintero JE, et al. **Actas Urol Esp** 1989 Sep-Oct;13(5):363-7 (Eng. Abstr.) (Spa)

[Bronchobiliary fistula (letter)] Fernández de la Puebla RA, et al. **Med Clin (Barc)** 1990 May 5;94(17):678-9 (Spa)

[Esophagobronchial fistula of tuberculous origin] Alvarez Mosre MA, et al. **Rev Esp Enferm Apar Dig** 1989 Jul; 76(1):63-5 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Bronchocutaneous fistula in dogs: influence of fistula size and ventilatory mode on airleak. Gagnon L, et al. **Crit Care Med** 1989 Dec;17(12):1301-5

Determinants of gas flow through a bronchopleural fistula. Walsh MC, et al. **J Appl Physiol** 1989 Oct;67(4):1591-6

PREVENTION & CONTROL

[Use of omental pedicle flap for the prevention of bronchopleural fistula after surgery: an unsuccessful case in a management of bronchopleural fistula] Morohoshi T, et al. **Kyobu Geka** 1989 Dec;42(13):1109-13 (Eng. Abstr.) (Jpn)

[Plastic surgery of bronchial stump using dura mater after pneumonectomy in patients with lung cancer] Tevit BM, et al. **Grud Serdechnososudistain Khir** 1990;(5):51-3 (Eng. Abstr.) (Rus)

[A method of managing the bronchial stump after surgical and combined treatment of patients with cancer of the lung] Trakhtenberg AKh, et al. **Khirurgiia (Mosk)** 1990 Apr; (4):15-8 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Nephro-broncho-cutaneous fistula. Gil-Salom M, et al. **Br J Urol** 1989 Dec;64(6):652-3

Hepatic echinococcosis complicated with transphrenic migration and bronchial fistula: CT demonstration. Grande D, et al. **Gastrointest Radiol** 1990 Spring;15(2):115-8

[Dyspnea and cavitated pulmonary infiltration in polytraumatized male] Alvarez Sanz C, et al. **Rev Clin Esp** 1990 Mar;186(5):238-40 (Spa)

SURGERY

Microvascular free muscle flaps for chronic empyema with bronchopleural fistula when the major local muscles have been divided—one-stage operation with primary wound closure. Chen HC, et al. **Ann Plast Surg** 1990 Jun; 24(6):510-6

Pulmonary resection using automatic stapling devices. Kaplan DK, et al. **Eur J Cardiothorac Surg** 1987;1(3):152-7

[Cholangiothoracic fistulae] Song ZL. **Chung Hua Wai Ko Tsa Chih** 1989 May;27(5):269-71, 316 (Eng. Abstr.) (Chi)

[Esophagorespiratory tract fistula treated by primary suture. Apropos of 2 cases of esophago-pleural fistula and 2 cases of esophagobronchial fistula] Faber C, et al. **Ann Chir** 1990; 44(4):290-5 (Eng. Abstr.) (Fre)

[Bronchobiliary fistula] Fabian W. **Chirurg** 1990 Feb; 61(2):137-9 (Ger)

[A case of omentopexy for bronchial fistula and pyothorax following the right completion pneumonectomy with combined resection of pericardium, diaphragm and chest wall] Hoshi E, et al. **Kyobu Geka** 1989 Dec;42(13):1114-7 (Eng. Abstr.) (Jpn)

[Closure method of bronchopleural fistula with omental pedicle flap in three cases following pneumonectomy] Inagaki K, et al. **Kyobu Geka** 1989 Dec;42(13):1090-4 (Eng. Abstr.) (Jpn)

[The use of an omental pedicle flap in the closure of a wide bronchial fistula after pneumonectomy: a case report] Iwanami H, et al. **Kyobu Geka** 1989 Dec;42(13):1105-8 (Eng. Abstr.) (Jpn)

[Clinical experience of omental pedicle flap for bronchopleural fistula] Nagata Y, et al. **Kyobu Geka** 1989 Dec;42(13):1101-4 (Eng. Abstr.) (Jpn)

[Successful use of an omental pedicled flap for obliterating empyema associated with a large bronchial fistula] Tsubota N, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Mar; 38(3):499-502 (Eng. Abstr.) (Jpn)

[Endoscopic occlusion of the bronchial stump in bronchial insufficiency] Vagner EA, et al. **Grud Serdechnososudistaia Khir** 1990;(2):46-9 (Eng. Abstr.) (Rus)

[Transdiaphragmatic large intestinal-bronchial fistula] Vaganov AV, et al. **Grudn Khir** 1989 Jul-Aug;(4):93-4 (Rus)

[Successful cure of a patient with acute destructive pneumonia and empyema with bronchial fistula after upper lobectomy] Danilovskii IuP, et al. **Probl Tuberk** 1990; (4):71-2 (Rus)

THERAPY

Medical management and therapy of bronchopleural fistulas in the mechanically ventilated patient. Baumann MH, et al. **Chest** 1990 Mar;97(3):721-8 (78 ref.)

A new device that allows synchronous intermittent inspiratory chest tube occlusion with any mechanical ventilator. Bianch PB, et al. **Chest** 1990 Jun;97(6):1426-30

Bronchoscopy in the management of bronchopleural fistula. McManigle JE, et al. **Chest** 1990 May;97(5):1235-8

Endobronchial vascular occlusion coils for control of a large parenchymal bronchopleural fistula. Salmon CJ, et al. **Chest** 1990 Jul;98(1):233-4

Successful closure of chronic BPF by thoracoscopy after failure of endoscopic fibrin glue application and thoracoplasty. Tschopp JM, et al. **Chest** 1990 Mar; 97(3):745-6

Intermittent inspiratory chest tube occlusion to limit bronchopleural cutaneous airleaks. Gallagher TJ, et al. **Crit Care Med** 1976 Nov-Dec;4(6):328-32

The use of endoscopy to treat bronchobiliary fistula caused by choledocholithiasis. Brem H, et al. **Gastroenterology** 1990 Feb;98(2):490-2

A new endoprosthesis for the treatment of esophago-bronchial fistulas. Spinelli P, et al. **Gastrointest Endosc** 1989 Nov-Dec;35(6):555-7

An esophagobronchopleural fistula successfully treated by a surgical procedure combined with conservative therapy after resection for lung cancer. Sano T, et al. **Jpn J Clin Oncol** 1989 Dec;19(4):402-8

Successful closure of bronchopleural fistula with adhesive tissue. Case report. Eng J, et al. **Scand J Thorac Cardiovasc Surg** 1990;24(2):157-9

[The use of hyperbaric oxygenation in the combined treatment of postresection tuberculous pleural empyema with bronchial fistulae] Mukhin EP, et al. **Probl Tuberk** 1989;(11):22-5 (Eng. Abstr.) (Rus)

[Conservative treatment of postoperative defects of the bronchial stump and of bronchoalveolar fistulae] Levashev IuN, et al. **Vestn Khir** 1989 Oct;143(10):76-80 (Eng. Abstr.) (Rus)

BRONCHIAL LAVAGE FLUID see **BRONCHOALVEOLAR LAVAGE FLUID**

BRONCHIAL NEOPLASMS

A hyperdense intracranial metastatic carcinoid tumor. Gordon DL, et al. **Am J Med** 1990 Mar;88(3):314-6

Recurrent bronchial carcinoid [letter] Kirschner PA. **Chest** 1990 May;97(5):1278

Synchronous vertebral decompression and posterior stabilization in the treatment of spinal malignancy. Johnston FG, et al. **Neurosurgery** 1989 Dec;25(6):872-6

[Testicular metastasis secondary to bronchial cancer (letter)] Alamowitch C, et al. **J Chir (Paris)** 1990 May;127(5):304 (Fre)

[Should a cancer of the bronchi be surgically treated after excision of a cerebral metastasis?] Degreef JM, et al. **Rev Mal Respir** 1989;6(5):429-34 (Eng. Abstr.) (Fre)

[Lymphoma of the thyroid and associated bronchial epidermoid cancer (letter)] Breton JL, et al. **Rev Pneumol Clin** 1989;45(2):94 (Fre)

[Endobronchial lipomas. Apropos of 16 cases] Nataf P, et al. **Rev Pneumol Clin** 1989;45(5):203-5 (Eng. Abstr.) (Fre)

[Endobronchial lipoma (presentation of a case)] Gallosi D, et al. **Chir Ital** 1988 Dec;40(6):388-91 (Eng. Abstr.) (Ita)

[Radiologic aspects of metastasis to the colon. Description of 4 cases] Boccardi A, et al. **Minerva Dietol Gastroenterol** 1989 Jul-Sep;35(3):205-10 (Eng. Abstr.) (Ita)

[Leiomyoma of the respiratory organs] Biriukov IuV, et al. **Khirurgiia (Mosk)** 1989 Sep;(9):138-40 (Rus)

[Skin tumor, the first distant manifestation of a carcinoid tumor of the bronchi (letter)] Panisello J, et al. **Rev Clin Esp** 1989 Nov;185(8):430-1 (Spa)

ANALYSIS

Amidated joining peptide in the human pituitary, gut, adrenal gland and bronchial carcinoids. Immunocytochemical and immunochemical evidence. Bjartell A, et al. **Peptides** 1990 Jan-Feb;11(1):149-61

[Bronchial carcinoid and small cell lung cancer—neuroendocrine tumors. Immunohistochemical studies] Maryniak R, et al. **Pneumonol Pol** 1989 Oct-Dec; 57(10-12):489-95 (Eng. Abstr.) (Pol)

COMPLICATIONS

Malignant tracheobronchial obstruction [letter; comment] Gaer JA, et al. **Ann Thorac Surg** 1990 Jun;49(6):1027 Comment on: Ann Thorac Surg 1989 Oct;48(4):463-4.

Treatment of malignant tracheobronchial obstruction [editorial; comment] [see comments] McElvein RB. **Ann Thorac Surg** 1989 Oct;48(4):463-4 Comment on: Ann Thorac Surg 1989 Oct;48(4):469-73; discussion 473-5. Comment in: Ann Thorac Surg 1990 Jun;49(6):1027.

Endoscopic relief of malignant airway obstruction [see comments] Mathisen DJ, et al. **Ann Thorac Surg** 1989 Oct; 48(4):469-73; discussion 473-5 Comment in: Ann Thorac Surg 1989 Oct;48(4):463-4.

Hypercalcemia in atypical bronchial carcinoid tumors. Allen MB, et al. **Chest** 1989 Nov;96(5):1206-8

Unresolved pneumonia due to endobronchial lipoma and actinomycosis. Arber N, et al. **Eur Respir J** 1989 Sep; 2(8):794-6

Goodpasture's syndrome in a patient with two endocrine tumours. McMahon RF, et al. **Postgrad Med J** 1989 Aug; 65(766):582-6

Catamenial haemoptysis from endobronchial endometriosis--a case report and review of previously reported cases. Bateman ED, et al. **Respir Med** 1990 Mar; 84(2):157-61 (18 ref.)

Recurrent localised pneumonia due to bronchial infiltration in a patient with chronic lymphocytic leukaemia. Desjardins A, et al. **Thorax** 1990 Jul;45(7):570

Systemic amyloid associated with carcinoma of the bronchus. Richmond I, et al. **Thorax** 1990 Feb;45(2):156-7

[Catamenial hemoptysis caused by bronchopulmonary endometriosis] Laraqui CH, et al. **Rev Mal Respir** 1989; 6(4):377-80 (Eng. Abstr.) (Fre)

[Polyradiculoneuritis revealing broncho-pulmonary cancer. A case report and brief review of the literature] M'Raihi ML, et al. **Rev Mal Respir** 1989;6(5):465-7 (6 ref.) (Eng. Abstr.) (Fre)

[Sézary's syndrome appearing 2 years before bronchial epidermoid cancer (letter)] Bouillet T, et al. **Rev Pneumol Clin** 1989;45(5):224-5 (Fre)

[Granular cell bronchial tumor associated with acoustic neurinoma. Apropos of a case (letter)] Underner M, et al. **Rev Pneumol Clin** 1989;45(6):280 (Fre)

[Bony metastases of a bronchial carcinoid tumor. A new form revealed by dorsal epidural inflammation] Bruno MC, et al. **Rev Rhum Mal Osteoartic** 1989 Jul-Sep;56(8-9):593-5 (Fre)

[Carcinoid of the bronchi and adenoma of the parathyroid: is it a fortuitous association or a multiple endocrine neoplasm? (letter)] Pedro-Botet ML, et al. **Rev Clin Esp** 1989 Oct;185(5):268 (Spa)

[Active pulmonary tuberculosis and cancer of the bronchi (letter)] Tomás S, et al. **Rev Clin Esp** 1989 Jul-Aug; 185(3):166-7 (Spa)

DIAGNOSIS

Efficacy and benefit of mediastinal computed tomography [letter] Gaer J, et al. **Ann Thorac Surg** 1990 Sep;50(3):508-9

Carcinoid tumour of bronchus—masquerading as carcinoma. Hira HS, et al. **Indian J Chest Dis Allied Sci** 1989 Oct-Dec; 31(4):275-7

Pneumothorax: an unusual manifestation of a bronchial carcinoid. Wagner RB, et al. **Md Med J** 1990 Mar; 39(3):263-5

Endobronchial metastases simulating primary carcinoma of the lung. Bourke SJ, et al. **Respir Med** 1989 Mar;83(2):151-2

Fibreoptic bronchoscopy: an assessment of immediate cytological diagnosis using methylene blue stain. Titley I, et al. **Respir Med** 1989 Jan;83(1):37-41

Bronchopulmonary carcinoids in Iceland 1955-1984. A retrospective clinical and histopathologic study. Hallgrimsson JG, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(3):275-8

Carcinoid tumorlet of the bronchus in a child. Rael J, et al. **South Med J** 1990 Sep;83(9):1104-5

Lipomas of the peripheral lung--a case report and review of the literature. Hirata T, et al. **Thorac Cardiovasc Surg** 1989 Dec;37(6):385-7 (22 ref.)

Intrabronchial neurilemmoma--review of cases in Japan. Shirakusa T, et al. **Thorac Cardiovasc Surg** 1989 Dec; 37(6):388-90 (13 ref.)

[Endobronchial hamartoma; a benign mesenchymal tumor] Peels JO, et al. **Ned Tijdschr Geneeskd** 1990 Mar 10; 134(10):481–3 (Eng. Abstr.) **(Dut)**

[Preoperative staging of central bronchopulmonary cancer. X-ray CT-MRI-pulmonary digital subtraction angiography and surgery] Chagnaud C, et al. **Ann Chir** 1990;44(2):125–8 (Eng. Abstr.) **(Fre)**

[Endobronchial tuberculosis simulating cancer] Astoul P, et al. **Rev Mal Respir** 1990;7(2):163–5 (Eng. Abstr.) **(Fre)**

[Two cases of mucoepidermoid carcinoma of the bronchus] Kato M, et al. **Bull Chest Dis Res Inst Kyoto Univ** 1988 Mar;21(1–2):8–16 (Eng. Abstr.) **(Jpn)**

[Bronchopulmonary cancer in persons under 40 of age] Jocu I, et al. **Rev Med Interna [Med Interna]** 1989 Jan–Feb; 41(1):29–36 **(Rum)**

[A case of metachronous cancer in one lung with a 24-year detection period] Voronov AA, et al. **Grudn Khir** 1989 Jul–Aug;(4):89–91 **(Rus)**

[Diagnostic difficulties in chronic obstruction of the trachea and main bronchi simulating bronchial asthma] Ovcharenko SI, et al. **Klin Med (Mosk)** 1990 May;68(5):65–8 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Effect of photodynamic therapy and external beam radiation therapy on juvenile laryngotracheobronchial papillomatosis. Kavuru MS, et al. **Am Rev Respir Dis** 1990 Feb;141(2):509–10

[Perspectives on chemotherapy of cancer of the bronchi] Chauvergne J, et al. **Rev Mal Respir** 1989;6(5):409–16 (42 ref.) (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

Neuron-specific enolase as a follow-up marker in small cell bronchial carcinoma. A prospective study in an unselected series. Nōu E, et al. **Cancer** 1990 Mar 15;65(6):1380–5

EPIDEMIOLOGY

[Malignant tumors of the lung and bronchi in children and adolescents. 2. Analysis of 66 cases of the East German National Cancer Registry (1961–1985)] Schubert W, et al. **Kinderarztl Prax** 1990 Feb;58(2):73–7 (Eng. Abstr.) **(Ger)**

[Malignant tumors of lungs and bronchi in children and youths. 1. Compilation of 175 cases from the literature] Schubert W, et al. **Kinderarztl Prax** 1989 Nov; 57(11):539–43 (8 ref.) (Eng. Abstr.) **(Ger)**

ETIOLOGY

Adenocarcinoma and wood. Schraub S, et al. **Am J Epidemiol** 1989 Dec;130(6):1164–6

Relation between asbestosis and bronchial cancer in amphibole asbestos miners [letter; comment] Rudd RM. **Br J Ind Med** 1990 Mar;47(3):215–6 Comment on: Br J Ind Med 1989 Aug;46(8):537–40.

Endobronchial polyp and chronic smoke injury. Smith RE. **Postgrad Med J** 1989 Oct;65(768):785–7

[Cancer and tobacco. Current data] Tredaniel J. **Pathol Biol (Paris)** 1989 Nov;37(9):1051–2 **(Fre)**

GENETICS

Oncogene expressions detected by in situ hybridization of squamous metaplasia, dysplasia and primary lung cancer in human. Lee JD, et al. **J Korean Med Sci** 1989 Sep; 4(3):121–7

IMMUNOLOGY

[A case of solitary bronchial papilloma with elevated serum CEA concentration] Kaneda M, et al. **Kyobu Geka** 1990 May;43(5):419–22 (Eng. Abstr.) **(Jpn)**

METABOLISM

Lectin histochemistry of normal bronchopulmonary tissues and common forms of bronchogenic carcinoma. Alvarez-Fernandez E, et al. **Arch Pathol Lab Med** 1990 May;114(5):475–81

PATHOLOGY

The histological spectrum of bronchial carcinoid tumours. Hasleton PS, et al. **Appl Pathol** 1989;7(4):205–18

A morphometric analysis of individual cell death in bronchial carcinoids. al-Saffar N, et al. **Cell Tissue Kinet** 1990 Jul; 23(4):325–30

Endobronchial epithelial papilloma associated with a foreign body. Greene JG, et al. **Chest** 1990 Jan;97(1):229–30

Bronchial adenoma—a heterogenous group of tumors: report of 38 patients. Su WJ, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Mar;45(3):174–80

Intravascular bronchioloalveolar tumour. De-Luca S, et al. **Eur Respir J** 1990 Mar;3(3):346–8

Multiple atypical adenomatous hyperplasia of type II pneumonocytes and bronchiolo-alveolar carcinoma. Weng S, et al. **Histopathology** 1990 Jan;16(1):101–3

An unusual case of bronchial carcinoid predominantly consisting of large cells. Shinoda M, et al. **Jpn J Clin Oncol** 1989 Dec;19(4):409–11

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 21–1990. A 21-year-old man with recurrent left-sided pneumonia. **N Engl J Med** 1990 May 24;322(21):1512–21

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 50–1989. A 17-year-old boy with right-lower-lobe pneumonitis and asthma. **N Engl J Med** 1989 Dec 14;321(24):1665–72

Bronchial carcinoids with S-100 positive sustentacular cells. A comparative study with gastrointestinal carcinoids, pheochromocytomas and paragangliomas. Barbareschi M, et al. **Pathol Res Pract** 1990 Apr;186(2):212–22

Endobronchial non-Hodgkin's lymphoma. Ieki R, et al. **Respir Med** 1989 Jan;83(1):87–9

Typical and atypical bronchial carcinoids. Torre M, et al. **Respir Med** 1989 Jul;83(4):305–8

Long-term follow-up of classical bronchial carcinoid tumors. Clinicopathologic observations. Warren WH, et al. **Scand J Thorac Cardiovasc Surg** 1990;24(2):125–30

Adenoid cystic carcinoma metastasizing before detection of the primary lesion. Warren CJ, et al. **South Med J** 1989 Oct;82(10):1277–9

[Abrikosov's endobronchial myoblastic myoma] Vlasov V, et al. **Khirurgiia (Sofiia)** 1989;42(4):66–7 **(Bul)**

[Solitary squamous papilloma of the bronchus: report of a case] Lee CM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Jan;89(1):63–5 (Eng. Abstr.) **(Chi)**

[Mucoepidermoid tumor as a less common form of bronchial adenoma] Hlad J, et al. **Cesk Pediatr** 1989 Oct;44(10):631–2 **(Cze)**

[Intradural spinal metastasis from visceral neoplasms. Apropos of 4 cases. Review of the literature] Pelissou-Guyotat I, et al. **Neurochirurgie** 1989;35(4):236–41 (34 ref.) (Eng. Abstr.) **(Fre)**

[The status of computerized tomography and conventional tomography in the assessment of endobronchial growth and extension of central bronchial cancer] Steppling H, et al. **Pneumologie** 1990 Feb;44 Suppl 1:603–4 (Eng. Abstr.) **(Ger)**

[Various rare tumors of the lung] Callegari P, et al. **Ann Ital Chir** 1989 Nov–Dec;60(6):515–21; discussion 521–2 (Eng. Abstr.) **(Ita)**

[Acinic cell tumor of the bronchial gland] Yoshida K, et al. **Nippon Geka Gakkai Zasshi** 1989 Oct;90(10):1810–3 (9 ref.) (Eng. Abstr.) **(Jpn)**

[Bronchial mucoepidermoid carcinoma in a child] Ramírez-Mendoza P, et al. **Bol Med Hosp Infant Mex** 1989 Nov;46(11):728–31 (16 ref.) (Eng. Abstr.) **(Spa)**

[A 16-year-old woman with pulmonary nodules (clinical conference)] Picado C, et al. **Med Clin (Barc)** 1990 Feb 3;94(4):149–54 **(Spa)**

[Intestinal subocclusion as the first manifestation of cancer of the lung (letter)] Ramos Soria F, et al. **Rev Clin Esp** 1990 Apr;186(7):360–1 **(Spa)**

PREVENTION & CONTROL

Recruitment for an efficacy study in chemoprevention—the Concerned Smoker Study. Arnold A, et al. **Prev Med** 1989 Sep;18(5):700–10

RADIOGRAPHY

Calcified endobronchial mass in a 28-year-old man. Underwood GA, et al. **Chest** 1990 Jul;98(1):209–10

Computed tomography in endobronchial neoplasms. Colletti PM, et al. **Comput Med Imaging Graph** 1990 Jul–Aug; 14(4):257–62

The positive bronchus sign in patients with known lung cancer. Zacharopoulos G, et al. **Eur J Radiol** 1990 Mar–Apr;10(2):130–3

CT/MR correlation in the evaluation of tracheobronchial neoplasia. Naidich DP. **Radiol Clin North Am** 1990 May; 28(3):555–71 (50 ref.)

Primary tracheal and bronchial adenoid cystic carcinoma (cylindroma). Baekelandt MA, et al. **ROFO** 1989 Sep; 151(3):381–3

[Benign tumors of the lungs and bronchi] Polák J, et al. **Cesk Radiol** 1989 Oct;43(5):290–9 (Eng. Abstr.) **(Cze)**

[Carcinoid tumors of the bronchi. Our experience of these during the last 10 years, with a review of the literature] Van Damme H, et al. **Acta Chir Belg** 1989 May–Jun; 89(3):166–74 (58 ref.) (Eng. Abstr.) **(Fre)**

[Endobronchial lipoma: a potential CT diagnosis] Mailleux P, et al. **J Belge Radiol** 1990 Mar;73(2):103–6 (Eng. Abstr.) **(Fre)**

[Abrikossoff's tumor with bronchial localization. Contribution ofx-ray computed tomography in a new case] Rossier S, et al. **J Radiol** 1989 Dec;70(12):739–42 (Eng. Abstr.) **(Fre)**

[Recurrence of a cutaneous, highly malignant non-Hodgkin's lymphoma with endobronchial manifestation] Dölken W, et al. **ROFO** 1989 Sep;151(3):384–5 **(Ger)**

[Laminar atelectasis in an adult with episodes of dyspnea and hemoptysis] Alvarez Sanz C, et al. **Rev Clin Esp** 1990 Jan;186(1):38–40 **(Spa)**

RADIOTHERAPY

Effect of endobronchial radiation therapy on malignant bronchial obstruction. Mehta M, et al. **Chest** 1990 Mar; 97(3):662–5

Short-term anesthesia with midazolam and flumazenil during intraluminal afterloading of esophageal and bronchial neoplasms in ill, inoperable patients [letter] Juettner FM, et al. **Endoscopy** 1990 Mar;22(2):97–8

Sequential combination chemotherapy and radiotherapy in locally advanced non-small cell carcinoma of the bronchus. Watkin SW, et al. **Respir Med** 1989 May;83(3):227–31

[Nd-YAG laser treatment of tracheobronchial lesions] Li JH, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jul;28(7):418–20, 444–5 (Eng. Abstr.) **(Chi)**

[Curative radiotherapy of unresectable bronchial cancer. Apropos of 266 cases without metastasis with 4 to 6 years follow-up (oat cell carcinoma excluded)] Baillet F, et al. **Ann Med Interne (Paris)** 1989;140(5):353–5 (Eng. Abstr.) **(Fre)**

[Value of radiotherapy in bronchial neoplasms] Israël L. **Ann Med Interne (Paris)** 1989;140(5):347–8 **(Fre)**

[Role of lasers in pneumology] Personne C, et al. **Pathol Biol (Paris)** 1989 Nov;37(9):1042–3 **(Fre)**

[Endoscopic Nd-YAG laser treatment and adjuvant therapy of metastatic lesions of airway] Okitsu H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jun;37(6):1187–93 (Eng. Abstr.) **(Jpn)**

SECONDARY

Endobronchial metastases due to colorectal carcinoma. Carlin BW, et al. **Chest** 1989 Nov;96(5):1110–4

Multiple endobronchial metastases due to renal carcinoma and laser therapy [letter] Umeki S. **Chest** 1990 Sep; 98(3):778–9

Endoscopic resection of an endobronchial hypernephroma metastasis using a polypectomy snare. Themelin D, et al. **Eur Respir J** 1990 Jun;3(6):732–3

Endobronchial metastasis from parotid gland tumour. Lossos IS, et al. **J R Soc Med** 1990 Mar;83(3):191

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 51–1989. A 72-year-old woman with bronchospasm and a pleural effusion after treatment of breast carcinoma. **N Engl J Med** 1989 Dec 21;321(25):1738–49

SECRETION

Bronchial and thymic carcinoids and the ectopic ACTH syndrome [editorial; comment] Odell WD. **Ann Thorac Surg** 1990 Jul;50(1):5–6 Comment on: Ann Thorac Surg 1990 Jul;50(1):52–7. Comment on: Ann Thorac Surg 1990 Jul;50(1):58–61.

Management of the ectopic ACTH syndrome due to thoracic carcinoids [see comments] Pass HI, et al. **Ann Thorac Surg** 1990 Jul;50(1):52–7 (38 ref.) Comment in: Ann Thorac Surg 1990 Jul;50(1):5–6.

Successful treatment by chemotherapy for acromegaly associated with ectopic growth hormone releasing hormone secretion from a carcinoid tumour. Harris PE, et al. **Clin Endocrinol (Oxf)** 1990 Mar;32(3):315–21

[Ectopic ACTH syndrome caused by bronchial carcinoid] Lu ZL, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Nov; 28(11):642–5, 699 (Eng. Abstr.) **(Chi)**

SURGERY

Tissue adhesive in bronchial closure. Eng J, et al. **Ann Thorac Surg** 1989 Nov;48(5):683–5

Ectopic thyroid tissue causing bronchial obstruction. Gleason IO, et al. **Ann Thorac Surg** 1967 Feb;3(2):151–3

Endobronchial stenting for anastomotic stenosis after sleeve resection. Tsang V, et al. **Ann Thorac Surg** 1989 Oct; 48(4):568–71

Nd:YAG laser photoresection of low-grade malignant tumors of the tracheobronchial tree. Díaz-Jiménez JP, et al. **Chest** 1990 Apr;97(4):920–2

Bronchoscopic laser photocoagulation of superficial cancer of the bronchi. Gerasin VA, et al. **Chest** 1990 Jul; 98(1):235–6

Intraoperative assessment of nodal staging at thoracotomy for carcinoma of the bronchus. Gaer JA, et al. **Eur J Cardiothorac Surg** 1990;4(4):207–10

Immunotherapy as an adjuvant to surgery in carcinoma of bronchus. Results in three randomised trials. Roeslin N, et al. **Eur J Cardiothorac Surg** 1989;3(5):430–5

Conservative and bronchoplastic resection for bronchial carcinoid tumours. Toledo J, et al. **Eur J Cardiothorac Surg** 1989;3(4):288–91

Tracheobronchial mucoepidermoid carcinoma in childhood with a ten year follow-up. Watterson KG, et al. **Eur J Cardiothorac Surg** 1990;4(2):112–3

Lasers in the management of upper aerodigestive malignancies. Pass HI, et al. **Important Adv Oncol** 1990; :159–79 (101 ref.)

Endoscopic bronchial polypectomy by high-frequency electric surgery. Aikawa T, et al. **Jpn J Med** 1989 Sep–Oct; 28(5):628–31

Bronchoplastic procedures in the treatment of endobronchial carcinoid tumors. Salminen US, et al. **Scand J Thorac Cardiovasc Surg** 1990;24(1):27–32

[Can we reduce the number of exploratory thoracotomies using mediastinoscopy?] Latreille R, et al. **Ann Chir** 1990; 44(2):129–32 (Eng. Abstr.) **(Fre)**

[Exploratory thoracotomy of necessity in surgery of bronchial cancer] Morand G, et al. **Ann Chir** 1990; 44(2):133–7 (Eng. Abstr.) **(Fre)**

[Pleuroscopy in the preoperative staging of bronchial cancer] Wihlm JM. **Ann Chir** 1990;44(2):139–42 (Eng. Abstr.) **(Fre)**

[Small cell cancer of the bronchi: what is the role of surgery?] Crisci R. **Rev Mal Respir** 1989;6(6):507–10 (Eng. Abstr.) **(Fre)**

[Small cell bronchial carcinoma: what is the role of surgery? (letter)] Depierre A. **Rev Mal Respir** 1990;7(4):378 **(Fre)**

[Bronchial sleeve resection at the level of the segmental bronchus for benign bronchial adenoma] Meyer G, et al. **Chirurg** 1990 Jan;61(1):63–7 **(Ger)**

[Bronchial carcinoid. A clinical study of 37 patients] Liewald F, et al. **Dtsch Med Wochenschr** 1989 Nov 3;114(44):1692–6 (Eng. Abstr.) **(Ger)**

[Stapler and manual bronchial anastomosis—results of a consecutive trial series] Junginger T, et al. **Langenbecks Arch Chir** 1989;374(6):323–8 (Eng. Abstr.) **(Ger)**

[Treatment of semi-malignant tumors in children and adolescents using the neodymium YAG laser—indications and differentiation from surgical procedures] Nowak W. **Z Kinderchir** 1988 Sep;43 Suppl 1:30–2 **(Ger)**

[First experiences with neodymium-YAG laser treatment of tracheal and bronchial diseases] Kertes I, et al. **Orv Hetil** 1990 Jan 21;131(3):111–6 (34 ref.) (Eng. Abstr.) **(Hun)**

[Two cases of wedge pneumonectomy in primary lung cancer involved into carina] Hoshi E, et al. **Kyobu Geka** 1990 Mar; 43(3):226–30 (Eng. Abstr.) **(Jpn)**

[Three cases of endobronchial hamartoma] Shimizu N, et al. **Kyobu Geka** 1989 Nov;42(12):986–90 (Eng. Abstr.) **(Jpn)**

[A case of removal of hamartoma of the intermediate bronchus through a bronchoscope] Agaev FF, et al. **Grudn Khir** 1989 Jul–Aug;(4):88–9 **(Rus)**

[Reconstructive operations in tumors of the bronchi in patients over 60 years of age] Sokur PP. **Klin Khir** 1989; (10):36–8 (Eng. Abstr.) **(Rus)**

THERAPY

Bronchial carcinoid with a twenty-four-year natural history. A case report. Maasilta P, et al. **Acta Oncol** 1989; 28(5):715–6

Endoscopic relief of airway obstruction [letter] Cavaliere S, et al. **Ann Thorac Surg** 1990 Jul;50(1):163–4

Endobronchial treatment for tracheobronchial tumours [editorial] **Lancet** 1990 Aug 18;336(8712):410–1

ULTRASTRUCTURE

The evaluation of micronuclei as an intermediate endpoint of bronchial carcinogenesis. Lippman SM, et al. **Prog Clin Biol Res** 1990;339:165–77

BRONCHIAL PROVOCATION TESTS

Leukotriene C4 in children with atopic asthma. II. Plasma levels in bronchial challenge with specific allergen. Iwasaki E. **Acta Paediatr Jpn Overseas Ed** 1989 Jun;31(3):295–302

Contribution of histamine and prostanoids to bronchoconstriction provoked by inhaled bradykinin in atopic asthma. Polosa R, et al. **Allergy** 1990 Apr; 45(3):174–82

The requirement for platelets in allergen-induced late asthmatic airway obstruction. Eosinophil infiltration and heightened airway responsiveness in allergic rabbits. Coyle AJ, et al. **Am Rev Respir Dis** 1990 Sep;142(3):587–93

The effect of an increase in inhaled allergen dose after rimiterol hydrobromide on the occurrence and magnitude of the late asthmatic response and the associated change in nonspecific bronchial responsiveness. Lai CK, et al. **Am Rev Respir Dis** 1989 Oct;140(4):917–23

The response of plasma histamine to bronchoprovocation with methacholine, adenosine 5'-monophosphate, and allergen in atopic nonasthmatic subjects. Phillips GD, et al. **Am Rev Respir Dis** 1990 Jan;141(1):9–13

Role of leukotriene D4 in the early and late pulmonary responses of rats to allergen challenge. Sapienza S, et al. **Am Rev Respir Dis** 1990 Aug;142(2):353–8

Allergen-stimulated release of thromboxane A2 and leukotriene E4 in humans. Effect of indomethacin. Sladek K, et al. **Am Rev Respir Dis** 1990 Jun;141(6):1441–5

Dexamethasone isonicotinate inhibits dual and late asthmatic reactions but not the increase of airway responsiveness induced by toluene diisocyanate in sensitized subjects. Tossin L, et al. **Ann Allergy** 1989 Oct;63(4):292–6

Variables in histamine inhalation tests [letter] Amirav I. **Chest** 1990 Aug;98(2):518–9

Effect of vasopressin on bronchial reactivity to histamine. Knox AJ, et al. **Clin Sci** 1989 Nov;77(5):467–71

Methacholine inhalation challenge in the diagnosis of asthma. Blanco J, et al. **Compr Ther** 1989 Dec;15(12):17–20

Effect of theophylline on airway responses to inhaled platelet-activating factor in man. Chung KF, et al. **Eur Respir J** 1989 Sep;2(8):763–8

A comparison of airway responsiveness in smokers with chronic bronchitis and in asthmatic subjects. Engel T, et al. **Eur Respir J** 1989 Nov;2(10):929–34

Does non-specific bronchial responsiveness indicate the severity of asthma? Josephs LK, et al. **Eur Respir J** 1990 Feb;3(2):220–7 (59 ref.)

Acute bronchoconstriction is not a stimulus for sympatho-adrenal activation in asthmatic or healthy subjects. Larsson K, et al. **Eur Respir J** 1990 Mar; 3(3):273–81

Airway responsiveness to adenosine 5' monophosphate following inhalation of hypertonic saline. O'Hickey SP, et al. **Eur Respir J** 1989 Nov;2(10):923–8

The site of airway responses to methacholine or antigen inhalation challenge. Di Maria GU, et al. **Eur Respir J Suppl** 1989 Jun;6:523s–526s

Are blood eosinophil number and activity important for the development of the late asthmatic reaction after allergen challenge? Venge P, et al. **Eur Respir J Suppl** 1989 Jun; 6:430s–434s

Serotype-related antigen of Trichosporon cutaneum in the induction of summer-type hypersensitivity pneumonitis: correlation between serotype of inhalation challenge-positive antigen and that of the isolates from patients' homes. Ando M, et al. **J Allergy Clin Immunol** 1990 Jan;85(1 Pt 1):36–44

Guidelines for bronchoprovocation on the investigation of occupational asthma. Report of the Subcommittee on Bronchoprovocation for Occupational Asthma. Cartier A, et al. **J Allergy Clin Immunol** 1989 Nov;84(5 Pt 2):823–9

Changes in conjunctival scrapings after provocation [letter; comment] Feinberg G. **J Allergy Clin Immunol** 1990 Jan; 85(1 Pt 1):141–2 Comment on: J Allergy Clin Immunol 1988 Sep;82(3 Pt 1):462–9.

Duration of the effect of astemizole on histamine-inhalation tests. Malo JL, et al. **J Allergy Clin Immunol** 1990 Apr; 85(4):729–36

Inhalation provocation tests using nonisotonic aerosols. Smith CM, et al. **J Allergy Clin Immunol** 1989 Nov;84(5 Pt 1):781–90 (74 ref.)

Relationship of different serum levels of theophylline on methacholine sensitivity. Tinkelman DG, et al. **J Allergy Clin Immunol** 1990 Apr;85(4):750–5

Histamine bronchoprovocation tests in subjects with gastro-oesophageal reflux disease. Agarwal A, et al. **J Assoc Physicians India** 1990 Feb;38(2):159–61

Asthmatic responses in allergic asthma, especially late asthmatic response. Kobayashi S. **Jpn J Med** 1989 Jul–Aug; 28(4):547

Histological changes in the airway after antigen inhalation challenge in asthma. Makino S. **Jpn J Med** 1989 Jul–Aug; 28(4):538–41 (10 ref.)

A prospective study of airway reactivity before bone marrow transplantation. Krowka MJ, et al. **Mayo Clin Proc** 1990 Jan;65(1):5–12

The clinical value of pharmacologic bronchoprovocation challenge. Irwin RS, et al. **Med Clin North Am** 1990 May; 74(3):767–78 (40 ref.)

Differences in airway responsiveness in asthma and chronic airflow obstruction. Ramsdale EH, et al. **Med Clin North Am** 1990 May;74(3):741–51 (66 ref.)

The effect of a leukotriene antagonist on the early response to antigen. Flowers BK, et al. **Otolaryngol Head Neck Surg** 1990 Mar;102(3):219–24

Pattern of airway response to allergen extract of Phleum pratensis in asthmatic patients during and outside the pollen season. Paggiaro PL, et al. **Respiration** 1990;57(1):51–6

Clinical experiences with bronchial provocation test using oscillation technique in Chinese patients. Yang SC. **Taiwan I Hsueh Hui Tsa Chih** 1990 Feb;89(2):97–103

[Effects of nebulized distilled water on tracheal reaction in asthmatic patients] Chen ZX. **Chung Hua I Hsueh Tsa Chih** 1989 Dec;69(12):668–70, 46 (Eng. Abstr.) **(Chi)**

[Study of bronchial reactivity by means of cold air inhalation] Pohunek P, et al. **Cesk Pediatr** 1989 Jul;44(7):410–3 (Eng. Abstr.) **(Cze)**

[Change in the lymphocyte subpopulations in bronchoalveolar lavage 72 hours after the allergen provocation test in the asthmatic] Maria Y, et al. **Rev Mal Respir** 1989;6(4):349–56 (Eng. Abstr.) **(Fre)**

[Comparison of respiratory control responses in bronchial and external airway stenosis] Marek W, et al. **Pneumologie** 1989 Nov;43 Suppl 1:576–9 (Eng. Abstr.) **(Ger)**

[Effect of recombinant gamma interferon on allergic skin reaction and bronchoconstriction] Scholz D, et al. **Pneumologie** 1990 Feb;44 Suppl 1:431–2 (Eng. Abstr.) **(Ger)**

[Comparative study of 2 in vitro screening tests for the diagnosis of allergy] Huwyler T, et al. **Schweiz Med Wochenschr** 1989 Nov 4;119(44):1544–7 (Eng. Abstr.) **(Ger)**

[Correlation of "nonspecific" hyper-reactivity of the airways with central and peripheral disorders of lung function] Schultz-Werninghaus G, et al. **Wien Med Wochenschr Suppl** 1989;104:suppl 14–6 **(Ger)**

[The relationship between respiratory threshold of acetylcholine and clinical course of asthma in children] Odajima H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Apr;27(4):456–60 (Eng. Abstr.) **(Jpn)**

[Mechanisms of bronchial hyperreactivity] Bánovčin P, et al. **Cesk Pediatr** 1989 Aug;44(8):473–5 **(Slo)**

ADVERSE EFFECTS

Syncope caused by methacholine in a patient with exercise-induced anaphylaxis [letter] van Assendelft AH. **Chest** 1989 Dec;96(6):1442–3

HISTORY

Landmark commentary. Samter on histamine sensitivity by bronchoprovocation [comment] Cohen SG. **Allergy Proc** 1989 Sep–Oct;10(5):375–7 Comment on: Allergy Proc 1989 Sep–Oct;10(5):379–85.

Asthma bronchiale und Histaminempfindlichkeit (Bronchial asthma and histamine sensitivity). 1933 [classical article] [see comments] Samter M. **Allergy Proc** 1989 Sep–Oct; 10(5):379–85 Comment in: Allergy Proc 1989 Sep–Oct;10(5):375–7.

INSTRUMENTATION

New methodology for specific inhalation challenges with occupational agents in powder form. Cloutier Y, et al. **Eur Respir J** 1989 Sep;2(8):769–77

Direct write-out of particle size distribution of inhaled aerosol deposition using a laser scattering method. Ishii M, et al. **Respir Physiol** 1989 Oct;78(1):107–21

[Comparison of the course of oxygen saturation and transcutaneous oxygen pressure in nonspecific inhalative provocation] Hoffarth HP, et al. **Pneumologie** 1990 Feb;44 Suppl 1:364–5 (Eng. Abstr.) **(Ger)**

METHODS

Bronchoprovocation challenge: update. **Allergy Proc** 1989 Sep–Oct;10(5):299–362

Platelet activating factor: effects on bronchomotor tone and bronchial responsiveness in human beings. Chung KF, et al. **Allergy Proc** 1989 Sep–Oct;10(5):333–7

Methacholine challenge in the evaluation of chronic cough. Corrao WM. **Allergy Proc** 1989 Sep–Oct;10(5):313–5

Comparison of isocapnic hyperventilation and histamine or methacholine inhalation for the assessment of airway responsiveness. Higgins D, et al. **Allergy Proc** 1989 Sep–Oct;10(5):317–21 (27 ref.)

Exercise challenge: indications and techniques. König P. **Allergy Proc** 1989 Sep–Oct;10(5):345–8 (35 ref.)

Is the demonstration of bronchial hyperreactivity the sine qua non for diagnosing symptomatic bronchial asthma? Pratter MR, et al. **Allergy Proc** 1989 Sep–Oct;10(5):323–7

Approved methodology for methacholine challenge. Rosenthal RR. **Allergy Proc** 1989 Sep–Oct;10(5):301–12 (175 ref.)

Environmental challenge. Schlueter DP. **Allergy Proc** 1989 Sep–Oct;10(5):339–44

Methacholine bronchoprovocation challenge in children. Shapiro GG. **Allergy Proc** 1989 Sep–Oct;10(5):329–32

Sulfite challenge for the diagnosis of sensitivity. Simon RA. **Allergy Proc** 1989 Sep–Oct;10(5):357–62 (27 ref.)

Controlled dynamic generation of standard 1,6-hexamethylene diisocyanate aerosols. Huynh CK, et al. **Ann Occup Hyg** 1989;33(4):573–81

Bronchodilating effect of inhaled or orally administered calcium channel blocking agents on methacholine-induced bronchoconstriction. Tsuda T, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S166

Clinical expression of airway hyperreactivity in adults. Postma DS, et al. **Clin Rev Allergy** 1989 Fall;7(3):321–43 (76 ref.)

Measurement of bronchial responsiveness. Trigg CJ, et al. **Clin Rev Allergy** 1989 Fall;7(3):279–300 (52 ref.)

Influence of the duration of inhalation of cold dry air on the resulting bronchoconstriction in asthmatic subjects. Caire N, et al. **Eur Respir J** 1989 Sep;2(8):741–5

A comparison of three measures of the response to inhaled methacholine. Knox AJ, et al. **Eur Respir J** 1989 Sep; 2(8):736–40

Comparative effects of volume history on bronchoconstriction induced by hyperventilation and methacholine in asthmatic subjects. Malo JL, et al. **Eur Respir J** 1990 Jun;3(6):639–43

Inhalational challenge using hypertonic saline in asthmatic subjects: a comparison with responses to hyperpnoea, methacholine and water. Smith CM, et al. **Eur Respir J** 1990 Feb;3(2):144–51

Prevention of antigen-induced early obstructive reaction by inhaled furosemide in (atopic) subjects with asthma and (actively sensitized) guinea pigs. Robuschi M, et al. **J Allergy Clin Immunol** 1990 Jan;85(1 Pt 1):10–6

Effect of antiasthma drugs on asthmatic reactions induced by toluene diisocyanate in sensitized subjects. Fabbri LM. **Lung** 1990;168 Suppl:128–31

Correspondence between forced oscillation and body plethysmography during bronchoprovocation with carbachol in children. Buhr W, et al. **Pediatr Pulmonol** 1990;8(4):280–8

Differences between bronchial response in children and adults with asthma to ultrasonically nebulized distilled water and methacholine [letter] de Benedictis FM, et al. **Pediatr Pulmonol** 1989;7(2):126

Does the outcome of the tidal breathing and dosimeter methods of assessing bronchial responsiveness in children with asthma depend on age? Birnie D, et al. **Thorax** 1990 Mar;45(3):199–202

Effect on histamine responsiveness of reducing airway dimensions by altering posture. Wang YT, et al. **Thorax** 1990 Jul;45(7):530–5

Oral provocation tests with aspirin and food additives in asthmatic patients. Hong SP, et al. **Yonsei Med J** 1989 Dec; 30(4):339–45

[Bronchial reactivity in clinically symptom-free adolescent patients with asthma] Steinbrugger B, et al. **Monatsschr Kinderheilkd** 1990 Jul;138(7):389–91 (Eng. Abstr.) **(Ger)**

[Detection of bronchial hyperreactivity using the 1-step histamine test] Baltsch J, et al. **Pneumologie** 1990 Mar;

44(3):681–6 (Eng. Abstr.) (Ger)
[Methodologic comparison of the polyfrequency oscillation method, transcutaneous oxygen pressure measurement and body plethysmography in bronchial provocation with methacholine] Fichter J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:624–6 (Eng. Abstr.) (Ger)
[Anamnesis, inhalation histamine test and 2 stress tests in the diagnosis of exercise-induced asthma] Franke C, et al. **Pneumologie** 1990 Feb;44 Suppl 1:349–51 (Eng. Abstr.) (Ger)
[The histamine provocation test: are 1 second capacity and specific conductance competing or complementary measurement values?] Heise D, et al. **Pneumologie** 1990 Feb;44 Suppl 1:635–6 (Eng. Abstr.) (Ger)
[Dependence of bronchial hyperreactivity on the initial value of airway resistance] Hoffarth HP, et al. **Pneumologie** 1990 Feb;44 Suppl 1:366–7 (Eng. Abstr.) (Ger)
[Effect of nitrogen dioxide on exercise-induced bronchial asthma and the sensitivity of the respiratory tract to methacholine] Jörres R, et al. **Pneumologie** 1990 Feb;44 Suppl 1:352–4 (Eng. Abstr.) (Ger)
[Neopterin in phases of exacerbation of bronchial asthma and in experimental asthma conditions] Menz G, et al. **Pneumologie** 1990 Feb;44 Suppl 1:232–3 (Eng. Abstr.) (Ger)
[Quantitative skin test and inhalation provocation test in asthma using platinum salts] Merget R, et al. **Pneumologie** 1990 Feb;44 Suppl 1:226–8 (Eng. Abstr.) (Ger)
[Patients with sarcoidosis frequently have bronchial hyperreactivity] Nowak D, et al. **Pneumologie** 1990 Feb; 44 Suppl 1:572–3 (Eng. Abstr.) (Ger)
[Is sodium salicylate suitable as a protective agent in the analgesic-induced asthma syndrome?] Schäufele A, et al. **Pneumologie** 1990 Feb;44 Suppl 1:371–2 (Eng. Abstr.) (Ger)
[Fading of the provocation effect following inhaled provocation with carbachol] Schlegel J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:355–7 (Eng. Abstr.) (Ger)
[Gas transfer in nonspecific inhalation provocation] Schultebraucks R, et al. **Pneumologie** 1990 Feb;44 Suppl 1:362–3 (Eng. Abstr.) (Ger)
[The bronchospasmolytic test with anticholinergic drugs and sympathomimetics: differences between body plethysmography and spirometry measuring procedures] Schwabl H, et al. **Pneumologie** 1990 Feb;44 Suppl 1:360–1 (Eng. Abstr.) (Ger)
[Lung function values in inhalative provocation with allergens. In immediate reactions, delayed reactions and bronchospasmolysis] Stein D. **Pneumologie** 1990 Feb;44 Suppl 1:368–70 (Eng. Abstr.) (Ger)
[Effect of histamine on bronchial hyperreactivity in sarcoidosis and other lung diseases] Velcovsky HG, et al. **Pneumologie** 1990 Feb;44 Suppl 1:569–71 (Eng. Abstr.) (Ger)
[Effects of intravenous prostaglandin E1 on bronchial histamine reactivity] Wilkens JH, et al. **Pneumologie** 1990 Feb;44 Suppl 1:446–8 (Eng. Abstr.) (Ger)
[Specific inhalative provocation—late reaction] Eckmayr J, et al. **Wien Med Wochenschr Suppl** 1987;103:47–8 (Ger)
[Air pollutants and bronchial reactivity in primary school children 1] Frischer T, et al. **Wien Med Wochenschr Suppl** 1989;104:suppl 43–4 (Ger)
[Bronchial provocation: cold air or cold water?] Götz M, et al. **Wien Med Wochenschr Suppl** 1989;104:suppl 37–8 (Ger)
[Nonspecific bronchial provocation: a comparison of 2 methods] Mayer KH, et al. **Wien Med Wochenschr Suppl** 1989;104:suppl 39–40 (Ger)
[Provocation by cold air hyperventilation for measuring nonspecific bronchial reactivity in children—the normal range for a spectrum of variable lung function parameters] Mileder P, et al. **Wien Med Wochenschr Suppl** 1989; 104:suppl 38–9 (Ger)
[Quantification of the allergen specific provocation test] Popp W, et al. **Wien Med Wochenschr Suppl** 1989;104:suppl 42 (Ger)
[Evaluation of inhalation provocation with methacholine—comparison of one second capacity and resistance] Raber W, et al. **Wien Med Wochenschr Suppl** 1989;104:suppl 40–2 (Ger)
[Nonspecific reactivity of former pediatric patients with asthma in clinical remission] Steinbrugger B, et al. **Wien Med Wochenschr Suppl** 1989;104:suppl 45–6 (Ger)
[Methodology and assessment of testing bronchial reactivity] Schneider WD. **Z Erkr Atmungsorgane** 1990;174(1):38–45 (14 ref.) (Eng. Abstr.) (Ger)
[Protective action of broxaterol in bronchial spasm induced by ultrasonic mist] Aversa C, et al. **Arch Monaldi Mal Torace** 1988 May–Jun;43(3):243–8 (Eng. Abstr.) (Ita)
[Prognostic value of aspecific and specific bronchial provocation tests in patients with allergic rhinitis] Grella E, et al. **Arch Monaldi Mal Torace** 1988 Mar–Apr; 43(2):201–5 (Eng. Abstr.) (Ita)

STATISTICS & NUMERICAL DATA

Post-test probability of asthma following methacholine challenge. Gilbert R, et al. **Chest** 1990 Mar;97(3):562–5

UTILIZATION

Antigen bronchial challenges: uses, misuses, and problems. Tinkelman DG. **Ann Allergy** 1989 Nov;63(5):452–4

BRONCHIAL SPASM

BLOOD

Thromboxane biosynthesis in allergen-induced bronchospasm. Evidence for platelet activation. Lupinetti MD, et al. **Am Rev Respir Dis** 1989 Oct;140(4):932–5

CHEMICALLY INDUCED

Cocaine-associated asthma. Rubin RB, et al. **Am J Med** 1990 Apr;88(4):438–9
Coughing and bronchospasm with propofol [letter] Thompson MC, et al. **Anaesthesia** 1990 Aug;45(8):690–1
Aminophylline does not attenuate histamine-induced airway constriction during halothane anesthesia [see comments] Tobias JD, et al. **Anesthesiology** 1989 Nov;71(5):723–9 Comment in: Anesthesiology 1990 Jun;72(6):1103.
Attenuation of histamine-induced airway constriction by albuterol during halothane anesthesia. Tobias JD, et al. **Anesthesiology** 1990 Jan;72(1):105–10
The significance of reactions to betaxolol reported by patients. Brooks AM, et al. **Aust N Z J Ophthalmol** 1989 Nov;17(4):353–5
Ventilatory problems at induction. Edmondson C, et al. **Br J Hosp Med** 1990 Jan;43(1):76
The role of dipyridamole in bronchospasm [letter; comment] Houben JJ. **Chest** 1990 Jul;98(1):253–5 Comment on: Chest 1989 Jun;95(6):1345–7.
Yohimbine-induced bronchospasm. Landis E, et al. **Chest** 1989 Dec;96(6):1424
Lidocaine-induced bronchoconstriction in asthmatic patients. Relation to histamine airway responsiveness and effect of preservative. McAlpine LG, et al. **Chest** 1989 Nov; 96(5):1012–5
Drug-induced bronchospasm. Meeker DP, et al. **Clin Chest Med** 1990 Mar;11(1):163–75 (120 ref.)
Separation of cough and reflex bronchoconstriction by inhaled local anaesthetics. Choudry NB, et al. **Eur Respir J** 1990 May;3(5):579–83
Acute bronchoconstriction is not a stimulus for sympatho-adrenal activation in asthmatic or healthy subjects. Larsson K, et al. **Eur Respir J** 1990 Mar; 3(3):273–81
Viewpoint: untoward effects of beta-adrenoceptor agonists in asthma. Morley J, et al. **Eur Respir J** 1990 Feb; 3(2):228–33 (41 ref.)
The effect of anticholinergic and beta-agonist pretreatment on bronchoconstriction induced by N-formyl-methionyl-leucyl-phenylalanine. Peters MJ, et al. **Eur Respir J** 1989 Nov;2(10):946–9
Bronchial hyperreactivity and cough induced by angiotensin-converting enzyme-inhibitor therapy [letter] Hinojosa M, et al. **J Allergy Clin Immunol** 1990 Apr; 85(4):818–9
Paradoxical bronchospasm associated with the use of inhaled beta agonists. Nicklas RA. **J Allergy Clin Immunol** 1990 May;85(5):959–64
Asthma—still a challenge for general practice [letter; comment] [see comments] **J R Coll Gen Pract** 1989 Sep; 39(326):390–1 Comment on: J R Coll Gen Pract 1989 Jun;39(323):254–6. Comment in: J R Coll Gen Pract 1989 Dec;39(329):519–20.
Aerosolised pentamidine [letter; comment] **Lancet** 1989 Nov 25;2(8674):1284–5 Comment on: Lancet 1989 Oct 7;2(8667):863–4.
Disopyramide: pulmonary complications and glaucoma [letter] Ahmad S. **Mayo Clin Proc** 1990 Jul;65(7):1030–1
Ketoprofen: possible idiosyncratic acute bronchospasm [letter] Schreuder G. **Med J Aust** 1990 Mar 19;152(6):332–3
Complications arising from the use of ophthalmologic medications in an intensive care unit patient [letter] Herschman Z, et al. **N Y State J Med** 1989 Sep;89(9):537–8
Role of thromboxane receptor activation in the bronchospastic response to endothelin. Schumacher WA, et al. **Prostagiandins** 1990 Jul;40(1):71–9
Effect of nicardipine on acetylcholine-induced bronchoconstriction in asthmatic subjects. Moscatelli P, et al. **Riv Eur Sci Med Farmacol** 1988 Aug;10(4):351–7
[Chemotactic activity of serum neutrophils during aspirin-induced bronchial spasm] Grzelewska-Rzymowska I, et al. **Pol Arch Med Wewn** 1987 Aug;78(2):65–72 (Eng. Abstr.) (Pol)

DIAGNOSIS

Increased bronchial responsiveness in primary and secondary Sjögren's syndrome. Potena A, et al. **Eur Respir J** 1990 May;3(5):548–53
Bronchial responsiveness in patients with mitral valve disease. Rolla G, et al. **Eur Respir J** 1990 Feb;3(2):127–31
[Diagnosis of bronchospasm in patients with newly detected destructive pulmonary tuberculosis] Shal'min AS. **Probl Tuberk** 1989;(7):20–2 (Eng. Abstr.) (Rus)

DRUG THERAPY

The effect of leukotriene antagonists, lipoxygenase inhibitors and selected standards on leukotriene-mediated allergic bronchospasm in guinea pigs. Kreutner W, et al. **Agents Actions** 1989 Nov;28(3–4):173–84
Breaking bronchospasm's grip with MDIs. Lindell KO, et al. **Am J Nurs** 1990 Mar;90(3):34–9
Effect of a leukotriene antagonist, LY171883, on cold air-induced bronchoconstriction in asthmatics. Israel E, et al. **Am Rev Respir Dis** 1989 Nov;140(5):1348–53
Influence of antihistamine (astemizole) and anticholinergic drugs (ipratropium bromide) on bronchoconstriction induced by substance P. Crimi N, et al. **Ann Allergy** 1990 Aug;65(2):115–20
Terfenadine blockade of exercise-induced bronchospasm. Pierson WE, et al. **Ann Allergy** 1989 Nov;63(5):461–4
Beta 2-adrenoceptors in human lung and peripheral mononuclear leukocytes of untreated and terbutaline-treated patients. Hauck RW, et al. **Chest** 1990 Aug;98(2):376–81
Ipratropium: an alternative for bronchodilator therapy. Lynn MM, et al. **Nurse Pract** 1990 May;15(5):44–8 (21 ref.)
[Bronchospasmolytic test] Wenzel D, et al. **Z Erkr Atmungsorgane** 1990;174(1):32–7 (Eng. Abstr.) (Ger)
[Study of the effects of calcium antagonists on respiration mechanics in patients with occlusive ventilation impairment] Frank-Piskorska A, et al. **Wiad Lek** 1989 Mar 1;42(5):278–83 (Eng. Abstr.) (Pol)
[The effect of morphine and naloxone on histamine- and serotonin-induced bronchospasms] Karpov OI. **Farmakol Toksikol** 1990 Jan–Feb;53(1):36–8 (Eng. Abstr.) (Rus)

ETIOLOGY

Adaptation of a nebuhaler for use by infants [letter] Everard M, et al. **Allergy** 1990 Jul;45(5):396–7
Dietary factors and their relation to respiratory symptoms. The Second National Health and Nutrition Examination Survey. Schwartz J, et al. **Am J Epidemiol** 1990 Jul; 132(1):67–76
Acid: a nocturnal bronchoconstrictor? [editorial; comment] Pack AI. **Am Rev Respir Dis** 1990 Jun;141(6):1391–2 Comment on: Am Rev Respir Dis 1990 Jun;141(6):1394–9.
Role of leukotriene D4 in the early and late pulmonary responses of rats to allergen challenge. Sapienza S, et al. **Am Rev Respir Dis** 1990 Aug;142(2):353–8
Effects of spontaneous and simulated gastroesophageal reflux on sleeping asthmatics [see comments] Tan WC, et al. **Am Rev Respir Dis** 1990 Jun;141(6):1394–9 Comment in: Am Rev Respir Dis 1990 Jun;141(6):1391–2.
Recurrent bronchospasm during anaesthesia. Martin CS, et al. **Anaesthesia** 1990 May;45(5):373–5
Apple juice challenge-pulmonary function test: a simple method to identify an acid-sensitive esophagus inducing bronchoconstriction: "the bronchoactive esophagus". Santucci TF Jr, et al. **Ann Allergy** 1990 Feb;64(2 Pt 1):135–42
Unilateral bronchospasm during pleurodesis in an asthmatic patient. Narr BJ, et al. **Chest** 1990 Sep;98(3):767–8
Skunk lung [letter] Snyder RW, et al. **Chest** 1990 May; 97(5):1277–8
Bronchial hyperresponsiveness in patients with chronic pulmonary congestion [letter] Zieliński J. **Chest** 1990 Aug; 98(2):511–2
Products of neutrophils and eosinophils increase the responsiveness of human isolated bronchial tissue. Hallahan AR, et al. **Eur Respir J** 1990 May;3(5):554–8
Comparative effects of volume history on bronchoconstriction induced by hyperventilation and methacholine in asthmatic subjects. Malo JL, et al. **Eur Respir J** 1990 Jun;3(6):639–43
The role of thromboxane A2 in the pathogenesis of airway hyperresponsiveness. O'Byrne PM, et al. **Eur Respir J** 1989 Sep;2(8):782–6 (49 ref.)
Effects of prostacyclin on bronchoconstriction and neutropenia induced by inhaled platelet-activating factor in man. Lammers JW, et al. **J Allergy Clin Immunol** 1990 Apr;85(4):763–9
Unexpected bronchospasm during spinal anesthesia. McGough EK, et al. **J Clin Anesth** 1990 Jan–Feb;2(1):35–6
Activated charcoal aspiration. Silberman H, et al. **N C Med J** 1990 Feb;51(2):79–80
[Iatrogenic tracheal and left bronchial stenoses. Uncommon complication of Carlens tube. Apropos of a case surgically treated in a single stage] Evrard C, et al. **Ann Chir** 1990; 44(2):149–56 (50 ref.) (Eng. Abstr.) (Fre)
[Asthma, persistent cough and recurring bronchospasm in children: observations and reflections based on data originating from the office of an allergology consultant] Reinhardt MC, et al. **Rev Med Suisse Romande** 1989 Sep; 109(9):719–25 (Fre)

GENETICS

Genetic factors controlling airway responsiveness. Pauwels RA. **Clin Rev Allergy** 1989 Fall;7(3):235–43 (28 ref.)

IMMUNOLOGY

Enhancement of antigen-induced bronchoconstriction in the guinea pig after intravascular complement activation with cobra venom factor. Regal JF. **Int Arch Allergy Appl Immunol** 1990;91(1):86–94
Development of local immunity: role in mechanisms of protection against or pathogenesis of respiratory syncytial viral infections. Nadal D, et al. **Lung** 1990;168 Suppl:379–87

(29 ref.)

PATHOLOGY

Mechanical factors determining maximum bronchoconstriction. Macklem PT. **Eur Respir J Suppl** 1989 Jun;6:516s–519s

PHYSIOPATHOLOGY

Is a myogenic response involved in deep inspiration–induced bronchoconstriction in asthmatics? Marthan R, et al. **Am Rev Respir Dis** 1989 Nov;140(5):1354–8

Airway hyperresponsiveness. Mechanisms in experimental models. Sheppard D. **Chest** 1989 Nov;96(5):1165–8 (21 ref.)

Does non–specific bronchial responsiveness indicate the severity of asthma? Josephs LK, et al. **Eur Respir J** 1990 Feb;3(2):220–7 (59 ref.)

Mucosal oedema and airway hyperreactivity. Bucca C, et al. **Eur Respir J Suppl** 1989 Jun;6:520s–522s (17 ref.)

Vagal reflexes and asthma. Paggiaro PL, et al. **Eur Respir J Suppl** 1989 Jun;6:502s–507s (53 ref.)

Respiratory infections: their role in airway responsiveness and the pathogenesis of asthma. Busse WW. **J Allergy Clin Immunol** 1990 Apr;85(4):671–83 (41 ref.)

Atopy in infancy predicts the severity of bronchial hyperresponsiveness in later childhood. Van Asperen PP, et al. **J Allergy Clin Immunol** 1990 Apr;85(4):790–5

Inhibition of antigen–induced airway hyperresponsiveness, but not acute hypoxia nor airway eosinophilia, by an antagonist of platelet–activating factor. Ishida K, et al. **J Immunol** 1990 May 15;144(10):3907–11

[Effects of nebulized distilled water on tracheal reaction in asthmatic patients] Chen ZX. **Chung Hua I Hsueh Tsa Chih** 1989 Dec;69(12):668–70, 46 (Eng. Abstr.) (Chi)

[Bronchial peptidergic control and concepts of neurogenic inflammation] Popin E, et al. **Rev Pneumol Clin** 1989; 45(4):141–3 (Fre)

[Bronchial asthma and bronchial hyperreactivity] Urbanek R, et al. **Monatsschr Kinderheilkd** 1989 Nov;137(11):704–9 (48 ref.) (Eng. Abstr.) (Ger)

[Comparison of respiratory control responses in bronchial and external airway stenosis] Marek W, et al. **Pneumologie** 1989 Nov;43 Suppl 1:576–9 (Eng. Abstr.) (Ger)

[Changes in the functional state of the adrenal glands in experimental bronchospasm in dogs] Trofimov VI, et al. **Biull Eksp Biol Med** 1990 Jun;109(6):541–3 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Albumin protects against capsaicin– and adenosine–induced bronchoconstriction and reduces overflow of calcitonin gene–related peptide from guinea–pig lung. Kröll F, et al. **Acta Physiol Scand** 1990 May;139(1):223–32

Inhaled furosemide inhibits cough induced by low chloride content solutions but not by capsaicin. Ventresca PG, et al. **Am Rev Respir Dis** 1990 Jul;142(1):143–6

Effect of theophylline on airway responses to inhaled platelet–activating factor in man. Chung KF, et al. **Eur Respir J** 1989 Sep;2(8):763–8

Effect of inhaled furosemide on the bronchial response to methacholine and cold–air hyperventilation challenges. Grubbe RE, et al. **J Allergy Clin Immunol** 1990 May; 85(5):881–4

Comparative protective effect of the inhaled beta 2–agonist salbutamol (albuterol) on bronchoconstriction provoked by histamine, methacholine, and adenosine 5'–monophosphate in asthma. Phillips GD, et al. **J Allergy Clin Immunol** 1990 Apr;85(4):755–62

[Protective action of broxaterol in bronchial spasm induced by ultrasonic mist] Aversa C, et al. **Arch Monaldi Mal Torace** 1988 May–Jun;43(3):243–8 (Eng. Abstr.) (Ita)

[Evaluation of the protective effects of nifedipine and verapamil in patients with bronchial hyperreactivity] Malinowski R, et al. **Wiad Lek** 1989 Feb 1;42(3):129–33 (Eng. Abstr.) (Pol)

THERAPY

[Antispasmodic effect of warm water administered in aerosols or parenteral injections] Magnin A, et al. **C R Soc Biol (Paris)** 1989;183(2):180–5 (Eng. Abstr.) (Fre)

BRONCHIECTASIS

[Bronchiectasis in children] Brook U, et al. **Harefuah** 1989 May 1;116(9):476–80 (34 ref.) (Heb)

BLOOD

Alpha 1–antitrypsin serum levels in widespread bronchiectasis. el–Kassimi FA, et al. **Respir Med** 1989 Mar; 83(2):119–21

COMPLICATIONS

Hydrocephalus, bronchiectasis, and ciliary aplasia. De Santi MM, et al. **Arch Dis Child** 1990 May;65(5):543–4

Chest pain in chronic sputum production: a neglected symptom. Munro NC, et al. **Respir Med** 1989 Jul; 83(4):339–41

[Localized dilatation of the bronchi. A misunderstood etiology of coronaro–bronchial fistula] Abergel E, et al. **Arch Mal Coeur** 1990 Feb;83(2):271–4 (Eng. Abstr.) (Fre)

[Bronchial infection and brain abscess caused by Pasteurella multocida] Martin F, et al. **Rev Pneumol Clin** 1989; 45(3):134–6 (Eng. Abstr.) (Fre)

CONGENITAL

[A probable case of adult Williams–Campbell syndrome incidentally detected by an episode of atypical mycobacterial infection] Tomii K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Apr; 27(4):518–22 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Rampant empiricism [letter; comment] Rehm SR, et al. **Am J Med** 1990 May;88(5N):65N Comment on: Am J Med 1989 Aug;87(2):201–6.

Underdiagnosis of bronchiectasis. Monie R. **Practitioner** 1989 Feb 8;233(1462):163–6

[A case from practice (181). Cystic bronchiectases. Chronic asthmatic bronchitis] Hausmann M. **Schweiz Rundsch Med Prax** 1990 Jun 5;79(23):743–5 (Ger)

DRUG THERAPY

The use of probenecid to increase the serum amoxycillin levels in patients with bronchiectasis. Allen MB, et al. **Respir Med** 1990 Mar;84(2):143–6

Long term venous access using a totally implantable drug delivery system in patients with cystic fibrosis and bronchiectasis. Ball AB, et al. **Respir Med** 1989 Sep; 83(5):429–31

Ofloxacin compared with amoxycillin in treating infective exacerbations in bronchiectasis. Lam WK, et al. **Respir Med** 1989 Jul;83(4):299–303

[Levamisole and splenin in combined therapy of patients with bronchiectasis] Sokhin AA, et al. **Klin Med (Mosk)** 1989 Sep;67(9):38–41 (Eng. Abstr.) (Rus)

ETIOLOGY

Unusual intrapulmonary tumor. A rare cause of bronchiectasis. Breatnach E, et al. **Chest** 1990 Jan; 97(1):197–8

IgG2/IgG4 subclass deficiency in a patient with chronic mucocutaneous candidiasis and bronchiectases. Brägger C, et al. **Eur J Pediatr** 1989 Dec;149(3):168–9

Importance of chronic aspiration in recipients of heart–lung transplants. Reid KR, et al. **Lancet** 1990 Jul 28; 336(8709):206–8

Prevalence of asthma, atopy, and bronchial hyperreactivity in bronchiectasis: a controlled study. Pang J, et al. **Thorax** 1989 Nov;44(11):948–51

[Pulmonary sequestration associated with localized cystic bronchiectasis and funnel chest] Ogawa H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Nov; 27(11):1371–4 (Eng. Abstr.) (Jpn)

[Possible pleurogenic route in the development of bronchiectasis in children] Klimanov VV, et al. **Grud Serdechnososudistaia Khir** 1990;(5):44–7 (Eng. Abstr.) (Rus)

[Changes in etiologic factors, anatomic distribution and age in children with bronchiectasis] Milović I, et al. **Plucne Bolesti** 1989 Jul–Dec;41(3–4):153–6 (Eng. Abstr.) (Scr)

[Giant bronchiectasis caused by chronic inhalation of porcine hair] Navarro–Reynoso F, et al. **Gac Med Mex** 1989 Sep–Oct;125(9–10):317–9 (Eng. Abstr.) (Spa)

GENETICS

[IgG subclass distribution in the serum of patients with homozygous alpha1–antitrypsin deficiency] Barth J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:561–2 (Eng. Abstr.) (Ger)

IMMUNOLOGY

Immunopathology of experimental bronchiectasis. Lapa e Silva JR, et al. **Am J Respir Cell Mol Biol** 1989 Oct; 1(4):297–304

IgA subclasses in sputum from patients with bronchiectasis. Burnett D, et al. **Respir Med** 1990 Mar;84(2):123–7

The immunological component of the cellular inflammatory infiltrate in bronchiectasis. Silva JR, et al. **Thorax** 1989 Aug;44(8):668–73

PATHOLOGY

[The tumorlet carcinoid in bronchiectasis–changed lungs. An example of a multifocal, endocrine tumor] Klinke F, et al. **Pneumologie** 1990 Feb;44 Suppl 1:607–9 (Eng. Abstr.) (Ger)

[The ultrastructure of the ciliary epithelium in patients with the Zivert–Kartagener syndrome, bronchiectasis and cystic hypoplasia of the lungs] Lisochkin BG, et al. **Arkh Patol** 1989;51(10):10–7 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Suitability of and tolerance to Iotrolan 300 in bronchography via the fibreoptic bronchoscope. Morcos SK, et al. **Thorax** 1990 Aug;45(8):628–9

Comparison of thin section computed tomography with bronchography for identifying bronchiectatic segments in patients with chronic sputum production. Munro NC, et al. **Thorax** 1990 Feb;45(2):135–9

[Importance of electroroentengography and fluorography in the detection of bronchiectatic disease] Sorokin IuK, et al. **Vestn Rentgenol Radiol** 1989 May–Jun;(3):50–6 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

Mucociliary clearance and transport in bronchiectasis: global and regional assessment. Isawa T, et al. **J Nucl Med** 1990 May;31(5):543–8

SURGERY

Heart and unilateral lung transplantation in patients with end–stage cardiopulmonary disease and previous thoracic surgery. Miralles A, et al. **Transplant Proc** 1990 Aug; 22(4):1468–9

[Late results of resection treatment of bronchiectases with special reference to functional studies] Staudacher R, et al. **Z Erkr Atmungsorgane** 1989;173(2):174–80 (Eng. Abstr.) (Ger)

[The significance of changes in the level of serum immunoglobulins in children with bronchiectasis in the early postoperative period] Mavliutova MG, et al. **Anesteziol Reanimatol** 1989 Jul–Aug;(4):44–6 (Eng. Abstr.) (Rus)

[Isolation of the bronchi with intraoperative packing in children with bronchiectasis] Stepanov EA, et al. **Grud Serdechnososudistaia Khir** 1990;(1):52–5 (Eng. Abstr.) (Rus)

[Experience in the surgical treatment of chronic suppurative lung disease in children] Voronov SA, et al. **Grud Serdechnososudistaia Khir** 1990;(1):55–8 (Eng. Abstr.) (Rus)

[Prognosis and prevention of postoperative empyema after radical operations on the lungs] Kurguzov OP, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):44–7 (Eng. Abstr.) (Rus)

[Late results of surgical treatment of bronchiectasis in children] Mavliutova MG, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):69–72 (Eng. Abstr.) (Rus)

BRONCHIOLES see **BRONCHI**

BRONCHIOLITIS

COMPLICATIONS

Terbutaline in wheezing infants [letter] Raghuveer TS, et al. **Indian Pediatr** 1989 Jul;26(7):729

A case of diffuse panbronchiolitis (DPB) with benign monoclonal IgA gammopathy and IgA nephropathy with monoclonal IgA deposition. Naito T, et al. **Jpn J Med** 1989 Jul–Aug;28(4):503–5

Clinical findings and severity of acute bronchiolitis. Mulholland EK, et al. **Lancet** 1990 May 26; 335(8700):1259–61

Outcome of severe acute bronchiolitis needing mechanical ventilation [letter] Priftis K, et al. **Lancet** 1990 Mar 10; 335(8689):607

Respiratory bronchiolitis–associated interstitial lung disease and its relationship to desquamative interstitial pneumonia. Yousem SA, et al. **Mayo Clin Proc** 1989 Nov; 64(11):1373–80

[Relationship of diffuse panbronchiolitis (DPB) and idiopathic interstitial pneumonia (IIP) with adult T cell leukemia (ATL)] Tsubota T, et al. **Rinsho Ketsueki** 1989 Oct;30(10):1723–31 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Bronchiolitis like presentation of Branhamella catarrhalis bronchopulmonary infection. Singh M, et al. **Indian Pediatr** 1989 Oct;26(10):1044–6

Simple clinical signs for diagnosis of acute respiratory infections [letter] Hortal M, et al. **Lancet** 1989 Nov 25; 2(8674):1275

[A case of primary ciliary dyskinesia simulating diffuse panbronchiolitis] Amitani R, et al. **Bull Chest Dis Res Inst Kyoto Univ** 1988 Mar;21(1–2):1–7 (Eng. Abstr.) (Jpn)

[A case of the bare lymphocyte syndrome with clinical manifestations of diffuse panbronchiolitis] Sugiyama Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Aug; 27(8):980–3 (Eng. Abstr.) (Jpn)

DRUG THERAPY

[Indomethacin inhalation therapy for patients with excessive sputum] Tamaoki J, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Sep; 27(9):1040–5 (Eng. Abstr.) (Jpn)

[Theophylline toxicity in infants] López García MJ, et al. **An Esp Pediatr** 1990 Mar;32(3):209–12 (Eng. Abstr.) (Spa)

EPIDEMIOLOGY

Bronchiolitis in tropical south India. Cherian T, et al. **Am J Dis Child** 1990 Sep;144(9):1026–30

Diffuse panbronchiolitis observed in an Italian [letter] Poletti

V, et al. **Chest** 1990 Aug;98(2):515–6
Acute bronchiolitis: a three year study. Dawson KP, et al. **N Z Med J** 1989 Oct 11;102(877):528–9

ETIOLOGY

Wood-burning stoves and lower respiratory tract infection in American Indian children [published erratum appears in Am J Dis Child 1990 Apr;144(4):490] Morris K, et al. **Am J Dis Child** 1990 Jan;144(1):105–8
Cystic fibrosis—a case presented with recurrent bronchiolitis in infancy in a Korean male infant. Moon HR, et al. **J Korean Med Sci** 1988 Dec;3(4):157–62
Respiratory syncytial virus infections in children admitted to the intensive care unit. Van Steensel-Moll HA, et al. **Pediatrie** 1989;44(7):583–8
[Six cases of HTLV-I associated bronchiolo-alveolar disorder (HABA)] Kimura I, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Sep; 27(9):1074–81 (Eng. Abstr.) **(Jpn)**

GENETICS

Analysis of HLA antigens in patients with diffuse panbronchiolitis. Sugiyama Y, et al. **Am Rev Respir Dis** 1990 Jun;141(6):1459–62

IMMUNOLOGY

[Polyserositic syndromes and/or sectorial dysventilation with platelet activation induced by immunoallergic etiopathogenesis] De Luca L. **Pediatr Med Chir** 1989 Jul–Aug;11(4):397–402 (Eng. Abstr.) **(Ita)**
[Bronchoalveolar lavage in diffuse panbronchiolitis] Ichikawa Y, et al. **Kansenshogaku Zasshi** 1989 Dec; 63(12):1350–1 **(Jpn)**
[Clinical evaluation of serum sialyl Lewis X-i (SLX) in diffuse panbronchiolitis] Noguchi M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Mar; 27(3):317–25 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

[Infection—clinico-pathological profile of diffuse aspiration bronchiolitis (DAB)] Fukuchi Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 May; 27(5):571–7 (Eng. Abstr.) **(Jpn)**
[Pathology of the idiopathic interstitial pneumonia and diffuse pan-bronchiolitis] Kawabata Y, et al. **Rinsho Hoshasen** 1989 Jul;34(7):747–54 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Importance of chronic aspiration in recipients of heart–lung transplants. Reid KR, et al. **Lancet** 1990 Jul 28; 336(8709):206–8
Water, electrolyte, and endocrine homeostasis in infants with bronchiolitis. Gozal D, et al. **Pediatr Res** 1990 Feb; 27(2):204–9
Disturbance in respiratory mechanics in infants with bronchiolitis [letter; comment] Godfrey S. **Thorax** 1990 Jan; 45(1):79 Comment on: Thorax 1989 Aug;44(8):660–7.
Disturbance in respiratory mechanics in infants with bronchiolitis [see comments] Seidenberg J, et al. **Thorax** 1989 Aug;44(8):660–7 Comment in: Thorax 1990 Jan;45(1):79.

RADIOGRAPHY

Chest X-ray appearances in pneumonia and bronchiolitis. Correlation to virological diagnosis and secretory bacterial findings. Friis B, et al. **Acta Paediatr Scand** 1990 Feb; 79(2):219–25
[Imaging diagnosis of diffuse infiltrative lung diseases—the role of conventional chest X-ray] Doi O, et al. **Rinsho Hoshasen** 1989 Jul;34(7):755–62 (Eng. Abstr.) **(Jpn)**
[CT pathologic correlative study of diffuse panbronchiolitis] Nishimura K, et al. **Rinsho Hoshasen** 1989 Jul;34(7):773–82 (Eng. Abstr.) **(Jpn)**

SURGERY

Application of the Belsey hiatal hernia repair to infants and children with recurrent bronchitis, bronchiolitis, and pneumonitis due to regurgitation and aspiration. Davis MV, et al. **Ann Thorac Surg** 1967 Feb;3(2):99–110

VETERINARY

Ultrastructural morphogenesis of 4-ipomeanol-induced bronchiolitis and interstitial pneumonia in calves. Li X, et al. **Vet Pathol** 1990 May;27(3):141–9
An ultrastructural study of spontaneous chronic lung lesions in asymptomatic rabbits. Uzal FA, et al. **Zentralbl Veterinarmed [A]** 1989 Dec;36(10):721–30

BRONCHIOLITIS, EXUDATIVE see **BRONCHIOLITIS OBLITERANS**

BRONCHIOLITIS OBLITERANS

BLOOD

[Changes in the levels of serum proteins in patients with chronic obstructive bronchitis] Lutoshkin SF, et al. **Klin Med (Mosk)** 1990 May;68(5):56–9 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Obliterative bronchiolitis and alveolitis associated with sulphamethoxypyridazine (Lederkyn) therapy for linear IgA disease of adults [letter] Godfrey KM, et al. **Br J Dermatol** 1990 Jul;123(1):125–6
Bronchiolitis obliterans possibly associated with amphotericin B [letter] Roncoroni AJ, et al. **J Infect Dis** 1990 Mar; 161(3):589
Bronchiolitis obliterans organising pneumonia in patients taking acebutolol or amiodarone. Camus P, et al. **Thorax** 1989 Sep;44(9):711–5
[Bronchiolitis obliterans following nitrogen dioxide (NO2) inhalation: clinical-roentgenologic-histologic study] Lenci G, et al. **Pneumologie** 1990 Jan;44(1):32–6 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

The myelodysplastic syndrome and bronchiolitis obliterans [letter] Tenholder MF, et al. **Ann Intern Med** 1990 May 1;112(9):714–5
Bronchiolitis obliterans organizing pneumonia and Sjögren's syndrome. Matteson EL, et al. **J Rheumatol** 1990 May; 17(5):676–9
Bronchiolitis obliterans organizing pneumonia. Patel U, et al. **Respir Med** 1989 May;83(3):241–4
[Pathogenesis and clinical features of various forms of pulmonary emphysema in children] Mercik W, et al. **Wiad Lek** 1990 Apr 1;43(7):259–63 (19 ref.) (Eng. Abstr.) **(Pol)**

DIAGNOSIS

Idiopathic bronchiolitis obliterans organizing pneumonia. Definition of characteristic clinical profiles in a series of 16 patients. Cordier JF, et al. **Chest** 1989 Nov; 96(5):999–1004
Evaluation of heart–lung transplant recipients with prospective, serial transbronchial biopsies and pulmonary function studies. Starnes VA, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 1):683–90
Bronchiolitis obliterans in children—a report of six cases. Omar AH, et al. **Med J Malaysia** 1989 Sep;44(3):204–9
[BALF cell findings in patients with BOOP, particularly in comparison with UIP] Izumi T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Apr; 27(4):474–80 (Eng. Abstr.) **(Jpn)**
[The "loud respiration syndrome" in children in the first few months of life] Artamonov RG, et al. **Pediatriia** 1990; (5):91–3 **(Rus)**

DRUG THERAPY

Failure of thalidomide to control bronchiolitis obliterans post bone marrow transplant [letter] Heaton DC. **Bone Marrow Transplant** 1989 Sep;4(5):598
[Use of dimexide in the complex treatment of acute stenosing laryngotracheobronchitis in children] Kusel'man AI, et al. **Pediatriia** 1990;(5):95–6 **(Rus)**

ETIOLOGY

Potential role of dendritic cells in bronchiolitis obliterans in heart–lung transplantation. Yousem SA, et al. **Ann Thorac Surg** 1990 Mar;49(3):424–8
Silicotic bronchiolitis obliterans. Gross P, et al. **Arch Environ Health** 1966 Jan;12(1):5–9
Bronchiolitis obliterans. A new clinical-pathologic complication of irradiation pneumonitis. Kaufman J, et al. **Chest** 1990 May;97(5):1243–4
Rapidly progressive bronchiolitis obliterans associated with Stevens-Johnson syndrome. Tsunoda N, et al. **Chest** 1990 Jul;98(1):243–5
Obliterative bronchiolitis. Theodore J, et al. **Clin Chest Med** 1990 Jun;11(2):309–21 (37 ref.)
Lung disease following allogeneic marrow transplantation [letter; comment] Milburn H. **Lancet** 1990 Jan 27; 335(8683):237 Comment on: Lancet 1989 Dec 9;2(8676):1368–9.
[A case of bronchobronchiolitis obliterans with Castleman's lymphoma] Kondo M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jun; 27(6):735–41 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

[Comparative results of skin tests and the analysis of specific antibodies by the RAST method in children up to 3 years of age with obstructive bronchitis] Mazurek H, et al. **Pneumonol Pol** 1990 Apr–May;58(4–5):219–22 (Eng. Abstr.) **(Pol)**
[Evaluation of the degree of allergy in children up to 3 years of age with obstructive bronchitis based on the analysis of specific IGE antibodies by the RAST method] Mazurek H, et al. **Pneumonol Pol** 1990 Apr–May;58(4–5):215–8 (Eng. Abstr.) **(Pol)**

METABOLISM

[Immunohistochemical study of idiopathic bronchiolitis obliterans organizing pneumonia] Yamada H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Oct; 27(10):1133–9 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Intra-alveolar fibrosis of idiopathic bronchiolitis obliterans-organizing pneumonia. Cell-matrix patterns. Peyrol S, et al. **Am J Pathol** 1990 Jul;137(1):155–70
Bronchiolitis obliterans organizing pneumonia [clinical conference] Lang L. **Del Med J** 1990 Jul;62(7):1101–8
Chronic rejection in single-lung transplantation manifested by obliterative bronchiolitis. LoCicero J 3d, et al. **J Thorac Cardiovasc Surg** 1990 Jun;99(6):1039–62
Obliterative bronchiolitis in the transplanted rat lung. Tazelaar HD, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1052
[Chronic bronchiolitis] Kawakami M. **Kokyu To Junkan** 1990 Feb;38(2):102–8 (74 ref.) **(Jpn)**
[A case of bronchiolitis obliterans organizing pneumonia (BOOP) showing spontaneous regression after an open lung biopsy] Imai H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jul;27(7):829–36 (Eng. Abstr.) **(Jpn)**
[Two cases of bronchiolitis obliterans organizing pneumonia, showing multiple infiltrative shadows, diagnosed by open lung biopsy, and a report of their BAL findings] Kusano S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Jan; 28(1):143–50 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Lung permeability in adult obliterative bronchiolitis. Sweatman MC, et al. **Respir Med** 1989 Jul;83(4):323–7

RADIOGRAPHY

Bronchiolitis obliterans organizing pneumonia: CT features in 14 patients. Müller NL, et al. **AJR Am J Roentgenol** 1990 May;154(5):983–7
Computed tomography in adult obliterative bronchiolitis [letter] Morcos SK. **Clin Radiol** 1990 Aug;42(2):142–3
Computed tomography in adult obliterative bronchiolitis. Sweatman MC, et al. **Clin Radiol** 1990 Feb;41(2):116–9

SURGERY

[The first lung transplantation in The Netherlands; a brief report] van den Bosch JM, et al. **Ned Tijdschr Geneeskd** 1990 Jul 28;134(30):1457–61 (Eng. Abstr.) **(Dut)**

BRONCHIOLITIS, PROLIFERATIVE see **BRONCHIOLITIS OBLITERANS**

BRONCHIOLITIS, VIRAL

BLOOD

Plasma elevations of histamine and a prostaglandin metabolite in acute bronchiolitis. Skoner DP, et al. **Am Rev Respir Dis** 1990 Aug;142(2):359–64

COMPLICATIONS

Cytomegalovirus necrotizing bronchiolitis with HIV infection. Vasudevan VP, et al. **Chest** 1990 Feb;97(2):483–4
Acute and long-term effects of viral bronchiolitis in infancy. Price JF. **Lung** 1990;168 Suppl:414–21 (30 ref.)
Childhood asthma following hospitalization with acute viral bronchiolitis in infancy. Sly PD, et al. **Pediatr Pulmonol** 1989;7(3):153–8
[The wheezy baby] Solé D, et al. **Rev Paul Med** 1988 Sep–Oct;106(5):261–7 (54 ref.) **(Por)**

DRUG THERAPY

Acute viral bronchiolitis in infancy: epidemiology and management. Nicolai T, et al. **Lung** 1990;168 Suppl:396–405 (48 ref.)
Economic and long-term benefits of ribavirin therapy on respiratory syncytial virus infection. Snell NJ. **Lung** 1990; 168 Suppl:422–9 (51 ref.)

EPIDEMIOLOGY

[A bronchiolitis epidemic caused by respiratory syncytial viruses] Jelić A, et al. **Acta Med Iugosl** 1990;44(3):247–58 (Eng. Abstr.) **(Ser)**

IMMUNOLOGY

Development of local immunity: role in mechanisms of protection against or pathogenesis of respiratory syncytial viral infections. Nadal D, et al. **Lung** 1990;168 Suppl:379–87 (29 ref.)
HLA class I antigens in severe RSV bronchiolitis. Isaacs D, et al. **Tissue Antigens** 1989 Sep;34(3):210–2

PATHOLOGY

Localization of inflammation and virions in canine adenovirus type 2 bronchiolitis. Grad R, et al. **Am Rev Respir Dis** 1990 Sep;142(3):691–9

PHYSIOPATHOLOGY

Canine parainfluenza type 2 bronchiolitis increases histamine responsiveness in beagle puppies. Lemen RJ, et al. **Am Rev Respir Dis** 1990 Jan;141(1):199–207
What is wheezy bronchitis? Lewiston NJ. **Pediatr Ann** 1989 Dec;18(12):792–3, 797–8 (35 ref.)

PREVENTION & CONTROL

Respiratory syncytial virus: virology, diagnosis, and vaccination. Toms GL. **Lung** 1990;168 Suppl:388–95 (24 ref.)

Immunoprophylaxis of infections with respiratory syncytial virus: observations and hypothesis. Hemming VG, et al. **Rev Infect Dis** 1990 May–Jun;12 Suppl 4:S470–4; discussion S474–5 (30 ref.)

THERAPY

Respiratory failure and mechanical ventilation in severe bronchiolitis [see comments] Lebel MH, et al. **Arch Dis Child** 1989 Oct;64(10):1431–7 Comment in: Arch Dis Child 1990 Mar;65(3):332.

Use of extracorporeal membrane oxygenation in the treatment of respiratory syncytial virus bronchiolitis: the national experience, 1983 to 1988 [see comments] Steinhorn RH, et al. **J Pediatr** 1990 Mar;116(3):338–42 Comment in: J Pediatr 1990 Mar;116(3):393–4.

BRONCHITIS

Plastic or cast bronchitis? [letter] Bowen A. **Am J Dis Child** 1990 Oct;144(10):1075–6

Chronic bronchitis in pigeon fanciers [letter] Carrillo T, et al. **Chest** 1990 Aug;98(2):508

[Acute inflammation of the bronchi in children] Hloušková Z, et al. **Zdrav Aktual** 1985;205:21–5 (Cze)

[Chronic inflammation of the bronchi in children] Hloušková Z, et al. **Zdrav Aktual** 1985;205:26–9 (Cze)

[Chronic inflammation of the bronchi] Simeček C. **Zdrav Aktual** 1983;204:72–7 (Cze)

[Acute inflammation of the bronchi] Vysloužil Z. **Zdrav Aktual** 1983;204:67–71 (Cze)

[Current concepts of chronic bronchitis and COPD] Yamakido M, et al. **Kokyu To Junkan** 1989 Oct; 37(10):1038–44 (35 ref.) (Jpn)

[Impaired physical work capacity in patients with newly diagnosed destructive pulmonary tuberculosis complicated by bronchial obstruction] Shal'min AS, et al. **Probl Tuberk** 1989;(10):24–6 (Eng. Abstr.) (Rus)

BLOOD

Paradoxical evolution of arterial blood gases during exercise in patients with chronic obstructive bronchitis. Frans A, et al. **Eur Respir J** 1990 Jun;3(6):723–4

Chronic bronchitis. IV—Antibody titres to bacterial antigens during acute exacerbations. Dalvi SG, et al. **J Postgrad Med** 1989 Jan;35(1):30–5

[Preliminary report on the serum level of pancreatic polypeptide in patients with chronic bronchitis and bronchial asthma during attacks] Zhang JC. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Jun; 12(3):141–2, 190 (Eng. Abstr.) (Chi)

[Changes in various serum protein levels between acute and convalescent phases in patients with respiratory infections] Takaishi M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb;28(2):315–9 (Eng. Abstr.) (Jpn)

[Post-fructose increase in the blood level of lactic acid in various pathologic conditions] Lao B, et al. **Pol Arch Med Wewn** 1987 Jun;77(6):283–90 (Eng. Abstr.) (Pol)

[Status of the protease inhibitor system in patients with dust-induced lung diseases] Arkhipova OG, et al. **Gig Tr Prof Zabol** 1990;(2):24–6 (Eng. Abstr.) (Rus)

[Regulation of fibrinolysis by lymphocytes in inflammatory diseases of the bronchopulmonary system] Bratchik AM, et al. **Klin Med (Mosk)** 1989 Nov;67(11):28–31 (Eng. Abstr.) (Rus)

[Changes in the fractions of atherogenic and antiatherogenic lipoproteins in patients with chronic bronchitis] Ionov VA. **Vrach Delo** 1990 May;(5):64–6 (Rus)

CHEMICALLY INDUCED

Effect of experimental airway inflammation on bronchial hyper-responsiveness induced by Broncho-Vaxom in dogs. Nagy B, et al. **Acta Paediatr Hung** 1988–89;29(3–4):271–80

Chronic respiratory effects of indoor formaldehyde exposure. Krzyzanowski M, et al. **Environ Res** 1990 Aug;52(2):117–25

Nebulizer bronchitis induced by bacteriostatic saline [letter] Reynolds RD. **JAMA** 1990 Jul 4;264(1):35

[Correlation between air pollution and respiratory morbidity in children at Dorog] Dávid A, et al. **Orv Hetil** 1990 Mar 11;131(10):513–7 (26 ref.) (Eng. Abstr.) (Hun)

CLASSIFICATION

[Dust lung or dust-induced lung disease (discussion on chronic dust-induced lung disease)] Kosarev VV. **Gig Tr Prof Zabol** 1989;(8):34–6 (Eng. Abstr.) (Rus)

[Recurrent obstructive bronchitis—is it pre-asthma?] Archakova EV, et al. **Pediatriia** 1989;(8):89–91 (Rus)

COMPLICATIONS

Intrapulmonary bronchogenic cyst: spontaneous dissolution? Shin MS, et al. **Ala Med** 1990 Apr;59(10):20–2

Bacterial colonisation of the respiratory tract in chronic bronchitis. Butt HL, et al. **Aust N Z J Med** 1990 Feb; 20(1):35–8

Spontaneous intercostal pulmonary hernia with subsegmental incarceration. Sloth-Nielsen J, et al. **Eur J Cardiothorac Surg** 1989;3(6):562–4

Bordetella bronchiseptica bronchitis in an immunosuppressed patient [letter] Meis JF, et al. **Eur J Clin Microbiol Infect Dis** 1990 May;9(5):366–7

Following concomitant problems. Perry R. **Iowa Med** 1990 Apr;80(4):209

The prevention of severe lower respiratory infections in chronic bronchitis. Ruben FL. **Semin Respir Infect** 1989 Dec;4(4):261–5 (38 ref.)

[Clinical symptoms of cardiac tamponade caused by mediastinal emphysema in a 3-year-old child with obstructive bronchitis and pneumonia] Iwańczak F, et al. **Pediatr Pol** 1989 Feb;64(2):112–6 (Pol)

[Relation between genetic and non-genetic factors of individual susceptibility to silicosis] Katsne'lson BA, et al. **Gig Tr Prof Zabol** 1989;(8):31–4 (Eng. Abstr.) (Rus)

[Use of beta 1-adrenostimulants in circulatory failure in patients with chronic inflammatory lung diseases] Gavrisiuk VK, et al. **Kardiologiia** 1990 Mar;30(3):32–5 (Eng. Abstr.) (Rus)

[The role of residual changes of the lungs after cured tuberculosis in severe somatic diseases] Biron MG. **Klin Med (Mosk)** 1989 Dec;67(12):56–61 (Eng. Abstr.) (Rus)

[A course of paroxysmal atrioventricular tachycardia with functioning anomalous conduction pathway in a patient with chronic obstructive lung disease] Grosu AA, et al. **Klin Med (Mosk)** 1990 Apr;68(4):119–21 (Rus)

[Significance of hypophyseo-thyroid disorders in chronic obstructive bronchitis] Pechatnikov LM. **Klin Med (Mosk)** 1989 Oct;67(10):40–3 (Eng. Abstr.) (Rus)

[Nitroglycerin test in the nitrong treatment of patients with ischemic heart disease and chronic obstructive bronchitis] Lazebnik LB, et al. **Sov Med** 1989;(10):119–20 (Rus)

[Bronchial obstruction secondary to necrotizing tracheobronchitis in the neonatal period. Apropos of a case] Negreira Cepeda S, et al. **An Esp Pediatr** 1989 Dec; 31(6):599–600 (Spa)

DIAGNOSIS

Airway carcinoembryonic antigen concentrations in patients with central lung cancer or chronic bronchitis. Wesselius LJ, et al. **Chest** 1990 Aug;98(2):393–7

The diagnosis of emphysema, chronic bronchitis, and asthma. Clausen JL. **Clin Chest Med** 1990 Sep;11(3):405–16 (54 ref.)

The effect of acute broncho-pulmonary infections on the FEV1 change in 13-year follow-up. The Cracow Study. Jedrychowski W, et al. **Eur J Epidemiol** 1990 Mar;6(1):20–8

A comparison of airway responsiveness in smokers with chronic bronchitis and in asthmatic subjects. Engel T, et al. **Eur Respir J** 1989 Nov;2(10):929–34

Increased paediatric admissions with asthma in Western Australia—a problem of diagnosis? Carman PG, et al. **Med J Aust** 1990 Jan 1;152(1):23–6

[Should we abandon the diagnosis of asthmatic bronchitis?] de Montis G, et al. **Ann Pediatr (Paris)** 1989 Nov; 36(9):603–6 (Fre)

[Microbiologic diagnosis of diseases of the lung, bronchi and pleura] Tauchnitz C, et al. **Z Erkr Atmungsorgane** 1989; 173(3):195–204 (34 ref.) (Eng. Abstr.) (Ger)

[Sino-bronchial syndrome] Krajewski Z. **Pneumonol Pol** 1990 Feb–Mar;58(2–3):139–45 (22 ref.) (Pol)

[Difficulties in diagnosing obstructive bronchitis] Pomarańska E. **Pneumonol Pol** 1990 Feb–Mar;58(2–3):118–22 (Eng. Abstr.) (Pol)

[Elastase and acid phosphatase activity in bronchoalveolar lavage fluid during chronic bronchitis] Drozhennikov VA, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):130–2 (Eng. Abstr.) (Rus)

[Value of biochemical and immunological indicators in differential diagnosis of dust-induced diseases of the respiratory organs] Pavlovskaia NA, et al. **Gig Sanit** 1990 May;(5):28–31 (Eng. Abstr.) (Rus)

[Diagnostic and therapeutic bronchoscopy in long-term presence of foreign bodies in the bronchi] Chernekhovskaia NE, et al. **Grud Serdechnososudistaia Khir** 1990;(2):52–7 (Eng. Abstr.) (Rus)

[Functional-diagnostic criteria of chronic bronchitis] Penknovich AA. **Klin Med (Mosk)** 1990 Feb;68(2):84–6 (Eng. Abstr.) (Rus)

[Laboratory diagnosis of inflammatory lung diseases in workers exposed to dust] Tkach SI, et al. **Lab Delo** 1989; (10):76–7 (Rus)

[Laboratory diagnosis of inflammations of the bronchopulmonary system (review of the literature)] Tkach Iul. **Lab Delo** 1990;(3):4–10 (23 ref.) (Rus)

[The cytological characteristics of bronchoalveolar washings in chronic bronchitis] Grobova OM, et al. **Probl Tuberk** 1989;(12):7–11 (Eng. Abstr.) (Rus)

[Chemoluminescence analysis of the functional state of blood phagocytes in silicosis and chronic dust-induced bronchitis] Velichkovskiĭ BT, et al. **Sov Med** 1990;(4):14–6 (Eng. Abstr.) (Rus)

[Diagnosis in pulmonology] **Ter Arkh** 1990;62(3):7–15 (Rus)

[The clinical analysis of patients with a history of acute bronchitis] Ado MA, et al. **Ter Arkh** 1990;62(3):37–9 (Rus)

[The diagnosis and treatment of pulmonary tuberculosis combined with chronic bronchitis in middle-aged and elderly subjects] Iashchenko BP, et al. **Vrach Delo** 1989 Oct;(10):52–5 (Eng. Abstr.) (Rus)

[Characteristics of the course of bronchitis in allergy] Iashchenko LV, et al. **Vrach Delo** 1990 Mar;(3):30–1 (Eng. Abstr.) (Rus)

[The importance of spiroergometry in the early detection of lung failure in patients with chronic obstructive bronchitis] Korabel'shchikova NI, et al. **Vrach Delo** 1990 Jun;(6):40–1 (Rus)

[Pathogenic and clinical differences between stasis and chronic bronchitis] Grbac I, et al. **Plucne Bolesti** 1989 Jan–Jun;41(1–2):112–4 (Eng. Abstr.) (Scr)

DRUG THERAPY

Acid-base balance and cardiac index in SO2-bronchitic, papaine-emphysematous and paraquat-fibrotic rats after isoproterenol treatment. Vértes K, et al. **Acta Physiol Hung** 1990;75(1):45–52

Comparative efficacy of ciprofloxacin versus josamycin in the treatment of acute, recurrent, or exacerbated bronchitis. Canton P, et al. **Am J Med** 1989 Nov 30;87(5A):121S–122S

Comparison of ciprofloxacin with ampicillin in acute infectious exacerbations of chronic bronchitis. A double-blind crossover study. Chodosh S, et al. **Am J Med** 1989 Nov 30;87(5A):107S–112S

Randomized comparative study of cefixime versus cephalexin in acute bacterial exacerbations of chronic bronchitis. Verghese A, et al. **Antimicrob Agents Chemother** 1990 Jun; 34(6):1041–4

A randomised, prospective, single-blind comparison of cefadroxil and amoxycillin in the treatment of acute exacerbations of chronic bronchitis. Bint AJ, et al. **Br J Clin Pract** 1989 Jan;43(1):19–23

Summary of the National Mucolytic Study. Morgan EJ, et al. **Chest** 1990 Feb;97(2 Suppl):24S–27S

The National Mucolytic Study. Results of a randomized, double-blind, placebo-controlled study of iodinated glycerol in chronic obstructive bronchitis. Petty TL. **Chest** 1990 Jan;97(1):75–83

A prospective, double-blind, randomized study comparing the efficacy and safety of low-dose ciprofloxacin with ampicillin in the treatment of bronchitis. Chmel H, et al. **Diagn Microbiol Infect Dis** 1990 Mar–Apr;13(2):149–51

Prospective randomized study comparing the efficacy and safety of ciprofloxacin with cefaclor in the treatment of patients with purulent bronchitis. Quenzer RW, et al. **Diagn Microbiol Infect Dis** 1990 Mar–Apr;13(2):143–8

A trial of inhaled budesonide on airway responsiveness in smokers with chronic bronchitis. Engel T, et al. **Eur Respir J** 1989 Nov;2(10):935–9

Cefodizime and cefotaxime in acute exacerbations of chronic bronchitis: a randomized double-blind prospective study in 180 patients. Maesen FP, et al. **J Antimicrob Chemother** 1990 Mar;25(3):413–22

Controlled prospective study of oral amoxycillin/clavulanate vs ciprofloxacin in acute exacerbations of chronic bronchitis. Schmidt EW, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:185–93

Treatment of severe chronic bronchitis with ceftazidime. Micklefield GH, et al. **J Hosp Infect** 1990 Apr;15 Suppl A:65–7

Clinical efficacy and tolerance of two new macrolides, clarithromycin and josamycin, in the treatment of patients with acute exacerbations of chronic bronchitis. Fraschini F. **J Int Med Res** 1990 Mar–Apr;18(2):171–6

Controlled release salbutamol tablets versus aminophylline in the control of reversible airways obstruction. Higenbottam TW, et al. **J Int Med Res** 1989 Sep–Oct; 17(5):435–41

Pharmacology of airway inflammation in asthma. Chung KF. **Lung** 1990;168 Suppl:132–41 (50 ref.)

Broxaterol: a new beta2-adrenoceptor agonist for the treatment of reversible airways disease. Proceedings of the satellite symposium. Budapest, September 8, 1988. **Respiration** 1989;55 Suppl 2:1–44

Today's treatment of airway obstruction ... and tomorrow's? Flenley DC. **Respiration** 1989;55 Suppl 2:4–9 (8 ref.)

Improvement from pulmonary hyperinflation and bronchial obstruction following sympathomimetics systemically given in infants with broncho-pulmonary diseases. Kraemer R, et al. **Z Erkr Atmungsorgane** 1990;174(2):85–96

[Prevention of bronchopulmonary infections with the Bulgarian immunomodulator respivaks] Dobrev P, et al. **Vutr Boles** 1989;28(4):40–2 (Bul)

[Recent traditional Chinese medicine treatment of chronic bronchitis] Lu S. **Chung Hsi I Chieh Ho Tsa Chih** 1990 Apr;10(4):250–2 (30 ref.) (Chi)

[Steroid response after long-term treatment with oral N-acetylcysteine in patients with chronic obstructive bronchitis] Evald T, et al. **Ugeskr Laeger** 1989 Nov 13; 151(46):2076–8 (Eng. Abstr.) (Dan)

[Ambulatory treatment with cefuroxime-axetil of infectious bronchitis in patients sixty years of age or older: comparative study of the combination of amoxicillin and clavulanic acid] Hugonot R, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):533–7 (Eng. Abstr.) (Fre)

[Oral and parenteral amoxicillin in the treatment of pneumonia and acute bronchitis] Ekoule D. **Pharmatherapeutica** 1989;5(6):387–91 (Eng. Abstr.) (Fre)

[Bronchial reactivity following corticoid treatment] M'Raihi ML, et al. **Tunis Med** 1990 Apr;68(4):271–4 (Eng. Abstr.) (Fre)

[Current therapy for chronic respiratory tract diseases] Hoffarth HP, et al. **Dtsch Med Wochenschr** 1990 Jan 12; 115(2):63–6 (12 ref.) **(Ger)**

[Inhalation treatment of obstructive bronchitis in infants and young children with bronchodilator agents] Hüls G, et al. **Pneumologie** 1990 Feb;44 Suppl 1:273–4 (Eng. Abstr.) **(Ger)**

[Obstructive bronchitis] Schwabl D, et al. **Wien Med Wochenschr** 1989 Sep 30;139(18):444–5 **(Ger)**

[Photosensitivity following enoxacin and xipamide: combined phototoxic and photo–allergic reaction to enoxacin, photo–allergic reaction to xipamide with subsequent transient light reaction] Schauder S. **Z Hautkr** 1990 Mar; 65(3):253–62 (Eng. Abstr.) **(Ger)**

[Clinical evaluation of the efficacy and tolerability of 2 acyl–ureido–penicillins (mezlocillin and piperacillin) in the treatment of chronic bronchitis during acute phase] Zappulla G, et al. **Arch Monaldi Mal Torace** 1988 May–Jun; 43(3):279–88 (Eng. Abstr.) **(Ita)**

[Treatment of infection of the lower respiratory tract. Experience with a new quinolinone: pefloxacin] Collimedaglia P, et al. **Clin Ter** 1989 Dec 31;131(6):391–5 (Eng. Abstr.) **(Ita)**

[Treatment with thymopentine of chronic bronchitis in elderly patients during seasonal prophylaxis] Santagata A. **Clin Ter** 1990 Feb 28;132(4):249–54 (Eng. Abstr.) **(Ita)**

[Clinical evaluation of letosteine activity in the treatment of acute febrile bronchitis in children. Double–blind controlled study versus placebo] Nespoli L, et al. **Minerva Pediatr** 1989 Oct;41(10):515–20 (Eng. Abstr.) **(Ita)**

[Thymic hormone treatment of acute and chronic respiratory infections in the elderly] Agostinelli M, et al. **Recenti Prog Med** 1989 Jul–Aug;80(7–8):438–41 (Eng. Abstr.) **(Ita)**

[Clinical and pharmacokinetic evaluation of cefsulodin in neonates and young infants] Fujita K, et al. **Jpn J Antibiot** 1989 Dec;42(12):2709–13 (Eng. Abstr.) **(Jpn)**

[Clinical examination of ceftibuten in acute bronchitis] Hayashi I, et al. **Jpn J Antibiot** 1990 May;43(5):761–7 (Eng. Abstr.) **(Jpn)**

[Clinical efficacy and safety of norfloxacin tablets in pediatrics] Morita H, et al. **Jpn J Antibiot** 1990 May; 43(5):884–9 (Eng. Abstr.) **(Jpn)**

[Antitussive effects of Bakumondô–tô and codeine in bronchitic guinea–pigs] Miyata T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Oct; 27(10):1157–62 (Eng. Abstr.) **(Jpn)**

[Study of the effect of salbutamol inhalation on the function of small airways in patients with chronic bronchitis without ventilatory disorders using simple spirographic tests] Niepsuj G, et al. **Pneumonol Pol** 1989 Mar;57(3):177–82 (Eng. Abstr.) **(Pol)**

[Clinical evaluation of aminophyllinum retard] Chazan R, et al. **Pol Arch Med Wewn** 1987 Aug;78(2):57–64 (Eng. Abstr.) **(Pol)**

[The most frequent complications during long–term corticotherapy] Matusiewicz R, et al. **Wiad Lek** 1989 Mar 1;42(5):273–7 (Eng. Abstr.) **(Pol)**

[Use of phthivazide in the treatment of patients with acute pneumonia and chronic bronchitis] Garmash VIa, et al. **Klin Med (Mosk)** 1990 Feb;68(2):86–8 (Eng. Abstr.) **(Rus)**

[Use of new mixtures of medicinal plants in the treatment of chronic bronchitis] Iakushin SS. **Klin Med (Mosk)** 1990 May;68(5):81–3 (Eng. Abstr.) **(Rus)**

[Use of decamethoxine in the complex treatment of chronic bronchitis] Iukhimets VA, et al. **Klin Med (Mosk)** 1990 Feb;68(2):91–4 (Eng. Abstr.) **(Rus)**

[A device for inserting a catheter into the trachea and bronchi for conducting endobronchial therapy] Provotorov VM, et al. **Med Tekh** 1990 Mar–Apr;(2):34–6 (Eng. Abstr.) **(Rus)**

[Correction of metabolic and immunologic disorders in chronic bronchitis with piracetam] Nikitin AV, et al. **Sov Med** 1990;(3):70–2 **(Rus)**

[Effectiveness of lasolvan and bromhexine in chronic nonspecific lung diseases] Solopov VN, et al. **Sov Med** 1989;(6):82–4 **(Rus)**

[The efficacy of theopek in bronchial asthma and chronic bronchitis] Korzh OB. **Ter Arkh** 1990;62(3):82–4 (Eng. Abstr.) **(Rus)**

[The effect of the inhalation of a single atrovent dose on pulmonary ventilation function and respiratory mechanics in patients with chronic obstructive bronchitis] Tetenev FF, et al. **Ter Arkh** 1989;61(8):53–5 (Eng. Abstr.) **(Rus)**

[The effect of calcium antagonists on pulmonary hemodynamics in patients with chronic bronchitis with manifest and latent pulmonary hypertension] Volkova LI. **Ter Arkh** 1989;61(8):50–3 (Eng. Abstr.) **(Rus)**

[Troventol treatment of patients with bronchial asthma and obstructive bronchitis] Goriachkina LA, et al. **Vrach Delo** 1989 Aug;(8):40–1 **(Rus)**

[The side effects of antibiotics in chronic bronchitis] Pilipchuk VN. **Vrach Delo** 1990 Jun;(6):38–40 (Eng. Abstr.) **(Rus)**

[Critical analysis of antibiotic therapy of acute respiratory infections caused by Mycoplasma pneumoniae] Kuzman I, et al. **Plucne Bolesti** 1989 Jan–Jun;41(1–2):13–7 (Eng. Abstr.) **(Scr)**

[Theophylline toxicity in infants] López García MJ, et al. **An Esp Pediatr** 1990 Mar;32(3):209–12 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

In vivo evaluation of bronchoalveolar lavage (BAL) fluid in atopic bronchial asthma, chronic bronchitis and sarcoidosis patients. Piusa T, et al. **Allerg Immunol (Leipz)** 1990;36(1):11–5

[Changes in protease inhibitor balance of the bronchoalveolar secretion in children with inflammatory lung diseases] Bogadel'nikov IV, et al. **Pediatriia** 1990;(3):17–20 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Characteristics of smokers and nonsmokers in Tecumseh, Michigan. II. The distribution of selected physical measurements and physiologic variables and the prevalence of certain diseases in smokers and nonsmokers. Higgins MW, et al. **Am J Epidemiol** 1967 Jul;86(1):60–77

The Mackenzie Institute Record Study—methods and preliminary findings. Day MP, et al. **Health Bull (Edinb)** 1989 Mar;47(2):95–103

[Comparison of the incidence of bronchitis in children of smoking and non–smoking parents. A contribution to the significance of passive smoking in children] Kühne A, et al. **Z Arztl Fortbild (Jena)** 1989;83(21):1059–60 **(Ger)**

[Study of the functional status of miners working in deep coal mines based on the results of mass screening] Nekhorosheva MA, et al. **Gig Tr Prof Zabol** 1990;(1):14–7 (Eng. Abstr.) **(Rus)**

[Incidence of chronic bronchitis in coal miners] Valutsina VM, et al. **Gig Tr Prof Zabol** 1990;(5):4–7 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Ischemic injury and necrotizing tracheobronchitis [letter; comment] Wiswell TE. **Am J Dis Child** 1989 Nov; 143(11):1259–60 Comment on: Am J Dis Child 1988 Oct;142(10):1094–8.

Dietary factors and their relation to respiratory symptoms. The Second National Health and Nutrition Examination Survey. Schwartz J, et al. **Am J Epidemiol** 1990 Jul; 132(1):67–76

Inflammation in the lungs of rats after deposition of dust collected from the air of wool mills: the role of epithelial injury and complement activation. Donaldson K, et al. **Br J Ind Med** 1990 Apr;47(4):231–8

Risk factors for recurrent acute otitis media and respiratory infection in infancy. Alho OP, et al. **Int J Pediatr Otorhinolaryngol** 1990 Jun;19(2):151–61

Is a child's history of acute otitis media and respiratory infection already determined in the antenatal and perinatal period? Alho OP, et al. **Int J Pediatr Otorhinolaryngol** 1990 Jun;19(2):129–37

The intrauterine and early postnatal origins of cardiovascular disease and chronic bronchitis. Barker DJ, et al. **J Epidemiol Community Health** 1989 Sep;43(3):237–40

Risk factors in chronic obstructive pulmonary malfunction and "chronic bronchitis" symptoms in Beijing district: a joint study between Japan and China. Yamaguchi S, et al. **J Epidemiol Community Health** 1989 Mar;43(1):1–6

Importance of chronic aspiration in recipients of heart–lung transplants. Reid KR, et al. **Lancet** 1990 Jul 28; 336(8709):206–8

Effects of exposure to dust in swine confinement buildings—a working group report. Rylander R, et al. **Scand J Work Environ Health** 1989 Oct;15(5):309–12

[Accumulation of respiratory diseases among employees at a recently established refuse sorting plant] Sigsgaard TI, et al. **Ugeskr Laeger** 1990 Aug 27;152(35):2485–8 (Eng. Abstr.) **(Dan)**

[Bronchopulmonary diseases in primary immune deficiencies] Dressler F, et al. **Pneumologie** 1990 Feb;44 Suppl 1:429–30 (Eng. Abstr.) **(Ger)**

[Isolation of methicillin–resistant Staphylococcus aureus (MRSA) from sputum and clinical features of bronchopulmonary infection due to MRSA during 4 years (1985–1988)] Mukae H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb;28(2):320–9 (Eng. Abstr.) **(Jpn)**

[A case of chronic bronchitis with Pasteurella multocida possibly resulting from infection from a bird] Nakajima M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jun; 27(6):742–6 (13 ref.) (Eng. Abstr.) **(Jpn)**

[Four cases of airway infections caused by MRSA (methicillin resistant Staphylococcus aureus)] Osakabe Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb; 28(2):368–73 (Eng. Abstr.) **(Jpn)**

[Gastroesophageal reflux and diseases of the respiratory system in children; etiopathogenesis, diagnosis and treatment] Kaliciński P, et al. **Pediatr Pol** 1989 Oct–Dec; 64(10–12):624–30 (Eng. Abstr.) **(Pol)**

[Effect of allergy on airway reactivity in children with obstructive bronchitis] Koczyńska–Nowacka K. **Pediatr Pol** 1989 May;64(5):288–94 (Eng. Abstr.) **(Pol)**

[Effect of lowered relative humidity of the air on the accumulation of plutonium–239 in the body and its biological effectiveness] Levdik Ti, et al. **Gig Sanit** 1989 Jul;(7):13–6 (Eng. Abstr.) **(Rus)**

[Occupational pathology of the respiratory organs in miners of highly mechanized ore mines using diesel vehicles] Milishnikova VV, et al. **Gig Tr Prof Zabol** 1990;(6):15–9 (Eng. Abstr.) **(Rus)**

[Immunomorphological characteristics of the bronchi and broncho– pulmonary lymphatic system after sensitization of rats with coal allergen] Shkutin AE, et al. **Gig Tr Prof Zabol** 1989;(8):48–50 **(Rus)**

[Bronchitis after pneumonectomy in patients with lung cancer] Motus IIa, et al. **Grud Serdechnososudistaia Khir** 1990;(2):62–4 (Eng. Abstr.) **(Rus)**

[Effect of air pollution on the incidence and course of allergic diseases in children] Andeenko NV, et al. **Pediatriia** 1990; (5):10–4 (Eng. Abstr.) **(Rus)**

[Relation between chronic microaspiration and gastroesophageal reflux in children with respiratory pathology] Filimonov AB, et al. **Pediatriia** 1990;(3):20–3 (Eng. Abstr.) **(Rus)**

[Several social and genetic risk factors in the development of bronchial asthma and asthmatic bronchitis in children] Gitinov NA, et al. **Pediatriia** 1989;(10):110 **(Rus)**

[Obstructive bronchitis syndrome in acute viral respiratory diseases in young children] Krolik EB, et al. **Pediatriia** 1990;(3):8–13 (Eng. Abstr.) **(Rus)**

[Chlamydia pneumonia and bronchitis in children] Shamansurova EA. **Pediatriia** 1989;(10):57–60 **(Rus)**

[Clinico–laboratory indicators in the prognosis and treatment of chronic obstructive bronchitis] Kaznacheeva EI, et al. **Sov Med** 1989;(9):78–81 **(Rus)**

[The broncho–obstructive syndrome in adolescents as a stage in the development of chronic bronchitis] Kozlovskiĭ VN, et al. **Ter Arkh** 1990;62(3):43–6 (Eng. Abstr.) **(Rus)**

[Prevalence of chronic bronchitis in workers in the tobacco industry] Popović–Custović G. **Med Arh** 1984;38(4):157–61 (Eng. Abstr.) **(Ser)**

[Repercussion of risk factors associated with the development of chronic bronchial pathology on pulmonary function in children] Sanz Ortega J, et al. **An Esp Pediatr** 1990 May; 32(5):399–406 (34 ref.) (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Atopy is a predisposing factor for chronic bronchitis among farmers. Terho EO, et al. **Am J Ind Med** 1990;17(1):105

Recovery of an epitope recognized by a novel monoclonal antibody from airway lavage during experimental induction of chronic bronchitis. Koshino T, et al. **Am J Respir Cell Mol Biol** 1990 May;2(5):453–62

Asthma and bronchitis. Boggs PB. **J Allergy Clin Immunol** 1989 Dec;84(6 Pt 2):1055–8

Pneumococcal polysaccharide vaccine in young adults and older bronchitics: determination of IgG responses by ELISA and the effect of adsorption of serum with non–type–specific cell wall polysaccharide. Musher DM, et al. **J Infect Dis** 1990 Apr;161(4):728–35

Effects of a bacterial extract on local immunity of the lung in patients with chronic bronchitis. Emmerich B, et al. **Lung** 1990;168 Suppl:726–31

[The role of cellular immunity in the etiopathogenesis of obstructive bronchitis in childhood] Kostrouchová M, et al. **Cesk Pediatr** 1989 Jul;44(7):406–9 (Eng. Abstr.) **(Cze)**

[Proteolytic activities in bronchoalveolar lavage fluid in pneumonia and chronic bronchitis] Schmidt M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:308–9 (Eng. Abstr.) **(Ger)**

[Monoclonal antibodies OKT4 and OKT8 in the evaluation of cellular immunity in children with recurrent bronchitis] Brębborowicz A, et al. **Pediatr Pol** 1989 Mar;64(3):155–61 (Eng. Abstr.) **(Pol)**

[Reactivity of the skin to the most common allergens in children aged 0–3 years with obstructive bronchitis] Mazurek H, et al. **Pneumonol Pol** 1989 Apr;57(4):228–34 (Eng. Abstr.) **(Pol)**

[Immunomorphological determination of secretory immunoglobulin A in the bronchial mucous membrane in chronic bronchitis] Lutsenko MT, et al. **Arkh Patol** 1989; 51(7):59–63 (Eng. Abstr.) **(Rus)**

[Enzymatic activity of leukocytes and immunologic reactivity of the body in chronic bronchitis] Linevskiĭ IuV, et al. **Sov Med** 1989;(11):117 **(Rus)**

[The leukotriene B4 content of the bronchoalveolar lavage fluid and the function of the prostacyclin–thromboxane system in patients with variants of chronic bronchitis] Efimov VV, et al. **Ter Arkh** 1990;62(4):94–6 (Eng. Abstr.) **(Rus)**

[Respiratory viral infection and the immune reactivity of patients with different forms of bronchitis] Putov NV, et al. **Ter Arkh** 1990;62(3):49–52 (Eng. Abstr.) **(Rus)**

METABOLISM

Fibronectin on the bronchoalveolar surface in children with recurrent obstructive bronchitis. Nagy B, et al. **Acta Paediatr Hung** 1988–89;29(3–4):261–9

Evaluation of elastase and antielastase balance in patients with chronic bronchitis and pulmonary emphysema. Fujita J, et al. **Am Rev Respir Dis** 1990 Jul;142(1):57–62

The nutritional status in advanced emphysema associated with chronic bronchitis. A study of amino acid and catecholamine levels. Hofford JM, et al. **Am Rev Respir Dis** 1990 Apr;141(4 Pt 1):902–8

Thymomodulin increases the depressed production of superoxide anion by alveolar macrophages in patients with chronic bronchitis. Maiorano V, et al.

Int J Tissue React 1989;11(1):21–5
Lower respiratory tract lactoferrin and lysozyme arise primarily in the airways and are elevated in association with chronic bronchitis. Thompson AB, et al.
J Lab Clin Med 1990 Feb;115(2):148–58
[Thromboxane A2 could be involved in bronchial hyperresponsiveness to methacholine in asthmatic subjects but not in bronchitic subjects] Fujimura M, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1990 Jan;28(1):121–5 (Eng. Abstr.) (Jpn)
[Correction of kininogenesis in dust-induced chronic bronchitis] Surovikina AS, et al. Sov Med 1990;(2):45–7 (Rus)

MICROBIOLOGY

Bacterial isolates and cigarette smoking in patients with chronic bronchitis: results from an Italian multicenter survey. Cazzola M, et al. Clin Ther 1990 Mar–Apr; 12(2):105–17
[The nonspecific microflora of patients with newly detected active pulmonary tuberculosis complicated by bronchial obstruction] Selina LG, et al. Probl Tuberk 1989;(9):38–41 (Eng. Abstr.) (Rus)
[Streptococcus pneumoniae serotypes in children with chronic inflammatory diseases of the respiratory organs] Katosova LK, et al.
Zh Mikrobiol Epidemiol Immunobiol 1990 Feb;(2):32–8 (Eng. Abstr.) (Rus)

MORTALITY

Predicting 15 year chronic bronchitis mortality in the Whitehall Study. Ebi-Kryston KL.
J Epidemiol Community Health 1989 Jun;43(2):168–72
Risk of death from cardiovascular disease and chronic bronchitis determined by place of birth in England and Wales. Osmond C, et al.
J Epidemiol Community Health 1990 Jun;44(2):139–41

PATHOLOGY

PMNs and airway inflammation/hyperreactivity. Payne AN, et al. Agents Actions 1990 Mar;29(3–4):181–3
Bronchial epithelial inflammation in children with chronic cough after early lower respiratory tract illness. Heino M, et al. Am Rev Respir Dis 1990 Feb;141(2):428–32
Intraluminal airway inflammation in chronic bronchitis. Characterization and correlation with clinical parameters. Thompson AB, et al. Am Rev Respir Dis 1989 Dec; 140(6):1527–37
Effect of oral N-acetylcysteine (NAC) on volume and albumin content of respiratory tract fluid but not on epithelial secretory cell number in "smoking" rats. Robinson N, et al. Eur Respir J 1990 Mar;3(3):304–10
Herpes simplex tracheobronchitis and pneumonitis. Benjamin DR. Pediatr Pathol 1989;9(6):773–7
Acquired ciliary defects in bronchial epithelium of patients with chronic bronchitis. Trevisani L, et al. Respiration 1990;57(1):6–13
Cellular characteristics of sputum from patients with asthma and chronic bronchitis. Gibson PG, et al. Thorax 1989 Sep; 44(9):693–9
Large airway inflammation in heart-lung transplant recipients—its significance and prognostic implications. Yousem SA, et al. Transplantation 1990 Mar;49(3):654–6
[Morphology and pathogenesis of chronic bronchitis] Kop'eva TN, et al. Arkh Patol 1989;51(7):83–7 (50 ref.) (Eng. Abstr.) (Rus)
[Value of cytological examination of bronchial and nasal contents in the diagnosis and evaluation of the effectiveness of antibacterial therapy of recurrent bronchitis in children] Gruzintseva OE, et al. Pediatriia 1990;(5):109–10 (Rus)
[Cytologic and microbiological examination of bronchial contents in chronic lung diseases in children] Lishke AA, et al. Vestn Khir 1990 Jan;144(1):146–8 (13 ref.) (Rus)

PHYSIOPATHOLOGY

Hard-rock mining exposures affect smokers and nonsmokers differently: results of a community prevalence study [letter; comment] Morgan WK, et al. Am Rev Respir Dis 1989 Dec;140(6):1832–4 Comment on: Am Rev Respir Dis 1989 Jun;139(6):1487–93.
Evaluation of the pathological changes progress in people of long-term exposure to asbestos dust during 5-year observation. Renke W.
Bull Inst Marit Trop Med Gdynia 1988;39(3–4):155–63
No effect of oral high frequency oscillation combined with forced expiration manoeuvres on tracheobronchial clearance in chronic bronchitis. van Hengstum M, et al. Eur Respir J 1990 Jan;3(1):14–8
Selective samples from human airways can help in studying chronic bronchitis. Reynolds HY. J Lab Clin Med 1990 Feb;115(2):142–3
The pharmacology of airway hyperresponsiveness and inflammation. Pauwels R. Lung 1990;168 Suppl:221–9 (64 ref.)
What is wheezy bronchitis? Lewiston NJ. Pediatr Ann 1989 Dec;18(12):792–3, 797–8 (35 ref.)
Formation of cysteinyl-leukotrienes by human bronchial mucosa in chronic obstructive bronchitis. Luck W, et al. Prog Clin Biol Res 1989;301:259–65
[Smoking cessation using nicotine chewing gum in smokers with chronic diseases] Kozák J. Cas Lek Cesk 1990 Jan 5;129(1):26–9 (Eng. Abstr.) (Cze)
[Prognostic elements of acute respiratory failure status in chronic bronchitis] Zakhama B, et al. Tunis Med 1989 Oct; 67(10):601–5 (Eng. Abstr.) (Fre)
[A comparative evaluation of lung ventilation in patients with dust-caused bronchitis and pneumoconiosis using roentgenpneumopolygraphy] Amosov IS, et al.
Radiol Diagn (Berl) 1990;31(1):49–56 (Eng. Abstr.) (Ger)
[Measuring ciliary frequency: modification of frequency by beta-2-adrenergic drugs and calcium antagonists] Kaspar P, et al. Wien Med Wochenschr Suppl 1989;104:suppl 46–7 (Ger)
[Peculiarities of the development and course of pulmonary hypertension in patients with chronic obstructive bronchitis] Kokosow AN, et al. Z Erkr Atmungsorgane 1989;173(2):138–44 (Eng. Abstr.) (Ger)
[Adult prognosis of infantile obstructive bronchitis] Szönyi L, et al. Orv Hetil 1989 Dec 17;130(51):2741–3 (Eng. Abstr.) (Hun)
[Pulmonary hypertension in chronic obstructive bronchitis] Macaluso S, et al. Arch Monaldi Mal Torace 1988 Jul–Aug; 43(4):305–15 (Eng. Abstr.) (Ita)
[Effect of physical exertion on respiratory airflow and airway resistance in patients with chronic bronchitis] Hanzlik J, et al. Wiad Lek 1989 Oct 1–Nov 1;42(19–21):1009–13 (Eng. Abstr.) (Pol)
[The relation of severe obstructive disorders to ventilation found in young patients with bronchitis and bronchopulmonary diseases in childhood] Dutu S, et al. Rev Ig [Pneumoftiziol] 1989 Apr–Jun;38(2):127–36 (Eng. Abstr.) (Rum)
[Radiokinetocariography—a noninvasive introscopic method of studying the function of the right ventricle in patients with chronic bronchitis] Anshelevich IuV, et al.
Klin Med (Mosk) 1989 Jul;67(7):43–7 (Eng. Abstr.) (Rus)
[Myocardial status, hemodynamics and pressor humoral substances in patients with bronchial asthma and arterial hypertension] Bobrov VA, et al. Klin Med (Mosk) 1989 Nov;67(11):31–5 (Eng. Abstr.) (Rus)
[Evaluation of external respiratory function in patients with chronic obstructive bronchitis using radionuclide methods] Zamotaev IP, et al. Klin Med (Mosk) 1989 Nov;67(11):24–8 (Eng. Abstr.) (Rus)
[The viscoelastic heterogeneity of the bronchial contents and the sputum in patients with chronic bronchitis] Dobrykh VA, et al. Lab Delo 1990;(5):37–41 (Eng. Abstr.) (Rus)
[The mucociliary transport function of the lungs in chronic bronchitis and the radionuclide methods for its study (a review)] Vyrenkova NIu, et al. Med Radiol (Mosk) 1989 Nov;34(11):16–22 (48 ref.) (Rus)
[Nonspecific bronchial reactivity in children with bronchial asthma and chronic and recurrent bronchopulmonary pathology] Orlov AV. Pediatriia 1989;(12):83 (Rus)
[Disorders of pulmonary capillary blood flow in chronic obstructive bronchitis] Zamotaev IP, et al. Sov Med 1990; (3):114–5 (Rus)
[Echocardiographic control during catheterization of the right chambers of the heart] Aleksandrov AL, et al.
Vestn Khir 1989 May;142(5):48 (Rus)
[Reevaluation of work disability in chronic bronchitis and functional criteria at rest] Pavlović M, et al.
Arh Hig Rada Toksikol 1989 Jun;40(2):191–203 (Eng. Abstr.) (Scr)

PREVENTION & CONTROL

Protection against recurrent acute bronchitis after oral immunization with killed Haemophilus influenzae. Clancy RL, et al. Med J Aust 1990 Apr 16;152(8):413–6
Prevention of chronic bronchitis exacerbations with ambroxol (mucosolvan retard). An open, long-term, multicenter study in 5,635 patients. Respiration 1989;55 Suppl 1:84–96
[Social problems associated with chronic bronchitis] Hutás I. Pneumologie 1990 Jul;44(7):880–2 (Eng. Abstr.) (Ger)

PSYCHOLOGY

[Self perception in patients with lung cancer and chronic bronchitis] Stankowska E, et al. Pneumonol Pol 1990 Feb–Mar;58(2–3):92–7 (Eng. Abstr.) (Pol)

RADIOGRAPHY

[The x-ray diagnosis of the functional disorder of bronchial patency in chronic bronchitis] Mamiliaev RM, et al.
Probl Tuberk 1989;(12):31–5 (Eng. Abstr.) (Rus)
[Roentgeno-endoscopic and morphologic diagnosis of deforming bronchitis] Chernekhovskaia NE.
Vestn Rentgenol Radiol 1989 May–Jun;(3):62–5 (Eng. Abstr.) (Rus)
[X-ray diagnosis of disturbed bronchial permeability in chronic bronchitis] Mamiliaev RM, et al.
Vestn Rentgenol Radiol 1989 May–Jun;(3):43–50 (Eng. Abstr.) (Rus)

RADIOTHERAPY

[Study of the mucociliary transport rate in evaluating the effectiveness of the treatment of suppurative endobronchitis by CO2 laser] Shesterina MV, et al. Probl Tuberk 1990; (4):3–7 (Eng. Abstr.) (Rus)

REHABILITATION

[Pilot study for evaluating patient education in asthma, bronchitis, emphysema with the support of the Bad Reichenhall Research Institute for Diseases of Respiratory Organs, Inc.] Betz HP, et al. Pneumologie 1990 Feb;44 Suppl 1:108–9 (Eng. Abstr.) (Ger)
[Bad Reichenhall model of structured patient education. Asthma, bronchitis, emphysema] Prittwitz M, et al.
Pneumologie 1990 Feb;44 Suppl 1:106–7 (Eng. Abstr.) (Ger)
[Characteristics and results of rehabilitation of patients with chronic obstructive bronchitis at a specialized department] Potashov DA, et al. Probl Tuberk 1990;(3):62–6 (Rus)
[The physiotherapy of patients with chronic bronchitis] Boksha VG, et al. Vopr Kurortol Fizioter Lech Fiz Kult 1989 May–Jun;(3):31–6 (Eng. Abstr.) (Rus)
[Medical rehabilitation problems in patients with dust-induced bronchitis] Iuldashev KIu, et al.
Vopr Kurortol Fizioter Lech Fiz Kult 1989 Jul–Aug;(4):23–7 (Rus)
[The late results of helioaerotherapy in the combined treatment of patients with chronic bronchitis] Sadykova GA. Vopr Kurortol Fizioter Lech Fiz Kult 1989 Sep–Oct; (5):57–8 (Rus)
[The effect of physical training loads on hemodynamics of the lesser circulation in patients with chronic obstructive bronchitis at the stage of rehabilitative treatment] Siurin SA, et al. Vopr Kurortol Fizioter Lech Fiz Kult 1989 Jul–Aug;(4):60–2 (Rus)
[Experience with the use of speleotherapy on persons suffering from bronchial asthma and chronic bronchitis subjected to the effect of ionizing radiation] Torokhtin MD, et al. Vopr Kurortol Fizioter Lech Fiz Kult 1990 Mar–Apr; (2):39–41 (Rus)
[The results of the combined treatment of patients with chronic bronchitis] Boksha VG, et al. Vrach Delo 1989 Oct;(10):49–51 (Rus)

SURGERY

Application of the Belsey hiatal hernia repair to infants and children with recurrent bronchitis, bronchiolitis, and pneumonitis due to regurgitation and aspiration. Davis MV, et al. Ann Thorac Surg 1967 Feb;3(2):99–110

THERAPY

Acupuncture induced immunoregulatory influence on the clinical state of patients suffering from chronic spastic bronchitis and undergoing long-term treatment with corticosteroids. Sliwinski J, et al.
Acupunct Electrother Res 1989;14(3–4):227–34
Long-term treatment of chronic bronchitis with positive expiratory pressure mask and chest physiotherapy. Christensen EF, et al. Chest 1990 Mar;97(3):645–50
Preventive effects of an immunostimulating product on recurrent infections of chronic bronchitis in the elderly. Debbas N, et al. Lung 1990;168 Suppl:737–40
Pseudomonas hyperimmune globulin passive immunotherapy for pulmonary exacerbations in cystic fibrosis. Van Wye JE, et al. Pediatr Pulmonol 1990;9(1):7–18
Cough with green sputum. Davies RJ, et al. Practitioner 1989 Feb 22;233(1463):219–20, 222
Oral immunotherapy of chronic bronchitis: a double-blind placebo-controlled multicentre study. Cvoriscec B, et al. Respiration 1989;55(3):129–35
[Biological evaluation of the microbial respiratory vaccine MRV in children with recurrent bronchitis (letter)] Hanna KM, et al. Therapie 1989 Jul–Aug;44(4):305–6 (Fre)
[Clinical and immunologic test of the activity of a polymicrobial vaccine in patients with chronic bronchitis during a flare-up] Zanasi A, et al. Clin Ter 1990 Mar 15; 132(5):321–8 (Eng. Abstr.) (Ita)
[Isoprinosine and climatotherapy at the Czerniawa-Zdrój health resort in the treatment of children with recurrent respiratory tract infections] Jankowski A, et al.
Pneumonol Pol 1989 Mar;57(3):192–5 (Eng. Abstr.) (Pol)
[Pulmonary arterial pressure and the effect of short term oxygen therapy on it in patients qualified for home oxygen treatment] Śliwiński P, et al. Pneumonol Pol 1989 Feb; 57(2):127–33 (Eng. Abstr.) (Pol)
[Use of chlotazol in the complex treatment of recurrent bronchitis and chronic pneumonia in children] Bogadel'nikov IV, et al. Pediatriia 1990;(2):110–1 (Rus)
[Effect of exercise therapy on clinico-functional and immunological indicators in children with respiratory allergy] Matveeva LA, et al. Pediatriia 1990;(5):29–32 (Eng. Abstr.) (Rus)
[An assessment of the efficacy and a validation of the methods of treating patients with chronic obstructive bronchitis at the Yevpatoriya health resort] Krasik IaD, et al.
Ter Arkh 1990;62(3):46–9 (Rus)
[The use of thermal vibromassage of the chest cavity in patients with chronic obstructive bronchitis for improving their tolerance for physical loads] Zaripova TN, et al.
Ter Arkh 1990;62(1):76–8 (Eng. Abstr.) (Rus)
[The use of a sodium chloride aerosol in the combined treatment of patients with bronchial asthma and obstructive bronchitis] Danko LI, et al. Vrach Delo 1990 Jan;(1):51–3 (Eng. Abstr.) (Rus)
[Evaluation of the efficacy of the treatment of patients with chronic bronchitis] Iashchenko LV, et al. Vrach Delo 1989 Jul;(7):62–3 (Eng. Abstr.) (Rus)

[The importance of antioxidants in the combined treatment of patients with dust-induced bronchitis] Kleiner AI, et al. **Vrach Delo** 1990 Jun;(6):98-100 (Eng. Abstr.) (Rus)

[Inhalations of essential oils in the combined treatment of patients with chronic bronchitis] Shubina LP, et al. **Vrach Delo** 1990 May;(5):66-7 (Eng. Abstr.) (Rus)

[The efficacy of hemo- and enterosorption in the combined treatment of patients with chronic asthmatic bronchitis] Solodkovskii ML, et al. **Vrach Delo** 1990 Mar;(3):32-4 (Eng. Abstr.) (Rus)

[The results of the combined treatment of patients with dust-induced bronchitis] Tolmach DV, et al. **Vrach Delo** 1990 Jun;(6):42-4 (Eng. Abstr.) (Rus)

VETERINARY

Pathology of experimentally induced quail bronchitis. Jack SW, et al. **Avian Dis** 1990 Jan-Mar;34(1):44-51

Canine chronic bronchitis. A pathophysiologic evaluation of 18 cases. Padrid PA, et al. **J Vet Intern Med** 1990 May-Jun; 4(3):172-80

Comparison of a levamisole sustained-release bolus and ivermectin treatment to prevent bovine lungworm infection. Borgsteede FH, et al. **Vet Q** 1990 Apr;12(2):65-72

BRONCHOALVEOLAR LAVAGE FLUID

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IRRIGATION

Clinical role of bronchoalveolar lavage in adults with pulmonary disease. Goldstein RA, et al. **Am Rev Respir Dis** 1990 Aug;142(2):481-6 (91 ref.)

Biomarkers of inflammation in ozone-exposed humans. Comparison of the nasal and bronchoalveolar lavage. Graham DE, et al. **Am Rev Respir Dis** 1990 Jul; 142(1):152-6

Bronchoalveolar lavage in stable asthmatics does not cause pulmonary inflammation. Jarjour NN, et al. **Am Rev Respir Dis** 1990 Jul;142(1):100-3

The utility of bronchoalveolar lavage and transbronchial lung biopsy combined with energy-dispersive X-ray analysis in the diagnosis of silicosis. Nugent KM, et al. **Am Rev Respir Dis** 1989 Nov;140(5):1438-41

Assessment of bronchoalveolar cell and mediator response to isocapnic hyperpnea in asthma. Pliss LB, et al. **Am Rev Respir Dis** 1990 Jul;142(1):73-8

Bronchoalveolar lavage for rapid diagnosis of the fat embolism syndrome in trauma patients. Chastre J, et al. **Ann Intern Med** 1990 Oct 15;113(8):583-8

Bronchoalveolar lavage in sarcoidosis and HIV infection [letter] **Chest** 1990 Aug;98(2):517-8

Bronchoalveolar lavage in the nonimmunocompromised patient. Helmers RA, et al. **Chest** 1989 Nov;96(5):1184-90 (43 ref.)

Effect of bronchoalveolar lavage fluid from patients with sarcoidosis or AIDS on interleukin 1 beta release from alveolar macrophages. Huang ZB, et al. **Chest** 1990 Sep; 98(3):576-80

Bronchoalveolar lavage findings in patients seropositive for the human immunodeficiency virus (HIV). Johnson JE, et al. **Chest** 1990 May;97(5):1066-71

Clinical usefulness of bronchoalveolar lavage. Howard P. **Eur Respir J** 1990 Mar;3(3):377-8

Pulmonary toxicity induced by chemical agents. Martin WJ. **Eur Respir J** 1990 Mar;3(3):375-6 (9 ref.)

Role of bronchoalveolar lavage in the assessment of pulmonary complications following bone marrow and organ transplantation. Rennard SI. **Eur Respir J** 1990 Mar; 3(3):373-5 (10 ref.)

Direct detection of cytomegalovirus from bronchoalveolar lavage samples by using a rapid in situ DNA hybridization assay. Gleaves CA, et al. **J Clin Microbiol** 1989 Nov; 27(11):2429-32

Pulmonary surfactant suppresses the immune lung injury response to inhaled antigen in guinea pigs. Richman PS, et al. **J Lab Clin Med** 1990 Jul;116(1):18-26

Bronchoalveolar lavage and the immunology of lung cancer. Semenzato G, et al. **Lung** 1990;168 Suppl:1041-9 (43 ref.)

Effect of bronchoalveolar lavage on the ultrastructure of the tracheal epithelium in rabbits. Konrádová V, et al. **Respiration** 1990;57(1):14-20

T lymphocytosis in a bronchoalveolar lavage of a pulmonary adenocarcinoma: case report. van Maarsseveen TC, et al. **Respiration** 1990;57(1):57-61

The comparison of a fibrogenic and two nonfibrogenic dusts by bronchoalveolar lavage. Lindenschmidt RC, et al. **Toxicol Appl Pharmacol** 1990 Feb;102(2):268-81

[Effect of bronchoalveolar lavage fluid on silica-induced alveolitis in rats] Tan J, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Mar;21(1):30-3 (Eng. Abstr.) (Chi)

[Reaction of the respiratory tract epithelium to bronchoalveolar lavage] Konrádová V, et al. **Cesk Pediatr** 1989 Aug;44(8):449-53 (Eng. Abstr.) (Cze)

[Diagnosis of lung injury due to amiodarone—contribution of bronchoalveolar lavage] Kolek V, et al. **Vnitr Lek** 1990 Jan;36(1):75-80 (Eng. Abstr.) (Cze)

[Value of bronchoalveolar lavage in rheumatoid polyarthritis: apropos of 16 cases] Kchir MM, et al. **Tunis Med** 1989 Nov;67(11):693-6 (Eng. Abstr.) (Fre)

[Bronchoalveolar lavage] Entzian P, et al. **Dtsch Med Wochenschr** 1990 Apr 27;115(17):663-6 (19 ref.) (Ger)

[Bronchoalveolar lavage: interim evaluation following 10 years clinical use] Costabel U, et al. **Med Klin** 1990 Jun 15;85(6):376-87 (118 ref.) (Ger)

[The value of fiberoptic bronchoscopy in diagnosis of HIV associated infections] Fischer B, et al. **Med Klin** 1990 Jun 15;85(6):361-5 (Eng. Abstr.) (Ger)

[Is bronchoalveolar lavage becoming the blood picture of the pneumonologist? (editorial)] Nolte D. **Med Klin** 1990 Jun 15;85(6):353-4 (Ger)

[Transitory bacteremia in bronchologic-biopsy procedures] Dürschmied H, et al. **Pneumologie** 1990 Feb;44 Suppl 1:208-9 (Eng. Abstr.) (Ger)

[The effect of bronchoalveolar lavage on the frequency of human bronchial cilia] Kaspar P, et al. **Wien Med Wochenschr Suppl** 1987;103:49-50 (Ger)

[Effect of bronchoalveolar lavage on regional lung function and lung permeability] Pohl W, et al. **Wien Med Wochenschr Suppl** 1987;103:30-2 (Ger)

[The effect of bronchologic studies on blood gases and hemodynamics in children] Wunderlich P, et al. **Z Erkr Atmungsorgane** 1989;173(3):222-8 (Eng. Abstr.) (Ger)

[Value of bronchial lavage and broncho-alveolar lavage in bronchial asthma in childhood] Hofmann A. **Z Kinderchir** 1988 Sep;43 Suppl 1:16-8 (Ger)

[Laboratory procedures in the processing of bronchoalveolar lavage fluid] Lučić N, et al. **Med Arh** 1989;43(4-6):211-4 (Scr)

ANALYSIS

Fibronectin on the bronchoalveolar surface in children with recurrent obstructive bronchitis. Nagy B, et al. **Acta Paediatr Hung** 1988-89;29(3-4):261-9

Pulmonary disease in systemic urticarial vasculitis: the role of bronchoalveolar lavage. Jones MD, et al. **Am J Med** 1990 Apr;88(4):431-4

Evaluation and management of scleroderma lung disease using bronchoalveolar lavage. Silver RM, et al. **Am J Med** 1990 May;88(5):470-6

Effects of nitrogen dioxide exposure on bronchoalveolar lavage proteins in humans. Frampton MW, et al. **Am J Respir Cell Mol Biol** 1989 Dec;1(6):499-505

Bronchoalveolar lavage constituents in healthy individuals, idiopathic pulmonary fibrosis, and selected comparison groups. The BAL Cooperative Group Steering Committee. **Am Rev Respir Dis** 1990 May;141(5 Pt 2):S169-202 (172 ref.)

Changes in surfactant in bronchoalveolar lavage fluid after hemithorax irradiation in patients with mesothelioma. Hallman M, et al. **Am Rev Respir Dis** 1990 Apr;141(4 Pt 1):998-1005

Bronchoalveolar lavage cell and mediator responses to hyperpnea-induced bronchoconstriction in the guinea pig. Ingenito EP, et al. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1162-6

Evidence for elevated levels of histamine, prostaglandin D2, and other bronchoconstricting prostaglandins in the airways of subjects with mild asthma. Liu MC, et al. **Am Rev Respir Dis** 1990 Jul;142(1):126-32

Hyaluronan (hyaluronic acid) in bronchoalveolar lavage fluid during the development of bleomycin-induced alveolitis in the rat. Nettelbladt O, et al. **Am Rev Respir Dis** 1989 Oct;140(4):1028-32

A modified bronchoalveolar lavage procedure that allows measurement of lung epithelial lining fluid volume. Peterson BT, et al. **Am Rev Respir Dis** 1990 Feb; 141(2):314-20

Functional loss of chemotactic factor inactivator in the adult respiratory distress syndrome [published erratum appears in Am Rev Respir Dis 1990 Sep;142(3):741] Robbins R, et al. **Am Rev Respir Dis** 1990 Jun;141(6):1463-8

Pulmonary disease progress in sarcoid patients with and without bronchoalveolar lavage collagenase. Ward K, et al. **Am Rev Respir Dis** 1990 Sep;142(3):636-41

Elevated levels of leukotriene C4 in bronchoalveolar lavage fluid from atopic asthmatics after endobronchial allergen challenge. Wenzel SE, et al. **Am Rev Respir Dis** 1990 Jul; 142(1):112-9

Increased levels of interleukin-1 in bronchoalveolar washings from children with bacterial pulmonary infections. Wilmott RW, et al. **Am Rev Respir Dis** 1990 Aug;142(2):365-8

Asbestos bodies in bronchoalveolar lavage fluids of brake lining and asbestos cement workers. Dumortier P, et al. **Br J Ind Med** 1990 Feb;47(2):91-8

Characteristics of alveolar cells and soluble components in bronchoalveolar lavage fluid from non-smoking aluminium potroom workers. Eklund A, et al. **Br J Ind Med** 1989 Nov;46(11):782-6

Biophysical inhibition of synthetic lung surfactants. Holm BA, et al. **Chem Phys Lipids** 1990 Feb;52(3-4):243-50

Elevated BAL fluid histamine levels and parenchymal pulmonary disease in rheumatoid arthritis. Casale TB, et al. **Chest** 1989 Nov;96(5):1016-21

Diagnostic value of carcinoembryonic antigen in bronchoalveolar lavage fluid of peripheral lung cancer [letter] de Diego A, et al. **Chest** 1990 Mar;97(3):767-8

Platelet-specific alpha-granule proteins and thrombospondin in bronchoalveolar lavage in the adult respiratory distress syndrome. Idell S, et al. **Chest** 1989 Nov;96(5):1125-32

Immunochemical characterization of corticosteroid-binding globulin in human bronchoalveolar fluid. Loric S, et al. **Clin Chim Acta** 1989 Dec 29;186(1):19-23

Measurement of tuberculostearic acid in sputa, pleural effusions, and bronchial washings. A clinical evaluation for diagnosis of pulmonary tuberculosis. Muranishi H, et al. **Diagn Microbiol Infect Dis** 1990 May-Jun;13(3):235-40

Two-dimensional electrophoresis of dog bronchoalveolar lavage fluid proteins. Lenz AG, et al. **Electrophoresis** 1990 Jun;11(6):510-3

DNA synthesis in alveolar macrophages and other changes in lavaged cells following exposure of CBA/H mice to cigarette smoke. Hornby SB, et al. **Environ Health Perspect** 1990 Apr;85:107-12

Detection of lipocortin 1 in human lung lavage fluid: lipocortin degradation as a possible proteolytic mechanism in the control of inflammatory mediators and inflammation. Smith SF, et al. **Environ Health Perspect** 1990 Apr; 85:135-44

A comparison of albumin and urea as reference markers in bronchoalveolar lavage fluid from patients with interstitial lung disease. Jones KP, et al. **Eur Respir J** 1990 Feb; 3(2):152-6

Procoagulant (thromboplastin) activity in human bronchoalveolar lavage fluids is derived from alveolar macrophages. Lyberg T, et al. **Eur Respir J** 1990 Jan; 3(1):61-7

Platelet-activating factor in bronchoalveolar lavage fluid from asthmatic subjects. Stenton SC, et al. **Eur Respir J** 1990 Apr;3(4):408-13

Bronchoalveolar lavage desmosine in bleomycin-induced lung injury in marmosets and patients with adult respiratory distress syndrome. Idell S, et al. **Exp Lung Res** 1989 Sep; 15(5):739-53

Immunoreactive interleukin-1 in bronchoalveolar lavage fluid of high-risk patients and patients with the adult respiratory distress syndrome. Siler TM, et al. **Exp Lung Res** 1989 Dec;15(6):881-94

Differential evaluation of bronchoalveolar lavage cells and leukotrienes in unilateral acute lung injury and ARDS patients. Antonelli M, et al. **Intensive Care Med** 1989; 15(7):439-45

Leukotrienes and ARDS [editorial] Brigham KL, et al. **Intensive Care Med** 1989;15(7):422-3

Corticosteroids increase lipocortin I in BAL fluid from normal individuals and patients with lung disease. Ambrose MP, et al. **J Appl Physiol** 1990 Apr;68(4):1668-71

Surfactant protein D is a divalent cation-dependent carbohydrate-binding protein. Persson A, et al. **J Biol Chem** 1990 Apr 5;265(10):5755-60

Determination of ofloxacin in bronchoalveolar lavage fluid by high-performance liquid chromatography and fluorimetric detection. Matsubayashi K, et al. **J Chromatogr** 1989 Oct 27;495:354-7

Increased levels of bombesin-like peptides in the lower respiratory tract of asymptomatic cigarette smokers. Aguayo SM, et al. **J Clin Invest** 1989 Oct;84(4):1105-13

Mast cells and pulmonary fibrosis. Identification of a histamine releasing factor in bronchoalveolar lavage fluid. Broide DH, et al. **J Immunol** 1990 Sep 15;145(6):1838-44

An assay for the assessment of lipocortin 1 levels in human lung lavage fluid. Smith SF, et al. **J Immunol Methods** 1990 Jul 20;131(1):119-25

Lower respiratory tract lactoferrin and lysozyme arise primarily in the airways and are elevated in association with chronic bronchitis. Thompson AB, et al. **J Lab Clin Med** 1990 Feb;115(2):148-58

Simplified quantitative determination of phospholipids in amniotic fluid, alveolar lavages and milk using high performance liquid chromatography (HPLC). Kynast G, et al. **J Perinat Med** 1989;17(3):203-12

Pulmonary surfactant in bronchoalveolar lavage after canine lung transplantation: effect of L-carnitine application. Klepetko W, et al. **J Thorac Cardiovasc Surg** 1990 Jun; 99(6):1048-58

Sequential bronchoalveolar lavages by endotracheal intubation in guineapigs. Tremblay G, et al. **Lab Anim** 1990 Jan;24(1):63-7

Reduction in pulmonary fibroblast-stimulating activity as an index of response to treatment of interstitial lung diseases [letter] Adolff CA, et al. **N Engl J Med** 1990 Jun 28; 322(26):1890-1

Production of leukotrienes in phorbol ester-induced acute lung injury. Sprague RS, et al. **Prostaglandins** 1990 Apr; 39(4):439-50

Immunoreactive prostaglandin production by equine monocytes and alveolar macrophages and concentrations of PGE2 and PGF in bronchoalveolar lavage fluid. Watson ED, et al. **Res Vet Sci** 1990 Jul;49(1):88-91

Bronchoalveolar lavage: its place in diagnosis and research [editorial] Walters EH, et al. **Respir Med** 1989 Nov; 83(6):457-8

Chemical structure of phospholipids in the lungs and airways of sheep. Barrow RE. **Respir Physiol** 1990 Jan;79(1):1-8

NHLBI-CNR workshop on usefulness and perspectives of bronchoalveolar lavage', Parma, June 13-14, 1988. **Respiration** 1989;56(3-4):245-51

Bronchoalveolar lavage analysis with anti-T6 monoclonal antibody in the evaluation of diffuse lung diseases. Xaubet A, et al. **Respiration** 1989;56(3-4):161-6

Immunoregulatory proteins in bronchoalveolar lavage fluid. A comparative analysis of pigeon breeders' disease, sarcoidosis and idiopathic pulmonary fibrosis. Reynolds SP,

et al. **Sarcoidosis** 1989 Sep;6(2):125–34

Non-fibrous inorganic particles in human bronchoalveolar lavage fluids. Dumortier P, et al. **Scanning Microsc** 1989 Dec;3(4):1207–16; discussion 1217–8

Bronchoalveolar lavage in patients with mild and severe rheumatoid lung disease. Gilligan DM, et al. **Thorax** 1990 Aug;45(8):591–6

Proteins of the respiratory tract after heart-lung transplantation [letter] Scott JP, et al. **Transplantation** 1990 Aug;50(2):356

Proteins of the respiratory tract after heart-lung transplantation. Winter SM, et al. **Transplantation** 1989 Dec;48(6):974–80

Bronchoalveolar lavage in dogs; analysis of proteins and respiratory cells. Mayer P, et al.
Zentralbl Veterinarmed [A] 1990 Jun;37(5):392–9

[Pulmonary surfactant and lower airway function] Liu BK.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1990 Feb; 13(1):9–11, 60 (Eng. Abstr.) **(Chi)**

[The effect of ozone on the bronchoalveolar lavage fluid and Fe receptor in rats] Gu YP.
Chung Hua Yu Fang I Hsueh Tsa Chih 1989 Jul;23(4):215–7 (Eng. Abstr.) **(Chi)**

[Fiber bronchoscopy and bronchoalveolar lavage in patients with asthma. A description of the method] Pedersen B, et al. **Ugeskr Laeger** 1989 Nov 27;151(48):3229–32 (Eng. Abstr.) **(Dan)**

[Alveolocellular carcinoma diagnosed by bronchoalveolar lavage] Pedersen B, et al. **Ugeskr Laeger** 1989 Dec 18; 151(51):3491–2 (Eng. Abstr.) **(Dan)**

[Pneumocystosis in HIV+ patients: significance of a low parasitism in the bronchoalveolar lavage fluid (letter)] Beauvais B, et al. **Presse Med** 1990 Feb 10;19(5):217–8 **(Fre)**

[Multiole elemental organic components of the broncho-alveolar lavage fluid in normal subjects and in various lung pathologies (excluding silica and asbestos fibers)] Dietemann-Molard A, et al. **Rev Mal Respir** 1989; 6(6):511–7 (Eng. Abstr.) **(Fre)**

[Study of the bronchoalveolar lavage in ankylosing spondylarthritis] Wendling D, et al.
Rev Rhum Mal Osteoartic 1990 May;57(5):393–5 (Eng. Abstr.) **(Fre)**

[Use of precipitins in the diagnosis of bird fancier's lung: apropos of 2 cases] Reynaud C, et al.
Schweiz Med Wochenschr 1989 Jul 22;119(29):1005–9 (Eng. Abstr.) **(Fre)**

[Pneumonia in immunocompromised patients: the value of non-biopsy bronchoscopic examination procedures in the diagnosis of pathogens] von Eiff M, et al.
Klin Wochenschr 1990 Apr 2;68(7):372–9 (Eng. Abstr.) **(Ger)**

[Trypsin and pancreatic elastase-inhibitory capacity of serum and bronchoalveolar lavage fluid of smokers, ex-smokers and nonsmokers] Ebert W, et al. **Pneumologie** 1990 Feb; 44 Suppl 1:267–8 (Eng. Abstr.) **(Ger)**

[Effect of smoking on pulmonary glycoprotein metabolism and phospholipid content] Loos U, et al. **Pneumologie** 1990 Feb;44 Suppl 1:341–2 (Eng. Abstr.) **(Ger)**

[Bronchial cancer and asbestos: comparison of anamnestic exposure to asbestos, detection of asbestos bodies in bronchoalveolar lavage and in lung tissue] Schildge J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:333–4 (Eng. Abstr.) **(Ger)**

[Proteolytic activities in bronchoalveolar lavage fluid in pneumonia and chronic bronchitis] Schmidt M, et al.
Pneumologie 1990 Feb;44 Suppl 1:308–9 (Eng. Abstr.) **(Ger)**

[Procollagen-III-peptide in bronchoalveolar lavage fluid as an index of fibrosis in sarcoidosis and idiopathic lung fibrosis?] Teschler H, et al. **Pneumologie** 1990 Feb;44 Suppl 1:217–8 (Eng. Abstr.) **(Ger)**

[Analysis of tumor markers in lung biopsies and in bronchial lavage] Vogel J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:465–6 (Eng. Abstr.) **(Ger)**

[Diagnostic significance of the tumor markers CEA, SCC and NSE in serum and bronchoalveolar lavage] von Eiff M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:462–4 (Eng. Abstr.) **(Ger)**

[Surfactant phospholipids in bronchoalveolar lavage fluid in smokers with healthy lungs and non-smokers] Würtemberger G, et al. **Pneumologie** 1990 Feb;44 Suppl 1:310–1 (Eng. Abstr.) **(Ger)**

[Detection of mediators in bronchoalveolar lavage] Klech H, et al. **Wien Med Wochenschr Suppl** 1987;103:56–9 (41 ref.) **(Ger)**

[Products of lipid peroxidation in the blood and respiratory secretions in 3 patients with acute respiratory diseases] Cavaliere F, et al. **Minerva Anestesiol** 1989 Jun;55(6):283–6 (Eng. Abstr.) **(Ita)**

[Measurement of carcinoembryonic antigen, squamous cell carcinoma related antigen and neuron-specific enolase in the bronchoalveolar lavage fluid in patients with peripheral lung cancer] Fujii M, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 Apr;27(4):452–5 (Eng. Abstr.) **(Jpn)**

[Fibrogenesis and glycoconjugates] Motomiya M.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 Apr; 27(4):418–21 (Eng. Abstr.) **(Jpn)**

[CEA and CA19-9 in BALF from patients with idiopathic interstitial pneumonia] Shiota Y, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 Aug; 27(8):887–93 (Eng. Abstr.) **(Jpn)**

[Analysis of bronchoalveolar lavage fluid] Kitamura S, et al. **Nippon Rinsho** 1990 Mar;48(3):490–6 **(Jpn)**

[Measurement of small quantities of alpha 2-macroglobulin in bronchoalveolar lavage fluid by enzyme-labelled immunoassay, and its clinical implication in pulmonary disease] Takasaki M, et al. **Rinsho Byori** 1989 Jul; 37(7):825–9 (Eng. Abstr.) **(Jpn)**

[Elastase and acid phosphatase activity in bronchoalveolar lavage fluid during chronic bronchitis] Drozhennikov VA, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):130–2 (Eng. Abstr.) **(Rus)**

[The leukotriene B4 content of the bronchoalveolar lavage fluid and the function of the prostacyclin-thromboxane system in patients with variants of chronic bronchitis] Efimov VV, et al. **Ter Arkh** 1990;62(4):94–6 (Eng. Abstr.) **(Rus)**

[Determination of secretory immunoglobulin A, IgG and IgM in bronchial lavage from patients with primary and metastatic lung neoplasms] Viramontes L, et al.
Arch Invest Med (Mex) 1989 Apr-Jun;20(2):175–81 (Eng. Abstr.) **(Spa)**

[Usefulness of determining 2 cell membrane enzymes in bronchial aspirate and lung tissue in patients with cancer of the lung] Ruiz Moral R, et al. **Rev Clin Esp** 1989 Oct; 185(6):291–4 (Eng. Abstr.) **(Spa)**

CYTOLOGY

Evaluation and management of scleroderma lung disease using bronchoalveolar lavage. Silver RM, et al.
Am J Med 1990 May;88(5):470–6

Brief inhalation of asbestos compromises superoxide production in cells from bronchoalveolar lavage. Petruska JM, et al. **Am J Respir Cell Mol Biol** 1990 Feb;2(2):129–36

Uptake of muramyl dipeptide fluorescent congeners by normal rabbit bronchoalveolar lavage cells: a study using flow cytometry. Richerson HB, et al.
Am J Respir Cell Mol Biol 1990 Feb;2(2):171–81

Inflammatory cells and eosinophilic activity in asthmatics investigated by bronchoalveolar lavage. The effects of antiasthmatic treatment with budesonide or terbutaline. Adelroth E, et al. **Am Rev Respir Dis** 1990 Jul;142(1):91–9

Diagnostic significance of increased bronchoalveolar lavage fluid eosinophils. Allen JN, et al. **Am Rev Respir Dis** 1990 Sep;142(3):642–7

Abnormal epithelial cells recovered by bronchoalveolar lavage: are they malignant? Biyoudi-Vouenze R, et al.
Am Rev Respir Dis 1990 Sep;142(3):686–90

Predictive value of bronchoalveolar lavage cells and serum precipitins in asymptomatic dairy farmers. Gariépy L, et al. **Am Rev Respir Dis** 1989 Nov;140(5):1386–9

Anaphylactic challenge causes eosinophil accumulation in bronchoalveolar lavage fluid of guinea pigs. Modulation by betamethasone, phenidone, indomethacin, WEB 2086, and a novel antiallergy agent, SCH 37224. Gulbenkian AR, et al. **Am Rev Respir Dis** 1990 Sep;142(3):680–5

Lung disease associated with progressive systemic sclerosis. Assessment of interlobar variation by bronchoalveolar lavage and comparison with noninvasive evaluation of disease activity. Miller KS, et al. **Am Rev Respir Dis** 1990 Feb;141(2):301–6

Fractional processing of sequential bronchoalveolar lavage to separate bronchial and alveolar samples. Rennard SI, et al. **Am Rev Respir Dis** 1990 Jan;141(1):208–17

Cell response in bronchoalveolar lavage fluid after exposure to sulfur dioxide: a time-response study. Sandström T, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1828–31

Prognostic implications of bronchoalveolar lavage neutrophilia in patients with Pneumocystis carinii pneumonia and AIDS: effects of an aggressive therapeutic approach [letter] Sauleda J, et al. **Am Rev Respir Dis** 1990 Apr;141(4 Pt 1):1080–1

Effects of inhaled PAF in humans on circulating and bronchoalveolar lavage fluid neutrophils. Relationship to bronchoconstriction and changes in airway responsiveness. Wardlaw AJ, et al. **Am Rev Respir Dis** 1990 Feb; 141(2):386–92

Usefulness of the analysis of broncho-alveolar lavage (BAL) cellular composition in diagnosis and monitoring of pulmonary sarcoidosis treatment. Szklarz E.
Arch Immunol Ther Exp (Warsz) 1989;37(1-2):133–40

Light microscopic and ultrastructural characterization of cells recovered by respiratory-tract lavage of 2- and 6-week-old chickens. Fulton RM, et al. **Avian Dis** 1990 Jan-Mar;34(1):87–98

Use of bronchoalveolar lavage cytology and determination of protein contents in pulmonary complications of bone marrow transplant recipients. Leskinen R, et al.
Bone Marrow Transplant 1990 Apr;5(4):241–5

Cytologic diagnosis in bronchoalveolar lavage specimens. A diagnostic technique for lung neoplasmas with a peripheral location [letter] Bellmunt J, et al. **Chest** 1990 Aug; 98(2):513–4

Cytology of bronchoalveolar lavage fluid in bacterial pneumonia [letter; comment] Castella X, et al. **Chest** 1990 Jun;97(6):1500–1 Comment on: Chest 1989 May;95(5):1021–7.

Bronchial hyperresponsiveness in asthmatic children. Correlation with macrophages and eosinophils in bronchoalvage fluid. Ferguson AC, et al. **Chest** 1989 Nov; 96(5):988–91

Inflammatory markers in bronchoalveolar lavage and in bronchial biopsy in asthma during remission. Foresi A, et al. **Chest** 1990 Sep;98(3):528–35

Neutrophil recruitment in the respiratory tract of a patient with plasma cell granuloma of the lung. Ozaki T, et al. **Chest** 1990 Sep;98(3):770–2

Analysis of airflow obstruction by bronchoalveolar lavage following bone marrow transplantation. Implications for pathogenesis and treatment. St. John RC, et al. **Chest** 1990 Sep;98(3):600–7

Predictive value of bronchoalveolar lavage in pulmonary sarcoidosis. Verstraeten A, et al. **Chest** 1990 Sep; 98(3):560–7

Bronchoalveolar mastocytosis and lymphocytosis after nitrogen dioxide exposure in man: a time-kinetic study. Sandström T, et al. **Eur Respir J** 1990 Feb;3(2):138–43

Reversibility of biochemical and cytological alterations in broncho-alveolar lavagate upon cessation of dust exposure. Creutzenberg O, et al. **Exp Pathol** 1989;37(1-4):243–7

Interrelationship between bronchoalveolar lavage cellular constituents and pulmonary functions in sarcoidosis. Sharma SK, et al. **Indian J Chest Dis Allied Sci** 1989 Apr-Jun;31(2):77–84

Bronchoalveolar lavage fluid (BALF) analysis in interstitial lung diseases--a 7-year experience. Sharma SK, et al.
Indian J Chest Dis Allied Sci 1989 Jul-Sep;31(3):187–96

Bronchoalveolar lavage study in victims of toxic gas leak at Bhopal. Vijayan VK, et al. **Indian J Med Res** 1989 Dec; 90:407–14

Production of arachidonic acid metabolites by caprine alveolar macrophages. Englen MD, et al. **Inflammation** 1990 Jun;14(3):239–45

Hyaluronan reflects the pre-fibrotic inflammation in irradiated rat lung: concomitant analysis of parenchymal tissues and bronchoalveolar lavage. Nilsson K, et al.
Int J Radiat Biol 1990 Sep;58(3):519–30

Repeated antigen inhalation results in a prolonged airway eosinophilia and airway hyperresponsiveness in primates. Gundel RH, et al. **J Appl Physiol** 1990 Feb;68(2):779–86

Chemiluminescence of bronchoalveolar lavage cells as an indicator of leukocyte activation in rats with a hyperreactive bronchus. Linssen M, et al.
J Biolumin Chemilumin 1990 Jan-Mar;5(1):65–9

Multiple defects in arachidonate metabolism in alveolar macrophages from young asymptomatic smokers. Balter MS, et al. **J Lab Clin Med** 1989 Dec;114(6):662–73

Heterogeneity in cell recovery and superoxide production in buoyant, density-defined subpopulations of human alveolar macrophages from healthy volunteers and sarcoidosis patients. Calhoun WJ, et al.
J Lab Clin Med 1989 Dec;114(6):682–90

Bronchoalveolar T-lymphocytes and subsets in pulmonary tuberculosis and bronchogenic carcinoma. Pushpakom R, et al. **J Med Assoc Thai** 1990 Jan;73(1):1–11

Impaired chemotactic responses of bronchoalveolar leukocytes in experimental pneumoconiosis. Donaldson K, et al. **J Pathol** 1990 Jan;160(1):63–9

Assessment of local cellular immunity in lung cancer by bronchoalveolar lavage. Lorenz J, et al.
Klin Wochenschr 1990 Jul 17;68(14):728–34

Cell composition and lymphocyte subsets in the bronchoalveolar lavage of normal pigs of different ages in comparison with germfree and pneumonic pigs. Gehrke I, et al. **Lung** 1990;168(2):79–92

Eosinophilic alveolitis in immunologic interstitial lung disorders. Olivieri D, et al. **Lung** 1990;168 Suppl:964–73

Bronchoalveolar lavage in the diagnosis of cancer. Rennard SI. **Lung** 1990;168 Suppl:1035–40 (38 ref.)

Future directions for bronchoalveolar lavage. Rennard SI. **Lung** 1990;168 Suppl:1050–6 (48 ref.)

Confirmation of lymphomatous pulmonary involvement by immunophenotypic and gene rearrangement analysis of bronchoalveolar lavage fluid. Pisani RJ, et al.
Mayo Clin Proc 1990 May;65(5):651–6 (12 ref.)

Bronchoalveolar lavage in an immunosuppressed rabbit model of invasive pulmonary aspergillosis. Chilvers ER, et al. **Mycopathologia** 1989 Dec;108(3):163–71

Separation of equine bronchopulmonary lavage cells by density gradient centrifugation and expression of procoagulant activity in unpurified cells and cell subpopulations. Grünig G, et al. **Res Vet Sci** 1990 Jul; 49(1):39–45

Improved recovery of cells elutriated from bronchoalveolar lavage fluid. Blaschke E, et al. **Scand J Clin Lab Invest** 1989 Oct;49(6):595–6

Bronchoalveolar leukocyte response in experimental silicosis: modulation by a soluble aluminum compound. Brown GM, et al. **Toxicol Appl Pharmacol** 1989 Oct;101(1):95–105

In vivo dynamics of pulmonary lymphoid cell subpopulations generated against pulmonary metastasis: evaluation by bronchoalveolar lavage fluid. Kitagawa M, et al.
Virchows Arch [B] 1990;58(5):365–70

[Changes of the lymphocytes and their subsets in broncho-alveolar lavage fluid in patients with pulmonary sarcoidosis] Li ZH.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1989 Aug; 12(4):208–11, 253 (Eng. Abstr.) **(Chi)**

[Cytological examination of bronchoalveolar lavage fluid and its clinical significance in patients with diffuse interstitial lung diseases] Li ZH, et al.
Chung Hua Nei Ko Tsa Chih 1990 Jan;29(1):2–4, 59 (Eng. Abstr.) **(Chi)**

[Alveolar macrophages of sheep: purification and

identification] Meniai-Belayat FZ, et al. **Ann Rech Vet** 1990;21(3):205–9 (Eng. Abstr.) **(Fre)**

[Thoracic computed tomography data and cytology of the bronchoalveolar lavage fluid in an adult case of Niemann-Pick disease. The physiognomy of the disease in Tunisia] Bouziani A, et al. **Rev Mal Respir** 1990; 7(3):267–71 (11 ref.) (Eng. Abstr.) **(Fre)**

[Change in the lymphocyte subpopulations in bronchoalveolar lavage 72 hours after the allergen provocation test in the asthmatic] Maria Y, et al. **Rev Mal Respir** 1989;6(4):349–56 (Eng. Abstr.) **(Fre)**

[Alveolar lavage in silicosis] Kamel A, et al. **Tunis Med** 1989 May;67(5):311–4 (Eng. Abstr.) **(Fre)**

[Functional and morphological characterization of alveolar macrophages from patients with pulmonary sarcoidosis] Barth J, et al. **Immun Infekt** 1990 Feb;18(1):20–2 (Eng. Abstr.) **(Ger)**

[Proliferation of alveolar macrophages in pulmonary sarcoidosis correlates with markers of lymphocyte activity in bronchoalveolar lavage fluid] Barth J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:224–5 (Eng. Abstr.) **(Ger)**

[Can electronic measurement of total cell number in bronchoalveolar lavage replace conventional chamber counting?] Braun S, et al. **Pneumologie** 1990 Feb;44 Suppl 1:295–6 (Eng. Abstr.) **(Ger)**

[The diagnostic value of bronchoalveolar lavage in opportunistic pneumonia following kidney transplantation] Dalhoff K, et al. **Pneumologie** 1990 Feb;44 Suppl 1:314–5 (Eng. Abstr.) **(Ger)**

[Chemiluminescence of alveolar macrophages in pneumonia] Dohmen BM, et al. **Pneumologie** 1990 Feb;44 Suppl 1:467–8 (Eng. Abstr.) **(Ger)**

[Bronchoalveolar lavage in the pig—comparison of normal, pathogen-free and pneumonic animals] Gehrke I, et al. **Pneumologie** 1990 Feb;44 Suppl 1:297–8 (Eng. Abstr.) **(Ger)**

[Value of diagnostic procedures in fiberoptic bronchoscopy of pulmonary infections] Mainz D, et al. **Pneumologie** 1990 Feb;44 Suppl 1:471–2 (Eng. Abstr.) **(Ger)**

[Interstitial lung fibrosis in rheumatoid arthritis—comparison of lung function and bronchoalveolar lavage] Petermann W, et al. **Pneumologie** 1990 Feb;44 Suppl 1:540–1 (Eng. Abstr.) **(Ger)**

[Bronchoalveolar lavage in cytostatic drug-induced lung changes] Petermann W, et al. **Pneumologie** 1990 Feb;44 Suppl 1:578–9 (Eng. Abstr.) **(Ger)**

[Reproducibility of differential bronchoalveolar lavage cytology in sarcoidosis in relation to elapsed time between bronchoalveolar lavage and sample processing] Steppling H, et al. **Pneumologie** 1990 Feb;44 Suppl 1:565–6 (Eng. Abstr.) **(Ger)**

[Oxygen radical production by alveolar macrophages in sarcoidosis in relation to activity status of bronchoalveolar lavage lymphocytes] Strausz J, et al. **Pneumologie** 1990 Feb; 44 Suppl 1:222–3 (Eng. Abstr.) **(Ger)**

[Value of bronchoalveolar lavage and findings of cytologic studies in the diagnosis of interstitial lung diseases] Vallée D, et al. **Pneumologie** 1990 Feb;44 Suppl 1:301–2 (Eng. Abstr.) **(Ger)**

[Discriminatory value of bronchoalveolar lavage parameters in differential diagnosis—exogenous allergic alveolitis, sarcoidosis and patients with healthy lungs] Zaiss AW, et al. **Pneumologie** 1990 Feb;44 Suppl 1:219–21 (Eng. Abstr.) **(Ger)**

[Cytologic and immunocytologic findings in bronchoalveolar lavage as a contribution to the differential diagnosis of chronic lung hemorrhage] Ziesche R, et al. **Pneumologie** 1990 Feb;44 Suppl 1:299–300 (Eng. Abstr.) **(Ger)**

[Bronchoalveolar lavage in the assessment of lung diseases] Schweisfurth H. **Versicherungsmedizin** 1989 Sep 1; 41(5):146–8 (27 ref.) (Eng. Abstr.) **(Ger)**

[The specificity of so-called "smoker cells" in lung tissue] Eckert H, et al. **Z Erkr Atmungsorgane** 1990;174(3):174–7 (Eng. Abstr.) **(Ger)**

[The synergism of Actinobacillus pleuropneumoniae and influenza A virus in experimentally-infected mice] Bröring S, et al. **Zentralbl Veterinarmed [B]** 1989 Nov;36(9):681–90 (Eng. Abstr.) **(Ger)**

[BALF cell findings in patients with BOOP, particularly in comparison with UIP] Izumi T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Apr; 27(4):474–80 (Eng. Abstr.) **(Jpn)**

[Cell population and elastase activity in bronchoalveolar lavage fluid from rats exposed to high concentration of nitrogen dioxide] Kondo M. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Apr; 27(4):497–54 (Eng. Abstr.) **(Jpn)**

[Diagnostic value of bronchoalveolar lavage in fat embolism syndrome—a case report] Niimi A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb;28(2):362–7 (Eng. Abstr.) **(Jpn)**

[T-lymphocytosis and increased levels of soluble IL-2 receptors in bronchoalveolar lavage fluid in cases of HTLV-I-associated myelopathy with pulmonary involvement] Sugimoto M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Apr;27(4):481–7 (Eng. Abstr.) **(Jpn)**

[Studies on the pathogenesis of lung fibrosis by bronchoalveolar lavage and Ga scintigraphy] Tada S. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Apr;27(4):434–9 (Eng. Abstr.) **(Jpn)**

[Increased neutrophils in bronchoalveolar lavage fluid from a patient with developing adult respiratory distress syndrome] Taniguchi H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Aug; 27(8):974–9 (Eng. Abstr.) **(Jpn)**

[Experimental studies on the pathogenesis and development of interstitial pneumonia and pulmonary fibrosis] Yamakido M. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Apr; 27(4):445–7 (Eng. Abstr.) **(Jpn)**

[Role of bronchoalveolar lavage in analysis of diffuse pulmonary diseases] Sato A, et al. **Rinsho Hoshasen** 1989 Jul;34(7):783–90 (Eng. Abstr.) **(Jpn)**

[Possibilities and limitations of bronchoalveolar lavage (BAL) in the cytologic evaluation of interstitial changes of the lungs] Chłap Z, et al. **Pol Tyg Lek** 1989 Jan 9–16; 44(2–3):63–7, 72 (33 ref.) **(Pol)**

[Segmental bronchoalveolar lavage with a flexible probe via a rigid bronchoscope in the diagnosis of mediastino-pulmonary sarcoidosis] Faina AG. **Rev Ig [Pneumoftiziol]** 1989 Jul–Sep;38(3):271–7 (Eng. Abstr.) **(Rum)**

[An electron microscopic and radioautographic study of bronchoalveolar lavage in chronic inflammation of the lungs under the effects of helium-neon laser] Nepomniashchikh LM, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):117–21 (Eng. Abstr.) **(Rus)**

[The cytological characteristics of bronchoalveolar washings in chronic bronchitis] Grobova OM, et al. **Probl Tuberk** 1989;(12):7–11 (Eng. Abstr.) **(Rus)**

[The complex cytologic and bacteriologic study of the bronchoalveolar lavage fluid for the purpose of differential diagnosis of sarcoidosis and disseminated pulmonary tuberculosis] Nikolaeva GM, et al. **Probl Tuberk** 1989; (11):33–7 (Eng. Abstr.) **(Rus)**

[The detection of mast cells in the bronchoalveolar contents in lung diseases] Gerasin VA, et al. **Ter Arkh** 1989; 61(12):60–2 (Eng. Abstr.) **(Rus)**

[Determination of B and T lymphocytes in bronchoalveolar lavage and peripheral blood of patients with active sarcoidosis] Dizdarević Z, et al. **Med Arh** 1989;43(1):17–22 (Eng. Abstr.) **(Scr)**

[The effect of magnesite emission into the environment on the respiratory tract in rabbits studies with scanning electron microscopy with additional equipment] Foltinová J, et al. **Bratisl Lek Listy** 1990 May;91(5):374–82 (Eng. Abstr.) **(Slo)**

ENZYMOLOGY

In vivo evaluation of bronchoalveolar lavage (BAL) fluid in atopic bronchial asthma, chronic bronchitis and sarcoidosis patients. Plusa T, et al. **Allerg Immunol (Leipz)** 1990;36(1):11–5

Bronchoalveolar lavage fluid angiotensin-converting enzyme in interstitial lung diseases. Specks U, et al. **Am Rev Respir Dis** 1990 Jan;141(1):117–23

Glutathione S-transferase isoenzymes in human bronchoalveolar lavage: a possible early marker for the detection of lung cancer. Howie AF, et al. **Carcinogenesis** 1990 Feb;11(2):295–300

Myeloperoxidase in human lung lavage. I. A marker of local neutrophil activity. Schmekel B, et al. **Inflammation** 1990 Aug;14(4):447–54

Myeloperoxidase in human lung lavage. II. Internalization of myeloperoxidase by alveolar macrophages. Schmekel B, et al. **Inflammation** 1990 Aug;14(4):455–61

Enzyme activities of lung lavage in silicosis. Larivée P, et al. **Lung** 1990;168(3):151–8

Depressed bronchoalveolar urokinase activity in patients with adult respiratory distress syndrome [see comments] Bertozzi P, et al. **N Engl J Med** 1990 Mar 29;322(13):890–7 Comment in: N Engl J Med 1990 Mar 29;322(13):929–31.

[Evaluation of the elastase: alpha 1-antitrypsin balance in patients with bacterial pneumonia using bronchoalveolar lavage] Fujita J, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jun;27(6):712–7 (Eng. Abstr.) **(Jpn)**

[Changes in protease inhibitor balance of the bronchoalveolar secretion in children with inflammatory lung diseases] Bogadel'nikov IV, et al. **Pediatriia** 1990;(3):17–20 (Eng. Abstr.) **(Rus)**

[The effect of antioxidants on the balance of proteinase-inhibitors system in the respiratory space of mice with pulmonary tuberculosis] Kaminskaia GO, et al. **Vopr Med Khim** 1990 Mar–Apr;36(2):30–3 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Antioxidant defences of rabbit alveolar lining fluid. Roveri A, et al. **Respiration** 1989;55 Suppl 1:68–73

IMMUNOLOGY

Recovery of an epitope recognized by a novel monoclonal antibody from airway lavage during experimental induction of chronic bronchitis. Koshino T, et al. **Am J Respir Cell Mol Biol** 1990 May;2(5):453–62

In vitro dissolution of uniform cobalt oxide particles by human and canine alveolar macrophages. Kreyling WG, et al. **Am J Respir Cell Mol Biol** 1990 May;2(5):413–22

Comparison of smoker and nonsmoker lavage fluid for the rate of association with neutrophil elastase. Wewers MD, et al. **Am J Respir Cell Mol Biol** 1989 Nov;1(5):423–9

Bronchoalveolar lavage in ankylosing spondylitis. Wendling D, et al. **Ann Rheum Dis** 1990 May;49(5):325–6

Immunoglobulin and anti-Escherichia coli antibody in lower respiratory tract secretions from infants weighing less than 1500 g at birth. Sennhauser FH, et al. **Arch Dis Child** 1990 Jan;65(1 Spec No):48–53

Involvement of eicosanoids and PAF in immune-complex alveolitis. Tavares-de-Lima W, et al. **Braz J Med Biol Res** 1989;22(6):745–8

The role of bronchoalveolar lavage in providing access to the evaluation of immune mechanisms taking place in lung cancer. Semenzato G. **Bull Cancer (Paris)** 1989;76(8):787–95 (71 ref.)

A prospective pilot study evaluating the effectiveness of secretory IgA measurements in bronchoalveolar lavage to detect non-small cell lung cancer. Pisani RJ, et al. **Chest** 1990 Mar;97(3):586–9

Alveolar macrophages in AIDS patients: increased spontaneous tumour necrosis factor-alpha production in Pneumocystis carinii pneumonia. Krishnan VL, et al. **Clin Exp Immunol** 1990 May;80(2):156–60

Effect of strenuous exercise stress on chemiluminescence response of equine alveolar macrophages. Wong CW, et al. **Equine Vet J** 1990 Jan;22(1):33–5

Inflammation and immune reactions in interstitial lung disease (ILD) associated with inorganic dust exposure. Costabel U, et al. **Eur Respir J** 1990 Mar;3(3):363–4

Evidence in bronchoalveolar lavage for third type immune reactions in hypersensitivity pneumonitis. Pesci A, et al. **Eur Respir J** 1990 Mar;3(3):359–61

Bronchoalveolar lavage in allergic asthma. Rossi GA, et al. **Eur Respir J** 1990 Mar;3(3):368–70 (6 ref.)

Cellular immune responses in the lung of hypersensitivity pneumonitis. Semenzato G, et al. **Eur Respir J** 1990 Mar; 3(3):357–9

Role of bronchoalveolar lavage in the investigation of cell-mediated defence mechanisms against lung cancer. Spatafora M, et al. **Eur Respir J** 1990 Mar;3(3):370–1 (5 ref.)

Immunological features of lung lavage cells from patients with primary biliary cirrhosis may reflect those seen in pulmonary sarcoidosis. Spiteri MA, et al. **Gut** 1990 Feb; 31(2):208–12

Influence of natural antigenic exposure on bronchoalveolar lavage in subjects with pollen-induced rhinitis. Boulet LP, et al. **J Allergy Clin Immunol** 1990 Jul;86(1):19–25

Application of immunoblotting to detect soluble Pneumocystis carinii antigen(s) in bronchoalveolar lavage of patients with Pneumocystis pneumonia and AIDS. Sethi KK. **J Clin Pathol** 1990 Jul;43(7):584–6

Production of interleukin 1 and tumour necrosis factor activities in bronchoalveolar washings following infection of mice by influenza virus. Vacheron F, et al. **J Gen Virol** 1990 Feb;71 (Pt 2):477–9

Assessment of chemokinetic behavior of inflammatory lung macrophages in a linear under-agarose assay. Newton-Nash DK, et al. **J Leukoc Biol** 1990 Oct; 48(4):297–305

Pulmonary inflammation in parasitic infection: immunoglobulins in bronchoalveolar washings of rats infected with Nippostrongylus brasiliensis. Ramaswamy K, et al. **Parasite Immunol** 1989 Nov;11(6):655–65

Lymphocyte subsets in bronchoalveolar lavage fluid and in circulating blood in epidermoid bronchogenic carcinoma. Piazza G, et al. **Respiration** 1990;57(1):28–36

Demonstration of surface antigens on bronchoalveolar lavage cells using the immunoalkaline phosphatase method. Xaubet A, et al. **Respiration** 1989;56(1–2):43–7

Expression of surface antigens distinguishing "naive" and previously activated lymphocytes in bronchoalveolar lavage fluid. Dominique S, et al. **Thorax** 1990 May; 45(5):391–6

Detection of peripheral blood and bronchoalveolar lavage fluid lymphocytes in rat lung transplantation for early diagnosis of rejection. Saito R, et al. **Tohoku J Exp Med** 1990 Mar;160(3):231–49

Proliferative responses of bronchoalveolar lavage lymphocytes from heart-lung transplant patients. Rabinowich H, et al. **Transplantation** 1990 Jan;49(1):115–21

[Bactericides against Pasteurella multocida in whole blood, plasma and lung lavage fluid of untreated and immunized young swine and calves] Müller G, et al. **Arch Exp Veterinarmed** 1990;44(1):65–73 (Eng. Abstr.) **(Ger)**

[Immunohistochemical study of T cell subsets in lung tissue and in BALF of patients with farmer's lung disease] Tomichi N, et al. **Arerugi** 1989 Jun;38(6):508–12 (Eng. Abstr.) **(Jpn)**

[Bronchoalveolar lavage in diffuse panbronchiolitis] Ichikawa Y, et al. **Kansenshogaku Zasshi** 1989 Dec; 63(12):1350–1 **(Jpn)**

[HTLV-I associated interstitial pneumonia—a case report and bronchoalveolar lavage study] Tashiro T, et al. **Kansenshogaku Zasshi** 1990 Apr;64(4):492–7 (Eng. Abstr.) **(Jpn)**

[2-color analysis of lymphocyte subpopulation of bronchoalveolar lavage fluid and peripheral blood in patients with sarcoidosis] Nishi K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Sep; 27(9):1066–73 (Eng. Abstr.) **(Jpn)**

[A case of pulmonary alveolar proteinosis accompanied with

the elevation of CEA (carcinoembryonic antigen) in bronchoalveolar lavage fluid] Tanaka F, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Aug; 27(8):968–73 (Eng. Abstr.) **(Jpn)**

[Concentration of carcinoembryonic antigen in the serum and bronchoalveolar lavage fluid in patients with lung cancer] Płusa T, et al. **Pneumonol Pol** 1989 May;57(5):277–82 (Eng. Abstr.) **(Pol)**

METABOLISM

Detection of histamine release inhibitory factor– and histamine releasing factor–like activities in bronchoalveolar lavage fluids. Alam R, et al. **Am Rev Respir Dis** 1990 Mar; 141(3):666–71

Extracellular matrix components in bronchoalveolar lavage fluid in sarcoidosis and their relationship to signs of alveolitis. Blaschke E, et al. **Am Rev Respir Dis** 1990 Apr; 141(4 Pt 1):1020–5

Identification of lipoxin A4 and its relationship to the sulfidopeptide leukotrienes C4, D4, and E4 in the bronchoalveolar lavage fluids obtained from patients with selected pulmonary diseases. Lee TH, et al. **Am Rev Respir Dis** 1990 Jun;141(6):1453–8

Penetration of ampicillin and sulbactam in the lower airways during respiratory infections. Valcke YJ, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):958–62

Fibroblast proliferation in vitro in response to bronchoalveolar lavage fluid. McIlgorm EA, et al. **Biochem Soc Trans** 1990 Apr;18(2):353

Serine proteinase requirement for the extra–cellular metabolism of pulmonary surfactant. Gross NJ, et al. **Biochim Biophys Acta** 1990 May 22;1044(2):222–30

Special neutrophil elastase inhibitory activity in BAL fluid from patients with silicosis and asbestosis. Scharfman A, et al. **Eur Respir J** 1989 Sep;2(8):751–7

Phagocyte enzymes in bronchoalveolar lavage from patients with pulmonary sarcoidosis and collagen vascular disorders [published erratum appears in Eur Respir J 1990 May;3(5):609] Sibille Y, et al. **Eur Respir J** 1990 Mar; 3(3):249–56

Effect of quinacrine on lipid content of bronchoalveolar lavage fluid in guinea pigs sensitized to ovalbumin. Rami J, et al. **Exp Lung Res** 1990 Mar–Apr;16(2):111–9

Cytotoxic factor for fibroblasts in bronchoalveolar lavage fluid of bleomycin–treated rats. Tani K, et al. **Exp Lung Res** 1990 May–Jun;16(3):293–307

Glutathione in bronchoalveolar lavage fluid from smokers is related to humoral markers of inflammatory cell activity. Linden M, et al. **Inflammation** 1989 Dec;13(6):651–8

Impact of C–reactive protein (CRP) on surfactant function. Li JJ, et al. **J Trauma** 1989 Dec;29(12):1690–7

Pulmonary gamma interferon production in patients with fibrosing alveolitis. Robinson BW, et al. **Thorax** 1990 Feb; 45(2):105–8

[Ozone–induced airway hyperresponsiveness in guinea pigs] Okazawa A, et al. **Arerugi** 1989 Nov;38(11):1217–25 (Eng. Abstr.) **(Jpn)**

[Evaluation of the lung uptake of 123I–IMP by bronchoalveolar lavage] Kosuda S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Apr 25; 49(4):484–6 (Eng. Abstr.) **(Jpn)**

[Lipid peroxidation in bronchoalveolar lavage fluid in interstitial lung diseases in relation to other components and smoking] Kawakami M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Apr;27(4):422–7 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

The significance of the detection of cytomegalovirus in the bronchoalveolar lavage fluid in AIDS patients with pneumonia. Bower M, et al. **AIDS** 1990 Apr;4(4):317–20

Successful use of shell vial centrifugation and 16 to 18–hour immunofluorescent staining for the detection of influenza A and B in clinical specimens. Bartholoma NY, et al. **Am J Clin Pathol** 1989 Oct;92(4):487–90

A prospective study of protected bronchoalveolar lavage in the diagnosis of nosocomial pneumonia [see comments] Rouby JJ, et al. **Anesthesiology** 1989 Nov;71(5):679–85 Comment in: Anesthesiology 1990 May;72(5):955–6.

Aerosolized pentamidine: effect on diagnosis and presentation of Pneumocystis carinii pneumonia. Jules–Elysee KM, et al. **Ann Intern Med** 1990 May 15;112(10):750–7

Cytomegalovirus is frequently isolated in bronchoalveolar lavage fluid of bone marrow transplant recipients without pneumonia. Ruutu P, et al. **Ann Intern Med** 1990 Jun 15; 112(12):913–6

Bronchoalveolar lavage in HIV infected patients with interstitial pneumonitis. de Blic J, et al. **Arch Dis Child** 1989 Sep;64(9):1246–50

Cytomegalovirus in the bronchoalveolar lavage fluid of patients with AIDS. Miles PR, et al. **Chest** 1990 May; 97(5):1072–6

Detection of fungi and other pathogens in immunocompromised patients by bronchoalveolar lavage in an area endemic for coccidioidomycosis. Sobonya RE, et al. **Chest** 1990 Jun;97(6):1349–55

Detection of cytomegalovirus in bronchoalveolar lavage specimens. Spin amplification and staining with a monoclonal antibody to the early nuclear antigen for diagnosis of cytomegalovirus pneumonia. Woods GL, et al. **Chest** 1990 Sep;98(3):568–75

Use of bronchoalveolar lavage to diagnose bacterial pneumonia in mechanically ventilated patients. Guerra LF, et al. **Crit Care Med** 1990 Feb;18(2):169–73

Rapid diagnosis of Pneumocystis carinii infection in AIDS by cytocentrifugation and rapid hematoxylin–eosin staining. Strigle SM, et al. **Diagn Cytopathol** 1990;6(3):164–8

A tracheoscopic technique for obtaining uncontaminated lower airway secretions for bacterial culture in the horse [see comments] Darien BJ, et al. **Equine Vet J** 1990 May; 22(3):170–3 Comment in: Equine Vet J 1990 May;22(3):147–8.

Opportunistic agents in bronchoalveolar lavage in 99 HIV seropositive patients. Durand–Amat S, et al. **Eur Respir J** 1990 Mar;3(3):282–7

Pseudoepidemic of Rhodotorula rubra in patients undergoing fiberoptic bronchoscopy. Hoffmann KK, et al. **Infect Control Hosp Epidemiol** 1989 Nov;10(11):511–4

Cytologic analysis of tracheal wash specimens and bronchoalveolar lavage fluid in the diagnosis of mycotic infections in dogs. Hawkins EC, et al. **J Am Vet Med Assoc** 1990 Jul 1;197(1):79–83

Rapid detection of Pneumocystis carinii in bronchoalveolar lavage samples by using Cellufluor staining. Baselski VS, et al. **J Clin Microbiol** 1990 Feb;28(2):393–4

Semiquantitative technique for estimating Pneumocystis carinii burden in the lung. Baughman RP, et al. **J Clin Microbiol** 1990 Jun;28(6):1425–7

Use of bronchoalveolar lavage to diagnose pulmonary infiltrates in immunocompromised hosts. Saenghirunvattana S, et al. **J Med Assoc Thai** 1989 Jul; 72(7):371–5

The diagnosis of pneumonia in the immunocompromised child: use of bronchoalveolar lavage. Winthrop AL, et al. **J Pediatr Surg** 1990 Aug;25(8):878–80

Rapid detection of cytomegalovirus in bronchoalveolar lavage specimens from marrow transplant patients: evaluation of a direct fluorescein–conjugated monoclonal antibody reagent. Gleaves CA, et al. **J Virol Methods** 1989 Dec;26(3):345–9

Special precautions reduce oropharyngeal contamination in bronchoalveolar lavage for bacteriologic studies. Pang JA, et al. **Lung** 1989;167(5):261–7

[Comparative study of 2 classical technics of coloration and an indirect immunofluorescent assay applied to research on Pneumocystis carinii in the bronchoalveolar lavage fluid and induced sputum in HIV+ patients] Beauvais B, et al. **Ann Biol Clin (Paris)** 1989;47(10):635–9 (Eng. Abstr.) **(Fre)**

[Bacterial pneumonia in ventilated patients. The role of bronchoalveolar lavage in diagnosis and therapy] Konrad F, et al. **Anaesthesist** 1990 Jan;39(1):53–9 (Eng. Abstr.) **(Ger)**

[Diagnostic usefulness of transbronchial aspiration and bronchial lavage for pulmonary tuberculosis] Watanabe K, et al. **Kekkaku** 1990 Mar;65(3):227–30 (Eng. Abstr.) **(Jpn)**

PARASITOLOGY

Recovery of Strongyloides stercoralis by bronchoalveolar lavage in a patient with acquired immunodeficiency syndrome. Schainberg L, et al. **Am J Med** 1989 Oct; 87(4):486

PATHOLOGY

Bronchoalveolar lavage in persons acutely exposed to dust in the farm environment. Bjermer L, et al. **Am J Ind Med** 1990;17(1):106

Investigation of bronchoalveolar lavage (BAL)–fluid in persons exposed to organic dusts. Müller S, et al. **Am J Ind Med** 1990;17(1):114–5

Bronchoalveolar lavage of pig farmers. Pedersen B, et al. **Am J Ind Med** 1990;17(1):118–9

Cathepsin D activity is increased in alveolar macrophages and bronchoalveolar lavage fluid of smokers. Chang JC, et al. **Am Rev Respir Dis** 1989 Oct;140(4):958–60

Studies of bronchoalveolar lavage cells and fluids in pulmonary sarcoidosis. I. Enhanced capacity of bronchoalveolar lavage cells from patients with pulmonary sarcoidosis to induce angiogenesis in vivo. Meyer KC, et al. **Am Rev Respir Dis** 1989 Nov;140(5):1446–9

Studies of bronchoalveolar lavage cells and fluids in pulmonary sarcoidosis. II. Enhanced capacity of bronchoalveolar lavage fluids from patients with pulmonary sarcoidosis to induce cell movement in vitro. Weber J, et al. **Am Rev Respir Dis** 1989 Nov;140(5):1450–4

Inflammatory responses in lungs of rats inhaling coalmine dust: enhanced proteolysis of fibronectin by bronchoalveolar leukocytes. Brown GM, et al. **Br J Ind Med** 1989 Dec;46(12):866–72

Bronchoalveolar lavage and morphology of the airways after cessation of exposure in asthmatic subjects sensitized to toluene diisocyanate. Paggiaro P, et al. **Chest** 1990 Sep; 98(3):536–42

Evaluation of a bronchoalveolar lavage technique [see comments] Fogarty U. **Equine Vet J** 1990 May;22(3):174–6 Comment in: Equine Vet J 1990 May;22(3):147–8.

Bronchoalveolar lavage in interstitial lung disease: effect of volume of fluid infused. Helmers RA, et al. **J Appl Physiol** 1989 Oct;67(4):1443–6

Value of bronchoalveolar lavage in interstitial lung diseases. Potdar PV, et al. **J Assoc Physicians India** 1989 Jul; 37(7):444–7 (21 ref.)

Changes in alveolar macrophage, monocyte, and neutrophil cell profiles after smoke inhalation injury. Riyami BM, et al. **J Clin Pathol** 1990 Jan;43(1):43–5

Effect of corticosteroid treatment on cell recovery by lung lavage in acute radiation–induced lung injury. Wesselius LJ, et al. **Radiat Res** 1989 Nov;120(2):313–22

The effect of filtration on absolute and differential cell counts in fluid obtained at bronchoalveolar lavage. Kelly C, et al. **Respir Med** 1989 Mar;83(2):107–10

Broncho–alveolar lavage—a window to the lung [editorial] Bateman ED, et al. **S Afr Med J** 1990 Jun 2;77(11):550–2

Is broncho–alveolar lavage a mirror of granulomas in the lung? Annie A, et al. **Sarcoidosis** 1989 Oct;6 Suppl 1:10–1

Pathogenic perspectives in the alveolitis of silicosis. Cordeiro R. **Sarcoidosis** 1989 Oct;6 Suppl 1:28–9

Bronchoalveolar lavage cell counts as a predictor of short term outcome in pulmonary sarcoidosis. Foley NM, et al. **Thorax** 1989 Sep;44(9):732–8

Transfer of 99mTc DTPA and bronchoalveolar lavage findings in patients with asymptomatic extrinsic allergic alveolitis. Schmekel B, et al. **Thorax** 1990 Jul;45(7):525–9

[Inflammatory cells in bronchial lavage fluid after general anesthesia and artificial respiration] Eliraz A, et al. **Harefuah** 1990 Feb 1;118(3):139–41 (Eng. Abstr.) **(Heb)**

[The role of bronchoalveolar lavage in the diagnostic evaluation of alveolo–septal diffuse pneumopathy] Perna A, et al. **Arch Monaldi Mal Torace** 1988 Sep–Oct; 43(5):423–34 (Eng. Abstr.) **(Ita)**

[Characteristic of cell components in bronchoalveolar lavage fluid (BALF) in patients with bronchial asthma classified by clinical symptoms] Tanizaki Y, et al. **Arerugi** 1990 Feb; 39(2 Pt 1):75–81 (Eng. Abstr.) **(Jpn)**

[Bronchoalveolar lavage fluid findings and lung function in psittacosis] Kurashima K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Nov; 27(11):1288–93 (Eng. Abstr.) **(Jpn)**

[Two cases of bronchiolitis obliterans organizing pneumonia, showing multiple infiltrative shadows, diagnosed by open lung biopsy, and a report of their BAL findings] Kusano S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Jan; 28(1):143–50 (Eng. Abstr.) **(Jpn)**

[Cell count and immunoglobulin level in the bronchoalveolar lavage fluid (BALF) in patients with sarcoidosis] Oklek K, et al. **Pneumonol Pol** 1990 Jan;58(1):17–25 (Eng. Abstr.) **(Pol)**

[Preliminary evaluation of the diagnostic usefulness of bronchoalveolar lavage (BAL) in selected cases of interstitial lung diseases] Zajączkowska J, et al. **Pneumonol Pol** 1989 Feb;57(2):92–9 (Eng. Abstr.) **(Pol)**

[The role of BAL in the process of decision making with regard to the treatment of sarcoidosis] Zaleska J, et al. **Pneumonol Pol** 1990 Apr–May;58(4–5):167–72 (Eng. Abstr.) **(Pol)**

[Bronchoalveolar lavage (BAL) in pulmonological diagnosis] Domagała–Kulawik J, et al. **Pol Arch Med Wewn** 1987 Mar; 77(3):116–22 **(Pol)**

[Cellular composition and T–lymphocyte subpopulations in the bronchoalveolar lavage fluid in patients with fibrosing alveolitis and pulmonary granulomatosis] Orlova GP, et al. **Klin Med (Mosk)** 1990 Jan;68(1):69–73 (Eng. Abstr.) **(Rus)**

[Cytologic and microbiological examination of bronchial contents in chronic lung diseases in children] Lishke AA, et al. **Vestn Khir** 1990 Jan;144(1):146–8 (13 ref.) **(Rus)**

[Interstitial pulmonary disease in plaster workers] Pérez Arellano JL, et al. **Rev Clin Esp** 1989 Jul–Aug; 185(3):136–40 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

[Theoretical basis and clinical assessment of fluid evacuation from the lungs during bronchoalveolar lavage in children] Soroka ND, et al. **Patol Fiziol Eksp Ter** 1989 Jul–Aug; (4):40–4 (Eng. Abstr.) **(Rus)**

VETERINARY

An improved method of bronchoalveolar lavage of lungs of small laboratory animals: short report. Van Soolingen D, et al. **Lab Anim** 1990 Jul;24(3):197–9

BRONCHODILATOR AGENTS

Bronchodilator action of inhaled fenoterol and ipratropium in normal subjects: a teaching exercise for medical students. Taylor RG, et al. **Br J Clin Pharmacol** 1989 Dec; 28(6):709–13

Evaluation of inhaled cromakalim and its active enantiomer BRL 38277 as bronchodilators in the guinea–pig. Bowring NE, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:805P

Bronchodilator activity of atrial natriuretic peptide in guinea pigs. Potvin W, et al. **Can J Physiol Pharmacol** 1989 Oct; 67(10):1213–8

Formoterol, a new long–acting selective beta 2–agonist, decreases airway responsiveness in children with asthma. Becker AB, et al. **Lung** 1990;168 Suppl:99–102

Characteristics of bronchodilating activity of formoterol. Clauzel AM. **Lung** 1990;168 Suppl:71–5

Long–term efficacy of formoterol compared to salbutamol. Hekking PR, et al. **Lung** 1990;168 Suppl:76–82

Multicenter 1–year trial on formoterol, a new long–acting beta 2–agonist, in chronic obstructive airway disease.

Schultze-Werninghaus G. **Lung** 1990;168 Suppl:83–9
Efficacy of formoterol metered aerosol in children. von Berg A, et al. **Lung** 1990;168 Suppl:90–8
Formoterol and salbutamol metered aerosols: comparison of a new and an established beta-2-agonist for their bronchodilating efficacy in the treatment of childhood bronchial asthma. von Berg A, et al. **Pediatr Pulmonol** 1989; 7(2):89–93
Broxaterol: pharmacological profile of a unique structural feature. Della Bella D. **Respiration** 1989;55 Suppl 2:10–4 (8 ref.)

ADMINISTRATION & DOSAGE

Breaking bronchospasm's grip with MDIs. Lindell KO, et al. **Am J Nurs** 1990 Mar;90(3):34–9
Use and misuse of metered-dose inhalers by patients with chronic lung disease. A controlled, randomized trial of two instruction methods [see comments] De Blaquiere P, et al. **Am Rev Respir Dis** 1989 Oct;140(4):910–6 Comment in: Am Rev Respir Dis 1990 Jun;141(6):1603.
Bronchodilators in patients with chronic obstructive pulmonary disease on mechanical ventilation. Utilization of metered-dose inhalers. Fernandez A, et al. **Am Rev Respir Dis** 1990 Jan;141(1):164–8
Comparison of safety and efficacy of inhaled pirbuterol with metaproterenol. Tinkelman DG, et al. **Ann Allergy** 1990 Feb;64(2 Pt 2):202–6
Pressure flow characteristics of the valve in spacer devices [see comments] Sennhauser FH, et al. **Arch Dis Child** 1989 Sep;64(9):1305–7 Comment in: Arch Dis Child 1990 Jan;65(1):159.
Effective bronchodilator treatment by a simple spacer device for wheezy premature infants. Yuksel B, et al. **Arch Dis Child** 1990 Jul;65(7):782–5
Discharging of asthma patients [letter; comment] **Chest** 1989 Oct;96(4):953–5 Comment on: Chest 1988 Dec;94(6):1205–10.
Comparison of the intensity and duration of effects of inhaled bitolterol and albuterol on airway caliber and airway responsiveness to histamine. Harris JB, et al. **J Allergy Clin Immunol** 1990 Jun;85(6):1043–9
Clinical management update: asthma. Edmondstone WM. **J R Nav Med Serv** 1989 Summer;75(2):105–12 (9 ref.)
Can a new beta 2-agonist reduce the mortality of asthma? Aldons PM. **Lung** 1990;168 Suppl:186–91
Acute and long-term effectiveness of tulobuterol inhaler, a new beta 2-agonist, in the treatment of asthma. Charpin D. **Lung** 1990;168 Suppl:194–201
The adult patient's difficulties with inhalers. Crompton GK. **Lung** 1990;168 Suppl:658–62 (19 ref.)
Prolonged treatment with oral and inhaled tulobuterol does not induce airways tachyphlaxis. Patel KR. **Lung** 1990;168 Suppl:210–8
Use of different inhalation devices in children. Pedersen S, et al. **Lung** 1990;168 Suppl:653–7
Effects of a combined treatment theophylline and tulobuterol on nocturnal chronic asthma. Rühle KH, et al. **Lung** 1990; 168 Suppl:192–3
Delivery of prevention and care to asthmatic children. Taytard A. **Lung** 1990;168 Suppl:256–62 (17 ref.)
Two-month comparative study of tulobuterol aerosol versus fenoterol aerosol in patients with chronic obstructive lung disease. Werdermann K. **Lung** 1990;168 Suppl:202–9
Pressurised aerosol inhalers [letter] Knowles FW. **N Z Med J** 1989 Jul 26;102(872):387
The use of water as a diluent for bronchodilator nebuliser solutions. Kwong T, et al. **N Z Med J** 1990 Jun 27; 103(892):290–1
Antiasthmatic therapy in children. Weinberger M. **Pediatr Clin North Am** 1989 Oct;36(5):1251–84 (150 ref.)
More concerning asthma and exercise [letter; comment] Altenburger KM. **Pediatrics** 1990 Mar;85(3):385–6 Comment on: Pediatrics 1989 Aug;84(2):392–3.
Prescribing of nebulized bronchodilators—can we change bad habits? Craig IR, et al. **Respir Med** 1989 Jul;83(4):333–4
A study of the duration of the bronchodilator effect of 12 micrograms and 24 micrograms of inhaled formoterol and 200 micrograms inhaled salbutamol in asthma. Sykes AP, et al. **Respir Med** 1990 Mar;84(2):135–8
Inhibition of fog-induced bronchoconstriction by nedocromil sodium and sodium cromoglycate in intrinsic asthma: a double-blind, placebo-controlled study. del Bufalo C, et al. **Respiration** 1989;55(3):181–5
Effect of theophylline and enprofylline on bronchial hyperresponsiveness. Koëter GH, et al. **Thorax** 1989 Dec; 44(12):1022–6
[An adapter for the intratracheal administration of a bronchodilator in intubated patients] Hruby J. **Anaesthesist** 1990 May;39(5):279 (Eng. Abstr.) **(Ger)**
[Aerosol therapy in obstructive respiratory tract diseases: deposition, administration methods, inhalation technics, inhalation aids] Niggemann B. **Ergeb Inn Med Kinderheilkd** 1989;59:169–212 (260 ref.) **(Ger)**
[Nedocromil sodium therapy in asthma patients. Therapeutic effect in addition to treatment with oral theophylline and inhaled bronchodilator agents] Boos R, et al. **Fortschr Med** 1989 Nov 20;107(33):712–6 (Eng. Abstr.) **(Ger)**
[Inhalation therapy with selective beta 2-sympathomimetic drugs. Effect of pirbuterol administered via the Autohaler and salbutamol administered via the Diskhaler in obstructive respiratory tract disease] Hoffarth HP, et al. **Fortschr Med** 1990 Mar 20;108(8):162–4 (Eng. Abstr.) **(Ger)**
[A new inhalation system for bronchodilatation. Study of the acceptance of the Ingelheim M inhaler in chronic obstructive respiratory tract diseases] Mütterlein R, et al. **Fortschr Med** 1990 Apr 15;108(11):225–8 (Eng. Abstr.) **(Ger)**
[Chronopharmacology—significance for clinical treatment?] Lemmer B. **Klin Wochenschr** 1989 Sep 15;67(18):963–5 (22 ref.) **(Ger)**
[Obstructive respiratory tract diseases. Diagnosis and principles of therapy] Heinl KW. **Med Monatsschr Pharm** 1989 Nov;12(11):338–43 (30 ref.) **(Ger)**
[Inhalation treatment of obstructive bronchitis in infants and young children with bronchodilator agents] Hüls G, et al. **Pneumologie** 1990 Feb;44 Suppl 1:273–4 (Eng. Abstr.) **(Ger)**
[Oral therapy with beta-2-sympathomimetic drugs: comparative study of the bronchospasmolytic effect of tulobuterol and fenoterol in patients with reversible airway obstruction] Morr H, et al. **Pneumologie** 1990 Apr; 44(4):739–43 (Eng. Abstr.) **(Ger)**
[Lung function values in inhalative provocation with allergens. In immediate reactions, delayed reactions and bronchospasmolysis] Stein D. **Pneumologie** 1990 Feb;44 Suppl 1:368–70 (Eng. Abstr.) **(Ger)**
[Effectiveness of various inhalation aids in children with bronchial asthma] Schöni MH, et al. **Schweiz Med Wochenschr** 1989 Nov 18;119(46):1636–7 (Eng. Abstr.) **(Ger)**
[A technical inhalation test variant for improving the effectiveness of the use of dose aerosols] Gregori P. **Z Erkr Atmungsorgane** 1990;174(3):190–5 (Eng. Abstr.) **(Ger)**
[Bronchospasmolytic test] Wenzel D, et al. **Z Erkr Atmungsorgane** 1990;174(1):32–7 (Eng. Abstr.) **(Ger)**
[Practical problems of the treatment of asthma] Chmielewska D, et al. **Pneumonol Pol** 1990 Jan;58(1):59–71 **(Pol)**
[Characteristics and results of rehabilitation of patients with chronic obstructive bronchitis at a specialized department] Potashov DA, et al. **Probl Tuberk** 1990;(3):62–6 **(Rus)**
[The treatment of bronchial asthma patients with intrapulmonary injections of metipred and finoptin using a needle jet injector] Provotorov VM, et al. **Vrach Delo** 1990 Mar;(3):34–5 **(Rus)**

ADVERSE EFFECTS

Hypophosphatemia complicating bronchodilator therapy for acute severe asthma. Brady HR, et al. **Arch Intern Med** 1989 Oct;149(10):2367–8
The pulmonary and extrapulmonary effects of inhaled beta-agonists in patients with asthma. Windom HH, et al. **Clin Pharmacol Ther** 1990 Sep;48(3):296–301
Effect of mequitazine on the pharmacokinetics of theophylline in asthmatic patients. Hasegawa T, et al. **Eur J Clin Pharmacol** 1990;38(3):255–8
Mechanism for the emetic side effect of xanthine bronchodilators. Howell RE, et al. **Life Sci** 1990; 46(8):563–8
Cardiovascular and hypokalaemic effects of inhaled salbutamol, fenoterol, and isoprenaline [letter; comment] Larsson K, et al. **Thorax** 1989 Sep;44(9):767–8 Comment on: Thorax 1989 Feb;44(2):136–40.
[Inhaled steroids and growth disorders (letter)] Møller NE. **Ugeskr Laeger** 1990 Jul 9;152(28):2058 **(Dan)**
[Interactions of levodropropizine and bronchodilator drugs on respiratory muscle activity in healthy subjects] Bejor M, et al. **Riv Eur Sci Med Farmacol** 1988 Nov;10(5):377–81 (Eng. Abstr.) **(Fre)**
[Cardiac arrhythmia in patients with chronic obstructive lung disease and therapy] Klitzke AK, et al. **Pneumologie** 1990 Feb;44 Suppl 1:536–7 (Eng. Abstr.) **(Ger)**
[Adverse reactions caused by drugs in pediatrics] Vázquez de la Villa A, et al. **An Esp Pediatr** 1989 Jul;31(1):49–53 (Eng. Abstr.) **(Spa)**

ANALYSIS

Determination of bambuterol, a prodrug of terbutaline, in plasma and urine by gas chromatography/mass spectrometry. Lindberg C, et al. **Biomed Environ Mass Spectrom** 1990 Apr;19(4):218–24
Osmolality changes in nebulizer solutions. Schöni MH, et al. **Eur Respir J** 1989 Oct;2(9):887–92
Use of cyclic boronates for GC/MS screening and quantitation of beta-adrenergic blockers and some bronchodilators. Zamecnik J. **J Anal Toxicol** 1990 Mar-Apr;14(2):132–6

CHEMICAL SYNTHESIS

Development of a novel series of (2-quinolinylmethoxy)phenyl-containing compounds as high-affinity leukotriene D4 receptor antagonists. 2. Effects of an additional phenyl ring on receptor affinity. Huang FC, et al. **J Med Chem** 1990 Apr;33(4):1194–200
Effect of structure on potency and selectivity in 2,6-disubstituted 4-(2-arylethenyl)phenol lipoxygenase inhibitors. Lazer ES, et al. **J Med Chem** 1990 Jul; 33(7):1892–8
A novel series of selective leukotriene antagonists: exploration and optimization of the acidic region in 1,6-disubstituted indoles and indazoles. Yee YK, et al. **J Med Chem** 1990 Sep;33(9):2437–51
Development of a novel series of (2-quinolinylmethoxy)phenyl-containing compounds as high-affinity leukotriene receptor antagonists. 1. Initial structure-activity relationships. Youssefyeh RD, et al. **J Med Chem** 1990 Apr;33(4):1186–94
[Synthesis and bronchodilator action of 4-(methoxycarbonylalkylsulfinyl)-4-pyrrol carboxylic esters] Eiden F, et al. **Arch Pharm (Weinheim)** 1989 Nov; 322(11):807–10 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

[Differential diagnosis possibilities of the bronchodilation test in the classification of bronchial asthma according to type] Hamzagić H. **Med Arh** 1984;38(4):163–6 (Eng. Abstr.) **(Scr)**

IMMUNOLOGY

Production and characterization of monoclonal antibodies to N-acetyl-aspartyl-glutamate. Frondoza CG, et al. **J Histochem Cytochem** 1990 Apr;38(4):493–502

PHARMACOKINETICS

Pharmacokinetics of bamifylline during chronic therapy. Segre G, et al. **Arzneimittelforschung** 1990 Apr;40(4):450–2
Bioequivalence of generic aerosol bronchodilators: what are the issues? Spino M. **Can Med Assoc J** 1989 Nov 1; 141(9):883–7
Doxofylline in rat brain in relation to locomotor activity. Cravanzola C, et al. **Drug Metab Dispos** 1989 Jul-Aug; 17(4):437–40
[Enhanced percutaneous absorption of formoterol fumarate via pulsed iontophoresis. I. Effect of constant current and constant voltage] Sudeji K, et al. **Yakugaku Zasshi** 1989 Oct;109(10):766–70 (Eng. Abstr.) **(Jpn)**
[Enhanced percutaneous absorption of formoterol fumarate via pulsed iontophoresis. II. Effect of polarity, pulse frequency and duty] Sudeji K, et al. **Yakugaku Zasshi** 1989 Oct;109(10):771–7 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Effects of N-acetyl-aspartyl glutamic acid and sodium cromoglycate on leukotriene B4 secretion by human leukocytes. Goldschmidt PL, et al. **Allergy** 1990 Jul; 45(5):363–9
Protease inhibitors potentiate smooth muscle relaxation induced by vasoactive intestinal peptide in isolated human bronchi. Tam EK, et al. **Am J Respir Cell Mol Biol** 1990 May;2(5):449–52
Effects of ketamine on isolated human bronchial preparations. Gateau O, et al. **Br J Anaesth** 1989 Dec;63(6):692–5
Bronchodilator and tracheal relaxant effects of potassium channel openers in the guinea-pig. De Souza RN, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:803P
Evaluation of the bronchodilator properties of Ro 31-6930, a novel potassium channel opener, in the guinea-pig. Paciorek PM, et al. **Br J Pharmacol** 1990 Jun;100(2):289–94
LG 30435, a new potential antiasthmatic agent. Berti F, et al. **Eur Respir J** 1989 Oct;2(9):868–73
Effect of bronchodilators on surfactant system of lung. Rao GJ, et al. **Indian J Med Res** 1989 Aug;90:266–9
Effects of the methyl xanthine S 9795 on isolated bronchi of the dog. Busk MF, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):1045–53
Effects of anticholinergic bronchodilators on mucociliary transport and airway secretion. Miyata T, et al. **Jpn J Pharmacol** 1989 Sep;51(1):11–5
Beta-agonistic properties of tulobuterol, a new beta-sympathicomimetic drug, and its effects on pulmonary beta-adrenoceptor characteristics. Terpstra GK, et al. **Lung** 1990;168 Suppl:179–85
A comparison of the haemodynamic and hypokalaemic effects of inhaled pirbuterol and salbutamol. Windom H, et al. **N Z Med J** 1990 Jun 13;103(891):259–61
Pharmacological activity of bamifylline on lung anaphylaxis: in vitro studies. Berti F, et al. **Pharmacol Res** 1990 Mar-Apr;22(2):143–50
[Measurement of the effect of a bronchodilator agent] Fitting JW. **Schweiz Rundsch Med Prax** 1990 May 29;79(22):688–90 (Eng. Abstr.) **(Fre)**
[The clinical pharmacology of drugs for the therapy of the broncho-obstructive syndrome] Zaitsev AA, et al. **Farmakol Toksikol** 1990 May-Jun;53(3):80–3 (21 ref.) (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Topical respiratory therapy. Lawrence ID, et al. **Adv Intern Med** 1990;35:27–43 (53 ref.)
Lung Health Study [editorial] Anthonisen NR. **Am Rev Respir Dis** 1989 Oct;140(4):871–2
Evaluation of the safety and efficacy of multiple doses of azelastine to adult patients with bronchial asthma over time. Tinkelman DG, et al. **Am Rev Respir Dis** 1990 Mar; 141(3):569–74
Mequitazine in the treatment of hayfever. Beaumont G, et al. **Br J Clin Pract** 1990 May;44(5):183–8
Assessment and treatment of obstructive airways disease in

the elderly. Dow I, et al. **Br Med Bull** 1990 Jan; 46(1):230–45 (44 ref.)

Tolerance to beta 2–agonists in patients with chronic obstructive pulmonary disease. Georgopoulos D, et al. **Chest** 1990 Feb;97(2):280–4

Cholinergic bronchomotor tone in COPD. Estimates of its amount in comparison with that in normal subjects. Gross NJ, et al. **Chest** 1989 Nov;96(5):984–7

Bronchodilator effect of inhaled formoterol vs salbutamol over 12 hours. Maesen FP, et al. **Chest** 1990 Mar; 97(3):590–4

Doxofylline and respiratory mechanics. Short–term effects in mechanically ventilated patients with airflow obstruction and respiratory failure. Poggi R, et al. **Chest** 1989 Oct; 96(4):772–8

Twelve hours' bronchodilating effect of inhaled formoterol in children with asthma: a double–blind cross–over study versus salbutamol. Graff–Lonnevig V, et al. **Clin Exp Allergy** 1990 Jul;20(4):429–32

Diagnosis and management of asthma. Bernstein MS, et al. **Compr Ther** 1989 Dec;15(12):53–60 (26 ref.)

Effect of positions, eating, and bronchodilators on gastroesophageal reflux in asthmatics. Sontag SJ, et al. **Dig Dis Sci** 1990 Jul;35(7):849–56

A trial of inhaled budesonide on airway responsiveness in smokers with chronic bronchitis. Engel T, et al. **Eur Respir J** 1989 Nov;2(10):935–9

Comparison between theophylline and an adenosine non–blocking xanthine in acute asthma. Vilsvik JS, et al. **Eur Respir J** 1990 Jan;3(1):27–32

Most asthmatics have gastroesophageal reflux with or without bronchodilator therapy. Sontag SJ, et al. **Gastroenterology** 1990 Sep;99(3):613–20

A comparison of enprofylline and theophylline in the maintenance therapy of chronic reversible obstructive airway disease. Chapman KR, et al. **J Allergy Clin Immunol** 1990 Feb;85(2):514–21

Asthma—a therapeutic challenge [clinical conference] Kearl GW, et al. **J Fam Pract** 1989 Oct;29(4):363–6

Nocturnal asthma: a study in general practice. Turner–Warwick M. **J R Coll Gen Pract** 1989 Jun; 39(323):239–43

Are you taking the medicine? [editorial] **Lancet** 1990 Feb 3;335(8684):262–3

Attenuation of nocturnal asthma by cromakalim. Williams AJ, et al. **Lancet** 1990 Aug 11;336(8711):334–6

Tibenelast, 5,6–diethoxybenzo(B)thiophene–2–carboxylic acid, sodium salt (LY186655), is an orally active anti–asthma compound in the guinea pig. Ho PP, et al. **Life Sci** 1990;46(13):917–25

The role of anticholinergic bronchodilators in adult asthma and chronic obstructive pulmonary disease. Chapman KR. **Lung** 1990;168 Suppl:295–303 (35 ref.)

Pharmacology of airway inflammation in asthma. Chung KF. **Lung** 1990;168 Suppl:132–41 (50 ref.)

Effect of antiasthma drugs on asthmatic reactions induced by toluene diisocyanate in sensitized subjects. Fabbri LM. **Lung** 1990;168 Suppl:128–31

Long–term drug treatment of asthma in children. Kerrebijn KF. **Lung** 1990;168 Suppl:142–53 (65 ref.)

Long–term management of reversible obstructive airways disease in adults. Lurie A, et al. **Lung** 1990;168 Suppl:154–67 (89 ref.)

Acute viral bronchiolitis in infancy: epidemiology and management. Nicolai T, et al. **Lung** 1990;168 Suppl:396–405 (48 ref.)

The role of anticholinergic antimuscarinic bronchodilator therapy in children. Silverman M. **Lung** 1990;168 Suppl:304–9 (37 ref.)

Drug therapy for bronchopulmonary dysplasia. Davis JM, et al. **Pediatr Pulmonol** 1990;8(2):117–25 (85 ref.)

Longitudinal response of pulmonary function to bronchodilators in cystic fibrosis. Pattishall EN. **Pediatr Pulmonol** 1990;9(2):80–5

Attenuation of acute lung injury in septic guinea–pigs by a new xanthine derivative (HWA–138). Hatherill JR, et al. **Pharmatherapeutica** 1989;5(6):407–15

Bronchodilators for patients with ischemic heart disease. How to avoid complications [published erratum appears in Postgrad Med 1990 Feb 1;87(2):30] Myers KE, et al. **Postgrad Med** 1989 Oct;86(5):324–6 (5 ref.)

Asthma spoils sport for too many children. Croft D, et al. **Practitioner** 1989 Jul 8;233(1472):969, 971

Asthma. Hill L. **Practitioner** 1989 Sep 8;233(1474):1174, 1176–7

Long term haemodynamic, pulmonary function and symptomatic effects of pirbuterol in COPD. Neilly JB, et al. **Respir Med** 1989 Jan;83(1):59–65

Remarks on broxaterol. Allegra L. **Respiration** 1989;55 Suppl 2:41–3

Today's treatment of airway obstruction ... and tomorrow's? Flenley DC. **Respiration** 1989;55 Suppl 2:4–9 (8 ref.)

Treatment of patients with airflow obstruction by general practitioners and chest physicians. van Schayck CP, et al. **Scand J Prim Health Care** 1989 Oct;7(3):137–42

Status asthmaticus in a medical intensive care. Lim TK. **Singapore Med J** 1989 Aug;30(4):334–8

The use of baselines in clinical trials of bronchodilators. Senn SJ. **Stat Med** 1989 Nov;8(11):1339–50 (21 ref.)

The response pattern of patients with chronic airway obstruction to bronchodilators. Yang SC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jul;88(7):700–6

Changes in maximum expiratory flow–volume curve configuration after treatment with inhaled corticosteroids. Kraan J, et al. **Thorax** 1989 Dec;44(12):1015–21

Treatment of adult asthma: is the diagnosis relevant? Littlejohns P, et al. **Thorax** 1989 Oct;44(10):797–802

[Bronchodilatation and anticholinergic agents] Tschopp JM. **Schweiz Rundsch Med Prax** 1990 May 29;79(22):698–9 (19 ref.) (Eng. Abstr.) **(Fre)**

[Efficacy and long–term tolerance of beta–2 adrenergic stimulants] Zellweger JP. **Schweiz Rundsch Med Prax** 1990 May 29;79(22):691–3 (26 ref.) (Eng. Abstr.) **(Fre)**

[Expectorants, antitussive agents, bronchospasmolytic agents. Therapy of obstructive respiratory tract diseases] Haen E. **Med Monatsschr Pharm** 1989 Nov;12(11):344–55 (18 ref.) **(Ger)**

[A strategy of drug treatment of obstructive respiratory tract diseases] Slapke J, et al. **Z Arztl Fortbild (Jena)** 1989; 83(17):857–9 (10 ref.) **(Ger)**

[Duration of the therapeutic effect of a beta 2 stimulant (procaterol hydrochloride) in patients with asthmatiform bronchopathies] Cammarata A, et al. **Arch Monaldi Mal Torace** 1988 Mar–Apr;43(2):131–40 (Eng. Abstr.) **(Ita)**

[Bamifylline in the treatment of chronic bronchial obstruction: a controlled clinico–functional study versus an anhydrous theophylline administered once a day] Caputi M, et al. **Arch Monaldi Mal Torace** 1988 Sep–Oct; 43(5):409–21 (Eng. Abstr.) **(Ita)**

[Bamifylline in the therapy of asthmatic syndromes. Efficacy and side effects vs delayed–action theophylline anhydride] Alciato P, et al. **Minerva Med** 1990 Jan–Feb;81(1–2):93–7 (Eng. Abstr.) **(Ita)**

[What is troventol?] Sirotin EA. **Ter Arkh** 1990;62(3):151–2 **(Rus)**

[Troventol treatment of patients with bronchial asthma and obstructive bronchitis] Goriachkina LA, et al. **Vrach Delo** 1989 Aug;(8):40–1 **(Rus)**

[Treatment of status asthmaticus. Experience of intravenous beta–adrenergic bronchodilator therapy in 71 cases] Escribano Subias J, et al. **An Esp Pediatr** 1989 Nov; 31(5):435–9 (Eng. Abstr.) **(Spa)**

BRONCHOGENIC CYST

[Bronchogenic cyst of the esophagus] Davydov MI, et al. **Grudn Khir** 1989 Nov–Dec;(6):92–4 **(Rus)**

BLOOD

Bronchogenic lung cyst with elevated serum type I chain related carbohydrate antigens, CA19–9, CA50 and FH–7. Sugano K, et al. **Jpn J Clin Oncol** 1990 Jun;20(2):182–7

COMPLICATIONS

Bronchogenic cyst with tracheal involvement. Yerman HM, et al. **Ann Otol Rhinol Laryngol** 1990 Feb;99(2 Pt 1):89–93

[A case of malignant pleural mesothelioma with infectious bronchogenic cyst] Shibata M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Sep; 27(9):1100–5 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Congenital bronchial cyst. Swarnakar M, et al. **Indian J Chest Dis Allied Sci** 1989 Oct–Dec;31(4):279–82

DIAGNOSIS

Mediastinal bronchogenic cyst. Wiatrak BJ, et al. **Ann Otol Rhinol Laryngol** 1990 May;99(5 Pt 1):413–5

ETIOLOGY

Intrapulmonary bronchogenic cyst: spontaneous dissolution? Shin MS, et al. **Ala Med** 1990 Apr;59(10):20–2

PATHOLOGY

Intraspinal bronchogenic cyst: ultrastructural study of the lining epithelium. Ho KL, et al. **Acta Neuropathol (Berl)** 1989;78(5):513–20

Cutaneous bronchogenic cyst. Muramatsu T, et al. **Int J Dermatol** 1990 Mar;29(2):143–4

RADIOGRAPHY

Bronchogenic cysts. Buckner CB, et al. **Am Fam Physician** 1989 Oct;40(4):167–72

Back pain with a congenital cyst of the esophagus. Huff WD, et al. **J Am Board Fam Pract** 1989 Oct–Dec;2(4):275–8

[Bronchogenic cysts of the mediastinum] Zingaretti C, et al. **Minerva Chir** 1989 Sep 30;44(18):2033–6 (Eng. Abstr.) **(Ita)**

[Radiologic manifestation of bronchogenic cyst] Shimoyama H, et al. **Rinsho Hoshasen** 1989 Jul;34(7):815–8 (Eng. Abstr.) **(Jpn)**

SURGERY

Bronchogenic cysts in children. Bosmans E, et al. **Acta Chir Belg** 1989 Nov–Dec;89(6):312–5

CT–guided extrapleural drainage of bronchogenic cyst. Adam A, et al. **J Comput Assist Tomogr** 1989 Nov–Dec; 13(6):1065–8

Bronchogenic cysts. Di Lorenzo M, et al. **J Pediatr Surg** 1989 Oct;24(10):988–91

[A case of double bronchogenic cysts in the mediastinum] Ohbayashi T, et al. **Kyobu Geka** 1990 Jun;43(6):487–90 (Eng. Abstr.) **(Jpn)**

[Intrapericardial bronchogenic cyst—a report of two surgical cases] Ohno K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Apr;38(4):660–6 (23 ref.) (Eng. Abstr.) **(Jpn)**

THERAPY

Central bronchogenic cyst: treatment by extrapleural percutaneous aspiration [clinical conference] Whyte MK, et al. **BMJ** 1989 Dec 9;299(6713):1457–8

BRONCHOGRAPHY

The effect of Hexabrix tracheobronchography on the ultrastructure of the airway epithelium. Konrádová V, et al. **Pediatr Radiol** 1990;20(6):440–3

Bronchography in the assessment of patients with lung collapse for endoscopic laser therapy. George PJ, et al. **Thorax** 1990 Jul;45(7):503–8

Comparison of thin section computed tomography with bronchography for identifying bronchiectatic segments in patients with chronic sputum production. Munro NC, et al. **Thorax** 1990 Feb;45(2):135–9

[Lung granulomas caused by bronchography with iodized, soluble contrast media solutions] Kiesler J, et al. **Pathologe** 1990 Jan;11(1):10–3 **(Ger)**

[Transitory bacteremia in bronchologic–biopsy procedures] Dürschmied H, et al. **Pneumologie** 1990 Feb;44 Suppl 1:208–9 (Eng. Abstr.) **(Ger)**

["Pneumonia following bronchography"] Maassen W. **Pneumologie** 1989 Oct;43(10):553–4 **(Ger)**

[The effect of bronchologic studies on blood gases and hemodynamics in children] Wunderlich P, et al. **Z Erkr Atmungsorgane** 1989;173(3):222–8 (Eng. Abstr.) **(Ger)**

[Laboratory diagnostic monitoring of blood gas parameters in children during bronchologic studies] Zöllner H, et al. **Z Erkr Atmungsorgane** 1990;174(2):126–30 (Eng. Abstr.) **(Ger)**

[Bronchography in children. Methodologic, statistical and functional findings] Castello D, et al. **Minerva Pediatr** 1989 Aug;41(8):405–12 (Eng. Abstr.) **(Ita)**

[Airbronchogram sign in small peripheral bronchogenic carcinomas] Kuriyama K, et al. **Rinsho Hoshasen** 1990 Feb; 35(2):189–93 (Eng. Abstr.) **(Jpn)**

[Thin–section computed tomography of the bronchi: right middle lobe, left lingular division, and lower lobes] Matsuoka Y, et al. **Rinsho Hoshasen** 1989 Jul;34(7):799–803 (Eng. Abstr.) **(Jpn)**

[Clear visualization of the tracheobronchial tree in complex congenital heart disease using digital subtraction fluorography] Shiba N, et al. **Rinsho Hoshasen** 1990 Feb; 35(2):259–63 (Eng. Abstr.) **(Jpn)**

[The x–ray diagnosis of the functional disorder of bronchial patency in chronic bronchitis] Mamiliaev RM, et al. **Probl Tuberk** 1989;(12):31–5 (Eng. Abstr.) **(Rus)**

HISTORY

Peripheral bronchographic morphology in the normal human lung 1971 [classical article] Gamsu G, et al. **Invest Radiol** 1990 Apr;25(4):392–401

METHODS

Peripheral bronchial involvement in relapsing polychondritis: demonstration by thin–section CT. Davis SD, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):953–4

The anterior wall stripe of the left lower lobe bronchus on the lateral chest radiograph: CT correlative study. Lang EV, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):33–9

An experimental study of the tissue reaction to the vehicles commonly used in bronchography. Christoforidis AJ, et al. **Am Rev Respir Dis** 1967 Aug;96(2):249–53

Three–dimensional CT of the bronchial tree. A trial using an inflated fixed lung specimen. Kitaoka H, et al. **Invest Radiol** 1990 Jul;25(7):813–7

Three–dimensional CT–volumetric reconstruction and display of the bronchial tree. Ney DR, et al. **Invest Radiol** 1990 Jun;25(6):736–42

Suitability of and tolerance to lotrolan 300 in bronchography via the fibreoptic bronchoscope. Morcos SK, et al. **Thorax** 1990 Aug;45(8):628–9

[Methodology of digital processing of bronchograms] Mamiljaev RM, et al. **Radiol Diagn (Berl)** 1990;31(3):231–6 (Eng. Abstr.) **(Ger)**

[Possibilities of the use of a non–ionic tri–iodinated contrast medium (iohexol) in bronchography and alveolography] Sada E. **Radiol Med (Torino)** 1989 Sep;78(3):185–9 (Eng. Abstr.) **(Ita)**

[A method of digital processing of bronchograms] Mamiliaev RM, et al. **Med Tekh** 1989 Jul–Aug;(4):52–5 (Eng. Abstr.) **(Rus)**

[Experience with the use of bronchography under local anesthesia in children] Orlov AV, et al. **Vestn Rentgenol Radiol** 1989 May–Jun;(3):88–90 **(Rus)**

BRONCHOPNEUMONIA

COMPLICATIONS

Terbutaline in wheezing infants [letter] Raghuveer TS, et al. **Indian Pediatr** 1989 Jul;26(7):729

DIAGNOSIS

[Adenovirus infection with hemorrhagic cystitis and pneumonia. Pathogen confirmation in urine by genome hybridization] Schuster V, et al. **Monatsschr Kinderheilkd** 1990 Jul;138(7):392–4 (Eng. Abstr.) **(Ger)**

[A case of pulmonary form of Nocardia infection] Gandybin AA, et al. **Klin Med (Mosk)** 1990 Feb;68(2):117–8 **(Rus)**

[A pneumonic type of tuberculosis in a 15-year-old girl] Martinović J, et al. **Srp Arh Celok Lek** 1987 Apr; 115(4):461–6 (Eng. Abstr.) **(Scc)**

DRUG THERAPY

Amphotericin B–related thrombocytopenia. A report of two cases. Charak BS, et al. **J Assoc Physicians India** 1990 Mar; 38(3):235–6

[Therapy of acute non-tubercular bronchopulmonary infections with josamycin] Baroni M, et al. **Clin Ter** 1989 Aug 15–31;130(3–4):185–9 (Eng. Abstr.) **(Ita)**

EPIDEMIOLOGY

[Virologic and serologic observations in an outbreak of infantile bronchopneumonitis] Yao K. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Oct; 10(5):274–6 (Eng. Abstr.) **(Chi)**

ETIOLOGY

[Amiodarone and radiotherapy. Remarks on a case of post-actinic pneumopathy] Beorchia A, et al. **Radiol Med (Torino)** 1989 Nov;78(5):519–21 **(Ita)**

[An unusual cause of pneumonia] Zechowicz T, et al. **Pneumonol Pol** 1989 Jul–Sep;57(7–9):429–30 **(Pol)**

[Etiology of acute lower respiratory tract infections in hospitalized infants: virologic studies] Escobar AM, et al. **Rev Chil Pediatr** 1988 Nov–Dec;59(6):349–53 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Moraxella (Branhamella) catarrhalis bacteremia. A case report and literature review. Wallace MR, et al. **Arch Intern Med** 1990 Jun;150(6):1332–4 (46 ref.)

[Bronchopneumonia caused by Chlamydia trachomatis in the premature infant] Vilanova Juanola JM, et al. **An Esp Pediatr** 1989 Aug;31(2):152–4 **(Spa)**

PATHOLOGY

Abnormal alveolar epithelial repair associated with failure of resolution in experimental streptococcal pneumonia. Rhodes GC, et al. **J Pathol** 1989 Nov;159(3):245–53

[A rarely encountered morphological variant of histiocytes in the sputum of a patient with acute bronchopneumonia] Ronin VS, et al. **Lab Delo** 1990;(2):74–5 **(Rus)**

RADIOTHERAPY

[The efficacy of using laser therapy in acute segmental bronchopneumonia in young children] Prakhin EI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Nov–Dec; (6):44–5 **(Rus)**

VETERINARY

Necrotizing viral bronchopneumonia in guinea pigs. Feldman SH, et al. **Lab Anim Sci** 1990 Jan;40(1):82–3

Pneumonia in mice produced by cell-free extract of cultures of Bordetella parapertussis. Chen W, et al. **Res Vet Sci** 1990 Jan;48(1):18–22

[Examination of cattle with respiratory diseases for Mycoplasma and bacterial bronchopneumonia agents] Binder A, et al. **Zentralbl Veterinarmed [B]** 1990 Aug; 37(6):430–5 (Eng. Abstr.) **(Ger)**

BRONCHOPULMONARY ASPERGILLOSIS see **ASPERGILLOSIS, ALLERGIC BRONCHOPULMONARY**

BRONCHOPULMONARY DYSPLASIA

Bronchopulmonary dysplasia. Goldson E. **Pediatr Ann** 1990 Jan;19(1):13–8 (11 ref.)

[Bronchopulmonary dysplasia: 1. Pathogenesis and complications] Kohelet D, et al. **Harefuah** 1990 Mar 15; 118(6):349–52 (39 ref.) **(Heb)**

BLOOD

Plasma retinol–binding protein response to vitamin A administration in infants susceptible to bronchopulmonary dysplasia. Shenai JP, et al. **J Pediatr** 1990 Apr; 116(4):607–14

Serum triglyceride concentrations in infants with bronchopulmonary dysplasia [letter] White RD. **J Pediatr** 1990 Mar;116(3):494

Elevated levels of fetal hemoglobin synthesis in infants with bronchopulmonary dysplasia. Bard H, et al. **Pediatrics** 1990 Aug;86(2):193–6

CHEMICALLY INDUCED

Early lipid intake and bronchopulmonary dysplasia [letter] Frank L, et al. **J Pediatr** 1989 Oct;115(4):658–9

COMPLICATIONS

Bronchopulmonary dysplasia and postnatal growth in extremely premature black infants. Bozynski ME, et al. **Early Hum Dev** 1990 Feb;21(2):83–92

Periodic breathing in preterm infants: influence of bronchopulmonary dysplasia and theophylline. Glotzbach SF, et al. **Pediatr Pulmonol** 1989;7(2):78–81

Potential of early chest roentgen examination in ventilator treated newborn infants to predict future lung function and disease. Mortensson W, et al. **Pediatr Radiol** 1989; 20(1–2):41–4

Is it a new syndrome or due to overstimulation in the ICU? [letter] Cole JG. **Pediatrics** 1990 Aug;86(2):324–5

[Feeding problems in infants with bronchopulmonary dysplasia and other chronic respiratory disorders] van Wezel-Meijler G, et al. **Tijdschr Kindergeneeskd** 1990 Apr; 58(2):73–8 (Eng. Abstr.) **(Dut)**

DIAGNOSIS

Lecithin/sphingomyelin ratio from tracheal aspirates and compliance of the respiratory system in infants with bronchopulmonary dysplasia. Kattner E, et al. **Lung** 1990; 168 Suppl:883–90

[Differential diagnostic cytochemical signs of dysplasia of the bronchial epithelium and squamous cell carcinoma of the lung] Tikhomirova EE, et al. **Lab Delo** 1989;(9):51–3 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Dexamethasone in the treatment of bronchopulmonary dysplasia. Benini F, et al. **Acta Paediatr Scand Suppl** 1989; 360:108–12

Adrenal response in very low birthweight babies after dexamethasone treatment for bronchopulmonary dysplasia. Ng PC, et al. **Arch Dis Child** 1989 Dec;64(12):1721–6

Randomized, double-blind, controlled trial of long-term diuretic therapy for bronchopulmonary dysplasia. Albersheim SG, et al. **J Pediatr** 1989 Oct;115(4):615–20

Dexamethasone therapy for chronic lung disease in ventilator- and oxygen-dependent infants: a controlled trial. Harkavy KL, et al. **J Pediatr** 1989 Dec;115(6):979–83

Increased compliance in response to salbutamol in premature infants with developing bronchopulmonary dysplasia. Rotschild A, et al. **J Pediatr** 1989 Dec;115(6):984–91

Double-blind, placebo-controlled trial of alternate-day furosemide therapy in infants with chronic bronchopulmonary dysplasia. Rush MG, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):112–8

Drug therapy for bronchopulmonary dysplasia. Davis JM, et al. **Pediatr Pulmonol** 1990;8(2):117–25 (85 ref.)

Effects of inhaled metaproteronol and atropine on the pulmonary mechanics of infants with bronchopulmonary dysplasia [letter; comment] Mavunda K. **Pediatr Pulmonol** 1989;7(4):284 Comment on: Pediatr Pulmonol 1989;6(2):74–80.

Hypothalamic–pituitary–adrenal axis function in very low birth weight infants treated with dexamethasone. Alkalay AL, et al. **Pediatrics** 1990 Aug;86(2):204–10

Improvement from pulmonary hyperinflation and bronchial obstruction following sympathomimetics systemically given in infants with broncho-pulmonary diseases. Kraemer R, et al. **Z Erkr Atmungsorgane** 1990;174(2):85–96

EPIDEMIOLOGY

Chronic lung disease of prematurity in the state of Wisconsin. Kayata S, et al. **J Perinatol** 1989 Sep;9(3):327–30

ETIOLOGY

Hydration during the first days of life and the risk of bronchopulmonary dysplasia in low birth weight infants. Van Marter LJ, et al. **J Pediatr** 1990 Jun;116(6):942–9

The relationship of respiratory complications from gastroesophageal reflux to prematurity in infants. Jolley SG, et al. **J Pediatr Surg** 1990 Jul;25(7):755–7

METABOLISM

Increased airway leukotriene levels in infants with severe bronchopulmonary dysplasia. Mirro R, et al. **Am J Dis Child** 1990 Feb;144(2):160–1

A catabolic state in dexamethasone treatment of bronchopulmonary dysplasia [letter] Macdonald PD, et al. **Arch Dis Child** 1990 May;65(5):560–1

Energy consumption in infants with bronchopulmonary dysplasia. Kalhan SC, et al. **J Pediatr** 1990 Apr; 116(4):662–4 (18 ref.)

Persistent elastase/proteinase inhibitor imbalance during prolonged ventilation of infants with bronchopulmonary dysplasia: evidence for the role of nosocomial infections. Walti H, et al. **Pediatr Res** 1989 Oct;26(4):351–5

PATHOLOGY

Bronchopulmonary dysplasia: a correlative study by light, scanning, and transmission electron microscopy. Anderson WR. **Ultrastruct Pathol** 1990 May–Jun;14(3):221–32

PHYSIOPATHOLOGY

Energy intake, growth, and development in ventilated very-low-birth-weight infants with and without bronchopulmonary dysplasia. Davidson S, et al. **Am J Dis Child** 1990 May;144(5):553–9

Changes in pulmonary circulation in severe bronchopulmonary dysplasia. Bush A, et al. **Arch Dis Child** 1990 Jul;65(7):739–45

Hemoglobin oxygen dissociation (P50) in bronchopulmonary dysplasia. Furfaro S, et al. **Biol Neonate** 1990;57(2):72–6

Winner of the Brazier Award. The dysmature EEG pattern in infants with bronchopulmonary dysplasia and its prognostic implications. Hahn JS, et al. **Electroencephalogr Clin Neurophysiol** 1990 Aug; 76(2):106–13

Motor development at term of very low birthweight infants with bronchopulmonary dysplasia. Byrne PJ, et al. **J Perinatol** 1989 Sep;9(3):301–6

Pulmonary function and respiratory morbidity in school-age children born prematurely and ventilated for neonatal respiratory insufficiency. Hakulinen AL, et al. **Pediatr Pulmonol** 1990;8(4):226–32

Changes in vasopressin, atrial natriuretic factor, and water homeostasis in the early stage of bronchopulmonary dysplasia. Kojima T, et al. **Pediatr Res** 1990 Mar; 27(3):260–3

Pulmonary function tests and fluid balance in neonates with chronic lung disease during dexamethasone treatment. Gladstone IM, et al. **Pediatrics** 1989 Dec;84(6):1072–6

PREVENTION & CONTROL

Effect of exogenous surfactant on the development of bronchopulmonary dysplasia in a baboon hyaline membrane disease model. Maeta H, et al. **Crit Care Med** 1990 Apr;18(4):403–9

Maternal glucocorticoid therapy and reduced risk of bronchopulmonary dysplasia. Van Marter LJ, et al. **Pediatrics** 1990 Sep;86(3):331–6

[Bronchopulmonary dysplasia: prevention] Kohelet D, et al. **Harefuah** 1990 Apr 1;118(7):408–11 (34 ref.) **(Heb)**

RADIOGRAPHY

Bronchopulmonary dysplasia: a radiographic and clinical review of 20 patients. Fitzgerald P, et al. **Br J Radiol** 1990 Jun;63(750):444–7

Asymmetrical pulmonary changes in premature infants with surgical closure of a persistent ductus arteriosus. Steinberg JD, et al. **Br J Radiol** 1990 Jan;63(745):22–5

[Bronchopulmonary dysplasia] Hulsmann AR, et al. **Tijdschr Kindergeneeskd** 1990 Feb;58(1):13–8 (24 ref.) (Eng. Abstr.) **(Dut)**

THERAPY

Late sudden unexpected deaths in hospitalized infants with bronchopulmonary dysplasia [letter] Goldberg AI. **Am J Dis Child** 1990 Mar;144(3):270

Side effects and long-term follow-up of corticosteroid therapy in very low birthweight infants with bronchopulmonary dysplasia. Ferrara TB, et al. **J Perinatol** 1990 Jun;10(2):137–42

BRONCHOPULMONARY SEQUESTRATION

[Pulmonary sequestration] Fanta J, et al. **Rozhl Chir** 1989 Oct;68(10):640–5 (Eng. Abstr.) **(Cze)**

COMPLICATIONS

Intralobar pulmonary sequestration presenting as a psoas abscess. Sinclair DG, et al. **Eur Respir J** 1990 Apr; 3(4):483–4

Aneurysm in the sequestrated lung and aortitis associated with the malignant rheumatoid arthritis. Mimura K, et al. **Pathol Res Pract** 1989 Sep;185(3):381–5; discussion 386–7

[Aspergillus colonization of a pulmonary sequestration. Apropos of a case associated with erythema nodosum] Coffernils M, et al. **Rev Mal Respir** 1990;7(2):173–4 (Eng. Abstr.) **(Fre)**

[Blood supply in intralobar pulmonary sequestration] Kharitonov VA, et al. **Grud Serdechnososudistaia Khir** 1990;(3):73–4 **(Rus)**

[Pulmonary sequestration with esophagobronchial fistula. Presentation of 2 cases and a review of the literature] Eizaguirre I, et al. **An Esp Pediatr** 1989 Sep;31(3):297–301 (35 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Unusual phrenic arteriovenous malformation mimicking pulmonary sequestration with heart failure: two cases successfully treated by surgery. Wu MH, et al. **Am Heart J** 1990 Feb;119(2 Pt 1):410–2

Ante natal diagnosis of extra-lobar sequestration. Davies PF, et al. **Australas Radiol** 1989 Aug;33(3):290–2

Case of the month. Radio-opaque hemithorax in a neonate. Creagh MF, et al. **Br J Radiol** 1989 Oct;62(742):951–2

Imaging of prenatally detected intra-abdominal extralobar pulmonary sequestration. Stern E, et al. **Clin Imaging** 1990

May;14(2):152–6 (22 ref.)
Pulmonary sequestration: ultrasonographic visualization of feeding artery. Tritrakarn A. **J Med Assoc Thai** 1989 Aug; 72(8):465–8
A case of intralobar pulmonary sequestration with calcification and elevated serum values of carcinoembryonic antigen and carbohydrate antigen 19–9. Uyama T, et al. **J Thorac Imaging** 1989 Oct;4(4):74–6
Spontaneous resolution of isolated fetal ascites associated with extralobar lung sequestration. Meizner I, et al. **JCU** 1990 Jan;18(1):57–60
Image interpretation session. Extralobar pulmonary sequestration. **Radiographics** 1990 Jan;10(1):140–2
[Preoperative diagnosis of pulmonary sequestration] Gilev VA, et al. **Klin Khir** 1989;(10):58 **(Rus)**
[Characteristics of intralobar pulmonary sequestration] Kharitonov VA. **Vrach Delo** 1989 Jul;(7):58–9 **(Rus)**

PATHOLOGY

[Intralobar sequestration of the lungs] Nepomniashchaia EM, et al. **Arkh Patol** 1989;51(9):54–60 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Imaging of pulmonary sequestration. Felker RE, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):241–9 (48 ref.)
Pulmonary sequestration in the neonate. Piccione W Jr, et al. **Chest** 1990 Jan;97(1):244–6
Extralobar pulmonary sequestration. Grove MK, et al. **Cleve Clin J Med** 1990 Jan–Feb;57(1):88–91
Pulmonary sequestration and related congenital disorders. A clinico–radiological review of 41 cases. John PR, et al. **Pediatr Radiol** 1989;20(1–2):4–9
Bronchopulmonary sequestration supplied from the renal artery. Vlahos L, et al. **Radiologe** 1990 Jan;30(1):32–3
Bronchopulmonary sequestration: CT assessment. Ikezoe J, et al. **Radiology** 1990 Aug;176(2):375–9
A young man with recurrent pulmonary infections. Infected intralobar bronchopulmonary sequestration. Camargo CA Jr, et al. **West J Med** 1990 Jul;153(1):89–90
[A case of atypical pulmonary sequestration] Michel O, et al. **Rev Mal Respir** 1989;6(5):473–4 **(Fre)**
[X-ray computed tomographic diagnosis of posterior opacity responsible for hemoptysis] Carles P, et al. **Rev Pneumol Clin** 1989;45(4):179–81 **(Fre)**
[Pulmonary sequestration in infants: diagnosis and therapy exemplified by a newborn infant] Trowitzsch E, et al. **Klin Padiatr** 1989 Nov–Dec;201(6):464–6 (Eng. Abstr.) **(Ger)**
[A rare case of venous drainage in intralobar pulmonary sequestration] Schmitzberger R, et al. **Pneumologie** 1990 May;44(5):787–9 (Eng. Abstr.) **(Ger)**
[The diagnosis of pulmonary sequestration—the value of computed tomography] Neumayer K. **ROFO** 1989 Sep; 151(3):263–7 (Eng. Abstr.) **(Ger)**
[A case of preoperative diagnosis of intrapulmonary sequestration associated with adenoma-like hamartoma] Zuskin LIu, et al. **Grud Serdechnososudistaia Khir** 1990; (5):75–7 **(Rus)**
[Pulmonary sequestration] Duzhyĭ ID, et al. **Klin Khir** 1989; (10):35–6 (Eng. Abstr.) **(Rus)**

SURGERY

[Pulmonary sequestration associated with localized cystic bronchiectasis and funnel chest] Ogawa H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Nov; 27(11):1371–4 (Eng. Abstr.) **(Jpn)**

BRONCHOSCOPY

see related
CATHETERIZATION, PERIPHERAL

An appropriate negative bronchoscopy rate in suspected foreign body aspiration. Mantor PC, et al. **Am J Surg** 1989 Dec;158(6):622–4
Use of fiberoptic bronchoscopy to retrieve bronchial foreign bodies in adults. Lan RS, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1734–7
Extraction of foreign bodies with fiberoptic bronchoscopy in mechanically ventilated patients [letter] Verea-Hernando H, et al. **Am Rev Respir Dis** 1990 Jul;142(1):258
A jet nebuliser for delivery of topical anesthesia to the respiratory tract. A comparison with cricothyroid puncture and direct spraying for fibreoptic bronchoscopy. Isaac PA, et al. **Anaesthesia** 1990 Jan;45(1):46–8
Anaesthesia for fibreoptic bronchoscopy in children [letter] Khoo ST. **Anaesthesia** 1990 Mar;45(3):248–9
Local anaesthesia for bronchoscopy [letter] Mehta M. **Anaesthesia** 1967 Jul;22(3):528
Endoscopic relief of airway obstruction [letter] Cavaliere S, et al. **Ann Thorac Surg** 1990 Jul;50(1):163–4
The role of fiberoptic bronchoscopy in patients with hemoptysis and a normal chest roentgenogram. Lee CJ, et al. **Chang Keng I Hsueh** 1989 Sep 20;12(3):136–40
Rapid mucosal absorption of topical lidocaine during bronchoscopy in the presence of oral candidiasis. Ameer B, et al. **Chest** 1989 Dec;96(6):1438–9
Bronchoscopic localization and treatment of occult lung cancer. Edell ES, et al. **Chest** 1989 Oct;96(4):919–21 (16 ref.)
Enticements for fruitless bronchoscopy [letter] Gilman MJ. **Chest** 1990 Sep;98(3):779–81
Lidocaine topical anesthesia for flexible bronchoscopy [editorial] Kirkpatrick MB. **Chest** 1989 Nov;96(5):965–7
Localized leukemic pulmonary infiltrates. Diagnosis by bronchoscopy and resolution with therapy. Kovalski R, et al. **Chest** 1990 Mar;97(3):674–8 (21 ref.)
Training in laser bronchoscopy and proposals for credentialing. Kvale PA. **Chest** 1990 Apr;97(4):983–9
Lidocaine-induced bronchoconstriction in asthmatic patients. Relation to histamine airway responsiveness and effect of preservative. McAlpine LG, et al. **Chest** 1989 Nov; 96(5):1012–5
Bronchoscopy in the management of bronchopleural fistula. McManigle JE, et al. **Chest** 1990 May;97(5):1235–8
Bronchoscopy for hemoptysis [letter; comment] Schraufnagel D, et al. **Chest** 1990 Jun;97(6):1502 Comment on: Chest 1989 May;95(5):1043–7.
Complication with a transbronchial histology needle [letter] Sherling BE. **Chest** 1990 Sep;98(3):783–4
Bronchoscopy: enough or not enough? [letter] Stangel P. **Chest** 1990 Sep;98(3):774–5
Fiberbronchoscopy in smear-negative miliary tuberculosis [letter] Watson JM, et al. **Chest** 1990 Aug;98(2):508–9
Bronchoscopy specimens in adults with AIDS. Comparative yields of cytology, histology and culture for diagnosis of infectious agents. Weldon-Linne CM, et al. **Chest** 1990 Jul; 98(1):24–8
Endoscopic diagnosis and treatment of postoperative bronchopleural fistula. York EL, et al. **Chest** 1990 Jun; 97(6):1390–2
Fibreoptic bronchoscopy in the management of lone pleural effusion: a negative study. Kelly P, et al. **Eur Respir J** 1990 Apr;3(4):397–8
Endoscopic resection of an endobronchial hypernephroma metastasis using a polypectomy snare. Themelin D, et al. **Eur Respir J** 1990 Jun;3(6):732–3
Bronchogenic carcinoma. A study of 109 cases. Jain NK, et al. **J Assoc Physicians India** 1989 Jun;37(6):379–82
Role of flexible bronchoscopy in the diagnosis of pulmonary infiltrates in pediatric patients with cancer. Stokes DC, et al. **J Pediatr** 1989 Oct;115(4):561–7
Bronchoscopy in the critical-care unit. Olopade CO, et al. **Mayo Clin Proc** 1989 Oct;64(10):1255–63
Fiberoptic bronchoscopy in the neonate. Finer NN, et al. **Pediatr Pulmonol** 1989;7(2):116–20
Fibreoptic bronchoscopy in rapid diagnosis of sputum smear negative pulmonary tuberculosis. Khoo KK, et al. **Respir Med** 1989 Jul;83(4):335–8
Fine percutaneous needle biopsy vs. fibreoptic bronchoscopy as a means of achieving a histological diagnosis in peripheral pulmonary opacity [letter] Seaton D. **Respir Med** 1990 Mar;84(2):178
Sedation for fibreoptic bronchoscopy: comparison of alfentanil with papaveretum and diazepam. Webb AR, et al. **Respir Med** 1989 May;83(3):213–7
Bronchoscopy in severe blunt chest trauma. Regel G, et al. **Surg Endosc** 1990;4(1):31–5
Transbronchial biopsy without fluoroscopy: a five year experience in outpatients. de Fenoyl O, et al. **Thorax** 1989 Nov;44(11):956–9
Value of washings and brushings at fibreoptic bronchoscopy in the diagnosis of lung cancer. Mak VH, et al. **Thorax** 1990 May;45(5):373–6
Sedation for fibreoptic bronchoscopy [see comments] Shelley MP, et al. **Thorax** 1989 Oct;44(10):769–75 (96 ref.) Comment in: Thorax 1990 Mar;45(3):239.
Topical nasal anaesthesia for fibreoptic bronchoscopy: patients' preference for lignocaine gel [see comments] Webb AR, et al. **Thorax** 1989 Aug;44(8):674–5 Comment in: Thorax 1990 Jan;45(1):79.
The value of routine bronchial aspirate culture at fibreoptic bronchoscopy for the diagnosis of tuberculosis. Ip M, et al. **Tubercle** 1989 Dec;70(4):281–5
[Bronchoscopic evaluation of 390 cases of hemoptysis without definite abnormality on the chest roentgenogram] Yin BY. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1990 Feb;13(1):44–6, 63–4 (Eng. Abstr.) **(Chi)**
[Endotracheal prosthesis. A new method of insertion. A case report (letter)] Seitz B, et al. **Rev Pneumol Clin** 1989; 45(3):137–8 **(Fre)**
[Prognostic significance of macroscopic and microscopic findings in acute inhalation damage in the most severely burned patients] Barth J, et al. **Anasth Intensivther Notfallmed** 1990 Jun;25(3):222–7 (Eng. Abstr.) **(Ger)**
[The endoscopic diagnosis of bronchial carcinoma] Lorenz J. **Dtsch Med Wochenschr** 1990 Mar 23;115(12):460–2 (15 ref.) **(Ger)**
[The value of fiberoptic bronchoscopy in diagnosis of HIV associated infections] Fischer B, et al. **Med Klin** 1990 Jun 15;85(6):361–5 (Eng. Abstr.) **(Ger)**
[Transitory bacteremia in bronchologic-biopsy procedures] Dürschmied H, et al. **Pneumologie** 1990 Feb;44 Suppl 1:208–9 (Eng. Abstr.) **(Ger)**
[HIV-associated infections: indications and importance of fiberoptic bronchoscopy] Fischer B, et al. **Pneumologie** 1990 Feb;44 Suppl 1:316–7 (Eng. Abstr.) **(Ger)**
[Pneumonia in patients with and without immunosuppression—value of bronchoscopic biopsy technics for the detection of pathogens] Schmitz KF, et al. **Pneumologie** 1990 Feb;44 Suppl 1:469–70 (Eng. Abstr.) **(Ger)**
[Value of bronchoalveolar lavage and findings of cytologic studies in the diagnosis of interstitial lung diseases] Vallée D, et al. **Pneumologie** 1990 Feb;44 Suppl 1:301–2 (Eng. Abstr.) **(Ger)**
[Bronchoscopic diagnosis of therapy refractory pneumonia] von Eiff M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:548–9 (Eng. Abstr.) **(Ger)**
[The effect of bronchologic studies on blood gases and hemodynamics in children] Wunderlich P, et al. **Z Erkr Atmungsorgane** 1989;173(3):222–8 (Eng. Abstr.) **(Ger)**
[Laboratory diagnostic monitoring of blood gas parameters in children during bronchologic studies] Zöllner H, et al. **Z Erkr Atmungsorgane** 1990;174(2):126–30 (Eng. Abstr.) **(Ger)**
[Types and significance of tracheal stenoses] Geissler W, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:19–22 **(Ger)**
[Bronchoscopic local treatment of pediatric bronchial lymph node tuberculosis with lymph node invasion] Hofmann A. **Z Kinderchir** 1988 Sep;43 Suppl 1:25–6 **(Ger)**
[Changes in the tracheobronchial tree of children with esophageal atresia] Holzki J. **Z Kinderchir** 1988 Sep;43 Suppl 1:27 **(Ger)**
[Treatment of semi-malignant tumors in children and adolescents using the neodymium YAG laser—indications and differentiation from surgical procedures] Nowak W. **Z Kinderchir** 1988 Sep;43 Suppl 1:30–2 **(Ger)**
[Diagnostic usefulness of the bronchoscopy for pulmonary tuberculosis] Hagiwara T. **Kekkaku** 1990 Jan;65(1):37–9 **(Jpn)**
[Diagnostic value of bronchoscopy in diagnosis of pulmonary tuberculosis: bronchial aspirate, bronchial washing and transbronchial lung biopsy] Kohno S. **Kekkaku** 1990 Jan; 65(1):33–6 **(Jpn)**
[Bronchoscopic findings of adenocarcinoma of the lung] Ono R, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jul 20; 24(7):1357–63 (Eng. Abstr.) **(Jpn)**
[Endoscopic Nd-YAG laser treatment and adjuvant therapy of metastatic lesions of airway] Okitsu H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jun;37(6):1187–93 (Eng. Abstr.) **(Jpn)**
[Effect of age and intravenous dose of lidocaine on the circulatory reaction during bronchoscopy] Duda K, et al. **Pneumonol Pol** 1989 May;57(5):293–9 (Eng. Abstr.) **(Pol)**
[Usefulness of bronchoscopic examination during the treatment of small cell carcinoma of the lung] Zajączkowska J, et al. **Pneumonol Pol** 1990 Apr–May; 58(4–5):199–204 (Eng. Abstr.) **(Pol)**
[The effect of bronchofibroscopy on the mechanics of breathing during disorders of bronchial patency in the postoperative period] Bondarenko AV, et al. **Anesteziol Reanimatol** 1989 Sep–Oct;(5):58–62 (Eng. Abstr.) **(Rus)**
[Evaluation of ketamine-sombrevin general anesthesia during bronchoscopy in children] Novikov VN, et al. **Anesteziol Reanimatol** 1989 Sep–Oct;(5):75–7 (Eng. Abstr.) **(Rus)**
[A case of removal of hamartoma of the intermediate bronchus through a bronchoscope] Agaev FF, et al. **Grudn Khir** 1989 Jul–Aug;(4):88–9 **(Rus)**
[Changes in blood gases during fiber bronchoscopy in children] Shelest M, et al. **Pediatriia** 1990;(6):109 **(Rus)**
[The endoscopic bronchial picture of patients with pulmonary tuberculosis of various age groups] Bubochkin BP, et al. **Probl Tuberk** 1989;(9):19–22 (Eng. Abstr.) **(Rus)**
[The potentials of fiber bronchoscopy with immediate cytological study in the diagnosis of lung cancer under outpatient conditions] Gorbacheva LM, et al. **Vopr Onkol** 1990;36(5):579–82 (Eng. Abstr.) **(Rus)**
[Endoscopic evaluation of the therapeutic results in patients with small cell lung cancer] Poddubnyĭ BK, et al. **Vopr Onkol** 1989;35(9):1083–6 (Eng. Abstr.) **(Rus)**
[Effect of endobronchial laser therapy on the local protection system of the lungs in patients with protracted pneumonia] Efimov VV, et al. **Vrach Delo** 1989 Jul;(7):55–7 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Routine fiberoptic bronchoscopy in intubated neonates? [letter; comment] Schellhase DE. **Am J Dis Child** 1990 Jul;144(7):746–7 Comment on: Am J Dis Child 1989 Sep;143(9):1064–5.
Hypoxia during bronchoalveolar lavage. Gibson PG, et al. **Aust N Z J Med** 1990 Feb;20(1):39–43
Fiberoptic bronchoscopy in ventilated patients. Evaluation of cardiopulmonary risk under midazolam sedation. Trouillet JL, et al. **Chest** 1990 Apr;97(4):927–33
Pseudoepidemic of Rhodotorula rubra in patients undergoing fiberoptic bronchoscopy [letter] Kennedy M. **Infect Control Hosp Epidemiol** 1990 Jul;11(7):334, 336
Flexible fiberoptic bronchoscopy does not alter airway responsiveness. Söderberg M, et al. **Respiration** 1989; 56(3–4):182–8
Bronchoscopy-induced fatal asystole in tetanus: the result of combined carotid-body chemoreceptor and vasovagal reflexes. Riggs JE. **South Med J** 1990 Aug;83(8):955–6
Effect of fibreoptic bronchoscopy on pulmonary function. Peacock AJ, et al. **Thorax** 1990 Jan;45(1):38–41
[Septic risk after fiberoptic bronchoscopy brush in lower respiratory tract infection (letter)] Quiot JJ, et al. **Presse Med** 1990 Jun 9;19(23):1103 **(Fre)**

[The risks of bronchoscopy in coronary patients] Dombret MC, et al. **Rev Mal Respir** 1990;7(4):313–7 (Eng. Abstr.) **(Fre)**

INSTRUMENTATION

A new technique for replacing an endobronchial double-lumen tube with an endotracheal single-lumen tube. Gatell JA, et al. **Anesthesiology** 1990 Aug;73(2):340–1

Flexible bronchoscopy in children at the University of Puerto Rico Pediatric Hospital. Review of 324 consecutive patients. Rivera JF, et al. **Bol Asoc Med P R** 1990 May; 82(5):211–5

A device for maintaining anaesthesia during fibreoptic bronchoscopy [letter] Corfield HM. **Br J Anaesth** 1974 Nov;46(11):900

A method of ventilation with Entonox during bronchoscopy. Keep PJ. **Br J Anaesth** 1974 Dec;46(12):970–2

Nd:YAG laser bronchoscopy. Rigid or fiberoptic mode? Chan AL, et al. **Chest** 1990 Aug;98(2):271–5

The high price of bronchoscopy. Maintenance and repair of the flexible fiberoptic bronchoscope. Mehta AC, et al. **Chest** 1990 Aug;98(2):448–54

Diagnosis of peripheral lung cancer using a new type of endoscope. Tanaka M, et al. **Chest** 1990 May;97(5):1231–4

Treatment for collapsed lung in critically ill patients. Selective intrabronchial air insufflation using the fiberoptic bronchoscope. Tsao TC, et al. **Chest** 1990 Feb;97(2):435–8

Pseudoepidemic of Rhodotorula rubra in patients undergoing fiberoptic bronchoscopy. Hoffmann KK, et al. **Infect Control Hosp Epidemiol** 1989 Nov;10(11):511–4

Indication and results of endobronchial laser therapy. Dierkesmann R. **Lung** 1990;168 Suppl:1095–102 (19 ref.)

Laser in bronchology: methods of application. Personne C, et al. **Lung** 1990;168 Suppl:1085–8

Complications of endobronchial neodymium–Yag (Nd:Yag) laser application. Vanderschueren RG, et al. **Lung** 1990;168 Suppl:1089–94 (26 ref.)

Disposable flexible fiberoptic mini-bronchoscope for evaluating the pediatric airway. Finkelhor BK, et al. **Otolaryngol Head Neck Surg** 1989 Oct;101(4):511–2

Prospective evaluation of the protected specimen brush for the diagnosis of pulmonary infections in ventilated newborns. Rigal E, et al. **Pediatr Pulmonol** 1990;8(4):268–72

Fiberoptic bronchoscopy in the diagnosis of pulmonary tuberculosis [published erratum appears in South Med J 1990 Aug;83(8):882] Mehta J, et al. **South Med J** 1990 Jul; 83(7):753–5

Neonatal bronchoscopy. Lindahl H, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:12–3

Bronchoscopy performed by the anaesthesiologist in children with severe airway problems. Smalhout B, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:10–1

[Rigid tube bronchoscopy in tuberculous children. Apropos of 24 cases] Gahouma D, et al. **Ann Pediatr (Paris)** 1990 Apr;37(4):227–9 (Eng. Abstr.) **(Fre)**

[High-frequency jet ventilation through a modified stomach tube in endobronchial 192 Iridium irradiation] Rieke H, et al. **Anaesthesist** 1989 Oct;38(10):549–52 (Eng. Abstr.) **(Ger)**

[Fiber bronchoscopy as an aid in placing and monitoring double lumen tubes in thoracic anesthesia] Schottke-Hennings H, et al. **Anasth Intensivther Notfallmed** 1989 Dec;24(6):327–33 (Eng. Abstr.) **(Ger)**

[Long-term follow-up of 52 endoluminal irradiated patients with central lung tumors] Huber RM, et al. **Pneumologie** 1990 Feb;44 Suppl 1:593–4 (Eng. Abstr.) **(Ger)**

[Value of diagnostic procedures in fiberoptic bronchoscopy of pulmonary infections] Mainz D, et al. **Pneumologie** 1990 Feb;44 Suppl 1:471–2 (Eng. Abstr.) **(Ger)**

[Respiratory mechanics in fiber optic bronchoscopy] Lang T, et al. **Wien Med Wochenschr Suppl** 1987;103:29–30 **(Ger)**

[Laser use in pneumology] Witt C. **Z Arztl Fortbild (Jena)** 1990;84(6):255–9 **(Ger)**

[Laryngo-tracheo- and bronchial diagnosis and therapy in pediatric surgery] Engert J, et al. **Z Kinderchir** 1988 Sep; 43 Suppl 1:14–6 (Eng. Abstr.) **(Ger)**

[Extraction without forceps of tracheo-bronchial foreign bodies in children] Hofmann U, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:29 **(Ger)**

[Indications for bronchologic study in children and adolescents] Uekötter J. **Z Kinderchir** 1988 Sep;43 Suppl 1:28 **(Ger)**

[Diagnosis of peripheral-type lung cancer using a new type of endoscope] Tanaka M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Nov; 27(11):1294–9 (Eng. Abstr.) **(Jpn)**

[Segmental bronchoalveolar lavage with a flexible probe via a rigid bronchoscope in the diagnosis of mediastino-pulmonary sarcoidosis] Faina AG. **Rev Ig [Pneumoftiziol]** 1989 Jul-Sep;38(3):271–7 (Eng. Abstr.) **(Rum)**

[Fibrobronchoscopy teaching using dynamic images in television] Pérez-Redondo CN, et al. **Gac Med Mex** 1989 Jan-Feb;125(1-2):41–4 **(Spa)**

METHODS

Anticholinergic pre-treatment in rigid bronchoscopy. Effect on heart rate, arterial blood pressure and cardiac arrhythmias. Lyew MA, et al. **Acta Anaesthesiol Belg** 1990; 41(1):25–31

The importance of fiberbronchoscopy in respiratory burns. Lukán J, et al. **Acta Chir Plast** 1990;32(2):107–13

Tracheobronchial foreign bodies [letter] Whitlock WL, et al. **Ann Intern Med** 1990 Sep 15;113(6):482–3

Surgery of giant bulla with tube drainage and bronchofiberoptic bronchial occlusion. Oizumi H, et al. **Ann Thorac Surg** 1990 May;49(5):824–5

The diagnostic role of fiberoptic bronchoscopy in AIDS patients with suspected Pneumocystis carinii pneumonia. Pedersen U, et al. **Arch Otorhinolaryngol** 1989;246(5):362–4

Rapid on-site evaluation of transbronchial aspirates. Davenport RD. **Chest** 1990 Jul;98(1):59–61

Pneumothorax following transbronchial biopsy. Low diagnostic yield with routine chest roentgenograms. Frazier WD, et al. **Chest** 1990 Mar;97(3):539–40

Transbronchial needle aspiration in clinical practice. A five-year experience. Harrow EM, et al. **Chest** 1989 Dec; 96(6):1268–72

Transbronchial needle aspiration for histology specimens. Mehta AC, et al. **Chest** 1989 Dec;96(6):1228–32

Diagnostic fiberoptic bronchoscopy and protected brush culture in patients with community-acquired pneumonia. Ortqvist A, et al. **Chest** 1990 Mar;97(3):576–82

Endobronchial vascular occlusion coils for control of a large parenchymal bronchopleural fistula. Salmon CJ, et al. **Chest** 1990 Jul;98(1):233–4

Pitfalls in the use of the flexible bronchoscope in pediatric patients. Wood RE. **Chest** 1990 Jan;97(1):199–203 (10 ref.)

Fiberoptic bronchoscopy in adult airway management. Dellinger RP. **Crit Care Med** 1990 Aug;18(8):882–7

Indication for fiberoptic bronchoscopy in HIV-infected patients suspected for Pneumocystis carinii pneumonia. Orholm M, et al. **Dan Med Bull** 1990 Feb;37(1):86–9

Diagnostic flexible bronchoscopy in human immunodeficiency virus (HIV)-positive children. Sculerati N, et al. **Int J Pediatr Otorhinolaryngol** 1989 Dec; 18(2):119–27

Endoscopic guided percutaneous tracheostomy: early results of a consecutive trial. Marelli D, et al. **J Trauma** 1990 Apr; 30(4):433–5

Fibre optic bronchoscopy [letter] [see comments] Bodle H, et al. **N Z Med J** 1989 Jul 26;102(872):387 Comment in: N Z Med J 1989 Sep 13;102(875):480.

Model systems for learning pediatric flexible bronchoscopy. Wood RE, et al. **Pediatr Pulmonol** 1990;8(3):168–71

Fibreoptic bronchoscopy: an assessment of immediate cytological diagnosis using methylene blue stain. Titley I, et al. **Respir Med** 1989 Jan;83(1):37–41

Sedation for fibreoptic bronchoscopy [letter; comment] Davidson AC, et al. **Thorax** 1990 Mar;45(3):239 Comment on: Thorax 1989 Oct;44(10):769–75.

Topical nasal anaesthesia for fibreoptic bronchoscopy [letter; comment] O'Driscoll BR, et al. **Thorax** 1990 Jan;45(1):79 Comment on: Thorax 1989 Aug;44(8):674–5.

Local anaesthesia for fibreoptic bronchoscopy: transcricoid injection or the "spray as you go" technique? Webb AR, et al. **Thorax** 1990 Jun;45(6):474–7

Flexible bronchoscopy for foreign body in airway. Monden Y, et al. **Tokushima J Exp Med** 1989 Jun;36(1–2):35–9

[Personal experience with general anesthesia and high-frequency jet ventilation during fiber bronchoscopy] Skeřík P, et al. **Cesk Otolaryngol** 1990 Feb;39(1):6–8 (Eng. Abstr.) **(Cze)**

[Fiber bronchoscopy and bronchoalveolar lavage in patients with asthma. A description of the method] Pedersen B, et al. **Ugeskr Laeger** 1989 Nov 27;151(48):3229–32 (Eng. Abstr.) **(Dan)**

[Broncho-alveolar lavage by fibroscopy in immunodepressed children] Farge A, et al. **Pediatrie** 1989;44(1):45–51 (Eng. Abstr.) **(Fre)**

[Bronchoscopy in ventilated patients: full narcosis or local anesthesia?] Konrad F, et al. **Anasth Intensivther Notfallmed** 1990 Apr;25(2):160–3 (Eng. Abstr.) **(Ger)**

[Palliative endoscopic therapy of bronchial carcinoma] Lorenz J. **Dtsch Med Wochenschr** 1990 Mar 23; 115(12):463–6 (12 ref.) **(Ger)**

[Pneumonia in immunocompromised patients: the value of non-biopsy bronchoscopic examination procedures in the diagnosis of pathogens] von Eiff M, et al. **Klin Wochenschr** 1990 Apr 2;68(7):372–9 (Eng. Abstr.) **(Ger)**

[Pneumonia in AIDS: pathogen spectrum and diagnostic value of various fiberoptic bronchoscopy methods for the detection of pathogens] Hermeler H, et al. **Pneumologie** 1990 Feb;44 Suppl 1:670–1 (Eng. Abstr.) **(Ger)**

[Analysis of respiratory mechanics in fiberoptic bronchoscopy in healthy probands and patients] Lang T, et al. **Pneumologie** 1990 Feb;44 Suppl 1:631–2 (Eng. Abstr.) **(Ger)**

[Anesthesia problems in pediatric bronchoscopy] Hagemann H, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:9–10 **(Ger)**

[Bronchoscopy in childhood—implications for anesthesia] Zander J, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:8–9 **(Ger)**

[Methodology and effectiveness of bronchoscopy with polychromatic analysis in patients with pulmonary tuberculosis and sarcoidosis] Kalashnikov NA, et al. **Probl Tuberk** 1990;(1):21–4 (Eng. Abstr.) **(Rus)**

[The use of bronchological methods as the means for the intensive treatment of patients with severe manifestations of lung and pleural diseases] Kazakov AF, et al. **Probl Tuberk** 1989;(12):25–8 (Eng. Abstr.) **(Rus)**

[Sanative bronchoscopy and selective artificial pulmonary ventilation via the bronchoscope in adult respiratory distress syndrome] Timen LIa, et al. **Voen Med Zh** 1989 Sep;(9):53–5 **(Rus)**

[Yield of bronchofibroscopy in patients with hemoptysis and normal thorax radiography] Martín Serrano C, et al. **Rev Clin Esp** 1990 Apr;186(6):259–63 (Eng. Abstr.) **(Spa)**

[Intubation in a conscious patient—2 complements] Bense L. **Lakartidningen** 1989 Sep 6;86(36):2927 **(Swe)**

UTILIZATION

Enticements for fruitless bronchoscopy. Rohwedder JJ. **Chest** 1989 Oct;96(4):708–10

Bronchoscopy. Enough or too much? Sen RP, et al. **Chest** 1989 Oct;96(4):710–2

BRONCHOSPASM see BRONCHIAL SPASM

BRONCHOSPIROMETRY

Bronchospirometry in the study of regional lung function. Svanberg L. **Scand J Respir Dis Suppl** 1966;62:91–103

INSTRUMENTATION

[Electronic spirometry] Willroth PO. **Z Erkr Atmungsorgane** 1990;174(1):7–17 (71 ref.) (Eng. Abstr.) **(Ger)**

[Peak flow measurement] Willroth PO, et al. **Z Erkr Atmungsorgane** 1990;174(1):73–9 (29 ref.) (Eng. Abstr.) **(Ger)**

BROWN FAT

ANALYSIS

Brown adipose tissue in lean and fat selection lines of sheep identified by immunodetection of uncoupling protein in western blots of tissue homogenates. Thompson MP, et al. **Comp Biochem Physiol [B]** 1989;94(3):493–8

Infrared spectroscopic studies of detergent-solubilized uncoupling protein from brown-adipose-tissue mitochondria. Rial E, et al. **Eur J Biochem** 1990 Feb 22; 188(1):83–9

DRUG EFFECTS

Comparison of the pharmacological profiles of adrenergic drugs (including BRL-agonists) at [3H]prazosin and [3H]CGP-12177 binding sites in brown adipose tissue. Mohell N, et al. **Comp Biochem Physiol [C]** 1989; 94(1):229–33

Membrane responses to norepinephrine in cultured brown fat cells. Lucero MT, et al. **J Gen Physiol** 1990 Mar; 95(3):523–44

Norepinephrine and BRL 37344 stimulate adenylate cyclase by different receptors in rat brown adipose tissue. Granneman JG. **J Pharmacol Exp Ther** 1990 Aug; 254(2):508–13

EMBRYOLOGY

In developing brown adipose tissue c-myc protooncogene expression is restricted to early differentiation stages. Hirning U, et al. **Cell Differ Dev** 1989 Sep;27(3):243–8

ENZYMOLOGY

Increase in cytochrome oxidase capacity of BAT and other tissues in cold-acclimated gerbils. Bourhim M, et al. **Am J Physiol** 1990 May;258(5 Pt 2):R1291–8

Defective regulation of thyroxine 5'-deiodinase in brown adipose tissue of ob/ob mice. Kates AL, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):E7–15

Adrenergic effects on thyroxine 5'-deiodinase in brown adipose tissue of lean and ob/ob mice. Kates AL, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):R430–5

Short photoperiod and cold activate brown fat lipoprotein lipase in the Djungarian hamster. Klingenspor M, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1123–7

Thyroxine 5'-deiodinase in brown adipose tissue of the cynomolgus monkey Macaca fascicularis. Kates AL, et al. **Biochem Cell Biol** 1990 Jan;68(1):231–7

Rapid quantitation of uncoupling protein in brown adipose tissue mitochondria by a dot immunobinding ("dot blot") procedure: application to the measurement of uncoupling protein in Richardson's ground squirrel, rats, and mice. Milner RE, et al. **Biochem Cell Biol** 1990 Jun;68(6):973–9

The presence of acyl-CoA hydrolase in rat brown-adipose-tissue peroxisomes. Alexson SE, et al. **Biochem J** 1989 Aug 15;262(1):41–6

Pyruvate dehydrogenase-complex activity in brown adipose tissue of gold thioglucose-obese mice. Cooney GJ, et al. **Biochem J** 1990 Aug 15;270(1):257–9

Pyruvate dehydrogenase activities and rates of lipogenesis during the fed-to-starved transition in liver and brown adipose tissue of the rat. Holness MJ, et al. **Biochem J** 1990 May 15;268(1):77–81

The novel thermogenic beta-adrenergic agonist Ro 16-8714 increases the interscapular brown-fat

beta-receptor-adenylate cyclase and the uncoupling-protein mRNA level in obese (fa/fa) Zucker rats. Muzzin P, et al. **Biochem J** 1989 Aug 1;261(3):721-4

Hibernation activates glyoxylate cycle and gluconeogenesis in black bear brown adipose tissue. Davis WL, et al. **Biochim Biophys Acta** 1990 Mar 9;1051(3):276-8

Lipoprotein lipase mRNA expression in brown adipose tissue: translational and/or posttranslational events are involved in the modulation of enzyme activity. Giralt M, et al. **Biochim Biophys Acta** 1990 Apr 6;1048(2-3):270-3

Alpha 1- and beta-adrenergic agents cause synergistic stimulation of the iodothyronine deiodinase in rat brown adipocytes. Raasmaja A, et al. **Endocrinology** 1989 Nov; 125(5):2502-9

Effects of methimazole on the 5'-monodeiodinase activities of various tissues. Zenker N, et al. **Enzyme** 1989;42(2):73-9

Tyrosine hydroxylase activity in the brown adipose tissue of the obese Zucker rat during development. Blouquit MF, et al. **Horm Metab Res** 1990 Feb;22(2):123

Synthesis of inactive nonsecretable high mannose-type lipoprotein lipase by cultured brown adipocytes of combined lipase-deficient cld/cld mice. Masuno H, et al. **J Biol Chem** 1990 Jan 25;265(3):1628-38

GROWTH & DEVELOPMENT

Postnatal appearance of uncoupling protein and formation of thermogenic mitochondria in hamster brown adipose tissue. Houštěk J, et al. **Biochim Biophys Acta** 1990 Feb 22;1015(3):441-9

Role of neural input in photoperiod-induced changes in hamster brown adipose tissue. Desautels M, et al. **Can J Physiol Pharmacol** 1990 Jun;68(6):677-81

INNERVATION

Effects of 2-deoxy-D-glucose on sympathetic nerve activity to interscapular brown adipose tissue. Egawa M, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1377-85

Lateral hypothalamic injection of 2-deoxy-D-glucose suppresses sympathetic activity. Egawa M, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1386-92

Interaction of intracerebroventricular insulin and glucose in the regulation of the activity of sympathetic efferent nerves to brown adipose tissue in lean and obese Zucker rats. Holt SJ, et al. **Brain Res** 1989 Oct 23;500(1-2):384-8

Neural control of the alpha-subunit of Gs messenger ribonucleic acid in rat brown adipose tissue. Granneman JG, et al. **Endocrinology** 1989 Nov;125(5):2328-34

Ventromedial hypothalamic lesions attenuate responses of sympathetic nerves to carotid arterial infusions of glucose and insulin. Sakaguchi T, et al. **Int J Obes** 1990; 14(2):127-33

A comparison of the effects of 6-hydroxydopamine and reserpine on noradrenergic and peptidergic nerves in rat brown adipose tissue. Mukherjee S, et al. **J Anat** 1989 Dec; 167:189-93

Adrenergic blockade paradoxically increases lipogenic response of brown adipose tissue to sympathetic nerve stimulation. Minokoshi Y, et al. **Neurosci Lett** 1990 Feb 16;109(3):341-6

Effect of corticotropin releasing hormone and neuropeptide Y on electrophysiological activity of sympathetic nerves to interscapular brown adipose tissue. Egawa M, et al. **Neuroscience** 1990;34(3):771-5

Effect of a high-fat diet on firing rate of sympathetic nerves innervating brown adipose tissue in anesthetized rats. Sakaguchi T, et al. **Physiol Behav** 1989 Jun;45(6):1177-82

METABOLISM

Early changes in thyroid hormone metabolism in the heart, liver, and brown adipose tissue during the induction of low T3 syndrome in streptozotocin-diabetic rats. Bjørn-Hansen Gøtzsche LS, et al. **Acta Endocrinol (Copenh)** 1990 Jul; 123(1):67-71

Regulation of the level of uncoupling protein in brown adipose tissue by insulin. Géloën A, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):R418-24

Evidence for two distinct chloride uniport pathways in brown adipose tissue mitochondria. Ježek P, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):C1142-8

Defective metabolic effects of norepinephrine and insulin in obese Zucker rat brown adipose tissue. Marette A, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E320-8

Stimulation of glucose transport by insulin and norepinephrine in isolated rat brown adipocytes. Marette A, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):C714-21

Thyroid hormones and 5'-deiodinase in rat brown adipose tissue during fetal life. Obregón MJ, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):E625-31

Neuronal regulation of substrate cycle between glucose 6-phosphate and glucose in brown adipose tissues of cold-exposed mice. Suzuki H, et al. **Anat Rec** 1990 Mar; 226(3):314-9

Expression of the brown fat mitochondria uncoupling protein in Xenopus oocytes and important into mitochondrial membrane. Klaus S, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):784-9

Measurements of glycolytic flux rate in brown adipocytes. Effects of insulin, noradrenaline and streptozotocin diabetes. Sobrino F, et al. **Biochem Int** 1989 Aug; 19(2):325-32

Insulin resistance of glucose metabolism in isolated brown adipocytes of lactating rats. Evidence for a post-receptor defect in insulin action. Burnol AF, et al. **Biochem J** 1990 Jan 15;265(2):511-7

Role of brown adipose tissue in glucose utilization in conscious pre-obese Zucker rats. Krief S, et al. **Biochem J** 1989 Oct 1;263(1):305-8

Differences in the properties of A1-type adenosine receptors in rat white and brown adipocytes. Saggerson ED, et al. **Biochem J** 1990 Jul 1;269(1):157-61

Effects of hypothyroidism and hyperthyroidism on GDP binding to brown-adipocyte mitochondria from rats. Woodward JA, et al. **Biochem J** 1989 Oct 15;263(2):341-5

Decrease of oxidative activities in brown adipose tissue mitochondria of cold acclimated rats on short term exposure to heat stress. Gaikwad AS, et al. **Biochim Biophys Acta** 1990 Jun 26;1017(3):242-50

New insights into mechanisms of anion uniport through the uncoupling protein of brown adipose tissue mitochondria. Garlid KD. **Biochim Biophys Acta** 1990 Jul 25; 1018(2-3):151-4

Variations in energization parameters and proton conductance induced by cold adaptation and essential fatty acid deficiency in mitochondria of brown adipose tissue in the rat. Goubern M, et al. **Biochim Biophys Acta** 1990 Feb 2;1015(2):334-40

Differentiation of brown adipose tissue and biogenesis of thermogenic mitochondria in situ and in cell culture. Houštěk J, et al. **Biochim Biophys Acta** 1990 Jul 25; 1018(2-3):243-7

Immunoelectron microscopical identification of the uncoupling protein in brown adipose tissue mitochondria. Cinti S, et al. **Biol Cell** 1989;67(3):359-62

Ontogenic characterization of type I and II thyroxine 5'-monodeiodinases in brown adipose tissue from fetal and newborn rabbits. Brzezińska-Slebodzińska E, et al. **Biol Neonate** 1990;57(6):358-66

Development of peroxisomal beta-oxidation activities in brown fat of perinatal rabbits. Mangurian LP, et al. **Biol Neonate** 1990;57(6):349-57

Foetal and lactational exposure to alcohol increases oxidative capacity of brown adipose tissue in the rat. A possible relationship to cot death. Huttunen P, et al. **Br J Exp Pathol** 1989 Dec;70(6):691-5

Glutamate injection into the suprachiasmatic nucleus stimulates brown fat thermogenesis in the rat. Amir S, et al. **Brain Res** 1989 Sep 25;498(1):140-4

Intra-ventromedial hypothalamic injection of glutamate stimulates brown adipose tissue thermogenesis in the rat. Amir S. **Brain Res** 1990 Mar 19;511(2):341-4

Relationship between uptake of norepinephrine by hypothalamic homogenates and the activity of brown adipose tissue. Shimizu H, et al. **Brain Res** 1990 Mar 5; 510(2):216-22

A commentary on the interpretation of in vitro biochemical measures of brown adipose tissue thermogenesis. Trayhurn P, et al. **Can J Physiol Pharmacol** 1989 Aug;67(8):811-9 (74 ref.)

Role of cell calcium in alpha-1 adrenergic receptor control of arachidonic acid release from brown adipocytes. Schimmel RJ. **Cell Signal** 1989;1(6):607-16

The effects of essential fatty acid deficiency on brown adipose tissue activity in rats maintained at thermal neutrality. Yazbeck J, et al. **Comp Biochem Physiol [A]** 1989; 94(2):273-6

A comparison of norepinephrine- and ACTH-stimulated lipolysis in white and brown adipocytes of female rats. Van Heerden M, et al. **Comp Biochem Physiol [C]** 1989; 93(2):275-9

Effects of exercise training on brown adipose tissue thermogenesis in ovariectomized obese rats. Yoshioka K, et al. **Endocrinol Jpn** 1989 Jun;36(3):403-8

The role of insulin in norepinephrine turnover and thermogenesis in brown adipose tissue after acute cold-exposure. Yoshioka K, et al. **Endocrinol Jpn** 1989 Aug;36(4):491-9

Relationship between Gs alpha messenger ribonucleic acid splice variants and the molecular forms of Gs alpha protein in rat brown adipose tissue. Granneman JG, et al. **Endocrinology** 1990 Oct;127(4):1596-601

Inhibition of 5'-deiodination of thyroxine suppresses the cold-induced increase in brown adipose tissue messenger ribonucleic acid for mitochondrial uncoupling protein without influencing lipoprotein lipase activity. Reiter RJ, et al. **Endocrinology** 1990 May;126(5):2550-4

Two pathways for thyroxine 5'-monodeiodination in brown adipose tissue in fetal sheep: ontogenesis and divergent responses to hypothyroidism and 3,5,3'-triiodothyronine replacement. Wu SY, et al. **Endocrinology** 1990 Apr; 126(4):1950-8

Development of the uncoupling protein in the rat brown-adipose tissue during the perinatal period. Its relationship with the mitochondrial GDP-binding and GDP-sensitive ion permeabilities and respiration. Porras A, et al. **Eur J Biochem** 1990 Feb 14;187(3):671-5

Alpha 1-adrenergic stimulation of Cl- efflux in isolated brown adipocytes. Dasso L, et al. **FEBS Lett** 1990 Mar 12;262(1):25-8

Regulation of the level of uncoupling protein in brown adipose tissue by insulin requires the mediation of the sympathetic nervous system. Géloën A, et al. **FEBS Lett** 1990 Jul 16;267(2):265-7

Norepinephrine-induced synthesis of the uncoupling protein thermogenin (UCP) and its mitochondrial targeting in brown adipocytes differentiated in culture. Herron D, et al. **FEBS Lett** 1990 Jul 30;268(1):296-300

Increased brown adipose tissue activity in children with malignant disease. Bianchi A, et al. **Horm Metab Res** 1989 Nov;21(11):640-1

Changes in thyroid hormone and insulin status of the brown adipose tissue of cold acclimated rats on short term exposure to heat. Gaikwad AS, et al. **Indian J Biochem Biophys** 1990 Jun;27(3):167-71

Effects of chronic low doses of d-fenfluramine on weight gain and calorie intake, brown adipose tissue thermogenic parameters and brain neurotransmitter content in rats fed chow or palatable diets. McCormack JG, et al. **Int J Obes** 1989;13(5):625-33

Alpha- and beta-adrenergic induction of the expression of the uncoupling protein thermogenin in brown adipocytes differentiated in culture. Rehnmark S, et al. **J Biol Chem** 1990 Sep 25;265(27):16464-71

Brown adipose tissue activity in pyrexial cases of cot death. Lean ME, et al. **J Clin Pathol** 1989 Nov;42(11):1153-6

High fat feeding increases brown fat GDP binding in lean but not obese Zucker rats. Gong TW, et al. **J Nutr** 1990 Jul;120(7):786-92

Maternal brown fat metabolism returns to control level by four weeks postweaning in rats. Moore BJ, et al. **J Nutr** 1989 Dec;119(12):1992-8

Effect of nicotine on norepinephrine turnover and thermogenesis in brown adipose tissue and metabolic rate in MSG obese mice. Yoshida T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Apr;36(2):123-30

Caffeine activates brown adipose tissue thermogenesis and metabolic rate in mice. Yoshioka K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Apr;36(2):173-8

Cold-induced and postnatal changes in brown adipose tissue ganglioside levels. Kuroshima A, et al. **Jpn J Physiol** 1990; 40(1):57-64

Changes in brown adipose tissue metabolism following intraventricular vasoactive intestinal peptide and other gastrointestinal peptides in rats. Shido O, et al. **Jpn J Physiol** 1989;39(3):359-69

Effect of acute cold-exposure on norepinephrine turnover and thermogenesis in brown adipose tissue and metabolic rate in MSG-induced obese mice. Yoshioka K, et al. **Jpn J Physiol** 1989;39(6):957-62

The effects of 2-deoxy-D-glucose and sympathetic denervation of brown fat GDP binding in Sprague-Dawley rats. Gong TW, et al. **Life Sci** 1990;46(14):1037-44

Nucleotide binding assay for uncoupling protein from brown fat mitochondria. Klingenberg M, et al. **Methods Enzymol** 1986;126:498-504

Isolation and hydrodynamic characterization of the uncoupling protein from brown adipose tissue. Klingenberg M, et al. **Methods Enzymol** 1986;126:490-8

Microsomal redox systems in brown adipose tissue: high lipid peroxidation, low cholesterol biosynthesis and no detectable cytochrome P-450. Sekhar BS, et al. **Mol Cell Biochem** 1990 Feb 9;92(2):147-57

Stable expression of functional mitochondrial uncoupling protein in Chinese hamster ovary cells. Casteilla L, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5124-8

Brown adipose tissue in humans. Lean ME. **Proc Nutr Soc** 1989 Jul;48(2):243-56 (82 ref.)

Mechanism and evolution of the uncoupling protein of brown adipose tissue. Klingenberg M. **Trends Biochem Sci** 1990 Mar;15(3):108-12 (32 ref.)

[Brown adipose tissue: physiologic effector of thermogenesis] Ricquier D. **Journ Annu Diabetol Hotel Dieu** 1990;:27-31 (13 ref.) **(Fre)**

PATHOLOGY

Capsaicin desensitization induces atrophy of brown adipose tissue in rats. Cui J, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R324-32

Role of acid proteases in brown adipose tissue atrophy caused by fasting in mice. Desautels M, et al. **Biochem Cell Biol** 1990 Feb;68(2):441-7

Importance of neural input and thyroid hormones in the control of brown fat atrophy in mice. Desautels M, et al. **Can J Physiol Pharmacol** 1990 Aug;68(8):1100-7

Effects of dietary carbohydrate and phenotype on thyroid hormones and brown adipose tissue locularity in adult LA/N-cp rats. Tulp OL, et al. **Comp Biochem Physiol [A]** 1989;94(2):225-9

PHYSIOLOGY

Role of prolactin in lactation-induced changes in brown adipose tissue. Chan E, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R51-6

Effects of cholera toxin on gene expression in brown preadipocytes differentiating in culture. Herron D, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):C920-5

Adrenalectomy increases brown adipose tissue metabolism in ob/ob mice housed at 35 degrees C. Kim HK, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):E362-9

Cold acclimation induces desensitization to adenosine in brown fat cells without changing receptor binding. Unelius L, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C818-26

Adaptative decrease in expression of the mRNA for uncoupling protein and subunit II of cytochrome c oxidase in rat brown adipose tissue during pregnancy and lactation.

Martin I, et al. **Biochem J** 1989 Nov 1;263(3):965–8
Stimulation of the paraventricular nucleus with glutamate activates interscapular brown adipose tissue thermogenesis in rats. Amir S. **Brain Res** 1990 Jan 29;508(1):152–5
Retinohypothalamic tract stimulation activates thermogenesis in brown adipose tissue in the rat. Amir S. **Brain Res** 1989 Nov 27;503(1):163–6
Tumour necrosis factor–alpha and lymphotoxin have opposite effects on sympathetic efferent nerves to brown adipose tissue by direct action in the central nervous system. Holt SJ, et al. **Brain Res** 1989 Sep 11;497(1):183–6
Evidence from immunoblotting studies on uncoupling protein that brown adipose tissue is not present in the domestic pig. Trayhurn P, et al. **Can J Physiol Pharmacol** 1989 Dec; 67(12):1480–5
Effects of cigarette smoke on norepinephrine turnover and thermogenesis in brown adipose tissue in MSG–induced obese mice. Yoshida T, et al. **Endocrinol Jpn** 1989 Aug; 36(4):537–44
Effect of total sleep deprivation on 5'-deiodinase activity of rat brown adipose tissue. Balzano S, et al. **Endocrinology** 1990 Aug;127(2):882–90
Long–term alcohol consumption and brown adipose tissue in man. Huttunen P, et al. **Eur J Appl Physiol** 1990; 60(6):418–24
Brown adipose tissue thermogenesis: interdisciplinary studies. Himms–Hagen J. **FASEB J** 1990 Aug;4(11):2890–8 (42 ref.)
Umbilical cord occlusion but not increased plasma T3 or norepinephrine stimulate brown adipose tissue thermogenesis in the fetal sheep. Power GG, et al. **J Dev Physiol** 1989 Mar;11(3):171–7
Estrous cycle irregularities in overfed rats. Glick Z, et al. **Physiol Behav** 1990 Feb;47(2):307–10
The effects of adrenalectomy, corticotropin releasing factor and vasopressin on the sympathetic firing rate of nerves to interscapular brown adipose tissue in the Zucker rat. Holt SJ, et al. **Physiol Behav** 1989 Jun;45(6):1123–9
Effect of interscapular brown adipose tissue denervation on body weight and feed efficiency in alcohol drinking rats. Larue–Achagiotis C, et al. **Physiol Behav** 1989 Aug; 46(2):195–7
Comparative physiology of brown adipose tissue. Andrews JF. **Proc Nutr Soc** 1989 Jul;48(2):237–41 (25 ref.)
Brown adipose tissue: structure and function. Arbuthnott E. **Proc Nutr Soc** 1989 Jul;48(2):177–82 (33 ref.)
The brown adipocyte beta–adrenoceptor. Arch JR. **Proc Nutr Soc** 1989 Jul;48(2):215–23 (39 ref.)
Does brown adipose tissue have a role to play in glucose homeostasis? Cawthorne MA. **Proc Nutr Soc** 1989 Jul; 48(2):207–14 (36 ref.)
Reactivation of brown adipose tissue. Holloway BR. **Proc Nutr Soc** 1989 Jul;48(2):225–30 (42 ref.)
Molecular biology of brown adipose tissue. Ricquier D. **Proc Nutr Soc** 1989 Jul;48(2):183–7 (21 ref.)
Central control of brown adipose tissue. Rothwell NJ. **Proc Nutr Soc** 1989 Jul;48(2):197–206 (79 ref.)
The role of brown adipose tissue in diet–induced thermogenesis. Stock MJ. **Proc Nutr Soc** 1989 Jul; 48(2):189–96 (59 ref.)
Brown adipose tissue and nutritional energetics—where are we now? Trayhurn P. **Proc Nutr Soc** 1989 Jul;48(2):165–75 (63 ref.)
Brown adipose tissue thermogenesis and obesity. Himms–Hagen J. **Prog Lipid Res** 1989;28(2):67–115 (626 ref.)
Brown adipose tissue thermogenesis above the lower critical temperature. Puerta M, et al. **Rev Esp Fisiol** 1989 Dec; 45(4):331–5

PHYSIOPATHOLOGY

Thermogenesis and brown fat: relevance to human obesity. Stock MJ. **Infusionstherapie** 1989 Dec;16(6):282–4 (39 ref.)
Effects of malaria on O2 consumption and brown adipose tissue activity in mice. Cooper AL, et al. **J Appl Physiol** 1989 Sep;67(3):1020–3

ULTRASTRUCTURE

In vivo differentiation of brown adipocytes in adult mice: an electron microscopic study. Géloën A, et al. **Am J Anat** 1990 Aug;188(4):366–72
Relation between membrane phospholipid composition, fluidity and function in mitochondria of rat brown adipose tissue. Effect of thermal adaptation and essential fatty acid deficiency. Senault C, et al. **Biochim Biophys Acta** 1990 Apr 13;1023(2):283–9
Epididymal white adipose tissue after cold stress in rats. I. Nonmitochondrial changes. Lončar D, et al. **J Ultrastruct Mol Struct Res** 1988 Nov–Dec; 101(2–3):109–22
Multiple symmetric lipomatosis. Ultrastructural investigation of the tissue and preadipocytes in primary culture. Zancanaro C, et al. **Lab Invest** 1990 Aug;63(2):253–8

BROWNING REACTION see **MAILLARD REACTION**

BROXURIDINE see **BROMODEOXYURIDINE**

BRUCELLA

ANALYSIS

Immunochemical studies of oligosaccharides obtained from the lipopolysaccharide of Brucella ovis. Suarez CE, et al. **Vet Microbiol** 1990 May;22(4):329–34

CLASSIFICATION

Isolation, identification, and characterization in Israel of Brucella melitensis biovar 1 atypical strains susceptible to dyes and penicillin, indicating the evolution of a new variant. Banai M, et al. **J Clin Microbiol** 1990 May; 28(5):1057–9
[A study on identification of atypical and R phase strains of Brucella] Shang DQ. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1990 Jun; 11(3):160–6 (Eng. Abstr.) **(Chi)**
[Genomic fingerprinting: new possibilities in determining the species identity of Brucella] Ryskov AP, et al. **Genetika** 1990 Jan;26(1):130–3 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Comparative in vitro activities of ofloxacin, difloxacin, ciprofloxacin, and other selected antimicrobial agents against Brucella melitensis. Khan MY, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1409–10
Antibacterial activity of lomefloxacin against Brucella melitensis. Qadri SM, et al. **Diagn Microbiol Infect Dis** 1990 May–Jun;13(3):277–9
Susceptibility of Brucella melitensis to fluoroquinolones. Qadri SM, et al. **Drugs Exp Clin Res** 1989;15(10):483–5
Development of ciprofloxacin resistance in Brucella melitensis [letter] al–Sibai MB, et al. **J Antimicrob Chemother** 1990 Feb;25(2):302–3

GENETICS

Cloning, expression, and occurrence of the Brucella Cu–Zn superoxide dismutase. Bricker BJ, et al. **Infect Immun** 1990 Sep;58(9):2935–9

IMMUNOLOGY

Evaluation of humoral immunity to Brucella sp in cattle by use of an agar–gel immunodiffusion test containing a polysaccharide antigen. Lord VR, et al. **Am J Vet Res** 1989 Nov;50(11):1813–6
Immunoglobulin class of Brucella antibodies in human sera. Kerr WR, et al. **Immunology** 1967 Aug;13(2):223–5
Antigenic relationships of the lipopolysaccharides of Escherichia hermannii strains with those of Escherichia coli O157:H7, Brucella melitensis, and Brucella abortus. Perry MB, et al. **Infect Immun** 1990 May;58(5):1391–5
Antibody response to Brucella ovis outer membrane proteins in ovine brucellosis. Riezu–Boj JI, et al. **Infect Immun** 1990 Feb;58(2):489–94
Analysis of Brucella lipopolysaccharide with specific and cross–reacting monoclonal antibodies. Palmer DA, et al. **J Clin Microbiol** 1989 Oct;27(10):2331–7
Differentiation of serological responses to Yersinia enterocolitica serotype O9 and Brucella species by immunoblot or enzyme–linked immunosorbent assay using whole bacteria and Yersinia outer membrane proteins. Schoerner C, et al. **J Clin Microbiol** 1990 Jul;28(7):1570–4
Latex agglutination assay for human anti–Brucella IgM antibodies. Cambiaso CL, et al. **J Immunol Methods** 1989 Sep 1;122(2):169–75
Selection of a Brucella vaccine strain of low residual virulence by chemical mutagenesis. Zhao WR, et al. **J Med Microbiol** 1989 Oct;30(2):143–8
Brucella antibodies in Sudanese blood donors. Khalil IA, et al. **Med Lab Sci** 1988 Oct;45(4):312–4
Discrimination between sheep antibodies to Brucella melitensis and to Brucella ovis. Plackett P, et al. **Vet Microbiol** 1989 Aug;20(4):339–48
[The presence of Brucella antibodies in human sera and some milk samples] Abbasoğlu U. **Mikrobiyol Bul** 1988 Jan; 22(1):25–9 (Eng. Abstr.) **(Tur)**
[Antibody levels to B. abortus, B. canis and C. burnetti in the sera of patients with brucellosis–like symptoms] Köksal F, et al. **Mikrobiyol Bul** 1988 Apr;22(2):132–41 (Eng. Abstr.) **(Tur)**

ISOLATION & PURIFICATION

Brucella meningitis. Challoner KR, et al. **Am J Emerg Med** 1990 Jan;8(1):40–2
Isolation of Brucella melitensis from human sperm [letter] Vandercam B, et al. **Eur J Clin Microbiol Infect Dis** 1990 Apr;9(4):303–4
Brucella ovis excretion in semen of seronegative, clinicaliy normal breeding rams. Bulgin MS. **J Am Vet Med Assoc** 1990 Jan 15;196(2):313–5
Buffered charcoal–yeast extract medium for the isolation of brucellae. Raad I, et al. **J Clin Microbiol** 1990 Jul; 28(7):1671–2
Brucella biovars isolated from nomadic cattle in the southern Darfur Province of western Sudan. Musa MT, et al. **J Comp Pathol** 1990 Jan;102(1):49–54
Isolation of Brucella melitensis biovar 3 from a chamois (Rupicapra rupicapra) in the southern French Alps. Garin–Bastuji B, et al. **J Wildl Dis** 1990 Jan;26(1):116–8

PATHOGENICITY

Pathogenesis of Brucella. Smith LD, et al. **Crit Rev Microbiol** 1990;17(3):209–30 (160 ref.)
Horizontal transmission in sheep and delayed clearance in guinea pigs and mice of a Brucella melitensis Rev. I mutant. Hunter P, et al. **J S Afr Vet Assoc** 1989 Jun;60(2):92–4

BRUCELLA ABORTUS

ENZYMOLOGY

A protein isolated from Brucella abortus is a Cu–Zn superoxide dismutase. Beck BL, et al. **Biochemistry** 1990 Jan 16;29(2):372–6
Characterization of a phosphomonoesterase from Brucella abortus. Saha AK, et al. **Infect Immun** 1990 May; 58(5):1153–8

GENETICS

Detection of Brucella abortus in mammalian tissue, using biotinylated, whole genomic DNA as a molecular probe. Hopper BR, et al. **Am J Vet Res** 1989 Dec;50(12):2064–8
DNA sequence and expression of the 36–kilodalton outer membrane protein gene of Brucella abortus. Ficht TA, et al. **Infect Immun** 1989 Nov;57(11):3281–91
Brucella abortus 16S rRNA and lipid A reveal a phylogenetic relationship with members of the alpha–2 subdivision of the class Proteobacteria. Moreno E, et al. **J Bacteriol** 1990 Jul;172(7):3569–76

IMMUNOLOGY

Effects of standard and variant strains of infectious bursal disease virus on infections of chickens. Craft DW, et al. **Am J Vet Res** 1990 Aug;51(8):1192–7
Evaluation of serologic and cellular immune responses of cattle to a nonlipopolysaccharide antigen from Brucella abortus. Hoffmann EM, et al. **Am J Vet Res** 1990 Feb; 51(2):216–21
Immunogenicity of Brucella–extracted and recombinant protein vaccines in CD–1 and BALB/c mice. Pugh GW Jr, et al. **Am J Vet Res** 1990 Sep;51(9):1413–20
Bovine T–lymphocyte lines reactive with Brucella abortus. Smith R 3d, et al. **Am J Vet Res** 1990 Apr;51(4):512–7
Differential reactivity of bovine lymphocytes to species of Brucella. Smith R 3d, et al. **Am J Vet Res** 1990 Apr; 51(4):518–23
Antigenic relationships of the lipopolysaccharides of Escherichia hermannii strains with those of Escherichia coli O157:H7, Brucella melitensis, and Brucella abortus. Perry MB, et al. **Infect Immun** 1990 May;58(5):1391–5
Oral immunization of mice with attenuated Salmonella typhimurium containing a recombinant plasmid which codes for production of a 31–kilodalton protein of Brucella abortus. Stabel TJ, et al. **Infect Immun** 1990 Jul; 58(7):2048–55
Capacity of passively administered antibody to prevent establishment of Brucella abortus infection in mice. Winter AJ, et al. **Infect Immun** 1989 Nov;57(11):3438–44
Comparative study of cell–immunoenzymatic methods for the estimation of IgG and IgM anti–Brucella antibodies in the diagnosis of human brucellosis. Mongini C, et al. **J Appl Bacteriol** 1990 Jul;69(1):86–91
Positive brucella agglutination test in enteric fever. Raju AZ, et al. **J Assoc Physicians India** 1990 Jun;38(6):427–8
Use of dried blood on filter paper in the ELISA for Brucella abortus. McLean G, et al. **J Immunol Methods** 1989 Sep 29;123(1):39–43
The serological response of cattle immunized with Yersinia enterocolitica O:9 or O:16 to Yersinia and Brucella abortus antigens in enzyme immunoassays. Nielsen K. **Vet Immunol Immunopathol** 1990 Apr;24(4):373–82
Bovine monoclonal antibody specific for Brucella abortus lipopolysaccharide. Nielsen KH, et al. **Vet Immunol Immunopathol** 1989 Jul;21(3–4):363–72
Immunogenicity of subcellular fractions of Brucella abortus: measurement by in vitro lymphocyte proliferative responses. Smith R 3d, et al. **Vet Immunol Immunopathol** 1990 May;25(1):83–97
[Antibody levels to B. abortus, B. canis and C. burnetti in the sera of patients with brucellosis–like symptoms] Köksal F, et al. **Mikrobiyol Bul** 1988 Apr;22(2):132–41 (Eng. Abstr.) **(Tur)**

ISOLATION & PURIFICATION

Brucella abortus infection in 14 farm dogs. Forbes LB. **J Am Vet Med Assoc** 1990 Mar 15;196(6):911–6
Intracellular localization of Brucella abortus in bovine placenta. Meador VP, et al. **Vet Pathol** 1989 Nov; 26(6):513–5
Isolation of Brucella abortus from experimentally infected dromedary camels in Sudan: a preliminary report. Abu Damir H, et al. **Vet Res Commun** 1989;13(6):403–6

PATHOGENICITY

Penetration and intracellular growth of Brucella abortus in nonphagocytic cells in vitro. Detilleux PG, et al. **Infect Immun** 1990 Jul;58(7):2320–8

PHYSIOLOGY

Ability of mononuclear phagocytes from cattle naturally

resistant or susceptible to brucellosis to control in vitro intracellular survival of Brucella abortus. Price RE, et al. **Infect Immun** 1990 Apr;58(4):879–86

BRUCELLA VACCINE

Vaccination against Brucella. Nicoletti P. **Adv Biotechnol Processes** 1990;13:147–68 (73 ref.)

Protection of mice against Brucella abortus by immunization with polyclonal anti-idiotype antibodies. Beauclair KD, et al. **Immunobiology** 1990 Feb;180(2–3):208–20

ADMINISTRATION & DOSAGE

Brucella abortus-specific immunoglobulin isotypes in serum and vaginal mucus from heifers vaccinated with Brucella abortus salt-extractable proteins and challenge exposed with virulent Brucella organisms. Hall SM, et al. **Am J Vet Res** 1989 Dec;50(12):1997–2003

Comparison of subcutaneous and conjunctival routes of Rev 1 vaccination for the prophylaxis of Brucella ovis infection in rams. Marín CM, et al. **Res Vet Sci** 1990 Mar; 48(2):209–15

ADVERSE EFFECTS

Effect of brucellosis vaccination and dehorning on transmission of bovine leukemia virus in heifers on a California dairy. Lassauzet ML, et al. **Can J Vet Res** 1990 Jan;54(1):184–9

IMMUNOLOGY

Serological and allergic reactions of ewes after simultaneous vaccinations with two living attenuated strains of Brucella and Salmonella. Pardon P, et al. **Ann Rech Vet** 1990; 21(2):153–60

Selection of a Brucella vaccine strain of low residual virulence by chemical mutagenesis. Zhao WR, et al. **J Med Microbiol** 1989 Oct;30(2):143–8

BRUCELLACEAE see under **GRAM-NEGATIVE AEROBIC BACTERIA**

BRUCELLOSIS

Acute pancreatitis associated with brucellosis. al-Awadhi NZ, et al. **Am J Gastroenterol** 1989 Dec;84(12):1570–4 (66 ref.)

Ocular brucellosis. Tabbara KF, et al. **Br J Ophthalmol** 1990 Apr;74(4):249–50

Serology, clinical manifestations and treatment of brucellosis in different age groups. Colmenero JD, et al. **Infection** 1990 May–Jun;18(3):152–6

Thyroiditis due to Brucella melitensis—report of two cases. von Graevenitz A, et al. **Infection** 1990 May–Jun; 18(3):179–80

The morbidity and mortality pattern of Brucella endocarditis. al-Harthi SS. **Int J Cardiol** 1989 Dec;25(3):321–4

Brucella thyroiditis [letter] Mousa AR, et al. **J Infect** 1989 Nov;19(3):287–8

Brucella melitensis cerebellar abscess [letter] Ayala-Gaytán JJ, et al. **J Infect Dis** 1989 Oct;160(4):730–2

Neurobrucellosis in children. Caglar MK, et al. **Paediatr Indones** 1989 Jan–Feb;29(1–2):28–32

Childhood brucellosis: a study of 102 cases. al-Eissa YA, et al. **Pediatr Infect Dis J** 1990 Feb;9(2):74–9

Pulmonary brucellosis. Lubani MM, et al. **Q J Med** 1989 Apr;71(264):319–24

Apyrexic Brucella melitensis aortic valve endocarditis. al-Mudallal DS, et al. **Trop Geogr Med** 1989 Oct; 41(4):372–6

[Brucellosis] Melino C, et al. **Clin Ter** 1989 Nov 30; 131(4):253–72 (27 ref.) (Eng. Abstr.) **(Ita)**

[Neurobrucellosis. Report of 25 cases] García T, et al. **Neurologia** 1986 Mar–Apr;1(2):63–71 (45 ref.) (Eng. Abstr.) **(Spa)**

[Epidural spinal cord compression in brucellar spondylitis (letter)] López-Arlandis JM, et al. **Rev Clin Esp** 1989 Jul–Aug;185(3):165–6 **(Spa)**

CEREBROSPINAL FLUID

Brucella meningitis. Challoner KR, et al. **Am J Emerg Med** 1990 Jan;8(1):40–2

Neurobrucellosis—another cause of increased adenosine deaminase activity in cerebrospinal fluid [letter] da Cunha S, et al. **J Infect Dis** 1990 Jan;161(1):156–7

COMPLICATIONS

Neurological complications of brucella spondylitis. Mousa AM, et al. **Acta Neurol Scand** 1990 Jan;81(1):16–23

Acute pulmonary edema in Brucella myocarditis and interstitial pneumonitis. Jubber AS, et al. **Chest** 1990 Apr; 97(4):1008–9

Spinal cord compression due to Brucella granuloma. Ceviker N, et al. **Infection** 1989 Sep–Oct;17(5):304–5

Localized brucellosis: popliteal artery aneurysm, mediastinitis, dementia, and pneumonia. Gelfand MS, et al. **Rev Infect Dis** 1989 Sep–Oct;11(5):783–8

Chronic neurobrucellosis due to Brucella melitensis. Bucher A, et al. **Scand J Infect Dis** 1990;22(2):223–6

Paraspinal abscess. Hossain J, et al. **Trans R Soc Trop Med Hyg** 1989 Jan–Feb;83(1):137

Gastrointestinal manifestations of brucellosis in Saudi Arabian patients. al-Aska AK. **Trop Gastroenterol** 1989 Oct–Dec;10(4):217–9

[Portal hypertension and acute brucellosis (letter)] Dubois A, et al. **Gastroenterol Clin Biol** 1990;14(6–7):601–2 **(Fre)**

[A case of pericarditis in acute brucellosis] Delmastro B, et al. **Minerva Med** 1989 Nov;80(11):1245–9 (Eng. Abstr.) **(Ita)**

[Induced pemphigus and brucellosis] Foti G, et al. **Minerva Med** 1990 Jan–Feb;81(1–2):107–9 (Eng. Abstr.) **(Ita)**

[Bacteremic brucellosis in heart patients] Celemín Torrijos L, et al. **Arch Inst Cardiol Mex** 1989 Nov–Dec; 59(6):597–602 (Eng. Abstr.) **(Spa)**

[Brucellosis and acute inflammatory polyradiculoneuropathy] García T, et al. **Neurologia** 1989 May;4(4):145–7 (Eng. Abstr.) **(Spa)**

[Neurobrucellosis and cerebral vasculitis] Hernández MA, et al. **Neurologia** 1988 Nov–Dec;3(6):241–3 (Eng. Abstr.) **(Spa)**

[Brucellar hepatic abscess: presentation of a case and review of the literature] Vaquero Gajate GJ, et al. **Rev Esp Enferm Apar Dig** 1989 Oct;76(4):409–12 (33 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Brucella arthritis of the knee in a young soccer player. Chen S. **Br J Sports Med** 1990 Mar;24(1):13

Brucellosis of the central nervous system. A case report of an infected infant. Drutz JE. **Clin Pediatr (Phila)** 1989 Oct; 28(10):476–8

C-reactive protein as a prognostic indicator in acute brucellosis. Navarro JM, et al. **Diagn Microbiol Infect Dis** 1990 May–Jun;13(3):269–70

Spinal brucellosis. Mohan V, et al. **Int Orthop** 1990;14(1):63–6

Comparative study of cell-immunoenzymatic methods for the estimation of IgG and IgM anti-Brucella antibodies in the diagnosis of human brucellosis. Mongini C, et al. **J Appl Bacteriol** 1990 Jul;69(1):86–91

Serological diagnosis of neurobrucellosis. Sanchez-Sousa A, et al. **J Clin Pathol** 1990 Jan;43(1):79–81

Enhancement of the antigen-binding capacity of incomplete IgG antibodies to Brucella melitensis through Fc region interactions with staphylococcal protein A. Jagannath C, et al. **J Immunol Methods** 1989 Nov 30;124(2):251–7

Brucellosis: an unusual cause of fever in Kentucky. Dotson R, et al. **J Ky Med Assoc** 1990 Aug;88(8):389–92

Brucellosis: a rare cause of the unstable spine. Aspegren DD. **J Manipulative Physiol Ther** 1990 Mar–Apr;13(3):165–8

Brucella orchitis: a rare cause of testicular enlargement. Reisman EM, et al. **J Urol** 1990 Apr;143(4):821–2

Sonographic findings in scrotal brucellosis. Patel PJ, et al. **JCU** 1988 Sep;16(7):483–6

Fever, hepatosplenomegaly, and pancytopenia in a 39-year-old hispanic woman [clinical conference] Chia JK, et al. **Rev Infect Dis** 1990 Jul–Aug;12(4):636–43

[A study on latex agglutination for serological diagnosis of brucellosis] Lu QF. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Oct; 10(5):295–8 (Eng. Abstr.) **(Chi)**

[Difficulties in the evaluation of the activity of chronic brucellosis and in the selection of the methods of treatment] Po'lshchikova NN, et al. **Sov Med** 1989;(11):109–10 **(Rus)**

[Antibody levels to B. abortus, B. canis and C. burnetti in the sera of patients with brucellosis-like symptoms] Köksal F, et al. **Mikrobiyol Bul** 1988 Apr;22(2):132–41 (Eng. Abstr.) **(Tur)**

DRUG THERAPY

Multicenter prospective study of treatment of Brucella melitensis brucellosis with doxycycline for 6 weeks plus streptomycin for 2 weeks. Cisneros JM, et al. **Antimicrob Agents Chemother** 1990 May;34(5):881–3

Successful treatment of Brucella melitensis endocarditis with pefloxacin [letter] Micozzi A, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jun;9(6):440–2

Diagnosis and treatment of 106 cases of human brucellosis. Shehabi A, et al. **J Infect** 1990 Jan;20(1):5–10

Brucella endocarditis cured by medical treatment [letter] Cisneros JM, et al. **J Infect Dis** 1989 Nov;160(5):907

Brucella endocarditis cured by medical treatment [letter] Farid Z. **J Infect Dis** 1990 Jul;162(1):281

Ceftriaxone in the treatment of acute and subacute human brucellosis. al-Idrissi HY, et al. **J Int Med Res** 1989 Jul–Aug;17(4):363–8

ECONOMICS

[Socioeconomic effects of human brucellosis] Colmenero Castillo JD, et al. **Rev Clin Esp** 1989 Dec;185(9):459–63 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Brucella endocarditis. Report of one case and review of the literature. Valliattu J, et al. **J Cardiovasc Surg (Torino)** 1989 Sep–Oct;30(5):782–5 (38 ref.)

Screening for brucellosis in pregnant women. Sharif A, et al. **J Trop Med Hyg** 1990 Feb;93(1):42–3

Brucellosis in the dairy-farming community and allied workers of Worcestershire. Henderson RJ. **Lancet** 1967 Aug 12;2(7511):353–7

Human brucellosis: eradication of the major source of infection [letter; comment] Skilbeck N. **Med J Aust** 1990 Jun 4;152(11):615 Comment on: Med J Aust 1988 Jun 6;148(11):587–8, 590.

Brucellosis in Saudi Arabia. Kiel FW, et al. **Soc Sci Med** 1989;29(8):999–1001

[Consumption of goat cheese and human brucellosis in Ghardaïa (Algeria)] Cherif A, et al. **Arch Inst Pasteur Alger** 1986;55:9–14 (Eng. Abstr.) **(Fre)**

[Brucellosis in the Campania region] Palombino R, et al. **Ann Ist Super Sanita** 1989;25(2):309–13 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Brucella melitensis endogenous endophthalmitis. al Faran MF. **Ophthalmologica** 1990;201(1):19–22

IMMUNOLOGY

HLA antigens in brucellosis. Pareja E, et al. **Exp Clin Immmunogenet** 1985;2(1):1–3

Immunoglobulin class of Brucella antibodies in human sera. Kerr WR, et al. **Immunology** 1967 Aug;13(2):223–5

In vitro effect of interferon alpha-2b on T lymphocyte transformation and leukocyte migration inhibition in patients with chronic brucellosis. Lagra F, et al. **Immunopharmacol Immunotoxicol** 1989;11(2–3):223–32

Temporal development of protective cell-mediated and humoral immunity in BALB/c mice infected with Brucella abortus. Araya LN, et al. **J Immunol** 1989 Nov 15; 143(10):3330–7

MICROBIOLOGY

Isolation of Brucella melitensis from human sperm [letter] Vandercam B, et al. **Eur J Clin Microbiol Infect Dis** 1990 Apr;9(4):303–4

Development of ciprofloxacin resistance in Brucella melitensis [letter] al-Sibai MB, et al. **J Antimicrob Chemother** 1990 Feb;25(2):302–3

PHYSIOPATHOLOGY

[Functional state of the heart in patients with acute and subacute brucellosis] Kurmanova KB, et al. **Klin Med (Mosk)** 1990 Mar;68(3):78–82 **(Rus)**

PREVENTION & CONTROL

Vaccination against Brucella. Nicoletti P. **Adv Biotechnol Processes** 1990;13:147–68 (73 ref.)

Protection of mice against Brucella abortus by immunization with polyclonal anti-idiotype antibodies. Beauclair KD, et al. **Immunobiology** 1990 Feb;180(2–3):208–20

Comparative protection of mice against virulent and attenuated strains of Brucella abortus by passive transfer of immune T cells or serum. Araya LN, et al. **Infect Immun** 1990 Jan;58(1):254–6

Capacity of passively administered antibody to prevent establishment of Brucella abortus infection in mice. Winter AJ, et al. **Infect Immun** 1989 Nov;57(11):3438–44

[Our work experience in the practical elimination of brucellosis in Krasnodar Territory] Nazarov ElA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Nov;(11):122–5 **(Rus)**

RADIONUCLIDE IMAGING

Scintigraphic evaluation of lumbosacral pain in brucellosis. Cordero-Sánchez M, et al. **Arthritis Rheum** 1990 Jul; 33(7):1052–5

THERAPY

[Immunocorrection in patients with chronic brucellosis at the sanatorium-health resort stage of treatment] Tsarfis PG, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1990 Jan–Feb; (1):32–5 (Eng. Abstr.) **(Rus)**

TRANSMISSION

Recurrent enterocolitis-like symptoms as the possible presenting manifestations of neonatal Brucella melitensis infection. Labrune P, et al. **Acta Paediatr Scand** 1990 Jun–Jul;79(6–7):707–9

Brucella antibodies in Sudanese blood donors. Khalil IA, et al. **Med Lab Sci** 1988 Oct;45(4):312–4

VETERINARY

Treatment of Brucella melitensis infection in mice by use of liposome-encapsulated gentamicin. Hernández-Caselles T, et al. **Am J Vet Res** 1989 Sep;50(9):1486–8

Detection of Brucella abortus in mammalian tissue, using biotinylated, whole genomic DNA as a molecular probe. Hopper BR, et al. **Am J Vet Res** 1989 Dec;50(12):2064–8

Protection of mice against Brucella abortus infection by inoculation with monoclonal antibodies recognizing Brucella O-antigen. Phillips M, et al. **Am J Vet Res** 1989 Dec;50(12):2158–61

Prevalence of ovine brucellosis in previously untested sheep flocks in Tasmania [letter] Andrewartha RM, et al. **Aust Vet J** 1990 Jan;67(1):32

Antibody response to Brucella ovis outer membrane proteins in ovine brucellosis. Riezu-Boj JI, et al. **Infect Immun** 1990 Feb;58(2):489–94

Brucella ovis epizootic in virgin ram lambs. Bulgin MS. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1120–2

Brucella ovis excretion in semen of seronegative, clinically normal breeding rams. Bulgin MS. **J Am Vet Med Assoc** 1990 Jan 15;196(2):313–5

Antimicrobial therapy for rams with Brucella ovis infection of the urogenital tract. Dargatz DA, et al. **J Am Vet Med Assoc** 1990 Feb 15;196(4):605–10

Brucella abortus infection in 14 farm dogs. Forbes LB. **J Am Vet Med Assoc** 1990 Mar 15;196(6):911–6

Agencies on collision course over brucellosis in Yellowstone [news] Gloyd JS. **J Am Vet Med Assoc** 1990 Jun 1; 196(11):1745–6

Selection of a Brucella vaccine strain of low residual virulence by chemical mutagenesis. Zhao WR, et al. **J Med Microbiol** 1989 Oct;30(2):143–8

Brucella abortus in captive bison. I. Serology, bacteriology, pathogenesis, and transmission to cattle. Davis DS, et al. **J Wildl Dis** 1990 Jul;26(3):360–71

Isolation of Brucella melitensis biovar 3 from a chamois (Rupicapra rupicapra) in the southern French Alps. Garin-Bastuji B, et al. **J Wildl Dis** 1990 Jan;26(1):116–8

Human brucellosis: eradication of the major source of infection [letter; comment] Skilbeck N. **Med J Aust** 1990 Jun 4;152(11):615 Comment on: Med J Aust 1988 Jun 6;148(11):587–8, 590.

Comparison of subcutaneous and conjunctival routes of Rev 1 vaccination for the prophylaxis of Brucella ovis infection in rams. Marín CM, et al. **Res Vet Sci** 1990 Mar; 48(2):209–15

Experimental treatment of Brucella melitensis infection in sheep with oxytetracycline alone or combined with streptomycin. Radwan AI, et al. **Trop Anim Health Prod** 1989 Aug;21(3):211–6

Pathogenesis of Brucella abortus infection of the mammary gland and supramammary lymph node of the goat. Meador VP, et al. **Vet Pathol** 1989 Sep;26(5):357–68

Effect of nursing on Brucella abortus infection of mammary glands of goats. Meador VP, et al. **Vet Pathol** 1989 Sep; 26(5):369–75

Comparison of three serological tests for Brucella ovis infection of rams using different antigenic extracts. Marín CM, et al. **Vet Rec** 1989 Nov 11;125(20):504–8

Isolation of Brucella abortus from experimentally infected dromedary camels in Sudan: a preliminary report. Abu Damir H, et al. **Vet Res Commun** 1989;13(6):403–6

[Seroepidemiologic studies of the detection of antibodies to Brucella, Chlamydia, Leptospira, BVD/MD virus, IBR/IPV virus and enzootic bovine leukosis virus (EBL) in dromedary mares (Camelus dromedarius)] Wernery U, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Mar; 97(3):134–5 (Eng. Abstr.) **(Ger)**

[Serologic studies of domestic animals for listeriosis, Q-fever, and brucellosis in Cairo] Sixl W, et al. **Geogr Med Suppl** 1989;3:127–8 (Eng. Abstr.) **(Ger)**

BRUCELLOSIS, BOVINE

COMPLICATIONS

Clinical manifestations of brucellosis in cattle of the southern Darfur Province, western Sudan. Musa MT, et al. **J Comp Pathol** 1990 Jul;103(1):95–9

DIAGNOSIS

A competition enzyme immunoassay for brucellosis diagnosis. MacMillan AP, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Feb;97(2):83–5

An evaluation of the delayed-type hypersensitivity test for diagnosing brucellosis in individual cattle: a field study. Bercovich Z, et al. **Vet Microbiol** 1990 Apr;22(2–3):241–8

[A study on latex agglutination for serological diagnosis of brucellosis] Lu QF. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Oct; 10(5):295–8 (Eng. Abstr.) **(Chi)**

[Control measures in officially acknowledged brucellosis-free and leukosis unsuspected dairy herds on the basis of bulk milk samples in combination with ELISA tests] Forschner E, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Nov-Dec; 96(10):475–86 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Brucella abortus-specific immunoglobulin isotypes in serum and vaginal mucus from heifers vaccinated with Brucella abortus salt-extractable proteins and challenge exposed with virulent Brucella organisms. Hall SM, et al. **Am J Vet Res** 1989 Dec;50(12):1997–2003

Evaluation of serologic and cellular immune responses of cattle to a nonlipopolysaccharide antigen from Brucella abortus. Hoffmann EM, et al. **Am J Vet Res** 1990 Feb; 51(2):216–21

Evaluation of humoral immunity to Brucella sp in cattle by use of an agar-gel immunodiffusion test containing a polysaccharide antigen. Lord VR, et al. **Am J Vet Res** 1989 Nov;50(11):1813–6

Immunopathology of experimental Brucella abortus strain 19 infection of the genitalia of bulls. Campero CM, et al. **Vet Immunol Immunopathol** 1990 Mar;24(3):235–46

MICROBIOLOGY

Intracellular localization of Brucella abortus in bovine placenta. Meador VP, et al. **Vet Pathol** 1989 Nov; 26(6):513–5

Effect of nursing on Brucella abortus infection of mammary glands of goats. Meador VP, et al. **Vet Pathol** 1989 Sep; 26(5):369–75

PATHOLOGY

Pathogenesis of Brucella abortus infection of the mammary gland and supramammary lymph node of the goat. Meador VP, et al. **Vet Pathol** 1989 Sep;26(5):357–68

PREVENTION & CONTROL

[Brucella abortus] **Tijdschr Diergeneeskd** 1989 Dec 1; 114(23):1210–2 **(Dut)**

TRANSMISSION

Brucella abortus in captive bison. I. Serology, bacteriology, pathogenesis, and transmission to cattle. Davis DS, et al. **J Wildl Dis** 1990 Jul;26(3):360–71

BRUCINE see under **STRYCHNINE**

BRUGIA

Comparative susceptibility of five strains of Mansonia uniformis (Diptera:Culicidae) in Malaysia to infection with subperiodic Brugia malayi. Chiang GL, et al. **Southeast Asian J Trop Med Public Health** 1989 Jun; 20(2):169–74

[Observation on the intake of Brugia malayi microfilariae by Anopheles sinensis and host efficiency] Huang JL, et al. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Dec; 10(6):344–7 (Eng. Abstr.) **(Chi)**

ANALYSIS

Localization and immunogenicity of tubulin in the filarial nematodes Brugia malayi and B. pahangi. Helm R, et al. **Parasite Immunol** 1989 Sep;11(5):479–502

DRUG EFFECTS

Effects of intermediary metabolites and electron transport inhibitors on action of chloroquine on Brugia pahangi and Onchocerca volvulus. VandeWaa EA, et al. **Biochem Pharmacol** 1989 Dec 1;38(23):4327–32

The effect of two novel analogues of antimycin A on oxygen consumption and survival of filarial nematodes in vitro. Hayes DJ, et al. **Mol Biochem Parasitol** 1990 Jan 15; 38(2):159–68

In vivo effect of benzothiazole and amoscanate derivatives on the fine structure of adult Brugia spp. and Litomosoides carinii. Franz M, et al. **Parasitol Res** 1990;76(5):393–400

Fine-structure alterations in female Brugia malayi and Litomosoides carinii after in vivo treatment with flubendazole. Franz M, et al. **Parasitol Res** 1990;76(5):401–5

Effects of potential inhibitors on Brugia pahangi in vitro: macrofilaricidal action and inhibition of microfilarial production. Barker GC, et al. **Parasitology** 1989 Dec;99 Pt 3:409–16

Brugia pahangi adults implanted into mice: a possible screen for filaricidal activity. Denham DA, et al. **Trop Med Parasitol** 1990 Jun;41(2):223–4

ENZYMOLOGY

Diethylcarbamazine: inhibitory effect on acetylcholinesterase of Dirofilaria immitis and Brugia pahangi. Fujimaki Y, et al. **Southeast Asian J Trop Med Public Health** 1989 Jun; 20(2):179–82

GENETICS

Human T-cell stimulation, molecular characterization and in situ mRNA localization of a Brugia malayi recombinant antigen. Arasu P, et al. **Mol Biochem Parasitol** 1989 Oct; 36(3):223–31

Nucleotide sequence of Brugia pahangi 17.4 kD protein. Ellenberger DL, et al. **Nucleic Acids Res** 1989 Dec 11; 17(23):10121

GROWTH & DEVELOPMENT

Experimental infection of the leaf-monkeys, Presbytis cristata and Presbytis melalophos with subperiodic Brugia malayi. Mak JW, et al. **Acta Trop (Basel)** 1990 May;47(4):223–6

Cultivation of sexually mature Brugia malayi in vitro. Riberu WA, et al. **Am J Trop Med Hyg** 1990 Jul;43(1):3–5

Circadian periodicity in microfilarial counts. Gupta CK, et al. **J Trop Med Hyg** 1990 Jun;93(3):222–4

[Further study on in vitro culture of third-stage larvae of Wuchereria bancrofti and Brugia malayi] Zheng HJ, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(4):276–9 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

The BALB/c mouse as a model for immunological studies of microfilariae-induced pulmonary eosinophilia. Egwang TG, et al. **Am J Trop Med Hyg** 1990 Jul;43(1):61–6

Protective immunity against Brugia malayi infective larvae in mice. I. Parameters of active and passive immunity. Hayashi Y, et al. **Am J Trop Med Hyg** 1989 Dec;41(6):650–6

Heightened anti-filarial immune responsiveness in a Haitian pediatric population. Hitch WL, et al. **Am J Trop Med Hyg** 1989 Dec;41(6):657–63

Phosphocholine-containing antigens of Brugia malayi nonspecifically suppress lymphocyte function. Lal RB, et al. **Am J Trop Med Hyg** 1990 Jan;42(1):56–64

Antigenic analysis of excretory-secretory products of Wuchereria bancrofti and Brugia malayi infective larval forms by SDS-PAGE. Kharat I, et al. **Indian J Exp Biol** 1989 Aug;27(8):681–4

Differential recognition of Brugia malayi antigens by bancroftian filariasis sera. Parab PB, et al. **Indian J Med Res** 1990 Mar;91:138–43

Evaluation of filarial skin test with Brugia malayi larval antigen in the field. Singh AK, et al. **Indian J Med Res** 1990 Jan;91:52–4

In vitro killing of microfilariae of Brugia pahangi and Brugia malayi by eosinophil granule proteins. Hamann KJ, et al. **J Immunol** 1990 Apr 15;144(8):3166–73

Protective immunity against Brugia malayi infective larvae in mice. II. Induction by a T cell-dependent antigen isolated by monoclonal antibody affinity chromatography and SDS-PAGE. Hammerberg B, et al. **J Immunol** 1989 Dec 15;143(12):4201–7

Protective efficacy of a cloned Brugia malayi antigen in a mouse model of microfilaremia. Kazura JW, et al. **J Immunol** 1990 Oct 1;145(7):2260–4

MHC and non-MHC-restricted recognition of filarial surface antigens in mice transplanted with adult Brugia malayi parasites. Kwan-Lim GE, et al. **J Immunol** 1990 Sep 15; 145(6):1912–20

Paramyosin-enhanced clearance of Brugia malayi microfilaremia in mice. Nanduri J, et al. **J Immunol** 1989 Nov 15;143(10):3359–63

Use of parasite antigen detection to monitor macrofilaricidal therapy in Brugia malayi-infected jirds. Chandrashekar R, et al. **J Parasitol** 1990 Feb;76(1):122–4

Circulating parasite antigen in Brugia pahangi-infected jirds. Weil GJ, et al. **J Parasitol** 1990 Feb;76(1):78–84

Injection of microfilariae induces resistance to Brugia malayi infection in ferrets and accelerates development of lymphostatic disease. Crandall RB, et al. **Parasite Immunol** 1990 Mar;12(2):229–32

Differential recognition of microfilarial antigens by sera from immigrants into an area endemic for brugian filariasis. Kurniawan L, et al. **Parasite Immunol** 1990 Mar; 12(2):213–28

Secreted antigens of filarial nematodes: a survey and characterization of in vitro excreted/secreted products of adult Brugia malayi. Kwan-Lim GE, et al. **Parasite Immunol** 1989 Nov;11(6):629–54

Modulation of lymphocyte activation by soluble Brugia pahangi extracts. Leiva LE, et al. **Trop Med Parasitol** 1989 Sep;40(3):327–31

In vitro activity of some monoclonal antibodies against Brugia malayi microfiliariae and infective larvae. Tan MA, et al. **Trop Med Parasitol** 1989 Sep;40(3):317–21

[Determination of circulating filarial antigen using monoclonal antibody against Brugia malayi adult worm ES antigen with Dot-ELISA] Zheng HJ. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1990 Jan;24(1):25–7 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Rapid diagnosis of Brugia malayi and Wuchereria bancrofti filariasis by an acridine orange/microhematocrit tube technique. Long GW, et al. **J Parasitol** 1990 Apr; 76(2):278–81

A rapid DNA assay for the species-specific detection and quantification of Brugia in blood samples. Poole CB, et al. **Mol Biochem Parasitol** 1990 Apr;40(1):129–36

METABOLISM

Lectin binding to larval stages of Brugia patei. Rao UR, et al. **Int J Parasitol** 1989 Sep;19(6):689–90

Intravascular filarial parasites elaborate cyclooxygenase-derived eicosanoids. Liu LX, et al. **J Exp Med** 1990 Sep 1;172(3):993–6

Investigation of ecdysteroid excretion by adult Dirofilaria immitis and Brugia pahangi. Mercer JG, et al. **Mol Biochem Parasitol** 1990 Jan 1;38(1):89–95

Comparison of glycolysis and glutaminolysis in Onchocerca volvulus and Brugia pahangi by 13C nuclear magnetic resonance spectroscopy. MacKenzie NE, et al. **Parasitology** 1989 Dec;99 Pt 3:427–35

PATHOGENICITY

Variation in four acid hydrolase activities in filarial-susceptible and -refractory genotypes of Aedes aegypti. Nasr-Schirf D, et al. **Biochem Genet** 1989 Oct; 27(9–10):533–9

Susceptibility of Anopheles quadrimaculatus (Diptera: Culicidae) to subperiodic Brugia malayi and Brugia pahangi (Nematoda: Filarioidea) adapted to nude mice and jirds. Nayar JK, et al. **J Med Entomol** 1990 May;27(3):409–11

BRUNEOMYCIN see **STREPTONIGRIN**

BRUNHILDE VIRUS see **POLIOVIRUS**

BRUNNER'S GLANDS see under DUODENUM

BRUSH BORDER see MICROVILLI

BRUXISM

Bruxism: a review of the literature. Part I. Faulkner KD. **Aust Dent J** 1990 Jun;35(3):266–76 (131 ref.)

COMPLICATIONS

The validity of tooth grinding measures: etiology of pain dysfunction syndrome revisited. Marbach JJ, et al. **J Am Dent Assoc** 1990 Mar;120(3):327–33 (60 ref.)

DRUG THERAPY

Treatment of bruxism with botulinum toxin injections [letter] Van Zandijcke M, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):530

EPIDEMIOLOGY

Changes in the incidence of nocturnal bruxism in college students: 1966–1989. Hicks RA, et al. **Percept Mot Skills** 1989 Oct;69(2):481–2

[The epidemiological correlations between mandibular dysfunctions and parafunctions] Sümnig W, et al. **Zahn Mund Kieferheilkd** 1990;78(3):241–5 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Bruxism [letter; comment] Jacome DE. **Neurology** 1990 Apr; 40(4):727–8 Comment on: Neurology 1989 Sep;39(9):1262.

PHYSIOPATHOLOGY

Methodological considerations concerning the use of Bruxcore Plates to evaluate nocturnal bruxism. Pierce CJ, et al. **J Dent Res** 1989 Jun;68(6):1110–4

THERAPY

The reduction of bruxism using contingent EMG audible biofeedback: a case study. Feehan M, et al. **J Behav Ther Exp Psychiatry** 1989 Jun;20(2):179–83

BRYOZOA

ANALYSIS

Seasonally occurring lectins from the bryozoan Bugula neritina. Colon-Urban R, et al. **J Exp Zool** 1990 May; 254(2):138–43

BUCCA see CHEEK

BUCOLOME see under BARBITURATES

BUCRYLATE see under CYANOACRYLATES

BUDD-CHIARI SYNDROME see HEPATIC VEIN THROMBOSIS

BUDDHISM

Three case reports of the metabolic and electroencephalographic changes during advanced Buddhist meditation techniques. Benson H, et al. **Behav Med** 1990 Summer;16(2):90–5

Sri Lanka's religious leaders back Facts for Life. Perera M. **Hygie** 1989 Dec;8(4):14–5

'Delusion of world destruction' (Wetzel). Comparative study between Japan and West Germany. Tateyama M. **Psychopathology** 1989;22(6):289–94

A practising faith—Buddhism. Hodgson K. **Radiogr Today** 1989 Sep;55(628):66–7

The Buddhist view concerning the dead body. Sugunasiri SH. **Transplant Proc** 1990 Jun;22(3):947–9

HISTORY

Lady Rokujo's ghost: spirit possession, Buddhism, and healing in Japanese literature. Barnes NJ. **Lit Med** 1989; 8:106–21

[Interrelations of Buddhism and classical Indian medicine] Butzenberger K, et al. **Sudhoffs Arch** 1989;73(1):88–109 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

The Buddhist mandala. Pilgrim RB. **Lit Med** 1989;8:36–41

BUDGETARY CONTROL see BUDGETS

BUDGETS

Getting a grip on your unit's budget. Brechbiel K. **Am J Nurs** 1990 Jan;90(1):42I, 42L

The clinical engineering budget. Mahachek AR. **Biomed Instrum Technol** 1989 Jul–Aug;23(4):276–82

The clinical engineering budget: how to tell the boss where the dollars went [interview by Michael J Miller] Stiefel R, et al. **Biomed Instrum Technol** 1989 Jul–Aug;23(4):270–4

Budget holding [letter] Sykes AJ. **Br J Gen Pract** 1990 Apr; 40(333):170

Perspectives used for gaining approval of budgets. Franks-Joiner GL. **J Nurs Adm** 1990 Jan;20(1):34–8

Managing operating room budget variances. Mailhot CB, et al. **J Nurs Adm** 1990 May;20(5):19–26

Practice budgets: lifting the veil of ignorance [editorial] Forbes JF. **J R Coll Gen Pract** 1989 Sep;39(326):355–6

Covetous eyes on the AIDS budget [news] Greenberg DS. **Lancet** 1990 May 12;335(8698):1148–9

The budget and certifying fitness for work [letter] Mackereth B. **N Z Med J** 1989 Oct 11;102(877):539

Strong support for science in US budget [news] **Nature** 1990 Feb 1;343(6257):397

AIDS research funding. Budget division disputed [news] Concar D. **Nature** 1990 Apr 26;344(6269):803

NIH budget crisis [letter; comment] [see comments] **Science** 1990 Jan 26;247(4941):393–4 Comment on: Science 1989 Nov 24;246(4933):988–90. Comment in: Science 1990 Mar 23;247(4949 Pt 1):1385.

Science and Congress: outlook uncertain [news] **Science** 1990 Jan 26;247(4941):404–5

Planning a budget: in God we trust? [news] Palca J. **Science** 1990 Jul 6;249(4964):17

LEGISLATION & JURISPRUDENCE

Consequence of the Omnibus Budget Reconciliation Act of 1987: elimination of markup for certain diagnostic tests. Kisslo J, et al. **J Am Soc Echocardiogr** 1988 Sep–Oct; 1(5):388–90

The 1989 OBRA legislation: implications for physicians. Caldwell JR. **J Fla Med Assoc** 1990 Apr;77(4):469–71

NCI appropriation for 1990 nearly settled [news] McClave C. **J Natl Cancer Inst** 1989 Nov 15;81(22):1694

Financial realities hit US science budget [news] Anderson C. **Nature** 1990 Sep 20;347(6290):215

Budget fix hits research grants [news]. Crawford M. **Science** 1989 Dec 1;246(4934):1115

STANDARDS

[Essence and method of determining standards of budgetary expenditures for public health calculated per 1 inhabitant] Korchagin VP, et al. **Sov Zdravookhr** 1989;(9):9–16 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

Hospital advertising budgets rebound in first half of 1990. Johnsson J. **Hospitals** 1990 Oct 5;64(19):40, 42, 44

TRENDS

Self-governing hospitals: a hospital manager's assessment. Graham NG. **Br J Hosp Med** 1989 Sep;42(3):234–6

Medicaid could bust state budgets in the '90s. **Hospitals** 1990 Sep 5;64(17):14

Data processing departments beef up spending. Packer CL. **Hospitals** 1990 Mar 5;64(5):65

Medicare marches on [news] Greenberg DS. **Lancet** 1990 Sep 15;336(8716):676–7

BUDR see BROMODEOXYURIDINE

BUERGER'S DISEASE see THROMBOANGIITIS OBLITERANS

BUFANOLIDES

PHARMACOLOGY

Actions of bufalin and cinobufotalin, two bufadienolides respectively more active and less active than ouabain, on ouabain binding and 86Rb uptake by human erythrocytes. Brownlee AA, et al. **Clin Sci** 1990 Feb;78(2):169–74

Antitumor agents, 110. Bryophyllin B, a novel potent cytotoxic bufadienolide from Bryophyllum pinnatum. Yamagishi T, et al. **J Nat Prod** 1989 Sep–Oct;52(5):1071–9

POISONING

The toxicity for cattle of bufadienolide cardiac glycosides from Bryophyllum tubiflorum flowers. McKenzie RA, et al. **Aust Vet J** 1989 Nov;66(11):374–6

BUFEXAMAC see under HYDROXAMIC ACIDS

BUFFALOES

Clinical and pathological responses of water buffalo (Bubalus bubalis) to experimental infection with bovine ephemeral fever virus—Chinese strain. Bai WB, et al. **Aust Vet J** 1989 Nov;66(11):373–4

Susceptibility of African buffaloes and Asiatic water buffaloes to foot-and-mouth disease [letter] Paine GD. **Aust Vet J** 1990 Feb;67(2):N24–5

N-terminal groups of buffalo thyroglobulin. Deshpande V, et al. **Indian J Biochem Biophys** 1990 Apr;27(2):118–20

Renal tubular acidosis, vanadium and buffaloes. Sitprija V, et al. **Nephron** 1990;54(1):97–8

Infertility and disease surveillance using a milk recording scheme in the Sahiwal district of Pakistan [published erratum appears in Trop Anim Health Prod 1990 Feb;22(1):60] Pedersen CH. **Trop Anim Health Prod** 1989 Nov;21(4):263–72

The carrier status of sheep, cattle and African buffalo recovered from heartwater. Andrew HR, et al. **Vet Parasitol** 1989 Dec;34(3):261–6

Field use of live haemorrhagic septicaemia vaccine [letter] Myint A, et al. **Vet Rec** 1990 Jun 30;126(26):648

ANATOMY & HISTOLOGY

The periurethral glandular complex in the water buffalo: an ultrastructural, histological and lectin-histochemical study. Abou-Elmagd A, et al. **Arch Histol Cytol** 1989 Dec; 52(5):501–12

The Sertoli cell of the water buffalo—an electron microscopic study. Azmi TI, et al. **Can J Vet Res** 1990 Jan;54(1):93–8

BLOOD

Some hormonal characteristics of high and low yielding Holstein cows and water buffaloes located in temperate and subtropical environments. el-Nouty FD, et al. **Beitr Trop Landwirtsch Veterinarmed** 1989;27(4):461–8

Purification and properties of buffalo serum albumin. Tayyab S, et al. **Biochem Int** 1990;20(2):405–15

Water buffalo (Bubalus bubalis) hemoglobins: an electrophoretic and chromatographic study. Di Luccia A, et al. **Comp Biochem Physiol [B]** 1989;94(1):71–7

Haematological changes in buffalo calves inoculated with Escherichia coli endotoxin and corticosteroids. Jain NC, et al. **Res Vet Sci** 1989 Nov;47(3):305–8

Studies on activation and levels of haemolytic complement of buffalo (Bubalus bubalis). 1. Classical complement pathway. Jain A, et al. **Vet Immunol Immunopathol** 1989 Dec;23(3–4):267–77

EMBRYOLOGY

Present status of embryo transfer in water buffalo (a review). Ocampo MB, et al. **Jpn J Vet Res** 1989 Oct;37(3–4):167–79 (38 ref.)

GENETICS

The HK/LK polymorphism of erythrocyte cation content in two wild species of east African bovids: demonstrated in wildebeest but not in African buffalo. Georgiadis N, et al. **Anim Genet** 1990;21(2):199–205

Identification of crossbred buffalo genotypes and their chromosome segregation patterns. Harisah M, et al. **Genome** 1989 Dec;32(6):999–1002

IMMUNOLOGY

Immune response induced by Vero cell culture adapted buffalo pox virus in rabbits and buffaloes. Mohanty PK, et al. **Indian J Exp Biol** 1989 Apr;27(4):350–5

METABOLISM

Effects of exogenous urea infusion on glucose metabolism in acute heat stressed swamp buffaloes (Bubalus bubalis). Chaiyabutr N, et al. **Br Vet J** 1989 Nov–Dec;145(6):538–45

Effects of repeated topical application of dichlorvos on blood enzymes and its toxicity in buffalo calves (Bubalus bubalis). Raina R, et al. **Br Vet J** 1990 May–Jun;146(3):264–9

Studies on the properties of muscarinic cholinergic receptor sites in bovine pineal gland. Govitrapong P, et al. **Comp Biochem Physiol [C]** 1989;94(1):159–64

Lipid peroxidation in buffalo (Bubalus bubalis L.) spermatozoa: effect of added vitamin C and glucose. Singh P, et al. **Indian J Exp Biol** 1989 Nov;27(11):1001–2

Pesticide residues in milk and fish samples collected from two Egyptian Governorates. Dogheim SM, et al. **J Assoc Off Anal Chem** 1990 Jan–Feb;73(1):19–21

Pharmacokinetics and plasma protein binding of gentamicin in Bubalus bubalis calves. Garg SK, et al. **J Vet Pharmacol Ther** 1990 Mar;13(1):105–8

The kinetic disposition and dosage regimen for carbenicillin in buffalo calves. Bal MS, et al. **Vet Res Commun** 1989; 13(5):389–94

Pharmacokinetics and dosage regimen of cephalexin in buffalo calves (Bubalus bubalis) following single intravenous and intramuscular administration. Garg SK, et al. **Vet Res Commun** 1990;14(1):59–62

Pharmacokinetics and distribution of ampicillin in plasma, milk and uterine fluid of female buffaloes. Jayachandran C, et al. **Vet Res Commun** 1990;14(1):47–51

MICROBIOLOGY

Pasteurella multocida infections in mice with reference to haemorrhagic septicaemia in cattle and buffalo. Ramdani, et al. **Immunol Cell Biol** 1990 Feb;68 (Pt 1):57–61

Aeromonas sobria in bubaline (water buffalo) abortion: growth requirement, biochemical characters, antibiotic susceptibility, experimental pathogenicity and serology. Das AM, et al. **Indian J Exp Biol** 1990 Apr;28(4):341–5

Fungi on the claws of buffalo and cow in Egypt. Abdel-Gawad KM. **J Basic Microbiol** 1989;29(6):323–8

Fungi isolated from lymph nodes of buffaloes. Pal M, et al. **Mycoses** 1989 Nov;32(11):578–80

A study of immunity against pasteurella multocida in buffalo calves and their carrier status [letter] Mohan K, et al. **Vet Rec** 1968 Aug 10;83(6):155–6

PARASITOLOGY

Schistosoma japonicum: an ultraviolet-attenuated cercarial

vaccine applicable in the field for water buffaloes. Shi YE, et al. **Exp Parasitol** 1990 Jul;71(1):100–6

Clinico–biochemical use of serum acetylcholine esterase following treatment with synthetic pyrethroids, cypermethrin and fenvalerate, in cattle and buffalo experimentally infested with Boophilus microplus. Ansari MZ, et al. **Indian J Exp Biol** 1990 Mar;28(3):241–4

Biochemical variations in Gigantocotyle explanatum and Gastrothylax crumenifer with respect to their seasonal reproduction. Khan P, et al. **Int J Parasitol** 1990 Feb; 20(1):109–17

Immunohistochemical demonstration of Trypanosoma evansi in tissues of experimentally infected rats and a naturally infected water buffalo (Bubalus bubalis). Sudarto MW, et al. **J Parasitol** 1990 Apr;76(2):162–7

Finding and recognition of the bovine host by the cercariae of Schistosoma spindale. Haas W, et al. **Parasitol Res** 1990; 76(4):343–50

Comparative study of sheep and buffalo isolates of Fasciola gigantica in the intermediate host Lymnaea auricularia. al–Kubaisee RY, et al. **Res Vet Sci** 1989 Sep;47(2):273–4

Susceptibility of African buffalo and Boran cattle to intravenous inoculation with Trypanosoma congolense bloodstream forms. Olubayo RO, et al. **Trop Med Parasitol** 1990 Jun;41(2):181–4

Ultrastructure of sarcocysts from water buffalo in India. Dubey JP, et al. **Vet Parasitol** 1989 Nov;34(1–2):149–52

Susceptibility of African buffalo and Boran cattle to Trypanosoma congolense transmitted by Glossina morsitans centralis. Grootenhuis JG, et al. **Vet Parasitol** 1990 Mar;35(3):219–31

The extraparasitic life cycle of Toxocara vitulorum in the village environment of Sri Lanka. Roberts JA. **Vet Res Commun** 1989;13(5):377–88

[Occurrence of tissue Filarioidea in ruminants in Poland] Demiaszkiewicz AW. **Wiad Parazytol** 1989;35(4):315–21 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Effect on Bubalus bubalis thermoregulation by monocrotophos and antidotal therapy. Sandhu HS, et al. **Bull Environ Contam Toxicol** 1989 Nov;43(5):776–8

Reticulo–ruminal motility in cattle (Bos indicus) and water buffaloes (Bubalus bubalis) fed a low quality roughage diet. McSweeney CS, et al. **Comp Biochem Physiol [A]** 1989; 94(4):635–8

Effect of vitamin E on lipid peroxidation in buffalo Bubalus bubalis L. Singh P, et al. **Indian J Exp Biol** 1989 Jan; 27(1):14–6

Milk production in lactating buffalo receiving recombinantly produced bovine somatotropin. Ludri RS, et al. **J Dairy Sci** 1989 Sep;72(9):2283–7

Effects of limited suckling and varying prepartum nutrition on postpartum reproductive traits of milked buffaloes. Usmani RH, et al. **J Dairy Sci** 1990 Jun;73(6):1564–70

Effect of prepartum feeding on milk yield and calf growth rate in limited–suckled and nonsuckled buffaloes. Usmani RH, et al. **J Dairy Sci** 1989 Aug;72(8):2087–94

Preliminary study of buffalo sperm penetration into zona–free hamster eggs after treatment with calcium ionophore A23187. Takahashi Y, et al. **Jpn J Vet Res** 1989 Oct; 37(3–4):161–6

Reduced work output of well–fed buffaloes pulling carts on the Terai in east Nepal. Pearson RA. **Trop Anim Health Prod** 1989 Nov;21(4):273–6

Plasma progesterone concentration and reproductive function relative to thyroid activity in postpartum buffaloes (Bubalus bubalis). Bahga CS. **Vet Res Commun** 1989; 13(6):407–12

SURGERY

Cannulation of the rumen in cattle and buffaloes. McSweeney CS. **Aust Vet J** 1989 Aug;66(8):266–8

BUFFERS

Electric charge effects on phospholipid headgroups. Phosphatidylcholine in mixtures with cationic and anionic amphiphiles. Scherer PG, et al. **Biochemistry** 1989 Sep 19; 28(19):7720–8

Characterization of the reaction products of deoxyguanosine with the anticancer agent BFNU and BFNU–1,1,1',1'–d4 in different buffers by high–performance liquid chromatography/atmospheric pressure ionization tandem mass spectrometry. Ikonomou MG, et al. **Biomed Environ Mass Spectrom** 1990 Jul;19(7):434–46

Intracellular diffusion in the presence of mobile buffers. Application to proton movement in muscle. Irving M, et al. **Biophys J** 1990 Apr;57(4):717–21

On the dissociation constants of BAPTA–type calcium buffers. Pethig R, et al. **Cell Calcium** 1989 Oct;10(7):491–8

Buffer agents do not reverse intramyocardial acidosis during cardiac resuscitation. Kette F, et al. **Circulation** 1990 May; 81(5):1660–6

Isoelectric focusing of human parotid salivary proteins in hybrid carrier ampholyte–immobilized pH gradient polyacrylamide gels. Khoo KS, et al. **Electrophoresis** 1990 Jun;11(6):489–94

Buffers can modulate the effect of sonication on egg lecithin liposomes. Fiorentini D, et al. **Free Radic Res Commun** 1989;6(4):243–50

Two–dimensional maps in very acidic immobilized pH gradients. Sinha PK, et al. **J Biochem Biophys Methods** 1990 Apr–May;20(4):345–52

Effect of Tris, HEPES, and TES buffers on binding at mu–, delta–, and kappa–opioid sites in guinea pig brain. Paterson SJ, et al. **J Pharmacol Methods** 1990 Jul;23(4):275–83

Buffers: principles and practice. Stoll VS, et al. **Methods Enzymol** 1990;182:24–38

Cytotoxicity and effect on mutagenicity of buffers in a microsuspension assay. DeMarini DM, et al. **Teratogenesis Carcinog Mutagen** 1989;9(5):287–95

BUFO see **BUFONIDAE**

BUFO ARENARUM

ABNORMALITIES

Protective effect of zinc against spontaneous malformations and lethality in Bufo arenarum embryos. Herkovits J, et al. **Biol Trace Elem Res** 1989 Dec;22(3):247–50

EMBRYOLOGY

Mechanisms underlying the organizer formation in Bufo arenarum embryos. Manes ME, et al. **Microsc Electron Biol Celular** 1989 Jun;13(1):73–83

METABOLISM

Liver arginase activity and urinary nitrogen products profile in adult Bufo arenarum under different protein intake. Castañé PM, et al. **Life Sci** 1990;46(26):1893–901

RNA metabolism in the follicle cells of Bufo arenarum oocytes. I. Biochemical studies. Sánchez Riera AN, et al. **Microsc Electron Biol Celular** 1988 Dec;12(2):149–61

RNA metabolism in the follicle cells of Bufo arenarum oocytes. II. Autoradiographic studies. Sánchez Riera AN, et al. **Microsc Electron Biol Celular** 1988 Dec;12(2):163–75

PARASITOLOGY

[Experimental evolutive cycle of Diphyllobothrium erinaceieuropei in Paracyclops fimbriatus, tadpoles of Bufo arenarum and dogs] Venturini L. **Rev Inst Med Trop Sao Paulo** 1989 Sep–Oct;31(5):308–12 (Eng. Abstr.) **(Spa)**

BUFO BUFO

ANATOMY & HISTOLOGY

Radial astrocytes and ependymocytes in the spinal cord of the adult toad (Bufo bufo L.). An immunohistochemical and ultrastructural study. Bodega G, et al. **Cell Tissue Res** 1990 May;260(2):307–14

METABOLISM

Comparative lectin–binding patterns in the epidermis and dermal glands of Bufo bufo (L.) and Xenopus laevis (Daudin). Danguy A, et al. **Biol Struct Morphog** 1989; 2(3):94–101

PHYSIOLOGY

[A neurophysiological analysis of the forms of wakefulness and rest in the toad Bufo bufo and the frog Rana ridibunda in the circadian cycle] Vataev SI. **Zh Evol Biokhim Fiziol** 1990 Mar–Apr;26(2):199–206 (Eng. Abstr.) **(Rus)**

[The reaction of tadpoles of the common toad (Bufo bufo L.) to chemical signals from individuals of their own and other species] Kiseleva EI. **Zh Obshch Biol** 1989 Nov–Dec; 50(6):794–8 (Eng. Abstr.) **(Rus)**

BUFO MARINUS

Composite replicas: methodologies for direct evaluation of the relationship between intramembrane and extramembrane structures. Coleman RA, et al. **J Electron Microsc Tech** 1989 Nov;13(3):216–27

ANATOMY & HISTOLOGY

The changing distribution of neurons in the inner nuclear layer from metamorphosis to adult: a morphometric analysis of the anuran retina. Zhu BS, et al. **Anat Embryol (Berl)** 1990;181(6):585–94

Morphological classification and retinal distribution of large ganglion cells in the retina of Bufo marinus. Straznicky C, et al. **Exp Brain Res** 1990;79(2):345–56

Retino–retinal projections in three anuran species. Tóth P, et al. **Neurosci Lett** 1989 Sep 25;104(1–2):43–7

[Histologic analysis of the tongue of the toad Bufo marinus (Linné)] González–Elorriaga MA, et al. **Acta Cient Venez** 1988;39(4):355–62 (Eng. Abstr.) **(Spa)**

METABOLISM

Immunolocalization of secretory protein–I or chromogranin A in amphibian urinary bladder granular cell granules. Davis WL, et al. **Cell Biol Int Rep** 1990 Jul;14(7):601–12

Bufo abuse. A toxic toad gets licked, boiled, teed up and tanned [news] Horgan J. **Sci Am** 1990 Aug;263(2):26–7

PHYSIOLOGY

Effect of hematocrit on behavioral thermoregulation of the toad Bufo marinus. Wood SC. **Am J Physiol** 1990 Apr;258(4 Pt 2):R848–51

Characteristics of toad bladder urinary acidification. Silveira JE, et al. **Braz J Med Biol Res** 1989;22(9):1163–70

Functional similarities in the mechanical design of the aorta in lower vertebrates and mammals. Gibbons CA, et al. **Experientia** 1989 Dec 1;45(11–12):1083–8

Compartmental and topographical specificity of reinnervation of the glutaeus muscle in the adult toad (Bufo marinus). Brown DR, et al. **J Comp Neurol** 1990 Feb 15; 292(3):363–72

Compensation of progressive hypercapnia in the toad (Bufo marinus) and the bullfrog (Rana catesbeiana). Toews DP, et al. **J Exp Biol** 1990 Jan;148:293–302

BUFONIDAE

[The toad: venomous animal. Experience of the Marseille Poison Control Center] Thomas M, et al. **J Toxicol Clin Exp** 1989 Sep–Oct;9(5):368–70 **(Fre)**

ANATOMY & HISTOLOGY

A sexual dimorphism of the harderian gland of the toad, Bufo viridis. Minucci S, et al. **Basic Appl Histochem** 1989; 33(4):299–310

BLOOD

Comparative ultrastructure of maturing toad (Bufo ictericus) and rabbit (Oryctolagus cuniculus) erythroid cells with regard to hemoglobin biosynthesis. Cianciarullo AM, et al. **Comp Biochem Physiol [A]** 1989;94(3):525–9

Altitudinal distribution and blood values in the toad, Bufo spinulosus Wiegmann. Ruiz G, et al. **Comp Biochem Physiol [A]** 1989;94(4):643–6

EMBRYOLOGY

Morphogenesis of the frontal organ in Bufo bufo during development. Farnesi RM, et al. **Anat Rec** 1990 Jun; 227(2):264–70

Induction of reinitiation of meiosis in amphibian Bufo oocytes by injection of ciliate Paramecium extracts. Fujishima M, et al. **Dev Biol** 1989 Dec;136(2):455–8

METABOLISM

Urea transport across urinary bladder and salt acclimation in toad (Bufo viridis). Shpun S, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):R883–8

Comparison of xanthine: NAD+ oxidoreductase from liver of toad Bufo viridis and other vertebrates. Zakrzewska B, et al. **Comp Biochem Physiol [B]** 1989;94(2):361–5

Insulin–like growth factor–I and insulin–like growth factor–binding protein in the toad, Bufo woodhousei. Pancak–Roessler MK, et al. **Gen Comp Endocrinol** 1990 May;78(2):263–72

Changes in lipid composition and some biologically important enzyme activities in the microsomal membranes of developing toad ovary in different seasons. Mukherjee S, et al. **Indian J Biochem Biophys** 1989 Jun;26(3):153–9

PARASITOLOGY

A light and electron microscopic study of Trypanosoma fallisi N. Sp. in toads (Bufo americanus) from Algonquin Park, Ontario. Martin DS, et al. **J Protozool** 1990 May–Jun; 37(3):199–206

PHYSIOLOGY

Seasonal changes in the prolactin cells of Bufo andersoni in relation to the serum calcium level. Pandey AK. **Biol Struct Morphog** 1989;2(3):110–6

After–effects of moving textured background in motion–sensitive neurons of anuran optic tectum. Satou M, et al. **Brain Res** 1989 Dec 18;504(2):320–4

Amputation level and hind limb regeneration in larvae of the Egyptian toad Bufo regularis Reuss: length, volume and rate. Abdel–Karim AE. **Folia Morphol (Praha)** 1989; 37(3):238–48

Regeneration of the optic tectum in larval stages of Bufo regularis Reuss after partial and total excision. Khalil SH. **Folia Morphol (Praha)** 1989;37(3):233–7

Annual cycle of pituitary and plasma gonadotropins and plasma sex steroids in a wild population of the toad, Bufo japonicus. Itoh M, et al. **Gen Comp Endocrinol** 1990 May; 78(2):242–53

Medullary reticular neurons in the Japanese toad: morphologies and excitatory inputs from the optic tectum. Matsushima T, et al. **J Comp Physiol [A]** 1989 Nov; 166(1):7–22

Origin of anuran calling: description of toad releasing. Schmidt RS, et al. **J Exp Zool** 1990 Jun;254(3):338–42

Changes in electric activity (EEG) of the telencephalon of conscious toads (Bufo paracnemis) caused by cholinergic stimulation of the mesencephalic tegmentum. Hoffmann A, et al. **Physiol Behav** 1990 May;47(5):857–61

[The spectral characteristics of the electroencephalogram of the toad Bufo bufo L. during the active and passive behavior of the animal in its circadian cycle] Vataev SI. **Zh Evol Biokhim Fiziol** 1989 Jul–Aug;25(4):555–8 (Eng.

Abstr.) (Rus)

BUFORMIN see under BIGUANIDES

BUFOTENIN see under SEROTONIN

BUILDING CODES see under FACILITY DESIGN AND CONSTRUCTION

BULBAR PALSY see PARALYSIS, BULBAR

BULBOCAPNINE see under APORPHINES

BULBOURETHRAL GLANDS

[Ultrasonography in syringocele of the male urethra (ultrasound–urethrography)] Pavlica P, et al. **Radiol Med (Torino)** 1989 Oct;78(4):348–50 (Eng. Abstr.) (Ita)

[Syringocele of Cowper's gland] Extramiana J, et al. **Actas Urol Esp** 1989 Nov–Dec;13(6):461–4 (4 ref.) (Eng. Abstr.) (Spa)

ABNORMALITIES

Syringocele, a rare lesion of Cowper's gland. Van Brien P, et al. **Acta Urol Belg** 1990;58(1):145–51

[Diverticulum of the anterior urethra or syringocele of the Cowper glands. Apropos of a case] Rodó Salas J, et al. **An Esp Pediatr** 1989 Dec;31(6):605–6 (Spa)

ANATOMY & HISTOLOGY

Changes in accessory sex glands of stallions after sexual preparation and ejaculation. Weber JA, et al. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1084–9

GROWTH & DEVELOPMENT

Anti-androgenic effects of Win 49,596 on development of the neonatal mouse bulbourethral gland in culture. Cooke PS, et al. **Prostate** 1990;17(2):145–54

PARASITOLOGY

Besnoitiosis of the reproductive tract of a Blue Duiker (Cephalophus monticola). Foley GL, et al. **Vet Parasitol** 1990 May;36(1–2):157–63

PATHOLOGY

[Syringoceles of Cowper's glands in children] Bethencourt O, et al. **Arch Esp Urol** 1989 Nov–Dec;42(9):889–92 (Eng. Abstr.) (Spa)

ULTRASTRUCTURE

Ultrastructure of human bulbourethral glands and of their main excretory ducts. Riva A, et al. **Arch Androl** 1990; 24(2):177–84

The periurethral glandular complex in the water buffalo: an ultrastructural, histological and lectin-histochemical study. Abou-Elmagd A, et al. **Arch Histol Cytol** 1989 Dec; 52(5):501–12

BULIMIA

Eating disorders. Holden NL. **Baillieres Clin Obstet Gynaecol** 1989 Dec;3(4):705–27 (47 ref.)

Bulimia nervosa. Fairburn CG. **BMJ** 1990 Feb 24; 300(6723):485–7 (41 ref.)

The Kleine–Levin syndrome. Gallinek A. **Dis Nerv Syst** 1967 Jul;28(7 Pt 1):448–51

Dietary intake and dieting practices of bulimic and non-bulimic female college students. Greene GW, et al. **J Am Diet Assoc** 1990 Apr;90(4):576–8

Bulimia and anorexia nervosa in dental and dental hygiene curricula. Gross KB, et al. **J Dent Educ** 1990 Mar; 54(3):210–2

Bulimia nervosa and anorexia nervosa. Treasure J. **Practitioner** 1989 Nov 22;233(1479):1525–7

[Bulimia nervosa] Ram A, et al. **Harefuah** 1990 Jun 1; 118(11):651–5 (50 ref.) (Heb)

BLOOD

Blood platelet monoamine oxidase activity, serotonin uptake and release rates in anorexia and bulimia patients and in healthy controls. Hallman J, et al. **Acta Psychiatr Scand** 1990 Jan;81(1):73–7

Insulin sensitivity in patients with anorexia nervosa and bulimia. Kiriike N, et al. **Acta Psychiatr Scand** 1990 Mar; 81(3):236–9

Does bingeing restore bulimics' alleged 5-HT-deficiency? Jansen A, et al. **Behav Res Ther** 1989;27(5):555–60

Disturbances in the hypothalamo–pituitary–adrenal and other neuroendocrine axes in bulimia. Fichter MM, et al. **Biol Psychiatry** 1990 May 1;27(9):1021–37

Disturbances of noradrenergic systems in normal weight bulimia: relationship to diet and menses. Kaye WH, et al. **Biol Psychiatry** 1990 Jan 1;27(1):4–21

Macroamylasemia [letter; comment] Yanovski SZ, et al. **J Am Board Fam Pract** 1990 Apr–Jun;3(2):140 Comment on: J Am Board Fam Pract 1989 Oct–Dec;2(4):279–82.

[Hyperamylasemia in anorexia nervosa and bulimia nervosa. Indication of a pancreatic disease?] Hempen I, et al. **Dtsch Med Wochenschr** 1989 Dec 8;114(49):1913–6 (Eng. Abstr.) (Ger)

[Atrial natriuretic peptide (ANP)] Hartwig W. **Pol Arch Med Wewn** 1989 Aug–Sep;82(2–3):114–6 (6 ref.) (Pol)

CEREBROSPINAL FLUID

CSF oxytocin in anorexia nervosa and bulimia nervosa: clinical and pathophysiologic considerations. Demitrack MA, et al. **Am J Psychiatry** 1990 Jul;147(7):882–6

CSF monoamine levels in normal-weight bulimia: evidence for abnormal noradrenergic activity. Kaye WH, et al. **Am J Psychiatry** 1990 Feb;147(2):225–9

COMPLICATIONS

DSM-III-R personality disorders in patients with eating disorders. Gartner AF, et al. **Am J Psychiatry** 1989 Dec; 146(12):1585–91

Insulin-dependent diabetes mellitus and eating disorders: a prevalence study. Powers PS, et al. **Compr Psychiatry** 1990 May–Jun;31(3):205–10

Binge eating and purging in young women with IDDM. Stancin T, et al. **Diabetes Care** 1989 Oct;12(9):601–3

Upper gastrointestinal endoscopy findings in patients with long-standing bulimia nervosa. Kiss A, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):516–8

Bulimia and taste: possible interactions. Rodin J, et al. **J Abnorm Psychol** 1990 Feb;99(1):32–9

Bulimia nervosa and associated alcohol abuse among secondary school students. Timmerman MG, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jan;29(1):118–22

The effectiveness of a dental/dietitian team in the assessment of bulimic dental health. Howat PM, et al. **J Am Diet Assoc** 1990 Aug;90(8):1099–102

Zinc deficiency and eating disorders. Humphries L, et al. **J Clin Psychiatry** 1989 Dec;50(12):456–9

Depth and area of dental erosions, and dental caries, in bulimic women. Jones RR, et al. **J Dent Res** 1989 Aug; 68(8):1275–8

Bulimia and sleep disturbance. McSherry J, et al. **J Fam Pract** 1990 Jan;30(1):102–3

Bulimia nervosa in overweight individuals. Mitchell JE, et al. **J Nerv Ment Dis** 1990 May;178(5):324–7

Pregnancy and lactation following anorexia and bulimia. Bowles BC, et al. **J Obstet Gynecol Neonatal Nurs** 1990 May–Jun;19(3):243–8

Medical complications of anorexia nervosa and bulimia nervosa. Comerci GD. **Med Clin North Am** 1990 Sep; 74(5):1293–310 (54 ref.)

Dental aspects of anorexia and bulimia nervosa. Roberts MW, et al. **Pediatrician** 1989;16(3–4):178–84 (65 ref.)

Weight and menstrual function in patients with eating disorders and cystic fibrosis. Weltman EA, et al. **Pediatrics** 1990 Mar;85(3):282–7

Medical complications of anorexia and bulimia. Hall RC, et al. **Psychiatr Med** 1989;7(4):165–92 (183 ref.)

Hypomagnesemia in eating disorder patients: clinical signs and symptoms. Hall RC, et al. **Psychiatr Med** 1989; 7(4):193–203 (55 ref.)

Type I diabetes mellitus and eating disorders: navigating nearly uncharted waters. Popkin MK. **Psychiatr Med** 1989; 7(4):205–10 (27 ref.)

[Acute distension followed by gastric rupture after an episode of bulimia. Apropos of a case] Petrin C, et al. **J Chir (Paris)** 1990 Apr;127(4):213–5 (Eng. Abstr.) (Fre)

[Gastric necrosis after a bulimia episode in an anorectic patient (letter)] Jacquot S, et al. **Presse Med** 1989 Nov 25; 18(39):1932 (Fre)

[Hypopotassemia and prolongation of the Q–T interval in a patient with severe malnutrition caused by bulimia and post-prandial vomiting] Contaldo F, et al. **Recenti Prog Med** 1990 Apr;81(4):266–8 (Eng. Abstr.) (Ita)

[Somatic and biochemical complications in bulimia] Spigset O. **Tidsskr Nor Laegeforen** 1990 Apr 30;110(11):1349–53 (29 ref.) (Eng. Abstr.) (Nor)

DIAGNOSIS

Sleep patterns and dexamethasone suppression in nondepressed bulimics. Byrne B, et al. **Biol Psychiatry** 1990 Feb 15;27(4):454–6

A brain magnetic resonance imaging study of pituitary gland morphology in anorexia nervosa and bulimia. Doraiswamy PM, et al. **Biol Psychiatry** 1990 Jul 15;28(2):110–6

A polysomnographic study in young psychiatric inpatients: major depression, anorexia nervosa, bulimia nervosa. Lauer CJ, et al. **J Affective Disord** 1990 Apr;18(4):235–45

Hyperamylasemia and binge-purge episodes [letter; comment] **J Clin Psychiatry** 1990 Mar;51(3):128–9 Comment on: J Clin Psychiatry 1989 Jun;50(6):196–204.

The reliability and discriminant validity of three potential measures of bulimic behaviours [published erratum appears in J Psychiatr Res 1990;24(1):95] Welch G, et al. **J Psychiatr Res** 1989;23(2):125–33

Anorexia nervosa and bulimia: incidence and diagnosis. Plehn KW. **Nurse Pract** 1990 Apr;15(4):22, 25, 28 passim

Nutritional assessment of patients with anorexia and bulimia; clinical and laboratory findings. Hooker C, et al. **Psychiatr Med** 1989;7(3):27–36

[Sleep in anorexia nervosa, bulimia nervosa and depressive diseases: a polysomnographic comparative study] Lauer C, et al. **Fortschr Neurol Psychiatr** 1989 Oct;57(10):403–10 (Eng. Abstr.) (Ger)

DRUG THERAPY

Levoprotiline--function regulator of food and satiety centres? Faltus F, et al. **Act Nerv Super (Praha)** 1989 Dec; 31(4):282–3

Effective treatment of bulimia with fluoxetine, a serotonin reuptake inhibitor, in a patient with type I diabetes mellitus. Ramirez LC, et al. **Am J Med** 1990 May;88(5):540–1

Methylphenidate treatment of bulimia nervosa after surgery. Messner E. **Can J Psychiatry** 1989 Nov;34(8):824–6

Antidepressants used in bulimia. Kim LE, et al. **DICP** 1989 Nov;23(11):882–5

The clinical efficacy of a 5-HT1A agonist, SM-3997, in the treatment of bulimia. Tamai H, et al. **Int J Obes** 1990; 14(3):289–92

The role of pharmacotherapy in anorexia nervosa and bulimia. Tolstoi LG. **J Am Diet Assoc** 1989 Nov; 89(11):1640–6 (46 ref.)

Pharmacological treatment of kleptomania and bulimia nervosa. McElroy SL, et al. **J Clin Psychopharmacol** 1989 Oct;9(5):358–60

Long-term pharmacotherapy of bulimia nervosa [letter] Pope HG Jr, et al. **J Clin Psychopharmacol** 1989 Oct;9(5):385–6

The aphrodisiac effect of fenfluramine: two case reports of a possible side effect to the use of fenfluramine in the treatment of bulimia. Stevenson RW, et al. **J Clin Psychopharmacol** 1990 Feb;10(1):69–71

Fluoxetine and bulimia. Wilcox JA. **J Psychoactive Drugs** 1990 Jan–Mar;22(1):81–2

L-tryptophan as an adjunct to treatment of bulimia nervosa [letter] Mira M, et al. **Lancet** 1989 Nov 11;2(8672):1162–3

A clinical study of anti-depressant medications in the treatment of bulimia. Edelstein CK, et al. **Psychiatr Med** 1989;7(3):111–21

[Drug therapy of eating disorders] Kiriike N, et al. **Seishin Shinkeigaku Zasshi** 1989;91(9):698–703 (Jpn)

ENZYMOLOGY

[Hyperamylasemia in anorexia and bulimia (letter)] Jacoby GE. **Dtsch Med Wochenschr** 1990 May 4;115(18):718 (Ger)

EPIDEMIOLOGY

Studies of the epidemiology of bulimia nervosa. Fairburn CG, et al. **Am J Psychiatry** 1990 Apr;147(4):401–8 (85 ref.)

The changing population of bulimia nervosa patients in an eating disorders program. Mitchell JE, et al. **Hosp Community Psychiatry** 1989 Nov;40(11):1188–9

You are what you eat—what you eat is what you are. Dietz WH. **J Adolesc Health Care** 1990 Jan;11(1):76–81

ETIOLOGY

Association of bulimia with sexual abuse [letter; comment] Schwartz HJ. **Am J Psychiatry** 1990 Jul;147(7):957 Comment on: Am J Psychiatry 1989 Feb;146(2):239–41.

Dietary restraint and binge eating: pseudo-quantitative anthropology for a medicalised problem habit? Booth DA, et al. **Appetite** 1990 Apr;14(2):116–9; discussion 142–3

From restraint to bulimic episodes: a problem of some loose connections. Cooper PJ, et al. **Appetite** 1990 Apr; 14(2):120–2; discussion 142–3

From dietary restraint to binge eating: attaching causes to effects. Herman CP, et al. **Appetite** 1990 Apr;14(2):123–5; discussion 142–3

Comments on some theoretical considerations: dietary restraint to binge eating. Treasure J. **Appetite** 1990 Apr; 14(2):131–2; discussion 142–3

From dietary restraint to binge eating: some theoretical considerations. Tuschl RJ. **Appetite** 1990 Apr;14(2):105–9 (37 ref.)

Childhood sexual abuse in women with bulimia. Bulik CM, et al. **J Clin Psychiatry** 1989 Dec;50(12):460–4

Anorexia nervosa, bulimia nervosa: causal theories and treatment. Palmer TA. **Nurse Pract** 1990 Apr;15(4):12–18, 21 (13 ref.)

GENETICS

Psychiatric disorders in the first-degree relatives of probands with bulimia nervosa. Kassett JA, et al. **Am J Psychiatry** 1989 Nov;146(11):1468–71

Psychiatric illness in relatives of patients with bulimia nervosa [letter] Stern SL, et al. **Am J Psychiatry** 1990 Oct; 147(10):1381–2

A controlled study of phenomenology and family history in outpatients with bulimia nervosa. Keck PE Jr, et al. **Compr Psychiatry** 1990 Jul–Aug;31(4):275–83

HISTORY

A description of eating disorders in 1932. Stunkard A. **Am J Psychiatry** 1990 Mar;147(3):263–8

METABOLISM

Greater left cerebral hemispheric metabolism in bulimia assessed by positron emission tomography. Wu JC, et al. **Am J Psychiatry** 1990 Mar;147(3):309–12

Preabsorptive insulin release in bulimic women and chronic

dieters. Broberg DJ, et al. **Appetite** 1989 Dec;13(3):161–9
Metabolic abnormalities in bulimia nervosa. Devlin MJ, et al. **Arch Gen Psychiatry** 1990 Feb;47(2):144–8
Reduced bone mineral in patients with eating disorders. Davies KM, et al. **Bone** 1990;11(3):143–7
Energy expenditure and the control of body weight. **Nutr Rev** 1989 Aug;47(8):249–52

PATHOLOGY

Brain T1 measured by magnetic resonance imaging in bulimia. Hoffman GW, et al. **Biol Psychiatry** 1990 Jan 1; 27(1):116–9

PHYSIOPATHOLOGY

Gastric emptying in patients with bulimia nervosa and anorexia nervosa. Hutson WR, et al. **Am J Gastroenterol** 1990 Jan;85(1):41–6
Sensory–specific satiety in anorexia and bulimia nervosa. Hetherington M, et al. **Ann N Y Acad Sci** 1989;575:387–98 (33 ref.)
Altered cerebrospinal fluid neuropeptide Y and peptide YY immunoreactivity in anorexia and bulimia nervosa. Kaye WH, et al. **Arch Gen Psychiatry** 1990 Jun;47(6):548–56
A serial study of gastric emptying in anorexia nervosa and bulimia. Szmukler GI, et al. **Aust N Z J Med** 1990 Jun; 20(3):220–5
Dysphagia in bulimia nervosa. Roberts MW, et al. **Dysphagia** 1989;4(2):106–11
Oesophageal and gastric motor activity in patients with bulimia nervosa. Kiss A, et al. **Gut** 1990 Mar;31(3):259–65
Cardiac regulation in bulimia nervosa. Kennedy SH, et al. **J Psychiatr Res** 1989;23(3–4):267–73
Corticotropin–releasing hormone: possible role in eating disorders. Krahn DD, et al. **Psychiatr Med** 1989;7(4):235–45 (49 ref.)

PREVENTION & CONTROL

Maintenance treatment and 6–month outcome for bulimic patients who respond to initial treatment. Pyle RL, et al. **Am J Psychiatry** 1990 Jul;147(7):871–5

PSYCHOLOGY

Ego functioning predicts first–year status in adults with anorexia nervosa and bulimia nervosa. Sohlberg S, et al. **Acta Psychiatr Scand** 1989 Oct;80(4):325–33
Emotional and somatic consequences of binge episodes. Lingswiler VM, et al. **Addict Behav** 1989;14(5):503–11
Patterns of food selection during meals in women with bulimia. Hadigan CM, et al. **Am J Clin Nutr** 1989 Oct; 50(4):759–66
Iodine–induced subacute thyroiditis with thyrotoxicosis presenting as fever of unknown origin. Candrina R, et al. **Am J Med Sci** 1990 Jul;300(1):37–40
Comments on bulimia [letter] **Am J Psychiatry** 1990 Sep; 147(9):1253–4
Bulimia associated with sexual trauma [letter] Solursh LP, et al. **Am J Psychiatry** 1990 Mar;147(3):373
Hunger and satiety in anorexia and bulimia nervosa. Halmi KA, et al. **Ann N Y Acad Sci** 1989;575:431–44; discussion 444–5
Eating behavior in bulimia. Walsh BT, et al. **Ann N Y Acad Sci** 1989;575:446–54; discussion 454–5
Is restraint the culprit? Agras WS. **Appetite** 1990 Apr; 14(2):111–2; discussion 142–3
How culture undermines the biopsychological system of appetite control. Blundell JE. **Appetite** 1990 Apr; 14(2):113–5; discussion 142–3
Developing concerns with dietary restraint: a supplement to Tuschl. Hill AJ. **Appetite** 1990 Apr;14(2):126–8; discussion 142–3
Dietary restraint—a useful concept? McCluskey SE. **Appetite** 1990 Apr;14(2):129–30; discussion 142–3
Early family experiences of women with bulimia and depression. Stuart GW, et al. **Arch Psychiatr Nurs** 1990 Feb;4(1):43–52
Cognitive performance in patients with bulimia nervosa: relationship to intermittent starvation. Laessle RG, et al. **Biol Psychiatry** 1990 Mar 1;27(5):549–51
Children of mothers with bulimia nervosa [letter; comment] Fahy T, et al. **BMJ** 1989 Oct 21;299(6706):1031 Comment on: BMJ 1989 Sep 23;299(6702):777–8.
Children of mothers with bulimia nervosa [see comments] Stein A, et al. **BMJ** 1989 Sep 23;299(6702):777–8 Comment in: BMJ 1989 Oct 21;299(6706):1031.
A comment on the role of dietary restraint in the development of bulimia nervosa. Charnock DJ. **Br J Clin Psychol** 1989 Nov;28 (Pt 4):329–40 (55 ref.)
Assessing bulimics' dissatisfaction with their bodies. Huon GF, et al. **Br J Clin Psychol** 1989 Sep;28 (Pt 3):283–4
Dietary restraint and binge eating: response to Charnock. Polivy J, et al. **Br J Clin Psychol** 1989 Nov;28 (Pt 4):341–3; discussion 343–6 (55 ref.)
Eating disorders and family interaction. Waller G, et al. **Br J Clin Psychol** 1989 Sep;28 (Pt 3):285–6
A comparison between women seeking self–help and psychiatric treatment in anorexia nervosa and bulimia. Deeble EA, et al. **Br J Med Psychol** 1990 Mar;63 (Pt 1):65–72
Distorting patient or distorting instrument? Body shape disturbance in patients with anorexia nervosa and bulimia. Bowden PK, et al. **Br J Psychiatry** 1989 Aug;155:196–201
The validity of the eating disorder examination and its subscales. Cooper Z, et al. **Br J Psychiatry** 1989 Jun; 154:807–12
The effects of loss of taste and smell in a case of anorexia nervosa and bulimia nervosa. Fahy TA, et al. **Br J Psychiatry** 1989 Dec;155:860–1
Perceptivity and paraceptivity during measurement of gastric emptying in anorexia and bulimia nervosa. Robinson PH. **Br J Psychiatry** 1989 Mar;154:400–5
Abnormal eating attitudes in young insulin–dependent diabetics. Steel JM, et al. **Br J Psychiatry** 1989 Oct; 155:515–21
Who knows best? Family interaction and eating disorders. Waller G, et al. **Br J Psychiatry** 1990 Apr;156:546–50
Psychiatric residents' educational experiences and attitudes toward eating disorders. Ghadirian AM, et al. **Can J Psychiatry** 1990 Apr;35(3):254–6
Prevalency rate and personality comparisons of bulimic and normal adolescents. Dacey CM, et al. **Child Psychiatry Hum Dev** 1990 Summer;20(4):243–51
Bulimia nervosa with and without a history of anorexia nervosa. Mitchell JE, et al. **Compr Psychiatry** 1990 Mar–Apr;31(2):171–5
Axis II comorbidity of normal–weight bulimia. Zanarini MC, et al. **Compr Psychiatry** 1990 Jan–Feb;31(1):20–4
Correlates of laxative abuse in bulimia. Waller DA, et al. **Hosp Community Psychiatry** 1990 Jul;41(7):797–9
Nausea in bulimic women in response to a palatable food. Broberg DJ, et al. **J Abnorm Psychol** 1990 May;99(2):183–8
Bulimia nervosa in an adolescent boy boxer. Lovett JW. **J Adolesc** 1990 Mar;13(1):79–83
Disordered eating in South–western Pueblo Indians and Hispanics. Snow JT, et al. **J Adolesc** 1989 Sep;12(3):329–36
Family dysfunction in normal weight bulimic and bulimic anorexic families. Shisslak CM, et al. **J Clin Psychol** 1990 Mar;46(2):185–9
The specific psychopathology of bulimia nervosa: a comparison with restrained and unrestrained (normal) eaters. Laessle RG, et al. **J Consult Clin Psychol** 1989 Dec; 57(6):772–5
Dysfunctional cognitions, attributional style, and depression in bulimia. Goebel M, et al. **J Psychosom Res** 1989; 33(6):747–52
Cerebral atrophy and vigilance performance in patients with anorexia nervosa and bulimia nervosa. Laessle RG, et al. **Neuropsychobiology** 1989;21(4):187–91
The effects of smoking deprivation on caloric consumption in women with bulimia nervosa. Bulik CM, et al. **NIDA Res Monogr** 1989;95:429–30
Covert drug abuse in patients with eating disorders. Hall RC, et al. **Psychiatr Med** 1989;7(4):247–55
Bulimia nervosa: diagnostic criteria, clinical features and discrete clinical sub–syndromes. Hall RC, et al. **Psychiatr Med** 1989;7(3):13–25 (51 ref.)
Mitral valve prolapse and anxiety disorders in patients with anorexia nervosa. Hall RC, et al. **Psychiatr Med** 1989; 7(4):217–33
A patient's view of anorexia and bulimia. Hall RC. **Psychiatr Med** 1989;7(4):123–64
Sexual abuse in patients with eating disorders. Tice L, et al. **Psychiatr Med** 1989;7(4):257–67
Anonymity, sex, and weight–preoccupation as variables on the eating disorders inventory with normal college students. Szekely BC, et al. **Psychol Rep** 1989 Dec;65(3 Pt 1):795–800
Thyrotoxicosis and bulimia nervosa. Krahn D. **Psychosomatics** 1990 Spring;31(2):222–4
[Anorexia nervosa and bulimia; a statement from the Public Health Council] Stolk PJ. **Ned Tijdschr Geneeskd** 1989 Oct 7;133(40):1965–6 **(Dut)**
[The cost of nutrition and its effect on human behavior] Luka LP. **Rev Med Suisse Romande** 1989 Nov;109(11):953–9 **(Fre)**
[Body image of patients with eating disorders] Baba K. **Seishin Shinkeigaku Zasshi** 1989;91(9):682–9 **(Jpn)**
[Abnormal eating behavior patterns and psychological factors] Kasahara T. **Seishin Shinkeigaku Zasshi** 1989; 91(9):677–81 **(Jpn)**
[Clinical characteristics of twenty–five male patients with eating disorders] Takizawa K, et al. **Seishin Shinkeigaku Zasshi** 1989;91(9):690–7 **(Jpn)**

REHABILITATION

The influence of prior alcohol and drug abuse problems on bulimia nervosa treatment outcome. Mitchell JE, et al. **Addict Behav** 1990;15(2):169–73

THERAPY

Treating bulimia. Thornton LP, et al. **Adolescence** 1989 Fall; 24(95):631–7
Anorexia and bulimia. Giannini AJ, et al. **Am Fam Physician** 1990 Apr;41(4):1169–76 (25 ref.)
Light therapy for seasonal bulimia [letter] Lam RW. **Am J Psychiatry** 1989 Dec;146(12):1640–1
A double–blind, placebo–controlled trial of fluoxetine plus behavior modification in the treatment of obese binge–eaters and non–binge–eaters. Marcus MD, et al. **Am J Psychiatry** 1990 Jul;147(7):876–81
A comparison study of antidepressants and structured intensive group psychotherapy in the treatment of bulimia nervosa. Mitchell JE, et al. **Arch Gen Psychiatry** 1990 Feb; 47(2):149–57
Experiential aspects of bulimia nervosa. Implications for cognitive behavioral therapy. Hsu LK. **Behav Modif** 1990 Jan;14(1):50–65
The use of hypnosis in the treatment of bulimia nervosa. Vanderlinden J, et al. **Int J Clin Exp Hypn** 1990 Apr; 38(2):101–11 (17 ref.)
Group coleadership: a new role for parents of adolescents with anorexia and bulimia nervosa. Eliot AO. **Int J Group Psychother** 1990 Jul;40(3):339–51
Why group therapy for bulimia? Laube JJ. **Int J Group Psychother** 1990 Apr;40(2):169–87
Treatment of bulimia with hypnosis involving awareness and control in clients with high dissociative capacity. Barabasz M. **Int J Psychosom** 1989;36(1–4):58
A case of bulimia successfully treated by cue exposure. Jansen A, et al. **J Behav Ther Exp Psychiatry** 1989 Dec; 20(4):327–32
Cognitive–behavioral treatment with and without exposure plus response prevention in the treatment of bulimia nervosa: a reply to Leitenberg and Rosen. Agras WS, et al. **J Consult Clin Psychol** 1989 Dec;57(6):778–9
Cognitive–behavioral therapy with and without exposure plus response prevention in treatment of bulimia nervosa: comment on Agras, Schneider, Arnow, Raeburn, and Telch. Leitenberg H, et al. **J Consult Clin Psychol** 1989 Dec;57(6):776–7
An overview of the treatment of anorexia nervosa. Eckert ED, et al. **Psychiatr Med** 1989;7(4):293–315 (73 ref.)
An overview of the treatment of bulimia nervosa. Mitchell JE, et al. **Psychiatr Med** 1989;7(4):317–32 (35 ref.)
The role of therapeutic recreation with eating disorder patients. Nowell R. **Psychiatr Med** 1989;7(4):285–92
Multiple family group treatment for eating disorders: a short term program. Slagerman M, et al. **Psychiatr Med** 1989; 7(4):269–83
Laxative abuse in eating disorders. Willard SG, et al. **Psychiatr Med** 1989;7(3):75–87
Bulimia nervosa: a four– to six–year follow–up study. Hsu LK, et al. **Psychol Med** 1989 Nov;19(4):1035–8
Bulimia nervosa: group behavior therapy with exposure plus response prevention. Gray JJ, et al. **Psychol Rep** 1990 Apr; 66(2):667–74
Effects and limitations of cognitive behavior therapy in bulimia inpatients. Bossert S, et al. **Psychother Psychosom** 1989;51(2):77–82

URINE

Sulphatoxy melatonin: an index of depression in anorexia nervosa and bulimia nervosa. Kennedy SH, et al. **Psychiatry Res** 1990 Jun;32(3):221–7

BULINUS

The use of Phytolacca dodecandra berries in the control of trematode–transmitting snails in Zimbabwe. Ndamba J, et al. **Acta Trop (Basel)** 1989 Oct;46(5–6):303–9
On the effects of ivermectin on freshwater snails of medical and veterinary importance. Okafor FC. **Angew Parasitol** 1990 May;31(2):65–8
Human community ecology of urinary schistosomiasis in relation to snail vector bionomics in the Igwun River Basin of Nigeria. Udonsi JK. **Trop Med Parasitol** 1990 Jun; 41(2):131–5

ANATOMY & HISTOLOGY

Ultrastructural changes in the male germ cells of Bulinus truncatus during spermatogenesis. Elsaadany MM. **Folia Morphol (Praha)** 1989;37(3):302–7

DRUG EFFECTS

[Ambrosia maritima L.: study of molluscicidal properties of several generations originating in Egypt and cultivated in Senegal] Belot J, et al. **Ann Pharm Fr** 1989;47(2):62–7 (Eng. Abstr.) **(Fre)**

PARASITOLOGY

Effect of mass chemotherapy and piped water on numbers of Schistosoma haematobium and prevalence in Bulinus globosus in Kwale, Kenya. Noda S, et al. **Am J Trop Med Hyg** 1988 May;38(3):487–95
Susceptibility of some bulinid species to infection with Schistosoma haematobium. Mamo B, et al. **Ann Soc Belg Med Trop** 1989 Jun;69(2):153–5
The effect of schistosome infection on the mortality rates of Bulinus globosus and Biomphalaria pfeifferi. Woolhouse ME. **Ann Trop Med Parasitol** 1989 Apr;83(2):137–41
The granulocyte response of Bulinus africanus to infection with compatible and non–compatible trematode parasites. Wolmarans CT, et al. **Int J Parasitol** 1990 May;20(3):315–8
On the distribution of schistosome infections among host snails. Woolhouse ME, et al. **Int J Parasitol** 1990 May; 20(3):325–7
Endemicity, focality and seasonality of transmission of human schistosomiasis in Amaguze Village, eastern Nigeria. Ozumba NA, et al. **J Helminthol** 1989 Sep;63(3):206–12
The effect of Schistosoma haematobium infection on the growth and fecundity of three sympatric species of bulinid snails. Fryer SE, et al. **J Parasitol** 1990 Aug;76(4):557–63
Temporal patterns in the epidemiology of schistosome

infections of snails: a model for field data. Woolhouse ME, et al. **Parasitology** 1990 Apr;100 Pt 2:247–53

The potential role of various species of intermediate hosts of Schistosoma haematobium in Saudi Arabia. Arfaa F, et al. **Trans R Soc Trop Med Hyg** 1989 Mar–Apr; 83(2):216–8

Susceptibility of South African Bulinus africanus populations to infection with Schistosoma haematobium. Joubert PH, et al. **Trans R Soc Trop Med Hyg** 1990 Jan–Feb;84(1):100–2

Chemotherapy–based control of schistosomiasis haematobia. 3. Snail studies monitoring the effect of chemotherapy on transmission in the Msambweni area, Kenya. Sturrock RF, et al. **Trans R Soc Trop Med Hyg** 1990 Mar–Apr; 84(2):257–61

Genetic variability in the compatibility between Schistosoma haematobium and its potential vectors in Niger. Epidemiological implications. Véra C, et al. **Trop Med Parasitol** 1990 Jun;41(2):143–8

PHYSIOLOGY

Population dynamics model for Bulinus globosus, intermediate host for Schistosoma haematobium, in river habitats. Woolhouse ME, et al. **Acta Trop (Basel)** 1990 Mar; 47(3):151–60

Human schistosomiasis in Cameroon. II. Distribution of the snail hosts. Greer GJ, et al. **Am J Trop Med Hyg** 1990 Jun;42(6):573–80

A laboratory study on the possible use of Heliosoma duryi in the biological control of Bulinus africanus, intermediate host of Schistosoma haematobium. Joubert PH, et al. **Trans R Soc Trop Med Hyg** 1989 Mar–Apr;83(2):229–32

[Resistance to drought of mollusks of the genus Bulinus, vectors of human and animal trematode infections in Senegal. II. Study under natural conditions in the North–Sudan area. Ecology and resistance to drought of Bulinus umbilicatus and B. senegalensis] Diaw OT, et al. **Rev Elev Med Vet Pays Trop** 1989;42(2):177–87 (Eng. Abstr.) **(Fre)**

BULLA see **BLISTER**

BULLFROG see **RANA CATESBEIANA**

BULLOUS SKIN DISEASES see **SKIN DISEASES, BULLOUS**

BUMETANIDE see under **DIURETICS, SULFAMYL**

BUN see **BLOOD UREA NITROGEN**

BUNAFTINE see under **NAPHTHALENES**

BUNDLE–BRANCH BLOCK

Adult acute rheumatic fever: a rare case presenting with left bundle branch block. Yahalom M, et al. **PACE** 1990 Jan; 13(1):123–7

COMPLICATIONS

Congenital tricuspid valve stenosis with atrial septal defect and left anterior fascicular block. Cohen ML, et al. **Clin Cardiol** 1990 Jul;13(7):497–9

Electrocardiographic diagnosis of left ventricular hypertrophy in the presence of left bundle branch block: a wasted effort. Fragola PV, et al. **Int J Cardiol** 1990 Aug; 28(2):215–21

[Electrovectorcardiographic diagnosis of left ventricular hypertrophy in complete left bundle–branch block] Brohet C, et al. **Ann Cardiol Angeiol (Paris)** 1990 Apr;39(4):207–12 (Eng. Abstr.) **(Fre)**

[Right ventricular diastolic overloading in left bundle–branch block] Denis B, et al. **Ann Cardiol Angeiol (Paris)** 1990 Apr;39(4):213–7 (7 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Noninvasive and invasive evaluation of left bundle branch block (LBBB). Shah KD, et al. **Acta Cardiol** 1990; 45(2):125–31

The scalar electrocardiogram of the orthotopic heart transplant recipient. Sandhu JS, et al. **Am Heart J** 1990 Apr;119(4):917–23

Incomplete left bundle–branch block. The view from transseptal intraventricular leads. Leighton RF, et al. **Circulation** 1967 Aug;36(2):261–74

Dynamic analysis of heart sounds in right and left bundle–branch blocks. Oravetz J, et al. **Circulation** 1967 Aug;36(2):275–83

Electrocardiogram of the month. Bundle branch block. Roberts WC, et al. **J Arkansas Med Soc** 1990 Feb;86(9):362

ECG of the month. On the right track. Complete left bundle branch block. Martinez–Lopez JI. **J La State Med Soc** 1989 Oct;141(10):7–10

Paroxysmal bundle branch block of supraventricular origin: a possible source of misdiagnosis in detecting ventricular tachycardia using time domain analyses of intraventricular electrograms. Throne RD, et al. **PACE** 1990 Apr; 13(4):453–68

[It is the tune which provides the diagnosis] Meijler FL, et al. **Ned Tijdschr Geneeskd** 1989 Nov 25;133(47):2313–5 **(Dut)**

[What is your diagnosis? Left posterior hemiblock] Mahaim C. **Schweiz Rundsch Med Prax** 1989 Sep 26;78(39):1055–6 **(Fre)**

[Fascicular block of the His bundle: critical approach for its identification] Luna Filho B, et al. **Arq Bras Cardiol** 1989 Nov;53(5):261–5 (Eng. Abstr.) **(Por)**

EPIDEMIOLOGY

Incidence and prognostic significance of intraventricular conduction abnormalities after coronary bypass surgery. Tuzcu EM, et al. **J Am Coll Cardiol** 1990 Sep;16(3):607–10

ETIOLOGY

Risk of right bundle–branch block and complete heart block during pulmonary artery catheterization [letter; comment] Patil AR. **Crit Care Med** 1990 Jan;18(1):122–3 Comment on: Crit Care Med 1989 Jan;17(1):1–3.

New bundle branch block after coronary artery bypass grafting—evaluation by CK–MB isoenzyme analysis and transoesophageal echocardiography. Hake U, et al. **Eur Heart J** 1990 Jan;11(1):59–64

Rate–dependent bundle branch block: occurrence, causes and clinical correlations. Fisher JD, et al. **J Am Coll Cardiol** 1990 Jul;16(1):240–3 (43 ref.)

Inadvertent catheter–induced right bundle branch block in a patient with preexistent left bundle branch block and recurrent macroreentrant ventricular tachycardia. Gössinger HD, et al. **PACE** 1989 Dec;12(12):1857–62

[Heart failure and complete atrio–ventricular block in a patient with acute myocardial infarct] Santos RM, et al. **Rev Port Cardiol** 1988 May–Jun;7(3):327–30 (Eng. Abstr.) **(Por)**

PATHOLOGY

[Histological substrate of ventricular tachycardias of the right bundle–branch block type (sensitive to verapamil)] Morgera T, et al. **G Ital Cardiol** 1989 Oct;19(10):901–7 (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

Clinical and electrophysiologic findings in acute ischemic intraHisian bundle–branch block. Cortadellas J, et al. **Am Heart J** 1990 Jan;119(1):23–9

Electrophysiologic differences between nodoventricular (Mahaim) fiber and atrioventricular accessory fiber with decremental properties. Fujiki A, et al. **Am Heart J** 1989 Nov;118(5 Pt 1):1057–62

ST–segment changes during transmural myocardial ischemia in chronic left bundle branch block. Cannon A, et al. **Am J Cardiol** 1989 Nov 15;64(18):1216–7

Dipyridamole testing compared to exercise stress for thallium–201 imaging in patients with left bundle branch block. Morais J, et al. **Can J Cardiol** 1990 Jan–Feb;6(1):5–8

Changing electrocardiographic findings in pulmonary embolism in relation to vascular obstruction. Nielsen TT, et al. **Cardiology** 1989;76(4):274–84

Bifascicular block and Wolff–Parkinson–White syndrome. Rakovec P. **Chest** 1990 Jul;98(1):224–5

Contrasting effects of verapamil and procainamide on rate–dependent bundle branch block: pharmacologic evidence for the role of depressed sodium channel responses. Chiale PA, et al. **J Am Coll Cardiol** 1990 Mar 1;15(3):633–9

[Effect of complete bundle–branch block on the averaged signal of high amplification electrocardiogram] Brembilla–Perrot B, et al. **Arch Mal Coeur** 1990 Jun; 83(7):907–12 (Eng. Abstr.) **(Fre)**

[An echocardiographic study of patients with left bundle branch block] Arturi E, et al. **Minerva Cardioangiol** 1990 Apr;38(4):127–34 (Eng. Abstr.) **(Ita)**

RADIONUCLIDE IMAGING

Intravenous dipyridamole thallium–201 SPECT imaging in patients with left bundle branch block. Rockett JF, et al. **Clin Nucl Med** 1990 Jun;15(6):401–7

[Evaluation of complete left bundle branch block with normal coronary artery using positron emission CT (PET) and Tl–201 scintigraphy] Yamada T, et al. **Kokyu To Junkan** 1990 Jun;38(6):585–8 (Eng. Abstr.) **(Jpn)**

THERAPY

Incessant ventricular tachycardia with a right bundle–branch block pattern and left axis deviation abolished by catheter manipulation. Blomström–Lundqvist C, et al. **PACE** 1990 Jan;13(1):11–6 (22 ref.)

[Indications for pacemaker therapy in ophthalmoplegia plus and Kearns–Sayre syndrome] Nitsch J, et al. **Z Kardiol** 1990 Jan;79(1):60–5 (Eng. Abstr.) **(Ger)**

[Use of transesophageal stimulation of the left atrium in the diagnosis of ischemia and cicatricial myocardial changes in patients with complete block of the left fascicle of the bundle of His] Shu'lman VA, et al. **Kardiologiia** 1989 Jul; 29(7):43–6 (Eng. Abstr.) **(Rus)**

BUNDLE OF HIS see under **HEART CONDUCTION SYSTEM**

BUNDLE OF KENT see **HEART CONDUCTION SYSTEM**

BUNGAROTOXINS

Kappa–neurotoxins: heterodimer formation between different neuronal nicotinic receptor antagonists. Chiappinelli VA, et al. **Biochemistry** 1989 Oct 17;28(21):8543–7

Beta–bungarotoxin. Preparation and characterization of crystals suitable for structural analysis. Kwong PD, et al. **J Biol Chem** 1989 Nov 15;264(32):19349–53

ANALYSIS

The intrinsic tryptophan fluorescence of beta 1–bungarotoxin and the Ca2+–binding domains of the toxin as probed with Tb3+ luminescence. Chu ST, et al. **Biochem J** 1989 Sep 15;262(3):773–9

DIAGNOSTIC USE

Characterization of neuronal nicotinic receptors using neuronal bungarotoxin. Loring RH, et al. **Prog Brain Res** 1989;79:109–16 (78 ref.)

GENETICS

A cDNA sequence encoding a neurotoxin–homolog from Bungarus multicinctus. Danse JM, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1045

Nucleotide sequence encoding beta–bungarotoxin A2–chain from the venom glands of Bungarus multicinctus. Danse JM, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4609

cDNA deduced amino–acid sequences of two novel kappa–neurotoxins from Bungarus multicinctus. Danse JM, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1050

IMMUNOLOGY

Preparation and characterization of monoclonal antibodies against beta–bungarotoxin and its A– and B–chains. Danse JM, et al. **Toxicon** 1989;27(9):1011–9

ISOLATION & PURIFICATION

Kappa 2–bungarotoxin and kappa 3–bungarotoxin: two new neuronal nicotinic receptor antagonists isolated from the venom of Bungarus multicinctus. Chiappinelli VA, et al. **Brain Res** 1990 Feb 19;509(2):237–48

METABOLISM

Chemical transduction with fluorescent lipid membranes using selective interactions of acetylcholine receptor with agonist/antagonist and acetylcholine with substrate. Krull UJ, et al. **Analyst** 1990 Feb;115(2):147–53

Nonequivalence of alpha–bungarotoxin binding sites in the native nicotinic receptor molecule. Conti–Tronconi BM, et al. **Biochemistry** 1990 Jan 30;29(4):1046–54

Cross–linking of beta–bungarotoxin to chick brain membranes. Identification of subunits of a putative voltage–gated K+ channel. Schmidt RR, et al. **Biochemistry** 1989 Oct 17;28(21):8346–50

Monoclonal antibodies directed against a synthetic peptide corresponding to the alpha–bungarotoxin binding region of the acetylcholine receptor. Preston–Hurlburt P, et al. **Biochim Biophys Acta** 1990 Mar 26;1033(3):324–8

[125I]alpha–bungarotoxin binding marks primary sensory area developing rat neocortex. Fuchs JL. **Brain Res** 1989 Nov 6;501(2):223–34

AF64A depletes hippocampal high–affinity choline uptake but does not alter the density of alpha–bungarotoxin binding sites or modify the effect of exogenous choline. Morley BJ, et al. **Brain Res** 1990 Jun 11;519(1–2):1–5

Comparison of acetylcholine and alpha–bungarotoxin binding sites in insects and vertebrates. Benke D, et al. **Comp Biochem Physiol [C]** 1989;94(1):71–80

Identification of a brain acetylcholine receptor alpha subunit able to bind alpha–bungarotoxin. McLane KE, et al. **J Biol Chem** 1990 Jun 15;265(17):9816–24

Localization of sequence segments forming a kappa–bungarotoxin–binding site on the alpha 3 neuronal nicotinic receptor. McLane KE, et al. **J Biol Chem** 1990 Jan 25;265(3):1537–44

Neuronal nicotinic alpha–bungarotoxin receptors. Quik M, et al. **J Neural Transm Suppl** 1990;29:57–64

Alpha–bungarotoxin binds to human acetylcholine receptor alpha–subunit peptide 185–199 in solution and solid phase but not to peptides 125–147 and 389–409. Griesmann GE, et al. **J Neurochem** 1990 May;54(5):1541–7

Thymopoietin inhibits function and ligand binding to nicotinic receptors at the neuromuscular junction. Quik M, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):1113–9

Thymopoietin, a thymic polypeptide, regulates nicotinic alpha–bungarotoxin sites in chromaffin cells in culture. Quik M, et al. **Mol Pharmacol** 1990 Jan;37(1):90–7

Phorbol esters and d–tubocurarine up–regulate alpha–bungarotoxin sites in chromaffin cells in culture via distinct mechanisms. Geertsen S, et al. **Neuroscience** 1990; 34(2):441–50

The alpha–bungarotoxin receptor purified from a human neuroblastoma cell line: biochemical and immunological characterization. Gotti C, et al. **Neuroscience** 1989; 32(3):759–67

Acetylcholine receptor–alpha–bungarotoxin interactions: determination of the region–to–region contacts by peptide–peptide interactions and molecular modeling of the receptor cavity. Ruan KH, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6156–60

Alpha-bungarotoxin receptors in the CNS. Morley BJ. **Prog Brain Res** 1989;79:101-8
In vitro neutralization by monoclonal antibodies of alpha-bungarotoxin binding to acetylcholine receptor. Pachner AR, et al. **Toxicon** 1989;27(12):1263-8
[The role of membrane protein SH-groups in regulating ouabain and bungarotoxin binding in the crab nerve] Maksimov GV, et al. **Biofizika** 1989 Jul-Aug;34(4):693-5 (Eng. Abstr.) **(Rus)**
[Tachykinin receptors in the rat brain bind alpha-bungarotoxin] Utkin IuN, et al. **Bioorg Khim** 1989 Aug;15(8):1030-6 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Selective antagonism to succinylcholine-induced depolarization by alpha-bungarotoxin with respect to the mode of action of depolarizing agents. Chang CC, et al. **Br J Pharmacol** 1989 Dec;98(4):1413-9
On the blockade of acetylcholine release at mouse motor nerve terminals by beta-bungarotoxin and crotoxin. Rowan EG, et al. **Br J Pharmacol** 1990 Jun;100(2):301-4
Blockade of nicotinic responses in rat retinal ganglion cells by neuronal bungarotoxin. Aizenman E, et al. **Brain Res** 1990 May 28;517(1-2):209-14
alpha-Bungarotoxin interacts with the rat brain tachykinin receptors. Utkin YuN, et al. **FEBS Lett** 1989 Sep 11; 255(1):111-5
Potassium channel blockade by the B subunit of beta-bungarotoxin. Benishin CG. **Mol Pharmacol** 1990 Aug;38(2):164-9
Quantitation of the beta-bungarotoxin-induced release of lactate dehydrogenase from cerebrocortical synaptosomes. Martinez C, et al. **Neurochem Res** 1989 Sep;14(9):865-9
Intracellular recording in avian brain of a nicotinic response that is insensitive to K-bungarotoxin. Sorenson EM, et al. **Neuron** 1990 Sep;5(3):307-15
Purified, modified eel sodium channels are active in planar bilayers in the absence of activating neurotoxins. Shenkel S, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9592-6
Leukotriene and prostaglandin production in rat brain synaptosomes treated with phospholipase A2 neurotoxins and enzymes. Yates SL, et al. **Prostaglandins** 1990 Apr; 39(4):425-38
[The action of alpha-bungarotoxin on the acetylcholine responses of the membrane of snail neurons] Arvanov VL, et al. **Neirofiziologiia** 1989;21(6):729-35 (Eng. Abstr.) **(Rus)**

TOXICITY

Phase partitioning of beta-bungarotoxin-treated cerebrocortical synaptosomes: quantitation of the toxin-vulnerable population. García-Garayo JJ, et al. **Res Commun Chem Pathol Pharmacol** 1990 Apr;68(1):55-63

BUNION see **HALLUX VALGUS**

BUNITROLOL see under **PROPANOLAMINES**

BUNOLOL

ADMINISTRATION & DOSAGE

Effect of varying drop size on the efficacy and safety of a topical beta blocker. Charap AD, et al. **Ann Ophthalmol** 1989 Sep;21(9):351-7
[Vistagan-Liquifilm in the treatment of simple glaucoma] Szymankiewiczowa S. **Klin Oczna** 1989 Jun;91(6):163-4 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

[Hypersensitivity to levobunolol] Schultheiss E. **Derm Beruf Umwelt** 1989 Sep-Oct;37(5):185-6 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

[Local anesthetic effect and subjective tolerance of 0.5% levobunolol in normal eyes] Höh H. **Klin Monatsbl Augenheilkd** 1990 Jul;197(1):20-6 (Eng. Abstr.) **(Ger)**

BUNOSTOMUM see **ANCYLOSTOMATOIDEA**

BUNYAMWERA GROUP VIRUSES see under **BUNYAVIRIDAE**

BUNYAVIRIDAE

Spatial distribution of Aedes triseriatus eggs in a site endemic for La Crosse encephalitis virus. Beehler JW, et al. **J Am Mosq Control Assoc** 1990 Jun;6(2):254-7
[Significance of viruses of antigen complex of California encephalitis in pathology] Kolobukhina LV, et al. **Klin Med (Mosk)** 1989 Sep;67(9):61-4 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Electron microscopic and antigenic studies of uncharacterized viruses. II. Evidence suggesting the placement of viruses in the family Bunyaviridae. Zeller HG, et al. **Arch Virol** 1989;108(3-4):211-27
Monoclonal antibodies specific for the G1 glycoprotein of La Crosse virus that react with other California serogroup viruses. Kingsford L, et al. **J Gen Virol** 1990 Mar;71 (Pt 3):523-30
Bunyaviridae. Serological relationships. Eley SM, et al. **Microbiologica** 1989 Oct;12(4):351-67 (94 ref.)
Biological and antigenic relationship between Rift Valley fever virus strains isolated in Egypt and Madagascar. Saluzzo JF, et al. **Trans R Soc Trop Med Hyg** 1989 Sep-Oct;83(5):701

DRUG EFFECTS

Mechanism of La Crosse virus inhibition by ribavirin. Cassidy LF, et al. **Antimicrob Agents Chemother** 1989 Nov; 33(11):2009-11

GENETICS

Genomic stability of La Crosse virus during vertical and horizontal transmission. Baldridge GD, et al. **Arch Virol** 1989;108(1-2):89-99
Heterologous reassortment of bunyaviruses in Aedes triseriatus mosquitoes and transovarial and oral transmission of newly evolved genotypes. Chandler LJ, et al. **J Gen Virol** 1990 May;71 (Pt 5):1045-50
Molecular biology of the Bunyaviridae. Elliott RM. **J Gen Virol** 1990 Mar;71 (Pt 3):501-22 (214 ref.)
Ambisense segment 4 of rice stripe virus: possible evolutionary relationship with phleboviruses and uukuviruses (Bunyaviridae). Kakutani T, et al. **J Gen Virol** 1990 Jul;71 (Pt 7):1427-32
Anti-mRNAs in La Crosse bunyavirus-infected cells. Hacker D, et al. **J Virol** 1990 Oct;64(10):5051-7
The translational requirement for complete La Crosse virus mRNA synthesis is cell-type dependent. Raju R, et al. **J Virol** 1989 Dec;63(12):5159-65
Uukuniemi virus S RNA segment: ambisense coding strategy, packaging of complementary strands into virions, and homology to members of the genus Phlebovirus. Simons JF, et al. **J Virol** 1990 Jan;64(1):247-55
Expression strategy of a phlebovirus: biogenesis of proteins from the Rift Valley fever virus M segment. Suzich JA, et al. **J Virol** 1990 Apr;64(4):1549-55
Use of reassortant viruses to map attenuating and temperature-sensitive mutations of the Rift Valley fever virus MP-12 vaccine. Saluzzo JF, et al. **Vaccine** 1990 Aug; 8(4):369-75
Characterization of the 5' and 3' ends of viral messenger RNAs isolated from BHK21 cells infected with Germiston virus (Bunyavirus). Bouloy M, et al. **Virology** 1990 Mar; 175(1):50-8
Nucleotide sequence analysis of the large (L) genomic RNA segment of Bunyamwera virus, the prototype of the family Bunyaviridae. Elliott RM. **Virology** 1989 Dec;173(2):426-36
Nucleotide sequence analysis of the S genomic segment of Prospect Hill virus: comparison with the prototype Hantavirus. Parrington MA, et al. **Virology** 1990 Mar; 175(1):167-75
Coding strategy of the S RNA segment of Dugbe virus (Nairovirus; Bunyaviridae). Ward VK, et al. **Virology** 1990 Apr;175(2):518-24
Rapid detection of genomic variations in different strains of hantaviruses by polymerase chain reaction techniques and nucleotide sequence analysis. Giebel LB, et al. **Virus Res** 1990 Jun;16(2):127-36
RNA probes detect nucleotide sequence homology between members of two different nairovirus serogroups. Marriott AC, et al. **Virus Res** 1990 Apr;16(1):77-81

IMMUNOLOGY

Neutralizing antibodies for sandfly fever Naples virus in human sera on the island of Mljet. Punda-Polić V, et al. **Acta Med Iugosl** 1990;44(1):15-20
Distribution of neutralizing antibodies to California and Bunyamwera serogroup viruses in horses and rodents in California. Campbell GL, et al. **Am J Trop Med Hyg** 1990 Mar;42(3):282-90
Incidence of sand fly fever among Swedish United Nations soldiers on Cyprus during 1985. Eitrem R, et al. **Am J Trop Med Hyg** 1990 Aug;43(2):207-11
Antigenic patterns within the California-encephalitis-virus group. Sather GE, et al. **Am J Trop Med Hyg** 1967 Jul; 16(4):548-57
Serological evidence of Crimean-Congo haemorrhagic fever viral infection among camels imported into Egypt. Morrill JC, et al. **J Trop Med Hyg** 1990 Jun;93(3):201-4
Jatobal virus antigenic characterization by ELISA and neutralization test using EIA as indicator, on tissue culture. Figueiredo LT, et al. **Mem Inst Oswaldo Cruz** 1989 Apr-Jun;83(2):161-4
Antibodies to haemorrhagic fever viruses in Madagascar populations. Mathiot CC, et al. **Trans R Soc Trop Med Hyg** 1989 May-Jun;83(3):407-9
ELISA test for the serodiagnosis of Akabane virus infection in cattle. Ungar-Waron H, et al. **Trop Anim Health Prod** 1989 Aug;21(3):205-10
[Incidence of zoonoses with their natural foci in the West Bohemia Region. II. Antibodies to the Tahyna and Tribec tick-borne encephalitis viruses] Januška J, et al. **Cesk Epidemiol Mikrobiol Imunol** 1990 Jun;39(3):134-8 (Eng. Abstr.) **(Cze)**
[Experimental study of the host immune response to one-time administration of heterologous antigen and Ukuniemi virus] Vinograd IA, et al. **Mikrobiol Zh** 1984 Jan-Feb;46(1):80-4 (Eng. Abstr.) **(Rus)**
[The use of immunoenzyme assay for detecting antigens of California group virus and Bunyamwera group virus (Bunyavirus, Bunyaviridae) in mosquito pools] Bystrova EA, et al. **Vopr Virusol** 1989 Nov-Dec;34(6):744-6 **(Rus)**

ISOLATION & PURIFICATION

Isolation of Soldado virus from a seabird (Rissa tridactyla L.) in France [letter] Chastel C, et al. **Acta Virol (Praha)** 1990 Feb;34(1):109
Biological profile of a virus belonging to California encephalitis complex isolated in Karelian Autonomous Soviet Socialist Republic. Lvov DK, et al. **Acta Virol (Praha)** 1989 Aug;33(4):355-60
Transstadial and horizontal transmission of Rift Valley fever virus in Hyalomma truncatum. Linthicum KJ, et al. **Am J Trop Med Hyg** 1989 Oct;41(4):491-6
Survey of ticks (Acarina: Ixodidae) for Crimean haemorrhagic fever virus activity in Jammu & Kashmir state, India. Kaul HN, et al. **Indian J Med Res** 1990 Jan; 91:5-8
[New types of virus infections of domestic animals in the German Democratic Republic. 4. Tahyna virus infections--a review] Knuth T, et al. **Arch Exp Veterinarmed** 1990;44(2):265-77 (96 ref.) (Eng. Abstr.) **(Ger)**
[Virological study of cases of sandfly fever in Afghanistan] Galdamovich SIa, et al. **Vopr Virusol** 1990 Jan-Feb; 35(1):45-7 (Eng. Abstr.) **(Rus)**
[Isolation of viruses of antigenic complexes of California encephalitis and Bunyamwera (Bunyaviridae, Bunuavirus) from mosquitoes in northeast Asia] L'vov SD, et al. **Vopr Virusol** 1989 May-Jun;34(3):333-8 (Eng. Abstr.) **(Rus)**
[A comparative evaluation of the effectiveness of isolating fleboviruses in cell culture and in mice] Shmidt OA, et al. **Vopr Virusol** 1990 Mar-Apr;35(2):167-9 **(Rus)**

METABOLISM

La Crosse virus nucleocapsid protein controls its own synthesis in mosquito cells by encapsidating its mRNA. Hacker D, et al. **J Virol** 1989 Dec;63(12):5166-74

PATHOGENICITY

Arbovirus infection in humans in NSW: seroprevalence and pathogenicity of certain Australian bunyaviruses. Boughton CR, et al. **Aust N Z J Med** 1990 Feb;20(1):51-5
Studies on the pathogenicity of a nairovirus, Dugbe virus, in normal and immunosuppressed mice. Coates DM, et al. **J Gen Virol** 1990 Feb;71 (Pt 2):325-32
Neuroattenuated bunyavirus variant: derivation, characterization, and revertant clones. Endres MJ, et al. **J Virol** 1990 May;64(5):1927-33

PHYSIOLOGY

Transmission of Rift Valley fever virus by the sand fly, Phlebotomus duboscqi (Diptera: Psychodidae). Turell MJ, et al. **Am J Trop Med Hyg** 1990 Feb;42(2):185-8
An investigation of transovarial transmission of Akabane virus in Culicoides brevitarsis. Allingham PG, et al. **Aust Vet J** 1990 Jul;67(7):273-4
Recently introduced Aedes albopictus in the United States: potential vector of La Crosse virus (Bunyaviridae: California serogroup). Grimstad PR, et al. **J Am Mosq Control Assoc** 1989 Sep;5(3):422-7
Na+ and K+ concentration and regulation of protein synthesis in L-A9 and Aedes albopictus cells infected with Marituba virus (Bunyaviridae). Frugulhetti IC, et al. **J Gen Virol** 1989 Dec;70 (Pt 12):3493-9
Replication of Crimean-Congo hemorrhagic fever virus in four species of ixodid ticks (Acari) infected experimentally. Logan TM, et al. **J Med Entomol** 1990 Jul;27(4):537-42
Replication and dissemination of La Crosse virus in the competent vector Aedes triseriatus and the incompetent vector Aedes hendersoni and evidence for transovarial transmission by Aedes hendersoni (Diptera: Culicidae). Paulson SL, et al. **J Med Entomol** 1989 Nov;26(6):602-9
Quantitative in situ hybridization using strand specific RNA probes: expression of the bunyavirus Germiston S segment in mosquito cells. Delord B, et al. **Mol Cell Probes** 1990 Aug;4(4):247-59
Non-viraemic transmission of Thogoto virus: influence of time and distance. Jones LD, et al. **Trans R Soc Trop Med Hyg** 1989 Sep-Oct;83(5):712-4
Culicoides: biological vectors of Akabane virus. Jennings M, et al. **Vet Microbiol** 1989 Dec;21(2):125-31
[An experimental study of the reproduction of the Hissar virus (Bunyaviridae) in Argas persicus ticks (Oken, 1918)] Nemova NV, et al. **Med Parazitol (Mosk)** 1990 Jan-Feb; (1):35-6 (Eng. Abstr.) **(Rus)**

BUNYAVIRUS INFECTIONS

EPIDEMIOLOGY

Arbovirus infection in humans in NSW: seroprevalence and pathogenicity of certain Australian bunyaviruses. Boughton CR, et al. **Aust N Z J Med** 1990 Feb;20(1):51-5

[1st register of an epidemic caused by Oropouche virus in the states of Maranhão and Goiás, Brazil] Vasconcelos PF, et al. **Rev Inst Med Trop Sao Paulo** 1989 Jul–Aug; 31(4):271–8 (Eng. Abstr.) **(Por)**

ETIOLOGY

[Virus transmission to man from Phlebotomus flies: role of the Tuscany virus (Bunyaviridae, Phlebovirus) in the etiology of infections of the central nervous system] Balducci M. **Parassitologia** 1988 May–Dec;30(2–3):179–85 (Eng. Abstr.) **(Ita)**

MICROBIOLOGY

Studies on the pathogenicity of a nairovirus, Dugbe virus, in normal and immunosuppressed mice. Coates DM, et al. **J Gen Virol** 1990 Feb;71 (Pt 2):325–32

TRANSMISSION

Genomic stability of La Crosse virus during vertical and horizontal transmission. Baldridge GD, et al. **Arch Virol** 1989;108(1–2):89–99

Difference in vector competence of two species of sympatric ticks, Amblyomma variegatum and Rhipicephalus appendiculatus, for Dugbe virus (Nairovirus, Bunyaviridae). Steele GM, et al. **Virus Res** 1989 Sep; 14(1):73–84

VETERINARY

An investigation of transovarial transmission of Akabane virus in Culicoides brevitarsis. Allingham PG, et al. **Aust Vet J** 1990 Jul;67(7):273–4

ELISA test for the serodiagnosis of Akabane virus infection in cattle. Ungar-Waron H, et al. **Trop Anim Health Prod** 1989 Aug;21(3):205–10

Evidence that Cache Valley virus induces congenital malformations in sheep. Chung SI, et al. **Vet Microbiol** 1990 Feb;21(4):297–307

BUPHTHALMOS see **HYDROPHTHALMOS**

BUPIVACAINE

Visceral pain during caesarean section under spinal and epidural anaesthesia with bupivacaine. Alahuhta S, et al. **Acta Anaesthesiol Scand** 1990 Feb;34(2):95–8

Mental function in elderly men after surgery during epidural analgesia. Asbjørn J, et al. **Acta Anaesthesiol Scand** 1989 Jul;33(5):369–73

Vagal and sympathetic activity during spinal analgesia. Cook PR, et al. **Acta Anaesthesiol Scand** 1990 May;34(4):271–5

Sympathetic blockade during extradural analgesia with mepivacaine or bupivacaine. Malmqvist LA, et al. **Acta Anaesthesiol Scand** 1989 Aug;33(6):444–9

A double-blind comparison of epidural bupivacaine and bupivacaine-fentanyl for caesarean section. Paech MJ, et al. **Anaesth Intensive Care** 1990 Feb;18(1):22–30

Long-term indwelling catheter for intermittent axillary plexus blocks with bupivacaine [letter; comment] Thomson S. **Anaesth Intensive Care** 1990 May;18(2):276–7 Comment on: Anaesth Intensive Care 1989 Aug;17(3):370–2.

Epidural infusion of bupivacaine-fentanyl during labour [letter; comment] Chestnut DH. **Anaesthesia** 1989 Nov; 44(11):935–6 Comment on: Anaesthesia 1989 Apr;44(4):341–4.

Dosage volume or concentration? [letter] Davies AJ. **Anaesthesia** 1990 May;45(5):414

Postoperative analgesia in children who have genito-urinary surgery. A comparison between caudal buprenorphine and bupivacaine. Girotra S, et al. **Anaesthesia** 1990 May; 45(5):406–8

Epidural fentanyl and 0.5% bupivacaine for elective caesarean section. King MJ, et al. **Anaesthesia** 1990 Apr; 45(4):285–8

Prolonged motor weakness after femoral nerve block with bupivacaine 0.5% [letter] Lynch J. **Anaesthesia** 1990 May; 45(5):421

Paediatric postoperative analgesia. A comparison of rectal diclofenac with caudal bupivacaine after inguinal herniotomy. Moores MA, et al. **Anaesthesia** 1990 Feb; 45(2):156–8

Postoperative analgesia for haemorrhoidectomy. A comparison between caudal and local infiltration. Pryn SJ, et al. **Anaesthesia** 1989 Dec;44(12):964–6

Total spinal anesthesia after caudal anesthesia in an infant. Desparmet JF. **Anesth Analg** 1990 Jun;70(6):665–7

Comparison of patient-controlled epidural analgesia and conventional intermittent "top-up" injections during labor. Gambling DR, et al. **Anesth Analg** 1990 Mar;70(3):256–61

Restless legs during recovery from spinal anesthesia [letter] Moorthy SS, et al. **Anesth Analg** 1990 Mar;70(3):337

Continuous spinal anesthesia with combined hyperbaric and isobaric bupivacaine in a patient with scoliosis. Moran DH, et al. **Anesth Analg** 1990 Apr;70(4):445–7

Transient maternal hypotension following epidural anesthesia. Philipson EH, et al. **Anesth Analg** 1989 Nov; 69(5):604–7

Spinal anesthesia with plain bupivacaine 0.5%: regression of sensory and motor blockade with different temperatures of the anesthetic solution. Stienstra R, et al. **Anesth Analg** 1989 Nov;69(5):593–7

Anesthetic management of a parturient with Osler-Weber-Rendu syndrome and rheumatic heart disease. Waring PH, et al. **Anesth Analg** 1990 Jul;71(1):96–9

Comparison of 0.5% ropivacaine and 0.5% bupivacaine for epidural anesthesia in patients undergoing lower-extremity surgery. Brown DL, et al. **Anesthesiology** 1990 Apr; 72(4):633–6

A comparison between bupivacaine instillation versus ilioinguinal/iliohypogastric nerve block for postoperative analgesia following inguinal herniorrhaphy in children. Casey WF, et al. **Anesthesiology** 1990 Apr;72(4):637–9

Continuous epidural infusion of 0.0625% bupivacaine–0.0002% fentanyl during the second stage of labor. Chestnut DH, et al. **Anesthesiology** 1990 Apr; 72(4):613–8

Labor analgesia with epidural bupivacaine plus fentanyl: enhancement with epinephrine and inhibition with 2-chloroprocaine. Grice SC, et al. **Anesthesiology** 1990 Apr;72(4):623–8

Perioperative analgesia with subarachnoid fentanyl–bupivacaine for cesarean delivery. Hunt CO, et al. **Anesthesiology** 1989 Oct;71(4):535–40

Continuous interscalene brachial plexus block during and after shoulder surgery. Haasio J, et al. **Ann Chir Gynaecol** 1990;79(2):103–7

The use of intraarticular bupivacaine [letter; comment] Imrie ST. **Arthroscopy** 1989;5(4):352–3 Comment on: Arthroscopy 1989;5(1):33–5.

The inadvertent continuous spinal continued [letter] Abouleish E. **Br J Anaesth** 1974 Aug;46(8):628

The strange case of the (inadvertent) continuous spinal [letter] Doctor NH. **Br J Anaesth** 1974 Sep;46(9):661

Bupivacaine 0.125% in epidural block analgesia during childbirth: maternal and foetal plasma concentrations. Geerinckx K, et al. **Br J Anaesth** 1974 Dec;46(12):937–41

Spinal analgesia with plain 0.5% bupivacaine administered at spinal interspace L2–3 or L4–5. Olsen KH, et al. **Br J Anaesth** 1990 Feb;64(2):170–2

Bupivacaine 0.125% in epidural block analgesia during childbirth: clinical evaluation. Vanderick G, et al. **Br J Anaesth** 1974 Nov;46(11):838–41

Effect of fluid preloading on cardiovascular variables after spinal anaesthesia with glucose-free 0.75% bupivacaine. Venn PJ, et al. **Br J Anaesth** 1989 Dec;63(6):682–7

Study of the effectiveness of bupivicaine infiltration of the ilioinguinal nerve at the time of hernia repair for post-operative pain relief. McLoughlin J, et al. **Br J Clin Pract** 1989 Aug;43(8):281–3

Analgesics and third molar removal [letter] Tuffin JR. **Br J Oral Maxillofac Surg** 1989 Dec;27(6):520

Analgesia and postoperative hypoxaemia after gastric partition with and without bupivacaine wound infiltration. Aull L, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S53

Intra-articular bupivacaine does not decrease narcotic requirements after arthroscopic surgery in adolescents. Broadman L, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S51

Ischiorectal space block for anorectal surgery. Courtice ID, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S65

Continuous infusion epidural anesthesia for obstetrics. Bupivacaine vs bupivacaine-fentanyl. Elliott RD, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S6

Oxygen desaturation in elderly patients during cataract surgery. Forrest JB, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S50

Scalp infiltration with bupivacaine in paediatric brain surgery. Hartley E, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S129

Epidural alfentanil during labor, in association with a continuous infusion of bupivacaine. Perreault C, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S5

Onset of subarachnoid bupivacaine in caesarean section. Puchalski SA, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S35

Hypobaric spinal anesthesia in percutaneous nephrostomy. Rosenblatt M, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S56

Spinal anesthesia with plain bupivicaine for lumbar spine surgery. Tetzlaff JE, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S61

Stress response and platelet function in minor surgery during epidural bupivacaine and general anaesthesia: effect of epidural morphine addition. Nielsen TH, et al. **Eur J Anaesthesiol** 1989 Nov;6(6):409–17

.5 per cent plain bupivacaine for spinal anaesthesia effects of posture. Vichitvejpaisal P, et al. **J Med Assoc Thai** 1989 Dec;72(12):687–91

Use of continuous caudal block to relieve lower-extremity ischemia caused by vasculitis in a child with meningococcemia. Tobias JD, et al. **J Pediatr** 1989 Dec; 115(6):1019–21

Outpatient minilaparotomy sterilization with local anesthesia. Nisanian A. **J Reprod Med** 1990 Apr;35(4):380–3

The use of continuous spinal anesthesia in severe tetanus with autonomic disturbance. Shibuya M, et al. **J Trauma** 1989 Oct;29(10):1423–9

Comparison of continuous epidural infusion of fentanyl and fentanyl–bupivacaine for post cholecystectomy pain control. Huang FY, et al. **Ma Tsui Hsueh Tsa Chi** 1990 Mar;28(1):9–13

Local anaesthetic block therapy of posttraumatic neuralgia of the infraorbital nerve. de Vries N, et al. **Rhinology** 1990 Jun;28(2):103–6

[Evaluation of abdominal motor blockade using surface integrated electromyography during bupivacaine spinal anesthesia] Cherng CH, et al. **Ma Tsui Hsueh Tsa Chi** 1990 Mar;28(1):15–21 (Eng. Abstr.) **(Chi)**

[Duration of analgesia after crural nerve block: effect of the addition of clonidine to bupivacaine] Ang ET, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R212 **(Fre)**

[Pharmacokinetics of bupivacaine after cervical block in carotid surgery] Debaene B, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R150 **(Fre)**

[Continuous crural block after knee surgery: bupivacaine pharmacokinetics] Esteve M, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R152 **(Fre)**

[Continuous output postoperative peridural analgesia: two bupivacaine dilutions] Hommeril JL, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R173 **(Fre)**

[Combined sufentanil and bupivacaine 0.25% by peridural administration for obstetrical analgesia?] Jorrot JC, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R64 **(Fre)**

[Analgesia and respiratory effects after caudal anesthesia with a bupivacaine–fentanyl combination in the child] Moine P, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R71 **(Fre)**

[Intrapleural analgesia with bupivacaine after thoracotomy for esophagectomy] Tartière J, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R178 **(Fre)**

[Intraocular pressure and ocular hemodynamics following oculopression with and without added retrobulbar anesthesia] Hessemer V, et al. **Fortschr Ophthalmol** 1989; 86(6):767–72 (Eng. Abstr.) **(Ger)**

[Changes in uveal and retinal hemodynamics caused by retrobulbar anesthesia using various injection volumes] Hessemer V, et al. **Fortschr Ophthalmol** 1989;86(6):760–6 (Eng. Abstr.) **(Ger)**

[Comparison of the effect of 0.75% bupivacaine with 0.75% bupivacaine/2% mepivacaine in retrobulbar anesthesia and the effect of adding hyaluronidase] Lange W, et al. **Fortschr Ophthalmol** 1989;86(4):312–5 (Eng. Abstr.) **(Ger)**

[Postoperative peridural analgesia via catheter following abdominal surgery. Peridural bupivacaine versus buprenorphine] Seeling W, et al. **Reg Anaesth** 1990 May; 13(3):78–87 (Eng. Abstr.) **(Ger)**

[The equipotency of ropivacaine, bupivacaine and etidocaine] Wahedi W, et al. **Reg Anaesth** 1990 May;13(3):66–72 (Eng. Abstr.) **(Ger)**

[Ropivacaine in epidural anesthesia. Dose-response relationship and a comparison with bupivacaine] Wahedi W, et al. **Reg Anaesth** 1990 May;13(3):57–65 (Eng. Abstr.) **(Ger)**

[The value of continuous catheter peridural anesthesia in the management of patients with EPH gestosis] Schneider M, et al. **Zentralbl Gynakol** 1990;112(6):345–50 (Eng. Abstr.) **(Ger)**

[Continuous intercostal nerve block for chronic pain] Shir Y, et al. **Harefuah** 1989 May 1;116(9):461–3 (Eng. Abstr.) **(Heb)**

[Subarachnoid anesthesia with hyperbaric bupivacaine] Okazaki S, et al. **Masui** 1989 Jul;38(7):923–6 (Eng. Abstr.) **(Jpn)**

[Lower maxillary nerve blockade as treatment of trismus secondary to pontomesencephalic hemorrhage (letter)] Roig C, et al. **Neurologia** 1986 Sep–Oct;1(5):226 **(Spa)**

ADMINISTRATION & DOSAGE

Effects of thoracic paravertebral block with bupivacaine versus combined thoracic epidural block with bupivacaine and morphine on pain and pulmonary function after cholecystectomy. Bigler D, et al. **Acta Anaesthesiol Scand** 1989 Oct;33(7):561–4

Comparison of the effects of continuous intrapleural vs epidural administration of 0.5% bupivacaine on pain, metabolic response and pulmonary function following cholecystectomy. Scott NB, et al. **Acta Anaesthesiol Scand** 1989 Oct;33(7):535–9

Spread of spinal anaesthesia using various doses of plain 0.5% bupivacaine injected at the LIV–V interspace. Taivainen T, et al. **Acta Anaesthesiol Scand** 1989 Nov;33(8):652–5

The local anesthetic dose is an important issue in evaluation of effects of epidural analgesia in nulliparous women [letter] Della Puppa A, et al. **Am J Obstet Gynecol** 1990 Aug; 163(2):701–3

Post-cholecystectomy pulmonary function following interpleural bupivacaine and intramuscular pethidine [see comments] Oxorn DC, et al. **Anaesth Intensive Care** 1989 Nov;17(4):440–3 Comment in: Anaesth Intensive Care 1990 May;18(2):271–2.

Motor and sensory blockade after epidural injection of mepivacaine, bupivacaine, and etidocaine—a double-blind study. Axelsson K, et al. **Anesth Analg** 1989 Dec; 69(6):739–47

Intrathecal combination of bupivacaine–fentanyl–morphine [letter] Gwirtz KH. **Anesth Analg** 1990 Jul;71(1):106

Single-dose interpleural versus intercostal blockade: nerve block characteristics and plasma concentration profiles after administration of 0.5% bupivacaine with epinephrine. van Kleef JW, et al. **Anesth Analg** 1990 May;70(5):484–8

Subarachnoid bupivacaine analgesia for seven months for a patient with a spinal cord tumor. Berde CB, et al. **Anesthesiology** 1990 Jun;72(6):1094–6

Patient variables and the subarachnoid spread of hyperbaric bupivacaine in the term parturient. Norris MC. **Anesthesiology** 1990 Mar;72(3):478–82

Interpleural anesthetics in the dog: differential somatic neural blockade. Riegler FX, et al. **Anesthesiology** 1989 Nov; 71(5):744–50

pH-adjusted bupivacaine and hyaluronidase for peribulbar block. Zahl K, et al. **Anesthesiology** 1990 Feb;72(2):230-2
Wound perfusion with bupivacaine: objective evidence for efficacy in postoperative pain relief. Chester JF, et al. **Ann R Coll Surg Engl** 1989 Nov;71(6):394-6
A comparison of postoperative pain relief techniques in orchidopexy. Lafferty PM, et al. **Ann R Coll Surg Engl** 1990 Jan;72(1):7-8
Interpleural catheter for analgesia after cholecystectomy: the surgical perspective. Schroeder D, et al. **Aust N Z J Surg** 1990 Sep;60(9):689-94
Comparison of bupivacaine and bupivacaine with fentanyl in continuous extradural analgesia during labour. Jones G, et al. **Br J Anaesth** 1989 Sep;63(3):254-9
Topical bupivacaine and etidocaine analgesia following fallopian tube banding. McKenzie R, et al. **Can J Anaesth** 1989 Sep;36(5):510-4
Postoperative pain management in patients with inflammatory bowel disease. Pillow KJ, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S63
Bupivacaine added to epidural fentanyl does not improve postoperative analgesia. Reimer EJ, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S54
Interpleural block: a new technique for regional anaesthesia during percutaneous nephrostomy and nephrolithotomy. Trivedi NS, et al. **Can J Anaesth** 1990 May;37(4 Pt 1):479-81
Clinic experience of peridual administration with 0.975% bupivacaine. Chuang JY. **Int Surg** 1990 Apr-Jun; 75(2):127-30
Treatment of Morton's neuroma [letter; comment] Imberman N. **J Am Podiatr Med Assoc** 1990 Jan;80(1):47 Comment on: J Am Podiatr Med Assoc 1989 Jan;79(1):27-30.
Anesthetic agents used in cataract surgery [letter] Livingston MW, et al. **J Cataract Refract Surg** 1990 Mar;16(2):272
Anesthesia for the obstetric patient with multiple sclerosis. Bader AM, et al. **J Clin Anesth** 1988;1(1):21-4
Effects of systemic morphine and epidural bupivacaine on postoperative oxygen consumption during rewarming. Bernard JM, et al. **J Clin Anesth** 1988;1(2):81-6
Onset of action between bupivacaine 0.5% and bupivacaine 0.5% plus fentanyl 75 mcg. Johnson C, et al. **J Clin Anesth** 1989;1(6):440-3
Continuous epidural analgesia in reflex sympathetic dystrophy [letter] Kirkpatrick A, et al. **J Clin Anesth** 1990 Jul-Aug;2(4):290-2
Peroperative bupivacaine for pyloromyotomy pain [letter] McNicol LR, et al. **Lancet** 1990 Jan 6;335(8680):54-5
The deposition of epidural bupivacaine in approximation to T10-11 decreases the onset time and the dose needed to establish labor analgesia. Ackerman WE, et al. **Middle East J Anesthesiol** 1989 Jun;10(2):177-83
Treatment of acute herpetic neuralgia. A case report and review of the literature. Hess TM, et al. **Minn Med** 1990 Apr;73(4):37-40 (28 ref.)
Repetitive intercostal nerve block via catheter for postoperative pain relief after thoracotomy. Kolvenbach H, et al. **Thorac Cardiovasc Surg** 1989 Oct;37(5):273-6
Intrapleural bupivacaine for early post-thoracotomy analgesia--comparison with bupivacaine intercostal block and cryofreezing. Shafei H, et al. **Thorac Cardiovasc Surg** 1990 Feb;38(1):38-41
[Spinal anesthesia with bupivacaine for transurethral resection of prostate: effects of specific gravity, volume and dose] Tsai YJ, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Jun;27(2):111-6 (Eng. Abstr.) **(Chi)**
[Epidural analgesia for hydrotherapy in burned patients with 0.25% bupivacaine] Yu CL, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Sep;27(3):303-5 **(Chi)**
[Interpleural bupivacaine (Marcain) in the treatment of pain in a patient with chronic pancreatitis] Ahlburg P, et al. **Ugeskr Laeger** 1989 Nov 20;151(47):3167-8 (Eng. Abstr.) **(Dan)**
[Comparison between conventional and continuous spinal anesthesia using bupivacaine] Bonnet F, et al. **Ann Fr Anesth Reanim** 1990;9(3):280-4 (Eng. Abstr.) **(Fre)**
[A combination of sufentanil and 0.25% bupivacaine administered epidurally for obstetrical analgesia. Comparison with fentanyl and placebo] Jorrot JC, et al. **Ann Fr Anesth Reanim** 1989;8(4):321-5 (Eng. Abstr.) **(Fre)**
[Peridural obstetrical anesthesia: intermittent injections or perfusion of bupivacaine?] Robert D, et al. **Can Anesthesiol** 1989 Jun-Jul;37(4):271-7 **(Fre)**
[A new technic for interpleural blockade] Sydow FW, et al. **Anaesthesist** 1990 May;39(5):280-2 (Eng. Abstr.) **(Ger)**
[Morphine combined with marcaine in long-term epidural analgesia in patients with Pancoast's syndrome caused by bronchogenic carcinoma of the apex of the lung] Cremonte LG, et al. **Minerva Med** 1989 Sep;80(9):1029-30 (Eng. Abstr.) **(Ita)**
[Continuous epidural infusion of bupivacaine and morphine for postoperative pain relief] Uchida H, et al. **Masui** 1990 Feb;39(2):237-42 (Eng. Abstr.) **(Jpn)**
[Effectiveness of infiltration anesthesia of postoperative abdominal wound using bupivacaine solution for alleviation of postoperative pain] Bielecki K, et al. **Wiad Lek** 1989 Feb 15;42(4):223-4 (Eng. Abstr.) **(Pol)**
[Conduction anesthesia with azacain in orthopedics and traumatology] Pashchuk AIu, et al. **Ortop Travmatol Protez** 1990 Mar;(3):62-3 **(Rus)**

ADVERSE EFFECTS

Is epidural anaesthesia using bupivacaine safe in patients with atrio-ventricular conduction defects? Eledjam JJ, et al. **Acta Anaesthesiol Scand** 1989 Jul;33(5):402-4
Unilateral subarachnoid anaesthesia [letter; comment] Brimacombe JR. **Anaesthesia** 1990 May;45(5):414 Comment on: Anaesthesia 1989 Nov;44(11):918-9.
Femoral nerve block after intra-operative subcutaneous bupivacaine injection [letter; comment] Chan TY, et al. **Anaesthesia** 1990 Feb;45(2):163-4 Comment on: Anaesthesia 1988 Mar;43(3):249.
Respiratory arrest after a caudal injection of bupivacaine [letter; comment] Fortuna A. **Anaesthesia** 1989 Dec; 44(12):1007 Comment on: Anaesthesia 1989 Apr;44(4):324-5.
Respiratory arrest after caudal bupivacaine [letter; comment] Lee E, et al. **Anaesthesia** 1990 Jan;45(1):63-4 Comment on: Anaesthesia 1989 Apr;44(4):324-5.
Epidural analgesia and hypotension [letter; comment] Lee JJ, et al. **Anaesthesia** 1990 Feb;45(2):170 Comment on: Anaesthesia 1989 Oct;44(10):869-70.
Bupivacaine-induced cardiac arrest [letter; comment] Boba A. **Anesth Analg** 1990 Apr;70(4):464-5 Comment on: Anesth Analg 1989 Sep;69(3):403-6.
Acute toxicity of ropivacaine compared with that of bupivacaine. Scott DB, et al. **Anesth Analg** 1989 Nov; 69(5):563-9
Prolonged brachial plexus block with 0.42% bupivacaine. Brockway MS, et al. **Br J Anaesth** 1989 Nov;63(5):604-5
Comparison of the respiratory effects of i.v. infusions of morphine and regional analgesia by extradural block. Clyburn PA, et al. **Br J Anaesth** 1990 Apr;64(4):446-9
Comparison of bupivacaine and bupivacaine with fentanyl in continuous extradural analgesia during labour [letter] McClure JH, et al. **Br J Anaesth** 1989 Nov;63(5):637
Respiratory difficulty following caesarean section. Tembo DC, et al. **Br J Hosp Med** 1990 Jul;44(1):52
Respiratory arrest following interpleural block in a narcotized patient [letter] Riley RH. **Can J Anaesth** 1990 May;37(4 Pt 1):487-8
Flare reaction following caudal analgesia. Roy WL, et al. **Can J Anaesth** 1990 Jan;37(1):127-9
Inadvertent epidural spread after subpleural-paravertebral block with 0.5% bupivacaine. Chung YT, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Dec;27(4):381-4
[Follow-up of spinal analgesia with somatosensory evoked potentials and biotesiometry] Jespersen TW, et al. **Ugeskr Laeger** 1990 Apr 9;152(15):1073-5 (Eng. Abstr.) **(Dan)**
[Hemodynamic changes after intrathecal injections of 12.5 mg of bupivacaine in the aged patient: effect of the concentration of the solution (0.5% vs 0.125%)] Alfonsi P, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R166 **(Fre)**

ANALOGS & DERIVATIVES

The effects of bupivacaine and pipecoloxylidide on platelet function in vitro. Odoom JA, et al. **Acta Anaesthesiol Scand** 1989 Jul;33(5):385-8

ANALYSIS

Factors influencing precipitation of pH-adjusted bupivacaine solutions. Bourget P, et al. **J Clin Pharm Ther** 1990 Jun; 15(3):197-204

ANTAGONISTS & INHIBITORS

Reversal of bupivacaine epidural anesthesia by intermittent epidural injections of crystalloid solutions. Johnson MD, et al. **Anesth Analg** 1990 Apr;70(4):395-9
Hypertonic NaCl antagonizes cardiac arrhythmia induced by bupivacaine. Scalabrini A, et al. **Braz J Med Biol Res** 1989;22(2):249-52
Hypertonic saline reverses bupivacaine-induced depression of rabbit Purkinje fiber depolarization Vmax. Simonetti MP, et al. **Braz J Med Biol Res** 1989;22(11):1393-6
Protective effect of a specific platelet-activating factor antagonist, BN 52021, on bupivacaine-induced cardiovascular impairments in rats. Lagente V, et al. **Pharmacol Res** 1989 Sep-Oct;21(5):577-85
[Alindine reduces decreased ventricular conduction induced by large doses of bupivacaine in the anesthetized dog] Bassoul B, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R194 **(Fre)**

BLOOD

The influence of midazolam on the plasma concentrations of bupivacaine and lidocaine after caudal injection of a mixture of the local anesthetics in children. Giaufre E, et al. **Acta Anaesthesiol Scand** 1990 Jan;34(1):44-6
Local anesthetic serum concentrations after penile nerve block in children. Sfez M, et al. **Anesth Analg** 1990 Oct; 71(4):423-6
Blood levels of bupivacaine after arthroscopy of the knee joint. Wasudev G, et al. **Arthroscopy** 1990;6(1):40-2
Plasma concentrations of bupivacaine after intercostal nerve block in patients after orthotopic liver transplantation. Bodenham A, et al. **Br J Anaesth** 1990 Apr;64(4):436-41
Effect of adrenaline on venous plasma concentrations of bupivacaine after interpleural administration. Gin T, et al. **Br J Anaesth** 1990 Jun;64(6):662-6
Bupivacaine free plasma levels in children after caudal anaesthesia: influence of pretreatment with diazepam? Bruguerolle B, et al. **Fundam Clin Pharmacol** 1990; 4(2):159-61
Sensitive determination of bupivacaine in human plasma by high-performance liquid chromatography. Michaelis HC, et al. **J Chromatogr** 1990 Apr 27;527(1):201-7
Predicting plasma concentrations of bupivacaine after epidural administration in obstetric analgesia. Chan K. **Ther Drug Monit** 1989 Sep;11(5):567-71
[Maternal and neonatal bupivacaine plasma levels in peridural anesthesia for relief of labor pain] Schürg R, et al. **Geburtshilfe Frauenheilkd** 1989 Nov;49(11):952-7 (Eng. Abstr.) **(Ger)**

METABOLISM

Extradural administration of bupivacaine: pharmacokinetics and metabolism in pregnant and non-pregnant women. Pihlajamäki K, et al. **Br J Anaesth** 1990 May;64(5):556-62

PHARMACOKINETICS

Steady-state pharmacokinetics of interpleural bupivacaine in patients after cholecystectomy. Kastrissios H, et al. **Anaesth Intensive Care** 1990 May;18(2):200-4
Effect of umbilical perfusate pH and controlled maternal hypotension on placental drug transfer in the rabbit. Gaylard DG, et al. **Anesth Analg** 1990 Jul;71(1):42-8
Bupivacaine use after knee arthroscopy: pharmacokinetics and pain control study. Kaeding CC, et al. **Arthroscopy** 1990;6(1):33-9
Effect of glucose concentration on the intrathecal spread of 0.5% bupivacaine. Bannister J, et al. **Br J Anaesth** 1990 Feb;64(2):232-4
Effect of adrenaline on placental transfer of bupivacaine in the perfused in situ rabbit placenta. Laishley RS, et al. **Br J Anaesth** 1989 Oct;63(4):439-43
Effect of adrenaline on the distribution of bupivacaine in the rabbit fetus. Laishley RS, et al. **Br J Anaesth** 1989 Dec; 63(6):721-5
Pharmacokinetics of interpleural bupivacaine in patients undergoing cholecystectomy. Mogg GA, et al. **Br J Anaesth** 1990 Jun;64(6):657-61
Influence of obesity on the spread of spinal analgesia after injection of plain 0.5% bupivacaine at the L3-4 or L4-5 interspace. Taivainen T, et al. **Br J Anaesth** 1990 May; 64(5):542-6
The effect of hyaluronidase on the speed of onset of retrobulbar anaesthesia. Wood G, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S62
Clinical pharmacokinetics after repeated intrapleural bupivacaine administration. Debruyne D, et al. **Clin Pharmacokinet** 1990 Mar;18(3):240-4
Temporal variations in the erythrocyte permeability to bupivacaine, etidocaine and mepivacaine in mice. Bruguerolle B, et al. **Life Sci** 1989;45(26):2587-90
[Effects of the addition of adrenaline and clonidine on the kinetics of bupivacaine in the spinal canal] Boico O, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R210 **(Fre)**
[Continuous block of the femoral nerve after surgery of the knee: pharmacokinetics of bupivacaine] Estève M, et al. **Ann Fr Anesth Reanim** 1990;9(4):322-5 (Eng. Abstr.) **(Fre)**
[Does adrenaline diminish vascular resorption of bupivacaine administered in cervical plexus block?] Guirimand F, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R151 **(Fre)**

PHARMACOLOGY

Effects of thoracic epidural anaesthesia on central haemodynamics compared to cardiac beta adrenoceptor blockade in conscious rats with acute myocardial infarction. Blomberg S, et al. **Acta Anaesthesiol Scand** 1990 Jan;34(1):1-7
The effect of 0.5% ropivacaine on epidural blood flow. Dahl JB, et al. **Acta Anaesthesiol Scand** 1990 May;34(4):308-10
Changes of blood pressure and cerebral arterio-venous oxygen content differences (AVDO2) with and without bupivacaine scalp infiltration during craniotomy. Engberg M, et al. **Acta Anaesthesiol Scand** 1990 Jul;34(5):346-9
Effects of intravenous administration of local anesthetics on the renal sympathetic nerve activity during nitrous oxide and nitrous oxide-halothane anesthesia in the cat. Nishikawa K, et al. **Acta Anaesthesiol Scand** 1990 Apr; 34(3):231-6
Motor blockade and EMG recordings in epidural anaesthesia. A comparison between mepivacaine 2%, bupivacaine 0.5% and etidocaine 1.5%. Nydahl PA, et al. **Acta Anaesthesiol Scand** 1989 Oct;33(7):597-604
The effects of bupivacaine and pipecoloxylidide on platelet function in vitro. Odoom JA, et al. **Acta Anaesthesiol Scand** 1989 Jul;33(5):385-8
Hemodynamic effects of interpleural analgesia in pigs. Strømskag KE, et al. **Acta Anaesthesiol Scand** 1990 Jul; 34(5):342-5
Influence of bupivacaine and morphine on human umbilical arteries and veins in vitro. Noren H, et al. **Acta Obstet Gynecol Scand** 1990;69(1):87-91
Effect of uterine contractility and maternal hypotension on prolonged decelerations after bupivacaine epidural anesthesia. Steiger RM, et al. **Am J Obstet Gynecol** 1990

Sep;163(3):808–12
In vitro study on mechanisms of bupivacaine-induced depression of myocardial contractility. Eledjam JJ, et al. **Anesth Analg** 1989 Dec;69(6):732–5
Mechanism of action of local anesthetics on synaptic transmission in the rat. Tabatabai M, et al. **Anesth Analg** 1990 Aug;71(2):149–57
Cardiac electrophysiologic properties of bupivacaine and lidocaine compared with those of ropivacaine, a new amide local anesthetic. Moller R, et al. **Anesthesiology** 1990 Feb; 72(2):322–9
Delayed healing of muscle after injection of bupivicaine and steroid. Guttu RL, et al. **Ann Dent** 1990 Summer;49(1):5–8
Effects of bupivacaine on the membrane properties of nerve cell soma. Tabatabai M, et al. **Arch Int Physiol Biochim** 1989 Oct;97(5):409–15
Kinetic analysis of phasic inhibition of neuronal sodium currents by lidocaine and bupivacaine. Chernoff DM. **Biophys J** 1990 Jul;58(1):53–68
Effects of segmental thoracic extradural analgesia on sympathetic block in conscious dogs. Peters J, et al. **Br J Anaesth** 1989 Oct;63(4):470–6
The analgesic interaction between intrathecal morphine, lidocaine and bupivacaine in the rat. Penning JP, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S48
Intrathecal morphine and bupivacaine in the rat; analgesic synergy without augmentation of motor dysfunction or hypotension. Penning JP, et al. **Can J Anaesth** 1990 May; 37(4 Pt 2):S49
Epidural epinephrine and the systemic circulation during peripheral vascular surgery. Salevsky FC, et al. **Can J Anaesth** 1990 Mar;37(2):160–5
Changes in motor nerve terminals during bupivacaine-induced postsynaptic deprivation. Tomas i Ferré J, et al. **J Anat** 1989 Feb;162:225–34
Effects of the local anesthetic bupivacaine on oxidative phosphorylation in mitochondria. Change from decoupling to uncoupling by formation of a leakage type ion pathway specific for H+ in cooperation with hydrophobic anions. Terada H, et al. **J Biol Chem** 1990 May 15;265(14):7837–42
Caudal analgesia for pediatric day case surgery: assessment of motor function prior to discharge. Burns AM, et al. **J Clin Anesth** 1990 Jan–Feb;2(1):27–30
.5 per cent plain bupivacaine for spinal anaesthesia effects of posture. Vichitvejpaisal P, et al. **J Med Assoc Thai** 1989 Dec;72(12):687–91
[Effects of bupivacaine and lidocaine on mitochondrial respiration and ATP synthesis] Ben Driss P, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R190 **(Fre)**
[Alkalization of bupivacaine in the combination fentanyl–bupivacaine in epidural obstetrical analgesia] Jacquinot P, et al. **Ann Fr Anesth Reanim** 1990;9(1):16–9 (Eng. Abstr.) **(Fre)**
[Effect of hypothermia on intraventricular conduction problems caused by bupivacaine] Timour Q, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R192 **(Fre)**
[Local analgesia in the mother: effects on the erythrocytes of the newborn infant] Tozzi E, et al. **Ric Clin Lab** 1989; 19 Suppl 1:147–51 **(Ita)**
[Effects of intravenous administration of bupivacaine on the renal sympathetic nerve activity in the cat] Fukuda T. **Masui** 1989 Dec;38(12):1554–60 (Eng. Abstr.) **(Jpn)**

POISONING

Effect of epinephrine on central nervous system and cardiovascular system toxicity of bupivacaine in pigs. Bernards CM, et al. **Anesthesiology** 1989 Nov;71(5):711–7

THERAPEUTIC USE

Treatment of pancreatic pain with interpleural bupivacaine: an open trial. Ahlburg P, et al. **Acta Anaesthesiol Scand** 1990 Feb;34(2):156–7
Reduced expression of mannose-specific receptors on murine peripheral blood polymorphonuclear leukocytes following prolonged anaesthesia with different inhalation agents. Bardosi L, et al. **Acta Anaesthesiol Scand** 1990 May; 34(4):286–90
Distribution of local anesthetics injected into the interpleural space, studied by computerized tomography. Strømskag KE, et al. **Acta Anaesthesiol Scand** 1990 May;34(4):323–6
Cost of postoperative analgesia [letter; comment] Raines M. **Anaesth Intensive Care** 1990 May;18(2):271–2 Comment on: Anaesth Intensive Care 1989 Nov;17(4):440–3.
Bupivacaine squirting [letter] Suresh D. **Ann R Coll Surg Engl** 1989 Nov;71(6):409
Bupivacaine use after knee arthroscopy: pharmacokinetics and pain control study. Kaeding CC, et al. **Arthroscopy** 1990;6(1):33–9
Painless split skin donor sites: a controlled double-blind trial of Opsite, scarlet red and bupivacaine. Morris WT, et al. **Aust N Z J Surg** 1990 Aug;60(8):617–20
Postoperative analgesia after paediatric orchidopexy: evaluation of a bupivacaine-morphine mixture. Wolf AR, et al. **Br J Anaesth** 1990 Apr;64(4):430–5
Does bupivacaine irrigation of third molar sockets reduce postoperative pain? A double blind controlled trial. Tuffin JR, et al. **Br J Oral Maxillofac Surg** 1990 Apr;28(2):96–8
Epidural analgesia in thoracic trauma: effects of lumbar morphine and thoracic bupivacaine on pulmonary function. Cicala RS, et al. **Crit Care Med** 1990 Feb;18(2):229–31
Analgesic benefit of locally injected bupivacaine after hemorrhoidectomy. Chester JF, et al. **Dis Colon Rectum** 1990 Jun;33(6):487–9
Carpal tunnel decompression under local anaesthesia [letter; comment] Gibson M. **J Hand Surg [Br]** 1989 Aug;14(3):359 Comment on: J Hand Surg [Br] 1988 Nov;13(4):395–6.
Interpleural analgesia for herpetic neuralgia. Chen JY, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Dec;27(4):377–80
[Incidence of tourniquet pain from spinal anesthesia with a combination of bupivacaine and clonidine] Bonnet F, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R208 **(Fre)**
[Intrapleural analgesia with bupivacaine after thoracotomy is ineffective. Controlled study and pharmacokinetics] Elman A, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R181 **(Fre)**
[New therapeutic prospects in acute acoustic trauma] Blotta P, et al. **Acta Otorhinolaryngol Ital** 1989 Jul–Aug; 9(4):349–55 (Eng. Abstr.) **(Ita)**
[Acute ischemia of lower limb and long-term treatment with epidural bupivacaine] Miralles FS, et al. **Rev Esp Anestesiol Reanim** 1990 May–Jun;37(3):160–3 (Eng. Abstr.) **(Spa)**

TOXICITY

Comparative systemic toxicity of convulsant and supraconvulsant doses of intravenous ropivacaine, bupivacaine, and lidocaine in the conscious dog. Feldman HS, et al. **Anesth Analg** 1989 Dec;69(6):794–801
Epinephrine and phenylephrine increase cardiorespiratory toxicity of intravenously administered bupivacaine in rats. Kambam JR, et al. **Anesth Analg** 1990 May;70(5):543–5
Bupivacaine toxicity in young pigs is age-dependent and is affected by volatile anesthetics. Badgwell JM, et al. **Anesthesiology** 1990 Aug;73(2):297–303
The effect of magnesium sulfate administration on cerebral and cardiac toxicity of bupivacaine in dogs. Solomon D, et al. **Anesthesiology** 1990 Feb;72(2):341–6
Enhancement by hyponatremia and hyperkalemia of ventricular conduction and rhythm disorders caused by bupivacaine. Timour Q, et al. **Anesthesiology** 1990 Jun; 72(6):1051–6
Treatment with isoproterenol of bupivacaine toxicity. Lacombe P, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S1
Bupivacaine acute toxicity protection by diazepam in mice. Bruguerolle B, et al. **Clin Exp Pharmacol Physiol** 1988 Jul; 15(7):563–4
[Resuscitation in a toxic cardiac accident involving bupivacaine. Experimental study] de La Coussaye JE, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R195 **(Fre)**
[Do beta adrenergic receptor blockaders increase bupivacaine cardiotoxicity?] de La Coussaye JE, et al. **Ann Fr Anesth Reanim** 1990;9(2):132–6 (Eng. Abstr.) **(Fre)**
[Effects of hypo- and hypernatremia on depression of ventricular conduction and arrhythmia induced by bupivacaine] Freysz M, et al. **Ann Fr Anesth Reanim** 1989; 8 Suppl:R193 **(Fre)**

BUPRANOLOL see under **PROPANOLAMINES**

BUPRENORPHINE

Postoperative analgesia in children who have genito-urinary surgery. A comparison between caudal buprenorphine and bupivacaine. Girotra S, et al. **Anaesthesia** 1990 May; 45(5):406–8
Buprenorphine as a premedicant in phaeochromocytoma [letter] Girotra S, et al. **Anaesthesia** 1989 Dec; 44(12):1009–10
Emergence of buprenorphine dependence [letter] Gray RF, et al. **Br J Addict** 1989 Nov;84(11):1373–4
Buprenorphine and temazepam—abuse. Hammersley R, et al. **Br J Addict** 1990 Feb;85(2):301–3
Haematogenous Serratia marcescens endophthalmitis in an HIV-infected intravenous drug addict. Alvarez R, et al. **Infection** 1990 Jan–Feb;18(1):29–30
The safety of buprenorphine (Temgesic) [letter; comment] Varey NC. **N Z Med J** 1990 Jan 24;103(882):24 Comment on: N Z Med J 1989 Nov 8;102(879):595.
[Postoperative peridural analgesia via catheter following abdominal surgery. Peridural bupivacaine versus buprenorphine] Seeling W, et al. **Reg Anaesth** 1990 May; 13(3):78–87 (Eng. Abstr.) **(Ger)**
[Buprenorphine in balanced anesthesia] Di Noto M, et al. **Minerva Anestesiol** 1989 Oct;55(10):409–11 (Eng. Abstr.) **(Ita)**
[Comparison of the use of classic diazoanalgesia in surgery and an applicative variant with buprenorphine] Manni MP, et al. **Minerva Anestesiol** 1989 Oct;55(10):397–402 (Eng. Abstr.) **(Ita)**
[Is epidural buprenorphine with nitrous oxide-oxygen-enflurane anesthesia indicated for surgery of short-duration?] Satoh K, et al. **Masui** 1990 May; 39(5):554–8 (Eng. Abstr.) **(Jpn)**
[Prevalence of buprenorphine use by heroin addicts undergoing treatment] San L, et al. **Med Clin (Barc)** 1989 Nov 25;93(17):645–8 (Eng. Abstr.) **(Spa)**
[Data on buprenorphine consumption in drug addicted individuals (letter)] Segui J, et al. **Rev Clin Esp** 1989 Oct; 185(5):271–2 **(Spa)**

ADMINISTRATION & DOSAGE

Subarachnoid buprenorphine administered by implantable micropumps. Francaviglia N, et al. **Acta Neurochir (Wien)** 1990;102(1–2):62–8
Epidural buprenorphine [letter; comment] Fox AW. **Can J Anaesth** 1990 Mar;37(2):273–4 Comment on: Can J Anaesth 1989 Jul;36(4):388–91.
Use of buprenorphine in the treatment of opioid addiction. II. Physiologic and behavioral effects of daily and alternate-day administration and abrupt withdrawal. Fudala PJ, et al. **Clin Pharmacol Ther** 1990 Apr; 47(4):525–34
Buprenorphine sedation of intensive care patients and ileus reversal. Gawrisch E, et al. **Crit Care Med** 1990 Sep; 18(9):1034–6
Buprenorphine treatment of cocaine abuse. Kosten TR, et al. **NIDA Res Monogr** 1989;95:461
[Postoperative analgesia after cesarean section: sublingual buprenorphine versus subcutaneous morphine] Abid A, et al. **Ann Fr Anesth Reanim** 1990;9(3):275–9 (Eng. Abstr.) **(Fre)**
[Epidural buprenorphine with nitrous oxide-oxygen-enflurane anesthesia] Satoh K, et al. **Masui** 1990 Jan;39(1):8–12 (Eng. Abstr.) **(Jpn)**
[Epidural morphine and buprenorphine for postoperative pain relief after hepatectomy] Takata T, et al. **Masui** 1990 Jan; 39(1):13–8 (Eng. Abstr.) **(Jpn)**
[Comparison of intravenous buprenorphine or fentanyl and epidural buprenorphine for pain relief after upper abdominal surgery] Yasuda S, et al. **Masui** 1990 Apr; 39(4):487–90 (Eng. Abstr.) **(Jpn)**
[Influence of intrathecal morphine and buprenorphine on EEG and their analgesic effect] Yonemura E, et al. **Masui** 1990 Apr;39(4):478–86 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Opioid antagonist challenges in buprenorphine maintained patients. Kosten TR, et al. **Drug Alcohol Depend** 1990 Feb; 25(1):73–8

ANALOGS & DERIVATIVES

No-carrier-added (NCA) N-(3-[18F]fluoropropyl)-N-norbuprenorphine and N-(3-[18F]fluoropropyl)-N-nordiprenorphine—synthesis, anatomical distribution in mice and rats, and tomographic studies in a baboon. Bai LQ, et al. **Int J Rad Appl Instrum [B]** 1990;17(2):217–27

ANALYSIS

Analysis of buprenorphine in plasma and urine by gas chromatography. Martínez D, et al. **J Chromatogr** 1990 Jun 29;528(2):459–63

PHARMACOKINETICS

Pharmacokinetics of morphine and its surrogates. X: Analyses and pharmacokinetics of buprenorphine in dogs. Garrett ER, et al. **Biopharm Drug Dispos** 1990 May–Jun; 11(4):311–50
Buprenorphine disposition in patients with renal impairment: single and continuous dosing, with special reference to metabolites. Hand CW, et al. **Br J Anaesth** 1990 Mar; 64(3):276–82
The systemic availability of buprenorphine administered by nasal spray. Eriksen J, et al. **J Pharm Pharmacol** 1989 Nov; 41(11):803–5
[Delayed-action opioids—limitations and advantages] Bonde J, et al. **Ugeskr Laeger** 1990 Apr 2;152(14):1022–4 (30 ref.) **(Dan)**

PHARMACOLOGY

No cutaneous histamine release with buprenorphine? Girotra S, et al. **Acta Anaesthesiol Scand** 1990 May;34(4):301–3
Comparative effects of the opioids fentanyl and buprenorphine on ventricular vulnerability during acute coronary artery occlusion. Saini V, et al. **Cardiovasc Res** 1989 Dec;23(12):1001–6
Buprenorphine and naltrexone effects on cocaine self-administration by rhesus monkeys. Mello NK, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):926–39
Buprenorphine suppresses cocaine self-administration in rhesus monkeys. Mello NK, et al. **NIDA Res Monogr** 1989; 95:333–4
Kappa antagonist effects of buprenorphine in the rat drug-discrimination procedure. Negus SS, et al. **NIDA Res Monogr** 1989;95:518–9
Combination of naloxone with buprenorphine in humans. Weinhold LL, et al. **NIDA Res Monogr** 1989;95:485
[Effects of narcotic analgesics on somatosympathetic reflex discharges in anesthetized cats: buprenorphine and naloxone] Kato J, et al. **Masui** 1990 May;39(5):605–12 (Eng. Abstr.) **(Jpn)**
[Influence of four opioids on pulmonary oxygenation and naloxone's effects in mechanically ventilated dogs] Takahashi H, et al. **Masui** 1989 Jul;38(7):880–7 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Sublingual buprenorphine as postoperative analgesic: a double-blind comparison with pethidine. Moa G, et al.

Acta Anaesthesiol Scand 1990 Jan;34(1):68–71
Treatment of cocaine abuse with buprenorphine. Kosten TR, et al. **Biol Psychiatry** 1989 Oct;26(6):637–9
Depressive symptoms during buprenorphine treatment of opioid abusers. Kosten TR, et al. **J Subst Abuse Treat** 1990; 7(1):51–4
From the Alcohol, Drug Abuse, and Mental Health Administration. Goodwin FK. **JAMA** 1990 May 23–30; 263(20):2725
Outpatient maintenance/detoxification comparison of methadone and buprenorphine. Johnson RE, et al. **NIDA Res Monogr** 1989;95:384
[Buprenorphine (Temgesic) can be used in hepatic porphyria (letter)] Deybach JC, et al. **Ann Fr Anesth Reanim** 1989; 8(5):525 **(Fre)**
[Buprenorphine in the analgesic treatment of patients subjected to bladder mapping] Altomare M, et al. **Minerva Urol Nefrol** 1989 Jul–Sep;41(3):199–200 (Eng. Abstr.) **(Ita)**

BURIAL see under **MORTUARY PRACTICE**

BURIMAMIDE see under **THIOUREA**

BURKITT HERPESVIRUS see **EPSTEIN–BARR VIRUS**

BURKITT'S LEUKEMIA see **LEUKEMIA, B-CELL, ACUTE**

BURKITT'S LYMPHOMA

Burkitt's lymphoma in a patient previously treated for Hodgkin's disease. Robinson AC, et al. **Br J Radiol** 1989 Dec;62(744):1089–90 (13 ref.)
Burkitt's lymphoma of the testis: an unusual scrotal mass in childhood. Leonard MP, et al. **J Urol** 1990 Jan;143(1):104–6
American Burkitt's lymphoma: a 10-year review and case study. Patton LL, et al. **Oral Surg Oral Med Oral Pathol** 1990 Mar;69(3):307–16 (25 ref.)

COMPLICATIONS

Cardiac tamponade as a result of American Burkitt's lymphoma of the heart and pericardium. Helfand J. **Conn Med** 1990 Apr;54(4):186–9
Nervous system involvement in Burkitt's lymphoma. Mehndirattra MM, et al. **J Assoc Physicians India** 1990 Jun;38(6):430–2
Epstein–Barr virus polymorphic B-cell lymphoma associated with leukemia and with congenital immunodeficiencies [see comments] Joncas JH, et al. **J Clin Oncol** 1990 Mar; 8(3):378–84 Comment in: J Clin Oncol 1990 Mar;8(3):371–3.
Possible role of Epstein–Barr virus infection in cutaneous T-cell lymphomas. Lee PY, et al. **J Invest Dermatol** 1990 Sep;95(3):309–12
Burkitt's lymphoma in a patient with systemic lupus erythematosus. Posner MA, et al. **J Rheumatol** 1990 Mar; 17(3):380–2
Chronic renal failure due to kidney infiltration by Burkitt type lymphoma. Gianviti A, et al. **Pediatr Nephrol** 1989 Oct;3(4):448–50
[Burkitt's lymphoma in HIV-infected patients (letter)] Kath R, et al. **Dtsch Med Wochenschr** 1990 Aug 24; 115(34):1293–4 **(Ger)**
[Cluster headache, Epstein–Barr and Burkitt's lymphoma virus infections] Giacovazzo M, et al. **Riv Eur Sci Med Farmacol** 1989 Jun;11(3):207–10 (Eng. Abstr.) **(Ita)**
[Burkitt's lymphoma of the stomach associated with macroglobulinemia] Masuya M, et al. **Rinsho Ketsueki** 1989 Jul;30(7):1016–20 (Eng. Abstr.) **(Jpn)**
[A case of Burkitt's lymphoma with numb chin syndrome as the initial manifestation] Iwatsuji K, et al. **Rinsho Shinkeigaku** 1989 Jun;29(6):764–8 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Diagnosis of Burkitt's lymphoma. Van den Bosch CA. **Trop Doct** 1990 Jan;20(1):11–4
[Non-Hodgkin's lymphoma of the descending colon in a 6-year-old girl] Sigmund G, et al. **Monatsschr Kinderheilkd** 1989 Dec;137(12):787–90 (Eng. Abstr.) **(Ger)**
[Burkitt's lymphoma. A case report] Cortelazzi R, et al. **Minerva Stomatol** 1989 Dec;38(12):1257–62 (Eng. Abstr.) **(Ita)**
[Epstein–Barr virus infections—clinical characteristics and diagnosis] Ernberg I, et al. **Lakartidningen** 1989 Oct 25; 86(43):3656–61 **(Swe)**

DRUG THERAPY

Changes in plasma methionine and total homocysteine levels in patients receiving methotrexate infusions. Broxson EH Jr, et al. **Cancer Res** 1989 Nov 1;49(21):5879–83
Daunomycin and doxorubicin Lym-1–drug conjugates for the treatment of malignant lymphomas. Chen FM, et al. **Cancer Treat Res** 1989;42:97–104
Variability in the disposition of intraventricular methotrexate: a proposal for rational dosing. Strother DR, et al. **J Clin Oncol** 1989 Nov;7(11):1741–7
Treatment outcome in children with malignancies associated with human immunodeficiency virus infection [see comments] Montalvo FW, et al. **J Pediatr** 1990 May; 116(5):735–8 Comment in: J Pediatr 1990 May;116(5):730–1.
Tumour lysis syndrome and the anaesthesiologist: intensive care aspects of paediatric oncology. Stokes DN. **Semin Surg Oncol** 1990;6(3):156–61
[Chemotherapy of nonendemic Burkitt's lymphoma] Kath R, et al. **Dtsch Med Wochenschr** 1990 Aug 17;115(33):1219–26 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

Rapid purification and structural study of DNA topoisomerase I from human Burkitt lymphoma Raji cells. Suzuki M, et al. **J Biochem (Tokyo)** 1989 Nov;106(5):742–4

EPIDEMIOLOGY

Burkitts lymphoma of the ovary in Nigerian adults—a 27-year review. Konje JC, et al. **Afr J Med Med Sci** 1989 Dec;18(4):301–5 (17 ref.)
Malignant disease in childhood in the tropics [editorial] Hutt M. **Trop Doct** 1990 Jan;20(1):1–2
[Incidence of cancer in children throughout the world] Parkin M, et al. **Pediatrie** 1989;44(9):725–36 (Eng. Abstr.) **(Fre)**

ETIOLOGY

Malaria, Epstein–Barr virus, and the genesis of lymphomas. Facer CA, et al. **Adv Cancer Res** 1989;53:33–72 (135 ref.)
The pathogenesis of Burkitt's lymphoma. Magrath I. **Adv Cancer Res** 1990;55:133–270 (587 ref.)
Unusual periodontal findings in an AIDS patient with Burkitt's lymphoma. A case report. Hernández Vallejo G, et al. **J Periodontol** 1989 Dec;60(12):723–7
In vitro analysis of Epstein–Barr virus: host balance in patients with acute Plasmodium falciparum malaria. I. Defective T-cell control. Gunapala DE, et al. **Parasitol Res** 1990;76(6):531–5
[Burkitt's lymphoma in HIV infection] Gross M, et al. **Dtsch Med Wochenschr** 1990 Feb 23;115(8):295–9 (17 ref.) (Eng. Abstr.) **(Ger)**
[Burkitt-type lymphoma associated with acquired immunodeficiency syndrome] Miguel Sosa A, et al. **Sangre (Barc)** 1989 Oct;34(5):375–6 **(Spa)**

GENETICS

Epstein–Barr virus does not induce DNA rearrangement at immunoglobulin gene and oncogene loci in BJAB cellular subclones. Wang YF, et al. **Acta Paediatr Sin** 1988 Jul–Aug; 29(4):248–53
Philip Levine award lecture. Chromosome translocations and oncogenes in human lymphoid tumors. Nowell PC, et al. **Am J Clin Pathol** 1990 Aug;94(2):229–37 (62 ref.)
Tumor detection through the use of immunoglobulin gene rearrangements combined with tissue in situ hybridization. Seibel NL, et al. **Blood** 1989 Oct;74(5):1791–5
Localization of breakpoints by polymerase chain reactions in Burkitt's lymphoma with 8;14 translocations. Shiramizu B, et al. **Blood** 1990 May 1;75(9):1848–52
Variant t(2;18) translocation in a Burkitt conversion of follicular lymphoma. Aventin A, et al. **Br J Haematol** 1990 Mar;74(3):367–9
Immunoglobulin and Myc gene structure in lymphnode biopsies from HIV-positive patients with LAS and lymphoma. Saglio G, et al. **Cancer Detect Prev** 1990; 14(3):359–62
American Burkitt lymphoma stage II with 47,XY,+20,t(8;14)(q24;q32). Xiao H, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):275–7
Expression of normal and translocated c-myc alleles in Burkitt's lymphoma cells: evidence for different regulation. Eick D, et al. **EMBO J** 1989 Jul;8(7):1965–72
The block to transcription elongation is promoter dependent in normal and Burkitt's lymphoma c-myc alleles. Spencer CA, et al. **Genes Dev** 1990 Jan;4(1):75–88
Establishment of a hybrid cell system between malignant Burkitt's lymphoma cells and nonmalignant lymphoblastoid cells. Wolf J, et al. **Hamatol Bluttransfus** 1989;32:220–2
Recurrent mutation of immunoglobulin and c-myc genes and differential expression of cell surface antigens occur in variant cell lines derived from a Burkitt lymphoma. Guy K, et al. **Int J Cancer** 1990 Jan 15;45(1):109–18
Detection of somatic mutations in tumours of diverse types by DNA fingerprinting with M13 phage DNA. Hayward N, et al. **Int J Cancer** 1990 Apr 15;45(4):687–90
Deregulated c-myc expression in Epstein–Barr-virus-immortalized B-cells induces altered growth properties and surface phenotype but not tumorigenicity. Hotchin NA, et al. **Int J Cancer** 1990 Mar 15;45(3):566–71
Chromosome abnormalities in a patient with acquired immunodeficiency syndrome (AIDS) and Burkitt lymphoma-leukemia. Beverstock GC, et al. **Leukemia** 1990 Jun;4(6):445–7
Expression of c-fgr in EBV positive and negative B cell tumors. Tesch H, et al. **Leukemia** 1989 Dec;3(12):897–8
Effects of translocations on transcription from PVT. Shtivelman E, et al. **Mol Cell Biol** 1990 Apr;10(4):1835–9
The block of elongation in c-myc exon 1 is abolished in Burkitt's lymphoma cell lines with variant translocation. Eick D, et al. **Oncogene** 1988 Oct;3(4):397–403
Molecular resemblance of an AIDS-associated lymphoma and endemic Burkitt lymphomas: implications for their pathogenesis. Haluska FG, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8907–11
[Oncogenes and malignant hemopathies] Pogliani EM, et al. **Recenti Prog Med** 1989 Oct;80(10):526–30 (20 ref.) (Eng. Abstr.) **(Ita)**
[Clinical, cytogenetic and immunological studies of 2 cases with B-cell acute lymphocytic leukemia. Comparison between B-ALL and Burkitt's lymphoma reported in Japan] Tokioka T, et al. **Rinsho Ketsueki** 1990 Jan; 31(1):121–6 (Eng. Abstr.) **(Jpn)**
[Molecular analysis in Argentinian patients with Burkitt's lymphoma] Gutiérrez MI, et al. **Sangre (Barc)** 1990 Feb; 35(1):10–4 (Eng. Abstr.) **(Spa)**

HISTORY

A missionary, heart and soul. Bendiner E. **Hosp Pract [Off]** 1990 Jul 15;25(7):166–72, 175–6, 179–80 passim

IMMUNOLOGY

Low expression of lymphocyte function-associated antigen (LFA)-1 and LFA-3 adhesion molecules is a common trait in Burkitt's lymphoma associated with and not associated with Epstein–Barr virus. Billaud M, et al. **Blood** 1990 May 1;75(9):1827–33
Expression of low-, intermediate-, and high-affinity IL-2 receptors on B cell lines derived from patients with undifferentiated lymphoma of Burkitt's and non-Burkitt's types. Benjamin D, et al. **Cell Immunol** 1990 Aug; 129(1):112–24
Internalization and shedding of Lym-1 monoclonal antibody following interaction with surface antigens of a cultured human B cell lymphoma. Wang BS, et al. **Cell Immunol** 1989 Oct 15;123(2):283–93
Severe chronic EBV infection associated with specific EBV immunodeficiency and an EBNA+ T-cell lymphoma containing linear, EBV DNA. Bonagura VR, et al. **Clin Immunol Immunopathol** 1990 Oct;57(1):32–44
Burkitt lymphoma and genetic markers of immunoglobulin. Grubb R, et al. **Exp Clin Immmunogenet** 1986;3(3):125–8
Modification of HLA expression as a possible factor in the pathogenesis of Burkitt's lymphoma. Voltz R, et al. **Hamatol Bluttransfus** 1989;32:289–92
Lymphokine-activated killer (LAK) cells discriminate between Epstein–Barr virus (EBV)-positive Burkitt's lymphoma cells. Misko IS, et al. **Int J Cancer** 1990 Sep 15;46(3):399–404
Immunological aspects of B-cell derived tumors in humans and rodents. Klein G. **Int Symp Princess Takamatsu Cancer Res Fund** 1988; 19:3–13 (49 ref.)
Enhancement of the antibody-dependent tumoricidal activity of human monocytes by human monocytic colony-stimulating factor. Suzu S, et al. **Jpn J Cancer Res** 1990 Jan;81(1):79–84

METABOLISM

Density-dependent regulation of amino acid transport in a Burkitt lymphoma cell line. Piedimonte G, et al. **Cancer Lett** 1989 Sep 15;47(1–2):121–5
Lectin-binding properties of Burkitt's lymphoma cell lines: application to bone marrow purging. Mumcuoglu M, et al. **Exp Hematol** 1990 Jan;18(1):55–60
Identification of functional platelet-activating factor receptors in Raji lymphoblasts. Travers JB, et al. **J Immunol** 1989 Dec 1;143(11):3708–13
A comparative autoradiographic study demonstrating differential intratumor localization of monoclonal antibodies to cell surface (Lym-1) and intracellular (TNT-1) antigens [see comments] Chen FM, et al. **J Nucl Med** 1990 Jun;31(6):1059–66 Comment in: J Nucl Med 1990 Jun;31(6):1066–8.
[Cellular pharmacokinetics of melphalan alone or in combination on human lymphoma or lymphoblasts] Sapet C, et al. **Bull Cancer (Paris)** 1989;76(8):875–7 **(Fre)**

MICROBIOLOGY

Different Epstein–Barr virus-B cell interactions in phenotypically distinct clones of a Burkitt's lymphoma cell line. Gregory CD, et al. **J Gen Virol** 1990 Jul;71 (Pt 7):1481–95
Activation of latent EBV via anti-IgG-triggered, second messenger pathways in the Burkitt's lymphoma cell line Akata. Daibata M, et al. **J Immunol** 1990 Jun 15; 144(12):4788–93
Burkitt's lymphoma and the role of Epstein–Barr virus. Goldstein JA, et al. **J Trop Pediatr** 1990 Jun;36(3):114–20 (35 ref.)
Persistence of parvovirus H-1 DNA in human B- and T-lymphoma cells. Faisst S, et al. **Virus Res** 1990 Jun; 16(2):211–23

PATHOLOGY

Carcinocythemia. Report of two cases, one simulating a Burkitt lymphoma. Lugassy G, et al. **Acta Cytol** 1990 Mar–Apr;34(2):265–8
Posttransplant mediastinal Burkitt-like lymphoma. Diagnosis by cytologic and flow cytometric analysis of pleural fluid.

Wolford JF, et al. **Acta Cytol** 1990 Mar-Apr;34(2):261-4
Immunomagnetic removal of B-lymphoma cells using a novel mono-sized magnetizable polymer bead, M-280, in conjunction with primary IgM and IgG antibodies. Kvalheim G, et al. **Bone Marrow Transplant** 1989 Sep; 4(5):567-74
Decreased accessibility of globotriaosylceramide associated with decreased tumorigenicity in Burkitt's lymphoma variants induced by immunoselection. Junqua S, et al. **Cancer Res** 1989 Dec 1;49(23):6480-6
Suppression of the malignant phenotype in somatic cell hybrids between Burkitt's lymphoma cells and Epstein-Barr virus-immortalized lymphoblastoid cells despite deregulated c-myc expression. Wolf J, et al. **Cancer Res** 1990 May 15;50(10):3095-100
Disseminated or localized growth of a human B-cell tumor (Daudi) in SCID mice. Ghetie MA, et al. **Int J Cancer** 1990 Mar 15;45(3):481-5
Plasma inter-alpha-trypsin inhibitor-related urinary glycoprotein EDC1 inhibits the growth of a Burkitt's lymphoma cell line. Chawla RK, et al. **J Cell Biochem** 1990 Apr;42(4):207-17
Head, neck, and maxillofacial childhood Burkitt's lymphoma: a retrospective analysis of 31 patients. Anavi Y, et al. **J Oral Maxillofac Surg** 1990 Jul;48(7):708-13
Tumour-specific inhibition of lymphoma growth by an antisense oligodeoxynucleotide. McManaway ME, et al. **Lancet** 1990 Apr 7;335(8693):808-11
[Significance and modulation of production of tumor growth inhibitor derived from human embryonic myofibroblasts] Wu KF. **Chung Hua Chung Liu Tsa Chih** 1989 Nov; 11(6):419-21 (Eng. Abstr.) **(Chi)**
[Anatomo-pathologic findings in 2 cases of Burkitt's lymphoma of the jaw] Milano B, et al. **Minerva Stomatol** 1989 Sep;38(9):941-7 (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

Studies of HIV infection and the development of Epstein-Barr virus-related B cell lymphomas following transfer of human lymphocytes to mice with severe combined immunodeficiency. Mosier DE, et al. **Curr Top Microbiol Immunol** 1989;152:195-9

PSYCHOLOGY

Reducing distress during invasive medical procedures: relating behavioral interventions to preferred coping style in pediatric cancer patients. Smith KE, et al. **J Pediatr Psychol** 1989 Sep;14(3):405-19

RADIOGRAPHY

Intravenous urographic findings in Burkitt's lymphoma. Nzeh DA. **Trop Geogr Med** 1989 Jul;41(3):261-5
[An abdominal mass in a 13-year-old male] Carreira Gómez C, et al. **Rev Clin Esp** 1990 Feb;186(3):141-2 **(Spa)**

SURGERY

Allogeneic bone marrow transplantation in adults with Burkitt's lymphoma or acute lymphoblastic leukemia in first complete remission. Troussard X, et al. **J Clin Oncol** 1990 May;8(5):809-12
[Rare malignant tumors of the ovaries in adolescents—clinical aspects in deciding therapeutic aggressiveness] Schröder W, et al. **Zentralbl Gynakol** 1990;112(10):633-40 (Eng. Abstr.) **(Ger)**

THERAPY

Molecular targets for cancer therapy [editorial] **Lancet** 1990 Apr 7;335(8693):826
[Burkitt's lymphoma and pregnancy (letter)] Morey M, et al. **Med Clin (Barc)** 1990 Feb 17;94(6):237-8 **(Spa)**

BURKITT'S LYMPHOMA VIRUS see **EPSTEIN-BARR VIRUS**

BURKITT'S TUMOR see **BURKITT'S LYMPHOMA**

BURN UNITS see under **INTENSIVE CARE UNITS**

BURNING MOUTH SYNDROME see under **MOUTH DISEASES**

BURNISHING, DENTAL see **DENTAL POLISHING**

BURNOUT, PROFESSIONAL

Fieldwork students under stress. Yuen HK. **Am J Occup Ther** 1990 Jan;44(1):80-1 (21 ref.)
Burnout among pharmacists. Lahoz MR, et al. **Am Pharm** 1990 Aug;30(8):28-32
Burnout. Symptoms, causes, prevention. Moss VA. **AORN J** 1989 Nov;50(5):1071-2, 1074-6 (13 ref.)
[Do our gynecologists suffer from the "burn out" syndrome?] Uzel R. **Cesk Gynekol** 1990 Jun;55(5):391-4 **(Cze)**

COMPLICATIONS

Family history of hypertension--an individual trait interacting with spontaneously occurring job stressors. Theorell T. **Scand J Work Environ Health** 1990;16 Suppl 1:74-9

EPIDEMIOLOGY

Burnout and its causes in Finnish dentists. Murtomaa H, et al. **Community Dent Oral Epidemiol** 1990 Aug;18(4):208-12
A comparison of frequency and sources of nursing job stress perceived by intensive care, hospice and medical-surgical nurses. Foxall MJ, et al. **J Adv Nurs** 1990 May;15(5):577-84
[Female physicians feel inferior to their male colleagues] Strandberg M, et al. **Lakartidningen** 1989 Dec 13; 86(50):4402-5 **(Swe)**

ETIOLOGY

Gender, work control, and stress: a theoretical discussion and an empirical test. Hall EM. **Int J Health Serv** 1989; 19(4):725-45
Role overload, social support, and burnout among nursing educators. Fong CM. **J Nurs Educ** 1990 Mar;29(3):102-8

PREVENTION & CONTROL

Strategies for burnout prevention in the mental health setting. Macinick CG, et al. **Int Nurs Rev** 1990 Mar-Apr; 37(2):247-9, 246
Screening: the case against [letter; comment] Manning CL. **J R Coll Gen Pract** 1989 Sep;39(326):389-90 Comment on: J R Coll Gen Pract 1989 May;39(322):193-5.

PSYCHOLOGY

Are you stressed out? Breakwell GM. **Am J Nurs** 1990 Aug; 90(8):31-3
Psychological and biographical differences between secondary school teachers experiencing high and low levels of burnout. Pierce CM, et al. **Br J Educ Psychol** 1990 Feb; 60 (Pt 1):37-51
Burnout among social workers working with patients with cystic fibrosis. Coady CA, et al. **Health Soc Work** 1990 May;15(2):116-24
A biopsychosocial approach to work life issues. Frankenhaeuser M. **Int J Health Serv** 1989;19(4):747-58 (24 ref.)
Occupational stress in nursing. McGrath A, et al. **Int J Nurs Stud** 1989;26(4):343-58
Occupational stress and coping strategies among female baccalaureate nursing faculty. Goldenberg D, et al. **J Adv Nurs** 1990 May;15(5):531-43
Rural nurses. Part I, Surviving cost containment. Fuszard B, et al. **J Nurs Adm** 1990 Apr;20(4):7-12
Setting limits [editorial] de Tornyay R. **J Nurs Educ** 1990 Mar;29(3):101
Psychological distress in a sample of teachers. Schonfeld IS. **J Psychol** 1990 May;124(3):321-38
Occupational distress disorder (ODD). Hockley D. **J Subst Abuse Treat** 1989;6(4):257-8
The construct validity of the Maslach Burnout Inventory: some data from down under. Pierce CM, et al. **Psychol Rep** 1989 Dec;65(3 Pt 2):1340-2
Externality and burnout among dentists. St-Yves A, et al. **Psychol Rep** 1989 Dec;65(3 Pt 1):755-8
Burnout among primary care physicians and mental health professionals in a managed health care setting. Snibbe JR, et al. **Psychol Rep** 1989 Dec;65(3 Pt 1):775-80
Locus of control and burnout among nurses in Zimbabwe. Wilson D, et al. **Psychol Rep** 1989 Oct;65(2):426
Golembiewski's phase model of psychological burnout: some issues. Wolpin J, et al. **Psychol Rep** 1990 Apr;66(2):451-7
Job strains and job satisfaction of dialysis nurses. Muthny FA. **Psychother Psychosom** 1989;51(3):150-5
Stress symptoms, burnout and suicidal thoughts in Finnish physicians. Olkinuora M, et al. **Soc Psychiatry Psychiatr Epidemiol** 1990 Mar;25(2):81-6
[Sources of stress and burn-out in anesthesiologists. Reality and perspectives] Agnetti B, et al. **Minerva Anestesiol** 1989 Jun;55(6):277-81 (Eng. Abstr.) **(Ita)**
[Burnout syndrome of human services professionals--doctors, nurses, caregivers, teachers and clerks (1). Maslach Burnout Inventory: factor structures for samples of human services professionals, and its relation with Zung's Self-rating Depression Scale (SDS)] Masuko E, et al. **Sangyo Igaku** 1989 Jul;31(4):203-15 (Eng. Abstr.) **(Jpn)**

THERAPY

CEO burnout: shift priorities to manage stress. Moran EJ. **Hospitals** 1990 May 5;64(9):67
Caring for the carers. Richards JG. **N Z Med J** 1989 Jul 26;102(872):381-3

BURNS

Woodheater burns. A Tasmanian experience. Vucak M. **Aust Fam Physician** 1989 Oct;18(10):1267-70
ABC of major trauma. Management of severe burns. Robertson C, et al. **BMJ** 1990 Aug 4;301(6746):282-6 (0 ref.)
Pattern of burn injuries at a Kenyan provincial hospital. Haq A. **Burns** 1990 Jun;16(3):185-9
Burns of the upper extremity. **Hand Clin** 1990 May; 6(2):163-349
Standards for burn nursing practice. Bayley EW, et al. **J Burn Care Rehabil** 1989 Jul-Aug;10(4):362-73
The burn surgeon and the need for critical care certification [editorial] Demling R, et al. **J Burn Care Rehabil** 1990 Jan-Feb;11(1):91-2
Microcomputer image processing for burn patients. Franceschi D, et al. **J Burn Care Rehabil** 1989 Nov-Dec; 10(6):546-9
Thermal injury in the elderly. The limited need for nursing home care. Keys TC, et al. **J Burn Care Rehabil** 1989 Sep-Oct;10(5):429-31
Developing a regional and national burn disaster response. Wachtel TL, et al. **J Burn Care Rehabil** 1989 Nov-Dec; 10(6):561-7
The burn doc at 21. Coming of age. Ward CG. **J Burn Care Rehabil** 1989 Jul-Aug;10(4):287-91
Methods for physical stabilization of ashed teeth in incinerated remains. Mincer HH, et al. **J Forensic Sci** 1990 Jul;35(4):971-4
Burns in the Lebanon War 1982: "the blow and the cure". Eldad A, et al. **Milit Med** 1990 Mar;155(3):130-2
Frequency of suspected abuse/neglect in burn patients. Rosenberg NM, et al. **Pediatr Emerg Care** 1989 Dec; 5(4):219-21
[Resuscitation of children with extended thermal burns] Mersch JM, et al. **Arch Fr Pediatr** 1989 Aug-Sep; 46(7):531-40 (74 ref.) **(Fre)**
[Two cases of age estimation from teeth of burned body using amino acid racemization] Ohtani S, et al. **Nippon Hoigaku Zasshi** 1989 Apr;43(2):191-7 (Eng. Abstr.) **(Jpn)**
[Diagnosis, classification and treatment of burns of the auricular conchae] Boenko SK, et al. **Klin Khir** 1990; (3):15-7 (Eng. Abstr.) **(Rus)**
[Burn injuries of the respiratory organs] Lukán N. **Cesk Otolaryngol** 1990 Feb;39(1):9-13 (Eng. Abstr.) **(Slo)**

BLOOD

Dependence between the free-radical peroxidation, the activity of the superoxide dismutase glucose-6-phosphate dehydrogenase and erythrocytes haemolysis after thermal trauma and alpha-tocopherol treatment. Bekyarova G, et al. **Acta Physiol Pharmacol Bulg** 1989;15(2):68-73
Elevated tumor necrosis factor alpha production concomitant to elevated prostaglandin E2 production by trauma patients' monocytes. Takayama TK, et al. **Arch Surg** 1990 Jan;125(1):29-35
Blood-borne collagenous debris complexes with plasma fibronectin after thermal injury. La Celle P, et al. **Blood** 1990 Jan 15;75(2):470-8
Acute phase proteins and prognostic inflammatory and nutritional index (PINI) in moderately burned children aged up to 3 years. Kudláčková M, et al. **Burns** 1990 Feb; 16(1):53-6
Atrial natriuretic polypeptide after burn injury: blood levels and physiological role in rats. Wakabayashi G, et al. **Burns** 1990 Jun;16(3):169-75
"First pass phenomenon" of inhaled gas in the fire victims. Matsubara K, et al. **Forensic Sci Int** 1990 Jul;46(3):203-8
Pathophysiologic glucocorticoid elevations promote bacterial translocation after thermal injury. Jones WG 2d, et al. **Infect Immun** 1990 Oct;58(10):3257-61
Prealbumin as a marker of nutritional status. Brose L. **J Burn Care Rehabil** 1990 Jul-Aug;11(4):372-5
Changes in coagulation factors in patients with burns during acute blood loss. Cullen JJ, et al. **J Burn Care Rehabil** 1989 Nov-Dec;10(6):517-22
Quantitative and functional alterations of peripheral blood neutrophils after 10% and 30% thermal injury. D'Alesandro MM, et al. **J Burn Care Rehabil** 1990 Jul-Aug; 11(4):295-300
Fibrinogen kinetics in major human burns. Effeney DJ, et al. **Surg Forum** 1978;29:56-9
Nondeformability of red blood cells in 40% burned adult rats. Wood JJ, et al. **Surg Forum** 1978;29:25-7
Serum cachectin/tumor necrosis factor in critically ill patients with burns correlates with infection and mortality. Marano MA, et al. **Surg Gynecol Obstet** 1990 Jan; 170(1):32-8
[Changes in trace elements, Zn and Cu, following burns] Bao PH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Dec;3(4):279-81 **(Chi)**
[Correlation of changes in serum zinc with serum proteins and alkaline phosphatase in rabbits with burns] Cai DL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Jun;5(2):127-9, 159-60 (Eng. Abstr.) **(Chi)**
[C-reactive protein in burned patients with sepsis] Dong YL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Sep;2(3):206-9, 236 (Eng. Abstr.) **(Chi)**
[A preliminary study of separation and assay of immunologic activity of a plasma inhibitory factor in burned pigs] Feng SJ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Mar;3(1):47-50 **(Chi)**
[An analysis of early blood gas changes in 25 burned patients] Fu QF. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Dec;3(4):268-70 **(Chi)**
[The evaluation of determination of Mb, T3, T4 by radioimmunoassay in burned patients] Gao XX. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Dec;3(4):257-8 **(Chi)**
[Determination of the content of "middle sized molecules" in the plasma of burned patients and its clinical significance]

Hao TZ, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Mar;2(1):42–5, 76 (Eng. Abstr.) (Chi)
[Clinical significance of a platelet count in severe burns] Hua Z.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Dec;1(4):297–8 (Chi)
[Alterations in serum proteins following thermal injuries] Huang WH.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Mar;5(1):25–7, 76 (Eng. Abstr.) (Chi)
[Dynamic changes in serum levels of T3 and T4 in burn patients and its clinical significance] Jia XM.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1990 Jun;6(2):100–2, 157 (Eng. Abstr.) (Chi)
[Plasma cyclic nucleotides in burned patients] Jin HS, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Jun;2(2):111–2, 155 (Eng. Abstr.) (Chi)
[An analysis of serum free amino acids in burn patients] Li CL.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Dec;4(4):266–8 (Chi)
[Blood gas analysis in 40 burned patients] Li GH.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Jun;3(2):124–6, 137, 157 (Eng. Abstr.) (Chi)
[Changes in serum osmolality and osmolar discrepancy in burn patients] Li YY.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Sep;5(3):174–6, 236 (Eng. Abstr.) (Chi)
[An analysis of arterial blood gases during the shock period in major burns] Liu SK.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Sep;3(3):163–7 (Chi)
[The observation of serum myoglobin in burned patients] Liu XZ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Dec;3(4):255–6 (Chi)
[Changes in thyroxin, insulin and blood sugar levels in burn patients] Tian FQ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Dec;3(4):262–4, 318 (Eng. Abstr.) (Chi)
[Postburn changes in serum levels of calcitonin, parathyroid hormone and 25-hydroxycholecalciferol] Xue Y.
Chung Hua I Hsueh Tsa Chih 1989 Oct;69(10):555–9, 38 (Eng. Abstr.) (Chi)
[Cardiodepressor agents in the blood of burn patients and an assessment of the efficacy of their elimination] Puzhevskiĭ AS, et al. **Anesteziol Reanimatol** 1990 Jan–Feb; (1):57–9 (Eng. Abstr.) (Rus)
[Changes in electric indices of blood in the early period after burns] Lavrov VA, et al. **Biull Eksp Biol Med** 1990 May; 109(5):440–2 (Rus)
[Changes in several characteristics of the erythrocyte membrane and erythrocyte structure in severe burns in animal experiments] Zaets TL, et al.
Biull Eksp Biol Med 1990 Jan;109(1):27–30 (Eng. Abstr.) (Rus)
[The indices of the function of the anticoagulation system and of the nonenzymatic fibrinolytic activity of the antithrombin III–heparin–thrombin complex in the blood of children with burn and traumatic shock] Pastorova VE, et al. **Fiziol Cheloveka** 1990 Mar–Apr;16(2):71–6 (Rus)
[The erythron system in burns] Ignatov SV.
Gematol Transfuziol 1990 Mar;35(3):22–6 (94 ref.) (Rus)
[Analysis of glycosaminoglycans in the blood of patients by the orcinol method] Kliatskiĭ SA, et al. **Lab Delo** 1989; (10):51–3 (Eng. Abstr.) (Rus)
[The level of leukotrienes B4 and C4 in the blood serum of rats subjected to thermal burns, x-irradiation and combined radiation–thermal injuries] Panosian AG, et al. **Radiobiologiia** 1990 May–Jun;30(3):364–8 (Eng. Abstr.) (Rus)
[The effect of middle molecules isolated from the serum of burn patients on the state of lipid peroxidation in animal tissues] Tupikova ZA, et al. **Vopr Med Khim** 1990 May–Jun; 36(3):24–6 (Eng. Abstr.) (Rus)

CLASSIFICATION

The classification of burns. Hendricks WM.
J Am Acad Dermatol 1990 May;22(5 Pt 1):838–9

COMPLICATIONS

Multiple trauma and the burn patient. Purdue GF, et al.
Am J Surg 1989 Dec;158(6):536–9
Basal cell burn carcinoma. Stromberg BV, et al.
Ann Plast Surg 1990 Feb;24(2):186–8
Hypertonic saline dextran resuscitation of thermal injury. Horton JW, et al. **Ann Surg** 1990 Mar;211(3):301–11
Bacterial translocation and intestinal atrophy after thermal injury and burn wound sepsis. Jones WG 2d, et al.
Ann Surg 1990 Apr;211(4):399–405
Pseudomonas hyperimmune globulin: antibiotic treatment of experimental Pseudomonas sepsis in burned mice. Holder IA, et al. **Antibiot Chemother** 1989;42:109–23
Pseudomonas aeruginosa: a controlled burn pathogen? McManus AT. **Antibiot Chemother** 1989;42:103–8 (8 ref.)
Clinical features and pathology of burns. Sørensen B, et al.
Antibiot Chemother 1989;42:97–102 (5 ref.)
Efficacy of mupirocin in methicillin-resistant Staphylococcus aureus burn wound infection. Rode H, et al.
Antimicrob Agents Chemother 1989 Aug;33(8):1358–61
Vimentin-positive squamous cell carcinoma arising in a burn scar. A highly malignant neoplasm composed of acantholytic round keratinocytes. Ikegawa S, et al.
Arch Dermatol 1989 Dec;125(12):1672–6
The immunoprophylaxis and immunotherapy of Pseudomonas infections in burns with polyvalent Pseudomonas aeruginosa corpuscular vaccine. Ionescu A, et al. **Arch Roum Pathol Exp Microbiol** 1979 Jul–Dec; 38(3–4):317–30
Growth delay in postburn pediatric patients. Rutan RL, et al. **Arch Surg** 1990 Mar;125(3):392–5
Burns in pregnancy—maternal and fetal prognosis. Cheah SH, et al. **Aust N Z J Obstet Gynaecol** 1989 May; 29(2):143–5
Toddlers, teapots, and kettles: beware intraoral scalds [see comments] Dye DJ, et al. **BMJ** 1990 Mar 3;300(6724):597–8 Comment in: BMJ 1990 Apr 21;300(6731):1075–6.
Facial dysmorphology in the neglected paediatric head and neck burn. Katsaros J, et al. **Br J Plast Surg** 1990 Mar; 43(2):232–5
Remission of psychotic symptoms after burn injury [letter] Bhugra D, et al. **Br J Psychiatry** 1989 Nov;155:717–8
Toxic shock syndrome in scalded children. Cole RP, et al. **Burns** 1990 Jun;16(3):221–4
Reconstruction of postburn sequelae with expanded flaps. Da Matta A. **Burns** 1989 Dec;15(6):407–11
Pulmonary embolism in burned children. Desai MH, et al. **Burns** 1989 Dec;15(6):376–80
Costal chondritis following very deep flame burns involving the chest wall. Escudero-Nafs FJ, et al. **Burns** 1989 Dec; 15(6):394–6
Reactions from nurses treating a burned patient after the diagnosis of HIV infection following a nursing incident. Haugsmyr E, et al. **Burns** 1990 Apr;16(2):148–9
An HIV-positive patient with severe burns: a case report. Ioannovich J, et al. **Burns** 1990 Apr;16(2):129–32
Legionnaire's pneumonia complicating a thermal burn. Signorini M, et al. **Burns** 1989 Dec;15(6):397–8
Fasciocutaneous flaps for burn contractures of the axilla. Tiwari P, et al. **Burns** 1990 Apr;16(2):150–2
Use of the lithotripter in the burned patient as an aid to mobilization. Wilkinson M, et al. **Burns** 1989 Oct; 15(5):327–9
Possible involvement of beta-endorphin in the deteriorating effect of arginine vasopressin on burn shock in rats. Sun K, et al. **Circ Shock** 1989 Nov;29(3):167–74
Sepsis following thermal injury. Mooney DP, et al.
Compr Ther 1989 Sep;15(9):22–9 (15 ref.)
Pain management following trauma and burns. Mackersie RC, et al. **Crit Care Clin** 1990 Apr;6(2):433–49 (77 ref.)
Upper extremity burn contractures. Kurtzman LC, et al.
Hand Clin 1990 May;6(2):261–79 (56 ref.)
The epidemiology of cytomegalovirus infection among patients with burns. Bale JF Jr, et al.
Infect Control Hosp Epidemiol 1990 Jan;11(1):17–22
Effect of proteolytic activity on virulence of Candida albicans in burned mice [published erratum appears in Infect Immun 1990 Aug;58(8):2725] Neely AN, et al.
Infect Immun 1990 Jun;58(6):1527–31
Skeletal injury in thermal trauma: a review of management. Curtis MJ, et al. **Injury** 1989 Nov;20(6):333–6
Inferior venacaval obstruction following burns [letter] Gupta SS, et al. **J Assoc Physicians India** 1990 Mar;38(3):243
Gluteal pouching: a complication of perineal burn scar contracture. A case report. Alghanem AA, et al.
J Burn Care Rehabil 1990 Mar–Apr;11(2):137–9
Cancers arising from burn scars. A literature review and report of twenty-one cases. Bartle EJ, et al.
J Burn Care Rehabil 1990 Jan–Feb;11(1):46–9 (45 ref.)
Serial casting: a method for treating burn contractures. Bennett GB, et al. **J Burn Care Rehabil** 1989 Nov–Dec; 10(6):543–5
Continuous intravenous infusion of methadone for control of burn pain. Concilus R, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):406–9
Comparative evaluation of zinc sulfadiazine and silver sulfadiazine in burn wound infection. Fox CL Jr, et al.
J Burn Care Rehabil 1990 Mar–Apr;11(2):112–7
Survey of treatment modalities for the prevention of hypertrophic facial scars. Gallagher J, et al.
J Burn Care Rehabil 1990 Mar–Apr;11(2):118–20
Cardiac disease and the patient with burns. Goff DR, et al.
J Burn Care Rehabil 1990 Jul–Aug;11(4):305–7
Bone marrow myelopoiesis in rats after 10%, 20%, or 30% thermal injury. Gruber DF, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):410–7
The efficacy of nystatin combined with topical microbial agents in the treatment of burn wound sepsis. Heggers JP, et al. **J Burn Care Rehabil** 1989 Nov–Dec;10(6):508–11
Therapeutic efficacy of timentin and augmentin versus silvadene in burn wound infections. Heggers JP, et al.
J Burn Care Rehabil 1989 Sep–Oct;10(5):421–4
Wet disc testing of mafenide hydrochloride, chlorhexidine gluconate, and triple antibiotic solution against bacteria isolated from burn wounds. Holder IA.
J Burn Care Rehabil 1990 Jul–Aug;11(4):301–4
Use of Pseudomonas hyperimmunoglobulin to treat septic shock in burn cases. Kistler D, et al.
J Burn Care Rehabil 1989 Jul–Aug;10(4):321–6
Microcirculation in hypertrophic scars after burn injury. Leung KS, et al. **J Burn Care Rehabil** 1989 Sep–Oct; 10(5):436–44
Control of endotoxemia in burn patients by use of polymyxin B. Munster AM, et al. **J Burn Care Rehabil** 1989 Jul–Aug; 10(4):327–30
Heterotopic ossification: can early surgery be performed, with a positive bone scan? Peters WJ.
J Burn Care Rehabil 1990 Jul–Aug;11(4):318–21
Acute septic cholecystitis in patients with burn injuries. Slater H, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):445–7
Heterotopic bone formation in the patient with burn injuries. A retrospective assessment of contributing factors and methods of investigation. VanLaeken N, et al.
J Burn Care Rehabil 1989 Jul–Aug;10(4):331–5
Effect of prostaglandin E in multiple experimental models. III. Effect on response to septic challenge. Waymack JP, et al. **J Burn Care Rehabil** 1989 Nov–Dec;10(6):481–5
Burns and associated nonthermal trauma: an analysis of management, outcome, and relation to the Injury Severity Score. Wong L, et al. **J Burn Care Rehabil** 1989 Nov–Dec; 10(6):512–6
Toxic shock syndrome [letter; comment] Frame JD.
J Hand Surg [Am] 1989 Nov;14(6):1036–7 Comment on: J Hand Surg [Am] 1988 Nov;13(6):957–9.
Classification and treatment of postburn metacarpophalangeal joint extension contractures in children. Graham TJ, et al.
J Hand Surg [Am] 1990 May;15(3):450–6
Anterior nasal stenosis from joss stick burns. Lee ST.
J Laryngol Otol 1990 Jun;104(6):497
Saksenaea vasiformis infection in a burn wound. Goldschmied-Reouven A, et al. **J Med Vet Mycol** 1989; 27(6):427–9
Lethal burn-induced bacterial translocation: role of genetic resistance. Deitch EA, et al. **J Trauma** 1989 Nov; 29(11):1480–7
Antibiotic prophylaxis diminishes bacterial translocation but not mortality in experimental burn wound sepsis. Jones WG 2d, et al. **J Trauma** 1990 Jun;30(6):737–40
The declining incidence of fatal sepsis following thermal injury. Merrell SW, et al. **J Trauma** 1989 Oct;29(10):1362–6
Calcitonin assay may help identify burn patients at risk for respiratory distress [news] Skolnick A. **JAMA** 1990 Aug 1;264(5):565–6
Sick child left in the charge of unsupervised students. Brahams D. **Lancet** 1989 Dec 16;2(8677):1465
Toxic shock syndrome in child with only 2% burn [letter] Heywood AJ, et al. **Lancet** 1990 Apr 7;335(8693):867
One-stage reconstruction of the postburn nailfold contracture. Achauer BM, et al. **Plast Reconstr Surg** 1990 Jun;85(6):937–40; discussion 941
The treatment of burn scar hypopigmentation and surface irregularity by dermabrasion and thin skin grafting. Onur Erol O, et al. **Plast Reconstr Surg** 1990 May;85(5):754–8
Thermal injury in pregnancy—the neglected tragedy. Rode H, et al. **S Afr Med J** 1990 Apr 7;77(7):346–8
[Treatment of postburn clawhand] Cao ZM.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Dec;1(4):263–6 (Chi)
[The treatment of postburn axillary contracture] Chen B.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Mar;3(1):16–8 (Chi)
[Acute stress mucosal lesion of the upper gastrointestinal tract after burn—a clinical and endoscopic analysis of 31 cases] Gan YL.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Dec;5(4):251–4, 315–6 (Eng. Abstr.) (Chi)
[The effect of pyridonic acid derivatives as topical antibiotics on the prevention and treatment of pyocyaneous infection following burn] Ge SD.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Mar;3(1):10–3 (Chi)
[The use of immune RNA (i-RNA) to prevent and treat burn infection] Han FY.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Mar;5(1):34–5, 77 (Eng. Abstr.) (Chi)
[Convulsion in burned children and its treatment] Heng DZ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Jun;2(2):121 (Chi)
[A T-shape flap in the repair of postburn syndactylism deformity] Heng DZ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Dec;1(4):257 (Chi)
[Treatment of axillary burn scar contracture with a parascapular flap and lateral thoracic island flap] Huang XY.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Jun;2(2):122–4, 160 (Eng. Abstr.) (Chi)
[Characteristics and experiences in treatment of acute CO intoxication combined with a burn] Jia XM.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Dec;1(4):288 (Chi)
[Cannula-related septicemia in severely burned patients] Jia XM.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Mar;3(1):6–9 (Chi)
[Major burns complicated with urinary lithiasis] Jia XM.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Mar;2(1):50–1, 53 (Chi)
[Analysis of microbiological flora in the blood and wounds of burn patients] Li GH.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Sep;5(3):199–200, 238–9 (Eng. Abstr.) (Chi)
[Changes in blood gas in severely burned patients with acute pulmonary insufficiency treated by high frequency

ventilation (HFV)] Li GH.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Jun;5(2):85–6, 155 (Eng. Abstr.) **(Chi)**

[Multiple organ complications after extensive burns] Li JS.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Sep;1(3):188–9, 197 **(Chi)**

[A 5-flap procedure for the treatment of an axillary webbed scar] Liu Q, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Jun;2(2):117–8, 120, 159 (Eng. Abstr.) **(Chi)**

[Experiences in the treatment of 53 cases of major burns with acute renal failure] Liu YL.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Jun;2(2):103–5, 108 **(Chi)**

[Prevention, early diagnosis and treatment of carcinoma developing at a postburn scar] Lu KH.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Dec;1(4):258–60 **(Chi)**

[An experimental study on enterogenic infection after severe burns] Ma L.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Sep;1(3):179–81, 238 (Eng. Abstr.) **(Chi)**

[Reversed forearm island flap with dorsal interosseous artery for reconstruction of postburn deformities of the hand—report of 6 cases] Qian YL.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1990 Jun;6(2):81–2, 155 (Eng. Abstr.) **(Chi)**

[Experimental study of pulmonary infection and its systemic dissemination in the early stage of severe burn] Rong XZ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1990 Mar;6(1):42–6, 77 (Eng. Abstr.) **(Chi)**

[The use of a thermoplastic splint in the prevention and correction of post-burn deformities] Tang XX.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Jun;2(2):115–6, 156 (Eng. Abstr.) **(Chi)**

[Treatment of Pseudomonas aeruginosa septicemia in burns] Wang DW.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Sep;3(3):181–3, 237–8 (Eng. Abstr.) **(Chi)**

[Early diagnosis and prevention of fungal infection after burns] Wang DW.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Sep;1(3):221–3 **(Chi)**

[Burn complicated with upper gastrointestinal bleeding and perforation of the gallbladder—report of one case] Wang GP.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Jun;2(2):89 **(Chi)**

[Experimental study on the early diagnosis of invasive aspergillosis after thermal injury in rats] Wang M.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Sep;4(3):198–201, 236 (Eng. Abstr.) **(Chi)**

[Effect of superoxide dismutase and allopurinol on microcirculatory disturbances during burn shock] Wu KY.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Dec;5(4):284–6, 319 (Eng. Abstr.) **(Chi)**

[Burns complicated by multiple organ failure—report of 41 cases] Wu WA.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1990 Jun;6(2):111–2, 157–8 (Eng. Abstr.) **(Chi)**

[The use of antibiotics in burned patients] Xu WS.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Jun;2(2):84–9 **(Chi)**

[Patterns of outbreaks of burn sepsis] Yang XD.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Dec;4(4):271–3 **(Chi)**

[Pathologic changes in the brain in burned children with septicemia and epileptiform convulsion—report of 5 autopsies] Yin JB.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1990 Mar;6(1):27–8, 75 (Eng. Abstr.) **(Chi)**

[Complication of soft tissue expander dilation and its prevention] Zha YK.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1990 Jun;6(2):113–4 **(Chi)**

[The use of anti-bacterial immuno-ribonucleic acid in the treatment of burns complicated with systemic infection] Zhang GD.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Sep;3(3):198–9 **(Chi)**

[Acute bleeding of ulcer of the digestive tract complicating burns in children] Zhang GD.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Jun;3(2):122–3 **(Chi)**

[Prognosis of burns in pregnancy—a report of 31 cases] Zhang H.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Sep;4(3):191–2 **(Chi)**

[A viewpoint of postburn toxemia—"postburn tissue toxolysin"] Zhang ML.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Dec;1(4):282–5 **(Chi)**

[Determination of blood endotoxin in severely burned patients and its clinical significance] Zhang YP.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Jun;5(2):100–2, 157 (Eng. Abstr.) **(Chi)**

[Effect of Polygonum cuspidatum No 4 on the enhancement of cardiac function during burn shock] Zhao KS.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Dec;5(4):275–8, 318 (Eng. Abstr.) **(Chi)**

[Topical use of horse immunoglobulin in the treatment of Pseudomonas burn wound infection—an experimental study] Zhao XB.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Sep;4(3):202–4, 237 (Eng. Abstr.) **(Chi)**

[Burns complicated by gastrointestinal haemorrhage—an analysis of 70 cases] Zhuo YP.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Dec;5(4):264–6, 317 (Eng. Abstr.) **(Chi)**

[Multiple system organ failure in postburn: characteristics of plasma amino acid profiles] Dong YL.
Chung Hua Wai Ko Tsa Chih 1989 Sep;27(9):541–5, 574 (Eng. Abstr.) **(Chi)**

[Analysis of 240 cases of burn patients with Pseudomonas aeruginosa septicemia] Yang XD.
Chung Hua Wai Ko Tsa Chih 1989 May;27(5):292–3, 317 (Eng. Abstr.) **(Chi)**

[Inhibitory effects of clonidine on edema formation after thermal injury in mice and rats] Jiang DJ, et al.
Chung Kuo Yao Li Hsueh Pao 1989 Nov;10(6):540–2 (Eng. Abstr.) **(Chi)**

[Therapy with antithrombin III in burned children—pilot study] Del Principe D, et al. **Haematologica** 1990 Mar–Apr; 75 Suppl 2:33–40 **(Ita)**

[Morphology of the gastric mucosa in burns and the pathogenetic aspects of its injuries] Khomerikin SG, et al. **Arkh Patol** 1989;51(12):10–6 (Eng. Abstr.) **(Rus)**

[Use of a synthetic opioid for the reversal of stress-induced damage of the myocardium and gastric mucosa in severe thermal trauma] Dvortsin GF. **Kardiologiia** 1989 Sep; 29(9):81–3 (Eng. Abstr.) **(Rus)**

[Complications after surgical treatment of post-burn cicatricial deformities in children] Vozdvizhenskiĭ SI, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):107–10 **(Rus)**

[Change in the urinary protein spectrum due to the treatment of renal insufficiency in the acute period of experimental burn disease] Tsarevskiĭ NN, et al. **Klin Khir** 1990;(3):36–8 (Eng. Abstr.) **(Rus)**

[A case of changes in the fundus oculi in burns] Luchik VI. **Oftalmol Zh** 1989;(7):443–4 **(Rus)**

[A method of graphic image of the amplitude of hand movements] Bizhko IP, et al. **Ortop Travmatol Protez** 1990 May;(5):56–8 **(Rus)**

[Treatment of postburn cicatricial deformations and contractures of the neck] Iudenich AA, et al. **Sov Med** 1989;(7):34–8 (Eng. Abstr.) **(Rus)**

[A method of correction of posterior dislocation of the fingers in post-burn deformity of the hand] Dmitriev GI, et al. **Vestn Khir** 1989 Jul;143(7):118–9 **(Rus)**

[Irreversible conditions after trauma and gunshot wounds] Dolinin VA. **Vestn Khir** 1990 Feb;144(2):64–8 (Eng. Abstr.) **(Rus)**

[Classification of post-burn cicatricial deformities of the neck and chest and clinico-anatomic substantiation of the use of cutaneofascial flaps from the thoracic wall] Iudenich AA, et al. **Vestn Khir** 1989 Nov;143(11):90–3 **(Rus)**

[Correction of post-burn cicatricial deformities and contractures of the neck by free autologous transplantation of the tissues] Iudenin AA, et al. **Vestn Khir** 1990 Mar; 144(3):101–3 **(Rus)**

[Burns of the auricular conchae, their complications and treatment] Boenko SK, et al. **Vestn Otorinolaringol** 1990 Mar–Apr;(2):11–3 (Eng. Abstr.) **(Rus)**

[The characteristics of the pathogenetic treatment of pneumonias in burn patients] Pekarskiĭ DE, et al. **Vrach Delo** 1990 Feb;(2):71–3 (Eng. Abstr.) **(Rus)**

[Experimental vaccinal prophylaxis of Pseudomonas aeruginosa burn sepsis] Bandman OA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jul;(7):59–62 (Eng. Abstr.) **(Rus)**

[Acinetobacter calcoaceticus as a cause of infection in wounds and burns] Pavlica R, et al. **Srp Arh Celok Lek** 1989 May–Jun;117(5–6):319–24 (Eng. Abstr.) **(Scc)**

DIAGNOSIS

Inventory of potential reconstructive needs in the patient with burns [published erratum appears in J Burn Care Rehabil 1990 Mar–Apr;11(2):180] Brou JA, et al. **J Burn Care Rehabil** 1989 Nov–Dec;10(6):555–60

[Errors resulting from incorrect estimation of the depth of the burn injury] Novák J, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1990; 33(1):73–6 (Eng. Abstr.) **(Hun)**

DIET THERAPY

Very early nutrition supplementation in burned patients. Chiarelli A, et al. **Am J Clin Nutr** 1990 Jun;51(6):1035–9

Calorie and protein provision for recovery from severe burns in infants and young children. Cunningham JJ, et al. **Am J Clin Nutr** 1990 Apr;51(4):553–7

Dietary noncompliance in pediatric patients in the burn unit. White S, et al. **J Burn Care Rehabil** 1990 Mar–Apr; 11(2):167–74 (19 ref.)

[The use of a computer for calculation of constituents and prescriptio of recipes in nutritional therapy of burned patients] Lang LM.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Jun;3(2):132–3, 158 (Eng. Abstr.) **(Chi)**

DRUG THERAPY

The use of Bactroban for infection management in burn patients. Vrtišková J, et al. **Acta Chir Plast** 1990;32(1):57–60

Cantharis in the early treatment of minor burns. Leaman AM, et al. **Arch Emerg Med** 1989 Dec;6(4):259–61

The effect of interleukin 1 alpha on survival in a murine model of burn wound sepsis. Silver GM, et al. **Arch Surg** 1990 Jul;125(7):922–5

Silver sulphadiazine and the healing of partial thickness burns: a prospective clinical trial. Stern HS. **Br J Plast Surg** 1989 Sep;42(5):581–5 (18 ref.)

Burn wound infection [letter; comment] Lawrence JC, et al. **Burns** 1989 Oct;15(5):342 Comment on: Burns 1989 Apr;15(2):117–9.

Patient tolerance study of topical chlorhexidine diphosphanilate: a new topical agent for burns. Miller LM, et al. **Burns** 1990 Jun;16(3):217–20

Long-term experience with 1 per cent topical silver sulphadiazine cream in the management of burn wounds. Sawhney CP, et al. **Burns** 1989 Dec;15(6):403–6

Imipenem pharmacokinetics in patients with burns. Boucher BA, et al. **Clin Pharmacol Ther** 1990 Aug;48(2):130–7

Silver sulphadiazene: an adjunct to central line maintenance protocol [letter] Bentivegna PE. **Crit Care Med** 1990 Jan; 18(1):120

A prostacyclin analog does not improve survival after infection in burned mice [letter] Peck MD, et al. **Crit Care Med** 1990 Apr;18(4):459

Neuromuscular blocking agents in burn patients. Thompson DF. **DICP** 1989 Dec;23(12):1006–8

Effect of isoprinosine on lymphocyte proliferation and natural killer cell activity following thermal injury. Singh H, et al. **Immunopharmacol Immunotoxicol** 1989; 11(4):631–44

Vitamin supplementation in the patient with burns. Gottschlich MM, et al. **J Burn Care Rehabil** 1990 May–Jun; 11(3):275–9 (55 ref.)

Sildimac: a new delivery system for silver sulfadiazine in the treatment of full-thickness burn injuries. Miller L, et al. **J Burn Care Rehabil** 1990 Jan–Feb;11(1):35–41

The effects of drugs on the arachidonate cascade in experimentally burned rabbits. Ono I, et al. **J Burn Care Rehabil** 1989 Jul–Aug;10(4):314–20

Leukopenia in acute thermal injury: evidence against topical silver sulfadiazine as the causative agent. Thomson PD, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):418–20

Somatropin and wound healing after injury. Belcher HJ, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):939–43

Pharmacokinetics of continuous intravenous infusion of methadone in the early post-burn period. Denson DD, et al. **J Clin Pharmacol** 1990 Jan;30(1):70–5

The effect of nicotinamide on microvascular density and thermal injury in rats. Smith YR, et al. **J Surg Res** 1989 Nov;47(5):465–9

Effectiveness of hypertonic saline–dextran 70 for initial fluid resuscitation of major burns. Onarheim H, et al. **J Trauma** 1990 May;30(5):597–603

Preventing the prostaglandin effect on dermal ischemia in the burn wound. Del Beccaro EJ, et al. **Surg Forum** 1978; 29:603–5

Effect of cimetidine on acute mortality and plasma water loss in mice with burn shock. Yoshioka T, et al. **Surg Forum** 1978;29:27–9

[Effect of nutritional support of extensively burned patients with splenico-stomachictonic] Luo C, et al.
Chung Hsi I Chieh Ho Tsa Chih 1990 Jan;10(1):30–1, 5 (Eng. Abstr.) **(Chi)**

[Effect of radix Paeoniae rubrae extract on mesenteric microcirculation] Chu ZX.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1990 Jun;6(2):128–30, 160 (Eng. Abstr.) **(Chi)**

[Experimental study of topical antimicrobial agents in burns] Ge SD.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Dec;1(4):255–6 (Eng. Abstr.) **(Chi)**

[Experimental study of topical uses of para-chloro-methyl-xylenol in burns: therapeutic effect against Staphylococcus aureus] Ge SD.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1990 Jun;6(2):115–7, 158–9 (Eng. Abstr.) **(Chi)**

[Changes in body zinc and copper levels in severely burned patients and the effects of oral administration of ZnSO4 by a double-blind method] Han CM.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1990 Jun;6(2):83–6, 155 (Eng. Abstr.) **(Chi)**

[Hypersensitivity due to topical use of silver sulfadiazine on burn wounds (report of 6 cases)] Jia XM.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Sep;1(3):232–3 **(Chi)**

[Dermazin in the treatment of burns—a clinical study] Li TZ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1990 Jun;6(2):103–5 (Eng. Abstr.) **(Chi)**

[The effect of vitamin A and Astragalus on the splenic T lymphocyte-CFU of burned mice] Pang SF.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Jun;5(2):122–4, 159 (Eng. Abstr.) **(Chi)**

[Effect of the thromboxane synthetase inhibitor dazmegrel (UK 38,485) on skin blood flow in deep partial thickness burns] Wang SL.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Sep;5(3):206–9, 239–40 (Eng. Abstr.) **(Chi)**

[The antipyretic efficacy of propacetamol in severely burned children] Marichy J, et al. **Cah Anesthesiol** 1989 Nov; 37(7):521–3 **(Fre)**

[Serum and tissue silver levels after burns treated with silver compounds] Kartal A, et al. **J Chir (Paris)** 1989 Dec; 126(12):676–81 (Eng. Abstr.) **(Fre)**

[Use of silver preparations in surgery and traumatology (review of foreign literature)] Savadian ESh. **Khirurgiia (Mosk)** 1989 Aug;(8):135–9 (81 ref.) **(Rus)**

[The use of kombutek 2 in treating patients with radiation damages to the skin] Selezneva LG, et al. **Med Radiol (Mosk)** 1990 Jul;35(7):33–4 (Eng. Abstr.) **(Rus)**

[Acceleration of the healing of burn wounds in mice under the influence of alpha 1–acid glycoprotein] Salomatin VV, et al. **Patol Fiziol Eksp Ter** 1989 Nov–Dec;(6):37–40 (Eng. Abstr.) **(Rus)**

ECONOMICS

Burn DRGs: effects of recent changes and implications for the future. Chakerian MU, et al. **J Trauma** 1990 Aug; 30(8):964–71; discussion 971–3

ENZYMOLOGY

[Observations on serum and urine lactate dehydrogenase in burned patients] Wang YP. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Sep;4(3):186–8, 235 **(Chi)**

[The effect of a superoxide dismutase compound on the level of endogenous superoxide dismutase and lipid peroxidation in thermal burns] Agadzhanov MI, et al. **Vopr Med Khim** 1989 Jul–Aug;35(4):28–30 (Eng. Abstr.) **(Rus)**

[The effect of benzonal on the functional activity of liver monooxygenase system un thermal injury] Khakimov ZZ. **Vopr Med Khim** 1989 Sep–Oct;35(5):64–7 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

The causes, cost, and prevention of childhood burn injuries. McLoughlin E, et al. **Am J Dis Child** 1990 Jun; 144(6):677–83

Burns in patients under 2 and over 70 years of age. Le HQ, et al. **Ann Plast Surg** 1986 Jul;17(1):39–44

Adult assault as a mechanism of burn injury. Purdue GF, et al. **Arch Surg** 1990 Feb;125(2):268–9

An analysis of 1704 burn injuries in Hong Kong children. Cheng JC, et al. **Burns** 1990 Jun;16(3):182–4

Contact burns in children. Datubo-Brown DD, et al. **Burns** 1989 Oct;15(5):285–6

Paediatric burn injuries in the Jeddah area of Saudi Arabia: a study of 197 patients. Jamal YS, et al. **Burns** 1990 Feb; 16(1):36–40

Burn injuries in the Jeddah area of Saudi Arabia: a study of 319 cases. Jamal YS, et al. **Burns** 1989 Oct;15(5):295–8

Epidemiology of domestic burns related to products. Lindblad BE, et al. **Burns** 1990 Apr;16(2):89–91

Paediatric burn injuries in New England, USA. Rossignol AM, et al. **Burns** 1990 Feb;16(1):41–8

Analysis of burn injury cases among Armed Forces personnel and their families dependent on Command Hospital (Southern Command) Pune. Ganguli SK, et al. **Indian J Public Health** 1988 Oct–Dec;32(4):185–90

Burn injuries during the puerperium in Zaria, Nigeria. Mabogunje OA. **Int J Gynaecol Obstet** 1989 Oct; 30(2):133–7

Profile of burn injury in steel industry. Agrawal OP. **J Indian Med Assoc** 1990 Jan;88(1):4–6

Employment status and the frequency and causes of burn injuries in New England. Rossignol AM, et al. **J Occup Med** 1989 Sep;31(9):751–7

[Scalding accidents among children—an epidemiologic study] Lindblad BE, et al. **Ugeskr Laeger** 1990 May 28; 152(22):1590–1 (Eng. Abstr.) **(Dan)**

[Burns. An epidemiologic casualty ward study] Maagaard Mortensen NH, et al. **Ugeskr Laeger** 1990 May 21; 152(21):1518–20 (Eng. Abstr.) **(Dan)**

[Epidemiologic profile of accidents in Tunisian children] Rekik A, et al. **Pediatrie** 1989;44(9):721–4 (Eng. Abstr.) **(Fre)**

[Burns among the elderly. Occurrence, causes, local treatment] Dahl BH, et al. **Tidsskr Nor Laegeforen** 1989 Nov 10;109(31):3205–8 (Eng. Abstr.) **(Nor)**

[Levels and structure of burn injuries in the Ukraine] Voronenko IuV. **Klin Khir** 1990;(3):1–3 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Severe burn of the finger caused by using a pulse oximeter during MR imaging [letter] Shellock FG, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):1105

Substance abuse and attempts at suicide by burning [letter] Swenson JR, et al. **Am J Psychiatry** 1990 Jun;147(6):811

Skin burns from a cold light source. Van Der Walt JH, et al. **Anaesth Intensive Care** 1990 Feb;18(1):113–5

Severe burns from a pulse oximeter. Murphy KG, et al. **Anesthesiology** 1990 Aug;73(2):350–2

Airway fire during co2 laser surgery using a Xomed Laser endotracheal tube. Sosis MB. **Anesthesiology** 1990 Apr; 72(4):747–9

Children with croup presenting with scalds. Greally P, et al. **BMJ** 1990 Jul 14;301(6743):113

Cold injury from liquid propane. James NK, et al. **BMJ** 1989 Oct 14;299(6705):950–1

The influence of microwave radiation on transdermal delivery systems. Moseley H, et al. **Br J Dermatol** 1990 Mar;122(3):361–3

A ring burn—electric or contact? Attalla MF, et al. **Burns** 1990 Feb;16(1):69–70

Possible role of chemical hair care products in 10 patients with face, scalp, ear, back, neck and extremity burns. Boucher J, et al. **Burns** 1990 Apr;16(2):146–7

Review of burns caused by bitumen and the problems of its removal. James NK, et al. **Burns** 1990 Jun;16(3):214–6

Foot spas as a cause of burns. Ovesen O, et al. **Burns** 1990 Jun;16(3):211–3

Flame burns involving kerosene pressure stoves in India. Sawhney CP. **Burns** 1989 Dec;15(6):362–4

Catatonia and burns. Zarr ML, et al. **Burns** 1990 Apr; 16(2):133–4

Mallinckrodt incuTemp 4 skin temperature probes and Air–Shields Vickers C–100 incubators. **Health Devices** 1990 Jul;19(7):245

Erroneous use of Welch Allyn 48200 fiberoptic light pipe. **Health Devices** 1989 Sep;18(9):326

Different manufacturers' patient probes and pulse oximeters. **Health Devices** 1990 Jul;19(7):244–5

Late heat damage in normal swine rectum: a comparison of thermosensitivity of rectum and oesophagus. Li DJ, et al. **Int J Hyperthermia** 1989 Nov–Dec;5(6):717–24

Medical and surgical management for localized radiation injuries. Nénot JC. **Int J Radiat Biol** 1990 Apr;57(4):783–95 (26 ref.)

Laryngeal burns secondary to the ingestion of microwave–heated food. Goldberg RM, et al. **J Emerg Med** 1990 May–Jun;8(3):281–3

Predictive criteria for burns from brief thermal exposures. Ripple GR, et al. **J Occup Med** 1990 Mar;32(3):215–9 (28 ref.)

Dangers of steam inhalations: case report [letter] O'Dowd TC. **J R Coll Gen Pract** 1989 Jun;39(323):258

Walker–related burns in infants and toddlers. Johnson CF, et al. **Pediatr Emerg Care** 1990 Mar;6(1):58–61

Burns associated with clinical MR examinations [letter] Kanal E, et al. **Radiology** 1990 May;175(2):585

[Lighter accidents. Burns caused by lighter explosions] Lindblad LN. **Ugeskr Laeger** 1990 Jun 25;152(26):1909–10 (Eng. Abstr.) **(Dan)**

[A device for modelling experimental thermal burns] Stepaniuk GI, et al. **Patol Fiziol Eksp Ter** 1990 Mar–Apr; (2):41–2 **(Rus)**

GENETICS

A genetic model for the control of host resistance to thermal injury. Gill TJ 3d, et al. **J Surg Res** 1989 Nov;47(5):433–7

HISTORY

Secondary repair of burned hands. 1981 [classical article] Beasley RW. **Hand Clin** 1990 May;6(2):319–41

Management of the burned hand. 1970 [classical article] Boswick JA Jr. **Hand Clin** 1990 May;6(2):297–303

Aesthetic aspects of hand surgery. Microsurgical approach with multiple free tissue transfers. 1981 [classical article] Buncke HJ. **Hand Clin** 1990 May;6(2):343–49

Primary excision and prompt grafting as routine therapy for the treatment of thermal burns in children. 1976 [classical article] Burke JF, et al. **Hand Clin** 1990 May;6(2):305–17

The treatment of burns: an historical perspective with emphasis on the hand. Robotti EB. **Hand Clin** 1990 May; 6(2):163–90

IMMUNOLOGY

In vitro effects of complement inactivation upon burn–associated cell–mediated immunosuppression. Ferrara JJ, et al. **Am Surg** 1990 Sep;56(9):571–4

Different lymphocyte compartments respond differently to mitogenic stimulation after thermal injury. Deitch EA, et al. **Ann Surg** 1990 Jan;211(1):72–7

Altered neutrophil functions in patients with large burns. Bjerknes R, et al. **Blood Cells** 1990;16(1):127–41; discussion 142–3

Flow cytometric analysis of neutrophil subsets in thermally injured patients developing infection. Babcock GF, et al. **Clin Immunol Immunopathol** 1990 Jan;54(1):117–25

Nutritional immunomodulation in burn patients. Alexander JW, et al. **Crit Care Med** 1990 Feb;18(2 Suppl):S149–53 (22 ref.)

Transportation of immunosuppressive substances produced at the site of burn injury into the systemic circulation: the role of lymphatics. Ferrara JJ, et al. **J Burn Care Rehabil** 1990 Jul–Aug;11(4):281–6

Alteration of rat polymorphonuclear leukocyte function after thermal injury. Gruber DF, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):394–401

Naloxone inhibits the in vivo immunosuppressive effects of morphine and thermal injury in mice. Hendrickson M, et al. **J Burn Care Rehabil** 1989 Nov–Dec;10(6):494–8

A long–term study and correlation of lymphocyte and neutrophil function in the patient with burns. Ogle CK, et al. **J Burn Care Rehabil** 1990 Mar–Apr;11(2):105–11

Bactericidal defect of neutrophils in a guinea pig model of thermal injury is related to elevation of intracellular cyclic–3',5'–adenosine monophosphate. Bjornson AB, et al. **J Immunol** 1989 Oct 15;143(8):2609–16

Effect of local and systemic burn microenvironment on neutrophil activation as assessed by complement receptor expression and morphology. Deitch EA, et al. **J Trauma** 1990 Mar;30(3):259–68

Postburn immune suppression: an inflammatory response to the burn wound? Hansbrough JF, et al. **J Trauma** 1990 Jun;30(6):671–4; discussion 674–5

Chronic ethanol exposure before injury produces greater immune dysfunction after thermal injury in rats. Kawakami M, et al. **J Trauma** 1990 Jan;30(1):27–31

Thermal injury–induced non–specific resistance to fatal Pseudomonas aeruginosa burn–infection in mice. Pinto M, et al. **Jpn J Exp Med** 1989 Oct;59(5):189–96

Complement activation and neutrophil dysfunction in burned patients with sepsis—a study of two cases. Utoh J, et al. **Jpn J Surg** 1989 Jul;19(4):462–7

Does glutamine contribute to immunosuppression after major burns? Parry–Billings M, et al. **Lancet** 1990 Sep 1; 336(8714):523–5

Immunosuppressive effect of burn patient serum on burn patient lymphocytes and normal lymphocytes: association with sepsis. Constantian MB, et al. **Surg Forum** 1978; 29:599–600

[Changes in immunological function of red cells in burn patients and their significances] Chen YL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):277–8 **(Chi)**

[The influence of wound infection on the peritoneal macrophage function of rats—a study using the activity of receptor of membrane as a parameter] Wu JZ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Jun;2(2):128–31 **(Chi)**

[Advances in immunologic research on burns] Wu JZ, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Sep;5(3):219–22 (24 ref.) **(Chi)**

[Changes in interleukin–1 and interleukin–2 in scalded rats] Zhang XN. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Sep;5(3):213–5, 240 (Eng. Abstr.) **(Chi)**

[Effects of burn injury on the reactivity of spleen cells of mice of different genotypes during regional graft vs host reaction] Barsukov AN, et al. **Biull Eksp Biol Med** 1990 Jun;109(6):592–4 (Eng. Abstr.) **(Rus)**

[Correction of immunologic disorders in patients with burns] Shkrob LO, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):116–9 (Eng. Abstr.) **(Rus)**

METABOLISM

Enteral nutrition with structured lipid: effect on protein metabolism in thermal injury. DeMichele SJ, et al. **Am J Clin Nutr** 1989 Dec;50(6):1295–302

Amide local anesthetics reduce albumin extravasation in burn injuries. Cassuto J, et al. **Anesthesiology** 1990 Feb; 72(2):302–7

Vancomycin pharmacokinetics in burn patients and intravenous drug abusers. Rybak MJ, et al. **Antimicrob Agents Chemother** 1990 May;34(5):792–5

Identification of a novel tumor necrosis factor alpha/cachectin from the livers of burned and infected rats. Keogh C, et al. **Arch Surg** 1990 Jan;125(1):79–84; discussion 85

Systemic absorption of sulphadiazine, silver sulphadiazine and sodium sulphadiazine through human burn wounds. Aoyama H, et al. **Burns** 1990 Jun;16(3):163–5

An investigation of the anabolic activity of somatropin in normal and burned rats. Belcher HJ, et al. **Burns** 1990 Feb; 16(1):17–20

Plasma levels of cutaneous burn toxin and lipid peroxides in thermal injury. Sparkes BG, et al. **Burns** 1990 Apr; 16(2):118–22

Metabolic alterations in burn patients: detection of adenosine triphosphate degradation products and lipid peroxides. Woolliscroft JO, et al. **Burns** 1990 Apr;16(2):92–6

Increased levels of circulating interleukin 6 in burn patients. Guo Y, et al. **Clin Immunol Immunopathol** 1990 Mar; 54(3):361–71

Effect of increasing oxygen delivery postburn on oxygen consumption and oxidant–induced lipid peroxidation in the adult sheep. Demling RH, et al. **Crit Care Med** 1989 Oct; 17(10):1025–30

Injury–induced inhibition of small intestinal protein and nucleic acid synthesis. Carter EA, et al. **Gastroenterology** 1990 Jun;98(6):1445–51

Pharmacokinetics of ticarcillin/clavulanate in severely burned patients. Adam D, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:121–9

The increased release of prostaglandin E2 by Kupffer cells from burned guinea pigs. Ogle CK, et al. **J Burn Care Rehabil** 1990 Jul–Aug;11(4):287–94

Effect of acute burn trauma on phagocytic activity of the reticuloendothelial system in rats. Trop M, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):388–93

Effect of ibuprofen on the postburn hypermetabolic response: a case report. Waymack JP, et al. **J Burn Care Rehabil** 1990 Jul–Aug;11(4):340–2

The influence of serum albumin and alpha 1–acid glycoprotein on vancomycin protein binding in patients with burn injuries. Zokufa HZ, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):425–8

Thermal injury effects on drug disposition: a prospective study with piperacillin. Shikuma LR, et al.

J Clin Pharmacol 1990 Jul;30(7):632–7
Wound endotoxin is not a principal mediator of postburn hypermetabolism in rats. Aulick LH, et al. J Trauma 1990 Apr;30(4):457–62
Systemic lipid peroxidation and inflammation induced by thermal injury persists into the post-resuscitation period. Demling RH, et al. J Trauma 1990 Jan;30(1):69–74
The effect of free radical scavengers on outcome after infection in burned mice. Fang CH, et al. J Trauma 1990 Apr;30(4):453–6
The effect of dietary fatty acids on response to Pseudomonas infection in burned mice. Peck MD, et al. J Trauma 1990 Apr;30(4):445–52
Validation of a new formula for calculating the energy requirements of burn patients. Allard JP, et al.
JPEN J Parenter Enteral Nutr 1990 Mar–Apr;14(2):115–8
Effect of low-dose bradykinin on glucose metabolism and nitrogen balance in surgical patients. Hartl W, et al.
Lancet 1990 Jan 13;335(8681):69–71
Human skin and post-burn scar hyaluronan: demonstration of the association with collagen and other proteins. Burd DA, et al. Matrix 1989 Aug;9(4):322–7
Differentiation between septic and postburn insulin resistance. Shangraw RE, et al. Metabolism 1989 Oct; 38(10):983–9
Increases in postburn hypermetabolism caused by application of topical ointments. Herndon DN, et al. Surg Forum 1978; 29:49–51
Collagen synthesis and prostaglandin inhibition in burns. Salomon JC, et al. Surg Forum 1978;29:601–3
Cutaneous thermal injury alters macromolecular permeability of rat small intestine. Carter EA, et al. Surgery 1990 Mar; 107(3):335–41
Intestinal permeability is increased in burn patients shortly after injury. Deitch EA. Surgery 1990 Apr;107(4):411–6
Early postburn lipid peroxidation: effect of ibuprofen and allopurinol. Demling RH, et al. Surgery 1990 Jan; 107(1):85–93
Early burn excision attenuates the postburn lung and systemic response to endotoxin. Demling RH, et al. Surgery 1990 Jul;108(1):28–35
Effect of a body burn on endotoxin-induced lipid peroxidation: comparison with physiologic and histologic changes. Demling RH, et al. Surgery 1990 Jun; 107(6):669–76
The effect of insulin-like growth factor I on postburn hypermetabolism. Strock LL, et al. Surgery 1990 Aug; 108(2):161–4
[Dynamic observation of the fibronectin content in plasma and subeschar tissue following burn] Chen GH.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1990 Mar;6(1):14–6, 74 (Eng. Abstr.) (Chi)
[A comparative study of free amino-acids in serum and blister fluid in burned patients] Chen YZ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Jun;2(2):109–10, 154 (Eng. Abstr.) (Chi)
[Changes in cAMP and cGMP in the liver and heart in early stages of burn injury in rats] Fan ZQ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Jun;5(2):134–5 (Chi)
[A study of vitamins A and C allowances in burn patients] Gao LX.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Dec;4(4):274–6, 318 (Eng. Abstr.) (Chi)
[An analysis of contents of burn blister fluid] Guo ZR.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Sep;3(3):208–9 (Chi)
[Peroxidation of the small intestine and its effect on absorption of amino acids in burned rats] Li CZ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1990 Mar;6(1):53–6, 78 (Eng. Abstr.) (Chi)
[Effect of insulin on the intestinal absorption of glucose in scalded rats] Qin ZY, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Dec;1(4):267–9 (Eng. Abstr.) (Chi)
[The effect of two resuscitation regimens on cardionatrin during burn shock] Sun SR.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Sep;3(3):213–5 (Chi)
[Effect of glucocorticoid hormone on the stress reaction in burned rabbits] Sun XG, et al.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Dec;1(4):247 (Chi)
[Alteration of plasma colloidal osmotic pressure and osmolarity by a hypertonic salt solution and a balanced salt solution in rabbits resuscitated from burn shock] Xia ZF.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Dec;1(4):243–7 (Eng. Abstr.) (Chi)
[A study of intracellular pH and energy metabolism of myocardium of burned rats with the aid of 31p nuclear magnetic resonance] Xia ZF.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Jun;3(2):145–7, 159 (Eng. Abstr.) (Chi)
[Effects of F.D.P. and D.C.A. on myocardial energy metabolism and intracellular pH of hearts of severely burned rats] Xia ZF.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1988 Sep;4(3):208–11, 238 (Eng. Abstr.) (Chi)
[Trace elements in the serum and blister fluid of burn patients] Yang HY.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Sep;3(3):187–90 (Chi)
[Effect of 30% body surface burns on the gluconeogenic capacity of rat kidneys] Zhai ZJ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Sep;2(3):219–22, 237–8 (Eng. Abstr.) (Chi)
[Changes in organ water content in patients with postburn multiple organ failure] Zhao ZD.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1990 Mar;6(1):50–2, 78–9 (Eng. Abstr.) (Chi)
[Pharmacokinetic study of propofol in burn patients] Galizia JP, et al. Ann Fr Anesth Reanim 1989;8 Suppl:R157 (Fre)
[The value of the indicators of oxygen balance in burn patients in the prognosis of the outcomes of burn disease] Pekarskiĭ DE, et al. Klin Khir 1990;(3):45–7 (Eng. Abstr.) (Rus)
[Changes in the testosterone levels in the serum and androgen receptor levels in the liver during experimental burns in immature rats] Davletov EG, et al. Vopr Med Khim 1990 Mar–Apr;36(2):49–50 (Eng. Abstr.) (Rus)
[The state and possible mechanisms of impairment of oxygen-dependent processes in burns (review of the literature)] Riabinin VE, et al. Vopr Med Khim 1990 Jan–Feb;36(1):7–13 (77 ref.) (Rus)

MICROBIOLOGY

The effect of bacterial products on human fibroblast and keratinocyte detachment and viability. Taylor D, et al.
Br J Dermatol 1990 Jan;122(1):23–8
Effect of intraluminal antibiotics on translocation of Candida albicans in burned guinea-pigs. Epstein MD, et al.
Burns 1990 Apr;16(2):105–8
Analysis of infection in a burn ward. Husain MT, et al.
Burns 1989 Oct;15(5):299–302
Alteration of wound colonization by selective intestinal decontamination in thermally injured mice. Manson WL, et al. Burns 1990 Jun;16(3):166–8
Topical antimicrobial testing of burn wound microorganisms: evaluation of a new technique. Taddonio TE, et al.
Burns 1990 Feb;16(1):64–6
Pseudomonas elastase acts as a virulence factor in burned hosts by Hageman factor-dependent activation of the host kinin cascade. Holder IA, et al. Infect Immun 1989 Nov; 57(11):3345–8
A comparison of effects of thermal injury and smoke inhalation on bacterial translocation. Morris SE, et al.
J Trauma 1990 Jun;30(6):639–43; discussion 643–5
Prevention of yeast translocation across the gut by a single enteral feeding after burn injury. Inoue S, et al.
JPEN J Parenter Enteral Nutr 1989 Nov–Dec;13(6):565–71
[Clinical significance of quantitative bacterial culture of the sub-eschar tissue in burns] Ma KX.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Sep;3(3):195–7 (Chi)
[Direct smear and staining of a burned tissue homogenate to predict the quantity of bacteria] Qin XJ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Mar;5(1):45–6 (Chi)
[On clinical examination of bacteria invading the deep tissues on burns] Tian FQ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Dec;1(4):289–91 (Eng. Abstr.) (Chi)
[Bacteriologic study of lung infection in 47 cases of burns] Cui DJ. Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1990 Apr;13(2):95–8, 127 (Eng. Abstr.) (Chi)
[A variety of microorganism species at the burn ward] Han ZX. Chung Hua Wai Ko Tsa Chih 1989 Sep;27(9):546–9, 574 (Eng. Abstr.) (Chi)
[Opportunistic infection and systemic dissemination in burns] Zhang YP. Chung Hua Wai Ko Tsa Chih 1989 Dec; 27(12):750–2, 781–2 (Eng. Abstr.) (Chi)
[Pathogen spectrum and pathways of infection at an intensive care burn unit] Kistler D, et al.
Anasth Intensivther Notfallmed 1990 Jun;25(3):216–21 (Eng. Abstr.) (Ger)

MORTALITY

Effect of low dose recombinant interleukin 2 plus indomethacin on mortality after sepsis in a murine burn model. Horgan PG, et al. Br J Surg 1990 Apr;77(4):401–4
Mortality from burns in Kuwait. Bang RL, et al. Burns 1989 Oct;15(5):315–21
Causes of death in aged burn patients: analysis of 36 cases. Li BG, et al. Burns 1990 Jun;16(3):207–10
Fatal tapwater scald burns in the USA, 1979–86. Walker AR. Burns 1990 Feb;16(1):49–52
Increased mortality with intravenous supplemental feeding in severely burned patients. Herndon DN, et al.
J Burn Care Rehabil 1989 Jul–Aug;10(4):309–13
A study of major burn unit mortality from 1978 to 1988. McGregor JC. J R Coll Surg Edinb 1989 Dec;34(6):326–7
Improving survival in the burned patient. Yarbrough DR 3d. J S C Med Assoc 1990 Jun;86(6):347–9
Incidence of mortality in boys and girls after severe thermal burns. Barrow RE, et al. Surg Gynecol Obstet 1990 Apr; 170(4):295–8
[A clinical analysis of characteristics of morbidity and mortality in 2630 burned patients] Dong YL.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Mar;5(1):10–2, 75 (Eng. Abstr.) (Chi)
[A retrospective survey of burn treatment in recent five years (1981–1985)] Gu B.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Jun;3(2):84–7 (Chi)
[An analysis of death in older burn patients] Li BG.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Jun;5(2):108–10, 158 (Eng. Abstr.) (Chi)
[Analysis of 240 cases of burn patients with Pseudomonas aeruginosa septicemia] Yang XD.
Chung Hua Wai Ko Tsa Chih 1989 May;27(5):292–3, 317 (Eng. Abstr.) (Chi)
[Analysis of fatality in the Dnepropetrovsk Regional Burn Unit] Bizhko IP, et al. Klin Khir 1990;(3):6–7 (Eng. Abstr.) (Rus)
[The structure of fatality in burn disease in children] Vozdvizhenskiĭ SI, et al. Klin Khir 1990;(3):3–5 (Eng. Abstr.) (Rus)

NURSING

The development of a discharge planning index for use in a pediatric acute burn unit. Sampson LJ.
J Burn Care Rehabil 1990 Jul–Aug;11(4):365–71
Thermal trauma. Dyer C, et al. Nurs Clin North Am 1990 Mar;25(1):85–117 (34 ref.)

PATHOLOGY

Structural changes of Kupffer cells in rat liver following experimental thermal injury. Okabayashi K, et al. Burns 1990 Apr;16(2):83–8
Incidence of hypertrophic scarring in burn-injured children. Spurr ED, et al. Burns 1990 Jun;16(3):179–81
Unsuspected cerebral Toxocara infection in a fire victim. Nelson J, et al. Clin Neuropathol 1990 Mar–Apr;9(2):106–8
Rating the burn scar. Sullivan T, et al.
J Burn Care Rehabil 1990 May–Jun;11(3):256–60
Sutureless microvascular anastomosis using the THC:YAG laser: a preliminary report. Bass LS, et al. Microsurgery 1989;10(3):189–93
The pattern of burn injuries in childhood. Heaton PA.
N Z Med J 1989 Nov 8;102(879):584–6
[Wound healing in the donor areas in burn patients] Zagurov G. Khirurgiia (Sofiia) 1989;42(3):52–7 (Eng. Abstr.) (Bul)
[The relationship between morphological changes of thyroid gland and serum calcium in severely burned dogs] Ge XY.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Dec;3(4):296–7 (Chi)
[The clinicopathological findings of multiple organ failure in major burns] Jia XM.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Jun;3(2):108–11, 156 (Eng. Abstr.) (Chi)
[Experimental study of injury of the tunica elastica interna after heat burn] Shen ZN.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Mar;3(1):51–4 (Chi)
[Histological and ultrastructural changes of the kidneys in burn-blast combined injuries in dogs] Shi JQ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Sep;1(3):166–8, 237 (Eng. Abstr.) (Chi)
[Ultrastructure of myocardium and permeability of cell membrane in early severe burns of mice] Tang GY.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Mar;5(1):51–2, 79 (Eng. Abstr.) (Chi)
[Pathological study of the burned dogs treated with two different resuscitation regimens during shock period] Wang DW.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1987 Sep;3(3):223–6, 240 (Eng. Abstr.) (Chi)
[A pathologic study of adenohypophyseal growth hormone cells in the rabbit after severe burn] Wu J.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1989 Jun;5(2):119–21, 158–9 (Eng. Abstr.) (Chi)
[Follow-up of burn injuries using the PINI index] Kudláčková M, et al. Rozhl Chir 1989 Sep;68(8–9):595–9 (Eng. Abstr.) (Cze)
[Eruptive viral warts of the burn area] Höpfl R, et al.
Hautarzt 1990 Jun;41(6):329–30 (Eng. Abstr.) (Ger)
[A heat gelatinized subdural hematoma in a burned cadaver as an indication of a vital accident] Ritter C.
Z Rechtsmed 1990;103(3):227–30 (Eng. Abstr.) (Ger)
[Comparative morphometric analysis of the reaction of the rat bone to dehydration and burn trauma] Koveshnikov VG, et al. Arkh Anat Gistol Embriol 1989 Jul;97(7):47–53 (Eng. Abstr.) (Rus)
[The ultrastructural changes in the central and peripheral nervous system in burns] Isaev IM, et al. Arkh Patol 1990; 52(4):39–43 (Eng. Abstr.) (Rus)
[Neurohistochemical study of autonomic nerve ganglia and lungs in burns] Isaev IM. Biull Eksp Biol Med 1989 Jul; 108(7):107–9 (Eng. Abstr.) (Rus)
[The pathomorphology of the superior cervical sympathetic ganglia in burns] Isaev IM. Biull Eksp Biol Med 1989 Dec; 108(12):751–3 (Eng. Abstr.) (Rus)
[Pathomorphology of stellate ganglia in thermal injuries of the body] Isaev IM. Biull Eksp Biol Med 1989 Nov; 108(11):628–31 (Eng. Abstr.) (Rus)
[Ultrastructure of nodose ganglia of the vagus nerve in burns] Isaev IM. Biull Eksp Biol Med 1990 Jun;109(6):609–12 (Eng. Abstr.) (Rus)
[Destruction of a long tubular bone in combined mechanical and thermal exposures] Bakhmet'ev VI.
Sud Med Ekspert 1990 Jan–Mar;33(1):19–20 (Eng. Abstr.)

(Rus)

[Forensic medical expertise on burned bone remains] Golubovich LL. **Sud Med Ekspert** 1990 Apr-Jun;33(2):24-8 (Eng. Abstr.) (Rus)

[Innervation of the respiratory tract in lesions of the airways in patients with burns] Boenko SK. **Vestn Otorinolaringol** 1989 Jul-Aug;(4):57-61 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Caloric requirements in burned patients. Pfisterer M, et al. **Acta Anaesthesiol Belg** 1989;40(3):187-94 (33 ref.)

Renal vasoconstriction induced by arachidonic acid during burn shock in rats. Haugan A, et al. **Acta Physiol Scand** 1990 May;139(1):21-7

Acetylcholine receptor density and acetylcholinesterase enzyme activity in skeletal muscle of rats following thermal injury [letter; comment] Martyn JA, et al. **Anesthesiology** 1989 Oct;71(4):625-7 Comment on: Anesthesiology 1989 Apr;70(4):654-9.

Changes in blood flow and metabolism in a neurovascular island skin flap after a burn. Eriksson E, et al. **Ann Plast Surg** 1986 Jul;17(1):79-81

Cardiovascular and neurohumoral responses following burn injury. Crum RL, et al. **Arch Surg** 1990 Aug;125(8):1065-9

Mediators of burn-induced neuromuscular changes in mice. Tomera JF, et al. **Br J Pharmacol** 1989 Nov;98(3):921-9

The use of automatic blood pressure monitors in the burned patient. Bainbridge LC, et al. **Br J Plast Surg** 1990 May; 43(3):322-4

Pulmonary complications in burn patients resuscitated with a low-volume colloid solution. Aharoni A, et al. **Burns** 1989 Oct;15(5):281-4

Thermographic assessment of hand burns. Cole RP, et al. **Burns** 1990 Feb;16(1):60-3

Is postburn dermal ischaemia enhanced by oxygen free radicals? Kaufman T, et al. **Burns** 1989 Oct;15(5):291-4 (48 ref.)

Deep partial skin thickness burns: a reproducible animal model to study burn wound healing. Kaufman T, et al. **Burns** 1990 Feb;16(1):13-6

Acute gastric mucosal lesions, haemodynamic and microcirculatory changes in the thermally injured rat. Kiviluoto T, et al. **Burns** 1989 Dec;15(6):365-70

Pulmonary capillary dynamics and fluid distribution after burn and inhalation injury. Roa L, et al. **Burns** 1990 Feb; 16(1):25-35

Blood volume changes of the anaesthetized rat to a large burn or mock burn injury measured using a continuous measuring circuit. Speakman EA, et al. **Burns** 1989 Oct; 15(5):322-6

Role of skin in the burn-induced reduction of reticuloendothelial phagocytic activity in rats. Trop M, et al. **Burns** 1990 Feb;16(1):57-9

Pathophysiology and pharmacokinetics following burn injury. Bonate PL. **Clin Pharmacokinet** 1990 Feb; 18(2):118-30 (64 ref.)

The use of infrared radiation to reduce heat loss in burned patients: experiments with a phantom. Bowker P, et al. **Clin Phys Physiol Meas** 1981 Nov;2(4):257-70

Burn wound evaporation—an evaluation of air diffusion resistances governing heat transfer in a clean air unit. Ferguson JC, et al. **Clin Phys Physiol Meas** 1989 Nov; 10(4):319-30

A comparison of some thermoregulatory responses in healthy children and in children with burn injury. Childs C, et al. **Clin Sci** 1989 Oct;77(4):425-30

Fluorescence digital microscopy of interstitial macromolecular diffusion in burn injury. Aggarwal SJ, et al. **Comput Biol Med** 1989;19(4):245-61

Toward a re-evaluation of burn resuscitation [editorial] Waxman K. **Crit Care Med** 1989 Oct;17(10):1077

How accurate is pulse oximetry in patients with burn injuries? Barillo DJ, et al. **J Burn Care Rehabil** 1990 Mar-Apr; 11(2):162-6

Alteration in temperature regulation induced by burn injury in the rat. Caldwell FT Jr, et al. **J Burn Care Rehabil** 1989 Nov-Dec;10(6):486-93

4-aminopyridine restores conduction in heat-blocked sciatic branches. Eliasson SG, et al. **J Burn Care Rehabil** 1989 Nov-Dec;10(6):499-503

Effects of auricular acupuncture-like transcutaneous electric nerve stimulation on pain levels following wound care in patients with burns: a pilot study. Lewis SM, et al. **J Burn Care Rehabil** 1990 Jul-Aug;11(4):322-9 (26 ref.)

An evaluation device for quantifying joint stiffness in the burned hand. Luster SH, et al. **J Burn Care Rehabil** 1990 Jul-Aug;11(4):312-7

Fibrinolysis inhibition in human burn blister fluid. Rockwell WB, et al. **J Burn Care Rehabil** 1990 Jan-Feb;11(1):1-6

Sensory loss over grafted areas in patients with burns. Ward RS, et al. **J Burn Care Rehabil** 1989 Nov-Dec;10(6):536-8

Second-degree burn healing: the effect of occlusive dressings and a cream. Davis SC, et al. **J Surg Res** 1990 Mar; 48(3):245-8

Postburn suppression of murine lymphocyte and neutrophil functions is not reversed by prostaglandin blockade. Gadd MA, et al. **J Surg Res** 1990 Jan;48(1):84-90

The pain of burns: characteristics and correlates. Choinière M, et al. **J Trauma** 1989 Nov;29(11):1531-9

Multiple graft harvestings from deep partial-thickness scald wounds healed under the influence of weak direct current. Chu CS, et al. **J Trauma** 1990 Aug;30(8):1044-9; discussion 1049-50

Experimental inhalation injury with concomitant surface burn: dextran resuscitation improves lung water and oxygenation. Schenk WG 3d, et al. **J Trauma** 1990 Jul; 30(7):813-8; discussion 818-9

Endocrine changes after burn trauma—a review. Doleček R. **Kelo J Med** 1989 Sep;38(3):262-76 (80 ref.)

The effects of burn injury on vasoactivity in hamster peripheral microcirculation. Aggarwal SJ, et al. **Microvasc Res** 1990 Jul;40(1):73-87

Wound healing in the patient with burns. Bayley EW. **Nurs Clin North Am** 1990 Mar;25(1):205-22 (28 ref.)

Decreased inflammatory responsiveness of hypophysectomized rats to heat is reversed by a corticotropin-releasing factor (CRF) antagonist. Wei ET, et al. **Regul Pept** 1990 Mar 5;27(3):317-23

Additive effects of thermal injury and infection on the small bowel. Jones WG 2d, et al. **Surgery** 1990 Jul;108(1):63-70

[The effect of whole blood or balanced solution transfusion on heart contractility during the shock period—experimental study] Gao WY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Dec;3(4):293-5 (Chi)

[In vivo alteration in ventricular transmembrane potentials of burned rats] He QJ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Sep;4(3):212-4, 238, 240 (Eng. Abstr.) (Chi)

[Clinical observations on the role played by intravenous drip of large dose of inosine in renal function protection in the course of severe burn shock] Huang ZC, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Dec;1(4):286 (Chi)

[Transvascular fluid exchange in the burn area and systemic hemodynamic changes in goats with second degree burn] Jin LJ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Mar;6(1):47-9, 78 (Eng. Abstr.) (Chi)

[Experimental study on lung injury following severe burn. Early changes in function and hemodynamics and morphologic changes in the lung of dogs with burns] Li LS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Sep;5(3):216-8, 240 back cover (Eng. Abstr.) (Chi)

[The study of hemodynamic changes in resuscitation of burns with two types of fluid regimens] Lin HY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Mar;5(1):53-5, 79 (Eng. Abstr.) (Chi)

[Recovery from multi-organ damage and rehabilitation of severe deformities due to extensive burns] Wang LN, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):161-5, 236 (Eng. Abstr.) (Chi)

[Does thromboxane inhibitor promote healing of deep partial thickness burns?] Wang SL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Sep;4(3):195-7, 236 (Eng. Abstr.) (Chi)

[Microcirculation following burns: 1. The changes in microcirculation of the burned skin] Zhao KS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Mar;3(1):55-7 (Chi)

[Burns of the hand] Groenevelt F. **Ned Tijdschr Geneeskd** 1990 Jan 27;134(4):159-62 (15 ref.) (Dut)

[Energy requirements of surgically treated, injured and infected patients] Adolph M, et al. **Infusionstherapie** 1990 Feb;17(1):5-16 (70 ref.) (Eng. Abstr.) (Ger)

[The state of general and regional hemodynamics in burn disease] Kharchenko VG, et al. **Klin Khir** 1990;(3):7-8 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

A simple method to protect tissue from accidental cautery burns. Guiloff AK, et al. **Ann Plast Surg** 1986 Aug;17(2):169

Radiator scald burns: a preventable hazard. Benmeir P, et al. **Burns** 1990 Apr;16(2):135-6

Importance of planned health education for burn injury prevention. Bouter LM, et al. **Burns** 1990 Jun;16(3):198-202

Coordinated strategies in burn prevention programs: a case study. Hammond J, et al. **J Burn Care Rehabil** 1990 Jul-Aug;11(4):376-8

Cooking-related burn injuries in the elderly preventing the "granny gown" burn. Turner DG, et al. **J Burn Care Rehabil** 1989 Jul-Aug;10(4):356-9

Crawl on your belly like GI Joe. Wade J, et al. **J Burn Care Rehabil** 1990 May-Jun;11(3):261-3

[The choice of work clothes and the risk of ignition] Larsen TK, et al. **Ugeskr Laeger** 1989 Dec 11;151(50):3396-8 (Eng. Abstr.) (Dan)

PSYCHOLOGY

A long-term psychosocial follow-up study of burned adults. Malt UF, et al. **Acta Psychiatr Scand Suppl** 1989;355:94-102

Post-traumatic stress [letter; comment] White AC. **Br J Psychiatry** 1989 Jun;154:886-7 Comment on: Br J Psychiatry 1989 Feb;154:221-8.

A "hateful epileptic" patient in the burn unit [clinical conference] Wurzberger B, et al. **Gen Hosp Psychiatry** 1990 May;12(3):198-204

Burned children [letter; comment] Kavanagh CK. **J Am Acad Child Adolesc Psychiatry** 1990 May;29(3):487 Comment on: J Am Acad Child Adolesc Psychiatry 1989 Jul;28(4):589-95.

Adaptation of self-image in burn-disfigured children. Beard SA, et al. **J Burn Care Rehabil** 1989 Nov-Dec;10(6):550-4

Patient perception of quality of life after burn injury. Results of an eleven-year survey. Cobb N, et al. **J Burn Care Rehabil** 1990 Jul-Aug;11(4):330-3

Restoration of play in a severely burned three-year-old child. Mahaney NB. **J Burn Care Rehabil** 1990 Jan-Feb; 11(1):57-63

Body image, self-esteem, and depression in burn-injured adolescents and young adults. Orr DA, et al. **J Burn Care Rehabil** 1989 Sep-Oct;10(5):454-61

Post-traumatic stress disorder in hospitalized patients with burn injuries. Patterson DR, et al. **J Burn Care Rehabil** 1990 May-Jun;11(3):181-4

Post-traumatic stress disorder [letter; comment] Sieck HS. **J Burn Care Rehabil** 1990 Jan-Feb;11(1):96 Comment on: J Burn Care Rehabil 1989 May-Jun;10(3):247-50.

Volitional collapse (loss of the will to live) in patients with burn injuries. Treatment strategy. Tempereau CE, et al. **J Burn Care Rehabil** 1989 Sep-Oct;10(5):464-8

Behavioral adjustment of pediatric burn victims. Tarnowski KJ, et al. **J Pediatr Psychol** 1989 Dec;14(4):607-15

Burns [comment] Crompton D, et al. **Med J Aust** 1990 May 21;152(10):509-11 Comment on: Med J Aust 1990 May 21;152(10):547-8.

Comparisons between patients' and nurses' assessment of pain and medication efficacy in severe burn injuries. Choinière M, et al. **Pain** 1990 Feb;40(2):143-52

[Psychological problems among children with burn injuries] Ulvik A. **Tidsskr Nor Laegeforen** 1989 Nov 10; 109(31):3203-4 (Eng. Abstr.) (Nor)

REHABILITATION

Acetaminophen use in a burn rehabilitation unit [letter] Rice TL. **Am J Hosp Pharm** 1990 Aug;47(8):1746

Factors influencing return to employment after a burn injury. Bowden ML, et al. **Arch Phys Med Rehabil** 1989 Oct; 70(10):772-4

Rehabilitation of the burned hand. Puddicombe BE, et al. **Hand Clin** 1990 May;6(2):281-92 (10 ref.)

Cardiovascular rehabilitation of patients with burns. Adams RB, et al. **J Burn Care Rehabil** 1990 May-Jun;11(3):246-55 (53 ref.)

Range of motion of the shoulder performed while patient is anesthetized. Blassingame WM, et al. **J Burn Care Rehabil** 1989 Nov-Dec;10(6):539-42

The value of isokinetic exercise and testing in burn rehabilitation and determination of back-to-work status. Cronan T, et al. **J Burn Care Rehabil** 1990 May-Jun; 11(3):224-7

Use of a ramp surface for lower extremity exercise with burn-injured patients. Duncan CE. **J Burn Care Rehabil** 1989 Jul-Aug;10(4):346-9

Community reintegration program. Goggins M, et al. **J Burn Care Rehabil** 1990 Jul-Aug;11(4):343-6

Use of positive plaster impressions to facilitate measurement of anti-burn scar support gloves for severely burned hands. Ward RS, et al. **J Burn Care Rehabil** 1989 Jul-Aug; 10(4):351-3

Management of long standing post burn deformities of hand. Chowdhury SR, et al. **J Indian Med Assoc** 1989 Nov; 87(11):251-3

A mouth splint for severe burns of the head and neck. Sela M, et al. **J Prosthet Dent** 1989 Dec;62(6):679-81

[Removal of postburn scar deformations of the lower third of the face] Grishkevich VM, et al. **Klin Khir** 1990;(3):17-20 (Eng. Abstr.) (Rus)

[The correction of postburn deformation of the neck using a musculocutaneous flap from the major pectoral muscle] Svistoniuk IU. **Klin Khir** 1990;(3):47-9 (Eng. Abstr.) (Rus)

SURGERY

Surgery for adduction contracture of the thumb after burn. Dmitriyev GI, et al. **Acta Chir Plast** 1989;31(4):236-42

First experiences with clinical application of cultured auto-epithelium grafts. Königová R, et al. **Acta Chir Plast** 1989;31(4):193-200

Does rapid wound closure improve survival in older patients with burns? Scott-Conner CE, et al. **Am Surg** 1990 Jan; 56(1):57-60

Continuous brachial plexus blockade. A technique that uses an axillary catheter to allow successful skin grafting. Randalls B. **Anaesthesia** 1990 Feb;45(2):143-4

Decreased oxygen consumption during anesthesia and surgery: decreased metabolism or oxygen deficit? [letter; comment] Sosis MB. **Anesth Analg** 1990 Apr;70(4):468-9 Comment on: Anesth Analg 1989 Oct;69(4):431-6.

Doppler-guided axillary block in a burn patient [letter] Kestenbaum AD, et al. **Anesthesiology** 1990 Sep;73(3):586-7

Outpatient or short-stay skin grafting with early ambulation for lower-extremity burns. Dean S, et al. **Ann Plast Surg** 1990 Aug;25(2):150-1

Treatment of the concrete scalp donor site. Engrav LH, et al. **Ann Plast Surg** 1990 Feb;24(2):162-4

The dartos musculocutaneous island flap in urethral reconstruction. Kenney JG, et al. **Ann Plast Surg** 1990 Jan; 24(1):63-7

Tissue expansion in the correction of burn alopecia: classification and methods of correction. McCauley RL,

et al. **Ann Plast Surg** 1990 Aug;25(2):103–15
Single-donor fibrin glue for hand burns. Stuart JD, et al. **Ann Plast Surg** 1990 Jun;24(6):524–7
Breast reconstruction by tissue expansion for congenital and burn deformities. Versaci AD, et al. **Ann Plast Surg** 1986 Jan;16(1):20–31
Increasing flap survival: a new method. Zhu ZX, et al. **Ann Plast Surg** 1990 May;24(5):414–9
Early burn wound excision significantly reduces blood loss. Desai MH, et al. **Ann Surg** 1990 Jun;211(6):753–9; discussion 759–62
Cultured epidermis for the coverage of massive burn wounds. A single center experience. Munster AM, et al. **Ann Surg** 1990 Jun;211(6):676–9; discussion 679–80
Characterization of cellular elements in healed cultured keratinocyte autografts used to cover burn wounds. Petersen MJ, et al. **Arch Dermatol** 1990 Feb;126(2):175–80
Characterization of cellular elements in healed cultured keratinocyte autografts used to cover burn wounds [letter] Phillips TJ, et al. **Arch Dermatol** 1990 Aug;126(8):1104–5
Alfentanil and propofol infusions for surgery in the burned patient. Reyneke CJ, et al. **Br J Anaesth** 1989 Oct; 63(4):418–22
The multiple Y-V plasty in linear burn scar contracture release. Cooper MA. **Br J Plast Surg** 1990 Mar;43(2):145–9
Extracorporeal tissue transfer for extensive facial defects. Govila A. **Br J Plast Surg** 1989 Sep;42(5):521–5
Use of cultured human epidermal keratinocytes for allografting burns and conditions for temporary banking of the cultured allografts. Bolívar-Flores J, et al. **Burns** 1990 Feb;16(1):3–8
Successful homografting in an elderly patient with extensive burns using his identical twin brother as skin donor. Coenen JM, et al. **Burns** 1990 Jun;16(3):225–6
Multicentre experience in the treatment of burns with autologous and allogenic cultured epithelium, fresh or preserved in a frozen state. De Luca M, et al. **Burns** 1989 Oct;15(5):303–9
Novel method of skin substitution in plastic surgery [see comments] Khalfan HA, et al. **Burns** 1989 Oct;15(5):335–7 Comment in: Burns 1990 Feb;16(1):71–2.
Expanding oral angle plasty using a subcutaneous pedicle flap to correct severe microstomia after extensive facial burns. Sawada Y, et al. **Burns** 1990 Jun;16(3):230–2
Effect of autografting on the diameter of collagen fibrils in human postburn wounds. Takayanagi K, et al. **Burns** 1989 Oct;15(5):287–90
Experience of reverse medial arm flaps in the reconstruction of burned elbow scar contractures. Yang JY. **Burns** 1989 Oct;15(5):330–4
Timing of burn therapy in the pediatric patient. Parks DH. **Clin Plast Surg** 1990 Jan;17(1):65–70
Primary tangential excision for hand burns. Brčić A. **Hand Clin** 1990 May;6(2):211–9 (14 ref.)
Burn excision with intraoperative vasopressin. Achauer BM, et al. **J Burn Care Rehabil** 1989 Jul–Aug;10(4):375–8
Management of pediatric perineal and genital burns: twenty-year review. Alghanem AA, et al. **J Burn Care Rehabil** 1990 Jul–Aug;11(4):308–11
Delayed autograft loss in HIV-positive patients: two cases. DeLaney AR, et al. **J Burn Care Rehabil** 1990 Jan–Feb; 11(1):67–70
Oxygen consumption is increased in the postanesthesia period after burn excision. Demling RH, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):381–7
Determinants of donor site infections in small burn grafts. Griswold JA, et al. **J Burn Care Rehabil** 1989 Nov–Dec; 10(6):531–5
Healing characteristics of expanded autografts on wounds covered with homograft and Biobrane temporary wound dressing. Hartford CE, et al. **J Burn Care Rehabil** 1989 Nov–Dec;10(6):476–80
Reconstructive allotransplantation: considerations regarding integumentary/musculoskeletal grafts, cyclosporine, wound coverage in thermal injury, and the immune response. Hewitt CW, et al. **J Burn Care Rehabil** 1990 Jan–Feb;11(1):74–85 (170 ref.)
Combined ionizing radiation and thermal injury in the rat. Evaluation of early excision and closure of the burn wound. Hirsch EF, et al. **J Burn Care Rehabil** 1990 Jan–Feb; 11(1):42–5
Burn excision with contact neodymium: YAG laser. Hukki J, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):402–5
Replacement of full-thickness burns on mice with isogeneic skin equivalents. Hull BE, et al. **J Burn Care Rehabil** 1990 Jan–Feb;11(1):14–20
A new surgical procedure for aged burn victims: applications of dermolipectomy for burn wounds and donor sites. Ikeda J, et al. **J Burn Care Rehabil** 1990 Jan–Feb;11(1):27–31
Application of autologous fibrin glue in burn wounds. Saltz R, et al. **J Burn Care Rehabil** 1989 Nov–Dec;10(6):504–7
Effect of aggressive surgical treatment in older patients with burns. Slater AL, et al. **J Burn Care Rehabil** 1989 Nov–Dec; 10(6):527–30
Prosthetic use in patients with burns and associated limb amputations. Ward RS, et al. **J Burn Care Rehabil** 1990 Jul–Aug;11(4):361–4
An early surgical approach to burns in the elderly. Kara M, et al. **J Trauma** 1990 Apr;30(4):430–2
The use of cultured autologous epidermis in the treatment of extensive burn wounds. Teepe RG, et al. **J Trauma** 1990 Mar;30(3):269–75
The radial forearm skin graft–fascial flap. Cherup LL, et al. **Plast Reconstr Surg** 1990 Jun;85(6):898–902
The "sponge deformity" after tangential excision and grafting of burns [letter; comment] Danielson J, et al. **Plast Reconstr Surg** 1989 Dec;84(6):1006 Comment on: Plast Reconstr Surg 1989 Mar;83(3):468–70.
Superficial cervical artery skin flaps. Hyakusoku H, et al. **Plast Reconstr Surg** 1990 Jul;86(1):33–8
Direct mounting of cultured epidermal grafts. A way to enhance the transplantation area. Haegerstrand A, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(3):169–71
Salvage of an avulsed expanded scalp flap to correct burn alopecia. Ortega MT, et al. **South Med J** 1990 Feb; 83(2):220–3 (6 ref.)
Tourniquet technique for reduced blood loss and wound assessment during excisions of burn wounds of the extremity. Marano MA, et al. **Surg Gynecol Obstet** 1990 Sep;171(3):249–50
[The use of an indigenous skin tissue expander in reconstructive surgery after burn injury] Ai YF. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):247–8, 315 (Eng. Abstr.) (Chi)
[Plastic surgery of scar deformity of the breast following burns] Cao HP. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):241–2 (Chi)
[An overview of progress in burn wound management in China] Ding YL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Mar;5(1):56–8 (14 ref.) (Chi)
[Seeding of autologous epithelial cells into the allograft dermis as coverage for full-thickness burns] Feng GD. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Sep;5(3):161–3, 235 (Eng. Abstr.) (Chi)
[Application of a free medial thigh flap to the treatment of late postburn cases (report of 6 cases)] Guan WX. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):258–9, 317 (Eng. Abstr.) (Chi)
[Prevention of deformities using thick split-thickness skin grafts to repair infected wounds. Report of 22 cases] Hu ZY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Sep;5(3):203–5, 239 (Eng. Abstr.) (Chi)
[Transplantation of a platysma musculocutaneous flap for burn wounds and scar contractures of the occipito-cervical region] Huan XY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Sep;3(3):206–7, 239 (Eng. Abstr.) (Chi)
[Thumb reconstruction using the index ray remnant in a postburn, crippled hand] Jin YT. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Mar;2(1):40–1, 75–6 (Eng. Abstr.) (Chi)
[The early treatment of a second degree burned wound—the use of a carborundum disk in debridement (report of 25 cases)] Kao ZD. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Dec;1(4):287 (Chi)
[Early escharectomy and grafting in the treatment of deep facial-cervical burns] Li CL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Sep;3(3):200–1 (Chi)
[Experiences in the successful management of a 100% TBSA (total body surface area) (third degree 96%) burn patient with severe inhalation injury] Li TZ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Sep;5(3):169–71 (Chi)
[Relation of early wound treatment and late deformity in burned children] Lu H. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Jun;6(2):89–90, 156 (Eng. Abstr.) (Chi)
[Correction of burn scar contracture of joints by traction] Luo JH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Dec;3(4):271–2, 319 (Eng. Abstr.) (Chi)
[Treatment of full-thickness burn by planned replacement using glutaraldehyde porcine skin with an autograft] Mu XX. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Sep;5(3):193–6, 238 (Eng. Abstr.) (Chi)
[An analysis of burn wound care in 182 cases with third degree burns] Pu SS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):202–3 (Chi)
[The use of free tissue flaps with anastomoses of blood vessels in the treatment of deep burns (analysis of 49 cases)] Shen ZN. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Dec;3(4):247–50 (Chi)
[The fate of a burned necrotic tubular bone covered by tissues with adequate blood supply] Shen ZY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):264–5 (Chi)
[The use of axial-pattern cutaneous and musculocutaneous flap transposition in the reconstruction of deep burns] Shen ZY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Mar;5(1):4–7, 74 (Eng. Abstr.) (Chi)
[The repair of severely perforated facial burns—report of 4 cases] Shi HR. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Mar;3(1):1–2 (Chi)
[Burned bone treated with free skin autograft: report of 19 cases] Su ZY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):260–1, 317 (Eng. Abstr.) (Chi)
[The treatment of the heat-mangled upper extremity] Sun YH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):211–2, 226, 239–40 (Eng. Abstr.) (Chi)
[Significance of preservation of a length of a burned phalangeal bone and its method of reconstruction] Sun YH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):252–4 (Chi)
[Skin pulp of auto-epithelium and homeoderma in the treatment of extensive full thickness burns—a new method of skin grafting] Sun YH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Sep;4(3):161–3, 233 (Eng. Abstr.) (Chi)
[Surgical treatment of scar contracture of a burned hand] Wang JD. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Dec;3(4):276–8 (Chi)
[Early excision and one-stage grafting with full-thickness autologous skin in total deep burn of the face] Wang JD. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Jun;3(2):103–5 (Chi)
[Clinical analysis of 64 cases of burns in aged patients] Yang HY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Sep;2(3):165–8 (Chi)
[Early escharectomy of third degree burns in perineal region—report of two cases] Yu SH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Jun;2(2):142, 144 (Chi)
[Early treatment of third degree burns of the entire hand] Zhang DC. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Jun;5(2):87–8, 156 (Eng. Abstr.) (Chi)
[Application of soft tissue expander in postburn cases (report on 10 cases)] Zhang DS, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Dec;1(4):241–2 (Eng. Abstr.) (Chi)
[The clinical application and viability assay of deep frozen stillborn skin] Zhang GD. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Jun;2(2):96–7 (Chi)
[The use of microskin-grafting in extensive burns] Zhang ML. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Jun;3(2):100–2, 156 (Eng. Abstr.) (Chi)
[Study on escharectomy and skin grafting in large and deep burns] Zhang ML. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):218–20 (Chi)
[Cultured allogenous epidermis and its clinical use—a preliminary report] Zhang WG, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Sep;4(3):180–1, 234–5 (Eng. Abstr.) (Chi)
[Prevention of deformities by early grafting in special areas of burns] Zhong DC, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Dec;1(4):253–4 (Eng. Abstr.) (Chi)
[Chlorhexidine-alcohol refrigerated porcine skin—a simple and long-term stored xenograft. 2. Preliminary experience with its use as a biological dressing for burn wounds] Zhu DA, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Mar;3(1):26–8, 78 (Eng. Abstr.) (Chi)
[Clinical application of grafts of cultured epidermis in burn patients. Apropos of 16 patients] Foyatier JL, et al. **Ann Chir Plast Esthet** 1990;35(1):39–46 (Eng. Abstr.) (Fre)
[Surgical therapeutic approach with the burn patient] Jacquemin D. **Rev Med Liege** 1989 Sep 1;44(17):525–7 (Fre)
[Bridging a subtotal ureter necrosis following burn injury by autotransplantation of the kidney and pyelo-cystostomy] Niebel W, et al. **Chirurg** 1989 Oct;60(10):707–10 (Ger)
[Radial island flap for the reconstruction of the 1st commissure] Noever G, et al. **Handchir Mikrochir Plast Chir** 1990 May;22(3):145–8 (Eng. Abstr.) (Ger)
[Follow-up of extensive burns in an HIV positive patient. Case report] de Roche R, et al. **Unfallchirurg** 1990 Feb; 93(2):84–7 (Eng. Abstr.) (Ger)
[Surgical treatment of burns] Røttingen JT, et al. **Tidsskr Nor Laegeforen** 1989 Nov 10;109(31):3195–6 (Eng. Abstr.) (Nor)
[Selection of the method of operation on the stomach in the complex treatment of esophageal and gastric burns] Chernousov AF, et al. **Khirurgiia (Mosk)** 1990 Feb; (2):55–60 (Eng. Abstr.) (Rus)
[Correction of extensive defects in soft tissues] Grishkevich VM, et al. **Khirurgiia (Mosk)** 1989 Dec;(12):91–3 (Eng. Abstr.) (Rus)
[Surgical treatment of post-burn deformities of the neck] Iudenich AA, et al. **Khirurgiia (Mosk)** 1989 Dec;(12):93–6 (Eng. Abstr.) (Rus)
[A method of expansion of soft tissues in plastic and reconstruction surgery (review of the literature)] Moroz VIu, et al. **Khirurgiia (Mosk)** 1989 Aug;(8):140–3 (54 ref.) (Rus)
[Characteristics of the wound process in patients with burns treated by tube hyperalimentation] Sologub VK, et al.

Khirurgiia (Mosk) 1989 Aug;(8):13–6 (Eng. Abstr.) **(Rus)**

[The effect of the microflora in burn wounds on the survival of free skin flaps in autodermoplasty] Le N. **Klin Khir** 1990; (3):13–5 (Eng. Abstr.) **(Rus)**

[Use of a new cutaneo–fascial islet flap from the posterior surface of the thigh for plastic surgery of wound defects in the region of the knee joint] Vikhriev BS, et al. **Klin Khir** 1989;(12):59–60 **(Rus)**

[The system of active surgical treatment of severely burned patients] Atiasov NI. **Vestn Khir** 1990 Feb;144(2):136–40 (Eng. Abstr.) **(Rus)**

[Vascular microsurgery during esophagoplasty in children] Bairov GA, et al. **Vestn Khir** 1989 Jun;142(6):69–71 (Eng. Abstr.) **(Rus)**

[Hemodynamic characteristics of autologous microsurgical transplantation of the greater omentum] Milanov NO, et al. **Vestn Khir** 1990 Jan;144(1):90–2 (Eng. Abstr.) **(Rus)**

[Obtaining and transplantation of the epidermis in the treatment of full–layer skin defects] Ostrovskii AA, et al. **Vestn Khir** 1990 Mar;144(3):94–8 **(Rus)**

[Anesthesia and lumbar epidural anesthesia in an infant with third–degree burns] Arqués Teixidor P, et al. **Rev Esp Anestesiol Reanim** 1989 Sep–Oct;36(5):288–90 (Eng. Abstr.) **(Spa)**

THERAPY

Recent advances in burn wound management in China. Ding YL, et al. **Acta Chir Plast** 1989;31(2):84–91 (10 ref.)

Local treatment for extensive deep dermal thickness burn and follow–up study. Fujii T. **Acta Chir Plast** 1990; 32(1):46–56

Burn wound care. Waymack JP, et al. **Adv Surg** 1990; 23:261–89 (72 ref.)

Securing endotracheal tubes in patients with facial burns or trauma. Ward CG, et al. **Am J Surg** 1990 Mar;159(3):339–40

Outpatient management of partial–thickness burns: Biobrane versus 1% silver sulfadiazine. Gerding RL, et al. **Ann Emerg Med** 1990 Feb;19(2):121–4

Current concepts in burn care. Wisnicki JL, et al. **Ann Plast Surg** 1986 Mar;16(3):242–9 (72 ref.)

Duplex scanning of central vascular access sites in burn patients. Wait M, et al. **Ann Surg** 1990 Apr;211(4):499–503

Intraoral scalds [letter; comment] Cooper MA, et al. **BMJ** 1990 Apr 21;300(6731):1075–6 Comment on: BMJ 1990 Mar 3;300(6724):597–8.

Cultured keratinocytes and keratinocyte grafts. Hancock K, et al. **BMJ** 1989 Nov 11;299(6709):1179–80 (32 ref.)

The use of semi–permeable membranes for wound management. Martin DL, et al. **Br J Plast Surg** 1990 Jan; 43(1):55–60

Water vapour permeance: a meaningful measure for water vapour permeability of wound coverings. Erasmus ME, et al. **Burns** 1989 Dec;15(6):371–5

Management of partial skin thickness burn wounds with Inadine dressings. Han KH, et al. **Burns** 1989 Dec; 15(6):399–402

Feed that burn. James Ellsworth Laing prize–winning essay for 1989. Henley M. **Burns** 1989 Dec;15(6):351–61 (54 ref.)

Histological and bacteriological studies of burn wounds treated with boiled potato peel dressings. Keswani MH, et al. **Burns** 1990 Apr;16(2):137–43

Fate of mass burn casualties: implications for disaster planning. Mackie DP, et al. **Burns** 1990 Jun;16(3):203–6

Amniotic membrane as a biological dressing in the management of burns. Sawhney CP. **Burns** 1989 Oct; 15(5):339–42

Modified fluid regimen for an extensively burned patient with a previous major amputation [letter] Tiwari VK, et al. **Burns** 1989 Dec;15(6):412

Allografted keratinocytes used to accelerate the treatment of burn wounds are replaced by recipient cells. van der Merwe AE, et al. **Burns** 1990 Jun;16(3):193–7

Metabolic and hormonal effects of early nutritional supplementation after surgery in burn patients. Enzi G, et al. **Crit Care Med** 1990 Jul;18(7):719–21

Burns in the elderly patient. Jerrard DA, et al. **Emerg Med Clin North Am** 1990 May;8(2):421–8 (25 ref.)

Acute management of pediatric hand burns. Clarke HM, et al. **Hand Clin** 1990 May;6(2):221–32 (11 ref.)

Decision making in the acute thermal hand burn: an algorithm for treatment. Falcone PA, et al. **Hand Clin** 1990 May; 6(2):233–8

Experience with upper extremity burns. The Mount Vernon experience. Harrison DH, et al. **Hand Clin** 1990 May; 6(2):191–209 (6 ref.)

Skin substitutes in upper extremity burns. Hergrueter CA, et al. **Hand Clin** 1990 May;6(2):239–42 (7 ref.)

Management of burns in major disasters. Sharpe DT, et al. **Injury** 1990 Jan;21(1):41–4; discussion 55–7

Fluid requirements of patients with burns and inhalation injuries in an intensive care unit. Hughes KR, et al. **Intensive Care Med** 1989;15(7):464–6

Hospital and prehospital resources for optimal care of patients with burn injury: guidelines for development and operation of burn centers. American Burn Association. **J Burn Care Rehabil** 1990 Mar–Apr;11(2):98–104

Computer simulation of fluid resuscitation in trauma. First pragmatic validation in thermal injury. Arturson G, et al. **J Burn Care Rehabil** 1989 Jul–Aug;10(4):292–9

Pediatric case studies. Cheney J. **J Burn Care Rehabil** 1989 Jul–Aug;10(4):379–80

Adjunctive hyperbaric oxygen in the treatment of thermal burns. An economic analysis. Cianci P, et al. **J Burn Care Rehabil** 1990 Mar–Apr;11(2):140–3

Adjunctive hyperbaric oxygen therapy reduces length of hospitalization in thermal burns. Cianci P, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):432–5

Water–Jel in the treatment of burns. A bacteriologic study. Doleček R, et al. **J Burn Care Rehabil** 1990 Mar–Apr; 11(2):135–6

The use of a modified tonometer in burn scar therapy. Esposito G, et al. **J Burn Care Rehabil** 1990 Jan–Feb; 11(1):86–90

Caloric needs of adolescent patients with burns. Hildreth MA, et al. **J Burn Care Rehabil** 1989 Nov–Dec;10(6):523–6

Increased gut blood flow with early enteral feeding in burned guinea pigs. Inoue S, et al. **J Burn Care Rehabil** 1989 Jul–Aug;10(4):300–8

The Kerlix tongue–depressor splint for skin–grafted areas in burned children. Kaufman T, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):462–3

Prospective randomized comparison of two types of pressure therapy garments. Kealey GP, et al. **J Burn Care Rehabil** 1990 Jul–Aug;11(4):334–6

Treatment of postextubation stridor in a pediatric patient with burns: the role of heliox. Kemper KJ, et al. **J Burn Care Rehabil** 1990 Jul–Aug;11(4):337–9 (34 ref.)

Immunologic study of artificial skin used in the treatment of thermal injuries. Michaeli D, et al. **J Burn Care Rehabil** 1990 Jan–Feb;11(1):21–6

"How do I do it?" The use of prismatic spectacles in patients with severe cervical burns. Orenstein A, et al. **J Burn Care Rehabil** 1990 Mar–Apr;11(2):144–5

The management of burns to the perineum and genitals. Peck MD, et al. **J Burn Care Rehabil** 1990 Jan–Feb;11(1):54–6

Meshed Biobrane: a dressing for difficult topography. Phillips LG, et al. **J Burn Care Rehabil** 1990 Jul–Aug;11(4):347–51

Obesity: a risk factor in the burn patient. Purdue GF, et al. **J Burn Care Rehabil** 1990 Jan–Feb;11(1):32–4

Should burn blister fluid be evacuated? Rockwell WB, et al. **J Burn Care Rehabil** 1990 Jan–Feb;11(1):93–5

Major burns managed without blood or blood products. Schlagintweit S, et al. **J Burn Care Rehabil** 1990 May–Jun; 11(3):214–20

Histologic study of artificial skin used in the treatment of full–thickness thermal injury. Stern R, et al. **J Burn Care Rehabil** 1990 Jan–Feb;11(1):7–13

A survey of burn hydrotherapy in the United States. Thomson PD, et al. **J Burn Care Rehabil** 1990 Mar–Apr; 11(2):151–5

A modified technique for securing oro–nasal tubes. Wade EJ, et al. **J Burn Care Rehabil** 1990 May–Jun;11(3):244–5

A knowledge–based information system for advice in the crisis management of the patient with burns. Wiener F, et al. **J Burn Care Rehabil** 1990 May–Jun;11(3):201–13

Current concepts in management of the burned patient. Bingham HG, et al. **J Fla Med Assoc** 1989 Jul;76(7):630–2 (16 ref.)

Improvement in catheter sepsis rate in burned children. Askew AA, et al. **J Pediatr Surg** 1990 Jan;25(1):117–9

The scalp as a donor site: revisited. Brou J, et al. **J Trauma** 1990 May;30(5):579–81

Hypertonic sodium lactate (HSL) with lactated Ringer's solution (LR) [letter; comment] Caldwell FT Jr. **J Trauma** 1990 Jun;30(6):751 Comment on: J Trauma 1989 Sep;29(9):1261–7.

A randomized trial of indirect calorimetry–based feedings in thermal injury. Saffle JR, et al. **J Trauma** 1990 Jul; 30(7):776–82; discussion 782–3

Comparison of a hydrocolloid dressing and silver sulfadiazine cream in the outpatient management of second–degree burns. Wyatt D, et al. **J Trauma** 1990 Jul;30(7):857–65

Burn wound closure with cultured autologous keratinocytes and fibroblasts attached to a collagen–glycosaminoglycan substrate. Hansbrough JF, et al. **JAMA** 1989 Oct 20; 262(15):2125–30

Covering wounds with cultured keratinocytes. Woodley DT. **JAMA** 1989 Oct 20;262(15):2140–1

Differential effects of three enteral dietary regimens on selected outcome variables in burn patients. Gottschlich MM, et al. **JPEN J Parenter Enteral Nutr** 1990 May–Jun; 14(3):225–36

Immediate stimulation of protein metabolism in burned rats by total parenteral nutrition enriched in branched–chain amino acids. Mori E, et al. **JPEN J Parenter Enteral Nutr** 1989 Sep–Oct;13(5):484–9 (43 ref.)

Patients' and nurses' ratings of pain and anxiety during burn wound care. Van der Does AJ. **Pain** 1989 Oct;39(1):95–101 (10 ref.)

Management of the acutely burned hand for the nonspecialized clinician. Howell JW. **Phys Ther** 1989 Dec; 69(12):1077–90 (62 ref.)

Coverage of full–thickness burns with bilayered skin equivalents: a preliminary clinical trial. Hull BE, et al. **Surgery** 1990 May;107(5):496–502

The continuing challenge of burn care in the elderly. Saffle JR, et al. **Surgery** 1990 Sep;108(3):534–43

[The treatment of the burned hand in massive trauma in a glove with an ointment with a water–soluble base] Dakova B. **Khirurgiia (Sofiia)** 1990;43(2):15–8 (Eng. Abstr.) **(Bul)**

[The treatment of burns of the hands in local isolators with a regulated abacterial environment] Dakova B. **Khirurgiia (Sofiia)** 1989;42(6):23–6 **(Bul)**

[The clinical use of a new type of a bathtub with whirlpool for burn patients] Ai YF. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Sep;2(3):182–4, 233 (Eng. Abstr.) **(Chi)**

[Management of mass burn casualties] Chang MQ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Jun;3(2):94–6, 155 (Eng. Abstr.) **(Chi)**

[Characteristics of burn shock in children and its fluid therapy] Chen B, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Mar;2(1):30–2, 34, 74 (Eng. Abstr.) **(Chi)**

[Venous nutrition supporting treatment for severely burned patients (experiences of 31 cases)] Deng SL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Mar;3(1):3–5 **(Chi)**

[Application and evaluation of the Parkland fluid infusion equation fo burns] Ding YL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):198–9 **(Chi)**

[A clinical analysis of burn injuries in 12 epileptic patients] Dong YL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Jun;3(2):134–5 **(Chi)**

[The effect of air–fluidized bed on fluid therapy in early burned patients] Dong YL, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Sep;3(3):202–5, 238–9 (Eng. Abstr.) **(Chi)**

[Evaluation of the recovery from shock in 293 cases with severe burns] Guo ZR. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):194–7 **(Chi)**

[Evaluation of resuscitation of shock with oral fluids in dogs with 30% superficial second degree burn] Jiang KY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):288–91, 320 (Eng. Abstr.) **(Chi)**

[Thermal injury during pregnancy] Li JY, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Mar;3(1):19–20, 77 (Eng. Abstr.) **(Chi)**

[Improvement on the immersion bath method for burned patients] Liu JC. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Mar;2(1):66–7, 78 (Eng. Abstr.) **(Chi)**

[Hypertonic saline solution for resuscitation of shock as a result of second degree burn] Liu LJ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Sep;3(3):210–2 **(Chi)**

[The coverage for burn wound] Ma YZ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Jun;2(2):137–9 **(Chi)**

[The use of glutaraldehyde–preserved bovine amniotic membranes on burn wounds] Mu XX. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Dec;3(4):265–7, 318–9 (Eng. Abstr.) **(Chi)**

[Development of septicemia in severely burned patients due to improper use of bathing treatment] Wang DC. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Sep;2(3):185–7, 233–4 (Eng. Abstr.) **(Chi)**

[The design and production of a new type of bath tubs with whirlpool for burned patients] Wang LG. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Mar;2(1):68 **(Chi)**

[An analysis of trace elements in fluids for intravenous infusion] Yang HY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Sep;4(3):171–3 **(Chi)**

[Management of mass casualty severely burned children] Zhao YN. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Sep;5(3):188–9, 237 (Eng. Abstr.) **(Chi)**

[Early management and rehabilitation of deeply burned hands—preliminary report] Zhong DC, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Mar;2(1):46–7, 76 (Eng. Abstr.) **(Chi)**

[Epidural analgesia for hydrotherapy in burned patients with 0.25% bupivacaine] Yu CL, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Sep;27(3):303–5 **(Chi)**

[Present trends in the treatment of burn injuries] Fára M, et al. **Rozhl Chir** 1990 Jan;69(1):2–8 (Eng. Abstr.) **(Cze)**

[Use of sodium carboxymethylcellulose (Comfeel) in the topical treatment of burns] Nefzi A, et al. **Ann Chir Plast Esthet** 1989;34(6):527–9 **(Fre)**

[Immediate water cooling. Emergency treatment of burns] Latarjet J, et al. **Ann Dermatol Venereol** 1990;117(5):415–6 **(Fre)**

[Immediate cooling with water: emergency treatment of burns] Latarjet J. **Pediatrie** 1990;45(4):237–9 (8 ref.) (Eng. Abstr.) **(Fre)**

[Temporary skin replacement with lyophilized swine skin and foam substances—comparative experimental studies] Kastner KH, et al. **Langenbecks Arch Chir** 1988; 373(5):287–97 (Eng. Abstr.) **(Ger)**

[Treatment of burns in children] Korab W, et al. **Wien Med Wochenschr** 1989 Sep 30;139(18):431–2 **(Ger)**

[Standardized therapy concepts in circumscribed burns. Wishes and reality!] Diem E. **Z Hautkr** 1990 Jun; 65(6):521–2, 525–6 (10 ref.) (Eng. Abstr.) **(Ger)**

[The treatment of burns in Israel] Eldad A, et al. **Harefuah** 1989 Jun 1;116(11):583–5 (5 ref.) **(Heb)**

[Necrolysis in burns using fibrinoiysin and deoxyribonuclease] Novák J, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1990; 33(2):114–8 (Eng. Abstr.) **(Hun)**

[Intensive care of patients with burns] Aanderud L, et al. **Tidsskr Nor Laegeforen** 1989 Nov 10;109(31):3197–9 (Eng. Abstr.) **(Nor)**
[Centralized treatment of extensive burns in Norway] Abyholm FE. **Tidsskr Nor Laegeforen** 1989 Nov 10; 109(31):3192–4 (Eng. Abstr.) **(Nor)**
[Treatment of burns] Eskeland G. **Tidsskr Nor Laegeforen** 1989 Nov 10;109(31):3191–2 (11 ref.) **(Nor)**
[Physical therapy of extensive burns] Hjellestad M. **Tidsskr Nor Laegeforen** 1989 Nov 10;109(31):3200–2 (Eng. Abstr.) **(Nor)**
[Local treatment of burn injuries and traumatic wounds with a hydrogel Geliperm dressing] Kuś H, et al. **Polim Med** 1988;18(4):211–9 (Eng. Abstr.) **(Pol)**
[Psychotropic therapy during anesthesia in the treatment of burn patients at various stages of the disease] Seregin GI, et al. **Anesteziol Reanimatol** 1989 May–Jun;(3):4–6 (Eng. Abstr.) **(Rus)**
[Experimental study of new polymer dressings in the treatment of burn wounds] Sologub VK, et al. **Biull Eksp Biol Med** 1990 Apr;109(4):389–91 (Eng. Abstr.) **(Rus)**
[Use of cultured fibroblasts in the treatment of burn wounds] Tumanov VP, et al. **Biull Eksp Biol Med** 1990 Apr; 109(4):400–2 (Eng. Abstr.) **(Rus)**
[Treatment of extensive burns in children using beds with air cushions] Astrozhnikova SP, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):100–3 (Eng. Abstr.) **(Rus)**
[The effect of combined methods of detoxication on the development of inflammatory reactions in severe burns] Kozinets GP, et al. **Klin Khir** 1990;(3):10–3 (Eng. Abstr.) **(Rus)**
[Extracorporeal hemosorption using a hydrogel sorbent in the treatment of early toxemia in combined thermal injuries] Nurkhanov BM, et al. **Klin Khir** 1990;(3):38–40 (Eng. Abstr.) **(Rus)**
[The organization of medical aid in mass thermal injuries] Povstianoi NE, et al. **Klin Khir** 1990;(3):54–7 **(Rus)**
[The efficacy of the extracorporeal connection of a porcine spleen in early and late septic complications in patients with burns] Povstianoi NE, et al. **Klin Khir** 1990;(3):9–10 (Eng. Abstr.) **(Rus)**
[The organization and extent of medical aid to burned patients in nonspecialized hospitals] Voronenko IuV, et al. **Klin Khir** 1990;(3):57–8 **(Rus)**
[Algimaf treatment of burns] Kuzin MI, et al. **Sov Med** 1989; (11):27–30 (Eng. Abstr.) **(Rus)**
[The organization of care for burn victims in catastrophes] Fedorov VD, et al. **Voen Med Zh** 1990 Apr;(4):38–41 (Eng. Abstr.) **(Rus)**
[Medical care in burn injuries on board ships of the northern basin] Shapovalov KA. **Voen Med Zh** 1989 Dec;(12):55–6 **(Rus)**

VETERINARY

Atypical contagious ecthyma in a sheep after extensive cutaneous thermal injury. Hooser SB, et al. **J Am Vet Med Assoc** 1989 Nov 1;195(9):1255–6

BURNS, CHEMICAL

Longitudinal shortening of esophagus in advanced corrosive injury [letter] Shah P, et al. **Indian J Gastroenterol** 1990 Jan;9(1):97–8
Standard models of corneal injury using alkali-immersed filter discs. Ormerod LD, et al. **Invest Ophthalmol Vis Sci** 1989 Oct;30(10):2148–53
Caustic ingestion. Freedman SF, et al. **J La State Med Soc** 1989 Nov;141(11):13–5
Caustic ingestions and foreign bodies in the aerodigestive tract of children. Friedman EM. **Pediatr Clin North Am** 1989 Dec;36(6):1403–10 (12 ref.)
Malingering aided by the use of herbal medicine [letter] Govrin-Yehudain J, et al. **Plast Reconstr Surg** 1990 Sep; 86(3):601–2
[Causticity of a non-foaming degreasor] David JM, et al. **J Toxicol Clin Exp** 1989 Sep–Oct;9(5):366–7 **(Fre)**
[Poisoning by immersion in a cleaning tank] Weber M, et al. **J Toxicol Clin Exp** 1989 Sep–Oct;9(5):355–8 **(Fre)**

COMPLICATIONS

Esophagocoloplasty in the management of postcorrosive strictures of the esophagus. Gerzic ZB, et al. **Ann Surg** 1990 Mar;211(3):329–36
Inhibition of alkali-induced corneal ulceration and perforation by a thiol peptide. Burns FR, et al. **Invest Ophthalmol Vis Sci** 1990 Jan;31(1):107–14
Corrosive acid strictures of the stomach (a case report). Mehendale VG, et al. **J Postgrad Med** 1989 Jan;35(1):59–60
[CD-4 burns associated with acute poisoning] Liu JH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Mar;6(1):40–1, 76–7 (Eng. Abstr.) **(Chi)**
[Use of the balloon catheter in dilatation of corrosive stenosis of the esophagus] Pokorný M. **Cesk Otolaryngol** 1990 Feb; 39(1):26–32 (Eng. Abstr.) **(Cze)**
[Caustic esophageal stenosis in children: report and prevention] Harouchi A, et al. **Chirurgie** 1989;115 Suppl 1:79–85 (Eng. Abstr.) **(Fre)**
[Esophagoplasty in caustic stenosis in children. Apropos of 28 cases] Kandil S, et al. **Chirurgie** 1989;115(7):407–11; discussion 411–2 (Eng. Abstr.) **(Fre)**
[Esophagoplasty in caustic esophageal stenosis in children] Pellerin D, et al. **Chirurgie** 1989;115 Suppl 1:86–91; discussion 91–2 (Eng. Abstr.) **(Fre)**
[Vasoactive intestinal peptide (VIP) protects against acid-induced acute lung injury in isolated perfused rat lungs] Iwanaga T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jul;27(7):789–95 (Eng. Abstr.) **(Jpn)**
[Total esophagoplasty with pharyngeal anastomosis] Chernousov AF, et al. **Grud Serdechnososudistaia Khir** 1990;(5):54–8 (Eng. Abstr.) **(Rus)**
[Reconstructive surgery of the esophagus in patients with combined chemical burns of the esophagus and stomach] Chernousov AF, et al. **Grud Serdechnososudistaia Khir** 1990;(3):48–52 (Eng. Abstr.) **(Rus)**
[Resection of the esophagus in patients with sequelae of chemical burns] Abakumov MM, et al. **Khirurgiia (Mosk)** 1990 Mar;(3):10–3 (Eng. Abstr.) **(Rus)**
[Use of the sigmoid in esophagoplasty] Chernousov AF, et al. **Khirurgiia (Mosk)** 1990 Mar;(3):3–6 (Eng. Abstr.) **(Rus)**
[Electrosurgical endoscopic interventions using low-energy laser irradiation] Sinev IuV, et al. **Khirurgiia (Mosk)** 1990 May;(5):141–3 **(Rus)**
[30-year experience with performing esophagoplasty using the large intestine] Zavgorodnil LG, et al. **Klin Khir** 1989; (10):27–9 (Eng. Abstr.) **(Rus)**
[Fungal infection of the esophagus and stomach after chemical burns] Sinev IuV, et al. **Klin Med (Mosk)** 1990 May;68(5):87–9 (Eng. Abstr.) **(Rus)**
[Status of the digestive organs at late periods after poisoning by corrosive substances] Sedov KR, et al. **Sov Med** 1990; (1):74–7 **(Rus)**
[Cicatricial stenosis of the pharynx, esophagus and stomach after chemical burns] Mumladze RB. **Vestn Khir** 1989 Apr; 142(4):106–8 **(Rus)**

DIAGNOSIS

Evaluation of motility disorders in caustic oesophagitis. Cadranel S, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:45–6
[Evaluation of the degree of chemical burns of the upper part of the gastrointestinal tract by luminescent esophagogastroduodenoscopy] Sinev IuV, et al. **Vestn Khir** 1989 Jun;142(6):121–3 **(Rus)**
[Role of endoscopy in caustic gastroesophageal lesions] Sebastián Domingo JJ, et al. **Rev Esp Enferm Dig** 1990 Mar;77(3):176–8 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

A controlled trial of corticosteroids in children with corrosive injury of the esophagus [see comments] Anderson KD, et al. **N Engl J Med** 1990 Sep 6;323(10):637–40 Comment in: N Engl J Med 1990 Sep 6;323(10):668–70.
Corrosive injury of the esophagus in children: failure of corticosteroid treatment reemphasizes prevention [editorial; comment] Lovejoy FH Jr. **N Engl J Med** 1990 Sep 6; 323(10):668–70 Comment on: N Engl J Med 1990 Sep 6;323(10):637–40.
[New drug in the treatment of hydrofluoric acid burn] Zhang ML. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Mar;5(1):40–2 **(Chi)**
[Treatment of eye burns with a polyvalent proteolytic inhibitor] Gundorowa RA, et al. **Klin Monatsbl Augenheilkd** 1990 Jul;197(1):1–5 (Eng. Abstr.) **(Ger)**
[Chemical burns of the eyes. I. Conservative treatment] Gierek-Łapińska A, et al. **Klin Oczna** 1989 Feb–Mar; 91(2–3):55–6 (Eng. Abstr.) **(Pol)**
[The use of lekozim phonophoresis for the treatment of eye burns] Iakimenko SA, et al. **Oftalmol Zh** 1989;(8):492–7 (Eng. Abstr.) **(Rus)**
[The use of lysosomotropic preparations in treating severe experimental chemical eye burns] Logai IM, et al. **Oftalmol Zh** 1989;(8):497–500 (Eng. Abstr.) **(Rus)**
[The wound-healing properties of the essential oils of yarrow and Yakut wormwood and khamazulen in napalm burns] Taran DD, et al. **Voen Med Zh** 1989 Aug;(8):50–2 **(Rus)**

EPIDEMIOLOGY

Epidemiology of burns due to domestic flammable agents. Pegg SP, et al. **Burns** 1990 Apr;16(2):113–7

ETIOLOGY

Burns from iodine [letter] White A, et al. **Anaesthesia** 1990 Jan;45(1):75
Freon: an unsuspected problem. Voge VM. **Aviat Space Environ Med** 1989 Oct;60(10 Pt 2):B27–8
Ingestion of dishwasher detergent by children. Madarikan BA, et al. **Br J Clin Pract** 1990 Jan;44(1):35–6
Eye injuries from assault with chemicals [see comments] Beare JD. **Br J Ophthalmol** 1990 Sep;74(9):514–8 Comment in: Br J Ophthalmol 1990 Sep;74(9):513.
Lye in the eye [editorial; comment] Smith R. **Br J Ophthalmol** 1990 Sep;74(9):513 Comment on: Br J Ophthalmol 1990 Sep;74(9):514–8.
Sulphuric acid burns: report of a mass domestic accident. Husain MT, et al. **Burns** 1989 Dec;15(6):389–91
Scalp burns from a permanent wave product. Fischer H, et al. **Clin Pediatr (Phila)** 1990 Jan;29(1):53
Skin burns due to transit-mixed Portland cement. Tosti A, et al. **Contact Dermatitis** 1989 Jul;21(1):58
Healing of rabbit corneal alkali wounds in vitro. Chung JH. **Cornea** 1990 Jan;9(1):36–40
Corrosive pyloric stenosis—a report of two cases. Beg MH, et al. **Indian J Chest Dis Allied Sci** 1989 Oct–Dec; 31(4):283–5
Carbon dioxide laser burn of laryngotracheobronchial mucosa. Bingham HG, et al. **J Burn Care Rehabil** 1990 Jan–Feb;11(1):64–6
Occupational medicine in Oklahoma: hydrofluoric acid dangers. Himes JE. **J Okla State Med Assoc** 1989 Nov; 82(11):567–9
Comparison of titratable acid/alkaline reserve and pH in potentially caustic household products. Hoffman RS, et al. **J Toxicol Clin Toxicol** 1989;27(4–5):241–6
Ingestion of 35% hydrogen peroxide. Humberston CL, et al. **J Toxicol Clin Toxicol** 1990;28(1):95–100
Full thickness skin burns secondary to an unusual exposure to diquat dibromide. Manoguerra AS. **J Toxicol Clin Toxicol** 1990;28(1):107–10
Drug induced esophageal injury. Perry PA, et al. **J Toxicol Clin Toxicol** 1989;27(4–5):281–6
Mass eye casualties at sea. O'Grady TC. **Milit Med** 1989 Dec;154(12):596–8
Total body immersion in hydrofluoric acid. Sadove R, et al. **South Med J** 1990 Jun;83(6):698–700
[Petroleum burns—toxic contact dermatitis] Larsen J, et al. **Ugeskr Laeger** 1989 Dec 18;151(51):3490–1 (Eng. Abstr.) **(Dan)**
[Hydrofluoric acid injuries: pathogenesis and treatment] Trap R, et al. **Ugeskr Laeger** 1990 May 28;152(22):1570–2 (Eng. Abstr.) **(Dan)**
[Esophageal mucoceles complicating double exclusion of the esophagus after ingestion of caustics] Chambon JP, et al. **Ann Chir** 1989;43(9):724–30 (Eng. Abstr.) **(Fre)**
[Apropos of accidental ingestion of products for dishwashers (letter)] Martinot A, et al. **Arch Fr Pediatr** 1989 Nov; 46(9):704 **(Fre)**
[Digestive injuries induced by the ingestion of ammonia (letter)] Gossot D, et al. **Gastroenterol Clin Biol** 1990; 14(2):191–2 **(Fre)**
[Caustic burns of the stomach secondary to ingestion of acid in infants: importance of fibro-endoscopy] Vila Carbó JJ, et al. **An Esp Pediatr** 1990 May;32(5):451–4 (Eng. Abstr.) **(Spa)**
[Diagnosis and aggressive therapy in caustic esophagogastritis: evaluation of 10 years' experience at the hospital of Lidice] Mora M, et al. **GEN** 1988 Jul–Sep; 42(3):83–7 (Eng. Abstr.) **(Spa)**
[Caustic esophagitis in children. Management and treatment] Piña JM, et al. **GEN** 1988 Oct–Dec;42(4):157–61 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Ingestion of aromatic ammonia 'smelling salts' capsules [letter] Wason S, et al. **Am J Dis Child** 1990 Feb; 144(2):139–40
Caustic injury of the upper gastrointestinal tract in adults: a clinical and endoscopic study. Sugawa C, et al. **Surgery** 1989 Oct;106(4):802–6; discussion 806–7
[Histopathological study on the alkaline burned skin of rats] Gong X. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Sep;4(3):205–7, 237 (Eng. Abstr.) **(Chi)**
[The experimental study in pathological changes in kidney and its mechanism during phosphorus burn] Jiao YR. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Sep;2(3):215–8 **(Chi)**
[Skin damage caused by fatal benzene fume inhalation] Rabl W, et al. **Beitr Gerichtl Med** 1989;47:295–300 (Eng. Abstr.) **(Ger)**
[Hydrofluoric acid burn: particulars on multiple pulmonary thrombi] Matsumoto S. **Sangyo Ika Daigaku Zasshi** 1989 Dec 1;11(4):411–24 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Anhydrous ammonia injuries. Millea TP, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):448–53

PREVENTION & CONTROL

Eye-irrigating lens more effective if applied seconds after accident. Poe CA. **Occup Health Saf** 1990 Jan;59(1):43, 47

RADIOTHERAPY

[Low-energy irradiation with helium-neon and semiconductor lasers in the combined treatment of chemical burns of the esophagus] Sinev IuV, et al. **Sov Med** 1990;(3):52–4 **(Rus)**

SURGERY

Emergency oesophageal stripping, an aggressive approach to acute, necrotic caustic burns of the oesophagus and stomach. Hendrickx L, et al. **Acta Chir Belg** 1990 Mar–Apr; 90(2):46–9
Surgical procedures in the treatment of most severe eye burns. Revival of the artificial epithelium. Reim M, et al. **Acta Ophthalmol Suppl (Copenh)** 1989;192:47–54
Treatment of cervical burn contracture with two

fasciocutaneous flaps. Staub S, et al. **Ann Plast Surg** 1986 Oct;17(4):350–2

Oesophagectomy for severe corrosive injuries: is it always legitimate? Ribet M, et al. **Eur J Cardiothorac Surg** 1990; 4(7):347–9; discussion 350

[Closed thorax esophagectomy in caustic stenosis of the esophagus] Chappuis JP, et al. **Chir Pediatr** 1989; 30(5):187–90 (Eng. Abstr.) **(Fre)**

[Role of surgery in burns of the upper digestive tract in adults. Apropos of 679 cases] Celerier M, et al. **Chirurgie** 1989;115(3):220–7 (Eng. Abstr.) **(Fre)**

[Extensive intramural diverticulum formation of the esophagus. 41 years following lye chemical burn] Wilker DK, et al. **Chirurg** 1990 Jan;61(1):71–3 **(Ger)**

[A new treatment concept in severe caustic injuries and burns of the eye] Reim M. **Fortschr Ophthalmol** 1989;86(6):722–6 (Eng. Abstr.) **(Ger)**

[A new treatment concept for severe caustic and thermal burns of the eyes] Reim M. **Klin Monatsbl Augenheilkd** 1990 Jan;196(1):1–5 (Eng. Abstr.) **(Ger)**

[Adaptation of the esophagus, reconstructed using the colon, based on 135 cases of surgery in corrosive stenosis] Kotsis L, et al. **Orv Hetil** 1990 Jun 10;131(23):1241–6 (33 ref.) (Eng. Abstr.) **(Hun)**

[Chemical burns of the eyes. II. Surgical treatment] Gierek-Łapińska A, et al. **Klin Oczna** 1989 Feb–Mar; 91(2–3):57–9 (Eng. Abstr.) **(Pol)**

[Successful treatment of complicated chemical burns of the esophagus and stomach] Alekseev VS, et al. **Khirurgiia (Mosk)** 1990 Mar;(3):100 **(Rus)**

[Results of the local endoscopic treatment of chemical burns of the esophagus using medical glues] Lukash IL, et al. **Khirurgiia (Mosk)** 1989 Oct;(10):55–9 (Eng. Abstr.) **(Rus)**

[Treatment of isolated and combined burns of the stomach] Dolgorukov MI, et al. **Vestn Khir** 1989 Sep;143(9):78–80 (Eng. Abstr.) **(Rus)**

THERAPY

Chemical burns. Herbert K, et al. **Burns** 1989 Dec;15(6):381–4

Chemical burns of the upper extremity. Bentivegna PE, et al. **Hand Clin** 1990 May;6(2):253–9 (33 ref.)

Medical management of hydrofluoric acid exposure. Upfal M, et al. **J Occup Med** 1990 Aug;32(8):726–31

Brain abscess after dilatation of esophageal stricture. Lui TN, et al. **Pediatr Neurosci** 1988;14(5):250–3 (15 ref.)

Experimental studies on caustic burns of the stomach by aggressive chemicals. Wit J, et al. **Prog Pediatr Surg** 1990; 25:68–70

[Clinical analysis of 107 cases with chemical burns] Li GH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Mar;6(1):34–5, 76 (Eng. Abstr.) **(Chi)**

[Chemical burns of the respiratory tract] Ma CR. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):215, 228 **(Chi)**

[The treatment of one case of extensive gasoline contact burn] Wang JD. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Jun;2(2):151 **(Chi)**

[Endoscopic percutaneous placement of a bouginage guide for dilatation treatment of the esophagus following 3d degree chemical burn] Hager J, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:41–2 **(Ger)**

[Therapeutic management of esophageal burns] Kawalski H, et al. **Wiad Lek** 1989 Feb 1;42(3):164–9 (31 ref.) (Eng. Abstr.) **(Pol)**

BURNS, ELECTRIC

Evolving clinical and scientific concepts of upper extremity electrical trauma. Zachary LM, et al. **Hand Clin** 1990 May; 6(2):243–52 (20 ref.)

COMPLICATIONS

Neurologic sequelae of minor electric burns. Rosenberg DB. **Arch Phys Med Rehabil** 1989 Dec;70(13):914–5

Pulmonary edema associated with electrical injury. Schein RM, et al. **Chest** 1990 May;97(5):1248–50

Bilateral femoral neck fractures after electrical injury: a case report and literature review. Slater RR Jr, et al. **J Burn Care Rehabil** 1990 May–Jun;11(3):240–3 (18 ref.)

Neurologic consequences of electrical burns. Grube BJ, et al. **J Trauma** 1990 Mar;30(3):254–8

[Treatment and prophylaxis of electrical burns complicated with bleeding] Huang GF, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Jun;2(2):145, 151, 158 (Eng. Abstr.) **(Chi)**

[Treatment of electric burn of the skull complicated with brain injury] Long DC. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Dec;1(4):294–6 **(Chi)**

[Complications of electrical burns--an analysis of 36 cases] Yu GS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):282–3 **(Chi)**

[Treatment of post-traumatic alopecia by the use of dermotension] Pekarskiĭ DE, et al. **Klin Khir** 1989;(12):57–8 **(Rus)**

DIAGNOSIS

Electric shock and associated injuries. Irvine J. **Practitioner** 1989 Nov 8;233(1478):1454–7

ETIOLOGY

Dangers of defibrillation: injuries to emergency personnel during patient resuscitation. Gibbs W, et al. **Am J Emerg Med** 1990 Mar;8(2):101–4

An engineering critical incident: direct current burn from a neuromuscular stimulator. Cooper JB, et al. **Anesthesiology** 1990 Jul;73(1):168–72

Helicopter wire strike accident and high voltage electrocution: a case report. Posey DM, et al. **Aviat Space Environ Med** 1989 Oct;60(10 Pt 2):B29–34

A ring burn--electric or contact? Attalla MF, et al. **Burns** 1990 Feb;16(1):69–70

Iatrogenic defibrillator burns. Reisin L, et al. **Burns** 1990 Apr; 16(2):128

Third-degree burns from the use of an external cardiac pacing device. Pride HB, et al. **Crit Care Med** 1990 May; 18(5):572–3

Low-voltage battery burns. Briggs PJ, et al. **Injury** 1990 May;21(3):185–6

[A case of group atmospheric electric injuries] Andreĭtsev AN, et al. **Klin Med (Mosk)** 1990 May;68(5):131–2 **(Rus)**

PHYSIOPATHOLOGY

Hemodynamic alterations secondary to an electrical burn in the rat: a pilot study. Imatani JH Jr, et al. **Ann Plast Surg** 1986 Feb;16(2):116–20

Rapid recovery after delayed myelopathy from electrical burns [letter] Clouston PD, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1308

SURGERY

Experiences in the treatment of electrical burns covering deep wounds with various tissue flaps. Liu HY, et al. **Acta Chir Plast** 1989;31(4):209–25

Surgery for hand deformities due to electrical injury. Sedova SV. **Acta Chir Plast** 1989;31(4):201–8

Repair of experimental high voltage electrical injuries. Zhu ZX, et al. **Acta Chir Plast** 1990;32(2):99–106

Maintenance of stump length of both upper extremities after severe electrical burn injury. Kömürcü F, et al. **Burns** 1990 Jun;16(3):227–9

Reconstruction of the oral commissure after an electrical burn. Pensler JM, et al. **J Burn Care Rehabil** 1990 Jan–Feb; 11(1):50–3

Prosthetic use in patients with burns and associated limb amputations. Ward RS, et al. **J Burn Care Rehabil** 1990 Jul–Aug;11(4):361–4

Superficial cervical artery skin flaps. Hyakusoku H, et al. **Plast Reconstr Surg** 1990 Jul;86(1):33–8

[Electric injury with a secondary fracture of the scapula] Ai SH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Dec;1(4):252 **(Chi)**

[Functional recovery of tendons and nerves after early repair of electric burns of the extremities using cutaneous and myocutaneous flaps] Chang ZD. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Dec;5(4):242–5, 315 (Eng. Abstr.) **(Chi)**

[Adjacent rotated cutaneous flap to repair deep electrical burns at functional positions] Cui QJ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Mar;5(1):43–4, 78 (Eng. Abstr.) **(Chi)**

[Treatment of wounds in 52 cases with severe electric burn] Deng JJ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Dec;1(4):292–3, 296 (Eng. Abstr.) **(Chi)**

[The characteristics and treatment of electric flash burns of the face] Fu SL, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Mar;3(1):39–40 **(Chi)**

[The evaluation on late reconstruction of electrical burn of the forearm] Guo ET. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Sep;2(3):172–4, 232–3 (Eng. Abstr.) **(Chi)**

[The treatment of extensive electrical burns of the skull by local flaps] Lu JZ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Mar;3(1):35–6 **(Chi)**

[Application of a retrograde radial artery island flap to the hand for the repair of deep burn] Wang XZ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Mar;3(1):43–4 **(Chi)**

[One-stage reconstruction of the exposed bone due to electric burn with an island latissimus dorsi myocutaneous flap] Yang JJ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Sep;4(3):189–90 **(Chi)**

[Operative treatment of deep burns of the skull vault] Prokopenko AN, et al. **Klin Khir** 1990;(3):64–5 **(Rus)**

THERAPY

[Treatment of electrical burns. A clinical analysis of 304 cases] Xu XZ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Dec;4(4):279–81, 319 (Eng. Abstr.) **(Chi)**

BURNS, INHALATION

[Airway burns and smoke inhalation] Eldad A. **Harefuah** 1989 Nov 1;117(9):257–61 (22 ref.) **(Heb)**

BLOOD

[The effects of antihistamines on the histamine content of blood in dogs with thermal injury of the respiratory tract] Huang YH, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Mar;2(1):54–6, 77 (Eng. Abstr.) **(Chi)**

[Blood gas studies in experimental steam burns of the respiratory tract 1 to 14 days after the injuries] Jiang KY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):190–3, 199, 239 **(Chi)**

CLASSIFICATION

Classification of inhalation injuries. Koller J, et al. **Acta Chir Plast** 1989;31(3):156–62

COMPLICATIONS

Selected anatomic burn pathology review for clinicians and pathologists. Goodwin MN Jr. **Aviat Space Environ Med** 1989 Oct;60(10 Pt 2):B39–43

Treatment of combined subglottic and critically low tracheal stenoses secondary to burn inhalation injury. Timon CI, et al. **J Laryngol Otol** 1989 Nov;103(11):1083–6

[Pulmonary edema in an isolated lobe after inhalation injury] Guo ZR. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Jun;6(2):121–4, 159 (Eng. Abstr.) **(Chi)**

[Advances in the study of the mechanism of inhalation pulmonary edema] Wang CZ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Dec;3(4):300–2 **(Chi)**

[Emergency tracheobronchoscopy in children with burns] Richard P, et al. **Ann Otolaryngol Chir Cervicofac** 1990; 107(3):195–9 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

The importance of fiberbronchoscopy in respiratory burns. Lukán J, et al. **Acta Chir Plast** 1990;32(2):107–13

[Assessment of fiberoptic bronchoscopic examination in inhalation injury--analysis of 32 cases] Tang XX. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Mar;5(1):17–9, 75–6 (Eng. Abstr.) **(Chi)**

[The diagnostic significance of disordered gas exchange in inhalation trauma] Knüttgen D, et al. **Anasth Intensivther Notfallmed** 1989 Oct;24(5):270–6 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Freon: an unsuspected problem. Voge VM. **Aviat Space Environ Med** 1989 Oct;60(10 Pt 2):B27–8

[The pathogenic factors of acute inhalation injury] Wang CZ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Mar;2(1):63–6 **(Chi)**

[Burns in children caused by camomile tea] Balslev T, et al. **Ugeskr Laeger** 1990 May 7;152(19):1384 (Eng. Abstr.) **(Dan)**

MICROBIOLOGY

[Bacteriologic study of lung infection in 47 cases of burns] Cui DJ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1990 Apr;13(2):95–8, 127 (Eng. Abstr.) **(Chi)**

PATHOLOGY

Current concepts of inhalation injury in burn victims. Vanacker B, et al. **Acta Anaesthesiol Belg** 1989;40(2):107–11

[Histopathological, histochemical (ALP) and submicroscopic changes of the liver in dogs with severe steam burns of the respiratory tract] Chen YS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):169–71, 174, 237 (Eng. Abstr.) **(Chi)**

[A case report of severe inhalation injury--the relation between the respiratory function and the pathological alterations] Deng SL, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Jun;2(2):143–4, 157–8 (Eng. Abstr.) **(Chi)**

[The role of free radicals in smoke inhalation injury in rats] Feng ZM. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Jun;5(2):130–3, 160 (Eng. Abstr.) **(Chi)**

[Pathological observations of respiratory tracts and lungs in burned patients with inhalation injuries] Li YP. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Jun;3(2):142–4, 159 (Eng. Abstr.) **(Chi)**

[Histopathological study of the tracheo-bronchial tissue and lung parenchyma of dogs with severe steam burns of the respiratory tract within 14 days after the injuries] Li YP, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Mar;2(1):57–9, 77–8 (Eng. Abstr.) **(Chi)**

[Prognostic significance of macroscopic and microscopic findings in acute inhalation damage in the most severely burned patients] Barth J, et al. **Anasth Intensivther Notfallmed** 1990 Jun;25(3):222–7 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

[Respiratory and hemodynamic sequelae of unilateral inhalation injury of the lung] Theissen JL, et al. **Anaesthesist** 1989 Oct;38(10):531-5 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Well-planned fire safety program vital for prevention, immediate response. Morgan SL. **Occup Health Saf** 1989 Oct;58(11):60-1, 109

THERAPY

Fluid requirements of patients with burns and inhalation injuries in an intensive care unit. Hughes KR, et al. **Intensive Care Med** 1989;15(7):464-6

[Experiences in the successful management of a 100% TBSA (total body surface area) (third degree 96%) burn patient with severe inhalation injury] Li TZ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Sep;5(3):169-71 **(Chi)**

[Chemical burns of the respiratory tract] Ma CR. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):215, 228 **(Chi)**

[Management of mass casualty severely burned children] Zhao YN. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Sep;5(3):188-9, 237 (Eng. Abstr.) **(Chi)**

[Introduction of tracheal intubation with the aid of an fiberoptic bronchoscope in inhalation injury] Zhao ZD. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Sep;5(3):179-81, 236 (Eng. Abstr.) **(Chi)**

BURSA-DEPENDENT LYMPHOCYTES see **B-LYMPHOCYTES**

BURSA OF FABRICIUS

CYTOLOGY

Dendritic cells of the lymphoepithelial organs. Törö I, et al. **Acta Morphol Hung** 1989;37(1-2):29-46 (32 ref.)

Questioning the role of adenosine deaminase in the development of B lymphocytes in chicken bursa. Senesi S, et al. **Dev Comp Immunol** 1990 Winter;14(1):95-104

Nurse cells of the bursa of Fabricius: do they exist? Wuorela M, et al. **Eur J Immunol** 1990 Apr;20(4):913-7

Generation of immunoglobulin heavy chain diversity subsequent to cell surface immunoglobulin expression in the avian bursa of Fabricius. Ratcliffe MJ. **J Exp Med** 1989 Oct 1;170(4):1165-73

A model of bursal colonization. Salant EP, et al. **J Theor Biol** 1989 Jul 10;139(1):1-16

TCDD inhibits the support of B-cell development by the bursa of Fabricius. Nikolaidis E, et al. **Pharmacol Toxicol** 1990 Jul;67(1):22-6

DRUG EFFECTS

Cyclophosphamide- and testosterone-induced alteration in chicken bursal stroma identified by monoclonal antibodies. Wilson TJ, et al. **Immunology** 1990 Jun;70(2):241-6

EMBRYOLOGY

Acid phosphatase in lymphoid tissues of developing chick embryos. Moriya O, et al. **Acta Histochem (Jena)** 1989; 87(2):99-105

Reappraisal of histogenesis in the bursal lymphoid follicle of the chicken. Lupetti M, et al. **Am J Anat** 1990 Mar; 187(3):287-302

In vitro organ culture of embryonic bursa of Fabricius. Nowak JS, et al. **Dev Comp Immunol** 1990 Spring; 14(2):239-46

Allantois as the bursa-equivalent in man. Zarabi CM. **Med Hypotheses** 1990 Jun;32(2):137-43

IMMUNOLOGY

Development of the peripheral immune function in the chicken. A study on the bursa of Fabricius isolated from the rest of the gut-associated lymphoid tissue (GALT). Naukkarinen A, et al. **APMIS** 1989 Sep;97(9):787-92

Effects of antigen and antigen concentration on serum antibody titres in chickens primed per bursam. Naukkarinen A, et al. **APMIS** 1989 Sep;97(9):793-7

Cross-linking of the surface immunoglobulin on lymphocytes from the bursa of Fabricius results in second messenger generation. Ratcliffe MJ, et al. **Eur J Immunol** 1990 May; 20(5):1073-8

Bu-2, a novel avian cell surface antigen on B cells and a population of non-lymphoid cells, is expressed homogeneously in germinal centers. Huffnagle GB, et al. **Hybridoma** 1989 Dec;8(6):589-604

[Regulating properties of peptides of the thymus and bursa of Fabricius in immunodepression in birds] Sukhinina TL, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):169-72 (Eng. Abstr.) **(Rus)**

METABOLISM

In vitro thymidine uptake and incorporation into thymic and bursal lymphocytes from young hypothyroidic chickens. Scott TR, et al. **Int Arch Allergy Appl Immunol** 1989; 89(4):394-9

PATHOLOGY

A primary epidemic of inclusion body hepatitis in broilers. Christensen NH, et al. **Avian Dis** 1989 Oct-Dec; 33(4):622-30

PHYSIOLOGY

Suppression of chicken J chain production by in ovo bursectomy. Moriya O, et al. **Vet Immunol Immunopathol** 1990 May;25(1):109-15

[The role of the thymus and bursa of Fabricius in regulating the hemostatic system] Kuzinik BI, et al. **Usp Fiziol Nauk** 1989 Oct-Dec;20(4):77-93 (110 ref.) **(Rus)**

TRANSPLANTATION

Grafts of the bursal primordium in quail—chick chimeras are tolerated after implantation of thymic epithelium. Corbel C, et al. **Prog Clin Biol Res** 1989;307:31-43

ULTRASTRUCTURE

An ultrastructural study of pigeon bursa of Fabricius during involution. Ciriaco E, et al. **Anat Anz** 1989;169(1):67-73

[Karyometric differences in the tissue of lymphoid organs in Marek's disease and lymphoid leukosis in poultry] Neuhybel P, et al. **Vet Med (Praha)** 1989 Nov;34(11):675-80 (Eng. Abstr.) **(Cze)**

BURSA, SYNOVIAL

A case of primary bursal chondromatosis. Ho QH, et al. **ROFO** 1990 Feb;152(2):233-5

INJURIES

[External synovial fistula of the infrapatellar bursa following arthroscopic meniscus resection. A clinical case report and topographic-anatomic study] Raunest J, et al. **Unfallchirurgie** 1990 Jun;16(3):151-3 (Eng. Abstr.) **(Ger)**

MICROBIOLOGY

Staphylococcal infection of the subacromial/subdeltoid bursa. Co DL, et al. **J Rheumatol** 1990 Jun;17(6):849-51

RADIOGRAPHY

The current role of tenography and bursography. Baker KS, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):129-33 (51 ref.)

An unusual swelling in the groin. Wiese H, et al. **Eur J Radiol** 1990 Mar-Apr;10(2):156-8

[Medial coxa saltans—a difficult diagnosis] Kalms SB, et al. **Ugeskr Laeger** 1990 May 21;152(21):1536-7 (Eng. Abstr.) **(Dan)**

BURSINE see **CHOLINE**

BURSITIS

DIAGNOSIS

Anserine bursal distention: diagnosis by ultrasonography and computed tomography [letter] Voorneveld C, et al. **Arthritis Rheum** 1989 Oct;32(10):1335-8

Infection of the infrapatellar bursa. A report of two cases. Waters P, et al. **J Bone Joint Surg [Am]** 1990 Aug; 72(7):1095-6

Septic ischial bursitis in systemic lupus erythematosus presenting as a perirectal mass. Lambie P, et al. **J Rheumatol** 1989 Nov;16(11):1497-9 (12 ref.)

Shoulder impingement syndrome: sonographic evaluation. Farin PU, et al. **Radiology** 1990 Sep;176(3):845-9

DRUG THERAPY

Treatment of nonseptic olecranon bursitis. A controlled, blinded prospective trial. Smith DL, et al. **Arch Intern Med** 1989 Nov;149(11):2527-30

Soft tissue injections in the surgery. Doherty M. **Practitioner** 1989 Oct 8;233(1476):1305

Common regional pain syndromes. II. Doherty M. **Practitioner** 1989 Nov 8;233(1478):1467

[Drug treatment of soft tissue rheumatoid complaints. Oral administration of a non-steroidal antirheumatic drug with a short half-life] Jelke K, et al. **Fortschr Med** 1990 Mar 20;108(7):140-2 (Eng. Abstr.) **(Ger)**

ETIOLOGY

First reported case of infection of the suprapatellar bursa of the knee due to Streptococcus pneumoniae [letter; comment] Brocq O, et al. **Arthritis Rheum** 1990 Jul; 33(7):1063-4 Comment on: Arthritis Rheum 1989 Oct;32(10):1312-4.

Prepatellar bursitis: a complication of arthroscopic surgery of the knee due to a lost meniscal fragment. Janecki CJ, et al. **Arthroscopy** 1989;5(4):342-3

Prepatellar bursitis associated with asthma. Leung AK. **Br J Clin Pract** 1989 Apr;43(4):164-5

Bilateral adhesive capsulitis and Hashimoto's thyroiditis [letter] Summers GD, et al. **Br J Rheumatol** 1989 Oct; 28(5):451

Mycobacterial prepatellar bursitis. Schickendantz MS, et al. **Clin Orthop** 1990 Sep;(258):209-12 (12 ref.)

Recalcitrant chronic adhesive capsulitis of the shoulder [letter] Sanders WE, et al. **J Bone Joint Surg [Am]** 1990 Sep;72(8):1269-70

Septic bursitis in human immunodeficiency virus infection. Buskila D, et al. **J Rheumatol** 1989 Oct;16(10):1374-6

[Shoulder bursitis in rheumatoid polyarthritis] Vicens JL, et al. **J Radiol** 1989 Nov;70(11):649-51 (Eng. Abstr.) **(Fre)**

[Protothecosis. A new, or rarely recognized disease?] Józsa L, et al. **Orv Hetil** 1990 Aug 19;131(33):1811-3 (Eng. Abstr.) **(Hun)**

MICROBIOLOGY

Septic bursitis caused by gram-negative bacilli [letter] Vartian CV, et al. **J Infect Dis** 1989 Nov;160(5):908-9

PATHOLOGY

Bursitis, tenosynovitis, ganglions, and painful lesions of the wrist, elbow, and hand. Canoso JJ. **Curr Opin Rheumatol** 1990 Apr;2(2):276-81 (13 ref.)

PHYSIOPATHOLOGY

Pseudo-radiculopathy in subacute trochanteric bursitis of the subgluteus maximus bursa. Swezey RL. **Arch Phys Med Rehabil** 1976 Aug;57(8):387-90

Inflammation of the deep infrapatellar bursa of the knee [see comments] Taylor PW. **Arthritis Rheum** 1989 Oct; 32(10):1312-4 Comment in: Arthritis Rheum 1990 Jul;33(7):1063-4.

RADIOTHERAPY

[Problems and perspectives of radiotherapy of non-tumor diseases] Pereslegin IA, et al. **Vestn Rentgenol Radiol** 1990 Jan-Feb;(1):54-8 (45 ref.) (Eng. Abstr.) **(Rus)**

SURGERY

Arthroscopic resection of olecranon and prepatellar bursae. Kerr DR, et al. **Arthroscopy** 1990;6(2):86-8

Chronic retrocalcaneal bursitis treated by resection of the calcaneus. Angermann P. **Foot Ankle** 1990 Apr;10(5):285-7

[Treatment of suppurative bursitis] Khutorianskii IN, et al. **Khirurgiia (Mosk)** 1989 Dec;(12):89-91 (Eng. Abstr.) **(Rus)**

THERAPY

Treating septic prepatellar bursitis [letter; comment] Hennrikus WL, et al. **West J Med** 1989 Sep;151(3):331-2 Comment on: West J Med 1988 Nov;149(5):607-10.

VETERINARY

Clofazimine for the treatment of fistulous withers in three horses. Knottenbelt DC, et al. **Vet Rec** 1989 Nov 11; 125(20):509-10

[Diseases of the extremities of swine in relationship to the floor condition with special reference to bursitis] Berner H, et al. **Berl Munch Tierarztl Wochenschr** 1990 Feb 1; 103(2):51-60 (Eng. Abstr.) **(Ger)**

BURST-FORMING UNITS, ERYTHROID see **ERYTHROID PROGENITOR CELLS**

BURST-PROMOTING FACTOR, ERYTHROCYTE see **INTERLEUKIN-3**

BUSERELIN see **BUSERELIN ACETATE**

BUSERELIN ACETATE

ADMINISTRATION & DOSAGE

Controlled release of a GnRH agonist from a polyhydroxybutyric acid implant: reversible suppression of the menstrual cycle in the macaque. Fraser HM, et al. **Acta Endocrinol (Copenh)** 1989 Dec;121(6):841-8

Intranasal LHRH agonist combined periodically with a progestogen for contraception. Lemay A. **Adv Contracept** 1989 Dec;5(4):253-62

Treatment of precocious puberty using an intranasal luteinizing hormone-releasing hormone analogue: Buserelin. Low LC, et al. **Aust Paediatr J** 1989 Oct; 25(5):274-8

Three-monthly GnRH agonist (buserelin) for prostatic cancer. Waxman J, et al. **Br J Urol** 1990 Jan;65(1):43-5

Buserelin-mediated osteoporosis: effects of restoring estrogen on bone resorption and whole body calcium content in the rat. Goulding A, et al. **Calcif Tissue Int** 1990 Jan; 46(1):14-9

GnRH agonist administration in polycystic ovary syndrome. Buckler HM, et al. **Clin Endocrinol (Oxf)** 1989 Aug; 31(2):151-65

Luteinizing hormone-releasing hormone analog therapy of uterine fibroid: analysis of results obtained with buserelin administered intranasally and goserelin administered subcutaneously as a monthly depot. Costantini S, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Oct;37(1):63-9

An improved use of buserelin in ovarian stimulation for in-vitro fertilization. Belaisch-Allart J, et al. **Hum Reprod** 1990 Jul;5(5):573-4

Short-term use of buserelin in combination with human menopausal gonadotrophins for ovarian stimulation for

in-vitro fertilization in endocrinologically normal women. Smitz J, et al. **Hum Reprod** 1990 Feb;5(2):157–62

Luteinizing hormone releasing hormone agonist for contraception in breast feeding women. Fraser HM, et al. **J Clin Endocrinol Metab** 1989 Nov;69(5):996–1002

[Preliminary study of the use of intranasal buserelin in the long-term protocol of ovarian stimulation with the view toward fertilization in vitro] Camier B, et al. **Rev Fr Gynecol Obstet** 1989 Oct;84(10):659–61 (Eng. Abstr.) **(Fre)**

[Combined GnRH analogs/hMG/hCG treatment] Braendle W. **Arch Gynecol Obstet** 1989;245(1–4):931–5 (Eng. Abstr.) **(Ger)**

[Combined GnRH agonist/hMG therapy and ovarian overstimulation syndrome] Lindner C, et al. **Arch Gynecol Obstet** 1989;245(1–4):860–1 **(Ger)**

[Residual endometriosis following LHRH analog therapy] Ochs H, et al. **Geburtshilfe Frauenheilkd** 1990 Feb; 50(2):140–4 (Eng. Abstr.) **(Ger)**

[Long-term follow-up of 14 patients with endometriosis, who were treated with the LHRH analog buserelin] Reichel R, et al. **Gynakol Rundsch** 1989;29 Suppl 2:425–7 **(Ger)**

ADVERSE EFFECTS

The management of predicted ovarian hyperstimulation involving gonadotropin-releasing hormone analog with elective cryopreservation of all pre-embryos. Amso NN, et al. **Fertil Steril** 1990 Jun;53(6):1087–90

Ectopic pregnancy after luteal phase initiation of gonadotropin-releasing hormone analog before in vitro fertilization. Forman R, et al. **Fertil Steril** 1990 Jul; 54(1):169–70

ANALOGS & DERIVATIVES

Effect of GnRH agonists on the thymus in female rats. Ataya KM, et al. **Acta Endocrinol (Copenh)** 1989 Dec; 121(6):833–40

Estrogen deprivation in breast cancer. Clinical, experimental, and biological aspects. Nicholson RI, et al. **Ann N Y Acad Sci** 1990;595:316–27

LHRH analogue for treatment of recurrent and refractory mastalgia. Hamed H, et al. **Ann R Coll Surg Engl** 1990 Jul;72(4):221–4

Testicular histology after treatment with LH-RH analogue for carcinoma of the prostate. Johansen TE, et al. **Br J Urol** 1990 Apr;65(4):376–8

Protection of spermatogenesis in rats from the cytotoxic procarbazine by the depot formulation of Zoladex, a gonadotropin-releasing hormone agonist. Ward JA, et al. **Cancer Res** 1990 Feb 1;50(3):568–74

Suppression of plasma androgens by the antiandrogen flutamide in prostatic cancer patients treated with Zoladex, a GnRH analogue. Ayub M, et al. **Clin Endocrinol (Oxf)** 1990 Mar;32(3):329–39

Haemostatic changes during hormone manipulation in advanced prostate cancer: a comparison of DES 3 mg/day and goserelin 3.6 mg/month. Emtage LA, et al. **Eur J Cancer** 1990 Mar;26(3):315–9

Luteinizing hormone-releasing hormone analog therapy of uterine fibroid: analysis of results obtained with buserelin administered intranasally and goserelin administered subcutaneously as a monthly depot. Costantini S, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Oct;37(1):63–9

Advanced prostatic cancer: clinical and hormonal response to flutamide in patients pretreated with LHRH analogue and cyproterone acetate. Di Silverio F, et al. **Eur Urol** 1990;18(1):10–5

Estrogenic action of tamoxifen in women treated with luteinizing hormone-releasing hormone agonists (goserelin)—lack of shrinkage of uterine fibroids. Lumsden MA, et al. **Fertil Steril** 1989 Dec;52(6):924–9

Gonadotropin-releasing hormone agonist analog therapy effective in ovarian granulosa cell malignancy. Martikainen H, et al. **Gynecol Oncol** 1989 Dec;35(3):406–8

Effect of treatment with LHRH analogue Zoladex on binding of oestradiol, progesterone and epidermal growth factor to uterine fibromyomata. Baird DT, et al. **Horm Res** 1989; 32 Suppl 1:154–6

Zoladex versus danazol in the treatment of pelvic endometriosis: effects on plasma lipid risk factors. Crook D, et al. **Horm Res** 1989;32 Suppl 1:157–60

Luteinising hormone-releasing hormone analogues alone in the treatment of advanced disease. Debruyne F. **Horm Res** 1989;32 Suppl 1:62–4; discussion 64–5

LHRH analogues in combination with an anti-androgen in the treatment of advanced disease. Denis L. **Horm Res** 1989;32 Suppl 1:66–7; discussion 68

Endocrinology of Zoladex in postmenopausal women. Dowsett M, et al. **Horm Res** 1989;32 Suppl 1:209–12

Pharmacology of the luteinising hormone-releasing hormone (LHRH) analogue, Zoladex. Furr BJ. **Horm Res** 1989;32 Suppl 1:86–92

Zoladex: therapeutic effects in postmenopausal breast cancer. Harris AL, et al. **Horm Res** 1989;32 Suppl 1:213–6; discussion 217

LHRH analogues in early breast cancer. Jonat W. **Horm Res** 1989;32 Suppl 1:223–5

Zoladex in the treatment of premenopausal metastatic breast cancer patients. Kaufmann M. **Horm Res** 1989;32 Suppl 1:202–5

Review of the endocrine actions of luteinising hormone-releasing hormone analogues in premenopausal women with breast cancer. Nicholson RI, et al. **Horm Res** 1989;32 Suppl 1:198–201

Therapy in premenopausal women with advanced, oestrogen positive or/and progesterone positive breast cancer: surgical oophorectomy versus the LHRH analogue, Zoladex. Robert NJ, et al. **Horm Res** 1989;32 Suppl 1:221–2

Zoladex in advanced breast cancer. Robertson JF, et al. **Horm Res** 1989;32 Suppl 1:206–8

A comparison of the skeletal effects of goserelin and danazol in premenopausal women with endometriosis. Stevenson JC, et al. **Horm Res** 1989;32 Suppl 1:161–3; discussion 164

A multi-centre randomised study to compare the effects of ovarian ablation with Zoladex depot in pre- and perimenopausal patients with advanced breast cancer. Tyrrell C. **Horm Res** 1989;32 Suppl 1:218–20

The short-term use of luteinising hormone-releasing hormone analogues in uterine fibroids. Van der Spuy ZM, et al. **Horm Res** 1989;32 Suppl 1:137–40

Prolonged suppression of rat testis function by a depot formulation of Zoladex, a GnRH agonist. Ward JA, et al. **J Androl** 1989 Nov-Dec;10(6):478–86

Predictive initial parameters for response of stage D prostate cancer to treatment with the luteinizing hormone-releasing hormone agonist goserelin. Kreis W, et al. **J Clin Oncol** 1990 May;8(5):870–4

Gn-RH agonists in breast and gynaecologic cancer treatment. Nicholson RI, et al. **J Steroid Biochem** 1989 Oct; 33(4B):801–4 (28 ref.)

Influence of different types of antiandrogens on luteinizing hormone-releasing hormone analogue-induced testosterone surge in patients with metastatic carcinoma of the prostate. Schulze H, et al. **J Urol** 1990 Oct; 144(4):934–41

Zoladex said to be "as effective as surgery" for prostate cancer [news] **Oncology (Williston Park)** 1990 Feb;4(2):92–3

Goserelin—depot preparation of LHRH analogue used in the treatment of endometriosis. Shaw RW. **Prog Clin Biol Res** 1990;323:383–92

Complete androgen blockade: data from an EORTC 30853 trial. Denis L, et al. **Semin Urol** 1990 Aug;8(3):166–74

[Goserelin] Klarskov P, et al. **Ugeskr Laeger** 1990 Apr 30; 152(18):1315–7 **(Dan)**

[Preoperative reduction of uterine leiomyoma by the GnRH-analog goserelin (zoladex)] Hackenberg R, et al. **Geburtshilfe Frauenheilkd** 1990 Feb;50(2):136–9 (Eng. Abstr.) **(Ger)**

[Lack of effect of therapy with LHRH analogs, alone or associated with flutamide, on prolactin levels in advanced prostatic carcinoma] Banchini A, et al. **Minerva Endocrinol** 1989 Jul-Sep;14(3):165–8 (Eng. Abstr.) **(Ita)**

[Treatment of patients with uterine myoma and its effectiveness] Vasil'chenko NP, et al. **Akush Ginekol (Mosk)** 1990 Feb;(2):7–10 (69 ref.) **(Rus)**

PHARMACOKINETICS

Sustained release of buserelin acetate, a luteinizing hormone-releasing hormone agonist, from an injectable oily preparation utilizing ethylated beta-cyclodextrin. Uekama K, et al. **J Pharm Pharmacol** 1989 Dec; 41(12):874–6

PHARMACOLOGY

The effects of gonadotrophin releasing hormone analogues in prostate cancer are mediated through specific tumour receptors. Qayum A, et al. **Br J Cancer** 1990 Jul;62(1):96–9

A pharmacological evaluation of a new 3-month depot preparation of buserelin for prostatic cancer. Waxman J, et al. **Cancer Chemother Pharmacol** 1989;25(3):219–20

Buserelin. A review of its pharmacodynamic and pharmacokinetic properties, and clinical profile. Brogden RN, et al. **Drugs** 1990 Mar;39(3):399–437 (280 ref.)

A gonadotropin releasing hormone analog induces spermiation in intact and hypophysectomized frogs, Rana esculenta. Minucci S, et al. **Experientia** 1989 Dec 1; 45(11–12):1118–21

Severe ovarian hyperstimulation syndrome using agonists of gonadotropin-releasing hormone for in vitro fertilization: a European series and a proposal for prevention. Forman RG, et al. **Fertil Steril** 1990 Mar;53(3):502–9

Comparison of different ovarian stimulation protocols for gamete intrafallopian transfer in patients with minimal and mild endometriosis. Remorgida V, et al. **Fertil Steril** 1990 Jun;53(6):1060–3

LH pulsatility and response to a single s.c. injection of buserelin in polycystic ovary syndrome. Prelević GM, et al. **Gynecol Endocrinol** 1990 Mar;4(1):1–13

Failure to improve ovarian response by combined gonadotropin-releasing hormone agonist and gonadotropin therapy. Bider D, et al. **Gynecol Obstet Invest** 1990; 29(3):192–6

Induction of pharmacological hypogonadotropism using gonadotropin-releasing hormone agonists in patients undergoing controlled ovarian stimulation. Lindner C, et al. **Gynecol Obstet Invest** 1990;29(2):32–9

Ovarian response and pregnancy rates in in vitro fertilization, gamete intrafallopian transfer, and in vivo fertilization therapies after combined gonadotropin-releasing hormone agonist/human menopausal gonadotropin stimulation. Lindner C, et al. **Gynecol Obstet Invest** 1990;29(2):140–4

Use of buserelin in an IVF programme for pituitary-ovarian suppression prior to ovarian stimulation with exogenous gonadotrophins. Ibrahim ZH, et al. **Hum Reprod** 1990 Apr; 5(3):258–62

Endocrine changes in women conceiving during treatment with an LHRH agonist. Isherwood PJ, et al. **Hum Reprod** 1990 May;5(4):409–12

Insulin secretion in polycystic ovarian disease: effect of ovarian suppression by GnRH agonist. Lanzone A, et al. **Hum Reprod** 1990 Feb;5(2):143–9

Endocrine responses to gonadotrophins after LHRH agonist administration on cycle days 1–4: prevention of premature luteinization. Martikainen H, et al. **Hum Reprod** 1990 Apr; 5(3):246–9

Effect of fertirelin acetate or buserelin on conception rate at first or second insemination in lactating dairy cows. Chenault JR. **J Dairy Sci** 1990 Mar;73(3):633–8

Suppression of pituitary-testis function in rats treated neonatally with a gonadotrophin-releasing hormone agonist and antagonist: acute and long-term effects. Kolho KL, et al. **J Endocrinol** 1989 Oct;123(1):83–91

FSH causes a time-dependent stimulation of preovulatory follicle growth in the absence of pulsatile LH secretion in ewes chronically treated with gonadotrophin-releasing hormone agonist. Picton HM, et al. **J Endocrinol** 1990 Aug; 126(2):297–307

Inhibin secretion after treatment with an LHRH agonist and subsequent ovarian hyperstimulation induced by FSH in the macaque (Macaca arctoides). Fraser HM, et al. **J Reprod Fertil** 1990 Jul;89(2):441–6

Embryonic development of fertilized rat oocytes induced to mature by an analogue of gonadotrophin-releasing hormone. Shalgi R, et al. **J Reprod Fertil** 1990 Jul; 89(2):681–7

Effects of gonadotrophin-releasing hormone agonist on uterine fibroids and bone density. Bianchi G, et al. **Maturitas** 1989 Sep;11(3):179–85

Hot flushes during Gn-RH analogue administration despite normal serum oestradiol levels. Bider D, et al. **Maturitas** 1989 Sep;11(3):223–8

[Regulation of aromatase activity by gonadotropin-releasing hormone and its agonists in cultured rat granulosa cells] Liang SG, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Nov;41(11):1725–30 (Eng. Abstr.) **(Jpn)**

[The function of the hypophyseo-gonadal system in hamadryas baboons during the tonic infusion of a luliberin agonist—buserelin] Goncharova ND, et al. **Probl Endokrinol (Mosk)** 1989 Sep-Oct;35(5):68–72 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Urinary excretion of [D-Ser(t-Bu)6,Des-Gly10]GnRH ethylamide (buserelin) during therapy of central precocious puberty: a multicentre study. Sizonenko PC, et al. **Acta Endocrinol (Copenh)** 1990 May;122(5):553–8

Efficacy of gonadotropin-releasing hormone agonist (buserelin) in the treatment of endometriosis. Rönnberg L, et al. **Acta Obstet Gynecol Scand** 1989;68(1):49–53

Buserelin versus danazol in the treatment of endometriosis-associated infertility. Fedele L, et al. **Am J Obstet Gynecol** 1989 Oct;161(4):871–6

Gonadotropin-releasing hormone analogs in the treatment of endometriomas. Schenken RS. **Am J Obstet Gynecol** 1990 Feb;162(2):579–81

LH-RH agonist (buserelin): treatment of endometriosis. Clinical, laparoscopic, endocrine and metabolic evaluation. Cirkel U, et al. **Arch Gynecol Obstet** 1989;246(3):139–51

Buserelin in the treatment of prostatic cancer. Roila F. **Biomed Pharmacother** 1989;43(4):279–85 (51 ref.)

Treatment with GnRH agonists before myomectomy and the risk of short-term myoma recurrence. Fedele L, et al. **Br J Obstet Gynaecol** 1990 May;97(5):393–6

Prolonged treatment with the GnRH analogue buserelin does not affect alpha-subunit production by the pituitary gonadotroph. Kwekkeboom DJ, et al. **Clin Endocrinol (Oxf)** 1990 Apr;32(4):443–51

Studies on GnRH agonist suppression of estrogen production in patients with endometriosis. Ohtsuka S, et al. **Endocrinol Jpn** 1989 Aug;36(4):611–9

Phase II trial of buserelin in hepatocellular carcinoma. Falkson G, et al. **Eur J Cancer Clin Oncol** 1989 Sep; 25(9):1339–40

The value of GnRH agonists in the treatment of failed cycles in an IVF-ET program: a comparative study. Feldberg D, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jan-Feb; 34(1–2):103–9

Comparative trial of luteinizing hormone-releasing hormone analog/human menopausal gonadotropin and clomiphene citrate/human menopausal gonadotropin in an assisted conception program. Abdalla HI, et al. **Fertil Steril** 1990 Mar;53(3):473–8

Long-term suppression of ovarian function by a luteinizing-hormone releasing hormone agonist implant in patients with endometriosis. Fraser HM, et al. **Fertil Steril** 1990 Jan;53(1):61–8

Use of buserelin acetate in an in vitro fertilization program: a comparison with classical clomiphene citrate-human menopausal gonadotropin treatment. Lejeune B, et al. **Fertil Steril** 1990 Sep;54(3):475–81

Uterine leiomyosarcoma diagnosed during treatment with agonist of luteinizing hormone-releasing hormone for

presumed uterine fibroid. Loong EP, et al. **Fertil Steril** 1990 Sep;54(3):530–1

The effects of combining norethindrone with a gonadotropin–releasing hormone agonist in the treatment of symptomatic endometriosis. Surrey ES, et al. **Fertil Steril** 1990 Apr;53(4):620–6

Stimulation with human menopausal gonadotropin versus follicle–stimulating hormone after pituitary suppression in polycystic ovarian syndrome. Tanbo T, et al. **Fertil Steril** 1990 May;53(5):798–803

GnRH–agonist therapy in women with the polycystic ovarian syndrome: effects on ovarian volume and on gonadotropin and sex steroid levels. Dale PO, et al. **Gynecol Endocrinol** 1989 Dec;3(4):309–15

LH surge induction by GnRH agonist at the time of ovulation. Lanzone A, et al. **Gynecol Endocrinol** 1989 Sep; 3(3):213–20

Gonadotropin and ovarian steroid production in polycystic ovarian syndrome during suppression with a gonadotropin–releasing hormone agonist. Tanbo T, et al. **Gynecol Obstet Invest** 1989;28(3):147–51

Clinical appreciation of LHRH analogue formulations. Lemay A. **Horm Res** 1989;32 Suppl 1:93–101; discussion 102

Long–term use of the low dose LHRH analogue combined with monthly medroxy–progesterone administration. Lemay A, et al. **Horm Res** 1989;32 Suppl 1:141–5

Successful treatment of infertile women with hypothalamic primary and secondary protracted amenorrhoea using gonadotrophin releasing hormone analogue and human menopausal gonadotrophin. Aboulghar MA, et al. **Hum Reprod** 1990 Jul;5(5):557–60

IVF pregnancy after induction of an ovulatory endogenous gonadotrophin surge using an LHRH agonist nasal spray. Bentick B, et al. **Hum Reprod** 1990 Jul;5(5):570–2

Endocrine profiles and luteal function during GnRH–analogue/HMG therapy. Braendle W, et al. **Hum Reprod** 1989 Nov;4(8 Suppl):121–6

The value of pre–treatment with gonadotrophin releasing hormone (GnRH) analogue in IVF–ET therapy of severe endometriosis. Dicker D, et al. **Hum Reprod** 1990 May; 5(4):418–20

The use of a short regimen of buserelin, a gonadotrophin–releasing hormone agonist, and human menopausal gonadotrophin in assisted conception cycles. Owen EJ, et al. **Hum Reprod** 1989 Oct;4(7):749–53

Effect of long–term inhibition of gonadotrophin secretion by the gonadotrophin–releasing hormone agonist, buserelin, on sex steroid secretion and ovarian morphology in polycystic ovary syndrome. Macleod AF, et al. **J Endocrinol** 1990 May;125(2):317–25

Treatment of central precocious puberty with LH–RHa (buserelin): long term effect on growth, bone maturation and predicted height. Galluzzi F, et al. **J Endocrinol Invest** 1989;12(8 Suppl 3):149–50

Endometriosis–associated infertility treated by long–term gonadotropin–releasing hormone agonist administration and assisted fertilization. Dale PO, et al. **J In Vitro Fert Embryo Transf** 1990 Jun;7(3):180–1

Treatment of endometriosis with gonadotropin releasing hormone agonist (buserelin). Sirimongkolkasem R, et al. **J Med Assoc Thai** 1990 Feb;73 Suppl 1:37–41

Luteinizing hormone–releasing hormone analogue (Buserelin) treatment for central precocious puberty: a multi–centre trial. Werther GA, et al. **J Paediatr Child Health** 1990 Feb;26(1):4–8

Buserelin treatment of advanced prostatic cancer: a phase II study. Veronesi A, et al. **Med Oncol Tumor Pharmacother** 1989;6(4):255–7

Endometrial patterns during danazol and buserelin therapy for endometriosis: comparative structural and ultrastructural study. Fedele L, et al. **Obstet Gynecol** 1990 Jul;76(1):79–84

A comparison of the efficacy and safety of buserelin vs danazol in the treatment of endometriosis. Protocol 310 Study Group. Dawood MY, et al. **Prog Clin Biol Res** 1990; 323:253–67

Efficacy and safety of intranasal buserelin acetate in the treatment of endometriosis: a review of six clinical trials and comparison with danazol. Trabant H, et al. **Prog Clin Biol Res** 1990;323:357–82 (60 ref.)

LHRH analogue treatment for the prevention of premenstrual attacks of acute porphyria. Herrick AL, et al. **Q J Med** 1990 Apr;75(276):355–63

Long–term results with the Gn–RH analogue, buserelin, in metastatic prostate cancer. Maffezzini M, et al. **Tumori** 1990 Feb 28;76(1):66–8

Clinical importance of prostatic measurements in follow–up of GnRH analogue–treated prostatic carcinoma patients. Matzkin H, et al. **Urology** 1990 Sep;36(3):214–8

[GnRH agonists in the ovulation stimulation scheme for in vitro fertilization] Roztočil A, et al. **Cesk Gynekol** 1989 Dec;54(10):776–82 **(Cze)**

[Treatment of uterine fibroma using LH–RH analogs and gestrinone. Limits and indications] Erny R, et al. **Rev Fr Gynecol Obstet** 1990 Feb;85(2):73–7 (Eng. Abstr.) **(Fre)**

[Turner syndrome with peritoneal endometriosis and ascites—therapeutic effects of buserelin therapy] Meinen K, et al. **Arch Gynecol Obstet** 1989;245(1–4):943–5 **(Ger)**

[The effect of buserelin therapy in endometriosis] Fuchs U. **Zentralbl Gynakol** 1989;111(18):1231–5 (Eng. Abstr.) **(Ger)**

[Hormonal changes in buserelin therapy] Fuchs U, et al. **Zentralbl Gynakol** 1989;111(18):1236–40 (Eng. Abstr.) **(Ger)**

[Therapeutic use of a gonadotropin releasing hormone analogue in breast cancer] Kahán Z, et al. **Orv Hetil** 1990 May 13;131(19):1033–6 (32 ref.) (Eng. Abstr.) **(Hun)**

[Testicular endocrine function in patients with prostatic cancer receiving medical castration by long–term administration of LH–RH agonists] Isurugi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Oct;80(10):1466–73 (Eng. Abstr.) **(Jpn)**

[Treatment of patients with uterine myoma and its effectiveness] Vasil'chenko NP, et al. **Akush Ginekol (Mosk)** 1990 Feb;(2):7–10 (69 ref.) **(Rus)**

BUSH BABIES see **GALAGO**

BUSINESS see **COMMERCE**

BUSPIRONE

Buspirone: potentials for abuse? [letter] Raleigh FR. **DICP** 1989 Dec;23(12):1035

Abuse potential of buspirone and related drugs. Balster RL. **J Clin Psychopharmacol** 1990 Jun;10(3 Suppl):31S–37S (31 ref.)

ADMINISTRATION & DOSAGE

A double–blind comparison of buspirone, clobazam, and placebo in patients with anxiety treated in a general practice setting. Böhm C, et al. **J Clin Psychopharmacol** 1990 Jun; 10(3 Suppl):38S–42S

Effects of buspirone in seven schizophrenic subjects. Brody D, et al. **J Clin Psychopharmacol** 1990 Feb;10(1):68–9

High–dose buspirone in case of tardive dyskinesia [letter] Neppe VM. **Lancet** 1989 Dec 16;2(8677):1458

Effects of buspirone in the benzodiazepine dependent rat. Boisse NR, et al. **NIDA Res Monogr** 1989;95:494

ADVERSE EFFECTS

Possible induction of mania by buspirone [letter] McDaniel JS, et al. **Am J Psychiatry** 1990 Jan;147(1):125–6

Comparative assessment of efficacy and withdrawal symptoms after 6 and 12 weeks' treatment with diazepam or buspirone [see comments] Murphy SM, et al. **Br J Psychiatry** 1989 Apr;154:529–34 Comment in: Br J Psychiatry 1989 Dec;155:866.

Comment: lack of abuse potential with buspirone [letter] Steinberg JR. **DICP** 1990 Jul–Aug;24(7–8):785–6

Movement disorders and new azapirone anxiolytic drugs. Jann MW, et al. **J Am Board Fam Pract** 1990 Apr–Jun; 3(2):111–9 (64 ref.)

Priapism associated with buspar [letter] Coates NE. **South Med J** 1990 Aug;83(8):983

Long–term buspirone therapy for chronic anxiety: a multicenter international study to determine safety. Rakel RE. **South Med J** 1990 Feb;83(2):194–8

ANALOGS & DERIVATIVES

Ipsapirone and 1–(2–pyrimidinyl)–piperazine increase rat locus coeruleus noradrenergic activity. Sanghera MK, et al. **Brain Res Bull** 1990 Jan;24(1):17–22

Antagonist properties of 1–(2–pyrimidinyl)piperazine at presynaptic alpha 2–adrenoceptors in the rat brain. Gobbi M, et al. **Eur J Pharmacol** 1990 May 3;180(1):183–6

Abuse potential of buspirone and related drugs. Balster RL. **J Clin Psychopharmacol** 1990 Jun;10(3 Suppl):31S–37S (31 ref.)

Buspirone metabolite and panic attacks [letter; comment] Fuller RW. **Lancet** 1990 Feb 24;335(8687):470 Comment on: Lancet 1989 Sep 9;2(8663):615.

Effect of buspirone and its metabolite 1–(2–pyrimidinyl)–piperazine on hippocampal serotoninergic system, studied in freely moving rats. Grazia De Simoni M, et al. **Life Sci** 1990;46(3):197–205

8–OH–DPAT and buspirone analogs inhibit the ketanserin–sensitive quipazine–induced head shake response in rats. Yocca FD, et al. **Pharmacol Biochem Behav** 1990 Jan;35(1):251–4

The central action of 1–(2–pyrimidinyl)–piperazine, an ipsapirone metabolite. Tatarczyńska E, et al. **Pol J Pharmacol Pharm** 1989 Jan–Feb;41(1):51–61

[Electroencephalographic study with buspirone, a novel nonbenzodiazepine anxiolytic, and its major metabolite, 1–(2–pyrimidinyl)piperazine (1–PP), in rabbits] Kawasaki H, et al. **Nippon Yakurigaku Zasshi** 1990 Mar;95(3):91–104 (Eng. Abstr.) **(Jpn)**

[An analysis of the hypothermic action of 8–hydroxy–2–(di–N–propylamino)tetralin, 1–(2–pyrimidinyl)piperazine and its derivatives] Komissarov IV, et al. **Biull Eksp Biol Med** 1990 Mar; 109(3):275–7 (Eng. Abstr.) **(Rus)**

BLOOD

Determination of plasma buspirone by high–performance liquid chromatography with coulometric detection. Franklin M. **J Chromatogr** 1990 Apr 6;526(2):590–6

HISTORY

Azapirones: history of development. Eison AS. **J Clin Psychopharmacol** 1990 Jun;10(3 Suppl):2S–5S

IMMUNOLOGY

[Antigenicity study of buspirone hydrochloride in guinea pigs and mice] Kawano S, et al. **J Toxicol Sci** 1990 Apr;15 Suppl 1:15–30 (Eng. Abstr.) **(Jpn)**

METABOLISM

Metabolism of the antianxiety drug buspirone in the rat. Jajoo HK, et al. **Drug Metab Dispos** 1989 Nov–Dec;17(6):625–33

Metabolism of the antianxiety drug buspirone in human subjects. Jajoo HK, et al. **Drug Metab Dispos** 1989 Nov–Dec;17(6):634–40

Quantitative autoradiographic distribution and pharmacological characterization of (3H)buspirone binding to sections from rat, bovine and marmoset brain. Brüning G, et al. **J Neural Transm** 1989;78(2):131–44

PHARMACOLOGY

Effects of buspirone on sleep and respiration. Mendelson WB, et al. **Am Rev Respir Dis** 1990 Jun;141(6):1527–30

Preliminary evidence of a serotonin (5–HT–1–like) component to the prolactin response to buspirone challenge in humans [letter] Coccaro EF, et al. **Arch Gen Psychiatry** 1990 Jun;47(6):594–5

Effect of buspirone on glutathione hepatic levels in rat. Micheli L, et al. **Boll Soc Ital Biol Sper** 1989 Oct; 65(10):945–9

The involvement of 5–hydroxytryptaminergic and dopaminergic mechanisms in the eating induced by buspirone, gepirone and ipsapirone. Fletcher PJ, et al. **Br J Pharmacol** 1990 Mar;99(3):519–25

Effects of chlordiazepoxide and buspirone on plasma catecholamine and corticosterone levels in rats under basal and stress conditions. de Boer SF, et al. **Endocrinol Exp** 1990 Mar;24(1–2):229–39

Evidence that the 5–HT1A receptor agonists buspirone and ipsapirone activate adrenaline release in the conscious rat. Chaouloff F, et al. **Eur J Pharmacol** 1990 Feb 20; 177(1–2):107–10

Intra–hippocampal buspirone in animal models of anxiety. Kostowski W, et al. **Eur J Pharmacol** 1989 Sep 22; 168(3):393–6

The reproducibility of the prolactin response to buspirone: relationship to the menstrual cycle. Dinan TG, et al. **Int Clin Psychopharmacol** 1990 Apr;5(2):119–23

Neuroendocrine effects of azapirones. Cowen PJ, et al. **J Clin Psychopharmacol** 1990 Jun;10(3 Suppl):21S–25S (44 ref.)

Neurochemistry and neurophysiology of buspirone and gepirone: interactions at presynaptic and postsynaptic 5–HT1A receptors. Yocca FD. **J Clin Psychopharmacol** 1990 Jun;10(3 Suppl):6S–12S (36 ref.)

Effects of buspirone and related compounds on suppressed operant responding in rats. Sanger DJ. **J Pharmacol Exp Ther** 1990 Aug;254(2):420–6

Effect of buspirone and its metabolite 1–(2–pyrimidinyl)–piperazine on hippocampal serotoninergic system, studied in freely moving rats. Grazia De Simoni M, et al. **Life Sci** 1990;46(3):197–205

Selective increase in carbohydrate intake by rats treated with 8–hydroxy–2–(di–n–propylamino)–tetraline or buspirone. Luo SQ, et al. **Life Sci** 1990;46(23):1643–8

The discovery and development of buspirone: a new approach to the treatment of anxiety. New JS. **Med Res Rev** 1990 Jul–Sep;10(3):283–326 (177 ref.)

Buspirone and diazepam: comparison of subjective, psychomotor and biological effects. Boulenger JP, et al. **Neuropsychobiology** 1989;22(2):83–9

Antinociceptive effects of the novel anxiolytic buspirone in three pain tests in rats. Giordano J, et al. **Pain** 1989 Oct; 39(1):109–13

Buspirone blocks the discriminative stimulus effects of apomorphine in monkeys. Kamien JB, et al. **Pharmacol Biochem Behav** 1990 Jan;35(1):117–20

Effects of intrathecal and systemic administration of buspirone on genital reflexes and mating behavior in male rats. Mathes CW, et al. **Pharmacol Biochem Behav** 1990 May;36(1):63–8

Effects of buspirone on plasma catecholamines, heart rate, and blood pressure in stressed and nonstressed rats. Taylor J, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):349–53

Discriminative stimulus properties of flesinoxan. Ybema CE, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):781–4

The long–term effects of diazepam, lorazepam, and buspirone on behavioral suppression by a shock signal. Davidson TL. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(2):223–36

Metergoline abolishes the prolactin response to buspirone. Gregory CA, et al. **Psychopharmacology (Berl)** 1990; 100(2):283–4

Conditioned taste aversion and place preference with buspirone and gepirone. Neisewander JL, et al. **Psychopharmacology (Berl)** 1990;100(4):485–90

Buspirone impairment of performance of passive avoidance and spatial learning tasks in the rat. Rowan MJ, et al. **Psychopharmacology (Berl)** 1990;100(3):393–8

Anti–conflict efficacy of buspirone following acute versus chronic treatment. Schefke DM, et al. **Psychopharmacology (Berl)** 1989;99(3):427–9

Serotonin supersensitivity: the pathophysiologic basis of

non-ulcer dyspepsia? A preliminary report of buspirone/prolactin responses. Dinan TG, et al. **Scand J Gastroenterol** 1990 May;25(5):541–4

[Electroencephalographic study with buspirone, a novel nonbenzodiazepine anxiolytic, and its major metabolite, 1-(2-pyrimidinyl)piperazine (1-PP), in rabbits] Kawasaki H, et al. **Nippon Yakurigaku Zasshi** 1990 Mar;95(3):91–104 (Eng. Abstr.) **(Jpn)**

[Buspirone: correlation of its anxiolytic and electroencephalographic effects] Bogdanov NN, et al. **Biull Eksp Biol Med** 1990 Mar;109(3):270–2 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Buspirone augmentation of fluoxetine in obsessive-compulsive disorder. Markovitz PJ, et al. **Am J Psychiatry** 1990 Jun;147(6):798–800

Comparison of diazepam and buspirone [letter; comment] Oswald I. **Br J Psychiatry** 1989 Dec;155:866 Comment on: Br J Psychiatry 1989 Apr;154:529–34.

A simple simulated public speaking test for evaluating anxiolytic drugs. Guimarães FS, et al. **Braz J Med Biol Res** 1989;22(9):1083–9

Evaluation of buspirone as an antianxiety agent: buspirone and diazepam versus placebo. Pecknold JC, et al. **Can J Psychiatry** 1989 Nov;34(8):766–71

Buspirone therapy for elderly patients with anxiety or depressive neurosis [letter] Böhm C, et al. **J Clin Psychiatry** 1990 Jul;51(7):309

Buspirone and transvestic fetishism [letter; comment] Fishbain DA. **J Clin Psychiatry** 1989 Nov;50(11):436–7 Comment on: J Clin Psychiatry 1988 Oct;49(10):408–9.

Buspirone therapy for maladaptive behavior and anxiety in developmentally disabled persons. Ratey JJ, et al. **J Clin Psychiatry** 1989 Oct;50(10):382–4

Buspirone for attention deficit hyperactivity disorder? [letter] Balon R. **J Clin Psychopharmacol** 1990 Feb;10(1):77

Buspirone in drug users with AIDS or AIDS-related complex. Batki SL. **J Clin Psychopharmacol** 1990 Jun;10(3 Suppl):111S–115S

Buspirone therapy in anxious elderly patients: a controlled clinical trial. Böhm C, et al. **J Clin Psychopharmacol** 1990 Jun;10(3 Suppl):47S–51S

An open trial of buspirone in alcoholics [letter] Kranzler HR, et al. **J Clin Psychopharmacol** 1989 Oct;9(5):379–80

Obsessive-compulsive disorder: treatment with serotonin-selective uptake inhibitors, azapirones, and other agents. Murphy DL, et al. **J Clin Psychopharmacol** 1990 Jun;10(3 Suppl):91S–100S (90 ref.)

Clinical effects of the 5-HT1A partial agonists in depression: a composite analysis of buspirone in the treatment of depression. Robinson DS, et al. **J Clin Psychopharmacol** 1990 Jun;10(3 Suppl):67S–76S

Is buspirone effective for panic disorder? Sheehan DV, et al. **J Clin Psychopharmacol** 1990 Feb;10(1):3–11

Buspirone: effects on prolactin and growth hormone as a function of drug level in generalized anxiety [letter] Tollefson GD. **J Clin Psychopharmacol** 1989 Oct;9(5):387

Analysis of individual symptoms in generalized anxiety—a pooled, multistudy, double-blind evaluation of buspirone. Feighner JP, et al. **Neuropsychobiology** 1989;21(3):124–30

Can buspirone substitute for benzodiazepines in all anxious patients? Wang RI, et al. **NIDA Res Monogr** 1989;95:433–4

Response to Julio Pascual regarding Kishore-Kumar et al. (Pain, 37 (1989) 223–227) [letter] Max MB, et al. **Pain** 1990 Jan;40(1):117

Serotonin, serotonin receptors, serotonin receptor subtype agonists and pain [letter] Pascual J. **Pain** 1990 Jan; 40(1):115–6

[Buspirone: a new non-benzodiazepine anxiolytic drug] Honorato J, et al. **Rev Clin Esp** 1990 Apr;186(6):286–91 (39 ref.) (Eng. Abstr.) **(Spa)**

[New perspectives in the pharmacologic treatment of anxiety] Rodríguez N. **Rev Clin Esp** 1990 Apr;186(7):SUPPL 3 P. **(Spa)**

TOXICITY

[Acute toxicity study of buspirone hydrochloride in mice, rats and dogs] Kadota T, et al. **J Toxicol Sci** 1990 Apr; 15 Suppl 1:1–14 (Eng. Abstr.) **(Jpn)**

[Reproductive and developmental toxicity studies of buspirone hydrochloride (I)—Oral administration to rats during the period of fetal organogenesis] Kai S, et al. **J Toxicol Sci** 1990 Apr;15 Suppl 1:31–60 (Eng. Abstr.) **(Jpn)**

[Reproductive and developmental toxicity studies of buspirone hydrochloride (II)—Oral administration to rats during perinatal and lactation periods] Kai S, et al. **J Toxicol Sci** 1990 Apr;15 Suppl 1:61–84 (Eng. Abstr.) **(Jpn)**

BUSULFAN

Structures of three DNA cross-linking agents, ethane-1,2-di(methylsulfonate), propane-1,3-di(methylsulfonate) and n-butane-1,4-di(methylsulfonate). McKenna R, et al. **Acta Crystallogr C** 1989 Feb 15;45 (Pt 2):311–4

ADMINISTRATION & DOSAGE

Bone marrow transplantation following busulfan and cyclophosphamide for acute myelogenous leukemia. Crilley P, et al. **Bone Marrow Transplant** 1990 Mar;5(3):187–91

Busulfan, cyclophosphamide and fractionated total body irradiation as a preparatory regimen for marrow transplantation in patients with advanced hematological malignancies: a phase I study. Petersen FB, et al. **Bone Marrow Transplant** 1989 Nov;4(6):617–23

Busulfan and cyclophosphamide in allogeneic and autologous bone marrow transplantation [editorial; comment] Ahmed T. **Cancer Invest** 1989;7(5):521–2 Comment on: Cancer Invest 1989;7(5):509–13.

The role of busulfan/cyclophosphamide regimens in allogeneic and autologous bone marrow transplantation [see comments] Brodsky I, et al. **Cancer Invest** 1989; 7(5):509–13 Comment in: Cancer Invest 1989;7(5):521–2.

Granulocyte colony-stimulating factor and neutrophil recovery after high-dose chemotherapy and autologous bone marrow transplantation. Sheridan WP, et al. **Lancet** 1989 Oct 14;2(8668):891–5

High-dose chemotherapy with busulphan and cyclophosphamide and bone-marrow transplantation for drug-sensitive malignancies in adults: a preliminary report. Sheridan WP, et al. **Med J Aust** 1989 Oct 2;151(7):379–86 (40 ref.)

ADVERSE EFFECTS

Pulmonary alveolar proteinosis and disseminated atypical mycobacteriosis in a patient with busulfan lung. Watanabe K, et al. **Acta Pathol Jpn** 1990 Jan;40(1):63–6

Busulphan and phenytoin [letter] Grigg AP, et al. **Ann Intern Med** 1989 Dec 15;111(12):1049–50

Busulfan and veno-occlusive disease of the liver [letter] Vassal G, et al. **Ann Intern Med** 1990 Jun 1;112(11):881

Does osteoporosis related to cytostatic drugs exist? Van Linthoudt D, et al. **Med Hypotheses** 1989 Aug;29(4):293–4

Pericardial fibrosis following busulfan treatment. Terpstra W, et al. **Neth J Med** 1989 Dec;35(5–6):249–52

[Liver damage during use of busulfan (published erratum appears in Ned Tijdschr Geneeskd 1989 Sep 16;133(37):1864)] Adang RP, et al. **Ned Tijdschr Geneeskd** 1989 Jul 29;133(30):1515–8 (Eng. Abstr.) **(Dut)**

[Liver damage during use of busulfan (letter)] Peters WG. **Ned Tijdschr Geneeskd** 1989 Sep 16;133(37):1849–50 **(Dut)**

[Hepatic veno-occlusive disease in a patient undergoing bone marrow autotransplant after busulfan and melphalan conditioning (letter)] Zuazu I, et al. **Med Clin (Barc)** 1990 Jan 27;94(3):119 **(Spa)**

ANALOGS & DERIVATIVES

Intravenous treosulfan versus intravenous treosulfan plus cisplatinum in advanced ovarian carcinoma. Masding J, et al. **Br J Obstet Gynaecol** 1990 Apr;97(4):342–51

Comparison of single-, double- or triple-exposure protocols for the rodent bone marrow/peripheral blood micronucleus assay using 4-aminobiphenyl and treosulphan. Gulati DK, et al. **Mutat Res** 1990 Jun-Aug;234(3–4):135–9

BLOOD

Determination of busulfan in plasma by high-performance liquid chromatography. Kazemifard AG, et al. **J Chromatogr** 1990 Jun 8;528(1):274–6

PHARMACOKINETICS

Anticonvulsants and busulfan [letter] Fitzsimmons WE, et al. **Ann Intern Med** 1990 Apr 1;112(7):552–3

Busulfan disposition in children. Grochow LB, et al. **Blood** 1990 Apr 15;75(8):1723–7

Pharmacokinetics of busulfan: correlation with veno-occlusive disease in patients undergoing bone marrow transplantation. Grochow LB, et al. **Cancer Chemother Pharmacol** 1989;25(1):55–61

Pharmacokinetics of high-dose busulfan in children. Vassal G, et al. **Cancer Chemother Pharmacol** 1989;24(6):386–90

PHARMACOLOGY

Comparative effects of busulfan, cytosine arabinoside and adriamycin on different maturation stages of normal human bone marrow cells. Tohda S, et al. **Acta Haematol (Basel)** 1990;83(1):16–21

Effect of busulfan on crystalline lens—glutathione, glutathione reductase and glucose-6-phosphate dehydrogenase. Cherian M, et al. **Indian J Exp Biol** 1989 Oct;27(10):915–6

Differential effect of Myleran on two normal haemopoietic progenitor cell populations. Blackett NM, et al. **Nature** 1973 Aug 3;244(5414):300–1

THERAPEUTIC USE

Treatment of severe beta-thalassemia (patients) with myleran. Liu DP, et al. **Am J Hematol** 1990 Jan;33(1):50–5

Gastrointestinal cancer in patients with chronic myeloid leukemia on busulphan treatment [letter] Storti S, et al. **Am J Hematol** 1990 Sep;35(1):69

The maintenance of busulphan-induced remissions in chronic granulocytic leukaemia with recombinant interferon alpha-2b. Bergsagel DE, et al. **Br J Cancer** 1990 Jun; 61(6):895–8

A comparison between regimens containing chemotherapy alone (busulfan and cyclophosphamide) and chemotherapy (V. RAPID) plus total body irradiation on marrow engraftment following allogeneic bone marrow transplantation. Reynolds M, et al. **Eur J Haematol** 1989 Oct;43(4):314–20

Allogeneic bone marrow transplantation from HLA-identical siblings following conditioning with busulfan and cyclophosphamide. First results. Wiktor-Jedrzejczak W, et al. **Folia Haematol (Leipz)** 1989;116(3–4):403–8

[Recent progress in the treatment of hematological malignancies. IV. Chronic myelocytic leukemia] Nagi K, et al. **Nippon Naika Gakkai Zasshi** 1989 Jun;78(6):792–5 **(Jpn)**

[A trial for prolongation of chronic phase of chronic myeloid leukemia—maintenance of leukocyte counts within normal range with busulfan] Matsuo T, et al. **Rinsho Ketsueki** 1989 May;30(5):625–30 (Eng. Abstr.) **(Jpn)**

TOXICITY

Dose-dependent neurotoxicity of high-dose busulfan in children: a clinical and pharmacological study. Vassal G, et al. **Cancer Res** 1990 Oct 1;50(19):6203–7

BUSULPHAN see **BUSULFAN**

BUTABARBITAL see under **BARBITURATES**

BUTACLAMOL see under **DIBENZOCYCLOHEPTENES**

BUTADIENES

Further development and evaluation of high impact strength denture base materials. Rodford RA. **J Dent** 1990 Jun; 18(3):151–7

ADVERSE EFFECTS

Future directions in epidemiologic studies of 1,3-butadiene-exposed workers. Acquavella JF. **Environ Health Perspect** 1990 Jun;86:129–34

Cancer risk assessment of 1,3-butadiene. Cote IL, et al. **Environ Health Perspect** 1990 Jun;86:149–53 (32 ref.)

An update on mortality among workers at a 1,3-butadiene facility—preliminary results. Divine BJ. **Environ Health Perspect** 1990 Jun;86:119–28

Occupational exposure of workers to 1,3-butadiene. Fajen JM, et al. **Environ Health Perspect** 1990 Jun;86:11–8

OSHA's approach to risk assessment for setting a revised occupational exposure standard for 1,3-butadiene. Grossman EA, et al. **Environ Health Perspect** 1990 Jun; 86:155–8

Critical assessment of epidemiologic studies on the human carcinogenicity of 1,3-butadiene. Landrigan PJ. **Environ Health Perspect** 1990 Jun;86:143–7 (27 ref.)

Environmental epidemiologic investigations in the styrene-butadiene rubber production industry. Lemen RA, et al. **Environ Health Perspect** 1990 Jun;86:103–6 (16 ref.)

Mortality of a cohort of workers in the styrene-butadiene polymer manufacturing industry (1943–1982). Matanoski GM, et al. **Environ Health Perspect** 1990 Jun;86:107–17

Assessment of 1,3-butadiene epidemiology studies. Ott MG. **Environ Health Perspect** 1990 Jun;86:135–41 (22 ref.)

Assessment of the potential risk to workers from exposure to 1,3-butadiene. Turnbull D, et al. **Environ Health Perspect** 1990 Jun;86:159–71 (52 ref.)

The paradox of butadiene epidemiology. Acquavella JF. **Exp Pathol** 1989;37(1–4):114–8 (7 ref.)

Neoplastic lesions induced by 1,3-butadiene in B6C3F1 mice. Miller RA, et al. **Exp Pathol** 1989;37(1–4):136–46

ANALYSIS

Industrial emissions of 1,3-butadiene. Mullins JA. **Environ Health Perspect** 1990 Jun;86:9–10

Determination of benzene, toluene and 1,3-butadiene in cigarette smoke by GC-MDS. Brunnemann KD, et al. **Exp Pathol** 1989;37(1–4):108–13

MK4588, a new antibiotic related to xanthocillin. Itoh J, et al. **J Antibiot (Tokyo)** 1990 May;43(5):456–61

Selected-ion monitoring of 4-vinyl-1-cyclohexene in acrylonitrile-butadiene-styrene polymer products and food simulants. Tan S, et al. **J Chromatogr** 1989 Nov 17; 482(1):246–51

[Composition of volatile thermo-destruction components of automobile brake straps] Kondakova LV, et al. **Gig Tr Prof Zabol** 1990;(3):18–21 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

The industrial production and use of 1,3-butadiene. Morrow NL. **Environ Health Perspect** 1990 Jun;86:7–8 (4 ref.)

Design, synthesis, and 5-lipoxygenase-inhibiting properties of 1-thio-substituted butadienes. Hanko R, et al. **J Med Chem** 1990 Apr;33(4):1163–70

METABOLISM

DNA-binding of sulfur-containing metabolites from 35S-(pentachlorobutadienyl)-L-cysteine in bacteria and isolated renal tubular cells. Vamvakas S, et al. **Drug Metabol Drug Interact** 1988;6(3–4):349–58

Species differences in the metabolism and disposition of inhaled 1,3-butadiene and isoprene. Dahl AR, et al. **Environ Health Perspect** 1990 Jun;86:65–9

Metabolism and mutagenicity of isoprene. Gervasi PG, et al. **Environ Health Perspect** 1990 Jun;86:85–7

Metabolism of inhaled butadiene to monkeys: comparison to rodents. Sun JD, et al. **Exp Pathol** 1989;37(1–4):133–5

Bioactivation of hexachlorobutadiene by glutathione conjugation. Dekant W, et al. **Food Chem Toxicol** 1990 Apr;28(4):285–93 (88 ref.)

Regulation of protein binding from 35S-(pentachlorobutadienyl)-L-cysteine in renal epithelial cells and mitochondria. Wallin A. **Res Commun Chem Pathol Pharmacol** 1989 Dec; 66(3):461–76

[Insomnia, lovastatin and isoprene (letter)] Allain P, et al. **Therapie** 1990 Jan–Feb;45(1):47–8 **(Fre)**

PHARMACOKINETICS

Inhalation pharmacokinetics of 1,3-butadiene and 1,2-epoxybutene-3 in rats and mice. Laib RJ, et al. **Environ Health Perspect** 1990 Jun;86:57–63

Inhalation pharmacokinetics of isoprene in rats and mice. Peter H, et al. **Environ Health Perspect** 1990 Jun;86:89–92

PHARMACOLOGY

In vitro and in vivo genotoxicity of 1,3-butadiene and metabolites. Arce GT, et al. **Environ Health Perspect** 1990 Jun;86:75–8 (30 ref.)

Results of NTP-sponsored mouse cytogenetic studies on 1,3-butadiene, isoprene, and chloroprene. Shelby MD. **Environ Health Perspect** 1990 Jun;86:71–3

Selective inhibition of cholesterol synthesis in liver versus extrahepatic tissues by HMG-CoA reductase inhibitors. Parker RA, et al. **J Lipid Res** 1990 Jul;31(7):1271–82

POISONING

Epidemiologic study of cancer mortality among chloroprene workers. Li SQ, et al. **Biomed Environ Sci** 1989 Jun; 2(2):141–9

TOXICITY

Short-term test for the induction of lung tumor in mouse by chloroprene. Dong QA, et al. **Biomed Environ Sci** 1989 Jun;2(2):150–3

Cytotoxicity of S-(1,2,3,4,4-pentachlorobutadienyl)-L cysteine after apical and basolateral exposure of LLC-PK monolayers. Involvement of an amino acid transport system. Mertens JJ, et al. **Chem Biol Interact** 1990; 75(1):119–30

Future directions—toxicology studies of 1,3-butadiene and isoprene. Bird MG. **Environ Health Perspect** 1990 Jun; 86:99–102 (22 ref.)

Studies on the mechanism of 1,3-butadiene-induced leukemogenesis: the potential role of endogenous murine leukemia virus. Irons RD. **Environ Health Perspect** 1990 Jun;86:49–55 (42 ref.)

Inhalation toxicology and carcinogenicity of 1,3-butadiene in B6C3F1 mice following 65 weeks of exposure. Melnick RL, et al. **Environ Health Perspect** 1990 Jun;86:27–36

Inhalation toxicology of isoprene in F344 rats and B6C3F1 mice following two-week exposures. Melnick RL, et al. **Environ Health Perspect** 1990 Jun;86:93–8

Morphology of neoplastic lesions induced by 1,3-butadiene in B6C3F1 mice. Miller RA, et al. **Environ Health Perspect** 1990 Jun;86:37–48

Overview of reproductive and developmental toxicity studies of 1,3-butadiene in rodents. Morrissey RE, et al. **Environ Health Perspect** 1990 Jun;86:79–84 (18 ref.)

Inhalation toxicity and carcinogenicity of 1,3-butadiene in Sprague-Dawley rats. Owen PE, et al. **Environ Health Perspect** 1990 Jun;86:19–25

Bioactivation of hexachlorobutadiene by glutathione conjugation. Dekant W, et al. **Food Chem Toxicol** 1990 Apr;28(4):285–93 (88 ref.)

Subchronic toxicology studies of hexachloro-1,3-butadiene (HCBD) in B6C3F1 mice by dietary incorporation. Yang RS, et al. **J Environ Pathol Toxicol Oncol** 1989 Jul–Aug; 9(4):323–32

Genotoxic activity of 1,3-butadiene and nitrogen dioxide and their photochemical reaction products in Drosophila and in the mouse bone marrow micronucleus assay. Victorin K, et al. **Mutat Res** 1990 Feb;228(2):203–9

Susceptibility to 1,3-butadiene-induced leukemogenesis correlates with endogenous ecotropic retroviral background in the mouse. Irons RD, et al. **Toxicol Appl Pharmacol** 1989 Oct;101(1):170–6

Role of gamma-glutamyltranspeptidase and beta-lyase in the nephrotoxicity of hexachloro-1,3-butadiene and methyl mercury in mice. de Ceaurriz J, et al. **Toxicol Lett** 1990 Feb;50(2–3):249–56

Development of newly formed nephrons in the goldfish kidney following hexachlorobutadiene-induced nephrotoxicity. Reimschuessel R, et al. **Toxicol Pathol** 1990; 18(1 Pt 1):32–8

[Lung tumors induction short-term test of chloroprene in mice] Dong QN, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Sep;20(3):299–302 (Eng. Abstr.) **(Chi)**

[Occupational exposure to butadiene and various parameters of cellular immunity in workers in petrochemical plants] Zeman K, et al. **Med Pr** 1989;40(2):99–104 (Eng. Abstr.) **(Pol)**

BUTALAMINE see under **OXADIAZOLES**

BUTANEDIOLS

Experimental dissection of devitrification in aqueous solutions of 1,3-butanediol. Mehl PM. **Cryobiology** 1990 Aug;27(4):378–400

Backbone-modified oligonucleotides containing a butanediol-1,3 moiety as a 'vicarious segment' for the deoxyribosyl moiety—synthesis and enzyme studies. Wilk A, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2065–8

ADMINISTRATION & DOSAGE

Metabolic responses of lactating goats to feed restriction and dietary 1,3-butanediol. Drackley JK, et al. **J Dairy Sci** 1989 Dec;72(12):3204–11

ANALYSIS

Quantitation of 1,3-butanediol and its acidic metabolites by gas chromatography-mass spectrometry. Desrochers S, et al. **Anal Biochem** 1990 Apr;186(1):101–7

METABOLISM

Assay of physiological levels of 2,3-butanediol diastereomers in blood and urine by gas chromatography-mass spectrometry. Montgomery JA, et al. **Anal Biochem** 1990 Feb 15;185(1):71–6

Influence of sugar source (lactose, glucose, galactose) on 2,3-butanediol production by Klebsiella oxytoca NRRL-B199. Champluvier B, et al. **Arch Microbiol** 1989; 152(5):411–4

In vivo conversion of gamma-aminobutyric acid and 1,4-butanediol to gamma-hydroxybutyric acid in rat brain. Studies using stable isotopes. Snead OC 3d, et al. **Biochem Pharmacol** 1989 Dec 15;38(24):4375–80

In vitro production of beta-hydroxybutyrate from 1,3-butanediol by bovine liver, rumen mucosa, and kidney. Drackley JK, et al. **J Dairy Sci** 1990 Mar;73(3):679–82

Short chain diol metabolism in human disease states. Casazza JP, et al. **Trends Biochem Sci** 1990 Jan;15(1):26–30 (30 ref.)

PHARMACOLOGY

Metabolic effects of intraruminal administration of 1,3-butanediol or tributyrin in lactating goats. Drackley JK, et al. **J Dairy Sci** 1989 Aug;72(8):1986–95

URINE

Gas chromatographic determination of 2,3-butanediol isomers in urine. Kežić S, et al. **J Chromatogr** 1989 Nov 10;496(1):209–13

BUTANES

[Clinical study of butane gas abuse: in comparison with toluene-based solvent and marihuana] Tohhara S, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1989 Dec;24(6):504–10 (Eng. Abstr.) **(Jpn)**

BUTANOLS see **ALCOHOLS, BUTYL**

BUTANONES

ADMINISTRATION & DOSAGE

Combined effects of methyl n-butyl ketone and methyl ethyl ketone on activities of microsomal drug metabolizing enzymes in rats. Harada K, et al. **Sangyo Igaku** 1989 May; 31(3):156–7

ISOLATION & PURIFICATION

[Studies on the chemical constituents from the root-sprouts of Agrimonia pilosa Ledeb] Pei YH, et al. **Yao Hsueh Hsueh Pao** 1989;24(6):431–7 (Eng. Abstr.) **(Chi)**

METABOLISM

Analyses of fermentation products of Listeria species by frequency-pulsed electron-capture gas-liquid chromatography. Daneshvar MI, et al. **Can J Microbiol** 1989 Aug;35(8):786–93

Purification and properties of two oxidoreductases catalyzing the enantioselective reduction of diacetyl and other diketones from baker's yeast. Heidlas J, et al. **Eur J Biochem** 1990 Feb 22;188(1):165–74

Evidence for oxidative thiolytic cleavage of acetoin in Pelobacter carbinolicus analogous to aerobic oxidative decarboxylation of pyruvate. Oppermann FB, et al. **FEMS Microbiol Lett** 1989 Jul 1;51(1):113–8

Biochemical and genetic analyses of acetoin catabolism in Alcaligenes eutrophus. Fründ C, et al. **J Bacteriol** 1989 Dec;171(12):6539–48

PHARMACOKINETICS

Effects of ethanol on the kinetics of methyl ethyl ketone in man. Lüira J, et al. **Br J Ind Med** 1990 May;47(5):235–30

Dose-dependent kinetics of inhaled methylethylketone in man. Lüira J, et al. **Toxicol Lett** 1990 Feb;50(2–3):195–201

PHARMACOLOGY

Effects of MEK on kinetics of n-hexane metabolites in serum. Shibata E, et al. **Arch Toxicol** 1990;64(3):247–50

Changes in urinary n-hexane metabolites by co-exposure to various concentrations of methyl ethyl ketone and fixed n-hexane levels. Shibata E, et al. **Arch Toxicol** 1990; 64(2):165–8

Oxygen radical scavenging activity of phenylbutenones and their correlation with antiinflammatory activity. Saldanha LA, et al. **Arzneimittelforschung** 1990 Jan;40(1):89–91

Effects of butanedione monoxime on neuromuscular transmission. Gage PW, et al. **Br J Pharmacol** 1990 Jul; 100(3):467–70

The effect of nabumetone and its principal active metabolite on in vitro human gastric mucosal prostanoid synthesis and platelet function. Jeremy JY, et al. **Br J Rheumatol** 1990 Apr;29(2):116–9

Protection of human left ventricular myocardium from cutting injury with 2,3-butanedione monoxime. Mulieri LA, et al. **Circ Res** 1989 Nov;65(5):1441–9

Inactivation of Escherichia coli L-threonine dehydrogenase by 2,3-butanedione. Evidence for a catalytically essential arginine residue. Epperly BR, et al. **J Biol Chem** 1989 Nov 5;264(31):18296–301

Inhibition by diacylmethane derivatives of mutagenicity and nucleic acid binding of 2-aminofluorene derivatives. Wang CY, et al. **J Natl Cancer Inst** 1989 Nov 15;81(22):1743–7

Effect of 2-butanol and 2-butanone on rat hepatic ultrastructure and drug metabolizing enzyme activity. Traiger GJ, et al. **J Toxicol Environ Health** 1989; 28(2):235–48

The effects of 2,3-butanedione monoxime on initial heat, tension, and aequorin light output of ferret papillary muscles. Blanchard EM, et al. **Pflugers Arch** 1990 Apr; 416(1–2):219–21

Suppressing effect of 2,3-butanedione monoxime on contraction and ATPase activity of rabbit skeletal muscle. Higuchi H, et al. **Prog Clin Biol Res** 1989;315:225–6

Cytochrome P450 isozyme induction by methyl ethyl ketone and m-xylene in rat liver. Raunio H, et al. **Toxicol Appl Pharmacol** 1990 Mar 15;103(1):175–9

POISONING

Peripheral zonal hepatic necrosis caused by accidental ingestion of methyl ethyl ketone peroxide. Karhunen PJ, et al. **Hum Exp Toxicol** 1990 May;9(3):197–200

THERAPEUTIC USE

Effectiveness of certain drugs in acute malathion intoxication in rats. Husain K, et al. **Ecotoxicol Environ Safety** 1990 Jun;19(3):271–5

[Arthaxan—perspectives and alternatives in rheumatic therapy!] **Internist (Berl)** 1989 Apr;30(4 Suppl [ARTHAX Anniv No):1–12 **(Ger)**

[Evaluation of tolerability and efficacy of a nabumetone preparation in the treatment of patients with rheumatoid arthritis] Alianti M, et al. **Clin Ter** 1990 Jun 15; 133(5):299–308 (Eng. Abstr.) **(Ita)**

TOXICITY

Mutagenicity of methylvinyl ketone in Salmonella typhimurium TA100—indication for epoxidation as an activation mechanism. Neudecker T, et al. **Mutat Res** 1989 Oct;227(2):131–4

BUTAPERAZINE

ADVERSE EFFECTS

Observation on 38 cases of drug-induced myospasm treated with massage over the acupoints. Su PH, et al. **J Tradit Chin Med** 1989 Dec;9(4):269–71

BUTIROSINS see under **ANTIBIOTICS, AMINOGLYCOSIDE**

BUTORPHANOL see under **MORPHINANS**

BUTOXAMINE see under **PROPANOLAMINES**

BUTTER

Butterfat and the Navy Ration Law [letter] Savage RW, et al. **Am J Cardiol** 1990 Aug 15;66(4):528

Effects of dietary fish oil and butterfat on serum lipids and monocyte and platelet interactions with aortic endothelial cells. Foxall TL, et al. **Atherosclerosis** 1990 Jan;80(3):171–9 (55 ref.)

Consumption of olive oil, butter, and vegetable oils and coronary heart disease risk factors. The Research Group ATS-RF2 of the Italian National Research Council [published erratum appears in JAMA 1990 Apr;263(13):1768] Trevisan M, et al. **JAMA** 1990 Feb 2; 263(5):688–92

ANALYSIS

Determination of residues of deltamethrin in milk and butter. Venant A, et al. **Food Addit Contam** 1990 Jan–Feb; 7(1):117–23

BUTTER YELLOW see **DIMETHYLAMINOAZOBENZENE**

BUTTERFLIES see under **LEPIDOPTERA**

BUTTOCKS

Flare reaction following caudal analgesia. Roy WL, et al. **Can J Anaesth** 1990 Jan;37(1):127–9

Adjuvant radiotherapy for recurrent granular cell tumor. Rosenthal SA, et al. **Cancer** 1990 Feb 15;65(4):897–900 (14 ref.)

Inframammary, intertriginous, and decubital erosions due to etretinate. Shelley ED, et al. **Cutis** 1990 Feb;45(2):111–3

Integrity of the gluteus medius after the transgluteal approach in total hip arthroplasty. Svensson O, et al. **J Arthroplasty** 1990 Mar;5(1):57–60

Acute gluteal abscesses: injectable chloroquine as a cause. Ahmed ME, et al. **J Trop Med Hyg** 1989 Oct;92(5):317–9

Mesenchymoma malignum of the buttock. Gruchala A, et al. **Pathol Res Pract** 1989 Sep;185(3):405–10; discussion 411

Case report 605: Gluteal amyotrophy: a late sequela of intramuscular injection. Sirinelli D, et al. **Skeletal Radiol** 1990;19(3):221–3

[Gluteal compartment syndrome] Lund N, et al. **Ugeskr Laeger** 1990 Feb 26;152(9):610–1 (Eng. Abstr.) **(Dan)**

ANATOMY & HISTOLOGY

The functional anatomy of tensor fasciae latae and gluteus medius and minimus. Gottschalk F, et al. **J Anat** 1989 Oct; 166:179–89

BLOOD SUPPLY

Experience with the island inferior gluteal thigh flap compared with other local flaps for the reconstruction of the pelvic area. Rosen JM, et al. **Ann Plast Surg** 1990 Jun; 24(6):498–509

Superior gluteal artery steal syndrome. Labs JD, et al. **Br J Plast Surg** 1989 Sep;42(5):603–6

Percutaneous angioplasty of the superior gluteal artery in the treatment of buttock claudication. Cook AM, et al. **Clin Radiol** 1990 Jan;41(1):63–5

Retroperitoneal haemorrhage from the superior gluteal artery: a late complication of total hip arthroplasty. Bakker KW, et al. **Clin Rheumatol** 1990 Jun;9(2):249–53

"Sore buttock syndrome": aseptic inflammation of the gluteal region following cardiopulmonary bypass. Shafei H, et al. **Eur J Cardiothorac Surg** 1989;3(1):79–80

Fracture of the pelvis associated with the gluteal artery false aneurysm. Kocialkowski A, et al. **Injury** 1990 May; 21(3):189–90

Traumatic rupture of the superior gluteal artery, without fracture of the pelvis, causing compartment syndrome of the buttock. A case report. Brumback RJ. **J Bone Joint Surg [Am]** 1990 Jan;72(1):134–7

Congenital arteriovenous fistula in the gluteal region--a report of five cases. Shindo S, et al. **Jpn J Surg** 1990 May; 20(3):335–40

[The vascularized pedicled flap of superior gluteal artery to hip bone chip—a new concept in the revascularization of hip necrosis in adults] Schwetlick G, et al. **Unfallchirurgie** 1990 Apr;16(2):75–9 (Eng. Abstr.) **(Ger)**

[Ischemic necrosis of the gluteal area with sciatic nerve damage in newborn infants] Merkulov VN, et al. **Akush Ginekol (Mosk)** 1990 May;(5):58–61 (Eng. Abstr.) **(Rus)**

INJURIES

Transient palsy of hip abductors after a fall on the buttocks. Tesio L, et al. **Arch Orthop Trauma Surg** 1990;109(3):164–5

Gluteal pouching: a complication of perineal burn scar contracture. A case report. Alghanem AA, et al. **J Burn Care Rehabil** 1990 Mar–Apr;11(2):137–9

[The treatment of large sacral and gluteal soft tissue defects following multiple trauma] Papp C, et al. **Chirurg** 1989 Nov; 60(11):801–4 **(Ger)**

INNERVATION

Malignant peripheral nerve sheath tumors of the buttock and lower extremity. A study of 43 cases. Hruban RH, et al. **Cancer** 1990 Sep 15;66(6):1253–65

The lateral cutaneous branches of the dorsal rami of the thoraco–lumbar junction. An anatomical study on 37 dissections. Maigne JY, et al. **Surg Radiol Anat** 1989; 11(4):289–93

[The posterior sacral plexus] Zadeh J, et al. **Bull Assoc Anat (Nancy)** 1989 Jun;73(221):35–7 (Eng. Abstr.) **(Fre)**

PATHOLOGY

Lipodystrophia centrifugalis sacralis infantilis. A 15–year follow–up observation. Caputo R. **Acta Derm Venereol (Stockh)** 1989;69(5):442–3

Gluteal necrosis and paraplegia following postoperative bilateral internal iliac artery occlusion. Senapati A, et al. **J Cardiovasc Surg (Torino)** 1990 Mar–Apr;31(2):194–6

SURGERY

Combination of facial rejuvenation and lipoplasty of the torso. Lewis CM. **Aesthetic Plast Surg** 1989 Fall; 13(4):239–42

BUTYLAMINES

ADMINISTRATION & DOSAGE

Terodiline: a dose titrated, multicenter study of the treatment of idiopathic detrusor instability in women. Tapp A, et al. **J Urol** 1989 Oct;142(4):1027–31

BLOOD

Pharmacokinetic aspects of tert–butylaminoethyl disulfide, an experimental drug against schistosomiasis in mice. Andrade MH, et al. **Mem Inst Oswaldo Cruz** 1990 Jan–Mar; 84(1):95–102

CHEMICAL SYNTHESIS

4–(1H–pyrazol–1–yl)–2–butylamine derivatives as inhibitors of blood platelet aggregation. Ferroni R, et al. **Farmaco** 1989 May;44(5):495–502

DIAGNOSTIC USE

Rapid protein purification using phenylbutylamine–Eupergit: a novel method for large–scale procedures. Kasche V, et al. **J Chromatogr** 1990 Jun 27;510:149–54

METABOLISM

Biotransformation of terodiline. V. Stereoselectivity in hydroxylation by human liver microsomes. Norén B, et al. **Chem Biol Interact** 1989;71(4):325–37

PHARMACOKINETICS

Pharmacokinetics of terodiline and a major metabolite in dogs with a correlation to a pharmacodynamic effect. Hallén B, et al. **Pharmacol Toxicol** 1990 May;66(5):373–81

PHARMACOLOGY

MDL 72,974: a potent and selective enzyme–activated irreversible inhibitor of monoamine oxidase type B with potential for use in Parkinson's disease. Zreika M, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(4):243–54

Enhanced fecal excretion of bile acids by a new anion–exchange resin possessing a spacer arm in rats. Honda Y, et al. **J Pharmacobiodyn** 1990 Feb;13(2):130–5

No effect of terodiline on anticoagulation effect of warfarin and steady–state plasma levels of warfarin enantiomers in healthy volunteers. Höglund P, et al. **Ther Drug Monit** 1989 Nov;11(6):667–73

POISONING

A correction to 'An apparent fatal overdose of terodiline' [letter] Boyd G. **J Anal Toxicol** 1990 May–Jun;14(3):194

THERAPEUTIC USE

[Terodiline in the treatment of stress incontinence in women] Feyereisl J, et al. **Schweiz Rundsch Med Prax** 1990 Apr 3;79(14):420–2 (Eng. Abstr.) **(Ger)**

[Clinical studies on terodiline hydrochloride in nocturnal enuresis] Sasagawa I. **Hinyokika Kiyo** 1989 Aug; 35(8):1463–5 (Eng. Abstr.) **(Jpn)**

BUTYLATED HYDROXYANISOLE

Mouse hepatic glutathione transferase isoenzymes and their differential induction by anticarcinogens. Specificities of butylated hydroxyanisole and bisethylxanthogen as inducers of glutathione transferases in male and female CD–1 mice. Benson AM, et al. **Biochem J** 1989 Aug 1; 261(3):1023–9

Isolation and characterization of some products of the BHA–nitrite reaction: examination of their mutagenicity. Kalus WH, et al. **Food Addit Contam** 1990 Mar–Apr; 7(2):223–33

Induction of hepatic tumors with butylated hydroxyanisole in the self–fertilizing hermaphroditic fish Rivulus ocellatus marmoratus. Park EH, et al. **Jpn J Cancer Res** 1990 Aug; 81(8):738–41

METABOLISM

DNA–adduct formation in the forestomach of rats treated with 3–tert–butyl–4–hydroxyanisole and its metabolites as assessed by an enzymatic 32P–postlabeling method. Saito K, et al. **Cancer Lett** 1989 Dec;48(3):189–95

Distribution and peroxidative oxidation of 2–t–butyl–4–methoxyphenol in rat tissues after a single intraperitoneal dose. Della Corte L, et al. **J Biochem Toxicol** 1989 Fall;4(3):147–50

Production of reactive oxygen species due to metabolic activation of butylated hydroxyanisole. Kahl R, et al. **Toxicology** 1989 Dec 1;59(2):179–94

PHARMACOKINETICS

Biliary excretion of butylated hydroxyanisole in the rat [letter] Verhagen H, et al. **Food Chem Toxicol** 1989 Jun; 27(6):421

PHARMACOLOGY

Enhanced decomposition of oxyferrous cytochrome P450CIA1 (P450cam) by the chemopreventive agent 3–t–butyl–4–hydroxyanisole. Gettings SD, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):500–9

Differential induction of class alpha glutathione S–transferases in mouse liver by the anticarcinogenic antioxidant butylated hydroxyanisole. Purification and characterization of glutathione S–transferase Ya1Ya1. McLellan LI, et al. **Biochem J** 1989 Oct 15;263(2):393–402

Effect of butylated hydroxyanisole on electron transport in rat liver mitochondria. Ferreira J. **Biochem Pharmacol** 1990 Aug 15;40(4):677–84

t–butyl–4–hydroxyanisole as an inhibitor of tumor cell respiration. Fones E, et al. **Biochem Pharmacol** 1989 Oct 15;38(20):3443–51

The effect of the antioxidant, butylated hydroxy anisole, on peroxide–induced and spontaneous activity of the uterus from the pregnant rat. Cherouny PH, et al. **Biol Reprod** 1989 Jul;41(1):98–103

Influence of oxidised dietary oil and antioxidant supplementation on membrane–bound lipid stability in broiler meat. Asghar A, et al. **Br Poult Sci** 1989 Dec; 30(4):815–23

Effects of oxidised dietary oil and antioxidant supplementation on broiler growth and meat stability. Lin CF, et al. **Br Poult Sci** 1989 Dec;30(4):855–64

Inhibition of binding of 2–acetylaminofluorene to DNA by butylated hydroxytoluene and butylated hydroxyanisole in vitro. Richer N, et al. **Cancer Lett** 1989 Oct;47(3):211–6

Modifying effects of simultaneous treatment with butylated hydroxyanisole (BHA) on rat tumor induction by 3,2'–dimethyl–4–aminobiphenyl, 2,2'–dihydroxy–di–n–propylnitrosamine and N–methylnitrosourea. Ito N, et al. **Carcinogenesis** 1989 Dec; 10(12):2255–9

Inhibition of estrogen–induced kidney carcinogenesis in Syrian hamsters by modulators of estrogen metabolism. Roy D, et al. **Carcinogenesis** 1990 Apr;11(4):567–70

Dose–dependent effects of short–term dietary administration of the food additive butylated hydroxyanisole on cell kinetic parameters in rat gastro–intestinal tract. Verhagen H, et al. **Carcinogenesis** 1990 Sep;11(9):1461–8

Butylated hydroxyanisole–induced alterations in cell kinetic parameters in rat forestomach in relation to its oxidative cytochrome P–450–mediated metabolism. Verhagen H, et al. **Carcinogenesis** 1989 Oct;10(10):1947–51

2,[3]tert–butyl–4–hydroxyanisole does not reduce SCE induction by benzo(a) pyrene in bone marrow cells of C57BL/6 mice. Van Horn R, et al. **Environ Mol Mutagen** 1990;16(1):26–31

7,12–Dimethylbenz[a]anthracene–induced perinatal carcinogenesis and its modulation by butylated hydroxyanisole in mice. Rao AR. **IARC Sci Publ** 1989; (96):63–74

Modulation of 7,12–dimethylbenz[a]anthracene–induced transmammary carcinogenesis by disulfiram and butylated hydroxyanisole in mice. Rao AR, et al. **Jpn J Cancer Res** 1989 Dec;80(12):1171–5

Effect of butylated hydroxyanisole on the level of DNA adduction by aristolochic acid in the rat forestomach and liver. Routledge MN, et al. **Jpn J Cancer Res** 1990 Mar; 81(3):220–4

Effects of 2(3)–tert–butyl–4–hydroxyanisole pretreatment on cefpiramide binding to mouse glutathione S–transferases. Nishiya H, et al. **Pharmacology** 1989;39(4):213–23

2(3)–tert–butyl–4–hydroxyanisole inhibits oxidative metabolism of aflatoxin B1 in isolated rat hepatocytes. Ch'ih JJ, et al. **Proc Soc Exp Biol Med** 1989 Oct; 192(1):35–42

STANDARDS

Estimate of the maximal daily dietary intake of butylated hydroxyanisole and butylated hydroxytoluene in The Netherlands. Verhagen H, et al. **Food Chem Toxicol** 1990 Apr;28(4):215–20

TOXICITY

The significance of induced forestomach tumors. Clayson DB, et al. **Annu Rev Pharmacol Toxicol** 1990;30:441–63 (84 ref.)

Adenomatous hyperplasia and adenomas in the lung induced by chronic feeding of butylated hydroxyanisole of Japanese house musk shrew (Suncus murinus). Amo H, et al. **Carcinogenesis** 1990 Jan;11(1):151–4

Regression of butylated hydroxyanisole (BHA)–induced hyperplasia but not dysplasia in the forestomach of hamsters. Hirose M, et al. **Carcinogenesis** 1990 Feb; 11(2):239–44

Antagonistic effect of diethylmaleate on the promotion of forestomach carcinogenesis by butylated hydroxyanisole (BHA) in rats pretreated with N–methyl–N'–nitro–N–nitrosoguanidine. Hirose M, et al. **Carcinogenesis** 1989 Dec;10(12):2223–6

Effect of subacute oral intake of the food antioxidant butylated hydroxyanisole on clinical parameters and phase–I and –II biotransformation capacity in man. Verhagen H, et al. **Hum Toxicol** 1989 Nov;8(6):451–9

Mutagenicity of 3–tert–butyl–4–hydroxyanisole (BHA) and its metabolites in short–term tests in vitro. Matsuoka A, et al. **Mutat Res** 1990 Jun;241(2):125–32

[In vitro use of a model for studying the effects of tumor promoters in food] Martel P, et al. **Bull Cancer (Paris)** 1990; 77(5):495–9 (Eng. Abstr.) **(Fre)**

BUTYLATED HYDROXYTOLUENE

Electron spin resonance study of free radicals generated from retinyl- and ionyl-derivatives. Mordi RC, et al. **Chem Phys Lipids** 1990 Apr;54(1):73–8

ADVERSE EFFECTS

Allergic contact dermatitis from BHT in leg ulcer patients. Dissanayake M, et al. **Contact Dermatitis** 1989 Sep;21(3):195

Allergic contact dermatitis in a pastry cook. Gola M, et al. **Contact Dermatitis** 1989 Jul;21(1):57

METABOLISM

Generation and recycling of radicals from phenolic antioxidants. Kagan VE, et al. **Arch Biochem Biophys** 1990 Jul;280(1):33–9

Enhancement of the peroxidase-mediated oxidation of butylated hydroxytoluene to a quinone methide by phenolic and amine compounds. Thompson DC, et al. **Chem Biol Interact** 1989;72(1–2):157–73

PHARMACOKINETICS

Disposition of single oral doses of butylated hydroxytoluene in man and rat. Verhagen H, et al. **Food Chem Toxicol** 1989 Dec;27(12):765–72

PHARMACOLOGY

Allopurinol promotes and butylated hydroxy toluene prevents sugar-induced cataractogenesis. Ansari NH, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):939–43

Effects of butylated hydroxytoluene upon protein transport in the isolated perfused rat liver. Billington D, et al. **Biochem Pharmacol** 1990 May 15;39(10):1624–7

Influence of oxidised dietary oil and antioxidant supplementation on membrane-bound lipid stability in broiler meat. Asghar A, et al. **Br Poult Sci** 1989 Dec; 30(4):815–23

Effects of oxidised dietary oil and antioxidant supplementation on broiler growth and meat stability. Lin CF, et al. **Br Poult Sci** 1989 Dec;30(4):855–64

Hepatic nuclear envelope cytochrome P-450 in rats fed 2-acetylaminofluorene. Effect of dietary fats and butylated hydroxytoluene. Carubelli R, et al. **Cancer Lett** 1989 Sep 15;47(1–2):83–9

Inhibition of binding of 2-acetylaminofluorene to DNA by butylated hydroxytoluene and butylated hydroxyanisole in vitro. Richer N, et al. **Cancer Lett** 1989 Oct;47(3):211–6

Effect of dietary butylated hydroxytoluene on the in vivo distribution, metabolism and DNA-binding of 7,12-dimethylbenz[a]anthracene. Singletary KW. **Cancer Lett** 1990 Mar;49(3):187–93

An antioxidant dependent in vitro response of rainbow trout (Salmo gairdneri) somatotrophs to carp growth hormone-releasing factor (GRF). Luo D, et al. **Horm Metab Res** 1989 Dec;21(12):690–2

Effect of butylated hydroxytoluene on bilineage differentiation of the human HL-60 myeloblastic leukemia cell. Burns CP, et al. **J Cell Physiol** 1990 Jul;144(1):36–41

Ferric ion-induced lipid peroxidation in erythrocyte membranes: effects of phytic acid and butylated hydroxytoluene. Ko KM, et al. **Mol Cell Biochem** 1990 Jun 25;95(2):125–31

[Limitation of ischemic necrosis by the use of antioxidant ionol] Evsev'eva MV, et al. **Biull Eksp Biol Med** 1989 Aug; 108(8):152–4 (Eng. Abstr.) **(Rus)**

[The effect of alpha-tocopherol and ionol on the physical structure of the membranes of rat liver microsomes under conditions of antioxidant insufficiency] Gubskiĭ IuI, et al. **Ukr Biokhim Zh** 1989 Jul-Aug;61(4):94–9 (Eng. Abstr.) **(Rus)**

STANDARDS

Estimate of the maximal daily dietary intake of butylated hydroxyanisole and butylated hydroxytoluene in The Netherlands. Verhagen H, et al. **Food Chem Toxicol** 1990 Apr;28(4):215–20

THERAPEUTIC USE

[Therapeutic effect of antioxidant dibunol in experimental alcoholic cardiomyopathy] Antonenkov VD, et al. **Biull Eksp Biol Med** 1990 May;109(5):446–9 (Eng. Abstr.) **(Rus)**

[Effect of the antioxidant ionol on energy metabolic indices and heart function during acute hypoxia and subsequent reoxygenation] Golubeva LIu, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):685–8 (Eng. Abstr.) **(Rus)**

[Correction of disorders of the system of blood aggregation regulation by ionol in the post-resuscitation period] Rezin VA. **Biull Eksp Biol Med** 1989 Nov;108(11):540–2 (Eng. Abstr.) **(Rus)**

[The use of dibunol for stimulating reparative processes in the cardiac muscle in myocardial infarct in rats] Pichugin VV, et al. **Farmakol Toksikol** 1989 Nov-Dec;52(6):52–6 (Eng. Abstr.) **(Rus)**

[Correction of catecholamine-induced myocardial damage with ionol] Markova EA, et al. **Fiziol Zh** 1990 Mar-Apr; 36(2):88–91 (Eng. Abstr.) **(Rus)**

[Effect of the antihypoxic agent ionol on the morphofunctional state of the air-blood barrier of the lungs in hypoxic anoxia] Rozova EV, et al. **Fiziol Zh** 1990 Jan-Feb;36(1):20–5 (Eng. Abstr.) **(Rus)**

[The effect of ionol on oxidative-reductive processes in the kidney during heat stroke] Seferova RI. **Patol Fiziol Eksp Ter** 1989 Sep-Oct;(5):32–4 (Eng. Abstr.) **(Rus)**

[Comparative evaluation of the anti-arrhythmia effect of the antioxidant ionol (dibunol) in the arrhythmic form of neurocirculatory asthenia and stable exertion-induced stenocardia] Meerson FZ, et al. **Sov Med** 1990;(3):67–70 **(Rus)**

[Factors of antiviral resistance in the pathogenesis of influenza in mice] Chetverikova LK, et al. **Vestn Akad Med Nauk SSSR** 1989;(11):63–8 (Eng. Abstr.) **(Rus)**

TOXICITY

Structure-activity relations in promotion of rat urinary bladder carcinogenesis by phenolic antioxidants. Kurata Y, et al. **Jpn J Cancer Res** 1990 Aug;81(8):754–9

The classification of chemical carcinogens. Matula TI, et al. **Regul Toxicol Pharmacol** 1989 Oct;10(2):174–82

Evidence for a role of tert-butyl hydroxylation in the induction of pneumotoxicity in mice by butylated hydroxytoluene. Malkinson AM, et al. **Toxicol Appl Pharmacol** 1989 Nov;101(2):196–204

Comparison of lung injury induced in 4 strains of mice by butylated hydroxytoluene. Kehrer JP, et al. **Toxicol Lett** 1990 Jun;52(1):55–61

[In vitro use of a model for studying the effects of tumor promoters in food] Martel P, et al. **Bull Cancer (Paris)** 1990; 77(5):495–9 (Eng. Abstr.) **(Fre)**

BUTYLCARBAMIDE see **CARBUTAMIDE**

BUTYLCYANOACRYLATE see **ENBUCRILATE**

BUTYLENE GLYCOLS see **BUTANEDIOLS**

BUTYLHYDROXYANISOLE see **BUTYLATED HYDROXYANISOLE**

BUTYLHYDROXYBUTYLNITROSAMINE see under **NITROSAMINES**

BUTYLHYDROXYTOLUENE see **BUTYLATED HYDROXYTOLUENE**

BUTYLSCOPOLAMMONIUM BROMIDE see under **SCOPOLAMINE DERIVATIVES**

BUTYRATES

Mitosis and histopathology in rat liver during methylclofenapate-induced hyperplasia. Bybee A, et al. **Cancer Lett** 1990 Jul 16;52(2):95–100

ADMINISTRATION & DOSAGE

Effect of liposomes containing sodium butyrate conjugated with anti-CD19 monoclonal antibody on in vitro and in vivo growth of malignant lymphoma. Watanabe M, et al. **Cancer Res** 1990 Jun 1;50(11):3245–8

METABOLISM

Effect of intraruminal butyrate infusion on the plasma insulin level in sheep. Neogrády Z, et al. **Acta Vet Hung** 1989; 37(3):247–53

A non-passive mechanism of butyrate excretion operates during acidogenic fermentation of methanol by Eubacterium limosum. Loubiere P, et al. **Antonie Van Leeuwenhoek** 1990 Feb;57(2):83–9

p-nitrophenyl butyrate hydrolyzing activity of hormone-sensitive lipase from bovine adipose tissue. Tsujita T, et al. **J Lipid Res** 1989 Jul;30(7):997–1004

System approach to the transepithelial transport across rat jejunal enterocytes: effect of cytochalasin B, colchicine, and ethylenediaminetetraacetic acid on butyric acid transport. Kreydiyyeh SI, et al. **J Pharm Sci** 1990 Jun; 79(6):494–9

PHARMACOLOGY

Regulation of distribution, amount and ligand affinity of sugar receptors in human colon carcinoma cells by treatment with sodium butyrate, retinoic acid and phorbol ester. Gabius S, et al. **Anticancer Res** 1990 Jul-Aug;10(4):1005–12

Regulation of hepatocyte epidermal growth factor receptors by n-butyrate and dimethyl sulfoxide: sensitivity to modulation by the tumor promoter TPA. Gladhaug IP, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1587–92

Enhancement by theophylline of the butyrate-mediated induction of choriogonadotropin alpha-subunit in HeLa cells. II. Effect of both agents on mRNA turnover. Cosgrove DE, et al. **Arch Biochem Biophys** 1990 Jul; 280(1):95–102

Enhancement by theophylline of the butyrate-mediated induction of choriogonadotropin alpha-subunit in HeLa cells. I. Lack of correlation with cAMP. Tamura RN, et al. **Arch Biochem Biophys** 1990 Jul;280(1):87–94

Effects of 1,25-dihydroxyvitamin D3 and its analogs on butyrate-induced differentiation of HT-29 human colonic carcinoma cells and on the reversal of the differentiated phenotype. Tanaka Y, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):415–23

Induction by sodium butyrate of cytomegalovirus replication in human endothelial cells. Radsak K, et al. **Arch Virol** 1989;107(1–2):151–8

In vitro and in vivo induction of squamous cell carcinoma antigen (SCC) in a uterine cervical cancer cell line (SKG-IIIa) with peplomycin and sodium butyrate. Nozawa S, et al. **Asia Oceania J Obstet Gynaecol** 1990 Jun;16(2):153–60

Butyrate increases catalase activity and protects rat pulmonary artery smooth muscle cells against hyperoxia. Yano S, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1143–8

Partial inhibition by cyclosporin A of the swelling of liver mitochondria in vivo and in vitro induced by sub-micromolar [Ca2+], but not by butyrate. Evidence for two distinct swelling mechanisms. Davidson AM, et al. **Biochem J** 1990 May 15;268(1):147–52

Inhibitory action of cyclobutyrol on the secretion of biliary cholesterol and phospholipids. Monte MJ, et al. **Biochem J** 1990 Feb 15;266(1):165–71

Inhibition of biliary cholesterol and phospholipid secretion during cyclobutyrol-induced hydrocholeresis. Monte MJ, et al. **Biochem J** 1989 Oct 15;263(2):513–8

Enhancement of butyrate-induced differentiation of HT-29 human colon carcinoma cells by 1,25-dihydroxyvitamin D3. Tanaka Y, et al. **Biochem Pharmacol** 1989 Nov 1; 38(21):3859–65

Effects of sodium butyrate and 5-azacytidine on DNA methylation in human tumor cell lines: variable response to drug treatment and withdrawal. Cosgrove DE, et al. **Biochim Biophys Acta** 1990 Sep 10;1087(1):80–6

Induction of fos and sis proto-oncogenes and genes of the extracellular matrix proteins during butyrate induced glioma differentiation. Tang SJ, et al. **Biochim Biophys Acta** 1990 Jan 30;1048(1):59–65

Dynamic histone acetylation in alfalfa cells. Butyrate interference with acetate labeling. Waterborg JH, et al. **Biochim Biophys Acta** 1990 Jul 30;1049(3):324–30

Choleretic mechanism and effects of cyclobutyrol in the rat: dose-response relationship. Monte MJ, et al. **Biomed Biochim Acta** 1990;49(1):83–90

On the induction of fetal hemoglobin by butyrates: in vivo and in vitro studies with sodium butyrate and comparison of combination treatments with 5-AzaC and AraC. Constantoulakis P, et al. **Blood** 1989 Nov 1;74(6):1963–71

Heterogeneous response to differentiation induction with different polar compounds in a clonal rat rhabdomyosarcoma cell line (BA-HAN-1C). Gerharz CD, et al. **Br J Cancer** 1989 Oct;60(4):578–84

Characterization and tumorigenicity of a butyrate-adapted T24 bladder cancer cell line. Flatow U, et al. **Cancer Invest** 1989;7(5):423–35

Combinations of retinoic acid with either sodium butyrate, dimethyl sulfoxide, or hexamethylene bisacetamide synergistically induce differentiation of the human myeloid leukemia cell line HL60. Breitman TR, et al. **Cancer Res** 1990 Oct 1;50(19):6268–73

Alteration of differentiation state of human hepatocytes cultured with novobiocin and butyrate. Kaneko Y, et al. **Cancer Res** 1990 May 15;50(10):3101–5

Alpha-fetoprotein mRNA: variation of half-life in rat hepatoma cell lines and destabilization by sodium butyrate. Cook JR, et al. **Cell Biol Int Rep** 1990 Jul;14(7):629–39

Effect of butyrate on the expression of the human preprourokinase gene introduced into Chinese hamster ovary cells. Okabayashi K, et al. **Cell Struct Funct** 1989 Oct;14(5):579–86

Sodium-N-butyrate induces cytoskeletal rearrangements and formation of cornified envelopes in cultured adult human keratinocytes. Staiano-Coico L, et al. **Cell Tissue Kinet** 1989 Sep;22(5):361–75

The effect of butyric acid and retinoic acid on invasion and experimental metastasis of murine melanoma cells. McGarvey TW, et al. **Clin Exp Metastasis** 1990 Sep-Oct; 8(5):433–48

Effects of intravenous injection of butyrate, valerate and their isomers on endocrine pancreatic responses in conscious sheep (Ovis aries). Mineo H, et al. **Comp Biochem Physiol [A]** 1990;95(3):411–6

Butyrate induces expression of transfected human fetal and endogenous mouse embryonic globin genes in GM 979 erythroleukemia cells. Zhang JW, et al. **Dev Genet** 1990; 11(2):168–74

Modulation by sodium butyrate of the differentiated status of a clonal pancreatic B-cell line (RIN). Gardner SL, et al. **Diabetes Res** 1989 Oct;12(2):93–9

Regulation by butyrate of the cAMP response to cholera toxin and forskolin in pituitary GH1 cells. Aranda A, et al. **Eur J Biochem** 1990 Feb 14;187(3):683–9

Sodium butyrate enhances the activities of membranal enzymes and increases drug sensitivity in a cell line from ascitic fluid of an ovarian carcinoma patient. Wasserman L, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1765–8

Differential effects of sodium butyrate and hyperosmolality on the modulation of alkaline phosphatases of LoVo cells. Herz F, et al. **Exp Cell Res** 1990 May;188(1):50–4

Increased cell surface EGF receptor expression during the butyrate-induced differentiation of human HCT-116 colon tumor cell clones. Nathan DF, et al. **Exp Cell Res** 1990 Sep;190(1):76–84

The induction of vimentin gene expression by sodium butyrate in human promonocytic leukemia U937 cells. Rius C, et al. **Exp Cell Res** 1990 May;188(1):129–34

Sodium butyrate suppresses the transforming activity of an activated N-ras oncogene in human colon carcinoma cells. Stoddart JH, et al. **Exp Cell Res** 1989 Sep;184(1):16–27

Butyrate decreases AFP and increases albumin in combination with laminin in a human hepatoma cell line [letter] Tokiwa T, et al. **In Vitro Cell Dev Biol** 1990 Mar; 26(3 Pt 1):220–1

Cytoarchitecture of ras oncogene-expressing tumor cells: butyrate modulation of substrate adhesion, cytoskeletal actin content and subcellular microfilament distribution. Higgins PJ, et al. **Int J Biochem** 1989;21(10):1143–51

Anti-tumor protection induced in mice by fatty acid conjugates: alkyl butyrates and poly(ethylene glycol) dibutyrates. Wakselman M, et al. **Int J Cancer** 1990 Sep 15;46(3):462–7

Retinoids and butyrate modulate fibroblast growth and contraction of collagen matrices. Kim RY, et al. **Invest Ophthalmol Vis Sci** 1990 Jun;31(6):1183–6

Effects of sodium butyrate on the synthesis of human pregnancy-specific beta 1-glycoprotein. Chou JY, et al. **J Biol Chem** 1990 May 25;265(15):8788–94

Increased synthesis of secreted proteins induces expression of glucose-regulated proteins in butyrate-treated Chinese hamster ovary cells. Dorner AJ, et al. **J Biol Chem** 1989 Dec 5;264(34):20602–7

Modulation of the expression of a multidrug resistance gene (mdr-1/P-glycoprotein) by differentiating agents. Mickley LA, et al. **J Biol Chem** 1989 Oct 25;264(30):18031–40

Sodium butyrate in combination with insulin or dexamethasone can terminally differentiate actively proliferating Swiss 3T3 cells into adipocytes. Toscani A, et al. **J Biol Chem** 1990 Apr 5;265(10):5722–30

Butyrate induces an ectoMg2(+)-ATPase activity in Li-7A human hepatoma cells. Murray SL, et al. **J Cell Physiol** 1990 Jul;144(1):26–35

Cyclic AMP and butyrate modulate melatonin synthesis in Y79 human retinoblastoma cells. Wiechmann AF, et al. **J Neurochem** 1990 Jul;55(1):208–14

Transcriptional activation of the adenine phosphoribosyltransferase promoter by an upstream butyrate-induced Moloney murine sarcoma virus enhancer-promoter element. Tang DC, et al. **J Virol** 1990 Jun;64(6):2907–11

Characterization of sublines of HL-60 human leukemia cells resistant to induction of differentiation by butyric acid. Fischkoff SA, et al. **Leukemia** 1990 Apr;4(4):302–6

Unusual c-fos induction upon chromaffin PC12 differentiation by sodium butyrate: loss of fos autoregulatory function. Naranjo JR, et al. **Nucleic Acids Res** 1990 Jun 25;18(12):3605–10

Evidence for a labile intermediate in the butyrate induced reduction of the level of c-myc RNA in SW837 rectal carcinoma cells. Herold KM, et al. **Oncogene** 1988 Oct; 3(4):423–8

Glucocorticoid receptor-dependent disruption of a specific nucleosome on the mouse mammary tumor virus promoter is prevented by sodium butyrate. Bresnick EH, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3977–81

Butyrate stimulates HbF in adult baboons. Constantoulakis P, et al. **Prog Clin Biol Res** 1989;316B:351–61

Effects of up-regulation by butyrate on delta opioid receptor GTP sensitivity and distribution in subcellular compartments. Coscia CJ, et al. **Prog Clin Biol Res** 1990; 328:157–60

Pharmacologic induction of embryonic globin gene expression in adult avian erythroid cells. Ginder GD, et al. **Prog Clin Biol Res** 1989;316B:327–39

Butyrate analogues modulate globin gene expression in human and ovine erythroid cells. Perrine SP, et al. **Prog Clin Biol Res** 1989;316B:341–50

Acute hyperplasia and peroxisome proliferation induced by methylclofenapate: a species comparison and implications for liver carcinogenesis. Styles JA, et al. **Prog Clin Biol Res** 1990;331:385–93

The effects of retinoic acid and butyric acid on in vitro migration by murine B16a cells: a quantitative scanning electron microscopic study. McGarvey TW, et al. **Scanning Microsc** 1989 Jun;3(2):591–603; discussion 603–4

Mutational analysis of sodium butyrate inducible elements in the human immunodeficiency virus type I long terminal repeat. Bohan CA, et al. **Virology** 1989 Oct;172(2):573–83

Chromatographic purification and characterization of EBV DNase from chemically induced lymphoid cells. Hwang GY, et al. **Virology** 1990 Mar;175(1):313–8

[Studies on mechanism of carcinogenesis in cell culture. III. Butyric acid-induced phenotypic reversion of malignant transformed Syrian hamster lung cells (BHLB4)] Xu K. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Jun; 11(3):195–9 (Eng. Abstr.) **(Chi)**

[The biological effect of sodium butyrate (NaBT) on SGC-7901 cells] Lü GZ, et al. **Shih Yen Sheng Wu Hsueh Pao** 1989 Jun;22(2):169–75 (Eng. Abstr.) **(Chi)**

[Inhibition of aromatic amino acid decarboxylases by the anti-inflammatory agent flobufen and 2',4'-difluorbiphenyl-4-acetic acid] Držata J, et al. **Cesk Farm** 1989 Nov;38(9):407–10 (Eng. Abstr.) **(Cze)**

[Oscillatory changes in the transcription and supercoiling of minichromosomal DNA after the withdrawal of butyric acid from a mouse cell culture] Kraevskiĭ VA, et al. **Dokl Akad Nauk SSSR** 1989;309(4):1008–11 **(Rus)**

TOXICITY

Studies on the hyperplastic responsiveness of binucleated rat hepatocytes. Styles JA, et al. **Carcinogenesis** 1990 Jul; 11(7):1149–52

Effects produced by the non-genotoxic hepatocarcinogen methylclofenapate in dwarf mice: peroxisome induction uncoupled from DNA synthesis and nuclearity changes. Styles JA, et al. **Carcinogenesis** 1990 Mar;11(3):387–91

Short chain fatty acid-induced colitis in mice. McCafferty DM, et al. **Int J Tissue React** 1989;11(4):165–8

Computer-based image analysis of cartilage differentiation in embryonic limb bud micromass cultures. Garrison JC, et al. **J Microsc** 1989 Dec;156 (Pt 3):353–61

Co-mutagenic activity of phenoxyherbicides MCPA- and MCPB-ethylester in the Ames assay. Shibuya N, et al. **Tohoku J Exp Med** 1990 Feb;160(2):167–8

URINE

Early diabetes detection? [letter] Massa DJ. **Ohio Med** 1990 May;86(5):339

BUTYRIBACTERIUM see **EUBACTERIUM**

BUTYRIC ACIDS see under **BUTYRATES**

4-BUTYROLACTONE see under **FURANS**

BUTYROPHENONE TRANQUILIZERS

Melperone-an atypical neuroleptic. Proceedings of a workshop. Malmö, Sweden, October 8, 1986. **Acta Psychiatr Scand Suppl** 1989;352:1–50

ADVERSE EFFECTS

Two cases of agranulocytosis on addition of a butyrophenone to a long-standing course of phenothiazine treatment. Young A, et al. **Br J Psychiatry** 1989 May;154:710–2

Neuroleptic malignant syndrome. Srinivasan AV, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):514–6

ANALYSIS

Mass spectral characterization of urinary pipamperone metabolites and high-performance liquid chromatography assay for pipamperone plasma levels. Köppel C, et al. **J Chromatogr** 1989 Jul 21;491(2):432–8

PHARMACOKINETICS

Haloperidol decanoate in chronic schizophrenia: a study of 12 months with plasma levels. Altamura CA, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(1):25–35

PHARMACOLOGY

Pharmacological data of the atypical neuroleptic compound melperone (Buronil). Christensson EG. **Acta Psychiatr Scand Suppl** 1989;352:7–15

Melperone and clozapine: neuroendocrine effects of atypical neuroleptic drugs. Meltzer HY, et al. **Acta Psychiatr Scand Suppl** 1989;352:24–9

Approaches for finding new types of antipsychotic compounds. Sedvall G. **Acta Psychiatr Scand Suppl** 1989; 352:16–23 (26 ref.)

Increases in rat striatal preproenkephalin mRNA levels following chronic treatment with the depot neuroleptic, haloperidol decanoate. Petrack B, et al. **Life Sci** 1990; 46(10):687–91

THERAPEUTIC USE

Melperone in the treatment of schizophrenia. Bjerkenstedt L. **Acta Psychiatr Scand Suppl** 1989;352:35–9

A clinical comparison of melperone and placebo in schizophrenic women on a milieu therapeutic ward. Härnryd C, et al. **Acta Psychiatr Scand Suppl** 1989;352:40–7

Clinical melperone treatment blocks D2-dopamine receptors in the human brain as determined by PET. Wiesel FA, et al. **Acta Psychiatr Scand Suppl** 1989;352:30–4

TOXICITY

Chronic melperone administration does not enhance oral movements in rats. Gunne LM, et al. **Acta Psychiatr Scand Suppl** 1989;352:48–50

BUTYROPHENONES

Melperone-an atypical neuroleptic. Proceedings of a workshop. Malmö, Sweden, October 8, 1986. **Acta Psychiatr Scand Suppl** 1989;352:1–50

BLOOD

Simultaneous determination of quinidine and butyrophenones in human plasma by GC-MS. Quaglio MP, et al. **Farmaco** 1990 Mar;45(3):361–79

CHEMICAL SYNTHESIS

Synthetic studies on diuretics. 5-(3,3-N,S-substituted-2-propenoyl)-2,3-dihydro-2-benzo[b]furancarboxylic acids. Ohsugi E, et al. **Chem Pharm Bull (Tokyo)** 1989 May;37(5):1268–78

PHARMACOLOGY

Pharmacological data of the atypical neuroleptic compound melperone (Buronil). Christensson EG. **Acta Psychiatr Scand Suppl** 1989;352:7–15

Melperone and clozapine: neuroendocrine effects of atypical neuroleptic drugs. Meltzer HY, et al. **Acta Psychiatr Scand Suppl** 1989;352:24–9

Approaches for finding new types of antipsychotic compounds. Sedvall G. **Acta Psychiatr Scand Suppl** 1989; 352:16–23 (26 ref.)

Dose-response relationship of the H1-histamine antagonist, ebastine, against histamine and methacholine-induced bronchoconstriction in patients with asthma. Wood-Baker R, et al. **Agents Actions** 1990 Apr;30(1-2):284–6

Melperone: electrophysiologic and antiarrhythmic activity in humans. Hui WK, et al. **J Cardiovasc Pharmacol** 1990 Jan;15(1):144–9

Distribution of cardiac output during pentobarbital versus midazolam/fentanyl/fluanisone anaesthesia in the rat. Skolleborg KC, et al. **Lab Anim** 1990 Jul;24(3):221–7

THERAPEUTIC USE

Melperone in the treatment of schizophrenia. Bjerkenstedt L. **Acta Psychiatr Scand Suppl** 1989;352:35–9

A clinical comparison of melperone and placebo in schizophrenic women on a milieu therapeutic ward. Härnryd C, et al. **Acta Psychiatr Scand Suppl** 1989;352:40–7

Clinical melperone treatment blocks D2-dopamine receptors in the human brain as determined by PET. Wiesel FA, et al. **Acta Psychiatr Scand Suppl** 1989;352:30–4

TOXICITY

Chronic melperone administration does not enhance oral movements in rats. Gunne LM, et al. **Acta Psychiatr Scand Suppl** 1989;352:48–50

BUTYRYLCHOLINESTERASE see under **CHOLINESTERASES**

BUTYRYLTHIOCHOLINE see under **CHOLINE**

BW 284 C 51 see under **ANILINE COMPOUNDS**

BW 755C

PHARMACOLOGY

The effect of sulphasalazine on the in vitro activation of human peripheral blood mononuclear cells by phytohemagglutinin P. Pacheco S, et al. **Braz J Med Biol Res** 1989;22(4):513–6

Modulation of arachidonic acid metabolism has limited effects on the development of type I diabetes in animal models. Schmidt M, et al. **Diabetes Res** 1989 Dec; 12(4):161–4

BW755C see **BW 755C**

BYPASS, CORONARY ARTERY see **CORONARY ARTERY BYPASS**

BYSSINOSIS

BLOOD

Circulating histamine levels and lung function test in cotton mill workers. Venkatakrishna-Bhatt H, et al. **Arh Hig Rada Toksikol** 1988 Dec;39(4):371–9

COMPLICATIONS

[A case of occupational asthma caused by cotton-dust] Okumura E. **Sangyo Igaku** 1989 May;31(3):160–1 **(Jpn)**

EPIDEMIOLOGY

Byssinosis study among 250 textile mill workers in Jakarta. Baratawidjaja K. **Am J Ind Med** 1990;17(1):71–2

Pulmonary function study of retired cotton textile workers and the relationship to cigarette smoking. Shi NY, et al. **Biomed Environ Sci** 1988 Aug;1(2):152–9

Prevalence of byssinosis in textile mills at Ahmedabad, India. Parikh JR, et al. **Br J Ind Med** 1989 Nov;46(11):787–90

A longitudinal study of pulmonary function in cotton gin workers in the San Joaquin Valley. Larson RK, et al. **Chest** 1989 Oct;96(4):819–23

ETIOLOGY

Toxicity of intratracheally instilled cotton dust, cellulose, and endotoxin. Milton DK, et al. **Am Rev Respir Dis** 1990 Jul; 142(1):184–92

Acute and chronic changes in pulmonary functions among Indian textile workers. Parikh JR, et al. **J Soc Occup Med** 1990 Summer;40(2):71–4

METABOLISM

[Correction of kininogenesis in dust-induced chronic bronchitis] Surovikina AS, et al. **Sov Med** 1990;(2):45–7 **(Rus)**

MORTALITY

Mortality of workers in the British cotton industry in 1968–1984. Hodgson JT, et al. **Scand J Work Environ Health** 1990 Apr;16(2):113–20

REHABILITATION

[Medical rehabilitation problems in patients with dust-induced bronchitis] Iuldashev KIu, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jul–Aug;(4):23–7 **(Rus)**

C1 ESTERASE see **COMPLEMENT 1S**

C1 INACTIVATORS see **COMPLEMENT 1 INACTIVATORS**

C3B INACTIVATORS see **COMPLEMENT 3B INACTIVATORS**

C4 COMPONENT COMPLEMENT PROTEINS see **COMPLEMENT 4**

C FIBERS see **NERVE FIBERS**

C-ONC PROTEINS see **PROTO-ONCOGENE PROTEINS, CELLULAR**

C-PEPTIDE

The extraction and purification of a peptide from rat insulinoma tissue. al-Ahkras G, et al. **Biochim Biophys Acta** 1989 Dec 8;993(2–3):275–9

[C-peptide assays of the urine and plasma at baseline and under stimulation with glucagon in healthy subjects and diabetics] Sabot O, et al. **Presse Med** 1990 May 5; 19(18):860–3 (Eng. Abstr.) **(Fre)**

ANALYSIS

Effects of high-fructose (90%) corn syrup on plasma glucose, insulin, and C-peptide in non-insulin-dependent diabetes mellitus and normal subjects. Hung CT. **Taiwan I Hsueh Hui Tsa Chih** 1989 Sep;88(9):883–5

Insulin and C-peptide co-localization in the beta granules of normal human pancreas and insulinomas. A quantitative immunocytochemical approach. Kalina M, et al. **Virchows Arch [A]** 1989;416(1):19–23

BLOOD

Fetal growth and fetal glucose and C-peptide levels in relation to the degree of anemia in fetuses affected by rhesus iso-immunization. Westgren M, et al. **Acta Obstet Gynecol Scand** 1989;68(4):309–11

Insulin secretory reserve in diabetic Nigerian Africans. Bella AF, et al. **Afr J Med Med Sci** 1990 Mar;19(1):39–42

Fructans of Jerusalem artichokes: intestinal transport, absorption, fermentation, and influence on blood glucose, insulin, and C-peptide responses in healthy subjects. Rumessen JJ, et al. **Am J Clin Nutr** 1990 Oct;52(4):675–81

Effects of a growth hormone pulse on total and forearm substrate fluxes in humans. Møller N, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):E86–91

Development of a radioimmunoassay for plasma C-peptide in sheep: kinetics of C-peptide and effects of exogenous growth hormone and glucose on insulin and C-peptide. Leenanuruksa D, et al. **Aust J Biol Sci** 1988;41(4):517–25

The effect of thyroid disease on proinsulin and C-peptide levels. Beer SF, et al. **Clin Endocrinol (Oxf)** 1989 Apr; 30(4):379–83

Home blood glucose monitoring, glycosylated hemoglobin and fructosamine: their relationships in diabetic patients with and without residual C-peptide secretion. Brichard SM, et al. **Diabete Metab** 1989 Nov–Dec;15(6):388–93

Pulsatile rather than continuous glucagon infusion leads to greater metabolic derangements in insulin-dependent diabetic subjects. Paolisso G, et al. **Diabete Metab** 1990 Jan–Feb;16(1):42–7

Plasma C-peptide levels and clinical remissions in recent-onset type I diabetic patients treated with cyclosporin A and insulin. Assan R, et al. **Diabetes** 1990 Jul;39(7):768–74

Pancreatic C-peptide response to oral glucose in fibrocalculous pancreatic diabetes. Improvement after treatment. Yajnik CS, et al. **Diabetes Care** 1990 May; 13(5):525–7

Effect of human proinsulin on blood glucose control and metabolic instability in type 1 diabetes mellitus. Bock E, et al. **Diabetes Res** 1989 Apr;10(4):165–9

C-peptide but not insulin concentrations are related to the serum lipoprotein levels during insulin treatment of non-insulin-dependent diabetes mellitus (NIDDM) patients. Vessby B, et al. **Diabetes Res** 1989 Nov; 12(3):109–16

The relevance of persistent C-peptide secretion in type 1 (insulin-dependent) diabetes mellitus to glycaemic control and diabetic complications. Winocour PH, et al. **Diabetes Res Clin Pract** 1990 Apr;9(1):23–35

The clinical and hormonal (C-peptide and glucagon) profile and liability to ketoacidosis during nutritional rehabilitation in Ethiopian patients with malnutrition-related diabetes mellitus. Abdulkadir J, et al. **Diabetologia** 1990 Apr; 33(4):222–7

The plasma C-peptide and insulin responses to stimulation with intravenous glucagon and a mixed meal in well-controlled type 2 (non-insulin-dependent) diabetes mellitus: dependency on acutely established hyperglycaemia. Gjessing HJ, et al. **Diabetologia** 1989 Dec; 32(12):858–63

The glucose dependent insulinotropic polypeptide response to oral glucose and mixed meals is increased in patients with type 2 (non-insulin-dependent) diabetes mellitus. Jones IR, et al. **Diabetologia** 1989 Sep;32(9):668–77

Proinsulin and C-peptide at onset and during 12 months cyclosporin treatment of type 1 (insulin-dependent) diabetes mellitus. Snorgaard O, et al. **Diabetologia** 1990 Jan; 33(1):36–42

Effect of cyclosporin A on B-cell loss in type 1 (insulin-dependent) diabetes mellitus [letter] Vague P, et al. **Diabetologia** 1989 Dec;32(12):887

The effects of ingestion time of gliclazide in relationship to meals on plasma glucose, insulin and C-peptide levels. Batch J, et al. **Eur J Clin Pharmacol** 1990;38(5):465–7

Influence of polyethylene glycol (PEG) extraction on the C-peptide determination in sera from insulin-dependent diabetic patients with circulating insulin antibodies. Besch W, et al. **Exp Clin Endocrinol** 1990 Feb;95(1):119–22

Decreased plasma C-peptide to insulin molar ratio after oral glucose in elderly subjects. Ikeda T, et al. **Exp Clin Endocrinol** 1989;94(3):351–6

Insulin and C-peptide secretion in non-obese patients with polycystic ovarian disease. Mahabeer S, et al. **Horm Metab Res** 1989 Sep;21(9):502–6

Effect of isoproterenol on the plasma C-peptide and insulin levels in humans. Górski J, et al. **Horm Res** 1989; 31(4):175–9

Correlation between high density lipoprotein cholesterol and C-peptide in sulfonylurea-treated diabetic patients. Migdalis IN, et al. **J Med** 1989;20(5–6):349–55

Relationships among islet cell antibodies, residual beta-cell function, and metabolic control in patients with insulin-dependent diabetes mellitus of long duration: use of a sensitive C-peptide radioimmunoassay. Nakanishi K, et al. **Metabolism** 1990 Sep;39(9):925–30

Visceral fat accumulation in men is positively associated with insulin, glucose, and C-peptide levels, but negatively with testosterone levels. Seidell JC, et al. **Metabolism** 1990 Sep; 39(9):897–901

Metabolic effects of continuous feeding. Wolever TM. **Metabolism** 1990 Sep;39(9):947–51

The glucagon-stimulated C-peptide test: an aid in classification of patients with diabetes mellitus. Vahlkamp T, et al. **Neth J Med** 1990 Apr;36(3–4):196–9

Relation between fasting C-peptide and other clinical and metabolic variables in non-insulin-dependent diabetes mellitus. Seghieri G, et al. **Quad Sclavo Diagn** 1988 Jan–Dec;24(1–4):65–72

C-peptide response to glucagon in young diabetics. Juang JH, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jun; 88(6):579–83

Glucagon-stimulated serum C-peptide levels in the early period following pancreas transplantation. Nyberg G, et al. **Transplant Proc** 1990 Apr;22(2):647–8

Effect of human fetal pancreas transplantation on secretion of C-peptide and glucose tolerance in type I diabetics. Robertson RP, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2354–6

Plasma insulin, C-peptide, HBA1c, and plasma glucose levels in organ donors. van Houten H, et al. **Transplant Proc** 1990 Apr;22(2):435–6

[The importance of C-peptide determination in the treatment and prognosis of type II diabetes] Válek J, et al. **Cas Lek Cesk** 1990 Feb 2;129(5):142–6 (Eng. Abstr.) **(Cze)**

[C-peptide measurement in the classification of diabetes mellitus and in the assessment of requirements for insulin treatment] Gjessing HJ. **Ugeskr Laeger** 1990 Feb 26; 152(9):588–93 (30 ref.) (Eng. Abstr.) **(Dan)**

[Nocturnal continuous subcutaneous insulin infusion—a therapeutic possibility in labile type I diabetes under exceptional conditions] Bruns W, et al. **Z Gesamte Inn Med** 1990 Mar 15;45(6):154–8 (Eng. Abstr.) **(Ger)**

[Plasma lipids, insulin, C-peptide, and glucagon levels in cirrhosis: personal observations] Luca M, et al. **Riv Eur Sci Med Farmacol** 1989 Apr;11(2):113–22 (Eng. Abstr.) **(Ita)**

[Plasma C-peptide assay and the clinical significance] Kaku K, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:48–50 **(Jpn)**

[New diagnostic tests for diabetes mellitus. C-peptide and proinsulin] Matsuda A. **Nippon Rinsho** 1989 Nov; 47(11):2495–500 **(Jpn)**

[C-peptide, diabetogenic factor and the blood anticoagulating system in patients with the insulin-dependent type of diabetes mellitus before and after heparin therapy] Balabolkin MI, et al. **Probl Endokrinol (Mosk)** 1990 Jan–Feb;36(1):25–8 (Eng. Abstr.) **(Rus)**

[Trypsin and C-peptide concentration in the blood serum of patients with chronic pancreatitis] Starodub EM. **Vrach Delo** 1989 Jul;(7):44–6 (Eng. Abstr.) **(Rus)**

GENETICS

Deletion of a highly conserved tetrapeptide sequence of the proinsulin connecting peptide (C-peptide) inhibits proinsulin to insulin conversion by transfected pituitary corticotroph (AtT20) cells. Gross DJ, et al. **J Biol Chem** 1989 Dec 25;264(36):21486–90

IMMUNOLOGY

Autoantibodies against insulin (IAA), C-peptide (CAA), and glucagon (GAA) in new-onset type 1 diabetic patients. Keilacker H, et al. **Exp Clin Endocrinol** 1990 Feb; 95(1):123–8

METABOLISM

Standard breakfast test: an alternative to glucagon testing for C-peptide reserve? Escobar-Jiménez F, et al. **Horm Metab Res** 1990 Jun;22(6):339–41

PHARMACOLOGY

Lack of effect of high-dose biosynthetic human C-peptide on pancreatic hormone release in normal subjects. Wojcikowski C, et al. **Metabolism** 1990 Aug;39(8):827–32

SECRETION

Decreased C-peptide secretion in sickle cell anemia. Saad ST, et al. **Acta Haematol (Basel)** 1989;82(2):81–4

Interactions between endogenous and exogenous insulin and human pancreatic polypeptide secretion. Zandomeneghi R, et al. **Diabete Metab** 1990 Jan–Feb;16(1):21–5

Endogenous insulin secretion in newly diagnosed diabetic patients in Saudi Arabia. al-Attas OS, et al. **Diabetes Res Clin Pract** 1990 Jan;8(1):51–9

Studies of the entero-insular axis following pancreas transplantation in man: neural or hormonal control? Clark JD, et al. **Diabetic Med** 1989 Dec;6(9):813–7

[Functional capacity of pancreatic B cells in patients with diabetes mellitus type 2 with late true ineffectiveness of sulfonylurea derivatives] Kasperska-Czyżykowa T, et al. **Pol Arch Med Wewn** 1989 Mar;81(3):168–75 (Eng. Abstr.) **(Hun)**

[Effects of induced hyperglycemia on the activity of pancreatic and gastrointestinal secretion of hormones in oncologic patients] Prokhorova VI, et al. **Eksp Onkol** 1990; 12(1):63–6 (Eng. Abstr.) **(Rus)**

[Insulin and peptide C secretion after food ingestion and the interaction of insulin with its erythrocyte receptor in a family with MODY type diabetes mellitus] Hernández A, et al. **Med Clin (Barc)** 1989 Sep 23;93(8):281–5 (Eng. Abstr.) **(Spa)**

URINE

Urinary C-peptide excretion in pancreas transplantation with urinary drainage. Esmatjes E, et al. **Transplant Proc** 1990 Aug;22(4):1598–9

C-REACTIVE PROTEIN

Preliminary crystallographic study of C-reactive protein from Limulus polyphemus. Myles DA, et al. **J Mol Biol** 1990 May 20;213(2):223–5

ANALYSIS

Elevation of C-reactive protein in "active" coronary artery disease. Berk BC, et al. **Am J Cardiol** 1990 Jan 15; 65(3):168–72

Electrochemical method for measuring C-reactive protein using crown ether—phosphate ester ionophores. Merritt CM, et al. **Anal Chem** 1989 Nov 1;61(21):2362–5

C-reactive protein (CRP) levels after normal and complicated caesarean section. Stavén P, et al. **Ann Chir Gynaecol** 1989;78(2):142–5

Can we measure C-reactive proteins? [letter] Whicher JT, et al. **Ann Clin Biochem** 1990 Jan;27 (Pt 1):89–90

Comparison of serum and synovial fluid concentrations of beta 2-microglobulin and C reactive protein in relation to clinical disease activity and synovial inflammation in rheumatoid arthritis. Walters MT, et al. **Ann Rheum Dis** 1989 Nov;48(11):905–11

C-reactive protein in preterm premature rupture of the membranes [published erratum appears in Arch Gynecol Obstet 1990;247(2):106] Kurki T, et al. **Arch Gynecol Obstet** 1990;247(1):31–7

C reactive protein in the detection of deep venous thrombosis [letter; comment] da Silva AF, et al. **BMJ** 1989 Nov 11; 299(6709):1221–2 Comment on: BMJ 1989 Oct 14;299(6705):951–2.

Liquid crystal thermography and C reactive protein in the detection of deep venous thrombosis [see comments] Thomas EA, et al. **BMJ** 1989 Oct 14;299(6705):951–2 Comment in: BMJ 1989 Nov 11;299(6709):1221–2.

C-reactive protein and serum amyloid A protein in pregnancy and labour. de Villiers WJ, et al. **Br J Obstet Gynaecol** 1990 Aug;97(8):725–30

It is said that elevated erythrocyte sedimentation rate and the elevation of C-reactive protein (CRP) may be indicators of continuing joint destruction in rheumatoid arthritis. What then is the explanation for joint destruction

in some patients in whom there is no such apparent elevation of either the sedimentation rate of CRP? McConkey B. **Br J Rheumatol** 1990 Apr;29(2):88

Falsely increased nephelometric results caused by a monoclonal rheumatoid factor [letter] Tsuda H, et al. **Clin Chem** 1990 Jun;36(6):1263–4

C-reactive protein as a prognostic indicator in acute brucellosis. Navarro JM, et al. **Diagn Microbiol Infect Dis** 1990 May–Jun;13(3):269–70

Granulocyte elastase in assessment of severity of acute pancreatitis. Comparison with acute-phase proteins C-reactive protein, alpha 1-antitrypsin, and protease inhibitor alpha 2-macroglobulin. Gross V, et al. **Dig Dis Sci** 1990 Jan;35(1):97–105

Laboratory aid in the diagnosis of acute appendicitis. A blinded, prospective trial concerning diagnostic value of leukocyte count, neutrophil differential count, and C-reactive protein. Ducholm S, et al. **Dis Colon Rectum** 1989 Oct;32(10):855–9

C-reactive protein and bacterial infection in preterm infants. Wasunna A, et al. **Eur J Pediatr** 1990 Mar;149(6):424–7

Agalactosyl IgG in inflammatory bowel disease: correlation with C-reactive protein. Dubé R, et al. **Gut** 1990 Apr; 31(4):431–4

C-reactive protein and 6-keto prostaglandin F 1-alpha in patients with gynecologic cancer. Terada K, et al. **Gynecol Oncol** 1990 Feb;36(2):212–4

Prognostic value of 'C' reactive protein in tuberculosis. Bajaj G, et al. **Indian Pediatr** 1989 Oct;26(10):1010–3

C-reactive protein is a marker for the diagnosis of adnexitis. Schmidt-Rhode P, et al. **Int J Gynaecol Obstet** 1990 Jun; 32(2):133–9

Value of C-reactive protein in reflecting the magnitude of complement activation in children undergoing open heart surgery. Aronen M, et al. **Intensive Care Med** 1990; 16(2):128–32

C-reactive protein in tibial fractures. Natural response to the injury and operative treatment. Kallio P, et al. **J Bone Joint Surg [Br]** 1990 Jul;72(4):615–7

Potential clinical applications of C-reactive protein. Okamura JM, et al. **J Clin Lab Anal** 1990;4(3):231–5 (68 ref.)

Peptides generated from C-reactive protein by a neutrophil membrane protease. Amino acid sequence and effects of peptides on neutrophil oxidative metabolism and chemotaxis. Shephard EG, et al. **J Immunol** 1990 Sep 1; 145(5):1469–76

A quantitative C-reactive protein assay using latex agglutination in microtiter plates. Collet-Cassart D, et al. **J Immunol Methods** 1989 Dec 20;125(1–2):137–41

Rapid isolation of human C reactive protein and serum amyloid P component [letter] Hashimoto K, et al. **J Immunol Methods** 1989 Dec 20;125(1–2):295–6

Predicting deterioration of treated tuberculosis by corticosteroid reserve and C-reactive protein. Scott GM, et al. **J Infect** 1990 Jul;21(1):61–9

Is C-reactive protein a reliable indicator of bacterial infection in the newborn? [letter] Gussetti N, et al. **J Infect Dis** 1989 Nov;160(5):909–10

Absence of a binding reactivity of human C-reactive protein for immunoglobulin or immune complexes. Ballou SP, et al. **J Lab Clin Med** 1990 Mar;115(3):332–8

The erythrocyte sedimentation rate, C-reactive protein, plasma fibrinogen and viscosity in chronic renal disease patients with infection. Ishak R, et al. **Malays J Pathol** 1989 Aug;11:29–31

C-reactive protein: an evaluation of two rapid assay techniques. Punter K, et al. **Med Lab Sci** 1989 Oct; 46(4):359–62

C-reactive protein and prealbumin in suspected sudden infant death syndrome. Benjamin DR, et al. **Pediatr Pathol** 1990; 10(4):503–7

Raised C-reactive protein response in rheumatoid arthritis patients with secondary Sjögren's syndrome. Youinou P, et al. **Rheumatol Int** 1990;10(1):39–41

Changes in erythrocyte sedimentation rate, C-reactive protein and hematological parameters in patients with acute malaria. Eriksson B, et al. **Scand J Infect Dis** 1989; 21(4):434–41

The value of C-reactive protein as a marker of bacterial infection in patients with septicaemia/endocarditis and influenza. Lindbäck S, et al. **Scand J Infect Dis** 1989; 21(5):543–9

Value of C-reactive protein in detecting complications after open-heart surgery in children. Aronen M. **Scand J Thorac Cardiovasc Surg** 1990;24(2):141–5

Value of C-reactive protein in detecting complications after closed-heart surgery in children. Aronen M. **Scand J Thorac Cardiovasc Surg** 1990;24(2):147–51

C-reactive protein as a diagnostic tool. Woo KT. **Singapore Med J** 1989 Feb;30(1):10–1

Monitoring of renal allograft rejection with fine needle aspiration biopsy and serum C-reactive protein determinations. Kaden J, et al. **Transplant Proc** 1987 Feb; 19(1 Pt 2):1657

Elevation of serum C-reactive protein levels during graft rejection. Lempert N, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1683–5

Value of C-reactive protein concentration in diagnosis and management of acute lower respiratory infections. Babu G, et al. **Trop Geogr Med** 1989 Oct;41(4):309–15

[C-reactive protein in burned patients with sepsis] Dong YL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Sep;2(3):206–9, 236 (Eng. Abstr.) **(Chi)**

[C-reactive protein and acute-phase proteins in monitoring infection caused by premature rupture of membranes] He JP. **Chung Hua Fu Chan Ko Tsa Chih** 1990 Mar; 25(2):98–101, 125 (Eng. Abstr.) **(Chi)**

[Assay of serum C-reactive protein. Comparison of 3 immunologic methods] Barrau E, et al. **Ann Biol Clin (Paris)** 1989;47(9):550–4 (Eng. Abstr.) **(Fre)**

[Evaluation of the inflammatory process in hepatic disorders: immunochemistry of C alpha-reactive protein and of alpha 1-acid glycoprotein] Monnet D, et al. **Bull Soc Pathol Exot Filiales** 1990;83(1):107–13 (Eng. Abstr.) **(Fre)**

[The value of leukocytes, C-reactive protein and granulocyte elastase in patients with premature rupture of fetal membranes and amniotic infection] Teichmann AT, et al. **Arch Gynecol Obstet** 1989;245(1–4):824–7 (Eng. Abstr.) **(Ger)**

[Chorioamniotic dissociation and C-reactive protein as predictors of early premature amniotic rupture] Passloer HJ. **Z Geburtshilfe Perinatol** 1990 May–Jun;194(3):115–20 (Eng. Abstr.) **(Ger)**

[The clinico-diagnostic value of C-reactive protein, determined by simple radial immunodiffusion and compared with latex agglutination] Szugs C, et al. **Z Gesamte Hyg** 1989 Oct;35(10):620–2 (Eng. Abstr.) **(Ger)**

[C-reactive protein in the maternal serum and risk of maternal infection in premature rupture of the fetal membranes and threatened premature labor] Hirsch W, et al. **Zentralbl Gynakol** 1989;111(21):1404–10 (Eng. Abstr.) **(Ger)**

[C-reactive protein in the maternal serum and risk of fetal infection in premature rupture of the fetal membranes and threatened premature labor] Hirsch W, et al. **Zentralbl Gynakol** 1989;111(21):1411–6 (Eng. Abstr.) **(Ger)**

[Rapid determination of C-reactive protein using latex agglutination] Schössler W, et al. **Zentralbl Gynakol** 1989; 111(22):1515–6 (Eng. Abstr.) **(Ger)**

[Clinical significance of C-reactive protein assay as a tumor marker] Suzuki H. **Nippon Rinsho** 1990 Feb;48 Suppl:989–91 **(Jpn)**

[Clinical study on the serum carcinoembryonic antigen, immunosuppressive acidic protein and C-reactive protein levels in patients with adult T cell leukemia] Kumagai E, et al. **Rinsho Byori** 1989 Jul;37(7):769–73 (Eng. Abstr.) **(Jpn)**

[Acute phase proteins in systemic lupus erythematosus] Marcinkowska-Pięta R, et al. **Pol Arch Med Wewn** 1987 Mar;77(3):77–82 (Eng. Abstr.) **(Pol)**

[A study of C-reactive protein in the diagnosis of Dupuytren's contracture] Kuznetsova NL, et al. **Lab Delo** 1989;(9):14–5 (Eng. Abstr.) **(Rus)**

[C-reactive protein values] Kapetanović B, et al. **Med Arh** 1989;43(4–6):269–73 (Eng. Abstr.) **(Scr)**

[Usefulness of C-reactive protein for the diagnosis of neonatal sepsis (published erratum appears in Bol Med Hosp Infant Mex 1989 Dec;46(12):824)] Baptista-González HA, et al. **Bol Med Hosp Infant Mex** 1989 Aug;46(8):543–6 (Eng. Abstr.) **(Spa)**

BIOSYNTHESIS

Induction of C-reactive protein by cytokines in human hepatoma cell lines is potentiated by caffeine. Ganapathi MK, et al. **Biochem J** 1990 Jul 1;269(1):41–6

Monitoring the acute phase response: comparison of tumour necrosis factor (cachectin) and C-reactive protein responses in inflammatory and infectious diseases. Maury CP. **J Clin Pathol** 1989 Oct;42(10):1078–82

CEREBROSPINAL FLUID

Cerebrospinal fluid C-reactive protein in the diagnosis of meningitis in children. Soetiono S, et al. **Paediatr Indones** 1989 Jan–Feb;29(1–2):20–7

GENETICS

Mouse C-reactive protein. Generation of cDNA clones, structural analysis, and induction of mRNA during inflammation. Whitehead AS, et al. **Biochem J** 1990 Feb 15;266(1):283–90

Dual control of C-reactive protein gene expression by interleukin-1 and interleukin-6. Ganter U, et al. **EMBO J** 1989 Dec 1;8(12):3773–9

Constitutive and IL-6-induced nuclear factors that interact with the human C-reactive protein promoter. Majello B, et al. **EMBO J** 1990 Feb;9(2):457–65

cis-acting elements responsible for interleukin-6 inducible C-reactive protein gene expression. Li SP, et al. **J Biol Chem** 1990 Mar 5;265(7):4136–42

Dinucleotide repeat polymorphism at the CRP locus. Weber JL, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4635

IMMUNOLOGY

C-reactive protein reacts with the U1 small nuclear ribonucleoprotein. Du Clos TW. **J Immunol** 1989 Oct 15; 143(8):2553–9

ISOLATION & PURIFICATION

Isolation, characterization, and quantitative analysis of C-reactive protein from horses. Takiguchi M, et al. **Am J Vet Res** 1990 Aug;51(8):1215–20

Purification of human C-reactive protein by barium sulfate and preparative agarose electrophoresis. Kindmark CO, et al. **APMIS** 1989 Oct;97(10):891–6

Isolation and characterization of rainbow trout C-reactive protein. Murai T, et al. **Dev Comp Immunol** 1990 Winter; 14(1):49–58

Isolation of lipid-free C-reactive protein by affinity chromatography. Coll JM. **Rev Esp Fisiol** 1989 Sep; 45(3):291–6

METABOLISM

Serum C-reactive protein in the early diagnosis of neonatal septicemia and bacterial meningitis. Nakamura H, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Oct;31(5):567–71

Elucidation of a protease-sensitive site involved in the binding of calcium to C-reactive protein. Kinoshita CM, et al. **Biochemistry** 1989 Dec 12;28(25):9840–8

Binding of rat serum phosphorylcholine binding protein to platelets. Randell E, et al. **Biochim Biophys Acta** 1990 Jun 20;1034(3):281–4

Study of serum C-reactive protein concentration in cardiac failure. Pye M, et al. **Br Heart J** 1990 Apr;63(4):228–30

CD8+ lymphocyte subset in polymyalgia rheumatica and arteritis temporalis. Inverse relationship between the acute hepatic phase reactants and the CD8+ T-cell subset. Elling H, et al. **Clin Exp Rheumatol** 1989 Nov–Dec;7(6):627–30

C-reactive protein concentrations pre- and post-transfusion. Enright H, et al. **Clin Lab Haematol** 1990;12(1):25–9

Relationship between angiotensinogen, alpha 1-protease inhibitor elastase complex, antithrombin III and C-reactive protein in septic ARDS. Hilgenfeldt U, et al. **Eur J Clin Pharmacol** 1990;38(2):125–31

C-reactive protein (CRP) and pregnancy. An early indicator of chorioamnionitis. A review. Bek KM, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Apr;35(1):29–33 (25 ref.)

C-reactive protein during normal pregnancy. Nielsen FR, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Apr; 35(1):23–7

C-reactive protein and the acute-phase response. Kushner I. **Hosp Pract [Off]** 1990 Mar 30;25(3A):13, 16, 21–8 (9 ref.)

Serum interleukin 6, C-reactive protein and pancreatic secretory trypsin inhibitor (PSTI) as acute phase reactants after major thoraco-abdominal surgery. Murata A, et al. **Immunol Invest** 1990 Jun;19(3):271–8

Appearance of C-reactive protein (CRP) in serum and liver cytosol of cadmium-treated rats. Agrawal A, et al. **Indian J Exp Biol** 1989 Dec;27(12):1024–7

A membrane-associated form of C-reactive protein is the galactose-specific particle receptor on rat liver macrophages. Kempka G, et al. **J Immunol** 1990 Feb 1; 144(3):1004–9

Generation of biologically active C-reactive protein peptides by a neutral protease on the membrane of phorbol myristate acetate-stimulated neutrophils. Shephard EG, et al. **J Immunol** 1989 Nov 1;143(9):2974–81

Characterization and isolation of a C-reactive protein receptor from the human monocytic cell line U-937. Tebo JM, et al. **J Immunol** 1990 Jan 1;144(1):231–8

Evaluation of C. reactive protein values in neonatal sepsis. Shortland DB, et al. **J Perinat Med** 1990;18(3):157–63

Impact of C-reactive protein (CRP) on surfactant function. Li JJ, et al. **J Trauma** 1989 Dec;29(12):1690–7

Binding and immunological properties of a synthetic peptide corresponding to the phosphorylcholine-binding region of C-reactive protein. Swanson SJ, et al. **Mol Immunol** 1990 Jul;27(7):679–87

C-reactive protein in acute renal failure. Harrison NA, et al. **Nephrol Dial Transplant** 1989;4(10):864–9

Influence of the snake venom batroxobin (Defibrase) on the degree of inflammatory reactions and on fibrinogen and C-reactive protein levels in rats. Hirschelmann R, et al. **Pharmazie** 1989 Jul;44(7):505–6

PHARMACOKINETICS

Kinetics of C-reactive protein in acute viral hepatitis. Atono Y, et al. **Gastroenterol Jpn** 1989 Dec;24(6):655–62

PHARMACOLOGY

Human C-reactive protein inhibits neutrophil chemotaxis in vitro: possible implications for the adult respiratory distress syndrome. Kew RR, et al. **J Lab Clin Med** 1990 Mar; 115(3):339–45

PHYSIOLOGY

Cytokines, acute phase proteins, and tissue injury. C-reactive protein opsonizes dead cells for debridement and stimulates cytokine production. Yamada Y, et al. **Ann N Y Acad Sci** 1990;587:351–61

Complement activation induced by human C-reactive protein in mildly acidic conditions. Miyazawa K, et al. **J Immunol** 1990 Jul 15;145(2):650–4

Platelet activation stimulated by the toxin of the brown recluse spider requires serum amyloid P component, not C-reactive protein. Rees RS. **Toxicon** 1989;27(9):953–4

THERAPEUTIC USE

Generation of tumoricidal effector cells by human C-reactive protein and muramyl tripeptide: a comparative study. Gautam S, et al. **J Biol Response Mod** 1989 Oct;8(5):560-9

C-TYPE VIRUSES

GENETICS

Alignment of U3 region sequences of mammalian type C viruses: identification of highly conserved motifs and implications for enhancer design. Golemis EA, et al. **J Virol** 1990 Feb;64(2):534-42

GROWTH & DEVELOPMENT

Activation of retrovirus in transgenic mice: association with development of olfactory neuroblastoma. Koike K, et al. **J Virol** 1990 Aug;64(8):3988-91

PHYSIOLOGY

N myristoylation of the spleen necrosis virus matrix protein is required for correct association of the Gag polyprotein with intracellular membranes and for particle formation. Weaver TA, et al. **J Virol** 1990 Aug;64(8):3995-4001

ULTRASTRUCTURE

C-type virus particles in placentas of rhesus monkeys after maternal treatment with recombinant leukocyte A interferon. Feldman D, et al. **J Exp Pathol** 1989 Fall; 4(4):193-8

CA-50 ANTIGEN see ANTIGENS, TUMOR-ASSOCIATED, CARBOHYDRATE

CA-125 ANTIGEN see ANTIGENS, TUMOR-ASSOCIATED, CARBOHYDRATE

CA-15-3 ANTIGEN see ANTIGENS, TUMOR-ASSOCIATED, CARBOHYDRATE

CA-19-9 ANTIGEN see ANTIGENS, TUMOR-ASSOCIATED, CARBOHYDRATE

CA ANTIGENS see ANTIGENS, TUMOR-ASSOCIATED, CARBOHYDRATE

CABBAGE see BRASSICA

CACAO see under PLANTS, EDIBLE

CACHECTIN see TUMOR NECROSIS FACTOR

CACHEXIA

CHEMICALLY INDUCED

Cachectic effects of recombinant human tumor necrosis factor in rats. Darling G, et al. **Cancer Res** 1990 Jul 1; 50(13):4008-13

Recombinant tumor necrosis factor-alpha chronically administered in rats: lack of cachectic effect. Mullen BJ, et al. **Proc Soc Exp Biol Med** 1990 Apr;193(4):318-25

DRUG THERAPY

Prolonged survival of tumor-bearing rats with repetitive low-dose recombinant tumor necrosis factor. Sheppard BC, et al. **Cancer Res** 1990 Jul 1;50(13):3928-33

Anticachectic activity of 5'-deoxy-5-fluorouridine in a murine tumor cachexia model, colon 26 adenocarcinoma. Tanaka Y, et al. **Cancer Res** 1990 Aug 1;50(15):4528-32

Modulation of tumor necrosis factor activities by a potential anticachexia compound, hydrazine sulfate. Hughes TK, et al. **Int J Immunopharmacol** 1989;11(5):501-7

Controlled trial of megestrol acetate for the treatment of cancer anorexia and cachexia. Loprinzi CL, et al. **J Natl Cancer Inst** 1990 Jul 4;82(13):1127-32

From the National Institutes of Health. Raub W. **JAMA** 1990 Sep 5;264(9):1086

ETIOLOGY

Studies of cachexia in parasitic infection. Tracey KJ, et al. **Ann N Y Acad Sci** 1989;569:211-8 (45 ref.)

Contribution of elevated protein turnover and anorexia to cachexia in patients with hepatocellular carcinoma. O'Keefe SJ, et al. **Cancer Res** 1990 Feb 15;50(4):1226-30

Experimental cancer cachexia induced by transplantable colon 26 adenocarcinoma in mice. Tanaka Y, et al. **Cancer Res** 1990 Apr 15;50(8):2290-5

Endogenous cachectin/tumour necrosis factor-alpha production contributes to experimental cancer-associated cachexia. Moldawer LL, et al. **Cancer Surv** 1989;8(4):853-9 (31 ref.)

[Ascites with cachexia revealing prostatic carcinoma (letter)] Disdier P, et al. **Presse Med** 1990 Feb 10;19(5):220 (Fre)

[The molecular bases of the cachexia associated with cancer] Argilés JM, et al. **Med Clin (Barc)** 1990 Jan 13;94(1):18-20 (7 ref.) (Spa)

IMMUNOLOGY

Prevention of adjuvant-induced cachexia in rats by cyclosporin A. Rofe AM, et al. **Immunol Cell Biol** 1990 Feb;68 (Pt 1):63-9

METABOLISM

Amino acid metabolism in human cancer cachexia. Pisters PW, et al. **Annu Rev Nutr** 1990;10:107-32 (138 ref.)

Tentative identification of the toxohormones of cancer cachexia: roles of vasopressin, prostaglandin E2 and cachectin-TNF. Siddiqui RA, et al. **Biochem Int** 1990; 20(4):787-97

Metabolic effects in a murine cachexia model. Tisdale MJ. **Biochem Soc Trans** 1990 Feb;18(1):83-4

Metabolic response to enteral food in different phases of cancer cachexia in rats. Zylicz Z, et al. **Oncology** 1990; 47(1):87-91

PATHOLOGY

Multi-organ damage (MOD) induced by cancer cachexia and its pathogenesis. Noriki S, et al. **Basic Appl Histochem** 1989; 33(4):337-46

PHYSIOPATHOLOGY

Insulin secretion in Walker 256 tumor cachexia. Fernandes LC, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):E1033-6

Some aspects of body composition in cancer. Burkinshaw L. **Infusionstherapie** 1990 Apr;17 Suppl 3:57-8 (16 ref.)

Body composition in cancer cachexia. Fearon KC, et al. **Infusionstherapie** 1990 Apr;17 Suppl 3:63-6

Tumor necrosis factor-alpha inhibits albumin gene expression in a murine model of cachexia. Brenner DA, et al. **J Clin Invest** 1990 Jan;85(1):248-55

Lingual fibrosarcoma induced by 7, 12-dimethylbenzanthracene in the rat. Perrin C, et al. **J Oral Pathol Med** 1990 Jan;19(1):13-5

PREVENTION & CONTROL

A controlled trial of cyproheptadine in cancer patients with anorexia and/or cachexia. Kardinal CG, et al. **Cancer** 1990 Jun 15;65(12):2657-62

Inhibition of weight loss by omega-3 fatty acids in an experimental cachexia model. Tisdale MJ, et al. **Cancer Res** 1990 Aug 15;50(16):5022-6

THERAPY

Retroperitoneal feeding tube for peritoneal dialysis patients. Kramer MS, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):593-5

'Wasting away' of the old old: can it--and should it--be treated? Verdery RB. **Geriatrics** 1990 Jun;45(6):26-31 (12 ref.)

Arrest of cachectic and lysosomal changes in rats by excision of mammary tumors. Ferguson WW. **Surg Forum** 1978; 29:165-7

VETERINARY

Nutrition and cancer. Recent developments. Ogilvie GK, et al. **Vet Clin North Am Small Anim Pract** 1990 Jul; 20(4):969-85 (55 ref.)

CACODYLIC ACID see under ARSENICALS

CADAVER

Fly larvae and their relevance in forensic toxicology. Kintz P, et al. **Am J Forensic Med Pathol** 1990 Mar;11(1):63-5

Animal cadaveric models for advanced trauma life support training. Eaton BD, et al. **Ann R Coll Surg Engl** 1990 Mar; 72(2):135-9

Total body burdens and tissue concentrations of lead, cadmium, copper, zinc, and ash in 55 human cadavers. Saltzman BE, et al. **Environ Res** 1990 Aug;52(2):126-45

Opiate analysis in cadaveric blowfly larvae as an indicator of narcotic intoxication. Introna F Jr, et al. **J Forensic Sci** 1990 Jan;35(1):118-22

Fly larvae: a new toxicological method of investigation in forensic medicine. Kintz P, et al. **J Forensic Sci** 1990 Jan; 35(1):204-7

The nature of a traumatic stressor: handling dead bodies. Ursano RJ, et al. **J Nerv Ment Dis** 1990 Jun;178(6):396-8

Control of transmission of HIV and other bloodborne pathogens in biomechanical cadaveric testing. Cavanaugh JM, et al. **J Orthop Res** 1990 Mar;8(2):159-66 (27 ref.)

Articulated cadaveric bones as a structural endoskeleton in an ankle-foot prosthesis: a preliminary report. Kabra SG. **J Rehabil Res Dev** 1990 Winter;27(1):43-52

Recovery of forensically important entomological specimens from human cadavers in Malaysia--an update. Lee HL. **Malays J Pathol** 1989 Aug;11:33-6

Donor pretreatment with lidocaine decreases incidence of early renal dysfunction in cadaver kidney transplantation. Schulak JA, et al. **Transplant Proc** 1990 Apr;22(2):353-4

[Two cases of age estimation from teeth of burned body using amino acid racemization] Ohtani S, et al. **Nippon Hoigaku Zasshi** 1989 Apr;43(2):191-7 (Eng. Abstr.) (Jpn)

[The diagnostic significance of the quantitative glycogen content in cadaveric tissues in different types of death] Chistova TI. **Sud Med Ekspert** 1990 Jan-Mar;33(1):30-3 (Eng. Abstr.) (Rus)

[The isolation of amitriptyline from cadaveric material using acetonitrile] Nikolaeva EG. **Sud Med Ekspert** 1990 Jan-Mar;33(1):39-40 (Eng. Abstr.) (Rus)

[An evaluation of methods for isolating antiparkinson preparations from cadaveric material] Vainauskas PV. **Sud Med Ekspert** 1990 Jan-Mar;33(1):40-1 (Eng. Abstr.) (Rus)

CADAVERINE see under DIAMINES

CADHERINS

ANALYSIS

Uvomorulin-catenin complex: cytoplasmic anchorage of a Ca2+-dependent cell adhesion molecule. Kemler R, et al. **Bioessays** 1989 Oct;11(4):88-91 (14 ref.)

N-cadherin of the human lens. Atreya PL, et al. **Curr Eye Res** 1989 Sep;8(9):947-56

N-cadherin detected in the membrane fraction of lens fiber cells. Maisel H, et al. **Experientia** 1990 Feb 15;46(2):222-3

Identification of a membrane-cytoskeletal complex containing the cell adhesion molecule uvomorulin (E-cadherin), ankyrin, and fodrin in Madin-Darby canine kidney epithelial cells. Nelson WJ, et al. **J Cell Biol** 1990 Feb;110(2):349-57

Absence of uvomorulin in a slowly compacting variant of H6 embryonal carcinoma cells. Littlefield JW, et al. **Somat Cell Mol Genet** 1990 Mar;16(2):191-4

BIOSYNTHESIS

A cadherin-like protein in eggs and cleaving embryos of Xenopus laevis is expressed in oocytes in response to progesterone. Choi YS, et al. **J Cell Biol** 1990 May; 110(5):1575-82

GENETICS

Localization of specificity determining sites in cadherin cell adhesion molecules. Nose A, et al. **Cell** 1990 Apr 6; 61(1):147-55

Altered uvomorulin expression in a noncompacting mutant cell line of F9 embryonal carcinoma cells. Adamson ED, et al. **Dev Biol** 1990 Apr;138(2):338-47

Characterization of N-cadherin mRNA in chicken brain and heart by means of oligonucleotide probes. Dalseg AM, et al. **FEBS Lett** 1990 Mar 26;262(2):234-6

cDNAs of cell adhesion molecules of different specificity induce changes in cell shape and border formation in cultured S180 cells. Matsuzaki F, et al. **J Cell Biol** 1990 Apr;110(4):1239-52

Identification of a conserved region common to cadherins and influenza strain A hemagglutinins. Blaschuk OW, et al. **J Mol Biol** 1990 Feb 20;211(4):679-82

N-cadherin gene maps to human chromosome 18 and is not linked to the E-cadherin gene. Walsh FS, et al. **J Neurochem** 1990 Sep;55(3):805-12

METABOLISM

Estradiol stimulates cadherin expression in rat granulosa cells. Blaschuk OW, et al. **Dev Biol** 1989 Dec;136(2):564-7

Cleavage of A-CAM by endogenous proteinases in cultured lens cells and in developing chick embryos. Volk T, et al. **Dev Biol** 1990 Jun;139(2):314-26

N-cadherin is stably associated with and is an acceptor for a cell surface N-acetylgalactosaminylphosphotransferase. Balsamo J, et al. **J Biol Chem** 1990 Feb 15;265(5):2923-8

Vectorial targeting of an endogenous apical membrane sialoglycoprotein and uvomorulin in MDCK cells. Le Bivic A, et al. **J Cell Biol** 1990 May;110(5):1533-9

PHARMACOLOGY

Identification of a cadherin cell adhesion recognition sequence. Blaschuk OW, et al. **Dev Biol** 1990 May; 139(1):227-9

Purified N-cadherin is a potent substrate for the rapid induction of neurite outgrowth. Bixby JL, et al. **J Cell Biol** 1990 Apr;110(4):1253-60

PHYSIOLOGY

Cadherins: a molecular family important in selective cell-cell adhesion. Takeichi M. **Annu Rev Biochem** 1990;59:237-52 (110 ref.)

Novel function of the cell adhesion molecule uvomorulin as an inducer of cell surface polarity. McNeill H, et al. **Cell** 1990 Jul 27;62(2):309-16

The role of cell adhesion molecules in neurite outgrowth on Müller cells. Drazba J, et al. **Dev Biol** 1990 Mar; 138(1):82-93

Expression and role of E- and P-cadherin adhesion molecules in embryonic histogenesis. II. Skin morphogenesis. Hirai Y, et al. **Development** 1989 Feb; 105(2):271-7

Expression and role of E- and P-cadherin adhesion molecules in embryonic histogenesis. I. Lung epithelial morphogenesis. Hirai Y, et al. **Development** 1989 Feb; 105(2):263-70

A role for the Ca2(+)-dependent adhesion molecule, N-cadherin, in myoblast interaction during myogenesis. Knudsen KA, et al. **Exp Cell Res** 1990 Jun;188(2):175-84

Epithelial cell adhesion mechanisms. Boyer B, et al. **J Membr Biol** 1989 Dec;112(2):97–108 (83 ref.)
The effects of N–cadherin misexpression on morphogenesis in Xenopus embryos. Detrick RJ, et al. **Neuron** 1990 Apr; 4(4):493–506
Role of N–cadherin cell adhesion molecules in the histogenesis of neural retina. Matsunaga M, et al. **Neuron** 1988 Jun;1(4):289–95
N–cadherin and integrins: two receptor systems that mediate neuronal process outgrowth on astrocyte surfaces. Tomaselli KJ, et al. **Neuron** 1988 Mar;1(1):33–43
Uvomorulin–catenin complex formation is regulated by a specific domain in the cytoplasmic region of the cell adhesion molecule. Ozawa M, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4246–50

CADMIUM

Determination of inorganic nitrate in serum and urine by a kinetic cadmium–reduction method. Cortas NK, et al. **Clin Chem** 1990 Aug;36(8 Pt 1):1440–3
An inexpensive miniaturized linear CdTe detector array system. Kearfott KJ, et al. **Health Phys** 1989 Nov; 57(5):825–30
Transition metal complexes of L–cysteine containing di– and tripeptides. Cherifi K, et al. **J Inorg Biochem** 1990 Jan; 38(1):69–80
Comparison of Ca(II), Cd(II), and Mg(II) titrations of tyrosine–99 spin–labeled bovine calmodulin. You GF, et al. **J Inorg Biochem** 1990 Feb;38(2):117–25
Three–dimensional structure of human [113Cd7]metallothionein–2 in solution determined by nuclear magnetic resonance spectroscopy. Messerle BA, et al. **J Mol Biol** 1990 Aug 5;214(3):765–79
DNA–sequence and metal–ion specificity of the formation of *H–DNA. Bernués J, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4067–73
[Clinical application of an ambulatory monitoring system (VEST) with cadmium telluride (CdTe) detector—Evaluation of left ventricular function immediately after exercise] Chiba H, et al. **Kaku Igaku** 1989 Dec;26(12):1575–84 **(Jpn)**
[Individual fluctuation in urinary excretion of low molecular weight proteins in inhabitants of a cadmium–polluted area] Iwata K, et al. **Sangyo Igaku** 1989 Nov;31(6):436–7 **(Jpn)**

ADMINISTRATION & DOSAGE

Ultrastructural observations in hamster and rat lungs after chronic inhalation of cadmium compounds. Thiedemann KU, et al. **Exp Pathol** 1989;37(1–4):264–8
A comparison of the effects of dietary cadmium on heart and kidney antioxidant enzymes: evidence for the greater vulnerability of the heart to cadmium toxicity. Jamall IS, et al. **J Appl Toxicol** 1989 Oct;9(5):339–45
Metallothionein production: similar responsiveness of avian liver and kidney to chronic cadmium administration. Scheuhammer AM, et al. **Toxicology** 1990 Jan–Feb; 60(1–2):151–9
[Angiotensin converting enzyme activity in the serum of animals after a single intraperitoneal administration of cadmium in various concentrations] Bešlagić R. **Med Arh** 1988;42(5–6):249–51 (Eng. Abstr.) **(Scr)**

ADVERSE EFFECTS

Long–term observation of serum creatinine and arterial blood pH in persons with cadmium–induced renal dysfunction. Kido T, et al. **Arch Environ Health** 1990 Jan–Feb; 45(1):35–41
Urinary kallikrein activity in workers exposed to cadmium, lead, or mercury vapour. Roels HA, et al. **Br J Ind Med** 1990 May;47(5):331–7
Health significance of cadmium induced renal dysfunction: a five year follow up. Roels HA, et al. **Br J Ind Med** 1989 Nov;46(11):755–64
Nephropathy in cadmium workers: assessment of risk from airborne occupational exposure to cadmium. Thun MJ, et al. **Br J Ind Med** 1989 Oct;46(10):689–97
The association between renal dysfunction and osteopenia in environmental cadmium–exposed subjects. Kido T, et al. **Environ Res** 1990 Feb;51(1):71–82
Quantification of proliferative lesions in hamster lungs after chronic exposure to cadmium aerosols. Aufderheide M, et al. **Exp Pathol** 1989;37(1–4):259–63
Investigation on the carcinogenic effects of various cadmium compounds after inhalation exposure in hamsters and mice. Heinrich U, et al. **Exp Pathol** 1989;37(1–4):253–8
Responses induced by long–term toxic effects of heavy metals on fish tissues concerned with digestion, absorption, and excretion. Datta D, et al. **Gegenbaurs Morphol Jahrb** 1989; 135(4):627–57
Serum vitamin D metabolites in cadmium–exposed persons with renal damage. Nogawa K, et al. **Int Arch Occup Environ Health** 1990;62(3):189–93
Does cadmium contribute to the development of renal parenchymal hypertension? Geiger H, et al. **Int J Artif Organs** 1989 Nov;12(11):733–7
Carbon monoxide, carbon disulfide, lead and cadmium—four examples of occupational toxic agents linked to cardiovascular disease. Wojtczak–Jaroszowa J, et al. **Med Hypotheses** 1989 Oct;30(2):141–50 (164 ref.)

ANALYSIS

Application of high–performance liquid chromatography—inductively coupled plasma mass spectrometry to the investigation of cadmium speciation in pig kidney following cooking and in vitro gastro–intestinal digestion. Crews HM, et al. **Analyst** 1989 Aug;114(8):895–9
Sequential extraction—spectrofluorometric determination of lead and cadmium using cryptands. Gomis DB, et al. **Analyst** 1990 Jan;115(1):89–91
Extraction, separation and spectrophotometric determination of cadmium and mercury using triphenylphosphine oxide and its application to environmental samples. Raman B, et al. **Analyst** 1990 Jan;115(1):93–8
Determination of trace amounts of cadmium, lead, copper and zinc in natural waters by inductively coupled plasma atomic emission spectrometry with thermospray nebulisation, after enrichment on Chelex–100. Vermeiren K, et al. **Analyst** 1990 Jan;115(1):17–22
Mercury, cadmium and lead levels in marine organisms (Mytilus galloprovincialis Lmk.) collected along the Italian coasts. Giordano R, et al. **Ann Ist Super Sanita** 1989; 25(3):511–6
The Cd–Chelex assay: a new sensitive method to determine metallothionein containing zinc and cadmium. Bartsch R, et al. **Arch Toxicol** 1990;64(3):177–80
Isolation of a novel rat testicular metalloprotein binding cadmium and zinc. Kinoshita CM, et al. **Biol Trace Elem Res** 1988 Sep–Dec;17:189–206
Cadmium concentrations in beef consumable tissues in relation to age of animals and area of their breeding. Antoniou V, et al. **Bull Environ Contam Toxicol** 1989 Dec; 43(6):915–9
Hair cadmium level of smoker and non–smoker human volunteers in and around Calcutta City. Chattopadhyay PK, et al. **Bull Environ Contam Toxicol** 1990 Aug; 45(2):177–80
Cadmium levels in bovine liver and kidney from agricultural regions on and off the Canadian Shield, 1985–1988. Frank R, et al. **Bull Environ Contam Toxicol** 1989 Nov; 43(5):737–41
Seasonal changes of cadmium and copper levels in stem–boring larvae of Agapanthia villosoviridescens (Coleoptera) on salt marshes of the Westerschelde Estuary. Hemminga MA, et al. **Bull Environ Contam Toxicol** 1989 Nov;43(5):747–54
Distribution and residue level of mercury, cadmium and lead in Korean birds. Lee DP, et al. **Bull Environ Contam Toxicol** 1989 Oct;43(4):550–5
Comparison of cadmium concentrations in Atlantic salmon (Salmo salar) fry fed different commercial feeds. Maage A. **Bull Environ Contam Toxicol** 1990 May;44(5):770–5
Cadmium content in rice and its daily intake in various countries. Rivai IF, et al. **Bull Environ Contam Toxicol** 1990 Jun;44(6):910–6
Lead and cadmium concentrations in marine organisms from the Tarragona coastal waters, Spain. Schuhmacher M, et al. **Bull Environ Contam Toxicol** 1990 May;44(5):784–9
Clinical significance of hair cadmium content in the diagnosis of mental retardation of children. Jiang HM, et al. **Chin Med J [Engl]** 1990 Apr;103(4):331–4
Cadmium exposure in Denmark. Based on analyses of liver and kidney tissues. Hansen JC, et al. **Dan Med Bull** 1989 Oct;36(5):499–502 (24 ref.)
Iron, copper, cadmium, zinc and magnesium contents of urinary tract stones and hair from men with stone disease. Durak I, et al. **Eur Urol** 1990;17(3):243–7
Smoking, hair cadmium and urinary tract stones [letter] Durak I, et al. **Eur Urol** 1990;17(3):267–8
Determination of cadmium and lead in foods by graphite furnace atomic absorption spectrometry with Zeeman background correction: test with certified reference materials. Ellen G, et al. **Food Addit Contam** 1990 Mar–Apr; 7(2):265–73
Cadmium and lead in muscle tissue and organs of broilers, turkeys and spent hens and in mechanically deboned poultry meat. Vos G, et al. **Food Addit Contam** 1990 Jan–Feb;7(1):83–91
Cadmium and lead distribution in fresh asparagus. Zurera–Cosano G, et al. **Food Addit Contam** 1990 May–Jun; 7(3):381–5
Survey of lead and cadmium in adult canned foods eaten by young children. Capar SG. **J Assoc Off Anal Chem** 1990 May–Jun;73(3):357–64
Nuclear magnetic resonance studies of the solution chemistry of metal complexes. 26. Mixed ligand complexes of cadmium, nitrilotriacetic acid, glutathione, and related ligands. Kadima W, et al. **J Inorg Biochem** 1990 Apr; 38(4):277–88
Determination of cadmium in water samples by substoichiometric radiochemical method employing potassium ethyl xanthate. Reddy PC, et al. **Radioisotopes** 1990 May;39(5):219–21
Cadmium concentration in human kidney biopsies. Lindqvist B, et al. **Scand J Urol Nephrol** 1989;23(3):213–7
The accumulation of cadmium by vegetables grown on soils contaminated from a variety of sources. Alloway BJ, et al. **Sci Total Environ** 1990 Feb;91:223–36
Concentrations of lead and cadmium in edible vegetables from Tarragona Province, Spain. Bosque MA, et al. **Sci Total Environ** 1990 Jun;95:61–7
Whole lake addition of cadmium–109: radiotracer accumulation in the mussel population in the first season. Malley DF, et al. **Sci Total Environ** 1989 Nov; 87–88:397–417
Use of Polytrichum formosum (moss) as a passive biomonitor for heavy metal pollution (cadmium, copper, lead and zinc). Markert B, et al. **Sci Total Environ** 1989 Oct 15; 86(3):289–94
Influence of complexing agents and surfactants on metal speciation analysis in road runoff. Morrison GM, et al. **Sci Total Environ** 1990 Apr;93:481–8
The transport of heavy metals within a small urban catchment. Revitt DM, et al. **Sci Total Environ** 1990 Apr; 93:359–73
Biological monitoring for occupational cadmium exposure: the urinary metallothionein. Shaikh ZA, et al. **Toxicology** 1990 Jul;63(1):53–62
[Cadmium exposure and health effects among residents in irrigation area with ore dressing wastewater] Cai SW. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 May; 23(3):143–6 (Eng. Abstr.) **(Chi)**
[The toxicological estimation of the heavy metal content (Cd, Hg, Pb) in food for infants and small children] Schümann K. **Z Ernahrungswiss** 1990 Mar;29(1):54–73 (53 ref.) (Eng. Abstr.) **(Ger)**
[Xenobiotics in the food chain] Rupčíková P, et al. **Z Gesamte Hyg** 1990 Jun;36(6):311–3 (Eng. Abstr.) **(Ger)**
[Lead and cadmium content in deciduous incisors of children from Duisburg and Gummersbach—developing trend 1976–1988] Ewers U, et al. **Zentralbl Hyg Umweltmed** 1990 Feb;189(4):333–51 (Eng. Abstr.) **(Ger)**
[Evaluation of the effect of cadmium exposure in a worker in Ni–Cd storage battery production by biological tests in vivo and the cadmium content of tissues postmortem] Senft V, et al. **Zentralbl Hyg Umweltmed** 1990 Apr; 189(5):395–404 (Eng. Abstr.) **(Ger)**
[Blood, teeth and hair: 3 different materials used to evaluate exposure to lead and cadmium in children living in an industrial zone] Bergomi M, et al. **Ann Ig** 1989 Sep–Oct; 1(5):1185–96 (Eng. Abstr.) **(Ita)**
[Cadmium in the total diet of the typical Italian collective] Melchiorri C, et al. **Ann Ig** 1989 May–Aug;1(3–4):841–9 (Eng. Abstr.) **(Ita)**
[Content of cadmium and lead in berries and seed fruits] Jędrzejczak R, et al. **Rocz Panstw Zaki Hig** 1989; 40(4–6):274–8 (Eng. Abstr.) **(Pol)**

ANTAGONISTS & INHIBITORS

Effect of N–benzyl–D–glucamine dithiocarbamate on renal toxicity induced by cadmium–metallothionein in rats. Kojima S, et al. **Arch Toxicol** 1990;64(2):91–6
Zinc protection against cadmium effect on estrual cycle of Wistar rat. Rivera OE, et al. **Biol Trace Elem Res** 1990 Apr;25(1):35–8
Effect of zinc administration on cadmium–induced suppression of natural killer cell activity in mice. Chowdhury BA, et al. **Immunol Lett** 1989 Oct;22(4):287–91
Reversal of cadmium–induced hypertension by D–myo–inositol–1,2,6–trisphosphate. Perry HM Jr, et al. **J Toxicol Environ Health** 1989;28(2):151–9
Magnesium: a competitive inhibitor of lead and cadmium. Ultrastructural studies of the human amniotic epithelial cell. Guiet–Bara A, et al. **Magnes Res** 1990 Mar;3(1):31–6
Behavioral antagonism between lead and cadmium. Nation JR, et al. **Neurotoxicol Teratol** 1990 Mar–Apr;12(2):99–104
Schedule dependency of a cadmium–complexing dithiocarbamate analog in mice. Gale GR, et al. **Toxicol Lett** 1990 Jan;50(1):85–96

BLOOD

Evaluation of the performance of Italian laboratories in the determination of cadmium levels in blood. Morisi G, et al. **Ann Ist Super Sanita** 1989;25(3):449–55
Cadmium uptake kinetics in human erythrocytes. Nguyen QH, et al. **Biol Trace Elem Res** 1989 Nov;22(2):119–29
The intrapartum content of toxic metals in maternal blood and umbilical cord blood. Sikorski R, et al. **Ginekol Pol** 1989 Mar;60(3):151–5
Blood cadmium in London civil servants. Staessen J, et al. **Int J Epidemiol** 1990 Jun;19(2):362–6
Bovine blood quality control material for cadmium, mercury, and lead. Cox DH. **J Anal Toxicol** 1989 Nov–Dec; 13(6):367–70
Correlations between magnesium and heavy metals in blood and sixteen tissues of rabbits. Speich M, et al. **Magnes Res** 1989 Sep;2(3):179–82
[Lead and cadmium burden of children in Stolberg] Hofstetter I, et al. **Off Gesundheitswes** 1990 May; 52(5):232–7 (Eng. Abstr.) **(Ger)**
[Blood lead and blood cadmium concentrations in 55–66–year–old women fron different areas of Nordrhein–Westfalen—chronological trends during 1982–1988] Ewers U, et al. **Zentralbl Hyg Umweltmed** 1990 Apr;189(5):405–18 (Eng. Abstr.) **(Ger)**
[Changes in blood Zn, Se, Cd, Pb during therapeutic abstinence from alcohol in 101 cases of alcoholism] Pujatti P, et al. **G Clin Med** 1989 Nov;70(11):653–4, 658–60 (Eng. Abstr.) **(Ita)**
[Significance of cadmium analysis in clinical tests] Wada O, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:745–8 **(Jpn)**

METABOLISM

Turnover of cadmium 109 in rats. Lucis OJ, et al. **Arch Environ Health** 1969 Mar;18(3):307–10

Biliary excretion of mercury and cadmium. Cikrt M. **Arh Hig Rada Toksikol** 1989 Jun;40(2):165–81

The binding of cadmium to crab cadmium metallothionein. A polarographic investigation. Sparla AM, et al. **Biochem J** 1990 Apr 15;267(2):539–40

Domain-specificity of Cd2+ and Zn2+ binding to rabbit liver metallothionein 2. Metal ion mobility in the formation of Cd4-metallothionein alpha-fragment. Stillman MJ, et al. **Biochem J** 1989 Aug 15;262(1):181–8

The DNA binding domain of GAL4 forms a binuclear metal ion complex. Pan T, et al. **Biochemistry** 1990 Mar 27; 29(12):2023–9

p10 single-stranded nucleic acid binding protein from murine leukemia virus binds metal ions via the peptide sequence Cys26-X2-Cys29-X4-His34-X4-Cys39. Roberts WJ, et al. **Biochemistry** 1989 Dec 26;28(26):10043–7

Translation in a cell-free system, and in Xenopus oocytes, of mRNA which specify a cadmium-binding protein in Nereis diversicolor (Annelida, Polychaeta). Benouareth DE, et al. **Biol Cell** 1989;67(2):167–71

Is cadmium released from metallothionein in rejected human kidneys? Elinder CG, et al. **Biol Met** 1990;2(4):219–22

Detoxification of cadmium. Ultrastructural study and electron-probe microanalysis of the midgut in a cadmium-resistant strain of Drosophila melanogaster. Lauverjat S, et al. **Biol Met** 1989;2(2):97–107

Incorporation of cadmium into proteins in a cadmium tolerant fungi. Razak AA. **Biol Trace Elem Res** 1989 Dec; 22(3):277–85

Cadmium uptake and toxicity to water hyacinth: effect of repeated exposures under controlled conditions. Nir R, et al. **Bull Environ Contam Toxicol** 1990 Jan;44(1):149–57

Uptake of lead, chromium, cadmium and cobalt by Cladophora glomerata. Vymazal J. **Bull Environ Contam Toxicol** 1990 Mar;44(3):468–72

Selective removal of cadmium from aged hepatic and renal deposits: N-substituted talooctamine dithiocarbamates as cadmium mobilizing agents. Singh PK, et al. **Chem Biol Interact** 1990;74(1-2):79–91

Age dependent changes in metallothionein and accumulation of cadmium in horses. Jeffery EH, et al. **Comp Biochem Physiol [C]** 1989;93(2):327–32

A mathematical model for cadmium in the stone loach (Noemacheilus barbatulus L.) from the River Ecclesbourne, Derbyshire. Douben PE. **Ecotoxicol Environ Safety** 1990 Apr;19(2):160–83

Intracellular metallothionein concentration and the rate of zinc or cadmium influx and MT mRNA accumulation in a CHO Cdr variant. Morris S, et al. **Exp Cell Res** 1989 Nov;185(1):166–75

Determination and metabolism of dithiol chelating agents. VII. Biliary excretion of dithiols and their interactions with cadmium and metallothionein. Zheng W, et al. **Fundam Appl Toxicol** 1990 Apr;14(3):598–607

Glutathione-coated cadmium-sulfide crystallites in Candida glabrata. Dameron CT, et al. **J Biol Chem** 1989 Oct 15; 264(29):17355–60

Ultrastructural studies on a cadmium-storing cell in rat pancreatic tissues following cadmium chloride administration. Watari N, et al. **J Electron Microsc (Tokyo)** 1989;38(4):235–41

The critical levels and the maximum metal uptake for wheat and rice plants when applying metal oxides to soil. Muramoto S, et al. **J Environ Sci Health [B]** 1990 Apr; 25(2):273–80

Effect of chelating agent structure on the mobilization of cadmium from intracellular deposits. Singh PK, et al. **J Toxicol Environ Health** 1989;28(4):501–18

Role of cadmium and magnesium in pathogenesis of idiopathic dilated cardiomyopathy. Müller KD. **Magnes Res** 1989 Sep;2(3):232–3

Investigation on lead and cadmium binding to gluten proteins of wheat flour. Prugarová A, et al. **Nahrung** 1990; 34(1):103–4

Uptake of cadmium and metallothionein by rat everted intestinal sacs. Ohta H, et al. **Toxicol Appl Pharmacol** 1989 Oct;101(1):62–9

Apparent deficiency of metallothionein in the Wistar rat prostate. Waalkes MP, et al. **Toxicol Appl Pharmacol** 1989 Oct;101(1):83–94

The rate of the in vivo dithiocarbamate-induced mobilization of hepatic and renal cadmium deposits. Jones MM, et al. **Toxicology** 1989 Oct 16;58(3):313–23

Diamide reduces cadmium accumulation by human lung carcinoma A549 cells. Kang YJ, et al. **Toxicology** 1990 May 14;62(1):53–8

Pregnancy-induced mobilization of copper and zinc bound to renal metallothionein in cadmium-loaded rats. Suzuki KT, et al. **Toxicology** 1990 Mar 16;60(3):199–210

[Influence of selenium supplement on cadmium metabolism in human] Wei HJ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Jun; 11(3):185–9 (Eng. Abstr.) **(Chi)**

[Levels of copper and its antagonists in mice with natural lymphocytic leukemia] Kaszubkiewicz C, et al. **Pol Arch Weter** 1988;28(1-2):35–43 (Eng. Abstr.) **(Pol)**

PHARMACOKINETICS

Lead and cadmium in human hair: a comparison among four countries. Ahmed AF, et al. **Bull Environ Contam Toxicol** 1990 Jul;45(1):139–48

Fate of dietary cadmium at two intake levels in the odonate nymph, Aeshna canadensis. Martin PA, et al. **Bull Environ Contam Toxicol** 1990 Jan;44(1):54–8

Distribution of cadmium in body organs and hepatic metallothionein content following chelation therapy. Tewari PC, et al. **Clin Exp Pharmacol Physiol** 1988 Jan; 15(1):71–5

Structural factors in the in vivo chelate mobilization of aged cadmium deposits. Singh PK, et al. **Environ Health Perspect** 1990 Apr;85:361–70

Uptake and distribution of Cd in the ovaries, adrenals, and pituitary in pseudopregnant rats: effect of Cd on progesterone serum levels. Paksy K, et al. **Environ Res** 1990 Feb;51(1):83–90

Influence of hexacyanoferrate (II) based treatments upon the elimination of heavy metal traces in wine. II. The case of cadmium. Wencker D, et al. **Food Addit Contam** 1990 May-Jun;7(3):375–9

Cellular cadmium distribution in the common winkle, Littorina littorea (L.) determined by X-ray microprobe analysis and histochemistry. Marigómez JA, et al. **Histochemistry** 1990;94(2):191–9

Uptake of cadmium by isolated human red blood cells. Mukhopadhyay S, et al. **Indian J Exp Biol** 1989 Jan; 27(1):69–71

Effect of trisodium pentetat on the distribution of cadmium in some body organs & on hepatic metallothionein in rats. Flora SJ, et al. **Indian J Med Res** 1989 Oct;90:363–6

Tissue levels of lead in experimentally exposed herring gull (Larus argentatus) chicks. Burger J, et al. **J Toxicol Environ Health** 1990;29(2):219–33

Lead and cadmium levels in violent criminals. Pihl RO, et al. **Psychol Rep** 1990 Jun;66(3 Pt 1):839–44

Role of transmembrane electrical potential on cadmium fixation by a marine pseudomonad. Flatau GN, et al. **Res Microbiol** 1989 Oct;140(8):553–62

Cadmium deposition and hepatic microsomal activity in mice fed Swiss chard grown on municipal incinerator refuse ash. Stoewsand GS, et al. **Sci Total Environ** 1990 May 15; 94(3):253–9

Acute cadmium uptake by rabbit kidneys: mechanism and effects. Foulkes EC, et al. **Toxicol Appl Pharmacol** 1990 Mar 1;102(3):464–73

The mobilization of intracellular cadmium by butyl and amyl esters of meso-2,3-dimercaptosuccinic acid. Singh PK, et al. **Toxicol Appl Pharmacol** 1989 Mar 1;97(3):572–9

Early changes in the tissue distribution of cadmium after oral but not intravenous cadmium exposure. Jonah MM, et al. **Toxicology** 1989 Oct 16;58(3):325–38

Comparison of effectiveness of 3 dithiocarbamates on excretion and distribution of cadmium in rats and mice. Kiyozumi M, et al. **Toxicology** 1990 Mar 16;60(3):275–85

[Placental transfer of cadmium in pregnant women] Nakano A, et al. **Nippon Eiseigaku Zasshi** 1989 Jun;44(2):579–86 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Effect of Cd2+ on growth of the cadmium-resistant and -sensitive Staphylococcus aureus. Tynecka Z, et al. **Acta Microbiol Pol** 1989;38(2):117–29

Plasmid-linked protection of [14C]-glutamate transport and its oxidation against Cd2+ in Staphylococcus aureus. Tynecka Z, et al. **Acta Microbiol Pol** 1989;38(2):131–41

The effects of naltrexone on cadmium-induced increases in oral ethanol self-administration. Nation JR, et al. **Alcohol** 1990 Jan-Feb;7(1):17–20

Cadmium inhibits glucose uptake in primary cultures of mouse cortical tubule cells. Blumenthal SS, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):F1625–33

Sensitivity to Cd2+ but resistance to Ni2+ of Ca2+ inflow into rat pancreatic islets. Plasman PO, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):E529–33

The effect of DCCD, HQNO or Cd2+ on glutamate oxidation in Staphylococcus aureus. Tynecka Z, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:149–55

Roles of Ca2+ in O2 evolution in higher plant photosystem II: effects of replacement of Ca2+ site by other cations. Ono T, et al. **Arch Biochem Biophys** 1989 Dec;275(2):440–8

The acute pressor response to cadmium in rats. Balaraman R, et al. **Arch Int Pharmacodyn Ther** 1989 Sep-Oct; 301:254–66

Effects of cadmium on the function and structure of the rat salivary glands. Chiarenza A, et al. **Arch Oral Biol** 1989; 34(12):999–1002

The effects of cadmium on the p-nitrophenyl phosphatase and inorganic pyrophosphatase activities of alkaline phosphatase in developing hamster tooth germs. Wöltgens JH, et al. **Arch Oral Biol** 1989;34(7):591–2

Characterization of metallothionein cDNAs induced by cadmium in the nematode Caenorhabditis elegans. Imagawa M, et al. **Biochem J** 1990 May 15;268(1):237–40

Roles of synthesis and degradation in the regulation of metallothionein accretion in a chicken macrophage-cell line. Laurin DE, et al. **Biochem J** 1990 Jun 1;268(2):459–63

Cadmium-binding protein in a cadmium-resistant strain of Saccharomyces cerevisiae. Inouhe M, et al. **Biochim Biophys Acta** 1989 Oct 13;993(1):51–5

Effects of interaction between 65Zn, cadmium, and copper in rats. Chmielnicka J, et al. **Biol Trace Elem Res** 1988 Sep-Dec;17:285–92

The stimulation of metallothionein synthesis in neuroblastoma IMR-32 by zinc and cadmium but not dexamethasone. Ebadi M, et al. **Biol Trace Elem Res** 1989 Dec;22(3):233–46

External cadmium and internal calcium block of single calcium channels in smooth muscle cells from rabbit mesenteric artery. Huang Y, et al. **Biophys J** 1989 Nov; 56(5):1023–8

Effect of dietary cadmium and/or copper on the bone lysyl oxidase in copper-deficient rats relative to the metabolism of copper in the bone. Iguchi H, et al. **Bone Miner** 1990 Jul;10(1):51–9

Contractions of rat aorta to endothelin are sensitive to nickel and cadmium ions but not nicardipine or omega-conotoxin. Lawson K, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:840P

In vivo effects of nickel and cadmium in rats on lipid peroxidation and ceruloplasmin activity. Solé J, et al. **Bull Environ Contam Toxicol** 1990 May;44(5):686–91

Cadmium inhibits brain calmodulin: in vitro and in vivo studies. Vig PJ, et al. **Bull Environ Contam Toxicol** 1989 Oct;43(4):541–7

Primary rat Sertoli and interstitial cells exhibit a differential response to cadmium. Clough SR, et al. **Cell Biol Toxicol** 1990 Jan;6(1):63–79

Effects of Ca2+, Zn2+ and Cd2+ on uridine diphosphate-glucuronyltransferase and beta-glucuronidase activities in rat liver microsomes. Yamaguchi M, et al. **Chem Pharm Bull (Tokyo)** 1990 Jan;38(1):159–63

Occurrence of various forms of metallothionein in the rat after a short-term cadmium injection regimen. Andersen RA, et al. **Comp Biochem Physiol [C]** 1989;93(2):367–75

The effect of cadmium on the light-sensitive current of isolated rods of the tiger salamander. Menini A, et al. **Exp Biol** 1988;48(1):5–11

Diverse actions of cadmium on the smooth muscle myosin phosphorylation system. Kostrzewska A, et al. **FEBS Lett** 1990 Apr 24;263(2):381–4

Anaerobic 109Cd accumulation by cadmium-resistant and -sensitive Staphylococcus aureus. Tynecka Z, et al. **FEMS Microbiol Lett** 1990 May;57(1-2):159–64

Effects of cadmium ions, D-600 and KCN on calcium-45 uptake in smooth muscle of guinea-pig taenia coli. Nasu T, et al. **Gen Pharmacol** 1990;21(3):349–53

Appearance of C-reactive protein (CRP) in serum and liver cytosol of cadmium-treated rats. Agrawal A, et al. **Indian J Exp Biol** 1989 Dec;27(12):1024–7

Cadmium resistance in some members of Enterobacteriaceae. Bhattacharyya G, et al. **Indian J Exp Biol** 1989 Jun; 27(6):574–5

Synergistic effect of allyl isopropyl acetamide with cadmium on hepatic heme synthesis in chick embryo. Prasad AR, et al. **Indian J Med Res** 1989 Oct;90:367–71

Cadmium induces transcription of proto-oncogenes c-jun and c-myc in rat L6 myoblasts. Jin P, et al. **J Biol Chem** 1990 Aug 25;265(24):14061–4

Arsenite and cadmium(II) as probes of glucocorticoid receptor structure and function. Simons SS Jr, et al. **J Biol Chem** 1990 Feb 5;265(4):1938–45

Effects of heavy metal on rat liver microsomal Ca2(+)-ATPase and Ca2+ sequestering. Relation to SH groups. Zhang GH, et al. **J Biol Chem** 1990 Feb 5; 265(4):2184–9

Structural forms and transitions of poly(dG-dC) with Cd(II), Ag(I) and NaNO3. Keller PB, et al. **J Biomol Struct Dyn** 1988 Jun;5(6):1221–9

New mouse somatic cell mutants resistant to cadmium affected in the expression of their metallothionein genes. Chopra A, et al. **J Cell Physiol** 1990 Feb;142(2):316–24

Novel type of ion channel activated by Pb2+, Cd2+, and Al3+ in cultured mouse neuroblastoma cells. Oortgiesen M, et al. **J Membr Biol** 1990 Feb;113(3):261–8

Cardiotoxicity in magnesium-deficient rats fed cadmium. Nishiyama S, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Feb; 36(1):33–44

The effects of cadmium, mercury and lead in vitro on hepatic microsomal mixed function oxidase and lipid peroxidation. Xiao GH, et al. **J Tongji Med Univ** 1989;9(2):81–5

A 1H-NMR comparison of calmodulin activation by calcium and by cadmium. Akiyama K, et al. **Jpn J Pharmacol** 1990 Jul;53(3):393–401

Cadmium enhances potassium conductance in cultured renal epitheloid (MDCK) cells. Jungwirth A, et al. **Kidney Int** 1990 Jun;37(6):1477–86

Identification of a gene conferring resistance to zinc and cadmium ions in the yeast Saccharomyces cerevisiae. Kamizono A, et al. **Mol Gen Genet** 1989 Oct;219(1-2):161–7

The effects of cadmium on the self-administration of ethanol and an isocaloric/isohedonic equivalent. Nation JR, et al. **Neurotoxicol Teratol** 1989 Sep-Oct;11(5):509–14

Effect of subcutaneous application of a single cadmium dose on oocyte maturation in vitro. Píša J, et al. **Physiol Bohemoslov** 1990;39(2):185–90

Deletion of stably integrated DNA is suppressed by cadmium and zinc. Abrams JM, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9380–4

Inhibition of sugar and amino acid transport across rat jejunum by cadmium, copper and mercury. Rodríguez-Yoldi MJ, et al. **Rev Esp Fisiol** 1989;45 Suppl:207–14

The stimulatory effect of heavy metal cations on proliferation

of aortic smooth muscle cells. Lu KP, et al. **Sci China [B]** 1990 Mar;33(3):303–10

Cross–tolerance to hyperoxia following cadmium aerosol pretreatment. Hart BA, et al. **Toxicol Appl Pharmacol** 1990 Apr;103(2):255–70

Hepatic isometallothioneins in mice: induction in adults and postnatal ontogeny. Kershaw WC, et al. **Toxicol Appl Pharmacol** 1990 Jun 15;104(2):267–75

Cadmium cytotoxicity correlates with the changes in glutathione content that occur during the logarithmic growth phase of A549–T27 cells. Kang YJ, et al. **Toxicol Lett** 1990 Mar;51(1):23–8

Cadmium–induced alterations of chlorpropham metabolism in isolated rat hepatocytes. Alary J, et al. **Toxicology** 1989 Dec 1;59(2):211–23

Induction of interferon–alpha by interferon–beta, but not of interferon–beta by interferon–alpha, in the mouse. Asano M, et al. **Virology** 1990 May;176(1):30–8

[Effects of cadmium on spermatogenic cells of male mice] Jiang YQ, et al. **I Chuan Hsueh Pao** 1988;15(3):191–6 (Eng. Abstr.) **(Chi)**

[The effect of CdCl2 and ZnCl2 on Dunn osteosarcoma] Noda K. **Nippon Seikeigeka Gakkai Zasshi** 1990 Jan; 64(1):70–5 (Eng. Abstr.) **(Jpn)**

[Effect of the combined action of cadmium and ethyl alcohol or cadmium and acetaldehyde on the genesis of sister chromatid exchange in lymphocytes of human blood in vitro] Bassendowska–Karska E, et al. **Rocz Panstw Zakl Hig** 1989;40(1):53–7 (Eng. Abstr.) **(Pol)**

[Ultrastructural changes in the C–cells of the thyroid gland of albino rats after experimental administration of cadmium] Kozlovskaia AG, et al. **Gig Sanit** 1990 May;(5):41–3 **(Rus)**

[The effect of cadmium ions on synaptic transmission in the tectum of the frog] Blistrabas RIu, et al. **Neirofiziologiia** 1989;21(6):756–65 (Eng. Abstr.) **(Rus)**

[In vivo induction of the metallothionein gene by cadmium ions and its effect on endogenous colony formation in the spleen of sublethally irradiated mice] Gracheva NI, et al. **Radiobiologiia** 1989 Nov–Dec;29(6):737–41 **(Rus)**

[Effect of cadmium chloride on the processes of learning and memory in rats] Nurmukhambetov AN, et al. **Zh Vyssh Nerv Deiat** 1989 Jul–Aug;39(4):640–4 (Eng. Abstr.) **(Rus)**

TOXICITY

Mercury and cadmium induced structural alterations in the taste buds of the fish Alburnus alburnus. Borovyagin V, et al. **Acta Biol Hung** 1989;40(3):237–54

Light–microscopic and immunopathologic observations on cadmium chloride–induced injury in mature rat testis. Gupta RK, et al. **Am J Pathol** 1967 Aug;51(2):191–205

Cadmium toxicity to the cornea of pregnant rats: electron microscopy and x–ray microanalysis. Yoshizuka M, et al. **Anat Rec** 1990 May;227(1):138–43

Evidence for the participation of topoisomerases I and II in cadmium–induced metallothionein expression in Chinese hamster ovary cells. Mattern MR, et al. **Anticancer Drug Des** 1989 Aug;4(2):107–24

Isolation and genetic analysis of Chlamydomonas reinhardtii strains resistant to cadmium. Collard JM, et al. **Appl Environ Microbiol** 1990 Jul;56(7):2051–5

Measurement of manganese amelioration of cadmium toxicity in Chlorella pyrenoidosa using turbidostat culture. Bennett WN. **Arch Environ Contam Toxicol** 1990 Jan–Feb; 19(1):118–23

Toxicity test procedures for Hyalella azteca, and chronic toxicity of cadmium and pentachlorophenol to H. azteca, Gammarus fasciatus, and Daphnia magna. Borgmann U, et al. **Arch Environ Contam Toxicol** 1989 Sep;18(5):756–64

A morphometric and X–ray energy dispersive approach to monitoring pH–altered cadmium toxicity in Anabaena flos–aquae. Rai LC, et al. **Arch Environ Contam Toxicol** 1990 Jul–Aug;19(4):479–87

Influence of salinity and temperature on acute toxicity of cadmium to Mysidopsis bahia molenock. Voyer RA, et al. **Arch Environ Contam Toxicol** 1990 Jan–Feb;19(1):124–31

Combined effect of cadmium (CdCl2) and high temperature on HeLa S3 cells. Kishimoto T, et al. **Arch Toxicol** 1990; 64(5):383–6

Changes in muntjac fibroblasts associated with the acquisition of cadmium resistance. A pre–resistance, transitional and post–resistance study. Ord MJ, et al. **Arch Toxicol** 1990; 64(2):77–90

Comparative neurotoxicity of cadmium in growing and adult rats after repeated administration. Gupta A, et al. **Biochem Int** 1990;21(1):97–105

A comparison of the effects of chromate, molybdate and cadmium oxide on respiration in the yeast Saccharomyces cerevisiae. Henderson G. **Biol Met** 1989;2(2):83–8

Cadmium–induced alterations in ocular trace elements. Influence of dietary selenium and copper. Jamall IS, et al. **Biol Trace Elem Res** 1989–90 Winter;23:55–63

Cadmium–induced alterations in the antioxidant defense system of the rat eye in relation to dietary selenium intake. Sinno JA. **Biol Trace Elem Res** 1989 Apr–May; 20(1–2):153–9

Cadmium and lead accumulation by goldfish exposed to aqueous refuse incinerator fly ash leachate. Bache CA, et al. **Bull Environ Contam Toxicol** 1989 Dec;43(6):846–9

Hepatic enzyme activity after combined administration of methylmercury, lead and cadmium in the pekin duck. Jordan SA, et al. **Bull Environ Contam Toxicol** 1990 Apr; 44(4):623–8

Effects of chromium and cadmium upon respiration and survival of Callinectes similis. Ramírez P, et al. **Bull Environ Contam Toxicol** 1989 Dec;43(6):850–7

Effect of cadmium on blood of tilapia, Oreochromis mossambicus (Peters), during prolonged exposure. Ruparelia SG, et al. **Bull Environ Contam Toxicol** 1990 Aug;45(2):305–12

Influence of humic acid on the toxicity of copper, cadmium and lead to the unicellular alga, Synechosystis aquatilis. Shanmukhappa H, et al. **Bull Environ Contam Toxicol** 1990 Jun;44(6):840–3

Life table evaluation of the effects of cadmium exposure on the freshwater cladoceran, Moina macrocopa. Wong CK, et al. **Bull Environ Contam Toxicol** 1990 Jan;44(1):135–41

Effects of inhaled cadmium on breathing in the mouse. Ueda F, et al. **Can J Physiol Pharmacol** 1989 Oct;67(10):1243–6

Protection against cadmium toxicity and enzyme inhibition by dithiothreitol. Ahammadsahib KI, et al. **Cell Biochem Funct** 1989 Jul;7(3):185–92

Toxicity and mutual interactions of cadmium and zinc ions in normal and carcinogen–transformed mouse cells. Frenial JM, et al. **Cell Biol Toxicol** 1986 Mar;2(1):1–8

Enhanced cadmium cytotoxicity in A549 cells with reduced glutathione levels is due to neither enhanced cadmium accumulation nor reduced metallothionein synthesis. Kang YJ, et al. **Cell Biol Toxicol** 1989 Nov;5(3):249–59

Quantitative responses of the digestive–lysosomal system of winkles to sublethal concentrations of cadmium. Marigomez JA, et al. **Cell Mol Biol** 1989;35(5):555–62

Effects of cadmium and PCBs on reproduction of the sea star Asterias rubens: aberrations in the early development. den Besten PJ, et al. **Ecotoxicol Environ Safety** 1989 Oct; 18(2):173–80

Testing environmental pollutants on soil organisms: a simple assay to investigate the toxicity of environmental pollutants on soil organisms, using CdCl2 and nematodes. van Kessel WH, et al. **Ecotoxicol Environ Safety** 1989 Oct;18(2):181–90

Heavy metal resistance in clinical isolates of Pseudomonas aeruginosa. Vasishta R, et al. **Folia Microbiol (Praha)** 1989; 34(5):448–52

Metal homeostasis and metallothionein induction in rainbow trout hepatocytes exposed to cadmium. Gagné F, et al. **Fundam Appl Toxicol** 1990 Feb;14(2):429–37

In vivo cadmium treatment alters natural killer activity and large granular lymphocyte number in the rat. Cifone MG, et al. **Immunopharmacology** 1989 Nov–Dec;18(3):149–56

Cadmium nephrotoxicity in human proximal tubule cell cultures. Hazen–Martin DJ, et al. **In Vitro Cell Dev Biol** 1989 Sep;25(9):784–90

An electrophysiological freeze fracture assessment of cadmium nephrotoxicity in vitro. Hazen–Martin DJ, et al. **In Vitro Cell Dev Biol** 1989 Sep;25(9):791–9

Rat primary hepatocyte cultures are a good model for examining metallothionein–induced tolerance to cadmium toxicity. Liu J, et al. **In Vitro Cell Dev Biol** 1990 Jan; 26(1):75–9

Differential response of cadmium toxicity towards Mg2(+)–ATPase activity in hepatic and renal nuclear membrane in rats. Das M, et al. **Indian J Biochem Biophys** 1990 Jun;27(3):172–5

Effect of cadmium on contractile response to spasmogens in vascular and nonvascular tissues. Balaraman R, et al. **Indian J Exp Biol** 1990 May;28(5):455–9

Accumulation of heavy metals in animals. Part 1: Lead and cadmium contamination in some wild animals. Köck M, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(4 Suppl):521–8

Modification of clastogenicity of lead and aluminium in mouse bone marrow cells by dietary ingestion of Phyllanthus emblica fruit extract. Dhir H, et al. **Mutat Res** 1990 Jul;241(3):305–12

Cytogenetic investigation in lymphocytes of people living in cadmium–polluted areas. Tang XM, et al. **Mutat Res** 1990 Jul;241(3):243–9

Studies on cadmium–induced myotonia in the mouse diaphragm. Fu WM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Aug; 340(2):191–5

Behavioral deficits due to prenatal exposure to cadmium chloride in CFY rat pups. Lehotzky K, et al. **Neurotoxicol Teratol** 1990 Mar–Apr;12(2):169–72

Assessment of heavy metal nephrotoxicity in vitro using isolated rat glomeruli and proximal tubular fragments. Wilks MF, et al. **Renal Physiol Biochem** 1990 Sep–Oct; 13(5):275–84

Effect of N–benzyl–D–glucamine dithiocarbamate on lipid peroxidation in testes of rats treated with cadmium. Kojima S, et al. **Res Commun Chem Pathol Pharmacol** 1990 Feb; 67(2):259–69

Cadmium inhalation and male reproductive toxicity. Ragan HA, et al. **Rev Environ Contam Toxicol** 1990;114:1–22 (134 ref.)

Effects of cadmium on a microbial food chain, Chlamydomonas reinhardii and Tetrahymena vorax. Lawrence SG, et al. **Sci Total Environ** 1989 Nov; 87–88:381–95

Amelioration of the teratogenicity of cadmium by the metallothionein induced by bismuth nitrate. Naruse I, et al. **Teratology** 1989 Nov;40(5):459–65

Toxicity of cadmium to rat osteosarcoma cells (ROS 17/2.8): protective effect of 1 alpha,25–dihydroxyvitamin D3. Angle CR, et al. **Toxicol Appl Pharmacol** 1990 Mar 15; 103(1):113–20

Cadmium inhibition of L–alanine transport into renal brush border membrane vesicles isolated from the winter flounder (Pseudopleuronectes americanus). Bevan C, et al. **Toxicol Appl Pharmacol** 1989 Dec;101(3):461–9

Non–metallothionein–bound cadmium in the pathogenesis of cadmium nephrotoxicity in the rat. Goyer RA, et al. **Toxicol Appl Pharmacol** 1989 Nov;101(2):232–44

Pulmonary tolerance to cadmium following cadmium aerosol pretreatment. Hart BA, et al. **Toxicol Appl Pharmacol** 1989 Dec;101(3):447–60

Pancreatic hepatocytes in Fischer and Wistar rats induced by repeated injections of cadmium chloride. Konishi N, et al. **Toxicol Appl Pharmacol** 1990 Jun 1;104(1):149–56

Effect of cadmium on F–actin and microtubules of Madin–Darby canine kidney cells. Mills JW, et al. **Toxicol Appl Pharmacol** 1989 Nov;101(2):245–54

Acute cadmium chloride–induced renal toxicity in the Syrian hamster. Rehm S, et al. **Toxicol Appl Pharmacol** 1990 Jun 1;104(1):94–105

Effects of fasting on cadmium toxicity, glutathione metabolism, and metallothionein synthesis in rats. Shimizu M, et al. **Toxicol Appl Pharmacol** 1990 Mar 15;103(1):28–39

Effect of oral cadmium exposure during pregnancy on maternal and fetal zinc metabolism in the rat. Sorell TL, et al. **Toxicol Appl Pharmacol** 1990 Mar 1;102(3):537–45

Involvement of sulfhydryl metabolism in tolerance to cadmium in testicular cells. Wahba ZZ, et al. **Toxicol Appl Pharmacol** 1990 Jun 1;104(1):157–66

Toxicity of cadmium in the perfused human placenta. Wier PJ, et al. **Toxicol Appl Pharmacol** 1990 Aug;105(1):156–71

Reactivity of resistance blood vessels ex vivo after administration of toxic chemicals to laboratory animals: arteriolotoxicity. Bekemeier H, et al. **Toxicol Lett** 1989 Oct; 49(1):49–54

Biochemical changes in the rat lung and liver following intratracheal instillation of cadmium oxide. Hirano S, et al. **Toxicol Lett** 1990 Jan;50(1):97–105

The effect of cadmium on the composition and metabolism of hepatic fatty acids in zinc–adequate and zinc–deficient rats. Kudo N, et al. **Toxicol Lett** 1990 Feb;50(2–3):203–12

Effect of methoxyethanol, cyclophosphamide and cadmium on metallothionein levels during prenatal development in the mouse. Muñoz C, et al. **Toxicol Lett** 1990 Feb; 50(2–3):263–74

The cytotoxic effects of cadmium chloride and mercuric chloride mixtures in rat primary hepatocyte cultures. Beattie JH, et al. **Toxicology** 1990 May 31;62(2):161–73

The acute vascular effects of cadmium in the testis do not require the presence of Leydig cells. Bergh AR. **Toxicology** 1990 Aug;63(2):183–6

The effect of cadmium and other metals on vascular smooth muscle of the dogfish shark, Squalus acanthias. Evans DH, et al. **Toxicology** 1990 Apr 30;61(3):275–81

The effect of atropine on cadmium– and nickel–induced constriction of vascular smooth muscle of the dogfish shark ventral aorta. Evans DH, et al. **Toxicology** 1990 May 14; 62(1):89–94

The search for chelate antagonists for chronic cadmium intoxication. Jones MM, et al. **Toxicology** 1990 May 14; 62(1):1–25 (121 ref.)

Cellular cadmium responses in subpopulations T20 and T27 of human lung carcinoma A549 cells. Kang YJ, et al. **Toxicology** 1990 Apr 17;61(2):195–203

The influence of growth phase and culture conditions of Tetrahymena on effects of cadmium. Larsen J. **Toxicology** 1989 Oct 2;58(2):211–23

Effect of cadmium on membrane potential in isolated rat hepatocytes. Martel J, et al. **Toxicology** 1990 Jan–Feb; 60(1–2):161–72

Protective effects of DL–alpha–lipoic acid on cadmium–induced deterioration of rat hepatocytes. Müller L. **Toxicology** 1989 Oct 2;58(2):175–85

Preventive effect of zinc against cadmium–induced bone resorption. Suzuki Y, et al. **Toxicology** 1990 May 14; 62(1):27–34

Protective effect of sodium molybdate against the acute toxicity of cadmium chloride. Yamane Y, et al. **Toxicology** 1990 Mar 16;60(3):235–43

In vitro effects of cadmium and arsenite on glutathione peroxidase, aspartate and alanine aminotransferases, cholinesterase and glucose–6–phosphate dehydrogenase activities in blood. Sheabar FZ, et al. **Vet Hum Toxicol** 1989 Dec;31(6):528–31

[Cadmium toxicity on rat's placenta: effect of zinc] Cho YS. **Bull Assoc Anat (Nancy)** 1989 Sep;73(222):55–7 (Eng. Abstr.) **(Fre)**

[Modification of the toxic effects of phenylmercury by adaptive reactions of the rat kidney. 2. Adaptation to phenylmercury acetate, cadmium chloride and cupric chloride] Solecki R. **Arch Exp Veterinarmed** 1989; 43(4):551–8 (Eng. Abstr.) **(Ger)**

[Possibility of potato growing in the central part of the Katowice province in the aspect of population exposure to harmful substances] Kucharski R, et al. **Rocz Panstw Zakl Hig** 1989;40(2):131–6 (Eng. Abstr.) **(Pol)**

[Effect of various cadmium doses in the diet on the body of growing rats] Sakowska E, et al.

Rocz Panstw Zakl Hig 1989;40(4–6):313–9 (Eng. Abstr.) (Pol)

[Cadmium and lead levels in domestic and imported cigarettes] Zawadzka T, et al. Rocz Panstw Zakl Hig 1989; 40(2):145–52 (Eng. Abstr.) (Pol)

[Morphofunctional status of the system of mononuclear phagocytes in rats exposed to the embryotoxic effect of cadmium] Litvinov NN, et al. Arkh Anat Gistol Embriol 1990 Jan;98(1):60–7 (Eng. Abstr.) (Rus)

[Mechanisms of disrupting DNA repair in human cells. IV. Interferon protects DNA of noninfected and chronically infected human cells from damage caused by cadmium chloride] Vasil'eva IM, et al. Genetika 1989 Oct; 25(10):1872–7 (Eng. Abstr.) (Rus)

[Principles of growth of unidirectional combined effects of harmful substances after increase in their quantity] Annaeva LR, et al. Gig Sanit 1989 Jul;(7):10–3 (Eng. Abstr.) (Rus)

[Study of the combined effects of lead and cadmium on experimental animals] Mushina EV. Gig Sanit 1989 Sep; (9):89–90 (Rus)

[The mutagenic activity of cadmium in peroral uptake] Volkova NA, et al. Vopr Pitan 1990 Jan–Feb;(1):74–6 (Eng. Abstr.) (Rus)

[Nephrotoxic action of platinum, chromium and cadmium compounds on marine bony fishes] Gambarian SP, et al. Zh Evol Biokhim Fiziol 1989 Nov–Dec;25(6):729–35 (Eng. Abstr.) (Rus)

URINE

Direct determination of cadmium in urine using graphite furnace atomic absorption spectrometry with Zeeman-effect background correction. Dube P, et al. Analyst 1989 Oct;114(10):1249–53

Electrothermal atomic absorption spectrometric determination of cadmium and nickel in urine. Ong CN, et al. J Anal Toxicol 1990 Jan–Feb;14(1):29–33

Renal effects of cadmium body burden of the general population. Buchet JP, et al. Lancet 1990 Sep 22; 336(8717):699–702

Dose-response relationship between urinary cadmium and beta 2-microglobulin in a Japanese environmentally cadmium exposed population. Ishizaki M, et al. Toxicology 1989 Oct 2;58(2):121–31

CADMIUM POISONING

[Itai-Itai syndrome] Odinokova VA, et al. Sov Med 1990; (6):113–5 (Rus)

COMPLICATIONS

Central nervous system lesions in the Wistar rat fetus following direct fetal injections of cadmium. White TE, et al. Teratology 1990 Jul;42(1):7–13

DIAGNOSIS

Assessment of urinary protein 1 and transferrin as early markers of cadmium nephrotoxicity. Bernard AM, et al. Br J Ind Med 1990 Aug;47(8):559–65

[A case of chronic cadmium intoxication] Lin JL, et al. Taiwan I Hsueh Hui Tsa Chih 1989 Mar;88(3):298–301 (Chi)

DRUG THERAPY

Studies on the efficacy of lipoate and dihydrolipoate in the alteration of cadmium2+ toxicity in isolated hepatocytes. Müller L, et al. Biochim Biophys Acta 1990 May 22; 1052(3):386–91

Oral cadmium exposure in mice: toxicokinetics and efficiency of chelating agents. Andersen O. Crit Rev Toxicol 1989; 20(2):83–112 (220 ref.)

The rate of the in vivo dithiocarbamate-induced mobilization of hepatic and renal cadmium deposits. Jones MM, et al. Toxicology 1989 Oct 16;58(3):313–23

Intracellular cadmium mobilization sequelae. Jones SG, et al. Toxicology 1990 Mar 30;61(1):73–83

[Effectiveness of the action of liposomal pentacin preparation in acute cadmium chloride poisoning in experimental animals] Muzia GI, et al. Gig Tr Prof Zabol 1989;(9):55–6 (Rus)

ETIOLOGY

Acute cadmium poisoning in a foreman plater welder. Yates DH, et al. Br J Ind Med 1990 Jun;47(6):429–31

[Cadmium exposure and health effects among residents in irrigation area with ore dressing wastewater] Cai SW. Chung Hua Yu Fang I Hsueh Tsa Chih 1989 May; 23(3):143–6 (Eng. Abstr.) (Chi)

[Assessment of health risk due to cadmium contaminated house gardens] Scholz RW, et al. Off Gesundheitswes 1990 Apr;52(4):161–7 (Eng. Abstr.) (Ger)

[Evaluation of the effect of cadmium exposure in a worker in Ni–Cd storage battery production by biological tests in vivo and the cadmium content of tissues postmortem] Senft V, et al. Zentralbl Hyg Umweltmed 1990 Apr; 189(5):395–404 (Eng. Abstr.) (Ger)

METABOLISM

A mechanism of cadmium poisoning: the cross effect of calcium and cadmium in the calmodulin-dependent system. Sutoo D, et al. Arch Toxicol 1990;64(2):161–4

Studies on the role of iron in the reversal of cadmium toxicity in chicks. Blalock TL, et al. Biol Trace Elem Res 1988 Sep–Dec;17:247–57

Correlation of cadmium-induced nephropathy and the metabolism of endogenous copper and zinc in rats. Chmielnicka J, et al. Ecotoxicol Environ Safety 1989 Dec; 18(3):268–76

Effect of trisodium pentetat on the distribution of cadmium in some body organs & on hepatic metallothionein in rats. Flora SJ, et al. Indian J Med Res 1989 Oct;90:363–6

Transport of organic compounds in renal plasma membrane vesicles of cadmium intoxicated rats. Lee HY, et al. Kidney Int 1990 Feb;37(2):727–35 (43 ref.)

Cadmium exposure and health effects among residents in an irrigation area with ore dressing wastewater. Cai SW, et al. Sci Total Environ 1990 Jan;90:67–73

[The effect of cadmium poisoning on glucose transformation in skeletal muscles] Jethon Z, et al. Arch Exp Veterinarmed 1989;43(4):505–10 (Eng. Abstr.) (Ger)

MORTALITY

[A study on the survival rates for patients and suspected patients with Itai-itai disease] Nakagawa H, et al. Nippon Eiseigaku Zasshi 1990 Feb;44(6):1059–64 (Eng. Abstr.) (Jpn)

PATHOLOGY

A quantitative study of iliac bone histopathology on 62 cases with itai-itai disease. Noda M, et al. Calcif Tissue Int 1990 Aug;47(2):66–74

Cadmium concentration in human kidney biopsies. Lindqvist B, et al. Scand J Urol Nephrol 1989;23(3):213–7

[Changes in histopathology and enzyme histochemistry of thymus in cadmium exposure mice] Xu PY, et al. Hua Hsi I Ko Ta Hsueh Hsueh Pao 1989 Dec;20(4):429–32 (Eng. Abstr.) (Chi)

PHYSIOPATHOLOGY

An investigation of the effects of cadmium exposure on human health. Han C. Biomed Environ Sci 1988 Oct; 1(3):323–31

Changes induced by cadmium in the kidney of black sea bream, Mylio macrocephalus (Teleostei). Ooi VE, et al. Bull Environ Contam Toxicol 1989 Nov;43(5):769–75

Cadmium induced malformation in eyes of Ambassis commersoni Cuvier. Pragatheeswaran V, et al. Bull Environ Contam Toxicol 1989 Nov;43(5):755–60

Cadmium nephropathy in a freshwater fish, Puntius conchonius Hamilton. Gill TS, et al. Ecotoxicol Environ Safety 1989 Oct;18(2):165–72

Occupational cadmium exposure and testicular endocrine function. Mason HJ. Hum Exp Toxicol 1990 Mar;9(2):91–4

[Early indicators of kidney injury in male and female rats after oral administration of cadmium] Ozierenski B, et al. Nahrung 1989;33(6):583–91 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

A study on the effect of garlic to the heavy metal poisoning of rat. Cha CW. J Korean Med Sci 1987 Dec;2(4):213–24

The search for chelate antagonists for chronic cadmium intoxication. Jones MM, et al. Toxicology 1990 May 14; 62(1):1–25 (121 ref.)

PSYCHOLOGY

Effects of combined lead and cadmium exposure: changes in schedule-controlled responding and in dopamine, serotonin, and their metabolites. Nation JR, et al. Behav Neurosci 1989 Oct;103(5):1108–14

Neuropsychological effects of occupational exposure to cadmium. Hart RP, et al. J Clin Exp Neuropsychol 1989 Dec;11(6):933–43

Lead and cadmium levels in violent criminals. Pihl RO, et al. Psychol Rep 1990 Jun;66(3 Pt 1):839–44

URINE

Cadmium, NAG activity, and beta 2-microglobulin in the urine of cadmium pigment workers [letter; comment] Bernard A, et al. Br J Ind Med 1989 Sep;46(9):679–80 Comment on: Br J Ind Med 1989 Jan;46(1):52–5.

Significance of the excretion of urinary indicator proteins for a low level of occupational exposure to cadmium. Kawada T, et al. Int Arch Occup Environ Health 1990; 62(1):95–100

[beta 2 microglobulin and the proximal tubules (letter)] Bragt PC, et al. Ned Tijdschr Geneeskd 1989 Sep 16; 133(37):1850–1 (Dut)

VETERINARY

Clinical, chemical, and hematological parameters in cattle kept in a cadmium-contaminated area. Kessels BG, et al. Bull Environ Contam Toxicol 1990 Feb;44(2):339–44

CADMIUM RADIOISOTOPES

DIAGNOSTIC USE

Whole lake addition of cadmium-109: radiotracer accumulation in the mussel population in the first season. Malley DF, et al. Sci Total Environ 1989 Nov; 87–88:397–417

CADUCEUS see EMBLEMS AND INSIGNIA

CAENORHABDITIS

ANALYSIS

Purification, characterization, and cDNA cloning of a novel metallothionein-like, cadmium-binding protein from Caenorhabditis elegans. Slice LW, et al. J Biol Chem 1990 Jan 5;265(1):256–63

CYTOLOGY

Posttranslational insertion of a membrane protein on Caenorhabditis elegans sperm occurs without de novo protein synthesis. Pavalko FM, et al. J Cell Biochem 1989 Oct;41(2):57–70

A neuron-specific antigen in C. elegans allows visualization of the entire nervous system. Hekimi S. Neuron 1990 Jun; 4(6):855–65

DRUG EFFECTS

The antiallatal effects on locusts and lethal effects on nematodes of synthetic precocene-1 derivatives differing at the carbon 7 position. Fodor A, et al. Acta Biol Hung 1989;40(3):255–69

Resistance to lethal levels of diethylstilboestrol in the nematode Caenorhabditis elegans. Goldstein P, et al. Cytobios 1989;58(232):7–17

Interaction of GABA and volatile anesthetics in the nematode Caenorhabditis elegans. Boswell MV, et al. FASEB J 1990 May;4(8):2506–10

Effect of benzimidazole drugs on tubulin in benzimidazole resistant and susceptible strains of Caenorhabditis elegans. Enos A, et al. Int J Parasitol 1990 Apr;20(2):161–7

Multiple sites of action of volatile anesthetics in Caenorhabditis elegans. Morgan PG, et al. Proc Natl Acad Sci U S A 1990 Apr;87(8):2965–9

EMBRYOLOGY

Caenorhabditis elegans development. Chalfie M. Curr Opin Cell Biol 1989 Dec;1(6):1122–6 (22 ref.)

A sperm-supplied product essential for initiation of normal embryogenesis in Caenorhabditis elegans is encoded by the paternal-effect embryonic-lethal gene, spe-11 [published erratum appears in Dev Biol 1990 May;139(1):230] Hill DP, et al. Dev Biol 1989 Nov;136(1):154–66

Determination of pattern and fate in early embryos of Caenorhabditis elegans. Wood WB. Dev Biol (N Y 1985) 1988;5:57–78 (49 ref.)

Genetics of intercellular signalling in C. elegans. Austin J, et al. Development 1989;107 Suppl:53–7 (23 ref.)

Two distinct yolk lipoprotein complexes from Caenorhabditis elegans. Sharrock WJ, et al. J Biol Chem 1990 Aug 25; 265(24):14422–31

ENZYMOLOGY

Regulation of proteinase levels in the nematode Caenorhabditis elegans. Preferential depression by acute or chronic starvation. Hawdon JM, et al. Biochem J 1989 Nov 15;264(1):161–5

GENETICS

Genetic control of cell type and pattern formation in Caenorhabditis elegans. Sternberg PW. Adv Genet 1990; 27:63–116 (104 ref.)

The regulatory hierarchy controlling sex determination and dosage compensation in Caenorhabditis elegans. Villeneuve AM, et al. Adv Genet 1990;27:117–88 (130 ref.)

Molecular genetics of nematode muscle. Anderson P. Annu Rev Genet 1989;23:507–25 (86 ref.)

The behavioral genetics of Caenorhabditis elegans. Wolinsky E, et al. Behav Genet 1990 Mar;20(2):169–89 (62 ref.)

Characterization of metallothionein cDNAs induced by cadmium in the nematode Caenorhabditis elegans. Imagawa M, et al. Biochem J 1990 May 15;268(1):237–40

Genetic control of cell communication in C. elegans development. Maine EM, et al. Bioessays 1990 Jun; 12(6):265–71 (31 ref.)

Functions of the myosin ATP and actin binding sites are required for C. elegans thick filament assembly. Bejsovec A, et al. Cell 1990 Jan 12;60(1):133–40

Spliced leader RNA sequences can substitute for the essential 5'end of U1 RNA during splicing in a mammalian in vitro system. Bruzik JP, et al. Cell 1990 Sep 7;62(5):889–99

daf-1, a C. elegans gene controlling dauer larva development, encodes a novel receptor protein kinase. Georgi LL, et al. Cell 1990 May 18;61(4):635–45

The product of fem-1, a nematode sex-determining gene, contains a motif found in cell cycle control proteins and receptors for cell-cell interactions. Spence AM, et al. Cell 1990 Mar 23;60(6):981–90

Molecular genetic approaches to the study of motility in Caenorhabditis elegans. Waterston RH. **Cell Motil Cytoskeleton** 1989;14(1):136–45 (57 ref.)
The Caenorhabditis elegans genes ced–3 and ced–4 act cell autonomously to cause programmed cell death. Yuan JY, et al. **Dev Biol** 1990 Mar;138(1):33–41
Mutations affecting embryonic cell migrations in Caenorhabditis elegans. Manser J, et al. **Dev Genet** 1990; 11(1):49–64
Identification of genes that interact with glp–1, a gene required for inductive cell interactions in Caenorhabditis elegans. Maine EM, et al. **Development** 1989 May; 106(1):133–43
Early determination in the C. elegans embryo: a gene, cib–1, required to specify a set of stem–cell–like blastomeres. Schnabel R, et al. **Development** 1990 Jan;108(1):107–19
The differentially expressed 16–kD heat shock genes of Caenorhabditis elegans exhibit differential changes in chromatin structure during heat shock. Dixon DK, et al. **DNA Cell Biol** 1990 Apr;9(3):177–91
Proper expression of myosin genes in transgenic nematodes [published erratum appears in EMBO J 1989 Dec;8(13):4359] Fire A, et al. **EMBO J** 1989 Nov; 8(11):3419–28
The minor myosin heavy chain, mhcA, of Caenorhabditis elegans is necessary for the initiation of thick filament assembly. Waterston RH. **EMBO J** 1989 Nov; 8(11):3429–36
Trans–splicing in nematodes. Nilsen TW. **Exp Parasitol** 1989 Nov;69(4):413–6 (15 ref.)
The mab–9 gene controls the fate of B, the major male–specific blast cell in the tail region of Caenorhabditis elegans. Chisholm AD, et al. **Genes Dev** 1989 Sep; 3(9):1413–23
A feast of worms. Greenwald I, et al. **Genes Dev** 1989 Sep; 3(9):1269–71 (0 ref.)
The Caenorhabditis elegans gene lin–10 is broadly expressed while required specifically for the determination of vulval cell fates. Kim SK, et al. **Genes Dev** 1990 Mar;4(3):357–71
Heterochronic genes control the stage–specific initiation and expression of the dauer larva developmental program in Caenorhabditis elegans. Liu ZC, et al. **Genes Dev** 1989 Dec; 3(12B):2039–49
The mec–3 gene of Caenorhabditis elegans requires its own product for maintained expression and is expressed in three neuronal cell types. Way JC, et al. **Genes Dev** 1989 Dec; 3(12A):1823–33
fog–1, a regulatory gene required for specification of spermatogenesis in the germ line of Caenorhabditis elegans. Barton MK, et al. **Genetics** 1990 May;125(1):29–39
The multivulva phenotype of certain Caenorhabditis elegans mutants results from defects in two functionally redundant pathways. Ferguson EL, et al. **Genetics** 1989 Sep; 123(1):109–21
A new kind of informational suppression in the nematode Caenorhabditis elegans. Hodgkin J, et al. **Genetics** 1989 Oct;123(2):301–13
Production of null mutants in the major intestinal esterase gene (ges–1) of the nematode Caenorhabditis elegans. McGhee JD, et al. **Genetics** 1990 Jul;125(3):505–14
Chromosome I duplications in Caenorhabditis elegans. McKim KS, et al. **Genetics** 1990 Jan;124(1):115–32
Dominant maternal–effect mutations causing embryonic lethality in Caenorhabditis elegans. Mains PE, et al. **Genetics** 1990 Jun;125(2):351–69
Pairing for recombination in LGV of Caenorhabditis elegans: a model based on recombination in deficiency heterozygotes. Rosenbluth RE, et al. **Genetics** 1990 Mar; 124(3):615–25
Analysis of the role of tra–1 in germline sex determination in the nematode Caenorhabditis elegans. Schedl T, et al. **Genetics** 1989 Dec;123(4):755–69
Genetic analysis of defecation in Caenorhabditis elegans. Thomas JH. **Genetics** 1990 Apr;124(4):855–72
The role of sdc–1 in the sex determination and dosage compensation decisions in Caenorhabditis elegans. Villeneuve AM, et al. **Genetics** 1990 Jan;124(1):91–114
Structure, organization, and expression of the 16–kDa heat shock gene family of Caenorhabditis elegans. Candido EP, et al. **Genome** 1989;31(2):690–7
Analysis of lethal mutations induced in a mutator strain that activates transposable elements in Caenorhabditis elegans. Clark DV, et al. **Genome** 1990 Feb;33(1):109–14
Evolutionarily conserved coding sequences in the dpy–20–unc–22 region of Caenorhabditis elegans. Prasad SS, et al. **Genomics** 1989 Aug;5(2):185–98
Genetic control of Caenorhabditis elegans cell lineage. Horvitz HR. **Harvey Lect** 1988–89;84:65–77 (30 ref.)
Cloning, characterization, and expression of the gene for the catalytic subunit of cAMP–dependent protein kinase in Caenorhabditis elegans. Identification of highly conserved and unique isoforms generated by alternative splicing. Gross RE, et al. **J Biol Chem** 1990 Apr 25;265(12):6896–907
The two Caenorhabditis elegans basement membrane (type IV) collagen genes are located on separate chromosomes. Guo XD, et al. **J Biol Chem** 1989 Oct 15;264(29):17574–82
Casein kinase II from Caenorhabditis elegans. Properties and developmental regulation of the enzyme; cloning and sequence analyses of cDNA and the gene for the catalytic subunit. Hu E, et al. **J Biol Chem** 1990 Mar 25; 265(9):5072–80
Cloning, structure, and expression of the gene for a novel regulatory subunit of cAMP–dependent protein kinase in Caenorhabditis elegans. Lu XY, et al. **J Biol Chem** 1990 Feb 25;265(6):3293–303
Genetic and molecular analysis of a Caenorhabditis elegans beta–tubulin that conveys benzimidazole sensitivity. Driscoll M, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):2993–3003
Genetic and molecular analysis of eight tRNA(Trp) amber suppressors in Caenorhabditis elegans. Kondo K, et al. **J Mol Biol** 1990 Sep 5;215(1):7–19
Wild–type and mutant actin genes in Caenorhabditis elegans. Krause M, et al. **J Mol Biol** 1989 Aug 5;208(3):381–92
Tandemly duplicated Caenorhabditis elegans collagen genes differ in their modes of splicing. Park YS, et al. **J Mol Biol** 1990 Jan 20;211(2):395–406
Identification of a Caenorhabditis elegans histone H1 gene family. Characterization of a family member containing an intron and encoding a poly(A)+ mRNA. Sanicola M, et al. **J Mol Biol** 1990 Mar 20;212(2):259–68
Characterization of a G–protein beta–subunit gene from the nematode Caenorhabditis elegans. van der Voorn L, et al. **J Mol Biol** 1990 May 5;213(1):17–26
Isolation and sequence analysis of Caenorhabditis briggsae repetitive elements related to the Caenorhabditis elegans transposon Tc1. Harris LJ, et al. **J Mol Evol** 1990 Apr; 30(4):359–69
Functional elements and domains inferred from sequence comparisons of a heat shock gene in two nematodes. Heschl MF, et al. **J Mol Evol** 1990 Jul;31(1):3–9
Comparison of collagen gene sequences in Ascaris suum and Caenorhabditis elegans. Kingston IB, et al. **Mol Biochem Parasitol** 1989 Nov;37(1):137–46
Cuticle collagen genes of Haemonchus contortus and Caenorhabditis elegans are highly conserved. Shamansky LM, et al. **Mol Biochem Parasitol** 1989 Nov;37(1):73–85
Trans–splicing and SL RNAs in C. elegans. Hirsh D, et al. **Mol Biol Rep** 1990;14(2–3):115
Molecular cloning and sequencing of ama–1, the gene encoding the largest subunit of Caenorhabditis elegans RNA polymerase II. Bird DM, et al. **Mol Cell Biol** 1989 Oct;9(10):4119–30
The Caenorhabditis elegans rol–6 gene, which interacts with the sqt–1 collagen gene to determine organismal morphology, encodes a collagen. Kramer JM, et al. **Mol Cell Biol** 1990 May;10(5):2081–9
trans–spliced Caenorhabditis elegans mRNAs retain trimethylguanosine caps. Liou RF, et al. **Mol Cell Biol** 1990 Apr;10(4):1764–8
mRNAs that mature through trans–splicing in Caenorhabditis elegans have a trimethylguanosine cap at their 5' termini. Van Doren K, et al. **Mol Cell Biol** 1990 Apr;10(4):1769–72
Many transcribed regions of the Onchocerca volvulus genome contain the spliced leader sequence of Caenorhabditis elegans. Zeng WL, et al. **Mol Cell Biol** 1990 Jun;10(6):2765–73
Molecular analysis of zyg–11, a maternal–effect gene required for early embryogenesis of Caenorhabditis elegans. Carter PW, et al. **Mol Gen Genet** 1990 Mar;221(1):72–80
Genetic and fine structure analysis of unc–26(IV) and adjacent regions in Caenorhabditis elegans. Charest DL, et al. **Mol Gen Genet** 1990 May;221(3):459–65
Myosin heavy chain gene amplification as a suppressor mutation in Caenorhabditis elegans. Maruyama IN, et al. **Mol Gen Genet** 1989 Oct;219(1–2):113–8
Interstrain crosses enhance excision of Tc1 transposable elements in Caenorhabditis elegans. Mori I, et al. **Mol Gen Genet** 1990 Jan;220(2):251–5
Sequence of an unusually large protein implicated in regulation of myosin activity in C. elegans. Benian GM, et al. **Nature** 1989 Nov 2;342(6245):45–50
Novel cysteine–rich motif and homeodomain in the product of the Caenorhabditis elegans cell lineage gene lin–11. Freyd G, et al. **Nature** 1990 Apr 26;344(6269):876–9
Analysis of gain–of–function mutations of the lin–12 gene of Caenorhabditis elegans. Greenwald I, et al. **Nature** 1990 Jul 12;346(6280):197–9
Sex determination compared in Drosophila and Caenorhabditis. Hodgkin J. **Nature** 1990 Apr 19; 344(6268):721–8 (61 ref.)
Use of repetitive DNA probes as physical mapping strategy in Caenorhabditis elegans. Cangiano G, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5077–81
Information content of Caenorhabditis elegans splice site sequences varies with intron length. Fields C. **Nucleic Acids Res** 1990 Mar 25;18(6):1509–12
Vectors for low copy transformation of C. elegans. Fire A, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4269–70
Two highly conserved transcribed regions in the 5S DNA repeats of the nematodes Caenorhabditis elegans and Caenorhabditis briggsae. Nelson DW, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8657–67
Splicing of a C. elegans myosin pre–mRNA in a human nuclear extract. Ogg SC, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):143–9
Cloning and analysis of three new homeobox genes from the nematode Caenorhabditis elegans. Schaller D, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2033–6
TcA, the putative transposase of the C. elegans Tc1 transposon, has an N–terminal DNA binding domain. Schukkink RF, et al. **Nucleic Acids Res** 1990 Feb 25; 18(4):895–900
The spliceosomal snRNAs of Caenorhabditis elegans. Thomas J, et al. **Nucleic Acids Res** 1990 May 11; 18(9):2633–42
The Caenorhabditis elegans genome contains monomorphic minisatellites and simple sequences. Uitterlinden AG, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):9527–30
Modulation of muscle gene expression in Caenorhabditis elegans: differential levels of transcripts, mRNAs, and polypeptides for thick filament proteins during nematode development. Honda S, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):876–80
A second trans–spliced RNA leader sequence in the nematode Caenorhabditis elegans. Huang XY, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8640–4
Genes that can be mutated to unmask hidden antigenic determinants in the cuticle of the nematode Caenorhabditis elegans. Politz SM, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):2901–5
The worm project [news] Roberts L. **Science** 1990 Jun 15; 248(4961):1310–3

GROWTH & DEVELOPMENT

The histones of Caenorhabditis elegans: no evidence of stage–specific isoforms. An overview. Vanfleteren JR, et al. **FEBS Lett** 1989 Nov 6;257(2):233–7
The identification and suppression of inherited neurodegeneration in Caenorhabditis elegans. Chalfie M, et al. **Nature** 1990 May 31;345(6274):410–6
Increased life–span of age–1 mutants in Caenorhabditis elegans and lower Gompertz rate of aging. Johnson TE. **Science** 1990 Aug 24;249(4971):908–12

METABOLISM

The primary structure of a minor isoform (H1.2) of histone H1 from the nematode Caenorhabditis elegans. Vanfleteren JR, et al. **Biochem J** 1990 Feb 1;265(3):739–46
Colchicine binding in the free–living nematode Caenorhabditis elegans. Russell GJ, et al. **Biochim Biophys Acta** 1989 Dec 8;993(2–3):233–9
Effects of starvation and neuroactive drugs on feeding in Caenorhabditis elegans. Avery L, et al. **J Exp Zool** 1990 Mar;253(3):263–70
Cell–cell interactions that specify certain cell fates in C. elegans development. Greenwald I. **Trends Genet** 1989 Aug;5(8):237–41 (36 ref.)

PHYSIOLOGY

Caenorhabditis elegans: a new model system for the study of learning and memory. Rankin CH, et al. **Behav Brain Res** 1990 Feb 12;37(1):89–92
Cell–cell interactions prevent a potential inductive interaction between soma and germline in C. elegans. Seydoux G, et al. **Cell** 1990 Jun 15;61(6):939–51
Cell interactions coordinate the development of the C. elegans egg–laying system. Thomas JH, et al. **Cell** 1990 Sep 21;62(6):1041–52
Selective silencing of cell communication influences anteroposterior pattern formation in C. elegans. Waring DA, et al. **Cell** 1990 Jan 12;60(1):123–31
Testing environmental pollutants on soil organisms: a simple assay to investigate the toxicity of environmental pollutants on soil organisms, using CdCl2 and nematodes. van Kessel WH, et al. **Ecotoxicol Environ Safety** 1989 Oct;18(2):181–90
A developmental analysis of spontaneous and reflexive reversals in the nematode Caenorhabditis elegans. Chiba CM, et al. **J Neurobiol** 1990 Jun;21(4):543–54
Pharyngeal pumping continues after laser killing of the pharyngeal nervous system of C. elegans. Avery L, et al. **Neuron** 1989 Oct;3(4):473–85
Organogenesis in C. elegans: positioning of neurons and muscles in the egg–laying system. Li C, et al. **Neuron** 1990 May;4(5):681–95

CAERULEIN

Cholecystokinin antagonist prevents hyperamylasemia and improves pancreatic exocrine function in cerulein–induced acute pancreatitis. Murayama KM, et al. **Pancreas** 1990 Jul; 5(4):439–44

ADVERSE EFFECTS

Does stress play a role in the development of severe pancreatitis in rats? Yamaguchi H, et al. **Gastroenterology** 1990 Jun;98(6):1682–8

ANALOGS & DERIVATIVES

Ceruletide, a cholecystokinin–related peptide, attenuates haloperidol–induced increase in dopamine release from the rat striatum: an in vivo microdialysis study. Kihara T, et al. **Brain Res** 1990 Jun 11;519(1–2):44–9

ANTAGONISTS & INHIBITORS

Inhibition of caerulein–induced gall bladder emptying by cimetropium bromide in humans. Gullo L, et al. **Eur J Clin Pharmacol** 1989;37(5):483–6
Protective effect of misoprostol, a synthetic prostaglandin E1 analog, on cerulein–induced acute pancreatitis in rats. Buscail L, et al. **Pancreas** 1990 Mar;5(2):171–6

BIOSYNTHESIS

Development of Xenopus laevis skin glands producing 5-hydroxytryptamine and caerulein. Seki T, et al. **Cell Tissue Res** 1989 Dec;258(3):483–9

DIAGNOSTIC USE

Sphincter of Oddi response to caerulein after endoscopic sphincterotomy for papillary stenosis. Yasui A, et al. **Surg Endosc** 1989;3(4):216–9

[Drug modification of double-contrast imaging of the small intestine] Weidenmaier W, et al. **ROFO** 1990 Feb; 152(2):137–41 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Caerulein-induced desensitization of enzyme secretion fails in neonatal rat pancreas. Papp M, et al. **Acta Physiol Hung** 1989;74(3–4):305–10

Dynamics of pancreatic tissue cells in the rat exposed to long-term caerulein treatment: 1. Biochemical, morphological and morphometrical evaluations. Morisset J, et al. **Biol Cell** 1989;66(3):271–8

Dynamics of pancreatic tissue cells in the rat exposed to long-term caerulein treatment. 2. Comparative analysis of the various cell types and their growth. Morisset J, et al. **Biol Cell** 1989;66(3):279–90

Effect of calcium channel blockers on gastric carcinogenesis and caerulein enhancement of gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Cancer Res** 1990 Apr 1; 50(7):2095–8

Effect of a new CCK-receptor antagonist, CR 1409, on pancreatic growth induced by caerulein, CCK-8, bombesin and gastrin-releasing peptide in the rat. Hajri A, et al. **Digestion** 1989;43(1–2):66–72

Effect of loxiglumide on gallbladder contractile response to cerulein and food in humans. Malesci A, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1307–10

Caerulein induced plasma amino acid decrease: a simple, sensitive, and specific test of pancreatic function. Gullo L, et al. **Gut** 1990 Aug;31(8):926–9

Inhibition of acid formation and stimulation of somatostatin release by cholecystokinin-related peptides in rabbit gastric glands. Bengtsson P, et al. **J Physiol (Lond)** 1989 Dec; 419:765–74

Anxiogenic-like action of caerulein, a CCK-8 receptor agonist, in the mouse: influence of acute and subchronic diazepam treatment. Harro J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jan–Feb; 341(1–2):62–7

Caerulein-induced antinociception: interaction with morphine and opioid antagonists in the rat. Rattray M, et al. **Neuropeptides** 1989 Nov–Dec;14(4):263–8

Long-lasting inhibitory action of caerulein on climbing fiber system in the cerebellum of the rat. Kageyama H, et al. **Neuropharmacology** 1989 Sep;28(9):991–5

The role of CCK caerulein, and CCK antagonists in nociception. Baber NS, et al. **Pain** 1989 Dec;39(3):307–28 (88 ref.)

Pancreatic polypeptide response to food and cerulein in patients with total gastrectomy. Malesci A, et al. **Pancreas** 1989;4(5):538–42

Inhibitory effect of ceruletide on haloperidol-induced catalepsy in rats. Ibii N, et al. **Peptides** 1989 Jul–Aug; 10(4):779–83

Memory effect of caerulein and its analogs in active and passive avoidance responses in the rat. Itoh S, et al. **Peptides** 1989 Jul–Aug;10(4):843–8

Acute and long-lasting effects of peripheral injection of caerulein and CCK-8 on the central GABAergic system in mice. Nagahama H. **Peptides** 1989 Nov–Dec; 10(6):1247–51

Effects of caerulein and cholecystokinin-octapeptide on acetylcholine and choline contents in the brains of intact and vagotomized mice. Miyate H. **Pharmacol Biochem Behav** 1990 Jan;35(1):143–9

L364,718 antagonizes the cholecystokinin-induced suppression of locomotor activity. Soar J, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):637–40

Similar behavioral and biochemical effects of long-term haloperidol and caerulein treatment in albino mice. Vasar E, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):855–9

Effect of intracerebroventricular and systemic injections of caerulein, a CCK analogue, on electrical self-stimulation and its interaction with the CCKA receptor antagonist, L-364,718 (MK-329). Hamilton MH, et al. **Psychopharmacology (Berl)** 1990;101(3):384–9

Changes in GABA content and turnover in discrete regions of rat brain after systemic administration of caerulein. Nakamura K, et al. **Psychopharmacology (Berl)** 1990; 101(1):73–6

Secretin potentiates, caffeine does not affect caerulein--stimulated pancreatic enzyme depletion and growth in newborn rats. Papp M, et al. **Z Gastroenterol** 1990 Apr;28(4):188–91

[Involvements of neuropeptides in pentylenetetrazol-induced convulsion in rats and effects of TRH and ceruletide on the convulsion] Hashiguchi S, et al. **No To Shinkei** 1990 Jan;42(1):73–8 (Eng. Abstr.) **(Jpn)**

[Neurotrophic effect of ceruletide and LH-RH on ventral spinal cord in culture] Iwasaki Y, et al. **Rinsho Shinkeigaku** 1989 Nov;29(11):1407–9 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Effects of some gastrointestinal peptides on pancreatic growth in rats (preliminary results). Varga G, et al. **Acta Physiol Hung** 1989;73(2–3):319–21

THERAPEUTIC USE

Spinocerebellar degeneration and neuropeptides. Matsuoka Y, et al. **Jpn J Med** 1989 Nov–Dec;28(6):791–3

Cholecystokinin peptides and bombesin reverse hemorrhagic shock in rats. Guarini S, et al. **Resuscitation** 1989 Dec; 18(2–3):129–31

Effects of ceruletide on post-operative intestinal atony: a manometric study. Stanciu C, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Apr–Jun;93(2):247–50

TOXICITY

Effect of treatment with submaximal and excessive doses of caerulein on pancreatic growth in newborn rats. Papp M, et al. **Acta Physiol Hung** 1989;73(2–3):311–3

Fasting prevents acute pancreatitis induced by cerulein in rats. Otsuki M, et al. **Dig Dis Sci** 1990 Jul;35(7):840–8

Experimental pancreatitis is mediated by low-affinity cholecystokinin receptors that inhibit digestive enzyme secretion. Saluja AK, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8968–71

CAERULEIN RECEPTORS see RECEPTORS, CHOLECYSTOKININ

CAERULOPLASMIN see CERULOPLASMIN

CAFFEA see COFFEE

CAFFEIC ACIDS see under CINNAMATES

CAFFEINE

Monomerizing effect of caffeine, o-phenanthroline, and tannin on cationic dyes: a model system to analyze spectral characteristics of the intercalative binding to nucleic acids. Stockert JC. **Acta Histochem (Jena)** 1989;87(1):33–42

Sixth International Caffeine Workshop, Hong Kong, 7–10 August 1989. Barone JJ, et al. **Food Chem Toxicol** 1990 Apr;28(4):279–83

Physical dependence on and toxicity from caffeine. Hughes JR, et al. **NIDA Res Monogr** 1989;95:437

ADMINISTRATION & DOSAGE

Caffeine augmentation of ECT. Coffey CE, et al. **Am J Psychiatry** 1990 May;147(5):579–85

Therapeutic effects of antimotion sickness medications on the secondary symptoms of motion sickness. Wood CD, et al. **Aviat Space Environ Med** 1990 Feb;61(2):157–61

Individual responses to methylphenidate and caffeine in children with minimal brain dysfunction. Garfinkel BD, et al. **Can Med Assoc J** 1975 Oct 18;113(8):729–32

Caffeine-modified electroconvulsive therapy in depressed patients with medical illness. Lurie SN, et al. **J Clin Psychiatry** 1990 Apr;51(4):154–7

Reinforcing effects of caffeine in coffee and capsules. Griffiths RR, et al. **J Exp Anal Behav** 1989 Sep;52(2):127–40

Does caffeine contribute to postoperative morbidity? [letter] Verhoeff FH, et al. **Lancet** 1990 Sep 8;336(8715):632

Caffeine and cigarette smoking: behavioral, cardiovascular, and metabolic interactions. Brown CR, et al. **Pharmacol Biochem Behav** 1989 Nov;34(3):565–70

Caffeine ingested under natural conditions does not alter taste intensity. Mela DJ. **Pharmacol Biochem Behav** 1989 Nov; 34(3):483–5

Effect of chronic caffeine administration on theophylline concentrations required to produce seizures in rats. Zhi JG, et al. **Proc Soc Exp Biol Med** 1990 Mar;193(3):210–3

Blood pressure response to the "second cup of coffee". Goldstein IB, et al. **Psychosom Med** 1990 May–Jun; 52(3):337–45

Caffeine effects on cardiovascular and neuroendocrine responses to acute psychosocial stress and their relationship to level of habitual caffeine consumption. Lane JD, et al. **Psychosom Med** 1990 May–Jun;52(3):320–36

Effects of caffeine intake during gestation and lactation on bones of young growing rats. Schneider PE, et al. **Res Exp Med (Berl)** 1990;190(2):131–6

[Intra-arterial infusion of cisplatin and caffeine for a recurrent malignant fibrous histiocytoma] Tsuchiya H, et al. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 1):681–4 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Behavioral and cerebrovascular effects of caffeine in patients with anxiety disorders. Mathew RJ, et al. **Acta Psychiatr Scand** 1990 Jul;82(1):17–22

Mesenteric aneurysms associated with ergotism [letter] Tupler RH, et al. **AJR Am J Roentgenol** 1990 Oct; 155(4):897–8

Caffeine and the risk of hip fracture: the Framingham Study. Kiel DP, et al. **Am J Epidemiol** 1990 Oct;132(4):675–84

Total and HDL cholesterol and their correlates in elderly men in Finland, Italy, and The Netherlands. Kromhout D, et al. **Am J Epidemiol** 1990 May;131(5):855–63

How much caffeine is too much in athletes? [letter] Price KO, et al. **Am J Hosp Pharm** 1990 Feb;47(2):303

Pathologic sleepiness induced by caffeine. Regestein QR. **Am J Med** 1989 Nov;87(5):586–8

Caffeine and premenstrual syndrome [letter; comment] Phillis JW. **Am J Public Health** 1989 Dec;79(12):1680 Comment on: Am J Public Health 1989 Jan;79(1):67–9.

Caffeine-containing beverages, total fluid consumption, and premenstrual syndrome. Rossignol AM, et al. **Am J Public Health** 1990 Sep;80(9):1106–10

Maternal caffeine ingestion increases the tyrosine level in neonatal rat cerebrum. Tanaka H, et al. **Biol Neonate** 1990; 57(2):133–9

Headache caused by caffeine withdrawal among moderate coffee drinkers switched from ordinary to decaffeinated coffee: a 12 week double blind trial. van Dusseldorp M, et al. **BMJ** 1990 Jun 16;300(6739):1558–9

Prenatal effects of maternal caffeine intake and dietary high protein on mandibular development in fetal rats. Driscoll PG, et al. **Br J Nutr** 1990 Mar;63(2):285–92

Coffee, caffeine, cholesterol, cardiologists and confusion [editorial; comment] Beamish RE. **Can J Cardiol** 1990 Apr; 6(3):93–4 Comment on: Can J Cardiol 1990 Apr;6(3):95–8.

High dose caffeine and ventricular arrhythmias [see comments] Myers MG, et al. **Can J Cardiol** 1990 Apr; 6(3):95–8 Comment in: Can J Cardiol 1990 Apr;6(3):93–4.

Longterm prognosis of analgesic withdrawal in patients with drug-induced headaches. Baumgartner C, et al. **Headache** 1989 Sep;29(8):510–4

Cardiovascular reactivity, mood, and task performance in deprived and nondeprived coffee drinkers. Ratliff-Crain J, et al. **Health Psychol** 1989;8(4):427–47

Caffeine and caffeinism. Mackay DC, et al. **J R Nav Med Serv** 1989 Summer;75(2):65–7

Caffeine and infertility [letter] **Lancet** 1990 Mar 31; 335(8692):792–3

Are caffeinated beverages risk factors for delayed conception? Joesoef MR, et al. **Lancet** 1990 Jan 20; 335(8682):136–7

Caffeine abstinence effects in humans. Griffiths RR. **NIDA Res Monogr** 1989;95:129–30

Does caffeine ingestion affect intraocular pressure? [letter; comment] Davis RH. **Ophthalmology** 1989 Nov; 96(11):1680–1 Comment on: Ophthalmology 1989 May;96(5):624–6.

Caffeine and other prescriptions for patients with glaucoma [editorial] Lichter RR. **Ophthalmology** 1990 Aug; 97(8):965–6

The anxiogenic effects of caffeine. Bruce MS. **Postgrad Med J** 1990;66 Suppl 2:S18–24

[Caffeine and pregnancy] Cepický P. **Cesk Gynekol** 1989 Jul; 54(6):468 **(Cze)**

[Effect of methylxanthines on periodic respiration and acid gastroesophageal reflux in newborn infants] Skopnik H, et al. **Monatsschr Kinderheilkd** 1990 Mar;138(3):123–7 (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES

Pharmacological effects and binding studies of new methylxanthine thioderivatives. Ragazzi E, et al. **Pharmacol Res** 1989 Nov–Dec;21(6):707–17

[The radiation therapy of experimental brain tumors by using the radiosensitizing preparation xanthobin (8-bromocaffeine)] Vartanian LP, et al. **Med Radiol (Mosk)** 1989 Nov;34(11):82–3 **(Rus)**

ANALYSIS

Simultaneous determination of ascorbic acid, caffeine and paracetamol in drug formulations by differential-pulse voltammetry using a glassy carbon electrode. Lau OW, et al. **Analyst** 1989 Sep;114(9):1047–51

Simpler measurement of caffeine and paraxanthine in saliva. Badcock NR. **Clin Chem** 1990 Feb;36(2):391

Comment: stability of caffeine injection [letter; comment] Hawkins A. **DICP** 1989 Nov;23(11):928 Comment on: DICP 1989 Jun;23(6):466–7.

Stability of caffeine injections stored in plastic and glass syringes [letter] Nahata MC, et al. **DICP** 1989 Dec; 23(12):1035

Caffeine as main interfering compound in radioimmunoassay of aflatoxin B1 in coffee samples. Rauch P, et al. **J Assoc Off Anal Chem** 1989 Nov–Dec;72(6):1015–7

Rapid determination of caffeine in green tea by gas-liquid chromatography with nitrogen-phosphorus-selective detection. Guo BY, et al. **J Chromatogr** 1990 May 4; 505(2):435–7

Interaction of caffeine with L-tryptophan: study by 1H nuclear magnetic resonance spectroscopy. Nishijo J, et al. **J Pharm Sci** 1990 Jan;79(1):14–8

[Determination of three components in aspirin compound tablets by use of UV-PLS method] Luo GA, et al. **Yao Hsueh Hsueh Pao** 1989;24(9):684–9 (Eng. Abstr.) **(Chi)**

ANTAGONISTS & INHIBITORS

Intracellular aluminium inhibits acetylcholine- and caffeine-evoked Ca2+ mobilization. Wakui M, et al. **FEBS Lett** 1990 Jul 16;267(2):301–4

BLOOD

Non-extraction HPLC method for the simultaneous measurement of theophylline and caffeine in human serum. Rainbow SJ, et al. **Ann Clin Biochem** 1989 Nov;26 (Pt 6):527–32

Phenylpropanolamine increases plasma caffeine levels. Lake CR, et al. **Clin Pharmacol Ther** 1990 Jun;47(6):675–85

Fasting plasma caffeine level in cirrhotic patients: relation to plasma levels of catecholamines and renin activity. Hasegawa M, et al. **Hepatology** 1989 Dec;10(6):973–7

Simultaneous analysis of theophylline, caffeine and eight of their metabolic products in human plasma by gradient high-performance liquid chromatography. Leakey TE. **J Chromatogr** 1990 May 16;507:199–220

Short-column liquid chromatographic assay for caffeine and chloramphenicol in serum. Markin RS, et al. **J Chromatogr** 1990 Feb 23;525(2):464–70

Development of an enzyme-linked immunosorbent assay for caffeine. Fickling SA, et al. **J Immunol Methods** 1990 May 25;129(2):159–64

Transplacentally acquired caffeine and the occurrence of apnea, bradycardia, and periodic breathing in preterm infants: preliminary communication. McCulloch KM, et al. **Pediatr Pulmonol** 1989;7(2):66–70

Cytochrome P-450-dependent biotransformation in Uje:WIST rats with chronic liver injury induced by thioacetamide. Kraul H, et al. **Z Versuchstierkd** 1989; 32(6):269–73

DIAGNOSTIC USE

Current diagnostic methods of malignant hyperthermia: an evaluation. Ording H. **Acta Anaesthesiol Belg** 1990; 41(2):103–6

Caffeine and halothane contracture testing in swine using the recommendations of the North American Malignant Hyperthermia Group. Allen GC, et al. **Anesthesiology** 1990 Jan;72(1):71–6

Effects of the acute administration of caffeine in patients with schizophrenia. Lucas PB, et al. **Biol Psychiatry** 1990 Jul 1;28(1):35–40

Maturation of AFMU excretion in infants. Pons G, et al. **Fundam Clin Pharmacol** 1989;3(6):589–95

Use of quantitative liver function tests--caffeine clearance and galactose elimination capacity--after orthotopic liver transplantation. Nagel RA, et al. **J Hepatol** 1990 Mar; 10(2):149–57

Pharmacologic provocation and dexamethasone suppression test sensitivity. Swartz CM, et al. **Neuropsychobiology** 1989; 22(1):11–3

[The caffeine test] Vial T, et al. **Therapie** 1989 Jul–Aug; 44(4):245–51 (39 ref.) (Eng. Abstr.) **(Fre)**

METABOLISM

Ciprofloxacin-caffeine: a drug interaction established using in vivo and in vitro investigations. Harder S, et al. **Am J Med** 1989 Nov 30;87(5A):89S–91S

Methylcholanthrene but not phenobarbital enhances caffeine and theophylline metabolism in cultured adult human hepatocytes. Ratanasavanh D, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):85–94

Human N-acetylation genotype determination with urinary caffeine metabolites. Kilbane AJ, et al. **Clin Pharmacol Ther** 1990 Apr;47(4):470–7

Effect of growth hormone on caffeine metabolism in hypophysectomized rats. Bienvenu T, et al. **Drug Metab Dispos** 1990 May–Jun;18(3):327–30

Determination of acetylator phenotype in Caucasians with caffeine. Hildebrand M, et al. **Eur J Clin Pharmacol** 1989; 37(5):525–6

Cola and cough syrup used to determine abnormal drug metabolism [news] **Oncology (Williston Park)** 1989 Nov; 3(11):111–2

Effects of uric acid and caffeine on A1 adenosine receptor binding in developing rat brain. Hunter RE, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):791–5

Demethylation pathways in caffeine metabolism as indicators of variability in 1,1,1-trichloroethane oxidation in man. Berode M, et al. **Pharmacol Toxicol** 1990 Jul;67(1):41–6

Human cytochrome P-450PA (P-450IA2), the phenacetin O-deethylase, is primarily responsible for the hepatic 3-demethylation of caffeine and N-oxidation of carcinogenic arylamines. Butler MA, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7696–700

Determination of carcinogenic arylamine N-oxidation phenotype in humans by analysis of caffeine urinary metabolites. Kadlubar FF, et al. **Prog Clin Biol Res** 1990; 340B:107–14

PHARMACOKINETICS

The effect of smoking on caffeine elimination: implications for its use as a semiquantitative test of liver function. Murphy TL, et al. **Clin Exp Pharmacol Physiol** 1988 Jan; 15(1):9–13

Dose-dependent pharmacokinetics of caffeine in humans: relevance as a test of quantitative liver function. Cheng WS, et al. **Clin Pharmacol Ther** 1990 Apr;47(4):516–24

Dose-dependency of caffeine metabolism with repeated dosing. Denaro CP, et al. **Clin Pharmacol Ther** 1990 Sep; 48(3):277–85

Effect of ketoconazole and terbinafine on the pharmacokinetics of caffeine in healthy volunteers. Wahlländer A, et al. **Eur J Clin Pharmacol** 1989; 37(3):279–83

Relationship between intraindividual variation of the saliva/plasma- and of the arteriovenous concentration ratio as demonstrated by the administration of caffeine. Haeckel R. **J Clin Chem Clin Biochem** 1990 May;28(5):279–84

Assessment of hepatic function. Comparison of caffeine clearance in serum and saliva during the day and at night. Wahlländer A, et al. **J Hepatol** 1990 Mar;10(2):129–37

PHARMACOLOGY

Changes in the optokinetic nystagmus cessation limit under the influence of ethanol and caffeine. Zikmund V, et al. **Act Nerv Super (Praha)** 1989 Oct;31(3):223–4

Influence of propranolol on the in vitro response to caffeine and halothane in malignant hyperthermia-susceptible muscle. Ording H. **Acta Anaesthesiol Scand** 1989 Jul; 33(5):405–8

Effects of caffeine on the micromechanics of the isolated cochlea. Ulfendahl M, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;467:221–8

Somatic growth in infants receiving prolonged caffeine therapy. Le Guennec JC, et al. **Acta Paediatr Scand** 1990 Jan;79(1):52–6

Studies on the spermiostatic actions of some local mineral water drinks. Oyelola OO, et al. **Adv Contracept** 1990 Mar; 6(1):47–51

Effects of caffeine on blood pressure response during exercise in normotensive healthy young men. Sung BH, et al. **Am J Cardiol** 1990 Apr 1;65(13):909–13

Caffeine: a double-blind, placebo-controlled study of its thermogenic, metabolic, and cardiovascular effects in healthy volunteers. Astrup A, et al. **Am J Clin Nutr** 1990 May;51(5):759–67

Effects of moderate caffeine intake on the calcium economy of premenopausal women. Barger-Lux MJ, et al. **Am J Clin Nutr** 1990 Oct;52(4):722–5

Cardiovascular effects of caffeine therapy in preterm infants. Walther FJ, et al. **Am J Dis Child** 1990 Oct;144(10):1164–6

Effect of decaffeinated versus regular coffee on serum lipoproteins. A 12-week double-blind trial. van Dusseldorp M, et al. **Am J Epidemiol** 1990 Jul;132(1):33–40

Fiber-type specific caffeine sensitivities in normal human skinned muscle fibers. Mitsumoto H, et al. **Anesthesiology** 1990 Jan;72(1):50–4

Interaction between caffeine intake and nutritional status on growing brains in newborn rats. Nakamoto T, et al. **Ann Nutr Metab** 1989;33(2):92–9 (33 ref.)

Clinical pharmacology of caffeine. Benowitz NL. **Annu Rev Med** 1990;41:277–88 (64 ref.)

Different effects of papaverine, isoprenaline and caffeine on rat uterine contractility in Ca-free medium. D'Ocon MP. **Arch Int Pharmacodyn Ther** 1989 Nov–Dec;302:268–79

Lack of importance of caffeine as an analgesic adjuvant of dipyrone in mice. Fialip J, et al. **Arch Int Pharmacodyn Ther** 1989 Nov–Dec;302:86–95

Studies on contractures induced in mouse diaphragm by caffeine and cupric and selenite ions. Lin-Shiau SY, et al. **Arch Int Pharmacodyn Ther** 1989 Jul–Aug;300:265–80

Effects of maternal caffeine with zinc intake during gestation and lactation on bone development in newborn rats. Sasahara H, et al. **Arch Oral Biol** 1990;35(6):425–30

In vitro caffeine induced aortic smooth muscle reactivity in rat. Rahmani MA, et al. **Artery** 1990;17(3):127–43

Anticonflict effect of caffeine: investigation by punishment and hypertonic NaCl solution procedures in mice. Kuribara H, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1989 Jun; 24(3):144–53

Induction of C-reactive protein by cytokines in human hepatoma cell lines is potentiated by caffeine. Ganapathi MK, et al. **Biochem J** 1990 Jul 1;269(1):41–6

Thapsigargin, but not caffeine, blocks the ability of thyrotropin-releasing hormone to release Ca2+ from an intracellular store in GH4C1 pituitary cells. Law GJ, et al. **Biochem J** 1990 Apr 15;267(2):359–64

Activities of caffeine, theophylline, and enprofylline analogs as tracheal relaxants. Brackett LE, et al. **Biochem Pharmacol** 1990 Jun 15;39(12):1897–904

Methylxanthines inhibit glucose transport in rat adipocytes by two independent mechanisms. Steinfelder HJ, et al. **Biochem Pharmacol** 1990 Sep 1;40(5):1154–7

Action of caffeine on DNA replication after ultraviolet irradiation in Indian muntjac cells: no connection with action on cell cycle delay. Musk SR, et al. **Biochim Biophys Acta** 1990 Apr 9;1052(1):53–62

Effect of caffeine on cerebral blood flow velocity in preterm infants. Saliba E, et al. **Biol Neonate** 1989;56(4):198–203

Caffeine-induced contraction in arteries from stroke-prone spontaneously hypertensive rats. Moriyama K, et al. **Blood Vessels** 1989;26(5):280–9

Effects of caffeine and ryanodine on depression of post-rest tension development produced by Bay K 8644 in canine ventricular muscle. Bouchard RA, et al. **Br J Pharmacol** 1989 Aug;97(4):1279–91

Caffeine-induced behavioural stimulation is dose- and concentration-dependent. Kaplan GB, et al. **Br J Pharmacol** 1990 Jul;100(3):435–40

Comparative effects of bepridil, its quaternary derivative CERM 11888 and verapamil on caffeine-induced contracture in ferret hearts. Leboeuf J, et al. **Br J Pharmacol** 1989 Sep;98(1):119–26

Caffeine-induced inhibition of calcium channel current in cultured smooth cells from pregnant rat myometrium. Martin C, et al. **Br J Pharmacol** 1989 Oct;98(2):493–8

Caffeine acting on pregnant rat myometrium: analysis of its relaxant action and its failure to release Ca2+ from intracellular stores. Savineau JP, et al. **Br J Pharmacol** 1990 Feb;99(2):261–6

The mode of action of caffeine on catecholamine release from perfused adrenal glands of cat. Yamada Y, et al. **Br J Pharmacol** 1989 Oct;98(2):351–6

The Rett syndrome related to fragile X(P22) in caffeine-induced lymphocyte culture. Wahlström J, et al. **Brain Dev** 1990;12(1):128–30

Antiparkinsonian effects of caffeine depend upon pavlovian drug conditioning processes. Carey RJ. **Brain Res** 1990 Jun 4;518(1-2):186–92

Adenosinergic modulation of caffeine-induced c-fos mRNA expression in mouse brain. Nakajima T, et al. **Brain Res** 1989 Nov 6;501(2):307–14

A central role for adenosine in the hypotension elicited by hypoxia in anesthetized rats. Simpson L, et al. **Brain Res Bull** 1989 Jul–Aug;23(1-2):37–40

Effect of adenosine on gonadotropin and prolactin secretion by hemipituitaries in vitro. Picanço-Diniz DL, et al. **Braz J Med Biol Res** 1989;22(6):783–5

Effects of caffeine ingestion on body fluid balance and thermoregulation during exercise. Falk B, et al. **Can J Physiol Pharmacol** 1990 Jul;68(7):889–92

Caffeine treatment inhibits drug-induced calcium release from sarcoplasmic reticulum and caffeine contracture but not tetanus in frog skeletal muscle. Koshita M, et al. **Can J Physiol Pharmacol** 1989 Aug;67(8):890–5

Altered electrical response to caffeine exposure in hypertrophied rat myocardium. Thollon C, et al. **Can J Physiol Pharmacol** 1989 Dec;67(12):1471–9

Caffeine increases sensitivity of DNA to denaturation in chromatin of L1210 cells. Kunicka JE, et al. **Cell Tissue Kinet** 1990 Jan;23(1):31–9

The effect of caffeine on exercise-induced bronchoconstriction. Kivity S, et al. **Chest** 1990 May; 97(5):1083–5

Caffeine and methylxanthines [letter] Raybin D. **Chest** 1990 May;97(5):1273–4

Effects of caffeine and ryanodine on delayed afterdepolarizations and sustained rhythmic activity in 1-day-old myocardial infarction in the dog. Boutjdir M, et al. **Circulation** 1990 Apr;81(4):1393–400

Isometric contractile properties and caffeine sensitivity of the diaphragm, EDL and soleus in the mouse. Singh YN, et al. **Clin Exp Pharmacol Physiol** 1989 Jul;16(7):581–9

Pharmacokinetic evaluation of erythromycin and caffeine administered with bromocriptine. Nelson MV, et al. **Clin Pharmacol Ther** 1990 Jun;47(6):694–7

Pharmacoepidemiology of the effect of caffeine on blood pressure. Sharp DS, et al. **Clin Pharmacol Ther** 1990 Jan; 47(1):57–60

Caffeine inhibits gallbladder absorption. Magnuson TH, et al. **Curr Surg** 1989 Nov–Dec;46(6):477–9

Caffeine and cerebral blood flow velocity in preterm infants. Saliba E, et al. **Dev Pharmacol Ther** 1989;13(2-4):134–8

Various levels of maternal caffeine ingestion during gestation affects biochemical parameters of fetal rat brain differently. Yazdani M, et al. **Dev Pharmacol Ther** 1990;14(1):52–61

Increase in electrically-stimulated Ca2+ release and suppression of caffeine response in diaphragm muscle of alloxan-diabetic mice compared with the denervation effect. Kimura I, et al. **Diabetologia** 1990 Feb;33(2):72–6

Reduced adipsin expression in murine obesity: effect of age and treatment with the sympathomimetic-thermogenic drug mixture ephedrine and caffeine. Lowell BB, et al. **Endocrinology** 1990 Mar;126(3):1514–20

The effects of substrate utilization, manipulated by caffeine, on post-exercise oxygen consumption in untrained female subjects. Chad K, et al. **Eur J Appl Physiol** 1989; 59(1-2):48–54

The effect of caffeine ingestion on physical performance after prolonged exercise. Falk B, et al. **Eur J Appl Physiol** 1989; 59(3):168–73

Psychomotor-stimulant effects of 3-isobutyl-1-methylxanthine: comparison with caffeine and 7-(2-chloroethyl) theophylline. Coffin VL, et al. **Eur J Pharmacol** 1989 Oct 24;170(1-2):35–40

Interaction of caffeine with the GABAA receptor complex: alterations in receptor function but not ligand binding. Lopez F, et al. **Eur J Pharmacol** 1989 Dec 5;172(6):453–9

Caffeine inhibits forskolin-stimulated cyclic AMP accumulation in rat brain. Mante S, et al. **Eur J Pharmacol** 1990 Jan 10;175(2):203–5

Effects of caffeine, L-phenylisopropyladenosine and their combination on local cerebral blood flow in the rat. Nehlig A, et al. **Eur J Pharmacol** 1990 Apr 25;179(3):271–80

Effects of caffeine and doxapram perfusion on local cerebral glucose utilization in conscious rats. Schroeder H, et al. **Eur J Pharmacol** 1989 Aug 22;167(2):245–54

The effects of caffeine and theophylline on the triple adenosine triphosphatase enzyme activities of spermatozoa from males with oligoasthenospermia. Karacagil M, et al. **Eur Urol** 1990;17(1):69–71

The caffeine-sensitive Ca2+ store in bovine adrenal chromaffin cells; an examination of its role in triggering secretion and Ca2+ homeostasis. Cheek TR, et al. **FEBS Lett** 1990 Jun 18;266(1-2):91–5

Caffeine and the myoplasmic calcium removal mechanisms in cut frog skeletal muscle fibres. Csernoch L, et al. **Gen Physiol Biophys** 1990 Jun;9(3):251–66

Impact of caffeine and psychological stress on blood pressure in black and white men. Myers HF, et al. **Health Psychol** 1989;8(5):597–612

Effect of decaffeinated versus regular coffee on blood pressure. A 12–week, double–blind trial. van Dusseldorp M, et al. **Hypertension** 1989 Nov;14(5):563–9

Inhibition of anticonvulsant action of carbamazepine by aminophylline and caffeine in rats. Kulkarni C, et al. **Indian J Exp Biol** 1989 Dec;27(12):1048–51

Expectancy effects in caffeine research. Christensen L, et al. **Int J Addict** 1990 Jan;25(1):27–31

Effects of propranolol and caffeine on movement characteristics of human sperm. Rogberg L, et al. **Int J Androl** 1990 Apr;13(2):87–92

Caffeine ingestion prior to incremental cycling to exhaustion in recreational cyclists. Flinn S, et al. **Int J Sports Med** 1990 Jun;11(3):188–93

Effects of ingested doses of caffeine on neuromuscular reflex response time in man. Jacobson BH, et al. **Int J Sports Med** 1990 Jun;11(3):194–7

Effect of caffeine on ventilatory responses to hypercapnia, hypoxia, and exercise in humans [published errata appear in J Appl Physiol 1990 May;68(5):preceding 1777 and 1990 Jun;68(6):following 2701] D'Urzo AD, et al. **J Appl Physiol** 1990 Jan;68(1):322–8

Effect of paraxanthine on FFA mobilization after intravenous caffeine administration in humans. Hetzler RK, et al. **J Appl Physiol** 1990 Jan;68(1):44–7

Influence of caffeine on metabolic responses of men at rest in 28 and 5 degrees C. MacNaughton KW, et al. **J Appl Physiol** 1990 May;68(5):1889–95

Spontaneous [Ca2+]i fluctuations in rat chromaffin cells do not require inositol 1,4,5–trisphosphate elevations but are generated by a caffeine– and ryanodine–sensitive intracellular Ca2+ store. Malgaroli A, et al. **J Biol Chem** 1990 Feb 25;265(6):3005–8

Characteristics of the histamine–sensitive calcium store in vascular smooth muscle. Comparison with norepinephrine– or caffeine–sensitive stores. Matsumoto T, et al. **J Biol Chem** 1990 Apr 5;265(10):5610–6

Endothelin mobilizes Ca2+ from a caffeine– and ryanodine–insensitive intracellular pool in rat atrial cells. Vigne P, et al. **J Biol Chem** 1990 Apr 25;265(12):6782–7

Caffeine–induced diuresis and atrial natriuretic peptides. Nussberger J, et al. **J Cardiovasc Pharmacol** 1990 May; 15(5):685–91

Caffeine overcomes a restriction point associated with DNA replication, but does not accelerate mitosis. Downes CS, et al. **J Cell Biol** 1990 Jun;110(6):1855–9

Caffeine, an inhibitor of endocytosis in Dictyostelium discoideum amoebae. Gonzalez C, et al. **J Cell Physiol** 1990 Sep;144(3):408–15

A randomized study on coffee and blood pressure. Bak AA, et al. **J Hum Hypertens** 1990 Jun;4(3):259–64

Alteration in sarcoplasmic reticulum–dependent contraction of tail arteries in response to caffeine and noradrenaline in spontaneously hypertensive rats. Dohi Y, et al. **J Hypertens** 1990 Mar;8(3):261–7

Association between habitual coffee consumption and blood pressure levels. Salvaggio A, et al. **J Hypertens** 1990 Jun; 8(6):585–90

Effect of caffeine on the bioavailability and pharmacokinetics of aspirin. Thithapandha A. **J Med Assoc Thai** 1989 Oct; 72(10):562–6

Effects of caffeine and ryanodine on low pHi–induced changes in gap junction conductance and calcium concentration in crayfish septate axons. Peracchia C. **J Membr Biol** 1990 Jul;117(1):79–89

Caffeine– and Ca2(+)–induced mechanical oscillations in isolated skeletal muscle fibres of the frog. Herrmann–Frank A. **J Muscle Res Cell Motil** 1989 Dec;10(6):437–45

Caffeine activates brown adipose tissue thermogenesis and metabolic rate in mice. Yoshioka K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Apr;36(2):173–8

Decrease in sensitivity to ethidium bromide by caffeine, dimethylsulfoxide or 3–aminobenzamide due to reduced permeability. Kimura H, et al. **J Pharmacobiodyn** 1989 Oct; 12(10):589–95

Low–dose caffeine discrimination in humans. Griffiths RR, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):970–8

Effect of methylxanthines on acetaminophen hepatotoxicity in various induction states. Kalhorn TF, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):112–6

Noncompetitive antagonism of adenosine by caffeine on the hepatic and superior mesenteric arteries of anesthetized cats. Lautt WW. **J Pharmacol Exp Ther** 1990 Aug; 254(2):400–6

Caffeine potentiates the renin response to furosemide in rats. Evidence for a regulatory role of endogenous adenosine. Paul S, et al. **J Pharmacol Exp Ther** 1989 Oct;251(1):183–7

Effects of chronic caffeine administration on peripheral adenosine receptors [erratum to be published] Zhang Y, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):270–6

The effects of chronic caffeine administration on peripheral adenosine receptors [corrected and republished article originally printed in J Pharmacol Exp Ther 1990 Jul;254(1):270–6] Zhang Y, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):757–63

Caffeine affects four different ionic currents in the bull–frog sympathetic neurone. Akaike N, et al. **J Physiol (Lond)** 1989 May;412:221–44

Actions of caffeine on fast– and slow–twitch muscles of the rat. Fryer MW, et al. **J Physiol (Lond)** 1989 Sep;416:435–54

The action of ryanodine on rat fast and slow intact skeletal muscles. Fryer MW, et al. **J Physiol (Lond)** 1989 Jul; 414:399–413

Maximum tension and force–velocity properties of fatigued, single Xenopus muscle fibres studied by caffeine and high K+. Lännergren J, et al. **J Physiol (Lond)** 1989 Feb; 409:473–90

Mechanisms of caffeine activation of single calcium–release channels of sheep cardiac sarcoplasmic reticulum. Sitsapesan R, et al. **J Physiol (Lond)** 1990 Apr;423:425–39

Suppressing effects of caffeine on postextrasystolic potentiation in papillary muscles of guinea pigs. Asayama J, et al. **Jpn Circ J** 1990 Feb;54(2):207–13

Similarity in the effect of caffeine on DNA synthesis after UV irradiation between xeroderma pigmentosum variant cells and mouse cells. Yagi T, et al. **Jpn J Cancer Res** 1989 Aug;80(8):754–8

Effects of ryanodine and 9,21–didehydroryanodine on caffeine–induced contraction of rat and guinea pig aortae. Ito K, et al. **Jpn J Pharmacol** 1989 Dec;51(4):531–8

Effects of sodium depletion on the caffeine–induced contraction of frog's skeletal muscle. Kawata H, et al. **Jpn J Physiol** 1990;40(2):243–51

Effects of dietary caffeine on renal handling of minerals in adult women. Bergman EA, et al. **Life Sci** 1990; 47(6):557–64

Caffeine and regional brain monoamine utilization in mice. Hadfield MG, et al. **Life Sci** 1989;45(26):2637–44

Pharmacologic differentiation between inositol–1,4,5–trisphosphate–induced Ca2+ release and Ca2+– or caffeine–induced Ca2+ release from intracellular membrane systems. Palade P, et al. **Mol Pharmacol** 1989 Oct;36(4):673–80

gamma–Aminobutyric acidA receptor regulation in culture: altered allosteric interactions following prolonged exposure to benzodiazepines, barbiturates, and methylxanthines. Roca DJ, et al. **Mol Pharmacol** 1990 May;37(5):710–9

Strong antimutagenic effect of caffeine on 9–aminoacridine–induced frameshift mutagenesis in Escherichia coli K12. Pons FW, et al. **Mutagenesis** 1990 Jul;5(4):363–6

Increased frequency of chromatid breaks in lymphocytes of heterozygotes of ataxia telangiectasia after in vitro treatment with caffeine. Pawlak AL, et al. **Mutat Res** 1990 Jun;230(2):197–204

Recombinagenicity of caffeine for Candida albicans. Sarachek A, et al. **Mycopathologia** 1990 May;110(2):63–76

Direct inhibition of chicken gizzard smooth muscle contractile apparatus by caffeine. Ozaki H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Mar; 341(3):262–7

Depletion of catecholamines in the brain of rats differentially affects stimulation of locomotor activity by caffeine, D–amphetamine, and methylphenidate. Finn IB, et al. **Neuropharmacology** 1990 Jul;29(7):625–31

Effect of chronic caffeine administration on monoamine and monoamine metabolite concentrations in rat brain. Kirch DG, et al. **Neuropharmacology** 1990 Jun;29(6):599–602

A comparison of the effects of caffeine, 8–cyclopentyltheophylline, and alloxazine on sleep in rats. Possible roles of central nervous system adenosine receptors. Virus RM, et al. **Neuropsychopharmacology** 1990 Aug;3(4):243–9

Ischaemic damage in gerbil hippocampus is reduced following upregulation of adenosine (A1) receptors by caffeine treatment. Rudolphi KA, et al. **Neurosci Lett** 1989 Sep 11;103(3):275–80

Sodium ions inhibit the stimulant action of caffeine on catecholamine secretion from adrenal chromaffin cells of the guinea pig. Teraoka H, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):179–82

Nonendocrine theories of the etiology of benign breast disease. Minton JP, et al. **Ohio Med** 1990 Mar;86(3):192

Caffeine has no clinically significant effect on aqueous humor flow in the normal human eye. Adams BA, et al. **Ophthalmology** 1990 Aug;97(8):1030–1

Effect of perchlorate on calcium release in skinned fibres stimulated by ionic substitution and caffeine. Fill M, et al. **Pflugers Arch** 1990 Mar;415(6):688–92

The action of caffeine on inward barium current through voltage–dependent calcium channels in single rabbit ear artery cells. Hughes AD, et al. **Pflugers Arch** 1990 Jun; 416(4):462–6

Features of a calcium independent, caffeine sensitive outward current in single smooth muscle cells from guinea pig protal vein. Noack Th, et al. **Pflugers Arch** 1990 Jun;416(4):467–9

Reinstatement by caffeine of an extinguished conditioned dopaminergic drug response. Carey RJ. **Pharmacol Biochem Behav** 1990 May;36(1):127–32

The acute effects of caffeine, cocaine and d–amphetamine on the repeated acquisition responding of pigeons. Evans EB, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):631–6

Potentiation of cocaine's discriminative effects by caffeine: a time–effect analysis. Gauvin DV, et al. **Pharmacol Biochem Behav** 1990 May;36(1):195–7

Behavioral interaction between cocaine and caffeine: a drug discrimination analysis in rats. Harland RD, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):1017–23

Tolerance and sensitization to chronic and subchronic oral caffeine: effects on wheelrunning in rats. Meliska CJ, et al. **Pharmacol Biochem Behav** 1990 Feb;35(2):477–9

Potentiation of cathinone by caffeine and nikethamide. Schechter MD. **Pharmacol Biochem Behav** 1989 Jun; 33(2):299–301

The effect of ethanol–caffeine interaction on the gastric mucosal barrier. Dziaduś–Sokołowska A, et al. **Pol J Pharmacol Pharm** 1989 May–Jun;41(3):253–8

Conditions that alter intracellular cAMP levels affect expression of the cAMP phosphodiesterase gene in Dictyostelium. Riley BB, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4746–50

Molecular mechanisms of DNA repair inhibition by caffeine. Selby CP, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(9):3522–5

Effects of isoproterenol and caffeine on calcium transients and action potentials in human ventricular cardiomyocytes. Li Q, et al. **Prog Clin Biol Res** 1990;327:743–50

Cytogenetic and biochemical studies in homo– and heterozygotes of ataxia–telangiectasia. Interaction between in vivo and in vitro exposure. Pawlak AL, et al. **Prog Clin Biol Res** 1990;340B:407–14

Mechanisms of caffeine inhibition of DNA repair in E. coli. Selby CP, et al. **Prog Clin Biol Res** 1990;340A:179–93

Comparison of endothelin– and caffeine–induced calcium mobilization in coronary artery smooth muscle cells. Wagner–Mann C, et al. **Prog Clin Biol Res** 1990;327:517–24

The centromere and aneuploidy: I. Caffeine–induced detachment and fragmentation of kinetochores of mammalian chromosomes. Zinkowski RP, et al. **Prog Clin Biol Res** 1989;318:43–60

Caffeine taste test for panic disorder: adenosine receptor supersensitivity. DeMet E, et al. **Psychiatry Res** 1989 Dec; 30(3):231–42

Smooth pursuit eye movements in schizophrenia: effects of neuroleptic treatment and caffeine. Litman RE, et al. **Psychopharmacol Bull** 1989;25(3):473–8

Central effects of corticotropin releasing factor (CRF): evidence for similar interactions with environmental novelty and with caffeine. Britton DR, et al. **Psychopharmacology (Berl)** 1990;101(3):366–70

Caffeine differentially affects kinesthetic aftereffect in high and low impulsives. Gupta U, et al. **Psychopharmacology (Berl)** 1990;102(1):102–5

Benzodiazepines and caffeine: effect on daytime sleepiness, performance, and mood. Johnson LC, et al. **Psychopharmacology (Berl)** 1990;101(2):160–7

Separate and combined effects of caffeine and alprazolam on motor activity and benzodiazepine receptor binding in vivo. Kaplan GB, et al. **Psychopharmacology (Berl)** 1990; 101(4):539–44

Effect of caffeine on physiological sleep tendency and ability to sustain wakefulness at night. Walsh JK, et al. **Psychopharmacology (Berl)** 1990;101(2):271–3

Effects of caffeine on alertness. Zwyghuizen–Doorenbos A, et al. **Psychopharmacology (Berl)** 1990;100(1):36–9

The action of caffeine on X–irradiated HeLa cells. X. Depressed recovery from potentially lethal damage in cells containing 5–bromodeoxyuridine. Labanowska J, et al. **Radiat Res** 1990 Aug;123(2):228–31

X–ray–related potentially lethal damage expressed by chromosome condensation and the influence of caffeine. Sasaki H, et al. **Radiat Res** 1989 Oct;120(1):72–82

The action of caffeine on X–irradiated HeLa cells. IX. Hypothermic effects. Tolmach LJ, et al. **Radiat Res** 1990 Jun;122(3):280–7

The effects of maternal caffeine intake during pregnancy on mineral contents of fetal rat bone. Nakamoto T, et al. **Res Exp Med (Berl)** 1989;189(4):275–80

Daytime sleepiness, performance, mood, nocturnal sleep: the effect of benzodiazepine and caffeine on their relationship. Johnson LC, et al. **Sleep** 1990 Apr;13(2):121–35

Rapid evaluation of topoisomerase inhibitors: caffeine inhibition of topoisomerases in vivo. Shin CG, et al. **Teratogenesis Carcinog Mutagen** 1990;10(1):41–52

Interaction between caffeine and methamphetamine by means of ambulatory activity in mice. Fujii W, et al. **Yakubutsu Seishin Kodo** 1989 Jun;9(2):225–31

Secretin potentiates, caffeine does not affect caerulein–stimulated pancreatic enzyme depletion and growth in newborn rats. Papp M, et al. **Z Gastroenterol** 1990 Apr;28(4):188–91

[Combination effect of caffeine and cisplatin on a cisplatin resistant human lung cancer cell line] Ohsaki Y, et al. **Gan To Kagaku Ryoho** 1990 Jul;17(7):1339–43 (Eng. Abstr.) **(Jpn)**

[Inhibitory effect of caffeine on the potential–dependent calcium current in isolated intestinal smooth muscle cells] Shuba MF, et al. **Dokl Akad Nauk SSSR** 1989 Nov–Dec; 309(1):240–3 **(Rus)**

[Effect of aminazine, caffeine and the intensity of mental stress on psychophysiological functions and work effectiveness of humans] Navakatikian AO, et al. **Fiziol Zh** 1989 Nov–Dec;35(6):79–83 (Eng. Abstr.) **(Rus)**

[The effect of caffeine on the cardiac diastole and systole in rats and guinea pigs] Kapel'ko VI, et al. **Fiziol Zh SSSR** 1990 Jan;76(1):56–61 (Eng. Abstr.) **(Rus)**

[Effects of UV–irradiation of carp sperm and its modification by caffeine] Rekurbatskiĭ AV. **Genetika** 1989 Nov; 25(11):2033–8 (Eng. Abstr.) **(Rus)**

[The modifying action of caffeine on the effect of fast neutrons in human cells] Chebotarev EE, et al. **Tsitol Genet** 1990 Jan-Feb;24(1):9-11 (Eng. Abstr.) **(Rus)**

[Effects of caffeine on post-extrasystolic potentiation and mechanical restitution in mammalian papillary muscle] Ibarra J, et al. **Arch Inst Cardiol Mex** 1989 Jul-Aug; 59(4):361-6 (Eng. Abstr.) **(Spa)**

POISONING

Treatment of caffeine toxicity with esmolol. Price KR, et al. **Ann Emerg Med** 1990 Jan;19(1):44-6

Massive caffeine ingestion resulting in death. Mrvos RM, et al. **Vet Hum Toxicol** 1989 Dec;31(6):571-2

THERAPEUTIC USE

The effect of caffeine compared with theophylline in the treatment of idiopathic apnea in premature infants. Fuglsang G, et al. **Acta Paediatr Scand** 1989 Sep; 78(5):786-8

Effects of oral caffeine on postdural puncture headache. A double-blind, placebo-controlled trial. Camann WR, et al. **Anesth Analg** 1990 Feb;70(2):181-4

Caffeine reduces dipyridamole-induced myocardial ischemia. Smits P, et al. **J Nucl Med** 1989 Oct;30(10):1723-6

Effect of caffeine on histamine bronchoprovocation in asthma. Colacone A, et al. **Thorax** 1990 Aug;45(8):630-2

[The choice between theophylline and caffeine in the treatment of apnea in premature infants] Bairam A, et al. **Arch Fr Pediatr** 1990 Jun-Jul;47(6):461-5 (Eng. Abstr.) **(Fre)**

[Efficacy of percutaneous caffeine in the treatment of apnea in the premature infant] Morisot C, et al. **Arch Fr Pediatr** 1990 Mar;47(3):221-4 (Eng. Abstr.) **(Fre)**

[Effect of Impletol injection into paratonsillar tissue on abnormal sensation in the throat] Yamagiwa M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Dec;92(12):2023-8 (Eng. Abstr.) **(Jpn)**

[The effect of the functional status of the CNS in the postresuscitation period on restoration of the neurologic status in dogs following systemic circulatory arrest] Kirsanova AK. **Anesteziol Reanimatol** 1989 Sep-Oct; (5):65-9 (Eng. Abstr.) **(Rus)**

[The effect of 5-fluorouracil, metronidazole, caffeine and irradiation on the synthesis of DNA in the Pliss lymphosarcoma] Ermekova SA, et al. **Radiobiologiia** 1989 Sep-Oct;29(5):702-4 (Eng. Abstr.) **(Rus)**

TOXICITY

Craniofacial and limb development in early rat embryos following in utero exposure to ethanol and caffeine. Ross CP, et al. **Anat Anz** 1990;170(1):9-14

Neural tube defects in early rat embryos following maternal treatment with ethanol and caffeine. Ross CP, et al. **Anat Anz** 1989;169(4):247-52

Nutrient reabsorption of intestine in vitro: effects of ethanol and caffeine. Hwang HY, et al. **Chin J Physiol** 1989; 32(2):115-24

Phenylpropanolamine potentiates caffeine neurotoxicity in rats. Walker JS. **J Pharm Sci** 1989 Dec;78(12):986-9

Caffeine-induced seizures: apparent proconvulsant action of N-ethyl carboxamidoadenosine (NECA). Morgan PF, et al. **Life Sci** 1990;47(1):1-8

Induction of frameshift mutations by caffeine in Escherichia coli K12. Pons FW, et al. **Mutagenesis** 1990 Mar;5(2):173-7

Synergistic induction of cytogenetic damage by the homo-aza-steroidal ester of p-bis(2-chloroethyl)aminophenylacetic acid in combination with caffeine in human lymphocytes in vitro and in Ehrlich ascites tumour cells in vivo. Petrou C, et al. **Mutat Res** 1990 Feb;243(2):109-13

Preliminary indications that functional effects of fetal caffeine exposure can be expressed in a second generation. Sinton CM. **Neurotoxicol Teratol** 1989 Jul-Aug;11(4):357-62

CAFFEINE RECEPTORS see **RECEPTORS, PURINERGIC**

CAFFEY-DE TONI-SILVERMANN SYNDROME see **HYPEROSTOSIS, CORTICAL CONGENITAL**

CAISSON DISEASE see **DECOMPRESSION SICKNESS**

CALABASH CURARE see **TOXIFERINE**

CALCANEUS

History and mechanical control of heel spur pain. Bergmann JN. **Clin Podiatr Med Surg** 1990 Apr;7(2):243-59 (26 ref.)

Tumors of the heel. Berlin SJ, et al. **Clin Podiatr Med Surg** 1990 Apr;7(2):307-21 (21 ref.)

The role of intrinsic musculature in the formation of inferior calcaneal exostoses. Forman WM, et al. **Clin Podiatr Med Surg** 1990 Apr;7(2):217-23 (11 ref.)

Retrocalcaneal problems. Subotnick SI, et al. **Clin Podiatr Med Surg** 1990 Apr;7(2):323-32

Sever's disease and its relationship to equinus: a statistical analysis. Szames SE, et al. **Clin Podiatr Med Surg** 1990 Apr;7(2):377-84

The ilizarov apparatus in the treatment of thalamic fractures of the calcaneus. Pescatori G, et al. **Ital J Orthop Traumatol** 1989 Sep;15(3):302-14

Surgical treatment of tarsal sheath effusion associated with an exostosis on the calcaneus of a horse. Welch RD, et al. **J Am Vet Med Assoc** 1990 Jun 15;196(12):1992-4

Bilateral calcaneal intraosseous lipomas: a case report. Rosenblatt EM, et al. **Mt Sinai J Med** 1990 May; 57(3):174-6

ANALYSIS

Measurement of bone in the os calcis: a clinical evaluation [see comments] Lancaster EK, et al. **J Bone Miner Res** 1989 Aug;4(4):507-14 Comment in: J Bone Miner Res 1990 Apr;5(4):419-20.

ANATOMY & HISTOLOGY

Calcaneus secundarius: description and frequency in six skeletal samples. Mann RW. **Am J Phys Anthropol** 1990 Jan;81(1):17-25

Comparison of speed of sound and ultrasound attenuation in the os calcis to bone density of the radius, femur and lumbar spine [see comments] Rossman P, et al. **Clin Phys Physiol Meas** 1989 Nov;10(4):353-60 Comment in: Clin Phys Physiol Meas 1990 May;11(2):177-80.

Calcaneus secundarius. Variation of a common accessory ossicle. Mann RW. **J Am Podiatr Med Assoc** 1989 Aug; 79(8):363-6

Role of the calcaneal inclination in the energy storage capacity of the human foot--a biomechanical model. Simkin A, et al. **Med Biol Eng Comput** 1990 Mar; 28(2):149-52

BLOOD SUPPLY

Distally based lateral calcaneal flap. Ishikawa K, et al. **Ann Plast Surg** 1990 Jan;24(1):10-6

INJURIES

Subtalar dislocation associated with calcaneonavicular coalition: a case report. Miller AR, et al. **Bull Hosp Jt Dis Orthop Inst** 1990 Spring;50(1):84-7

Experimental intra-articular calcaneal fractures: anatomic basis for a new classification. Carr JB, et al. **Foot Ankle** 1989 Oct;10(2):81-7

Surgical management of calcaneus fractures: indications and techniques. Miller ME. **Instr Course Lect** 1990;39:161-5 (19 ref.)

Computerized axial tomography in calcaneal fractures. Neri M, et al. **Ital J Orthop Traumatol** 1990 Mar;16(1):133-8

Intra-articular fractures of the calcaneus [letter] Burdeaux BD Jr. **J Bone Joint Surg [Am]** 1990 Jul;72(6):946

Computerized tomography scanning of acute intra-articular fractures of the calcaneus. A new classification system. Crosby LA, et al. **J Bone Joint Surg [Am]** 1990 Jul; 72(6):852-9

Intra-articular fractures of the calcaneus: a review. Colburn MW, et al. **J Foot Surg** 1989 May-Jun;28(3):249-54 (19 ref.)

Compartment syndrome of the foot. Goldman FD, et al. **J Foot Surg** 1990 Jan-Feb;29(1):37-43 (33 ref.)

Diagnostic imaging of trauma to the ankle and foot: IV. Fractures of the calcaneus. Mitchell MJ, et al. **J Foot Surg** 1989 Sep-Oct;28(5):479-84 (3 ref.)

Avulsion fracture of the calcaneus at the origin of the abductor hallucis muscle. Pelletier JP, et al. **J Foot Surg** 1990 May-Jun;29(3):268-71

New radiographic angle to assess intra-articular calcaneal fractures. Saxena A, et al. **J Foot Surg** 1989 May-Jun; 28(3):200-3

Complications of calcaneus fractures entrapment of the flexor hallucis longus: report of two cases. Carr JB. **J Orthop Trauma** 1990;4(2):166-8

Operative treatment of intraarticular fractures of the os calcis--the role of rigid internal fixation and primary bone grafting: preliminary results. Leung KS, et al. **J Orthop Trauma** 1989;3(3):232-40

Surgical treatment of calcaneal fractures. Hammesfahr JF. **Orthop Clin North Am** 1989 Oct;20(4):679-89

Calcaneal fracture controversies Can we put Humpty Dumpty together again? Paley D, et al. **Orthop Clin North Am** 1989 Oct;20(4):665-77

Coverage of bilateral lower extremity calcaneal fractures with osteomyelitis using a single split free gracilis muscle transfer. Wellisz T, et al. **Plast Reconstr Surg** 1990 Mar; 85(3):457-60

[Osteomyelitis of the calcaneus in newborn infants; who is afraid of a small puncture?] Waelkens JJ. **Ned Tijdschr Geneeskd** 1989 Aug 19;133(33):1641-4 (Eng. Abstr.) **(Dut)**

[Osteosynthesis of thalamic fractures of the calcaneus using triangulation-fixed 1/4-tube plates. Preliminary results of 32 osteosyntheses] Saragaglia D, et al. **J Chir (Paris)** 1990 Mar;127(3):150-6 (Eng. Abstr.) **(Fre)**

[X-ray computed tomography of fractures of the calcaneum. Apropos of 30 cases] Devred P, et al. **J Radiol** 1989 Aug-Sep;70(8-9):455-63 (18 ref.) (Eng. Abstr.) **(Fre)**

[What is your diagnosis? Microfractures of the tibia (near the joint) and of the calcaneus caused by fluoride] Brückle W, et al. **Schweiz Rundsch Med Prax** 1990 Jul 3; 79(27-28):847-8 **(Ger)**

[Intra-articular juvenile calcaneus fractures in skiing] Bauer G, et al. **Sportverletz Sportschaden** 1989 Dec;3(4):183-6 (Eng. Abstr.) **(Ger)**

[Conservative treatment of calcaneus fracture versus repositioning and percutaneous bore wire fixation. A comparison of 2 methods] Buch J, et al. **Unfallchirurg** 1989 Dec;92(12):595-603 (Eng. Abstr.) **(Ger)**

[Treatment of intra-articular calcaneus fracture in the standard care hospital] Dresing K, et al. **Unfallchirurg** 1990 Jul;93(7):320-6 (Eng. Abstr.) **(Ger)**

[Bilateral dislocated intra-articular calcaneus fracture in the child] Havránek P, et al. **Zentralbl Chir** 1990;115(10):625-9 **(Ger)**

[Value of functional treatment of severe calcaneus fractures] Winkler H, et al. **Zentralbl Chir** 1990;115(10):619-24 (Eng. Abstr.) **(Ger)**

[Management of calcaneus fractures] Zadravecz G. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(3):201-10 (Eng. Abstr.) **(Hun)**

[Long-term results of the conservative treatment of thalamic fractures of the calcaneus] Olmeda A, et al. **Chir Organi Mov** 1989 Jan-Jun;74(1-2):35-43 (Eng. Abstr.) **(Ita)**

PATHOLOGY

Assessment of broadband ultrasound attenuation in the os calcis in vitro. McCloskey EV, et al. **Clin Sci** 1990 Feb; 78(2):221-5

Broadband ultrasound attenuation in the os calcis: relationship to bone mineral at other skeletal sites. McCloskey EV, et al. **Clin Sci** 1990 Feb;78(2):227-33

Leiomyosarcoma of the os calcis. Marymont JV, et al. **Foot Ankle** 1990 Feb;10(4):239-42

[The surgical treatment of stenosis of the tenoperoneal canal caused by hyperplasia of the trochlea fibularis calcanei] Marin IM. **Ortop Travmatol Protez** 1989 Dec;(12):52-3 **(Rus)**

PHYSIOLOGY

Dual-photon absorptiometry for determination of bone mineral content in the calcaneus with correction for fat. Jonson R, et al. **Phys Med Biol** 1990 Jul;35(7):961-9

PHYSIOPATHOLOGY

The tendo Achillis as it relates to rearfoot position. A new classification for evaluation of calcaneal stance position. Grumbine NA, et al. **Clin Podiatr Med Surg** 1990 Apr; 7(2):203-16

[Spontaneous fracture of the calcaneus in the aged subject without any fluoride therapy] Kuntz JL, et al. **Rev Rhum Mal Osteoartic** 1989 Nov;56(11):759-61 **(Fre)**

RADIOGRAPHY

Posterior subtalar joint arthrography. A useful tool in the diagnosis of hindfoot disorders. Goossens M, et al. **Clin Orthop** 1989 Dec;(249):248-55

Diagnostic radiographic imaging of the adult calcaneus. Osher L. **Clin Podiatr Med Surg** 1990 Apr;7(2):333-68 (142 ref.)

Renal cell carcinoma and osseous metastases. Case report and literature review. Goldman FD, et al. **J Am Podiatr Med Assoc** 1989 Dec;79(12):618-25 (40 ref.)

[Osteochondritis dissecans of the calcaneus] Nafei A, et al. **Ugeskr Laeger** 1990 Apr 9;152(15):1095 (Eng. Abstr.) **(Dan)**

[Morphometric approach to the assessment of the heel bone in the computed tomogram] Krause P, et al. **ROFO** 1990 Mar;152(3):303-6 (Eng. Abstr.) **(Ger)**

[Osteoid osteoma of the calcaneus] Beliakova LI, et al. **Vestn Rentgenol Radiol** 1989 Nov-Dec;(6):76-8 **(Rus)**

SURGERY

Inferior heel spur surgery. Schwartz NH. **Clin Podiatr Med Surg** 1990 Apr;7(2):261-70 (8 ref.)

Chronic retrocalcaneal bursitis treated by resection of the calcaneus. Angermann P. **Foot Ankle** 1990 Apr;10(5):285-7

Fasciotomy of the foot: an anatomical study with special reference to release of the calcaneal compartment. Manoli A 2d, et al. **Foot Ankle** 1990 Apr;10(5):267-75

Os subcalcaneum. Varounis G, et al. **J Am Podiatr Med Assoc** 1989 Oct;79(10):517-8

Use of the cannulated bone screw in rearfoot surgery. Chieppa WA, et al. **J Foot Surg** 1989 Jul-Aug;28(4):333-4

Partial calcaneectomy for the treatment of osteomyelitis of the os calcis. Weisenfeld LS, et al. **J Foot Surg** 1990 May-Jun;29(3):226-30

Subtalar posterior displacement osteotomy of the calcaneus: a preliminary report of seven cases. Badelon O, et al. **J Pediatr Orthop** 1990 May-Jun;10(3):401-4

Role of talocalcaneal osteotomy in clubfoot surgery: results in 31 surgically treated feet. Hjelmstedt A, et al. **J Pediatr Orthop** 1990 Mar-Apr;10(2):193-7

[Calcaneus osteotomy in flexible flatfoot in children (long-term results)] Magyar A. **Z Orthop** 1990 Jan-Feb; 128(1):96-9 (Eng. Abstr.) **(Ger)**

[Dermatoplasty of a cavity in the calcaneus] Izmailov GA. **Zentralbl Chir** 1990;115(5):279-85 (Eng. Abstr.) **(Ger)**

[Surgical treatment of chronic osteomyelitis of the calcaneus] Pecheniuk VI, et al. **Ortop Travmatol Protez** 1990 Jan; (1):6-11 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

[Osteoid osteoma: ultrastructural aspects] Tamburrelli F, et al. **Arch Putti Chir Organi Mov** 1989;37(1):199–207 (Eng. Abstr.) **(Ita)**

CALCIFEDIOL

ADMINISTRATION & DOSAGE

[Effect of long-term administration of 25-hydroxycholecalciferol on the regeneration of compact and spongy bone tissue in dogs receiving prednisone] Durlik M. **Pol Arch Med Wewn** 1988 Apr;79(4):181–7 (Eng. Abstr.) **(Pol)**

ANALOGS & DERIVATIVES

Synthesis and biological activity of novel vitamin D analogues: 24,24-difluoro-25-hydroxy-26,27-dimethylvitamin D3 and 24,24-difluoro-1 alpha,25-dihydroxy-26,27-dimethylvitamin D3. Gill HS, et al. **J Med Chem** 1990 Feb;33(2):480–90

BIOSYNTHESIS

[Vitamin D metabolism in the elderly. Evidence of appropriate synthesis of 1,25 (OH)2 D3] Quesada Gómez J, et al. **Rev Clin Esp** 1989 Dec;185(9):436–9 (Eng. Abstr.) **(Spa)**

BLOOD

1,25(OH)2D response to combined zinc and phosphorus depletion in rats. Kimmel PL, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):E319–26

Effect of phototherapy on serum 25-hydroxyvitamin D in the Antarctic. Griffiths AP, et al. **Eur J Appl Physiol** 1989; 59(1–2):68–72

The impact of lifestyle factors on serum 25-hydroxy vitamin D levels in older adults: a preliminary study. Kligman EW, et al. **Fam Pract Res J** 1989 Fall-Winter;9(1):11–9

Effect of theophylline on calcium metabolism and circulating vitamin D metabolites. Fortenbery EJ, et al. **J Bone Miner Res** 1990 Apr;5(4):321–4

Vitamin D status and related parameters in a healthy population: the effects of age, sex, and season. Sherman SS, et al. **J Clin Endocrinol Metab** 1990 Aug;71(2):405–13

Effect of vitamin D3 administration on serum 25-hydroxyvitamin D3, 1,25-dihydroxyvitamin D3 and osteocalcin in vitamin D-deficient elderly people. Guillemant S, et al. **J Steroid Biochem** 1989 Dec; 33(6):1155–9

Parathyroid hormone, 25-hydroxyvitamin D and 1,25-dihydroxyvitamin D concentration in elderly patients. Oster P, et al. **Klin Wochenschr** 1990 Apr 17;68(8):421–6

Natural and synthetic sources of circulating 25-hydroxyvitamin D in man. Haddad JG Jr, et al. **Nature** 1973 Aug 24;244(5417):515–7

[Postburn changes in serum levels of calcitonin, parathyroid hormone and 25-hydroxycholecalciferol] Xue Y. **Chung Hua I Hsueh Tsa Chih** 1989 Oct;69(10):555–9, 38 (Eng. Abstr.) **(Chi)**

[Serum concentrations of 25 hydroxyvitamin D in hospitalized infants. Relation to calciuria] Freycon MT, et al. **Pediatrie** 1989;44(5):419–23 (Eng. Abstr.) **(Fre)**

[Methodologic recommendations for the determination of 25-OH vitamin D3 in plasma using HPLC] Matthey M, et al. **Nahrung** 1989;33(6):503–7 (Eng. Abstr.) **(Ger)**

[Serum levels of calcitonin, parathyroid hormone and 25-hydroxycholecalciferol in patients with diabetes mellitus] Błasiak M, et al. **Endokrynol Pol** 1989;40(5):241–50 (Eng. Abstr.) **(Pol)**

DEFICIENCY

[Decompensation of physiologic hypocalcemia in infants inducing vitamin D deficiency rickets] Sun B. **Chung Hua I Hsueh Tsa Chih** 1990 May;70(5):265–7, 20 (Eng. Abstr.) **(Chi)**

METABOLISM

Role of 25-hydroxyvitamin D3 dose in determining rat 1,25-dihydroxyvitamin D3 production. Vieth R, et al. **Am J Physiol** 1990 May;258(5 Pt 1):E780–9

Identification of 8 alpha,25-dihydroxy-9,10-seco-4,6,10(19)-cholestatrien-3-one as a product of metabolism of 25-hydroxycholecalciferol by liver microsomes. Thierry-Palmer M, et al. **Arch Biochem Biophys** 1990 Mar; 277(2):277–82

Separation of the cytochromes P-450 in pig kidney mitochondria catalyzing 1 alpha-, 24- and 26-hydroxylations of 25-hydroxyvitamin D3. Postlind H. **Biochem Biophys Res Commun** 1990 Apr 16;168(1):261–6

Interaction of the vitamin D-binding protein (group-specific component) and its ligand 25-hydroxy-vitamin D3: binding differences of the various genetic types disclosed by isoelectric focusing. Braun A, et al. **Electrophoresis** 1990 Jun;11(6):478–83

Evidence for extrarenal production of 1,25-dihydroxyvitamin during physiological bone growth: in vivo and in vitro production by deer antler cells. Sempere AJ, et al. **Endocrinology** 1989 Nov;125(5):2312–9

Metabolism of 25-hydroxyvitamin D3 to 24,25-dihydroxyvitamin D3 and its sensitivity to ketoconazole in 1 alpha,25-dihydroxyvitamin D3-differentiated HL60 cells. Hayes ME, et al. **J Mol Endocrinol** 1989 Nov;3(3):199–205

PHARMACOLOGY

Correction of low circulating levels of 1,25-dihydroxyvitamin D by 25-hydroxyvitamin D during reversal of hypomagnesaemia. Fuss M, et al. **Clin Endocrinol (Oxf)** 1989 Jul;31(1):31–8

Vitamin D3 metabolites modulate dihydropyridine-sensitive calcium currents in clonal rat osteosarcoma cells. Caffrey JM, et al. **J Biol Chem** 1989 Dec 5;264(34):20265–74

Effects of vitamin D3 metabolites on thyrotropin secretion from rat pituitary cells in culture. Törnquist K, et al. **J Endocrinol Invest** 1990 May;13(5):391–5

25-Hydroxyvitamin D metabolism and its effect on calcitriol metabolism in experimental renal failure. Hsu CH, et al. **J Lab Clin Med** 1990 Jul;116(1):51–7

The in vivo and in vitro effect of calmodulin antagonists on the renal actions of 25(OH) vitamin D3 in the rat. Friedlaender MM, et al. **Pflugers Arch** 1989 Dec; 415(3):372–80

Stimulation of myoblast membrane protein synthesis by 25-hydroxy-vitamin D3. Bellido T, et al. **Z Naturforsch [C]** 1989 Sep-Oct;44(9–10):807–12

THERAPEUTIC USE

Long-term treatment with active vitamin D (alphacalcidol) in middle-aged men with impaired glucose tolerance. Effects on insulin secretion and sensitivity, glucose tolerance and blood pressure. Lind L, et al. **Diabetes Res** 1989 Jul;11(3):141–7

[The treatment of hypocalcemia in children using 25 OH D3] Boudhina T, et al. **Tunis Med** 1989 Oct;67(10):631–6 (Eng. Abstr.) **(Fre)**

[Prevention of hypocalcemia in low-birth-weight newborn infants: a comparative clinical study on the efficacy of ergocalciferol (Vit. D2) and calcifediol (Vit. 25(OH)D3)] Zecca E, et al. **Minerva Pediatr** 1990 May;42(5):185–8 (Eng. Abstr.) **(Ita)**

CALCIFEROLS see **ERGOCALCIFEROLS**

CALCIFICATION, PATHOLOGIC see **CALCINOSIS**

CALCIFICATION, PHYSIOLOGIC

ATP-dependent mineralization of hyaline articular cartilage matrix vesicles. Wortmann RL, et al. **Adv Exp Med Biol** 1989;253A:81–5

Calcification on chest radiographs: the association with age. Teale C, et al. **Age Ageing** 1989 Sep;18(5):333–36

Longitudinal changes in the bone mineral content of term and premature infants. Pittard WB 3d, et al. **Am J Dis Child** 1990 Jan;144(1):36–40

Osteogenesis in bone defects in rats: the effects of hydroxyapatite and demineralized bone matrix. Alper G, et al. **Am J Med Sci** 1989 Dec;298(6):371–6

Hypertrophic cartilage matrix. Type X collagen, supramolecular assembly, and calcification. Schmid TM, et al. **Ann N Y Acad Sci** 1990;580:64–73 (29 ref.)

Sulphation of secreted phosphoprotein I (SPPI, osteopontin) is associated with mineralized tissue formation. Nagata T, et al. **Biochem Biophys Res Commun** 1989 Nov 30; 165(1):234–40

Quantification of biomineralization: an in-vitro tissue culture system and microanalysis of calcium, phosphorus and trace elements by total-reflection X-ray fluorescence. Niemann A, et al. **Biochem Biophys Res Commun** 1990 Aug 16; 170(3):1216–22

BIOMAT 89. Calcified tissues and biomaterials. December 13–15, 1989, Bordeaux, France. Proceedings. **Biomaterials** 1990 Jul;11:1–94

Effect of glass-ceramic implants on primary calcification in rat tibial bone after injury. Amir D, et al. **Biomaterials** 1989 Nov;10(9):585–9

Intervertebral disk mineralization in progressive ankylosis mice. Sampson HW, et al. **Bone Miner** 1990 Jul;10(1):71–7

Correlations of serum alkaline phosphatases and bone mineralization rate [letter] Himes JH. **Calcif Tissue Int** 1990 May;46(5):346–7

Dual-energy CT-scan quantification of recalcification in osteolyses of the vertebral body due to mammary carcinomas in the course of antineoplastic treatment. Crone-Münzebrock W, et al. **Clin Exp Metastasis** 1990 Mar-Apr;8(2):173–9

Mechanisms of inhibition of calcification. Blumenthal NC. **Clin Orthop** 1989 Oct;(247):279–89 (54 ref.)

Hypertrophy and calcification of rabbit permanent chondrocytes in pelleted cultures: synthesis of alkaline phosphatase and 1,25-dihydroxycholecalciferol receptor. Iwamoto M, et al. **Dev Biol** 1989 Dec;136(2):500–7

Intramembranaceous ossification analyses by a proton microprobe. Cichocki T, et al. **Histochemistry** 1990; 94(2):171–7

Bone acidic glycoprotein-75 is a major synthetic product of osteoblastic cells and localized as 75- and/or 50-kDa forms in mineralized phases of bone and growth plate and in serum. Gorski JP, et al. **J Biol Chem** 1990 Sep 5; 265(25):14956–63

Immunoreactive calbindin-D9K localization in matrix vesicle-initiated calcification in rat epiphyseal cartilage: an immunoelectron microscope study. Balmain N, et al. **J Bone Miner Res** 1989 Aug;4(4):565–75

An immortalized osteogenic cell line derived from mouse teratocarcinoma is able to mineralize in vivo and in vitro. Kellermann O, et al. **J Cell Biol** 1990 Jan;110(1):123–32

Mineralization of the falx cerebri simulating interhemispheric vascular anomalies on MR imaging. Report of three cases. Ruge JR, et al. **J Neurosurg** 1990 Jun;72(6):971–4

A mathematical modelling study of epiphyseal cartilage calcification. Hunter GK, et al. **J Theor Biol** 1989 May 22;138(2):195–211

Dystrophic calcification and mineralization during bone induction: biochemical differences. Nimni ME. **Nippon Seikeigeka Gakkai Zasshi** 1989 May;63(5):630–42

[The hydrodynamic components in joints: proof of a membrane-cistern system within the calcified zone of the femur head cartilage] Copf F, et al. **Acta Anat (Basel)** 1989; 136(3):248–54 (Eng. Abstr.) **(Ger)**

[The physiology of bone metabolism] Keck E. **Z Rheumatol** 1989;48 Suppl 1:3–14 (66 ref.) **(Ger)**

[Matrix vesicles in membranous ossification] Inage S, et al. **Kokubyo Gakkai Zasshi** 1990 Jun;57(2):335–52 (Eng. Abstr.) **(Jpn)**

[Establishment of osteoblastic cell line (OR-D 3)] Okuda H. **Nippon Seikeigeka Gakkai Zasshi** 1989 Nov;63(11):1379–88 (Eng. Abstr.) **(Jpn)**

[Mineralization status in bones in patients with femoral neck fractures] Vojtaššák J, et al. **Acta Chir Orthop Traumatol Cech** 1989 Dec;56(6):538–42 (Eng. Abstr.) **(Slo)**

DRUG EFFECTS

Effects of vitamin D derivatives on soft tissue calcification in neonatal and calcium mobilization in adult rats. Kistler A, et al. **Arch Toxicol** 1989;63(5):394–400

Effects of parathyroid hormone and calcitonin on alkaline phosphatase activity and matrix calcification in rabbit growth-plate chondrocyte cultures. Kato Y, et al. **Endocrinology** 1990 Jul;127(1):114–8

Induction of mineral deposition by primary cultures of chicken growth plate chondrocytes in ascorbate-containing media. Evidence of an association between matrix vesicles and collagen. Wu LN, et al. **J Biol Chem** 1989 Dec 15; 264(35):21346–55

PHYSIOLOGY

The possible role of collagen fibrils and collagen-phosphoprotein complexes in the calcification of bone in vitro and in vivo. Glimcher MJ. **Biomaterials** 1990 Jul;11:7–10 (37 ref.)

Microcinematographic and autoradiographic kinetic studies of bone cell differentiation in vitro: matrix formation and mineralization. Nefussi JR, et al. **Bone** 1989;10(5):345–52

An electron microscopical study on the presence of proteoglycans in the calcified bone matrix by use of cuprolinic blue. Sauren YM, et al. **Bone** 1989;10(4):287–94

In vitro mineralization of osteoblastic cells derived from human bone. Gotoh Y, et al. **Bone Miner** 1990 Mar; 8(3):239–50

Mechanical stimulation by intermittent compression stimulates sulfate incorporation and matrix mineralization in fetal mouse long-bone rudiments under serum-free conditions. Bagi C, et al. **Calcif Tissue Int** 1989 Dec; 45(6):342–7

Changes in osteonectin distribution and levels are associated with mineralization of the chicken tibial growth cartilage. Pacifici M, et al. **Calcif Tissue Int** 1990 Jul;47(1):51–61

Preliminary studies of mineralization during distraction osteogenesis. Aronson J, et al. **Clin Orthop** 1990 Jan; (250):43–9

Histochemical properties of the "crystal ghosts" of calcifying epiphyseal cartilage. Bonucci E, et al. **Connect Tissue Res** 1989;22(1–4):43–50; discussion 53–61

The effect of complexing phosphoproteins to decalcified collagen on in vitro calcification. Endo A, et al. **Connect Tissue Res** 1989;21(1–4):179–90; discussion 191–6

Use of cultured embryonic chicken osteoblasts as a model of cellular differentiation and bone mineralization. Gerstenfeld LC, et al. **Connect Tissue Res** 1989; 21(1–4):215–23; discussion 224–5

The structure of mineralized collagen fibrils. Katz EP, et al. **Connect Tissue Res** 1989;21(1–4):149–54; discussion 155–8

Association of the C-propeptide of type II collagen with mineralization of embryonic chick long bone and sternal development. Kujawa MJ, et al. **Connect Tissue Res** 1989; 23(2–3):179–99

Vesicle- and collagen-mediated calcification in the turkey leg tendon. Landis WJ, et al. **Connect Tissue Res** 1989; 22(1–4):35–42; discussion 53–61

Mineral induction by polyanionic dentin and bone proteins at physiological ionic conditions. Linde A, et al. **Connect Tissue Res** 1989;21(1–4):197–202; discussion 203

First identification of a gene defect for hypophosphatasia: evidence that alkaline phosphatase acts in skeletal mineralization. Weiss MJ, et al. **Connect Tissue Res** 1989; 21(1–4):99–104; discussion 104–6

Mechanism of de novo mineral formation by matrix vesicles.

Wuthier RE. **Connect Tissue Res** 1989;22(1–4):27–33; discussion 53–61 (27 ref.)
Cross-linking and stereospecific structure of collagen in mineralized and nonmineralized skeletal tissues. Yamauchi M, et al. **Connect Tissue Res** 1989;21(1–4):159–67; discussion 168–9
Alkaline phosphatase cDNA transfected cells promote calcium and phosphate deposition. Yoon K, et al. **Connect Tissue Res** 1989;22(1–4):17–25; discussion 53–61
Increases in calbindin D 28K mRNA in the uterus of the domestic fowl induced by sexual maturity and shell formation. Nys Y, et al. **Gen Comp Endocrinol** 1989 Nov; 76(2):322–9
Bone remodeling in predialysis chronic renal failure: how does the choice of index for mineralizing surface influence the interpretation? Dahl E, et al. **J Bone Miner Res** 1989 Dec;4(6):845–52
[Experimental study of the ossification of decalcified cortical bone] Szabó G, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(4):275–80 (Eng. Abstr.) **(Hun)**
[The dynamic characteristics of regional muscle blood flow and the activity of mineralization processes in the bony callus with various methods of treating mandibular fractures] Zuev VP, et al. **Stomatologiia (Mosk)** 1989 Sep–Oct;68(5):38–40 (Eng. Abstr.) **(Rus)**

CALCINOSIS

see related

CHONDROCALCINOSIS

Difficult intubation associated with calcified stylohyoid ligament. Walls RD, et al. **Anaesth Intensive Care** 1990 Feb; 18(1):110–2
Calciphylaxis and systemic calcinosis. Collective review. Khafif RA, et al. **Arch Intern Med** 1990 May;150(5):956–9 (53 ref.)
Calcified sphenoid mucocele. Lidov M, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jun;116(6):718–20
Radiologic vignette. Tumoral calcinosis. Resnik CS. **Arthritis Rheum** 1989 Nov;32(11):1484–6 (6 ref.)
Orbital phleboliths. Baskararajan G. **Indian J Ophthalmol** 1990 Jan–Mar;38(1):36–7
Calcinosis cutis circumscripta. A literature review and case report. Mendoza LE, et al. **J Am Podiatr Med Assoc** 1990 Feb;80(2):97–9 (22 ref.)
Tumoral calcinosis of the foot: case report and literature review. Slomovitz M, et al. **J Foot Surg** 1990 May–Jun; 29(3):278–83 (16 ref.)
Case report 584: Ossified stylohyoid complex with pseudarthroses. Genez BM, et al. **Skeletal Radiol** 1989; 18(8):623–5
[Chronic calcifying pancreatitis in hospitals in the Ivory Coast] Attia Y, et al. **Med Trop (Mars)** 1989 Oct–Dec; 49(4):365–9 (Eng. Abstr.) **(Fre)**
[Calcification of the intervertebral disks in children: apropos of a case] Oulebsir A, et al. **Pediatrie** 1989;44(4):327–9 (12 ref.) (Eng. Abstr.) **(Fre)**
[Tumor calcinosis. Review of the literature: apropos of a case] Haddad SN, et al. **Rev Chir Orthop** 1989;75(5):340–4 (25 ref.) (Eng. Abstr.) **(Fre)**
[Intervertebral disk calcification in children] Jawish R, et al. **Rev Chir Orthop** 1989;75(5):308–17 (24 ref.) (Eng. Abstr.) **(Fre)**

BLOOD

Plasma glucagon responses in tropical fibrocalculous pancreatic diabetes. Mohan V, et al. **Diabetes Res Clin Pract** 1990 Apr;9(1):97–101

CHEMICALLY INDUCED

Right upper quadrant calcification in a patient receiving long-term cholestyramine therapy for primary biliary cirrhosis. Wells RF, et al. **Am J Dig Dis** 1968 Jan; 13(1):86–94
Calciphylaxis induced by iron-citrate sorbitol. Raica M. **Exp Pathol** 1990;38(3):196–200
Bladder wall calcification after intravesical mitomycin C treatment of superficial bladder cancer. Drago PC, et al. **J Urol** 1989 Oct;142(4):1071–2
Tracheobronchial calcification: an observation in three children after mitral valve replacement and warfarin sodium therapy. Taybi H, et al. **Radiology** 1990 Sep; 176(3):728–30
[Calcification of the epidural space following an intradiscal injection of triamcinolone hexacetonide (letter)] Menkes CJ, et al. **Presse Med** 1989 Oct 21;18(34):1707 **(Fre)**
[Encephalopathy and cerebellar calcifications from lead poisoning] Rémy P. **Presse Med** 1990 May 26; 19(21):997–1000 (Eng. Abstr.) **(Fre)**
[Calcified lipogranuloma after gomenoleo oil injection: "paraffinoma" 60 years later] Galland MC, et al. **Therapie** 1990 Jan–Feb;45(1):27–32 (Eng. Abstr.) **(Fre)**
[Analysis of renal calcification and stone formation in rats treated with ethoxyquin using X-ray analytical scanning electron microscopy: ultrastructural observations and element analysis] Imazawa T, et al. **Eisei Shikenjo Hokoku** 1989;(107):68–72 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Fahr's disease in postthyroidectomy hypoparathyroidism. A case report. Rachele MG, et al. **Acta Neurol (Napoli)** 1989 Oct;11(5):360–4
Congenital cytomegalovirus infection associated with fetal ascites and intrahepatic calcifications. Yamashita Y, et al. **Acta Paediatr Scand** 1989 Nov;78(6):965–7
Left ventricular outflow obstruction caused by mitral ring calcification. Iga K, et al. **Am Heart J** 1990 Feb;119(2 Pt 1):418–9
Association of mitral anular calcium with new thromboembolic stroke and cardiac events at 39-month follow-up in elderly patients. Aronow WS, et al. **Am J Cardiol** 1990 Jun 15;65(22):1511–2
Familial renal hypophosphatemia, minor facial anomalies, intracerebral calcifications, and non-rachitic bone changes: apparently new syndrome? Chitayat D, et al. **Am J Med Genet** 1990 Mar;35(3):406–14
Cutaneous vascular calcification with ulceration in hyperparathyroidism. Pulitzer DR, et al. **Arch Pathol Lab Med** 1990 May;114(5):482–4
Calcium oxalate crystals in breast biopsies. An overlooked form of microcalcification associated with benign breast disease. Radi MJ. **Arch Pathol Lab Med** 1989 Dec; 113(12):1367–9
Stones associated with leg ulcers. Flanagan PG, et al. **BMJ** 1989 Dec 23–30;299(6715):1568
Herniation of a calcified nucleus pulposus in a child: case report. Bradford R, et al. **Br J Neurosurg** 1989;3(6):699–703
Spontaneous disappearance of tuberculous psoas abscess calcification. Whitaker SC, et al. **Br J Radiol** 1990 Apr; 63(748):303–4
Arthritis mutilans, tumoral calcinosis, Raynaud's phenomenon and Sjögren's syndrome. Monteagudo M, et al. **Br J Rheumatol** 1990 Aug;29(4):303–5
Extensor tendon rupture related to calcium pyrophosphate crystal deposition disease [letter; comment] Van Linthoudt D, et al. **Br J Rheumatol** 1989 Dec;28(6):552–3 Comment on: Br J Rheumatol 1989 Jun;28(3):251–3.
Acute visual loss due to a calcified optic nerve glioma. Jordan DR, et al. **Can J Ophthalmol** 1989 Dec;24(7):335–9
Calcinosis in childhood dermatomyositis [letter] Martínez-Cordero E, et al. **Clin Exp Rheumatol** 1990 Mar–Apr;8(2):198–200
Eagle's syndrome: an atypical cause of dysphonia [letter] Sundmaker WH. **Ear Nose Throat J** 1989 Jul;68(7):561
Acquired coarctation due to calcified thrombus in atherosclerosis of the descending thoracic aorta. Two cases and a review. Sadony V, et al. **Eur J Cardiothorac Surg** 1989;3(5):464–7 (17 ref.)
Nodular regenerative hyperplasia of the liver, CREST syndrome and primary biliary cirrhosis: an overlap syndrome? [see comments] McMahon RF, et al. **Gut** 1989 Oct;30(10):1430–3 Comment in: Gut 1990 Apr;31(4):483–4.
Calcinosis cutis associated with syringomas: a transepidermal elimination disorder in a patient with Down syndrome. Maroon M, et al. **J Am Acad Dermatol** 1990 Aug;23(2 Pt 2):372–5
Calcium overload in human giant cell myocarditis. Olbrich HG, et al. **J Clin Pathol** 1990 Aug;43(8):650–3
Calcified ligamenta flava in a patient with Coffin-Lowry syndrome: biochemical analysis of glycosaminoglycans. Miyazaki K, et al. **Jinrui Idengaku Zasshi** 1990 Jun; 35(2):215–21
Psychotic symptoms in basal ganglia sclerosis [letter; comment] Förstl H, et al. **Lancet** 1990 Jan 6;335(8680):55 Comment on: Lancet 1989 Nov 18;2(8673):1193–4.
Pineal gland calcification and tardive dyskinesia [letter] Sandyk R, et al. **Lancet** 1990 Jun 23;335(8704):1528
Acral gangrene attributed to calcific azotaemic arteriopathy and the steal effect of an arteriovenous fistula. Mactier RA, et al. **Nephron** 1990;54(4):347–50
Bacterial calcification in infective endocarditis. Poller DN, et al. **Postgrad Med J** 1989 Sep;65(767):665–7
Calcified hilar and mediastinal lymph nodes in an AIDS patient with Pneumocystis carinii infection. Groskin SA, et al. **Radiology** 1990 May;175(2):345–6
Acute respiratory distress syndrome with pulmonary calcification in two patients with B cell malignancies. Poe RH, et al. **Respiration** 1989;56(1–2):127–33
Diabetes mellitus, pulmonary tuberculosis and chronic calcific pancreatitis revisited. Mollentze WF, et al. **S Afr Med J** 1990 Sep 1;78(5):235–6
Contralateral trigeminal neuralgia as a false localizing sign in calcified chronic subdural hematoma: a case report. Kondoh T, et al. **Surg Neurol** 1989 Dec;32(6):471–5
Congenital ureteropelvic junction obstruction with calcified renal pelvis and superimposed spindle cell urothelial carcinoma. Gold RP, et al. **Urol Radiol** 1990;12(1):15–7
[Left auricular dilatation in calcified aortic stenosis in adults] Boschat J, et al. **Arch Mal Coeur** 1989 Dec;82(12):2003–8 (Eng. Abstr.) **(Fre)**
[Comparative measurement of the pedicle common bile duct by echography and endoscopic retrograde cholangiography in chronic calcifying pancreatitis (letter)] Bastid C, et al. **Gastroenterol Clin Biol** 1990;14(4):402 **(Fre)**
[Chronic calcifying pancreatitis in hospitals in the Ivory Coast] Attia Y, et al. **Med Trop (Mars)** 1989 Oct–Dec; 49(4):365–9 (Eng. Abstr.) **(Fre)**
[Epilepsy and bilateral occipital calcifications: 3 cases] Giroud M, et al. **Rev Neurol (Paris)** 1990;146(4):288–92 (22 ref.) (Eng. Abstr.) **(Fre)**
[Incidence of vertebral hyperostosis in patients with calcified tendinitis of the shoulder. Prospective study] Mathieu P, et al. **Rev Rhum Mal Osteoartic** 1990 Mar;57(3):177–80 (Eng. Abstr.) **(Fre)**
[Calcified thoracic herniated disk and chondrocalcinosis] Gerster JC, et al. **Schweiz Med Wochenschr** 1990 May 26; 120(21):798–800 (Eng. Abstr.) **(Fre)**
[Elongated styloid process as a cause of dysphagia] Kehrl W, et al. **HNO** 1990 Apr;38(4):129–33 (Eng. Abstr.) **(Ger)**
[Asymptomatic calcified aneurysm of the inferior pancreaticoduodenal artery—differential diagnostic considerations] Grün B, et al. **Radiologe** 1989 Nov; 29(11):572–5 (Eng. Abstr.) **(Ger)**
[Correlation between the sites of mitral annular calcification and conduction disturbances: echocardiographic evaluation] Cavalli G, et al. **Cardiologia** 1989 Oct; 34(10):885–8 (Eng. Abstr.) **(Ita)**
[Uncommon calcification of a pheochromocytoma: a case report] Kojima Y, et al. **Hinyokika Kiyo** 1989 Sep; 35(9):1555–9 (18 ref.) (Eng. Abstr.) **(Jpn)**
[Coronary revascularization using an internal mammary artery-saphenous vein composite graft in a patient with severely calcified ascending aorta] Sekine S, et al. **Kyobu Geka** 1990 Jul;43(7):573–5 (Eng. Abstr.) **(Jpn)**
[A case of pulmonary sarcoidosis with calcification in the lung] Asami H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Oct; 27(10):1237–42 (Eng. Abstr.) **(Jpn)**
[A case of Fahr's disease showing West syndrome at the onset] Origuchi Y. **No To Hattatsu** 1989 Sep;21(5):499–501 **(Jpn)**
[A case of renal leiomyoma with remarkable calcification] Ohnishi T, et al. **Rinsho Hoshasen** 1989 Nov;34(12):1509–12 (Eng. Abstr.) **(Jpn)**
[Neurologic syndromes in calcinosis of the vertebral artery] Buletsa BA. **Zh Nevropatol Psikhiatr** 1990;90(1):53–4 (Eng. Abstr.) **(Rus)**
[Autoimmune hemolytic anemia and CREST syndrome] Jordana R, et al. **Med Clin (Barc)** 1990 May 19;94(19):740–1 (9 ref.) (Eng. Abstr.) **(Spa)**

CONGENITAL

Idiopathic infantile arterial calcification in two siblings: failure of treatment with diphosphonate. Stuart G, et al. **Br Heart J** 1990 Aug;64(2):156–9
Subepidermal calcified nodule. Vázquez Doval J, et al. **Dermatol Monatsschr** 1990;176(2–3):133–8
Solitary congenital nodular calcification of Winer located on the ear: report of two cases. Azón-Masoliver A, et al. **Pediatr Dermatol** 1989 Sep;6(3):191–3

DIAGNOSIS

Bilateral triangular adrenal calcifications [letter] Akhan O, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):1102
Visceral and nodal calcification in patients with AIDS-related Pneumocystis carinii infection. Radin DR, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):27–31
In vivo identification of mitral valve fibrosis and calcium by real-time quantitative ultrasonic analysis. Lattanzi F, et al. **Am J Cardiol** 1990 Feb 1;65(5):355–9
Mitral annulus calcification. Morrison WL, et al. **Br J Clin Pract** 1990 May;44(5):204–5
Calcification and thyroid carcinoma [letter] [published erratum appears in Ear Nose Throat J 1989 Oct;68(10):798] Ophir D. **Ear Nose Throat J** 1989 Aug;68(8):636–8
A case of calcification of the subcortical nuclei (a clinical, electrophysiological and X-ray observation). Zahariev Z, et al. **Folia Med (Plovdiv)** 1988;30(1):18–22
Catheter-based intravascular ultrasound discriminates bicuspid from tricuspid valves in adults with calcific aortic stenosis. Isner JM, et al. **J Am Coll Cardiol** 1990 May; 15(6):1310–7
Isolated thickening of one aortic cusp: preferential thickening of the noncoronary cusp. Cujec B, et al. **J Am Soc Echocardiogr** 1988 Nov–Dec;1(6):430–2
Calcific aortic stenosis presenting as acute myocardial infarction. Mansur AJ, et al. **J Cardiovasc Surg (Torino)** 1990 May–Jun;31(3):310–2
Identification of calcified intracardiac lesions using gradient echo MR imaging. Pucillo AL, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):743–7
Tumoral calcinosis simulating osteomyelitis. Caspi I, et al. **J Foot Surg** 1989 Nov–Dec;28(6):547–8
Partially calcified renal cell carcinoma mimicking renal calculus. Sarma DP, et al. **J La State Med Soc** 1990 Jan; 142(1):24–6
Intraluminal colonic calcifications associated with anorectal atresia. Prenatal sonographic detection. Grant T, et al. **J Ultrasound Med** 1990 Jul;9(7):411–3
Idiopathic infantile arterial calcification. In utero diagnosis. Spear R, et al. **J Ultrasound Med** 1990 Aug;9(8):473–6
Significance of scrotal calcifications detected by sonography. Martin B, et al. **JCU** 1988 Oct;16(8):545–52
Unusual combination of an appendicolith in a leukemic patient with typhlitis—ultrasound diagnosis. Rodgers B, et al. **JCU** 1990 Mar–Apr;18(3):191–3
Cerebral calcifications [letter] Gomez CR. **Neurology** 1989 Nov;39(11):1558
Intraluminal bladder calcifications: an antenatal sign of an

enterovesical fistula. Hill LM, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):500–2

Milk of calcium fluid collection in dermatomyositis: ultrasound findings. Hesla RB, et al. **Pediatr Radiol** 1990; 20(5):344–6

Calcified neonatal renal vein thrombosis demonstration by CT and US. Jayogapal S, et al. **Pediatr Radiol** 1990; 20(3):160–2

Is it calcification of the ductus venosus or calcification of the ligamentum teres? [letter; comment] Abu-Yousef MM. **Radiology** 1990 Jul;176(1):291 Comment on: Radiology 1989 Oct;173(1):89–90.

Is it calcification of the ductus venosus or calcification of the umbilical vein? [letter; comment] Lafortune M. **Radiology** 1990 Jul;176(1):290–1 Comment on: Radiology 1989 Oct;173(1):89–90.

Imaging of tumoral calcinosis: new observations. Martinez S, et al. **Radiology** 1990 Jan;174(1):215–22

[Alveolar microlithiasis—contribution of computerized scanning and bone scintigraphy] Cheikh R, et al. **Tunis Med** 1990 Jan;68(1):45–9 (14 ref.) (Eng. Abstr.) **(Fre)**

[Breast sonographic imaging and evaluation of microcalcifications] Leucht W, et al. **Arch Gynecol Obstet** 1989;245(1–4):684–7 **(Ger)**

[Kidney involvement in pseudoxanthoma elasticum—sonography shows early calcinosis of the kidney parenchyma] Gresser U, et al. **Bildgebung** 1987–89; 56(5):179–80 (Eng. Abstr.) **(Ger)**

[Nonstenosing arterial calcinosis] Kriessmann A. **Dtsch Med Wochenschr** 1990 Apr 27;115(17):677 **(Ger)**

[Intracranial calcification—how much more information can be obtained by MR than CT?] Uhlenbrock D, et al. **ROFO** 1990 Jul;153(1):22–8 (Eng. Abstr.) **(Ger)**

[Calcific retropharyngeal tendinitis] Chaimoff C, et al. **Harefuah** 1989 Jun 1;116(11):579–81 (Eng. Abstr.) **(Heb)**

[Ultrasound-guided percutaneous antegrade wirsungography in chronic calcifying pancreatitis] Mádi Szabó L, et al. **Orv Hetil** 1990 Feb 4;131(5):245–7 (Eng. Abstr.) **(Hun)**

[A calcified thrombus of the vena cava inferior in lupus nephropathy] Madia G, et al. **Radiol Med (Torino)** 1990 Mar;79(3):251–4 **(Ita)**

[The importance of mitral calcification in the elderly] Carvalho Filho ET, et al. **Arq Bras Cardiol** 1989 Mar; 52(3):121–7 (Eng. Abstr.) **(Por)**

[Diagnosis of tumor-like diseases of soft tissues of the musculoskeletal system] Suslova OIa, et al. **Ortop Travmatol Protez** 1990 Mar;(3):64–9 **(Rus)**

[Calcification of the globus pallidus] Kovačević M, et al. **Srp Ark Celok Lek** 1987 Aug–Sep;115(8–9):861–7 (Eng. Abstr.) **(Scc)**

[Calcified kidney masses. Study of 23 cases] Romero Martín JA, et al. **Actas Urol Esp** 1989 Nov–Dec;13(6):447–50 (Eng. Abstr.) **(Spa)**

[Metastatic calcification simulating a sacral tumor in a patient on periodic dialysis] Rivera M, et al. **Rev Clin Esp** 1990 Mar;186(4):171–2 (Eng. Abstr.) **(Spa)**

[CREST syndrome—a type of progressive systemic sclerosis] Jurkas L. **Lakartidningen** 1989 Nov 22;86(47):4109–10 **(Swe)**

DRUG THERAPY

Calcium antagonists: pharmacologic agents in search of new clinical indications. Gasser R. **Angiology** 1990 Jan; 41(1):36–43 (57 ref.)

Is there a treatment for the calcinosis of juvenile dermatomyositis? Ansell B. **Br J Rheumatol** 1990 Aug; 29(4):263

ENZYMOLOGY

Serum rhodanese in goitre and calcific pancreatitis of tropics. Narendranathan M, et al. **J Assoc Physicians India** 1989 Oct;37(10):648–9

EPIDEMIOLOGY

Chronic calcifying pancreatitis: epidemiology and current concept of the lithogenesis. Sarles H, et al. **Acta Med Hung** 1989;46(4):225–33 (42 ref.)

Tumoral calcinosis in Somalia and Ethiopia: a report of twenty one cases and brief review of literature. Jain SP. **East Afr Med J** 1989 Jul;66(7):476–80 (20 ref.)

ETIOLOGY

Ochronosis and alkaptonuria: report of a new case with calcified aortic valve stenosis. Dereymaeker L, et al. **Acta Cardiol** 1990;45(1):87–92

Bilateral cortical calcifications with benign clinical course: an unusual case of Sturge–Weber syndrome? Narbone MC, et al. **Acta Neurol (Napoli)** 1989 Dec;11(6):423–7

Calcifications in the breast in Filaria loa infection. Novak R. **Acta Radiol** 1989 Sep–Oct;30(5):507–8

Metastatic liver calcification in adult T-cell leukemia–lymphoma associated with hypercalcemia [letter] Senba M, et al. **Am J Gastroenterol** 1990 Sep;85(9):1202–3

Calcifications of the breast probably due to Loa loa. Carme B, et al. **Am J Trop Med Hyg** 1990 Jan;42(1):65–6

Capsule calcification following mammaplasty: a survey [letter] Cocke WM Jr. **Ann Plast Surg** 1986 Jun;16(6):541

Milialike idiopathic calcinosis cutis in Down's syndrome [letter] Smith ML, et al. **Arch Dermatol** 1989 Nov; 125(11):1586–7

Nephrogenic diabetes insipidus and intracerebral calcification. Schofer O, et al. **Arch Dis Child** 1990 Aug; 65(8):885–7

Extensive brain calcification and progressive dysarthria and dysphagia associated with chronic hypoparathyroidism. Cheek JC, et al. **Arch Neurol** 1990 Sep;47(9):1038–9

Myositis ossificans non-progressiva—reversible muscle calcification in polymyositis [see comments] Coakley JH, et al. **Br J Rheumatol** 1989 Oct;28(5):443–5 Comment in: Br J Rheumatol 1990 Apr;29(2):155–6.

The mechanism of muscle calcification [letter; comment] Gray RE. **Br J Rheumatol** 1990 Apr;29(2):155–6 Comment on: Br J Rheumatol 1989 Oct;28(5):443–5.

Recurrent calcium emboli in a patient with aortic stenosis. Wilson JH, et al. **Chest** 1989 Dec;96(6):1433–4

Late presentation and microcrystalline arthropathy in primary hyperoxaluria. Verbruggen LA, et al. **Clin Exp Rheumatol** 1989 Nov–Dec;7(6):631–3

Overlap syndrome with multiple calcifications of the spleen. Van Linthoudt D, et al. **Clin Rheumatol** 1990 Mar; 9(1):88–91

Self-healing dystrophic calcinosis following trauma with transepidermal elimination. Pitt AE, et al. **Cutis** 1990 Jan; 45(1):28–30

Calcified hepatic and renal cysts in adult dominant polycystic kidney disease. Coffin B, et al. **Dig Dis Sci** 1990 Sep; 35(9):1172–5

Calcifying panniculitis associated with polycystic kidney disease and chronic renal failure. Lugo-Somolinos A, et al. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):743–7

Calcific aortic stenosis with myocardial infarction secondary to coronary embolisation (role of echocardiography in diagnosis) [letter] Sharma S, et al. **J Assoc Physicians India** 1990 Jun;38(6):447–8

Widespread visceral calcifications in disseminated Pneumocystis carinii infection: CT characteristics. Feuerstein IM, et al. **J Comput Assist Tomogr** 1990 Jan–Feb;14(1):149–51

Cervical myelopathy in diffuse idiopathic skeletal hyperostosis. Case report. Stechison MT, et al. **J Neurosurg** 1990 Aug;73(2):279–82

Periarticular tumoral calcinosis and hypercalcemia in a hemodialysis patient without hyperparathyroidism: a case report. Eisenberg B, et al. **J Nucl Med** 1990 Jun; 31(6):1099–103

Invited letter concerning: calcification after end-to-end arterial anastomoses [letter] Myers JL. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):380

Intracardiac thrombus complicating prolonged parenteral nutrition in an adult. McCulloch I, et al. **JPEN J Parenter Enteral Nutr** 1989 Sep–Oct;13(5):557–9

Cocaine, rhabdomyolysis and metastatic calcifications [letter] Castelao AM, et al. **Nephrol Dial Transplant** 1989;4(7):675

Cerebral calcifications in a neonate with candidiasis. Goldsmith LS, et al. **Pediatr Infect Dis J** 1990 Jun; 9(6):451–3

Brain calcification in hypoxic–ischemic lesions: an autopsy review. Ansari MQ, et al. **Pediatr Neurol** 1990 Mar–Apr; 6(2):94–101

Hepatomegaly with bull's eye calcifications. Kreel L. **Postgrad Med J** 1989 Apr;65(762):233–5

Calcific constrictive pericarditis due to rheumatoid arthritis. Manji H, et al. **Postgrad Med J** 1990 Jan;66(771):57–8

Fulminant pulmonary calcification complicating renal transplantation: CT demonstration. Kuhlman JE, et al. **Radiology** 1989 Nov;173(2):459–60

Metastatic pulmonary calcifications after cardiac surgery in children. Mani TM, et al. **Radiology** 1990 Feb;174(2):463–7

Intracorporeal calcifications after self-injection of papaverine. Pery M, et al. **Radiology** 1990 Jul;176(1):81–3

[Primary hypoparathyroidism with basal ganglia calcification: report of a case] Chow KS, et al. **Acta Paediatr Sin** 1989 Mar–Apr;30(2):129–33 (Eng. Abstr.) **(Chi)**

[A case of multiple brain calcifications associated with hypoparathyroidism] Delplace PO, et al. **J Belge Radiol** 1989 Aug;72(4):263–6 (Eng. Abstr.) **(Fre)**

[Splenic calcification following cat scratch disease] Baratte T, et al. **Pediatrie** 1990;45(5):307–9 (Eng. Abstr.) **(Fre)**

[Isolated cerebral calcifications after prophylactic treatment of cerebromeningeal involvement of acute lymphoblastic leukemia: relation of psycho-intellectual sequelae] Rejou F, et al. **Pediatrie** 1989;44(5):405–11 (Eng. Abstr.) **(Fre)**

[Liver calcifications in metastasizing vipoma] Fassbender CM, et al. **Dtsch Med Wochenschr** 1989 Sep 22; 114(38):1445–9 (Eng. Abstr.) **(Ger)**

[Vitamin D-induced tissue calcinosis and arteriosclerosis changes. II. Current knowledge and conclusions for preventive vitamin D administration in infancy and early childhood] Hesse V, et al. **Padiatr Grenzgeb** 1990; 29(3):213–9 (12 ref.) (Eng. Abstr.) **(Ger)**

[Vitamin D-induced tissue calcinosis and arteriosclerosis changes. I: A contribution to the 60 year history of vitamin D research with special reference to childhood] Jahreis G, et al. **Padiatr Grenzgeb** 1990;29(3):203–11 (12 ref.) (Eng. Abstr.) **(Ger)**

[Calcification of peritoneal cysts in a patient on periodic hemodialysis] Baldrati L, et al. **Radiol Med (Torino)** 1989 Oct;78(4):402–3 **(Ita)**

[Assessment of the relation between bone mineral metabolism and mitral annular calcification or aortic valve sclerosis in elderly patients] Sugihara N, et al. **Kokyu To Junkan** 1989 Oct;37(10):1119–25 (Eng. Abstr.) **(Jpn)**

[Ectopic calcification of the abdominal aorta and bone mineral content of vertebrae] Sugihara N, et al. **Nippon Ronen Igakkai Zasshi** 1989 May;26(3):256–64 (Eng. Abstr.) **(Jpn)**

[Disseminated necrotizing leukoencephalopathy accompanied with multiple calcium deposits following antineoplastic and radiation therapy in a case of intracranial germ cell tumor: computerized tomographical study] Shimura T, et al. **No Shinkei Geka** 1989 Jun;17(6):573–7 (Eng. Abstr.) **(Jpn)**

[A case of neonatal herpes simplex virus encephalitis with calcifications of thalamus and basal ganglia] Takahashi H, et al. **No To Hattatsu** 1990 Mar;22(2):179–83 (Eng. Abstr.) **(Jpn)**

[Idiopathic arterial calcification: its link with calciphylaxis] Khodasevich LS, et al. **Arkh Patol** 1990;52(2):23–9 (Eng. Abstr.) **(Rus)**

[Diagnosis and treatment of sequelae of splenic injury] Iudin MIa, et al. **Khirurgiia (Mosk)** 1989 Aug;(8):79–83 (Eng. Abstr.) **(Rus)**

[Present methods of inducing calcinosis and atherosclerosis and perspectives of pharmacologic prevention] Kovalčík V, et al. **Bratisl Lek Listy** 1989 Sep;90(9):649–57 (98 ref.) (Eng. Abstr.) **(Slo)**

[Calcification and contamination as complications in the use of double-J catheters: incidence and correlation] Picurelli L, et al. **Actas Urol Esp** 1989 Sep–Oct;13(5):375–7 (Eng. Abstr.) **(Spa)**

[Calcification of the basal ganglia and hypoparathyroidism: Fahr disease. Study of a family] García Urra D, et al. **Arch Neurobiol (Madr)** 1990 Jan–Feb;53(1):18–22 (Eng. Abstr.) **(Spa)**

GENETICS

Multiple gastrointestinal atresias with intraluminal calcifications. Gahukamble DB. **Indian J Pediatr** 1989 Jul–Aug;56(4):529–31

Idiopathic arterial calcification of infancy: a case with prolonged survival. Thomas P, et al. **Pediatr Nephrol** 1990 May;4(3):233–5

[A 20-year-old patient with chronic calcifying pancreatitis] Grün R, et al. **Internist (Berl)** 1989 Sep;30(9):619–21 **(Ger)**

IMMUNOLOGY

Anticentromere antibody positive CREST syndrome associated with polyarthritis, renal impairment and mixed cryoglobulinaemia. Shetty HG, et al. **Clin Rheumatol** 1989 Sep;8(3):381–5

[Occurrence of anti-adrenal antibodies in Addison's disease in relation to the results of computerized tomography of the adrenal glands] Gryczyńska M, et al. **Pol Arch Med Wewn** 1987 Apr;77(4):129–39 (Eng. Abstr.) **(Pol)**

METABOLISM

Skin necrosis associated with acquired protein C deficiency in patients with renal failure and calciphylaxis. Mehta RL, et al. **Am J Med** 1990 Mar;88(3):252–7

Abnormal systemic metabolism of iron, porphyrin, and calcium in Fahr's syndrome. Beall SS, et al. **Ann Neurol** 1989 Oct;26(4):569–75

The distribution of calcific deposits in intervertebral discs of the lumbosacral spine. Feinberg J, et al. **Clin Orthop** 1990 May;(254):303–10

Analysis of calcific deposits in calcifying tendinitis. Gärtner J, et al. **Clin Orthop** 1990 May;(254):111–20

Simultaneous occurrence of calcium pyrophosphate dihydrate and basic calcium phosphate (hydroxyapatite) crystals in a knee. Halverson PB, et al. **Clin Orthop** 1990 Aug;(257):162–5

Dystrophic calcification and mineralization during bone induction: biochemical differences. Nimni ME, et al. **Connect Tissue Res** 1989;20(1–4):193–204

Isolation and characterization of human apatite-inducing aortic proteolipid. Romeo R, et al. **Exp Mol Pathol** 1989 Oct;51(2):149–58

Myocardial disorders caused by magnesium deficiency in diabetic KK mice. Nagase N, et al. **Magnesium** 1989; 8(5–6):307–15

Phosphorus, calcium and lead distribution in collagen in lead induced soft tissue calcification. An ultrastructural and X-ray microanalytical study. Vandeputte DF, et al. **Matrix** 1990 Mar;10(1):33–7

PATHOLOGY

Simultaneous occurrence of calcification and amyloid deposit in pilomatricoma. Sano Y, et al. **Acta Derm Venereol (Stockh)** 1990;70(3):256–9

Osseous metaplasia of transitional cell carcinoma within a duplicated ureter [letter] Gassner JR, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):1101–2

A rapid technique for accurately localizing microcalcifications in breast biopsy specimens. Gauvin GP, et al. **Am J Clin Pathol** 1990 Apr;93(4):557–60

Cartilaginous metaplasia in calcific aortic valve disease. Groom DA, et al. **Am J Clin Pathol** 1990 Jun;93(6):809–12

Solitary bone cyst of the radius containing Liesegang's rings.

Kragel PJ, et al. **Am J Clin Pathol** 1989 Dec;92(6):831–3
Use of the von Kossa stain in identifying occult calcifications in breast biopsies. Symonds DA. **Am J Clin Pathol** 1990 Jul;94(1):44–8
New insights into idiopathic infantile arterial calcinosis. Three patient reports. Juul S, et al. **Am J Dis Child** 1990 Feb;144(2):229–33
Calcification of vascular lesions in Takayasu's disease [letter] Mengis CL. **Am J Med** 1990 Sep;89(3):396
Subepidermal calcified nodules of the eyelid. Ferry AP. **Am J Ophthalmol** 1990 Jan 15;109(1):85–8
Calcium oxalate crystals in breast biopsies. The missing microcalcifications. Tornos C, et al. **Am J Surg Pathol** 1990 Oct;14(10):961–8
Subepidermal calcified nodule in an octogenarian [letter] Kantor GR, et al. **Arch Dermatol** 1989 Oct;125(10):1438–9
Large subcutaneous calcification in systemic lupus erythematosus. Nomura M, et al. **Arch Dermatol** 1990 Aug; 126(8):1057–9
Extensive calcinosis cutis with systemic lupus erythematosus. Rothe MJ, et al. **Arch Dermatol** 1990 Aug;126(8):1060–3
Endochondral calcification by hypertrophic chondrocytes in the Meckel's cartilage grafted into the isogenic mouse spleen. Ishizeki K, et al. **Arch Histol Cytol** 1990 May; 53(2):187–92
Breast biopsy for calcifications in nonpalpable breast lesions. A prospective study. Franceschi D, et al. **Arch Surg** 1990 Feb;125(2):170–3
Calcifying tendinitis. Uhthoff HK, et al. **Baillieres Clin Rheumatol** 1989 Dec;3(3):567–81
Symptomatic calcification and ossification of the cervical ligamentum flavum: clinical, radiological and pathological features. Sato K, et al. **Br J Neurosurg** 1989;3(5):597–602
Growing bilateral occipital calcifications and epilepsy. DeMarco P, et al. **Brain Dev** 1990;12(3):342–4
Idiopathic familial cerebrovascular ferrocalcinosis. Zhang XZ, et al. **Chin Med J [Engl]** 1989 Jun;102(6):453–6
Calcification in oligodendroglioma. Chen WY, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Mar;45(3):143–6
Calcific deposits in the heart. Catellier MJ, et al. **Clin Cardiol** 1990 Apr;13(4):287–94
Idiopathic calcinosis of the scrotum presenting as a solitary pedunculated tumour. Dekio S, et al. **Clin Exp Dermatol** 1989 Jan;14(1):60–1
Quantitative estimation of the collagen content in normal and pathologic pancreas tissue. Bedossa P, et al. **Digestion** 1989;44(1):7–13
Calcified ovarian fibromas in prepubertal girls. Bosch-Banyeras JM, et al. **Eur J Pediatr** 1989 Aug; 148(8):749–50
Mental retardation syndrome with renal concentration deficiency and intracerebral calcification. Schofer O, et al. **Eur J Pediatr** 1990 Apr;149(7):470–4
Multiple pulmonary nodules. Tulippe-Hecq C, et al. **Eur Respir J** 1990 Jan;3(1):119–20
Weddellite calcification in the breast: eighteen cases with implications for breast cancer screening. Going JJ, et al. **Histopathology** 1990 Feb;16(2):119–24
Scrotal calcinosis [letter] Dave AJ. **J Am Acad Dermatol** 1990 Jul;23(1):150–1
Contrasting histoarchitecture of calcified leaflets from stenotic bicuspid versus stenotic tricuspid aortic valves. Isner JM, et al. **J Am Coll Cardiol** 1990 Apr;15(5):1104–8
Calcification of umbilical artery: two distinct lesions. Khong TY, et al. **J Clin Pathol** 1989 Sep;42(9):931–4
Tumoral calcinosis associated with early onset periodontitis. Katz J, et al. **J Clin Periodontol** 1989 Nov;16(10):643–6 (15 ref.)
Subcutaneous calcification in venous ulcers: report of a case. Pathy AL, et al. **J Dermatol Surg Oncol** 1990 May; 16(5):450–2
Effect of ethane-1-hydroxy-1, 1-diphosphonate on arterial calcinosis induced by hypervitaminosis D: a morphologic investigation. Kingma JG Jr, et al. **J Exp Pathol (Oxford)** 1990 Apr;71(2):145–53
Calcifying pseudoneoplasms of the neural axis. Bertoni F, et al. **J Neurosurg** 1990 Jan;72(1):42–8
Sampling grossly benign breast biopsy specimens [letter] [published erratum appears in Lancet 1989 Dec 2;2(8675):1350] Schnitt SJ, et al. **Lancet** 1989 Oct 28; 2(8670):1038
Intracranial calcified deposits in neurofibromatosis type 2. A CT study of 11 cases. Mayfrank L, et al. **Neuroradiology** 1990;32(1):33–7 (14 ref.)
Calcified metastatic brain tumor. Tashiro Y, et al. **Neurosurgery** 1990 Jun;26(6):1065–70 (34 ref.)
Calcification of spinal cord tumors: report of two cases. Shikata J, et al. **Nippon Geka Hokan** 1989 Jan 1;58(1):140–6
Calcification of the stylohyoid ligament: incidence and morphoquantitative evaluations. Ferrario VF, et al. **Oral Surg Oral Med Oral Pathol** 1990 Apr;69(4):524–9
Juvenile idiopathic chronic calcifying pancreatitis: report of 10 cases from central Tunisia. Chatti N, et al. **Pancreas** 1990 May;5(3):354–7
Extracorporeal shock wave lithotripsy of calcified gallstones. Work in progress. Rawat B, et al. **Radiology** 1990 Jun; 175(3):667–70
Tumoral calcinosis. Prasad VL, et al. **World J Surg** 1989 Nov-Dec;13(6):803–7; discussion 807–8
[Calcified aortic valve stenosis in adults. Analysis of supra- and infra-hissian conduction disorders] Blanc JJ, et al. **Ann Cardiol Angeiol (Paris)** 1989 Nov;38(9):531–4 (Eng. Abstr.) **(Fre)**
[Idiopathic calcinosis of the scrotum. Apropos of 2 cases] Lesourd A, et al. **Arch Anat Cytol Pathol** 1990; 38(1–2):48–50 (Eng. Abstr.) **(Fre)**
[Tumoral calcinosis] Zimmermann J, et al. **Hautarzt** 1990 Jul;41(7):375–7 (Eng. Abstr.) **(Ger)**
[Calcinosis cutis: cutaneous manifestations of generalized calcinosis in renal hyperparathyroidism] Zouboulis CC, et al. **Hautarzt** 1990 Apr;41(4):212–7 (Eng. Abstr.) **(Ger)**
[Osteosis and calcinosis in scleroderma circumscripta linearis] Nagy E, et al. **Z Hautkr** 1990 Feb;65(2):190–2 (Eng. Abstr.) **(Ger)**
[A calcified mucinous adenocarcinoma of the stomach—case report] Ohsaki A, et al. **Gan No Rinsho** 1990 Feb; 36(2):187–92 (23 ref.) (Eng. Abstr.) **(Jpn)**
[Coronary calcification in cinefluoroscopy: the noninvasive diagnosis of ischemic myocardial disease masquerading as dilated cardiomyopathy] Yamanaka O. **Nippon Naika Gakkai Zasshi** 1989 Jul;78(7):899–904 **(Jpn)**
[A case of calcified gastric cancer—review of Japanese literature] Kunieda K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 May;87(5):1236–42 (9 ref.) **(Jpn)**
[Idiopathic calcification of the cerebral vessels (Fara's syndrome) in conjunction with pregnancy] Akimov OV. **Arkh Patol** 1989;51(9):76–9 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

The mechanism of the obstruction in calcific aortic stenosis with bicuspid valve: a reason for failure of balloon aortic valvuloplasty in the elderly. Di Segni E, et al. **Cardiology** 1989;76(6):450–4
Raised vascular calcium in an animal model: effects on aortic function. Cannon EP, et al. **Cardiovasc Res** 1990 Jan; 24(1):47–52
Effect of medial arterial calcification on O2 supply to exercising diabetic feet. Chantelau E, et al. **Diabetes** 1990 Aug;39(8):938–41
Extensive cerebral calcification and retinal changes in pseudohypoparathyroidism. Ellie E, et al. **J Neurol** 1989 Oct;236(7):432–4
[Visco-elastic characteristics of the aorta in conscious dogs in a model of experimental calcinosis] Armentano R, et al. **Arch Mal Coeur** 1989 Jul;82(7):1159–62 (Eng. Abstr.) **(Fre)**
[Measurement of arterial pressure using 3 measurement methods in medial arterial calcification] Thierry FX, et al. **Arch Mal Coeur** 1989 Jul;82(7):1007–11 (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

Al3 binding studies and metallic cation effects on bioprosthetic heart valve calcification in the rat subdermal model. Webb CL, et al. **ASAIO Trans** 1990 Apr–Jun; 36(2):56–9
Prevention of experimental calcinosis by salmon calcitonin in rats. Czirfusz A, et al. **Endocrinol Exp** 1989 Dec; 23(4):321–6
Lipid extraction attenuates the calcific degeneration of bovine pericardium used in cardiac valve bioprostheses. Rossi MA, et al. **J Exp Pathol (Oxford)** 1990 Apr; 71(2):187–96
Scavenger effect of elastase on calcifications in liver, kidney and central nervous system tissues of rabbits with atherosclerosis induced by cholesterol-rich diet. Yasui M, et al. **J Int Med Res** 1989 Jul–Aug;17(4):350–7
Prevention of osteitis fibrosa, aluminium bone disease and soft-tissue calcification in dialysis patients: a long-term comparison of moderate doses of oral calcium +/- Mg(OH)2 vs Al(OH)3 +/- 1 alpha OH vitamin D3. Morinière P, et al. **Nephrol Dial Transplant** 1989; 4(12):1045–53
[An experimental study on delayed calcification of bovine pericardial valve using Triton X-100] Gu CX. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Aug; 17(4):236–7 **(Chi)**
[Calcification of heart valve xenograft bioprostheses and the means for its prevention] Barbarash LS, et al. **Grudn Khir** 1989 Sep–Oct;(5):83–8 (50 ref.) **(Rus)**
[A new approach to the creation of heart valve xenograft bioprostheses resistant to calcification] Zhuravleva IIu, et al. **Grudn Khir** 1989 Sep–Oct;(5):25–30 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Pigmented villonodular synovitis containing coarse calcifications. Baker ND, et al. **AJR Am J Roentgenol** 1989 Dec;153(6):1228–30
Calcific tendinitis of the long head of the biceps brachii distal to the glenohumeral joint: plain film radiographic findings. Goldman AB. **AJR Am J Roentgenol** 1989 Nov; 153(5):1011–6
The relationship of mammographic microcalcification to histologic malignancy: radiologic-pathologic correlation. Homer MJ, et al. **AJR Am J Roentgenol** 1989 Dec; 153(6):1187–9
Diagnosis of breast calcifications: comparison of contact, magnified, and television-enhanced images. Kimme-Smith C, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):963–7
Calcification in non-Hodgkin lymphoma occurring before therapy: identification on plain films and CT. Lautin EM, et al. **AJR Am J Roentgenol** 1990 Oct;155(4):739–40
CT demonstration of calcification in carcinoma of the lung. Mahoney MC, et al. **AJR Am J Roentgenol** 1990 Feb; 154(2):255–8
Infarcted undescended testis appearing as a calcified abdominal mass in an adult. Wilbur AC, et al. **AJR Am J Roentgenol** 1990 Sep;155(3):547–8
CT demonstration of calcification in an adenoid cystic carcinoma of the lung [letter] Yoshikawa J, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):419
Radiological case of the month. Calcinosis universalis as a manifestation of dermatomyositis. Gwinn JL, et al. **Am J Dis Child** 1967 Jul;114(1):93–4
Factitious "calcification" in the lacrimal gland fossa. Vasquez RJ, et al. **Ann Ophthalmol** 1989 Oct;21(10):384–5
Calcified obstructive disease of the aortic isthmus. Coffin O, et al. **Ann Vasc Surg** 1990 Mar;4(2):147–50
The effect of diltiazem on calcinosis in a patient with the CREST syndrome. Farah MJ, et al. **Arthritis Rheum** 1990 Aug;33(8):1287–93
Basal ganglia calcification in schizophrenia [letter] Fernandez-Bouzas A, et al. **Biol Psychistry** 1990 Mar 15; 27(6):682–5
Radiologically visible gallbladder calcification due to schistosomiasis. Fataar S, et al. **Br J Radiol** 1990 Sep; 63(753):706–9
Calcification of the large bowel in schistosomiasis demonstrated by computed tomography. al-Hindawi M, et al. **Br J Radiol** 1990 May;63(749):357–60
Calcification of the intrathoracic trachea demonstrated by computed tomography. Lloyd DC, et al. **Br J Radiol** 1990 Jan;63(745):31–2
Pulmonary alveolar microlithiasis with pleural calcification and nephrolithiasis. Pant K, et al. **Chest** 1990 Jul; 98(1):243–6
Calcified plaque in the superior portion of the major fissure. An unusual manifestation of asbestos exposure. Rupp SB, et al. **Chest** 1989 Dec;96(6):1436–7
Multilocular renal cyst associated with transposition of the inferior vena cava and malrotation of the bowel. Vogel HJ, et al. **Eur J Radiol** 1990 Mar–Apr;10(2):140–2
Idiopathic chronic calcifying pancreatitis and giant pancreatic stones [letter] Colombel JF, et al. **Gastrointest Endosc** 1990 Mar–Apr;36(2):162
Computed tomographic detection of intestinal calcification of Schistosomiasis japonica. Araki T, et al. **Gastrointest Radiol** 1989 Fall;14(4):360–2
"Porcelain liver" appearance due to Glisson's capsule phleboliths. Delamarre J, et al. **Gastrointest Radiol** 1989 Fall;14(4):339–40
A calcified vascular mediastinal mass. Ferrante SL, et al. **J Am Board Fam Pract** 1989 Oct–Dec;2(4):272–4
Quantification of coronary artery calcium using ultrafast computed tomography. Agatston AS, et al. **J Am Coll Cardiol** 1990 Mar 15;15(4):827–32
Calcified mass of the renal parenchyma. Lambert-Waroquet M, et al. **J Belge Radiol** 1989 Dec;72(6):520–1
The impact of osteophytic and vascular calcifications on vertebral mineral density measurements in men. Orwoll ES, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):1202–7
CT demonstration of calcifying sludge balls. Feuerstein IM, et al. **J Comput Assist Tomogr** 1990 Mar–Apr;14(2):325–6
Nonunion of a fractured scaphoid tubercle. Jonsson K. **J Hand Surg [Am]** 1990 Mar;15(2):283–5
Analysis of the solitary pulmonary nodule by means of digital techniques. Chiles C, et al. **J Thorac Imaging** 1990 Jan; 5(1):55–60
Biopsy of occult breast lesions. Analysis of 1261 abnormalities. Meyer JE, et al. **JAMA** 1990 May 2; 263(17):2341–3
An unusual abdominal mass in an elderly woman [letter] Miller DL, et al. **N Engl J Med** 1989 Dec 7;321(23):1613–4
Calcified liver lesions. Jacoby JH, et al. **N J Med** 1990 Aug; 87(8):651–2
Calcification in cerebral non-Hodgkin's lymphoma: CT demonstration. Yamada I, et al. **Neuroradiology** 1989; 31(4):372
Computerized tomography in occlusive infantile arteriopathy. Vade A, et al. **Pediatr Cardiol** 1989 Fall; 10(4):221–4
Calcification of an aneurysm of the vein of Galen. Chapman S, et al. **Pediatr Radiol** 1989;19(8):541–2
Calcified cerebral sinus thrombosis in infancy—CT appearances with pathological correlation. Davies RP, et al. **Pediatr Radiol** 1989;20(1–2):101–3
Tumoral calcinosis in an infant. Greenberg SB. **Pediatr Radiol** 1990;20(3):206–7
Stippled epiphyses in fetal alcohol syndrome. Leicher-Düber A, et al. **Pediatr Radiol** 1990;20(5):369–70 (11 ref.)
The effect of breast implants on the radiographic detection of microcalcification and soft-tissue masses. Gumucio CA, et al. **Plast Reconstr Surg** 1989 Nov;84(5):772–8; discussion 779–82
Pathognomonic intracranial calcification. Kreel L. **Postgrad Med J** 1989 Jul;65(765):476–7
Mammographic and histologic correlations of microcalcifications. de Paredes ES, et al. **Radiographics** 1990 Jul;10(4):577–89
Ingested raisins simulating abdominal calcifications [letter] Steinberg AW, et al. **Radiology** 1990 Feb;174(2):576–7
Wandering calcified abdominal mass in a female child.

Kozlowski K, et al. **ROFO** 1990 Feb;152(2):227–8
Coracoclavicular and coracoacromial ligament calcification and ossification. Chen YM, et al. **Skeletal Radiol** 1990; 19(4):263–6
Case report. Diffuse cortical destruction in both femurs and the left humerus in puerperium. Kasperczyk A, et al. **Skeletal Radiol** 1989;18(7):533–6
Case report 620. Progressive systemic sclerosis (PSS) with paraspinous and intraspinous calcifications. Walden CA, et al. **Skeletal Radiol** 1990;19(5):377–8
Computed tomographic (CT) demonstration of calcification of the ligamenta flava of the lumbosacral spine associated with protrusion of the intervertebral disc. Avrahami E, et al. **Spine** 1990 Jan;15(1):21–3
The CT appearances of arachnoiditis ossificans. Jaspan T, et al. **Spine** 1990 Feb;15(2):148–51
Postsurgical lumbar calcified extradural cyst. Report of a case. Shifrin LZ, et al. **Spine** 1990 Mar;15(3):229–31
Computed tomographic study of cervical carotid calcification. Culebras A, et al. **Stroke** 1989 Nov; 20(11):1472–6
Giant prostatic fossa with misleading radiographic features. Stenzl A, et al. **Urol Radiol** 1989;11(3):169–71
[Investigation on calcifications in the breast] Xu JG. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Aug; 23(4):198–200 (Eng. Abstr.) **(Chi)**
[Iconographic rubric. Idiopathic disc calcifications] Silberman B, et al. **Arch Fr Pediatr** 1990 May;47(5):377–8 **(Fre)**
[The value of preoperative location of microcalcifications without palpable breast tumors] Salmon RJ, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(3):333–6 (Eng. Abstr.) **(Fre)**
[Calcification of the umbilical artery in small infants] Sirinelli D, et al. **J Radiol** 1989;70(4):285–7 (Eng. Abstr.) **(Fre)**
[Diagnosis of calcified mediastinal opacity] Granier P, et al. **Rev Pneumol Clin** 1989;45(6):258–60 **(Fre)**
[Teutschländer disease—a rare benign soft tissue calcinosis. Case report] Rupf G, et al. **Aktuel Traumatol** 1990 Jun; 20(3):144–7 (Eng. Abstr.) **(Ger)**
[Bilateral exostoses of the anterior inferior iliac spine with dystopic calcinosis in the area of the rectus femoris muscle] Meyer HH, et al. **Beitr Orthop Traumatol** 1989 Aug; 36(8):384–6 **(Ger)**
[Periarticular calcinosis following implantation of total hip endoprostheses] Schulze HK, et al. **Beitr Orthop Traumatol** 1989 Jul;36(7):303–10 (Eng. Abstr.) **(Ger)**
[Preoperative marking of non-palpable breast findings with the hole screen tube] Schröcksnadel H, et al. **Gynakol Rundsch** 1989;29 Suppl 2:228–30 **(Ger)**
[Periarthritis calcarea of the finger joints] Schwarz M, et al. **Handchir Mikrochir Plast Chir** 1989 Nov;21(6):328–30 (Eng. Abstr.) **(Ger)**
[Peritendinitis calcarea of the hand, a case report] Wulle C, et al. **Handchir Mikrochir Plast Chir** 1990 Mar;22(2):92–5 (Eng. Abstr.) **(Ger)**
[Aortic calcification in CT. Correlation with risk factors and cardiovascular diseases] Görich J, et al. **Radiologe** 1989 Dec;29(12):614–9 (Eng. Abstr.) **(Ger)**
[Thoracic calcification in the elderly—frequency and clinical value] Mundinger A, et al. **Radiologe** 1989 Dec; 29(12):596–604 (37 ref.) (Eng. Abstr.) **(Ger)**
[A calcified tumor in the mesenterium. Ovarian carcinoma with a calcified metastasis in the abdominal wall ("omental cake"), histologically cystadenocarcinoma] Rieber A, et al. **Radiologe** 1990 Mar;30(3):145–6 **(Ger)**
[Bladder calcinosis caused by schistosomiasis] von Wechmar M, et al. **Rontgenblatter** 1989 Oct;42(10):435–6 (Eng. Abstr.) **(Ger)**
[A case of myocardial calcification] Furuse S. **Rinsho Hoshasen** 1990 Jul;35(7):861–2 **(Jpn)**
[CT fiadings of the benign tracheobronchial lesions with calcification] Ohkubo Y, et al. **Rinsho Hoshasen** 1990 Jul; 35(7):839–46 (Eng. Abstr.) **(Jpn)**
[CT evidence of high density area in bilateral striatum secondary to anoxia] Iwasaki Y, et al. **Rinsho Shinkeigaku** 1989 Aug;29(8):1045–7 (Eng. Abstr.) **(Jpn)**
[Radiographic diagnosis of calcinosis of the coronary arteries in young patients] Tseluiko VI, et al. **Kardiologiia** 1990 Mar;30(3):103–5 **(Rus)**
[Macroaggregated calcifications in cancer of the breast] Ostrovskaia IM, et al. **Vestn Rentgenol Radiol** 1989 Jul–Aug;(4):39–44 (Eng. Abstr.) **(Rus)**
[Calcification of the basal ganglia. Study of 16 cases] Roquer J, et al. **Neurologia** 1987 Sep–Oct;2(5):221–6 (23 ref.) (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

Calcification in the supraspinatus tendon detected on bone scan. Slavin JD Jr, et al. **Clin Nucl Med** 1989 Dec; 14(12):921–2
Bone scintigraphy in calcific discitis of childhood. Delpassand ES, et al. **J Nucl Med** 1990 Feb;31(2):234–6
[Bone scintigraphy of metastatic calcifications] Koizumi Y, et al. **Rinsho Hoshasen** 1989 Sep;34(9):1059–62 (Eng. Abstr.) **(Jpn)**
[Metastatic calcifications detected by Tc-99m MDP bone scanning in patients with hypercalcemia: case report] Sugita R, et al. **Rinsho Hoshasen** 1990 Mar;35(3):419–22 (Eng. Abstr.) **(Jpn)**

SURGERY

Repair of the calcified ventricular aneurysm. Cooley DA. **Ann Thorac Surg** 1990 Mar;49(3):489–90
Coronary artery bypass grafting in patients with calcified ascending aorta: aortic no-touch technique. Suma H. **Ann Thorac Surg** 1989 Nov;48(5):728–30
Calcifectomy for ductal carcinoma in situ [letter; comment] Shetty MR. **Br J Surg** 1989 Jun;76(6):655 Comment on: Br J Surg 1989 Feb;76(2):185–6.
Aortic valve decalcification revisited. Marty AT, et al. **Indiana Med** 1989 Nov;82(11):880–1
Heterotopic ossification: can early surgery be performed, with a positive bone scan? Peters WJ. **J Burn Care Rehabil** 1990 Jul–Aug;11(4):318–21
A comparison of repair and replacement for mitral stenosis with partially calcified valve. Eguaras MG, et al. **J Thorac Cardiovasc Surg** 1990 Aug;100(2):161–6
Aortic valve decalcification. McBride LR, et al. **J Thorac Cardiovasc Surg** 1990 Jul;100(1):36–42; discussion 42–3
Pulsed holmium laser ablation of cardiac valves. Lilge L, et al. **Lasers Surg Med** 1989;9(5):458–64
Endoscopic cysto-enterostomy of cysts of chronic calcifying pancreatitis. Sahel J. **Z Gastroenterol** 1990 Mar;28(3):170–2

THERAPY

Ultrasonic debridement of the aortic valve with six-month echocardiographic follow-up. Scott WJ, et al. **Am J Cardiol** 1989 Nov 15;64(18):1206–9
Calcinosis circumscripta: indications for surgery. Lipskeir E, et al. **Bull Hosp Jt Dis Orthop Inst** 1989 Spring;49(1):75–84
Balloon valvotomy of calcified pulmonary valve stenosis. Goudevenos J, et al. **Cardiology** 1990;77(1):55–7
Densely calcified gallstone treated successfully with piezoelectric lithotripsy. ALbert MB, et al. **Gastroenterology** 1990 Mar;98(3):777–9
"Conservative" aortic valve intervention: thwarted again! [editorial; comment] Campbell DB, et al. **J Am Coll Cardiol** 1990 Sep;16(3):631–2 Comment on: J Am Coll Cardiol 1990 Sep;16(3):623–30.
Ultrasonic aortic valve decalcification: serial Doppler echocardiographic follow-up [see comments] Freeman WK, et al. **J Am Coll Cardiol** 1990 Sep;16(3):623–30 Comment in: J Am Coll Cardiol 1990 Sep;16(3):631–2.
Can mechanical dilatation improve the function of calcified heart valves? Björk VO. **Monogr Atheroscler** 1990;15:20–1
[Puncture-lavage of calcifications of the sub-epineural tendon] Kuta J, et al. **Acta Belg Med Phys** 1989 Jul–Sep; 12(3):89 **(Fre)**
[Laser angioplasty and the removal of calcified plaques. An in vitro study] Vorwerk D, et al. **ROFO** 1990 Jun; 152(6):693–7 (Eng. Abstr.) **(Ger)**
[Hemodynamic and clinical results following percutaneous aortic valve valvuloplasty in adults] Scherer HE, et al. **Z Kardiol** 1990 Jul;79(7):489–98 (Eng. Abstr.) **(Ger)**
[Rupture and fragmentation of a polyethylene terephthalate balloon catheter in a calcified coronary artery stenosis] Schräder R, et al. **Z Kardiol** 1990 Mar;79(3):199–202 (Eng. Abstr.) **(Ger)**
[A case report of ultrasonic decalcification for calcified bicuspid aortic valve stenosis] Matsui M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Nov;37(11):2382–6 (Eng. Abstr.) **(Jpn)**
[Calcinosis tumoralis. Pharmacological alternatives to surgical treatment and its etiological justification] Gregosiewicz A, et al. **Chir Narzadow Ruchu Ortop Pol** 1989;54(2):159–63 (Eng. Abstr.) **(Pol)**
[Coronary angioplasty on calcified lesions] Alfonso F, et al. **Rev Esp Cardiol** 1990 Apr;43(4):231–8 (Eng. Abstr.) **(Spa)**

VETERINARY

Calcinosis circumscripta of the metacarpal pad in a dog. Stampley A, et al. **J Am Vet Med Assoc** 1990 Jan 1; 196(1):113–4
Soft tissue mineralization in rabbits fed a diet containing excess vitamin D. Zimmerman TE, et al. **Lab Anim Sci** 1990 Mar;40(2):212–5
Ultrastructure of spontaneous degenerative lesions in the tongue of DBA mice. Itagaki S, et al. **Nippon Juigaku Zasshi** 1989 Dec;51(6):1231–3
A case of solanum malacoxylon toxicity in pigs. Campero CM, et al. **Vet Hum Toxicol** 1990 Jun;32(3):238–9
Hypercalcaemia and soft tissue mineralisation associated with lymphosarcoma in two horses. Mair TS, et al. **Vet Rec** 1990 Feb 3;126(5):99–101

CALCIPHYLAXIS see under **CALCINOSIS**

CALCITONIN

Expression of calcitonin receptors during osteoclast differentiation in mouse metatarsals. Taylor LM, et al. **J Bone Miner Res** 1989 Oct;4(5):751–8
[Calcitonin] Kraiem A, et al. **Tunis Med** 1989 Aug–Sep; 67(8–9):473–9 (47 ref.) **(Fre)**

ADMINISTRATION & DOSAGE

Efficacy of intranasal human calcitonin in patients with Paget's disease refractory to salmon calcitonin. Muff R, et al. **Am J Med** 1990 Aug;89(2):181–4
Treatment of multiple myeloma with nasal spray calcitonin: a histomorphometric and biochemical study. Rico H, et al. **Bone Miner** 1990 Mar;8(3):231–7
Acute effect of the intranasal administration of salmon calcitonin in osteoporotic women. Vega E, et al. **Bone Miner** 1989 Nov;7(3):267–73
Effects of intranasal calcitonin administration on pituitary GH response to hGHRH (1–29)NH2 in normal adult subjects. Giustina A, et al. **Clin Endocrinol (Oxf)** 1989 Jun; 30(6):699–704
A comparison of the acute effects of subcutaneous and intranasal calcitonin. O'Doherty DP, et al. **Clin Sci** 1990 Feb;78(2):215–9
Plasma beta-endorphin, ACTH and cortisol secretion in man after nasal spray administration of calcitonin. Franceschini R, et al. **Eur J Clin Pharmacol** 1989;37(4):341–3
Calcitonin nasal spray for painful diabetic neuropathy [letter] Zieleniewski W. **Lancet** 1990 Aug 18;336(8712):449
[The new concept of osteoporosis. Early diagnosis, prevention and therapy are possible today] Hesch RD, et al. **Fortschr Med** 1990 Apr 15;108(11):219–21 (Eng. Abstr.) **(Ger)**
[Early therapy of osteoporosis with (1–38) parathyroid hormone and calcitonin nasal spray] Hesch RD, et al. **Med Klin** 1989 Oct 15;84(10):488–98 (63 ref.) **(Ger)**
[Morphologic study of iliac crest spongiosa in patients with osteoporosis treated with combination therapy of pulsatile administration of parathyroid hormone (1–38 hPTH) and sequential addition of calcitonin nasal spray] Vogel M, et al. **Med Klin** 1990 Feb 15;85(2):82–6 (Eng. Abstr.) **(Ger)**
[Effects of activate-depress-free-repeat (ADFR) treatment on bone mass in old beagles with osteoporosis] Kuranobu K. **Nippon Seikeigeka Gakkai Zasshi** 1990 May; 64(5):430–41 (Eng. Abstr.) **(Jpn)**

ANALOGS & DERIVATIVES

Evidence for calcitonin receptor heterogeneity: binding studies with nonhelical analogs. Nakamuta H, et al. **Endocrinology** 1990 Jul;127(1):163–9
A noncyclical analog of salmon calcitonin (N alpha-propionyl Di-Ala1,7,des-Leu19 sCT) retains full potency without inducing anorexia in rats. Yates AJ, et al. **Endocrinology** 1990 Jun;126(6):2845–9
Study of a series of analogs of salmon calcitonin in which alanine replaces leucine. Epand RM, et al. **Eur J Biochem** 1990 Mar 30;188(3):633–5
Stimulatory effect of calcitonin on bone formation in tissue culture. Yamaguchi M, et al. **J Pharmacobiodyn** 1989 Nov; 12(11):708–15
Antiulcer activity of eel-calcitonin (elcatonin) is associated with enhanced gastric mucosal PGE2 generation in the rat. Goto Y, et al. **Jpn J Pharmacol** 1990 Feb;52(2):379–82
[Effectiveness of synthetic calcitonin derivative (elcatonin) on the bone pain and serum calcium concentration in multiple myeloma] Hirota Y, et al. **Gan To Kagaku Ryoho** 1990 May;17(5):1059–63 (Eng. Abstr.) **(Jpn)**
[Quantitative assessment of gastric mucosal bleeding in the development of acute gastric mucosal lesions in the rat and prophylactic effect of elcatonin] Goto Y, et al. **Nippon Yakurigaku Zasshi** 1990 Mar;95(3):113–9 (Eng. Abstr.) **(Jpn)**

ANALYSIS

An immunohistochemical study of calcitonin-containing cells in benign and malignant thyroid lesions. Inoue S, et al. **Acta Pathol Jpn** 1990 Mar;40(3):187–92
Pulmonary bombesin and calcitonin in hamsters during exposure to hyperoxia and diethylnitrosamine. Nylen ES, et al. **Am J Respir Cell Mol Biol** 1990 Jan;2(1):25–31
Concentration of calcitonin in seminal plasma of infertile men. Badr O, et al. **Andrologia** 1989 Sep–Oct;21(5):416–22
Sequential 1H NMR assignment and secondary structure determination of salmon calcitonin in solution. Motta A, et al. **Biochemistry** 1989 Oct 3;28(20):7996–8002
The development of a two-site enzyme immunometric assay (EIA) for calcitonin and its application in the measurement of the hormone in normal subjects, MTC-patients and post-menopausal women. Seth R, et al. **Horm Metab Res Suppl** 1989;21:3–5
Diagnosis of medullary carcinoma of the thyroid (MCT) by calcitonin assay using monoclonal antibodies: criteria for the pentagastrin stimulation test in hereditary MCT. Guilloteau D, et al. **J Clin Endocrinol Metab** 1990 Oct; 71(4):1064–7
A new approach for calcitonin determination based on target cell responsiveness. Zaidi M, et al. **J Endocrinol Invest** 1990 Feb;13(2):119–26
The significance of immunochemically staining calcitonin and CEA in fine-needle aspiration biopsy materials from medullary carcinoma of the thyroid. Takeichi N, et al. **Jpn J Surg** 1989 Nov;19(6):674–8
Distribution of calcitonin gene-related peptide and calcitonin-like immunoreactivity in trout. Fouchereau-Peron M, et al. **Regul Pept** 1990 Feb 4; 27(2):171–9
Calcitonin, calcitonin gene-related peptide, and gastrin-releasing peptide in familial thyroid medullary carcinoma. Månsson B, et al. **Surgery** 1990 Feb;107(2):182–6
Gastrin-releasing peptide-, calcitonin gene-related peptide-, and calcitonin-like immunoreactivity in human breast cyst

fluid and gastrin-releasing peptide-like immunoreactivity in human breast carcinoma cell lines. Weber CJ, et al. **Surgery** 1989 Dec;106(6):1134–9; discussion 1139–40

Carcinoembryonic antigen, arginine vasopressin and calcitonin as markers of early small-cell lung cancer relapse. Biran H, et al. **Tumour Biol** 1989;10(5):258–67

[Detection of medullary cancer of the thyroid. Contribution of calcitonin determination by an immunoradiometric method using 2 monoclonal antibodies (letter)] Bigorgne JC, et al. **Presse Med** 1989 Oct 28;18(35):1754 **(Fre)**

ANTAGONISTS & INHIBITORS

Uncoupling of receptor-mediated cellular responses by ionic lithium. Zaidi M, et al. **J Endocrinol** 1989 Nov;123(2):R5–7

BIOSYNTHESIS

Calcitonin variations in male and female trout, Salmo gairdneri, during the annual cycle. Fouchereau-Peron M, et al. **Gen Comp Endocrinol** 1990 May;78(2):159–63

Ontogenesis of calcitonin mRNA in the rabbit. Jousset V, et al. **J Bone Miner Res** 1990 May;5(5):475–81

Production of calcitonin gene-related peptide from human cancer cells. Zaidi M, et al. **J Endocrinol** 1989 Oct; 123(1):159–65

[Calcitonin: properties and methods of production] Myshkina LA, et al. **Bioorg Khim** 1989 Dec;15(12):1589–601 (114 ref.) (Eng. Abstr.) **(Rus)**

BLOOD

Is thyrotropin-releasing hormone as reliable a calcitonin stimulant as pentagastrin in medullary thyroid carcinoma? Ahuja S. **Acta Endocrinol (Copenh)** 1990 May;122(5):640–2

Bone mineral analysis in obese children [letter; comment] de la Torre W, et al. **Acta Paediatr Scand** 1990 Mar; 79(3):362–3 Comment on: Acta Paediatr Scand 1988 Sep;77(5):741–6.

Calcitonin, estradiol, and hydroxyproline as parameters in the early diagnosis of involutional osteoporosis. The importance of the "second calcitonin phenomenon". Ferrández L, et al. **Arch Orthop Trauma Surg** 1990; 109(4):181–5

Medullary carcinoma of the thyroid: management of persistent hypercalcitonaemia utilizing [99mTc] (v) dimercaptosuccinic acid scintigraphy. Udelsman R, et al. **Br J Surg** 1989 Dec;76(12):1278–81

Calcitonin reserve in healthy women and patients with postmenopausal osteoporosis. Pérez Cano R, et al. **Calcif Tissue Int** 1989 Oct;45(4):203–8

Results of a screening program for C-cell disease (medullary thyroid cancer and C-cell hyperplasia). Simpson WJ, et al. **Cancer** 1990 Apr 1;65(7):1570–6

Identification and measurement of calcitonin precursors in serum of patients with malignant diseases. Ghillani PP, et al. **Cancer Res** 1989 Dec 1;49(23):6845–51

Monoclonal immunoradiometric assay of calcitonin improves investigation of familial medullary thyroid carcinoma. Perdrisot R, et al. **Clin Chem** 1990 Feb;36(2):381–3

Calcitonin gene-related peptide and calcitonin as tumour markers in MEN 2 family screening. Schifter S. **Clin Endocrinol (Oxf)** 1989 Mar;30(3):263–70

Development of an avian calcitonin radioimmunoassay using synthetic chicken calcitonin as immunogen. McMurtry JP, et al. **Comp Biochem Physiol [B]** 1989;94(1):49–51

17 beta-estradiol increases plasma calcitonin levels in salmonid fish. Björnsson BT, et al. **Endocrinology** 1989 Oct; 125(4):1754–60

Regulation of calciotropic hormones in vivo in the New Zealand white rabbit. Warren HB, et al. **Endocrinology** 1989 Nov;125(5):2683–90

Changes in plasma vitellogenin, sex steroids, calcitonin, and thyroid hormones related to sexual maturation in female brown trout (Salmo trutta). Norberg B, et al. **Gen Comp Endocrinol** 1989 Aug;75(2):316–26

A preliminary evaluation of calcitonin and PDN-21 as tumor markers for lung cancer. EORTC Lung Cancer Working Party. Body JJ, et al. **Henry Ford Hosp Med J** 1989; 37(3–4):190–3

Use of somatostatin analog SMS 201-995 in medullary thyroid carcinoma. Libroia A, et al. **Henry Ford Hosp Med J** 1989;37(3–4):151–3

Postoperative pentagastrin-stimulated serum calcitonin concentrations in patients with medullary thyroid carcinoma: reoperations in patients with concentrations bordering the detection limit. Meybier H, et al. **Henry Ford Hosp Med J** 1989;37(3–4):138–40

Effects of short-term subcutaneous administration of SMS 201-995 on calcitonin plasma levels in patients suffering from medullary thyroid carcinoma. Guliana JM, et al. **Horm Metab Res** 1989 Oct;21(10):584–6

Circulating levels of calcitonin gene-related peptide in patients with medullary thyroid carcinoma. Kim S, et al. **J Clin Chem Clin Biochem** 1989 Jul;27(7):423–7

Contribution of thyroid ultrasound and serum calcitonin to the diagnosis of congenital hypothyroidism. Chanoine JP, et al. **J Endocrinol Invest** 1990 Feb;13(2):103–9

Hypercalcitoninemia in acutely ill children [letter] Mallet E. **J Pediatr** 1990 Aug;117(2 Pt 1):337

PDN-21: possible tumor marker for medullary thyroid carcinoma. Takami H, et al. **J Surg Oncol** 1990 Aug; 44(4):205–7

Calcitonin assay may help identify burn patients at risk for respiratory distress [news] Skolnick A. **JAMA** 1990 Aug 1;264(5):565–6

Influence of ultraviolet irradiation on plasma vitamin D and calcitonin levels in humans. Kokot F, et al. **Kidney Int Suppl** 1989 Nov;27:S143–6

Effects of in vivo stimulation on molecular forms of circulatory calcitonin and calcitonin gene-related peptide in man. Wimalawansa SJ. **Mol Cell Endocrinol** 1990 May 28;71(1):13–9

Change of serum calcitonin in patients receiving glucocorticoids: an acute phase study. Mulder H, et al. **Neth J Med** 1990 Jun;36(5–6):288–90

Hypocalcemia and an inappropriate endocrine response in osteoblastic metastatic breast cancer. Bouvier DP. **South Med J** 1989 Dec;82(12):1574–6 (9 ref.)

[Postburn changes in serum levels of calcitonin, parathyroid hormone and 25-hydroxycholecalciferol] Xue Y. **Chung Hua I Hsueh Tsa Chih** 1989 Oct;69(10):555–9, 38 (Eng. Abstr.) **(Chi)**

[Katacalcin levels in healthy children and children with spasmophilia] Saggese G, et al. **Minerva Pediatr** 1989 Sep; 41(9):459–66 (30 ref.) (Eng. Abstr.) **(Ita)**

[Clinical significance of serum calcitonin analysis in endocrine tests of the thyroid-parathyroid system] Miki T, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:1097–100 **(Jpn)**

[Assessment of osteopenia following oophorectomy by quantitative computed tomography and its relation with Ca-regulating hormones] Ohta H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Sep;41(9):1471–8 (Eng. Abstr.) **(Jpn)**

[Serum levels of calcitonin, parathyroid hormone and 25-hydroxycholecalciferol in patients with diabetes mellitus] Blasiak M, et al. **Endokrynol Pol** 1989;40(5):241–50 (Eng. Abstr.) **(Pol)**

[Analysis of calcitonin level in the diagnosis and evaluation of the results of the treatment of medullary carcinoma of the thyroid gland] Krassowski J, et al. **Pol Tyg Lek** 1989 Aug 7–14;44(32–33):757–9 **(Pol)**

[The dynamics of parathyroid hormone and calcitonin in surgery with artificial circulation] Vinnitskiĭ LI, et al. **Anesteziol Reanimatol** 1989 Jul-Aug;(4):14–8 (Eng. Abstr.) **(Rus)**

[Calcium-regulating hormones in primary arterial hypotension in children] Kaloeva ZD. **Pediatriia** 1989; (12):41–2 (Eng. Abstr.) **(Rus)**

[The significance of a change in the calcitonin level of the blood in various carbohydrate metabolic states in the ontogeny of rats] Iaroshevskkiĭ IuA, et al. **Probl Endokrinol (Mosk)** 1989 Sep-Oct;35(5):81–4 (Eng. Abstr.) **(Rus)**

[Heterogeneity of calcitonin in liver cirrhosis] Sánchez JJ, et al. **Rev Clin Esp** 1989 Oct;185(5):235–9 (Eng. Abstr.) **(Spa)**

DEFICIENCY

Estrogens and progestogens conserve bone in rats deficient in calcitonin and parathyroid hormone. Goulding A, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):E903–8

Calcitonin and bone mass status in congenital hypothyroidism. Demeester-Mirkine N, et al. **Calcif Tissue Int** 1990 Apr;46(4):222–6

[Experimental study of thyroid hormone and bone metabolism in the rat] Ding G. **Chung Hua I Hsueh Tsa Chih** 1990 Apr;70(4):198–200, 16 (Eng. Abstr.) **(Chi)**

DRUG EFFECTS

Stimulating effect of calcium channel activator BAY-K 8644 on calcitonin secretion. Gozariu L, et al. **Endocrinologie** 1989 Oct-Dec;27(4):231–5

GENETICS

Increase in calcitonin mRNA levels in rats at high risk of C cell tumours is genetically determined. Delehaye MC, et al. **Biochem Biophys Res Commun** 1990 Feb 28; 167(1):232–7

Changes in calcitonin gene RNA processing during growth of a human medullary thyroid carcinoma cell line. Nelkin BD, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):6949–52

Transcriptional and post-transcriptional strategies in neuroendocrine gene expression. Rosenfeld M, et al. **Dev Biol (N Y 1985)** 1988;5:317–34 (67 ref.)

Additive effects of dexamethasone and calcium on the calcitonin mRNA level in adrenalectomized rats. Besnard P, et al. **FEBS Lett** 1989 Dec 4;258(2):293–6

Evolutionary pathways of the calcitonin (CALC) genes. Lips CJ, et al. **Henry Ford Hosp Med J** 1989;37(3–4):201–3

Transcriptional regulation of the human calcitonin gene: a progress report. Peleg S, et al. **Henry Ford Hosp Med J** 1989;37(3–4):194–7

Actinomycin D inhibits the rapid increase in translatable calcitonin mRNA provoked by acute calcium stimulation. Segond N, et al. **Horm Metab Res** 1989 Sep;21(9):489–93

Expression of synthetic calcitonin genes in plasmid vectors containing tandemly repeated non-overlapping ribosome binding sites. Alexciev K, et al. **Int J Biochem** 1989; 21(9):987–96

Transfection of calcitonin gene regulatory elements into a cell culture model of the C cell. Cote GJ, et al. **J Bone Miner Res** 1990 Feb;5(2):165–71

Detection of calcitonin-encoding mRNA by radioactive and non-radioactive in situ hybridization: improved colorimetric detection and cellular localization of mRNA in thyroid sections. Denijn M, et al. **J Histochem Cytochem** 1990 Mar;38(3):351–8

Histochemical detection of the messenger RNAs coding for calcitonin and calcitonin gene-related peptide in medullary thyroid carcinomas with radioactive and biotinylated oligonucleotide probes. Mougin C, et al. **J Pathol** 1990 Mar; 160(3):187–94

Chemical synthesis and characteristics of a hybrid phage T5-lac promoter. Ivanov I, et al. **Microbiologica** 1990 Apr; 13(2):85–90

Differential utilization of calcitonin gene regulatory DNA sequences in cultured lines of medullary thyroid carcinoma and small-cell lung carcinoma. de Bustros A, et al. **Mol Cell Biol** 1990 Apr;10(4):1773–8

A tissue-specific enhancer in the rat-calcitonin/CGRP gene is active in both neural and endocrine cell types. Stolarsky-Fredman L, et al. **Mol Endocrinol** 1990 Mar; 4(3):497–504

[Katacalcin levels in healthy children and children with spasmophilia] Saggese G, et al. **Minerva Pediatr** 1989 Sep; 41(9):459–66 (30 ref.) (Eng. Abstr.) **(Ita)**

[Structure and regulation of the expression of calcitonin and CGRP genes and processing of the precursors] Fujita T. **Nippon Rinsho** 1989 Oct;47(10):2231–5 **(Jpn)**

IMMUNOLOGY

In vitro detection of neutralizing antibodies after treatment of Paget's disease of bone with nasal salmon calcitonin. Grauer A, et al. **J Bone Miner Res** 1990 Apr;5(4):387–91

ISOLATION & PURIFICATION

Stability of the hypocalcemic activity of porcine thyrocalcitonin. Tashjian AH Jr, et al. **Endocrinology** 1967 Aug;81(2):306–18

METABOLISM

"Hypoparathyroidism", hyperostosis, normophosphataemia and thyrocalcitonin. A possible case of hyperthyrocalcitoninism. Fischer JA, et al. **Acta Endocrinol (Copenh)** 1967 Aug;55(4):562–72

Localization and origins of calcitonin gene-related peptide containing fibres in the vestibular end-organs of the rat. Tanaka M, et al. **Acta Otolaryngol Suppl (Stockh)** 1989; 468:31–4

Heat shock proteins bind calcitonin. Dana RC, et al. **Endocrinology** 1990 Jan;126(1):672–4

Evidence for calcitonin receptor heterogeneity: binding studies with nonhelical analogs. Nakamuta H, et al. **Endocrinology** 1990 Jul;127(1):163–9

Thyroidal content of thyrocalcitonin in hypothyroid and hyperthyroid rats. Yasumura S, et al. **Endocrinology** 1967 Aug;81(2):256–60

Cholinergic regulation of hamster pulmonary neuroendocrine cell calcitonin. Tabassian AR, et al. **Exp Lung Res** 1990 May-Jun;16(3):267–77

Distribution of renal calcitonin binding sites in mammalian and nonmammalian vertebrates. Bouizar Z, et al. **Gen Comp Endocrinol** 1989 Dec;76(3):364–70

Pulmonary endocrine cells in hypertensive pulmonary vascular disease. Heath D, et al. **Histopathology** 1990 Jan; 16(1):21–8

Calcitonin production: an examination of the regulatory effects of extracellular calcium and 1,25-dihydroxyvitamin D3. Cote GJ, et al. **Horm Metab Res Suppl** 1989;21:15–8

The calcitonin receptor: characterization and processing. Raue F, et al. **Prog Clin Biol Res** 1990;332:67–79 (25 ref.)

Calcitonin free oat-cell carcinoma of the thyroid gland. Eusebi V, et al. **Virchows Arch [A]** 1990;417(3):267–71

[Parathyroid hormone and calcitonin receptors] Bouizar Z, et al. **Ann Endocrinol (Paris)** 1989;50(5):464–71 (41 ref.) (Eng. Abstr.) **(Fre)**

[Tissue distribution and physiologic role of calcitonin and CGRP] Inaba M, et al. **Nippon Rinsho** 1990 May; 48(5):1011–5 **(Jpn)**

PHARMACOKINETICS

Absorption of intranasal salmon calcitonin in normal subjects and hypogonadic men. Pun KK, et al. **Calcif Tissue Int** 1990 Feb;46(2):130–2

Nasal administration of glucagon and human calcitonin to healthy subjects: a comparison of powders and spray solutions and of different enhancing agents. Pontiroli AE, et al. **Eur J Clin Pharmacol** 1989;37(4):427–30

The effect of bile salts on the oral mucosal absorption of human calcitonin in rats. Nakada Y, et al. **J Pharmacobiodyn** 1989 Dec;12(12):736–43

PHARMACOLOGY

Vitamin D metabolism in osteoporotic women during treatment with estrogen, an anabolic steroid, or calcitonin. Hartwell D, et al. **Acta Endocrinol (Copenh)** 1990 Jun; 122(6):715–21

Effects of synthetic salmon calcitonin on C cells of the thyroid. Kakudo K, et al. **Acta Pathol Jpn** 1989 Sep; 39(9):545–50

Effect of salmon calcitonin on the infiltration of T lymphocytes in a synovium-like membrane of a rat

inflammatory model. Grieder A, et al. **Agents Actions** 1990 Mar;29(3–4):308–14

Distinct hemodynamic and renal effects of calcitonin gene–related peptide and calcitonin in men. Gnaedinger MP, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):E848–54

Regulation of plasma calcium and phosphate in calcitonin–infused rats. Lausson S, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):E370–7

Effects of PTH, calcitonin, and cAMP on calcium transport in rabbit distal nephron segments. Shimizu T, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):F408–14

Absence of direct effect of beta–endorphin and calcitonin on human sperm motility. Graczykowski JW, et al. **Arch Androl** 1990;24(2):121–4

Pathophysiological and therapeutic aspects of dentoalveolar resorption. Pierce A. **Aust Dent J** 1989 Oct;34(5):437–48

Inhibition of the calcium pump by human parathyroid hormone–(1–34) and human calcitonin in liver plasma membranes. McKenzie RC, et al. **Biochem J** 1990 Mar 15; 266(3):817–22

Effects of thyroparathyroidectomy and of thyroxin and calcitonin on the tissue distribution of twelve elements in the rat. LeBlondel G, et al. **Biol Trace Elem Res** 1989 Mar; 19(3):171–83

Effect of calcitonin administration on young pig trabecular bone remodeling. de Vernejoul MC, et al. **Bone** 1990; 11(1):29–33

Comparison between the effects of forskolin and calcitonin on bone resorption and osteoclast morphology in vitro. Lerner UH, et al. **Bone** 1989;10(5):377–87

Calcitonin (but not calcitonin gene–related peptide) increases mouse bone cell proliferation in a dose–dependent manner, and increases mouse bone formation, alone and in combination with fluoride. Farley JR, et al. **Calcif Tissue Int** 1989 Oct;45(4):214–21

The effect of high–dose salmon calcitonin on bone mineral metabolism in the normal rat. Glajchen N, et al. **Calcif Tissue Int** 1990 Jan;46(1):28–32

The effect of different doses of nasal salmon calcitonin on plasma cyclic AMP and serum ionized calcium. Thamsborg G, et al. **Calcif Tissue Int** 1990 Jan;46(1):5–8

The effect of calcitonin on growth hormone secretion in acromegaly. Looij BJ Jr, et al. **Clin Endocrinol (Oxf)** 1989 Nov;31(5):573–9

Prevention of experimental calcinosis by salmon calcitonin in rats. Czirfusz A, et al. **Endocrinol Exp** 1989 Dec; 23(4):321–6

Calcitonin decreases thyrotropin–releasing hormone–stimulated prolactin release through a mechanism that involves inhibition of inositol phosphate production. Judd AM, et al. **Endocrinology** 1990 Jul;127(1):191–9

Effects of parathyroid hormone and calcitonin on alkaline phosphatase activity and matrix calcification in rabbit growth–plate chondrocyte cultures. Kato Y, et al. **Endocrinology** 1990 Jul;127(1):114–8

Mode of action of thyrocalcitonin. O'Riordan JL, et al. **Endocrinology** 1968 Feb;82(2):377–83

Calcitonin inhibits basal and thyrotropin–releasing hormone–induced release of prolactin from anterior pituitary cells: evidence for a selective action exerted proximal to secretagogue–induced increases in cytosolic Ca2+. Shah GV, et al. **Endocrinology** 1990 Aug; 127(2):621–8

Calcitonin inhibits thyrotropin–releasing hormone–induced increases in cytosolic Ca2+ in isolated rat anterior pituitary cells. Shah GV, et al. **Endocrinology** 1990 Aug; 127(2):613–20

A noncyclical analog of salmon calcitonin (N alpha–propionyl Di–Ala1,7,des–Leu19 sCT) retains full potency without inducing anorexia in rats. Yates AJ, et al. **Endocrinology** 1990 Jun;126(6):2845–9

Intrathecal porcine calcitonin enhances the release of [Met5]enkephalin–like material from the rat spinal cord. Collin E, et al. **Eur J Pharmacol** 1989 Sep 13;168(2):201–8

Oxytocin does not modify glucagon– or calcitonin–induced ACTH–cortisol rise in humans. Volpi R, et al. **Horm Metab Res** 1989 Nov;21(11):635–7

Effect of calcitonin and 1,25(OH)2–vitamin D3 on the FSH, LH and testosterone secretion at rest and LHRH stimulated secretion. Zofková I, et al. **Horm Metab Res** 1989 Dec; 21(12):682–5

Interferon gamma and calcitonin induce differential changes in cellular kinetics and morphology of osteoclasts in cultured neonatal mouse calvaria. Klaushofer K, et al. **J Bone Miner Res** 1989 Aug;4(4):585–606

Effects of parathyroid hormone, calcitonin, and dibutyryl–cyclic AMP on osteoclast area in cultured chick tibia. Pandalai S, et al. **J Bone Miner Res** 1990 Jul; 5(7):701–5

Calcitonin receptors on circulating normal human lymphocytes. Body JJ, et al. **J Clin Endocrinol Metab** 1990 Sep;71(3):675–81

Human monocyte chemotactic activity of calcitonin and somatostatin related peptides: modulation by chronic peptide treatment. Sacerdote P, et al. **J Clin Endocrinol Metab** 1990 Jan;70(1):141–8

Effect of calcitonin on gastric emptying and on serum insulin and gastrin concentrations after ingestion of a mixed solid–liquid meal in humans. Jonderko K, et al. **J Clin Gastroenterol** 1990 Feb;12(1):22–8

In vitro effects of calcitonin and/or parathyroid hormone on odontogenesis of mouse embryonic molars. Sakakura Y, et al. **J Dent Res** 1989 Aug;68(8):1279–84

Calcitonin, prostaglandin E2, and dibutyryl cyclic adenosine 3',5'–monophosphate disperse the specific microfilament structure in resorbing osteoclasts. Lakkakorpi PT, et al. **J Histochem Cytochem** 1990 Oct;38(10):1487–93

Stimulation of adult chondrocyte metabolism by a thyroid–derived factor. Jones DG, et al. **J Orthop Res** 1990 Mar;8(2):227–33

hCGRP8–37, a calcitonin gene–related peptide antagonist revealing calcitonin gene–related peptide receptor heterogeneity in brain and periphery. Dennis T, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):123–8

The activity of several peptide fragments of parathyroid hormone, alone and in combination with salmon calcitonin and morphine, in antinociceptive tests in the mouse. Welch SP, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):140–6

Effects of hormones and drugs on cartilage repair. Franchimont P, et al. **J Rheumatol Suppl** 1989 Aug;18:5–9

Relationships between the effects of peripherally administered salmon calcitonin on calcaemia and brain biogenic amines. Gaggi R, et al. **Jpn J Pharmacol** 1989 Nov;51(3):309–20

Calcitonin inhibits accumulation of cyclic AMP in stimulated peritoneal macrophages from normal rats but not from osteopetrotic (incisors–absent) littermates. Popoff SN, et al. **Life Sci** 1989;45(21):2007–13

Specific inhibition of basal gastric acid secretion by salmon calcitonin in rats does not necessarily involve a central pathway. Guidobono F, et al. **Pharmacol Res** 1990 May–Jun;22(3):287–95

Effects of cholecystokinin and calcitonin on evoked brain potentials and satiety in man. Pietrowsky R, et al. **Physiol Behav** 1989 Sep;46(3):513–9

Immunocytology on microwave–fixed cells reveals rapid and agonist–specific changes in subcellular accumulation patterns for cAMP or cGMP [published erratum appears in Proc Natl Acad Sci U S A 1990 May;87(9):3633] Barsony J, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1188–92

Procalcitonin's amino–terminal cleavage peptide is a bone–cell mitogen. Burns DM, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9519–23

Source of urinary cyclic AMP in response to calcitonin and parathyroid hormone in the rat. Firek AF, et al. **Res Commun Chem Pathol Pharmacol** 1990 Jan; 67(1):147–50

Additive interactions of calcitonin gene–related peptide and calcitonin on pancreatic exocrine function in conscious dogs. Nealon WH, et al. **Surgery** 1990 Apr;107(4):434–41

[Calcitonin gene products and the skeleton] Fischer JA, et al. **Z Orthop** 1990 May–Jun;128(3):240–2 (32 ref.) (Eng. Abstr.) **(Ger)**

[In vitro effect of calcitonin on guinea pig gallbladder] Portincasa P, et al. **Boll Soc Ital Biol Sper** 1989 Sep; 65(9):869–75 (Eng. Abstr.) **(Ita)**

[Effect of calcitonin on gallbladder volume between food intake and on its emptying after meals in humans] Jonderko G, et al. **Pol Arch Med Wewn** 1989 Jan;81(1):7–12 (Eng. Abstr.) **(Pol)**

[Effects of several regulatory peptides on the functional activity of the pancreas in acute experimental pancreatitis] Grigorevskiĭ VP, et al. **Biull Eksp Biol Med** 1989 Oct; 108(10):428–30 (Eng. Abstr.) **(Rus)**

[Effect of calcitonin on insulin and glucagon secretion by the pancreas] Iaroshevskiĭ IuA, et al. **Probl Endokrinol (Mosk)** 1989 Jul–Aug;35(4):58–61 (Eng. Abstr.) **(Rus)**

[Results of the functional tests using calcitonin in patients with chronic diffuse hepatopathy] Lorenzo A, et al. **Rev Clin Esp** 1990 Apr;186(6):270–3 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Protein kinase–C–induced down–regulation of calcitonin receptors and calcitonin–activated adenylate cyclase in T47D and BEN cells. Findlay DM, et al. **Endocrinology** 1989 Nov;125(5):2656–63

In vivo effect of thyrocalcitonin on bone solubility. Khan BT, et al. **Endocrinology** 1967 Aug;81(2):398–9

Possible participation of calcium–regulating factors in senile dementia in elderly female subjects. Ogihara T, et al. **Gerontology** 1990;36 Suppl 1:25–30

Regulation of plasma calcium in man: the influence of parathyroid hormone and calcitonin. Gudmundsson TV, et al. **Hormones** 1971;2(1):26–39 (70 ref.)

Calcitonin gene products and the kidney. Kurtz A, et al. **Klin Wochenschr** 1989 Sep 1;67(17):870–5 (45 ref.)

[The role of calcium homeostasis hormones in the development of tolerance following drug and alcohol consumption] Balabanova S, et al. **Beitr Gerichtl Med** 1989; 47:379–83 (Eng. Abstr.) **(Ger)**

[Functional state of the calcium–regulating system in patients with bronchial asthma] Chuchalin AG, et al. **Klin Med (Mosk)** 1989 Aug;67(8):56–9 (Eng. Abstr.) **(Rus)**

SECRETION

Monomeric calcitonin secretion in infants with congenital hypothyroidism. Zamboni G, et al. **Acta Paediatr Scand** 1989 Nov;78(6):885–8

Human medullary thyroid carcinoma: cell cultures and xenotransplants in nude mice. Immunocytochemistry and calcitonin secretion. Andry G, et al. **Eur J Surg Oncol** 1989 Dec;15(6):556–63

Modulation of calcitonin secretion by modification of calcium channels? Scherubl H, et al. **Henry Ford Hosp Med J** 1989; 37(3–4):198–200

Maitotoxin induces calcitonin secretion from rat thyroid C–cells in vitro. Nishiyama I, et al. **Horm Metab Res** 1990 Apr;22(4):258–9

Secretory protein 7B2. A novel tumor marker of medullary carcinoma of the thyroid. Ohashi M, et al. **Horm Metab Res** 1990 Feb;22(2):114–6

Calcitonin secretion and cyclic AMP–efflux from C–cells, stimulated by glucagon and either calcium or Bay K 8644. Scherübl H, et al. **Horm Metab Res Suppl** 1989;21:18–21

A case of calcitonin–producing parathyroid adenoma with primary hyperparathyroidism. Maeda T, et al. **Jpn J Med** 1989 Sep–Oct;28(5):640–6

Developmental change in calcitonin secretory capacity of fetal rat thyroid C–cells. Nishiyama I, et al. **Jpn J Pharmacol** 1990 Jan;52(1):149–53

Calcitonin and lumbar bone mineral content during oestrogen–progestogen administration in post–menopausal women. Isaia G, et al. **Maturitas** 1989 Dec;11(4):287–94

Differential release of calcitonin in sheep to calcium and pentagastrin stimulation. Klementschitsch P, et al. **Surg Forum** 1978;29:107–9

Inhibition of in vivo secretion of porcine calcitonin by somatostatin. Linehan WM, et al. **Surg Forum** 1978; 29:103–4

Effects of cyclic nucleotides on concurrent secretion of calcitonin and parathyroid hormone in vitro. Ross AJ 3d, et al. **Surg Forum** 1978;29:105–7

Metastasizing neuroendocrine carcinoma of the larynx with calcitonin and somatostatin secretion and CEA production, resembling medullary thyroid carcinoma. Smets G, et al. **Virchows Arch [A]** 1990;416(6):539–43

[Dynamic tests for calcium–regulating hormones in childhood. Evaluation of the incremental response in normal subjects] Saggese G, et al. **Minerva Pediatr** 1989 May;41(5):241–6 (Eng. Abstr.) **(Ita)**

[Dynamics of calcitonin secretion in tissue culture of medullary thyroid carcinoma] Martin RC, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Jan–Feb;44(1):36–9 (Eng. Abstr.) **(Por)**

[Ultrastructural changes in the C–cells of the thyroid gland of albino rats after experimental administration of cadmium] Kozlovskaia AG, et al. **Gig Sanit** 1990 May;(5):41–3 **(Rus)**

[Chronic effect of inorganic fluorides on the parathyroid and C–cells of the thyroid in industrial workers] Tokar' VI, et al. **Gig Sanit** 1989 Dec;(12):85–6 **(Rus)**

THERAPEUTIC USE

Salmon calcitonin: state of the art in prevention of postmenopausal bone loss? Reginster JY, et al. **Acta Belg Med Phys** 1989 Apr–Jun;12(2):41–6 (34 ref.)

Discontinuous calcitonin treatment of established osteoporosis—effects of withdrawal of treatment. Overgaard K, et al. **Am J Med** 1990 Jul;89(1):1–6

Treatment of steroid–induced osteopenia with calcitonin in corticosteroid–dependent asthma. A one–year follow–up study. Luengo M, et al. **Am Rev Respir Dis** 1990 Jul; 142(1):104–7

Treatment of migraine with salmon calcitonin: effects on plasma beta–endorphin, ACTH and cortisol levels. Ustdal M, et al. **Biomed Pharmacother** 1989;43(9):687–91

Effect of salcatonin given intranasally on early postmenopausal bone loss. Overgaard K, et al. **BMJ** 1989 Aug 19;299(6697):477–9

Biochemical responses to sequential human parathyroid hormone (1–38) and calcitonin in osteoporotic patients. Hodsman AB, et al. **Bone Miner** 1990 May;9(2):137–52

Calcitonin treatment in lumbar spinal stenosis: clinical observations. Eskola A, et al. **Calcif Tissue Int** 1989 Dec; 45(6):372–4

Estimated long–term effect of calcitonin treatment in acute osteoporotic spine fractures. Resch H, et al. **Calcif Tissue Int** 1989 Oct;45(4):209–13

Salmon calcitonin in the acute management of hypercalcemia. Wisneski LA. **Calcif Tissue Int** 1990;46 Suppl:S26–30 (29 ref.)

Nasal calcitonin for treatment of established osteoporosis. Overgaard K, et al. **Clin Endocrinol (Oxf)** 1989 Apr; 30(4):435–42

Potentiation of calcitonin by corticosteroids during the treatment of the hypercalcaemia of malignancy. Hosking DJ, et al. **Eur J Clin Pharmacol** 1990;38(1):37–41

Calcitonin therapy in osteoporotic syndromes. Avioli LV. **J Am Med Wom Assoc** 1990 May–Jun;45(3):103–7 (58 ref.)

Salmon calcitonin as adjunct treatment for vitamin D toxicosis in a dog. Dougherty SA, et al. **J Am Vet Med Assoc** 1990 Apr 15;196(8):1269–72

Calcitonin and calcium combined therapy in osteoporosis: effects on vertebra trabecular bone density. Ozoran K, et al. **J Int Med Res** 1989 Jul–Aug;17(4):395–400

Effects of synthetic salmon calcitonin therapy in children with osteogenesis imperfecta. Rebelo I, et al. **J Int Med Res** 1989 Jul–Aug;17(4):401–5

Influence of specific anti–salmon calcitonin antibodies on biological effectiveness of nasal salmon calcitonin in Paget's disease of bone. Reginster JY, et al. **Scand J Rheumatol** 1990;19(1):83–6

[Treatment and evolution of algodystrophy of the foot.

Retrospective study of 199 cases] Eulry F, et al. **Ann Med Interne (Paris)** 1990;141(1):20–5 (Eng. Abstr.) **(Fre)**

[Treatment of primary osteoporosis with calcium and salmon calcitonin] Ringe JD. **Dtsch Med Wochenschr** 1990 Aug 3;115(31–32):1176–82 (Eng. Abstr.) **(Ger)**

[Calcitonin and osteoporosis—a critical review of the literature 1980–1989] Haas HG, et al. **Klin Wochenschr** 1990 Apr 2;68(7):359–71 (62 ref.) (Eng. Abstr.) **(Ger)**

[Clinical efficacy of treatment with salmon calcitonin, administered intranasally for 1 year, in stabilized postmenopausal osteoporosis] Agnusdei D, et al. **Minerva Endocrinol** 1989 Jul–Sep;14(3):169–76 (Eng. Abstr.) **(Ita)**

[Salmon calcitonin nasal spray in the treatment of Paget's disease] Giustina A, et al. **Recenti Prog Med** 1989 Nov; 80(11):599–602 (Eng. Abstr.) **(Ita)**

[Eel calcitonin treatment on patients with urogenital carcinoma for relief of pain from metastatic bone lesions] Noguchi K, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Dec 20;24(11):2577–86 (Eng. Abstr.) **(Jpn)**

[A comparative study of the effectiveness of regulatory peptides in acute experimental pancreatitis] Grigorevskii VP, et al. **Biull Eksp Biol Med** 1989 Nov;108(11):571–4 (Eng. Abstr.) **(Rus)**

[The treatment of peptic ulcer patients with calcitrin] Starodub EM. **Vrach Delo** 1990 May;(5):9–11 (Eng. Abstr.) **(Rus)**

CALCITONIN GENE-RELATED PEPTIDE

Changes in CGRP-immunoreactive nerve fibres during experimental tooth movement in rats. Kvinnsland I, et al. **Eur J Orthod** 1990 Aug;12(3):320–9

Structure-activity relationship of calcitonin gene related peptide. Morita K, et al. **Horm Metab Res** 1989 Dec; 21(12):666–8

Calcitonin gene-related peptide in the nervous tissue. Ishida-Yamamoto A, et al. **Prog Neurobiol** 1989; 33(5–6):335–86 (281 ref.)

ADMINISTRATION & DOSAGE

Cardiovascular responses to intravenous calcitonin gene-related peptide (CGRP) in the albino rabbit. Andersson SE. **Acta Physiol Scand** 1989 Oct;137(2):279–90

Effects of intravenous calcitonin gene-related peptide (CGRP) on local blood flow in the cat. Andersson SE. **Acta Physiol Scand** 1989 Oct;137(2):259–70

The enhancement of carbachol-induced salivary secretion by VIP and CGRP in rat parotid gland is mimicked by forskolin. Larsson O, et al. **Acta Physiol Scand** 1989 Oct; 137(2):231–6

ANALOGS & DERIVATIVES

Activities of calcitonin gene-related peptide (CGRP) and related peptides at the CGRP receptor. Maton PN, et al. **Peptides** 1990 May–Jun;11(3):485–9

ANALYSIS

Calcitonin gene-related peptide in human nasal mucosa. Baraniuk JN, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):L81–8

Calcitonin gene-related peptide immunoreactivity in neuronal perikarya in dorsal root. Jeftinija S, et al. **Brain Res** 1990 Jun 11;519(1–2):324–8

Percentages of dorsal root axons immunoreactive for galanin are higher than those immunoreactive for calcitonin gene-related peptide in the rat. Klein CM, et al. **Brain Res** 1990 Jun 11;519(1–2):97–101

Immunohistochemical identification of calcitonin gene-related peptide and substance P in nerves of the bovine parathyroid gland. Mortimer ST, et al. **Cell Tissue Res** 1990 Aug;261(2):339–45

Localization of calcitonin gene-related peptide in the small intestine of various vertebrate species. Ohtani R, et al. **Cell Tissue Res** 1989 Oct;258(1):35–42

Age-related decrease of calcitonin gene-related peptide-containing vasodilator innervation in the mesenteric resistance vessel of the spontaneously hypertensive rat. Kawasaki H, et al. **Circ Res** 1990 Sep; 67(3):733–43

Development and performance of a highly sensitive and specific two-site immunometric assay of calcitonin gene-related peptide. Zaidi M, et al. **Clin Chem** 1990 Jul; 36(7):1288–94

Calcitonin gene-related peptide in the human hypothalamus. Takahashi K, et al. **Endocrinol Jpn** 1989 Jun;36(3):409–15

Calcitonin gene-related peptide in neural tissues: a phylogenetic study. Kline LW, et al. **Gen Comp Endocrinol** 1989 Dec;76(3):408–13

Immunocytochemical study of the relations of acetylcholinesterase, enkephalin-, substance P-, choline acetyltransferase- and calcitonin gene-related peptide-immunoreactive structures in the ventral horn of rat spinal cord. Hietanen M, et al. **Histochemistry** 1990; 93(5):473–7

Ultrastructure of calcitonin gene-related peptide- and substance P-like immunoreactive nerve fibres in the carotid body and carotid sinus of the guinea pig. Kummer W, et al. **Histochemistry** 1989;92(5):433–9

Origin and colocalization of CGRP- and SP-reactive nerves in cat airway epithelium. Dey RD, et al. **J Appl Physiol** 1990 Feb;68(2):770–8

Distribution of calcitonin gene-related peptide-like immunoreactivity in the medulla oblongata of the cat, in relation to choline acetyltransferase-immunoreactive motoneurones and substance P-immunoreactive fibres. Batten TF, et al. **J Chem Neuroanat** 1989 May–Jun; 2(3):163–76

Calcitonin gene-related peptide immunoreactivity in the cat lumbosacral spinal cord and the effects of multiple dorsal rhizotomies. Traub RJ, et al. **J Comp Neurol** 1989 Sep 8; 287(2):225–37

Ultrastructural identification of neuropeptides in the central nervous system. Maley BE. **J Electron Microsc Tech** 1990 May;15(1):67–80 (107 ref.)

Calcitonin gene-related peptide: endocrine distribution and characterization of circulating forms. Zaidi M, et al. **J Endocrinol Invest** 1989 Nov;12(10):699–704

Regional brain concentrations of calcitonin gene-related peptide in spontaneously hypertensive and normotensive Wistar-Kyoto rats. Lewis SJ, et al. **J Hypertens** 1990 Apr; 8(4):315–9

Both alpha- and beta-calcitonin gene-related peptides are present in plasma, cerebrospinal fluid and spinal cord in man. Wimalawansa SJ, et al. **J Mol Endocrinol** 1989 Nov; 3(3):247–52

Prenatal specification and target induction underlie the enrichment of calcitonin gene-related peptide in the trigeminal ganglion neurons projecting to the cerebral vasculature. Horgan K, et al. **J Neurosci** 1990 Jul; 10(7):2485–92

Regrowth of calcitonin gene-related peptide (CGRP) immunoreactive axons from the chronically injured rat spinal cord into fetal spinal cord tissue transplants. Houle JD, et al. **Neurosci Lett** 1989 Sep 11;103(3):253–8

Calcitonin gene-related peptide in the rat uterus: presence in nerves and effects on uterine contraction. Shew RL, et al. **Peptides** 1990 May–Jun;11(3):583–9

Effect of multiple dorsal rhizotomies on calcitonin gene-related peptide-like immunoreactivity in the lumbosacral dorsal spinal cord of the cat: a radioimmunoassay analysis. Traub RJ, et al. **Peptides** 1989 Sep–Oct;10(5):979–83

Distribution of calcitonin gene-related peptide and calcitonin-like immunoreactivity in trout. Fouchereau-Peron M, et al. **Regul Pept** 1990 Feb 4; 27(2):171–9

Neuroimmunohistochemical analysis of peridiscal nociceptive neural elements. Konttinen YT, et al. **Spine** 1990 May;15(5):383–6

Calcitonin, calcitonin gene-related peptide, and gastrin-releasing peptide in familial thyroid medullary carcinoma. Månsson B, et al. **Surgery** 1990 Feb;107(2):182–6

Gastrin-releasing peptide-, calcitonin gene-related peptide-, and calcitonin-like immunoreactivity in human breast cyst fluid and gastrin-releasing peptide-like immunoreactivity in human breast carcinoma cell lines. Weber CJ, et al. **Surgery** 1989 Dec;106(6):1134–9; discussion 1139–40

[Calcitonin gene-related peptide in normotensive and spontaneously hypertensive rats] Xu D, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Jun; 17(3):174–7, 190 (Eng. Abstr.) **(Chi)**

[Origin and distribution of nerve fibers immunoreacting with calcitonin gene-related peptide (CGRP) in the nasal respiratory mucosa in mammals] Amores AE, et al. **Acta Otorrinolaringol Esp** 1988 Sep–Oct;39(5):315–8 (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS

[Tyr0]-calcitonin gene-related peptide 28–37 (rat) as a putative antagonist of calcitonin gene-related peptide responses on opossum internal anal sphincter smooth muscle. Chakder S, et al. **J Pharmacol Exp Ther** 1990 Apr; 253(1):200–6

hCGRP8–37, a calcitonin gene-related peptide antagonist revealing calcitonin gene-related peptide receptor heterogeneity in brain and periphery. Dennis T, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):123–8

BIOSYNTHESIS

Steroid regulation of calcitonin gene-related peptide mRNA expression in motoneurons of the spinal nucleus of the bulbocavernosus. Popper P, et al. **Brain Res Mol Brain Res** 1990 Jul;8(2):159–66

Production of calcitonin gene-related peptide from human cancer cells. Zaidi M, et al. **J Endocrinol** 1989 Oct; 123(1):159–65

BLOOD

Effects of epidural analgesia on plasma calcitonin gene-related peptide. Bythell VE, et al. **Acta Anaesthesiol Scand** 1989 Nov;33(8):666–9

Calcitonin gene-related peptide-LI in subarachnoid haemorrhage in man. Signs of activation of the trigemino-cerebrovascular system? Juul R, et al. **Br J Neurosurg** 1990;4(3):171–9

Calcitonin gene-related peptide in the pathogenesis and treatment of hypertension. Tang JA, et al. **Chin Med J [Engl]** 1989 Dec;102(12):897–901

Calcitonin gene-related peptide and calcitonin as tumour markers in MEN 2 family screening. Schifter S. **Clin Endocrinol (Oxf)** 1989 Mar;30(3):263–70

Elevated serum levels of calcitonin gene-related peptide (CGRP) but no evidence for CGRP gene expression in non-small cell lung carcinomas. Schifter S, et al. **Clin Endocrinol (Oxf)** 1989 Aug;31(2):137–42

Circulating levels of calcitonin gene-related peptide in patients with medullary thyroid carcinoma. Kim S, et al. **J Clin Chem Clin Biochem** 1989 Jul;27(7):423–7

Reduced levels of calcitonin gene-related peptide (CGRP) but not substance P during and after treatment of severe hypertension in man. Edvinsson L, et al. **J Hum Hypertens** 1989 Aug;3(4):267–70

Plasma concentrations of calcitonin gene-related peptide increase during haemodialysis: relation to blood pressure. Odar-Cederlöf I, et al. **J Intern Med** 1989 Sep; 226(3):177–82

Further evidence for the origin of circulating calcitonin gene-related peptide in the rat. Emson PC, et al. **J Physiol (Lond)** 1989 May;412:297–308

Calcitonin gene-related peptide in patients with endocrine tumors. Takami H, et al. **J Surg Oncol** 1990 Jan;43(1):28–32

Plasma CGRP in acute myocardial infarction [letter; comment] Mair J, et al. **Lancet** 1990 Jan 20;335(8682):168 Comment on: Lancet 1989 Oct 21;2(8669):958–9.

Effects of in vivo stimulation on molecular forms of circulatory calcitonin and calcitonin gene-related peptide in man. Wimalawansa SJ. **Mol Cell Endocrinol** 1990 May 28;71(1):13–9

Hormonal influence on calcitonin gene-related peptide in man: effects of sex difference and contraceptive pills. Valdemarsson S, et al. **Scand J Clin Lab Invest** 1990 Jun; 50(4):385–8

[Measurement of plasma calcitonin gene-related peptide (CGRP) level in patients with thyroid disease] Takami H, et al. **Nippon Geka Gakkai Zasshi** 1990 Mar;91(3):401–6 (Eng. Abstr.) **(Jpn)**

[Clinical significance of serum calcitonin gene related peptide analysis in endocrine tests of the thyroid-parathyroid system] Horie H, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:1101–3 **(Jpn)**

CEREBROSPINAL FLUID

Modulation of pain in fibromyalgia (fibrositis syndrome): cerebrospinal fluid (CSF) investigation of pain related neuropeptides with special reference to calcitonin gene related peptide (CGRP). Vaerøy H, et al. **J Rheumatol Suppl** 1989 Nov;19:94–7

DRUG EFFECTS

Acrolein depletes the neuropeptides CGRP and substance P in sensory nerves in rat respiratory tract. Springall DR, et al. **Environ Health Perspect** 1990 Apr;85:151–7

GENETICS

Alpha-CGRP and beta-CGRP mRNAs are differentially regulated in the rat spinal cord and dorsal root ganglion. Noguchi K, et al. **Brain Res Mol Brain Res** 1990 May; 7(4):299–304

Histochemical detection of the messenger RNAs coding for calcitonin and calcitonin gene-related peptide in medullary thyroid carcinomas with radioactive and biotinylated oligonucleotide probes. Mougin C, et al. **J Pathol** 1990 Mar; 160(3):187–94

A tissue-specific enhancer in the rat-calcitonin/CGRP gene is active in both neural and endocrine cell types. Stolarsky-Fredman L, et al. **Mol Endocrinol** 1990 Mar; 4(3):497–504

[Structure and regulation of the expression of calcitonin and CGRP genes and processing of the precursors] Fujita T. **Nippon Rinsho** 1989 Oct;47(10):2231–5 **(Jpn)**

IMMUNOLOGY

CGRP-like immunoreactivity in sensory nerve endings of the Golgi tendon organ. A light- and electron-microscopic study in the grey short-tailed opossum (Monodelphis domestica). Strasmann T, et al. **Acta Anat (Basel)** 1990; 137(3):278–81

ISOLATION & PURIFICATION

Isolation, purification and characterization of beta-hCGRP from human spinal cord. Wimalawansa SJ, et al. **Biochem Biophys Res Commun** 1990 Mar 30; 167(3):993–1000

METABOLISM

Localization and origins of calcitonin gene-related peptide containing fibres in the vestibular end-organs of the rat. Tanaka M, et al. **Acta Otolaryngol Suppl (Stockh)** 1989; 468:31–4

Albumin protects against capsaicin- and adenosine-induced bronchoconstriction and reduces overflow of calcitonin gene-related peptide from guinea-pig lung. Kröll F, et al. **Acta Physiol Scand** 1990 May;139(1):223–32

Capsaicin evokes secretion of nasal fluid and depletes substance P and calcitonin gene-related peptide from the nasal mucosa in the rat. Petersson G, et al. **Br J Pharmacol** 1989 Nov;98(3):930–6

Dynorphin A(1–8) immunoreactive cell bodies, dendrites and terminals are postsynaptic to calcitonin gene-related

peptide primary afferent terminals in the monkey dorsal horn. Carlton SM, et al. **Brain Res** 1989 Dec 11; 504(1):124–8

Parvalbumin is highly colocalized with calbindin D28k and rarely with calcitonin gene–related peptide in dorsal root ganglia neurons of rat. Carr PA, et al. **Brain Res** 1989 Sep 11;497(1):163–70

Evidence for differential storage of calcitonin gene–related peptide, substance P and serotonin in synaptosomal vesicles of rat spinal cord. Fried G, et al. **Brain Res** 1989 Oct 16; 499(2):315–24

Release of sensory neuropeptides from dural venous sinuses of guinea pig. Geppetti P, et al. **Brain Res** 1990 Feb 26; 510(1):58–62

Chick myotubes in culture express high–affinity receptors for calcitonin gene–related peptide. Jennings CG, et al. **Brain Res** 1989 Dec 18;504(2):199–205

Origins and projections of peptide–immunoreactive nerves in the male rat genitofemoral nerve. Kar S, et al. **Brain Res** 1990 Apr 2;512(2):229–37

Adrenergic modulation of calcitonin gene–related peptide (CGRP)–containing nerve–mediated vasodilation in the rat mesenteric resistance vessel. Kawasaki H, et al. **Brain Res** 1990 Jan 8;506(2):287–90

Electron microscopic observation of calcitonin gene–related peptide–like immunoreactivity in the organ of Corti of the rat. Kuriyama H, et al. **Brain Res** 1990 May 28; 517(1–2):76–80

CGRP expression in the rat olivocerebellar system during postnatal development. Morara S, et al. **Brain Res** 1989 Dec 18;504(2):315–9

Localization of calcitonin gene–related peptide and its receptors in a striated muscle. Popper P, et al. **Brain Res** 1989 Sep 4;496(1–2):180–6

Localization, origin and fine structure of calcitonin gene–related peptide–containing fibers in the vestibular end–organs of the rat. Tanaka M, et al. **Brain Res** 1989 Dec 11;504(1):31–5

Coexistence of calcitonin gene–related peptide and enkephalin in single neurons of the lateral superior olivary nucleus of the guinea pig that project to the cochlea as lateral olivocochlear system. Tohyama Y, et al. **Brain Res** 1990 May 7;515(1–2):312–4

The localization and release of substance P and calcitonin gene–related peptide at nerve fibre endings in rat cutaneous nerve neuroma. White DM, et al. **Brain Res** 1989 Dec 4; 503(2):198–204

Cell types and axonal sizes of calcitonin gene–related peptide–containing primary sensory neurons of the rat. Ishida–Yamamoto A, et al. **Brain Res Bull** 1990 Jun; 24(6):759–64

Calcitonin gene–related peptide in the developing mouse olfactory system. Baker H. **Brain Res Dev Brain Res** 1990 Jul 1;54(2):295–8

Calcitonin gene–related peptide–like immunoreactive cells in the secretory portions of rat sweat glands. Ishida–Yamamoto A, et al. **Cell Tissue Res** 1990 May; 260(3):621–3

Distribution of CGRP–, somatostatin–, galanin–, VIP–, and substance P–immunoreactive nerve fibers in the chicken carotid body. Kameda Y. **Cell Tissue Res** 1989 Sep; 257(3):623–9

Neuromedin U–immunoreactivity in the nervous system of the small intestine of the pig and its coexistence with substance P and CGRP. Timmermans JP, et al. **Cell Tissue Res** 1989 Nov;258(2):331–7

Sensory neuropeptides (substance P, calcitonin gene–related peptide) and vasoactive intestinal polypeptide in human saliva: their pattern in migraine and cluster headache. Nicolodi M, et al. **Cephalalgia** 1990 Feb;10(1):39–50

Autoradiographic mapping of calcitonin gene–related peptide receptors in human and guinea pig hearts. Coupe MO, et al. **Circulation** 1990 Mar;81(3):741–7

Activation of adenylate cyclase by islet amyloid polypeptide with COOH–terminal amide via calcitonin gene–related peptide receptors on rat liver plasma membranes. Morishita T, et al. **Diabetes** 1990 Jul;39(7):875–7

Peripheral nerve section induces increased levels of calcitonin gene–related peptide (CGRP)–like immunoreactivity in axotomized motoneurons. Arvidsson U, et al. **Exp Brain Res** 1990;79(1):212–6

Localization of DARPP–32 immunoreactive neurons in the bed nucleus of the stria terminalis and central nucleus of the amygdala: co–distribution with axons containing tyrosine hydroxylase, vasoactive intestinal polypeptide, and calcitonin gene–related peptide. Gustafson EL, et al. **Exp Brain Res** 1990;79(3):447–58

Termination patterns of calcitonin gene–related peptide–immunoreactive nerve fibers in the dorsal horn of the human spinal cord. Jakab G, et al. **Exp Brain Res** 1990; 80(3):609–17

Light and electron microscopic studies of calcitonin gene–related peptide–like immunoreactive terminals in the central nucleus of the amygdala and the bed nucleus of the stria terminalis of the rat. Shimada S, et al. **Exp Brain Res** 1989;77(1):217–20

CGRP–like immunoreactivity in the guinea pig organ of Corti: a light and electron microscopy study [published erratum appears in Hear Res 1989 Dec;43(1):93] Sliwinska–Kowalska M, et al. **Hear Res** 1989 Oct; 42(1):83–95

Pancreatic nerve stimulation releases neuropeptide Y– but not galanin– or calcitonin gene–related peptide–like immunoreactivity from the pig pancreas. Ahrén B, et al. **J Auton Nerv Syst** 1989 Jun;27(1):11–6

Mucosal peptidergic innervation of the opossum esophagus and anal canal: a comparison with snout skin. Singaram C, et al. **J Auton Nerv Syst** 1990 Mar;29(3):231–40

Calcitonin gene–related peptide containing sensory neurons innervating tooth pulp and buccal mucosa of the rat: an immunohistochemical analysis. Mori H, et al. **J Chem Neuroanat** 1990 May–Jun;3(3):155–63

Calcitonin gene–related peptide (CGRP)–immunoreactive neurons in the human cervico–thoracic paravertebral ganglia. Schmitt M, et al. **J Chem Neuroanat** 1988 Sep–Oct; 1(5):287–92

Ultrastructure of substance P– and CGRP–immunoreactive nerve fibers in the nasal epithelium of rodents. Finger TE, et al. **J Comp Neurol** 1990 Apr 8;294(2):293–305

Ultrastructural organization of regenerated adult dorsal root axons within transplants of fetal spinal cord. Itoh Y, et al. **J Comp Neurol** 1990 Feb 15;292(3):396–411

Denervation–induced intraspinal synaptogenesis of calcitonin gene–related peptide containing primary afferent terminals. McNeill DL, et al. **J Comp Neurol** 1990 Jun 8;296(2):263–8

Origins and distribution of cerebrovascular nerve fibers showing calcitonin gene–related peptide–like immunoreactivity in the major cerebral artery of the dog. Nozaki K. et al. **J Comp Neurol** 1990 Jul 8;297(2):219–26

Development of calcitonin gene–related peptide (CGRP) immunoreactivity in relationship to the formation of neuromuscular junctions in Xenopus myotomal muscle. Peng HB, et al. **J Comp Neurol** 1989 Dec 22;290(4):533–43

Analysis of taste bud innervation based on glycoconjugate and peptide neuronal markers. Silverman JD, et al. **J Comp Neurol** 1990 Feb 22;292(4):575–84

Calcitonin gene–related peptide immunoreactivity in the visceral sensory cortex, thalamus, and related pathways in the rat. Yasui Y, et al. **J Comp Neurol** 1989 Dec 22; 290(4):487–501

Tachykinins and calcitonin gene–related peptide in oxazolone–induced allergic contact dermatitis in mice. Ek L, et al. **J Invest Dermatol** 1990 Jun;94(6):761–3

Regional distribution of calcitonin gene–related peptide–, substance P–, cholecystokinin–, Met5–enkephalin–, and dynorphin A (1–8)–like materials in the spinal cord and dorsal root ganglia of adult rats: effects of dorsal rhizotomy and neonatal capsaicin. Pohl M, et al. **J Neurochem** 1990 Oct;55(4):1122–30

Release of calcitonin gene–related peptide–like immunoreactive substance from neuromuscular junction by nerve excitation and its action on striated muscle. Uchida S, et al. **J Neurochem** 1990 Mar;54(3):1000–3

Nerve fibre studies in skin biopsies in peripheral neuropathies. I. Immunohistochemical analysis of neuropeptides in diabetes mellitus. Lindberger M, et al. **J Neurol Sci** 1989 Nov;93(2–3):289–96

Axonal transport and distribution of endogenous calcitonin gene–related peptide in rat peripheral nerve. Kashihara Y, et al. **J Neurosci** 1989 Nov;9(11):3796–802

Calcitonin gene–related peptide identifies spinal motoneurons in vitro. Juurlink BH, et al. **J Neurosci Res** 1990 Jun; 26(2):238–41

Effect of lithium on tachykinins, calcitonin gene–related peptide, and neuropeptide Y in rat brain. Mathé AA, et al. **J Neurosci Res** 1990 Jun;26(2):233–7

Time–related decrease of substance P and CGRP in central and peripheral projections of sensory neurones in Mycobacterium leprae infected nude mice: a model for lepromatous leprosy in man. Karanth SS, et al. **J Pathol** 1990 Apr;160(4):335–45

Presence and release of calcitonin gene–related peptide in rat stomach. Inui T, et al. **Life Sci** 1989;45(13):1199–206

Prostaglandins and CGRP release from cardiac sensory nerves. Franco–Cereceda A. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Aug; 340(2):180–4

The effect of castration on calcitonin gene–related peptide in spinal motor neurons. Popper P, et al. **Neuroendocrinology** 1989 Sep;50(3):338–43

Characterization of the calcitonin gene–related peptide receptor in mouse T lymphocytes. Umeda Y, et al. **Neuropeptides** 1989 Nov–Dec;14(4):237–42

Calcitonin gene–related peptide containing primary afferent fibers synapse on primate spinothalamic tract cells. Carlton SM, et al. **Neurosci Lett** 1990 Feb 5;109(1–2):76–81

Release of calcitonin gene–related peptide (CGRP) from capsaicin–sensitive vasodilator nerves in the rat mesenteric artery. Fujimori A, et al. **Neurosci Lett** 1990 May 4; 112(2–3):173–8

Different patterns of immunolocalization of calcitonin gene–related peptide and substance P in sympathetic ganglia of normotensive and genetically hypertensive rats. Gurusinghe CJ, et al. **Neurosci Lett** 1989 Nov 20; 106(1–2):89–94

Release of calcitonin gene–related peptide induced by capsaicin in the vascularly perfused rat stomach. Holzer P, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):195–200

Simultaneous localization of calcitonin gene–related peptide and neurotensin in rat central amygdaloid nucleus. Honkaniemi J, et al. **Neurosci Lett** 1990 May 18;113(1):1–6

Substance P mRNA is present in a population of CGRP–immunoreactive cholinergic postganglionic sympathetic neurons of the cat: evidence from combined in situ hybridization and immunohistochemistry. Lindh B, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):1–5

Which mechanisms account for the sensory neuron blocking action of capsaicin on primary afferents in the rat urinary bladder? Maggi CA, et al. **Neurosci Lett** 1990 Mar 14; 110(3):267–72

Co–expression of alpha–CGRP and beta–CGRP mRNAs in the rat dorsal root ganglion cells. Noguchi K, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):1–5

Erythrocytes suppress calcitonin gene–related peptide– and vasoactive intestinal polypeptide–like immunoreactivities in cerebrovascular nerve fibers after subarachnoid hemorrhage. Nozaki K, et al. **Neurosci Lett** 1990 Mar 2; 110(1–2):22–7

Long ascending unmyelinated primary afferent axons in the rat dorsal column: immunohistochemical localizations. Patterson JT, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):6–10

Histamine application to the nasal mucosa induces release of calcitonin gene–related peptide and substance P from peripheral terminals of trigeminal ganglion: a morphological study in the guinea pig. Tani E, et al. **Neurosci Lett** 1990 Apr 20;112(1):1–6

Calcitonin gene–related peptide (CGRP)–immunoreactive nerve varicosities in synaptic contact with sensory neurons in the trigeminal ganglion of rats. Yamamoto M, et al. **Neurosci Lett** 1989 Oct 9;104(3):253–7

Aversive taste stimuli increase CGRP levels in the gustatory insular cortex of the rat. Yamamoto T, et al. **Neurosci Lett** 1990 May 4;112(2–3):167–72

Capsaicin–induced release of calcitonin gene–related peptide from dorsal horn slices is enhanced in adjuvant arthritic rats. Nanayama T, et al. **Neurosci Res** 1989 Aug;6(6):569–72

Marked increases in calcitonin gene–related peptide–containing nerves in the developing rat following long–term sympathectomy with guanethidine. Aberdeen J, et al. **Neuroscience** 1990;35(1):175–84

Ontogeny of acetylcholinesterase, substance P and calcitonin gene–related peptide–like immunoreactivity in chick dorsal root ganglia. Castrignano F, et al. **Neuroscience** 1990; 34(2):499–510

Calcitonin gene–related peptide–positive neurons and fibers in the cat dorsal column nuclei. Fabri M, et al. **Neuroscience** 1990;35(1):167–74

Combined retrograde tracing and enzyme/immunohistochemistry of trigeminal ganglion cell bodies innervating tooth pulps in the rat. Fried K, et al. **Neuroscience** 1989;33(1):101–9

Calcitonin gene–related peptide–alpha receptor binding sites in the gastrointestinal tract. Gates TS, et al. **Neuroscience** 1989;31(3):757–70

Neuropeptide expression in cultures of adult sensory neurons: modulation of substance P and calcitonin gene–related peptide levels by nerve growth factor. Lindsay RM, et al. **Neuroscience** 1989;33(1):53–65

Cell type and conduction velocity of rat primary sensory neurons with calcitonin gene–related peptide–like immunoreactivity. McCarthy PW, et al. **Neuroscience** 1990; 34(3):623–32

Quantitative analysis of peptide levels and neurogenic extravasation following regeneration of afferents to appropriate and inappropriate targets. McMahon SB, et al. **Neuroscience** 1989;33(1):67–73

Release of sensory neuropeptides in the spinal cord: studies with calcitonin gene–related peptide and galanin. Morton CR, et al. **Neuroscience** 1989;31(3):807–15

Visceral and somatic afferent origin of calcitonin gene–related peptide immunoreactivity in the lower thoracic spinal cord of the rat. Sharkey KA, et al. **Neuroscience** 1989;32(1):169–79

Origins and pathways of cerebrovascular nerves storing substance P and calcitonin gene–related peptide in rat. Suzuki N, et al. **Neuroscience** 1989;31(2):427–38

Relative sparing of calcitonin gene–related peptide–containing primary sensory neurons following neonatal capsaicin treatment in the rat. Kashiba H, et al. **Peptides** 1990 May–Jun;11(3):491–6

Activities of calcitonin gene–related peptide (CGRP) and related peptides at the CGRP receptor. Maton PN, et al. **Peptides** 1990 May–Jun;11(3):485–9

Age–related increase in CGRP binding site densities in rat cerebellum. Pagani F, et al. **Pharmacol Res** 1989 Nov–Dec; 21 Suppl 1:105–6

Insulin hypoglycemia increases the levels of neuropeptide Y and calcitonin gene–related peptide, but not of chromogranins A and B, in rat chromaffin granules. Laslop A, et al. **Regul Pept** 1989 Dec;26(3):191–202

Pronounced increases in brain levels of calcitonin gene–related peptide after kainic acid induced seizures. Saria A, et al. **Regul Pept** 1989 Dec;26(3):215–23

Light and electron microscopic immunocytochemical demonstration of intraepidermal CGRP–containing nerves in human skin. Vaalasti A, et al. **Skin Pharmacol** 1988; 1(4):225–9

Calcitonin gene–related peptide (CGRP)–positive neurons and fibers in the cat periaqueductal grey matter. Conti F, et al. **Somatosens Mot Res** 1989;6(5–6):497–511

Studies on the coexistence of substance P with other putative transmitters in the nodose and petrosal ganglia. Helke CJ, et al. **Synapse** 1990;5(2):144–51

Islet amyloid polypeptide and calcitonin gene–related peptide immunoreactivity in amyloid and tumor cells of canine pancreatic endocrine tumors. O'Brien TD, et al.

Vet Pathol 1990 May;27(3):194–8
[Tissue distribution and physiologic role of calcitonin and CGRP] Inaba M, et al. Nippon Rinsho 1990 May; 48(5):1011–5 (Jpn)

PHARMACOKINETICS

The distribution of vasoactive intestinal polypeptides and calcitonin gene-related peptide in the periodontal ligament of mouse molar teeth. Kato J, et al. Arch Oral Biol 1990; 35(1):63–6

PHARMACOLOGY

Calcitonin gene-related peptide stimulates irregular spiking and transit of contents in the small intestine of the rat. Lördal M, et al. Acta Physiol Scand 1990 Mar;138(3):429–30
Human alpha- and beta-calcitonin gene-related peptides are vasodilators in human chorionic plate vasculature. Firth KF, et al. Am J Obstet Gynecol 1989 Nov;161(5):1318–9
Hemodynamic effects of calcitonin gene-related peptide in spontaneously hypertensive rats. Ando K, et al. Am J Physiol 1990 Feb;258(2 Pt 2):R425–9
CGRP stimulates the release of pro-somatostatin-derived peptides from the gastric fundus. Bunnett NW, et al. Am J Physiol 1990 Feb;258(2 Pt 1):G316–9
Calcitonin gene-related peptide: effects on renal arteriolar tone and tubular cAMP levels. Edwards RM, et al. Am J Physiol 1990 Jan;258(1 Pt 2):F121–5
Distinct hemodynamic and renal effects of calcitonin gene-related peptide and calcitonin in men. Gnaedinger MP, et al. Am J Physiol 1989 Dec;257(6 Pt 1):E848–54
Cardiovascular effects of calcitonin gene-related peptide in conscious dogs. Wang BC, et al. Am J Physiol 1989 Oct; 257(4 Pt 2):R726–31
A dual effect of calcitonin gene-related peptide on plasma calcium levels in the chick. Bevis PJ, et al. Biochem Biophys Res Commun 1990 Jun 29;169(3):846–50
Inhibition of periarterial nerve stimulation-induced vasodilation of the mesenteric arterial bed by CGRP (8–37) and CGRP receptor desensitization. Han SP, et al. Biochem Biophys Res Commun 1990 Apr 30;168(2):786–91
The effect of amylin and calcitonin gene-related peptide on insulin-stimulated glucose transport in the diaphragm. Hothersall JS, et al. Biochem Biophys Res Commun 1990 Jun 15;169(2):451–4
Suppression of insulin-stimulated glucose transport in L6 myocytes by calcitonin gene-related peptide. Kreutter D, et al. Biochem Biophys Res Commun 1989 Oct 16; 164(1):461–7
A comparison of the effects of human alpha calcitonin gene-related peptide and glyceryl trinitrate on regional blood velocity in man. MacDonald NJ, et al. Br J Clin Pharmacol 1989 Sep;28(3):257–61
Effects of alpha- and beta-calcitonin gene-related peptides upon ion transport in rat descending colon. Cox HM, et al. Br J Pharmacol 1989 Aug;97(4):996–8
Action of calcitonin gene-related peptide upon bovine vascular endothelial and smooth muscle cells grown in isolation and co-culture. Crossman DC, et al. Br J Pharmacol 1990 Jan;99(1):71–6
Regional haemodynamic effects of human alpha- and beta-calcitonin gene-related peptide in conscious Wistar rats. Gardiner SM, et al. Br J Pharmacol 1989 Dec; 98(4):1225–32
Synergistic internal carotid vasodilator effects of human alpha-calcitonin gene-related peptide and nimodipine in conscious rats. Gardiner SM, et al. Br J Pharmacol 1990 Apr;99(4):830–4
Effects of neuropeptide Y and calcitonin gene-related peptide on sheep coronary artery rings under oxygenated, hypoxic and simulated myocardial ischaemic conditions. Kwan YW, et al. Br J Pharmacol 1990 Apr;99(4):774–8
Electrophysiological and mechanical effects of calcitonin gene-related peptide on guinea-pig atria. Ohmura T, et al. Br J Pharmacol 1990 May;100(1):27–30
Calcitonin gene related peptide (CGRP) activates adenylate cyclase of bovine aortic endothelial cells: guanosine 5' triphosphate dependence and partial agonist activity of a tyrosinated analogue. McEwan JR, et al. Cardiovasc Res 1989 Nov;23(11):921–7
Calcitonin gene related peptide: vasodilator in ovine hepatic and renal vasculature. Fletcher DR, et al. Clin Exp Pharmacol Physiol 1990 Jul;17(7):467–76
The effect of calcitonin gene-related peptide (CGRP) on human forearm blood flow. Jernbeck J, et al. Clin Physiol 1990 Jul;10(4):335–43
Calcitonin gene-related peptide is an inhibitor of aldosterone secretion. Murakami M, et al. Endocrinology 1989 Oct; 125(4):2227–9
Biological activity of N-terminal fragments of calcitonin gene-related peptide. Maggi CA, et al. Eur J Pharmacol 1990 Apr 10;179(1–2):217–9
Action of calcitonin gene-related peptide on rat aortic smooth muscle. Vallotton MB, et al. Eur J Pharmacol 1989 Jul 18;166(2):219–22
Kidney: a target organ for calcitonin gene-related peptide. Zaidi M, et al. Exp Physiol 1990 Jan;75(1):27–32
Induction of normal ultrastructure by CGRP treatment in dysgenic myotubes. Garcia L, et al. FEBS Lett 1990 Apr 9;263(1):147–52
Functional characteristics of calcitonin gene-related peptide receptors in human Ewing's sarcoma WE-68 cells. van Valen F, et al. FEBS Lett 1989 Oct 9;256(1–2):170–4
Inhibition of natural killer activity by calcitonin gene-related peptide. Umeda Y, et al. Immunopharmacol Immunotoxicol 1989;11(2–3):309–20
Trophic effects of cholecystokinin and calcitonin gene-related peptide on ventral spinal cord in culture. Iwasaki Y, et al. Int J Neurosci 1989 Oct;48(3–4):285–9
Calcitonin gene-related peptide vasodilation of human pulmonary vessels. McCormack DG, et al. J Appl Physiol 1989 Sep;67(3):1265–70
Cerebroventricular calcitonin gene-related peptide inhibits rat duodenal bicarbonate secretion by release of norepinephrine and vasopressin. Lenz HJ, et al. J Clin Invest 1990 Jan;85(1):25–32
Tachykinins and calcitonin gene-related peptide enhance release of endogenous glutamate and aspartate from the rat spinal dorsal horn slice. Kangrga I, et al. J Neurosci 1990 Jun;10(6):2026–38
Vascular relaxation properties of calcitonin gene-related peptide and vasoactive intestinal polypeptide in subarachnoid hemorrhage. Nozaki K, et al. J Neurosurg 1990 May;72(5):792–7
Relaxant effect of calcitonin gene-related peptide on cerebral arterial spasm induced by experimental subarachnoid hemorrhage in dogs. Nozaki K, et al. J Neurosurg 1989 Oct;71(4):558–64
hCGRP8–37, a calcitonin gene-related peptide antagonist revealing calcitonin gene-related peptide receptor heterogeneity in brain and periphery. Dennis T, et al. J Pharmacol Exp Ther 1990 Jul;254(1):123–8
Structure-activity profile of calcitonin gene-related peptide in peripheral and brain tissues. Evidence for receptor multiplicity. Dennis T, et al. J Pharmacol Exp Ther 1989 Nov;251(2):718–25
The antinociception produced by intrathecal morphine, calcium, A23187, U50,488H, [D-Ala2, N-Me-Phe4, Gly-ol]enkephalin and [D-Pen2, D-Pen5]enkephalin after intrathecal administration of calcitonin gene-related peptide in mice. Welch SP, et al. J Pharmacol Exp Ther 1989 Oct;251(1):1–8
Adrenal responses to calcitonin gene-related peptide in conscious hypophysectomized calves. Bloom SR, et al. J Physiol (Lond) 1989 Feb;409:29–41
Selective suprasensitivity to calcitonin-gene-related peptide in the hands in Raynaud's phenomenon [see comments] Shawket S, et al. Lancet 1989 Dec 9;2(8676):1354–7 Comment in: Lancet 1990 Jan 27;335(8683):239.
Effects of calcitonin gene-related peptide on the adenylate cyclase system in cultured rat skeletal muscle cells. Hashimoto K, et al. Life Sci 1989;45(23):2183–92
Effect of denervation of the phrenic nerve on the action of calcitonin gene-related peptide in rat diaphragm. Matsumoto N, et al. Life Sci 1990;47(6):547–55
Arterial dilations in response to calcitonin gene-related peptide involve activation of K+ channels. Nelson MT, et al. Nature 1990 Apr 19;344(6268):770–3
Effects of capsaicin, tachykinins, calcitonin gene-related peptide and bradykinin in the pig iris sphincter muscle. Geppetti P, et al. Naunyn Schmiedebergs Arch Pharmacol 1990 Apr; 341(4):301–7
Effects of calcitonin gene-related peptide on canine cerebral artery strips and the in-vivo vertebral blood flow in dogs. Ikegaki I, et al. Naunyn Schmiedebergs Arch Pharmacol 1989 Oct;340(4):431–6
Effect of calcitonin gene-related peptide on synaptic transmission at the neuromuscular junction of the frog. Caratsch CG, et al. Neurosci Lett 1990 Apr 6;111(3):344–50
Intrathecal administration of CGRP in the rat attenuates a facilitation of the tail flick reflex induced by either substance P or noxious cutaneous stimulation. Cridland RA, et al. Neurosci Lett 1989 Jul 31;102(2–3):241–6
The effects of substance P and calcitonin gene-related peptide on the efflux of endogenous glutamate and aspartate from the rat spinal dorsal horn in vitro. Kangrga I, et al. Neurosci Lett 1990 Jan 1;108(1–2):155–60
Acetylcholine receptor expression in primary cultures of embryonic chick myotubes—II. Comparison between the effects of spinal cord cells and calcitonin gene-related peptide. Kirilovsky J, et al. Neuroscience 1989;32(2):289–96
Acetylcholine receptor expression in primary cultures of embryonic chick myotubes—I. Discoordinate regulation of alpha-, gamma- and delta-subunit gene expression by calcitonin gene-related peptide and by muscle electrical activity. Osterlund M, et al. Neuroscience 1989;32(2):279–87
Effects of calcitonin gene-related peptide on the non-adrenergic inhibitory potentials in the intestinal smooth muscle cells of the guinea pig. Ohkawa H. Nippon Heikatsukin Gakkai Zasshi 1989 Jun;25(3):89–96
Calcitonin gene-related peptide stimulates proliferation of human endothelial cells. Haegerstrand A, et al. Proc Natl Acad Sci U S A 1990 May;87(9):3299–303
Dual effects of calcitonin gene-related peptide on insulin secretion in the perfused dog pancreas. Hermansen K, et al. Regul Pept 1990 Jan;27(1):149–57
Close arterial infusion of calcitonin gene-related peptide into the rat stomach inhibits aspirin- and ethanol-induced hemorrhagic damage. Lippe IT, et al. Regul Pept 1989 Aug; 26(1):35–46
Additive interactions of calcitonin gene-related peptide and calcitonin on pancreatic exocrine function in conscious dogs. Nealon WH, et al. Surgery 1990 Apr;107(4):434–41
[Calcitonin gene products and the skeleton] Fischer JA, et al. Z Orthop 1990 May-Jun;128(3):240–2 (32 ref.) (Eng. Abstr.) (Ger)

PHYSIOLOGY

Role of neuropeptides on conductive and resistive coronary vessels in man. Maseri A. Bibl Cardiol 1989;(44):1–4
Structure-activity relationship of human calcitonin-gene-related peptide. Zaidi M, et al. Biochem J 1990 Aug 1;269(3):775–80
Modulation of neurotransmission in the guinea-pig vas deferens by capsaicin: involvement of calcitonin gene-related peptide and substance P. Ellis JL, et al. Br J Pharmacol 1989 Oct;98(2):707–13
Antinociceptive effect of intrathecally administered antiserum against calcitonin gene-related peptide on thermal and mechanical noxious stimuli in experimental hyperalgesic rats. Kawamura M, et al. Brain Res 1989 Sep 11;497(1):199–203
Changes in calcitonin gene-related peptide (CGRP)-containing vasodilator nerve activity in hypertension. Kawasaki H, et al. Brain Res 1990 Jun 4; 518(1–2):303–7
Central regulation of duodenal bicarbonate secretion. Dharmsathaphorn K, et al. Gastroenterology 1990 Jul; 99(1):278
Evolutionary pathways of the calcitonin (CALC) genes. Lips CJ, et al. Henry Ford Hosp Med J 1989;37(3–4):201–3
Is calcitonin gene-related peptide (CGRP) a regulator of blood pressure in hemodialysis patients? Odar-Cederlöf I, et al. Int J Artif Organs 1990 Mar;13(3):134–7 (36 ref.)
Immunocytochemical evidence for calcitonin gene-related peptide-like neurons in the dorsal horn and lateral spinal nucleus of the rat cervical spinal cord. Conrath M, et al. J Chem Neuroanat 1989 Nov-Dec;2(6):335–47
Role of calcitonin gene-related peptide-containing nerves in the vascular adrenergic neurotransmission. Kawasaki H, et al. J Pharmacol Exp Ther 1990 Jan;252(1):403–9
A possible role for calcitonin-gene-related peptide in the regulation of the smooth muscle tone of the bladder and penis. Stief CG, et al. J Urol 1990 Feb;143(2):392–7
Effect of neuropeptide Y on vasodilation mediated by calcitonin gene-related peptide (CGRP)-containing nerves in the mesenteric resistance vessel of the rat. Nuki C, et al. Jpn J Pharmacol 1990 May;53(1):125–8
Calcitonin gene products and the kidney. Kurtz A, et al. Klin Wochenschr 1989 Sep 1;67(17):870–5 (45 ref.)
Regulation of epithelial transport in the jejunal mucosa of the guinea pig by neurokinins. Mathison R, et al. Life Sci 1989;45(12):1057–64
The role of calcitonin gene-related peptide in the control of growth hormone and prolactin release. Fahim A, et al. Neuroendocrinology 1990 Jun;51(6):688–93
Calcitonin gene-related peptide regulates phosphorylation of the nicotinic acetylcholine receptor in rat myotubes. Miles K, et al. Neuron 1989 May;2(5):1517–24
Antibodies to calcitonin-gene related peptide reduce inflammation induced by topical mustard oil but not that due to carrageenin in the rat. Louis SM, et al. Neurosci Lett 1989 Jul 31;102(2–3):257–60
The role of substance P and calcitonin gene-related peptide in neurogenic plasma extravasation and vasodilatation in the rat. Louis SM, et al. Neuroscience 1989;32(3):581–6
Effects of calcitonin gene-related peptide on airway epithelial functions in dogs. Tamaoki J, et al. Peptides 1989 Sep-Oct; 10(5):1007–11
Calcitonin gene-related peptide (CGRP) in the regulation of salivary secretion. Salo A, et al. Proc Finn Dent Soc 1989;85(4–5):333–7
[Biological active polypeptides in the heart and coronary vessels] Guo XM, et al. Chung Hua Hsin Hsueh Kuan Ping Tsa Chih 1989 Oct; 17(5):314–6 (16 ref.) (Chi)

SECRETION

Neurogenic vasodilation and release of calcitonin gene-related peptide (CGRP) from perivascular nerves in the rat mesenteric artery. Fujimori A, et al. Biochem Biophys Res Commun 1989 Dec 29;165(3):1391–8
Opioid control of the in vitro release of calcitonin gene-related peptide from primary afferent fibres projecting in the rat cervical cord. Pohl M, et al. Neuropeptides 1989 Oct;14(3):151–9
Neurochemical evidence for the involvement of N-type calcium channels in transmitter secretion from peripheral endings of sensory nerves in guinea pigs. Maggi CA, et al. Neurosci Lett 1990 Jul 3;114(2):203–6

THERAPEUTIC USE

The salvage of rabbit ischaemic epigastric free flaps using the vasodilator calcitonin gene-related peptide. Knight KR, et al. Br J Plast Surg 1990 Jul;43(4):447–51
Improved cardiac performance with human calcitonin gene related peptide in patients with congestive heart failure. Gennari C, et al. Cardiovasc Res 1990 Mar;24(3):239–41
Calcitonin gene-related peptide and Raynaud's phenomenon [letter; comment] Bunker CB, et al. Lancet 1990 Jan 27; 335(8683):239 Comment on: Lancet 1989 Dec 9;2(8676):1354–7.
Effect of calcitonin-gene-related peptide on postoperative neurological deficits after subarachnoid haemorrhage.

Johnston FG, et al. **Lancet** 1990 Apr 14;335(8694):869–72

CALCITRIOL

ADMINISTRATION & DOSAGE

Improvement of palmoplantar keratoderma of nonhereditary type (eczema tyloticum) after oral administration of 1 alpha,25–dihydroxyvitamin D3 [letter] Katayama H, et al. **Arch Dermatol** 1989 Dec;125(12):1713

Cytokine–induced peritoneal fibrosis in CAPD. Effects of Ca++ and 1,25(OH)2D3. Carozzi S, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):418–20

In vivo beneficial effects of cyclosporin A and 1,25–dihydroxyvitamin D3 on the induction of experimental autoimmune thyroiditis. Fournier C, et al. **Clin Immunol Immunopathol** 1990 Jan;54(1):53–63

Calcitriol for osteitis fibrosa [letter; comment] **N Engl J Med** 1989 Dec 28;321(26):1831–3 Comment on: N Engl J Med 1989 Aug 3;321(5):274–9.

Regression of parathyroid hyperplasia by calcitriol–pulse therapy in patients on long–term dialysis [letter] Fukagawa M, et al. **N Engl J Med** 1990 Aug 9;323(6):421–2

Intravenous calcitriol lowers serum calcium concentrations in uraemic patients with severe hyperparathyroidism and hypercalcaemia. Hamdy NA, et al. **Nephrol Dial Transplant** 1989;4(6):545–8

Intestinal lead and calcium absorption: effect of 1,25–dihydroxycholecalciferol and lead status. Fullmer CS. **Proc Soc Exp Biol Med** 1990 Jul;194(3):258–64

ADVERSE EFFECTS

Hypercalcemia in a calcitriol–treated hypoparathyroid woman during lactation. Caplan RH, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):485–9

ANALOGS & DERIVATIVES

Expression of interleukin–6–like molecules and tumour necrosis factor after topical treatment of psoriasis with a new vitamin D analogue (MC 903). Oxholm A, et al. **Acta Derm Venereol (Stockh)** 1989;69(5):385–90

Biological activity of 26,26,26,27,27,27–hexafluoro–1,25–dihydroxyvitamin D3 in the chick. Kiriyama T, et al. **Acta Endocrinol (Copenh)** 1989 Oct;121(4):520–4

Novel vitamin D3 derivatives, 26–homo–delta 22–dehydro–1 alpha,25(S)–dihydroxyvitamin D3 and 26–homo–delta 22–dehydro–1 alpha,25(R)–dihydroxyvitamin D3: preferential activity in c–myc mRNA production and in induction of phenotypic differentiation of HL–60 cells. Koizumi T, et al. **Arch Biochem Biophys** 1990 Feb 1; 276(2):310–6

Effects of 1,25–dihydroxyvitamin D3 and its analogs on butyrate–induced differentiation of HT–29 human colonic carcinoma cells and on the reversal of the differentiated phenotype. Tanaka Y, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):415–23

Will 1,25–dihydroxyvitamin D3, MC 903, and their analogues herald a new pharmacologic era for the treatment of psoriasis? [comment] Holick MF. **Arch Dermatol** 1989 Dec; 125(12):1692–7 (35 ref.) Comment on: Arch Dermatol 1989 Dec;125(12):1647–52.

Treatment of psoriasis by the topical application of the novel cholecalciferol analogue calcipotriol (MC 903) [see comments] Kragballe K. **Arch Dermatol** 1989 Dec; 125(12):1647–52 Comment in: Arch Dermatol 1989 Dec;125(12):1692–7.

Calcipotriol (MC 903), a novel vitamin D3 analogue stimulates terminal differentiation and inhibits proliferation of cultured human keratinocytes. Kragballe K, et al. **Arch Dermatol Res** 1990;282(3):164–7

Affinity of 22–oxa–1,25(OH)2D3 for 1,25–dihydroxyvitamin D receptor and its effects on the synthesis of osteocalcin in human osteosarcoma cells. Valaja T, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):629–35

In vitro metabolism of calcipotriol (MC 903), a vitamin D analogue. Sørensen H, et al. **Biochem Pharmacol** 1990 Jan 15;39(2):391–3

24–homologated 1,25–dihydroxyvitamin D3 compounds: separation of calcium and cell differentiation activities. Perlman K, et al. **Biochemistry** 1990 Jan 9;29(1):190–6

Comparative effects of a novel vitamin D analogue MC–903 and 1,25–dihydroxyvitamin D3 on alkaline phosphatase activity, osteocalcin and DNA synthesis by human osteoblastic cells in culture. Marie PJ, et al. **Bone** 1990; 11(3):171–9

26,27–Hexafluoro–1,25–dihydroxyvitamin D3 (F6–1,25(OH)2D3) prevents osteoporosis induced by immobilization combined with ovariectomy in the rat. Okumura H, et al. **Bone Miner** 1990 May;9(2):101–9

Vitamin D3 analogues in psoriasis [letter; comment] Kragballe K. **Dermatologica** 1990;180(2):110–1 Comment on: Dermatologica 1989;178(4):184–8.

Biological activity assessment of 1 alpha,25–dihydroxyvitamin D3–26,23–lactone and its intermediate metabolites in vivo and in vitro. Ishizuka S, et al. **Endocrinology** 1990 Aug;127(2):695–701

23(S),25(R)–1,25–dihydroxyvitamin D3–26,23–lactone stimulates murine bone formation in vivo. Shima M, et al. **Endocrinology** 1990 Feb;126(2):832–6

24– and 26–homo–1,25–dihydroxyvitamin D3 analogs: potencies on in vitro bone resorption differ from those reported for cell differentiation. Paulson SK, et al. **J Bone Miner Res** 1990 Feb;5(2):201–6

Effect of subcutaneously released 24F–1,25–dihydroxyvitamin D3 on incidence of parturient paresis in dairy cows. Goff JP, et al. **J Dairy Sci** 1990 Feb;73(2):406–12

Synthesis and biological activity of novel vitamin D analogues: 24,24–difluoro–25–hydroxy–26,27–dimethylvitamin D3 and 24,24–difluoro–1 alpha,25–dihydroxy–26,27–dimethylvitamin D3. Gill HS, et al. **J Med Chem** 1990 Feb;33(2):480–90

Prevention of immunological disorders in MRL/l mice by a new synthetic analogue of vitamin D3: 22–oxa–1 alpha,25–dihydroxyvitamin D3. Abe J, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Feb;36(1):21–31

Synthesis and biological activity of (22E,25R)– and (22,25S)–22–dehydro– 1 alpha,25–dihydroxy–26–methylvitamin D3. Hara N, et al. **J Steroid Biochem** 1990 May;35(6):655–64

1,25–Dihydroxy–16–ene–23–yne–vitamin D3 prolongs survival time of leukemic mice. Zhou JY, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3929–32

ANALYSIS

[Comparative study of the content of 1,25–dihydroxyvitamin D3 receptors in digestive mucosa and adenocarcinoma] Meggouh F, et al. **Bull Cancer (Paris)** 1990;77(3):205–12 (Eng. Abstr.) **(Fre)**

BIOSYNTHESIS

Synthesis of the active metabolite of vitamin D, 1,25(OH)2D3, by synovial fluid macrophages in arthritic diseases. Hayes ME, et al. **Ann Rheum Dis** 1989 Sep; 48(9):723–9

Evidence of 1,25–dihydroxyvitamin D synthesis by the rat Walker carcinosarcoma 256. Traba ML, et al. **Cancer Lett** 1990 Aug;53(1):5–8

Evidence for extrarenal production of 1,25–dihydroxyvitamin during physiological bone growth: in vivo and in vitro production by deer antler cells. Sempere AJ, et al. **Endocrinology** 1989 Nov;125(5):2312–9

Acidosis inhibits 1,25–(OH)2D3 but not cAMP production in response to parathyroid hormone in the rat. Ro HK, et al. **J Bone Miner Res** 1990 Mar;5(3):273–8

Permissive action of growth hormone on the renal response to dietary phosphorus deprivation. Harbison MD, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):1035–40

1,25(OH)2D2 production by T lymphocytes and alveolar macrophages recovered by lavage from normocalcemic patients with tuberculosis. Cadranel J, et al. **J Clin Invest** 1990 May;85(5):1588–93

Normal regulation of calcitriol production in Gy mice. Evidence for biochemical heterogeneity in the X–linked hypophosphatemic diseases. Davidai GA, et al. **J Clin Invest** 1990 Feb;85(2):334–9

Effect of polyamines, methylguanidine, and guanidinosuccinic acid on calcitriol synthesis. Patel S, et al. **J Lab Clin Med** 1990 Jan;115(1):69–73

Synthesis of 1,25–dihydroxyvitamin D3 by spleen cells isolated from two patients with myelofibrosis and a normal subject. Hayes ME, et al. **J Steroid Biochem** 1990 Feb; 35(2):191–4

Production of 1 alpha,25–dihydroxyvitamin D3 by hematopoietic cells. Reichel H, et al. **Prog Clin Biol Res** 1990;332:81–97 (46 ref.)

[Vitamin D metabolism in the elderly. Evidence of appropriate synthesis of 1,25 (OH)2 D3] Quesada Gómez J, et al. **Rev Clin Esp** 1989 Dec;185(9):436–9 (Eng. Abstr.) **(Spa)**

BLOOD

High total and free 1,25–dihydroxyvitamin D concentrations in serum of premature infants. Schilling R, et al. **Acta Paediatr Scand** 1990 Jan;79(1):36–40

Vitamin D supplementation in elderly nursing home residents increases 25(OH)D but not 1,25(OH)2D. Himmelstein S, et al. **Am J Clin Nutr** 1990 Oct;52(4):701–6

Granulomatous infiltration of the talus and abnormal vitamin D and calcium metabolism in a patient with sarcoidosis: successful treatment with hydroxychloroquine [see comments] DeSimone DP, et al. **Am J Med** 1989 Dec; 87(6):694–6 Comment in: Am J Med 1990 May;88(5):553–4.

Effects of chronic metabolic alkalosis on Ca2+, PTH and 1,25(OH)2D3 in the rat. Bushinsky DA, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):E578–82

1,25(OH)2D response to combined zinc and phosphorus depletion in rats. Kimmel PL, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):E319–26

Phosphorus restriction reverses hyperparathyroidism in uremia independent of changes in calcium and calcitriol. Lopez–Hilker s, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):F432–7

Response of plasma 1,25–dihydroxyvitamin D in the human PTH(1–34) infusion test: an improved index for the diagnosis of idiopathic hypoparathyroidism and pseudohypoparathyroidism. Miura R, et al. **Calcif Tissue Int** 1990 May;46(5):309–13

1,25–Dihydroxycholecalciferol as measured by a radioreceptor assay in normal subjects and patients after kidney transplantation. Bonnin MR, et al. **Clin Chem** 1990 Feb;36(2):389–90

Development of a double antibody radioimmunoassay for quantitation of 1 alpha,25–dihydroxyvitamin D. Armbruster FP, et al. **Clin Chim Acta** 1990 Aug 15; 189(2):97–110

Correction of low circulating levels of 1,25–dihydroxyvitamin D by 25–hydroxyvitamin D during reversal of hypomagnesaemia. Fuss M, et al. **Clin Endocrinol (Oxf)** 1989 Jul;31(1):31–8

Serum free 1,25–dihydroxyvitamin D and the free 1,25–dihydroxyvitamin D index during a longitudinal study of human pregnancy and lactation. Wilson SG, et al. **Clin Endocrinol (Oxf)** 1990 May;32(5):613–22

Normal serum concentrations of 1,25 dihydroxyvitamin D in osteoporosis. Cantatore FP, et al. **Clin Rheumatol** 1990 Jun;9(2):210–3

Stimulatory effect of insulin–like growth factor–1 on renal Pi transport and plasma 1,25–dihydroxyvitamin D3. Caverzasio J, et al. **Endocrinology** 1990 Jul;127(1):453–9

Rickets due to dietary calcium deficiency. Legius E, et al. **Eur J Pediatr** 1989 Aug;148(8):784–5

Effect of theophylline on calcium metabolism and circulating vitamin D metabolites. Fortenbery EJ, et al. **J Bone Miner Res** 1990 Apr;5(4):321–4

Regulation of 1,25–dihydroxyvitamin D3 by calcium in the parathyroidectomized, parathyroid hormone–replete rat. Weisinger JR, et al. **J Bone Miner Res** 1989 Dec; 4(6):929–35

Ketoconazole decreases the serum 1,25–dihydroxyvitamin D and calcium concentration in sarcoidosis–associated hypercalcemia. Adams JS, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):1090–5

The effects of the menopause on calcitriol and parathyroid hormone: responses to a low dietary calcium stress test. Prince RL, et al. **J Clin Endocrinol Metab** 1990 Apr; 70(4):1119–23

Bone mass reduction after estrogen deprivation by long–acting gonadotropin–releasing hormone agonists and its relation to pretreatment serum concentrations of 1,25–dihydroxyvitamin D3. Scharla SH, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):1055–61

Vitamin D status and related parameters in a healthy population: the effects of age, sex, and season. Sherman SS, et al. **J Clin Endocrinol Metab** 1990 Aug;71(2):405–13

Ketoconazole reduces elevated serum levels of 1,25–dihydroxyvitamin D in hypercalcemic sarcoidosis. Glass AR, et al. **J Endocrinol Invest** 1990 May;13(5):407–13

Effect of dietary calcium supplementation on blood pressure and calciotropic hormones in mineralocorticoid–salt hypertension. DiPette DJ, et al. **J Hypertens** 1990 Jun; 8(6):515–20

Parathyroid hormone, 25–hydroxyvitamin D and 1,25–dihydroxyvitamin D concentration in elderly patients. Oster P, et al. **Klin Wochenschr** 1990 Apr 17;68(8):421–6

Atrial natriuretic factor levels in renal stone patients with idiopathic hypercalciuria and in healthy controls: the effect of an oral calcium load. Halabe A, et al. **Metabolism** 1990 Feb;39(2):209–12

Humoral abnormalities in X–linked hypophosphatemic mice. Meyer RA Jr. **Nephron** 1989;53(4):293–6 (28 ref.)

Determination of the production and metabolic clearance rates of 1,25–dihydroxyvitamin D3 in the pregnant sheep and its chronically catheterized fetus by primed infusion technique. Ross R, et al. **Pediatr Res** 1989 Dec;26(6):633–8

Discrepancy between serum concentrations of 1,25–dihydroxyvitamin D metabolites measured by radio–immunoassay and thymus radioreceptor assay during vitamin D2 treatment. Hartwell D, et al. **Scand J Clin Lab Invest** 1989 Oct;49(6):545–53

Altered TSH levels associated with increased serum 1,25–dihydroxyvitamin D3: a possible link between thyroid and parathyroid disease. Smith MA, et al. **Surgery** 1989 Dec;106(6):987–91

IMMUNOLOGY

1,25–Dihydroxyvitamin D in severe immune challenges [letter] Stack KM, et al. **Immunol Lett** 1989 Nov;23(1):77

METABOLISM

Developmental changes of Ca2+, PO4, and calcitriol metabolism in spontaneously hypertensive rats. Bourgouin P, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):F104–10

Low–calcium diets increase both production and clearance of 1,25–dihydroxyvitamin D3 in rats. Fox J, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E282–7

Elevated 1,25–dihydroxyvitamin D3 and intestinal calbindin–D9k in the toothless rat. Seifert MF, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E377–81

Role of 25–hydroxyvitamin D3 dose in determining rat 1,25–dihydroxyvitamin D3 production. Vieth R, et al. **Am J Physiol** 1990 May;258(5 Pt 1):E780–9

Specific receptors for 1,25–dihydroxyvitamin D3 (1,25–DR) and human colorectal carcinogenesis. Lointier P, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1921–4

Relationship of the 1 alpha, 25–dihydroxyvitamin D3 receptor concentration and the DNA content in renal cell carcinomas. Trydal T, et al. **Anticancer Res** 1989 Nov–Dec; 9(6):1951–5

Up–regulation of the intestinal 1,25–dihydroxyvitamin D receptor during hypervitaminosis D: a comparison between

vitamin D2 and vitamin D3. Beckman MJ, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):910–5

Developmental changes in rat kidney 1,25–dihydroxyvitamin D receptor. Koszewski NJ, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):65–72

Affinity of 22–oxa–1,25(OH)2D3 for 1,25–dihydroxyvitamin D receptor and its effects on the synthesis of osteocalcin in human osteosarcoma cells. Valaja T, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):629–35

Target cell metabolism of 1,25–dihydroxyvitamin D3 to calcitroic acid. Evidence for a pathway in kidney and bone involving 24–oxidation. Makin G, et al. **Biochem J** 1989 Aug 15;262(1):173–80

Reciprocal post–translational regulation of renal 1 alpha– and 24–hydroxylases of 25–hydroxyvitamin D3 by phosphorylation of ferredoxin. mRNA–directed cell–free synthesis and immunoisolation of ferredoxin. Mandel ML, et al. **Biochem J** 1990 Mar 1;266(2):385–92

Regulation of arachidonic acid turnover by 1,25–(OH)2D3 and 24,25–(OH)2D3 in growth zone and resting zone chondrocyte cultures. Schwartz Z, et al. **Biochim Biophys Acta** 1990 Sep 7;1027(3):278–86

Cultured osteoblasts from normal and hypophosphatemic mice: calcitriol receptors and biological response to the hormone. Delvin EE, et al. **Bone** 1990;11(2):87–94

Evidence for in vivo upregulation of 1,25(OH)2 vitamin D3 receptor in human monocytes. Merke J, et al. **Calcif Tissue Int** 1989 Oct;45(4):255–6

Role of calcium and cAMP in heterologous up–regulation of the 1,25–dihydroxyvitamin D3 receptor in an osteoblast cell line. van Leeuwen JP, et al. **Cell Calcium** 1990 Apr; 11(4):281–9

Parathyroid hormone down–regulates 1,25–dihydroxyvitamin D receptors (VDR) and VDR messenger ribonucleic acid in vitro and blocks homologous up–regulation of VDR in vivo. Reinhardt TA, et al. **Endocrinology** 1990 Aug;127(2):942–8

Presence and binding characteristics of calcitriol receptors in human fetal gut. Delvin EE, et al. **FEBS Lett** 1990 Mar 12;262(1):55–7

Sites of action of soltriol (vitamin D) in hamster spleen, thymus, and lymph node, studied by autoradiography. Stumpf WE, et al. **Histochemistry** 1990;94(2):121–5

Mutant vitamin D receptors which confer hereditary resistance to 1,25–dihydroxyvitamin D3 in humans are transcriptionally inactive in vitro. Sone T, et al. **J Biol Chem** 1989 Dec 5;264(34):20230–4

1,25–Dihydroxyvitamin D3 metabolism in a human osteosarcoma cell line and human bone cells. Miller BE, et al. **J Bone Miner Res** 1990 Jun;5(6):597–608

Calcitropic hormone levels in polynesians: evidence against their role in interracial differences in bone mass. Reid IR, et al. **J Clin Endocrinol Metab** 1990 May;70(5):1452–6

25–Hydroxyvitamin D metabolism and its effect on calcitriol metabolism in experimental renal failure. Hsu CH, et al. **J Lab Clin Med** 1990 Jul;116(1):51–7

Protein–binding properties of 22–oxa–1 alpha,25–dihydroxyvitamin D3, a synthetic analogue of 1 alpha,25–dihydroxyvitamin D3. Okano T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Oct;35(5):529–33

Vitamin D metabolism in chronic childhood hypoparathyroidism: evidence for a direct regulatory effect of calcium. Carpenter TO, et al. **J Pediatr** 1990 Feb; 116(2):252–7

Characterisation of receptors for 1,25–dihydroxyvitamin D3 in the human testis. Habib FK, et al. **J Steroid Biochem** 1990 Feb;35(2):195–9

Synthesis and biological activity of (22E,25R)– and (22,25S)–22–dehydro– 1 alpha,25–dihydroxy–26–methylvitamin D3. Hara N, et al. **J Steroid Biochem** 1990 May;35(6):655–64

Evidence of 1,25–dihydroxyvitamin D3–receptors in human digestive mucosa and carcinoma tissue biopsies taken at different levels of the digestive tract, in 152 patients. Meggouh F, et al. **J Steroid Biochem** 1990 Jun; 36(1–2):143–7

Multiple sites of action of the vitamin D endocrine system: FSH stimulation of testis 1,25–dihydroxyvitamin D3 receptors. Osmundsen BC, et al. **J Steroid Biochem** 1989; 34(1–6):339–43

Factors influencing calcitriol metabolism in renal failure. Hsu CH, et al. **Kidney Int** 1990 Jan;37(1):44–50

Lymphocyte cell lines from vitamin D–dependent rickets type II show functional defects in the 1 alpha,25–dihydroxyvitamin D3 receptor. Koeffler HP, et al. **Mol Cell Endocrinol** 1990 Mar 26;70(1):1–11

Characterization of 1,25–dihydroxyvitamin D3 receptors and in vivo targeting of [3H]–1,25(OH)2D3 in the sheep placenta. Ross R, et al. **Placenta** 1989 Nov–Dec; 10(6):553–67

Serum calcium and vitamin D regulate 1,25–dihydroxyvitamin D3 receptor concentration in rat kidney in vivo. Sandgren ME, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4312–4

PHARMACOKINETICS

Biological activity of 26,26,26,27,27,27–hexafluoro–1,25–dihydroxyvitamin D3 in the chick. Kiriyama T, et al. **Acta Endocrinol (Copenh)** 1989 Oct;121(4):520–4

Pharmacokinetics of calcitriol in continuous ambulatory and cycling peritoneal dialysis patients. Salusky IB, et al. **Am J Kidney Dis** 1990 Aug;16(2):126–32

Pregnancy does not alter the metabolic clearance of 1,25–dihydroxyvitamin D in rats. Paulson SK, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):E158–62

Production and metabolic clearance rates of 1,25–dihydroxyvitamin D3 during maturation in rats: studies using a rapid, primed–infusion technique. Fox J. **Horm Metab Res** 1990 May;22(5):278–82

PHARMACOLOGY

The effect of parathyroid hormone and 1,25 (OH)2D3 on nerve conductance in patients on maintenance hemodialysis. Ivić MA, et al. **Acta Med Iugosl** 1989; 43(5):349–55

Effect of 1,25 dihydroxyvitamin D3 on isolated islets from vitamin D3–deprived rats. Billaudel BJ, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):E643–8

Ion microprobe analysis of bone surface elements: effects of 1,25(OH)2D3. Bushinsky DA, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):E815–22

Rapid nongenomic inhibition of renal 25–hydroxyvitamin D3 1–hydroxylase by 1,25–dihydroxyvitamin D3. Dick IM, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):E272–7

Differential regulation of mRNAs encoding for rat intestinal alkaline phosphatase. Eliakim R, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):G93–8

Vitamin D3 and glucose–6–phosphate dehydrogenase in rat duodenal epithelial cells. Nasr LB, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):G760–5

1,25–Dihydroxyvitamin D3–inducible catabolism of vitamin D metabolites in mouse intestine. Tomon M, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):G557–63

Stimulation of cellular alkaline phosphatase activity and its messenger RNA level in a human osteosarcoma cell line by 1,25–dihydroxyvitamin D3. Kyeyune–Nyombi E, et al. **Arch Biochem Biophys** 1989 Dec;275(2):363–70

Effects of 1,25–dihydroxyvitamin D3 and its analogs on butyrate–induced differentiation of HT–29 human colonic carcinoma cells and on the reversal of the differentiated phenotype. Tanaka Y, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):415–23

Ca2(+)–channel agonist BAY K8644 mimics 1,25(OH)2–vitamin D3 rapid enhancement of Ca2+ transport in chick perfused duodenum. de Boland AR, et al. **Biochem Biophys Res Commun** 1990 Jan 15; 166(1):217–22

The in vitro effect of 1 alpha,25–dihydroxyvitamin D3 on insulin production by neonatal rat islets. d'Emden MC, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):413–8

Agents affecting adenylate cyclase activity modulate the stimulatory action of 1,25–dihydroxyvitamin D3 on the production of osteocalcin by human bone cells. Evans DB, et al. **Biochem Biophys Res Commun** 1989 Nov 15; 164(3):1076–85

Induction of resistance to TNF cytotoxicity and mitochondrial superoxide dismutase on U–937 cells by 1,25–dihydroxyvitamin D3. Iwamoto S, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):73–9

Growth–inhibitory effects of 1,25–dihydroxyvitamin D3 on normal human keratinocytes cultured in serum–free medium. Matsumoto K, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):916–23

Comparison of the inhibitions of proliferation of normal and psoriatic fibroblasts by 1 alpha,25–dihydroxyvitamin D3 and synthetic analogues of vitamin D3 with an oxygen atom in their side chain. Morimoto S, et al. **Biochem Int** 1989 Nov;19(5):1143–9

Calcitriol enhances transcriptional activity of lysozyme and cathepsin D genes in U937 promonocytes. Redecker B, et al. **Biochem J** 1989 Sep 15;262(3):843–7

Enhancement of butyrate–induced differentiation of HT–29 human colon carcinoma cells by 1,25–dihydroxyvitamin D3. Tanaka Y, et al. **Biochem Pharmacol** 1989 Nov 1; 38(21):3859–65

Effect of 1,25–dihydroxyvitamin D3 on bone metabolism in tissue culture. Enhancement of the steroid effect by zinc. Yamaguchi M, et al. **Biochem Pharmacol** 1989 Oct 15; 38(20):3453–9

Regulation of cellular retinol binding protein type II by 1,25–dihydroxyvitamin D3. Finlay JA, et al. **Biochemistry** 1990 May 22;29(20):4914–21

1,25–(OH)2 vitamin D–3 enhances Paf–stimulated calcium mobilization in U937 cells by expression of specific Paf binding sites. Aepfelbacher M, et al. **Biochim Biophys Acta** 1990 Feb 19;1051(2):179–84

Modulation of DNA synthesis in cultured muscle cells by 1,25–dihydroxyvitamin D–3. Drittanti L, et al. **Biochim Biophys Acta** 1989 Nov 20;1014(2):112–9

Effect of 1,25(OH)2D3 on its receptor mRNA levels and osteocalcin synthesis in human osteosarcoma cells. Mahonen A, et al. **Biochim Biophys Acta** 1990 Jan 30; 1048(1):30–7

Reactivity of sulfhydryl groups in the brush–border membranes of chick duodena is increased by 1,25–dihydroxycholecalciferol. Mykkanen HM, et al. **Biochim Biophys Acta** 1990 Mar 26;1033(3):282–6

Type I collagen degradation by mouse calvarial osteoblasts stimulated with 1,25–dihydroxyvitamin D–3: evidence for a plasminogen–plasmin–metalloproteinase activation cascade. Thomson BM, et al. **Biochim Biophys Acta** 1989 Nov 20;1014(2):125–32

1,25(OH)2D3 stimulates phospholipid biosynthesis and surfactant release in fetal rat lung explants. Marin L, et al. **Biol Neonate** 1990;57(3–4):257–60

Comparative effects of a novel vitamin D analogue MC–903 and 1,25–dihydroxyvitamin D3 on alkaline phosphatase activity, osteocalcin and DNA synthesis by human osteoblastic cells in culture. Marie PJ, et al. **Bone** 1990; 11(3):171–9

Retinoic acid and 1,25–dihydroxyvitamin D3 stimulate osteoclast formation by different mechanisms. Scheven BA, et al. **Bone** 1990;11(1):53–9

Effects of clomiphene and tamoxifen in vivo on the bone–resorbing effects of parathyroid hormone and of high oral doses of calcitriol (1,25(OH)2D3) in rats with intact ovarian function consuming low calcium diet. Goulding A, et al. **Bone Miner** 1990 Mar;8(3):185–93

1,25–Dihydroxyvitamin D3 prevents the decrease of bone mineral appositional rate in rats with inflammation–mediated osteopenia (IMO). Lempert UG, et al. **Bone Miner** 1989 Sep;7(2):149–58

Changes in cytoskeletal proteins in response to parathyroid hormone and 1,25–dihydroxyvitamin D in human osteoblastic cells. Lomri A, et al. **Bone Miner** 1990 Jul; 10(1):1–12

Growth–inhibitory effects of 1,25–dihydroxyvitamin D3 on normal and psoriatic keratinocytes. Hashimoto K, et al. **Br J Dermatol** 1990 Jul;123(1):93–8

I alpha–25–dihydroxyvitamin D3 increases intracellular free calcium in murine B16 melanoma. Hill SE, et al. **Br J Dermatol** 1989 Jan;120(1):21–30

Effect of 1 alpha,25–dihydroxycholecalciferol on egg shell quality and egg production. Tsang CP, et al. **Br Poult Sci** 1990 Jun;31(2):241–7

Induction of matrix Gla protein synthesis during prolonged 1,25–dihydroxyvitamin D3 treatment of osteosarcoma cells. Fraser JD, et al. **Calcif Tissue Int** 1990 Apr;46(4):270–9

In vitro calcium transport properties of skeletal muscle mitochondria from vitamin D–deficient and 1,25–dihydroxy–vitamin D3–treated chicks. Selles J, et al. **Calcif Tissue Int** 1990 Jul;47(1):46–50

cis–diamminedichloroplatinum(II) cross–linking of the human myeloid cell nuclear differentiation antigen to DNA in HL–60 cells following 1,25–dihydroxy vitamin D3–induced monocyte differentiation. Gaczynski M, et al. **Cancer Res** 1990 Feb 15;50(4):1183–8

Effects of 1 alpha, 25–dihydroxyvitamin D3 on the human chronic myelogenous leukemia cell line RWLeu–4. Lasky SR, et al. **Cancer Res** 1990 May 15;50(10):3087–94

Modulation of ornithine decarboxylase gene transcript levels by differentiation inducers in human promyelocytic leukemia HL60 cells. Rius C, et al. **Cell Differ Dev** 1989 Oct;28(1):39–46

1,25 Dihydroxyvitamin D3–dependent inhibition of growth or killing of Mycobacterium avium complex in human macrophages is mediated by TNF and GM–CSF. Bermudez LE, et al. **Cell Immunol** 1990 May;127(2):432–41

Mechanism in 1,25(OH)2D3–induced suppression of helper/suppressor function of CD4/CD8 cells to immunoglobulin production in B cells. Iho S, et al. **Cell Immunol** 1990 Apr 15;127(1):12–25

1,25–Dihydroxyvitamin D3 modulates the effects of interleukin 2 independent of IL–2 receptor binding. Rigby WF, et al. **Cell Immunol** 1990 Feb;125(2):396–414

T lymphocytes and their CD4 subset are direct targets for the inhibitory effect of calcitriol. Vanham G, et al. **Cell Immunol** 1989 Dec;124(2):320–33

Comparative morphological and biochemical analysis of hypertrophic, non–hypertrophic and 1,25(OH)2D3 treated non–hypertrophic chondrocytes. Gerstenfeld LC, et al. **Connect Tissue Res** 1990;24(1):29–39

Stimulation of calbindin–D9K (CaBP9K) gene expression by calcium and 1,25–dihydroxycholecalciferol in fetal rat duodenal organ culture. Brehier A, et al. **Endocrinology** 1990 Aug;127(2):580–7

Evidence for involvement of protein kinase C and cyclic adenosine 3',5' monophosphate–dependent protein kinase in the 1,25–dihydroxy–vitamin D3–mediated rapid stimulation of intestinal calcium transport, (transcaltachia). de Boland AR, et al. **Endocrinology** 1990 Jul;127(1):39–45

Effect of 1,25–dihydroxyvitamin D3 on induction of chondrocyte maturation in culture: extracellular matrix gene expression and morphology. Gerstenfeld LC, et al. **Endocrinology** 1990 Mar;126(3):1599–609

Contrasting effects of exogenous 1,25–dihydroxyvitamin D [1,25–(OH)2D] versus endogenous 1,25–(OH)2D, induced by dietary calcium restriction, on vitamin D receptors. Goff JP, et al. **Endocrinology** 1990 Feb;126(2):1031–5

Biological activity assessment of 1 alpha,25–dihydroxyvitamin D3–26,23–lactone and its intermediate metabolites in vivo and in vitro. Ishizuka S, et al. **Endocrinology** 1990 Aug;127(2):695–701

1,25–Dihydroxyvitamin D3 [1,25–(OH)2D3] increases insulin–like growth factor I (IGF–I) receptors in clonal osteoblastic cells. Study on interaction of IGF–I and 1,25–(OH)2D3. Kurose H, et al. **Endocrinology** 1990 Apr; 126(4):2088–94

Two–dimensional gel autoradiographic analyses of the effects of 1,25–dihydroxycholecalciferol on protein synthesis in clonal rat osteosarcoma cells. Murray EJ, et al. **Endocrinology** 1990 May;126(5):2679–92

Interferon–gamma inhibits 1,25–dihydroxyvitamin D3–stimulated synthesis of bone GLA protein in rat osteosarcoma cells by a pretranslational mechanism. Nanes

MS, et al. **Endocrinology** 1990 Aug;127(2):588–94

1,25–Dihydroxyvitamin D3 enhances the effect of refeeding on steady state preproinsulin messenger ribonucleic acid levels in rats. Ozono K, et al. **Endocrinology** 1990 Apr; 126(4):2041–5

Glucocorticoid and 1,25–dihydroxyvitamin D modulate the degree of adenosine 3',5'–monophosphate–dependent protein kinase isoenzyme I and II activation by parathyroid hormone in rat osteosarcoma cells. Titus L, et al. **Endocrinology** 1989 Dec;125(6):2806–11

1,25–Dihydroxyvitamin D3 antagonizes interferon–gamma–induced expression of class II major histocompatibility antigens on thyroid follicular and testicular Leydig cells. Tokuda N, et al. **Endocrinology** 1990 Sep;127(3):1419–27

12–O–tetradecanoyl–phorbol–13–acetate decreases influx of extracellular $Ca2+$ induced by depolarization in GH4C1 cells: effects of pretreatment with 1,25–dihydroxycholecalciferol. Tornquist K, et al. **Endocrinology** 1990 Apr;126(4):2068–78

The effect of 1.25 dihydroxyvitamin D3 on binding and internalization of epidermal growth factor in cultures cells. Studies on BT–20 cells using quantitative electron microscope autoradiography. Frappart L, et al. **Exp Cell Res** 1989 Oct;184(2):329–41

1 alpha,25–dihydroxyvitamin D3 stimulates colony formation of chick embryo chondrocytes in soft agar. Sato K, et al. **Exp Cell Res** 1990 Apr;187(2):335–8

Modulation of tartrate–resistant acid phosphatase expression by calcitriol in CSF–induced macrophage colonies. Povolny B, et al. **Exp Hematol** 1990 May;18(4):283–8

Steroid hormones and the cardiovascular system: direct actions of estradiol, progesterone, testosterone, gluco– and mineralcorticoids, and soltriol [vitamin D] on central nervous regulatory and peripheral tissues. Stumpf WE. **Experientia** 1990 Jan 15;46(1):13–25 (115 ref.)

Rapid actions of 1 alpha,25–dihydroxyvitamin D3 on $Ca2+$ and phospholipids in isolated rat liver nuclei. Baran DT, et al. **FEBS Lett** 1989 Dec 18;259(1):205–8

1,25–Dihydroxyvitamin D3 induces normal mononuclear blood cells to differentiate in the direction of monocyte–macrophages. Choudhuri U, et al. **Haematologia (Budap)** 1990;23(1):9–19

Calbindin–D9K immunolocalization and vitamin D–dependence in the bone of growing and adult rats. Balmain N, et al. **Histochemistry** 1989;92(5):359–65

Effect of calcitonin and 1,25(OH)2–vitamin D3 on the FSH, LH and testosterone secretion at rest and LHRH stimulated secretion. Zofková I, et al. **Horm Metab Res** 1989 Dec; 21(12):682–5

Modulation of the expression of CD4 on HL–60 cells by exposure to 1,25–dihydroxyvitamin D3. Schlesinger M, et al. **Immunol Lett** 1989 Oct;22(4):307–11

Autocrine regulation of 1,25–dihydroxycholecalciferol metabolism in myelomonocytic cells. Hewison M, et al. **Immunology** 1989 Oct;68(2):247–52

1,25–Dihydroxyvitamin D3 acts directly on human lymphocytes and interferes with the cellular response to interleukin–2. Koren R, et al. **Immunopharmacology** 1989 Nov–Dec;18(3):187–94

Effect of 1,25–dihydroxyvitamin D3 on human keratinocytes grown under different culture conditions. McLane JA, et al. **In Vitro Cell Dev Biol** 1990 Apr;26(4):379–87

Effect of 1 alpha,25–dihydroxyvitamin D3 on polyamine metabolism in human monocyte cell line–U937. Yukioka K, et al. **Int J Biochem** 1989;21(11):1287–94

Suppression of c–myc mRNA expression by steroid hormones in HTLV–I–infected T–cell line, KH–2. Koizumi T, et al. **Int J Cancer** 1989 Oct 15;44(4):701–6

Phosphorylation of the 1,25–dihydroxyvitamin D3 receptor. A primary event in 1,25–dihydroxyvitamin D3 action. Brown TA, et al. **J Biol Chem** 1990 Jun 15;265(17):10025–9

Vitamin D3 metabolites modulate dihydropyridine–sensitive calcium currents in clonal rat osteosarcoma cells. Caffrey JM, et al. **J Biol Chem** 1989 Dec 5;264(34):20265–74

Effect of hormones and development on the expression of the rat 1,25–dihydroxyvitamin D3 receptor gene. Comparison with calbindin gene expression. Huang YC, et al. **J Biol Chem** 1989 Oct 15;264(29):17454–61

Calbindin–D28K, a 1 alpha,25–dihydroxyvitamin D3–induced calcium–binding protein, binds five or six $Ca2+$ ions with high affinity. Leathers VL, et al. **J Biol Chem** 1990 Jun 15;265(17):9838–41

A functional cell surface type receptor is required for the early action of 1,25–dihydroxyvitamin D3 on the phosphoinositide metabolism in rat enterocytes. Lieberherr M, et al. **J Biol Chem** 1989 Dec 5;264(34):20403–6

Transcriptional regulation of protein kinase C by 1,25–dihydroxyvitamin D3 in HL–60 cells. Obeid LM, et al. **J Biol Chem** 1990 Feb 5;265(4):2370–4

Sphingomyelin turnover induced by vitamin D3 in HL–60 cells. Role in cell differentiation. Okazaki T, et al. **J Biol Chem** 1989 Nov 15;264(32):19076–80

Role of ceramide as a lipid mediator of 1 alpha,25–dihydroxyvitamin D3–induced HL–60 cell differentiation. Okazaki T, et al. **J Biol Chem** 1990 Sep 15;265(26):15823–31

1,25–Dihydroxyvitamin D3 regulation of c–myc protooncogene transcription. Possible involvement of protein kinase C. Simpson RU, et al. **J Biol Chem** 1989 Nov 25;264(33):19710–5

1,25–Dihydroxyvitamin D3 inhibits synthesis and enhances degradation of proteoglycans in osteoblastic cells. Takeuchi Y, et al. **J Biol Chem** 1989 Nov 5;264(31):18407–13

1 alpha,25–dihydroxyvitamin D3–induced increments in hepatocyte cytosolic calcium and lysophosphatidylinositol: inhibition by pertussis toxin and 1 beta,25–dihydroxyvitamin D3. Baran DT, et al. **J Bone Miner Res** 1990 May;5(5):517–24

Regulation of calbindin–D28K gene expression in the chick intestine: effects of serum calcium status and 1,25–dihydroxyvitamin D3. Hall AK, et al. **J Bone Miner Res** 1990 Apr;5(4):331–6

Regulation of calbindin–D28K gene expression by 1,25–dihydroxyvitamin D3 in chick kidney. Hall AK, et al. **J Bone Miner Res** 1990 Apr;5(4):325–30

Osteotropic agents induce the differential secretion of granulocyte–macrophage colony–stimulating factor by the osteoblast cell line MC3T3–E1. Horowitz MC, et al. **J Bone Miner Res** 1989 Dec;4(6):911–21

Fusion of mouse alveolar macrophages induced by 1 alpha,25–dihydroxyvitamin D3 involves extracellular, but not intracellular, calcium. Jin CH, et al. **J Cell Physiol** 1990 Feb;142(2):434–9

1,25–dihydroxyvitamin D3 and agents that increase intracellular adenosine 3',5'–monophosphate synergistically inhibit the mitogenic stimulation of human lymphocytes. Ravid A, et al. **J Clin Endocrinol Metab** 1990 Jun; 70(6):1687–92

25–Hydroxyvitamin D–24–hydroxylase in phytohemagglutinin–stimulated lymphocytes: intermediate bioresponse to 1,25–dihydroxyvitamin D3 of cells from parents of patients with vitamin D–dependent rickets type II. Takeda E, et al. **J Clin Endocrinol Metab** 1990 Apr; 70(4):1068–74

Prenatal diagnosis of vitamin D–dependent rickets, type II: response to 1,25–dihydroxyvitamin D in amniotic fluid cells and fetal tissues. Weisman Y, et al. **J Clin Endocrinol Metab** 1990 Oct;71(4):937–43

1,25(OH)2 vitamin D3 stimulates membrane phosphoinositide turnover, activates protein kinase C, and increases cytosolic calcium in rat colonic epithelium. Wali RK, et al. **J Clin Invest** 1990 Apr;85(4):1296–303

Effects of continuous administration of 1,25–dihydroxyvitamin D3 on plasma minerals and unoccupied colon mucosal 1,25–dihydroxyvitamin D3 receptor concentrations. Naito Y, et al. **J Dairy Sci** 1989 Nov;72(11):2936–41

Effect of 1,24R–dihydroxyvitamin D3 on the growth of human keratinocytes. Matsumoto K, et al. **J Dermatol** 1990 Feb;17(2):97–103

Ontogeny of vitamin D action on the morphology and calcium transport properties of the chick embryonic yolk sac. Clark NB, et al. **J Dev Physiol** 1989 Apr;11(4):243–51

Effects of 1,25–dihydroxyvitamin D3 and cortisol on bovine and human parathyroid cells. Karmali R, et al. **J Endocrinol** 1989 Oct;123(1):137–42

Effects of vitamin D3 metabolites on thyrotropin secretion from rat pituitary cells in culture. Törnquist K, et al. **J Endocrinol Invest** 1990 May;13(5):391–5

Impaired macrophage activation in vitamin D3 deficiency: differential in vitro effects of 1,25–dihydroxyvitamin D3 on mouse peritoneal macrophage functions. Gavison R, et al. **J Immunol** 1989 Dec 1;143(11):3686–90

The effect of calcitriol on natural killer cell activity in hemodialyzed patients. Quesada JM, et al. **J Steroid Biochem** 1989;34(1–6):423–5

Diversity in peritoneal macrophage response of CAPD patients to 1,25–dihydroxyvitamin D3. Levy R, et al. **Kidney Int** 1990 May;37(5):1310–5

Effects of retinoic acid, 1,25–dihydroxyvitamin D3, cytosine arabinoside and alpha–interferon on bone marrow cells from patients with myelodysplastic syndromes. Hellström E, et al. **Leuk Res** 1989;13(12):1113–21

Effects of 1,25–dihydroxyvitamin D3 on the syntheses of DNA and glycosaminoglycans by rat aortic smooth muscle cells in vitro. Koh E, et al. **Life Sci** 1990;46(21):1545–51

Receptors for and bioresponses to 1,25–dihydroxyvitamin D in a human colon carcinoma cell line (HT–29). Harper KD, et al. **Metabolism** 1989 Nov;38(11):1062–9

Effect of 1,25–dihydroxyvitamin D3 in vivo on circulating T lymphocytes. Bargman JM, et al. **Miner Electrolyte Metab** 1989;15(6):359–64

1,25–Dihydroxyvitamin D3–mediated vesicular calcium transport in intestine: dose–response studies. Nemere I, et al. **Mol Cell Endocrinol** 1989 Nov;67(1):47–53

1,25–Dihydroxyvitamin D3 has opposite effects on the expression of parathyroid secretory protein and parathyroid hormone genes. Russell J, et al. **Mol Endocrinol** 1990 Mar; 4(3):505–9

1,25–Dihydroxyvitamin–D3 regulation of interleukin–2 and interleukin–2 receptor levels and gene expression in human T cells. Jordan SC, et al. **Mol Immunol** 1989 Oct; 26(10):979–84

Exogenous interleukin–2 does not reverse the immunoinhibitory effects of 1,25–dihydroxyvitamin D3 on human peripheral blood lymphocyte immunoglobulin production. Jordan SC, et al. **Mol Immunol** 1990 Jan; 27(1):95–100

1,25–Dihydroxycholecalciferol: inhibition of action in organ–cultured intestine by actinomycin D and alpha–amanitin. Corradino RA. **Nature** 1973 May 4; 243(5401):41–3

Effect of physiological concentrations of calcitriol on lymphocyte proliferation in normal subjects and in patients with renal failure. Zarrabeitia MT, et al. **Nephron** 1990; 55(2):110–3

1 alpha, 25–dihydroxyvitamin D3 enhances the up–regulation of interleukin–2 receptor (p55) by interleukin–2. Tamori S, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Sep; 52(6):996–1003

A harvesting method of monocytes/macrophages derived from bone marrow and their characteristics—special reference to the effect of 1,25–dihydroxyvitamin D3 on monocytes/macrophages. Takagi M, et al. **Nippon Seikeigeka Gakkai Zasshi** 1990 Jan;64(1):89–98

Some observations on the influence of vitamin D metabolites when added to the diet of commercial laying hens. Harms RH, et al. **Poult Sci** 1990 Mar;69(3):426–32

1 alpha,25–dihydroxyvitamin D3 regulates the expression of carbonic anhydrase II in nonerythroid avian bone marrow cells. Billecocq A, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6470–4

DNA sequences in the rat osteocalcin gene that bind the 1,25–dihydroxyvitamin D3 receptor and confer responsiveness to 1,25–dihydroxyvitamin D3. Demay MB, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):369–73

Role of 1,25–dihydroxycholecalciferol in growth–plate cartilage: inhibition of terminal differentiation of chondrocytes in vitro and in vivo. Kato Y, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6522–6

Vitamin D–mediated modifications in protein–DNA interactions at two promoter elements of the osteocalcin gene. Markose ER, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1701–5

1,25–Dihydroxyvitamin D3 up–regulates the 1,25–dihydroxyvitamin D3 receptor in vivo. Strom M, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9770–3

Proliferation of tartrate–resistant acid phosphatase positive multinucleate cells in ovariectomized animals. Kalu DN. **Proc Soc Exp Biol Med** 1990 Oct;195(1):70–4

The influence of 24,25(OH)2D3 on the calcemic effect of 1,25(OH)2D in rats with chronic renal failure is parathyroid hormone dependent. Rubinger D, et al. **Proc Soc Exp Biol Med** 1990 Oct;195(1):13–7

Thyroid hormone enhances the genomic action of calcitriol in the small intestine. Cross HS, et al. **Prog Clin Biol Res** 1990;332:163–80

Unidirectional duodenal and jejunal calcium and phosphorus transport in the rat: effects of dietary phosphorus depletion, ethane–1–hydroxy–1,1–diphosphonate and 1,25 dihydroxycholecalciferol. Jungbluth H, et al. **Res Exp Med (Berl)** 1989;189(6):439–49

Effect of retinoids and 1,25(OH)2 vitamin D3 bound to their plasma transport proteins on growth and differentiation of HL–60 cells. Botilsrud M, et al. **Scand J Clin Lab Invest** 1990 May;50(3):309–17

1,25–dihydroxyvitamin D–responsive element and glucocorticoid repression in the osteocalcin gene. Morrison NA, et al. **Science** 1989 Dec 1;246(4934):1158–61

Toxicity of cadmium to rat osteosarcoma cells (ROS 17/2.8): protective effect of 1 alpha,25–dihydroxyvitamin D3. Angle CR, et al. **Toxicol Appl Pharmacol** 1990 Mar 15; 103(1):113–20

Lead inhibits the basal and stimulated responses of a rat osteoblast–like cell line ROS 17/2.8 to 1 alpha,25–dihydroxyvitamin D3 and IGF–I. Angle CR, et al. **Toxicol Appl Pharmacol** 1990 Apr;103(2):281–7

Stimulation of calmodulin binding to skeletal muscle membrane proteins by 1,25–dihydroxy–vitamin D3. Massheimer V, et al. **Z Naturforsch [C]** 1990 Jun; 45(6):663–70

[In vitro effects of 1,25–dihydroxycholecalciferol on alkaline phosphatase and gamma–glutamyltransferase activity in hypophysectomized rats] Prelot M, et al. **Arch Int Physiol Biochim** 1990 Mar;98(1):59–66 (Eng. Abstr.) **(Fre)**

[In vitro stimulation of alkaline phosphatase and gamma–glutamyltransferase in the kidney of hypophysectomized rat by the mixture of 1,25 and 24,25 dihydroxycholecalciferols] Do Thanh X, et al. **Pathol Biol (Paris)** 1989 Oct;37(8):912–4 (Eng. Abstr.) **(Fre)**

[Effects of 1,25 dihydroxyvitamin d3 on the morphology and alkaline phosphatase activity of ROS 17/2,8 osteoblastic cells: influence of time and dose] Chavassieux P, et al. **Reprod Nutr Dev** 1990;30(3):439–43 (Eng. Abstr.) **(Fre)**

[The effect of 1, 25–dihydroxyvitamin D3 on cultured human hair follicle cells from a patients with vitamin D–dependent rickets type II with alopecia] Sadamoto Y, et al. **Nippon Hifuka Gakkai Zasshi** 1990 Feb;100(2):211–4 (Eng. Abstr.) **(Jpn)**

[Effect of 1 alpha, 25(OH)2D3 on experimental rat nephrotoxic serum nephritis] Hattori M. **Nippon Jinzo Gakkai Shi** 1990 Feb;32(2):147–59 (Eng. Abstr.) **(Jpn)**

[Effect of active metabolites of vitamin D 3 on the status of rat bone tissue in various experimental models of hypokinesia] Belakovskiĭ MS, et al. **Kosm Biol Aviakosm Med** 1989 Nov–Dec;23(6):36–9 (Eng. Abstr.) **(Rus)**

[Levels of inorganic and organic substances in the femur of Fisher rats treated with derivatives of vitamin D] Ostojić L, et al. **Med Arh** 1985;39(2–3):57–9 (Eng. Abstr.) **(Scr)**

[Chronic kidney insufficiency and respiratory muscle function. Changes induced by treatment with

1,25(OH)2D3] Gómez-Fernández P, et al. **Med Clin (Barc)** 1990 Feb 17;94(6):204-7 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Calbindin-D9K (CaBP9K) gene: a model for studying the genomic actions of cacitriol and calcium in mammals. Thomasset M, et al. **Adv Exp Med Biol** 1990;269:35-6

Vitamin D (soltriol), light, and reproduction. Stumpf WE, et al. **Am J Obstet Gynecol** 1989 Nov;161(5):1375-84 (107 ref.)

Regulation of the synthesis of DNA polymerase-alpha in regenerating liver by calcium and 1,25-dihydroxyvitamin D3. Sikorska M, et al. **Biochem Cell Biol** 1989 Jul; 67(7):345-51

Regulation of human monocyte HLA-DR and CD4 antigen expression, and antigen presentation by 1,25-dihydroxyvitamin D3. Rigby WF, et al. **Blood** 1990 Jul 1;76(1):189-97

Insulin like growth factor I hormonal regulation by growth hormone and by 1,25(OH)2D3 and activity on human osteoblast-like cells in short-term cultures. Chenu C, et al. **Bone** 1990;11(2):81-6

Calcitonin production: an examination of the regulatory effects of extracellular calcium and 1,25-dihydroxyvitamin D3. Cote GJ, et al. **Horm Metab Res Suppl** 1989;21:15-8

Transforming growth factor-beta 1 modulates the effect of 1 alpha, 25-dihydroxyvitamin D3 on leukemic cells. Morikawa M, et al. **In Vitro Cell Dev Biol** 1990 Jul; 26(7):682-90

1,25 dihydroxyvitamin-D3 regulation of immunoglobulin production in peripheral blood mononuclear cells of patients with systemic lupus erythematosus. Chong PJ, et al. **J Autoimmun** 1989 Dec;2(6):861-7

Regulation by calcium and 1,25-(OH)2D3 of cell proliferation and function of bovine parathyroid cells in culture. Ishimi Y, et al. **J Bone Miner Res** 1990 Jul; 5(7):755-60

Osteoporosis and the metabolites of vitamin D. DeLuca HF. **Metabolism** 1990 Apr;39(4 Suppl 1):3-9 (71 ref.)

Role of 1,25(OH)2D in the genesis of secondary hyperparathyroidism of early renal failure and its use in the prevention of this abnormality. Massry SG. **Metabolism** 1990 Apr;39(4 Suppl 1):13-7

Role of 1,25-(OH)2D3 during pregnancy; studies with pigs suffering from pseudo-vitamin D-deficiency rickets, type I. Lachenmaier-Currle U, et al. **Q J Exp Physiol** 1989 Nov; 74(6):875-81

[Regulation of calcium homeostasis and cellular functions by vitamin D] Miyaura C, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2311-23 **(Jpn)**

[Vitamin D as immunomodulator factor] Zarrabeitia Cimiano MT, et al. **Rev Clin Esp** 1990 Feb;186(2):53-5 **(Spa)**

SECRETION

[Dynamic tests for calcium-regulating hormones in childhood. Evaluation of the incremental response in normal subjects] Saggese G, et al. **Minerva Pediatr** 1989 May;41(5):241-6 (Eng. Abstr.) **(Ita)**

THERAPEUTIC USE

1,25-Dihydroxyvitamin D3 and myeloproliferative syndromes [letter] Foa P, et al. **Am J Hematol** 1990 Mar; 33(3):222

Calcitriol and osteoporosis [letter; comment] Nordin BE, et al. **Ann Intern Med** 1989 Oct 15;111(8):689 Comment on: Ann Intern Med 1989 Feb 15;110(4):267-74.

Calcitriol for postmenopausal osteoporosis [letter] Parfitt AM. **Ann Intern Med** 1990 Jan 15;112(2):147

Will 1,25-dihydroxyvitamin D3, MC 903, and their analogues herald a new pharmacologic era for the treatment of psoriasis? [comment] Holick MF. **Arch Dermatol** 1989 Dec; 125(12):1692-7 (35 ref.) Comment on: Arch Dermatol 1989 Dec;125(12):1647-52.

A double-blind, placebo-controlled trial of topical 1,25-dihydroxycholecalciferol in psoriasis. Henderson CA, et al. **Br J Dermatol** 1989 Oct;121(4):493-6

Nephrocalcinosis in children and adolescents: sonographic evaluation during long-term treatment with 1,25-dihydroxycholecalciferol. Weber G, et al. **Child Nephrol Urol** 1988-89;9(5):273-6

Renal function during calcitriol therapy in chronic renal failure. Bertoli M, et al. **Clin Nephrol** 1990 Feb;33(2):98-102

Two siblings with vitamin-D-dependent rickets type II: no recurrence of rickets for 14 years after cessation of therapy. Takeda E, et al. **Eur J Pediatr** 1989 Oct;149(1):54-7

History and organization of the Growth Failure in Children with Renal Diseases Study. Chan JC, et al. **J Pediatr** 1990 Feb;116(2):S3-7

Protocol of the Growth Failure in Children with Renal Diseases Study. Chan JC, et al. **J Pediatr** 1990 Feb; 116(2):S17-21

Statistical methods and determination of sample size in the Growth Failure in Children with Renal Diseases Study. Chinchilli VM, et al. **J Pediatr** 1990 Feb;116(2):S32-6

Masking procedure, randomization and stratification, and compliance monitoring in the Growth Failure in Children with Renal Diseases Study. Shasky DA, et al. **J Pediatr** 1990 Feb;116(2):S22-3

Direct inhibitory effect of calcitriol on parathyroid function (sigmoidal curve) in dialysis. Dunlay R, et al. **Kidney Int** 1989 Dec;36(6):1093-8

Early therapy of renal bone disease with calcitriol: a prospective double-blind study. Baker LR, et al. **Kidney Int Suppl** 1989 Nov;27:S140-2

Calcitriol for osteoporosis [letter; comment] Need AG, et al. **Lancet** 1990 May 26;335(8700):1291 Comment on: Lancet 1990 May 5;335(8697):1065-6.

Clinical update on calcitriol. A symposium. Seattle, WA, June 2, 1989. Proceedings. **Metabolism** 1990 Apr;39(4 Suppl 1):1-54

Role of calcitriol in the treatment of postmenopausal osteoporosis. Aloia JF. **Metabolism** 1990 Apr;39(4 Suppl 1):35-8

Long-term treatment with calcitriol in postmenopausal osteoporosis. Caniggia A, et al. **Metabolism** 1990 Apr;39(4 Suppl 1):43-9

Role of calcitriol in prevention of osteoporosis: Part I. Drezner MK, et al. **Metabolism** 1990 Apr;39(4 Suppl 1):18-23

Metabolic effects of synthetic calcitriol (Rocaltrol) in the treatment of postmenopausal osteoporosis. Gallagher JC. **Metabolism** 1990 Apr;39(4 Suppl 1):27-9

Action of 1,25-dihydroxyvitamin D3 on calcium balance and bone turnover and its effect on vertebral fracture rate. Gallagher JC, et al. **Metabolism** 1990 Apr;39(4 Suppl 1):30-4

Calcitriol treatment in vitamin D-dependent and vitamin D-resistant rickets. Glorieux FH. **Metabolism** 1990 Apr; 39(4 Suppl 1):10-2

Role of calcitriol in the management of osteoporosis. Malluche HH, et al. **Metabolism** 1990 Apr;39(4 Suppl 1):24-6

Calcium and calcitriol therapy in osteoporotic postmenopausal women with impaired calcium absorption. Need AG, et al. **Metabolism** 1990 Apr;39(4 Suppl 1):53-4

Clinical update on calcitriol: introduction. Riggs BL. **Metabolism** 1990 Apr;39(4 Suppl 1):1-2

Low-dose calcitriol versus calcium in established postmenopausal osteoporosis. Tilyard M. **Metabolism** 1990 Apr;39(4 Suppl 1):50-2

Severe vitamin D deficiency in a case of primary hyperparathyroidism caused by parathyroid lipoadenoma, effect of 25OHD3 treatment. Coen G, et al. **Miner Electrolyte Metab** 1989;15(6):332-7

Bone aluminum content in predialysis chronic renal failure and its relation with secondary hyperparathyroidism and 1,25(OH)2D3 treatment. Coen G, et al. **Miner Electrolyte Metab** 1989;15(5):295-302

Marked direct suppression of primary hyperparathyroidism with osteitis fibrosa cystica by intravenous administration of 1,25-dihydroxycholecalciferol. Patron P, et al. **Miner Electrolyte Metab** 1989;15(6):321-5

Psoriasis, 1,25(OH)2 vitamin D3 and renal failure. De Francisco AL, et al. **Nephrol Dial Transplant** 1990; 5(4):293-4

Reduced deposition of aluminium in trabecular bone of uraemic rats treated with dihydroxylated vitamin D metabolites. Ittel TH, et al. **Nephrol Dial Transplant** 1989; 4(11):957-65

[The effect of 1,25(OH)2D3 on bone mineral content in senile osteoporosis--a dose-finding study] Shiraki M, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Nov 20; 65(11):1253-63 (Eng. Abstr.) **(Jpn)**

[Beneficial effect of 1,25-dihydroxyvitamin D3 in the treatment of myelofibrosis] Palomera L, et al. **Med Clin (Barc)** 1989 Sep 16;93(7):265-8 (Eng. Abstr.) **(Spa)**

CALCIUM

see related
HYPERCALCEMIA
HYPOCALCEMIA

Preparation of brain microsomes with cytochrome P450 activity using calcium aggregation method. Ravindranath V, et al. **Anal Biochem** 1990 Jun;187(2):310-3

Calcium in lipid peroxidation: does calcium interact with superoxide? Bors W, et al. **Arch Biochem Biophys** 1990 Apr; 278(1):269-72

Calcium and phosphorus solubility in neonatal intravenous feeding solutions. MacMahon P, et al. **Arch Dis Child** 1990 Apr;65(4 Spec No):352-3

Calcitonin, estradiol, and hydroxyproline as parameters in the early diagnosis of involutional osteoporosis. The importance of the "second calcitonin phenomenon". Ferrández L, et al. **Arch Orthop Trauma Surg** 1990; 109(4):181-5

Zinc forms complexes with higher kinetical stability than calcium, 5-F-BAPTA as a good example. Csermely P, et al. **Biochem Biophys Res Commun** 1989 Dec 15; 165(2):838-44

Semi-synthetic aequorins with improved sensitivity to Ca2+ ions. Shimomura O, et al. **Biochem J** 1989 Aug 1; 261(3):913-20

EPR signals from modified charge accumulation states of the oxygen evolving enzyme in Ca2+-deficient photosystem II. Boussac A, et al. **Biochemistry** 1989 Nov 14;28(23):8984-9

Refined crystal structure of calcium-liganded carp parvalbumin 4.25 at 1.5-A resolution. Kumar VD, et al. **Biochemistry** 1990 Feb 13;29(6):1404-12

Evidence from X-ray absorption fine structure spectroscopy for significant differences in the structure of concanavalin A in solution and in the crystal. Lin SL, et al. **Biochemistry** 1990 Apr 17;29(15):3599-603

Calcium-induced lipid phase separations and interactions of phosphatidylcholine/anionic phospholipid vesicles. Fluorescence studies using carbazole-labeled and brominated phospholipids. Silvius JR. **Biochemistry** 1990 Mar 27;29(12):2930-8

A calcium-dependent antibody for identification and purification of recombinant proteins. Prickett KS, et al. **Biotechniques** 1989 Jun;7(6):580-9

Binding of zinc and calcium to inositol phosphates (phytate) in vitro. Simpson CJ, et al. **Br J Nutr** 1990 Jul;64(1):225-32

Caged-Ca2+: a new agent allowing liberation of free Ca2+ in biological systems by photolysis. Grell E, et al. **Cell Mol Biol** 1989;35(5):515-22

Fluorescence spectroscopic analysis of calpain II interactions with calcium and calmodulin antagonists. Hong H, et al. **Int J Biochem** 1990;22(4):399-404

Symposium on natriuretic factors, sodium, calcium and hypertension. Proceedings of the 11th National Congress of Cardiology. Ancona, Italy. **Int J Cardiol** 1989;25 Suppl 1:S1-92

Cyclic hexapeptides bearing carboxyl groups. Interaction with metal ions and lipid membrane. Ozeki E, et al. **Int J Pept Protein Res** 1989 Aug;34(2):97-103

The role of hydrated divalent metal ions in the bridging of two anionic groups. An ab initio quantum chemical and molecular mechanics study of dimethyl phosphate and formate bridged by calcium and magnesium ions. Deerfield DW 2d, et al. **J Biomol Struct Dyn** 1989 Jun;6(6):1077-91

Comparison of Ca(II), Cd(II), and Mg(II) titrations of tyrosine-99 spin-labeled bovine calmodulin. You GF, et al. **J Inorg Biochem** 1990 Feb;38(2):117-25

Long-term potentiation of hippocampal mossy fiber synapses is blocked by postsynaptic injection of calcium chelators. Williams S, et al. **Neuron** 1989 Nov;3(5):583-8

[The regulation of polymerization and depolymerization of action of Ca2+] Nonomura Y. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2076-82 **(Jpn)**

ADMINISTRATION & DOSAGE

Dietary calcium, phytate, and zinc intakes and the calcium, phytate, and zinc molar ratios of the diets of a selected group of East African children. Ferguson EL, et al. **Am J Clin Nutr** 1989 Dec;50(6):1450-6

Calcium supplementation and bone loss in middle-aged women. Smith EL, et al. **Am J Clin Nutr** 1989 Oct; 50(4):833-42

Normocalcemic tetany abolished by calcium infusion. Day JW, et al. **Ann Neurol** 1990 Apr;27(4):438-40

Cytokine-induced peritoneal fibrosis in CAPD. Effects of Ca++ and 1,25(OH)2D3. Carozzi S, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):418-20

Calcium supplementation of the diet [letter] Kanis JA, et al. **BMJ** 1990 Jun 9;300(6738):1523

Calcium supplementation of the diet [letter] Nordin BE, et al. **BMJ** 1990 Jul 14;301(6743):120

Low calcium diet in dogs causes a greater increase in parathyroid function measured with an intact hormone than with a carboxylterminal assay. Cloutier M, et al. **Bone Miner** 1990 Jun;9(3):179-88

Effects of clomiphene and tamoxifen in vivo on the bone-resorbing effects of parathyroid hormone and of high oral doses of calcitriol (1,25(OH)2D3) in rats with intact ovarian function consuming low calcium diet. Goulding A, et al. **Bone Miner** 1990 Mar;8(3):185-93

Contrasting effects of exogenous 1,25-dihydroxyvitamin D [1,25-(OH)2D] versus endogenous 1,25-(OH)2D, induced by dietary calcium restriction, on vitamin D receptors. Goff JP, et al. **Endocrinology** 1990 Feb;126(2):1031-5

Rickets due to dietary calcium deficiency. Legius E, et al. **Eur J Pediatr** 1989 Aug;148(8):784-5

Dietary modification with dairy products for preventing vertebral bone loss in premenopausal women: a three-year prospective study. Baran D, et al. **J Clin Endocrinol Metab** 1990 Jan;70(1):264-70

Long-term consistency of nutrient intakes in humans. Heaney RP, et al. **J Nutr** 1990 Aug;120(8):869-75

Effect of calcium citrate-malate on skeletal development in young, growing rats. Kochanowski BA. **J Nutr** 1990 Aug; 120(8):876-81

Effects of low extracellular calcium on cytosolic calcium and ischemic contracture. Jimenez E, et al. **J Surg Res** 1990 Sep;49(3):252-5

Consequences of low dietary magnesium and high dietary calcium on pregnancy outcome and tissue mineralization in rats. Pinkham CS, et al. **Magnes Res** 1988 Dec; 1(3-4):147-53

Calcium supplements. **Med Lett Drugs Ther** 1989 Nov 17; 31(805):101-3

A controlled trial of the effect of calcium supplementation on bone density in postmenopausal women. Dawson-Hughes B, et al. **N Engl J Med** 1990 Sep 27; 323(13):878-83

Factors to consider in the selection of a calcium supplement. Shangraw RF. **Public Health Rep** 1989 Sep-Oct;104 Suppl:46-50 (4 ref.)

Zinc, magnesium and copper in serum of women given a calcium supplement. Jendryczko A, et al.

Zentralbl Gynakol 1989;111(21):1441–4
[The treatment of vertebral osteoporosis. Use of sodium fluoride and sodium monofluorophosphate in combination with calcium] Meunier PJ. Fortschr Med 1990 Jan 15; 108(1):45–8 (10 ref.) (Eng. Abstr.) (Ger)
[Prevention of arrhythmogenic and contractile effects of excessive Ca2+ on the heart through adaptation to stress by increasing the activity of sarcoplasmic reticulum] Meerson FZ, et al. Kardiologiia 1989 Aug;29(8):69–75 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Calcium paradox in an in vivo model of multidose cardioplegia and moderate hypothermia. Prevention with diltiazem or trace calcium levels. Rebeyka IM, et al. J Thorac Cardiovasc Surg 1990 Mar;99(3):475–83

ANALYSIS

Morphometry and elemental analysis of rat exocrine pancreas following administration of trypsin inhibitor. Sato T, et al. Acta Anat (Basel) 1990;137(1):65–76
Breast-milk calcium concentrations during prolonged lactation in British and rural Gambian mothers. Laskey MA, et al. Acta Paediatr Scand 1990 May;79(5):507–12
A transient acidification linked to intracellular Ca2+ in anti-mu-stimulated human B-lymphocytes. Schøyen H, et al. Acta Physiol Scand 1990 Feb;138(2):221–7
Fluorescence ratio imaging of dynamic intracellular signals. Tsien RY. Acta Physiol Scand Suppl 1989;582:6
Interaction of Mg2+ and Ca2+ in in vitro hexagonal assembly of R-form lipopolysaccharides. Kato N, et al. Adv Exp Med Biol 1990;256:247–55
Age changes in some inorganic constituents of bone and aorta: a comparative study in wild-trapped and laboratory mice (Mus). Morgan AJ, et al. Age Ageing 1975 Nov; 4(4):209–23
Analysis of calcium, zinc, magnesium, iron and copper content in myocardium and stenotic mitral valves. Durak I, et al. Am J Cardiol 1989 Dec 1;64(19):1392–4
Relationship between the calcium-to-protein ratio in milk and the urinary calcium excretion in healthy adults—a controlled crossover study. van Beresteijn EC, et al. Am J Clin Nutr 1990 Jul;52(1):142–6
Filtration of platelet-poor plasma specimens yields platelet-free plasma. Application for batch analysis of beta-thromboglobulin and platelet factor 4. Schiebout-Clark RC, et al. Am J Clin Pathol 1990 Aug; 94(2):206–10
Effect of retrograde aminophylline administration on calcium and phosphate solubility in neonatal total parenteral nutrient solutions. Kirkpatrick AE, et al. Am J Hosp Pharm 1989 Dec;46(12):2496–500
Effects of relaxin on calcium concentrations [letter; comment] Young RC. Am J Obstet Gynecol 1990 Feb;162(2):605 Comment on: Am J Obstet Gynecol 1988 Dec;159(6):1395–401.
High-speed digital imaging of cytosolic Ca2+ and contraction in single cardiomyocytes. O'Rourke B, et al. Am J Physiol 1990 Jul;259(1 Pt 2):H230–42
Quin-2 and fura-2 measure calcium differently. Mazorow DL, et al. Anal Biochem 1990 Apr;186(1):28–30
Quantitative imaging of boron, calcium, magnesium, potassium, and sodium distributions in cultured cells with ion microscopy. Ausserer WA, et al. Anal Chem 1989 Dec 15;61(24):2690–5
Studies of chemical interferences in an inductively coupled plasma using moment analysis of space-resolved emission profiles. Li KP, et al. Anal Chem 1990 Jul 1;62(13):1233–8
Simultaneous determination of total and free calcium in milk by flow injection. van Staden JF, et al. Analyst 1990 May; 115(5):605–8
The effects of pH and temperature on fluorescent calcium indicators as determined with Chelex-100 and EDTA buffer systems. Lattanzio FA Jr. Biochem Biophys Res Commun 1990 Aug 31;171(1):102–8
Quantification of biomineralization: an in-vitro tissue culture system and microanalysis of calcium, phosphorus and trace elements by total-reflection X-ray fluorescence. Niemann A, et al. Biochem Biophys Res Commun 1990 Aug 16; 170(3):1216–22
Stimulation of calcium-ATPase activity by 3,5,3'-tri-iodothyronine in rat thymocyte plasma membranes. A possible role in the modulation of cellular calcium concentration. Segal J, et al. Biochem J 1989 Aug 1;261(3):749–54
Recombinant aequorin and recombinant semi-synthetic aequorins. Cellular Ca2+ ion indicators. Shimomura O, et al. Biochem J 1990 Sep 1;270(2):309–12
Resistance of conformable indwelling urinary catheters to encrustation. Cox AJ, et al. Biomater Artif Cells Artif Organs 1989;17(4):429–35
Tb3+ and Ca2+ binding to phosphatidylcholine. A study comparing data from optical, NMR, and infrared spectroscopies. Petersheim M, et al. Biophys J 1989 Sep; 56(3):551–7
1,25-Dihydroxyvitamin D3 prevents the decrease of bone mineral appositional rate in rats with inflammation-mediated osteopenia (IMO). Lempert UG, et al. Bone Miner 1989 Sep;7(2):149–58
What on earth are we drinking? Mayne PD, et al. Br J Urol 1990 Aug;66(2):123–6
Modelling the relationships of egg weight, specific gravity, shell calcium and shell thickness. Sooncharenying S, et al. Br Poult Sci 1989 Sep;30(3):623–31
Fluoride and mineral redeposition in outermost layers of bovine enamel during surface softening. Rentsch H, et al. Caries Res 1990;24(2):97–100
Effect of brushing with fluoride toothpastes on the fluoride, calcium, and inorganic phosphorus concentrations in approximal plaque of young adults. Sidi AD. Caries Res 1989;23(4):268–71
Localization of Ca2+ important in myocardial contractile control. Langer GA. Cell Biol Int Rep 1990 Apr; 14(4):295–8 (15 ref.)
Imaging of cell calcium. Cell Calcium 1990 Feb–Mar; 11(2–3):55–249
Measurement of intracellular Ca2+ in BC3H-1 muscle cells with Fura-2: relationship to acetylcholine receptor synthesis. Berlin JR, et al. Cell Calcium 1990 May; 11(5):371–84
Ca2+ imaging in single living cells: theoretical and practical issues. Moore ED, et al. Cell Calcium 1990 Feb–Mar; 11(2–3):157–79 (46 ref.)
Real-time confocal microscopy and calcium measurements in heart muscle cells: towards the development of a fluorescence microscope with high temporal and spatial resolution. Niggli E, et al. Cell Calcium 1990 Feb–Mar; 11(2–3):121–30
Alteration of intracellular Fura-2 fluorescence by viscosity: a simple correction. Poenie M. Cell Calcium 1990 Feb–Mar; 11(2–3):85–91
Assessment of Fura-2 for measurements of cytosolic free calcium. Roe MW, et al. Cell Calcium 1990 Feb–Mar; 11(2–3):63–73 (44 ref.)
High temporal resolution video imaging of intracellular calcium. Takamatsu T, et al. Cell Calcium 1990 Feb–Mar; 11(2–3):111–20
Practical design criteria for a dynamic ratio imaging system. Tsien RY, et al. Cell Calcium 1990 Feb–Mar;11(2–3):93–109
Intracellular calibration of the fluorescent calcium indicator Fura-2. Williams DA, et al. Cell Calcium 1990 Feb–Mar; 11(2–3):75–83
Encapsulation of drugs by lyophilized empty dipalmitoylphosphatidylcholine liposomes: effect of calcium ion. Jizomoto H, et al. Chem Pharm Bull (Tokyo) 1989 Nov;37(11):3066–9
Correlation between cytosolic free calcium, contracture, ATP, and irreversible ischemic injury in perfused rat heart. Steenbergen C, et al. Circ Res 1990 Jan;66(1):135–46
Discriminant functions in differential diagnosis of hypercalcemic patients. Gibb JA, et al. Clin Chem 1990 Feb;36(2):358–61
Decreased cytosolic free calcium concentration of aged human lymphocytes in resting state. Tóth S, et al. Compr Gerontol [A] 1989;3 Suppl:16–22
INCA: software for consort 30 analysis of flow cytometric calcium determinations. Keij JF, et al. Cytometry 1989 Nov;10(6):814–7
Diabetic state-induced modification of Ca, Mg, Fe and Zn content of skeletal, cardiac and smooth muscles. Nakagawa M, et al. Endocrinol Jpn 1989 Dec;36(6):795–807
Use of photoproteins as intracellular calcium indicators. Blinks JR. Environ Health Perspect 1990 Mar;84:75–81 (37 ref.)
Calcium measurements with electron probe X-ray and electron energy loss analysis. LeFurgey A, et al. Environ Health Perspect 1990 Mar;84:57–73 (72 ref.)
Measurement of cytosolic calcium using 19F NMR. Murphy E, et al. Environ Health Perspect 1990 Mar;84:95–8
Development of 19F NMR for measurement of [Ca2+]i and [Pb2+]i in cultured osteoblastic bone cells. Schanne FA, et al. Environ Health Perspect 1990 Mar;84:99–106
Ultrastructural localization of Ca2(+)-binding sites in the middle ear mucosa of the rat. Karatay MC, et al. Eur Arch Otorhinolaryngol 1990;247(3):156–60
Effect of buffer systems and pHi on the measurement of [Ca2+]i with fura 2. Ganz MB, et al. FASEB J 1990 Apr 1;4(6):1638–44
Cytosolic and vacuolar Ca2+ concentrations in yeast cells measured with the Ca2+-sensitive fluorescence dye indo-1. Halachmi D, et al. FEBS Lett 1989 Oct 9; 256(1–2):55–61
Factors affecting ionized calcium concentration in human bile. Usui R, et al. Gastroenterol Jpn 1990 Jun;25(3):403
Calcium and calmodulin changes with ageing in C57BL/6J mice. Massie HR, et al. Gerontology 1989;35(2–3):100–5
Ultrastructural localization of endogenous calcium in the teleost retina. Freihöfer D, et al. Histochem J 1990 Feb; 22(2):63–72
Ultrastructural localization of calcium in post-mortem bovine muscle: a cytochemical and X-ray microanalytical study. Vignon X, et al. Histochem J 1989 Jul;21(7):403–11
Quantitative X-ray microanalysis of calcium in sea urchin eggs after quick-freezing and freeze-substitution. Validity of the method. Gillot I, et al. Histochemistry 1989; 92(6):523–9
Cytosolic free calcium of aorta in hypertensive rats. Chronic inhibition of angiotensin converting enzyme. Sada T, et al. Hypertension 1990 Sep;16(3):245–51
The relationship between calcium content and aluminum and silicon content in uraemic rats. Hosokawa S, et al. Int Urol Nephrol 1989;21(4):435–44
Solute concentrations of the pulmonary epithelial lining fluid of anesthetized rats. Effros RM, et al. J Appl Physiol 1990 Jan;68(1):275–81
Ca,P-rich layer formed on high-strength bioactive glass-ceramic A-W. Kokubo T, et al. J Biomed Mater Res 1990 Mar;24(3):331–43
Detection of extracellular calcium gradients with a calcium-specific vibrating electrode. Kühtreiber WM, et al. J Cell Biol 1990 May;110(5):1565–73
Release of organic matrix components from bovine incisor roots during in vitro lesion formation. Klont B, et al. J Dent Res 1990 Mar;69(3):896–900
The inorganic components of cementum- and enamel-related dentin in the rat incisor. Steinfort J, et al. J Dent Res 1990 Jun;69(6):1287–92
Limitations of ZAF correction factors in the determination of calcium/phosphorus ratios: important forensic science considerations relevant to the analysis of bone fragments using scanning electron microscopy and energy-dispersive x-ray microanalysis. Payne CM, et al. J Forensic Sci 1990 May;35(3):560–8
Calcium signals recorded from two new purpurate indicators inside frog cut twitch fibers. Hirota A, et al. J Gen Physiol 1989 Oct;94(4):597–631
Effects of bacterial lipopolysaccharide and calmodulin on Ca2(+)-ATPase and calcium in human natural killer cells, studied by a combined technique of immunoelectron microscopy and ultracytochemistry. Kang YH. J Histochem Cytochem 1990 Mar;38(3):359–70
Basal platelet intracellular free calcium concentrations in untreated hypertensive patients and normotensive controls. Barr SM, et al. J Hum Hypertens 1989 Aug;3(4):263–6
Flow cytometric measurement of cytoplasmic free calcium in human peripheral blood T lymphocytes with fluo-3, a new fluorescent calcium indicator. Vandenberghe PA, et al. J Immunol Methods 1990 Mar 9;127(2):197–205
Simultaneous flow cytometric measurements of cytoplasmic Ca++ and membrane potential changes upon FMLP exposure as HL-60 cells mature into granulocytes: using [Ca++]in as an indicator of granulocyte maturity. Bernardo J, et al. J Leukoc Biol 1990 Mar;47(3):265–74
Use of 1,2-bis(2-amino-5-fluorophenoxy)ethane-N,N,N',N'-tetraacetic acid (5FBAPTA) in the measurement of free intracellular calcium in the brain by 19F-nuclear magnetic resonance spectroscopy. Badar-Goffer RS, et al. J Neurochem 1990 Sep;55(3):878–84
Solubility of calcium and phosphorus in parenteral nutrition solutions [letter; comment] Drwal LA, et al. J Pediatr 1990 Feb;116(2):319–20 Comment on: J Pediatr 1989 Jun;114(6):1002–4.
Studies of normal and prematurely ruptured human amniotic membranes: low calcium and magnesium in prematurely ruptured membranes. Kidroni G, et al. J Perinat Med 1989; 17(6):433–8
A mineral-related feature of young plaque characteristic to periodontitis-affected adults. Sewón L, et al. J Periodontol 1990 Jan;61(1):42–4
Angiotensin II receptor-mediated stimulation of cytosolic-free calcium and inositol phosphates in chick myocytes. Baker KM, et al. J Pharmacol Exp Ther 1989 Nov;251(2):578–85
Effects of nicorandil on cytosolic calcium concentrations in quin2-loaded rat aortic vascular smooth muscle cells in primary culture. Kai H, et al. J Pharmacol Exp Ther 1989 Dec;251(3):1174–80
ATP-activated channels gate calcium entry in single smooth muscle cells dissociated from rabbit ear artery. Benham CD. J Physiol (Lond) 1989 Dec;419:689–701
Bradykinin-evoked changes in cytosolic calcium and membrane currents in cultured bovine pulmonary artery endothelial cells. Cannell MB, et al. J Physiol (Lond) 1989 Dec;419:555–68
Magnesium-to-calcium ratio in tap water, and its relationship to geological features and the incidence of calcium-containing urinary stones. Kohri K, et al. J Urol 1989 Nov;142(5):1272–5
Intracellular calcium measurements with PVC-resin Ca-selective microelectrodes in frog proximal tubules and sartorius muscle fibers. Kubota T, et al. Jpn J Physiol 1990; 40(1):79–95
The magnesium, calcium, sodium, potassium and chloride contents of the term human placenta. Challier JC, et al. Magnes Res 1988 Dec;1(3–4):141–5
Phosphorus, calcium and lead distribution in collagen in lead induced soft tissue calcification. An ultrastructural and X-ray microanalytical study. Vandeputte DF, et al. Matrix 1990 Mar;10(1):33–7
Possible regulation of the cytosolic-free calcium concentration by Na+ spikes in immature cerebellar Purkinje cells. Sorimachi M, et al. Neurosci Lett 1990 Apr 6;111(3):333–8
The antiulcer effect of verapamil in relation to gastric calcium levels in stressed rats. Koo MW, et al. Pharmacol Biochem Behav 1989 Sep;34(1):73–6
Intracellular distribution of calcium and zinc in normal, hyperplastic, and neoplastic human prostate: X-ray microanalysis of freeze-dried cryosections. Tvedt KE, et al. Prostate 1989;15(1):41–51
Effects of erythrocytes, bicarbonate, temperature and albumin on in vitro ionized calcium variations with pH. Kancir CB, et al. Scand J Clin Lab Invest 1989 Sep; 49(5):475–82
Ionized calcium and cyclic AMP in plasma and urine.

Biochemical evaluation in calcium metabolic disease. Thode J. **Scand J Clin Lab Invest Suppl** 1990;197:1–45 (94 ref.)

Comparative study on mineralization–related intraoral parameters in periodontitis–affected and periodontitis–free adults. Sewón L, et al. **Scand J Dent Res** 1990 Aug; 98(4):305–12

Calcium levels in ruffle–ended and smooth–ended maturation ameloblasts. Ashrafi SH, et al. **Scanning Microsc** 1989 Jun; 3(2):629–36; discussion 637–8

A method to determine the end point of decalcification of hard tissue and bone. Müller S, et al. **Stain Technol** 1990; 65(2):77–83

Ouabain enhances basal and stimulus–induced cytoplasmic calcium concentrations in platelets. Lees AD, et al. **Thromb Haemost** 1989 Nov 24;62(3):1000–5

Calcium rise in human platelets elicited by anti–CD9 and –CD41 murine monoclonal antibodies. Favier R, et al. **Thromb Res** 1989 Sep 1;55(5):591–9

Identification of precipitable Ca2+ by electron spectroscopic imaging and electron energy loss spectroscopy in the organ of Corti of the guinea pig. Heinrich UR, et al. **Ultramicroscopy** 1990 Jan;32(1):1–6

Reference–material–based collaborative test of flame atomic absorption spectroscopic determination of calcium and magnesium in foods and biological materials. Vaessen HA, et al. **Z Lebensm Unters Forsch** 1990 Mar;190(3):199–204

[Clinical observations and calcium determinations in hypocalcemic cataract] Huang QL. **Chung Hua Yen Ko Tsa Chih** 1989 Sep;25(5):268–70 (Eng. Abstr.) **(Chi)**

[Analytical studies on calcium and microelements in calcined longgu (an animal bone)] Mao WL, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Dec;14(12):725–7, 762 (Eng. Abstr.) **(Chi)**

[Interference of bisphosphonate in calcium determination using atomic absorption spectroscopy] Krause S, et al. **Z Med Lab Diagn** 1989;30(7):388–90 (Eng. Abstr.) **(Ger)**

[Comments on: "Determination of calcium and magnesium in postmortem human vitreous humor as a test to ascertain the cause and time of death" by R. Nowak and S. Balabanova] Madea B. **Z Rechtsmed** 1990;103(3):231–3 **(Ger)**

[Determination of calcium and trace elements in hard tissues of the healthy tooth by neutron activation analysis and statistical data processing] Rizzo S, et al. **Minerva Stomatol** 1989 Sep;38(9):929–33 (Eng. Abstr.) **(Ita)**

[Assay methods for Ca ion in immunocytes using Ca ion–sensitive fluorescent reagents] Shinomiya H. **Nippon Saikingaku Zasshi** 1989 Sep;44(5):727–33 **(Jpn)**

[Measurement of cytosolic free calcium using a fluorescent indicator] Karaki H. **Nippon Yakurigaku Zasshi** 1990 Jan; 95(1):Suppl 1–2 **(Jpn)**

[The calcium content in the bile of patients with cholelithiasis, chronic hepatitis, liver cirrhosis and in healthy subjects] Dzhuraev KhSh, et al. **Lab Delo** 1990; (1):23–4 (Eng. Abstr.) **(Rus)**

[Determination of the elemental composition of cerebrospinal fluid using emission spectroscopy] Vasil'eva IG, et al. **Lab Delo** 1989;(11):76 **(Rus)**

[Milk of calcium lithiasis. Crystallographic study] Linares P, et al. **Arch Esp Urol** 1989 Apr;42(3):237–43 (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS

Vasodilator actions of HA1077 in vitro and in vivo putatively mediated by the inhibition of protein kinase. Asano T, et al. **Br J Pharmacol** 1989 Dec;98(4):1091–100

Analogous effects of organic calcium antagonists and magnesium on the epiphyseal growth plate. Messler HH, et al. **Clin Orthop** 1990 Sep;(258):135–41

Effects of lithium ex vivo on the GTP–mediated inhibition of calcium–stimulated adenylate cyclase activity in rat brain. Mørk A, et al. **Eur J Pharmacol** 1989 Sep 22; 168(3):347–54

Cromakalim, a vasodilator, differentially inhibits Ca2+ currents in NG108–15 neuroblastoma x glioma hybrid cells. Ito Y, et al. **FEBS Lett** 1990 Mar 26;262(2):313–6

KS–504 compounds, novel inhibitors of Ca2+ and calmodulin–dependent cyclic nucleotide phosphodiesterase from Mollisia ventosa. Nakanishi S, et al. **J Antibiot (Tokyo)** 1989 Dec;42(12):1775–83

Structures of KS–501 and KS–502, the new inhibitors of Ca2+ and calmodulin–dependent cyclic nucleotide phosphodiesterase. Yasuzawa T, et al. **J Antibiot (Tokyo)** 1990 Apr;43(4):336–43

Factors affecting rabbit mesenteric artery smooth muscle sensitivity to calcium antagonists. Meisheri KD, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1167–74

Simple and specific assessment of Ca–entry–blocking activities of drugs by measurement of Ca reversal. Matsuo K, et al. **J Pharmacol Methods** 1989 Dec;22(4):265–75

Modification of the positive inotropic effects of catecholamines, cardiac glycosides and Ca2+ by the orally active male contraceptive, gossypol, in isolated guinea–pig heart. Ye YX, et al. **Life Sci** 1989;45(20):1853–61

Deoxycorticosterone prevents the blood pressure–lowering effect of calcium in spontaneously hypertensive rats. Wuorela H, et al. **Methods Find Exp Clin Pharmacol** 1990 Jan–Feb;12(1):37–42

Inhibition of Ca2+ inflow at nerve terminals of frog muscle blocks facilitation while phasic transmitter release is still considerable. Dudel J. **Pflugers Arch** 1990 Feb; 415(5):566–74

Anticoagulant effect of inositol hexasulfate as measurable by clotting times of fibrinogen and recalcified plasma. Oshima G. **Thromb Res** 1990 May 1;58(3):243–50

BLOOD

Calcium and other biochemical alterations induced by masseter spasm following suxamethonium. Kancir CB, et al. **Acta Anaesthesiol Belg** 1989;40(3):175–8

Significance of ionized calcium during liver transplantation. Scheinin B, et al. **Acta Anaesthesiol Belg** 1989;40(2):101–5

Radiological and biochemical evaluation of bone growth in young dogs. Koscinczuk P, et al. **Acta Physiol Pharmacol Latinoam** 1989;39(3):289–97

Calcium and magnesium concentrations in affective disorder: difference between plasma and serum in relation to symptoms. Linder J, et al. **Acta Psychiatr Scand** 1989 Dec; 80(6):527–37

Association of calcaemic status with survival of elderly inpatients. Sorva A, et al. **Age Ageing** 1989 Jul;18(4):230–4

Comparison of the effect between leukotriene B4 and leukotriene B5 on the induction of interleukin 1–like activity and calcium mobilizing activity in human blood monocytes. Tatsuno I, et al. **Agents Actions** 1990 Mar; 29(3–4):324–7

Blood lead, calcium status, and behavior in preschool children. Laraque D, et al. **Am J Dis Child** 1990 Feb; 144(2):186–9

Serum phosphate concentration. Effect on serum ionized calcium concentration in vitro. Lehmann M, et al. **Am J Dis Child** 1989 Nov;143(11):1340–1

Calcium mobilization in osteopetrosis. Morrow G 3d, et al. **Am J Dis Child** 1967 Aug;114(2):161–8

Deficient elevation of the cytoplasmic calcium ion concentration by epinephrine in epinephrine–insensitive platelets of patients with myeloproliferative disorders. Ushikubi F, et al. **Am J Hematol** 1990 Feb;33(2):96–100

Plasma digitalis–like activity and cytosolic Ca2+ in essential hypertension. Le Quan Sang KH, et al. **Am J Hypertens** 1990 Mar;3(3):171–5

Endothelin does not affect intracellular calcium ion concentration in the platelets of rats. Murakawa K, et al. **Am J Hypertens** 1990 Apr;3(4):307–9

DOCA–salt treatment decreases serum total calcium but not ionized calcium concentrations in rats. Takata Y, et al. **Am J Hypertens** 1990 Mar;3(3):237–9

Granulomatous infiltration of the talus and abnormal vitamin D and calcium metabolism in a patient with sarcoidosis: successful treatment with hydroxychloroquine [see comments] DeSimone DP, et al. **Am J Med** 1989 Dec; 87(6):694–6 Comment in: Am J Med 1990 May;88(5):553–4.

Relationship between plasma calcium fractions, other bone–related variables, and serum follicle–stimulating hormone levels in premenopausal, perimenopausal, and postmenopausal women. Nordin BE, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):140–5

Early neonatal predictors of neonatal hypocalcemia in infants of diabetic mothers: an epidemiologic study. Mimouni F, et al. **Am J Perinatol** 1990 Jul;7(3):203–6

Effects of chronic metabolic alkalosis on Ca2+, PTH and 1,25(OH)2D3 in the rat. Bushinsky DA, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):E578–82

Halothane–dependent release of intracellular Ca2+ in blood cells in malignant hyperthermia. Klip A, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):C495–503

Regulation of plasma calcium and phosphate in calcitonin–infused rats. Lausson S, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):E370–7

Phosphorus restriction reverses hyperparathyroidism in uremia independent of changes in calcium and calcitriol. Lopez–Hilker s, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):F432–7

Proton fluxes associated with the Ca pump in human red blood cells. Milanick MA. **Am J Physiol** 1990 Mar;258(3 Pt 1):C552–62

Failure of pH to predict ionized calcium percentage in healthy horses. Kohn CW, et al. **Am J Vet Res** 1990 Aug; 51(8):1206–10

Interference by haemoglobin with the cresolphthalein complexone method for serum calcium measurement. Corns CM. **Ann Clin Biochem** 1990 Mar;27 (Pt 2):152–5

Anomalies in pH 7.40 correction in ionised calcium analysers. Sachs C, et al. **Ann Clin Biochem** 1989 Nov;26 (Pt 6):542–6

A comparison of serum ionized calcium in arterial and mixed venous blood during CPR. Gando S, et al. **Ann Emerg Med** 1990 Aug;19(8):850–6

Hypouricemia, hypercalciuria, and decreased bone density: a hereditary syndrome. Sperling O, et al. **Ann Intern Med** 1974 Apr;80(4):482–7

Abnormal systemic metabolism of iron, porphyrin, and calcium in Fahr's syndrome. Beall SS, et al. **Ann Neurol** 1989 Oct;26(4):569–75

Postischemic [Ca2+] repletion improves cardiac performance without altering oxygen demands. Yokoyama H, et al. **Ann Thorac Surg** 1990 Jun;49(6):894–902

Plasmapheresis in patients with familial hypercholesterolemia lowers ionized calcium but does not deteriorate left ventricular function. Gisinger C, et al. **Atherosclerosis** 1990 Feb;81(1):75–7

A dual effect of calcitonin gene–related peptide on plasma calcium levels in the chick. Bevis PJ, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):846–50

The correlation between Ca2+ influx and inositol 1, 4, 5–trisphosphate (IP3) formation in platelets stimulated by various agonists. Uemura Y, et al. **Biochem Int** 1990; 20(5):853–61

Hepoxilin A3 induces changes in cytosolic calcium, intracellular pH and membrane potential in human neutrophils. Dho S, et al. **Biochem J** 1990 Feb 15; 266(1):63–8

Further characterization of the plasma membrane– and intracellular membrane–associated platelet Ca2+ transport systems. Enouf J, et al. **Biochem J** 1989 Oct 15; 263(2):547–52

Activation of protein kinase C in human neutrophils attenuates agonist–stimulated rises in cytosolic free Ca2+ concentration by inhibiting bivalent–cation influx and intracellular Ca2+ release in addition to stimulating Ca2+ efflux. McCarthy SA, et al. **Biochem J** 1989 Dec 1; 264(2):357–64

Use of fluo–3 to measure cytosolic Ca2+ in platelets and neutrophils. Loading cells with the dye, calibration of traces, measurements in the presence of plasma, and buffering of cytosolic Ca2+. Merritt JE, et al. **Biochem J** 1990 Jul 15;269(2):513–9

Influence of nitric oxide on agonist–mediated calcium mobilization in platelets. Rao GH, et al. **Biochem Med Metab Biol** 1990 Jun;43(3):271–5

Nitroprusside inhibits platelet function primarily by inhibiting Ca2+ mobilization. Krishnamurthi S, et al. **Biochem Soc Trans** 1990 Jun;18(3):468–9

Does calmodulin regulate the affinity of the human red cell Ca2+ pump for ATP? Caride AJ, et al. **Biochim Biophys Acta** 1990 Aug 10;1027(1):21–4

Degranulation in human neutrophils primes the cells for subsequent responsiveness to the chemoattractant N–formylmethionylleucylphenylalanine but does not increase the sensitivity of the NADPH–oxidase to an intracellular calcium rise. Dahlgren C, et al. **Biochim Biophys Acta** 1990 Apr 9;1052(1):42–6

Kinetic evidence that arachidonate–induced calcium efflux from platelet microsomes involves a carrier–type ionophoric mechanism. Fischer TH, et al. **Biochim Biophys Acta** 1990 Feb 28;1022(2):215–28

Seasonal changes in the prolactin cells of Bufo andersoni in relation to the serum calcium level. Pandey AK. **Biol Struct Morphog** 1989;2(3):110–6

Myelin basic protein inhibits the calcium response to phytohaemagglutinin in human lymphocytes. Bellini T, et al. **Biosci Rep** 1990 Feb;10(1):55–9

Effect of 17 beta–estradiol on calcium response to phytohaemagglutinin in human lymphocytes. Bellini T, et al. **Biosci Rep** 1990 Feb;10(1):73–8

GTP gamma S–induced calcium transients and exocytosis in human neutrophils. Nüsse O, et al. **Biosci Rep** 1990 Feb; 10(1):93–103

Calcium mobilization in human platelets using indo–1 and flow cytometry. Jennings LK, et al. **Blood** 1989 Dec; 74(8):2674–80

Ca2+ permeability in deoxygenated sickle cells. Rhoda MD, et al. **Blood** 1990 Jun 15;75(12):2453–8

Cytosolic free calcium concentrations in lymphocytes from malignant hyperthermia susceptible patients. Ording H, et al. **Br J Anaesth** 1990 Mar;64(3):341–5

Ionized calcium in acidosis: differential effect of hypercapnic and lactic acidosis. Schaer H, et al. **Br J Anaesth** 1974 Nov;46(11):842–8

Elevated platelet–free calcium in uraemia. Moosa A, et al. **Br J Haematol** 1990 Mar;74(3):300–5

Abnormal calcium transport of acanthocytes in acute myelodysplasia with myelofibrosis. Ohsaka A, et al. **Br J Haematol** 1989 Dec;73(4):568–70

Calcium techniques [letter; comment] Smyth MG. **Br J Psychiatry** 1989 Jul;155:127 Comment on: Br J Psychiatry 1988 Dec;153:849.

The effect of high–dose salmon calcitonin on bone mineral metabolism in the normal rat. Glajchen N, et al. **Calcif Tissue Int** 1990 Jan;46(1):28–32

The effect of different doses of nasal salmon calcitonin on plasma cyclic AMP and serum ionized calcium. Thamsborg G, et al. **Calcif Tissue Int** 1990 Jan;46(1):5–8

The effect of adenosine and adenosine analogues on methylxanthine–induced hypercalciuria in the rat. McPhee MD, et al. **Can J Physiol Pharmacol** 1989 Oct; 67(10):1278–82

A brief note on serum calcium levels in schizophrenics and controls. Khan A, et al. **Can J Psychiatry** 1990 Feb; 35(1):74–6

Epinephrine potentiates calcium mobilization and activation of protein kinases in platelets stimulated by ADP through a mechanism unrelated to phospholipase C. Olbrich C, et al. **Cell Signal** 1989;1(5):483–92

Disturbances of calcium and magnesium metabolism occur in most hyperthyroid patients. Ford HC, et al. **Clin Biochem** 1989 Oct;22(5):373–6

Variable citrate interference in arsenazo III dye assays of total calcium in serum [letter; comment] Beilby J, et al. **Clin Chem** 1990 May;36(5):824–5 Comment on: Clin Chem 1989 Oct;35(10):2140–1.

Determination of serum calcium by glyoxal bis (2–hydroxyanil) chelation. Bellinger JF, et al. **Clin Chem** 1966 Feb;12(2):90–4

Citrate interference in assays of total calcium in serum [see comments] Gawoski JM, et al. **Clin Chem** 1989 Oct; 35(10):2140–1 Comment in: Clin Chem 1990 May;36(5):824–5.

Direct photometric analysis of serum calcium with glyoxal bis (2–hydroxyanil). Mager M, et al. **Clin Chem** 1966 Apr; 12(4):234–42

Albumin–adjusted calcium concentration in serum increases during normal pregnancy. Payne RB, et al. **Clin Chem** 1990 Jan;36(1):142–4

Adjusted ionized calcium (at pH 7.4) and actual ionized calcium (at actual pH) in capillary blood compared for clinical evaluation of patients with disorders of calcium metabolism. Thode J, et al. **Clin Chem** 1990 Mar;36(3):541–4

Critical analytical and clinical aspects of ionized calcium in neonates. Wandrup J. **Clin Chem** 1989 Oct;35(10):2027–33 (67 ref.)

Aminopropylidine diphosphonate (APD) in mild primary hyperparathyroidism: effect on clinical status. Schmidli RS, et al. **Clin Endocrinol (Oxf)** 1990 Mar;32(3):293–300

Platelet cytosolic free calcium before and after antihypertensive treatment in perinephritis hypertension of the rabbit. Barr SM, et al. **Clin Exp Hypertens [A]** 1989; 11(4):633–48

Red blood cell ionized calcium concentration in spontaneous hypertension: modulation in vivo by the calcium antagonist PN 200.110. Morris MJ, et al.
Clin Exp Pharmacol Physiol 1988 Apr;15(4):257–60

Severe metabolic acidosis and disturbances of calcium metabolism induced by acetazolamide in patients on haemodialysis. De Marchi S, et al. **Clin Sci** 1990 Mar; 78(3):295–302

Blood pressure, left ventricular mass and intracellular calcium in primary hyperparathyroidism. Dominiczak AF, et al. **Clin Sci** 1990 Feb;78(2):127–32

Alterations in Na+, K+ and Ca2+ transport in erythrocytes of patients with carcinomas of the head and neck: possible role of mild anaemia and cell age. Engelmann B, et al. **Clin Sci** 1990 Mar;78(3):315–20

A cross–sectional study of basal platelet intracellular free calcium concentration in normotensive and hypertensive primigravid pregnancies. Kilby MD, et al. **Clin Sci** 1990 Jan;78(1):75–80

Influence of Ca/Na exchange and diamide on membrane partitioning of glyceraldehyde–3–phosphate dehydrogenase in dog red cells. Colclasure GC, et al.
Comp Biochem Physiol [A] 1990;96(1):147–50

Erythrocyte osmotic fragility and cation concentrations during experimentally induced bovine anaplasmosis. Silva IM, et al. **Comp Biochem Physiol [A]** 1989;94(3):455–9

Hypermagnesemia and hypocalcemia as predictors of high mortality in critically ill pediatric patients. Broner CW, et al. **Crit Care Med** 1990 Sep;18(9):921–8

Postresuscitation electrolyte changes: role of arrhythmia and resuscitation efforts in their genesis. Salerno DM, et al. **Crit Care Med** 1989 Nov;17(11):1181–6

Altered cellular Ca2+ and Na+ transport in diabetes mellitus. Mazzanti L, et al. **Diabetes** 1990 Jul;39(7):850–4

Effects of carbamazepine on serum calcium in schizophrenia [letter] Tran–Johnson T, et al. **DICP** 1989 Dec;23(12):1034

Bolus injections of recombinant human interleukin–1 cause transient hypocalcemia in normal mice. Boyce BF, et al. **Endocrinology** 1989 Nov;125(5):2780–3

Stability of the hypocalcemic activity of porcine thyrocalcitonin. Tashjian AH Jr, et al. **Endocrinology** 1967 Aug;81(2):306–18

Regulation of calciotropic hormones in vivo in the New Zealand white rabbit. Warren HB, et al. **Endocrinology** 1989 Nov;125(5):2683–90

Regulation of hormone–induced Ca2+ mobilization in the human platelets. Crouch MF, et al.
Environ Health Perspect 1990 Mar;84:41–4 (4 ref.)

Dissociation of unidirectional influx of external Ca2+ and release from internal stores in activated human T lymphocytes. Gelfand EW, et al. **Eur J Immunol** 1990 Jun; 20(6):1237–41

Blockade of ADP–induced Ca2+–signal and platelet aggregation by lipoxygenase inhibitors. Borin ML, et al. **FEBS Lett** 1989 Nov 6;257(2):345–7

Changes in serum calcium, magnesium, cyclic AMP and monoamine oxidase levels during pregnancy and under prolonged ritodrine treatment for preterm labor. Kawarabayashi T, et al. **Gynecol Obstet Invest** 1989; 28(3):132–7

Glucose raises cytosolic free calcium in the rat pancreatic islets. Komatsu M, et al. **Horm Metab Res** 1989 Aug; 21(8):405–9

Regulation of plasma calcium in man: the influence of parathyroid hormone and calcitonin. Gudmundsson TV, et al. **Hormones** 1971;2(1):26–39 (70 ref.)

Platelet ionic calcium and serum total calcium in essential hypertension. Chandra M, et al. **Indian J Exp Biol** 1990 Jan;28(1):96–7

Effect of increased level of CO2 exposure in a closed environment on calcium and phosphorus balance in rats. Viswanathan KR, et al. **Indian J Exp Biol** 1989 Feb; 27(2):151–5

Prospective study of changes in serum calcium after diethyl–ether anaesthesia. Haleem S, et al.
Indian J Med Res 1990 Jun;92:192–4

Calcium mobilization in C5a–stimulated adult and newborn bovine neutrophils. Doré M, et al. **Inflammation** 1990 Feb; 14(1):71–82

Effects of oral base therapy on serum ionized calcium, phosphorus and parathyroid hormone in chronic hemodialysis patients. Caruana RJ, et al.
Int J Artif Organs 1989 Dec;12(12):778–81

Cytoplasmic Ca2+ is necessary for thrombin–induced platelet activation. Davies TA, et al. **J Biol Chem** 1989 Nov 25;264(33):19600–6

Simultaneous flow cytometric measurements of thrombin–induced cytosolic pH and Ca2+ fluxes in human platelets. Davies TA, et al. **J Biol Chem** 1990 Jul 15; 265(20):11522–6

The ligand binding site of the platelet integrin receptor GPIIb–IIIa is proximal to the second calcium binding domain of its alpha subunit. D'Souza SE, et al.
J Biol Chem 1990 Feb 25;265(6):3440–6

Receptor–activated single channels in intact human platelets. Mahaut–Smith MP, et al. **J Biol Chem** 1990 Jun 25; 265(18):10479–83

Correlation between spontaneous oscillations of cytosolic free Ca2+ and tumor necrosis factor–induced degranulation in adherent human neutrophils. Richter J, et al. **J Biol Chem** 1990 Aug 25;265(24):14358–63

A role for Na+/Ca2+ exchange in the generation of superoxide radicals by human neutrophils. Simchowitz L, et al. **J Biol Chem** 1990 Aug 15;265(23):13449–56

Parathyroid hormone is not required for normal milk composition or secretion or lactation–associated bone loss in normocalcemic rats. Garner SC, et al.
J Bone Miner Res 1990 Jan;5(1):69–75

Regulation of calbindin–D28K gene expression in the chick intestine: effects of serum calcium status and 1,25–dihydroxyvitamin D3. Hall AK, et al.
J Bone Miner Res 1990 Apr;5(4):331–6

Transient increases in cytosolic free calcium appear to be required for the migration of adherent human neutrophils [published erratum appears in J Cell Biol 1990 Mar;110(3):861] Marks PW, et al. **J Cell Biol** 1990 Jan; 110(1):43–52

Use of chlortetracycline fluorescence for the detection of Ca storing intracellular vesicles in normal human erythrocytes. Engelmann B, et al. **J Cell Physiol** 1990 May; 143(2):357–63

A comparison of reference method values for calcium, lithium and magnesium with method–dependent assigned values. Külpmann WR, et al.
J Clin Chem Clin Biochem 1989 Sep;27(9):631–7

Ketoconazole decreases the serum 1,25–dihydroxyvitamin D and calcium concentration in sarcoidosis–associated hypercalcemia. Adams JS, et al.
J Clin Endocrinol Metab 1990 Apr;70(4):1090–5

Rate and concentration dependence of parathyroid hormone dynamics during stepwise changes in serum ionized calcium in normal humans. Grant FD, et al.
J Clin Endocrinol Metab 1990 Aug;71(2):370–8

Vitamin D status and related parameters in a healthy population: the effects of age, sex, and season. Sherman SS, et al. **J Clin Endocrinol Metab** 1990 Aug;71(2):405–13

Effects of pentoxifylline on Ca2+–dependent transglutaminase in rat erythrocytes. Swislocki NI, et al.
J Clin Pharmacol 1989 Sep;29(9):775–80

Basal and stimulated cytosolic platelet calcium in essential hypertension. Norris KC, et al. **J Hum Hypertens** 1990 Apr;4(2):110–2

Correlation of increased serum calcium with elevated blood pressure and vascular resistance during calcium infusion in normotensive man. Aoki K, et al. **J Hypertens** 1990 Jun; 8(6):579–83

Serum sodium, potassium, calcium and magnesium and blood pressure in a Dutch population. Rinner MD, et al.
J Hypertens 1989 Dec;7(12):977–81

Interstrain restriction fragment length polymorphism in the c–src correlates with Na,K cotransport and calcium content in hybrid rat erythrocytes. Kotelevtsev YV, et al.
J Hypertens Suppl 1989 Dec;7(6):S112–3

Increased platelet aggregation and intracellular calcium in hypertensive patients: effects of cyclo–oxygenase blockade. Lechi C, et al. **J Hypertens Suppl** 1989 Dec;7(6):S160–1

Red blood cell calcium level in chronic renal failure: effect of continuous ambulatory peritoneal dialysis. Gafter U, et al. **J Lab Clin Med** 1990 Sep;116(3):386–92

Effects of pretreatment with propranolol on potassium, calcium, and magnesium shifts after ventricular fibrillation in dogs. Salerno DM, et al. **J Lab Clin Med** 1989 Nov; 114(5):595–603

Agonist–evoked changes in cytosolic pH and calcium concentration in human platelets: studies in physiological bicarbonate. Sage SO, et al. **J Physiol (Lond)** 1990 Jan; 420:31–45

Relationships between the effects of peripherally administered salmon calcitonin on calcaemia and brain biogenic amines. Gaggi R, et al. **Jpn J Pharmacol** 1989 Nov;51(3):309–20

Correlation of blood pressure in end–stage renal disease with platelet cytosolic free–calcium concentration. Schiffl H.
Klin Wochenschr 1990 Jul 17;68(14):718–22

Effects of lithium on platelet ionic intracellular calcium concentration in patients with bipolar (manic–depressive) disorder and healthy controls. Tan CH, et al. **Life Sci** 1990; 46(16):1175–80

Calcium homeostasis in the critically ill patient. Zaloga GP.
Magnesium 1989;8(3–4):190–200 (23 ref.)

Serum calcium and salt restriction in the diet of patients with essential arterial hypertension. Uza G, et al.
Med Interne 1989 Apr–Jun;27(2):93–7

Total red cell Ca2+ content and rheological determinants in a group of subjects with vascular atherosclerotic disease. Caimi G, et al. **Microcirc Endothelium Lymphatics** 1990 Feb;6(1):35–43

Platelets and the beginnings of preeclampsia [editorial; comment] Redman CW. **N Engl J Med** 1990 Aug 16; 323(7):478–80 Comment on: N Engl J Med 1990 Aug 16;323(7):434–8.

Altered platelet calcium metabolism as an early predictor of increased peripheral vascular resistance and preeclampsia in urban black women [see comments] Zemel MB, et al. **N Engl J Med** 1990 Aug 16;323(7):434–8 Comment in: N Engl J Med 1990 Aug 16;323(7):478–80.

Intravenous calcitriol lowers serum calcium concentrations in uraemic patients with severe hyperparathyroidism and hypercalcaemia. Hamdy NA, et al.
Nephrol Dial Transplant 1989;4(6):545–8

Neuroleptic–induced extrapyramidal symptoms and serum calcium levels. Results of a pilot study. Kuny S, et al.
Neuropsychobiology 1989;21(2):67–70

Relationship between plasmatic concentrations of K, Na and Ca, and ECG from foals during postnatal phase. Escabias MI, et al. **Nippon Juigaku Zasshi** 1990 Apr;52(2):257–63

Abnormalities of calcium ion movement in platelets of patients with myeloproliferative disorders. Fujimoto T, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec;52(8):1542–8

Characterization of platelet cytoplasmic Ca2+ mobilization in patients with congenital cyclo–oxygenase deficiency and with defective platelet aggregation to A23187. Fuse I, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec;52(8):1522–33

Determination of intracellular calcium ions during shear–induced platelet aggregation. Ikeda Y, et al.
Nippon Ketsueki Gakkai Zasshi 1989 Dec;52(8):1549–54

Gray platelet syndrome: relationship between morphological abnormality of the dense tubular system (DTS) and intracellular Ca++ mobilization in the platelet. Mori K, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec; 52(8):1534–41

The signal transduction systems and intracellular Ca2+ dynamics in arachidonate–induced platelet activation. Nishikawa M, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec;52(8):1489–97

Ca2+ influx and platelet membrane glycoproteins. Yamaguchi A, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec;52(8):1480–8

Hypercalcemia in a calcitriol–treated hypoparathyroid woman during lactation. Caplan RH, et al.
Obstet Gynecol 1990 Sep;76(3 Pt 2):485–9

Ionized calcium: pediatric perspective. Lynch RE.
Pediatr Clin North Am 1990 Apr;37(2):373–89 (176 ref.)

Pineal and adrenal effects on calcium homeostasis in the rat. Hakanson DO, et al. **Pediatr Res** 1990 Jun;27(6):571–3

Endogenous inhibitors of the Na+, K(+)–pump and platelet Ca2+ handling in hypertension. Devynck MA, et al.
Physiol Bohemoslov 1990;39(1):71–8

Serum calcium and vitamin D regulate 1,25–dihydroxyvitamin D3 receptor concentration in rat kidney in vivo. Sandgren ME, et al.
Proc Natl Acad Sci U S A 1990 Jun;87(11):4312–4

The influence of 24,25(OH)2D3 on the calcemic effect of 1,25(OH)2D in rats with chronic renal failure is parathyroid hormone dependent. Rubinger D, et al.
Proc Soc Exp Biol Med 1990 Oct;195(1):13–7

Elevated serum gastrin after food intake or acid blockade evokes hypocalcemia. Håkanson R, et al. **Regul Pept** 1990 Apr 24;28(2):131–6

Endotoxin concentrations in the blood following intravenous injection and effect on prostaglandin F2 alpha release, calcium and bile acids in goats. Aiumlamai S, et al.
Res Vet Sci 1990 Mar;48(2):190–5

Anticoagulant–induced preanalytical errors in ionized calcium determination on blood. Sachs C, et al.
Scand J Clin Lab Invest 1989 Nov;49(7):647–51

Inadequate algorithm: a cause for 'incorrect pH 7.40 correction' in ionized calcium analysers. Sachs C, et al.
Scand J Clin Lab Invest 1989 Oct;49(6):561–5

Parathyroid carcinoma with steroid–suppressible plasma immunoreactive parathyroid hormone and human chorionic gonadotrophin. Chng SL, et al.
Singapore Med J 1990 Feb;31(1):83–4

Circadian rhythms for calcium, inorganic phosphorus, and parathyroid hormone in primary hyperparathyroidism: functional and practical considerations. Lobaugh B, et al.
Surgery 1989 Dec;106(6):1009–16; discussion 1016–7

Concurrent hyperthyroidism and hyperparathyroidism: influence of hyperthyroidism on serum magnesium, free calcium and parathyroid hormone. Lam HC, et al.
Taiwan I Hsueh Hui Tsa Chih 1989 Jun;88(6):601–5

Time dependence of aequorin–indicated calcium levels in stimulated and unstimulated platelets: evidence for multiple aequorin environments in platelets. Lages B, et al.
Thromb Haemost 1989 Dec 29;62(4):1094–9

Extracellular–free Ca++ accounts for the sex difference in the aggregation of human platelets in citrated platelet–rich plasma. Bell DN, et al. **Thromb Res** 1990 Apr 1;58(1):47–60

Aequorin–detected calcium changes in stimulated thrombasthenic platelets. Aggregation–dependent calcium movement in response to ADP. Lecompte T, et al.
Thromb Res 1990 Jun 15;58(6):561–70

Cyclic AMP-dependent protein kinase does not increase calcium transport in platelet microsomes. White GC 2d, et al. **Thromb Res** 1989 Dec 1;56(5):575-81

Sequential changes in divalent ion metabolism after renal transplantation. Cotorruelo JG, et al. **Transplant Proc** 1990 Aug;22(4):1414-5

Blood glucose, calcium and urea in cows from a herd with congenital nuclear cataract. France MP, et al. **Vet Rec** 1990 May 12;126(19):484-5

[The relationship between morphological changes of thyroid gland and serum calcium in severely burned dogs] Ge XY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Dec;3(4):296-7 **(Chi)**

[Ca, Mg, Cu and Zn contents of the maternal and umbilical cord serum in pregnancy-induced hypertension] Zhao F. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Jul;24(4):212-4, 252 (Eng. Abstr.) **(Chi)**

[Free calcium in platelets and the serum in essential hypertension] Chen S, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Jun; 17(3):137-9, 189 (Eng. Abstr.) **(Chi)**

[Evaluation of calcium and phosphorus nutrition in residents of Beijing] Feng AL. **Chung Hua I Hsueh Tsa Chih** 1989 Sep;69(9):509-11 **(Chi)**

[Evaluation of calcium and phosphorus nutrition in children in nurseries in Beijing] Xu J, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Sep;69(9):512-4 **(Chi)**

[The effect of polychlorinated biphenyls (PCB) on chickens: the effect of long-term administration of medium doses of Delor 103 on the levels of thyroxine, triiodothyronine and total calcium in the blood serum] Ruprich J, et al. **Vet Med (Praha)** 1990 Feb;35(2):97-103 (Eng. Abstr.) **(Cze)**

[Method for the determination of ionized calcium in clinical practice] Poršová I, et al. **Vnitr Lek** 1990 Apr;36(4):379-86 (Eng. Abstr.) **(Cze)**

[Ionized calcium, total calcium and albumin corrected calcium in the serum in 1213 patients with suspected calcium metabolic diseases. A prospective multicenter study] Thode J, et al. **Ugeskr Laeger** 1989 Sep 18; 151(38):2423-5 (Eng. Abstr.) **(Dan)**

[The effect of heparin on analysis of calcium ions in whole blood] Constant I, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R59 **(Fre)**

[Parathyroidectomy and autotransplantation in renal hyperparathyroidism. I. Clinical and chemical laboratory studies following tissue selection] Niederle B, et al. **Chirurg** 1989 Oct;60(10):665-70 **(Ger)**

[Parathyroidectomy and autotransplantation in renal hyperparathyroidism. II. Morphologic and functional studies in transplant-dependent recurrence] Niederle B, et al. **Chirurg** 1989 Oct;60(10):671-7 (Eng. Abstr.) **(Ger)**

[Relation between post-thrombotic syndrome, ADP-induced thrombocyte aggregation and intrathrombocyte calcium content] Heintz B, et al. **Klin Wochenschr** 1989 Dec 4; 67(23):1194-8 (Eng. Abstr.) **(Ger)**

[Biochemical basis of pharmaceutical chemistry. 7. Drugs for maintenance of calcium-, fluid volume- and blood sugar homeostasis] Nuhn P. **Pharmazie** 1990 Jun;45(6):448-58 (50 ref.) **(Ger)**

[Changes in the concentration of plasma histamine and the blood electrolyte picture following the venous administration of nonionic x-ray contrast media] Jansen O, et al. **Rontgenpraxis** 1990 Mar;43(3):104-9 **(Ger)**

[Effectiveness of synthetic calcitonin derivative (elcatonin) on the bone pain and serum calcium concentration in multiple myeloma] Hirota Y, et al. **Gan To Kagaku Ryoho** 1990 May;17(5):1059-63 (Eng. Abstr.) **(Jpn)**

[Calcium metabolism in tuberculosis] Shirai M, et al. **Kekkaku** 1990 Jun;65(6):415-20 (Eng. Abstr.) **(Jpn)**

[Necessity of blood test to diagnosis kidney diseases] Koide H. **Nippon Naika Gakkai Zasshi** 1990 Feb 10;79(2):134-9 **(Jpn)**

[Significance of calcium analysis in clinical tests] Fujita T. **Nippon Rinsho** 1989 Dec;48 Suppl:646-8 **(Jpn)**

[A screening index for primary hyperparathyroidism using discriminant functions] Shirata T, et al. **Rinsho Byori** 1989 Sep;37(9):1045-50 (Eng. Abstr.) **(Jpn)**

[Effect of intravenous contrast media used in urography on the complement system and blood calcium] Korzec-Grzegorczyk I. **Pol Tyg Lek** 1989 May 1-8; 44(18-19):423-6 (Eng. Abstr.) **(Pol)**

[Mathematical model of oscillations in mammalian erythrocytes. The role of calmodulin-dependent Ca-activated Ca-pump] Kholmukhamedov EL, et al. **Biofizika** 1990 Mar-Apr;35(2):375-7 (Eng. Abstr.) **(Rus)**

[Biochemical features of platelet alpha2-adrenergic receptors and their connection with an increase in concentration of intracellular Ca2+] Negresku EV, et al. **Biokhimiia** 1989 Jun;54(6):909-15 (Eng. Abstr.) **(Rus)**

[C-src locus determines increased rate of Na+,K+-cotransport and increased calcium content in erythrocytes of (SHR x WKY) F2 hybrids] Kotelevtsev IuV, et al. **Biull Eksp Biol Med** 1989 Nov;108(11):608-9 (Eng. Abstr.) **(Rus)**

[The effect of fenigidin (nifedipine) and verapamil on renin activity, the levels of ionized calcium and aldosterone in the blood plasma and on the hemodynamic indices of rats with spontaneous hypertension] Nasyrov ShN, et al. **Farmakol Toksikol** 1990 Jan-Feb;53(1):32-5 (Eng. Abstr.) **(Rus)**

[Membrane-protective effect of finoptin in exertion-induced stenocardia] Kokarev AN, et al. **Kardiologiia** 1989 Jul; 29(7):21-5 (Eng. Abstr.) **(Rus)**

[Transport of monovalent cations and calcium in erythrocytes of rats with spontaneous hypertension: study with fractions enriched with young and old cells] Pokudin NI, et al. **Kardiologiia** 1989 Aug;29(8):83-8 (Eng. Abstr.) **(Rus)**

[Role of electrolytes in the pathogenesis of arterial spasm and muscle cramps in varicose veins of the lower limbs] Khokhlov AM, et al. **Khirurgiia (Mosk)** 1989 Sep;(9):88-92 (Eng. Abstr.) **(Rus)**

[Clinico-biochemical parallels in diverse forms of primary hyperparathyroidism] Fekson EG, et al. **Klin Med (Mosk)** 1989 Sep;67(9):92-6 (Eng. Abstr.) **(Rus)**

[Methodologic aspects of study and the normal values of calcium fractions of the blood] Ermakova IP, et al. **Lab Delo** 1989;(11):28-33 **(Rus)**

[Calcium-regulating hormones in primary arterial hypotension in children] Kaloeva ZD. **Pediatriia** 1989; (12):41-2 (Eng. Abstr.) **(Rus)**

[Correlation between blood levels of uric acid and calcium in rheumatoid arthritis and deforming polyosteoarthrosis] Pekhlivanov D, et al. **Revmatologiia (Moskva)** 1989 Apr-Jun;(2):12-5 (Eng. Abstr.) **(Rus)**

[Calcium-transporting system of erythrocytes in psoriasis] Mavrov II, et al. **Ukr Biokhim Zh** 1990 May-Jun;62(3):72-6 (Eng. Abstr.) **(Rus)**

[Permeability for 45Ca and Ca-ATPase activity in erythrocyte membranes of patients with psoriasis] Petruniaka VV, et al. **Vopr Med Khim** 1989 Nov-Dec; 35(6):59-63 (Eng. Abstr.) **(Rus)**

[Effects of prospidin on the development of pulmonary metastases of Lewis tumors in rats in regard to changes in the level of extracellular calcium (published erratum appears in Vopr Onkol 1990;36(5):following 614)] Kinzirskiĭ AS, et al. **Vopr Onkol** 1989;35(8):961-7 (Eng. Abstr.) **(Rus)**

[The effect of dietotherapy and supplementary calcium intake on phosphorus-calcium homeostasis in hypertensive patients] Gladkevich AV, et al. **Vopr Pitan** 1990 Mar-Apr; (2):23-6 (Eng. Abstr.) **(Rus)**

[The vitamin D allowance of premature infants and their phosphorus-calcium metabolic status with different types of feeding and rickets prevention] Shakirova EM, et al. **Vopr Pitan** 1990 Mar-Apr;(2):37-41 (Eng. Abstr.) **(Rus)**

[Serum calcium, phosphorus and alkaline phosphatase as indicators in the therapy of renal osteodystrophy] Laboš I, et al. **Med Arh** 1988;42(4):181-5 (Eng. Abstr.) **(Scr)**

[Relation between hypertension and plasma minerals in therapy with various antihypertensive agents] Zulić I, et al. **Med Arh** 1983;37(2):77-9 (Eng. Abstr.) **(Scr)**

[Effects of lithium on serum calcium, magnesium and inorganic phosphorus after exercise in rats] Córdova A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1990 Mar-Apr;18(2):103-9 (Eng. Abstr.) **(Spa)**

[Changes in blood calcium during liver transplant in children] Barat G, et al. **Rev Esp Anestesiol Reanim** 1990 Jan-Feb; 37(1):8-11 (Eng. Abstr.) **(Spa)**

[Patient data for evaluating reference values] Loria A, et al. **Rev Invest Clin** 1989 Oct-Dec;41(4):381-5 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

Positive correlation of calcium concentration in cerebrospinal fluid and rectal temperature in rabbits. Palmi M, et al. **Acta Physiol Hung** 1990;75 Suppl:229-30

CSF ion composition and manipulation during thermoregulation in an avian species, Gallus domesticus. Maki AA, et al. **Comp Biochem Physiol [A]** 1990; 96(1):135-40

DEFICIENCY

Nutritional factors in bone health in elderly subjects: methodological and contextual problems. Heaney RP. **Am J Clin Nutr** 1989 Nov;50(5 Suppl):1182-9; discussion 1231-5 (31 ref.)

Low-calcium diets increase both production and clearance of 1,25-dihydroxyvitamin D3 in rats. Fox J, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E282-7

Adrenergic regulation of calcium-deficient hypertension in chick embryos. Koide M, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):H1900-9

Calcium deprivation increases salt intake. Tordoff MG, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):R411-9

The ability of physicians to predict electrolyte deficiency from the ECG [published erratum appears in Ann Emerg Med 1990 Aug;19(8):905] Wrenn KD, et al. **Ann Emerg Med** 1990 May;19(5):580-3

Effects of a low calcium maternal and weaning diet on the thickness and microhardness of rat incisor enamel and dentine. Lozupone E, et al. **Arch Oral Biol** 1989;34(7):491-8

A light and scanning electron microscopic study of osteocyte activity in calcium-deficient rats. Sissons HA, et al. **Calcif Tissue Int** 1990 Jan;46(1):33-7

Regional patterns of bone loss and altered bone remodeling in response to calcium deprivation in laboratory rabbits. Wu DD, et al. **Calcif Tissue Int** 1990 Jul;47(1):18-23

The effects of the menopause on calcitriol and parathyroid hormone: responses to a low dietary calcium stress test. Prince RL, et al. **J Clin Endocrinol Metab** 1990 Apr; 70(4):1119-23

Effect of calcium deficiency on vitamin B12 absorption in rats. Bergesen O, et al. **Scand J Gastroenterol** 1990 Mar; 25(3):276-80

Potential of alfalfa as a source of calcium for calcium deficient horses. Cuddeford D, et al. **Vet Rec** 1990 Apr 28;126(17):425-9

[The effect of calcium and vitamin D deficiency in the food on the uptake and retention of 99mTc-methylenediphosphonate and 85Sr in the bones in rats] Kapitola J, et al. **Sb Lek** 1990 May;92(5):135-41 (Eng. Abstr.) **(Cze)**

[Circulatory changes in the rat tibia in dietary calcium and vitamin D deficiency. Effects of age and sex] Kapitola J, et al. **Sb Lek** 1990 Jan;92(1):6-11 (Eng. Abstr.) **(Cze)**

[Pathologic fracture of the sternum in a patient with anorexia nervosa] Olmos JM, et al. **Rev Clin Esp** 1990 Jan; 186(1):23-5 (Eng. Abstr.) **(Spa)**

DIAGNOSTIC USE

Secretin and calcium provocative tests in the Zollinger-Ellison syndrome. A prospective study [see comments] Frucht H, et al. **Ann Intern Med** 1989 Nov 1; 111(9):713-22 Comment in: Ann Intern Med 1989 Nov 1;111(9):697-9.

Diagnosis of gastrinoma: much ado about nothing? [comment] Wolfe MM. **Ann Intern Med** 1989 Nov 1; 111(9):697-9 Comment on: Ann Intern Med 1989 Nov 1;111(9):713-22.

Metabolic bone disease evaluated by a combined calcium balance and tracer kinetic study. Charles P. **Dan Med Bull** 1989 Oct;36(5):463-79 (148 ref.)

The usefulness of an oral calcium tolerance test in the choice of management of patients with idiopathic hypercalciuria. Naafs MA, et al. **Neth J Med** 1990 Jun;36(5-6):223-7

ISOLATION & PURIFICATION

Sequential removal of Ca2+ from satellite tobacco necrosis virus. Crystal structure of two EDTA-treated forms. Montelius I, et al. **J Mol Biol** 1990 Mar 20;212(2):331-43

METABOLISM

Acetylosalicylic acid and calcium ions. Hrková V, et al. **Act Nerv Super (Praha)** 1989 Jun;31(2):133-4

Inhibition by sodium bromide of synaptic potentiation and calcium accumulation in the superior cervical ganglion of rat. Párducz A, et al. **Acta Biol Hung** 1989;40(3):221-8

Dysfunction in myoplasmic Ca(2+) homeostasis in neuroleptic malignant syndrome. López JR, et al. **Acta Cient Venez** 1989;40(3):232-4

State and role of calcium homeostasis in pathogenesis of psoriasis. Mavrov II, et al. **Acta Derm Venereol Suppl (Stockh)** 1989;146:217

Renal calcium and magnesium handling in experimental diabetes mellitus in the rat. Anwana AB, et al. **Acta Endocrinol (Copenh)** 1990 Apr;122(4):479-86

Human interleukin 1 beta stimulates islet insulin release by a mechanism not dependent on changes in phospholipase C and protein kinase C activities or Ca2+ handling. Welsh N, et al. **Acta Endocrinol (Copenh)** 1989 Nov;121(5):698-704

Calcium-imaging with Fura-2 in isolated cerebral microvessels. Hess J, et al. **Acta Histochem (Jena)** 1989; 87(2):107-14

Calcium content in erythrocytes of patients with Duchenne muscular dystrophy [letter] Shoji S, et al. **Acta Neurol Scand** 1990 Feb;81(2):191

The effect of external stimuli on cultured rat middle ear epithelium. I. Extracellular calcium concentration. Van Blitterswijk CA, et al. **Acta Otolaryngol (Stockh)** 1990 Jan-Feb;109(1-2):101-10

Effect of long-term treatment with massive doses of 1 alpha-hydroxyvitamin D3 on calcium-phosphate balance in patients with vitamin D-dependent rickets type II. Takeda E, et al. **Acta Paediatr Jpn Overseas Ed** 1990 Feb; 32(1):39-43

Amiloride-ouabain interaction in cardiac contraction: the role of Na+/Ca2+ exchange. Cargnelli G, et al. **Acta Physiol Hung** 1990;75 Suppl:47-8

Vasocortin inhibits Ca2+ influx and histamine release induced by concanavalin A in rat mast cells. Ialenti A, et al. **Acta Physiol Hung** 1990;75 Suppl:147-8

How maitotoxin increases cytosolic calcium levels? Meucci O, et al. **Acta Physiol Hung** 1990;75 Suppl:207-8

Oxytocin regulates Ca2+ level in myometrium by influencing phosphoinositide metabolism. Vér A, et al. **Acta Physiol Hung** 1989;74(2):189-94

Plasma membrane mechanisms for intracellular calcium regulation in squid axons. DiPolo R, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(4):437-44 (29 ref.)

Effect of verapamil and trifluoperazine upon glucose-induced calcium distribution within B cells. Gagliardino JJ, et al. **Acta Physiol Pharmacol Latinoam** 1988;38(3):275-91

Effect of extracellular alkalosis upon calcium distribution within the B cells. Rebolledo OR, et al. **Acta Physiol Pharmacol Latinoam** 1988;38(3):329-43

Simultaneous measurement of cytosolic free Ca2+ in macula densa cells and in cortical thick ascending limb cells using fluorescence digital imaging microscopy. Salomonsson M, et al. **Acta Physiol Scand** 1990 Mar;138(3):425-6

Vasoactive intestinal peptide (VIP) may reduce the removal rate of cytosolic Ca2+ after transient elevations in clonal rat lactotrophs. Sand O, et al. **Acta Physiol Scand** 1989 Sep;137(1):113–23

Does K+ channel block 'upstream' of varicosities enhance the probability of nerve impulse-induced ATP release from sympathetic nerves by mobilizing Ca2+ from Schwann cells? Stjärne L, et al. **Acta Physiol Scand** 1990 May; 139(1):251–2

Decreased Ca2-buffering contributes to slowing of relaxation in fatigued Xenopus muscle fibres. Westerblad H, et al. **Acta Physiol Scand** 1990 May;139(1):243–4

Asymmetrical properties of the Na–Ca exchanger in voltage clamped, internally dialyzed squid axons under symmetrical ionic conditions. DiPolo R, et al. **Acta Physiol Scand Suppl** 1989;582:14

Is a rise in [CA]i responsible for rapid changes in neuronal excitability, CA currents, extracellular ions and pH0 induced by brief anoxia? Krnjević K, et al. **Acta Physiol Scand Suppl** 1989;582:11

The absorption of calcium and phosphate from the rumen. Care AD, et al. **Acta Vet Scand Suppl** 1989;86:152–8 (23 ref.)

Frequency-dependent inhibition of the intracellular calcium transients by calmodulin antagonists in the aequorin-injected rabbit papillary muscle. Endoh M. **Adv Exp Med Biol** 1989;255:461–70

Neutralization of surface charges markedly affects the properties of bovine calbindin D9k. Forsén S, et al. **Adv Exp Med Biol** 1989;255:185–94

Ca2(+)-dependent mobility shift of parvalbumin in one- and two-dimensional gel-electrophoresis. Gregersen HJ, et al. **Adv Exp Med Biol** 1990;269:89–91

Mutant analysis approaches to understanding calcium signal transduction through calmodulin and calmodulin regulated enzymes. Haiech J, et al. **Adv Exp Med Biol** 1990;269:43–56 (56 ref.)

Structure of the calcium release channel of skeletal muscle sarcoplasmic reticulum and its regulation by calcium. Lai FA, et al. **Adv Exp Med Biol** 1990;269:73–7 (27 ref.)

Calmodulin and calbindin in pancreatic islet cells. Malaisse WJ, et al. **Adv Exp Med Biol** 1990;269:127–33 (23 ref.)

Peptide hormones, cytosolic calcium and renal epithelial response. Morrison AR, et al. **Adv Exp Med Biol** 1989; 259:149–66 (79 ref.)

Cooperativity in calcium binding and calcium dependent reactions. Ogawa Y. **Adv Exp Med Biol** 1989;255:205–14

Role of anions in platelet intra cellular calcium ion rise and arachidonic acid release induced by thrombin. Ozaki Y, et al. **Adv Exp Med Biol** 1989;255:455–60

Disregulation of cell calcium and calcium-binding proteins in experimental hypertension. Rao RM, et al. **Adv Exp Med Biol** 1989;255:505–14

A possible mechanism for increments of calcium and protein kinase C activity in kidney of experimental acute fluorosis. Suketa Y, et al. **Adv Exp Med Biol** 1989;255:515–24

Analysis of calcium-binding sites in calcium-activated neutral protease. Suzuki K, et al. **Adv Exp Med Biol** 1989; 255:173–83

Calpain I activates Ca2+ transport by the human erythrocyte plasma membrane calcium pump. Wang KK, et al. **Adv Exp Med Biol** 1990;269:175–80

Calcium and cell steady states. Williams RJ. **Adv Exp Med Biol** 1990;269:7–16 (0 ref.)

Brain edema, autoregulation, and calcium antagonism. An experimental study with nimodipine. Gaab MR, et al. **Adv Neurol** 1990;52:391–400

LTD4 increases cytosolic free calcium and inositol phosphates in human neutrophils: inhibition by the novel LTD4 receptor antagonist, SR2640, and possible relation to modulation of chemotaxis. Bouchelouche PN, et al. **Agents Actions** 1990 Mar;29(3–4):299–307

Ethanol and inositol 1,4,5-trisphosphate mobilize calcium from rat brain microsomes. Machu T, et al. **Alcohol** 1989 Nov–Dec;6(6):431–6

Fura-2 measurement of cytosolic free calcium in rat brain cortical synaptosomes and the influence of ethanol. Rezazadeh SM, et al. **Alcohol** 1989 Sep–Oct;6(5):341–5

Influence of positive inotropic agents on intracellular calcium transients. Part I. Normal rat heart. Auffermann W, et al. **Am Heart J** 1989 Dec;118(6):1219–27

Influence of positive inotropic agents on intracellular calcium transients. Part II. Cardiomyopathic hamster hearts. Stefenelli T, et al. **Am Heart J** 1989 Dec;118(6):1228–36

Effects of moderate caffeine intake on the calcium economy of premenopausal women. Barger-Lux MJ, et al. **Am J Clin Nutr** 1990 Oct;52(4):722–5

Calcium absorption from kale. Heaney RP, et al. **Am J Clin Nutr** 1990 Apr;51(4):656–7

Intestinal calcium absorption: a vitamin D-hormone-mediated adaptive response. Norman AW. **Am J Clin Nutr** 1990 Feb;51(2):290–300 (44 ref.)

Effect of lactose or its component sugars on jejunal calcium absorption in adult man. Schuette SA, et al. **Am J Clin Nutr** 1989 Nov;50(5):1084–7

Sodium chloride supplementation and urinary calcium excretion in postmenopausal women. Zarkadas M, et al. **Am J Clin Nutr** 1989 Nov;50(5):1088–94

Calcium retention from milk-based infant formulas, whey-hydrolysate formula, and human milk in weanling rhesus monkeys. Rudloff S, et al. **Am J Dis Child** 1990 Mar;144(3):360–3

Cytosolic calcium in T lymphocytes from the spontaneously hypertensive rat. Batlle DC, et al. **Am J Hypertens** 1990 May;3(5 Pt 1):343–8

Reduced calcium binding capacity is an intrinsic abnormality of red blood cell membrane in spontaneously hypertensive rats. Cirillo M. **Am J Hypertens** 1990 Jul;3(7):570–2

Calcium and calcium regulating hormones in the "prehypertensive" Dahl salt sensitive rat (calcium and salt sensitive hypertension). Kotchen TA, et al. **Am J Hypertens** 1989 Oct;2(10):747–53

The effects of calcium channel blockade on blood pressure and calcium metabolism. Resnick LM, et al. **Am J Hypertens** 1989 Dec;2(12 Pt 1):927–30

Low-level lead exposure, blood pressure, and calcium metabolism. Morris C, et al. **Am J Kidney Dis** 1990 Jun; 15(6):568–74

Role of cellular calcium metabolism in abnormal glucose metabolism and diabetic hypertension. Levy J, et al. **Am J Med** 1989 Dec 8;87(6A):7S–16S (139 ref.)

Hypertension and abnormal glucose homeostasis. Possible role of divalent ion metabolism. Resnick LM. **Am J Med** 1989 Dec 8;87(6A):17S–22S (64 ref.)

The effects of mercuric chloride on calmodulin-mediated Ca2+ transport in rat brain. Clifton GG, et al. **Am J Med Sci** 1990 Jan;299(1):26–31

Effects of nafarelin versus danazol on lipids and calcium metabolism. Bergquist C. **Am J Obstet Gynecol** 1990 Feb; 162(2):589–91

Endothelin increases cytoplasmic calcium and myosin phosphorylation in human myometrium. Word RA, et al. **Am J Obstet Gynecol** 1990 Apr;162(4):1103–8

Calcium gradients in inner ear endolymph. Salt AN, et al. **Am J Otolaryngol** 1989 Nov–Dec;10(6):371–5

Altered calcium homeostasis in irreversibly injured P388D1 macrophages. Gleva GF, et al. **Am J Pathol** 1990 Jul; 137(1):43–57

Stimulation of H+ secretion by CO2 in turtle bladder: role of intracellular pH, exocytosis, and calcium. Arruda JA, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R222–31

Intracellular Ca transients in rat cardiac myocytes: role of Na–Ca exchange in excitation–contraction coupling. Bers DM, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C944–54

Gadolinium blocks low- and high-threshold calcium currents in pituitary cells. Biagi BA, et al. **Am J Physiol** 1990 Sep; 259(3 Pt 1):C515–20

Effects of low extracellular Ca2+ on cytosolic free Ca2+, Na+, and pH of MDCK cells. Borle AB, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):C19–25

cAMP-stimulated rise of [Ca2+]i in rabbit connecting tubules: role of peritubular Ca. Bourdeau JE, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):F751–5

Developmental changes of Ca2+, PO4, and calcitriol metabolism in spontaneously hypertensive rats. Bourgouin P, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):F104–10

Renal calcium transport: mechanisms and regulation—an overview. Bronner F. **Am J Physiol** 1989 Nov;257(5 Pt 2):F707–11 (41 ref.)

Intracellular Ca2+ and force determined simultaneously in isolated resistance arteries. Bukoski RD, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1728–35

Ion microprobe analysis of bone surface elements: effects of 1,25(OH)2D3. Bushinsky DA, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):E815–22

ATP receptor-induced Ca2+ transients in cardiac myocytes: sources of mobilized Ca2+. De Young MB, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):C750–8

Na+ electrochemical gradient and Na+–Ca2+ exchange in rat proximal tubule. Dominguez JH, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):F531–8

Calcium reabsorption in proximal tubule of the dog nephron. Duarte CG, et al. **Am J Physiol** 1967 Jun;212(6):1355–60

Effects of quinacrine on calcium active transport by rat intestinal epithelium. Favus MJ, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):G818–22

Parathyroid hormone regulation of cytosolic Ca2+ in rat proximal tubules. Filburn CR, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):F545–52

Oral verapamil and calcium and vitamin D metabolism in rats: effect of dietary calcium. Fox J, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):E632–8

Effects of mitogens and other agents on rat mesangial cell proliferation, pH, and Ca2+. Ganz MB, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):F269–78

Mechanisms by which mitochondria transport calcium. Gunter TE, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C755–86 (455 ref.)

Measurement of cytoplasmic calcium in single microvessels with increased permeability. He P, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1366–74

Rapid cooling contractures as an index of sarcoplasmic reticulum calcium content in rabbit ventricular myocytes. Hryshko LV, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1369–77

Regulating transient and sustained changes of cytosolic Ca2+ in rat pancreatic acini. Hurley TW, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):C54–61

Propagation and collision characteristics of calcium waves in rat myocytes. Ishide N, et al. **Am J Physiol** 1990 Sep; 259(3 Pt 2):H940–50

Cytosolic free calcium regulation in renal tubules from spontaneously hypertensive rats. Jacobs WR, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):F175–82

Histamine receptors in human fibroblasts: inositol phosphates, Ca2+, and cell growth. Johnson CL, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):C533–43

Calcium and the heat-shock response in the human monocytic line U-937. Kantengwa S, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):C77–83

Calcium release from cardiac sarcoplasmic reticulum induced by photorelease of calcium or Ins(1,4,5)P3. Kentish JC, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H610–5

Mechanism of ischemic contracture in ferret hearts: relative roles of [Ca2+]i elevation and ATP depletion. Koretsune Y, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):H9–16

Hormonal stimulation of Ca2+ release from the perfused liver: effects of uncoupler. Kraus-Friedmann N, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):G73–7

Effects of MeCh, thapsigargin, and La3+ on plasmalemmal and intracellular Ca2+ transport in lacrimal acinar cells. Kwan CY, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1006–15

Ca exchange under non-perfusion-limited conditions in rat ventricular cells: identification of subcellular compartments. Langer GA, et al. **Am J Physiol** 1990 Aug; 259(2 Pt 2):H592–602

Na(+)–Ca2+ exchange in cultured rat hepatocytes: evidence against a role in cytosolic Ca2+ regulation or signaling. Lidofsky SD, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):G56–61

cGMP-dependent protein kinase mediates the reduction of Ca2+ by cAMP in vascular smooth muscle cells. Lincoln TM, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):C399–407

cAMP attenuates autacoid release from endothelial cells: relation to internal calcium. Lückhoff A, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H960–6

Myosin light chain phosphorylation in human myometrial smooth muscle cells. Mackenzie LW, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):C92–8

Calcium transport across rat inner medullary collecting duct perfused in vitro. Magaldi AJ, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):F738–45

Ketone bodies and islet function: 45Ca handling, insulin synthesis, and release. Malaisse WJ, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):E117–22

Glomerular endothelial cells respond to calcium-mobilizing agonists with release of EDRF. Marsden PA, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1295–303

Effects of substance P on [Ca2+]i and force in intact guinea pig ileal smooth muscle. Matthijs G, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):C150–60

Calcium entry in rat parotid acini: activation by carbachol and aluminum fluoride. Mertz LM, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):C654–61

Effects of the halothane-sensitivity gene on sarcoplasmic reticulum function. Mickelson JR, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):C787–94

Protein kinase A, cytosolic calcium, and phosphate uptake in human proximal renal cells. Middleton JP, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):F631–8

Dual effects of carbachol on cytosolic Ca2+ and contraction in intestinal smooth muscle. Mitsui M, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C787–93

Stimulation of transient elevations in cytosolic Ca2+ is related to inhibition of Pi transport in OK cells. Miyauchi A, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):F485–93

The effect of mitochondrial inhibitors on calcium homeostasis in tumor mast cells. Mohr FC, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C217–26

Modulation of agonist-activated calcium influx by extracellular pH in rat pancreatic acini. Muallem S, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):G917–24

Ca2(+)-induced Ca2+ release as examined by photolysis of caged Ca2+ in single ventricular myocytes. Näbauer M, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):C189–93

Hypothermia increases calcium content of hypoxic myocytes. Navas JP, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):H333–9

Adenine nucleotides mobilize cellular Ca2+ and inhibit parathyroid hormone secretion. Nemeth EF, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):E505–13

Mobilization of calcium, phosphorus, and magnesium by embryonic alligators (Alligator mississippiensis). Packard MJ, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1541–7

Theophylline inhibits transcellular Ca transport in intestine and Ca binding by CaBP. Pansu D, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):G935–43

Effects of simulated weightlessness on rat osteocalcin and bone calcium. Patterson-Buckendahl P, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1103–9

Protection by benzamil against dysfunction and damage in rat myocardium after calcium depletion and repletion. Pierce GN, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):H17–23

Sensitivity to Cd2+ but resistance to Ni2+ of Ca2+ inflow into rat pancreatic islets. Plasman PO, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):E529–33

Carbachol-induced cytosolic free Ca2+ increases in T84 colonic cells seen by microfluorimetry. Reinlib L, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):G950–60

Olfactory neurons exhibit heterogeneity in depolarization-induced calcium changes. Restrepo D, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1051–61

Volume-activated K+ and Cl- pathways of dissociated epithelial cells (MDCK): role of Ca2+. Rothstein A, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C827–34

Calcium uptake by duodenal enterocytes isolated from young

and mature SHR and WKY rats: influence of dietary calcium. Roullet CM, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):F574–9

Effects of PTH, calcitonin, and cAMP on calcium transport in rabbit distal nephron segments. Shimizu T, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):F408–14

Intracellular [Ca2+] and inositol phosphates in avian nasal gland cells. Shuttleworth TJ, et al. **Am J Physiol** 1989 Nov; 257(5 Pt 1):C1020–9

Energy dependence of sodium–calcium exchange in vascular smooth muscle cells. Smith JB, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):C302–9

Mechanism of aluminum–induced calcium efflux from cultured neonatal mouse calvariae. Sprague SM, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):F583–8

Simultaneous measurement of Ca2+, contraction, and potential in cardiac myocytes. Spurgeon HA, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H574–86

Exercise training alters Ca release from coronary smooth muscle sarcoplasmic reticulum. Stehno–Bittel L, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):H643–7

Multiple calcium mobilization pathways in single avian salt gland cells. Stuenkel EL, et al. **Am J Physiol** 1990 Feb; 258(2 Pt 1):C289–98

Heterogeneous response of cytoplasmic free Ca2+ in proximal convoluted and straight tubule cells in primary culture. Suzuki M, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):F724–31

[Ca2+]i rises via G protein during regulatory volume decrease in rabbit proximal tubule cells. Suzuki M, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):F690–6

Calcium uptake by brush–border and basolateral membrane vesicles in chick duodenum. Takito J, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):G16–23

Endothelin–1 activates phospholipase C and mobilizes Ca2+ from extra– and intracellular pools in osteoblastic cells. Takuwa Y, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):E797–803

Vascular washout reduces Ca2+ overload and improves function of reperfused ischemic hearts. Tani M, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H354–61

Effects of anti–free radical agents on Na+, Ca2+, and function in reperfused rat hearts. Tani M. **Am J Physiol** 1990 Jul;259(1 Pt 2):H137–43

Enhanced calcium uptake of cardiac sarcoplasmic reticulum in exercise–trained old rats. Tate CA, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H431–5

Ca2+ transport in myocardial sarcolemma from rainbow trout. Tibbits GF, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):R453–60

Decreased secretion due to a Ca2+ influx defect in frog peptic cells isolated with EGTA. Uemura N, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):G544–51

Norepinephrine inhibits islet lipid metabolism, 45Ca2+ uptake, and insulin secretion. Vara E, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):E923–9

Inositol 1,4,5–trisphosphate releases intracellular Ca2+ in permeabilized chick atria. Vites AM, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1745–52

Regulation of inositol 1,4,5–trisphosphate–induced Ca2+ release. I. Effect of Mg2+. Volpe P, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1077–85

Regulation of inositol 1,4,5–trisphosphate–induced Ca2+ release. II. Effect of cAMP–dependent protein kinase. Volpe P, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1086–91

Differential blockade of agonist– and depolarization–induced 45Ca2+ influx in smooth muscle cells. Wallnöfer A, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):C607–11

Cell swelling increases intracellular free [Ca] in cultured toad bladder cells. Wong SM, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):F292–6

Effect of physical activity on calciotropic hormones and calcium balance in rats. Yeh JK, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E263–8

Modulation of Ca by agents affecting voltage–sensitive Ca channels in mesangial cells. Yu YM, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):F1094–9

Compensatory increase in calcium extrusion activity of untreated lymphocytes from swine susceptible to malignant hyperthermia. O'Brien PJ, et al. **Am J Vet Res** 1990 Jul; 51(7):1038–43

Calcium compartmentation and exchange rates in primary hepatocyte culture. Gish RG, et al. **Anal Biochem** 1990 May 15;187(1):187–96

Determination of platelet adhesion to collagen and the associated formation of phosphatidic acid and calcium mobilization. Smith JB, et al. **Anal Biochem** 1990 May 15; 187(1):173–8

The effects of extracellular magnesium on myoplasmic [Ca2+] in malignant hyperthermia susceptible swine. Lopez JR, et al. **Anesthesiology** 1990 Jul;73(1):109–17

Pathophysiology of malignant hyperthermia. Ording H. **Ann Fr Anesth Reanim** 1989;8(5):411–6 (69 ref.)

Calcitriol and osteoporosis [letter; comment] Nordin BE, et al. **Ann Intern Med** 1989 Oct 15;111(8):689 Comment on: Ann Intern Med 1989 Feb 15;110(4):267–74.

Effect of aging on calcium cytosolic concentration in rat cortical synaptosomes. Pepeu G, et al. **Ann Ist Super Sanita** 1990;26(1):49–53

Excitation–contraction coupling in heart cells. Roles of the sodium–calcium exchange, the calcium current, and the sarcoplasmic reticulum. Lederer WJ, et al. **Ann N Y Acad Sci** 1990;588:190–206

Ca2+ handling systems and neuronal aging. Michaelis ML. **Ann N Y Acad Sci** 1989;568:89–94

Defective calcium signal generation in a T cell subset that accumulates in old mice. Miller RA. **Ann N Y Acad Sci** 1989;568:271–6

Changes in calcium homeostasis during aging and Alzheimer's disease. Peterson C, et al. **Ann N Y Acad Sci** 1989;568:262–70

Cycling of Ca2+ across the plasma membrane as a mechanism for generating a Ca2+ signal for cell activation. Rasmussen H, et al. **Ann N Y Acad Sci** 1989;568:73–80

Calcium homeostasis and aging: role in altered signal transduction. Roth GS. **Ann N Y Acad Sci** 1989;568:68–72

Calcium, excitotoxins, and neuronal death in the brain. Siesjö BK, et al. **Ann N Y Acad Sci** 1989;568:234–51 (104 ref.)

Evidence for increased calcium buffering in motor–nerve terminals of aged rats. Smith DO. **Ann N Y Acad Sci** 1989; 568:106–14

Proton channels in snail neurones. Does calcium entry mimic the effects of proton influx? Thomas RC. **Ann N Y Acad Sci** 1989;574:287–93

CGS–19755, a competitive NMDA receptor antagonist, reduces calcium–calmodulin binding and improves outcome after global cerebral ischemia. Grotta JC, et al. **Ann Neurol** 1990 Jun;27(6):612–9

Unusual aspects of calcium metabolism in aquatic animals. Cameron JN. **Annu Rev Physiol** 1990;52:77–95 (148 ref.)

Mechanisms of Ca2+ overload in reperfused ischemic myocardium. Tani M. **Annu Rev Physiol** 1990;52:543–59 (95 ref.)

Cytoplasmic [Ca2+] in mammalian ventricle: dynamic control by cellular processes. Wier WG. **Annu Rev Physiol** 1990;52:467–85 (71 ref.)

Calcium binding and induction of conidiation in protoplasts of Penicillium cyclopium. Ugalde UO, et al. **Antonie Van Leeuwenhoek** 1990;57(1):43–9

Calcium uptake in human spermatozoa: characterization and mechanisms. Silvestroni L, et al. **Arch Androl** 1989; 23(2):87–96

Temperature dependence of Na+/Ca2+ exchange activity in beef–heart sarcolemmal vesicles and proteoliposomes. Debetto P, et al. **Arch Biochem Biophys** 1990 Apr; 278(1):205–10

Calcium mobilization and influx during the biphasic cytosolic calcium and secretory responses in agonist–stimulated pituitary gonadotrophs. Izumi S, et al. **Arch Biochem Biophys** 1989 Dec;275(2):410–28

The effect of adriamycin and duramycin on calcium translocation in liposome systems modeled on the inner mitochondrial membrane. Kester MB, et al. **Arch Biochem Biophys** 1990 Aug 1;280(2):405–11

Structural and ion–binding properties of an S100b protein mixed disulfide: comparison with the reappraised native S100b protein properties. Mely Y, et al. **Arch Biochem Biophys** 1990 May 15;279(1):174–82

The heavy metal ions Ag+ and Hg2+ trigger calcium release from cardiac sarcoplasmic reticulum. Prabhu SD, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):47–55

Calcium– and cysteine–participatory oxidative formation of albumin–copper complex. Suzuki KT, et al. **Arch Biochem Biophys** 1990 Apr;278(1):120–4

Effects of compound 48/80 on the Ca2+ release by reversal of the Ca2+ pump and by the Ca2+ channel of sarcoplasmic reticulum membranes. Vale MG. **Arch Biochem Biophys** 1990 Jun;279(2):275–80

Intracellular Ca2+ and cytotoxicity. Lynn WS, et al. **Arch Environ Health** 1989 Sep–Oct;44(5):323–30

A preliminary report of the short–term effect of carbonated beverage consumption on calcium metabolism in normal women. Smith S, et al. **Arch Intern Med** 1989 Nov; 149(11):2517–9

Vascular actions of cicletanine. Bukoski RD, et al. **Arch Mal Coeur** 1989 Nov;82 Spec No 4:45–50

Ca2+ mobilization and Cl efflux in submandibular salivary cells of adult and newborn rats. Martinez JR, et al. **Arch Oral Biol** 1989;34(3):147–52

Plaque fluid pH, calcium and phosphorus responses to calcium food additives in a chewable candy. Rankine CA, et al. **Arch Oral Biol** 1989;34(10):821–4

Late preventive effects against carbon tetrachloride–induced liver necrosis of the calcium chelating agent Calcion. de Ferreyra EC, et al. **Arch Toxicol** 1989;63(6):450–5

Effects of vitamin D derivatives on soft tissue calcification in neonatal and calcium mobilization in adult rats. Kistler A, et al. **Arch Toxicol** 1989;63(5):394–400

Enhanced DNA synthesis of cultured vascular smooth muscle cells from spontaneously hypertensive rats. Difference of response to growth factor, intracellular free calcium concentration and DNA synthesizing cell cycle. Hamada M, et al. **Atherosclerosis** 1990 Apr;81(3):191–8

Development of endocrine pathways in the regulation of calcium homeostasis. Care AD. **Baillieres Clin Endocrinol Metab** 1989 Nov;3(3):671–88 (70 ref.)

Genetic and non–genetic control of myocardial calcium. Alpert NR, et al. **Basic Res Cardiol** 1989;84 Suppl 1:55–66

Myofibrillar Ca++ activation and heart failure—Ca++ sensitization by the cardiotonic agent APP 201–533. Herzig JW, et al. **Basic Res Cardiol** 1989;84 Suppl 1:117–24

Mitochondrial calcium in hearts subjected to lipid peroxidation with contracture development. Ytrehus K, et al. **Basic Res Cardiol** 1989 Nov–Dec;84(6):646–52

Aggregating platelets increase intracellular calcium in endothelial cells through release of adenine nucleotides. Ashmore RC, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):909–15

Calcium–ion binding by the potential calcium–ion–binding protein, p9Ka. Barraclough R, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):660–6

Calcium–activated protein kinase from soluble and membrane fractions of maize coleoptiles. Battey NH. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):17–22

Activation of protein kinase C assists insulin producing cells in recovery from raised cytoplasmic Ca2+ by stimulating Ca2+ efflux. Berggren PO, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):416–21

Endothelin–1 increases intracellular calcium mobilization but not calcium uptake in rabbit vascular smooth muscle cells. Bialecki RA, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):474–9

Effect of platelet release products on cytosolic calcium in cardiac myocytes. Chien WW, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1121–7

Neuropeptide Y mobilizes intracellular Ca2+ and increases inositol phosphate production in human erythroleukemia cells. Daniels AJ, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1138–44

Intracellular calcium in the control of osteoclast function. I. Voltage–insensitivity and lack of effects of nifedipine, BAYK8644 and diltiazem. Datta HK, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):183–8

Ca2(+)–channel agonist BAY K8644 mimics 1,25(OH)2–vitamin D3 rapid enhancement of Ca2+ transport in chick perfused duodenum. de Boland AR, et al. **Biochem Biophys Res Commun** 1990 Jan 15; 166(1):217–22

The influence of pH on Ca2+ exchange in ferret heart mitochondria. Fry CH, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1352–7

Improved resolution of the initial fast phase of heavy sarcoplasmic reticulum Ca2+ uptake by Ca2+:antipyrylazo III dual–wavelength spectroscopy. Gilchrist JS, et al. **Biochem Biophys Res Commun** 1990 Apr 16;168(1):364–71

Na(+)–dependent Ca2+ efflux inhibits stimulus–induced secretion in bovine chromaffin cells. Goh Y, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1346–51

Phytohemagglutinin rapidly lyses S49 T–lymphoma cells and the cytotoxicity is not mediated by generation of cAMP or increase in cytosolic calcium. Gupta A, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1035–43

Calcium uptake kinetics into brush–border membrane vesicles: higher Vmax in the spontaneously hypertensive rat than in normotensive control. Hennessen U, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):742–7

Attenuation of inositol trisphosphate generation and cytosolic Ca2+ elevation in dispersed rat parotid acini stimulated simultaneously at muscarinic and alpha 1–adrenergic receptors. Horn VJ, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):967–72

Role of voltage–sensitive calcium channels in [Ca2+]i and secretory responses to activators of protein kinase C in pituitary gonadotrophs. Izumi S, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):359–67

Evidence for a GTP–dependent increase in membrane permeability for calcium in NG108–15 microsomes. Jean T, et al. **Biochem Biophys Res Commun** 1989 Nov 15; 164(3):1060–8

Biphasic increasing effect of angiotensin–II on intracellular free calcium in isolated rat early proximal tubule. Jung KY, et al. **Biochem Biophys Res Commun** 1989 Dec 29; 165(3):1221–8

Parathyroid hormone causes a transient rise in intracellular ionized calcium in vascular smooth muscle cells. Kawashima H. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):709–14

Endothelin depolarizes membrane voltage and increases intracellular calcium concentration in human ciliary muscle cells. Korbmacher C, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1031–9

Multiple hormone actions: the rises in cAMP and Ca++ in MDCK–cells treated with glucagon and prostaglandin E1 are independent processes. Kurstjens NP, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):1162–9

Transient expression of the angiotensin II receptor: a rapid and functional analysis of a calcium–mobilizing seven–transmembrane domain receptor in COS–7 cells. McGillis JP, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):935–41

Interrelationship between growth factor–induced activation of the Na+/H(+)–antiporter and mobilization of intracellular Ca2+ in NIH3T3–fibroblasts. Maly K, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):1206–13

Measurement of CA2+ transients using simultaneous dual–emission microspectrofluorimetry and electrophysiology in individual pituitary cells [published erratum appears in Biochem Biophys Res Commun 1989 Dec 29;165(3):1446] Mollard P, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1045–52

Isovalerylcarnitine is a specific activator of the high calcium requiring calpain forms. Pontremoli S, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):373–80

Depolarization potentiates endothelin–induced effects on

cytosolic calcium in bovine adrenal chromaffin cells. Rasmussen K, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):306–11

Control of mitochondrial matrix calcium: studies using fluo-3 as a fluorescent calcium indicator. Saavedra-Molina A, et al. **Biochem Biophys Res Commun** 1990 Feb 28; 167(1):148–53

Low-density lipoprotein elevates intracellular calcium and pH in vascular smooth muscle cells and fibroblasts without mediation of LDL receptor. Sachinidis A, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):353–9

Inositol trisphosphate independent increase of intracellular free calcium and amylase secretion in pancreatic acini. Saluja AK, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):8–13

Regulation of cytosolic Ca2+ in clonal human muscle cell cultures. Sarabia V, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1130–7

The rate of increase not the amplitude of cytosolic Ca2+ regulates the degree of prolactin secretion induced by depolarizing K+ or hyposmolarity in GH4C1 cells. Sato N, et al. **Biochem Biophys Res Commun** 1990 Jul 31; 170(2):968–72

cis,cis-cyclohexane 1,3,5-triol polyphosphates release calcium from Neurospora crassa via an unspecific Ins 1,4,5-P3 receptor. Schultz C, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1319–27

Coomassie Brilliant Blue G is a more potent antagonist of P2 purinergic responses than Reactive Blue 2 (Cibacron Blue 3GA) in rat parotid acinar cells. Soltoff SP, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1279–85

Free calcium rise and mitogenesis in glial cells caused by endothelin. Supattapone S, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1115–22

Rapid Ca2+ refilling system of intracellular store(s) in human vascular endothelial cells. Takata S, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):933–40

Thrombin's effects on osteoblastic cells. I. Cytosolic calcium and phosphoinositides. Tatakis DN, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):119–27

Secretagogue-induced oscillations of cytoplasmic Ca2+ in single beta and alpha-cells obtained from pancreatic islets by fluorescence-activated cell sorting. Wang JL, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):813–8

Multiple neuropeptides mobilise calcium in small cell lung cancer: effects of vasopressin, bradykinin, cholecystokinin, galanin and neurotensin. Woll PJ, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):66–73

Intracellular calcium in the control of osteoclast function. II. Paradoxical elevation of cytosolic free calcium by verapamil. Zaidi M, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):807–12

Calcium binding proteins. Elucidating the contributions to calcium affinity from an analysis of species variants and peptide fragments. Marsden BJ, et al. **Biochem Cell Biol** 1990 Mar;68(3):587–601 (138 ref.)

Selective metal ion binding at the calcium-binding sites of the sea urchin extraembryonic coat protein hyalin. Robinson JJ. **Biochem Cell Biol** 1989 Nov-Dec; 67(11–12):808–12

Role of extracellular calcium in the metabolic and hemodynamic actions of sympathetic nerve stimulation, noradrenaline and prostaglandin F2 alpha in perfused rat liver. Differential inhibition by nifedipine and verapamil. Athari A, et al. **Biochem Int** 1990;20(1):13–23

Calcium binding properties of the beta tubulin subunit from chicken erythrocytes. Serrano L, et al. **Biochem Int** 1989 Aug;19(2):235–46

Interaction of erythrocyte transglutaminase with calcium ions. Signorini M, et al. **Biochem Int** 1989 Dec; 19(6):1205–12

Effects in vitro of benthiocarb on the uptake of 45Ca by neonatal rat (Wistar strain) brain synaptosomes. Srinivas PN, et al. **Biochem Int** 1989 Sep;19(3):463–8

Demonstration of adenylate-kinase activity in hepatic microsomes. Relevance to Ca2+ uptake. Zhang GH, et al. **Biochem Int** 1989 Aug;19(2):333–43

Neurotransmitter release from bradykinin-stimulated PC12 cells. Stimulation of cytosolic calcium and neurotransmitter release. Appell KC, et al. **Biochem J** 1989 Oct 1;263(1):11–8

Extracellular ATP increases cytoplasmic free Ca2+ concentration in clonal insulin-producing RINm5F cells. A mechanism involving direct interaction with both release and refilling of the inositol 1,4,5-trisphosphate-sensitive Ca2+ pool. Arkhammar P, et al. **Biochem J** 1990 Jan 1; 265(1):203–11

The Ca2+-binding sequence in bovine brain S100b protein beta-subunit. A spectroscopic study. Baudier J, et al. **Biochem J** 1989 Nov 15;264(1):79–85

Thyroid status and beta-agonistic effects on cytosolic calcium concentrations in single rat cardiac myocytes activated by electrical stimulation or high-K+ depolarization. Beekman RE, et al. **Biochem J** 1990 Jun 15;268(3):563–9

Histamine and a guanine nucleotide increase calcium permeability in pig aortic microsomal fractions. Blayney LM, et al. **Biochem J** 1990 Apr 1;267(1):105–9

Neurotensin stimulates inositol trisphosphate-mediated calcium mobilization but not protein kinase C activation in HT29 cells. Involvement of a G-protein. Bozou JC, et al. **Biochem J** 1989 Dec 15;264(3):871–8

Phosphate and calcium uptake by mitochondria and by perfused rat liver induced by the synergistic action of glucagon and vasopressin. Bygrave FL, et al. **Biochem J** 1990 Apr 1;267(1):69–73

Protein kinase C activation alters the sensitivity of agonist-stimulated endothelial-cell prostacyclin production to intracellular Ca2+. Carter TD, et al. **Biochem J** 1989 Sep 1;262(2):431–7

Calcium-binding affinity and calcium-enhanced activity of Clostridium thermocellum endoglucanase D. Chauvaux S, et al. **Biochem J** 1990 Jan 1;265(1):261–5

Inhibition of receptor-mediated calcium influx in T cells by unsaturated non-esterified fatty acids. Chow SC, et al. **Biochem J** 1990 May 1;267(3):727–32

The measurement of Ca2+ inflow across the liver cell plasma membrane by using quin2 and studies of the roles of Na+ and extracellular Ca2+ in the mechanism of Ca2+ inflow. Crofts JN, et al. **Biochem J** 1989 Nov 15;264(1):61–70

The liver cell plasma membrane Ca2+ inflow systems exhibit a broad specificity for divalent metal ions. Crofts JN, et al. **Biochem J** 1990 Aug 1;269(3):579–87

A role for calcium and protein kinase C in agonist-stimulated adhesion of human neutrophils. Davies MP, et al. **Biochem J** 1990 Apr 1;267(1):13–6

Evidence for two Ca2(+)-mobilizing purinoceptors on rat hepatocytes. Dixon CJ, et al. **Biochem J** 1990 Jul 15; 269(2):499–502

Inositol 1,3,4,5-tetrakisphosphate stimulates calcium release from bovine adrenal microsomes by a mechanism independent of the inositol 1,4,5-trisphosphate receptor. Ely JA, et al. **Biochem J** 1990 Jun 1;268(2):333–8

Extracellular nucleotides stimulate receptor-mediated calcium mobilization and inositol phosphate production in human fibroblasts. Fine J, et al. **Biochem J** 1989 Oct 15; 263(2):371–6

The identification of sarcoplasmic reticulum terminal cisternae proteins in platelets. Fischer TH, et al. **Biochem J** 1989 Oct 15;263(2):605–8

Characterization of the inositol 1,4,5-trisphosphate-induced calcium release from permeabilized endocrine cells and its inhibition by decavanadate and p-hydroxymercuribenzoate. Föhr KJ, et al. **Biochem J** 1989 Aug 15;262(1):83–9

Manganese and calcium efflux kinetics in brain mitochondria. Relevance to manganese toxicity. Gavin CE, et al. **Biochem J** 1990 Mar 1;266(2):329–34

Monoclonal antibodies specific to a Ca2(+)-bound form of lipocortin I distinguish its Ca2(+)-dependent phospholipid-binding ability from its ability to inhibit phospholipase A2. Hayashi H, et al. **Biochem J** 1990 Aug 1;269(3):709–15

The role of cytosolic free Ca2+ and protein kinase C in acetylcholine-induced insulin release in the clonal beta-cell line, HIT-T15. Hughes SJ, et al. **Biochem J** 1990 Apr 1; 267(1):227–32

Ca2+-induced accumulation of pyrophosphate in mitochondria during acetate metabolism. Inoue T, et al. **Biochem J** 1989 Sep 15;262(3):965–70

Reversible cell damage by T-cell perforins. Calcium influx and propidium iodide uptake into K562 cells in the absence of lysis. Jones J, et al. **Biochem J** 1990 Apr 15;267(2):303–7

Sequence similarity of calreticulin with a Ca2(+)-binding protein that co-purifies with an Ins(1,4,5)P3-sensitive Ca2+ store in HL-60 cells. Krause KH, et al. **Biochem J** 1990 Sep 1;270(2):545–8

Muscarinic-receptor-mediated changes in intracellular Ca2+ and inositol 1,4,5-trisphosphate mass in a human neuroblastoma cell line, SH-SY5Y. Lambert DG, et al. **Biochem J** 1990 Jan 15;265(2):555–62

Thapsigargin, but not caffeine, blocks the ability of thyrotropin-releasing hormone to release Ca2+ from an intracellular store in GH4C1 pituitary cells. Law GJ, et al. **Biochem J** 1990 Apr 15;267(2):359–64

Desensitization of calcium mobilization and cell function in human neutrophils. Lee GH, et al. **Biochem J** 1989 Aug 15;262(1):165–72

Effects of spermine on mitochondrial Ca2+ transport and the ranges of extramitochondrial Ca2+ to which the matrix Ca2+-sensitive dehydrogenases respond. McCormack JG. **Biochem J** 1989 Nov 15;264(1):167–74

Alkalinization stimulates the purified plasma-membrane Ca2+ pump by increasing its Ca2+ affinity. Missiaen L, et al. **Biochem J** 1989 Aug 15;262(1):361–4

Actin polymerization in neutrophils is triggered without a requirement for a rise in cytoplasmic Ca2+. al-Mohanna FA, et al. **Biochem J** 1990 Mar 15;266(3):669–74

Thyrotropin-releasing hormone activates a [Ca2+]i-dependent K+ current in GH3 pituitary cells via Ins(1,4,5)P3-sensitive and Ins(1,4,5)P3-insensitive mechanisms. Mollard P, et al. **Biochem J** 1990 Jun 1; 268(2):345–52

Relationship between hormonal, GTP and Ins(1,4,5)P3-stimulated Ca2+ uptake and release in pancreatic acinar cells. Muallem S, et al. **Biochem J** 1989 Oct 15;263(2):333–9

Prolonged high intracellular free calcium concentrations induced by ATP are not immediately cytotoxic in isolated rat hepatocytes. Changes in biochemical parameters implicated in cell toxicity. Nagelkerke JF, et al. **Biochem J** 1989 Oct 15;263(2):347–53

Liver inositol, 1,4,5-trisphosphate-binding sites are the Ca2(+)-mobilizing receptors. Nunn DL, et al. **Biochem J** 1990 Aug 15;270(1):227–32

Inhibition of pro-oxidant-induced mitochondrial pyridine nucleotide hydrolysis and calcium release by 4-hydroxynonenal. Richter C, et al. **Biochem J** 1990 Aug 1;269(3):735–7

The binding of Ca2+ ions to pig heart NAD+-isocitrate dehydrogenase and the 2-oxoglutarate dehydrogenase complex. Rutter GA, et al. **Biochem J** 1989 Oct 15; 263(2):453–62

Rapid kinetics of agonist-evoked changes in cytosolic free Ca2+ concentration in fura-2-loaded human neutrophils. Sage SO, et al. **Biochem J** 1990 Feb 1;265(3):915–8

ADP evokes biphasic Ca2+ influx in fura-2-loaded human platelets. Evidence for Ca2+ entry regulated by the intracellular Ca2+ store. Sage SO, et al. **Biochem J** 1990 Feb 1;265(3):675–80

Inhibitors of protein kinase C prolong the falling phase of each free-calcium transient in a hormone-stimulated hepatocyte. Sanchez-Bueno A, et al. **Biochem J** 1990 Jun 15;268(3):627–32

Aluminium perturbs oscillatory phosphoinositide-mediated calcium signalling in hormone-stimulated hepatocytes. Schöfl C, et al. **Biochem J** 1990 Jul 15;269(2):547–50

Distinct ryanodine- and inositol 1,4,5-trisphosphate-binding sites in hepatic microsomes. Shoshan-Barmatz V, et al. **Biochem J** 1990 Jun 15;268(3):699–705

Receptor-activated calcium entry in exocrine cells does not occur via agonist-sensitive intracellular pools. Shuttleworth TJ. **Biochem J** 1990 Mar 15;266(3):719–26

Fluoroaluminate activation of different components of the calcium signal in an exocrine cell. Shuttleworth TJ. **Biochem J** 1990 Jul 15;269(2):417–22

Evidence for receptor-mediated bivalent-cation entry in A10 vascular smooth-muscle cells. Simpson AW, et al. **Biochem J** 1990 Apr 1;267(1):277–80

Stimulated cholesterol-enriched platelets display increased cytosolic Ca2+ and phospholipase A activity independent of changes in inositol trisphosphates and agonist/receptor binding. Sorisky A, et al. **Biochem J** 1990 Feb 1; 265(3):747–54

The size of inositol 1,4,5-trisphosphate-sensitive Ca2+ stores depends on inositol 1,4,5-trisphosphate concentration. Taylor CW, et al. **Biochem J** 1990 Feb 15;266(1):189–94

Phosphatidylinositol 4,5-bisphosphate hydrolysis in human sperm stimulated with follicular fluid or progesterone is dependent upon Ca2+ influx. Thomas P, et al. **Biochem J** 1989 Dec 1;264(2):539–46

Direct evidence for a role of intramitochondrial Ca2+ in the regulation of oxidative phosphorylation in the stimulated rat heart. Studies using 31P n.m.r. and ruthenium red. Unitt JF, et al. **Biochem J** 1989 Aug 15;262(1):293–301

Ca2(+)-sensitivity of inositol 1,4,5-trisphosphate-mediated Ca2+ release in permeabilized pancreatic acinar cells. Willems PH, et al. **Biochem J** 1990 Feb 1;265(3):681–7

Fluoroaluminate mimics agonist application in single rat hepatocytes. Woods NM, et al. **Biochem J** 1990 Jan 15; 265(2):613–5

Conditions that result in the mobilization and influx of Ca2+ into rat hepatocytes induce the rapid loss of 3-hydroxy-3-methylglutaryl-CoA reductase activity that is not reversed by phosphatase treatment. Zammit VA, et al. **Biochem J** 1990 Jul 15;269(2):373–9

Evidence for a direct role of intracellular calcium in paracetamol toxicity. Boobis AR, et al. **Biochem Pharmacol** 1990 Apr 15;39(8):1277–81

Effects of halothane on calcium release from sarcoplasmic reticulum of rabbit psoas and semitendinosus skinned muscle fibers. Carrier L, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):145–9

Ethanol and synaptosomal calcium homeostasis. Davidson M, et al. **Biochem Pharmacol** 1990 Apr 15;39(8):1283–8

Effects of the novel dihydropyridine derivative niguldipine on the cytoplasmic free calcium concentration of mouse thymocytes. Drozd MP, et al. **Biochem Pharmacol** 1990 Sep 1;40(5):955–9

Interaction of cyclopiazonic acid with rat skeletal muscle sarcoplasmic reticulum vesicles. Effect on Ca2+ binding and Ca2+ permeability. Goeger DE, et al. **Biochem Pharmacol** 1989 Nov 15;38(22):3995–4003

Maitotoxin: a unique pharmacological tool for research on calcium-dependent mechanisms. Gusovsky F, et al. **Biochem Pharmacol** 1990 Jun 1;39(11):1633–9 (46 ref.)

Involvement of calcium in the thimerosal-stimulated formation of leukotriene by fMLP in human polymorphonuclear leukocytes. Hatzelmann A, et al. **Biochem Pharmacol** 1990 Feb 1;39(3):559–67

Ca2+ mobilization with leukotriene A4 and epoxytetraenes in human neutrophils. Luscinskas FW, et al. **Biochem Pharmacol** 1990 Jan 15;39(2):355–65

Inhibitory action of carvedilol, a novel alpha, beta-adrenoceptor antagonist, on catecholamine secretion and calcium influx in cultured bovine adrenal chromaffin cells. Morita K, et al. **Biochem Pharmacol** 1989 Dec 15; 38(24):4461–5

Interactions between phencyclidine and nifedipine at 45Ca2(+)-uptake sites on mouse brain neurons. Rice KC, et al. **Biochem Pharmacol** 1990 Jun 1;39(11):1825–7

Cyclosporine A inhibits mitochondrial pyridine nucleotide hydrolysis and calcium release. Richter C, et al. **Biochem Pharmacol** 1990 Aug 15;40(4):779–82

Muscarinic regulation of Ca2+ mobilization in a human salivary myoepithelial cell line. Wu XZ, et al. **Biochem Pharmacol** 1990 Feb 1;39(3):612–5

Halothane-induced Ca2+ release from heavy sarcoplasmic reticulum. Barry KM, et al. **Biochem Soc Trans** 1990 Apr; 18(2):357–8

Inhibition by cyclic GMP-dependent protein kinase of a histamine- and guanyl nucleotide-induced calcium permeability in pig aortic microsomes. Blayney LM, et al. **Biochem Soc Trans** 1990 Jun;18(3):479–80

Glutamate-receptor-mediated regulation of the cytoplasmic free calcium level in cultured cerebellar granule cells. Courtney MJ, et al. **Biochem Soc Trans** 1990 Jun; 18(3):420–1

Effect of calcium-modifying drugs on glutamate dehydrogenase and isocitrate dehydrogenase activity. Fox R, et al. **Biochem Soc Trans** 1990 Apr;18(2):319–20

Modulation of (Ca2+ +Mg2+)-ATPases and Ca2+ fluxes through the plasma membrane of synaptosomes and sarcoplasmic reticulum by local anaesthetics. Garcia-Martin E, et al. **Biochem Soc Trans** 1989 Dec; 17(6):960–2 (21 ref.)

Arachidonic acid acts through protein kinase C to inhibit depolarization-induced 45Ca2+ influx. MacEwan D, et al. **Biochem Soc Trans** 1990 Jun;18(3):432–3

The relationship between cytoplasmic free Ca2+ and the release of glutamate from synaptosomes. McMahon HT, et al. **Biochem Soc Trans** 1990 Jun;18(3):375–7 (19 ref.)

Cytoplasmic calcium ions and other signalling events in insulin secretion. Wollheim CB, et al. **Biochem Soc Trans** 1990 Feb;18(1):111–4 (24 ref.)

Multinuclear magnetic resonance studies on the calcium (II) binding site in trypsin, chymotrypsin, and subtilisin. Adebodun F, et al. **Biochemistry** 1989 Sep 19; 28(19):7524–31

Olfactory transduction: cross-talk between second-messenger systems. Anholt RR, et al. **Biochemistry** 1990 May 1;29(17):4049–54

NH2-terminal calcium-binding domain of human complement C1s- mediates the interaction of C1r- with C1q. Busby TF, et al. **Biochemistry** 1990 May 15; 29(19):4613–8

Weak binding of divalent cations to plasma gelsolin. Doi Y, et al. **Biochemistry** 1990 Feb 13;29(6):1392–7

Postulated role of calsequestrin in the regulation of calcium release from sarcoplasmic reticulum. Ikemoto N, et al. **Biochemistry** 1989 Aug 8;28(16):6764–71

Distinction between the two basic mechanisms of cation transport in the cardiac Na(+)-Ca2+ exchange system. Khananshvili D. **Biochemistry** 1990 Mar 13;29(10):2437–42

Elucidation of a protease-sensitive site involved in the binding of calcium to C-reactive protein. Kinoshita CM, et al. **Biochemistry** 1989 Dec 12;28(25):9840–8

Ca2+ binding to calbindin D9k strongly affects backbone dynamics: measurements of exchange rates of individual amide protons using 1H NMR. Linse S, et al. **Biochemistry** 1990 Jun 26;29(25):5925–34

Role of surface electrostatics in the operation of a high-conductance Ca2+-activated K+ channel. MacKinnon R, et al. **Biochemistry** 1989 Oct 3;28(20):8092–9

Protein surface charges and Ca2+ binding to individual sites in calbindin D9k: stopped-flow studies. Martin SR, et al. **Biochemistry** 1990 May 1;29(17):4188–93

Manganese and calcium requirements for reconstitution of oxygen-evolution activity in manganese-depleted photosystem II membranes. Miller AF, et al. **Biochemistry** 1989 Oct 3;28(20):8181–90

Identification of the sodium-calcium exchanger as the major ricin-binding glycoprotein of bovine rod outer segments and its localization to the plasma membrane. Reid DM, et al. **Biochemistry** 1990 Feb 13;29(6):1601–7

A calcium-specific site influences the structure and activity of the manganese cluster responsible for photosynthetic water oxidation. Sivaraja M, et al. **Biochemistry** 1989 Nov 28;28(24):9459–64

Calcium(II) site specificity: effect of size and charge on metal ion binding to an EF-hand-like site. Snyder EE, et al. **Biochemistry** 1990 Apr 24;29(16):3937–43

Structure of Ca2+ prothrombin fragment 1 including the conformation of the Gla domain. Soriano-Garcia M, et al. **Biochemistry** 1989 Aug 22;28(17):6805–10

Multifunctional Ca2+/calmodulin-dependent protein kinase made Ca2+ independent for functional studies. Waldmann R, et al. **Biochemistry** 1990 Feb 20;29(7):1679–84

1,25-(OH)2 vitamin D-3 enhances Paf-stimulated calcium mobilization in U937 cells by expression of specific Paf binding sites. Aepfelbacher M, et al. **Biochim Biophys Acta** 1990 Feb 19;1051(2):179–84

A calcium pump in plasma membrane vesicles from Leishmania braziliensis. Benaim G, et al. **Biochim Biophys Acta** 1990 Aug 10;1027(1):79–84

Calcium transport in bovine sperm mitochondria: effect of substrates and phosphate. Breitbart H, et al. **Biochim Biophys Acta** 1990 Jul 9;1026(1):57–63

Inhibition by caltrin of calcium transport into spermatozoa, liver and heart mitochondria. Breitbart H, et al. **Biochim Biophys Acta** 1990 Feb 16;1022(1):27–32

Regulation of calcium transport in bovine spermatozoa. Breitbart H, et al. **Biochim Biophys Acta** 1990 Aug 10; 1027(1):72–8

Currents related to the sodium-calcium exchange in squid giant axon. Caputo C, et al. **Biochim Biophys Acta** 1989 Nov 27;986(2):250–6

Loading of quin2 into the oat protoplast and measurement of cytosolic calcium ion concentration changes by phytochrome action. Chae Q, et al. **Biochim Biophys Acta** 1990 Feb 19;1051(2):115–22

Characterization by Hg2+ of two different pathways for mitochondrial Ca2+ release. Chávez E, et al. **Biochim Biophys Acta** 1989 Nov 17;986(1):27–32

Loss of membrane phospholipid asymmetry in platelets and red cells may be associated with calcium-induced shedding of plasma membrane and inhibition of aminophospholipid translocase. Comfurius P, et al. **Biochim Biophys Acta** 1990 Jul 24;1026(2):153–60

Isolation of a cDNA likely to encode a novel Ca2+-dependent/calmodulin-stimulated protein phosphatase. da Cruz e Silva EF, et al. **Biochim Biophys Acta** 1989 Dec 22;1009(3):293–6

Quinacrine inhibits the calcium-induced calcium release in heavy sarcoplasmic reticulum vesicles. Fernandez-Belda F, et al. **Biochim Biophys Acta** 1989 Nov 3;985(3):279–85

Ca2(+)-fatty acid interaction in the control of hepatic gluconeogenesis. González-Manchón C, et al. **Biochim Biophys Acta** 1990 Mar 9;1051(3):215–20

The relationship between mitogen-induced changes in the cytoplasmic pH and free Ca2+ concentration in rat thymocytes. Gukovskaya AS, et al. **Biochim Biophys Acta** 1990 Mar 9;1051(3):242–9

Stimulation of ATP-driven Ca2+ pump in the basal-lateral plasma membranes of kidney cortex during compensatory renal growth. Hadžić A, et al. **Biochim Biophys Acta** 1990 Mar;1022(3):265–72

Early membrane potential and cytoplasmic calcium changes during mitogenic stimulation of WEHI 231 cell line by polyene antibiotics, lipopolysaccharide and anti-immunoglobulin. Henry-Toulmé N, et al. **Biochim Biophys Acta** 1990 Mar 9;1051(3):285–92

A novel action of glucocorticosteroid in inhibition of leukotriene C4 production by rat basophilic leukemia cells: suppression of the elevation of cytosolic free Ca2+ induced by antigen. Her E, et al. **Biochim Biophys Acta** 1990 Feb 19;1051(2):203–6

Inhibition of the liver cell receptor-activated Ca2+ inflow system by metal ion inhibitors of voltage-operated Ca2+ channels but not by other inhibitors of Ca2+ inflow. Hughes BP, et al. **Biochim Biophys Acta** 1989 Oct 9; 1013(3):197–205

Calcium oscillations in electrically non-excitable cells [published erratum appears in Biochim Biophys Acta 1990 Aug 13;1054(1):141] Jacob R. **Biochim Biophys Acta** 1990 May 22;1052(3):427–38 (108 ref.)

Beta-adrenergic inhibition of AGEPC-stimulated Na+/Ca2+ exchange and AGEPC-induced platelet activation. Kester M, et al. **Biochim Biophys Acta** 1989 Nov 20;1014(2):195–202

Inhibitory mechanism of cis-polyunsaturated fatty acids on platelet aggregation: the relation with their effects on Ca2+ mobilization, cyclic AMP levels and membrane fluidity. Kitagawa S, et al. **Biochim Biophys Acta** 1990 Aug 13;1054(1):114–8

GABAA receptor-mediated increase of cytosolic Ca2+ in isolated bovine adrenal chromaffin cells. Kitayama S, et al. **Biochim Biophys Acta** 1990 Jul 12;1053(2–3):189–94

Phorbol esters and chemotactic factor induce distinct changes in cytoplasmic Ca2+ and pH in granulocytic like HL60 cells. Ladoux A, et al. **Biochim Biophys Acta** 1989 Sep 4;1013(1):55–9

The lipopeptide antibiotic A21978C has a specific interaction with DMPC only in the presence of calcium ions. Lakey JH, et al. **Biochim Biophys Acta** 1989 Oct 2;985(1):60–6

The role of mitochondrial Ca2+ transport and matrix Ca2+ in signal transduction in mammalian tissues. McCormack JG, et al. **Biochim Biophys Acta** 1990 Jul 25; 1018(2–3):287–91 (59 ref.)

Changes in phospholipid composition and calcium flux in LLC-PK cells cultured at low magnesium concentrations. Mahfouz MM, et al. **Biochim Biophys Acta** 1989 Nov 6; 1006(1):75–83

Evidence for an alteration in the microsomal Ca2+ release mechanism in senescent rat parotid acinar cells. Maki T, et al. **Biochim Biophys Acta** 1989 Oct 30;1014(1):73–7

Ca2(+)-dependent synthesis of prostaglandin I2 and mobilization of arachidonic acid from phospholipids in cultured endothelial cells permeabilized with saponin. Martin TW, et al. **Biochim Biophys Acta** 1990 Sep 1; 1054(2):159–68

Perturbation in liver mitochondrial Ca2+ homeostasis in experimental iron overload: a possible factor in cell injury. Masini A, et al. **Biochim Biophys Acta** 1989 Nov 20; 1014(2):133–40

Ruthenium red and compound 48/80 inhibit the smooth-muscle plasma-membrane Ca2+ pump via interaction with associated polyphosphoinositides. Missiaen L, et al. **Biochim Biophys Acta** 1990 Apr 30;1023(3):449–54

Regulation of calcium influx across the plasma membrane of the human T-leukemic cell line, JURKAT: dependence on a rise in cytosolic free calcium can be dissociated from formation of inositol phosphates. Ng J, et al. **Biochim Biophys Acta** 1990 Jun 12;1053(1):97–105

Modulation of vincristine sensitivity of human kidney tumor cells by pharmacological agents interfering with intracellular signals. No apparent relationship to changes in cytoplasmic Ca2+ or pH. Nygren P, et al. **Biochim Biophys Acta** 1990 May 22;1052(3):392–8

Ca2(+)-dependence of arachidonic acid redistribution among phospholipids of cultured mouse keratinocytes. Pacini L, et al. **Biochim Biophys Acta** 1990 Aug 6; 1045(3):213–8

Early over-expression of low-affinity [3H]ryanodine receptor sites in heavy sarcoplasmic reticulum fraction from dystrophic chicken pectoralis major. Pessah IN, et al. **Biochim Biophys Acta** 1990 Mar 30;1023(1):98–106

A fluorescence spectroscopy study of the calpactin I complex and its subunits p11 and p36: calcium-dependent conformation changes. Pigault C, et al. **Biochim Biophys Acta** 1990 Jan 19;1037(1):106–14

Kinetic properties of cation/H(+)-exchange: calcimycin (A23187)-mediated Ca2+/2H(+)-exchange on the bilayer lipid membrane. Pohl P, et al. **Biochim Biophys Acta** 1990 Sep 7;1027(3):295–300

Hormone-induced intracellular calcium oscillations and mitochondrial energy supply in single hepatocytes. Reber BF, et al. **Biochim Biophys Acta** 1990 Jul 25; 1018(2–3):190–3

Regulation of Ca2+ transport in brain mitochondria. I. The mechanism of spermine enhancement of Ca2+ uptake and retention. Rottenberg H, et al. **Biochim Biophys Acta** 1990 Mar 15;1016(1):77–86

Regulation of Ca2+ transport in brain mitochondria. II. The mechanism of the adenine nucleotides enhancement of Ca2+ uptake and retention. Rottenberg H, et al. **Biochim Biophys Acta** 1990 Mar 15;1016(1):87–98

Membrane depolarization selectively inhibits receptor-operated calcium channels in human T (Jurkat) lymphoblasts. Sarkadi B, et al. **Biochim Biophys Acta** 1990 Aug 24;1027(2):130–40

Effect of lead on parathyroid hormone-induced responses in rat osteoblastic osteosarcoma cells (ROS 17/2.8) using 19F-NMR. Schanne FA, et al. **Biochim Biophys Acta** 1990 Sep 1;1054(2):250–5

Effect of maitotoxin on cytosolic Ca2+ levels and membrane potential in purified rat brain synaptosomes. Taglialatela M, et al. **Biochim Biophys Acta** 1990 Jul 9;1026(1):126–32

A novel method for the efficient entrapment of calcium in large unilamellar phospholipid vesicles. Veiro JA, et al. **Biochim Biophys Acta** 1990 Jun 11;1025(1):109–15

The effects of thyrotropin-releasing hormone and potassium depolarization on phosphoinositide metabolism and cytoplasmic calcium in bovine pituitary cells. Wood CA, et al. **Biochim Biophys Acta** 1989 Sep 4;1013(1):97–106

Secondary signals mediated by GPIIb/IIIa in thrombin-activated platelets. Yamaguchi A, et al. **Biochim Biophys Acta** 1990 Aug 13;1054(1):8–13

Studies on the alignment of fibroblasts in uniform applied electrical fields. Ross SM, et al. **Bioelectromagnetics** 1989; 10(4):371–84

The phospholipase A2-induced increase in the permeability of phospholipid membranes to Ca2+ and H+ ions. Eriksson O, et al. **Biol Chem Hoppe Seyler** 1989 Dec; 370(12):1315–20

Furosemide increases total calcium in kidney and cytoplasmic free calcium in blood mononuclear cells of guinea pigs. Tsao PW, et al. **Biol Neonate** 1990;57(3–4):250–6

Hormonal regulation of free intracellular calcium concentrations in small and large ovine luteal cells. Wiltbank MC, et al. **Biol Reprod** 1989 Oct;41(4):771–8

Reduced intestinal calcium and dietary calcium intake, increased aluminum absorption, and tissue concentration in the rat. Provan SD, et al. **Biol Trace Elem Res** 1989–90 Winter;23:119–32

Age-related changes in strontium to calcium ratios in rat tissues. Sugihira N, et al. **Biol Trace Elem Res** 1990 Apr; 25(1):79–88

Renal discrimination between strontium and calcium in rats. Effects of renal damage caused by cadmium-metallothionein. Sugihira N, et al. **Biol Trace Elem Res** 1989 Oct;22(1):71–82

Effects of parathyroidectomy on tissue calcium, phosphorus, magnesium, and copper concentrations in aluminum-loaded uremic rats. Vukičević S, et al. **Biol Trace Elem Res** 1989 Oct;22(1):45–53

Ionic currents of channels that are permeable to monovalent and divalent cations. Oosawa Y. **Biophys J** 1989 Dec; 56(6):1217–23

Calcium diffusion modeling in a spherical neuron. Relevance of buffering properties. Sala F, et al. **Biophys J** 1990 Feb; 57(2):313–24

Activation of two different receptors mobilizes calcium from distinct stores in Xenopus oocytes. Shapira H, et al. **Biophys J** 1990 Jun;57(6):1281–5

Ca2+ release by inositol-trisphosphorothioate in isolated triads of rabbit skeletal muscle. Valdivia C, et al. **Biophys J** 1990 Jun;57(6):1233–43

Stimulus-response coupling in mammalian ciliated cells. Demonstration of two mechanisms of control for cytosolic [Ca2+] Villalón M, et al. **Biophys J** 1989 Dec;56(6):1255–8

Ca2+ interaction with phospholipid bilayers studied by multifrequency phase fluorometry. Zolese G, et al. **Biosci Rep** 1989 Aug;9(4):497–502

Exposure of human neutrophils to exogenous nucleotides causes elevation in intracellular calcium, transmembrane calcium fluxes, and an alteration of a cytosolic factor resulting in enhanced superoxide production in response to FMLP and arachidonic acid. Axtell RA, et al. **Blood** 1990 Mar 15;75(6):1324–32

Induction of platelet Ca2+ influx and mobilization by a monoclonal antibody to CD9 antigen. Hato T, et al. **Blood** 1990 Mar 1;75(5):1087–91

CD28 ligation in T-cell activation: evidence for two signal transduction pathways. Ledbetter JA, et al. **Blood** 1990 Apr 1;75(7):1531–9

Providing the fetus with calcium. Misra R, et al. **BMJ** 1990 May 12;300(6734):1220–1 (19 ref.)

Intracellular acidification induces decrease of cytosolic calcium in isolated osteoclasts. Teti A, et al. **Boll Soc Ital Biol Sper** 1989 Aug;65(8):689–93

No short-term effects of 24,25-dihydroxycholecalciferol in healthy subjects. Kappelle JW, et al. **Bone** 1989;10(6):397–9

Calcium metabolism of rats with varying degrees of insulinopenia. Locatto ME, et al. **Bone Miner** 1990 Feb; 8(2):119–30

Regulatory effect of endogenous zinc and inhibitory action of toxic metal ions on calcium accumulation by matrix vesicles in vitro. Sauer GR, et al. **Bone Miner** 1989 Nov; 7(3):233–44

The effects of human parathyroid hormone-related peptide on cytosolic free calcium and cAMP production in opossum kidney cell. Yamamoto Y, et al. **Bone Miner** 1989 Nov;7(3):221–31

I alpha-25-dihydroxyvitamin D3 increases intracellular free calcium in murine B16 melanoma. Hill SE, et al. **Br J Dermatol** 1989 Jan;120(1):21–30

Epidermal adenylate cyclase system is regulated by diacylglycerol-protein kinase C signal, but not by calcium signal. Iizuka H, et al. **Br J Dermatol** 1990 Apr; 122(4):459–67

The effect of variation in dietary protein or mineral supply on calcium and phosphorus metabolism in lactating ewes. Rajaratne AA, et al. **Br J Nutr** 1990 Jul;64(1):147–60

The 2-chloroadenosine inhibition of histamine-induced inositol phosphates accumulation in mouse brain and calcium ions. Alexander SP, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:832P

2-chloroadenosine attenuates kainic acid-induced toxicity within the rat straitum: relationship to release of glutamate and Ca2+ influx. Arvin B, et al. **Br J Pharmacol** 1989 Sep;98(1):225–35

Muscarinic receptors coupled to phosphoinositide hydrolysis and elevated cytosolic calcium in a human neuroblastoma cell line SK-N-SH. Baird JG, et al. **Br J Pharmacol** 1989 Dec;98(4):1328–34

Calcium permeability of pig aortic microsomes is increased by histamine and a guanyl nucleotide. Blayney LM, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:791P

Accumulation of extracellular calcium at the endplate of mouse diaphragm after ecothiopate in vitro. Burd PF, et al. **Br J Pharmacol** 1989 Sep;98(1):243–51

Effects of platelet activating factor on contractile force and 45Ca fluxes in guinea-pig isolated atria. Diez J, et al. **Br J Pharmacol** 1990 Jun;100(2):305–11

Effects of okadaic acid on cytosolic calcium concentrations and on contractions of the porcine coronary artery. Hirano K, et al. **Br J Pharmacol** 1989 Dec;98(4):1261–6

Antagonism by nifedipine of contraction and Ca2(+)-influx evoked by ATP in guinea-pig urinary bladder. Katsuragi T, et al. **Br J Pharmacol** 1990 Jun;100(2):370–4

Multiple sources of calcium for contraction of the human urinary bladder muscle. Maggi CA, et al. **Br J Pharmacol** 1989 Nov;98(3):1021–31

Characterisation of the intracellular calcium response to vasopressin in A7r5 smooth muscle cells. Newgreen DT, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:793P

Continuous fluorimetric assessment of the changes in cytoplasmic calcium concentration during exposure of rat isolated myocardium to conditions of simulated ischaemia. Northover BJ. **Br J Pharmacol** 1990 Jul;100(3):477–82

Effects of endothelin on the mechanical activity and cytosolic calcium level of various types of smooth muscle. Sakata K, et al. **Br J Pharmacol** 1989 Oct;98(2):483–92

Caffeine acting on pregnant rat myometrium: analysis of its relaxant action and its failure to release Ca2+ from intracellular stores. Savineau JP, et al. **Br J Pharmacol** 1990 Feb;99(2):261–6

Effects of verapamil on ischaemia-induced impairment of ATP-dependent calcium extrusion in rat heart sarcolemma. van Amsterdam FT, et al. **Br J Pharmacol** 1989 Sep; 98(1):161–6

K(+)-stimulation of the phosphoinositide pathway in guinea-pig ileum longitudinal smooth muscle is predominantly neuronal in origin and mediated by the entry of extracellular Ca2+. Watson SP, et al. **Br J Pharmacol** 1990 Jan;99(1):212–6

Alpha 2-adrenoceptor agonists enhance vasoconstrictor responses to alpha 1-adrenoceptor agonists in the rat tail artery by increasing the influx of Ca2+. Xiao XH, et al. **Br J Pharmacol** 1989 Nov;98(3):1032–8

Nitroglycerin relaxes canine coronary arterial smooth muscle without reducing intracellular Ca2+ concentrations measured with fura-2. Yanagisawa T, et al. **Br J Pharmacol** 1989 Oct;98(2):469–82

Elucidation of the mechanism responsible for the temperature-dependent reversible inactivation of the motility of fowl spermatozoa. Thomson MF, et al. **Br Poult Sci** 1989 Sep;30(3):687–92

Glutamate stimulates release of Ca2+ from internal stores in astroglia. Ahmed Z, et al. **Brain Res** 1990 May 14; 516(1):165–9

Ethanol inhibits NMDA-induced increases in free intracellular Ca2+ in dissociated brain cells. Dildy JE, et al. **Brain Res** 1989 Oct 16;499(2):383–7

Alpha-receptor and cholinergic receptor-linked changes in cytosolic Ca2+ and membrane potential in primary rat astrocytes. Enkvist MO, et al. **Brain Res** 1989 Oct 23; 500(1-2):46–54

Is the function of dendritic spines to concentrate calcium? Holmes WR. **Brain Res** 1990 Jun 11;519(1-2):338–42

Accumulation of calcium in substantia nigra lesions induced by status epilepticus. A microprobe analysis. Inamura K, et al. **Brain Res** 1990 Apr 23;514(1):49–54

Regional differences in the activation of synaptosomal mitochondrial Ca2+ uptake by spermine in rat brain. Jensen J, et al. **Brain Res** 1990 Jul 23;523(2):313–5

Calcium-dependent displacement of haloperidol-sensitive sigma receptor binding in rat hippocampal slices following tissue depolarization. Neumaier JF, et al. **Brain Res** 1989 Oct 23;500(1-2):215–22

Ganglioside GM1 prevents and reverses toluene-induced increases in membrane fluidity and calcium levels in rat brain synaptosomes. von Euler G, et al. **Brain Res** 1990 Feb 5;508(2):210–4

Mode of blockade by MK-801 of N-methyl-D-aspartate-induced increase in intracellular Ca2+ in cultured mouse hippocampal neurons. Yuzaki M, et al. **Brain Res** 1990 May 28;517(1-2):51–6

Calcium, neuronal hyperexcitability and ischemic injury. Meyer FB. **Brain Res Brain Res Rev** 1989 Jul-Sep; 14(3):227–43 (171 ref.)

Alpha-latrotoxin triggers an increase of ionized calcium in Xenopus oocytes injected with rat brain mRNA. Umbach JA, et al. **Brain Res Mol Brain Res** 1990 Jun;8(1):31–6

Calcium-osmolality interaction in the inotropic response of isolated rat atria to increased sodium concentration. Bassani JW, et al. **Braz J Med Biol Res** 1989;22(6):807–10

The relationship between extracellular calcium and isovolumic systolic pressure in the Langendorff-perfused rat heart. Stefanon I, et al. **Braz J Med Biol Res** 1989; 22(7):905–7

Cytoskeleton and calcium. A review. Dard M. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Dec; 32(4):209–15 (87 ref.)

Calcium homeostasis and the activation of calcium channels in cells of the immune system. Grinstein S, et al. **Bull N Y Acad Med** 1989 Jan;65(1):69–79 (39 ref.)

Buserelin-mediated osteoporosis: effects of restoring estrogen on bone resorption and whole body calcium content in the rat. Goulding A, et al. **Calcif Tissue Int** 1990 Jan; 46(1):14–9

Neurotransmitter regulation of cytosolic calcium in osteoblast-like bone cells. Kumagai H, et al. **Calcif Tissue Int** 1989 Oct;45(4):251–4

Midazolam potently affects free calcium concentration in astrocytes. Code WE, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S27

Effect of calcium antagonists on aortae isolated from normotensive and hypertensive rats: relaxation and calcium influx blockade. Cattaneo EA, et al. **Can J Cardiol** 1990 Jun;6(5):212–8

Caffeine treatment inhibits drug-induced calcium release from sarcoplasmic reticulum and caffeine contracture but not tetanus in frog skeletal muscle. Koshita M, et al. **Can J Physiol Pharmacol** 1989 Aug;67(8):890–5

The effect of sulfonylurea therapy on defective calcium movement associated with diabetic cardiomyopathy. Mozaffari MS, et al. **Can J Physiol Pharmacol** 1989 Nov; 67(11):1431–6

Effects of endogenous calcium transport inhibitor from heart muscle on the active calcium uptake and passive calcium release properties of sarcoplasmic reticulum. Narayanan N, et al. **Can J Physiol Pharmacol** 1989 Sep;67(9):999–1006

Interactions between the presynaptically active neurotoxins alpha-latrotoxin and omega-conotoxin GVIA: studies on calcium fluxes and binding parameters in rat and chicken synaptosomes. Scheer HW. **Can J Physiol Pharmacol** 1990 Aug;68(8):1049–54

Recent studies of human calcium metabolism using stable isotopic tracers. Yergey AL, et al. **Can J Physiol Pharmacol** 1990 Jul;68(7):973–6

High molecular weight dextran sulfate inhibits intracellular Ca2+ release and decreases growth factor-induced increases in intracellular free Ca2+ in Swiss 3T3 fibroblasts. Seewald MJ, et al. **Cancer Commun** 1989; 1(3):151–6

Vasoactive intestinal polypeptide (VIP) induces calcium mobilization in the human neuroblastoma cell line SK-N-SH. Oettling G, et al. **Cancer Lett** 1990 Apr 30; 50(3):203–7

Suramin blocks intracellular Ca2+ release and growth factor-induced increases in cytoplasmic free Ca2+ concentration. Seewald MJ, et al. **Cancer Lett** 1990 Feb; 49(2):107–13

Role of calcium in the thermal inactivation of calcium transport proteins. Cheng KH. **Cancer Res** 1989 Dec 15; 49(24 Pt 1):7026–30

Elevation of leukemic cell intracellular calcium by the ether lipid SRI 62-834. Lazenby CM, et al. **Cancer Res** 1990 Jun 1;50(11):3327–30

Activation of inositol phospholipid signaling and Ca2+ efflux in human breast cancer cells by bombesin. Patel KV, et al. **Cancer Res** 1990 Jan 15;50(2):235–9

Stimulation of calcium mobilization but not proliferation by bombesin and tachykinin neuropeptides in human small cell lung cancer cells. Takuwa N, et al. **Cancer Res** 1990 Jan 15;50(2):240–4

Effect of prolonged hypothermic ischaemia on myocardial sarcoplasmic reticular calcium transport. Fukumoto K, et al. **Cardiovasc Res** 1990 Mar;24(3):169–75

The effect of flunarizine on intracellular calcium in isolated rat cardiomyocytes. A digital image processing study [published erratum appears in Cardiovasc Res 1989 Nov;23(11):992] Geerts H, et al. **Cardiovasc Res** 1989 Sep; 23(9):797–806

Effects of hydrogen peroxide on action potentials and intracellular Ca2+ concentration of guinea pig heart. Hayashi H, et al. **Cardiovasc Res** 1989 Sep;23(9):767–73

Effects of strophanthidin on intracellular Ca2+ concentration and cellular morphology of guinea pig myocytes. Miyata H, et al. **Cardiovasc Res** 1989 May; 23(5):378–84

Effects of low extracellular sodium concentration on reperfusion induced arrhythmias: changes in the myocardial sodium, potassium and calcium contents in isolated guinea pig hearts. Tosaki A, et al. **Cardiovasc Res** 1989 Dec; 23(12):993–1000

Do studies of mechanical restitution tell us anything about the mechanism of Ca2+ release in myocardial cells? Noble MI, et al. **Cell Biol Int Rep** 1990 Apr;14(4):299–304 (25 ref.)

Interaction of phospholipids with Ca2+ ions. On the role of the phospholipid head groups. Seelig J. **Cell Biol Int Rep** 1990 Apr;14(4):353–60 (15 ref.)

Ultrastructure and Ca2+ reallocation during ischemia, the Ca2+ paradox and metabolic acidosis. Vandeplassche G, et al. **Cell Biol Int Rep** 1990 Apr;14(4):317–34

Changes in cytosolic CA2+ are not involved in DDT-induced loss of gap junctional communication in WB-F344 cells. Fransson R, et al. **Cell Biol Toxicol** 1990 Apr;6(2):235–44

Ca2+ binding by Myxicola neurofilament proteins. Abercrombie RF, et al. **Cell Calcium** 1990 May; 11(5):361–70

Intracellular calcium and hormone secretion in clonal AtT-20/D16-16 anterior pituitary cells. Adler M, et al. **Cell Calcium** 1989 Oct;10(7):467–76

Cholera toxin and its B subunit do not change cytosolic free calcium concentration. Astashkin EI, et al. **Cell Calcium** 1990 Jun-Jul;11(6):419–23

Ethanol protects the heart against the calcium paradox injury. Auffermann W, et al. **Cell Calcium** 1990 Jan;11(1):47–54

The role of increased calcium influx rate in receptor mediated function of differentiating HL-60 cells. Aviram A, et al. **Cell Calcium** 1990 Apr;11(4):269–74

Spontaneous and experimentally evoked [Ca2+]i-transients in cardiac myocytes measured by means of a fast Fura-2 technique. Bals S, et al. **Cell Calcium** 1990 Jun-Jul; 11(6):385–96

Calcium release induced by inositol 1,4,5-trisphosphate in thymocyte microsomes. Inhibition by barium and strontium. Baquero-Leonis D, et al. **Cell Calcium** 1989 Oct; 10(7):451–5

Effect of hormones on cytosolic free calcium in adipocytes. Blackmore PF, et al. **Cell Calcium** 1989 Nov-Dec; 10(8):561–7

Effect of Quin-2 on 45Ca2+ uptake mediated by Na+i/Ca2+o exchange and 45Ca2+ efflux in rat brain synaptosomes: a requirement for [Ca2+]i. Blanco P, et al. **Cell Calcium** 1990 Jan;11(1):25–33

Existence of two calcium currents recorded at normal calcium concentrations in single frog atrial cells. Bonvallet R, et al. **Cell Calcium** 1989 Oct;10(7):499–508

Ca2+ dynamics in neuronal growth cones: regulation and changing patterns of Ca2+ entry. Connor JA, et al. **Cell Calcium** 1990 Feb-Mar;11(2-3):233–9

Influence of thyroid status on Ca2+ mobilization and amylase secretion in rat pancreatic acini. Dho S, et al. **Cell Calcium** 1989 Nov-Dec;10(8):551–60

Inhibition of Fura-2 sequestration and secretion with organic anion transport blockers. Di Virgilio F, et al. **Cell Calcium** 1990 Feb-Mar;11(2-3):57–62 (16 ref.)

Ca2+ transients and Mn2+ entry in human neutrophils induced by thapsigargin. Foder B, et al. **Cell Calcium** 1989 Oct;10(7):477–90

Measurement of intracellular Ca2+ in cultured arterial smooth muscle cells using Fura-2 and digital imaging microscopy. Goldman WF, et al. **Cell Calcium** 1990 Feb-Mar;11(2-3):221–31

Monoclonal antiparathyroid antibodies--tools for studies of the regulation of cytoplasmic calcium and function of parathyroid and other antibody-reactive cells. Gylfe E, et al. **Cell Calcium** 1990 May;11(5):329–32 (22 ref.)

Glucose induces temperature-dependent oscillations of cytoplasmic Ca2+ in single pancreatic beta-cells related to their electrical activity. Hellman B, et al. **Cell Calcium** 1990 Jun-Jul;11(6):413–8

Does beta-adrenoceptor activation stimulate Ca2+ mobilization and inositol trisphosphate formation in parotid acinar cells? Hughes AR, et al. **Cell Calcium** 1989 Nov-Dec;10(8):519–25

Imaging cytoplasmic free calcium in histamine stimulated endothelial cells and in fMet-Leu-Phe stimulated neutrophils [published erratum appears in Cell Calcium 1990 May;11(5):following 384] Jacob R. **Cell Calcium** 1990 Feb-Mar;11(2-3):241–9

Charge-coupled device imaging of rapid calcium transients in cultured arterial smooth muscle cells [published erratum

appears in Cell Calcium 1990 Jun-Jul;11(6):following 444]
Linderman JJ, et al. **Cell Calcium** 1990 Feb-Mar; 11(2-3):131-44

Local and global changes in cytosolic free calcium in neutrophils during chemotaxis and phagocytosis. Marks PW, et al. **Cell Calcium** 1990 Feb-Mar;11(2-3):181-90

Glucose increases cytosolic calcium concentration and inositol lipid metabolism in HIT-T15 cells. Meats JE, et al. **Cell Calcium** 1989 Nov-Dec;10(8):535-41

Ca2+ channels and intracellular Ca2+ stores in neuronal and neuroendocrine cells. Milani D, et al. **Cell Calcium** 1990 Feb-Mar;11(2-3):191-9 (50 ref.)

A calcium flux at the termination of replication triggers cell division in Escherichia coli. Hypothesis. Norris V. **Cell Calcium** 1989 Nov-Dec;10(8):511-7 (53 ref.)

On the dissociation constants of BAPTA-type calcium buffers. Pethig R, et al. **Cell Calcium** 1989 Oct;10(7):491-8

Effects of cyclic nucleotide dependent protein kinases on the endoplasmic reticulum Ca2+ pump of bovine pulmonary artery. Raeymaekers L, et al. **Cell Calcium** 1990 Apr; 11(4):261-8

Imaging [Ca2+]i dynamics during signal transduction. Ryan TA, et al. **Cell Calcium** 1990 Feb-Mar;11(2-3):145-55

Endotoxicosis modulates cytosolic free calcium and basal and ACTH-stimulated lipolysis in rat adipocytes. Spitzer JA, et al. **Cell Calcium** 1990 Jun-Jul;11(6):405-11

Calcium efflux across the plasma membrane of rat parotid acinar cells is unaffected by receptor activation or by the microsomal calcium ATPase inhibitor, thapsigargin. Takemura H, et al. **Cell Calcium** 1990 Jan;11(1):11-7

Imaging spatial distribution of release in single muscle fibres from Balanus nubilus using image intensification. Timmerman MP, et al. **Cell Calcium** 1990 Feb-Mar; 11(2-3):211-20

Ca2(+)-binding site of carp parvalbumin recognized by monoclonal antibody. Tinner R, et al. **Cell Calcium** 1990 Jan;11(1):19-23

The role of calcium in insulin release from the human fetal pancreas. Tuch BE, et al. **Cell Calcium** 1990 Jan;11(1):1-9

Cell shape and increased free cytosolic calcium [Ca2+]i induced by growth factors. Tucker RW, et al. **Cell Calcium** 1990 Feb-Mar;11(2-3):201-9

Role of calcium and cAMP in heterologous up-regulation of the 1,25-dihydroxyvitamin D3 receptor in an osteoblast cell line. van Leeuwen JP, et al. **Cell Calcium** 1990 Apr; 11(4):281-9

Influence of ischemia on [Ca2+]i transients following drug therapy in hearts from aortic constricted rats. Wagner S, et al. **Cell Calcium** 1990 Jun-Jul;11(6):431-44

Confocal imaging of ionised calcium in living plant cells. Williams DA, et al. **Cell Calcium** 1990 Apr;11(4):291-7

Modulation of free Ca oscillations in single hepatocytes by changes in extracellular K+, Na+ and Ca2+. Woods NM, et al. **Cell Calcium** 1990 May;11(5):353-60

The effects of Mg2+ on rat liver microsomal Ca2+ sequestration. Zhang GH, et al. **Cell Calcium** 1990 Jun-Jul; 11(6):397-403

Effects of modulators of adenylyl cyclase on interleukin-2 production, cytosolic Ca2+ elevation, and K+ channel activity in Jurkat T cells. Bastin B, et al. **Cell Immunol** 1990 Jul;128(2):385-9

Inositol 1,4,5-trisphosphate- and arachidonic acid-induced calcium mobilization in T and B lymphocytes. Corado J, et al. **Cell Immunol** 1990 Apr 1;126(2):245-54

The stimulatory effect of calpactin (annexin II) on calcium-dependent exocytosis in chromaffin cells: requirement for both the N-terminal and core domains of p36 and ATP. Ali SM, et al. **Cell Signal** 1990;2(3):265-76

GTP causes calcium release from a plant microsomal fraction. Allan E, et al. **Cell Signal** 1989;1(1):23-9

The control of cytoskeletal actin and exocytosis in intact and permeabilized adrenal chromaffin cells: role of calcium and protein kinase C. Burgoyne RD, et al. **Cell Signal** 1989; 1(4):323-34

Staphylococcus aureus alpha-toxin activates phospholipases and induces a Ca2+ influx in PC12 cells. Fink D, et al. **Cell Signal** 1989;1(4):387-93

Protein phosphorylation and the dependence on Ca2+ and GTP-gamma-S for exocytosis from permeabilised mast cells. Howell TW, et al. **Cell Signal** 1989;1(2):157-63

Calcium involvement in the muscarinic response of the gastric parietal cell. Leonard A, et al. **Cell Signal** 1990; 2(2):177-86

Diffusion into the patch-clamp recording pipette of a factor necessary for muscarinic current response. Marty A, et al. **Cell Signal** 1989;1(3):259-68

Bradykinin-induced changes in phosphoinositides, inositol phosphate production and intracellular free calcium in cultured bovine aortic endothelial cells. Myers DE, et al. **Cell Signal** 1989;1(4):335-43

Homologous and heterologous desensitization mediated by vasopressin in smooth muscle cells. Nambi P, et al. **Cell Signal** 1989;1(3):241-51

Pertussis toxin B-subunit-induced Ca2(+)-fluxes in Jurkat human lymphoma cells: the action of long-term pre-treatment with cholera and pertussis holotoxins. Sommermeyer H, et al. **Cell Signal** 1990;2(2):115-28

G-protein dependent potentiation of calcium release from sarcoplasmic reticulum of skeletal muscle. Villaz M, et al. **Cell Signal** 1989;1(5):493-506

Simultaneous investigation of intracellular Ca2+ increase and morphological events upon fertilization in the sand dollar egg. Hamaguchi Y, et al. **Cell Struct Funct** 1990 Jun;15(3):159-62

Dual-fluorescence flow cytometric analysis of membrane potential and cytoplasmic free Ca2+ concentration in embryonic rat hippocampal cells. Mitsumoto Y, et al. **Cell Struct Funct** 1989 Dec;14(6):669-72

Effect on carbon lengthening at the side chain terminal of 1 alpha,25-dihydroxyvitamin D3 for calcium regulating activity. Eguchi T, et al. **Chem Pharm Bull (Tokyo)** 1990 May;38(5):1246-9

Effect of the calcium-binding protein regucalcin on the Ca2+ transport system in rat liver microsomes: the protein stimulates Ca2+ release. Yamaguchi M, et al. **Chem Pharm Bull (Tokyo)** 1989 Nov;37(11):3037-41

Pulse NMR study of the interaction of calcium ion with dipalmitoylphosphatidylcholine lamellae. Shibata T. **Chem Phys Lipids** 1990 Mar;53(1):47-52

Soluble products of Staphylococcus aureus-stimulated blood mononuclear cells in enhancing polymorphonuclear leukocyte degradation of bone. Wang JH, et al. **Chin Med J [Engl]** 1990 Apr;103(4):326-30

Transporting of sodium and calcium cation in erythrocyte in patients with essential hypertension. Zhu ZM, et al. **Chin Med J [Engl]** 1990 Feb;103(2):107-9

Phorbol ester and dioctanoylglycerol stimulate membrane association of protein kinase C and have a negative inotropic effect mediated by changes in cytosolic Ca2+ in adult rat cardiac myocytes. Capogrossi MC, et al. **Circ Res** 1990 Apr;66(4):1143-55

Developmental changes in cardiac myocyte calcium regulation. Chin TK, et al. **Circ Res** 1990 Sep;67(3):574-9

Effect of thyroid status on thin-filament Ca2+ regulation and expression of troponin I in perinatal and adult rat hearts. Dieckman LJ, et al. **Circ Res** 1990 Aug;67(2):344-51

Differential effect of global ischemia on the ryanodine-sensitive and ryanodine-insensitive calcium uptake of cardiac sarcoplasmic reticulum. Feher JJ, et al. **Circ Res** 1989 Nov;65(5):1400-8

Effect of protein kinase C activation on sarcoplasmic reticulum function and apparent myofibrillar Ca2+ sensitivity in intact and skinned muscles from normal and diseased human myocardium. Gwathmey JK, et al. **Circ Res** 1990 Sep;67(3):744-52

Quantitative aspects of dog cardiac microsomal calcium binding and calcium uptake. Katz AM, et al. **Circ Res** 1967 Aug;21(2):153-62

Direct measurement of changes in intracellular calcium transients during hypoxia, ischemia, and reperfusion of the intact mammalian heart. Kihara Y, et al. **Circ Res** 1989 Oct;65(4):1029-44

Effects of intracellular acidosis on [Ca2+]i transients, transsarcolemmal Ca2+ fluxes, and contraction in ventricular myocytes. Kohmoto O, et al. **Circ Res** 1990 Mar;66(3):622-32

Changes in intracellular calcium during mechanical alternans in isolated ferret ventricular muscle. Lab MJ, et al. **Circ Res** 1990 Mar;66(3):585-95

Contribution of endothelial cells to calcium-dependent fluorescence transients in rabbit hearts loaded with indo 1. Lorell BH, et al. **Circ Res** 1990 Aug;67(2):415-25

Changes in myofibrillar activation and troponin C Ca2+ binding associated with troponin T isoform switching in developing rabbit heart. McAuliffe JJ, et al. **Circ Res** 1990 May;66(5):1204-16

Quantification of [Ca2+]i in perfused hearts. Critical evaluation of the 5F-BAPTA and nuclear magnetic resonance method as applied to the study of ischemia and reperfusion. Marban E, et al. **Circ Res** 1990 May; 66(5):1255-67

Ca2+ uptake by cardiac sarcoplasmic reticulum from patients with idiopathic dilated cardiomyopathy. Movsesian MA, et al. **Circ Res** 1989 Oct;65(4):1141-4

Effect of acidosis on intracellular pH and calcium concentration in the newborn and adult rabbit myocardium. Nakanishi T, et al. **Circ Res** 1990 Jul;67(1):111-23

Differential effects of cardiac hypertrophy and failure on right versus left ventricular calcium activation. Perreault CL, et al. **Circ Res** 1990 Sep;67(3):707-12

The role of mitochondria and sarcoplasmic reticulum calcium handling upon reoxygenation of hypoxic myocardium. Pesaturo JA, et al. **Circ Res** 1990 Mar;66(3):696-709

Muscle length, shortening, myoplasmic [Ca2+], and activation of arterial smooth muscle. Rembold CM, et al. **Circ Res** 1990 May;66(5):1354-61

Inotropic and calcium kinetic effects of calcium channel agonist and antagonist in isolated cardiac myocytes from cardiomyopathic hamsters. Sen LY, et al. **Circ Res** 1990 Sep;67(3):599-608

Spatial heterogeneity of intracellular Ca2+ concentration in nonbeating guinea pig ventricular myocytes. Williford DJ, et al. **Circ Res** 1990 Jan;66(1):241-8

Gram-negative endotoxemia: effects on cardiac Na-Ca exchange and stoichiometry. Hale CC, et al. **Circ Shock** 1989 Oct;29(2):133-42

Relation between steady-state force and intracellular [Ca2+] in intact human myocardium. Index of myofibrillar responsiveness to Ca2+. Gwathmey JK, et al. **Circulation** 1990 Oct;82(4):1266-78

Abnormal intracellular calcium handling, a major cause of systolic and diastolic dysfunction in ventricular myocardium from patients with heart failure. Morgan JP, et al. **Circulation** 1990 Feb;81(2 Suppl):III21-32

Disturbed intracellular calcium-related processes of hepatocytes and neutrophils in human alcoholic liver disease. Baffy G, et al. **Clin Biochem** 1990 Jun;23(3):241-5

The calcium signal and neutrophil activation. Krause KH, et al. **Clin Biochem** 1990 Apr;23(2):159-66 (56 ref.)

Inositol phospholipid turnover and intracellular Ca2+ responses to thyrotrophin-releasing hormone, gonadotrophin-releasing hormone and arginine vasopressin in pituitary corticotroph and somatotroph adenomas. Levy A, et al. **Clin Endocrinol (Oxf)** 1990 Jul;33(1):73-9

In vivo potentiation of vasopressors by spontaneously hypertensive rat plasma: correlation with blood pressure and calcium uptake. Lewanczuk RZ, et al. **Clin Exp Hypertens [A]** 1989;11(8):1471-85

Dual mechanism in induction of human neutrophil cytotoxicity: activation of protein kinase C and elevation in intracellular calcium. Gavioli R, et al. **Clin Exp Immunol** 1990 May;80(2):247-51

Spontaneous oscillations in cytoplasmic free calcium concentration in vascular smooth muscle: a potential mechanism associated with myogenic tone. Bobik A, et al. **Clin Exp Pharmacol Physiol** 1988 Apr;15(4):281-4

Arrhythmogenic effect of forskolin in the isolated perfused rat heart: influence of nifedipine or reduction of external calcium [corrected]. Huang XD, et al. **Clin Exp Pharmacol Physiol** 1989 Oct;16(10):751-7

Intestinal calcium absorption in rheumatoid arthritis. A study using whole body counting. Broggini M, et al. **Clin Exp Rheumatol** 1989 Jul-Aug;7(4):403-6

Independent pathways causing cellular damage in mouse soleus muscle under hypoxia. McCall KE, et al. **Comp Biochem Physiol [A]** 1989;94(4):799-804

Calcium transport in chicken leukocytes and erythrocytes. Porter DW, et al. **Comp Biochem Physiol [A]** 1990; 95(3):453-7

Chronic in situ monitoring of the free calcium ion concentration in the uterine tubes and horns of the sheep. Ward JP, et al. **Comp Biochem Physiol [A]** 1989;94(4):765-9

Brain synaptosomal Ca2+ uptake: comparison of Sprague-Dawley, Wistar-Kyoto and spontaneously hypertensive rats. Honda H, et al. **Comp Biochem Physiol [B]** 1990;95(3):555-8

Evidence for tight coupling of phospholipase activation and Ca2+ influx during acrosome reaction of golden hamster spermatozoa. Imai A, et al. **Comp Biochem Physiol [B]** 1990; 95(3):635-9

Inhibition by taurine of Na(+)-Ca2+ exchange in sarcolemmal membrane vesicles from bovine and guinea pig hearts. Matsuda T, et al. **Comp Biochem Physiol [C]** 1989;94(1):335-9

Binding of calcium and phosphate ions to dentin phosphophoryn. Marsh ME. **Connect Tissue Res** 1989; 21(1-4):205-10; discussion 211

Alkaline phosphatase cDNA transfected cells promote calcium and phosphate deposition. Yoon K, et al. **Connect Tissue Res** 1989;22(1-4):17-25; discussion 53-61

Cellular calcium in the pathogenesis of ischemic acute renal failure. Schieppati A, et al. **Contrib Nephrol** 1990;77:123-31 (45 ref.)

Mechanisms of cell toxicity. Chipman JK. **Curr Opin Cell Biol** 1989 Apr;1(2):231-5 (33 ref.)

Actin-binding proteins. Vandekerckhove J. **Curr Opin Cell Biol** 1990 Feb;2(1):41-50 (29 ref.)

Coordinate interactions of cyclic nucleotide and phospholipid metabolizing pathways in calcium-dependent cellular processes. Laychock SG. **Curr Top Cell Regul** 1989; 30:203-42 (322 ref.)

Development of calcium release mechanisms during starfish oocyte maturation. Chiba K, et al. **Dev Biol** 1990 Aug; 140(2):300-6

Calcium and cell cycle control. Whitaker M, et al. **Development** 1990 Apr;108(4):525-42 (187 ref.)

Bone and mineral metabolism in BB rats with long-term diabetes. Decreased bone turnover and osteoporosis. Verhaeghe J, et al. **Diabetes** 1990 Apr;39(4):477-82

Increase in electrically-stimulated Ca2+ release and suppression of caffeine response in diaphragm muscle of alloxan-diabetic mice compared with the denervation effect. Kimura I, et al. **Diabetologia** 1990 Feb;33(2):72-6

Effects of CCK-receptor antagonists on CCK-stimulated pepsinogen secretion and calcium increase in isolated guinea pig gastric chief cells. Sakamoto C, et al. **Dig Dis Sci** 1990 Jul;35(7):873-8

Ca2+-activated mechanisms in cell killing. Nicotera P, et al. **Drug Metab Rev** 1989;20(2-4):193-201 (22 ref.)

The first EGF-like domain from human factor IX contains a high-affinity calcium binding site. Handford PA, et al. **EMBO J** 1990 Feb;9(2):475-80

Vasopressin directly closes ATP-sensitive potassium channels evoking membrane depolarization and an increase in the free intracellular Ca2+ concentration in insulin-secreting cells. Martin SC, et al. **EMBO J** 1989 Dec 1;8(12):3595-9

Cytoplasmic Ca2+ oscillations evoked by receptor stimulation, G-protein activation, internal application of inositol trisphosphate or Ca2+: simultaneous microfluorimetry and Ca2+ dependent Cl- current recording in single pancreatic acinar cells. Osipchuk YV, et al. **EMBO J** 1990 Mar;9(3):697-704

Single islet beta-cell stimulation by nutrients: relationship between pyridine nucleotides, cytosolic Ca2+ and secretion. Pralong WF, et al. **EMBO J** 1990 Jan;9(1):53-60

Evidence for an inhibitory effect of protein kinase C on G-protein-mediated repetitive calcium transients in hamster eggs. Swann K, et al. **EMBO J** 1989 Dec 1; 8(12):3711-8

Raising the intracellular level of inositol 1,4,5-trisphosphate changes plasma membrane ion transport in characean algae. Thiel G, et al. **EMBO J** 1990 Jun;9(6):1737-41

Signal transduction mechanisms of Ca2+ mobilizing hormones: the case of gonadotropin-releasing hormone. Naor Z. **Endocr Rev** 1990 May;11(2):326-53 (389 ref.)

Modulation of adrenal chromaffin cell intracellular calcium by angiotensin, bradykinin and endothelin. Printz MP, et al. **Endocrinol Exp** 1990 Mar;24(1-2):55-61

Effects of thyroid hormones on bone and mineral metabolism. Mosekilde L, et al. **Endocrinol Metab Clin North Am** 1990 Mar;19(1):35-63 (145 ref.)

Thrombin stimulates inositol phosphate production and intracellular free calcium by a pertussis toxin-insensitive mechanism in osteosarcoma cells. Babich M, et al. **Endocrinology** 1990 Feb;126(2):948-54

Effects of high potassium concentration and dihydropyridine Ca2(+)-channel agonists on cytoplasmic Ca2+ and aldosterone production in rat adrenal glomerulosa cells. Balla T, et al. **Endocrinology** 1990 Aug;127(2):815-22

Neuropeptide-Y enhances luteinizing hormone (LH)-releasing hormone-induced LH release and elevations in cytosolic Ca2+ in rat anterior pituitary cells: evidence for involvement of extracellular Ca2+ influx through voltage-sensitive channels. Crowley WR, et al. **Endocrinology** 1990 Sep;127(3):1487-94

Evidence for involvement of protein kinase C and cyclic adenosine 3',5' monophosphate-dependent protein kinase in the 1,25-dihydroxy-vitamin D3-mediated rapid stimulation of intestinal calcium transport, (transcaltachia). de Boland AR, et al. **Endocrinology** 1990 Jul;127(1):39-45

Structure-function relationships for full-length recombinant parathyroid hormone-related peptide and its amino-terminal fragments: effects on cytosolic calcium ion mobilization and adenylate cyclase activation in rat osteoblast-like cells. Donahue HJ, et al. **Endocrinology** 1990 Mar;126(3):1471-7

Stimulation by parathyroid hormone of 45Ca2+ uptake in osteoblast-like cells: possible involvement of alkaline phosphatase. Fukayama S, et al. **Endocrinology** 1990 Apr; 126(4):1941-9

Follicle-stimulating hormone receptor-mediated uptake of 45Ca2+ by proteoliposomes and cultured rat sertoli cells: evidence for involvement of voltage-activated and voltage-independent calcium channels. Grasso P, et al. **Endocrinology** 1989 Dec;125(6):3029-36

Follicle-stimulating hormone receptor-mediated uptake of 45Ca2+ by cultured rat Sertoli cells does not require activation of cholera toxin- or pertussis toxin-sensitive guanine nucleotide binding proteins or adenylate cyclase. Grasso P, et al. **Endocrinology** 1990 Aug;127(2):949-56

Biological activity assessment of 1 alpha,25-dihydroxyvitamin D3-26,23-lactone and its intermediate metabolites in vivo and in vitro. Ishizuka S, et al. **Endocrinology** 1990 Aug;127(2):695-701

A comparison of the concentration-dependent actions of thyrotropin-releasing hormone, angiotensin II, bradykinin, and Lys-bradykinin on cytosolic free calcium dynamics in rat anterior pituitary cells: selective effects of dopamine. Kuan SI, et al. **Endocrinology** 1990 Oct;127(4):1841-8

Interactions of dopamine and neurotensin on calcium fluxes and prolactin release in normal rat pituitary cells. Login IS, et al. **Endocrinology** 1990 Oct;127(4):1948-55

Calcium release from pituitary secretory granules: modulation by thiols, disulfides, and dihydropyridine calcium channel blockers. Lorenson MY, et al. **Endocrinology** 1990 May;126(5):2671-8

Effects of phosphatidic acid on parathyroid hormone release, intracellular free Ca2+, and inositol phosphates in dispersed bovine parathyroid cells. McGhee JG, et al. **Endocrinology** 1990 Feb;126(2):899-907

Effect of hydroxy-vitamin D3 derivatives on 45Ca release from rat fetal bones in vitro. Mahgoub A, et al. **Endocrinology** 1977 Mar;100(3):629-34

Cytosolic Ca2+ in melanotrophs: pharmacological insights into regulatory influences of electrical activity and ion channels. Nemeth EF, et al. **Endocrinology** 1990 Feb; 126(2):754-8

The correlation between calcium outflow and growth hormone release in perifused rat somatotrophs. Ohlsson L, et al. **Endocrinology** 1990 Jan;126(1):488-97

Mode of action of thyrocalcitonin. O'Riordan JL, et al. **Endocrinology** 1968 Feb;82(2):377-83

The calcium-mobilizing agent, thapsigargin, inhibits progesterone production in rat luteal cells by a calcium-independent mechanism. Pepperell JR, et al. **Endocrinology** 1990 Oct;127(4):1818-24

Evidence that angiotensin-II and potassium collaborate to increase cytosolic calcium and stimulate the secretion of aldosterone. Pratt JH, et al. **Endocrinology** 1989 Nov; 125(5):2463-9

Cytosolic calcium and aldosterone response patterns of rat adrenal glomerulosa cells stimulated by vasopressin: comparison with angiotensin II. Quinn SJ, et al. **Endocrinology** 1990 Aug;127(2):541-8

Intracellular Ca2+ mobilization by thyrotropin, carbachol, and adenosine triphosphate in dog thyroid cells. Rani CS, et al. **Endocrinology** 1989 Oct;125(4):1889-97

Medium hyposmolarity stimulates prolactin secretion in GH4C1 cells by inducing an increase in cytosolic free calcium. Sato N, et al. **Endocrinology** 1990 Aug; 127(2):957-64

Interleukin-1-beta modulation of prolactin secretion from rat anterior pituitary cells: involvement of adenylate cyclase activity and calcium mobilization. Schettini G, et al. **Endocrinology** 1990 Mar;126(3):1435-41

In vivo effect of 3,5,3'-triiodothyronine on calcium uptake in several tissues in the rat: evidence for a physiological role for calcium as the first messenger for the prompt action of thyroid hormone at the level of the plasma membrane. Segal J. **Endocrinology** 1990 Jul;127(1):17-24

Calcium is the first messenger for the action of thyroid hormone at the level of the plasma membrane: first evidence for an acute effect of thyroid hormone on calcium uptake in the heart. Segal J. **Endocrinology** 1990 May; 126(5):2693-702

Calcitonin inhibits thyrotropin-releasing hormone-induced increases in cytosolic Ca2+ in isolated rat anterior pituitary cells. Shah GV, et al. **Endocrinology** 1990 Aug; 127(2):613-20

Direct neuropeptide Y-induced modulation of gonadotrope intracellular calcium transients and gonadotropin secretion. Shangold GA, et al. **Endocrinology** 1990 May; 126(5):2336-42

Effects of protein kinase C activation on inositol phosphate generation and intracellular Ca2+ mobilization in bovine parathyroid cells. Shoback DM, et al. **Endocrinology** 1990 Jul;127(1):141-8

Effect of diabetes on hormone-stimulated and basal hepatocyte calcium metabolism. Studer RK, et al. **Endocrinology** 1989 Nov;125(5):2421-33

12-O-tetradecanoyl-phorbol-13-acetate decreases influx of extracellular Ca2+ induced by depolarization in GH4C1 cells: effects of pretreatment with 1,25-dihydroxycholecalciferol. Tornquist K, et al. **Endocrinology** 1990 Apr;126(4):2068-78

Effect of inhibin on activators of protein kinase-C and calcium-mobilizing agents which stimulate secretion of gonadotropins in vitro: implication of a postgonadotropin-releasing hormone receptor effect of inhibin on gonadotropin release. Wang QF, et al. **Endocrinology** 1990 Jun;126(6):3210-7

Roles of intracellular and extracellular calcium in the kinetic profile of adrenocorticotropin secretion by perifused rat anterior pituitary cells. II. Arginine vasopressin, oxytocin, and angiotensin-II stimulation. Won JG, et al. **Endocrinology** 1990 Feb;126(2):858-68

An overview of techniques for the measurement of calcium distribution, calcium fluxes, and cytosolic free calcium in mammalian cells. Borle AB. **Environ Health Perspect** 1990 Mar;84:45-56 (30 ref.)

Regulation of renal sodium calcium exchange by PTH: alteration with age. Liang CT, et al. **Environ Health Perspect** 1990 Mar;84:137-40 (15 ref.)

Impact of halogenated compounds on calcium homeostasis in hepatocytes. Moore L, et al. **Environ Health Perspect** 1990 Mar;84:149-53 (32 ref.)

Signal transduction mechanisms involved in hormonal Ca2+ fluxes. Williamson JR, et al. **Environ Health Perspect** 1990 Mar;84:121-36 (211 ref.)

Regulation of intracellular Ca2+. Dawson AP. **Essays Biochem** 1990;25:1-37 (87 ref.)

Abnormal intracellular calcium handling in acute and chronic heart failure: role in systolic and diastolic dysfunction. Perreault CL, et al. **Eur Heart J** 1990 May;11 Suppl C:8-21 (44 ref.)

Dissection of laminin by cathepsin G into its long-arm and short-arm structures and localization of regions involved in calcium dependent stabilization and self-association. Bruch M, et al. **Eur J Biochem** 1989 Nov 6;185(2):271-9

Bile acids mobilise internal Ca2+ independently of external Ca2+ in rat hepatocytes. Combettes L, et al. **Eur J Biochem** 1990 Jul 5;190(3):619-23

Mn(II)-EPR measurements of cation binding by aequorin. Kemple MD, et al. **Eur J Biochem** 1990 Jan 12;187(1):131-5

Mechanism of stimulation of cyclic-GMP level in a neuronal cell line mediated by serotonin (5-HT3) receptors. Involvement of nitric oxide, arachidonic-acid metabolism and cytosolic Ca2+. Reiser G. **Eur J Biochem** 1990 May 20;189(3):547-52

Short-term effects of Carbetimer on calcium and bone metabolism in man. Body JJ, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1831-5

Distribution of intracellular free calcium in quiescent BALB/c 3T3 cells stimulated by platelet-derived growth factor. Tucker RW, et al. **Eur J Cell Biol** 1990 Feb; 51(1):120-7

Effect of one month of lactitol treatment on calcium metabolism in man. Egger B, et al. **Eur J Clin Pharmacol** 1989;37(2):205-7

Potentiation of calcitonin by corticosteroids during the treatment of the hypercalcaemia of malignancy. Hosking DJ, et al. **Eur J Clin Pharmacol** 1990;38(1):37-41

Extracellular but not intracellular calcium mobilization is required for Epstein-Barr virus-containing supernatant-induced B cell activation. Dugas B, et al. **Eur J Immunol** 1989 Oct;19(10):1867-71

Regulation of surface IgM- and IgD-mediated inositol phosphate formation and Ca2+ mobilization in murine B lymphocytes. Harnett MM, et al. **Eur J Immunol** 1989 Oct; 19(10):1933-9

cAMP inhibits the OKT3-induced increase in cytoplasmic free calcium in the Jurkat T cell line: the degree of inhibition correlates inversely with the amount of CD3 binding ligand used. Papadogiannakis N, et al. **Eur J Immunol** 1989 Oct;19(10):1953-6

Effect of diltiazem on spontaneous cyclic Ca2+ release from sarcoplasmic reticulum. Asayama J, et al. **Eur J Pharmacol** 1990 Jan 17;175(3):309-15

Inhibition of aftercontractions and phasic calcium release by yohimbine in ferret papillary muscle. Briggs GM, et al. **Eur J Pharmacol** 1989 Nov 7;170(3):281-4

Multiple actions of SC 38249: the blocker of both voltage-operated and second messenger-operated Ca2+ channels also inhibits Ca2+ extrusion. Ciardo A, et al. **Eur J Pharmacol** 1990 Jun 12;188(6):417-21

Inhibitory effects of amitriptyline on the stimulation-induced Ca2+ increase in parotid acini. Dissing S, et al. **Eur J Pharmacol** 1990 Feb 20;177(1-2):43-54

Stannous chloride-induced increase in calcium entry into motor nerve terminals of the frog. Hattori T, et al. **Eur J Pharmacol** 1989 Aug 3;166(3):527-30

The influence of nifedipine and mioflazine on mitochondrial calcium overload in normoxic and ischaemic guinea-pig hearts. Hugtenburg JG, et al. **Eur J Pharmacol** 1990 Mar 13;178(1):71-8

Inhibitory effects of cadralazine and its metabolite, ISF-2405, on contractions and the level of cytosolic Ca2+ in vascular smooth muscle. Mitsui M, et al. **Eur J Pharmacol** 1990 Mar 20;178(2):171-7

Effects of NG-monomethyl-L-arginine on field stimulation-induced decreases in cytosolic Ca2+ levels and relaxation in the rat anococcygeus muscle. Ramagopal MV, et al. **Eur J Pharmacol** 1989 Dec 19;174(2-3):297-9

5-HT1 receptor agonists reduce the Ca+ component of sensory neuron action potentials. Scroggs RS, et al. **Eur J Pharmacol** 1990 Mar 20;178(2):229-32

Norepinephrine and serotonin increase the vasoconstrictor response of the perfused rat tail artery to changes in cytosolic Ca2+. Thorin-Trescases N, et al. **Eur J Pharmacol** 1990 Apr 25;179(3):469-71

R 56865 and flunarizine displace Ca2+ from phosphatidylserine monolayers in a stoichiometric manner. Vogelgesang R, et al. **Eur J Pharmacol** 1990 Jan 23; 188(1):17-22

Calcium in the brain under physiological and pathological conditions. Siesjö BK. **Eur Neurol** 1990;30 Suppl 2:3-9; discussion 39-41 (58 ref.)

The tubular maximum for calcium reabsorption in patients with chronic active thoracic sarcoidosis. Broulik PD, et al. **Eur Respir J** 1990 Apr;3(4):447-9

Relationship between intracellular pH (pHi) and calcium (Cai2+) in avian heart fibroblasts. Dickens CJ, et al. **Exp Cell Res** 1990 Mar;187(1):39-46

EGF receptor down-regulation attenuates ligand-induced second messenger formation. Gilligan A, et al. **Exp Cell Res** 1990 Mar;187(1):134-42

Characterization of a new type of variant of rat basophilic leukemia 2H3 cells presenting a different pattern of calcium signal. Kato K, et al. **Exp Cell Res** 1990 Jun;188(2):247-53

Identification of a high-affinity Ca2+ pump associated with endocytotic vesicles in Dictyostelium discoideum. Milne JL, et al. **Exp Cell Res** 1989 Nov;185(1):21-32

The effect of alteration of extracellular Na+ or Ca2+ and inhibition of Ca2+ entry, Na(+)-H+ exchange, and Na(+)-Ca2+ exchange by diltiazem, amiloride, and dichlorobenzamil on the response of cardiac cell aggregates to epidermal growth factor. Rabkin SW. **Exp Cell Res** 1990 Jun;188(2):262-6

Mechanisms for activation and subsequent removal of cytosolic Ca2+ in bradykinin-stimulated neuronal and glial cell lines. Reiser G, et al. **Exp Cell Res** 1990 Jan; 186(1):47-53

Cytosolic free calcium spiking affected by intracellular pH change. Tsunoda Y. **Exp Cell Res** 1990 Jun;188(2):294-301

Cytosolic calcium mobilization and thromboxane synthesis in a human megakaryocytic leukemia cell. Ryo R, et al. **Exp Hematol** 1990 May;18(4):271-5

Histamine-evoked amylase secretion is associated with small changes in calcium mobilization in isolated guinea-pig pancreas. Salido G, et al. **Exp Physiol** 1990 Mar;75(2):263-6

Secretory agonists stimulate a rise in intracellular cyclic AMP but not Ca2+ and inositol phosphates in cultured rat epididymal epithelium. Wong PY, et al. **Exp Physiol** 1990 May;75(3):321-37

Calcium release from frog sarcoplasmic reticulum by an imidazolyl reagent. Aoki T, et al. **Experientia** 1989 Oct 15;45(10):987-91

Ion channels and regulation of intracellular calcium in vascular endothelial cells. Adams DJ, et al. **FASEB J** 1989 Oct;3(12):2389-400 (71 ref.)

NK cell-induced cytotoxicity is dependent on a Ca2+ increase in the target. McConkey DJ, et al. **FASEB J** 1990 Jun;4(9):2661-4

A role for Na+-dependent Ca2+ extrusion in protection against neuronal excitotoxicity. Mattson MP, et al. **FASEB J** 1989 Nov;3(13):2519-26

Calcium waves in mammalian heart: quantification of origin, magnitude, waveform, and velocity. Takamatsu T, et al. **FASEB J** 1990 Mar;4(5):1519-25

Y1 receptors for neuropeptide Y are coupled to mobilization of intracellular calcium and inhibition of adenylate cyclase.

Aakerlund L, et al. **FEBS Lett** 1990 Jan 15;260(1):73–8

Rapid actions of 1 alpha,25-dihydroxyvitamin D3 on Ca2+ and phospholipids in isolated rat liver nuclei. Baran DT, et al. **FEBS Lett** 1989 Dec 18;259(1):205–8

The caffeine-sensitive Ca2+ store in bovine adrenal chromaffin cells; an examination of its role in triggering secretion and Ca2+ homeostasis. Cheek TR, et al. **FEBS Lett** 1990 Jun 18;266(1–2):91–5

Increased calcium permeability is not responsible for the rapid lethal effects of amphotericin B on Leishmania sp. Cohen BE, et al. **FEBS Lett** 1990 Jan 1;259(2):286–8

Interaction between injected Ca2+ and intracellular Ca2+ stores in Xenopus oocytes. Dascal N, et al. **FEBS Lett** 1990 Jul 2;267(1):22–4

S-100a0 protein stimulates Ca2+-induced Ca2+ release from isolated sarcoplasmic reticulum vesicles. Fanò G, et al. **FEBS Lett** 1989 Sep 25;255(2):381–4

Calcyclin is a calcium and zinc binding protein. Filipek A, et al. **FEBS Lett** 1990 May 21;264(2):263–6

Effects of vasoactive intestinal contractor (VIC) and endothelin on intracellular calcium level in neuroblastoma NG108-15 cells. Fu T, et al. **FEBS Lett** 1989 Nov 6; 257(2):351–3

Calcium mobilization and Na+/H+ antiport activation by endothelin in human skin fibroblasts. Gardner JP, et al. **FEBS Lett** 1989 Oct 9;256(1–2):38–42

Evidence for the convergence of beta-adrenergic and muscarinic signalling systems at a post-receptor site. Horn VJ, et al. **FEBS Lett** 1989 Nov 20;258(1):13–6

'Quantal' Ca2+ release and the control of Ca2+ entry by inositol phosphates--a possible mechanism. Irvine RF. **FEBS Lett** 1990 Apr 9;263(1):5–9 (36 ref.)

Evidence for the involvement of carboxyl groups in passive calcium uptake by liver plasma membrane vesicles and in agonist-induced calcium uptake by hepatocytes. Karjalainen A, et al. **FEBS Lett** 1989 Sep 25;255(2):441–4

Extracellular calcium participates in responses to acetylcholine in Xenopus oocytes. Lupu-Meiri M, et al. **FEBS Lett** 1990 Mar 26;262(2):165–9

Neuropeptide Y-induced intracellular Ca2+ increases in vascular smooth muscle cells. Mihara S, et al. **FEBS Lett** 1989 Dec 18;259(1):79–82

Rapid relaxation of single frog skeletal muscle fibres following laser flash photolysis of the caged calcium chelator, diazo-2. Mulligan IP, et al. **FEBS Lett** 1989 Sep 11;255(1):196–200

Intra- and extraluminal sarcoplasmic reticulum membrane regulatory sites for Ca2(+)-induced Ca2+ release. Nelson TE, et al. **FEBS Lett** 1990 Apr 24;263(2):292–4

Mitogen-induced oscillations of membrane potential and Ca2+ in human fibroblasts. Peres A, et al. **FEBS Lett** 1990 Feb 12;261(1):35–8

Potentiation of angiotensin II-stimulated phosphoinositide hydrolysis, calcium mobilization and contraction of renal mesangial cells upon down-regulation of protein kinase C. Pfeilschifter J, et al. **FEBS Lett** 1990 Feb 26;261(2):307–11

31P and 23Na nuclear magnetic resonance studies of resting and stimulated mast cells. Pilatus U, et al. **FEBS Lett** 1990 Sep 3;269(2):292–6

Receptor-mediated calcium entry. Rink TJ. **FEBS Lett** 1990 Aug 1;268(2):381–5 (29 ref.)

Extracellular ATP activates receptor-operated cation channels in mouse lacrimal acinar cells to promote calcium influx in the absence of phosphoinositide metabolism. Sasaki T, et al. **FEBS Lett** 1990 May 7;264(1):130–4

Modulation of calcium mobilization by guanosine 5'-O-(2-thiodiphosphate) in Xenopus oocytes. Sealfon SC, et al. **FEBS Lett** 1990 Aug 20;269(1):135–8

Dendrotoxin and charybdotoxin increase the cytosolic concentration of free Ca2+ in cerebrocortical synaptosomes: an effect not shared by apamin. Tibbs GR, et al. **FEBS Lett** 1989 Sep 11;255(1):159–62

Mastoparan, a peptide toxin from wasp venom, stimulates glycogenolysis mediated by an increase of the cytosolic free Ca2+ concentration but not by an increase of cAMP in rat hepatocytes. Tohkin M, et al. **FEBS Lett** 1990 Jan 29;260(2):179–82

Platelet-activating factor (PAF) acts as an intercellular messenger in the changes of cytosolic free Ca2+ in human neutrophils induced by opsonized particles. Tool AT, et al. **FEBS Lett** 1989 Dec 18;259(1):209–12

Glucose-induced oscillations of intracellular Ca2+ concentration resembling bursting electrical activity in single mouse islets of Langerhans. Valdeolmillos M, et al. **FEBS Lett** 1989 Dec 18;259(1):19–23

Functional expression of Ca2(+)-mobilizing alpha-thrombin receptors in mRNA-injected Xenopus oocytes. Van Obberghen-Schilling E, et al. **FEBS Lett** 1990 Mar 26; 262(2):330–4

Polyamines improve Ca2+ transport system of the yeast mitochondria. Votyakova TV, et al. **FEBS Lett** 1990 Feb 12;261(1):139–41

Cytoplasmic Ca2+ oscillations evoked by acetylcholine or intracellular infusion of inositol trisphosphate or Ca2+ can be inhibited by internal Ca2+. Wakui M, et al. **FEBS Lett** 1990 Apr 24;263(2):206–8

Intracellular aluminium inhibits acetylcholine- and caffeine-evoked Ca2+ mobilization. Wakui M, et al. **FEBS Lett** 1990 Jul 16;267(2):301–4

Carbonic anhydrase inhibition and calcium transients in soleus fibers. Wetzel P, et al. **FEBS Lett** 1990 Jul 2; 267(1):66–70

Influence of vitamin D on calcium metabolism and the parathyroid glands of cattle. Capen CC, et al. **Fed Proc** 1968 Jan-Feb;27(1):142–52

Significance of the thyroid hormones in calcium homeostasis. Care AD. **Fed Proc** 1968 Jan-Feb;27(1):153–5

Seminal concentrations of total and ionized calcium from men with normal and decreased motility. Prien SD, et al. **Fertil Steril** 1990 Jul;54(1):171–2

Calcium metabolism in postpartum lactation: the effect of estrogen status. Zinaman MJ, et al. **Fertil Steril** 1990 Sep; 54(3):465–9

Intracellular Ca2+ chelators prevent DNA damage and protect hepatoma 1C1C7 cells from quinone-induced cell killing. Dypbukt JM, et al. **Free Radic Res Commun** 1990; 8(4–6):347–54

2,5-Di(tert-butyl)-1,4-benzohydroquinone--a novel mobilizer of the inositol 1,4,5-trisphosphate-sensitive Ca2+ pool. Moore GA, et al. **Free Radic Res Commun** 1990;8(4–6):337–45

The prooxidant-induced and spontaneous mitochondrial calcium release: inhibition by meta-iodo-benzylguanidine (MIBG), a substrate for mono (ADP-ribosylation). Richter C. **Free Radic Res Commun** 1990;8(4–6):329–34

Effects of protein kinase C stimulation and free Ca2+ rise in mammalian egg activation. Colonna R, et al. **Gamete Res** 1989 Oct;24(2):171–83

Effects of synthetic peptide fragments of teleocalcin (hypocalcin) on calcium uptake in juvenile rainbow trout (Salmo gairdneri). Milliken CE, et al. **Gen Comp Endocrinol** 1990 Mar;77(3):416–22

Effects of depolarizing concentrations of K+ and reduced osmotic pressure on 45Ca2+ accumulation by the rostral pars distalis of the tilapia (Oreochromis mossambicus). Richman NH 3d, et al. **Gen Comp Endocrinol** 1990 Feb; 77(2):292–7

Effect of estrogen on calcium homeostasis and pituitary hormones in the growing chick. Sommerville BA, et al. **Gen Comp Endocrinol** 1989 Nov;76(2):261–6

Effects of vitamin D3, 25(OH) vitamin D3, 24,25(OH)2 vitamin D3, and 1,25(OH)2 vitamin D3 on the in vitro intestinal calcium absorption in the marine teleost, Atlantic cod (Gadus morhua). Sundell K, et al. **Gen Comp Endocrinol** 1990 Apr;78(1):74–9

Digoxin-stimulated calcium transport across rat diaphragm interactions with aminophylline and verapamil. Arrabi WM, et al. **Gen Pharmacol** 1989;20(6):721–4

Effects of cadmium ions, D-600 and KCN on calcium-45 uptake in smooth muscle of guinea-pig taenia coli. Nasu T, et al. **Gen Pharmacol** 1990;21(3):349–53

Pentylenetetrazole-induced seizure activity produces an increased release of calcium from endoplasmic reticulum by mediating cyclic AMP-dependent protein phosphorylation in rat cerebral cortex. Onozuka M, et al. **Gen Pharmacol** 1989;20(5):627–34

The effect of amiloride and its analog dichlorobenzamil on the cardiac chronotropic responses of myocardial cell aggregates in culture to alterations of extracellular potassium or calcium. Rabkin SW. **Gen Pharmacol** 1989; 20(5):595–600

Calcium uptake activity of cardiac sarcoplasmic reticulum in myo-inositol-treated diabetic rats. Xiang H, et al. **Gen Pharmacol** 1990;21(2):251–4

Release of intracellularly stored Ca2+ by inositol 1,4,5-trisphosphate--an overview. Yamamoto H, et al. **Gen Pharmacol** 1990;21(4):387–93 (61 ref.)

Caffeine and the myoplasmic calcium removal mechanisms in cut frog skeletal muscle fibres. Csernoch L, et al. **Gen Physiol Biophys** 1990 Jun;9(3):251–66

Model of calcium diffusion, binding and membrane transport in the sarcomere of frog skeletal muscle. Hollý M, et al. **Gen Physiol Biophys** 1989 Dec;8(6):539–53

Changes of calcium channel inactivation during run-down. Markwardt F, et al. **Gen Physiol Biophys** 1990 Jun; 9(3):209–18

Tetracaine inhibition of electron transport in pea chloroplasts is coupled to calcium displacement by the local anesthetic. Semin BK, et al. **Gen Physiol Biophys** 1990 Feb;9(1):65–70

Light-dependent Na(+)-Ca2+ exchange in retinal rod discs. Volotovski ID, et al. **Gen Physiol Biophys** 1989 Dec; 8(6):589–601

Calcium metabolism in Alzheimer's disease. A case-control study. Martyn CN, et al. **Gerontology** 1989;35(2–3):153–7

Metabolism of Ca and Sr in late adult life. Newton D, et al. **Health Phys** 1990 Oct;59(4):433–42

Is there release of mitochondrial calcium in toxic injury? [letter; comment] Lemasters JJ, et al. **Hepatology** 1990 May; 11(5):902–3 Comment on: Hepatology 1989 Sep;10(3):375–84.

Histochemical demonstration of calcium accumulation in muscle fibres after experimental organophosphate poisoning. Inns RH, et al. **Hum Exp Toxicol** 1990 Jul; 9(4):245–50

Ionized calcium in human male and female reproductive fluids: relationships to sperm motility. Magnus O, et al. **Hum Reprod** 1990 Jan;5(1):94–8

Decreased cytosolic calcium and prostaglandin synthesis in prehypertensive rats. Craven PA, et al. **Hypertension** 1990 Apr;15(4):388–96

Regulation of cytosolic calcium by angiotensins in vascular smooth muscle. Dostal DE, et al. **Hypertension** 1990 Jun; 15(6 Pt 2):815–22

Ion transport defects and hypertension. Where is the link? Ives HE. **Hypertension** 1989 Dec;14(6):590–7 (83 ref.)

Cell calcium, oncogenes, and hypertrophy. Marban E, et al. **Hypertension** 1990 Jun;15(6 Pt 1):652–8 (67 ref.)

Abnormal calcium handling by platelets of spontaneously hypertensive rats. Oshima T, et al. **Hypertension** 1990 Jun; 15(6 Pt 1):606–11

Deuterium oxide normalizes blood pressure and vascular calcium uptake in Dahl salt-sensitive hypertensive rats. Vasdev S, et al. **Hypertension** 1990 Feb;15(2):183–9

Suppress of the increase in free cytosolic calcium during the inhibition of T-cell activation by an autoantibody present in the serum of leprosy patients. Poulton TA, et al. **Immunology** 1989 Nov;68(3):353–8

Respective contribution of intracellular calcium release and extracellular calcium influx for interleukin-2 synthesis in activated T-cell hybrids. Williams DB, et al. **Immunology** 1990 Mar;69(3):468–75

Adenosine blocks calcium entry in activated neutrophils and binds to flunarizine-sensitive calcium channels. Pasini FL, et al. **Immunopharmacol Immunotoxicol** 1990;12(1):77–91

Adenosine triphosphatases in p-fluorophenylalanine sensitive and resistant strains of Aspergillus nidulans. Jha PK, et al. **Indian J Exp Biol** 1990 Jun;28(6):592–3

Effect of denervation on loss of ions in chick skeletal muscle. Malhotra RK, et al. **Indian J Exp Biol** 1989 Nov; 27(11):1010–2

Endocrine regulation of calcium and phosphate in rat eye lens and its significance in cataract formation. Srivastava VK, et al. **Indian J Exp Biol** 1990 Apr;28(4):365–8

Changes in brain calcium content and CA(++)-ATPase activity in potassium embelate treated rats. Johri RK, et al. **Indian J Physiol Pharmacol** 1989 Oct-Dec;33(4):273–4

Calcium is required for binding of Escherichia coli hemolysin (HlyA) to erythrocyte membranes. Boehm DF, et al. **Infect Immun** 1990 Jun;58(6):1951–8

Sequential analysis of histamine release and intracellular Ca2+ release from murine mast cells. Tasaka K, et al. **Int Arch Allergy Appl Immunol** 1990;91(2):211–3

Effects of keto-analogues on phosphocalcic and aminoacid metabolism in dialysed patients: a crossover study. Mahmoud MD, et al. **Int J Artif Organs** 1989 Nov; 12(11):692–6

Induction of mitochondrial Ca2+ uptake by mersalyl. Chavez E, et al. **Int J Biochem** 1989;21(11):1241–4

Uptake and release of calcium ions by heavy sarcoplasmic reticulum fraction of normal and malignant hyperthermia-susceptible human skeletal muscle. McSweeney DM, et al. **Int J Biochem** 1990;22(4):329–33

Role of calcium and cyclic AMP on the activation of lymphocyte glycogen phosphorylase by mitogens. Ruf J, et al. **Int J Biochem** 1990;22(4):341–5

In vitro infection of cell lines with HTLV-I and SIVmac results in altered intracellular free calcium concentration and increased membrane polarization. Wright KA, et al. **Int J Cancer** 1989 Oct 15;44(4):753–6

Relationship between the inhibition of receptor-induced increase in cytosolic free calcium concentration and the vasodilator effects of nitrates in patients with congestive heart failure. Negrescu EV, et al. **Int J Cardiol** 1990 Feb; 26(2):175–84 (22 ref.)

Milrinone enhances cytosolic calcium transient and contraction in rat cardiac myocytes during beta-adrenergic stimulation. Raffaeli S, et al. **Int J Cardiol** 1989;25 Suppl 1:S63–9

Calcium and sodium transport in gestational hypertension. Tranquilli AL, et al. **Int J Cardiol** 1989;25 Suppl 1:S53–5

Calcium and calmodulin levels in late embryonic and early hatched Japanese quail brain. Alston-Mills B, et al. **Int J Dev Neurosci** 1990;8(2):187–92

Synthesis and characterization of 1,1,4,4-butanetetracarboxylic acid. A di-gamma-carboxyglutamic acid (GlaGla) analogue. Cabaniss SE, et al. **Int J Pept Protein Res** 1990 Jul; 36(1):79–85

Distribution of 241Am in offspring from BALB/c mice injected with 241Am at 14 days of gestation: relation to calcium and iron metabolism and comparison with distribution of 241Am after injection of adults. Schoeters G, et al. **Int J Radiat Biol** 1990 Aug;58(2):371–82

Ca2+ mobilization is related to the lethal effect of X-irradiation in L5178Y cells. Szumiel I, et al. **Int J Radiat Biol** 1990 Jul;58(1):125–31

45Ca uptake by retinal pigment epithelial cells. Salceda R. **Invest Ophthalmol Vis Sci** 1989 Oct;30(10):2114–7

Calcium-activated, phospholipid-dependent protein kinase (protein kinase C): general aspects and experimental considerations. Boneh A, et al. **Isr J Med Sci** 1990 May; 26(5):293–300 (67 ref.)

Sensitization alters contractile responses and calcium influx in human airway smooth muscle. Black JL, et al. **J Allergy Clin Immunol** 1989 Oct;84(4 Pt 1):440–7

Role of calcium in airway reactivity and asthma [letter] Weiss EB. **J Allergy Clin Immunol** 1990 Aug;86(2):274

Calcium metabolism. Pak CY. **J Am Coll Nutr** 1989;8 Suppl:46S–53S (82 ref.)

Plant contents of magnesium, calcium and potassium in relation to ruminant nutrition. Grunes DL, et al. **J Anim Sci** 1989 Dec;67(12):3485–94 (68 ref.)

The effects of lysocellin and varying calcium levels on performance and ruminal and plasma characteristics of growing beef steers fed corn silage. Kegley EB, et al. **J Anim Sci** 1990 Feb;68(2):483–9

Effects of calcium soaps of long-chain fatty acids on feedlot performance, carcass characteristics and ruminal metabolism of steers. Ngidi ME, et al. J Anim Sci 1990 Aug;68(8):2555–65

Altered sarcoplasmic reticulum function after high-intensity exercise. Byrd SK, et al. J Appl Physiol 1989 Nov; 67(5):2072–7

Rat skeletal muscle mitochondrial [Ca2+] and injury from downhill walking. Duan C, et al. J Appl Physiol 1990 Mar; 68(3):1241–51

Epithelial modulation of trachealis muscle tension is calcium and temperature dependent. Lev A, et al. J Appl Physiol 1989 Aug;67(2):713–9

Aminophylline enhances contractility of frog skeletal muscle: an effect dependent on extracellular calcium. Ridings JW, et al. J Appl Physiol 1989 Aug;67(2):671–6

Bone growth and calcium balance during simulated weightlessness in the rat. Roer RD, et al. J Appl Physiol 1990 Jan;68(1):13–20

Interdependence of calcium and cobalamin binding by wild-type and mutant BtuB protein in the outer membrane of Escherichia coli. Bradbeer C, et al. J Bacteriol 1990 Sep;172(9):4919–26

Calcium-dependent control of caldesmon-actin interaction by S100 protein. Fujii T, et al. J Biochem (Tokyo) 1990 Jan;107(1):133–7

Structural change of troponin C molecule and its domains upon Ca2+ binding in the presence of Mg2+ ions measured by a solution X-ray scattering technique. Fujisawa T, et al. J Biochem (Tokyo) 1990 Mar; 107(3):343–51

A fragmin-like protein from plasmodium of Physarum polycephalum that severs F-actin and caps the barbed end of F-actin in a Ca2+-sensitive way. Furuhashi K, et al. J Biochem (Tokyo) 1989 Aug;106(2):311–8

Modulation of plasma membrane Ca2+ pump by membrane potential in cultured vascular smooth muscle cells. Furukawa K, et al. J Biochem (Tokyo) 1989 Dec; 106(6):1068–73

Calorimetric studies on calcium and magnesium binding by troponin C from bullfrog skeletal muscle. Imaizumi M, et al. J Biochem (Tokyo) 1990 Jan;107(1):127–32

Mechanism of action of GTP in the induction of Ca2+ release from hepatic microsomes. Kimura S, et al. J Biochem (Tokyo) 1990 Apr;107(4):550–3

Calcium-dependent binding of phosphorylated human pre interleukin 1 alpha to phospholipids. Kobayashi Y, et al. J Biochem (Tokyo) 1990 May;107(5):666–70

Involvement of Ca2+ release and activation of phospholipase A2 in mitochondrial dysfunction during anoxia. Nishida T, et al. J Biochem (Tokyo) 1989 Sep;106(3):533–8

Ca-release by phosphoinositides from sarcoplasmic reticulum of frog skeletal muscle. Ogawa Y, et al. J Biochem (Tokyo) 1989 Nov;106(5):864–7

Potentiation by chlordecone of the defect in hepatic microsomal calcium sequestration induced by carbon tetrachloride. Hegarty JM, et al. J Biochem Toxicol 1986 Jun;1(2):73–8

Mechanisms of petroleum hydrocarbon toxicity: destruction of liver microsomal and mitochondrial calcium pump activities by a Prudhoe Bay crude oil. Khan S, et al. J Biochem Toxicol 1986 Dec;1(4):31–43

The calmodulin-activated form of the Ca2(+)-pumping ATPase of the cardiac sarcolemmal membrane produces Ca2+ gradients with a thermodynamic efficiency of 100%. Dixon DA, et al. J Bioenerg Biomembr 1990 Apr; 22(2):181–95

Protein phosphorylation associated with the stimulation of neutrophils. Modulation of superoxide production by protein kinase C and calcium. Heyworth PG, et al. J Bioenerg Biomembr 1990 Feb;22(1):1–26 (151 ref.)

Regulation of Ca2+ fluxes in rat liver mitochondria by Ca2+. Effects on Ca2+ distribution. Saris NE, et al. J Bioenerg Biomembr 1990 Feb;22(1):81–90

Calcium and phosphate uptake of human dental enamel treated with sodium bicarbonate. Goldberg M, et al. J Biol Buccale 1990 Mar;18(1):55–8

Calcium oscillations. Berridge MJ. J Biol Chem 1990 Jun 15;265(17):9583–6 (78 ref.)

Voltage sensitivity of H+/Ca2+ antiport in higher plant tonoplast suggests a role in vacuolar calcium accumulation. Blackford S, et al. J Biol Chem 1990 Jun 15;265(17):9617–20

Progesterone and 17 alpha-hydroxyprogesterone. Novel stimulators of calcium influx in human sperm. Blackmore PF, et al. J Biol Chem 1990 Jan 25;265(3):1376–80

Functional properties of calbindin D9K mutants with exchanged Ca2+ binding sites. Brodin P, et al. J Biol Chem 1990 Jul 5;265(19):11125–30

Receptor-stimulated phospholipase A2 activation is coupled to influx of external calcium and not to mobilization of intracellular calcium in C62B glioma cells. Brooks RC, et al. J Biol Chem 1989 Nov 25;264(33):20147–53

Mitogen-induced [Ca2+]i changes in individual human fibroblasts. Image analysis reveals asynchronous responses which are characteristic for different mitogens. Byron KL, et al. J Biol Chem 1989 Oct 25;264(30):18234–9

Vitamin D3 metabolites modulate dihydropyridine-sensitive calcium currents in clonal rat osteosarcoma cells. Caffrey JM, et al. J Biol Chem 1989 Dec 5;264(34):20265–74

Fast kinetics of calcium release induced by myo-inositol trisphosphate in permeabilized rat hepatocytes. Champeil P, et al. J Biol Chem 1989 Oct 25;264(30):17665–73

Inhibitory and stimulatory effects of phorbol ester on vasopressin-induced cellular responses in cultured rat aortic smooth muscle cells. Chardonnens D, et al. J Biol Chem 1990 Jun 25;265(18):10451–7

Polyunsaturated free fatty acids stimulate an increase in cytosolic Ca2+ by mobilizing the inositol 1,4,5-trisphosphate-sensitive Ca2+ pool in T cells through a mechanism independent of phosphoinositide turnover. Chow SC, et al. J Biol Chem 1990 Jan 15;265(2):902–7

Effect of diethyl pyrocarbonate modification on the calcium binding mechanism of the sarcoplasmic reticulum ATPase. Coan C, et al. J Biol Chem 1990 Apr 5;265(10):5376–84

Functional reconstitution of fMet-Leu-Phe receptor in Xenopus laevis oocytes. Coats WD Jr, et al. J Biol Chem 1990 Apr 15;265(11):5964–6

Calcium- and magnesium-binding properties of oncomodulin. Direct binding studies and microcalorimetry. Cox JA, et al. J Biol Chem 1990 Apr 25;265(12):6633–7

Effect of inositol trisphosphate and calcium on oscillating elevations of intracellular calcium in Xenopus oocytes. DeLisle S, et al. J Biol Chem 1990 Jul 15;265(20):11726–30

Ca2(+)-mobilizing hormones stimulate Ca2+ efflux from hepatocytes. Duddy SK, et al. J Biol Chem 1989 Dec 15; 264(35):20863–6

Calcium binding to extracellular sites of skeletal muscle calcium channels regulates dihydropyridine binding. Ebata H, et al. J Biol Chem 1990 Jan 5;265(1):177–82

Carmustine augments the effects of tert-butyl hydroperoxide on calcium signaling in cultured pulmonary artery endothelial cells. Elliott SJ, et al. J Biol Chem 1990 Jan 5;265(1):103–7

Effect of membrane potential on divalent cation transport catalyzed by the "electroneutral" ionophores A23187 and ionomycin. Fasolato C, et al. J Biol Chem 1989 Nov 25; 264(33):19630–6

Amiloride analogs inhibit L-type calcium channels and display calcium entry blocker activity. Garcia ML, et al. J Biol Chem 1990 Mar 5;265(7):3763–71

Site-specific mutants of oncomodulin. 1H NMR and optical stopped-flow studies of the effect on the metal binding properties of an Asp59——Glu59 substitution in the calcium-specific site. Golden LF, et al. J Biol Chem 1989 Dec 5;264(34):20314–9

Identification of a monoclonal antibody against platelet GPIIb that interacts with a calcium-binding site and induces aggregation. Gulino D, et al. J Biol Chem 1990 Jun 5;265(16):9575–81

Monomeric state and Ca2+ transport by sarcoplasmic reticulum Ca2(+)-ATPase, reconstituted with an excess of phospholipid. Heegaard CW, et al. J Biol Chem 1990 Jul 15;265(20):12020–8

Synthetic inositol trisphosphate analogs and their effects on phosphatase, kinase, and the release of Ca2+. Hirata M, et al. J Biol Chem 1989 Dec 5;264(34):20303–8

Ca2+ binding capacity of cytoplasmic proteins from rod photoreceptors is mainly due to arrestin. Huppertz B, et al. J Biol Chem 1990 Jun 5;265(16):9470–5

Essential role for induced Ca2+ influx followed by [Ca2+]i rise in maintaining viability of yeast cells late in the mating pheromone response pathway. A study of [Ca2+]i in single Saccharomyces cerevisiae cells with imaging of fura-2. Iida H, et al. J Biol Chem 1990 Aug 5;265(22):13391–9

NMR measurement of cytosolic free calcium, free magnesium, and intracellular sodium in the aorta of the normal and spontaneously hypertensive rat. Jelicks LA, et al. J Biol Chem 1990 Jan 25;265(3):1394–400

How does a calcium pump pump calcium? Jencks WP. J Biol Chem 1989 Nov 15;264(32):18855–8 (41 ref.)

500-Kilodalton calcium sensor regulating cytoplasmic Ca2+ in cytotrophoblast cells of human placenta. Juhlin C, et al. J Biol Chem 1990 May 15;265(14):8275–9

In vitro translocation through the yeast nuclear envelope. Signal-dependent transport requires ATP and calcium. Kalinich JF, et al. J Biol Chem 1989 Oct 25; 264(30):17979–89

The calcium-transporting ATPase and the calcium- or magnesium-dependent nucleotide phosphatase activities of human placental trophoblast basal plasma membrane are separate enzyme activities. Kelley LK, et al. J Biol Chem 1990 Apr 5;265(10):5453–9

Membrane potential and Na(+)-K+ pump activity modulate resting and bradykinin-stimulated changes in cytosolic free calcium in cultured endothelial cells from bovine atria. Laskey RE, et al. J Biol Chem 1990 Feb 15;265(5):2613–9

Ca2(+)-induced conformational changes and location of Ca2+ transport sites in sarcoplasmic reticulum Ca2(+)-ATPase as detected by the use of proteolytic enzyme (V8). le Maire M, et al. J Biol Chem 1990 Jan 15;265(2):1111–23

Calbindin-D28K, a 1 alpha,25-dihydroxyvitamin D3-induced calcium-binding protein, binds five or six Ca2+ ions with high affinity. Leathers VL, et al. J Biol Chem 1990 Jun 15;265(17):9838–41

Purification, calcium binding properties, and ultrastructural localization of the 53,000- and 160,000 (sarcalumenin)-dalton glycoproteins of the sarcoplasmic reticulum. Leberer E, et al. J Biol Chem 1990 Jun 15; 265(17):10118–24

Ascorbic acid induces alkaline phosphatase, type X collagen, and calcium deposition in cultured chick chondrocytes. Leboy PS, et al. J Biol Chem 1989 Oct 15;264(29):17281–6

Perturbation of cellular calcium blocks exit of secretory proteins from the rough endoplasmic reticulum. Lodish HF, et al. J Biol Chem 1990 Jul 5;265(19):10893–9

Characterization of the functional defect in factor IX Alabama. Evidence for a conformational change due to high affinity calcium binding in the first epidermal growth factor domain. McCord DM, et al. J Biol Chem 1990 Jun 25;265(18):10250–4

A proton nuclear magnetic resonance and molecular modeling study of cardiac troponin C. Calcium dependence and aromatic spectral assignments. MacLachlan LK, et al. J Biol Chem 1990 Jun 15;265(17):9754–63

Spontaneous [Ca2+]i fluctuations in rat chromaffin cells do not require inositol 1,4,5-trisphosphate elevations but are generated by a caffeine- and ryanodine-sensitive intracellular Ca2+ store. Malgaroli A, et al. J Biol Chem 1990 Feb 25;265(6):3005–8

Agonist-induced activation of Na+/H+ exchange in rat parotid acinar cells is dependent on calcium but not on protein kinase C. Manganel M, et al. J Biol Chem 1990 Mar 15;265(8):4284–9

Characteristics of the histamine-sensitive calcium store in vascular smooth muscle. Comparison with norepinephrine- or caffeine-sensitive stores. Matsumoto T, et al. J Biol Chem 1990 Apr 5;265(10):5610–6

Calcium binding to the H+,K(+)-ATPase. Evidence for a divalent cation site that is occupied during the catalytic cycle. Mendlein J, et al. J Biol Chem 1990 Sep 15; 265(26):15590–8

Refill status of the agonist-sensitive Ca2+ pool regulates Mn2+ influx into parotid acini. Mertz LM, et al. J Biol Chem 1990 Sep 5;265(25):15010–4

Immunoglobulin E receptor cross-linking induces oscillations in intracellular free ionized calcium in individual tumor mast cells. Millard PJ, et al. J Biol Chem 1989 Nov 25; 264(33):19730–9

Multiple signaling pathways of histamine H2 receptors. Identification of an H2 receptor-dependent Ca2+ mobilization pathway in human HL-60 promyelocytic leukemia cells. Mitsuhashi M, et al. J Biol Chem 1989 Nov 5;264(31):18356–62

The human alpha 2-macroglobulin receptor contains high affinity calcium binding sites important for receptor conformation and ligand recognition. Moestrup SK, et al. J Biol Chem 1990 Jul 25;265(21):12623–8

The route of Ca2+ entry during reloading of the intracellular Ca2+ pool in pancreatic acini. Muallem S, et al. J Biol Chem 1990 Feb 5;265(4):2011–6

Intracellular pH-regulatory mechanisms in pancreatic acinar cells. II. Regulation of H+ and HCO3- transporters by Ca2(+)-mobilizing agonists. Muallem S, et al. J Biol Chem 1990 Aug 5;265(22):12813–9

pH and temperature resolve the kinetics of two pools of calcium bound to the sarcoplasmic reticulum Ca2+ -ATPase. Nakamura J. J Biol Chem 1989 Oct 15; 264(29):17029–31

Toxic injury from mercuric chloride in rat hepatocytes. Nieminen AL, et al. J Biol Chem 1990 Feb 5; 265(4):2399–408

Bradykinin-evoked acetylcholine release via inositol trisphosphate-dependent elevation in free calcium in neuroblastoma x glioma hybrid NG108-15 cells. Ogura A, et al. J Biol Chem 1990 Feb 25;265(6):3577–84

Cyclic GMP mediates the agonist-stimulated increase in plasma membrane calcium entry in the pancreatic acinar cell. Pandol SJ, et al. J Biol Chem 1990 Aug 5; 265(22):12846–53

Activation of Ca2+ uptake and inhibition of reversal of the sarcoplasmic reticulum Ca2+ pump by aromatic compounds. Petretski JH, et al. J Biol Chem 1989 Dec 5;264(34):20339–43

Chelation of cytoplasmic Ca2+ increases plasma membrane permeability in murine macrophages. Picello E, et al. J Biol Chem 1990 Apr 5;265(10):5635–9

Stimulus-response coupling in insulin-secreting HIT cells. Effects of secretagogues on cytosolic Ca2+, diacylglycerol, and protein kinase C activity. Regazzi R, et al. J Biol Chem 1990 Sep 5;265(25):15003–9

Synthetic fragments of calmodulin calcium-binding site III. A test of the acid pair hypothesis. Reid RE. J Biol Chem 1990 Apr 15;265(11):5971–6

Protein kinase C inhibits Ca2+ accumulation in cardiac sarcoplasmic reticulum. Rogers TB, et al. J Biol Chem 1990 Mar 15;265(8):4302–8

Agonist-induced cytosolic calcium oscillations originate from a specific locus in single hepatocytes. Rooney TA, et al. J Biol Chem 1990 Jun 25;265(18):10792–6

Characterization of cytosolic calcium oscillations induced by phenylephrine and vasopressin in single fura-2-loaded hepatocytes. Rooney TA, et al. J Biol Chem 1989 Oct 15; 264(29):17131–41

Muscle-type MM creatine kinase is specifically bound to sarcoplasmic reticulum and can support Ca2+ uptake and regulate local ATP/ADP ratios. Rossi AM, et al. J Biol Chem 1990 Mar 25;265(9):5258–66

Bovine seminal plasma constituents modulate the activity of caltrin, the calcium-transport regulating protein of bovine spermatozoa [published erratum appears in J Biol Chem 1990 Sep 25;265(27):16704] San Agustin JT, et al. J Biol Chem 1990 Apr 25;265(12):6360–7

Na+/H+ exchange modulates Ca2+ mobilization in human platelets stimulated by ADP and the thromboxane mimetic U 46619. Siffert W, et al. J Biol Chem 1990 Jan 15;

265(2):719–25
Calcium and lanthanide binding in the sarcoplasmic reticulum ATPase. Squier TC, et al. **J Biol Chem** 1990 Aug 15; 265(23):13713–20
The in vitro NADPH–dependent inhibition by CCl4 of the ATP–dependent calcium uptake of hepatic microsomes from male rats. Studies on the mechanism of the inactivation of the hepatic microsomal calcium pump by the CCl3.radical. Srivastava SP, et al. **J Biol Chem** 1990 May 25;265(15):8392–9
Dissociation of Ca2+ entry and Ca2+ mobilization responses to angiotensin II in bovine adrenal chromaffin cells. Stauderman KA, et al. **J Biol Chem** 1989 Nov 5; 264(31):18349–55
Insulin–like growth factor I stimulates inositol phosphate accumulation, a rise in cytoplasmic free calcium, and proliferation in cultured porcine thyroid cells. Takasu N, et al. **J Biol Chem** 1989 Nov 5;264(31):18485–8
Ca2+ binding properties and Ca2(+)–dependent interactions of the isolated NH2–terminal alpha fragments of human complement proteases C1–r and C1–s. Thielens NM, et al. **J Biol Chem** 1990 Aug 25;265(24):14469–75
Calcium binds cooperatively to the regulatory sites of the cardiac thin filament. Tobacman LS, et al. **J Biol Chem** 1990 Jan 15;265(2):931–9
Evidence for the direct interaction between tightly bound divalent metal ion and ATP on actin. Binding of the lambda isomers of beta gamma–bidentate cratp to actin. Valentin–Ranc C, et al. **J Biol Chem** 1989 Dec 15; 264(35):20871–80
Differential coupling of dopaminergic D2 receptors expressed in different cell types. Stimulation of phosphatidylinositol 4,5–bisphosphate hydrolysis in LtK– fibroblasts, hyperpolarization, and cytosolic–free Ca2+ concentration decrease in GH4C1 cells. Vallar L, et al. **J Biol Chem** 1990 Jun 25;265(18):10320–6
Four intracisternal calcium–binding glycoproteins from rat liver microsomes with high affinity for calcium. No indication for calsequestrin–like proteins in inositol 1,4,5–trisphosphate–sensitive calcium sequestering rat liver vesicles. Van PN, et al. **J Biol Chem** 1989 Oct 15; 264(29):17494–501
The calcium–binding site in the galactose chemoreceptor protein. Crystallographic and metal–binding studies. Vyas MN, et al. **J Biol Chem** 1989 Dec 5;264(34):20817–21
Ca2(+)–dependent interactions between the C–helix of troponin–C and troponin–I. Photocross–linking and fluorescence studies using a recombinant troponin–C. Wang ZY, et al. **J Biol Chem** 1990 Mar 25;265(9):4953–7
Activation of M3 muscarinic acetylcholine receptors inhibits voltage–dependent calcium influx in small cell lung carcinoma. Williams CL, et al. **J Biol Chem** 1990 Jan 25; 265(3):1443–7
Calcium accumulation and release by the sarcoplasmic reticulum of digitonin–lysed adult mammalian ventricular cardiomyocytes. Wimsatt DK, et al. **J Biol Chem** 1990 Sep 5;265(25):14849–57
Resolution and calcium–binding properties of the two major isoforms of troponin C from crayfish. Wnuk W. **J Biol Chem** 1989 Oct 25;264(30):18240–6
Ca2(+)–induced conformational change and aggregation of chromogranin A. Yoo SH, et al. **J Biol Chem** 1990 Aug 25;265(24):14414–21
Inositol 1,4,5–trisphosphate–triggered Ca2+ release from bovine adrenal medullary secretory vesicles. Yoo SH, et al. **J Biol Chem** 1990 Aug 15;265(23):13446–8
Reactive disulfides trigger Ca2+ release from sarcoplasmic reticulum via an oxidation reaction. Zaidi NF, et al. **J Biol Chem** 1989 Dec 25;264(36):21725–36
Disulfide linkage of biotin identifies a 106–kDa Ca2+ release channel in sarcoplasmic reticulum. Zaidi NF, et al. **J Biol Chem** 1989 Dec 25;264(36):21737–47
Crystallization of a calcium–binding lysozyme from horse milk. Zeng J, et al. **J Biol Chem** 1990 Sep 5;265(25):14886–7
Effects of heavy metal on rat liver microsomal Ca2(+)–ATPase and Ca2+ sequestering. Relation to SH groups. Zhang GH, et al. **J Biol Chem** 1990 Feb 5; 265(4):2184–9
Agonist–mediated Ca2+ release in permeabilized UMR–106–01 cells. Transport properties and generation of inositol 1,4,5–trisphosphate. Zhao H, et al. **J Biol Chem** 1990 Sep 5;265(25):14822–7
Photoproteins as indicators of intracellular free Ca2+. Campbell AK, et al. **J Biolumin Chemilumin** 1989 Jul; 4(1):463–74
A joint 2D NMR and theoretical investigation of Ca2+ binding loops III and IV of calmodulin. Gresh N, et al. **J Biomol Struct Dyn** 1990 Apr;7(5):1003–18
1989 program & abstracts. Tenth International Conference on Calcium Regulating Hormones. Eleventh annual meeting of the American Society for Bone and Mineral Research. Joint meeting. September 9–14, 1989, Montréal, Québec, Canada. **J Bone Miner Res** 1989 Aug;4 Suppl 1:S1–421
1 alpha,25–dihydroxyvitamin D3–induced increments in hepatocyte cytosolic calcium and lysophosphatidylinositol: inhibition by pertussis toxin and 1 beta,25–dihydroxyvitamin D3. Baran DT, et al. **J Bone Miner Res** 1990 May;5(5):517–24
Mechanism of amphotericin B stimulation of net calcium efflux from neonatal mouse calvariae. Blair NF, et al. **J Bone Miner Res** 1990 Jul;5(7):725–32
Intestinal calcium absorption: have we absorbed enough from research to have a test for the patient? [editorial] Favus MJ. **J Bone Miner Res** 1989 Aug;4(4):461–2
Effect of theophylline on calcium metabolism and circulating vitamin D metabolites. Fortenbery EJ, et al. **J Bone Miner Res** 1990 Apr;5(4):321–4
Calcium absorption in women: relationships to calcium intake, estrogen status, and age. Heaney RP, et al. **J Bone Miner Res** 1989 Aug;4(4):469–75
Human lactation: forearm trabecular bone loss, increased bone turnover, and renal conservation of calcium and inorganic phosphate with recovery of bone mass following weaning. Kent GN, et al. **J Bone Miner Res** 1990 Apr; 5(4):361–9
Effect of age on variables relating to calcium and phosphorus metabolism in women. Kotowicz MA, et al. **J Bone Miner Res** 1990 Apr;5(4):345–52
Fluoride rapidly and transiently raises intracellular calcium in human osteoblasts. Zerwekh JE, et al. **J Bone Miner Res** 1990 Mar;5 Suppl 1:S131–6
Comparison of the effects of angiotensin II and vasopressin on cytosolic free calcium concentration, protein kinase C activity, and prostacyclin production in cultured rat aortic and mesenteric smooth muscle cells. Chardonnens D, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 6:S39–44
Mechanism of atriopeptin–induced decrease of cytosolic free Ca in rat vascular smooth muscle cells: evidence for an intracellular locus of action. Hassid A, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 6:S34–8
Modulation of sodium/calcium exchange: a hypothetical positive inotropic mechanism. Ravens U, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 3:S30–5 (75 ref.)
Spontaneous oscillations and agonist–evoked changes in Ca2+ in cultured smooth muscle cells. Simpson AW, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 6:S59–62
Effects of diltiazem on lactate, ATP, and cytosolic free calcium levels in ischemic hearts. Watts JA, et al. **J Cardiovasc Pharmacol** 1990 Jan;15(1):44–9
Glycolipids and transmembrane signaling: antibodies to galactocerebroside cause an influx of calcium in oligodendrocytes. Dyer CA, et al. **J Cell Biol** 1990 Aug; 111(2):625–33
Inositol 1,4,5–trisphosphate–induced calcium release in the organelle layers of the stratified, intact egg of Xenopus laevis. Han JK, et al. **J Cell Biol** 1990 Apr;110(4):1103–10
Calcium transients during mitosis: observations in flux. Hepler PK. **J Cell Biol** 1989 Dec;109(6 Pt 1):2567–73 (32 ref.)
Active involvement of Ca2+ in mitotic progression of Swiss 3T3 fibroblasts. Kao JP, et al. **J Cell Biol** 1990 Jul; 111(1):183–96
Subcellular distribution of calcium–binding proteins and a calcium–ATPase in canine pancreas. Nigam SK, et al. **J Cell Biol** 1990 Jul;111(1):197–200
The activation wave of calcium in the ascidian egg and its role in ooplasmic segregation. Speksnijder JE, et al. **J Cell Biol** 1990 May;110(5):1589–98
Decrease in the basal levels of cytosolic free calcium in chondrocytes during aging in culture: possible role as differentiation–signal. Beit–Or A, et al. **J Cell Physiol** 1990 Aug;144(2):197–203
Cholinergic desensitization of pepsinogen secretion and calcium mobilization of dispersed guinea pig chief cells. Cherner JA, et al. **J Cell Physiol** 1990 Jan;142(1):46–54
Receptor specific for certain nucleotides stimulates inositol phosphate metabolism and Ca2+ fluxes in A431 cells. Gonzalez FA, et al. **J Cell Physiol** 1989 Dec;141(3):606–17
Inositol tetrakisphosphate–induced sequestration of Ca2+ replenishes an intracellular pool sensitive to inositol trisphosphate. Hill TD, et al. **J Cell Physiol** 1990 Jan; 142(1):163–9
Release of calcium from intracellular stores in rat basophilic leukemia cells monitored with the fluorescent probe chlortetracycline. Marcotte GV, et al. **J Cell Physiol** 1990 Jan;142(1):78–88
Fibroblast growth factor stimulates protein kinase C in quiescent 3T3 cells without Ca2+ mobilization or inositol phosphate accumulation. Nånberg E, et al. **J Cell Physiol** 1990 May;143(2):232–42
Proliferation–associated changes of Ca2+ transport in myeloid leukemic cell lines. Rephaeli A, et al. **J Cell Physiol** 1990 Apr;143(1):154–9
Participation of transient–type Ca2+ channels in the sustained increase of Ca2+ level in GH3 cells. Suzuki N, et al. **J Cell Physiol** 1990 Jul;144(1):62–8
Serotonin regulates cytosolic Ca2+ activity and membrane potential in a neuronal and in a glial cell line via 5–HT3 and 5–HT2 receptors by different mechanisms. Reiser G, et al. **J Cell Sci** 1989 Jul;93 (Pt 3):545–55
Immunohistochemical determination of calcium–calmodulin binding predicts neuronal damage after global ischemia. Picone CM, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):805–11
Influence of MK–801 on brain extracellular calcium and potassium activities in severe hypoglycemia. Zhang ET, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):136–9
Myocardial cell damage and breakdown of cation homeostasis during conditions of ischaemia and reperfusion, the oxygen paradox, and reduced extracellular calcium. Diederichs F, et al. **J Clin Chem Clin Biochem** 1990 Mar; 28(3):139–48
Effects of dietary carbohydrates on metabolism of calcium and other minerals in normal subjects and patients with noninsulin–dependent diabetes mellitus. Garg A, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):1007–13
Parathyroid hormone sensitivity in primary hyperparathyroidism and idiopathic hypercalciuria: effects on postadenylate cyclase parameters. McElduff A, et al. **J Clin Endocrinol Metab** 1990 May;70(5):1457–61
Calcitropic hormone levels in polynesians: evidence against their role in interracial differences in bone mass. Reid IR, et al. **J Clin Endocrinol Metab** 1990 May;70(5):1452–6
Inhibition of basal and corticotropin–releasing hormone–stimulated adenylate cyclase activity and cytosolic Ca2+ levels by somatostatin in human corticotropin–secreting pituitary adenomas. Spada A, et al. **J Clin Endocrinol Metab** 1990 May;70(5):1262–8
1,25(OH)2D2 production by T lymphocytes and alveolar macrophages recovered by lavage from normocalcemic patients with tuberculosis. Cadranel J, et al. **J Clin Invest** 1990 May;85(5):1588–93
Effect of thrombin on calcium homeostasis in chick embryonic heart cells. Receptor–operated calcium entry with inositol trisphosphate and a pertussis toxin–sensitive G protein as second messengers. Chien WW, et al. **J Clin Invest** 1990 May;85(5):1436–43
Perinatal changes in lung surfactant calcium measured in situ. Eckenhoff RG. **J Clin Invest** 1989 Oct;84(4):1295–301
Release of Ca2+ from the endoplasmic reticulum is not the mechanism for bile acid–induced cholestasis and hepatotoxicity in the intact rat liver. Farrell GC, et al. **J Clin Invest** 1990 Apr;85(4):1255–9
Role of intracellular calcium handling in force–interval relationships of human ventricular myocardium. Gwathmey JK, et al. **J Clin Invest** 1990 May; 85(5):1599–613
Phospholamban–mediated stimulation of Ca2+ uptake in sarcoplasmic reticulum from normal and failing hearts. Movsesian MA, et al. **J Clin Invest** 1990 May; 85(5):1698–702
Adhesion molecules of cultured hematopoietic malignancies. A calcium–dependent lectin is the principle mediator of binding to the high endothelial venule of lymph nodes. Stoolman LM, et al. **J Clin Invest** 1989 Oct;84(4):1196–205
1,25(OH)2 vitamin D3 stimulates membrane phosphoinositide turnover, activates protein kinase C, and increases cytosolic calcium in rat colonic epithelium. Wali RK, et al. **J Clin Invest** 1990 Apr;85(4):1296–303
Calcium oscillations index the extent of calcium loading and predict functional recovery during reperfusion in rat myocardium. Weiss RG, et al. **J Clin Invest** 1990 Mar; 85(3):757–65
Experimental antiarteriosclerotic effects of calcium antagonists. Fleckenstein A, et al. **J Clin Pharmacol** 1990 Feb;30(2):151–4
The effects of nicardipine on sodium and calcium metabolism in hypertensive patients: a chronic study. Soro S, et al. **J Clin Pharmacol** 1990 Feb;30(2):133–7
The effects of a concurrent infection of Trichostrongylus colubriformis and Ostertagia circumcincta on calcium, phosphorus and magnesium transactions along the digestive tract of lambs. Brown MD, et al. **J Comp Pathol** 1989 Jul; 101(1):11–20
Ca–sensitive sodium absorption in the colon of Xenopus laevis. Krattenmacher R, et al. **J Comp Physiol [B]** 1990; 160(2):161–5
Phylogenetic variations in the calcium–dependent electrophoretic shift of alpha–lactalbumin. Thompson MP, et al. **J Dairy Sci** 1989 Dec;72(12):3156–65
Detection of calcium binding sites in Merkel cell granules of fetal rat skin. Nindl M, et al. **J Dermatol** 1989 Dec; 16(6):464–8
Ontogeny of vitamin D action on the morphology and calcium transport properties of the chick embryonic yolk sac. Clark NB, et al. **J Dev Physiol** 1989 Apr;11(4):243–51
An embryonic Ca++ mobilizing muscarinic system in the chick embryo heart. Oettling G, et al. **J Dev Physiol** 1989 Aug;12(2):85–94
On the mechanism of overdrive suppression in the guinea pig sinoatrial node. Greenberg YJ, et al. **J Electrocardiol** 1990 Jan;23(1):53–67
Effects of verapamil and nifedipine on gliclazide–induced increase in cytosolic free Ca2+ in pancreatic islet cells. Gobbe P, et al. **J Endocrinol Invest** 1989 Jul–Aug; 12(7):469–74
Direct tubular effect on calcium retention by hydrochlorothiazide. Krause U, et al. **J Endocrinol Invest** 1989 Sep;12(8):531–5
TRH raises cytosolic Ca2+ in human adenomatous lactotrophs. Spada A, et al. **J Endocrinol Invest** 1990 Jan; 13(1):13–8
Inhibitory activity of Jatropha multifida latex on classical complement pathway activity in human serum mediated by a calcium–binding proanthocyanidin. Kosasi S, et al. **J Ethnopharmacol** 1989 Nov;27(1–2):81–9
Regional variations in the tightness of the ectodermal epithelium in the developing chick embryo: a study using ion–sensitive microelectrodes. Carnan E, et al. **J Exp Zool** 1990 Aug;255(2):186–92
Calcium requirement and increased association with bovine sperm during capacitation by heparin. Handrow RR, et al. **J Exp Zool** 1989 Nov;252(2):174–82
Activation of Ca2+ influx by metabolic substrates in Saccharomyces cerevisiae: role of membrane potential and

cellular ATP levels. Eilam Y, et al. **J Gen Microbiol** 1990 May;136 (Pt 5):861–6

Divalent cation activation and inhibition of single calcium release channels from sheep cardiac sarcoplasmic reticulum. Ashley RH, et al. **J Gen Physiol** 1990 May; 95(5):981–1005

Biphasic Ca2+ dependence of inositol 1,4,5–trisphosphate–induced Ca release in smooth muscle cells of the guinea pig taenia caeci. Iino M. **J Gen Physiol** 1990 Jun;95(6):1103–22

Calcium–induced calcium release mechanism in guinea pig taenia caeci. Iino M. **J Gen Physiol** 1989 Aug;94(2):363–83

Influence of sodium–calcium exchange on calcium current rundown and the duration of calcium–dependent chloride currents in pituitary cells, studied with whole cell and perforated patch recording. Korn SJ, et al. **J Gen Physiol** 1989 Nov;94(5):789–812

Calcium regulates some, but not all, aspects of light adaptation in rod photoreceptors. Nicol GD, et al. **J Gen Physiol** 1989 Aug;94(2):233–59

Intracellular and extracellular changes of [Ca2+] ir hypoxia and ischemia in rat brain in vivo. Silver IA, et al. **J Gen Physiol** 1990 May;95(5):837–66

Effects of extracellular ATP on ion transport systems and [Ca2+]i in rat parotid acinar cells. Comparison with the muscarinic agonist carbachol. Soltoff SP, et al. **J Gen Physiol** 1990 Feb;95(2):319–46

Permeation in the dihydropyridine–sensitive calcium channel. Multi–ion occupancy but no anomalous mole–fraction effect between Ba2+ and Ca2+. Yue DT, et al. **J Gen Physiol** 1990 May;95(5):911–39

Aging–related deficiency in intracellular calcium response to anti–CD3 or concanavalin A in murine T–cell subsets. Grossmann A, et al. **J Gerontol** 1990 May;45(3):B81–6

Diminished calcium signal generation in subsets of T lymphocytes that predominate in old mice. Philosophe B, et al. **J Gerontol** 1990 May;45(3):B87–93

Cytochemical calcium localization in hypothalamo–neurohypophysial system of rats after ischemia. Preliminary observations. Gajkowska B, et al. **J Hirnforsch** 1989;30(6):747–55

Cytochemical localization of calcium and Ca2+,Mg2(+)–adenosine triphosphatase in colchicine–altered rat incisor ameloblasts. Eisenmann DR, et al. **J Histochem Cytochem** 1990 Oct;38(10):1469–78

Interactions between indices of calcium metabolism and blood pressure during calcium infusion in humans. Hvarfner A, et al. **J Hum Hypertens** 1989 Aug;3(4):211–20

Intracellular Ca2+ metabolism of isolated resistance arteries and cultured vascular myocytes of spontaneously hypertensive and Wistar–Kyoto normotensive rats. Bukoski RD. **J Hypertens** 1990 Jan;8(1):37–43

Kinetic study of the Ca2+ pump in erythrocytes from essential hypertensive patients. de la Sierra A, et al. **J Hypertens** 1990 Mar;8(3):285–93

Abnormal calcium handling in vascular smooth muscle cells of spontaneously hypertensive rats. Sugiyama T, et al. **J Hypertens** 1990 Apr;8(4):369–75

Effects of deuterium oxide (D2O) on the development of hypertension and Ca2+ homeostasis in spontaneously hypertensive rats. Vasdev S, et al. **J Hypertens** 1990 Feb; 8(2):185–9

Stretch of vascular smooth muscle activates tone and 45Ca2+ influx. Laher I, et al. **J Hypertens Suppl** 1989 Sep; 7(4):S17–20 (29 ref.)

Effect of low–density lipoprotein on intracellular calcium, intracellular pH and DNA synthesis in cultured vascular smooth muscle cells. Sachinidis A, et al. **J Hypertens Suppl** 1989 Dec;7(6):S116–7

The rise in concentration of free Ca2+ and of pH provides sequential, synergistic signals for secretion in antigen–stimulated rat basophilic leukemia (RBL–2H3) cells. Ali H, et al. **J Immunol** 1989 Oct 15;143(8):2626–33

Phorbol esters regulate CD2– and CD3–mediated calcium responses in peripheral blood–derived human T cells. Cantrell DA, et al. **J Immunol** 1989 Dec 1;143(11):3653–8

Studies on molecular regulation of phagocytosis and activation of the NADPH oxidase in neutrophils. IgG– and C3b–mediated ingestion and associated respiratory burst independent of phospholipid turnover and Ca2+ transients. Della Bianca V, et al. **J Immunol** 1990 Feb 15;144(4):1411–7

Differential CD3/T cell antigen receptor–mediated IL–2 production in jurkat T cells. Dissociation of IL–2 response from total inositol phosphate and calcium responses. Stohl W, et al. **J Immunol** 1990 Aug 15;145(4):1078–87

The role of formylpeptide receptors, C5a receptors, and cytosolic–free calcium in neutrophil priming. Zimmerli W, et al. **J Infect Dis** 1990 Feb;161(2):242–9

Comparison of the binding of Ca2+ and Mn2+ to bovine alpha–lactalbumin and equine lysozyme. Desmet J, et al. **J Inorg Biochem** 1989 Nov;37(3):185–91

Calcium, phosphorus and aluminium concentrations in the central nervous system, liver and kidney of rabbits with experimental atherosclerosis: preventive effects of vinpocetine on the deposition of these elements. Yasui M, et al. **J Int Med Res** 1990 Mar–Apr;18(2):142–52

Active Ca2+ transport systems in basolateral membranes from rabbit distal colon. Wiener H, et al. **J Intern Med Suppl** 1990;732:119–24

Biliary calcium secretion in the dog occurs primarily by passive convection and diffusion and is linked to bile flow. Rege RV, et al. **J Lab Clin Med** 1990 May;115(5):593–602

Na+, K+, H+, Cl–, and Ca2+ concentrations in cystic fibrosis eccrine sweat in vivo and in vitro. Sato K, et al. **J Lab Clin Med** 1990 Apr;115(4):504–11

Effects of adenosine on inositol 1,4,5–trisphosphate formation and intracellular calcium changes in formyl–Met–Leu–Phe–stimulated human neutrophils. Walker BA, et al. **J Leukoc Biol** 1990 Sep;48(3):281–3

Calcium binding by bile acids: in vitro studies using a calcium ion electrode. Gleeson D, et al. **J Lipid Res** 1990 May; 31(5):781–91

Synthesis and bioactivity of a new class of rigid glutamate analogues. Modulators of the N–methyl–D–aspartate receptor. Kozikowski AP, et al. **J Med Chem** 1990 Jun; 33(6):1561–71

Stimulant–evoked depolarization and increase in [Ca2+]i in insulin–secreting cells is dependent on external Na+. Dunne MJ, et al. **J Membr Biol** 1990 Feb;113(2):131–8

Comparative study of the effects of cromakalim (BRL 34915) and diazoxide on membrane potential, [Ca2+]i and ATP–sensitive potassium currents in insulin–secreting cells. Dunne MJ, et al. **J Membr Biol** 1990 Mar;114(1):53–60

Calcium absorption by fish intestine: the involvement of ATP– and sodium–dependent calcium extrusion mechanisms. Flik G, et al. **J Membr Biol** 1990 Jan; 113(1):13–22

Evidence for two modes of Ca2+ entry following muscarinic stimulation of a human salivary epithelial cell line. He XJ, et al. **J Membr Biol** 1990 May;115(2):159–66

Coupling of catalytic and channel function in the Ca2+ transport ATPase. Inesi G, et al. **J Membr Biol** 1990 Jun; 116(1):1–8 (43 ref.)

Sulfhydryl–reactive heavy metals increase cell membrane K+ and Ca2+ transport in renal proximal tubule. Kone BC, et al. **J Membr Biol** 1990 Jan;113(1):1–12

Calcium–dependent sodium current in the marine ciliate Euplotes vannus. Krüppel T, et al. **J Membr Biol** 1990 Jun;116(1):79–86

Electrogenic properties of the Na:Ca exchange. Lagnado L, et al. **J Membr Biol** 1990 Feb;113(3):177–91 (81 ref.)

Ca modulates outward current through IK1 channels. Mazzanti M, et al. **J Membr Biol** 1990 Jun;116(1):41–5

Lowering extracellular sodium or pH raises intracellular calcium in gastric cells. Negulescu PA, et al. **J Membr Biol** 1990 Jul;116(3):239–48

Calcium ion and turgor regulation in plant cells. Okazaki Y, et al. **J Membr Biol** 1990 Apr;114(3):189–94 (87 ref.)

Effects of caffeine and ryanodine on low pHi–induced changes in gap junction conductance and calcium concentration in crayfish septate axons. Peracchia C. **J Membr Biol** 1990 Jul;117(1):79–89

Evidence for two K+ currents activated upon hyperpolarization of Paramecium tetraurelia. Preston RR, et al. **J Membr Biol** 1990 Apr;115(1):41–50

Direct inhibitory action of EGTA–Ca complex on reverse–mode Na/Ca exchange in Myxicola giant axons. Sjodin RA, et al. **J Membr Biol** 1990 Apr;114(3):225–30

Calpain I activates Ca2+ transport by the reconstituted erythrocyte Ca2+ pump. Wang KK, et al. **J Membr Biol** 1989 Dec;112(3):233–45

Intestinal secretagogues increase cytosolic free Ca2+ concentration and K+ conductance in a human intestinal epithelial cell line. Yada T, et al. **J Membr Biol** 1989 Dec; 112(2):159–67

Calcium binding sites in tomato bushy stunt virus visualized by Laue crystallography. Campbell JW, et al. **J Mol Biol** 1990 Aug 5;214(3):627–32

Comparative structural analysis of the calcium free and bound states of the calcium regulatory protein calbindin D9K. Skelton NJ, et al. **J Mol Biol** 1990 Jun 20; 213(4):593–8

The effects of bathing sodium ions upon the intracellular sodium activity in calcium–free media and the calcium paradox of isolated ferret ventricular muscle. Bhojani IH, et al. **J Mol Cell Cardiol** 1990 May;22(5):507–22

A rise in intracellular sodium would seem to predispose the heart to the calcium paradox [comment] Chapman Ra. **J Mol Cell Cardiol** 1990 May;22(5):503–5 Comment on: J Mol Cell Cardiol 1990 May;22(5):499–501.

Recovery of the slow inward current from Ca2(+)–mediated and voltage–dependent inactivation in the rabbit sinoatrial node. Habuchi Y, et al. **J Mol Cell Cardiol** 1990 Apr; 22(4):469–82

Sarcoplasmic reticulum function in the "stunned" myocardium. Limbruno U, et al. **J Mol Cell Cardiol** 1989 Oct;21(10):1063–72

Effect of atriopeptin II on Ca influx, contractile behavior and cyclic nucleotide content of cultured neonatal rat myocardial cells. McCall D, et al. **J Mol Cell Cardiol** 1990 Feb;22(2):201–12

Is an increase of intracellular Na+ during Ca2+ depletion essential for the occurrence of the calcium paradox? [see comments] Ruigrok TJ. **J Mol Cell Cardiol** 1990 May; 22(5):499–501 Comment in: J Mol Cell Cardiol 1990 May;22(5):503–5.

Effects of active oxygen generated by DTT/Fe2+ on cardiac Na+/Ca2+ exchange and membrane permeability to Ca2+. Shi ZQ, et al. **J Mol Cell Cardiol** 1989 Oct; 21(10):1009–16

Hypoxia–reoxygenation induced increase in cellular Ca2+ in myocytes and perfused hearts: the role of mitochondria. Stone D, et al. **J Mol Cell Cardiol** 1989 Oct;21(10):963–73

Na+ accumulation increases Ca2+ overload and impairs function in anoxic rat heart. Tani M, et al. **J Mol Cell Cardiol** 1990 Jan;22(1):57–72

pH regulation of calcium recognition by an amino acid containing acyclic ionophore. Spisni A, et al. **J Mol Recognit** 1989 Sep;2(2):94–101

Effects of tetracaine and procaine on skinned muscle fibres depend on free calcium. Pike GK, et al. **J Muscle Res Cell Motil** 1989 Oct;10(5):337–49

Neuron–specific modulation by serotonin of regenerative outgrowth and intracellular calcium within the CNS of Helisoma trivolvis. Murrain M, et al. **J Neurobiol** 1990 Jun; 21(4):611–8

12–O–tetradecanoylphorbol 13–acetate and forskolin modify muscarinic receptor–linked Ca2+ mobilization in SH–SY5Y neuroblastoma cells through different mechanisms. Akerman KE, et al. **J Neurochem** 1990 Feb; 54(2):497–504

Is the adenosine receptor modulation of histamine–induced accumulation of inositol phosphates in cerebral cortical slices mediated by effects on calcium ion fluxes? Alexander SP, et al. **J Neurochem** 1990 Oct;55(4):1138–41

Effects of N–methyl–D–aspartate on [Ca2+]i and the energy state in the brain by 19F– and 31P–nuclear magnetic resonance spectroscopy. Ben–Yoseph O, et al. **J Neurochem** 1990 Oct;55(4):1446–9

Stimulation of muscarinic acetylcholine receptors increases synaptosomal free calcium concentration by protein kinase–dependent opening of L–type calcium channels. Boess FG, et al. **J Neurochem** 1990 Jul;55(1):230–6

Intracellular calcium pools in neuroblastoma x glioma hybrid NG108–15 cells. Chueh SH, et al. **J Neurochem** 1990 Oct; 55(4):1281–6

Effects of diltiazem on bioenergetics, K+ gradients, and free cytosolic Ca2+ levels in rat brain synaptosomes submitted to energy metabolism inhibition and depolarization. Dagani F, et al. **J Neurochem** 1989 Nov;53(5):1379–89

Calcium movements mediated by proteolipid protein and nucleotides in liposomes prepared with the endogenous lipids from brain white matter. Díaz RS, et al. **J Neurochem** 1990 Oct;55(4):1304–9

Glutamate–induced 45Ca2+ uptake into immature cerebral cortex neurons shows a distinct pharmacological profile. Frandsen A, et al. **J Neurochem** 1989 Dec;53(6):1959–62

Modulation of calcium fluxes across synaptosomal plasma membrane by local anesthetics. García–Martín E, et al. **J Neurochem** 1990 Aug;55(2):370–8

Mechanism of calcium transport across the plasma membrane of bovine chromaffin cells. Kao LS, et al. **J Neurochem** 1990 Jun;54(6):1972–9

Effects of hypoxia on the catecholamine release, Ca2+ uptake, and cytosolic free Ca2+ concentration in cultured bovine adrenal chromaffin cells. Lee K, et al. **J Neurochem** 1990 Oct;55(4):1131–7

Protein kinase C participates in up–regulation of dihydropyridine–sensitive calcium channels by ethanol. Messing RO, et al. **J Neurochem** 1990 Oct;55(4):1383–9

Angiotensin II effects on the cytosolic free Ca2+ concentration in N1E–115 neuroblastoma cells: kinetic properties of the Ca2+ transient measured in single fura–2–loaded cells. Monck JR, et al. **J Neurochem** 1990 Jan;54(1):278–87

Different patterns of agonist–stimulated increases of 3H–inositol phosphate isomers and cytosolic Ca2+ in bovine adrenal chromaffin cells: comparison of the effects of histamine and angiotensin II. Stauderman KA, et al. **J Neurochem** 1990 Mar;54(3):946–53

Repetitive action potentials in isolated nerve terminals in the presence of 4–aminopyridine: effects on cytosolic free Ca2+ and glutamate release. Tibbs GR, et al. **J Neurochem** 1989 Dec;53(6):1693–9

Gangliosides stimulate calcium flux in neuro–2A cells and require exogenous calcium for neuritogenesis. Wu GS, et al. **J Neurochem** 1990 Aug;55(2):484–91

Regulation of calcium concentrations in synaptosomes: alpha 2–adrenoceptors reduce free Ca2+ by closure of N–type Ca2+ channels. Xiang JZ, et al. **J Neurochem** 1990 Jul; 55(1):303–10

Beta–endorphin modulates T–cell intracellular calcium flux and c–myc expression via a potassium channel. Hough CJ, et al. **J Neuroimmunol** 1990 May;27(2–3):163–71

Calcium in motor nerve terminals associated with posttetanic potentiation. Delaney KR, et al. **J Neurosci** 1989 Oct; 9(10):3558–67

Increasing intracellular free calcium induces circumferential contractions in isolated cochlear outer hair cells. Dulon D, et al. **J Neurosci** 1990 Apr;10(4):1388–97

Light–induced calcium release and re–uptake in toad rods. Fain GL, et al. **J Neurosci** 1990 Jul;10(7):2238–49

Fluorescence measurement of changes in intracellular calcium induced by excitatory amino acids in cultured cortical astrocytes. Jensen AM, et al. **J Neurosci** 1990 Apr; 10(4):1165–75

Glutamate neurotoxicity in vitro: antagonist pharmacology and intracellular calcium concentrations. Michaels RL, et al. **J Neurosci** 1990 Jan;10(1):283–92

Elevated cytosolic calcium in the growth cone inhibits neurite elongation in neuroblastoma cells: correlation of behavioral states with cytosolic calcium concentration. Silver RA, et al. **J Neurosci** 1989 Nov;9(11):4007–20

Prevention of chemically induced synaptosomal changes. Bondy SC, et al. **J Neurosci Res** 1990 Feb;25(2):229–35

Coupling of glutamatergic receptors to changes in

intracellular Ca2+ in rat cerebellar granule cells in primary culture. Holopainen I, et al. **J Neurosci Res** 1990 Feb; 25(2):187–93

Cytosolic calcium changes in endothelial cells induced by a protein product of human gliomas containing vascular permeability factor activity. Criscuolo GR, et al. **J Neurosurg** 1989 Dec;71(6):884–91

Calcium and magnesium utilization in rats: effect of dietary butterfat and calcium and of age. Kaup SM, et al. **J Nutr** 1990 Mar;120(3):266–73

Nutritive utilization of calcium in rats: effects of dietary fat components and vitamin D3 on intestinal resected rats. Campos MS, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Oct; 35(5):511–21

Effects of high protein diet and sodium bicarbonate supplementation on calcium metabolism in rats. Funaba M, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Oct;35(5):495–503

Changes in glucose/amino acid/calcium uptake and brush-border membrane-associated enzymes in rat small intestine after the administration of embelin (plant benzoquinone), an antifertility agent. Gupta S, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Apr;36(2):153–64

Different effects of bile and sodium taurocholate on mucosal calcium accumulation and calcium absorption in rats. Limlomwongse L, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Aug;35(4):267–77

Vitamin D and mineral metabolism in the very low birth weight infant receiving 400 IU of vitamin D. Cooke R, et al. **J Pediatr** 1990 Mar;116(3):423–8

Effect of high calcium and phosphorus intake on mineral retention in very low birth weight infants chronically treated with furosemide. Rowe JC, et al. **J Pediatr Gastroenterol Nutr** 1989 Aug;9(2):206–11

Placental transport of calcium and phosphorus in pigs. Lachenmaier-Currle U, et al. **J Perinat Med** 1989; 17(2):127–36 (28 ref.)

Greater tension is developed at the same level of cytosolic Ca2+ concentration in the presence of clonidine, an adrenergic partial agonist, than in the presence of norepinephrine. Takayanagi I, et al. **J Pharmacobiodyn** 1989 Dec;12(12):781–6

Effects of a new positive inotropic agent with a vasodilatory action, 5-methyl-6-(4-pyridyl)-2H-1,4-thiazin-3(4H)-one (ZSY-27), on calcium-movement and mechanical response in rabbit thoracic aorta. Yoshioka K, et al. **J Pharmacobiodyn** 1989 Nov;12(11):667–70

Ca2(+)-evoked [3H]dopamine release from synaptosomes is dependent on neuronal type Ca2+ channels and is not mediated by acetylcholine, glutamate or aspartate release. Bowyer JF, et al. **J Pharmacol Exp Ther** 1990 Aug; 254(2):664–70

Endothelin receptor-coupling mechanisms in vascular smooth muscle: a role for protein kinase C. Danthuluri NR, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):393–9

Acute- and long-term glutamate-mediated regulation of [Ca++]i in rat hippocampal pyramidal neurons in vitro. Glaum SR, et al. **J Pharmacol Exp Ther** 1990 Jun; 253(3):1293–302

Halothane increases cytosolic Ca2+ and inhibits Na+/H+ exchange in L6 muscle cells. Klip A, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):552–9

Doxorubicin blocks the increase in intracellular Ca++, part of a second messenger system in N1E-115 murine neuroblastoma cells. Oakes SG, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):979–83

Effects of histamine-trifluoromethyl-toluidide derivative (HTMT) on intracellular calcium in human lymphocytes. Qiu R, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):1245–52

Cellular mechanisms of somatostatin inhibition of calcium influx in the anterior pituitary cell line AtT-20. Reisine T. **J Pharmacol Exp Ther** 1990 Aug;254(2):646–51

Uptake of catamphiphilic drugs into erythrocytes and muscular tissue correlates to membrane enrichment and to 45Ca displacement from phosphatidylserine monolayers. Scheufler E, et al. **J Pharmacol Exp Ther** 1990 Jan; 252(1):333–8

Angiotensin II desensitization and Ca++ and Na+ fluxes in cultured intestinal smooth muscle cells. Shimuta SI, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):1215–21

Ethanol inhibition of active 86Rb(+)-transport: evidence for enhancement by sodium or calcium influx. Swann AC. **J Pharmacol Exp Ther** 1990 Sep;254(3):864–71

Regulation of the neurotensin receptor and intracellular calcium mobilization in HT29 cells. Turner JT, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):1049–56

Alterations in [Ca2+]i mediated by sodium-calcium exchange in smooth muscle cells isolated from the guinea-pig ureter. Aaronson PI, et al. **J Physiol (Lond)** 1989 Sep;416:1–18

The consequences of simulated ischaemia on intracellular Ca2+ and tension in isolated ferret ventricular muscle. Allen DG, et al. **J Physiol (Lond)** 1989 Mar;410:297–323

Intracellular calcium and tension during fatigue in isolated single muscle fibres from Xenopus laevis [published erratum appears in J Physiol (Lond) 1990 May;424:563] Allen DG, et al. **J Physiol (Lond)** 1989 Aug;415:433–58

The probability of quantal secretion at release sites in different calcium concentrations in toad (Bufo marinus) muscle. Bennett MR, et al. **J Physiol (Lond)** 1989 Nov; 418:219–33

Intracellular Ca2+ transients during rapid cooling contractures in guinea-pig ventricular myocytes. Bers DM, et al. **J Physiol (Lond)** 1989 Oct;417:537–53

Sodium-calcium exchange in guinea-pig cardiac cells: exchange current and changes in intracellular Ca2+. Beuckelmann DJ, et al. **J Physiol (Lond)** 1989 Jul; 414:499–520

Measurements of intracellular Ca2+ in dissociated type I cells of the rabbit carotid body. Biscoe TJ, et al. **J Physiol (Lond)** 1989 Sep;416:421–34

Calcium-force coupling mechanisms during vasodilator-induced relaxation of ferret aorta. DeFeo TT, et al. **J Physiol (Lond)** 1989 May;412:123–33

Effects of metabolic blockade on the regulation of intracellular calcium in dissociated mouse sensory neurones. Duchen MR, et al. **J Physiol (Lond)** 1990 May; 424:411–26

The effects of metabolic inhibition on intracellular calcium and pH in isolated rat ventricular cells. Eisner DA, et al. **J Physiol (Lond)** 1989 Apr;411:393–418

Effects of gallopamil on calcium release and intramembrane charge movements in frog skeletal muscle fibres. Feldmeyer D, et al. **J Physiol (Lond)** 1990 Feb;421:343–62

Intracellular calcium mobilization triggered by a glutamate receptor in rat cultured hippocampal cells. Furuya S, et al. **J Physiol (Lond)** 1989 Jul;414:539–48

Comparison of sodium-calcium exchanger and transient inward currents in single cells from rabbit ventricle. Giles W, et al. **J Physiol (Lond)** 1989 Oct;417:465–81

Evidence for reduced presynaptic Ca2+ entry in a lobster neuromuscular junction at high pressure. Grossman Y, et al. **J Physiol (Lond)** 1990 Jan;420:355–64

Modulation by intracellular Ca2+ of the hyperpolarization-activated inward current in rabbit single sino-atrial node cells. Hagiwara N, et al. **J Physiol (Lond)** 1989 Feb;409:121–41

Desensitization to cytoplasmic Ca2+ and Ca2+ sensitivities of guinea-pig ileum and rabbit pulmonary artery smooth muscle. Himpens B, et al. **J Physiol (Lond)** 1989 Jun; 413:489–503

Calcium-sensitive and insensitive transient outward current in rabbit ventricular myocytes. Hiraoka M, et al. **J Physiol (Lond)** 1989 Mar;410:187–212

Serotonin-induced bistability of turtle motoneurones caused by a nifedipine-sensitive calcium plateau potential. Hounsgaard J, et al. **J Physiol (Lond)** 1989 Jul;414:265–82

Permeation of calcium through excitatory amino acid receptor channels in cultured rat hippocampal neurones. Iino M, et al. **J Physiol (Lond)** 1990 May;424:151–65

Calcium release in skinned muscle fibres of the toad by transverse tubule depolarization or by direct stimulation. Lamb GD, et al. **J Physiol (Lond)** 1990 Apr;423:495–517

Control of calcium release and the effect of ryanodine in skinned muscle fibres of the toad. Lamb GD, et al. **J Physiol (Lond)** 1990 Apr;423:519–42

Sodium nitroprusside alters Ca2+ flux components and Ca2(+)-dependent fluxes of K+ and Cl- in rat aorta. Magliola L, et al. **J Physiol (Lond)** 1990 Feb;421:411–24

Cross-bridge movement in rat cardiac muscle as a function of calcium concentration. Matsubara I, et al. **J Physiol (Lond)** 1989 Oct;417:555–65

Second messenger-activated calcium influx in rat peritoneal mast cells. Matthews G, et al. **J Physiol (Lond)** 1989 Nov; 418:105–30

Sodium-dependent calcium extrusion and sensitivity regulation in retinal cones of the salamander. Nakatani K, et al. **J Physiol (Lond)** 1989 Feb;409:525–48

Depletion of intracellular free Mg2+ in Mg2(+)- and Ca2(+)-free solution in the taenia isolated from guinea-pig caecum. Nakayama S, et al. **J Physiol (Lond)** 1990 Feb; 421:363–78

Modulation of slow gating process of calcium channels by isoprenaline in guinea-pig ventricular cells. Ochi R, et al. **J Physiol (Lond)** 1990 May;424:187–204

Modulation of Ca2+ transients and contractile properties by beta-adrenoceptor stimulation in ferret ventricular muscles. Okazaki O, et al. **J Physiol (Lond)** 1990 Apr; 423:221–40

Desensitization of swine arterial smooth muscle to transplasmalemmal Ca2+ influx. Rembold CM. **J Physiol (Lond)** 1989 Sep;416:273–90

Muscarinic agonists and ATP increase the intracellular Ca2+ concentration in chick cochlear hair cells. Shigemoto T, et al. **J Physiol (Lond)** 1990 Jan;420:127–48

Whole-cell calcium current in guinea-pig ventricular myocytes dialysed with guanine nucleotides. Shuba YM, et al. **J Physiol (Lond)** 1990 May;424:205–28

Transport of calcium across the dually perfused placenta of the rat. Stulc J, et al. **J Physiol (Lond)** 1990 Jan;420:295–311

Characterization of apamin-binding protein associated with a Ca2+ -activated K+ channel. Marquèze B, et al. **J Protein Chem** 1989 Jun;8(3):425–7

Mechanisms of current activation by intracellular Ca2+ ions in two types of pacemaker neurons. Müller TH, et al. **J Protein Chem** 1989 Jun;8(3):430–2

Simultaneous capacitance and calcium measurements in degranulating neutrophils. Nüsse O, et al. **J Protein Chem** 1989 Jun;8(3):441–3

Regulation of inositol 1,4,5-trisphosphate-sensitive and -insensitive Ca2+ pools in exocrine glands. Schulz I, et al. **J Protein Chem** 1989 Jun;8(3):397–9

Regulation of side-chain cleavage enzyme and 3 beta-hydroxysteroid dehydrogenase by Ca2+ second messenger and protein kinase C systems in the placenta of the cow. Shemesh M, et al. **J Reprod Fertil Suppl** 1989; 37:163–72

Synthesis and biological activity of (22E,25R)- and (22,25S)-22-dehydro- 1 alpha,25-dihydroxy-26-methylvitamin D3. Hara N, et al. **J Steroid Biochem** 1990 May;35(6):655–64

Mechanism of action of GnRH: the participation of calcium mobilization and activation of protein kinase C in gonadotropin secretion. Stojilković SS, et al. **J Steroid Biochem** 1989 Oct;33(4B):693–703

Effect of nitrendipine, a calcium antagonist, on the distribution of calcium in aortic smooth muscle cells of deoxycorticosterone-hypertensive rats. A quantitative ultracytochemical study. Nickerson PA, et al. **J Submicrosc Cytol Pathol** 1990 Jan;22(1):91–6

An electrostatic model for the interaction between growth hormone and its receptor involving chelation of Ca2+ to the human growth hormone molecule. Barnard R, et al. **J Theor Biol** 1989 Oct 9;140(3):355–67

A kinetic model for calcium distribution. Sen P, et al. **J Theor Biol** 1990 Jan 23;142(2):179–88

Effects of temperature on myocardial calcium homeostasis and mitochondrial function during ischemia and reperfusion. Ferrari R, et al. **J Thorac Cardiovasc Surg** 1990 May;99(5):919–28

Agonist-induced contraction and accumulation of inositol phosphates in the guinea-pig detrusor: evidence that muscarinic and purinergic receptors raise intracellular calcium by different mechanisms. Iacovou JW, et al. **J Urol** 1990 Sep;144(3):775–9

Changes in intracellular free Ca2+ concentration by activation of alpha-adrenoceptors in rat tail artery. Abe K, et al. **Jpn J Pharmacol** 1990 Feb;52(2):337–44

Enhancement by L-methionine on the contractile response of uterine segments to acetylcholine and high KCl is mainly due to enhancement of Ca uptake. Ichida S, et al. **Jpn J Pharmacol** 1990 Jan;52(1):154–9

Histamine increases vascular tone and intracellular calcium level using both intracellular and extracellular calcium in porcine coronary arteries. Mori T, et al. **Jpn J Pharmacol** 1990 Feb;52(2):263–71

Relationship between cytosolic activities of calcium and pH in frog proximal tubules. Fujimoto M, et al. **Jpn J Physiol** 1990;40(2):273–96

Depression of voltage-dependent Ca2+ current by noradrenaline in the guinea-pig vas deferens in tetraethylammonium medium. Inomata H, et al. **Jpn J Physiol** 1989;39(3):455–60

Change in surface charge of sarcoplasmic reticulum membrane may elicit conformational change in sulfhydryl groups of membrane proteins to release calcium. Liu GH, et al. **Jpn J Physiol** 1989;39(4):623–7

The relationship between free cytosolic calcium and amylase release in rat pancreatic acini. Ogami Y, et al. **Jpn J Physiol** 1989;39(4):571–84

The inhibitory effect of CR-1409 on amylase secretion and intracellular Ca2+ mobilization in rat pancreatic acini in vitro. Shinozaki H, et al. **Jpn J Physiol** 1989;39(4):585–93

Calcium homeostasis in untreated pulmonary tuberculosis. I—Basic study. Hafiez AA, et al. **Kekkaku** 1990 May; 65(5):309–16

Calcium homeostasis in untreated pulmonary tuberculosis II—dynamic study. Hafiez AA, et al. **Kekkaku** 1990 Jun; 65(6):391–5

Interaction of arginine vasopressin and angiotensin II on Ca2+ in vascular smooth muscle cells. Caramelo C, et al. **Kidney Int** 1990 Jul;38(1):47–54

Optimal concentration of cellular free calcium for AVP-induced cAMP in collecting tubules. Ishikawa S, et al. **Kidney Int** 1990 Apr;37(4):1060–6

The actions of LDL and PDGF on vascular tissue: relevant for hypertension and atherosclerosis. Block LH. **Klin Wochenschr** 1990;68 Suppl 20:60–4

Induction of cell proliferation and vasoconstriction by low density lipoprotein. Sachinidis A, et al. **Klin Wochenschr** 1990;68 Suppl 20:65–7

Short-term metabolic effects of pamidronate in patients with prostatic carcinoma and bone metastases [letter; comment] Pelger RC, et al. **Lancet** 1989 Oct 7;2(8667):865 Comment on: Lancet 1989 May 6;1(8645):1021–2.

Age- and sex-dependent stimulation of calcium uptake in duodenal cells by prolactin in vitamin D-deficient rats. Balakir RA, et al. **Life Sci** 1990;47(1):77–83

Calcium mediated neurohumoral inhibition of chicken enterocyte Na influx: role of phosphatidylinositol metabolites. Chang EB, et al. **Life Sci** 1990;46(26):1913–21

The effect of Li+ on Na-Ca exchange in cardiac sarcolemmal vesicles. Hale CC, et al. **Life Sci** 1990; 47(1):9–15

Difference in effects of sodium fluoride and cholecystokinin on diacylglycerol accumulation and calcium increase in guinea pig gastric chief cells. Nakano O, et al. **Life Sci** 1990;47(7):647–54

Prostaglandin D2 modulates human neutrophil intracellular calcium flux and inhibits superoxide release via its ring carbonyl. Simpkins CO, et al. **Life Sci** 1990;46(11):793–801

Enhanced contractile response to noradrenaline and calcium influx in thoracic aorta isolated from dietary magnesium deficient rats. Nishio A, et al. **Magnes Res** 1989 Sep; 2(3):173–8

Dietary intake levels and requirements of Mg and Ca for different segments of the U.S. population. Lichton IJ.

Magnesium 1989;8(3–4):117–23 (15 ref.)
Alterations in cellular calcium and magnesium during circulatory/septic shock. Sayeed MM, et al. **Magnesium** 1989;8(3–4):179–89 (24 ref.)
Effects of nandrolone decanoate therapy on bone mass and calcium metabolism in women with established post-menopausal osteoporosis: a double-blind placebo-controlled study. Gennari C, et al. **Maturitas** 1989 Sep;11(3):187–97
Age-dependent stimulation or inhibition of calcium release from bone cultures by 1 alpha, 25-dihydroxyvitamin D3. Goldhaber P, et al. **Mech Ageing Dev** 1989 Sep; 49(3):199–209 (34 ref.)
Effects of aging on phospholamban phosphorylation and calcium transport in rat cardiac sarcoplasmic reticulum. Jiang MT, et al. **Mech Ageing Dev** 1990 May 15; 54(1):87–101
The regulation of cytosolic Ca2+ concentration in a mammalian cell. Ota A. **Med Hypotheses** 1990 May; 32(1):37–8 (6 ref.)
Effect of exercise on bone: permissive influence of estrogen and calcium. Dalsky GP. **Med Sci Sports Exerc** 1990 Jun; 22(3):281–5 (27 ref.)
Action of 1,25-dihydroxyvitamin D3 on calcium balance and bone turnover and its effect on vertebral fracture rate. Gallagher JC, et al. **Metabolism** 1990 Apr;39(4 Suppl 1):30–4
Effects of phospholipid or cholesterol enrichment of rat intestinal brush border membrane on membrane order and transport of calcium. Schedl HP, et al. **Metabolism** 1989 Dec;38(12):1164–9
Somatostatin inhibition of hormone release: effects on cytosolic Ca++ and interference with distal secretory events. Wollheim CB, et al. **Metabolism** 1990 Sep;39(9 Suppl 2):101–4 (24 ref.)
Impaired calcium metabolism associated with hypertension in Zucker obese rats. Zemel MB, et al. **Metabolism** 1990 Jul;39(7):704–8
Influence of calcium ions on mammalian intramitochondrial dehydrogenases. McCormack JG, et al. **Methods Enzymol** 1989;174:95–118
Measurement of transported calcium in synaptosomes. Nicholls DG. **Methods Enzymol** 1989;174:3–9
Calcium ion transport in mitochondria. Saris NE, et al. **Methods Enzymol** 1989;174:68–85
The influence of methionine-5-enkephalin on calcium uptake by the bovine aortic media. Kokkas B, et al. **Methods Find Exp Clin Pharmacol** 1990 Apr;12(3):181–4
The effect of ischemia-reperfusion derived oxygen free radicals on skeletal muscle calcium metabolism. Cronenwett JL, et al. **Microcirc Endothelium Lymphatics** 1989 Jun–Oct; 5(3–5):171–87
Disturbances of calcium metabolism in experimental hypertension. Drüeke TB, et al. **Miner Electrolyte Metab** 1990;16(1):6–11 (47 ref.)
Ca2+ transport in isolated mitochondrial vesicles from Leishmania braziliensis promastigotes. Benaim G, et al. **Mol Biochem Parasitol** 1990 Feb;39(1):61–8
Appraisal of the physiological relevance of two hypothesis for the mechanism of calcium release from the mammalian cardiac sarcoplasmic reticulum: calcium-induced release versus charge-coupled release. Fabiato A. **Mol Cell Biochem** 1989 Sep 7;89(2):135–40 (26 ref.)
External calcium is required for activation of phospholipase C by angiotensin II in adrenal glomerulosa cells. Foster RH, et al. **Mol Cell Biochem** 1990 Jun 25;95(2):157–66
The contribution of mitochondrial calcium ion exchange to relaxation of tension in cardiac muscle. Fry CH, et al. **Mol Cell Biochem** 1989 Sep 7;89(2):127–33
Redistribution of subcellular calcium in rat liver on administration of vanadate. Gullapalli S, et al. **Mol Cell Biochem** 1989 Oct 31;90(2):155–64
The control of calcium influx by cytoplasmic calcium in mammalian heart muscle. Kirby MS, et al. **Mol Cell Biochem** 1989 Sep 7;89(2):109–13 (14 ref.)
Excitation–contraction coupling in heart muscle. Lederer WJ, et al. **Mol Cell Biochem** 1989 Sep 7;89(2):115–9
The role of Ca2+ ions in the regulation of intramitochondrial metabolism and energy production in rat heart. McCormack JG, et al. **Mol Cell Biochem** 1989 Sep 7; 89(2):121–5 (14 ref.)
Microassay for malignant hyperthermia susceptibility: hypersensitive ligand-gating of the Ca channel in muscle sarcoplasmic reticulum causes increased amounts and rates of Ca-release. O'Brien PJ. **Mol Cell Biochem** 1990 Mar 5;93(1):53–9
Calcium sequestration by isolated sarcoplasmic reticulum: real-time monitoring using ratiometric dual-emission spectrofluorometry and the fluorescent calcium-binding dye indo-1. O'Brien PJ. **Mol Cell Biochem** 1990 May 10; 94(2):113–9
The effects of metabolic inhibition on intracellular pH and Ca. O'Neill SC, et al. **Mol Cell Biochem** 1989 Sep 7; 89(2):199–203
Effect of calcium overload on the phosphoinositide breakdown in the rat left ventricular papillary muscle. Otani H, et al. **Mol Cell Biochem** 1989 Oct 31;90(2):111–20
Regulation of intracellular pH in the myocardium; relevance to pathology. Poole-Wilson PA. **Mol Cell Biochem** 1989 Sep 7;89(2):151–5 (28 ref.)
Calcium movements during each heart beat. Powell T, et al. **Mol Cell Biochem** 1989 Sep 7;89(2):103–8 (18 ref.)
Fructose-1,6-diphosphate counteracts ethanol-stimulated calcium uptake in isolated BHK cells. Rizzoli V, et al. **Mol Cell Biochem** 1990 Jun 1;95(1):89–93
Ca2+, pH and the regulation of cardiac myofilament force and ATPase activity. Solaro RJ, et al. **Mol Cell Biochem** 1989 Sep 7;89(2):163–7
Sodium–calcium exchange in mammalian heart: current–voltage relation and intracellular calcium concentration. Wier WG, et al. **Mol Cell Biochem** 1989 Sep 7;89(2):97–102
Correction of the N-terminal sequences of the human plastin isoforms by using anchored polymerase chain reaction: identification of a potential calcium-binding domain. Lin CS, et al. **Mol Cell Biol** 1990 Apr;10(4):1818–21
Rhythmic oscillations of cytosolic free calcium in rat C-cells. Eckert RW, et al. **Mol Cell Endocrinol** 1989 Jul; 64(2):267–70
Melanocortin receptors: targets for control by extracellular calcium. Salomon Y. **Mol Cell Endocrinol** 1990 Apr 17; 70(2):139–45 (49 ref.)
The permeant molecule urea stimulates prolactin secretion in GH4C1 cells by inducing Ca2+ influx through dihydropyridine-sensitive Ca2+ channels. Sato N, et al. **Mol Cell Endocrinol** 1990 May 7;70(3):273–9
Effect of W-7 on ionic fluxes and electrical activity of mouse pancreatic islets. Wahl MA, et al. **Mol Cell Endocrinol** 1990 May 28;71(1):63–9
Control of insulin secretion: a model involving Ca2+, cAMP and diacylglycerol. Zawalich WS, et al. **Mol Cell Endocrinol** 1990 Apr 17;70(2):119–37 (108 ref.)
Histamine stimulates glycogen breakdown and increases 45Ca2+ permeability in rat astrocytes in primary culture. Arbonés L, et al. **Mol Pharmacol** 1990 Jun;37(6):921–7
Cyclic AMP inhibits inositol polyphosphate production and calcium mobilization in neuroblastoma X glioma NG108-15 cells. Campbell MD, et al. **Mol Pharmacol** 1990 Aug; 38(2):282–8
Ryanodine as a probe for the functional state of the skeletal muscle sarcoplasmic reticulum calcium release channel. Chu A, et al. **Mol Pharmacol** 1990 May;37(5):735–41
Sulfonylurea mimics the effect of glucose in inducing large amplitude oscillations of cytoplasmic Ca2+ in pancreatic beta-cells. Grapengiesser E, et al. **Mol Pharmacol** 1990 Mar;37(3):461–7
Pharmacologic differentiation between inositol-1,4,5-trisphosphate-induced Ca2+ release and Ca2+- or caffeine-induced Ca2+ release from intracellular membrane systems. Palade P, et al. **Mol Pharmacol** 1989 Oct;36(4):673–80
Direct inhibition of inositol-1,4,5-trisphosphate-induced Ca2+ release from brain microsomes by K+ channel blockers. Palade P, et al. **Mol Pharmacol** 1989 Oct; 36(4):664–72
Adenosine inhibits the rise in intracellular calcium and platelet aggregation produced by thrombin: evidence that both effects are coupled to adenylate cyclase. Paul S, et al. **Mol Pharmacol** 1990 Jun;37(6):870–5
Role of intracellular Ca2+ mobilization in muscarinic and histamine receptor-mediated activation of guanylate cyclase in N1E-115 neuroblastoma cells: assessment of the arachidonic acid release hypothesis. Surichamorn W, et al. **Mol Pharmacol** 1990 Jun;37(6):860–9
Na(+)-Ca2+ exchange activity in central nerve endings. I. Ionic conditions that discriminate 45Ca2+ uptake through the exchanger from that occurring through voltage-operated Ca2+ channels. Taglialatela M, et al. **Mol Pharmacol** 1990 Sep;38(3):385–92
Na(+)-Ca2+ exchange activity in central nerve endings. II. Relationship between pharmacological blockade by amiloride analogues and dopamine release from tuberoinfundibular hypothalamic neurons. Taglialatela M, et al. **Mol Pharmacol** 1990 Sep;38(3):393–400
Ca2+ uptake during capacitation of mouse spermatozoa and the effect of an anion transport inhibitor on Ca2+ uptake. Ruknudin A, et al. **Mol Reprod Dev** 1990 May;26(1):63–8
Changes in the mitochondrial calcium influx and efflux properties are responsible for the decline in sperm calcium during epididymal maturation. Vijayaraghavan S, et al. **Mol Reprod Dev** 1990 Feb;25(2):186–94
Receptor-triggered polyphosphoinositide turnover produces less cytosolic free calcium in cultured dysgenic myotubes than in normal myotubes. Tassin AM, et al. **Muscle Nerve** 1990 Feb;13(2):142–5
Calcium bioavailability from two calcium carbonate preparations [letter] Sheikh MS, et al. **N Engl J Med** 1990 Sep 27;323(13):921
Effect of varying levels of oyster shell on serum constituents and erythrocyte indices in growing chicken fed gossypol-containing Nigerian cottonseed cake. Aletor VA. **Nahrung** 1989;33(9):905–7
Reversible inactivation of K+ channels of Vicia stomatal guard cells following the photolysis of caged inositol 1,4,5-trisphosphate [see comments] Blatt MR, et al. **Nature** 1990 Aug 23;346(6286):766–9 Comment in: Nature 1990 Aug 23;346(6286):700–1.
Purified inositol 1,4,5-trisphosphate receptor mediates calcium flux in reconstituted lipid vesicles. Ferris CD, et al. **Nature** 1989 Nov 2;342(6245):87–9
Calcium entry through stretch-inactivated ion channels in mdx myotubes. Franco A Jr, et al. **Nature** 1990 Apr 12; 344(6267):670–3
Probing the calcium-induced conformational transition of troponin C with site-directed mutants [see comments] Fujimori K, et al. **Nature** 1990 May 10;345(6271):182–4 Comment in: Nature 1990 May 10;345(6271):116–7.
Elevation of cytoplasmic calcium by caged calcium or caged inositol triphosphate initiates stomatal closure [see comments] Gilroy S, et al. **Nature** 1990 Aug 23; 346(6286):769–71 Comment in: Nature 1990 Aug 23;346(6286):700–1.
Regulation and deregulation of cardiac Na(+)-Ca2+ exchange in giant excised sarcolemmal membrane patches. Hilgemann DW. **Nature** 1990 Mar 15;344(6263):242–5
Postsynaptic NMDA receptor-mediated calcium accumulation in hippocampal CA1 pyramidal cell dendrites. Regehr WG, et al. **Nature** 1990 Jun 28; 345(6278):807–10
Optical imaging of calcium accumulation in hippocampal pyramidal cells during synaptic activation. Regehr WG, et al. **Nature** 1989 Oct 12;341(6242):533–6
Calcium hotspots caused by L-channel clustering promote morphological changes in neuronal growth cones. Silver RA, et al. **Nature** 1990 Feb 22;343(6260):751–4
Inositol phosphate and Ca2+ flow [letter] Whitaker M. **Nature** 1990 Feb 22;343(6260):701–2
Cardiac Ca current does not run down and is very sensitive to isoprenaline in the nystatin-method of whole cell recording. Kurachi Y, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Aug; 340(2):219–22
Activators of potassium channels enhance calcium influx into endothelial cells as a consequence of potassium currents. Lückhoff A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jul; 342(1):94–9
Phorbol 12,13-dibutyrate increases vascular tone but has a dual action on intracellular calcium levels in porcine coronary arteries. Mori T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Mar; 341(3):251–5
Inhibition by vecuronium of carbachol-induced influx of 22Na+, 45Ca2+ and secretion of catecholamines in cultured bovine adrenal medullary cells. Wada A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Dec; 340(6):605–9
Heparin specifically inhibits the inositol 1,4,5-trisphosphate-induced Ca2+ release from skinned rat aortic smooth muscle cells in primary culture. Yamamoto H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Apr; 341(4):273–8
Influence of isolation media on synaptosomal properties: intracellular pH, pCa, and Ca2+ uptake. Bandeira-Duarte C, et al. **Neurochem Res** 1990 Mar;15(3):313–20
Regional distribution of potassium, calcium, and six trace elements in normal human brain. Duflou H, et al. **Neurochem Res** 1989 Nov;14(11):1099–112
Effect of pulsed electromagnetic fields on calcium tissue changes in focal ischaemia. Rappaport ZH, et al. **Neurol Res** 1990 Jun;12(2):95–8
Accumulation of calcium in the brain following head trauma. Shapira Y, et al. **Neurol Res** 1989 Sep;11(3):169–72
Growth of sympathetic nerve fibers in culture does not require extracellular calcium. Campenot RB, et al. **Neuron** 1989 Dec;3(6):733–43
Low- and high-voltage-activated calcium currents: their relationship to the site of neurotransmitter release in an identified neuron of Helisoma. Haydon PG, et al. **Neuron** 1988 Dec;1(10):919–27
Two types of calcium channels coexist in peptide-releasing vertebrate nerve terminals. Lemos JR, et al. **Neuron** 1989 May;2(5):1419–26
Imaging of cytosolic Ca2+ transients arising from Ca2+ stores and Ca2+ channels in sympathetic neurons. Lipscombe D, et al. **Neuron** 1988 Jul;1(5):355–65
Development alters the expression of calcium currents in chick limb motoneurons. McCobb DP, et al. **Neuron** 1989 Jun;2(6):1633–43
Interactive effects of serotonin and acetylcholine on neurite elongation. McCobb DP, et al. **Neuron** 1988 Jul;1(5):377–85
Antibodies to the GTP binding protein, Go, antagonize noradrenaline-induced calcium current inhibition in NG108-15 hybrid cells. McFadzean I, et al. **Neuron** 1989 Aug;3(2):177–82
Expressed cerebellar-type inositol 1,4,5-trisphosphate receptor, P400, has calcium release activity in a fibroblast L cell line. Miyawaki A, et al. **Neuron** 1990 Jul;5(1):11–8
The alpha 1 and alpha 2 polypeptides of the dihydropyridine-sensitive calcium channel differ in developmental expression and tissue distribution. Morton ME, et al. **Neuron** 1989 May;2(5):1499–506
Agonists that suppress M-current elicit phosphoinositide turnover and Ca2+ transients, but these events do not explain M-current suppression. Pfaffinger PJ, et al. **Neuron** 1988 Aug;1(6):477–84
Elementary properties and pharmacological sensitivities of calcium channels in mammalian peripheral neurons. Plummer MR, et al. **Neuron** 1989 May;2(5):1453–63
Specific inhibitors of protein kinase C block transmitter-induced modulation of sensory neuron calcium current. Rane SG, et al. **Neuron** 1989 Aug;3(2):239–45
Neural cell adhesion molecules influence second messenger systems. Schuch U, et al. **Neuron** 1989 Jul;3(1):13–20
The kappa-opiate agonist U50488H decreases the entry of

45Ca into rat cortical synaptosomes by inhibiting N- but not L-type calcium channels. Xiang JZ, et al. **Neuropharmacology** 1990 May;29(5):439–44

Depolarization-dependent 45Ca uptake by synaptosomes of rat cerebral cortex is enhanced by L-triiodothyronine. Mason GA, et al. **Neuropsychopharmacology** 1990 Aug; 3(4):291–5

Acute hepatic encephalopathy decreases potassium-evoked calcium uptake in astrocytes but not in synaptosomes of the rat. Albrecht J, et al. **Neurosci Lett** 1990 Apr 6; 111(3):321–4

gamma-Aminobutyric acid elevates cytosolic Ca in bovine chromaffin cells. Doroshenko PA. **Neurosci Lett** 1989 Sep 25;104(1–2):83–7

Ruthenium red blocks the capsaicin-induced increase in intracellular calcium and activation of membrane currents in sensory neurones as well as the activation of peripheral nociceptors in vitro. Dray A, et al. **Neurosci Lett** 1990 Mar 2;110(1–2):52–9

Sr and Ba transients in isolated snail neurones studied with fura-2. The recovery from depolarization induced load and modulation of Ca release from intracellular stores. Mironov SL, et al. **Neurosci Lett** 1990 May 4;112(2–3):184–9

Effects of pertussis toxin on the affinity of exocytosis for Ca2+ in bovine adrenal chromaffin cells. Ohara-Imaizumi M, et al. **Neurosci Lett** 1990 Mar 2;110(1–2):167–71

The glycine site modulates NMDA-mediated changes of intracellular free calcium in cultures of hippocampal neurons. Oliver MW, et al. **Neurosci Lett** 1990 Jul 3; 114(2):197–202

[3H]acetylcholine release and the change in cytosolic free calcium level induced by high K+ and ouabain in rat brain synaptosomes. Satoh E, et al. **Neurosci Lett** 1989 Dec 15; 107(1–3):284–8

Effects of calcium antagonists on the evoked release of dynorphin A(1–8) and availability of intraterminal calcium in rat hippocampal mossy fiber synaptosomes. Terrian DM, et al. **Neurosci Lett** 1989 Dec 4;106(3):322–7

Change in calcium permeability caused by quinolinic acid in cultured rat hippocampal neurons. Tsuzuki K, et al. **Neurosci Lett** 1989 Nov 6;105(3):269–74

Evidence for light-induced release of Ca2+ from intracellular stores in bee photoreceptors. Ziegler A, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):87–91

Impairement of vascular reactivity and changes in intracellular calcium and calmodulin levels of smooth muscle cells in canine basilar arteries after subarachnoid hemorrhage. Sakaki S, et al. **Neurosurgery** 1989 Nov; 25(5):753–61

Intracellular calcium and neurotoxic events. Bondy SC. **Neurotoxicol Teratol** 1989 Nov-Dec;11(6):527–31 (59 ref.)

Ethanol inhibition of spontaneous calcium release from isolated sarcoplasmic reticulum. Mrak RE. **Neurotoxicology** 1989 Fall;10(3):445–54

Modulation of synaptosomal free intracellular calcium in naive and morphine-tolerant mice: correlation of calcium modulation in vitro and in vivo to tolerance development. Welch SP, et al. **NIDA Res Monogr** 1989;95:552–3

Cytosolic calcium levels in vascular smooth muscle. Karaki H. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec;52(8):1506–15 (22 ref.)

Identification of a Ets1 variant protein unaffected in its chromatin and in vitro DNA binding capacities by T cell antigen receptor triggering and intracellular calcium rises. Pognonec P, et al. **Oncogene** 1990 Apr;5(4):603–10

Microprobe analysis of cryofixed, chemically untreated freeze-dried cochlear hair cells. Anniko M, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(5):290–4

Calcium homeostasis. Boden SD, et al. **Orthop Clin North Am** 1990 Jan;21(1):31–42 (26 ref.)

Nutrition and bone. Einhorn TA, et al. **Orthop Clin North Am** 1990 Jan;21(1):43–50

Hatching of Schistosoma mansoni eggs is a Ca2+/calmodulin-dependent process. Katsumata T, et al. **Parasitol Res** 1989;76(1):90–1

Chronic renal magnesium loss, hypocalciuria and mild hypokalaemic metabolic alkalosis after cisplatin. Bianchetti MG, et al. **Pediatr Nephrol** 1990 May;4(3):219–22

Neurotensin elevates cytosolic calcium in small cell lung cancer cells. Staley J, et al. **Peptides** 1989 Nov-Dec; 10(6):1217–21

Angiotensin II desensitization and Ca2+ and Na+ fluxes in vascular smooth muscle cells. Aboulafia J, et al. **Pflugers Arch** 1989 Nov;415(2):230–4

Effects of purinergic stimulation on the Ca current in single frog cardiac cells. Alvarez JL, et al. **Pflugers Arch** 1990 Apr;416(1–2):189–95

The effects of 2,3-butanedione monoxime on initial heat, tension, and aequorin light output of ferret papillary muscles. Blanchard EM, et al. **Pflugers Arch** 1990 Apr; 416(1–2):219–21

Beta-adrenergic modulation of transient inward current in guinea-pig cardiac myocytes. Evidence for regulation of Ca2(+)-release from sarcoplasmic reticulum by a cyclic AMP dependent mechanism. Boller M, et al. **Pflugers Arch** 1989 Dec;415(3):276–88

Inactivation of calcium-activated chloride conductance in Xenopus oocytes: roles of calcium and protein kinase C. Boton R, et al. **Pflugers Arch** 1990 Apr;416(1–2):1–6

Dimethyl sulfoxide elevates intracellular Ca2+ and mimics effects of increased light intensity in a photoreceptor. Brown HM, et al. **Pflugers Arch** 1990 Jan;415(4):395–8

Ca currents in human neuroblastoma IMR32 cells: kinetics, permeability and pharmacology. Carbone E, et al. **Pflugers Arch** 1990 Apr;416(1–2):170–9

The blockade of excitation/contraction coupling by nifedipine in patch-clamped rat skeletal muscle cells in culture. Cognard C, et al. **Pflugers Arch** 1990 Apr; 416(1–2):98–105

Calcium dependence of quantal release triggered by graded depolarization pulses to nerve terminals on crayfish and frog muscle. Dudel J. **Pflugers Arch** 1989 Dec; 415(3):289–98

Shifts in the voltage dependence of synaptic release due to changes in the extracellular calcium concentration at nerve terminals on muscle of crayfish and frogs. Dudel J. **Pflugers Arch** 1989 Dec;415(3):299–303

Calcium and depolarization dependence of twin-pulse facilitation of synaptic release at nerve terminals of crayfish and frog muscle. Dudel J. **Pflugers Arch** 1989 Dec; 415(3):304–9

Twin pulse facilitation in dependence on pulse duration and calcium concentration at motor nerve terminals of crayfish and frogs. Dudel J. **Pflugers Arch** 1989 Dec;415(3):310–5

Effect of perchlorate on calcium release in skinned fibres stimulated by ionic substitution and caffeine. Fill M, et al. **Pflugers Arch** 1990 Mar;415(6):688–92

Effects of anoxia on K and Ca currents in isolated guinea pig cardiocytes. Friedrich M, et al. **Pflugers Arch** 1990 Apr; 416(1–2):207–9

Repetitive stimulation increases the activation rate of skeletal muscle Ca2+ currents. Garcia J, et al. **Pflugers Arch** 1990 Apr;416(1–2):210–2

The effect of N-(6-aminohexyl)-5-chloro-1-naphthalenesulfonamide (W-7) on muscarinic receptor-induced Ca2+ mobilization in a human salivary epithelial cell line. He XJ, et al. **Pflugers Arch** 1990 Apr;416(1–2):36–42

Giant excised cardiac sarcolemmal membrane patches: sodium and sodium-calcium exchange currents. Hilgemann DW. **Pflugers Arch** 1989 Nov;415(2):247–9

Different effects of depolarization and muscarinic stimulation on the Ca2+/force relationship during the contraction-relaxation cycle in the guinea pig ileum. Himpens B, et al. **Pflugers Arch** 1990 Apr;416(1–2):28–35

Properties of membrane currents in isolated smooth muscle cells from guinea-pig trachea. Hisada T, et al. **Pflugers Arch** 1990 Apr;416(1–2):151–61

Effects of extracellular K+ and Ca2+ on membrane potential, contraction and 86Rb+ efflux in guinea-pig mesotubarium. Lydrup ML, et al. **Pflugers Arch** 1990 Mar; 415(6):664–70

Li+ inhibition of membrane current responses to epinephrine in guinea-pig ventricular cells. Matsuoka S, et al. **Pflugers Arch** 1989 Dec;415(3):384–6

AlF-4 inhibits the accumulation of Ca in the endoplasmic reticulum in intact myometrial strips, but not in the rabbit ear artery. Missiaen L, et al. **Pflugers Arch** 1989 Aug; 414(4):423–9

Changes in cytosolic CA2+ and contraction induced by various stimulants and relaxants in canine tracheal smooth muscle. Ozaki H, et al. **Pflugers Arch** 1990 Jun;416(4):351–9

Calcium release modulated by inositol trisphosphate in ruptured fibers from frog skeletal muscle. Rojas C, et al. **Pflugers Arch** 1990 May;416(3):296–304

pH modulates conducting and gating behaviour of single calcium release channels. Rousseau E, et al. **Pflugers Arch** 1990 Feb;415(5):645–7

Single-channel and Fura-2 analysis of internal Ca2+ oscillations in HeLa cells: contribution of the receptor-evoked Ca2+ influx and effect of internal pH. Sauvé R, et al. **Pflugers Arch** 1990 Apr;416(1–2):43–52

Relations between chronic stimulation-induced changes in contractile properties and the Ca2+-sequestering system of rat and rabbit fast-twitch muscles. Simoneau JA, et al. **Pflugers Arch** 1989 Sep;414(6):629–33

Spatial gradients of intracellular calcium in skeletal muscle during fatigue. Westerblad H, et al. **Pflugers Arch** 1990 Mar;415(6):734–40

Sodium gradient influences agonist-induced Ca++ transients in single vascular smooth muscle cells: a fluorescence digital imaging microscopy study. Bova S, et al. **Pharmacol Res** 1989 Nov-Dec;21 Suppl 1:113–4

Dihydropiridine inhibition of K+ and maitotoxin stimulated calcium fluxes in PC12 cells: effect of pertussis toxin. Meucci O, et al. **Pharmacol Res** 1989 Nov-Dec;21 Suppl 1:1–2

Studies of the effect of glyceryl trinitrate and cyclic GMP on calcium turnover in bovine mesenteric artery. Ahlner J, et al. **Pharmacol Toxicol** 1990 Apr;66(4):277–82

Comparison of the effects of calcium and the calcium channel stimulant Bay k 8644 on neomycin-induced neuromuscular blockade. Baeyens JM, et al. **Pharmacol Toxicol** 1989 Nov; 65(5):398–401

Relation of Ca++ accumulation and lipid peroxidation with CCl4-induced toxicity in the rat liver. Yamamoto H. **Pharmacol Toxicol** 1990 Mar;66(3):213–6

Interaction of calcium channel antagonists with parietal cell acid production, adenylate cyclase, intracellular-free Ca2+ and H+/K+-ATPase. Beil W, et al. **Pharmacology** 1990; 40(1):8–20

Cocaine and lidocaine interfere with epinephrine-induced changes in intracellular calcium concentration and glucose efflux from rat hepatocytes. Engelking LR, et al. **Pharmacology** 1990;40(3):129–36

Effects of muscarinic stimulation on intracellular calcium in the rabbit bladder: comparison with metabolic response. Levin RM, et al. **Pharmacology** 1989;39(2):69–77

Effect of calmodulin antagonists on contraction and 45Ca movements in rat aorta. Wermelskirchen D, et al. **Pharmacology** 1989;39(5):317–26

Gravity, calcium, and bone: update, 1989. Arnaud SB, et al. **Physiologist** 1990 Feb;33(1 Suppl):S65–8 (22 ref.)

Competing antagonists to energy production in space and their effect on calcium metabolism. Tanner HA. **Physiologist** 1990 Feb;33(1 Suppl):S98–9 (15 ref.)

Calcium reserve assembly: a basic structural unit of the calcium reserve system of the hen egg shell [published erratum appears in Poult Sci 1989 Dec;68(12):1738] Dieckert JW, et al. **Poult Sci** 1989 Nov;68(11):1569–84

Relationship of dietary aluminum, phosphorus, and calcium to phosphorus and calcium metabolism and growth performance of broiler chicks. Hussein AS, et al. **Poult Sci** 1990 Jun;69(6):966–71

The utilization of calcium soaps from animal fat by laying hens. Rising R, et al. **Poult Sci** 1990 May;69(5):768–73

Effect of ligustrazine on Ca2+ uptake by inside-out red cell membrane vesicles from renal hypertensive rats. Luo H, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989;4(4):220–3

GTP-binding Ypt1 protein and Ca2+ function independently in a cell-free protein transport reaction. Baker D, et al. **Proc Natl Acad Sci U S A** 1990 Jan; 87(1):355–9

Evidence that a guanine nucleotide-binding protein linked to a muscarinic receptor inhibits directly phospholipase C. Bizzarri C, et al. **Proc Natl Acad Sci U S A** 1990 Jun; 87(12):4889–93

Calcium wave evoked by activation of endogenous or exogenously expressed receptors in Xenopus oocytes. Brooker G, et al. **Proc Natl Acad Sci U S A** 1990 Apr; 87(7):2813–7

Neuropeptide stimulation of calcium flux in human lung cancer cells: delineation of alternative pathways. Bunn PA Jr, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2162–6

Ion microscopic imaging of calcium transport in the intestinal tissue of vitamin D-deficient and vitamin D-replete chickens: a 44Ca stable isotope study. Chandra S, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5715–9

Calcium flux mediated by purified inositol 1,4,5-trisphosphate receptor in reconstituted lipid vesicles is allosterically regulated by adenine nucleotides. Ferris CD, et al. **Proc Natl Acad Sci U S A** 1990 Mar; 87(6):2147–51

Glutamate receptors activate Ca2+ mobilization and Ca2+ influx into astrocytes. Glaum SR, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3454–8

Cellular responses to Ca2+ from extracellular and intracellular sources are different as shown by simultaneous measurements of cytosolic Ca2+ and secretion from bovine chromaffin cells. Kim KT, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9881–5

Isolation of the regulatory domain of scallop myosin: role of the essential light chain in calcium binding. Kwon H, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4771–5

Lipoprotein binding and endosomal itinerary of the low density lipoprotein receptor-related protein in rat liver. Lund H, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(23):9318–22

Expression of striatal D1 dopamine receptors coupled to inositol phosphate production and Ca2+ mobilization in Xenopus oocytes. Mahan LC, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2196–200

Molecular cloning and characterization of the ryanodine receptor/junctional channel complex cDNA from skeletal muscle sarcoplasmic reticulum. Marks AR, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8683–7

Transient calcium release induced by successive increments of inositol 1,4,5-trisphosphate. Meyer T, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3841–5

An inositol 1,4,5-trisphosphate-sensitive Ca2+ pool in liver nuclei. Nicotera P, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6858–62

On the ion selectivity in Ca-binding proteins: the cyclo(-L-Pro-Gly-)3 peptide as a model. Sussman F, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7880–4

Thapsigargin, a tumor promoter, discharges intracellular Ca2+ stores by specific inhibition of the endoplasmic reticulum Ca2(+)-ATPase. Thastrup O, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2466–70

Effects of hydralazine on guanosine cyclic 3', 5'-monophosphate levels in rat aorta. Yen MH, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Apr;13(2):83–8

Intra- and extracellular calcium and hypertension. Heagerty AM. **Proc Nutr Soc** 1990 Feb;49(1):83–9 (40 ref.)

Intracellular calcium, cell injury and relationships to free radicals and fatty acid metabolism. Jackson MJ. **Proc Nutr Soc** 1990 Feb;49(1):77–81 (32 ref.)

Temporal and spatial correlation of fertilization current, calcium waves and cytoplasmic contraction in eggs of Ciona intestinalis. Brownlee C, et al. **Proc R Soc Lond [Biol]** 1990 Apr 23;239(1296):321–8

Inward current generated by Na-Ca exchange during the action potential in single atrial cells of the rabbit. Earm YE, et al. **Proc R Soc Lond [Biol]** 1990 May 22; 240(1297):61–81

A model of the single atrial cell: relation between calcium current and calcium release. Earm YE, et al. **Proc R Soc Lond [Biol]** 1990 May 22;240(1297):83–96

Changes in cytosolic calcium monitored by inward currents during action potentials in guinea–pig ventricular cells. Terrar DA, et al. **Proc R Soc Lond [Biol]** 1989 Nov 22; 238(1291):171–88

Intestinal lead and calcium absorption: effect of 1,25–dihydroxycholecalciferol and lead status. Fullmer CS. **Proc Soc Exp Biol Med** 1990 Jul;194(3):258–64

The nuclear–cytoplasmic [Ca2+] gradient in single mammalian vascular smooth muscle cells. Papageorgiou P, et al. **Proc Soc Exp Biol Med** 1990 Apr;193(4):331–4

Intestinal calcium transport in spontaneously hypertensive rats (SHR) and their genetically matched WKY rats. Shibata H, et al. **Proc Soc Exp Biol Med** 1990 May; 194(1):26–31

Molecular and cellular regulation of calcium and phosphate metabolism. Proceedings of a symposium. Vienna, November 17, 1988. **Prog Clin Biol Res** 1990;332:1–230

Action of tumoral PTH–related peptide on phosphate and calcium transport. Bonjour JP, et al. **Prog Clin Biol Res** 1990;332:39–49 (20 ref.)

Renal calcium transport: a mechanistic analysis. Bronner F, et al. **Prog Clin Biol Res** 1990;332:127–41

Regulation of inositolphosphates, intracellular calcium and membrane current via P2–purinoceptors and alpha 1–adrenoceptors. den Hertog A, et al. **Prog Clin Biol Res** 1990;327:183–92

Hypocalcin physiology. Flik G. **Prog Clin Biol Res** 1990; 342:578–85 (25 ref.)

Calcium homeostasis in avian species. Hurwitz S. **Prog Clin Biol Res** 1990;342:586–91 (24 ref.)

Thermodynamic properties of bullfrog skeletal troponin C associated with calcium and magnesium binding. Imaizumi M, et al. **Prog Clin Biol Res** 1989;315:211–2

Intracellular metabolite and free calcium concentrations during the 'catch' contraction and relaxation in a molluscan smooth muscle. Ishii N, et al. **Prog Clin Biol Res** 1989; 315:463–4

Modulation of calcium–induced eicosanoid synthesis in mouse peritoneal macrophages by protein kinase C. Kaever V, et al. **Prog Clin Biol Res** 1989;301:535–9

The intracellular compartment in transcellular Ca2+ transport: effects of vitamin D deficiency. Kaune R, et al. **Prog Clin Biol Res** 1990;332:143–62

Hair aluminium in normal aged and senile dementia of Alzheimer type. Kobayashi S, et al. **Prog Clin Biol Res** 1989;317:1055–109

Negative surface charges provoke conformational change of membrane proteins and release of calcium from sarcoplasmic reticulum. Liu G, et al. **Prog Clin Biol Res** 1990;327:779–84

Modulations by drugs of the relationship between calcium binding to troponin C and tension. Ogawa Y, et al. **Prog Clin Biol Res** 1989;315:75–86

Dietary factors that can impair calcium and zinc nutriture of the elderly. Sandstead HH, et al. **Prog Clin Biol Res** 1990;326:241–62 (47 ref.)

The role of the ultimobranchial gland in calcium metabolism of amphibians and reptiles. Sasayama Y, et al. **Prog Clin Biol Res** 1990;342:592–7

Calorimetric studies of calcium binding by amphibian parvalbumins. Tanokura M, et al. **Prog Clin Biol Res** 1989; 315:215–6

Measurements of intracellular calcium during fatiguing stimulation in single Xenopus muscle fibres. Westerblad H, et al. **Prog Clin Biol Res** 1989;315:231–2

Calcium–sequestering cell organelles: in situ localization, morphological and functional characterization. Walz B, et al. **Prog Histochem Cytochem** 1989;20(2):1–47 (141 ref.)

Aspects of hepatic calcium metabolism. Heilmann C, et al. **Prog Liver Dis** 1990;9:261–79 (159 ref.)

Arachidonic acid and its metabolites increase cytosolic free calcium in bovine luteal cells. Alila HW, et al. **Prostaglandins** 1990 May;39(5):481–96

Stimulation of ovine placental calcium transport by purified natural and recombinant parathyroid hormone–related protein (PTHrP) preparations. Abbas SK, et al. **Q J Exp Physiol** 1989 Jul;74(4):549–52

Interactions between intracellular pH and calcium in single mouse neuroblastoma (N2A) and rat pheochromocytoma cells (PC12). Dickens CJ, et al. **Q J Exp Physiol** 1989 Sep; 74(5):671–9

A comparison of the effects of oral and intravenous glucose administration on renal calcium excretion in the rat. Singh HJ, et al. **Q J Exp Physiol** 1989 Jul;74(4):531–40

Cytotoxic hyperthermia and Ca2+ homeostasis: the effect of heat on Ca2+ uptake by nonmitochondrial intracellular Ca2+ stores. Mikkelsen RB, et al. **Radiat Res** 1990 Jul; 123(1):82–6

Evidence that gastrin enhances 45Ca uptake into bone through release of a gastric hormone. Håkanson R, et al. **Regul Pept** 1990 Mar 27;28(1):107–18

23Na, 19F, 35Cl and 31P multinuclear nuclear magnetic resonance studies of perfused rat kidney. Gupta RK, et al. **Renal Physiol Biochem** 1989 May–Jun;12(3):144–60

Calcium–dependent effect of gentamicin on glucose formation in isolated rabbit kidney–cortex tubules. Michalik M, et al. **Renal Physiol Biochem** 1990 Sep–Oct;13(5):269–74

Participation of calcium ions in stannous chloride–induced facilitation of transmitter release from frog motor nerve terminals. Hattori T, et al. **Res Commun Chem Pathol Pharmacol** 1990 May; 68(2):267–70

Effects of various metals on hepatic bile calcium excretion in rats: the stimulatory effect of zinc is mediated through acetylcholine action. Yamaguchi M, et al. **Res Exp Med (Berl)** 1990;190(2):145–51

Calcium fluxes across the wall of the ovine reticulorumen in vivo. Beardsworth L, et al. **Res Vet Sci** 1989 Nov; 47(3):404–5

Canine stress syndrome/malignant hyperthermia susceptibility: calcium–homeostasis defect in muscle and lymphocytes. O'Brien PJ, et al. **Res Vet Sci** 1990 Jan; 48(1):124–8

Regulatory mechanisms in platelets. Arnout J, et al. **Rev Port Cardiol** 1988 Jan–Feb;7(1):54–7 (28 ref.)

Ischemic myocardial cell necrosis: calcium overload or oxygen free–radicals? de Leiris J, et al. **Rev Port Cardiol** 1990 Feb;9(2):153–8 (22 ref.)

Effects of calmodulin and calcium channel blockers on the Ca2+ induced outflow of K+ in intact red blood cells of patients with essential hypertension. Buemi M, et al. **Riv Eur Sci Med Farmacol** 1989 Feb;11(1):69–75

Calcium absorption after intestinal resection. The importance of a preserved colon. Hylander E, et al. **Scand J Gastroenterol** 1990 Jul;25(7):705–10

Changes in the intracellular calcium ion concentration in the gastric mucosa in a rat ischemia–reperfusion model. Hayashi N, et al. **Scand J Gastroenterol Suppl** 1989;162:43–6

Cross–linking of both types of IgG Fc receptors, Fc gamma RI and Fc gamma RII, enhances intracellular free Ca2+ in the monocytic cell line U937. van de Winkel JG, et al. **Scand J Immunol** 1990 Mar;31(3):315–25

Glutamate induces calcium waves in cultured astrocytes: long–range glial signaling. Cornell–Bell AH, et al. **Science** 1990 Jan 26;247(4941):470–3

HIV–1 coat protein neurotoxicity prevented by calcium channel antagonists [see comments] Dreyer EB, et al. **Science** 1990 Apr 20;248(4953):364–7 Comment in: Science 1990 Apr 20;248(4953):303.

Intracellular calcium release mediated by sphingosine derivatives generated in cells. Ghosh TK, et al. **Science** 1990 Jun 29;248(4963):1653–6

Is AIDS dementia due to increases in calcium? [news; comment] Gibbons A. **Science** 1990 Apr 20;248(4953):303 Comment on: Science 1990 Apr 20;248(4953):364–7.

Subcellular calcium transients visualized by confocal microscopy in a voltage–clamped vertebrate neuron. Hernández–Cruz A, et al. **Science** 1990 Feb 16; 247(4944):858–62

Sodium current–induced release of calcium from cardiac sarcoplasmic reticulum [see comments] Leblanc N, et al. **Science** 1990 Apr 20;248(4953):372–6 Comment in: Science 1990 Apr 20;248(4953):283.

Sodium–calcium exchange in excitable cells: fuzzy space [comment] Lederer WJ, et al. **Science** 1990 Apr 20; 248(4953):283 Comment on: Science 1990 Apr 20;248(4953):372–6. Comment on: Science 1990 Apr 20;248(4953):376–8.

Microinjection of a conserved peptide sequence of p34cdc2 induces a Ca2+ transient in oocytes. Picard A, et al. **Science** 1990 Jan 19;247(4940):327–9

Angiotensin II–induced calcium mobilization in oocytes by signal transfer through gap junctions. Sandberg K, et al. **Science** 1990 Jul 20;249(4966):298–301

Protection of dentate hilar cells from prolonged stimulation by intracellular calcium chelation. Scharfman HE, et al. **Science** 1989 Oct 13;246(4927):257–60

Calcium–induced peptide association to form an intact protein domain: 1H NMR structural evidence. Shaw GS, et al. **Science** 1990 Jul 20;249(4966):280–3

Endothelin stimulation of cytosolic calcium and gonadotropin secretion in anterior pituitary cells. Stojilković SS, et al. **Science** 1990 Jun 29;248(4963):1663–6

Recent advances in calcium transport by the kidney. Borke JL, et al. **Semin Nephrol** 1990 Jan;10(1):15–23 (78 ref.)

Membrane potential and the cytotoxic Ca cascade of human red blood cells. Freedman JC, et al. **Soc Gen Physiol Ser** 1988;43:217–31 (56 ref.)

The dynamics and relationship of K+ efflux and Ca++ influx in B lymphocytes after antigen–receptor cross–linking. Ransom JT, et al. **Soc Gen Physiol Ser** 1988; 43:241–51

Calcium–calmodulin binding in ischemic rat neurons after calcium channel blocker therapy. Grotta JC, et al. **Stroke** 1990 Jun;21(6):948–52

Nimodipine attenuates both increase in cytosolic free calcium and histologic damage following focal cerebral ischemia and reperfusion in cats. Uematsu D, et al. **Stroke** 1989 Nov; 20(11):1531–7

The effect of cardiac hypertrophy on changes in cytosolic free calcium concentration during ischemia. del Nido PJ, et al. **Surgery** 1990 Aug;108(2):312–6; discussion 316–7

Mechanisms of oxygen free radical–induced calcium overload in endothelial cells. Franceschi D, et al. **Surgery** 1990 Aug;108(2):292–7

The effects of short–term ethanol exposure on the canine jejunal handling of calcium and glucose. Money SR, et al. **Surgery** 1990 Feb;107(2):167–71

Stimulation of D2 dopamine receptors decreases intracellular calcium levels in rat anterior pituitary cells but not striatal synaptosomes: a flow cytometric study using indo–1. Wolf ME, et al. **Synapse** 1989;4(4):353–70

Intracellular compartmentalization of fura–2 dye demonstrated by laser–excitation fluorescence microscopy: a problem in measuring cytosolic free calcium concentration using fura–2 fluorescence in vascular smooth muscle cells. Takeuchi K, et al. **Tohoku J Exp Med** 1989 Sep;159(1):23–35

Effects of inorganic mercury on [3H]dopamine release and calcium homeostasis in rat striatal synaptosomes. Hare MF, et al. **Toxicol Appl Pharmacol** 1990 Feb;102(2):316–30

Potentiation of malaoxon–induced convulsions by lithium: early neuronal injury, phosphoinositide signaling, and calcium. Hirvonen MR, et al. **Toxicol Appl Pharmacol** 1990 Jun 15;104(2):276–89

Maitotoxin–induced liver cell death involving loss of cell ATP following influx of calcium [published erratum appears in Toxicol Appl Pharmacol 1990 Jan;102(1):195] Kutty RK, et al. **Toxicol Appl Pharmacol** 1989 Oct; 101(1):1–10

Cyanide–induced neurotoxicity: calcium mediation of morphological changes in neuronal cells. Maduh EU, et al. **Toxicol Appl Pharmacol** 1990 Apr;103(2):214–21

Amiodarone–mediated increase in intracellular free Ca2+ associated with cellular injury to human pulmonary artery endothelial cells. Powis G, et al. **Toxicol Appl Pharmacol** 1990 Mar 15;103(1):156–64

Maitotoxin–induced myocardial cell injury: calcium accumulation followed by ATP depletion precedes cell death. Santostasi G, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):164–73

Lead inhibits the voltage–activated calcium current of Aplysia neurons. Büsselberg D, et al. **Toxicol Lett** 1990 Mar;51(1):51–7

Acute alterations of tissue Ca++ and lethal tubular cell injury during HgCl2 nephrotoxicity in the rat. Weinberg JM, et al. **Toxicol Pathol** 1989;17(3):483–93

The effects of lindane and linuron on calcium metabolism, bone morphometry and the kidney in rats. Andrews JE, et al. **Toxicology** 1990 Jan–Feb;60(1–2):99–107

Modification of the transport of protons and Ca2+ ions across mitochondrial coupling membrane by N–(phosphonomethyl)glycine. Olorunsogo OO. **Toxicology** 1990 Apr 17;61(2):205–9

Effect of antibacterial plant flavanones on the intracellular calcium compartment involved in the first cleavage of sea urchin eggs. Biyiti L, et al. **Toxicon** 1990;28(3):275–83

Malignant hyperthermia may be due to a defect in a large Ca2+ release channel protein. Davies K. **Trends Genet** 1990 Jun;6(6):171–2 (19 ref.)

Receptor–mediated Ca2+ entry: diversity of function and mechanism. Hallam TJ, et al. **Trends Pharmacol Sci** 1989 Jan;10(1):8–10 (31 ref.)

Receptors that inhibit phosphoinositide breakdown. Linden J, et al. **Trends Pharmacol Sci** 1989 Mar;10(3):114–20 (35 ref.)

Receptor–regulated Ca2+ entry: secret pathway or secret messenger? Taylor CW. **Trends Pharmacol Sci** 1990 Jul; 11(7):269–71 (23 ref.)

The actions of growth hormone and prolactin on rat hepatocytes are not mediated by changes in cytoplasmic Ca2+. Emtner M, et al. **Ups J Med Sci** 1989;94(3):291–7

Ca2+ transport in muscle. A study of the Ca2+–transport ATPases in smooth muscle. Wuytack F. **Verh K Acad Geneeskd Belg** 1989;51(3):269–93 (59 ref.)

Effects of extra– and intracellular calcium concentration on DNA replication, lateral growth, and differentiation of human epidermal cells in culture. Jensen PK, et al. **Virchows Arch [B]** 1990;59(1):17–25

Inhibition of human immunodeficiency virus (HIV–1) infection by diphenylhydantoin (dilantin) implicates role of cellular calcium in virus life cycle. Cloyd MW, et al. **Virology** 1989 Dec;173(2):581–90

Cytoplasmic free calcium concentration in dark–adapted retinal rod outer segments. Korenbrot JI, et al. **Vision Res** 1989;29(8):939–48

Light–evoked changes in extracellular calcium concentration in frog retina. Livsey CT, et al. **Vision Res** 1990; 30(6):853–61

Calcium homeostasis in birds. Hurwitz S. **Vitam Horm** 1989; 45:173–221 (228 ref.)

On the problem of season and cold dependence of calcium transport by skeletal muscle sarcoplasmic reticulum. Agostini B, et al. **Z Naturforsch [C]** 1990 Jun;45(6):671–5

Closure of a rapidly exchanging calcium compartment in rat cardiac myocytes by lanthanum. Hartl C, et al. **Z Naturforsch [C]** 1990 Jan–Feb;45(1–2):121–4

[Changes in RBC Ca2(+)–ATPase activity and red–cell calcium concentration during dialysis in patients with uremia] Yang Y. **Chung Hua I Hsueh Tsa Chih** 1990 Jan; 70(1):23–5, 4 (Eng. Abstr.) **(Chi)**

[Metabolism of calcium and phosphorus in Cushing syndrome with osteoporosis] Meng XW, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Sep;28(9):548–52, 573 (Eng. Abstr.) **(Chi)**

[Estimation of intracellular free calcium concentration in patients undergoing digitalis treatment and in patients presenting digitalis toxicity] Qi WH, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Oct;28(10):609–11, 637 (Eng. Abstr.) **(Chi)**

[Preparation of inside–out vesicles from red blood cell membranes and measurement for its Ca2+ uptake] Luo H. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1990

Feb;12(1):70–3 (Eng. Abstr.) (Chi)

[Effects of tetrandrine on cytoplasmic free calcium in rat neutrophils] Hong JL, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Nov;10(6):533–7 (Eng. Abstr.) (Chi)

[Factors affect Na(+)–Ca2+ exchange in rat's cardiomyocytes and protein-reconstituted liposomes] Li ZP, et al. **Sheng Li Hsueh Pao** 1989 Oct;41(5):470–5 (Eng. Abstr.) (Chi)

[Changes in calcium and water content of stunned myocardium and effects of hyperosmotic mannitol in rat heart] Sun JZ, et al. **Sheng Li Hsueh Pao** 1990 Apr; 42(2):155–62 (Eng. Abstr.) (Chi)

[Biochemical aspects of reoxygenation of the ischemic and hypoxic myocardium (the oxygen and calcium paradox)] Pelouch V. **Cesk Fysiol** 1989;38(6):485–90 (Cze)

[Are there abnormalities of parathormone, calcium and phosphorus metabolism in hypertrophic cardiomyopathy?] Gregor P, et al. **Vnitr Lek** 1990 May;36(5):446–52 (Eng. Abstr.) (Cze)

[Hypercalcemia in the elderly] Raymakers JA. **Tijdschr Gerontol Geriatr** 1990 Feb;21(1):11–6 (18 ref.) (Eng. Abstr.) (Dut)

[Contraction of skeletal muscles: regulation of calcium intracellular movements] Villaz M, et al. **Ann Fr Anesth Reanim** 1989;8(5):392–6 (Eng. Abstr.) (Fre)

[Mechanisms of excitation–contraction coupling and calcium liberation in striated muscles of vertebrates] Raymond G. **Arch Int Physiol Biochim** 1989 Aug;97(4):A79–95 (57 ref.) (Eng. Abstr.) (Fre)

[Essential hypertension and platelet cytosolic concentrations of H(+) and Ca2(+)] Astarie C, et al. **Arch Mal Coeur** 1989 Jul;82(7):1173–6 (Eng. Abstr.) (Fre)

[Calcium intestinal absorption in normotensive and essential hypertensive subjects before and after nicardipine] Fouquoire B, et al. **Arch Mal Coeur** 1989 Jul;82(7):1289–91 (Eng. Abstr.) (Fre)

[Stimulation of calcium flows induced by endothelin in cultured smooth muscle cells] Lonchampt MO, et al. **Arch Mal Coeur** 1989 Jul;82(7):1265–8 (Eng. Abstr.) (Fre)

[Ionic perturbations produced by a non-laminar flow in vascular smooth muscle cells in culture. Protection by cicletanine via a cyclo-oxygenase metabolite] Rosati C, et al. **Arch Mal Coeur** 1989 Nov;82 Spec No 4:41–4 (Eng. Abstr.) (Fre)

[Metabolic investigation of calcium renal lithiasis in adults and therapeutic advice] Paillard M. **J Urol (Paris)** 1989; 95(7):387–92 (Eng. Abstr.) (Fre)

[Physiopathology of idiopathic calcium lithiasis] Bataille P, et al. **Nephrologie** 1990;11(1):29–42 (177 ref.) (Eng. Abstr.) (Fre)

[Ionized calcium. An essential parameter for the study of calcium metabolism] Garabedian M, et al. **Presse Med** 1990 May 12;19(19):915–9 (Eng. Abstr.) (Fre)

[Absence of effect of the incorporation of a milk phosphopeptide on the utilization of calcium and phosphorus in the young pig] Pointillart A, et al. **Reprod Nutr Dev** 1989;29(4):477–86 (Eng. Abstr.) (Fre)

[Phosphorus–calcium metabolism and calcitropic hormones in fracture of the femoral neck after 70 years of age] Benhamou CL, et al. **Rev Rhum Mal Osteoartic** 1989 Dec; 56(12):835–41 (Fre)

[Calcium determination, enzyme biochemical and electron microscopy studies of saphenous veins in patients with coronary sclerosis or varicose veins] Seydewitz V, et al. **Z Gesamte Inn Med** 1990 Feb 15;45(4):96–100 (Eng. Abstr.) (Ger)

[Ionized calcium] Plebani M, et al. **G Clin Med** 1990 Jan; 71(1):57–63 (Ita)

[Dynamic tests for calcium-regulating hormones in childhood. Evaluation of the incremental response in normal subjects] Saggese G, et al. **Minerva Pediatr** 1989 May;41(5):241–6 (Eng. Abstr.) (Ita)

[Abnormal synthesis of 1,25-dihydroxyvitamin D and hypercalcemia in children with tuberculosis] Saggese G, et al. **Pediatr Med Chir** 1989 Sep–Oct;11(5):529–32 (Eng. Abstr.) (Ita)

[Cardiovascular involvement and Ca, Mg dynamics in animals with experimentally induced diabetes mellitus] Saijo Y, et al. **J Cardiol Suppl** 1989;22:57–9 (Jpn)

[Assessment of the relation between bone mineral metabolism and mitral annular calcification or aortic valve sclerosis in elderly patients] Sugihara N, et al. **Kokyu To Junkan** 1989 Oct;37(10):1119–25 (Eng. Abstr.) (Jpn)

[The effects of nicardipine on morphological changes and calcium accumulation during ischemic hypoxia in pyramidal nerve cells in the rat cerebral cortex] Yamazaki M, et al. **Masui** 1989 Oct;38(10):1264–70 (Eng. Abstr.) (Jpn)

[Alteration of regional calcium and energy metabolism in ischemic neuronal injury] Kobayashi S. **Nippon Geka Hokan** 1989 Jan 1;58(1):43–58 (Eng. Abstr.) (Jpn)

[Calcium urolithiasis and bone change] Katayama Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):89–95 (Eng. Abstr.) (Jpn)

[A case of rhabdomyolysis associated with calcium deposition to the skeletal muscle and myocardial necrosis] Suzuki F, et al. **Nippon Naika Gakkai Zasshi** 1989 Nov;78(11):1592–6 (Jpn)

[Calcium kinetics and effects of calcium antagonist on vascular smooth muscle] Aoki K, et al. **Nippon Rinsho** 1989 Aug;47(8):1746–52 (Jpn)

[Calcium and phosphate transport by the proximal tubules] Fujita T. **Nippon Rinsho** 1989 Jul;47(7):1532–6 (Jpn)

[Physiologic and pharmacologic effect of arachidonic acids on calcium metabolism] Fujita T. **Nippon Rinsho** 1990 Jun; 48(6):1207–11 (Jpn)

[Renal tubular dysfunction and urological disease] Higashihara E, et al. **Nippon Rinsho** 1989 Jul;47(7):1660–5 (Jpn)

[Voltage-operated Ca2+ channel—its molecular structure and Ca2+ permeation] Hirata H. **Nippon Rinsho** 1989 Aug; 47(8):1696–701 (Jpn)

[Effects of calcium antagonists on cardiac cells] Iijima T. **Nippon Rinsho** 1989 Aug;47(8):1753–8 (20 ref.) (Jpn)

[Control mechanism of intracellular calcium in skeletal muscle] Kirino Y. **Nippon Rinsho** 1990 Jul;48(7):1401–8 (Jpn)

[Excitation–contraction coupling and ion transport in membrane of skeletal muscle] Nagatomo T. **Nippon Rinsho** 1990 Jul;48(7):1379–84 (Jpn)

[Regulation of ion channels by arachidonic acid metabolites] Oda N, et al. **Nippon Rinsho** 1990 Jun;48(6):1321–6 (Jpn)

[Natural products affecting Ca channels] Ohizumi Y. **Nippon Rinsho** 1989 Aug;47(8):1683–8 (Jpn)

[Kidney tubular transport disorders. Pseudohypoparathyroidism] Takuwa Y. **Nippon Rinsho** 1989 Jul;47(7):1636–40 (Jpn)

[Intracellular calcium messenger system and drug action] Tanaka T, et al. **Nippon Rinsho** 1989 Aug;47(8):1740–5 (Jpn)

[Effects of Ca antagonists on Ca2+ movement in nervous system] Yoshizumi M, et al. **Nippon Rinsho** 1989 Aug; 47(8):1759–63 (Jpn)

[Calcium and magnesium metabolism in the aged] Ouchi Y, et al. **Nippon Ronen Igakkai Zasshi** 1989 May;26(3):216–22 (Eng. Abstr.) (Jpn)

[Assessment of osteopenia following oophorectomy by quantitative computed tomography and its relation with Ca-regulating hormones] Ohta H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Sep;41(9):1471–8 (Eng. Abstr.) (Jpn)

[Changes in cytosolic free Ca++ by histamine stimulation in isolated guinea-pig parietal cells (the second report)] Muto N. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jun; 86(6):1246–53 (Eng. Abstr.) (Jpn)

[Effects of tricyclic antidepressant drugs on receptor binding sites and Ca2+ binding to sarcoplasmic reticulum in rat heart] Sakamoto H, et al. **Nippon Yakurigaku Zasshi** 1989 Oct;94(4):229–36 (Eng. Abstr.) (Jpn)

[Distribution of calcium and magnesium in soft tissues, especially in the central nervous system, and bone of rats fed with low calcium-magnesium with or without aluminum loading diets] Yasui M, et al. **No To Shinkei** 1990 Mar;42(3):283–9 (Eng. Abstr.) (Jpn)

[The inhibitory effect of elastase on calcium increase in brain and spinal cord of rabbits with atherosclerosis induced by cholesterol-rich diet] Yasui M, et al. **No To Shinkei** 1989 Aug;41(8):781–7 (Eng. Abstr.) (Jpn)

[Contents of calcium, phosphorus and aluminum in central nervous system, liver and kidney of rabbits with experimental atherosclerosis—scavenger effects of vinpocetine on the deposition of elements] Yasui M, et al. **No To Shinkei** 1990 Apr;42(4):325–31 (Eng. Abstr.) (Jpn)

[Ca2+-dependent phospholipid binding protein in guinea pig neutrophils: its structure and function] Sato EF, et al. **Seikagaku** 1989 Aug;61(8):661–80 (95 ref.) (Jpn)

[Control of intracellular calcium ion concentration and homeostasis of cell calcium] Endo M. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1855–61 (Jpn)

[Intracellular Ca2+ mobilization in cardiac muscle] Endoh M. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1888–95 (Jpn)

[Roles and mechanisms of IP3 and IP4 in calcium mobilization] Iino M. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1908–14 (Jpn)

[Calcium-activated neutral protease and its endogenous inhibitor: structure and function] Imajoh-Ohmi S, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2175–92 (Jpn)

[Structure and function of the Ca2+ binding photoprotein aequorin] Inouye S, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1985–93 (Jpn)

[Calcium release channels of sarcoplasmic reticulum] Inui M. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(11):1331–41 (56 ref.) (Jpn)

[EF-hand proteins; an intracellular calcium sensor] Isobe T, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1955–68 (Jpn)

[Sarcoplasmic reticulum of skeletal muscles and calcium pump] Kawakita M. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(12):1915–26 (Jpn)

[Intracellular calcium mobilization in skeletal muscle] Kirino Y. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1877–87 (Jpn)

[Calcium mobilization in smooth muscles] Kitamura K, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1896–907 (Jpn)

[Myosin-linked Ca2(+)-regulation of action–myosin–ATP interaction] Kohama K. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2051–66 (Jpn)

[Regulation of calcium homeostasis and cellular functions by vitamin D] Miyaura C, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2311–23 (Jpn)

[Na(+)–Ca2+ exchange] Noma A. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1949–54 (Jpn)

[Dynamic aspect of calcium binding to troponin C] Ogawa Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(12):2043–50 (Jpn)

[Calcium regulation of muscle contraction and three troponin components] Ohtsuki I. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2020–32 (Jpn)

[gamma-Carboxyglutamic acid–containing proteins of bone] Otawara-Hamamoto Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1975–84 (Jpn)

[Calcium metabolism and bone formation] Sasaki S. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2324–31 (Jpn)

[The plasma membrane Ca pump] Shigekawa M, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1938–48 (Jpn)

[The role of phospholamban in cardiac sarcoplasmic reticulum] Tada M, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1927–37 (Jpn)

[Vitamin D-dependent Ca2(+)-binding protein] Takagi T. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1969–74 (Jpn)

[Microcalorimetric studies on Ca2+ binding by the Ca2+ binding proteins] Tanokura M, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2003–12 (Jpn)

[Ca2+ binding to calmodulin—conformational change and expression of function] Yagi K. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2083–90 (Jpn)

[Relationship between calcium and plasticity in synaptic transmission] Yamamoto C. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2248–55 (Jpn)

[Intracellular calcium ion mobilization and nicotinic acetylcholine receptor-mediated signal transduction in neuro-skeletal muscle synapse] Kimura I. **Yakugaku Zasshi** 1990 Mar;110(3):163–78 (36 ref.) (Eng. Abstr.) (Jpn)

[Selected indicators of calcium–phosphate metabolism in patients with diabetes mellitus] Blasiak M, et al. **Endokrynol Pol** 1989;40(5):251–62 (Eng. Abstr.) (Pol)

[Effect of various beta-adrenolytic drugs and calcium channel blocker (nifedipine) on selected indicators of calcium–phosphorus metabolism in patients with hyperthyroidism and simple goiter] Gasińska T, et al. **Endokrynol Pol** 1988;39(6):327–37 (Eng. Abstr.) (Pol)

[The effect of thyroxine on cAMP-dependent protein phosphorylation and ion transport in the sarcolemma of the heart and skeletal muscles] Famulski KS, et al. **Postepy Biochem** 1989;35(3):329–36 (32 ref.) (Pol)

[Principal mechanisms involved in coronary spasm] Ribeiro Jorge PA. **Arq Bras Cardiol** 1989 Dec;53(6):343–6 (25 ref.) (Por)

[Calcium metabolism of patients with sclerocystic ovaries in the presence of endocraniosis] Mindubaeva FZ, et al. **Akush Ginekol (Mosk)** 1989 Jul;(7):60–1 (Rus)

[The role of Ca2+ ions in a phage infection of Corynebacterium glutamicum] Manukian RR, et al. **Biofizika** 1989 Sep–Oct;34(5):830–2 (Eng. Abstr.) (Rus)

[The role of Na+/Ca2+ exchange in the generation of delayed electrical activity of smooth muscle cells] Markevich NI, et al. **Biofizika** 1989 Sep–Oct;34(5):844–8 (Eng. Abstr.) (Rus)

[The effect of cobalt on the dynamics of membrane-bound calcium in the cerebral cortex structures] Samoilov MO, et al. **Biofizika** 1989 Nov–Dec;34(6):1024–7 (Eng. Abstr.) (Rus)

[cAMP, calmodulin-dependent stimulation and stability to proteolysis of Ca 2+ transport in the heart sarcoplasmic reticulum] Antipenko AE, et al. **Biokhimiia** 1989 Dec; 54(12):2023–9 (Eng. Abstr.) (Rus)

[Active Na+-dependent transport of Ca 2+ into the fraction of smooth muscle sarcolemma vesicles] Burchinskaia NF, et al. **Biokhimiia** 1990 Mar;55(3):541–8 (Eng. Abstr.) (Rus)

[Calcium transport in endoplasmic reticulum of the rat liver during lipid peroxidation] Gubskii IuI, et al. **Biokhimiia** 1990 Jan;55(1):12–22 (Eng. Abstr.) (Rus)

[Regulation by Ca2+-calmodulin-dependent phosphorylation of passive transport of Ca2+ in the myometrial sarcolemma] Kondratiuk TP, et al. **Biokhimiia** 1989 Aug;54(8):1368–72 (Eng. Abstr.) (Rus)

[Calcium transport in brain synaptosomes during depolarization. The role of potential-dependent channels and Na+/Ca2+ metabolism] Konev SV, et al. **Biokhimiia** 1989 Jul;54(7):1150–62 (Eng. Abstr.) (Rus)

[Delta pH-induced transport of Ca 2+ into smooth muscle plasma membrane vesicle fraction] Kosterin SA, et al. **Biokhimiia** 1990 Jan;55(1):73–9 (Eng. Abstr.) (Rus)

[Stimulation of spreading and aggregation of platelets on

immobilized type V collagen: mechanisms depending on Ca2+ and protein kinase C] Leĭtin VL, et al. **Biokhimiia** 1989 Sep;54(9):1565–70 (Eng. Abstr.) **(Rus)**

[Ca2+– and inositol–1,4,5–triphosphate induced release of Ca2+ in the microsomal fraction of the rat brain] Men'shikova EV, et al. **Biokhimiia** 1989 Jul;54(7):1059–65 (Eng. Abstr.) **(Rus)**

[Calmodulin–induced activation of ATP–dependent Ca2+ transport in plasma membranes of the myometrium] Prishchepa LA, et al. **Biokhimiia** 1990 May;55(5):905–10 (Eng. Abstr.) **(Rus)**

[Quantitative composition of phosphoinositide cycle components and 45Ca uptake by squid axons at rest and during excitation] Revin VV, et al. **Biokhimiia** 1990 Jan; 55(1):181–4 **(Rus)**

[Calcium binding by smooth muscle plasma membranes] Rybal'chenko VK. **Biokhimiia** 1990 May;55(5):796–800 (Eng. Abstr.) **(Rus)**

[Interaction of alkali metal ions with Ca2+–binding center of Ca2+– ATPase of the sarcoplasmic reticulum in skeletal muscles] Timonin IM, et al. **Biokhimiia** 1989 Jul; 54(7):1170–8 (Eng. Abstr.) **(Rus)**

[Increase of calcium ion level in the cytoplasm of indo 1–loaded HeLa cells under the action of histamine] Bochkov VN, et al. **Biull Eksp Biol Med** 1990 Jan; 109(1):40–2 (Eng. Abstr.) **(Rus)**

[Discovery of new sites of CA2+ binding by vesiculated fraction of plasma membranes of the smooth muscle cells in the presence of alameticin] Kucherenko NE, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):111–3 (Eng. Abstr.) **(Rus)**

[Adaptation to stress increases the resistance of isolated heart to damaging effects of Ca2+ due to optimization of Ca pump function in the sarcoplasmic reticulum] Meerson FZ, et al. **Biull Eksp Biol Med** 1989 Oct;108(10):412–4 (Eng. Abstr.) **(Rus)**

[Influence of adaptation to stressor effects on bioelectrical activity, contractile function and resistance of the papillary muscles to the excess of intracellular calcium] Meerson FZ, et al. **Biull Eksp Biol Med** 1989 Nov;108(11):536–40 (Eng. Abstr.) **(Rus)**

[Ca2+–dependent secretion of serotonin by the rat hypothalamus during ontogenesis] Sapronova AIa, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):166–9 (Eng. Abstr.) **(Rus)**

[Effects of short and long term immobilization stress on the functioning of Ca pump of the sarcoplasmic reticulum and cardiac resistance to Ca2+ excess] Sazontova TG, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):122–4 (Eng. Abstr.) **(Rus)**

[Stress–induced changes in the functioning of the Ca–transport system of the cardiac sarcoplasmic reticulum and its resistance to endogenous damaging factors] Sazontova TG. **Biull Eksp Biol Med** 1989 Sep;108(9):271–4 (Eng. Abstr.) **(Rus)**

[Increased sensitivity to Ca2+ ions of contractile proteins of portal vein smooth muscle cells in rats with spontaneous hypertension] Bershtein SA, et al. **Dokl Akad Nauk SSSR** 1989;307(5):1256–8 **(Rus)**

[Water soluble protein components of preparations of bovine outer rod segments bound with melittin–sepharose in a Ca2+–dependent manner] Grishchenko VM, et al. **Dokl Akad Nauk SSSR** 1989;307(6):1498–502 **(Rus)**

[Modulating effect of intracellular serotonin on the acetylcholine responses of Lymnaea neurons. Calcium dependence] Iurchenko OP, et al. **Dokl Akad Nauk SSSR** 1990;310(6):1507–10 **(Rus)**

[Omega–conotoxin block calcium current in a membrane of cultured rat cardiocytes] Verkhatskiĭ AN, et al. **Dokl Akad Nauk SSSR** 1990;310(3):747–50 **(Rus)**

[The Ca2+ reactivity and the subunit composition of myocardial actomyosin during the pyromecaine and pyrroxan treatment of experimental ischemia] Kaĭfadzhian MA, et al. **Farmakol Toksikol** 1990 Jan–Feb;53(1):27–30 (Eng. Abstr.) **(Rus)**

[Pharmacologic possibility of limiting the energy–dependent accumulation of calcium by mitochondria of the ischemic myocardium] Zamost'ianova GB, et al. **Farmakol Toksikol** 1989 Jul–Aug;52(4):27–9 (Eng. Abstr.) **(Rus)**

[Use of a microfluorometric method for measuring free calcium in the cytoplasm of isolated cultured rat cardiomyocytes] Belan PV, et al. **Fiziol Zh** 1989 Nov–Dec; 35(6):39–45 (Eng. Abstr.) **(Rus)**

[Effect of reduced extracellular level of sodium ions on the intracellular level of calcium ions in the cytoplasm of cultured rat cardiomyocytes] Verkhratskiĭ AN, et al. **Fiziol Zh** 1989 Nov–Dec;35(6):45–9 (Eng. Abstr.) **(Rus)**

[The regulation of the spontaneous activity of the ureter by a Na+/Ca++–metabolic mechanism] Kazarian KV, et al. **Fiziol Zh SSSR** 1990 Jan;76(1):115–20 (Eng. Abstr.) **(Rus)**

[Passive Ca2+ transport in a suspension of isolated smooth–muscle cells and the contribution of the basal calcium permeability of the plasma membrane to the activation of a tonic contraction] Shmalova OP, et al. **Izv Akad Nauk SSSR [Biol]** 1990 May–Jun;(3):383–90 (Eng. Abstr.) **(Rus)**

[Significance of circulatory changes, left–ventricular form and calcium metabolism in ventricular hypertrophy in patients with ischemic heart disease] Ianovskiĭ GV, et al. **Kardiologiia** 1989 Aug;29(8):95–7 **(Rus)**

[Effects of cordarone on Ca2+–dependent cellular systems] Kurennaia GS, et al. **Kardiologiia** 1990 May;30(5):70–3 (Eng. Abstr.) **(Rus)**

[Functional state of the calcium–regulating system in patients with bronchial asthma] Chuchalin AG, et al. **Klin Med (Mosk)** 1989 Aug;67(8):56–9 (Eng. Abstr.) **(Rus)**

[Effect of increased consumption of plant proteins during hypokinesia on various indicators of calcium metabolism in rats] Arustamov OV, et al. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):85–6 **(Rus)**

[Effect of simulated weightlessness on calcium metabolism and the condition of bone tissue in experimental animals] Morukov BV, et al. **Kosm Biol Aviakosm Med** 1990 Mar–Apr;24(2):31–4 (Eng. Abstr.) **(Rus)**

[Mineral density of human skeletal bones in modeling of decreased gravity load] Oganov VS, et al. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):43–6 (Eng. Abstr.) **(Rus)**

[Ca2+ reactivity of actomyosin of heart ventricles of rats exposed to gravitation loads] Tikunov BA, et al. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):88–9 **(Rus)**

[Calcium release from the intracellular stores of the soma of the mollusk neuron under the action of inositol triphosphate and its nonhydrolyzable analog GTP] Belan PV, et al. **Neirofiziologiia** 1989;21(5):707–10 (Eng. Abstr.) **(Rus)**

[Participation of the calcium–binding membrane components in the neurophysiologic mechanisms of habituation in the edible snail (see comments)] Nikitin VP, et al. **Neirofiziologiia** 1989;21(5):605–12 (Eng. Abstr.) Comment in: Neirofiziologiia 1989;21(5):711. **(Rus)**

[The use of a chlortetracycline fluorescent probe for recording the dynamic content of intracellular calcium in neurons (a reply to the editorial commentary on the article by V. P. Nikitin and M. O. Samoĭlov The participation of the calcium–binding membrane components in the neurophysiological mechanisms of habituation in the edible snail)] Samoĭlov MO, et al. **Neirofiziologiia** 1990; 22(3):421–3 **(Rus)**

[The action of strontium and barium ions on the calcium binding and transport systems of nerve cells] Usachev IuM, et al. **Neirofiziologiia** 1989;21(6):820–5 (Eng. Abstr.) **(Rus)**

[A commentary on the article by V. P. Nikitin and M. O. Samoĭlov. The participation of the calcium–binding membrane components in the neurophysiologic mechanisms of habituation in the edible snail (comment)] Vasilenko DA. **Neirofiziologiia** 1989;21(5):711 Comment on: Neirofiziologiia 1989;21(5):605–12. **(Rus)**

[The effect of dihydropyridines on the strontium and calcium content in frog muscle] Shvinka NE, et al. **Tsitologiia** 1989 Nov;31(11):1358–62 (Eng. Abstr.) **(Rus)**

[The effect of hypothermia on the Ca2+–pump in sarcoplasmatic reticulum during autolysis of the myocardium] Brovkovich VM, et al. **Ukr Biokhim Zh** 1989 Nov–Dec;61(6):58–63 (Eng. Abstr.) **(Rus)**

[Static and dynamic pH–dependent components of calcium exchange in the fraction of smooth muscle sarcolemma vesicles] Chervonenko IB, et al. **Ukr Biokhim Zh** 1989 Sep–Oct;61(5):65–70 (Eng. Abstr.) **(Rus)**

[Isolation of Ca 2+–activated photoprotein obelin from Obelia longissima and its use for the recording the outflow of Ca 2+ from fragmented sarcoplasmic reticulum of skeletal muscles] Gitel'zon GI, et al. **Ukr Biokhim Zh** 1990 Mar–Apr;62(2):69–76 (Eng. Abstr.) **(Rus)**

[The effect of Ca2+–phospholipid dependent phosphorylation on passive calcium transport in the myocardial sarcolemma] Kurskiĭ MD, et al. **Ukr Biokhim Zh** 1989 Sep–Oct;61(5):60–5 (Eng. Abstr.) **(Rus)**

[A mechanism of passive transport of Ca2+ in muscle sarcoplasmic reticulum] Kurskiĭ MD, et al. **Ukr Biokhim Zh** 1989 Nov–Dec;61(6):3–13 (96 ref.) (Eng. Abstr.) **(Rus)**

[Ability of nucleoside triphosphates to provide for Ca 2+ transport by sarcoplasmic reticulum fragments] Lushchak VI. **Ukr Biokhim Zh** 1990 Mar–Apr;62(2):64–9 (Eng. Abstr.) **(Rus)**

[Molecular mechanism of calcium ion transport in mitochondria. I. Glycoprotein–peptide complex as a component of the electron transport system] Mironova GD, et al. **Ukr Biokhim Zh** 1989 Nov–Dec;61(6):48–54 (Eng. Abstr.) **(Rus)**

[The effect of oxytocin and sigetin on Ca2+ transport in the fraction of plasma membranes of myometrial cells] Stepankovskaia GK, et al. **Ukr Biokhim Zh** 1989 Sep–Oct; 61(5):109–12 (Eng. Abstr.) **(Rus)**

[Ca 2+ outflow from sarcoplasmic reticulum vesicles during changes in membrane potential, Ca2+ concentration and pH] Tugai VA, et al. **Ukr Biokhim Zh** 1990 Jan–Feb; 62(1):70–5 (Eng. Abstr.) **(Rus)**

[Molecular mechanism of calcium ion transport in mitochondria. II. Parameters of Ca2+ binding with glycoprotein and glycoprotein–peptide complex] Utesheva ZhA, et al. **Ukr Biokhim Zh** 1989 Nov–Dec;61(6):54–8 (Eng. Abstr.) **(Rus)**

[ATP–dependent transport of calcium in the myocardial sarcoplasmic reticulum during adaptation to muscular activities] Kalinskiĭ MI, et al. **Vopr Med Khim** 1989 Jul–Aug;35(4):31–4 (Eng. Abstr.) **(Rus)**

[Adaptation to short–term stressor factors increases calcium pump activity in sarcoplasmic reticulum and decreases the rate of its inactivation during autolysis] Meerson FZ, et al. **Vopr Med Khim** 1990 Mar–Apr;36(2):55–61 (Eng. Abstr.) **(Rus)**

[The age–related characteristics of the contractile function and of the calcium–transport system of the rat myocardium under conditions of restricted coronary perfusion] Frol'kis VV, et al. **Zh Evol Biokhim Fiziol** 1990 Mar–Apr; 26(2):174–81 (Eng. Abstr.) **(Rus)**

[Calcium release during contraction and changes in optical anisotropy in skeletal muscle cells] Lacinová L, et al. **Bratisl Lek Listy** 1990 Mar;91(3):197–201 (Eng. Abstr.) **(Slo)**

[Effect of calcium antagonists on the Ca2(+) paradox] Tribulová N, et al. **Bratisl Lek Listy** 1990 Jun;91(6):437–45 (Eng. Abstr.) **(Slo)**

[The calcium paradox in the isolated rat heart—effects of diltiazem] Ravingerová T, et al. **Cesk Fysiol** 1989; 38(6):491–4 **(Slo)**

[Mineral metabolism of calcium, magnesium and phosphorus in the normal newborn infant] Clemente Yago F, et al. **An Esp Pediatr** 1989 Dec;31(6):533–6 (Eng. Abstr.) **(Spa)**

[Changes in phosphorus–calcium metabolism in osteopoikilosis (Buschke–Ollendorf syndrome)] Llado Blanch A, et al. **An Esp Pediatr** 1989 Aug;31(2):139–41 (Eng. Abstr.) **(Spa)**

[Effects of caffeine on post–extrasystolic potentiation and mechanical restitution in mammalian papillary muscle] Ibarra J, et al. **Arch Inst Cardiol Mex** 1989 Jul–Aug; 59(4):361–6 (Eng. Abstr.) **(Spa)**

[Diabetes and calcium transportation in liver mitochondria] Grinblat L, et al. **Medicina (B Aires)** 1989;49(1):21–7 (Eng. Abstr.) **(Spa)**

[Immunologically disturbed energy and calcium homeostasis as a possible pathogenesis of dilated cardiomyopathy] Sylvén C. **Lakartidningen** 1989 Aug 30;86(35):2856–8 **(Swe)**

PHARMACOKINETICS

Calcium accumulation by sarcoplasmic reticulum in whole muscle homogenate preparations of malignant hyperthermia diagnostic patients and pigs. Cheah KS, et al. **Acta Anaesthesiol Scand** 1990 Feb;34(2):114–9

Calcium, phosphorus and vitamin D needs of low birthweight infants on various feedings. Atkinson SA. **Acta Paediatr Scand Suppl** 1989;351:104–8 (17 ref.)

Calcium signaling of calcium–binding proteins and drug actions. Tanaka T, et al. **Adv Exp Med Biol** 1989;255:165–71

Transport of calcium and other metals across the blood–brain barrier: mechanisms and implications for neurodegenerative disorders. Smith QR. **Adv Neurol** 1990;51:217–22 (41 ref.)

Dynamic calcium requirements for activation of rabbit papillary muscle calculated from tension–independent heat. Blanchard EM, et al. **Am J Cardiol** 1990 Apr 3; 65(14):8G–11G

Oxalate: effect on calcium absorbability. Heaney RP, et al. **Am J Clin Nutr** 1989 Oct;50(4):830–2

Isoproterenol increases Ca, Mg, and NaCl reabsorption in mouse thick ascending limb. Bailly C, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1224–31

Improved method for estimating Ca uptake in vascular smooth muscle using compartmental analysis. Massaldi HA, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):R172–83

Membrane–delimited stimulation of heart cell calcium current by beta–adrenergic signal–transducing Gs protein. Pelzer S, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H264–7

The effects of volatile anesthetics on Ca++ mobilization in rat hepatocytes. Iaizzo PA, et al. **Anesthesiology** 1990 Mar;72(3):504–9

Regulation of cytosolic Ca2+ in resting and stimulated rat submandibular salivary gland acini. Brinck RW, et al. **Arch Oral Biol** 1989;34(11):917–22

Effects of acetylcholine and monensin on 22Na uptake and cytosolic Ca2+ in rat submandibular salivary cells. Martinez JR, et al. **Arch Oral Biol** 1990;35(5):359–64

Bio–utilization of protein, calcium and zinc from diets based on rice and beans, in human beings. de Angelis RC, et al. **Arq Gastroenterol** 1989 Jul–Sep;26(3):50–4

Activation of calcium uptake in rat liver mitochondria by aminoglucoside antibiotics. Kröner H. **Biochem Pharmacol** 1990 Mar 1;39(5):891–4

Staurosporine inhibition of intracellular free Ca2+ transients in mitogen–stimulated Swiss 3T3 fibroblasts. Olsen R, et al. **Biochem Pharmacol** 1990 Mar 1;39(5):968–72

Independent flexible motion of submolecular domains of the Ca2+,Mg2+–ATPase of sarcoplasmic reticulum measured by time–resolved fluorescence depolarization of site–specifically attached probes. Suzuki S, et al. **Biochemistry** 1989 Sep 19;28(19):7734–40

Effect of L–carnitine and L–aminocarnitine on calcium transport, motility, and enzyme release from ejaculated bovine spermatozoa. Deana R, et al. **Biol Reprod** 1989 Nov; 41(5):949–55

Effects of phytate reduction, fat extraction, and level of Ca on Ca and Zn bioavailability. Compared in vitro and in vivo. Schwartz R, et al. **Biol Trace Elem Res** 1989 Jan–Feb; 19(1–2):93–106

Kinetics of intestinal calcium absorption in humans measured using stable isotopes and high–precision thermal ionization

mass spectrometry. Price RI, et al.
Biomed Environ Mass Spectrom 1990 Jun;19(6):353–9

Development of tolerance in brain mitochondria for calcium uptake following chronic ethanol ingestion. Farrar RP, et al. **Brain Res** 1989 Oct 23;500(1–2):374–8

Changes in the mode of calcium and phosphate transport during rat incisal enamel formation. Kawamoto T, et al. **Calcif Tissue Int** 1990 Jun;46(6):406–14

Intestinal calcium absorption during hyperinsulinemic euglycemic glucose clamp in healthy humans. Rümenapf G, et al. **Calcif Tissue Int** 1990 Feb;46(2):73–9

In vitro calcium transport properties of skeletal muscle mitochondria from vitamin D–deficient and 1,25–dihydroxy–vitamin D3–treated chicks. Selles J, et al. **Calcif Tissue Int** 1990 Jul;47(1):46–50

Effects of thyroid hormone on Ca2+ efflux and Ca2+ transport capacity in rat skeletal muscle. Everts ME. **Cell Calcium** 1990 May;11(5):343–52

Calcium fluxes in cardiac sarcolemma and sarcoplasmic reticulum isolated from endotoxin–shocked guinea pigs. Kutsky P, et al. **Circ Shock** 1990 Apr;30(4):349–64

Calcium absorption in children estimated from single and double stable calcium isotope techniques. Miller JZ, et al. **Clin Chim Acta** 1989 Aug 15;183(2):107–13

Malabsorption of calcium and phosphate in chronic renal failure: 32P and 45Ca studies in dialysis patients. Wiegmann TB, et al. **Clin Nephrol** 1990 Jul;34(1):35–41

Verapamil stimulates Ca(++)-uptake and Ca(++)-ATPase in plasma membrane vesicles of guinea pig spermatozoa. Juneja R, et al. **Contraception** 1990 Apr;41(4):419–29

Effects of angiotensin–II on inositol phosphate accumulation and calcium influx in bovine adrenal and Y–1 tumor adrenal cells. Langlois D, et al. **Endocr Res** 1990;16(1):31–49

The use of the Ca2(+)-sensitive intramitochondrial dehydrogenases and entrapped fura–2 to study Sr2+ and Ba2+ transport across the inner membrane of mammalian mitochondria. McCormack JG, et al. **Eur J Biochem** 1990 Aug 28;192(1):239–44

N–methyl–D–aspartate–evoked calcium uptake by kitten visual cortex maintained in vitro. Feldman D, et al. **Exp Brain Res** 1990;80(2):252–9

Endpoint of first stage of zona pellucida–induced acrosome reaction in mouse spermatozoa characterized by acrosomal H+ and Ca2+ permeability: population and single cell kinetics. Lee MA, et al. **Gamete Res** 1989 Nov;24(3):303–26

Cellular and paracellular magnesium transport across the terminal ileum of the rat and its interaction with the calcium transport. Karbach U, et al. **Gastroenterology** 1990 Apr; 98(4):985–92

Effects of an enteric anaerobic bacterial culture supernatant and deoxycholate on intestinal calcium absorption and disaccharidase activity. Walshe K, et al. **Gut** 1990 Jul; 31(7):770–6

Comparison of effects of verapamil, low calcium diet and betamethasone on duodenal calcium absorption efficiency in the chick. Blahos J, et al. **Horm Metab Res** 1989 Nov; 21(11):612–5

Calcium absorption [letter] Heaney RP.
J Bone Miner Res 1989 Oct;4(5):795–6

Intestinal calcium transport in spontaneously hypertensive rats and their genetically matched Wistar–Kyoto rats. I. Endoplasmic reticulum. Shibata H, et al. **J Hypertens** 1990 May;8(5):473–7

The analysis of extracellular calcium exchange in perfused myocardium using mathematical modeling. Aliev MK. **J Mol Cell Cardiol** 1989 Sep;21(9):849–63

Rapid, non–perfusion–limited calcium exchange in cultured neonatal myocardial cells. Kuwata JH, et al. **J Mol Cell Cardiol** 1989 Nov;21(11):1195–208

Transmural distribution of calcium accumulation and glucose uptake in the calcium paradox in the rat left ventricle. Leipälä JA, et al. **J Mol Cell Cardiol** 1989 Sep;21(9):841–8

Calcium is rapidly exchangeable in cultured vascular smooth muscle cells from rabbit aorta. Pierce GN, et al. **J Mol Cell Cardiol** 1989 Sep;21(9):889–99

Calcium transport and phospholamban in sarcoplasmic reticulum of ischemic myocardium. Schoutsen B, et al. **J Mol Cell Cardiol** 1989 Jul;21(7):719–27

Isolation of a Ca2(+)-releasing factor from caffeine–treated skeletal muscle fibres and its effect on Ca2+ release from sarcoplasmic reticulum. Herrmann–Frank A, et al. **J Muscle Res Cell Motil** 1989 Dec;10(6):427–36

Effect of phenytoin on intracellular 45Ca2+ accumulation in gingival fibroblasts in vitro. Brunius G, et al. **J Oral Pathol Med** 1989 Sep;18(8):485–9

Role of the source of phosphate salt in improving the mineral balance of parenterally fed low birth weight infants. Chessex P, et al. **J Pediatr** 1990 May;116(5):765–72

Calcium absorption in man: some dosing recommendations. Blanchard J, et al. **J Pharmacokinet Biopharm** 1989 Dec; 17(6):631–44 (47 ref.)

Agonist–stimulated divalent cation entry into single cultured human umbilical vein endothelial cells. Jacob R. **J Physiol (Lond)** 1990 Feb;421:55–77

Effects of age on calcium transport activity of sarcoplasmic reticulum in fast– and slow–twitch rat muscle fibres. Larsson L, et al. **J Physiol (Lond)** 1989 Dec;419:253–64

The initiation of calcium release following muscarinic stimulation in rat lacrimal glands. Marty A, et al. **J Physiol (Lond)** 1989 Dec;419:665–87

The effects of taurine on Ca2+ uptake by the sarcoplasmic reticulum and Ca2+ sensitivity of chemically skinned rat heart. Steele DS, et al. **J Physiol (Lond)** 1990 Mar; 422:499–511

Spontaneous and secretagogue–induced changes in cytosolic free Ca concentration measured by microfluorimetry with fura–2 on single bovine adrenal chromaffin cells. Sorimachi M, et al. **Jpn J Physiol** 1989;39(5):687–701

Effect of platelet–activating factor (PAF) on sodium calcium exchange in cardiac sarcolemmal vesicles. Meng HP, et al. **Mol Cell Biochem** 1990 Jan 18;92(1):45–51

1,25–Dihydroxyvitamin D3–mediated vesicular calcium transport in intestine: dose–response studies. Nemere I, et al. **Mol Cell Endocrinol** 1989 Nov;67(1):47–53

Parathyroid hormone acute vascular effect is mediated by decreased Ca2+ uptake and enhanced cAMP level. Schleiffer R, et al. **Mol Cell Endocrinol** 1989 Nov; 67(1):63–71

Decreased efficacy of inositol 1,4,5–trisphosphate to elicit calcium mobilization from cerebrocortical microsomes of aged rats. Burnett DM, et al. **Mol Pharmacol** 1990 Apr; 37(4):566–71

Metal cations as synaptosomal calcium blockers in studies with Fura–2. Sun YD, et al. **Neurochem Res** 1989 Nov; 14(11):1061–6

Acute reduction of extracellular sodium differentially affects receptor–mediated and K+–induced calcium uptake in PC12 pheochromocytoma cells. Koski G, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):188–92

The effect of oxygen tension on collagen synthesis and calcium uptake in newborn rats' calvaria in vitro. Miwa T, et al. **Nippon Seikeigeka Gakkai Zasshi** 1990 Jan; 64(1):76–81

Modulation of sodium channel gating by external divalent cations: differential effects on opening and closing rates. Cukierman S, et al. **Pflugers Arch** 1990 Jun;416(4):360–7

Calcium influx into endothelial cells and formation of endothelium–derived relaxing factor is controlled by the membrane potential. Lückhoff A, et al. **Pflugers Arch** 1990 May;416(3):305–11

Is potassium co–transported by the cardiac Na–Ca exchange? Yasui K, et al. **Pflugers Arch** 1990 Jan;415(4):513–5

Unidirectional duodenal and jejunal calcium and phosphorus transport in the rat: effects of dietary phosphorus depletion, ethane–1–hydroxy–1,1–diphosphonate and 1,25 dihydroxycholecalciferol. Jungbluth H, et al. **Res Exp Med (Berl)** 1989;189(6):439–49

Intestinal absorption of oxalate and calcium in patients with jejunoileal bypass. Lindsjö M, et al. **Scand J Urol Nephrol** 1989;23(4):283–9

Effects of ultrasound on placental transfer during the last third of gestation in the rat. Atkinson DE, et al. **Ultrasonics** 1990 May;28(3):171–4

[Control and kinetics of intracellular calcium movement in striated muscle] Gillis JM. **Bull Mem Acad R Med Belg** 1989;144(8–9):398–405; discussion 405–6 (15 ref.) (Eng. Abstr.) **(Fre)**

[Comparison of the fluoride bioavailability from two oral preparations of monofluorophosphate disodium in combination with various calcium salts] Brazier M, et al. **Therapie** 1990 May–Jun;45(3):235–41 (Eng. Abstr.) **(Fre)**

[Identification of depolarization–activated calcium flow in the secretory cell membrane] Klevets MIu, et al. **Fiziol Zh** 1990 Mar–Apr;36(2):102–4 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Comparative evaluation of the Ca2+–antagonistic activity of some Bulgarian vasodilating agents and of known Ca2+–antagonists on K+–depolarized smooth muscle from guinea–pig taenia coli. Mutafova–Yambolieva V, et al. **Acta Physiol Pharmacol Bulg** 1989;15(2):40–6

Effects of calcium and EDTA on rat skin capillary permeability and on its response to histamine, serotonin and bradykinin. Busch L, et al. **Acta Physiol Pharmacol Latinoam** 1989;39(3):227–34

Influence of calcium on myocardial potassium balance, oxygen consumption, and performance. Gilmore JP, et al. **Am Heart J** 1968 Feb;75(2):215–22

Relationship of mineral metabolism and long–term calcium and cholecalciferol supplementation to blood pressure in normotensive men. Orwoll ES, et al. **Am J Clin Nutr** 1990 Oct;52(4):717–21

Calcium attenuates cardiovascular reactivity to sodium and stress in blacks. Ernst FA, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 1):451–7

Protection against membrane–mediated cytotoxicity by calcium and zinc. Mahadevan D, et al. **Am J Pathol** 1990 Mar;136(3):513–20

Retinoic acid stimulation of human dermal fibroblast proliferation is dependent on suboptimal extracellular Ca2+ concentration. Varani J, et al. **Am J Pathol** 1990 Jun;136(6):1275–81

Normal responsiveness to external Ca and to Ca–channel modifying agents in hypertrophied rat heart. Callens–el Amrani F, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1727–34

Calcium–dependent regulation of airway epithelial chloride channels. Clancy JP, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):L25–32

Ca2(+)-dependent inhibition of sodium transport in rabbit cortical collecting tubules. Frindt G, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):F568–82

Modulation of effect of extracellular calcium buffering in cardiac muscle. Ginsburg S, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):H1843–50

Direct evidence of changes in myofilament responsiveness to Ca2+ during hypoxia and reoxygenation in myocardium. Hajjar RJ, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H784–95

Nifedipine inhibits calcium–activated K transport in human erythrocytes. Kaji DM. **Am J Physiol** 1990 Aug;259(2 Pt 1):C332–9

Effect of global myocardial stunning on Ca2(+)-sensitive myofibrillar ATPase activity and creatine kinase kinetics. Krause SM. **Am J Physiol** 1990 Sep;259(3 Pt 2):H813–9

Role of prostaglandins in the renal response to calcium infusion. Lahera V, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):F1096–9

Calcium and alpha–adrenergic regulation of Na–Cl(K) cotransport in rabbit tracheal epithelial cells. Liedtke CM. **Am J Physiol** 1990 Aug;259(2 Pt 1):L66–72

Differential modulation of Ca2(+)-activated K+ channels by substance P. Mayer EA, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 1):G887–97

Evidence for increased myofilament Ca2+ sensitivity in norepinephrine–activated vascular smooth muscle. Nishimura J, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H2–8

Ca2+ requirement for metabolic effects of secretagogues in the amphibian gastric mucosa. Subero O, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):G969–76

Mechanisms of reduced reperfusion injury by low Ca2+ and/or high K+. Tani M, et al. **Am J Physiol** 1990 Apr; 258(4 Pt 2):H1025–31

The endothelium inhibits activation by calcium of vascular neurotransmission. Tesfamariam B, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):H1871–7

ANG II inhibits calcium–activated potassium channels from coronary smooth muscle in lipid bilayers. Toro L, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H912–5

Phosphoinositide metabolism in intestinal brush borders: stimulation of IP3 formation by guanine nucleotides and Ca2+. Vaandrager AB, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):G410–9

Effect of frequency and Ca++ concentration on oxygen consumption of the isolated rat heart. van der Veen KJ, et al. **Am J Physiol** 1967 Jun;212(6):1536–40

Activation of pyruvate dehydrogenase complex by Ca2+ in intact heart, cardiac myocytes, and cardiac mitochondria. Hansford RG, et al. **Ann N Y Acad Sci** 1989; 573:240–53

The concentration of calcium in neonatal cardioplegia. Zweng TN, et al. **Ann Thorac Surg** 1990 Aug;50(2):262–7

Adenine and pyridine nucleotide levels during calcium–induced conidiation in Penicillium notatum. Mosley MJ, et al. **Antonie Van Leeuwenhoek** 1989 Aug; 56(2):191–9

Persistent Ca2(+)-induced activation of erythrocyte membrane Ca2(+)-ATPase unrelated to calpain proteolysis. Roufogalis BD, et al. **Arch Biochem Biophys** 1990 May 15;279(1):78–86

Effect of divalent cations on NADH–dependent and NADPH–dependent cytochrome b5 reduction by hepatic microsomes. Tamura M, et al. **Arch Biochem Biophys** 1990 Aug 1;280(2):313–9

Antagonism of fluoride toxicity by high levels of calcium but not of inorganic phosphate during secretory amelogenesis in the hamster tooth germ in vitro. Bronckers AL, et al. **Arch Oral Biol** 1989;34(8):625–36

Destabilization of herpes simplex virus type 1 virions by local anesthetics, alkaline pH, and calcium depletion. Yanagi K, et al. **Arch Virol** 1989;108(1–2):151–9

No evidence of oxygen free radicals–mediated damage during the calcium paradox. Ferrari R, et al. **Basic Res Cardiol** 1989 Jul–Aug;84(4):396–403

Adaptation to stress exposure prevents arrhythmogenic and contractural effects of the excess of Ca2+ on the heart by the increased activity of sarcoplasmic reticulum. Meerson FZ, et al. **Basic Res Cardiol** 1990 Jan–Feb; 85(1):96–103

Histamine stimulates calcium–mediated protein phosphorylation in a colonic epithelial cell line. Cohn JA, et al. **Biochem Biophys Res Commun** 1989 Dec 15; 165(2):810–6

Interaction of DnaK with ATP: binding, hydrolysis and Ca+2–stimulated autophosphorylation. Dalie BL, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1284–92

Counter–regulatory effects of phosphatidic acid on protein kinase C activity in the presence of calcium and diolein. Epand RM, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):487–90

Involvement of Ca2(+)-induced Ca2+ release in the volume regulation of human epithelial cells exposed to a hypotonic medium. Hazama A, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):287–93

Protein kinase C potentiates stretch–induced cerebral artery tone by increasing intracellular sensitivity to Ca2+. Laher I, et al. **Biochem Biophys Res Commun** 1989 Nov 30; 165(1):312–8

The effect of extracellular calcium on the contractile action of endothelin. Marsault R, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):301–5

Ca2+–independent contraction of uterine smooth muscle. Matsuo K, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):722–7

Biosynthesis of endothelium–derived relaxing factor: a cytosolic enzyme in porcine aortic endothelial cells

Ca2+-dependently converts L-arginine into an activator of soluble guanylyl cyclase. Mayer B, et al. **Biochem Biophys Res Commun** 1989 Oct 31;164(2):678-85

Calpain II-dependent solubilization of a nuclear protein kinase at micromolar calcium concentrations. Mellgren RL, et al. **Biochem Biophys Res Commun** 1990 Apr 30; 168(2):589-95

Effects of phorbol ester and teleocidin on Ca2+-induced fusion of liposomes. Nam K, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1256-61

Possible involvement of actomyosin ADP complex in regulation of Ca2+ sensitivity in alpha-toxin permeabilized smooth muscle. Nishimura J, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):408-15

Characterization of a bovine brain magnesium-dependent phosphotyrosine protein phosphatase that is inhibited by micromolar concentrations of calcium. Singh TJ. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):621-7

Translocation of phospholipase A2 from cytosol to membranes in rat brain induced by calcium ions. Yoshihara Y, et al. **Biochem Biophys Res Commun** 1990 Jul 31; 170(2):484-90

Role of calcium on protein phosphorylation in collagen-stimulated platelets. Effect of a new dihydropyridine derivative. Catalán RE, et al. **Biochem Int** 1989 Oct;19(4):919-28

Na(+)-induced reversal of the Ca2(+)-dependent red-shift of cytochrome a. Is there a hydronium output well in cytochrome c oxidase? Mkrtchyan H, et al. **Biochem Int** 1990;20(1):183-9

Studies on receptor interaction of ceruloplasmin with human red blood cells. Saenko EL, et al. **Biochem Int** 1990; 20(2):215-25

Characterization of Ca2(+)-dependent phospholipid binding, vesicle aggregation and membrane fusion by annexins. Blackwood RA, et al. **Biochem J** 1990 Feb 15; 266(1):195-200

A heart mitochondrial Ca2(+)-dependent pore of possible relevance to re-perfusion-induced injury. Evidence that ADP facilitates pore interconversion between the closed and open states. Crompton M, et al. **Biochem J** 1990 Feb 15;266(1):33-9

Partial inhibition by cyclosporin A of the swelling of liver mitochondria in vivo and in vitro induced by sub-micromolar [Ca2+], but not by butyrate. Evidence for two distinct swelling mechanisms. Davidson AM, et al. **Biochem J** 1990 May 15;268(1):147-52

Evidence for the calcium-dependent activation of phospholipase D in thrombin-stimulated human erythroleukaemia cells. Halenda SP, et al. **Biochem J** 1990 Apr 15;267(2):479-83

Inhibition of Ca2(+)-induced large-amplitude swelling of liver and heart mitochondria by cyclosporin is probably caused by the inhibitor binding to mitochondrial-matrix peptidyl-prolyl cis-trans isomerase and preventing it interacting with the adenine nucleotide translocase. Halestrap AP, et al. **Biochem J** 1990 May 15;268(1):153-60

Induction and activity of NO synthase in bone-marrow-derived macrophages are independent of Ca2+. Hauschildt S, et al. **Biochem J** 1990 Sep 1; 270(2):351-6

Stimulation of Ca2(+)-independent catecholamine secretion from digitonin-permeabilized bovine adrenal chromaffin cells by guanine nucleotide analogues. Relationship to arachidonate release. Morgan A, et al. **Biochem J** 1990 Jul 15;269(2):521-6

Rapid purification of pig heart NAD+-isocitrate dehydrogenase. Studies on the regulation of activity by Ca2+, adenine nucleotides, Mg2+ and other metal ions. Rutter GA, et al. **Biochem J** 1989 Oct 15;263(2):445-52

Micromolar free calcium exposes ouabain-binding sites in digitonin-permeabilized Xenopus laevis oocytes. Schmalzing G, et al. **Biochem J** 1990 Aug 1;269(3):757-66

Rat brain inositol 1,4,5-trisphosphate 3-kinase. Ca2(+)-sensitivity, purification and antibody production. Takazawa K, et al. **Biochem J** 1990 May 15;268(1):213-7

Somatostatin inhibition of Ca2(+)-induced insulin secretion in permeabilized HIT-T15 cells. Ullrich S, et al. **Biochem J** 1990 Aug 15;270(1):273-6

Calcium stimulates luteinizing-hormone (lutropin) exocytosis by a mechanism independent of protein kinase C. van der Merwe PA, et al. **Biochem J** 1990 Jun 1;268(2):493-8

Calcium activates glucose-6-phosphatase in intact rat hepatic microsomes. Waddell ID, et al. **Biochem J** 1990 Apr 15; 267(2):549-51

Extracellular calcium alleviates cell toxicity due to hepatotoxins that induce lipid peroxidation, but has no effect on toxins that do not cause lipid peroxidation. A study in isolated rat hepatocytes. Dogterom P, et al. **Biochem Pharmacol** 1989 Dec 1;38(23):4225-30

Effect of diacylglycerols on calcium-induced fusion of phosphatidylserine/phosphatidylcholine vesicles. Gómez-Fernández JC, et al. **Biochem Soc Trans** 1989 Dec; 17(6):957-60 (23 ref.)

Proteolytic modification of calcium-dependent protease I in erythrocytes treated with ionomycin and calcium. Croall DE. **Biochemistry** 1989 Aug 22;28(17):6882-8

Functional modification of a Ca2+-activated K+ channel by trimethyloxonium. MacKinnon R, et al. **Biochemistry** 1989 Oct 3;28(20):8087-92

Characterization of a Ca2(+)- and phospholipid-dependent ATPase reaction catalyzed by rat brain protein kinase C. O'Brian CA, et al. **Biochemistry** 1990 May 8;29(18):4278-82

Disulfide bond reduction in fibrinogen: calcium protection and effect on clottability. Procyk R, et al. **Biochemistry** 1990 Feb 13;29(6):1501-7

Calcium-binding ATPase inhibitor protein of bovine heart mitochondria. Role in ATP synthesis and effect of Ca2+. Yamada EW, et al. **Biochemistry** 1989 Dec 12;28(25):9714-8

Involvement of a guanine-nucleotide-binding protein-mediated mechanism in the enhancement of arachidonic acid liberation by phorbol 12-myristate 13-acetate and Ca2+ in saponin-permeabilized platelets. Akiba S, et al. **Biochim Biophys Acta** 1990 Jun 14; 1044(3):291-6

Incorporation of mitochondrial L-glycerol-3-phosphate dehydrogenase into liposomes; effect of sodium oleate and calcium ions. Beleznai Z, et al. **Biochim Biophys Acta** 1990 Jul 17;1018(1):72-6

Kinetic characteristics of calcium-dependent, cholinergic receptor controlled ATP secretion from adrenal medullary chromaffin cells. Ceña V, et al. **Biochim Biophys Acta** 1990 Apr 13;1023(2):213-22

Interaction of calcium and cholesterol sulphate induces membrane destabilization and fusion: implications for the acrosome reaction. Cheetham JJ, et al. **Biochim Biophys Acta** 1990 May 24;1024(2):367-72

Rat pancreatic acini permeabilised with streptolysin O secrete amylase at Ca2+ concentrations in the micromolar range, when provided with ATP and GTP gamma S. Edwardson JM, et al. **Biochim Biophys Acta** 1990 Jun 12;1053(1):32-6

Exocytotic enzyme release from rabbit polymorphonuclear leukocytes after treatment with fluoride and calcium. Elferink JG, et al. **Biochim Biophys Acta** 1989 Oct 9; 1013(3):247-53

Calcium-dependent fusion of the plasma membrane fraction from human neutrophils with liposomes. Francis JW, et al. **Biochim Biophys Acta** 1990 Jun 11;1025(1):1-9

Inhibition of Cl(-)-stimulated ATPase activity in isolated basolateral membranes from Aplysia gut. Gerencser GA. **Biochim Biophys Acta** 1990 Apr 30;1023(3):475-7

T-cell restricted and unrestricted expression of transfected human interleukin-2 gene: phorbol ester- and calcium-inducible versus constitutive expression. Gulino A, et al. **Biochim Biophys Acta** 1990 Sep 10;1087(1):7-17

Calcium-dependent polymerization of human serum amyloid P component is inhibited by heparin and dextran sulfate. Hamazaki H. **Biochim Biophys Acta** 1989 Oct 19; 998(3):231-5

Effect of calcium ion on the interaction of aldolase with rabbit muscle myofibrils. Harris SJ, et al. **Biochim Biophys Acta** 1989 Nov 9;999(1):95-9

The mechanism of Ca2+ stimulation of citrulline and N-acetylglutamate synthesis by mitochondria. Johnston JD, et al. **Biochim Biophys Acta** 1990 Jan 29;1033(1):85-90

Composition of polar lipid acyl chains of Bacillus stearothermophilus as affected by temperature and calcium. Martins LO, et al. **Biochim Biophys Acta** 1990 Jun 28; 1045(1):17-20

Regulation of the pyruvate dehydrogenase complex by Ca2+ within toluene-permeabilized heart mitochondria. Rutter GA, et al. **Biochim Biophys Acta** 1989 Dec 14; 1014(3):263-70

Calcium-induced localization of calcium-activated neutral proteinase on plasma membranes. Sakai K, et al. **Biochim Biophys Acta** 1989 Oct 2;985(1):51-4

Hexose metabolism in pancreatic islets. Participation of Ca2(+)-sensitive 2-ketoglutarate dehydrogenase in the regulation of mitochondrial function. Sener A, et al. **Biochim Biophys Acta** 1990 Aug 9;1019(1):42-50

Effect of calcium ion on the dimerization of alpha-chymotrypsin. Shearwin KE, et al. **Biochim Biophys Acta** 1990 Mar 29;1038(1):136-8

Ca2(+)-induced secretion by electropermeabilized human neutrophils. The roles of Ca2+, nucleotides and protein kinase C. Smolen JE, et al. **Biochim Biophys Acta** 1990 Apr 9;1052(1):133-42

Lipid solubility is not the sole criterion for the inhibition of a Ca2(+)-activated K+ channel by alcohols. Tas PW, et al. **Biochim Biophys Acta** 1990 Apr 30;1023(3):436-40

Cross-linking and proteolysis in Ca2(+)-treated lens homogenates. Velasco PT, et al. **Biochim Biophys Acta** 1990 Sep 3;1040(2):187-91

Chicken skeletal muscle has three Ca2+-dependent proteinases. Wolfe FH, et al. **Biochim Biophys Acta** 1989 Oct 19;998(3):236-50

Effects of calcium on the stability and activity of guinea pig liver transglutaminase. Nury S, et al. **Biochimie** 1990 Apr; 72(4):219-26

Activation of bovine prothrombin as monitored by the clotting assay. Ong TC, et al. **Biol Chem Hoppe Seyler** 1990 Jan;371(1):63-8

Bradykinin action in the rat duodenum: Ca2(+)-dependent effects of bradykinin on the activity of particulate guanylate cyclase. Liebmann C, et al. **Biomed Biochim Acta** 1989; 48(8):597-600

A fluorescence temperature-jump study on Ca2(+)-induced conformational changes in calmodulin. Tsuruta H, et al. **Biophys Chem** 1990 Jan;35(1):75-84

The influence of Li+, Na+, Mg2+, Ca2+, and Zn2+ ions on the hydrogen bonds of the Watson-Crick base pairs. Anwander EH, et al. **Biopolymers** 1990 Mar-Apr; 29(4-5):757-69

Light scattering studies of the effect of Ca2+ on the structure of porcine submaxillary mucin. Varma BK, et al. **Biopolymers** 1990 Feb 5;29(2):441-8

Podosome expression in osteoclasts: influence of high extracellular calcium concentration. Teti A, et al. **Boll Soc Ital Biol Sper** 1989 Nov;65(11):1039-43

Influence of food and antacid administration on fluoride bioavailability from enteric-coated sodium fluoride tablets. Arnold P, et al. **Bone** 1989;10(6):401-7

Effects of Ca/Pi ratio, Ca2+ x Pi ion product, and pH of incubation fluid on accumulation of 45Ca2+ by matrix vesicles in vitro. Valhmu WB, et al. **Bone Miner** 1990 Mar; 8(3):195-209

Effect of ionized calcium on the neuromuscular blocking actions of atracurium and vecuronium in the cat. Gramstad L, et al. **Br J Anaesth** 1990 Feb;64(2):199-206

Alterations of responsiveness to adrenoceptor agonists and calcium of non-infarcted hypertrophied muscles from rats with chronic myocardial infarction. Itaya T, et al. **Br J Pharmacol** 1990 Mar;99(3):572-6

Effects of calmodulin antagonists on calcium-activated potassium channels in pregnant rat myometrium. Kihira M, et al. **Br J Pharmacol** 1990 Jun;100(2):353-9

Endothelium-dependent calcium-induced relaxation in the presence of Ca2+-antagonists in canine depolarized coronary arteries. Kikkawa K, et al. **Br J Pharmacol** 1989 Oct;98(2):700-6

The mode of inhibition of the Na+-K+ pump activity in mast cells by calcium. Knudsen T, et al. **Br J Pharmacol** 1989 Dec;98(4):1119-26

Calcium antagonizes the magnesium-induced high affinity state of the hepatic vasopressin receptor for the agonist interaction. Wang H, et al. **Br J Pharmacol** 1990 May; 100(1):5-10

Effect of cromakalim on contractions in rabbit isolated renal artery in the presence and absence of extracellular Ca2+. Wilson C, et al. **Br J Pharmacol** 1989 Dec;98(4):1303-11

Calcium- and voltage-dependent potassium channel in the rat retinal amacrine cells identified in vitro using a cell type-specific monoclonal antibody. Akagawa K, et al. **Brain Res** 1990 Jun 4;518(1-2):1-5

Effects of extracellular potassium concentration and postsynaptic membrane potential on calcium-induced potentiation in area CA1 of rat hippocampus. Grover LM, et al. **Brain Res** 1990 Jan 1;506(1):53-61

Ca2(+)-dependence provides evidence for differing mechanisms of GABA-induced inositol phosphate formation and GABA potentiation of inositol phosphate formation induced by noradrenaline in rat cerebral cortex. Crawford ML, et al. **Brain Res Mol Brain Res** 1990 Jul; 8(2):181-3

Effects of elevated calcium concentration on Na-K-ATPase activity of two euryhaline species, Cyprinodon variegatus and Mysidopsis bahia. Price EE, et al. **Bull Environ Contam Toxicol** 1990 Jan;44(1):121-8

Effects of sodium fluoride, vitamin D, and calcium on cortical bone remodeling in osteoporotic patients. Kragstrup J, et al. **Calcif Tissue Int** 1989 Dec;45(6):337-41

Calcium and protein kinase C enhance parathyroid hormone- and forskolin-stimulated adenylate cyclase in ROS 17/2.8 cells. Rao LG, et al. **Calcif Tissue Int** 1989 Dec;45(6):354-9

Inotropic effect of calcium on stunned myocardium. Beauchamp RJ, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S151

Reversible elimination of myofibrillar Ca2+ sensitivity by diamide and other sulfhydryl reagents: comparison with reversible contracture produced in intact cells. Gailis L, et al. **Can J Physiol Pharmacol** 1990 Aug;68(8):1170-5

Characterization of a calcium-activated potassium channel in human fibroblasts. Stockbridge LL, et al. **Can J Physiol Pharmacol** 1989 Oct;67(10):1300-7

Extracellular calcium and the inotropic effect of epinephrine on frog skeletal muscle. Williams JH, et al. **Can J Physiol Pharmacol** 1989 Dec;67(12):1574-9

The role of calcium in differentiation of leukemic cell lines. Rephaeli A, et al. **Cancer Biochem Biophys** 1990 Apr; 11(2):119-25

Choline uptake is increased by Ca++ and liposomes+ Ca++ in ascites tumor cells. Ritter C, et al. **Cancer Biochem Biophys** 1989 Oct;10(4):329-35

Enhanced Ca2(+)-dependent proteolysis associated with Adriamycin-resistant HL-60 cells. Aquino A, et al. **Cancer Commun** 1990;2(7):243-7

Bovine papillomavirus type I induces resistance to Ca+(+)-induced terminal differentiation in murine keratinocytes. Reiss M, et al. **Cancer Commun** 1989; 1(2):75-82

Attenuation of azoxymethane-induced colonic mucosal ornithine decarboxylase and tyrosine kinase activity by calcium in rats. Arlow FL, et al. **Cancer Res** 1989 Nov 1;49(21):5884-8

Effect of extracellular calcium concentration on the metabolism of polycyclic aromatic hydrocarbons by cultured mouse keratinocytes. DiGiovanni J, et al. **Cancer Res** 1989 Oct 15;49(20):5567-74

Ca2(+)-dependent binding of tamoxifen to calmodulin isolated from bovine brain. Lopes MC, et al. **Cancer Res** 1990 May 1;50(9):2753-8

Effect of tumour promoters and non-genotoxic carcinogens on terminal differentiation and proliferation in mouse teratoma XB2 cells cultured in low calcium medium. Hewitt SD, et al. **Carcinogenesis** 1990 Mar;11(3):371-5

Electrical and mechanical effects of strontium in sheep

cardiac Purkinje fibres. Gonzalez MD, et al. **Cardiovasc Res** 1989 Oct;23(10):867–81

Circulating calcium modulates adrenaline induced cyclic adenosine monophosphate production. Prielipp RC, et al. **Cardiovasc Res** 1989 Oct;23(10):838–41

Proliferating, transformed keratinocytes cultured under low Ca2+ conditions exhibit high-affinity epidermal growth factor receptors. Boonstra J, et al. **Cell Biol Int Rep** 1989 Jul;13(7):609–17

Potent and cooperative feedback inhibition of adenylate cyclase activity by calcium in pituitary-derived GH3 cells. Boyajian CL, et al. **Cell Calcium** 1990 Apr;11(4):299–307

Ca2+ and calmodulin-sensitive inositol trisphosphate kinase from bovine parathyroid. Conigrave AD, et al. **Cell Calcium** 1989 Nov–Dec;10(8):543–50

The effect of Ca2+ and calmodulin on the inhibition of Ca2(+)+Mg2(+)-ATPase in erythrocyte ghost membranes by nonpolar and polar carbodiimides. Famulski KS, et al. **Cell Calcium** 1990 Apr;11(4):275–80

Control of renin secretion by extracellular calcium. Fray JC. **Cell Calcium** 1990 May;11(5):339–41 (26 ref.)

The organization of gangliosides and other lipid components in synaptosomal plasma membranes and modifying effects of calcium ion. Leskawa KC, et al. **Cell Mol Neurobiol** 1981 Dec;1(4):373–88

Phorbol ester inhibits polyphosphoinositide phosphodiesterase activity stimulated by either Ca2+, fluoride or GTP analogue in HL60 membranes and in permeabilized HL60 cells. Geny B, et al. **Cell Signal** 1989; 1(2):165–72

Ram spermatozoa produce inositol 1,4,5-trisphosphate but not inositol 1,3,4,5-tetrakisphosphate during the Ca2+/ionophore-induced acrosome reaction. Harrison RA, et al. **Cell Signal** 1990;2(3):277–84

Intracellular distribution of a 32-KDa calcium-dependent phospholipid-binding protein from human placenta. Giga-Hama Y, et al. **Cell Struct Funct** 1989 Oct; 14(5):587–95

Effects of Ca2+, Zn2+ and Cd2+ on uridine diphosphate-glucuronyltransferase and beta-glucuronidase activities in rat liver microsomes. Yamaguchi M, et al. **Chem Pharm Bull (Tokyo)** 1990 Jan;38(1):159–63

Calcium ion influence on thermotropic behaviour of dipalmitoylphosphatidylcholine-vitamin D3 systems. Castelli F, et al. **Chem Phys Lipids** 1990 Jan;52(2):129–38

Neurohormonal control of calcium sensitivity of myofilaments in rat single heart cells. Puceat M, et al. **Circ Res** 1990 Aug;67(2):517–24

Calcium attenuates epinephrine's beta-adrenergic effects in postoperative heart surgery patients. Zaloga GP, et al. **Circulation** 1990 Jan;81(1):196–200

Inhibition of lactate dehydrogenase by an EDTA.Ca2+ complex. Shina R, et al. **Clin Chim Acta** 1990 Aug 15; 189(2):231–5

Suppressor calcium infusion raises plasma atrial natriuretic peptide concentrations in humans. Finn WL, et al. **Clin Exp Pharmacol Physiol** 1990 Mar;17(3):173–7

Calmodulin-independent stimulation of renin release by exposure of rat kidney cortical slices to calcium. Matsumura Y, et al. **Clin Exp Pharmacol Physiol** 1988 Aug; 15(8):585–90

Calcium reverses lidocaine-induced conduction block in rat fimbria in vitro. Newmark J, et al. **Comp Biochem Physiol [A]** 1989;94(2):183–6

Pharmacodynamic response to ionized calcium during acute sepsis [see comments] Steinhorn DM, et al. **Crit Care Med** 1990 Aug;18(8):851–7 Comment in: Crit Care Med 1990 Aug;18(8):895–6.

Hypothermic perfusion of rabbit livers: effect of perfusate composition (Ca and lactobionate) on enzyme release and tissue swelling. Lindell S, et al. **Cryobiology** 1989 Oct; 26(5):407–12

Transient expression of a Ca2+-activated Cl- current during development of quail sensory neurons. Bernheim L, et al. **Dev Biol** 1989 Nov;136(1):129–39

Nerve growth cone migration onto Schwann cells involves the calcium-dependent adhesion molecule, N-cadherin. Letourneau PC, et al. **Dev Biol** 1990 Apr;138(2):430–42

Beta cell desensitization to glucose induced by hyperglycemia is augmented by increased calcium. Dunbar JC, et al. **Diabetes Res Clin Pract** 1989 Sep 18;7(3):187–96

Recombinant human protein C derivatives: altered response to calcium resulting in enhanced activation by thrombin. Ehrlich HJ, et al. **EMBO J** 1990 Aug;9(8):2367–73

Okadaic acid, an inhibitor of protein phosphatase 1 in Paramecium, causes sustained Ca2(+)-dependent backward swimming in response to depolarizing stimuli. Klumpp S, et al. **EMBO J** 1990 Mar;9(3):685–9

Chromaffin cell scinderin, a novel calcium-dependent actin filament-severing protein. Rodriguez Del Castillo A, et al. **EMBO J** 1990 Jan;9(1):43–52

Altered rate of synthesis of gonadotropin-releasing hormone receptors: effects of homologous hormone appear independent of extracellular calcium. Braden TD, et al. **Endocrinology** 1990 May;126(5):2577–82

Stimulation of calbindin-D9K (CaBP9K) gene expression by calcium and 1,25-dihydroxycholecalciferol in fetal rat duodenal organ culture. Brehier A, et al. **Endocrinology** 1990 Aug;127(2):580–7

Influence of calcium on the metabolism of intact parathyroid hormone by isolated perfused rat kidney and liver. Daugaard H, et al. **Endocrinology** 1990 Apr;126(4):1813–20

Individual parathyroid cells are more sensitive to calcium than a parathyroid cell population. Fitzpatrick LA, et al. **Endocrinology** 1990 Mar;126(3):1720–7

Differences in the actions of calcium versus lanthanum to influence parathyroid hormone release. Fitzpatrick LA. **Endocrinology** 1990 Aug;127(2):711–5

Calcium-dependent protein kinase activity is decreased in diabetic rat sciatic nerve. Gabbay RA, et al. **Endocrinology** 1990 Sep;127(3):1194–8

Some effects of energy-transfer inhibitors and of Ca++-free or K+-enhanced media on the release of luteinizing hormone (LH) from the rat pituitary gland in vitro. Samli MH, et al. **Endocrinology** 1968 Feb;82(2):225–31

Endothelin: a potent stimulus of atrial natriuretic peptide secretion by superfused rat atria and its dependency on calcium. Schiebinger RJ, et al. **Endocrinology** 1990 Jul; 127(1):119–25

Guanine nucleotides and Ca2(+)-dependent lysosomal secretion in electropermeabilised human platelets. Athayde CM, et al. **Eur J Biochem** 1990 May 20;189(3):647–55

Effect of pressure and calcium on the reversible inhibition of the sarcoplasmic-reticulum calcium-transport enzyme and on its tryptic cleavage pattern. Ronzani N, et al. **Eur J Biochem** 1990 Mar 30;188(3):557–65

Calcium-dependent distance changes in binary and ternary complexes of troponin. Schulzki HD, et al. **Eur J Biochem** 1990 May 20;189(3):683–92

Heat capacity and entropy changes of the major isotype of the toad (Bufo) parvalbumin induced by calcium binding. Tanokura M. **Eur J Biochem** 1990 Feb 22;188(1):23–8

Increased calcium sensitivity in isolated resistance arteries from spontaneously hypertensive rats: effects of dihydropyridines. Boonen HC, et al. **Eur J Pharmacol** 1990 Apr 25;179(3):403–12

Calcium influx and protein kinase C activation involved in uterine vasoconstriction in guinea pigs. Fallgren B, et al. **Eur J Pharmacol** 1989 Oct 24;170(1–2):61–7

A Ca2+-activated K+ channel from rabbit aorta: modulation by cromakalim. Gelband CH, et al. **Eur J Pharmacol** 1989 Aug 22;167(2):201–10

Effects of ouabain and EGTA on the inhibitory effect of Ca2+ on guinea pig stomach smooth muscle ('Ca reversal'). Karibe H, et al. **Eur J Pharmacol** 1990 Jul 3; 182(2):273–81

Homologous desensitization of the effects of endothelin on rabbit aorta rings and on cultured rat aorta smooth muscle cells. Miasiro N, et al. **Eur J Pharmacol** 1990 Apr 10; 179(1–2):151–8

5-Hydroxytryptamine receptor agonists influence calcium-stimulated adenylate cyclase activity in the cerebral cortex and hippocampus of the rat. Mørk A, et al. **Eur J Pharmacol** 1990 Jan 17;175(3):237–44

Inhibitory action of dantrolene on Ca-induced Ca2+ release from sarcoplasmic reticulum in guinea pig skeletal muscle. Ohta T, et al. **Eur J Pharmacol** 1990 Mar 13;178(1):11–9

Effect of calcium on endothelium-derived relaxing factor formation and cGMP levels in endothelial cells. Schmidt K, et al. **Eur J Pharmacol** 1989 Nov 7;170(3):157–66

Isolation and properties of a soluble fraction of Paracentrotus lividus sea urchin eggs responsible for the calcium-induced oxidative burst. Firon N, et al. **Exp Cell Res** 1990 May; 188(1):10–5

Involvement of protein kinase C in translocation of desmoplakins from cytosol to plasma membrane during desmosome formation in human squamous cell carcinoma cells grown in low to normal calcium concentration. Sheu HM, et al. **Exp Cell Res** 1989 Nov;185(1):176–90

Stimulation of DNA synthesis by an inositol polyphosphate-activated protein phosphatase in calcium-deprived rat liver cells. Zwiller J, et al. **Exp Cell Res** 1990 Apr;187(2):193–6

Regulation of goblet cell differentiation by calcium in embryonic chick intestine. Black BL, et al. **FASEB J** 1989 Dec;3(14):2653–9

Additive effects of dexamethasone and calcium on the calcitonin mRNA level in adrenalectomized rats. Besnard P, et al. **FEBS Lett** 1989 Dec 4;258(2):293–6

Calcium-dependent nitric oxide synthesis in endothelial cytosol is mediated by calmodulin. Busse R, et al. **FEBS Lett** 1990 Jun 4;265(1–2):133–6

Two novel brain proteins, CaBP33 and CaBP37, are calcium-dependent phospholipid- and membrane-binding proteins. Donato R, et al. **FEBS Lett** 1990 Mar 12; 262(1):72–6

Activation of single Ca2(+)-dependent K+ channel by external ATP in mouse macrophages. Hara N, et al. **FEBS Lett** 1990 Jul 16;267(2):281–4

Extracellular Ca2+-activated K channel in coronary artery smooth muscle cells and its role in vasodilation. Inoue I, et al. **FEBS Lett** 1989 Sep 25;255(2):281–4

The calcium ATPase of sarcoplasmic reticulum is inhibited by one Ca2+ ion. Khananshvili D, et al. **FEBS Lett** 1990 Jan 15;260(1):83–4

Ca2(+)-dependent noradrenaline release from permeabilised PC12 cells is blocked by botulinum neurotoxin A or its light chain. McInnes C, et al. **FEBS Lett** 1990 Feb 26; 261(2):323–6

Quinine blocks the high conductance, calcium-activated potassium channel in rat pancreatic beta-cells. Mancilla E, et al. **FEBS Lett** 1990 Jan 15;260(1):105–8

Ca2+-dependent formation of an L-arginine-derived activator of soluble guanylyl cyclase in bovine lung. Mayer B, et al. **FEBS Lett** 1989 Oct 9;256(1–2):211–4

Calcium-dependent phospholipid binding proteins associated with the membranes of rabbit skeletal muscle. Melgunov VI, et al. **FEBS Lett** 1990 Jan 15;260(1):79–82

Regulation of phosphoinositide hydrolysis induced by histamine and guanine nucleotides in human HeLa carcinoma cells. Calcium and pH dependence and inhibitory role of protein kinase C. Tilly BC, et al. **FEBS Lett** 1990 Jun 4;265(1–2):80–4

Some relationships between drugs and ions at a ganglionic synapse. Volle RL, et al. **Fed Proc** 1968 Jan–Feb; 27(1):110–4

Influence of calcium ions on the action of substances which affect cardiac function. West TC. **Fed Proc** 1968 Jan–Feb; 27(1):120–5

Transient exposure to a physiologically-relevant concentration of calcium confers tobramycin resistance upon sessile cells of Pseudomonas aeruginosa. Hoyle BD, et al. **FEMS Microbiol Lett** 1989 Aug;51(3):339–41

The role of exogenous calcium for gonadotropin-stimulated progesterone production by human granulosa-luteal cells. Lee HL, et al. **Fertil Steril** 1989 Dec;52(6):958–64

Calcium influence on the dry mass content and surface area of nuclei and cytoplasm during differentiation of cortex cells in pea (Pisum sativum L.) roots treated with heavy metals. Gabara B, et al. **Folia Histochem Cytobiol** 1989; 27(3):149–60

Alterations of human erythrocyte membrane fluidity by oxygen-derived free radicals and calcium. Watanabe H, et al. **Free Radic Biol Med** 1990;8(6):507–14

Modifying effects of calcium on aluminum induced toxicity in mammalian tissues in vivo. Roy AK, et al. **Gegenbaurs Morphol Jahrb** 1990;136(2):155–61

The effects of ions and hypothalamic factors on the in vitro activity of rainbow trout prolactin cells. Johnston LR, et al. **Gen Comp Endocrinol** 1990 Aug;79(2):253–60

Possible participation of calcium in growth hormone release and in thyrotropin-releasing hormone and human pancreatic growth hormone-releasing factor synergy in a primary culture of chicken pituitary cells. Perez FM, et al. **Gen Comp Endocrinol** 1989 Sep;75(3):481–91

Effect of extracellular calcium and calcium channel antagonists on ATP and field stimulation induced contractions of the mouse urinary bladder. Acevedo CG, et al. **Gen Pharmacol** 1989;20(6):811–5

Influence of extracellular calcium in the effects of dibekacin and diltiazem on indirectly elicited tetanic responses in the rat phrenic-hemidiaphragm preparation. Baños JE, et al. **Gen Pharmacol** 1990;21(4):521–5

Interactions between forskolin, calcium and Bay K 8644 in K+-depolarized rat uterine muscle. Calixto JB. **Gen Pharmacol** 1989;20(6):771–8

Effect of lipoxygenase inhibitors on Ca2(+)-induced constriction of the rabbit ear artery. Scriabine A, et al. **Gen Pharmacol** 1990;21(2):235–9

Calcium affects phosphoinositide turnover in human erythrocytes. Folk P, et al. **Gen Physiol Biophys** 1990 Jun; 9(3):281–90

The influence of the rate of rigor state development on its tension in single muscle fibre. Khromov AS, et al. **Gen Physiol Biophys** 1990 Jun;9(3):245–50

The effect of magnesium on calcium uptake and contractility in the human myometrium. Popper LD, et al. **Gynecol Obstet Invest** 1989;28(2):78–81

Mitochondrial alpha-glycerol phosphate dehydrogenase activity in IIA fibres of the rat lateral gastrocnemius muscle; the effect of Ca2+ and ATP. Lomax RB, et al. **Histochem J** 1990 Feb;22(2):119–24

Actinomycin D inhibits the rapid increase in translatable calcitonin mRNA provoked by acute calcium stimulation. Segond N, et al. **Horm Metab Res** 1989 Sep;21(9):489–93

Calcitonin secretion and cyclic AMP-efflux from C-cells, stimulated by glucagon and either calcium or Bay K 8644. Scherübl H, et al. **Horm Metab Res Suppl** 1989;21:18–21

Calcium sensitivity of Ca2(+)-activated K+ channels in spontaneously hypertensive stroke-prone rats. Furspan PB, et al. **Hypertension** 1990 Feb;15(2 Suppl):I97–101

Sodium depletion increases calcium-activated left ventricular pressure in the rat. Rossi G, et al. **Hypertension** 1990 Jun; 15(6 Pt 2):894–9

Interaction of central Asian cobra (Naja naja oxiana Eichwald) venom cytotoxins with phospholipase D. Khole V. **Indian J Biochem Biophys** 1989 Aug;26(4):275–7

Ca2(+)-dependent glucose transport in chicken intestine. Majumdar S, et al. **Indian J Exp Biol** 1989 Jul;27(7):661–3

Effects of calcium, strontium, and barium salts on frog rectus abdominis. Premendran SJ, et al. **Indian J Exp Biol** 1990 Jun;28(6):590–1

Effects of calcium ion on neurite outgrowth of rat spinal cord neurons in vitro: the role of non-neuronal cells in regulating neurite sprouting. Hantaz-Ambroise D, et al. **Int J Dev Neurosci** 1989;7(6):591–602

Calcium-dependent anticandidal action of pradimicin A. Sawada Y, et al. **J Antibiot (Tokyo)** 1990 Jun;43(6):715–21

Influence of nutrient-limited growth on pathogenesis-associated outer membrane proteins of Yersinia enterocolitica. Harakeh S, et al. **J Appl Bacteriol** 1989 Aug;67(2):209–12

lcrR, a low-Ca2(+)-response locus with dual Ca2(+)-dependent functions in Yersinia pestis. Barve SS, et al. **J Bacteriol** 1990 Aug;172(8):4661–71

Energy and calcium ion dependence of proteolysis during

sporulation of Bacillus subtilis cells. O'Hara MB, et al. J Bacteriol 1990 Aug;172(8):4161–70

Nucleotide sequencing of the Proteus mirabilis calcium–independent hemolysin genes (hpmA and hpmB) reveals sequence similarity with the Serratia marcescens hemolysin genes (shlA and shlB). Uphoff TS, et al. J Bacteriol 1990 Mar;172(3):1206–16

The lcrE gene is part of an operon in the lcr region of Yersinia enterocolitica O:3. Viitanen AM, et al. J Bacteriol 1990 Jun;172(6):3152–62

Purification and characterization of an aminopeptidase from sperm of the sea urchin, Strongylocentrotus intermedius. Ca2(+)-dependent substrate specificity as a novel feature of the enzyme. Yasuhara T, et al. J Biochem (Tokyo) 1990 Feb;107(2):273–9

The active site of membrane–bound meizothrombin. A fluorescence determination of its distance from the phospholipid surface and its conformational sensitivity to calcium and factor Va. Armstrong SA, et al. J Biol Chem 1990 Apr 15;265(11):6210–8

Leiurotoxin I (scyllatoxin), a peptide ligand for Ca2(+)-activated K+ channels. Chemical synthesis, radiolabeling, and receptor characterization. Auguste P, et al. J Biol Chem 1990 Mar 15;265(8):4753–9

A chloride– and calcium–dependent glutamate–binding protein from rat brain. Identification as a ubiquitous constituent of the inner mitochondrial membrane. Brose N, et al. J Biol Chem 1990 Jun 25;265(18):10604–10

The calcium requirement for stability and enzymatic activity of two isoforms of barley aleurone alpha–amylase. Bush DS, et al. J Biol Chem 1989 Nov 15;264(32):19392–8

A calcium–dependent mechanism for associating a soluble arachidonoyl–hydrolyzing phospholipase A2 with membrane in the macrophage cell line RAW 264.7. Channon JY, et al. J Biol Chem 1990 Apr 5;265(10):5409–13

Divalent cation regulation of phosphoinositide metabolism. Naturally occurring B lymphoblasts contain a Mg2(+)-regulated phosphatidylinositol–specific phospholipase C. Chien MM, et al. J Biol Chem 1990 Jun 5;265(16):9201–7

Calcium–dependent and phosphorylation–stimulated proteolysis of lipocortin I by an endogenous A431 cell membrane protease. Chuah SY, et al. J Biol Chem 1989 Dec 15;264(35):21160–6

Calcium/calmodulin–independent autophosphorylation sites of calcium/calmodulin–dependent protein kinase II. Studies on the effect of phosphorylation of threonine 305/306 and serine 314 on calmodulin binding using synthetic peptides. Colbran RJ, et al. J Biol Chem 1990 Jul 5;265(19):11213–9

High affinity interaction between C4b–binding protein and vitamin K–dependent protein S in the presence of calcium. Suggestion of a third component in blood regulating the interaction. Dahlbäck B, et al. J Biol Chem 1990 Sep 25; 265(27):16082–7

Generation of the Ca2(+)-independent form of Ca2+/calmodulin–dependent protein kinase II in cerebellar granule cells. Fukunaga K, et al. J Biol Chem 1989 Dec 25;264(36):21830–6

Purification and characterization of a unique, potent, peptidyl probe for the high conductance calcium–activated potassium channel from venom of the scorpion Buthus tamulus. Galvez A, et al. J Biol Chem 1990 Jul 5; 265(19):11083–90

Calcium–independent phospholipases from guinea pig digestive tract as probes to study the mechanism of lipocortin. Gassama–Diagne A, et al. J Biol Chem 1990 Mar 15;265(8):4309–14

Characterizations of two distinct Ca2+–dependent phospholipid–binding proteins of 68–kDa isolated from human placenta. Hayashi H, et al. J Biol Chem 1989 Oct 15;264(29):17222–30

Comparison of metal ion–induced conformational changes in parvalbumin and oncomodulin as probed by the intrinsic fluorescence of tryptophan 102. Hutnik CM, et al. J Biol Chem 1990 Jul 15;265(20):11456–64

Calcium–dependent regulation of actin filament bundling by lipocortin–85. Ikebuchi NW, et al. J Biol Chem 1990 Feb 25;265(6):3392–400

Ca2+–dependent deimination–induced disassembly of intermediate filaments involves specific modification of the amino–terminal head domain. Inagaki M, et al. J Biol Chem 1989 Oct 25;264(30):18119–27

Effect of Ca2+ on binding of the calpains to calpastatin. Kapprell HP, et al. J Biol Chem 1989 Oct 25; 264(30):17888–96

Protein kinase C heterogeneity in GH4C1 rat pituitary cells. Characterization of a Ca2(+)-independent phorbol ester receptor. Kiley S, et al. J Biol Chem 1990 Sep 15; 265(26):15704–12

Ca2(+)-activated K+ channels from rabbit kidney medullary thick ascending limb cells expressed in Xenopus oocytes. Lu L, et al. J Biol Chem 1990 Sep 25; 265(27):16190–4

Two functionally distinct cholecystokinin receptors show different modes of action on Ca2+ mobilization and phospholipid hydrolysis in isolated rat pancreatic acini. Studies using a new cholecystokinin analog, JMV–180. Matozaki T, et al. J Biol Chem 1990 Apr 15;265(11):6247–54

The substitution of calcium for magnesium in H+,K+–ATPase catalytic cycle. Evidence for two actions of divalent cations. Mendlein J, et al. J Biol Chem 1989 Nov 5;264(31):18512–9

Reappraisal of the effect of Ca2+ on the activity of liver microsomal glucose–6–phosphatase. Mithieux G, et al. J Biol Chem 1990 May 5;265(13):7257–9

Coupling of ATP hydrolysis to phosphate uptake in Rhodospirillum rubrum chromatophores under the influence of Ca2+ and Mg2+. Montero–Lomelí M, et al. J Biol Chem 1989 Dec 15;264(35):21014–7

Submicromolar Ca2+ regulates phosphorylating respiration by normal rat liver and AS–30D hepatoma mitochondria by different mechanisms. Murphy AN, et al. J Biol Chem 1990 Jun 25;265(18):10527–34

Translocation of protein kinase C in human polymorphonuclear neutrophils. Regulation by cytosolic Ca2(+)–independent and Ca2(+)–dependent mechanisms. O'Flaherty JT, et al. J Biol Chem 1990 Jun 5; 265(16):9146–52

Activation of type II calcium/calmodulin–dependent protein kinase by Ca2+/calmodulin is inhibited by autophosphorylation of threonine within the calmodulin–binding domain. Patton BL, et al. J Biol Chem 1990 Jul 5;265(19):11204–12

Calcium ion activation of rabbit liver alpha 1,2–mannosidase. Schutzbach JS, et al. J Biol Chem 1990 Feb 15; 265(5):2546–9

Purification, crystallization, and preliminary X–ray diffraction analysis of rat kidney annexin V, a calcium–dependent phospholipid–binding protein. Seaton BA, et al. J Biol Chem 1990 Mar 15;265(8):4567–9

Calcium dependence of phenylephrine–, endothelin–, and potassium chloride–stimulated atrial natriuretic factor secretion from long term primary neonatal rat atrial cardiocytes. Sei CA, et al. J Biol Chem 1990 May 5; 265(13):7166–72

Polyvalent cations inhibit human neutrophil chemotaxis by interfering with the polymerization of actin. Simchowitz L, et al. J Biol Chem 1990 Aug 15;265(23):13457–63

Expression of a synthetic gene for horseradish peroxidase C in Escherichia coli and folding and activation of the recombinant enzyme with Ca2+ and heme. Smith AT, et al. J Biol Chem 1990 Aug 5;265(22):13335–43

Extracellular calcium regulates distribution and transport of heparan sulfate proteoglycans in a rat parathyroid cell line. Takeuchi Y, et al. J Biol Chem 1990 Aug 15; 265(23):13661–8

Characterization of high affinity binding sites for charybdotoxin in sarcolemmal membranes from bovine aortic smooth muscle. Evidence for a direct association with the high conductance calcium–activated potassium channel. Vázquez J, et al. J Biol Chem 1989 Dec 15; 264(35):20902–9

Regulation of norepinephrine secretion in permeabilized PC12 cells by Ca2(+)-stimulated phosphorylation. Effects of protein phosphatases and phosphatase inhibitors. Wagner PD, et al. J Biol Chem 1990 Jun 25;265(18):10352–7

Thiophosphorylation causes Ca2+–independent norepinephrine secretion from permeabilized PC12 cells. Wagner PD, et al. J Biol Chem 1989 Nov 25; 264(33):19614–20

Calcium–induced shape change of calmodulin with mastoparan studied by solution X–ray scattering. Yoshino H, et al. J Biol Chem 1989 Nov 25;264(33):19706–9

Perturbation of hydrogen bonds in the adenine ... thymine base pair by Na+, Mg2+, Ca2+ and NH4+ cations. Hobza P, et al. J Biomol Struct Dyn 1985 Jun;2(6):1245–54

Bioavailability of enteric–coated sodium fluoride tablets as affected by the administration of calcium supplements at different time intervals. Devogelaer JP, et al. J Bone Miner Res 1990 Mar;5 Suppl 1:S75–9

High extracellular calcium increases the production of a parathyroid hormone–like activity by cultured Leydig tumor cells associated with humoral hypercalcemia. Rizzoli R, et al. J Bone Miner Res 1989 Dec;4(6):839–44

Calcium–sensitivity modulation of cardiac myofibrillar proteins. Rüegg JC, et al. J Cardiovasc Pharmacol 1989;14 Suppl 3:S20–3

Influence of extracellular calcium on cell permeabilization and growth regulation by the lymphokine leukoregulin. Barnett SC, et al. J Cell Biochem 1990 May;43(1):89–101

Anchorage of secretion–competent dense granules on the plasma membrane of bovine platelets in the absence of secretory stimulation. Morimoto T, et al. J Cell Biol 1990 Jul;111(1):79–86

Calcium–independent growth of human ovarian carcinoma cells. Chan TC. J Cell Physiol 1989 Dec;141(3):461–6

Fusion of mouse alveolar macrophages induced by 1 alpha,25–dihydroxyvitamin D3 involves extracellular, but not intracellular, calcium. Jin CH, et al. J Cell Physiol 1990 Feb;142(2):434–9

Ca–dependent slow action potentials in neuromuscular diseases. Nicola Siri L, et al. J Cell Physiol 1990 Jun; 143(3):590–5

Bimodal redistribution of surface transmembrane glycoproteins during Ca2+–dependent secretion (acrosome reaction) in boar spermatozoa. Aguas AP, et al. J Cell Sci 1989 Jul;93 (Pt 3):467–79

A Ca2(+)-sensitive glycoprotein, GP90, associated with the cytoskeleton from brain and gizzard. Moss DJ, et al. J Cell Sci 1989 May;93 (Pt 1):85–94

Effect of acute hypercalcemia on thyrotropin (TSH) and triiodothyronine responses to TSH–releasing hormone in man. Gillet C, et al. J Clin Endocrinol Metab 1990 Aug; 71(2):516–9

Suppression of parathyroid hormone secretion with oral calcium in normal subjects and patients with primary hyperparathyroidism. Tohme JF, et al. J Clin Endocrinol Metab 1990 Apr;70(4):951–6

Voltage–dependent and Ca2(+)–activated ion channels in human neutrophils. Krause KH, et al. J Clin Invest 1990 Feb;85(2):491–8

Simple assay of calcium dependency for virulent plasmid–bearing clones of Yersinia enterocolitica. Bhaduri S, et al. J Clin Microbiol 1990 Apr;28(4):798–800

Enhancement by calcium of the detection of cytomegalovirus in cells treated with dexamethasone and dimethyl sulfoxide. West PG, et al. J Clin Microbiol 1990 Aug;28(8):1708–10

Characterization of the calcium paradox in the isolated perfused frog heart: enzymatic, ionic, contractile and electrophysiological studies. Touraki M, et al. J Comp Physiol [B] 1990;160(1):113–8

Cytosolic pH regulation in osteoblasts. Regulation of anion exchange by intracellular pH and Ca2+ ions. Green J, et al. J Gen Physiol 1990 Jan;95(1):121–45

Calcium–independent cell volume regulation in human lymphocytes. Inhibition by charybdotoxin. Grinstein S, et al. J Gen Physiol 1990 Jan;95(1):97–120

Effects of partial extraction of light chain 2 on the Ca2+ sensitivities of isometric tension, stiffness, and velocity of shortening in skinned skeletal muscle fibers. Hofmann PA, et al. J Gen Physiol 1990 Mar;95(3):477–98

The Ca2+–activated K+ channel and its functional roles in smooth muscle cells of guinea pig taenia coli. Hu SL, et al. J Gen Physiol 1989 Nov;94(5):833–47

Permeation, selectivity, and blockade of the Ca2+–activated potassium channel of the guinea pig taenia coli myocyte. Hu SL, et al. J Gen Physiol 1989 Nov;94(5):849–62

Kinetic time constants independent of previous single–channel activity suggest Markov gating for a large conductance Ca–activated K channel. McManus OB, et al. J Gen Physiol 1989 Dec;94(6):1037–70

Effects of insulin and phosphatase on a Ca2(+)-dependent Cl– channel in a distal nephron cell line (A6). Marunaka Y, et al. J Gen Physiol 1990 May;95(5):773–89

Calcium supplementation lowers serum parathyroid hormone levels in elderly subjects. Kochersberger G, et al. J Gerontol 1990 Sep;45(5):M159–62

Effects of chlorpromazine and low calcium on the cytoskeleton and the secretory function of hepatocytes in vitro. Kawahara H, et al. J Hepatol 1990 Jan;10(1):8–16

The influence of calcium, sodium, and the Na+/Ca2+ antiport on susceptibility to cytolysin/perforin–mediated cytolysis. Kraut RP, et al. J Immunol 1990 May 1; 144(9):3498–505

Dependence on Ca2+ of lipoprotein lipase stability. Goldman R. J Leukoc Biol 1990 Aug;48(2):193–9

Calcium is required for PMA induced superoxide release from human neutrophils. Ishihara Y, et al. J Leukoc Biol 1990 Jul;48(1):89–96

Ca2+–activated K+ channels from cultured renal medullary thick ascending limb cells: effects of pH. Cornejo M, et al. J Membr Biol 1989 Aug;110(1):49–55

H+/Ca2+ exchange in rabbit renal cortical endosomes. Hilden SA, et al. J Membr Biol 1989 Dec;112(2):131–8

Ca2+ and cAMP activate K+ channels in the basolateral membrane of crypt cells isolated from rabbit distal colon. Loo DD, et al. J Membr Biol 1989 Aug;110(1):19–28

Analysis of the blocking activity of charybdotoxin homologs and iodinated derivatives against Ca2+–activated K+ channels. Lucchesi K, et al. J Membr Biol 1989 Aug; 109(3):269–81

Increase in gap junction resistance with acidification in crayfish septate axons is closely related to changes in intracellular calcium but not hydrogen ion concentration. Peracchia C. J Membr Biol 1990 Jan;113(1):75–92

Calmodulin defects cause the loss of Ca2(+)-dependent K+ currents in two pantophobiac mutants of Paramecium tetraurelia. Preston RR, et al. J Membr Biol 1990 Apr; 115(1):51–60

Interactions between mutants with defects in two Ca2(+)-dependent K+ currents of Paramecium tetraurelia. Preston RR, et al. J Membr Biol 1990 Apr; 115(1):61–9

Ca2+–activated K+ conductance of the human red cell membrane: voltage–dependent Na+ block of outward–going currents. Stampe P, et al. J Membr Biol 1989 Nov;112(1):9–14

Sulmazole (AR–L 115BS) activates the sheep cardiac muscle sarcoplasmic reticulum calcium–release channel in the presence and absence of calcium. Williams AJ, et al. J Membr Biol 1990 May;115(2):167–78

Segmental electrical uncoupling and conduction blocks after calcium removal and replacement in a mammalian auricle. Hervé JC, et al. J Mol Cell Cardiol 1989 Oct;21(10):1017–27

Mediation by GTP gamma S and Ca2+ of inositol trisphosphate generation in rat heart membranes. Renard D, et al. J Mol Cell Cardiol 1990 Jan;22(1):13–22

Effects of calcium depletion and loading on injury during metabolic inhibition of isolated adult rat myocytes. Rim DS, et al. J Mol Cell Cardiol 1990 Feb;22(2):227–37

Ca–mediated action potentials in ventricular myocardium. Variation by various stimulation patterns and by K–channel blockers. Schüttler K, et al. J Mol Cell Cardiol 1989 Sep; 21(9):901–9

Caffeine– and Ca2(+)-induced mechanical oscillations in isolated skeletal muscle fibres of the frog. Herrmann–Frank

A. **J Muscle Res Cell Motil** 1989 Dec;10(6):437–45

Deterioration induced by physiological concentration of calcium ions in skinned muscle fibres. Kasuga N, et al. **J Muscle Res Cell Motil** 1990 Feb;11(1):41–7

Ca2(+)-dependent, ATP-induced conversion of the [3H]hemicholinium-3 binding sites from high- to low-affinity states in rat striatum: effect of protein kinase inhibitors on this affinity conversion and synaptosomal choline transport. Chatterjee TK, et al. **J Neurochem** 1990 May;54(5):1500–8

Diacylglycerol-induced stimulation of neurotransmitter release from rat brain striatal synaptosomes. Davis ME, et al. **J Neurochem** 1990 Feb;54(2):662–8

Selective alterations in presynaptic cytomatrix protein organization induced by calcium and other divalent cations that modulate exocytosis. Garner JA. **J Neurochem** 1990 May;54(5):1700–8

Differential sensitivity to cations of the melatonin receptors in the rat area postrema and suprachiasmatic nuclei. Laitinen JT, et al. **J Neurochem** 1990 Oct;55(4):1450–3

Glutamine and aspartate loading of synaptosomes: a reevaluation of effects on calcium-dependent excitatory amino acid release. McMahon HT, et al. **J Neurochem** 1990 Feb;54(2):373–80

Ca2(+)-independent stimulation of adenylate cyclase activity by muscarinic receptors in rat olfactory bulb. Olianas MC, et al. **J Neurochem** 1990 Sep;55(3):1083–6

Effect of peroxide, sodium, and calcium on brain mitochondrial respiration in vitro: potential role in cerebral ischemia and reperfusion. Vlessis AA, et al. **J Neurochem** 1990 Apr;54(4):1412–8

The intermediate dense line of the myelin sheath is preferentially accessible to cations and is stabilized by cations. Ropte S, et al. **J Neurocytol** 1990 Apr;19(2):242–52

Ca2(+)-dependent proteolytic modification of the cAMP-dependent protein kinase in Drosophila wild-type and dunce memory mutants. Müller U, et al. **J Neurogenet** 1989 Nov;6(2):95–114

Regulation of short-term associative memory by calcium-dependent protein kinase. Matzel LD, et al. **J Neurosci** 1990 Jul;10(7):2300–7

Calcium-dependent protein phosphorylation in Babesia bovis and its role in growth regulation. Ray A, et al. **J Parasitol** 1990 Apr;76(2):153–61

Magnesium metabolism in preterm infants: effects of calcium, magnesium, and phosphorus, and of postnatal and gestational age. Giles MM, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):147–54

Mechanisms of creatine kinase release from isolated rat skeletal muscles damaged by propylene glycol and ethanol. Brazeau GA, et al. **J Pharm Sci** 1990 May;79(5):393–7

Alpha-2 adrenergic inhibition of Ca(++)-evoked [3H]norepinephrine release from synaptosomes is blocked by depolarization. Bowyer JF, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):1063–9

Role of calcium in adrenergic neurochemical transmission in the aging heart. Roberts J, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):957–64

Vascular contraction induced by activation of membrane calcium ion channels is enhanced in streptozotocin-diabetes. White RE, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):1057–62

The properties of calcium-activated potassium ion channels in guinea-pig isolated hepatocytes. Capiod T, et al. **J Physiol (Lond)** 1989 Feb;409:285–95

Measurement of reversal potential of Na+–Ca2+ exchange current in single guinea-pig ventricular cells. Ehara T, et al. **J Physiol (Lond)** 1989 Mar;410:227–49

Physiological properties of skinned fibres from normal and dystrophic (Duchenne) human muscle activated by Ca2+ and Sr2+. Fink RH, et al. **J Physiol (Lond)** 1990 Jan; 420:337–53

A novel calcium-dependent chloride current in Xenopus oocytes injected with brain messenger RNA. Gillo B, et al. **J Physiol (Lond)** 1989 Oct;417:47–61

Dependence of spontaneous release at frog junctions on synaptic strength, external calcium and terminal length. Grinnell AD, et al. **J Physiol (Lond)** 1989 Nov;418:397–410

A calcium- and voltage-dependent chloride current in developing chick skeletal muscle. Hume RI, et al. **J Physiol (Lond)** 1989 Oct;417:241–61

Intracellular calcium ions modulate acetylcholine-induced inward current in guinea-pig ileum. Inoue R, et al. **J Physiol (Lond)** 1990 May;424:73–92

Effects of intracellular pH on calcium-activated potassium channels in rabbit tracheal smooth muscle. Kume H, et al. **J Physiol (Lond)** 1990 May;424:445–57

The activation of calcium and calcium-activated potassium channels in mammalian colonic smooth muscle by substance P. Mayer EA, et al. **J Physiol (Lond)** 1990 Jan; 420:47–71

Latencies of membrane currents evoked in Xenopus oocytes by receptor activation, inositol trisphosphate and calcium. Miledi R, et al. **J Physiol (Lond)** 1989 Aug;415:189–210

Investigation of the Ca2(+)-dependent interaction of trifluoperazine with S100a: a 19F NMR and circular dichroism study. Pingerelli PL, et al. **J Protein Chem** 1990 Apr;9(2):169–75

A 1H-NMR comparison of calmodulin activation by calcium and by cadmium. Akiyama K, et al. **Jpn J Pharmacol** 1990 Jul;53(3):393–401

iPTH values during hemodialysis: role of ionized Ca, dialysis membranes and iPTH assays. D'Amour P, et al. **Kidney Int** 1990 Aug;38(2):308–14

Long-term effects of calcium carbonate and 2.5 mEq/liter calcium dialysate on mineral metabolism. Slatopolsky E, et al. **Kidney Int** 1989 Nov;36(5):897–903

Prostanoid biosynthesis in cultured rabbit renal microvascular smooth muscle cells. Effect of arachidonic acid, calcium, and A23187. Chaudhari A, et al. **Lab Invest** 1990 Jul; 63(1):30–7

Increased covalent binding of acetaldehyde to calmodulin in the presence of calcium. Jennett RB, et al. **Life Sci** 1989; 45(16):1461–6

The response of chloride transport to cyclic AMP, calcium and hypotonic shock in normal and cystic fibrosis fibroblasts. Mastrocola T, et al. **Life Sci** 1990;46(23):1661–9

Calcium-associated cytoprotective effect of taurine on the calcium and oxygen paradoxes in isolated rat hepatocytes. Nakashima T, et al. **Liver** 1990 Jun;10(3):167–72

Effects of potassium and calcium on magnesium and lithium handling in the isolated rat kidney. Siegers JF, et al. **Magnes Trace Elem** 1990;9(1):36–43

Effect of Ca2+ on structure and fluidity of microvillus membranes of human placenta. Mazzanti L, et al. **Membr Biochem** 1987–88;7(4):193–205

Effect of divalent cations on the structure of dipalmitoylphosphatidylcholine and phosphatidylcholine/phosphatidylglycerol bilayers: an 2H-NMR study. Zidovetzki R, et al. **Membr Biochem** 1989; 8(3):177–86

Atrial natriuretic factor levels in renal stone patients with idiopathic hypercalciuria and in healthy controls: the effect of an oral calcium load. Halabe A, et al. **Metabolism** 1990 Feb;39(2):209–12

Inhibitory effect of Ca2+ on formation of Mg2(+)-mediated two-dimensional hexagonal lattice structure by an R-form lipopolysaccharide from Klebsiella pneumoniae. Kato N, et al. **Microbiol Immunol** 1990;34(5):427–38

Extracellular and membranal bound calcium on the contraction of mesenteric arteries of the rat. Fasciolo JC, et al. **Microsc Electron Biol Celular** 1988 Dec;12(2):231–43

Calcium regulation of prolactin gene expression: opposing effects of extracellular CaCl2 and Ca2+ ionophores. White BA, et al. **Mol Endocrinol** 1989 Nov;3(11):1757–64

Niflumic and flufenamic acids are potent reversible blockers of Ca2(+)-activated Cl- channels in Xenopus oocytes. White MM, et al. **Mol Pharmacol** 1990 May;37(5):720–4

Evidence for an increased sensitivity to Ca2+ in the flagella of sperm from tw32/+mice. Lindemann CB, et al. **Mol Reprod Dev** 1990 May;26(1):69–77

Elevation of cytoplasmic calcium by caged calcium or caged inositol triphosphate initiates stomatal closure [see comments] Gilroy S, et al. **Nature** 1990 Aug 23; 346(6286):769–71 Comment in: Nature 1990 Aug 23;346(6286):700–1.

The differential effect of calcium antagonists on the positive inotropic effects induced by calcium and monensin in cardiac preparations of rats and guinea-pigs. Hugtenburg JG, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Nov;340(5):558–66

Modulation of in vitro chemosensitivity by extracellular Ca++ in adriamycin sensitive and resistant P388 leukemic cells. Adwankar MK, et al. **Neoplasma** 1990;37(1):31–6

Effects of free Ca2+ on the [Ca2+ + Mg2+]-dependent adenosinetriphosphatase (ATPase) of Alzheimer and normal fibroblasts. Rizopoulos E, et al. **Neurobiol Aging** 1989 Nov-Dec;10(6):717–20

Characteristics of Ca2+/calmodulin- and Ca2+/phosphatidylserine-stimulated phosphoproteins in rat striatum. Lau YS. **Neurochem Res** 1990 Mar; 15(3):265–72

Intercellular signaling as visualized by endogenous calcium-dependent bioluminescence. Brehm P, et al. **Neuron** 1989 Aug;3(2):191–8

Expression of a multifunctional Ca2+/calmodulin-dependent protein kinase and mutational analysis of its autoregulation. Hanson PI, et al. **Neuron** 1989 Jul;3(1):59–70

Mutational and gene dosage analysis of calcium-activated potassium channels in Drosophila: correlation of micro- and macroscopic currents. Komatsu A, et al. **Neuron** 1990 Feb;4(2):313–21

Calcium and calcium-dependent chloride currents generate action potentials in solitary cone photoreceptors. Maricq AV, et al. **Neuron** 1988 Aug;1(6):503–15

Antigenic changes similar to those seen in neurofibrillary tangles are elicited by glutamate and Ca2+ influx in cultured hippocampal neurons. Mattson MP. **Neuron** 1990 Jan;4(1):105–17

Competition for block of a Ca2(+)-activated K+ channel by charybdotoxin and tetraethylammonium. Miller C. **Neuron** 1988 Dec;1(10):1003–6

A family of calcium-dependent potassium channels from rat brain. Reinhart PH, et al. **Neuron** 1989 Jan;2(1):1031–41

Differential effects of NMDA receptor antagonist APV on tetanic stimulation induced and calcium induced potentiation. Grover LM, et al. **Neurosci Lett** 1990 Jun 8;113(3):309–14

Calcium-activated potassium channels recorded from rat neocortical neurons in cell culture. Zona C, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):223–8

Control of cGMP concentration by calcium ions in frog rods. Kawamura S, et al. **Neurosci Res Suppl** 1989;10:S15–22

Capsaicin-induced stimulation of polymodal nociceptors is antagonized by ruthenium red independently of extracellular calcium. Amann R, et al. **Neuroscience** 1989; 32(1):255–9

Calcium sensitivity and unloaded shortening velocity of hypertrophied and non-hypertrophied skinned human atrial fibres. Arndt H, et al. **Pflugers Arch** 1989 Nov; 415(2):209–13

A long lasting Ca2+-activated outward current in guinea-pig atrial myocytes. Baró I, et al. **Pflugers Arch** 1989 Oct;415(1):63–71

Stretch-induced increase in the Ca2+ sensitivity of myofibrillar ATPase activity in skinned fibres from pig ventricles. Kuhn HJ, et al. **Pflugers Arch** 1990 Mar; 415(6):741–6

Polymyxin B as a highly effective gating modifier of high-conductance Ca2(+)-activated K+ channels in mouse skeletal muscle. Weik R, et al. **Pflugers Arch** 1990 Mar;415(6):671–7

Quinidine blockade of calcium-activated potassium channels in dissociated gastric smooth muscle cells. Wong BS. **Pflugers Arch** 1989 Aug;414(4):416–22

Single Ca2(+)-activated K+ channels in excised membrane patches of hamster oocytes. Yoshida S, et al. **Pflugers Arch** 1990 Jan;415(4):516–8

Pharmacology of calcium-induced long-term potentiation in rat hippocampal slices. Frank C, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):713–5

Effect of calcium ions and calcium chelators on 3H-CHA binding. Rosati A, et al. **Pharmacol Res** 1989 Nov-Dec;21 Suppl 1:137–8

Influence of magnesium and extracellular calcium reduction on ouabain-treated sinoatrial node cells in rabbit heart. Miyamae S. **Pharmacol Toxicol** 1989 Sep;65(3):192–7

Stimulatory effects of extracellular calcium on chorionic gonadotrophin and placental lactogen release by human placental explants. Polliotti B, et al. **Placenta** 1990 Mar-Apr;11(2):181–90

Ca2+/calmodulin sensitivity may be common to all forms of neural adenylate cyclase. Eliot LS, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9564–8

Membrane sidedness and the interaction of H+ and K+ on Ca2(+)-activated K+ transport in human red blood cells. Heinz A, et al. **Proc Natl Acad Sci U S A** 1990 Mar; 87(5):1998–2002

In vitro activation of heat shock transcription factor DNA-binding by calcium and biochemical conditions that affect protein conformation. Mosser DD, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3748–52

Modulation of constitutive cytochrome P-450 expression in vivo and in vitro in murine keratinocytes as a function of differentiation and extracellular Ca2+ concentration. Reiners JJ Jr, et al. **Proc Natl Acad Sci U S A** 1990 Mar; 87(5):1825–9

Mutagenesis of Thr-286 in monomeric Ca2+/calmodulin-dependent protein kinase II eliminates Ca2+/calmodulin-independent activity. Waxham MN, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1273–7

Regulation of interleukin 3 mRNA expression in mast cells occurs at the posttranscriptional level and is mediated by calcium ions. Wodnar-Filipowicz A, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):777–81

Effect of septal kindling on glutamate binding and calcium/calmodulin-dependent phosphorylation in a postsynaptic density fraction isolated from rat cerebral cortex. Wu K, et al. **Proc Natl Acad Sci U S A** 1990 Jul; 87(14):5298–302

Calcium-activated potassium channels in human platelets. Fine BP, et al. **Proc Soc Exp Biol Med** 1989 Nov; 192(2):109–13

Calcium-sensitive cross-bridge transitions in mammalian fast and slow skeletal muscle fibers. Metzger JM, et al. **Science** 1990 Mar 2;247(4946):1088–90

Calmodulin activation of calcium-dependent sodium channels in excised membrane patches of Paramecium. Saimi Y, et al. **Science** 1990 Sep 21;249(4975):1441–4

Left ventricular performance during sustained hypo- and hypercalcemia. Drop LJ, et al. **Surg Forum** 1978;29:259–60

Reducing reperfusion injury with hypocalcemic, hyperkalemic, alkalotic blood during reoxygenation. Follette DM, et al. **Surg Forum** 1978;29:284–6

Differential release of calcitonin in sheep to calcium and pentagastrin stimulation. Klementschitsch P, et al. **Surg Forum** 1978;29:107–9

Effect of the concentration of Ca2+ in the suspending medium on the responses of human and rabbit platelets to aggregating agents. Packham MA, et al. **Thromb Haemost** 1989 Nov 24;62(3):968–76

Anti-human factor IX monoclonal antibodies specific for calcium ion-induced conformations. Sugo T, et al. **Thromb Res** 1990 Jun 15;58(6):603–14

Cyclosporine inhibition of insulin secretion: effect of tolbutamide and extracellular calcium concentration. Bartlett ST, et al. **Transplant Proc** 1990 Apr;22(2):749–53

The effects of thiamin on the neurophysiological alterations induced by lead. Kim JS, et al. **Vet Hum Toxicol** 1990 Apr; 32(2):101–5

[Calcium ions, calcium antagonists and ischemic arrhythmia] An RH. **Sheng Li Ko Hsueh Chin Chan** 1989 Jul; 20(3):219–23 (50 ref.) **(Chi)**

[Effect of Ca level on 65Zn absorption at the ligated duodenal loop of rat] Gunshin H, et al. **Ann Physiol Anthropol** 1989

Oct;8(4):227–31 (Eng. Abstr.) (Jpn)
[Pharmacological experiments in the aged rat urinary bladder. Responses to inorganic ions (Ca2+, K+, Ba2+, Mg2+)] Saito M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jun;81(6):862–7 (Eng. Abstr.) (Jpn)
[The action of extracellular calcium and the temperature of the isolation of lymphocytes on their viability] Kirillov GP, et al. **Biol Nauki** 1990;(3):20–6 (Eng. Abstr.) (Rus)
[Adaptation to stress exposure prevents the arrhythmogenic and contractile effects of the "calcium paradox"] Malyshev IIu, et al. **Biull Eksp Biol Med** 1990 Mar;109(3):227–9 (Eng. Abstr.) (Rus)
[Specific binding of cGMP by the retinal rod axoneme and its modulation by calcium ions and calmodulin] Volotovskiĭ ID, et al. **Dokl Akad Nauk SSSR** 1990 Jan–Feb; 310(1):214–7 (Rus)
[The role of lipids during exposure of mutant cells of Candida tropicalis D-2 to heterologous DNA after treatment with calcium cations] Danilenko II, et al. **Genetika** 1990 Mar; 26(3):567–9 (Eng. Abstr.) (Rus)
[Sanitary and technological basis of correcting the salt level of desalinated water with air-slaked lime] Rakhmanin IuA, et al. **Gig Sanit** 1989 Jun;(6):66–9 (Rus)
[Cation transport and calcium-induced hemolysis in the erythrocytes of patients with hypertension and in spontaneously hypertensive rats (comparative analysis)] Orlov SN, et al. **Kardiologiia** 1989 Jul;29(7):89–95 (Eng. Abstr.) (Rus)
[The organization of the cortical layer of amphibian ova. 1. The ultrastructure of the cortex of the oocytes and ova of the clawed toad: the effect of divalent cations] Riabova LV. **Ontogenez** 1990 May–Jun;21(3):286–91 (Eng. Abstr.) (Rus)
[The effect of obzidan, finoptin and Ca2+ on the cAMP level during contraction–relaxation of isolated heart of guinea pigs activated with isadrin] Laptev BI, et al. **Ukr Biokhim Zh** 1990 May–Jun;62(3):111–5 (Eng. Abstr.) (Rus)
[The role of Na(+) pump inhibition induced by Ca2(+) ions in the development of pathologic changes during calcium overload in myocardial cells] Breier A, et al. **Bratisl Lek Listy** 1990 Mar;91(3):172–6 (Eng. Abstr.) (Slo)
[Rubidium permeability through Ca2(+)-activated potassium channels in human erythrocytes] Zahradníková A, et al. **Bratisl Lek Listy** 1990 Mar;91(3):202–7 (Eng. Abstr.) (Slo)
[Transmural nonhomogeneous calcium-induced heart damage] Tribulová N, et al. **Cesk Fysiol** 1989;38(6):499–501 (Slo)

PHYSIOLOGY

Modulation of calcium flux influences interleukin 1 beta effects on insulin release from isolated islets of Langerhans. Helqvist S, et al. **Acta Endocrinol (Copenh)** 1989 Sep; 121(3):447–55
Evidence that action potential-induced Ca2+ influx is necessary but not sufficient to release transmitter from sympathetic nerve terminals. Msghina M, et al. **Acta Physiol Scand** 1990 Feb;138(2):239–40
Calcium dependency of the post-stimulatory potentiation of the neurogenic response in small mesenteric arteries from the rat. Sjöblom-Widfeldt N, et al. **Acta Physiol Scand** 1989 Nov;137(3):443–8
Variations in intracellular pH and calcium in neural crest cells during migration and differentiation into neurones. Dickens CJ, et al. **Acta Physiol Scand Suppl** 1989;582:7
Regulation of GABA-ergic receptor activity by changes in intracellular calcium: electrophysiological investigation in neurones and endocrine cells. Feltz P, et al. **Acta Physiol Scand Suppl** 1989;582:10
Characteristics of calcium currents and of pH regulation in Purkinje cells maintained in primary culture. Gaillard S, et al. **Acta Physiol Scand Suppl** 1989;582:38
Calcium accumulation and calcium effects in astrocytes in primary cultures. Hertz L. **Acta Physiol Scand Suppl** 1989; 582:33
Astroglial H+ and Ca2+ changes—signals for cell activation? Kraig RP. **Acta Physiol Scand Suppl** 1989;582:32
Ion channel modulation by divalent cations. Latorre R. **Acta Physiol Scand Suppl** 1989;582:13
Apparent proton influx via channels: perhaps pHi decrease in depolarised snail neurones is caused by calcium entry. Thomas RC. **Acta Physiol Scand Suppl** 1989;582:12
Calcium: a second messenger. Fairley JA. **Adv Dermatol** 1989;4:95–110; discussion 111 (102 ref.)
Calcium protein signaling. **Adv Exp Med Biol** 1989;255:1–524
Role of calcium in secretion and synthesis in bovine adrenal chromaffin cells. Bader MF, et al. **Adv Exp Med Biol** 1990; 269:93–7 (24 ref.)
Role of calcium released from the sarcoplasmic reticulum of smooth muscle cells as induced by inositol phosphatides. Kitamura K, et al. **Adv Exp Med Biol** 1989;255:49–60 (64 ref.)
Inhibitory regulation by calcium ion of myosin ATPase activity: binding of calcium ion and phosphorylation of myosin. Kohama K, et al. **Adv Exp Med Biol** 1990; 269:181–5 (21 ref.)
Roles of calcium in the regulation of tyrosine hydroxylase. Nagatsu T, et al. **Adv Exp Med Biol** 1989;255:425–33
Calcium in mitosis: role of 51-kD protein in the centrosome of sea urchin egg in aster formation. Sakai H, et al. **Adv Exp Med Biol** 1989;255:471–80
Calbindin-D9K (CaBP9K) gene: a model for studying the genomic actions of cacitriol and calcium in mammals. Thomasset M, et al. **Adv Exp Med Biol** 1990;269:35–6
A comparative study about voltage-dependent Ca currents in smooth muscle cells isolated from several tissues. Watanabe M, et al. **Adv Exp Med Biol** 1989;255:119–28
Calcium and polyphosphoinositide regulation of actin network structure by gelsolin. Yin HL. **Adv Exp Med Biol** 1989;255:315–23 (41 ref.)
Role of Ca2(+)-ATPases in regulation of cellular Ca2+ signalling, as studied with the selective microsomal Ca2(+)-ATPase inhibitor, thapsigargin. Thastrup O. **Agents Actions** 1990 Jan;29(1–2):8–15 (59 ref.)
Calcium-dependent histidine and histamine release from superfused synaptosomes. Tikkanen T, et al. **Agents Actions** 1990 Apr;30(1–2):220–2
Calcium-dependent fluorescence transients during ventricular fibrillation. Stefenelli T, et al. **Am Heart J** 1990 Sep;120(3):590–7
Influence of Na+ gradient on Ca2+ transients and contraction in vascular smooth muscle. Bova S, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):H409–23
Effect of compartmentalized Ca2+ ions on electrical bursting activity of pancreatic beta-cells. Chay TR. **Am J Physiol** 1990 May;258(5 Pt 1):C955–65
Rest decay of calcium transients and contractility in feline ventricular myocytes. DuBell WH, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):H395–402
Modification of temperature dependence of myofilament Ca sensitivity by troponin C replacement. Harrison SM, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C282–8
Temperature dependence of myofilament Ca sensitivity of rat, guinea pig, and frog ventricular muscle. Harrison SM, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C274–81
Ca current facilitation during postrest recovery depends on Ca entry. Hryshko LV, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H951–61
Ca2+ and pH regulation of K+ channels in membrane vesicles of rabbit proximal tubule. Jacobsen C, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):F1634–9
Stimulatory effect of ouabain on T- and L-type calcium currents in guinea pig cardiac myocytes. Le Grand B, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1620–3
Unstimulated force during hypoxia of rat cardiac muscle: stiffness and calcium dependence. Leijendekker WJ, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H861–9
Hyperthyroid adult rat cardiomyocytes. II. Single cell electrophysiology and free calcium transients. Li Q, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):C957–63
Basolateral K+ channels in airway epithelia. I. Regulation by Ca2+ and block by charybdotoxin. McCann JD, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):L334–42
Luminal calcium regulates potassium transport by the renal distal tubule. Okusa MD, et al. **Am J Physiol** 1990 Feb; 258(2 Pt 2):F423–8
Role of extracellular calcium on heart muscle energetics: effects of verapamil. Ponce-Hornos JE, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):H64–72
Interactions between Ca2+ and cAMP messenger system in regulation of airway smooth muscle contraction. Rasmussen H, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):L279–88 (84 ref.)
Latch-bridge model in smooth muscle: [Ca2+]i can quantitatively predict stress. Rembold CM, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):C251–7
Contribution of intracellular calcium to gallbladder smooth muscle contraction. Renzetti LM, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):G1–5
Role of calcium in U 46619 and PGF2 alpha pulmonary vasoconstriction in rat lungs. Santoian EC, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):H2001–5
Calcium-sensitive delayed rectifier potassium current in guinea pig ventricular cells. Tohse N. **Am J Physiol** 1990 Apr;258(4 Pt 2):H1200–7
Oscillatory mode of calcium signaling in rat pancreatic acinar cells. Tsunoda Y, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):C147–55
Adenosine-induced changes in atrial action potential: contribution of Ca and K currents. Visentin S, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H1070–8
cAMP and calcium-dependent mechanisms of phospholamban phosphorylation in intact hearts. Vittone L, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H318–25
Role of calcium in mediating action of carbachol in T84 cells. Wong SM, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):C976–85
Cardiovascular effects of acute changes in extracellular ionized calcium concentration induced by citrate and CaCl2 infusions in chronically instrumented dogs, conscious and during enflurane, halothane, and isoflurane anesthesia. Hysing ES, et al. **Anesthesiology** 1990 Jan; 72(1):100–4
The calcium endocrine system. Sethi S, et al. **Ann Acad Med Singapore** 1989 Jul;18(4):431–5 (30 ref.)
Calcium, membranes, aging, and Alzheimer's disease. A symposium. Irvine, California, October 24–26, 1988. Proceedings. **Ann N Y Acad Sci** 1989;568:1–290
Effects of calcium, ATP, and lipids on human erythrocyte sugar transport. Carruthers A, et al. **Ann N Y Acad Sci** 1989;568:52–67 (52 ref.)
Calcium- versus G-protein-activated phosphoinositide hydrolysis in synaptoneurosomes from young and old rats. Chandler LJ, et al. **Ann N Y Acad Sci** 1989;568:187–92
Glutamate neurotoxicity, calcium, and zinc. Choi DW, et al. **Ann N Y Acad Sci** 1989;568:219–24
Mechanisms of polar lobe formation in fertilized eggs of molluscs. Conrad GW, et al. **Ann N Y Acad Sci** 1990; 582:273–94
Multiple excitatory amino acid receptor regulation of intracellular Ca2+. Implications for aging and Alzheimer's disease. Cotman C, et al. **Ann N Y Acad Sci** 1989;568:138–48 (43 ref.)
Chloroplast thylakoid membrane-bound Ca2+ acts in a gating mechanism to regulate energy-coupled proton fluxes. Dilley RA, et al. **Ann N Y Acad Sci** 1989;574:246–67
Calcium-regulated contractile and cytoskeletal proteins in dendritic spines may control synaptic plasticity. Fifková E, et al. **Ann N Y Acad Sci** 1989;568:131–7
Calcium-induced neuronal degeneration: a normal growth cone regulating signal gone awry (?). Kater SB, et al. **Ann N Y Acad Sci** 1989;568:252–61 (31 ref.)
Calcium, membranes, aging, and Alzheimer's disease. Introduction and overview. Khachaturian ZS. **Ann N Y Acad Sci** 1989;568:1–4
Calcium and proto-oncogene involvement in the immediate-early response in the nervous system. Morgan JI, et al. **Ann N Y Acad Sci** 1989;568:283–90
Regulation of calcium in isolated nerve terminals (synaptosomes): relationship to neurotransmitter release. Nicholls DG. **Ann N Y Acad Sci** 1989;568:81–8
The role of calcium in long-term potentiation. Nicoll RA, et al. **Ann N Y Acad Sci** 1989;568:166–70
The role of Ca2+ in the hormonal regulation of the activities of pyruvate dehydrogenase and oxoglutarate dehydrogenase complexes. Rutter GA, et al. **Ann N Y Acad Sci** 1989;573:206–17 (42 ref.)
Intracellular ionic calcium and the cytoskeleton in living cells. Shelanski ML. **Ann N Y Acad Sci** 1989;568:121–4
Calcium and cellular clocks orchestrate cell division. Silver RB. **Ann N Y Acad Sci** 1990;582:207–21 (60 ref.)
Calcium regulation of the first cell cycle of the sea urchin embryo. Steinhardt RA. **Ann N Y Acad Sci** 1990; 582:199–206 (20 ref.)
Influence of indomethacin on extracellular calcium homeostasis. Bijlsma JW, et al. **Ann Rheum Dis** 1990 Feb; 49(2):125–7
Effect of sulphasalazine and sulphapyridine on neutrophil superoxide production: role of cytosolic free calcium. Kanerud L, et al. **Ann Rheum Dis** 1990 May;49(5):296–300
Calcium channels in vertebrate cells. Hess P. **Annu Rev Neurosci** 1990;13:337–56 (167 ref.)
The role of calcium in osteoporosis. Arnaud CD, et al. **Annu Rev Nutr** 1990;10:397–414 (125 ref.)
The role of vitamin D in bone and intestinal cell differentiation. Suda T, et al. **Annu Rev Nutr** 1990; 10:195–211 (56 ref.)
Calcium-dependent regulation of protein synthesis in intact mammalian cells. Brostrom CO, et al. **Annu Rev Physiol** 1990;52:577–90 (70 ref.)
Ca2+ as a second messenger within mitochondria of the heart and other tissues. Denton RM, et al. **Annu Rev Physiol** 1990;52:451–66 (97 ref.)
Ca2(+)-activated cell volume recovery mechanisms. Pierce SK, et al. **Annu Rev Physiol** 1990;52:27–42 (69 ref.)
Calcium signaling in human platelets. Rink TJ, et al. **Annu Rev Physiol** 1990;52:431–49 (91 ref.)
Roles of Ca2+ in O2 evolution in higher plant photosystem II: effects of replacement of Ca2+ site by other cations. Ono T, et al. **Arch Biochem Biophys** 1989 Dec;275(2):440–8
Ca2+-independent interaction of the gamma subunit of phosphorylase kinase with dansyl-calmodulin. Yuan CJ, et al. **Arch Biochem Biophys** 1989 Nov 1;274(2):317–26
Calcium binding proteins in the brain. Celio MR. **Arch Ital Anat Embriol** 1989 Jul–Sep;94(3):227–36 (36 ref.)
The role of magnesium and calcium ions in the glucose dehydrogenase activity of Klebsiella pneumoniae NCTC 418. Buurman ET, et al. **Arch Microbiol** 1990;153(5):502–5
Calcium regulation of antigen expression on normal and malignant human squamous cells in vitro. Hoffman HT, et al. **Arch Otolaryngol Head Neck Surg** 1990 Mar; 116(3):299–303
A mechanism of cadmium poisoning: the cross effect of calcium and cadmium in the calmodulin-dependent system. Sutoo D, et al. **Arch Toxicol** 1990;64(2):161–4
Roles of calcium, cyclic nucleotides, and protein kinase C in regulation of endothelial permeability. Yamada Y, et al. **Arterioscler Thromb** 1990 May–Jun;10(3):410–20
Glutathione alters calcium responsiveness of cardiac skinned fibers. Bauer SF, et al. **Basic Res Cardiol** 1989 Nov–Dec; 84(6):591–6
The role of calcium in the enhanced myocardial contractility of the hyperthyroid rat heart. Butkow N, et al. **Basic Res Cardiol** 1990 May–Jun;85(3):297–306
Role of Ca2+ in sorbitol release from rat inner medullary collecting duct (IMCD) cells under hypoosmotic stress. Bevan C, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):563–8
Preparation and partial characterization of polyclonal antibodies raised against a preselected sequence of calcium dependent lectins. Blanck O, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):880–7
Effect of atrial natriuretic peptide on renin release in rat

isolated glomeruli. Kageyama S, et al. **Biochem Biophys Res Commun** 1990 Apr 16;168(1):37–42

Voltage gating of Ca2(+)-activated potassium channels in human lymphocytes. Mátyus L, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):325–9

Striated scallop muscle relaxation: fast force transients produced by photolysis of Diazo-2. Palmer RE, et al. **Biochem Biophys Res Commun** 1990 Apr 16;168(1):295–300

Intracellular ionized calcium mobilization of CD 9 monoclonal antibody-activated human platelets. Yatomi Y, et al. **Biochem Biophys Res Commun** 1990 Aug 31; 171(1):109–15

Regulation of the synthesis of DNA polymerase-alpha in regenerating liver by calcium and 1,25-dihydroxyvitamin D3. Sikorska M, et al. **Biochem Cell Biol** 1989 Jul; 67(7):345–51

Differences between muscarinic-receptor- and Ca2(+)-induced inositol polyphosphate isomer accumulation in rat cerebral-cortex slices. Baird JG, et al. **Biochem J** 1990 May 1;267(3):835–8

Ca2(+)-stimulatable and protein kinase C-inhibitable accumulation of inositol 1,3,4,6-tetrakisphosphate in human platelets. King WG, et al. **Biochem J** 1990 Aug 15; 270(1):125–31

Calcium- and guanine-nucleotide-dependent exocytosis in permeabilized rat mast cells. Modulation by protein kinase C. Koopmann WR Jr, et al. **Biochem J** 1990 Jan 15; 265(2):365–73

P2-purinoceptor regulation of surfactant phosphatidylcholine secretion. Relative roles of calcium and protein kinase C. Rice WR, et al. **Biochem J** 1990 Mar 1;266(2):407–13

Histamine-H1-receptor-mediated phosphoinositide hydrolysis, Ca2+ signalling and membrane-potential oscillations in human HeLa carcinoma cells. Tilly BC, et al. **Biochem J** 1990 Feb 15;266(1):235–43

Increased intracellular Ca2+ is necessary for maximal expression of the proto-oncogene c-jun in the Jurkat T-cell line. Vandenplas ML, et al. **Biochem J** 1990 Apr 15; 267(2):349–51

The ratio of macrophage prostaglandin and leukotriene synthesis is determined by the intracellular free calcium level. Kaever V, et al. **Biochem Pharmacol** 1990 Apr 15; 39(8):1313–9

The role of extracellular Ca2+ and Na+ in paf-acether-induced human platelet activation. Keraly CL, et al. **Biochem Pharmacol** 1989 Oct 15;38(20):3415–21

(Dys)regulation of epithelial chloride channels. de Jonge HR, et al. **Biochem Soc Trans** 1989 Oct;17(5):816–8

Intracellular Ca2+ trigger mucin release from rat submandibular acini. Mills CL, et al. **Biochem Soc Trans** 1990 Jun;18(3):448–9

Guanine nucleotides enhance Ca2(+)-driven protein storage granule secretion from electropermeabilized human platelets. Peltola K, et al. **Biochem Soc Trans** 1990 Jun; 18(3):466–7

Calmodulin involvement in Ca2(+)-induced insulin release from electropermeabilized islets of Langerhans. Smethurst PA, et al. **Biochem Soc Trans** 1990 Jun;18(3):464

Role of calcium and calpain in complement-induced vesiculation of the platelet plasma membrane and in the exposure of the platelet factor Va receptor. Wiedmer T, et al. **Biochemistry** 1990 Jan 23;29(3):623–32

In squid nerve fibers monovalent activating cations are not cotransported during Na+/Ca2+ exchange. Condrescu M, et al. **Biochim Biophys Acta** 1990 May 9;1024(1):198–202

Polarized 86Rb+ effluxes in primary cultures of rabbit kidney proximal cells: role of calcium and hypotonicity. le Maout S, et al. **Biochim Biophys Acta** 1990 Jul 9; 1026(1):29–39

Anionic phospholipids stimulate an arachidonoyl-hydrolyzing phospholipase A2 from macrophages and reduce the calcium requirement for activity. Leslie CC, et al. **Biochim Biophys Acta** 1990 Aug 6;1045(3):261–70

Cyclic AMP calcium and the growth of mastocytoma cells. Lints T, et al. **Biochim Biophys Acta** 1989 Oct 9; 1013(3):287–93

Distinct effects of calcium- and cyclic AMP-enhancing factors on cytoskeletal synthesis and assembly in mouse osteoblastic cells. Lomri A, et al. **Biochim Biophys Acta** 1990 Apr 9;1052(1):179–86

Ernst Klenk lecture, November 1989. The complexities of intracellular Ca2+ signalling. Rasmussen H. **Biol Chem Hoppe Seyler** 1990 Mar;371(3):191–206 (94 ref.)

A novel member of the calcium-dependent cysteine protease family. Sorimachi H, et al. **Biol Chem Hoppe Seyler** 1990 May;371 Suppl:171–6

Electrical bursting and intracellular Ca2+ oscillations in excitable cell models. Chay TR. **Biol Cybern** 1990; 63(1):15–23

Abnormal ryanodine receptor channels in malignant hyperthermia. Fill M, et al. **Biophys J** 1990 Mar;57(3):471–5

External cadmium and internal calcium block of single calcium channels in smooth muscle cells from rabbit mesenteric artery. Huang Y, et al. **Biophys J** 1989 Nov; 56(5):1023–8

Elastic behavior of zymogen granule membranes in response to changes in pH and pCa. Miyamoto S, et al. **Biophys J** 1990 Mar;57(3):615–9

Some aspects of calcium regulation in cell biology. Cavaggioni A. **Biosci Rep** 1989 Aug;9(4):421–36 (42 ref.)

The effect of extracellular calcium elevation on morphology and function of isolated rat osteoclasts. Datta HK, et al. **Biosci Rep** 1989 Dec;9(6):747–51

Ca2(+)-dependent membrane-binding proteins in normal erythrocytes and erythrocytes from patients with chronic myelogenous leukemia. Fujimagari M, et al. **Blood** 1990 Mar 15;75(6):1337–45

Thrombin induces c-fos expression in cultured human endothelial cells by a Ca2(+)-dependent mechanism. Lampugnani MG, et al. **Blood** 1990 Sep 15;76(6):1173–80

Ionized calcium plays a pivotal role in controlling blood pressure during haemodialysis. Leunissen KM, et al. **Blood Purif** 1989;7(5):233–9

Caffeine-induced contraction in arteries from stroke-prone spontaneously hypertensive rats. Moriyama K, et al. **Blood Vessels** 1989;26(5):280–9

Calcium sensitisers. Lee JA, et al. **BMJ** 1990 Mar 3; 300(6724):551–2 (44 ref.)

Cytosolic free calcium dependent regulation of osteoclast bone resorbing activity. Teti A, et al. **Boll Soc Ital Biol Sper** 1990 Jan;66(1):1–4

Calcium modulation of the parathyroid hormone-sensitive adenylate cyclase in ROS 17/2.8 cells: effects of N-(6-aminohexyl-5-Cl-naphthalene sulfonamide) (W-7) and trifluoperazine (TFP). Rao LG, et al. **Bone Miner** 1989 Nov;7(3):191–204

Thapsigargin, a new calcium-dependent epithelial anion secretagogue. Brayden DJ, et al. **Br J Pharmacol** 1989 Nov; 98(3):809–16

An examination of the sources of calcium for contractions mediated by postjunctional alpha 1- and alpha 2-adrenoceptors in several blood vessels isolated from the rabbit. Daly CJ, et al. **Br J Pharmacol** 1990 Feb; 99(2):253–60

Temporal changes in the calcium-dependence of the histamine H1-receptor-stimulation of cyclic AMP accumulation in guinea-pig cerebral cortex. Donaldson J, et al. **Br J Pharmacol** 1989 Dec;98(4):1365–75

Developmental changes in beta-adrenergic and cholinergic interactions on calcium-dependent slow action potentials in rat ventricular muscles. Kojima M, et al. **Br J Pharmacol** 1990 Feb;99(2):327–33

Evidence that pinacidil may promote the opening of ATP-sensitive K+ channels yet inhibit the opening of Ca2(+)-activated K+ channels in K(+)-contracted canine mesenteric artery. Masuzawa K, et al. **Br J Pharmacol** 1990 May;100(1):143–9

Sodium salicylate facilitates calcium-dependent release of transmitter at mouse neuromuscular junctions. Nishimura M, et al. **Br J Pharmacol** 1989 Aug;97(4):1239–45

Ryanodine facilitates calcium-dependent release of transmitter at mouse neuromuscular junctions. Nishimura M, et al. **Br J Pharmacol** 1990 May;100(1):114–8

Influences of external Ca2+ on the GABA-induced chloride current and the efficacy of diazepam in internally perfused frog sensory neurons. Akaike N, et al. **Brain Res** 1989 Dec 18;504(2):293–6

MDMA (ecstasy) effects on cultured serotonergic neurons: evidence for Ca2(+)-dependent toxicity linked to release. Azmitia EC, et al. **Brain Res** 1990 Feb 26;510(1):97–103

The role of dihydropyridine-sensitive voltage-gated calcium channels in potassium-mediated neuronal survival. Collins F, et al. **Brain Res** 1989 Nov 13;502(1):99–108

Two subtypes of C current in identified Helix neurons. Crest M, et al. **Brain Res** 1990 Jun 4;518(1-2):299–302

Effects of divalent cations on the frequency of spontaneous action potentials from the lateral line organ of Xenopus laevis. Guth SL, et al. **Brain Res** 1990 Jan 29;508(1):76–84

Entorhinal kindling permanently enhances Ca2(+)-dependent L-glutamate release in regio inferior of rat hippocampus. Jarvie PA, et al. **Brain Res** 1990 Feb 5;508(2):188–93

GABAB receptor activation inhibits Ca2(+)-activated 86Rb-efflux in cultured spinal cord neurons via G-protein mechanism. Kamatchi GL, et al. **Brain Res** 1990 Jan 8; 506(2):181–6

Kindling increases the K(+)-evoked Ca2(+)-dependent release of endogenous GABA in area CA1 of rat hippocampus. Kamphuis W, et al. **Brain Res** 1990 Mar 12; 511(1):63–70

The low-threshold Ca current in isolated amygdaloid neurons in the rat. Kaneda M, et al. **Brain Res** 1989 Sep 11;497(1):187–90

Calcium in phase control of the Bulla circadian pacemaker. Khalsa SB, et al. **Brain Res** 1990 Jan 1;506(1):40–5

Postsynaptic nicotinic ACh receptor-operated Ca2+ transients with neostigmine in phrenic nerve-diaphragm muscles of mice. Kimura I, et al. **Brain Res** 1990 Jan 22; 507(2):309–11

Ca2(+)-dependent adaptive properties in the solitary olfactory receptor cell of the newt. Kurahashi T, et al. **Brain Res** 1990 May 7;515(1-2):261–8

Low calcium-induced release of glutamate results in autotoxicity of cerebellar granule cells. McCaslin PP, et al. **Brain Res** 1990 Apr 16;513(2):280–5

Effect of temperature on the inhibition of the GABA-gated response by intracellular calcium. Maruyama T, et al. **Brain Res** 1990 Jan 15;507(1):17–22

Postsynaptic long-term enhancement (LTE) by dopamine may be mediated by Ca2+ and calmodulin. Mochida S, et al. **Brain Res** 1990 Apr 9;513(1):144–8

Spontaneous and evoked transmitter releases after concanavalin A treatment are affected differently by hypertonic low calcium solutions at frog neuromuscular junction. Narita K, et al. **Brain Res** 1990 Mar 26;512(1):33–9

Somatostatin inhibits two types of voltage-activated calcium currents in rat growth-hormone secreting cells. Nussinovitch I. **Brain Res** 1989 Dec 11;504(1):136–8

Relationship of calcium and adenylate cyclase messenger systems in rat brain synaptosomes. Okada M, et al. **Brain Res** 1989 Oct 30;501(1):23–31

Aging-related prolongation of calcium spike duration in rat hippocampal slice neurons. Pitler TA, et al. **Brain Res** 1990 Jan 29;508(1):1–6

In vitro ischemia and protein synthesis in the rat hippocampal slice: the role of calcium and NMDA receptor activation. Raley-Susman KM, et al. **Brain Res** 1990 May 7; 515(1-2):27–38

Activation of a K+ conductance by bradykinin and by inositol-1,4,5-trisphosphate in rat glioma cells: involvement of intracellular and extracellular Ca2+. Reiser G, et al. **Brain Res** 1990 Jan 8;506(2):205–14

Differential modulation of Ca2+-activated K+ channels in ovine pituitary gonadotrophs by GnRH, Ca2+ and cyclic AMP. Sikdar SK, et al. **Brain Res** 1989 Sep 4; 496(1-2):113–23

Tetraethylammonium stimulates adrenomedullary secretion by causing fluctuations in a cytosolic free Ca concentration. Sorimachi M, et al. **Brain Res** 1990 Jan 22;507(2):347–50

Calcium currents in a vertebrate presynaptic nerve terminal: the chick ciliary ganglion calyx. Stanley EF. **Brain Res** 1989 Dec 29;505(2):341–5

Ca2+ and vasopressin release in isolated rat neurohypophysis: differential effects of four classes of Ca2+ channel ligands. von Spreckelsen S, et al. **Brain Res** 1990 Apr 23;514(1):68–76

Calcium-dependent chloride currents elicited by injection of ethanol into Xenopus oocytes. Wafford KA, et al. **Brain Res** 1989 Dec 29;505(2):215–9

Role of calcium in the expression of ACTH-induced stretching, yawning and penile erection. Argiolas A, et al. **Brain Res Bull** 1990 Jun;24(6):853–6

Alterations in cytosolic free calcium in the cat cortex during bicuculline-induced epilepsy. Uematsu D, et al. **Brain Res Bull** 1990 Feb;24(2):285–8

Localized calcium influx orients axon formation in embryonic hippocampal pyramidal neurons. Mattson MP, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1-2):201–9

Possible involvements of intracellular Ca2+ and Ca2+-dependent protein phosphorylation in cholinergic differentiation of clonal rat pheochromocytoma cells (PC12) induced by glioma-conditioned medium and retinoic acid. Mizuno N, et al. **Brain Res Dev Brain Res** 1989 Nov 1;50(1):1–10

Differential effect of membrane depolarization on levels of tyrosine hydroxylase and dopamine beta-hydroxylase mRNAs in PC12 pheochromocytoma cells. Kilbourne EJ, et al. **Brain Res Mol Brain Res** 1990 Jul;8(2):121–7

The possible involvement of calcium in renal proximal tubular reabsorptive defect in the rat after release of ureteral obstruction. Chatsudthipong V, et al. **Can J Physiol Pharmacol** 1990 Jun;68(6):667–70

Does in vitro activation of postsynaptic alpha 2-adrenoceptor utilize intracellular Ca2+ for contraction in dog saphenous vein? Guan YY, et al. **Can J Physiol Pharmacol** 1989 Sep; 67(9):1086–91

Possible role of Na(+)-Ca2+ exchange in the regulation of contractility in isolated adult ventricular myocytes from rat and guinea pig. Horackova M. **Can J Physiol Pharmacol** 1989 Dec;67(12):1525–33

Extracellular calcium-dependent and -independent effects of adenosine in bovine coronary artery. Ramagopal MV, et al. **Can J Physiol Pharmacol** 1990 May;68(5):608–13

Excitation-contraction coupling model to estimate the recirculating fraction of activator calcium in intact cardiac muscle. Urthaler F, et al. **Can J Physiol Pharmacol** 1990 Aug;68(8):1041–8

Inhibition of growth factor-dependent inositol phosphate Ca2+ signaling by antitumor ether lipid analogues. Seewald MJ, et al. **Cancer Res** 1990 Aug 1;50(15):4458–63

Calcium dependency of the production of interleukin 1 and the expression of interleukin 1 receptors of human adult T-cell leukemia cells in vitro. Tanaka Y, et al. **Cancer Res** 1990 Jul 15;50(14):4344–8

Calcium inhibition of glycolysis contributes to ischaemic injury. Auffermann W, et al. **Cardiovasc Res** 1990 Jun; 24(6):510–20

The role of potassium and sodium-calcium exchange currents in the action potential durations of normal Purkinje fibres and Purkinje fibres surviving infarction. Bril A, et al. **Cardiovasc Res** 1989 May;23(5):410–6

Perturbation of cellular calcium induces secretion of luminal ER proteins. Booth C, et al. **Cell** 1989 Nov 17;59(4):729–37

Functional independence of the epidermal growth factor receptor from a domain required for ligand-induced internalization and calcium regulation. Chen WS, et al. **Cell** 1989 Oct 6;59(1):33–43

Calcium and T lymphocyte activation. Gardner P. **Cell** 1989 Oct 6;59(1):15–20 (61 ref.)

The involvement of calcium in transport of secretory proteins from the endoplasmic reticulum. Sambrook JF. **Cell** 1990 Apr 20;61(2):197–9 (16 ref.)

Intracellular mechanism of neurotransmitter-induced modulations of voltage-dependent Ca current in snail neurons. Gerschenfeld HM, et al. **Cell Biol Int Rep** 1989

Dec;13(12):1141–54 (56 ref.)
Destabilization of ionized Ca2+ homeostasis in excitatory amino acid neurotoxicity: antagonism by glycosphingolipids. Manev H, et al. **Cell Biol Int Rep** 1990 Jan;14(1):3–14 (24 ref.)
Ca2(+)-sensing, second messengers, and the control of parathyroid hormone secretion. Brown EM, et al. **Cell Calcium** 1990 May;11(5):333–7 (31 ref.)
Regulation of cytosolic calcium by extracellular divalent cations in C-cells and parathyroid cells. Nemeth EF. **Cell Calcium** 1990 May;11(5):323–7 (23 ref.)
The role of extracellular calcium in the regulation of intracellular calcium and cell function. Nemeth EF, et al. **Cell Calcium** 1990 May;11(5):319–21 (10 ref.)
Mechanism of the activation of arachidonic acid release by oxysterols in NRK 49F cells: role of calcium. Lahoua Z, et al. **Cell Signal** 1989;1(6):569–76
Calcium uptake-dependent and -independent mechanisms of inositol trisphosphate formation in adrenal chromaffin cells: comparative studies with high K+, carbamylcholine and angiotensin II. Sasakawa N, et al. **Cell Signal** 1989; 1(1):75–84
Role of cell calcium in alpha-1 adrenergic receptor control of arachidonic acid release from brown adipocytes. Schimmel RJ. **Cell Signal** 1989;1(6):607–16
Calcium: an important second messenger in mast cells. Fewtrell C, et al. **Ciba Found Symp** 1989;147:114–27; discussion 128–32 (27 ref.)
Heterogeneity of human Fc epsilon RI-bearing cells. Warner JA, et al. **Ciba Found Symp** 1989;147:230–41; discussion 241–53
Reduced L-type calcium current in the embryonic chick heart with persistent truncus arteriosus. Creazzo TL. **Circ Res** 1990 Jun;66(6):1491–8
Antagonistic modulatory roles of magnesium and calcium on release of endothelium-derived relaxing factor and smooth muscle tone. Gold ME, et al. **Circ Res** 1990 Feb; 66(2):355–66
Excitation-contraction coupling in postischemic myocardium. Does failure of activator Ca2+ transients underlie stunning? Kusuoka H, et al. **Circ Res** 1990 May; 66(5):1268–76
Contractile shortening response of ventricular cells to extracellular acidosis. Evidence for two-site control of H+-Ca2+ interaction. Langer GA, et al. **Circ Res** 1989 Oct;65(4):894–902
H(+)-induced vasodilation of rat aorta is mediated by alterations in intracellular calcium sequestration. Loutzenhiser R, et al. **Circ Res** 1990 Aug;67(2):426–39
Calcium current in single cells isolated from normal and hypertrophied rat heart. Effects of beta-adrenergic stimulation. Scamps F, et al. **Circ Res** 1990 Jul; 67(1):199–208
Role of intracellular Na+ in Ca2+ overload and depressed recovery of ventricular function of reperfused ischemic rat hearts. Possible involvement of H+-Na+ and Na+-Ca2+ exchange. Tani M, et al. **Circ Res** 1989 Oct; 65(4):1045–56
Multiple types of Ca2+ currents in single canine Purkinje cells. Tseng GN, et al. **Circ Res** 1989 Dec;65(6):1735–50
Relative roles of Ca2(+)-dependent and Ca2(+)-independent mechanisms in hypoxic contractile dysfunction [see comments] Koretsune Y, et al. **Circulation** 1990 Aug;82(2):528–35 Comment in: Circulation 1990 Aug;82(20:652–4.
Role of calcium in arrhythmogenesis. Levy MN. **Circulation** 1989 Dec;80(6 Suppl):IV23–30 (52 ref.)
Role of calcium on excitation-contraction coupling in cardiac and vascular smooth muscle. Lucchesi BR. **Circulation** 1989 Dec;80(6 Suppl):IV1–13 (74 ref.)
Calcium and its role in myocardial cell injury during ischemia and reperfusion. Marban E, et al. **Circulation** 1989 Dec;80(6 Suppl):IV17–22
Action potential duration alternans in dog Purkinje and ventricular muscle fibers. Further evidence in support of two different mechanisms. Saitoh H, et al. **Circulation** 1989 Nov;80(5):1421–31
Recent insights into the calcium channels. Zelis R, et al. **Circulation** 1989 Dec;80(6 Suppl):IV14–6
Calcium homeostasis. Nordin BE. **Clin Biochem** 1990 Feb; 23(1):3–10 (20 ref.)
Relaxation of mesenteric artery of stroke prone spontaneously hypertensive rats by calcium removal. Sunano S, et al. **Clin Exp Pharmacol Physiol** 1990 Jun; 17(6):413–25
The role of excitatory amino acids and intraneuronal calcium in the acute intoxicational effects of ethanol. Deutsch SI, et al. **Clin Neuropharmacol** 1989 Dec;12(6):483–9 (28 ref.)
Cholinergic stimulation of isolated rat parietal cells: role of calcium, calmodulin and protein kinase C. Schepp W, et al. **Clin Physiol Biochem** 1989;7(3–4):137–48
Inhibitory role of Ca2+ in the control of renin secretion: a study using superfused dispersed rat renal cortical cells. Pardy K, et al. **Clin Sci** 1989 Sep;77(3):273–9
Effects of calcium availability on the release of ovine choriomammotropin from cotyledonary cells incubated in vitro. Burke JL, et al. **Comp Biochem Physiol [A]** 1989; 93(2):489–92
Mammalian lens inter-fiber resistance is modulated by calcium and calmodulin. Gandolfi SA, et al. **Curr Eye Res** 1990 Jun;9(6):533–41
Regulation of calcium in non-excitable cells. Capiod T, et al. **Curr Opin Cell Biol** 1989 Apr;1(2):211–4 (44 ref.)
Calcium-dependent cell adhesion molecules. Kemler R, et al. **Curr Opin Cell Biol** 1989 Oct;1(5):892–7 (19 ref.)
Calcium signalling. Rink TJ, et al. **Curr Opin Cell Biol** 1990 Apr;2(2):198–205 (42 ref.)
Hypocalcemic and hypercalcemic disorders in children. Kainer G, et al. **Curr Probl Pediatr** 1989 Oct;19(10):489–545 (268 ref.)
Spontaneous calcium influx and its roles in differentiation of spinal neurons in culture. Holliday J, et al. **Dev Biol** 1990 Sep;141(1):13–23
A role for the neural cell adhesion molecule, NCAM, in myoblast interaction during myogenesis. Knudsen KA, et al. **Dev Biol** 1990 Mar;138(1):159–68
Hemocytes of Pomacea canaliculata: I. Reversible aggregation induced by Ca2+. Shozawa A, et al. **Dev Comp Immunol** 1990 Spring;14(2):175–84
Release of prostacyclin and EDRF from endothelial cells is differentially controlled by extra- and intracellular calcium. Lückhoff A. **Eicosanoids** 1988;1(1):5–11 (34 ref.)
Role of calcium in angiotensin II-mediated aldosterone secretion. Barrett PQ, et al. **Endocr Rev** 1989 Nov; 10(4):496–518 (149 ref.)
Endothelin stimulates steroid secretion by frog adrenal gland in vitro: evidence for the involvement of prostaglandins and extracellular calcium in the mechanism of actin of endothelin. Delarue C, et al. **Endocrinology** 1990 Oct; 127(4):2001–8
Mechanism of insulin resistance induced by sustained levels of cytosolic free calcium in rat adipocytes. Draznin B, et al. **Endocrinology** 1989 Nov;125(5):2341–9
Effect of the lectin concanavalin-A on calcium-regulated adenosine 3',5'-monophosphate accumulation in bovine parathyroid cells. el-Hajj Fuleihan G, et al. **Endocrinology** 1990 Apr;126(4):1996–2002
Refractoriness to the insulin-like effects of growth hormone depends upon calcium. Schwartz Y, et al. **Endocrinology** 1990 Jul;127(1):170–6
Calcitonin inhibits basal and thyrotropin-releasing hormone-induced release of prolactin from anterior pituitary cells: evidence for a selective action exerted proximal to secretagogue-induced increases in cytosolic Ca2+. Shah GV, et al. **Endocrinology** 1990 Aug; 127(2):621–8
Roles of intracellular and extracellular calcium in the kinetic profile of adrenocorticotropin secretion by perifused rat anterior pituitary cells. I. Corticotropin-releasing factor stimulation. Won JG, et al. **Endocrinology** 1990 Feb; 126(2):849–57
Calcium in renal cells. Modulation of calcium-dependent activation of phospholipase A2. Bonventre JV. **Environ Health Perspect** 1990 Mar;84:155–62 (46 ref.)
Mediators of Ca2(+)-dependent secretion. Chaudhry A, et al. **Environ Health Perspect** 1990 Mar;84:35–9 (25 ref.)
The role of calcium ions in toxic cell injury. Farber JL. **Environ Health Perspect** 1990 Mar;84:107–11 (25 ref.)
Inositol phosphate formation and its relationship to calcium signaling. Hughes AR, et al. **Environ Health Perspect** 1990 Mar;84:141–7 (73 ref.)
Multiparameter digitized video microscopy of toxic and hypoxic injury in single cells. Lemasters JJ, et al. **Environ Health Perspect** 1990 Mar;84:83–94 (26 ref.)
The role of cell calcium in current approaches to toxicology. Pounds JG. **Environ Health Perspect** 1990 Mar;84:7–15 (55 ref.)
Calcium ion as intracellular messenger and cellular toxin. Rasmussen H, et al. **Environ Health Perspect** 1990 Mar; 84:17–25 (42 ref.)
Extracellular calcium effects on cell viability and thiol homeostasis. Reed DJ, et al. **Environ Health Perspect** 1990 Mar;84:113–20 (81 ref.)
Hormonal regulation of cytosolic free calcium and its functional consequences: the GH-cell model. Tashjian AH Jr. **Environ Health Perspect** 1990 Mar;84:27–30 (19 ref.)
Effects of NMDA antagonists on picrotoxin-, low Mg2+- and low Ca2+-induced epileptogenesis and on evoked changes in extracellular Na+ and Ca2+ concentrations in rat hippocampal slices. Köhr G, et al. **Epilepsy Res** 1989 Nov-Dec;4(3):187–200
Effects of the dihydropyridine Ca2+ channel antagonist nimodipine on kainic acid-induced limbic seizures. Paczynski RP, et al. **Epilepsy Res** 1990 May-Jun;6(1):33–8
Model of spontaneous hippocampal epilepsy in the anesthetized rat: electrographic, [K+]0, and [Ca2+]0 response patterns. Stringer JL, et al. **Epilepsy Res** 1989 Nov-Dec;4(3):177–86
Gi proteins and calcium in dynorphin-induced hypothermia and behaviour. Cavicchini E, et al. **Eur J Pharmacol** 1990 May 16;180(2-3):357–60
Action of antiepileptic and anaesthetic drugs on Na- and Ca-spikes in mammalian non-myelinated axons. Elliott P. **Eur J Pharmacol** 1990 Jan 10;175(2):155–63
Ca2+ dependence of the amphetamine, nomifensine, and Lu 19-005 effect on in vivo dopamine transmission. Hurd YL, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):261–9
Inhibitory effects of protein kinase inhibitors and cytoskeletal inhibitors on Ca2(+)-free contraction of rat uterus. Karibe H, et al. **Eur J Pharmacol** 1990 Jun 12;188(6):407–10
Participation of both intracellular free Ca2+ and protein kinase C in tonic vasoconstriction induced by prostaglandin F2 alpha. Morimoto S, et al. **Eur J Pharmacol** 1990 Jun 12;188(6):369–78
Stimulation of synaptosomal dopamine synthesis by corticotropin-releasing factor in rat striatum: role of Ca2+-dependent mechanisms. Olianas MC, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):165–74
EDRF release is a common pathway in the activation of guanylate cyclase by receptor agonists and calcium ionophores. Pou WS, et al. **Eur J Pharmacol** 1990 Jul 3; 182(2):393–4
Roles of calcium and the endothelium in the relaxations produced by 5'-N-ethylcarboxamidoadenosine (NECA). Sabouni MH, et al. **Eur J Pharmacol** 1989 Jul 18; 166(2):311–4
Potassium currents activated in hippocampal neurons by serotonin are mediated by a change in intracellular calcium concentrations. Segal M. **Eur J Pharmacol** 1990 Jun 8; 181(3):299–301
Pharmacology of calcium antagonists: clinical relevance in neurology. Cohan SL. **Eur Neurol** 1990;30 Suppl 2:28–30; discussion 39–41 (34 ref.)
Cerebrovascular effect of calcium antagonists. Morel N, et al. **Eur Neurol** 1990;30 Suppl 2:10–5; discussion 39–41
Calcium-dependent potassium current following penicillin-induced epileptiform discharges in the hippocampal slice. Domann R, et al. **Exp Brain Res** 1989; 78(3):646–8
A role for N-methyl-D-aspartate receptors in norepinephrine-induced long-lasting potentiation in the dentate gyrus. Stanton PK, et al. **Exp Brain Res** 1989; 77(3):517–30
Regulation of nuclear scaffold protease activity by calcium. Madsen KR, et al. **Exp Cell Res** 1990 Apr;187(2):343–5
Calcium response to erythropoietin in erythroleukemia cells. Worthington RE. **Exp Cell Res** 1989 Sep;184(1):250–5
A non-selective cation channel in rabbit corneal endothelium activated by internal calcium and inhibited by internal ATP. Rae JL, et al. **Exp Eye Res** 1990 Apr;50(4):373–84
Cluster formation of canine dendritic cells and lymphocytes is calcium dependent and not inhibited by cyclosporine. Aprile J, et al. **Exp Hematol** 1990 Jan;18(1):32–6
Normal extracellular calcium levels block kindled seizures. Davies G, et al. **Exp Neurol** 1989 Oct;106(1):99–101
Biochemical events associated with rapid cellular damage during the oxygen- and calcium-paradoxes of the mammalian heart. Duncan CJ. **Experientia** 1990 Jan 15; 46(1):41–8 (84 ref.)
Regulation of cross-bridge detachment by Ca ions at high ionic strength in molluscan catch muscle. Tameyasu T. **Experientia** 1990 Jul 15;46(7):677–9
Involvement of external calcium in the release of arachidonic acid by mouse peritoneal macrophages. Fernández B, et al. **FEBS Lett** 1990 Jul 30;268(1):107–9
Injected inositol 1,4,5-trisphosphate activates Ca2(+)-sensitive K+ channels in the plasmalemma of Eremosphaera viridis. Förster B. **FEBS Lett** 1990 Aug 20; 269(1):197–201
Membrane depolarization inhibits thrombin-induced calcium influx and aggregation in human platelets. Kovács T, et al. **FEBS Lett** 1990 Jun 18;266(1-2):171–4
Functional expression of the calcium release channel from skeletal muscle ryanodine receptor cDNA. Penner R, et al. **FEBS Lett** 1989 Dec 18;259(1):217–21
Calcium-dependent DNA fragmentation in human synovial cells exposed to cold shock. Perotti M, et al. **FEBS Lett** 1990 Jan 1;259(2):331–4
Loss of calcium sensitivity of plasma gelsolin is associated with the presence of calcium ions during preparation. Pope B, et al. **FEBS Lett** 1989 Dec 18;259(1):185–8
Calcium ion activation of the anion-conducting channel in the rat liver mitochondrial inner membrane. Selwyn MJ, et al. **FEBS Lett** 1990 Aug 20;269(1):205–8
Na+/H+ exchange and Ca2+ influx. Siffert W, et al. **FEBS Lett** 1989 Dec 18;259(1):1–4 (28 ref.)
The effect of adenosine on the fluorescence responses of chlorotetracycline-loaded human polymorphonuclear leukocytes. Tsuruta S, et al. **FEBS Lett** 1990 Jul 30; 268(1):241–4
Relation between the ionic environment and the action of drugs on the myometrium. Marshall JM. **Fed Proc** 1968 Jan-Feb;27(1):115–9
The importance of iron, calcium and free radicals in reperfusion injury: an overview of studies in ischaemic rabbit kidneys. Green CJ, et al. **Free Radic Res Commun** 1989;7(3–6):255–64 (30 ref.)
Acid secretion by parietal cells: relative roles for [Ca2+]i and protein kinase C. Chang EB. **Gastroenterology** 1990 Jan;98(1):244–5
Role of prostaglandins and calcium in the effects of Entamoeba histolytica on colonic electrolyte transport. McGowan K, et al. **Gastroenterology** 1990 Apr; 98(4):873–80
Calcium and gallbladder motility: another piece in the puzzle. Thirlby RC. **Gastroenterology** 1990 Mar;98(3):801–2
Use of a pituitary cell dispersion method and primary culture system for the studies of gonadotropin-releasing hormone action in the goldfish, Carassius auratus. II. Extracellular calcium dependence and dopaminergic inhibition of gonadotropin responses. Chang JP, et al. **Gen Comp Endocrinol** 1990 Feb;77(2):274–82
Gonadotropin secretion from perifused tilapia pituitary in relation to gonadotropin-releasing hormone, extracellular calcium, and activation of protein kinase C. Levavi-Sivan B, et al. **Gen Comp Endocrinol** 1989 Aug;75(2):187–94

Calcium-dependent stimulation of estrogen secretion by FSH from theca cells of the domestic hen (Gallus domesticus). Onagbesan OM, et al. **Gen Comp Endocrinol** 1989 Aug; 75(2):177–86

Role of calcium ions in action of gonadotropin-releasing hormone on gonadotropin secretion in the African catfish, Clarias gariepinus. van Asselt LA, et al. **Gen Comp Endocrinol** 1989 Oct;76(1):46–52

Effects of inhibitors of eicosanoid synthesis in the uterus of ovariectomized rats and rats in natural oestrus: relation with calcium. Cantabrana B, et al. **Gen Pharmacol** 1990; 21(1):89–95

Positive inotropic effect of ryanodine on rabbit ventricular muscle: dependence on the intracellular calcium load. Gainullin RZ, et al. **Gen Physiol Biophys** 1989 Dec; 8(6):555–68

The isometric twitch of rabbit papillary muscle: reflection of the cellular calcium movements? Gross T, et al. **Gen Physiol Biophys** 1989 Dec;8(6):521–38

Possible participation of calcium-regulating factors in senile dementia in elderly female subjects. Ogihara T, et al. **Gerontology** 1990;36 Suppl 1:25–30

Glutamate receptor-linked changes in membrane potential and intracellular Ca2+ in primary rat astrocytes. Enkvist MO, et al. **GLIA** 1989;2(6):397–402

Stereocilia bundle stiffness: effects of neomycin sulphate, A23187 and concanavalin A. Kössl M, et al. **Hear Res** 1990 Mar;44(2–3):217–29

Calcitonin production: an examination of the regulatory effects of extracellular calcium and 1,25-dihydroxyvitamin D3. Cote GJ, et al. **Horm Metab Res Suppl** 1989;21:15–8

Extracellular calcium regulates expression of the gene for atrial natriuretic factor. LaPointe MC, et al. **Hypertension** 1990 Jan;15(1):20–8

[Ca2+], not diacylglycerol, is the primary regulator of sustained swine arterial smooth muscle contraction. Rembold CM, et al. **Hypertension** 1990 Jun;15(6 Pt 2):692–8

Release of O2- and LTC4 by murine eosinophils: role of intra- and extracellular calcium. de Andres B, et al. **Immunology** 1990 Feb;69(2):271–6

Possible involvement of adenosine 3':5'-cyclic monophosphate and extracellular calcium ions in histamine stimulation of interleukin-1 release from macrophage-like P388D1 cells. Okamoto H, et al. **Immunology** 1990 Jun; 70(2):186–90

Serotonin modulated Ca++ dependent K+ channels in alloimmune effector cell lytic function. Liepins A, et al. **Immunopharmacol Immunotoxicol** 1989;11(2-3):165–78

Calcium-mediated modulation of microtubule assembly in human breast epithelial cells. Ochieng J, et al. **In Vitro Cell Dev Biol** 1990 Apr;26(4):318–24

Calcium regulation of skeletal myogenesis. I. Cell content critical to myotube formation. Przybylski RJ, et al. **In Vitro Cell Dev Biol** 1989 Sep;25(9):830–8

Effect of magnesium and calcium ions on photoinduced lipid peroxidation and thylakoid breakdown of cell-free chloroplasts. Panda S, et al. **Indian J Biochem Biophys** 1990 Jun;27(3):159–63

Role of intracellular calcium in priming of human peripheral blood monocytes by bacterial lipopolysaccharide. McLeish KR, et al. **Inflammation** 1989 Dec;13(6):681–92

Skeletal muscle mitochondrial respiration of malignant hyperthermia-susceptible patients. Ca2+-induced uncoupling and free fatty acids. Cheah KS, et al. **Int J Biochem** 1989;21(8):913–20

Calcium in sea urchin egg during fertilization. Gillot I, et al. **Int J Dev Biol** 1990 Mar;34(1):117–25 (114 ref.)

Blocking the calcium cascade in experimental acute renal failure. Greif F, et al. **Isr J Med Sci** 1990 Jun;26(6):301–5

Extracellular calcium ions are required for muscarine-sensitive potassium current in bullfrog sympathetic neurons. Tokimasa T, et al. **J Auton Nerv Syst** 1990 Feb;29(2):163–74

Calcium requirement for gliding motility in myxobacteria. Womack BJ, et al. **J Bacteriol** 1989 Nov;171(11):6093–6

Ca2(+)-dependent protein phosphatase which dephosphorylates regulatory light chain-a in scallop smooth muscle myosin. Inoue K, et al. **J Biochem (Tokyo)** 1990 Jun;107(6):872–8

Ca2+ activates actin-filament sliding on scallop myosin but inhibits that on Physarum myosin. Okagaki T, et al. **J Biochem (Tokyo)** 1989 Dec;106(6):955–7

Glucagon- and dibutyryl cyclic AMP-produced inhibition of cholesterol ester hydrolase in isolated rat hepatocytes: role of calcium. Ruiz MB, et al. **J Biochem (Tokyo)** 1990 Mar;107(3):476–9

Role of Ca2+ in the substrate binding and catalytic functions of snake venom phospholipases A2. Teshima K, et al. **J Biochem (Tokyo)** 1989 Sep;106(3):518–27

Bi-directional regulation of dephosphorylation of cAMP-dependent phosphorylated proteins by cAMP and calcium in permeabilized rat heart cells. Yoshida A, et al. **J Biochem (Tokyo)** 1989 Nov;106(5):894–9

Ca2+ homeostasis and cytotoxicity in isolated hepatocytes: studies with extracellular adenosine 5'-triphosphate. Mirabelli F, et al. **J Biochem Toxicol** 1986 Mar;1(1):29–39

Molecular mechanisms of calcium-induced membrane fusion. Papahadjopoulos D, et al. **J Bioenerg Biomembr** 1990 Apr; 22(2):157–79 (158 ref.)

Induction of c-fos and c-myc proto-oncogene expression by epidermal growth factor and transforming growth factor alpha is calcium-independent. Cutry AF, et al. **J Biol Chem** 1989 Nov 25;264(33):19700–5

Activity of an intracellular lymphocyte stimulator is independent of G-protein interactions, [Ca2+]i elevation, phosphoinositide hydrolysis, and protein kinase C translocation. Goodman MG, et al. **J Biol Chem** 1990 Jul 25;265(21):12248–52

Thrombin induces a calcium transient that mediates an activation of the Na+/H+ exchanger in human fibroblasts. Hendey B, et al. **J Biol Chem** 1989 Nov 25;264(33):19540–7

Activation of glucose transport in skeletal muscle by phospholipase C and phorbol ester. Evaluation of the regulatory roles of protein kinase C and calcium [published erratum appears in J Biol Chem 1990 Apr 5;265(10):5917] Henriksen EJ, et al. **J Biol Chem** 1989 Dec 25; 264(36):21536–43

Lysophosphatidic acid, but not phosphatidic acid, is a potent Ca2(+)-mobilizing stimulus for fibroblasts. Evidence for an extracellular site of action. Jalink K, et al. **J Biol Chem** 1990 Jul 25;265(21):12232–9

Stimulation of glycine catabolism in isolated perfused rat liver by calcium mobilizing hormones and in isolated rat liver mitochondria by submicromolar concentrations of calcium. Jois M, et al. **J Biol Chem** 1990 Jan 25;265(3):1246–8

Platelet-derived growth factor stimulates non-mitochondrial Ca2+ uptake and inhibits mitogen-induced Ca2+ signaling in Swiss 3T3 fibroblasts. Powis G, et al. **J Biol Chem** 1990 Jun 25;265(18):10266–73

Modulation of RNA expression by intracellular calcium. Existence of a threshold calcium concentration for induction of VL30 RNA by epidermal growth factor, endothelin, and protein kinase C. Rodland KD, et al. **J Biol Chem** 1990 Jul 5;265(19):11000–7

The diltiazem analog TA-3090 mimics the actions of high extracellular Ca2+ on parathyroid function in dispersed bovine parathyroid cells. Chen CJ, et al. **J Bone Miner Res** 1990 Jun;5(6):581–7

Regulation by calcium and 1,25-(OH)2D3 of cell proliferation and function of bovine parathyroid cells in culture. Ishimi Y, et al. **J Bone Miner Res** 1990 Jul; 5(7):755–60

Regulation of 1,25-dihydroxyvitamin D3 by calcium in the parathyroidectomized, parathyroid hormone-replete rat. Weisinger JR, et al. **J Bone Miner Res** 1989 Dec; 4(6):929–35

Enhanced contractile responses of arteries from diabetic rats to alpha 1-adrenoceptor stimulation in the absence and presence of extracellular calcium. Abebe W, et al. **J Cardiovasc Pharmacol** 1990 Aug;16(2):239–48

Tissue selectivity and calcium dependence of contractile responses to endothelin. Bolger GT, et al. **J Cardiovasc Pharmacol** 1990 Jun;15(6):946–58

The positive inotropic effect of pimobendan involves stereospecific increases in the calcium sensitivity of cardiac myofilaments. Solaro RJ, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 2:S7–12

Vascular calcium overload produced by administration of vitamin D3 and nicotine in rats. Changes in tissue calcium levels, blood pressure, and pressor responses to electrical stimulation or norepinephrine in vivo. Thorin E, et al. **J Cardiovasc Pharmacol** 1990 Aug;16(2):257–66

Identification of a Ca2(+)-dependent cell-cell adhesion molecule in endothelial cells. Heimark RL, et al. **J Cell Biol** 1990 May;110(5):1745–56

Cytosolic free calcium elevation mediates the phagosome-lysosome fusion during phagocytosis in human neutrophils. Jaconi ME, et al. **J Cell Biol** 1990 May; 110(5):1555–64

Ca2+ transients are not required as signals for long-term neurite outgrowth from cultured sympathetic neurons. Tolkovsky AM, et al. **J Cell Biol** 1990 Apr;110(4):1295–306

Regulation of anaphase chromosome motion in Tradescantia stamen hair cells by calcium and related signaling agents. Zhang DH, et al. **J Cell Biol** 1990 Jul;111(1):171–82

Dexamethasone-induced killing of neoplastic cells of lymphoid derivation: lack of early calcium involvement. Bansal N, et al. **J Cell Physiol** 1990 Apr;143(1):105–9

Modulation of Ca2(+)-dependent intercellular adhesion in bovine aortic and human umbilical vein endothelial cells by heparin-binding growth factors. Bavisotto LM, et al. **J Cell Physiol** 1990 Apr;143(1):39–51

Retinyl acetate inhibits platelet-derived growth factor-induced Ca2+ signals in C3H 10T1/2 fibroblasts. Hill TD, et al. **J Cell Physiol** 1990 Aug;144(2):229–36

Anti-proliferative activity of L-651,582 correlates with calcium-mediated regulation of nucleotide metabolism at phosphoribosyl pyrophosphate synthetase. Hupe DJ, et al. **J Cell Physiol** 1990 Sep;144(3):457–66

Extracellular calcium affects the membrane currents of cultured human keratinocytes. Mauro TM, et al. **J Cell Physiol** 1990 Apr;143(1):13–20

Calcium regulation of growth and differentiation of normal human keratinocytes: modulation of differentiation competence by stages of growth and extracellular calcium. Pillai S, et al. **J Cell Physiol** 1990 May;143(2):294–302

Calcium influx regulates antibody-induced glycoprotein movements within the Chlamydomonas flagellar membrane. Bloodgood RA, et al. **J Cell Sci** 1990 May;96 (Pt 1):27–33

Spatial aspects of calcium signalling. Cheek TR. **J Cell Sci** 1989 Jun;93 (Pt 2):211–6

Calcium-induced chromatin condensation and cyclin phosphorylation during chromatin condensation cycles in ammonia-activated sea urchin eggs. Patel R, et al. **J Cell Sci Suppl** 1989;12:129–44

Atrial natriuretic peptide protects hepatocytes against damage induced by hypoxia and reactive oxygen. Possible role of intracellular free ionized calcium. von Ruecker AA, et al. **J Clin Chem Clin Biochem** 1989 Sep;27(9):531–7

Chloride secretory response of cystic fibrosis human airway epithelia. Preservation of calcium but not protein kinase C- and A-dependent mechanisms. Boucher RC, et al. **J Clin Invest** 1989 Nov;84(5):1424–31

Purification and characterization of an abundant cytosolic protein from human neutrophils that promotes Ca2(+)-dependent aggregation of isolated specific granules. Ernst JD, et al. **J Clin Invest** 1990 Apr; 85(4):1065–71

Aspirin potentiates prestimulated acid secretion and mobilizes intracellular calcium in rabbit parietal cells. Levine RA, et al. **J Clin Invest** 1990 Aug;86(2):400–8

Epidermal growth factor-stimulated phosphoinositide hydrolysis in cultured rat inner medullary collecting tubule cells. Regulation by G protein, calcium, and protein kinase C. Teitelbaum I, et al. **J Clin Invest** 1990 Apr;85(4):1044–50

Three-dimensional intracellular calcium gradients in single human burst-forming units-erythroid-derived erythroblasts induced by erythropoietin. Yelamarty RV, et al. **J Clin Invest** 1990 Jun;85(6):1799–809

Distribution of calcium-activated protease calpain in the rat brain. Perlmutter LS, et al. **J Comp Neurol** 1990 Jun 8; 296(2):269–76

Membrane currents of spiking cells isolated from turtle retina. Lasater EM, et al. **J Comp Physiol [A]** 1990 May; 167(1):11–21

On the role of Ca2(+)-calmodulin-dependent and cAMP-dependent protein phosphorylation in the circadian rhythm of Neurospora crassa. Techel D, et al. **J Comp Physiol [B]** 1990;159(6):695–706

Relationship between myoplasmic calcium transients and calcium currents in frog skeletal muscle. García J, et al. **J Gen Physiol** 1989 Dec;94(6):973–86

Delayed rectifying and calcium-activated K+ channels and their significance for action potential repolarization in mouse pancreatic beta-cells. Smith PA, et al. **J Gen Physiol** 1990 Jun;95(6):1041–59

Gap junctional conductance between pairs of ventricular myocytes is modulated synergistically by H+ and Ca++. White RL, et al. **J Gen Physiol** 1990 Jun;95(6):1061–75

The role of calcium precipitation in the sulfoglycolithocholate-induced cholestasis of the bile fistula hamster. Bellentani S, et al. **J Hepatol** 1990 May; 10(3):356–63

Calcium dependency of the angiotensin II-induced vasoconstriction in the rat. van Heiningen PN, et al. **J Hypertens Suppl** 1989 Dec;7(6):S158–9

Regulation of arachidonic acid release in mouse peritoneal macrophages. The role of extracellular calcium and protein kinase C. Balsinde J, et al. **J Immunol** 1990 Jun 1; 144(11):4298–304

Phorbol myristate acetate-induced down-modulation of CD4 is dependent on calmodulin and intracellular calcium. Bigby M, et al. **J Immunol** 1990 Apr 15;144(8):3111–6

Differential regulation of Ca2+ mobilization in human thymocytes by coaggregation of surface molecules. Deusch K, et al. **J Immunol** 1990 Apr 15;144(8):2851–8

Superoxide responses of immune complex-stimulated rat alveolar macrophages. Intracellular calcium and priming. Hagenlocker BE, et al. **J Immunol** 1990 May 15; 144(10):3898–906

Membrane IgM and IgD molecules fail to transduce Ca2+ mobilizing signals when expressed on differentiated B lineage cells. Justement LB, et al. **J Immunol** 1990 May 1;144(9):3272–80

Role of intracellular calcium concentration and protein kinase C activation in IFN-gamma stimulation of U937 cells. Klein JB, et al. **J Immunol** 1990 Jun 1;144(11):4305–11

Monoclonal anti-CD23 antibodies induce a rise in [Ca2+]i and polyphosphoinositide hydrolysis in human activated B cells. Involvement of a Gp protein. Kolb JP, et al. **J Immunol** 1990 Jul 15;145(2):429–37

Antigen-induced Ca2+ signaling and desensitization in B cells. Lazarus AH, et al. **J Immunol** 1990 Jun 1; 144(11):4147–55

An intracellular calcium increase and protein kinase C activation fail to initiate T cell proliferation in the absence of a costimulatory signal. Mueller DL, et al. **J Immunol** 1990 May 15;144(10):3701–9

Inhibition of protein kinase C and anti-CD3-induced Ca2+ influx in Jurkat T cells by a synthetic peptide with sequence identity to HIV-1 gp41. Ruegg CL, et al. **J Immunol** 1990 May 15;144(10):3928–35

Multiple calcium-mediated mechanisms regulate c-myc expression in HL-60 cells. Salehi Z, et al. **J Immunol** 1990 Jul 1;145(1):276–82

IL-1 secretion by macrophages. Enhancement of IL-1 secretion and processing by calcium ionophores. Suttles J, et al. **J Immunol** 1990 Jan 1;144(1):175–82

Regulatory role of CD4/L3T4 molecules in IL-2 production by affecting intracellular Ca2+ concentration of T cell clone stimulated with soluble anti-CD3. Tamura T, et al. **J Immunol** 1990 Jul 1;145(1):78–84

Stimulation of the respiratory burst in peripheral blood monocytes by lipoteichoic acid. The involvement of calcium ions and phospholipase A2. Tarsi-Tsuk D, et al.

J Immunol 1990 Apr 1;144(7):2665–70
Monovalent ligands of complement receptor 2 inhibit whereas polyvalent ligands enhance anti-Ig-induced human B cell intracytoplasmic free calcium concentration. Tsokos GC, et al. J Immunol 1990 Mar 1;144(5):1640–5
HCl secretion and [Ca2+]i in cultured parietal cells. Chew CS, et al. J Intern Med Suppl 1990;732:9–15
Calcium and hypertension. Sowers JR, et al. J Lab Clin Med 1989 Oct;114(4):338–48 (93 ref.)
Effects of calcium and Bay K-8644 on calcium currents in adrenal medullary chromaffin cells. Ceña V, et al. J Membr Biol 1989 Dec;112(3):255–65
Proteolytic activation of a hyperpolarization- and calcium-dependent potassium channel in Paramecium. Kubalski A, et al. J Membr Biol 1989 Nov;112(1):91–6
Aminoglycoside blockade of Ca2(+)-activated K+ channel from rat brain synaptosomal membranes incorporated into planar bilayers. Nomura K, et al. J Membr Biol 1990 May; 115(3):241–51
Calcium-dependent potassium channel in Paramecium studied under patch clamp. Saimi Y, et al. J Membr Biol 1989 Nov;112(1):79–89
Expression of a rapid, low-voltage threshold K current in insulin-secreting cells is dependent on intracellular calcium buffering. Satin LS, et al. J Membr Biol 1989 Dec; 112(3):213–22
Cyclic AMP and calcium in mouse mammary tumour virus expression: effects and post-transcriptional site of action. Bolander FF, et al. J Mol Endocrinol 1990 Aug;5(1):27–31
Calcium and strontium activation characteristics of skeletal muscle fibres from the small marsupial Sminthopsis macroura. Wilson GJ, et al. J Muscle Res Cell Motil 1990 Feb;11(1):12–24
Depletion of the Ca(++)-dependent releasable pool of glutamate in striatal synaptosomes associated with dendrotoxin-induced potassium channel blockade. Barbeito L, et al. J Neural Transm Gen Sect 1990;80(3):167–79
Elevated potassium shortens action potential duration by altering outward currents in chick dorsal root ganglia neurons. Yang J, et al. J Neurobiol 1990 Jun;21(4):661–71
Calcium- versus G protein-mediated phosphoinositide. Hydrolysis in rat cerebral cortical synaptoneurosomes. Chandler LJ, et al. J Neurochem 1990 Sep;55(3):1022–30
Calmodulin-binding proteins and calcium/calmodulin-regulated enzyme activities associated with brain actomyosin. Larson RE, et al. J Neurochem 1990 Apr;54(4):1288–94
Differential calcium dependence between the release of endogenous dopamine and noradrenaline from rat brain synaptosomes. Okada M, et al. J Neurochem 1990 Jun; 54(6):1947–52
Response of a fast muscle from normal and dystrophic (dy2j) mice to a local decrease in extracellular Ca2+ induced at different stages of postnatal life. Dangain J, et al. J Neurol Sci 1990 Mar;95(3):271–82
Insights into associative long-term potentiation from computational models of NMDA receptor-mediated calcium influx and intracellular calcium concentration changes. Holmes WR, et al. J Neurophysiol 1990 May; 63(5):1148–68
Low-threshold calcium current in isolated Purkinje cell bodies of rat cerebellum. Kaneda M, et al. J Neurophysiol 1990 May;63(5):1046–51
Activity-dependent neuromodulation in Aplysia neuron R15: intracellular calcium antagonizes neurotransmitter responses mediated by cAMP. Kramer RH, et al. J Neurophysiol 1990 May;63(5):1075–88
Neuropeptide Y reduces calcium current and inhibits acetylcholine release in nodose neurons via a pertussis toxin-sensitive mechanism. Wiley JW, et al. J Neurophysiol 1990 Jun;63(6):1499–507
Serotonin enhances a low-voltage-activated calcium current in rat spinal motoneurons. Berger AJ, et al. J Neurosci 1990 Jun;10(6):1922–8
Ca2+ and Na+ currents in developing skeletal myoblasts are expressed in a sequential program: reversible suppression by transforming growth factor beta-1, an inhibitor of the myogenic pathway. Caffrey JM, et al. J Neurosci 1989 Oct;9(10):3443–53
Regulation of tension on hair-cell transduction channels: displacement and calcium dependence. Hacohen N, et al. J Neurosci 1989 Nov;9(11):3988–97
Evidence for two calcium-dependent potassium conductances in lizard motor nerve terminals. Morita K, et al. J Neurosci 1990 Aug;10(8):2614–25
Calcium-dependent depolarizations originating in lizard motor nerve terminals. Morita K, et al. J Neurosci 1989 Sep;9(9):3359–69
Distribution of calcium currents in sprouting PC12 cells. Streit J, et al. J Neurosci 1989 Dec;9(12):4190–9
Electrophysiological properties of neuroendocrine cells of the intact rat pars intermedia: multiple calcium currents. Williams PJ, et al. J Neurosci 1990 Mar;10(3):748–56
Synaptic modulation by dopamine of calcium currents in rat pars intermedia. Williams PJ, et al. J Neurosci 1990 Mar; 10(3):757–63
A new device for monitoring concentrations of intracellular Ca2+ in CNS preparations and its application to the frog's spinal cord. Kudo Y, et al. J Neurosci Methods 1989 Nov; 30(2):161–8
Aminoglycoside antibiotics impair calcium entry but not viability and motility in isolated cochlear outer hair cells. Dulon D, et al. J Neurosci Res 1989 Oct;24(2):338–46
Calcium-dependent volume reduction in regenerating ganglion cell axons in vitro. Edmonds BT, et al. J Neurosci Res 1990 Jun;26(2):168–80
Uptake and release of glycine in cerebellar granule cells and astrocytes in primary culture: potassium-stimulated release from granule cells is calcium-dependent. Holopainen I, et al. J Neurosci Res 1989 Nov;24(3):374–83
Mechanisms of [3H] gamma-aminobutyric acid release by chromaffin cells in primary culture. Oset-Gasque MJ, et al. J Neurosci Res 1990 Jun;26(2):181–7
Chelation of endogenous membrane calcium inhibits gamma-aminobutyric acid uptake in synaptosomes. Tapia R, et al. J Neurosci Res 1989 Oct;24(2):293–8
Vitamin D metabolism in chronic childhood hypoparathyroidism: evidence for a direct regulatory effect of calcium. Carpenter TO, et al. J Pediatr 1990 Feb; 116(2):252–7
Epithelial transport of drugs in cell culture. II: Effect of extracellular calcium concentration on the paracellular transport of drugs of different lipophilicities across monolayers of intestinal epithelial (Caco-2) cells. Artursson P, et al. J Pharm Sci 1990 Jul;79(7):595–600
Opioid-induced prejunctional inhibition of vasoconstriction in the rabbit ear artery: alpha-2 adrenoceptor activation and external calcium. Budai D, et al. J Pharmacol Exp Ther 1989 Nov;251(2):497–501
Mechanism of cyclosporin potentiation of vasoconstriction of the isolated rat mesenteric arterial bed: role of extracellular calcium. Rego A, et al. J Pharmacol Exp Ther 1990 Sep;254(3):799–808
Alpha adrenoceptor activation and postreceptor contractile mechanisms in the human digital artery. Stevens MJ, et al. J Pharmacol Exp Ther 1990 Apr;253(1):375–80
The antinociception produced by intrathecal morphine, calcium, A23187, U50,488H, [D-Ala2, N-Me-Phe4, Gly-ol]enkephalin and [D-Pen2, D-Pen5]enkephalin after intrathecal administration of calcitonin gene-related peptide in mice. Welch SP, et al. J Pharmacol Exp Ther 1989 Oct;251(1):1–8
Calcium-dependent chloride current in neurones of the rabbit pelvic parasympathetic ganglia. Akasu T, et al. J Physiol (Lond) 1990 Mar;422:303–20
The calcium-dependent potassium conductance in rat sympathetic neurones. Belluzzi O, et al. J Physiol (Lond) 1990 Mar;422:561–83
Voltage-gated and agonist-mediated rises in intracellular Ca2+ in rat clonal pituitary cells (GH3) held under voltage clamp. Benham CD. J Physiol (Lond) 1989 Aug;415:143–58
Properties of calcium stores and transient outward currents in single smooth muscle cells of rabbit intestine. Bolton TB, et al. J Physiol (Lond) 1989 Feb;409:385–401
Calcium dependency of the endothelium-dependent hyperpolarization in smooth muscle cells of the rabbit carotid artery. Chen GF, et al. J Physiol (Lond) 1990 Feb; 421:521–34
Calcium currents in rat thalamocortical relay neurones: kinetic properties of the transient, low-threshold current. Coulter DA, et al. J Physiol (Lond) 1989 Jul;414:587–604
Sodium-calcium exchange during the action potential in guinea-pig ventricular cells. Egan TM, et al. J Physiol (Lond) 1989 Apr;411:639–61
Cytoplasmic calcium as the messenger for light adaptation in salamander rods. Fain GL, et al. J Physiol (Lond) 1989 Sep;416:215–43
Ca2(+)-activated K+ current involvement in neuronal function revealed by in situ single-channel analysis in Helix neurones. Gola M, et al. J Physiol (Lond) 1990 Jan; 420:73–109
2-Chloroadenosine reduces the N calcium current of cultured mouse sensory neurones in a pertussis toxin-sensitive manner. Gross RA, et al. J Physiol (Lond) 1989 Apr; 411:585–95
Somatostatin blocks a calcium current in rat sympathetic ganglion neurones. Ikeda SR, et al. J Physiol (Lond) 1989 Feb;409:221–40
Deactivation kinetics of different components of calcium inward current in the membrane of mice sensory neurones. Kostyuk PG, et al. J Physiol (Lond) 1989 Feb;409:343–55
Ca2(+)-activated K+ channels in human B lymphocytes and rat thymocytes. Mahaut-Smith MP, et al. J Physiol (Lond) 1989 Aug;415:69–83
Characteristics of voltage-gated Ca2+ currents in ovine gonadotrophs. Mason WT, et al. J Physiol (Lond) 1989 Aug;415:367–91
Light adaptation in cone photoreceptors of the salamander: a role for cytoplasmic calcium. Matthews HR, et al. J Physiol (Lond) 1990 Jan;420:447–69
Kinetics of the conductance evoked by noradrenaline, inositol trisphosphate or Ca2+ in guinea-pig isolated hepatocytes. Ogden DC, et al. J Physiol (Lond) 1990 Mar; 422:585–602
Effect of lowered extracellular pH on Ca2(+)-dependent K+ currents in type I cells from the neonatal rat carotid body. Peers C. J Physiol (Lond) 1990 Mar;422:381–95
Activation of neurohypophysial vasopressin release by Ca2+ influx and intracellular Ca2+ accumulation in the rat. Shibuki K. J Physiol (Lond) 1990 Mar;422:321–31
Evaluation of a model of long-term memory based on the properties of the Ca2+/calmodulin-dependent protein kinase. Lisman J, et al. J Physiol (Paris) 1988–89; 83(3):187–97
The effect of calcium on gallbladder absorption. Scheeres DE, et al. J Surg Res 1990 Jun;48(6):547–51
The role of extracellular calcium in ischemia/reperfusion injury in skeletal muscle. Smith A, et al. J Surg Res 1990 Aug;49(2):153–6
Bursting excitable cell models by a slow Ca2+ current. Chay TR. J Theor Biol 1990 Feb 9;142(3):305–15
Diffusion effects in calcium-regulated strain fields. Hart TN, et al. J Theor Biol 1989 Feb 8;136(3):327–36
Ca2(+)-dependent and independent mechanisms of sustained contraction in vascular smooth muscle of rat aorta. Ozaki H, et al. Jpn J Pharmacol 1990 Mar;52(3):509–12
Acetylcholine induces Ca-dependent K currents in rabbit endothelial cells. Sakai T. Jpn J Pharmacol 1990 Jun; 53(2):235–46
Mechanism of phenytoin action at the cellular level. Sugaya E, et al. Jpn J Psychiatry Neurol 1989 Sep;43(3):554–6 (11 ref.)
Dystrophin function: calcium-related rather than mechanical [letter] [see comments] Tay JS, et al. Lancet 1990 Apr 21; 335(8695):983 Comment in: Lancet 1990 May 26;335(8700):1289.
Calcium and cell death. Siesjö BK. Magnesium 1989; 8(5-6):223–37 (80 ref.)
Pancreatic acini as second messenger models in exocrine secretion. Gardner JD, et al. Methods Enzymol 1989; 171:590–3
Alpha 2-adrenergic receptors and calcium: alpha 2-receptor blockade in vascular smooth muscle as an approach to the treatment of hypertension. Lee JY, et al. Methods Find Exp Clin Pharmacol 1990 Apr;12(3):213–25 (115 ref.)
Role of protein phosphorylation in Ca2+ regulated intracellular messenger systems. Hidaka H, et al. Microcirc Endothelium Lymphatics 1989 Feb-Apr; 5(1-2):13–29 (17 ref.)
Effects of inorganic and organic promoters and inhibitors of calcium influx on stretch-induced myogenic tone of vascular tissues. Nakayama K, et al. Microcirc Endothelium Lymphatics 1989 Feb-Apr; 5(1-2):55–76
Role of calcium in the cardiac and vascular smooth muscle contraction—overview. Shibata S. Microcirc Endothelium Lymphatics 1989 Feb-Apr; 5(1-2):3–11 (21 ref.)
Effects of physiologic hyperinsulinemia on renal phosphate handling in the rat: a role for calcium. Guntupalli J, et al. Miner Electrolyte Metab 1989;15(6):338–45
Calcium is essential for both the membrane binding and lytic activity of pore-forming protein (perforin) from cytotoxic T-lymphocyte. Ishiura S, et al. Mol Immunol 1990 Aug; 27(8):803–7
Hormone-induced biosynthesis of endothelium-derived relaxing factor/nitric oxide-like material in N1E-115 neuroblastoma cells requires calcium and calmodulin. Förstermann U, et al. Mol Pharmacol 1990 Jul;38(1):7–13
Ca2+-mediated neuronal death in rat brain neuronal cultures by veratridine: protection by flunarizine. Pauwels PJ, et al. Mol Pharmacol 1989 Oct;36(4):525–31
Involvement of a Ca2+-calmodulin interaction in the yeast-mycelial (Y-M) transition of Candida albicans. Sabie FT, et al. Mycopathologia 1989 Oct;108(1):47–54
Distribution of two distinct Ca2+-ATPase-like proteins and their relationships to the agonist-sensitive calcium store in adrenal chromaffin cells. Burgoyne RD, et al. Nature 1989 Nov 2;342(6245):72–4
Calcium signalling: receptor kinships revealed [news] Gill DL. Nature 1989 Nov 2;342(6245):16–8
Membrane depolarization evokes neurotransmitter release in the absence of calcium entry. Hochner B, et al. Nature 1989 Nov 23;342(6248):433–5
Free energy transfer in the cell by calcium. Becker EW. Naturwissenschaften 1990 Apr;77(4):176–7
Endothelin-1 induced contraction of rat aorta: contributions made by Ca2+ influx and activation of contractile apparatus associated with no change in cytoplasmic Ca2+ level. Huang XN, et al. Naunyn Schmiedebergs Arch Pharmacol 1990 Jan-Feb; 341(1-2):80–7
Differences between negative inotropic and vasodilator effects of calcium antagonists acting on extra- and intracellular calcium movements in rat and guinea-pig cardiac preparations. Hugtenburg JG, et al. Naunyn Schmiedebergs Arch Pharmacol 1989 Nov; 340(5):567–75
Nitric oxide synthesis in endothelial cytosol: evidence for a calcium-dependent and a calcium-independent mechanism. Mülsch A, et al. Naunyn Schmiedebergs Arch Pharmacol 1989 Dec;340(6 Pt 2):767–70
Erythrocyte calcium content and cell deformability in chronic renal failure [letter; comment] Docci D. Nephron 1990;54(2):189 Comment on: Nephron 1989;51(4):573–4.
Effects of atropine on the release of newly synthesized acetylcholine from rat striatal slices at various concentrations of calcium ions. Doležal V, et al. Neurochem Res 1990 Jan;15(1):41–5
Involvement of extracellular calcium and arachidonate in [3H] dopamine release from rat tuberoinfundibular neurons. Ohmichi M, et al. Neuroendocrinology 1989 Oct;50(4):481–7
Elevated calmodulin levels and reduced

calmodulin-stimulated calcium-ATPase in Duchenne progressive muscular dystrophy. Niebroj-Dobosz I, et al. **Neurology** 1989 Dec;39(12):1610-4

Cyclic GMP depresses hippocampal Ca2+ current through a mechanism independent of cGMP-dependent protein kinase. Doerner D, et al. **Neuron** 1988 Oct;1(8):693-9

An alpha 40 subunit of a GTP-binding protein immunologically related to Go mediates a dopamine-induced decrease of Ca2+ current in snail neurons. Harris-Warrick RM, et al. **Neuron** 1988 Mar; 1(1):27-32

Regulation of muscle AChR alpha subunit gene expression by electrical activity: involvement of protein kinase C and Ca2+. Klarsfeld A, et al. **Neuron** 1989 Mar;2(3):1229-36

Vasoactive intestinal peptide activates Ca2(+)-dependent K+ channels through a cAMP pathway in mouse lacrimal cells. Lechleiter JD, et al. **Neuron** 1988 May;1(3):227-35

Apparent desensitization of NMDA responses in Xenopus oocytes involves calcium-dependent chloride current. Leonard JP, et al. **Neuron** 1990 Jan;4(1):53-60

Quisqualate receptor-mediated depression of calcium currents in hippocampal neurons. Lester RA, et al. **Neuron** 1990 May;4(5):741-9

Spider toxins selectively block calcium currents in Drosophila. Leung HT, et al. **Neuron** 1989 Dec;3(6):767-72

Subconductance behavior in a maxi Ca2(+)-activated K+ channel induced by dendrotoxin-I. Lucchesi K, et al. **Neuron** 1990 Jan;4(1):141-8

Sequences of autophosphorylation sites in neuronal type II CaM kinase that control Ca2(+)-independent activity. Miller SG, et al. **Neuron** 1988 Sep;1(7):593-604

Neuron-specific and state-specific differences in calcium homeostasis regulate the generation and degeneration of neuronal architecture. Mills LR, et al. **Neuron** 1990 Jan; 4(1):149-63

Electrical activity, cAMP, and cytosolic calcium regulate mRNA encoding sodium channel alpha subunits in rat muscle cells. Offord J, et al. **Neuron** 1989 May;2(5):1447-52

Feedback inhibition by calcium limits the release of calcium by inositol trisphosphate in Limulus ventral photoreceptors. Payne R, et al. **Neuron** 1990 Apr;4(4):547-55

Serotonin receptor activation reduces calcium current in an acutely dissociated adult central neuron. Penington NJ, et al. **Neuron** 1990 May;4(5):751-8

Membrane depolarization and calcium induce c-fos transcription via phosphorylation of transcription factor CREB. Sheng M, et al. **Neuron** 1990 Apr;4(4):571-82

Dynorphin prolongs the action potential of mouse sensory ganglion neurons by decreasing a potassium conductance whereas another specific kappa opioid does so by increasing a calcium conductance. Shen KF, et al. **Neuropharmacology** 1990 Apr;29(4):343-9

Molecular mechanisms of neuronal plasticity during learning: the role of secondary messengers. Kotlyar BI, et al. **Neurosci Behav Physiol** 1990 Mar-Apr;20(2):118-35 (100 ref.)

NMDA and quisqualate reduce a Ca-dependent K+ current by a protein kinase-mediated mechanism. Baskys A, et al. **Neurosci Lett** 1990 Apr 20;112(1):76-81

Terbium simulates the action of calcium on electrophysiological activity in the isolated fish retina. Dakin SR, et al. **Neurosci Lett** 1990 Apr 20;112(1):82-6

Low- and high-voltage-activated Ca2+ conductances in electrically excitable growth cones of chick dorsal root ganglion neurons. Gottmann K, et al. **Neurosci Lett** 1990 Mar 2;110(1-2):34-9

Decrease of free calcium concentration at the outer surface of identified snail neurons during paroxysmal depolarization shifts. Lücke A, et al. **Neurosci Lett** 1990 May 4; 112(2-3):190-3

Analysis of the cardiovascular changes evoked by microinjection of NaCl into the nucleus tractus solitarii of rats: evidence for a Na+/Ca2+ relationship. Lukovic L, et al. **Neurosci Lett** 1990 Mar 2;110(1-2):46-51

Block by a putative antiarrhythmic agent of a calcium-dependent potassium channel in cultured hippocampal neurons. McLarnon JG. **Neurosci Lett** 1990 May 4;112(2-3):210-5

Inactivation of a slow Ca2+ current in CA1 neurones of the adult rat hippocampal slice. Nistri A, et al. **Neurosci Lett** 1990 Mar 26;111(1-2):102-8

Ca2+/calmodulin-dependent protein kinase II immunoreactivity in the rat hippocampus after forebrain ischemia. Onodera H, et al. **Neurosci Lett** 1990 May 31; 113(2):134-8

Demonstration of reversible membrane internalization after exocytosis in the rat neurohypophysis. Shibuki K. **Neurosci Lett** 1989 Oct 9;104(3):292-7

Elevation of intracellular calcium content in area CA1 of hippocampus is not directly correlated with the development of long-term potentiation. Siklós L, et al. **Neurosci Lett** 1989 Dec 15;107(1-3):99-104

Dopamine (D2) or gamma-aminobutyric acid (GABAB) receptor activation hyperpolarizes rat melanotrophs and pertussis toxin blocks these responses and the accompanying fall in [Ca2+]i. Taraskevich PS, et al. **Neurosci Lett** 1990 May 4;112(2-3):205-9

Sodium ions inhibit the stimulant action of caffeine on catecholamine secretion from adrenal chromaffin cells of the guinea pig. Teraoka H, et al. **Neurosci Lett** 1990 Jan 1;108(1-2):179-82

Pharmacological characterization of voltage-dependent calcium currents in rat hippocampal neurons. Toselli M, et al. **Neurosci Lett** 1990 Apr 20;112(1):70-5

Cultured glial precursor cells from mouse cortex express two types of calcium currents. Verkhratsky AN, et al. **Neurosci Lett** 1990 May 4;112(2-3):194-8

Endothelin-1 induces intracellular calcium rise and inositol 1,4,5-trisphosphate formation in cultured rat and human glioma cells. Zhang W, et al. **Neurosci Lett** 1990 May 4; 112(2-3):199-204

Transient calcium current of retinal bipolar cells of the mouse. Kaneko A, et al. **Neurosci Res Suppl** 1989;10:S67-76 (12 ref.)

Control of intracellular calcium in vertebrate photoreceptors. McNaughton PA, et al. **Neurosci Res Suppl** 1989;10:S23-35 (30 ref.)

Calcium dependency of N-methyl-D-aspartate toxicity in slices from the immature rat hippocampus. Ellrén K, et al. **Neuroscience** 1989;32(2):371-9

Calcium-dependent potentials with different sensitivities to calcium agonists and antagonists in guinea-pig hippocampal neurons. Higashi H, et al. **Neuroscience** 1990;34(1):35-47

The role of intracellular pH and Ca++ on arachidonic acid metabolism in human platelets. Ozaki Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Dec;52(8):1498-505

Bradykinin and inositol 1,4,5-trisphosphate-stimulated calcium release from intracellular stores in cultured bovine endothelial cells. Freay A, et al. **Pflugers Arch** 1989 Aug; 414(4):377-84

Calcium dependence of BAY K 8644 effects on the rabbit gall-bladder. Hansen CP, et al. **Pflugers Arch** 1990 Jan; 415(4):444-8

Identification of a voltage- and calcium-dependent non-selective cation channel in cultured adult and fetal human nasal epithelial cells. Jorissen M, et al. **Pflugers Arch** 1990 Feb;415(5):617-23

Calcium-activated potassium channels in the luminal membrane of Amphiuma diluting segment: voltage-dependent block by intracellular Na+ upon depolarisation. Kawahara K, et al. **Pflugers Arch** 1990 Jun; 416(4):422-7

L-type Ca-channels: similar Q10 of Ca-, Ba- and Na-conductance points to the importance of ion-channel interaction. Klöckner U, et al. **Pflugers Arch** 1990 Feb; 415(5):638-41

Features of a calcium independent, caffeine sensitive outward current in single smooth muscle cells from guinea pig protal vein. Noack Th, et al. **Pflugers Arch** 1990 Jun;416(4):467-9

A rapidly inactivating Ca2(+)-dependent K+ current in pheochromocytoma cells (PC12) of the rat. Pun RY, et al. **Pflugers Arch** 1990 Jan;415(4):425-32

Oxytocin-induced penile erection and yawning: role of calcium and prostaglandins. Argiolas A, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):601-5

Calcium dependence of the evoked arginine vasopressin release by electrical stimulation and by L-glutamate. Berrino L, et al. **Pharmacol Res** 1989 Nov-Dec;21 Suppl 1:3-4

Mode of action of lithium in affective disorders. An influence on intracellular calcium functions. Meltzer HL. **Pharmacol Toxicol** 1990;66 Suppl 3:84-99

Transmural non-homogeneity of calcium-induced heart injury. Tribulová N, et al. **Physiol Bohemoslov** 1990; 39(2):147-50

Role of calcium ions in regulation of mammalian intramitochondrial metabolism. McCormack JG, et al. **Physiol Rev** 1990 Apr;70(2):391-425 (355 ref.)

Expression of tissue factor procoagulant activity: regulation by cytosolic calcium. Bach R, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):6995-9

Separate Cl- conductances activated by cAMP and Ca2+ in Cl(-)-secreting epithelial cells. Cliff WH, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):4956-60

Neuronal modulation of calcium channel activity in cultured rat astrocytes. Corvalan V, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4345-8

Minimal model for signal-induced Ca2+ oscillations and for their frequency encoding through protein phosphorylation. Goldbeter A, et al. **Proc Natl Acad Sci U S A** 1990 Feb; 87(4):1461-5

Specific reduction of calcium-binding protein (28-kilodalton calbindin-D) gene expression in aging and neurodegenerative diseases. Iacopino AM, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4078-82

Muscarinic and beta-adrenergic depression of the slow Ca2(+)-activated potassium conductance in hippocampal CA3 pyramidal cells is not mediated by a reduction of depolarization-induced cytosolic Ca2+ transients. Knöpfel T, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4083-7

Inhibition by Ca2+ of inositol trisphosphate-mediated Ca2+ liberation: a possible mechanism for oscillatory release of Ca2+. Parker I, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):260-4

Calcium is an intracellular mediator of the climbing fiber in induction of cerebellar long-term depression. Sakurai M. **Proc Natl Acad Sci U S A** 1990 May;87(9):3383-5

Role of extracellular calcium in anoxic injury of mammalian central white matter. Stys PK, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4212-6

Real-time imaging of calcium influx in mammalian cerebellar Purkinje cells in vitro. Sugimori M, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5084-8

Calcium as an intracellular regulator. Campbell AK. **Proc Nutr Soc** 1990 Feb;49(1):51-6 (23 ref.)

Intracellular calcium ions and intramitochondrial Ca2+ in the regulation of energy metabolism in mammalian tissues. McCormack JG, et al. **Proc Nutr Soc** 1990 Feb;49(1):57-75 (127 ref.)

Inositol 1,4,5-trisphosphate-induced calcium mobilization is localized in Xenopus oocytes. Berridge MJ. **Proc R Soc Lond [Biol]** 1989 Dec 22;238(1292):235-43

Oscillation period of MEPP frequency at frog neuromuscular junctions is inversely correlated with release efficacy and independent of acute Ca2+ loading. Pawson PA, et al. **Proc R Soc Lond [Biol]** 1989 Sep 22;237(1289):489-99

Spatial and temporal analysis of calcium-dependent electrical activity in guinea pig Purkinje cell dendrites. Ross WN, et al. **Proc R Soc Lond [Biol]** 1990 May 22;240(1297):173-85

Hyposmolar stimulation of secretion of thyrotropin, prolactin, and luteinizing hormone does not require extracellular calcium and is not inhibited by colchicine, cytochalasin B, ouabain, or tetrodotoxin. Greer MA, et al. **Proc Soc Exp Biol Med** 1990 Mar;193(3):203-9

Ethanol inhibition of cell-mediated lysis of antibody-sensitized target cells at a calcium-dependent step. Walia AS, et al. **Proc Soc Exp Biol Med** 1989 Nov; 192(2):177-81

Membrane currents in hippocampal neurons. Brown DA, et al. **Prog Brain Res** 1990;83:141-60 (139 ref.)

Activity-dependent ionic changes and neuronal plasticity in rat hippocampus. Heinemann U, et al. **Prog Brain Res** 1990; 83:197-214 (126 ref.)

Cytosolic free calcium in hippocampal CA3 pyramidal cells. Knöpfel T, et al. **Prog Brain Res** 1990;83:189-95 (26 ref.)

Requirement of extracellular calcium in gonadotropin releasing hormone action. Bhattacharya S, et al. **Prog Clin Biol Res** 1990;342:572-7

The role of elevated intracellular calcium in the susceptibility to ventricular fibrillation. Billman GE, et al. **Prog Clin Biol Res** 1990;327:755-63

Calcium regulation of smooth muscle contraction. Ebashi S. **Prog Clin Biol Res** 1989;315:239-51 (55 ref.)

Development of Ca2+ concept in smooth muscle research. Ebashi S. **Prog Clin Biol Res** 1990;327:159-65 (35 ref.)

Control of calcium release in smooth muscle cells. Endo M, et al. **Prog Clin Biol Res** 1990;327:193-204

Modulation of calcium sensitivity of the cardiac contractile system: drug actions at the myofilament level? Herzig JW, et al. **Prog Clin Biol Res** 1989;315:600-1

Modulators of myosin light chain kinase activity affect both [Ca+2] and contraction in single smooth muscle cells. Itoh T, et al. **Prog Clin Biol Res** 1990;327:73-87 (26 ref.)

Calcium antagonists protect hippocampal neurons against ischemic damage. Krieglstein J, et al. **Prog Clin Biol Res** 1989;317:393-400

The role of calcium in the development of diastolic force during hypoxia in rat myocardium. Leijendekker WJ, et al. **Prog Clin Biol Res** 1989;315:604-5

Effects of isoproterenol and caffeine on calcium transients and action potentials in human ventricular cardiomyocytes. Li Q, et al. **Prog Clin Biol Res** 1990;327:743-50

Regulation by calcium and myosin phosphorylation of the development and maintenance of stress in vascular smooth muscle. Moreland RS, et al. **Prog Clin Biol Res** 1989; 315:317-28

Calcium regulation of myofibrillar contraction. Ohtsuki I, et al. **Prog Clin Biol Res** 1989;315:213-4

Sodium and calcium currents recorded from single uterine smooth muscle cells freshly isolated from pregnant rat. Ohya Y, et al. **Prog Clin Biol Res** 1990;327:659-63 (12 ref.)

Messenger Ca2+, protein kinase C, and smooth muscle contraction. Rasmussen H, et al. **Prog Clin Biol Res** 1990; 327:89-106 (30 ref.)

Signal transduction in hypoxic pulmonary vasoconstriction (HPV). Rhoades RA, et al. **Prog Clin Biol Res** 1990; 327:565-73

Ca2(+)-activated K+ channels in bovine aortic smooth muscle and GH3 cells: properties and regulation by guanine nucleotides. Roy-Contancin L, et al. **Prog Clin Biol Res** 1990;334:145-70 (29 ref.)

Endothelin and vasopressin evoked elevation of intracellular free Ca2+ ([Ca2+]i) in A10 rat aortic smooth muscle cells. Simpson AW, et al. **Prog Clin Biol Res** 1990;327:559-63

Transitions in isoform populations of thick and thin filament proteins and calcium activation of force and ATP hydrolysis by cardiac myofilaments. Solaro RJ, et al. **Prog Clin Biol Res** 1989;315:487-502

Heparin-sensitive inositol trisphosphate signaling and the role of G-proteins in Ca2(+)-release and contractile regulation in smooth muscle. Somlyo AV, et al. **Prog Clin Biol Res** 1990;327:167-82 (50 ref.)

Cyclic nucleotide regulation of Ca2+ slow channels and neurotransmitter release in vascular muscle. Sperelakis N, et al. **Prog Clin Biol Res** 1990;327:277-98 (47 ref.)

Calcium second messenger responses and hormone-stimulated bone resorption. Stern PH. **Prog Clin Biol Res** 1990;332:205-20 (35 ref.)

Comparison of endothelin- and caffeine-induced calcium mobilization in coronary artery smooth muscle cells. Wagner-Mann C, et al. **Prog Clin Biol Res** 1990;327:517-24

A calcium independent on-off switch for cardiac force generators. Winegrad S, et al. **Prog Clin Biol Res** 1989; 315:473-9

Modification by calyculin A of inward Ca currents in smooth muscle cells isolated from guinea pig taenia coli. Yabu H,

et al. **Prog Clin Biol Res** 1990;327:623–6

Calcium-binding proteins in avian and mammalian central nervous system: localization, development and possible functions. Braun K. **Prog Histochem Cytochem** 1990; 21(1):1–64 (267 ref.)

Facilitation of calcium-dependent cholinergic function by ucb L059, a new "second generation" nootropic agent. Wülfert E, et al. **Psychopharmacol Bull** 1989;25(3):498–502

Chrysotile asbestos-induced cytotoxicity and calcium-dependent exocytosis in polymorphonuclear leukocytes. Elferink JG. **Res Commun Chem Pathol Pharmacol** 1989 Sep; 65(3):361–72

Cytoskeletal elements and calcium: do they play a role in the Escherichia coli cell cycle? Holland IB, et al. **Res Microbiol** 1990 Jan;141(1):131–6 (38 ref.)

Does voltage affect excitation-contraction coupling in the heart? [letter; comment] Cannell MB, et al. **Science** 1989 Dec 22;246(4937):1640 Comment on: Science 1989 May 19;244(4906):800–3.

Odor stimuli trigger influx of calcium into olfactory neurons of the channel catfish. Restrepo D, et al. **Science** 1990 Sep 7;249(4973):1166–8

Calcium-induced movement of troponin-I relative to actin in skeletal muscle thin filaments. Tao T, et al. **Science** 1990 Mar 16;247(4948):1339–41

Modulation of neuronal calcium currents by G protein activation. Dolphin AC, et al. **Soc Gen Physiol Ser** 1990; 45:11–27 (63 ref.)

Initiation and termination of Ca2+ signals: studies in human platelets. Rink TJ, et al. **Soc Gen Physiol Ser** 1988; 43:381–94 (45 ref.)

Increased calcium levels alter cellular and molecular events in wound healing. Sank A, et al. **Surgery** 1989 Dec; 106(6):1141–7; discussion 1147–8

Presynaptic calcium currents evoking quantal transmission from avian ciliary ganglion neurons. Brosius DC, et al. **Synapse** 1990;5(4):313–23

Role of extracellular calcium in chrysotile asbestos stimulation of alveolar macrophages. Kalla B, et al. **Toxicol Appl Pharmacol** 1990 Jun 1;104(1):130–8

Effect of a phospholipase A2 with cardiotoxin-like properties, from Bungarus fasciatus snake venom, on calcium-modulated potassium currents. Gong QH, et al. **Toxicon** 1989;27(12):1339–49

Oxidative damage to kidney membranes during cold ischemia. Evidence of a role for calcium. Cotterill LA, et al. **Transplantation** 1989 Nov;48(5):745–51

Regulation of vertebrate striated muscle contraction [see comments] Payne MR, et al. **Trends Biochem Sci** 1989 Sep; 14(9):357–60 (32 ref.) Comment in: Trends Biochem Sci 1990 Feb;15(2):51–2.

Calcium-effector mechanisms. **Trends Neurosci** 1989 Nov; 12(11):417–78

Calcium and polyphosphoinositide control of cytoskeletal dynamics. Forscher P. **Trends Neurosci** 1989 Nov; 12(11):468–74 (42 ref.)

Regulation of neuronal function by calcium. Kennedy MB. **Trends Neurosci** 1989 Nov;12(11):417–20 (50 ref.)

Calcium-dependent and calcium-independent exocytosis. Knight DE, et al. **Trends Neurosci** 1989 Nov;12(11):451–8 (91 ref.)

The impact of postsynaptic calcium on synaptic transmission—its role in long-term potentiation. Malenka RC, et al. **Trends Neurosci** 1989 Nov;12(11):444–50 (79 ref.)

Ca2+ localization and sensitivity in vascular smooth muscle. Karaki H. **Trends Pharmacol Sci** 1989 Aug;10(8):320–5 (37 ref.)

Excitatory amino acid receptors, second messengers and regulation of intracellular Ca2+ in mammalian neurons. Mayer ML, et al. **Trends Pharmacol Sci** 1990 Jun; 11(6):254–60 (48 ref.)

[The relation of the calcium messenger system and platelet function] Zhuang QQ. **Sheng Li Ko Hsueh Chin Chan** 1989 Jul;20(3):215–8 (15 ref.) **(Chi)**

[Excitation-contraction coupling in isolated muscle fibers with calcium electrogenesis preserved in a culture medium] Zacharová D, et al. **Bratisl Lek Listy** 1990 Mar; 91(3):185–96 (Eng. Abstr.) **(Cze)**

[The calcium signal in the regulation of insulin secretion] Zofková I. **Cas Lek Cesk** 1989 Dec 8;128(50):1569–74 (35 ref.) (Eng. Abstr.) **(Cze)**

[Calcium and contraction of digestive smooth muscle] Bouchoucha M, et al. **Gastroenterol Clin Biol** 1989 Oct; 13(10):822–8 (56 ref.) **(Fre)**

[Hepatic cytoprotection (5). Calcium and hepatotoxicity] Pavoine C, et al. **Gastroenterol Clin Biol** 1989 Aug–Sep; 13(8–9):720–4 (28 ref.) **(Fre)**

[The role of calcium, diglyceride ester bindings and a synthetic polypeptide in protein kinase C activation] Da Silva C, et al. **Reprod Nutr Dev** 1989;29(6):669–75 (Eng. Abstr.) **(Fre)**

[Calcium homeostasis and exocrine pancreas: physiological ans pathological interrelations] Layer P, et al. **Schweiz Med Wochenschr** 1989 Nov 25;119(47):1655–63 (87 ref.) (Eng. Abstr.) **(Ger)**

[Comparison of the coronary vasomotor response to nifedipine in syndrome X and in Prinzmetal's angina] Montorsi P, et al. **Cardiologia** 1989 Jun;34(6):507–12 (Eng. Abstr.) **(Ita)**

[A theoretical study on the regulation mechanism of Ca2+ concentration in lens related to the Ca2+ dependence of Ca2(+)-ATPase activity] Imaizumi M, et al. **Nippon Ganka Gakkai Zasshi** 1990 Feb;94(2):135–40 (Eng. Abstr.) **(Jpn)**

[Relationship of calcium, and magnesium with blood pressure] Mikawa T. **Nippon Rinsho** 1989 Sep;47(9):1930–3 **(Jpn)**

[Mechanisms and their pharmacology of mobilization of calcium ion in muscle cells] Endo M. **Nippon Yakurigaku Zasshi** 1989 Dec;94(6):329–38 (100 ref.) (Eng. Abstr.) **(Jpn)**

[The research of regulatory mechanism of muscle contraction: past and present] Ebashi S. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2013–9 **(Jpn)**

[The history and prospects of studying calcium ions and cell functions] Endo M. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(12):1850–4 **(Jpn)**

[Cell motility and Ca2+] Hatano S, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2067–75 **(Jpn)**

[Calcium-dependent ionic conductance] Higashida H, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2217–27 **(Jpn)**

[Ca2+ and regulation of glycogen metabolism] Kobayashi T, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(12):2256–64 **(Jpn)**

[Role of calcium in the regulation of cell growth] Kojima I, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(12):2283–91 **(Jpn)**

[Role of Ca2+ in the secretion of catecholamines] Morita K, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(12):2228–36 **(Jpn)**

[Regulation of platelet functions] Nakashima S, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2265–75 **(Jpn)**

[Ca2(+)-regulatory systems in yeast cell cycle] Ohya Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2300–10 **(Jpn)**

[Intracellular calcium signaling and selective inhibitors] Tanaka T, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(12):2207–16 **(Jpn)**

[Regulation of cell cycle by intracellular factors] Uno I. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(9):1028–39 **(Jpn)**

[Temporal and spatial changes in intracellular Ca2+ upon fertilization and during cell division] Yoshimoto Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2292–9 **(Jpn)**

[Heart insufficiency. Physiology and physiopathology of muscle contraction of the heart] Carvalho LS. **Rev Port Cardiol** 1989 Feb;8(2):121–7 (10 ref.) (Eng. Abstr.) **(Por)**

[Ca2+-dependent mechanisms of membrane carbohydrate hydrolysis and of the transport of the monosaccharides being formed in the small intestine] Gurman EG. **Fiziol Zh SSSR** 1989 Sep;75(9):1256–61 (Eng. Abstr.) **(Rus)**

[The role of Ca2+ in the pathogenesis of epilepsy. Calcium antagonists—a new class of anticonvulsants] Glebov RN, et al. **Patol Fiziol Eksp Ter** 1990 May–Jun;(3):57–61 (80 ref.) **(Rus)**

[Calcium regulation of the short-term plasticity of the cholinoreceptors in neurons RPa3 and LPa3 of the edible snail] Pivovarov AS, et al. **Zh Vyssh Nerv Deiat** 1990 Jan–Feb;40(1):135–42 (Eng. Abstr.) **(Rus)**

[The role of calcium ions in neuromuscular transmission] Dragić S. **Vojnosanit Pregl** 1990 Jan–Feb;47(1):29–34 (81 ref.) **(Scr)**

POISONING

Unintentional self-intoxication with inorganic calcium. McAlister NH, et al. **J Intern Med** 1990 Aug;228(2):193–5

[Clinical effects of an extreme Ca overdose in feed for growing piglets] Kamphues J, et al. **Tierarztl Prax** 1990 Jun;18(3):251–4 (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

[Effect of ultraviolet irradiation on calcium, sodium and potassium levels in albino rats] Bardov VG, et al. **Gig Sanit** 1990 May;(5):74–6 (Eng. Abstr.) **(Rus)**

[Experimental research on the effect of ultraviolet irradiation on the phosphorus-calcium metabolic status] Antonova NP, et al. **Vopr Pitan** 1990 Mar–Apr;(2):41–4 (Eng. Abstr.) **(Rus)**

STANDARDS

Calcium, phosphorus, and magnesium: how much is too much for infant formulas? Greer FR. **J Nutr** 1989 Dec;119(12 Suppl):1846–51 (39 ref.)

THERAPEUTIC USE

Hypocalcemic myocardial dysfunction: short- and long-term improvement with calcium replacement. Wong CK, et al. **Am Heart J** 1990 Aug;120(2):381–6

A randomized study on the effects of estrogen/gestagen or high dose oral calcium on trabecular bone remodeling in postmenopausal osteoporosis. Steiniche T, et al. **Bone** 1989; 10(5):313–20

Short-term control of supraventricular tachycardia with verapamil infusion and calcium pretreatment. Barnett JC, et al. **Chest** 1990 May;97(5):1106–9

Calcium: does it have a therapeutic role in sepsis? [editorial; comment] Chernow B. **Crit Care Med** 1990 Aug; 18(8):895–6 Comment on: Crit Care Med 1990 Aug;18(8):851–7.

Comparative study of fluoride bioavailability following the administration of sodium fluoride alone and in combination with different calcium salts. Briançon D, et al. **J Bone Miner Res** 1990 Mar;5 Suppl 1:S71–3

Treatment of the vertebral crush fracture syndrome with enteric-coated sodium fluoride tablets and calcium supplements. Nagant de Deuxchaisnes C, et al. **J Bone Miner Res** 1990 Mar;5 Suppl 1:S5–26

Efficacy of long-term fluoride and calcium therapy in correcting the deficit of spinal bone density in osteoporosis. Farley SM, et al. **J Clin Epidemiol** 1989;42(11):1067–74

Oral calcium supplementation and blood pressure: an overview of randomized controlled trials. Cappuccio FP, et al. **J Hypertens** 1989 Dec;7(12):941–6

Calcitonin and calcium combined therapy in osteoporosis: effects on vertebra trabecular bone density. Ozoran K, et al. **J Int Med Res** 1989 Jul–Aug;17(4):395–400

Long-term efficacy and safety of oral calcium as compared to A1(OH)3 as phosphate binders. Moriniere P, et al. **Kidney Int Suppl** 1989 Nov;27:S133–5

Calcium salts of ketoacids as a new treatment strategy for uremic hyperphosphatemia. Schaefer K, et al. **Kidney Int Suppl** 1989 Nov;27:S136–9

Model of gentamicin-induced nephrotoxicity and its amelioration by calcium and thyroxine. Ernest S. **Med Hypotheses** 1989 Nov;30(3):195–202 (86 ref.)

Calcium and calcitriol therapy in osteoporotic postmenopausal women with impaired calcium absorption. Need AG, et al. **Metabolism** 1990 Apr;39(4 Suppl 1):53–4

Low-dose calcitriol versus calcium in established postmenopausal osteoporosis. Tilyard M. **Metabolism** 1990 Apr;39(4 Suppl 1):50–2

Will calcium supplementation preserve bone integrity? [letter] Garn SM. **Nutr Rev** 1990 Jan;48(1):26–7

Treatment of osteoporosis. What is the role of calcium? Trachtenbarg DE. **Postgrad Med** 1990 Mar;87(4):263–6, 269–70

Treatment of vertebral osteoporosis with fluoride and calcium. Meunier PJ. **Prog Clin Biol Res** 1990;332:221–30 (19 ref.)

[A fundamental study on expansive splitter lithotripsy] Kawauchi A. **Hinyokika Kiyo** 1989 Jul;35(7):1105–11 (Eng. Abstr.) **(Jpn)**

TOXICITY

Acid precipitation and food quality: inhibition of growth and survival in black ducks and mallards by dietary aluminum, calcium, and phosphorus. Sparling DW. **Arch Environ Contam Toxicol** 1990 May–Jun;19(3):457–63

Protective effect of the plasticizer di(2-ethylhexyl) phthalate against damage of the mitochondrial membrane induced by calcium: possible participation of the adenine nucleotide translocator. Kora S, et al. **Biochim Biophys Acta** 1989 Nov 3;985(3):286–92

Calmodulin concentration in mucus of rainbow trout, Salmo gairdneri, exposed to combinations of acid, aluminum, and calcium. Lewis TE, et al. **Bull Environ Contam Toxicol** 1990 Mar;44(3):449–55

Effects of repeated low calcium perfusion on the rat heart: a gradual induction of calcium related damage. Seymour AM, et al. **J Mol Cell Cardiol** 1990 Feb;22(2):131–41

Protection by benidipine hydrochloride (KW-3049), a calcium antagonist, of ischemic kidney in rats via inhibitions of Ca-overload, ATP-decline and lipid peroxidation. Karasawa A, et al. **Jpn J Pharmacol** 1990 Apr;52(4):553–62

[The role of chemical composition of drinking water in predicting the incidence of urolithiasis] Pivovarov IuP, et al. **Gig Sanit** 1989 Jun;(6):11–3 (Eng. Abstr.) **(Rus)**

URINE

The renal utilization of citric acid in idiopathic hypercalciuria. Brodwall EK, et al. **Acta Med Scand** 1967 Jan;181(6):725–8

Hypercalciuria and postglomerular hematuria in children. The effects of thiazide on calcium excretion, urine saturation with respect to calcium-hydrogenphosphate and hematuria. Reusz G, et al. **Acta Paediatr Hung** 1990; 30(1):63–71

Nephrocalcinosis, hypercalciuria and elevated serum levels of 1,25-dihydroxyvitamin D in children. Possible link to vitamin D toxicity. Misselwitz J, et al. **Acta Paediatr Scand** 1990 Jun–Jul;79(6–7):637–43

On the pathogenetic mechanism of hypercalciuria in genetically hypertensive rats of the Milan strain. Cirillo M, et al. **Am J Hypertens** 1989 Oct;2(10):741–6

Dopamine1-receptor blockade inhibits ANP-induced phosphaturia and calciuria in rats. Ortola FV, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):F138–46

The effect of vitamin K supplementation on circulating osteocalcin (bone Gla protein) and urinary calcium excretion. Knapen MH, et al. **Ann Intern Med** 1989 Dec 15;111(12):1001–5

Diffuse nephrocalcinosis and idiopathic renal hypercalciuria. Aggarwal VK, et al. **Arch Dis Child** 1989 Jul;64(7):1055–7

Osteopenia, pathological fractures, and increased urinary calcium excretion in schizophrenic patients with polydipsia.

Delva NJ, et al. **Biol Psychiatry** 1989 Dec;26(8):781–93

Urinary mineral ion loss after sugar ingestion. Ericsson Y, et al. **Bone Miner** 1990 Jun;9(3):233–7

Reduction in calcium excretion in women with breast cancer and bone metastases using the oral bisphosphonate pamidronate. Dodwell DJ, et al. **Br J Cancer** 1990 Jan; 61(1):123–5

Heterogeneity of pseudohypoparathyroidism type I from the aspect of urinary excretion of calcium and serum levels of parathyroid hormone. Mizunashi K, et al. **Calcif Tissue Int** 1990 Apr;46(4):227–32

Renal excretion of magnesium and calcium in diabetes mellitus. Olukoga AO, et al. **Cent Afr J Med** 1989 Apr; 35(4):378–83

Microtiter plate techniques for estimating urinary calcium, protein, and creatinine [letter] Phillipou G, et al. **Clin Chem** 1990 Jul;36(7):1385

Method comparison for calcium determination by flame atomic absorption spectrophotometry in the presence of phosphate. Welch MW, et al. **Clin Chem** 1990 Feb; 36(2):351–4

Is hydrochlorothiazide-induced hypocalciuria due to inhibition of prostaglandin E2 synthesis? Caló L, et al. **Clin Sci** 1990 Mar;78(3):321–5

Hyperphosphaturia and hypermagnesuria in children with IDDM. Ponder SW, et al. **Diabetes Care** 1990 Apr; 13(4):437–41

Hypocalciuria in hypertensive disorder in pregnancy and how to measure it. Huikeshoven FJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jul–Aug; 36(1–2):81–5

On the relation between citrate and calcium in normal and stone-former subjects. Conte A, et al. **Int Urol Nephrol** 1990;22(1):7–12

On the relation between citrate and calcium in normal and stone-former subjects. Conte A, et al. **Int Urol Nephrol** 1989;21(4):369–73

Blood levels of glucometabolic hormones and urinary saturation with stone forming phases after an oral test meal in male patients with recurrent idiopathic calcium urolithiasis and in healthy controls. Schwille PO, et al. **J Am Coll Nutr** 1989 Dec;8(6):557–66 (58 ref.)

Quantitative evaluation of anticalciuretic effects of synthetic parathyroid hormonelike peptides. Scheinman SJ, et al. **J Bone Miner Res** 1990 Jun;5(6):653–8

Increased monocyte interleukin-1 activity and decreased vertebral bone density in patients with fasting idiopathic hypercalciuria. Pacifici R, et al. **J Clin Endocrinol Metab** 1990 Jul;71(1):138–45

Calcium intake, calcium excretion and blood pressure in adolescents in the upper decile of the distribution: the Torrejon study. Martell-Claros N, et al. **J Hypertens Suppl** 1989 Dec;7(6):S256–7

Dietary protein increases urinary calcium. Kerstetter JE, et al. **J Nutr** 1990 Jan;120(1):134–6 (40 ref.)

Urinary calcium and calcium balance in young women affected by high protein diet of soy protein isolate and adding sulfur-containing amino acids and/or potassium. Kaneko K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Apr; 36(2):105–16

Hypercalciuria in the frequency-dysuria syndrome of childhood. Alon U, et al. **J Pediatr** 1990 Jan;116(1):103–5

Renal calcium handling in cystic fibrosis: lack of evidence for a primary renal defect. Bentur L, et al. **J Pediatr** 1990 Apr;116(4):556–60

Uric acid excretion in children with urolithiasis. Miller LA, et al. **J Pediatr** 1989 Dec;115(6):923–6

Effect of magnesium citrate and magnesium oxide on the crystallization of calcium salts in urine: changes produced by food-magnesium interaction. Lindberg J, et al. **J Urol** 1990 Feb;143(2):248–51

Wheat bran in the selective therapy of absorptive hypercalciuria: a study performed on 18 lithiasic patients. Tizzani A, et al. **J Urol** 1989 Oct;142(4):1018–20

Small bowel resection-associated urinary calcium loss in rats on long-term total parenteral nutrition. Chu RC, et al. **JPEN J Parenter Enteral Nutr** 1990 Jan–Feb;14(1):64–7

Hematuria due to hypercalciuria and hyperuricosuria in adult patients. Andres A, et al. **Kidney Int** 1989 Jul;36(1):96–9

Gestational hypercalciuria causes pathological urine calcium oxalate supersaturations. Maikranz P, et al. **Kidney Int** 1989 Jul;36(1):108–13

Idiopathic hypercalciuria: association with isolated hematuria and risk for urolithiasis in children. The Southwest Pediatric Nephrology Study Group. Stapleton FB. **Kidney Int** 1990 Feb;37(2):807–11

Effects of citrate on urinary calcium excretion. Borensztein P, et al. **Miner Electrolyte Metab** 1989;15(6):353–8

Fasting urinary calcium/creatinine and hydroxyproline/creatinine values in young women with amenorrhoea and in matched eumenorrhoeic controls. Goulding A, et al. **N Z Med J** 1989 Dec 13;102(881):629–30

Irritability and dysuria in infants with idiopathic hypercalciuria. Fivush B. **Pediatr Nephrol** 1990 May; 4(3):262–3

"Chloride-shunt" syndrome: an overlooked cause of renal hypercalciuria. Rodríguez-Soriano J, et al. **Pediatr Nephrol** 1989 Apr;3(2):113–21

Self-limited neonatal familial hyperparathyroidism associated with hypercalciuria and renal tubular acidosis in three siblings. Nishiyama S, et al. **Pediatrics** 1990 Sep;86(3):421–7

Furosemide effect on mineral status of parenterally nourished premature neonates with chronic lung disease. Vileisis RA. **Pediatrics** 1990 Mar;85(3):316–22

Effect of aspirin and indomethacin on the serum and urinary calcium, magnesium and phosphate. Gomaa AA, et al. **Pharmacol Res** 1990 Jan–Feb;22(1):59–70

Renal phosphate handling and calcium nephrolithiasis: role of dietary phosphate and phosphate leak. Roberts DH, et al. **Semin Nephrol** 1990 Jan;10(1):24–30 (45 ref.)

Effect of unprocessed wheat bran on calciuria and oxaluria in patients with urolithiasis. Gleeson MJ, et al. **Urology** 1990 Mar;35(3):231–4

[Hypercalciuria with hematuria. A report of two cases] Chen YH, et al. **Acta Paediatr Sin** 1988 Mar–Apr;29(2):126–30 (Eng. Abstr.) **(Chi)**

[Familial hypocalciuric hypercalcemia (letter)] Angeli C, et al. **Presse Med** 1989 Sep 30;18(30):1479 **(Fre)**

[A case of hemangioendothelioma of the rib associated with hypocalciuria] Cortet B, et al. **Rev Rhum Mal Osteoartic** 1990 Mar;57(3):185–7 **(Fre)**

[Is there a correlation between Nordin's index and the areas of bone resorption measured by histomorphometry?] Kuntz JL, et al. **Rev Rhum Mal Osteoartic** 1990 Apr 25; 57(4):317–8 **(Fre)**

[Changes in the urine composition induced by indapamide in subjects with recurrent calcic calculosis: a possible alternative to thiazide diuretics] Elia GF, et al. **Ann Ital Med Int** 1987 Apr–Jun;2(2):94–9 (Eng. Abstr.) **(Ita)**

[Effects of long-term administration of furosemide on calcium balance, kidney and parathyroid gland] Asano Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):19–24 (Eng. Abstr.) **(Jpn)**

[Hypercalciuria in patients with diabetes mellitus type 1 and 2--studies of its pathogenesis using the oral calcium tolerance test] Gasińska T, et al. **Endokrynol Pol** 1989; 40(3):115–24 (Eng. Abstr.) **(Pol)**

[Studies of the cause of increased calciuria in patients with chronic diseases of the digestive system during ultraviolet irradiation of the body to supplement vitamin D deficiency] Marcinowska-Suchowierska E, et al. **Pol Arch Med Wewn** 1988 Apr;79(4):200–6 (Eng. Abstr.) **(Pol)**

[Evaluation of risk index according to Tiselius in patients with calcium urinary stones] Głuszek J, et al. **Pol Tyg Lek** 1989 Feb 27;44(9):223–5 (Eng. Abstr.) **(Pol)**

[Rice bran in the treatment of idiopathic hypercalciuria in patients with urinary calculosis] Noronha IL, et al. **Rev Paul Med** 1989 Jan–Feb;107(1):19–24 (Eng. Abstr.) **(Por)**

[Incidence of different types of hypercalciuria in the Madrid area. Demographic features] Martínez ME, et al. **Arch Esp Urol** 1990 May;43(4):364–8 (Eng. Abstr.) **(Spa)**

[Response of vitamin D metabolites to calcium restriction in hypercalciuric renal lithiasis] Saro Gutiérrez G, et al. **Med Clin (Barc)** 1990 Mar 17;94(10):361–3 (Eng. Abstr.) **(Spa)**

CALCIUM-ACTIVATED NEUTRAL PROTEASE see **CALPAIN**

CALCIUM-ACTIVATED PHOSPHOLIPID-DEPENDENT KINASE see **PROTEIN KINASE C**

CALCIUM ADENOSINE TRIPHOSPHATASE see **ADENOSINE TRIPHOSPHATASE, CALCIUM**

CALCIUM ANTAGONISTS, EXOGENOUS see **CALCIUM CHANNEL BLOCKERS**

CALCIUM ATPASE see **ADENOSINE TRIPHOSPHATASE, CALCIUM**

CALCIUM-BINDING PROTEIN, VITAMIN D-DEPENDENT

Identification of an isoaspartyl linkage formed upon deamidation of bovine calbindin D9k and structural characterization by 2D 1H NMR. Chazin WJ, et al. **Biochemistry** 1989 Oct 17;28(21):8646–53

1H NMR sequential resonance assignments, secondary structure, and global fold in solution of the major (trans-Pro43) form of bovine calbindin D9k. Kördel J, et al. **Biochemistry** 1989 Aug 22;28(17):7065–74

1H NMR resonance assignments, secondary structure, and global fold of Apo bovine calbindin D9k. Skelton NJ, et al. **Biochemistry** 1990 Jun 19;29(24):5752–61

Comparative structural analysis of the calcium free and bound states of the calcium regulatory protein calbindin D9K. Skelton NJ, et al. **J Mol Biol** 1990 Jun 20; 213(4):593–8

ANALYSIS

Immunohistochemical detection of 28KDa calbindin in human tissues. Buffa R, et al. **Adv Exp Med Biol** 1990; 269:205–10 (22 ref.)

Calbindin-D28 in mammalian brain, retina, and endocrine pancreas: immunohistochemical comparison with calretinin. Pochet R, et al. **Adv Exp Med Biol** 1989; 255:435–43

Calbindin D28k is essentially located in the colonic part of the toad intestine. Parmentier M. **Biol Cell** 1990;68(1):43–9

Immunocytochemical localization of vitamin D-dependent calcium-binding protein (calbindin) in thyroid parafollicular cells of guinea pig. Zabel M, et al. **Bone Miner** 1989 Sep;7(2):107–12

The use of quantitative immunocytochemistry (QICC) to measure calbindin D28k-like immunoreactivity in the rat brain. Davenport AP, et al. **Cell Mol Biol** 1990;36(1):1–11

Side chain mobility in bovine calbindin D9k. Rotational motion of Tyr13. Rigler R, et al. **Eur J Biochem** 1990 Mar 30;188(3):541–5

Increases in calbindin D 28K mRNA in the uterus of the domestic fowl induced by sexual maturity and shell formation. Nys Y, et al. **Gen Comp Endocrinol** 1989 Nov; 76(2):322–9

Calbindin-D9K immunolocalization and vitamin D-dependence in the bone of growing and adult rats. Balmain N, et al. **Histochemistry** 1989;92(5):359–65

Calbindin immunoreactivity is a characteristic of enterochromaffin-like cells (ECL cells) of the human stomach. Furness JB, et al. **Histochemistry** 1989; 92(5):449–51

Immunoreactive calbindin-D9K localization in matrix vesicle-initiated calcification in rat epiphyseal cartilage: an immunoelectron microscope study. Balmain N, et al. **J Bone Miner Res** 1989 Aug;4(4):565–75

Colocalization of calbindin and GABA in medial nucleus of the trapezoid body of the rat. Webster WR, et al. **Neurosci Lett** 1990 Apr 6;111(3):252–7

Calbindin D-28k and parvalbumin in the rat nervous system. Celio MR. **Neuroscience** 1990;35(2):375–475

CLASSIFICATION

[Vitamin D-dependent Ca2(+)-binding protein] Takagi T. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1969–74 **(Jpn)**

GENETICS

Functional analysis of the promoter region of the gene encoding chicken calbindin D28K. Ferrari S, et al. **Adv Exp Med Biol** 1990;269:21–5

The human calbindins: cDNA and gene cloning. Parmentier M. **Adv Exp Med Biol** 1989;255:233–40

Structure of the human cDNAs and genes coding for calbindin D28K and calretinin. Parmentier M. **Adv Exp Med Biol** 1990;269:27–34 (32 ref.)

Structure of the rat vitamin D-induced calbindin-D9K gene and evolution of the EF-hand calcium-binding protein family. Perret C, et al. **Adv Exp Med Biol** 1989;255:241–50

Calretinin and other CaBPs in the nervous system. Rogers J, et al. **Adv Exp Med Biol** 1990;269:195–203 (20 ref.)

Calbindin-D9K (CaBP9K) gene: a model for studying the genomic actions of cacitriol and calcium in mammals. Thomasset M, et al. **Adv Exp Med Biol** 1990;269:35–6

Cellular gene expression for calbindin-D28k in mouse kidney. Rhoten WB, et al. **Anat Rec** 1990 Jun;227(2):145–51

Identification of chicken calbindin D28K pre-messenger RNA sequences by polymerase chain reaction. Ferrari S, et al. **Biochem Biophys Res Commun** 1990 Apr 30; 168(2):430–6

The human genes for calbindin 27 and 29 kDa proteins are located on chromosomes 8 and 16, respectively. Parmentier M, et al. **Cytogenet Cell Genet** 1989;52(1–2):85–7

Expression of calbindin-D decreases with age in intestine and kidney. Armbrecht HJ, et al. **Endocrinology** 1989 Dec; 125(6):2950–6

Stimulation of calbindin-D9K (CaBP9K) gene expression by calcium and 1,25-dihydroxycholecalciferol in fetal rat duodenal organ culture. Brehier A, et al. **Endocrinology** 1990 Aug;127(2):580–7

Biophysical studies of engineered mutant proteins based on calbindin D9k modified in the pseudo EF-hand. Johansson C, et al. **Eur J Biochem** 1990 Jan 26;187(2):455–60

Cloning and analysis of calbindin-D28K cDNA and its expression in the central nervous system. Lomri N, et al. **Gene** 1989 Aug 1;80(1):87–98

Effect of hormones and development on the expression of the rat 1,25-dihydroxyvitamin D3 receptor gene. Comparison with calbindin gene expression. Huang YC, et al. **J Biol Chem** 1989 Oct 15;264(29):17454–61

Corticosterone regulates calbindin-D28k mRNA and protein levels in rat hippocampus. Iacopino AM, et al. **J Biol Chem** 1990 Jun 25;265(18):10177–80

Regulation of calbindin-D28K gene expression in the chick intestine: effects of serum calcium status and 1,25-dihydroxyvitamin D3. Hall AK, et al. **J Bone Miner Res** 1990 Apr;5(4):331–6

Regulation of calbindin-D28K gene expression by 1,25-dihydroxyvitamin D3 in chick kidney. Hall AK, et al. **J Bone Miner Res** 1990 Apr;5(4):325–30

Differential regulation of calbindin-D28K mRNA in the intestine and eggshell gland of the laying hen. Bar A, et al. **J Mol Endocrinol** 1990 Apr;4(2):93–9

Tissue-specific regulation of the concentration of calbindin D28K mRNA in the developing chicken. Ferrari S, et al. **Life Sci** 1989;45(14):1247–53

Specific reduction of calcium-binding protein (28-kilodalton calbindin-D) gene expression in aging and neurodegenerative diseases. Iacopino AM, et al.

Proc Natl Acad Sci U S A 1990 Jun;87(11):4078–82

IMMUNOLOGY

Calbindin neurons of the guinea-pig small intestine: quantitative analysis of their numbers and projections. Furness JB, et al. **Cell Tissue Res** 1990 May;260(2):261–72

METABOLISM

Immunohistochemical localization of calbindin-D28K in the brain of a cartilaginous fish, the dogfish (Scyliorhinus canicula L.). Rodriguez-Moldes I, et al. **Acta Anat (Basel)** 1990;137(4):293–302

Neutralization of surface charges markedly affects the properties of bovine calbindin D9k. Forsén S, et al. **Adv Exp Med Biol** 1989;255:185–94

Calmodulin and calbindin in pancreatic islet cells. Malaisse WJ, et al. **Adv Exp Med Biol** 1990;269:127–33 (23 ref.)

Comparison between rat brain calbindin- and calretinin-immuno-reactivities. Résibois A, et al. **Adv Exp Med Biol** 1990;269:211–4

Theophylline inhibits transcellular Ca transport in intestine and Ca binding by CaBP. Pansu D, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):G935–43

Elevated 1,25-dihydroxyvitamin D3 and intestinal calbindin-D9k in the toothless rat. Seifert MF, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E377–81

Asymmetric distribution of calbindin-D28K in the ganglia habenulae of an elasmobranch fish. Rodriguez-Moldes I, et al. **Anat Embryol (Berl)** 1990;181(4):389–91

The rate and structural consequences of proline cis-trans isomerization in calbindin D9k: NMR studies of the minor (cis-Pro43) isoform and the Pro43Gly mutant. Kördel J, et al. **Biochemistry** 1990 May 8;29(18):4400–9

Ca2+ binding to calbindin D9k strongly affects backbone dynamics: measurements of exchange rates of individual amide protons using 1H NMR. Linse S, et al. **Biochemistry** 1990 Jun 26;29(25):5925–34

Protein surface charges and Ca2+ binding to individual sites in calbindin D9k: stopped-flow studies. Martin SR, et al. **Biochemistry** 1990 May 1;29(17):4188–93

Appearance during chick embryogenesis of vitamin D-dependent calcium-binding protein (calbindin-D28K). Opperman LA, et al. **Bone Miner** 1990 Apr;9(1):1–8

Parvalbumin is highly colocalized with calbindin D28k and rarely with calcitonin gene-related peptide in dorsal root ganglia neurons of rat. Carr PA, et al. **Brain Res** 1989 Sep 11;497(1):163–70

Synapses of double bouquet cells in monkey cerebral cortex visualized by calbindin immunoreactivity. DeFelipe J, et al. **Brain Res** 1989 Nov 27;503(1):49–54

Calbindin-immunoreactive cholinergic neurones in the nucleus basalis of Meynert in Alzheimer-type dementia. Ichimiya Y, et al. **Brain Res** 1989 Oct 16;499(2):402–6

Calbindin D-28K immunoreactivity in the cat's superior olivary complex. Matsubara JA. **Brain Res** 1990 Feb 5; 508(2):353–7

Parvalbumin- and calbindin D28k-immunoreactive neurons in the superficial layers of the spinal cord dorsal horn of rat. Yamamoto T, et al. **Brain Res Bull** 1989 Dec; 23(6):493–508

Calbindin-immunoreactive sensory neurons in dissociated dorsal root ganglion cell cultures of chick embryo: role of culture conditions. Barakat I, et al. **Brain Res Dev Brain Res** 1989 Dec 1;50(2):205–16

Calbindins D-9kDa and -28kDa and enamel secretion in vitamin D-deficient and control rats. Berdal A, et al. **Connect Tissue Res** 1989;22(1–4):165–71

The presence and estrogen control of immunoreactive calbindin-D9k in the fallopian tube of the rat. Mathieu CL, et al. **Endocrinology** 1989 Nov;125(5):2745–50

Peptidyl-prolyl cis-trans isomerase does not affect the Pro-43 cis-trans isomerization rate in folded calbindin D9k. Kördel J, et al. **FEBS Lett** 1990 Apr 9;263(1):27–30

Functional properties of calbindin D9K mutants with exchanged Ca2+ binding sites. Brodin P, et al. **J Biol Chem** 1990 Jul 5;265(19):11125–30

Calbindin-D28K, a 1 alpha,25-dihydroxyvitamin D3-induced calcium-binding protein, binds five or six Ca2+ ions with high affinity. Leathers VL, et al. **J Biol Chem** 1990 Jun 15;265(17):9838–41

Calcium-binding proteins, parvalbumin- and calbindin-D 28k-immunoreactive neurons in the rat spinal cord and dorsal root ganglia: a light and electron microscopic study. Antal M, et al. **J Comp Neurol** 1990 May 15;295(3):467–84

Poly- and monoclonal antibodies against recombinant rat brain calbindin D-28K were produced to map its selective distribution in the central nervous system. Pinol MR, et al. **J Neurochem** 1990 Jun;54(6):1827–33

Cajal-Retzius neurons in developing monkey neocortex show immunoreactivity for calcium binding proteins. Huntley GW, et al. **J Neurocytol** 1990 Apr;19(2):200–12

The abnormal cerebellar organization of Weaver and reeler mice does not affect the cellular distribution of three neuronal mRNAs. Wuenschell CW, et al. **Neuron** 1988 Nov;1(9):805–15

Cerebral cortical calbindin D28K and parvalbumin neurones in Down's syndrome. Kobayashi K, et al. **Neurosci Lett** 1990 May 18;113(1):17–22

Co-localization of adrenergic receptors and vitamin-D-dependent calcium-binding protein (calbindin) in the dopaminergic amacrine cells of the rat retina. Ishimoto I, et al. **Neurosci Res** 1989 Dec;7(3):257–63

Analysis of parvalbumin and calbindin D28k-immunoreactive neurons in dorsal root ganglia of rat in relation to their cytochrome oxidase and carbonic anhydrase content. Carr PA, et al. **Neuroscience** 1989; 33(2):363–71

Two calcium-binding proteins mark many chick sensory neurons. Rogers JH. **Neuroscience** 1989;31(3):697–709

Immunoreactivity for calretinin and other calcium-binding proteins in cerebellum. Rogers JH. **Neuroscience** 1989; 31(3):711–21

Characterization of 1,25-dihydroxyvitamin D3 receptors and in vivo targeting of [3H]-1,25(OH)2D3 in the sheep placenta. Ross R, et al. **Placenta** 1989 Nov-Dec; 10(6):553–67

Immunocytochemical demonstration of the calcium-binding proteins calbindin-D 28k and parvalbumin in the subiculum, hippocampus and dentate area of the domestic pig. Holm IE, et al. **Prog Brain Res** 1990;83:85–97

PHARMACOLOGY

Stimulation of intestinal basolateral membrane calcium-pump activity by recombinant synthetic calbindin-D9k and specific mutants. Walters JR, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):603–8

PHYSIOLOGY

Protein engineering and structure/function relations in bovine calbindin D9k. Forsén S, et al. **Adv Exp Med Biol** 1990;269:37–42 (18 ref.)

Physiology and biochemistry of vitamin D-dependent calcium binding proteins. Gross M, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):F195–209 (227 ref.)

CALCIUM-BINDING PROTEIN, VITAMIN K-DEPENDENT see **OSTEOCALCIN**

CALCIUM-BINDING PROTEINS

Calcium binding proteins in normal and transformed cells. Proceedings of the first European symposium. April 20–22, 1989, Brussels, Belgium. **Adv Exp Med Biol** 1990;269:1–223

Calcium binding proteins. Elucidating the contributions to calcium affinity from an analysis of species variants and peptide fragments. Marsden BJ, et al. **Biochem Cell Biol** 1990 Mar;68(3):587–601 (138 ref.)

cDNA cloning and sequencing of phospholamban from pig stomach smooth muscle. Verboomen H, et al. **Biochem J** 1989 Aug 15;262(1):353–6

A 1H NMR determination of the solution conformation of a synthetic peptide analogue of calcium-binding site III of rabbit skeletal troponin C. Marsden BJ, et al. **Biochemistry** 1989 Oct 31;28(22):8839–47

Location of tryptophans in membrane-bound annexins. Meers P. **Biochemistry** 1990 Apr 3;29(13):3325–30

A fluorescence spectroscopy study of the calpactin I complex and its subunits p11 and p36: calcium-dependent conformation changes. Pigault C, et al. **Biochim Biophys Acta** 1990 Jan 19;1037(1):106–14

Gla-containing proteins of bone. Price PA. **Connect Tissue Res** 1989;21(1–4):51–7; discussion 57–60 (24 ref.)

'Antiflammins': two nonapeptide fragments of uteroglobin and lipocortin I have no phospholipase A2-inhibitory and anti-inflammatory activity. Märki F, et al. **FEBS Lett** 1990 May 21;264(2):171–5

Renaming pancreatic stone protein as 'lithostathine' [letter] Sarles H, et al. **Gastroenterology** 1990 Sep;99(3):900–1

Reactivity of cysteine 18 in oncomodulin. Clayshulte TM, et al. **J Biol Chem** 1990 Jan 25;265(3):1800–5

Elastic filaments in skeletal muscle revealed by selective removal of thin filaments with plasma gelsolin. Funatsu T, et al. **J Cell Biol** 1990 Jan;110(1):53–62

Structural characterization of phospholamban in cardiac sarcoplasmic reticulum membranes by cross-linking. Young EF, et al. **Membr Biochem** 1989;8(2):95–106

[Molecular biology of lipocortins: glucocorticoid-induced phospholipase A2 inhibitory proteins] Kawai S, et al. **Nippon Rinsho** 1989 Oct;47(10):2365–71 **(Jpn)**

ANALYSIS

The calpain-calpastatin system in hematopoietic cells. Murachi T, et al. **Adv Exp Med Biol** 1989;255:445–54

Immunomicroscopic localization of the 10,000 molecular weight calcium-binding protein in the human enterocyte. Staun M, et al. **APMIS** 1989 Oct;97(10):901–7

Characterization of high-capacity low-affinity calcium binding protein of liver endoplasmic reticulum: calsequestrin-like and divergent properties. Damiani E, et al. **Biochem Biophys Res Commun** 1989 Dec 29; 165(3):973–80

Calsequestrin, an intracellular calcium-binding protein of skeletal muscle sarcoplasmic reticulum, is homologous to aspartactin, a putative laminin-binding protein of the extracellular matrix. Yazaki PJ, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):898–903

The proteins associated with the soluble form of p36, the main target of the src oncogene product in chicken fibroblasts, are glycolytic enzymes. Simon M, et al. **Biochem Cell Biol** 1989 Oct;67(10):740–8

An immunological and biochemical comparison of 67 kDa calcimedin and 67 kDa calelectrin. Kobayashi R, et al. **Biochem J** 1989 Sep 15;262(3):993–6

Calcium-binding protein from mouse Ehrlich ascites-tumour cells is homologous to human calcyclin. Kuźnicki J, et al. **Biochem J** 1989 Nov 1;263(3):951–6

Identification and quantification in single muscle fibers of four isoforms of parvalbumin in the iliofibularis muscle of Xenopus laevis. Simonides WS, et al. **Biochim Biophys Acta** 1989 Oct 5;998(2):137–44

Immunohistochemical study of melanocytic nevus and malignant melanoma with monoclonal antibodies against S-100 subunits. Cho KH, et al. **Cancer** 1990 Aug 15; 66(4):765–71

Epidermal growth factor induces the accumulation of calpactin II on the cell surface during membrane ruffling. Campos-Gonzalez R, et al. **Cell Motil Cytoskeleton** 1990; 15(1):34–40

Detection of lipocortin 1 in human lung lavage fluid: lipocortin degradation as a possible proteolytic mechanism in the control of inflammatory mediators and inflammation. Smith SF, et al. **Environ Health Perspect** 1990 Apr; 85:135–44

Structural analysis of p36, a Ca2+/lipid-binding protein of the annexin family, by proteolysis and chemical fragmentation. Johnsson N, et al. **Eur J Biochem** 1990 Feb 22;188(1):1–7

Protein kinase C inhibitor proteins. Purification from sheep brain and sequence similarity to lipocortins and 14-3-3 protein. Toker A, et al. **Eur J Biochem** 1990 Jul 31; 191(2):421–9

Evidence for a calsequestrin-like calcium-binding protein in human spermatozoa. Berruti G, et al. **Eur J Cell Biol** 1990 Jun;52(1):117–22

The p36 substrate of pp60src kinase is located at the cytoplasmic surface of the plasma membrane of fibroblasts; an immunoelectron microscopic analysis. Semich R, et al. **Eur J Cell Biol** 1989 Dec;50(2):313–23

Amino acid sequence of the Ca2(+)-triggered luciferin binding protein of Renilla reniformis. Kumar S, et al. **FEBS Lett** 1990 Jul 30;268(1):287–90

Finnish hereditary amyloidosis. Amino acid sequence homology between the amyloid fibril protein and human plasma gelsoline. Maury CP, et al. **FEBS Lett** 1990 Jan 15;260(1):85–7

Ontogeny of epidermal growth factor receptor and lipocortin-1 in fetal and neonatal human lungs. Johnson MD, et al. **Hum Pathol** 1990 Feb;21(2):182–91

A novel flagellar Ca2+-binding protein in trypanosomes. Engman DM, et al. **J Biol Chem** 1989 Nov 5; 264(31):18627–31

Four intracisternal calcium-binding glycoproteins from rat liver microsomes with high affinity for calcium. No indication for calsequestrin-like proteins in inositol 1,4,5-trisphosphate-sensitive calcium sequestering rat liver vesicles. Van PN, et al. **J Biol Chem** 1989 Oct 15; 264(29):17494–501

Subcellular distribution of calcium-binding proteins and a calcium-ATPase in canine pancreas. Nigam SK, et al. **J Cell Biol** 1990 Jul;111(1):197–200

Expression pattern of two related cystic fibrosis-associated calcium-binding proteins in normal and abnormal tissues. Wilkinson MM, et al. **J Cell Sci** 1988 Oct;91 (Pt 2):221–30

Polarization of gelsolin and actin binding protein in kidney epithelial cells. Hartwig JH, et al. **J Histochem Cytochem** 1990 Aug;38(8):1145–53

An assay for the assessment of lipocortin 1 levels in human lung lavage fluid. Smith SF, et al. **J Immunol Methods** 1990 Jul 20;131(1):119–25

Pancreatic stone protein: quantification in pancreatic juice by enzyme-linked immunosorbent assay and comparison with other methods. Provansal-Cheylan M, et al. **Pancreas** 1989;4(6):680–9

[Clinical significance of calcium-binding proteins analysis in biochemical tests] Tanaka T, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:101–3 **(Jpn)**

[Comparative analysis of sequences of protein D2 from photosystem 2 reaction center and various Ca 2+-binding proteins] Semin BK, et al. **Mol Biol (Mosk)** 1989 Sep-Oct; 23(5):1350–4 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Role of calcium in the thermal inactivation of calcium transport proteins. Cheng KH. **Cancer Res** 1989 Dec 15; 49(24 Pt 1):7026–30

BIOSYNTHESIS

Chemosensitisation by verapamil and cyclosporin A in mouse tumour cells expressing different levels of P-glycoprotein and CP22 (sorcin). Twentyman PR, et al. **Br J Cancer** 1990 Jul;62(1):89–95

Induction of matrix Gla protein synthesis during prolonged 1,25-dihydroxyvitamin D3 treatment of osteosarcoma cells. Fraser JD, et al. **Calcif Tissue Int** 1990 Apr;46(4):270–9

Expression of gelsolin by Cos cell secretion. Kwiatkowski DJ, et al. **Cell Motil Cytoskeleton** 1989;14(1):21–5 (29 ref.)

Expression of annexins as a function of cellular growth state. Schlaepfer DD, et al. **J Cell Biol** 1990 Jul;111(1):229–38

Comparative two-dimensional gel analysis and microsequencing identifies gelsolin as one of the most prominent downregulated markers of transformed human fibroblast and epithelial cells. Vandekerckhove J, et al.

J Cell Biol 1990 Jul;111(1):95–102

Calgranulin expression and association with the keratinocyte cytoskeleton. Clark BR, et al. **J Pathol** 1990 Jan; 160(1):25–30

Anti-inflammatory lipocortin 1 production by peripheral blood leucocytes in response to hydrocortisone. Goulding NJ, et al. **Lancet** 1990 Jun 16;335(8703):1416–8

Studies on the structural properties of lipocortin-1 and the regulation of its synthesis by steroids. Browning JL, et al. **Prog Clin Biol Res** 1990;349:27–45 (29 ref.)

Expression of lipocortin 1 and endonexin II as a function of cellular growth state. Haigler HT, et al. **Prog Clin Biol Res** 1990;349:91–8

BLOOD

Hydrocortisone induces lipocortin 1 production by peripheral blood mononuclear cells in vivo in man. Goulding NJ, et al. **Biochem Soc Trans** 1990 Apr;18(2):306–7

Ca2(+)-dependent membrane-binding proteins in normal erythrocytes and erythrocytes from patients with chronic myelogenous leukemia. Fujimagari M, et al. **Blood** 1990 Mar 15;75(6):1337–45

Elastic filaments in skeletal muscle revealed by selective removal of thin filaments with plasma gelsolin. Funatsu T, et al. **J Cell Biol** 1990 Jan;110(1):53–62

Affinity chromatography of human plasma gelsolin with polyphosphate compounds on immobilized Cibacron Blue F3GA. Ito H, et al. **J Chromatogr** 1990 Apr 6; 526(2):397–406

CLASSIFICATION

Too soon for consensus? [news] Browning J, et al. **Nature** 1990 Jul 26;346(6282):324

Protein terminology tangle [letter] Crumpton MJ, et al. **Nature** 1990 May 17;345(6272):212

Improving PCR efficiency [letter] Furrer B, et al. **Nature** 1990 Jul 26;346(6282):324

The EF-hand family of calcium-modulated proteins. Persechini A, et al. **Trends Neurosci** 1989 Nov;12(11):462–7 (40 ref.)

DIAGNOSTIC USE

[The paraneoplastic phenotype of human gastric glands studied using the carcinoembryonic antigen-specific lectin crustacin] Pugachev KK, et al. **Biull Eksp Biol Med** 1990 Mar;109(3):287–9 (Eng. Abstr.) **(Rus)**

GENETICS

Evolution of the "EF-hand" family of calcium-binding proteins. Perret C, et al. **Adv Exp Med Biol** 1990;269:17–20 (11 ref.)

Structure of the rat vitamin D-induced calbindin-D9K gene and evolution of the EF-hand calcium-binding protein family. Perret C, et al. **Adv Exp Med Biol** 1989;255:241–50

Gene expression of a rat cerebellar Ca-binding protein, spot 35 protein. Takahashi Y, et al. **Adv Exp Med Biol** 1989; 255:257–62

Hypothesis: familial Mediterranean fever--a genetic disorder of the lipocortin family? Shohat M, et al. **Am J Med Genet** 1989 Oct;34(2):163–7 (45 ref.)

Amyloid protein in familial amyloidosis (Finnish type) is homologous to gelsolin, an actin-binding protein. Haltia M, et al. **Biochem Biophys Res Commun** 1990 Mar 30; 167(3):927–32

Elevated gelsolin and alpha-actin expression in a flat revertant R1 of Ha-ras oncogene-transformed NIH/3T3 cells. Müllauer L, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):852–9

Characterization of a functional domain of human calpastatin. Uemori T, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1485–93

The expression of canine cardiac phospholamban in heterologous systems. Cook EA, et al. **Biochem J** 1989 Dec 1;264(2):533–8

Sequence similarity between the reg transcript and pancreatic stone protein mRNA [letter] Rouquier S, et al. **Biochem J** 1989 Dec 1;264(2):621–2

Structure and chromosome assignment of the murine p36 (calpactin I heavy chain) gene. Amiguet P, et al. **Biochemistry** 1990 Feb 6;29(5):1226–32

Structure and expression of genes encoding the three-domain Ca2+-binding proteins parvalbumin and oncomodulin. Berchtold MW. **Biochim Biophys Acta** 1989 Dec 22; 1009(3):201–15 (124 ref.)

Non-P-glycoprotein-mediated multidrug resistance with reduced EGF receptor expression in a human large cell lung cancer cell line. Reeve JG, et al. **Br J Cancer** 1990 Jun;61(6):851–5

The human endonexin II (ENX2) gene is located at 4q28----q32. Modi WS, et al. **Cytogenet Cell Genet** 1989; 52(3-4):167–9

Transcription of the Spec 1-like gene of Lytechinus is selectively inhibited in response to disruption of the extracellular matrix. Wessel GM, et al. **Development** 1989 Jun;106(2):355–65

The Rhizobium nodulation gene nodO encodes a Ca2(+)-binding protein that is exported without N-terminal cleavage and is homologous to haemolysin and related proteins. Economou A, et al. **EMBO J** 1990 Feb; 9(2):349–54

Multiple zones in the sequence of calreticulin (CRP55, calregulin, HACBP), a major calcium binding ER/SR protein. Smith MJ, et al. **EMBO J** 1989 Dec 1;8(12):3581–6

Slow/cardiac sarcoplasmic reticulum Ca2+-ATPase and phospholamban mRNAs are expressed in chronically stimulated rabbit fast-twitch muscle. Leberer E, et al. **Eur J Biochem** 1989 Oct 20;185(1):51–4

The growth-regulated gene 1B6 is identified as the heavy chain of calpactin I. Keutzer JC, et al. **Exp Cell Res** 1990 May;188(1):153–9

Schistosoma mansoni: stage-specific expression of muscle-specific genes. Grossman Z, et al. **Exp Parasitol** 1990 Jan;70(1):62–71

Consensus peptide antibodies reveal a widespread occurrence of Ca2+/lipid-binding proteins of the annexin family. Gerke V. **FEBS Lett** 1989 Dec 4;258(2):259–62

Alternative splicing gives rise to two forms of the p68 Ca2(+)-binding protein. Moss SE, et al. **FEBS Lett** 1990 Feb 26;261(2):299–302

Expression of the cDNA encoding lipocortin-like 39 kDa protein of guinea pig neutrophils in yeast. Purification and biological characterization. Sato EF, et al. **FEBS Lett** 1989 Sep 25;255(2):231–6

A chemically transformed rat fibroblast cell line expresses high levels of oncomodulin. Sommer EW, et al. **FEBS Lett** 1989 Nov 6;257(2):307–10

Cloning, characterization, and heterologous expression of the Saccharopolyspora erythraea (Streptomyces erythraeus) gene encoding an EF-hand calcium-binding protein. Swan DG, et al. **J Bacteriol** 1989 Oct;171(10):5614–9

Molecular structure, chromosome assignment, and promoter organization of the human matrix Gla protein gene. Cancela L, et al. **J Biol Chem** 1990 Sep 5;265(25):15040–8

Molecular cloning of the high affinity calcium-binding protein (calreticulin) of skeletal muscle sarcoplasmic reticulum. Fliegel L, et al. **J Biol Chem** 1989 Dec 25; 264(36):21522–8

Isolation and analysis of a rat genomic clone containing a long terminal repeat with high similarity to the oncomodulin mRNA leader sequence. Furter CS, et al. **J Biol Chem** 1989 Nov 5;264(31):18276–9

Site-specific substitution of glutamate for aspartate at position 59 of rat oncomodulin. Hapak RC, et al. **J Biol Chem** 1989 Nov 5;264(31):18751–60

Molecular cloning of a histidine-rich Ca2+-binding protein of sarcoplasmic reticulum that contains highly conserved repeated elements. Hofmann SL, et al. **J Biol Chem** 1989 Oct 25;264(30):18083–90

Two novel annexins from Drosophila melanogaster. Cloning, characterization, and differential expression in development. Johnston PA, et al. **J Biol Chem** 1990 Jul 5;265(19):11382–8

Inhibition of calpain by a synthetic oligopeptide corresponding to an exon of the human calpastatin gene. Maki M, et al. **J Biol Chem** 1989 Nov 15;264(32):18866–9

Site-specific replacement of amino acid residues within the CD binding loop of rat oncomodulin. Palmisano WA, et al. **J Biol Chem** 1990 Aug 25;265(24):14450–6

Cloning and sequencing of the gene for Tetrahymena calcium-binding 25-kDa protein (TCBP-25). Takemasa T, et al. **J Biol Chem** 1989 Nov 15;264(32):19293–301

The third calmodulin family protein in Tetrahymena. Cloning of the cDNA for Tetrahymena calcium-binding protein of 23 kDa (TCBP-23). Takemasa T, et al. **J Biol Chem** 1990 Feb 15;265(5):2514–7

Complete nucleotide sequence of human reg gene and its expression in normal and tumoral tissues. The reg protein, pancreatic stone protein, and pancreatic thread protein are one and the same product of the gene. Watanabe T, et al. **J Biol Chem** 1990 May 5;265(13):7432–9

A human Ro/SS-A autoantigen is the homologue of calreticulin and is highly homologous with onchocercal RAL-1 antigen and an aplysia "memory molecule". McCauliffe DP, et al. **J Clin Invest** 1990 Jul;86(1):332–5

Human and mouse LSP1 genes code for highly conserved phosphoproteins. Jongstra-Bilen J, et al. **J Immunol** 1990 Feb 1;144(3):1104–10

Parvalbumin genes from human and rat are identical in intron/exon organization and contain highly homologous regulatory elements and coding sequences. Berchtold MW. **J Mol Biol** 1989 Dec 5;210(3):417–27

Evolution of EF-hand calcium-modulated proteins. I. Relationships based on amino acid sequences. Moncrief ND, et al. **J Mol Evol** 1990 Jun;30(6):522–62

Characterisation of Sm20, a 20-kilodalton calcium-binding protein of Schistosoma mansoni. Havercroft JC, et al. **Mol Biochem Parasitol** 1990 Jan 15;38(2):211–9

1,25-Dihydroxyvitamin D3 has opposite effects on the expression of parathyroid secretory protein and parathyroid hormone genes. Russell J, et al. **Mol Endocrinol** 1990 Mar; 4(3):505–9

Visinin: a novel calcium binding protein expressed in retinal cone cells. Yamagata K, et al. **Neuron** 1990 Mar;4(3):469–76

The cDNA sequence of chicken annexin II. Gerke V, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4246

The cDNA and derived amino acid sequences of human and bovine bone Gla protein. Kiefer MC, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1909

A putative flagellar Ca2(+)-binding protein of the flagellum of trypanosomatid protozoan parasites. Lee MG, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4252

Structural homology between the rat calreticulin gene product and the Onchocerca volvulus antigen Ral-1. Murthy KK, et al. **Nucleic Acids Res** 1990 Aug 25; 18(16):4933

Conservation of residue interactions in a family of Ca-binding proteins. Godzik A, et al. **Protein Eng** 1989 Aug;2(8):589–96

Identity of inositol 1,2-cyclic phosphate 2-phosphohydrolase with lipocortin III. Ross TS, et al. **Science** 1990 May 4; 248(4955):605–7

Factor IX Chongqing: a new mutation in the calcium-binding domain of factor IX resulting in severe hemophilia B. Wang NS, et al. **Thromb Haemost** 1990 Feb 19;63(1):24–6

Alternative splicing or cloning artefact? [letter] Moss SE, et al. **Trends Biochem Sci** 1989 Aug;14(8):325

[Structure of the mts271 gene, coding a new calcium-binding protein] Tul'chinskiĭ EM, et al. **Genetika** 1989 Jul; 25(7):1150–9 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Amyloid in familial amyloidosis, Finnish type, is antigenically and structurally related to gelsolin. Haltia M, et al. **Am J Pathol** 1990 Jun;136(6):1223–8

Autoantibodies to recombinant lipocortin-1 in rheumatoid arthritis and systemic lupus erythematosus. Goulding NJ, et al. **Ann Rheum Dis** 1989 Oct;48(10):843–50

Monoclonal antibodies specific to a Ca2(+)-bound form of lipocortin I distinguish its Ca2(+)-dependent phospholipid-binding ability from its ability to inhibit phospholipase A2. Hayashi H, et al. **Biochem J** 1990 Aug 1;269(3):709–15

Bronchial asthma is not associated with auto-antibodies to lipocortin-1 [see comments] Wilkinson JR, et al. **Clin Exp Allergy** 1990 Mar;20(2):189–92 Comment in: Clin Exp Allergy 1990 Mar;20(2):125–6.

Monoclonal antibodies to lipocortin-1 as probes for biological function. Pepinsky RB, et al. **FEBS Lett** 1990 Feb 26;261(2):247–52

Collagen-binding proteins of mammary epithelial cells are related to Ca2(+)- and phospholipid-binding annexins. Wirl G, et al. **J Cell Physiol** 1990 Sep;144(3):511–22

Expression of a cell surface antigen with potential Ca2+-sensor/receptor function in rat placenta and uterus. Bernadotte F, et al. **J Reprod Immunol** 1989 Nov; 16(2):199–205

Oncoprecipitins from marine invertebrates are glycoproteins with a higher specificity to carcinoembryonic antigen. Pavlenko AF, et al. **Tumour Biol** 1990;11(3):137–44

ISOLATION & PURIFICATION

Calcyclin-like protein from Ehrlich ascites tumour cells-Ca2(+)-binding properties, distribution and target protein. Kuźnicki J, et al. **Adv Exp Med Biol** 1990; 269:149–52 (8 ref.)

Purification, characterization, and partial sequence analysis of 32-kDa calcimedin from chicken gizzard. Kobayashi R, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):203–10

Purification of a calcium binding protein (rat SPARC) from primary Sertoli cell-enriched culture medium. Cheng CY. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):1393–9

Identification of the 32 kDa components of bovine lens EDTA-extractable protein as endonexins I and II. Kobayashi R, et al. **Biochem J** 1990 Mar 1;266(2):505–11

Sequence similarity of calreticulin with a Ca2(+)-binding protein that co-purifies with an Ins(1,4,5)P3-sensitive Ca2+ store in HL-60 cells. Krause KH, et al. **Biochem J** 1990 Sep 1;270(2):545–8

Purification and partial sequence analysis of plant annexins. Smallwood M, et al. **Biochem J** 1990 Aug 15;270(1):157–61

Purification and partial characterization of human platelet calcium-binding proteins. Munkonge FM, et al. **Biochem Soc Trans** 1990 Jun;18(3):471–2

Isolation and characterization of a novel molecular weight 11,000 Ca2(+)-binding protein from smooth muscle. Mani RS, et al. **Biochemistry** 1990 Feb 13;29(6):1398–404

Purification and characterization of six annexins from human placenta. Römisch J, et al. **Biol Chem Hoppe Seyler** 1990 May;371(5):383–8

Characterization in rat pancreatic juice of a protein homologous to the human pancreatic stone protein. Adrich Z, et al. **Comp Biochem Physiol [B]** 1989;93(4):793–7

Soluble calcium-binding proteins: parvalbumins and calmodulin from eel skeletal muscle. Dubois I, et al. **Comp Biochem Physiol [B]** 1990;95(2):381–5

Identification and characterization of phospholipase A2 inhibitory proteins in human mononuclear cells. Coméra C, et al. **Eur J Biochem** 1990 Feb 22;188(1):139–46

Purification, biological properties and partial sequence analysis of 67-kDa calcimedin and its 34-kDa fragment from chicken gizzard. Kobayashi R, et al. **Eur J Biochem** 1990 Mar 10;188(2):447–53

Two novel brain proteins, CaBP33 and CaBP37, are calcium-dependent phospholipid- and membrane-binding proteins. Donato R, et al. **FEBS Lett** 1990 Mar 12; 262(1):72–6

Calcium-binding proteins 33 kDa, 35 kDa, and 65/67 kDa in normal rat and Morris hepatoma tissues. A biochemical and immunohistochemical study. Josić D, et al. **Histochemistry** 1990;93(4):389–95

Simplified co-purification of vascular smooth muscle calponin and caldesmon. Abe M, et al. **J Biochem (Tokyo)** 1990 Apr;107(4):507–9

Differential fractionation of matrix vesicle proteins. Further

characterization of the acidic phospholipid-dependent Ca2(+)-binding proteins. Genge BR, et al. **J Biol Chem** 1990 Mar 15;265(8):4703–10

Characterizations of two distinct Ca2+-dependent phospholipid-binding proteins of 68-kDa isolated from human placenta. Hayashi H, et al. **J Biol Chem** 1989 Oct 15;264(29):17222–30

Isolation and characterization of calcium binding glycoproteins of cardiac sarcolemmal vesicles. Michalak M, et al. **J Biol Chem** 1990 Apr 5;265(10):5869–74

Purification, crystallization, and preliminary X-ray diffraction analysis of rat kidney annexin V, a calcium-dependent phospholipid-binding protein. Seaton BA, et al. **J Biol Chem** 1990 Mar 15;265(8):4567–9

Purification, characterization, and localization of 70 kDa calcium-sensitive protein (calelectrin) from mammary glands. Lozano JJ, et al. **J Cell Physiol** 1989 Nov; 141(2):318–24

Purification and characterization of an abundant cytosolic protein from human neutrophils that promotes Ca2(+)-dependent aggregation of isolated specific granules. Ernst JD, et al. **J Clin Invest** 1990 Apr; 85(4):1065–71

Immunocytochemical localization of a calcium-binding phosphoprotein in hemocytes of heterodont bivalves. Marsh ME. **J Exp Zool** 1990 Mar;253(3):280–6

Isolation and characterization of gelsolin from cultured BHK cells. Edgar AJ. **J Muscle Res Cell Motil** 1989 Dec; 10(6):465–72

Characterization of annexins in mammalian brain. Woolgar JA, et al. **J Neurochem** 1990 Jan;54(1):62–71

Identification of immunoreactive pancreatic stone protein in pancreatic stone, pancreatic tissue, and pancreatic juice. Yamadera K, et al. **Pancreas** 1990 May;5(3):255–60

Isolation, partial amino acid sequence, and immunohistochemical localization of a brain-specific calcium-binding protein. Winsky L, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10139–43

[Ca2+-dependent phospholipid binding protein in guinea pig neutrophils: its structure and function] Sato EF, et al. **Seikagaku** 1989 Aug;61(8):661–80 (95 ref.) **(Jpn)**

METABOLISM

High levels of oncomodulin and calmodulin expression in the log phase of cell growth in a chemically transformed rat fibroblast cell line. Blum JK, et al. **Adv Exp Med Biol** 1990;269:121–5 (10 ref.)

Unique calcium binding proteins in invertebrates. Cox JA. **Adv Exp Med Biol** 1990;269:67–72 (27 ref.)

Phosphorylation of the calcium-binding protein, p68, in the submembranous cytoskeleton of human placental syncytiotrophoblast. Kenton P, et al. **Adv Exp Med Biol** 1990;269:145–8 (23 ref.)

Calcyclin-like protein from Ehrlich ascites tumour cells-Ca2(+)-binding properties, distribution and target protein. Kuźnicki J, et al. **Adv Exp Med Biol** 1990; 269:149–52 (8 ref.)

Oncomodulin in normal and transformed cells. MacManus JP, et al. **Adv Exp Med Biol** 1990;269:107–10 (27 ref.)

Cooperativity in calcium binding and calcium dependent reactions. Ogawa Y. **Adv Exp Med Biol** 1989;255:205–14

Disregulation of cell calcium and calcium-binding proteins in experimental hypertension. Rao RM, et al. **Adv Exp Med Biol** 1989;255:505–14

Ca2(+)-binding proteins as components of the cytoskeleton. Schleicher M, et al. **Adv Exp Med Biol** 1990;269:99–102 (21 ref.)

Lipocortin-1 immunoreactivity in the normal human central nervous system and lesions with astrocytosis. Johnson MD, et al. **Am J Clin Pathol** 1989 Oct;92(4):424–9

Plasma membrane calcium pump and 28-kDa calcium binding protein in cells of rat kidney distal tubules. Borke JL, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):F842–9

cAMP and calcium-dependent mechanisms of phospholamban phosphorylation in intact hearts. Vittone L, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H318–25

The distribution of chromogranin A-like immunoreactivity in the human hippocampus coincides with the pattern of resistance to epilepsy-induced neuronal damage. Munoz DG. **Ann Neurol** 1990 Mar;27(3):266–75

In vivo effect of a beta-adrenergic agonist on activity of calcium-dependent proteinases, their specific inhibitor, and cathepsins B and H in skeletal muscle. Kretchmar DH, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):228–35

Biochemical demonstration of calpains and calpastatin in osteoarthritic synovial fluid. Suzuki K, et al. **Arthritis Rheum** 1990 May;33(5):728–32

Alterations in heart sarcolemmal Ca2(+)-ATPase and Ca2(+)-binding activities due to oxygen free radicals. Kaneko M, et al. **Basic Res Cardiol** 1990 Jan-Feb; 85(1):45–54

Calcium-ion binding by the potential calcium-ion-binding protein, p9Ka. Barraclough R, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):660–6

Sequence homology of a canine brain calcium-binding protein with calregulin and the human Ro/SS-A antigen. Collins JH, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):575–9

Human tumor cell lines express low levels of oncomodulin. Huber S, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):905–9

Differential sensitivity to isoprenaline of troponin I and phospholamban phosphorylation in isolated rat hearts. Karczewski P, et al. **Biochem J** 1990 Feb 15;266(1):115–22

A dimeric form of lipocortin-1 in human placenta. Pepinsky RB, et al. **Biochem J** 1989 Oct 1;263(1):97–103

A 32 kDa lipocortin from human mononuclear cells appears to be identical with the placental inhibitor of blood coagulation. Rothhut B, et al. **Biochem J** 1989 Nov 1; 263(3):929–35

Weak binding of divalent cations to plasma gelsolin. Doi Y, et al. **Biochemistry** 1990 Feb 13;29(6):1392–7

Immunological detection of phospholamban phosphorylation states facilitates the description of the mechanism of phosphorylation and dephosphorylation. Li CF, et al. **Biochemistry** 1990 May 15;29(19):4535–40

Calcium(II) site specificity: effect of size and charge on metal ion binding to an EF-hand-like site. Snyder EE, et al. **Biochemistry** 1990 Apr 24;29(16):3937–43

The phosphorylation of p68, a calcium-binding protein associated with the human syncytiotrophoblast submembranous cytoskeleton, is modulated by growth factors, activators of protein kinase C and cyclic AMP. Kenton P, et al. **Biochim Biophys Acta** 1989 Dec 14; 1014(3):271–81

The binding of large calpastatin to biologic membranes is mediated in part by interaction of an amino terminal region with acidic phospholipids. Mellgren RL, et al. **Biochim Biophys Acta** 1989 Nov 9;999(1):71–7

Purification and characterization of two rabbit lung Ca2(+)-dependent phospholipid-binding proteins. Tsao FH. **Biochim Biophys Acta** 1990 Jun 28;1045(1):29–39

Somatostatin-like immunoreactivity in rat main olfactory bulb: extent of coexistence with neuropeptide Y-, tyrosine hydroxylase- and vitamin D-dependent calcium binding protein-like immunoreactivities. Seroogy K, et al. **Brain Res** 1989 Sep 4;496(1-2):389–96

Tyrosine protein kinase substrate p36: a member of the annexin family of Ca2+/phospholipid-binding proteins. Gerke V. **Cell Motil Cytoskeleton** 1989;14(4):449–54 (34 ref.)

Phospholamban and troponin I are substrates for protein kinase C in vitro but not in intact beating guinea pig hearts. Edes I, et al. **Circ Res** 1990 Aug;67(2):394–400

Differential expression of the calcium-binding proteins MRP8 and MRP14 in granulomatous conditions: an immunohistochemical study. Delabie J, et al. **Clin Exp Immunol** 1990 Jul;81(1):123–6

Differential localization of calmodulin, the 67kDa calcimedin and calpactin II in secretory ameloblasts. Goldberg M, et al. **Connect Tissue Res** 1989;22(1-4):157–64

Binding of calcium and phosphate ions to dentin phosphophoryn. Marsh ME. **Connect Tissue Res** 1989; 21(1-4):205–10; discussion 211

Calpain and calpastatin in rabbit corneal epithelium. Shearer TR, et al. **Curr Eye Res** 1990 Jan;9(1):39–44

Modulation of gelsolin content in rat aortic smooth muscle cells during development, experimental intimal thickening and culture. An immunohistochemical and biochemical study. Chaponnier C, et al. **Eur J Biochem** 1990 Jul 5; 190(3):559–65

Monoclonal antibody VC1.1 selectively stains a population of GABAergic neurons containing the calcium-binding protein parvalbumin in the rat cerebral cortex. Kosaka T, et al. **Exp Brain Res** 1989;78(1):43–50

Tumor promoter-dependent phosphorylation of a Triton X-100 extractable form of lipocortin I in T51B rat liver cells. Campos-Gonzalez R, et al. **Exp Cell Res** 1989 Oct; 184(2):287–96

Identification of four lipocortin proteins and phosphorylation of lipocortin I by protein kinase C in cytosols of porcine thyroid cell cultures. Antonicelli F, et al. **FEBS Lett** 1989 Dec 4;258(2):346–50

Calcyclin is a calcium and zinc binding protein. Filipek A, et al. **FEBS Lett** 1990 May 21;264(2):263–6

Interaction of two brain annexins, CaBP33 and CaBP37, with membrane-skeleton proteins. Giambanco I, et al. **FEBS Lett** 1990 Jul 2;267(1):171–5

Do thin filaments of smooth muscle contain calponin? A new method for the preparation. Nishida W, et al. **FEBS Lett** 1990 Jul 30;268(1):165–8

Interaction of smooth muscle caldesmon with S-100 protein. Skripnikova EV, et al. **FEBS Lett** 1989 Nov 6;257(2):380–2

A major outer membrane protein of Serratia marcescens which was easily solubilized and had a capacity to bind to calcium. Tada Y, et al. **FEMS Microbiol Lett** 1990 Jun 15;58(1):115–8

Expression of immunoreactivity for Ca-binding protein, spot 35 in the interstitial cell of the rat pineal organ. Yamamoto M, et al. **Histochem J** 1990 Jan;22(1):4–10

Corticosteroids increase lipocortin I in BAL fluid from normal individuals and patients with lung disease. Ambrose MP, et al. **J Appl Physiol** 1990 Apr;68(4):1668–71

Bi-directional regulation of dephosphorylation of cAMP-dependent phosphorylated proteins by cAMP and calcium in permeabilized rat heart cells. Yoshida A, et al. **J Biochem (Tokyo)** 1989 Nov;106(5):894–9

Characterization of the interaction between calpactin I and fodrin (non-erythroid spectrin). Cheney RE, et al. **J Biol Chem** 1989 Oct 25;264(30):18068–75

Calcium-dependent and phosphorylation-stimulated proteolysis of lipocortin I by an endogenous A431 cell membrane protease. Chuah SY, et al. **J Biol Chem** 1989 Dec 15;264(35):21160–6

Calcium- and magnesium-binding properties of oncomodulin. Direct binding studies and microcalorimetry. Cox JA, et al. **J Biol Chem** 1990 Apr 25;265(12):6633–7

Binding and inhibition studies on lipocortins using phosphatidylcholine vesicles and phospholipase A2 from snake venom, pancreas, and a macrophage-like cell line. Davidson FF, et al. **J Biol Chem** 1990 Apr 5;265(10):5602–9

Site-specific mutants of oncomodulin. 1H NMR and optical stopped-flow studies of the effect on the metal binding properties of an Asp59——Glu59 substitution in the calcium-specific site. Golden LF, et al. **J Biol Chem** 1989 Dec 5;264(34):20314–9

Ca2+ binding capacity of cytoplasmic proteins from rod photoreceptors is mainly due to arrestin. Huppertz B, et al. **J Biol Chem** 1990 Jun 5;265(16):9470–5

Comparison of metal ion-induced conformational changes in parvalbumin and oncomodulin as probed by the intrinsic fluorescence of tryptophan 102. Hutnik CM, et al. **J Biol Chem** 1990 Jul 15;265(20):11456–64

Calcium-dependent regulation of actin filament bundling by lipocortin-85. Ikebuchi NW, et al. **J Biol Chem** 1990 Feb 25;265(6):3392–400

Alkylation of cysteine 82 of p11 abolishes the complex formation with the tyrosine-protein kinase substrate p36 (annexin 2, calpactin 1, lipocortin 2). Johnsson N, et al. **J Biol Chem** 1990 Aug 25;265(24):14464–8

Effect of Ca2+ on binding of the calpains to calpastatin. Kapprell HP, et al. **J Biol Chem** 1989 Oct 25; 264(30):17888–96

Functional reconstitution of the cardiac sarcoplasmic reticulum Ca2(+)-ATPase with phospholamban in phospholipid vesicles. Kim HW, et al. **J Biol Chem** 1990 Jan 25;265(3):1702–9

Terbium luminescence in synthetic peptide loops from calcium-binding proteins with different energy donors. MacManus JP, et al. **J Biol Chem** 1990 Jun 25; 265(18):10358–66

Eu3+ luminescence studies of oncomodulin. The origin of the pH-dependent behavior. Treviño CL, et al. **J Biol Chem** 1990 Jun 15;265(17):9694–700

Purification of a novel type of calcium-activated neutral protease from rat brain. Possible involvement in production of the neuropeptide kyotorphin from calpastatin fragments. Yoshihara Y, et al. **J Biol Chem** 1990 Apr 5;265(10):5809–15

Gelsolin-actin interaction and actin polymerization in human neutrophils. Howard T, et al. **J Cell Biol** 1990 Jun; 110(6):1983–91

Conformational change and localization of calpactin I complex involved in exocytosis as revealed by quick-freeze, deep-etch electron microscopy and immunocytochemistry. Nakata T, et al. **J Cell Biol** 1990 Jan;110(1):13–25

Altered synthesis of the 26-kDa heat stress protein family and thermotolerance in cell lines with elevated levels of calcium-binding proteins. Evans DP, et al. **J Cell Physiol** 1990 Mar;142(3):615–27

Lipocortin I (p35) is abundant in a restricted number of differentiated cell types in adult organs. Fava RA, et al. **J Cell Physiol** 1989 Nov;141(2):284–93

Phospholamban-mediated stimulation of Ca2+ uptake in sarcoplasmic reticulum from normal and failing hearts. Movsesian MA, et al. **J Clin Invest** 1990 May; 85(5):1698–702

Monoclonal antibody to phospholamban isolated from bovine cardiac muscle. Hori Y, et al. **J Clin Lab Immunol** 1989 Dec;30(4):163–8

Calcium-binding proteins, parvalbumin- and calbindin-D 28k-immunoreactive neurons in the rat spinal cord and dorsal root ganglia: a light and electron microscopic study. Antal M, et al. **J Comp Neurol** 1990 May 15;295(3):467–84

Compartmental organization of the ventral striatum of the rat: immunohistochemical distribution of enkephalin, substance P, dopamine, and calcium-binding protein. Voorn P, et al. **J Comp Neurol** 1989 Nov 8;289(2):189–201

Immunochemical and immunocytochemical studies of the C-propeptide of type II procollagen in chondrocytes of the growth plate. Lee ER, et al. **J Histochem Cytochem** 1990 May;38(5):659–73

Ca2+ pump and Ca2+/H+ antiporter in plasma membrane vesicles isolated by aqueous two-phase partitioning from corn leaves. Kasai M, et al. **J Membr Biol** 1990 Mar; 114(2):133–42

Calcium transport and phospholamban in sarcoplasmic reticulum of ischemic myocardium. Schoutsen B, et al. **J Mol Cell Cardiol** 1989 Jul;21(7):719–27

Developmental regulation of tyrosine kinase substrate p36 (calpactin heavy chain) in rat cerebellum. Burgoyne RD, et al. **J Mol Neurosci** 1989;1(1):47–54

Intra- and interchain disulfide bond generation in S100b protein. Mely Y, et al. **J Neurochem** 1990 Oct;55(4):1100–6

Cajal-Retzius neurons in developing monkey neocortex show immunoreactivity for calcium binding proteins. Huntley GW, et al. **J Neurocytol** 1990 Apr;19(2):200–12

Muscular dystrophy: possible role of mitochondrial deficiency in muscle degeneration processes. Lucas-Heron B, et al. **J Neurol Sci** 1990 Mar;95(3):327–34

Investigation of the Ca2(+)-dependent interaction of trifluoperazine with S100a: a 19F NMR and circular dichroism study. Pingerelli PL, et al. **J Protein Chem** 1990 Apr;9(2):169–75

Effects of aging on phospholamban phosphorylation and calcium transport in rat cardiac sarcoplasmic reticulum.

Jiang MT, et al. **Mech Ageing Dev** 1990 May 15; 54(1):87–101

Isolation of everted plasma membrane vesicles from Neurospora crassa and measurement of transport function. Scarborough GA. **Methods Enzymol** 1989;174:667–76 (28 ref.)

Ionomycin–regulated phosphorylation of the myeloid calcium–binding protein p14. Edgeworth J, et al. **Nature** 1989 Nov 9;342(6246):189–92

Resemblance of actin–binding protein/actin gels to covalently crosslinked networks. Janmey PA, et al. **Nature** 1990 May 3;345(6270):89–92

Calpain and calpastatin in normal and Alzheimer–degenerated human brain tissue. Nilsson E, et al. **Neurobiol Aging** 1990 Jul–Aug;11(4):425–31

Developmental changes of calpain and calpastatin in rabbit brain. Blomgren K, et al. **Neurochem Res** 1989 Nov; 14(11):1149–52

Calpain II activity and calpastatin content in brain regions of 3– and 24–month–old rats. Kenessey A, et al. **Neurochem Res** 1990 Mar;15(3):243–9

GABAergic hippocampal neurons resistant to ischemia–induced neuronal death contain the Ca2(+)–binding protein parvalbumin. Nitsch C, et al. **Neurosci Lett** 1989 Nov 6;105(3):263–8

Immunoreactivity for calretinin and other calcium–binding proteins in cerebellum. Rogers JH. **Neuroscience** 1989; 31(3):711–21

On the ion selectivity in Ca–binding proteins: the cyclo(–L–Pro–Gly–)3 peptide as a model. Sussman F, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7880–4

Thrombolamban, the 22–kDa platelet substrate of cyclic AMP–dependent protein kinase, is immunologically homologous with the Ras family of GTP–binding proteins. White TE, et al. **Proc Natl Acad Sci U S A** 1990 Jan; 87(2):758–62

Recent studies on calcium–dependent membrane–binding proteins: specificity and cooperativity of membrane–protein interactions and characterization of yeast analogs. Creutz CE, et al. **Prog Clin Biol Res** 1990;349:99–110 (16 ref.)

Microinjection of antibodies to the calpactin I light chain in MDBK cells causes precipition of the cytoskeletal calpactin I complex without affecting the distribution of related proteins. Glenney JR Jr. **Prog Clin Biol Res** 1990; 349:135–46

P36, member of the CA2+/lipid binding proteins (annexins, calpactins, lipocortins) and its complex with P11; molecular aspects. Johnsson N, et al. **Prog Clin Biol Res** 1990; 349:123–33 (33 ref.)

Interaction of placental anticoagulant protein–I (lipocortin V) with model membranes. Tait JF, et al. **Prog Clin Biol Res** 1990;349:173–81

Calcium–binding proteins in avian and mammalian central nervous system: localization, development and possible functions. Braun K. **Prog Histochem Cytochem** 1990; 21(1):1–64 (267 ref.)

The non–lysosomal, calcium–dependent proteolytic system of mammalian cells. Mellgren RL, et al. **Revis Biol Celular** 1989;20:139–59 (41 ref.)

The lipocortins and the EF hand proteins: Ca2(+)–binding sites and evolution. Moss SE, et al. **Trends Biochem Sci** 1990 Jan;15(1):11–2 (6 ref.)

[Modifications of protein kinase C activity and phosphorylation of lipocortin I in cultures of pig thyroid cells] Antonicelli F, et al. **Reprod Nutr Dev** 1990; 30(3):297–307 (Eng. Abstr.) **(Fre)**

[Calpain and calpastatin] Murachi T. **Rinsho Byori** 1990 Apr; 38(4):337–46 (25 ref.) (Eng. Abstr.) **(Jpn)**

[Interaction of calcium agonists and antagonists with Ca–binding proteins and their effect on cyclic nucleotide phosphodiesterase] Feoktistov IA, et al. **Biokhimiia** 1990 Apr;55(4):754–9 (Eng. Abstr.) **(Rus)**

[Molecular mechanism of calcium ion transport in mitochondria. I. Glycoprotein–peptide complex as a component of the electron transport system] Mironova GD, et al. **Ukr Biokhim Zh** 1989 Nov–Dec;61(6):48–54 (Eng. Abstr.) **(Rus)**

[Molecular mechanism of calcium ion transport in mitochondria. II. Parameters of Ca2+ binding with glycoprotein and glycoprotein–peptide complex] Utesheva ZhA, et al. **Ukr Biokhim Zh** 1989 Nov–Dec;61(6):54–8 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Calcium signaling of calcium–binding proteins and drug actions. Tanaka T, et al. **Adv Exp Med Biol** 1989;255:165–71

PHARMACOLOGY

Anti–inflammatory effects of vasocortin and nonapeptide fragments of uteroglobin and lipocortin I (antiflammins). Ialenti A, et al. **Agents Actions** 1990 Jan;29(1–2):48–9

Lipocortin 1 fragment modifies pyrogenic actions of cytokines in rats. Carey F, et al. **Am J Physiol** 1990 Aug; 259(2 Pt 2):R266–9

Inhibition of glutathione reductase by oncomodulin. Palmer EJ, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):149–54

Novel peptides derived from a region of local homology between uteroglobin and lipocortin–1 inhibit platelet aggregation and secretion. Vostal JG, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):27–36

Characterization of Ca2(+)–dependent phospholipid binding, vesicle aggregation and membrane fusion by annexins. Blackwood RA, et al. **Biochem J** 1990 Feb 15; 266(1):195–200

Inhibitory effect of calcium–binding protein regucalcin on protein kinase C activity in rat liver cytosol. Yamaguchi M, et al. **Biochem Med Metab Biol** 1990 Apr;43(2):140–6

A purified lipocortin shares the anti–inflammatory effect of glucocorticosteroids in vivo in mice. Errasfa M, et al. **Br J Pharmacol** 1989 Aug;97(4):1051–8

Differential effects of gelsolins on tissue culture cells. Huckriede A, et al. **Cell Motil Cytoskeleton** 1990; 16(4):229–38

The stimulatory effect of calpactin (annexin II) on calcium–dependent exocytosis in chromaffin cells: requirement for both the N–terminal and core domains of p36 and ATP. Ali SM, et al. **Cell Signal** 1990;2(3):265–76

Effect of the calcium–binding protein regucalcin on the Ca2+ transport system in rat liver microsomes: the protein stimulates Ca2+ release. Yamaguchi M, et al. **Chem Pharm Bull (Tokyo)** 1989 Nov;37(11):3037–41

Severin is a gelsolin prototype. Yin HL, et al. **FEBS Lett** 1990 May 7;264(1):78–80

Modulation of Ca2+ release channel activity from sarcoplasmic reticulum by annexin VI (67–kDa calcimedin). Díaz–Muñoz M, et al. **J Biol Chem** 1990 Sep 15;265(26):15894–9

Calcium–independent phospholipases from guinea pig digestive tract as probes to study the mechanism of lipocortin. Gassama–Diagne A, et al. **J Biol Chem** 1990 Mar 15;265(8):4309–14

Smooth muscle calponin. Inhibition of actomyosin MgATPase and regulation by phosphorylation. Winder SJ, et al. **J Biol Chem** 1990 Jun 15;265(17):10148–55

Lipocortins are major substrates for protein kinase C in extracts of human neutrophils. Stoehr SJ, et al. **J Immunol** 1990 May 15;144(10):3936–45

Calpain and calpastatin activity in the optic pathway. Blomgren K, et al. **Neurosci Lett** 1990 May 4; 112(2–3):179–83

Phospholipase A2 and lipocortin effects. Dennis EA, et al. **Prog Clin Biol Res** 1990;349:47–54 (14 ref.)

Inhibition of the actomyosin MgATPase by chicken gizzard calponin. Winder S, et al. **Prog Clin Biol Res** 1990; 327:141–8 (13 ref.)

[The effect of mitochondrial Ca 2+–transporting Ca 2+–binding glycoprotein on development of Ehrlich ascites carcinoma] Sirota TV, et al. **Vopr Med Khim** 1990 Mar–Apr;36(2):52–3 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Calcium protein signaling. **Adv Exp Med Biol** 1989;255:1–524

Structural and functional characterization of protein I (p36(2)p11(2)) and II (p32)–calcium/phospholipid binding proteins with homologies to lipocortin I. Gerke V. **Adv Exp Med Biol** 1990;269:135–8

Structural and functional investigation of p68—a protein of the lipocortin/calpactin family. Moss SE, et al. **Adv Exp Med Biol** 1990;269:79–83 (10 ref.)

Molecular structure and function of phospholamban: the regulatory protein of calcium pump in cardiac sarcoplasmic reticulum. Tada M, et al. **Adv Exp Med Biol** 1989;255:79–89

Possible role for two calcium–binding proteins of the S–100 family, co–expressed in granulocytes and certain epithelia. van Heyningen V, et al. **Adv Exp Med Biol** 1990;269:139–43 (27 ref.)

Calcium and polyphosphoinositide regulation of actin network structure by gelsolin. Yin HL. **Adv Exp Med Biol** 1989;255:315–23 (41 ref.)

The role of lipocortin in corticosteroid actions. Peers SH, et al. **Am Rev Respir Dis** 1990 Feb;141(2 Pt 2):S18–21 (63 ref.)

Calcium binding proteins in the brain. Celio MR. **Arch Ital Anat Embriol** 1989 Jul–Sep;94(3):227–36 (36 ref.)

Calpain I activation is not correlated with aggregation in human platelets. Elce JS, et al. **Biochem J** 1989 Aug 1; 261(3):1039–42

Biological relevance of lipocortins and related proteins as inhibitors of phospholipase A2. Davidson FF, et al. **Biochem Pharmacol** 1989 Nov 1;38(21):3645–51 (60 ref.)

Villin induces microvilli growth and actin redistribution in transfected fibroblasts. Friederich E, et al. **Cell** 1989 Nov 3;59(3):461–75

Role of phospholipase A2 in the stimulation of sponge cell proliferation by homologous lectin. Gramzow M, et al. **Cell** 1989 Dec 1;59(5):939–48

Association of the C–propeptide of type II collagen with mineralization of embryonic chick long bone and sternal development. Kujawa MJ, et al. **Connect Tissue Res** 1989; 23(2–3):179–99

Expression and role of E– and P–cadherin adhesion molecules in embryonic histogenesis. I. Lung epithelial morphogenesis. Hirai Y, et al. **Development** 1989 Feb; 105(2):263–70

Expression and role of E– and P–cadherin adhesion molecules in embryonic histogenesis. II. Skin morphogenesis. Hirai Y, et al. **Development** 1989 Feb; 105(2):271–7

Signal transduction mechanisms of Ca2+ mobilizing hormones: the case of gonadotropin–releasing hormone. Naor Z. **Endocr Rev** 1990 May;11(2):326–53 (389 ref.)

Microfilament organization correlates with increased cellular content of gelsolin. Banyard MR, et al. **Exp Cell Res** 1990 Mar;187(1):180–3

Inhibition by glucocorticoids of tumor necrosis factor–mediated cytotoxicity. Evidence against lipocortin involvement. Beyaert R, et al. **FEBS Lett** 1990 Mar 12; 262(1):93–6

Loss of calcium sensitivity of plasma gelsolin is associated with the presence of calcium ions during preparation. Pope B, et al. **FEBS Lett** 1989 Dec 18;259(1):185–8

Evaluation of the annexins as potential mediators of membrane fusion in exocytosis. Zaks WJ, et al. **J Bioenerg Biomembr** 1990 Apr;22(2):97–120 (91 ref.)

Role of lipocortin I in the glucocorticoid induction of the terminal differentiation of a human squamous carcinoma. Violette SM, et al. **J Cell Physiol** 1990 Jan;142(1):70–7

Expression of oncomodulin does not lead to the transformation or immortalization of mammalian cells in vitro. Mes–Masson AM, et al. **J Cell Sci** 1989 Nov;94 (Pt 3):517–25

Lipocortins, mediators of the anti–inflammatory actions of corticosteroids? Whitehouse BJ. **J Endocrinol** 1989 Dec; 123(3):363–6 (35 ref.)

The role of lipocortin I in macrophage–mediated immunosuppression in tumor–bearing mice. Sakata T, et al. **J Immunol** 1990 Jul 1;145(1):387–96

Nature and site of phospholamban regulation of the Ca2+ pump of sarcoplasmic reticulum. James P, et al. **Nature** 1989 Nov 2;342(6245):90–2

Modulation of ATPase activities in the central nervous system by the S–100 proteins. Simonian A, et al. **Neurochem Res** 1989 Aug;14(8):761–4

Microinjection of metallothionein–oncomodulin DNA into fertilized mouse embryos is correlated with fetal lethality. Chalifour LE, et al. **Oncogene** 1989 Oct;4(10):1241–6

Cytokines and lipocortins in inflammation and differentiation. Proceedings of the International Conference on Molecular and Cellular Biology of IL–1, TNF, and Lipocortins in Inflammation and Differentiation. Siena, Italy, October 22–25, 1989. Proceedings. **Prog Clin Biol Res** 1990; 349:1–444

Tension independent heat reflects phospholamban regulation of sarcoplasmic reticulum activity in rabbit papillary muscle. Blanchard EM, et al. **Prog Clin Biol Res** 1989; 315:606–7

The putative role of secretory protein–I/chromogranin A as a precursor for regulatory hormones. Cohn DV, et al. **Prog Clin Biol Res** 1990;332:51–66 (39 ref.)

Lipocortin. Flower RJ. **Prog Clin Biol Res** 1990;349:11–25 (47 ref.)

Structures and functions of a supergene family of calcium and phospholipid binding proteins. Geisow MJ, et al. **Prog Clin Biol Res** 1990;349:111–21 (24 ref.)

Are the lipocortins the second messengers of the anti–inflammatory action of glucocorticoids? Parente L, et al. **Prog Clin Biol Res** 1990;349:55–68 (44 ref.)

Enzyme activation by yeast calmodulin and a calcium–binding protein of Escherichia coli. Yazawa M, et al. **Prog Clin Biol Res** 1989;315:458–9

[Mechanism of action of glucocorticoids: role of lipocortins] Tranchant C, et al. **Rev Neurol (Paris)** 1989;145(12):813–8 (66 ref.) (Eng. Abstr.) **(Fre)**

[EF–hand proteins; an intracellular calcium sensor] Isobe T, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1955–68 **(Jpn)**

[Actin regulatory proteins] Mimura N, et al. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(12 Suppl):1471–9 **(Jpn)**

[Roles of calpain and calpastatin in cellular functions] Murachi T. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(12):2193–206 **(Jpn)**

[The role of phospholamban in cardiac sarcoplasmic reticulum] Tada M, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1927–37 **(Jpn)**

SECRETION

Secretion of sulfated and nonsulfated forms of parathyroid chromogranin A (secretory protein–I). Gorr SU, et al. **J Biol Chem** 1990 Feb 25;265(6):3012–6

ULTRASTRUCTURE

The Ca2+–binding sequence in bovine brain S100b protein beta–subunit. A spectroscopic study. Baudier J, et al. **Biochem J** 1989 Nov 15;264(1):79–85

CALCIUM BLOCKADERS, EXOGENOUS see **CALCIUM CHANNEL BLOCKERS**

CALCIUM CARBONATE

Quantitative study of the coral transformations in vivo' by several physical analytical methods. Irigaray JL, et al. **Biomateriais** 1990 Jul;11:73–4

Isolation of an acidic protein from cholesterol gallstones, which inhibits the precipitation of calcium carbonate in vitro. Shimizu S, et al. **J Clin Invest** 1989 Dec;84(6):1990–6

Interpretation of the hindered settling of calcium carbonate suspensions in terms of permeability. Alexander KS, et al. **J Pharm Sci** 1990 May;79(5):401–6

Crystal growth of calcium oxalate monohydrate and calcium carbonate from dilute solutions. Deganello S, et al. **Scanning Microsc** 1990 Mar;4(1):171–4

[Ventilatory function of the lungs in Brač stone cutters]

Pavlović M, et al. **Arh Hig Rada Toksikol** 1989 Dec; 40(4):383–7 (Eng. Abstr.) **(Ser)**

ADMINISTRATION & DOSAGE

Renal osteodystrophy in patients on continuous ambulatory peritoneal dialysis. Hisano S, et al. **Acta Paediatr Jpn Overseas Ed** 1990 Feb;32(1):44–50

Oral calcium chloride in hypoparathyroidism refractory to massive doses of calcium carbonate and vitamin D. Komindr S, et al. **Am J Med Sci** 1989 Sep;298(3):182–4

Calcium carbonate powder as a phosphate binder. Miller D, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):322–4

Nitrogen utilization and digestibility of amino acids by lambs fed a high–concentrate diet with limestone or magnesium oxide. Christiansen ML, et al. **J Anim Sci** 1990 Jul; 68(7):2095–104

Long–term effect of low calcium dialysate on parathyroid activity in dialysis patients treated with calcium carbonate as a phosphate binder [letter; comment] Malberti F, et al. **Nephrol Dial Transplant** 1989;4(8):758–9 Comment on: Nephrol Dial Transplant 1989;4(2):105–9.

[Comparison of the fluoride bioavailability from two oral preparations of monofluorophosphate disodium in combination with various calcium salts] Brazier M, et al. **Therapie** 1990 May–Jun;45(3):235–41 (Eng. Abstr.) **(Fre)**

[Stomach tolerance of acetylsalicylic acid by addition of calcium carbonate. A study of a 2–treatment/3–period cross–over design] Göke B, et al. **Med Klin** 1989 Oct 15; 84(10):474–8, 511 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Colonic intussusception secondary to a calcium phosphate bezoar in a child receiving calcium carbonate for hyperphosphatemia. Fildes RD, et al. **J Pediatr Surg** 1989 Nov;24(11):1195–7

ANALYSIS

Dissolution of calcium bilirubinate and calcium carbonate debris remaining after methyl tert–butyl ether dissolution of cholesterol gallstones. Nelson PE, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1345–50

An intrarenal opacity resisting extracorporeal shock wave lithotripsy. Vandeursen H, et al. **J Urol** 1990 Oct; 144(4):961–2

Mineralogical analysis of sputum lith from an apparently healthy subject. Goto Y, et al. **Jpn J Med** 1989 Nov–Dec; 28(6):731–5

[Determination of calcium carbonate, trace elements and amino acids in Os Sepiae] Zhao Z, et al. **Chung Kuo Chung Yao Tsa Chih** 1990 Jan;15(1):41–3, 64 (Eng. Abstr.) **(Chi)**

METABOLISM

Calcium carbonate as phosphate binder in patients on low–calcium dialysate [letter] Daelemans R, et al. **Am J Nephrol** 1989;9(4):348

Calcium bioavailability from two calcium carbonate preparations [letter] Sheikh MS, et al. **N Engl J Med** 1990 Sep 27;323(13):921

PHARMACOKINETICS

Variable efficacy of calcium carbonate tablets. Kobrin SM, et al. **Am J Kidney Dis** 1989 Dec;14(6):461–5

PHARMACOLOGY

Calcium carbonate exacerbates glomerular capillary hypertension and injury in rats with desoxycorticosterone–salt hypertension. Dworkin LD, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 1):444–50

Effect of antacid treatment on endogenous prostaglandin synthesis in human antral and duodenal mucosa. Preclik G, et al. **Dig Dis Sci** 1989 Dec;34(12):1860–4

Intestinal acid flow, dry matter, starch and protein digestibility and amino acid absorption in beef cattle fed a high–concentrate diet with defluorinated rock phosphate, limestone or magnesium oxide. Christiansen ML, et al. **J Anim Sci** 1990 Jul;68(7):2105–18

Increased risk of urinary tract infection associated with the use of calcium supplements. Apicella LL, et al. **Urol Res** 1990;18(3):213–7

[Study on the interactions during storage of compounds of the antacid group. I. Interactions of the components in suspensions] Pawlaczyk J, et al. **Acta Pol Pharm** 1989; 46(1):74–80 (Eng. Abstr.) **(Pol)**

[Sanitary and technological basis of correcting the salt level of desalinated water with air–slaked lime] Rakhmanin IuA, et al. **Gig Sanit** 1989 Jun;(6):66–9 **(Rus)**

[The hygienic evaluation of potato treated with the preparation Polikar made from the byproducts of soda manufacture] Tsyganenko OI, et al. **Vopr Pitan** 1990 Mar–Apr;(2):74–7 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

The rate of bone mineral loss in normal men and the effects of calcium and cholecalciferol supplementation. Orwoll ES, et al. **Ann Intern Med** 1990 Jan 1;112(1):29–34

Long–term effects of calcium carbonate and 2.5 mEq/liter calcium dialysate on mineral metabolism. Slatopolsky E, et al. **Kidney Int** 1989 Nov;36(5):897–903

Safety and efficacy of calcium carbonate in children with chronic renal failure. Clark AG, et al. **Nephrol Dial Transplant** 1989;4(6):539–44

Uraemic hyperphosphataemia—what is the therapy of choice? Schaefer K. **Nephrol Dial Transplant** 1989; 4(12):1005–7 (10 ref.)

The use of calcium carbonate to treat the hyperphosphataemia of chronic renal failure. Williams B, et al. **Nephrol Dial Transplant** 1989;4(8):725–9

Plasma zinc decreases in hemodialysis patients treated with calcium carbonate as the phosphate binder [letter] Gilli P, et al. **Nephron** 1989;53(4):384–5

Treatment of secondary hyperparathyroidism in patients on maintenance hemodialysis. Okada K, et al. **Nippon Jinzo Gakkai Shi** 1989 Oct;31(10):1085–9

Influence of 1 alpha–hydroxy vitamin D3 (0.25 micrograms/day) and calcium carbonate on patients with chronic renal failure at the predialytic stage. Okada K, et al. **Nippon Jinzo Gakkai Shi** 1989 Jun;31(6):657–60

Calcium carbonate 1250 mg/1260 mg: an effective phosphate binder. Taylor JE, et al. **Scott Med J** 1990 Apr;35(2):45–7

[Coral substituted for bone grafting in posterior vertebral arthrodesis in children. Initial results] Pouliquen JC, et al. **Rev Chir Orthop** 1989;75(6):360–9 (Eng. Abstr.) **(Fre)**

[Calcium carbonate for the treatment of hyperphosphatemia in chronic hemodialysis patients] Kiss D, et al. **Schweiz Med Wochenschr** 1990 Mar 3;120(9):295–8 (Eng. Abstr.) **(Ger)**

[Use of calcium carbonate as an intestinal chelator of phosphorus] Bongiorno P, et al. **Minerva Urol Nefrol** 1990 Jan–Mar;42(1):55–7 (Eng. Abstr.) **(Ita)**

[Is the problem of using alkalizing drugs only medical history?] **Przegl Lek** 1989;46(6):527–32 **(Pol)**

CALCIUM CHANNEL ACTIVATORS see **CALCIUM CHANNEL AGONISTS**

CALCIUM CHANNEL AGONISTS

ANTAGONISTS & INHIBITORS

Selective antagonism of calcium channel activators by flupirilene. Kenny BA, et al. **Br J Pharmacol** 1990 Jun; 100(2):211–6

CHEMICAL SYNTHESIS

A search for calcium–channel activators in the verapamil series. Romanelli MN, et al. **Farmaco** 1989 May; 44(5):449–64

PHARMACOLOGY

Effects of calcium channel modulators on the proliferation of mouse spleen lymphocytes in vitro. Kunert–Radek J, et al. **Agents Actions** 1990 Mar;29(3–4):254–8

Effect of Ca2(+)–channel agonists and antagonists on skeletal muscle sugar transport. Westfall MV, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):R462–8

Calcium channel modulation of alpha 1– and alpha 2–adrenergic pressor responses in conscious and anesthetized dogs. Kenny D, et al. **Anesthesiology** 1990 May;72(5):874–81

Ca–agonists: a new class of inotropic drugs. Bechem M, et al. **Basic Res Cardiol** 1989;84 Suppl 1:105–16

Analysis and functional characteristics of dihydropyridine–sensitive and –insensitive calcium channel proteins. Dascal N. **Biochem Pharmacol** 1990 Sep 15; 40(6):1171–8 (104 ref.)

Synergistic effects of calcium–mobilizing agents and adenosine on histamine release from rat peritoneal mast cells. Lohse MJ, et al. **Br J Pharmacol** 1989 Dec; 98(4):1392–8

RS 30026: a potent and effective calcium channel agonist. Patmore L, et al. **Br J Pharmacol** 1990 Apr;99(4):687–94

Vascular and insulinotropic effects of YC 170, a calcium agonist, on isolated perfused rat pancreas. Abadie E, et al. **Diabete Metab** 1990 Jan–Feb;16(1):7–10

Two subtypes of dihydropyridine–sensitive calcium channels in rat ventricular muscle. Saxon M, et al. **Eur J Pharmacol** 1990 Mar 13;178(1):37–45

Activators and inactivators of calcium channels: effects in the central nervous system [published erratum appears in Fundam Clin Pharmacol 1990;4(1):128] Spedding M, et al. **Fundam Clin Pharmacol** 1989;3 Suppl:3s–29s (185 ref.)

Effects of the Ca agonists Bay K 8644 and CGP 28392 on vascular smooth muscle tone. Alonso MJ, et al. **Gen Pharmacol** 1989;20(6):827–31

Spontaneous oscillations and agonist–evoked changes in Ca2+ in cultured smooth muscle cells. Simpson AW, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 6:S59–62

Comparative behavioral, neurochemical and pharmacological activities of dihydropyridine calcium channel activating drugs. O'Neill SK, et al. **J Pharmacol Exp Ther** 1990 Jun; 253(3):905–12

Interaction between calcium channel ligands and guanine nucleotides in cultured rat sensory and sympathetic neurones. Dolphin AC, et al. **J Physiol (Lond)** 1989 Jun; 413:271–88

Dihydropyridine calcium channel antagonists block and agonists potentiate high potassium contractures but not twitches in frog skeletal muscle. Frank GB. **Jpn J Physiol** 1990;40(2):205–24

The response of single cardiac sodium channels in neonatal rats to the dihydropyridines CGP 28392 and (–)–Bay K 8644. Kohlhardt M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Aug; 340(2):210–8

Characterization of the calcium channel state transitions induced by the enantiomers of the 1,4–dihydropyridine Sandoz 202 791 in neonatal rat heart cells. A nonmodulated receptor model. Hering S, et al. **Pflugers Arch** 1989 Sep; 414(6):690–700

Sodium gradient influences agonist–induced Ca++ transients in single vascular smooth muscle cells: a fluorescence digital imaging microscopy study. Bova S, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:113–4

Effects of calcium channel activators on the response of rabbit aortic rings to alpha 1–receptor agonists: evidence for two modes of action. Babich M, et al. **Pharmacology** 1989;39(3):176–84

Actions of Ca2+ channel ligands depend on G–proteins. Ca2+ agonists/antagonists and GTP [letter] Dolphin AC, et al. **Trends Pharmacol Sci** 1988 Nov;9(11):394–5

1,4–Dihydropyridine activators and antagonists: structural and functional distinctions. Triggle DJ, et al. **Trends Pharmacol Sci** 1989 Dec;10(12):507–11 (31 ref.)

[Calcium antagonists: concepts and recent progresses in research on the mechanism of action] Yoshida Y, et al. **Nippon Rinsho** 1989 Aug;47(8):1714–8 **(Jpn)**

[Interaction of calcium agonists and antagonists with Ca–binding proteins and their effect on cyclic nucleotide phosphodiesterase] Feoktistov IA, et al. **Biokhimiia** 1990 Apr;55(4):754–9 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

The antiseizure activity of dihydropyridine calcium channel antagonists in the conscious rat. Morón MA, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1150–5

CALCIUM CHANNEL AGONISTS, EXOGENOUS see **CALCIUM CHANNEL AGONISTS**

CALCIUM CHANNEL BLOCKERS

Drugs recently released in Belgium. Felodipine—olsalazine. Harvengt C. **Acta Clin Belg** 1989;44(2):137–9

Chronic treatment by the calcium channel blocker +/– PN 200–110 in the rat counteracts the stimulations of pituitary weight, prolactin release and pituitary C–kinase activity induced by a chronic estradiol treatment, in vivo. Touraine P, et al. **Acta Endocrinol (Copenh)** 1990 Mar;122(3):403–8

Calcium channel antagonist effects of spironolactone, an aldosterone antagonist. Mironneau J. **Am J Cardiol** 1990 Jun 19;65(23):7K–8K; discussion 3K

Calcium antagonists: pharmacologic agents in search of new clinical indications. Gasser R. **Angiology** 1990 Jan; 41(1):36–43 (57 ref.)

8–Bromo–cyclic GMP inhibits the calcium channel current in embryonic chick ventricular myocytes. Wahler GM, et al. **Can J Physiol Pharmacol** 1990 Apr;68(4):531–4

Two pyridine analogues with more effective ability to reverse multidrug resistance and with lower calcium channel blocking activity than their dihydropyridine counterparts. Shudo N, et al. **Cancer Res** 1990 May 15;50(10):3055–61

Biotransformation of terodiline. V. Stereoselectivity in hydroxylation by human liver microsomes. Norén B, et al. **Chem Biol Interact** 1989;71(4):325–37

Effects of ouabain and EGTA on the inhibitory effect of Ca2+ on guinea pig stomach smooth muscle ('Ca reversal'). Karibe H, et al. **Eur J Pharmacol** 1990 Jul 3; 182(2):273–81

Comparative study of d–diltiazem and its analogues as calcium antagonists in snail neurones. Novales–Li P, et al. **Eur J Pharmacol** 1990 Mar 20;178(2):161–70

Norepinephrine blocks a calcium current of adult rat sympathetic neurons via an alpha 2–adrenoceptor. Schofield GG. **Eur J Pharmacol** 1990 May 3;180(1):37–47

Monoclonal antibodies against the presynaptic calcium channel antagonist omega–conotoxin GVI A from cone snail poison. Tombaccini D, et al. **FEBS Lett** 1990 Feb 12;261(1):71–5

Blockade of current through single calcium channels by trivalent lanthanide cations. Effect of ionic radius on the rates of ion entry and exit. Lansman JB. **J Gen Physiol** 1990 Apr;95(4):679–96

Potent blocking action of chlorpromazine on two types of calcium channels in cultured neuroblastoma cells. Ogata N, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1142–9

Characterization of the binding parameters of 3H–nitrendipine as a Ca2+–channel blocker in the myocardial membrane of the infarction region of mini–pigs. Pham NA, et al. **J Protein Chem** 1989 Jun;8(3):446–8

Recent development in calcium channel antagonists. Triggle DJ, et al. **Magnesium** 1989;8(5–6):213–22 (35 ref.)

Antipsychotic pimozide is a potent Ca2+ channel blocker in heart. Enyeart JJ, et al. **Mol Pharmacol** 1990 May; 37(5):752–7

The kappa–opiate agonist U50488H decreases the entry of 45Ca into rat cortical synaptosomes by inhibiting N– but not L–type calcium channels. Xiang JZ, et al. **Neuropharmacology** 1990 May;29(5):439–44

High affinity binding of the calcium channel blocker, (+)–[methyl–3H]PN200–110(3HPN) in rat brain. Magill SB, et al. **Physiol Behav** 1989 Jul;46(1):101–4

[Ilexonin A may be a slow calcium channel blocker] Wang L, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Nov; 9(11):668–71, 645 (Eng. Abstr.) **(Chi)**

[Negative inotropic effect of 3,6–dimethamidodibenzopyriodonium citrate (I–65) on guinea pig papillary muscles] Cui Y, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Jan;10(1):54–7 (Eng. Abstr.) **(Chi)**

[Calcium antagonism of enpiperate on isolated rabbit aorta strips and guinea pig ileum] Du YL, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar;10(2):114–7 (Eng. Abstr.) **(Chi)**

[Effects of 2–[p–(dimethylamino) styryl] pyridine methiodide on action potentials of depolarized papillary muscle cells of guinea pig] Kerram P, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Sep;10(5):402–6 (Eng. Abstr.) **(Chi)**

[Effects of 2[p–(dimethylamino)styryl]pyridine methiodide on action potentials of sinoatrial node cells of rabbits] Li DM, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Jul; 10(4):336–9 (Eng. Abstr.) **(Chi)**

[Effects of l–tetrahydropalmatine on isolated rabbit arterial strips] Sun F, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Jan;10(1):30–3 (Eng. Abstr.) **(Chi)**

[Effect of berberine on slow inward ionic current in guinea pig ventricular papillary muscle] Sun XD, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar;10(2):130–4 (Eng. Abstr.) **(Chi)**

[Effects of Panax notoginseng saponins on cardiac action potentials and slow inward current] Xiong ZG, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar;10(2):122–5 (Eng. Abstr.) **(Chi)**

[Effect of nisoldipine on cultured myocardial cells of neonatal rats] Yang JC, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar;10(2):118–21 (Eng. Abstr.) **(Chi)**

[Calcium channel blocking agents in thrombotic diseases] Ariad S. **Harefuah** 1989 May 10;116(10):542–4 (45 ref.) **(Heb)**

[The blocking action of platelet–activating factor (PAF) on the calcium currents of the atrial fibers in the frog and guinea pig] Vornovitskiĭ EG, et al. **Biull Eksp Biol Med** 1989 Dec;108(12):643–6 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Effects of isradipine, a new calcium antagonist, on postpartum uterine activity. Ingemarsson I, et al. **Acta Obstet Gynecol Scand** 1989;68(8):725–30

Possible survival benefit from concomitant beta–but not calcium–antagonist therapy during reperfusion for acute myocardial infarction. Ellis SG, et al. **Am J Cardiol** 1990 Jul 15;66(2):125–8

Calcium channel blockers as second–line therapy in thiazide–resistant hypertension [letter] Collart F, et al. **Arch Intern Med** 1990 Aug;150(8):1755, 1758, 1760

Bronchodilating effect of inhaled or orally administered calcium channel blocking agents on methacholine–induced bronchoconstriction. Tsuda T, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S166

Prevention of restenosis after coronary angioplasty: a pharmacological approach. Meier B. **Eur Heart J** 1989 Dec; 10 Suppl G:64–8 (22 ref.)

Theophylline, beta–adrenergic agents, and calcium channel blockers. Berman BA. **J Allergy Clin Immunol** 1989 Dec; 84(6 Pt 2):1097–9

The effects of thiazides plus calcium channel blockers [letter] Cappuccio FP, et al. **JAMA** 1990 Aug 22–29;264(8):971–3

Some behavioral effects of repeated administration of calcium channel antagonists. Czyrak A, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):557–60

[Calcium antagonists: an antihypertensive alternative] Bruun NE, et al. **Ugeskr Laeger** 1990 Feb 12;152(7):453–6 (30 ref.) (Eng. Abstr.) **(Dan)**

[Dose–response relation of gallopamil in comparison with nifedipine, diltiazem and tiapamil in patients with coronary heart disease] Hopf R, et al. **Z Kardiol** 1989;78 Suppl 5:69–76 (Eng. Abstr.) **(Ger)**

[Helium–neon laser therapy in the combined treatment of unstable stenocardia] Korochkin IM, et al. **Sov Med** 1990; (3):12–5 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Pathophysiological mechanisms underlying the adverse effects of calcium channel–blocking drugs in patients with chronic heart failure. Packer M. **Circulation** 1989 Dec;80(6 Suppl):IV59–67 (116 ref.)

The effect of nisoldipine on renal function in the long–term treatment of hypertension in patients with and without renal impairment. Wilson J, et al. **Eur J Clin Pharmacol** 1989;37(5):437–41

Glucose metabolism and calcium antagonists. Trost BN. **Horm Metab Res Suppl** 1990;22:48–56 (79 ref.)

Renal and endocrine effects of long–term converting enzyme inhibition as compared with calcium antagonism in essential hypertension. Katzman PL, et al. **J Cardiovasc Pharmacol** 1990 Mar;15(3):360–4

Platelet aggregation and metabolic control are not affected by calcium antagonist treatment in type II diabetes mellitus. Klauser R, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S93–6

The effect of calcium channel blocking on immune capacity of cardiovascular patients. Lehtonen LA, et al. **J Clin Lab Immunol** 1989 Oct;30(2):75–80

Effects of calcium antagonists on anti–cancer drug toxicity to haematopoietic progenitor cells in normal human bone marrow. Nakarai T, et al. **Leuk Res** 1990;14(5):401–5

Calcium entry blockers in cerebral resuscitation. Sakabe T. **Magnesium** 1989;8(5–6):238–52 (41 ref.)

[Comment on the contribution by R. Hefner and P.–A. Fischer. Increase in Parkinson symptoms in treatment with calcium antagonists] Philipps GR. **Nervenarzt** 1989 Sep; 60(9):587 **(Ger)**

[Side effects of cardiac glycosides, calcium antagonists and beta blockers in the secondary data of the legal health insurance] Krappweis J, et al. **Verh Dtsch Ges Inn Med** 1989;95:693–9 **(Ger)**

[The spectrum of side effects of gallopamil in comparison with other calcium antagonists] Mildenberger D, et al. **Z Kardiol** 1989;78 Suppl 5:25–8 (20 ref.) (Eng. Abstr.) **(Ger)**

[Cinarizine and Parkinson's disease. Double–blind placebo–controlled study] Martí Massó JF. **Neurologia** 1986 Mar–Apr;1(2):55–7 (Eng. Abstr.) **(Spa)**

ANALYSIS

Column liquid chromatography of calcium channel blockers. Waki H, et al. **J Chromatogr** 1989 Sep 29;494:408–12

Improved radioreceptor assay for the determination of plasma levels of dihydropyridine calcium channel blockers in humans. Quennedey MC, et al. **Ther Drug Monit** 1989 Sep;11(5):598–606

BLOOD

Quantitative determination of naltiazem in human plasma by gas chromatography/mass spectrometry. Davis PP, et al. **Biomed Environ Mass Spectrom** 1989 Nov;18(11):978–82

Assay of a calcium antagonist (PU 122) in plasma by gas chromatography. Marzo A, et al. **J Chromatogr** 1989 Dec 29;497:296–301

Determination of manidipine and its pyridine metabolite in human serum by high–performance liquid chromatography with ultraviolet detection and column switching. Miyabayashi T, et al. **J Chromatogr** 1989 Sep 29;494:209–17

Determination of a new calcium antagonist, sesamodil fumarate (SD–3211), and its metabolite in plasma by liquid chromatography with electrochemical detection. Morishima K, et al. **J Chromatogr** 1990 May 18; 527(2):381–8

Determination of belfosdil, a new calcium channel blocker, in human plasma by capillary gas chromatography with nitrogen–phosphorus detection. Mulvana DE, et al. **J Chromatogr** 1990 May 18;527(2):343–50

Enantioselective determination of felodipine and other chiral dihydropyridine calcium entry blockers in human plasma. Soons PA, et al. **J Chromatogr** 1990 Jun 29;528(2):343–56

Determination of mepirodipine in plasma by capillary column gas chromatography–negative–ion chemical ionization mass spectrometry. Teramura T, et al. **J Chromatogr** 1990 Jun 8;528(1):191–8

CHEMICAL SYNTHESIS

Synthesis and Ca–antagonist activity of some benzhydryl derivatives. Corsano S, et al. **Arch Pharm (Weinheim)** 1989 Dec;322(12):873–8

Synthesis of some 1,4–dihydropyridine derivatives and their calcium antagonistic activity. Safak C, et al. **Arzneimittelforschung** 1990 Feb;40(2 Pt 1):119–22

Synthesis and calcium antagonistic activity of (+)–(R)– and (–)–(S)–3–acetyl–2–[5–methoxy–2–[4–[N–methyl–N–(3,4,5– trimethoxyphenethyl) amino]butoxy]phenyl]benzothiazoline hydrochloride. Fujita M, et al. **Chem Pharm Bull (Tokyo)** 1990 Apr; 38(4):936–41

Synthesis and pharmacological properties of azido derivatives of 1,5–benzothiazepine Ca antagonist. Narita H, et al. **Chem Pharm Bull (Tokyo)** 1990 Feb;38(2):407–10

Organic phosphorus compounds. IV. Asymmetric 4–(benzothiazol–2–yl)benzylphosphonates as potent calcium antagonistic vasodilators. Yoshino K, et al. **Chem Pharm Bull (Tokyo)** 1990 Mar;38(3):676–80

Long–acting dihydropyridine calcium antagonists. 4. Synthesis and structure–activity relationships for a series of basic and nonbasic derivatives of 2–[(2–aminoethoxy)methyl]–1,4–dihydropyridine calcium antagonists. Alker D, et al. **J Med Chem** 1990 Feb; 33(2):585–91

Long–acting dihydropyridine calcium antagonists. 3. Synthesis and structure–activity relationships for a series of 2–[(heterocyclylmethoxy)methyl] derivatives. Alker D, et al. **J Med Chem** 1989 Oct;32(10):2381–8

Dihydropyrimidine calcium channel blockers: 2–heterosubstituted 4–aryl–1,4–dihydro–6–methyl–5–pyrimidinecarboxylic acid esters as potent mimics of dihydropyridines. Atwal KS, et al. **J Med Chem** 1990 May;33(5):1510–5

Dihydropyrimidine calcium channel blockers. 2. 3–substituted–4–aryl–1,4–dihydro–6–methyl–5–pyrimidinecarboxylic acid esters as potent mimics of dihydropyridines. Atwal KS, et al. **J Med Chem** 1990 Sep; 33(9):2629–35

Dihydropyrimidines: novel calcium antagonists with potent and long–lasting vasodilative and antihypertensive activity. Cho H, et al. **J Med Chem** 1989 Oct;32(10):2399–406

Synthesis and Ca2+ antagonistic activity of 2–[2–[(aminoalkyl)oxy]–5–methoxyphenyl]–3,4–dihydro–4–methyl–3–oxo–2H– 1,4–benzothiazines. Fujita M, et al. **J Med Chem** 1990 Jul;33(7):1898–905

Specific bradycardic agents. 1. Chemistry, pharmacology, and structure–activity relationships of substituted benzazepinones, a–new class of compounds exerting antiischemic properties. Reiffen M, et al. **J Med Chem** 1990 May;33(5):1496–504

Studies on Ca2+ channel antagonists. A 2–diazo–3,3,3–trifluoropropionamide derivative related to verapamil as a potential photoaffinity probe. Theodore LJ, et al. **J Med Chem** 1990 Feb;33(2):873–7

Vinylogous and coupled hexahydroquinolinones and dihydropyridines with calcium–modulating effects. Rose U. **Pharm Acta Helv** 1990;65(7):178–85

[Hexahydroquinolinones with calcium–modulatory effects—synthesis and pharmacologic action] Rose U. **Arch Pharm (Weinheim)** 1990 May;323(5):281–6 (Eng. Abstr.) **(Ger)**

[Calcium modulators of the anellated dihydropyridine type. Synthesis and pharmacologic action] Rose U. **Arzneimittelforschung** 1989 Nov;39(11):1393–8 (Eng. Abstr.) **(Ger)**

CLASSIFICATION

[Classification of Ca antagonist by its chemical structure and characteristics of each derivative] Oike M, et al. **Nippon Rinsho** 1989 Aug;47(8):1719–27 **(Jpn)**

ISOLATION & PURIFICATION

Omega–agatoxins: novel calcium channel antagonists of two subtypes from funnel web spider (Agelenopsis aperta) venom. Adams ME, et al. **J Biol Chem** 1990 Jan 15; 265(2):861–7

METABOLISM

[3H]PN200–110 and [3H]ryanodine binding and reconstitution of ion channel activity with skeletal muscle membranes. Hamilton SL, et al. **Anal Biochem** 1989 Nov 15;183(1):31–41

Metabolic fate of the new Ca++–channel blocking agent (+)–(2S,3S)–3–acetoxy–8–chloro–(2–(dimethylamino) ethyl)–2,3–dihydro–2–(4–methoxyphenyl)–2,5–benzothiazepin–4–(5H)–one maleate. Distribution, excretion and protein binding in rats and dogs. Nakamura S, et al. **Arzneimittelforschung** 1989 Sep;39(9):1100–8

Calcium antagonist binding sites in failing and nonfailing human ventricular myocardium. Rasmussen RP, et al. **Biochem Pharmacol** 1990 Feb 15;39(4):691–6

Interaction of the dihydropyridine calcium antagonist, CD–349, with calmodulin. Tanaka M, et al. **Biochem Pharmacol** 1990 Sep 1;40(5):991–6

Differences in the serum binding determinants of isradipine and darodipine—consequences for serum protein binding in various diseases. Pinquier JL, et al. **Br J Clin Pharmacol** 1989 Nov;28(5):587–92

Calcium channel antagonists and cyclosporine metabolism: in vitro studies with human liver microsomes. Tjia JF, et al. **Br J Clin Pharmacol** 1989 Sep;28(3):362–5

The binding of (+)–isradipine by guinea–pig intact atria. Herzig S, et al. **Br J Pharmacol** 1989 Aug;97(4):1246–50

Stereoselective binding of niguldipine enantiomers to alpha 1A–adrenoceptors labeled with [3H]5–methyl–urapidil. Graziadei I, et al. **Eur J Pharmacol** 1989 Oct 17; 172(4–5):329–37

Photoaffinity labeling of the purified skeletal muscle calcium antagonist receptor by a novel benzothiazepine, [3H]azidobutyryl diltiazem. Naito K, et al. **J Biol Chem** 1989 Dec 15;264(35):21211–4

Reduction of calcium channel antagonist binding sites by oxygen free radicals in rat heart. Kaneko M, et al. **J Mol Cell Cardiol** 1989 Sep;21(9):935–43

Protein kinase C participates in up–regulation of dihydropyridine–sensitive calcium channels by ethanol. Messing RO, et al. **J Neurochem** 1990 Oct;55(4):1383–9

Calcium channel receptor sites for (+)–[3H]PN 200–110 in coronary artery. Yamada S, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):327–32

[3H]TA–3090, a selective benzothiazepine–type calcium channel receptor antagonist: in vitro characterization. Zobrist RH, et al. **J Pharmacol Exp Ther** 1990 May; 253(2):461–5

Mitochondrial Ca2+ antagonist binding sites are associated with an inner mitochondrial membrane anion channel. Zernig G, et al. **Mol Pharmacol** 1990 Sep;38(3):362–9

Calcium antagonist, adenosine A1, and muscarinic bindings in rat hippocampus after transient ischemia. Onodera H, et al. **Stroke** 1990 May;21(5):771–6

Increasing complexity revealed in regulation of Ca2+ antagonist receptor. Godfraind T, et al. **Trends Pharmacol Sci** 1989 Aug;10(8):297–301 (7 ref.)

Metabolism of a new dihydropyridine calcium antagonist in rats and dogs. Takayama F, et al. **Xenobiotica** 1989 Dec; 19(12):1407–20

Sex differences in the metabolism and excretion of nilvadipine, a new dihydropyridine calcium antagonist, in rats. Terashita S, et al. **Xenobiotica** 1989 Nov;19(11):1221–9

PHARMACOKINETICS

Calcium antagonists. Pharmacologic differences and similarities. Wood AJ. **Circulation** 1989 Dec;80(6 Suppl):IV184–8

Pharmacokinetics of terodiline and a major metabolite in dogs with a correlation to a pharmacodynamic effect. Hallén B, et al. **Pharmacol Toxicol** 1990 May;66(5):373–81

[Pharmacokinetics and dynamics of Ca-antagonists in relation to the development of their slow release formulas] Echizen H, et al. **Nippon Rinsho** 1989 Aug;47(8):1781–7 **(Jpn)**

[Therapeutic drug monitoring of calcium antagonists] Nakagawa M, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:1152–5 **(Jpn)**

[Radioreceptor binding assay of Ca antagonist] Nakayama K, et al. **Nippon Rinsho** 1989 Aug;47(8):1728–34 **(Jpn)**

PHARMACOLOGY

Effects of HA1077, a novel calciumantagonistic spasmolytic agent on intracerebral arterioles of rats. Takayasu M, et al. **Acta Neurochir (Wien)** 1990;103(1–2):67–70

Calcium–antagonist effect on purine release from dissociated primary glial cultures of rat striatum. Caciagli F, et al. **Acta Physiol Hung** 1990;75 Suppl:43–4

Dihydropyridino–sensitive calcium channels in opioid–induced thermic and behavioral effects. Cavicchini E, et al. **Acta Physiol Hung** 1990;75 Suppl:55–6

Relative selectivity of responsiveness to calcium antagonists in peripheral vascular smooth muscle of dogs. Horváth A, et al. **Acta Physiol Hung** 1990;75 Suppl:143–4

Dihydropyridine calcium antagonists prevent cocaine–, but not amphetamine–, induced dopamine release and motor activity in rats. Rossetti ZL, et al. **Acta Physiol Hung** 1990; 75 Suppl:249–50

Concentration–dependent action of 4–aminopyridine on the adenosine–induced sinus slowing and vasorelaxation. Szentmiklósi AJ, et al. **Acta Physiol Hung** 1990;75 Suppl:265–6

Comparative evaluation of the Ca2+–antagonistic activity of some Bulgarian vasodilating agents and of known Ca2+–antagonists on K+–depolarized smooth muscle from guinea–pig taenia coli. Mutafova–Yambolieva V, et al. **Acta Physiol Pharmacol Bulg** 1989;15(2):40–6

Organic and inorganic calcium blockers on voltage and receptor operated channels of resistance arteries of the rat. Fasciolo JC, et al. **Acta Physiol Pharmacol Latinoam** 1989; 39(2):101–17

K+ and Ca2+ channel blocking agents increase or decrease stimulus–evoked but not spontaneous quantal transmitter release in sympathetic nerve terminals. Stjärne L, et al. **Acta Physiol Scand** 1990 Feb;138(2):235–7

Influence of TMB–8 and calmidazolium on phorbol ester promoted histamine release from isolated rat mast cells. Grosman N, et al. **Agents Actions** 1990 Apr;30(1–2):134–6

Effects of calcium channel modulators on the proliferation of mouse spleen lymphocytes in vitro. Kunert–Radek J, et al. **Agents Actions** 1990 Mar;29(3–4):254–8

Chronic ethanol treatment alters omega–conotoxin and Bay K 8644 sensitive calcium channels in rat striatal synaptosomes. Woodward JJ, et al. **Alcohol** 1990 Jul–Aug; 7(4):279–84

Effect of nifedipine on skin prick tests. Fernández Rivas M, et al. **Allergol Immunopathol (Madr)** 1990 Mar–Apr; 18(2):79–82

New approach to the mechanism of antiasthmatic action of Tranilast. García Mesa M. **Allergol Immunopathol (Madr)** 1990 Jan–Feb;18(1):53–6

Circadian variation in myocardial ischemia: the 24–hour antianginal effect of amlodipine. Proceedings of a symposium. Monte Carlo, Monaco, April 7, 1989. **Am Heart J** 1989 Nov;118(5 Pt 2):1083–140

A symposium: Pharmacology and therapeutic considerations of amlodipine, a new 1,4–dihydropyridine calcium antagonist. November 5, 1988, Paris, France. Proceedings. **Am J Cardiol** 1989 Nov 7;64(17):1I–137I

Effects of calcium antagonists on lipids and atherosclerosis. Bernini F, et al. **Am J Cardiol** 1989 Nov 7;64(17):129I–133I; discussion 133I–134I (44 ref.)

Different cardiodepressant potency of various calcium antagonists in human myocardium. Böhm M, et al. **Am J Cardiol** 1990 Apr 15;65(15):1039–41

Effects of bepridil and CERM 4205 (ORG 30701) on the relation between cardiac cycle length and QT duration in healthy volunteers. Lecocq B, et al. **Am J Cardiol** 1990 Sep 1;66(5):636–41

Calcium antagonists: review and perspective on mechanism of action. Schwartz A. **Am J Cardiol** 1989 Nov 7; 64(17):3I–9I (19 ref.)

Vascular effects of calcium antagonists: implications for hypertension and other risk factors for coronary heart disease. van Zwieten PA. **Am J Cardiol** 1989 Nov 7; 64(17):117I–121I (57 ref.)

The calcium antagonist isradipine and its effect on blood pressure related to plasma renin activity. Carr AA, et al. **Am J Hypertens** 1990 May;3(5 Pt 1):354–9

The effects of calcium channel blockade on blood pressure and calcium metabolism. Resnick LM, et al. **Am J Hypertens** 1989 Dec;2(12 Pt 1):927–30

Effect of different calcium antagonists on transcapillary fluid shift. Valentin JP, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 1):491–5

Hypertensive dysregulation and its modification by calcium channel blockade in nonoliguric renal failure. Weidmann P, et al. **Am J Nephrol** 1989;9(4):269–78

Normal responsiveness to external Ca and to Ca–channel modifying agents in hypertrophied rat heart. Callens–el Amrani F, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1727–34

Cardiovascular and renal actions of endothelin: effects of calcium–channel blockers. Cao LQ, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):F254–8

Calcium–channel blockade in canine hemorrhagic shock. Horton JW. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1012–9

Tubuloglomerular feedback responses during peritubular infusions of calcium channel blockers. Mitchell KD, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):F537–44

Integrated autonomic and behavioral responses to L/N Ca2(+)–channel blocker omega–conotoxin in conscious rats. Shapira S, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):R427–38

Ethacizin blockade of calcium channels: a test of the guarded receptor hypothesis. Starmer CF, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1693–704

Effect of Ca2(+)–channel agonists and antagonists on skeletal muscle sugar transport. Westfall MV, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):R462–8

Attenuation of the vasoconstrictor action of neuropeptide–Y by calcium–channel blockers. Aizawa Y, et al. **Angiology** 1989 Oct;40(10):890–4

Calcium channel antagonists and gastrointestinal function. Glavin GB. **Ann N Y Acad Sci** 1990;597:293–7

Effects of calcium channel blockers on renal function. Chan L, et al. **Annu Rev Med** 1990;41:289–302 (61 ref.)

Comparison of the cardiovascular effects of three dihydropyridine compounds. Nagura J, et al. **Arch Int Pharmacodyn Ther** 1989 Nov–Dec;302:174–85

Effects of nilvadipine, a new calcium entry blocker, on systemic blood pressure, cardiac hypertrophy and venous distensibility in spontaneously hypertensive rats. Ohtsuka M, et al. **Arch Int Pharmacodyn Ther** 1989 Sep–Oct; 301:228–45

Antihypertensive properties of the novel calcium antagonist (1S,2S)–2–[2–[[3–(2–benzimidazolyl)propyl]methylamino] ethyl]–6–fluoro–1,2,3,4–tetrahydro–1–isopropyl–2–naphthyl methoxyacetate dihydrochloride in rat models of hypertension. Comparison with verapamil. Hefti F, et al. **Arzneimittelforschung** 1990 Apr;40(4):417–21

Inhibition of 3H–nitrendipine binding in rat aortic and cerebral cortex membranes by the new dihydropyridine calcium antagonist benidipine hydrochloride. Ishii A. **Arzneimittelforschung** 1989 Dec;39(12):1546–50

Effects of nilvadipine on cerebral circulation and metabolism in cats. Isozumi K, et al. **Arzneimittelforschung** 1990 Apr; 40(4):421–4

Tissue selectivity of the novel calcium antagonist sesamodil fumarate in isolated smooth muscles and cardiac muscles. Nishimura K, et al. **Arzneimittelforschung** 1990 Mar; 40(3):244–8

Antihypertensive effect of a new dihydropyridine calcium entry blocker in conscious hypertensive and normotensive rats. Nomura M, et al. **Arzneimittelforschung** 1989 Dec; 39(12):1542–5

Suppression of atherogenesis in cholesterol–fed rabbits treated with nilvadipine, a new vasoselective calcium entry blocker. Koibuchi Y, et al. **Atherosclerosis** 1989 Oct; 79(2–3):147–55

Potent and specific inhibition of IL–8–, IL–1 alpha– and IL–1 beta–induced in vitro human lymphocyte migration by calcium channel antagonists. Bacon KB, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):349–54

Analysis and functional characteristics of dihydropyridine–sensitive and –insensitive calcium channel proteins. Dascal N. **Biochem Pharmacol** 1990 Sep 15; 40(6):1171–8 (104 ref.)

Effects of the novel dihydropyridine derivative niguldipine on the cytoplasmic free calcium concentration of mouse thymocytes. Drozd MP, et al. **Biochem Pharmacol** 1990 Sep 1;40(5):955–9

Antiperoxidant effects of dihydropyridine calcium antagonists. Janero DR, et al. **Biochem Pharmacol** 1989 Dec 1;38(23):4344–8

In vitro modulation of human neutrophil superoxide anion generation by various calcium channel antagonists used in ischemia–reperfusion resuscitation. Zimmerman JJ, et al. **Biochem Pharmacol** 1989 Oct 15;38(20):3601–10

Interaction between calcium channel blockers and volatile anaesthetics in the rat heart–lung preparation. Kashimoto S, et al. **Br J Anaesth** 1990 May;64(5):601–5

Comparative haemodynamic effects of intravenous nisoldipine and hydralazine in congestive heart failure. Haitas B, et al. **Br J Clin Pharmacol** 1990 Mar;29(3):366–8

The effects of calcium channel antagonists in an in vitro cortical slice model of epilepsy. Boulton CL, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:836P

Local application of omega–conotoxin GVIA to sympathetic nerve terminals in the guinea–pig isolated vas deferens. Brock JA, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:775P

Reactivity and sensitivity of mesenteric vascular beds and aortic rings of spontaneously hypertensive rats to endothelin: effects of calcium entry blockers. Criscione L, et al. **Br J Pharmacol** 1990 May;100(1):31–6

The effects of Ca2+ antagonists and hydralazine on central 5–hydroxytryptamine biochemistry and function in rats and mice. Green AR, et al. **Br J Pharmacol** 1990 Jan;99(1):41–6

Endothelium–dependent calcium–induced relaxation in the presence of Ca2+–antagonists in canine depolarized coronary arteries. Kikkawa K, et al. **Br J Pharmacol** 1989 Oct;98(2):700–6

Electrophysiological effects of bepridil and its quaternary derivative CERM 11888 in closed chest anaesthetized dogs: a comparison with verapamil and diltiazem. Leboeuf J, et al. **Br J Pharmacol** 1989 Dec;98(4):1351–9

The antiarrhythmic efficacy of intravenous anipamil against occlusion and reperfusion arrhythmias. MacLeod BA, et al. **Br J Pharmacol** 1989 Dec;98(4):1165–72

Niguldipine discriminates between alpha 1–adrenoceptor–mediated second messenger responses in rat cerebral cortex slices. Robinson JP, et al. **Br J Pharmacol** 1990 May;100(1):3–4

Voltage–dependent modulation of rat sensory neurone calcium channel currents by G protein activation: effect of a dihydropyridine antagonist. Scott RH, et al. **Br J Pharmacol** 1990 Apr;99(4):629–30

Inhibition of neurally–evoked transmitter release by calcium channel antagonists in rat parasympathetic ganglia. Seabrook GR, et al. **Br J Pharmacol** 1989 Aug; 97(4):1125–36

Effects of anipamil on cardiovascular status and regional blood flow in anaesthetized rats. Tabrizchi R, et al. **Br J Pharmacol** 1989 Dec;98(4):1185–90

Effects of calcium entry blockers on contractions evoked by endothelin–1, [Ala3,11]endothelin–1 and [Ala1,15]endothelin–1 in rat isolated aorta. Topouzis S, et al. **Br J Pharmacol** 1989 Oct;98(2):669–77

Specific but differential antagonism by glibenclamide of the vasodepressor effects of cromakalim and nicorandil in spinally–anaesthetized dogs. Yamada H, et al. **Br J Pharmacol** 1990 Jul;100(3):413–6

The low–threshold Ca current in isolated amygdaloid neurons in the rat. Kaneda M, et al. **Brain Res** 1989 Sep 11;497(1):187–90

Calcium channel blocker reverses anticholinesterase–induced myopathy. Meshul CK. **Brain Res** 1989 Sep 11;497(1):142–8

Inhibition of histamine release from rat hypothalamic slices by omega–conotoxin GVIA, but not by nilvadipine, a dihydropyridine derivative. Takemura M, et al. **Brain Res** 1989 Sep 4;496(1–2):351–6

Ca2+ and vasopressin release in isolated rat neurohypophysis: differential effects of four classes of Ca2+ channel ligands. von Spreckelsen S, et al. **Brain Res** 1990 Apr 23;514(1):68–76

Inhibition by tetrandrine of calcium currents at mouse motor nerve endings. Wiegand H, et al. **Brain Res** 1990 Jul 30; 524(1):112–8

Role of calcium in the expression of ACTH–induced stretching, yawning and penile erection. Argiolas A, et al. **Brain Res Bull** 1990 Jun;24(6):853–6

The effect of nimodipine on picrotoxin–induced seizures. Thomas J. **Brain Res Bull** 1990 Jan;24(1):11–5

Long acting calcium antagonist anipamil limits myocardial necrosis and penetrates the ischemic zone during 24 h of coronary artery occlusion in the dog. Denniss AR, et al. **Can J Cardiol** 1990 Jan–Feb;6(1):31–7

Activities of newly synthesized dihydropyridines in overcoming of vincristine resistance, calcium antagonism, and inhibition of photoaffinity labeling of P–glycoprotein in rodents. Kiue A, et al. **Cancer Res** 1990 Jan 15; 50(2):310–7

Effect of calcium channel blockers on gastric carcinogenesis and caerulein enhancement of gastric carcinogenesis induced by N–methyl–N'–nitro–N–nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Cancer Res** 1990 Apr 1; 50(7):2095–8

Effect of MCI–176, a new calcium channel blocker, on large and small coronary arteries in dogs. Ishibashi T, et al. **Cardiovasc Res** 1989 Apr;23(4):295–302

Blocking of human T lymphocyte activation by channel antagonists. Bono MR, et al. **Cell Biochem Funct** 1989 Jul; 7(3):219–26

Class IV Ca2+ antagonists do not affect lipid peroxidation in singlet oxygen challenged cardiomyocytes. Ver Donck L, et al. **Cell Biol Int Rep** 1990 Apr;14(4):399–406

Theoretical calculations on calcium channel drugs: is electron transfer involved mechanistically? Kovacic P, et al. **Chem Biol Interact** 1990;75(1):61–70

Passive electrical properties, mechanical activity, and extracellular potassium in arterially perfused and ischemic rabbit ventricular muscle. Effects of calcium entry blockade or hypocalcemia. Cascio WE, et al. **Circ Res** 1990 Jun; 66(6):1461–73

Calcium channel blockers enhance cholesteryl ester hydrolysis and decrease total cholesterol accumulation in human aortic tissue. Etingin OR, et al. **Circ Res** 1990 Jan; 66(1):185–90

Actions of Ca2+ antagonists on two types of Ca2+ channels in rat aorta smooth muscle cells in primary culture. Kuga T, et al. **Circ Res** 1990 Aug;67(2):469–80

Comparative antioxidant activities of propranolol, nifedipine, verapamil, and diltiazem against sarcolemmal membrane lipid peroxidation. Mak IT, et al. **Circ Res** 1990 May; 66(5):1449–52

Calcium entry blockade prevents leakage of macromolecules induced by ischemia–reperfusion in skeletal muscle. Paul J, et al. **Circ Res** 1990 Jun;66(6):1636–42

Effects of calcium entry blockade on myocardial blood flow. Bache RJ. **Circulation** 1989 Dec;80(6 Suppl):IV40–6 (48 ref.)

Pharmacology of TA–3090 (8–chloro diltiazem) related to its cerebrovascular protective properties. Bevan JA, et al. **Circulation** 1989 Dec;80(6 Suppl):IV178–83

Role of calcium in arrhythmogenesis. Levy MN. **Circulation** 1989 Dec;80(6 Suppl):IV23–30 (52 ref.)

Antiarrhythmic actions of diltiazem during experimental atrioventricular reentrant tachycardias. Importance of use–dependent calcium channel–blocking properties. Talajic M, et al. **Circulation** 1990 Jan;81(1):334–42

Calcium antagonists. Pharmacologic differences and similarities. Wood AJ. **Circulation** 1989 Dec;80(6 Suppl):IV184–8

Effects of calcium antagonists on beta–receptors of cultured cardiac myocytes isolated from neonatal rat ventricle. Yonemochi H, et al. **Circulation** 1990 Apr;81(4):1401–8

Effects of calcium antagonists on atherogenesis. Kiowski W, et al. **Clin Exp Hypertens [A]** 1989;11(5–6):1085–96 (53 ref.)

Red blood cell ionized calcium concentration in spontaneous hypertension: modulation in vivo by the calcium antagonist PN 200.110. Morris MJ, et al. **Clin Exp Pharmacol Physiol** 1988 Apr;15(4):257–60

Calcium antagonists and hypertension. Nayler WG, et al. **Clin Exp Pharmacol Physiol** 1988 Feb;15(2):93–103

The actions and role of calcium entry blockers in hypertension: cardiac considerations. Sole MJ. **Clin Invest Med** 1989 Oct;12(5):294–9 (49 ref.)

Effects of amlodipine, a long–acting dihydropyridine calcium antagonist in aging hypertension: pharmacodynamics in relation to disposition. Abernethy DR, et al. **Clin Pharmacol Ther** 1990 Jul;48(1):76–86

Effects of calcium channel blockers on the pharmacokinetics of propranolol stereoisomers. Hunt BA, et al. **Clin Pharmacol Ther** 1990 May;47(5):584–91

Short–term effects of calcium antagonists on hemodynamics and cyclosporine pharmacokinetics in heart–transplant and kidney–transplant patients. Roy LF, et al. **Clin Pharmacol Ther** 1989 Dec;46(6):657–67

Attenuation of the low–density–lipoprotein–activated phosphoinositide signalling system by calcium blockers in human lymphocytes. Locher R, et al. **Clin Sci** 1990 May; 78(5):509–14

Effect of verapamil on different spermatozoal functions in guinea pigs—a preliminary study. Juneja R, et al. **Contraception** 1990 Feb;41(2):179–87

Cardiovascular effects of isradipine (Lomir) with special emphasis on haemodynamics and antihypertensive efficacy. A review. Dahlöf B. **Cor Vasa** 1990;32(2 Suppl 1):23–34 (50 ref.)

From channels to cats: an overview of isradipine pharmacology. Rüegg UT, et al. **Cor Vasa** 1990;32(2 Suppl 1):12–22 (14 ref.)

Ca++ antagonists distinguish different requirements for cAMP–mediated gene expression in the cellular slime mold, Dictyostelium discoideum. Blumberg DD, et al. **Differentiation** 1989 Jul;41(1):14–21

Diversity and novel pharmacological properties of Ca2+ channels in Drosophila brain membranes. Pelzer S, et al. **EMBO J** 1989 Aug;8(8):2365–71

Calcium release from pituitary secretory granules: modulation by thiols, disulfides, and dihydropyridine calcium channel blockers. Lorenson MY, et al. **Endocrinology** 1990 May;126(5):2671–8

Calcium currents in rat myoballs and their inhibition by insulin. Wu FS, et al. **Endocrinology** 1989 Nov; 125(5):2563–72

Anticonvulsant effects of dihydropyridine Ca2+ antagonists in electrocortical shock seizures. Meyer FB, et al. **Epilepsia** 1990 Jan–Feb;31(1):68–74

Effects of the dihydropyridine Ca2+ channel antagonist nimodipine on kainic acid–induced limbic seizures. Paczynski RP, et al. **Epilepsy Res** 1990 May–Jun;6(1):33–8

A new perspective on the antiatherosclerotic activity of Ca2(+)–channel blockers. Block LH, et al. **Eur J Clin Invest** 1990 Jun;20(3):236–8 (19 ref.)

Haemodynamic effects and pharmacokinetics of felodipine at rest and during exercise in hypertensive patients treated with metoprolol or atenolol. Bengtsson–Hasselgren B, et al. **Eur J Clin Pharmacol** 1989;37(5):459–65

Effect of felodipine, a new calcium channel antagonist, on platelet function and fibrinolytic activity at rest and after exercise. Sengeløv H, et al. **Eur J Clin Pharmacol** 1989; 37(5):453–7

Calcium channel inhibitors prevent apomorphine– and oxytocin–induced penile erection and yawning in male rats. Argiolas A, et al. **Eur J Pharmacol** 1989 Aug 3;166(3):515–8

Increased calcium sensitivity in isolated resistance arteries from spontaneously hypertensive rats: effects of dihydropyridines. Boonen HC, et al. **Eur J Pharmacol** 1990 Apr 25;179(3):403–12

Effects of calcium channel inhibitors upon the efficacy of common antiepileptic drugs. Czuczwar SJ, et al. **Eur J Pharmacol** 1990 Jan 25;176(1):75–83

Inhibitory effects of calcium channel blockers on intestinal motility in the dog. De Ponti F, et al. **Eur J Pharmacol** 1989 Sep 13;168(2):133–44

Effects of calcium antagonists on biogenic amines in discrete brain areas. Gaggi R, et al. **Eur J Pharmacol** 1990 Jun 8; 181(3):187–97

The effects of TMB–8 on acetylcholine release from frog motor nerve: interactions with adenosine. Hunt JM, et al. **Eur J Pharmacol** 1990 Mar 27;178(3):259–66

Potentiation of stretch–induced myogenic tone of dog cerebral artery by hemolysate and the inhibitory action of calcium antagonists. Nakayama K, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):33–42

Suppression of calcium current in a snail neurone by eperisone and its analogues. Novales–Li P, et al. **Eur J Pharmacol** 1989 Sep 22;168(3):299–305

Effects of calcium channel blocking agents on neostigmine–induced fasciculations. Raines A, et al. **Eur J Pharmacol** 1989 Nov 28;173(1):11–7

Effects of Ca2+ entry blockers on CaCl2–, KCl– and noradrenaline–induced contractions of goat cerebral arteries. Salom JB, et al. **Eur J Pharmacol** 1990 Feb 20; 177(1–2):1–8

Interactions between oxytocin– and calcium–modifying agents in the rat testicular capsule in vitro. Sánchez M, et al. **Eur J Pharmacol** 1989 Sep 13;168(2):169–77

Calcium channel blockers protect against ethylene glycol monomethyl ether (2–methoxyethanol)–induced testicular toxicity. Ghanayem BI, et al. **Exp Mol Pathol** 1990 Jun; 52(3):279–90

Plasmodium chabaudi: in vivo effects of Ca2+ antagonists on chloroquine–resistant and chloroquine–sensitive parasites. Tanabe K, et al. **Exp Parasitol** 1990 May; 70(4):419–26

Direct and indirect contractile responses of the human vas deferens and actions of noradrenaline and of calcium antagonists. Smith IC, et al. **Exp Physiol** 1990 Jan; 75(1):33–43

Negative inotropic and calcium antagonistic activity of alkyl and arylalkyl phosphonates. Bellucci C, et al. **Farmaco** 1989 Dec;44(12):1167–91

Arterial baroreceptor reflex and calcium antagonists. Berdeaux A. **Fundam Clin Pharmacol** 1989;3 Suppl:65s–70s (30 ref.)

Central cardiovascular actions of calcium channel antagonists in dogs. Damase–Michel C, et al. **Fundam Clin Pharmacol** 1989;3 Suppl:57s–64s (26 ref.)

Central neurochemical effects of dihydropyridine calcium antagonists. Huguet F. **Fundam Clin Pharmacol** 1989;3 Suppl:31s–46s (102 ref.)

Central cardiovascular effects of dihydropyridines in spontaneously hypertensive rats. Laurent S, et al. **Fundam Clin Pharmacol** 1989;3 Suppl:47s–56s (38 ref.)

Cardiovascular properties of LF 2.0254, a new potent vasoselective calcium channel blocker with a slow onset of action. Pruneau D, et al. **Fundam Clin Pharmacol** 1990; 4(2):223–43

Calcium antagonists and the vestibular system: a critical review of flunarizine as an antivertigo drug. Rascol O, et al. **Fundam Clin Pharmacol** 1989;3 Suppl:79s–87s (45 ref.)

Neuropsychological profiles of calcium antagonists. Soubrie P. **Fundam Clin Pharmacol** 1989;3 Suppl:71s–78s (40 ref.)

Activators and inactivators of calcium channels: effects in the central nervous system [published erratum appears in Fundam Clin Pharmacol 1990;4(1):128] Spedding M, et al. **Fundam Clin Pharmacol** 1989;3 Suppl:3s–29s (185 ref.)

Effect of extracellular calcium and calcium channel antagonists on ATP and field stimulation induced contractions of the mouse urinary bladder. Acevedo CG, et al. **Gen Pharmacol** 1989;20(6):811–5

Comparative antiulcer and antisecretory effects of various calcium antagonists. Hertz F, et al. **Gen Pharmacol** 1989; 20(5):635–40

Ca2+ entry blockers, force staircase and the onset of the positive inotropic action of cardiotonic steroids in isolated cardiac muscle. Kyosuke T, et al. **Gen Pharmacol** 1990; 21(1):33–9

Interactions between analgesics and calcium channel blockers. Miranda HF, et al. **Gen Pharmacol** 1990; 21(2):171–4 (53 ref.)

Stereoselectivity of NC–1100, a Ca–entry blocker. Miyake N, et al. **Gen Pharmacol** 1990;21(2):261–3

New generation dihydropyridine calcium entry blockers: in search of greater selectivity for one tissue subtype. Ohtsuka M, et al. **Gen Pharmacol** 1989;20(5):539–56 (143 ref.)

Effects of the Ca2(+)–antagonists nifedipine, verapamil, flunarizine and of the calmodulin antagonist trifluoperazine on muscarinic cholinergic receptors in rat cerebral cortex. Popova J, et al. **Gen Pharmacol** 1990;21(3):317–9

Influence of long–term treatment with the Ca2(+)–antagonists nifedipine, verapamil, flunarizine and with the calmodulin antagonist trifluoperazine on beta–adrenoceptors in rat cerebral cortex. Staneva–Stoytcheva D, et al. **Gen Pharmacol** 1990; 21(1):149–52

Omega–conotoxin blockade of calcium currents in cultured neonatal rat cardiomyocytes: different action on EGTA–modified calcium channels. Savtchenko AN, et al. **Gen Physiol Biophys** 1990 Apr;9(2):147–65

Calcium antagonists for uterine relaxation. Lechner W, et al. **Gynecol Obstet Invest** 1989;28(3):144–6

Increase in PGE2 and TXA2 in the saliva of common migraine patients. Action of calcium channel blockers. Tuca JO, et al. **Headache** 1989 Sep;29(8):498–501

Antiatherosclerotic effects of calcium antagonists. Study in human aortic cell culture. Orekhov AN, et al. **Herz** 1990 Apr;15(2):139–45

Inhibition of human mesangial cell proliferation by calcium channel blockers. Shultz PJ, et al. **Hypertension** 1990 Feb; 15(2 Suppl):I76–80

Calcium antagonists inhibit elevated potassium efflux from aorta of aldosterone–salt hypertensive rats. Smith JM, et al. **Hypertension** 1990 Jan;15(1):78–83

Histamine release from beta–escin–permeabilized rat peritoneal mast cells and its inhibition by intracellular Ca2+ blockers, calmodulin inhibitors and cAMP. Izushi K, et al. **Immunopharmacology** 1989 Nov–Dec;18(3):177–86

Anti–asthmatic activity of newly synthesized calcium antagonists: 2–n–butyl–1 (N–methyl–n–[2–(N',N'–dimethylamino)ethyl]amino) –5,6–methylenedioxy–indene and –indane. Nagai H, et al. **Int Arch Allergy Appl Immunol** 1989;90(2):137–43

Effect of calcium–modifying drugs on mouse in vitro fertilization and preimplantation development. Blancato JK, et al. **Int J Fertil** 1990 May–Jun;35(3):171–6

Second generation calcium channel blockers in the treatment of chronic heart failure: are they any better than their predecessors? [comment] Packer M. **J Am Coll Cardiol** 1989 Nov 1;14(5):1339–42 Comment on: J Am Coll Cardiol 1989 Nov 1;14(5):1331–8.

Effects of Ca2+ antagonists and K+–channel activators on K+–induced contractions in the rat aorta. Lawson K, et al. **J Auton Pharmacol** 1989 Oct;9(5):329–36

Amiloride analogs inhibit L–type calcium channels and display calcium entry blocker activity. Garcia ML, et al. **J Biol Chem** 1990 Mar 5;265(7):3763–71

Studies on the structural requirements for the activity of the skeletal muscle dihydropyridine receptor/slow Ca2+ channel. Allosteric regulation of dihydropyridine binding in the absence of alpha 2 and beta components of the purified protein complex. Kim HS, et al. **J Biol Chem** 1990 Jul 15;265(20):11858–63

The diltiazem analog TA–3090 mimics the actions of high extracellular Ca2+ on parathyroid function in dispersed bovine parathyroid cells. Chen CJ, et al. **J Bone Miner Res** 1990 Jun;5(6):581–7

Vascular selectivity of calcium antagonists: importance for the management of hypertension. Proceedings of the Third International Symposium on Felodipine. Rome, Italy, October 17–18, 1988. **J Cardiovasc Pharmacol** 1990;15 Suppl 4:S1–114

Cardiac electrophysiologic effects of a new calcium antagonist, lacidipine. Cerbai E, et al. **J Cardiovasc Pharmacol** 1990 Apr;15(4):604–9

Effects of Ro 40–5967, a novel calcium antagonist, on myocardial function during ischemia induced by lowering coronary perfusion pressure in dogs: comparison with verapamil. Clozel JP, et al. **J Cardiovasc Pharmacol** 1989 Nov;14(5):713–21

Effects of isradipine on hemodynamic parameters and ventricular tachycardia in healed myocardial infarction. de Langen CD, et al. **J Cardiovasc Pharmacol** 1990 Feb; 15(2):254–8

Effects of the novel coronary selective calcium channel blocker, McN–6186, on cardiocirculatory dynamics, coronary vascular resistance, and cardiac output distribution in normal, conscious rats. Flaim SF, et al. **J Cardiovasc Pharmacol** 1990 May;15(5):780–90

Triggered activity induced by K(+)–free, Na(+)–deficient solution in guinea pig ventricular muscle: the effects of ouabain, lidocaine, and Ca2+ channel blockers. Gilat E, et al. **J Cardiovasc Pharmacol** 1990 Aug;16(2):267–75

Isradipine: a new calcium antagonist with strong vasodilatory but negligible cardiodepressive effects. Griebenow R, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S84–6

Comparative hemodynamic studies of isradipine and dihydralazine in atherosclerotic and normal rabbits. Hof RP, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S13–22

Effect of isradipine on left ventricular relaxation and diastolic filling. Hoppeler H, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S79–83

Lacidipine: a calcium antagonist with potent and long–lasting antihypertensive effects in animal studies. Micheli D, et al. **J Cardiovasc Pharmacol** 1990 Apr;15(4):666–75

Antihypertensive activity of OPC–13340, a new potent and long–acting dihydropyridine calcium antagonist, in rats. Nakayama N, et al. **J Cardiovasc Pharmacol** 1990 May; 15(5):836–44

Acute hemodynamic effects of nilvadipine, a new calcium channel blocker, in patients with congestive heart failure. Sato H, et al. **J Cardiovasc Pharmacol** 1990 Feb; 15(2):317–22

Negative inotropic properties of isradipine, nifedipine, diltiazem, and verapamil in diseased human myocardial tissue. Schwinger RH, et al. **J Cardiovasc Pharmacol** 1990 Jun;15(6):892–9

The pharmacology of calcium antagonists: a review. Struyker–Boudier HA, et al. **J Cardiovasc Pharmacol** 1990; 15 Suppl 4:S1–10 (108 ref.)

Occlusion and reperfusion–induced arrhythmias in rats: involvement of platelets and effects of calcium antagonists. Swies J, et al. **J Cardiovasc Pharmacol** 1990 May; 15(5):816–25

Hemodynamic effects of calcium antagonists with high or low vascular selectivity. Thorén P, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 4:S21–4

Effect of different calcium channel blockers on angiotensin II– and vasopressin–induced prostacyclin biosynthesis in vascular smooth muscle cells. Vallotton MB, et al. **J Cardiovasc Pharmacol** 1990 Apr;15(4):598–603

Stereoisomers of calcium antagonists distinguish a myocardial

and vascular mode of protection against cardiac ischemic injury. van Amsterdam FT, et al.
J Cardiovasc Pharmacol 1990 Feb;15(2):198–204

Drug–induced decrease of serum alanine and aspartate aminotransferase activity in the rat, as a result of treatment with oxodipine, a new calcium channel blocker. Waner T, et al. **J Clin Chem Clin Biochem** 1990 Jan;28(1):25–30

Experimental antiarteriosclerotic effects of calcium antagonists. Fleckenstein A, et al. **J Clin Pharmacol** 1990 Feb;30(2):151–4

Inhibition of vascular myogenic tone and reactivity by calcium antagonists. Nordlander MI. **J Hypertens Suppl** 1989 Sep;7(4):S141–5; discussion S146 (28 ref.)

Clinical pharmacological evaluation of calcium antagonists and other drugs modifying myogenic tone in essential hypertension. Reid JL, et al. **J Hypertens Suppl** 1989 Sep; 7(4):S169–71

Long–acting dihydropyridine calcium antagonists. 5. Synthesis and structure–activity relationships for a series of 2–[[(N–substituted–heterocyclyl)ethoxy]methyl]–1,4–dihydropyridine calcium antagonists. Alker D, et al.
J Med Chem 1990 Jun;33(6):1805–11

4–Isoxazolyl–1,4–dihydropyridines: biological, theoretical, and structural studies. Natale NR, et al. **J Med Chem** 1990 Aug;33(8):2255–9

Organic phosphorus compounds. 5. (4–Benzothiazol–2–ylbenzyl)amidophosphonate as potent calcium antagonistic vasodilators. Yoshino K, et al.
J Med Chem 1990 Aug;33(8):2192–6

The effect of calcium antagonists on the activities of lipid metabolizing enzymes in the isolated ischaemically perfused and reperfused rat heart. Griffiths EJ, et al.
J Mol Cell Cardiol 1990 Mar;22(3):303–10

Effect of exposure to calcium entry blockers on doxorubicin accumulation and cytotoxicity in multidrug–resistant cells. Bruno NA, et al. **J Natl Cancer Inst** 1990 Mar 7; 82(5):419–24

Calcium antagonists inhibit met–enkephalin immunoreactive material release: in vitro and ex vivo experiments. Govoni S, et al. **J Neural Transm Gen Sect** 1990;80(1):1–8

Effects of a new calcium channel blocker, KB–2796, on protein synthesis of the CA1 pyramidal cell and delayed neuronal death following transient forebrain ischemia. Yoshidomi M, et al. **J Neurochem** 1989 Nov;53(5):1589–94

Calcium antagonists fail to protect mammalian spinal neurons after physical injury. Shi RY, et al. **J Neurotrauma** 1989 Winter;6(4):261–76; discussion 277–8

Effects of calcium channel–blocking agents on platelet–osteogenic sarcoma interaction: platelet aggregation and electron microscopic findings. Mehta P, et al. **J Orthop Res** 1990 Sep;8(5):629–34

Study of the structure–activity relationships of new dihydropyridine derivatives. Suzuki K, et al.
J Pharmacobiodyn 1989 May;12(5):293–8

Pharmacological profiles of YM–16151–1 and its optical isomers: a novel calcium entry blocking and selective beta–1 adrenoceptor blocking agent. Asano M, et al.
J Pharmacol Exp Ther 1990 Jul;254(1):204–11

Alpha–2 adrenergic inhibition of Ca(++)–evoked [3H]norepinephrine release from synaptosomes is blocked by depolarization. Bowyer JF, et al.
J Pharmacol Exp Ther 1990 Jun;253(3):1063–9

Anti–ischemic and vasorelaxant effects of the new benzazepine calcium channel blocker SQ 31,765. Grover GJ, et al. **J Pharmacol Exp Ther** 1989 Dec;251(3):1020–5

Dihydropyridine calcium antagonists reduce the consumption of high–energy phosphates in the rat brain. A study using combined 31P/1H magnetic resonance spectroscopy and 31P saturation transfer. Rudin M, et al.
J Pharmacol Exp Ther 1989 Nov;251(2):700–6

Calcium antagonists show two modes of protection in ischemic heart failure. van Amsterdam FT, et al.
J Pharmacol Exp Ther 1990 Apr;253(1):277–83

Simple and specific assessment of Ca–entry–blocking activities of drugs by measurement of Ca reversal. Matsuo K, et al. **J Pharmacol Methods** 1989 Dec;22(4):265–75

Interaction between calcium channel ligands and guanine nucleotides in cultured rat sensory and sympathetic neurones. Dolphin AC, et al. **J Physiol (Lond)** 1989 Jun; 413:271–88

The effect of the phenylalkylamine D888 (devapamil) on force and Ca2+ current in isolated frog skeletal muscle fibres. Erdmann R, et al. **J Physiol (Lond)** 1989 Jun; 413:521–41

Effect of calcium–channel blockers and salbutamol on the isolated mare uterus—interaction with the calcium agonist Bay K 8644. Coruzzi G, et al. **J Vet Pharmacol Ther** 1989 Dec;12(4):404–10

Inhibitory effects of endothelial cells and calcium channel blockers on platelet aggregation. Yamada Y, et al.
Jpn Heart J 1990 Mar;31(2):201–15

Mechanisms of the synergistic interactions between organic calcium channel antagonists and various neuromuscular blocking agents. Chang CC, et al. **Jpn J Pharmacol** 1990 Jul;53(3):285–92

Slow onset of and recovery from Ca blocking action of benidipine in rat aorta and portal vein. Gotoh Y, et al.
Jpn J Pharmacol 1989 Sep;51(1):37–45

Effects of KT–362, a new Na and Ca influx and Ca release inhibitor, on canine ventricular arrhythmias. Hashimoto K, et al. **Jpn J Pharmacol** 1989 Dec;51(4):475–82

Protection by benidipine hydrochloride (KW–3049), a calcium antagonist, of ischemic kidney in rats via inhibitions of Ca–overload, ATP–decline and lipid peroxidation. Karasawa A, et al. **Jpn J Pharmacol** 1990 Apr;52(4):553–62

Effects of CV–4093, a new dihydropyridine calcium channel blocker, on renal hemodynamics and function in stroke–prone spontaneously hypertensive rats (SHRSP). Morimoto S, et al. **Jpn J Pharmacol** 1989 Oct;51(2):257–65

Reconsideration of vascular selectivity of dihydropyridine calcium antagonists: comparison of cardiovascular profile of mepirodipine, a novel dihydropyridine consisting of a single stereoisomer with (+)–(S)–(S) conformation, with those of nifedipine and nicardipine. Motomura S, et al.
Jpn J Pharmacol 1990 Feb;52(2):319–30

Effects of a new dihydropyridine derivative, CV–4093.2HCl, on renal hemodynamics in spontaneously hypertensive rats. Nagaoka A, et al. **Jpn J Pharmacol** 1989 Sep;51(1):25–35

Natriuretic action of manidipine hydrochloride, a new calcium channel blocker, in spontaneously hypertensive rats. Nagaoka A, et al. **Jpn J Pharmacol** 1989 Oct; 51(2):299–301

Effects of S–312, a new calcium antagonist, on the mechanical and electrophysiological responses of isolated cardiovascular preparations. Ninomiya M, et al.
Jpn J Pharmacol 1989 Oct;51(2):227–38

Antihypertensive effect of CS–905, a novel dihydropyridine calcium blocker, in conscious hypertensive dogs. Oizumi K, et al. **Jpn J Pharmacol** 1990 Jun;53(2):264–6

Antihypertensive effects of CS–905, a novel dihydropyridine Ca++ channel blocker. Oizumi K, et al.
Jpn J Pharmacol 1989 Sep;51(1):57–64

Effects of calcium channel blockers and hydralazine on plasma glucose levels in streptozotocin–induced diabetic rats in vivo. Sunaga K, et al. **Jpn J Pharmacol** 1990 Mar; 52(3):449–55

Effects of calcium antagonists, felodipine and nicardipine, on cerebral circulation in dogs. Tanaka M, et al.
Jpn J Pharmacol 1990 Feb;52(2):273–9

Effects of Ca2+ blockers on the various types of stimuli–induced acetylcholine release from guinea pig ileum myenteric plexus. Yokoyama K, et al. **Jpn J Pharmacol** 1990 Jan;52(1):109–14

Dihydropyridine calcium channel antagonists block and agonists potentiate high potassium contractures but not twitches in frog skeletal muscle. Frank GB.
Jpn J Physiol 1990;40(2):205–24

Pharmacological basis for use of calcium antagonists in hypertension. Scriabine A, et al. **Magnesium** 1989; 8(5–6):253–65 (77 ref.)

Effects of inorganic and organic promoters and inhibitors of calcium influx on stretch–induced myogenic tone of vascular tissues. Nakayama K, et al.
Microcirc Endothelium Lymphatics 1989 Feb–Apr; 5(1–2):55–76

Nifedipine impairs neutrophil respiratory burst by a mechanism other than calcium channel blockade. Nalini K, et al. **Mol Cell Biochem** 1990 Mar 5;93(1):27–34

Effect of inorganic calcium channel blockers on dihydropyridine binding to cardiac sarcolemma. Schilling WP, et al. **Mol Pharmacol** 1990 Jan;37(1):80–9

Antiarrhythmic effects of a benzothiazine derivative (SD–3211) and its stereoisomer (SA3212) in anaesthetized rats and isolated perfused rat hearts compared with bepridil. Fukuchi M, et al.
Naunyn Schmiedebergs Arch Pharmacol 1990 Jun; 341(6):557–64

[3H]HOE166 defines a novel calcium antagonist drug receptor—distinct from the 1,4 dihydropyridine binding domain. Grassegger A, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Dec;340(6 Pt 2):752–9

Investigations of the roles of dihydropyridine and omega–conotoxin–sensitive calcium channels in mediating depolarisation–evoked endogenous dopamine release from striatal slices. Herdon H, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Jul; 340(1):36–40

Differences between negative inotropic and vasodilator effects of calcium antagonists acting on extra– and intracellular calcium movements in rat and guinea–pig cardiac preparations. Hugtenburg JG, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Nov; 340(5):567–75

The differential effect of calcium antagonists on the positive inotropic effects induced by calcium and monensin in cardiac preparations of rats and guinea–pigs. Hugtenburg JG, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Nov;340(5):558–66

The preferential inhibition of alpha 1– over beta–adrenoceptor–mediated positive inotropic effect by organic calcium antagonists in the rabbit papillary muscle. Kushida H, et al.
Naunyn Schmiedebergs Arch Pharmacol 1990 Mar; 341(3):206–14

Differential effects of calcium channel antagonists (omega–conotoxin GVIA, nifedipine, verapamil) on the electrically–evoked release of [3H]acetylcholine from the myenteric plexus, phrenic nerve and neocortex of rats. Wessler I, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Apr;341(4):288–94

Calcium antagonists and the kidney. Rodicio JL, et al.
Nephrol Dial Transplant 1990;5(2):81–6 (40 ref.)

Randomised prospective study on renal effects of two different contrast media in humans: protective role of a calcium channel blocker. Russo D, et al. **Nephron** 1990; 55(3):254–7

Calcium entry blockers and their effects on glucose metabolism. Kingma PJ, et al. **Neth J Med** 1990 Feb; 36(1–2):32–8 (61 ref.)

Metal cations as synaptosomal calcium blockers in studies with Fura–2. Sun YD, et al. **Neurochem Res** 1989 Nov; 14(11):1061–6

The blocking effects of omega–conotoxin on Ca current in bovine chromaffin cells. Hans M, et al. **Neurosci Lett** 1990 Jun 22;114(1):63–8

Hippocampal synaptic plasticity induced by excitatory amino acids includes changes in sensitivity to the calcium channel blocker, omega–conotoxin. Krishtal OA, et al.
Neurosci Lett 1989 Jul 31;102(2–3):197–204

Effects of calcium antagonists on the evoked release of dynorphin A(1–8) and availability of intraterminal calcium in rat hippocampal mossy fiber synaptosomes. Terrian DM, et al. **Neurosci Lett** 1989 Dec 4;106(3):322–7

Pharmacological characterization of voltage–dependent calcium currents in rat hippocampal neurons. Toselli M, et al. **Neurosci Lett** 1990 Apr 20;112(1):70–5

A possible pacemaker mechanism in pars compacta neurons of the guinea–pig substantia nigra revealed by various ion channel blocking agents. Harris NC, et al. **Neuroscience** 1989;31(2):355–62

Calcium–dependent potentials with different sensitivities to calcium agonists and antagonists in guinea–pig hippocampal neurons. Higashi H, et al. **Neuroscience** 1990;34(1):35–47

The effect of two different calcium antagonists on the glomerular haemodynamics in the dog. Heller J, et al.
Pflugers Arch 1990 Mar;415(6):751–5

Characterization of the calcium channel state transitions induced by the enantiomers of the 1,4–dihydropyridine Sandoz 202 791 in neonatal rat heart cells. A nonmodulated receptor model. Hering S, et al. **Pflugers Arch** 1989 Sep; 414(6):690–700

Calcium channel current and its sensitivity to (+) isradipine in cultured pregnant rat myometrial cells. An electrophysiological and a binding study. Honoré E, et al.
Pflugers Arch 1989 Aug;414(4):477–83

Oxytocin–induced penile erection and yawning: role of calcium and prostaglandins. Argiolas A, et al.
Pharmacol Biochem Behav 1990 Mar;35(3):601–5

Hyperthermia induced in rabbits by organic calcium antagonists. Palmi M, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):325–30

In vitro inhibition of arterial myocyte growth and stimulation of low density lipoprotein metabolism by SIM 6080, a new calcium antagonist. Bernini F, et al. **Pharmacol Res** 1990 Jan–Feb;22(1):27–35

Effect of some Ca++ entry blockers (CEBs) on vascular and non vascular preparations "in vitro". Urciuoli M, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:147–8

Drug interactions with calcium antagonists. Kirch W, et al.
Pharmacol Ther 1990;45(1):109–36 (167 ref.)

Interaction of calcium channel antagonists with parietal cell acid production, adenylate cyclase, intracellular–free Ca2+ and H+/K+–ATPase. Beil W, et al. **Pharmacology** 1990; 40(1):8–20

Comparative anti–ischemic effects of dihydropyridine calcium antagonists in isolated perfused rat hearts: relationship of cardiodepression and cardioprotection. Grover GJ, et al. **Pharmacology** 1990;40(3):137–49

Effect of ligustrazine on Ca2+ uptake by inside–out red cell membrane vesicles from renal hypertensive rats. Luo H, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989;4(4):220–3

Funnel–web spider venom and a toxin fraction block calcium current expressed from rat brain mRNA in Xenopus oocytes. Lin JW, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4538–42

Effect of calcium channel blockers on serotonin uptake. Hill NS, et al. **Proc Soc Exp Biol Med** 1990 Apr;193(4):326–30

Calcium antagonists protect hippocampal neurons against ischemic damage. Krieglstein J, et al.
Prog Clin Biol Res 1989;317:393–400

Effects of calcium–channel blockers (CCB) on mu and delta opioid receptors in rat brain membranes. Schwarz S, et al. **Prog Clin Biol Res** 1990;328:109–12

Elevated calcium–dependent K+ efflux in aorta from stroke prone–spontaneously hypertensive rat. Smith JM, et al.
Prog Clin Biol Res 1990;327:539–47

Calcium blockers: antiatherogenic action by influencing the prostaglandin–system. Weiss K, et al.
Prog Clin Biol Res 1989;301:353–7

A comparison of calcium antagonists and diazepam in reducing ethanol withdrawal tremors. Bone GH, et al.
Psychopharmacology (Berl) 1989;99(3):386–8

Yawning induced by apomorphine, physostigmine or pilocarpine is potentiated by dihydropyridine calcium channel blockers. Bourson A, et al.
Psychopharmacology (Berl) 1990;100(2):168–72

Calcium channel blockers: effect on morphine–induced hypermotility. Martin MI, et al.
Psychopharmacology (Berl) 1990;101(2):267–70

Use of calcium channel antagonists as magnetoprotective agents. Papatheofanis FJ. **Radiat Res** 1990 Apr;122(1):24–8

Effects of the calcium antagonist, TMB–8 on halothane and on caffeine contractures of malignant hyperthermia susceptible skeletal muscle. Williams JH, et al.

Res Commun Chem Pathol Pharmacol 1990 Jun; 68(3):387–90

Effects of calmodulin and calcium channel blockers on the Ca2+ induced outflow of K+ in intact red blood cells of patients with essential hypertension. Buemi M, et al. **Riv Eur Sci Med Farmacol** 1989 Feb;11(1):69–75

HIV-1 coat protein neurotoxicity prevented by calcium channel antagonists [see comments] Dreyer EB, et al. **Science** 1990 Apr 20;248(4953):364–7 Comment in: Science 1990 Apr 20;248(4953):303.

Immunoprotective effect of a calcium channel blocker on macrophage antigen presentation function, major histocompatability class II antigen expression, and interleukin-1 synthesis after hemorrhage. Ertel W, et al. **Surgery** 1990 Aug;108(2):154–9; discussion 159–60

No effect of terodiline on anticoagulation effect of warfarin and steady-state plasma levels of warfarin enantiomers in healthy volunteers. Höglund P, et al. **Ther Drug Monit** 1989 Nov;11(6):667–73

The effects of calcium channel blockers on cyclosporine and its metabolites in renal transplant recipients. Tortorice KL, et al. **Ther Drug Monit** 1990 Jul;12(4):321–8

Adenosine potentiates the inhibitory effects of calcium channel antagonists on human platelet aggregation induced by thromboxane A2 or U46619. Johnson GJ, et al. **Thromb Res** 1990 Jul 1;59(1):139–48

Antithrombotic/antiplatelet activity of tetramethylpyrazine. Liu SY, et al. **Thromb Res** 1990 Apr 15;58(2):129–40

Calcium channel blockers reverse the sustained elevation of blood pressure induced by chronic infusion of endothelin in conscious rats. Yasujima M, et al. **Tohoku J Exp Med** 1990 Feb;160(2):157–65

Reversal of drug-resistant falciparum malaria by calcium antagonists: potential for host cell toxicity. Watt G, et al. **Trans R Soc Trop Med Hyg** 1990 Mar–Apr;84(2):187–90

(-)-Phenylalkylamines more potent than (+)-isomers. Further promiscuity of phenylalkylamine Ca2+ antagonists [letter; comment] Defeudis FV. **Trends Pharmacol Sci** 1988 Oct;9(10):352–3 Comment on: Trends Pharmacol Sci 1988 Jul;9(7):235.

Actions of Ca2+ channel ligands depend on G-proteins. Ca2+ agonists/antagonists and GTP [letter] Dolphin AC, et al. **Trends Pharmacol Sci** 1988 Nov;9(11):394–5

1,4-Dihydropyridine activators and antagonists: structural and functional distinctions. Triggle DJ, et al. **Trends Pharmacol Sci** 1989 Dec;10(12):507–11 (31 ref.)

Widening potential for Ca2+ antagonists: non-L-type Ca2+ channel interaction. Zernig G. **Trends Pharmacol Sci** 1990 Jan;11(1):38–44 (35 ref.)

Endothelium-derived relaxing factor(s) and calcium antagonists. Auch-Schwelk W, et al. **Z Kardiol** 1989;78 Suppl 6:120–3

[The possibilities of influencing the smooth muscle activity of the respiratory tract with calcium antagonists] Vasilev P. **Eksp Med Morfol** 1990;29(1):64–8 (22 ref.) **(Bul)**

[Effects of 3,6-dimethamidodibenzopyriodonium citrate (I-65) on action potentials and contractions in guinea pig papillary muscles] Cui Y, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar;10(2):126–30 (Eng. Abstr.) **(Chi)**

[Effects of tetrandrine on cytoplasmic free calcium in rat neutrophils] Hong JL, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Nov;10(6):533–7 (Eng. Abstr.) **(Chi)**

[Effects of Panax notoginseng saponin Rb1 and Rg1 on myocardial action potential and slow inward current] Xiong ZG, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Nov; 10(6):520–2 (Eng. Abstr.) **(Chi)**

[Calcium ions, calcium antagonists and ischemic arrhythmia] An RH. **Sheng Li Ko Hsueh Chin Chan** 1989 Jul; 20(3):219–23 (50 ref.) **(Chi)**

[Determination of 45Ca transmembrane flux and its application to research on calcium antagonists] Dong H, et al. **Sheng Li Ko Hsueh Chin Chan** 1990 Apr;21(2):171–4 (26 ref.) **(Chi)**

[Rate-dependent blocking effect of class I antiarrhythmic drugs] Kuang Y, et al. **Sheng Li Ko Hsueh Chin Chan** 1989 Oct;20(4):307–12 (42 ref.) **(Chi)**

[The effects of calcium antagonists on the nervous system] Zhai J, et al. **Sheng Li Ko Hsueh Chin Chan** 1989 Oct; 20(4):369–71 (24 ref.) **(Chi)**

[Calcium inhibitors: effects on cerebral blood flow and intracranial pressure] Payen D, et al. **Agressologie** 1989 Jun; 30(7):408–10 (Eng. Abstr.) **(Fre)**

[Effect on atrioventricular conduction of a new calcium antagonist: lacidipine. Evaluation by the Holter method] Frank R, et al. **Ann Cardiol Angeiol (Paris)** 1990 Jun; 39(6):363–9 (Eng. Abstr.) **(Fre)**

[Changes in myocardial metabolism induced by drugs used during intensive care] Lançon JP, et al. **Ann Fr Anesth Reanim** 1990;9(1):31–41 (68 ref.) (Eng. Abstr.) **(Fre)**

[The effect of Ca++ antagonists on cellular lipid metabolism] Schmitz G, et al. **Arzneimittelforschung** 1990 Mar;40(3A):366–72 (45 ref.) (Eng. Abstr.) **(Ger)**

[Myocardial effects of the calcium antagonists nifedipine, nisoldipine and isradipine in coronary heart disease] Mauser M, et al. **Dtsch Med Wochenschr** 1990 May 11; 115(19):723–9 (Eng. Abstr.) **(Ger)**

[Selective action of calcium antagonists] Heinzl S. **Med Monatsschr Pharm** 1990 Mar;13(3):66–8 **(Ger)**

[Hemorheologic effects of calcium antagonists in comparison with beta receptor blockers] Ernst E. **Z Kardiol** 1989;78 Suppl 5:12–5 (24 ref.) (Eng. Abstr.) **(Ger)**

[Platelet adrenergic alpha receptors in hypertensive subjects undergoing treatment with calcium antagonists] Radaelli A, et al. **Boll Soc Ital Biol Sper** 1990 Jan;66(1):9–13 (Eng. Abstr.) **(Ita)**

[Cardiovascular effects of calcium antagonists] Pasanisi F, et al. **Clin Ter** 1989 Jul 15;130(1):3–10 (74 ref.) (Eng. Abstr.) **(Ita)**

[Calcium channel as molecular target of drug action] Taglialatela M, et al. **Clin Ter** 1989 Dec 15;131(5):299–305 (20 ref.) (Eng. Abstr.) **(Ita)**

[Effect of a Ca2+ antagonist (verapamil) on Va/Q distribution] Hirano M. **Masui** 1989 Aug;38(8):992–9 (Eng. Abstr.) **(Jpn)**

[Calcium kinetics and effects of calcium antagonist on vascular smooth muscle] Aoki K, et al. **Nippon Rinsho** 1989 Aug;47(8):1746–52 **(Jpn)**

[Effects of calcium antagonists on cardiac cells] Iijima T. **Nippon Rinsho** 1989 Aug;47(8):1753–8 (20 ref.) **(Jpn)**

[Effect of Ca2+ antagonists on coronary circulation] Kajiwara N, et al. **Nippon Rinsho** 1989 Aug;47(8):1764–9 **(Jpn)**

[Tissue selectivity of Ca-antagonist] Suzuki H, et al. **Nippon Rinsho** 1989 Aug;47(8):1735–9 **(Jpn)**

[Calcium antagonist as biological modulator in cancer chemotherapy] Tsuruo T. **Nippon Rinsho** 1989 Aug; 47(8):1851–6 **(Jpn)**

[Calcium channel blockers and cerebral circulation] Uematsu D, et al. **Nippon Rinsho** 1989 Aug;47(8):1770–5 **(Jpn)**

[Calcium antagonists: concepts and recent progresses in research on the mechanism of action] Yoshida Y, et al. **Nippon Rinsho** 1989 Aug;47(8):1714–8 **(Jpn)**

[Effects of Ca antagonists on Ca2+ movement in nervous system] Yoshizumi M, et al. **Nippon Rinsho** 1989 Aug; 47(8):1759–63 **(Jpn)**

[Vasodilator actions of felodipine, a new Ca2+ entry blocker] Kawakami M, et al. **Nippon Yakurigaku Zasshi** 1989 Oct;94(4):251–6 (Eng. Abstr.) **(Jpn)**

[Angiographic studies on the effects of a novel calcium antagonist AE0047 on cerebral arteries in dogs, with special reference to the preventive effects of AE0047 on cerebral vasoconstriction induced by endothelin] Kido H, et al. **Nippon Yakurigaku Zasshi** 1990 Apr;95(4):177–84 (Eng. Abstr.) **(Jpn)**

[Ca2+ antagonist on cerebral artery] Nishiye E, et al. **No To Shinkei** 1990 Jan;42(1):5–15 **(Jpn)**

[Cerebral circulation and calcium antagonists] Uematsu D, et al. **No To Shinkei** 1990 Jan;42(1):17–31 (168 ref.) **(Jpn)**

[Intracellular recording of myotonia in mdx mouse and the effect of Ca antagonist in myotonia] Kishi M, et al. **Rinsho Shinkeigaku** 1989 May;29(5):563–7 (Eng. Abstr.) **(Jpn)**

[Calcium channels and calcium antagonists] Imai S. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1862–76 **(Jpn)**

[Do calcium antagonists protect the heart?] Refsum H. **Tidsskr Nor Laegeforen** 1990 Feb 20;110(5):618–21 (Eng. Abstr.) **(Nor)**

[The central effect of calcium antagonists] Siembab D, et al. **Pol Tyg Lek** 1988 Dec 19–26;43(51–52):1676–8 **(Pol)**

[Anti-atherosclerotic properties of calcium antagonists] Smilgin Z. **Przegl Lek** 1990;47(2):304–7 (38 ref.) **(Pol)**

[Interaction of calcium agonists and antagonists with Ca-binding proteins and their effect on cyclic nucleotide phosphodiesterase] Feoktistov IA, et al. **Biokhimiia** 1990 Apr;55(4):754–9 (Eng. Abstr.) **(Rus)**

[Omega-conotoxin block calcium current in a membrane of cultured rat cardiocytes] Verkhatskiĭ AN, et al. **Dokl Akad Nauk SSSR** 1990;310(3):747–50 **(Rus)**

[The polymorphism of the pharmacological effects of calcium channel blockers] Ivanova TM, et al. **Farmakol Toksikol** 1990 Mar–Apr;53(2):34–6 (Eng. Abstr.) **(Rus)**

[Anticalcium preparations that prevent the neurodegenerative action of quinolinic acid] Kozlovskiĭ VL, et al. **Farmakol Toksikol** 1990 Mar–Apr;53(2):27–9 (Eng. Abstr.) **(Rus)**

[Comparative effect of the action of calcium antagonists on cerebral blood flow] Karadzhaeva GB, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1624–9 **(Rus)**

[2 components of the high-threshold calcium current possessing different sensitivities to omega-conotoxin in the membrane of pheochromocytoma cells] Pogorelaia NKh, et al. **Neirofiziologiia** 1990;22(3):397–400 (Eng. Abstr.) **(Rus)**

[Renal effects of calcium antagonists] Rodicio Díaz JL. **Rev Clin Esp** 1990 Feb;186(3):105–7 **(Spa)**

POISONING

Cardiac drug toxicity: digitalis glycosides and calcium-channel and beta-blocking agents. Pentel PR, et al. **Med J Aust** 1990 Jan 15;152(2):88–94 (78 ref.)

[Poisoning with verapamil and other calcium antagonists] Strubelt O. **Dtsch Med Wochenschr** 1989 Oct 20; 114(42):1623–7 (56 ref.) **(Ger)**

THERAPEUTIC USE

Is the combination between beta-blockers and calcium antagonists appropriate in the management of angina pectoris? Godfraind T. **Acta Clin Belg** 1990;45(3):151–7

Drugs recently released in Belgium. Isradipine—teicoplanin. Harvengt C. **Acta Clin Belg** 1990;45(3):201–5

Flunarizine treatment in poor-grade aneurysm patients. Fujita S, et al. **Acta Neurochir (Wien)** 1990;103(1-2):11–7

Effects of calcium channel blockers on ischemic brain edema in rats. Wang JY, et al. **Adv Neurol** 1990;52:540

CBF decreases after calcium antagonist treatment in acute ischemic stroke. Vorstrup S, et al. **Agressologie** 1989 Jun; 30(7):447–9

Use of heart rate spectral analysis to study the effects of calcium channel blockers on sympathetic activity after myocardial infarction. Bekheit S, et al. **Am Heart J** 1990 Jan;119(1):79–85

The role of calcium antagonists in the treatment of myocardial ischemia. Follath F. **Am Heart J** 1989 Nov; 118(5 Pt 2):1093–6; discussion 1096–7 (37 ref.)

Pharmacologic management of ischemic heart disease with beta-blockers and calcium channel blockers. Pearle DL. **Am Heart J** 1990 Sep;120(3):739–42; discussion 743–5

The new calcium antagonist isradipine. Effect on blood pressure and the left ventricle in black hypertensive patients. Carr AA, et al. **Am J Hypertens** 1990 Jan;3(1):8–15

Cardioprotection and antihypertensive therapy. Are beta-blockers the only effective therapy? Laher MS. **Am J Hypertens** 1989 Nov;2(11 Pt 2):274S–277S (31 ref.)

Treatment of postoperative hypertensive crises in vascular surgery. Le Bret F, et al. **Ann Fr Anesth Reanim** 1989; 8(5):591–7, 551–7 **(Eng, Fre)**

Effects on infarct size of reperfusion and pretreatment with beta-blockade and calcium antagonists. Torr S, et al. **Basic Res Cardiol** 1989 Nov–Dec;84(6):564–82

Calcium channel blockers in myocardial infarction [letter; comment] **BMJ** 1990 Jan 27;300(6719):259–60 Comment on: BMJ 1989 Nov 11;299(6709):1187–92.

Calcium channel blockers in acute myocardial infarction and unstable angina: an overview [see comments] Held PH, et al. **BMJ** 1989 Nov 11;299(6709):1187–92 Comment in: BMJ 1990 Jan 27;300(6719):259–60.

Haemodynamic and radionuclide effects of amlodipine in coronary artery disease. Silke B, et al. **Br J Clin Pharmacol** 1990 Apr;29(4):437–45

Calcium antagonists in cardiovascular disease. Purcell H, et al. **Br J Clin Pract** 1989 Oct;43(10):369–79 (44 ref.)

Treatment of extrapyramidal side-effects [letter; comment] Adler LA, et al. **Br J Psychiatry** 1989 Aug;155:269 Comment on: Br J Psychiatry 1988 May;152:722–3.

Relationship between cytotoxicity, drug accumulation, DNA damage and repair of human ovarian cancer cells treated with doxorubicin: modulation by the tiapamil analog RO11-2933. Alaoui Jamali MA, et al. **Cancer Chemother Pharmacol** 1989;25(2):77–83

Circumvention of drug resistance with calcium channel blockers and monoclonal antibodies. Tsuruo T. **Cancer Treat Res** 1989;48:73–95 (141 ref.)

Calcium entry blockers: usefulness in ischemia and hypertensive heart disease. September 23 to 28, 1988, Cannes, France. Proceedings. **Circulation** 1989 Dec;80(6 Suppl):IV1–188

Use of calcium channel entry blockers in the treatment of cardiac arrhythmias. Akhtar M, et al. **Circulation** 1989 Dec; 80(6 Suppl):IV31–9 (48 ref.)

Calcium antagonists in the treatment of Prinzmetal's angina and unstable angina pectoris. Beller GA. **Circulation** 1989 Dec;80(6 Suppl):IV78–87 (68 ref.)

Theoretical considerations in the use of calcium entry blockers in silent myocardial ischemia. Crawford MH. **Circulation** 1989 Dec;80(6 Suppl):IV74–7 (21 ref.)

Effects of calcium entry blockade on hypertension-induced left ventricular hypertrophy. Frishman WH, et al. **Circulation** 1989 Dec;80(6 Suppl):IV151–61 (94 ref.)

Current status of calcium channel-blocking drugs after Q wave and non-Q wave myocardial infarction. Gibson RS. **Circulation** 1989 Dec;80(6 Suppl):IV107–19 (68 ref.)

Response of blood pressure, cardiac output, peripheral resistance, and exercise performance to substitution of calcium blocker for beta-blocker plus thiazide diuretic therapy in patients with both systemic hypertension and mild stable angina. Kawanishi DT, et al. **Circulation** 1989 Dec;80(6 Suppl):IV162–70

Mechanisms of action and clinical use of calcium antagonists in hypertension. Kiowski W, et al. **Circulation** 1989 Dec; 80(6 Suppl):IV136–44 (95 ref.)

Calcium channel blockers. Progression of renal disease. Krishna GG, et al. **Circulation** 1989 Dec;80(6 Suppl):IV47–51 (34 ref.)

Effects of long-term treatment with calcium antagonists on left ventricular diastolic function in stable angina and heart failure. Lahiri A, et al. **Circulation** 1990 Feb;81(2 Suppl):III130–8

Role of calcium on excitation-contraction coupling in cardiac and vascular smooth muscle. Lucchesi BR. **Circulation** 1989 Dec;80(6 Suppl):IV1–13 (74 ref.)

Effects of antihypertensive therapy on hypertensive heart disease. Messerli FH, et al. **Circulation** 1989 Dec;80(6 Suppl):IV145–50 (75 ref.)

Thrombolysis and its sequelae. Calcium antagonists as potential adjunctive therapy. Roberts R. **Circulation** 1989 Dec;80(6 Suppl):IV93–101 (73 ref.)

Usefulness of calcium entry blockers during and after percutaneous transluminal coronary artery angioplasty. Schlant RC, et al. **Circulation** 1989 Dec;80(6

Suppl):IV88–92 (69 ref.)
The effects of calcium entry blockade on normal and ischemic ventricular diastolic function. Walsh RA. **Circulation** 1989 Dec;80(6 Suppl):IV52–8 (48 ref.)
Use of calcium entry blockers in elderly patients. Special considerations. Wei JY. **Circulation** 1989 Dec;80(6 Suppl):IV171–7 (60 ref.)
Postischemic mechanical and vascular dysfunction (myocardial "stunning" and microvascular "stunning") and the effects of calcium-channel blockers on ischemia/reperfusion injury. Bolli R, et al. **Clin Cardiol** 1989 Jul;12(7 Suppl 3):III16–25 (75 ref.)
Influence of calcium channel antagonist therapy on the ischemic response to acute coronary occlusion in humans. Kern MJ. **Clin Cardiol** 1989 Jul;12(7 Suppl 3):III77–85 (60 ref.)
Review of calcium antagonist trials in acute myocardial infarction. Roberts R. **Clin Cardiol** 1989 Jul;12(7 Suppl 3):III41–7 (20 ref.)
Renal protection with calcium antagonism in essential hypertension. Bauer JH, et al. **Clin Invest Med** 1989 Oct; 12(5):300–4 (28 ref.)
Treatment of Tourette's syndrome with calcium antagonists. Micheli F, et al. **Clin Neuropharmacol** 1990 Feb;13(1):77–83
Current concepts of silent myocardial ischemia. Bleske BE, et al. **Clin Pharm** 1990 May;9(5):339–57 (119 ref.)
Calcium-channel blockers and the elderly. Ryan C. **Compr Ther** 1990 Jun;16(6):51–4
Calcium-channel blockers in the management of essential hypertension. Wallis DE. **Compr Ther** 1989 Nov; 15(11):14–9 (17 ref.)
Isradipine (Lomir) in the treatment of hypertension. An international satellite symposium of the Vth International Congress on Pulmonary Circulation. Prague, July 6, 1989. Proceedings. **Cor Vasa** 1990;32(2 Suppl 1):1–80
Foridone and other calcium antagonists in the treatment of essential hypertension. Andreeva TN. **Cor Vasa** 1990; 32(1):45–55
24-hour ambulatory blood pressure monitoring in the treatment of mild hypertension with isradipine. Cihák R, et al. **Cor Vasa** 1990;32(2 Suppl 1):54–60
Isradipine in monotherapy and in combination with bopindolol: results of a 3-month multicentre study in hypertensives. Dzúrik R, et al. **Cor Vasa** 1990;32(2 Suppl 1):42–53
Nicardipine in combination with other antihypertensive drugs: calcium antagonist and prazosin have no additive antihypertensive effect? Kanniainen E, et al. **Cor Vasa** 1990; 32(2):126–33
Place of calcium antagonists in the treatment of hypertension. Kiowski W. **Cor Vasa** 1990;32(2 Suppl 1):2–11 (29 ref.)
Effect of isradipine, a new calcium antagonist on the lipid profile in patients with hypertension. Samuel P. **Cor Vasa** 1990;32(2 Suppl 1):35–41
Review of the international literature on isradipine in hypertension (Lomir/Dynacirc). Soland FX. **Cor Vasa** 1990;32(2 Suppl 1):61–72 (33 ref.)
Calcium antagonists in the vasodilatory treatment of primary pulmonary hypertension. Widimský J. **Cor Vasa** 1990;32(2 Suppl 1):73–80 (35 ref.)
Isradipine (Lomir) in the treatment of hypertension. Introduction. Widimský J. **Cor Vasa** 1990;32(2 Suppl 1):1
Nitrendipine: a new dihydropyridine calcium-channel antagonist for the treatment of hypertension. Santiago TM, et al. **DICP** 1990 Feb;24(2):167–75 (76 ref.)
Beta-adrenoceptor blockers and calcium antagonists in the prophylaxis and treatment of migraine. Andersson KE, et al. **Drugs** 1990 Mar;39(3):355–73 (101 ref.)
Angiotensin-converting enzyme inhibitors or calcium channel blockers? An overview. Gavras H. **Drugs** 1990;39 Suppl 2:73–5
Profile of an ideal antianginal agent. Lazar EJ, et al. **Drugs** 1989;38 Suppl 2:1–8 (74 ref.)
Antihypertensive therapy. Is it different in the elderly? Messerli FH. **Drugs** 1990;39 Suppl 2:49–54 (28 ref.)
Effects of the calcium antagonist, isradipine, and nifedipine on resting and exercise haemodynamics and the neurohumoral system in patients with stable chronic angina. Mitrovic V, et al. **Eur Heart J** 1990 May;11(5):454–61
Comparison of the antianginal efficacy of four calcium antagonists and propranolol in stable angina pectoris. Picca M, et al. **Eur J Clin Pharmacol** 1989;37(4):325–31
Basis for the application of calcium antagonists in neurology. Florence, May 25–27, 1989. Proceedings. **Eur Neurol** 1990; 30 Suppl 2:1–41
Pharmacology of calcium antagonists: clinical relevance in neurology. Cohan SL. **Eur Neurol** 1990;30 Suppl 2:28–30; discussion 39–41 (34 ref.)
Treatment of acute stroke with calcium antagonists. Hülser PJ, et al. **Eur Neurol** 1990;30 Suppl 2:35–8; discussion 39–41 (27 ref.)
Flunarizine in acute ischemic stroke: a pilot study. Limburg M, et al. **Eur Neurol** 1990;30(3):121–2
Calcium antagonists in migraine and vertigo. Possible mechanisms of action and review of clinical trials. Olesen J. **Eur Neurol** 1990;30 Suppl 2:31–4; discussion 39–41 (14 ref.)
Clinical neuropharmacology of calcium antagonists. Delumeau JC, et al. **Fundam Clin Pharmacol** 1989;3 Suppl:89s–102s (92 ref.)
Calcium channel blockers in hypertension. Maharaj B. **Int J Cardiol** 1989 Oct;25(1):1–6 (51 ref.)
Calcium channel blockers and experimental acute renal failure. Blau A, et al. **Isr J Med Sci** 1990 Jun;26(6):334–6
Calcium antagonists: hypertension, atherosclerosis, and stroke. An international symposium to the Fourth European Meeting on Hypertension. Milan, Italy, June 18, 1989. Proceedings. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S1–96
Central hemodynamics and brachial artery compliance during therapy with isradipine, a new calcium antagonist. Andersson OK, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S87–9
Interventional clinical trials using noninvasive ultrasound end points: the Multicenter Isradipine/Diuretic Atherosclerosis Study. The MIDAS Research Group. Bond MG, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S30–3
Multicenter study with isradipine and diuretics against atherosclerosis. US MIDAS Research Group. Borhani NO, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S23–9
Isotonic and isometric responses of blood pressure and heart rate in mild to moderate hypertension with isradipine and propranolol. Cantor A, et al. **J Cardiovasc Pharmacol** 1990; 15 Suppl 1:S76–8
JNC-IV and the evolution of stepped care to individualized treatment of hypertension. DeQuattro V. **J Cardiovasc Pharmacol** 1990;15 Suppl 3:S16–21
Calcium antagonists after acute myocardial infarction. Ferrario M, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 9:S75–8 (24 ref.)
Anti-ischemic activity of the novel benzazepine calcium antagonist SQ 31,486. Grover GJ, et al. **J Cardiovasc Pharmacol** 1990 Aug;16(2):219–27
Calcium antagonists in the treatment of hypertension: state of the art. Hansson L, et al. **J Cardiovasc Pharmacol** 1990; 15 Suppl 4:S71–5 (72 ref.)
The effect of dihydropyridine calcium antagonists in hypertensive patients with impaired renal function. Hansson LH. **J Cardiovasc Pharmacol** 1989;14 Suppl 10:S36–9; discussion S59–62 (20 ref.)
Hemodynamic, antivasoconstrictor, and antiatherosclerotic effects of calcium antagonists in animal models of atherosclerosis. Hof RP, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S7–12 (84 ref.)
Efficacy and tolerability of the new calcium antagonist isradipine in essential hypertension. Kirch W, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S55–9
Antihypertensive drugs and airway function, with special reference to calcium channel blockade. Löfdahl CG. **J Cardiovasc Pharmacol** 1989;14 Suppl 10:S40–51; discussion S59–62 (136 ref.)
Age hemodynamics and exercise in essential hypertension: difference between beta-blockers and dihydropyridine calcium antagonists. Lund-Johansen P. **J Cardiovasc Pharmacol** 1989;14 Suppl 10:S7–13 (32 ref.)
Isradipine: overall clinical experience in hypertension in the United States. Miller H. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S60–4 (7 ref.)
Calcium-entry blockers and arterial compliance in hypertension. Safar ME, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 10:S1–6; discussion S59–62 (26 ref.)
Calcium antagonists for reduction of brain damage in stroke. Sauter A, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S43–7
Timing of blood pressure measurements in determining anomalies in duration of effect of an antihypertensive drug: assessment of isradipine. Stokes GS, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S65–9
Calcium antagonists as first-line antihypertensive agents: a placebo-controlled, comparative trial of isradipine and nifedipine. Welzel D, et al. **J Cardiovasc Pharmacol** 1990; 15 Suppl 1:S70–4
Progression of cardiac hypertrophy during long term calcium antagonist treatment with tiapamil. Ding YA, et al. **J Hum Hypertens** 1989 Aug;3(4):239–43
Haemodynamic parameters in hypertensive patients: changes induced by lacidipine and nifedipine. Pancera P, et al. **J Hypertens Suppl** 1989 Dec;7(6):S284–5
Pump performance after regression of cardiac hypertrophy following treatment of hypertension with isradipine. Saragoça MA, et al. **J Hypertens Suppl** 1989 Dec; 7(6):S288–9
Peter Harris Award lecture. History and prospects in calcium antagonist research. Fleckenstein A. **J Mol Cell Cardiol** 1990 Mar;22(3):241–51 (24 ref.)
Reduction of primary postoperative adhesion formation under calcium channel blockade in the rabbit. Steinleitner A, et al. **J Surg Res** 1990 Jan;48(1):42–5
Beneficial renal effects of CS-905, a novel dihydropyridine calcium blocker, in SHR. Oizumi K, et al. **Jpn J Pharmacol** 1989 Dec;51(4):501–8
Aspects of brain metabolism during ischemia: intervention. Cottrell JE. **Minerva Anestesiol** 1989 Mar;55(3):59–61 (21 ref.)
Renal failure in haemorrhagic shock in dogs: salutary effects of the calcium entry blocker felodipine. Chintala MS, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Apr; 341(4):357–63
A comparison of the cardioprotective effects of calcium antagonists from different classes upon ischaemic damage in the guinea-pig working heart. Hugtenburg JG, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jul; 340(1):126–34
Calcium blocking agents in pediatric emergency care. Shahar E, et al. **Pediatr Emerg Care** 1990 Mar;6(1):52–7 (76 ref.)
Effects of dihydropyridine calcium channel antagonists in ethanol withdrawal; doses required, stereospecificity and actions of Bay K 8644. Littleton JM, et al. **Psychopharmacology (Berl)** 1990;100(3):387–92
Antihypertensive therapy and blood lipids: calcium antagonists. Lehtonen A. **Scand J Clin Lab Invest Suppl** 1990;199:49–54 (17 ref.)
Calcium antagonists: stroke therapy coming of age. Wong MC, et al. **Stroke** 1990 Mar;21(3):494–501 (68 ref.)
Vasodilators and calcium blocking agents as treatment of cardiovascular manifestations of human scorpion envenomation. Gueron M, et al. **Toxicon** 1990;28(2):127–8
Converting enzyme inhibitors and calcium antagonists in the long-term treatment of hypertension in chronic renal failure. Lenz T, et al. **Wien Klin Wochenschr** 1990 May 25;102(11):315–9 (43 ref.)
[Effects of m-nisoldipine on ischemic arrhythmia in conscious rats] An RH, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar;10(2):151–6 (Eng. Abstr.) **(Chi)**
[Comparison of the effects of diltiazem and isradipine in patients with chronic stable angina pectoris] Meluzín J, et al. **Vnitr Lek** 1989 Nov;35(11):1062–71 (Eng. Abstr.) **(Cze)**
[Isradipine, a calcium antagonist in hypertension] Christensen HR, et al. **Ugeskr Laeger** 1990 Aug 20;152(34):2448–50 **(Dan)**
[Beta-blockers or calcium channel blockers after myocardial infarction?] Helin M. **Duodecim** 1990;106(1):122–32 (47 ref.) **(Fin)**
[Feasibility of calcium inhibitors in the treatment of brain disease following cardiac arrest] Lamer C, et al. **Agressologie** 1989 Jun;30(7):451–4 (Eng. Abstr.) **(Fre)**
[Antihypertensive effectiveness and tolerance of cicletanine. Results obtained with bitherapy] Tarrade T, et al. **Arch Mal Coeur** 1989 Nov;82 Spec No 4:103–8 (Eng. Abstr.) **(Fre)**
[Calcium inhibitors and arterial hypertension] Hugue C, et al. **J Mal Vasc** 1989;14(4):356–9 (25 ref.) (Eng. Abstr.) **(Fre)**
[Use of calcium inhibitors in neuropsychiatric pathology] Lançon C, et al. **Therapie** 1990 Mar-Apr;45(2):131–7 (53 ref.) (Eng. Abstr.) **(Fre)**
[Atherosclerosis prevention is possible. Calcium antagonists protect the endothelium. Abstracts of the Bayotensin Workshop on New Aspects of Antihypertensive Treatment with Calcium Antagonists: Calcium Antagonists and Atherosclerosis. Fuschl, 8–10 June 1990] **Fortschr Med** 1990;108 Suppl 95:1–15 **(Ger)**
[Dihydropyridines are not the only antihypertensives. Calcium blockers in the therapy of elderly hypertensive patients] **Fortschr Med** 1989;107 Suppl 71:1–18 **(Ger)**
[Calcium blockers: ventricular arrhythmias are significantly reduced. Prof. F. Messerli, New Orleans, on the value of calcium antagonists in the treatment of hypertension (interview by Stefanie Mühlbauer)] Messerli F. **Fortschr Med** 1990 Jun 30;108(19):63–4 **(Ger)**
[Treatment of heart failure with calcium antagonists] Hall D, et al. **Herz** 1990 Jun;15(3):179–84 (34 ref.) (Eng. Abstr.) **(Ger)**
[Therapy of obstructive respiratory tract diseases. II: Xanthines, calcium antagonists and VIP] Ukena D, et al. **Med Klin** 1989 Jul 15;84(7):347–54 (65 ref.) **(Ger)**
[Terodiline in the treatment of stress incontinence in women] Feyereisl J, et al. **Schweiz Rundsch Med Prax** 1990 Apr 3;79(14):420–2 (Eng. Abstr.) **(Ger)**
[Anti-arrhythmia effects of calcium antagonists] Gülker H, et al. **Z Kardiol** 1989;78 Suppl 5:49–54 (19 ref.) (Eng. Abstr.) **(Ger)**
[Electrophysiologic effects of the calcium antagonist isradipine, a double-blind placebo controlled study] Kühlkamp V, et al. **Z Kardiol** 1990 Jun;79(6):436–40 (Eng. Abstr.) **(Ger)**
[Can the progression of coronary heart disease be modified by calcium antagonists?] Schneider W, et al. **Z Kardiol** 1989; 78 Suppl 5:112–20 (47 ref.) (Eng. Abstr.) **(Ger)**
[Electrophysiologic effects of calcium channel blockers on supraventricular tachycardia in children] Fujino H, et al. **J Cardiol** 1989 Mar;19(1):307–15 (Eng. Abstr.) **(Jpn)**
[Protective effect of calcium channel blockers on the liver against halothane hepatitis in rats] Goto T, et al. **Masui** 1990 Feb;39(2):204–9 (Eng. Abstr.) **(Jpn)**
[Experimental studies on pharmacologic protection of the brain against focal ischemia. 2. Effects of KB-2796 and nicardipine on focal brain ischemia in rats] Shiino A. **Nippon Geka Hokan** 1989 Sep 1;58(5):438–44 (Eng. Abstr.) **(Jpn)**
[Effects of cardioplegic solution and calcium entry blockers on coronary artery contraction] Yoshida K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jan;38(1):86–92 (Eng. Abstr.) **(Jpn)**
[New approach to the development of Ca antagonists] Baba A, et al. **Nippon Rinsho** 1989 Aug;47(8):1788–93 **(Jpn)**
[Prevention and countermeasures in kidney diseases complicated by hypertension] Fujiwara Y, et al. **Nippon Rinsho** 1989 Sep;47(9):2091–6 **(Jpn)**
[Calcium antagonists in the treatment of myocardial infarction] Kanazawa T, et al. **Nippon Rinsho** 1989 Aug; 47(8):1804–9 **(Jpn)**
[Treatment of congestive heart failure using Ca blockers] Kimata S. **Nippon Rinsho** 1989 Aug;47(8):1820–4 **(Jpn)**

[Clinical application of calcium antagonists in the treatment of cerebral infarction] Komatsumoto S, et al. **Nippon Rinsho** 1989 Aug;47(8):1837–41 **(Jpn)**

[Clinical application of Ca2(+)-antagonist for prevention and treatment of cerebral vasospasm] Kyoi K, et al. **Nippon Rinsho** 1989 Aug;47(8):1831–6 **(Jpn)**

[Pulmonary circulation and Ca-antagonists] Maruyama Y, et al. **Nippon Rinsho** 1989 Aug;47(8):1776–80 **(Jpn)**

[Treatment of cardiomyopathy using Ca blockers] Matsumori A, et al. **Nippon Rinsho** 1989 Aug;47(8):1825–30 **(Jpn)**

[Use of calcium antagonists in cardiac arrhythmias] Mitsuoka T, et al. **Nippon Rinsho** 1989 Aug;47(8):1810–9 **(Jpn)**

[Calcium antagonists in the treatment of hypertension] Omae T. **Nippon Rinsho** 1989 Aug;47(8):1794–8 **(Jpn)**

[Antiepileptic action of Ca antagonist, flunarizine] Otomo E. **Nippon Rinsho** 1989 Aug;47(8):1842–6 **(Jpn)**

[Clinical application of calcium antagonists in the treatment of hypertension] Takeda K, et al. **Nippon Rinsho** 1989 Sep; 47(9):2052–7 **(Jpn)**

[Antiatherosclerotic effects of Ca2+ antagonists] Ueda K. **Nippon Rinsho** 1989 Aug;47(8):1847–50 **(Jpn)**

[Calcium antagonists in the treatment of angina] Yasue H, et al. **Nippon Rinsho** 1989 Aug;47(8):1799–803 **(Jpn)**

[Ca antagonists in neurosurgical practice] Handa J, et al. **No To Shinkei** 1990 Jan;42(1):43–52 (53 ref.) **(Jpn)**

[Nervous disease & Ca antagonist] Otomo E. **No To Shinkei** 1990 Jan;42(1):33–41 **(Jpn)**

[Calcium antagonists in acute myocardial infarction] Omvik P. **Tidsskr Nor Laegeforen** 1989 Sep 30;109(27):2794–6 **(Nor)**

[Use of calcium channel blockers in gastroenterology] Markiewicz A, et al. **Pol Tyg Lek** 1988 Dec 19–26; 43(51–52):1679–83 **(Pol)**

[Study of the effects of calcium antagonists on respiration mechanics in patients with occlusive ventilation impairment] Frank-Piskorska A, et al. **Wiad Lek** 1989 Mar 1;42(5):278–83 (Eng. Abstr.) **(Pol)**

[Calcium channel blockers and their administration in respiratory diseases] Wysokińska R. **Wiad Lek** 1989 May 15;42(10):653–6 (35 ref.) **(Pol)**

[Treatment of chronic coronary insufficiency] da Luz PL, et al. **AMB Rev Assoc Med Bras** 1989 Jul–Sep;35(4):137–43 (62 ref.) **(Por)**

[Cardiac insufficiency: current aspects of treatment] Vitola D, et al. **Arq Bras Cardiol** 1989 Sep;53(3):143–6 (47 ref.) **(Por)**

[Role of calcium antagonists in the pharmacologic treatment of heart insufficiency] de Sá ME. **Rev Port Cardiol** 1989 Jul–Aug;8(7–8):547–52 (57 ref.) (Eng. Abstr.) **(Por)**

[Effect of a Ca-channel blocker, ryodipine, on focal and generalized epileptic activity] Karpova MN, et al. **Biull Eksp Biol Med** 1989 Nov;108(11):553–5 (Eng. Abstr.) **(Rus)**

[Calcium antagonists in the treatment of moderate arterial hypertension] Mazur NA, et al. **Kardiologiia** 1989 Nov; 29(11):125–8 (35 ref.) **(Rus)**

[Drugs in secondary prevention of ischemic heart disease: achievements, problems and prospects] Metelitsa VI. **Kardiologiia** 1989 Nov;29(11):57–62 (Eng. Abstr.) **(Rus)**

[Comparative effectiveness of Na+ channel blockers in ventricular disorders of cardiac rhythm] Orlov VN, et al. **Kardiologiia** 1989 Aug;29(8):45–50 (Eng. Abstr.) **(Rus)**

[Changes in the platelet-vascular system of hemostasis in patients with ischemic heart disease and hypertension after the treatment] Zadionchenko VS, et al. **Kardiologiia** 1989 Oct;29(10):51–4 (Eng. Abstr.) **(Rus)**

[The role of Ca2+ in the pathogenesis of epilepsy. Calcium antagonists—a new class of anticonvulsants] Glebov RN, et al. **Patol Fiziol Eksp Ter** 1990 May–Jun;(3):57–61 (80 ref.) **(Rus)**

[Antifibrillatory effect of the calcium antagonist foridon in acute myocardial ischemia in conscious rabbits] Glukhovtsev EV, et al. **Patol Fiziol Eksp Ter** 1989 May–Jun;(3):46–8 (Eng. Abstr.) **(Rus)**

[Evaluation of the antianginal effects of foridon by transesophageal stimulation of the left atrium] Vishnevskiĭ VI, et al. **Sov Med** 1990;(6):75–7 **(Rus)**

[The clinico-functional effectiveness of calcium antagonists in correcting the bronchial hyperreactivity of bronchial asthma patients] Fedoseev GB, et al. **Ter Arkh** 1990; 62(1):63–6 (Eng. Abstr.) **(Rus)**

[Calcium antagonist treatment of renal hypertension—a new step on the way to optimizing hypotensive therapy] Galstian GM. **Ter Arkh** 1989;61(8):138–43 (86 ref.) **(Rus)**

[The efficacy of calcium antagonists in circulatory failure in elderly patients with hypertension] Orynchak MA. **Ter Arkh** 1989;61(12):36–41 (Eng. Abstr.) **(Rus)**

[Treatment procedures in the vasoconstrictive form of hypertension using calcium antagonists in relation to their effect on kidney function] Tikhonov VP, et al. **Ter Arkh** 1989;61(7):108–12 (Eng. Abstr.) **(Rus)**

[The effect of calcium antagonists on pulmonary hemodynamics in patients with chronic bronchitis with manifest and latent pulmonary hypertension] Volkova LI. **Ter Arkh** 1989;61(8):50–3 (Eng. Abstr.) **(Rus)**

[Post-infarction stenocardia: comparative evaluation of the results of surgical and conservative treatment] Ioseliani DG, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):39–43 (Eng. Abstr.) **(Rus)**

[Endovascular laser methods in the treatment of arteriosclerotic cardiovascular diseases] Petrosian IuS, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):32–9 (Eng. Abstr.) **(Rus)**

[Calcium antagonists in cardiologic practice (a review of the literature)] Andrushchenko EV, et al. **Vrach Delo** 1990 May;(5):31–6 (65 ref.) **(Rus)**

[Calcium antagonists. Ambulatory and hospital use] Jovanović D. **Med Arh** 1986;40(1–2):37–41 (Eng. Abstr.) **(Scr)**

[Arterial hypertension in the elderly: a therapeutic problem] Rico L, et al. **Rev Clin Esp** 1989 Nov;185(8):55–6 p. (14 ref.) **(Spa)**

TOXICITY

Differential sensitivity of multi-drug-resistant and -sensitive cells to resistance-modifying agents and the relation with reversal of anthracycline resistance. Schuurhuis GJ, et al. **Int J Cancer** 1990 Aug 15;46(2):330–6

Gingival hyperplasia in rats induced by oxodipine—a calcium channel blocker. Nyska A, et al. **J Periodont Res** 1990 Mar; 25(2):65–8

CALCIUM CHANNELS

Molecular properties of voltage-sensitive calcium channels. Catterall WA, et al. **Adv Exp Med Biol** 1989;255:101–9 (36 ref.)

Antibodies to junctional sarcoplasmic reticulum proteins: probes for the Ca2+-release channel. Zorzato F, et al. **Biochem J** 1989 Aug 1;261(3):863–70

cDNA cloning, functional expression, and mRNA tissue distribution of a third organellar Ca2+ pump. Burk SE, et al. **J Biol Chem** 1989 Nov 5;264(31):18561–8

Cloning of internal Ca pump from rabbit stomach smooth muscle. Khan I, et al. **Nucleic Acids Res** 1990 Jul 11; 18(13):4026

Molecular properties of calcium channels. Glossmann H, et al. **Rev Physiol Biochem Pharmacol** 1990;114:1–105 (336 ref.)

Primary structure of the gamma subunit of the DHP-sensitive calcium channel from skeletal muscle. Jay SD, et al. **Science** 1990 Apr 27;248(4954):490–2

[Calcium ions, calcium antagonists and ischemic arrhythmia] An RH. **Sheng Li Ko Hsueh Chin Chan** 1989 Jul; 20(3):219–23 (50 ref.) **(Chi)**

[Mechanisms of action of halogenated anesthetics on isolated cardiac muscle] Murat I. **Ann Fr Anesth Reanim** 1990; 9(4):346–61 (168 ref.) (Eng. Abstr.) **(Fre)**

ANALYSIS

The plasma membrane calcium pump: structure, function and regulation. Carafoli E. **Biochem Soc Trans** 1989 Oct; 17(5):808–10

Molecular characterization of 1,4-dihydropyridine-sensitive calcium channels of chick heart and skeletal muscle. Yoshida A, et al. **J Biochem (Tokyo)** 1990 Apr; 107(4):608–12

Distinct immunopeptide maps of the sarcoplasmic reticulum Ca2+ release channel in malignant hyperthermia. Knudson CM, et al. **J Biol Chem** 1990 Feb 15;265(5):2421–4

Identification of the benzothiazepine-binding polypeptide of skeletal muscle calcium channels with (+)-cis-azidodiltiazem and anti-ligand antibodies. Striessnig J, et al. **J Biol Chem** 1990 Jan 5;265(1):363–70

Clustering of L-type Ca2+ channels at the base of major dendrites in hippocampal pyramidal neurons. Westenbroek RE, et al. **Nature** 1990 Sep 20;347(6290):281–4

Multiple types of voltage-dependent Ca channels in mammalian intestinal smooth muscle cells. Yoshino M, et al. **Pflugers Arch** 1989 Aug;414(4):401–9

DRUG EFFECTS

Dihydropyridino-sensitive calcium channels in opioid-induced thermic and behavioral effects. Cavicchini E, et al. **Acta Physiol Hung** 1990;75 Suppl:55–6

Omega-conotoxin GVIA and nifedipine inhibit Ca2+ action potentials in rat locus coeruleus neurons. Illes P, et al. **Acta Physiol Scand** 1989 Nov;137(3):459–60

Role of endothelium in endotoxin blockade of voltage-sensitive Ca2+ channels in smooth muscle cells. Goligorsky MS. **Am J Physiol** 1989 Nov;257(5 Pt 1):C875–81

Ethacizin blockade of calcium channels: a test of the guarded receptor hypothesis. Starmer CF, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1693–704

Inotropic effect of meperidine: influence of receptor and ion channel blockers in the rat atrium. Helgesen KG, et al. **Anesth Analg** 1990 May;70(5):499–506

Neuronal Ca2+ channels and their regulation by excitatory amino acids. Miller RJ, et al. **Ann N Y Acad Sci** 1989; 568:149–58 (22 ref.)

Effects of compound 48/80 on the Ca2+ release by reversal of the Ca2+ pump and by the Ca2+ channel of sarcoplasmic reticulum membranes. Vale MG. **Arch Biochem Biophys** 1990 Jun;279(2):275–80

Inhibition of the calcium pump by human parathyroid hormone-(1-34) and human calcitonin in liver plasma membranes. McKenzie RC, et al. **Biochem J** 1990 Mar 15; 266(3):817–22

Analysis and functional characteristics of dihydropyridine-sensitive and -insensitive calcium channel proteins. Dascal N. **Biochem Pharmacol** 1990 Sep 15; 40(6):1171–8 (104 ref.)

Irreversible modification of the voltage-sensitive calcium channel by N-ethoxycarbonyl-2-ethoxy-1,2-dihydroquinoline (EEDQ). Gopalakrishnan M, et al. **Biochem Pharmacol** 1990 Jul 15;40(2):327–32

Toward an understanding of the dihydropyridine-sensitive calcium channel. McKenna E, et al. **Biochem Pharmacol** 1990 Apr 1;39(7):1145–50 (36 ref.)

Oligopeptides interfering with calcium channels inhibit prolactin and growth hormone release by cultured anterior pituitary cells of the rat. Nagy I, et al. **Biochem Pharmacol** 1990 Aug 15;40(4):887–92

Interactions between phencyclidine and nifedipine at 45Ca2(+)-uptake sites on mouse brain neurons. Rice KC, et al. **Biochem Pharmacol** 1990 Jun 1;39(11):1825–7

2-Chloroadenosine-sensitive calcium channels in synaptosomes: effects of Ba2+. Arvin B, et al. **Biochem Soc Trans** 1989 Dec;17(6):1064–5

Nicardipine as a Ca2+ channel blocker in single barnacle muscle fibers. Xie H, et al. **Biochim Biophys Acta** 1989 Nov 20;1014(2):207–9

Effects of pinaverium on voltage-activated calcium channel currents of single smooth muscle cells isolated from the longitudinal muscle of the rabbit jejunum. Beech DJ, et al. **Br J Pharmacol** 1990 Feb;99(2):374–8

Increase in calcium channel current by beta-adrenoceptor agonists in single smooth muscle cells isolated from porcine coronary artery. Fukumitsu T, et al. **Br J Pharmacol** 1990 Jul;100(3):593–9

Caffeine-induced inhibition of calcium channel current in cultured smooth cells from pregnant rat myometrium. Martin C, et al. **Br J Pharmacol** 1989 Oct;98(2):493–8

Somatostatin decreases the calcium inward current in guinea-pig atria. Ohmura T, et al. **Br J Pharmacol** 1990 Mar;99(3):587–91

Augmentation and subsequent attenuation of Ca2+ current due to lipid peroxidation of the membrane caused by t-butyl hydroperoxide in the rabbit sinoatrial node. Sato N, et al. **Br J Pharmacol** 1989 Nov;98(3):721–3

Effect of palytoxin on the calcium current and the mechanical activity of frog heart muscle. Sauviat MP. **Br J Pharmacol** 1989 Nov;98(3):773–80

Inability of endothelin to increase Ca2+ current in guinea-pig heart cells. Tohse N, et al. **Br J Pharmacol** 1990 Mar;99(3):437–8

Midazolam potently affects free calcium concentration in astrocytes. Code WE, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S27

Interactions between peripheral-type benzodiazepine receptor ligands and an activator of voltage-operated calcium channels. Bolger GT, et al. **Can J Physiol Pharmacol** 1990 Jan;68(1):40–5

Digestion of cardiac and skeletal muscle junctional sarcoplasmic reticulum vesicles with calpain II. Effects on the Ca2+ release channel. Rardon DP, et al. **Circ Res** 1990 Jul;67(1):84–96

From channels to cats: an overview of isradipine pharmacology. Rüegg UT, et al. **Cor Vasa** 1990;32(2 Suppl 1):12–22 (14 ref.)

Stimulating effect of calcium channel activator BAY-K 8644 on calcitonin secretion. Gozariu L, et al. **Endocrinologie** 1989 Oct–Dec;27(4):231–5

Binding of [125I]iodipine to parathyroid cell membranes: evidence of a dihydropyridine-sensitive calcium channel. Jones JI, et al. **Endocrinology** 1990 Apr;126(4):2015–20

Multiple actions of SC 38249: the blocker of both voltage-operated and second messenger-operated Ca2+ channels also inhibits Ca2+ extrusion. Ciardo A, et al. **Eur J Pharmacol** 1990 Jun 12;188(6):417–21

Desmethoxyverapamil-sensitive calcium channels in rat portal vein smooth muscle. Loirand G, et al. **Eur J Pharmacol** 1989 Aug 22;167(2):265–74

Suppression of calcium current in a snail neurone by eperisone and its analogues. Novales-Li P, et al. **Eur J Pharmacol** 1989 Sep 22;168(3):299–305

Omega-conotoxin GVIA and dihydropyridines discriminate two types of Ca2+ channels involved in GABA release from striatal neurons in culture. Pin JP, et al. **Eur J Pharmacol** 1990 Jan 23;188(1):81–4

Modulation of dihydropyridine-sensitive calcium channels: a role for G proteins. Bergamaschi S, et al. **Eur Neurol** 1990;30 Suppl 2:16–20; discussion 39–41

Quinolinic acid as calcium channel modulator in isolated rat heart preparations. Beskid M. **Exp Pathol** 1990;39(1):31–6

Activators and inactivators of calcium channels: effects in the central nervous system [published erratum appears in Fundam Clin Pharmacol 1990;4(1):128] Spedding M, et al. **Fundam Clin Pharmacol** 1989;3 Suppl:3s–29s (185 ref.)

Trimebutine maleate has inhibitory effects on the voltage-dependent Ca2+ inward current and other membrane currents in intestinal smooth muscle cells. Shimada T, et al. **Gastroenterol Jpn** 1990 Apr;25(2):175–9

Possible calcium channel modulating activity of iloprost in rabbit isolated vascular segments. Demirel E, et al. **Gen Pharmacol** 1989;20(6):737–42

Changes of calcium channel inactivation during run-down. Markwardt F, et al. **Gen Physiol Biophys** 1990 Jun; 9(3):209–18

Modulation of calcitonin secretion by modification of calcium channels? Scherubl H, et al. **Henry Ford Hosp Med J** 1989; 37(3–4):198–200

Penicillic acid as Na+,K+ and Ca2+ channel blocker in isolated frog's heart at toxic levels. Pandiyan V, et al. **Indian J Exp Biol** 1990 Mar;28(3):295–6

Tetrandrine and transmembrane signal transduction: effect on phosphoinositide metabolism, calcium flux and protein kinase C translocation in human lymphocytes. Ioannoni B, et al. **Int Arch Allergy Appl Immunol** 1989;89(4):349–54

The role of cyclic AMP and the dihydropyridine-sensitive channels on the mechanism of action of milrinone (Corotrope). Frangakis CJ, et al. **J Cardiovasc Pharmacol** 1989 Jun;13(6):915–24

Voltage-gated cardiac Ca channels as a target for new positive inotropic drugs. Porzig H. **J Cardiovasc Pharmacol** 1989;14 Suppl 3:S15–9 (38 ref.)

New positive inotropic agent OPC-8212 modulates single Ca2+ channels in ventricular myocytes of guinea pig. Yatani A, et al. **J Cardiovasc Pharmacol** 1989 Jun; 13(6):812–9

Complex regulation of calcium current in cardiac cells. Dependence on a pertussis toxin-sensitive substrate, adenosine triphosphate, and an alpha 1-adrenoceptor. Keung EC, et al. **J Clin Invest** 1990 Mar;85(3):950–4

Calcium channel blockers in affective illness: role of sodium-calcium exchange. el-Mallakh RS, et al. **J Clin Psychopharmacol** 1990 Jun;10(3):203–6 (70 ref.)

Influence of chronic oestrogen treatment on the density of muscarinic cholinergic receptors and calcium channels in the rabbit uterus. Batra S. **J Endocrinol** 1990 May; 125(2):185–9

Nonlinear charge movement in mammalian cardiac ventricular cells. Components from Na and Ca channel gating [published erratum appears in J Gen Physiol 1989 Aug;94(2):401] Bean BP, et al. **J Gen Physiol** 1989 Jul; 94(1):65–93

Calcium currents in bullfrog sympathetic neurons. II. Inactivation. Jones SW, et al. **J Gen Physiol** 1989 Jul; 94(1):169–82

Nimodipine block of calcium channels in rat vascular smooth muscle cell lines. Exceptionally high-affinity binding in A7r5 and A10 cells. McCarthy RT, et al. **J Gen Physiol** 1989 Oct;94(4):669–92

Activation of three types of membrane currents by various divalent cations in identified molluscan pacemaker neurons. Müller TH, et al. **J Gen Physiol** 1989 Dec;94(6):997–1014

Internal and external effects of dihydropyridines in the calcium channel of skeletal muscle. Valdivia HH, et al. **J Gen Physiol** 1990 Jan;95(1):1–27

Recovery of the slow inward current from Ca2(+)-mediated and voltage-dependent inactivation in the rabbit sinoatrial node. Habuchi Y, et al. **J Mol Cell Cardiol** 1990 Apr; 22(4):469–82

Reduction of calcium channel antagonist binding sites by oxygen free radicals in rat heart. Kaneko M, et al. **J Mol Cell Cardiol** 1989 Sep;21(9):935–43

Effects of tetracaine and procaine on skinned muscle fibres depend on free calcium. Pike GK, et al. **J Muscle Res Cell Motil** 1989 Oct;10(5):337–49

Ca2(+)-evoked [3H]dopamine release from synaptosomes is dependent on neuronal type Ca2+ channels and is not mediated by acetylcholine, glutamate or aspartate release. Bowyer JF, et al. **J Pharmacol Exp Ther** 1990 Aug; 254(2):664–70

Differential modulation by beta adrenoceptors of inward calcium and delayed rectifier potassium current in single ventricular cells of guinea pig heart. Iijima T, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):142–6

Amiodarone blocks calcium current in single guinea pig ventricular myocytes. Nishimura M, et al. **J Pharmacol Exp Ther** 1989 Nov;251(2):650–9

Potent blocking action of chlorpromazine on two types of calcium channels in cultured neuroblastoma cells. Ogata N, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1142–9

Tocolytic agents act on calcium channel current in single smooth muscle cells of pregnant rat uterus. Ohya Y, et al. **J Pharmacol Exp Ther** 1990 May;253(2):580–5

Ethanol effects on two types of voltage-activated calcium channels. Twombly DA, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):1029–37

Mechanism of cardiac T-type Ca channel blockade by amiloride. Tytgat J, et al. **J Pharmacol Exp Ther** 1990 Aug; 254(2):546–51

Flunarizine selectively blocks transient calcium channel currents in N1E-115 cells. Wang R, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):1006–11

ATP-activated channels gate calcium entry in single smooth muscle cells dissociated from rabbit ear artery. Benham CD. **J Physiol (Lond)** 1989 Dec;419:689–701

The effect of the phenylalkylamine D888 (devapamil) on force and Ca2+ current in isolated frog skeletal muscle fibres. Erdmann R, et al. **J Physiol (Lond)** 1989 Jun; 413:521–41

Interactive effects of isoprenaline, forskolin and acetylcholine on Ca2+ current in frog ventricular myocytes. Fischmeister R, et al. **J Physiol (Lond)** 1989 Oct;417:213–39

Somatostatin blocks a calcium current in rat sympathetic ganglion neurones. Ikeda SR, et al. **J Physiol (Lond)** 1989 Feb;409:221–40

Endothelin augments unitary calcium channel currents on the smooth muscle cell membrane of guinea-pig portal vein. Inoue Y, et al. **J Physiol (Lond)** 1990 Apr;423:171–91

cis-Fatty acids, which activate protein kinase C, attenuate Na+ and Ca2+ currents in mouse neuroblastoma cells. Linden DJ, et al. **J Physiol (Lond)** 1989 Dec;419:95–119

Dual action (stimulation, inhibition) of D600 on contractility and calcium channels in guinea-pig and cat heart cells. McDonald T, et al. **J Physiol (Lond)** 1989 Jul;414:569–86

Dihydropyridine inhibition of single calcium channels and contraction in rabbit mesenteric artery depends on voltage. Nelson MT, et al. **J Physiol (Lond)** 1989 May;412:65–91

Modulation of slow gating process of calcium channels by isoprenaline in guinea-pig ventricular cells. Ochi R, et al. **J Physiol (Lond)** 1990 May;424:187–204

A cation channel in the thick ascending limb of Henle's loop of the mouse kidney: inhibition by adenine nucleotides. Paulais M, et al. **J Physiol (Lond)** 1989 Jun;413:315–27

Whole-cell calcium current in guinea-pig ventricular myocytes dialysed with guanine nucleotides. Shuba YM, et al. **J Physiol (Lond)** 1990 May;424:205–28

Mechanisms of caffeine activation of single calcium-release channels of sheep cardiac sarcoplasmic reticulum. Sitsapesan R, et al. **J Physiol (Lond)** 1990 Apr;423:425–39

Molecular modeling study of calcium channel activating and blocking 1,4-dihydropyridine derivatives: a hypothetical molecular receptor model. Marrer S, et al. **J Protein Chem** 1989 Jun;8(3):420–1

Maitotoxin: effects on calcium channels, phosphoinositide breakdown, and arachidonate release in pheochromocytoma PC12 cells. Choi OH, et al. **Mol Pharmacol** 1990 Feb;37(2):222–30

Regulation by GTP and its stable thiol derivatives of calcium current components in rat nodose ganglion neurons. Gross RA, et al. **Mol Pharmacol** 1990 Apr;37(4):546–53

Pharmacologic differentiation between inositol-1,4,5-trisphosphate-induced Ca2+ release and Ca2+- or caffeine-induced Ca2+ release from intracellular membrane systems. Palade P, et al. **Mol Pharmacol** 1989 Oct;36(4):673–80

Anthraquinone-sensitized Ca2+ release channel from rat cardiac sarcoplasmic reticulum: possible receptor-mediated mechanism of doxorubicin cardiomyopathy. Pessah IN, et al. **Mol Pharmacol** 1990 Apr;37(4):503–14

Characterization of interactions of methylmercury with Ca2+ channels in synaptosomes and pheochromocytoma cells: radiotracer flux and binding studies. Shafer TJ, et al. **Mol Pharmacol** 1990 Jul;38(1):102–13

Investigations of the roles of dihydropyridine and omega-conotoxin-sensitive calcium channels in mediating depolarisation-evoked endogenous dopamine release from striatal slices. Herdon H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jul; 340(1):36–40

Pharmacological properties of voltage-dependent calcium channels in functional microvessels isolated from rat brain. Morel N, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Oct;340(4):442–51

Two phases of the prostaglandin F2 alpha-induced contraction in guinea-pig taenia coli involve different Ca2+ channels. Usune S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Oct; 340(4):437–41

LHRH and GTP-gamma-S modify calcium current activation in bullfrog sympathetic neurons. Elmslie KS, et al. **Neuron** 1990 Jul;5(1):75–80

Membrane receptors, involved in up-regulation of calcium channels in bovine adrenal chromaffin cells, chronically exposed to ethanol. Brennan CH, et al. **Neuropharmacology** 1989 Dec;28(12):1303–7

Multiple actions of Bay K 8644 on high-threshold Ca channels in adult rat sensory neurons. Carbone E, et al. **Neurosci Lett** 1990 Apr 6;111(3):315–20

Effects of in vitro lead exposure on voltage-sensitive calcium channels differ among cell types in central neurons of Lymnaea stagnalis. Audesirk G, et al. **Neurotoxicology** 1990 Winter;10(4):659–69

Characterization of the calcium channel state transitions induced by the enantiomers of the 1,4-dihydropyridine Sandoz 202 791 in neonatal rat heart cells. A nonmodulated receptor model. Hering S, et al. **Pflugers Arch** 1989 Sep; 414(6):690–700

Effects of thrombin on single calcium channels in frog ventricular cells. Markwardt F, et al. **Pflugers Arch** 1990 Feb;415(5):547–53

The effects of strychnine on the regulation of voltage-dependent calcium channels by dihydropyridines in brain and heart. O'Neill SK, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):833–40

Effect of doxorubicin on calcium receptors of myocardial cells. Monti E, et al. **Pharmacol Res** 1989 Nov-Dec;21 Suppl 1:87–8

R 56865 differentiates between contractile agents with respect to the nifedipine-sensitive component in the isolated rat aorta. Koch P, et al. **Pharmacology** 1989; 39(1):11–8

The furanocoumarin columbianadin inhibits depolarization induced Ca2+ uptake in rat pituitary GH3 cells. Törnquist K, et al. **Planta Med** 1990 Feb;56(1):127–9

Opiate analgesia and calcium channels modulation by dihydropyridines under acute and tolerant conditions. Flórez J, et al. **Prog Clin Biol Res** 1990;328:461–4

Pharmacological modulation of voltage-dependent calcium channels in intact cells. Porzig H. **Rev Physiol Biochem Pharmacol** 1990;114:209–62 (316 ref.)

The calcium channel blocker nifedipine attenuates slow excitatory amino acid neurotoxicity. Weiss JH, et al. **Science** 1990 Mar 23;247(4949 Pt 1):1474–7

The nematocyst extract of Hydra attenuata causes single channel events in lipid bilayers. Weber J, et al. **Toxicon** 1990;28(4):403–9

Insulin acts on Na, K, and Ca currents. Zierler K, et al. **Trans Assoc Am Physicians** 1988;101:320–5 (9 ref.)

Actions of Ca2+ channel ligands depend on G-proteins. Ca2+ agonists/antagonists and GTP [letter] Dolphin AC, et al. **Trends Pharmacol Sci** 1988 Nov;9(11):394–5

Widening potential for Ca2+ antagonists: non-L-type Ca2+ channel interaction. Zernig G. **Trends Pharmacol Sci** 1990 Jan;11(1):38–44 (35 ref.)

[Calcium channel as molecular target of drug action] Taglialatela M, et al. **Clin Ter** 1989 Dec 15;131(5):299–305 (20 ref.) (Eng. Abstr.) **(Ita)**

[Natural products affecting Ca channels] Ohizumi Y. **Nippon Rinsho** 1989 Aug;47(8):1683–8 **(Jpn)**

[The central effect of calcium antagonists] Siembab D, et al. **Pol Tyg Lek** 1988 Dec 19–26;43(51–52):1676–8 **(Pol)**

[The effect of cobalt on the dynamics of membrane-bound calcium in the cerebral cortex structures] Samoilov MO, et al. **Biofizika** 1989 Nov-Dec;34(6):1024–7 (Eng. Abstr.) **(Rus)**

[The blocking effect of aliphatic hydrocarbons on Ca2+ leakage channels formed by aggregates of Ca2+-ATPase of the sarcoplasmic reticulum] Shevchenko SI, et al. **Biokhimiia** 1989 Sep;54(9):1526–32 (Eng. Abstr.) **(Rus)**

[The blocking action of platelet-activating factor (PAF) on the calcium currents of the atrial fibers in the frog and guinea pig] Vornovitskiĭ EG, et al. **Biull Eksp Biol Med** 1989 Dec;108(12):643–6 (Eng. Abstr.) **(Rus)**

[Oxytocin inhibits potential-dependent calcium channels in pheochromocytoma PC12 cells] Kolchinskaia LI, et al. **Dokl Akad Nauk SSSR** 1989 Sep-Oct;308(1):222–5 **(Rus)**

[Inhibitory effect of caffeine on the potential-dependent calcium current in isolated intestinal smooth muscle cells] Shuba MF, et al. **Dokl Akad Nauk SSSR** 1989 Nov-Dec; 309(1):240–3 **(Rus)**

[Insulin regulation of 2 kinetically different types of calcium current] Nakipova OV, et al. **Fiziol Zh SSSR** 1989 Jun; 75(6):804–12 (Eng. Abstr.) **(Rus)**

[The effect of oxytocin on the potential-activated calcium current in the neurons of the edible snail] Kononeko NI, et al. **Neirofiziologiia** 1990;22(2):272–5 (Eng. Abstr.) **(Rus)**

[Parathyroid hormone stimulation of nerve cell calcium conduction] Kostiuk PG, et al. **Neirofiziologiia** 1990; 22(3):373–80 (Eng. Abstr.) **(Rus)**

[2 components of the high-threshold calcium current possessing different sensitivities to omega-conotoxin in the membrane of pheochromocytoma cells] Pogorelaia NKh, et al. **Neirofiziologiia** 1990;22(3):397–400 (Eng. Abstr.) **(Rus)**

[The mechanisms of the inhibiting action of cyclic adenosine monophosphate on the calcium current of intact mollusk neurons] Solntseva EI. **Neirofiziologiia** 1990;22(1):54–61 (Eng. Abstr.) **(Rus)**

[Activation of the calcium channels of A-431 cells by epidermal growth factor] Mozhaeva GN, et al. **Tsitologiia** 1989 Sep;31(9):1064–73 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Ca2+ pumping ATPase of cardiac sarcolemma is insensitive to membrane potential produced by K+ and Cl- gradients but requires a source of counter-transportable H+. Dixon DA, et al. **J Membr Biol** 1989 Dec;112(2):169–83

IMMUNOLOGY

Calcium channel autoantibodies in Lambert-Eaton myasthenic syndrome [letter] Leys K, et al. **Lancet** 1989 Nov 4;2(8671):1107

Calcium channel autoantibody and non-small-cell lung cancer in patients with Lambert-Eaton syndrome [letter] Sher E, et al. **Lancet** 1990 Feb 17;335(8686):413

Autoimmunity to the voltage-gated calcium channel underlies the Lambert-Eaton myasthenic syndrome, a paraneoplastic disorder. Vincent A, et al. **Trends Neurosci** 1989 Dec;12(12):496–502 (71 ref.)

METABOLISM

Permeabilisation of the sarcolemma in mouse diaphragm exposed to Bay K 8644 in vitro: time course, dependence on Ca2+ and effects of enzyme inhibitors. Howl JD, et al. **Acta Neuropathol (Berl)** 1990;79(4):438–43

Calcium distribution and mobilization during depolarization in single cochlear hair cells. Imaging microscopy and fura-2. Yamashita T, et al. **Acta Otolaryngol (Stockh)** 1990 Mar-Apr;109(3–4):256–62

Effects of inhibition of cardiac potassium and calcium channels on the digoxin-induced cardiotonic arrhythmogenic and toxic actions. Szegi J, et al. **Acta Physiol Hung** 1990;75 Suppl:263–4

Structure of the calcium release channel of skeletal muscle sarcoplasmic reticulum and its regulation by calcium. Lai FA, et al. **Adv Exp Med Biol** 1990;269:73–7 (27 ref.)

Ethanol and neuronal calcium channels. Leslie SW, et al. **Alcohol** 1990 May-Jun;7(3):233–6 (45 ref.)

Hydrophobic calcium channel ligands: methodical problems and their solution. Graziadei I, et al. **Am J Cardiol** 1989 Nov 7;64(17):43I–50I

Sodium pump and calcium channel modulation of Mg-deficiency cardiomyopathy. Ahmad A, et al. **Am J Cardiovasc Pathol** 1989;2(4):277–83

Plasma membrane calcium pump and 28-kDa calcium binding protein in cells of rat kidney distal tubules. Borke JL, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):F842–9

Two pathways for Ca2+ channel gating differentially modulated by physiological stimuli. Richard S, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1872–81

Characteristics of two types of calcium channels in rat pituitary gonadotrophs. Stutzin A, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):C865–74

G protein modulation of calcium currents in neurons. Dolphin AC. **Annu Rev Physiol** 1990;52:243–55 (63 ref.)

Role of G proteins in calcium channel modulation. Schultz G, et al. **Annu Rev Physiol** 1990;52:275–92 (102 ref.)

Regulation of cardiac L-type calcium current by phosphorylation and G proteins. Trautwein W, et al. **Annu Rev Physiol** 1990;52:257–74 (146 ref.)

Activation of the skeletal muscle Ca2+ release channel by the triazine dyes cibacron blue F3A-G and reactive red 120. Xu L, et al. **Arch Biochem Biophys** 1989 Nov 1; 274(2):609–16

[3H]PN200-110 binding in a fibroblast cell line transformed with the alpha 1 subunit of the skeletal muscle L-type Ca2+ channel. Rampe D, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):825–31

Stimulation of intestinal basolateral membrane calcium-pump activity by recombinant synthetic calbindin-D9k and specific mutants. Walters JR, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):603–8

The liver cell plasma membrane Ca2+ inflow systems exhibit a broad specificity for divalent metal ions. Crofts JN, et al. **Biochem J** 1990 Aug 1;269(3):579–87

Characterization of the mRNAs encoding the gene 2 sarcoplasmic/endoplasmic-reticulum Ca2+ pump in pig smooth muscle. Eggermont JA, et al. **Biochem J** 1990 Mar 15;266(3):901–7

Abundance of sarcoplasmic reticulum calcium pump isoforms in stomach and cardiac muscles. Khan I, et al. **Biochem J** 1990 Jun 1;268(2):415–9

Evidence for receptor-mediated bivalent-cation entry in A10 vascular smooth-muscle cells. Simpson AW, et al. **Biochem J** 1990 Apr 1;267(1):277–80

Maitotoxin: a unique pharmacological tool for research on calcium-dependent mechanisms. Gusovsky F, et al. **Biochem Pharmacol** 1990 Jun 1;39(11):1633–9 (46 ref.)

Taurine deficiency and doxorubicin: interaction with the cardiac sarcolemmal calcium pump. Harada H, et al. **Biochem Pharmacol** 1990 Feb 15;39(4):745–51

Brain microsomes bind ryanodine and contain ryanodine-sensitive calcium channels. Ashley RH. **Biochem Soc Trans** 1989 Dec;17(6):1102–3

Receptor-operated calcium channels in human platelets. Garcia-Sancho J, et al. **Biochem Soc Trans** 1989 Dec; 17(6):980–2

Interaction of calmodulin with the calmodulin binding domain of the plasma membrane Ca2+ pump. Vorherr T, et al. **Biochemistry** 1990 Jan 16;29(2):355–65

The cardiac sarcoplasmic reticulum calcium-release channel: modulation of ryanodine binding and single-channel activity. Holmberg SR, et al. **Biochim Biophys Acta** 1990 Feb 28;1022(2):187–93

Dihydropyridine binding to the L-type Ca2+ channel in rabbit heart sarcolemma and skeletal muscle transverse-tubules: role of disulfide, sulfhydryl and phosphate groups. Murphy BJ, et al. **Biochim Biophys Acta** 1990 May 2;1052(2):333–9

Regulation of calcium influx across the plasma membrane of the human T-leukemic cell line, JURKAT: dependence on a rise in cytosolic free calcium can be dissociated from formation of inositol phosphates. Ng J, et al. **Biochim Biophys Acta** 1990 Jun 12;1053(1):97–105

Expression of calcium channels in Xenopus oocyte injected with crab skeletal muscle fibre mRNA. Fournier F, et al. **Biol Cell** 1990;68(1):37–42

Osteoblastic cells have L-type calcium channels. Grygorczyk C, et al. **Bone Miner** 1989 Sep;7(2):137–48

Developmental changes in beta-adrenoceptors, muscarinic cholinoceptors and Ca2+ channels in rat ventricular muscles. Kojima M, et al. **Br J Pharmacol** 1990 Feb; 99(2):334–9

Voltage-dependent modulation of rat sensory neurone calcium channel currents by G protein activation: effect of a dihydropyridine antagonist. Scott RH, et al. **Br J Pharmacol** 1990 Apr;99(4):629–30

The regulation of interferon production by aspirin, other inhibitors of the cyclooxygenase pathway and agents influencing calcium channel flux. Cesario TC, et al. **Bull N Y Acad Med** 1989 Jan;65(1):26–35

Calcium homeostasis and the activation of calcium channels in cells of the immune system. Grinstein S, et al. **Bull N Y Acad Med** 1989 Jan;65(1):69–79 (39 ref.)

Smooth muscle contractility and calcium channel density in hibernating and nonhibernating animals. Wolowyk MW, et al. **Can J Physiol Pharmacol** 1990 Jan;68(1):68–70

Voltage-operated calcium channels in small cell lung carcinoma cell lines: pharmacological, functional, and immunological properties. Sher E, et al. **Cancer Res** 1990 Jul 1;50(13):3892–6

Chronic diabetes mellitus prolongs action potential duration of rat ventricular muscles: circumstantial evidence for impaired Ca2+ channel. Nobe S, et al. **Cardiovasc Res** 1990 May;24(5):381–9

Ca2+ channels and intracellular Ca2+ stores in neuronal and neuroendocrine cells. Milani D, et al. **Cell Calcium** 1990 Feb-Mar;11(2-3):191–9 (50 ref.)

Effects of cyclic nucleotide dependent protein kinases on the endoplasmic reticulum Ca2+ pump of bovine pulmonary artery. Raeymaekers L, et al. **Cell Calcium** 1990 Apr; 11(4):261–8

Taurine modulates ion influx through cardiac Ca2+ channels. Sawamura A, et al. **Cell Calcium** 1990 Apr; 11(4):251–9

Functional expression of dihydropyridine-insensitive calcium channels during PC12 cell differentiation by nerve growth factor (NGF), oncogenic ras, or src tyrosine kinase. Rausch DM, et al. **Cell Mol Neurobiol** 1990 Jun;10(2):237–55

Adenosine A1 receptors inhibit both adenylate cyclase activity and TRH-activated Ca2+ channels by a pertussis toxin-sensitive mechanism in GH3 cells. Cooper DM, et al. **Cell Signal** 1989;1(1):85–97

Inotropic and calcium kinetic effects of calcium channel agonist and antagonist in isolated cardiac myocytes from cardiomyopathic hamsters. Sen LY, et al. **Circ Res** 1990 Sep;67(3):599–608

Postnatal development of voltage-dependent calcium channels in the mouse brain disclosed by the Xenopus oocyte assay. Cohen RW, et al. **Dev Neurosci** 1990; 12(2):81–8

Diversity and novel pharmacological properties of Ca2+ channels in Drosophila brain membranes. Pelzer S, et al. **EMBO J** 1989 Aug;8(8):2365–71

Pharmacological characterization of the voltage-dependent calcium channel of pancreatic B-cell. Komatsu M, et al. **Endocrinology** 1989 Oct;125(4):2008–14

T- and L-calcium channels in steroid-producing chicken granulosa cells in primary culture. Schwartz JL, et al. **Endocrinology** 1989 Oct;125(4):1973–82

Identification of P2Y purinoceptors associated with voltage-activated cation channels in cardiac ventricular myocytes of the rat. Björnsson OG, et al. **Eur J Biochem** 1989 Dec 8;186(1-2):395–404

Presynaptic alpha 2-adrenoceptor and kappa-opiate receptor occupancy promotes closure of neuronal (N-type) calcium channels. Adamson P, et al. **Eur J Pharmacol** 1989 Dec 12;174(1):63–70

Two subtypes of dihydropyridine-sensitive calcium channels in rat ventricular muscle. Saxon M, et al. **Eur J Pharmacol** 1990 Mar 13;178(1):37–45

Cellular signaling by peptides of the endothelin gene family. Simonson MS, et al. **FASEB J** 1990 Sep;4(12):2989–3000

The cDNA and deduced amino acid sequence of the gamma subunit of the L-type calcium channel from rabbit skeletal muscle. Bosse E, et al. **FEBS Lett** 1990 Jul 2;267(1):153–6

G-protein regulation of neuronal voltage-activated calcium currents. Scott RH, et al. **Gen Pharmacol** 1989;20(6):715–20 (45 ref.)

Subunits of purified calcium channels. Alpha 2 and delta are encoded by the same gene. De Jongh KS, et al. **J Biol Chem** 1990 Sep 5;265(25):14738–41

Calcium binding to extracellular sites of skeletal muscle calcium channels regulates dihydropyridine binding. Ebata H, et al. **J Biol Chem** 1990 Jan 5;265(1):177–82

Effect of membrane potential on divalent cation transport catalyzed by the "electroneutral" ionophores A23187 and ionomycin. Fasolato C, et al. **J Biol Chem** 1989 Nov 25; 264(33):19630–6

Amiloride analogs inhibit L-type calcium channels and display calcium entry blocker activity. Garcia ML, et al. **J Biol Chem** 1990 Mar 5;265(7):3763–71

Photoaffinity probes for the alpha 1-adrenergic receptor and the calcium channel bind to a common domain in P-glycoprotein. Greenberger LM, et al. **J Biol Chem** 1990 Mar 15;265(8):4394–401

Studies on the structural requirements for the activity of the skeletal muscle dihydropyridine receptor/slow Ca2+ channel. Allosteric regulation of dihydropyridine binding in the absence of alpha 2 and beta components of the purified protein complex. Kim HS, et al. **J Biol Chem** 1990 Jul 15;265(20):11858–63

Heparin binds with high affinity to voltage-dependent L-type Ca2+ channels. Evidence for an agonistic action. Knaus HG, et al. **J Biol Chem** 1990 Jul 5;265(19):11156–66

Disulfide linkage of biotin identifies a 106-kDa Ca2+ release channel in sarcoplasmic reticulum. Zaidi NF, et al. **J Biol Chem** 1989 Dec 25;264(36):21737–47

Vascular muscle calcium channel modulation in hypertension. Hermsmeyer K, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 6:S45–8

Receptor-operated calcium-permeable channels in vascular smooth muscle. Rüegg UT, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 6:S49–58

Effect of thrombin on calcium homeostasis in chick embryonic heart cells. Receptor-operated calcium entry with inositol trisphosphate and a pertussis toxin-sensitive G protein as second messengers. Chien WW, et al. **J Clin Invest** 1990 May;85(5):1436–43

Analysis of calcium channel properties in cultured leech retzius cells by internal perfusion, voltage-clamp and single-channel recording. Bookman RJ, et al. **J Exp Biol** 1990 Mar;149:223–37

Non-voltage-gated calcium channels in snail heart ventricle cells. Brezden BL, et al. **J Exp Biol** 1990 May;150:187–203

A novel calcium current in dysgenic skeletal muscle. Adams BA, et al. **J Gen Physiol** 1989 Sep;94(3):429–44

Divalent cation activation and inhibition of single calcium release channels from sheep cardiac sarcoplasmic reticulum. Ashley RH, et al. **J Gen Physiol** 1990 May; 95(5):981–1005

Interactions of protons with single open L-type calcium channels. pH dependence of proton-induced current fluctuations with Cs+, K+, and Na+ as permeant ions. Pietrobon D, et al. **J Gen Physiol** 1989 Jul;94(1):1–21

Interactions of protons with single open L-type calcium channels. Location of protonation site and dependence of proton-induced current fluctuations on concentration and species of permeant ion. Prod'hom B, et al. **J Gen Physiol** 1989 Jul;94(1):23–42

Permeation in the dihydropyridine-sensitive calcium channel. Multi-ion occupancy but no anomalous mole-fraction effect between Ba2+ and Ca2+. Yue DT, et al. **J Gen Physiol** 1990 May;95(5):911–39

A mechanical stress increases sodium ion content in vascular smooth muscle cells through a calcium-dependent pathway: prevention by cicletanine via a cyclo-oxygenase product. Rosati C, et al. **J Hypertens Suppl** 1989 Dec; 7(6):S322–3

Studies on Ca2+ channel antagonists. A 2-diazo-3,3,3-trifluoropropionamide derivative related to verapamil as a potential photoaffinity probe. Theodore LJ, et al. **J Med Chem** 1990 Feb;33(2):873–7

Activation and conductance properties of ryanodine-sensitive calcium channels from brain microsomal membranes incorporated into planar lipid bilayers. Ashley RH. **J Membr Biol** 1989 Oct;111(2):179–89

Macroscopic and single-channel studies of two Ca2+ channel types in oocytes of the ascidian Ciona intestinalis. Bosma MM, et al. **J Membr Biol** 1990 Apr;114(3):231–43

Effects of calcium and Bay K-8644 on calcium currents in adrenal medullary chromaffin cells. Ceña V, et al. **J Membr Biol** 1989 Dec;112(3):255–65

Barium- and calcium-permeable channels open at negative membrane potentials in rat ventricular myocytes. Coulombe A, et al. **J Membr Biol** 1989 Oct;111(1):57–67

Coupling of catalytic and channel function in the Ca2+ transport ATPase. Inesi G, et al. **J Membr Biol** 1990 Jun; 116(1):1–8 (43 ref.)

Ca2+ pump and Ca2+/H+ antiporter in plasma membrane vesicles isolated by aqueous two-phase partitioning from corn leaves. Kasai M, et al. **J Membr Biol** 1990 Mar; 114(2):133–42

Analysis of the T-type calcium channel in embryonic chick ventricular myocytes. Kawano S, et al. **J Membr Biol** 1990 Jun;116(1):9–17

Ca modulates outward current through IK1 channels. Mazzanti M, et al. **J Membr Biol** 1990 Jun;116(1):41–5

Sulmazole (AR-L 115BS) activates the sheep cardiac muscle sarcoplasmic reticulum calcium-release channel in the presence and absence of calcium. Williams AJ, et al. **J Membr Biol** 1990 May;115(2):167–78

Stimulation of muscarinic acetylcholine receptors increases synaptosomal free calcium concentration by protein kinase-dependent opening of L-type calcium channels. Boess FG, et al. **J Neurochem** 1990 Jul;55(1):230–6

Identification of omega-conotoxin binding sites on adrenal medullary membranes: possibility of multiple calcium channels in chromaffin cells. Jan CR, et al. **J Neurochem** 1990 Jan;54(1):355–8

Protein kinase C participates in up-regulation of dihydropyridine-sensitive calcium channels by ethanol. Messing RO, et al. **J Neurochem** 1990 Oct;55(4):1383–9

Regulation of calcium concentrations in synaptosomes: alpha 2-adrenoceptors reduce free Ca2+ by closure of N-type Ca2+ channels. Xiang JZ, et al. **J Neurochem** 1990 Jul; 55(1):303–10

Calcium current in cortical astrocytes: induction by cAMP and neurotransmitters and permissive effect of serum factors. Barres BA, et al. **J Neurosci** 1989 Sep;9(9):3169–75

T-type calcium channels: heterogeneous expression in rat sensory neurons and selective modulation by phorbol esters. Schroeder JE, et al. **J Neurosci** 1990 Mar; 10(3):947–51

Multiple components of both transient and sustained barium currents in a rat dorsal root ganglion cell line. Boland LM, et al. **J Physiol (Lond)** 1990 Jan;420:223–45

Permeation of calcium through excitatory amino acid receptor channels in cultured rat hippocampal neurones. Iino M, et al. **J Physiol (Lond)** 1990 May;424:151–65

Calcium channels in solitary retinal ganglion cells from post-natal rat. Karschin A, et al. **J Physiol (Lond)** 1989 Nov;418:379–96

The whole-cell Ca2+ channel current in single smooth muscle cells of the guinea-pig ureter. Lang RJ. **J Physiol (Lond)** 1990 Apr;423:453–73

Molecular properties of voltage-activated calcium channels. Flockerzi V. **J Protein Chem** 1989 Jun;8(3):428–30

Depression of voltage-dependent Ca2+ current by noradrenaline in the guinea-pig vas deferens in tetraethylammonium medium. Inomata H, et al. **Jpn J Physiol** 1989;39(3):455–60

Sodium and calcium currents in action potentials of rat somatotrophs: their possible functions in growth hormone secretion. Chen C, et al. **Life Sci** 1990;46(14):983–9

Autoantibodies bind solubilized calcium channel-omega-conotoxin complexes from small cell lung

carcinoma: a diagnostic aid for Lambert-Eaton myasthenic syndrome. Lennon VA, et al. **Mayo Clin Proc** 1989 Dec; 64(12):1498–504

The control of calcium influx by cytoplasmic calcium in mammalian heart muscle. Kirby MS, et al. **Mol Cell Biochem** 1989 Sep 7;89(2):109–13 (14 ref.)

Microassay for malignant hyperthermia susceptibility: hypersensitive ligand-gating of the Ca channel in muscle sarcoplasmic reticulum causes increased amounts and rates of Ca-release. O'Brien PJ. **Mol Cell Biochem** 1990 Mar 5;93(1):53–9

Calcium movements during each heart beat. Powell T, et al. **Mol Cell Biochem** 1989 Sep 7;89(2):103–8 (18 ref.)

The permeant molecule urea stimulates prolactin secretion in GH4C1 cells by inducing Ca2+ influx through dihydropyridine-sensitive Ca2+ channels. Sato N, et al. **Mol Cell Endocrinol** 1990 May 7;70(3):273–9

Ryanodine as a probe for the functional state of the skeletal muscle sarcoplasmic reticulum calcium release channel. Chu A, et al. **Mol Pharmacol** 1990 May;37(5):735–41

Comparison of location and binding for the positively charged 1,4-dihydropyridine calcium channel antagonist amlodipine with uncharged drugs of this class in cardiac membranes. Mason RP, et al. **Mol Pharmacol** 1989 Oct; 36(4):634–40

Identification, characterization, and photoaffinity labeling of the dihydropyridine receptor associated with the L-type calcium channel from bovine adrenal medulla. Murphy BJ, et al. **Mol Pharmacol** 1990 Feb;37(2):173–81

Ultrastructural localization of calcium binding sites on human muscle cell surface. Moggio M, et al. **Muscle Nerve** 1989 Nov;12(11):910–4

Channel hands [letter] Babitch J. **Nature** 1990 Jul 26; 346(6282):321–2

Role of omega-conotoxin-sensitive calcium channels in inositolphosphate production and noradrenaline release due to potassium depolarization or stimulation with carbachol. Hofmann F, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Mar; 341(3):200–5

Cardiac Ca current does not run down and is very sensitive to isoprenaline in the nystatin-method of whole cell recording. Kurachi Y, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Aug; 340(2):219–22

The interactions of 1,4-dihydropyridines bearing a 2-(2-aminoethylthio)methyl substituent at voltage-dependent Ca2+ channels of smooth muscle, cardiac muscle and neuronal tissues. Kwon YW, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jan-Feb; 341(1-2):128–36

Two types of calcium channels coexist in peptide-releasing vertebrate nerve terminals. Lemos JR, et al. **Neuron** 1989 May;2(5):1419–26

Development alters the expression of calcium currents in chick limb motoneurons. McCobb DP, et al. **Neuron** 1989 Jun;2(6):1633–43

The alpha 1 and alpha 2 polypeptides of the dihydropyridine-sensitive calcium channel differ in developmental expression and tissue distribution. Morton ME, et al. **Neuron** 1989 May;2(5):1499–506

Second messengers involved in genetic regulation of the number of calcium channels in bovine adrenal chromaffin cells in culture. Brennan CH, et al. **Neuropharmacology** 1990 Jul;29(7):689–93

Genetic regulation of dihydropyridine-sensitive calcium channels in brain may determine susceptibility to physical dependence on alcohol. Brennan CH, et al. **Neuropharmacology** 1990 May;29(5):429–32

Functional expression of a subtype of the Ca2+ channels in the embryonic rat hippocampus as detected by dual-fluorescence flow cytometric analysis. Mitsumoto Y, et al. **Neurosci Lett** 1989 Nov 20;106(1-2):141–6

Endothelin localizes in the dorsal horn and acts on the spinal neurones: possible involvement of dihydropyridine-sensitive calcium channels and substance P release. Yoshizawa T, et al. **Neurosci Lett** 1989 Jul 31; 102(2-3):179–84

Ionic currents in a mammalian intestinal smooth muscle—from tissue to single channels. Kao CY. **Nippon Heikatsukin Gakkai Zasshi** 1989 Feb;25(1):1–12

Effects of purinergic stimulation on the Ca current in single frog cardiac cells. Alvarez JL, et al. **Pflugers Arch** 1990 Apr;416(1-2):189–95

The blockade of excitation/contraction coupling by nifedipine in patch-clamped rat skeletal muscle cells in culture. Cognard C, et al. **Pflugers Arch** 1990 Apr; 416(1-2):98–105

pH modulates conducting and gating behaviour of single calcium release channels. Rousseau E, et al. **Pflugers Arch** 1990 Feb;415(5):645–7

Direct modulation of voltage-dependent calcium channels by muscarinic activation of a pertussis toxin-sensitive G-protein in hippocampal neurons. Toselli M, et al. **Pflugers Arch** 1989 Dec;415(3):255–61

Comparison of the effects of calcium and the calcium channel stimulant Bay k 8644 on neomycin-induced neuromuscular blockade. Baeyens JM, et al. **Pharmacol Toxicol** 1989 Nov; 65(5):398–401

Dihydropyridine receptors in the pregnant human uterus in vitro. Poli E, et al. **Pharmacology** 1989;39(5):309–16

Subunits of purified calcium channels: a 212-kDa form of alpha 1 and partial amino acid sequence of a phosphorylation site of an independent beta subunit. De Jongh KS, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(21):8585–9

Rat brain expresses a heterogeneous family of calcium channels. Snutch TP, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3391–5

Ion channels, membrane lipids and cholesterol: a role for membrane lipid domains in arterial function. Tulenko TN, et al. **Prog Clin Biol Res** 1990;334:187–203

Atrionatriuretic peptide transforms cardiac sodium channels into calcium-conducting channels. Sorbera LA, et al. **Science** 1990 Feb 23;247(4945):969–73

Malignant hyperthermia may be due to a defect in a large Ca2+ release channel protein. Davies K. **Trends Genet** 1990 Jun;6(6):171–2 (19 ref.)

New advances in molecular pharmacology of Ca2+ channels. Rampe D, et al. **Trends Pharmacol Sci** 1989 Oct; 10(10):388–9 (12 ref.)

[Sodium and calcium cation transport of erythrocytes in essential hypertension] Zhu ZM, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Aug; 17(4):216–7, 254 (Eng. Abstr.) **(Chi)**

[Contraction of skeletal muscles: regulation of calcium intracellular movements] Villaz M, et al. **Ann Fr Anesth Reanim** 1989;8(5):392–6 (Eng. Abstr.) **(Fre)**

[Decrease in the regulatory capacity of the calcium pump in a subgroup of essential hypertensive patients] de la Sierra A, et al. **Arch Mal Coeur** 1989 Jul;82(7):1285–8 (Eng. Abstr.) **(Fre)**

[Voltage-operated Ca2+ channel--its molecular structure and Ca2+ permeation] Hirata H. **Nippon Rinsho** 1989 Aug; 47(8):1696–701 **(Jpn)**

[Effects of calcium antagonists on cardiac cells] Iijima T. **Nippon Rinsho** 1989 Aug;47(8):1753–8 (20 ref.) **(Jpn)**

[Molecular biological studies on Ca2+ channels] Kaneko S, et al. **Nippon Rinsho** 1989 Aug;47(8):1708–13 **(Jpn)**

[Control of intracellular calcium ion concentration and homeostasis of cell calcium] Endo M. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1855–61 **(Jpn)**

[Calcium channels and calcium antagonists] Imai S. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1862–76 **(Jpn)**

[Calcium release channels of sarcoplasmic reticulum] Inui M. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(11):1331–41 (56 ref.) **(Jpn)**

[Molecular structure of voltage-sensitive Ca2+ channels] Takahashi M, et al. **Tanpakushitsu Kakusan Koso** 1990 Mar; 35(4 Suppl):784–95 **(Jpn)**

[Studies on the transmembrane signalling mechanism of the brain using Xenopus oocytes] Nomura Y. **Yakugaku Zasshi** 1990 May;110(5):304–14 (32 ref.) (Eng. Abstr.) **(Jpn)**

[Mathematical model of oscillations in mammalian erythrocytes. The role of calmodulin-dependent Ca-activated Ca-pump] Kholmukhamedov EL, et al. **Biofizika** 1990 Mar-Apr;35(2):375–7 (Eng. Abstr.) **(Rus)**

[The effect of holotoxin A1 on transport of calcium ions across the lipid models of biological membranes] Aminin DL, et al. **Biokhimiia** 1990 Feb;55(2):270–5 (Eng. Abstr.) **(Rus)**

[Phorbol ester blocks the coupling of GTP-binding protein with receptor-controlled calcium channels] Bochkov VN, et al. **Biokhimiia** 1989 Sep;54(9):1533–42 (Eng. Abstr.) **(Rus)**

[Calcium transport in brain synaptosomes during depolarization. The role of potential-dependent channels and Na+/Ca2+ metabolism] Konev SV, et al. **Biokhimiia** 1989 Jul;54(7):1150–62 (Eng. Abstr.) **(Rus)**

[Identification of depolarization-activated calcium flow in the secretory cell membrane] Klevets MIu, et al. **Fiziol Zh** 1990 Mar-Apr;36(2):102–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Plasma membrane mechanisms for intracellular calcium regulation in squid axons. DiPolo R, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(4):437–44 (29 ref.)

Regulation of GABA-ergic receptor activity by changes in intracellular calcium: electrophysiological investigation in neurones and endocrine cells. Feltz P, et al. **Acta Physiol Scand Suppl** 1989;582:10

Calcium accumulation and calcium effects in astrocytes in primary cultures. Hertz L. **Acta Physiol Scand Suppl** 1989; 582:33

Apparent proton influx via channels: perhaps pHi decrease in depolarised snail neurones is caused by calcium entry. Thomas RC. **Acta Physiol Scand Suppl** 1989;582:12

The calcium pump of the plasma membrane: structure-function relationships. Carafoli E, et al. **Adv Exp Med Biol** 1989;255:61–70

Intracellular mechanisms involved in "run-down" of calcium channels. Kameyama M, et al. **Adv Exp Med Biol** 1989; 255:111–7

Molecular structure and function of phospholamban: the regulatory protein of calcium pump in cardiac sarcoplasmic reticulum. Tada M, et al. **Adv Exp Med Biol** 1989;255:79–89

Two types of Ca channels in smooth muscle cells isolated from guinea-pig taenia coli. Yabu H, et al. **Adv Exp Med Biol** 1989;255:129–34

Chronic ethanol treatment alters omega-conotoxin and Bay K 8644 sensitive calcium channels in rat striatal synaptosomes. Woodward JJ, et al. **Alcohol** 1990 Jul-Aug; 7(4):279–84

Cellular electrophysiology of amlodipine: probing the cardiac L-type calcium channel. Kass RS, et al. **Am J Cardiol** 1989 Nov 7;64(17):35I–41I; discussion 41I–42I

Gadolinium blocks low- and high-threshold calcium currents in pituitary cells. Biagi BA, et al. **Am J Physiol** 1990 Sep; 259(3 Pt 1):C515–20

Effect of compartmentalized Ca2+ ions on electrical bursting activity of pancreatic beta-cells. Chay TR. **Am J Physiol** 1990 May;258(5 Pt 1):C955–65

Catecholamine modulation of calcium currents in clonal pancreatic beta-cells. Keahey HH, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):C1171–6

D 600 block of L-type Ca2+ channel in vascular smooth muscle cells: comparison with permanently charged derivative, D 890. Leblanc N, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):C689–95

Atrial natriuretic peptide differentially modulates T- and L-type calcium channels. McCarthy RT, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):F473–8

Voltage-dependent calcium currents in rat gonadotropes separated by centrifugal elutriation. Marchetti C, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):E589–96

Calcium channels, potassium channels, and voltage dependence of arterial smooth muscle tone. Nelson MT, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):C3–18 (139 ref.)

Sensitivity to Cd2+ but resistance to Ni2+ of Ca2+ inflow into rat pancreatic islets. Plasman PO, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):E529–33

Olfactory neurons exhibit heterogeneity in depolarization-induced calcium changes. Restrepo D, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1051–61

Long-lasting openings of single slow (L-type) Ca2+ channels in chick embryonic heart cells. Tohse N, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):H639–42

Characterization of a muscarinic receptor controlling Cl- secretion in hen trachea. Winding B, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C982–7

Modulation of Ca by agents affecting voltage-sensitive Ca channels in mesangial cells. Yu YM, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):F1094–9

Aging-related increases in voltage-sensitive, inactivating calcium currents in rat hippocampus. Implications for mechanisms of brain aging and Alzheimer's disease. Landfield PW, et al. **Ann N Y Acad Sci** 1989;568:95–105

Calcium channels in vertebrate cells. Hess P. **Annu Rev Neurosci** 1990;13:337–56 (167 ref.)

Development of a novel biocompatibility test method based on intracellular calcium ion mobilization. Takemoto Y, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):325–7

Adaptation to stress exposure prevents arrhythmogenic and contractural effects of the excess of Ca2+ on the heart by the increased activity of sarcoplasmic reticulum. Meerson FZ, et al. **Basic Res Cardiol** 1990 Jan-Feb; 85(1):96–103

Voltage-dependent calcium currents in trigeminal chick neurons. Galdzicki Z, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):1015–21

Role of voltage-sensitive calcium channels in [Ca2+]i and secretory responses to activators of protein kinase C in pituitary gonadotrophs. Izumi S, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):359–67

Changes of N-methyl-D-aspartate activated channels of cerebellar granule cells with days in culture. Sciancalepore M, et al. **Biochem Biophys Res Commun** 1989 Nov 30; 165(1):481–7

Homologous and heterologous regulation of voltage-dependent calcium channels. Ferrante J, et al. **Biochem Pharmacol** 1990 Apr 15;39(8):1267–70 (37 ref.)

Failure of adenosine analogues to affect N-type voltage sensitive Ca2+ channels in chicken brain synaptosomes. Lundy PM, et al. **Biochem Pharmacol** 1990 Aug 1; 40(3):651–4

Kinetics of calcium channel opening by inositol 1,4,5-trisphosphate. Meyer T, et al. **Biochemistry** 1990 Jan 9;29(1):32–7

Inhibition of the liver cell receptor-activated Ca2+ inflow system by metal ion inhibitors of voltage-operated Ca2+ channels but not by other inhibitors of Ca2+ inflow. Hughes BP, et al. **Biochim Biophys Acta** 1989 Oct 9; 1013(3):197–205

Membrane depolarization selectively inhibits receptor-operated calcium channels in human T (Jurkat) lymphoblasts. Sarkadi B, et al. **Biochim Biophys Acta** 1990 Aug 24;1027(2):130–40

Genetic dissection of Ca2(+)-dependent ion channel function in Paramecium. Preston RR. **Bioessays** 1990 Jun; 12(6):273–81 (50 ref.)

Role of an apical cation-selective channel in function of tight epithelia. van Driessche W, et al. **Biol Cell** 1989; 66(1-2):37–41

Electrical bursting and intracellular Ca2+ oscillations in excitable cell models. Chay TR. **Biol Cybern** 1990; 63(1):15–23

Activation of calcium channels in sarcoplasmic reticulum from frog muscle by nanomolar concentrations of ryanodine. Bull R, et al. **Biophys J** 1989 Oct;56(4):749–56

Inactivation properties of T-type calcium current in canine cardiac Purkinje cells. Hirano Y, et al. **Biophys J** 1989 Nov;

56(5):1007–16
External cadmium and internal calcium block of single calcium channels in smooth muscle cells from rabbit mesenteric artery. Huang Y, et al. **Biophys J** 1989 Nov; 56(5):1023–8
Guanosine-5'-O-(3-thiotriphosphate) modifies kinetics of voltage-dependent calcium current in chick sensory neurons. Marchetti C, et al. **Biophys J** 1989 Dec; 56(6):1267–72
Voltage dependent calcium channel expression in isolated osteoclasts. Teti A, et al. **Boll Soc Ital Biol Sper** 1989 Dec; 65(12):1115–8
Endothelium-dependent and BRL 34915-induced vasodilatation in rat isolated perfused mesenteric arteries: role of G-proteins, K+ and calcium channels. Adeagbo AS, et al. **Br J Pharmacol** 1990 Jul;100(3):427–34
Role of endothelium and calcium channels in endothelin-induced contraction of human cerebral arteries. de Aguilera EM, et al. **Br J Pharmacol** 1990 Mar; 99(3):439–40
The role of dihydropyridine-sensitive voltage-gated calcium channels in potassium-mediated neuronal survival. Collins F, et al. **Brain Res** 1989 Nov 13;502(1):99–108
Mn and Mg influxes through Ca channels of motor nerve terminals are prevented by verapamil in frogs. Narita K, et al. **Brain Res** 1990 Mar 5;510(2):289–95
Somatostatin inhibits two types of voltage-activated calcium currents in rat growth-hormone secreting cells. Nussinovitch I. **Brain Res** 1989 Dec 11;504(1):136–8
Inhibition of histamine release from rat hypothalamic slices by omega-conotoxin GVIA, but not by nilvadipine, a dihydropyridine derivative. Takemura M, et al. **Brain Res** 1989 Sep 4;496(1–2):351–6
Inhibition by tetrandrine of calcium currents at mouse motor nerve endings. Wiegand H, et al. **Brain Res** 1990 Jul 30; 524(1):112–8
The role of Ca2+ channels of the L-type in neurotransmitter plasticity of cultured sympathetic neurons. Vidal S, et al. **Brain Res Mol Brain Res** 1989 Nov;6(2–3):187–96
Further investigation of a potential calcium channel modulator isolated from rat erythrocytes. Huang BS, et al. **Can J Physiol Pharmacol** 1989 Oct;67(10):1252–8
Calcium current in embryonic Xenopus muscle cells in culture. Moody-Corbett F, et al. **Can J Physiol Pharmacol** 1989 Oct;67(10):1259–64
Action of Ca2+ agonists/antagonists in mammalian peripheral neurons. Carbone E, et al. **Cell Biol Int Rep** 1989 Dec;13(12):1155–64 (29 ref.)
Cross-talk between receptors coupled to calcium currents in adult but not neonatal rat sensory neurons. Wanke E, et al. **Cell Biol Int Rep** 1989 Dec;13(12):1165–75 (30 ref.)
Patterns of interaction between anthraquinone drugs and the calcium-release channel from cardiac sarcoplasmic reticulum. Holmberg SR, et al. **Circ Res** 1990 Aug; 67(2):272–83
Single channel recordings from human cardiac sarcoplasmic reticulum. Holmberg SR, et al. **Circ Res** 1989 Nov; 65(5):1445–9
Actions of Ca2+ antagonists on two types of Ca2+ channels in rat aorta smooth muscle cells in primary culture. Kuga T, et al. **Circ Res** 1990 Aug;67(2):469–80
Multiple types of Ca2+ currents in single canine Purkinje cells. Tseng GN, et al. **Circ Res** 1989 Dec;65(6):1735–50
Effects of calcium entry blockade on myocardial blood flow. Bache RJ. **Circulation** 1989 Dec;80(6 Suppl):IV40–6 (48 ref.)
Role of calcium on excitation-contraction coupling in cardiac and vascular smooth muscle. Lucchesi BR. **Circulation** 1989 Dec;80(6 Suppl):IV1–13 (74 ref.)
Recent insights into the calcium channels. Zelis R, et al. **Circulation** 1989 Dec;80(6 Suppl):IV14–6
Neuropeptide-Y enhances luteinizing hormone (LH)-releasing hormone-induced LH release and elevations in cytosolic Ca2+ in rat anterior pituitary cells: evidence for involvement of extracellular Ca2+ influx through voltage-sensitive channels. Crowley WR, et al. **Endocrinology** 1990 Sep;127(3):1487–94
Follicle-stimulating hormone receptor-mediated uptake of 45Ca2+ by proteoliposomes and cultured rat sertoli cells: evidence for involvement of voltage-activated and voltage-independent calcium channels. Grasso P, et al. **Endocrinology** 1989 Dec;125(6):3029–36
Dopamine inhibits two characterized voltage-dependent calcium currents in identified rat lactotroph cells. Lledo PM, et al. **Endocrinology** 1990 Sep;127(3):990–1001
Stimulation of luteinizing hormone release by gamma-aminobutyric acid (GABA) agonists: mediation by GABAA-type receptors and activation of chloride and voltage-sensitive calcium channels. Virmani MA, et al. **Endocrinology** 1990 May;126(5):2499–505
Calcium currents in rat myoballs and their inhibition by insulin. Wu FS, et al. **Endocrinology** 1989 Nov; 125(5):2563–72
Voltage-dependent Ca2+ channels are involved in regulation of steroid synthesis by bovine but not rat fasciculata cells. Yanagibashi K, et al. **Endocrinology** 1990 Jul;127(1):311–8
Effects induced by the antiepileptic drug valproic acid upon the ionic currents recorded in rat neocortical neurons in cell culture. Zona C, et al. **Exp Brain Res** 1990;81(2):313–7
Opposing effects of acetylcholine on the two classes of voltage-dependent calcium channels in hippocampal neurons. Toselli M, et al. **Experientia Suppl** 1989;57:97–103
Primary structure and functional expression of a high voltage activated calcium channel from rabbit lung. Biel M, et al. **FEBS Lett** 1990 Sep 3;269(2):409–12
Voltage-dependent transient calcium currents in freshly dissociated capillary endothelial cells. Bossu JL, et al. **FEBS Lett** 1989 Sep 25;255(2):377–80
Calcium channels in undifferentiated PC12 rat pheochromocytoma cells. Janigro D, et al. **FEBS Lett** 1989 Sep 25;255(2):398–400
Functional expression of the calcium release channel from skeletal muscle ryanodine receptor cDNA. Penner R, et al. **FEBS Lett** 1989 Dec 18;259(1):217–21
A new class of calcium channels activated by glucose in human pancreatic beta-cells. Rojas E, et al. **FEBS Lett** 1990 Feb 26;261(2):265–70
Omega-conotoxin blockade of calcium currents in cultured neonatal rat cardiomyocytes: different action on EGTA-modified calcium channels. Savtchenko AN, et al. **Gen Physiol Biophys** 1990 Apr;9(2):147–65
Effects of dihydropyridine CGP on currents through the calcium channels in frog skeletal muscle. Shvinka NE, et al. **Gen Physiol Biophys** 1990 Feb;9(1):83–6
Calcium channel alterations in genetic hypertension. Hermsmeyer K, et al. **Hypertension** 1989 Oct;14(4):453–6
Receptor-operated, but not voltage-operated, calcium channels are involved in basophil leucocyte activation and histamine release. Tedeschi A, et al. **Int Arch Allergy Appl Immunol** 1989;90(1):109–11
Further thoughts on mast cells, calcium channels and histamine release. West GB. **Int Arch Allergy Appl Immunol** 1990;91(2):214–6
Barium-induced nondriven action potentials as a model of triggered potentials from early afterdepolarizations: significance of slow channel activity and differing effects of quinidine and amiodarone. Takanaka C, et al. **J Am Coll Cardiol** 1990 Jan;15(1):213–21
Disulfonic stilbene derivatives open the Ca2+ release channel of sarcoplasmic reticulum. Kawasaki T, et al. **J Biochem (Tokyo)** 1989 Sep;106(3):401–5
Vitamin D3 metabolites modulate dihydropyridine-sensitive calcium currents in clonal rat osteosarcoma cells. Caffrey JM, et al. **J Biol Chem** 1989 Dec 5;264(34):20265–74
Dihydropyridine receptor regulation of acetylcholinesterase biosynthesis. Decker MM, et al. **J Biol Chem** 1990 Jul 15; 265(20):11796–803
Modulation of Ca2+ release channel activity from sarcoplasmic reticulum by annexin VI (67-kDa calcimedin). Díaz-Muñoz M, et al. **J Biol Chem** 1990 Sep 15;265(26):15894–9
Blockade of low and high threshold Ca2+ channels by diphenylbutylpiperidine antipsychotics linked to inhibition of prolactin gene expression. Enyeart JJ, et al. **J Biol Chem** 1990 Sep 25;265(27):16373–9
Evidence for the activation of two different Ca2+ channels during the egg jelly-induced acrosome reaction of sea urchin sperm. Guerrero A, et al. **J Biol Chem** 1989 Nov 25;264(33):19593–9
Activation of M3 muscarinic acetylcholine receptors inhibits voltage-dependent calcium influx in small cell lung carcinoma. Williams CL, et al. **J Biol Chem** 1990 Jan 25; 265(3):1443–7
Menthol blocks dihydropyridine-insensitive Ca2+ channels and induces neurite outgrowth in human neuroblastoma cells. Sidell N, et al. **J Cell Physiol** 1990 Feb;142(2):410–9
Participation of transient-type Ca2+ channels in the sustained increase of Ca2+ level in GH3 cells. Suzuki N, et al. **J Cell Physiol** 1990 Jul;144(1):62–8
Voltage-dependent inactivation of slow calcium channels in intact twitch muscle fibers of the frog. Cota G, et al. **J Gen Physiol** 1989 Nov;94(5):937–51
Decay of the slow calcium current in twitch muscle fibers of the frog is influenced by intracellular EGTA. Francini F, et al. **J Gen Physiol** 1989 Nov;94(5):953–69
Effects of magnesium on inactivation of the voltage-gated calcium current in cardiac myocytes. Hartzell HC, et al. **J Gen Physiol** 1989 Oct;94(4):745–67
Calcium currents in bullfrog sympathetic neurons. I. Activation kinetics and pharmacology. Jones SW, et al. **J Gen Physiol** 1989 Jul;94(1):151–67
Influence of sodium-calcium exchange on calcium current rundown and the duration of calcium-dependent chloride currents in pituitary cells, studied with whole cell and perforated patch recording. Korn SJ, et al. **J Gen Physiol** 1989 Nov;94(5):789–812
Blockade of current through single calcium channels by trivalent lanthanide cations. Effect of ionic radius on the rates of ion entry and exit. Lansman JB. **J Gen Physiol** 1990 Apr;95(4):679–96
Ca2+ channels from the sea urchin sperm plasma membrane. Liévano A, et al. **J Gen Physiol** 1990 Feb;95(2):273–96
Activation kinetics of single high-threshold calcium channels in the membrane of sensory neurons from mouse embryos. Kostyuk PG, et al. **J Membr Biol** 1989 Aug;110(1):29–38
Involvement of dihydropyridine-sensitive Ca2+ channels in adenosine-evoked inhibition of acetylcholine release from guinea pig ileal preparation. Katsuragi T, et al. **J Neurochem** 1990 Aug;55(2):363–9
Functional coupling of the gamma-aminobutyric acidB receptor with calcium ion channel and GTP-binding protein and its alteration following solubilization of the gamma-aminobutyric acidB receptor. Ohmori Y, et al. **J Neurochem** 1990 Jan;54(1):80–5
Properties and distribution of single voltage-gated calcium channels in adult hippocampal neurons. Fisher RE, et al. **J Neurophysiol** 1990 Jul;64(1):91–104
Low-threshold calcium current in isolated Purkinje cell bodies of rat cerebellum. Kaneda M, et al. **J Neurophysiol** 1990 May;63(5):1046–51
Low- and high-voltage-activated calcium currents in rat spinal dorsal horn neurons. Ryu PD, et al. **J Neurophysiol** 1990 Feb;63(2):273–85
Characterization of Ca current underlying burst formation in lobster cardiac ganglion motorneurons. Tazaki K, et al. **J Neurophysiol** 1990 Feb;63(2):370–84
Protein kinase C-dependent and -independent effects of phorbol esters on hippocampal calcium channel current. Doerner D, et al. **J Neurosci** 1990 May;10(5):1699–706
Endogenous modulation of ACh release by somatostatin and the differential roles of Ca2+ channels. Gray DB, et al. **J Neurosci** 1990 Aug;10(8):2687–98
Regulation of tension on hair-cell transduction channels: displacement and calcium dependence. Hacohen N, et al. **J Neurosci** 1989 Nov;9(11):3988–97
Dihydropyridine actions on calcium currents of frog sympathetic neurons. Jones SW, et al. **J Neurosci** 1990 Jul; 10(7):2261–7
Neurotransmitter modulation of calcium current in rat spinal cord neurons. Sah DW. **J Neurosci** 1990 Jan;10(1):136–41
Calcium-dependent volume reduction in regenerating ganglion cell axons in vitro. Edmonds BT, et al. **J Neurosci Res** 1990 Jun;26(2):168–80
D2 dopamine receptors modulate calcium channel currents and catecholamine secretion in bovine adrenal chromaffin cells. Bigornia L, et al. **J Pharmacol Exp Ther** 1990 Feb; 252(2):586–92
Dihydropyridine-sensitive low-threshold calcium channels in isolated rat hypothalamic neurones. Akaike N, et al. **J Physiol (Lond)** 1989 May;412:181–95
Low-voltage-activated calcium current in rat aorta smooth muscle cells in primary culture. Akaike N, et al. **J Physiol (Lond)** 1989 Sep;416:141–60
Calcium currents in the normal adult rat sympathetic neurone. Belluzzi O, et al. **J Physiol (Lond)** 1989 May; 412:493–512
Pharmacological and anatomical separation of calcium currents in rat dentate granule neurones in vitro. Blaxter TJ, et al. **J Physiol (Lond)** 1989 May;412:93–112
A T-type Ca2+ current underlies low-threshold Ca2+ potentials in cells of the cat and rat lateral geniculate nucleus. Crunelli V, et al. **J Physiol (Lond)** 1989 Jun; 413:543–61
Interaction between calcium channel ligands and guanine nucleotides in cultured rat sensory and sympathetic neurones. Dolphin AC, et al. **J Physiol (Lond)** 1989 Jun; 413:271–88
Kinetic properties of the cardiac T-type calcium channel in the guinea-pig. Droogmans G, et al. **J Physiol (Lond)** 1989 Dec;419:627–50
Characterization of Ca2+ and K+ currents in the human Jurkat T cell line: effects of phytohaemagglutinin. Dupuis G, et al. **J Physiol (Lond)** 1989 May;412:135–54
Voltage-dependent and calcium-dependent inactivation of calcium channel current in identified snail neurones. Gutnick MJ, et al. **J Physiol (Lond)** 1989 May;412:197–220
Calcium channels in isolated rat dorsal horn neurones, including labelled spinothalamic and trigeminothalamic cells. Huang LY. **J Physiol (Lond)** 1989 Apr;411:161–77
Transient calcium current of retinal bipolar cells of the mouse. Kaneko A, et al. **J Physiol (Lond)** 1989 Mar; 410:613–29
Properties of calcium channels in guinea-pig gastric myocytes. Katzka DA, et al. **J Physiol (Lond)** 1989 Jun; 413:175–97
Deactivation kinetics of different components of calcium inward current in the membrane of mice sensory neurones. Kostyuk PG, et al. **J Physiol (Lond)** 1989 Feb;409:343–55
Two types of calcium currents in single smooth muscle cells from rat portal vein. Loirand G, et al. **J Physiol (Lond)** 1989 May;412:333–49
Characteristics of voltage-gated Ca2+ currents in ovine gonadotrophs. Mason WT, et al. **J Physiol (Lond)** 1989 Aug;415:367–91
Selective action of myasthenic syndrome antibodies on calcium channels in a rodent neuroblastoma x glioma cell line. Peers C, et al. **J Physiol (Lond)** 1990 Feb;421:293–308
Direct hormonal regulation of smooth muscle calcium current. Welling A, et al. **J Protein Chem** 1989 Jun; 8(3):417–9
A voltage-dependent calcium current in mouse MC3T3-E1 osteogenic cells. Amagai Y, et al. **Jpn J Physiol** 1989; 39(5):773–7
Receptor-mediated Ca++ entry in blood vessels. Hester RK. **Microcirc Endothelium Lymphatics** 1989 Feb-Apr; 5(1–2):31–53
Effects of inorganic and organic promoters and inhibitors of calcium influx on stretch-induced myogenic tone of vascular tissues. Nakayama K, et al. **Microcirc Endothelium Lymphatics** 1989 Feb-Apr; 5(1–2):55–76
Antipsychotic pimozide is a potent Ca2+ channel blocker in heart. Enyeart JJ, et al. **Mol Pharmacol** 1990 May; 37(5):752–7
Regulation of calcium current by low-Km cyclic AMP

phosphodiesterases in cardiac cells. Fischmeister R, et al. **Mol Pharmacol** 1990 Sep;38(3):426–33

Functional coupling of presynaptic GABAB receptors with voltage-gated Ca2+ channel: regulation by protein kinases A and C in cultured spinal cord neurons. Kamatchi GL, et al. **Mol Pharmacol** 1990 Sep;38(3):342–7

Na(+)-Ca2+ exchange activity in central nerve endings. I. Ionic conditions that discriminate 45Ca2+ uptake through the exchanger from that occurring through voltage-operated Ca2+ channels. Taglialatela M, et al. **Mol Pharmacol** 1990 Sep;38(3):385–92

Anion channels activated by adrenaline in cardiac myocytes. Ehara T, et al. **Nature** 1990 Sep 20;347(6290):284–6

Direct measurement of exocytosis and calcium currents in single vertebrate nerve terminals. Lim NF, et al. **Nature** 1990 Mar 29;344(6265):449–51

Glucagon stimulates the cardiac Ca2+ current by activation of adenylyl cyclase and inhibition of phosphodiesterase. Méry PF, et al. **Nature** 1990 May 10;345(6271):158–61

Novel mechanism of voltage-dependent gating in L-type calcium channels. Pietrobon D, et al. **Nature** 1990 Aug 16;346(6285):651–5

Voltage-dependent InsP3-insensitive calcium channels in membranes of pancreatic endoplasmic reticulum vesicles. Schmid A, et al. **Nature** 1990 Jul 26;346(6282):374–6

Calcium hotspots caused by L-channel clustering promote morphological changes in neuronal growth cones. Silver RA, et al. **Nature** 1990 Feb 22;343(6260):751–4

Modulation of dihydropyridine-sensitive Ca2+ channels by glucose metabolism in mouse pancreatic beta-cells [see comments] Smith PA, et al. **Nature** 1989 Nov 30; 342(6249):550–3 Comment in: Nature 1990 Mar 22;344(6264):300.

Ventricular and atrial electrophysiological effects of a IC antiarrhythmic drug, cibenzoline, in the innervated dog heart. Role of sodium and calcium channels. Timour Q, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Sep; 340(3):338–44

Calcium channel involvement in potassium depolarization-induced phosphoinositide hydrolysis in rat cortical slices. Gonzales RA, et al. **Neurochem Res** 1989 Nov;14(11):1067–74

Thyroliberin and dihydropyridines modulate prolactin gene expression through interacting pathways in GH3 cells. Laverrière JN, et al. **Neuroendocrinology** 1989 Dec; 50(6):693–701

Inhibition of Ca2+ and K+ channels in sympathetic neurons by neuropeptides and other ganglionic transmitters. Bley KR, et al. **Neuron** 1990 Mar;4(3):379–91

Differential G protein-mediated coupling of neurotransmitter receptors to Ca2+ channels in rat dorsal root ganglion neurons in vitro. Ewald DA, et al. **Neuron** 1989 Feb; 2(2):1185–93

Imaging of cytosolic Ca2+ transients arising from Ca2+ stores and Ca2+ channels in sympathetic neurons. Lipscombe D, et al. **Neuron** 1988 Jul;1(5):355–65

Calcium and calcium-dependent chloride currents generate action potentials in solitary cone photoreceptors. Maricq AV, et al. **Neuron** 1988 Aug;1(6):503–15

Elementary properties and pharmacological sensitivities of calcium channels in mammalian peripheral neurons. Plummer MR, et al. **Neuron** 1989 May;2(5):1453–63

Evidence for the involvement of distinct voltage-sensitive calcium channels in the release of 3H-dopamine from primary cultures of mesencephalic neurons. Grilli MG, et al. **Neuropharmacology** 1989 Nov;28(11):1275–8

Genetic up-regulation of calcium channels in a cellular model of ethanol dependence. Harper JC, et al. **Neuropharmacology** 1989 Dec;28(12):1299–302

The blocking effects of omega-conotoxin on Ca current in bovine chromaffin cells. Hans M, et al. **Neurosci Lett** 1990 Jun 22;114(1):63–8

Extracellular adenosine 5'-triphosphate-evoked norepinephrine secretion not relating to voltage-gated Ca channels in pheochromocytoma PC12 cells. Inoue K, et al. **Neurosci Lett** 1989 Dec 4;106(3):294–9

Neurochemical evidence for the involvement of N-type calcium channels in transmitter secretion from peripheral endings of sensory nerves in guinea pigs. Maggi CA, et al. **Neurosci Lett** 1990 Jul 3;114(2):203–6

L-type calcium channels in the regulation of neurite outgrowth from rat dorsal root ganglion neurons in culture. Robson SJ, et al. **Neurosci Lett** 1989 Sep 25;104(1–2):110–4

Hippocampal CA1 pyramidal cells of rats have four voltage-dependent calcium conductances. Takahashi K, et al. **Neurosci Lett** 1989 Sep 25;104(1–2):229–34

Cultured glial precursor cells from mouse cortex express two types of calcium currents. Verkhratsky AN, et al. **Neurosci Lett** 1990 May 4;112(2–3):194–8

Differential blockade by nifedipine and omega-conotoxin GVIA of alpha 1- and beta 1-adrenoceptor-controlled calcium channels on motor nerve terminals of the rat. Wessler I, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):173–8

Control of intracellular calcium in vertebrate photoreceptors. McNaughton PA, et al. **Neurosci Res Suppl** 1989;10:S23–35 (30 ref.)

A possible pacemaker mechanism in pars compacta neurons of the guinea-pig substantia nigra revealed by various ion channel blocking agents. Harris NC, et al. **Neuroscience** 1989;31(2):355–62

Two types of Ca channel in rat pancreatic beta-cells. Ashcroft FM, et al. **Pflugers Arch** 1990 Jan;415(4):504–6

Appearance of the slow Ca conductance in myotubes from mutant mice with "muscular dysgenesis". Bournaud R, et al. **Pflugers Arch** 1989 Aug;414(4):410–5

Calcium channel current and its sensitivity to (+) isradipine in cultured pregnant rat myometrial cells. An electrophysiological and a binding study. Honoré E, et al. **Pflugers Arch** 1989 Aug;414(4):477–83

The action of caffeine on inward barium current through voltage-dependent calcium channels in single rabbit ear artery cells. Hughes AD, et al. **Pflugers Arch** 1990 Jun; 416(4):462–6

L-type Ca-channels: similar Q10 of Ca-, Ba- and Na-conductance points to the importance of ion-channel interaction. Klöckner U, et al. **Pflugers Arch** 1990 Feb; 415(5):638–41

Lack of direct evidence for a functional role of voltage-operated calcium channels in juxtaglomerular cells. Kurtz A, et al. **Pflugers Arch** 1990 May;416(3):281–7

Temperature sensitivity of Ca currents in chick sensory neurones. Nobile M, et al. **Pflugers Arch** 1990 Mar; 415(6):658–63

Regulation of Ca2+ current in frog ventricular myocytes by the holding potential, c-AMP and frequency. Schouten VJ, et al. **Pflugers Arch** 1989 Oct;415(1):1–11

Calcium current inactivation during nerve-growth-factor-induced differentiation of PC12 cells. Streit J, et al. **Pflugers Arch** 1990 Jun;416(4):368–74

Drug- and disease-induced regulation of voltage-dependent calcium channels. Ferrante J, et al. **Pharmacol Rev** 1990 Mar;42(1):29–44 (140 ref.)

Neuronal modulation of calcium channel activity in cultured rat astrocytes. Corvalan V, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4345–8

Dynorphin A and cAMP-dependent protein kinase independently regulate neuronal calcium currents. Gross RA, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7025–9

Funnel-web spider venom and a toxin fraction block calcium current expressed from rat brain mRNA in Xenopus oocytes. Lin JW, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4538–42

Gamma-aminobutyrate type B receptor modulation of L-type calcium channel current at bipolar cell terminals in the retina of the tiger salamander. Maguire G, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10144–7

Specific inhibition of long-lasting, L-type calcium channels by synthetic parathyroid hormone. Pang PK, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):623–7

Increase in T-type calcium current in atrial myocytes from adult rats with growth hormone-secreting tumors. Xu XP, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4655–9

Beta-adrenergic stimulation of calcium channels occurs by potentiation of high-activity gating modes. Yue DT, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):753–7

A model of the single atrial cell: relation between calcium current and calcium release. Earm YE, et al. **Proc R Soc Lond [Biol]** 1990 May 22;240(1297):83–96

Changes in cytosolic calcium monitored by inward currents during action potentials in guinea-pig ventricular cells. Terrar DA, et al. **Proc R Soc Lond [Biol]** 1989 Nov 22; 238(1291):171–88

Light-induced relaxation of smooth muscle after treatment with BAY K 8644 is related to release of nitric oxide. Golenhofen K, et al. **Prog Clin Biol Res** 1990;327:595–604

Ionic and cellular basis for slow-wave-type and spike-like action potentials. Huizinga JD, et al. **Prog Clin Biol Res** 1990;327:605–15 (16 ref.)

Effects of calcium channel activators on contractile behavior in vascular smooth muscle. Moreland S, et al. **Prog Clin Biol Res** 1990;327:525–34

Mechanism of electrical rhythmicity in colonic smooth muscle: an hypothesis. Sanders KM, et al. **Prog Clin Biol Res** 1990;327:307–21

Two types of Ca channels in mammalian intestinal smooth muscle. Yabu H, et al. **Prog Clin Biol Res** 1989;315:469–70

Receptor-controlled calcium discharge in frog heart cells. Niedergerke R, et al. **Q J Exp Physiol** 1989 Dec; 74(7):987–1002

Properties and regulation of calcium channels in muscle cells. Pelzer D, et al. **Rev Physiol Biochem Pharmacol** 1990; 114:107–207 (536 ref.)

The relationship between charge movements associated with ICa and INa-Ca in cardiac myocytes [see comments] Bridge JH, et al. **Science** 1990 Apr 20;248(4953):376–8 Comment in: Science 1990 Apr 20;248(4953):283.

Subcellular calcium transients visualized by confocal microscopy in a voltage-clamped vertebrate neuron. Hernández-Cruz A, et al. **Science** 1990 Feb 16; 247(4944):858–62

Odor stimuli trigger influx of calcium into olfactory neurons of the channel catfish. Restrepo D, et al. **Science** 1990 Sep 7;249(4973):1166–8

Chloride channels in cystic fibrosis patients. Wine JJ, et al. **Science** 1990 Jan 12;247(4939):222

Modulation of neuronal calcium currents by G protein activation. Dolphin AC, et al. **Soc Gen Physiol Ser** 1990; 45:11–27 (63 ref.)

The physiological role of calcium-dependent channels. Marty A. **Trends Neurosci** 1989 Nov;12(11):420–4 (61 ref.)

[Determination of 45Ca transmembrane flux and its application to research on calcium antagonists] Dong H, et al. **Sheng Li Ko Hsueh Chin Chan** 1990 Apr;21(2):171–4 (26 ref.) **(Chi)**

[The voltage dependency calcium channels] Tang YG, et al. **Sheng Li Ko Hsueh Chin Chan** 1989 Oct;20(4):328–34 (47 ref.) **(Chi)**

[Relation between post-thrombotic syndrome, ADP-induced thrombocyte aggregation and intrathrombocyte calcium content] Heintz B, et al. **Klin Wochenschr** 1989 Dec 4; 67(23):1194–8 (Eng. Abstr.) **(Ger)**

[Psychotropic drugs and ion channels] Ogata N. **Fukuoka Igaku Zasshi** 1990 Jun;81(6):215–20 **(Jpn)**

[Current topics in receptor-dependent Ca2+ channel] Asayama J, et al. **Nippon Rinsho** 1989 Aug;47(8):1702–7 **(Jpn)**

[Variety of Ca2+ channel in plasma membrane] Kajioka S, et al. **Nippon Rinsho** 1989 Aug;47(8):1689–95 **(Jpn)**

[Skeletal muscle receptors] Ohta M, et al. **Nippon Rinsho** 1990 Jul;48(7):1385–92 **(Jpn)**

[Adaptation to stress increases the resistance of isolated heart to damaging effects of Ca2+ due to optimization of Ca pump function in the sarcoplasmic reticulum] Meerson FZ, et al. **Biull Eksp Biol Med** 1989 Oct;108(10):412–4 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Cellular distribution and biochemical characterization of G proteins in skeletal muscle: comparative location with voltage-dependent calcium channels. Toutant M, et al. **EMBO J** 1990 Feb;9(2):363–9

Surface topography analysis of the ryanodine receptor/junctional channel complex based on proteolysis sensitivity mapping. Marks AR, et al. **J Biol Chem** 1990 Aug 5;265(22):13143–9

Subunit structure and localization of dihydropyridine-sensitive calcium channels in mammalian brain, spinal cord, and retina. Ahlijanian MK, et al. **Neuron** 1990 Jun;4(6):819–32

CALCIUM CHLORIDE

ADMINISTRATION & DOSAGE

Calcium does not augment phenylephrine's hypertensive effects. Butterworth JF 4th, et al. **Crit Care Med** 1990 Jun; 18(6):603–6

[Free choice of salt solutions and functional enzyme-transport mechanisms of the small intestine in relation to different calcium levels in the body] Gurman EG, et al. **Fiziol Zh** 1990 May-Jun;36(3):35–40 (Eng. Abstr.) **(Rus)**

[Lowering the toxic effect of fluorine on warm-blooded animals by changing the chemical composition of water] Opopol NI, et al. **Gig Sanit** 1989 Jun;(6):69–71 **(Rus)**

METABOLISM

Twenty-four-hour whole-body retention of 47Ca-chloride: an index of global bone metabolism in rat models. Seto H, et al. **Int J Rad Appl Instrum [B]** 1989;16(8):799–804

The basement membrane glycoprotein entactin promotes cell attachment and binds calcium ions. Chakravarti S, et al. **J Biol Chem** 1990 Jun 25;265(18):10597–603

PHARMACOKINETICS

Ionization and hemodynamic effects of calcium chloride and calcium gluconate in the absence of hepatic function. Martin TJ, et al. **Anesthesiology** 1990 Jul;73(1):62–5

PHARMACOLOGY

One-day kinetics of CaCl2 arrhythmogenicity following acute isoprenaline treatment. Mikus L, et al. **Acta Physiol Hung** 1990;75 Suppl:213–4

Possible antitumor promoter in the glandular stomach: calcium chloride. Furihata C, et al. **Basic Life Sci** 1990; 52:395–400

Adrenergic and calcium-mediated subcellular redistribution of protein kinase C in primary neuronal cultures. Kalberg CJ, et al. **Biochem Biophys Res Commun** 1990 Jan 15; 166(1):22–8

The contributions of Ca2+, phospholipids and tissue-factor apoprotein to the activation of human blood-coagulation factor X by activated factor VII. Bom VJ, et al. **Biochem J** 1990 Jan 15;265(2):327–36

Protein phosphorylation and hydrogen ions modulate calcium-induced closure of gap junction channels. Arellano RO, et al. **Biophys J** 1990 Feb;57(2):363–7

Inhibition of a cAMP-dependent Ca-activated K conductance by forskolin prolongs Ca action potential duration in lamprey sensory neurons. Womble MD, et al. **Brain Res** 1990 Jun 4;518(1–2):135–42

The effect of CaCl2 and verapamil on the binding of cisplatin to cultures of normal and transformed human fibroblasts. Hamel B, et al. **Cancer Biochem Biophys** 1990 Apr; 11(2):155–68

Injury induced by fatty acids or bile acid in isolated human colonocytes prevented by calcium. Buset M, et al. **Cancer Lett** 1990 Apr 30;50(3):221–6

Calcium chloride inhibits stimulation of replicative DNA synthesis by sodium chloride in the pyloric mucosa of rat stomach. Furihata C, et al. **Carcinogenesis** 1989 Nov; 10(11):2135–7

Effects of Ca2+ entry blockers on CaCl2-, KCl- and noradrenaline-induced contractions of goat cerebral arteries. Salom JB, et al. **Eur J Pharmacol** 1990 Feb 20;

177(1–2):1–8
Calcium–induced aggregation of the urea–deaggregated human lens insoluble protein. Satoh K, et al. **Exp Eye Res** 1990 Jun;50(6):719–23
Effect of calcium ion on analgesia of opioid peptides. Wang JF, et al. **Int J Neurosci** 1989 Aug;47(3–4):279–85
Circular dichroism of bovine serum albumin in divalent salt solutions. Sun SF, et al. **Int J Pept Protein Res** 1989 Jul; 34(1):46–51
A Dictyostelium discoideum mutant exhibiting calcium–dependent, high–level detergent resistance. Madigan SJ, et al. **J Bacteriol** 1990 May;172(5):2785–7
Lanthanum inhibits steady–state turnover of the sarcoplasmic reticulum calcium ATPase by replacing magnesium as the catalytic ion. Fujimori T, et al. **J Biol Chem** 1990 Sep 25; 265(27):16262–70
Fluorescence energy transfer studies of purified erythrocyte Ca2+–ATPase. Ca2+–regulated activation by oligomerization. Kosk–Kosicka D, et al. **J Biol Chem** 1989 Nov 25;264(33):19495–9
Calcium stimulates ATP–Mg/Pi carrier activity in rat liver mitochondria. Nosek MT, et al. **J Biol Chem** 1990 May 25;265(15):8444–50
Transcriptional and posttranscriptional regulation of the rat prolactin gene by calcium. Preston GM, et al. **Mol Cell Biol** 1990 Feb;10(2):442–8
Calcium regulation of prolactin gene expression: opposing effects of extracellular CaCl2 and Ca2+ ionophores. White BA, et al. **Mol Endocrinol** 1989 Nov;3(11):1757–64
Characterization of melatonin receptors in the rat area postrema: modulation of affinity with cations and guanine nucleotides. Laitinen JT, et al. **Neuroendocrinology** 1990 Jun;51(6):619–24
The effect of calcium chloride on anti–Xa activity of heparin and its molecular weight fractions. Barrowcliffe TW, et al. **Thromb Haemost** 1989 Nov 24;62(3):950–4
Inhibition by calcium ions of thrombin. Oshima G. **Thromb Res** 1990 May 15;58(4):383–93
[Pharmacology of cardiopulmonary resuscitation] Hoffmann AC, et al. **Ann Fr Anesth Reanim** 1990;9(3):204–7 (17 ref.) (Eng. Abstr.) **(Fre)**
[Effect of electrolytes, components of peritoneal dialysis fluid, on the stability of glucose] Trzeciak M, et al. **Acta Pol Pharm** 1989;46(2):174–8 (Eng. Abstr.) **(Pol)**
[An optimal coagulation method to determine anti–heparin compounds in biological specimens] Roszkowska–Jakimiec W. **Rocz Akad Med Bialymstoku** 1986–87;31–32:143–51 (Eng. Abstr.) **(Pol)**
[Effect of stress of "struggle" and the stress of "capitulation" on the resistance of the myocardium to excessive level of calcium] Meerson FZ, et al. **Biull Eksp Biol Med** 1990 Apr; 109(4):325–7 (Eng. Abstr.) **(Rus)**
[The effect of temperature and Ca2+ on the interaction of high–density lipoproteins with epithelial cells in the human small intestine] Safonova IG, et al. **Biull Eksp Biol Med** 1989 Dec;108(12):666–8 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Oral calcium chloride in hypoparathyroidism refractory to massive doses of calcium carbonate and vitamin D. Komindr S, et al. **Am J Med Sci** 1989 Sep;298(3):182–4
Treatment of nesacaine–MPF–induced back pain with calcium chloride [letter; comment] Dirkes WE Jr. **Anesth Analg** 1990 Apr;70(4):461–2 Comment on: Anesth Analg 1989 Jul;69(1):113–5.
Postischemic [Ca2+] repletion improves cardiac performance without altering oxygen demands. Yokoyama H, et al. **Ann Thorac Surg** 1990 Jun;49(6):894–902

TOXICITY

[Toxicologic assessment of calcium chloride and its compounds] Sukhanov VV, et al. **Gig Tr Prof Zabol** 1990; (5):51–2 **(Rus)**

CALCIUM–DEPENDENT ACTIVATOR PROTEIN see **CALMODULIN**

CALCIUM–DEPENDENT NEUTRAL PROTEINASE see **CALPAIN**

CALCIUM–DEPENDENT REGULATOR see **CALMODULIN**

CALCIUM, DIETARY

Calcium in the diet: food sources, recommended intakes, and nutritional bioavailability. Miller DD. **Adv Food Nutr Res** 1989;33:103–56 (147 ref.)
Role of dietary calcium in osteoporosis. Arnaud CD. **Adv Intern Med** 1990;35:93–106 (85 ref.)
Calcium uptake by duodenal enterocytes isolated from young and mature SHR and WKY rats: influence of dietary calcium. Roullet CM, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):F574–9
The role of dietary calcium in the pathogenesis and treatment of osteoporosis. Reid IR. **N Z Med J** 1989 Oct 11; 102(877):532–3 (21 ref.)
[Daily intake of macro and trace elements in the diet. 4. Sodium, potassium, calcium, and magnesium] Cocchioni M, et al. **Ann Ig** 1989 Sep–Oct;1(5):923–42 (Eng. Abstr.) **(Ita)**

ADMINISTRATION & DOSAGE

Blood lead, calcium status, and behavior in preschool children. Laraque D, et al. **Am J Dis Child** 1990 Feb; 144(2):186–9
The role of calcium in osteoporosis. Arnaud CD, et al. **Annu Rev Nutr** 1990;10:397–414 (125 ref.)
Calcium requirements for dogs [letter] Pigott RF. **Aust Vet J** 1990 Feb;67(2):N25
Dietary calcium deprivation increased the levels of plasma catecholamines and catecholamine–synthesizing enzymes of adrenal glands in rats. Hagihara M, et al. **Biochem Pharmacol** 1990 Apr 1;39(7):1229–31
Dietary calcium, physical activity, and risk of hip fracture [letter; comment] Adebajo AO. **BMJ** 1989 Nov 4; 299(6708):1165 Comment on: BMJ 1989 Oct 7;299(6704):889–92.
Dietary calcium, sex hormones, and bone mineral density in men. Kelly PJ, et al. **BMJ** 1990 May 26;300(6736):1361–4
Calcium supplementation of the diet: justified by present evidence. Nordin BE, et al. **BMJ** 1990 Apr 21; 300(6731):1056–60 (87 ref.)
Dietary calcium, physical activity, and risk of hip fracture: a prospective study [see comments] Wickham CA, et al. **BMJ** 1989 Oct 7;299(6704):889–92 Comment in: BMJ 1989 Nov 4;299(6708):1165.
The effect of diets adequate and deficient in calcium on blood pressures and the activities of intestinal and kidney plasma membrane enzymes in normotensive and spontaneously hypertensive rats. Blakeborough P, et al. **Br J Nutr** 1990 Jan;63(1):65–78
The effect of combined dietary iron, calcium and folic acid supplementation on apparent 65Zn absorption and zinc status in pregnant rats. Southon S, et al. **Br J Nutr** 1989 Sep;62(2):415–23
Calcium, magnesium and phosphorus status of elderly inpatients: dietary intake, metabolic balance studies and biochemical status. Thomas AJ, et al. **Br J Nutr** 1989 Jul; 62(1):211–9
Low calcium diet in idiopathic urolithiasis: a risk factor for osteopenia as great as in primary hyperparathyroidism. Fuss M, et al. **Br J Urol** 1990 Jun;65(6):560–3
Modelling the relationships of egg weight, specific gravity, shell calcium and shell thickness. Soonchareneying S, et al. **Br Poult Sci** 1989 Sep;30(3):623–31
Involvement of low–calcium diet in the reduced bone mineral content of idiopathic renal stone formers. Fuss M, et al. **Calcif Tissue Int** 1990 Jan;46(1):9–13
Effects of physical activity, dietary calcium intake and selected lifestyle factors on bone density in young women. McCulloch RG, et al. **Can Med Assoc J** 1990 Feb 1; 142(3):221–7
The influence of dairy and nondairy calcium on subsite large–bowel cancer risk. Stemmermann GN, et al. **Dis Colon Rectum** 1990 Mar;33(3):190–4
Acute effect of parathyroid hormone–(1–34) fragment on blood pressure in rats fed a low calcium diet. Togari A, et al. **Gen Pharmacol** 1990;21(4):547–9
Comparison of effects of verapamil, low calcium diet and betamethasone on duodenal calcium absorption efficiency in the chick. Blahos J, et al. **Horm Metab Res** 1989 Nov; 21(11):612–5
Progesterone production and release in cultured placental tissue from diabetic and normal rats fed high calcium [letter] Reiziss SM, et al. **In Vitro Cell Dev Biol** 1989 Nov; 25(11):978–9
The effect of dietary interventions to reduce blood pressure in normal humans. Luft FC, et al. **J Am Coll Nutr** 1989 Dec;8(6):495–503 (34 ref.)
Effect of increased dietary calcium on the development of reduced renal mass saline hypertension in rats. Pamnani MB, et al. **J Am Coll Nutr** 1990 Feb;9(1):35–43
Validation of a quantitative food frequency questionnaire for rapid assessment of dietary calcium intake. Musgrave KO, et al. **J Am Diet Assoc** 1989 Oct;89(10):1484–8
The necessity and safety of calcium and vitamin D in the elderly. Honkanen R, et al. **J Am Geriatr Soc** 1990 Aug; 38(8):862–6
Calcium intake and bone health throughout life. Heaney RP. **J Am Med Wom Assoc** 1990 May–Jun;45(3):80–6 (47 ref.)
Persistently elevated parathyroid hormone secretion and action in young women after four weeks of ingesting high phosphorus, low calcium diets. Calvo MS, et al. **J Clin Endocrinol Metab** 1990 May;70(5):1334–40
The effects of the menopause on calcitriol and parathyroid hormone: responses to a low dietary calcium stress test. Prince RL, et al. **J Clin Endocrinol Metab** 1990 Apr; 70(4):1119–23
Ciprofloxacin pharmacokinetics after a standard or high–fat/high–calcium breakfast. Frost RW, et al. **J Clin Pharmacol** 1989 Oct;29(10):953–5
Effect of high calcium diet and nitrendipine on the development of high blood pressure in adrenalectomised spontaneously hypertensive rats treated with aldosterone. Semafuko WE, et al. **J Hum Hypertens** 1990 Apr;4(2):165–7
Calcium intake, calcium excretion and blood pressure in adolescents in the upper decile of the distribution: the Torrejon study. Martell–Claros N, et al. **J Hypertens Suppl** 1989 Dec;7(6):S256–7
The effects of calcium on bone mineral density in postmenopausal women with colles fractures. Cimino PM, et al. **J La State Med Soc** 1989 Nov;141(11):24–9
Calcium and magnesium utilization in rats: effect of dietary butterfat and calcium and of age. Kaup SM, et al. **J Nutr** 1990 Mar;120(3):266–73
Absence of effect of supplemental oral calcium on ornithine decarboxylase (ODC) activity in colonic mucosae of healthy individuals with a family history of colorectal cancer. Love RR, et al. **J Surg Oncol** 1990 Feb;43(2):79–82
Dietary calcium supplementation and prevention of pregnancy hypertension [letter] [see comments] Lopez–Jaramillo P, et al. **Lancet** 1990 Feb 3;335(8684):293 Comment in: Lancet 1990 Apr 7;335(8693):861.
Dietary calcium and chronic diseases. McCarron DA, et al. **Med Hypotheses** 1990 Apr;31(4):265–73 (82 ref.)
Possible involvement of atrial natriuretic factor in the antihypertensive action of a high–calcium diet in spontaneously hypertensive and Wistar–Kyoto rats. Kohno M, et al. **Metabolism** 1989 Oct;38(10):997–1004
Use of oyster shell as calcium supplement. Part 1. Effect on the utilization of gossypol–containing cotton seed cake by the chicken. Aletor VA, et al. **Nahrung** 1990;34(4):311–8
Use of oyster shell as calcium supplement. Part 2. An assessment of the responses of hepatic and serum enzymes, relative organ weights, and bone mineralization in the broiler chicken fed gossypol–containing cottonseed cake supplemented with oyster shell. Aletor VA, et al. **Nahrung** 1990;34(4):319–24
Calcium, dairy products, and colorectal cancer. Negri E, et al. **Nutr Cancer** 1990;13(4):255–62
Nutrition and bone. Einhorn TA, et al. **Orthop Clin North Am** 1990 Jan;21(1):43–50
Factors influencing the self–selection of calcium in lactating rats. Millelire L, et al. **Physiol Behav** 1989 Sep;46(3):429–34
Relationship of dietary aluminum, phosphorus, and calcium to phosphorus and calcium metabolism and growth performance of broiler chicks. Hussein AS, et al. **Poult Sci** 1990 Jun;69(6):966–71
Intra– and extracellular calcium and hypertension. Heagerty AM. **Proc Nutr Soc** 1990 Feb;49(1):83–9 (40 ref.)
Long–term effects of dietary calcium on risk markers for colon cancer in patients with familial polyposis. Stern HS, et al. **Surgery** 1990 Sep;108(3):528–33
[Evaluation of calcium and phosphorus nutrition in residents of Beijing] Feng AL. **Chung Hua I Hsueh Tsa Chih** 1989 Sep;69(9):509–11 **(Chi)**
[Circulatory changes in the rat tibia in dietary calcium and vitamin D deficiency. Effects of age and sex] Kapitola J, et al. **Sb Lek** 1990 Jan;92(1):6–11 (Eng. Abstr.) **(Cze)**
[Dietary calcium content and prevention of postmenopausal osteoporosis (letter)] van Hemert AM. **Ned Tijdschr Geneeskd** 1990 Feb 17;134(7):353–4 **(Dut)**
[Free choice of salt solutions and functional enzyme–transport mechanisms of the small intestine in relation to different calcium levels in the body] Gurman EG, et al. **Fiziol Zh** 1990 May–Jun;36(3):35–40 (Eng. Abstr.) **(Rus)**
[Methodological problems of evaluation of electrolyte intake in the clinical and population studies] Britov AN, et al. **Kardiologiia** 1989 Oct;29(10):88–93 (Eng. Abstr.) **(Rus)**
[The effect of dietotherapy and supplementary calcium intake on phosphorus–calcium homeostasis in hypertensive patients] Gladkevich AV, et al. **Vopr Pitan** 1990 Mar–Apr; (2):23–6 (Eng. Abstr.) **(Rus)**
[Response of vitamin D metabolites to calcium restriction in hypercalciuric renal lithiasis] Saro Gutiérrez G, et al. **Med Clin (Barc)** 1990 Mar 17;94(10):361–3 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

High dietary calcium to phosphorus ratio and alkali–forming potential as factors promoting silica urolithiasis in sheep. Stewart SR, et al. **J Anim Sci** 1990 Feb;68(2):498–503
Mucosal proliferation characteristics in ureterosigmoidostomy: effect of calcium supplement. Weber T, et al. **J Pediatr Surg** 1990 Jan;25(1):130–2; discussion 133
Dietary calcium and development of hypertension in spontaneously hypertensive rats. Tenner TE Jr, et al. **Magnesium** 1989;8(5–6):288–98
Order of exposure to high dietary calcium and gray strain infectious bronchitis virus alters renal function and the incidence of urolithiasis. Glahn RP, et al. **Poult Sci** 1989 Sep;68(9):1193–204

ANALYSIS

Calcium content of soup stocks with added vinegar. Hadfield LC, et al. **J Am Diet Assoc** 1989 Dec;89(12):1810–1
[Calcium content of food and prevention of postmenopausal osteoporosis] van Beresteijn EC. **Ned Tijdschr Geneeskd** 1989 Dec 16;133(50):2490–2 **(Dut)**

METABOLISM

Interrelations of calcium, fluorine and vitamin D in bone metabolism. Gaster D, et al. **Br J Nutr** 1967;21(2):413–8
Effect of dietary calcium and lead status on intestinal calcium absorption. Fullmer CS, et al. **Environ Res** 1990 Feb; 51(1):91–9
One–day test using stable isotopes to measure true fractional calcium absorption. Eastell R, et al. **J Bone Miner Res** 1989 Aug;4(4):463–8
Calcium absorption in women: relationships to calcium

intake, estrogen status, and age. Heaney RP, et al. **J Bone Miner Res** 1989 Aug;4(4):469–75

Calcium salts of fatty acids in diets that differ in neutral detergent fiber: effect on lactation performance and nutrient digestibility. Canale CJ, et al. **J Dairy Sci** 1990 Apr;73(4):1031–8

True absorption of calcium and phosphorus from alfalfa and corn silage when fed to lactating cows. Martz FA, et al. **J Dairy Sci** 1990 May;73(5):1288–95

Interactions of lactose with calcium, magnesium and zinc in rats. Greger JL, et al. **J Nutr** 1989 Nov;119(11):1691–7

Effect of dietary aluminum sulfate on calcium and phosphorus metabolism of broiler chicks. Hussein AS, et al. **Poult Sci** 1990 Jun;69(6):985–91

Influence of dietary calcium level and particle size of calcium source on in vivo calcium solubilization by commercial Leghorns. Rao KS, et al. **Poult Sci** 1989 Nov; 68(11):1499–505

Factors influencing the response of broiler chickens to calcium supplementation of canola meal. Summers JD, et al. **Poult Sci** 1990 Apr;69(4):615–22

The calcium controversy: finding a middle ground between the extremes. Heaney RP. **Public Health Rep** 1989 Sep–Oct; 104 Suppl:36–46 (60 ref.)

[Osteopathy in malabsorption syndromes] Kotova SM, et al. **Klin Med (Mosk)** 1989 Oct;67(10):74–8 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Studies on calcium absorption from milk using a double-label stable isotope technique. Fairweather-Tait SJ, et al. **Br J Nutr** 1989 Sep;62(2):379–88

Absorbability of calcium sources: the limited role of solubility. Heaney RP, et al. **Calcif Tissue Int** 1990 May; 46(5):300–4

Malabsorption of calcium in corticosteroid-induced osteoporosis. Morris HA, et al. **Calcif Tissue Int** 1990 May; 46(5):305–8

Potential of alfalfa as a source of calcium for calcium deficient horses. Cuddeford D, et al. **Vet Rec** 1990 Apr 28;126(17):425–9

PHARMACOLOGY

Effects of different calcium sources on iron absorption in postmenopausal women. Deehr MS, et al. **Am J Clin Nutr** 1990 Jan;51(1):95–9

The effects of dietary calcium on blood pressure in spontaneously hypertensive rats may be mediated by parathyroid hypertensive factor. Lewanczuk RZ, et al. **Am J Hypertens** 1990 May;3(5 Pt 1):349–53

Dietary calcium induces regression of left ventricular hypertrophy in hypertensive non-insulin-dependent diabetic blacks. Zemel MB, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 1):458–63

Low-calcium diets increase both production and clearance of 1,25-dihydroxyvitamin D3 in rats. Fox J, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E282–7

Oral verapamil and calcium and vitamin D metabolism in rats: effect of dietary calcium. Fox J, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):E632–8

Reduced intestinal calcium and dietary calcium intake, increased aluminum absorption, and tissue concentration in the rat. Provan SD, et al. **Biol Trace Elem Res** 1989–90 Winter;23:119–32

The influence of dietary calcium reduction on aluminum absorption and kinetics in the rabbit. Yokel RA, et al. **Biol Trace Elem Res** 1989–90 Winter;23:109–17

Relation of axial bone mass to habitual calcium intake and to cortical bone loss in healthy early postmenopausal women. van Beresteijn EC, et al. **Bone** 1990;11(1):7–13

Effects of dietary fat, calcium, and vitamin D on growth and mammary tumorigenesis induced by 7,12-dimethylbenz(a)anthracene in female Sprague-Dawley rats. Jacobson EA, et al. **Cancer Res** 1989 Nov 15;49(22):6300–3

Effects of calcium and bile acid feeding on colon tumors in the rat. McSherry CK, et al. **Cancer Res** 1989 Nov 1; 49(21):6039–43

Effect of a calcium-enriched diet on the colonic epithelial hyperproliferation induced by N-methyl-N'-nitro-N-nitrosoguanidine in rats on a low calcium and fat diet. Reshef R, et al. **Cancer Res** 1990 Mar 15;50(6):1764–7

Blood pressure in spontaneously hypertensive rats fed butterfat, corn oil, or fish oil. Karanja N, et al. **Hypertension** 1989 Dec;14(6):674–9

The effect of oral calcium load or verapamil on gentamicin-induced nephrotoxicity. Tamir A, et al. **J Clin Chem Clin Biochem** 1989 Nov;27(11):847–50

Effect of dietary calcium supplementation on blood pressure and calciotropic hormones in mineralocorticoid-salt hypertension. DiPette DJ, et al. **J Hypertens** 1990 Jun; 8(6):515–20

Association of magnesium deficiency with the blood pressure-lowering effects of calcium. Evans GH, et al. **J Hypertens** 1990 Apr;8(4):327–37

Effect of calcium on blood pressure, platelet aggregation and erythrocyte sodium transport in Dahl salt-sensitive rats. Kang JS, et al. **J Hypertens** 1990 Mar;8(3):245–50

Dietary Ca2+ prevents NaCl-induced exacerbation of hypertension and increases hypothalamic norepinephrine turnover in spontaneously hypertensive rats. Wyss JM, et al. **J Hypertens** 1989 Sep;7(9):711–9

Influence of dietary calcium and cholecalciferol on composition of plasma lipids in young pigs. Foley MK, et al. **J Nutr** 1990 Jan;120(1):45–51

Effect of excess dietary calcium on colon mucosal membranes and fecal lipids. Awad AB, et al. **Lipids** 1990 Jul; 25(7):379–82

Changes in intestinal function of rats initiated with DMH and fed varying levels of butterfat, calcium, and magnesium. Behling AR, et al. **Nutr Cancer** 1990; 13(3):189–99

Dietary regulation of the intestinal vitamin D receptor. **Nutr Rev** 1989 Sep;47(9):275–6 (10 ref.)

Effect of dietary sodium zeolite A and excess calcium on growth and tibia calcium and phosphorus concentration in uninfected and Eimeria acervulina-infected chicks. Watkins KL, et al. **Poult Sci** 1989 Sep;68(9):1236–40

Manganese utilization in chicks as affected by excess calcium and phosphorus ingestion. Wedekind KJ, et al. **Poult Sci** 1990 Jun;69(6):977–84

The impact of dietary sodium, potassium and calcium on blood pressure. Hung JS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Jan;89(1):17–22

Lack of effect of dietary minerals on liver cholesterol concentrations in rats. Beynen AC, et al. **Z Ernahrungswiss** 1989 Dec;28(4):316–8

[Effect of dietary calcium on erythrocyte sodium pump in spontaneously hypertensive rats (SHR)] Fujito K. **Nippon Jinzo Gakkai Shi** 1990 Jan;32(1):45–51 (Eng. Abstr.) **(Jpn)**

POISONING

Effects of moderate calcium overload on magnesium metabolism in growing pigs receiving normal magnesium intakes. Pointillart A. **Magnes Res** 1989 Dec;2(4):249–52

THERAPEUTIC USE

The role of calcium supplementation in the treatment of hypertension. Current evidence. Grobbee DE, et al. **Drugs** 1990 Jan;39(1):7–18 (90 ref.)

A total dietary program emphasizing magnesium instead of calcium. Effect on the mineral density of calcaneous bone in postmenopausal women on hormonal therapy. Abraham GE, et al. **J Reprod Med** 1990 May;35(5):503–7

Dietary calcium supplementation and prevention of pregnancy hypertension [letter; comment] Payne RB, et al. **Lancet** 1990 Apr 7;335(8693):861 Comment on: Lancet 1990 Feb 3;335(8684):293.

Calcium and osteoporosis. **Med J Aust** 1990 Aug 20; 153(4):237–9

Calcium and osteoporosis. Evans RA. **Med J Aust** 1990 Apr 16;152(8):431–3 (31 ref.)

Basic and clinical investigations of dietary calcium in the prevention of colorectal cancer. Wargovich MJ, et al. **Prev Med** 1989 Sep;18(5):672–9 (55 ref.)

CALCIUM DOBESILATE see under **BENZENESULFONATES**

CALCIUM FLUORIDE

ADVERSE EFFECTS

Threshold limit values for fluoride in fluorspar exposure [letter] Rama DB, et al. **S Afr Med J** 1990 Jan 20;77(2):112

PHARMACOKINETICS

Kinetics of acquisition and loss of calcium fluoride by enamel in vivo. Saxegaard E, et al. **Caries Res** 1989;23(6):406–11

PHARMACOLOGY

Comparison of the effects of NaF and CaF2 on rat gastric mucosa. A light-, scanning- and transmission electron microscopic study. Kertész P, et al. **Acta Morphol Hung** 1989;37(1–2):21–8

Relative cariostatic effects of KOH-soluble and KOH-insoluble fluoride in situ. Ogaard B, et al. **J Dent Res** 1990 Aug;69(8):1505–7

Critical evaluation of the composition and use of topical fluorides, with emphasis on the role of calcium fluoride in caries inhibition. Rølla G, et al. **J Dent Res** 1990 Feb; 69 Spec No:780–5; discussion 820–3 (44 ref.)

POISONING

Fluoride in workplace air and in urine of workers concentrating fluorspar. Rees D, et al. **Am J Ind Med** 1990; 17(3):311–20

CALCIUM GLUCONATE see under **GLUCONATES**

CALCIUM HYDROXIDE

Solubility of zinc oxide-eugenol and calcium hydroxide cements in simulated dentinal fluid. Driscoll CF, et al. **J Oral Rehabil** 1989 Sep;16(5):451–5

Leakage of chemical and light-cured basing materials. Chan KC, et al. **J Prosthet Dent** 1989 Oct;62(4):408–11

PHARMACOLOGY

[The hygienic evaluation of potato treated with the preparation Polikar made from the byproducts of soda manufacture] Tsyganenko OI, et al. **Vopr Pitan** 1990 Mar-Apr;(2):74–7 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Prevention of osteitis fibrosa, aluminium bone disease and soft-tissue calcification in dialysis patients: a long-term comparison of moderate doses of oral calcium +/- Mg(OH)2 vs Al(OH)3 +/- 1 alpha OH vitamin D3. Morinière P, et al. **Nephrol Dial Transplant** 1989; 4(12):1045–53

Healing of primate dental pulps capped with Teflon. Heys DR, et al. **Oral Surg Oral Med Oral Pathol** 1990 Feb; 69(2):227–37

[Root canal obturation based on Sealapex calcium hydroxide. A clinical and radiological follow-up after 1 year] Verdon C, et al. **Schweiz Monatsschr Zahnmed** 1990;100(7):829–34 (Eng. Abstr.) **(Fre)**

CALCIUM INHIBITORS, EXOGENOUS see **CALCIUM CHANNEL BLOCKERS**

CALCIUM ISOTOPES

Recent studies of human calcium metabolism using stable isotopic tracers. Yergey AL, et al. **Can J Physiol Pharmacol** 1990 Jul;68(7):973–6

CALCIUM LEUCOVORIN see **LEUCOVORIN**

CALCIUM METABOLISM DISORDERS

BLOOD

[Ionized calcium, total calcium and albumin corrected calcium in the serum in 1213 patients with suspected calcium metabolic diseases. A prospective multicenter study] Thode J, et al. **Ugeskr Laeger** 1989 Sep 18; 151(38):2423–5 (Eng. Abstr.) **(Dan)**

[Disordered calcium metabolism in Reiter's disease] Mavrov II, et al. **Vestn Dermatol Venerol** 1989;(8):7–9 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Cervical myelopathy in C.P.P.D. deposition disease. Parker GD, et al. **Australas Radiol** 1990 Feb;34(1):82–5

Crystal deposition diseases and osteoarthritis. **Curr Opin Rheumatol** 1989 Oct;1(3):391–5

Calcium and miscellaneous crystal deposition disease. Doherty M. **Curr Opin Rheumatol** 1989 Oct;1(3):294–302 (24 ref.)

Effects of high protein diet and sodium bicarbonate supplementation on calcium metabolism in rats. Funaba M, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Oct;35(5):495–503

[Ectopic calcification of the abdominal aorta and bone mineral content of vertebrae] Sugihara N, et al. **Nippon Ronen Igakkai Zasshi** 1989 May;26(3):256–64 (Eng. Abstr.) **(Jpn)**

[Evaluation of systemic magnesium reserves in patients with calcium-induced kidney calculi] Głuszek J. **Pol Arch Med Wewn** 1987 Sep;78(3):130–8 (Eng. Abstr.) **(Pol)**

[Osteopathy in malabsorption syndromes] Kotova SM, et al. **Klin Med (Mosk)** 1989 Oct;67(10):74–8 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[Efficacy of oral etidronic acid on pain and hypocalciuria in myeloma (letter)] Laroche M, et al. **Presse Med** 1989 Sep 16;18(28):1391 **(Fre)**

[Use of xidifon for prevention and treatment of nephropathies with metabolic disorders in children] Korovina NA, et al. **Pediatriia** 1990;(2):36–40 (Eng. Abstr.) **(Rus)**

ETIOLOGY

[Hypercalciuria in patients with diabetes mellitus type 1 and 2—studies of its pathogenesis using the oral calcium tolerance test] Gasińska T, et al. **Endokrynol Pol** 1989; 40(3):115–24 (Eng. Abstr.) **(Pol)**

METABOLISM

Calcium metabolism. Pak CY. **J Am Coll Nutr** 1989;8 Suppl:46S–53S (82 ref.)

[Phosphorus-calcium metabolism in hyperthyroidism] Popelier M, et al. **Presse Med** 1990 Apr 14;19(15):705–8 (Eng. Abstr.) **(Fre)**

VETERINARY

Solanum malacoxylon: a toxic plant which affects animal calcium metabolism. Boland RL. **Biomed Environ Sci** 1988 Dec;1(4):414–23 (42 ref.)

CALCIUM OXALATE

Retinal oxalosis. A clinicopathologic report. Wells CG, et al. **Arch Ophthalmol** 1989 Nov;107(11):1638–43

Comparison of urinary tract infection in calcium oxalate and calcium phosphate stone formers. Gault MH, et al. **Nephron** 1990;55(4):408–13

Crystal growth of calcium oxalate monohydrate and calcium carbonate from dilute solutions. Deganello S, et al. **Scanning Microsc** 1990 Mar;4(1):171–4

Effect of glycosaminoglycans on calcium oxalate crystal aggregation. Shirane Y, et al. **Tokushima J Exp Med** 1989 Dec;36(3–4):81–5

Effect of extract of Hirudo Medicinalis L. against adherence of calcium oxalate crystals to acid-injured bladder mucosa. Liu GD, et al. **Urol Res** 1989;17(6):381–4

[Inhibitory factors of calcium oxalate crystal growth in urinary macromolecules] Matsumoto A, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jun;81(6):883–8 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Calcium oxalate crystals in breast biopsies. The missing microcalcifications. Tornos C, et al. **Am J Surg Pathol** 1990 Oct;14(10):961–8

Alkali citrate for preventing recurrence of calcium oxalate stones. Hauser W, et al. **Eur Urol** 1990;17(3):248–51

Clinical and histologic features of primary oxalosis. Spiers EM, et al. **J Am Acad Dermatol** 1990 May;22(5 Pt 2):952–6

Effects of magnesium salts in preventing experimental oxalate urolithiasis in rats. Ogawa Y, et al. **J Urol** 1990 Aug;144(2 Pt 1):385–9

Crystal agglomeration is a major element in calcium oxalate urinary stone formation. Kok DJ, et al. **Kidney Int** 1990 Jan;37(1):51–6

Calcium in breast biopsy specimens [editorial] **Lancet** 1990 Mar 31;335(8692):763–4

Oxalate crystallization in the kidney in the presence of hyperuricemia. Noda S, et al. **Scanning Microsc** 1989 Sep; 3(3):829–35; discussion 835–6

Relation between calcium oxalate hydrate form found in renal calculi and some urinary parameters. Conte A, et al. **Urol Int** 1990;45(1):25–7

Comparative study of the circadian rhythmicity in the urinary concentration of glycosaminoglycans in patients of calcium oxalate nephrolithiasis and in healthy adults. Sidhu H, et al. **Urol Int** 1989;44(4):218–21

[Risk factors for the formation of urinary calcium-containing stones in diabetics] Liu JG, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Nov;28(11):649–53, 699–700 (Eng. Abstr.) **(Chi)**

[On the types and distribution of crystals in medical plants] Xu YM, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Feb; 14(2):6–8, 61 (Eng. Abstr.) **(Chi)**

[The quantitative study of inhibitory effect of pentosan polysulfate and chlorophyllin on the experimental calcium oxalate stone] Miyazawa K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jun;80(6):861–9 (Eng. Abstr.) **(Jpn)**

CHEMICAL SYNTHESIS

Production of calcium oxalate monohydrate, dihydrate or trihydrate. A comparative study. Grases F, et al. **Urol Res** 1990;18(1):17–20

METABOLISM

Facial-auditory nerve oxalosis [letter; comment] Anderson B, et al. **Am J Med** 1990 Jan;88(1):87–8 Comment on: Am J Med 1989 Jul;87(1):91–2.

Calcium oxalate crystals in breast biopsies. An overlooked form of microcalcification associated with benign breast disease. Radi MJ. **Arch Pathol Lab Med** 1989 Dec; 113(12):1367–9

Membrane-associated crystallization of calcium oxalate in vitro. Khan SR, et al. **Calcif Tissue Int** 1990 Feb; 46(2):116–20

Distribution of peroxisomes and glycolate metabolism in relation to calcium oxalate formation in Lemna minor L. Li XX, et al. **Eur J Cell Biol** 1990 Feb;51(1):9–16

Inhibitory effect of glutamic acid and aspartic acid on calcium oxalate crystal formation. Kohri K, et al. **Eur Urol** 1990;17(2):173–7

Localized peripheral calcium oxalate crystal deposition caused by Aspergillus niger infection. Louthrenoo W, et al. **J Rheumatol** 1990 Mar;17(3):407–12 (17 ref.)

Surface phase transition of hydrated calcium oxalate crystal in the presence of normal and stone-formers' urine. Akbarieh M, et al. **Scanning Microsc** 1990 Jun;4(2):387–93; discussion 393–4

Cardioembolic stroke in primary oxalosis with cardiac involvement. Di Pasquale G, et al. **Stroke** 1989 Oct; 20(10):1403–6

Effect of drugs on crystal adhesion to injured urothelium. Pantazopoulos D, et al. **Urology** 1990 Sep;36(3):255–9

[Facilitators of calcium oxalate renal lithiasis: heterogeneous nucleation and aggregation capacity] Grases F, et al. **Med Clin (Barc)** 1989 Jul 1;93(5):189–94 (85 ref.) **(Spa)**

PHARMACOKINETICS

Oxalate: effect on calcium absorbability. Heaney RP, et al. **Am J Clin Nutr** 1989 Oct;50(4):830–2

PHARMACOLOGY

Induction of lipid peroxidation in calcium oxalate stone formation. Kurien TB, et al. **Indian J Exp Biol** 1989 May; 27(5):450–3

URINE

Ethylene glycol poisoning [letter; comment] Goodkin DA. **Am J Med** 1990 Feb;88(2):201 Comment on: Am J Med 1989 Jul;87(1):91–2.

Calcium oxalate crystal formation in patients with hyperparathyroidism and hyperthyroidism and related metabolic disturbances. Kohri K, et al. **Bone Miner** 1990 Jan;8(1):59–67

Risk factors for urinary calcium oxalate crystals as revealed by their specific enzymatic assay. Hallson PC, et al. **Br J Urol** 1989 Nov;64(5):451–7

Measurement of calcium phosphate crystalluria: influence of pH and osmolality and invariable presence of oxalate. Hallson PC, et al. **Br J Urol** 1989 Nov;64(5):458–62

Possible role of Tamm-Horsfall glycoprotein in calcium oxalate crystallisation. Yoshioka T, et al. **Br J Urol** 1989 Nov;64(5):463–7

Effect of urate on calcium oxalate crystallization in human urine: evidence for a promotory role of hyperuricosuria in urolithiasis. Grover PK, et al. **Clin Sci** 1990 Jul; 79(1):9–15

How are urine composition and stone disease affected by therapeutic measures at an outpatient stone clinic? Tiselius HG, et al. **Eur Urol** 1990;17(3):206–12

The effects of dietary excesses in animal protein and in sodium on the composition and the crystallization kinetics of calcium oxalate monohydrate in urines of healthy men. Kok DJ, et al. **J Clin Endocrinol Metab** 1990 Oct; 71(4):861–7

The effect of decreasing the concentration of urinary urate on the crystallization of calcium oxalate in undiluted human urine. Grover PK, et al. **J Urol** 1990 May;143(5):1057–61

Gestational hypercalciuria causes pathological urine calcium oxalate supersaturations. Maikranz P, et al. **Kidney Int** 1989 Jul;36(1):108–13

Urinary supersaturation with respect to brushite in patients suffering calcium oxalate lithiasis. Berland Y, et al. **Nephrol Dial Transplant** 1990;5(3):179–84

The usefulness of an oral calcium tolerance test in the choice of management of patients with idiopathic hypercalciuria. Naafs MA, et al. **Neth J Med** 1990 Jun;36(5–6):223–7

The in-vivo effect of sodium-potassium citrate on the crystal growth rate of calcium oxalate and other parameters in human urine. Achilles W, et al. **Urol Res** 1990;18(1):1–6

Hydration feature of urinary compounds. Evidence for molecular abnormality in calcium oxalate urolithiasis. Azoury R, et al. **Urol Res** 1990;18(1):7–11

Rapid method of measuring the inhibition of calcium–oxalate monohydrate growth in urine. Baumann JM, et al. **Urol Res** 1990;18(5):219–22

Effects of different doses of alkaline citrate on urine composition and crystallization of calcium oxalate. Berg C, et al. **Urol Res** 1990;18(1):13–6

Glycose aminoglycane excretion and concentration in the urine of patients with frequently recurrent calcium–oxalate lithiasis prior to and following Diclofenac-Na therapy. Brundig P, et al. **Urol Res** 1990;18(1):21–4

Determination of urinary oxalate by high-performance liquid chromatography monitoring with an ultraviolet detector. Kataoka K, et al. **Urol Res** 1990;18(1):25–8

Sialic acid concentrations in the urine of men with and without renal stones. van Aswegen CH, et al. **Urol Res** 1990;18(1):29–33

[New pathophysiologic aspects of nephrolithiasis] Hess B. **Schweiz Med Wochenschr** 1989 Jul 1;119(26):929–34 (32 ref.) (Eng. Abstr.) **(Ger)**

[Diagnosis of intestinal oxalate hyperabsorption in patients with idiopathic recurrent calcium oxalate urinary calculi] Berg W, et al. **Urologe [A]** 1990 May;29(3):148–51 (Eng. Abstr.) **(Ger)**

[Urinary calculus protective side effects of anti-rheumatic therapy] Schlichter A, et al. **Z Urol Nephrol** 1990 Apr; 83(4):175–81 (Eng. Abstr.) **(Ger)**

[Study of oval crystals in urine] Tozuka K, et al. **Hinyokika Kiyo** 1989 Oct;35(10):1679–81 (Eng. Abstr.) **(Jpn)**

[A study of the risk factors in calcium oxalate stone formation—simple method for measuring metastable limits by the microplate method] Kawamura K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec;80(12):1733–40 (Eng. Abstr.) **(Jpn)**

[Effect of urinary material and glycosaminoglycans on calcium oxalate monohydrate crystal aggregation] Shirane Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jul; 80(7):1000–3 (Eng. Abstr.) **(Jpn)**

[Urinary material affecting calcium oxalate monohydrate stone formation] Shirane Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jul;80(7):995–9 (Eng. Abstr.) **(Jpn)**

[Comparison of calcium oxalate values as indicators of risk for calcium oxalate calcinosis and the degree of urine saturation in patients with calcium urolithiasis and in healthy patients] Głuszek J, et al. **Pol Tyg Lek** 1989 Feb 27;44(9):220–2 (Eng. Abstr.) **(Pol)**

CALCIUM PHOSPHATES

Radiographic and histological analysis of tooth eruption through calcium phosphate ceramics in the cat. Feinberg SE, et al. **Arch Oral Biol** 1989;34(12):975–84

Stability and mutual conversion of enamel apatite and brushite at 20 degrees C as a function of pH of the aqueous phase. Larsen MJ, et al. **Arch Oral Biol** 1989;34(12):963–8

Tricalcium phosphate ceramic as immediate root implants for the maintenance of alveolar bone in partially edentulous mandibular jaws. A clinical study. Mathai JK, et al. **Aust Dent J** 1989 Oct;34(5):421–6

Stem cell delivery vehicle. Caplan AI. **Biomaterials** 1990 Jul; 11:44–6 (6 ref.)

Effect of the macroporosity for osseous substitution of calcium phosphate ceramics. Daculsi G, et al. **Biomaterials** 1990 Jul;11:86–7

Calcium phosphate ceramic coatings on porous titanium: effect of structure and composition on electrophoretic deposition, vacuum sintering and in vitro dissolution. Ducheyne P, et al. **Biomaterials** 1990 May;11(4):244–54

Calcium phosphate cements: study of the beta-tricalcium phosphate—monocalcium phosphate system. Mirtchi AA, et al. **Biomaterials** 1989 Sep;10(7):475–80

Calcium phosphate cements: study of the beta-tricalcium phosphate—dicalcium phosphate—calcite cements. Mirtchi AA, et al. **Biomaterials** 1990 Mar;11(2):83–8

Calcium phosphate cements: action of setting regulators on the properties of the beta-tricalcium phosphate-monocalcium phosphate cements. Mirtchi AA, et al. **Biomaterials** 1989 Nov;10(9):634–8

Calcium phosphate biomaterials and bone mineral. Differences in composition, structures and properties. Rey C. **Biomaterials** 1990 Jul;11:13–5

Calcium phosphate-mediated gene transfer: a highly efficient transfection system for stably transforming cells with plasmid DNA. Chen CA, et al. **Biotechniques** 1988 Jul–Aug;6(7):632–8

Formation of carbonate-apatite crystals after implantation of calcium phosphate ceramics. Daculsi G, et al. **Calcif Tissue Int** 1990 Jan;46(1):20–7

Selection for spontaneous metastasis after calcium phosphate-mediated transfer of DNA. Muschel RJ. **Cancer Res** 1990 Sep 1;50(17):5581–6

Effect of monofluorophosphate on calcium phosphate formation in supersaturated solutions. Vintiner GM, et al. **Caries Res** 1990;24(2):101–6

Macroporous calcium phosphate ceramic performance in human spine fusion. Passuti N, et al. **Clin Orthop** 1989 Nov; (248):169–76

Calcium phosphate mineralization. Nancollas GH, et al. **Connect Tissue Res** 1989;21(1–4):239–44; discussion 245–6

The adsorption of 99mTc(Sn)-diphosphonate complexes on tri-calciumphosphate: the influence of preparation conditions, ligand-type, incubation media and adsorption conditions. The reversibility of the adsorption. Huigen YM, et al. **Int J Rad Appl Instrum [A]** 1990;41(2):189–94

Macroporous calcium phosphate ceramic for long bone surgery in humans and dogs. Clinical and histological study. Daculsi G, et al. **J Biomed Mater Res** 1990 Mar; 24(3):379–96

Surface reactions of calcium phosphate ceramics to various solutions. Hyakuna K, et al. **J Biomed Mater Res** 1990 Apr; 24(4):471–88

Thermodynamic study of phase transfer of precipitates on SiC whisker reinforced glass ceramics. Imai K, et al. **J Biomed Mater Res** 1990 Jan;24(1):1–10

X-ray diffraction studies on plasma-sprayed calcium phosphate-coated implants. Koch B, et al. **J Biomed Mater Res** 1990 Jun;24(6):655–67

Effect of tricalcium phosphate on new bone formation: an experimental study in beagles. Içten O, et al. **J Nihon Univ Sch Dent** 1989 Sep;31(3):507–17

Brushite in the pulp of primary molars. Arys A, et al. **J Oral Pathol Med** 1989 Aug;18(7):371–6

The effect of local doxycycline with and without tricalcium phosphate on the regenerative healing potential of periodontal osseous defects in dogs. Al-Ali W, et al. **J Periodontol** 1989 Oct;60(10):582–90

Effect of various graft materials with tetracycline in localized juvenile periodontitis. Evans GH, et al. **J Periodontol** 1989 Sep;60(9):491–7

Biphasic calcium phosphate ceramic combined with fibrillar collagen with and without citric acid conditioning in the treatment of periodontal osseous defects. Nery EB, et al. **J Periodontol** 1990 Mar;61(3):166–72

Bone formation in tricalcium phosphate-filled periodontal intrabony lesions. Histological observations in humans. Saffar JL, et al. **J Periodontol** 1990 Apr;61(4):209–16

Comparison of urinary tract infection in calcium oxalate and calcium phosphate stone formers. Gault MH, et al. **Nephron** 1990;55(4):408–13

Adsorption of 5'-adenosine monophosphate onto precipitated calcium phosphate: effects of inorganic polyphosphates and carbamyl phosphate. Hermes-Lima M, et al. **Orig Life Evol Biosph** 1990;20(1):27–41

[Bone replacement-plasty with tricalcium phosphate ceramics in children] Pochon JP. **Aktuel Probl Chir Orthop** 1990;36:1–51 **(Ger)**

[Experimental studies of the obliteration of extensive radical ear cavities with a new kind of ceramic granulate] Schadel A, et al. **Laryngorhinootologie** 1989 Oct;68(10):571–5 (Eng. Abstr.) **(Ger)**

[An experimental comparative study of hydroxyapatite and tricalcium-phosphate as bone substitutes] Nishina H. **Nippon Seikeigeka Gakkai Zasshi** 1989 Oct;63(10):1237–47

(Eng. Abstr.) (Jpn)
[An experimental study on the osteoconductive properties of porous calcium phosphate glass ceramics] Wada M. **Nippon Seikeigeka Gakkai Zasshi** 1989 Nov;63(11):1368–78 (Eng. Abstr.) (Jpn)
[Artificial synthetic bone tissue] Poliakov VA, et al. **Vestn Khir** 1989 Apr;142(4):101–3 (Rus)

ADMINISTRATION & DOSAGE

[Bone integration within calcium phosphate ceramic by creation of posterior inter-articular lumbar spine fusions in dogs] Martin S, et al. **Neurochirurgie** 1989;35(4):209–15 (30 ref.) (Eng. Abstr.) (Fre)

ANALYSIS

Detection of crystals in synovial fluids by light microscopy: sensitivity and reliability. Gordon C, et al. **Ann Rheum Dis** 1989 Sep;48(9):737–42
Simultaneous occurrence of calcium pyrophosphate dihydrate and basic calcium phosphate (hydroxyapatite) crystals in a knee. Halverson PB, et al. **Clin Orthop** 1990 Aug;(257):162–5
The three-dimensional spatial relationship between the collagen fibrils and the inorganic calcium-phosphate crystals of pickerel and herring fish bone. Lee DD, et al. **Connect Tissue Res** 1989;21(1–4):247–57
Morphology and chemical composition of dental calculi mainly composed of whitlockite. Sakae T, et al. **Scanning Microsc** 1989 Sep;3(3):855–60

IMMUNOLOGY

An immunological study of tricalcium phosphate supplied by three different manufacturers. Sasaoka K, et al. **J Clin Lab Immunol** 1989 Dec;30(4):197–202

METABOLISM

Solubilization of hydroxyapatite crystals by murine bone cells, macrophages and fibroblasts. Kwong CH, et al. **Biomaterials** 1989 Nov;10(9):579–84
Resolution-enhanced Fourier transform infrared spectroscopy study of the environment of phosphate ions in the early deposits of a solid phase of calcium-phosphate in bone and enamel, and their evolution with age. I: Investigations in the upsilon 4 PO4 domain. Rey C, et al. **Calcif Tissue Int** 1990 Jun;46(6):384–94
Inhibition of the amorphous calcium phosphate phase transformation reaction by polyphosphates and metal ions. Root MJ. **Calcif Tissue Int** 1990 Aug;47(2):112–6
Complete primary structure of statherin, a potent inhibitor of calcium phosphate precipitation, from the saliva of the monkey, Macaca arctoides. Schlesinger DH, et al. **Int J Pept Protein Res** 1989 Nov;34(5):374–80
Ultrastructural and histochemical study of beta-tricalcium phosphate resorbing cells in periodontium of dogs. Wada T, et al. **J Periodont Res** 1989 Nov;24(6):391–401
[Degree of mineralization of pulmonary, tracheal and bronchial tissues in healthy persons of different age] Levinskiĭ IaA, et al. **Arkh Anat Gistol Embriol** 1990 Apr; 98(4):71–5 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Inhibition of basic calcium phosphate crystal-induced mitogenesis by phosphocitrate. Cheung HS, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):20–5
Enhanced root fluoride uptake by monocalcium phosphate monohydrate gels. Takagi S, et al. **Caries Res** 1990; 24(1):18–22
The influence of calcium phosphate biomaterials on human bone cell activities. An in vitro approach. Grégoire M, et al. **J Biomed Mater Res** 1990 Feb;24(2):165–77
Effects of synthetic calcium phosphates on the 3H-thymidine incorporation and alkaline phosphatase activity of human fibroblasts in culture. Orly I, et al. **J Biomed Mater Res** 1989 Dec;23(12):1433–40
Effects on wound healing of tricalcium phosphate-collagen complex implants in periodontal osseous defects in the dog. Sugaya A, et al. **J Periodont Res** 1990 Jan;25(1):60–3

THERAPEUTIC USE

An ultrastructural study of the process of hard tissue formation in amputated dental pulp dressed with alpha-tricalcium phosphate. Ikami K, et al. **Arch Histol Cytol** 1990 May;53(2):227–43
Assessment of loosely-bound and firmly-bound fluoride uptake by tooth enamel from topically applied fluoride treatments. Sieck B, et al. **J Dent Res** 1990 Jun;69(6):1261–5
[Study of a biological response modifier in the treatment of infections of the ORL region] Hötzinger H. **Acta Otorrinolaringol Esp** 1988 Mar–Apr;39(2):135–8 (Eng. Abstr.) (Spa)

URINE

Hypercalciuria and postglomerular hematuria in children. The effects of thiazide on calcium excretion, urine saturation with respect to calcium-hydrogenphosphate and hematuria. Reusz G, et al. **Acta Paediatr Hung** 1990; 30(1):63–71
Measurement of calcium phosphate crystalluria: influence of pH and osmolality and invariable presence of oxalate. Hallson PC, et al. **Br J Urol** 1989 Nov;64(5):458–62
Urinary supersaturation with respect to brushite in patients suffering calcium oxalate lithiasis. Berland Y, et al. **Nephrol Dial Transplant** 1990;5(3):179–84

CALCIUM-PHOSPHOLIPID DEPENDENT PROTEIN KINASE see **PROTEIN KINASE C**

CALCIUM PYROPHOSPHATE see under **PYROPHOSPHATES**

CALCIUM RADIOISOTOPES

METABOLISM

The pathogenesis of loosening of total hip arthroplasties. The production of factors by periprosthetic tissues that stimulate in vitro bone resorption. Ohlin A, et al. **Clin Orthop** 1990 Apr;(253):287–96
Kinetics of rapid 45Ca uptake into chick skeleton in vivo: effects of microwave fixation. Shaw AJ, et al. **Q J Exp Physiol** 1989 Nov;74(6):907–15
[The effect of various concentrations of hydrochloric acid solutions on the enamel permeability for 45Ca in experimental fluorosis] Nikolishin AK. **Stomatologiia (Mosk)** 1989 Sep–Oct;68(5):13–4 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

[Determination of 45Ca transmembrane flux and its application to research on calcium antagonists] Dong H, et al. **Sheng Li Ko Hsueh Chin Chan** 1990 Apr;21(2):171–4 (26 ref.) (Chi)
[Characteristics of passive transport of 45Ca2(+) into the synaptosomes of the cerebral cortex in rats] Orlický J, et al. **Bratisl Lek Listy** 1990 Mar;91(3):213–8 (Eng. Abstr.) (Slo)

CALCIUM SULFATE

Effect of humidity on calcium sulphate hemihydrate. Torrance A, et al. **Aust Dent J** 1990 Jun;35(3):230–5
Manganese activation of CaSO4:Dy. Li SH, et al. **Health Phys** 1990 Jan;58(1):65–72
Investigation of a hydroxyapatite and calcium sulfate composite supplemented with an osteoinductive factor. Damien CJ, et al. **J Biomed Mater Res** 1990 Jun; 24(6):639–54
A comparison of the mechanical properties of fiberglass cast materials and their clinical relevance. Berman AT, et al. **J Orthop Trauma** 1990;4(1):85–92
Linear distortion and compatibility of an antimicrobial irreversible hydrocolloid impression material and improved dental stones. Sevedge SR, et al. **J Prosthet Dent** 1989 Nov; 62(5):612–5
Sealing ability of intermediate restorations and cavity design used in endodontics. Barkhordar RA, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jan;69(1):99–101
Fiberglass versus plaster casts. How to choose between them [see comments] Silfverskiold JP. **Postgrad Med** 1989 Oct; 86(5):71–2, 74 Comment in: Postgrad Med 1990 Feb 15;87(3):34.
[Treatment of bone infection by plaster of Paris pellets impregnated with antibiotics] Evrard J, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):543–7 (Eng. Abstr.) (Fre)

PHARMACOLOGY

Bactericidal effect of a disinfectant dental stone on irreversible hydrocolloid impressions and stone casts. Schutt RW. **J Prosthet Dent** 1989 Nov;62(5):605–7

STANDARDS

Evaluation of physical-mechanical properties of 3 brands of plaster of Paris in the Kenyan market. Mwaniki DL. **East Afr Med J** 1990 May;67(5):365–9

THERAPEUTIC USE

[The effect of sodium-magnesium-calcium sulfate water on bile secretion and bile formation in patients with chronic cholecystitis] Poshtar' TIa, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1990 Jan–Feb;(1):54–6 (Rus)

CALCIUM TRANSPORT PROTEINS see **CALCIUM-BINDING PROTEINS**

CALCULATORS, PROGRAMMABLE see **COMPUTERS**

CALCULI

see related

LITHOTRIPSY

Scrotal calculi [letter] Fariña LA, et al. **Eur Urol** 1990; 18(1):80
[Pulmonary alveolar microlithiasis] Mažuranić I, et al. **Lijec Vjesn** 1989 Aug;111(8):272–4 (Eng. Abstr.) (Scr)

ANALYSIS

Analysis of calcific deposits in calcifying tendinitis. Gärtner J, et al. **Clin Orthop** 1990 May;(254):111–20
Mineralogical analysis of sputum lith from an apparently healthy subject. Goto Y, et al. **Jpn J Med** 1989 Nov–Dec; 28(6):731–5
Identification of immunoreactive pancreatic stone protein in pancreatic stone, pancreatic tissue, and pancreatic juice. Yamadera K, et al. **Pancreas** 1990 May;5(3):255–60

COMPLICATIONS

Two case reports of macrovascular complications in fibrocalculous pancreatic diabetes. Mohan V, et al. **Acta Diabetol Lat** 1989 Oct–Dec;26(4):345–9
Intrahepatic cholesterol stones associated with peripheral cholangiocellular carcinoma: an autopsy case. Terada T, et al. **Am J Gastroenterol** 1989 Nov;84(11):1434–6
Stones associated with leg ulcers. Flanagan PG, et al. **BMJ** 1989 Dec 23–30;299(6715):1568
Fibrocalculous pancreatic diabetes and obesity. Mohan V, et al. **Diabetes Res Clin Pract** 1990 Jan;8(2):161–6
Recurrent pancreatitis in a young patient associated with a solitary nonopaque concretion in the main pancreatic duct. Lorente JA, et al. **Gastrointest Endosc** 1990 Jan–Feb; 36(1):63–5
Orbital varix with a pearly phlebolith. Case report. Kubota T, et al. **J Neurosurg** 1990 Aug;73(2):291–5
Lacrimal gland ductule stones. Baker RH, et al. **Ophthalmology** 1990 Apr;97(4):531–4
Concurrent preputial calculi and penile carcinoma—a rare association. Mohapatra TP, et al. **Postgrad Med J** 1989 Apr; 65(762):256–7
Appendiceal calculi and fecaliths as indications for appendectomy. Nitecki S, et al. **Surg Gynecol Obstet** 1990 Sep;171(3):185–8
[A case of stones in the periurethral glands in a woman] Lachand AT. **Ann Urol (Paris)** 1989;23(5):411 (Fre)
[Hemoptysis with an unusual etiology] D'Odemont JP, et al. **Rev Mal Respir** 1989;6(4):391–2 (Fre)
[A case of obstructive jaundice caused by incarceration of pancreatic stones in the ampulla of papilla Vater] Moritomo H, et al. **Nippon Geka Gakkai Zasshi** 1990 Jan;91(1):146–9 (Eng. Abstr.) (Jpn)
[A case of pulmonary alveolar calculi complicated by lung aspergillosis] Furukawa M, et al. **Nippon Naika Gakkai Zasshi** 1990 Jan 10;79(1):108–9 (Jpn)
[Conservative treatment of Bouveret's syndrome] Karpov IB, et al. **Vestn Khir** 1989 Jul;143(7):62–3 (Rus)
[Rhinolithiasis complicated by purulent dacryocystitis] Udovički J. **Med Pregl** 1989;42(9–10):329–31 (Eng. Abstr.) (Scr)
[Isolated diverticulum of the cecum (letter)] Cabeza Lamban F, et al. **Rev Esp Enferm Dig** 1990 Feb;77(2):165–6 (Spa)

DIAGNOSIS

Epididymitis associated with müllerian duct cyst and calculus: sonographic diagnosis. Ardill RH, et al. **AJR Am J Roentgenol** 1990 Jul;155(1):91–2
Pulmonary alveolar microlithiasis: case report. Lema LE, et al. **East Afr Med J** 1989 May;66(5):365–7
Chronic acalculous cholecystitis: difficulties in diagnosis. Begley VJ. **Milit Med** 1989 Nov;154(11):567–71
Broncholithiasis: present clinical spectrum. Galdermans D, et al. **Respir Med** 1990 Mar;84(2):155–6
[Problems of diagnosis and treatment of pulmonary thesaurismosis] Slepukha IM, et al. **Klin Med (Mosk)** 1989 Dec;67(12):65–8 (Eng. Abstr.) (Rus)

ETIOLOGY

Incidental enterolithiasis. Gardiner KR, et al. **Ulster Med J** 1989 Oct;58(2):196–7
Complications of retropubic bladder neck suspension. Bihrle W 3d, et al. **Urology** 1990 Mar;35(3):213–4
Enteroliths in association with right hemicolectomy for cecal carcinoma. Gordin SJ, et al. **W V Med J** 1990 Jul; 86(7):292–3
[Giant secondary vaginal calculus] Lukács T, et al. **Orv Hetil** 1989 Nov 19;130(47):2537–8 (Eng. Abstr.) (Hun)
[Carcinoma of the papilla of Vater associated with pancreatolithiasis—a case report] Ogiso S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Oct;86(10):2456–9 (Jpn)
[A case report of true enterolith (bile acid) with gastrointestinal bleeding, hypoproteinemia and subacute ileus—reference to reported 13 cases in Japan] Takahashi M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Apr; 87(4):1067–73 (25 ref.) (Jpn)
[A case of tophus situated in the optic nerve] Bażowski P, et al. **Neurol Neurochir Pol** 1989 May–Jun;23(3):250–2 (Eng. Abstr.) (Pol)
[Obstructive ileus caused by a gallstone] Koshevarov MN, et al. **Klin Khir** 1990;(4):65–6 (Rus)
[Testicular microlithiasis: clinico-pathologic significance of the process] López Muñoz A, et al. **Actas Urol Esp** 1989 Nov–Dec;13(6):413–4 (Spa)

PATHOLOGY

Microphleboliths in vascular ectasia of the intestine: a case report. Fenner MN, et al. **Indiana Med** 1989 Oct;

82(10):780–2
Rare cavernous haemangioma of the hypopharynx with numerous phleboliths. Li X. **J Laryngol Otol** 1990 Mar; 104(3):262–3
[Tonsillolith: clinical picture and mineralogic analysis] Heppt W, et al. **HNO** 1989 Oct;37(10):438–9 (Eng. Abstr.) **(Ger)**
[A case of mycotic sphenoidal sinusitis with stone formation] Tanaka M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1990 Jan;93(1):23–32 (49 ref.) (Eng. Abstr.) **(Jpn)**
[A case showing a free substance in the thoracic cavity detected during surgery in lung cancer considered to the precursor of the so-called "intrathoracic calculus"] Kuwabara M, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 Jun;27(6):730–4 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

A stone in Meckel's diverticulum: a clue to its pre-operative diagnosis. Hubens G, et al. **Br J Clin Pract** 1990 Mar; 44(3):116–8
The occurrence of macroscopical pituitary calcifications in prolactinomas. Rasmussen C, et al. **Neuroradiology** 1990; 31(6):507–11
A giant stone in the müllerian duct cyst. Kim CJ, et al. **Urol Radiol** 1989;11(3):172–3
[A case of pulmonary alveolar microlithiasis on the bone image of dual-energy subtraction radiography] Takashima T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Mar; 27(3):380–4 (Eng. Abstr.) **(Jpn)**
[Anomaly of the biliopancreatic junction, choledocal cyst and pancreatic lithiasis. Endoscopic possibilities] Martin L, et al. **Rev Esp Enferm Apar Dig** 1989 Dec;76(6 Pt 2):685–8 (Eng. Abstr.) **(Spa)**

SURGERY

Broncholithiasis: bronchoscopic vs. surgical management. Igoe D, et al. **Respir Med** 1990 Mar;84(2):163–5
Intraoperative removal of pancreatic duct calculus with a rigid ureterorenoscope and ultrasonic lithotripsy. Haapiainen RK, et al. **Surgery** 1990 Mar;107(3):353–5
[Suppurative pseudo-lithiasic canaliculitis] Ritleng P, et al. **Ophtalmologie** 1989 Jan–Mar;3(1):1–3 (Eng. Abstr.) **(Fre)**
[Surgical treatment of chronic calculous pancreatitis] Nosal'chuk NK, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):86–7 **(Rus)**

THERAPY

Extracorporeal piezoelectric shockwave lithotripsy of multiple pancreatic duct stones under ultrasonographic control. Kerzel W, et al. **Endoscopy** 1989 Sep;21(5):229–31
Extracorporeal shock wave lithotripsy of pancreatic stones. Sauerbruch T, et al. **Gut** 1989 Oct;30(10):1406–11
Pancreatic and biliary calculi: percutaneous treatment with tunable dye laser lithotripsy. Feldman RK, et al. **Radiology** 1990 Mar;174(3 Pt 1):793–5
[ESWL in pancreatic duct stones (letter)] Greiner L, et al. **Dtsch Med Wochenschr** 1989 Dec 8;114(49):1940 **(Ger)**
[Extracorporeal shockwave lithotripsy of pancreatic calculi] Sauerbruch T. **Leber Magen Darm** 1990 May;20(3):146–8 (Eng. Abstr.) **(Ger)**
[Treatment of chronic calcified pancreatitis by extracorporeal shockwave lithotripsy?] Sauerbruch T. **Z Gastroenterol** 1990 Feb;28(2):123–4 **(Ger)**
[Vesico-prostatic calculi treated by microexplosion lithotripsy: a case report] Yoneda K, et al.
Hinyokika Kiyo 1990 Feb;36(2):161–3 (Eng. Abstr.) **(Jpn)**
[Extracorporeal shock wave lithotripsy. Dramatic progress in the treatment of lithiasis] **Nippon Rinsho** 1989 Dec; 47(12):2659–810 **(Jpn)**
[Laser destruction of a broncholith of the middle-lobe bronchus] Gerasin VA, et al.
Grud Serdechnososudistaia Khir 1990;(5):77–8 **(Rus)**
[Removal of a large broncholith using laser and basket instrumentation] Gerasin VA, et al. **Sov Med** 1990;(3):111–2 **(Rus)**

ULTRASTRUCTURE

Conjunctival concretions. Polarized microscopic, histopathologic, and ultrastructural studies. Chang SW, et al. **Arch Ophthalmol** 1990 Mar;108(3):405–7

URINE

Surface phase transition of hydrated calcium oxalate crystal in the presence of normal and stone-formers' urine. Akbarieh M, et al. **Scanning Microsc** 1990 Jun;4(2):387–93; discussion 393–4

VETERINARY

Cystitis, urolithiasis and cystic calculi in ageing guineapigs. Peng X, et al. **Lab Anim** 1990 Apr;24(2):159–63

CALDESMON see **CALMODULIN-BINDING PROTEINS**

CALIBRATION see under **WEIGHTS AND MEASURES**

CALICIVIRIDAE

ANALYSIS

Biochemical characterization of porcine enteric calicivirus: analysis of structural and nonstructural viral proteins. Parwani AV, et al. **Arch Virol** 1990;112(1–2):41–53

IMMUNOLOGY

Enzyme-linked immunosorbent assay of antibodies to rabbit haemorrhagic disease virus and determination of its major structural proteins. Rodák L, et al. **J Gen Virol** 1990 May; 71 (Pt 5):1075–80
Preparation and characterization of neutralizing monoclonal antibodies to feline calicivirus. Tohya Y, et al.
Nippon Juigaku Zasshi 1990 Apr;52(2):251–6

ISOLATION & PURIFICATION

New marine calicivirus serotype infective for swine. Berry ES, et al. **Am J Vet Res** 1990 Aug;51(8):1184–7
Purification and characterization of a calicivirus as the causative agent of a lethal hemorrhagic disease in rabbits. Parra F, et al. **J Virol** 1990 Aug;64(8):4013–5

METABOLISM

Feline calicivirus protein synthesis investigated by western blotting. Carter MJ. **Arch Virol** 1989;108(1–2):69–79

PHYSIOLOGY

Sites of persistence of feline calicivirus. Dick CP, et al. **Res Vet Sci** 1989 Nov;47(3):367–73

ULTRASTRUCTURE

Electron and immunoelectron microscopy of rabbit haemorrhagic disease virus (RHDV). Valíček L, et al. **Arch Virol** 1990;112(3–4):271–5

CALIFORNIA GROUP VIRUSES see under **BUNYAVIRIDAE**

CALIFORNIUM

Boron neutron capture enhancement of 252Cf brachytherapy. Beach JL, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun; 18(6):1421–7

THERAPEUTIC USE

Complete remission of metastatic squamous carcinoma after cisplatinum chemotherapy without sustained control, following primary tumor control by californium-252 brachytherapy [letter] Maruyama Y, et al. **Br J Radiol** 1990 Aug;63(752):661–3
Clinical study of relative biological effectiveness for cervical carcinoma treated by 252Cf neutrons and assessed by histological tumour eradication. Maruyama Y, et al.
Br J Radiol 1990 Apr;63(748):270–7
Regeneration in cervix cancer after 252Cf neutron brachytherapy. Maruyama Y, et al.
Int J Radiat Oncol Biol Phys 1990 Jul;19(1):61–7
Cure of cervical cancer using 252Cf neutron brachytherapy. Maruyama Y, et al. **Strahlenther Onkol** 1990 May; 166(5):317–21
Effect of small doses of 252Cf on the tumour regression in cervix uteri during combined radiotherapy. Tačev T, et al. **Strahlenther Onkol** 1989 Dec;165(12):837–43
[The technology of preparation and experience in the clinical use of 252Cf sources] Vtiurin BM, et al.
Med Radiol (Mosk) 1989 Sep;34(9):60–4 (Eng. Abstr.) **(Rus)**

CALISTHENICS see **GYMNASTICS**

CALLA-POSITIVE LYMPHOBLASTIC LEUKEMIA see **LEUKEMIA, CALLA-POSITIVE**

CALLIMICO see **CALLITHRICIDAE**

CALLITHRICIDAE

Trichobezoars in two saddleback tamarins (Saguinus fuscicollis). Gozalo AS, et al. **J Med Primatol** 1990; 19(2):151–3
Adenocarcinoma of the small intestine in a common marmoset (Callithrix jacchus). Chalifoux LV.
Lab Anim Sci 1990 Mar;40(2):210–2
[The marmoset in biomedical research. Value of this primate model for cardiovascular studies] Michel JB, et al.
Pathol Biol (Paris) 1990 Mar;38(3):197–204 (69 ref.) (Eng. Abstr.) **(Fre)**

BLOOD

Isolation and characterization of several plasma apolipoproteins of common marmoset monkey. Crook D, et al. **Arterioscler Suppl** 1990 Jul–Aug;10(4):625–32
Isolation and characterization of plasma lipoproteins of common marmoset monkey. Comparison of effects of control and atherogenic diets. Crook D, et al.
Arterioscler Suppl 1990 Jul–Aug;10(4):633–47
Plasma vitamins A and E and hydrogen peroxide-induced in vitro erythrocyte haemolysis in common marmosets (Callithrix jacchus). Ghebremeskel K, et al. **Vet Rec** 1990 Apr 28;126(17):429–31

GENETICS

Satellite DNA sequences in the neotropical marmoset Callimico goeldii (Primates, Platyrrhini). Fanning TG, et al. **Chromosoma** 1989 Dec;98(6):396–401
The Callimico goeldii (Primates, Platyrrhini) genome: karyology and middle repetitive (LINE-1) DNA sequences. Seuánez HN, et al. **Chromosoma** 1989 Dec; 98(6):389–95
Molecular cloning of cDNA that encode MHC class I molecules from a New World primate (Saguinus oedipus). Natural selection acts at positions that may affect peptide presentation to T cells. Watkins DI, et al. **J Immunol** 1990 Feb 1;144(3):1136–43
Evolution of the MHC class I genes of a New World primate from ancestral homologues of human non-classical genes [see comments] Watkins DI, et al. **Nature** 1990 Jul 5; 346(6279):60–3 Comment in: Nature 1990 Jul 5;346(6279):17.
Polymorphisms of the group-specific component (Gc) in three species of tamarins (Saguinus oedipus, S. labiatus, S. mystax). Tsuchida S, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):649–51

IMMUNOLOGY

Expression of immune sensitization to epithelial cell-associated components in the cotton-top tamarin: a model of chronic ulcerative colitis. Winter HS, et al. **Gastroenterology** 1989 Nov;97(5):1075–82
Immunoregulation in the common marmoset, Calithrix jaccus: functional properties of T and B lymphocytes and their response to human interleukins 2 and 4. Quint DJ, et al. **Immunology** 1990 Apr;69(4):616–21
Renin immunization and angiotensin converting enzyme inhibition in the normotensive marmoset. Michel JB, et al. **J Hypertens Suppl** 1989 Dec;7(6):S218–9
Genetically distinct cell populations in naturally occurring bone marrow-chimeric primates express similar MHC class I gene products. Watkins DI, et al. **J Immunol** 1990 May 15;144(10):3726–35
Monoclonal antibodies from Epstein-Barr virus-transformed lymphocytes of common marmosets (Callithrix jacchus) immune to malaria. Johnston DA, et al.
J Immunol Methods 1990 Mar 9;127(2):187–95
Immunology. Tamarin compatibility [news] [comment] Ellis SA, et al. **Nature** 1990 Jul 5;346(6279):17 Comment on: Nature 1990 Jul 5;346(6279):60–3.

METABOLISM

Immunofluorescence-microscopic localization of collagen type IV and VI, laminin and nidogen in the livers of Callithrix jacchus during pre- and postnatal development. Xu DQ, et al. **Acta Anat (Basel)** 1990;138(3):212–9
Plasma thyroxine-binding proteins and thyroid hormone levels in primate species; is callithricidae thyroid hormone resistant? Seo H, et al. **Endocrinol Jpn** 1989 Oct; 36(5):665–73
Purification and properties of a beta-galactoside-binding lectin from neonatal marmoset. Ohsawa F, et al.
J Biochem (Tokyo) 1990 Mar;107(3):431–4
Distribution of two morphologically distinct subsets of serotoninergic axons in the cerebral cortex of the marmoset. Hornung JP, et al. **J Comp Neurol** 1990 Jul 8;297(2):165–81

MICROBIOLOGY

A new transmissible viral hepatitis of marmosets and tamarins. Montali RJ, et al. **J Infect Dis** 1989 Nov; 160(5):759–65
Isolation and identification of strains of Bacteroides fragilis group from the digestive tract of Callithrix penicillata marmosets. Avila-Campos MJ, et al. **Lab Anim** 1990 Jan; 24(1):68–70
[Primates in the study of hepatitis viruses] Pillot J.
Pathol Biol (Paris) 1990 Mar;38(3):177–81 (Eng. Abstr.) **(Fre)**

PARASITOLOGY

A marmoset model for some New World dermatotropic leishmaniases. Pereira LH, et al. **Parassitologia** 1988 May–Dec;30(2–3):187–96

PHYSIOLOGY

Learning about rules but not about reward is impaired following lesions of the cholinergic projection to the hippocampus. Ridley RM, et al. **Brain Res** 1989 Nov 20; 502(2):306–18
Splitting of the circadian activity rhythm in common marmosets (Callithrix j. jacchus; primates). Schardt U, et al. **Experientia** 1989 Dec 1;45(11–12):1112–5
Medial hypothalamic lesions and sexual receptivity in the female common marmoset (Callithrix jacchus). Dixson AF. **Folia Primatol (Basel)** 1990;54(1–2):46–56
A re-evaluation of the social organisation of the Callitrichidae, with reference to the ecological differences between genera. Ferrari SF, et al.
Folia Primatol (Basel) 1989;52(3–4):132–47 (81 ref.)
Postpartum ovulation and conception in Goeldi's monkey, Callimico goeldii. Ziegler TE, et al.

Folia Primatol (Basel) 1989;52(3–4):206–10
Pituitary–testicular function is suppressed by an LHRH antagonist but not by an LHRH agonist in the marmoset monkey. Lunn SF, et al. J Endocrinol 1990 May; 125(2):233–9
The organization and connections of somatosensory cortex in marmosets. Krubitzer LA, et al. J Neurosci 1990 Mar; 10(3):952–74
The effects of excitotoxic lesions of the basal forebrain on the acquisition, retention and serial reversal of visual discriminations in marmosets. Roberts AC, et al. Neuroscience 1990;34(2):311–29
Ablations of areas 3b (SI proper) and 3a of somatosensory cortex in marmosets deactivate the second and parietal ventral somatosensory areas. Garraghty PE, et al. Somatosens Mot Res 1990;7(2):125–35
[The behavior of tamarin monkeys during the learning and realization of instrumental food habits in a competitive situation] Maliukova IV, et al. Zh Evol Biokhim Fiziol 1990 Mar–Apr;26(2):221–9 (Eng. Abstr.) (Rus)

PSYCHOLOGY

Food–sharing in cotton–top tamarins (Saguinus oedipus). Feistner AT, et al. Folia Primatol (Basel) 1990; 54(1–2):34–45
Patterns of social preference across different social contexts in golden lion tamarins (Leontopithecus rosalia). Inglett BJ, et al. J Comp Psychol 1990 Jun;104(2):131–9

URINE

Aspects of urinary oestrogen excretion during the ovarian cycle and pregnancy in Goeldi's monkey, Callimico goeldii. Carroll JB, et al. Folia Primatol (Basel) 1989;52(3–4):201–5
Urinary excretion of oestradiol–17 beta in the female cycle of Goeldi's monkeys (Callimico goeldii). Christen A, et al. Folia Primatol (Basel) 1989;52(3–4):191–200
Urinary endocrine monitoring of the ovarian cycle and pregnancy in Goeldi's monkey (Callimico goeldii). Carroll JB, et al. J Reprod Fertil 1990 May;89(1):149–61
Urinary excretion of oestrone conjugates and gonadotrophins during pregnancy in the Goeldi's monkey (Callimico goeldii). Ziegler TE, et al. J Reprod Fertil 1990 May; 89(1):163–8
Systems for collection of urine in the captive common marmoset, Callithrix jacchus. Lunn SF. Lab Anim 1989 Oct;23(4):353–6

CALLITHRIX see under CALLITHRICIDAE

CALLOSITIES

DRUG THERAPY

Corn cures can damage your feet: an important lesson for diabetic patients. Foster A, et al. Diabetic Med 1989 Dec; 6(9):818–9

PATHOLOGY

The cameo engraver's corn. Villano PA, et al. Int J Dermatol 1990 Jul–Aug;29(6):424–5

SURGERY

The callous elbow and aging of the upper arm. González–Ulloa M. Aesthetic Plast Surg 1990 Winter; 14(1):53–7

CALLUS

The callus of crack cocaine [letter] Larkin RF. N Engl J Med 1990 Sep 6;323(10):685

BLOOD SUPPLY

Demonstration of blood–vessellike structures in cartilaginous callus by antilaminin and antiheparin sulfate proteoglycan antibodies. Hulth A, et al. Clin Orthop 1990 May; (254):289–93

ENZYMOLOGY

Neutral protein–degrading enzymes in experimental fracture callus: a preliminary report. Einhorn TA, et al. J Orthop Res 1989;7(6):792–805 (56 ref.)

GROWTH & DEVELOPMENT

Acidic fibroblast growth factor (aFGF) injection stimulates cartilage enlargement and inhibits cartilage gene expression in rat fracture healing. Jingushi S, et al. J Orthop Res 1990 May;8(3):364–71

METABOLISM

Estrogen receptor mRNA expression in callus during fracture healing in the rat. Boden SD, et al. Calcif Tissue Int 1989 Nov;45(5):324–5
[The dynamic characteristics of regional muscle blood flow and the activity of mineralization processes in the bony callus with various methods of treating mandibular fractures] Znev VP, et al. Stomatologiia (Mosk) 1989 Sep–Oct;68(5):38–40 (Eng. Abstr.) (Rus)

PATHOLOGY

Repair of trabecular fatigue fractures. Cadaver studies of the upper femur. Benaissa R, et al. Acta Orthop Scand 1989 Oct;60(5):585–9
[Sonographic follow–up of secondary fracture healing. Initial experiences with morphologic and semiquantitative assessment of periosteal callus formation] Hannesschläger G, et al. ROFO 1990 Aug;153(2):113–9 (Eng. Abstr.) (Ger)

PHYSIOLOGY

Biological considerations in osteosynthesis. McKibbin B. Chirurgie 1989;115(9):683–6
Organic matrix of healing fracture callus: perifracture vs fracture callus. Li WK, et al. Surg Forum 1978;29:536–8

PHYSIOPATHOLOGY

Local application of growth–factor IGF–1 to healing bone. Experiments with a titanium chamber in rabbits. Aspenberg P, et al. Acta Orthop Scand 1989 Oct;60(5):607–10
Mineral and matrix contributions to rigidity in fracture healing. Chakkalakal DA, et al. J Biomech 1990; 23(5):425–34
Biochemical and biomechanical properties of avian callus after local administration of dihydroxylated vitamin D metabolites. Lidor C, et al. J Bone Joint Surg [Br] 1990 Jan;72(1):137–40
[Relation of the mechanical properties of callus tissue and its roentgenologic picture during osteotomy in radiation sickness] Procházka V. Rozhl Chir 1989 Dec;68(12):807–14 (Eng. Abstr.) (Cze)

CALMETTE–GUERIN BACILLUS see MYCOBACTERIUM BOVIS

CALMETTE GUERIN BACILLUS VACCINE see BCG VACCINE

CALMODULIN

The domain structure of the calmodulin–dependent phosphodiesterase isozymes. Novack JP, et al. Adv Exp Med Biol 1989;255:387–95
Formation of cyclic imide–like structures upon the treatment of calmodulin and a calmodulin peptide with heat. Martin BL, et al. Arch Biochem Biophys 1990 Jan;276(1):94–101
A novel synthetic substrate for casein kinase 2. Hagiwara T, et al. Biochem Int 1990;20(5):913–9
Heteronuclear 3D NMR and isotopic labeling of calmodulin. Towards the complete assignment of the 1H NMR spectrum. Ikura M, et al. Biochem Pharmacol 1990 Jul 1; 40(1):153–60
A novel approach for sequential assignment of 1H, 13C, and 15N spectra of proteins: heteronuclear triple–resonance three–dimensional NMR spectroscopy. Application to calmodulin. Ikura M, et al. Biochemistry 1990 May 15; 29(19):4659–67
Calmodulin interaction with mesocaine–modified lipid bilayer. Dovinová I, et al. Gen Physiol Biophys 1990 Apr; 9(2):177–88
Fluorescence spectroscopic analysis of calpain II interactions with calcium and calmodulin antagonists. Hong H, et al. Int J Biochem 1990;22(4):399–404
Comparison of Ca(II), Cd(II), and Mg(II) titrations of tyrosine–99 spin–labeled bovine calmodulin. You GF, et al. J Inorg Biochem 1990 Feb;38(2):117–25
The interaction of calmodulin with fluorescent and photoreactive model peptides: evidence for a short interdomain separation. O'Neil KT, et al. Proteins 1989; 6(3):284–93
Model for the interaction of amphiphilic helices with troponin C and calmodulin. Strynadka NC, et al. Proteins 1990;7(3):234–48
Computational and site–specific mutagenesis analyses of the asymmetric charge distribution on calmodulin. Weber PC, et al. Proteins 1989;6(1):70–85
[Structure of Ca2(+)–binding proteins—X–ray and NMR] Ikura M, et al. Tanpakushitsu Kakusan Koso 1988 Sep; 33(12):1994–2002 (Jpn)

ANALYSIS

Topical interferon–alpha in psoriasis increases epidermal calmodulin activity. Wollina U, et al. Arch Dermatol Res 1990;282(4):270–1
A spectrophotometric method for calmodulin assay. Garg UC, et al. Biotechniques 1988 Apr;6(4):294–6
Calmodulin content and distribution in six human melanoma cell lines. Aquaron R, et al. Cell Mol Biol 1990;36(1):85–92
Calmodulin in heterocystous cyanobacteria: biochemical and immunological evidence. Pettersson A, et al. FEMS Microbiol Lett 1989 Jul 1;51(1):95–9
Calcium and calmodulin changes with ageing in C57BL/6J mice. Massie HR, et al. Gerontology 1989;35(2–3):100–5
Calmodulin quantification and immunolocalization in developing embryonic orofacial tissue. Greene RM, et al. J Craniofac Genet Dev Biol 1989;9(2):161–72
Simple immunoassays for semiquantitative determination of calmodulin (CaM) and anti–CaM. Applications to affinity column chromatography of anti–CaM antibodies and estimation of CaM in synaptosomal membranes from rat cerebral cortex. Natsukari N, et al. J Immunol Methods 1989 Dec 20;125(1–2):159–66
[Urticaria pigmentosa—histochemical and immunohistologic studies] Wollina U, et al. Dermatol Monatsschr 1989; 175(12):764–6 (Ger)

ANTAGONISTS & INHIBITORS

Frequency–dependent inhibition of the intracellular calcium transients by calmodulin antagonists in the aequorin–injected rabbit papillary muscle. Endoh M. Adv Exp Med Biol 1989;255:461–70
Effects of calmodulin antagonists on human adenoidal mast cells. Bent S, et al. Agents Actions 1990 Apr;30(1–2):121–4
Influence of TMB–8 and calmidazolium on phorbol ester promoted histamine release from isolated rat mast cells. Grosman N, et al. Agents Actions 1990 Apr;30(1–2):134–6
Anti–ischemic and membrane stabilizing activity of calmodulin inhibitors. Beresewicz A. Basic Res Cardiol 1989 Nov–Dec;84(6):631–45
Isolation of NPY–25 (neuropeptide Y[12–36]), a potent inhibitor of calmodulin, from porcine brain. Kitamura K, et al. Biochem Biophys Res Commun 1990 Jun 29; 169(3):1164–71
The autoinhibitor of cell fusion in Dictyostelium inhibits calmodulin. Lydan MA, et al. Biochem Biophys Res Commun 1989 Nov 15;164(3):1176–81
Effects of ruthenium red on activation of Ca2(+)–dependent cyclic nucleotide phosphodiesterase. Masuoka H, et al. Biochem Biophys Res Commun 1990 May 31;169(1):315–22
Calmodulin antagonist action in smooth–muscle myosin phosphorylation. Different mechanisms for trifluoperazine and calmidazolium inhibition. Sobieszek A. Biochem J 1989 Aug 15;262(1):215–23
Variation of the inhibition of calmodulin dependent cyclic AMP phosphodiesterase amongst analogues of tamoxifen; correlations with cytotoxicity. Rowlands MG, et al. Biochem Pharmacol 1990 Jul 15;40(2):283–9
Inhibition of protein kinase C and calmodulin by the geometric isomers cis– and trans–tamoxifen. O'Brian CA, et al. Biopolymers 1990 Jan;29(1):97–104
Calcium modulation of the parathyroid hormone–sensitive adenylate cyclase in ROS 17/2.8 cells: effects of N–(6–aminohexyl–5–Cl–naphthalene sulfonamide) (W–7) and trifluoperazine (TFP). Rao LG, et al. Bone Miner 1989 Nov;7(3):191–204
Effects of calmodulin antagonists on calcium–activated potassium channels in pregnant rat myometrium. Kihira M, et al. Br J Pharmacol 1990 Jun;100(2):353–9
Benzylisoquinoline compounds inhibit the ability of calmodulin to activate cyclic nucleotide phosphodiesterase. Hu ZY, et al. Cell Signal 1989;1(2):181–5
Fasciculic acids A, B and C as calmodulin antagonists from the mushroom Naematoloma fasciculare. Takahashi A, et al. Chem Pharm Bull (Tokyo) 1989 Dec;37(12):3247–50
Calmodulin–antagonist drugs and porcine malignant hyperpyrexia. Collins SP, et al. Clin Exp Pharmacol Physiol 1988 Jun;15(6):473–7
Prevention of anaphylactoid shock in the rat by the calmodulin antagonist thioridazine. Grollmuss O, et al. Clin Physiol Biochem 1989;7(5):229–37
Calmodulin inhibition by anthralin? Investigations in vitro and in vivo. Wollina U, et al. Dermatologica 1989; 179(2):61–3
Suppression of spontaneous maturation of isolated cumulus–free mouse oocytes by a calmodulin antagonist. Sato E. Endocrinol Jpn 1990 Feb;37(1):19–25
Treatment of frostbite with the calmodulin antagonists thioridazine and trifluoperazine. Beitner R, et al. Gen Pharmacol 1989;20(5):641–6
Effects of the Ca2(+)–antagonists nifedipine, verapamil, flunarizine and of the calmodulin antagonist trifluoperazine on muscarinic cholinergic receptors in rat cerebral cortex. Popova J, et al. Gen Pharmacol 1990;21(3):317–9
Influence of long–term treatment with the Ca2(+)–antagonists nifedipine, verapamil, flunarizine and with the calmodulin antagonist trifluoperazine on beta–adrenoceptors in rat cerebral cortex. Staneva–Stoytcheva D, et al. Gen Pharmacol 1990; 21(1):149–52
Inhibition of human ovarian cancer cell proliferation by calmodulin inhibitors and the possible mechanism. Kikuchi Y, et al. Gynecol Oncol 1989 Nov;35(2):156–8
Adjuvant effects of calmodulin antagonists on antitumor activity of 1–(2–tetrahydrofuryl)–5–fluorouracil (ftorafur) and a mixture of ftorafur and uracil (UFT) in nude mice bearing human ovarian carcinomas. Kikuchi Y, et al. Gynecol Oncol 1989 Nov;35(2):172–6
Histamine release from beta–escin–permeabilized rat peritoneal mast cells and its inhibition by intracellular Ca2+ blockers, calmodulin inhibitors and cAMP. Izushi K, et al. Immunopharmacology 1989 Nov–Dec;18(3):177–86
Inhibition of mitochondrial palmitate oxidation by calmodulin antagonists. Loo G, et al. Int J Biochem 1990;22(6):631–4
Differential sensitivity of multi–drug–resistant and –sensitive cells to resistance–modifying agents and the relation with reversal of anthracycline resistance. Schuurhuis GJ, et al. Int J Cancer 1990 Aug 15;46(2):330–6
Metal inhibition of calmodulin activity in monkey brain. Vig PJ, et al. J Appl Toxicol 1989 Oct;9(5):313–6
Effect of calmodulin antagonists on the interferon system: induction and action of interferons. Lin HY, et al. J Interferon Res 1990 Feb;10(1):39–46
Divergent pharmacological effects of three calmodulin

antagonists,
N-(6-aminohexyl)-5-chloro-1-naphthalenesulfonamide (W-7), chlorpromazine and calmidazolium, on isometric tension development and myosin light chain phosphorylation in intact bovine tracheal smooth muscle. Asano M. **J Pharmacol Exp Ther** 1989 Nov;251(2):764–73

Novel calmodulin antagonist CGS 9343B inhibits secretory diarrhea. Shook JE, et al. **J Pharmacol Exp Ther** 1989 Oct; 251(1):247–52

Inhibition of calmodulin-activated Ca2(-)-ATPase by endosulfan in rat brain. Srikanth NS, et al. **J Toxicol Environ Health** 1989;28(4):473–81

Effects of the calmodulin antagonist W-7 on isometric tension development and myosin light chain phosphorylation in bovine tracheal smooth muscle. Asano M. **Jpn J Pharmacol** 1990 Mar;52(3):471–81

Effect of anti-calmodulin agents on vasopressin release in vitro to depolarization and calcium ionophore. Rossi NF. **Life Sci** 1990;46(15):1091–8

Effect of W-7 on ionic fluxes and electrical activity of mouse pancreatic islets. Wahl MA, et al. **Mol Cell Endocrinol** 1990 May 28;71(1):63–9

Inhibition of calmodulin activated adenylate cyclase in rat brain by selected insecticides. Kodavanti PR, et al. **Neurotoxicology** 1989 Summer;10(2):219–28

The in vivo and in vitro effect of calmodulin antagonists on the renal actions of 25(OH) vitamin D3 in the rat. Friedlaender MM, et al. **Pflugers Arch** 1989 Dec; 415(3):372–80

The effect of
N-(6-aminohexyl)-5-chloro-1-naphthalenesulfonamide (W-7) on muscarinic receptor-induced Ca2+ mobilization in a human salivary epithelial cell line. He XJ, et al. **Pflugers Arch** 1990 Apr;416(1-2):36–42

Effect of calmodulin antagonists on contraction and 45Ca movements in rat aorta. Wermelskirchen D, et al. **Pharmacology** 1989;39(5):317–26

Effect of H1-antihistamines and calmodulin antagonists on the ionophore A23187-induced eicosanoid release from human leukocytes. Simmet T, et al. **Prog Clin Biol Res** 1989;301:529–33

Modulation of the course of CCl4-induced liver injury by the anti-calmodulin drug thioridazine. Villarruel MC, et al. **Toxicol Lett** 1990 Mar;51(1):13–21

[Prevention of adrenaline-induced arrhythmia by a calmodulin blocker, trifluoroperazine] Meerson FZ, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):59–62 (Eng. Abstr.) **(Rus)**

[Calmodulin blockaders weaken the short-term plasticity of the neuronal cholinoreceptors in the edible snail] Pivovarov AS, et al. **Zh Vyssh Nerv Deiat** 1990 May-Jun;40(3):535–42 (Eng. Abstr.) **(Rus)**

[Protection of myocytes against reperfusion injury by calmodulin inhibition] Slezák J, et al. **Cesk Fysiol** 1989; 38(6):495–8 **(Slo)**

BIOSYNTHESIS

Expression of calmodulin gene is down-regulated in diabetic BB rats. Solomon SS, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):1007–12

BLOOD

Stimulation of free radical generation in human leukocytes by various agents including tumor necrosis factor is a calmodulin dependent process. Das UN, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):1030–6

Does calmodulin regulate the affinity of the human red cell Ca2+ pump for ATP? Caride AJ, et al. **Biochim Biophys Acta** 1990 Aug 10;1027(1):21–4

Platelet calmodulin correlates with platelet turnover. Endoh N, et al. **Eur J Haematol** 1990 Jan;44(1):45–50

[Mathematical model of oscillations in mammalian erythrocytes. The role of calmodulin-dependent Ca-activated Ca-pump] Kholmukhamedov EL, et al. **Biofizika** 1990 Mar-Apr;35(2):375–7 (Eng. Abstr.) **(Rus)**

GENETICS

Molecular analysis of calmodulin and smooth muscle myosin light chain kinase. Means AR, et al. **Adv Exp Med Biol** 1989;255:135–45

Structural organization of calmodulin genes in the rat genome. Nojima H, et al. **Adv Exp Med Biol** 1989; 255:223–32

Conditional-lethal mutant of calmodulin in yeast. Ohya Y, et al. **Adv Exp Med Biol** 1989;255:481–90

Perturbation of the calmodulin system in transformed cells. Van Eldik LJ, et al. **Adv Exp Med Biol** 1990;269:111–20

Genetic dissection of Ca2(+)-dependent ion channel function in Paramecium. Preston RR. **Bioessays** 1990 Jun; 12(6):273–81 (50 ref.)

High-level expression of complementary DNA encoding rat calmodulin in Escherichia coli. Matsuki S, et al. **Biotechnol Appl Biochem** 1990 Jun;12(3):284–91

Ontogenetic development of calmodulin mRNA in rat brain using in situ hybridization histochemistry. Cimino M, et al. **Brain Res Dev Brain Res** 1990 Jun 1;54(1):43–9

Rain-, wind-, and touch-induced expression of calmodulin and calmodulin-related genes in Arabidopsis. Braam J, et al. **Cell** 1990 Feb 9;60(3):357–64

Mutations in paramecium calmodulin indicate functional differences between the C-terminal and N-terminal lobes in vivo. Kink JA, et al. **Cell** 1990 Jul 13;62(1):165–74

Cloning and expression of mouse-brain calmodulin as an activator of Bordetella pertussis adenylate cyclase in Escherichia coli. Danchin A, et al. **Gene** 1989 Aug 1; 80(1):145–9

Structure and expression of fungal calmodulin gene. LéJohn HB. **J Biol Chem** 1989 Nov 15;264(32):19366–72

Site-directed mutagenesis of glutamine residue of calmodulin. Activation of guanylate cyclase of Tetrahymena plasma membrane. Nagao S, et al. **J Biol Chem** 1990 Apr 15; 265(11):5926–9

Characterization and expression of the unique calmodulin gene of Aspergillus nidulans. Rasmussen CD, et al. **J Biol Chem** 1990 Aug 15;265(23):13767–75

The third calmodulin family protein in Tetrahymena. Cloning of the cDNA for Tetrahymena calcium-binding protein of 23 kDa (TCBP-23). Takemasa T, et al. **J Biol Chem** 1990 Feb 15;265(5):2514–7

Fimbrin is a homologue of the cytoplasmic phosphoprotein plastin and has domains homologous with calmodulin and actin gelation proteins. de Arruda MV, et al. **J Cell Biol** 1990 Sep;111(3):1069–79

Partial deduced sequence of the 110-kD-calmodulin complex of the avian intestinal microvillus shows that this mechanoenzyme is a member of the myosin I family. Garcia A, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):2895–903

Calmodulin defects cause the loss of Ca2(+)-dependent K+ currents in two pantophobiac mutants of Paramecium tetraurelia. Preston RR, et al. **J Membr Biol** 1990 Apr; 115(1):51–60

Drosophila melanogaster contains a single calmodulin gene. Further structure and expression studies. Doyle KE, et al. **J Mol Biol** 1990 Jun 20;213(4):599–605

Analysis of expression of multiple genes encoding calmodulin during spermatogenesis. Slaughter GR, et al. **Mol Endocrinol** 1989 Oct;3(10):1569–78

Nucleotide sequence of an alfalfa calmodulin cDNA. Barnett MJ, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3395

Linkage of the calmodulin and ubiquitin loci in Trypanosoma cruzi. Chung SH, et al. **Nucleic Acids Res** 1990 Aug 11; 18(15):4561–9

Vertebrate and yeast calmodulin, despite significant sequence divergence, are functionally interchangeable. Davis TN, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7909–13

In vivo mutations of calmodulin: a mutant Paramecium with altered ion current regulation has an isoleucine-to-threonine change at residue 136 and an altered methylation state at lysine residue 115. Lukas TJ, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7331–5

Substitution at position 116 of Schizosaccharomyces pombe calmodulin decreases its stability under nitrogen starvation and results in a sporulation-deficient phenotype. Takeda T, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9737–41

Anatomical localization of calmodulin mRNA in the rat brain with cloned cDNA and synthetic oligonucleotide probes. Roberts-Lewis JM, et al. **Synapse** 1990;5(3):247–54

[Ca2(+)-regulatory systems in yeast cell cycle] Ohya Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2300–10 **(Jpn)**

[Molecular evolution of calmodulin] Yazawa M. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2091–101 **(Jpn)**

IMMUNOLOGY

Functional properties of peptides derived from seminalplasmin: binding to monospecific anti-seminalplasmin immunoglobulins G and calmodulin. Krauhs E, et al. **Biol Chem Hoppe Seyler** 1990 Feb; 371(2):111–6

Structurally distinct mammalian calmodulins. Zuklys K, et al. **Immunol Lett** 1990 May;24(2):87–92

[Clinical significance of anti-calmodulin antibody assay] Ikeda Y. **Nippon Rinsho** 1990 Feb;48 Suppl:522–5 **(Jpn)**

ISOLATION & PURIFICATION

Soluble calcium-binding proteins: parvalbumins and calmodulin from eel skeletal muscle. Dubois I, et al. **Comp Biochem Physiol [B]** 1990;95(2):381–5

High performance capillary electrophoresis of calmodulin. Chan KF, et al. **Electrophoresis** 1990 Jan;11(1):15–8

[Isolation, purification and characterization of porcine brain calmodulin] Yan JC, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Sep;20(3):235–8 (Eng. Abstr.) **(Chi)**

METABOLISM

High levels of oncomodulin and calmodulin expression in the log phase of cell growth in a chemically transformed rat fibroblast cell line. Blum JK, et al. **Adv Exp Med Biol** 1990;269:121–5 (10 ref.)

Mutant analysis approaches to understanding calcium signal transduction through calmodulin and calmodulin regulated enzymes. Haiech J, et al. **Adv Exp Med Biol** 1990;269:43–56 (56 ref.)

Novel and selective inhibitors of CaM-kinase II and other calmodulin-dependent enzymes. Hidaka H, et al. **Adv Exp Med Biol** 1990;269:159–62 (26 ref.)

Erythrocyte Ca2(+)-ATPase: activation by enzyme oligomerization versus by calmodulin. Kosk-Kosicka D, et al. **Adv Exp Med Biol** 1990;269:169–74 (20 ref.)

Structural details of the interaction of calmodulin with the plasma membrane Ca2(+)-ATPase. Krebs J, et al. **Adv Exp Med Biol** 1990;269:163–7

Calmodulin and calbindin in pancreatic islet cells. Malaisse WJ, et al. **Adv Exp Med Biol** 1990;269:127–33 (23 ref.)

Regulation of the 63-kDa subunit-containing calmodulin-dependent cyclic nucleotide phosphodiesterase isozyme. Sharma RK, et al. **Adv Exp Med Biol** 1989; 255:397–408

Significances of two different Mr caldesmons. Sobue K, et al. **Adv Exp Med Biol** 1989;255:325–35

Interaction between calmodulin and target proteins. Yagi K, et al. **Adv Exp Med Biol** 1989;255:147–54

CGS-19755, a competitive NMDA receptor antagonist, reduces calcium-calmodulin binding and improves outcome after global cerebral ischemia. Grotta JC, et al. **Ann Neurol** 1990 Jun;27(6):612–9

Interaction of amiodarone and its analogs with calmodulin. Deziel MR, et al. **Arch Biochem Biophys** 1989 Nov 1; 274(2):463–70

Potent peptide inhibitors of smooth muscle myosin light chain kinase: mapping of the pseudosubstrate and calmodulin binding domains. Foster CJ, et al. **Arch Biochem Biophys** 1990 Aug 1;280(2):397–404

The interaction of calmodulin with the C-terminal M5 peptide of myosin light chain kinase. Garone L, et al. **Arch Biochem Biophys** 1990 Jan;276(1):12–8

Multiple sites of methyl esterification of calmodulin in intact human erythrocytes. Ota IM, et al. **Arch Biochem Biophys** 1990 Jun;279(2):320–7

Calmodulin-dependent adenylate cyclase activity in rat cerebral cortex: effects of divalent cations, forskolin and isoprenaline. Mørk A, et al. **Arch Int Physiol Biochim** 1989 Jun;97(3):259–71

Calmodulin-binding proteins of Saccharomyces cerevisiae. Liu YS, et al. **Biochem Biophys Res Commun** 1990 Jan 30; 166(2):681–6

Identification and partial purification of a chromatin bound calmodulin activated histone 3 kinase from calf thymus. Wakim BT, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):84–90

A novel synthetic substrate for casein kinase 2. Hagiwara T, et al. **Biochem Int** 1990;20(5):913–9

Tyrosine-specific phosphorylation of calmodulin by the insulin receptor kinase purified from human placenta. Sacks DB, et al. **Biochem J** 1989 Nov 1;263(3):803–12

Interaction of the dihydropyridine calcium antagonist, CD-349, with calmodulin. Tanaka M, et al. **Biochem Pharmacol** 1990 Sep 1;40(5):991–6

Specific association of calmodulin-dependent protein kinase and related substrates with the junctional sarcoplasmic reticulum of skeletal muscle. Chu A, et al. **Biochemistry** 1990 Jun 26;29(25):5899–905

Isolation of a protein fraction from Bordetella pertussis that facilitates entry of the calmodulin-sensitive adenylate cyclase into animal cells. Donovan MG, et al. **Biochemistry** 1989 Oct 3;28(20):8124–9

Changes in the structure of calmodulin induced by a peptide based on the calmodulin-binding domain of myosin light chain kinase. Heidorn DB, et al. **Biochemistry** 1989 Aug 8;28(16):6757–64

Fluorescence studies on calmodulin binding to erythrocyte Ca2(+)-ATPase in different oligomerization states. Kosk-Kosicka D, et al. **Biochemistry** 1990 Feb 20; 29(7):1875–9

Interactions of troponin I and its inhibitory fragment (residues 104–115) with troponin C and calmodulin. Lan J, et al. **Biochemistry** 1989 Sep 5;28(18):7380–5

Turkey gizzard caldesmon: molecular weight determination and calmodulin binding studies. Malencik DA, et al. **Biochemistry** 1989 Oct 3;28(20):8227–33

Identification of the site on calcineurin phosphorylated by Ca2+/CaM-dependent kinase II: modification of the CaM-binding domain. Martensen TM, et al. **Biochemistry** 1989 Nov 28;28(24):9243–7

Trifluoperazine binding to porcine brain calmodulin and skeletal muscle troponin C. Massom L, et al. **Biochemistry** 1990 Jan 23;29(3):671–81

Interaction of calmodulin with the calmodulin binding domain of the plasma membrane Ca2+ pump. Vorherr T, et al. **Biochemistry** 1990 Jan 16;29(2):355–65

Inhibitory effects of newly synthesized sulfonamide derivatives on calmodulin-dependent phosphodiesterase activity and their modulation of the external ATP-dependent permeability change in mammalian cultured cells. Kitagawa T, et al. **Biochim Biophys Acta** 1989 Dec 28;987(2):235–8

Caldesmon, calmodulin and tropomyosin interactions. Watson MH, et al. **Biochim Biophys Acta** 1990 Aug 13; 1054(1):103–13

Identification of the calmodulin binding domain of alpha-fodrin and implications for folding. Sri Widada J, et al. **Biochimie** 1990 Jan;72(1):19–24

Decreased binding of calmodulin to bull sperm proteins during heparin-induced capacitation [published erratum appears in Biol Reprod 1990 Aug;43(2):following 362] Leclerc P, et al. **Biol Reprod** 1990 Mar;42(3):483–9

A fluorescence temperature-jump study on Ca2(+)-induced conformational changes in calmodulin. Tsuruta H, et al. **Biophys Chem** 1990 Jan;35(1):75–84

The interaction of cyclosporin and calmodulin. Steiner RF, et al. **Biopolymers** 1990 May-Jun;29(6-7):1005–14

Developmental expression of calmodulin-dependent cyclic

nucleotide phosphodiesterase in rat brain. Billingsley ML, et al. **Brain Res Dev Brain Res** 1990 May 1;53(2):253–63

Calmodulin concentration in mucus of rainbow trout, Salmo gairdneri, exposed to combinations of acid, aluminum, and calcium. Lewis TE, et al. **Bull Environ Contam Toxicol** 1990 Mar;44(3):449–55

Cadmium inhibits brain calmodulin: in vitro and in vivo studies. Vig PJ, et al. **Bull Environ Contam Toxicol** 1989 Oct;43(4):541–7

Ca2(+)-dependent binding of tamoxifen to calmodulin isolated from bovine brain. Lopes MC, et al. **Cancer Res** 1990 May 1;50(9):2753–8

A long-lasting potentiation of calmodulin-mediated chloride channel activity without a mediation of protein kinase C in Xenopus oocytes injected with rat brain mRNA. Kaneko S, et al. **Cell Calcium** 1990 Apr;11(4):309–17

A second isoform of chicken brush border myosin I contains a 29-residue inserted sequence that binds calmodulin. Halsall DJ, et al. **FEBS Lett** 1990 Jul 2;267(1):126–30

Subcellular distribution of alpha and beta subunit proteins of Ca2+/calmodulin-dependent protein kinase II expressed in Chinese hamster ovary cells. Yamauchi T, et al. **FEBS Lett** 1990 Jun 18;266(1–2):55–8

Allosteric binding of nickel(II) to calmodulin. Raos N, et al. **Fundam Appl Toxicol** 1989 Nov;13(4):816–22

Calcium and calmodulin levels in late embryonic and early hatched Japanese quail brain. Alston-Mills B, et al. **Int J Dev Neurosci** 1990;8(2):187–92

In vitro interactions of calmodulin with the ovine proacrosin-acrosin system. Frenette G, et al. **J Androl** 1990 Jan–Feb;11(1):25–31

Chlordecone interaction of calmodulin binding with phosphodiesterase. Vig PJ, et al. **J Appl Toxicol** 1990 Feb; 10(1):55–7

Inter-domain interaction and the structural flexibility of calmodulin in the connecting region of the terminal two domains. Yazawa M, et al. **J Biochem (Tokyo)** 1990 Feb; 107(2):287–91

Characterization of the carboxyl-terminal 10-kDa cyanogen bromide fragment of caldesmon as an actin-calmodulin-binding region. Bartegi A, et al. **J Biol Chem** 1990 Sep 5;265(25):15231–8

Calcium/calmodulin-independent autophosphorylation sites of calcium/calmodulin-dependent protein kinase II. Studies on the effect of phosphorylation of threonine 305/306 and serine 314 on calmodulin binding using synthetic peptides. Colbran RJ, et al. **J Biol Chem** 1990 Jul 5;265(19):11213–9

The gamma-subunit of skeletal muscle phosphorylase kinase contains two noncontiguous domains that act in concert to bind calmodulin. Dasgupta M, et al. **J Biol Chem** 1989 Oct 15;264(29):17156–63

Phosphorylation-regulated calmodulin binding to a prominent cellular substrate for protein kinase C. Graff JM, et al. **J Biol Chem** 1989 Dec 25;264(36):21818–23

Purification and characterization of catalytic fragments of phosphorylase kinase gamma subunit missing a calmodulin-binding domain. Harris WR, et al. **J Biol Chem** 1990 Jul 15;265(20):11740–5

Modulation of the stability of rabbit skeletal muscle myosin light chain kinase through the calmodulin-binding domain. Kennelly PJ, et al. **J Biol Chem** 1990 Jan 25;265(3):1742–9

Effect of alpha-adrenergic blockers on calmodulin association with the nuclear matrix of rat liver cells during proliferative activation. Pujol MJ, et al. **J Biol Chem** 1989 Nov 15;264(32):18863–5

A proton nuclear magnetic resonance and molecular modeling study of calmidazolium (R24571) binding to calmodulin and skeletal muscle troponin C. Reid DG, et al. **J Biol Chem** 1990 Jun 15;265(17):9744–53

Synthetic fragments of calmodulin calcium-binding site III. A test of the acid pair hypothesis. Reid RE. **J Biol Chem** 1990 Apr 15;265(11):5971–6

Calmodulin activation of target enzymes. Consequences of deletions in the central helix. VanBerkum MF, et al. **J Biol Chem** 1990 Mar 5;265(7):3750–6

Calcium-induced shape change of calmodulin with mastoparan studied by solution X-ray scattering. Yoshino H, et al. **J Biol Chem** 1989 Nov 25;264(33):19706–9

Fluorescent adducts of wheat calmodulin implicate the amino-terminal region in the activation of skeletal muscle myosin light chain kinase. Zot HG, et al. **J Biol Chem** 1990 Sep 5;265(25):14796–801

Use of DNA sequence and mutant analyses and antisense oligodeoxynucleotides to examine the molecular basis of nonmuscle myosin light chain kinase autoinhibition, calmodulin recognition, and activity. Shoemaker MO, et al. **J Cell Biol** 1990 Sep;111(3):1107–25

Immunohistochemical determination of calcium-calmodulin binding predicts neuronal damage after global ischemia. Picone CM, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):805–11

Retinoic acid inhibits calmodulin binding to human erythrocyte membranes and reduces membrane Ca2(+)-adenosine triphosphatase activity. Davis FB, et al. **J Clin Invest** 1990 Jun;85(6):1999–2003

Ultracentrifugation study on interactions among calmodulin, cardiac troponin and tropomyosin-actin complex. Yamamoto K, et al. **J Mol Cell Cardiol** 1990 Mar; 22(3):279–85

Smooth muscle myosin as a calmodulin binding protein. Affinity increase on filament assembly. Sobieszek A. **J Muscle Res Cell Motil** 1990 Apr;11(2):114–24

Binding of the neuronal protein B-50, but not the metabolite B-60, to calmodulin. Coggins PJ, et al. **J Neurochem** 1990 Jan;54(1):274–7

Myelin basic protein: interaction with calmodulin and gangliosides. Chan KF, et al. **J Neurosci Res** 1990 Apr; 25(4):535–44

A 1H-NMR comparison of calmodulin activation by calcium and by cadmium. Akiyama K, et al. **Jpn J Pharmacol** 1990 Jul;53(3):393–401

Increased covalent binding of acetaldehyde to calmodulin in the presence of calcium. Jennett RB, et al. **Life Sci** 1989; 45(16):1461–6

Stimulation of proteolysis on calmodulin. Kuo WN, et al. **Life Sci** 1990;47(4):291–7

The regulatory role of calmodulin-dependent guanylate cyclase in association with hormonal imprinting in Tetrahymena. Kovács P, et al. **Microbios** 1989; 59(239):123–8

Members of the 70-kilodalton heat shock protein family contain a highly conserved calmodulin-binding domain. Stevenson MA, et al. **Mol Cell Biol** 1990 Mar;10(3):1234–8

Muscarinic receptor-mediated translocation of calmodulin in SK-N-SH human neuroblastoma cells. Mangels LA, et al. **Mol Pharmacol** 1990 Jun;37(6):820–6

Cyclic nucleotide phosphodiesterase and 5'-nucleotidase: a coupled system. Galoyan AA, et al. **Neurochem Res** 1989 Dec;14(12):1213–21

Elevated calmodulin levels and reduced calmodulin-stimulated calcium-ATPase in Duchenne progressive muscular dystrophy. Niebroj-Dobosz I, et al. **Neurology** 1989 Dec;39(12):1610–4

Impairement of vascular reactivity and changes in intracellular calcium and calmodulin levels of smooth muscle cells in canine basilar arteries after subarachnoid hemorrhage. Sakaki S, et al. **Neurosurgery** 1989 Nov; 25(5):753–61

Hatching of Schistosoma mansoni eggs is a Ca2+/calmodulin-dependent process. Katsumata T, et al. **Parasitol Res** 1989;76(1):90–1

Calmodulin loss in vascular smooth muscle following Triton X-100 or saponin skinning. Gardner JP, et al. **Pflugers Arch** 1989 Aug;414(4):484–91

Isolation of nitric oxide synthetase, a calmodulin-requiring enzyme. Bredt DS, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):682–5

Identification of a noncatalytic cGMP-binding domain conserved in both the cGMP-stimulated and photoreceptor cyclic nucleotide phosphodiesterases. Charbonneau H, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):288–92

In vitro tyrosine phosphorylation studies on RAS proteins and calmodulin suggest that polylysine-like basic peptides or domains may be involved in interactions between insulin receptor kinase and its substrate. Fujita-Yamaguchi Y, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7306–10

Functional and structural similarities between the inhibitory region of troponin I coded by exon VII and the calmodulin-binding regulatory region of the catalytic subunit of phosphorylase kinase. Paudel HK, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7285–9

Effects of drugs on calmodulin-mediated enzymatic actions. Ovádi J. **Prog Drug Res** 1989;33:353–95 (180 ref.)

Calcium-calmodulin binding in ischemic rat neurons after calcium channel blocker therapy. Grotta JC, et al. **Stroke** 1990 Jun;21(6):948–52

How calmodulin binds its targets: sequence independent recognition of amphiphilic alpha-helices. O'Neil KT, et al. **Trends Biochem Sci** 1990 Feb;15(2):59–64 (32 ref.)

Stimulation of calmodulin binding to skeletal muscle membrane proteins by 1,25-dihydroxy-vitamin D3. Massheimer V, et al. **Z Naturforsch [C]** 1990 Jun; 45(6):663–70

[Ca2+ binding to calmodulin—conformational change and expression of function] Yagi K. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2083–90 **(Jpn)**

[Interaction of calmodulin with its target proteins] Leśniak W. **Postepy Biochem** 1989;35(1–2):63–88 (166 ref.) **(Pol)**

[cAMP, calmodulin-dependent stimulation and stability to proteolysis of Ca 2+ transport in the heart sarcoplasmic reticulum] Antipenko AE, et al. **Biokhimiia** 1989 Dec; 54(12):2023–9 (Eng. Abstr.) **(Rus)**

[Regulation by Ca2+-calmodulin-dependent phosphorylation of passive transport of Ca2+ in the myometrial sarcolemma] Kondratiuk TP, et al. **Biokhimiia** 1989 Aug;54(8):1368–72 (Eng. Abstr.) **(Rus)**

[A catalytic component of calmodulin-independent adenylate cyclase from bovine brain. Amino acid sequence of a protein and nucleotide sequence of corresponding cDNA] Lipkin VM, et al. **Dokl Akad Nauk SSSR** 1989; 307(6):1502–6 **(Rus)**

[Effects of cordarone on Ca2+-dependent cellular systems] Kurennaia GS, et al. **Kardiologiia** 1990 May;30(5):70–3 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

The effects of mercuric chloride on calmodulin-mediated Ca2+ transport in rat brain. Clifton GG, et al. **Am J Med Sci** 1990 Jan;299(1):26–31

A comparative kinetic study of bovine calmodulin-dependent cyclic nucleotide phosphodiesterase isozymes utilizing cAMP, cGMP and their 2'-O-anthraniloyl-,2'-O-(N-methylanthraniloyl)-derivatives as substrates. Grewal J, et al. **Biochem Int** 1989 Dec;19(6):1287–95

Calmodulin dependence of transferrin receptor recycling in rat reticulocytes. Grasso JA, et al. **Biochem J** 1990 Feb 15;266(1):261–72

Age-related determination of the basal and calmodulin-stimulated human RBC Ca2(+)-ATPase activity. Friederichs E, et al. **Biochem Med Metab Biol** 1990 Feb;43(1):39–44

Olfactory transduction: cross-talk between second-messenger systems. Anholt RR, et al. **Biochemistry** 1990 May 1;29(17):4049–54

Specific association of calmodulin-dependent protein kinase and related substrates with the junctional sarcoplasmic reticulum of skeletal muscle. Chu A, et al. **Biochemistry** 1990 Jun 26;29(25):5899–905

Effects of calmodulin on erythrocyte Ca2(+)-ATPase activation and oligomerization. Kosk-Kosicka D, et al. **Biochemistry** 1990 Apr 17;29(15):3772–7

Similarities between the effects of dimethyl sulfoxide and calmodulin on the red blood cell Ca2(+)-ATPase. Benaim G, et al. **Biochim Biophys Acta** 1990 Jul 9;1026(1):87–92

Conformational changes of (Ca2+-Mg2+)-ATPase of erythrocyte plasma membrane caused by calmodulin and phosphatidylserine as revealed by circular dichroism and fluorescence studies. Wrzosek A, et al. **Biochim Biophys Acta** 1989 Nov 27;986(2):263–70

Ca2+ and calmodulin-sensitive inositol trisphosphate kinase from bovine parathyroid. Conigrave AD, et al. **Cell Calcium** 1989 Nov–Dec;10(8):543–50

The effect of Ca2+ and calmodulin on the inhibition of Ca2(+)+Mg2(+)-ATPase in erythrocyte ghost membranes by nonpolar and polar carbodiimides. Famulski KS, et al. **Cell Calcium** 1990 Apr;11(4):275–80

Rat duodenal smooth muscle contractile responses to angiotensin II are dependent on calmodulin. Weekley LB. **Clin Exp Pharmacol Physiol** 1990 Feb;17(2):99–104

Calcium-dependent nitric oxide synthesis in endothelial cytosol is mediated by calmodulin. Busse R, et al. **FEBS Lett** 1990 Jun 4;265(1–2):133–6

Invasive adenylyl cyclase of Bordetella pertussis. Physical, catalytic, and toxic properties. Gentile F, et al. **J Biol Chem** 1990 Jun 25;265(18):10686–92

Chimeric calmodulin-cardiac troponin C proteins differentially activate calmodulin target enzymes. George SE, et al. **J Biol Chem** 1990 Jun 5;265(16):9228–35

Molecular cloning of a third isoform of the calmodulin-sensitive plasma membrane Ca2+-transporting ATPase that is expressed predominantly in brain and skeletal muscle. Greeb J, et al. **J Biol Chem** 1989 Nov 5; 264(31):18569–76

Calmodulin regulates fodrin susceptibility to cleavage by calcium-dependent protease I. Harris AS, et al. **J Biol Chem** 1989 Oct 15;264(29):17401–8

Activation of type II calcium/calmodulin-dependent protein kinase by Ca2+/calmodulin is inhibited by autophosphorylation of threonine within the calmodulin-binding domain. Patton BL, et al. **J Biol Chem** 1990 Jul 5;265(19):11204–12

A-type ATP binding consensus sequences are critical for the catalytic activity of the calmodulin-sensitive adenylyl cyclase from Bacillus anthracis. Xia ZG, et al. **J Biol Chem** 1990 Apr 25;265(12):6517–20

Calmodulin dissociation regulates brush border myosin I (110-kD-calmodulin) mechanochemical activity in vitro. Collins K, et al. **J Cell Biol** 1990 Apr;110(4):1137–47

Effects of EGTA and calmodulin, neutral thiol proteinases and protein kinase C inhibitors on loss of chicken pineal serotonin N-acetyltransferase activity. Rodriguez-Cabello JC, et al. **J Comp Physiol [B]** 1989;159(5):583–8

Effects of bacterial lipopolysaccharide and calmodulin on Ca2(+)-ATPase and calcium in human natural killer cells, studied by a combined technique of immunoelectron microscopy and ultracytochemistry. Kang YH. **J Histochem Cytochem** 1990 Mar;38(3):359–70

Calmodulin involvement in stress- and corticosterone-induced down-regulation of cyclic AMP-generating systems in brain. Gannon MN, et al. **J Neurochem** 1990 Jul;55(1):276–84

Calcium-dependent protein phosphorylation in Babesia bovis and its role in growth regulation. Ray A, et al. **J Parasitol** 1990 Apr;76(2):153–61

Inhibition of protein kinase C by calmodulin and calmodulin fragments. Krüger H, et al. **J Protein Chem** 1989 Jun; 8(3):363–5

Characteristics of Ca2+/calmodulin- and Ca2+/phosphatidylserine-stimulated phosphoproteins in rat striatum. Lau YS. **Neurochem Res** 1990 Mar; 15(3):265–72

Expression of a multifunctional Ca2+/calmodulin-dependent protein kinase and mutational analysis of its autoregulation. Hanson PI, et al. **Neuron** 1989 Jul;3(1):59–70

The effect of calmodulin inhibitors of the adenylate cyclase system. Okruhlicová L, et al. **Physiol Bohemoslov** 1990; 39(2):151–5

Ca2+/calmodulin sensitivity may be common to all forms of neural adenylate cyclase. Eliot LS, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9564–8

Mutagenesis of Thr-286 in monomeric Ca2+/calmodulin-dependent protein kinase II eliminates Ca2+/calmodulin-independent activity. Waxham MN, et

al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1273–7

Effect of septal kindling on glutamate binding and calcium/calmodulin-dependent phosphorylation in a postsynaptic density fraction isolated from rat cerebral cortex. Wu K, et al. **Proc Natl Acad Sci U S A** 1990 Jul; 87(14):5298–302

Modulators of myosin light chain kinase activity affect both [Ca+2] and contraction in single smooth muscle cells. Itoh T, et al. **Prog Clin Biol Res** 1990;327:73–87 (26 ref.)

Free radical generation in human leukocytes by CIS-unsaturated fatty acids is a calmodulin dependent process. Sangeetha P, et al.
Prostaglandins Leukot Essent Fatty Acids 1990 Jan; 39(1):27–30

Effects of calmodulin and calcium channel blockers on the Ca2+ induced outflow of K+ in intact red blood cells of patients with essential hypertension. Buemi M, et al. **Riv Eur Sci Med Farmacol** 1989 Feb;11(1):69–75

Calmodulin activation of calcium-dependent sodium channels in excised membrane patches of Paramecium. Saimi Y, et al. **Science** 1990 Sep 21;249(4975):1441–4

[Staurosporine inhibits enhancement of the metabolism of phospholipids induced by phorbol-ester in a manner similar to that of combined action agents with calmodulin] Nishino H, et al. **C R Soc Biol (Paris)** 1989;183(6):571–7 (Eng. Abstr.) **(Fre)**

[The effect of calmodulin and chlorpromazine on the activity of phospholipases A2 from various sources] Azizova NN, et al. **Biokhimiia** 1990 Jan;55(1):23–8 (Eng. Abstr.) **(Rus)**

[Calmodulin-induced activation of ATP-dependent Ca2+ transport in plasma membranes of the myometrium] Prishchepa LA, et al. **Biokhimiia** 1990 May;55(5):905–10 (Eng. Abstr.) **(Rus)**

[Specific binding of cGMP by the retinal rod axoneme and its modulation by calcium ions and calmodulin] Volotovskiĭ ID, et al. **Dokl Akad Nauk SSSR** 1990 Jan–Feb; 310(1):214–7 **(Rus)**

PHYSIOLOGY

Calmodulin-dependent enzymes as a target of staphylococcal enterotoxin A. Alakhov VYu, et al. **Adv Enzyme Regul** 1990;30:331–55

A mechanism of cadmium poisoning: the cross effect of calcium and cadmium in the calmodulin-dependent system. Sutoo D, et al. **Arch Toxicol** 1990;64(2):161–4

Ca2(+)-calmodulin-dependent protein kinase II phosphorylates various types of non-epithelial intermediate filament proteins. Tokui T, et al.
Biochem Biophys Res Commun 1990 Jun 29;169(3):896–904

Role of Ca2(+)-calmodulin and protein kinase C in the secretory action of heat-labile enterotoxin of Escherichia coli in mice. Goyal J, et al. **Biochem Int** 1989 Nov; 19(5):1007–17

The quaternary structure of phosphorylase kinase as influenced by low concentrations of urea. Evidence suggesting a structural role for calmodulin. Paudel HK, et al. **Biochem J** 1990 Jun 1;268(2):393–9

Inhibition of inositol 1,4,5-trisphosphate 3-kinase by heparin: basal and Ca2+/calmodulin-stimulated activity [letter] Takazawa K, et al. **Biochem J** 1989 Aug 1;261(3):1059

Calmodulin involvement in Ca2(+)-induced insulin release from electropermeabilized islets of Langerhans. Smethurst PA, et al. **Biochem Soc Trans** 1990 Jun;18(3):464

A role for calmodulin in the growth of human hematopoietic progenitor cells. Katayama N, et al. **Blood** 1990 Apr 1; 75(7):1446–54

Postsynaptic long-term enhancement (LTE) by dopamine may be mediated by Ca2+ and calmodulin. Mochida S, et al. **Brain Res** 1990 Apr 9;513(1):144–8

Calmodulin-independent stimulation of renin release by exposure of rat kidney cortical slices to calcium. Matsumura Y, et al. **Clin Exp Pharmacol Physiol** 1988 Aug; 15(8):585–90

Cholinergic stimulation of isolated rat parietal cells: role of calcium, calmodulin and protein kinase C. Schepp W, et al. **Clin Physiol Biochem** 1989;7(3–4):137–48

Mammalian lens inter-fiber resistance is modulated by calcium and calmodulin. Gandolfi SA, et al.
Curr Eye Res 1990 Jun;9(6):533–41

The role of calmodulin in the responses to adrenocorticotropin of plasma membranes from adrenal cells. Papadopoulos V, et al. **Endocrinology** 1990 May; 126(5):2465–73

Effects of changes in calmodulin levels on cell proliferation. Rasmusen CD, et al. **Environ Health Perspect** 1990 Mar; 84:31–4 (29 ref.)

Central helix role in the contraction-relaxation switching mechanisms of permeabilized skeletal and smooth muscles with genetic manipulation of calmodulin. Gulati J, et al. **FEBS Lett** 1990 Apr 24;263(2):340–4

The calmodulin-activated form of the Ca2(+)-pumping ATPase of the cardiac sarcolemmal membrane produces Ca2+ gradients with a thermodynamic efficiency of 100%. Dixon DA, et al. **J Bioenerg Biomembr** 1990 Apr; 22(2):181–95

On the role of Ca2(+)-calmodulin-dependent and cAMP-dependent protein phosphorylation in the circadian rhythm of Neurospora crassa. Techel D, et al.
J Comp Physiol [B] 1990;159(6):695–706

The inhibition by calmodulin of thyroid-stimulating hormone binding to epididymal fat, testis and thyroid membranes in the guinea-pig. Inui T, et al. **J Endocrinol** 1990 Apr; 125(1):103–7

Phorbol myristate acetate-induced down-modulation of CD4 is dependent on calmodulin and intracellular calcium. Bigby M, et al. **J Immunol** 1990 Apr 15;144(8):3111–6

ATP and calmodulin dependent actomyosin aggregates induced by cytochalasin D in goldfish retinal ganglion cell axons in vitro. Edmonds BT, et al. **J Neurobiol** 1990 Jun; 21(4):555–66

Calmodulin-binding proteins and calcium/calmodulin-regulated enzyme activities associated with brain actomyosin. Larson RE, et al. **J Neurochem** 1990 Apr;54(4):1288–94

Staggerer mutant mouse Purkinje cells do not contain detectable calmodulin mRNA. Messer A, et al.
J Neurochem 1990 Jul;55(1):293–302

Evaluation of a model of long-term memory based on the properties of the Ca2+/calmodulin-dependent protein kinase. Lisman J, et al. **J Physiol (Paris)** 1988–89; 83(3):187–97

Differential effects of triorganotins on calmodulin activity. Yallapragada PR, et al. **J Toxicol Environ Health** 1990; 29(3):317–27

Characterization of phytochrome-regulated gene expression in a photoautotrophic cell suspension: possible role for calmodulin. Lam E, et al. **Mol Cell Biol** 1989 Nov; 9(11):4819–23

Calmodulin and protein kinase C activation duplicates the biphasic secretion of luteinizing hormone. Das S, et al.
Mol Cell Endocrinol 1989 Sep;66(1):1–8

Hormone-induced biosynthesis of endothelium-derived relaxing factor/nitric oxide-like material in N1E-115 neuroblastoma cells requires calcium and calmodulin. Förstermann U, et al. **Mol Pharmacol** 1990 Jul;38(1):7–13

Involvement of a Ca2+-calmodulin interaction in the yeast-mycelial (Y-M) transition of Candida albicans. Sabie FT, et al. **Mycopathologia** 1989 Oct;108(1):47–54

Ca2+/calmodulin-dependent protein kinase II immunoreactivity in the rat hippocampus after forebrain ischemia. Onodera H, et al. **Neurosci Lett** 1990 May 31; 113(2):134–8

Calmodulin and the transmitter release at the neuromuscular junction. Contradictory results obtained with trifluoperazine. Brănişteanu DD, et al. **Physiologie** 1989 Oct–Dec;26(4):261–6

Enzyme activation by yeast calmodulin and a calcium-binding protein of Escherichia coli. Yazawa M, et al. **Prog Clin Biol Res** 1989;315:458–9

Calmodulin, cell growth and gene expression. Rasmussen CD, et al. **Trends Neurosci** 1989 Nov;12(11):433–8 (65 ref.)

[Development of Ca2(+)-calmodulin activated protein kinase II and cAMP activated protein kinase in the central nervous system] Wang X, et al.
Sheng Li Ko Hsueh Chin Chan 1990 Jan;21(1):58–60 (18 ref.) **(Chi)**

[Contribution of calmodulin to renin release in spontaneously hypertensive rats] Shiotani M, et al.
Nippon Jinzo Gakkai Shi 1989 Aug;31(8):859–63 (Eng. Abstr.) **(Jpn)**

[Calmodulin and its role in the regulation of plant cell metabolism] Sączyńska V. **Postepy Biochem** 1989; 35(1–2):89–108 (68 ref.) **(Pol)**

ULTRASTRUCTURE

A joint 2D NMR and theoretical investigation of Ca2+ binding loops III and IV of calmodulin. Gresh N, et al. **J Biomol Struct Dyn** 1990 Apr;7(5):1003–18

CALMODULIN-BINDING PROTEINS

Characterization of the calmodulin-binding domain of calcineurin deduced from a complementary DNA clone. Kincaid RL, et al. **Adv Exp Med Biol** 1989;255:347–58

Assignment of the positions of chymotryptic fragments and cysteinyl groups in the primary structure of caldesmon in relation to a conformational change. Katayama E.
J Biochem (Tokyo) 1989 Dec;106(6):988–93

Amino acid sequence studies on cyanogen bromide peptides of chicken caldesmon which bind to calmodulin. Takagi T, et al. **J Biochem (Tokyo)** 1989 Nov;106(5):778–83

ANALYSIS

Demonstration of different regional distributions of calcineurin subunits using monoclonal antibodies. Matsui H, et al. **Adv Exp Med Biol** 1989;255:369–75

Caldesmon from rabbit liver: molecular weight and length by analytical ultracentrifugation. Stafford WF, et al.
Arch Biochem Biophys 1990 Aug 15;281(1):66–9

Tropomyosin-caldesmon/actomyosin systems in platelets and arterial smooth muscle: results from exchange experiments. Onji T, et al. **Biochim Biophys Acta** 1989 Dec 21; 999(3):248–53

Calcineurin in the postnatal striatum of the rat: an immunohistochemical study. Goto S, et al.
Exp Brain Res 1989;77(2):442–6

Identity of the calmodulin-binding proteins in bovine lens plasma membranes. Louis CF, et al. **Exp Eye Res** 1990 May;50(5):495–503

Cyclical differentiation of Trypanosoma brucei involves changes in the cellular complement of calmodulin-binding proteins. Ruben L, et al. **Exp Parasitol** 1990 Feb; 70(2):144–53

Demonstration of calmodulin-stimulated phosphatase isozymes by monoclonal antibodies. Yokoyama N, et al. **J Biol Chem** 1990 May 15;265(14):8170–5

Nuclear localization of 68 kDa calmodulin-binding protein is associated with the onset of DNA replication. Subramanyam C, et al. **J Cell Physiol** 1990 Sep;144(3):423–8

Identification of calmodulin-binding proteins. Billingsley ML, et al. **Methods Enzymol** 1990;184:451–67

ANTAGONISTS & INHIBITORS

Identification of an autoinhibitory domain in calcineurin. Hashimoto Y, et al. **J Biol Chem** 1990 Feb 5;265(4):1924–7

GENETICS

Calspermin is a testis specific calmodulin-binding protein closely related to Ca2+/calmodulin-dependent protein kinases. Ono T, et al. **Adv Exp Med Biol** 1989;255:263–8

Significances of two different Mr caldesmons. Sobue K, et al. **Adv Exp Med Biol** 1989;255:325–35

Primary structure and functional expression of h-caldesmon complementary DNA. Hayashi K, et al.
Biochem Biophys Res Commun 1989 Oct 16;164(1):503–11

Evidence for a second isoform of the catalytic subunit of calmodulin-dependent protein phosphatase (calcineurin A). Kuno T, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1352–8

Expression of cDNAs encoding wild-type and mutant neuromodulins in Escherichia coli: comparison with the native protein from bovine brain. Au DC, et al.
Biochemistry 1989 Oct 3;28(20):8142–8

Isolation of a cDNA likely to encode a novel Ca2+-dependent/calmodulin-stimulated protein phosphatase. da Cruz e Silva EF, et al.
Biochim Biophys Acta 1989 Dec 22;1009(3):293–6

Isolation and sequence of a cDNA clone for human calcineurin B, the Ca2+-binding subunit of the Ca2+/calmodulin-stimulated protein phosphatase. Guerini D, et al. **DNA** 1989 Nov;8(9):675–82

Mapping the domain structure of human erythrocyte adducin. Joshi R, et al. **J Biol Chem** 1990 Aug 5; 265(22):13130–6

Cloning and characterization of molecular isoforms of the catalytic subunit of calcineurin using nonisotopic methods. Kincaid RL, et al. **J Biol Chem** 1990 Jul 5;265(19):11312–9

Cloning of human calcineurin A: evidence for two isozymes and identification of a polyproline structural domain. Guerini D, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(23):9183–7

IMMUNOLOGY

Characterization of a high-affinity monoclonal antibody to calcineurin whose epitope defines a new structural domain of calcineurin A. Hubbard MJ, et al. **Eur J Biochem** 1989 Nov 6;185(2):411–8

ISOLATION & PURIFICATION

Ca2+/calmodulin-dependent protein phosphatase in bovine parotid gland: purification and characterization. Yokoyama N, et al. **Cell Calcium** 1989 Oct;10(7):457–66

Isolation, characterization and immunocytochemical localization of caldesmon-like protein from molluscan striated muscle. Bartegi A, et al. **Eur J Biochem** 1989 Nov 20;185(3):589–95

Simplified co-purification of vascular smooth muscle calponin and caldesmon. Abe M, et al.
J Biochem (Tokyo) 1990 Apr;107(4):507–9

Purification and characterization of novel calmodulin-binding protein from cardiac muscle. Sharma RK. **J Biol Chem** 1990 Jan 15;265(2):1152–7

METABOLISM

Calcineurin and synaptophysin in the human spinal cord of normal individuals and patients with familial dysautonomia. Goto S, et al. **Acta Neuropathol (Berl)** 1990;79(6):647–52

Subdivisional involvement of nigrostriatal loop in idiopathic Parkinson's disease and striatonigral degeneration. Goto S, et al. **Ann Neurol** 1989 Dec;26(6):766–70

Calmodulin-binding proteins of Saccharomyces cerevisiae. Liu YS, et al. **Biochem Biophys Res Commun** 1990 Jan 30; 166(2):681–6

Identification of a 51-kilodalton calmodulin binding protein that changes during estrogen-stimulated cell growth. Laquerre S, et al. **Biochem Cell Biol** 1990 May;68(5):863–9

Characterization of the fragmented forms of calcineurin produced by calpain I. Wang KK, et al.
Biochem Cell Biol 1989 Oct;67(10):703–11

Kinase activity associated with caldesmon is Ca2+/calmodulin-dependent kinase II. Scott-Woo GC, et al. **Biochem J** 1990 Jun 1;268(2):367–70

Defective phosphorylation of a calmodulin-binding protein in cystic-fibrosis submandibular glands. Shori DK, et al. **Biochem J** 1989 Oct 15;263(2):613–6

Calmodulin-binding proteins as calpain substrates. Wang KK, et al. **Biochem J** 1989 Sep 15;262(3):693–706 (167 ref.)

Studies on phosphorylation of calcineurin. Pereira MM, et al. **Biochem Soc Trans** 1990 Jun;18(3):447

Identification of the protein kinase C phosphorylation site in neuromodulin. Apel ED, et al. **Biochemistry** 1990 Mar 6;29(9):2330–5

Turkey gizzard caldesmon: molecular weight determination

and calmodulin binding studies. Malencik DA, et al. **Biochemistry** 1989 Oct 3;28(20):8227–33

Identification of the site on calcineurin phosphorylated by Ca2+/CaM-dependent kinase II: modification of the CaM-binding domain. Martensen TM, et al. **Biochemistry** 1989 Nov 28;28(24):9243–7

Decreased binding of calmodulin to bull sperm proteins during heparin-induced capacitation [published erratum appears in Biol Reprod 1990 Aug;43(2):following 362] Leclerc P, et al. **Biol Reprod** 1990 Mar;42(3):483–9

Developmental expression of neuronal calmodulin-binding proteins in rat brain. Polli JW, et al. **Brain Res Dev Brain Res** 1990 Apr 1;53(1):62–70

The effect of caldesmon on dynamic properties of F-actin alone and bound to heavy meromyosin and/or tropomyosin. Gałązkiewicz B, et al. **Eur J Biochem** 1989 Dec 8;186(1–2):233–8

Phosphorylation of high-Mr caldesmon by protein kinase C modulates the regulatory function of this protein on the interaction between actin and myosin. Tanaka T, et al. **Eur J Biochem** 1990 Mar 30;188(3):495–500

Phosphorylation of caldesmon. Abougou JC, et al. **FEBS Lett** 1989 Nov 6;257(2):408–10

Competitive binding of the troponin T-specific pool of caldesmon antibodies and tropomyosin to skeletal troponin T and smooth muscle caldesmon. Birukov KG, et al. **FEBS Lett** 1990 Mar 26;262(2):263–5

Complexes between 15 kDa caldesmon fragment and actin investigated by immuno-electron microscopy. Harricane MC, et al. **FEBS Lett** 1990 Aug 20;269(1):185–8

Interaction of smooth muscle caldesmon with S-100 protein. Skripnikova EV, et al. **FEBS Lett** 1989 Nov 6;257(2):380–2

In vitro interactions of calmodulin with the ovine prosacrosin-acrosin system. Frenette G, et al. **J Androl** 1990 Jan–Feb;11(1):25–31

Calcium-dependent control of caldesmon-actin interaction by S100 protein. Fujii T, et al. **J Biochem (Tokyo)** 1990 Jan;107(1):133–7

Characterization of the carboxyl-terminal 10-kDa cyanogen bromide fragment of caldesmon as an actin–calmodulin–binding region. Bartegi A, et al. **J Biol Chem** 1990 Sep 5;265(25):15231–8

Cross-linking of smooth muscle caldesmon to the NH2-terminal region of skeletal F-actin. Bartegi A, et al. **J Biol Chem** 1990 Feb 5;265(4):2231–7

Calcineurin–phospholipid interactions. Identification of the phospholipid-binding subunit and analyses of a two-stage binding process. Politino M, et al. **J Biol Chem** 1990 May 5;265(13):7619–22

Identification and protein kinase C-dependent phosphorylation of alpha-adducin in human fibroblasts. Waseem A, et al. **J Cell Sci** 1990 May;96 (Pt 1):93–8

Smooth muscle myosin as a calmodulin binding protein. Affinity increase on filament assembly. Sobieszek A. **J Muscle Res Cell Motil** 1990 Apr;11(2):114–24

Calmodulin-binding proteins and calcium/calmodulin-regulated enzyme activities associated with brain actomyosin. Larson RE, et al. **J Neurochem** 1990 Apr;54(4):1288–94

Mitosis-specific phosphorylation causes 83K non-muscle caldesmon to dissociate from microfilaments. Yamashiro S, et al. **Nature** 1990 Apr 12;344(6267):675–8

Stimulation of calmodulin binding to skeletal muscle membrane proteins by 1,25-dihydroxy-vitamin D3. Massheimer V, et al. **Z Naturforsch [C]** 1990 Jun; 45(6):663–70

PHARMACOLOGY

Caldesmon inhibits the cooperative turning-on of the smooth muscle heavy meromyosin by tropomyosin-actin. Horiuchi KY, et al. **Biochemistry** 1989 Nov 14;28(23):9111–6

Caldesmon weakens the bonding between myosin heads and actin in ghost fibers. Nowak E, et al. **Biochim Biophys Acta** 1989 Dec 21;999(3):289–92

Caldesmon, calmodulin and tropomyosin interactions. Watson MH, et al. **Biochim Biophys Acta** 1990 Aug 13; 1054(1):103–13

Dissociation of the effect of caldesmon on the ATPase activity and on the binding of smooth heavy meromyosin to actin by partial digestion of caldesmon. Velaz L, et al. **J Biol Chem** 1990 Feb 15;265(5):2929–34

PHYSIOLOGY

A model for caldesmon in latch-bridge formation in smooth muscle. Walsh MP, et al. **Adv Exp Med Biol** 1989; 255:337–46

Alpha-actinins, calspectin (brain spectrin or fodrin), and actin participate in adhesion and movement of growth cones. Sobue K, et al. **Neuron** 1989 Sep;3(3):311–9

Smooth muscle caldesmon. Walsh MP. **Prog Clin Biol Res** 1990;327:127–40 (51 ref.)

[Calcineurin and neuronal function] Goto S, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2130–44 **(Jpn)**

[Calmodulin-binding protein; recent biological aspects of calspectin (fodrin or nonerythroid spectrin)] Sobue K, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2116–29 **(Jpn)**

ULTRASTRUCTURE

Caldesmon and the structure of smooth muscle thin filaments: electron microscopy of isolated thin filaments. Moody C, et al. **J Muscle Res Cell Motil** 1990 Apr;11(2):176–85

CALORIC INTAKE

Caloric requirements in burned patients. Pfisterer M, et al. **Acta Anaesthesiol Belg** 1989;40(3):187–94 (33 ref.)

Exercise therapy and hypocaloric diet in the treatment of obese children and adolescents. Reybrouck T, et al. **Acta Paediatr Scand** 1990 Jan;79(1):84–9

Protein and energy requirements of low birth weight infants. Heird WC, et al. **Acta Paediatr Scand Suppl** 1989;351:13–23

Exercise intensity does not affect the composition of diet- and exercise-induced body mass loss. Ballor DL, et al. **Am J Clin Nutr** 1990 Feb;51(2):142–6

Quantitative changes in dietary fat intake and serum cholesterol in women: results from a randomized, controlled trial. Boyd NF, et al. **Am J Clin Nutr** 1990 Sep; 52(3):470–6

Calorie and protein provision for recovery from severe burns in infants and young children. Cunningham JJ, et al. **Am J Clin Nutr** 1990 Apr;51(4):553–7

Moderate alcohol intake and spontaneous eating patterns of humans: evidence of unregulated supplementation. de Castro JM, et al. **Am J Clin Nutr** 1990 Aug;52(2):246–53

Adaptation of energy metabolism of overweight women to alternating and continuous low energy intake. de Groot LC, et al. **Am J Clin Nutr** 1989 Dec;50(6):1314–23

Social and public health issues in adaptation to low energy intakes. Ferro-Luzzi A. **Am J Clin Nutr** 1990 Feb; 51(2):309–15 (44 ref.)

Controlled trial of the metabolic effects of a very-low-calorie diet: short- and long-term effects. Foster GD, et al. **Am J Clin Nutr** 1990 Feb;51(2):167–72

Validation of a new computerized technique for quantitating individual dietary intake: the Nutrition Evaluation Scale System (NESSy) vs the weighed food record. Kretsch MJ, et al. **Am J Clin Nutr** 1990 Mar;51(3):477–84

Changes in food and nutrient intake in middle-aged men from 1960 to 1985 (the Zutphen Study). Kromhout D, et al. **Am J Clin Nutr** 1990 Jan;51(1):123–9

Increased muscle dynamic endurance associated with weight reduction on a very-low-calorie diet. Krotkiewski M, et al. **Am J Clin Nutr** 1990 Mar;51(3):321–30

Effect of breakfast cereals on short-term food intake. Levine AS, et al. **Am J Clin Nutr** 1989 Dec;50(6):1303–7

Energy values of unavailable carbohydrate and diets: an inquiry and analysis. Livesey G. **Am J Clin Nutr** 1990 Apr; 51(4):617–37 (14 ref.)

Diet composition, energy intake, and exercise in relation to body fat in men and women. Miller WC, et al. **Am J Clin Nutr** 1990 Sep;52(3):426–30

Nutrient intake and vitamin status of healthy French vegetarians and nonvegetarians. Millet P, et al. **Am J Clin Nutr** 1989 Oct;50(4):718–27

Use of p-aminobenzoic acid to monitor compliance with prescribed dietary regimens during metabolic balance studies in man. Roberts SB, et al. **Am J Clin Nutr** 1990 Mar;51(3):485–8

Comparative effects of fructose, aspartame, glucose, and water preloads on calorie and macronutrient intake. Rodin J. **Am J Clin Nutr** 1990 Mar;51(3):428–35

Comparison of thermic effects of constant and relative caloric loads in lean and obese men. Segal KR, et al. **Am J Clin Nutr** 1990 Jan;51(1):14–21

Partitioning macronutrient intake estimates from a food frequency questionnaire. Flegal KM, et al. **Am J Epidemiol** 1990 Jun;131(6):1046–58

The association between alcohol intake and adiposity in the general population. Hellerstedt WL, et al. **Am J Epidemiol** 1990 Oct;132(4):594–611 (82 ref.)

Effect of nutrient intake on premenstrual depression. Wurtman JJ, et al. **Am J Obstet Gynecol** 1989 Nov; 161(5):1228–34

The immune response to short-term nutritional intervention in advanced chronic obstructive pulmonary disease. Fuenzalida CE, et al. **Am Rev Respir Dis** 1990 Jul; 142(1):49–56

Parotid gland enlargement and female reproductive performance in a Papua New Guinea highland population. Brush G, et al. **Ann Hum Biol** 1989 Sep-Oct;16(5):437–41

Effects of meal size reduction on postprandial variables in male volunteers. van Amelsvoort JM, et al. **Ann Nutr Metab** 1990;34(3):163–74

Bio-utilization of protein, calcium and zinc from diets based on rice and beans, in human beings. de Angelis RC, et al. **Arq Gastroenterol** 1989 Jul-Sep;26(3):50–4

Accuracy of weighed dietary records in studies of diet and health [see comments] Livingstone MB, et al. **BMJ** 1990 Mar 17;300(6726):708–12 Comment in: BMJ 1990 Apr 28;300(6732):1138–9.

The influence of calorie and nitrogen balance on weight loss. Kinney JM. **Br J Clin Pract Symp Suppl** 1988 Dec; 63:114–20 (11 ref.)

IONIP, a criterion of surgical outcome and patient selection for perioperative nutritional support. Meguid MM, et al. **Br J Clin Pract Symp Suppl** 1988 Dec;63:8–14 (29 ref.)

The effect of a low-protein diet and a cold environment on calorie intake and body composition in the rat. Schmidt P, et al. **Br J Nutr** 1967;21(2):457–65

Overall intake of energy and key nutrients: data for middle-aged and older middle-class adults. Tiidus P, et al. **Can J Sport Sci** 1989 Sep;14(3):173–7

Analysis of dietary fat, calories, body weight, and the development of mammary tumors in rats and mice: a review. Freedman LS, et al. **Cancer Res** 1990 Sep 15; 50(18):5710–9 (115 ref.)

Effect of different levels of calorie restriction on azoxymethane-induced colon carcinogenesis in male F344 rats. Kumar SP, et al. **Cancer Res** 1990 Sep 15;50(18):5761–6

A case-control study of diet and benign proliferative epithelial disorders of the breast. Rohan TE, et al. **Cancer Res** 1990 Jun 1;50(11):3176–81

Alterations in beta-adrenergic sensitivity and platelet alpha 2-adrenoceptors in obese women: effect of exercise and caloric restriction. Berlin I, et al. **Clin Sci** 1990 Jan; 78(1):81–7

Treatment in the Hypertension Prevention Trial. Hypertension Prevention Trial Research Group. Jeffery RW, et al. **Controlled Clin Trials** 1989 Sep;10(3 Suppl):65S–83S

Design, methods, and rationale in the Hypertension Prevention Trial. Hypertension Prevention Trial Research Group. Meinert CL, et al. **Controlled Clin Trials** 1989 Sep; 10(3 Suppl):1S–29S

Peritoneal dialysis for acute renal failure: overfeeding resulting from dextrose absorbed during dialysis. Manji S, et al. **Crit Care Med** 1990 Jan;18(1):29–31

Self-regulation of food intake among rural Mexican preschool children. Garcia SE, et al. **Eur J Clin Nutr** 1990 May;44(5):371–80

The relationship of eating frequency and caloric density to energy intake among rural Mexican preschool children. Garcia SE, et al. **Eur J Clin Nutr** 1990 May;44(5):381–7

Food and nutrient intakes in Swedish diabetic children. Samuelson G, et al. **Eur J Clin Nutr** 1989 Nov;43(11):801–3

Body weight changes and basal metabolic rates of rural Beninese women during seasons with different energy intakes. Schultink WJ, et al. **Eur J Clin Nutr** 1990;44 Suppl 1:31–40

Day-to-day variations in basal metabolic rates and energy intakes of human subjects. Soares MJ, et al. **Eur J Clin Nutr** 1989 Jul;43(7):465–72

Effects of addition of exercise to energy restriction on 24-hour energy expenditure, sleeping metabolic rate and daily physical activity. van Dale D, et al. **Eur J Clin Nutr** 1989 Jul;43(7):441–51 (34 ref.)

Dietary intakes and activity levels of stunted and non-stunted children in Kingston, Jamaica. Part 1. Dietary intakes. Walker SP, et al. **Eur J Clin Nutr** 1990 Jul;44(7):527–34

Intra and inter-person sources of variability in fat intake in a feeding trial of 14 men. Hebert JR, et al. **Eur J Epidemiol** 1990 Mar;6(1):55–60

Dietary management of geriatric diabetes. Mezitis NH, et al. **Geriatrics** 1989 Dec;44(12):70–2, 75–8 (27 ref.)

Dietary restriction—a procedure with an undefined goal: a critical review of two recent books. Bellamy D. **Gerontology** 1990;36(2):99–103

Effect of calorie restriction on skeletal muscle and liver insulin binding in growing rat. Balage M, et al. **Horm Metab Res** 1990 Apr;22(4):207–14

The fromagification of America. Morowitz HJ. **Hosp Pract [Off]** 1989 Oct 15;24(10):45–6

Are energy and energy-providing nutrients related to exocrine carcinoma of the pancreas? Bueno de Mesquita HB, et al. **Int J Cancer** 1990 Sep 15;46(3):435–44

Dietary factors and risk of pancreatic cancer: results of a Canadian population-based case-control study. Howe GR, et al. **Int J Cancer** 1990 Apr 15;45(4):604–8

Diet and survival of patients with colon cancer in Utah: is there an association? Slattery ML, et al. **Int J Epidemiol** 1989 Dec;18(4):792–7

2nd European Congress of Obesity. Satellite conference. Very low calorie diets. (Cambridge, 28–30 March 1989). Proceedings. **Int J Obes** 1989;13 Suppl 2:1–199

The effect of very low calorie diet on liver morphology. Andersen T, et al. **Int J Obes** 1989;13 Suppl 2:153–4

VLCD compliance and lean body mass. Astrup A, et al. **Int J Obes** 1989;13 Suppl 2:27–31

The myth of the yo-yo: consistent rate of weight loss with successive dieting by VLCD. Beeson V, et al. **Int J Obes** 1989;13 Suppl 2:135–9

A model for group therapy in major obesity using VLCD. Cox J, et al. **Int J Obes** 1989;13 Suppl 2:197–9

Rapid weight loss and lean tissue: evidence for comparable body composition and metabolic rate in differing rates of weight loss. Coxon A, et al. **Int J Obes** 1989;13 Suppl 2:179–81

Short term effect of a very low calorie diet on body composition and fat distribution. Dalle Grave R, et al. **Int J Obes** 1989;13 Suppl 2:177–8

Very low calorie diet induces opposite effects on sympathetic nervous system and adrenomedullary responses. Del Rio G, et al. **Int J Obes** 1989;13 Suppl 2:173–5

Changes in blood rheology of grossly obese individuals during a very low calorie diet. Ernst E, et al. **Int J Obes** 1989;13 Suppl 2:167–8

Prolonged use of a very low calorie diet (Cambridge diet) in massively obese patients attending an obesity clinic: safety, efficacy and additional benefit from dexfenfluramine. Finer N, et al. **Int J Obes** 1989;13 Suppl 2:91–3

Circadian rhythm of energy intake and corpulence status in adults. Fricker J, et al. **Int J Obes** 1990;14(5):387–93

A positive correlation between energy intake and body mass index in a population of 1312 overweight subjects. Fricker J, et al. **Int J Obes** 1989;13(5):673–81

Very low calorie diets should not be used. Garrow JS. **Int J Obes** 1989;13 Suppl 2:145–7; discussion 149 (4 ref.)

Very low energy formula diet in the treatment of obesity. Hainer V, et al. **Int J Obes** 1989;13 Suppl 2:185–8

Very low calorie diet therapy in obese non-insulin dependent diabetes patients. Hanefeld M, et al. **Int J Obes** 1989;13 Suppl 2:33–7

Sensitivity of the appetite control system in obese subjects to nutritional and serotoninergic challenges. Hill AJ, et al. **Int J Obes** 1990;14(3):219–33

The historical development of very low calorie diets. Howard AN. **Int J Obes** 1989;13 Suppl 2:1–9

Effects of very low calorie diet (VLCD) on body weight, blood glucose and serum lipid metabolism in severe obesity with glucose intolerance. Inoue S, et al. **Int J Obes** 1989; 13 Suppl 2:183–4

Weight loss outcome and health benefits associated with the Optifast program in the treatment of obesity. Kanders BS, et al. **Int J Obes** 1989;13 Suppl 2:131–4

The effect of exercise on energy intake and body composition in overweight women. Keim NL, et al. **Int J Obes** 1990; 14(4):335–46

Restoration to normal body composition by VLCD: a comparison of post obese and lean subjects questions BMI 25 as diet limit. Kreitzman S, et al. **Int J Obes** 1989;13 Suppl 2:161–2

Lean body mass, exercise and VLCD. Kreitzman SN. **Int J Obes** 1989;13 Suppl 2:17–25 (26 ref.)

Predicting attrition and adherence to a very low calorie diet: a prospective investigation of the eating inventory. LaPorte DJ, et al. **Int J Obes** 1990;14(3):197–206

The long term effectiveness of combined therapy by behavior modification and very low calorie diet: 2 years follow-up. Miura J, et al. **Int J Obes** 1989;13 Suppl 2:73–7

VLCD: future perspectives. Munro JF, et al. **Int J Obes** 1989; 13 Suppl 2:11–5

Short-term weight loss and exercise training effects on glucose-induced thermogenesis in obese adolescent males during hypocaloric feeding. Nichols JF, et al. **Int J Obes** 1989;13(5):683–90

The efficacy and metabolic effects of two different regimens of very low calorie diet. Ohno M, et al. **Int J Obes** 1989; 13 Suppl 2:79–85

Initial very low calorie diet (VLCD) improves ultimate weight loss. Quaade F, et al. **Int J Obes** 1989;13 Suppl 2:107–11

Cardiovascular changes in obese subjects on very low calorie diet. Ramhamadany E, et al. **Int J Obes** 1989;13 Suppl 2:95–9

Maintenance of weight loss with recovery of resting metabolic rate following 8 weeks of very low calorie dieting. Rattan S, et al. **Int J Obes** 1989;13 Suppl 2:189–92

Effects of exercise during VLCD diet on metabolic rate, body composition and aerobic power: pooled data of four studies. Saris WH, et al. **Int J Obes** 1989;13 Suppl 2:169–70

Three year hospital experience with control of major obesity by VLCD in medically compromised individuals. Shapiro H, et al. **Int J Obes** 1989;13 Suppl 2:125–9

Effects of low (LCD) and very low (VLCD) energy diets on metabolic rate and body composition in obese (fa/fa) Zucker rats. Stock MJ. **Int J Obes** 1989;13 Suppl 2:61–5

Cardiac stroke work output during a short term very low calorie diet, noradrenaline-induced thermogenesis and T3 supplementation. Stokholm KH, et al. **Int J Obes** 1989;13 Suppl 2:151

Very low calorie diets should be used. Stordy BJ. **Int J Obes** 1989;13 Suppl 2:141–3; discussion 149 (11 ref.)

Long term effects of a very low calorie diet on metabolic control and cardiovascular risk factors in the treatment of obese non-insulin-dependent diabetics. Uusitupa M, et al. **Int J Obes** 1989;13 Suppl 2:163–4

Effect of a long term very low calorie diet on glucose/insulin metabolism in obesity. Influence of fat distribution on hepatic insulin extraction. Van Gaal L, et al. **Int J Obes** 1989;13 Suppl 2:47–9

Short and long term effects of a very low calorie diet on resting metabolic rate and body composition. Vansant G, et al. **Int J Obes** 1989;13 Suppl 2:87–9

Very low calorie diets—clinical trial. Voliovitch H, et al. **Int J Obes** 1989;13 Suppl 2:157

Treatment of obesity by very low calorie diet, behavior therapy, and their combination: a five-year perspective. Wadden TA, et al. **Int J Obes** 1989;13 Suppl 2:39–46

Formulation change in VLCD in response to DHSS recommendations: comparative evaluation. Walls J, et al. **Int J Obes** 1989;13 Suppl 2:67–72

Effects of VLCD in obese NIDDM (non-insulin dependent diabetes) on glucose, insulin and C-peptide dynamics. Weck M, et al. **Int J Obes** 1989;13 Suppl 2:159–60

Preliminary assessment of very low calorie diets by conventional and signal-averaged electrocardiography. Weigle DS, et al. **Int J Obes** 1989;13(5):691–7

The effect of very low energy diets on the fatty acid composition of serum lipids. Wilson JH, et al. **Int J Obes** 1989;13 Suppl 2:51–60

Abdominal fat, insulin and C-peptide modifications induced by severe caloric restriction. Zamboni M, et al. **Int J Obes** 1989;13 Suppl 2:165–6

24 hours electrocardiographic monitoring in obese children and adolescents during a 3 weeks low calorie diet (500 kcal). Zwiauer K, et al. **Int J Obes** 1989;13 Suppl 2:101–5

Restrained eating: an experimental disentanglement of the disinhibiting variables of perceived calories and food type. Knight LJ, et al. **J Abnorm Psychol** 1989 Nov;98(4):412–20

Assessment and implications of the dietary intakes of hospitalized psychogeriatric patients. Martinez JA, et al. **J Am Diet Assoc** 1990 Aug;90(8):1111–4

Hypertension Prevention Trial (HPT): food pattern changes resulting from intervention on sodium, potassium, and energy intake. Hypertension Prevention Trial Research Group. Shah M, et al. **J Am Diet Assoc** 1990 Jan; 90(1):69–76

Supplemental fat source affects feedlot performance and carcass traits of finishing yearling steers and estimated diet net energy value. Brandt RT Jr, et al. **J Anim Sci** 1990 Aug;68(8):2208–16

Supplementation of dormant tallgrass-prairie forage: I. Influence of varying supplemental protein and(or) energy levels on forage utilization characteristics of beef steers in confinement. DelCurto T, et al. **J Anim Sci** 1990 Feb; 68(2):515–31

Influence of gestation energy level on the production of Large White x Landrace sows. Hoppe MK, et al. **J Anim Sci** 1990 Aug;68(8):2235–42

Effects of body composition, pre- and postpartum energy level and early weaning on reproductive performance of beef cows and preweaning calf gain. Houghton PL, et al. **J Anim Sci** 1990 May;68(5):1438–46

Effects of body composition, pre- and postpartum energy intake and stage of production of energy utilization by beef cows. Houghton PL, et al. **J Anim Sci** 1990 May; 68(5):1447–56

Feed intake and weight gain of growing goats fed diets of various energy and protein levels. Lu CD, et al. **J Anim Sci** 1990 Jun;68(6):1751–9

Energy requirements for maintenance of crossbred beef cattle with different genetic potential for milk. Montaño-Bermudez M, et al. **J Anim Sci** 1990 Aug; 68(8):2279–88

Biological efficiency to weaning and to slaughter of crossbred beef cattle with different genetic potential for milk. Montaño-Bermudez M, et al. **J Anim Sci** 1990 Aug; 68(8):2297–309

Effects of energy supplementation on lamb production of Javanese thin-tail ewes. Reese AA, et al. **J Anim Sci** 1990 Jul;68(7):1827–40

Caloric needs of adolescent patients with burns. Hildreth MA, et al. **J Burn Care Rehabil** 1989 Nov-Dec;10(6):523–6

The relative validity of retrospectively assessed energy intake data in cases with myocardial infarction and controls (the Zutphen Study). Bloemberg BP, et al. **J Clin Epidemiol** 1989;42(11):1075–82

Dietary restriction alone and in combination with oral ethoxyquin/2-mercaptoethylamine in mice. Harris SB, et al. **J Gerontol** 1990 Sep;45(5):B141–7

Dietary restriction and aging: the initiation of a primate study. Ingram DK, et al. **J Gerontol** 1990 Sep;45(5):B148–63

The effect of food restriction and germ-free environment on age-related changes in bone matrix. Nishimoto SK, et al. **J Gerontol** 1990 Sep;45(5):B164–8

Dietary restriction, tumors, and aging in rodents. Weindruch R. **J Gerontol** 1989 Nov;44(6):67–71 (54 ref.)

Influence of chronic energy intake restriction on intestinal alkaline phosphatase in C3H/Bi mice and autoimmune-prone MRL/lpr,lpr mice. Dao ML, et al. **J Nutr** 1989 Dec;119(12):2017–22

High nutrient intakes—the toxicologist's view. Hathcock JN. **J Nutr** 1989 Dec;119(12 Suppl):1779–84 (26 ref.)

Long-term consistency of nutrient intakes in humans. Heaney RP, et al. **J Nutr** 1990 Aug;120(8):869–75

Dietary pattern, energy and nutrient intake in patients with oro-facial discomfort complaints. Yontchev E, et al. **J Oral Rehabil** 1989 Jul;16(4):345–51

Bases of weaning recommendations. Barness LA. **J Pediatr** 1990 Aug;117(2 Pt 2):S84–5

Food and nutrient intake of 6- to 12-month-old infants fed formula or cow milk: a summary of four national surveys. Ernst JA, et al. **J Pediatr** 1990 Aug;117(2 Pt 2):S86–100

Modified fat diets: do they apply to infancy? Finberg L. **J Pediatr** 1990 Aug;117(2 Pt 2):S132–3

Energy intakes of human milk-fed infants during the first year. Garza C, et al. **J Pediatr** 1990 Aug;117(2 Pt 2):S124–31

Milks and formulas for older infants. Ziegler EE. **J Pediatr** 1990 Aug;117(2 Pt 2):S76–9

A behavioral approach to increasing calorie consumption in children with cystic fibrosis. Stark LJ, et al. **J Pediatr Psychol** 1990 Jun;15(3):309–26

Very-low-calorie diets [letter; comment] **JAMA** 1990 Jun 6;263(21):2885–7 Comment on: JAMA 1990 Jan 5;263(1):83–5.

Effects of overfeeding in children with muscle dystrophies. Goldstein M, et al. **JPEN J Parenter Enteral Nutr** 1989 Nov-Dec;13(6):603–7

Recommended dietary allowances for Europe [letter] Hautvast JG, et al. **Lancet** 1989 Nov 18;2(8673):1220

Caloric restriction perturbs the pituitary-ovarian axis and inhibits mouse mammary tumor virus production in a high-spontaneous-mammary-tumor-incidence mouse strain (C3H/SHN). Koizumi A, et al. **Mech Ageing Dev** 1989 Aug;49(2):93–104

Energy expenditure and physical performance in overweight women: response to training with and without caloric restriction. Keim NL, et al. **Metabolism** 1990 Jun; 39(6):651–8

The effects of smoking deprivation on caloric consumption in women with bulimia nervosa. Bulik CM, et al. **NIDA Res Monogr** 1989;95:429–30

The influence of pre- and postnatal caloric intake on colon carcinogenesis. Newberne PM, et al. **Nutr Cancer** 1990; 13(3):165–73

A proxy approach to the determination of total caloric intake for use in cancer epidemiology. Toporoff E, et al. **Nutr Cancer** 1990;13(1–2):35–49

Effect of the composition of the diet on energy intake. Pi-Sunyer FX. **Nutr Rev** 1990 Feb;48(2):94–105; discussion 114–31 (64 ref.)

Total parenteral nutrition in the newborn: energy substrates and plasma total fatty acids. Pineault M, et al. **Pediatr Res** 1989 Oct;26(4):290–3

Conditioned flavor preferences in young children. Birch LL, et al. **Physiol Behav** 1990 Mar;47(3):501–5

Social facilitation of duration and size but not rate of the spontaneous meal intake of humans. De Castro JM. **Physiol Behav** 1990 Jun;47(6):1129–35

Phenylketonuria diet in adolescents—energy and nutrient intake—is it adequate? Link R. **Postgrad Med J** 1989;65 Suppl 2:S21–4

Body composition of the broiler-breeder pullet. Bennett CD, et al. **Poult Sci** 1990 May;69(5):715–20

An assessment of caloric intake as an indicator of physical activity. Slattery ML, et al. **Prev Med** 1989 Jul;18(4):444–51

Effect of calorie restriction on the development of virus induced leukaemia in mice. Sarkar RN, et al. **Proc Soc Exp Biol Med** 1990 Feb;193(2):164–6

Dietary manipulation of mammary tumor development in adult C3H/Bi mice. Shao RP, et al. **Proc Soc Exp Biol Med** 1990 Apr;193(4):313–7

Quantitative assessment of fat and calorie as risk factors in mammary carcinogenesis in an experimental model. Ip C. **Prog Clin Biol Res** 1990;346:107–17

Contrast effects in flavour preference learning. Capaldi E, et al. **Q J Exp Psychol [B]** 1989 Aug;41(3):307–23

The use of very low calorie diets in obesity. Report of the Working Group on Very Low Calorie Diets. Committee on Medical Aspects of Food Policy. **Rep Health Soc Subj (Lond)** 1987;31:1–43

Protein restriction or calorie restriction? A critical assessment of the influence of selective calorie restriction on the progression of experimental renal disease. Tapp DC, et al. **Semin Nephrol** 1989 Dec;9(4):343–53 (79 ref.)

Energy intake and stress as determinants of nitrogen excretion in rats. Souba WW, et al. **Surg Forum** 1978; 29:76–7

The relationship between dietary energy levels and the severity of Trypanosoma brucei infection in growing pigs. Fagbemi BO, et al. **Vet Parasitol** 1990 Feb;35(1–2):29–42

[A Czechoslovak low-energy protein diet in the treatment of obesity] Hainer V, et al. **Vnitr Lek** 1990 Apr;36(4):368–78 (Eng. Abstr.) **(Cze)**

[A low-energy protein diet—its effect on lipid and protein metabolism] Kunešová M, et al. **Vnitr Lek** 1990 May; 36(5):417–25 (Eng. Abstr.) **(Cze)**

[Diet and dietary supplements of the elderly in Denmark] Osler M, et al. **Ugeskr Laeger** 1990 Aug 20;152(34):2423–6 (Eng. Abstr.) **(Dan)**

[The role of dietary fiber in gastroenterology: fact or fancy? (letter)] Compaan E, et al. **Ned Tijdschr Geneeskd** 1989 Dec 2;133(48):2410–1 **(Dut)**

[The role of dietary fiber in gastroenterology: fact or fancy? (letter)] Robberecht E, et al. **Ned Tijdschr Geneeskd** 1990 Jan 27;134(4):181–2 **(Dut)**

[The effect of nutritional energy intake on endurance] Décombaz J. **Rev Med Suisse Romande** 1990 Feb; 110(2):105–10 **(Fre)**

[Variability and circadian rhythms of maintenance energy expenditure in adult humans] Müller HL, et al. **Ann Nutr Metab** 1989;33(2):114–24 (Eng. Abstr.) **(Ger)**

[Energy requirements of pregnant and lactating sows] Hoffmann L, et al. **Arch Tierernahr** 1990 Apr;40(4):279–96 (Eng. Abstr.) **(Ger)**

[The energy requirements of Holstein-Friesian heifers during rearing and pregnancy under the tropical conditions of Cuba. 1. Determination of dry matter and energy assimilation and of the live weight development and energy expenditure] Zarragoitia L, et al. **Arch Tierernahr** 1990 Apr; 40(4):363–73 (Eng. Abstr.) **(Ger)**

[The energy requirements of Holstein-Friesian heifers during rearing and pregnancy under the tropical conditions of Cuba. 2. Generalization of the results and derivation of the energy requirements] Zarragoitia L, et al. **Arch Tierernahr** 1990 Apr;40(4):375–84 (Eng. Abstr.) **(Ger)**

[Current calorie value of intravenous infusion of nutritional solutions] Halmágyi M, et al. **Infusionstherapie** 1989 Aug; 16 Suppl 1:44–8 **(Ger)**

[Effect of various calorie substrates on protein homeostasis] Schauder P. **Infusionstherapie** 1989 Aug;16 Suppl 1:34–5 (10 ref.) **(Ger)**

[Limits and relations of amino acid and energy administration] Schmitz JE. **Infusionstherapie** 1989 Aug;16 Suppl 1:36–43 (31 ref.) **(Ger)**

[The effect of energy-rich and energy-reduced rations with

n-alkane yeast portions on the fatty acid composition of fat stores of swine] Doberschütz KD, et al. **Nahrung** 1990; 34(4):345–55 (Eng. Abstr.) **(Ger)**

[Effects of various caloric intakes on nitrogen metabolism of the body, the muscles and the viscera during total parenteral nutrition with aminoacidic solution enriched with branched-chain amino acids] Iapichino G, et al. **Minerva Anestesiol** 1989 Sep;55(9):349–53 (Eng. Abstr.) **(Ita)**

[Malnutrition after total gastrectomy] Braga M, et al. **Minerva Chir** 1990 May 15;45(9):625–9 (Eng. Abstr.) **(Ita)**

[Semifasting and type II diabetes mellitus] Sinagra D. **Recenti Prog Med** 1990 Feb;81(2):79–82 (11 ref.) (Eng. Abstr.) **(Ita)**

[Nutritional assessment of chronic renal patients in hemodialysis programs. A multicenter study] Cuppari L, et al. **AMB Rev Assoc Med Bras** 1989 Jan–Feb;35(1):9–14 (Eng. Abstr.) **(Por)**

[Metabolic basis of protein-calorie malnutrition and the role of nutritional support of patients with cirrhosis of the liver (review of the literature)] Tsatsanidi KN, et al. **Khirurgiia (Mosk)** 1990 Apr;(4):137–45 (137 ref.) **(Rus)**

[Health aspects of the use of low-calorie rations enriched with wild plants] Novoselov VG. **Kosm Biol Aviakosm Med** 1990 May–Jun;24(3):45–7 (Eng. Abstr.) **(Rus)**

[The effect of a hypocaloric diet enriched with polyunsaturated fatty acids on various indicators of cellular immunity in obese children] Kravets EB, et al. **Vopr Pitan** 1989 Nov–Dec;(6):13–6 (Eng. Abstr.) **(Rus)**

[Obesity and hyperlipoproteinemia. II. The effect of a low energy diet on lipid levels in the blood of obese persons] Beňo I, et al. **Cas Lek Cesk** 1990 May 18;129(20):614–8 (Eng. Abstr.) **(Slo)**

[Dietary recommendations and hypercholesteremia in children] Sarría Chueca A. **An Esp Pediatr** 1990 Feb; 32(2):95–8 (35 ref.) **(Spa)**

DRUG EFFECTS

A controlled trial of megestrol acetate on appetite, caloric intake, nutritional status, and other symptoms in patients with advanced cancer. Bruera E, et al. **Cancer** 1990 Sep 15;66(6):1279–82

Effects of chronic low doses of d-fenfluramine on weight gain and calorie intake, brown adipose tissue thermogenic parameters and brain neurotransmitter content in rats fed chow or palatable diets. McCormack JG, et al. **Int J Obes** 1989;13(5):625–33

The effect of the 5-HT re-uptake inhibitor fluoxetine on food intake and body weight in healthy male subjects. McGuirk J, et al. **Int J Obes** 1990;14(4):361–72

Route of delivery of phenylalanine influences its effect on short-term food intake in adult male rats. Bialik RJ, et al. **J Nutr** 1989 Oct;119(10):1519–27

Dietary disproportions of amino acids in the rat: effects on food intake, plasma and brain amino acids and brain serotonin. Tackman JM, et al. **J Nutr** 1990 May; 120(5):521–33

Hydrazine sulfate may promote caloric intake and increase survival [news] **Oncology (Williston Park)** 1988 Mar;2(3):47

Diet selection following a chronic morphine and naloxone regimen. Marks-Kaufman R, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):665–9

Effects of aspartame and sucrose on hunger and energy intake in humans. Mattes R. **Physiol Behav** 1990 Jun;47(6):1037–44

Effect of intravenous nutrient infusions on food intake in rats. Walls EK, et al. **Physiol Behav** 1989 Jun;45(6):1223–6

IMMUNOLOGY

Immune potentiation after fractionated exposure to very low doses of ionizing radiation and/or caloric restriction in autoimmune-prone and normal C57Bl/6 mice. James SJ, et al. **Clin Immunol Immunopathol** 1990 Jun;55(3):427–37

PHYSIOLOGY

Effects of varying energy intakes on nitrogen retention and growth in very low birthweight infants fed fortified human milk. Boehm G, et al. **Acta Paediatr Scand** 1990 Feb; 79(2):228–9

Validity of reported energy intake in obese and nonobese adolescents. Bandini LG, et al. **Am J Clin Nutr** 1990 Sep; 52(3):421–5

Calorie restriction and iopanoic acid effects on thyroid hormone metabolism. Katzeff HL, et al. **Am J Clin Nutr** 1990 Aug;52(2):263–6

Metabolic effects of nicotine after consumption of a meal in smokers and nonsmokers. Perkins KA, et al. **Am J Clin Nutr** 1990 Aug;52(2):228–33

Comparison of doubly labeled water, intake-balance, and direct- and indirect-calorimetry methods for measuring energy expenditure in adult men. Seale JL, et al. **Am J Clin Nutr** 1990 Jul;52(1):66–71

Nutrient partitioning by transgenic animals. Steele NC, et al. **Annu Rev Nutr** 1990;10:213–32

Effects of food snacks on cognitive performance in male college students. Kanarek RB, et al. **Appetite** 1990 Feb; 14(1):15–27

Dietary restraint--a useful concept? McCluskey SE. **Appetite** 1990 Apr;14(2):129–30; discussion 142–3

Hunger and food intake following consumption of low-calorie foods. Rolls BJ, et al. **Appetite** 1989 Oct; 13(2):115–27

Some restrictions on dietary restraint. Westenhoefer J, et al. **Appetite** 1990 Apr;14(2):137–41; discussion 142–3

Caloric costs of activity in paraplegic persons. Clarke KS. **Arch Phys Med Rehabil** 1966 Jul;47(7):427–35

Discrepancies between energy intake and expenditure in physically active women. Mulligan K, et al. **Br J Nutr** 1990 Jul;64(1):23–36

The integrated analysis of seasonal energy deficits: problems and prospects. Bayliss-Smith TP. **Eur J Clin Nutr** 1990;44 Suppl 1:113–21 (49 ref.)

Low energy expenditures in free-living populations. Durnin JV. **Eur J Clin Nutr** 1990;44 Suppl 1:95–102

Seasonal energy deficiency in Ethiopian rural women. Ferro-Luzzi A, et al. **Eur J Clin Nutr** 1990;44 Suppl 1:7–18

Seasonal energy stress in marginally nourished rural women: interpretation and integrated conclusions of a multicentre study in three developing countries. Ferro-Luzzi A. **Eur J Clin Nutr** 1990;44 Suppl 1:41–6

Seasonal fluctuation of BMR in populations not exposed to limitations in food availability: reality or illusion? Kashiwazaki H. **Eur J Clin Nutr** 1990;44 Suppl 1:85–93 (37 ref.)

Role of the sympathetic nervous system in adaptation to seasonal energy deficiency. Shetty PS, et al. **Eur J Clin Nutr** 1990;44 Suppl 1:47–53 (23 ref.)

Variations in somatomedin-C/insulin-like growth factor-I associated with environmental temperature and nutrition. Dauncey MJ, et al. **Horm Metab Res** 1990 May;22(5):261–4

The influence of posttraumatic parenteral calorie and nitrogen supply upon the cumulative nitrogen balance. Behrendt W, et al. **Infusionstherapie** 1990 Feb;17(1):32–9 (57 ref.)

Changes in overall plasma norepinephrine turnover and lymphomonocyte beta-adrenoceptor number during combined caloric and sodium restriction in normotensive obese subjects. Cignarelli M, et al. **Int J Obes** 1990; 14(5):429–37

Caloric intake and activity levels are related in young children. Vara L, et al. **Int J Obes** 1989;13(5):613–7

Effects of a very low calorie diet on weight, thyroid hormones and mood. Wadden TA, et al. **Int J Obes** 1990; 14(3):249–58

Effects of a low calorie, low protein diet on nutritional parameters, and routine laboratory values in nonobese young and elderly subjects. Rammohan M, et al. **J Am Coll Nutr** 1989 Dec;8(6):545–53

Effect of low-calorie diets on metabolism of man under hypokinesia. Zorbas YG, et al. **J Environ Pathol Toxicol Oncol** 1989 Dec;9(5–6):457–65

Changes in the basal metabolic rate of a normal woman induced by short-term and long-term alterations of energy intake. Yamashita J, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Aug;35(4):371–81

Effect of life-long hypocaloric diet on age-related changes in motor and cognitive behavior in a rat population. Pitsikas N, et al. **Neurobiol Aging** 1990 Jul–Aug;11(4):417–23

The effect of early caloric restriction on colonic cellular growth in rats. Albanes D, et al. **Nutr Cancer** 1990; 13(1–2):73–80

The effect of elevated selenium intake on colonic cellular growth in rats. Salbe AD, et al. **Nutr Cancer** 1990; 13(1–2):81–7

Effects of weight cycling in female rats. Archambault CM, et al. **Physiol Behav** 1989 Sep;46(3):417–21

Acute, chronic, and interactive effects of type I and II corticosteroid receptor stimulation on feeding and weight gain. Devenport L, et al. **Physiol Behav** 1990 Jun; 47(6):1221–8

Dietary hyperphagia in rats: role of fat, carbohydrate, and energy content. Ramirez I, et al. **Physiol Behav** 1990 Jun; 47(6):1157–63

A nutritive control of independent ingestion in rat pups emerges by nine days of age. Swithers SE, et al. **Physiol Behav** 1989 Nov;46(5):873–9

Effects of dietary energy on semen production, fertility, plasma testosterone, and carcass composition of broiler-breeder males in cages. Sexton KJ, et al. **Poult Sci** 1989 Dec;68(12):1688–94

Increasing age impairs the thyroid hormone response to overfeeding. Katzeff HL. **Proc Soc Exp Biol Med** 1990 Jul;194(3):198–203

Comparison of dietary energy sources and obesity. Kowrygo B, et al. **Rocz Panstw Zakl Hig** 1989;40(3):169–77

Impact of energy intake and exercise on resting metabolic rate. Molé PA. **Sports Med** 1990 Aug;10(2):72–87 (98 ref.)

Metabolic adaptation to decreases in energy intake due to changes in the energy cost of low energy expenditure regimen. Garby L. **World Rev Nutr Diet** 1990;61:173–208 (44 ref.)

[Energy requirements of surgically treated, injured and infected patients] Adolph M, et al. **Infusionstherapie** 1990 Feb;17(1):5–16 (70 ref.) (Eng. Abstr.) **(Ger)**

CALORIC TESTS see under **VESTIBULAR FUNCTION TESTS**

CALORIMETRY

Repeatability of 24-h energy expenditure measurements in humans by indirect calorimetry. Rumpler WV, et al. **Am J Clin Nutr** 1990 Feb;51(2):147–52

Indirect calorimetry: methodological and interpretative problems. Simonson DC, et al. **Am J Physiol** 1990 Mar; 258(3 Pt 1):E399–412 (97 ref.)

Calorimetrically determined dynamics of complex unfolding transitions in proteins. Freire E, et al. **Annu Rev Biophys Biophys Chem** 1990;19:159–88 (23 ref.)

Calorimetric measurements made on rats during repeated periods of weight gain and weight loss. Farrell DJ, et al. **Comp Biochem Physiol [A]** 1989;94(1):61–7

Thermodynamic properties of the binding of alpha-, omega-amino acids to the isolated kringle 4 region of human plasminogen as determined by high sensitivity titration calorimetry. Sehl LC, et al. **J Biol Chem** 1990 Apr 5;265(10):5482–6

A randomized trial of indirect calorimetry-based feedings in thermal injury. Saffle JR, et al. **J Trauma** 1990 Jul; 30(7):776–82; discussion 782–3

Effects of gas leak around endotracheal tubes on indirect calorimetry measurement. Dietrich KA, et al. **JPEN J Parenter Enteral Nutr** 1990 Jul–Aug;14(4):408–13

Energy exchange in downhill and uphill walking: a calorimetric study. Nagle FJ, et al. **Med Sci Sports Exerc** 1990 Aug;22(4):540–4

Microcalorimetric studies on metabolism of hepatic tissue. I. A methodological study of normal tissue. Asakawa H, et al. **Res Exp Med (Berl)** 1990;190(1):25–32

Microcalorimetric studies on metabolism of hepatic tissue. II. Measurements of ischemic tissue. Asakawa H, et al. **Res Exp Med (Berl)** 1990;190(1):33–41

[Calorimetric study of enteral low-carbohydrate diet in patients with respiratory insufficiency and decompensation] Barale F, et al. **Agressologie** 1990 Jan;31(1):77–9 (Eng. Abstr.) **(Fre)**

[Practical aspects of indirect calorimetry in post-anesthesia recovery] Lepape A, et al. **Agressologie** 1990 Jan;31(1):74–6 (Eng. Abstr.) **(Fre)**

[Procedure for calculating various parameters of the metabolism of amino acid mixtures] Fauth U, et al. **Infusionstherapie** 1989 Dec;16(6):253–62 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

Mobile velocity-controlled respirometer: description and performance capabilities. Griffith ER, et al. **Arch Phys Med Rehabil** 1976 Aug;57(8):374–81

Evaluation of metabolic measuring instruments for use in critically ill patients. Makita K, et al. **Crit Care Med** 1990 Jun;18(6):638–44

A microcalorimetric vessel for monitoring cytotoxic reactions in the micro-submicrowatt region. Thorén SA, et al. **J Biochem Biophys Methods** 1990 Mar;20(3):217–25

A validation and comparison study of two metabolic monitors. Phang PT, et al. **JPEN J Parenter Enteral Nutr** 1990 May–Jun;14(3):259–61

In vitro evaluation of a compact metabolic measurement instrument. Weissman C, et al. **JPEN J Parenter Enteral Nutr** 1990 Mar–Apr;14(2):216–21

[The indirect calorimeter, "do it yourself"] Bachour K, et al. **Agressologie** 1990 Jan;31(1):64–7 (Eng. Abstr.) **(Fre)**

[Critical evaluation of periodic metabolic measurements for determination of the diurnal energy metabolism of traumatized patients] Fauth U, et al. **Beitr Infusionther** 1990;25:277–88 **(Ger)**

METHODS

Heat production in isolated heart myocytes: differences among species. Ponce-Hornos JE, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H880–6

A microcalorimetric procedure for evaluating the kinetic parameters of enzyme-catalyzed reactions: kinetic measurements of the nitrogenase system. Watt GD. **Anal Biochem** 1990 May 15;187(1):141–6

A differential scanning calorimetric study of the bovine lens crystallins. Steadman BL, et al. **Biochemistry** 1989 Dec 12; 28(25):9653–8

Role of the arginine-45 salt bridge in ligand dissociation from sperm whale carboxymyoglobin as probed by photoacoustic calorimetry. Westrick JA, et al. **Biochemistry** 1990 Jul 17;29(28):6741–6

A comparative study on different methods for the determination of energy expenditure. Wenzel C, et al. **Int Arch Occup Environ Health** 1990;62(1):101–3

Validation of oxygen consumption measurements during artificial ventilation. Nunn JF, et al. **J Appl Physiol** 1989 Nov;67(5):2129–34

A new analysis of whole-body calorimetry data. Lynch TJ, et al. **NIDA Res Monogr** 1989;95:289–90

Accurate, noninvasive quantitation of expiratory gas leak from uncuffed infant endotracheal tubes. Knauth A, et al. **Pediatr Pulmonol** 1990;9(1):55–60

[Optimizing parenteral nutrition using indirect calorimetry] Behrendt W. **Beitr Infusionther** 1990;25:304–13 **(Ger)**

[Microcalorimetric studies on Ca2+ binding by the Ca2+ binding proteins] Tanokura M, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2003–12 **(Jpn)**

[A method of dynamic teplometry] Kalugin VA, et al. **Med Tekh** 1989 Jul–Aug;(4):44–7 (Eng. Abstr.) **(Rus)**

CALORIMETRY, DIFFERENTIAL SCANNING see under **CALORIMETRY**

CALORIMETRY, INDIRECT see under **CALORIMETRY**

CALPAIN

Neutrophil chemotactic activity of N-terminal peptides from the calpain small subunit. Kunimatsu M, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):1242–7

Fluorescence spectroscopic analysis of calpain II interactions with calcium and calmodulin antagonists. Hong H, et al. **Int J Biochem** 1990;22(4):399–404

ANALYSIS

The calpain–calpastatin system in hematopoietic cells. Murachi T, et al. **Adv Exp Med Biol** 1989;255:445–54

Monoclonal antibodies against the complex between HMW kininogen and calpain I. Ohkubo I, et al. **Adv Exp Med Biol** 1989;247B:305–10

Protease activity in brain, nerve, and muscle of hens given neuropathy–inducing organophosphates and a calcium channel blocker. el–Fawal HA, et al. **Toxicol Appl Pharmacol** 1990 Mar 15;103(1):133–42

ANTAGONISTS & INHIBITORS

Characterization of a functional domain of human calpastatin. Uemori T, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1485–93

Multiple forms of calpastatin in pig brain. Takano E, et al. **Biochem Int** 1989 Sep;19(3):633–43

Kinetics of inhibition of platelet calpain II by human kininogens. Bradford HN, et al. **Biochem J** 1990 Aug 15; 270(1):83–90

Effects of the calpain inhibitor E64–d on platelet activation responses. Patel Y, et al. **Biochem Soc Trans** 1990 Jun; 18(3):470–1

Cross–linking and proteolysis in Ca2(+)–treated lens homogenates. Velasco PT, et al. **Biochim Biophys Acta** 1990 Sep 3;1040(2):187–91

Effects of the calpain inhibitor E64–d on platelet activation responses. Patel Y, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:846P

Inhibitory effects of spermine and spermidine on muscle calpain II. Johnson P, et al. **Experientia** 1990 Mar 15; 46(3):276–8

Identification and characterization of inhibitory sequences in four repeating domains of the endogenous inhibitor for calcium–dependent protease. Kawasaki H, et al. **J Biochem (Tokyo)** 1989 Aug;106(2):274–81

Inhibition of calpain by a synthetic oligopeptide corresponding to an exon of the human calpastatin gene. Maki M, et al. **J Biol Chem** 1989 Nov 15;264(32):18866–9

Alpha–diketone and alpha–keto ester derivatives of N–protected amino acids and peptides as novel inhibitors of cysteine and serine proteinases. Angelastro MR, et al. **J Med Chem** 1990 Jan;33(1):11–3

Calcium–activated neutral protease inhibitor (E–64c) and reperfusion for experimental myocardial infarction. Toda G, et al. **Jpn Heart J** 1989 May;30(3):375–86

Developing selective inhibitors of calpain. Wang KK. **Trends Pharmacol Sci** 1990 Apr;11(4):139–42 (32 ref.)

BLOOD

Binding sites for calcium–activated neutral protease on erythrocyte membranes are not membrane phospholipids. Inomata M, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):625–32

Calcium dependent cysteine proteinase is a precursor of a chemotactic factor for neutrophils. Kunimatsu M, et al. **Biochem Biophys Res Commun** 1989 Oct 31;164(2):875–82

Proteolytic modification of calcium–dependent protease 1 in erythrocytes treated with ionomycin and calcium. Croall DE. **Biochemistry** 1989 Aug 22;28(17):6882–8

Calcium activated neutral protease in blood cells from patients & carriers of Duchenne muscular dystrophy. Moses L, et al. **Indian J Med Res** 1990 Feb;92:5–8

Properties of erythrocyte membrane binding and autolytic activation of calcium–activated neutral protease. Inomata M, et al. **J Biol Chem** 1989 Nov 5;264(31):18838–43

[Clinical significance of kininogen–proteinase complex analysis in biochemical laboratory tests] Takeda A. **Nippon Rinsho** 1989 Dec;48 Suppl:257–60 **(Jpn)**

GENETICS

Analysis of calcium–binding sites in calcium–activated neutral protease. Suzuki K, et al. **Adv Exp Med Biol** 1989; 255:173–83

Cloning and expression of the genes for calpains and calpastatins. Murachi T, et al. **Biochem Soc Symp** 1989; 55:29–44

Molecular cloning of a novel mammalian calcium–dependent protease distinct from both m– and mu–types. Specific expression of the mRNA in skeletal muscle. Sorimachi H, et al. **J Biol Chem** 1989 Nov 25;264(33):20106–11

Gene expression for calpain isozymes in human hematopoietic system cells. Murachi T, et al. **Prog Clin Biol Res** 1990;344:477–94 (24 ref.)

ISOLATION & PURIFICATION

Chicken skeletal muscle has three Ca2+–dependent proteinases. Wolfe FH, et al. **Biochim Biophys Acta** 1989 Oct 19;998(3):236–50

Purification of a novel type of calcium–activated neutral protease from rat brain. Possible involvement in production of the neuropeptide kyotorphin from calpastatin fragments. Yoshihara Y, et al. **J Biol Chem** 1990 Apr 5;265(10):5809–15

METABOLISM

Activation of calcium ion–dependent proteinases by bradykinin in dental pulp of the rat. Kudo T, et al. **Adv Exp Med Biol** 1989;247B:627–31

In vivo effect of a beta–adrenergic agonist on activity of calcium–dependent proteinases, their specific inhibitor, and cathepsins B and H in skeletal muscle. Kretchmar DH, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):228–35

Persistent Ca2(+)–induced activation of erythrocyte membrane Ca2(+)–ATPase unrelated to calpain proteolysis. Roufogalis BD, et al. **Arch Biochem Biophys** 1990 May 15;279(1):78–86

Biochemical demonstration of calpains and calpastatin in osteoarthritic synovial fluid. Suzuki K, et al. **Arthritis Rheum** 1990 May;33(5):728–32

Isovalerylcarnitine is a specific activator of the high calcium requiring calpain forms. Pontremoli S, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):373–80

Identification of an endogenous activator of calpain in rat skeletal muscle. Pontremoli S, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):569–74

Proteolytic conversion of xanthine dehydrogenase to xanthine oxidase: evidence against a role for calcium–activated protease (calpain). Stark K, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):858–64

Characterization of the fragmented forms of calcineurin produced by calpain I. Wang KK, et al. **Biochem Cell Biol** 1989 Oct;67(10):703–11

Investigation of the structural basis of the interaction of calpain II with phospholipid and with carbohydrate. Crawford C, et al. **Biochem J** 1990 Jan 15;265(2):575–9

Calmodulin–binding proteins as calpain substrates. Wang KK, et al. **Biochem J** 1989 Sep 15;262(3):693–706 (167 ref.)

Regulation of the calcium–activated neutral proteinase (CANP) of bovine brain by myelin lipids. Chakrabarti AK, et al. **Biochim Biophys Acta** 1990 Apr 19;1038(2):195–8

Calcium–induced localization of calcium–activated neutral proteinase on plasma membranes. Sakai K, et al. **Biochim Biophys Acta** 1989 Oct 2;985(1):51–4

Activities of calcium–activated neutral proteases and its endogenous inhibitor in skeletal muscle of dystrophic hamster. Kawashima S, et al. **Biol Chem Hoppe Seyler** 1990 May;371 Suppl:205–10

Effects of autolysis on the catalytic properties of the calpains. Thompson VF, et al. **Biol Chem Hoppe Seyler** 1990 May; 371 Suppl:177–85 (12 ref.)

Membrane expression of platelet calpain. Schmaier AH, et al. **Blood** 1990 Mar 15;75(6):1273–81

Effects of L–1–methyl–histidine and the muscle dipeptides carnosine and anserine on the activities of muscle calpains. Johnson P, et al. **Comp Biochem Physiol [B]** 1989;94(1):45–8

Calpain and calpastatin in rabbit corneal epithelium. Shearer TR, et al. **Curr Eye Res** 1990 Jan;9(1):39–44

Diabetic state–induced activation of calcium–activated neutral proteinase in mouse skeletal muscle. Kobayashi S, et al. **Endocrinol Jpn** 1989 Dec;36(6):833–44

Age–related changes in calpain II and calpastatin in rat lens. Varnum MD, et al. **Exp Eye Res** 1989 Dec;49(6):1053–65

Effects of cimaterol on rabbit growth and myofibrillar protein degradation and on calcium–dependent proteinase and calpastatin activities in skeletal muscle. Forsberg NE, et al. **J Anim Sci** 1989 Dec;67(12):3313–21

Characterization of calpain I–binding proteins in human erythrocyte plasma membrane. Kuboki M, et al. **J Biochem (Tokyo)** 1990 May;107(5):776–80

Calmodulin regulates fodrin susceptibility to cleavage by calcium–dependent protease I. Harris AS, et al. **J Biol Chem** 1989 Oct 15;264(29):17401–8

Effect of Ca2+ on binding of the calpains to calpastatin. Kapprell HP, et al. **J Biol Chem** 1989 Oct 25; 264(30):17888–96

Identification of major autolytic cleavage sites in the regulatory subunit of vascular calpain II. A comparison of partial amino–terminal sequences to deduced sequence from complementary DNA. McCelland P, et al. **J Biol Chem** 1989 Oct 15;264(29):17428–31

Nerve growth factor–induced decrease in the calpain activity of PC12 cells. Oshima M, et al. **J Biol Chem** 1989 Dec 5;264(34):20811–6

Isozymes of protein kinase C in human neutrophils and their modification by two endogenous proteinases. Pontremoli S, et al. **J Biol Chem** 1990 Jan 15;265(2):706–12

Distribution of calcium–activated protease calpain in the rat brain. Perlmutter LS, et al. **J Comp Neurol** 1990 Jun 8; 296(2):269–76

Ganglioside–modulated proteolysis by Ca2(+)–activated neutral proteinase (CANP): a role of glycoconjugates in CANP regulation. Chakrabarti AK, et al. **J Neurochem** 1990 May;54(5):1816–9

Proteolytic processing of beta–amyloid precursor by calpain I. Siman R, et al. **J Neurosci** 1990 Jul;10(7):2400–11

Failure to find Ca2(+)–dependent proteinase (calpain) activity in a plant species, Elodea densa. Wolfe FH, et al. **Life Sci** 1989;45(22):2093–101

Specific proteolysis of the c–mos proto–oncogene product by calpain on fertilization of Xenopus eggs [see comments] Watanabe N, et al. **Nature** 1989 Nov 30;342(6249):505–11 Comment in: Nature 1989 Nov 30;342(6249):483–4.

Calpain and calpastatin in normal and Alzheimer–degenerated human brain tissue. Nilsson E, et al. **Neurobiol Aging** 1990 Jul–Aug;11(4):425–31

Developmental changes of calpain and calpastatin in rabbit brain. Blomgren K, et al. **Neurochem Res** 1989 Nov; 14(11):1149–52

Calpain II activity and calpastatin content in brain regions of 3– and 24–month–old rats. Kenessey A, et al. **Neurochem Res** 1990 Mar;15(3):243–9

Excitatory amino acids activate calpain I and induce structural protein breakdown in vivo. Siman R, et al. **Neuron** 1988 Jun;1(4):279–87

Calmodulin and calcium–dependent protease I coordinately regulate the interaction of fodrin with actin. Harris AS, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3009–13

Identification of calcium–activated neutral protease as a processing enzyme of human interleukin 1 alpha. Kobayashi Y, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5548–52

The non–lysosomal, calcium–dependent proteolytic system of mammalian cells. Mellgren RL, et al. **Revis Biol Celular** 1989;20:139–59 (41 ref.)

[Calpain and calpastatin] Murachi T. **Rinsho Byori** 1990 Apr; 38(4):337–46 (25 ref.) (Eng. Abstr.) **(Jpn)**

[Calcium–activated neutral protease and its endogenous inhibitor: structure and function] Imajoh–Ohmi S, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2175–92 **(Jpn)**

[Ca2+–protease—an enzyme of the metabolism of cytoskeletal proteins in the olfactory membrane of vertebrates] Chistiakova IuV, et al. **Tsitologiia** 1989 Nov; 31(11):1345–52 (Eng. Abstr.) **(Rus)**

[The effect of physical exertion on the activity of calpains and myeloperoxidase level in skeletal muscles of rats] Nazarov IB, et al. **Ukr Biokhim Zh** 1990 May–Jun; 62(3):101–5 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Calpain II–dependent solubilization of a nuclear protein kinase at micromolar calcium concentrations. Mellgren RL, et al. **Biochem Biophys Res Commun** 1990 Apr 30; 168(2):589–95

Calpain proteolysis of von Willebrand factor enhances its binding to platelet membrane glycoprotein IIb/IIIa: an explanation for platelet aggregation in thrombotic thrombocytopenic purpura. Moore JC, et al. **Br J Haematol** 1990 Apr;74(4):457–64

Digestion of cardiac and skeletal muscle junctional sarcoplasmic reticulum vesicles with calpain II. Effects on the Ca2+ release channel. Rardon DP, et al. **Circ Res** 1990 Jul;67(1):84–96

Purification and properties of D–myo–inositol 1,4,5–trisphosphate 3–kinase from rat brain. Susceptibility to calpain. Lee SY, et al. **J Biol Chem** 1990 Jun 5; 265(16):9434–40

Calpain I activates Ca2+ transport by the reconstituted erythrocyte Ca2+ pump. Wang KK, et al. **J Membr Biol** 1989 Dec;112(3):233–45

Degradation of skeletal muscle plasma membrane proteins by calpain. Zaidi SI, et al. **J Membr Biol** 1989 Sep; 110(3):209–16

Digestion of proteins associated with the Z–disc by calpain. Bullard B, et al. **J Muscle Res Cell Motil** 1990 Jun; 11(3):271–9

Calpain and calpastatin activity in the optic pathway. Blomgren K, et al. **Neurosci Lett** 1990 May 4; 112(2–3):179–83

Effect of calpain II on turkey gizzard muscle and structural dissection of cytoplasmic dense bodies by low ionic strength extraction. Yamaguchi M, et al. **Prog Clin Biol Res** 1990;327:637–49

PHYSIOLOGY

Calpain I activates Ca2+ transport by the human erythrocyte plasma membrane calcium pump. Wang KK, et al. **Adv Exp Med Biol** 1990;269:175–80

Links between long–term potentiation and neuropathology. An hypothesis involving calcium–activated proteases. Lynch G, et al. **Ann N Y Acad Sci** 1989;568:171–80 (67 ref.)

Calcium–activated neutral proteinases as regulators of cellular function. Implications for Alzheimer's disease pathogenesis. Nixon RA. **Ann N Y Acad Sci** 1989; 568:198–208 (120 ref.)

Role of calcium and calpain in complement–induced vesiculation of the platelet plasma membrane and in the exposure of the platelet factor Va receptor. Wiedmer T, et al. **Biochemistry** 1990 Jan 23;29(3):623–32

Calcium activated neutral protease—structure–function relationship and functional implications. Suzuki K, et al. **Cell Struct Funct** 1990 Feb;15(1):1–6 (10 ref.)

Potential participation of calpain in platelet activation studied by use of a cell penetrating calpain inhibitor (calpeptin). Tsujinaka T, et al. **Life Sci** 1990;46(15):1059–66

The role of intracellular proteinases in human neutrophil activation. Pontremoli S, et al. **Revis Biol Celular** 1989;

20:161–77 (28 ref.)
The calpains. Melloni E, et al. **Trends Neurosci** 1989 Nov; 12(11):438–44 (54 ref.)
[Roles of calpain and calpastatin in cellular functions] Murachi T. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(12):2193–206 **(Jpn)**

CALSEQUESTRIN see under **MUSCLE PROTEINS**

CALSPECTIN see **CALMODULIN-BINDING PROTEINS**

CALUSTERONE see under **METHYLTESTOSTERONE**

CAMAZEPAM see under **BENZODIAZEPINE TRANQUILIZERS**

CAMBENDAZOLE see under **BENZIMIDAZOLES**

CAMELIDS, NEW WORLD see under **ARTIODACTYLA**

CAMELLIA see **TEA**

CAMELS

Clinical and subclinical colloid goitre in adult camels (Camelus dromedarius) at Kordofan region of Sudan. Abu Damir H, et al. **Br Vet J** 1990 May–Jun;146(3):219–27
Bacterial infertility in camels (Camelus dromedarius): isolation of Campylobacter fetus. Wernery U, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Nov–Dec; 96(10):497–8
Acute monensin toxicosis in Stone sheep (Ovis dalli stonei), blesbok (Damaliscus dorcus phillipsi), and a Bactrian camel (Camelus bactrianus). Miller RE, et al. **J Am Vet Med Assoc** 1990 Jan 1;196(1):131–4
Serological evidence of Crimean–Congo haemorrhagic fever viral infection among camels imported into Egypt. Morrill JC, et al. **J Trop Med Hyg** 1990 Jun;93(3):201–4
N-terminal amino-sequencing of camel (Camelus dromedarius) luteinizing-hormone alpha and beta-subunits. Combarnous Y, et al. **Pathol Biol (Paris)** 1989 Sep; 37(7):814–8
Camel bites: report of severe osteolysis as late bone complications. al-Boukai AA, et al. **Postgrad Med J** 1989 Dec;65(770):900–4
Corynebacterium pseudotuberculosis infection in camels (Camelus dromedarius) in Saudi Arabia. Radwan AI, et al. **Trop Anim Health Prod** 1989 Nov;21(4):229–30
Silicate pneumoconiosis in camels (Camelus dromedarius L.). Hansen HJ, et al. **Zentralbl Veterinarmed [A]** 1989 Dec; 36(10):789–96
Camel papillomatosis in Somalia. Munz E, et al. **Zentralbl Veterinarmed [B]** 1990 May;37(3):191–6
[Seroepidemiologic studies of the detection of antibodies to Brucella, Chlamydia, Leptospira, BVD/MD virus, IBR/IPV virus and enzootic bovine leukosis virus (EBL) in dromedary mares (Camelus dromedarius)] Wernery U, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Mar; 97(3):134–5 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

Morphometric and histological studies on the adrenal glands of the camel Camelus dromedarius. Abdalla MA, et al. **Acta Morphol Neerl Scand** 1988–89;26(4):269–81
Structure of the carotid sinus of the dromedary camel (Camelus dromedarius). Abdel-Magied EM, et al. **Anat Histol Embryol** 1989 Dec;18(4):316–26

BLOOD

A 35Cl(-)-NMR study of the singular anion-binding properties of dromedary hemoglobin. Lundberg P, et al. **Biochim Biophys Acta** 1989 Nov 9;999(1):12–8
Serum cortisol levels in camels (Camelus dromedarius) during the reproductive cycle. Elias E, et al. **Comp Biochem Physiol [A]** 1989;94(4):787–90
The relationship between the concentration of selenium in the blood and the activity of glutathione peroxidase in the erythrocytes of the dromedary camel (Camelus dromedarius). Hamliri A, et al. **Vet Res Commun** 1990; 14(1):27–30
Fine structure of the camel neutrophilic granulocytes with special references to its function. Ali AM, et al. **Z Mikrosk Anat Forsch** 1989;103(6):985–92

METABOLISM

Comparative pharmacokinetics of netobimin and albendazole in the one-humped camel (Camelus dromedarius). Delatour P, et al. **Br Vet J** 1989 Sep–Oct;145(5):478–82
Liver function and protein binding in camels. Ben-Zvi Z, et al. **Comp Biochem Physiol [A]** 1989;93(2):349–52
Liver uricase in Camelus dromedarius: purification and properties. Osman AM, et al. **Comp Biochem Physiol [B]** 1989;94(3):469–74
A comparative study of enzyme profile of camel (Camelus dromedarius) hump and sheep (Ovis aries) tail tissues. al-Rehaimi AA, et al. **Comp Biochem Physiol [B]** 1989; 93(4):857–8
Pharmacokinetics and metabolism of sulphadimidine in the camel. Younan W, et al. **J Vet Pharmacol Ther** 1989 Sep; 12(3):327–9

MICROBIOLOGY

Isolation of Brucella abortus from experimentally infected dromedary camels in Sudan: a preliminary report. Abu Damir H, et al. **Vet Res Commun** 1989;13(6):403–6

PARASITOLOGY

Acute toxoplasmosis in a camel. Hagemoser WA, et al. **J Am Vet Med Assoc** 1990 Jan 15;196(2):347
Effect of unfed female weight on the biology of Hyalomma (Hyalomma) dromedarii Koch (Acari: Ixodidae). Khalil GM, et al. **J Egypt Soc Parasitol** 1990 Jun;20(1):69–82
Echinococcosis in camels as revealed by indirect haemagglutination test in Belbas. el-Ridi AM, et al. **J Egypt Soc Parasitol** 1990 Jun;20(1):95–8
Pasture infestation with trichostrongyles of camels in the Butana area of eastern Sudan. Magzoub M, et al. **Trop Anim Health Prod** 1990 Feb;22(1):7–8
Gastro-intestinal helminths of camels in Nigeria. Onyali IO, et al. **Trop Anim Health Prod** 1989 Nov;21(4):245–6
Efficacy of RM110, a novel trypanocide, in the treatment of Trypanosoma evansi infections in camels. Zelleke D, et al. **Trop Anim Health Prod** 1989 Nov;21(4):223–6
Two simple antigen-detection enzyme immunoassays for the diagnosis of Trypanosoma evansi infections in the dromedary camel (Camelus dromedarius). Nantulya VM, et al. **Trop Med Parasitol** 1989 Dec;40(4):415–8

PHYSIOLOGY

Heterogeneity of the histological features along the course of the facial vein of the desert camel (Camelus dromedarius): relevance to brain cooling. Bou-Resli MN, et al. **Acta Morphol Neerl Scand** 1988–89;26(4):249–54
Facial vessels of desert camel (Camelus dromedarius): role in brain cooling. Elkhawad AO, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):R602–7
Brain cooling and respiratory heat exchange in camels during rest and exercise. Schroter RC, et al. **Respir Physiol** 1989 Oct;78(1):95–105

CAMPHANES see **BORNANES**

CAMPHOR

Tyrosine-96 as a natural spectroscopic probe of the cytochrome P-450cam active site. Atkins WM, et al. **Biochemistry** 1990 Feb 6;29(5):1271–5

METABOLISM

Lack of regio- and stereospecificity in oxidation of (+) camphor by Streptomyces griseus enriched in cytochrome P-450soy. Sariaslani FS, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):456–61

PHARMACOLOGY

Sensory characteristics of camphor. Green BG. **J Invest Dermatol** 1990 May;94(5):662–6
[Enhancement of absorption of tetramethylpyrazine by synthetic borneol] Chen TF, et al. **Chung Kuo Yao Li Hsueh Pao** 1990 Jan;11(1):42–4 (Eng. Abstr.) **(Chi)**
[The long-term action of camphor on "audiosensitive" rats: electrophysiological research and mathematical modelling of the properties of the neuronal networks] Medvedev AV. **Neirofiziologiia** 1990;22(2):193–200 (Eng. Abstr.) **(Rus)**

TOXICITY

Radiomodifying influence of camphor on sister-chromatid exchange induction in mouse bone marrow. Goel HC, et al. **Mutat Res** 1989 Oct;224(2):157–60

CAMPIMETRY see **PERIMETRY**

CAMPING

Sickle cell disease. Summer camp. Experience of a 22-year community-supported program. Powars DR, et al. **Clin Pediatr (Phila)** 1990 Feb;29(2):81–5
Summer camps for diabetic children in Beijing of China. Yan C, et al. **Indian J Pediatr** 1989 Nov–Dec;56 Suppl 1:S125–7
Full-timing: a housing alternative for older people. Hartwigsen G, et al. **Int J Aging Hum Dev** 1989; 29(4):317–28
Use of a camp setting to provide medical information to siblings of pediatric cancer patients. Carpenter PJ, et al. **J Cancer Educ** 1990;5(1):21–6
Knowledge acquired during camp for children with cancer [letter] Ladd RE, et al. **J Pediatr** 1990 Aug;117(2 Pt 1):337–8
[Educational value of diabetes camps for children] Métroz-Dayer MD, et al. **Schweiz Med Wochenschr** 1990 Jan 20;120(3):66–71 (Eng. Abstr.) **(Fre)**
[Medical care in large camp grounds—a report of experiences] Saeger W, et al. **Off Gesundheitswes** 1989 Oct; 51(10):629–34 (Eng. Abstr.) **(Ger)**
[Hydrophobic quality and the level of surface proteins in the cell wall of cultures of Streptococcus pyogenes isolated from clinically healthy children from an organized collective] Briko NI, et al. **Vestn Akad Med Nauk SSSR** 1989;(11):32–6 (Eng. Abstr.) **(Rus)**
[The epidemic process of an acute streptococcal respiratory infection in large organized collectives of children] Zhukov VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Jan; (1):37–42 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Children's knowledge of cancer and its treatment: impact of an oncology camp experience [see comments] Bluebond-Langner M, et al. **J Pediatr** 1990 Feb; 116(2):207–13 Comment in: J Pediatr 1990 Feb;116(2):271–2.
Disease-specific camping for children [comment] Seeler RA. **J Pediatr** 1990 Feb;116(2):271–2 Comment on: J Pediatr 1990 Feb;116(2):207–13.

CAMPTOTHECIN

13C-nmr assignments of camptothecine and 10-hydroxycamptothecine. Lin LZ, et al. **J Nat Prod** 1990 Jan–Feb;53(1):186–9

ADMINISTRATION & DOSAGE

[The effect of drug-microsphere embolization of hepatic artery on normal liver and experimental hepatic tumor in rats] Wu XJ. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Dec;23(6):326–9 (Eng. Abstr.) **(Chi)**
[An experimental study of the basic properties of drug microspheres and target treatment of rats with liver tumor] Wu XJ. **Chung Hua Wai Ko Tsa Chih** 1990 Apr;28(4):241–3, 254 (Eng. Abstr.) **(Chi)**

ANALOGS & DERIVATIVES

Collateral drug sensitivity induced in CPT-11 (a novel derivative of camptothecin)-resistant cell lines. Oguro M, et al. **Biomed Pharmacother** 1990;44(4):209–16
DNA topoisomerase I as a site of action for 10-hydroxycamptothecin in human promyelocytic leukemia cells. Ling YH, et al. **Cancer Biochem Biophys** 1990 Jan;11(1):23–30
Nonlinear pharmacokinetics of CPT-11 in rats. Kaneda N, et al. **Cancer Res** 1990 Mar 15;50(6):1721–5
Metabolism and pharmacokinetics of the camptothecin analogue CPT-11 in the mouse [published erratum appears in Cancer Res 1990 Jul 15;50(14):4451] Kaneda N, et al. **Cancer Res** 1990 Mar 15;50(6):1715–20
Establishment of a camptothecin analogue (CPT-11)-resistant cell line of human non-small cell lung cancer: characterization and mechanism of resistance. Kanzawa F, et al. **Cancer Res** 1990 Sep 15;50(18):5919–24
Synthesis and antileukemic activity of (+-)-20-deoxyaminocamptothecin analogues. Ejima A, et al. **Chem Pharm Bull (Tokyo)** 1989 Aug;37(8):2253–5
Some pharmacological properties of a new antitumor drug, CPT-11, in isolated muscle preparations. Takayanagi I, et al. **Gen Pharmacol** 1989;20(6):763–6
Plant antitumor agents. 29. Synthesis and biological activity of ring D and ring E modified analogues of camptothecin. Nicholas AW, et al. **J Med Chem** 1990 Mar;33(3):972–8
13C-nmr assignments of camptothecine and 10-hydroxycamptothecine. Lin LZ, et al. **J Nat Prod** 1990 Jan–Feb;53(1):186–9
DNA topoisomerase I--targeted chemotherapy of human colon cancer in xenografts. Giovanella BC, et al. **Science** 1989 Nov 24;246(4933):1046–8
[A phase I study of weekly administration of CPT-11 in lung cancer] Fukuoka M, et al. **Gan To Kagaku Ryoho** 1990 May;17(5):993–7 (Eng. Abstr.) **(Jpn)**
[Effect of administration schedules on the antitumor activity of CPT-11, a camptothecin derivative] Furuta T, et al. **Gan To Kagaku Ryoho** 1990 Jan;17(1):121–30 (Eng. Abstr.) **(Jpn)**
[Phase I clinical study of CPT-11. Research group of CPT-11] Taguchi T, et al. **Gan To Kagaku Ryoho** 1990 Jan;17(1):115–20 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Induction of differentiation of human and mouse myeloid leukemia cells by camptothecin. Chou S, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):160–7
Exposure to camptothecin breaks leading and lagging strand simian virus 40 DNA replication forks. Shin CG, et al. **Biochem Biophys Res Commun** 1990 Apr 16;168(1):135–40
Effects of minor groove binding drugs on camptothecin-induced DNA lesions in L1210 nuclei. McHugh MM, et al. **Biochem Pharmacol** 1990 Feb 15; 39(4):707–14
Camptothecin-stabilized topoisomerase I-DNA adducts cause premature termination of transcription. Bendixen C, et al. **Biochemistry** 1990 Jun 12;29(23):5613–9
Expression of human DNA topoisomerase I in yeast cells lacking yeast DNA topoisomerase I: restoration of sensitivity of the cells to the antitumor drug camptothecin. Bjornsti MA, et al. **Cancer Res** 1989 Nov 15;49(22):6318–23
Diverse effects of camptothecin, an inhibitor of topoisomerase I, on the cell cycle of lymphocytic (L1210, MOLT-4) and myelogenous (HL-60, KG1) leukemic cells. Del Bino G, et al. **Cancer Res** 1990 Sep 15;50(18):5746–50
Differential requirement of DNA replication for the cytotoxicity of DNA topoisomerase I and II inhibitors in Chinese hamster DC3F cells. Holm C, et al. **Cancer Res** 1989 Nov 15;49(22):6365–8

Induction of endonucleolytic DNA cleavage in human acute myelogenous leukemia cells by etoposide, camptothecin, and other cytotoxic anticancer drugs: a cautionary note. Kaufmann SH. **Cancer Res** 1989 Nov 1;49(21):5870–8

Nonproductive rearrangement of DNA topoisomerase I and II genes: correlation with resistance to topoisomerase inhibitors. Tan KB, et al. **J Natl Cancer Inst** 1989 Nov 15;81(22):1732–5

Topoisomerase I and II cleavage of adenovirus DNA in vivo: both topoisomerase activities appear to be required for adenovirus DNA replication. Schaack J, et al. **J Virol** 1990 Jan;64(1):78–85

Involvement of topoisomerases in replication, transcription, and packaging of the linear adenovirus genome. Wong ML, et al. **J Virol** 1990 Feb;64(2):691–9

DNA-break repair, radioresistance of DNA synthesis, and camptothecin sensitivity in the radiation-sensitive irs mutants: comparisons to ataxia-telangiectasia cells. Thacker J, et al. **Mutat Res** 1990 Mar;235(2):49–58

Comparison of effects of fostriecin, novobiocin, and camptothecin, inhibitors of DNA topoisomerases, on DNA replication and repair in human cells. Gedik CM, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1007–13

Sequence dependent modulating effect of camptothecin on the DNA-cleaving activity of the calf thymus type I topoisomerase. Gromova II, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):637–45

The basis for camptothecin enhancement of DNA breakage by eukaryotic topoisomerase I. Porter SE, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8521–32

Transcription of adenovirus and HeLa cell genes in the presence of drugs that inhibit topoisomerase I and II function. Schaak J, et al. **Nucleic Acids Res** 1990 Mar 25; 18(6):1499–508

THERAPEUTIC USE

DNA topoisomerase I--targeted chemotherapy of human colon cancer in xenografts. Giovanella BC, et al. **Science** 1989 Nov 24;246(4933):1046–8

TOXICITY

Induction of sister chromatid exchanges by inhibitors of topoisomerases. Lim M, et al. **Cell Biol Toxicol** 1986 Dec; 2(4):485–94

CAMPYLOBACTER

Antral Campylobacter pylori colonization, ABO blood group, and secretor status [letter] Levi S, et al. **Gastroenterol Clin Biol** 1989 Dec;13(12):1095

Campylobacter pylori. A new era in gastroduodenal disorders? Gill HH, et al. **J Assoc Physicians India** 1990 Feb;38(2):147–50 (47 ref.)

Campylobacter pylori. The organism and its clinical relevance. Graham DY, et al. **J Clin Gastroenterol** 1989; 11 Suppl 1:S43–8

[Campylobacter pylori in patients with gastroduodenal disease] Fukuda Y, et al. **Gan To Kagaku Ryoho** 1990 Apr; 17(4 Pt 1):575–88 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Interlaboratory comparative study of the numerical analysis of one-dimensional sodium dodecyl sulphate-polyacrylamide gel electrophoretic protein patterns of Campylobacter strains. Costas M, et al. **Electrophoresis** 1990 Jun;11(6):467–74

Unusual fatty acid substitution in lipids and lipopolysaccharides of Helicobacter pylori. Geis G, et al. **J Clin Microbiol** 1990 May;28(5):930–2

Isoprenoid quinones of Campylobacter cryaerophila, C. cinaedi, C. fennelliae, C. hyointestinalis, C. pylori, and "C. upsaliensis". Moss CW, et al. **J Clin Microbiol** 1990 Feb; 28(2):395–7

Signature patterns of DNA restriction fragments of Helicobacter pylori before and after treatment. Owen RJ, et al. **J Clin Pathol** 1990 Aug;43(8):646–9

CLASSIFICATION

Application of a new phagetyping scheme to campylobacters isolated during outbreaks. Salama SM, et al. **Epidemiol Infect** 1990 Jun;104(3):405–11

Serotypes & biotypes of Campylobacter jejuni & C. coli from diverse sources in Calcutta. Bhadra RK, et al. **Indian J Med Res** 1989 Jul;89:225–8

Investigation of zoonotically acquired Campylobacter jejuni enteritis with serotyping and restriction endonuclease DNA analysis. Fox JG, et al. **J Clin Microbiol** 1989 Nov; 27(11):2423–5

Evaluation of the indoxyl acetate hydrolysis test for the differentiation of Campylobacters. Hodge DS, et al. **J Clin Microbiol** 1990 Jun;28(6):1482–3

Application of different chromosomal DNA restriction digest fingerprints to specific and subspecific identification of Campylobacter isolates. Owen RJ, et al. **J Clin Microbiol** 1989 Oct;27(10):2338–43

Typing of Campylobacter pylori by bacterial DNA restriction endonuclease analysis and determination of plasmid profile. Simor AE, et al. **J Clin Microbiol** 1990 Jan;28(1):83–6

Biotypes, serogroups and antibiotic susceptibility of Campylobacter jejuni and Campylobacter coli in Chile. Figueroa G, et al. **J Infect** 1990 Mar;20(2):123–7

Correlation between human and animal bio-serogroups of Campylobacter isolates in Nigeria. Adegbola RA, et al. **J Trop Med Hyg** 1990 Aug;93(4):280–3

Campylobacter pylori becomes Helicobacter pylori [editorial] **Lancet** 1989 Oct 28;2(8670):1019–20

Helicobacter pylori (Campylobacter pylori) and duodenal ulcer [editorial] Goodwin CS, et al. **Med J Aust** 1990 Jul 16;153(2):66–7

Biotype and Lior serogroup distribution of enteric Campylobacter isolated from children in Bangui (Central African Republic), and comparison with Penner serotypes. Georges-Courbot MC, et al. **Res Microbiol** 1989 Sep; 140(7):489–97

DRUG EFFECTS

Campylobacter pylori-associated gastritis: attempts to eradicate the bacteria by various antibiotics and anti-ulcer regimens. Glupczynski Y, et al. **Acta Gastroenterol Belg** 1989 Jul-Oct;51(4–5):329–37

In vitro activities of new oral beta-lactams and macrolides against Campylobacter pylori. García-Rodríguez JA, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1650–1

Eradication of Helicobacter mustelae from the ferret stomach: an animal model of Helicobacter (Campylobacter) pylori chemotherapy. Otto G, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1232–6

Guinea pig model for antibiotic transport across gastric mucosa: inhibitory tissue concentrations of clindamycin against Helicobacter pylori (Campylobacter pylori) following two separate dose regimens. Westblom TU, et al. **Antimicrob Agents Chemother** 1990 Jan;34(1):25–8

Effect of varying pH on the susceptibility of Campylobacter pylori to antimicrobial agents. Grayson ML, et al. **Eur J Clin Microbiol Infect Dis** 1989 Oct;8(10):888–9

In vitro susceptibility of Campylobacter jejuni and Campylobacter coli isolated in Austria to erythromycin and ciprofloxacin. Hirschl AM, et al. **Int J Med Microbiol** 1990 Apr;272(4):443–7

The minimum inhibitory concentrations of various bismuth salts against Campylobacter pylori. Vogt K, et al. **Int J Med Microbiol** 1989 Sep;271(3):304–10

Effect of bismuth subcarbonate against Campylobacter pylori: do citrate ions improve antibacterial activity? Vogt K, et al. **Int J Med Microbiol** 1990 May;273(1):33–5

In-vitro susceptibility of Campylobacter pylori to quinolones. Carley NH, et al. **J Antimicrob Chemother** 1989 Aug; 24(2):266–8

Activity of quinolones against Campylobacter pylori in vitro. García-Rodríguez JA, et al. **J Antimicrob Chemother** 1989 Dec;24(6):1014–6

Unsaturated fatty acids and viability of Helicobacter (Campylobacter) pylori. Hazell SL, et al. **J Clin Microbiol** 1990 May;28(5):1060–1

Lack of in vitro activity of omeprazole against Campylobacter pylori [letter] [published erratum appears in J Clin Pathol 1990 May;43(5):440] Ghelani AM, et al. **J Clin Pathol** 1990 Feb;43(2):171–2

Metronidazole-resistant Helicobacter pylori [letter] [see comments] Becx MC, et al. **Lancet** 1990 Mar 3; 335(8688):539–40 Comment in: Lancet 1990 Apr 21;335(8695):976–7.

In vitro killing of Helicobacter pylori with photodynamic therapy [letter] Bedwell J, et al. **Lancet** 1990 May 26; 335(8700):1287

Fluoroquinolone resistance in Campylobacter spp isolated from human stools and poultry products [letter] Endtz HP, et al. **Lancet** 1990 Mar 31;335(8692):787

Metronidazole resistance in Helicobacter pylori [letter; comment] Glupczynski Y, et al. **Lancet** 1990 Apr 21; 335(8695):976–7 Comment on: Lancet 1990 Mar 3;335(8688):539–40.

Helicobacter pylori acid resistance [letter] Mooney C, et al. **Lancet** 1990 May 19;335(8699):1232

Fluoroquinolone-resistance in thermophilic Campylobacter spp isolated from stools of Spanish patients [letter] Reina J, et al. **Lancet** 1990 Jul 21;336(8708):186

Is antibacterial therapy against Campylobacter pylori useful in the treatment of indigestion and chronic peptic ulceration? Talley NJ, et al. **Trends Pharmacol Sci** 1989 Jan;10(1):36–40 (32 ref.)

[Helicobacter pylori and nonsteroidal antirheumatics] Scherak O, et al. **Dtsch Med Wochenschr** 1990 Aug 3; 115(31–32):1171–5 (Eng. Abstr.) **(Ger)**

[Antibiotic resistance of Campylobacter and its epidemiologic significance] Aleksandrova NZ, et al. **Antibiot Khimioter** 1990 Mar;35(3):34–6 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Lipolytic activity of Campylobacter pylori: effect of sofalcone. Slomiany BL, et al. **Digestion** 1989;43(1–2):33–40

Antigenic conservation of the ureases of spiral- and helical-shaped bacteria colonising the stomachs of man and animals. Newell DG, et al. **FEMS Microbiol Lett** 1989 Nov; 53(1–2):183–6

Purification and N-terminal analysis of urease from Helicobacter pylori. Hu LT, et al. **Infect Immun** 1990 Apr; 58(4):992–8

Helicobacter pylori urease activity is toxic to human gastric epithelial cells. Smoot DT, et al. **Infect Immun** 1990 Jun; 58(6):1992–4

Purification and characterization of urease from Helicobacter pylori. Dunn BE, et al. **J Biol Chem** 1990 Jun 5; 265(16):9464–9

Intracellular vacuolization caused by the urease of Helicobacter pylori. Xu JK, et al. **J Infect Dis** 1990 Jun; 161(6):1302–4

Hypothesis: Helicobacter pylori, urease, mucus, and gastric ulcer [see comments] Sidebotham RL, et al. **Lancet** 1990 Jan 27;335(8683):193–5 (3 ref.) Comment in: Lancet 1990 Mar 24;335(8691):728–9.

[The urease rapid test (CLO test). Attempt at statistical analysis for the evaluation of Campylobacter colonization in the gastric antrum] Allmendinger G, et al. **Schweiz Rundsch Med Prax** 1990 Mar 27;79(13):389–90 (Eng. Abstr.) **(Ger)**

GENETICS

Plasmid profiles of six species of Campylobacter from human beings, swine, and sheep. Boosinger TR, et al. **Am J Vet Res** 1990 May;51(5):718–22

Emergence of aminoglycoside resistance genes aadA and aadE in the genus Campylobacter. Pinto-Alphandary H, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1294–6

Occurrence of plasmids in "Campylobacter upsaliensis" (catalase negative or weak group) from geographically diverse patients with gastroenteritis or bacteraemia. Owen RJ, et al. **Eur J Epidemiol** 1990 Jun;6(2):111–7

Polynucleotide sequence relationships among flagellin genes of Campylobacter jejuni and Campylobacter coli. Thornton SA, et al. **Infect Immun** 1990 Aug;58(8):2686–9

Use of pulsed-field agarose gel electrophoresis to size genomes of Campylobacter species and to construct a SalI map of Campylobacter jejuni UA580. Chang N, et al. **J Bacteriol** 1990 Sep;172(9):5211–7

Genomic organization and expression of Campylobacter flagellin genes. Guerry P, et al. **J Bacteriol** 1990 Apr; 172(4):1853–60

Natural transformation in Campylobacter species. Wang Y, et al. **J Bacteriol** 1990 Feb;172(2):949–55

Genotypical variation of Campylobacter pylori from gastric mucosa. Oudbier JH, et al. **J Clin Microbiol** 1990 Mar; 28(3):559–65

Natural competence for genetic transformation in Campylobacter pylori [letter] Nedenskov-Sørensen P, et al. **J Infect Dis** 1990 Feb;161(2):365–6

Use of DNA restriction endonuclease digest and ribosomal RNA gene probe patterns to fingerprint Helicobacter pylori and Helicobacter mustelae isolated from human and animal hosts. Morgan DD, et al. **Mol Cell Probes** 1990 Aug;4(4):321–34

Use of non-radioactive DNA probes for detection of Campylobacter jejuni and Campylobacter coli in stool specimens. Taylor DE, et al. **Mol Cell Probes** 1990 Aug; 4(4):261–71

Nucleotide sequence of two genes from Helicobacter pylori encoding for urease subunits. Clayton CL, et al. **Nucleic Acids Res** 1990 Jan 25;18(2):362

GROWTH & DEVELOPMENT

Inability of human clinical strains of Helicobacter pylori to colonize the alimentary tract of germfree rodents. Cantorna MT, et al. **Can J Microbiol** 1990 Apr;36(4):237–41

The response of Campylobacter jejuni and Campylobacter coli in the Sydney rock oyster (Crassostrea commercialis), during depuration and storage. Arumugaswamy RK, et al. **Int J Food Microbiol** 1988 Dec;7(3):173–83

Heat resistance of Campylobacter and Yersinia strains by three methods. Sörqvist S. **J Appl Bacteriol** 1989 Nov; 67(5):543–9

Lactobacillus acidophilus inhibits growth of Campylobacter pylori in vitro. Bhatia SJ, et al. **J Clin Microbiol** 1989 Oct; 27(10):2328–30

[Semiquantitative culture of Campylobacter pylori in gastroduodenal disorder] Tsuneoka H, et al. **Kansenshogaku Zasshi** 1990 Feb;64(2):169–73 (Eng. Abstr.) **(Jpn)**

[Evaluation of agar media for growth of Campylobacter pylori] Narikawa S, et al. **Rinsho Byori** 1990 Jan; 38(1):104–6 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Helicobacter pylori in Gambian children with chronic diarrhoea and malnutrition. Sullivan PB, et al. **Arch Dis Child** 1990 Feb;65(2):189–91

Campylobacter pylori colonization factor shows specificity for lactosylceramide sulfate and GM3 ganglioside. Slomiany BL, et al. **Biochem Int** 1989 Oct;19(4):929–36

The source of Campylobacter pylori. Vaira D, et al. **Biomed Pharmacother** 1989;43(6):447–50

Serological investigations of children in Iran for Campylobacter, Yersinia and Shigella. Bashiribod H. **Geogr Med Suppl** 1989;5:205–6

Structural and antigenic properties of Campylobacter coli lipopolysaccharides. Mandatori R, et al. **Infect Immun** 1989 Nov;57(11):3506–11

Seroprevalence of Helicobacter pylori infections in Thailand. Perez-Perez GI, et al. **J Infect Dis** 1990 Jun;161(6):1237–41

Opsonic activity of specific human IgG against Helicobacter pylori. Tosi MF, et al. **J Infect Dis** 1990 Jul;162(1):156–62

The prevalence of anti-Helicobacter (Campylobacter) pylori antibodies in patients and healthy blood donors. Loffeld

RJ, et al. **J Med Microbiol** 1990 Jun;32(2):105–9
Antibodies to Helicobacter pylori in HIV infection [letter] Aceti A, et al. **Lancet** 1990 Sep 1;336(8714):571
Effect of ABO blood group and secretor status on the frequency of Helicobacter pylori antibodies. Höök-Nikanne J, et al. **Scand J Gastroenterol** 1990 Aug; 25(8):815–8
[Analysis of the prevalence of anti-Campylobacter pylori antibodies detected in a healthy human population] Reina J, et al. **Rev Esp Enferm Apar Dig** 1989 Aug;76(2):151–4 (26 ref.) (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Identification of Campylobacter pylori in gastric biopsy smears. Faverly D, et al. **Acta Cytol** 1990 Mar–Apr; 34(2):205–10
Campylobacter pylori in gastric, duodenal and jejunal juices and mucosae of patients with duodenal ulcer. Debongnie JC, et al. **Acta Gastroenterol Belg** 1989 Jan–Apr;52(1–2):3–8
Campylobacter pylori colonizing heterotopic gastric tissue in the rectum. Dye KR, et al. **Am J Clin Pathol** 1990 Jan; 93(1):144–7
Response to Dr. Peterson [letter] Fry WA. **Am J Gastroenterol** 1990 Jul;85(7):899–900
Comparison of different tests for Helicobacter pylori [letter; comment] Rudensky B, et al. **Am J Gastroenterol** 1990 Mar; 85(3):325–6 Comment on: Am J Gastroenterol 1989 Feb;84(2):133–7.
Comparison of culture and histology for the identification of Helicobacter pylori in endoscopic biopsies. Yap I, et al. **Ann Acad Med Singapore** 1990 May;19(3):354–6
Prevalence and antibiogram of Campylobacter jejuni in domestic animals in rural Ghana. Abrahams CA, et al. **Arch Environ Health** 1990 Jan–Feb;45(1):59–62
A simple method to detect Helicobacter pylori in gastric specimens. Schneider RE, et al. **BMJ** 1990 Jun 16; 300(6739):1559
Gastric campylobacter-like organisms and active antral gastritis in Puerto Rico. Toro DH, et al. **Bol Asoc Med P R** 1990 Mar;82(3):107–10
Natural bactericidal activity of human serum against strains of Campylobacter jejuni isolated in Lagos, Nigeria. Obi CL, et al. **Cent Afr J Med** 1989 Aug;35(8):444–8
Identification of Campylobacter pylori by gastric brush cytology [letter] Claren R, et al. **Diagn Cytopathol** 1990; 6(3):223–4
Campylobacter pylori in esophagus [letter; comment] Fallingborg J, et al. **Dig Dis Sci** 1989 Nov;34(11):1802–3 Comment on: Dig Dis Sci 1989 Mar;34(3):445–8.
Campylobacter-like organisms, nonsteroidal anti-inflammatory drugs and gastric lesions in patients with rheumatoid arthritis. Caselli M, et al. **Digestion** 1989; 44(2):101–4
Possible evidence of invasiveness of Helicobacter (Campylobacter) pylori. Andersen LP, et al. **Eur J Clin Microbiol Infect Dis** 1990 Feb;9(2):135–8
Enterotoxigenicity and frequency of Campylobacter jejuni, C. coli and C. laridis in human and animal stool isolates from different countries. Lindblom GB, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1–3):163–7
Evaluation of a selective enrichment technique for the isolation of Campylobacter pylori. Morgan DR, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1–3):303–6
Helicobacter-like organisms in gastroduodenal diseases. Andreica V, et al. **Gastroenterol Clin Biol** 1990;14(5):437–41
Campylobacter pylori in Japan: bacteriological feature and prevalence in healthy subjects and patients with gastroduodenal disorders. Inouye H, et al. **Gastroenterol Jpn** 1989 Oct;24(5):494–504
Helicobacter pylori gastritis: a 'normal' phenomenon. Peterson WL. **Gastroenterology** 1990 Jul;99(1):278–9
Campylobacter pylori infection in Meckel's diverticula containing gastric mucosa [see comments] Morris A, et al. **Gut** 1989 Sep;30(9):1233–5 Comment in: Gut 1990 Feb;31(2):243.
Helicobacter pylori infection in Meckel's diverticula [letter; comment] Newbold KM, et al. **Gut** 1990 Feb;31(2):243 Comment on: Gut 1989 Sep;30(9):1233–5.
Patterns of colonisation of Campylobacter pylori in the oesophagus, stomach and duodenum. Walker SJ, et al. **Gut** 1989 Oct;30(10):1334–8
Evaluation of a modified medium for the one hour urease test for Helicobacter pylori infection. Khanna MU, et al. **Indian J Gastroenterol** 1990 Jul;9(3):219–20
Evaluation of different methods for detection of Helicobacter pylori in patients with gastric disease. Ayyagari A, et al. **Indian J Med Res** 1990 Mar;91:126–8
Frequency of occurrence and characterization of catalase negative Campylobacter isolated from human feces in Vienna. Hirschl AM, et al. **Int J Med Microbiol** 1990 Apr; 272(4):547–53
Application of a biotin-labelled DNA probe to detect Campylobacter. Zhou YT, et al. **Int J Med Microbiol** 1989 Dec;272(2):186–90
Campylobacter pylori in Israel: prospective study of prevalence and epidemiology. Braverman DZ, et al. **Isr J Med Sci** 1990 Aug;26(8):434–8
An endoscopic study of Campylobacter pylori in an Israeli population. Konikoff F, et al. **Isr J Med Sci** 1989 Nov; 25(11):661–3
Comparison of some enrichment broths and growth media for the isolation of thermophilic campylobacters from surface water samples. Korhonen LK, et al. **J Appl Bacteriol** 1990 Jun;68(6):593–9
Campylobacter pylori detection by rapid urease test [letter] [published erratum appears in J Assoc Physicians India 1990 Jun;38(6):417] Pal LS, et al. **J Assoc Physicians India** 1989 Dec;37(12):795–6
Histological evaluation of Campylobacter pylori from tissue specimens stored in formaldehyde can be misleading [letter] Fich A, et al. **J Clin Gastroenterol** 1989 Oct;11(5):585
Rapid detection of gastric Campylobacter pylori colonization by a simple biochemical test. Abdalla S, et al. **J Clin Microbiol** 1989 Nov;27(11):2604–5
"Campylobacter upsaliensis" isolated from cats as identified by DNA relatedness and biochemical features. Fox JG, et al. **J Clin Microbiol** 1989 Oct;27(10):2376–8
Species-specific cloned DNA probes for the identification of Campylobacter hyointestinalis. Gebhart CJ, et al. **J Clin Microbiol** 1989 Dec;27(12):2717–23
Characterization and description of "Campylobacter upsaliensis" isolated from human feces. Goossens H, et al. **J Clin Microbiol** 1990 May;28(5):1039–46
Oligonucleotide probe for detection and identification of Campylobacter pylori. Morotomi M, et al. **J Clin Microbiol** 1989 Dec;27(12):2652–5
Culture confirmation of Campylobacter spp. by latex agglutination. Nachamkin I, et al. **J Clin Microbiol** 1990 Apr;28(4):817–8
Use of an alkaline phosphatase-labeled synthetic oligonucleotide probe for detection of Campylobacter jejuni and Campylobacter coli. Olive DM, et al. **J Clin Microbiol** 1990 Jul;28(7):1565–9
Evidence for the occurrence of the same strain of Campylobacter pylori in the stomach and dental plaque. Shames B, et al. **J Clin Microbiol** 1989 Dec;27(12):2849–50
Isolation of a Campylobacter-like organism from healthy Syrian hamsters (Mesocricetus auratus). Stills HF Jr, et al. **J Clin Microbiol** 1989 Nov;27(11):2497–501
Minitek urea disk test, a sensitive and cost-effective method to screen for Campylobacter pylori in gastric biopsies. Sweeney L, et al. **J Clin Microbiol** 1989 Dec;27(12):2684–6
DNA probe culture confirmation assay for identification of thermophilic Campylobacter species. Tenover FC, et al. **J Clin Microbiol** 1990 Jun;28(6):1284–7
Identification of Campylobacter cinaedi isolated from blood and feces of children and adult females. Vandamme P, et al. **J Clin Microbiol** 1990 May;28(5):1016–20
Reproducible test for detecting Helicobacter pylori in frozen samples [letter] Abdalla S, et al. **J Clin Pathol** 1990 Jun; 43(6):519
Immunocytochemical detection of Helicobacter pylori in formalin fixed tissue biopsy specimens [letter] Cartun RW, et al. **J Clin Pathol** 1990 Jun;43(6):518
Gastric mucosa in patients with portal hypertension: prevalence of capillary dilatation and Campylobacter pylori. Foster PN, et al. **J Clin Pathol** 1989 Sep; 42(9):919–21
Campylobacter pylori in the upper gastrointestinal tract of patients with HIV-1 infection. Francis ND, et al. **J Clin Pathol** 1990 Jan;43(1):60–2
Duodenal gastric heterotopia and Campylobacter pylori: an exception to the rule? [letter] Haboubi NY, et al. **J Clin Pathol** 1989 Oct;42(10):1111–2
Cold Ziehl-Neelsen stain for Campylobacter in gastric biopsy specimens [letter] Hawkins JA, et al. **J Clin Pathol** 1989 Dec;42(12):1309
CLO in Meckel's diverticula [letter; comment] Heatley MK, et al. **J Clin Pathol** 1990 Jan;43(1):86–7 Comment on: J Clin Pathol 1989 Feb;42(2):132–4.
Campylobacter-like organisms in Meckel's diverticulum? [letter] Loffeld RJ, et al. **J Clin Pathol** 1989 Oct;42(10):1111
A five minute stain for Campylobacter in tissue [letter; comment] Robinson CR. **J Clin Pathol** 1990 Feb;43(2):174 Comment on: J Clin Pathol 1986 Nov;39(11):1279.
Simple carbolfuchsin staining for showing C pylori and other spiral bacteria in gastric mucosa [letter] Rocha GA, et al. **J Clin Pathol** 1989 Sep;42(9):1004–5
Antral Helicobacter pylori in patients with chronic renal failure. Shousha S, et al. **J Clin Pathol** 1990 May; 43(5):397–9
Detection of Campylobacter pylori in stomach tissue by DNA in situ hybridisation. Van den Berg FM, et al. **J Clin Pathol** 1989 Sep;42(9):995–1000
Distribution of Campylobacter pylori in the upper and lower gastrointestinal tract: a microbiological and histological study [letter] Walker MM, et al. **J Clin Pathol** 1990 Jan; 43(1):82
Persistence of Helicobacter pylori in conventionalized piglets. Eaton KA, et al. **J Infect Dis** 1990 Jun; 161(6):1299–301
Helicobacter pylori is not identified in areas of gastric metaplasia of gall bladder. Arnaout AH, et al. **J Pathol** 1990 Apr;160(4):333–4
Investigation of the relationship between gastric antral inflammation and Campylobacter pylori using graphic tablet planimetry. Collins JS, et al. **J Pathol** 1989 Dec; 159(4):281–5
Nodular gastritis and Helicobacter pylori. Bujanover Y, et al. **J Pediatr Gastroenterol Nutr** 1990 Jul;11(1):41–4
Gastric campylobacter-like organisms: their role in gastric disease of laboratory animals. Fox JG, et al. **Lab Anim Sci** 1989 Nov;39(6):543–53 (82 ref.)
"Gastrospirillum hominis": another four cases [letter; comment] Fischer R, et al. **Lancet** 1990 Jan 6;335(8680):59 Comment on: Lancet 1989 Jul 29;2(8657):252–3.
Mixed gastric infection by Gastrospirillum hominis and Helicobacter pylori [letter] Queiroz DM, et al. **Lancet** 1990 Aug 25;336(8713):507–8
Does Helicobacter pylori colonize the gastric mucosa of Meckel's diverticulum? Fich A, et al. **Mayo Clin Proc** 1990 Feb;65(2):187–91
Rapid demonstration of Campylobacter in gastric biopsies using microwave irradiation. Chiu KY, et al. **Med Lab Sci** 1989 Oct;46(4):357–8
Isolation and antimicrobial susceptibility of Campylobacter coli and Campylobacter jejuni from slaughter hogs. Hariharan H, et al. **Microbiologica** 1990 Jan;13(1):1–6
The prevalence of Campylobacter pylori in gastric biopsies from cancer patients. Robey-Cafferty SS, et al. **Mod Pathol** 1989 Sep;2(5):473–6
Use of non-radioactive DNA probes for detection of Campylobacter jejuni and Campylobacter coli in stool specimens. Taylor DE, et al. **Mol Cell Probes** 1990 Aug; 4(4):261–71
Enzymatically labelled nucleic acid (NA) probe assays for detection of Campylobacter spp. in human faecal specimens and in culture. Thorne GM, et al. **Mol Cell Probes** 1990 Apr;4(2):133–42
Successful lyophilization of Campylobacter pylori and spiral organisms from the stomachs of animals. Goodwin CS, et al. **Pathology** 1989 Jul;21(3):227–9
Diagnosis of Campylobacter pylori infections: the "gold standard" and the alternatives. Barthel JS, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 1:S107–14 (48 ref.)
Rapid diagnosis of Campylobacter pylori by brush cytology. Gad A. **Scand J Gastroenterol Suppl** 1989;167:101–3
Campylobacter pylori—a role in non-ulcer dyspepsia? Lambert JR, et al. **Scand J Gastroenterol Suppl** 1989; 160:7–13
Campylobacter pylori in dyspeptic subjects: a report from north India. Kochhar R, et al. **Trans R Soc Trop Med Hyg** 1989 Jan–Feb;83(1):135
Duodenal ultrastructure in patients with chronic renal failure with a comment on the incidence of Campylobacter pylori infection. Shousha S, et al. **Ultrastruct Pathol** 1990 Jan–Feb; 14(1):1–10
Trends in Campylobacter pylori in pediatric and adult antral biopsies. A 5-year retrospective analysis. Veereman-Wauters G, et al. **West J Med** 1989 Oct; 151(4):406–9
Search for Campylobacter species in the public water supply of a large urban community. Megraud F, et al. **Zentralbl Hyg Umweltmed** 1990 May;189(6):536–42
A study of Campylobacter jejuni and Campylobacter coli in a river system. Stelzer W, et al. **Zentralbl Hyg Umweltmed** 1989 Oct;189(1):20–8
Bovine diarrhea associated with Campylobacter hyointestinalis. Diker KS, et al. **Zentralbl Veterinarmed [B]** 1990 Mar;37(2):158–60
[Comparative study of the frequency of Campylobacter pylori in duodenal and stomach ulcers and chronic gastritis using the urease test and histologic staining] Mitova R, et al. **Vutr Boles** 1989;28(4):78–80 **(Bul)**
[Campylobacter pylori, its detection and association with common pathologic conditions of the gastro-duodenum] Fixa B, et al. **Vnitr Lek** 1990 Feb;36(2):170–6 (Eng. Abstr.) **(Cze)**
[Campylobacter pylori gastritis: review of diagnostic methods] Debongnie JC, et al. **Acta Gastroenterol Belg** 1989 May–Aug;52(3–4):311–9 (45 ref.) (Eng. Abstr.) **(Fre)**
[The isolation by blood culture of Campylobacter is no longer a rarity (letter)] Bastard JP, et al. **Presse Med** 1990 Mar 10;19(9):431 **(Fre)**
[Campylobacter infection and Campylobacter excretion in turkeys] Glünder G. **Berl Munch Tierarztl Wochenschr** 1989 Nov 1;102(11):374–8 (Eng. Abstr.) **(Ger)**
[13C-urea breath test as a non-invasive method for the detection of Helicobacter (Campylobacter) pylori] Cooreman M, et al. **Dtsch Med Wochenschr** 1990 Mar 9; 115(10):367–71 (Eng. Abstr.) **(Ger)**
[Thermophilic Campylobacter from fecal samples of animals and their behavior in the ganglioside (GM1)-ELISA, Vero cell test and salt aggregation test] Rakotozandrindraini R, et al. **Zentralbl Veterinarmed [B]** 1990 Mar;37(2):142–7 (Eng. Abstr.) **(Ger)**
[Stationary and migratory avifauna as reservoirs of Salmonella, Yersinia and Campylobacter] Levrè E, et al. **Ann Ig** 1989 May–Aug;1(3–4):729–40 (Eng. Abstr.) **(Ita)**
[Detection frequency of Campylobacter pylori at the white exudate of gastric ulcers] Yamada M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Dec;86(12):2839 **(Jpn)**
[Campylobacter pylori in gastro-duodenal diseases, with special reference to endoscopic diagnosis, histological inflammatory grading, and intestinal metaplasia] Yoshida M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jun; 86(6):1241–5 (Eng. Abstr.) **(Jpn)**
[Distribution and prevalence of Campylobacter pylori in the stomach] Yoshida M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 May;86(5):1025–30 (Eng. Abstr.) **(Jpn)**
[Diagnostic value of various methods of detection of Campylobacter pylori in patients with gastroduodenal pathology] Rozhavin MA, et al. **Klin Med (Mosk)** 1989 Aug;67(8):38–43 **(Rus)**

[A rapid method of diagnosis of gastric and duodenal Campylobacter pylori infections] Starostin BD, et al. **Klin Med (Mosk)** 1989 Aug;67(8):50–2 **(Rus)**

[A method of isolating Campylobacter pylori from the gastrointestinal mucosa] Kolts KK, et al. **Lab Delo** 1990; (2):44–6 **(Rus)**

[Isolation of Campylobacter pylori] Il'chenko AA, et al. **Sov Med** 1990;(4):19–23 (Eng. Abstr.) **(Rus)**

[The frequency of detecting Campylobacter pylori in biopsies of the gastric mucosa] Kanishchev PA, et al. **Vrach Delo** 1990 May;(5):14–6 (Eng. Abstr.) **(Rus)**

[Campylobacter pylori and early relapse of peptic ulcer] Loginov AS, et al. **Vrach Delo** 1989 Dec;(12):54–6 (Eng. Abstr.) **(Rus)**

[Personal experience with isolation of Campylobacter pylori from the gastroduodenal mucosa] Kuboňová K, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Sep;38(5):286–91 (Eng. Abstr.) **(Slo)**

[Is Campylobacter pylori the pathogenic agent in gastritis and peptic ulcer?] Vráblik V, et al. **Vnitr Lek** 1989 Jul; 35(7):672–8 (Eng. Abstr.) **(Slo)**

[Gastritis in children associated with Campylobacter pylori] Delgado R, et al. **GEN** 1988 Oct–Dec;42(4):177–80 (Eng. Abstr.) **(Spa)**

[Frequency of Campylobacter pylori in gastroduodenal lesions at an outpatient gastroenterology clinic] Ogly S, et al. **GEN** 1988 Oct–Dec;42(4):174–6 (Eng. Abstr.) **(Spa)**

[Frequency of Campylobacter pylori in antral biopsies of patients with indications for upper digestive endoscopy] Piñero R, et al. **GEN** 1988 Oct–Dec;42(4):170–3 (Eng. Abstr.) **(Spa)**

[Isolation of Campylobacter pylori from the gastric mucosa by gram stain and culture] Urrestarazu de Garcia MI, et al. **GEN** 1988 Oct–Dec;42(4):166–9 (Eng. Abstr.) **(Spa)**

[Infections caused by bacteria of the Campylobacter genus] Roy C. **Med Clin (Barc)** 1990 Apr 21;94(15):576–8 (27 ref.) **(Spa)**

[Campylobacter in gastric pathology] López-Brea M, et al. **Microbiologia** 1985 Sep;1(1–2):97–9 (Eng. Abstr.) **(Spa)**

[Campylobacter pylori, gastritis and ulcer. Where are we going now?] Wadström T, et al. **Nord Med** 1990;105(1):24–6 (15 ref.) (Eng. Abstr.) **(Swe)**

METABOLISM

Lipolytic activity of Campylobacter pylori: effect of colloidal bismuth subcitrate (De-Nol) [see comments] Slomiany BL, et al. **Am J Gastroenterol** 1989 Oct;84(10):1273–7 Comment in: Am J Gastroenterol 1990 May;85(5):619–21.

Interaction of Campylobacter pylori... [letter; comment] Crabtree JE, et al. **Gut** 1989 Dec;30(12):1795 Comment on: Gut 1989 Jul;30(7):906–11.

Hydrophobic characterisation of Helicobacter (Campylobacter) pylori. Pruul H, et al. **J Med Microbiol** 1990 Jun;32(2):93–100

PATHOGENICITY

Morphological evidence of Campylobacter pylori pathogenicity in chronic gastritis and peptic ulcer. Fiocca R, et al. **Acta Gastroenterol Belg** 1989 May–Aug; 52(3–4):324–35

Campylobacter pylori: a new pathogen. Czinn SJ, et al. **Adv Pediatr Infect Dis** 1990;5:221–37 (103 ref.)

Adherence, enterotoxigenicity, invasiveness and serogroups in Campylobacter jejuni and Campylobacter coli strains from adult humans with acute enterocolitis. Lindblom GB, et al. **APMIS** 1990 Feb;98(2):179–84

Characterization of and human serologic response to proteins in Helicobacter pylori broth culture supernatants with vacuolizing cytotoxin activity. Cover TL, et al. **Infect Immun** 1990 Mar;58(3):603–10

Inoculation of barrier-born pigs with Helicobacter pylori: a useful animal model for gastritis type B. Engstrand L, et al. **Infect Immun** 1990 Jun;58(6):1763–8

Effect of enteroviruses on adherence to and invasion of HEp-2 cells by Campylobacter isolates. Konkel ME, et al. **Infect Immun** 1990 Apr;58(4):1101–5

The role of Campylobacter (Helicobacter) pylori in disorders of the gastrointestinal tract. Przyklenk B, et al. **Infection** 1990 Jan–Feb;18(1):3–7

Helicobacter pylori and the pathogenesis of gastroduodenal inflammation. Blaser MJ. **J Infect Dis** 1990 Apr; 161(4):626–33 (69 ref.)

Adhesion to HeLa cells of Campylobacter jejuni and C. coli outer membrane components. Fauchère JL, et al. **Res Microbiol** 1989 Jul–Aug;140(6):379–92

Helicobacter (= Campylobacter) pylori in Africa. Holcombe C, et al. **Trans R Soc Trop Med Hyg** 1990 Mar–Apr; 84(2):294–6 (22 ref.)

[Campylobacter pylori and its role in the etiopathogenesis of gastroduodenal ulcer] Talalaj M. **Pol Arch Med Wewn** 1987 Oct;78(4):235–40 (35 ref.) **(Pol)**

[Campylobacter pylori in diseases of the stomach and duodenum] Reguła A, et al. **Wiad Lek** 1989 Aug 15–Sep 15;42(16–18):945–51 (49 ref.) (Eng. Abstr.) **(Pol)**

[The role of Campylobacter pylori in the clinical course of chronic antral gastritis and duodenal ulcer] Kalinin AV, et al. **Klin Med (Mosk)** 1989 Oct;67(10):64–6 **(Rus)**

[Campylobacter pylori, peptic ulcer and chronic gastritis] Komarov FI, et al. **Klin Med (Mosk)** 1989 Aug;67(8):44–8 **(Rus)**

[Pathogenetic properties of Campylobacter pylori] Rozhavin MA. **Klin Med (Mosk)** 1989 Nov;67(11):20–4 (38 ref.) **(Rus)**

[Campylobacter pylori and its relation to gastritis and peptic ulcer] Rozhavin MA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jul;(7):114–8 (42 ref.) **(Rus)**

[Campylobacter jejuni and Campylobacter coli: epidemiologic markers of isolated strains in Santiago, Chile] Maggi L, et al. **Rev Med Chil** 1988 Nov;116(11):1105–10 **(Spa)**

PHYSIOLOGY

Campylobacter pylori and gastroduodenal disease. Buck GE. **Clin Microbiol Rev** 1990 Jan;3(1):1–12 (135 ref.)

Campylobacter pylori: its role in gastritis and peptic ulcer disease. Hornick RB. **Curr Clin Top Infect Dis** 1989; 10:157–73 (71 ref.)

Microbiological aspects of Helicobacter pylori (Campylobacter pylori). Goodwin CS, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jan;9(1):1–13 (84 ref.)

Urea protects Helicobacter (Campylobacter) pylori from the bactericidal effect of acid. Marshall BJ, et al. **Gastroenterology** 1990 Sep;99(3):697–702

Bacterial adhesion and disease activity in Helicobacter associated chronic gastritis. Hessey SJ, et al. **Gut** 1990 Feb; 31(2):134–8

In vitro surface properties of the newly recognized gastric pathogen Helicobacter pylori. Smith JI, et al. **Infect Immun** 1990 Sep;58(9):3056–60

Survival of Helicobacter pylori in water and saline [letter] West AP, et al. **J Clin Pathol** 1990 Jul;43(7):609

[Advances in research on Campylobacter pylori] Qui YL, et al. **Chung Hua I Hsueh Tsa Chih** 1989 May;69(5):298–300 (25 ref.) **(Chi)**

ULTRASTRUCTURE

Purification, characterization, and localization of a protein antigen shared by thermophilic campylobacters. Dubreuil JD, et al. **J Clin Microbiol** 1990 Jun;28(6):1321–8

Bacteriophages in Helicobacter (Campylobacter) pylori. Schmid EN, et al. **J Med Microbiol** 1990 Jun;32(2):101–4

CAMPYLOBACTER FETUS

[Surgical treatment of infectious aneurysm of the popliteal artery. Description of a case caused by Campylobacter jejuni and a review of the literature] Goëau-Brissonnière O, et al. **J Chir (Paris)** 1990 Apr;127(4):223–6 (20 ref.) (Eng. Abstr.) **(Fre)**

ANALYSIS

Partial purification and characterization of the enterotoxin produced by Campylobacter jejuni. Daikoku T, et al. **Infect Immun** 1990 Aug;58(8):2414–9

Cholera-like enterotoxin in certain Campylobacter jejuni strains: some observations. Hariharan H, et al. **Microbiologica** 1990 Jan;13(1):7–9

CLASSIFICATION

Surface array proteins of Campylobacter fetus block lectin-mediated binding to type A lipopolysaccharide. Fogg GC, et al. **Infect Immun** 1990 Sep;58(9):2738–44

Serogroups of Campylobacter jejuni from man and animals. Varga J, et al. **Zentralbl Veterinarmed [B]** 1990 Aug; 37(6):407–11

Serogroups of Campylobacter fetus and Campylobacter jejuni isolated in cases of ovine abortion. Varga J, et al. **Zentralbl Veterinarmed [B]** 1990 Mar;37(2):148–52

DRUG EFFECTS

In vitro susceptibility of Campylobacter jejuni to rokitamycin. Miyake Y, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1440–1

Control of Campylobacter fetus in artificially contaminated bovine semen by incubation with antibiotics before freezing. Chen SS, et al. **Br Vet J** 1990 Jan–Feb; 146(1):68–74

Bismuth subsalicylate in the prevention of colonization of infant mice with Campylobacter jejuni. Hänninen ML. **Epidemiol Infect** 1990 Jun;104(3):397–404

In vitro susceptibility of Campylobacter jejuni and Campylobacter coli isolated in Austria to erythromycin and ciprofloxacin. Hirschl AM, et al. **Int J Med Microbiol** 1990 Apr;272(4):443–7

In-vitro evaluation of antibiotic combinations against Campylobacter fetus. Goossens H, et al. **J Antimicrob Chemother** 1989 Aug;24(2):195–201

In vitro evaluation of antibiotics for treatment of meningitis caused by Campylobacter fetus subspecies fetus. Morooka T, et al. **Pediatr Infect Dis J** 1989 Sep;8(9):653–4

ENZYMOLOGY

Catalase activity in Campylobacter jejuni: comparison of a wild-type strain with an aerotolerant variant. Vercellone PA, et al. **Can J Microbiol** 1990 Jun;36(6):449–51

GENETICS

Polynucleotide sequence relationships among flagellin genes of Campylobacter jejuni and Campylobacter coli. Thornton SA, et al. **Infect Immun** 1990 Aug;58(8):2686–9

Use of pulsed-field agarose gel electrophoresis to size genomes of Campylobacter species and to construct a SalI map of Campylobacter jejuni UA580. Chang N, et al. **J Bacteriol** 1990 Sep;172(9):5211–7

Natural transformation in Campylobacter species. Wang Y, et al. **J Bacteriol** 1990 Feb;172(2):949–55

Surface array protein of Campylobacter fetus. Cloning and gene structure. Blaser MJ, et al. **J Biol Chem** 1990 Aug 25;265(24):14529–35

GROWTH & DEVELOPMENT

The application of a transport and enrichment medium to the diagnosis of Campylobacter fetus infections in bulls. Lander KP. **Br Vet J** 1990 Jul–Aug;146(4):334–40

The development of a transport and enrichment medium for Campylobacter fetus. Lander KP. **Br Vet J** 1990 Jul–Aug; 146(4):327–33

The response of Campylobacter jejuni and Campylobacter coli in the Sydney rock oyster (Crassostrea commercialis), during depuration and storage. Arumugaswamy RK, et al. **Int J Food Microbiol** 1988 Dec;7(3):173–83

Heat resistance of Campylobacter and Yersinia strains by three methods. Sörqvist S. **J Appl Bacteriol** 1989 Nov; 67(5):543–9

Effect of endotoxin on colonisation of Campylobacter jejuni in infant mice. Hänninen ML. **J Med Microbiol** 1989 Nov; 30(3):199–206

[Dynamics of Campylobacter jejuni invasion in gnotobiotic piglets] Tomancová I, et al. **Vet Med (Praha)** 1989 Sep; 34(9):553–8 (Eng. Abstr.) **(Cze)**

IMMUNOLOGY

Plasmids and serogroups in Campylobacter jejuni. Lind L, et al. **APMIS** 1989 Dec;97(12):1097–102

Antigenic differences among Campylobacter fetus S-layer proteins. Dubreuil JD, et al. **J Bacteriol** 1990 Sep; 172(9):5035–43

Human antibody response to Campylobacter jejuni flagellin protein and a synthetic N-terminal flagellin peptide. Nachamkin I, et al. **J Clin Microbiol** 1989 Oct; 27(10):2195–8

Invasion-related antigens of Campylobacter jejuni. Konkel ME, et al. **J Infect Dis** 1990 Oct;162(4):888–95

Protection of breast-fed infants against Campylobacter diarrhea by antibodies in human milk. Ruiz-Palacios GM, et al. **J Pediatr** 1990 May;116(5):707–13

Antibodies to Campylobacter flagellin recognize epitopes common to phase 1 and phase 2 flagella. Kirimat M, et al. **Res Microbiol** 1989 Nov–Dec;140(9):645–51

Inhibition of Campylobacter jejuni in vitro by broiler chicken caecal contents. Humphrey TJ, et al. **Vet Rec** 1989 Sep 2;125(10):272–3

[Antibodies to Campylobacter jejuni in patients with acute enteritis] Pulchartová E, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Sep;38(5):304–10 (Eng. Abstr.) **(Cze)**

ISOLATION & PURIFICATION

Fecal contamination of shanty town toddlers in households with non-corralled poultry, Lima, Peru. Marquis GS, et al. **Am J Public Health** 1990 Feb;80(2):146–9

Campylobacter fetus subsp. jejuni in poultry reared under different management systems in Nigeria. Adekeye JO, et al. **Avian Dis** 1989 Oct–Dec;33(4):801–3

Prevalence of Campylobacter jejuni in selected domestic and wild birds in Louisiana. Yogasundram K, et al. **Avian Dis** 1989 Oct–Dec;33(4):664–7

Endotoxic activity and enterotoxigenicity of human strains of Campylobacter jejuni isolated from patients in a Nigerian hospital. Coker AO, et al. **Cent Afr J Med** 1989 Nov; 35(11):524–7

Bacterial infertility in camels (Camelus dromedarius): isolation of Campylobacter fetus. Wernery U, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Nov–Dec; 96(10):497–8

Application of a biotin-labelled DNA probe to detect Campylobacter. Zhou YT, et al. **Int J Med Microbiol** 1989 Dec;272(2):186–90

Use of an alkaline phosphatase-labeled synthetic oligonucleotide probe for detection of Campylobacter jejuni and Campylobacter coli. Olive DM, et al. **J Clin Microbiol** 1990 Jul;28(7):1565–9

To the problem of Campylobacter jejuni detectability in water. Pokorný J. **J Hyg Epidemiol Microbiol Immunol** 1990;34(1):57–61

Isolation and antimicrobial susceptibility of Campylobacter coli and Campylobacter jejuni from slaughter hogs. Hariharan H, et al. **Microbiologica** 1990 Jan;13(1):1–6

Use of non-radioactive DNA probes for detection of Campylobacter jejuni and Campylobacter coli in stool specimens. Taylor DE, et al. **Mol Cell Probes** 1990 Aug; 4(4):261–71

Isolation of Campylobacter jejuni from the eggs and organs in experimentally infected laying Japanese quails (Coturnix coturnix japonica). Maruyama S, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):671–4

A study of Campylobacter jejuni and Campylobacter coli in a river system. Stelzer W, et al. **Zentralbl Hyg Umweltmed** 1989 Oct;189(1):20–8

Campylobacter jejuni in poultry giblets. Khalafalla FA. **Zentralbl Veterinarmed [B]** 1990 Feb;37(1):31–4

[Campylobacter jejuni] **Tijdschr Diergeneeskd** 1989 Dec 1; 114(23):1212–4 **(Dut)**

[Serological diagnosis of Campylobacter jejuni infections] Przondo-Mordarska A, et al. **Med Dosw Mikrobiol** 1989; 41(3–4):160–5 (Eng. Abstr.) **(Pol)**

METABOLISM

Production and characterisation of Campylobacter jejuni enterotoxin in a synthetic medium and its assay in rat ileal loops. Saha SK, et al. **FEMS Microbiol Lett** 1990 Feb; 55(3):333–8

Identification of Campylobacter jejuni surface proteins that bind to Eucaryotic cells in vitro. de Melo MA, et al. **Infect Immun** 1990 Jun;58(6):1749–56

Isolation, characterization, and host-cell-binding properties of a cytotoxin from Campylobacter jejuni. Mahajan S, et al. **J Clin Microbiol** 1990 Jun;28(6):1314–20

PATHOGENICITY

Adherence, enterotoxigenicity, invasiveness and serogroups in Campylobacter jejuni and Campylobacter coli strains from adult humans with acute enterocolitis. Lindblom GB, et al. **APMIS** 1990 Feb;98(2):179–84

Pathogenesis of Campylobacter infection [editorial] Arimi SM. **East Afr Med J** 1989 Oct;66(10):629–30

Response of the chick embryo to live and heat-killed Campylobacter jejuni injected into the yolk sac. Clark AG, et al. **Epidemiol Infect** 1989 Dec;103(3):577–85

Infection of adult Syrian hamsters with flagellar variants of Campylobacter jejuni. Aguero-Rosenfeld ME, et al. **Infect Immun** 1990 Jul;58(7):2214–9

Pathogenesis of Campylobacter fetus infections. Role of surface array proteins in virulence in a mouse model. Pei Z, et al. **J Clin Invest** 1990 Apr;85(4):1036–43

[Cytotoxin adhesion and invasiveness of Campylobacter jejuni from children with diarrhea: assay and correlation with clinical manifestations] Sun ZJ, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Sep;69(9):489–90, 34 (Eng. Abstr.) **(Chi)**

PHYSIOLOGY

Interaction of Campylobacter jejuni with extracellular matrix components. Kuusela P, et al. **Biochim Biophys Acta** 1989 Dec 8;993(2–3):297–300

CAMPYLOBACTER INFECTIONS

Campylobacter pylori as possible factor in peptic ulcer recurrence. Rauws EA. **Acta Gastroenterol Belg** 1989 May-Aug;52(3–4):320–3 (23 ref.)

Risk of diarrhea during the first year of life associated with initial and subsequent colonization by specific enteropathogens. Cravioto A, et al. **Am J Epidemiol** 1990 May;131(5):886–904

Campylobacter (Helicobacter) pylori. Is peptic disease a bacterial infection? Chamberlain CE, et al. **Arch Intern Med** 1990 May;150(5):951–5 (79 ref.)

Infectoepidemilogic and immunologic implications of Campylobacter coli enteritis in one newborn monozygotic twin pair. Fernández H, et al. **Arq Gastroenterol** 1989 Jan-Jun;26(1–2):28–32

Gastric campylobacter-like organisms and active antral gastritis in Puerto Rico. Toro DH, et al. **Bol Asoc Med P R** 1990 Mar;82(3):107–10

Helicobacter pylori and the Italian general practitioners [letter] Trevisani L, et al. **Gastroenterol Clin Biol** 1990; 14(3):293–4

Another important effect of Helicobacter pylori infection. Achord JL. **Gastroenterology** 1990 Oct;99(4):1185

Peptic ulcer, noxious stress, and Campylobacter pylori [letter] Dotevall G. **Gastroenterology** 1990 Jan;98(1):252–3

Cronkhite Canada syndrome: case report with some features not previously described. Nardone G, et al. **Gastrointest Endosc** 1990 Mar-Apr;36(2):150–2

Helicobacter pylori: bridging the credibility gap. McKinlay AW, et al. **Gut** 1990 Aug;31(8):940–5 (91 ref.)

Campylobacter pylori. A new era in gastroduodenal disorders? Gill HH, et al. **J Assoc Physicians India** 1990 Feb;38(2):147–50 (47 ref.)

Campylobacter pylori. The organism and its clinical relevance. Graham DY, et al. **J Clin Gastroenterol** 1989; 11 Suppl 1:S43–8

Peritonitis caused by Campylobacter jejuni and serologically confirmed in a patient being treated with continuous ambulatory peritoneal dialysis. Goodman DJ, et al. **J Infect** 1990 Jul;21(1):71–5

Gastroduodenal pathology and Campylobacter pylori. Second meeting of the European Campylobacter pylori Study Group. October 12–14, 1989, Ulm, FRG. Abstracts. **Klin Wochenschr** 1989;67 Suppl 18:1–78

Gastroenterologists in Sydney—histology and helicobacter [editorial] **Lancet** 1990 Sep 29;336(8718):779–80

"Gastrospirillum hominis": another four cases [letter; comment] Fischer R, et al. **Lancet** 1990 Jan 6;335(8680):59 Comment on: Lancet 1989 Jul 29;2(8657):252–3.

Guillain-Barré syndrome and Campylobacter jejuni infection [letter] Fujimoto S, et al. **Lancet** 1990 Jun 2;335(8701):1350

Helicobacter pylori, mucus, and gastric ulcer [letter; comment] Guslandi M. **Lancet** 1990 Mar 24; 335(8691):728–9 Comment on: Lancet 1990 Jan 27;335(8683):193–5.

Mixed gastric infection by Gastrospirillum hominis and Helicobacter pylori [letter] Queiroz DM, et al. **Lancet** 1990 Aug 25;336(8713):507–8

Helicobacter gastritis and intestinal metaplasia in a gastric cancer family [letter] Scott N, et al. **Lancet** 1990 Mar 24; 335(8691):728

Helicobacter pylori: controversies and an approach to management. Ormand JE, et al. **Mayo Clin Proc** 1990 Mar; 65(3):414–26 (116 ref.)

Campylobacter pylori infection: diagnosis and therapy [editorial] Marshall BJ. **Med J Aust** 1989 Oct 16; 151(8):426–7

Campylobacter pylori and gastroduodenal disease. Is there a relationship? McKinlay AW, et al. **Postgrad Med** 1989 Nov 15;86(7):31–3, 37–8, 41

Cardiovascular and bacteremic manifestations of Campylobacter fetus infection: case report and review. Morrison VA, et al. **Rev Infect Dis** 1990 May-Jun; 12(3):387–92 (67 ref.)

Campylobacter pylori: Defining a cause of gastritis and peptic ulcer disease. Proceedings from a symposium of the 13th International Congress of Gastroenterology. Rome, 7 September 1988. **Scand J Gastroenterol Suppl** 1989;160:1–68

Pathogenicity of Campylobacter pylori—a causative factor in gastritis? McNulty CA. **Scand J Gastroenterol Suppl** 1989;160:3–6 (15 ref.)

Helicobacter (= Campylobacter) pylori in Africa. Holcombe C, et al. **Trans R Soc Trop Med Hyg** 1990 Mar-Apr; 84(2):294–6 (22 ref.)

[Comparative study of the effect of wei-yan-ning and furazolidone in the treatment of gastritis and gastric ulcer caused by pyloric Campylobacter] Zhang BM, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Oct;9(10):599–600, 581 (Eng. Abstr.) **(Chi)**

[Advances in research on Campylobacter pylori] Qui YL, et al. **Chung Hua I Hsueh Tsa Chih** 1989 May;69(5):298–300 (25 ref.) **(Chi)**

[Extraintestinal campylobacter infections] Cheng ZH, et al. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Aug; 10(4):246–8 (19 ref.) **(Chi)**

[Guillain-Barré syndrome following Campylobacter jejuni enteritis] Beenen LF, et al. **Ned Tijdschr Geneeskd** 1990 May 19;134(20):1010–2 (Eng. Abstr.) **(Dut)**

[Campylobacter pylori gastritis: review of diagnostic methods] Debongnie JC, et al. **Acta Gastroenterol Belg** 1989 May-Aug;52(3–4):311–9 (45 ref.) (Eng. Abstr.) **(Fre)**

[Helicobacter pylori and gastric pathology] Guerre J. **Ann Gastroenterol Hepatol (Paris)** 1990 May;26(3):115–7 (11 ref.) **(Fre)**

[Ulcer symptoms without demonstration of ulcer: causative therapy with demonstration of Helicobacter pylori] Kobler E, et al. **Schweiz Rundsch Med Prax** 1990 Mar 27; 79(13):398–9 (Eng. Abstr.) **(Ger)**

[Clinical study on norfloxacin in pediatrics] Minamitani M, et al. **Jpn J Antibiot** 1990 May;43(5):837–41 (Eng. Abstr.) **(Jpn)**

[A case of right-sided infective endocarditis in a drug addict] Ohshima H, et al. **Kokyu To Junkan** 1990 Mar;38(3):277–81 (Eng. Abstr.) **(Jpn)**

[Campylobacter pylori and diseases of the stomach] Ishimori A, et al. **Rinsho Byori** 1989 Nov;37(11):1238–45 (Eng. Abstr.) **(Jpn)**

[Gastritis in children associated with Campylobacter pylori] Delgado R, et al. **GEN** 1988 Oct-Dec;42(4):177–80 (Eng. Abstr.) **(Spa)**

[Morphology of chronic gastritis associated with Campylobacter pylori infection] Sancho Poch FJ, et al. **Rev Esp Enferm Apar Dig** 1989 Dec;76(6 Pt 1):551–4 (Eng. Abstr.) **(Spa)**

BLOOD

Increased blood leukocytes in patients with Campylobacter pylori [letter] Karttunen T, et al. **Ann Intern Med** 1990 Feb 1;112(3):232

Inappropriate hypergastrinaemia in asymptomatic healthy subjects infected with Helicobacter pylori. Smith JT, et al. **Gut** 1990 May;31(5):522–5

[Pharmacokinetics of bismuth preparations in patients with gastritis and ulcer disease] Raedsch R, et al. **Klin Wochenschr** 1990 May 4;68(9):488 **(Ger)**

CHEMICALLY INDUCED

NSAID associated gastritis and Helicobacter pylori [letter] Scherak O, et al. **J Rheumatol** 1990 Jun;17(6):860–1

COMPLICATIONS

Campylobacter fetus subspecies fetus infection of an abdominal aneurysm. Jacobs J, et al. **Acta Clin Belg** 1989; 44(2):123–8 (21 ref.)

Campylobacter pylori and reflux oesophagitis [letter] Stewart RJ, et al. **Acta Paediatr Scand** 1990 Jan;79(1):107

Ablation of exaggerated meal-stimulated gastrin release in duodenal ulcer patients after clearance of Helicobacter (Campylobacter) pylori infection. Graham DY, et al. **Am J Gastroenterol** 1990 Apr;85(4):394–8

Campylobacter pylori, NSAIDS, and smoking: risk factors for peptic ulcer disease. Martin DF, et al. **Am J Gastroenterol** 1989 Oct;84(10):1268–72

Campylobacter pylori: its association with active chronic gastritis. Ho B. **Ann Acad Med Singapore** 1989 Jul; 18(4):382–6 (58 ref.)

Helicobacter pylori and protein losing enteropathy [letter] Sullivan PB, et al. **Arch Dis Child** 1990 Mar;65(3):332–3

Glomerulonephritis, pulmonary hemorrhage and anemia associated with Campylobacter jejuni infection. Andrews PI, et al. **Aust N Z J Med** 1989 Dec;19(6):721–3

Antral Helicobacter pylori, hypergastrinaemia, and duodenal ulcers: effect of eradicating the organism. Levi S, et al. **BMJ** 1989 Dec 16;299(6714):1504–5

Campylobacter pylori, duodenal ulcer disease, and gastrin [clinical conference] Levi S, et al. **BMJ** 1989 Oct 28; 299(6707):1093–4

Non-steroidal anti-inflammatory drugs, hiatus hernia, and Helicobacter pylori, in patients with oesophageal ulceration. Shallcross TM, et al. **Br J Rheumatol** 1990 Aug; 29(4):288–90

Campylobacter pylori: prevalence and significance in patients with chronic renal failure. Offerhaus GJ, et al. **Clin Nephrol** 1989 Nov;32(5):239–41

Septic abortion due to Campylobacter jejuni [letter] Moscuna M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep; 8(9):800–1

Campylobacter jejuni infection occurring during pregnancy. Simor AE, et al. **Eur J Clin Microbiol Infect Dis** 1990 Feb; 9(2):142–4

Campylobacter pylori and its role in peptic ulcer disease. Tytgat GN, et al. **Gastroenterol Clin North Am** 1990 Mar; 19(1):183–96 (68 ref.)

Prospective comparative study of the influence of postoperative bile reflux on gastric mucosal histology and Campylobacter pylori infection. Offerhaus GJ, et al. **Gut** 1989 Nov;30(11):1552–7

Campylobacter pylori. An advance in understanding of dyspepsia and gastritis. Colin-Jones DG. **J Clin Gastroenterol** 1989;11 Suppl 1:S39–42

Is pernicious anemia caused by Campylobacter pylori gastritis? [letter] DeLuca VA Jr. **J Clin Gastroenterol** 1989 Oct;11(5):584–5

Campylobacter pylori, mucus, and peptic ulceration. A dynamic interaction. Ormand JA, et al. **J Clin Gastroenterol** 1989 Oct;11(5):492–5

Helicobacter pylori (formerly Campylobacter pyloridis/pylori) 1986–1989: a review. Maddocks AC. **J Clin Pathol** 1990 May;43(5):353–6 (43 ref.)

Campylobacter fetus infections in two patients with AIDS [letter] Rao GG, et al. **J Infect** 1990 Mar;20(2):170–2

Antibodies to Helicobacter pylori in HIV infection [letter] Aceti A, et al. **Lancet** 1990 Sep 1;336(8714):571

Is "Campylobacter upsaliensis" an unrecognised cause of human diarrhoea? Goossens H, et al. **Lancet** 1990 Mar 10; 335(8689):584–6

Helicobacter pylori and HIV infection [letter] Logan RP, et al. **Lancet** 1990 Jun 16;335(8703):1456

Hypothesis: Helicobacter pylori, urease, mucus, and gastric ulcer [see comments] Sidebotham RL, et al. **Lancet** 1990 Jan 27;335(8683):193–5 (3 ref.) Comment in: Lancet 1990 Mar 24;335(8691):728–9.

Duodenal bulb biopsy findings for patients with non-ulcer dyspepsia with or without Campylobacter pylori gastritis. Frierson HF Jr, et al. **Mod Pathol** 1990 May;3(3):271–6

Prevalence of Campylobacter pylori as demonstrated by histology or CLO-test in different types of gastritis. A study in 5 clinically predefined groups of patients. Koch HK, et al. **Pathol Res Pract** 1990 Feb;186(1):154–8

Mixed enteric infection [letter] Hamer IE, et al. **Postgrad Med J** 1990 May;66(775):411

Campylobacter pylori: its link to gastritis and peptic ulcer disease. Marshall BJ. **Rev Infect Dis** 1990 Jan-Feb;12 Suppl 1:S87–93 (53 ref.)

Chronic gastritis and ulcer risk. Sipponen P. **Scand J Gastroenterol** 1990 Mar;25(3):193–6 (32 ref.)

Campylobacter pylori: defining a cause of gastritis and peptic ulcer disease? **Scand J Gastroenterol Suppl** 1989;160:59–68

Campylobacter pylori as a pathogenetic factor in duodenal ulcer: the case for. Graham DY. **Scand J Gastroenterol Suppl** 1989;160:46–52

The potential impact of Campylobacter pylori on the treatment of duodenal ulcer disease. Miller JP, et al. **Scand J Gastroenterol Suppl** 1989;160:39–45 (50 ref.)

Duodenal ulcer disease: what role does Campylobacter pylori play? Smith AC. **Scand J Gastroenterol Suppl** 1989;160:14–8 (58 ref.)

Campylobacter pylori and ulcer disease—a causal connection? Wormsley KG. **Scand J Gastroenterol Suppl** 1989;160:53–8 (90 ref.)

Simultaneous Streptococcus pneumoniae, Giardia lamblia and Campylobacter pylori infection: an adult presentation of X-linked hypogammaglobulinaemia [see comments] Nathwani D, et al. **Scott Med J** 1989 Aug;34(4):502 Comment in: Scott Med J 1989 Dec;34(6):549.

Peptic ulcer—an infectious disease?[clinical conference] Peterson WL. **West J Med** 1990 Feb;152(2):167–71 (36 ref.)

[Dyspepsia without ulcers and Campylobacter-related gastritis] Loffeld RJ, et al. **Ned Tijdschr Geneeskd** 1989 Jul 29;133(30):1489–92 (54 ref.) **(Dut)**

[Asymptomatic Campylobacter infection in the course of HIV infection] Lortholary O, et al. **Ann Med Interne (Paris)** 1989;140(8):742–3 **(Fre)**

[Ulcer—campylobacter pylori—bismuth therapy] **Internist (Berl)** 1989 Feb;30(2 Suppl [ULKUS]):1–11 **(Ger)**

[Erythema nodosum in Campylobacter jejuni colitis] Fröhli P, et al. **Schweiz Med Wochenschr** 1990 Jun 23; 120(25):946–7 (Eng. Abstr.) **(Ger)**

[Does Helicobacter pylori have a direct proteolytic effect in ulcerative disease?] Tessaro P, et al. **G Clin Med** 1990 Mar;71(3):173–8, 181 (Eng. Abstr.) **(Ita)**

[The role of Campylobacter pylori in gastroduodenal pathology] Sirigu F, et al. **Recenti Prog Med** 1990 Mar; 81(3):142–5 (Eng. Abstr.) **(Ita)**

[Campylobacter pylori and its role in the etiopathogenesis of gastroduodenal ulcer] Talalaj M. **Pol Arch Med Wewn** 1987 Oct;78(4):235–40 (35 ref.) **(Pol)**

[Campylobacter pylori infection in chronic gastritis and gastric cancer] Andreica V, et al. **Rev Med Interna [Med Interna]** 1989 Jan–Feb;41(1):49–56 (Eng. Abstr.) **(Rum)**

[Campylobacter pylori and late recurrences of duodenal ulcer] Loginov AS, et al. **Klin Med (Mosk)** 1989 Aug; 67(8):48–50 **(Rus)**

[Current views on the etiology and pathogenesis of peptic ulcer] Grigor'ev PIa, et al. **Vestn Akad Med Nauk SSSR** 1990;(3):60–4 (65 ref.) **(Rus)**

[Clinical importance of Campylobacter pylori. Second part] Dehesa Violante M. **Rev Gastroenterol Mex** 1989 Oct–Dec; 54(4):243–9 (80 ref.) **(Spa)**

DIAGNOSIS

Cytologic diagnosis of Campylobacter pylori–associated gastritis. Davenport RD. **Acta Cytol** 1990 Mar–Apr; 34(2):211–3

Is CLOtest an unnecessary expense? [letter] Peterson WL. **Am J Gastroenterol** 1989 Dec;84(12):1587

14C–urea breath test for the detection of Helicobacter pylori. Veldhuyzen van Zanten SJ, et al. **Am J Gastroenterol** 1990 Apr;85(4):399–403

Endotoxic activity and enterotoxigenicity of human strains of Campylobacter jejuni isolated from patients in a Nigerian hospital. Coker AO, et al. **Cent Afr J Med** 1989 Nov; 35(11):524–7

Helicobacter pylori–related gastroduodenal disease in children. Diagnostic utility of enzyme–linked immunosorbent assay. Glassman MS, et al. **Dig Dis Sci** 1990 Aug;35(8):993–7

[14C]urea breath test for diagnosis of Helicobacter pylori. Ormand JE, et al. **Dig Dis Sci** 1990 Jul;35(7):879–84

Value of serology (ELISA and immunoblotting) for the diagnosis of Campylobacter pylori infection. Peña AS, et al. **Digestion** 1989;44(3):131–41

14C–urea breath test for C pylori [letter; comment] **Gut** 1989 Nov;30(11):1656–7 Comment on: Gut 1989 Jun;30(6):798–803.

Evaluation of a modified medium for the one hour urease test for Helicobacter pylori infection. Khanna MU, et al. **Indian J Gastroenterol** 1990 Jul;9(3):219–20

Campylobacter enteritis in a pregnant woman with hypogammaglobulinaemia. Thakore JH, et al. **Ir Med J** 1989 Dec;82(4):165

ELISA for Campylobacter jejuni antibodies in Israeli children with diarrhea and in healthy soldiers. Schwartz D, et al. **Isr J Med Sci** 1990 Jun;26(6):319–24

Rapid diagnostic test of Campylobacter pylori infection in patients of gastritis, duodenal ulcer and gastric ulcer. A study of 100 cases. Nanivadekar SA, et al. **J Assoc Physicians India** 1989 May;37(5):307–10

Campylobacter pylori detection by rapid urease test [letter] [published erratum appears in J Assoc Physicians India 1990 Jun;38(6):417] Pal LS, et al. **J Assoc Physicians India** 1989 Dec;37(12):795–6

Campylobacter pylori. Diagnosis and treatment. Tytgat GN, et al. **J Clin Gastroenterol** 1989;11 Suppl 1:S49–53

Iron deficiency in Helicobacter (Campylobacter) pylori [letter; comment] Zhu FG, et al. **J Clin Gastroenterol** 1990 Apr;12(2):244 Comment on: J Clin Gastroenterol 1989 Aug;11(4):445–7.

Rapid detection of gastric Campylobacter pylori colonization by a simple biochemical test. Abdalla S, et al. **J Clin Microbiol** 1989 Nov;27(11):2604–5

Isolation, characterization, and host–cell–binding properties of a cytotoxin from Campylobacter jejuni. Mahajan S, et al. **J Clin Microbiol** 1990 Jun;28(6):1314–20

Rapid urease tests for Campylobacter pylori [letter] Bhasin DK, et al. **J Clin Pathol** 1990 Feb;43(2):174

Comparison of ELISA antigen preparations alone or in combination for serodiagnosing Helicobacter pylori infections. Hirschl AM, et al. **J Clin Pathol** 1990 Jun; 43(6):511–3

The 14CO2 urea breath test for Helicobacter pylori infection [letter] Conti–Nibali S, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug;11(2):284–5

Rapid endoscopy room diagnosis of Campylobacter pylori–associated gastritis in children. Yeung CK, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr;10(3):357–60

Effect of various anti–ulcer drugs on rapid urease test for Campylobacter pylori infection [letter] [published erratum appears in Lancet 1990 Jan 20;335(8682):180] Bhasin DK, et al. **Lancet** 1989 Oct 14;2(8668):918–9

The 14C–urea breath–test for the detection of gastric Campylobacter pylori infection. Surveyor I, et al. **Med J Aust** 1989 Oct 16;151(8):435–9

Evaluation of methods for identification of Campylobacter pyloris infection. Santogade PJ, et al. **N Y State J Med** 1990 Jan;90(1):4–7

Diagnosis of Campylobacter pylori infections: the "gold standard" and the alternatives. Barthel JS, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 1:S107–14 (48 ref.)

How reliable are the 14C–urea breath test and specific serology for the detection of gastric Campylobacter? Husebye E, et al. **Scand J Gastroenterol** 1990 Jul; 25(7):725–30

The reliability of urease tests, histology and culture in the diagnosis of Campylobacter pylori infection. Deltenre M, et al. **Scand J Gastroenterol Suppl** 1989;160:19–24 (42 ref.)

Detecting Campylobacter pylori with the 13C– and 14C–urea breath test. Rauws EA. **Scand J Gastroenterol Suppl** 1989; 160:25–6

The role of serology in the diagnosis of Campylobacter pylori infection. Wyatt JI, et al. **Scand J Gastroenterol Suppl** 1989; 160:27–34

[Diagnostic serology of campylobacter infections—advisability of a supplementary review of diarrhea] Rautelin H, et al. **Duodecim** 1989; 105(19):1597–601 **(Fin)**

[13C–urea breath test as a non–invasive method for the detection of Helicobacter (Campylobacter) pylori] Cooreman M, et al. **Dtsch Med Wochenschr** 1990 Mar 9; 115(10):367–71 (Eng. Abstr.) **(Ger)**

[Has Campylobacter pylori infection any clinical relevance? Methodologic, epidemiologic and clinical studies] Döbrönte Z, et al. **Orv Hetil** 1989 Nov 26;130(48):2563–8 (42 ref.) (Eng. Abstr.) **(Hun)**

[Serological diagnosis of Campylobacter jejuni infections] Przondo–Mordarska A, et al. **Med Dosw Mikrobiol** 1989; 41(3–4):160–5 (Eng. Abstr.) **(Pol)**

[The microbiological diagnosis of chronic gastropathy associated with Campylobacter pylori] Rusu V, et al. **Rev Ig [Bacteriol]** 1989 Oct–Dec;34(4):345–60 (Eng. Abstr.) **(Rum)**

[Diagnosis of Campylobacter infection in patients with diseases of the stomach and duodenum] Masevich TsG, et al. **Klin Med (Mosk)** 1989 Nov;67(11):80–1 (Eng. Abstr.) **(Rus)**

[Diagnostic value of various methods of detection of Campylobacter pylori in patients with gastroduodenal pathology] Rozhavin MA, et al. **Klin Med (Mosk)** 1989 Aug;67(8):38–43 **(Rus)**

[A rapid method of diagnosis of gastric and duodenal Campylobacter pylori infections] Starostin BD, et al. **Klin Med (Mosk)** 1989 Aug;67(8):50–2 **(Rus)**

[Diagnosis of Campylobacter pylori based on the level of urea in the gastric juice] Rozhavin MA, et al. **Lab Delo** 1990;(4):6–9 (Eng. Abstr.) **(Rus)**

[Diagnosis of Campylobacter pylori in chronic gastritis, gastric ulcer and duodenal ulcer (review of the literature)] Starodub EM, et al. **Lab Delo** 1990;(4):4–6 (44 ref.) **(Rus)**

[Clinico–endoscopic characteristics of gastroduodenal Campylobacter infection in children] Korovina NA, et al. **Pediatriia** 1989;(8):9–13 (Eng. Abstr.) **(Rus)**

[Characteristics of the endoscopic diagnosis of peptic ulcer and chronic gastritis associated with Campylobacter pylori] Grigor'ev PIa, et al. **Ter Arkh** 1989;61(11):65–9 (42 ref.) **(Rus)**

[Diagnosis of Campylobacter pylori infection of the gastric mucosa: histologic and microbiologic aspects] Sainz S, et al. **Med Clin (Barc)** 1990 Apr 21;94(15):561–3 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Failure of azythromycin to eradicate Campylobacter pylori from the stomach because of acquired resistance during treatment [letter] Glupczynski Y, et al. **Am J Gastroenterol** 1990 Jan;85(1):98–9

Treatment of Campylobacter pylori does not alter gastric acid secretion. Montbriand JR, et al. **Am J Gastroenterol** 1989 Dec;84(12):1513–6

Helicobacter pylori and bismuth subnitrate [letter] Sodeman WA Jr. **Am J Gastroenterol** 1990 Sep;85(9):1200–1

Animal model of Helicobacter pylori infection [letter] Glupczynski Y, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1462

Eradication of Helicobacter mustelae from the ferret stomach: an animal model of Helicobacter (Campylobacter) pylori chemotherapy. Otto G, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1232–6

Helicobacter associated gastritis in patients with duodenal ulcer: the influence of various drugs [letter; comment] Archimandritis AJ, et al. **Gut** 1990 Apr;31(4):481–2 Comment on: Gut 1989 Sep;30(9):1206–12.

Campylobacter associated gastritis in patients with non–ulcer dyspepsia: a double blind placebo controlled trial with colloidal bismuth subcitrate [see comments] Loffeld RJ, et al. **Gut** 1989 Sep;30(9):1206–12 Comment in: Gut 1990 Apr;31(4):481–2.

Can gastritis symptoms be evaluated in clinical trials? An overview of treatment of gastritis, nonulcer dyspepsia and Campylobacter–associated gastritis. Veldhuyzen van Zanten SJ, et al. **J Clin Gastroenterol** 1989 Oct; 11(5):496–501 (40 ref.)

Ciprofloxacin in the treatment of Helicobacter pylori in patients with gastritis and peptic ulcer. Forsmark CE, et al. **J Infect Dis** 1990 Oct;162(4):998–9

Treatment of Campylobacter gastritis in young children [letter; comment] Bonamico M, et al. **J Pediatr** 1989 Nov; 115(5 Pt 1):833–4 Comment on: J Pediatr 1988 Nov;113(5):908–12.

Treatment of Helicobacter pylori positive duodenal ulcers [letter] Isakov VA, et al. **Lancet** 1990 Sep 22; 336(8717):755–6

Cure of peptic ulcer associated with eradication of Helicobacter pylori [letter; comment] Oderda G, et al. **Lancet** 1990 Jun 30;335(8705):1599 Comment on: Lancet 1990 May 26;335(8700):1233–5.

Cure of duodenal ulcer associated with eradication of Helicobacter pylori [see comments] Rauws EA, et al. **Lancet** 1990 May 26;335(8700):1233–5 Comment in: Lancet 1990 Jun 30;335(8705):1599.

Fluoroquinolone–resistance in thermophilic Campylobacter spp isolated from stools of Spanish patients [letter] Reina J, et al. **Lancet** 1990 Jul 21;336(8708):186

Helicobacter pylori, peptic ulcer, and cimetidine [letter] Kaya IS, et al. **Mayo Clin Proc** 1990 Sep;65(9):1274–5

Recurrence of duodenal ulcer and Campylobacter pylori infection after eradication. Borody TJ, et al. **Med J Aust** 1989 Oct 16;151(8):431–5

Cure of duodenal ulcer after eradication of Helicobacter pylori. George LL, et al. **Med J Aust** 1990 Aug 6; 153(3):145–9

Campylobacter pylori infection in uremic dialyzed patients. Eradication of the infection by colloidal bismuth subcitrate [letter] Conz P, et al. **Nephron** 1990;55(4):442–3

In vitro evaluation of antibiotics for treatment of meningitis caused by Campylobacter fetus subspecies fetus. Morooka T, et al. **Pediatr Infect Dis J** 1989 Sep;8(9):653–4

Very long term diarrhoea due to Campylobacter jejuni [letter] Paulet P, et al. **Postgrad Med J** 1990 May; 66(775):410–1

Effect of oral bismuth subsalicylate on Campylobacter pylori and on healing and relapse rate of peptic ulcer. Eberhardt R, et al. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 1:S115–9

Bismuth subsalicylate in the treatment of gastritis due to Campylobacter pylori. McNulty CA. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 1:S94–8

Suppression of gastric urease activity by antacids. Berstad K, et al. **Scand J Gastroenterol** 1990 May;25(5):496–500

Campylobacter pylori—therapy review. Axon AT. **Scand J Gastroenterol Suppl** 1989;160:35–8 (25 ref.)

Campylobacter pylori and non–ulcer dyspepsia. 1. The final results of a double–blind multicentre trial for treatment with pirenzepine in Italy. Gad A, et al. **Scand J Gastroenterol Suppl** 1989;167:39–43

Does omeprazole improve antimicrobial therapy directed towards gastric Campylobacter pylori in patients with antral gastritis? A pilot study. Unge P, et al. **Scand J Gastroenterol Suppl** 1989;167:49–54

[Effect of gastritis–granule on 52 cases of chronic gastritis infected with Campylobacter pyloridis] Pu CS. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Dec;9(12):722–3, 708 (Eng. Abstr.) **(Chi)**

[Antibiotic therapy and Campylobacter pylori (letter)] Michelssen A. **Dtsch Med Wochenschr** 1990 Feb 9; 115(6):236 **(Ger)**

[Antibiotics for Campylobacter pylori colonization of the stomach (letter)] Schmidt G, et al. **Dtsch Med Wochenschr** 1989 Nov 17;114(46):1812–3 **(Ger)**

[Search for the best procedure for Campylobacter eradication. Results of long–term studies are still unavailable] Börsch G. **Fortschr Med** 1989 Jul 30; 107(22):471–2 **(Ger)**

[Bismuth aluminate in gastroenterology. Therapeutic effects in chronic erosive Campylobacter pylori–associated gastritis] Stanescu A, et al. **Fortschr Med** 1989 Oct 10; 107(29):623–6 (Eng. Abstr.) **(Ger)**

[Campylobacter pylori associated gastritis] **Internist (Berl)** 1989 Dec;30(12):830–2 **(Ger)**

[Functional upper abdominal pain in Campylobacter–associated gastritis: does the patient profit from bismuth therapy?] Koop H. **Z Gastroenterol** 1989 Nov; 27(11):701–2 **(Ger)**

[Bismuth—an environmental pollutant of the future] Mueller RL. **Zentralbl Hyg Umweltmed** 1989 Nov;189(2):117–24 (Eng. Abstr.) **(Ger)**

[Experience with the treatment of duodenal ulcer associated with Campylobacter pylori infection by combined use of anti–secretory and antibacterial drugs] Grigo'rev PIa, et al. **Klin Med (Mosk)** 1989 Aug;67(8):52–5 **(Rus)**

ECONOMICS

[Helicobacter pylori–induced cost–benefit risk considerations] Leiss O. **Leber Magen Darm** 1989 Dec; 19(6):333–5 **(Ger)**

[Campylobacter (Helicobacter) pylori–induced cost effectiveness–risk considerations] Rösch W. **Leber Magen Darm** 1990 Jan;20(1):45–6 **(Ger)**

EPIDEMIOLOGY

Helicobacter pylori and gastritis in Peruvian patients: relationship to socioeconomic level, age, and sex. The Gastrointestinal Physiology Working Group. **Am J Gastroenterol** 1990 Jul;85(7):819–23

Prevalence of Helicobacter (formerly Campylobacter) pylori infection in Saudia Arabia, and comparison of those with and without upper gastrointestinal symptoms. al-Moagel MA, et al. **Am J Gastroenterol** 1990 Aug;85(8):944–8

Prevalence of Campylobacter pylori in a tertiary care hospital in the mid-Atlantic United States [letter; comment] Rothstein RD, et al. **Arch Intern Med** 1990 May; 150(5):1132, 1134 Comment on: Arch Intern Med 1989 Jun;149(6):1373–5.

Campylobacter pylori–related gastrointestinal disease in children. Incidence and clinical findings. Glassman MS, et al. **Dig Dis Sci** 1989 Oct;34(10):1501–4

Campylobacter infection in humans. Arimi SM. **East Afr Med J** 1989 Dec;66(12):851–5 (36 ref.)

Incidence of Campylobacter infection in infants in western Algeria and the possible protective role of breast feeding. Mégraud F, et al. **Epidemiol Infect** 1990 Aug;105(1):73–8

Campylobacter pylori in Saudi patients undergoing upper gastrointestinal endoscopy: prevalence and effect of conventional therapy. al-Freihi HM, et al. **Hepatogastroenterology** 1989 Dec;36(6):516–8

Campylobacter diarrhea in children in Trivandrum. Devi KI, et al. **Indian J Pediatr** 1989 Sep–Oct;56(5):657–60

Campylobacter jejuni versus Campylobacter coli in developing countries: how accurate are prevalence estimates? [letter] Pazzaglia G, et al. **J Infect Dis** 1990 Aug; 162(2):570

Seroprevalence of Helicobacter pylori infections in Thailand. Perez-Perez GI, et al. **J Infect Dis** 1990 Jun;161(6):1237–41

Clinical experience with Campylobacter pylori in western Kentucky. Kraus JW, et al. **J Ky Med Assoc** 1989 Sep; 87(9):448–50

The prevalence of anti-Helicobacter (Campylobacter) pylori antibodies in patients and healthy blood donors. Loffeld RJ, et al. **J Med Microbiol** 1990 Jun;32(2):105–9

Prevalence of Helicobacter pylori infection and histologic gastritis in asymptomatic persons. Dooley CP, et al. **N Engl J Med** 1989 Dec 7;321(23):1562–6

Intrafamilial clustering of Helicobacter pylori infection. Drumm B, et al. **N Engl J Med** 1990 Feb 8;322(6):359–63

A further study of the epidemiology of Campylobacter jejuni infections. Brieseman MA. **N Z Med J** 1990 May 9; 103(889):207–9

Epidemiology and pathophysiology of Campylobacter pylori infections. Blaser MJ. **Rev Infect Dis** 1990 Jan–Feb;12 Suppl 1:S99–106 (77 ref.)

Campylobacter pylori and non-ulcer dyspepsia. 2. A prospective study in a Swedish population. Gad A, et al. **Scand J Gastroenterol Suppl** 1989;167:44–8

Campylobacter pylori and gastroduodenal ulcer disease. A prospective study in a Swedish population. Gad A, et al. **Scand J Gastroenterol Suppl** 1989;167:81–5

Campylobacter pylori: epidemiological considerations. Tytgat GN. **Scand J Gastroenterol Suppl** 1989;160:1–2

Waterborne Campylobacter jejuni epidemic in a Finnish hospital for rheumatic diseases. Rautelin H, et al. **Scand J Infect Dis** 1990;22(3):321–6

A cohort study of enteric campylobacter infection in children from birth to two years in Bangui (Central African Republic). Georges-Courbot MC, et al. **Trans R Soc Trop Med Hyg** 1990 Jan–Feb;84(1):122–5

[Campylobacter pyloridis (Cp) infection of gastric mucosa in the high and low risk areas of gastric cancer in Liaoning province] Lin HZ. **Chung Hua Chung Liu Tsa Chih** 1989 Sep;11(5):365–7 (Eng. Abstr.) **(Chi)**

[A survey on Campylobacter jejuni high infection in a nursery] Chen ZX, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Dec;20(4):445–7 (Eng. Abstr.) **(Chi)**

[Survey of Campylobacter jejuni/coli infection and risk factors in children] Lu DS, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Mar;20(1):74–6 (Eng. Abstr.) **(Chi)**

[Frequency and characteristics of Campylobacter jejuni–coli diarrhea in Tunisia] Fendri C, et al. **Bull Soc Pathol Exot Filiales** 1989;82(5):645–9 (Eng. Abstr.) **(Fre)**

[Role of Campylobacter in the etiology of diarrheas in Tunisia] Fendri C, et al. **Tunis Med** 1989 Aug–Sep; 67(8–9):517–20 (Eng. Abstr.) **(Fre)**

[Epidemiology of Helicobacter pylori infection] Nowottny U, et al. **Leber Magen Darm** 1990 Jul;20(4):180, 183–6 (Eng. Abstr.) **(Ger)**

[The development of acute gastroenteritis in the German Democratic Republic] Rasch G, et al. **Z Gesamte Hyg** 1989 Nov;35(11):634–8 (Eng. Abstr.) **(Ger)**

[Helicobacter pylori infection among employees at the gastroenterologic section, Haukeland Hospital] Berstad K, et al. **Tidsskr Nor Laegeforen** 1990 Feb 28;110(6):713–5 (Eng. Abstr.) **(Nor)**

[Clinico-epidemiologic aspects of campylobacteriosis in Moscow and Moscow Province] Cherkasskiĭ BL, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Aug;(8):40–3 (Eng. Abstr.) **(Rus)**

[Epidemiology of Campylobacter jejuni/coli] Kouřilová J, et al. **Cesk Epidemiol Mikrobiol Imunol** 1990 Jan;39(1):43–9 (Eng. Abstr.) **(Slo)**

ETHNOLOGY

Helicobacter pylori and gastritis in patients with peptic ulcer and non-ulcer dyspepsia: ethnic differences in Singapore. Kang JY, et al. **Gut** 1990 Aug;31(8):850–3

ETIOLOGY

The source of Campylobacter pylori. Vaira D, et al. **Biomed Pharmacother** 1989;43(6):447–50

Campylobacter fetus cholangitis and bacteremia. Douketis J, et al. **Can Med Assoc J** 1989 Nov 1;141(9):925–6

Pathogenesis of Campylobacter infection [editorial] Arimi SM. **East Afr Med J** 1989 Oct;66(10):629–30

Helicobacter mustelae-associated gastritis in ferrets. An animal model of Helicobacter pylori gastritis in humans. Fox JG, et al. **Gastroenterology** 1990 Aug;99(2):352–61

Vacation diarrhea. How should it be managed? Potts JF, et al. **Postgrad Med** 1990 Jul;88(1):83–7, 90

[Campylobacter pylori in diseases of the stomach and duodenum] Regula A, et al. **Wiad Lek** 1989 Aug 15–Sep 15;42(16–18):945–51 (49 ref.) (Eng. Abstr.) **(Pol)**

[The role of Campylobacter pylori in the clinical course of chronic antral gastritis and duodenal ulcer] Kalinin AV, et al. **Klin Med (Mosk)** 1989 Oct;67(10):64–6 **(Rus)**

[Campylobacter pylori, peptic ulcer and chronic gastritis] Komarov FI, et al. **Klin Med (Mosk)** 1989 Aug;67(8):44–8 **(Rus)**

[Pathogenetic properties of Campylobacter pylori] Rozhavin MA. **Klin Med (Mosk)** 1989 Nov;67(11):20–4 (38 ref.) **(Rus)**

[Campylobacter bacteremia] Baykal M, et al. **Mikrobiyol Bul** 1989 Jan;23(1):30–4 (Eng. Abstr.) **(Tur)**

HISTORY

[Campylobacter pylori–Helicobacter pylori. A long development] Steininger H. **Pathologe** 1990 Mar; 11(2):103–6 **(Ger)**

IMMUNOLOGY

Helicobacter pylori in Gambian children with chronic diarrhoea and malnutrition. Sullivan PB, et al. **Arch Dis Child** 1990 Feb;65(2):189–91

Heterozygosity at the Km locus associated with humoral immunity to Campylobacter jejuni. Pandey JP, et al. **Exp Clin Immmunogenet** 1986;3(1):49–53

Isotype evolution in the follow-up study of patients with Campylobacter pylori associated gastritis. Gobert B, et al. **Gastroenterol Clin Biol** 1989 Nov;13(11):880–3

Infection of adult Syrian hamsters with flagellar variants of Campylobacter jejuni. Aguero-Rosenfeld ME, et al. **Infect Immun** 1990 Jul;58(7):2214–9

A domestic ferret model of immunity to Campylobacter jejuni–induced enteric disease. Bell JA, et al. **Infect Immun** 1990 Jun;58(6):1848–52

Helicobacter pylori gastric infection in gnotobiotic beagle dogs. Radin MJ, et al. **Infect Immun** 1990 Aug; 58(8):2606–12

Antibody to cytotoxin in infection by Helicobacter pylori. Leunk RD, et al. **J Clin Microbiol** 1990 Jun;28(6):1181–4

Cellular and humoral immune responses in Campylobacter pylori–associated chronic gastritis. Kazi JI, et al. **J Pathol** 1989 Nov;159(3):231–7

Campylobacter jejuni: clinical and diagnostic value of serum antibody titres. Kolkman JJ, et al. **Neth J Med** 1990 Feb; 36(1–2):46–52

[State of local and total humoral immunity in duodenal ulcer with Campylobacter pylori infection] Il'chenko AA, et al. **Sov Med** 1990;(5):43–5 (Eng. Abstr.) **(Rus)**

METABOLISM

The gastric juice urea and ammonia levels in patients with Campylobacter pylori. Kim H, et al. **Am J Clin Pathol** 1990 Aug;94(2):187–91

Gastric mucosal prostaglandin synthesis in the presence of Campylobacter pylori in patients with gastric ulcers and non-ulcer dyspepsia. Taha AS, et al. **Am J Gastroenterol** 1990 Jan;85(1):47–50

Immunostaining of antral gastrin cells is quantitatively increased in Heliobacter pylori gastritis. Sankey EA, et al. **Histopathology** 1990 Feb;16(2):151–5

Ammonia produced by Campylobacter pylori neutralizes H+ moving through gastric mucus. Thomsen L, et al. **Scand J Gastroenterol** 1989 Aug;24(6):761–8

MICROBIOLOGY

Campylobacter pylori: a new pathogen. Czinn SJ, et al. **Adv Pediatr Infect Dis** 1990;5:221–37 (103 ref.)

Campylobacter pylori colonizing heterotopic gastric tissue in the rectum. Dye KR, et al. **Am J Clin Pathol** 1990 Jan; 93(1):144–7

Inability of human clinical strains of Helicobacter pylori to colonize the alimentary tract of germfree rodents. Cantorna MT, et al. **Can J Microbiol** 1990 Apr;36(4):237–41

Campylobacter pylori and gastroduodenal disease. Buck GE. **Clin Microbiol Rev** 1990 Jan;3(1):1–12 (135 ref.)

Campylobacter pylori: its role in gastritis and peptic ulcer disease. Hornick RB. **Curr Clin Top Infect Dis** 1989; 10:157–73 (71 ref.)

Campylobacter pylori is not associated with gastroparesis. Barnett JL, et al. **Dig Dis Sci** 1989 Nov;34(11):1677–80

Application of a new phagetyping scheme to campylobacters isolated during outbreaks. Salama SM, et al. **Epidemiol Infect** 1990 Jun;104(3):405–11

Occurrence of plasmids in "Campylobacter upsaliensis" (catalase negative or weak group) from geographically diverse patients with gastroenteritis or bacteraemia. Owen RJ, et al. **Eur J Epidemiol** 1990 Jun;6(2):111–7

Systemic spread of Campylobacter jejuni after intravenous infections. Bär W, et al. **FEMS Microbiol Immunol** 1989 Apr;1(5):263–70

Bacterial adhesion and disease activity in Helicobacter associated chronic gastritis. Hessey SJ, et al. **Gut** 1990 Feb; 31(2):134–8

Campylobacter pylori infection in Meckel's diverticula containing gastric mucosa [see comments] Morris A, et al. **Gut** 1989 Sep;30(9):1233–5 Comment in: Gut 1990 Feb;31(2):243.

Inoculation of barrier-born pigs with Helicobacter pylori: a useful animal model for gastritis type B. Engstrand L, et al. **Infect Immun** 1990 Jun;58(6):1763–8

Frequency of occurrence and characterization of catalase negative Campylobacter isolated from human feces in Vienna. Hirschl AM, et al. **Int J Med Microbiol** 1990 Apr; 272(4):547–53

Investigation of zoonotically acquired Campylobacter jejuni enteritis with serotyping and restriction endonuclease DNA analysis. Fox JG, et al. **J Clin Microbiol** 1989 Nov; 27(11):2423–5

Oligonucleotide probe for detection and identification of Campylobacter pylori. Morotomi M, et al. **J Clin Microbiol** 1989 Dec;27(12):2652–5

Genotypical variation of Campylobacter pylori from gastric mucosa. Oudbier JH, et al. **J Clin Microbiol** 1990 Mar; 28(3):559–65

Identification of Campylobacter cinaedi isolated from blood and feces of children and adult females. Vandamme P, et al. **J Clin Microbiol** 1990 May;28(5):1016–20

Helicobacter pylori and the pathogenesis of gastroduodenal inflammation. Blaser MJ. **J Infect Dis** 1990 Apr; 161(4):626–33 (69 ref.)

Persistence of Helicobacter pylori in conventionalized piglets. Eaton KA, et al. **J Infect Dis** 1990 Jun; 161(6):1299–301

Nodular gastritis and Helicobacter pylori. Bujanover Y, et al. **J Pediatr Gastroenterol Nutr** 1990 Jul;11(1):41–4

Correlation between human and animal bio-serogroups of Campylobacter isolates in Nigeria. Adegbola RA, et al. **J Trop Med Hyg** 1990 Aug;93(4):280–3

Evidence of gastritis with several Helicobacter pylori strains [letter] Beji A, et al. **Lancet** 1989 Dec 9;2(8676):1402–3

The origins of Helicobacter (Campylobacter) pylori [letter] Budd LE. **Med J Aust** 1990 Feb 19;152(4):224

Trends in Campylobacter pylori in pediatric and adult antral biopsies. A 5-year retrospective analysis. Veereman-Wauters G, et al. **West J Med** 1989 Oct; 151(4):406–9

Serogroups of Campylobacter jejuni from man and animals. Varga J, et al. **Zentralbl Veterinarmed [B]** 1990 Aug; 37(6):407–11

[Campylobacter jejuni] **Tijdschr Diergeneeskd** 1989 Dec 1; 114(23):1212–4 **(Dut)**

[Campylobacter: pediatric experience in Oran] Bensid S, et al. **Arch Inst Pasteur Alger** 1988;56:7–13 (Eng. Abstr.) **(Fre)**

[Spirochetal bacteria as the cause of gastritis? (letter)] Berndt R, et al. **Dtsch Med Wochenschr** 1989 Dec 1;114(48):1899 **(Ger)**

[A rapid urease test in Campylobacter pylori colonization of the gastric mucosa] Bornschein W, et al. **Gastroenterol J** 1989;49(2):54–8 (Eng. Abstr.) **(Ger)**

[Significance of Campylobacter pylori in gastritis, non-ulcer dyspepsia and ulcer. A critical observation] Fritsch WP. **Med Klin** 1989 Aug 15;84(8):400–4 (61 ref.) **(Ger)**

[A case report of Campylobacter fetus subspecies fetus bacteremia] Noguchi M, et al. **Kansenshogaku Zasshi** 1989 Dec;63(12):1338–43 (19 ref.) (Eng. Abstr.) **(Jpn)**

[Antibiotic resistance of Campylobacter and its epidemiologic significance] Aleksandrova NZ, et al. **Antibiot Khimioter** 1990 Mar;35(3):34–6 (Eng. Abstr.) **(Rus)**

[Infections caused by bacteria of the Campylobacter genus] Roy C. **Med Clin (Barc)** 1990 Apr 21;94(15):576–8 (27 ref.) **(Spa)**

[Spontaneous bacteremia caused by Campylobacter jejuni (letter)] Casas Fernández de Tejerina JM, et al. **Rev Clin Esp** 1990 Mar;186(5):246 **(Spa)**

[Helicobacter pylori and gastroduodenal pathology in the Republic of Panama] Méndez JR, et al. **Rev Med Panama** 1990 May;15(2):96–105 (Eng. Abstr.) **(Spa)**

[Helicobacter pylori is a globally spread bacterium causing gastritis in man] Wadström T. **Lakartidningen** 1990 Jun 13; 87(24):2104 **(Swe)**

PATHOLOGY

Helicobacter pylori–associated upper gastrointestinal disease in Saudi Arabia: a pathologic evaluation of 298 endoscopic biopsies from 201 consecutive patients. Satti MB, et al. **Am J Gastroenterol** 1990 May;85(5):527–34

Helicobacter (Campylobacter) pylori infestation and the development and progression of chronic gastritis: results of long-term follow-up examinations of a random sample. Villako K, et al. **Endoscopy** 1990 May;22(3):114–7

Surface hydrophobicity of gastric mucosa in peptic ulcer disease. Relationship to gastritis and Campylobacter pylori infection. Spychal RT, et al. **Gastroenterology** 1990 May; 98(5 Pt 1):1250–4

Lymphoid follicles in antral mucosa: immune response to Campylobacter pylori? Stolte M, et al. **J Clin Pathol** 1989

Dec;42(12):1269–71
Ultrastructural study of Helicobacter pylori–associated gastritis. Kazi JL, et al. **J Pathol** 1990 May;161(1):65–70
Campylobacter–associated chronic gastritis. Wyatt JI, et al. **Pathol Annu** 1990;25 Pt 1:75–98 (89 ref.)
Acridine orange fluorescence, Campylobacter pylori, and chronic gastritis. Langdale–Brown B, et al. **Scand J Gastroenterol** 1990 Feb;25(2):127–33
Rapid diagnosis of Campylobacter pylori by brush cytology. Gad A. **Scand J Gastroenterol Suppl** 1989;167:101–3
Differences in Helicobacter pylori associated gastritis in the antrum and body of the stomach. Stolte M, et al. **Z Gastroenterol** 1990 May;28(5):229–33
Campylobacter pylori in children: endoscopic and histopathologic investigations. Falchetti D, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:50–1
[Zhongxu–qizhi type of chronic gastritis and Campylobacter pyloridis infection] Zhu YH. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Dec;9(12):714–6, 707 (Eng. Abstr.) **(Chi)**
[Does Campylobacter Helicobacter pylori infection have a clinical relevance? Methodologic, epidemiologic and clinical studies] Döbrönte Z, et al. **Gastroenterol J** 1990; 50(1):32–7 (Eng. Abstr.) **(Ger)**
[Workshop Gastroduodenal Pathology and Campylobacter pylori. Second meeting of the European Campylobacter pylori Study Group] **Internist (Berl)** 1990 Feb;31(2 Suppl):1–12 **(Ger)**
[Campylobacter pylori (letter)] Rohde H. **Leber Magen Darm** 1989 Jul;19(4):215–6 **(Ger)**
[Campylobacter pylori in heterotopic gastric mucosa in Meckel's diverticulum] Stolte M, et al. **Leber Magen Darm** 1989 Jul;19(4):209–10 (Eng. Abstr.) **(Ger)**
[Intragastric formation of ammonia in Campylobacter pylori associated gastritis. Diagnostic and pathogenetic significance] Bornschein W, et al. **Med Klin** 1989 Jul 15; 84(7):329–32, 368 (Eng. Abstr.) **(Ger)**
[Lysozyme and lactoferrin in normal and inflammatory changes of the gastric mucosa] Grosse Hülsewiesche A, et al. **Z Gastroenterol** 1989 Dec;27(12):714–21 (Eng. Abstr.) **(Ger)**
[Reflections on the significance of detecting Campylobacter pylori in a biopsy of the stomach mucosa] Thaler W, et al. **Zentralbl Chir** 1989;114(24):1540–3 (Eng. Abstr.) **(Ger)**
[Campylobacter pylori in endoscopic biopsies of the gastric antrum and its association with chronic gastritis] Ocaña Andrade E, et al. **Rev Gastroenterol Mex** 1989 Oct–Dec; 54(4):207–11 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Na+/H+ ion–exchange property of postmortem human gastric mucus. The effects of Campylobacter pylori infection and sucralfate. Thomsen L, et al. **Scand J Gastroenterol** 1989 Sep;24(7):781–6
[Campylobacter pylori and its role in the etiopathogenesis of upper digestive tract diseases] Pindel B, et al. **Przegl Lek** 1990;47(2):301–3 (20 ref.) **(Pol)**

PREVENTION & CONTROL

Bismuth subsalicylate in the prevention of colonization of infant mice with Campylobacter jejuni. Hänninen ML. **Epidemiol Infect** 1990 Jun;104(3):397–404
Protection of breast–fed infants against Campylobacter diarrhea by antibodies in human milk. Ruiz–Palacios GM, et al. **J Pediatr** 1990 May;116(5):707–13
Vaccination against Helicobacter pylori urease [letter] Pallen MJ, et al. **Lancet** 1990 Jul 21;336(8708):186–7

RADIOGRAPHY

Campylobacter gastritis simulating Menetrier's disease by upper gastrointestinal radiography. Chaloupka JC, et al. **Pediatr Radiol** 1990;20(3):200–1

TRANSMISSION

Fecal contamination of shanty town toddlers in households with non–corralled poultry, Lima, Peru. Marquis GS, et al. **Am J Public Health** 1990 Feb;80(2):146–9
Patient–to–patient transmission of Campylobacter pylori infection by fiberoptic gastroduodenoscopy and biopsy. Langenberg W, et al. **J Infect Dis** 1990 Mar;161(3):507–11
Jackdaws as potential source of milk–borne Campylobacter jejuni infection [letter] Hudson SJ, et al. **Lancet** 1990 May 12;335(8698):1160
[Campylobacter jejuni and Campylobacter coli: epidemiologic markers of isolated strains in Santiago, Chile] Maggi L, et al. **Rev Med Chil** 1988 Nov;116(11):1105–10 **(Spa)**

VETERINARY

Helicobacter pylori–like microorganisms and chronic active gastritis in ferrets. Gottfried MR, et al. **Am J Gastroenterol** 1990 Jul;85(7):813–8
Control of Campylobacter fetus in artificially contaminated bovine semen by incubation with antibiotics before freezing. Chen SS, et al. **Br Vet J** 1990 Jan–Feb; 146(1):68–74
The development of a transport and enrichment medium for Campylobacter fetus. Lander KP. **Br Vet J** 1990 Jul–Aug; 146(4):327–33
The application of a transport and enrichment medium to the diagnosis of Campylobacter fetus infections in bulls. Lander KP. **Br Vet J** 1990 Jul–Aug;146(4):334–40
Bacterial infertility in camels (Camelus dromedarius): isolation of Campylobacter fetus. Wernery U, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Nov–Dec; 96(10):497–8
Horizontal transmission of Campylobacter jejuni amongst broiler chicks: experimental studies. Shanker S, et al. **Epidemiol Infect** 1990 Feb;104(1):101–10
Evidence of reinfection with multiple strains of Campylobacter jejuni and Campylobacter coli in Macaca nemestrina housed under hyperendemic conditions. Russell RG, et al. **Infect Immun** 1990 Jul;58(7):2149–55
Efficacy of a vaccine to prevent Chlamydia– or Campylobacter–induced abortions in ewes. Hansen DE, et al. **J Am Vet Med Assoc** 1990 Mar 1;196(5):731–4
Efficacies of erythromycin and chloramphenicol in extinguishing fecal shedding of Campylobacter jejuni in dogs. Monfort JD, et al. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1069–72
Effect of Campylobacter spp–induced enteritis on growth rate and feed efficiency in pigs. Straw BE. **J Am Vet Med Assoc** 1990 Aug 1;197(3):355–7
Species–specific cloned DNA probes for the identification of Campylobacter hyointestinalis. Gebhart CJ, et al. **J Clin Microbiol** 1989 Dec;27(12):2717–23
Isolation of a Campylobacter–like organism from healthy Syrian hamsters (Mesocricetus auratus). Stills HF Jr, et al. **J Clin Microbiol** 1989 Nov;27(11):2497–501
Gastric campylobacter–like organisms: their role in gastric disease of laboratory animals. Fox JG, et al. **Lab Anim Sci** 1989 Nov;39(6):543–53 (82 ref.)
Isolation and antimicrobial susceptibility of Campylobacter coli and Campylobacter jejuni from slaughter hogs. Hariharan H, et al. **Microbiologica** 1990 Jan;13(1):1–6
Enterocecocolitis associated with intraepithelial Campylobacter–like bacteria in rabbits (Oryctolagus cuniculus). Schoeb TR, et al. **Vet Pathol** 1990 Mar; 27(2):73–80
Inhibition of Campylobacter jejuni in vitro by broiler chicken caecal contents. Humphrey TJ, et al. **Vet Rec** 1989 Sep 2;125(10):272–3
Factors responsible for the introduction and spread of Campylobacter jejuni infection in commercial poultry production. Kazwala RR, et al. **Vet Rec** 1990 Mar 31; 126(13):305–6
Bovine diarrhea associated with Campylobacter hyointestinalis. Diker KS, et al. **Zentralbl Veterinarmed [B]** 1990 Mar;37(2):158–60
Serogroups of Campylobacter fetus and Campylobacter jejuni isolated in cases of ovine abortion. Varga J, et al. **Zentralbl Veterinarmed [B]** 1990 Mar;37(2):148–52
[Dynamics of Campylobacter jejuni invasion in gnotobiotic piglets] Tomancová I, et al. **Vet Med (Praha)** 1989 Sep; 34(9):553–8 (Eng. Abstr.) **(Cze)**
[Campylobacter infection and Campylobacter excretion in turkeys] Glünder G. **Berl Munch Tierarztl Wochenschr** 1989 Nov 1;102(11):374–8 (Eng. Abstr.) **(Ger)**
[Thermophilic Campylobacter from fecal samples of animals and their behavior in the ganglioside (GM1)–ELISA, Vero cell test and salt aggregation test] Rakotozandrindraini R, et al. **Zentralbl Veterinarmed [B]** 1990 Mar;37(2):142–7 (Eng. Abstr.) **(Ger)**

CAMPYLOBACTER JEJUNI see **CAMPYLOBACTER FETUS**

CANARIES

GENETICS

The inheritance of microstructure variation in the song of four generations of Roller canaries. Scott PJ. **Behav Genet** 1990 Jan;20(1):97–102

PARASITOLOGY

Pathology of experimental Sarcocystis falcatula infections of canaries (Serinus canarius) and pigeons (Columba livia). Smith JH, et al. **J Parasitol** 1990 Feb;76(1):59–68

PHYSIOLOGY

Hearing and vocalizations in hybrid Waterslager–Roller canaries (Serinus canarius). Okanoya K, et al. **Hear Res** 1990 Jul;46(3):271–5
Neuronal development and migration in explant cultures of the adult canary forebrain. Goldman SA. **J Neurosci** 1990 Sep;10(9):2931–9
Birth of projection neurons in adult avian brain may be related to perceptual or motor learning. Alvarez–Buylla A, et al. **Science** 1990 Sep 21;249(4975):1444–6

CANAVANINE

METABOLISM

Regulation of breakdown of canavanyl proteins in Escherichia coli by growth conditions in lon+ and lon– cells. Rosenberger RF, et al. **FEMS Microbiol Lett** 1990 Mar 1;56(1–2):19–25

PHARMACOLOGY

Lupus–inducing drugs alter the structure of supercoiled circular DNA domains. Zacharias W, et al. **Arthritis Rheum** 1990 Mar;33(3):366–74
L–canavanine acts on suppressor–inducer T cells to regulate antibody synthesis: lymphocytes of systemic lupus erythematosus patients are specifically unresponsive to L–canavanine. Morimoto I, et al. **Clin Immunol Immunopathol** 1990 Apr;55(1):97–108
A study on immunological effects of L–canavanine. Morimoto I. **Kobe J Med Sci** 1989 Dec;35(5–6):287–98

CANCER see **NEOPLASMS**

CANCER–ASSOCIATED CARBOHYDRATE ANTIGENS see **ANTIGENS, TUMOR–ASSOCIATED, CARBOHYDRATE**

CANCER CARE FACILITIES see under **HOSPITALS, SPECIAL**

CANCER CARE UNITS see **HOSPITAL UNITS**

CANCER GENES see **ONCOGENES**

CANCER STAGING see **NEOPLASM STAGING**

CANCER SYNDROMES, HEREDITARY see **NEOPLASTIC SYNDROMES, HEREDITARY**

CANDICIDIN see under **ANTIBIOTICS, MACROLIDE**

CANDIDA

[A clinicopathological study of candidemia in the elderly] Kawahata N, et al. **Nippon Ronen Igakkai Zasshi** 1990 Jan; 27(1):45–51 (Eng. Abstr.) **(Jpn)**
[A bioautographic method of analyzing trichothecene mycotoxins in grain and its products] Kotik AN, et al. **Gig Sanit** 1989 Sep;(9):53–4 **(Rus)**

ANALYSIS

A novel peroxisomal nonspecific lipid–transfer protein from Candida tropicalis. Gene structure, purification and possible role in beta–oxidation. Tan H, et al. **Eur J Biochem** 1990 May 31;190(1):107–12
Gas chromatographic assessment of alcoholyzed fatty acids from yeasts: a new chemotaxonomic method. Brondz I, et al. **J Clin Microbiol** 1989 Dec;27(12):2815–9
Discriminant analysis of cellular fatty acids of Candida species, Torulopsis glabrata, and Cryptococcus neoformans determined by gas–liquid chromatography. Marumo K, et al. **J Clin Microbiol** 1990 Jul;28(7):1509–13
SDS–PAGE protein patterns of yeasts from human sources. Cunningham MJ, et al. **Mycoses** 1989 Jul;32(7):344–8
Occurrence of peroxisomal membrane proteins in methylotrophic yeasts grown under different conditions. Sulter GJ, et al. **Yeast** 1990 Jan–Feb;6(1):35–43
[Isolation of yeast nuclei and characteristics of their lipid composition] Belov AP, et al. **Mikrobiologiia** 1989 Jul–Aug; 58(4):562–5 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Multivariate analyses of cellular carbohydrates and fatty acids of Candida albicans, Torulopsis glabrata, and Saccharomyces cerevisiae. Brondz I, et al. **J Clin Microbiol** 1990 Aug;28(8):1854–7
Typing and nosocomial candidiasis [letter; comment] Maffei C, et al. **J Clin Microbiol** 1990 May;28(5):1086–7 Comment on: J Clin Microbiol 1989 Nov;27(11):2426–8.
Numerical taxonomic analysis of imperfect yeast species in Candida and Torulopsis shows no basis for generic separation. Odds FC, et al. **J Gen Microbiol** 1990 Apr;136 (Pt 4):761–5
The identification of pathogenic yeast strains by electrophoretic analysis of their chromosomes. Monod M, et al. **J Med Microbiol** 1990 Jun;32(2):123–9
Adansonian study of Candida albicans: intraspecific homogeneity excepting C. stellatoidea strains. Kamiyama A, et al. **J Med Vet Mycol** 1989;27(4):229–41
Differentiation of Candida guilliermondii varieties by lectin–like substances from marine algae. Fabregas J, et al. **Res Microbiol** 1989 Jul–Aug;140(6):373–8
[Studies on hyperglycophilic yeast causing gaseous fermentation of sweetened condensed milk] Fu XH, et al. **Wei Sheng Wu Hsueh Pao** 1989 Aug;29(4):235–8 (Eng. Abstr.) **(Chi)**

CYTOLOGY

[Changes in the morphologic cellular indices of methanol–assimilating yeasts in synchronous culture] Ivanov VN. **Mikrobiol Zh** 1985 Mar–Apr;47(2):42–8 (Eng. Abstr.) **(Rus)**
[Correlation between the size and growth of yeast cells] Ivanov VN, et al. **Mikrobiol Zh** 1986 Sep–Oct;48(5):54–7 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Enzyme immunoconjugates utilizing glucose oxidase and myeloperoxidase are cytotoxic to Candida tropicalis.

Casentini-Borocz D, et al.
Antimicrob Agents Chemother 1990 May;34(5):875–80
Effects of octenidine and pirtenidine on adhesion of Candida species to human buccal epithelial cells in vitro. Ghannoum MA, et al. **Arch Oral Biol** 1990;35(4):249–53
Susceptibility of clinical isolates of Candida spp. to terconazole and other azole antifungal agents. Pfaller MA, et al. **Diagn Microbiol Infect Dis** 1989 Nov–Dec; 12(6):467–71
The spermicidal compound nonoxynol-9 increases adhesion of Candida species to human epithelial cells in vitro [published erratum appears in Infect Immun 1990 Aug;58(8):2725] McGroarty JA, et al. **Infect Immun** 1990 Jun;58(6):2005–7
FR109615, a new antifungal antibiotic from Streptomyces setonii. Taxonomy, fermentation, isolation, physico-chemical properties and biological activity. Iwamoto T, et al. **J Antibiot (Tokyo)** 1990 Jan;43(1):1–7
An in vitro study of the antibacterial and antifungal properties of an irreversible hydrocolloid impression material impregnated with disinfectant. Tobias RS, et al. **J Prosthet Dent** 1989 Nov;62(5):601–5
Sensitivity of yeasts to amphotericin B and 5-fluorocytosine. Abdul-Samad S, et al. **Malaya J Pathol** 1989 Aug;11:37–42
Ketoconazole resistance in Torulopsis glabrata. Nobre G, et al. **Mycopathologia** 1989 Jul;107(1):51–5
Effects of sub-inhibitory concentrations of antifungal agents on adherence of Candida spp. to buccal epithelial cells in vitro. Abu-el Teen K, et al. **Mycoses** 1989 Nov; 32(11):551–62
Change of causative organisms under antifungal treatment in immunosuppressed patients with HIV-infections. Just G, et al. **Mycoses** 1989;32 Suppl 2:47–51 (12 ref.)
In vitro antifungal activity of saperconazole (R 66905) against Candida and Torulopsis. Mallié M, et al. **Mycoses** 1989 Dec;32(12):631–7
[The effect of acetic acid and furfural on yeast growth] Lazarova G, et al. **Acta Microbiol Bulg** 1990;25:24–30 (Eng. Abstr.) **(Bul)**
[Antifungal activity of 6-acetamido-2-alkylthiobenzothiasoles in vitro] Kuchta T, et al. **Cesk Farm** 1989 Sep;38(7):310–1 (Eng. Abstr.) **(Cze)**
[Action of 2 new imidazole derivatives (butoconazole and sulconazole) on Candida, Trichophyton and Aspergillus] Latge JP, et al. **Ann Dermatol Venereol** 1989;116 Suppl 1:20–3 **(Fre)**
[In vitro effect of itraconazole against various species of Candida] Bastide M, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):694–9 (Eng. Abstr.) **(Fre)**
[Sensitivity of microorganisms of infected root canals to disinfectants] Glockmann E, et al. **Z Gesamte Hyg** 1989 Sep;35(9):567–9 (Eng. Abstr.) **(Ger)**
[Sensitivity of aerobic bacteria and Candida species to chlormidazole hydrochloride in vitro] Krasiejko I, et al. **Pol Tyg Lek** 1990 Jan 22–29;45(4–5):91–2 (Eng. Abstr.) **(Pol)**
[In vitro investigations of Candida strains for itraconazole] Gwieździński Z, et al. **Przegl Dermatol** 1989 Jan–Mar; 76(1):23–7 (Eng. Abstr.) **(Pol)**
[Comparison of the susceptibility of Candida strains to ketoconazole and itraconazole in in vitro experiments] Gwieździński Z, et al. **Przegl Dermatol** 1989 Sep–Dec; 76(5–6):399–404 (Eng. Abstr.) **(Pol)**
[Determining the biological activity of levorin by the international standard of candicidin] Bo'lshakova LO, et al. **Antibiot Khimioter** 1989 Oct;34(10):732–6 (Eng. Abstr.) **(Rus)**
[Drug sensitivity of Candida in patients with kidney diseases receiving immunosuppressive therapy] Kudriavskaia VM, et al. **Antibiot Khimioter** 1989 Oct;34(10):769–73 (Eng. Abstr.) **(Rus)**
[The conflicting action of low and high doses of ozone on the reproductive capacity and respiratory activity of Candida utilis yeast cells] Mel'nikova AM, et al. **Zh Obshch Biol** 1989 Nov–Dec;50(6):815–8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Influence of the support on the reaction course of tributyrin hydrolysis catalyzed by soluble and immobilized lipases. Otero C, et al. **Appl Biochem Biotechnol** 1990 Mar; 23(3):237–47
Mechanism and inhibition of delta 24-sterol methyltransferase from Candida albicans and Candida tropicalis. Ator MA, et al. **Biochemistry** 1989 Dec 12; 28(25):9633–40
The esterase profile of a lipase from Candida cylindracea. Brahimi-Horn MC, et al. **Biochim Biophys Acta** 1990 Jan 16;1042(1):51–4
In vivo import of Candida tropicalis hydratase-dehydrogenase-epimerase into peroxisomes of Candida albicans. Aitchison JD, et al. **Curr Genet** 1990 Jun; 17(6):481–6
A common ancestor for Candida tropicalis and dehydrogenases that synthesize antibiotics and steroids. Baker ME. **FASEB J** 1990 Sep;4(12):3028–32
Presence of two trehalose-6-phosphate synthase enzymes in Candida utilis. Vicente-Soler J, et al. **FEMS Microbiol Lett** 1989 Oct 15;52(3):273–7
Comparative production and rapid purification of Candida acid proteinase from protein-supplemented cultures. Ray TL, et al. **Infect Immun** 1990 Feb;58(2):508–14
Peroxisomal isocitrate lyase of the n-alkane-assimilating yeast Candida tropicalis: gene analysis and characterization. Atomi H, et al. **J Biochem (Tokyo)** 1990 Feb;107(2):262–6
Peroxisomal acetoacetyl-CoA thiolase and 3-ketoacyl-CoA thiolase from an n-alkane-utilizing yeast, Candida tropicalis: purification and characterization. Kurihara T, et al. **J Biochem (Tokyo)** 1989 Sep;106(3):474–8
Purification of microbial uricase. Adámek V, et al. **J Chromatogr** 1989 Dec 29;497:268–75
Isoenzyme biotypes of Candida species. Lehmann PF, et al. **J Clin Microbiol** 1989 Nov;27(11):2514–21
Demonstration of fungal proteinase during phagocytosis of Candida albicans and Candida tropicalis. Borg M, et al. **J Med Vet Mycol** 1990;28(1):3–14
Purification and crystallization of transaldolase from Candida utilis. Horecker BL, et al. **Methods Enzymol** 1990; 182:788–93
Comparative study of two trehalases from Candida utilis. Argüelles JC, et al. **Microbiologia** 1986 Oct;2(2):105–14
Comparative study on cytochrome P-450 of yeasts using specific antibodies to cytochromes P-450alk and P-450(14DM). Kaergel E, et al. **Yeast** 1990 Jan–Feb; 6(1):61–7

GENETICS

Candida shehatae--genetic diversity and phylogenetic relationships with other xylose-fermenting yeasts. Kurtzman CP. **Antonie Van Leeuwenhoek** 1990 May; 57(4):215–22
Isolation of Candida tropicalis auxotrophic mutants. Gleeson MA, et al. **Appl Environ Microbiol** 1990 Aug;56(8):2562–4
Application of the theory of adaptive polymorphism to the ecology and epidemiology of pathogenic yeasts. Hunter PR, et al. **Appl Environ Microbiol** 1990 Jul;56(7):2219–22
Isolation and characterization of a RNA-virus like particle from Candida curvata. Matte O, et al. **Biol Cell** 1990; 68(2):159–62
An improved host-vector system for Candida maltosa using a gene isolated from its genome that complements the his5 mutation of Saccharomyces cerevisiae. Hikiji T, et al. **Curr Genet** 1989 Oct;16(4):261–6
Heterogeneity within the alkane-inducible cytochrome P450 gene family of the yeast Candida tropicalis. Sanglard D, et al. **FEBS Lett** 1989 Oct 9;256(1–2):128–34
Evidence that Candida stellatoidea type II is a mutant of Candida albicans that does not express sucrose-inhibitable alpha-glucosidase. Kwon-Chung KJ, et al. **Infect Immun** 1990 Sep;58(9):2804–8
Genomic structure of Candida stellatoidea: extra chromosomes and gene duplication. Rikkerink EH, et al. **Infect Immun** 1990 Apr;58(4):949–54
Development of an integrative DNA transformation system for the yeast Candida tropicalis. Haas LO, et al. **J Bacteriol** 1990 Aug;172(8):4571–7
cDNA cloning and characterization of Geotrichum candidum lipase II. Shimada Y, et al. **J Biochem (Tokyo)** 1990 May;107(5):703–7
Selective and tandem amplification of a member of the metallothionein gene family in Candida glabrata. Mehra RK, et al. **J Biol Chem** 1990 Apr 15;265(11):6369–75
Candida glabrata metallothioneins. Cloning and sequence of the genes and characterization of proteins. Mehra RK, et al. **J Biol Chem** 1989 Nov 25;264(33):19747–53
Isolation and characterization of the alkane-inducible NADPH-cytochrome P-450 oxidoreductase gene from Candida tropicalis. Identification of invariant residues within similar amino acid sequences of divergent flavoproteins. Sutter TR, et al. **J Biol Chem** 1990 Sep 25; 265(27):16428–36
Electrophoretic karyotypes of Torulopsis glabrata. Kaufmann CS, et al. **J Clin Microbiol** 1989 Oct; 27(10):2165–8
DNA homology between Candida albicans strains: evidence to justify the synonymous status of C. stellatoidea. Kamiyama A, et al. **Mycopathologia** 1989 Jul;107(1):3–7
Cloning and sequencing of a fragment of the linear mitochondrial DNA of the yeast Candida parapsilosis supporting genes encoding subunit 8 of Fo ATP synthase and a putative t-RNA(Pro). Guelin E, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4267
Sequence of the gene for the cytoplasmic ribosomal RNA small subunit from Candida (Torulopsis) glabrata. Wong OC, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1888
[The role of lipids during exposure of mutant cells of Candida tropicalis D-2 to heterologous DNA after treatment with calcium cations] Danilenko II, et al. **Genetika** 1990 Mar; 26(3):567–9 (Eng. Abstr.) **(Rus)**
[The use of various mutagens for induction of nystatin-resistant mutants in Candida maltosa] Durasova EN, et al. **Mikrobiologiia** 1989 Sep–Oct;58(5):760–3 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Respiratory capacities of mitochondria of Saccharomyces cerevisiae CBS 8066 and Candida utilis CBS 621 grown under glucose limitation. Van Urk H, et al. **Antonie Van Leeuwenhoek** 1989 Oct;56(3):211–20
Competition for glucose between the yeasts Saccharomyces cerevisiae and Candida utilis. Postma E, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3214–20
A study of sulfite-tolerant yeasts from comminuted lamb products. Dillon VM, et al. **Biotechnol Appl Biochem** 1990 Feb;12(1):99–115
Experimental rat vaginal infection with Candida parapsilosis. De Bernardis F, et al. **FEMS Microbiol Lett** 1989 Nov; 53(1–2):137–41
[Utilization of sulfite leach by yeasts: growth parameters of producer and fusion strains] Weide H, et al. **J Basic Microbiol** 1990;30(4):289–94 (Eng. Abstr.) **(Ger)**
[Various regularities in the growth of yeast cultures in media, containing carbohydrates and alcohols] Podgorskiĭ VS, et al. **Mikrobiol Zh** 1986 Jul–Aug;48(4):33–7 (Eng. Abstr.) **(Rus)**
[Regularities of growth of ethanol-assimilating yeast Candida krusei in limited concentrations of nitrogen and phosphorus] Podgorskiĭ VS, et al. **Mikrobiol Zh** 1986 Nov–Dec;48(6):32–6 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Structure of the D-mannan of Candida stellatoidea IFO 1397 strain. Comparison with that of the phospho-D-mannan of Candida albicans NIH B-792 strain. Tojo M, et al. **Carbohydr Res** 1990 Jun 1;199(2):215–26
Tissue-bound immunity: a mechanism of candidacidal activity. Takahashi H, et al. **Curr Top Med Mycol** 1989; 3:50–63 (41 ref.)
Value of the Cand-Tec Candida antigen assay in the diagnosis and therapy of systemic candidiasis in high-risk patients. Cabezudo I, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):770–7
Lewis a blood group antigen of non-secretors: a receptor for candida blastospores. May SJ, et al. **FEMS Microbiol Immunol** 1989 Jun;1(6–7):407–9
Comparison of antibody, antigen, and metabolite assays for hospitalized patients with disseminated or peripheral candidiasis. Bougnoux ME, et al. **J Clin Microbiol** 1990 May;28(5):905–9
Candida antigen latex test [letter; comment] Price MF, et al. **J Infect Dis** 1990 Apr;161(4):807–8 Comment on: J Infect Dis 1989 Mar;159(3):495–502.
Candidosis: diagnostic tools in the laboratory. Rüchel R. **Mycoses** 1989;32 Suppl 2:18–22 (30 ref.)
Identification of certain false-positive results in the Cand-Tec test for candidal antigen. Rüchel R. **Mycoses** 1989 Dec;32(12):627–30
New developments in the serological diagnosis of Candida infection. Matthews RC, et al. **Mykosen Suppl** 1988;2:34–8 (18 ref.)
Application of serological tests in the diagnosis of invasive candidiasis. Platenkamp GJ. **Mykosen Suppl** 1988;2:27–33
Effects of diets of high sulphur content and varied concentrations of copper, molybdenum and thiamine on in vitro phagocytic and candidacidal activity of neutrophils in sheep. Olkowski AA, et al. **Res Vet Sci** 1990 Jan; 48(1):82–6
[Study of sensitizing properties of yeast-like fungi of the genus Candida in the production of dietary proteins] Spivak SM, et al. **Gig Sanit** 1989 Jun;(6):77–9 **(Rus)**
[An evaluation of the degree of serological affinity of the surface structures in Candida maltosa and Candida albicans] Ermolaev AV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Oct;(10):77–81 (Eng. Abstr.) **(Rus)**
[The dynamic immunological indices in in vivo stimulation with a Candida antigen] Pogorel'skaia SA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Nov;(11):57–60 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Laboratory diagnosis of invasive candidiasis. Jones JM. **Clin Microbiol Rev** 1990 Jan;3(1):32–45 (131 ref.)
Salivary levels of mutans streptococci, Lactobacillus, Candida, and Veillonella species in a group of Scottish adolescents. Russell JI, et al. **Community Dent Oral Epidemiol** 1990 Feb;18(1):17–21
Vaginal microbial flora in women with and without vaginal discharge registered in general practice. Bro F. **Dan Med Bull** 1989 Oct;36(5):483–5
Isolation, acid proteinase secretion, and experimental pathogenicity of Candida parapsilosis from outpatients with vaginitis. De Bernardis F, et al. **J Clin Microbiol** 1989 Nov; 27(11):2598–603
Is Candida stellatoidea disappearing from the vaginal mucosa? Kwon-Chung KJ, et al. **J Clin Microbiol** 1990 Mar;28(3):600–1
Impact of the BACTEC NR system in detecting Candida fungemia. Muñoz P, et al. **J Clin Microbiol** 1990 Mar; 28(3):639–41
Carriage of Candida species and C albicans biotypes in patients undergoing chemotherapy or bone marrow transplantation for haematological disease. Odds FC, et al. **J Clin Pathol** 1989 Dec;42(12):1259–66
Study of candida and Trichomonas vaginalis in Leucorrhoea. Poria VC, et al. **J Indian Med Assoc** 1989 Aug;87(8):184–5
High levels of oral yeasts in early HIV-1 infection. Tylenda CA, et al. **J Oral Pathol Med** 1989 Oct;18(9):520–4
Clinical significance of Candida isolated from peritoneum in surgical patients. Calandra T, et al. **Lancet** 1989 Dec 16;2(8677):1437–40
The significance of Candida pulcherrima findings in human clinical specimens. Pospisil L. **Mycoses** 1989 Nov;

32(11):581-3
Characterization of the mycoflora from oral mucosal surfaces of some HIV-infected patients. Franker CK, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jun;69(6):683-7
[Cryptosporidium and candida in pediatric diarrhea in Abidjan] Koffi-Akoua G, et al. **Bull Soc Pathol Exot Filiales** 1989;82(4):451-7 (Eng. Abstr.) (Fre)
[Diagnostic and clinical characteristics of mycotic vaginitis caused by Candida glabrata (Torulopsis glabrata)] Pawlik B, et al. **Med Dosw Mikrobiol** 1989;41(3-4):206-14 (Eng. Abstr.) (Pol)
[Candida tropicalis as a possible indicator of the degree of pollution of surface waters] Lewonowska E. **Rocz Akad Med Bialymstoku** 1986-87;31-32:125-42 (Eng. Abstr.) (Pol)
[Cerebrospinal fluid in infection of the central nervous system by yeasts of the genus Candida: analysis of 11 cases] Livramento JA, et al. **Arq Neuropsiquiatr** 1989 Sep; 47(3):332-6 (Eng. Abstr.) (Por)
[Yeast flora of the intestinal tract in long-lived residents of Abkhaziia] Kvasnikov EI, et al. **Mikrobiol Zh** 1985 Jul-Aug;47(4):22-6 (Eng. Abstr.) (Rus)
[Evaluation of an agglutination method of latex particles sensitized for the detection of vaginal candidiasis] Cabronero MC, et al. **Med Clin (Barc)** 1990 Mar 10; 94(9):329-32 (Eng. Abstr.) (Spa)
[A technic for rapid identification of yeasts: the seroagglutination method (letter)] Gallach Bau C, et al. **Med Clin (Barc)** 1989 Oct 7;93(10):397 (Spa)

METABOLISM

Ester formation from ethanol by Candida pseudotropicalis. Willetts A. **Antonie Van Leeuwenhoek** 1989 Aug; 56(2):175-80
Permeability properties of peroxisomal membranes from yeasts. Douma AC, et al. **Arch Microbiol** 1990;153(5):490-5
Specific, high-affinity binding sites for human luteinizing hormone (hLH) and human chorionic gonadotrophin (hCG) in Candida species. Bramley TA, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):1050-6
Lipid metabolism and cell composition of the oleaginous yeast Apiotrichum curvatum grown at different carbon to nitrogen ratios. Park WS, et al. **Can J Microbiol** 1990 May; 36(5):318-26
Production of dodecanedioic acid from n-dodecane by yeasts. Liu WH, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1989 Nov;22(4):242-8
Hydrocarbon emulsification by Candida tropicalis and Debaryomyces polymorphus. Singh M, et al. **Indian J Exp Biol** 1989 Mar;27(3):224-6
Inhibition of Candida adhesion to buccal epithelial cells by an aqueous extract of Allium sativum (garlic). Ghannoum MA. **J Appl Bacteriol** 1990 Feb;68(2):163-9
Glutathione-coated cadmium-sulfide crystallites in Candida glabrata. Dameron CT, et al. **J Biol Chem** 1989 Oct 15; 264(29):17355-60
Transport of glucose and cellobiose by Candida wickerhamii and Clavispora lusitaniae. Freer SN, et al. **J Biol Chem** 1990 Aug 5;265(22):12864-8
Enantioselective measurement of the Candida metabolite D-arabinitol in human serum using multi-dimensional gas chromatography and a new chiral phase. Wong B, et al. **J Chromatogr** 1989 Oct 27;495:21-30
The alternative respiratory pathway of the yeast Candida parapsilosis: oxidation of exogenous NAD(P)H. Camougrand NM, et al. **J Gen Microbiol** 1988 Dec;134 (Pt 12):3195-204
[Culture conditions for uricase formation of Candida utilis] Liu JG, et al. **Wei Sheng Wu Hsueh Pao** 1989 Feb; 29(1):45-50 (Eng. Abstr.) (Chi)
[A method for calculating the rate of biopolymer synthesis based on data from the chemical analysis of the biomass of microorganism cells] Ivanov VN. **Mikrobiol Zh** 1985 Jan-Feb;47(1):90-3 (Eng. Abstr.) (Rus)
[Comparative study of Candida lipolytica yeasts with various abilities to produce citrate] Finogenova TV, et al. **Mikrobiologiia** 1989 May-Jun;58(3):387-92 (Eng. Abstr.) (Rus)
[The effect of yeast autolysates on the level and distribution of free amino acids in yeast cells of the Candida genus] Gusel'nikova TV, et al. **Mikrobiologiia** 1989 Mar-Apr; 58(2):202-5 (Eng. Abstr.) (Rus)

PATHOGENICITY

Experimental pathogenicity and acid proteinase secretion of vaginal isolates of Candida parapsilosis. de Bernardis F, et al. **J Med Vet Mycol** 1990;28(2):125-37
[The antilysozyme activity of yeasts in the genus Candida] Sheremet ZA, et al. **Mikrobiol Zh** 1990 Mar-Apr;52(2):53-6 (Eng. Abstr.) (Rus)
[The significance of yeastlike fungi of the genus Candida in the clinical picture of candidiasis of the oral mucosa] Volosevich LI, et al. **Vrach Delo** 1989 Oct;(10):114-6 (Eng. Abstr.) (Rus)

PHYSIOLOGY

The second respiratory chain of Candida parapsilosis: a comprehensive study. Guerin M, et al. **Biochimie** 1989 Aug; 71(8):887-902 (56 ref.)
Non-specific adherence of Candida species to surface-modified glass. Nikawa H, et al. **J Med Vet Mycol** 1989;27(4):269-71
[The importance of adhesion capacity in Candida to pathogenicity in mucosal and skin candidiasis] Tomšíková A, et al. **Cesk Epidemiol Mikrobiol Imunol** 1990 Jun; 39(3):182-90 (Eng. Abstr.) (Cze)
[Effect of enzymes on the adhesion of fungi of the genus Candida to the buccal mucosa in vitro] Macura AB, et al. **Med Dosw Mikrobiol** 1989;41(2):130-4 (Eng. Abstr.) (Pol)

RADIATION EFFECTS

[A photosynergistic lethal effect in the irradiation of yeasts with long-wave ultraviolet and visible light] Belenikina NS, et al. **Biol Nauki** 1990;(3):42-8 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Proliferation and metabolic significance of peroxisomes in Candida boidinii during growth on D-alanine or oleic acid as the sole carbon source. Sulter GJ, et al. **Arch Microbiol** 1990;153(5):485-9
Scanning electron microscope study of Torulopsis ethanolitolerans prepared by glutaraldehyde--thiosemicarbohydrazide procedure. Hulínská D, et al. **Folia Microbiol (Praha)** 1989;34(3):238-42
Isolation and characterization of membranes from oleic acid-induced peroxisomes of Candida tropicalis. Nuttley WM, et al. **J Cell Sci** 1990 Mar;95 (Pt 3):463-70
[Importance of cellular homogenization for the posterior isolation of plasma membranes of the Candida utilis yeast] Pérez Cabo A, et al. **Microbiologia** 1985 Sep;1(1-2):19-27 (Eng. Abstr.) (Spa)

CANDIDA ALBICANS

Current trends in Candida albicans research. Datta A, et al. **Adv Microb Physiol** 1989;30:53-88 (114 ref.)
Modulation of anti-Candida activity of human alveolar macrophages by interferon-gamma or interleukin-1-alpha. Vecchiarelli A, et al. **Am J Respir Cell Mol Biol** 1989 Jul; 1(1):49-55
Participation of mannose receptors on the surface of stimulated macrophages in the phagocytosis of glutaraldehyde-fixed Candida albicans, in vitro. Felipe I, et al. **Braz J Med Biol Res** 1989;22(10):1251-4
Interaction of Candida albicans with neutrophils: effect of phenotypic changes in yeast cell-surface composition. Houston JG, et al. **J Gen Microbiol** 1989 Jul;135 (Pt 7):1885-93
International Workshop on Oral and Gastrointestinal Candidosis: From Pathology to Therapy. Introduction. Braun-Falco O. **Mycoses** 1989;32 Suppl 2:6-8

ANALYSIS

Structural study of cell wall phosphomannan of Candida albicans NIH B-792 (serotype B) strain, with special reference to 1H and 13C NMR analyses of acid-labile oligomannosyl residues. Kobayashi H, et al. **Arch Biochem Biophys** 1990 Apr;278(1):195-204
Mannan composition of the hyphal form of two relatively avirulent mutants of Candida albicans. Saxena A, et al. **Infect Immun** 1990 Jul;58(7):2061-6
Purification and characterization of the extracellular C3d-binding protein of Candida albicans. Saxena A, et al. **Infect Immun** 1990 Feb;58(2):309-14
Gas chromatographic assessment of alcoholyzed fatty acids from yeasts: a new chemotaxonomic method. Brondz I, et al. **J Clin Microbiol** 1989 Dec;27(12):2815-9
Variation in lipid and sterol contents in Candida albicans white and opaque phenotypes. Ghannoum MA, et al. **J Med Vet Mycol** 1990;28(2):103-15

CLASSIFICATION

Typing tools for the investigation of epidemic fungal infection. Howell SA, et al. **Epidemiol Infect** 1990 Aug; 105(1):1-9 (54 ref.)
Multivariate analyses of cellular carbohydrates and fatty acids of Candida albicans, Torulopsis glabrata, and Saccharomyces cerevisiae. Brondz I, et al. **J Clin Microbiol** 1990 Aug;28(8):1854-7
Application of a numerical index of discriminatory power to a comparison of four physiochemical typing methods for Candida albicans. Hunter PR, et al. **J Clin Microbiol** 1989 Oct;27(10):2156-60
Candida albicans in patients with the acquired immunodeficiency syndrome: absence of a novel of hypervirulent strain. Whelan WL, et al. **J Infect Dis** 1990 Aug;162(2):513-8
The identification of pathogenic yeast strains by electrophoretic analysis of their chromosomes. Monod M, et al. **J Med Microbiol** 1990 Jun;32(2):123-9
Adansonian study of Candida albicans: intraspecific homogeneity excepting C. stellatoidea strains. Kamiyama A, et al. **J Med Vet Mycol** 1989;27(4):229-41
The identification of Candida albicans strains by restriction fragment length polymorphism analysis of DNA. Smith RA, et al. **J Med Vet Mycol** 1989;27(6):431-4
Interest of biotyping Candida albicans in chronic vulvovaginitis. Poirier S, et al. **Mycoses** 1990 Jan;33(1):24-8
Application of DNA typing methods to Candida albicans epidemiology and correlations with phenotype. Stevens DA, et al. **Rev Infect Dis** 1990 Mar-Apr;12(2):258-66
[Methodologic problems in the biotyping of Candida albicans] Gorshkova GI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Sep;(9):7-11 (Eng. Abstr.) (Rus)

CYTOLOGY

Prostaglandin E2 enhances and gamma interferon inhibits germ tube formation in Candida albicans. Kalo-Klein A, et al. **Infect Immun** 1990 Jan;58(1):260-2
Isolation and characterization of Candida albicans morphological mutants derepressed for the formation of filamentous hypha-type structures. Gil C, et al. **J Bacteriol** 1990 May;172(5):2384-91
A morphology index for characterization of cell shape in Candida albicans. Merson-Davies LA, et al. **J Gen Microbiol** 1989 Nov;135 (Pt 11):3143-52
[Effect of selected bacteria on mycelial transformation of cells of Candida albicans] Kaczmarski W, et al. **Med Dosw Mikrobiol** 1989;41(3-4):184-91 (Eng. Abstr.) (Pol)
[Isolation and identification of the products of Streptococcus faecalis inhibiting mycelial transformation of Candida albicans] Kaczmarski W, et al. **Med Dosw Mikrobiol** 1989; 41(3-4):192-201 (Eng. Abstr.) (Pol)

DRUG EFFECTS

Azole susceptibility and hyphal formation in a cytochrome P-450-deficient mutant of Candida albicans. Lees ND, et al. **Antimicrob Agents Chemother** 1990 May;34(5):831-6
Involvement of a cell wall receptor in the mode of action of an anti-Candida toxin of Pichia anomala. Sawant AD, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1331-5
Effect of intraluminal antibiotics on translocation of Candida albicans in burned guinea-pigs. Epstein MD, et al. **Burns** 1990 Apr;16(2):105-8
Effects of terconazole and other azole antifungal agents on the sterol and carbohydrate composition of Candida albicans. Pfaller MA, et al. **Diagn Microbiol Infect Dis** 1990 Jan-Feb;13(1):31-5
"Mycelial vaginal test" and Candida susceptibility. Simonetti G, et al. **Drugs Exp Clin Res** 1989;15(10):487-90
Growth inhibition of Candida albicans and other medically important yeasts by vaginal contraceptive products. Shubair M, et al. **Gynecol Obstet Invest** 1990;29(1):67-70
Hydrazides--a novel type of derivatives of polyene macrolide antifungal antibiotics. Grzybowska J, et al. **J Antibiot (Tokyo)** 1990 Jul;43(7):907-8
Calcium-dependent anticandidal action of pradimicin A. Sawada Y, et al. **J Antibiot (Tokyo)** 1990 Jun;43(6):715-21
Effect of cilofungin (LY121019), a fungal cell wall synthesis inhibitor, on interactions of Candida albicans with human neutrophils. Meshulam T, et al. **J Antimicrob Chemother** 1989 Nov;24(5):741-5
Effect of amphotericin B, fluconazole and itraconazole on intracellular Candida albicans and germ tube development in macrophages. Van 't Wout JW, et al. **J Antimicrob Chemother** 1990 May;25(5):803-11
The effect of antimycotics on secretory acid proteinase of Candida albicans. Angiolella L, et al. **J Chemother** 1990 Feb;2(1):55-61
Action of the ketoconazole-alkylaminoethylglycine combination on Candida albicans. Villa A, et al. **J Chemother** 1989 Dec;1(6):388-90
Bacteriostatic and bactericidal actions of boric acid against bacteria and fungi commonly found in urine. Meers PD, et al. **J Clin Pathol** 1990 Jun;43(6):484-7
Factors influencing the haematoporphyrin-sensitized photoinactivation of Candida albicans. Bertoloni G, et al. **J Gen Microbiol** 1989 Apr;135 (Pt 4):957-66
Anticandidal properties of N3-(4-methoxyfumaroyl)-L-2,3-diaminopropanoic acid oligopeptides. Andruszkiewicz R, et al. **J Med Chem** 1990 Jan;33(1):132-5
Effects of cisplatin and two novel palladium complexes on Candida albicans. Moussa NM, et al. **Microbios** 1990; 62(252-253):165-78
Development of phenotypic resistance to direct lethal miconazole action by Candida albicans entering stationary phase. Beggs WH. **Mycopathologia** 1989 Dec;108(3):201-6
Fungispecificity of fluconazole against Candida albicans. Liss RH, et al. **Mycopathologia** 1989 Dec;108(3):173-8
Recombinagenicity of caffeine for Candida albicans. Sarachek A, et al. **Mycopathologia** 1990 May;110(2):63-76
Effects of sub-inhibitory concentrations of antifungal agents on adherence of Candida spp. to buccal epithelial cells in vitro. Abu-el Teen K, et al. **Mycoses** 1989 Nov; 32(11):551-62
Antifungal activity of diethyldithiocarbamate. Allerberger F, et al. **Mycoses** 1989 Oct;32(10):527-30
Bioassay for determination of nystatin in faeces after oral application. Blaschke-Hellmessen R, et al. **Mycoses** 1990 Mar;33(3):129-35
In vitro antifungal activity of saperconazole (R 66905) against Candida and Torulopsis. Mallié M, et al. **Mycoses** 1989 Dec;32(12):631-7
Action spectra and chromophores for lethal photosensitization of Candida albicans by DNA monoadducts formed by 8-methoxypsoralen and monofunctional furocoumarins. Baydoun SA, et al.

Photochem Photobiol 1989 Dec;50(6):753–61

Further studies on factors controlling phenotypic susceptibility of Candida albicans to miconazole kill. Beggs WH. **Res Commun Chem Pathol Pharmacol** 1990 Jan; 67(1):159–62

Effects of subinhibitory dose of amphotericin B on cell wall biosynthesis in Candida albicans. Mpona-Minga M, et al. **Res Microbiol** 1989 Feb;140(2):95–105

Susceptibility of Candida albicans and other yeasts to fluconazole: relation between in vitro and in vivo studies. Galgiani JN. **Rev Infect Dis** 1990 Mar-Apr;12 Suppl 3:S272–5 (21 ref.)

[In vitro assessment of candidacidal activity of human leukocyte myeloperoxidase preparation] Li CL, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Mar;20(1):39–41 (Eng. Abstr.) **(Chi)**

[Effect of itraconazole on the process of mycelial transformation of Candida albicans cells in human serum] Gwieździński Z, et al. **Med Dosw Mikrobiol** 1989; 41(3–4):202–5 (Eng. Abstr.) **(Pol)**

[New possibilities of prevention of occupational Candida albicans infection] Maleszka R, et al. **Przegl Dermatol** 1988 Nov-Dec;75(6):425–30 (Eng. Abstr.) **(Pol)**

[Antifungal activity of itraconazole and ketoconazole investigated in vitro, determined with minimal inhibitory concentrations and mycelial cell transformation in Candida albicans] Urbanowski S, et al. **Przegl Dermatol** 1989 Sep-Dec;76(5–6):405–9 (Eng. Abstr.) **(Pol)**

ENZYMOLOGY

Characteristics of L-alanine:4,5-dioxovaleric acid transaminase: an alternate pathway of heme biosynthesis in yeast. Hoare K, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):122–9

A guanine nucleotide-sensitive, glucagon-stimulated adenylyl cyclase in Candida albicans: effect of glucagon on cell morphology. Paveto C, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):1177–83

Purification and properties of cytochrome P-450-dependent 14 alpha-sterol demethylase from Candida albicans. Hitchcock CA, et al. **Biochem J** 1989 Oct 15;263(2):573–9

Interaction of azole antifungal antibiotics with cytochrome P-450-dependent 14 alpha-sterol demethylase purified from Candida albicans. Hitchcock CA, et al. **Biochem J** 1990 Mar 1;266(2):475–80

Mechanism and inhibition of delta 24-sterol methyltransferase from Candida albicans and Candida tropicalis. Ator MA, et al. **Biochemistry** 1989 Dec 12; 28(25):9633–40

Inhibition of yeast exoglucanases by glucosidase inhibitors. Ridruejo JC, et al. **Biochim Biophys Acta** 1989 Dec 8; 993(2–3):179–85

Characterization of Candida albicans epidermolytic proteases and their role in yeast-cell adherence to keratinocytes. el-Maghrabi EA, et al. **Clin Exp Dermatol** 1990 May; 15(3):183–91

In vivo import of Candida tropicalis hydratase-dehydrogenase-epimerase into peroxisomes of Candida albicans. Aitchison JD, et al. **Curr Genet** 1990 Jun; 17(6):481–6

Pathways to acetyl-CoA formation in Candida albicans. Sheridan R, et al. **FEMS Microbiol Lett** 1990 May; 57(1–2):165–9

Activation of the plasma kallikrein-kinin system by Candida albicans proteinase. Kaminishi H, et al. **Infect Immun** 1990 Jul;58(7):2139–43

Cilofungin inhibition of (1–3)-beta-glucan synthase: the lipophilic side chain is essential for inhibition of enzyme activity. Taft CS, et al. **J Antibiot (Tokyo)** 1990 Apr; 43(4):433–7

Isoenzyme biotypes of Candida species. Lehmann PF, et al. **J Clin Microbiol** 1989 Nov;27(11):2514–21

Chitinase activity from Candida albicans and its inhibition by allosamidin. Dickinson K, et al. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1417–21

Purification and some properties of Candida albicans exo-1,3-beta-glucanase. Molina M, et al. **J Gen Microbiol** 1989 Feb;135 (Pt 2):309–14

Evidence for a role for secreted aspartate proteinase of Candida albicans in vulvovaginal candidiasis. De Bernardis F, et al. **J Infect Dis** 1990 Jun;161(6):1276–83

Relationship between Candida albicans producing proteinase (CAPP) and its environmental pH—comparison with a case of trichophyton mentagrophytes. Ko IJ, et al. **J Korean Med Sci** 1987 Jun;2(2):97–101

Demonstration of fungal proteinase during phagocytosis of Candida albicans and Candida tropicalis. Borg M, et al. **J Med Vet Mycol** 1990;28(1):3–14

A role of secreted proteinase of Candida albicans for the invasion of chick chorio-allantoic membrane. Kobayashi I, et al. **Microbiol Immunol** 1989;33(9):709–19

Preliminary characterization of two glucan synthetase preparations and their reaction products from Candida albicans. Andaluz E, et al. **Microbiologia** 1985 Sep; 1(1–2):5–17

Isolation of a chitin synthase gene (CHS1) from Candida albicans by expression in Saccharomyces cerevisiae. Au-Young J, et al. **Mol Microbiol** 1990 Feb;4(2):197–207

GENETICS

Sequence and transcript analysis of the C. albicans URA3 gene encoding orotidine-5'-phosphate decarboxylase. Losberger C, et al. **Curr Genet** 1989 Sep;16(3):153–8

The isolation of osmotic-remedial conditional lethal mutants of Candida albicans. Payton MA, et al. **Curr Genet** 1990 Apr;17(4):293–6

Efficient translation of the UAG termination codon in Candida species. Santos M, et al. **Curr Genet** 1990 Jun; 17(6):487–91

Cloning of a DNA sequence encoding a major fragment of the 47 kilodalton stress protein homologue of Candida albicans. Matthews R, et al. **FEMS Microbiol Lett** 1989 Jul 1;51(1):25–30

Cloning and characterization of the 2,3-oxidosqualene cyclase-coding gene of Candida albicans. Kelly R, et al. **Gene** 1990 Mar 15;87(2):177–83

Functional expression of the Candida albicans beta-tubulin gene in Saccharomyces cerevisiae. Smith HA, et al. **Gene** 1990 May 31;90(1):115–23

Genetic analysis of prototrophic natural variants of Candida albicans. Goshorn AK, et al. **Genetics** 1989 Dec; 123(4):667–73

Evidence that Candida stellatoidea type II is a mutant of Candida albicans that does not express sucrose-inhibitable alpha-glucosidase. Kwon-Chung KJ, et al. **Infect Immun** 1990 Sep;58(9):2804–8

Isolation and characterization of cell surface mutants of Candida albicans. Whelan WL, et al. **Infect Immun** 1990 Jun;58(6):1552–7

Isolation of the Candida albicans histidinol dehydrogenase (HIS4) gene and characterization of a histidine auxotroph. Altboum Z, et al. **J Bacteriol** 1990 Jul;172(7):3898–904

Chromosomal rearrangements associated with morphological mutants provide a means for genetic variation of Candida albicans. Rustchenko-Bulgac EP, et al. **J Bacteriol** 1990 Mar;172(3):1276–83

Characterization of the inverted duplication in the mitochondrial DNA of Candida albicans. Shaw JA, et al. **J Bacteriol** 1989 Nov;171(11):6353–6

Sequence analysis and expression of the two genes for elongation factor 1 alpha from the dimorphic yeast Candida albicans. Sundstrom P, et al. **J Bacteriol** 1990 Apr; 172(4):2036–45

Unidirectional internuclear transfer of linked genes in heterokaryons of Candida albicans. Sarachek A, et al. **J Basic Microbiol** 1989;29(8):527–35

Electrophoretic karyotyping of typical and atypical Candida albicans. Mahrous M, et al. **J Clin Microbiol** 1990 May; 28(5):876–81

Computer-assisted methods for assessing strain relatedness in Candida albicans by fingerprinting with the moderately repetitive sequence Ca3. Schmid J, et al. **J Clin Microbiol** 1990 Jun;28(6):1236–43

High frequency variation of colony morphology and chromosome reorganization in the pathogenic yeast Candida albicans. Suzuki T, et al. **J Gen Microbiol** 1989 Feb;135 (Pt 2):425–34

The molecular genetics of Candida albicans. Kurtz MB, et al. **Microbiol Sci** 1988 Feb;5(2):58–63 (44 ref.)

Isolation and nucleotide sequence of an autonomously replicating sequence (ARS) element functional in Candida albicans and Saccharomyces cerevisiae. Cannon RD, et al. **Mol Gen Genet** 1990 Apr;221(2):210–8

DNA homology between Candida albicans strains: evidence to justify the synonymous status of C. stellatoidea. Kamiyama A, et al. **Mycopathologia** 1989 Jul;107(1):3–7

Sequence of the Candida albicans gene encoding actin. Losberger C, et al. **Nucleic Acids Res** 1989 Nov 25; 17(22):9488

GROWTH & DEVELOPMENT

Persistent diarrhea secondary to Candida overgrowth [letter] Margolis BD, et al. **Am J Gastroenterol** 1990 Mar; 85(3):329–30

Correlation between culture medium pH, extracellular proteinase activity, and cell growth of Candida albicans in insoluble stratum corneum-supplemented media. Tsuboi R, et al. **Arch Dermatol Res** 1989;281(5):342–5

Carbon dioxide induces endotrophic germ tube formation in Candida albicans. Mock RC, et al. **Can J Microbiol** 1990 Apr;36(4):249–53

Regulation of Candida albicans populations in the gastrointestinal tract: mechanisms and significance in GI and systemic candidiasis. Kennedy MJ. **Curr Top Med Mycol** 1989;3:315–402 (173 ref.)

Interconversion of polyamines in wild-type strains and mutants of yeasts and the effects of polyamines on their growth. Hamana K, et al. **FEMS Microbiol Lett** 1989 Oct 1;52(1–2):231–6

A model of sustained gastrointestinal colonization by Candida albicans in healthy adult mice. Samonis G, et al. **Infect Immun** 1990 Jun;58(6):1514–7

The role of microfilaments and microtubules in apical growth and dimorphism of Candida albicans. Yokoyama K, et al. **J Gen Microbiol** 1990 Jun;136 (Pt 6):1067–75

Mitochondrial behaviour during the yeast-hypha transition of Candida albicans. Aoki S, et al. **Microbios** 1989; 60(243):79–86

Evidence for the involvement of thiocyanate in the inhibition of Candida albicans by Lactobacillus acidophilus. Jack M, et al. **Microbios** 1990;62(250):37–46

The improved recovery of Candida albicans from fluid culture media. Reeder JC, et al. **Microbios** 1989; 60(243):71–7

Candida albicans gastrointestinal colonization and invasion in the mouse: effect of antibacterial dosing, antifungal therapy and immunosuppression. Kinsman OS, et al. **Mycoses** 1989 Dec;32(12):664–74

[The quantitative recovery of microbes during testing of disinfectants for instruments] Höller C, et al. **Zentralbl Hyg Umweltmed** 1990 Feb;189(4):300–11 (Eng. Abstr.) **(Ger)**

[The dynamics of the invasive growth of Candida albicans in the host's tissues] Bykov VL. **Vestn Dermatol Venerol** 1990;(4):25–8 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Determination of immunoglobulins responsible for histamine release induced by microbial antigens in AIDS patients. Pedersen M, et al. **Allergy** 1989 Sep;44(7):460–6

Immunoblotting analysis of concanavalin A-isolated allergens of Candida albicans. Savolainen J, et al. **Allergy** 1990 Jan;45(1):40–6

Distribution of watersoluble antigens and allergens of Candida albicans in blastospore cell extract fractions. Savolainen J, et al. **Allergy** 1990 Jan;45(1):47–53

IgE-, IgA- and IgG-antibody responses to carbohydrate and protein antigens of Candida albicans in asthmatic children. Savolainen J, et al. **Allergy** 1990 Jan;45(1):54–63

Candida albicans: cellular immune system interactions during different stages of the menstrual cycle. Kalo-Klein A, et al. **Am J Obstet Gynecol** 1989 Nov;161(5):1132–6

Recurrent allergic vulvovaginitis: treatment with Candida albicans allergen immunotherapy. Rigg D, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):332–6

Humoral immunity to Candida albicans (anti-candida antibody titers) in premature infants. Katikaneni LD, et al. **Am J Reprod Immunol** 1990 May;23(1):1–3

Structure of the D-mannan of Candida stellatoidea IFO 1397 strain. Comparison with that of the phospho-D-mannan of Candida albicans NIH B-792 strain. Tojo M, et al. **Carbohydr Res** 1990 Jun 1;199(2):215–26

Growth inhibition of Candida albicans by interleukin-2-induced lymph node cells. Beno DW, et al. **Cell Immunol** 1990 Jun;128(1):89–100

Induction of LAK-like cells in the peritoneal cavity of mice by inactivated Candida albicans. Scaringi L, et al. **Cell Immunol** 1990 Sep;129(2):271–87

Protective immunity induced by low-virulence Candida albicans: cytokine production in the development of the anti-infectious state. Vecchiarelli A, et al. **Cell Immunol** 1989 Dec;124(2):334–44

Identification of immunodominant antigens of Candida albicans in patients with superficial candidosis. Weller BI, et al. **Clin Immunol Immunopathol** 1990 Mar;54(3):347–53

Value of detection of antibodies to Candida albicans germ tube in the diagnosis of systemic candidosis. Quindós G, et al. **Eur J Clin Microbiol Infect Dis** 1990 Mar;9(3):178–83

Antibody to selected strains of Saccharomyces cerevisiae (baker's and brewer's yeast) and Candida albicans in Crohn's disease. McKenzie H, et al. **Gut** 1990 May; 31(5):536–8

Determination and kinetics of antibody response to Candida albicans in ulcerative colitis. Nagy F, et al. **Hepatogastroenterology** 1989 Aug;36(4):182–4

Involvement of reactive oxygen metabolites in the candidacidal activity of human neutrophils stimulated by muramyl dipeptide or tumor necrosis factor. Jupin C, et al. **Immunobiology** 1989 Nov;180(1):68–79

Antigens and immune responses in Candida albicans infection. Ashman RB, et al. **Immunol Cell Biol** 1990 Feb; 68 (Pt 1):1–13 (130 ref.)

A further characterization of Candida albicans-induced suppressor B-cell activity. Cuff CF, et al. **Immunology** 1989 Sep;68(1):80–6

Augmentation of GG2EE macrophage cell line-mediated anti-Candida activity by gamma interferon, tumor necrosis factor, and interleukin-1. Blasi E, et al. **Infect Immun** 1990 Apr;58(4):1073–7

Caveats in the investigation of form-specific molecules of Candida albicans. Brawner DL, et al. **Infect Immun** 1990 Feb;58(2):378–83

Characterization of Candida albicans mannan-induced, mannan-specific delayed hypersensitivity suppressor cells. Garner RE, et al. **Infect Immun** 1990 Aug;58(8):2613–20

Reduced expression of the functionally active complement receptor for iC3b but not for C3d on an avirulent mutant of Candida albicans. Ollert MW, et al. **Infect Immun** 1990 Apr;58(4):909–13

A monoclonal antibody that defines a surface antigen on Candida albicans hyphae cross-reacts with yeast cell protoplasts. Ollert MW, et al. **Infect Immun** 1990 Mar; 58(3):625–31

Altered hepatic clearance and killing of Candida albicans in the isolated perfused mouse liver model. Sawyer RT, et al. **Infect Immun** 1990 Sep;58(9):2869–74

Comparison of candidacidal and candidastatic activities of human neutrophils. Sohnle PG, et al. **Infect Immun** 1990 Aug;58(8):2696–8

Allergenic variability of different strains of Candida albicans. Savolainen J, et al. **Int Arch Allergy Appl Immunol** 1989; 90(1):61–6

Direct modulation of human neutrophil behaviour by Candida albicans. Vuddhakul V, et al.

Int Arch Allergy Appl Immunol 1989;90(3):291–6

Candida albicans and ABO blood groups [letter] Singh S, et al. **J Assoc Physicians India** 1990 Jun;38(6):448–9

Cell-mediated immune response in human hepatic echinococcosis. Analysis of antigen-induced lymphoproliferation and NK activity. Ausiello C, et al. **J Biol Regul Homeost Agents** 1989 Oct–Dec;3(4):146–52

Detection of Candida antigenuria in disseminated candidiasis by immunoblotting. Ferreira RP, et al. **J Clin Microbiol** 1990 May;28(5):1075–8

Immunologic significance of diverse specificity of monoclonal antibodies against mannans of Candida albicans. Kagaya K, et al. **J Immunol** 1989 Nov 15; 143(10):3353–8

Different effects of native Candida albicans mannan and mannan-derived oligosaccharides on antigen-stimulated lymphoproliferation in vitro. Podzorski RP, et al. **J Immunol** 1990 Jan 15;144(2):707–16

Patterns of guanine nucleotide exchange reflecting disparate neutrophil activation pathways by opsonized and unopsonized Candida albicans hyphae. Diamond RD, et al. **J Infect Dis** 1990 Jul;162(1):262–5

Granulocyte-macrophage colony-stimulating factor augments human monocyte fungicidal activity for Candida albicans. Smith PD, et al. **J Infect Dis** 1990 May; 161(5):999–1005

Experimental pulmonary candidiasis. Sawyer RT. **Mycopathologia** 1990 Feb;109(2):99–109

Candida albicans: mannan and protein activation of cells from various human lymphoid organs. Tollemar J, et al. **Scand J Immunol** 1989 Oct;30(4):473–80

[Action of sulconazole on Candida and dermatophyte antigens] Hearn VM. **Ann Dermatol Venereol** 1989;116 Suppl 1:13–5 **(Fre)**

[Specificity of the humoral immune response to Candida albicans in patients with panuveitis] Damms T, et al. **Fortschr Ophthalmol** 1989;86(4):323–6 (Eng. Abstr.) **(Ger)**

[Assessment of the phagocytosis and intracellular killing of Candida albicans by granulocytes of patients with atopic dermatitis] Baran E, et al. **Przegl Dermatol** 1989 Sep–Dec; 76(5–6):391–8 (Eng. Abstr.) **(Pol)**

[Development of an immunoenzyme test-system for diagnosis of specific antibodies of the IgG class to Candida albicans] Ignat'eva SM, et al. **Tr Inst Pastera** 1988;64:174–85 **(Rus)**

[An evaluation of the degree of serological affinity of the surface structures in Candida maltosa and Candida albicans] Ermolaev AV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Oct;(10):77–81 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Isolation of Candida albicans and halophilic Vibrio spp. from aquatic birds in Connecticut and Florida. Buck JD. **Appl Environ Microbiol** 1990 Mar;56(3):826–8

Blood group, secretor status and oral carriage of yeasts among patients with diabetes mellitus. Blackwell CC, et al. **Diabetes Res** 1989 Nov;12(3):101–4

Rapid identification of Candida albicans using 4-methylumbelliferyl N-acetyl-beta-galactosaminide. Dalton MT, et al. **Diagn Microbiol Infect Dis** 1989 Nov–Dec;12(6):521–3

Rapid, colorimetric identification of Candida albicans. Perry JL, et al. **J Clin Microbiol** 1990 Mar;28(3):614–5

An in vivo replica method for the site-specific detection of Candida albicans on the denture surface in denture stomatitis patients: correlation with clinical disease. Santarpia RP 3d, et al. **J Prosthet Dent** 1990 Apr; 63(4):437–43

The use of microtitre plates to observe germ tube formation in Candida albicans. Brightman CA, et al. **Med Lab Sci** 1989 Jul;46(3):270–1

Characterization of the mycoflora from oral mucosal surfaces of some HIV-infected patients. Franker CK, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jun;69(6):683–7

A combination of Gomori-Grocott methenamine silver nitrate and hematoxylene and eosin staining technique for the demonstration of Candida albicans in tissue. Sinha BK, et al. **Quad Sclavo Diagn** 1988 Jan–Dec;24(1–4):129–32

Detection of surgical pathogens by in vitro DNA amplification. Part I. Rapid identification of Candida albicans by in vitro amplification of a fungus-specific gene. Buchman TG, et al. **Surgery** 1990 Aug;108(2):338–46; discussion 346–7

METABOLISM

The role of yeasts in oral cancer by means of endogenous nitrosation. Krogh P. **Acta Odontol Scand** 1990 Feb; 48(1):85–8 (19 ref.)

cAMP levels and in situ measurement of cAMP related enzymes during yeast-to-hyphae transition in Candida albicans. Egidy G, et al. **Cell Biol Int Rep** 1990 Jan; 14(1):59–68

Secretion of glycoproteins through the cell wall of Candida albicans. Poulain D, et al. **Eur J Cell Biol** 1989 Oct; 50(1):94–9

Dynamic changes of the cell wall surface of Candida albicans associated with germination and adherence. Tronchin G, et al. **Eur J Cell Biol** 1989 Dec;50(2):285–90

Adherence of Candida albicans to components of the subendothelial extracellular matrix. Klotz SA. **FEMS Microbiol Lett** 1990 Mar 15;56(3):249–54

Laminin receptors on Candida albicans germ tubes. Bouchara JP, et al. **Infect Immun** 1990 Jan;58(1):48–54

Cryptococcus neoformans, Candida albicans, and other fungi bind specifically to the glycosphingolipid lactosylceramide (Gal beta 1–4Glc beta 1–1Cer), a possible adhesion receptor for yeasts. Jimenez-Lucho V, et al. **Infect Immun** 1990 Jul; 58(7):2085–90

Tumor necrosis factor (TNF) is induced in mice by Candida albicans: role of TNF in fibrinogen increase. Riipi L, et al. **Infect Immun** 1990 Sep;58(9):2750–4

Effects of gastrointestinal candidiasis, antibiotics, dietary arabinitol, and cortisone acetate on levels of the Candida metabolite D-arabinitol in rat serum and urine. Wong B, et al. **Infect Immun** 1990 Feb;58(2):283–8

Abrogation by glucose of the ATP suppression induced by miconazole in Candida albicans. Abbott AB, et al. **J Antimicrob Chemother** 1989 Dec;24(6):905–19

Phospholipid biosynthesis in Candida albicans: regulation by the precursors inositol and choline. Klig LS, et al. **J Bacteriol** 1990 Aug;172(8):4407–14

Internalization of lucifer yellow in Candida albicans by fluid phase endocytosis. Basrai MA, et al. **J Gen Microbiol** 1990 Jun;136 (Pt 6):1059–65

The lipid composition and permeability to the triazole antifungal antibiotic ICI 153066 of serum-grown mycelial cultures of Candida albicans. Hitchcock CA, et al. **J Gen Microbiol** 1989 Jul;135 (Pt 7):1949–55

Lipids of Candida albicans: subcellular distribution and biosynthesis. Mago N, et al. **J Gen Microbiol** 1990 Jun;136 (Pt 6):993–6

Thermotolerance and the heat-shock response in Candida albicans. Zeuthen ML, et al. **J Gen Microbiol** 1989 Sep; 135 (Pt 9):2509–18

The iC3b receptor on Candida albicans: subcellular localization and modulation of receptor expression by glucose. Hostetter MK, et al. **J Infect Dis** 1990 Apr; 161(4):761–8

Interaction of Candida albicans with murine gastrointestinal mucosa: effect of irradiation on adherence in vitro. Sandovsky-Losica H, et al. **J Med Vet Mycol** 1989; 27(6):345–52

[Loading of polystyrene solid phases with microbial agents and their polysaccharide antigens for the screening of monoclonal antibodies] Mehl M, et al. **J Basic Microbiol** 1989;29(6):361–7 (Eng. Abstr.) **(Ger)**

PATHOGENICITY

Cell wall of Candida albicans as a factor of pathogenicity. Weigl E, et al. **Acta Univ Palacki Olomuc Fac Med** 1989; 122:45–53

Characteristics of Candida albicans adherence to mouse tissues. Cutler JE, et al. **Infect Immun** 1990 Jun;58(6):1902–8

Environmental alteration and phenotypic regulation of Candida albicans adhesion to plastic. Kennedy MJ, et al. **Infect Immun** 1989 Dec;57(12):3876–81

Oral and esophageal Candida albicans infection in hyposalivatory rats. Meitner SW, et al. **Infect Immun** 1990 Jul;58(7):2228–36

Effect of proteolytic activity on virulence of Candida albicans in burned mice [published erratum appears in Infect Immun 1990 Aug;58(8):2725] Neely AN, et al. **Infect Immun** 1990 Jun;58(6):1527–31

Biological attributes of colony-type variants of Candida albicans. Dutton S, et al. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3363–72

Pathogenicity of 5-fluorocytosine resistant strains of Candida albicans. Fasoli MO, et al. **J Med Vet Mycol** 1990; 28(1):27–34

Host-parasite relationships in candidosis. Calderone RA. **Mycoses** 1989;32 Suppl 2:12–7 (23 ref.)

[A cytomorphological analysis of the adhesion of fungi of the genus Candida to human and animal epithelial cells] Bykov VL, et al. **Izv Akad Nauk SSSR [Biol]** 1990 Jan–Feb; (1):45–51 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Oral adhesion of yeasts. Olsen I. **Acta Odontol Scand** 1990 Feb;48(1):45–53 (60 ref.)

Improved assay for surface hydrophobic avidity of Candida albicans cells. Hazen KC, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1974–6

Surface-active properties of Candida albicans. Klotz SA. **Appl Environ Microbiol** 1989 Sep;55(9):2119–22

The influence of Streptococcus mutans on adhesion of Candida albicans to acrylic surfaces in vitro. Branting C, et al. **Arch Oral Biol** 1989;34(5):347–53

Equilibrium analysis of binding of Candida albicans to human buccal epithelial cells. Staddon W, et al. **Can J Microbiol** 1990 May;36(5):336–40

Coaggregation of Streptococcus sanguis and other streptococci with Candida albicans. Jenkinson HF, et al. **Infect Immun** 1990 May;58(5):1429–36

Effects of neutrophils and in vitro oxidants on survival and phenotypic switching of Candida albicans WO-1. Kolotila MP, et al. **Infect Immun** 1990 May;58(5):1174–9

Influence of some carbohydrates and concanavalin A on the adherence of Candida albicans in vitro to buccal epithelial cells. Macura AB, et al. **Int J Med Microbiol** 1989 Dec; 272(2):196–201

Effect of antifungal agents on the adherence of Candida albicans to murine gastrointestinal mucosal surfaces. Mehentee JF, et al. **J Antimicrob Chemother** 1990 Jan; 25(1):111–9

In vitro adherence of Candida albicans strains to murine gastrointestinal mucosal cells and explants and the role of environmental pH. Mehentee JF, et al. **J Gen Microbiol** 1989 Aug;135 (Pt 8):2181–8

The secreted aspartate proteinase of Candida albicans: physiology of secretion and virulence of a proteinase-deficient mutant. Ross IK, et al. **J Gen Microbiol** 1990 Apr;136 (Pt 4):687–94

Aggregated platelets enhance adherence of Candida yeasts to endothelium. Klotz SA, et al. **J Infect Dis** 1989 Oct; 160(4):669–77

The use of flow cytometry to monitor chitin synthesis in regenerating protoplasts of Candida albicans. Hector RF, et al. **J Med Vet Mycol** 1990;28(1):51–7

Prevention of yeast translocation across the gut by a single enteral feeding after burn injury. Inoue S, et al. **JPEN J Parenter Enteral Nutr** 1989 Nov–Dec;13(6):565–71

Involvement of a Ca2+-calmodulin interaction in the yeast-mycelial (Y-M) transition of Candida albicans. Sabie FT, et al. **Mycopathologia** 1989 Oct;108(1):47–54

[The roles of proteinase production and germ tube formation in the invasion of Candida albicans into newborn mouse skin] Suzuki S, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Nov;99(12):1227–34 (Eng. Abstr.) **(Jpn)**

RADIATION EFFECTS

Influence of applied electrical fields on yeast and hyphal growth of Candida albicans. Crombie T, et al. **J Gen Microbiol** 1990 Feb;136 (Pt 2):311–7

Bidirectional stimulation of the white-opaque transition of Candida albicans by ultraviolet irradiation. Morrow B, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1201–8

ULTRASTRUCTURE

Cell wall of Candida albicans: its functions and its impact on the host. Cassone A. **Curr Top Med Mycol** 1989; 3:248–314 (262 ref.)

Ultrastructure and possible processes involved in the invasion of host epithelial cells by Candida albicans in vaginal candidosis. Rajasingham KC, et al. **Cytobios** 1989; 60(240):11–20

Effects of cilofungin (LY121019) on carbohydrate and sterol composition of Candida albicans. Pfaller M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Dec;8(12):1067–70

Ultrastructure and antigenicity of the unique cell wall pimple of the Candida opaque phenotype. Anderson J, et al. **J Bacteriol** 1990 Jan;172(1):224–35

Variation in cytoplasmic microtubule organization and spindle length between the two forms of the dimorphic fungus Candida albicans. Barton R, et al. **J Cell Sci** 1988 Oct;91 (Pt 2):211–20

Scanning electron microscopic pattern of recurrent vaginitis by Candida albicans in the mouse. Gargani G, et al. **Mycoses** 1989 Dec;32(12):644–51

CANDIDIASIS

Candida mediastinitis after a cardiac operation. Glower DD, et al. **Ann Thorac Surg** 1990 Jan;49(1):157–63 (47 ref.)

Mixed haematogenous endophthalmitis caused by Candida albicans and CDC fermentative corynebacterium group A-4. Barker C, et al. **Br J Ophthalmol** 1990 Apr;74(4):247–8

Fungal bezoars of the upper urinary tract. Irby PB, et al. **J Urol** 1990 Mar;143(3):447–51

Clinical significance of Candida isolated from peritoneum in surgical patients. Calandra T, et al. **Lancet** 1989 Dec 16;2(8677):1437–40

Bowel-associated dermatosis-arthritis syndrome [published erratum appears in Med J Aust 1990 Apr 16;152(8):448] Kemp DR, et al. **Med J Aust** 1990 Jan 1;152(1):43–5

International Workshop on Oral and Gastrointestinal Candidosis: From Pathology to Therapy. Munich, May 27, 1989. Proceedings. **Mycoses** 1989;32 Suppl 2:6–64

Rectal stenosis associated with fungal peritonitis: a complication of continuous ambulatory peritoneal dialysis. Uchida M, et al. **Nephron** 1989;53(3):288–9

Chronic mucocutaneous candidiasis-thymoma syndrome. A case report. Rothberg MS, et al. **Oral Surg Oral Med Oral Pathol** 1989 Oct;68(4):411–3

Gallbladder and biliary tract candidiasis: nine cases and review. Morris AB, et al. **Rev Infect Dis** 1990 May–Jun; 12(3):483–9 (29 ref.)

Candidal meningitis following bacterial meningitis. Gelfand MS, et al. **South Med J** 1990 May;83(5):567–70

[Torulopsis glabrata septicemia: apropos of a case] Daumal M, et al. **Agressologie** 1989 May;30(5):265–6 (Eng. Abstr.) **(Fre)**

[A case of candida endocarditis with consecutive measurement of serum mannan and D-arabinitol concentrations] Maeno K, et al. **Kokyu To Junkan** 1990 Jun;38(6):605–8 (Eng. Abstr.) **(Jpn)**

[Mediastinitis and left pyopneumothorax complicating a laryngeal phlegmon] Shiota T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Nov; 27(11):1367–70 (Eng. Abstr.) **(Jpn)**

[A successfully treated case of splenic abscess due to candidiasis associated with drug induced myelosuppression]

Sakane M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Feb;87(2):278–82 **(Jpn)**

[Multiple liver abscesses due to Candida albicans in a patient with acute promyelocytic leukemia: percutaneous transhepatic intraportal administration of amphotericin B] Ishii H, et al. **Rinsho Ketsueki** 1990 Mar;31(3):330–4 (Eng. Abstr.) **(Jpn)**

[Sepsis caused by Candida parapsilosis. Joint and lung involvement in 2 patients with acute leukemia] Saló J, et al. **Med Clin (Barc)** 1990 Jan 20;94(2):58–60 (Eng. Abstr.) **(Spa)**

[Chronic mucocutaneous candidiasis. A case report] Montero Mora P, et al. **Rev Alerg Mex** 1990 Jan–Feb;37(1):29–31 (Eng. Abstr.) **(Spa)**

BLOOD

Heparin-like anticoagulant associated with systemic candidiasis. Horne MK 3d, et al. **Am J Hematol** 1990 Sep; 35(1):37–42

Non-secretion of blood group antigens and susceptibility to infection by Candida species. Thom SM, et al. **FEMS Microbiol Immunol** 1989 Jun;1(6–7):401–5

Determination of monosaccharides by high-performance liquid chromatography in systemic candidosis. Zaton A, et al. **J Chromatogr** 1990 Jan 26;525(1):169–75

Serum amphotericin B concentration in a very premature infant with disseminated candidiasis. Nirasawa M, et al. **Keio J Med** 1989 Sep;38(3):319–24

[Candida fungemia] Zanetti G, et al. **Schweiz Med Wochenschr** 1989 Sep 9;119(36):1213–8 (Eng. Abstr.) **(Fre)**

[Medical progress enhances the risk of candidemia and disseminating candidiasis] Holmberg K, et al. **Lakartidningen** 1990 May 23;87(21):1865–9 (75 ref.) **(Swe)**

COMPLICATIONS

Histiocytic hemophagocytosis in the bone marrow in children with sepsis and disseminated intravascular coagulation. Hara T, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Jun; 31(3):335–9

Severe clinical manifestations of primary HIV infection. Tindall B, et al. **AIDS** 1989 Nov;3(11):747–9

Prospective evaluation of blind brushing of the esophagus for Candida esophagitis in patients with human immunodeficiency virus infection. Bonacini M, et al. **Am J Gastroenterol** 1990 Apr;85(4):385–9

Systemic Torulopsis glabrata infection causing shock, fever and coma. Katz D, et al. **Am J Med** 1967 Jul;43(1):151–2

Disruption of the aortic anastomosis after heart–lung transplantation. Dowling RD, et al. **Ann Thorac Surg** 1990 Jan;49(1):118–22

Septic peripheral embolization from bacterial and fungal endocarditis. Freischlag JA, et al. **Ann Vasc Surg** 1989 Oct; 3(4):318–23 (17 ref.)

Hepatobiliary candidiasis in chronic lymphatic leukaemia. Hacking CN, et al. **BMJ** 1989 Dec 23–30;299(6715):1568

Hepatosplenic candidiasis in children with acute leukemia. Verdeguer A, et al. **Cancer** 1990 Feb 15;65(4):874–7

Survival after rupture of the oesophagus and subsequent candidal endocarditis: use of new serological methods in management. de Belder MA, et al. **Eur Heart J** 1989 Sep; 10(9):858–62

Candida-associated diarrhea in hospitalized patients. Gupta TP, et al. **Gastroenterology** 1990 Mar;98(3):780–5

Association of Candida with carcinoma of esophagus [letter; comment] Misra SP, et al. **Indian J Gastroenterol** 1989 Oct; 8(4):308–9 Comment on: Indian J Gastroenterol 1989 Jul;8(3):171–2.

Oesophageal candidiasis [letter] Maitra I, et al. **J Assoc Physicians India** 1989 Dec;37(12):800–1

Candida albicans and ABO blood groups [letter] Singh S, et al. **J Assoc Physicians India** 1990 Jun;38(6):448–9

Fungal cholecystitis and AIDS [letter] Cervia JS, et al. **J Infect Dis** 1990 Feb;161(2):358

Chronic mucocutaneous candidiasis in childhood and complications of non-Candida infection: a report of the Pediatric Immunodeficiency Collaborative Study Group. Herrod HG. **J Pediatr** 1990 Mar;116(3):377–82

Long-term follow-up of Candida endophthalmitis in the premature infant. Annable WL, et al. **J Pediatr Ophthalmol Strabismus** 1990 Mar–Apr; 27(2):103–6

Candida septic arthritis in rheumatoid arthritis. Campen DH, et al. **J Rheumatol** 1990 Jan;17(1):86–8 (15 ref.)

Cerebral granuloma and meningitis caused by Candida albicans: useful monitoring of mannan antigen in cerebrospinal fluid. Ikeda K, et al. **Neurosurgery** 1990 May; 26(5):860–3

Cerebral calcifications in a neonate with candidiasis. Goldsmith LS, et al. **Pediatr Infect Dis J** 1990 Jun; 9(6):451–3

Unexpected diagnosis of Candida albicans meningitis in a premature neonate. Lenoir P, et al. **Pediatr Neurol** 1989 Nov–Dec;5(6):370–2

Candidiasis-endocrinopathy syndrome with progressive myopathy. Evans RA, et al. **Q J Med** 1989 Feb; 70(262):139–44

Candida albicans infected pseudocyst in a postpartum woman. Chia N, et al. **South Med J** 1990 Jun;83(6):687–9 (9 ref.)

Torulopsis glabrata fungemia in a diabetic patient. Connolly JP, et al. **South Med J** 1990 Mar;83(3):352–3

Renal candidiasis in the rat: effects of ureteral obstruction and diabetes. Tarry WF, et al. **Urol Res** 1989;17(6):367–70

[False ruptured mycotic aneurysm developing on an pre-existing venous bypass. Complication of Candida albicans septicemia in a patient with acquired immunodeficiency syndrome (letter)] Thomas P, et al. **Ann Med Interne (Paris)** 1990;141(2):195 **(Fre)**

[Mycotic osteitis of the facial bones. A review of the literature apropos of a case] Camuzard JF, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(6):334–7 (35 ref.) (Eng. Abstr.) **(Fre)**

[Acute hydrocephalus due to Candida meningitis in a 2-month-old infant] Héron B, et al. **Arch Fr Pediatr** 1990 Apr;47(4):279–81 (Eng. Abstr.) **(Fre)**

[Visceral candidiasis in 2 children treated for acute leukemia] Levine M, et al. **Arch Fr Pediatr** 1990 May;47(5):365–7 (Eng. Abstr.) **(Fre)**

[Hepato-splenic candidiasis in patients treated for leukemia] Troussard X, et al. **Presse Med** 1989 Oct 21;18(34):1687–90 (Eng. Abstr.) **(Fre)**

[The significance of yeasts in seborrheic eczema] Buslau M, et al. **Hautarzt** 1989 Oct;40(10):611–3 (26 ref.) (Eng. Abstr.) **(Ger)**

[Systemic candidiasis with meningeal involvement in a newborn infant] Kacprzak-Bergman I, et al. **Pol Tyg Lek** 1989 Apr 24;44(17):394–6 (Eng. Abstr.) **(Pol)**

[Cerebrospinal fluid in infection of the central nervous system by yeasts of the genus Candida: analysis of 11 cases] Livramento JA, et al. **Arq Neuropsiquiatr** 1989 Sep; 47(3):332–6 (Eng. Abstr.) **(Por)**

[Fungus invasion in the morphogenesis of gastro-duodenal ulcers] Khmel'nitskiĭ OK, et al. **Arkh Patol** 1989;51(7):11–5 (Eng. Abstr.) **(Rus)**

[A case of esophageal candidiasis in a patient with achalasia of the cardia] Trukhmanov AS, et al. **Klin Med (Mosk)** 1990 Mar;68(3):131–3 **(Rus)**

[Increased sensitivity to Candida in patients with bronchial asthma] Pronina EV, et al. **Pediatriia** 1990;(5):14–8 (Eng. Abstr.) **(Rus)**

[Meningitis caused by Candida in a patient with acquired immunodeficiency syndrome (letter)] Martínez Gil A, et al. **Neurologia** 1987 Sep–Oct;2(5):256–7 **(Spa)**

[Esophagitis caused by Candida albicans] Riestra Menéndez S, et al. **Rev Esp Enferm Apar Dig** 1989 Aug;76(2):188–93 (66 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Neonatal systemic candidiasis diagnosed by ultrasound. Tung KT, et al. **Acta Radiol** 1990 May;31(3):293–5

Dysphagia and the human immunodeficiency virus: endoscopy is not a first step [letter; comment] San Roman AL, et al. **Am J Gastroenterol** 1989 Nov;84(11):1461–2 Comment on: Am J Gastroenterol 1989 Feb;84(2):143–6.

Prospective evaluation of a Candida antigen detection test for invasive candidiasis in immunocompromised adult patients with cancer. Escuro RS, et al. **Am J Med** 1989 Dec;87(6):621–7

Clinical significance of the antibody-coated bacteria test in patients with candiduria. Ohkawa M, et al. **Br J Urol** 1990 Jul;66(1):22–5

Laboratory diagnosis of invasive candidiasis. Jones JM. **Clin Microbiol Rev** 1990 Jan;3(1):32–45 (131 ref.)

An assessment of sonography in the diagnosis and management of neonatal renal candidiasis [published erratum appears in Clin Radiol 1990 Feb;41(2):145] Berman LH, et al. **Clin Radiol** 1989 Nov;40(6):577–81 (17 ref.)

Value of the Cand-Tec Candida antigen assay in the diagnosis and therapy of systemic candidiasis in high-risk patients. Cabezudo I, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):770–7

Value of detection of antibodies to Candida albicans germ tube in the diagnosis of systemic candidosis. Quindós G, et al. **Eur J Clin Microbiol Infect Dis** 1990 Mar;9(3):178–83

Focal hepatic candidiasis with perihepatic adhesions: laparoscopic and immunohistologic diagnosis. Gordon SC, et al. **Gastroenterology** 1990 Jan;98(1):214–7

Upper esophageal sphincter spasm as a marker of monilial esophagitis [letter] Graham JR. **Gastrointest Endosc** 1990 Jan–Feb;36(1):77

Rapid slide haemagglutination test in urinary candidiasis. Shetty M, et al. **Indian J Pathol Microbiol** 1989 Jan; 32(1):46–9

Separation and quantification by gas chromatography–mass spectrometry of arabinitol enantiomers to aid the differential diagnosis of disseminated candidiasis. Roboz J, et al. **J Chromatogr** 1990 Feb 2;500:413–26

Comparison of antibody, antigen, and metabolite assays for hospitalized patients with disseminated or peripheral candidiasis. Bougnoux ME, et al. **J Clin Microbiol** 1990 May;28(5):905–9

Detection of Candida antigenuria in disseminated candidiasis by immunoblotting. Ferreira RP, et al. **J Clin Microbiol** 1990 May;28(5):1075–8

Collaborative evaluation of antigen detection by a commercial latex agglutination test and enzyme immunoassay in the diagnosis of invasive candidiasis. Lemieux C, et al. **J Clin Microbiol** 1990 Feb;28(2):249–53

Impact of the BACTEC NR system in detecting Candida fungemia. Muñoz P, et al. **J Clin Microbiol** 1990 Mar; 28(3):639–41

Rapid diagnosis of Candida mediastinitis by coagglutination [letter] Koshi G, et al. **J Clin Pathol** 1990 Aug;43(8):696

MR imaging of hepatosplenic candidiasis superimposed on hemochromatosis. Cho JS, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):774–6

Diagnosis of systemic candidosis by immunodiffusion test with locally prepared antigen. Srimuang S, et al. **J Med Assoc Thai** 1989 Aug;72(8):436–40

Diagnostically usable skin lesions in Candida septicaemia. Lindblad R, et al. **Mycoses** 1989 Aug;32(8):416–20

Candida guilliermondii var. guilliermondii infection in infertile women. Nagy B, et al. **Mycoses** 1989 Sep; 32(9):463–8

Identification of certain false-positive results in the Cand-Tec test for candidal antigen. Rüchel R. **Mycoses** 1989 Dec;32(12):627–30

Candidosis: diagnostic tools in the laboratory. Rüchel R. **Mycoses** 1989;32 Suppl 2:18–22 (30 ref.)

New developments in the serological diagnosis of Candida infection. Matthews RC, et al. **Mykosen Suppl** 1988;2:34–8 (18 ref.)

Application of serological tests in the diagnosis of invasive candidiasis. Platenkamp GJ. **Mykosen Suppl** 1988;2:27–33

Diagnosis and management of septic thrombosis of the inferior vena cava caused by Candida tropicalis. Ashkenazi S, et al. **Pediatr Infect Dis J** 1990 Jun;9(6):446–7

The diagnosis and management of the discharging ear. Burke P. **Practitioner** 1989 May 22;233(1469):742, 744, 746

Ultrasound appearances of systemic candidiasis in the neonate. Currie JL. **Radiogr Today** 1989 Jul;55(626):20–1

Pancreatic candidiasis. A case report. Mannell A, et al. **S Afr J Surg** 1990 Mar;28(1):26–7

Septic arthritis in the newborn—a 17 years' clinical experience. Ho NK, et al. **Singapore Med J** 1989 Aug; 30(4):356–8

[Laboratory contributions in systemic Candida albicans infections] Manoury B, et al. **Agressologie** 1989 May; 30(5):283–5 (Eng. Abstr.) **(Fre)**

[Candida albicans uveopapillitis. Diagnostic and therapeutic discussion apropos of a case] Despres E, et al. **Bull Soc Ophtalmol Fr** 1990 Jan;90(1):105–8 (12 ref.) (Eng. Abstr.) **(Fre)**

[Determination of Candida albicans mannan antigen in serum] Helbig JH, et al. **Z Gesamte Hyg** 1989 Oct;35(10):599–600 (Eng. Abstr.) **(Ger)**

[Comparison of D-arabinitol, candida antigen, and beta-glucan, measured by the chromogenic limulus assay, in the rabbit model of systemic candidiasis] Miyazaki T, et al. **Kansenshogaku Zasshi** 1990 Apr;64(4):474–8 (Eng. Abstr.) **(Jpn)**

[Serodiagnosis of candidiasis] Hamamoto T. **Nippon Rinsho** 1990 Feb;48 Suppl:381–4 **(Jpn)**

[Diagnosis, management tactics and prevention of suppurative inflammatory diseases of the adnexa uteri] Krasnopol'skiĭ VI, et al. **Akush Ginekol (Mosk)** 1990 May; (5):71–6 **(Rus)**

[Value of measuring the fibronectin level in the evaluation of the severity of the septic process in newborn infants] Estrin VV, et al. **Pediatriia** 1990;(3):108–9 **(Rus)**

[Development of an immunoenzyme test-system for diagnosis of specific antibodies of the IgG class to Candida albicans] Ignat'eva SM, et al. **Tr Inst Pastera** 1988;64:174–85 **(Rus)**

[A case of candidal mycotic sepsis] Fomina AA, et al. **Vrach Delo** 1990 Mar;(3):28–30 **(Rus)**

DRUG THERAPY

Treatment of fungal peritonitis in patients undergoing continuous ambulatory peritoneal dialysis [letter; comment] Abraham G, et al. **Am J Med** 1990 Jun;88(6):699–700 Comment on: Am J Med 1989 Jun;86(6 Pt 2):825–7.

Successful medical treatment of Candida parapsilosis endocarditis in a premature infant. Faix RG, et al. **Am J Perinatol** 1990 Jul;7(3):272–5

Candidal endocarditis and treatment with fluconazole and granulocyte-macrophage colony-stimulating factor [letter] Martino P, et al. **Ann Intern Med** 1990 Jun 15;112(12):966–7

Otitic candidiasis in children: an evaluation of the problem and effectiveness of ketoconazole in 10 patients. Cohen SR, et al. **Ann Otol Rhinol Laryngol** 1990 Jun;99(6 Pt 1):427–31

Comparison of in vivo activity of fluconazole with that of amphotericin B against Candida tropicalis, Candida glabrata, and Candida krusei. Fisher MA, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1443–6

Therapeutic evaluation of free and liposome-encapsulated amphotericin B in the treatment of systemic candidiasis in mice. Gondal JA, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1544–8

Evaluation of Bay R 3783 in rodent models of superficial and systemic candidiasis, meningeal cryptococcosis, and pulmonary aspergillosis. Hector RF, et al. **Antimicrob Agents Chemother** 1990 Mar;34(3):448–54

Comparative effects of cilofungin and amphotericin B on experimental murine candidiasis. Morrison CJ, et al. **Antimicrob Agents Chemother** 1990 May;34(5):746–50

Evaluation of cilofungin (LY121019) for treatment of experimental Candida albicans endocarditis in rabbits. Padula A, et al. **Antimicrob Agents Chemother** 1989 Oct; 33(10):1822–3

Treatment of experimental cryptococcal meningitis and disseminated candidiasis with SCH39304. Perfect JR, et

al. **Antimicrob Agents Chemother** 1989 Oct;33(10):1735–40
Treatment of experimental disseminated candidiasis with cilofungin. Perfect JR, et al.
Antimicrob Agents Chemother 1989 Oct;33(10):1811–2
Comparison of the effectiveness of the sodium salt of N-succinylperimycin and nystatin in experimental candidiasis of white mice. Rutecka-Bonin I.
Arch Immunol Ther Exp (Warsz) 1971;19(5):547–53
Gentian violet—is it safe? [editorial] Drinkwater P.
Aust N Z J Obstet Gynaecol 1990 Feb;30(1):65–6
Topical fluconazole for experimental candida keratitis in rabbits. Behrens-Baumann W, et al. **Br J Ophthalmol** 1990 Jan;74(1):40–2
Successful treatment with liposomal amphotericin B in two patients with persisting fungemia. Sculier JP, et al.
Eur J Clin Microbiol Infect Dis 1989 Oct;8(10):903–7
Fluconazole therapy in an underweight infant. Viscoli C, et al. **Eur J Clin Microbiol Infect Dis** 1989 Oct;8(10):925–6
Influence of the immunostimulating substance tiprotimod on Candida albicans infection in relation to activation of macrophages. Dickneite G, et al.
Int J Immunopharmacol 1989;11(8):895–903
Cispentacin, a new antifungal antibiotic. II. In vitro and in vivo antifungal activities. Oki T, et al.
J Antibiot (Tokyo) 1989 Dec;42(12):1756–62
New antifungal antibiotics, pradimicins D and E. Glycine analogs of pradimicins A and C. Sawada Y, et al.
J Antibiot (Tokyo) 1990 Jul;43(7):771–7
Potential use of tuftsin in treatment of candida peritonitis in a murine model. Levy R, et al.
J Biol Regul Homeost Agents 1989 Apr-Jun;3(2):71–8
Successfully treated candida sinusitis in an AIDS patient. Colmenero C, et al. **J Craniomaxillofac Surg** 1990 May; 18(4):175–8
Enhancement of the treatment of experimental candidiasis with vascular decongestants. Luke DR, et al.
J Infect Dis 1990 Jul;162(1):211–4
Effects of preventive, early, and late antifungal chemotherapy with fluconazole in different granulocytopenic models of experimental disseminated candidiasis. Walsh TJ, et al. **J Infect Dis** 1990 Apr; 161(4):755–60
Treatment of a murine model of systemic candidiasis with liposomal amphotericin B bearing antibody to Candida albicans. Hospenthal D, et al. **J Med Microbiol** 1989 Nov; 30(3):193–7
Clinical evaluation of terconazole. European experience. Hirsch HA. **J Reprod Med** 1989 Aug;34(8 Suppl):593–6
Fluconazole-induced jaundice [letter] Franklin IM, et al.
Lancet 1990 Sep 1;336(8714):565
Amphotericin-resistant invasive hepatosplenic candidiasis controlled by fluconazole [letter] Jakab K, et al. **Lancet** 1990 Feb 24;335(8687):473–4
Fluconazole. **Med Lett Drugs Ther** 1990 May 18;32(818):50–2
Ketoconazole resistance in Torulopsis glabrata. Nobre G, et al. **Mycopathologia** 1989 Jul;107(1):51–5
Results of a combination treatment with natamycin and butylscopolamine in cases of intestinal Candida colonization. Gehring W, et al. **Mycoses** 1990 Mar; 33(3):140–5
A new experimental model of localized candidosis for the study of antifungal chemotherapy. Polak A, et al.
Mycoses 1989 Aug;32(8):398–404
Fluconazole found effective against candidiasis [news]
Oncology (Williston Park) 1989 Nov;3(11):112
Endogenous Candida endophthalmitis. Management without intravenous amphotericin B. Brod RD, et al.
Ophthalmology 1990 May;97(5):666–72; disc: 672–4
Amphotericin B as a single agent in the treatment of systemic candidiasis in neonates. Butler KM, et al.
Pediatr Infect Dis J 1990 Jan;9(1):51–6
Susceptibility of Candida albicans and other yeasts to fluconazole: relation between in vitro and in vivo studies. Galgiani JN. **Rev Infect Dis** 1990 Mar-Apr;12 Suppl 3:S272–5 (21 ref.)
Overview of studies of fluconazole in oropharyngeal candidiasis. Hay RJ. **Rev Infect Dis** 1990 Mar-Apr;12 Suppl 3:S334–7 (18 ref.)
Efficacy of fluconazole in prophylaxis and treatment of experimental Candida endocarditis. Longman LP, et al.
Rev Infect Dis 1990 Mar-Apr;12 Suppl 3:S294–8
Fluconazole therapy for experimental cryptococcosis and candidiasis in the rabbit. Perfect JR. **Rev Infect Dis** 1990 Mar-Apr;12 Suppl 3:S299–302 (30 ref.)
Experimental basis for use of fluconazole for preventive or early treatment of disseminated candidiasis in granulocytopenic hosts. Walsh TJ, et al. **Rev Infect Dis** 1990 Mar-Apr;12 Suppl 3:S307–17 (27 ref.)
[Nystatin in the treatment of candidal conjunctivitis] Haicl P. **Cesk Oftalmol** 1990 Feb;46(1):42–6 (Eng. Abstr.) **(Cze)**
[Value of fluconazole in the treatment of systemic yeast infection] Bernard E, et al. **Pathol Biol (Paris)** 1989 Jun; 37(5 Pt 2):690–3 (Eng. Abstr.) **(Fre)**
[Candida albicans cubital tenosynovitis. Apropos of a case with lymphocytic synovial fluid and outpatient treatment using a new antifungal agent, fluconazole (letter)] Bismuth M, et al. **Rev Rhum Mal Osteoartic** 1990 Feb;57(2):163–4 **(Fre)**
[Recent advances in Candida albicans mycoses in children] Cantani A, et al. **Riv Eur Sci Med Farmacol** 1989 Feb; 11(1):17–20 (16 ref.) (Eng. Abstr.) **(Fre)**
[Natamycin (pimaricin) in the treatment of experimental keratomycosis] Behrens-Baumann W, et al.
Fortschr Ophthalmol 1990;87(3):237–40 (Eng. Abstr.) **(Ger)**
[Infections caused by Candida krusei in newborn infants] Handrick W, et al. **Padiatr Padol** 1989;24(4):289–95 (Eng. Abstr.) **(Ger)**
[New, registered specialty drugs in Austria. Diflucan, Fungata] Ganzinger U. **Wien Klin Wochenschr** 1990 Jun 22;102(13):384–91 (51 ref.) **(Ger)**
[Therapy of systemic candidiasis] Cascioli CF, et al.
Minerva Med 1990 Jun;81(6):481–3 (Eng. Abstr.) **(Ita)**
[Treatment of experimental murine candidiasis with liposome-encapsulated amphotericin B] Sasahara T.
Kansenshogaku Zasshi 1989 Dec;63(12):1301–7 (Eng. Abstr.) **(Jpn)**
[The effect of a synthetic thymus peptide (thymogen) on the immune system in candidiasis under immunodepression] Khmel'nitskii OK, et al. **Arkh Patol** 1990;52(1):20–5 (Eng. Abstr.) **(Rus)**
[The use of chlorhexidine bigluconate in the combined treatment of patients with chronic generalized (granulomatous) candidiasis] Sambukova GA, et al.
Vestn Dermatol Venerol 1989;(6):49–51 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Effect of proteolytic activity on virulence of Candida albicans in burned mice [published erratum appears in Infect Immun 1990 Aug;58(8):2725] Neely AN, et al.
Infect Immun 1990 Jun;58(6):1527–31

EPIDEMIOLOGY

Hierarchical pattern of mucosal candida infections in HIV-seropositive women. Imam N, et al. **Am J Med** 1990 Aug;89(2):142–6
Prospective study of Candida endophthalmitis in hospitalized patients with candidemia. Brooks RG. **Arch Intern Med** 1989 Oct;149(10):2226–8
Defining risks for nosocomial candidemia [editorial] Henderson DK. **Arch Intern Med** 1989 Oct;149(10):2172–3
Risk factors for hospital-acquired candidemia. A matched case-control study. Wey SB, et al. **Arch Intern Med** 1989 Oct;149(10):2349–53
The incidence of gram-negative bacterial and fungal infections in liver transplant patients treated with selective decontamination. Wiesner RH. **Infection** 1990;18 Suppl 1:S19–21
Single-source outbreak of Candida tropicalis complicating coronary bypass surgery [see comments] Isenberg HD, et al. **J Clin Microbiol** 1989 Nov;27(11):2426–8 Comment in: J Clin Microbiol 1990 May;28(5):1086–7.
Clinical variation of autoimmune polyendocrinopathy-candidiasis-ectodermal dystrophy (APECED) in a series of 68 patients. Ahonen P, et al. **N Engl J Med** 1990 Jun 28;322(26):1829–36
Application of DNA typing methods to Candida albicans epidemiology and correlations with phenotype. Stevens DA, et al. **Rev Infect Dis** 1990 Mar-Apr;12(2):258–66
[Further studies on the occurrence of mycoses in the bronchial stump and bronchial anastomosis or trachea] Zajączkowska J, et al. **Pneumonol Pol** 1989 Feb; 57(2):104–13 (Eng. Abstr.) **(Pol)**
[Epidemiologic picture of trichomoniasis and candidiasis in the Bytom district] Grygierczyk D, et al.
Wiad Parazytol 1989;35(6):547–53 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Candida albicans endophthalmitis following extra-corporeal shock wave lithotripsy of a kidney stone [letter] Heilesen AM, et al. **Acta Ophthalmol (Copenh)** 1989 Aug;67(4):478
Candidal splenic abscess in a renal transplant patient. Nemec DK, et al. **Am J Kidney Dis** 1989 Nov;14(5):408–11
Risk factors for nosocomial candidemia: a case-control study in adults without leukemia. Bross J, et al. **Am J Med** 1989 Dec;87(6):614–20
Pathogenesis of candidiasis. Immunosuppression by cell wall mannan catabolites. Podzorski RP, et al. **Arch Surg** 1989 Nov;124(11):1290–4
Systemic candidiasis with DIC and candida endophthalmitis in a postoperative neonate. Doi O, et al.
Aust Paediatr J 1989 Dec;25(6):372–5 (22 ref.)
Hepatosplenic candidiasis, a late manifestation of Candida septicaemia in neutropenic patients with haematologic malignancies. von Eiff M, et al. **Blut** 1990 Apr;60(4):242–8
Systemic candidiasis: an unusual complication of eating mutton [clinical conference] Bates J, et al. **BMJ** 1989 Aug 26;299(6698):557–8
Candida right ventricular mural endocarditis complicating indwelling right atrial catheter. Leung WH, et al. **Chest** 1990 Jun;97(6):1492–3
Chronic systemic candidiasis. Bodey GP, et al.
Eur J Clin Microbiol Infect Dis 1989 Oct;8(10):855–7 (18 ref.)
IgG2/IgG4 subclass deficiency in a patient with chronic mucocutaneous candidiasis and bronchiectases. Brägger C, et al. **Eur J Pediatr** 1989 Dec;149(3):168–9
Hepatosplenic candidiasis in acute leukemias. von Eiff M, et al. **Hamatol Bluttransfus** 1990;33:555–7
Nosocomial outbreak of systemic candidosis associated with parenteral nutrition. Moro ML, et al.
Infect Control Hosp Epidemiol 1990 Jan;11(1):27–35
The spermicidal compound nonoxynol-9 increases adhesion of Candida species to human epithelial cells in vitro [published erratum appears in Infect Immun 1990 Aug;58(8):2725] McGroarty JA, et al. **Infect Immun** 1990 Jun;58(6):2005–7
Oral and esophageal Candida albicans infection in hyposalivatory rats. Meitner SW, et al. **Infect Immun** 1990 Jul;58(7):2228–36
Candida norvegensis peritonitis and invasive disease in a patient on continuous ambulatory peritoneal dialysis. Nielsen H, et al. **J Clin Microbiol** 1990 Jul;28(7):1664–5
Candida spondylodiscitis. Chronic illness due to heroin analgesia in an HIV positive person [letter] Boix V, et al.
J Rheumatol 1990 Apr;17(4):563–5
Hepatic candidosis in a patient with acute leukemia. Meunier F, et al. **Mycoses** 1989 Aug;32(8):421–6
The role of Candida infections as an adverse effect upon head and neck cancer patients undergoing therapeutic radiation and the effect of antimycotic treatment. Poland JM. **Mycoses** 1989;32 Suppl 2:39–41 (2 ref.)
Necrotizing candidal fasciitis following hip surgery. Cook DA, et al. **Orthopedics** 1990 Jul;13(7):768–70
Hepatosplenic candidiasis in children with cancer. Three cases in leukemic children and a literature review. Carstensen H, et al. **Pediatr Hematol Oncol** 1990;7(1):3–12 (21 ref.)
Fungal peritonitis complicating peritoneal dialysis: report of 27 cases and review of treatment. Cheng IK, et al.
Q J Med 1989 May;71(265):407–16
Extracorporeal shock wave lithotripsy of a kidney stone complicated with Candida albicans septicaemia and endophthalmitis. Case report. Westh H, et al.
Scand J Urol Nephrol 1990;24(1):81
Systemic Torulopsis glabrata infection in a neonate. Walter EB Jr, et al. **South Med J** 1990 Jul;83(7):837–8 (11 ref.)
Risk factors for deep candida infections in liver transplant recipients. Tollemar J, et al. **Transplant Proc** 1990 Aug; 22(4):1826–7
[Candidiasis of the stomach as a complication of hiatal hernia surgery] Grossmann E, et al. **Ugeskr Laeger** 1990 Feb 12; 152(7):482–3 (Eng. Abstr.) **(Dan)**
[Fatal catheter septicemia with finding of Candida lusitaniae] Kjaeldgaard P, et al. **Ugeskr Laeger** 1990 Feb 26; 152(9):611–2 (Eng. Abstr.) **(Dan)**
[Spondylodiscitis caused by Candida albicans in a former drug addict in the course of acquired immunodeficiency syndrome (AIDS)] Saint-Marc T, et al.
Ann Med Interne (Paris) 1989;140(8):738–40 **(Fre)**
[Esophageal and gastric candidiasis] Figus IA, et al.
Orv Hetil 1990 Feb 11;131(6):279–81 (20 ref.) (Eng. Abstr.) **(Hun)**
[Ano-rectal candidiasis] Corno F, et al. **Minerva Chir** 1989 Nov 15;44(21):2251–3 (Eng. Abstr.) **(Ita)**
[Amiodarone and radiotherapy. Remarks on a case of post-actinic pneumopathy] Beorchia A, et al.
Radiol Med (Torino) 1989 Nov;78(5):519–21 **(Ita)**
[Invasive fungal infections in hematologic malignancies—a retrospective study of 61 autopsied cases] Kuzuyama Y, et al. **Gan No Rinsho** 1990 Jul;36(8):899–902 (Eng. Abstr.) **(Jpn)**
[Induction by corticosteroids of systemic candidiasis in adult mice infected during the neonatal period] Bykov VL.
Biull Eksp Biol Med 1990 May;109(5):452–3 **(Rus)**
[Visceral candidiasis as an AIDS-associated infection] Antonov VB, et al. **Klin Med (Mosk)** 1990 Mar; 68(3):129–31 **(Rus)**
[Fungal infection of the esophagus and stomach after chemical burns] Sinev IuV, et al. **Klin Med (Mosk)** 1990 May;68(5):87–9 (Eng. Abstr.) **(Rus)**
[Secondary candidal infection in patients with chronic dermatoses] Dovzhanskiĭ SI, et al.
Vestn Dermatol Venerol 1989;(11):41–5 (Eng. Abstr.) **(Rus)**
[Systemic candidiasis in children with cancer] Fernández Navarro JM, et al. **An Esp Pediatr** 1989 Nov;31(5):455–60 (Eng. Abstr.) **(Spa)**
[Candida meningitis in a human immunodeficiency virus seropositive woman (letter)] Giménez-Esparza JA, et al.
Med Clin (Barc) 1989 Dec 2;93(18):719 **(Spa)**

IMMUNOLOGY

Growth inhibition of Candida albicans by interleukin-2-induced lymph node cells. Beno DW, et al.
Cell Immunol 1990 Jun;128(1):89–100
Detection of an antibody response in immunocompetent patients with systemic candidiasis or Candida albicans colonisation. Porsius JC, et al.
Eur J Clin Microbiol Infect Dis 1990 May;9(5):352–5
Murine candidiasis: cell-mediated immune responses correlate directly with susceptibility and resistance to infection. Ashman RB. **Immunol Cell Biol** 1990 Feb;68 (Pt 1):15–20
Antigens and immune responses in Candida albicans infection. Ashman RB, et al. **Immunol Cell Biol** 1990 Feb; 68 (Pt 1):1–13 (130 ref.)
Severe duodenal candidiasis in a patient with IgA deficiency and T cell defects. Singh S, et al.
Indian J Gastroenterol 1990 Jan;9(1):95–6
Correlates of cell-mediated immunity in Candida albicans-colonized gnotobiotic mice. Balish E, et al.
Infect Immun 1990 Jan;58(1):107–13

Mucosal and systemic candidiasis in congenitally immunodeficient mice. Cantorna MT, et al. **Infect Immun** 1990 Apr;58(4):1093–100

Role of L3T4+ lymphocytes in protective immunity to systemic Candida albicans infection in mice. Cenci E, et al. **Infect Immun** 1989 Nov;57(11):3581–7

Comparison of immunosuppressive effects of cyclosporine A in a murine model of systemic candidiasis and of localized thrushlike lesions. Krause MW, et al. **Infect Immun** 1989 Nov;57(11):3472–8

Role of granulocytes in increased host resistance to Candida albicans induced by recombinant interleukin–1. Kullberg BJ, et al. **Infect Immun** 1990 Oct;58(10):3319–24

T cell subsets and IFN–gamma production in resistance to systemic candidosis in immunized mice. Cenci E, et al. **J Immunol** 1990 Jun 1;144(11):4333–9

Immunosuppressive effect of cyclosporin A on resistance to systemic infection with Candida albicans. Vecchiarelli A, et al. **J Med Microbiol** 1989 Nov;30(3):183–92

Gastrointestinal and systemic candidosis in immunocompromised mice. Cole GT, et al. **J Med Vet Mycol** 1989;27(6):363–80

Immune response in mice infected with Candida albicans in the mycelial form. Bibas Bonet de Jorrat ME, et al. **Mycopathologia** 1989 May;106(2):81–7

The relative contribution of resident pulmonary alveolar macrophage and inflammatory polymorphonuclear neutrophils in host resistance to pulmonary infection by Candida albicans. Sawyer RT, et al. **Mycopathologia** 1989 Nov;108(2):95–105

Experimental pulmonary candidiasis. Sawyer RT. **Mycopathologia** 1990 Feb;109(2):99–109

'Caveman diet' and Candida worthy of attention [letter; comment] Crook WG. **Nurse Pract** 1989 Dec;14(12):8–9 Comment on: Nurse Pract 1989 Sep;14(9):17–8, 28, 30 passim.

[Specificity of the humoral immune response to Candida albicans in patients with panuveitis] Damms T, et al. **Fortschr Ophthalmol** 1989;86(4):323–6 (Eng. Abstr.) **(Ger)**

[Modifications to the surface of T–lymphocytes in chronic candidiasis of the skin and mucous membranes] Sardyko NV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Jan; (1):63–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Tumor necrosis factor (TNF) is induced in mice by Candida albicans: role of TNF in fibrinogen increase. Riipi L, et al. **Infect Immun** 1990 Sep;58(9):2750–4

MICROBIOLOGY

Candida colonization and systemic infection in neutropenic patients. A retrospective study. Martino P, et al. **Cancer** 1989 Nov 15;64(10):2030–4

Regulation of Candida albicans populations in the gastrointestinal tract: mechanisms and significance in GI and systemic candidiasis. Kennedy MJ. **Curr Top Med Mycol** 1989;3:315–402 (173 ref.)

Typing tools for the investigation of epidemic fungal infection. Howell SA, et al. **Epidemiol Infect** 1990 Aug; 105(1):1–9 (54 ref.)

Effect of Friend leukemia virus infection on susceptibility to Candida albicans. Moors MA, et al. **Infect Immun** 1990 Jun;58(6):1796–801

A model of sustained gastrointestinal colonization by Candida albicans in healthy adult mice. Samonis G, et al. **Infect Immun** 1990 Jun;58(6):1514–7

Typing and nosocomial candidiasis [letter; comment] Maffei C, et al. **J Clin Microbiol** 1990 May;28(5):1086–7 Comment on: J Clin Microbiol 1989 Nov;27(11):2426–8.

Candida albicans in patients with the acquired immunodeficiency syndrome: absence of a novel of hypervirulent strain. Whelan WL, et al. **J Infect Dis** 1990 Aug;162(2):513–8

Experimental pathogenicity and acid proteinase secretion of vaginal isolates of Candida parapsilosis. de Bernardis F, et al. **J Med Vet Mycol** 1990;28(2):125–37

Pathogenicity of 5–fluorocytosine resistant strains of Candida albicans. Fasoli MO, et al. **J Med Vet Mycol** 1990; 28(1):27–34

The improved recovery of Candida albicans from fluid culture media. Reeder JC, et al. **Microbios** 1989; 60(243):71–7

Fungal diarrhoea: association of different fungi and seasonal variation in their incidence. Talwar P, et al. **Mycopathologia** 1990 May;110(2):101–5

International Workshop on Oral and Gastrointestinal Candidosis: From Pathology to Therapy. Introduction. Braun–Falco O. **Mycoses** 1989;32 Suppl 2:6–8

Host–parasite relationships in candidosis. Calderone RA. **Mycoses** 1989;32 Suppl 2:12–7 (23 ref.)

Change of causative organisms under antifungal treatment in immunosuppressed patients with HIV–infections. Just G, et al. **Mycoses** 1989;32 Suppl 2:47–51 (12 ref.)

Candida albicans gastrointestinal colonization and invasion in the mouse: effect of antibacterial dosing, antifungal therapy and immunosuppression. Kinsman OS, et al. **Mycoses** 1989 Dec;32(12):664–74

Gastrointestinal colonization with yeast species and Candida septicemia in very low birth weight infants. Pappu–Katikaneni LD, et al. **Mycoses** 1990 Jan;33(1):20–3

[The importance of adhesion capacity in Candida to pathogenicity in mucosal and skin candidiasis] Tomšíková A, et al. **Cesk Epidemiol Mikrobiol Imunol** 1990 Jun; 39(3):182–90 (Eng. Abstr.) **(Cze)**

[Drug sensitivity of Candida in patients with kidney diseases receiving immunosuppressive therapy] Kudriavskaia VM, et al. **Antibiot Khimioter** 1989 Oct;34(10):769–73 (Eng. Abstr.) **(Rus)**

[Microflora of suppurative inflammatory foci in surgical patients and its sensitivity to antibiotics] Veselov AIa. **Antibiot Khimioter** 1990 Jan;35(1):40–3 (Eng. Abstr.) **(Rus)**

[Severe infection caused by Candida parapsilosis in an infant] Bosch Mestres J, et al. **An Esp Pediatr** 1990 Jan;32(1):70–2 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Ultrastructure and possible processes involved in the invasion of host epithelial cells by Candida albicans in vaginal candidosis. Rajasingham KC, et al. **Cytobios** 1989; 60(240):11–20

An animal model for oropharyngeal, esophageal and gastric candidosis. Cole GT, et al. **Mycoses** 1990 Jan;33(1):7–19

Infantile endogenous Candida endophthalmitis presenting as a cataract. Clinch TE, et al. **Surv Ophthalmol** 1989 Sep–Oct;34(2):107–12 (31 ref.)

Detection by light microscopy of Candida in thin sections of bladder stone. Takeuchi H, et al. **Urology** 1989 Dec; 34(6):385–7

An autopsy case of disseminated trichosporonosis with candidiasis of the urinary bladder. Kimura M, et al. **Virchows Arch [A]** 1989;416(2):159–62

PHYSIOPATHOLOGY

Use of DBA/2N mice in models of systemic candidiasis and pulmonary and systemic aspergillosis. Hector RF, et al. **Infect Immun** 1990 May;58(5):1476–8

Pathophysiology of vulvovaginal candidiasis. Sobel JD. **J Reprod Med** 1989 Aug;34(8 Suppl):572–9; discussion 579–80 (66 ref.)

[Functional characteristics of the endocrine and immune systems in patients with visceral candidiasis] Sokolova GA, et al. **Ter Arkh** 1989;61(11):81–5 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Protective immunity induced by low–virulence Candida albicans: cytokine production in the development of the anti–infectious state. Vecchiarelli A, et al. **Cell Immunol** 1989 Dec;124(2):334–44

Prevention of yeast translocation across the gut by a single enteral feeding after burn injury. Inoue S, et al. **JPEN J Parenter Enteral Nutr** 1989 Nov–Dec;13(6):565–71

Effect of N–acetylchitohexaose against Candida albicans infection of tumor–bearing mice. Kobayashi M, et al. **Microbiol Immunol** 1990;34(5):413–26

Oral and gastrointestinal candidosis: prophylaxis during immunosuppressive therapy. Prentice AG. **Mycoses** 1989; 32 Suppl 2:42–6 (30 ref.)

[Prevention of candidiasis in at–risk patients] Hain K. **Wien Med Wochenschr** 1989 Aug 31;139(15–16):381–3 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Candida myositis manifesting as a discrete neck mass. Fornadley JA, et al. **Otolaryngol Head Neck Surg** 1990 Jan;102(1):74–6

RADIONUCLIDE IMAGING

Occult Candida thyroid abscess diagnosed by gallium–67 scanning. Bach MC, et al. **Clin Nucl Med** 1990 Jun; 15(6):395–6

In–111 labeled leukocyte scintigraphy in a case of multifocal candidiasis. Palestro CJ, et al. **Clin Nucl Med** 1990 Jun; 15(6):392–4

Gallium–67 imaging in candidal esophagitis. Rundback JH, et al. **Clin Nucl Med** 1990 Jan;15(1):38–9

Thallium–201 accumulation in cerebral candidiasis: unexpected finding on SPECT. Tonami N, et al. **Clin Nucl Med** 1990 Jun;15(6):397–400

SURGERY

Candida endocarditis with saddle embolism: a successful surgical intervention. Kawamoto T, et al. **Ann Thorac Surg** 1989 Nov;48(5):723–4

Tricuspid valve Candida endocarditis cured by valve–sparing debridement. Tanaka M, et al. **Ann Thorac Surg** 1989 Dec; 48(6):857–8

Vitrectomy for epiretinal membrane with Candida chorioretinitis. McDonald HR, et al. **Ophthalmology** 1990 Apr;97(4):466–9

THERAPY

Intracardiac candidiasis in an infant. Yau KI. **Acta Paediatr Sin** 1988 Jan–Feb;29(1):49–59 (41 ref.)

A fungi snack? [letter] Hastings EN. **Am J Nurs** 1990 Aug; 90(8):20

Candidemia in children with central venous catheters: role of catheter removal and amphotericin B therapy. Dato VM, et al. **Pediatr Infect Dis J** 1990 May;9(5):309–14

[Effect of pepstatin A on Candida albicans infection in the mouse] Zotter C, et al. **Dermatol Monatsschr** 1990; 176(2–3):189–98 (Eng. Abstr.) **(Ger)**

[A successful treatment of chronic mucocutaneous candidiasis by interleukin–2] Kondo M, et al. **Nippon Naika Gakkai Zasshi** 1989 Nov;78(11):1609–10 **(Jpn)**

[Heparin in the treatment of suppurative meningitis in newborn infants] Shilenok IG, et al. **Pediatriia** 1990; (1):69–72 **(Rus)**

[Renal candidiasis: percutaneous endoscopic treatment of the pyeloureteral fungus–ball] Navarro Sebastián J, et al. **Arch Esp Urol** 1990 Jun;43(5):543–9 (Eng. Abstr.) **(Spa)**

TRANSMISSION

Candidiasis in the breastfeeding mother and infant. Johnstone HA, et al. **J Obstet Gynecol Neonatal Nurs** 1990 Mar–Apr; 19(2):171–3

URINE

Ureteral blockage by Candida in a patient with urinary derivation type Camey. Aguilera RG, et al. **Int Urol Nephrol** 1989;21(6):591–6

VETERINARY

Preulcerative changes to the pars oesophagea associated with Torulopsis glabrata infection in a weaned pig. McGillivery DJ. **Aust Vet J** 1989 Oct;66(10):337–8

Hematologic effects of exposure to three infective agents in rabbits. Toth LA, et al. **J Am Vet Med Assoc** 1989 Oct 1;195(7):981–6

Evaluation of a murine model of hepatic candidiasis. Cole GT, et al. **J Clin Microbiol** 1990 Aug;28(8):1828–41

A retrospective study of disease and mortality in zebra finches. Prattis SM, et al. **Lab Anim Sci** 1990 Jul;40(4):402–5

A role of secreted proteinase of Candida albicans for the invasion of chick chorio–allantoic membrane. Kobayashi I, et al. **Microbiol Immunol** 1989;33(9):709–19

Otitis externa in a foxhound pack associated with Candida albicans. McKellar QA, et al. **Vet Rec** 1990 Jul 7; 127(1):15–6

CANDIDIASIS, CHRONIC MUCOCUTANEOUS see under **CANDIDIASIS**

CANDIDIASIS, CUTANEOUS

COMPLICATIONS

Cutaneous ulcers due to Candida albicans in an immunocompromised patient—response to therapy with itraconazole. Galimberti RL, et al. **Clin Exp Dermatol** 1989 Jul;14(4):295–7

Cutaneous candidosis in a non drug addict cancer patient [letter] Lopez–Gomez S, et al. **Clin Exp Dermatol** 1989 Jan;14(1):93–4

DIAGNOSIS

Atypical auricular pyoderma gangrenosum simulating fungal infection. Lysy J, et al. **J Clin Gastroenterol** 1989 Oct; 11(5):561–4

Cutaneous candidiasis. A practical guide for primary care physicians. Pariser DM. **Postgrad Med** 1990 May 1; 87(6):101–3, 106–8

DRUG THERAPY

Comparative study of miconazole and clotrimazole in superficial mycosis. Saha KC. **Indian J Dermatol** 1989 Sep; 34(3):69–72

Treatment of cutaneous candidosis in guinea pigs: effect of zinc oxide on the antifungal efficacy of nystatin. Auger P, et al. **Mycoses** 1989 Sep;32(9):455–60

ETIOLOGY

'Oral medicine in practice: angular cheilitis' [letter; comment] Fieldhouse J. **Br Dent J** 1989 Sep 23;167(6):186 Comment on: Br Dent J 1989 Jul 8;167(1):15–8.

Candida cellulitis: a complication of percutaneous endoscopic gastrostomy. Patel AS, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):571–2

Primary cutaneous infections with candida species associated with percutaneous intravenous catheters in patients with cancer. Spiers AS. **J Fla Med Assoc** 1989 Apr;76(4):386–7

Autoinoculated palmar pustules in neonatal candidiasis. Resnick SD, et al. **Pediatr Dermatol** 1989 Sep;6(3):206–9

NURSING

Clues: itching and burning in skin folds. Cuzzell JZ. **Am J Nurs** 1990 Jan;90(1):23–4

PATHOLOGY

[Candidal granuloma of the scalp in a child] Stepanova ZhV, et al. **Vestn Dermatol Venerol** 1989;(7):66–7 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

[New possibilities of prevention of occupational Candida albicans infection] Maleszka R, et al. **Przegl Dermatol** 1988

Nov-Dec;75(6):425-30 (Eng. Abstr.) (Pol)

SURGERY

[Experience with the treatment of suppurative wounds using silver nitrate stabilized in dimexide] Pul'niashenko PR, et al. **Klin Khir** 1990;(1):35-6 (Eng. Abstr.) (Rus)

CANDIDIASIS, ORAL

Special issue on oral yeast infections. Proceedings of a joint meeting of the British Society for Mycopathology, the Danish Society for Mycopathology and the Swedish Society for Clinical Mycopathology. Gothenburg, September 1989. **Acta Odontol Scand** 1990 Feb;48(1):1-88

Etiology, pathogenesis, therapy, and prophylaxis of oral yeast infections. Budtz-Jörgensen E. **Acta Odontol Scand** 1990 Feb;48(1):61-9 (66 ref.)

International Workshop on Oral and Gastrointestinal Candidosis: From Pathology to Therapy. Munich, May 27, 1989. Proceedings. **Mycoses** 1989;32 Suppl 2:6-64

CLASSIFICATION

Classification and clinical manifestations of oral yeast infections. Holmstrup P, et al. **Acta Odontol Scand** 1990 Feb;48(1):57-9 (18 ref.)

COMPLICATIONS

The role of yeasts in oral cancer by means of endogenous nitrosation. Krogh P. **Acta Odontol Scand** 1990 Feb; 48(1):85-8 (19 ref.)

Refractory esophageal candidiasis in acquired immune deficiency syndrome (AIDS). Bluhm CS, et al. **Am J Gastroenterol** 1990 Apr;85(4):479-80

'Oral medicine in practice: angular cheilitis' [letter; comment] Fieldhouse J. **Br Dent J** 1989 Sep 23;167(6):186 Comment on: Br Dent J 1989 Jul 8;167(1):15-8.

Does Candida have a role in oral epithelial neoplasia? Field EA, et al. **J Med Vet Mycol** 1989;27(5):277-94 (99 ref.)

Clinical spectrum of oral candidosis and its role in HIV-infected patients. Korting HC. **Mycoses** 1989;32 Suppl 2:23-9 (28 ref.)

Autoinoculated palmar pustules in neonatal candidiasis. Resnick SD, et al. **Pediatr Dermatol** 1989 Sep;6(3):206-9

DIAGNOSIS

Histopathology, immunology, and serology of oral yeast infections. Diagnosis of oral candidosis. Budtz-Jörgensen E. **Acta Odontol Scand** 1990 Feb;48(1):37-43 (29 ref.)

[Candidiasis and leukoplakia of the oral cavity in the patient wearing complete dentures] Stancari F, et al. **Minerva Stomatol** 1989 Oct;38(10):1137-42 (34 ref.) (Eng. Abstr.) (Ita)

[Diagnostic and prognostic significance of various changes in the skin and mucous membranes in HIV infection] Mazurkiewicz W, et al. **Przegl Dermatol** 1989 Jul-Aug; 76(4):292-6 (17 ref.) (Eng. Abstr.) (Pol)

DRUG THERAPY

AIDS file. New oral antifungal may replace i.v. treatment [news] Freeman EM. **Am J Nurs** 1990 May;90(5):25

Fluconazole in the treatment of refractory oral candidiasis and tinea pedis in an elderly patient [letter] Hansen E. **Br J Dermatol** 1990 Jun;122(6):839

High dose oral fluconazole for oropharyngeal candidosis in AIDS [letter] Ansari AM, et al. **J Antimicrob Chemother** 1990 Apr;25(4):720-1

Once-weekly fluconazole to prevent recurrence of oropharyngeal candidiasis in patients with AIDS and AIDS-related complex: a double-blind placebo-controlled study. Leen CL, et al. **J Infect** 1990 Jul;21(1):55-60

Pharmacokinetics of topical and oral antifungals. Schäfer-Korting M. **Mycoses** 1989;32 Suppl 2:34-8 (23 ref.)

Fluconazole found effective against candidiasis [news] **Oncology (Williston Park)** 1989 Nov;3(11):112

Antifungal therapy in oropharyngeal mycotic infections. Epstein JB. **Oral Surg Oral Med Oral Pathol** 1990 Jan; 69(1):32-41 (87 ref.)

The management of candida infections. Scott E. **Practitioner** 1990 Mar 8;234(1484):232, 234, 236

Overview of studies of fluconazole in oropharyngeal candidiasis. Hay RJ. **Rev Infect Dis** 1990 Mar-Apr;12 Suppl 3:S334-7 (18 ref.)

Therapy for oropharyngeal candidiasis in the immunocompromised host: a randomized double-blind study of fluconazole vs. ketoconazole. Meunier F, et al. **Rev Infect Dis** 1990 Mar-Apr;12 Suppl 3:S364-8

Fluconazole for ketoconazole-resistant oropharyngeal candidiasis in HIV-1 infected patients. Thorsen S, et al. **Scand J Infect Dis** 1990;22(3):375-6

[Does sodium hydroxide soda help in oral candidiasis?] Dahm C. **Wien Med Wochenschr** 1989 Aug 31;139(15-16):360 (Eng. Abstr.) (Ger)

[Incidence of oro-gastrointestinal mycoses--results of an Ampho-Moronal study] Kohler M. **Wien Med Wochenschr** 1989 Aug 31;139(15-16):375-6 (Eng. Abstr.) (Ger)

[Pimafucin in the treatment of mycoses of the oral cavity in children with chronic blood diseases] Rokicka-Milewska R, et al. **Pediatr Pol** 1989 Apr;64(4):223-8 (Eng. Abstr.) (Pol)

EPIDEMIOLOGY

Incidence of oral candidosis. Meinhof W, et al. **Mycoses** 1989; 32 Suppl 2:9-11

Prevalence of oral lesions among HIV-infected intravenous drug abusers and other risk groups. Barone R, et al. **Oral Surg Oral Med Oral Pathol** 1990 Feb;69(2):169-73

[Oral candidiasis: epidemiology, diagnosis and treatment] Samson J. **Schweiz Monatsschr Zahnmed** 1990; 100(5):548-59 (84 ref.) (Eng. Abstr.) (Fre)

ETIOLOGY

Factors predisposing to oral yeast infections. Oksala E. **Acta Odontol Scand** 1990 Feb;48(1):71-4 (27 ref.)

Herpes simplex virus, Candida albicans and mouth ulcers in neutropenic patients with non-haematological malignancy. Beattie G, et al. **Cancer Chemother Pharmacol** 1989; 25(1):75-6

Candida esophagitis after antibiotic use. Thapa BR, et al. **Indian J Pediatr** 1989 Mar-Apr;56(2):296-9

An update on the human immunodeficiency virus and infection control. Hardie J. **J Can Dent Assoc** 1990 May; 56(5):423-6

Oral candidiasis and human immunodeficiency virus infection. Samaranayake LP, et al. **J Oral Pathol Med** 1989 Dec;18(10):554-64 (99 ref.)

Oral candidosis in HIV infection. **Lancet** 1989 Dec 23-30; 2(8678-8679):1491-2 (21 ref.)

Oral candidiasis and hairy leukoplakia correlate with HIV infection in Tanzania. Schiødt M, et al. **Oral Surg Oral Med Oral Pathol** 1990 May;69(5):591-6

Acute oral candidiasis during febrile episodes in immunocompromised patients with haematologic malignancies. Bergmann OJ, et al. **Scand J Infect Dis** 1990; 22(3):353-8

[Oral symptoms of denture wearers and the monomer content of the base plate] Szabó G, et al. **Fogorv Sz** 1990 Jul; 83(7):205-9 (21 ref.) (Eng. Abstr.) (Hun)

IMMUNOLOGY

Oral yeast infections in immunocompromised and seriously diseased patients. Heimdahl A, et al. **Acta Odontol Scand** 1990 Feb;48(1):77-84 (41 ref.)

Alteration of humoral responses to Candida in HIV infection. Wray D, et al. **Br Dent J** 1990 Apr 21;168(8):326-9

Comparison of immunosuppressive effects of cyclosporine A in a murine model of systemic candidiasis and of localized thrushlike lesions. Krause MW, et al. **Infect Immun** 1989 Nov;57(11):3472-8

Elevated antibody levels to mycobacterial 65-kDa stress protein in patients with superficial candidiasis. Ivanyi L, et al. **J Infect Dis** 1990 Aug;162(2):519-22

Oral candidosis and its role in immunocompromised patients. Lode H, et al. **Mycoses** 1989;32 Suppl 2:30-3 (17 ref.)

Host defense and oral candidiasis. Pollock JJ, et al. **N Y State Dent J** 1990 May;56(5):36-8 (7 ref.)

METABOLISM

Rapid mucosal absorption of topical lidocaine during bronchoscopy in the presence of oral candidiasis. Ameer B, et al. **Chest** 1989 Dec;96(6):1438-9

[The proteins of human mixed saliva in galvanism and yeast-induced stomatitis] Freidlin LI, et al. **Stomatologiia (Mosk)** 1989 Nov-Dec;68(6):54-5 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Oral mycology. Stenderup A. **Acta Odontol Scand** 1990 Feb; 48(1):3-10 (57 ref.)

International Workshop on Oral and Gastrointestinal Candidosis: From Pathology to Therapy. Introduction. Braun-Falco O. **Mycoses** 1989;32 Suppl 2:6-8

[The significance of yeastlike fungi of the genus Candida in the clinical picture of candidiasis of the oral mucosa] Volosevich LI, et al. **Vrach Delo** 1989 Oct;(10):114-6 (Eng. Abstr.) (Rus)

PATHOLOGY

Clinical, histologic and scanning electron microscopic study of the development of chronic candidiasis of the rat tongue. Allen CM, et al. **J Oral Pathol Med** 1989 Jul;18(6):352-9

Experimental oral candidosis in the mouse: microbiologic and histologic aspects. Lacasse M, et al. **J Oral Pathol Med** 1990 Mar;19(3):136-41

[Experimental candidiasis of the mouth mucosa under conditions of the inhibition of leukopoiesis] Chumakov AA, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):112-4 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

More on 'head and neck radiation therapy' [letter; comment] Epstein JB, et al. **Can Dent Assoc J** 1989 Dec;55(12):960 Comment on: Can Dent Assoc J 1989 Mar;55(3):193-8.

Oral and gastrointestinal candidosis: prophylaxis during immunosuppressive therapy. Prentice AG. **Mycoses** 1989; 32 Suppl 2:42-6 (30 ref.)

Prophylaxis of oropharyngeal candidiasis with fluconazole. Samonis G, et al. **Rev Infect Dis** 1990 Mar-Apr;12 Suppl 3:S369-73

Prophylaxis of candidiasis in cancer patients. Bodey GP, et al. **Semin Oncol** 1990 Jun;17(3 Suppl 6):24-8

CANDIDIASIS, VULVOVAGINAL

[Vulvo-vaginal mycoses] Leng JJ. **Rev Fr Gynecol Obstet** 1989 Mar 25;84(3 Pt 2):263-4; discussion 265-7 (Eng. Abstr.) (Fre)

[Vulvovaginal candidiasis (editorial)] Laílla Vicens JM. **Med Clin (Barc)** 1990 Mar 10;94(9):337-8 (Spa)

BLOOD

Iron deficiency and candida infection [letter] Tattersall P. **Practitioner** 1990 Apr 8;234(1486):326

COMPLICATIONS

Vulvovaginal candidiasis complicating recurrent bacterial vaginosis. Redondo-Lopez V, et al. **Sex Transm Dis** 1990 Jan-Mar;17(1):51-3

DIAGNOSIS

A new slide latex agglutination test for the diagnosis of acute Candida vaginitis. Sobel JD, et al. **Am J Clin Pathol** 1990 Sep;94(3):323-5

The limited value of symptoms and signs in the diagnosis of vaginal infections. Schaaf VM, et al. **Arch Intern Med** 1990 Sep;150(9):1929-33

Vaginitis/vaginosis. Spiegel CA. **Clin Lab Med** 1989 Sep; 9(3):525-33 (27 ref.)

[Mycologic seminars for gynecologists] Begemann H. **Wien Med Wochenschr** 1989 Aug 31;139(15-16):361-3 (9 ref.) (Eng. Abstr.) (Ger)

[Diagnostic and clinical characteristics of mycotic vaginitis caused by Candida glabrata (Torulopsis glabrata)] Pawlik B, et al. **Med Dosw Mikrobiol** 1989;41(3-4):206-14 (Eng. Abstr.) (Pol)

[Evaluation of an agglutination method of latex particles sensitized for the detection of vaginal candidiasis] Cabronero MC, et al. **Med Clin (Barc)** 1990 Mar 10; 94(9):329-32 (Eng. Abstr.) (Spa)

DRUG THERAPY

An open study to assess the acceptability and effectiveness of miconazole 1,200 mg single ovule in the treatment of acute vaginal candidosis. Dinsmore WW, et al. **Br J Clin Pract** 1989 Jul;43(7):238-41

Terconazole--a new antifungal agent for vulvovaginal candidiasis. Weisberg M. **Clin Ther** 1989 Sep-Oct; 11(5):659-68 (20 ref.)

Single dose therapy of vaginal candidiasis: a comparative trial of fenticonazole vaginal ovules versus clotrimazole vaginal tablets. Lawrence AG, et al. **Curr Med Res Opin** 1990;12(2):114-20

Comparative clinical trial of fenticonazole ovule (600 mg) versus clotrimazole vaginal tablet (500 mg) in the treatment of symptomatic vaginal candidiasis. Studd JW, et al. **Curr Med Res Opin** 1989;11(8):477-84

Chronic recurrent vaginal candidosis: easy to treat, difficult to cure. Results of intermittent treatment with a new oral antifungant. van Heusden AM, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Apr;35(1):75-83

Oral versus local treatment of vaginal candidosis. Salem HT, et al. **Int J Gynaecol Obstet** 1989 Sep;30(1):57-62

Single-dose 500-mg clotrimazole vaginal tablets compared with placebo in the treatment of Candida vaginitis. Bro F. **J Fam Pract** 1990 Aug;31(2):148-52

Comparison of single administration with an ovule of 600 mg fenticonazole versus a 500 mg clotrimazole vaginal pessary in the treatment of vaginal candidiasis. Wiest W, et al. **J Int Med Res** 1989 Jul-Aug;17(4):369-72

Comparison of 0.8% and 1.6% terconazole cream in severe vulvovaginal candidiasis. Schmitt C, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 1):414-6

The management of candida infections. Scott E. **Practitioner** 1990 Mar 8;234(1484):232, 234, 236

Preferences in the treatment of vaginal candidosis. Tooley P. **Practitioner** 1989 May 8;233(1468):668-9

[Value of benzydamine, the first anti-inflammatory vaginal solution] Lévy G. **Rev Fr Gynecol Obstet** 1989 Nov; 84(11):779-81 (Eng. Abstr.) (Fre)

[General and advanced aspects of treatment of vulvovaginal mycosis] Ginter G, et al. **Wien Med Wochenschr** 1989 Aug 31;139(15-16):345-9 (8 ref.) (Eng. Abstr.) (Ger)

[Comparison of fluconazole and ketoconazole in the therapy of vaginal candidiasis by administration in two different oral doses] Bottino G, et al. **Minerva Ginecol** 1990 May; 42(5):197-9 (Eng. Abstr.) (Ita)

[Controlled clinical study of cyclopyroxolamine in vaginal candidiasis] Jasonni VM, et al. **Minerva Ginecol** 1989 Aug; 41(8):417-9 (Eng. Abstr.) (Ita)

[A clinical study of cyclopyroxolamine versus clotrimazole in the treatment of mycotic vulvovaginitis] Giannoni M, et al. **Minerva Med** 1990 Jul-Aug;81(7-8):555-9 (Eng. Abstr.) (Ita)

ENZYMOLOGY

Evidence for a role for secreted aspartate proteinase of Candida albicans in vulvovaginal candidiasis. De Bernardis F, et al. **J Infect Dis** 1990 Jun;161(6):1276-83

EPIDEMIOLOGY

The epidemiology of vulvovaginal candidiasis: risk factors. Foxman B. **Am J Public Health** 1990 Mar;80(3):329–31
Prevalence of common infective agents of vaginitis. Ray A, et al. **J Commun Dis** 1989 Sep;21(3):241–4
Incidence and distribution of vaginal yeasts in Malaysian women. Ngeow YF, et al. **Mycoses** 1989 Nov;32(11):563–7
[Urogenital trichomoniasis and vaginal mycosis in female offenders—a repeat study 20 years later] Klobušický M, et al. **Bratisl Lek Listy** 1989 Sep;90(9):700–4 (Eng. Abstr.) **(Slo)**

ETIOLOGY

Pathogenesis of Candida vulvovaginitis. Sobel JD. **Curr Top Med Mycol** 1989;3:86–108 (103 ref.)
A 'new' candidal vaginitis risk factor? [letter] Lumsden L, et al. **J Fam Pract** 1990 Jul;31(1):16–7
The association between dietary intake and reported history of Candida vulvovaginitis. Reed BD, et al. **J Fam Pract** 1989 Nov;29(5):509–15
[The problems of vaginal candidiasis. I. The sources and predisposing factors of the infection] Zlatkov V, et al. **Akush Ginekol (Sofiia)** 1989;28(6):67–70 (25 ref.) **(Bul)**
[The morphogenesis of candidiasis of the mucous membranes after the administration of immunodepressants] Bykov VL, et al. **Arkh Patol** 1990;52(1):28–31 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Elevated antibody levels to mycobacterial 65-kDa stress protein in patients with superficial candidiasis. Ivanyi L, et al. **J Infect Dis** 1990 Aug;162(2):519–22
Immunological findings in patients with chronically recurrent vaginal candidosis and new therapeutic approaches. Mendling W, et al. **Mycoses** 1989 Aug;32(8):386–90

METABOLISM

Fluconazole levels in plasma and vaginal secretions of patients after a 150-milligram single oral dose and rate of eradication of infection in vaginal candidiasis. Houang ET, et al. **Antimicrob Agents Chemother** 1990 May;34(5):909–10

MICROBIOLOGY

Experimental rat vaginal infection with Candida parapsilosis. De Bernardis F, et al. **FEMS Microbiol Lett** 1989 Nov; 53(1–2):137–41
Isolation, acid proteinase secretion, and experimental pathogenicity of Candida parapsilosis from outpatients with vaginitis. De Bernardis F, et al. **J Clin Microbiol** 1989 Nov; 27(11):2598–603
Is Candida stellatoidea disappearing from the vaginal mucosa? Kwon-Chung KJ, et al. **J Clin Microbiol** 1990 Mar;28(3):600–1
Experimental pathogenicity and acid proteinase secretion of vaginal isolates of Candida parapsilosis. de Bernardis F, et al. **J Med Vet Mycol** 1990;28(2):125–37
Interest of biotyping Candida albicans in chronic vulvovaginitis. Poirier S, et al. **Mycoses** 1990 Jan;33(1):24–8
[Retrospective study of mycotic and other colpitis pathogens] Pupp C, et al. **Wien Med Wochenschr** 1989 Aug 31; 139(15–16):366–8 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Scanning electron microscopic pattern of recurrent vaginitis by Candida albicans in the mouse. Gargani G, et al. **Mycoses** 1989 Dec;32(12):644–51

PHYSIOPATHOLOGY

[Functional status of the endocrine and immune systems in women with chronic candidiasis of external genital organs] Sokolova GA, et al. **Akush Ginekol (Mosk)** 1989 Jul; (7):52–4 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

A follow-up study of methods of contraception, sexual activity, and rates of trichomoniasis, candidiasis, and bacterial vaginosis. Barbone F, et al. **Am J Obstet Gynecol** 1990 Aug;163(2):510–4
Phase II study of D.651, an oral vaccine designed to prevent recurrences of vulvovaginal candidiasis. Levy DA, et al. **Vaccine** 1989 Aug;7(4):337–40
[Use of immunomycologic indicators in solving the problems of health protection of pregnant workers in the microbial synthesis industry] Litovskaia AV, et al. **Gig Tr Prof Zabol** 1989;(7):31–3 (Eng. Abstr.) **(Rus)**

THERAPY

Recurrent allergic vulvovaginitis: treatment with Candida albicans allergen immunotherapy. Rigg D, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):332–6
Management of vaginal candidosis: a survey in general practice. Tooley P. **Practitioner** 1990 May 22; 234(1489):519–20, 522

CANDY

Plaque fluid pH, calcium and phosphorus responses to calcium food additives in a chewable candy. Rankine CA, et al. **Arch Oral Biol** 1989;34(10):821–4
Oral electrochemical action after soft drink rinsing and consumption of sweets. Vassilakos N, et al. **Scand J Dent Res** 1990 Aug;98(4):336–40
[Physiological and hygienic studies of the thermal status of workers engaged in the manufacture of chocolate and other confectionary products] Vodichenska Ts, et al. **Probl Khig** 1989;14:25–37 (Eng. Abstr.) **(Bul)**

CANES see under **ORTHOPEDIC EQUIPMENT**

CANINE TOOTH see **CUSPID**

CANINE TRACHEOBRONCHITIS VIRUS see under **HERPESVIRIDAE**

CANKER SORE see **STOMATITIS, APHTHOUS**

CANNABIDIOL see under **CANNABINOIDS**

CANNABINOIDS

Study of the topography of cannabinoids in model membranes using X-ray diffraction. Mavromoustakos T, et al. **Biochim Biophys Acta** 1990 May 24;1024(2):336–44
Investigation of interference by nonsteroidal anti-inflammatory drugs in urine tests for abused drugs. Rollins DE, et al. **Clin Chem** 1990 Apr;36(4):602–6
Identification of metabolites of CP-55,940 formed in-vitro by mouse livers. Thomas BF, et al. **NIDA Res Monogr** 1989;95:287–8

ANALYSIS

The amount of main cannabinoid substances in hemp, cultivated for industrial fibre production and their changes in the course of one vegetation period. Hanuš L, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;122:11–23
Evaluation of InstaScreen Cannabinoid Drug Screen Test [letter] Schwartz RH, et al. **Arch Pathol Lab Med** 1989 Nov;113(11):1204
More on the false negative rate for EMIT cannabinoids [letter] Lehrer M, et al. **J Anal Toxicol** 1990 Jan–Feb; 14(1):62
Stability of cannabinoids in dried samples of cannabis dating from around 1896–1905. Harvey DJ. **J Ethnopharmacol** 1990 Feb;28(1):117–28

BLOOD

Gas chromatographic–mass spectrometric confirmation of radioimmunoassay results for cannabinoids in blood and urine. Clatworthy AJ, et al. **Forensic Sci Int** 1990 Jul; 46(3):219–30
Screening for drugs in forensic blood samples using EMIT urine assays. Gjerde H, et al. **Forensic Sci Int** 1990 Feb; 44(2–3):179–85
Direct automated EMIT d.a.u. analysis of N,N-dimethylformamide-modified serum, plasma, and postmortem blood for benzodiazepines, benzoylecgonine, cannabinoids, and opiates. Blum LM, et al. **J Anal Toxicol** 1989 Sep–Oct;13(5):285–8

CHEMICAL SYNTHESIS

Cannabimimetic activity of novel enantiomeric, benzofuran cannabinoids. Mechoulam R, et al. **J Med Chem** 1990 Mar; 33(3):1037–43
Structural studies leading to the discovery of a cannabinoid binding site. Johnson M, et al. **NIDA Res Monogr** 1988; 90:129–35 (21 ref.)

METABOLISM

Oxidative cleavage of the pentyl side-chain of cannabinoids. Identification of new biotransformation pathways in the metabolism of 4'-hydroxy-delta-9-tetrahydrocannabinol in the mouse. Harvey DJ. **Drug Metab Dispos** 1990 May–Jun; 18(3):350–5
Microsomal metabolism of the 1",1"-dimethylheptyl analogue of cannabidiol: relative percentage of monohydroxy metabolites in four species. Samara E, et al. **Drug Metab Dispos** 1990 Jul–Aug;18(4):548–9
Mechanism of biological formation of cannabielsoin from cannabidiol in the guinea-pig, mouse, rat and rabbit. Yamamoto I, et al. **J Pharmacobiodyn** 1989 Aug; 12(8):488–94
Structure of a cannabinoid receptor and functional expression of the cloned cDNA [see comments] Matsuda LA, et al. **Nature** 1990 Aug 9;346(6284):561–4 Comment in: Nature 1990 Aug 9;36(6248):508].
Pharmacology: planning for serendipity [news; comment] Snyder SH. **Nature** 1990 Aug 9;346(6284):508 Comment on: Nature 1990 Aug 9;346(6284):561–4].
Metabolites of cannabidiol identified in human urine. Harvey DJ, et al. **Xenobiotica** 1990 Mar;20(3):303–20
Further studies on the oxidative cleavage of the pentyl side-chain of cannabinoids: identification of new biotransformation pathways in the metabolism of 3'-hydroxy-delta-9-tetrahydrocannabinol by the mouse. Harvey DJ. **Xenobiotica** 1989 Dec;19(12):1437–47
Identification of metabolites of the 1",1"-dimethylheptyl analogue of cannabidiol in rat and dog in vivo. Samara E, et al. **Xenobiotica** 1990 May;20(5):447–55

PHARMACOKINETICS

[Comparison of various immunologic methods with a GC-MS analysis in cannabinoid detection in urine] Käferstein H, et al. **Beitr Gerichtl Med** 1989;47:115–22 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Regulation of adenylate cyclase by cannabinoid drugs. Insights based on thermodynamic studies. Howlett AC, et al. **Biochem Pharmacol** 1989 Oct 1;38(19):3297–304
Psychopharmacological effects of cannabis. Johnson BA. **Br J Hosp Med** 1990 Feb;43(2):114–6, 118–20, 122 (93 ref.)
Changes in brain dopaminergic indices induced by perinatal exposure to cannabinoids in rats. Rodriguez de Fonseca F, et al. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):237–40
Inhibition of hepatic microsomal cytochrome P450 by cannabidiol in adult male rats. Narimatsu S, et al. **Chem Pharm Bull (Tokyo)** 1990 May;38(5):1365–8
Inhibition of cisplatin-induced emesis in the pigeon by a non-psychotropic synthetic cannabinoid. Feigenbaum JJ, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):159–65
Alterations in murine delayed type hypersensitivity responses by delta-8-THC and cannabinol. Levy JA, et al. **J Immunopharmacol** 1978–79;1(1):105–14
The inhibitory effects of cannabinoids, the active constituents of Cannabis sativa L. on human and rabbit platelet aggregation. Formukong EA, et al. **J Pharm Pharmacol** 1989 Oct;41(10):705–9
Antagonism to the actions of platelet activating factor by a nonpsychoactive cannabinoid. Burstein SH, et al. **J Pharmacol Exp Ther** 1989 Nov;251(2):531–5
Pharmacological evaluation of water soluble cannabinoids and related analogs. Compton DR, et al. **Life Sci** 1990; 46(22):1575–85
Selective inactivation of mouse liver cytochrome P-450IIIA by cannabidiol. Bornheim LM, et al. **Mol Pharmacol** 1990 Sep;38(3):319–26
Cannabinoid modulation of cyclic AMP accumulation in synaptosomes. Little PJ, et al. **NIDA Res Monogr** 1989; 95:282–3
Cannabinoid action in the central nervous system. Martin B, et al. **NIDA Res Monogr** 1988;90:275–83 (30 ref.)
Cannabinoid receptor localization in brain. Herkenham M, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1932–6
Antianxiety effect of cannabidiol in the elevated plus-maze. Guimarães FS, et al. **Psychopharmacology (Berl)** 1990; 100(4):558–9

POISONING

Ingestion of cannabis: a cause of coma in children. Macnab A, et al. **Pediatr Emerg Care** 1989 Dec;5(4):238–9
[Cannabis poisoning in a young child; don't ask about drugs] de Sonnaville-de Roy van Zuidewijn ML, et al. **Ned Tijdschr Geneeskd** 1989 Sep 2;133(35):1752–3 (Eng. Abstr.) **(Dut)**
[Symptomatology of chronic and acute marijuana poisoning] Marmajewska G. **Psychiatr Pol** 1988 Nov–Dec; 22(6):474–82 (28 ref.) **(Pol)**

TOXICITY

Genotoxicity of heroin and cannabinoids in humans. Piatti E, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:59–60

URINE

Enhanced chemiluminescent enzyme immunoassay for cannabinoids in urine. Sharma JD, et al. **Analyst** 1989 Oct; 114(10):1279–82
Comparative results with five cannabinoid immunoassay systems at the screening threshold of 100 micrograms/L. Wells DJ, et al. **Clin Chem** 1989 Nov;35(11):2241–3
Gas chromatographic–mass spectrometric confirmation of radioimmunoassay results for cannabinoids in blood and urine. Clatworthy AJ, et al. **Forensic Sci Int** 1990 Jul; 46(3):219–30
Presence of inhibitors to the EMIT test in postmortem urine samples [letter; comment] Taylor J. **J Forensic Sci** 1989 Sep;34(5):1055–6 Comment on: J Forensic Sci 1988 Nov;33(6):1421–31.
Evaluation of the EZ-SCREEN enzyme immunoassay test for detection of cocaine and marijuana metabolites in urine specimens. Schwartz RH, et al. **Pediatr Emerg Care** 1990 Jun;6(2):147–9
Identification of glucose conjugates as major urinary metabolites of cannabidiol in the dog. Samara E, et al. **Xenobiotica** 1990 Feb;20(2):177–83

CANNABINOL see under **CANNABINOIDS**

CANNABIS

see related
CANNABINOIDS
Aggressive behaviour—basic & clinical frontiers. Bhattacharya SK, et al. **Indian J Med Res** 1989 Dec; 90:387–406 (66 ref.)
Nutritional effects of marijuana, heroin, cocaine, and nicotine. Mohs ME, et al. **J Am Diet Assoc** 1990 Sep;90(9):1261–7 (67 ref.)
Allergic inhalant dermatitis attributable to marijuana exposure in a dog. Evans AG. **J Am Vet Med Assoc** 1989

Dec 1;195(11):1588–90
The diagnosis of marijuana (cannabis) dependence. Miller NS, et al. **J Subst Abuse Treat** 1989;6(3):183–92 (92 ref.)
Effect of d-amphetamine, secobarbital, and marijuana on choice behavior: social versus nonsocial options. Heishman SJ, et al. **Psychopharmacology (Berlin)** 1989;99(2):156–62
[Neurologic complications of drug addiction. General aspects. Complications caused by cannabis, designer drugs and volatile substances] Farre Albaladejo M. **Arch Neurobiol (Madr)** 1989;52 Suppl 1:143–8 (27 ref.) (Eng. Abstr.) **(Spa)**

ANALYSIS

The amount of main cannabinoid substances in hemp, cultivated for industrial fibre production and their changes in the course of one vegetation period. Hanuš L, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;122:11–23
Age-related suppression of murine lymphoid cell blastogenesis by marijuana components. Pross SH, et al. **Dev Comp Immunol** 1990 Winter;14(1):131–7
Stability of cannabinoids in dried samples of cannabis dating from around 1896–1905. Harvey DJ. **J Ethnopharmacol** 1990 Feb;28(1):117–28

MICROBIOLOGY

Acute pulmonary histoplasmosis: newly recognized hazard of marijuana plant hunters. Ramírez J. **Am J Med** 1990 May;88(5N):60N–62N

CANNABIS ABUSE see **MARIJUANA ABUSE**

CANNABIS SMOKING see **MARIJUANA SMOKING**

CANNIBALISM

The relationship between infanticide and pregnancy block in mice. Elwood RW, et al. **Behav Neural Biol** 1990 Mar; 53(2):277–83
Study of maternal behaviour in wild mice: avoidance to retrieve young and increase in cannibalic activity. Pandey SC, et al. **Indian J Exp Biol** 1989 Jan;27(1):87–8
Effects of maternal diet, body weight and body composition on infanticide in Syrian hamsters. Schneider JE, et al. **Physiol Behav** 1989 Nov;46(5):815–21

PSYCHOLOGY

Short-term early exposure to pups alters infanticide in adulthood in male but not in female wild house mice (Mus domesticus). McCarthy MM. **J Comp Psychol** 1990 Jun; 104(2):195–7
Pheromonal emission by pregnant rats protects against infanticide by nulliparous conspecifics. Mennella JA, et al. **Physiol Behav** 1989 Oct;46(4):591–5
Sex differences in the flesh-eating preferences of wild house mice. Wuensch KL. **Physiol Behav** 1990 Feb;47(2):389–91

CANNULATION see **CATHETERIZATION**

CANRENOATE POTASSIUM see under **PREGNADIENES**

CANRENONE see under **PREGNADIENES**

CANTHARIDES see **CANTHARIDIN**

CANTHARIDIN

Gustatory sensitivity of an anuran to cantharidin. Kelling ST, et al. **Experientia** 1990 Jul 15;46(7):763–4
[Blister dermatitis caused by Epicauta flagellaria (Erichson) (Coleoptera: Meloidae) species] Méndez E, et al. **Rev Med Panama** 1989 Sep;14(3):139–44 (Eng. Abstr.) **(Spa)**

ANALYSIS

Post-mortem serum concentration of cantharidin in a fatal case of cantharides poisoning. Hundt HK, et al. **Hum Exp Toxicol** 1990 Jan;9(1):35–40
[Ultraviolet spectrophotometric determination of cantharidin in Mylabris] Liu L, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Jul;14(7):424–5, 447 (Eng. Abstr.) **(Chi)**

HISTORY

[Trials of laryngeal tuberculosis treatment with cantharidin in the past century] Kierzek A. **Przegl Lek** 1990; 47(2):308–10 **(Pol)**

PHARMACOLOGY

Medical uses of mylabris in ancient China and recent studies. Wang GS. **J Ethnopharmacol** 1989 Sep;26(2):147–62 (51 ref.)

POISONING

Cantharidin toxicosis in horses. Schmitz DG. **J Vet Intern Med** 1989 Oct-Dec;3(4):208–15 (41 ref.)
Cantharidin content of two species of Oklahoma blister beetles associated with toxicosis in horses [published erratum appears in Vet Hum Toxicol 1989 Dec;31(6):554] Edwards WC, et al. **Vet Hum Toxicol** 1989 Oct;31(5):442–4

THERAPEUTIC USE

Cantharis in the early treatment of minor burns. Leaman AM, et al. **Arch Emerg Med** 1989 Dec;6(4):259–61

CAOUTCHOUC see **RUBBER**

CAPD see **PERITONEAL DIALYSIS, CONTINUOUS AMBULATORY**

CAPGRAS SYNDROME see under **PSYCHOTIC DISORDERS**

CAPILLARIA see under **TRICHUROIDEA**

CAPILLARIES

Determination of glomerular filtration rate using iohexol clearance and capillary sampling. Krutzén E, et al. **Scand J Clin Lab Invest** 1990 May;50(3):279–83

ABNORMALITIES

Relationship of endoneurial capillary abnormalities to type and severity of diabetic polyneuropathy. Britland ST, et al. **Diabetes** 1990 Aug;39(8):909–13

ANALYSIS

[Leu-enkephalin localization in brain capillaries] Lomakin AV, et al. **Dokl Akad Nauk SSSR** 1990;310(5):1263–5 **(Rus)**

ANATOMY & HISTOLOGY

Analysis of capillary geometry in rat subepicardium and subendocardium. Poole DC, et al. **Am J Physiol** 1990 Jul; 259(1 Pt 2):H204–10
Quantifying the capillary supply of skeletal muscle [editorial] Plyley MJ. **Can J Sport Sci** 1990 Jun;15(2):84–5
Demonstration of blood–vessellike structures in cartilaginous callus by antilaminin and antiheparin sulfate proteoglycan antibodies. Hulth A, et al. **Clin Orthop** 1990 May; (254):289–93
Effect of age on blood vessels and neurovascular appositions in the rat dentate fascia. Topple A, et al. **Neurobiol Aging** 1990 Jul-Aug;11(4):371–80
[Microcirculatory bed of the epithelial layer of human esophageal mucous membrane in postnatal ontogenesis] Parshin MM. **Biull Eksp Biol Med** 1990 Jun;109(6):607–9 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Capillary growth of rat aortic segments cultured in collagen gel without serum. Kawasaki S, et al. **Acta Pathol Jpn** 1989 Nov;39(11):712–8
Subcutaneous perfusion of tumor necrosis factor induces local proliferation of fibroblasts, capillaries, and epidermal cells, or massive tissue necrosis. Piguet PF, et al. **Am J Pathol** 1990 Jan;136(1):103–10
Influence of pericytes on capillary endothelial cell growth. Antonelli-Orlidge A, et al. **Am Rev Respir Dis** 1989 Oct; 140(4):1129–31 (21 ref.)
Influence of extracellular magnesium on capillary endothelial cell proliferation and migration. Banai S, et al. **Circ Res** 1990 Sep;67(3):645–50
Structure and organization of the subepithelial microvasculature in the canine nasal mucosa. Adams DR, et al. **Microvasc Res** 1990 May;39(3):307–14

DRUG EFFECTS

[Functional morphology of capillary bed of the uterus after administration of synestrol] Chertok AG, et al. **Biull Eksp Biol Med** 1990 Jun;109(6):605–7 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Development of the vasculature of the pars distalis in a tumor-susceptible strain of rat (Fischer 344) differs from vascular development in a non-tumor-susceptible strain (Lewis). Schechter JE. **Am J Anat** 1990 Jul;188(3):297–306
Initial development of capillaries in the neuroepithelium of the mouse. Herken R, et al. **J Anat** 1989 Jun;164:85–92

ENZYMOLOGY

Capillaries phosphorylate glucose in a concentration-dependent manner through a glucokinase-like enzyme: a study in the eel. Belfiore F, et al. **Biochem Med Metab Biol** 1990 Jun;43(3):226–33
Gamma-glutamyl transpeptidase and acetylcholinesterase activities in brain capillaries of cholesterol-fed rabbits. Eryürek FG, et al. **Res Commun Chem Pathol Pharmacol** 1990 Aug;69(2):245–8

GROWTH & DEVELOPMENT

Type VIII collagen in murine development. Association with capillary formation in vitro. Sage H, et al. **Ann N Y Acad Sci** 1990;580:17–31
Formation of capillary networks from bone marrow cultured in collagen gel. Mori M, et al. **Cell Struct Funct** 1989 Aug; 14(4):393–8
Capillary growth in anemia-induced ventricular wall remodeling in the rat heart. Olivetti G, et al. **Circ Res** 1989 Nov;65(5):1182–92
Progressive failure of cerebral angiogenesis supporting neural plasticity in aging rats. Black JE, et al. **Neurobiol Aging** 1989 Jul-Aug;10(4):353–8 (43 ref.)

IMMUNOLOGY

Immune function of the blood–brain barrier: incomplete presentation of protein (auto-)antigens by rat brain microvascular endothelium in vitro. Risau W, et al. **J Cell Biol** 1990 May;110(5):1757–66
Immunogenic potential of capillary bed components in rat renal allografts. Halttunen J, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):242–3

METABOLISM

Arterioles supply oxygen to capillaries by diffusion as well as by convection. Ellsworth ML, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H1240–3
Measurement of cytoplasmic calcium in single microvessels with increased permeability. He P, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1366–74
Differential sensitivity of exchange vessel hydraulic conductivity to atrial natriuretic peptide. Meyer DJ Jr, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H521–8
Sodium-dependent high-affinity uptake of taurine by isolated rat brain capillaries [published erratum appears in Biochem Biophys Acta 1989 Dec 11;987(1):137] Tayarani I, et al. **Biochim Biophys Acta** 1989 Oct 16;985(2):168–72
Blood–tissue exchange via transport and transformation by capillary endothelial cells. Bassingthwaighte JB, et al. **Circ Res** 1989 Oct;65(4):997–1020
Evidence for cholinergic regulation of microvessel hydraulic conductance during tissue hypoxia. Tucker VL, et al. **Circ Res** 1990 Feb;66(2):517–24
Plasmalemmal vesicles are involved in transendothelial transport of albumin, lysosomal enzymes and mannose 6-phosphate receptor fragments in capillary endothelium. Willemsen R, et al. **Eur J Cell Biol** 1990 Apr;51(2):235–41
Insulin transport across capillaries is rate limiting for insulin action in dogs. Yang YJ, et al. **J Clin Invest** 1989 Nov; 84(5):1620–8
A mathematical model of interstitial transport. II. Microvascular exchange in mesentery. Taylor DG, et al. **Microvasc Res** 1990 May;39(3):279–306 (29 ref.)

PARASITOLOGY

Further evidence of a skewed distribution of microfilariae in capillary blood. Dickerson JW, et al. **Trop Med Parasitol** 1989 Dec;40(4):472–3

PATHOLOGY

Electron-dense lipidic capillary deposits in Rett syndrome. Dieler R, et al. **Acta Neuropathol (Berl)** 1990;79(5):573–8
Capillary microscopy during eosinophilic fasciitis in 15 patients: distinction from systemic scleroderma. Herson S, et al. **Am J Med** 1990 Jun;88(6):598–600
A study of capillary morphology in the digits of patients with acquired clubbing. Fara EF, et al. **Am Rev Respir Dis** 1989 Oct;140(4):1063–6
Quantitative study of the microvascular pattern in tourniquet-induced muscle ischemia. Artacho-Pérula E, et al. **Anal Quant Cytol Histol** 1990 Apr;12(2):139–45
Changes in endothelial cell mass, luminal volume and capillary number in the gravitational syndrome. Mourad MM, et al. **Br J Dermatol** 1989 Oct;121(4):447–61
Ocular complications in the old and glucose-intolerant genetically obese (fa/fa) rat. Dosso A, et al. **Diabetologia** 1990 Mar;33(3):137–44
Muscle biopsy findings in systemic capillary leak syndrome. Navarro C, et al. **Hum Pathol** 1990 Mar;21(3):297–301
Relationship between capillary and muscle damage in dermatomyositis. Casademont J, et al. **Int J Dermatol** 1990 Mar;29(2):117–20
Significance of capillary basement membrane changes in diabetes mellitus. Boyd RB, et al. **J Am Podiatr Med Assoc** 1990 Jun;80(6):307–13 (62 ref.)
Granulocyte activation and capillary obstruction. Schmid-Schönbein GW. **Monogr Atheroscler** 1990; 15:150–9 (46 ref.)
Neuritic plaques and vessels of visual cortex in aging and Alzheimer's dementia. Bell MA, et al. **Neurobiol Aging** 1990 Jul-Aug;11(4):359–70

PHYSIOLOGY

Sympathetic alpha-adrenergic control of large-bore arterial vessels, arterioles and veins, and of capillary pressure and fluid exchange in whole-organ cat skeletal muscle. Maspers M, et al. **Acta Physiol Scand** 1990 Apr;138(4):509–21
Transcapillary fluid dynamics during ovarian stimulation for in vitro fertilization. Tollan A, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):554–8
Thromboxane plays a role in postprandial jejunal oxygen uptake and capillary exchange. Alemayehu A, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):G430–5
Modulation of microvessel wall charge by plasma glycoprotein orosomucoid. Curry FE, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1354–9
Heparinase treatment suggests a role for the endothelial cell glycocalyx in regulation of capillary hematocrit. Desjardins

C, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H647-54
Regulation of blood flow in single capillaries. Johnson PC, et al. **Am J Physiol** 1967 Jun;212(6):1405-15
Effect of small-solute gradients on transcapillary fluid movement in renal inner medulla. Pallone TL, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):F547-53
Microvascular exchange and interstitial volume regulation in the rat: implications of the model. Reed RK, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):H2081-91
Effects of vasomotion and venous pressure elevation on capillary-tissue fluid exchange across hetero-porous membrane. Iida N. **Biorheology** 1990;27(2):205-24
Do transvascular forces in isolated lobe preparations equilibrate? Hancock BJ, et al. **J Appl Physiol** 1989 Aug; 67(2):628-35
Astrocytes induce neural microvascular endothelial cells to form capillary-like structures in vitro. Laterra J, et al. **J Cell Physiol** 1990 Aug;144(2):204-15
Effect of sarcomere length on total capillary length in skeletal muscle: in vivo evidence for longitudinal stretching of capillaries. Ellis CG, et al. **Microvasc Res** 1990 Jul; 40(1):63-72
Capillary blood cell velocity in finger nailfold: characteristics and reproducibility of the local cold response. Gasser P. **Microvasc Res** 1990 Jul;40(1):29-35
Changes in capillary perfusion induced by different patterns of activity in rat skeletal muscle. Hargreaves D, et al. **Microvasc Res** 1990 Jul;40(1):14-28
Simplified micropressure measurements via bridge current feedback. Intaglietta M, et al. **Microvasc Res** 1990 May; 39(3):386-9
Four window differential capillary velocimetry. Intaglietta M, et al. **Microvasc Res** 1990 Jul;40(1):46-54
Assessment of human muscle blood perfusion with single-fiber laser Doppler flowmetry. Kvernebo K, et al. **Microvasc Res** 1990 May;39(3):376-85
A simple model for prediction of oxygen transport rates by flowing blood in large capillaries. Nair PK, et al. **Microvasc Res** 1990 Mar;39(2):203-11
Prediction of oxygen transport rates in blood flowing in large capillaries. Nair PK, et al. **Microvasc Res** 1989 Nov; 38(3):269-85
The induction of capillary bed development by endothelial cell growth factor before islet transplantation may prevent islet ischemia. Stagner JI, et al. **Transplant Proc** 1990 Apr; 22(2):824-8
[The effect of plasma viscosity on the resistance of erythrocyte movement along capillaries] Kopyl'sov AV. **Biofizika** 1989 Nov-Dec;34(6):1046-50 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Long-term pressure-induced cardiac hypertrophy: capillary and mast cell proliferation. Olivetti G, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):H1766-72
The role of activation of neutrophils and microvascular pressure in acute pulmonary edema. Patterson CE, et al. **Am Rev Respir Dis** 1989 Oct;140(4):1052-62
Capillary hypertension and abnormal pressure dynamics in patients with essential hypertension. Williams SA, et al. **Clin Sci** 1990 Jul;79(1):5-8
Relationships between microvascular function and capillary structure in diabetic and nondiabetic human skin. Katz MA, et al. **Diabetes** 1989 Oct;38(10):1245-50
Reduction of functional capillary density in human brain after stroke. Gjedde A, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):317-26
Impaired capillary perfusion and brain edema following experimental subarachnoid hemorrhage: a morphometric study. Johshita H, et al. **J Neurosurg** 1990 Sep;73(3):410-7
A model of regional microvascular ischemia in intact skin. Mayrovitz HN, et al. **Microvasc Res** 1990 May;39(3):390-4
Transcapillary forces in muscle compartments of lower limbs with deep venous thrombosis. Seem E, et al. **Scand J Clin Lab Invest** 1990 May;50(3):325-30
Transcapillary filtration in lower limbs with deep venous thrombosis; the role of the capillary filtration coefficient. Seem E, et al. **Scand J Clin Lab Invest** 1990 May; 50(3):331-6
[The capillary system of the rat heart in occlusion of the coronary artery] Sisakian SA, et al. **Arkh Anat Gistol Embriol** 1989 Aug;97(8):15-8 (Eng. Abstr.) **(Rus)**
[Capillarotrophic insufficiency in rheumatoid arthritis in children and the effectiveness of health resort therapy] Ivanova MV, et al. **Pediatriia** 1990;(4):110 **(Rus)**

SURGERY

Computed temperature distributions around ectatic capillaries exposed to yellow (578 nm) laser light. Pickering JW, et al. **Phys Med Biol** 1989 Sep;34(9):1247-58

ULTRASTRUCTURE

Ultrastructure of capillary walls in human brain tumors. Shibata S. **Acta Neuropathol (Berl)** 1989;78(6):561-71
Neonatal hyperoxia alters the pulmonary alveolar and capillary structure of 40-day-old rats. Randell SH, et al. **Am J Pathol** 1990 Jun;136(6):1259-66
Ultrastructures of the epithelial basement membrane and the subepithelial capillaries in rabbit palatine tonsils. Higashikawa T, et al. **Arch Histol Cytol** 1990 Mar; 53(1):31-9
Morphometric analysis of coronary capillaries during physiologic myocardial growth and induced cardiac hypertrophy: a review. Anversa P, et al. **Int J Microcirc Clin Exp** 1989 Nov;8(4):353-63 (44 ref.)
Cardiac work and capillary density in normal and vascularly compromised hearts. Hudlická O, et al. **Int J Microcirc Clin Exp** 1989 Nov;8(4):365-82
Three-dimensional ultrastructural distribution of cytoplasmic interdigitation between endothelium and pericyte of capillary in human granulation tissue by serial section reconstruction method. Furusato M, et al. **J Electron Microsc (Tokyo)** 1990;39(2):86-91
Periosteal microvasculature in the dog alveolar process. Nobuto T, et al. **J Periodontol** 1989 Dec;60(12):709-15
Associations between pericytes and capillary endothelium in the eel rete mirabile. Buchanan RA, et al. **Microvasc Res** 1990 Jan;39(1):60-76
Tridimensional ultrastructure of glomerular capillary endothelium revealed by high-resolution scanning electron microscopy. Lea PJ, et al. **Microvasc Res** 1989 Nov; 38(3):296-308
Anionic fixed charges in the fenestrated capillaries of the mouse mesentery. Gotloib L, et al. **Nephron** 1990; 55(4):419-22
Ultrastructural changes in cerebral pericytes and astrocytes of stroke-prone spontaneously hypertensive rats. Tagami M, et al. **Stroke** 1990 Jul;21(7):1064-71
Effect of pancreatic transplantation on cardiovascular changes in diabetic rats: a qualitative and quantitative ultrastructural study. Hayashi T, et al. **Transplant Proc** 1990 Aug;22(4):2027-34

CAPILLARY ENDOTHELIUM see **ENDOTHELIUM, VASCULAR**

CAPILLARY FRAGILITY

Growth hormone (GH) therapy in GH-deficient patients, the plasma factor VIII-von Willebrand factor complex, and capillary fragility. A double-blind, placebo-controlled crossover study. Jørgensen JO, et al. **Scand J Clin Lab Invest** 1990 Jun;50(4):417-20

CAPILLARY PERMEABILITY

Ultracytochemical localisation of Na+, K(+)-ATPase in cerebral endothelium in acute hypertension. Nag S. **Acta Neuropathol (Berl)** 1990;80(1):7-11
Changes in microvascular permeability with acceleration of edema in dog lungs. Butler BD, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H395-9
Measurement of cytoplasmic calcium in single microvessels with increased permeability. He P, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1366-74
Peritubular capillary permeability and intravascular RBC aggregation after ischemia: effects of neutrophils. Hellberg PO, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):F1018-25
Permeability changes at blood-retinal barrier in diabetes and effect of aldose reductase inhibition. Lightman S, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):R601-5
Transcapillary adenosine transport in isolated guinea pig and rat hearts. Mohrman DE, et al. **Am J Physiol** 1990 Sep; 259(3 Pt 2):H772-83
Microvascular permeability to endogenous plasma proteins in the jejunum. Mortillaro NA, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1650-4
Effects of elevated venous pressure on capillary permeability in cat hindlimbs. Wolf MB, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):H2025-32
Vascular permeability and coagulation during Rickettsia rickettsii infection in dogs. Davidson MG, et al. **Am J Vet Res** 1990 Jan;51(1):165-70
Leaky vessels, fibrin deposition, and fibrosis: a sequence of events common to solid tumors and to many other types of disease. Brown LF, et al. **Am Rev Respir Dis** 1989 Oct; 140(4):1104-7 (34 ref.)
Oxidant-induced endothelial leak correlates with decreased cellular energy levels. Holman RG, et al. **Am Rev Respir Dis** 1990 Jan;141(1):134-40
Pulmonary clearance of 99mTc-DTPA in the diagnosis and evolution of increased permeability pulmonary oedema. Barrowcliffe MP, et al. **Anaesth Intensive Care** 1989 Nov; 17(4):422-32
Prolonged reduction in colloid oncotic pressure does not increase brain edema following cryogenic injury in rabbits. Kaieda R, et al. **Anesthesiology** 1989 Oct;71(4):554-60
Fractal character of pulmonary microvascular permeability. McNamee JE. **Ann Biomed Eng** 1990;18(2):123-33
Roles of calcium, cyclic nucleotides, and protein kinase C in regulation of endothelial permeability. Yamada Y, et al. **Arteriosclerosis** 1990 May-Jun;10(3):410-20
Effects of vasomotion and venous pressure elevation on capillary-tissue fluid exchange across hetero-porous membrane. Iida N. **Biorheology** 1990;27(2):205-24
Patterns of change in endoneurial capillary permeability and vascular space during nerve regeneration. Weerasuriya A. **Brain Res** 1990 Feb 26;510(1):135-9
Do connective tissue components induce plasma activation in vivo? Baccaro MR, et al. **Braz J Med Biol Res** 1989; 22(4):485-9
Solute transfer into the extravascular space: comparison of two non-invasive measurement techniques. Peters AM, et al. **Cardiovasc Res** 1989 Jul;23(7):639-46
Measurement of microvascular permeability to small solutes in man: limitations of the technique. Peters AM. **Cardiovasc Res** 1990 Jun;24(6):504-9
Autoradiographic assessment of pineal gland glucose utilization and capillary permeability in the unanesthetized rat. Cicciarello R, et al. **Childs Nerv Syst** 1990 Jun; 6(4):222-4
Functional coronary microvascular injury evident as increased permeability due to brief ischemia and reperfusion. Dauber IM, et al. **Circ Res** 1990 Apr; 66(4):986-98
Low density lipoprotein transport across a microvascular endothelial barrier after permeability is increased. Rutledge JC, et al. **Circ Res** 1990 Feb;66(2):486-95
Resistance of essential fatty acid-deficient rats to endotoxin-induced increases in vascular permeability. Li EJ, et al. **Circ Shock** 1990 Jun;31(2):159-70
TNF- and LPS-induced changes of lung vascular permeability: studies in unanesthetised sheep. Redl H, et al. **Circ Shock** 1990 Jun;31(2):183-92
Fluorescence digital microscopy of interstitial macromolecular diffusion in burn injury. Aggarwal SJ, et al. **Comput Biol Med** 1989;19(4):245-61
Barotrauma and microvascular injury in lungs of nonadult rabbits: effect of ventilation pattern. Peevy KJ, et al. **Crit Care Med** 1990 Jun;18(6):634-7
Gamma scintigraphic imaging of lung microvascular permeability in adult respiratory distress syndrome. Putensen C, et al. **Crit Care Med** 1990 Aug;18(8):807-12
Permeability of continuous capillaries. Paaske WP, et al. **Dan Med Bull** 1989 Dec;36(6):570-90 (220 ref.)
Myocyte contracture, vascular resistance, and vascular permeability after global ischemia in isolated hearts from alloxan-induced diabetic rabbits. Tilton RG, et al. **Diabetes** 1989 Nov;38(11):1484-91
Transcapillary permeability and subendothelial distribution of endothelial and amniotic fluid insulin-like growth factor binding proteins in the rat heart. Bar RS, et al. **Endocrinology** 1990 Sep;127(3):1078-86
Endotoxin-induced plasma exudation in guinea-pig airways in vivo and the effect of neutrophil depletion. Evans TW, et al. **Eur Respir J** 1990 Mar;3(3):299-303
Permeability of ocular vessels and transport across the blood-retinal-barrier. Törnquist P, et al. **Eye** 1990;4 (Pt 2):303-9 (42 ref.)
Inactivation of the vascular permeability-increasing activity of bradykinin by mycoplasmas. Shibata K, et al. **FEMS Microbiol Lett** 1989 Nov;53(1-2):149-52
Muscle biopsy findings in systemic capillary leak syndrome. Navarro C, et al. **Hum Pathol** 1990 Mar;21(3):297-301
Transendothelial macromolecular transport in the aorta of spontaneously hypertensive rats. Wu CH, et al. **Hypertension** 1990 Aug;16(2):154-61
Microperfusion studies on the permeability of retinal vessels. A new model demonstrating organic anion transport and a reabsorptive fluid flux. Murta JN, et al. **Invest Ophthalmol Vis Sci** 1990 Mar 1;31(3):471-80
Elevated intracranial pressure increases pulmonary vascular permeability to protein. McClellan MD, et al. **J Appl Physiol** 1989 Sep;67(3):1185-91
Evaluating pulmonary vascular permeability with radiolabeled proteins: an error analysis. Mintun MA, et al. **J Appl Physiol** 1990 Apr;68(4):1696-706
Derecruitment of filtration surface area in paraquat-injured isolated dog lungs. Shibamoto T, et al. **J Appl Physiol** 1990 Apr;68(4):1581-9
Demonstration of vascular permeability changes in cattle infected with bovine ephemeral fever virus. Young PL, et al. **J Comp Pathol** 1990 Jan;102(1):55-62
Lung vascular permeability changes in lambs with hyaline membrane disease. Sundell HW, et al. **J Dev Physiol** 1989 Dec;12(6):353-62
Vasogenic brain edema in focal 4-aminopyridine seizures: the role of neuronal hyperactivity. Mihály A, et al. **J Hirnforsch** 1990;31(1):77-86
Ability of human T lymphocytes to adhere to vascular endothelial cells and to augment endothelial permeability to macromolecules is linked to their state of post-thymic maturation. Damle NK, et al. **J Immunol** 1990 Feb 15; 144(4):1233-40
Neurogenic inflammation, vascular permeability, and mast cells. II. Additional evidence indicating that mast cells are not involved in neurogenic inflammation. Kowalski ML, et al. **J Immunol** 1990 Aug 15;145(4):1214-21
Blood brain barrier permeability in multiple sclerosis using labelled DTPA with PET, CT and MRI [letter; comment] Tofts PS, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug; 52(8):1019-20 Comment on: J Neurol Neurosurg Psychiatry 1988 Aug;51(8):1058-62.
Neurogenic inflammation in the airways: characterisation of electrical parameters for vagus nerve stimulation in the guinea pig. Belvisi MG, et al. **J Neurosci Methods** 1990 May;32(2):159-67
Effect of hyperosmotic blood-brain barrier disruption on transcapillary transport in canine brain tumors. Groothuis DR, et al. **J Neurosurg** 1990 Mar;72(3):441-9
Comparison of iron-59, indium-111, and gallium-69 transferrin as a macromolecular tracer of vascular permeability and the transferrin receptor. Otsuki H, et al. **J Nucl Med** 1989 Oct;30(10):1676-85

Effects of ischemia-reperfusion injury on microvascular permeability in skeletal muscle. Durán WN, et al. **Microcirc Endothelium Lymphatics** 1989 Jun-Oct; 5(3-5):223-39

Analysis of microvascular permeability to macromolecules by video-image digital processing. Bekker AY, et al. **Microvasc Res** 1989 Sep;38(2):200-16

Extravascular distribution of low-density lipoprotein and dextran in a high-permeability state. Rutledge JC, et al. **Microvasc Res** 1990 Jul;40(1):137-56

An analysis of microcirculatory flow heterogeneity using measurements of transit time. Sarelius IH. **Microvasc Res** 1990 Jul;40(1):88-98

Measurement of cerebral blood flow, cerebral blood volume, and cerebral capillary permeability in glioma-bearing rats. Aizawa S, et al. **Neurol Med Chir (Tokyo)** 1990 Feb; 30(2):113-8

Regional lung microvascular permeability using dual isotope scintigraphy. Keegan J, et al. **Nucl Med Commun** 1989 Dec; 10(12):871-8

Noninvasive measurement of microvascular permeability to small solutes. Peters AM, et al. **Nucl Med Commun** 1989 Jul;10(7):513-21

Alterations in lectin binding accompany increased permeability in the dystrophic rat model for proliferative retinopathy. Fitzgerald ME, et al. **Prog Clin Biol Res** 1989; 314:409-25

The effects of neutrophils and phospholipase A2 on transvascular albumin flux in isolated rabbit lungs. Littner MR, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Mar;39(3):167-75

Blood-brain barrier permeability after electrically induced seizure in normoglycemic, hypoglycemic, and hyperglycemic rats. Oztaş B, et al. **Psychiatry Res** 1989 Aug;29(2):151-9

Systemic capillary leak syndrome. Teelucksingh S, et al. **Q J Med** 1990 May;75(277):515-24 (39 ref.)

Vascular leak syndrome associated with interleukin-2: chest radiographic manifestations. Mann H, et al. **Radiology** 1990 Jul;176(1):191-4

Platelet activating factor induced gastric damage in rats: participation of increased gastric vascular permeability. Hatakeyama K, et al. **Scand J Gastroenterol Suppl** 1989; 162:71-4

Brain edema and cerebrovascular permeability during cerebral ischemia in rats. Hatashita S, et al. **Stroke** 1990 Apr;21(4):582-8

Effects of citrated plasma on pulmonary capillary permeability. Mayer JE Jr, et al. **Surg Forum** 1978;29:185-7

Etiology of the disruption in blood-arterial wall barrier following experimental subarachnoid hemorrhage. Nakagomi T, et al. **Surg Neurol** 1990 Jul;34(1):16-26

Ischemia-induced neutrophil activation and diapedesis is lipoxygenase dependent. Goldman G, et al. **Surgery** 1990 Apr;107(4):428-33

[Microcirculation following burns: 1. The changes in microcirculation of the burned skin] Zhao KS. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Mar;3(1):55-7 **(Chi)**

[Jaffe's syndrome and anomalies of capillary permeability] Mancel E, et al. **Bull Soc Ophtalmol Fr** 1989 Feb; 89(2):301-3 (Eng. Abstr.) **(Fre)**

[Capillary hyperpermeability. An uncommon cause of hypovolemic shock] Luquel L, et al. **Rev Med Interne** 1989 Jul-Aug;10(4):359-60 **(Fre)**

[Permeability pulmonary edema in pheochromocytoma] Zimmermann-Hösli MB, et al. **Schweiz Med Wochenschr** 1990 Jan 10;120(1-2):30-3 (Eng. Abstr.) **(Ger)**

[Comparison between PVHIS on the MRI and the permeability of brain blood vessels in elderly patients] Yamaguchi K, et al. **Nippon Ronen Igakkai Zasshi** 1989 Nov;26(6):624-9 (Eng. Abstr.) **(Jpn)**

[Ultrastructure of capillary permeability in malignant lymphoma] Ochi A, et al. **No Shinkei Geka** 1989 Dec; 17(12):1139-43 (Eng. Abstr.) **(Jpn)**

[Ultrastructure of capillary permeability in human brain tumor: primary meningeal malignant melanoma] Shibata S, et al. **No Shinkei Geka** 1990 Jun;18(6):527-31 (Eng. Abstr.) **(Jpn)**

[A study on the vascular permeability of brain tumors using dynamic CT] Terada T, et al. **No Shinkei Geka** 1989 Sep; 17(9):841-8 (Eng. Abstr.) **(Jpn)**

[Capillary permeability factor produced by C 6 glioma cells: role in peritumoral brain edema and possible mechanism of glucocorticoid action] Ohnishi T, et al. **No To Shinkei** 1989 Nov;41(11):1141-7 (Eng. Abstr.) **(Jpn)**

[Vascular permeability and microcirculation in patients with hemorrhagic fever associated with renal syndrome] Fedorchenko IuL. **Ter Arkh** 1989;61(6):75-8 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Increased microvascular permeability caused by toxic oxygen metabolites is partly reversed by exchanging the perfusate in isolated rat lungs. Kjaeve J, et al. **Acta Anaesthesiol Scand** 1989 Oct;33(7):605-9

Effects of p-chlorophenylalanine on microvascular permeability changes in spinal cord trauma. An experimental study in the rat using 131I-sodium and lanthanum tracers. Olsson Y, et al. **Acta Neuropathol (Berl)** 1990;79(6):595-603

Cochlear vessel permeability to horseradish peroxidase after diuretic administration in the chinchilla. Duvall AJ 3d, et al. **Acta Otolaryngol (Stockh)** 1989 Nov-Dec; 108(5-6):397-403

Effects of calcium and EDTA on rat skin capillary permeability and on its response to histamine, serotonin and bradykinin. Busch L, et al. **Acta Physiol Pharmacol Latinoam** 1989;39(3):227-34

Role of bradykinin generating and degrading systems in the vascular permeability response induced with kaolin in rats. Kumakura S, et al. **Adv Exp Med Biol** 1989;247B:541-6

Characterization of a protein product of human malignant glial tumors that induces microvascular permeability. Criscuolo GR, et al. **Adv Neurol** 1990;52:469-74

Endotoxin-induced increase in leukocyte adherence and macromolecular permeability of postcapillary venules. Svensjö E, et al. **Agents Actions** 1990 Jan;29(1-2):21-3

Effect of lysophosphatidylcholine on the filtration coefficient in intact dog lungs. Butler BD, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1466-70

Graded modulation of frog microvessel permeability to albumin using ionophore A23187. Curry FE, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H587-98

Leukocyte repletion reverses protective effect of neutropenia in thrombin-induced increase in lung vascular permeability. Lo SK, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H149-55

Isoproterenol reduces thrombin-induced pulmonary endothelial permeability in vitro. Minnear FL, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1613-23

Neurogenic inflammation, vascular permeability, and mast cells. Capsaicin desensitization fails to influence IgE-anti-DNP induced vascular permeability in rat airways. Didier A, et al. **Am Rev Respir Dis** 1990 Feb; 141(2):398-406

Effect of glucocorticosteroids on microvascular permeability. Williams TJ, et al. **Am Rev Respir Dis** 1990 Feb;141(2 Pt 2):S39-43 (112 ref.)

Capillary filtration and ankle edema in patients with venous hypertension treated with TTFCA. Belcaro GV, et al. **Angiology** 1990 Jan;41(1):12-8

Improvement of capillary permeability in patients with venous hypertension after treatment with TTFCA. Belcaro GV, et al. **Angiology** 1990 Jul;41(7):533-40

Involvement of arachidonic acid metabolites in increases in vascular permeability in experimental dental pulpal inflammation in the rat. Okiji T, et al. **Arch Oral Biol** 1989; 34(7):523-8

Physiological changes in the sciatic nerve endoneurium of lead-intoxicated rats: a model of endoneurial homeostasis. Weerasuriya A, et al. **Brain Res** 1990 May 28;517(1-2):1-6

Inhibition of formaldehyde-induced arthritis by a purified fraction prepared from Wilbrandia (cf) verticillata which contains novel norcucurbitacin glucosides. Almeida FR, et al. **Braz J Med Biol Res** 1989;22(11):1397-9

Effects of antihistamines on phorbol ester tumor promotion and vascular permeability changes. Fischer SM, et al. **Carcinogenesis** 1990 Jun;11(6):991-6

Effects of recombinant human superoxide dismutase on increased lung vascular permeability and respiratory disorder in endotoxemic rats. Schneider J, et al. **Circ Shock** 1990 Feb;30(2):97-106

Macromolecules reduce abnormal microvascular permeability in rat limb ischemia-reperfusion injury. Zikria BA, et al. **Crit Care Med** 1989 Dec;17(12):1306-9

The role of toxic oxygen metabolites in interleukin-2-induced vascular leak syndrome. Mulvin DW, et al. **Curr Surg** 1989 Sep-Oct;46(5):396-8

Modulation of the blood-aqueous barrier by gram positive and gram negative bacterial cell wall components in the rat and rabbit. Kufoy EA, et al. **Exp Eye Res** 1990 Feb; 50(2):189-95

Increased vascular permeability, erythema, and leukocyte emigration induced in rabbit skin by streptococcal erythrogenic toxin type A. Kamezawa Y, et al. **FEMS Microbiol Lett** 1990 Mar 1;56(1-2):159-62

Increased capillary permeability mediated by a dengue virus-induced lymphokine. Khanna M, et al. **Immunology** 1990 Mar;69(3):449-53

Leukotriene B4-induced permeability increase in postcapillary venules and its inhibition by three different antiinflammatory drugs. Erlansson M, et al. **Inflammation** 1989 Dec;13(6):693-705

Capillary filtration and lymphatic resorption in diabetes. Application to the pharmacodynamic activity of Daflon 500 mg. Behar A, et al. **Int Angiol** 1989 Oct-Dec;8(4 Suppl):27-9

Daflon 500 mg depresses bradykinin-ischemia-induced microvascular leakage of FITC dextran in rat cremaster muscle. Stucker O, et al. **Int Angiol** 1989 Oct-Dec;8(4 Suppl):39-43

Recombinant neutral endopeptidase attenuates substance P-induced plasma extravasation in the guinea pig skin. Rubinstein I, et al. **Int Arch Allergy Appl Immunol** 1990; 91(3):232-8

Plasminogen activator is involved in the hCG-induced neutrophil extravasation and vasopermeability increase in the rat testis. Loukusa AK, et al. **Int J Androl** 1990 Aug; 13(4):306-14

Pharmacologic modulation of vascular permeability in ocular allergy in the rat. Calonge MC, et al. **Invest Ophthalmol Vis Sci** 1990 Jan;31(1):176-80

The effect of platelet-activating factor (PAF), histamine, and ethanol on vascular permeability of the guinea pig conjunctiva. Stock EL, et al. **Invest Ophthalmol Vis Sci** 1990 May;31(5):987-92

Permeability of human endothelial monolayers: effect of vasoactive agonists and cAMP. Casnocha SA, et al. **J Appl Physiol** 1989 Nov;67(5):1997-2005

Hypertonic saline increases vascular permeability in the rat trachea by producing neurogenic inflammation. Umeno E, et al. **J Clin Invest** 1990 Jun;85(6):1905-8

Substance P-induced augmentation of cutaneous vascular permeability and granulocyte infiltration in mice is mast cell dependent. Yano H, et al. **J Clin Invest** 1989 Oct; 84(4):1276-86

Effect of dengue virus-induced cytotoxin on capillary permeability. Dhawan R, et al. **J Exp Pathol (Oxford)** 1990 Feb;71(1):83-8

Neutrophil accumulation and plasma leakage induced in vivo by neutrophil-activating peptide-1. Colditz IG, et al. **J Leukoc Biol** 1990 Aug;48(2):129-37

Differential central nervous system responses following single and multiple recombinant interleukin-2 infusions. Ellison MD, et al. **J Neuroimmunol** 1990 Aug;28(3):249-60

Temporal effects of dexamethasone on blood-to-brain and blood-to-tumor transport of 14C-alpha-aminoisobutyric acid in rat C6 glioma. Shapiro WR, et al. **J Neurooncol** 1990 Jun;8(3):197-204

Capillary permeability factor secreted by malignant brain tumor. Role in peritumoral brain edema and possible mechanism for anti-edema effect of glucocorticoids. Ohnishi T, et al. **J Neurosurg** 1990 Feb;72(2):245-51

Factors in snake venoms that increase capillary permeability. Miller RA, et al. **J Pharm Pharmacol** 1989 Nov; 41(11):792-4

Early and late tracheobronchial plasma exudation by platelet-activating factor administered to the airway mucosal surface in guinea pigs: effects of WEB 2086 and enprofylline. O'Donnell SR, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):65-70

A physiological increase in LH may influence vascular permeability in the rat testis. Bergh A, et al. **J Reprod Fertil** 1990 May;89(1):23-31

Rat testicular interstitial fluid contains mediators of vasopermeability. Tapanainen JM, et al. **J Reprod Fertil** 1990 Jul;89(2):723-8

Differential effects of ovarian steroids and triphenylethylene compounds on macromolecular uptake and thymidine incorporation in the mouse uterus. Huet-Hudson YM, et al. **J Steroid Biochem** 1990 Jan;35(1):23-7

Pulmonary transvascular fluid filtration response to hyperproteinemia and Hespan infusion. Harms BA, et al. **J Surg Res** 1990 May;48(5):408-14

Hemodynamic and vascular permeability effects of lipid emulsion in the isolated canine lung lobe. Hall JE, et al. **JPEN J Parenter Enteral Nutr** 1990 Jul-Aug;14(4):376-80

The effect of aldose reductase inhibitor, statil, on hyperpermeability of iridial vessels in experimental galactosemic rats. Terubayashi H, et al. **Jpn J Ophthalmol** 1989;33(3):343-7

Assessment of vascular permeability increase in the mouse by dye leakage during paw edema. Qu XF, et al. **Jpn J Pharmacol** 1990 Mar;52(3):500-3

Staphylococcal alpha-toxin-induced vascular leakage in isolated perfused rabbit lungs. Seeger W, et al. **Lab Invest** 1990 Sep;63(3):341-9

Substance P increases rat aortic albumin permeability. Markle RA, et al. **Life Sci** 1990;46(13):965-9

Partial normalization by dietary cod-liver oil of increased microvascular albumin leakage in patients with insulin-dependent diabetes and albuminuria. Jensen T, et al. **N Engl J Med** 1989 Dec 7;321(23):1572-7

Capillary permeability induced by intravenous neurokinins. Receptor characterization and mechanism of action. Jacques L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Aug; 340(2):170-9

The role of substance P and calcitonin gene-related peptide in neurogenic plasma extravasation and vasodilatation in the rat. Louis SM, et al. **Neuroscience** 1989;32(3):581-6

Experimental neoplastic spinal cord compression: effect of anti-inflammatory agents and glutamate receptor antagonists on vascular permeability. Siegal T, et al. **Neurosurgery** 1990 Jun;26(6):967-70

Sequential changes in the permeability of the blood-nerve barrier over the course of ricin neuronopathy in the rat. Bouldin TW, et al. **Neurotoxicology** 1990 Spring; 11(1):23-34

Inhibitory effects of beta-adrenergic stimulants on increased vascular permeability caused by passive cutaneous anaphylaxis, allergic mediators, and mediator releasers in rats. Inagaki N, et al. **Pharmacology** 1989;39(1):19-27

Effect of chuanxiongqin (tetrame-thylpyrazine) on microcirculatory perfusion in hamsters and capillary permeability in rats. Xue QF, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(4):224-8

A double isotope technique to determine regional albumin permeability: effects of anesthesia. Simchon S, et al. **Proc Soc Exp Biol Med** 1990 Oct;195(1):114-8

Effects of naloxone on pulmonary capillary permeability. Silverstein JH, et al. **Prog Clin Biol Res** 1990;328:389-92

Effect of plasmin inhibitors on gastric mucosal permeability

in rats. Yoo JK, et al. **Scand J Gastroenterol Suppl** 1989; 162:215–7

[Effects of tetrandrine on vascular permeability and neutrophil function in acute inflammation] He FC, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 May;10(3):249–51 (Eng. Abstr.) **(Chi)**

[The effect of procyanidolic oligomers on vascular permeability. A study using quantitative morphology] Robert L, et al. **Pathol Biol (Paris)** 1990 Jun;38(6):608–16 (Eng. Abstr.) **(Fre)**

[Ozone-induced airway hyperresponsiveness in guinea pigs] Okazawa A, et al. **Arerugi** 1989 Nov;38(11):1217–25 (Eng. Abstr.) **(Jpn)**

[Pharmacological profile of mofezolac, a new non-steroidal analgesic anti-inflammatory drug] Ono N, et al. **Nippon Yakurigaku Zasshi** 1990 Feb;95(2):63–81 (Eng. Abstr.) **(Jpn)**

[Effect of defensin on the process of healing of aseptic skin wound and on the permeability of blood vessels] Kudriashov BA, et al. **Biull Eksp Biol Med** 1990 Apr; 109(4):391–3 (Eng. Abstr.) **(Rus)**

[Capillary permeability under the action of the naphthene hydrocarbons of naphtalane] Omarov IA, et al. **Biull Eksp Biol Med** 1990 Mar;109(3):239–40 (Eng. Abstr.) **(Rus)**

[The role of the terminal amino acids in the physiological activity of opioid peptides (lymph stimulation and vascular permeability)] Khugaeva VK. **Fiziol Zh SSSR** 1990 Jan; 76(1):92–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effects of hyperthermia, radiotherapy and thermoradiotherapy on tumor microvascular permeability. Fujiwara K, et al. **Acta Pathol Jpn** 1990 Feb;40(2):79–84

Large capacity in man for effective plasma volume control in hypovolaemia via fluid transfer from tissue to blood. Lundvall J, et al. **Acta Physiol Scand** 1989 Dec; 137(4):513–20

Sympathetic alpha-adrenergic control of large-bore arterial vessels, arterioles and veins, and of capillary pressure and fluid exchange in whole-organ cat skeletal muscle. Maspers M, et al. **Acta Physiol Scand** 1990 Apr;138(4):509–21

Atrial natriuretic peptide augments forearm capillary filtration in humans. Groban L, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H258–63

Permeability of neutral vs. anionic dextrans in cultured brain microvascular endothelium. Sahagun G, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H162–6

Mechanism of tachyphylaxis associated with neurogenic plasma extravasation in the rat trachea. Brokaw JJ, et al. **Am Rev Respir Dis** 1990 Jun;141(6):1434–40

The systemic capillary leak syndrome: appearance of interleukin-2-receptor-positive cells during attacks. Cicardi M, et al. **Ann Intern Med** 1990 Sep 15;113(6):475–7

Perihemorheology: the bridge between the vessel-blood organ and the organs it penetrates. Copley AL. **Biorheology** 1989;26(2):377–88 (39 ref.)

Transport through deformable matrices. Silberberg A. **Biorheology** 1989;26(2):291–313

Neutrophil-mediated increased permeability of microcarrier-cultured endothelial monolayers: a model for the in vitro study of neutrophil-dependent mediators of vasopermeability. Killackey JJ, et al. **Can J Physiol Pharmacol** 1990 Jul;68(7):836–44

Capillary permeability of 99mTc-DTPA in canine myocardium determined by intracoronary bolus injection and residue detection. Svendsen JH, et al. **Cardiovasc Res** 1989 Jun;23(6):512–9

PEEP increases non-pulmonary microvascular fluid flux in healthy and septic sheep. Hersch M, et al. **Chest** 1989 Nov; 96(5):1142–9

Capillary permeability and extracellular fluid volumes in pregnancy-induced hypertension. Brown MA, et al. **Clin Sci** 1989 Dec;77(6):599–604

Early onset of increased transcapillary albumin escape in awake diabetic rats. Tucker BJ. **Diabetes** 1990 Aug; 39(8):919–23

The role of increased airway microvascular permeability and plasma exudation in asthma. Chung KF, et al. **Eur Respir J** 1990 Mar;3(3):329–37 (105 ref.)

Determination of lung capillary blood volume and membrane diffusing capacity in patients with COLD using the NO-CO method. Moinard J, et al. **Eur Respir J** 1990 Mar; 3(3):318–22

Activation of the plasma kallikrein-kinin system by Candida albicans proteinase. Kaminishi H, et al. **Infect Immun** 1990 Jul;58(7):2139–43

Microvascular permeability, venous stasis and oedema. Michel CC. **Int Angiol** 1989 Oct-Dec;8(4 Suppl):9–13 (12 ref.)

Whole body plasma extravasation in saline and Haemaccel loaded rats: effects of endotoxemia. van Lambalgen AA, et al. **Int J Microcirc Clin Exp** 1990 Aug;9(3):303–18

Selective permeability changes in the lungs and airways of sheep after toxic smoke inhalation. Barrow RE, et al. **J Appl Physiol** 1990 May;68(5):2165–70

Sendai virus infection potentiates neurogenic inflammation in the rat trachea. Piedimonte G, et al. **J Appl Physiol** 1990 Feb;68(2):754–60

Suppression of late phase enhanced vascular permeability in rats by selective depletion of neutrophils with a monoclonal antibody. Sekiya S, et al. **J Leukoc Biol** 1990 Sep; 48(3):258–65

Transcapillary fluid balance and plasma volume regulation: a review. Fadnes HO, et al. **Obstet Gynecol Surv** 1989 Nov; 44(11):769–73 (28 ref.)

Vascular events in experimental otitis media models: a comparative study. Goldie P, et al. **ORL J Otorhinolaryngol Relat Spec** 1990;52(2):104–12

Lung permeability in adult obliterative bronchiolitis. Sweatman MC, et al. **Respir Med** 1989 Jul;83(4):323–7

Changes in pulmonary microvascular permeability accompanying re-expansion oedema: evidence from dual isotope scintigraphy. Wilkinson PD, et al. **Thorax** 1990 Jun; 45(6):456–9

A new method for estimating filtration variables in isolated zone 1 rat lung. Tanita T, et al. **Tohoku J Exp Med** 1990 Mar;160(3):277–84

Supplement on severe and complicated malaria: a comment [letter] Maegraith B. **Trans R Soc Trop Med Hyg** 1989 Mar-Apr;83(2):288

Role of the endothelial actin filament cytoskeleton in rheology and permeability. Schnittler H, et al. **Z Kardiol** 1989;78 Suppl 6:1–4

[Changes in the concentration of K+ induced by a flash of light in the preretinal vitreous of the anesthesized minipig] Poitry-Yamate CL, et al. **Klin Monatsbl Augenheilkd** 1990 May;196(5):351–3 (Eng. Abstr.) **(Fre)**

[Fructosamine values in venous and capillary blood] Lemke C, et al. **Wien Klin Wochenschr Suppl** 1990;180:38–9; discussion 57–9 (Eng. Abstr.) **(Ger)**

[Age-related and pathophysiologic significance of capillary bed rarefaction of the hypertensive vascular system] Henrich HA, et al. **Z Gerontol** 1990 May-Jun;23(3):147–51 (Eng. Abstr.) **(Ger)**

[A new method for determining capillary filtration coefficients in tissues. 1. Methodologic principles] Petrow JM. **Z Gesamte Inn Med** 1990 Mar 1;45(5):137–40 (Eng. Abstr.) **(Ger)**

[A new method for determining capillary filtration coefficients in tissues. 2. Animal experiment studies] Petrow JM. **Z Gesamte Inn Med** 1990 Mar 1;45(5):141–4 (Eng. Abstr.) **(Ger)**

[The role of changes in vascular permeability, interstitial relaxation and surface tension forces in the alveoli in disordered filtration-absorption equilibrium in pulmonary edema] Serikov VB, et al. **Patol Fiziol Eksp Ter** 1989 Sep-Oct;(5):37–41 (Eng. Abstr.) **(Rus)**

[Permeability of the hemato-ophthalmic barrier in uveitis] Pen'kov MA, et al. **Vestn Oftalmol** 1990 Mar-Apr; 106(2):53–6 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Pharmacological alteration of the lung vascular response to radiation. Graham MM, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):329–39

CAPILLARY RESISTANCE see under **VASCULAR RESISTANCE**

CAPILLARY RESISTANCE, HEMATOLOGIC see **CAPILLARY FRAGILITY**

CAPITAL EXPENDITURES see under **ECONOMICS**

CAPITAL FINANCING see under **FINANCIAL MANAGEMENT**

CAPITAL PUNISHMENT

Healing-killing conflicts. Medical ethics and the death penalty. Bonnie RJ. **Hastings Cent Rep** 1990 May-Jun; 20(3):12–8

Differentiation of death-row murderers and life-sentence murderers by antisociality and intelligence measures. Heilbrun AB Jr. **J Pers Assess** 1990 Summer;54(3-4):617–27

The penalty of death [editorial] Lee NC. **S Afr Med J** 1989 Oct 21;76(8):396

[Danish physicians and capital punishment (editorial)] Rosenbeck-Hansen J. **Ugeskr Laeger** 1989 Sep 4; 151(36):2241 **(Dan)**

[Danish physicians' attitude to capital punishment. A questionnaire study] Tulinius AC, et al. **Ugeskr Laeger** 1989 Sep 4;151(36):2252–5 (Eng. Abstr.) **(Dan)**

HISTORY

Judicial electrocution and the prison doctor. Jones GR. **Lancet** 1990 Mar 24;335(8691):713–4

LEGISLATION & JURISPRUDENCE

Behavioral science and the juvenile death penalty. Leong GB, et al. **Bull Am Acad Psychiatry Law** 1989;17(3):301–9 (42 ref.)

Capital punishment, gun control, and personal violence (suicide and homicide). Lester D. **Psychol Rep** 1990 Feb; 66(1):122

CAPITALISM see **POLITICAL SYSTEMS**

CAPITATION FEE see under **FEES AND CHARGES**

CAPLAN'S SYNDROME see under **PNEUMOCONIOSIS**

CAPNOCYTOPHAGA see under **CYTOPHAGACEAE**

CAPPING, IMMUNOLOGIC see **IMMUNOLOGIC CAPPING**

CAPPING, RECEPTOR see **RECEPTOR AGGREGATION**

CAPRIC ACIDS see **DECANOIC ACIDS**

CAPROATES

METABOLISM

Oxidation of 2-oxoisocaproate and 2-oxoisovalerate by the perfused rat heart. Interactions with fatty acid oxidation. Letto J, et al. **Biochem Cell Biol** 1990 Jan;68(1):260–5

PHARMACOLOGY

Selective inactivation of peroxisomal and cytosolic 3-ketothiolase IB by 2-chloro-6-phenylhexanoate in intact hepatocytes. Sephton GB, et al. **J Biol Chem** 1990 Jun 5; 265(16):9214–20

[DNA damage and anticancer effect] Kanamaru R, et al. **Gan To Kagaku Ryoho** 1990 Mar;17(3 Pt 2):517–23 (14 ref.) (Eng. Abstr.) **(Jpn)**

POISONING

Urinary arginine and ornithine in occupational exposure to 2-ethylhexanoic acid. Pennanen S, et al. **Arch Toxicol** 1990; 64(5):426–7

THERAPEUTIC USE

Potentiation of vincristine and actinomycin D by a new synthetic imidazole anti-tumor agent YM534 active against human cancer cells and multidrug-resistant cells. Sato S, et al. **Anticancer Drug Des** 1989 Aug;4(2):125–35

TOXICITY

Penicillic acid as Na+,K+ and Ca2+ channel blocker in isolated frog's heart at toxic levels. Pandiyan V, et al. **Indian J Exp Biol** 1990 Mar;28(3):295–6

Asymmetric synthesis and teratogenic activity of (R)- and (S)-2-ethylhexanoic acid, a metabolite of the plasticizer di-(2-ethylhexyl)phthalate. Hauck RS, et al. **Life Sci** 1990; 46(7):513–8

URINE

Gas chromatographic determination of 2-ethylhexanoic acid in urine as its pentafluorobenzyl ester. Kröger S. **Analyst** 1989 Dec;114(12):1647–8

Evaluation of workers' exposure to 2-ethylhexanoic acid (2-EHA) in Finnish sawmills. A field study. Kröger S, et al. **Int Arch Occup Environ Health** 1990;62(3):213–6

CAPROLACTAM see under **AZEPINES**

CAPRYLATES

Purification of IgG from serum with caprylic acid and ammonium sulphate precipitation is not superior to ammonium sulphate precipitation alone. Mohanty JG, et al. **Comp Immunol Microbiol Infect Dis** 1989;12(4):153–60

METABOLISM

1-(13)C-octanoate oxidation, energy expenditure and vitamin B2 supplement in premature infants. Patterson BE, et al. **Acta Paediatr Scand** 1989 Sep;78(5):780–1

Ca2(+)-fatty acid interaction in the control of hepatic gluconeogenesis. González-Manchón C, et al. **Biochim Biophys Acta** 1990 Mar 9;1051(3):215–20

Liberation of 14CO2 from [14C]adipic acid and [14C]octanoic acid by adult rats during riboflavin deficiency and its reversal. Bates CJ. **Br J Nutr** 1990 May; 63(3):553–62

Octanoate metabolism in isolated hepatocytes and mitochondria from fetal, newborn and adult rabbit. Evidence for a high capacity for octanoate esterification in term fetal liver. Pégorier JP, et al. **Eur J Biochem** 1989 Oct 1;184(3):681–6

Quantitation of oxidation of medium-chain triglycerides in preterm infants. Sulkers EJ, et al. **Pediatr Res** 1989 Oct; 26(4):294–7

PHARMACOKINETICS

Medium-chain-triglyceride lipid emulsion: metabolism and tissue distribution. Johnson RC, et al. **Am J Clin Nutr** 1990 Sep;52(3):502–8

Disposition of perfluorooctanoic acid in the rat after single and subchronic administration. Ylinen M, et al. **Bull Environ Contam Toxicol** 1990 Jan;44(1):46–53

PHARMACOLOGY

Sex-related differences in the enhancing effects of perfluoro-octanoic acid on stearoyl-CoA desaturase and its influence on the acyl composition of phospholipid in rat liver. Comparison with clofibric acid and tiadenol. Kawashima Y, et al. **Biochem J** 1989 Nov 1;263(3):897–904

Comparative studies on sex-related difference in biochemical responses of livers to perfluorooctanoic acid between rats

and mice. Uy-Yu N, et al. **Biochem Pharmacol** 1990 May 1;39(9):1492-5

The contribution of ATP turnover by the Na+/K+-ATPase to the rate of respiration of hepatocytes. Effects of thyroid status and fatty acids. Nobes CD, et al. **Biochim Biophys Acta** 1989 Sep 28; 976(2-3):241-5

Effect of phenol and sodium octanoate on the astrocyte benzodiazepine receptor. Ducis I, et al. **Brain Res** 1990 Apr 30;514(2):349-51

The effect of octanoic fatty acid on the cardiovascular system of the guinea pig. Kristev A, et al. **Cor Vasa** 1989; 31(4):321-7

The mechanism of stimulation of respiration by fatty acids in isolated hepatocytes. Nobes CD, et al. **J Biol Chem** 1990 Aug 5;265(22):12910-5

On octanoic acid-induced hyperventilation--implications for hepatic encephalopathy and Reye's syndrome. Mitkov D, et al. **Res Exp Med (Berl)** 1989;189(5):347-54

URINE

Stimulation by oestradiol of the urinary excretion of perfluorooctanoic acid in the male rat. Ylinen M, et al. **Pharmacol Toxicol** 1989 Oct;65(4):274-7

CAPSAICIN

Albumin protects against capsaicin- and adenosine-induced bronchoconstriction and reduces overflow of calcitonin gene-related peptide from guinea-pig lung. Kröll F, et al. **Acta Physiol Scand** 1990 May;139(1):223-32

A bradykinin (BK)1 receptor antagonist blocks capsaicin-induced ear inflammation in mice. Mantione CR, et al. **Br J Pharmacol** 1990 Mar;99(3):516-8

Heat and mechanical hyperalgesia induced by capsaicin. Cross modality threshold modulation in human C nociceptors. Culp WJ, et al. **Brain** 1989 Oct;112 (Pt 5):1317-31

ADMINISTRATION & DOSAGE

Post-occlusive reactive hyperaemia in the heart, skeletal muscle and skin of control and capsaicin-pre-treated pigs. Franco-Cereceda A, et al. **Acta Physiol Scand** 1989 Oct; 137(2):271-7

Compliance problems, placebo effect cloud trials of topical analgesic [news] Cotton P. **JAMA** 1990 Jul 4;264(1):13-4

Relief of local stump pain by capsaicin cream [letter] Rayner HC, et al. **Lancet** 1989 Nov 25;2(8674):1276-7

[The treatment of post-herpetic neuralgia using capsaicin ointment (letter)] van Horssen N. **Ned Tijdschr Geneeskd** 1990 Jun 2;134(22):1105-6 **(Dut)**

[Thermal analgesia following intrathecal capsaicin administration in rats--detailed measurements of thermal analgesia over the lower body by a thermal probe] Harada Y, et al. **Masui** 1989 Oct;38(10):1329-34 (Eng. Abstr.) **(Jpn)**

ANALOGS & DERIVATIVES

Effects of capsaicin (C) and dihydrocapsaicin (DC) on serum ethanol (ET) concentration of ET treated CF-1 mice. Negulesco JA, et al. **Artery** 1990;17(3):144-58

Specific binding of resiniferatoxin, an ultrapotent capsaicin analog, by dorsal root ganglion membranes. Szallasi A, et al. **Brain Res** 1990 Jul 30;524(1):106-11

Duration of desensitization and ultrastructural changes in dorsal root ganglia in rats treated with resiniferatoxin, an ultrapotent capsaicin analog. Szallasi A, et al. **Brain Res** 1989 Nov 27;503(1):68-72

The mutagenicity of capsaicin and dihydrocapsaicin in V79 cells. Lawson T, et al. **Cancer Lett** 1989 Nov 30; 48(2):109-13

NE-19550 and NE-21610, antinociceptive capsaicin analogues: studies on nociceptive fibres of the neonatal rat tail in vitro. Dray A, et al. **Eur J Pharmacol** 1990 Jun 8; 181(3):289-93

Capsaicin and dihydrocapsaicin stimulate oxygen consumption in the perfused rat hindlimb. Cameron-Smith D, et al. **Int J Obes** 1990;14(3):259-70

ANTAGONISTS & INHIBITORS

Systemically applied ruthenium red inhibits the stimulation of sensory receptors by capsaicin. Pethö G, et al. **Acta Physiol Hung** 1990;75 Suppl:235-6

Ruthenium red selectively inhibits oedema formation and increased blood flow induced by capsaicin in rabbit skin. Buckley TL, et al. **Br J Pharmacol** 1990 Jan;99(1):7-8

The effects of ruthenium red on the response of guinea-pig ileum to capsaicin. Chahl LA. **Eur J Pharmacol** 1989 Oct 10;169(2-3):241-7

Ruthenium red antagonism of the effect of capsaicin on the motility of the isolated guinea-pig ileum [published erratum appears in Eur J Pharmacol 1990 Mar 27;178(3):380] Takaki M, et al. **Eur J Pharmacol** 1989 Dec 12;174(1):57-62

Effects of carbonyl cyanide p-trichloromethoxyphenylhydrazone (CCCP) and of ruthenium red (RR) on capsaicin-evoked neuropeptide release from peripheral terminals of primary afferent neurones. Amann R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jun; 341(6):534-7

Both single-dose and repeated administration of clomipramine reduces the behavioural response to intrathecal capsaicin in mice. Rosland JH, et al. **Pharmacol Toxicol** 1989 Sep;65(3):189-91

[Antagonism by ruthenium red of the action of capsaicin on the motility of the isolated guinea-pig ileum] Takagi M, et al. **Nippon Heikatsukin Gakkai Zasshi** 1989 Oct; 25(5):220-2 **(Jpn)**

DIAGNOSTIC USE

Inhaled furosemide inhibits cough induced by low chloride content solutions but not by capsaicin. Ventresca PG, et al. **Am Rev Respir Dis** 1990 Jul;142(1):143-6

IMMUNOLOGY

Neurogenic inflammation, vascular permeability, and mast cells. Capsaicin desensitization fails to influence IgE-anti-DNP induced vascular permeability in rat airways. Didier A, et al. **Am Rev Respir Dis** 1990 Feb; 141(2):398-406

METABOLISM

Immunochemical detection of photoaffinity-labelled capsaicin-binding proteins from sensory neurons. Wood JN, et al. **FEBS Lett** 1990 Sep 3;269(2):381-5

PHARMACOLOGY

Effects of capsaicin on the circular muscle motility of the isolated guinea-pig ileum. Takaki M, et al. **Acta Med Okayama** 1989 Dec;43(6):353-7

Capsaicin-sensitive and hexamethonium-insensitive circular muscle responses to mesenteric nerve stimulation in the isolated guinea pig ileum. Takaki M, et al. **Acta Med Okayama** 1990 Jun;44(3):135-9

Neuroparalytic keratitis and capsaicin. Knyazev GG, et al. **Acta Physiol Hung** 1990;75(1):29-34

Effect of capsaicin, resiniferatoxin and piperine on ethanol-induced gastric ulcer of the rat. Szolcsányi J. **Acta Physiol Hung** 1990;75 Suppl:267-8

Capsaicin and histamine antagonist-sensitive mechanisms in the immediate allergic reaction of pig airways. Alving K, et al. **Acta Physiol Scand** 1990 Jan;138(1):49-60

Ruthenium red differentiates between capsaicin and nicotine effects on cardiac sensory nerves. Franco-Cereceda A, et al. **Acta Physiol Scand** 1989 Nov;137(3):457-8

Muscarinic supersensitivity in the rat urinary bladder after capsaicin pretreatment. Malmgren A, et al. **Acta Physiol Scand** 1990 Mar;138(3):377-87

Participation of substance P in inflammatory responses. Yonehara N, et al. **Adv Exp Med Biol** 1989;247B:529-34

Capsaicin and anaphylactic reactions in the guinea-pig airways. Gentilini G, et al. **Agents Actions** 1990 Apr; 30(1-2):92-4

Inhibition of histamine skin flare reaction following repeated topical applications of capsaicin. Bjerring P, et al. **Allergy** 1990 Feb;45(2):121-5

Effects of intracardiac bradykinin and capsaicin on spinal and spinoreticular neurons. Bolser DC, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1543-50

Capsaicin desensitization induces atrophy of brown adipose tissue in rats. Cui J, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R324-32

Synthetic capsaicin reversibly impairs vasopressin-mediated blood pressure recovery. Gardiner SM, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1429-35

Influence of morphine or capsaicin pretreatment on rat gastric microcirculatory response to PAF. Pique JM, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):G352-7

Capsaicin attenuates hindbrain neuron responses to circulating cholecystokinin. Ritter RC, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1162-8

Capsaicin-sensitive nerves are required for glucostasis but not for catecholamine output during hypoglycemia in rats. Zhou XF, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):E212-9

Regional differences in the motor and inflammatory responses to capsaicin in guinea pig airways. Correlation with content and release of substance P-like immunoreactivity. Manzini S, et al. **Am Rev Respir Dis** 1989 Oct;140(4):936-41

Ion transport in rat tracheal epithelium in vitro. Role of capsaicin-sensitive nerves in allergic reactions. Sestini P, et al. **Am Rev Respir Dis** 1990 Feb;141(2):393-7

Effects of capsaicin on the metabolism of rheumatoid arthritis synoviocytes in vitro [see comments] Matucci-Cerinic M, et al. **Ann Rheum Dis** 1990 Aug;49(8):598-602 Comment in: Ann Rheum Dis 1990 Aug;49(8):653.

Effect of capsaicin on the release of substance P from rheumatoid arthritis and osteoarthritis synoviocytes in vitro [letter; comment] Partsch G, et al. **Ann Rheum Dis** 1990 Aug;49(8):653 Comment on: Ann Rheum Dis 1990 Aug;49(8):598-602.

Inhibition by capsaicin of NADH-quinone oxidoreductases is correlated with the presence of energy-coupling site 1 in various organisms. Yagi T. **Arch Biochem Biophys** 1990 Sep;281(2):305-11

The human pharmacology of capsaicin. Fuller RW. **Arch Int Pharmacodyn Ther** 1990 Jan-Feb;303:147-56 (45 ref.)

Capsaicin-sensitive nerves in the gastrointestinal tract. Maggi CA. **Arch Int Pharmacodyn Ther** 1990 Jan-Feb;303:157-66 (55 ref.)

Effects of capsaicin (C) and dihydrocapsaicin (DC) on serum ethanol (ET) concentration of ET treated CF-1 mice. Negulesco JA, et al. **Artery** 1990;17(3):144-58

Effects of capsaicin on glucose metabolism in isolated incubated skeletal muscle in vitro. Leighton B, et al. **Biochem Soc Trans** 1990 Jun;18(3):476-7

Influence of capsaicin on the reagibility of the isolated guinea pig trachea. Schreiber J, et al. **Biomed Biochim Acta** 1990; 49(1):97-101

Resiniferatoxin, a potent capsaicin-like stimulator of peripheral nociceptors in the neonatal rat tail in vitro. Dray A, et al. **Br J Pharmacol** 1990 Feb;99(2):323-6

Cerebrovascular responses to capsaicin in vitro and in situ. Edvinsson L, et al. **Br J Pharmacol** 1990 Jun;100(2):312-8

Effects of capsaicin pretreatment on neuropeptides and salivary secretion of rat parotid glands. Ekström J, et al. **Br J Pharmacol** 1989 Aug;97(4):1031-8

Modulation of neurotransmission in the guinea-pig vas deferens by capsaicin: involvement of calcitonin gene-related peptide and substance P. Ellis JL, et al. **Br J Pharmacol** 1989 Oct;98(2):707-13

Influence of capsaicin-sensitive afferent neurones on the acid secretory responses of the rat stomach in vivo. Esplugues JV, et al. **Br J Pharmacol** 1990 Jul;100(3):491-6

Increase in gastric secretion induced by 2-deoxy-D-glucose is impaired in capsaicin pretreated rats. Evangelista S, et al. **Br J Pharmacol** 1989 Sep;98(1):35-7

Prejunctional modulatory action of neuropeptide Y on peripheral terminals of capsaicin-sensitive sensory nerves. Giuliani S, et al. **Br J Pharmacol** 1989 Oct;98(2):407-12

Suppression by neuropeptide Y of capsaicin-sensitive sensory nerve-mediated contraction in guinea-pig airways. Grundemar L, et al. **Br J Pharmacol** 1990 Mar;99(3):473-6

Arachidonic acid-induced bronchomotor responses are partially mediated by release of sensory neuropeptides from capsaicin-sensitive structures. Manzini S, et al. **Br J Pharmacol** 1989 Dec;98(4):1077-9

Cigarette smoke, nicotine and capsaicin aerosol-induced vasodilatation in pig respiratory mucosa. Matran R, et al. **Br J Pharmacol** 1990 Jul;100(3):535-41

Dual effects of capsaicin on responses of the rabbit ear artery to field stimulation. Moritoki H, et al. **Br J Pharmacol** 1990 Jan;99(1):152-6

Capsaicin evokes secretion of nasal fluid and depletes substance P and calcitonin gene-related peptide from the nasal mucosa in the rat. Petersson G, et al. **Br J Pharmacol** 1989 Nov;98(3):930-6

Effect of capsaicin-sensitive sensory nerves on plasma glucose and catecholamine levels during 2-deoxyglucose-induced stress in conscious rats. Zhou XF, et al. **Br J Pharmacol** 1990 Jul;100(3):523-9

Effect of capsaicin on the rabbit urinary bladder. What is the function of sensory nerves that contain substance P? Harrison SC, et al. **Br J Urol** 1990 Aug;66(2):155-61

The receptive part of the primary afferent axon is most vulnerable to systemic capsaicin in adult rats. Chung K, et al. **Brain Res** 1990 Mar 19;511(2):222-6

Neuronal intermediate filaments in rat dorsal root ganglia: differential distribution of peripherin and neurofilament protein immunoreactivity and effect of capsaicin. Ferri GL, et al. **Brain Res** 1990 May 7;515(1-2):331-5

The excitation of cutaneous nerve endings in a neuroma by capsaicin. Hartung M, et al. **Brain Res** 1989 Oct 16; 499(2):363-6

Substance P is released from the endothelium of normal and capsaicin-treated rat hind-limb vasculature, in vivo, by increased flow. Ralevic V, et al. **Circ Res** 1990 May; 66(5):1178-83

The effects of capsaicin denervation on leucocyte and complement components of the inflammatory response. Helme RD, et al. **Clin Exp Neurol** 1987;24:207-11

Different control of the adrenocorticotropin-corticosterone response and of prolactin secretion during cold stress, anesthesia, surgery, and nicotine injection in the rat: involvement of capsaicin-sensitive sensory neurons. Donnerer J, et al. **Endocrinology** 1990 Feb;126(2):921-6

Capsaicin selectively reduces airway responses to histamine, substance P and vagal stimulation. Biggs DF, et al. **Eur J Pharmacol** 1990 Jan 3;175(1):29-33

Inhibitory effect of capsaicin on the ascending pathway of the guinea-pig ileum and antagonism of this effect by ruthenium red. Jin JG, et al. **Eur J Pharmacol** 1990 May 3;180(1):13-9

The 'efferent' function of capsaicin-sensitive nerves: ruthenium red discriminates between different mechanisms of activation. Maggi CA, et al. **Eur J Pharmacol** 1989 Nov 7;170(3):167-77

Characterization of opioid receptors modulating the function of capsaicin-sensitive neurons in guinea-pig atria. Mantelli L, et al. **Eur J Pharmacol** 1990 May 16;180(2-3):325-30

Effects of opioid drugs on capsaicin-sensitive neurones in guinea-pig atria. Mantelli L, et al. **Eur J Pharmacol** 1989 Nov 7;170(3):217-23

Evidence that toluene diisocyanate activates the efferent function of capsaicin-sensitive primary afferents. Mapp CE, et al. **Eur J Pharmacol** 1990 May 3;180(1):113-8

The autoradiographic distribution of substance P binding sites in guinea-pig vas deferens is altered by capsaicin pretreatment. Mussap CJ, et al. **Eur J Pharmacol** 1989 Sep 22;168(3):337-45

Capsaicin-sensitive vagal afferent fibers and stimulation of gastric acid secretion in anesthetized rats. Raybould HE, et al. **Eur J Pharmacol** 1989 Aug 22;167(2):237-43

Afferent nerve-mediated protection against deep mucosal damage in the rat stomach. Holzer P, et al. **Gastroenterology** 1990 Apr;98(4):838-48

Laparotomy-induced gastric protection against ethanol injury is mediated by capsaicin-sensitive sensory neurons. Yonei Y, et al. **Gastroenterology** 1990 Jul;99(1):3-9

Opioid receptors and prejunctional modulation of capsaicin-sensitive sensory nerves in guinea-pig left atrium. Giuliani S, et al. **Gen Pharmacol** 1990;21(4):417-21

Motor and inflammatory effect of hyperosmolar solutions on the rat urinary bladder in relation to capsaicin-sensitive sensory nerves. Maggi CA, et al. **Gen Pharmacol** 1990; 21(1):97-103

Further studies on the motor response of the human isolated urinary bladder to tachykinins, capsaicin and electrical field stimulation. Maggi CA, et al. **Gen Pharmacol** 1989; 20(5):663-9

Effect of capsaicin on skeletal muscle lipoprotein lipase in rats fed high fat diet. Srinivasan MR, et al. **Indian J Exp Biol** 1989 Oct;27(10):910-2

Increased delayed-type hypersensitivity reaction in rats neuromanipulated with capsaicin. Nilsson G, et al. **Int Arch Allergy Appl Immunol** 1989;90(3):256-60

Capsaicin treatment to developing rats induces increase of noradrenaline levels in the iris without affecting the adrenergic terminal density. Luthman J, et al. **Int J Dev Neurosci** 1989;7(6):613-22

Nasal mucosal permeability after methacholine, substance P, and capsaicin challenge in the rat. Petersson G, et al. **Int J Microcirc Clin Exp** 1990 May;9(2):205-12

Capsaicin and dihydrocapsaicin stimulate oxygen consumption in the perfused rat hindlimb. Cameron-Smith D, et al. **Int J Obes** 1990;14(3):259-70

Effects of capsaicin and ethanol on hepatic drug-metabolizing enzymes in rat. Iwama M, et al. **Int J Vitam Nutr Res** 1990;60(1):100-3

Resorptive clearance and transepithelial potential difference in capsaicin-treated F344 rats. De Sanctis GT, et al. **J Appl Physiol** 1990 May;68(5):1826-32

Capsaicin-induced bronchoconstriction and neuropeptide release in guinea pig perfused lungs. Kröll F, et al. **J Appl Physiol** 1990 Apr;68(4):1679-87

Oxygen radicals in capsaicin-induced bronchoconstriction. Lai YL. **J Appl Physiol** 1990 Feb;68(2):568-73

Capsaicin-induced bronchodilation in mild asthmatic subjects: possible role of nonadrenergic inhibitory system. Lammers JW, et al. **J Appl Physiol** 1989 Aug;67(2):856-61

Reflex responses to capsaicin: intravenous, aerosol, and intratracheal administration [published errata appear in J Appl Physiol 1990 Jan;68(1):following Table of Contents and 1990 Jun;68(6):following 2701] Palecek F, et al. **J Appl Physiol** 1989 Oct;67(4):1428-37

Sendai virus infection potentiates neurogenic inflammation in the rat trachea. Piedimonte G, et al. **J Appl Physiol** 1990 Feb;68(2):754-60

Effects of cold and capsaicin desensitization on prostaglandin E hypothermia in rats. Shimada SG, et al. **J Appl Physiol** 1990 Jun;68(6):2618-22

Stimulation of tracheal ciliary beat frequency by capsaicin. Wong LB, et al. **J Appl Physiol** 1990 Jun;68(6):2574-80

Neonatal capsaicin treatment induces invasion of the substantia gelatinosa by the terminal arborizations of hair follicle afferents in the rat dorsal horn. Shortland P, et al. **J Comp Neurol** 1990 Jun 1;296(1):23-31

Capsaicin-sensitive primary sensory neurons are potent modulators of murine delayed-type hypersensitivity reactions. Girolomoni G, et al. **J Immunol** 1990 Aug 15; 145(4):1105-12

Capsaicin interferes with the centrifugal spread of virus in primary and recurrent genital herpes simplex virus infections. Stanberry LR. **J Infect Dis** 1990 Jul;162(1):29-34

Regional distribution of calcitonin gene-related peptide-, substance P-, cholecystokinin-, Met5-enkephalin-, and dynorphin A (1-8)-like materials in the spinal cord and dorsal root ganglia of adult rats: effects of dorsal rhizotomy and neonatal capsaicin. Pohl M, et al. **J Neurochem** 1990 Oct;55(4):1122-30

Effects of capsaicin treatment on immunoglobulin secretion in the rat: further evidence for involvement of tachykinin-containing afferent nerves. Eglezos A, et al. **J Neuroimmunol** 1990 Feb;26(2):131-8

Modification of serotonergic innervation of the rat spinal cord dorsal horn after neonatal capsaicin treatment. Marlier L, et al. **J Neurosci Res** 1990 Jan;25(1):112-8

Influence of capsaicin-sensitive fibres on experimentally-induced colitis in rats. Evangelista S, et al. **J Pharm Pharmacol** 1989 Aug;41(8):574-5

Administration of recombinant enkephalinase (neutral endopeptidase) prevents capsaicin-induced miosis in the rabbit eye in vivo. Malfroy B, et al. **J Pharmacol Exp Ther** 1990 Feb;252(2):462-5

Further evidence for the origin of circulating calcitonin gene-related peptide in the rat. Emson PC, et al. **J Physiol (Lond)** 1989 May;412:297-308

Increased flap survival after sensory denervation with capsaicin accompanied by delay. Chang CC, et al. **J Reconstr Microsurg** 1990 Jan;6(1):29-33; discussion 35-6

Studying selective blockage of sensation [news] Cotton P. **JAMA** 1990 Jul 4;264(1):14-5

Influence of capsaicin-induced denervation on neurogenic and humoral control of arterial pressure. Donnerer J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Dec;340(6 Pt 2):740-3

Effects of capsaicin, tachykinins, calcitonin gene-related peptide and bradykinin in the pig iris sphincter muscle. Geppetti P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Apr; 341(4):301-7

The effect of thiorphan and epithelium removal on contractions and tachykinin release produced by activation of capsaicin-sensitive afferents in the guinea-pig isolated bronchus. Maggi CA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jan-Feb; 341(1-2):74-9

Effect of ruthenium red on responses mediated by activation of capsaicin-sensitive nerves of the rat urinary bladder. Maggi CA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Nov; 340(5):541-6

Capsaicin-like activity of some natural pungent substances on peripheral endings of visceral primary afferents. Patacchini R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jul; 342(1):72-7

Nerve growth factor (NGF) regulates adult rat cultured dorsal root ganglion neuron responses to the excitotoxin capsaicin. Winter J, et al. **Neuron** 1988 Dec;1(10):973-81

Ruthenium red blocks the capsaicin-induced increase in intracellular calcium and activation of membrane currents in sensory neurones as well as the activation of peripheral nociceptors in vitro. Dray A, et al. **Neurosci Lett** 1990 Mar 2;110(1-2):52-9

Release of calcitonin gene-related peptide (CGRP) from capsaicin-sensitive vasodilator nerves in the rat mesenteric artery. Fujimori A, et al. **Neurosci Lett** 1990 May 4; 112(2-3):173-8

Neurochemical evidence for the activation of the 'efferent' function of capsaicin-sensitive nerves by lowering of the pH in the guinea-pig urinary bladder. Geppetti P, et al. **Neurosci Lett** 1990 Jun 22;114(1):101-6

Capsaicin sensitization and desensitization on the tongue produced by brief exposures to a low concentration. Green BG. **Neurosci Lett** 1989 Dec 15;107(1-3):173-8

Release of calcitonin gene-related peptide induced by capsaicin in the vascularly perfused rat stomach. Holzer P, et al. **Neurosci Lett** 1990 Jan 1;108(1-2):195-200

The effects of capsaicin applied topically to inferior alveolar nerve on antidromic vasodilatation in cat gingiva. Izumi H, et al. **Neurosci Lett** 1990 Apr 20;112(1):65-9

Bile salt potentiates the action of capsaicin on sensory neurones of guinea-pig ileum. Jin JG, et al. **Neurosci Lett** 1990 Feb 5;109(1-2):88-91

Ruthenium red prevents capsaicin-induced neurotoxic action on sensory fibers of the guinea pig ileum. Jin JG, et al. **Neurosci Lett** 1989 Nov 20;106(1-2):152-6

Involvement of capsaicin-sensitive afferent nerve fibres in serotonin-induced plasma extravasation and vasodilatation in rat skin. Khalil Z, et al. **Neurosci Lett** 1989 Sep 25; 104(1-2):105-9

Neurochemical evidence for the involvement of N-type calcium channels in transmitter secretion from peripheral endings of sensory nerves in guinea pigs. Maggi CA, et al. **Neurosci Lett** 1990 Jul 3;114(2):203-6

Which mechanisms account for the sensory neuron blocking action of capsaicin on primary afferents in the rat urinary bladder? Maggi CA, et al. **Neurosci Lett** 1990 Mar 14; 110(3):267-72

Spinal c-fos induction by sensory stimulation in neonatal rats. Williams S, et al. **Neurosci Lett** 1990 Feb 16;109(3):309-14

Capsaicin-induced release of calcitonin gene-related peptide from dorsal horn slices is enhanced in adjuvant arthritic rats. Nanayama T, et al. **Neurosci Res** 1989 Aug;6(6):569-72

Capsaicin-induced stimulation of polymodal nociceptors is antagonized by ruthenium red independently of extracellular calcium. Amann R, et al. **Neuroscience** 1989; 32(1):255-9

Desensitization and capsaicin-induced release of substance P-like immunoreactivity from guinea-pig ureter in vitro. Dray A, et al. **Neuroscience** 1989;31(2):479-83

Topical versus systemic capsaicin desensitization: specific and unspecific effects as indicated by modification or reflex micturition in rats. Maggi CA, et al. **Neuroscience** 1989; 31(3):745-56

Effect of omega conotoxin on reflex responses mediated by activation of capsaicin-sensitive nerves of the rat urinary bladder and peptide release from the rat spinal cord. Maggi CA, et al. **Neuroscience** 1990;34(1):243-50

The effects of capsaicin treatment on self-administration of amphetamine vapor in rats. Sharpe LG, et al. **NIDA Res Monogr** 1989;95:539

The measurement of capsaicin-sensitive sensory nerve fiber function in elderly patients with pain. LeVasseur SA, et al. **Pain** 1990 Apr;41(1):19-25

Capsaicin: actions on nociceptive C-fibres and therapeutic potential. Lynn B. **Pain** 1990 Apr;41(1):61-9 (86 ref.)

The C-fibre conduction block caused by capsaicin on rat vagus nerve in vitro. Waddell PJ, et al. **Pain** 1989 Nov; 39(2):237-42

Opioid modulation of capsaicin-evoked release of substance P from rat spinal cord in vivo. Aimone LD, et al. **Peptides** 1989 Nov-Dec;10(6):1127-31

Relative sparing of calcitonin gene-related peptide-containing primary sensory neurons following neonatal capsaicin treatment in the rat. Kashiba H, et al. **Peptides** 1990 May-Jun;11(3):491-6

Capsaicin-sensitive primary afferents are involved in the hypotensive effect of neurotensin in ganglion-blocked guinea pigs. Rioux F, et al. **Peptides** 1989 Sep-Oct; 10(5):1033-40

Captopril and capsaicin modify opioid withdrawal in the morphine-dependent rat. Sharpe LG, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):899-902

The effects of capsaicin on emotional responses to odors in the rat. Cormareche-Leydier M, et al. **Physiol Behav** 1989 Oct;46(4):679-84

Temporal gustatory and salivary responses to capsaicin upon repeated stimulation. Nasrawi CW, et al. **Physiol Behav** 1990 Apr;47(4):611-5

Temporal effectiveness of mouth-rinsing on capsaicin mouth-burn. Nasrawi CW, et al. **Physiol Behav** 1990 Apr; 47(4):617-23

Inverse relationship between intensity of vaginal self-stimulation-produced analgesia and level of chronic intake of a dietary source of capsaicin. Whipple B, et al. **Physiol Behav** 1989 Aug;46(2):247-52

Sensory denervation with capsaicin does not influence the critical ischemia time in rat island flaps. Westin M, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(3):173-6

Localization of chemical stimulation: capsaicin on hairy skin. Green BG, et al. **Somatosens Mot Res** 1989;6(5-6):553-66

Capsaicin pretreatment modifies hydrogen sulphide-induced pulmonary injury in rats. Prior M, et al. **Toxicol Pathol** 1990;18(2):279-88

Sensory neuron-specific actions of capsaicin: mechanisms and applications. Bevan S, et al. **Trends Pharmacol Sci** 1990 Aug;11(8):330-3 (35 ref.)

[Effect of epidural capsaicin on substance P in the dorsal horn in adult rats using epidural tubing] Matsumoto H. **Masui** 1989 Jul;38(7):891-900 (Eng. Abstr.) **(Jpn)**

[Changes in the activity of the taste receptor apparatus and the preference for a sodium chloride solution in newborn rats receiving capsaicin] Serova ON. **Biull Eksp Biol Med** 1990 Mar;109(3):215-7 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Argon laser induced cutaneous sensory and pain thresholds in post-herpetic neuralgia. Quantitative modulation by topical capsaicin. Bjerring P, et al. **Acta Derm Venereol (Stockh)** 1990;70(2):121-5

Effects of topical capsaicin on normal skin and affected dermatomes in herpes zoster. Westerman RA, et al. **Clin Exp Neurol** 1988;25:71-84

Neuromodulation of synovitis: capsaicin effect on severity of experimental arthritis. Inman RD, et al. **J Neuroimmunol** 1989 Sep;24(1-2):17-22

TOXICITY

The mutagenicity of capsaicin and dihydrocapsaicin in V79 cells. Lawson T, et al. **Cancer Lett** 1989 Nov 30; 48(2):109-13

Capsaicin-induced neuronal degeneration in the brain and retina of preweanling rats. Ritter S, et al. **J Comp Neurol** 1990 Jun 15;296(3):447-61

Use of a new argon laser technique to evaluate changes in sensory and pain thresholds in human skin following topical capsaicin treatment. Bjerring P, et al. **Skin Pharmacol** 1989; 2(3):162-7

CAPSICUM see under **PLANTS, EDIBLE**

CAPSID

Structure and dynamics of detergent-solubilized M13 coat protein (an integral membrane protein) determined by 13C and 15N nuclear magnetic resonance spectroscopy. Henry GD, et al. **Biochem Cell Biol** 1990 Jan;68(1):318-29 (63 ref.)

Structural study of the lipid-containing bacteriophage PRD1 and its capsid and DNA components by laser Raman spectroscopy. Bamford DH, et al. **Biochemistry** 1990 Jun 26;29(25):5982-7

Environmental modulation of M13 coat protein tryptophan fluorescence dynamics. Johnson ID, et al. **Biochemistry** 1989 Jul 25;28(15):6392-400

Structural studies of bean pod mottle virus, capsid, and RNA in crystal and solution states by laser Raman spectroscopy. Li TS, et al. **Biochemistry** 1990 May 29;29(21):5018-26

Side-chain dynamics of a detergent-solubilized membrane protein: measurement of tryptophan and glutamine hydrogen-exchange rates in M13 coat protein by 1H NMR spectroscopy. O'Neil JD, et al. **Biochemistry** 1989 Aug 8; 28(16):6736-45

Aggregation-related conformational change of the membrane-associated coat protein of bacteriophage M13. Spruijt RB, et al. **Biochemistry** 1989 Nov 14;28(23):9158-65

The use of folding patterns in a multisolution approach of the all-beta protein three-dimensional structure. A beta-roll structure is predicted in the retroviral glycoprotein. Busetta B. **Biochim Biophys Acta** 1989 Oct 19;998(3):301-9

Analysis of time-resolved fluorescence anisotropy in lipid-protein systems. I. Application to the lipid probe octadecyl rhodamine B in interaction with bacteriophage M13 coat protein incorporated in phospholipid bilayers.

Peng K, et al. **Eur Biophys J** 1990;18(5):277–83

Analysis of time-resolved fluorescence anisotropy in lipid-protein systems. II. Application to tryptophan fluorescence of bacteriophage M13 coat protein incorporated in phospholipid bilayers. Peng K, et al. **Eur Biophys J** 1990;18(5):285–93

Fluorescence studies on the coat protein of alfalfa mosaic virus. Kan JH, et al. **J Biomol Struct Dyn** 1986 Feb; 3(4):827–42

Protruding domain of tomato bushy stunt virus coat protein is a hitherto unrecognized class of jellyroll conformation. Gibson TJ, et al. **J Mol Biol** 1990 Mar 5;212(1):7–9

Detergent-solubilized M13 coat protein exists as an asymmetric dimer. Observation of individual monomers by 15N, 13C and 1H nuclear magnetic resonance spectroscopy. Henry GD, et al. **J Mol Biol** 1990 Mar 5; 212(1):11–4

The primary structure of papaya mosaic virus coat protein: a revision. Verde C, et al. **J Protein Chem** 1989 Dec; 8(6):795–805

The use of ELISA for detection of the antibody-induced conformational change in a viral protein and its intermolecular spread. Cepica A, et al. **J Virol Methods** 1990 Apr;28(1):1–13

Two independent signals, a nuclear localization signal and a Vp1-interactive signal, reside within the carboxy-35 amino acids of SV40 Vp3. Gharakhanian E, et al. **Virology** 1990 Sep;178(1):62–71

[A problem of tymovirus taxonomy: comparison of coat proteins of two Belladonna Mottle viruses] Peter R, et al. **C R Acad Sci [III]** 1989;309(14):599–604 (Eng. Abstr.) **(Fre)**

ANALYSIS

A CD determination of the alpha-helix contents of the coat proteins of four filamentous bacteriophages: fd, IKe, Pf1, and Pf3. Clack BA, et al. **Biopolymers** 1989 Nov; 28(11):1861–73

A search for the presence of the enteroviral capsid protein VP1 in pancreases of patients with type 1 (insulin-dependent) diabetes and pancreases and hearts of infants who died of coxsackieviral myocarditis. Foulis AK, et al. **Diabetologia** 1990 May;33(5):290–8

Unusual electrophoretic properties of the coat protein of raspberry ringspot nepovirus. Acosta O, et al. **Intervirology** 1990;31(1):31–7

Nucleocapsid, nuclear association, and genome location of the herpes simplex virus type 2 38-kD DNA-binding protein. Burdett LA, et al. **Intervirology** 1990;31(2–4):76–84

Alteration of amino acid 101 within capsid protein VP-1 changes the pathogenicity of Theiler's murine encephalomyelitis virus. Zurbriggen A, et al. **J Exp Med** 1989 Dec 1;170(6):2037–49

Biophysical studies on the morphology of baculovirus-expressed bluetongue virus tubules. Marshall JJ, et al. **J Gen Virol** 1990 Aug;71 (Pt 8):1839–44

Biochemical characterization of the structural and nonstructural polypeptides of a porcine group C rotavirus. Jiang BM, et al. **J Virol** 1990 Jul;64(7):3171–8

Nuclear localization of Semliki Forest virus-specific nonstructural protein nsP2. Peränen J, et al. **J Virol** 1990 May;64(5):1888–96

Characterization of a 75-kDa Epstein-Barr virus capsid protein using a new monoclonal antibody H250. Sanchez-Pinel A, et al. **Res Virol** 1989 Nov-Dec; 140(6):531–43

Mouse hepatitis virus ORF 2a is expressed in the cytosol of infected mouse fibroblasts. Zoltick PW, et al. **Virology** 1990 Feb;174(2):605–7

Determination of polyprotein processing sites by amino terminal sequencing of nonstructural proteins encoded by plum pox potyvirus. Martín MT, et al. **Virus Res** 1990 Feb; 15(2):97–106

[Rotaviruses: structure and function of the principal polypeptides] Vautherot-Chabanne D. **Ann Rech Vet** 1989; 20(4):431–42 (75 ref.) (Eng. Abstr.) **(Fre)**

[The problem of classifying simian adenoviruses. Electrophoretic and immunologic analysis of hexons] Tarasishin LA, et al. **Mikrobiol Zh** 1984 May-Jun; 46(3):82–4 (Eng. Abstr.) **(Rus)**

[Standardization of conditions for detecting the internal proteins of the influenza virus in studying their antigenic properties in solid-phase immunoenzyme analysis] Schefer J, et al. **Vopr Virusol** 1990 Mar-Apr;35(2):105–8 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Cloning and expression of the major inner capsid protein of SA-11 simian rotavirus in Escherichia coli. Smith RE, et al. **Gene** 1989 Jul 15;79(2):239–48

Expression of the Lassa virus nucleocapsid protein in insect cells infected with a recombinant baculovirus: application to diagnostic assays for Lassa virus infection. Barber GN, et al. **J Gen Virol** 1990 Jan;71 (Pt 1):19–28

A recombinant hepatitis B core antigen polypeptide with the protamine-like domain deleted self-assembles into capsid particles but fails to bind nucleic acids. Gallina A, et al. **J Virol** 1989 Nov;63(11):4645–52

Karyophilic properties of Semliki Forest virus nucleocapsid protein. Michel MR, et al. **J Virol** 1990 Oct;64(10):5123–31

Overproduction of yeast viruslike particles by strains deficient in a mitochondrial nuclease. Liu YX, et al. **Mol Cell Biol** 1989 Aug;9(8):3323–31

Differential viral gene expression and its effect on the biological properties of the cell clones of an HIV-1-infected cell line. Kalyanaraman VS, et al. **Virology** 1990 Jul;177(1):380–3

Time course of TMV 30K protein accumulation in intact leaves. Lehto K, et al. **Virology** 1990 Jan;174(1):290–3

Increased permissivity of monkey cells to human adenovirus multiplication is affected by culturing conditions and correlates with both synthesis of virion fiber protein and altered splicing of its mRNA. Silverman L, et al. **Virology** 1989 Nov;173(1):109–19

High level expression of the two outer capsid proteins of bluetongue virus serotype 10: their relationship with the neutralization of virus infection. Marshall JJ, et al. **Virus Res** 1990 Mar;15(3):189–95

DRUG EFFECTS

6-(3,4-Dichlorophenoxy)-3-(ethylthio)-2-pyridincarbonitrile inhibits poliovirus uncoating. González ME, et al. **Antimicrob Agents Chemother** 1990 Jun; 34(6):1259–61

Optimization of the in vitro packaging efficiency of bacteriophage T7 DNA: effects of neutral polymers. Son M, et al. **Gene** 1989 Oct 30;82(2):321–5

Structural analysis of antiviral agents that interact with the capsid of human rhinoviruses. Badger J, et al. **Proteins** 1989;6(1):1–19

GENETICS

Nucleotide sequence of the coat protein gene of a necrotic strain of potato virus Y from New Zealand. Hay JM, et al. **Arch Virol** 1989;107(1–2):111–22

Comparative sequence analysis of VP7 genes from five Australian porcine rotaviruses. Huang J, et al. **Arch Virol** 1989;109(3–4):173–83

Cloning of the potato virus Y genes encoding the capsid protein CP and the nuclear inclusion protein NIb. Wefels E, et al. **Arch Virol** 1989;107(1–2):123–34

What is the role of the cys-his motif in retroviral nucleocapsid (NC) proteins? Katz RA, et al. **Bioessays** 1989 Dec;11(6):176–81 (34 ref.)

Nucleotide sequences of the VP1 capsid proteins of wild poliovirus types 1 and 3 from epidemic areas of Brazil. Da-Silva EE, et al. **Braz J Med Biol Res** 1990;23(1):1–5

Programmed killing of human cells by means of an inducible clone of parvoviral genes encoding non-structural proteins. Caillet-Fauquet P, et al. **EMBO J** 1990 Sep;9(9):2989–95

Initial steps in protein membrane insertion. Bacteriophage M13 procoat protein binds to the membrane surface by electrostatic interaction. Gallusser A, et al. **EMBO J** 1990 Sep;9(9):2723–9

Efficient translocation of positively charged residues of M13 procoat protein across the membrane excludes electrophoresis as the primary force for membrane insertion. Kuhn A, et al. **EMBO J** 1990 Aug;9(8):2385–8, 2429

The reverse transcriptase gene of cauliflower mosaic virus is translated separately from the capsid gene. Schultze M, et al. **EMBO J** 1990 Apr;9(4):1177–85

The Semliki-Forest-virus-specific nonstructural protein nsP4 is an autoproteinase. Takkinen K, et al. **Eur J Biochem** 1990 Apr 20;189(1):33–8

Synthesis of human adenovirus type 2 fiber protein in Escherichia coli cells. Chatellard C, et al. **Gene** 1989 Sep 30;81(2):267–74

Nucleotide sequence of the zucchini yellow mosaic virus capsid-encoding gene and its expression in Escherichia coli. Gal-On A, et al. **Gene** 1990 Mar 15;87(2):273–7

Synthesis in Escherichia coli of the major glycoprotein of human rotavirus: analysis of the antigenic regions. Johnson MA, et al. **Gene** 1989 Dec 7;84(1):73–81

Expression in Escherichia coli of the major outer capsid protein of infectious pancreatic necrosis virus. Lawrence WR, et al. **Gene** 1989 Jul 15;79(2):369–74

Cloning and expression of the major inner capsid protein of SA-11 simian rotavirus in Escherichia coli. Smith RE, et al. **Gene** 1989 Jul 15;79(2):239–48

Nucleotide sequence of the 24S subgenomic messenger RNA of a vaccine strain (HPV77) of rubella virus: comparison with a wild-type strain (M33). Zheng DX, et al. **Gene** 1989 Oct 30;82(2):343–9

Characterization of bacteriophage P22 tailspike mutant proteins with altered endorhamnosidase and capsid assembly activities. Schwarz JJ, et al. **J Biol Chem** 1989 Nov 25;264(33):20112–9

Rabies diagnostic reagents prepared from a rabies N gene recombinant expressed in baculovirus. Reid-Sanden FL, et al. **J Clin Microbiol** 1990 May;28(5):858–63

A comparison of the sequences of segment A of four infectious bursal disease virus strains and identification of a variable region in VP2. Bayliss CD, et al. **J Gen Virol** 1990 Jun;71 (Pt 6):1303–12

Cloning and sequencing the messenger RNA of the N gene of viral haemorrhagic septicaemia virus. Bernard J, et al. **J Gen Virol** 1990 Aug;71 (Pt 8):1669–74

The S RNA segment of tomato spotted wilt virus has an ambisense character. de Haan P, et al. **J Gen Virol** 1990 May;71 (Pt 5):1001–7

The nucleocapsid protein of vesicular stomatitis virus isolated from the brains of nude mice is responsible for abated viral RNA synthesis at the normal body temperature of mice. Doll SC, et al. **J Gen Virol** 1990 Jan;71 (Pt 1):29–36

Strain-variable editing during transcription of the P gene of mumps virus may lead to the generation of non-structural proteins NS1 (V) and NS2. Elliott GD, et al. **J Gen Virol** 1990 Jul;71 (Pt 7):1555–60

Evidence for the role of subgenomic RNAs in the production of potato virus S coat protein during in vitro translation. Foster GD, et al. **J Gen Virol** 1990 May;71 (Pt 5):1247–9

The use of 3' non-coding nucleotide sequences in the taxonomy of potyviruses: application to watermelon mosaic virus 2 and soybean mosaic virus-N. Frenkel MJ, et al. **J Gen Virol** 1989 Oct;70 (Pt 10):2775–83

Analysis of influenza A virus temperature-sensitive mutants with mutations in RNA segment 8. Hatada E, et al. **J Gen Virol** 1990 Jun;71 (Pt 6):1283–92

A new potexvirus associated with strawberry mild yellow edge disease. Jelkmann W, et al. **J Gen Virol** 1990 Jun;71 (Pt 6):1251–8

Sequence comparison of the phosphoprotein mRNAs of antigenic subgroups A and B of human respiratory syncytial virus identifies a highly divergent domain in the predicted protein. Johnson PR, et al. **J Gen Virol** 1990 Feb;71 (Pt 2):481–5

Nucleotide sequence of the capsid protein gene of barley yellow mosaic virus. Kashiwazaki S, et al. **J Gen Virol** 1989 Nov;70 (Pt 11):3015–23

Constraints in simian virus 40 (SV40) encapsidation, as determined by SV40-based shuttle viruses. Menck CF, et al. **J Gen Virol** 1990 Jan;71 (Pt 1):143–50

Interaction of canine distemper virus nucleocapsid variants with 70K heat-shock proteins. Oglesbee M, et al. **J Gen Virol** 1990 Jul;71 (Pt 7):1585–90

The outer capsid protein of rice dwarf virus is encoded by genome segment S8. Omura T, et al. **J Gen Virol** 1989 Oct;70 (Pt 10):2759–64

The nucleotide sequences of the 3'-terminal regions of papaya ringspot virus strains W and P. Quemada H, et al. **J Gen Virol** 1990 Jan;71 (Pt 1):203–10

Coat protein of melon necrotic spot carmovirus is more similar to those of tombusviruses than those of carmoviruses. Riviere CJ, et al. **J Gen Virol** 1989 Nov;70 (Pt 11):3033–42

Identification of the genes encoding two capsid proteins of herpes simplex virus type 1 by direct amino acid sequencing. Rixon FJ, et al. **J Gen Virol** 1990 May;71 (Pt 5):1211–4

Synthesis of foot-and-mouth disease virus capsid proteins in insect cells using baculovirus expression vectors. Roosien J, et al. **J Gen Virol** 1990 Aug;71 (Pt 8):1703–11

Cell surface expression of yellow fever virus non-structural glycoprotein NS1: consequences of interaction with antibody. Schlesinger JJ, et al. **J Gen Virol** 1990 Mar;71 (Pt 3):593–9

RNA2 of grapevine fanleaf virus: sequence analysis and coat protein cistron location. Serghini MA, et al. **J Gen Virol** 1990 Jul;71 (Pt 7):1433–41

Identification and primary structure of the gene encoding the Berne virus nucleocapsid protein. Snijder EJ, et al. **J Gen Virol** 1989 Dec;70 (Pt 12):3363–70

Nucleotide sequence of the coat protein gene of pea seed-borne mosaic potyvirus. Timmerman GM, et al. **J Gen Virol** 1990 Aug;71 (Pt 8):1869–72

The adenovirus type 40 hexon: sequence, predicted structure and relationship to other adenovirus hexons. Toogood CI, et al. **J Gen Virol** 1989 Dec;70 (Pt 12):3203–14

Structure and inherent properties of the bacteriophage lambda head shell. VII. Molecular design of the form-determining major capsid protein. Katsura I, et al. **J Mol Biol** 1990 Jun 5;213(3):503–11

Dissection of functional domains in phage fd adsorption protein. Discrimination between attachment and penetration sites. Stengele I, et al. **J Mol Biol** 1990 Mar 5;212(1):143–9

Two groups of rhinoviruses revealed by a panel of antiviral compounds present sequence divergence and differential pathogenicity. Andries K, et al. **J Virol** 1990 Mar; 64(3):1117–23

Phosphoprotein and nucleocapsid protein evolution of vesicular stomatitis virus New Jersey. Bilsel PA, et al. **J Virol** 1990 Jun;64(6):2498–504

A mutant poliovirus containing a novel proteolytic cleavage site in VP3 is altered in viral maturation. Blair WS, et al. **J Virol** 1990 Apr;64(4):1784–93

Characterization of a simian hepatitis A virus (HAV): antigenic and genetic comparison with human HAV. Brown EA, et al. **J Virol** 1989 Nov;63(11):4932–7

Leader sequence distinguishes between translatable and encapsidated measles virus RNAs. Castaneda SJ, et al. **J Virol** 1990 Jan;64(1):222–30

Temperature-sensitive poliovirus mutant fails to cleave VP0 and accumulates provirions. Compton SR, et al. **J Virol** 1990 Sep;64(9):4067–75

Presence of a retroviral encapsidation sequence in nonretroviral RNA increases the efficiency of formation of cDNA genes. Dornburg R, et al. **J Virol** 1990 Feb; 64(2):886–9

Point mutations in the proximal Cys-His box of Rous sarcoma virus nucleocapsid protein. Dupraz P, et al. **J Virol** 1990 Oct;64(10):4978–87

Identification of human rotavirus serotype by hybridization

to polymerase chain reaction-generated probes derived from a hyperdivergent region of the gene encoding outer capsid protein VP7. Flores J, et al. **J Virol** 1990 Aug; 64(8):4021-4

Identification of precursor to cytomegalovirus capsid assembly protein and evidence that processing results in loss of its carboxy-terminal end. Gibson W, et al. **J Virol** 1990 Mar;64(3):1241-9

Similarity of the outer capsid protein VP4 of the Gottfried strain of porcine rotavirus to that of asymptomatic human rotavirus strains. Gorziglia M, et al. **J Virol** 1990 Jan; 64(1):414-8

Site-directed mutagenesis of the proposed catalytic amino acids of the Sindbis virus capsid protein autoprotease. Hahn CS, et al. **J Virol** 1990 Jun;64(6):3069-73

Processing the nonstructural polyproteins of sindbis virus: nonstructural proteinase is in the C-terminal half of nsP2 and functions both in cis and in trans. Hardy WR, et al. **J Virol** 1989 Nov;63(11):4653-64

Limited expression of poliovirus by vaccinia virus recombinants due to inhibition of the vector by proteinase 2A. Jewell JE, et al. **J Virol** 1990 Mar;64(3):1388-93

Mutations in VP1 of poliovirus specifically affect both encapsidation and release of viral RNA. Kirkegaard K. **J Virol** 1990 Jan;64(1):195-206

Conditional poliovirus mutants made by random deletion mutagenesis of infectious cDNA. Kirkegaard K, et al. **J Virol** 1990 Jan;64(1):185-94

Myristoylation of the poliovirus polyprotein is required for proteolytic processing of the capsid and for viral infectivity. Kräusslich HG, et al. **J Virol** 1990 May; 64(5):2433-6

Myristylated polyomavirus VP2: role in the life cycle of the virus. Krauzewicz N, et al. **J Virol** 1990 Sep;64(9):4414-20

Mutations which alter the level or structure of nsP4 can affect the efficiency of Sindbis virus replication in a host-dependent manner. Lemm JA, et al. **J Virol** 1990 Jun; 64(6):3001-11

Mutation of lysine 405 to serine in the parvovirus H-1 NS1 abolishes its functions for viral DNA replication, late promoter trans activation, and cytotoxicity. Li X, et al. **J Virol** 1990 Oct;64(10):4654-60

Identification, cloning, and expression of the major capsid protein gene of human herpesvirus 6. Littler E, et al. **J Virol** 1990 Feb;64(2):714-22

Rotavirus RNA replication: VP2, but not VP6, is necessary for viral replicase activity. Mansell EA, et al. **J Virol** 1990 Oct;64(10):4988-96

Lack of myristoylation of poliovirus capsid polypeptide VP0 prevents the formation of virions or results in the assembly of noninfectious virus particles. Marc D, et al. **J Virol** 1990 Sep;64(9):4099-107

In vitro processing of dengue virus type 2 nonstructural proteins NS2A, NS2B, and NS3. Preugschat F, et al. **J Virol** 1990 Sep;64(9):4364-74

Preassembled capsids of type D retroviruses contain a signal sufficient for targeting specifically to the plasma membrane. Rhee SS, et al. **J Virol** 1990 Aug;64(8):3844-52

Structural role of the matrix protein of type D retroviruses in gag polyprotein stability and capsid assembly. Rhee SS, et al. **J Virol** 1990 Sep;64(9):4383-9

Steady-state infection by echovirus 6 associated with nonlytic viral RNA and an unprocessed capsid polypeptide. Righthand VF, et al. **J Virol** 1989 Dec;63(12):5268-75

Identification of bluetongue virus VP6 protein as a nucleic acid-binding protein and the localization of VP6 in virus-infected vertebrate cells. Roy P, et al. **J Virol** 1990 Jan;64(1):1-8

Transcriptional analysis of the eight-kilobase mRNA encoding the major capsid protein of human cytomegalovirus. Rudolph SA, et al. **J Virol** 1990 Oct; 64(10):5167-72

Effects of deletions in the N-terminal basic arm of brome mosaic virus coat protein on RNA packaging and systemic infection. Sacher R, et al. **J Virol** 1989 Nov;63(11):4545-52

Murine coronavirus nonstructural protein ns2 is not essential for virus replication in transformed cells. Schwarz B, et al. **J Virol** 1990 Oct;64(10):4784-91

Lack of cosegregation of the subgroup II antigens on genes 2 and 6 in porcine rotaviruses. Svensson L, et al. **J Virol** 1990 Jan;64(1):411-3

Molecular cloning, characterization, and expression of the Tipula iridescent virus capsid gene. Tajbakhsh S, et al. **J Virol** 1990 Jan;64(1):125-36

Molecular basis for linkage of a continuous and discontinuous neutralization epitope on the structural polypeptide VP2 of poliovirus type 1. Wiegers KJ, et al. **J Virol** 1990 Mar; 64(3):1283-9

Identification and characterization of the herpes simplex virus type 2 gene encoding the essential capsid protein ICP32/VP19c. Yei SP, et al. **J Virol** 1990 Mar; 64(3):1124-34

Nucleotide sequence of cDNA encoding the BYMV coat protein gene. Boye K, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4926

Similarity between the picornavirus VP3 capsid polypeptide and the Saccharomyces cerevisiae virus capsid polypeptide. Bruenn LA, et al. **Nucleic Acids Res** 1989 Sep 25; 17(18):7487-93

Nucleotide sequences of three Nodavirus RNA2's: the messengers for their coat protein precursors. Dasgupta R, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7525-6

Nucleotide sequences of the nonstructural protein NS1 gene of three dengue-2 viruses, M1, M2 and M3, isolated in Malaysia from patients with dengue haemorrhagic fever, dengue shock syndrome and dengue fever, respectively. Fong MY, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1642

Nucleocapsid protein gene of Junin arenavirus (cDNA sequence). Ghiringhelli PD, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):8001

The complete sequence of the capsid p40 gene from infectious laryngotracheitis virus. Griffin AM. **Nucleic Acids Res** 1990 Jun 25;18(12):3664

Nucleotide and deduced amino acid sequence of the nonstructural protein, NS1, of the US bluetongue virus serotype 17. Grubman MJ, et al. **Nucleic Acids Res** 1989 Dec 25;17(24):10498

The complete nucleotide and deduced amino acid sequence of the gene encoding the major inner capsid protein, VP7 of US bluetongue virus serotype 17. Kowalik TF, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5302

Nucleotide and deduced amino acid sequences of bacteriophage T4 gene 20. Marusich EI, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7514

Coat protein TP4 of the virus TTV1: primary structure of the gene and the protein. Neumann H, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9475

Nucleotide sequence of the coat protein gene and flanking regions of Cucumber Mosaic Virus (CMV) strain 117F [published erratum appears in Nucleic Acids Res 1990 Mar 11;18(5):1332] Noel MJ, et al. **Nucleic Acids Res** 1989 Dec 25;17(24):10492

Nucleotide sequence of the coat protein gene and flanking regions of cucumber virus (CMV) strain 117F. Noel MJ, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1332

Nucleotide sequence of bacteriophage T4 gene 31 region. Raudonikiene A, et al. **Nucleic Acids Res** 1990 Jul 25; 18(14):4280

Cloning and sequence analysis of a cDNA encoding the capsid protein of the MAV isolate of barley yellow dwarf virus. Rizzo TM, et al. **Nucleic Acids Res** 1990 Aug 11; 18(15):4625

Nucleotide and encoded amino acid sequences of the capsid protein gene of three dengue-2 viruses isolated in Malaysia from patients with dengue haemorrhagic fever, dengue shock syndrome or dengue fever. Samuel S, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1904

Nucleotide sequence of the VP7 gene of a bovine rotavirus (strain 61A) with different serotype specificity from serotype 6. Taniguchi K, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4613

Nucleotide sequence of group antigen (VP6) of the UK tissue culture adapted strain of bovine rotavirus. Tarlow O, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4921

Expression of largest RNA segment and synthesis of VP1 protein of bluetongue virus in insect cells by recombinant baculovirus: association of VP1 protein with RNA polymerase activity. Urakawa T, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7395-401

Complete sequence of genome segment 10, encoding the NS3 protein, of bluetongue virus, serotype 1 from South Africa. Wade-Evans AM. **Nucleic Acids Res** 1990 Aug 25; 18(16):4920

Complete sequence of the NS1 gene (S6 RNA) of US bluetongue virus serotype 17. Wang LF, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):8002

Regulation of icosahedral virion capsid size by the in vivo activity of a cloned gene product. Agarwal M, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2428-32

Antigenic relationships among human rotaviruses as determined by outer capsid protein VP4. Gorziglia M, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7155-9

Retroviral nucleocapsid protein-metal ion interactions: folding and sequence variants. Green LM, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6403-7

A genetically engineered cell line that produces empty capsids of B19 (human) parvovirus. Kajigaya S, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7601-5

Mutation in NS2, a nonstructural protein of influenza A virus, extragenically causes aberrant replication and expression of the PA gene and leads to generation of defective interfering particles. Odagiri T, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5988-92

Genetic stability of poliovirus insertion mutants with a foreign oligopeptide on the capsid surface. Christodoulou C, et al. **Res Virol** 1989 Nov-Dec;140(6):501-9

Foot-and-mouth disease virus subtyping by sequencing VP1 genes. Marquardt O, et al. **Vet Microbiol** 1990 Jun; 23(1-4):175-83

Sequence and expression analysis of potential nonstructural proteins of 4.9, 4.8, 12.7, and 9.5 kDa encoded between the spike and membrane protein genes of the bovine coronavirus. Abraham S, et al. **Virology** 1990 Aug; 177(2):488-95

A point mutation in the coat protein abolishes aphid transmissibility of a potyvirus. Atreya CD, et al. **Virology** 1990 Sep;178(1):161-5

Capsomer proteins of bacteriophage PRD1, a bacterial virus with a membrane. Bamford JK, et al. **Virology** 1990 Aug; 177(2):445-51

Deletion of repeated sequences from tobacco mosaic virus mutants with two coat protein genes. Beck DL, et al. **Virology** 1990 Aug;177(2):462-9

Geminivirus coat protein gene replacement alters insect specificity. Briddon RW, et al. **Virology** 1990 Jul; 177(1):85-94

Identification of the gene encoding the group B rotavirus VP7 equivalent: primary characterization of the ADRV segment 9 RNA. Chen GM, et al. **Virology** 1990 Sep; 178(1):311-5

Alternate splicing in a parvoviral nonstructural gene links a common amino-terminal sequence to downstream domains which confer radically different localization and turnover characteristics. Cotmore SF, et al. **Virology** 1990 Aug;177(2):477-87

Membrane association and secretion of the Japanese encephalitis virus NS1 protein from cells expressing NS1 cDNA. Fan WF, et al. **Virology** 1990 Aug;177(2):470-6

Map location of lactate dehydrogenase-elevating virus (LDV) capsid protein (Vp1) gene. Godeny EK, et al. **Virology** 1990 Aug;177(2):768-71

Synthesis and processing of the nonstructural polyproteins of several temperature-sensitive mutants of Sindbis virus. Hardy WR, et al. **Virology** 1990 Jul;177(1):199-208

Coding strategy of rice stripe virus: major nonstructural protein is encoded in viral RNA segment 4 and coat protein in RNA complementary to segment 3. Hayano Y, et al. **Virology** 1990 Jul;177(1):372-4

In vitro and in vivo expression of rubella virus glycoprotein E2: the signal peptide is contained in the C-terminal region of capsid protein. Hobman TC, et al. **Virology** 1989 Nov; 173(1):241-50

Sequencing analyses and comparison of parainfluenza virus type 4A and 4B NP protein genes. Kondo K, et al. **Virology** 1990 Jan;174(1):1-8

Molecular cloning and comparative sequence analyses of bluetongue virus S1 segments by selective synthesis of specific full-length DNA copies of dsRNA genes. Kowalik TF, et al. **Virology** 1990 Aug;177(2):820-3

Insertion of sequences containing the coat protein subgenomic RNA promoter and leader in front of the tobacco mosaic virus 30K ORF delays its expression and causes defective cell-to-cell movement. Lehto K, et al. **Virology** 1990 Jan;174(1):145-57

Mapping and sequence of the gene coding for protein p72, the major capsid protein of African swine fever virus. López-Otín C, et al. **Virology** 1990 Apr;175(2):477-84

Genome sequence of tick-borne encephalitis virus (Western subtype) and comparative analysis of nonstructural proteins with other flaviviruses. Mandl CW, et al. **Virology** 1989 Nov;173(1):291-301

Conservation of a potential metal binding motif despite extensive sequence diversity in the rotavirus nonstructural protein NS53. Mitchell DB, et al. **Virology** 1990 Feb; 174(2):618-21

Intracellular stability of nonreplicating paramyxovirus nucleocapsids. Mottet G, et al. **Virology** 1990 May; 176(1):1-7

A capsid-associated protein of the multicapsid nuclear polyhedrosis virus of Orgyia pseudotsugata: genetic location, sequence, transcriptional mapping, and immunocytochemical characterization. Müller R, et al. **Virology** 1990 May;176(1):133-44

A porcine rotavirus strain with dual VP7 serotype specificity. Nagesha HS, et al. **Virology** 1990 Mar;175(1):319-22

Decreased levels of TMV coat protein in transgenic tobacco plants at elevated temperatures reduce resistance to TMV infection. Nejidat A, et al. **Virology** 1989 Dec;173(2):531-8

VP4 protein of porcine rotavirus strain OSU expressed by a baculovirus recombinant induces neutralizing antibodies. Nishikawa K, et al. **Virology** 1989 Dec;173(2):631-7

Two forms of the major barley stripe mosaic virus nonstructural protein are synthesized in vivo from alternative initiation codons. Petty IT, et al. **Virology** 1990 Aug;177(2):829-32

Nucleotide sequence of the genome and complete amino acid sequence of the polyprotein of tick-borne encephalitis virus. Pletnev AG, et al. **Virology** 1990 Jan;174(1):250-63

Mutational analysis of the coat protein gene of tobacco mosaic virus in relation to hypersensitive response in tobacco plants with the N' gene. Saito T, et al. **Virology** 1989 Nov;173(1):11-20

Temperature sensitive shut-off of alphavirus minus strand RNA synthesis maps to a nonstructural protein, nsP4. Sawicki D, et al. **Virology** 1990 Jan;174(1):43-52

Cleavage between nsP1 and nsP2 initiates the processing pathway of Sindbis virus nonstructural polyprotein P123. Shirako Y, et al. **Virology** 1990 Jul;177(1):54-64

Nucleotide sequence of the leader and nucleocapsid protein gene of mumps virus and epitope mapping with the in vitro expressed nucleocapsid protein. Tanabayashi K, et al. **Virology** 1990 Jul;177(1):124-30

Nucleotide sequence and some biological properties of the NS gene of a newly isolated influenza B virus mutant which has a long carboxyl terminal deletion in the NS1 protein. Tobita K, et al. **Virology** 1990 Jan;174(1):314-9

Interference with vaccinia virus growth caused by insertion of the coding sequence for poliovirus protease 2A. Turner PC, et al. **Virology** 1989 Dec;173(2):509-21

Nucleotide sequence analysis of the capsid genes and the right-hand terminal palindrome of porcine parvovirus, strain NADL-2. Vasudevacharya J, et al. **Virology** 1989 Dec;173(2):368-77

Coding strategy of the S RNA segment of Dugbe virus (Nairovirus; Bunyaviridae). Ward VK, et al. **Virology** 1990 Apr;175(2):518-24

Evolution of the NS genes of the influenza A viruses. II. Characteristics of the amino acid changes in the NS1 proteins of the influenza A viruses. Nakajima K, et al. **Virus Genes** 1990 Jun;4(1):15–26

Evolution of the NS genes of the influenza A viruses. I. The genetic relatedness of the NS genes of animal influenza viruses. Nakajima K, et al. **Virus Genes** 1990 Jun;4(1):5–13

Nucleotide and deduced amino acid sequence of the nonstructural phosphoprotein, NS2, of bluetongue virus serotype 17: comparison to two isolates of serotype 10. Grubman MJ, et al. **Virus Res** 1990 Mar;15(3):243–50

The complete nucleotide sequence of VP5 of a strain of bluetongue virus of serotype 2 isolated in the USA reveals its close relationship with a virus of serotype 1 isolated in Australia. Hirasawa T, et al. **Virus Res** 1990 Feb; 15(2):107–12

Budding efficiency of Sendai virus nucleocapsids: influence of size and ends of the RNA. Mottet G, et al. **Virus Res** 1989 Oct;14(2):175–87

A 36 nucleotide deletion mutation in the coding region of the NS1 gene of an influenza A virus RNA segment 8 specifies a temperature-dependent host range phenotype. Snyder MH, et al. **Virus Res** 1990 Jan;15(1):69–83

Expression of the outer capsid protein, VP2, from a full length cDNA clone of genome segment 2 of bluetongue serotype 1 from South Africa, using both Sp6 and vaccinia expression systems and a comparison of the nucleic acid sequence of this segment with those of other serotypes. Wade-Evans AM, et al. **Virus Res** 1990 Mar;15(3):213–29

[Production of a viable variant of the M13 phage with a foreign peptide inserted into the basic coat protein] Il'ichev AA, et al. **Dokl Akad Nauk SSSR** 1989;307(2):481–3 **(Rus)**

[The use of filamentous phage M13 in protein engineering] Il'ichev AA, et al. **Mol Biol (Mosk)** 1990 Mar-Apr; 24(2):530–5 (Eng. Abstr.) **(Rus)**

[The effect of proteolytic cleavage of potato virus X coat protein on its ability to self-assemble with RNA and viral infectivity] Gol'dshtein MI, et al. **Mol Gen Mikrobiol Virusol** 1990 Feb;(2):9–16 (Eng. Abstr.) **(Rus)**

[Immunoenzyme analysis of adenovirus hexon. Determination of antibodies from hyperimmunized chickens] Khil'ko SN, et al. **Mol Gen Mikrobiol Virusol** 1989 Sep;(9):43–8 (Eng. Abstr.) **(Rus)**

[Analysis of structural proteins and products of cell-free translation of vaccinia virus of mRNA using mono-specific antibodies] Muravlev AI, et al. **Mol Gen Mikrobiol Virusol** 1989 Oct;(10):19–24 (Eng. Abstr.) **(Rus)**

[Primary structure of the gene for protein VP1 from foot-and-mouth disease virus serotype O1 isolated in the USSR] Onishchenko AM, et al. **Mol Gen Mikrobiol Virusol** 1990 Apr;(4):22–5 (Eng. Abstr.) **(Rus)**

[Primary structure of the gene for VP1 protein of the foot-and-mouth disease virus of Asia 1 serotype] Sosnovtsev SV, et al. **Mol Gen Mikrobiol Virusol** 1989 Dec; (12):44–6 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Protection of mice against lethal Japanese encephalitis with a recombinant baculovirus vaccine. McCown J, et al. **Am J Trop Med Hyg** 1990 May;42(5):491–9

Construction of human monoclonal antibodies against rabies NS-protein antigen by Epstein-Barr virus transformation. Gebauer W, et al. **Arzneimittelforschung** 1990 Jun; 40(6):718–22

The apparent infection of NA-C1300 cell cultures by nucleocapsid material of the Canadian Arctic strain of rabies virus. Webster WA, et al. **Can J Microbiol** 1989 Aug; 35(8):811–3

Cloning of human T cells specific for measles virus haemagglutinin and nucleocapsid. Ilonen J, et al. **Clin Exp Immunol** 1990 Aug;81(2):212–7

Anti-idiotype response to selected neutralizing monoclonal antibodies generated against adenovirus type 2 fiber. Talbot BG, et al. **Intervirology** 1989;30(6):313–22

Identification of immunogenic regions of the major coat protein of human papillomavirus type 16 that contain type-restricted epitopes. Cason J, et al. **J Gen Virol** 1989 Nov;70 (Pt 11):2973–87

Human monoclonal antibodies specific for the rabies virus glycoprotein and N protein. Lafon M, et al. **J Gen Virol** 1990 Aug;71 (Pt 8):1689–96

Monoclonal antibodies to the VP6 of porcine subgroup I rotaviruses reactive with subgroup I and non-subgroup I non-subgroup II strains. Liprandi F, et al. **J Gen Virol** 1990 Jun;71 (Pt 6):1395–8

Serological prospects for peptide vaccines against foot-and-mouth disease virus. Parry NR, et al. **J Gen Virol** 1989 Nov;70 (Pt 11):2919–30

Protection of mice against yellow fever virus encephalitis by immunization with a vaccinia virus recombinant encoding the yellow fever virus non-structural proteins, NS1, NS2a and NS2b. Putnak JR, et al. **J Gen Virol** 1990 Aug;71 (Pt 8):1697–702

Disoxaril stabilization and immunogenicity of poliovirus procapsids. Rombaut B, et al. **J Gen Virol** 1990 May;71 (Pt 5):1081–6

Passive protection studies in mice with monoclonal antibodies directed against the non-structural protein NS3 of dengue 1 virus. Tan CH, et al. **J Gen Virol** 1990 Mar;71 (Pt 3):745–9

Conformation of the VP2 protein of bluetongue virus (BTV) determines the involvement in virus neutralization of highly conserved epitopes within the BTV serogroup. White JR, et al. **J Gen Virol** 1990 Jun;71 (Pt 6):1325–32

Identification of a rabies virus T cell epitope on the basis of its similarity with a hepatitis B surface antigen peptide presented to T cells by the same MHC molecule (HLA-DPw4). Celis E, et al. **J Immunol** 1990 Jul 1; 145(1):305–10

Crystallization of genetically engineered active maltose-binding proteins, including an immunogenic viral epitope insertion. Rodseth LE, et al. **J Mol Biol** 1990 Jun 20;213(4):607–11

Detection of restricted predominant epitopes of Theiler's murine encephalomyelitis virus capsid proteins expressed in the lambda gt11 system: differential patterns of antibody reactivity among different mouse strains. Crane MA, et al. **J Neuroimmunol** 1990 May;27(2–3):173–86

The immunogenicity of VP7, a rotavirus antigen resident in the endoplasmic reticulum, is enhanced by cell surface expression. Andrew ME, et al. **J Virol** 1990 Oct; 64(10):4776–83

Priming for rotavirus neutralizing antibodies by a VP4 protein-derived synthetic peptide. Arias CF, et al. **J Virol** 1989 Dec;63(12):5393–8

Immunization of mice with recombinant vaccinia virus expressing authentic dengue virus nonstructural protein NS1 protects against lethal dengue virus encephalitis. Falgout B, et al. **J Virol** 1990 Sep;64(9):4356–63

Neutralization epitopes on rotavirus SA11 4fM outer capsid proteins. Gorziglia M, et al. **J Virol** 1990 Sep;64(9):4534–9

Immunization with baculovirus-expressed VP4 protein passively protects against simian and murine rotavirus challenge. Mackow ER, et al. **J Virol** 1990 Apr; 64(4):1698–703

Antibodies with specificities against a dispase-produced 15-kilodalton hexon fragment neutralize adenovirus type 2 infectivity. Varga MJ, et al. **J Virol** 1990 Sep; 64(9):4217–25

Serum-neutralizing antibody to VP4 and VP7 proteins in infants following vaccination with WC3 bovine rotavirus. Ward RL, et al. **J Virol** 1990 Jun;64(6):2687–91

Hepadna virus nucleocapsid and surface antigens and the antigen-specific antibodies associated with hepatocyte plasma membranes in experimental woodchuck acute hepatitis. Michalak TI, et al. **Lab Invest** 1990 Jun; 62(6):680–9

Identification of Lassa fever virus infection with recombinant nucleocapsid protein antigen [letter] Lloyd G, et al. **Lancet** 1989 Nov 18;2(8673):1222

Detection of subclinical nasopharyngeal carcinoma by fibreoptic endoscopy and multiple biopsy. Sham JS, et al. **Lancet** 1990 Feb 17;335(8686):371–4

A new peptide for human parvovirus B19 antibody detection. Fridell E, et al. **Scand J Infect Dis** 1989;21(6):597–603

Antibodies elicited by a biosynthetic peptide related to a major immunogenic area of FMDV A12. Borca MV, et al. **Viral Immunol** 1990 Summer;3(2):147–60

Neutralizing monoclonal antibody against enterovirus-70 reacts with viral proteins 1C and 1D. Wiley JA, et al. **Viral Immunol** 1990 Summer;3(2):137–46

Immunological cross-reactivity to laboratory-produced HPV-11 virions of polysera raised against bacterially derived fusion proteins and synthetic peptides of HPV-6b and HPV-16 capsid proteins. Christensen ND, et al. **Virology** 1990 Mar;175(1):1–9

Tobacco mosaic virus coat protein: an elicitor of the hypersensitive reaction but not required for the development of mosaic symptoms in Nicotiana sylvestris. Culver JN, et al. **Virology** 1989 Dec;173(2):755–8

Evidence that HIV-1 gag precursor shares antigenic sites with the major capsid protein of human cytomegalovirus. Gibson W, et al. **Virology** 1990 Apr;175(2):595–9

Cross-reactive protection against influenza A virus infections by an NS1-specific CTL clone. Kuwano K, et al. **Virology** 1990 Sep;178(1):174–9

Identification of a bluetongue virus serotype 1-specific ovine helper T-cell determinant in outer capsid protein VP2. Takamatsu H, et al. **Virology** 1990 Jul;177(1):396–400

Antigenic parvovirus B19 coat proteins VP1 and VP2 produced in large quantities in a baculovirus expression system. Brown CS, et al. **Virus Res** 1990 Mar;15(3):197–211

A recombinant vaccinia virus expressing the major capsid protein of Simian rotavirus-induced anti-rotavirus antibodies. Poncet D, et al. **Virus Res** 1990 Mar; 15(3):267–74

Antigenic variation of foot-and-mouth disease virus of serotype C during propagation in the field is mainly restricted to only one structural protein (VP1). Sobrino F, et al. **Virus Res** 1989 Dec;14(4):273–80

Antigenic cross-reaction between a varicella-zoster virus nucleocapsid protein encoded by gene 40 and a herpes simplex virus nucleocapsid protein. Vafai A, et al. **Virus Res** 1990 Feb;15(2):163–74

Epitopes on 14S subunits, natural empty capsids and virions of bovine enteroviruses. Zhang AQ, et al. **Virus Res** 1990 Jul;16(3):235–46

Identification of fox rabies by a monoclonal antibody directed against nucleocapsid of a street rabies virus. Umoh JU, et al. **Zentralbl Veterinarmed [B]** 1990 Mar;37(2):153–7

[The efficacy of the ERA rabies vaccine, in mice against 4 antigenic variants of rabies virus] Erbolato EB, et al. **Rev Saude Publica** 1989 Dec;23(6):447–54 (Eng. Abstr.) **(Por)**

[The antigenic characteristics of field strains of the rabies virus from different districts of the USSR studied using antinucleocapsid monoclonal antibodies] Botvinkin AD, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Jan;(1):50–4 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Detection and preliminary studies of small double capsid virus. Xu AY, et al. **Chin Med J [Engl]** 1989 Aug; 102(8):614–9

Purification and analysis of infectious virions and native non-structural antigens from cells infected with tick-borne encephalitis virus. Crooks AJ, et al. **J Chromatogr** 1990 Feb 21;502(1):59–68

Adenovirus serotype 3 fibre protein is expressed as a trimer in Escherichia coli. Albiges-Rizo C, et al. **J Mol Biol** 1990 Mar 20;212(2):247–52

Polypeptide composition of rotavirus empty capsids and their possible use as a subunit vaccine. Brüssow H, et al. **J Virol** 1990 Aug;64(8):3635–42

Purification of plant viruses and virus coat proteins by high performance liquid chromatography. Albrechtsen M, et al. **J Virol Methods** 1990 Jun;28(3):245–56

Some physico-chemical properties of the rigid form of the Sendai virus nucleocapsid. Repanovici R, et al. **Virologie** 1989 Jul-Sep;40(3):189–96

African swine fever virus: purification of capsomeres released by lipase. Pan IC, et al. **Virology** 1990 Mar;175(1):271–3

Description of a procedure which allows isolation of viral nonstructural proteins from BHK vertebrate cells infected with the West Nile flavivirus in a state which allows their direct chemical characterization. Wengler G, et al. **Virology** 1990 Aug;177(2):795–801

METABOLISM

Comparative studies on the antirhinovirus activity and the mode of action of the rhinovirus capsid binding agents, chalcone amides. Ninomiya Y, et al. **Antiviral Res** 1990 Feb;13(2):61–74

Conformational states of the bacteriophage P22 capsid subunit in relation to self-assembly. Prevelige PE Jr, et al. **Biochemistry** 1990 Jun 12;29(23):5626–33

Identification of trapped and boundary lipid binding sites in M13 coat protein/lipid complexes by deuterium NMR spectroscopy. Van Gorkom LC, et al. **Biochemistry** 1990 Apr 24;29(16):3828–34

Spin-label ESR of bacteriophage M13 coat protein in mixed lipid bilayers. Characterization of molecular selectivity of charged phospholipids for the bacteriophage M13 coat protein in lipid bilayers. Wolfs JA, et al. **Biochemistry** 1989 Dec 26;28(26):9995–10001

Cleavage-site preferences of Sindbis virus polyproteins containing the non-structural proteinase. Evidence for temporal regulation of polyprotein processing in vivo. de Groot RJ, et al. **EMBO J** 1990 Aug;9(8):2631–8

Role of myristoylation of poliovirus capsid protein VP4 as determined by site-directed mutagenesis of its N-terminal sequence. Marc D, et al. **EMBO J** 1989 Sep;8(9):2661–8

Binding properties of avian retroviral proteins. II. Binding of protein ASLV NC(p12) to viral RNA and proviral DNA. Felsberg J, et al. **Folia Biol (Praha)** 1990;36(1):12–22

Binding properties of avian retroviral proteins. I. Preparation and basic characterization of ASLV NC(p12) and MA(p19). Trávníček M, et al. **Folia Biol (Praha)** 1990; 36(1):1–11

Intragenic suppression of a capsid assembly-defective P22 tailspike mutation. Maurides PA, et al. **Genetics** 1990 Aug; 125(4):673–81

Simian virus 40 chromatin interaction with the capsid proteins. Bina M, et al. **J Biomol Struct Dyn** 1983 Dec; 1(3):689–704 (42 ref.)

Interaction of R17 coat protein with its RNA binding site for translational repression. Uhlenbeck OC, et al. **J Biomol Struct Dyn** 1983 Oct;1(2):539–52 (38 ref.)

Structure and assembly of turnip crinkle virus. VI. Identification of coat protein binding sites on the RNA. Wei N, et al. **J Mol Biol** 1990 Jul 5;214(1):85–95

NS35 and not vp7 is the soluble rotavirus protein which binds to target cells. Bass DM, et al. **J Virol** 1990 Jan;64(1):322–30

La Crosse virus nucleocapsid protein controls its own synthesis in mosquito cells by encapsidating its mRNA. Hacker D, et al. **J Virol** 1989 Dec;63(12):5166–74

Cleavage of dengue virus NS1-NS2A requires an octapeptide sequence at the C terminus of NS1. Hori H, et al. **J Virol** 1990 Sep;64(9):4573–7

Rotavirus proteins VP7, NS28, and VP4 form oligomeric structures. Maass DR, et al. **J Virol** 1990 Jun;64(6):2632–41

Phosphorylation of NS protein by vesicular stomatitis virus nucleocapsids: lack of effect during RNA synthesis and separation of kinase from L protein. Massey DM, et al. **J Virol** 1990 Jul;64(7):3259–64

Oligomers of the cytoplasmic domain of the p62/E2 membrane protein of Semliki Forest virus bind to the nucleocapsid in vitro. Metsikkö K, et al. **J Virol** 1990 Oct; 64(10):4678–83

Evidence for specificity in the encapsidation of Sindbis virus RNAs. Weiss B, et al. **J Virol** 1989 Dec;63(12):5310–8

Proteins of viral and cellular origin bind to the Aleutian disease virus (ADV) DNA 3'-terminal hairpin: presentation of a scheme for encapsidation of ADV DNA. Willwand K, et al. **J Virol** 1990 Apr;64(4):1598–605

A study of the dimer formation of Rous sarcoma virus RNA and of its effect on viral protein synthesis in vitro. Bieth E, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):119–27

Use of synthetic oligoribonucleotides to probe RNA–protein interactions in the MS2 translational operator complex. Talbot SJ, et al. **Nucleic Acids Res** 1990 Jun 25; 18(12):3521–8

Intracellular expression and processing of foot-and-mouth disease virus capsid precursors using vaccinia virus vectors: influence of the L protease. Belsham GJ, et al. **Virology** 1990 Jun;176(2):524–30

Encapsidation of truncated human hepatitis B virus genomes through trans-complementation of the core protein and polymerase. Chiang PW, et al. **Virology** 1990 Jun; 176(2):355–61

Conformational variability of a picornavirus capsid: pH-dependent structural changes of Mengo virus related to its host receptor attachment site and disassembly. Kim S, et al. **Virology** 1990 Mar;175(1):176–90

Protection against tobacco mosaic virus infection in transgenic plants requires accumulation of coat protein rather than coat protein RNA sequences. Powell PA, et al. **Virology** 1990 Mar;175(1):124–30

Creation of an antigenic site in poliovirus type 1 by assembly of 14 S subunits. Rombaut B, et al. **Virology** 1990 Jan; 174(1):305–7

Separate domains of Sendai virus P protein are required for binding to viral nucleocapsids. Ryan KW, et al. **Virology** 1990 Feb;174(2):515–21

[Energy of cooperative transitions in bacteriophage SD] Mrevlishvili GM, et al. **Biofizika** 1990 Mar-Apr; 35(2):263–8 (Eng. Abstr.) **(Rus)**

[Identification of a peptide of the membrane protein of tobacco mosaic virus, cross-linked with intraviral RNA under the effect of UV-radiation] Grebenshchikov NI, et al. **Mol Gen Mikrobiol Virusol** 1989 Jul;(7):21–4 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Translational repression by bacteriophage MS2 coat protein expressed from a plasmid. A system for genetic analysis of a protein–RNA interaction. Peabody DS. **J Biol Chem** 1990 Apr 5;265(10):5684–9

Cytotoxicity of gelonin conjugated to targeting molecules: effects of weak amines, monensin, adenovirus, and adenoviral capsid proteins penton, hexon, and fiber. Goldmacher VS, et al. **Mol Pharmacol** 1989 Nov; 36(5):818–22

Vesicular stomatitis virion-associated transcriptase activity was suppressed in vitro by a synthetic 21 amino acid oligopeptide prepared to mimic the carboxy-terminus of NS protein. Yamashita T, et al. **Virology** 1990 Sep; 178(1):166–73

PHYSIOLOGY

A theoretical study of the acidification of the rhinovirus capsid. Warwicker J. **FEBS Lett** 1989 Nov 6;257(2):403–7

Vesicular stomatitis virus RNA replication: a role for the NS protein. Howard M, et al. **J Gen Virol** 1989 Oct;70 (Pt 10):2683–94

Receptor activity of rotavirus nonstructural glycoprotein NS28. Au KS, et al. **J Virol** 1989 Nov;63(11):4553–62

NS-1 and NS-2 proteins may act synergistically in the cytopathogenicity of parvovirus MVMp. Brandenburger A, et al. **Virology** 1990 Feb;174(2):576–84

The coat protein of beet curly top virus is essential for infectivity. Briddon RW, et al. **Virology** 1989 Oct; 172(2):628–33

Effect of protein aggregation state on coat protein-mediated protection against tobacco mosaic virus using a transient protoplast assay. Register JC 3d, et al. **Virology** 1989 Dec; 173(2):656–63

Long-distance movement and viral assembly of tobacco mosaic virus mutants. Saito T, et al. **Virology** 1990 Jun; 176(2):329–36

[Rotaviruses: structure and function of the principal polypeptides] Vautherot-Chabanne D. **Ann Rech Vet** 1989; 20(4):431–42 (75 ref.) (Eng. Abstr.) **(Fre)**

ULTRASTRUCTURE

The maturation-dependent conformational change of the major capsid protein of bacteriophage T4 involves a substantial change in secondary structure. Steven AC, et al. **Biochemistry** 1990 Jun 12;29(23):5556–61

ESR of spin-labeled bacteriophage M13 coat protein in mixed phospholipid bilayers. de Jongh HH, et al. **Biochim Biophys Acta** 1990 May 9;1024(1):82–8

Polymorphism in the assembly of polyomavirus capsid protein VP1. Salunke DM, et al. **Biophys J** 1989 Nov; 56(5):887–900

Ultraviolet resonance Raman spectroscopy as a probe of protein structure in the fd virus. Grygon CA, et al. **Biotechniques** 1988 Jan;6(1):50–5

Adenovirus polypeptide IX revealed as capsid cement by difference images from electron microscopy and crystallography. Furcinitti PS, et al. **EMBO J** 1989 Dec 1;8(12):3563–70

Prediction of secondary structure, spatial organization and distribution of antigenic determinants for hepatitis A virus proteins. Mesyanzhinov VV, et al. **J Biomol Struct Dyn** 1987 Oct;5(2):447–58

Analysis of the structure of a common cold virus, human rhinovirus 14, refined at a resolution of 3.0 A. Arnold E, et al. **J Mol Biol** 1990 Feb 20;211(4):763–801

Three-dimensional structures of maturable and abortive capsids of equine herpesvirus 1 from cryoelectron microscopy. Baker TS, et al. **J Virol** 1990 Feb;64(2):563–73

Hepatitis B virus nucleocapsid assembly: primary structure requirements in the core protein. Birnbaum F, et al. **J Virol** 1990 Jul;64(7):3319–30

Cell-induced conformational change in poliovirus: externalization of the amino terminus of VP1 is responsible for liposome binding. Fricks CE, et al. **J Virol** 1990 May; 64(5):1934–45

Use of Ar+ plasma etching to localize structural proteins in the capsid of herpes simplex virus type 1. Newcomb WW, et al. **J Virol** 1989 Nov;63(11):4697–702

CAPSID PROTEINS see **CAPSID**

CAPSULES

Effect of sodium bicarbonate and sodium starch glycolate on the in vivo disintegration of hard gelatin capsules--a radiological study in the dog. Marvola M, et al. **Acta Pharm Nord** 1989;1(6):355–62

Effect of capsule permeability on growth of CHO cells in Eudragit RL microcapsules: use of FITC-dextran as a marker of capsule quality. Broughton RL, et al. **Biomaterials** 1989 Sep;10(7):462–5

Platelet adhesion on to polyamide microcapsules coated with lipid bilayer membrane. Kono K, et al. **Biomaterials** 1989 Sep;10(7):455–61

Effects of microencapsulated monosialoganglioside GM1 on cholinergic neurons. Maysinger D, et al. **Brain Res** 1989 Sep 4;496(1-2):165–72

Measuring free thyroxin by using magnetic antibody-containing microcapsules. Wallace AM, et al. **Clin Chem** 1990 Apr;36(4):614–9

Phase separation modulation and aggregation prevention: mechanism of the non-solvent addition method in the presence and absence of polyisobutylene as an additive. Donbrow M, et al. **J Microencapsul** 1990 Jan-Mar;7(1):1–15

In vitro diffusion in polyacrylamide embedded agarose microbeads. Gin H, et al. **J Microencapsul** 1990 Jan-Mar; 7(1):17–23

Potential distribution across a plasma protein-coated poly(L-lactide) microcapsule surface. Makino K, et al. **J Microencapsul** 1990 Apr-Jun;7(2):199–208

Studies on the masking of unpleasant taste of beclamide: microencapsulation and tabletting. Ozer AY, et al. **J Microencapsul** 1990 Jul-Sep;7(3):327–39

Preparation and in vitro evaluation of rosin microcapsules: solvent evaporation technique. Sheorey DS, et al. **J Microencapsul** 1990 Apr-Jun;7(2):261–4

Electrostatic interaction of microcapsules with guinea-pig polymorphonuclear leucocytes. Yasukawa S, et al. **J Microencapsul** 1990 Apr-Jun;7(2):179–84

Implantable microencapsulated dopamine (DA): prolonged functional release of DA in denervated striatal tissue. McRae A, et al. **J Neural Transm Suppl** 1990;29:207–15

What happens to tablets and capsules in the stomach: endoscopic comparison of disintegration and dispersion characteristics of two microencapsulated potassium formulations. Graham DY, et al. **J Pharm Sci** 1990 May; 79(5):420–4

Nylon microcapsules. II. Effect of selected variables on theophylline release. Madan PL, et al. **Pharm Res** 1989 Aug;6(8):714–8

Gastrointestinal transit of a solid indigestible capsule as measured by radiotelemetry and dual gamma scintigraphy. Mojaverian P, et al. **Pharm Res** 1989 Aug;6(8):719–24

[The effect of cross-linked protein microcapsules on cell cultures] Desoize B, et al. **J Pharm Belg** 1989 Jul-Aug; 44(4):261–9 (Eng. Abstr.) **(Fre)**

ANALYSIS

Albumin microspheres. I: Physico-chemical characteristics. Gupta PK, et al. **J Microencapsul** 1989 Oct-Dec; 6(4):427–62 (158 ref.)

Microencapsulation using poly(L-lactic acid) IV: Release properties of microcapsules containing phenobarbitone. Jalil R, et al. **J Microencapsul** 1990 Jan-Mar;7(1):53–66

CHEMICAL SYNTHESIS

Microencapsulation using poly(L-lactic acid). I: Microcapsule properties affected by the preparative technique. Jalil R, et al. **J Microencapsul** 1989 Oct-Dec; 6(4):473–84

Effect of electrolytes, stirring and surfactants in the coacervation and microencapsulation processes in presence of gelatin. Rozenblat J, et al. **J Microencapsul** 1989 Oct-Dec;6(4):515–26

METABOLISM

Enzymatically activated microencapsulated liposomes can provide pulsatile drug release. Kibat PG, et al. **FASEB J** 1990 May;4(8):2533–9

PHARMACOLOGY

Albumin microspheres. II: Applications in drug delivery. Gupta PK, et al. **J Microencapsul** 1989 Oct-Dec; 6(4):463–72 (58 ref.)

CAPTAN

ANALOGS & DERIVATIVES

[Behavior of captafol residues after prolonged application in a wheat monoculture] Garcia-G JE, et al. **J Environ Sci Health [B]** 1990 Apr;25(2):185–204 (Eng. Abstr.) **(Ger)**

METABOLISM

Captan binding to avian myeloblastosis virus reverse transcriptase and its effect on RNase H activity. Freeman-Wittig MJ, et al. **Mol Cell Biochem** 1990 Apr 18;94(1):9–17

RADIATION EFFECTS

Destruction of pesticides and their formulations in water using short wavelength UV light. Peterson D, et al. **Bull Environ Contam Toxicol** 1990 May;44(5):744–50

TOXICITY

Acute toxicity of the fungicide captan to the earthworm Eisenia foetida (Savigny). Anton F, et al. **Bull Environ Contam Toxicol** 1990 Jul;45(1):82–7

CAPTOPRIL

Hypotensive effect of captopril. Role of bradykinin and prostaglandinlike substances. Pontieri V, et al. **Hypertension** 1990 Feb;15(2 Suppl):I55–8

Controlled release captopril microcapsules: effect of ethyl cellulose viscosity grade on the in vitro dissolution from microcapsules and tableted microcapsules. Singh J, et al. **J Microencapsul** 1990 Jan-Mar;7(1):67–76

ADMINISTRATION & DOSAGE

Aldactazine/captopril combination, safe and effective in mild to moderate systemic hypertension: report on a multicenter study of 967 patients. Schohn DC, et al. **Am J Cardiol** 1990 Jun 19;65(23):4K–6K

Pressor responses to tracheal intubation after sublingual captopril. A pilot study. McCarthy GJ, et al. **Anaesthesia** 1990 Mar;45(3):243–5

Hypertonic saline resuscitation is prevented by intracerebroventricular saralasin but not by captopril. Velasco IT, et al. **Braz J Med Biol Res** 1989;22(2):237–9

Sublingual administration of captopril versus nitroglycerin in patients with severe congestive heart failure. Haude M, et al. **Int J Cardiol** 1990 Jun;27(3):351–9

Short-term effect of captopril on renal haemodynamics in chronic renal failure. Smith WG, et al. **Nephrol Dial Transplant** 1989;4(8):696–700

Patients at high risk for renal artery stenosis: a simple method of renal scintigraphic analysis with Tc-99m DTPA and captopril. Chen CC, et al. **Radiology** 1990 Aug; 176(2):365–70

[Short and medium term evaluation of captopril-ketanserin combination in mild to moderate arterial hypertension] Terrachini V, et al. **Clin Ter** 1990 Apr 15;133(1):31–4 (Eng. Abstr.) **(Ita)**

[Effect of a single dose of captopril on left-ventricular function in patients with chronic congestive cardiomyopathy] Markiewicz K, et al. **Kardiol Pol** 1989; 32(3):142–7 (Eng. Abstr.) **(Pol)**

[Evaluation of nifedipine and captopril as adjuvant drugs in the standard treatment of chronic heart failure] Cholewa M, et al. **Pol Arch Med Wewn** 1989 Oct-Dec; 82(4–6):146–55 (Eng. Abstr.) **(Pol)**

[Pharmacodynamics, pharmacokinetics and clinical effectiveness of captopril in patients with hypertension] Kukes VG, et al. **Kardiologiia** 1990 Mar;30(3):28–32 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Captopril and glomerulitis [letter] [published erratum appears in Ann Intern Med 1990 May 15;112(10):798] Chandrasekar PH, et al. **Ann Intern Med** 1990 Apr 1;112(7):550

Captopril glossopyrosis [letter] Drucker CR, et al. **Arch Dermatol** 1989 Oct;125(10):1437–8

Induction of acantholysis in organ explant culture by penicillamine and captopril [see comments] Yokel BK, et al. **Arch Dermatol** 1989 Oct;125(10):1367–70 Comment in: Arch Dermatol 1990 Jul;126(7):965–6.

Captopril and lymphocytic alveolitis. Kidney JC, et al. **BMJ** 1989 Oct 14;299(6705):981

Arthralgia associated with captopril. Malnick SD, et al. **BMJ** 1989 Aug 5;299(6695):394

Gynaecomastia induced by angiotensin converting enzyme inhibitor. Nakamura Y, et al. **BMJ** 1990 Feb 24; 300(6723):541

Angiotensin converting enzyme inhibitors and renal artery occlusion [letter; comment] Stansby G, et al. **BMJ** 1989 Sep 16;299(6701):736 Comment on: BMJ 1989 Aug 5;299(6695):394.

Serum lipid levels in hypertensive patients during captopril

treatment. Nishide T, et al. **Clin Ther** 1989 Nov–Dec; 11(6):820–7

Psoriasis related to angiotensin–converting enzyme inhibitors. Wolf R, et al. **Dermatologica** 1990;181(1):51–3

Captopril versus enalapril: cough versus pancreatitis [letter] Pedro-Botet J, et al. **DICP** 1990 Apr;24(4):438–9

Captopril–associated aplastic anemia [letter] Torelló J, et al. **DICP** 1990 May;24(5):543–4

Longterm effects of captopril and hydrochlorothiazide on glucose metabolism in the hypertensive patient. Lithell H, et al. **Horm Metab Res Suppl** 1990;22:74

Captopril and alopecia: a case report and review of known cutaneous reactions in captopril use. Motel PJ. **J Am Acad Dermatol** 1990 Jul;23(1):124–5 (4 ref.)

Insulin sensitivity in newly detected hypertensive patients: influence of captopril and other antihypertensive agents on insulin sensitivity and related biological parameters. Lithell HO, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 5:S46–52 (22 ref.)

Mortality associated with captopril and enalapril: a report from the DHSS Hypertension Care Computing Project. Palmer AJ, et al. **J Hypertens** 1990 Jun;8(6):521–4

Zinc metabolism in patients treated with captopril versus enalapril. Golik A, et al. **Metabolism** 1990 Jul;39(7):665–7

A case of acute renal failure induced by the co–administration of NSAIDs and captopril. Hawkins MM, et al. **N C Med J** 1990 Jun;51(6):291–2

Life–threatening captopril–induced hyperkalemia in a patient on continuous ambulatory peritoneal dialysis [letter] Atkin SL, et al. **Nephrol Dial Transplant** 1989;4(12):1084

Angioedema related to angiotensin–converting enzyme inhibitors. Seidman MD, et al. **Otolaryngol Head Neck Surg** 1990 Jun;102(6):727–31

Adverse effects of captopril in hospital outpatients with hypertension. Walley T, et al. **Postgrad Med J** 1990 Feb; 66(772):106–9

Autoimmune thrombocytopenia in three patients treated with captopril [letter] Pujol M, et al. **Vox Sang** 1989;57(3):218

[Severe first dose reaction after administration of captopril to patients with carotid artery stenosis] Fruergaard P, et al. **Ugeskr Laeger** 1990 Jul 23;152(30):2179–80 (Eng. Abstr.) **(Dan)**

[Psychotropic effects of captopril? Effect of a short–term treatment on reaction and concentration capabilities and space perception ability] Rüddel H, et al. **Dtsch Med Wochenschr** 1990 May 18;115(20):771–5 (Eng. Abstr.) **(Ger)**

[Angioneurotic edema of the tongue, induced by administration of ACE inhibitors] Zech J, et al. **HNO** 1990 Apr;38(4):143–4 (Eng. Abstr.) **(Ger)**

[Severe generalized exanthema following long–term treatment with captopril] Clemens G, et al. **Verh Dtsch Ges Inn Med** 1989;95:721–3 **(Ger)**

[Cough associated with captopril and enalapril] Katz A, et al. **Harefuah** 1989 Jun 15;116(12):632–4 (Eng. Abstr.) **(Heb)**

[Severe hyponatremia associated with captopril therapy in dilated cardiomyopathy: a case report] Inoue S, et al. **Kokyu To Junkan** 1989 Oct;37(10):1143–6 (Eng. Abstr.) **(Jpn)**

[Captopril–induced attacks of bronchial asthma] Banaszewski M, et al. **Kardiol Pol** 1989;32(3):167–70 (Eng. Abstr.) **(Pol)**

[Importance of bronchial hyperreactivity in cough induced by captopril (letter)] Lobos Bejarano JM, et al. **Med Clin (Barc)** 1990 Apr 21;94(15):596–7 **(Spa)**

[Cough secondary to the use of captopril. An adverse effect more and more frequent (letter)] Marcos Sánchez F, et al. **Rev Clin Esp** 1990 Apr;186(7):359–60 **(Spa)**

ANALOGS & DERIVATIVES

Significance of kallikrein–kinin and renin–angiotensin systems in the hypotensive mechanism of angiotensin–I converting enzyme inhibitors in essential hypertensives. Iimura O, et al. **Adv Exp Med Biol** 1989;247A:39–48

Influence of zofenopril and low doses of hydrochlorothiazide on plasma lipoproteins in patients with mild to moderate essential hypertension. Lacourcière Y, et al. **Am J Hypertens** 1989 Nov;2(11 Pt 1):861–4

Preclinical pharmacology of zofenopril, an inhibitor of angiotensin I converting enzyme. DeForrest JM, et al. **J Cardiovasc Pharmacol** 1989 Jun;13(6):887–94

Peripheral hemodynamic and humoral effects of oral zofenopril calcium (SQ 26,991) in patients with congestive heart failure. Borghi C, et al. **J Clin Pharmacol** 1989 Dec; 29(12):1077–82

ANALYSIS

Stability of captopril in powder papers under three storage conditions. Taketomo CK, et al. **Am J Hosp Pharm** 1990 Aug;47(8):1799–801

The chemical stability of captopril capsules. Colucci RD, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Dec; 27(12):599–601

Potentiometric determination of captopril. Nikolić KI, et al. **J Pharm Belg** 1990 Jan–Feb;45(1):17–9

ANTAGONISTS & INHIBITORS

Angiotensins II and III prevent captopril–induced renin release in the rat. Moldenhauer GK, et al. **Clin Exp Pharmacol Physiol** 1988 Feb;15(2):113–21

BLOOD

Effect of drugs on in vitro captopril protein binding. Das AS, et al. **Pharmazie** 1989 Jul;44(7):503–4

Simple measurement of captopril in plasma by high–performance liquid chromatography with ultraviolet detection. Klein J, et al. **Ther Drug Monit** 1990 Jan; 12(1):105–10

DIAGNOSTIC USE

The captopril challenge for renovascular hypertension. Kaplan NM. **Am J Hypertens** 1990 Jul;3(7):588–90

A prospective evaluation of a simplified captopril test for the detection of renovascular hypertension [see comments] Frederickson ED, et al. **Arch Intern Med** 1990 Mar; 150(3):569–72 Comment in: Arch Intern Med 1990 Mar;150(3):493–5.

The captopril test and renovascular hypertension. A cautionary tale [editorial; comment] McCarthy JE, et al. **Arch Intern Med** 1990 Mar;150(3):493–5 Comment on: Arch Intern Med 1990 Mar;150(3):569–72. Comment on: Arch Intern Med 1990 Mar;150(3):625–8.

The captopril test in the detection of renovascular disease in hypertensive patients [see comments] Postma CT, et al. **Arch Intern Med** 1990 Mar;150(3):625–8 Comment in: Arch Intern Med 1990 Mar;150(3):625–8.

Low–dose captopril scintigraphy in the evaluation of renovascular hypertension. Ramirez G, et al. **Clin Nucl Med** 1990 Jul;15(7):480–4

Blood glucose control determines the renal haemodynamic response to angiotensin converting enzyme inhibition in type 1 diabetes. Jenkins DA, et al. **Diabetic Med** 1990 Mar–Apr;7(3):252–7

The captopril test for identification of renovascular hypertension: value and immediate adverse effects. Hansen PB, et al. **J Intern Med** 1990 Aug;228(2):159–63

Diagnosis of renovascular hypertension: the captopril stimulation test. Hall WD. **J Med Assoc Ga** 1990 May; 79(5):327–9 (19 ref.)

Captopril renal scintigraphy in a patient with bilateral renal artery stenosis. Itoh K, et al. **J Nucl Med** 1989 Dec; 30(12):2042–5

Captopril renal scintigraphy—an advance in the detection and treatment of renovascular hypertension. Meier GH, et al. **J Vasc Surg** 1990 Jun;11(6):770–6; discussion 776–7

Renal artery stenosis, reno–vascular hypertension and predicting the blood pressure response to renal revascularization. Peters AM. **Nucl Med Commun** 1990 Jan; 11(1):1–5 (26 ref.)

Comparison of captopril scan and Doppler ultrasonography as screening tests for transplant renal artery stenosis. Glicklich D, et al. **Transplantation** 1990 Jan;49(1):217–9

[The clinical use of captopril in the diagnosis and treatment of primary aldosteronism] Li J. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1990 Feb; 18(1):2–4, 60 (Eng. Abstr.) **(Chi)**

[The captopril test as a part of the examination in arterial hypertension. Value and immediate complications] Hansen BP, et al. **Ugeskr Laeger** 1989 Sep 11;151(37):2362–4 (Eng. Abstr.) **(Dan)**

[Status of the captopril test in the diagnosis of hypertension] Degenhardt S, et al. **Klin Wochenschr** 1989 Nov 3; 67(21):1077–84 (Eng. Abstr.) **(Ger)**

[The diagnostic value of captopril radionuclide nephrography for renovascular hypertension in childhood] Rascher W, et al. **Monatsschr Kinderheilkd** 1990 May;138(5):268–73 (Eng. Abstr.) **(Ger)**

[Captopril–enhanced renography using 99mTc–DTPA in renovascular hypertensive patients] Itoh K, et al. **Kaku Igaku** 1990 Apr;27(4):363–71 (Eng. Abstr.) **(Jpn)**

[An experience of single dose captopril renal scintigraphy in the diagnosis and management of bilateral renovascular hypertension] Kurisu K, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 May;81(5):739–42 (Eng. Abstr.) **(Jpn)**

[Diagnostic value of the captopril test in patients with arterial hypertension] Kuska J, et al. **Kardiol Pol** 1989;32(3):131–7 (Eng. Abstr.) **(Pol)**

[Significance of the captopril test in the diagnosis of primary hyperaldosteronism —apropos of 4 clinical cases] Proença R, et al. **Rev Port Cardiol** 1990 Apr;9(4):333–7 (Eng. Abstr.) **(Por)**

METABOLISM

The interaction between indomethacin and captopril or enalapril in healthy volunteers. Koopmans PP, et al. **J Intern Med** 1989 Sep;226(3):139–42

PHARMACOKINETICS

[Therapeutic drug monitoring of inhibitors of renin–angiotensin system] Saito I, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:1146–8 **(Jpn)**

PHARMACOLOGY

Effect of captopril on urinary excretion of prostaglandins and renin–angiotensin–aldosterone system in normal subjects. Zacharieva S, et al. **Acta Physiol Pharmacol Bulg** 1989;15(4):25–30

Renal function as affected by inhibitors of kininase II and of neutral endopeptidase 24.11 in rats with and without desoxycorticosterone pretreatment. Nakagawa M, et al. **Adv Exp Med Biol** 1989;247B:495–9

Increased insulin–responsiveness by ACE–inhibition in noninsulin dependent diabetes mellitus. Rett K, et al. **Adv Exp Med Biol** 1989;247A:207–13

Angiotensin converting enzyme inhibitors, captopril and enalaprilat, augment bradykinin–induced prostacyclin synthesis in cultured rat vascular smooth muscle cells. Takeuchi K, et al. **Adv Exp Med Biol** 1989;247B:489–94

Captopril and enalaprilat do not scavenge the superoxide anion. Kukreja RC, et al. **Am J Cardiol** 1990 May 22; 65(19):24I–27I

Interaction of captopril and ibuprofen on glomerular and tubular function in humans. Allon M, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):F233–8

Role of lowering arterial pressure on maximal coronary flow with and without regression of cardiac hypertrophy. Canby CA, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1110–8

Baroreflex control of sympathetic outflow in pregnant rats: effects of captopril. Crandall ME, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1417–23

Captopril reduces left ventricular enlargement induced by chronic volume overload. Gay RG. **Am J Physiol** 1990 Sep;259(3 Pt 2):H796–803

NaCl modulates captopril effects on glomerular prostaglandin synthesis and glomerular filtration. Rathaus M, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):F382–7

Potassium load prevents the decrease of GFR induced by captopril in sodium–depleted rats. Rathaus M, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):F670–4

Differential effects of vasodilators on forearm and calf vessels. Colardyn F, et al. **Angiology** 1990 Apr;41(4):313–7

Effect of captopril on plasma prolactin in patients with essential hypertension. Saito I, et al. **Angiology** 1990 May; 41(5):377–81

Drug interference in the measurement of serum fructosamine. Rumley AG, et al. **Ann Clin Biochem** 1990 Jul;27 (Pt 4):384–5

Effects of inhibitors of the renin–angiotensin system on water intake after insulin administration. Lopez–Sela P, et al. **Appetite** 1989 Oct;13(2):143–54

Angiotensin–converting enzyme in subfornical organ mediates captopril–induced drinking. Thunhorst RL, et al. **Behav Neurosci** 1989 Dec;103(6):1302–10

Effect of inhibition of glutathione synthesis on the immunogenicity of captopril and captopril–protein conjugates in the mouse. Yeung JH. **Biochem Pharmacol** 1990 Sep 15;40(6):1235–40

Captopril as an antidepressant? Effects on the learned helplessness paradigm in rats. Martin P, et al. **Biol Psychiatry** 1990 May 1;27(9):968–74

Effect of captopril on blood pressure and kidney function in normotensive insulin dependent diabetics with nephropathy. Parving HH, et al. **BMJ** 1989 Aug 26; 299(6698):533–6

Cardiac electrophysiological actions of captopril: lack of direct antiarrhythmic effects. Hemsworth PD, et al. **Br J Pharmacol** 1989 Sep;98(1):192–6

Effects of nifedipine and captopril on vascular capacitance of ganglion–blocked anesthetized dogs. Ogilvie RI, et al. **Can J Physiol Pharmacol** 1990 Mar;68(3):431–8

The effect of inhibitors of endogenous opioid degradation, bacitracin, bestatin, captopril, and D–phenylalanine, on digoxin–induced arrhythmias in guinea pigs. Rabkin SW, et al. **Can J Physiol Pharmacol** 1989 Aug;67(8):857–63

Effects of antihypertensive drugs on heart and resistance vessels. Kobayashi H, et al. **Cardiovasc Res** 1990 Feb; 24(2):137–43

The effect of intravenous captopril on the left ventricular function–an acute study by hemodynamics and radionuclide angiography. Chen YT, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jul;44(1):7–14

Angiotensins and the failing heart. Enhanced positive inotropic response to angiotensin I in cardiomyopathic hamster heart in the presence of captopril. Hirakata H, et al. **Circ Res** 1990 Apr;66(4):891–9

Influence of angiotensin converting enzyme inhibitor (captopril) on kidney epithelial cells in vitro: studies on potassium (86Rb) influx and cellular proliferation. Bauer H, et al. **Clin Chim Acta** 1990 Jan 31;187(1):47–53

Altering angiotensin levels by administration of captopril or indomethacin, or by angiotensin infusion, contributes to an understanding of atrial natriuretic peptide regulation in man. Klemm SA, et al. **Clin Exp Pharmacol Physiol** 1988 Apr;15(4):349–55

Synergistic potentiation by captopril and propranolol of bradykinin–induced bronchoconstriction in the guinea–pig. Lau WA, et al. **Clin Exp Pharmacol Physiol** 1989 Nov; 16(11):849–57

The effect of captopril or enalaprilic acid on the Na appetite of Na–deplete rats. Weisinger RS, et al. **Clin Exp Pharmacol Physiol** 1988 Jan;15(1):55–65

Intrapatient comparison of acute hemodynamic, hormonal, and natriuretic responses to captopril versus enalapril in liver cirrhosis. Ohnishi A, et al. **Clin Pharmacol Ther** 1990 Jul;48(1):67–75

Effects of chronic administration of an angiotensin–converting enzyme inhibitor on angiotensin–converting enzyme activity in the pars recta of rabbits. Praddaude F, et al. **Clin Sci** 1990 Jul;79(1):29–35

Renal haemodynamics during short–term angiotensin converting enzyme inhibition in normotensive normoalbuminuric insulin dependent diabetics. Vora JP,

et al. **Diabetes Res** 1989 May;11(1):9–12

Myocardial and coronary effects of captopril during pacing-induced ischaemia in patients with coronary artery disease. Karsch KR, et al. **Eur Heart J** 1990 Apr;11 Suppl B:157–61

Cardioprotective effects of captopril in myocardial ischaemia, ischaemia/reperfusion and infarction. Mehta PM, et al. **Eur Heart J** 1990 Apr;11 Suppl B:94–9 (30 ref.)

Effect of diuretics on captopril-induced urinary zinc excretion. Golik A, et al. **Eur J Clin Pharmacol** 1990; 38(4):359–61

Effect of captopril on skin blood flow following intradermal bradykinin measured by laser Doppler flowmetry. Li Kam Wa TC, et al. **Eur J Clin Pharmacol** 1989;37(5):471–5

Effect of captopril on oxyphenbutazone and ethanol-induced gastric lesions in rats. Bhounsule SA, et al. **Eur J Pharmacol** 1990 Feb 20;177(1–2):87–90

The effects of captopril and enalapril on tissue levels of various elements in spontaneously hypertensive rats. Allain P, et al. **Fundam Clin Pharmacol** 1989;3(4):329–35

The serotonergic mechanisms are not involved in the inhibitory effect of captopril on rat platelet aggregation. Malinowska B, et al. **Haemostasis** 1990;20(1):48–53

Brain kinins are responsible for the pressor effect of intracerebroventricular captopril in spontaneously hypertensive rats [see comments] Madeddu P, et al. **Hypertension** 1990 Apr;15(4):407–12 Comment in: Hypertension 1990 Apr;15(4):413–4.

Ventricular myosin and creatine-kinase isoenzymes in hypertensive rats treated with captopril. Pauletto P, et al. **Hypertension** 1989 Nov;14(5):556–62

Captopril reduces aortic and microvascular growth in hypertensive and normotensive rats. Wang DH, et al. **Hypertension** 1990 Jan;15(1):68–77

Degradative enzymes modulate airway responses to intravenous neurokinins A and B. Shore SA, et al. **J Appl Physiol** 1989 Dec;67(6):2504–11

Captopril—nifedipine interaction in hypertension. Moulick ND, et al. **J Assoc Physicians India** 1989 Feb;37(2):150–2

Fosinopril, a phosphinic acid inhibitor of angiotensin I converting enzyme: in vitro and preclinical in vivo pharmacology. DeForrest JM, et al. **J Cardiovasc Pharmacol** 1989 Nov;14(5):730–6

Acute and long-term hemodynamic effects of pimobendan (UD-CG 115 BS) in comparison with captopril. Hauf GF, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 2:S49–56

The effects of captopril on the renin-angiotensin system and the sympathetic nervous system during sodium nitroprusside-induced hypotension in the halothane-anesthetized rabbit. Stead SW, et al. **J Cardiovasc Pharmacol** 1990 Mar;15(3):465–71

Hemodynamic, renal, and humoral effects of the calcium entry blocker nicardipine and converting enzyme inhibitor captopril in hypertensive type II diabetic patients with nephropathy. Stornello M, et al. **J Cardiovasc Pharmacol** 1989 Dec;14(6):851–5

Hypotensive effects of angiotensin II analogues and angiotensin converting enzyme inhibitors in water-deprived Brattleboro rats. Tomlinson KC, et al. **J Cardiovasc Pharmacol** 1990 Apr;15(4):562–8

Acute sympathetic denervation does not eliminate the effect of angiotensin converting enzyme inhibition on CBF autoregulation in spontaneously hypertensive rats. Waldemar G. **J Cereb Blood Flow Metab** 1990 Jan; 10(1):43–7

Influence of captopril on urinary excretion of furosemide in hypertensive subjects. Fujimura A, et al. **J Clin Pharmacol** 1990 Jun;30(6):538–42

ACE inhibition and pressor responsiveness to norepinephrine in hypertensive patients. Malini PL, et al. **J Clin Pharmacol** 1990 May;30(5):422–4

The effect of intravenous captopril on right and left ventricular load and function in moderate-severe essential hypertension. Chen YT, et al. **J Hum Hypertens** 1990 Apr; 4(2):141–3

The value of the captopril test and the effect of captopril on renal function. Lu ZW, et al. **J Hum Hypertens** 1990 Apr;4(2):138–40

Kidney renin gene expression in spontaneously hypertensive rats. Kitami Y, et al. **J Hypertens** 1989 Sep;7(9):727–31

Angiotensin converting enzyme inhibition lowers blood pressure in patients with primary autonomic failure independently of plasma renin levels and sympathetic nervous activity. Kooner JS, et al. **J Hypertens Suppl** 1989 Dec;7(6):S42–3

Restraining effect of captopril on cardiovascular sympathetic efferent neural activity. Lombardi F, et al. **J Hypertens Suppl** 1989 Sep;7(7):S55–6

The haemodynamic effects of two angiotensin converting enzyme inhibitors, enalaprilat and zofenoprilat, in the rat: evidence for the involvement of bradykinin. Tio RA, et al. **J Hypertens Suppl** 1989 Dec;7(6):S296–7

Captopril and ramiprilat protect against free radical injury in isolated working rat hearts. Pi XJ, et al. **J Mol Cell Cardiol** 1989 Dec;21(12):1261–71

The effect of captopril on the membrane properties of central neurons in-vitro. Robinson EL, et al. **J Pharm Pharmacol** 1990 Jan;42(1):20–5

Effect of single-administration captopril on plasma and urinary vasopressin in normotensive subjects and patients with essential hypertension and primary aldosteronism. Tsuchihashi T, et al. **Jpn Circ J** 1989 Dec;53(12):1473–80

Captopril uncovers kinin-dependent release of arachidonic acid metabolites in carrageenin-induced rat pleurisy. Dozen M, et al. **Jpn J Pharmacol** 1989 Sep;51(1):101–5

Effects of antihypertensive agents on blood pressure and the progress of renal failure in partially nephrectomized spontaneously hypertensive rats. Katsumata H, et al. **Lab Invest** 1990 Apr;62(4):474–80

Cardiorenal actions of endothelin, Part I: Effects of converting enzyme inhibition. Cao LQ, et al. **Life Sci** 1990; 46(8):577–83

The angiotensin I converting enzyme inhibitors, captopril and Wy-44,655 attenuate the consequences of cerebral ischemia in renovascular hypertensive rats. Capdeville C, et al. **Life Sci** 1990;47(6):539–46

The effects of hydrochlorothiazide and captopril on glucose and lipid metabolism [letter; comment] **N Engl J Med** 1990 Mar 15;322(11):776–7 Comment on: N Engl J Med 1989 Sep 28;321(13):868–73.

Effects of captopril on locomotor activity, passive avoidance behaviour and spatial memory tasks in the trimethyltin-treated rat. Earley B, et al. **Neuropsychobiology** 1989;22(1):49–56

Focal metabolic effects of angiotensin and captopril on subregions of the rat subfornical organ. Shaver SW, et al. **Peptides** 1990 May-Jun;11(3):557–63

Effects of captopril and SQ29,852 on anxiety-related behaviours in rodent and marmoset. Costall B, et al. **Pharmacol Biochem Behav** 1990 May;36(1):13–20

The effects of ACE inhibitors captopril and SQ29,852 in rodent tests of cognition. Costall B, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):573–9

Captopril and capsaicin modify opioid withdrawal in the morphine-dependent rat. Sharpe LG, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):899–902

Prostacyclin-mediated cardioprotection of captopril and ramiprilate against lipid peroxidation in rat. Chen X, et al. **Prog Clin Biol Res** 1989;301:167–73

Studies on the nöotropic potential of some angiotensin converting enzyme inhibitors in the mouse. Manning-Sayi J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(6):953–62

Effect of captopril or enalapril on renal prostaglandin E2. Katayama S, et al. **Prostaglandins** 1989 Oct;38(4):401–11

Enhanced prostaglandin production in the ischemic-reperfused myocardium by captopril linked with its free radical scavenging action. Bagchi D, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Nov; 38(2):145–50

Effect of captopril and enalapril medication on the serum ACE test for sarcoidosis. Lieberman J, et al. **Sarcoidosis** 1989 Sep;6(2):118–23

[Effect of captopril on the plasma aldosterone response to metoclopramide in normal subjects] Zachariéva S, et al. **Ann Endocrinol (Paris)** 1989;50(3):233–6 (Eng. Abstr.) **(Fre)**

[Renal effects of captopril in hypertension with renal artery stenosis. Comparison between Tc-99m-DTPA scintigraphy and clearance method] Chaignon M, et al. **Arch Mal Coeur** 1989 Jul;82(7):1205–9 (Eng. Abstr.) **(Fre)**

[Effects of long-term treatment with captopril on the isomyosin profile of the heart from SHR and Wistar rats] Sublimi-Saponetti L, et al. **Boll Soc Ital Biol Sper** 1990 Feb;66(2):113–20 (Eng. Abstr.) **(Ita)**

[Evaluation of the cardiac and peripheral vascular effects of the single-dose administration of enalapril and captopril in essential arterial hypertension (letter)] Longhini C, et al. **Cardiologia** 1989 Sep;34(9):813 **(Ita)**

[Hemodynamic effects of the intravenous administration of captopril in patients with chronic congestive heart failure] Volpini M, et al. **Cardiologia** 1989 Jun;34(6):517–23 (Eng. Abstr.) **(Ita)**

[The effect of angiotensin I converting enzyme inhibitor (SQ 14225) on plasma 18-hydroxycorticosterone and aldosterone in sodium depleted conscious rats] Yamamoto I, et al. **Nippon Naibunpi Gakkai Zasshi** 1990 Jan 20; 66(1):42–9 (Eng. Abstr.) **(Jpn)**

[Effects of captopril on hemodynamics, gas exchange and exercise capacity in patients with pulmonary hypertension secondary to chronic obstructive pulmonary disease] Paitl CE, et al. **Arq Bras Cardiol** 1989 Feb;52(2):59–67 (42 ref.) (Eng. Abstr.) **(Por)**

[The role of angiotensin-converting enzyme inhibitor (captopril) on the mechanism of hypoxic pulmonary vasoconstriction. Experimental study in dogs] Soares GP, et al. **Arq Bras Cardiol** 1989 Jun;52(6):307–14 (Eng. Abstr.) **(Por)**

[The effect of captopril on the coronary circulation in a clinical and experimental study] Hăulică I, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Oct-Dec;93(4):741–6 (Eng. Abstr.) **(Rum)**

[The effect of captopril on audiogenic stress] Subakov M, et al. **Med Arh** 1987;41(5):235–40 (Eng. Abstr.) **(Scr)**

THERAPEUTIC USE

Clinical usefulness of low-dose captopril on mild to moderate essential hypertension. Abe K. **Adv Exp Med Biol** 1989; 247A:49–53

Significance of kallikrein-kinin and renin-angiotensin systems in the hypotensive mechanism of angiotensin-I converting enzyme inhibitors in essential hypertensives. Iimura O, et al. **Adv Exp Med Biol** 1989;247A:39–48

Clinical efficacy and quality of life with indapamide alone or in combination with beta blockers or angiotensin-converting enzyme inhibitors. Athanassiadis DI, et al. **Am J Cardiol** 1990 May 2;65(17):62H–66H

Effects of captopril versus milrinone therapy in modulating the adrenergic nervous system response to exercise in congestive heart failure. Corbalán R, et al. **Am J Cardiol** 1990 Mar 1;65(9):644–9

Failure of captopril to prevent nitrate tolerance in congestive heart failure secondary to coronary artery disease. Dakak N, et al. **Am J Cardiol** 1990 Sep 1;66(5):608–13

Antianginal, hemodynamic and coronary vascular effects of captopril in stable angina pectoris. Ikram H, et al. **Am J Cardiol** 1990 Jul 15;66(2):164–7

A comparison of the efficacy and safety of a beta-blocker, a calcium channel blocker, and a converting enzyme inhibitor in hypertensive blacks. Saunders E, et al. **Arch Intern Med** 1990 Aug;150(8):1707–13

Efficacy, safety, and quality-of-life assessment of captopril antihypertensive therapy in clinical practice. Schoenberger JA, et al. **Arch Intern Med** 1990 Feb;150(2):301–6

Comparison of enalapril and captopril in the management of self-induced water intoxication. Sebastian CS, et al. **Biol Psychiatry** 1990 Apr 1;27(7):787–90

Captopril and hypertension in black diabetics [letter; comment] Burr AJ, et al. **BMJ** 1989 Aug 12; 299(6696):456–7 Comment on: BMJ 1989 Jul 22;299(6693):230–3.

Acute and chronic arterial and venous effects of captopril in congestive cardiac failure [see comments] Capewell S, et al. **BMJ** 1989 Oct 14;299(6705):942–5 Comment in: BMJ 1989 Nov 18;299(6710):1283.

Captopril in congestive cardiac failure [letter; comment] Webb DJ, et al. **BMJ** 1989 Nov 18;299(6710):1283 Comment on: BMJ 1989 Oct 14;299(6705):942–5.

Comparison of the immediate and long-term effects of captopril and isosorbide dinitrate as adjunctive treatment in mild heart failure. Wilkes NP, et al. **Br J Clin Pharmacol** 1989 Oct;28(4):427–34

The effect of Captopril on benign and malignant reactions in irradiated rat skin. Ward WF, et al. **Br J Radiol** 1990 May;63(749):349–54

Hemodynamic and clinical effects of captopril in patients with severe congestive heart failure. Nigri A, et al. **Cardiologia** 1989 Jun;34(6):525–9

Captopril therapy of recurrent nephrolithiasis in a child with cystinuria. Sandroni S, et al. **Child Nephrol Urol** 1988–89; 9(6):347–8

Captopril restores hemodynamic responsiveness to atrial natriuretic peptide in rats with heart failure. Raya TE, et al. **Circulation** 1989 Dec;80(6):1886–92

Beneficial effects of captopril in acute coxsackievirus B3 murine myocarditis. Rezkalla S, et al. **Circulation** 1990 Mar; 81(3):1039–46

Captopril improves hemodynamic response to static exercise in patients with congestive heart failure: a double-blind, placebo-controlled, randomized trial. Borgi C, et al. **Clin Cardiol** 1990 May;13(5):329–34

The effects of ACE inhibitors and other antihypertensive drugs on cardiovascular risk factors and atherogenesis. Chobanian AV. **Clin Cardiol** 1990 Jun;13(6 Suppl 7):VII43–8

The efficacy and safety of quinapril in the treatment of moderate to severe and severe hypertension: comparison to captopril. Frishman WH. **Clin Cardiol** 1990 Jun;13(6 Suppl 7):VII26–31 (5 ref.)

Abnormal captopril renal scintigraphy in a case of renal artery branch stenosis. Wells GA, et al. **Clin Nucl Med** 1990 Mar;15(3):191–2

The effect of captopril on thallium 201 myocardial perfusion in systemic sclerosis. Kahan A, et al. **Clin Pharmacol Ther** 1990 Apr;47(4):483–9

Survival in patients with heart failure: focus on captopril. DiBianco R. **Clin Ther** 1988;10(2):204–15 (59 ref.)

A double-blind comparison of transdermal clonidine and oral captopril in essential hypertension. McMahon FG, et al. **Clin Ther** 1990 Mar-Apr;12(2):88–100

Converting enzyme-inhibition in diabetic nephropathy. Mathiesen ER, et al. **Contrib Nephrol** 1989;73:160–1; discussion 161–2

Effect of antihypertensive treatment on blood-retinal barrier permeability to fluorescein in hypertensive type 1 (insulin-dependent) diabetic patients with background retinopathy. Parving HH, et al. **Diabetologia** 1989 Jul; 32(7):440–4

Captopril in diabetic nephropathy. Fong M, et al. **DICP** 1990 Mar;24(3):260–1

Methods of assessing the effect of drug therapy on quality of life. Ganz PA. **Drug Saf** 1990 Jul-Aug;5(4):233–42 (54 ref.)

Acute and long-term haemodynamic and neurohumoral response to nisoldipine vs captopril in patients with heart failure: a randomized double-blind study. Schofer J, et al. **Eur Heart J** 1990 Aug;11(8):712–21

Regression of left ventricular hypertrophy on long-term treatment with captopril of severe hypertensives refractory to standard triple treatment. de Faire U, et al. **Eur J Clin Pharmacol** 1989;37(3):291–4

Antihypertensive activity and duration of action of dilevalol in hypertensive patients at rest and during exercise. A comparison with captopril. Fogari R, et al. **G Ital Cardiol** 1990 Apr;20(4):309–15

Captopril in hypertensive emergencies. Sakano T, et al. **Hiroshima J Med Sci** 1981 Dec;30(4):351–4

Antiatherogenic effect of captopril in the Watanabe heritable hyperlipidemic rabbit. Chobanian AV, et al. **Hypertension** 1990 Mar;15(3):327–31

Captopril improves hypertension and cardiomyopathy in rats with pheochromocytoma. Hu ZW, et al. **Hypertension** 1990 Feb;15(2):210–5

Captopril. Yadav S, et al. **Indian Pediatr** 1989 Dec; 26(12):1237–40

Effects of captopril and minoxidil on left ventricular hypertrophy in resistant hypertensive patients: a 6 month double-blind comparison [see comments] Julien J, et al. **J Am Coll Cardiol** 1990 Jul;16(1):137–42 Comment in: J Am Coll Cardiol 1990 Jul;16(1):143–4.

Captopril in the treatment of moderate to severe hypertension. Kaul UA, et al. **J Assoc Physicians India** 1989 Feb;37(2):152–4

Effects of captopril on atherosclerosis in cynomolgus monkeys. Aberg G, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 5:S65–72

Effects of captopril on blood pressure and respiratory function compared to verapamil in patients with hypertension and asthma. Riska H, et al. **J Cardiovasc Pharmacol** 1990 Jan;15(1):57–61

Comparison of intravenous nitroprusside, nitroprusside–captopril, and nitroglycerin for deliberate hypotension during posterior spine fusion in adults. Porter SS, et al. **J Clin Anesth** 1988;1(2):87–95

Intravenous captopril in congestive heart failure. Ahmad S, et al. **J Clin Pharmacol** 1990 Jul;30(7):609–14

Preliminary observations of the acute effects of selective serum thromboxane inhibition and angiotensin converting enzyme inhibition on blood pressure and renal hemodynamics in hypertensive humans. Weir MR, et al. **J Clin Pharmacol** 1989 Dec;29(12):1108–16

Evaluation of anterior pituitary function in hypertensive patients following inhibition of angiotensin II generation. Alagna S, et al. **J Endocrinol Invest** 1989 Oct;12(9):611–5

Effectiveness and safety of captopril in Sudanese hypertensive patients. Abdel Rahim IM, et al. **J Hum Hypertens** 1990 Apr;4(2):168–70

Antihypertensive therapy and quality of life: a comparison of atenolol, captopril, enalapril and propranolol. Steiner SS, et al. **J Hum Hypertens** 1990 Jun;4(3):217–25

Cardiovascular regulation during angiotensin converting enzyme inhibition with captopril in diabetes–associated hypertension. Beretta–Piccoli C, et al. **J Hypertens** 1990 Jul;8(7):671–8

Quality of life on antihypertensive therapy: a randomized double–blind controlled trial of captopril and atenolol. Fletcher AE, et al. **J Hypertens** 1990 May;8(5):463–6

Effect of angiotensin converting enzyme inhibition on cardiovascular regulation during reflex sympathetic activation in sodium–replete patients with essential hypertension. Morganti A, et al. **J Hypertens** 1989 Oct; 7(10):825–35

Captopril treatment in elderly hypertensive patients: efficacy and tolerability. Captopril Study Group. Giuntoli F, et al. **J Hypertens Suppl** 1989 Sep;7(7):S57–8

Effects of treatment with captopril on exercise tolerance and plasma catecholamines in elderly hypertensives. Kusaka M, et al. **J Hypertens Suppl** 1989 Sep;7(7):S59–61

Attenuation of neurogenic hypertension by chronic converting enzyme inhibition. Longo VL, et al. **J Hypertens Suppl** 1989 Dec;7(6):S44–5

Short–term effect of captopril and nifedipine on micro–albuminuria induced by exercise in hypertensive diabetic patients. Romanelli G, et al. **J Hypertens Suppl** 1989 Dec;7(6):S312–3

Systemic and renal effects of chronic angiotensin converting enzyme inhibition with captopril in hypertensive diabetic patients. Stornello M, et al. **J Hypertens Suppl** 1989 Sep; 7(7):S65–7

The effect of captopril and metoprolol as monotherapy or combined with bendroflumethiazide on blood lipids. Foss OP, et al. **J Intern Med** 1990 Feb;227(2):119–23

Angiotensin converting enzyme inhibitor therapy to decrease microalbuminuria in normotensive children with insulin–dependent diabetes mellitus. Cook J, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):39–45

Effect of captopril on urinary cystine excretion in homozygous cystinuria. Streem SB, et al. **J Urol** 1989 Dec; 142(6):1522–4

Comparison of sublingual captopril and sublingual nifedipine in hypertensive emergencies. Ceyhan B, et al. **Jpn J Pharmacol** 1990 Feb;52(2):189–93

Post–transplant hypertension in the rat: effects of captopril and native nephrectomy. Coffman TM, et al. **Kidney Int** 1989 Jul;36(1):35–40

ACE inhibitors after myocardial infarction [see comments] **Lancet** 1989 Nov 11;2(8672):1133–4 (24 ref.) Comment in: Lancet 1989 Dec 23–30;2(8678–8679):1527. Comment in: Lancet 1990 Jan 27;335(8683):227. Comment in: Lancet 1990 Feb 3;335(8684):295. Comment in: Lancet 1990 Jun 9;335(8702):1398.

Regression of hypertensive left ventricular hypertrophy and left ventricular diastolic function. Shahi M, et al. **Lancet** 1990 Aug 25;336(8713):458–61

ACE inhibitors and peripheral vascular disease [letter] Walley T, et al. **Lancet** 1990 Sep 29;336(8718):810

The effects of captopril in severe congestive heart failure. An echocardiographic study. Drăgulescu SI, et al. **Med Interne** 1989 Apr–Jun;27(2):99–105

Double–blind study on the antiproteinuric effect of captopril versus placebo in cryoglobulinaemic glomerulonephritis: a Franco–Hispano–Italian study [letter] **Nephrol Dial Transplant** 1989;4(9):839

Evaluation of the effect–duration of once–daily enalapril compared with once–daily captopril. Germanò G, et al. **Nephron** 1990;55 Suppl 1:65–9

Captopril, but not diltiazem, favorably affects the course of early chronic renal disease in rats. Podjarny E, et al. **Nephron** 1990;55(2):196–202

The effect of captopril in renal hypertension in children. Alatas H, et al. **Paediatr Indones** 1987 Nov–Dec; 27(11–12):231–6

Captopril treatment in rheumatic heart disease with congestive heart failure. A preliminary report. Sastrosubroto H, et al. **Paediatr Indones** 1989 Sep–Oct; 29(9–10):209–14

Captopril in children with dilated cardiomyopathy: acute and long–term effects in a prospective study of hemodynamic and hormonal effects. Stern H, et al. **Pediatr Cardiol** 1990 Jan;11(1):22–8

Comparative effects of captopril and enalapril on the progression of chronic renal disease in partially nephrectomized rats. Fettman MJ, et al. **Res Commun Chem Pathol Pharmacol** 1989 Aug; 65(2):131–46

Reduction of albuminuria after angiotensin converting enzyme inhibition in various renal disorders. Kurkus J, et al. **Scand J Urol Nephrol** 1990;24(1):63–8

Captopril treatment in Bartter's syndrome. Scherling B, et al. **Scand J Urol Nephrol** 1990;24(2):123–5

Observations with captopril (Tensiomin) treatment in hypertensive patients (one–year period). Bányai T, et al. **Ther Hung** 1989;37(3):144–50

Use of tensiomin (captopril) in the antihypertensive treatment of haemodialysis patients. Kakuk G, et al. **Ther Hung** 1990; 38(2):71–6

Captopril (Tensiomin) in the treatment of chronic heart failure of ischaemic heart disease patients. Palócz E, et al. **Ther Hung** 1989;37(4):220–4

Captopril provides sustained hemodynamic benefits in dogs with experimentally induced mitral regurgitation. Blackford LW, et al. **Vet Surg** 1990 May–Jun;19(3):237–42

[Captopril in the therapy of stable angina pectoris] Lupínek Z, et al. **Cas Lek Cesk** 1990 Mar 2;129(9):278–82 (Eng. Abstr.) **(Cze)**

[The effects of nifedipine and captopril on blood pressure, clinical chemical parameters and general health] Birkebaek NH, et al. **Ugeskr Laeger** 1990 Jan 15;152(3):162–4 (Eng. Abstr.) **(Dan)**

[Essential arterial hypertension and quality of life. Comparative crossed double–blind study of labetalol and captopril] Carre A, et al. **Arch Mal Coeur** 1989 Jul; 82(7):1269–73 (Eng. Abstr.) **(Fre)**

[Comparison of the effects of cicletanine and captopril on kidney and heart lesions in spontaneously hypertensive rats (SHR–SP)] Ruchoux MM, et al. **Arch Mal Coeur** 1989 Nov; 82 Spec No 4:169–74 (Eng. Abstr.) **(Fre)**

[Comparison of enalapril and captopril in the treatment of chronic heart failure] Tjon–A–Meeuw L, et al. **Z Kardiol** 1990 Jun;79(6):429–35 (Eng. Abstr.) **(Ger)**

[Etozolin and captopril in the treatment of arterial hypertension] Battaglia A, et al. **Clin Ter** 1990 Feb 15; 132(3):173–9 (Eng. Abstr.) **(Ita)**

[Comparison of the efficacy of captopril and enalapril in single doses in the treatment of arterial hypertension. Evaluation by means of non–invasive ambulatory monitoring] Valori C, et al. **Clin Ter** 1989 Jul 15; 130(1):37–44 (Eng. Abstr.) **(Ita)**

[Acute and long–term effects of captopril in patients with left ventricular dysfunction and dilatation: evaluation of function and work capacity] Foresti A, et al. **G Ital Cardiol** 1989 Nov;19(11):999–1006 (Eng. Abstr.) **(Ita)**

[Sublingually administered captopril versus nifedipine in hypertension emergencies] Guerrera G, et al. **Minerva Cardioangiol** 1990 Jan–Feb;38(1–2):37–44 (Eng. Abstr.) **(Ita)**

[Captopril and hydrochlorothiazide combined in the treatment of mild–to–moderate hypertension. Evaluation of sugar and lipid metabolism in a long–term study] Malacco E, et al. **Minerva Med** 1989 Oct;80(10):1115–8 (Eng. Abstr.) **(Ita)**

[Evaluation of the efficacy and tolerability of a fixed dose combination of captopril (CPT) 50 mg and hydrochlorothiazide (HCTZ) 15 mg in the elderly] Antonicelli R, et al. **Riv Eur Sci Med Farmacol** 1989 Apr; 11(2):155–61 (Eng. Abstr.) **(Ita)**

[Comparison of the antihypertensive effectiveness of captopril in combination with various doses of hydrochlorothiazide] Costa FV, et al. **Riv Eur Sci Med Farmacol** 1988 Dec;10(6):527–32 (Eng. Abstr.) **(Ita)**

[Combination captopril–hydrochlorothiazide in a single dose for treatment of essential arterial hypertension] Forattini C, et al. **Riv Eur Sci Med Farmacol** 1988 Feb;10(1):63–7 (Eng. Abstr.) **(Ita)**

[Assessment of tolerability and antihypertensive efficacy of aceplus mite (captopril (CPT) 50 mg + hydrochlorothiazide (HCTZ) 15 mg): a double–blind study vs. HCTZ in diabetic hypertensive patients. A report on three treatments] Santucci A, et al. **Riv Eur Sci Med Farmacol** 1989 Apr;11(2):149–53 (Eng. Abstr.) **(Ita)**

[The effectiveness and duration of antihypertensive action of captopril 50 mg. + hydrochlorothiazide 25 mg. (CAP + HCTZ)] Stornello M, et al. **Riv Eur Sci Med Farmacol** 1988 Jun;10(3):265–70 (Eng. Abstr.) **(Ita)**

[The effect of bunazosin vs captopril on hemodynamic and neurohumoral parameters in patients with congestive heart failure] Kawahara Y, et al. **Kokyu To Junkan** 1989 Dec; 37(12):1333–40 (Eng. Abstr.) **(Jpn)**

[Hypertension and prostanoids—the etiology and its implications for treatment] Abe K, et al. **Nippon Rinsho** 1990 Jun;48(6):1246–53 **(Jpn)**

[Effect of captopril on various components of the kinin system and plasma renin activity in patients with idiopathic arterial hypertension] Kolber–Postepska B, et al. **Kardiol Pol** 1989;32(3):121–30 (Eng. Abstr.) **(Pol)**

[Effect of captopril on superoxide dismutase (SOD–1) activity and malondialdehyde (MDA) level in blood platelets in patients with arterial hypertension] Tkaczewski W, et al. **Kardiol Pol** 1989;32(3):138–41 (Eng. Abstr.) **(Pol)**

[Comparative study of the use of nifedipine and captopril in hypertensive emergencies] Moritz RD, et al. **Arq Bras Cardiol** 1989 Jun;52(6):323–6 (Eng. Abstr.) **(Por)**

[Treatment of mild and moderate hypertension with the use of captopril alone or combined with hydrochlorothiazide. A multicenter study] Nascimento LO, et al. **Arq Bras Cardiol** 1989 Sep;53(3):177–83 (Eng. Abstr.) **(Por)**

[Efficacy of captopril in the treatment of mild and moderate hypertension in patients over 60 years of age] Nascimento LO, et al. **Arq Bras Cardiol** 1989 Nov;53(5):295–9 (Eng. Abstr.) **(Por)**

[Neurohumoral response to sublingual captopril and nifedipine in hypertensive emergencies and during the cold test. Contribution to the study of the interaction between the sympathetic and renin–angiotensin systems and atrial natriuretic factor] Polónia JJ, et al. **Rev Port Cardiol** 1988 Jul–Aug;7(4):389–98 (Eng. Abstr.) **(Por)**

[The cardioprotective action of captopril during atrial electrostimulation] Cosovanu A, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Apr–Jun;93(2):251–5 (Eng. Abstr.) **(Rum)**

[Use of prazosin and capoten in the treatment of heart failure in patients with ischemic heart disease] Burduli FU, et al. **Kardiologiia** 1989 Sep;29(9):49–52 (Eng. Abstr.) **(Rus)**

[Immunological effects of captopril and ramipril in patients with hypertension] Vil'chinskaia MIu, et al. **Klin Med (Mosk)** 1990 Feb;68(2):61–4 (Eng. Abstr.) **(Rus)**

[Use of captopril in myocardial infarct] Pinzur SV, et al. **Sov Med** 1990;(5):45–50 (77 ref.) **(Rus)**

[Captopril in circulatory insufficiency in patients with dilated cardiomyopathy] Shatkovskiĭ NP, et al. **Sov Med** 1990; (5):82–4 **(Rus)**

[Neurohumoral mechanisms regulating renal blood circulation in patients with hypertension undergoing captopril block of angiotensin–converting enzyme] Almazov VA, et al. **Ter Arkh** 1989;61(8):13–5 (Eng. Abstr.) **(Rus)**

[The use of capoten in the treatment of chronic cor pulmonale in elderly patients] Kalinovskaia EG, et al. **Vestn Akad Med Nauk SSSR** 1990;(3):52–4 (Eng. Abstr.) **(Rus)**

[The hemodynamic effect of Capoten in patients with myocardial infarct complicated by heart failure] Iaremenko OB, et al. **Vrach Delo** 1989 Nov;(11):44–7 (Eng. Abstr.) **(Rus)**

[The efficacy of the captopril treatment of elderly hypertension patients] Korkushko OV, et al. **Vrach Delo** 1990 Feb;(2):10–3 (Eng. Abstr.) **(Rus)**

[Captopril in the ambulatory treatment of arterial hypertension in diabetics] Jovanović D. **Med Arh** 1987; 41(5):257–64 (Eng. Abstr.) **(Scr)**

[Captopril treatment of neonatal arterial hypertension] Moreno Villares JM, et al. **An Esp Pediatr** 1990 Mar; 32(3):253–6 (Eng. Abstr.) **(Spa)**

[Arteriosclerosis obliterans. Treatment with angiotensin–converting enzyme inhibitors] Orea A, et al. **Arch Inst Cardiol Mex** 1990 Mar–Apr;60(2):183–90 (Eng. Abstr.) **(Spa)**

[Captopril in single doses in the treatment mild–moderated arterial hypertension] Alcántara Nicolás J, et al. **Rev Clin Esp** 1990 Mar;186(5):201–5 (Eng. Abstr.) **(Spa)**

[Right ventricular function and effort tolerance in patients with chronic congestive heart insufficiency. A cross–over double–blind study] Montes Orbe PM, et al. **Rev Esp Cardiol** 1990 Mar;43(3):137–41 (Eng. Abstr.) **(Spa)**

CAR SEATS see **INFANT EQUIPMENT**

CARBACHOL

ADMINISTRATION & DOSAGE

The enhancement of carbachol–induced salivary secretion

by VIP and CGRP in rat parotid gland is mimicked by forskolin. Larsson O, et al. **Acta Physiol Scand** 1989 Oct; 137(2):231–6

Correspondence between forced oscillation and body plethysmography during bronchoprovocation with carbachol in children. Buhr W, et al. **Pediatr Pulmonol** 1990;8(4):280–8

ADVERSE EFFECTS

Carbachol dose response. Zimmerman TJ, et al. **Am J Ophthalmol** 1989 Oct 15;108(4):456–7

[Circulatory collapse caused by carbachol-containing eye drops (letter)] Mönig H, et al. **Dtsch Med Wochenschr** 1989 Nov 24;114(47):1860 (Ger)

ANALOGS & DERIVATIVES

Pharmacological activity of N-methyl-carbamylcholine, a novel acetylcholine receptor agonist with selectivity for nicotinic receptors. Boksa P, et al. **Eur J Pharmacol** 1989 Nov 28;173(1):93–108

N-[3H]methylcarbamylcholine binding sites in the rat and human brain: relationship to functional nicotinic autoreceptors and alterations in Alzheimer's disease. Araujo DM, et al. **Prog Brain Res** 1989;79:345–52 (49 ref.)

ANTAGONISTS & INHIBITORS

Intracellular coupling of prostaglandin inhibition of acid secretion in isolated rabbit gastric parietal cells. Choquet A, et al. **Biochem Pharmacol** 1990 Jun 15;39(12):1905–11

Muscarinic receptors mediating the positive inotropic effect of carbachol in embryonic chick ventricle have a low affinity for pirenzepine. Protas LL. **Eur J Pharmacol** 1990 Jan 10;175(2):215–8

Muscarinic receptor subtypes mediating negative chrono- and inotropic responses in isolated, blood-perfused dog right atria. Akahane K, et al. **J Auton Pharmacol** 1990 Feb; 10(1):39–48

Inhibition of carbachol-induced inositol phosphate accumulation by phencyclidine, phencyclidine-like ligands and sigma agonists involves blockade of the muscarinic cholinergic receptor: a novel dioxadrol-preferring interaction. Brog JS, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):952–6

Inhibition of CCK or carbachol-stimulated amylase release by nicotine. Chowdhury P, et al. **Life Sci** 1989; 45(22):2163–8

Inhibition by vecuronium of carbachol-induced influx of 22Na+, 45Ca2+ and secretion of catecholamines in cultured bovine adrenal medullary cells. Wada A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Dec; 340(6):605–9

DIAGNOSTIC USE

[Fading of the provocation effect following inhaled provocation with carbachol] Schlegel J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:355–7 (Eng. Abstr.) (Ger)

METABOLISM

Chemical transduction with fluorescent lipid membranes using selective interactions of acetylcholine receptor with agonist/antagonist and acetylcholine with substrate. Krull UJ, et al. **Analyst** 1990 Feb;115(2):147–53

A model for the interaction of muscarinic receptors, agonists, and two distinct effector substances. Minton AP, et al. **Biochemistry** 1990 Feb 13;29(6):1586–93

PHARMACOLOGY

Serotonin depletion with P-chlorophenylalanine in the cat: effects on carbachol-induced defensive behavior and regional brain amine content. Romaniuk A, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(4):130–40

Mechanisms of short-term (second range) regulation of the activities of enzymes of lipid and phospholipid metabolism in secretory cells. Söling HD, et al. **Adv Enzyme Regul** 1989;28:35–50

Protein kinase C mediates cholinergically regulated protein phosphorylation in a Cl(-)-secreting epithelium. Cohn JA. **Am J Physiol** 1990 Feb;258(2 Pt 1):C227–33

Carbachol induces oscillations of membrane potassium conductance in a colonic cell line, T84. Devor DC, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C318–26

Aequorin luminescence, myosin phosphorylation, and active stress in tracheal smooth muscle. Gerthoffer WT, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):C1062–8

Calcium entry in rat parotid acini: activation by carbachol and aluminum fluoride. Mertz LM, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):C654–61

Rapid activation of gluconeogenesis after intracerebroventricular carbachol. Migliorini RH, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):E486–90

Dual effects of carbachol on cytosolic Ca2+ and contraction in intestinal smooth muscle. Mitsui M, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C787–93

Modulation of agonist-activated calcium influx by extracellular pH in rat pancreatic acini. Muallem S, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):G917–24

Neural control of duodenal motor inhibition by antral contractions in dogs. Reddy SN, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):G24–31

Carbachol-induced cytosolic free Ca2+ increases in T84 colonic cells seen by microfluorimetry. Reinlib L, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):G950–60

Muscarinic regulation of potassium transport in a human submandibular epithelial cell line. Ship JA, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):C340–8

Carbachol desensitizes pancreatic enzyme secretion by downregulation of receptors. Vinayek R, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):G107–21

Role of calcium in mediating action of carbachol in T84 cells. Wong SM, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):C976–85

Characterization of beta-adrenoreceptors on smooth muscle cells from guinea pig stomach. Zhang L, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):G436–42

Effects of cholecystokinin and carbamylcholine on Paneth cell secretion in mice: a comparison with pancreatic acinar cells. Satoh Y, et al. **Anat Rec** 1989 Oct;225(2):124–32

Aspects of salivary gland radiosensitivity: effects of sialagogues and irradiation. Norberg LE, et al. **Arch Otorhinolaryngol** 1989;246(4):200–4

Kainic acid lesions of the cat's midbrain periaqueductal grey region and emotional-defensive response evoked by carbachol injection to the same loci. Gołębiewski H, et al. **Behav Brain Res** 1989 Oct 1;35(1):1–7

Pineal muscarinic phosphoinositide response: pertussis toxin resistant signaling with very low receptor number. Laitinen JT, et al. **Biochem Biophys Res Commun** 1989 Oct 31; 164(2):645–52

Inhibitory action of atrial natriuretic factor on cholinergic and nonadrenergic, noncholinergic neurotransmission in guinea pig small intestine. Matusak O, et al. **Biochem Biophys Res Commun** 1989 Oct 31;164(2):638–44

Phospholipase C-mediated hydrolysis of phosphatidylcholine is activated by muscarinic agonists. Diaz-Meco MT, et al. **Biochem J** 1989 Oct 1;263(1):115–20

Agonist-induced desensitization of cholinergically stimulated phosphoinositide breakdown is independent of endogenously activated protein kinase C in HT-29 human colon carcinoma cells. Kopp R, et al. **Biochem J** 1990 Jul 1;269(1):73–8

Muscarinic-receptor-mediated changes in intracellular Ca2+ and inositol 1,4,5-trisphosphate mass in a human neuroblastoma cell line, SH-SY5Y. Lambert DG, et al. **Biochem J** 1990 Jan 15;265(2):555–62

Stimulation of generation of inositol phosphates by carbamoylcholine and its inhibition by phorbol esters and iodide in dog thyroid cells. Laurent E, et al. **Biochem J** 1989 Nov 1;263(3):795–801

Modulation of carbachol-induced inositol phosphate formation in bovine tracheal smooth muscle by cyclic AMP phosphodiesterase inhibitors. Hall IP, et al. **Biochem Pharmacol** 1990 Apr 15;39(8):1357–63

Desensitization of muscarinic M1 receptors of murine neuroblastoma cells (clone N1E-115) without receptor down-regulation and protein kinase C activity. Kanba S, et al. **Biochem Pharmacol** 1990 Sep 1;40(5):1005–14

Potassium- and carbachol-evoked released of [3H]noradrenaline from human neuroblastoma cells, SH-SY5Y. Murphy NP, et al. **Biochem Soc Trans** 1990 Jun;18(3):436–7

Activation of phospholipase C in rabbit brain membranes by carbachol in the presence of GTP gamma S; effects of biological detergents. Carter HR, et al. **Biochim Biophys Acta** 1990 Aug 13;1054(1):129–35

Potentiation of [3H]inositol phosphate formation by receptor activation and membrane depolarization in brain cortical slices (I). Diamant S, et al. **Brain Res** 1989 Nov 27; 503(1):55–61

Medullary control of lumbar motoneurons during carbachol-induced motor inhibition. Pereda AE, et al. **Brain Res** 1990 Apr 23;514(1):175–9

Long-term treatment with antipsychotics does not alter the phosphoinositide response to muscarinic or D2 dopaminergic agonists in rat striatum. Rubinstein JE, et al. **Brain Res** 1989 Sep 4;496(1-2):385–8

Synergy between membrane depolarization and muscarinic receptor activation leads to potentiation of neurotransmitter release (II) Schwartz L, et al. **Brain Res** 1989 Nov 27; 503(1):62–7

Microinjections of cholinergic agonists into the intermediolateral cell column of the spinal cord at T1-T3 increase heart rate and contractility. Sundaram K, et al. **Brain Res** 1989 Nov 27;503(1):22–31

Carbachol phase shifts the circadian rhythm of locomotor activity in the Djungarian hamster. Wee BE, et al. **Brain Res** 1989 Dec 29;505(2):209–14

Evaluation for roles of periventricular cholinoceptors in vasopressin secretion in response to angiotensin II and an osmotic stimulus. Yamaguchi K, et al. **Brain Res** 1989 Sep 4;496(1-2):345–50

Developmental changes in the effects of carbachol and morphine on cGMP contents of plasma, heart, and lung of mice. Muraki T, et al. **Can J Physiol Pharmacol** 1989 Oct;67(10):1283–7

Calcium involvement in the muscarinic response of the gastric parietal cell. Leonard A, et al. **Cell Signal** 1990; 2(2):177–86

Effects of alpha,beta-methylene ATP on potentiation of contractions to field stimulation of rat vas deferens by carbachol. Lee CM, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Jan;10(1):17–22

Cholinergic stimulation of isolated rat parietal cells: role of calcium, calmodulin and protein kinase C. Schepp W, et al. **Clin Physiol Biochem** 1989;7(3-4):137–48

Long-term heat adaptation results in an enhanced efficiency of muscarinically-induced water secretion in rat submaxillary glands. Oron Y, et al. **Comp Biochem Physiol [A]** 1989;94(4):673–6

Age-dependent stimulation of neonatal insulin release and inositol phosphate accumulation by CCK-8 and carbachol. Fletcher DJ, et al. **Diabetes** 1989 Nov;38(11):1337–42

Intracellular Ca2+ mobilization by thyrotropin, carbachol, and adenosine triphosphate in dog thyroid cells. Rani CS, et al. **Endocrinology** 1989 Oct;125(4):1889–97

Cholinergic agonists prime the beta-cell to glucose stimulation. Zawalich WS, et al. **Endocrinology** 1989 Nov; 125(5):2400–6

Muscarinic acetylcholine receptor-stimulated binding of guanosine 5'-O-(3-thiotriphosphate) to guanine-nucleotide-binding proteins in cardiac membranes. Hilf G, et al. **Eur J Biochem** 1989 Dec 22;186(3):725–31

Carbachol-induced potentiation and inhibition of acid secretion by guinea pig gastric gland. Kajimura M, et al. **Eur J Pharmacol** 1990 Mar 13;178(1):59–69

Enhancement of pharmacologically induced bronchoconstriction by Ro 5-4864. Marano G, et al. **Eur J Pharmacol** 1990 Apr 10;179(1-2):237–40

Selective antagonists provide evidence that M1 muscarinic receptors may mediate carbachol-induced drinking in the rat. Polidori C, et al. **Eur J Pharmacol** 1990 Apr 10; 179(1-2):159–65

Cholinergic enhancement of megakaryocytopoiesis and granulocytopoiesis in culture: mediation via T-lymphocytes. Chatelain C, et al. **Exp Hematol** 1989 Dec; 17(11):1067–71

Characteristics of tremor in cats following injections of carbachol into the caudate nucleus. Connor JD, et al. **Exp Neurol** 1966 Mar;14(3):371–82

Cholinergic activation of medial pontine reticular formation neurons in vitro. Greene RW, et al. **Experientia Suppl** 1989; 57:123–37

Carbachol and pirenzepine discriminate effects mediated by two muscarinic receptor subtypes on hippocampal neurons in vitro. Müller W, et al. **Experientia Suppl** 1989;57:114–22

Effect of carbachol and cyclic GMP on susceptibility to ventricular fibrillation. Billman GE. **FASEB J** 1990 Apr 1;4(6):1668–73

Carbamylcholine inhibits beta-adrenergic receptor-coupled Gs protein function proximal to adenylate cyclase. Avissar S, et al. **FEBS Lett** 1990 Jan 15;260(1):95–7

Synergism between vasoactive intestinal polypeptide and carbachol-mediated responses in a human mucus-secreting colonic epithelial cell line. Barrett KE, et al. **Gastroenterology** 1989 Nov;97(5):1345–6

Stimulation of thromboxane release from primary cell cultures derived from human astrocytic glioma biopsies. Murphy S, et al. **GLIA** 1990;3(3):205–11

Central cholinergic stimulation affects ocular functions through sympathetic pathways. Liu JH, et al. **Invest Ophthalmol Vis Sci** 1990 Jul;31(7):1332–8

Epithelial vs. serosal stimulation of tracheal muscle: role of epithelium. Pavlovic D, et al. **J Appl Physiol** 1989 Dec; 67(6):2522–6

Carbachol in the presence of guanosine 5'-O-(3-thiotriphosphate) stimulates the breakdown of exogenous phosphatidylinositol 4,5-bisphosphate, phosphatidylinositol 4-phosphate, and phosphatidylinositol by rat brain membranes. Claro E, et al. **J Biol Chem** 1989 Nov 5;264(31):18288–95

Effects of insulin secretagogues on protein kinase C-catalyzed phosphorylation of an endogenous substrate in isolated pancreatic islets. Easom RA, et al. **J Biol Chem** 1990 Sep 5;265(25):14938–46

Phosphorylation of smooth muscle myosin heavy and light chains. Effects of phorbol dibutyrate and agonists. Kamm KE, et al. **J Biol Chem** 1989 Dec 15;264(35):21223–9

Cytosolic heparin inhibits muscarinic and alpha-adrenergic Ca2+ release in smooth muscle. Physiological role of inositol 1,4,5-trisphosphate in pharmacomechanical coupling. Kobayashi S, et al. **J Biol Chem** 1989 Oct 25; 264(30):17997–8004

Refill status of the agonist-sensitive Ca2+ pool regulates Mn2+ influx into parotid acini. Mertz LM, et al. **J Biol Chem** 1990 Sep 5;265(25):15010–4

Beta gamma dimers of G proteins inhibit atrial muscarinic K+ channels. Okabe K, et al. **J Biol Chem** 1990 Aug 5; 265(22):12854–8

Cyclic GMP mediates the agonist-stimulated increase in plasma membrane calcium entry in the pancreatic acinar cell. Pandol SJ, et al. **J Biol Chem** 1990 Aug 5; 265(22):12846–53

Stimulus-response coupling in insulin-secreting HIT cells. Effects of secretagogues on cytosolic Ca2+, diacylglycerol, and protein kinase C activity. Regazzi R, et al. **J Biol Chem** 1990 Sep 5;265(25):15003–9

Carbachol inhibits atrial contractility in the presence of potassium channel blocking agents. Groschner K, et al. **J Cardiovasc Pharmacol** 1989 Oct;14(4):648–52

Effects of extracellular ATP on ion transport systems and [Ca2+]i in rat parotid acinar cells. Comparison with the muscarinic agonist carbachol. Soltoff SP, et al. **J Gen Physiol** 1990 Feb;95(2):319–46

Evidence for two modes of Ca2+ entry following muscarinic

stimulation of a human salivary epithelial cell line. He XJ, et al. **J Membr Biol** 1990 May;115(2):159–66

Carbachol and bradykinin increase the production of diacylglycerol from sources other than inositol-containing phospholipids in PC12 cells. Horwitz J. **J Neurochem** 1990 Mar;54(3):983–91

Positive inotropic effect of carbachol and inositol phosphate levels in mammalian atria after pretreatment with pertussis toxin. Kohl C, et al. **J Pharmacol Exp Ther** 1990 Sep; 254(3):894–9

The relationship between agonist states of the M1 muscarinic receptor and the hydrolysis of inositol lipids in transfected murine fibroblast cells (B82) expressing different receptor densities. Mei L, et al. **J Pharmacol Exp Ther** 1989 Oct; 251(1):90–7

Effect of bradykinin on opossum esophageal longitudinal smooth muscle: evidence for novel bradykinin receptors. Saha JK, et al. **J Pharmacol Exp Ther** 1990 Mar; 252(3):1012–20

Characterization of alkaline response induced by cholinergic agents in the rat duodenum: involvement of M2 receptors and the calcium-dependent process. Takeuchi K, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):465–70

Phorbol ester effects on coupling mechanisms during cholinergic contraction of swine tracheal smooth muscle. Baba K, et al. **J Physiol (Lond)** 1989 May;412:23–42

Suppression of secretagogue-induced amylase secretion in pancreatic acini of cold-exposed rats. Habara Y. **J Physiol (Lond)** 1989 Jul;414:73–87

Augmentation of secretagogue-induced amylase secretion in pancreatic acini of heat-exposed rats. Habara Y. **J Physiol (Lond)** 1989 Jun;413:91–105

Local neuronal circuitry underlying cholinergic rhythmical slow activity in CA3 area of rat hippocampal slices. MacVicar BA, et al. **J Physiol (Lond)** 1989 Oct;417:197–212

Sodium-dependent membrane current induced by carbachol in single guinea-pig ventricular myocytes. Matsumoto K, et al. **J Physiol (Lond)** 1989 Aug;415:487–502

Possible involvement of a G-protein in carbamylcholine-induced gap junction closure. Somogyi R, et al. **J Protein Chem** 1989 Jun;8(3):434–6

Effect of membrane depolarization by high K+ on carbachol-stimulated phosphoinositides hydrolysis in guinea pig cerebral cortical slices. Zhou XM, et al. **Jpn J Pharmacol** 1990 Jun;53(2):229–34

Antinociceptive effect of spinal cholinergic stimulation: interaction with substance P. Smith MD, et al. **Life Sci** 1989;45(14):1255–61

Phosphoinositides metabolism in primary culture of dog thyroid cells: effects of thyrotropin and carbachol. Taguchi M, et al. **Metabolism** 1990 Apr;39(4):418–24

Polyphosphoinositides are the major source of inositol phosphates in carbamoylcholine-stimulated SK-N-SH neuroblastoma cells. Fisher SK, et al. **Mol Pharmacol** 1990 Jul;38(1):54–63

Role of omega-conotoxin-sensitive calcium channels in inositolphosphate production and noradrenaline release due to potassium depolarization or stimulation with carbachol. Hofmann F, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Mar; 341(3):200–5

Regulation by batrachotoxin, veratridine, and monensin of basal and carbachol-induced phosphoinositide hydrolysis in neurohybrid NCB-20 cells. Chuang DM. **Neurochem Res** 1990 Jul;15(7):695–704

Profile of phosphatidylinositol metabolism stimulated by carbachol and glutamate in primary cultures of rat cerebellar neurons. Hynie S, et al. **Neuropharmacology** 1989 Dec;28(12):1309–15

The carbachol-induced enhancement of desynchronized sleep signs is dose dependent and antagonized by centrally administered atropine. Baghdoyan HA, et al. **Neuropsychopharmacology** 1989 Mar;2(1):67–79

Ultrasonic vocalization in rats produced by cholinergic stimulation of the brain. Brudzynski SM, et al. **Neurosci Lett** 1990 Feb 5;109(1–2):222–6

Carbachol injection into the medial preoptic area induces natriuresis, kaliuresis and antidiuresis in rats. De Luca Júnior LA, et al. **Neurosci Lett** 1989 Nov 6;105(3):333–9

Potentiation of neurotransmitter release coincides with potentiation of phosphatidyl inositol turnover. A possible in vitro model for long term potentiation. Diamant S, et al. **Neurosci Lett** 1990 Feb 5;109(1–2):140–5

The anteroventral third ventricle (AV3V) region is essential for pressor, dipsogenic and natriuretic responses to central carbachol. Menani JV, et al. **Neurosci Lett** 1990 Jun 8; 113(3):339–44

Carbachol reduces IK,baclofen, but not IK,GABA in guinea pig hippocampal slices. Müller W, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):229–34

Increased responsiveness of the cerebral cortical phosphatidylinositol system to noradrenaline and carbachol in senescent rats. Nalepa I, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):195–9

Presynaptic M1 muscarinic cholinoceptors mediate inhibition of excitatory synaptic transmission in the hippocampus in vitro. Sheridan RD, et al. **Neurosci Lett** 1990 Jan 22; 108(3):273–8

Pancreatic and biliary secretion in the anesthetized Syrian golden hamster in response to secretin, cholecystokinin-octapeptide, bombesin, and carbachol. Ali AE, et al. **Pancreas** 1990 May;5(3):314–22

Carbamylcholine and phorbol esters desensitize muscarinic receptors by different mechanisms in rat pancreatic acini. Blanchard LM, et al. **Pancreas** 1990;5(1):50–9

Secretagogue and second messenger-activated Cl- permeabilities in isolated pancreatic zymogen granules. Fuller CM, et al. **Pflugers Arch** 1989 Oct;415(1):29–36

Different effects of depolarization and muscarinic stimulation on the Ca2+/force relationship during the contraction-relaxation cycle in the guinea pig ileum. Himpens B, et al. **Pflugers Arch** 1990 Apr;416(1–2):28–35

Changes in cytosolic CA2+ and contraction induced by various stimulants and relaxants in canine tracheal smooth muscle. Ozaki H, et al. **Pflugers Arch** 1990 Jun;416(4):351–9

Mechanism of action of nicotine on amylase release by isolated pancreatic acini. Hosotani R, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):663–6

Cortical second messengers after NBM damage: no change in responses to cholinergic agonists. Shoham S, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):507–13

Role of the hypothalamus in the control of atrial natriuretic peptide release. Baldissera S, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9621–5

Carbachol depolarizes and evokes an inward current in heart muscle: a novel action of muscarinic agonist. Pappano AJ, et al. **Prog Clin Biol Res** 1990;334:313–22

Effects of combined secretagogues and extracellular calcium on neonatal insulin release. Schuppin GT, et al. **Regul Pept** 1990 Feb 4;27(2):237–46

Radioprotection of minipig salivary glands by orciprenaline-carbachol. An ultrastructural and semiquantitative light microscopic study. Lotz S, et al. **Virchows Arch** [A] 1990;417(2):119–28

[Effects of isoprenaline and carbachol on delayed after-depolarization in myocardium] Shi WB, et al. **Sheng Li Hsueh Pao** 1989 Aug;41(4):361–6 (Eng. Abstr.) **(Chi)**

[TRH dissociates the aggressivity of vegetative and motor phenomena induced by carbachol in the cat] Samardžić R, et al. **C R Soc Biol (Paris)** 1989;183(2):148–52 (Eng. Abstr.) **(Fre)**

[Effects of acetylcholine and carbachol on the iris sphincter] Yoshino H, et al. **Nippon Ganka Gakkai Zasshi** 1989 Apr; 93(4):489–93 (Eng. Abstr.) **(Jpn)**

[Effects of carbachol and atropine on bile secretion in sheep] Garwacki S, et al. **Pol Arch Weter** 1988;28(3–4):71–7 (Eng. Abstr.) **(Pol)**

[The effect of carbacholine on spontaneous quantum secretion of a mediator from frog motor nerve endings in the presence of ouabain and in a potassium-free medium] Nikol'skiĭ EE, et al. **Neirofiziologiia** 1989;21(4):558–61 (Eng. Abstr.) **(Rus)**

[A statistical analysis of the change in spontaneous quantum secretion of a mediator in the presence of carbacholine in rat neuromuscular synapse] Strunskiĭ EG, et al. **Neirofiziologiia** 1989;21(4):561–4 (Eng. Abstr.) **(Rus)**

[Changes in laryngeal resistance and bronchial tonus] González-Barón S, et al. **Rev Esp Fisiol** 1989;45 Suppl:191–6 (Eng. Abstr.) **(Spa)**

TOXICITY

Aerosol deposition in the lung with asymmetric airways obstruction: in vivo observation. Kim CS, et al. **J Appl Physiol** 1989 Dec;67(6):2579–85

CARBADOX see under **QUINOXALINES**

CARBAMATES

Neuroactive carbamate adducts of beta-N-methylamino-L-alanine and ethylenediamine. Detection and quantitation under physiological conditions by 13C NMR. Myers TG, et al. **J Biol Chem** 1990 Jun 25;265(18):10193–5

Influence of fenoxycarb on German cockroach (Dictyoptera: Blattellidae) populations in public housing. Reid BL, et al. **J Econ Entomol** 1990 Apr;83(2):444–50

Fly pupae as attractant carriers for toxic baits for red imported fire ants (Hymenoptera: Formicidae). Williams DF, et al. **J Econ Entomol** 1990 Feb;83(1):67–73

Comparative sterilizing and ovicidal activity of fenoxycarb and hydroprene in adults and oothecae of the German cockroach (Dictyoptera: Blattellidae). King JE, et al. **J Med Entomol** 1990 Jul;27(4):642–5

Adsorption of 5'-adenosine monophosphate onto precipitated calcium phosphate: effects of inorganic polyphosphates and carbamyl phosphate. Hermes-Lima M, et al. **Orig Life Evol Biosph** 1990;20(1):27–41

ADMINISTRATION & DOSAGE

Chronic vs acute carbamate administration in exercising rats. Matthew CB, et al. **Life Sci** 1990;47(4):335–43

ADVERSE EFFECTS

Contact allergy to the fungicide benomyl? Larsen AI, et al. **Contact Dermatitis** 1990 May;22(5):278–81

Occupational contact dermatitis from antitumor agent intermediates. Niklasson B, et al. **Contact Dermatitis** 1990 Apr;22(4):233–5

[Photoallergic dermatitis caused by the herbicide phenmedipham] Koch P, et al. **Derm Beruf Umwelt** 1989 Nov-Dec;37(6):203–5 (Eng. Abstr.) **(Ger)**

ANALYSIS

Concentrations of diazinon, chlorpyrifos, and bendiocarb after application in offices. Currie KL, et al. **Am Ind Hyg Assoc J** 1990 Jan;51(1):23–7

Optimization of the postcolumn hydrolysis reaction on solid phases for the routine high-performance liquid chromatographic determination of N-methylcarbamate pesticides in food products. De Kok A, et al. **J Chromatogr** 1990 May 16;507:459–72

CHEMICAL SYNTHESIS

Molecular electrostatic potential-anthelmintic activity relationships of 5H-mebendazole and some related heterocyclic carbamates. Cativiela C, et al. **Farmaco** 1989 Jul-Aug;44(7–8):671–82

Synthesis and antitumor activity of 9-[(carbamoyloxy)alkyl]anthracyclines: a novel class of anthracycline derivatives. Adams N, et al. **J Med Chem** 1990 Sep;33(9):2380–4

S-[2-[(2'-carbamoylethyl)amino]ethyl] phosphorothioate and related compounds as potential antiradiation agents. Carroll FI, et al. **J Med Chem** 1990 Sep;33(9):2501–8

Cyclization-activated prodrugs. Basic carbamates of 4-hydroxyanisole. Saari WS, et al. **J Med Chem** 1990 Jan; 33(1):97–101

New anticancer agents: alterations of the carbamate group of ethyl (5-amino-1,2-dihydro-3-phenylpyrido[3,4-b]pyrazin-7-yl)car bamates. Temple C Jr, et al. **J Med Chem** 1989 Oct; 32(10):2363–7

Piperazine derivatives of benzimidazole as potential anthelmintics. Part 1: Synthesis and activity of methyl-5-(4-substituted piperazin-1-yl)benzimidazole-2-carbamates. Sánchez-Alonso RM, et al. **Pharmazie** 1989 Sep; 44(9):606–7

[Relation of structure, gas chromatographic retention data and local anesthetic activity and toxicity of piperidine ethyl esters of alkoxyphenylcarbamic acids] Hollá M, et al. **Pharmazie** 1990 Apr;45(4):259–62 (Eng. Abstr.) **(Ger)**

METABOLISM

Substrate specificity and protonation state of Escherichia coli ornithine transcarbamoylase as determined by pH studies. Binding of carbamoyl phosphate. Zambidis I, et al. **J Biol Chem** 1990 Feb 15;265(5):2620–3

Identification of fenoldopam prodrugs with prolonged renal vasodilator activity. Brooks DP, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):1084–9

On the formation of carbamate glucuronides. Delbressine LP, et al. **Xenobiotica** 1990 Jan;20(1):133–4

PHARMACOKINETICS

High-performance liquid chromatographic determination and pharmacokinetics of methyl N-[5[[4-(2-pyridinyl)-1-piperazinyl]carbonyl]-1H-benzimidazol-2-yl] carbamate (CDRI Compound 81-470), a new anthelmintic agent in rats. Paliwal JK, et al. **Pharm Res** 1989 Nov;6(11):991–3

[Ethyl benzimidazole carbamate: teratogenic effect and presence in the milk of cows after administration of thiophanate] Delatour P, et al. **Ann Rech Vet** 1990; 21(1):87–92 (Eng. Abstr.) **(Fre)**

[Transplacental transfer, tissue localization and morphological study of the rabbit placenta after the administration of pentacaine] Ujházy E, et al. **Cesk Farm** 1990 Apr;39(2):82–5 (Eng. Abstr.) **(Slo)**

PHARMACOLOGY

Chronotropic and inotropic actions of amrinone, carbazeran and isobutylmethyl xanthine: role of phosphodiesterase inhibition. Shahid M, et al. **Br J Pharmacol** 1989 Sep; 98(1):291–301

In vitro inhibition of acetylcholinesterase from four marine species by organophosphates and carbamates. Galgani F, et al. **Bull Environ Contam Toxicol** 1990 Aug;45(2):243–9

Oncolytic activity and mechanism of action of a novel L-cysteine derivative, L-cysteine, ethyl ester, S-(N-methylcarbamate) monohydrochloride. Jayaram HN, et al. **Cancer Chemother Pharmacol** 1990;26(2):88–92

Secretion of an Mr 60000 protein by benomyl-treated cells of Neurospora crassa. Rossier C, et al. **Eur J Cell Biol** 1989 Dec;50(2):333–9

Effects of local anesthetics on mechanical characteristics of lipid bilayers and on the ion transport dynamics. Hianik T, et al. **Gen Physiol Biophys** 1990 Jun;9(3):267–80

Yeast mutants sensitive to antimicrotubule drugs define three genes that affect microtubule function. Stearns T, et al. **Genetics** 1990 Feb;124(2):251–62

Effects of methyl [5 [[4-(2-pyridinyl)-1-piperazinyl]carbonyl]-1H-benzimidazol-2-yl] carbamate on energy metabolism of Ancylostoma ceylanicum and Nippostrongylus brasiliensis. Srivastava JK, et al. **Indian J Exp Biol** 1989 Aug; 27(8):735–8

Synergistic effect of fungicides on resistant strains of Penicillium italicum and Penicillium digitatum. Díaz Borrás A, et al. **Int J Food Microbiol** 1988 Aug;7(1):79–85

Tertiary 2-haloethylamine derivatives of the muscarinic agent McN-A-343,

[4-[[N-(3-chlorophenyl)carbamoyl]oxy]-2-butynyl]trimethylammonium chloride. Ringdahl B, et al. **J Med Chem** 1990 Jan;33(1):281-6

Potent, low molecular weight renin inhibitors containing a C-terminal heterocycle: hydrogen bonding at the active site. Rosenberg SH, et al. **J Med Chem** 1990 Jun; 33(6):1582-90

Pharmacological modulation of 2-methyl-carbamate-PAF induced rat paw oedema. Castro-Faria-Neto HC, et al. **J Pharm Pharmacol** 1990 Mar;42(3):203-4

Inhibitory potencies of UK-69 578 and thiorphan [letter] Barclay PL, et al. **Lancet** 1990 Sep 22;336(8717):754-5

Effects of carbamate, BPMC, on the central cholinergic functions and behavior of mice. Kobayashi H, et al. **Nippon Juigaku Zasshi** 1989 Aug;51(4):789-95

Biochemical effects of luxabendazole on Trichinella spiralis. Criado-Fornelio A, et al. **Parasitol Res** 1990;76(6):518-20

Critical controlled test to evaluate resistance of field strains of Haemonchus contortus to thiophanate. Ngomuo AJ, et al. **Vet Parasitol** 1990 May;36(1-2):21-6

[Interaction of membrane-bound and solubilized erythrocyte acetylcholinesterase with carbamates] Kugusheva LI, et al. **Ukr Biokhim Zh** 1990 Jan-Feb;62(1):34-9 (Eng. Abstr.) **(Rus)**

[Hematologic and biochemical characteristics of the effects of pentacaine in pregnant rabbits] Krištofová A, et al. **Bratisl Lek Listy** 1990 Apr;91(4):298-302 (Eng. Abstr.) **(Slo)**

POISONING

Pralidoxime in the treatment of carbamate intoxication. Kurtz PH. **Am J Emerg Med** 1990 Jan;8(1):68-70 (22 ref.)

Pharmacological and toxicological considerations in the treatment of carbamate intoxications [editorial] Mortensen ME. **Am J Emerg Med** 1990 Jan;8(1):83-4

The respiratory response to CO2 and O2 in patients with coma due to voluntary intoxication with barbiturates and carbamates. Launois S, et al. **Eur Respir J** 1990 May; 3(5):566-72

The transition between apnoea and spontaneous ventilation in patients with coma due to voluntary intoxication with barbiturates and carbamates. Launois S, et al. **Eur Respir J** 1990 May;3(5):573-8

In response to Dr. May's letter [letter; comment] Kurt TL. **Vet Hum Toxicol** 1989 Aug;31(4):391 Comment on: Vet Hum Toxicol 1989 Apr;31(2):181-2.

THERAPEUTIC USE

Efficacy of combined ranitidine and pentacaine treatment in experimentally induced gastric damage in rats. Nosál'ová V, et al. **Agents Actions** 1990 Apr;30(1-2):185-7

Multicentre clinical trials of benzimidazole-carbamates in human cystic echinococcosis (phase 2). Davis A, et al. **Bull World Health Organ** 1989;67(5):503-8

Helminthosis in goats in southern Tanzania: investigations on epidemiology and control. Connor RJ, et al. **Trop Anim Health Prod** 1990 Feb;22(1):1-6

Efficacy of thiophanate and albendazole against natural infections of Dicrocoelium dentriticum, Fasciola hepatica, and gastrointestinal nematodes and cestodes in sheep. Onar E. **Vet Parasitol** 1990 Feb;35(1-2):139-45

TOXICITY

Genotoxic activity of benomyl in different test systems. Georgieva V, et al. **Environ Mol Mutagen** 1990;16(1):32-6

Effects of in ovo injection of carbamates on chick embryo hatchability, esterase enzyme activity and locomotion of chicks. Farage-Elawar M. **J Appl Toxicol** 1990 Jun; 10(3):197-201

Haematological and hepatotoxic effects of isoprocarb in chicken. Rahman MF, et al. **J Appl Toxicol** 1990 Jun; 10(3):187-92

Inhibitory effects of benomyl and carbendazim on the [3H]thymidine incorporation in various organs of the mouse--evidence for a more pronounced action of benomyl. Hellman B, et al. **Toxicology** 1990 Apr 17; 61(2):161-9

[Evaluation of the potential carcinogenicity of pesticides in short-term tests] Andreeva IV, et al. **Gig Sanit** 1990 Feb; (2):59-62 **(Rus)**

[Evaluation of the effectiveness of vitamin and amino acid mixtures for increasing body resistance to pesticides in experimental studies] Ladnova GG. **Gig Sanit** 1989 Nov; (11):83-4 **(Rus)**

CARBAMAZEPINE

From the Food and Drug Administration. Nightingale SL. **JAMA** 1990 Apr 11;263(14):1896

ADMINISTRATION & DOSAGE

Oxazepam and carbamazepine for alcohol withdrawal [letter; comment] Ames D. **Am J Psychiatry** 1990 Mar; 147(3):375-6 Comment on: Am J Psychiatry 1989 May;146(5):617-21.

Is the carbamazepine-phenelzine combination safe? [letter] Yatham LN, et al. **Am J Psychiatry** 1990 Mar;147(3):367

Medical management of trigeminal neuralgia. Zakrzewska JM. **Br Dent J** 1990 May 19;168(10):399-401 (19 ref.)

A comparative pharmacokinetic study of conventional and chewable carbamazepine in epileptic patients. Patsalos PN. **Br J Clin Pharmacol** 1990 May;29(5):574-7

Rectal administration of carbamazepine gel [letter] Brouard A, et al. **Clin Pharm** 1990 Jan;9(1):13-4

Effects of removal of phenytoin, carbamazepine, and valproate on cognitive function. Duncan JS, et al. **Epilepsia** 1990 Sep-Oct;31(5):584-91

Discontinuation of phenytoin, carbamazepine, and valproate in patients with active epilepsy. Duncan JS, et al. **Epilepsia** 1990 May-Jun;31(3):324-33

The efficacy and tolerability of chewable carbamazepine compared to conventional carbamazepine in patients with epilepsy. Patsalos PN, et al. **Epilepsy Res** 1990 Apr; 5(3):235-9

From the Alcohol, Drug Abuse, and Mental Health Administration. Goodwin FK. **JAMA** 1990 Aug 22-29; 264(8):950

Carbamazepine suppository. Olson WL. **Neurology** 1990 Sep; 40(9):1472-3

Formulation of aqueous injection of carbamazepine. Jain NK, et al. **Pharmazie** 1990 Mar;45(3):221-2

ADVERSE EFFECTS

Epidemiology of adverse reactions to carbamazepine as seen in a spontaneous reporting system. Askmark H, et al. **Acta Neurol Scand** 1990 Feb;81(2):131-40

Carbamazepine and SIADH [letter] Cooney JA. **Am J Psychiatry** 1990 Aug;147(8):1101-2

Carbamazepine and SIADH [letter] Khan A, et al. **Am J Psychiatry** 1989 Dec;146(12):1639

Carbamazepine-induced aseptic meningitis. Simon LT, et al. **Ann Intern Med** 1990 Apr 15;112(8):627-8

Acute liver failure induced by carbamazepine. Hadžić N, et al. **Arch Dis Child** 1990 Mar;65(3):315-7

Epilepsy in women of childbearing age [letter; comment] **BMJ** 1989 Oct 14;299(6705):976-7 Comment on: BMJ 1989 Sep 2;299(6699):581.

Bone marrow suppression secondary to carbamazepine. Varghese A, et al. **Br J Clin Pract** 1989 Aug;43(8):302-4

Carbamazepine, epilepsy, and optic nerve hypoplasia [letter] West J, et al. **Br J Ophthalmol** 1990 Aug;74(8):511

Carbamazepine-induced dyskinesia and ophthalmoplegia. Schwartzman MJ, et al. **Cleve Clin J Med** 1990 Jun; 57(4):367-72 (24 ref.)

Carbamazepine-induced tics. Kurlan R, et al. **Clin Neuropharmacol** 1989 Aug;12(4):298-302

Breakthrough seizures with generic carbamazepine? [letter] Hartley R, et al. **Dev Med Child Neurol** 1990 May; 32(5):460-2

Carbamazepine toxicity precipitated by intravenous erythromycin. Mitsch RA. **DICP** 1989 Nov;23(11):878-9

Effects of carbamazepine on serum calcium in schizophrenia [letter] Tran-Johnson T, et al. **DICP** 1989 Dec;23(12):1034

A transient retardation of early postnatal growth in drug-exposed children of epileptic mothers. Gaily E, et al. **Epilepsy Res** 1989 Sep-Oct;4(2):147-55

Differences in side effects between a conventional carbamazepine preparation and a slow-release preparation of carbamazepine. Persson LI, et al. **Epilepsy Res** 1990 Jul; 6(2):134-40

Valproic acid-induced carbamazepine-10,11-epoxide toxicity in children and adolescents. Rambeck B, et al. **Eur Neurol** 1990;30(2):79-83

Hematologic monitoring in children with epilepsy treated with carbamazepine. Evans OB, et al. **J Child Neurol** 1989 Oct;4(4):286-90

Change in haloperidol level due to carbamazepine--a complicating factor in combined medication for schizophrenia. Kahn EM, et al. **J Clin Psychopharmacol** 1990 Feb;10(1):54-7

Carbamazepine auto- and hetero-induction complicating clinical care [letter] Onady AA, et al. **J Clin Psychopharmacol** 1989 Oct;9(5):387-8

Carbamazepine-induced eruption histologically mimicking mycosis fungoides. Welykyj S, et al. **J Cutan Pathol** 1990 Apr;17(2):111-6

Carbamazepine-induced bradycardia-tachycardia syndrome with pharmacological analysis and concurrent ECG monitoring. Takayanagi K, et al. **J Electrocardiol** 1990 Jan; 23(1):85-8

Carbamazepine-induced pseudolymphoma and immune dysregulation. Sinnige HA, et al. **J Intern Med** 1990 May; 227(5):355-8

Mental disorders induced by carbamazepine. Mizukami K, et al. **Jpn J Psychiatry Neurol** 1990 Mar;44(1):59-63

Carbamazepine update [letter] [see comments] **Lancet** 1989 Oct 21;2(8669):980-1 Comment in: Lancet 1989 Nov 25;2(8674):1275-6.

Non-Hodgkin lymphoma and carbamazepine [letter; comment] O'Keane JC. **Lancet** 1989 Nov 25;2(8674):1275-6 Comment on: Lancet 1989 Oct 21;2(8669):980-1.

Teratogenic effects of carbamazepine [letter; comment] **N Engl J Med** 1989 Nov 23;321(21):1480-1 Comment on: N Engl J Med 1989 Jun 22;320(25):1661-6.

Stevens-Johnson syndrome in a patient receiving cranial irradiation and carbamazepine. Khé HX, et al. **Neurology** 1990 Jul;40(7):1144-5

Antipsychotic drugs, lithium, carbamazepine, and abnormal diurnal weight gain in psychosis. Vieweg V, et al. **Neuropsychopharmacology** 1989 Mar;2(1):39-43

Pure red-cell aplasia associated with carbamazepine. A case report. Buitendag DJ. **S Afr Med J** 1990 Aug 18; 78(4):214-5

Inappropriate antidiuretic state in long-term psychiatric inpatients. Emsley RA, et al. **S Afr Med J** 1990 Mar 17; 77(6):307-8

Clinically significant hemorrhage due to warfarin-carbamazepine interaction. Denbow CE, et al. **South Med J** 1990 Aug;83(8):981

[Interaction between erythromycin and carbamazepine] Goldhoorn PB, et al. **Ned Tijdschr Geneeskd** 1989 Sep 30; 133(39):1944 (Eng. Abstr.) **(Dut)**

[Mononucleosis syndrome with hypersensitivity hepatitis following carbamazepine administration] Hintsche-Kilger BB, et al. **Z Arztl Fortbild (Jena)** 1990;84(11):551-3 **(Ger)**

[Ageusia in a patient treated with carbamazepine] Barajas García-Talavera F. **Neurologia** 1988 May-Jun;3(3):126-7 (3 ref.) **(Spa)**

[Aplastic anemia caused by carbamazepine (letter)] Martí J, et al. **Neurologia** 1989 Jul-Aug;4(6):221-2 **(Spa)**

[Granulomatous hepatitis secondary to ingestion of carbamazepine. Report of a case] Rodríguez Hernández H, et al. **Rev Gastroenterol Mex** 1989 Oct-Dec;54(4):239-41 (12 ref.) (Eng. Abstr.) **(Spa)**

ANALOGS & DERIVATIVES

Oxcarbazepine (GP 47 680) in the treatment of intractable seizures. Sillanpää M, et al. **Acta Paediatr Hung** 1988-89; 29(3-4):359-64

Carbamazepine-10,11-epoxide in epilepsy. A pilot study. Tomson T, et al. **Arch Neurol** 1990 Aug;47(8):888-92

Oxcarbazepine disposition: preliminary observations in patients. Kumps A, et al. **Biopharm Drug Dispos** 1990 May-Jun;11(4):365-70

Carbamazepine drug interactions: the influence of concurrent drug therapy on serum concentrations of carbamazepine and its epoxide metabolite. Wang RB, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Apr;45(4):222-32

Further clinical and pharmacokinetic observations on the new anticonvulsant, oxcarbazepine. Dickinson RG, et al. **Clin Exp Neurol** 1988;25:127-33

Oxcarbazepine: preliminary clinical and pharmacokinetic studies on a new anticonvulsant. Hooper WD, et al. **Clin Exp Neurol** 1987;24:105-12

Interaction of carbamazepine-10,11-epoxide, an active metabolite of carbamazepine, with valproate: a pharmacokinetic study. Pisani F, et al. **Epilepsia** 1990 May-Jun;31(3):339-42

First dose and steady-state pharmacokinetics of oxcarbazepine and its 10-hydroxy metabolite. Dickinson RG, et al. **Eur J Clin Pharmacol** 1989;37(1):69-74

Valproic acid-induced carbamazepine-10,11-epoxide toxicity in children and adolescents. Rambeck B, et al. **Eur Neurol** 1990;30(2):79-83

Hyponatraemia during oxcarbazepine therapy. Pendlebury SC, et al. **Hum Toxicol** 1989 Sep;8(5):337-44

Diurnal variation of carbamazepine and carbamazepine-10,11-epoxide in plasma and saliva in children with epilepsy: a comparison between conventional and slow-release formulations. Eeg-Olofsson O, et al. **J Child Neurol** 1990 Apr;5(2):159-65

Simple and rapid micro-analytical high-performance liquid chromatographic technique for the assay of oxcarbazepine and its primary active metabolite 10-hydroxycarbazepine. Elyas AA, et al. **J Chromatogr** 1990 Jun 29;528(2):473-9

Simultaneous quantitation of salivary carbamazepine, carbamazepine-10,11-epoxide, phenytoin and phenobarbitone by high-performance liquid chromatography. Herkes GK, et al. **J Chromatogr** 1989 Nov 10;496(1):147-54

Inhibitory effect of valproic acid on metabolic clearance of carbamazepine epoxide. Ogiso T, et al. **J Pharmacobiodyn** 1990 Apr;13(4):238-45

Carbamazepine update [letter] [see comments] **Lancet** 1989 Oct 21;2(8669):980-1 Comment in: Lancet 1989 Nov 25;2(8674):1275-6.

Carbamazepine metabolism in humans: effect of concurrent anticonvulsant therapy. Ramsay RE, et al. **Ther Drug Monit** 1990 May;12(3):235-41

[Simultaneous determination of carbamazepine and its active metabolite in serum by high performance liquid chromatography] Bao JQ, et al. **Yao Hsueh Hsueh Pao** 1989;24(9):715-9 (Eng. Abstr.) **(Chi)**

ANALYSIS

Simultaneous quantitation of salivary carbamazepine, carbamazepine-10,11-epoxide, phenytoin and phenobarbitone by high-performance liquid chromatography. Herkes GK, et al. **J Chromatogr** 1989 Nov 10;496(1):147-54

Determination of the relative amounts of anhydrous carbamazepine (C15H12N2O) and carbamazepine dihydrate (C15H12N2O.2H2O) in a mixture by powder x-ray diffractometry. Suryanarayanan R. **Pharm Res** 1989 Dec;6(12):1017-24

Quantitation of the relative amounts of anhydrous carbamazepine (C15H12N2O) and carbamazepine dihydrate (C15H12N2O.2H2O) in a mixture by solid-state nuclear magnetic resonance (NMR). Suryanarayanan R, et al. **Pharm Res** 1990 Feb;7(2):184-7

ANTAGONISTS & INHIBITORS

Inhibition of anticonvulsant action of carbamazepine by

aminophylline and caffeine in rats. Kulkarni C, et al. **Indian J Exp Biol** 1989 Dec;27(12):1048–51

BLOOD

Simultaneous determination of the free and total carbamazepine concentrations in human plasma by high-performance frontal analysis using an internal-surface reversed-phase silica support. Shibukawa A, et al. **Chem Pharm Bull (Tokyo)** 1990 Feb;38(2):443–7

Carbamazepine drug interactions: the influence of concurrent drug therapy on serum concentrations of carbamazepine and its epoxide metabolite. Wang RB, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Apr;45(4):222–32

A micromethod for the estimation of free levels of anticonvulsant drugs in serum. Ratnaraj N, et al. **Clin Biochem** 1989 Dec;22(6):443–50

Comparison of a noninstrumented immunoassay for carbamazepine to high performance liquid chromatography and fluorescence polarization immunoassay. Cochran EB, et al. **Epilepsia** 1990 Jul–Aug;31(4):480–4

Direct serum injection high-performance liquid chromatographic method for the simultaneous determination of phenobarbital, carbamazepine and phenytoin. Rainbow SJ, et al. **J Chromatogr** 1990 May 18; 527(2):389–96

A rapid, noninstrumented whole blood carbamazepine assay for pediatric patients. Cochran EB, et al. **J Pediatr** 1990 Feb;116(2):307–10

Predicting the range of plasma carbamazepine concentrations in patients with epilepsy. Racine-Poon A, et al. **Stat Med** 1989 Nov;8(11):1327–37

Derivation and evaluation of an equation for prediction of free carbamazepine concentrations in patients comedicated with valproic acid. Haidukewych D, et al. **Ther Drug Monit** 1989 Sep;11(5):528–32

Simultaneous assay of felbamate plus carbamazepine, phenytoin, and their metabolites by liquid chromatography with mobile phase optimization. Remmel RP, et al. **Ther Drug Monit** 1990 Jan;12(1):90–6

Relationship of intraindividual dose to plasma concentration of carbamazepine: indication of dose-dependent induction of metabolism. Tomson T, et al. **Ther Drug Monit** 1989 Sep;11(5):533–9

[Simultaneous determination of carbamazepine and its active metabolite in serum by high performance liquid chromatography] Bao JQ, et al. **Yao Hsueh Hsueh Pao** 1989;24(9):715–9 (Eng. Abstr.) **(Chi)**

[A modified gas chromatography method for determination of valproic acid and carbamazepine in human serum] al Zehouri J, et al. **Pharmazie** 1989 Jul;44(7):493 **(Ger)**

IMMUNOLOGY

Carbamazepine and patch testing [letter] Motley RJ, et al. **Contact Dermatitis** 1989 Oct;21(4):285–6

METABOLISM

Interaction of carbamazepine-10,11-epoxide, an active metabolite of carbamazepine, with valproate: a pharmacokinetic study. Pisani F, et al. **Epilepsia** 1990 May–Jun;31(3):339–42

Carbamazepine metabolism in humans: effect of concurrent anticonvulsant therapy. Ramsay RE, et al. **Ther Drug Monit** 1990 May;12(3):235–41

[Drugs from the classes of tricyclic antidepressives and antiepileptics, nitrosatable under simulated human gastric conditions] Ziebarth D, et al. **Arch Geschwulstforsch** 1989; 59(4):257–63 (Eng. Abstr.) **(Ger)**

[Microbial mutagenicity testing of N-nitrosoiminostilbene and N-nitrosoiminodibenzyl, the nitrosation products of the drugs carbamazepine and trimipramine hydrochloride] Ziebarth D, et al. **Arch Geschwulstforsch** 1989;59(6):393–7 (Eng. Abstr.) **(Ger)**

PHARMACOKINETICS

The effect of clobazam on steady state plasma concentrations of carbamazepine and its metabolites. Muñoz JJ, et al. **Br J Clin Pharmacol** 1990 Jun;29(6):763–5

Clinical relevance of therapeutic drug level estimation with respect to clonazepam and carbamazepine: preliminary report. Beran RG, et al. **Clin Exp Neurol** 1987;24:91–5

Carbamazepine clearance in paediatric epilepsy patients. Influence of body mass, dose, sex and co-medication. Summers B, et al. **Clin Pharmacokinet** 1989 Sep; 17(3):208–16

Absolute bioavailability of carbamazepine after oral administration of a 2% syrup. Gérardin A, et al. **Epilepsia** 1990 May–Jun;31(3):334–8

Effect of phenobarbital on carbamazepine and its major metabolites in serum, different brain areas, and urine after acute and chronic administration to rats. Mendez-Alvarez E, et al. **Epilepsia** 1990 Mar–Apr;31(2):202–10

Multiple-dose pharmacokinetic study with a slow-release carbamazepine preparation. Reunanen M, et al. **Epilepsy Res** 1990 Jul;6(2):126–33

Pharmacokinetics of anticonvulsants in pregnancy: alterations in plasma protein binding. Yerby MS, et al. **Epilepsy Res** 1990 Apr;5(3):223–8

Comparative bioavailability of Mazetol and Tegretol [letter; comment] Batham AK. **J Assoc Physicians India** 1989 Jun; 37(6):413–4 Comment on: J Assoc Physicians India 1988 Oct;36(10):611–2.

Comparative bioavailability of two brands of carbamazepine. Reply from the authors. Bhatt AD. **J Assoc Physicians India** 1989 Sep;37(9):619–20

Diurnal variation of carbamazepine and carbamazepine-10,11-epoxide in plasma and saliva in children with epilepsy: a comparison between conventional and slow-release formulations. Eeg-Olofsson O, et al. **J Child Neurol** 1990 Apr;5(2):159–65

Dose-dependent pharmacokinetics of carbamazepine in rats: determination of the formation clearance of carbamazepine-10,11-epoxide. Remmel RP, et al. **Pharm Res** 1990 May;7(5):513–7

Effect of ponsinomycin on single-dose kinetics and metabolism of carbamazepine. Couet W, et al. **Ther Drug Monit** 1990 Mar;12(2):144–9

[Therapeutic drug monitoring of carbamazepine] Gomita Y, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:1112–5 **(Jpn)**

[Clinical pharmacokinetics of carbamazepine (review of the literature)] Martynova LA, et al. **Zh Nevropatol Psikhiatr** 1989;89(10):145–8 (49 ref.) **(Rus)**

PHARMACOLOGY

Effect of carbamazepine on cortical interhemispheric responses in adult and young rats. Mareš P, et al. **Act Nerv Super (Praha)** 1989 Oct;31(3):238

Carbamazepine abolishes epileptic after-discharges induced by entorhinal stimulation in rats. Matějovská I, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):262

A case in which carbamazepine attenuated cocaine "rush" [letter] Sherer MA, et al. **Am J Psychiatry** 1990 Jul; 147(7):950

Effects of carbamazepine on dopamine- and serotonin-mediated neuroendocrine responses. Elphick M, et al. **Arch Gen Psychiatry** 1990 Feb;47(2):135–40

The effects of phenytoin and carbamazepine on serum concentrations of mono-unsaturated metabolites of valproic acid. Kondo T, et al. **Br J Clin Pharmacol** 1990 Jan;29(1):116–9

Inhibition of epoxide hydrolase by valproic acid in epileptic patients receiving carbamazepine. Robbins DK, et al. **Br J Clin Pharmacol** 1990 Jun;29(6):759–62

Inhibition of agonist-stimulated inositol lipid metabolism by the anticonvulsant carbamazepine in rat hippocampus. McDermott EE, et al. **Br J Pharmacol** 1989 Oct;98(2):581–9

Effects of anticonvulsants on hippocampus-generating seizures. Emori K, et al. **Brain Res** 1990 Mar 19; 511(2):217–21

Chronic carbamazepine inhibits the development of local anesthetic seizures kindled by cocaine and lidocaine. Weiss SR, et al. **Brain Res** 1989 Sep 11;497(1):72–9

Anxiolytic effect of carbamazepine measured in the elevated plus-maze. Zangrossi Júnior H, et al. **Braz J Med Biol Res** 1989;22(6):703–5

Potassium currents in rat cortical neurons in culture are enhanced by the antiepileptic drug carbamazepine. Zona C, et al. **Can J Physiol Pharmacol** 1990 Apr;68(4):545–7

Effects of polytherapy with phenytoin, carbamazepine, and stiripentol on formation of 4-ene-valproate, a hepatotoxic metabolite of valproic acid. Levy RH, et al. **Clin Pharmacol Ther** 1990 Sep;48(3):225–35

Quantitative EEG analysis of carbamazepine effects on amygdaloid kindled seizures in cats. So N, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jul;76(1):63–72

Inhibition of N6-[3H]cyclohexyladenosine binding by carbamazepine. Weir RL, et al. **Epilepsia** 1990 Sep–Oct; 31(5):503–12

Computer analysis of saccadic eye movements: assessment of two different carbamazepine formulations. Tedeschi G, et al. **Eur J Clin Pharmacol** 1989;37(5):513–6

GABAB receptors are up-regulated by chronic treatment with lithium or carbamazepine. GABA hypothesis of affective disorders? Motohashi N, et al. **Eur J Pharmacol** 1989 Jul 4;166(1):95–9

Evidence for a common site of action of lidocaine and carbamazepine in voltage-dependent sodium channels. Zimányi I, et al. **Eur J Pharmacol** 1989 Aug 29; 167(3):419–22

Effects of phenytoin, carbamazepine, and clonazepam on cortex- and amygdala-evoked potentials in partially kindled rats. Burnham WM, et al. **Exp Neurol** 1989 Nov; 106(2):150–5

Probable pseudocholinesterase induction by valproic acid, carbamazepine and phenytoin leading to increased serum aspirin-esterase activity in epileptics. Puche E, et al. **Int J Clin Pharmacol Res** 1989;9(5):309–11

Interaction of fluoxetine with carbamazepine [letter; comment] Pearson HJ. **J Clin Psychiatry** 1990 Mar; 51(3):126 Comment on: J Clin Psychiatry 1989 Jun;50(6):226–7.

Effects of carbamazepine, valproate calcium, clonazepam and piracetam on behavioral test methods for evaluation of memory-enhancing drugs. Rostock A, et al. **Methods Find Exp Clin Pharmacol** 1989 Sep;11(9):547–53

The protective effect of adenosinergic agents, Ro 5-4864 and carbamazepine against hypoxic stress-induced neurotoxicity in mice. Thorat SN, et al. **Methods Find Exp Clin Pharmacol** 1990 Jan–Feb; 12(1):17–22

Carbamazepine retards the development of cocaine-kindled seizures but not sensitization to cocaine-induced hyperactivity. Weiss SR, et al. **Neuropsychopharmacology** 1990 Aug;3(4):273–81

Inhibition by antimanic drugs of hyperactivity induced by methamphetamine-chlordiazepoxide mixture in mice. Okada K, et al. **Pharmacol Biochem Behav** 1990 Apr; 35(4):897–901

Effects of acute or chronic carbamazepine on experimentally-induced conflict in the rat. Almeida RN, et al. **Psychopharmacology (Berl)** 1990;100(2):227–9

Chronic carbamazepine down-regulates adenosine A2 receptors: studies with the putative selective adenosine antagonists PD115,199 and PD116,948. Elphick M, et al. **Psychopharmacology (Berl)** 1990;100(4):522–9

Effects of carbamazepine on dopamine function in rodents. Elphick M. **Psychopharmacology (Berl)** 1989;99(4):532–6

Effects of carbamazepine on 5-hydroxytryptamine function in rodents. Elphick M, et al. **Psychopharmacology (Berl)** 1990;100(1):49–53

Interactions between carbamazepine and birth control pills [letter] Rapport DJ, et al. **Psychosomatics** 1989 Fall; 30(4):462–4

[The effect of carbamazepine on the behavior of rats in a raised T- and 8-arm radial maze] Kittner H, et al. **Pharmazie** 1989 Nov;44(11):797–8 **(Ger)**

[Mechanism of the psychotropic action of carbamazepine] Rybakowski J, et al. **Psychiatr Pol** 1989 Jul–Aug; 23(4):314–21 (42 ref.) **(Pol)**

POISONING

Pulmonary oedema after carbamazepine overdose [letter; comment] Begley JP. **Anaesthesia** 1989 Sep;44(9):789–90 Comment on: Anaesthesia 1988 Nov;43(11):967–9.

Treatment of carbamazepine poisoning by combined hemodialysis/hemoperfusion. Bock E, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Oct;27(10):490–2

Erythromycin-induced carbamazepine intoxication in two epileptic children. Tagawa T, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):513–4

THERAPEUTIC USE

Controlled cross-over comparison of carbamazepine with perphenazine in schizophrenic psychoses. Svestka J, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):276–7

Effects of carbamazepine and phenobarbital on kainic acid-induced model of psychomotor seizures during ontogenesis in the rat. Velíšek L, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):263

A double-blind study of adjunctive carbamazepine versus placebo on excited states of schizophrenic and schizoaffective disorders. Okuma T, et al. **Acta Psychiatr Scand** 1989 Sep;80(3):250–9

Improvements in treatment of alcohol withdrawal syndromes. Gallant DM. **Alcoholism (N Y)** 1989 Oct; 13(5):721–2

Carbamazapine for behavioral disorders [comment] Laminack L. **Am J Ment Retard** 1990 Mar;94(5):563–4 Comment on: Am J Ment Retard 1989 May;93(6):640–3.

Addition of lithium carbonate to carbamazepine: hematological and thyroid effects. Kramlinger KG, et al. **Am J Psychiatry** 1990 May;147(5):615–20

Vitamin D status of ambulatory and nonambulatory mentally retarded children with and without carbamazepine treatment. Lamberg-Allardt C, et al. **Ann Nutr Metab** 1990; 34(4):216–20

Thyroid function in epileptic patients treated with carbamazepine. Isojärvi JI, et al. **Arch Neurol** 1989 Nov; 46(11):1175–8

Carbamazepine-10,11-epoxide in epilepsy. A pilot study. Tomson T, et al. **Arch Neurol** 1990 Aug;47(8):888–92

Decreased episodic violence and increased control of dissociation in a carbamazepine-treated case of multiple personality. Fichtner CG, et al. **Biol Psychiatry** 1990 May 1;27(9):1045–52

Epilepsy in women of childbearing age [see comments] Saunders M. **BMJ** 1989 Sep 2;299(6699):581 (17 ref.) Comment in: BMJ 1989 Oct 14;299(6705):976–7. Comment in: BMJ 1989 Nov 4;299(6708):1163–4.

Cyclosporin A in psoriasis: interaction with carbamazepine [letter] Schofield OM, et al. **Br J Dermatol** 1990 Mar; 122(3):425–6

Carbamazepine in affective disorders [letter; comment] Murphy DJ, et al. **Br J Psychiatry** 1990 Feb;156:282–1 Comment on: Br J Psychiatry 1988 Aug;153:198–204.

Use of carbamazepine in psychosis after neuroleptic malignant syndrome. Peet M, et al. **Br J Psychiatry** 1990 Apr;156:579–81

Restless legs syndrome in pregnancy. Case reports. McParland P, et al. **Clin Exp Obstet Gynecol** 1990;17(1):5–6 (11 ref.)

The combination of lithium and carbamazepine in treatment and prevention of manic-depressive disorder: a review and a case report. Strömgren LS. **Compr Psychiatry** 1990 May–Jun;31(3):261–5 (19 ref.)

Effects of carbamazepine on psychomotor performance in children as a function of drug concentration, seizure type, and time of medication. Aman MG, et al. **Epilepsia** 1990 Jan–Feb;31(1):51–60

Effects of the removal of phenytoin, carbamazepine, and valproate on the electroencephalogram. Duncan JS, et al. **Epilepsia** 1989 Sep–Oct;30(5):590–6

Serum bilirubin levels with antiepileptic drugs. Gough H,

et al. **Epilepsia** 1989 Sep–Oct;30(5):597–602
Serum steroid hormones and pituitary function in female epileptic patients during carbamazepine therapy. Isojärvi JI. **Epilepsia** 1990 Jul–Aug;31(4):438–45
Initiation of carbamazepine therapy in partial epilepsy: a regional cerebral blood flow study. Valmier J, et al. **Epilepsy Res** 1990 Apr;5(3):229–34
Epileptic transient amnesia. Stracciari A, et al. **Eur Neurol** 1990;30(3):176–9
Nocturnal myoclonus in restless legs syndrome effect of carbamazepine treatment. Zucconi M, et al. **Funct Neurol** 1989 Jul–Sep;4(3):263–71
Drug therapy. Carbamazepine. Sharma M, et al. **Indian Pediatr** 1989 Jul;26(7):685–90 (45 ref.)
Carbamazepine compared to haloperidol in acute mania. Brown D, et al. **Int Clin Psychopharmacol** 1989 Jul; 4(3):229–38
Factors associated with relapse during maintenance treatment of affective disorders. Leverich GS, et al. **Int Clin Psychopharmacol** 1990 Apr;5(2):135–56
Corpus callosum agenesis and uncinate seizures. Mohapatro AK, et al. **J Assoc Physicians India** 1990 May;38(5):371–2
Carbamazepine treatment of agitation in Alzheimer's outpatients refractory to neuroleptics. Gleason RP, et al. **J Clin Psychiatry** 1990 Mar;51(3):115–8
Non–lithium treatment for bipolar disorder. Post RM. **J Clin Psychiatry** 1990 Aug;51 Suppl:9–16; discussion 17–9 (70 ref.)
Carbamazepine in the prophylaxis of mood disorders. Stuppaeck C, et al. **J Clin Psychopharmacol** 1990 Feb; 10(1):39–42
Carbamazepine adjunct for nonresponsive psychosis with prior hallucinogenic abuse. Scher M, et al. **J Nerv Ment Dis** 1989 Dec;177(12):755–7
Carbamazepine update [letter; comment] **Lancet** 1989 Oct 7;2(8667):867 Comment on: Lancet 1989 Sep 9;2(8663):595–7.
Carbamazepine in bipolar affective disorder [letter; comment] Murphy DJ, et al. **Lancet** 1989 Nov 11;2(8672):1151–2 Comment on: Lancet 1989 Sep 9;2(8663):595–7.
Clinical pharmacology of drugs used to treat head and face pain. Fromm GH. **Neurol Clin** 1990 Feb;8(1):143–51 (41 ref.)
Carbamazepine for 1st seizure [letter; comment] Pledger GW. **Neurology** 1989 Dec;39(12):1645–6 Comment on: Neurology 1989 Jun;39(6):851–2.
Carbamazepine treatment of cocaine dependence in methadone maintenance patients with dual opiate–cocaine addiction. Kuhn KL, et al. **NIDA Res Monogr** 1989; 95:316–7
Relief of chronic burning pain in Fabry disease with neurotropin. Inagaki M, et al. **Pediatr Neurol** 1990 May–Jun;6(3):211–3
Rapid loading of critically ill patients with carbamazepine suspension. Miles MV, et al. **Pediatrics** 1990 Aug; 86(2):263–6
Comparison of the antimanic efficacy of carbamazepine and lithium carbonate by double–blind controlled study. Okuma T, et al. **Pharmacopsychiatry** 1990 May;23(3):143–50
Sensitization and kindling perspectives for the course of affective illness: toward a new treatment with the anticonvulsant carbamazepine. Post RM. **Pharmacopsychiatry** 1990 Jan;23(1):3–17 (115 ref.)
Efficacy of carbamazepine in assaultive patients with frontal lobe dysfunction. Foster HG, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(6):865–74
Antiepileptic drugs in the treatment of neuroleptic–induced supersensitivity psychosis. Sultan S, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(3):431–8
Clinical issues in the use of carbamazepine in psychiatry: a review. Elphick M. **Psychol Med** 1989 Aug;19(3):591–604 (130 ref.)
[Comparative open trial of carbamazepine and slow–release carbamazepine in epilepsy in adults] Remy C. **Presse Med** 1990 Mar 24;19(11):511–3 (Eng. Abstr.) **(Fre)**
[Carbamazepine–sensitive neuromyotonia and Charcot–Marie–Tooth disease of the neuronal type] Serratrice G, et al. **Rev Neurol (Paris)** 1989;145(12):867–8 (7 ref.) (Eng. Abstr.) **(Fre)**
[Kleine–Levin syndrome. The provocation of manic symptoms by an antidepressant and a therapeutic trial of carbamazepine] Wurthmann C, et al. **Dtsch Med Wochenschr** 1989 Oct 6;114(40):1528–31 (Eng. Abstr.) **(Ger)**
[Comparative features of the preventive action of carbamazepine and lithium carbonate in affective and schizoaffective psychoses] Kostiukova EG. **Zh Nevropatol Psikhiatr** 1989;89(12):64–71 (Eng. Abstr.) **(Rus)**
[Carbamazepine: an effective adjuvant treatment in the schizophrenias] Martín Muñoz JC, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Jul–Aug;17(4):245–50 (Eng. Abstr.) **(Spa)**
[Status of complex partial crisis as a response to the treatment with oral carbamazepine (letter)] Mauri Llerda JA, et al. **Neurologia** 1989 Jan–Feb;4(1):33–5 **(Spa)**
[Clinical use of pharmacologic monitoring at a hospital community] Arranz Peña MI, et al. **Rev Clin Esp** 1990 Jan; 186(1):19–22 (Eng. Abstr.) **(Spa)**

TOXICITY

Teratogenicity of carbamazepine in rats. Vorhees CV, et al. **Teratology** 1990 Mar;41(3):311–7

CARBAMAZINE see **DIETHYLCARBAMAZINE**

CARBAMYL PHOSPHATE see under **CARBAMATES**

CARBAMYL PHOSPHATE SYNTHASE (AMMONIA)

ANALYSIS

Levels of carbamoyl phosphate synthetase I in livers of young and old rats assessed by activity and immunoassays and by electron microscopic immunogold procedures. Martinez–Ramon A, et al. **J Histochem Cytochem** 1990 Mar;38(3):371–6

DEFICIENCY

A case of carbamylphosphate synthetase–I deficiency associated with secondary carnitine deficiency—L–carnitine treatment of CPS–I deficiency. Mori T, et al. **Eur J Pediatr** 1990 Jan;149(4):272–4
False positive alanine tolerance test results in heterozygote detection of urea cycle disorders. Batshaw ML, et al. **J Pediatr** 1989 Oct;115(4):595–8
N–acetylglutamate content in liver and gut of normal and fasted mice, normal human livers, and livers of individuals with carbamyl phosphate synthetase or ornithine transcarbamylase deficiency. Tuchman M, et al. **Pediatr Res** 1990 Apr;27(4 Pt 1):408–12
Identification of benzoylcarnitine in the urine of a patient of hyperammonemia. Sakuma T, et al. **Tohoku J Exp Med** 1989 Oct;159(2):147–51

GENETICS

Coexpression of glutamine synthetase and carbamoylphosphate synthase I genes in pancreatic hepatocytes of rat. Yeldandi AV, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):881–5
[An immunohistochemical and in situ hybridization study of carbamyl phosphate synthetase I in altered liver cells during carcinogenesis] Yang YP. **Chung–hua Ping Li Hsueh Tsa Chih** 1990 Mar;19(1):38–41 (Eng. Abstr.) **(Chi)**

METABOLISM

Cooperation of lysosomes and inner mitochondrial membrane in the degradation of carbamoyl phosphate synthetase and other proteins. Vargas JL, et al. **Biochim Biophys Acta** 1990 Jun 20;1034(3):268–74
Carbamyl phosphate synthetase I. A novel marker for gastric carcinoma. Liu TH, et al. **Chin Med J [Engl]** 1989 Aug; 102(8):630–8
A structure–reactivity study of the binding of acetylglutamate to carbamoyl phosphate synthetase I. Britton HG, et al. **Eur J Biochem** 1990 Feb 22;188(1):47–53
A new approach of the estimation of Km of carbamyl phosphate synthetase for ammonia in isolated rat hepatocytes. Kaloyianni M, et al. **Int J Biochem** 1989; 21(9):971–4
The immunohistochemistry and in situ cDNA–mRNA hybridization of carbamyl phosphate synthetase I in enzyme–altered liver cells during carcinogenesis. Yang Y, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1990;5(1):13–8

CARBAMYL PHOSPHATE SYNTHASE (GLUTAMINE)

ANTAGONISTS & INHIBITORS

Effect of polyamines on the carbamoyl–phosphate synthase activity of CAD protein. Szondy Z, et al. **Acta Biochim Biophys Hung** 1989;24(1–2):107–17

BIOSYNTHESIS

The initial accumulation of carbamoylphosphate synthetase in embryonic rat hepatocytes, and the cell cycle. van Roon MA, et al. **Differentiation** 1989 Aug;41(2):139–47
Induction of glutamine synthetase and transient co–expression with carbamoylphosphate synthetase in hepatocytes transplanted into fat pads of syngeneic hosts. Gebhardt R, et al. **Histochemistry** 1989;92(4):337–42

GENETICS

Pyrimidine regulation of tandem promoters for carAB in Salmonella typhimurium. Lu CD, et al. **J Bacteriol** 1989 Oct;171(10):5436–42
Unorthodox expression of an enzyme: evidence for an untranslated region within carA from Pseudomonas aeruginosa. Wong SC, et al. **J Bacteriol** 1990 Feb; 172(2):630–42
Mammalian carbamyl phosphate synthetase (CPS). DNA sequence and evolution of the CPS domain of the Syrian hamster multifunctional protein CAD. Simmer JP, et al. **J Biol Chem** 1990 Jun 25;265(18):10395–402
Structural organization and expression of amplified chromosomal sequences, which include the rudimentary gene, in cultured Drosophila cells resistant to N–(phosphonacetyl)–L–aspartate. Laval M, et al. **Mol Gen Genet** 1989 Dec;220(1):102–12
Mammalian dihydroorotase: nucleotide sequence, peptide sequences, and evolution of the dihydroorotase domain of the multifunctional protein CAD. Simmer JP, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):174–8

METABOLISM

Effect of polyamines on the carbamoyl–phosphate synthase activity of CAD protein. Szondy Z, et al. **Acta Biochim Biophys Hung** 1989;24(1–2):107–17
Acivicin: a highly active potential chemotherapeutic agent against visceral leishmaniasis. Mukherjee T, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):426–32
The effect of glutamine concentration on the activity of carbamoyl–phosphate synthase II and on the incorporation of [3H]thymidine into DNA in rat mesenteric lymphocytes stimulated by phytohaemagglutinin. Szondy Z, et al. **Biochem J** 1989 Aug 1;261(3):979–83
An improved method for determination of N–acetyl–L–glutamate by its function as an activator of carbamoyl phosphate synthetase I. Sonoda T, et al. **Biochim Biophys Acta** 1990 Feb 26;1033(2):162–8
Effect of growth temperature on folding of carbamoylphosphate synthetases of Salmonella typhimurium and a cold–sensitive derivative. Han BD, et al. **J Bacteriol** 1990 Sep;172(9):5089–96
Dissection of the functional domains of Escherichia coli carbamoyl phosphate synthetase by site–directed mutagenesis. Post LE, et al. **J Biol Chem** 1990 May 15; 265(14):7742–7
Escherichia coli carbamoyl–phosphate synthetase: domains of glutaminase and synthetase subunit interaction. Guillou F, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8304–8

CARBAMYLCHOLINE see **CARBACHOL**

CARBANILIDES

ANALYSIS

High–performance liquid chromatographic screening method for low levels of nicarbazin in eggs with off–line cartridge sample clean–up. Vertommen MH, et al. **J Chromatogr** 1989 Nov 3;481:452–7

PHARMACOLOGY

Lack of interactive effect of nicarbazin and dietary energy–to–protein ratio on performance and abdominal fat pad weight of broiler chicks. Bartov I. **Poult Sci** 1989 Nov; 68(11):1535–9

THERAPEUTIC USE

Vaccination against bovine babesiosis with drug–controlled live parasites [published erratum appears in Vet Rec 1989 Dec 23–30;125(26–27):646] Gray JS, et al. **Vet Rec** 1989 Sep 30;125(14):369–72
Redwater fever [letter] Rutter JM. **Vet Rec** 1990 Jul 28; 127(4):94–5
[Importance of an antiseptic solution, Solubacter, in vulvo–vaginal infections] Colau JC. **Rev Fr Gynecol Obstet** 1989 Mar 25;84(3 Pt 2):291–4 (Eng. Abstr.) **(Fre)**

CARBAPENEMS

ANALYSIS

Structures of the alkaline hydrolysis products of penem antibiotic, SUN5555. Iwata H, et al. **J Antibiot (Tokyo)** 1990 Jul;43(7):901–3
High–performance liquid chromatographic method for the simultaneous assay of a new synthetic penem molecule and its salt–forming agent in injectable formulations. Farina M, et al. **J Chromatogr** 1990 May 16;507:171–6

CHEMICAL SYNTHESIS

Synthesis and antibacterial activity of C–2 carboxyethenylthio–carbapenem derivatives. Basker MJ, et al. **J Antibiot (Tokyo)** 1990 Jul;43(7):847–57
Cephalosporins to carbapenems: 1–oxygenated carbapenems and carbapenams. Rosati RL, et al. **J Med Chem** 1990 Jan; 33(1):291–7

METABOLISM

Biochemical characterization of a beta–lactamase that hydrolyzes penems and carbapenems from two Serratia marcescens isolates. Yang YJ, et al. **Antimicrob Agents Chemother** 1990 May;34(5):755–8

PHARMACOKINETICS

Physiologically based pharmacokinetics of a new penem, SUN5555, for evaluation of in vivo efficacy. Tsuji A, et al. **Drug Metab Dispos** 1990 Mar–Apr;18(2):245–52
The pharmacokinetics of meropenem in volunteers. Bax RP, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:311–20
The disposition and metabolism of meropenem in laboratory animals and man. Harrison MP, et al.

J Antimicrob Chemother 1989 Sep;24 Suppl A:265–77
Pharmacokinetics in healthy subjects of FCE 22101 and its acetoxymethyl ester, FCE 22891: effect of co-administration of imipenem/cilastatin on the renal metabolism of FCE 22101. Norrby SR, et al. **J Antimicrob Chemother** 1990 Mar;25(3):371–83

PHARMACOLOGY

Susceptibility of anaerobic bacteria to ALP 201. Nord CE, et al. **Antimicrob Agents Chemother** 1989 Dec;33(12):2137–9
In vitro activity of LJC10,627, a new carbapenem antibiotic with high stability to dehydropeptidase I. Ubukata K, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):994–1000
Postantibiotic effect of the penem FCE 22101 against selected gram-positive and gram-negative bacteria in vitro and in vivo by the use of a tissue cage model in rabbits. Bergholm AM, et al. **APMIS** 1990 Mar;98(3):269–75
Comparative in vitro activity of the new oral penem ALP-201 against aerobic and anaerobic bacteria. Rylander M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Oct; 8(10):919–24
A novel carbapenem antibiotic, SM-7338 structure-activity relationships. Sunagawa M, et al. **J Antibiot (Tokyo)** 1990 May;43(5):519–32
Meropenem (SM7338)—a new carbapenem. Twenty-Eighth Interscience Conference on Antimicrobial Agents and Chemotherapy. Los Angeles, California, 1988. Fourth European Congress of Clinical Microbiology. Nice, France, 1989. Selected papers. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:1–320
In-vitro activity of meropenem imipenem, the penem HRE 664 and ceftazidine against clinical isolates from West Germany. Bauernfeind A, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:73–84
Comparative in-vitro activity of meropenem against clinical isolates including Enterobacteriaceae with expanded-spectrum beta-lactamases. Chanal C, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:133–41
In-vitro activity of meropenem against clinical isolates obtained in Canada. Clarke AM, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:47–55
Interaction of meropenem with humoral and phagocytic defences. Easmon CS. **J Antimicrob Chemother** 1989 Sep; 24 Suppl A:259–64
Bactericidal activity of meropenem and interactions with other antibiotics. Ferrara A, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:239–50
Decreases of the susceptibility to low molecular weight beta-lactam antibiotics in imipenem-resistant Pseudomonas aeruginosa mutants: role of outer membrane protein D2 in their diffusion. Gotoh N, et al. **J Antimicrob Chemother** 1990 Feb;25(2):191–8
Bacteriostatic and bactericidal in-vitro activity of meropenem against clinical isolates, including Mycobacterium avium complex. Inderlied CB, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:85–99
In-vitro activity of FCE 22101 and other beta-lactam antibiotics against Enterobacteriaceae resistant to third generation cephalosporins. Jarlier V, et al. **J Antimicrob Chemother** 1989 Aug;24(2):165–72
In-vitro studies of meropenem. Jones RN, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:9–29
Activity of meropenem, against gram-positive bacteria. Kayser FH, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:101–12
Comparative in-vitro activity of meropenem on clinical isolates from the United Kingdom. King A, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:31–45
Antibacterial activity of meropenem against gram-negative bacteria with a permeability defect and against staphylococci. Kitzis MD, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:125–32
Interactions of meropenem, with beta-lactamases, including enzymes with extended-spectrum activity against third-generation cephalosporins. Labia R, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:219–23
Comparative activity of meropenem against Pseudomonas aeruginosa strains with well-characterized resistance mechanisms. Livermore DM, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:149–59
Emergence of resistance to carbapenem antibiotics in Pseudomonas aeruginosa. Margaret BS, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:161–7
The carbapenems: new broad spectrum beta-lactam antibiotics. Moellering RC Jr, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:1–7 (22 ref.)
The postantibiotic effect of meropenem and imipenem on selected bacteria. Nadler HL, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:225–31
Susceptibility of anaerobic bacteria to meropenem. Nord CE, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:113–7
Development of a meropenem susceptibility disc: drug content, preliminary interpretive and quality control criteria and potency bioassay. Pitkin DH, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:251–8
In-vitro susceptibility of Haemophilus influenzae to meropenem compared with imipenem, five other beta-lactams, chloramphenicol and ciprofloxacin. Powell M, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:175–81
Meropenem: activity against resistant gram-negative bacteria and interactions with beta-lactamases. Sanders CC, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:187–96
In-vitro activity of meropenem against clinical isolates in a multicentre study in Italy. Schito GC, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:57–72
In-vitro activity of meropenem against Neisseria gonorrhoeae, Haemophilus influenzae and H. ducreyi from Canada and Kenya. Slaney L, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:183–6
In-vitro activity of meropenem, a new carbapenem, against multiresistant Pseudomonas aeruginosa compared with that of other antipseudomonal antimicrobials. Voutsinas D, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:143–7
The growth-inhibitory properties of meropenem against anaerobes of clinical importance. Watt B, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:119–24
Antibacterial properties of meropenem towards clinical isolates, beta-lactamase producers and laboratory mutants. Wiedemann B, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:197–205
The antibacterial activity of meropenem in combination with gentamicin or vancomycin. Wise R, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:233–8
Response of chemostat cultures of Pseudomonas aeruginosa to carbapenems and other beta-lactams. Wu PJ, et al. **J Antimicrob Chemother** 1990 Jun;25(6):891–902
Interactions of meropenem with class I chromosomal beta-lactamases. Yang YJ, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:207–17
Bactericidal activity of meropenem against Pseudomonas aeruginosa. Yourassowsky E, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:169–74

THERAPEUTIC USE

Therapeutic activity of meropenem in experimental infections. Edwards JR, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:279–85

TOXICITY

Meropenem: evidence of lack of proconvulsive tendency in mice. Patel JB, et al. **J Antimicrob Chemother** 1989 Sep; 24 Suppl A:307–9
Safety evaluation of meropenem in animals: studies on the kidney. Topham JC, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:287–306

CARBARYL see **SEVIN**

CARBAZILQUINONE see under **AZIRINES**

CARBAZOCHROME see under **ADRENOCHROME**

CARBAZOLES

A DNA-intercalating compound derived from 7H-pyridocarbazole: the structure of 10-methoxy-2-methyl-7H-pyrido[4,3-c]carbazolium iodide. Courseille C, et al. **Acta Crystallogr C** 1988 Dec 15;44 (Pt 12):2154–6
Spin-labeled oxazolopyridocarbazole as a probe for studying nonintercalating DNA groove binding ligands. Carrier A, et al. **Biochemistry** 1990 Jun 26;29(25):6002–9
Calcium-induced lipid phase separations and interactions of phosphatidylcholine/anionic phospholipid vesicles. Fluorescence studies using carbazole-labeled and brominated phospholipids. Silvius JR. **Biochemistry** 1990 Mar 27;29(12):2930–8
An ellipticine derivative (oxazolopyridocarbazolium) 3' linked to tetrathymidylate stacks intramolecularly with the nearest thymine at low concentration and head-to-tail intermolecularly at high concentration. Bazile D, et al. **Biopolymers** 1990 May-Jun;29(6-7):1077–87
1H-NMR studies of a monointercalating drug into a d(CpGpApTpCpG)2 minihelix. Delepierre M, et al. **Biopolymers** 1989 Dec;28(12):2097–113
Bisintercalation of ditercalinium into a d(CpGpApTpCpG)2 minihelix: a 1H- and 31P-NMR study. Delepierre M, et al. **Biopolymers** 1989 Dec;28(12):2115–42
alpha-DNA X: alpha and beta tetrathymidilates covalently linked to oxazolopyridocarbazolium (OPC): comparative stabilization of oligo beta-[dT]:oligo beta-[dA] and oligo alpha-[dT]:oligo beta-[dA] duplexes by the intercalating agent. Bazile D, et al. **Nucleic Acids Res** 1989 Oct 11; 17(19):7749–59

ADMINISTRATION & DOSAGE

Carvedilol and atenolol once daily in the treatment of hypertension. Luurila OJ, et al. **J Hypertens Suppl** 1989 Dec;7(6):S264–5
[The acute hemodynamic effects of the new vasodilating beta blocker carvedilol in comparison with combined administration of nifedipine and propranolol in patients with coronary heart disease] Mauser M, et al. **Z Kardiol** 1989 Nov;78(11):726–31 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

The safety of adding carvedilol to hypertensive patients inadequately treated with diuretics. Dupont AG, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S153–7
Effects of carvedilol on serum lipids in hypertensive and normotensive subjects. Seguchi H, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S139–42

ANALYSIS

[The determination of pyrazidol in blood and urine] Borisova IV, et al. **Sud Med Ekspert** 1989 Oct-Dec;32(4):49–50 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Synthesis and absolute configuration of the new thromboxane antagonist (3R)-3-(4-fluorophenylsulfonamido)-1,2,3,4-tetrahydro-9-carbazolepropan oic acid and comparison with its enantiomer. Rosentreter U, et al. **Arzneimittelforschung** 1989 Dec;39(12):1519–21
Synthesis of disubstituted tetrahydrocarbazoles with potential antidepressive activity. Giancaspro GI, et al. **Farmaco** 1989 May;44(5):483–93
[Synthesis and pharmacologic study of pyridazino[4,5-b]carbazoles] Landelle H, et al. **Chem Pharm Bull (Tokyo)** 1989 Oct;37(10):2679–82 (Eng. Abstr.) **(Fre)**

ISOLATION & PURIFICATION

Studies on free radical scavenging substances from microorganisms. I. Carazostatin, a new free radical scavenger produced by Streptomyces chromofuscus DC 118. Kato S, et al. **J Antibiot (Tokyo)** 1989 Dec; 42(12):1879–81

METABOLISM

Stereoselective binding of the glucuronide conjugates of carprofen enantiomers to human serum albumin. Iwakawa S, et al. **Biochem Pharmacol** 1990 Mar 1;39(5):949–53
Effect of partial hepatectomy on the formation and elimination of 3-methyldibenzo(c,g)carbazole and 5,9-dimethyldibenzo(c,g)carbazole-DNA adducts in mouse liver. Szafarz D, et al. **Biol Cell** 1990;68(2):91–4
Cerebral metabolic effects of sigma ligands in the rat. della Puppa A, et al. **Brain Res** 1989 Dec 29;505(2):283–90
Binding of 7H-dibenzo[c,g]carbazole to polynucleotides and DNA in vitro. Lindquist BE, et al. **Carcinogenesis** 1989 Dec;10(12):2187–95
Direct determination of diastereomeric carprofen glucuronides in human plasma and urine and preliminary measurements of stereoselective metabolic and renal elimination after oral administration of carprofen in man. Iwakawa S, et al. **Drug Metab Dispos** 1989 Jul-Aug; 17(4):414–9
Intercalative binding of ditercalinium to d(CpGpCpG)2: a theoretical study. Maroun R, et al. **J Biomol Struct Dyn** 1989 Dec;7(3):607–21

PHARMACOKINETICS

Stereoselective disposition of carvedilol in man after intravenous and oral administration of the racemic compound. Neugebauer G, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S108–11
Assay and disposition of carvedilol enantiomers in humans and monkeys: evidence of stereoselective presystemic metabolism. Fujimaki M, et al. **J Pharm Sci** 1990 Jul; 79(7):568–72
Influence of the hydrophilicity of suppository bases on rectal absorption of carprofen, a lipophilic nonsteroidal anti-inflammatory drug. Schmitt M, et al. **J Pharm Sci** 1990 Apr;79(4):359–63

PHARMACOLOGY

Reduction of in vivo coronary artery thrombosis by the novel thromboxane antagonist (3R)-3-(4-fluorophenylsulfonamido)-1,2,3,4-tetrahydro-9- carbazolepropanoic acid. Fiedler VB, et al. **Arzneimittelforschung** 1989 Dec;39(12):1527–30
Inhibition of platelet aggregation in vitro and ex vivo by the new thromboxane antagonist (3R)-3-(4-fluorophenylsulfonamido)-1,2,3,4-tetrahydro-9- carbazolepropanoic acid. Seuter F, et al. **Arzneimittelforschung** 1989 Dec;39(12):1525–7
K252a is a potent and selective inhibitor of phosphorylase kinase. Elliott LH, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):148–54
Differentiative action of K252a on protein kinase C and a calcium-unresponsive, phorbol ester/phospholipid-activated protein kinase. Gschwendt M, et al. **Biochem Biophys Res Commun** 1989 Nov 15; 164(3):974–82
Induction of differentiation of HL-60 cells by protein kinase C inhibitor, K252a. Taoka T, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1151–6
Selective alteration of mitochondrial function by Ditercalinium (NSC 335153), a DNA bisintercalating agent. Esnault C, et al. **Biochem Pharmacol** 1990 Jan 1; 39(1):109–22
Inhibitory action of carvedilol, a novel alpha, beta-adrenoceptor antagonist, on catecholamine secretion and calcium influx in cultured bovine adrenal chromaffin cells. Morita K, et al. **Biochem Pharmacol** 1989 Dec 15; 38(24):4461–5
Differential inhibition of histamine release from mast cells by protein kinase C inhibitors: staurosporine and K-252a. White JR, et al. **Biochem Pharmacol** 1990 Aug 1; 40(3):447–56
DNase I susceptibility of bent DNA and its alteration by

ditercalinium and distamycin. Mendoza R, et al. **Biochemistry** 1990 May 29;29(21):5035–43
Carvedilol increases the systemic bioavailability of oral digoxin. De Mey C, et al. **Br J Clin Pharmacol** 1990 Apr; 29(4):486–90
The pharmacology of L-670,596, a potent and selective thromboxane/prostaglandin endoperoxide receptor antagonist. Ford-Hutchinson AW, et al. **Can J Physiol Pharmacol** 1989 Sep;67(9):989–93
The interaction of the enantiomers of carvedilol with alpha 1- and beta 1-adrenoceptors. Nichols AJ, et al. **Chirality** 1989;1(4):265–70
Analysis of the mechanism underlying the vasodilator action of carvedilol in pithed spontaneously hypertensive rats. Hashimoto H, et al. **Drugs** 1988;36 Suppl 6:31–6
Vasodilating mechanism and response to physiological pressor stimuli of acute doses of carvedilol compared with labetalol, propranolol and hydralazine. Tomlinson B, et al. **Drugs** 1988;36 Suppl 6:37–47
Pharmacological characteristics of the stereoisomers of carvedilol. Bartsch W, et al. **Eur J Clin Pharmacol** 1990; 38 Suppl 2:S104–7
Hemodynamic profile of carvedilol. Hombach V, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S101–3 (13 ref.)
Effects of carvedilol on cerebral blood flow and its autoregulation in previous stroke patients with hypertension. Kuriyama Y, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S120–1
Effects of carvedilol on common carotid arterial flow, peripheral hemodynamics, and hemorheologic variables in hypertension. Nagakawa Y, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S115–9
Hemodynamic differences between carvedilol and labetalol in the cutaneous circulation. Ruffolo RR Jr, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S112–4
The pharmacology of carvedilol. Ruffolo RR Jr, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S82–8 (13 ref.)
Influence of carvedilol and propranolol on coronary blood flow. Sievert H, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S122–4
The ligand rimcazole antagonises (+)SKF 10,047, but not (+)3-PPP, in the mouse isolated vas deferens. Kennedy C, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):315–8
Triphasic inotropic response of guinea-pig papillary muscle to murrayaquinone-A isolated from Rutaceae. Takeya K, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):137–45
Local cutaneous hemodynamic effects of carvedilol and labetalol in the anesthetized rat. Willette RN, et al. **Eur J Pharmacol** 1990 Feb 6;176(2):237–40
Adrenoceptor-blocking activity and cardiohemodynamic effects of carvedilol in animals. Kawada T, et al. **J Cardiovasc Pharmacol** 1990 Jul;16(1):147–53
1H and 31P nuclear magnetic resonance studies of the differences in DNA deformation induced by anti-tumoral 7H-pyrido[4,3-c]carbazole dimers. Delepierre M, et al. **J Mol Biol** 1989 Nov 5;210(1):211–28
Mimicry and inhibition of nerve growth factor effects: interactions of staurosporine, forskolin, and K252a in PC12 cells and normal rat chromaffin cells in vitro. Tischler AS, et al. **J Neurochem** 1990 Oct;55(4):1159–65
Nerve growth factor and K-252a increase catecholamine release from PC12 cells. Nikodijevic B, et al. **J Neurosci Res** 1990 Jul;26(3):288–95
Differential effects of the protein kinase inhibitor K-252a on the in vitro survival of chick embryonic neurons. Borasio GD. **Neurosci Lett** 1990 Jan 1;108(1-2):207–12
In vitro pharmacologic profile of the novel beta-adrenoceptor antagonist and vasodilator, carvedilol. Nichols AJ, et al. **Pharmacology** 1989;39(5):327–36
Tetrahydrocarbazol-1-acetic acids: new class of thromboxane receptor antagonists. Girard Y, et al. **Prog Clin Biol Res** 1989;301:585–9
Effects of carvedilol on left ventricular function and arrhythmias during repeated short-time myocardial ischemia in experimental pigs. Höher M, et al. **Z Kardiol** 1989;78 Suppl 3:7–15
Clinical pharmacology of multiple action compounds. Prichard BN, et al. **Z Kardiol** 1989;78 Suppl 3:1–6 (52 ref.)
[The effect of pyrazidol and inkazan on the rotation behavior of rats] Mashkovskiĭ MD, et al. **Farmakol Toksikol** 1989 Nov-Dec;52(6):29–32 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Influence of carvedilol on blood glucose and glycohaemoglobin A1 in non-insulin-dependent diabetics. Ehmer B, et al. **Drugs** 1988;36 Suppl 6:136–40
Therapeutic benefits and safety of carvedilol in the treatment of renal hypertension. An open, short term study. Carvedilol Renal Hypertension Study Group in Japan. Kohno M, et al. **Drugs** 1988;36 Suppl 6:129–35
Effects of carvedilol on blood pressure in patients with mild to moderate hypertension. A dose response study. McPhillips JJ, et al. **Drugs** 1988;36 Suppl 6:82–91
Dose-effect relationship of carvedilol in essential hypertension. An open study. Ogihara T, et al. **Drugs** 1988; 36 Suppl 6:75–81
Response rate with respect to the blood pressure-lowering effect of the vasodilating and beta-blocking agent carvedilol. Rittinghausen R. **Drugs** 1988;36 Suppl 6:92–101
Effects of carvedilol on renal function. Dupont AG. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S96–100
Blood-pressure-lowering effect of carvedilol vs nitrendipine in geriatric hypertensives. Krönig B, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S167–70
The use of carvedilol in elderly hypertensive patients. Morgan TO, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S129–33
Safety and efficacy of once-daily carvedilol vs twice-daily labetalol in mild to moderate hypertension. Ollivier JP, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S164–6
Efficacy and safety of carvedilol in renal hypertension. A multicenter open trial. Takeda T, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S158–63
Efficacy and safety of carvedilol in comparison with atenolol in hypertensive patients pretreated with hydrochlorothiazide. van der Does R, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S147–52
Safety and antihypertensive efficacy of carvedilol and atenolol alone and in combination with hydrochlorothiazide. Widmann L, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S143–6
Multiple action compounds in angina pectoris. Kelly DT, et al. **Z Kardiol** 1989;78 Suppl 3:16–20 (20 ref.)
Effects of carvedilol in patients with impaired left ventricular function due to ischaemic heart disease. Lahiri A, et al. **Z Kardiol** 1989;78 Suppl 3:21–7
[Acute hemodynamic effects of the vasodilator beta blocker carvedilol in heart failure] Buchwald A, et al. **Z Kardiol** 1990 Jun;79(6):424–8 (Eng. Abstr.) **(Ger)**
[Comparative effectiveness of mianserin and pyrazidol in endogenous depression] Mosolov SN, et al. **Zh Nevropatol Psikhiatr** 1990;90(4):108–14 (Eng. Abstr.) **(Rus)**

TOXICITY

A comparison of DNA adduct formation in white blood cells and internal organs of mice exposed to benzo[a]pyrene, dibenzo[c,g]carbazole, safrole and cigarette smoke condensate. Reddy MV, et al. **Mutat Res** 1990 May; 241(1):37–48

CARBENICILLIN

ADMINISTRATION & DOSAGE

[Combined antibacterial therapy of infectious complications in oncological patients] Smolianskaia AZ. **Antibiot Khimioter** 1989 Sep;34(9):696–9 (Eng. Abstr.) **(Rus)**

ANALYSIS

An efficient indirect micro-analytical method for the determination of palladium in carbenicillin. Palaniappan R. **Pharmazie** 1989 Sep;44(9):644–5

METABOLISM

The analysis of five carbenicillin-hydrolysing enzymes by electrophoretic methods. Vedel G, et al. **Res Microbiol** 1989 Oct;140(8):579–90

PHARMACOKINETICS

The kinetic disposition and dosage regimen for carbenicillin in buffalo calves. Bal MS, et al. **Vet Res Commun** 1989; 13(5):389–94

THERAPEUTIC USE

Delayed cerebrospinal fluid sterilization in infants with Hemophilus influenzae type b meningitis. Hatch DL, et al. **J Infect Dis** 1989 Oct;160(4):711–5

CARBENOXOLONE see under **GLYCYRRHETINIC ACID**

CARBIDOPA

ADMINISTRATION & DOSAGE

Long-term efficacy of controlled-release carbidopa/levodopa in patients with advanced Parkinson's disease. Mark MH, et al. **Ann Clin Lab Sci** 1989 Nov-Dec; 19(6):415–21
Randomized double-blind cross-over study of Sinemet-controlled release (CR4 50/200) versus Sinemet 25/100 in Parkinson's disease. Lieberman A, et al. **Eur Neurol** 1990;30(2):75–8
Comparison of Sinemet CR4 and standard Sinemet: double blind and long-term open trial in parkinsonian patients with fluctuations. Jankovic J, et al. **Mov Disord** 1989;4(4):303–9
New strategies in dopaminergic therapy of Parkinson's disease: the use of a controlled-release formulation. London, England, April 28 and 29, 1989. Proceedings. **Neurology** 1989 Nov;39(11 Suppl 2):1–106
An open multicenter long-term treatment evaluation of Sinemet CR. Sinemet CR Multicenter Study Group. Bush DF, et al. **Neurology** 1989 Nov;39(11 Suppl 2):101–4; discussion 105
Controlled-release carbidopa/levodopa (CR) in parkinsonian patients with response fluctuations on standard levodopa treatment: clinical and pharmacokinetic observations. Deleu D, et al. **Neurology** 1989 Nov;39(11 Suppl 2):88–92; discussion 95
Pharmaceutical design and development of a Sinemet controlled-release formulation. Dempski RE, et al. **Neurology** 1989 Nov;39(11 Suppl 2):20–4 (14 ref.)
Double-blind comparison of standard Sinemet and Sinemet CR in patients with mild-to-moderate Parkinson's disease. Feldman RG, et al. **Neurology** 1989 Nov;39(11 Suppl 2):96–101; discussion 105
Development and progression of motor fluctuations and side effects in Parkinson's disease: comparison of Sinemet CR versus carbidopa/levodopa. Goetz CG, et al. **Neurology** 1989 Nov;39(11 Suppl 2):63–6; discussion 72–3
Controlled-release carbidopa/levodopa (Sinemet 50/200 CR4): clinical and pharmacokinetic studies. LeWitt PA, et al. **Neurology** 1989 Nov;39(11 Suppl 2):45–53; discussion 59
Treatment of early Parkinson's disease with controlled-release levodopa preparations. Rinne UK, et al. **Neurology** 1989 Nov;39(11 Suppl 2):78–81; discussion 95
Long-term clinical efficacy of Sinemet CR in patients with Parkinson's disease. Rodnitzky RL, et al. **Neurology** 1989 Nov;39(11 Suppl 2):92–5; discussion 95
Effect of controlled-release carbidopa/levodopa on motor performance in advanced Parkinson's disease. Rondot P, et al. **Neurology** 1989 Nov;39(11 Suppl 2):74–7; discussion 95
Decreased efficacy of levodopa with carbidopa in parkinsonian patients after adrenal-to-caudate implants. Tsui JK, et al. **Neurology** 1990 May;40(5):845–6
Experiences with Sinemet CR in the Paracelsus-Elena-Klinik. Ulm G, et al. **Neurology** 1989 Nov;39(11 Suppl 2):85–7; discussion 95
Gastrointestinal transit of Sinemet CR in healthy volunteers. Wilding IR, et al. **Neurology** 1989 Nov;39(11 Suppl 2):53–8
[Effect of carbidopa-levodopa on growth hormone secretion and absolute eosinophil count in healthy persons and those with allergic diseases] Podolec Z, et al. **Pol Arch Med Wewn** 1987 Jul;78(1):24–9 (Eng. Abstr.) **(Pol)**
[Dopamine deficiency syndrome in children with specific reaction to the treatment with levodopa preparations] Shoshina LM, et al. **Zh Nevropatol Psikhiatr** 1989; 89(8):27–32 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Severity of Parkinson's disease is a risk factor for peak-dose dyskinesia. Horstink MW, et al. **J Neurol Neurosurg Psychiatry** 1990 Mar;53(3):224–6

ANALYSIS

Sensitive colorimetric assay of carbidopa and methyldopa using tetrazolium blue chloride in pharmaceutical products. Issopoulos PB. **Pharm Weekbl [Sci]** 1989 Dec 15; 11(6):213–7

METABOLISM

Effect of acute levodopa on brain catecholamines after selective MAO and COMT inhibition in male rats. Männistö PT, et al. **J Neural Transm Park Dis Dement Sect** 1990;2(1):31–43

PHARMACOKINETICS

Steady plasma levodopa concentrations required for good clinical response to CR-4 in patients with 'on-off'. McHale DM, et al. **Eur Neurol** 1990;30(2):90–2
A pharmacokinetic and pharmacodynamic comparison of Sinemet CR (50/200) and standard Sinemet (25/100). Cedarbaum JM, et al. **Neurology** 1989 Nov;39(11 Suppl 2):38–44; discussion 59
Pharmacodynamic modeling of concentration-effect relationships after controlled-release carbidopa/levodopa (Sinemet CR4) in Parkinson's disease. Nelson MV, et al. **Neurology** 1990 Jan;40(1):70–4
Pharmacokinetics and bioavailability of Sinemet CR: a summary of human studies. Yeh KC, et al. **Neurology** 1989 Nov;39(11 Suppl 2):25–38

PHARMACOLOGY

Carbidopa does not affect the renal response to atrial natriuretic factor in man. Lewis HM, et al. **Clin Sci** 1989 Sep;77(3):281–5
The effects of carbidopa on the metabolism of 6-[18F]fluoro-L-dopa in rats, monkeys and humans. Melega WP, et al. **Life Sci** 1990;47(2):149–57

THERAPEUTIC USE

Selegiline in the treatment of Parkinson's disease—long term experience. Yahr MD, et al. **Acta Neurol Scand Suppl** 1989; 126:157–61
Determinants of gait in the elderly parkinsonian on maintenance levodopa/carbidopa therapy. Bowes SG, et al. **Br J Clin Pharmacol** 1990 Jul;30(1):13–24
Clinical and pharmacokinetic evaluation of controlled-release levodopa/carbidopa (CR-4) in parkinsonian patients with severe motor fluctuations: a six month follow-up study. Deleu D, et al. **Clin Neurol Neurosurg** 1989;91(4):303–9
Randomized double-blind cross-over study of Sinemet-controlled release (CR4 50/200) versus Sinemet 25/100 in Parkinson's disease. Lieberman A, et al. **Eur Neurol** 1990;30(2):75–8
MAO and L-dopa treatment of Parkinson's disease. Tyce GM, et al. **J Neural Transm Suppl** 1990;29:233–9

New drugs for Parkinson's disease. Hodges LC, et al. **J Neurosci Nurs** 1990 Aug;22(4):254–7

Sinemet CR in the treatment of patients with Parkinson's disease already on long–term treatment with levodopa. Aarli JA, et al. **Neurology** 1989 Nov;39(11 Suppl 2):82–5; discussion 95

Rationale for continuous dopaminomimetic therapy of Parkinson's disease. Chase TN, et al. **Neurology** 1989 Nov; 39(11 Suppl 2):7–10; discussion 19 (43 ref.)

Multicenter controlled study of Sinemet CR vs Sinemet (25/100) in advanced Parkinson's disease. Hutton JT, et al. **Neurology** 1989 Nov;39(11 Suppl 2):67–72; discussion 72–3

[Clinical results of using Nakom in diseases of the nervous system] Evtushenko SK, et al. **Zh Nevropatol Psikhiatr** 1989;89(8):35–7 (Eng. Abstr.) **(Rus)**

CARBIMAZOLE

ADMINISTRATION & DOSAGE

The prognostic value of TSH receptor binding and thyroid stimulating antibodies following antithyroid drug treatment of Graves' disease. Wilson R, et al. **Acta Endocrinol (Copenh)** 1989 Nov;121(5):666–70

[An attempt to substitute carbimazole for Alkiron in an atherogenic diet] Záhoř Z, et al. **Sb Lek** 1989 Sep; 91(8):238–41 (Eng. Abstr.) **(Cze)**

ADVERSE EFFECTS

[Anti–triiodothyronine antibodies in Basedow's disease treated with carbimazole (letter)] Heshmati HM, et al. **Presse Med** 1989 Dec 16–23;18(42):2066 **(Fre)**

[Anicteric cholestasis caused by thiocarbamides (letter)] Clotet Solsona J, et al. **Rev Clin Esp** 1989 Sep;185(4):216 **(Spa)**

[Acute submassive cholestatic hepatitis after treatment with carbimazole. Presentation of a new case and review of the literature] Moreno Sánchez D, et al. **Rev Esp Enferm Apar Dig** 1989 Sep;76(3):273–6 (20 ref.) (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Late recurrence of Graves' disease. Lewis NP. **Br J Clin Pract** 1989 Feb;43(2):82

A cautionary tale: inappropriate drug treatment after false–positive diagnosis of thyrotoxicosis [letter] Stubbs PJ, et al. **Clin Chem** 1990 Jul;36(7):1381–3

Insulin autoantibodies in Graves' disease—before and after carbimazole therapy. Armitage M, et al. **Diabetes Res Clin Pract** 1990 Mar;8(3):169–76

Combination therapy (131I and carbimazole) of toxic diffuse goitre [letter] Noor A, et al. **J Assoc Physicians India** 1989 Nov;37(11):733–4

Thyroglobulin, thyrotropin and thyrotropin binding inhibiting immunoglobulins assayed at the withdrawal of antithyroid drug therapy as predictors of relapse of Graves' disease within one year. Talbot JN, et al. **J Endocrinol Invest** 1989 Oct;12(9):589–95

Comparison of placebo with L–thyroxine alone or with carbimazole for treatment of sporadic non–toxic goitre. Berghout A, et al. **Lancet** 1990 Jul 28;336(8709):193–7

[Hyperthyroidism and pregnancy. A retrospective multicenter study Nord–Picardie–Champagne. Report of 48 cases] Dorangeon PH, et al. **Rev Fr Gynecol Obstet** 1989 Dec;84(12):905–13 (Eng. Abstr.) **(Fre)**

[Amyotrophic lateral sclerosis syndrome and hyperthyroidism. Cure with antithyroid drugs] Pou Serradell A, et al. **Rev Neurol (Paris)** 1990;146(3):219–20 (Eng. Abstr.) **(Fre)**

[Carbimazole therapy in Basedow's disease: therapy results in individual dosage adjustment] Trabucco P, et al. **Schweiz Med Wochenschr** 1989 Dec 30;119(52):1894–8 (Eng. Abstr.) **(Ger)**

CARBOCAINE see **MEPIVACAINE**

CARBOCYANINES see under **QUINOLINES**

CARBOCYSTEINE see under **CYSTEINE**

CARBODIIMIDES

Stability of water–soluble carbodiimides in aqueous solution. Gilles MA, et al. **Anal Biochem** 1990 Feb 1;184(2):244–8

Formation of optically pure N–acyl–N,N'–dicyclohexylurea in N,N'–dicyclohexylcarbodiimide–mediated peptide synthesis. Slebioda M, et al. **Int J Pept Protein Res** 1990 Jun;35(6):539–41

A novel carbodiimide coupling method for synthetic peptides. Enhanced anti–peptide antibody responses. Deen C, et al. **J Immunol Methods** 1990 May 8;129(1):119–25

Detection of single–base mutations by reaction of DNA heteroduplexes with a water–soluble carbodiimide followed by primer extension: application to products from the polymerase chain reaction. Ganguly A, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):3933–9

Immunoassays for carbodiimide modified DNA–detection of unpairing transitions in supercoiled ColE1 DNA. Wani AA, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):9957–77

ANALYSIS

[Reaction of carbodiimide for the introduction of p–bis(2–chloroethyl)amino–L–phenylalanine to lysozyme] Smolders RR, et al. **J Pharm Belg** 1989 May–Jun; 44(3):215–20 (Eng. Abstr.) **(Fre)**

METABOLISM

The sequence of the major protein stored in ovine ceroid lipofuscinosis is identical with that of the dicyclohexylcarbodiimide–reactive proteolipid of mitochondrial ATP synthase. Fearnley IM, et al. **Biochem J** 1990 Jun 15;268(3):751–8

Differential labeling of the catalytic subunit of cAMP–dependent protein kinase with a water–soluble carbodiimide: identification of carboxyl groups protected by MgATP and inhibitor peptides. Buechler JA, et al. **Biochemistry** 1990 Feb 20;29(7):1937–43

Crosslinking of cytochrome c and cytochrome b5 with a water–soluble carbodiimide. Reaction conditions, product analysis and critique of the technique. Mauk MR, et al. **Eur J Biochem** 1989 Dec 22;186(3):473–86

Chemiosmotic energy conversion of the archaebacterial thermoacidophile Sulfolobus acidocaldarius: oxidative phosphorylation and the presence of an F0–related N,N'–dicyclohexylcarbodiimide–binding proteolipid. Lübben M, et al. **J Bacteriol** 1989 Nov;171(11):6106–16

Cross–linking of smooth muscle caldesmon to the NH2–terminal region of skeletal F–actin. Bartegi A, et al. **J Biol Chem** 1990 Feb 5;265(4):2231–7

Resolution of ion translocating proteolipid subclasses active in bacterial calcification. Swain LD, et al. **J Dent Res** 1989 Jun;68(6):1094–7

Identification of essential residues in the F1–ATPases by chemical modification. Allison WS, et al. **Methods Enzymol** 1986;126:741–61

PHARMACOLOGY

The effect of DCCD, HQNO or Cd2+ on glutamate oxidation in Staphylococcus aureus. Tynecka Z, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:149–55

Stabilization of the superoxide–generating respiratory burst oxidase of human neutrophil plasma membrane by crosslinking with 1–ethyl–3–(3–dimethylaminopropyl) carbodiimide. Tamura M, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):23–32

Solubilization and functional reconstitution of the DCCD–sensitive Na+/H(+)–antiporter from Halobacterium halobium. Konishi T, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1339–45

N,N'–dicyclohexylcarbodiimide is a specific, reversible inhibitor of proline–beta–naphthylamidase. Takahashi T, et al. **Biochem Biophys Res Commun** 1990 May 16; 168(3):1001–6

Inactivation of skeletal–muscle UDP–glucose pyrophosphorylase by reaction with carboxylate–directed reagents. Signorini M, et al. **Biochem J** 1989 Dec 15; 264(3):799–84

Activation of the dynein adenosinetriphosphatase by cross–linking to microtubules. Shimizu T, et al. **Biochemistry** 1989 Aug 22;28(17):7016–21

Chemical modification of a beta–glucosidase from Schizophyllum commune: evidence for essential carboxyl groups. Clarke AJ. **Biochim Biophys Acta** 1990 Sep 3; 1040(2):145–52

Covalent cross–linking of single fibers from rabbit psoas increases oscillatory power. Tawada K, et al. **Biophys J** 1990 Mar;57(3):643–7

The effect of Ca2+ and calmodulin on the inhibition of Ca2(+)+Mg2(+)–ATPase in erythrocyte ghost membranes by nonpolar and polar carbodiimides. Famulski KS, et al. **Cell Calcium** 1990 Apr;11(4):275–80

Inactivation of human thrombin by water–soluble carbodiimides. The essential carboxyl has a pKa of 5.6 and is one other than Asp–189. Borders CL Jr, et al. **FEBS Lett** 1989 Sep 25;255(2):365–8

Evidence for the involvement of carboxyl groups in passive calcium uptake by liver plasma membrane vesicles and in agonist–induced calcium uptake by hepatocytes. Karjalainen A, et al. **FEBS Lett** 1989 Sep 25;255(2):441–4

Inactivation of Ca2(+)–, Na+K(+)–, and H+K(+)–ATPases with a carbodiimide derivative of ATP. Murphy AJ. **FEBS Lett** 1990 Apr 9;263(1):175–7

Optimal conditions for the toxoiding of pertussis toxin with 1–ethyl–3(3–dimethylaminopropyl) carbodiimide.HCl. Christodoulides M, et al. **FEMS Microbiol Immunol** 1989 Dec;1(8–9):425–35

Carbodiimide crosslinking of human C1q and rabbit IgG. Wines BD, et al. **Mol Immunol** 1990 Mar;27(3):221–6

[The 5S rRNA–protein complex of Escherichia coli studied by carbodiimide modification] Dontsova OA, et al. **Biol Nauki** 1990;(2):22–30 (Eng. Abstr.) **(Rus)**

CARBOFURAN see under **INSECTICIDES, CARBAMATE**

CARBOHYDRATE ANTIGENS, TUMOR–ASSOCIATED see **ANTIGENS, TUMOR–ASSOCIATED, CARBOHYDRATE**

CARBOHYDRATE CONFORMATION

Interaction of adenylic acid with alkaline earth metal ions in the crystalline solid and aqueous solution. Evidence for the sugar C'2–endo/anti, C'3–endo/anti and C'4–exon/anti conformational changes. Tajmir–Riahi HA. **Biochim Biophys Acta** 1990 Sep 10;1087(1):49–54

Theoretical studies on the conformation of saccharides. XIV. Structure and conformational properties of the glycosylamines. Kožár T, et al. **Biopolymers** 1990 Oct–Nov; 29(12–13):1531–9

Agreement between single crystal X–ray and molecular mechanical sugar ring conformations. Garcia AE, et al. **J Biomol Struct Dyn** 1987 Dec;5(3):513–37

CARBOHYDRATE DEHYDROGENASES

A new family of 2–hydroxyacid dehydrogenases. Grant GA. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1371–4

Enzymatic properties of isozymes and variants of glucose dehydrogenase from Bacillus megaterium. Mitamura T, et al. **Eur J Biochem** 1989 Dec 8;186(1–2):389–93

ANALYSIS

Biosynthesis of glycosaminoglycan precursors: evidences for different tissue specific forms of UDP–glucose dehydrogenase. Bardoni A, et al. **Ital J Biochem** 1989 Sep–Oct;38(5):360–8

ANTAGONISTS & INHIBITORS

Inhibition kinetics of human kidney aldose and aldehyde reductases by aldose reductase inhibitors. Bhatnagar A, et al. **Biochem Pharmacol** 1990 Mar 15;39(6):1115–24

DEFICIENCY

Enzymological characterization of a feline analogue of primary hyperoxaluria type 2: a model for the human disease. Danpure CJ, et al. **J Inherited Metab Dis** 1989; 12(4):403–14

The L–3–hydroxyacyl–CoA dehydrogenase deficiency. Hale DE, et al. **Prog Clin Biol Res** 1990;321:503–10

GENETICS

A new family of 2–hydroxyacid dehydrogenases. Grant GA. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1371–4

Control of alginate synthesis in Pseudomonas aeruginosa: regulation of the algR1 gene. Kimbara K, et al. **Biochem Biophys Res Commun** 1989 Oct 31;164(2):601–8

Construction of an artificial bifunctional enzyme, beta–galactosidase/galactose dehydrogenase, exhibiting efficient galactose channeling. Ljungcrantz P, et al. **Biochemistry** 1989 Oct 31;28(22):8786–92

The same domain motif for ubiquinone reduction in mitochondrial or chloroplast NADH dehydrogenase and bacterial glucose dehydrogenase. Friedrich T, et al. **FEBS Lett** 1990 Jun 4;265(1–2):37–40

Developmental expression of the glucose dehydrogenase gene in Drosophila melanogaster. Cox–Foster DL, et al. **Genetics** 1990 Apr;124(4):873–80

Divergent transcription of pdxB and homology between the pdxB and serA gene products in Escherichia coli K–12. Schoenlein PV, et al. **J Bacteriol** 1989 Nov;171(11):6084–92

Evolution of the glucose dehydrogenase gene in Drosophila. Krasney PA, et al. **Mol Biol Evol** 1990 Mar;7(2):155–77

Mucoid Pseudomonas aeruginosa in cystic fibrosis: mutations in the muc loci affect transcription of the algR and algD genes in response to environmental stimuli. Deretic V, et al. **Mol Microbiol** 1990 Feb;4(2):189–96

Stability of DNA methylation of X–chromosome genes during aging. Pagani F, et al. **Somat Cell Mol Genet** 1990 Jan;16(1):79–84

ISOLATION & PURIFICATION

Purification and characterization of glucose dehydrogenase from the thermoacidophilic archaebacterium Thermoplasma acidophilum. Smith LD, et al. **Biochem J** 1989 Aug 1;261(3):973–7

Quinoprotein D–glucose dehydrogenase of the Acinetobacter calcoaceticus respiratory chain: membrane–bound and soluble forms are different molecular species. Matsushita K, et al. **Biochemistry** 1989 Jul 25;28(15):6276–80

METABOLISM

The role of magnesium and calcium ions in the glucose dehydrogenase activity of Klebsiella pneumoniae NCTC 418. Buurman ET, et al. **Arch Microbiol** 1990;153(5):502–5

Microsomal hexose–6–phosphate and 6–phosphogluconate dehydrogenases in extrahepatic tissues: human placenta and pig kidney cortex. Barash V, et al. **Biochem Int** 1990; 20(2):267–74

Reactions of reduced cellobiose oxidase with oxygen. Is cellobiose oxidase primarily an oxidase? Wilson MT, et al. **Biochem J** 1990 Aug 15;270(1):265–7

The role of futile cycles in the energetics of bacterial growth. Neijssel OM, et al. **Biochim Biophys Acta** 1990 Jul 25; 1018(2–3):252–5

Coenzyme specificity of mammalian liver D–glycerate dehydrogenase. Van Schaftingen E, et al. **Eur J Biochem** 1989 Dec 8;186(1–2):355–9

Effect of busulfan on crystalline lens—glutathione, glutathione reductase and glucose–6–phosphate

dehydrogenase. Cherian M, et al. **Indian J Exp Biol** 1989 Oct;27(10):915–6
Influence of experimental diabetes on the kinetic behaviour of renal cortex hexose monophosphate dehydrogenases. Peragón J, et al. **Int J Biochem** 1989;21(6):689–94
Evidence for electron transfer via ubiquinone between quinoproteins D-glucose dehydrogenase and alcohol dehydrogenase of Gluconobacter suboxydans. Shinagawa E, et al. **J Biochem (Tokyo)** 1990 Jun;107(6):863–7

CARBOHYDRATE ISOMERASES

Structure of yeast triosephosphate isomerase at 1.9-A resolution. Lolis E, et al. **Biochemistry** 1990 Jul 17; 29(28):6609–18
An 8-fold beta alpha barrel protein with redundant folding possibilities. Luger K, et al. **Protein Eng** 1990 Mar; 3(4):249–58
Crystallization and structure solution at 4 A resolution of the recombinant synthase domain of N-(5'-phosphoribosyl)anthranilate isomerase:indole-3-glycerol-phosphate synthase from Escherichia coli complexed to a substrate analogue. Wilmanns M, et al. **Protein Eng** 1990 Jan;3(3):173–80

ANALYSIS

Single active-site histidine in D-xylose isomerase from Streptomyces violaceoruber. Identification by chemical derivatization and peptide mapping. Vangrysperre W, et al. **Biochem J** 1989 Oct 1;263(1):195–9
Protein-decorated micelle structure of sodium-dodecyl-sulfate--protein complexes as determined by neutron scattering. Ibel K, et al. **Eur J Biochem** 1990 Jun 20;190(2):311–8

DEFICIENCY

Myopathy with altered mitochondria due to a triosephosphate isomerase (TPI) deficiency. Bardosi A, et al. **Acta Neuropathol (Berl)** 1990;79(4):387–94
Prenatal diagnosis of triose phosphate isomerase deficiency [letter] Bellingham AJ, et al. **Lancet** 1990 Jan 27; 335(8683):230

GENETICS

Cloning and characterization of the N-acetylglucosamine operon of Escherichia coli. Peri KG, et al. **Biochem Cell Biol** 1990 Jan;68(1):123–37
Identification of the rhaA, rhaB and rhaD gene products from Escherichia coli K-12. Badía J, et al. **FEMS Microbiol Lett** 1989 Dec;53(3):253–7
Characterization of triosephosphate isomerase mutants with reduced enzyme activity in Mus musculus. Merkle S, et al. **Genetics** 1989 Dec;123(4):837–44
Cloning, expression, and characterization of the Escherichia coli K-12 rfaD gene. Pegues JC, et al. **J Bacteriol** 1990 Aug;172(8):4652–60
Induction of the nag regulon of Escherichia coli by N-acetylglucosamine and glucosamine: role of the cyclic AMP-catabolite activator protein complex in expression of the regulon. Plumbridge JA. **J Bacteriol** 1990 May; 172(5):2728–35
Carbohydrate utilization in Streptococcus thermophilus: characterization of the genes for aldose 1-epimerase (mutarotase) and UDPglucose 4-epimerase. Poolman B, et al. **J Bacteriol** 1990 Jul;172(7):4037–47
Identification and sequence of rfbS and rfbE, which determine antigenic specificity of group A and group D salmonellae. Verma N, et al. **J Bacteriol** 1989 Oct; 171(10):5694–701
Alternative route for biosynthesis of amino sugars in Escherichia coli K-12 mutants by means of a catabolic isomerase [published erratum appears in J Bacteriol 1990 Sep;172(9):5521] Vogler AP, et al. **J Bacteriol** 1989 Dec; 171(12):6586–92
Identification and sequence of the gene for abequose synthase, which confers antigenic specificity on group B salmonellae: homology with galactose epimerase. Wyk P, et al. **J Bacteriol** 1989 Oct;171(10):5687–93
A conservative amino acid substitution, arginine for lysine, abolishes export of a hybrid protein in Escherichia coli. Implications for the mechanism of protein secretion. Summers RG, et al. **J Biol Chem** 1989 Nov 25; 264(33):20082–8
Illicit secretion of a cytoplasmic protein into the periplasm of Escherichia coli requires a signal peptide plus a portion of the cognate secreted protein. Demarcation of the critical region of the mature protein. Summers RG, et al. **J Biol Chem** 1989 Nov 25;264(33):20074–81
An evolutionary comparison of Acinetobacter calcoaceticus trpF with trpF genes of several organisms. Ross CM, et al. **Mol Biol Evol** 1990 Jan;7(1):74–81
Translation to near the distal end of the penultimate exon is required for normal levels of spliced triosephosphate isomerase mRNA. Cheng J, et al. **Mol Cell Biol** 1990 Oct; 10(10):5215–25
Xylose isomerase from Actinoplanes missouriensis: primary structure of the gene and the protein. Amore R, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7515
Nucleotide sequence of murine triosephosphate isomerase cDNA. Cheng J, et al. **Nucleic Acids Res** 1990 Jul 25; 18(14):4261
cDNA from rat cells with reconstitutive galactose-epimerase activity in E. coli. Zeschnigk M, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5289
Searching sequence space by definably random mutagenesis: improving the catalytic potency of an enzyme. Hermes JD, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):696–700
Genetics and evolution of chloroplast isozymes of triosephosphate isomerase. Feierabend J, et al. **Prog Clin Biol Res** 1990;344:665–82

IMMUNOLOGY

Autoantibodies against triosephosphate isomerase. A possible clue to pathogenesis of hemolytic anemia in infectious mononucleosis. Ritter K, et al. **J Exp Med** 1990 Feb 1; 171(2):565–70

METABOLISM

Resistance of spores and vegetative cells of Streptomyces thermovulgaris strain 127 and the glucose isomerase produced by them to temperature and glutaraldehyde. Djejeva G, et al. **Acta Microbiol Bulg** 1990;25:8–15
Conversion of mannose to fructose by immobilized mannose isomerase from Pseudomonas cepacia. Allenza P, et al. **Appl Biochem Biotechnol** 1990 Spring-Summer; 24–25:171–82
Localization of the essential histidine and carboxylate group in D-xylose isomerases. Vangrysperre W, et al. **Biochem J** 1990 Feb 1;265(3):699–705
How can a catalytic lesion be offset? The energetics of two pseudorevertant triosephosphate isomerases. Blacklow SC, et al. **Biochemistry** 1990 May 1;29(17):4099–108
Crystallographic studies of the mechanism of xylose isomerase. Farber GK, et al. **Biochemistry** 1989 Sep 5; 28(18):7289–97
Reaction of uridine diphosphate galactose 4-epimerase with a suicide inactivator. Flentke GR, et al. **Biochemistry** 1990 Mar 6;29(9):2430–6
Crystallographic analysis of the complex between triosephosphate isomerase and 2-phosphoglycolate at 2.5-A resolution: implications for catalysis. Lolis E, et al. **Biochemistry** 1990 Jul 17;29(28):6619–25
Stabilization of a reaction intermediate as a catalytic device: definition of the functional role of the flexible loop in triosephosphate isomerase. Pompliano DL, et al. **Biochemistry** 1990 Apr 3;29(13):3186–94
Proton diffusion in the active site of triosephosphate isomerase. Rose IA, et al. **Biochemistry** 1990 May 8; 29(18):4312–7
Zinc binding and its trapping by allosteric transition in glucosamine-6-phosphate deaminase from Escherichia coli. Altamirano MM, et al. **Biochim Biophys Acta** 1990 May 8;1038(3):291–4
Phosphoglucoisomerase-catalyzed interconversion of hexose phosphates; comparison with phosphomannoisomerase. Malaisse-Lagae F, et al. **Biochim Biophys Acta** 1989 Oct 5;998(2):118–25
Comparative kinetics of D-xylose and D-glucose isomerase activities of the D-xylose isomerase from Thermus aquaticus HB8. Lehmacher A, et al. **Biol Chem Hoppe Seyler** 1990 Jun;371(6):527–36
Myo-inositol-1-phosphate synthase in different Streptomyces griseus variants. Sipos L, et al. **FEMS Microbiol Lett** 1989 Dec;53(3):339–43
Mechanism for aldose-ketose interconversion by D-xylose isomerase involving ring opening followed by a 1,2-hydride shift. Collyer CA, et al. **J Mol Biol** 1990 Mar 5;212(1):211–35
Identification of essential histidine residues in the active site of Escherichia coli xylose (glucose) isomerase. Batt CA, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):618–22
Observations of reaction intermediates and the mechanism of aldose-ketose interconversion by D-xylose isomerase. Collyer CA, et al. **Proc Natl Acad Sci U S A** 1990 Feb; 87(4):1362–6
Isoprotein changes in aging: biochemical basis and physiological consequences. Gracy RW, et al. **Prog Clin Biol Res** 1990;344:787–817 (109 ref.)
Anatomy of a conformational change: hinged "lid" motion of the triosephosphate isomerase loop. Joseph D, et al. **Science** 1990 Sep 21;249(4975):1425–8

CARBOHYDRATE LINKAGE see **CARBOHYDRATE CONFORMATION**

CARBOHYDRATE METABOLISM, INBORN ERRORS

COMPLICATIONS

Interrelations between carbohydrates, lipids, and the hemostatic system in relation to the risk of thrombotic and cardiovascular disease. Juhan-Vague I, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):313–5 (20 ref.)
Cataract formation in patients with lactose and galactose disorders. Simonelli F, et al. **Dev Ophthalmol** 1989;17:82–6
Nephrosis in two siblings with infantile sialic acid storage disease. Sperl W, et al. **Eur J Pediatr** 1990 Apr; 149(7):477–82
[A not-previously described hereditary neurological disease with a deficiency of sialic acid, galactose and N-acetylglucosamine of plasma glycoproteins] Jacken J. **Verh K Acad Geneeskd Belg** 1989;51(4):377–406 (Eng. Abstr.) **(Dut)**
[Late-infantile form galactosialidosis with psychomotor retardation and spastic paraparesis] Miyashita K, et al. **Rinsho Shinkeigaku** 1989 Oct;29(10):1244–50 (26 ref.) (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Sialic acid storage disease. Cameron PD, et al. **Arch Dis Child** 1990 Mar;65(3):314–5
Quantitative analysis of disaccharides in the urine of beta-mannosidosis patients. Tjoa S, et al. **J Inherited Metab Dis** 1990;13(2):187–94
Glucose-galactose malabsorption--a report in a Chinese family. Quak SH, et al. **J Singapore Paediatr Soc** 1989; 31(3–4):126–8
[Congenital saccharase-isomaltase defect--diagnostic difficulties] Kovács JB, et al. **Orv Hetil** 1989 Nov 26; 130(48):2577–82 (35 ref.) (Eng. Abstr.) **(Hun)**
[Primary saccharose-isomaltose deficit: a 20-year case load] Prieto Bozano G, et al. **An Esp Pediatr** 1990 Apr; 32(4):317–20 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Deficient lysosomal carboxypeptidase activity in galactosialidosis. Tranchemontagne J, et al. **Biochem Biophys Res Commun** 1990 Apr 16;168(1):22–9

GENETICS

Carbohydrate deficient serum transferrin in a new systemic hereditary syndrome. Stibler H, et al. **Arch Dis Child** 1990 Jan;65(1):107–11
A new aldolase B variant, N334K, is a common cause of hereditary fructose intolerance in Yugoslavia. Cross NC, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1925
D(+)-glyceric aciduria: etiology and clinical consequences. Bonham JR, et al. **Pediatr Res** 1990 Jul;28(1):38–41

METABOLISM

Identification of the metabolic defect in sialuria. Weiss P, et al. **J Biol Chem** 1989 Oct 25;264(30):17635–6
Renal handling of free sialic acid in normal humans and patients with Salla disease or renal disease. Seppala R, et al. **Lab Invest** 1990 Aug;63(2):197–203
Determination of fructose metabolic pathways in normal and fructose-intolerant children: a 13C NMR study using [U-13C]fructose. Gopher A, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5449–53
[Sugar malabsorption] Igarashi Y. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):634–6 **(Jpn)**
[Disorders in carbohydrate metabolism] Kono N, et al. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):629–33 **(Jpn)**

PHYSIOPATHOLOGY

Sugar malabsorption due to deficiencies of disaccharidase activities and of monosaccharide transport. Holzel A. **Arch Dis Child** 1967 Aug;42(224):341–52 (115 ref.)

PREVENTION & CONTROL

Results of newborn screening for galactose metabolic disorders. Inoue B, et al. **J Inherited Metab Dis** 1990; 13(1):93–101

URINE

Interference of amikacin in thin-layer chromatographic screening of urine for oligosaccharidosis. Piraud M, et al. **Clin Chem** 1990 May;36(5):809
Isolation and characterization of major urinary amino acid O-glycosides and a dipeptide O-glycoside from a new lysosomal storage disorder (Kanzaki disease). Excessive excretion of serine- and threonine-linked glycan in the patient urine. Hirabayashi Y, et al. **J Biol Chem** 1990 Jan 25;265(3):1693–701

VETERINARY

Lectin histochemistry of an ovine lysosomal storage disease with deficiencies of beta-galactosidase and alpha-neuraminidase. Murnane RD, et al. **Am J Pathol** 1989 Oct;135(4):623–30

CARBOHYDRATE OXIDOREDUCTASES see **CARBOHYDRATE DEHYDROGENASES**

CARBOHYDRATES

Heterogeneity of N-linked sugar chains of apolipoprotein B-100 in Watanabe heritable hyperlipidemic and fasting rabbits. Tsunemitsu M, et al. **Arteriosclerosis** 1990 May-Jun;10(3):386–93
Structural evidence for two isozymic forms and the carbohydrate attachment site of human gastric cathepsin E. Athauda SB, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):878–85
Sugar modified oligonucleotides. I. Carbo-oligodeoxynucleotides as potential antisense agents. Perbost M, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):742–7
Influence of carbohydrates on the antigenic structure of

gonadotropins: distinction of agonists and antagonists. Sairam MR, et al. **Biochem Cell Biol** 1990 May;68(5):889–93

Cooperativity of carbohydrate moiety orientation and beta-turn stability is determined by intramolecular hydrogen bonds in protected glycopeptide models. Hollosi M, et al. **Biopolymers** 1990 Oct–Nov;29(12–13):1549–64

Special issue in honor of Professor W.T.J. Morgan. **Carbohydr Res** 1988 Jul 15;178:xi–xv, 1–336

Synthesis of C-glycosylarenes by way of internal reactions of benzylated and benzoylated carbohydrate derivatives. Martin OR, et al. **Carbohydr Res** 1990 Feb 25;196:41–58

Altered thyrotropin (TSH) carbohydrate structures in hypothalamic hypothyroidism created by paraventricular nuclear lesions are corrected by in vivo TSH-releasing hormone administration. Taylor T, et al. **Endocrinology** 1989 Oct;125(4):2198–203

Utilization of tropical foods: sugars, spices and stimulants. **FAO Food Nutr Pap** 1989;47(6):1–62

Psycho-social aspects of workers of sugar factories in Distt Gorakhpur. Sandell J, et al. **Indian J Public Health** 1988 Jul–Sep;32(3):137–41

Production of enterotoxins and thermonuclease by Staphylococcus aureus in cooked egg-noodles. Göckler L, et al. **Int J Food Microbiol** 1988 Mar;6(2):127–39

Thermodynamic analysis of ligand binding to winged bean (Psophocarpus tetragonolobus) acidic agglutinin reveals its specificity for terminally monofucosylated H-reactive sugars. Acharya S, et al. **J Biol Chem** 1990 Jul 15; 265(20):11586–94

Carbohydrates as a tool for oriented immobilization of antigens and antibodies. Turková J, et al. **J Chromatogr** 1990 Feb 2;500:585–93

Exercise and training effects on gastric emptying of carbohydrate beverages. Rehrer NJ, et al. **Med Sci Sports Exerc** 1989 Oct;21(5):540–9

Mass spectrometry of carbohydrates. Hellerqvist CG, et al. **Methods Biochem Anal** 1990;34:91–143 (60 ref.)

Complex carbohydrates. Part F. **Methods Enzymol** 1989; 179:1–581

Two-dimensional proton magnetic resonance spectroscopy. Dabrowski J. **Methods Enzymol** 1989;179:122–56

Vegetative tissue lectins from Dolichos biflorus. Etzler ME. **Methods Enzymol** 1989;179:341–7

Snowdrop lectin. Kaku H, et al. **Methods Enzymol** 1989; 179:327–31

Adhesion of eukaryotic cells to immobilized carbohydrates. Schnaar RL, et al. **Methods Enzymol** 1989;179:542–58

Allomyrina dichotoma lectins. Yamashita K, et al. **Methods Enzymol** 1989;179:331–41

Sugar and spice: similarities and sensory attributes. Blank DM, et al. **Nurs Res** 1990 Sep–Oct;39(5):290–3

The Complex Carbohydrate Structure Database. Doubet S, et al. **Trends Biochem Sci** 1989 Dec;14(12):475–7

[The role of carbonyl–amine reaction in biological systems and food technology (review of the literature)] Pisarnitskiĭ AF, et al. **Prikl Biokhim Mikrobiol** 1989 Sep–Oct; 25(5):579–94 (95 ref.) (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

The search for an optimized treatment of hypoglycemia. Carbohydrates in tablets, solutin, or gel for the correction of insulin reactions. Slama G, et al. **Arch Intern Med** 1990 Mar;150(3):589–93

Physiological effects of dehydration and rehydration with water and acidic or neutral carbohydrate electrolyte solutions. Bothorel B, et al. **Eur J Appl Physiol** 1990; 60(3):209–16

ANALYSIS

Crystallographic studies of carbohydrates. Jeffrey GA. **Acta Crystallogr B** 1990 Apr 1;46 (Pt 2):89–103 (93 ref.)

Indirect potentiometric titration of reducing carbohydrates. I. Using alkaline potassium mercuric bromide solution and sulphide selective electrode. Shalaby A, et al. **Acta Pharm Hung** 1989 Sep;59(5):201–4

Fluid availability of sports drinks differing in carbohydrate type and concentration. Davis JM, et al. **Am J Clin Nutr** 1990 Jun;51(6):1054–7

Adaptation of the Nelson–Somogyi reducing-sugar assay to a microassay using microtiter plates. Green F 3d, et al. **Anal Biochem** 1989 Nov 1;182(2):197–9

High-performance liquid chromatography of reducing carbohydrates as strongly ultraviolet-absorbing and electrochemically sensitive 1-phenyl-3-methyl-5-pyrazolone derivatives. Honda S, et al. **Anal Biochem** 1989 Aug 1;180(2):351–7

Coaxial continuous flow fast atom bombardment in conjunction with tandem mass spectrometry for the analysis of biomolecules. Deterding LJ, et al. **Anal Chem** 1989 Nov 15;61(22):2504–11

Adaptation of a thermospray liquid chromatography/mass spectrometry interface for use with alkaline anion exchange liquid chromatography of carbohydrates. Simpson RC, et al. **Anal Chem** 1990 Feb 1;62(3):248–52

Catalytic oxidation and flow detection of carbohydrates at ruthenium dioxide modified electrodes. Wang J, et al. **Anal Chem** 1990 Jul 15;62(14):1413–6

Quantitative evaluation of carbohydrate components present in lagomorph oviducts. Menghi G, et al. **Anat Anz** 1989; 169(1):75–80

Histology, ultrastructure and carbohydrate histochemistry of pig carpal glands. Gargiulo AM, et al. **Anat Histol Embryol** 1989 Dec;18(4):289–96

Surface carbohydrate differences of Glossina salivary glands and infectivity of Trypanosoma brucei gambiense to Glossina. Okolo CJ, et al. **Ann Soc Belg Med Trop** 1990 Mar;70(1):39–47

Surface reaction of Leishmania. IV. Variation in the surface membrane carbohydrates of different strains of Leishmania major. Schnur LF, et al. **Ann Trop Med Parasitol** 1989 Oct;83(5):455–63

Carbohydrate analysis of glycoproteins. A review. Lee KB, et al. **Appl Biochem Biotechnol** 1990 Jan;23(1):53–80 (163 ref.)

Neutral sugar composition and gravimetric yield of plant and bacterial fractions of feces. Čabotaje LM, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1786–92

Characterization of hepatic lactogen receptor. Subcellular distribution and characterization of N-linked carbohydrate chains. Haldosén LA, et al. **Biochem J** 1989 Oct 1; 263(1):33–40

Diversities in animal vitronectins. Differences in molecular weight, immunoreactivity and carbohydrate chains. Kitagaki-Ogawa H, et al. **Biochim Biophys Acta** 1990 Jan 29;1033(1):49–56

Carbohydrate analysis of immunoglobulin G myeloma proteins by lectin and high performance liquid chromatography: role of glycosyltransferases in the structures. Nishiura T, et al. **Cancer Res** 1990 Sep 1; 50(17):5345–50

Sugar-chain multiformity of human carcinoembryonic antigen: difference between normal and tumor-associated subfractions [letter] Miura M, et al. **Clin Chem** 1990 Mar; 36(3):583–4

The sugar-chain heterogeneity of human gamma-glutamyl transferases from the reproductive system and kidney. Arai K, et al. **Clin Chim Acta** 1989 Sep 15;184(1):75–84

Microheterogeneity of the carbohydrate moiety of human alpha 1-acid glycoprotein in two benign liver diseases: alcoholic cirrhosis and acute hepatitis. Biou D, et al. **Clin Chim Acta** 1989 Dec 29;186(1):59–66

Allelic and ectopic polymorphisms in human placental alkaline phosphatases: sugar chain heterogeneities. Komoda T, et al. **Clin Chim Acta** 1990 Jan 15;186(2):203–10

Effects of terconazole and other azole antifungal agents on the sterol and carbohydrate composition of Candida albicans. Pfaller MA, et al. **Diagn Microbiol Infect Dis** 1990 Jan–Feb;13(1):31–5

Carbohydrate composition of the alpha-subunit of human choriogonadotropin (hCG alpha) and the free alpha molecules produced in pregnancy: most free alpha and some combined hCG alpha molecules are fucosylated. Blithe DL. **Endocrinology** 1990 Jun;126(6):2788–99

Carbohydrate composition of beta-core. Blithe DL, et al. **Endocrinology** 1989 Nov;125(5):2267–72

Insulin receptor carbohydrate units contain poly-N-acetyllactosamine chains. Edge AS, et al. **Endocrinology** 1990 Oct;127(4):1887–95

Conformational studies on the N-linked carbohydrate chain of bromelain. Bouwstra JB, et al. **Eur J Biochem** 1990 May 31;190(1):113–22

The cell envelope of Mycobacterium smegmatis: cytochemistry and architectural implications. Mamadou D, et al. **FEMS Microbiol Lett** 1989 Oct 1;52(1–2):89–93

Cytochemical studies of developmental stages during oogenesis in Culex pipiens molestus (Forskål). I. Lipids and carbohydrates. Ramadan AA, et al. **Folia Morphol (Praha)** 1990;38(1):66–73

The carbohydrate composition of mucin in colonic cancer. Boland CR, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1170–7

Studies of lectin binding to the human cervix uteri: I. Normal cervix. Byrne P, et al. **Histochem J** 1989 Jun;21(6):311–22

Studies of lectin binding to the human cervix uteri: II. Cervical intraepithelial neoplasia and invasive squamous carcinoma. Byrne P, et al. **Histochem J** 1989 Jun; 21(6):323–36

Rapid identification of Haemophilus influenzae serovar b by gas liquid chromatography using carbohydrate fingerprints. Böhning A, et al. **Int J Med Microbiol** 1989 Nov; 272(1):19–29

Selective distribution of sugars on the tegumental surface of adult Bothriocephalus gregarius (Cestoda: Pseudophyllidea). Berrada-Rkhami O, et al. **Int J Parasitol** 1990 May;20(3):285–97

Membrane carbohydrate characterization of Acanthamoeba astronyxis, A. castellanii and Naegleria fowleri by fluorescein-conjugated lectins. Bose K, et al. **Int J Parasitol** 1989 Nov;19(7):737–41

Expression of human interleukin-2 in recombinant baby hamster kidney, Ltk-, and Chinese hamster ovary cells. Structure of O-linked carbohydrate chains and their location within the polypeptide. Conradt HS, et al. **J Biol Chem** 1989 Oct 15;264(29):17368–73

High-performance liquid chromatographic determination of metabolic products for fermentation control of mammalian cell culture: analysis of carbohydrates, organic acids and orthophosphate using refractive index and ultraviolet detectors. Weigang F, et al. **J Chromatogr** 1989 Dec 29; 497:59–68

Multivariate analyses of cellular carbohydrates and fatty acids of Candida albicans, Torulopsis glabrata, and Saccharomyces cerevisiae. Brondz I, et al. **J Clin Microbiol** 1990 Aug;28(8):1854–7

Chemotaxonomic differentiation of legionellae by detection and characterization of aminodideoxyhexoses and other unique sugars using gas chromatography–mass spectrometry. Fox A, et al. **J Clin Microbiol** 1990 Mar; 28(3):546–52

Effect of Altoside (ZR-515) on oxygen consumption, carbon dioxide out put and carbohydrate content of organophosphorus resistant strain of Musca domestica. Abou el Ela R, et al. **J Egypt Soc Parasitol** 1990 Jun; 20(1):307–18

Plant-derived sweetening agents: saccharide and polyol constituents of some sweet-tasting plants. Hussain KA, et al. **J Ethnopharmacol** 1990 Feb;28(1):103–15

Biochemical characterization and worldwide distribution of serologically distinct lipopolysaccharides of Haemophilus influenzae type b. van Alphen L, et al. **J Infect Dis** 1990 Sep;162(3):659–63

Visualization of the sugar moiety in lymphoid cell lines from Fabry's disease by lectin binding. Lageron A, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:375–8

Apolipoprotein C-III0 lacks carbohydrate residues: use of mass spectrometry to study apolipoprotein structure. Ito Y, et al. **J Lipid Res** 1989 Nov;30(11):1781–7

Kinetoplastid flagellates: surface-reactive carbohydrates detected by fluorescein-conjugated lectins. Ghosh DK, et al. **J Parasitol** 1990 Feb;76(1):130–3

Variation in macronutrients in human bank milk: influencing factors and implications for human milk banking. Michaelsen KF, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug;11(2):229–39

Analysis of the carbohydrate composition of glycoproteins by high-performance liquid chromatography. Kang EY, et al. **J Protein Chem** 1990 Feb;9(1):31–5

A study of cell membrane structure. Feinmesser R, et al. **J Surg Oncol** 1990 Mar;43(3):172–6

Biochemical features of major organ of Corti proteins (OCP-I and OCP-II) including partial amino acid sequence. Thalmann I, et al. **Laryngoscope** 1990 Jan; 100(1):99–105 (30 ref.)

Histochemistry of complex carbohydrates in the horse duodenal gland. Takehana K, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):909–15

Changes in carbohydrate and nitrogenous components and amylase activities during germination of grain amaranth. Balasubramanian T, et al. **Plant Foods Hum Nutr** 1989 Dec; 39(4):325–30

Influence of variety, date of harvest and storage time on factors connected with the crystallisation on canned scorzonera (Scorzonera hispanica). Vulsteke G, et al. **Plant Foods Hum Nutr** 1990 Apr;40(2):149–66

Analyses of surface membrane carbohydrates in parasitic flagellates of the order kinetoplastida using lectins. Chao D, et al. **Proc Natl Sci Counc Repub China [B]** 1990 Jan; 14(1):54–8

Changes in milk carbohydrates during lactation in the common brushtail possum, Trichosurus vulpecula (Marsupialia:Phalangeridae). Crisp EA, et al. **Reprod Fertil Dev** 1989;1(4):309–14

[The thiobarbituric method for analyzing sugars. III. A method for studying sorbitol dehydrogenase activity] Lilov L, et al. **Acta Microbiol Bulg** 1990;25:40–5 (Eng. Abstr.) **(Bul)**

[Investigations on methods of quantitative polarization optical estimation of neutral carbohydrates in extracellular matrix] Pfister C, et al. **Acta Histochem (Jena)** 1989; 87(2):151–5 (Eng. Abstr.) **(Ger)**

[Augmentation of the biodisposition of simple sugars from sorghum biomass mediated with biotechnologic processes] Miceli A, et al. **Boll Soc Ital Biol Sper** 1990 Jan;66(1):59–66 (Eng. Abstr.) **(Ita)**

[Characterization of the biomass of the stems of sweet sorghum] Miceli A, et al. **Boll Soc Ital Biol Sper** 1989 Dec; 65(12):1141–7 (Eng. Abstr.) **(Ita)**

[Natural C-glycoside antibiotics and the approaches to determining the structure of their carbohydrate moiety] Murenets NV. **Antibiot Khimioter** 1990 Jun;35(6):47–50 (54 ref.) **(Rus)**

[Segmental flexibility of Fc-region of spin labeled 2 subclasses of IgG molecule from cow blood and local conformational mobility of their carbohydrate components] Arutiunian AE, et al. **Biofizika** 1989 Nov–Dec;34(6):946–8 (Eng. Abstr.) **(Rus)**

[The structure of chordin: characteristics of protein and carbohydrate components and their role in antigenicity] Preobrazhenskiĭ AA, et al. **Biokhimiia** 1989 Aug; 54(8):1235–46 (Eng. Abstr.) **(Rus)**

[Conformation analysis of carbohydrate chains of glycoconjugates] Lipkind GM. **Bioorg Khim** 1990 Jan; 16(1):5–20 (80 ref.) (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Saccharide expression on wounded endothelial cell monolayers in vitro. Ball RY, et al. **J Cell Sci** 1989 May; 93 (Pt 1):163–72

BLOOD

Metabolic effects of a single administration of growth hormone on lipid and carbohydrate metabolism in normal-weight and obese subjects. Seng G, et al. **Am J Clin Nutr** 1989 Dec;50(6):1348–54

Effects of oral contraceptives on carbohydrate and lipid metabolisms in a healthy population: the Telecom study. Simon D, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):382–7

Blood carbohydrates and phosalone poisoning in Rana tigrina (Daudin). Ramalingam K, et al. **Arch Int Physiol Biochim** 1989 Oct;97(5):369–74

Carbohydrate, lipid and amino acid metabolism of insulin-dependent diabetic patients regulated by an artificial beta-cell unit. Foss MC, et al. **Diabetes Res** 1989 May; 11(1):1–8

Arteriovenous differences across human adipose and forearm tissues after overnight fast. Coppack SW, et al. **Metabolism** 1990 Apr;39(4):384–90

Effects of polymyxin B on selected features of equine carbohydrate overload. Raisbeck MF, et al. **Vet Hum Toxicol** 1989 Oct;31(5):422–6

[The effect of dexamethasone on the metabolism of the hormone regulators of carbohydrate metabolism in the postresuscitation period] Lobov VV, et al. **Farmakol Toksikol** 1990 Jan–Feb;53(1):53–4 (Eng. Abstr.) **(Rus)**

[The significance of a change in the calcitonin level of the blood in various carbohydrate metabolic states in the ontogeny of rats] Iaroshevskkiĭ IuA, et al. **Probl Endokrinol (Mosk)** 1989 Sep–Oct;35(5):81–4 (Eng. Abstr.) **(Rus)**

[An analysis of the interrelationship of the HLA genotype and carbohydrate metabolism in the families of probands with insulin-dependent diabetes mellitus] Molitvoslovova NN, et al. **Probl Endokrinol (Mosk)** 1990 May–Jun; 36(3):11–4 (Eng. Abstr.) **(Rus)**

[The correction of carbohydrate metabolic disorders in myocardial infarct patients during convalescence] Pronina EA. **Vrach Delo** 1990 May;(5):23–6 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Improving the tumor retention of radioiodinated antibody: aryl carbohydrate adducts. Ali SA, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):783s–788s

Simultaneous assessment of intestinal permeability and lactose tolerance with orally administered raffinose, lactose and L-arabinose. Lobley RW, et al. **Clin Sci** 1990 Aug; 79(2):175–83

Intestinal permeability tests: are they clinically useful? Lifschitz CH, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr; 10(3):283–7

IMMUNOLOGY

Anticarbohydrate autoantibodies to sialidase-treated erythrocytes and thymocytes in serum from patients with pulmonary sarcoidosis. Pilatte Y, et al. **Am J Med** 1990 May;88(5):486–92

Do carbohydrate antigens stimulate human T cells? Review article. Emmrich F. **APMIS** 1990 Jan;98(1):1–8 (13 ref.)

Changes in the expression of the carbohydrate epitope HNK-1 associated with mesoderm induction in the chick embryo. Canning DR, et al. **Development** 1988 Dec; 104(4):643–55

Carbohydrate moieties in recombinant human thyroid peroxidase: role in recognition by antithyroid peroxidase antibodies in Hashimoto's thyroiditis. Foti D, et al. **Endocrinology** 1990 Jun;126(6):2983–8

Serum immunoglobulin levels and naturally occurring antibodies against carbohydrate antigens in germ-free BALB/c mice fed chemically defined ultrafiltered diet. Bos NA, et al. **Eur J Immunol** 1989 Dec;19(12):2335–9

An anticarbohydrate monoclonal antibody inhibits cell-cell adhesion in many species of Dictyostelium but not of Polysphondylium. Springer WR, et al. **Exp Cell Res** 1990 Feb;186(2):197–202

Carbohydrates as recognition molecules in infection and immunity. Weir DM. **FEMS Microbiol Immunol** 1989 Jun; 1(6–7):331–40 (84 ref.)

Immunological studies of the glycoprotein allergen Ag-54 (Cla h II) in Cladosporium herbarum with special attention to the carbohydrate and protein moieties. Swärd-Nordmo M, et al. **Int Arch Allergy Appl Immunol** 1989;90(2):155–61

Idiotope structure and genetic diversity in anti-streptococcal group A carbohydrate antibodies. Phillips NJ, et al. **J Immunol** 1990 Aug 1;145(3):915–24

Human keratinocytes contain carbohydrates that are recognized by keratan sulfate-specific monoclonal antibodies. Sorrell JM, et al. **J Invest Dermatol** 1990 Sep; 95(3):347–52

Human neuroectoderm-derived cell line secretes fibronectin that shares the HNK-1/10C5 carbohydrate epitope with neural cell adhesion molecules. Harper JR, et al. **J Neurochem** 1990 Feb;54(2):395–401

Expression of blood group antigen-related carbohydrates by human gingival epithelia. Mackenzie IC, et al. **J Periodont Res** 1989 Sep;24(5):289–97

Hormonal control of a carbohydrate epitope involved in implantation in mice. Kimber SJ, et al. **J Reprod Fertil** 1990 May;89(1):13–21

Production of carbohydrate-specific human monoclonal antibodies in vitro. Silberstein LE, et al. **Methods Enzymol** 1989;179:299–304

Antibody to schistosomulum surface carbohydrate epitopes in subjects infected with Schistosoma haematobium. Ali PO, et al. **Trans R Soc Trop Med Hyg** 1989 May–Jun; 83(3):358–61

ISOLATION & PURIFICATION

Estimation of elution times on reverse-phase high-performance liquid chromatography of pyridylamino derivatives of sugar chains from glycoproteins. Hase S, et al. **Anal Biochem** 1990 Jan;184(1):135–8

Liquid chromatographic separation of anomeric forms of saccharides with cyclodextrin bonded phases. Armstrong DW, et al. **Chirality** 1989;1(1):27–37

METABOLISM

13C-nuclear magnetic resonance-spectral studies of the interactions of metal ions with carbohydrates: use of relaxation probes. Dill K, et al. **Adv Carbohydr Chem Biochem** 1989;47:125–66 (83 ref.)

A three-year evaluation of metabolic changes in Singaporean Norplant-2 rod acceptors. Singh K, et al. **Adv Contracept** 1990 Jun;6(2):71–80

Effects of glyburide on carbohydrate metabolism and insulin action in the liver. Caro JF. **Am J Med** 1990 Aug 20; 89(2A):17S–25S; discussion 51S–53S (59 ref.)

Hypertension as a disease of carbohydrate and lipoprotein metabolism. Reaven GM, et al. **Am J Med** 1989 Dec 8; 87(6A):2S–6S (52 ref.)

Triphasic Randomized Clinical Trial: Comparison of effects on carbohydrate metabolism. Bowes WA Jr, et al. **Am J Obstet Gynecol** 1989 Nov;161(5):1402–7

Clinical aspects of the relationship between oral contraceptives, abnormalities in carbohydrate metabolism, and the development of cardiovascular disease. Gaspard UJ, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):334–43 (62 ref.)

Low-dose oral contraceptives and carbohydrate metabolism. Godsland IF, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):348–53 (55 ref.)

Mechanism of action of oral contraceptives on carbohydrate metabolism at the cellular level. Skouby SO, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):343–8 (31 ref.)

Effect of Ca2(+)-channel agonists and antagonists on skeletal muscle sugar transport. Westfall MV, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):R462–8

Sugar-coated semiconductors [news] **Anal Chem** 1989 Oct 1;61(19):1077A

Introduction to the histochemical study of carbohydrate metabolism in the lymph vascular wall. Fruschelli C, et al. **Angiologica** 1967;4(5):279–94

Effects of calcium, ATP, and lipids on human erythrocyte sugar transport. Carruthers A, et al. **Ann N Y Acad Sci** 1989;568:52–67 (52 ref.)

Cell surface glycosylation patterns in psoriasis. Dabelsteen E, et al. **APMIS** 1990 Mar;98(3):221–8

Binding of bacteria to carbohydrates immobilized on beads to demonstrate the presence of cell-associated hemagglutinins in Vibrio cholerae. Sanchez J, et al. **APMIS** 1990 Apr;98(4):353–7

Carbohydrate-binding specificity of the daffodil (Narcissus pseudonarcissus) and amaryllis (Hippeastrum hybr.) bulb lectins. Kaku H, et al. **Arch Biochem Biophys** 1990 Jun; 279(2):298–304

Carbohydrate fermentation by gut microflora in preterm neonates. Walker V, et al. **Arch Dis Child** 1989 Oct;64(10 Spec No):1367–73

In vitro studies into some parameters of protein and carbohydrate metabolism in lymphocytes infected with bovine leucosis virus. Madej JA, et al. **Arch Exp Veterinarmed** 1989 Nov;43(6):923–7

Enzymic activities of carbohydrate, purine, and pyrimidine metabolism in the Anaeroplasmataceae (class Mollicutes). Petzel JP, et al. **Arch Microbiol** 1989;152(4):309–16

Effect of adrenalectomy on diazinon-induced changes in carbohydrate metabolism. Matin MA, et al. **Arch Toxicol** 1989;63(5):376–80

Carbohydrate metabolism on high dose growth hormone therapy in children treated for leukaemia. Crawford BA, et al. **Aust Paediatr J** 1989 Aug;25(4):236–40

Localization of carbohydrates in thick and ultrathin LR white-embedded tissue sections oxidized by acetic anhydride in dimethyl sulfoxide. Lo HK, et al. **Basic Appl Histochem** 1989;33(4):269–75

Hepatocytes mediate coenzyme A transfer to specific carbohydrate-derivatized surfaces. Weisz OA, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):67–73

Effect of deglycosylation of N-linked sugar chains on glucose oxidase from Aspergillus niger. Takegawa K, et al. **Biochem Cell Biol** 1989 Aug;67(8):460–4

Role of carbohydrate moieties in peanut (Arachis hypogaea) peroxidases. Hu CF, et al. **Biochem J** 1989 Oct 1; 263(1):129–35

The effects of amylin on carbohydrate metabolism in skeletal muscle in vitro and in vivo. Leighton B, et al. **Biochem J** 1990 Jul 1;269(1):19–23

Fuel selection and carbon flux during the starved-to-fed transition. Sugden MC, et al. **Biochem J** 1989 Oct 15; 263(2):313–23 (167 ref.)

Thyroid hormone analogue SKF L-94901: effects on amino acid and carbohydrate metabolism in rat skeletal muscle in vitro. Leighton B, et al. **Biochem Pharmacol** 1990 Sep 1;40(5):1161–4

Human splenic galaptin: carbohydrate-binding specificity and characterization of the combining site. Ahmed H, et al. **Biochemistry** 1990 Jun 5;29(22):5315–9

Location of the carbohydrates present in the HK-ATPase vesicles isolated from hog gastric mucosa. Hall K, et al. **Biochemistry** 1990 Jan 23;29(3):701–6

The role of carbohydrate moieties of cholecystokinin receptors in cholecystokinin octapeptide binding: alteration of binding data by specific lectins. Santer R, et al. **Biochim Biophys Acta** 1990 Jan 23;1051(1):78–83

Evidence for a sodium-dependent sugar transport in rat tracheal epithelium. Saumon G, et al. **Biochim Biophys Acta** 1990 Apr 30;1023(3):313–8

Determination of metabolite and nucleotide concentrations in proliferating lymphocytes by 1H-NMR of acid extracts. Sze DY, et al. **Biochim Biophys Acta** 1990 Sep 1; 1054(2):181–97

Phenylarsine oxide and the mechanism of insulin-stimulated sugar transport. Douen AG, et al. **Biofactors** 1990 Jul; 2(3):153–61 (97 ref.)

Glycosylation and processing of carbohydrate side chains of ecto-5'-nucleotidase in cultured human chorionic cells. Burgemeister R, et al. **Biol Chem Hoppe Seyler** 1990 Apr; 371(4):355–61

Modulation of the sympathetic nerve action on carbohydrate and ketone body metabolism by fatty acids, glucagon und insulin in perfused rat liver. Küster J, et al. **Biol Chem Hoppe Seyler** 1989 Sep;370(9):1035–44

Range of the influence of the carbohydrate moiety on the conformation of the poly(amino acid) backbone in glycosylated mucins. Tanpipat N, et al. **Biopolymers** 1990 Feb 5;29(2):377–83

Carbohydrate recognition systems in avian sinusoidal liver cells. Dini L, et al. **Biosci Rep** 1990 Feb;10(1):37–46

Flow cytometric analysis of cell surface carbohydrates in metastatic human breast cancer. Alam SM, et al. **Br J Cancer** 1990 Aug;62(2):238–42

Abnormalities of carbohydrate metabolism and of OCT gene function in the Rett syndrome. Clarke A, et al. **Brain Dev** 1990;12(1):119–24

The effect of reserpine and guanethidine on carbohydrate metabolism in ischaemic rat myocardium. Metz V, et al. **Cardiovasc Res** 1989 May;23(5):385–9

Alteration of cell surface carbohydrates associated with ordered and disordered proliferation of oral epithelia: a lectin histochemical study in oral leukoplakias, papillomas and carcinomas. Vigneswaran N, et al. **Cell Tissue Kinet** 1990 Jan;23(1):41–55

Mutual inhibition of sugars and amino acid intestinal absorption. Vinardell MP. **Comp Biochem Physiol [A]** 1990; 95(1):17–21 (59 ref.)

Comparison of two triphasic contraceptives with different progestogens: effects on metabolism and coagulation proteins. Ball MJ, et al. **Contraception** 1990 Apr; 41(4):363–76

The sugar moiety of bovine S-antigen. Shichi H, et al. **Curr Eye Res** 1990;9 Suppl:103–9

Comparison of clinical Acinetobacter strains using a carbon source growth assay. Dijkshoorn L, et al. **Epidemiol Infect** 1990 Jun;104(3):443–53

Altered carbohydrate, lipid, and xenobiotic metabolism by liver from rats flown on Cosmos 1887 [published erratum appears in FASEB J 1990 May;4(8):2539] Merrill AH Jr, et al. **FASEB J** 1990 Jan;4(1):95–100

Surface Listeria monocytogenes carbohydrate-binding components revealed by agglutination with neoglycoproteins. Cottin J, et al. **FEMS Microbiol Lett** 1990 Mar 15;56(3):301–5

The barrier function of the outer membrane of Pseudomonas maltophilia in the diffusion of saccharides and beta-lactam antibiotics. Yamazaki E, et al. **FEMS Microbiol Lett** 1989 Jul 1;51(1):85–8

The fermentation pathways of Escherichia coli. Clark DP. **FEMS Microbiol Rev** 1989 Sep;5(3):223–34 (97 ref.)

Molecular mechanisms of bacterial chemotaxis towards PTS-carbohydrates. Lengeler JW, et al. **FEMS Microbiol Rev** 1989 Jun;5(1–2):81–92 (32 ref.)

Regulation of sugar uptake and efflux in gram-positive bacteria. Reizer J. **FEMS Microbiol Rev** 1989 Jun; 5(1–2):149–56 (21 ref.)

Sialic acid, serendipity, and sugar transport: discovery of the bacterial phosphotransferase system. Roseman S. **FEMS Microbiol Rev** 1989 Jun;5(1–2):3–11

Bacitracin and a bacitracin-zinc complex damage DNA and carbohydrate in the presence of iron and copper salts. Quinlan GJ, et al. **Free Radic Res Commun** 1989;7(1):37–44

Interval sampling of end-expiratory hydrogen (H2) concentrations to quantify carbohydrate malabsorption by means of lactulose standards. Rumessen JJ, et al. **Gut** 1990 Jan;31(1):37–42

Effects of a tocolytic oxytocin analogue on lipid and carbohydrate metabolism. Eriksson H, et al. **Gynecol Obstet Invest** 1990;29(2):97–100

Effects of perinatal hypothyroidism in the carbohydrate composition of cochlear tectorial membrane. Gil-Loyzaga P, et al. **Hear Res** 1990 Apr;45(1–2):151–5

Detection and mapping of endogenous receptors for carrier-immobilized constituents of glycoconjugates (lectins) by labelled (neo)glycoproteins and by affinity chromatography in human adult mesencephalon, pons, medulla oblongata and cerebellum. Bardosi A, et al. **Histochemistry** 1990;94(3):285–91

Inhibition of basal insulin secretion induces insulin resistance in normal man: evidence for a tonic effect of insulin on

carbohydrate metabolism. Bertoli A, et al. **Horm Res** 1989; 31(5–6):238–43

Effect of corticosteroids on carbohydrate metabolism in Bufo melanostictus (Schneider). Pathak VK. **Indian J Exp Biol** 1989 Dec;27(12):1056–9

Inhibition of Streptococcus mutans by the antibiotic streptozotocin: mechanisms of uptake and the selection of carbohydrate-negative mutants. Jacobson GR, et al. **Infect Immun** 1990 Feb;58(2):543–9

Effects of epinephrine on glucose-1,6-bisphosphate and carbohydrate metabolism in skin. Bassukevitz Y, et al. **Int J Biochem** 1989;21(11):1229–34

Regulation of carbohydrate metabolism by glucose 1,6-bisphosphate in extrahepatic tissues; comparison with fructose 2,6-bisphosphate. Beitner R. **Int J Biochem** 1990; 22(6):553–7 (48 ref.)

Analysis of cell-surface sugar receptor expression by neoglycoenzyme binding and adhesion to plastic-immobilized neoglycoproteins for related weakly and strongly metastatic cell lines of murine tumor model systems. Gabius S, et al. **Int J Cancer** 1990 Sep 15; 46(3):500–7

The metabolic effects of diuretics and other antihypertensive drugs: a perspective as of 1989. Raftery EB. **Int J Cardiol** 1990 Aug;28(2):143–50 (62 ref.)

Metabolic aspects of the new low-dose oral contraceptives. Chez RA. **Int J Fertil** 1989 Sep;34 Suppl:50–4 (34 ref.)

Utilization of sugars by Lactobacillus acidophilus strains. Srinivas D, et al. **Int J Food Microbiol** 1990 Jan;10(1):51–7

Carbohydrate metabolism in skeletal muscle: an update of current concepts. Bonen A, et al. **Int J Sports Med** 1989 Dec;10(6):385–401 (129 ref.)

Recent advances in carbohydrate nutrition and metabolism in diabetes mellitus. Anderson JW. **J Am Coll Nutr** 1989; 8 Suppl:61S–67S (76 ref.)

Ionophores alter hepatic concentrations of intermediary carbohydrate metabolites in steers. Benz DA, et al. **J Anim Sci** 1989 Sep;67(9):2393–9

Effect of different carbohydrates on growth, polysaccharidase and glycosidase production by Bacteroides ovatus, in batch and continuous culture. Macfarlane GT, et al. **J Appl Bacteriol** 1990 Feb; 68(2):179–87

Carbohydrate utilization in Streptococcus thermophilus: characterization of the genes for aldose 1-epimerase (mutarotase) and UDPglucose 4-epimerase. Poolman B, et al. **J Bacteriol** 1990 Jul;172(7):4037–47

Recognition of borderline carbohydrate-lipid metabolism disturbance: an incipient form of type IV hyperlipoproteinemia? Bassett DR, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 5:S8–17

Role of abnormalities of carbohydrate and lipoprotein metabolism in the pathogenesis and clinical course of hypertension. Reaven GM. **J Cardiovasc Pharmacol** 1990; 15 Suppl 5:S4–7 (40 ref.)

Carbohydrate and energy metabolism during the evolution of hypoxic–ischemic brain damage in the immature rat. Palmer C, et al. **J Cereb Blood Flow Metab** 1990 Mar; 10(2):227–35

Role of the splanchnic tissues in the pathogenesis of altered carbohydrate metabolism in patients with chronic renal failure. Capaldo B, et al. **J Clin Endocrinol Metab** 1990 Jan;70(1):127–33

Fermentation of carbohydrates under aerobic and anaerobic conditions by intestinal microflora from infants. Ross LF, et al. **J Clin Microbiol** 1989 Nov;27(11):2529–34

Sugar and amino acid transport properties of the chicken ceca. Moretó M, et al. **J Exp Zool Suppl** 1989;3:111–6 (20 ref.)

Interspecific variation in sugar and amino acid transport by the avian cecum. Obst BS, et al. **J Exp Zool Suppl** 1989; 3:117–26

Large enhancement of canine taste responses to sugars by salts. Kumazawa T, et al. **J Gen Physiol** 1990 May; 95(5):1007–18

Analysis of carbohydrate properties essential for melanogenesis in tyrosinases of cultured malignant melanoma cells by differential carbohydrate processing inhibition. Imokawa G. **J Invest Dermatol** 1990 Jul; 95(1):39–49

Membrane potentials and the mechanism of intestinal Na(+)-dependent sugar transport. Kimmich GA. **J Membr Biol** 1990 Mar;114(1):1–27 (137 ref.)

Maltooligosaccharide composition of flours, weaning foods, and gruels prepared from germinated rice, corn, mungbean, and cowpea. Marero LM, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Feb;36(1):55–64

Changing surface carbohydrate configurations during the growth of Leishmania major. Jacobson RL, et al. **J Parasitol** 1990 Apr;76(2):218–24

Colonic fermentation of carbohydrate in the premature infant: possible relevance to necrotizing enterocolitis. Kien CL. **J Pediatr** 1990 Jul;117(1 Pt 2):S52–8 (65 ref.)

Carbohydrate malabsorption in children. Quak SH. **J Singapore Paediatr Soc** 1989;31(3–4):157–61 (7 ref.)

Ultrastructural comparative distribution of carbohydrates in human tracheal and frog palate mucosa using neuraminidase and lectin-colloidal gold complexes. Plotkowski MC, et al. **J Submicrosc Cytol Pathol** 1990 Jan; 22(1):79–90

A comparison of different carbohydrates as substrates for the isolated working heart. Mahoney JR Jr, et al. **J Surg Res** 1989 Dec;47(6):530–4

Alterations in carbohydrate metabolism in canine lymphoma. Vail DM, et al. **J Vet Intern Med** 1990 Jan–Feb;4(1):8–11

Insulin secretion and carbohydrate tolerance in childhood obesity. Molnár D. **Klin Padiatr** 1990 May–Jun; 202(3):131–5 (34 ref.)

Galactose clearance and carbohydrate metabolism across the gastrointestinal tract in the newborn lamb. Kaempf JW, et al. **Metabolism** 1990 Jul;39(7):698–703

Dose-response effects of dietary marine oil on carbohydrate and lipid metabolism in normal subjects and patients with hypertriglyceridemia. Stacpoole PW, et al. **Metabolism** 1989 Oct;38(10):946–56

Sugar transport in normal and mutant yeast cells. Cirillo VP. **Methods Enzymol** 1989;174:617–22 (23 ref.)

Carbohydrate receptor binding using colloidal gold. Kolb-Bachofen V. **Methods Enzymol** 1989;179:111–21

Metabolic adaptation of the renal carbohydrate metabolism. III. Effects of high protein diet on the gluconeogenic and glycolytic fluxes in the proximal and distal renal tubules. García-Salguero L, et al. **Mol Cell Biochem** 1989 Oct 31; 90(2):99–110

Carbohydrate utilization in exercising muscle in subtotally nephrectomized rabbits. Parrish A, et al. **Nephron** 1990; 55(2):187–92

Carbohydrate metabolism of the rat C6 glioma. An in vivo 13C and in vitro 1H magnetic resonance spectroscopy study. Ross BD, et al. **NMR Biomed** 1988 Feb;1(1):20–6

Carbohydrate metabolism in uremia. Mak RH. **Pediatr Nephrol** 1989 Apr;3(2):201–8 (68 ref.)

Characterization of carbohydrate fermentation in feces of formula-fed and breast-fed infants. Lifschitz CH, et al. **Pediatr Res** 1990 Feb;27(2):165–9

Somatostatin and its analogue (D-Trp8,D-Cys14)-somatostatin do not modify intestinal absorption in vivo of carbohydrates in hamster intestine, but they do modify some disaccharidases. Martínez-Sapiña J, et al. **Q J Exp Physiol** 1989 Nov;74(6):851–6

Increased muscle and liver carbohydrates during hemorrhagic shock in the nutria. Abou-Samra S, et al. **Surg Forum** 1978;29:46–9

Effects of low temperature on the respiratory metabolism of carbohydrates by plants. ap Rees T, et al. **Symp Soc Exp Biol** 1988;42:377–93

Effect of cyclosporin A, azathioprine, and prednisolone on carbohydrate metabolism of rat hepatocytes. Riegel W, et al. **Transpl Int** 1990 May;3(1):2–7

Effect of thiabendazole and fenbendazole on glucose uptake and carbohydrate metabolism in Trichuris globulosa. Jasra N, et al. **Vet Parasitol** 1990 Mar;35(3):201–9

Effect of VIP on sugar transport in rabbit small intestine in vitro. Arruebo MP, et al. **Zentralbl Veterinarmed [A]** 1990 Mar;37(2):123–9

[Histochemical study of carbohydrate residues in human aortic atherosclerotic lesions by application of lectins] Zheng M, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1990 Mar;19(1):19–21 (Eng. Abstr.) **(Chi)**

[The significance of cell surface carbohydrates in the pathogenesis of bacterial infection] Finne J. **Duodecim** 1989; 105(21):1695–9 (23 ref.) **(Fin)**

[In vitro study of the metabolism of carbohydrates in circulating leukocytes in guinea pigs treated with cortisone] Antonioli JA, et al. **Acta Endocrinol (Copenh)** 1966 Feb; 51(2):193–202 (Eng. Abstr.) **(Fre)**

[The effect of cadmium poisoning on glucose transformation in skeletal muscles] Jethon Z, et al. **Arch Exp Veterinarmed** 1989;43(4):505–10 (Eng. Abstr.) **(Ger)**

[Eperythrozoon infection in swine: effect on the acid–base balance and the glucose, lactate and pyruvate content of venous blood] Heinritzi K, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Jan;97(1):31–4 (Eng. Abstr.) **(Ger)**

[Comparison of guar gum, wheat bran and placebo on carbohydrate and lipid metabolism in type II diabetics] Stahl M, et al. **Schweiz Med Wochenschr** 1990 Mar 24; 120(12):402–8 (27 ref.) (Eng. Abstr.) **(Ger)**

[The acid–base equilibrium and carbohydrate metabolism during infection with Eperythrozoon suis] Heinritzi K, et al. **Zentralbl Veterinarmed [B]** 1990 Aug;37(6):412–7 (Eng. Abstr.) **(Ger)**

[Effects of low-dose oral contraceptives on sugar metabolism] Miccoli R, et al. **Minerva Ginecol** 1989 Sep; 41(9):441–4 (Eng. Abstr.) **(Ita)**

[Acid–base balance and carbohydrate metabolism after palatoplasty in children with cleft palate] Takuma C. **Fukuoka Igaku Zasshi** 1990 Mar;81(3):135–44 (Eng. Abstr.) **(Jpn)**

[Comparison of effects on carbohydrate metabolism of hypotension induced by sodium nitroprusside and a nitroprusside–trimetaphan mixture in rabbits] Takeda S, et al. **Masui** 1989 Dec;38(12):1605–11 (Eng. Abstr.) **(Jpn)**

[Various factors related to carbohydrate metabolism. Thyroid hormone] Harakawa S, et al. **Nippon Rinsho** 1989 Nov; 47(11):2431–5 **(Jpn)**

[Various factors related to carbohydrate metabolism. Biogenic amines] Kitakaze Y, et al. **Nippon Rinsho** 1989 Nov;47(11):2420–4 **(Jpn)**

[Various factors related to carbohydrate metabolism. Gastro-entero-pancreatic hormones] Matsuda M, et al. **Nippon Rinsho** 1989 Nov;47(11):2415–9 **(Jpn)**

[Various factors related to carbohydrate metabolism. Growth hormone] Saito S, et al. **Nippon Rinsho** 1989 Nov; 47(11):2436–43 **(Jpn)**

[Effects of glucocorticoids on carbohydrate metabolism] Yasuda K, et al. **Nippon Rinsho** 1989 Nov;47(11):2425–30 **(Jpn)**

[Effects of betaxolol, a cardioselective beta-adrenoceptor antagonist, on ischemic myocardial energy and carbohydrate metabolism in dogs] Abe Y, et al. **Nippon Yakurigaku Zasshi** 1990 Jun;95(6):319–25 (Eng. Abstr.) **(Jpn)**

[The effect of condition of oxidation of the carbohydrate component of peroxidase on the composition and properties of insulin–peroxidase conjugate] Dikova EB, et al. **Bioorg Khim** 1990 Apr;16(4):476–81 (Eng. Abstr.) **(Rus)**

[Reaction of specific cell populations of hypothalamic paraventricular nuclei of the rat to carbohydrate loading and fasting] Gorbatiuk OS, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):105–7 (Eng. Abstr.) **(Rus)**

[Study of the carbohydrate components of the surface of S 1300 neuroblastoma cells with the use of cytochemical and lectin agglutination methods] Tsegel'skiĭ AA, et al. **Eksp Onkol** 1989;11(5):30–4 (Eng. Abstr.) **(Rus)**

[Effect of fenicoberan on parameters of carbohydrate metabolism and electrolyte levels in blood vessel tissue] Puchkova VA, et al. **Farmakol Toksikol** 1989 Jul–Aug; 52(4):30–3 (Eng. Abstr.) **(Rus)**

[The pentosephosphate pathway of carbohydrate metabolism in evaluating the pharmacologic correction of immuno-inflammatory processes in systemic connective tissue diseases] Shishkin VI, et al. **Farmakol Toksikol** 1989 May–Jun;52(3):73–7 (Eng. Abstr.) **(Rus)**

[The effect of copper on the metabolism of iodine, carbohydrates and proteins in rats] Esipenko BE, et al. **Fiziol Zh** 1990 Mar–Apr;36(2):35–43 (Eng. Abstr.) **(Rus)**

[Iodine, carbohydrate and protein metabolism in rats receiving insufficient amount of iodine in the feed] Esipenko BE, et al. **Fiziol Zh** 1990 Jan–Feb;36(1):42–50 (Eng. Abstr.) **(Rus)**

[Iodine, carbohydrate and protein metabolism in rats with cobalt deficiency] Marsakova NV, et al. **Fiziol Zh** 1990 Mar–Apr;36(2):43–50 (Eng. Abstr.) **(Rus)**

[Iodine, carbohydrate and protein metabolism in rats with iodine, copper and cobalt deficiency] Marsakova NV, et al. **Fiziol Zh** 1990 Jan–Feb;36(1):51–9 (Eng. Abstr.) **(Rus)**

[Current theories on the mechanism of the effect of glucagon on carbohydrate metabolism] Pavliuk PM. **Fiziol Zh** 1990 Jan–Feb;36(1):113–21 (66 ref.) (Eng. Abstr.) **(Rus)**

[Characteristics of the oxidation of the intermediates of carbohydrate and fat metabolism in the liver mitochondria of young rabbits during perinatal development] Makhmudov ES, et al. **Ontogenez** 1989 Jul–Aug; 20(4):439–43 (Eng. Abstr.) **(Rus)**

[Pathogenesis of arthrosis deformans of the knee joint] Pliatsko VV, et al. **Ortop Travmatol Protez** 1990 Mar; (3):45–9 (Eng. Abstr.) **(Rus)**

[Glycolysis activation, a decrease in the glycogen reserve and the absence of glucocorticoid control over the enzymes of carbohydrate metabolism in the liver of rats under prolonged hypokinetic stress] Kuznetsov VI, et al. **Patol Fiziol Eksp Ter** 1989 Jul–Aug;(4):56–9 (Eng. Abstr.) **(Rus)**

[Mechanisms of action of ethanol on carbohydrate–energy metabolism in the brain] Panchenko LF, et al. **Patol Fiziol Eksp Ter** 1989 May–Jun;(3):83–8 (53 ref.) **(Rus)**

[State of insulin receptors and carbohydrate metabolism in children with diabetes mellitus] Vakhrusheva LL, et al. **Pediatriia** 1989;(11):16–8 (Eng. Abstr.) **(Rus)**

[Daily dynamics of indicators of carbohydrate metabolism in rat tissue after irradiation at various times of the day] Alersova E, et al. **Probl Kosm Biol** 1989;64:163–73 **(Rus)**

[Identification of Mycobacteria species by liquid–gas chromatography] Pinchuk LM, et al. **Probl Tuberk** 1990; (3):36–41 (Eng. Abstr.) **(Rus)**

[Carbohydrate–energy metabolism of periodontal bony tissue in the artificial modelling of traumatic occlusion] Shvarts VV. **Stomatologiia (Mosk)** 1990 Jan–Feb;69(1):17–9 (Eng. Abstr.) **(Rus)**

[Carbohydrate metabolism in patients with chronic pyoderma and its dynamics during therapy using sugar-decreasing preparations] Bukharovich AM. **Vestn Dermatol Venerol** 1989;(6):14–7 (Eng. Abstr.) **(Rus)**

[Various defense factors of gastroduodenal mucosa in different time periods after suturing ulcer perforation] Murav'eva LA, et al. **Vopr Med Khim** 1989 Nov–Dec; 35(6):20–3 (Eng. Abstr.) **(Rus)**

[The effect of malnutrition during milk feeding on the enzyme activity of the initial and final stages of carbohydrate hydrolysis in the small intestine of growing rats] Sadykov BA, et al. **Vopr Pitan** 1990 Mar–Apr;(2):65–9 (Eng. Abstr.) **(Rus)**

[The effect of starvation during an early postnatal period on carbohydrate metabolism in the swine brain] Snitynʹkyĭ VV. **Ukr Biokhim Zh** 1990 Jan–Feb;62(1):55–9 (Eng. Abstr.) **(Ukr)**

PHARMACOKINETICS

Carbohydrate uptake in the oral pathogen Streptococcus mutans: mechanisms and regulation by protein phosphorylation. Jacobson GR, et al. **Biochimie** 1989

Sep-Oct;71(9-10):997-1004 (50 ref.)
Binding-protein-dependent sugar transport by Agrobacterium radiobacter and A. tumefaciens grown in continuous culture. Cornish A, et al. **J Gen Microbiol** 1989 Nov;135 (Pt 11):3001-13
Intestinal permeability to inert sugars and different-sized polyethyleneglycols in children with celiac disease. Stenhammar L, et al. **J Pediatr Gastroenterol Nutr** 1989 Oct;9(3):281-9
Fetal rabbit intestinal absorption: implications for transamniotic fetal feeding. Phillips JD, et al. **J Pediatr Surg** 1990 Aug;25(8):909-13
Disorders of carbohydrate absorption in clinical practice. Montes RG, et al. **Md Med J** 1990 Apr;39(4):383-8
Sugar and amino acid intestinal transport systems in land snail Helix aspersa. Barber A, et al. **Rev Esp Fisiol** 1989; 45 Suppl:215-23
Inhibition of sugar and amino acid transport across rat jejunum by cadmium, copper and mercury. Rodríguez-Yoldi MJ, et al. **Rev Esp Fisiol** 1989;45 Suppl:207-14

PHARMACOLOGY

Diet-induced changes in subcutaneous adipose tissue blood flow in man: effect of beta-adrenoceptor inhibition. Simonsen L, et al. **Acta Physiol Scand** 1990 Jun; 139(2):341-6
Effect of some sugars on the growth and differentiation of MCF-7 cells: I. Detection of glycosylative changes using lectin histochemistry. Kolář Z, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;122:113-20
Carbohydrates inhibit the potentiating effect of bacteria, endotoxin and virus on basophil histamine release. Norn S, et al. **Agents Actions** 1990 Apr;30(1-2):53-6
Effect of sugars on the phase behaviour of phospholipid model membranes. Quinn PJ. **Biochem Soc Trans** 1989 Dec; 17(6):953-7 (31 ref.)
Protection by sugars against phase transition-induced leak in hydrated dimyristoylphosphatidylcholine liposomes. Fabrie CH, et al. **Biochim Biophys Acta** 1990 May 24; 1024(2):380-4
Antagonistic and agonistic properties of saccharide moieties in the hemizona assay. Oehninger S, et al. **Fertil Steril** 1990 Jan;53(1):143-9
Influence of some carbohydrates and concanavalin A on the adherence of Candida albicans in vitro to buccal epithelial cells. Macura AB, et al. **Int J Med Microbiol** 1989 Dec; 272(2):196-201
Dietary effects on cardiac metabolic properties in rodents. Haddad F, et al. **J Mol Cell Cardiol** 1990 Mar;22(3):353-9
Stimulation of gastric inhibitory polypeptide release in ob/ob mice by oral administration of sugars and their analogues. Flatt PR, et al. **J Nutr** 1989 Sep;119(9):1300-3
Effectiveness of sodium sugar sulfates on acute toxicity of paraquat in mice. Tsuchiya T, et al. **J Pharmacobiodyn** 1989 Aug;12(8):456-60
Involvement of a carbohydrate group in the active site for surface guided reassociation of animal cells. Turner RS, et al. **Nature** 1973 Aug 24;244(5417):509-10
Effect of a simultaneous potassium and carbohydrate load on extrarenal K homeostasis in end-stage renal failure. Alvo M, et al. **Nephron** 1989;53(2):133-7
Sugars induce the Agrobacterium virulence genes through a periplasmic binding protein and a transmembrane signal protein. Cangelosi GA, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6708-12
Modification of membrane protein expression and protein secretion in LLC-PK1 cultures grown on different carbohydrates. Frick H, et al. **Renal Physiol Biochem** 1989 Sep-Dec;12(5-6):393-9
[Effect of carbohydrates on possible utilization of wastes from antibiotic-manufacturing plants in the construction industry] Tarakanov OV, et al. **Antibiot Khimioter** 1989 Aug;34(8):606-9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Carbohydrate recognition in cellular function. **Ciba Found Symp** 1989;145:1-294
N-linked oligosaccharides are not required for hormone binding of the lutropin receptor in a Leydig tumor cell line and rat granulosa cells. Ji IH, et al. **Endocrinology** 1990 Jul;127(1):494-6
The role of carbohydrate in recombinant human erythropoietin. Tsuda E, et al. **Eur J Biochem** 1990 Mar 10;188(2):405-11
Role of cell surface carbohydrate moieties in monocytic cell adhesion to endothelium in vitro. DiCorleto PE, et al. **J Immunol** 1989 Dec 1;143(11):3666-72
Inhibition of processing of asparagine-linked carbohydrate chains on IgG2a by using swainsonine has no influence upon antibody effector functions in vitro. Nose M, et al. **J Immunol** 1990 Aug 1;145(3):910-4
Carbohydrates and fertilization in animals. Miller DJ, et al. **Mol Reprod Dev** 1990 Jun;26(2):184-98 (107 ref.)
Why do sugars taste good? Ramirez I. **Neurosci Biobehav Rev** 1990 Summer;14(2):125-34
Critical role of the carbohydrate moiety in human von Willebrand factor protein for interactions with type I collagen. Kessler CM, et al. **Thromb Res** 1990 Jan 1; 57(1):59-76

RADIATION EFFECTS

Effects of irradiation and tunicamycin on the surface glycoproteins of Schistosoma mansoni. Kusel JR, et al. **Mem Inst Oswaldo Cruz** 1989 Oct;84 Suppl 1:199-208

THERAPEUTIC USE

Salmonella, Shigella and sugar [letter] Fulton JD, et al. **Br J Surg** 1990 May;77(5):593
[Topical treatment using granulated sugar in advanced mediastinitis following open heart surgery] Szerafin T, et al. **Orv Hetil** 1990 Apr 1;131(13):691-5 (33 ref.) (Eng. Abstr.) **(Hun)**

TOXICITY

Chromosome aberrations induced by pyrolysates of carbohydrates in Chinese hamster V79 cells. Nishi Y, et al. **Mutat Res** 1989 Oct;227(2):117-23

URINE

Melituria in muscular dystrophy. Piccardo MG, et al. **Riv Eur Sci Med Farmacol** 1988 Nov;10(5):393-6

CARBOLINES

3-(1-Methyl-1,2,3,6-tetrahydropyrid-4-yl)indole. Bates RB, et al. **Acta Crystallogr C** 1989 Jan 15;45 (Pt 1):109-11
Synthesis and characterization of novel biologically active platinum(II) and palladium(II) complexes of some beta-carboline alkaloids. Al-Alaf TA, et al. **J Inorg Biochem** 1990 Jan;38(1):47-56
[Present and future of carcinogenic tryptophan pyrolysis products in the environment] Manabe S, et al. **Nippon Eiseigaku Zasshi** 1989 Oct;44(4):821-30 (42 ref.) (Eng. Abstr.) **(Jpn)**

ANALYSIS

Identification of carcinogenic tryptophan pyrolysis products in human bile by high-performance liquid chromatography. Manabe S, et al. **Environ Mol Mutagen** 1990;15(4):229-35

ANTAGONISTS & INHIBITORS

Inhibition of the genotoxicity of 3-amino-1-methyl-5H-pyrido[4,3-b]indole (Trp-P-2) in Drosophila by chlorophyll. Negishi T, et al. **Basic Life Sci** 1990;52:341-4
Riluzole antagonizes the anxiogenic properties of the beta-carboline FG 7142 in rats. Stutzmann JM, et al. **Psychopharmacology (Berl)** 1989;99(4):515-9
Conditioned place aversion produced by FG 7142 is attenuated by haloperidol. Di Scala G, et al. **Psychopharmacology (Berlin)** 1989;99(2):176-80

BLOOD

Automated high-performance liquid chromatographic assay for the beta-carboline derivative Abecarnil in plasma. Krause W, et al. **J Chromatogr** 1989 Oct 27;495:324-9
Thin-layer chromatographic determination of 3H-labelled stobadin in rat plasma for pharmacokinetic purposes. Bittererová J, et al. **Pharmazie** 1990 Jun;45(6):437-8
Plasma protein binding of a novel cardioprotective drug, stobadin. Koprda V, et al. **Pharmazie** 1989 Dec;44(12):869

CHEMICAL SYNTHESIS

Synthetic and computer-assisted analyses of the pharmacophore for the benzodiazepine receptor inverse agonist site. Allen MS, et al. **J Med Chem** 1990 Sep; 33(9):2343-57
N-aminoalkylderivatives of 1,2,3,4-tetrahydro-beta-carboline-1-spiro-4'-N'-benzylpiperidine--a putative way to novel anxiolytic agents. Bartyzel P, et al. **Pol J Pharmacol Pharm** 1989 Sep-Oct;41(5):495-504
[Esters of beta-carboline-3-carboxylic acids with alicyclic alcohols--synthesis and benzodiazepine receptor affinity] Geldsetzer KH, et al. **Arch Pharm (Weinheim)** 1990 Jan; 323(1):9-12 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

First use of a beta-carboline as photoaffinity label for the benzodiazepine receptor. Dellouve-Courillon C, et al. **Eur J Pharmacol** 1989 Aug 3;166(3):557-62

ISOLATION & PURIFICATION

Separation and determination of 8beta-hydroxyasterolid and perlolyrine in Codonopsis pilosula by reversed-phase high-performance liquid chromatography. Tun L, et al. **J Chromatogr** 1989 Aug 30;477(2):458-62

METABOLISM

Electrostatic requirements for high benzodiazepine receptor affinity among betacarboline-3-carboxylic acid derivatives. Gynther J, et al. **Acta Pharm Nord** 1990;2(1):45-52
Non-benzodiazepine, Ag-dependent, brain-specific binding sites for [3H]beta-carboline-3-carboxylic acid ethyl ester. Korneyev AYa, et al. **Eur J Pharmacol** 1989 Dec 7; 173(2-3):201-5
[Benzodiazepine receptor in the central nervous system and its natural and synthetic agonists and antagonists. Clinical uses] Feldman R. **Pol Arch Med Wewn** 1988 May; 79(5):283-7 (26 ref.) **(Pol)**

PHARMACOKINETICS

Pharmacokinetics of the anxiolytic beta-carboline derivative abecarnil in the mouse, rat, rabbit, dog, cynomolgus monkey and baboon. Studies on species differences. Krause W, et al. **Arzneimittelforschung** 1990 May;40(5):522-9
Pharmacokinetics and acute toleration of the beta-carboline derivative abecarnil in man. Krause W, et al. **Arzneimittelforschung** 1990 May;40(5):529-32
Developmental changes in hepatic activation of dietary mutagens by mice. Brennan-Craddock WE, et al. **Chem Biol Interact** 1989;71(4):367-79

PHARMACOLOGY

The behavioural effects of benzodiazepine receptor ligands in mice are inhibited by adamantylamide dipeptide. Sulcová A, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):293-4
The action of stress and anxiolytic and anxiogenic benzodiazepine receptors ligands on [35S] T-butylbicyclophosphorothionate binding in the rat cerebral cortex. Concas A, et al. **Ann Ist Super Sanita** 1990; 26(1):19-24
Stimulation by gamma-carboline derivatives (simplified analogues of antitumor ellipticines) of site specific DNA cleavage by calf DNA topoisomerase II. Fossé P, et al. **Biochem Pharmacol** 1990 Feb 15;39(4):669-76
Augmentation of GABAA receptor function by chronic exposure to GABA-neutral and GABA-negative benzodiazepine ligands in cultured cortical neurons. Miller LG, et al. **Biochem Pharmacol** 1990 Sep 15;40(6):1337-44
Are changes in glutamatergic mechanisms responsible for kindling to the benzodiazepine receptor inverse agonist, FG 7142? Stephens DN, et al. **Br J Pharmacol** 1989 Dec; 98 Suppl:837P
Dopamine uptake inhibitory capacities of beta-carboline and 3,4-dihydro-beta-carboline analogs of N-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) oxidation products. Drucker G, et al. **Brain Res** 1990 Feb 12;509(1):125-33
Stressor-like effects of FG-7142 on medial prefrontal cortex self-stimulation. McGregor IS, et al. **Brain Res** 1990 May 14;516(1):170-4
Effects of dietary and intraperitoneally administered beta-naphthoflavone on mutagenicity and tissue distribution of Trp-P-1 in the rat. Lindeskog P, et al. **Carcinogenesis** 1990 Jun;11(6):915-9
Suppression of GABA-induced chloride current by 3-amino-1-methyl-5H-pyrido[4,3-b]indole (Trp-P-2). Kanai Y, et al. **Eur J Pharmacol** 1989 Aug 3;166(3):553-6
Elevations of local cerebral glucose utilization by the beta-carboline ZK 93426. Sarter M. **Eur J Pharmacol** 1990 Feb 27;177(3):155-62
Structural requirements for agonist actions at the benzodiazepine receptor: studies with analogues of 6-(benzyloxy)-4-(methoxymethyl)-beta-carboline-3-carboxylic acid ethyl ester. Hollinshead SP, et al. **J Med Chem** 1990 Mar;33(3):1062-9
Differential effects of forced locomotion, tail-pinch, immobilization, and methyl-beta-carboline carboxylate on extracellular 3,4-dihydroxyphenylacetic acid levels in the rat striatum, nucleus accumbens, and prefrontal cortex: an in vivo voltammetric study. Bertolucci-D'Angio M, et al. **J Neurochem** 1990 Oct;55(4):1208-15
Benzodiazepine agonist and inverse agonist actions on GABAA receptor-operated chloride channels. I. Acute effects of ethanol. Buck KJ, et al. **J Pharmacol Exp Ther** 1990 May;253(2):706-12
Benzodiazepine agonist and inverse agonist actions on GABAA receptor-operated chloride channels. II. Chronic effects of ethanol. Buck KJ, et al. **J Pharmacol Exp Ther** 1990 May;253(2):713-9
Antihypertensive effects of CGS 19281A, an inhibitor of phenylethanolamine-N-methyltransferase. Chatelain RE, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):117-25
Abecarnil, a metabolically stable, anxioselective beta-carboline acting at benzodiazepine receptors. Stephens DN, et al. **J Pharmacol Exp Ther** 1990 Apr; 253(1):334-43
Functional modulation of cerebral gamma-aminobutyric acidA receptor/benzodiazepine receptor/chloride ion channel complex with ethyl beta-carboline-3-carboxylate: presence of independent binding site for ethyl beta-carboline-3-carboxylate. Taguchi J, et al. **J Pharmacol Exp Ther** 1990 May;253(2):558-66
Modulation of mesoprefrontal dopamine neurons by central benzodiazepine receptors. I. Pharmacological characterization. Tam SY, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):989-96
Anticonvulsant action of the beta-carboline abecarnil: studies in rodents and baboon, Papio papio. Turski L, et al. **J Pharmacol Exp Ther** 1990 Apr;253(1):344-52
beta-CCM inhibits muricide induced by olfactory bulbectomy in rats. Nagatani T, et al. **Jpn J Pharmacol** 1990 Mar;52(3):441-7
Tolerance to diazepam and methyl-beta-carboline-3-carboxylate measured in substantia nigra of benzodiazepine tolerant rats. Rosenberg HC, et al. **Life Sci** 1990;46(7):519-25
Evidence for an excitatory action of the benzodiazepine

receptor inverse agonist FG 7142 on C-fibre afferents. Donnerer J. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Sep;340(3):352–4

The regulation of high-affinity choline uptake in vitro in rat cortical and hippocampal synaptosomes by beta-carbolines administered in vivo. Miller JA, et al. **Neurosci Lett** 1990 Jul 13;114(3):351–5

beta-Carboline-induced seizures in mice: genetic analysis. Desforges C, et al. **Pharmacol Biochem Behav** 1989 Dec; 34(4):733–7

EEG effects of Ro 15-4513 and FG 7142 alone and in combination with ethanol. Ehlers CL, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):607–11

Pharmacological manipulation of anxiety and male rat sexual behavior. Fernández-Guasti A, et al. **Pharmacol Biochem Behav** 1990 Jan;35(1):263–7

Ibotenic acid lesions of the medial prefrontal cortex potentiate FG-7142-induced attenuation of exploratory activity in the rat. Jaskiw GE, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):695–7

Behavioral effects induced by beta CCE in free or restrained rhesus monkeys (Macaca mulatta). Lagarde D, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):713–9

Diazepam sensitizes mice to FG 7142 and reduces muscimol-stimulated 36Cl- flux. Lewin E, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):465–8

Inhibition of sleep and benzodiazepine receptor binding by a beta-carboline derivative. Martin JV, et al. **Pharmacol Biochem Behav** 1989 Sep;34(1):37–42

Methyl beta-carboline-3-carboxylate enhances performance in a multiple-trial learning task in mice. Raffalli-Sebille MJ, et al. **Pharmacol Biochem Behav** 1990 Feb;35(2):281–4

Antagonism of ethanol-reinforced behavior by the benzodiazepine inverse agonists Ro15-4513 and FG 7142: relation to sucrose reinforcement. Samson HH, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):601–8

Effects of two benzodiazepine inverse agonists, RO 15-4513 and FG 7142, on recovery from pentobarbital and halothane anesthesia in the rat. Weinger MB, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):889–95

Effect of stobadine and vitamin E on the ischemic reperfused brain tissue. Horáková L, et al. **Pharmazie** 1990 Mar; 45(3):223–4

Antiserotonin activity of 9-methyl-2-[3-(4-phenyl-1-piperazinylpropyl)]-1,2,3,4-tetrahydro -beta-carbolin-1-one (B-193). Wiczyńska B, et al. **Pol J Pharmacol Pharm** 1989 Mar-Apr;41(2):169–81

Antidepressant profile of 9-methyl-2[-3-(4-phenyl-1-piperazinylpropyl)]-1,2,3,4-tetrahydro-beta- carbolin-1-one (B-193). Wiczyńska B, et al. **Pol J Pharmacol Pharm** 1989 Jul-Aug;41(4):331–44

Behavioral neurobiology of inverse agonist FG 7142 induced anxiety syndrome in rats. Shanbhogue R, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(2):249–60

Effects of benzodiazepine agonist, inverse agonist and antagonist drugs in the mouse staircase test. Emmanouil DE, et al. **Psychopharmacology (Berl)** 1990;102(1):95–7

Effects of midazolam, DMCM and lindane on potentiated startle in the rat. Hijzen TH, et al. **Psychopharmacology (Berl)** 1989;99(3):362–5

[Effect of carbidine on parameters of ethanol oxidation in experimental alcoholic intoxication] Gurtovenko VM, et al. **Farmakol Toksikol** 1989 May-Jun;52(3):83–6 (Eng. Abstr.) **(Rus)**

[The effect of pyrazidol and inkazan on the rotation behavior of rats] Mashkovskiĭ MD, et al. **Farmakol Toksikol** 1989 Nov-Dec;52(6):29–32 (Eng. Abstr.) **(Rus)**

[A pharmacological analysis of the anxiolytic action of derivations of benzodiazepine, GABA and beta-carboline in various tests of tension reaction] Talalaenko AN. **Farmakol Toksikol** 1989 Nov-Dec;52(6):26–9 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Inhibition of photosensitive seizures in man by the beta-carboline, ZK 95962, a selective benzodiazepine receptor agonist. Møller A, et al. **Epilepsy Res** 1990 Mar; 5(2):155–9

[The anti-allergic activity and mechanism of action of gamma-carboline derivatives] Kiseleva EE, et al. **Farmakol Toksikol** 1990 May-Jun;53(3):22–4 (Eng. Abstr.) **(Rus)**

TOXICITY

Upper motor neurone effects in sheep of some beta-carboline alkaloids identified in zygophyllaceous plants. Bourke CA, et al. **Aust Vet J** 1990 Jul;67(7):248–51

Adverse effects on rat cardiac function ex vivo after repeated administration of the benzodiazepine partial inverse agonist, FG7142. Stanford SC, et al. **Br J Pharmacol** 1990 Mar; 99(3):441–4

Mutational specificity of the carcinogen 3-amino-1-methyl-5H-pyrido[4,3-b]-indole in mammalian cells. Akagi T, et al. **Carcinogenesis** 1990 May;11(5):841–6

Antagonism of gamma-aminobutyric acidA receptor-mediated responses by amino-gamma-carbolines. Kanai Y, et al. **J Pharmacol Exp Ther** 1990 Mar; 252(3):1269–76

Dietary fat modifies the in vivo mutagenicity of some food-borne carcinogens. Brennan-Craddock WE, et al. **Mutat Res** 1990 May;230(1):49–54

Acute cytogenetic effects of tyramine and MTCAs on mouse bone marrow cells in vivo by the micronucleus test. Fujie K, et al. **Mutat Res** 1990 Jan;240(1):19–23

Acute cytogenetic effects of tyramine, MTCAs, NaCl and soy sauce on rat bone marrow cells in vivo. Fujie K, et al. **Mutat Res** 1990 Apr;240(4):281–8

Genotoxicity of heterocyclic amines in the hepatocyte/DNA repair assay using hepatocytes of rats or mice pretreated with 3-methylcholanthrene. Iwata H, et al. **Mutat Res** 1990 May;244(1):1–6

Striatal dopaminergic toxicity following intranigral injection in rats of 2-methyl-norharman, a beta-carbolinium analog of N-methyl-4-phenylpyridinium ion (MPP+). Neafsey EJ, et al. **Neurosci Lett** 1989 Nov 6;105(3):344–9

URINE

Highly sensitive method for the determination of 1-methyl-1,2,3,4-tetrahydro-beta-carboline using combined capillary gas chromatography and negative-ion chemical ionization mass spectrometry. Hayashi T, et al. **J Chromatogr** 1990 Jun 8;528(1):1–8

CARBOMONOXYHEMOGLOBIN see **CARBOXYHEMOGLOBIN**

CARBON

Carbon and polyester fibers as a scaffold for bone repair. Studies of segmentary implants in the rabbit radius. Guiral J, et al. **Acta Orthop Scand** 1990 Feb;61(1):16–20

Carbon paste-tetrathiafulvalene amperometric enzyme electrode forthe determination of glucose in flowing systems. Gunasingham H, et al. **Analyst** 1990 Jan; 115(1):35–9

Pre-concentration of indolic compounds at a carbon paste electrode and indirect determination of L-tryptophan in serum by adsorptive stripping voltammetry. Zoulis NE, et al. **Analyst** 1990 Mar;115(3):291–5

Activated carbon filters in air cleaning processes--II. Prediction of breakthrough times and capacities from laboratory studies of model filters. Balieu E, et al. **Ann Occup Hyg** 1990 Feb;34(1):1–11

Lignite and the derived steam-activated carbon. The pulmonary response to their dusts. Gross P, et al. **Arch Environ Health** 1967 Mar;14(3):450–60

Placental transfer of metals of coal fly ash into various fetal organs of rat. Srivastava VK, et al. **Arch Toxicol** 1990; 64(2):153–6

Artificial heart valves: improved blood compatibility by PECVD a-SiC:H coating. Bolz A, et al. **Artif Organs** 1990 Aug;14(4):260–9

A new improved biodegradable tracheal prosthesis using hydroxy apatite and carbon fiber. Takahama T, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):291–3

A spectroelectrochemical study of microperoxidase at bare and gold-plated RVC thin-layer electrodes. Zamponi S, et al. **Biochim Biophys Acta** 1990 Jun 20;1034(3):294–7

Biocompatibility of carbon-carbon materials: blood tolerability. Baquey C, et al. **Biomaterials** 1989 Sep; 10(7):435–40

Influence of surface charge on adsorption of fibrinogen and/or albumin on a rotating disc electrode of platinum and carbon. Bernabeu P, et al. **Biomaterials** 1990 May; 11(4):258–64

Electrochemistry of galvanic couples between carbon and common metallic biomaterials in the presence of crevices. Silva RA, et al. **Biomaterials** 1990 Jul;11(5):336–40

Woven carbon-fibre patch versus Dacron mesh in the repair of experimental defects in the lumbar fascia of rabbits. Ward R, et al. **Biomaterials** 1989 Aug;10(6):425–8

Replacement of the rabbit medial meniscus with a polyester-carbon fibre bioprosthesis. Wood DJ, et al. **Biomaterials** 1990 Jan;11(1):13–6

Respiratory symptoms associated with low level sulphur dioxide exposure in silicon carbide production workers. Osterman JW, et al. **Br J Ind Med** 1989 Sep;46(9):629–35

Selenium in tissues of rats fed rutabagas grown on soil covering a coal fly ash landfill. Stoewsand GS, et al. **Bull Environ Contam Toxicol** 1990 May;44(5):681–5

Cancer chemotherapy administered by activated carbon particles and liposomes. Hagiwara A, et al. **Crit Rev Oncol Hematol** 1989;9(4):319–50 (210 ref.)

An improved passive activated C collector for measuring environmental 222Rn in indoor air. George AC, et al. **Health Phys** 1990 May;58(5):583–9

A mathematical model for Rn sampling by activated C adsorption. Nagarajan R, et al. **Health Phys** 1990 May; 58(5):575–81

Severe electrical injury from a graphite fishing rod. Clarke AM, et al. **Injury** 1990 Mar;21(2):120–1

A comparative experimental investigation in monkeys between three different implant materials. Nordlund A, et al. **Int J Oral Maxillofac Surg** 1989 Dec;18(6):373–7

New design of hip prosthesis using carbon fibre reinforced composite. Shirandami R, et al. **J Biomed Eng** 1990 Jan; 12(1):19–22

Thermodynamic study of phase transfer of precipitates on SiC whisker reinforced glass ceramics. Imai K, et al. **J Biomed Mater Res** 1990 Jan;24(1):1–10

Preparation of spherical encapsulation of activated carbons and their adsorption capacity of typical uremic toxins. Lee CJ, et al. **J Biomed Mater Res** 1990 Feb;24(2):243–58

Cyclic fatigue-crack propagation, stress-corrosion, and fracture-toughness behavior in pyrolytic carbon-coated graphite for prosthetic heart valve applications. Ritchie RO, et al. **J Biomed Mater Res** 1990 Feb;24(2):189–206

Biological response to woven carbon fibre pads in the knee. A clinical and experimental study. Muckle DS, et al. **J Bone Joint Surg [Br]** 1990 Jan;72(1):60–2

Rat kidney glomerular basement membrane visualized in situ by embedment-free sectioning and subsequent platinum-carbon replication. Kondo H. **J Electron Microsc Tech** 1990 Jan;14(1):63–9

Prosthetic use of carbon fiber-reinforced epoxy resin for esthetic crowns and fixed partial dentures. Malquarti G, et al. **J Prosthet Dent** 1990 Mar;63(3):251–7

Graphite pneumoconiosis and its declining prevalence in Sri Lanka. Uragoda CG. **J Trop Med Hyg** 1989 Dec; 92(6):422–4

Lower chronic stimulation threshold in the carbon-tip than in the platinum-tip endocardial electrode: a randomized study. Thuesen L, et al. **PACE** 1989 Oct;12(10):1592–5

Use of low-angle diamond knives leads to improved ultrastructural preservation of ultrathin sections. Jésior JC. **Scanning Microsc Suppl** 1989;3:147–52; discussion 152–3

Inorganic chemistry of chromium and its speciation in Whetlerite. Katz SA, et al. **Sci Total Environ** 1989 Oct 1;86(1-2):53–7

Pyrolytic carbon-coated Dacron grafts. Sharp WV, et al. **Surg Forum** 1978;29:218–20

Use of carbon fibers for repair of abdominal-wall defects in rats. Morris DM, et al. **Surgery** 1990 Jun;107(6):627–31

[Carbon fiber reinforced polysulfone implants for tumor surgery of the spine] Burri C, et al. **Aktuel Traumatol** 1989 Dec;19(6):297–301 (Eng. Abstr.) **(Ger)**

[Carbon as a conductor for stimulation electrodes] Bolz A, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:66–7 **(Ger)**

[Cardiovascular device coatings of silicon carbide as a new material for artificial heart valves] Bolz A, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:93–4 **(Ger)**

[Carbon fiber reinforced polysulfone--a new implant material] Claes L. **Biomed Tech (Berlin)** 1989 Dec; 34(12):315–9 (Eng. Abstr.) **(Ger)**

[Application of activated carbon to radiochemical analysis--adsorption behavior of inorganic ions] Shibata S, et al. **Radioisotopes** 1990 May;39(5):226–36 (95 ref.) **(Jpn)**

[A device for cutting carbon fibers when preparing microelectrodes] Blistrabas R, et al. **Fiziol Zh SSSR** 1989 Jun;75(6):874–5 **(Rus)**

[Effective methods for shaping the recording tips of carbon microelectrodes] Blistrabas RIu, et al. **Fiziol Zh SSSR** 1990 Mar;76(3):418–21 **(Rus)**

[The interaction of metal-containing carbon sorbents with pathogenic microflora] Grigor'ev AV, et al. **Klin Khir** 1990; (3):42–4 (Eng. Abstr.) **(Rus)**

[Experience in the use of carbon fixators in sequelae of injuries] Ungbaev TE. **Ortop Travmatol Protez** 1989 Jun; (6):46–7 **(Rus)**

ADMINISTRATION & DOSAGE

Carbon fibre composite bone plates. Development, evaluation and early clinical experience. Ali MS, et al. **J Bone Joint Surg [Br]** 1990 Jul;72(4):586–91

Reduction in pulmonary and hepatic respiratory cytochrome contents by fly ash inhalation in rats. Chauhan SS, et al. **Toxicol Lett** 1989 Oct;49(1):15–20

[Experimental study on the therapeutic effect on lymphnodal metastasis by intralymphnodal injection of the activated carbon particles in 80% ethanol: preliminary report] Seiki K, et al. **Nippon Geka Gakkai Zasshi** 1989 Jun;90(6):953 **(Jpn)**

ADVERSE EFFECTS

Work related decrement in pulmonary function in silicon carbide production workers. Osterman JW, et al. **Br J Ind Med** 1989 Oct;46(10):708–16

Eczematous dermatitis in relation to carbon ligamentoplasty. Pibouin M, et al. **Clin Exp Dermatol** 1989 Sep;14(5):352–4

Comparative long-term animal inhalation studies using various particulate matter: objectives, experimental design and preliminary results. Heinrich U, et al. **Exp Pathol** 1989; 37(1-4):27–31

Ventilatory function of workers exposed to cobalt and diamond containing dust. Gennart JP, et al. **Int Arch Occup Environ Health** 1990;62(4):333–6

Pulmonary effects of ultrafine coal fly ash inhaled by guinea pigs. Chen LC, et al. **J Toxicol Environ Health** 1990; 29(2):169–84

Acute pulmonary response in healthy, nonsmoking adults to inhalation of formaldehyde and carbon. Green DJ, et al. **J Toxicol Environ Health** 1989;28(3):261–75

[Comparative studies of the effects of fly ash, soil dust and clay on selected structures of the visual system of female albino rats] Toczołowski J, et al. **Klin Oczna** 1989 Apr; 91(4):82–4 (Eng. Abstr.) **(Pol)**

[Fly ash and its biological effects. 3. Exposure to dust of workers in the energy-generating industry (power plants and thermoelectric power stations)] Wojtczak J, et al. **Med Pr** 1989;40(5):294–301 (Eng. Abstr.) **(Pol)**

[Value of immunologic studies in the assessment of the effects of the dust factor based on the example of artificial mineral

fiber substances (silicon carbide)] Sharshenova AA, et al. **Gig Tr Prof Zabol** 1989;(9):49–51 **(Rus)**

[Etiology of lung cancer in workers of graphite industry] Gladkova EV. **Vopr Onkol** 1990;36(4):415–20 (Eng. Abstr.) **(Rus)**

ANALYSIS

Localization in the rat spleen of carbon–laden macrophages introduced into the splenic artery: a subpopulation of macrophages entering the white pulp. Miyakawa K, et al. **Anat Rec** 1990 Aug;227(4):464–74

Assessment of radiological emissions from Spanish coal power plants: radioactive releases and associated risks. Alvarez MC, et al. **Health Phys** 1989 Nov;57(5):765–9

Electron spin resonance investigation of laser and heated metal–tip–induced free radical formation in various tissues. Jain S, et al. **Lasers Surg Med** 1989;9(6):616–22

Thermal desorption of organic solvent from activated carbon for determination of vapor concentration in work environment. Hori H, et al. **Sangyo Ika Daigaku Zasshi** 1989 Dec 1;11(4):347–60

[Characteristics of the dust factor in the manufacture of artificial mineral fiber substances (silicon carbide)] Sharshenova AA. **Gig Tr Prof Zabol** 1989;(10):52–4 **(Rus)**

DIAGNOSTIC USE

Improvement of activated carbon for air sampling. Rudling J. **J Chromatogr** 1990 Mar 9;503(1):33–40

Studies of refractory carbides, nitrides, and borides as the thermionic emitters for electron microscopy. Yada K, et al. **J Electron Microsc Tech** 1989 Jul;12(3):252–61

[Development of Tc–99m labeled activated carbon microspheres and clinical application] Saeki T, et al. **Nippon Geka Gakkai Zasshi** 1990 Jun;91(6):729–40 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Challenge of the mononuclear phagocytic system with colloidal carbon alters lymphocyte distribution and responsiveness. Wellhausen SR, et al. **Immunol Invest** 1990 Apr;19(2):185–97

METABOLISM

Methylthioadenosine serves as a single carbon source to the folate co–enzyme pool in rat bone marrow cells. Deacon R, et al. **Biochim Biophys Acta** 1990 Jun 20;1034(3):342–6

Carbon flux through tricarboxylic acid cycle in rat renal tubules. Nissim I, et al. **Biochim Biophys Acta** 1990 Feb 26;1033(2):194–200

Short–term effect of glutamine on the incorporation of glucose–carbon into nucleic acids in Ehrlich ascites tumour cells. Medina MA, et al. **Biochimie** 1990 Apr;72(4):291–3

Regulated transcriptional systems for the production of proteins in yeast: regulation by carbon source. Shuster JR. **Biotechnology** 1989;13:83–108 (127 ref.)

Regulation of carbon flux from amino acids into sugar phosphates in Xenopus embryos. Dworkin MB, et al. **Dev Biol** 1990 Mar;138(1):177–87

Disturbances of reticulo–endothelial function following experimental liver transplantation. Lahnborg G, et al. **Eur Surg Res** 1989;21(3–4):129–36

Carbon metabolism and catabolite repression in Rhizobium spp. O'Gara F, et al. **FEMS Microbiol Rev** 1989 Jun; 5(1–2):93–101 (95 ref.)

Role of gene duplications in the adaptation of Salmonella typhimurium to growth on limiting carbon sources. Sonti RV, et al. **Genetics** 1989 Sep;123(1):19–28

Utility of cheap carbon & nitrogen sources for the production of a mosquito–pathogenic fungus, Lagenidium. Hoti SL, et al. **Indian J Med Res** 1990 Jan;91:67–9

Identification of psychrotrophic pseudomonads from goats' milk by computer–assisted analysis of carbon source assimilation data. Cox JM, et al. **J Appl Bacteriol** 1989 Oct; 67(4):377–93

Molecular biology of carbon–phosphorus bond cleavage. Cloning and sequencing of the phn (psiD) genes involved in alkylphosphonate uptake and C–P lyase activity in Escherichia coli B. Chen CM, et al. **J Biol Chem** 1990 Mar 15;265(8):4461–71

Control of carbon flux to acetate excretion during growth of Escherichia coli in batch and continuous cultures. el–Mansi EM, et al. **J Gen Microbiol** 1989 Nov;135 (Pt 11):2875–83

Changes in the incorporation of carbon derived from glucose into cellular pools during the cell cycle of Saccharomyces cerevisiae. Oehlen LJ, et al. **J Gen Microbiol** 1990 Mar; 136 (Pt 3):413–8

Influence of colloidal carbon phagocytosis as a metabolic load on the hepatic energy metabolism in rats. Shimahara Y, et al. **J Surg Res** 1990 Aug;49(2):146–52

Temperature and the partitioning and translocation of carbon. Farrar JF. **Symp Soc Exp Biol** 1988;42:203–35 (94 ref.)

[The sodium dodecyl sulfate sensitivity of Pseudomonas aeruginosa 1C growing on media with various carbon sources] Udilov OF, et al. **Mikrobiol Zh** 1985 Jan–Feb; 47(1):25–9 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Modification of pulmonary silicotic reaction in rats exposed to coal fly ash. Kaw JL, et al. **Exp Pathol** 1990;39(1):49–57

Interference with the humoral immune response in diverse genetic lines of chickens. II. The effect of colloidal carbon. Van der Zijpp AJ, et al. **Vet Immunol Immunopathol** 1989 Nov 30;23(1–2):187–94

POISONING

A case–control study of circulatory, malignant, and respiratory morbidity in carbon black workers in the United States. Robertson JM, et al. **Am Ind Hyg Assoc J** 1989 Oct;50(10):510–5

THERAPEUTIC USE

[MRT of the status following augmentation plasty of the anterior cruciate ligament using carbon fibers] Fezoulidis I, et al. **Radiologe** 1989 Nov;29(11):550–3 (Eng. Abstr.) **(Ger)**

[The use of SKN carbon enterosorbents in the combined treatment of patients with obstructive jaundice. III. The results of clinical research] Zemskov VS, et al. **Klin Khir** 1989;(9):1–3 (Eng. Abstr.) **(Rus)**

TOXICITY

Comparative effects of inhaled silica or synthetic graphite dusts on rat alveolar cells. Anderson RS, et al. **Arch Environ Contam Toxicol** 1989 Nov;18(6):844–9

Cadmium and lead accumulation by goldfish exposed to aqueous refuse incinerator fly ash leachate. Bache CA, et al. **Bull Environ Contam Toxicol** 1989 Dec;43(6):846–9

Speciation, bioavailability, and systemic distribution of chromium from Whetlerite dust. Salem H, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):59–64

Genotoxic effects of fly ash in bacteria, mammalian cells and animals. Morris DL, et al. **Teratogenesis Carcinog Mutagen** 1989;9(5):297–314

[Various types of diesel motor automobiles as a source of atmospheric air pollution caused by soot] Kapranov SV, et al. **Gig Sanit** 1989 Dec;(12):82–3 **(Rus)**

CARBON DIOXIDE

see related

HYPERCAPNIA

Gas endarterectomy. Taylor RS. **Am Heart J** 1968 Sep; 76(3):436–8

Cerebral blood flow and end–tidal PCO2 during prolonged acetazolamide treatment in humans. Friberg L, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H954–9

A carbon dioxide air–gap microelectrode based on a neutral hydrogen ion exchanger pH microelectrode. Ma YL. **Anal Biochem** 1990 Apr;186(1):74–7

On the water produced when CO2 reacts with soda lime [letter; comment] Sosis M. **Anesth Analg** 1990 Jan;70(1):126 Comment on: Anesth Analg 1989 Jul;69(1):83–6.

Photodeactivation of ethyl violet: a potential hazard of Sodasorb. Andrews JJ, et al. **Anesthesiology** 1990 Jan; 72(1):59–64

Influence of modified–atmosphere storage on the growth of uninjured and heat–injured Aeromonas hydrophila. Golden DA, et al. **Appl Environ Microbiol** 1989 Nov;55(11):3012–5

The permeability of hydrophobic membranes to 22Na salts and 14CO2 in low dielectric media. Conroy CW, et al. **Biophys Chem** 1989 Oct;34(2):177–84

Lake Nyos disaster [letter] Freeth SJ. **BMJ** 1989 Aug 19; 299(6697):513

Response of the human brain to a hypercapnic acid load in vivo. Cadoux–Hudson TA, et al. **Clin Sci** 1990 Jul;79(1):1–3

Relationship between inspiratory drive and perceived inspiratory effort in normal man. Clague JE, et al. **Clin Sci** 1990 May;78(5):493–6

Relation between plasma beta–endorphin and the ventilatory response to hypercapnia in humans. Levick MP, et al. **Clin Sci** 1989 Sep;77(3):323–7

The effects of 5% carbon dioxide on the quantitative analysis of long–term pathology of the brain after surface hypothermia. Ohmi M, et al. **Cryobiology** 1990 Feb; 27(1):31–41

Ventilatory effects of hypercapnic end–tidal PCO2 clamps during aerobic exercise of varying intensity. Essfeld D, et al. **Eur J Appl Physiol** 1990;60(6):412–7

Cultivation of mammalian cells in heat–sealable pouches that are permeable to carbon dioxide. Klebe RJ, et al. **Exp Cell Res** 1990 Jun;188(2):316–9

Sodasorb PrePak CO2 absorption cartridges. **Health Devices** 1988 Jan;17(1):35–6

Dryden 10100 disposable CO2 absorbers. **Health Devices** 1988 Sep;17(9):276–7

Comparison of several different trapping methods for Culicoides variipennis (Diptera: Ceratopogonidae). Anderson JR, et al. **J Am Mosq Control Assoc** 1989 Sep; 5(3):325–34

Carbon dioxide and 1–octen–3–ol as mosquito attractants. Takken W, et al. **J Am Mosq Control Assoc** 1989 Sep; 5(3):311–6

Effect of sustained hypoxia on ventilatory response to CO2 in normal adults. Georgopoulos D, et al. **J Appl Physiol** 1990 Mar;68(3):891–6

Effects of hypercarbia on arterial and alveolar oxygen tensions in a model of gram–negative pneumonia. Keenan RJ, et al. **J Appl Physiol** 1990 May;68(5):1820–5

Nasal obstruction as a cause of reduced PCO2 and disordered breathing during sleep. Tanaka Y, et al. **J Appl Physiol** 1989 Sep;67(3):970–2

Accumulation of carbon dioxide during eye surgery. Zeitlin GL, et al. **J Clin Anesth** 1989;1(4):262–7

Compensation of progressive hypercapnia in the toad (Bufo marinus) and the bullfrog (Rana catesbeiana). Toews DP, et al. **J Exp Biol** 1990 Jan;148:293–302

On a pseudo–rebreathing technique to assess the ventilatory sensitivity to carbon dioxide in man. Dahan A, et al. **J Physiol (Lond)** 1990 Apr;423:615–29

Effects of gas leak around endotracheal tubes on indirect calorimetry measurement. Dietrich KA, et al. **JPEN J Parenter Enteral Nutr** 1990 Jul–Aug;14(4):408–13

Addition of a hypoxic cell selective cytotoxic agent (mitomycin C or porfiromycin) to Fluosol–DA/carbogen/radiation. Holden SA, et al. **Radiother Oncol** 1990 May;18(1):59–70

The effects of carotid body hypocapnia on ventilation in goats. Daristotle L, et al. **Respir Physiol** 1990 Feb; 79(2):123–35

Temperature effects on pulmonary receptor responses to airway pressure and CO2 in Alligator mississippiensis. Douse MA, et al. **Respir Physiol** 1989 Dec;78(3):331–43

Alveolar partial pressures of carbon dioxide and oxygen measured by a helium washout technique. Jordanoglou J, et al. **Thorax** 1990 Jul;45(7):520–4

[The arterial–end tidal CO2 partial pressure difference during anesthesia] Frei FJ, et al. **Anaesthesist** 1990 Feb;39(2):101–6 (Eng. Abstr.) **(Ger)**

[CO2 embolism during hysteroscopy] Obenhaus T, et al. **Anaesthesist** 1990 Apr;39(4):243–6 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

The effect of inhalation of 5 per cent carbon dioxide in air on postural hypotension in quadriplegia. Downey JA, et al. **Arch Phys Med Rehabil** 1966 Jul;47(7):422–6

The influence of Fluosol–DA and carbogen breathing on the antitumor effects of cyclophosphamide in vivo. Kim GE, et al. **Cancer Chemother Pharmacol** 1989;25(2):99–102

Comparison of carbon–dioxide–enriched, oxygen–enriched, and normal air in treatment of acute mountain sickness. Bärtsch P, et al. **Lancet** 1990 Sep 29;336(8718):772–5

The effect of carbon dioxide on the changes in blood pH during hypoxia. Watanabe H, et al. **Nippon Hoigaku Zasshi** 1989 Jun;43(3):233–7

[Comparison of the effects of carbonated baths with those of carbon dioxide baths, "dry baths"] Lecomte J, et al. **Acta Belg Med Phys** 1990 Jan–Mar;13(1):11–4 (Eng. Abstr.) **(Fre)**

[Variations of carotid flow at altitude and during modifications of respiratory conditions] Bailliart D, et al. **Physiologie** 1989 Apr–Jun;26(2):81–93 **(Fre)**

[Arterial DSA using CO2 as a contrast medium: improvement of picture quality using a novel gas injector in an animal experiment] Krasny R, et al. **ROFO** 1990 Apr;152(4):425–9 (Eng. Abstr.) **(Ger)**

[CO2–induced increase in skin circulation and transcutaneous oxygen partial pressure of the top of the foot in patients with intermittent claudication] Hartmann B, et al. **Vasa Suppl** 1989;27:251–2 **(Ger)**

[The effectiveness of CO2 gas insufflation in migraine] Taubert K. **Z Arztl Fortbild (Jena)** 1989;83(15):785–6 **(Ger)**

[Long–term effect of natural spring CO2 gas insufflation in reflex headaches—a case study] Volkmer E, et al. **Z Arztl Fortbild (Jena)** 1990;84(5):219–20 **(Ger)**

[The effect of carbon dioxide baths on blood pressure of borderline hypertensive patients] Hartmann B, et al. **Z Kardiol** 1989 Aug;78(8):526–31 (Eng. Abstr.) **(Ger)**

[Thermoregulatory reactions of the human body to moderate hypercapnia] Mukhamedieva LN, et al. **Kosm Biol Aviakosm Med** 1989 Nov–Dec;23(6):51–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Is nitrous oxide next [letter] Smith MB, et al. **Anaesthesia** 1989 Dec;44(12):998

Carbon dioxide embolism treated with hyperbaric oxygen [see comments] McGrath BJ, et al. **Can J Anaesth** 1989 Sep;36(5):586–9 Comment in: Can J Anaesth 1990 Mar;37(2):270–1.

Cardiac gas embolism during carbon dioxide hysteroscopy: risk and management. Brundin J, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Dec;33(3):241–5

ANALYSIS

Quantitation of total carbon dioxide in nanoliter samples by flow–through fluorometry. Star RA. **Am J Physiol** 1990 Feb;258(2 Pt 2):F429–32

An interesting capnograph tracing [letter] Prevedoros HP, et al. **Anaesth Intensive Care** 1990 May;18(2):271

An unusual capnogram [letter] Sims C. **Anaesth Intensive Care** 1990 May;18(2):272

The Fenem CO2 detector device. An apparatus to prevent unnoticed oesophageal intubation. Denman WT, et al. **Anaesthesia** 1990 Jun;45(6):465–7

The effect of exhaled alcohol on the performance of the Datex Capnomac. Foley MA, et al. **Anaesthesia** 1990 Mar; 45(3):232–4

Confirmation of tracheal intubation in a neonate using the Fenem CO2 detector [letter] Higgins D. **Anaesthesia** 1990

Jul;45(7):591-2
Discerning rebreathing during anaesthesia [letter; comment] Miller DM. **Anaesthesia** 1989 Dec;44(12):1008-9 Comment on: Anaesthesia 1989 Mar;44(3):194-9.
The end-tidal carbon dioxide detector. Assessment of a new method to distinguish oesophageal from tracheal intubation. O'Flaherty D, et al. **Anaesthesia** 1990 Aug;45(8):653-5
The FEF end-tidal CO2 detector [letter; comment] Wee MY. **Anaesthesia** 1990 Mar;45(3):251 Comment on: Anaesthesia 1989 Nov;44(11):929-30.
High-accuracy gas analysis via isotope dilution mass spectrometry: carbon dioxide in air. Verkouteren RM, et al. **Anal Chem** 1989 Nov 1;61(21):2416-22
Extremity tourniquet deflation increases end-tidal PCO2. Dickson M, et al. **Anesth Analg** 1990 Apr;70(4):457-8
Colorimetric end-tidal carbon dioxide monitoring for tracheal intubation. Goldberg JS, et al. **Anesth Analg** 1990 Feb;70(2):191-4
Endotracheal tube confirmation with colorimetric CO2 detectors [letter] Menegazzi JJ, et al. **Anesth Analg** 1990 Oct;71(4):441-2
Capnography or capnometry? [letter] Endler GC. **Anesthesiology** 1990 Jan;72(1):214-5
Capnometer readings at high altitude [letter] Hilberman M. **Anesthesiology** 1990 Aug;73(2):354-5
Unusual cause of an absent capnogram [letter] Markovitz BP, et al. **Anesthesiology** 1989 Dec;71(6):992-3
Biphasic carbon dioxide excretion waveform from a patient with severe kyphoscoliosis. Nichols KP, et al. **Anesthesiology** 1989 Dec;71(6):986-7
Is distal sampling of end-tidal CO2 necessary in small subjects? Rich GF, et al. **Anesthesiology** 1990 Aug; 73(2):265-8
End-tidal CO2 detection [letter; comment] Heller MB, et al. **Ann Emerg Med** 1989 Dec;18(12):1375 Comment on: Ann Emerg Med 1989 Apr;18(4):387-90.
Capnometry in emergency medicine. Sanders AB. **Ann Emerg Med** 1989 Dec;18(12):1287-90
End-tidal CO2 measurement in the detection of esophageal intubation during cardiac arrest. Sayah AJ, et al. **Ann Emerg Med** 1990 Aug;19(8):857-60
Capnography. Swedlow DB. **Biomed Tech (Berlin)** 1990;35 Suppl 1:35-7
Effectiveness of using end tidal carbon dioxide concentration to monitor cardiopulmonary resuscitation [see comments] Higgins D, et al. **BMJ** 1990 Mar 3;300(6724):581 Comment in: BMJ 1990 Apr 14;300(6730):1012-3.
End tidal carbon dioxide detector for monitoring cardiopulmonary resuscitation [letter] Muir JD, et al. **BMJ** 1990 Jul 7;301(6742):41-2
Monitoring cardiopulmonary resuscitation by end tidal carbon dioxide concentration [letter; comment] Nielsen MS, et al. **BMJ** 1990 Apr 14;300(6730):1012-3 Comment on: BMJ 1990 Mar 3;300(6724):581.
Automated non-invasive measurement of cardiac output by the carbon dioxide rebreathing method: comparisons with dye dilution and thermodilution. Russell AE, et al. **Br Heart J** 1990 Mar;63(3):195-9
Carbon dioxide monitoring during high frequency jet ventilation for direct laryngoscopy. Bourgain JL, et al. **Br J Anaesth** 1990 Mar;64(3):327-30
Early detection of "rebreathing" in afferent and efferent reservoir breathing systems using capnography. Miller DM. **Br J Anaesth** 1990 Feb;64(2):251-5
Monitoring of end-tidal carbon dioxide partial pressure during high frequency jet ventilation. Sehati S, et al. **Br J Anaesth** 1989;63(7 Suppl 1):47S-52S
Air hygiene in a pullet house: spatial homogeneity of aerial pollutants. Conceição MA, et al. **Br Poult Sci** 1989 Dec; 30(4):765-76
Stability of arterial to end-tidal carbon dioxide gradients during postoperative cardiorespiratory support. Russell GB, et al. **Can J Anaesth** 1990 Jul;37(5):560-6
Comparison of end-tidal carbon dioxide, oxygen saturation and clinical signs for the detection of oesophageal intubation. Vaghadia H, et al. **Can J Anaesth** 1989 Sep; 36(5):560-4
End tidal carbon dioxide as an haemodynamic determinant of cardiopulmonary resuscitation in the rat. von Planta M, et al. **Cardiovasc Res** 1989 Apr;23(4):364-8
Carbon dioxide tensions in physiological salt solutions: direct measurements. Abrahamsen J, et al. **Clin Chim Acta** 1989 Oct 31;185(1):1-6
Prediction of outcome of cardiopulmonary resuscitation from end-tidal carbon dioxide concentration. Callaham M, et al. **Crit Care Med** 1990 Apr;18(4):358-62
Use of capnography in diagnosis of pulmonary embolism during acute respiratory failure of chronic obstructive pulmonary disease. Chopin C, et al. **Crit Care Med** 1990 Apr;18(4):353-7
End-tidal carbon dioxide as a noninvasive monitor during cardiopulmonary resuscitation [letter; comment] Nielsen M, et al. **Crit Care Med** 1989 Dec;17(12):1365 Comment on: Crit Care Med 1987 Oct;15(10):958-9.
Immediate resuscitation [editorial] Weil MH, et al. **Crit Care Med** 1990 Apr;18(4):455
Headspace determination of evolved carbon dioxide in a biodegradability screening test. Struijs J, et al. **Ecotoxicol Environ Safety** 1990 Apr;19(2):204-11
13CO2 breath test to measure the hydrolysis of various starch formulations in healthy subjects. Hiele M, et al. **Gut** 1990 Feb;31(2):175-8
Preincubation time and the use of oxygen indicators in determining the microbiological quality of aseptically packed pea and tomato soup. Mattila T, et al. **Int J Food Microbiol** 1989 Nov;9(3):205-14
Does the expired carbon dioxide waveform suggest endobronchial intubation? Mokriski BK, et al. **J Clin Anesth** 1990 Mar-Apr;2(2):140-1
Anesthesia machine malfunction simulating spontaneous respiratory effort. Hensler T, et al. **J Clin Monit** 1990 Apr; 6(2):128-31
Relationship between arterial carbon dioxide and end-tidal carbon dioxide when a nasal sampling port is used. McNulty SE, et al. **J Clin Monit** 1990 Apr;6(2):93-8
The deconjugation ability of bacteria isolated from the jejunal fluids in the blind loop syndrome with high 14CO2 excretion--using the breath analysis technique and thin-layer chromatography. Shindo K, et al. **Life Sci** 1989; 45(24):2275-83
Modified sampling connection for sidestream end tidal CO2 monitoring during pediatric anesthesia. el-Attar AM. **Middle East J Anesthesiol** 1989 Oct;10(3):323-7
Origin of abomasum gas in the cows with displaced abomasum. Sarashina T, et al. **Nippon Juigaku Zasshi** 1990 Apr;52(2):371-8
Accurate, noninvasive quantitation of expiratory gas leak from uncuffed infant endotracheal tubes. Knauth A, et al. **Pediatr Pulmonol** 1990;9(1):55-60
[Capnometry on awakening following celioscopy of long duration] Duchêne P, et al. **Can Anesthesiol** 1989 Oct; 37(6):435-7 **(Fre)**
[Early recognition of malignant hyperthermia using capnometry] Meier-Hellmann A, et al. **Anaesthesist** 1990 Jan;39(1):41-3 (Eng. Abstr.) **(Ger)**
[Errors in the measurements of a capnometer due to disturbances in transport of the samples (letter)] Reissmann H, et al. **Anaesthesist** 1990 May;39(5):292 **(Ger)**
[Fluctuation of end-tidal CO2 concentration at rCBF measurement by Xe-133 inhalation and the necessity of its correction for CO2] Komatani A. **Kaku Igaku** 1990 Jan; 27(1):65-8 **(Jpn)**

BLOOD

Changes in the arterial to end-tidal PCO2 differences during coronary artery bypass grafting. Fletcher R, et al. **Acta Anaesthesiol Scand** 1989 Nov;33(8):656-9
Predictable PaCO2 with two different flow settings using the Mapleson D system. Jonsson LO. **Acta Anaesthesiol Scand** 1990 Apr;34(3):237-40
Studies on gas tension in the normal middle ear. Gas chromatographic analysis and a new sampling technique. Grøntved A, et al. **Acta Otolaryngol (Stockh)** 1990 Mar-Apr;109(3-4):271-7
Effect of PaCO2 and haemoglobin concentration on day to day variation of CBF in preterm neonates. Pryds O, et al. **Acta Paediatr Scand Suppl** 1989;360:33-6
Capillary blood gases in the neonate. A reassessment and review of the literature. Courtney SE, et al. **Am J Dis Child** 1990 Feb;144(2):168-72 (29 ref.)
Umbilical cord blood gases for term healthy newborns. Miller JM Jr, et al. **Am J Perinatol** 1990 Apr;7(2):157-9
Endothelial modulation of norepinephrine-induced constriction of rat aorta at normal and high CO2 tensions. Fukuda S, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H1049-54
Eucapnia and hypercapnia in patients with chronic airflow limitation. The role of the upper airway. Chan CS, et al. **Am Rev Respir Dis** 1990 Apr;141(4 Pt 1):861-5
Intrinsic PEEP and arterial PCO2 in stable patients with chronic obstructive pulmonary disease. Haluszka J, et al. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1194-7
End-tidal carbon dioxide in critically ill patients during changes in mechanical ventilation. Hoffman RA, et al. **Am Rev Respir Dis** 1989 Nov;140(5):1265-8
Analysis of refractory period after exercise and eucapnic voluntary hyperventilation challenge. Rosenthal RR, et al. **Am Rev Respir Dis** 1990 Feb;141(2):368-72
Effect of premedication on arterial blood gases prior to cardiac surgery. Jones RD, et al. **Anaesth Intensive Care** 1990 Feb;18(1):15-21
Potentiometric combination ion/carbon dioxide sensors for in vitro and in vivo blood measurements. Collison ME, et al. **Anal Chem** 1989 Nov 1;61(21):2365-72
Measurement of cerebral blood flow and volume with positron emission tomography during isoflurane administration in the hypocapnic baboon. Archer DP, et al. **Anesthesiology** 1990 Jun;72(6):1031-7
A randomized study of carbon dioxide management during hypothermic cardiopulmonary bypass [see comments] Bashein G, et al. **Anesthesiology** 1990 Jan;72(1):7-15 Comment in: Anesthesiology 1990 Jan;72(1):3-6. Comment in: Anesthesiology 1990 Jun;72(6):1100-1.
Percutaneous extracorporeal CO2 removal in a patient with bullous emphysema with recurrent bilateral pneumothoraces and respiratory failure. Pesenti A, et al. **Anesthesiology** 1990 Mar;72(3):571-3
PaCO2 management during cardiopulmonary bypass: intriguing physiologic rationale, convincing clinical data, evolving hypothesis? [comment] Prough DS, et al. **Anesthesiology** 1990 Jan;72(1):3-6 Comment on: Anesthesiology 1990 Jan;72(1):7-15.
Significance of transcranial Doppler CO2. Reactivity measurements for the diagnosis of hemodynamically relevant carotid obstructions. Reith W, et al. **Ann Vasc Surg** 1990 Jul;4(4):359-64
Effect of ethanol on interaction of hypoxia and PCO2 levels in rabbits. Watanabe H, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1989 Oct;24(5):397-404
CO2 removal with hemodialysis and control of plasma oncotic pressure. Gille JP, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):654-7
A new type of low blood flow ECCO2R using a hemodialysis system in apneic states. Isobe J, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):638-9
Heparin free long-term extracorporeal circulation using bioactive surfaces. Mottaghy K, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):635-7
Long-term in vivo study of gas diffusion in bilaminar compliance chambers. Sakakibara N, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):478-80
Hyperventilation and panic attacks. Kenardy J, et al. **Aust N Z J Psychiatry** 1990 Jun;24(2):261-7 (38 ref.)
Pathophysiology of the vasomotor reactivity to hypo- and hypercapnia: role of aging and chronic cerebrovascular disorders. Ceravolo G, et al. **Boll Soc Ital Biol Sper** 1989 Oct;65(10):989-96
The effect of nitrous oxide and halothane upon the intracranial pressure in hypocapnic patients with intracranial disorders. Misfeldt BB, et al. **Br J Anaesth** 1974 Nov;46(11):853-8
Hyperventilation: is it a cause of panic attacks? Hibbert G, et al. **Br J Psychiatry** 1989 Dec;155:805-9
Endobronchial intubation in dogs. Chang PC, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S44
Accuracy of end-tidal PCO2 measurements using a sidestream capnometer in infants and children ventilated with the Sechrist infant ventilator. Hillier SC, et al. **Can J Anaesth** 1990 Apr;37(3):318-21
Cranial duplex sonography: does isoflurane affect the cerebrovascular response to carbon dioxide in anaesthetized children? Leon JE, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S33
Cranial duplex sonography: does halothane affect the cerebrovascular response to carbon dioxide in anaesthetized children? Leon JE, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S24
End-tidal carbon dioxide measurements in critically ill neonates: a comparison of side-stream and mainstream capnometers. McEvedy BA, et al. **Can J Anaesth** 1990 Apr; 37(3):322-6
Autoregulation and the CO2 responsiveness of cerebral blood flow after cardiopulmonary bypass. McNeill BR, et al. **Can J Anaesth** 1990 Apr;37(3):313-7
A comparison of end-tidal and transcutaneous PCO2 measurements during anaesthesia. Reid CW, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S89
Cerebral haemodynamics in infants during cardiopulmonary bypass. Taylor RH, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S153
Blood gas and hematological changes in experimental peracute porcine pleuropneumonia. Kiorpes AL, et al. **Can J Vet Res** 1990 Jan;54(1):164-9
The determinants of arterial CO2 tension during weaning from mechanical ventilation. Dunn WF, et al. **Chest** 1990 Mar;97(3 Suppl):68S-69S
Positive interferences with the Ektachem total CO2 assay from therapy with topical cerous nitrate. Daoud EW, et al. **Clin Chem** 1990 Aug;36(8 Pt 1):1521-2
A knowledge-based support system for mechanical ventilation of the lungs. The KUSIVAR concept and prototype. Rudowski R, et al. **Comput Methods Programs Biomed** 1989 Sep;30(1):59-70
Discrepancies between transcutaneous and end-tidal carbon dioxide monitoring in the critically ill neonate with respiratory distress syndrome [letter] Luz G, et al. **Crit Care Med** 1990 Sep;18(9):1050
Prediction of changing cerebral blood flow by use of the conjunctival oxygen tension/arterial oxygen tension index [published erratum appears in Crit Care Med 1990 Jun;18(6):688] Rutherford WF, et al. **Crit Care Med** 1989 Dec;17(12):1328-32
Monitoring of fetal carbon dioxide tension during human labour. Nickelsen C. **Dan Med Bull** 1989 Dec;36(6):537-51 (99 ref.)
Acute and protracted effects of intratracheal surfactant application on internal carotid blood flow velocity, blood pressure and carbondioxide tension in very low birth weight infants. Jorch G, et al. **Eur J Pediatr** 1989 Aug; 148(8):770-3
Paradoxical evolution of arterial blood gases during exercise in patients with chronic obstructive bronchitis. Frans A, et al. **Eur Respir J** 1990 Jun;3(6):723-4
CO2 transport properties of the blood of a primitive vertebrate, Myxine glutinosa (L.). Tufts BL, et al. **Exp Biol** 1990;48(6):341-7
Metabolic CO2 removal by dialysis: THAM vs NaOH infusion. Gille JP, et al. **Int J Artif Organs** 1989 Nov; 12(11):720-7
Arterial blood gases, acid-base balance, and lactate and gas exchange variables during hypoxic exercise. Yoshida T, et al. **Int J Sports Med** 1989 Aug;10(4):279-85
Cyclic haemodynamic and arterial blood gas changes during Cheyne-Stokes breathing. Faber J, et al. **Intensive Care Med** 1990;16(3):208-9
Abrupt changes in mixed venous blood gas composition after

the onset of exercise. Casaburi R, et al. **J Appl Physiol** 1989 Sep;67(3):1106–12

Mechanisms of gas exchange with different gases during constant-flow ventilation. Chen FJ, et al. **J Appl Physiol** 1990 Jan;68(1):88–93

Blood gas changes during and after nonspecific airway challenge in asthmatic and normal subjects. Dal Negro R, et al. **J Appl Physiol** 1989 Dec;67(6):2627–30

Cardiac receptors evoke ventilatory response with increased venous PCO2 at constant arterial PCO2. Estavillo JA. **J Appl Physiol** 1990 Jan;68(1):369–73

Plasma [H+] regulation and whole blood [CO2] in exercising ponies. Forster HV, et al. **J Appl Physiol** 1990 Jan; 68(1):309–15

In vivo regulation of plasma [H+] in ponies during acute changes in PCO2. Forster HV, et al. **J Appl Physiol** 1990 Jan;68(1):316–21

Increases in coronary vein CO2 during cardiac resuscitation. Gudipati CV, et al. **J Appl Physiol** 1990 Apr;68(4):1405–8

Gas exchange abnormalities after pneumonectomy in conditioned foxhounds. Hsia CC, et al. **J Appl Physiol** 1990 Jan;68(1):94–104

Respiration during recovery from exercise: effects of trapping and release of femoral blood flow. Innes JA, et al. **J Appl Physiol** 1989 Dec;67(6):2608–13

A comparison of indirect methods for continuous estimation of arterial PCO2 in men. Robbins PA, et al. **J Appl Physiol** 1990 Apr;68(4):1727–31

Autonomic nerve and cardiovascular responses to changing blood oxygen and carbon dioxide levels in the rat. Fukuda Y, et al. **J Auton Nerv Syst** 1989 Oct;28(1):61–74

Haemolysis during in vitro CO2 removal from human blood using a membrane lung. McRae KM, et al. **J Biomed Eng** 1989 Sep;11(5):369–74

Blood-gas and circulatory changes during total knee replacement. Role of the intramedullary alignment rod. Fahmy NR, et al. **J Bone Joint Surg [Am]** 1990 Jan; 72(1):19–26

The apnea–PaCO2 relationship: some clinical and medico-legal considerations [comment] Shapiro BA. **J Clin Anesth** 1989;1(5):323–7 Comment on: J Clin Anesth 1989;1(5):328–32.

The PaCO2 rate of rise in anesthetized patients with airway obstruction [see comments] Stock MC, et al. **J Clin Anesth** 1989;1(5):328–32 (15 ref.) Comment in: J Clin Anesth 1989;1(5):323–7.

The carbon dioxide rate of rise in awake apneic humans [see comments] Stock MC, et al. **J Clin Anesth** 1988;1(2):96–103 Comment in: J Clin Anesth 1989;1(5):401–2.

Hypoventilation during endoscopy: a questionable cause for arterial desaturation [letter; comment] Pecora AA. **J Clin Gastroenterol** 1990 Apr;12(2):242–3 Comment on: J Clin Gastroenterol 1989 Feb;11(1):17–22.

Non-invasive continuous fetal transcutaneous pO2 and pCO2 monitoring during labor. Okane M, et al. **J Perinat Med** 1989;17(6):399–410

Influences on the cardiovascular response to graded levels of systemic hypoxia of the accompanying hypocapnia in the rat. Marshall JM, et al. **J Physiol (Lond)** 1989 Mar; 410:381–94

Regional cerebrovascular reactivity to carbon dioxide during cardiopulmonary bypass in patients with cerebrovascular disease. Gravlee GP, et al. **J Thorac Cardiovasc Surg** 1990 Jun;99(6):1022–9

Hypoxia and hypercapnia increase the sympathoadrenal medullary functions in anesthetized, artificially ventilated rats. Biesold D, et al. **Jpn J Physiol** 1989;39(4):511–22

Hypercapnia, hypocapnia and hypoxemia. Salem MR. **Middle East J Anesthesiol** 1989 Oct;10(3):221–46 (34 ref.)

Umbilical cord blood gas assessment of twins. Brown HL, et al. **Obstet Gynecol** 1990 May;75(5):826–9

Frequency, tidal volume, and mean airway pressure combinations that provide adequate gas exchange and low alveolar pressure during high frequency oscillatory ventilation in rabbits. Kamitsuka MD, et al. **Pediatr Res** 1990 Jan;27(1):64–9

Role of the ventrolateral medulla in the cardiovascular responses to changes in the carbon dioxide tension in the arterial blood. Lioy F. **Prog Brain Res** 1989;81:205–13 (57 ref.)

Effects of electroimmobilisation on blood gas and pH status in sheep. Jephcott EH, et al. **Res Vet Sci** 1990 May; 48(3):314–20

Acute changes in osmolality and renin and respiratory control of arterial PCO2 and [H+]. Anderson JW, et al. **Respir Physiol** 1990 Apr;80(1):1–16

Control of expiratory duration by arterial CO2 oscillations in vagotomized dogs. Takahashi E, et al. **Respir Physiol** 1990 Jan;79(1):45–55

[An analysis of early blood gas changes in 25 burned patients] Fu QF. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Dec;3(4):268–70 **(Chi)**

[Blood gas studies in experimental steam burns of the respiratory tract 1 to 14 days after the injuries] Jiang KY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Sep;1(3):190–3, 199, 239 **(Chi)**

[Blood gas analysis in 40 burned patients] Li GH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Jun;3(2):124–6, 137, 157 (Eng. Abstr.) **(Chi)**

[An analysis of arterial blood gases during the shock period in major burns] Liu SK. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Sep;3(3):163–7 **(Chi)**

[Dynamic changes of blood gases in dogs with severe smoke inhalation injury] Zhu PF. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Dec;1(4):270–3 (Eng. Abstr.) **(Chi)**

[The effect of exercise on blood gases and oxygen transport in patients with chronic obstructive pulmonary disease] Zeng GB. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1990 Feb;13(1):6–8, 60 (Eng. Abstr.) **(Chi)**

[Does nicardipine, a calcium inhibitor, change the metabolic consequences of acute hypocapnia?] Combes P, et al. **Agressologie** 1989 Jun;30(7):437 **(Fre)**

[Monitoring of CO2 in resuscitation: transcutaneous measurement of capnometry?] Barré E, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R223 **(Fre)**

[Capnography in high frequency jet ventilation (JVHF) in ORL endoscopies] Bourgain JL, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R268 **(Fre)**

[Respiration at base frequency associated with extracorporeal purification of CO2: role of oxygen output by the intratracheal catheter] Brunet F, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R256 **(Fre)**

[Respiration at low frequency associated with extracorporeal purification of CO2 in the treatment of ARDS: methodology and first results] Brunet F, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R257 **(Fre)**

[Is monitoring of PECO2 a reliable means of estimating PaCO2 during artificial respiration of separate lungs in surgery of the descending thoracic aorta] Godet G, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R41 **(Fre)**

[Capnography and pulse oximetry in resuscitation after cardiac arrest outside the hospital] Rozenberg A, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R78 **(Fre)**

[Development of nocturnal desaturation in 35 patients with chronic obstructive bronchopneumopathy (COBP). Relation to functional and hemodynamic data] Pépin JL, et al. **Rev Mal Respir** 1989;6(4):357–64 (Eng. Abstr.) **(Fre)**

[Evolutionary biological aspects of the physiology of extracorporeal CO2 removal] Nolte S. **Anaesthesist** 1989 Nov;38(11):622–5 (17 ref.) (Eng. Abstr.) **(Ger)**

[Personal experiences with extracorporeal CO2 elimination in patients with severe ARDS—a current review] Knoch M, et al. **Anasth Intensivther Notfallmed** 1989 Oct; 24(5):283–8 (20 ref.) (Eng. Abstr.) **(Ger)**

[Determinants of survival in cardiopulmonary resuscitation] von Planta M, et al. **Med Klin** 1990 Apr 15;85(4):181–6, 228 (Eng. Abstr.) **(Ger)**

[The diurnal rhythm of chemosensitivity and its contribution to nocturnal disorders of respiratory control] Raschke F, et al. **Pneumologie** 1989 Nov;43 Suppl 1:568–71 (Eng. Abstr.) **(Ger)**

[Diagnosis of the function of respiratory control in patients with obstructive sleep apnea syndrome] Tafil-Klawe M, et al. **Pneumologie** 1989 Nov;43 Suppl 1:572–5 (Eng. Abstr.) **(Ger)**

[Monitoring respiratory and circulatory parameters in comparing various jet ventilation procedures] Eger L, et al. **Z Erkr Atmungsorgane** 1990;174(2):104–12 (Eng. Abstr.) **(Ger)**

[The effect of bronchologic studies on blood gases and hemodynamics in children] Wunderlich P, et al. **Z Erkr Atmungsorgane** 1989;173(3):222–8 (Eng. Abstr.) **(Ger)**

[Hemodynamic adaptation during extracorporeal perfusion and arteriovenous extracorporeal CO2 removal] Schmidt S, et al. **Z Geburtshilfe Perinatol** 1990 Mar–Apr;194(2):81–4 (Eng. Abstr.) **(Ger)**

[Comparison of arterial and venous blood gas and acid–base values in prematurely born healthy calves or calves with a late asphyxia] Pickel M, et al. **Zentralbl Veterinarmed [A]** 1989 Nov;36(9):653–63 (Eng. Abstr.) **(Ger)**

[Correlation between hemorheological and blood gas analytical indices in hypoxic-hypercapnic respiratory insufficiency] Porro F, et al. **Ric Clin Lab** 1989;19 Suppl 1:99–102 **(Ita)**

[The effect of hypocapnia and hypercapnia on myocardial oxygen tension in hemorrhaged dogs] Hashimoto K, et al. **Masui** 1990 Apr;39(4):437–41 (Eng. Abstr.) **(Jpn)**

[A simple method of extracorporeal membrane oxygenation (ECMO)—3. The effects of pumpless ECMO (arterio-venous shunt) on arterial blood gas measured for 24 hours] Kasama A, et al. **Masui** 1990 Feb;39(2):162–7 (Eng. Abstr.) **(Jpn)**

[Statistical study of factors related to occurrence and progression of retinopathy in extremely premature infants: especially clinical changes in PaCO2 and pH] Maeda A, et al. **Nippon Ganka Gakkai Zasshi** 1989 Dec;93(12):1140–8 (Eng. Abstr.) **(Jpn)**

[Effects of hypopressure on blood gases and spirograms of patients suffering from chronic respiratory failure] Hasegawa M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Mar;27(3):304–9 (Eng. Abstr.) **(Jpn)**

[Significance of arterial carbon dioxide tension analysis in clinical tests] Kawashiro T. **Nippon Rinsho** 1989 Dec;48 Suppl:673–5 **(Jpn)**

[Umbilical blood-gas status at cesarean section for breech presentation: a comparison with vertex presentation] Haruta M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Oct;41(10):1530–6 (Eng. Abstr.) **(Jpn)**

[Effect of hemodialysis on the functional status of small airways and partial pressure of oxygen and carbon dioxide in the blood of patients with chronic uremia] Grzeszczak W, et al. **Pneumonol Pol** 1989 Mar;57(3):165–9 (Eng. Abstr.) **(Pol)**

[Indices of the acid–base status and blood gases and the serotonin content during the treatment of uterine inertia with hyperbaric oxygenation and prostenon] Okoev GG, et al. **Akush Ginekol (Mosk)** 1989 Nov;(11):62–3 **(Rus)**

[The hemostasis system in hypoxic anoxia of varying degree] Pak GD, et al. **Kosm Biol Aviakosm Med** 1990 Mar–Apr; 24(2):4–9 (62 ref.) (Eng. Abstr.) **(Rus)**

[Changes in blood gases during fiber bronchoscopy in children] Shelest M, et al. **Pediatriia** 1990;(6):109 **(Rus)**

[Changes in oxygen and carbon dioxide tension in skin capillaries as an indicator of the status of blood supply of compound skin flaps] Vikhriev BS, et al. **Vestn Khir** 1989 Jun;142(6):54–9 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Bumetanide and cerebrospinal fluid acid–base variables during acute CO2 elevation. Freidel JF, et al. **Respir Physiol** 1990 Jan;79(1):91–100

DIAGNOSTIC USE

Response to 35% CO2 as a marker of panic in severe anxiety. Griez E, et al. **Am J Psychiatry** 1990 Jun;147(6):796–7

Five percent carbon dioxide challenge: valid analogue and marker of panic disorder? Sanderson WC, et al. **Biol Psychiatry** 1990 Apr 1;27(7):689–701 (25 ref.)

CO2 arthroscopy of the knee. Riddell RR. **Clin Orthop** 1990 Mar;(252):92–4

Carbon dioxide methods of double contrast barium enemas [letter; comment] Pochaczevsky R. **Clin Radiol** 1989 Nov; 40(6):656–7 Comment on: Clin Radiol 1989 May;40(3):318.

Evaluation of the 11CO2 positron emission tomographic method for measuring brain pH. II. Quantitative pH mapping in patients with ischemic cerebrovascular diseases. Senda M, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):859–73

Specific sensitivity of patients with panic attacks to carbon dioxide inhalation. Griez E, et al. **Psychiatry Res** 1990 Feb; 31(2):193–9

[CO2 angiography: development and trial of an animal experimental gas dosage device] Krasny R, et al. **Biomed Tech (Berlin)** 1990 Apr;35(4):72–7 (Eng. Abstr.) **(Ger)**

[Contrast echography of uterine tumors using albumin–carbon dioxide–foam] Rizaev MN, et al. **Radiol Diagn (Berl)** 1990;31(1):81–5 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

[Hygienic evaluation of moisture and carbon dioxide absorbers recommended for purifying the atmosphere of hermetically sealed chambers] Koziarin IP. **Kosm Biol Aviakosm Med** 1990 May–Jun;24(3):43–5 (Eng. Abstr.) **(Rus)**

[Balance of substances during catalytic oxidation of water admixtures by hydrogen peroxide] Vasilenko II, et al. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):75–8 (Eng. Abstr.) **(Rus)**

METABOLISM

The influence of histamine and PGE2-induced hyperaemia and oedema on respiratory metabolism in normal human forearm skin. Carnochan FM, et al. **Agents Actions** 1990 Mar;29(3–4):292–8

Recovery of labeled CO2 during the infusion of C-1- vs C-2-labeled acetate: implications for tracer studies of substrate oxidation. Wolfe RR, et al. **Am J Clin Nutr** 1990 Feb;51(2):248–52

PCO2 in renal cortex. De Mello Aires M, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):F357–65

Acetazolamide as a control for CO2-induced panic [letter; comment] Klein DF, et al. **Am J Psychiatry** 1990 May; 147(5):677–8 Comment on: Am J Psychiatry 1989 Aug;146(8):996–1000.

The ventilatory recruitment threshold for carbon dioxide. Prechter GC, et al. **Am Rev Respir Dis** 1990 Mar; 141(3):758–64

Determination of carbonic anhydrase activity by a pCO2 sensor. Botrè C, et al. **Anal Biochem** 1990 Mar; 185(2):254–64

What is the meaning of the expired CO2 waveform? [letter; comment] Cruz JC. **Anesth Analg** 1990 Jun;70(6):675–6 Comment on: Anesth Analg 1989 Dec;69(6):829–32.

Biphasic carbon dioxide elimination waveform with right mainstem bronchial intubation [see comments] Gilbert D, et al. **Anesth Analg** 1989 Dec;69(6):829–32 Comment in: Anesth Analg 1990 Jun;70(6):675–6.

Elemental metals as electron sources for biological methane formation from CO2. Belay N, et al. **Antonie Van Leeuwenhoek** 1990;57(1):1–7

Glucose metabolism and the channeling of glycolytic intermediates in permeabilized L-929 cells. Clegg JS, et al. **Arch Biochem Biophys** 1990 May 1;278(2):452–60

Numerical simulation of systemic O2 and CO2 exchange in a hyperbaric environment. Sharan M, et al. **Biosystems** 1989;23(1):21–30

Liberation of 14CO2 from [14C]adipic acid and [14C]octanoic acid by adult rats during riboflavin deficiency and its reversal. Bates CJ. **Br J Nutr** 1990 May; 63(3):553–62

Dependence of the carbon-isotope contents of breath carbon dioxide, milk, serum and rumen fermentation products on the delta 13C value of food in dairy cows. Metges C, et al. **Br J Nutr** 1990 Mar;63(2):187–96

Plateau waves due to carbon dioxide production in a patient with hypoxic encephalopathy [letter] Gando S, et al. **Crit Care Med** 1989 Oct;17(10):1083–4

Percutaneous carbon dioxide excretion in the newborn infant. Cartlidge PH, et al. **Early Hum Dev** 1990 Feb;21(2):93–103

Modulation of the frequency of glucose-dependent bursts of electrical activity by HCO3/CO2 in rodent pancreatic B-cells: experimental and theoretical results. Carroll PB, et al. **Eur Biophys J** 1990;18(2):71–7

The sodium cycle in methanogenesis. CO2 reduction to the formaldehyde level in methanogenic bacteria is driven by a primary electrochemical potential of Na+ generated by formaldehyde reduction to CH4. Kaesler B, et al. **Eur J Biochem** 1989 Dec 8;186(1–2):309–16

Recovery of [13C]-bicarbonate as respiratory 13CO2 in parenterally fed infants. Bresson JL, et al. **Eur J Clin Nutr** 1990 Jan;44(1):3–9

Radiorespirometric patterns of 14C-substrates in rats. I. Differences in kinds of 14C-substrates and their structural positions labelled with 14C. Momose Y, et al. **Eur J Drug Metab Pharmacokinet** 1989 Jul–Sep; 14(3):187–94

Direct observation of spin-trapped carbon dioxide radicals in hepatocytes exposed to carbon tetrachloride. Rau JM, et al. **Free Radic Res Commun** 1990;9(3–6):197–204

Liberation of 14CO2 from 14C-fatty acids by riboflavin-deficient sucking rat pups: a study of 14C-Octanoate and 14C-palmitate oxidation in vivo. Patterson BE, et al. **Int J Vitam Nutr Res** 1989;59(3):293–9

Cardiac effects of carbon dioxide-consuming and carbon dioxide-generating buffers during cardiopulmonary resuscitation. Gazmuri RJ, et al. **J Am Coll Cardiol** 1990 Feb;15(2):482–90

CO2 sensitivity changes during the menstrual cycle. Dutton K, et al. **J Appl Physiol** 1989 Aug;67(2):517–22

Extracorporeal bicarbonate space after bicarbonate or a bicarbonate-carbonate mixture in acidotic dogs. Kindig NB, et al. **J Appl Physiol** 1989 Dec;67(6):2331–4

Effects of ischemic and hypoxic hypoxia on VO2 and lactic acid output during tetanic contractions. Stainsby WN, et al. **J Appl Physiol** 1990 Feb;68(2):574–9

Phosphoribulokinase activity and regulation of CO2 fixation critical for photosynthetic growth of Rhodobacter sphaeroides. Hallenbeck PL, et al. **J Bacteriol** 1990 Apr; 172(4):1749–61

Biotransformations of carboxylated aromatic compounds by the acetogen Clostridium thermoaceticum: generation of growth-supportive CO2 equivalents under CO2-limited conditions. Hsu T, et al. **J Bacteriol** 1990 Jan;172(1):212–7

Catabolic thiosulfate disproportionation and carbon dioxide reduction in strain DCB-1, a reductively dechlorinating anaerobe. Mohn WW, et al. **J Bacteriol** 1990 Apr; 172(4):2065–70

Methanogenesis involving a novel carrier of C1 compounds in Methanogenium tationis. Raemakers-Franken PC, et al. **J Bacteriol** 1990 Feb;172(2):1157–9

Reassessment of 14CO2 compartmentation and of [14C]formate oxidation in rat liver. Marsolais C, et al. **J Biol Chem** 1989 Nov 25;264(33):19761–4

CO2 production after induction synchrony of the fission yeast Schizosaccharomyces pombe: the origin and nature of entrainment. Novak B, et al. **J Cell Sci** 1990 May;96 (Pt 1):79–91

Metabolism of propionate, glucose, and carbon dioxide as affected by exogenous glucose in dairy cows at energy equilibrium. Amaral DM, et al. **J Dairy Sci** 1990 May; 73(5):1244–54

pH regulation of urease levels in Streptococcus salivarius. Sissons CH, et al. **J Dent Res** 1990 May;69(5):1131–7

Effect of Altoside (ZR-515) on oxygen consumption, carbon dioxide out put and carbohydrate content of organophosphorus resistant strain of Musca domestica. Abou el Ela R, et al. **J Egypt Soc Parasitol** 1990 Jun; 20(1):307–18

Isolation of plasmid DNA sequences that complement Rhodobacter sphaeroides mutants deficient in the capacity for CO2-dependent growth. Rainey AM, et al. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1699–713

Partitioning of amino acids in lactating cows: oxidation to carbon dioxide. Black AL, et al. **J Nutr** 1990 Jul; 120(7):700–10

A validation and comparison study of two metabolic monitors. Phang PT, et al. **JPEN J Parenter Enteral Nutr** 1990 May–Jun;14(3):259–61

In vitro evaluation of a compact metabolic measurement instrument. Weissman C, et al. **JPEN J Parenter Enteral Nutr** 1990 Mar–Apr;14(2):216–21

A new CO2 inhalation system for studying regulation of breathing. Mussell MJ, et al. **Jpn J Physiol** 1989; 39(4):635–42

Trichomonas vaginalis requires traces of oxygen and high concentrations of carbon dioxide for optimal growth. Paget TA, et al. **Mol Biochem Parasitol** 1990 Jun;41(1):65–72

Simultaneous recording of tissue PCO2, interstitial pH and potassium activity in the rat cerebral cortex during anoxia and the subsequent recovery period. Ohno M, et al. **Neurol Res** 1989 Sep;11(3):153–9

Effects of acetazolamide on medullary extracellular pH and PCO2 and on ventilation in peripherally chemodenervated cats. Teppema LJ, et al. **Pflugers Arch** 1990 Feb; 415(5):519–25

Binding of substrate CO2 to the active site of human carbonic anhydrase II: a molecular dynamics study [published erratum appears in Proc Natl Acad Sci U S A 1990 Aug;87(16):6475] Liang JY, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3675–9

CO2 back-diffusion in the rete aids O2 secretion in the swimbladder of the eel. Kobayashi H, et al. **Respir Physiol** 1990 Mar;79(3):231–42

This and that: an unsuitable eponym, leeches, and the transmutation of the disciplines. Max B. **Trends Pharmacol Sci** 1990 Apr;11(4):143–6

Oscillatory CO2 evolution in glycolysing yeast extracts. Das J, et al. **Yeast** 1990 May–Jun;6(3):255–61

[Mathematical approach to the study of the capnographic curve] Zatelli R, et al. **Boll Soc Ital Biol Sper** 1989 Jun; 65(6):575–9 (Eng. Abstr.) **(Ita)**

[Changes in (a-ET) PCO2 produced by acetazolamide in red cells, not in plasma] Taki K, et al. **Kokyu To Junkan** 1989 Aug;37(8):879–83 (Eng. Abstr.) **(Jpn)**

[Pulsatile assistance for profoundly hypothermic circulatory arrest, low-flow perfusion, and moderate-flow perfusion: comparative study of brain tissue pH, PO2, and PCO2] Watanabe T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Dec;37(12):2449–55 (Eng. Abstr.) **(Jpn)**

[The role of capnographic studies in present-day medicine] Karaś Z, et al. **Wiad Lek** 1989 Aug 15–Sep 15; 42(16–18):960–2 (23 ref.) **(Pol)**

[Carbon dioxide level in pulmonary alveoli as an indicator of a patient's condition during surgery] Shitikov II, et al. **Anesteziol Reanimatol** 1990 Mar–Apr;(2):22–5 **(Rus)**

[Monitoring of myocardial gases and evaluation of the viability of the preserved heart] Chilaia SM, et al. **Grud Serdechnososudistaia Khir** 1990;(5):33–7 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Carbon dioxide distribution in Mapleson A and D systems: an experimental study. Andersen PK, et al. **Acta Anaesthesiol Scand** 1989 Aug;33(6):439–43

Total CO2 transport in rat cortical collecting duct in chloride-depletion alkalosis. Gifford JD, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):F848–53

Cerebral perfusion pressure and CO2-reactivity in the evaluation of carotid obstructions. Strik F. **Clin Neurol Neurosurg** 1990;92(2):137–41

The carbon dioxide rate of rise in awake apneic humans [letter; comment] Bryan-Brown CW. **J Clin Anesth** 1989; 1(5):401–2 Comment on: J Clin Anesth 1988;1(2):96–103.

PHARMACOLOGY

The effect of external stimuli on rat middle ear epithelium in culture. Extracellular carbon dioxide concentration. Lutgert HW, et al. **Acta Otolaryngol (Stockh)** 1990 May–Jun;109(5–6):431–7

Stimulation of H+ secretion by CO2 in turtle bladder: role of intracellular pH, exocytosis, and calcium. Arruda JA, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R222–31

Olfactory receptor response to CO2 in bullfrogs. Coates EL, et al. **Am J Physiol** 1990 May;258(5 Pt 2):R1207–12

Adaptation of rabbit renal cortical Na+–H+ exchange activity in chronic hypocapnia. Hilden SA, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):F615–22

pH regulation and response to AVP in A10 cells differ markedly in the presence vs. absence of CO2–HCO3–. Kikeri D, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):C471–83

Steady-state pHi, buffering power, and effect of CO2 in a smooth muscle-like cell line. Putnam RW, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):C461–9

Genotype and anesthetic determine mate choice in Drosophila melanogaster. Joachim D, et al. **Behav Genet** 1990 Jan;20(1):73–9

Evidence for functional differences between the two sites of rabbit transferrin: effects of serum and carbon dioxide. Zak O, et al. **Biochim Biophys Acta** 1990 Apr 9;1052(1):24–8

The effect of carbon dioxide on the diameter of brain capillaries. Atkinson JL, et al. **Brain Res** 1990 May 28; 517(1–2):333–40

Carbon dioxide induces endotrophic germ tube formation in Candida albicans. Mock RC, et al. **Can J Microbiol** 1990 Apr;36(4):249–53

The responses of superior laryngeal nerve afferent fibres to laryngeal airway CO2 concentration in the anaesthetized cat. Bradford A, et al. **Exp Physiol** 1990 Mar;75(2):267–70

The effects of changes in laryngeal airway CO2 concentration on genioglossus muscle activity in the anaesthetized cat. Nolan P, et al. **Exp Physiol** 1990 Mar; 75(2):271–4

Responses of type II pneumocyte antioxidant enzymes to normoxic and hyperoxic culture. Panus PC, et al. **In Vitro Cell Dev Biol** 1989 Sep;25(9):821–9

Effect of increased level of CO2 exposure in a closed environment on calcium and phosphorus balance in rats. Viswanathan KR, et al. **Indian J Exp Biol** 1989 Feb; 27(2):151–5

Non-invasive tracking of peripheral ventilatory response to carbon dioxide. Khoo MC. **Int J Biomed Comput** 1989 Dec; 24(4):283–95

Growth of pathogenic Yersinia enterocolitica strains in minced meat with and without protective gas with consideration of the competitive background flora. Kleinlein N, et al. **Int J Food Microbiol** 1990 Jan; 10(1):65–71

Effect of carbon dioxide on growth and extracellular enzyme production by Pseudomonas fluorescens B52. Rowe MT. **Int J Food Microbiol** 1988 Feb;6(1):51–6

The inhibition by CO2 of the growth and metabolism of micro-organisms. Dixon NM, et al. **J Appl Bacteriol** 1989 Aug;67(2):109–36 (260 ref.)

Hypocapnia does not alter collateral ventilation in sheep. Hudak BB, et al. **J Appl Physiol** 1990 Feb;68(2):503–7

A model-based evaluation of the single-breath CO2 ventilatory response test. Khoo MC. **J Appl Physiol** 1990 Jan;68(1):393–9

Tachykinins mediate hypocapnia-induced bronchoconstriction in guinea pigs. Reynolds AM, et al. **J Appl Physiol** 1989 Dec;67(6):2454–60

Influence of ventilation and hypocapnia on sympathetic nerve responses to hypoxia in normal humans. Somers VK, et al. **J Appl Physiol** 1989 Nov;67(5):2095–100

Contrasting effects of hypoxia and hypercapnia on ventilation and sympathetic activity in humans. Somers VK, et al. **J Appl Physiol** 1989 Nov;67(5):2101–6

Effect of hypercapnia and hypoxia on respiratory muscle activation in humans. Takasaki Y, et al. **J Appl Physiol** 1989 Nov;67(5):1776–84

Expiratory abdominal muscle activity during ventilatory chemostimulation in piglets. Watchko JF, et al. **J Appl Physiol** 1990 Apr;68(4):1343–9

Pressor response and respiratory depression evoked by intravertebral arterial injections of hypoxic saline. Arita H, et al. **J Auton Nerv Syst** 1989 Oct;28(1):27–33

CO dehydrogenase from Clostridium thermoaceticum. EPR and electrochemical studies in CO2 and argon atmospheres. Lindahl PA, et al. **J Biol Chem** 1990 Mar 5;265(7):3873–9

Capillary recruitment of the cerebral cortex during CO2 inhalation: fact or illusion? [letter; comment] Tomita M, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):294 Comment on: J Cereb Blood Flow Metab 1989 Aug;9(4):491–9.

Ventilatory responses to hypercapnia during tetracaine spinal anesthesia. Steinbrook RA, et al. **J Clin Anesth** 1988; 1(2):75–80

Influence of carbon dioxide on the surface characteristics and adherence potential of coagulase-negative staphylococci. Denyer SP, et al. **J Clin Microbiol** 1990 Aug;28(8):1813–7

Cardiorespiratory responses of the woodchuck and porcupine to CO2 and hypoxia. Boggs DF, et al. **J Comp Physiol [B]** 1989;159(5):641–8

New carbon dioxide-independent basal growth medium for culture of diverse tumor and nontumor cells of human and nonhuman origin. Vistica DT, et al. **J Natl Cancer Inst** 1990 Jun 20;82(12):1055–61

The effect of oxygen and carbon dioxide on the development of the free-living stages of Strongyloides ratti in axenic culture. Taylor KA, et al. **J Parasitol** 1990 Aug; 76(4):545–51

Periodic breathing at high altitude and ventilatory responses to O2 and CO2. Masuyama S, et al. **Jpn J Physiol** 1989; 39(4):523–35

Carbon dioxide-heart rate responses during hyperoxia, euoxia, and hypoxia. Tanaka M, et al. **Jpn J Physiol** 1989; 39(5):703–12

The effects of carbon dioxide inhalation on plasma MHPG, plasma hormones respiratory rate, and behavior in the rhesus monkey. Krystal JH, et al. **Life Sci** 1989; 45(18):1657–63

Effect of carbon dioxide on the utilization of brain capillary reserve and flow. Frankel H, et al. **Microcirc Endothelium Lymphatics** 1989 Dec;5(6):391–415

Carbon dioxide-related changes in cerebral blood volume and cerebral blood flow in mechanically ventilated preterm neonates: comparison of near infrared spectrophotometry and 133Xenon clearance. Pryds O, et al. **Pediatr Res** 1990 May;27(5):445–9

Role of cholinergic, vagal reflexes on the bronchoconstrictor responses to histamine during carbon dioxide inhalation in conscious guinea-pigs. Chapman RW, et al. **Pharmacol Res** 1990 Mar–Apr;22(2):133–41

Intrapulmonary CO2 inhibits inspiration in garter snakes. Furilla RA, et al. **Respir Physiol** 1989 Nov;78(2):207–17

Influence of naloxone on fetal breathing and the respiratory response to hypercapnia. Jansen AH, et al. **Respir Physiol** 1989 Nov;78(2):187–96

Almitrine and the peripheral ventilatory response to CO2 in hyperoxia and hypoxia. Olievier CN, et al. **Respir Physiol** 1989 Dec;78(3):391–402

The effect of pH and hypoxia on function and intracellular pH of the rat diaphragm. Shee CD, et al. **Respir Physiol** 1990 Jan;79(1):57–68

Ventilatory responses to carbon dioxide in four ethnic groups in Cape Town. Willcox PA, et al. **S Afr Med J** 1990 Apr 7;77(7):349–51

Carbon monoxide criteria. With reference to effects on the heart, central nervous system and fetus. Rylander R, et al. **Scand J Work Environ Health** 1981;7 Suppl 1:1–39

Changes in hyperfrontality of cerebral blood flow and carbon dioxide reactivity with age. Tsuda Y, et al. **Stroke** 1989 Dec;20(12):1667–73

Changes in coronary artery bypass graft flows with varying arterial carbon dioxide pressure levels. Lewis JW Jr, et al. **Surg Forum** 1978;29:303–6

[Experimental study of the direct effect of CO2 laser beam on the oral mucosa] Gáspár L, et al.
Morphol Igazsagugyi Orv Sz 1989 Jul;29(3):207–12 (Eng. Abstr.) **(Hun)**

PHYSIOLOGY

Cerebral blood flow responses to inhaled carbon dioxide in schizophrenia. Mathew RJ, et al. **Acta Psychiatr Scand** 1990 Jun;81(6):497–506

The influence of CO2 production and physiological deadspace on end-tidal CO2 during controlled ventilation: a study using a mechanical model. Stockwell MA, et al. **Anaesth Intensive Care** 1989 Nov;17(4):482–6

Arterial to end-tidal carbon dioxide tension difference during laparoscopy. Magnitude and effect of anaesthetic technique. Brampton WJ, et al. **Anaesthesia** 1990 Mar; 45(3):210–4

The influence of halothane, isoflurane, and pentobarbital on cerebral plasma volume in hypocapnic and normocapnic rats. Weeks JB, et al. **Anesthesiology** 1990 Sep;73(3):461–6

Estimation of peripheral chemoreflex gain from spontaneous sigh responses. Khoo MC, et al. **Ann Biomed Eng** 1989; 17(6):557–70

Blood flow velocity in the middle cerebral artery during carotid cross-clamping: loss of regulatory response to carbon dioxide partial pressure. A transcranial Doppler intraoperative study. Faccenda F, et al. **Artery** 1990; 17(3):159–69

Transmural inhomogeneity of extracellular [K+] and pH and myocardial energy metabolism in the isolated rat heart during acute global ischemia; dependence on gaseous environment. Schaapherder AF, et al. **Basic Res Cardiol** 1990 Jan–Feb;85(1):33–44

CO2 waveforms revisited [letter] Wickens CD.
Biomed Instrum Technol 1990 Jan–Feb;24(1):55

Influence of end-expiratory lung volume on carbon dioxide elimination during high frequency ventilation in dogs. Baum M, et al. **Br J Anaesth** 1989;63(7 Suppl 1):53S–58S

The effect of varying alveolar carbon dioxide levels on free recall. Marangoni AH, et al. **Brain Cogn** 1990 May; 13(1):77–85

Time constant related distortion in side-stream capnography. Doyle DJ. **Can J Anaesth** 1990 May;37(4 Pt 2):S70

CHF, rales, and the Dco [editorial; comment] Clausen JL. **Chest** 1990 Sep;98(3):523–4 Comment on: Chest 1990 Sep;98(3):550–3.

Ventilatory responses to hypercapnia and hypoxia in patients with eucapnic morbid obesity before and after weight loss. Chapman KR, et al. **Clin Sci** 1990 Jun;78(6):541–5

Ultradian and circadian CO2 emission variations in nocturnal and diurnal animals exposed to a light stimulus. Stupfel M, et al. **Comp Biochem Physiol [A]** 1989;94(3):415–25

Hyperpnoea and CO2 sensitivity of the respiratory centres during exercise. Mercier J, et al. **Eur J Appl Physiol** 1990; 59(6):411–5

The effect of almitrine on the steady-state ventilatory response to carbon dioxide at rest and during exercise in man. Cummin AR, et al. **Eur Respir J** 1990 Jun;3(6):693–8

CO2 decreases membrane conductance and depolarizes neurons in the nucleus tractus solitarii. Dean JB, et al.
Exp Brain Res 1989;76(3):656–61

Hypercarbia versus hypocarbia in panic disorder. Zandbergen J, et al. **J Affective Disord** 1990 Feb; 18(2):75–81

An online technique for estimating cerebral carbon dioxide reactivity. Patel MC, et al. **J Biomed Eng** 1990 Jul; 12(4):316–8

End-tidal carbon dioxide concentration, carbon dioxide production, heart rate, and blood pressure as indicators of induced hyperthermia. de las Alas V, et al.
J Clin Monit 1990 Jul;6(3):183–5

Respiratory monitoring of carbon dioxide and oxygen: a ten-year perspective. Weingarten M. **J Clin Monit** 1990 Jul;6(3):217–25

Effects of variation in systemic blood pressure on intraosseous pressure, PO2, and PCO2. Kiaer T, et al.
J Orthop Res 1990 Jul;8(4):618–22

The ventilatory CO2 sensitivities from Read's rebreathing method and the steady-state method are not equal in man. Berkenbosch A, et al. **J Physiol (Lond)** 1989 Apr; 411:367–77

Transient, steady-state and rebreathing responses to carbon dioxide in man, at rest and during light exercise. Jacobi MS, et al. **J Physiol (Lond)** 1989 Apr;411:85–96

Putative cerebral cortical involvement in the ventilatory response to inhaled CO2 in conscious man. Murphy K, et al. **J Physiol (Lond)** 1990 Jan;420:1–18

End-tidal PCO2 during cardiopulmonary resuscitation [letter; comment] Weil MH, et al. **JAMA** 1990 Feb 9; 263(6):814–5 Comment on: JAMA 1989 Sep 8;262(10):1347–51.

Cardiodynamic factors affecting hyperpnea during steady-state exercise in man. Miyamoto Y, et al.
Jpn J Physiol 1989;39(3):411–20

Effect of gas phase on carbohydrate metabolism in Ascaris suum larvae. Vanover-Dettling L, et al.
Mol Biochem Parasitol 1989 Aug;36(1):29–39

Effect of nimodipine on cerebrovascular response to CO2 in asymptomatic individuals and patients with subarachnoid hemorrhage: a transcranial Doppler ultrasound study. Seiler RW, et al. **Neurosurgery** 1990 Aug;27(2):247–51

The effect of arteriovenous malformation resection on cerebrovascular reactivity to carbon dioxide. Young WL, et al. **Neurosurgery** 1990 Aug;27(2):257–66; discussion 266–7

Insulin increases energy expenditure and respiratory quotient in the rat. Menéndez JA, et al.
Pharmacol Biochem Behav 1989 Dec;34(4):765–8

cDNA cloning, sequence, and expression of carbonic anhydrase in Chlamydomonas reinhardtii: regulation by environmental CO2 concentration. Fukuzawa H, et al.
Proc Natl Acad Sci U S A 1990 Jun;87(11):4383–7

Respiratory muscle activation by chemical stimuli in awake and sleeping dogs. Phillipson EA, et al.
Prog Clin Biol Res 1990;345:201–11; discussion 211–3

No evidence of interference of hypocapnia/respiratory alkalosis with classical conditioning of electrodermal responses. van den Hout MA, et al. **Psychosom Med** 1990 Mar–Apr;52(2):143–8

Cerebrovascular reactivity to CO2 in patients with hepatic or septic encephalopathy. Sari A, et al. **Resuscitation** 1990 Apr;19(2):125–34

Behavioral effects of increased CO2 load in divers. Henning RA, et al. **Undersea Biomed Res** 1990 Mar;17(2):109–20

[Significance of bicarbonate kinetics for 13CO2 respiratory gas analysis] Keles T, et al. **Beitr Infusionther** 1990; 25:374–88 (25 ref.) **(Ger)**

[Respiratory regulations of pulmonary vagal nerves under hypercapnic conditions; effects of J-receptor] Sagara Y, et al. **Kokyu To Junkan** 1989 Nov;37(11):1221–4 (Eng. Abstr.) **(Jpn)**

[The effects of hypocapnia and hypercapnia on tissue surface PO2 in hemorrhaged dogs] Hashimoto K, et al. **Masui** 1989 Oct;38(10):1271–4 (Eng. Abstr.) **(Jpn)**

[Influence of hypercapnia on circulatory response to endotracheal intubation] Sugimori K, et al. **Masui** 1990 Jun; 39(6):690–4 (Eng. Abstr.) **(Jpn)**

[Upper airway: innervation and chemical regulation of respiration] Fukuda Y.
Nippon Kyobu Shikkan Gakkai Zasshi 1990 Jan;28(1):5–15 (16 ref.) (Eng. Abstr.) **(Jpn)**

[Open loop gain of the CO2-ventilation feedback control system in chronic obstructive pulmonary disease] Kimura H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jul; 27(7):796–802 (Eng. Abstr.) **(Jpn)**

[The shaping of the functional state of the respiratory and thermoregulatory systems during work in an atmosphere with an elevated carbon dioxide content] Levinskiĭ SV, et al. **Fiziol Cheloveka** 1990 Jan–Feb;16(1):133–40 **(Rus)**

[The acid-base status of the human body during the breathing of air with an admixture of different concentrations of carbon dioxide] Sapov IA, et al. **Fiziol Cheloveka** 1990 Jan–Feb;16(1):127–32 **(Rus)**

POISONING

Toxicology of selected pesticides, drugs, and chemicals. Smoke inhalation. Beasley VR.
Vet Clin North Am Small Anim Pract 1990 Mar; 20(2):545–56 (24 ref.)

[Value of electroencephalographic examination in the diagnosis of chronic carbon dioxide poisoning] Langauer-Lewowicka H, et al. **Med Pr** 1989;40(5):310–4 (Eng. Abstr.) **(Pol)**

THERAPEUTIC USE

Cerebral vasoreactivity to carbon dioxide during cardiopulmonary perfusion at normothermia and hypothermia [see comments] Johnsson P, et al.
Ann Thorac Surg 1989 Dec;48(6):769–75 Comment in: Ann Thorac Surg 1989 Dec;48(6):752–4.

[Use of the carbon dioxide laser in the treatment of leukoplakia] Gáspár L, et al. **Fogorv Sz** 1990 Mar;83(3):65–9 (Eng. Abstr.) **(Hun)**

[The rationale for the use of a hypercapnic mixture in the aerosol therapy of patients with diseases of the lungs] Lasitsa TS, et al. **Probl Tuberk** 1990;(5):44–8 (Eng. Abstr.) **(Rus)**

[Dry CO2 baths in the treatment of sterility in women due to tubal factors] Cvijetić R, et al. **Med Arh** 1988;42(4):205–9 (Eng. Abstr.) **(Scr)**

TOXICITY

Carbon monoxide and cardiovascular disease [editorial; comment] Dwyer EM Jr, et al. **N Engl J Med** 1989 Nov 23;321(21):1474–5 Comment on: N Engl J Med 1989 Nov 23;321(21):1426–32.

[Potentiation of carbon dioxide for hypoxic hypoxia-induced death] Harafuji K, et al. **Nippon Hoigaku Zasshi** 1989 Oct; 43(5):424–9 (Eng. Abstr.) **(Jpn)**

[Dynamics of the intellectual changes in workers exposed to long-term effect of carbon dioxide] Waszkowska M, et al. **Med Pr** 1989;40(6):350–4 (Eng. Abstr.) **(Pol)**

[Interrelations of chemical composition and toxicity of the products of thermal destruction of various organic fibers] Poddubnaia LT, et al. **Gig Sanit** 1989 Nov;(11):85–6 **(Rus)**

[Reversible cardiorespiratory failure induced by CO2 inhalation in cats] Tomori Z, et al. **Bratisl Lek Listy** 1990 Jan;91(1):21–9 (Eng. Abstr.) **(Slo)**

CARBON DIOXIDE PARTIAL PRESSURE DETERMINATION, TRANSCUTANEOUS see **BLOOD GAS MONITORING, TRANSCUTANEOUS**

CARBON DIOXIDE SNOW see **DRY ICE**

CARBON DISULFIDE

ADVERSE EFFECTS

Carbon disulfide exposure and neurotoxic sequelae among viscose rayon workers. Aaserud O, et al.
Am J Ind Med 1990;18(1):25–37

Carbon monoxide, carbon disulfide, lead and cadmium—four examples of occupational toxic agents linked to cardiovascular disease. Wojtczak-Jaroszowa J, et al.
Med Hypotheses 1989 Oct;30(2):141–50 (164 ref.)

[Use of the psychologic-neurologic questionnaire and the diagnostic follow-up program in long-term CS2 exposed workers] Braemer M, et al. **Z Gesamte Hyg** 1989 Jul; 35(7):424–5 (Eng. Abstr.) **(Ger)**

[Evaluation of the health status of workers exposed to carbon disulfide] Krstev S, et al. **Arh Hig Rada Toksikol** 1989 Jun; 40(2):221–6 (Eng. Abstr.) **(Scr)**

ANALYSIS

Biological monitoring of carbon disulfide. Meuling WJ, et al. **Am J Ind Med** 1990;17(2):247–54

[Exposure analysis of the effect of air pollution by carbon disulfide] Winkelmann H, et al. **Z Gesamte Hyg** 1990 Jul; 36(7):371–2 (Eng. Abstr.) **(Ger)**

PHARMACOKINETICS

[Inhalation of carbon disulfide—studies of carbon disulfide uptake in dynamic dose administration lasting 4 hours] Herrmann G, et al. **Z Gesamte Hyg** 1989 Sep;35(9):537–41 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Subacute carbon disulfide exposure modifies adrenergic cardiovascular actions in rats. Hoffmann P, et al.
Biomed Biochim Acta 1990;49(1):115–20

Inhibition of ammonia monooxygenase in Nitrosomonas europaea by carbon disulfide. Hyman MR, et al.
J Bacteriol 1990 Sep;172(9):4775–82

POISONING

[Histologic aspects of the testis in experimental carbon disulfide poisoning] Mihalache C, et al.
Rev Med Chir Soc Med Nat Iasi 1989 Apr–Jun;93(2):339–41 (Eng. Abstr.) **(Rum)**

TOXICITY

Hepatic cholesterol metabolism following exposure to carbon disulfide in phenobarbital-treated rats. Simmons JE, et al.
Arch Environ Contam Toxicol 1989 Sep;18(5):678–87

Effects of carbon disulfide on cardiovascular function after acute and subacute exposure of rats. Hoffmann P, et al.
Biomed Biochim Acta 1990;49(1):121–8

Mechanism of the neurotoxic and hepatotoxic effects of carbon disulfide. Dalvi RR.
Drug Metabol Drug Interact 1988;6(3–4):275–84 (26 ref.)

[Short term effects of carbon disulfide on the intracardial irritation development and transmission in the rat] Hoffmann P, et al. **Arch Exp Veterinarmed** 1989;43(4):515–9 (Eng. Abstr.) **(Ger)**

[A program of medical examination of the effect of air pollution by carbon disulfide] Winkelmann H, et al.
Z Gesamte Hyg 1990 Jul;36(7):373–5 (Eng. Abstr.) **(Ger)**

CARBON ISOTOPES

Analysis of tricarboxylic acid cycle of the heart using 13C isotope isomers. Malloy CR, et al. **Am J Physiol** 1990 Sep; 259(3 Pt 2):H987–95

Versatile stable isotope technique for the measurement of amino acids and keto acids: comparison with radioactive isotope and its use in measuring in vivo disposal rates. Loy GL, et al. **Anal Biochem** 1990 Feb 15;185(1):1–9

Isotopic measurement of glucose and lactate kinetics. Wolfe RR. **Ann Med** 1990 Jun;22(3):163–70

Isotope dilution studies: determination of carbon-13, nitrogen-15 and deuterium-enriched compounds using capillary gas chromatography-chemical reaction interface/mass spectrometry. Chace DH, et al.
Biomed Environ Mass Spectrom 1990 Mar;19(3):117–22

Dependence of the carbon-isotope contents of breath carbon dioxide, milk, serum and rumen fermentation products on the delta 13C value of food in dairy cows. Metges C, et al. **Br J Nutr** 1990 Mar;63(2):187–96

Radiorespirometry evidence for the discrimination between 13C-enriched glucose and unlabelled glucose molecules by Paracoccus denitrificans. Dunstan RH, et al. **FEBS Lett** 1990 Aug 20;269(1):177–80

13C NMR assignments of the protonated carbons of [d(TAGCGCTA)]2 by two-dimensional proton-detected heteronuclear correlation. LaPlante SR, et al.

J Biomol Struct Dyn 1988 Apr;5(5):1089–99
Spectral editing of tumor 13C MRS in situ. Xue M, et al. Magn Reson Med 1990 Jun;14(3):530–7

CARBON MONOXIDE

Characteristics of pulmonary diffusing capacity for CO at rest and during exercise. Yasukouchi A. Ann Physiol Anthropol 1990 Apr;9(2):123–32 (39 ref.)
MK–801 ameliorates delayed amnesia, but potentiates acute amnesia induced by CO. Nabeshima T, et al. Neurosci Lett 1990 Jan 22;108(3):321–7
Sarcoidosis and the diffusing capacity for carbon monoxide. Sietsma K. Sarcoidosis 1990 Mar;7(1):12–4

ADVERSE EFFECTS

Production of arrhythmias by elevated carboxyhemoglobin in patients with coronary artery disease [see comments] Sheps DS, et al. Ann Intern Med 1990 Sep 1;113(5):343–51 Comment in: Ann Intern Med 1990 Sep 1;113(5):337–8.
Effects of short–term exposure to carbon monoxide in subjects with coronary artery disease. Kleinman MT, et al. Arch Environ Health 1989 Nov–Dec;44(6):361–9
The role of combustion products in building–associated illness. Lambert WE, et al. Occup Med 1989 Oct–Dec; 4(4):723–33 (54 ref.)
Neurotoxicity of prenatal carbon monoxide exposure. Fechter LD. Res Rep Health Eff Inst 1987 Sep;(12):3–22
Maximal aerobic capacity at several ambient concentrations of carbon monoxide at several altitudes. Horvath SM, et al. Res Rep Health Eff Inst 1988 Dec;(21):1–21
[Carbon monoxide and coronary heart disease] Motz W, et al. Dtsch Med Wochenschr 1990 May 25;115(21):839 (Ger)
[The combined action of carbon monoxide and a heating microclimate on the human body under extreme conditions] Sedov AV, et al. Gig Tr Prof Zabol 1989;(12):1–4 (Eng. Abstr.) (Rus)

ANALYSIS

Fire fighters' exposure to carbon monoxide during Australian bushfires. Brotherhood JR, et al. Am Ind Hyg Assoc J 1990 Apr;51(4):234–40
Carbon monoxide in indoor ice skating rinks: evaluation of absorption by adult hockey players. Lévesque B, et al. Am J Public Health 1990 May;80(5):594–8
Abstinence from smoking and expired–air carbon monoxide levels: lactose intolerance as a possible source of error [see comments] McNeill AD, et al. Am J Public Health 1990 Sep;80(9):1114–5 Comment in: Am J Public Health 1990 Sep;80(9):1040–1.
Single–breath carbon monoxide diffusing capacity prediction equations from a Mediterranean population. Roca J, et al. Am Rev Respir Dis 1990 Apr;141(4 Pt 1):1026–32
Carbon monoxide diffusing capacity, other indices of lung function, and respiratory symptoms in a general population sample. Viegi G, et al. Am Rev Respir Dis 1990 Apr;141(4 Pt 1):1033–9
Resonance Raman characterization of Chromatium vinosum cytochrome c'. Effect of pH and comparison of equilibrium and photolyzed carbon monoxide species. Hobbs JD, et al. Biochemistry 1990 May 1;29(17):4166–74
Human exposure to carbon monoxide and inhalable particulate in Beijing, China. Wang JN, et al. Biomed Environ Sci 1988 Jun;1(1):5–12
Charge motion in MbCO crystals after flash photolysis. Iben IE, et al. Biophys J 1989 Sep;56(3):459–63
Carbon monoxide levels in indoor "tractor–pull" events—Manitoba. Luckhurst DG, et al. Can Dis Wkly Rep 1990 Apr 28;16(17):79–81 (Eng, Fre)
Evaluation of an alveolar carbon monoxide analysis method. Lavoie R, et al. Clin Chem 1990 Jan;36(1):160
Medical air compressors. Health Devices 1988 Sep;17(9):279
Woodstove smoke and CO emissions: comparison of reference methods with the VIP sampler. Jaasma DR, et al. J Air Waste Manage Assoc 1990 Jun;40(6):866–71
Adding spirometry, carbon monoxide, and pulmonary symptom results to smoking cessation counseling: a randomized trial. Risser NL, et al. J Gen Intern Med 1990 Jan–Feb;5(1):16–22
Carbon monoxide excretion as an index of bilirubin production in rhesus monkeys. Vreman HJ, et al. J Med Primatol 1989;18(6):449–60
Indoor–outdoor carbon monoxide concentrations at four sites in Riyadh, Saudi Arabia. Rowe DR, et al. JAPCA 1989 Aug;39(8):1100–2
Carbon monoxide unlikely to be a hazard to bushfire fighters [letter] Brotherhood JR, et al. Med J Aust 1989 Dec 4–18; 151(11–12):719–20
Self–selected blocking of vents on low–yield cigarettes. Kozlowski LT, et al. Pharmacol Biochem Behav 1989 Aug; 33(4):815–9
Effects of puff number and puff spacing on carbon monoxide exposure from commercial brand cigarettes. Weinhold LL, et al. Pharmacol Biochem Behav 1989 Aug;33(4):853–8
Concentrations of air pollutants inside and outside cars driving on highways. Rudolf W. Sci Total Environ 1990 Apr;93:263–76

BLOOD

Mechanisms regulating the reactions of human hemoglobin with oxygen and carbon monoxide. Perutz MF. Annu Rev Physiol 1990;52:1–25 (49 ref.)
Carbon monoxide control in a high highway tunnel. Miranda JM, et al. Arch Environ Health 1967 Jul;15(1):16–25
CO transfer factor on exercise: age and sex differences. Kendrick AH, et al. Eur Respir J 1990 Mar;3(3):323–8
Effect of ethanol on fatal carbon monoxide poisoning in awake mice [correction of rats]. Tomita M, et al. Toxicol Lett 1990 Feb;50(2–3):151–7
[Laboratory diagnostic monitoring of blood gas parameters in children during bronchologic studies] Zöllner H, et al. Z Erkr Atmungsorgane 1990;174(2):126–30 (Eng. Abstr.) (Ger)

DIAGNOSTIC USE

Comparison of single breath carbon monoxide diffusing capacity and pressure–volume curves in detecting emphysema [letter; comment] Colebatch HJ, et al. Am Rev Respir Dis 1990 Mar;141(3):799–800 Comment on: Am Rev Respir Dis 1989 May;139(5):1179–87.
Determination of single and repeated red cell volumes by the indicator dilution method using carbon monoxide as the indicator. Fukui M, et al. Crit Care Med 1989 Nov; 17(11):1199–202
Carbon monoxide diffusing capacity is a poor predictor of clinically significant bleomycin lung. New Zealand Clinical Oncology Group [see comments] McKeage MJ, et al. J Clin Oncol 1990 May;8(5):779–83 Comment in: J Clin Oncol 1990 May;8(5):765–7.

METABOLISM

O2 and CO reactions with heme proteins: quantum yields and geminate recombination on picosecond time scales. Chance MR, et al. Biochemistry 1990 Jun 12;29(23):5537–45
Kinetics and thermodynamics of oxygen and carbon monoxide binding to the T–state hemoglobin of Urechis caupo. Martin KD, et al. Biochemistry 1990 Jun 19; 29(24):5718–26
CO recombination in cytochrome c peroxidase: effect of the local heme environment on CO binding explored through site–directed mutagenesis. Miller MA, et al. Biochemistry 1990 Feb 20;29(7):1777–91
Effect of the distal histidine modification (Cyanation) of myoglobin on the ligand binding kinetics and the heme environmental structures. Morishima I, et al. Biochemistry 1989 Sep 19;28(19):7582–6
Role of the arginine–45 salt bridge in ligand dissociation from sperm whale carboxymyoglobin as probed by photoacoustic calorimetry. Westrick JA, et al. Biochemistry 1990 Jul 17;29(28):6741–6
Carbon monoxide production by nonbacterial sources after heme feeding of neonatal rats. Stevenson DK, et al. Biol Neonate 1990;57(3–4):238–42
Activation thermodynamics of the binding of carbon monoxide to horseradish peroxidase. Role of pressure, temperature and solvent. Balny C, et al. Biophys Chem 1989 Jul;33(3):237–44
Characterization of two low Em forms of cytochrome a3 and their carbon monoxide complexes in mammalian cytochrome c oxidase. Sidhu GS, et al. Biophys J 1990 Jun;57(6):1125–40
Effect of blood in the gut on measurements of endogenous carbon monoxide production. Brouillard RP, et al. Blood 1975 Jan;45(1):67–9
Effect of pH on CO recombination to cytochrome oxidase in intact mitochondria. Harmon HJ, et al. FEBS Lett 1990 Jul 2;267(1):167–70
In vivo binding of carbon monoxide to cytochrome c oxidase in rat brain. Brown SD, et al. J Appl Physiol 1990 Feb; 68(2):604–10
Rate of CO uptake by canine erythrocytes as a function of PO2. Crapo RO, et al. J Appl Physiol 1989 Dec; 67(6):2265–8
Characterization of the H2– and CO–dependent chemolithotrophic potentials of the acetogens Clostridium thermoaceticum and Acetogenium kivui. Daniel SL, et al. J Bacteriol 1990 Aug;172(8):4464–71
The effects of pressure on oxygen and carbon monoxide binding kinetics for myoglobin. A high pressure laser flash photolysis study. Adachi S, et al. J Biol Chem 1989 Nov 15;264(32):18896–901
Characterization of a carbon monoxide complex of reduced dopamine beta–hydroxylase. Evidence for inequivalence of the Cu(I) centers. Blackburn NJ, et al. J Biol Chem 1990 Sep 15;265(26):15383–6
Expression of cyoA and cyoB demonstrates that the CO–binding heme component of the Escherichia coli cytochrome o complex is in subunit I. Nakamura H, et al. J Biol Chem 1990 Jul 5;265(19):11193–7
Cooperative ligand binding of crosslinked hemoglobins at very high temperatures. Bellelli A, et al. J Mol Biol 1990 Jun 20;213(4):571–4
Stereochemistry of carbon monoxide binding to normal human adult and Cowtown haemoglobins [published erratum appears in J Mol Biol 1990 Aug 20;214(4):949] Derewenda Z, et al. J Mol Biol 1990 Feb 5;211(3):515–9
Effect of age on kinetics and carbon monoxide binding to cytochrome oxidase in synaptic and non–synaptic brain mitochondria. Harmon HJ. Mech Ageing Dev 1990 Mar 31;53(1):35–48
Effect of cold pressor test on carbon monoxide diffusing capacity in normal subjects. Kuwahira I, et al. Respiration 1989;56(1–2):87–93

PHARMACOKINETICS

Carbon monoxide assessment of smoking in chronic obstructive pulmonary disease. Crowley TJ, et al. Addict Behav 1989;14(5):493–502
Crystal structure of the carbon monoxide–substrate–cytochrome P–450CAM ternary complex. Raag R, et al. Biochemistry 1989 Sep 19; 28(19):7586–92
Parameters influencing carbon monoxide kinetics. Hauck H. Exp Pathol 1989;37(1–4):170–6
[Optimizing carbon monoxide detection in biological material] Iffland R, et al. Beitr Gerichtl Med 1989;47:87–94 (Eng. Abstr.) (Ger)

PHARMACOLOGY

Placental growth in rats exposed to carbon monoxide at selected stages of pregnancy. Lynch AM, et al. Biol Neonate 1989;56(3):151–7
Study on the mechanism of carbon monoxide induced endothelium–independent relaxation in porcine coronary artery and vein. Gräser T, et al. Biomed Biochim Acta 1990; 49(4):293–6
Similar endothelium–independent arterial relaxation by carbon monoxide and nitric oxide. Vedernikov YP, et al. Biomed Biochim Acta 1989;48(8):601–3
Chick embryo survival under acute carbon monoxide challenges. Cirotto C, et al. Comp Biochem Physiol [A] 1989;94(1):117–23
Effects of verapamil and carbon monoxide on blood pressure and heart mass in the spontaneously hypertensive rat. Penney DG, et al. Eur J Pharmacol 1990 Jun 21; 182(1):29–36
Chronic CO exposure stimulates erythropoiesis but not glomus cell growth. Sherpa AK, et al. J Appl Physiol 1989 Oct;67(4):1383–7
The metabolic effect of carbon monoxide on the heart. Hattori H, et al. Mol Cell Biochem 1990 Jun 25;95(2):117–23
[Sex difference in operant behavior following single exposure to carbon monoxide in adult rats] Aikawa H, et al. Sangyo Igaku 1990 Jan;32(1):26–32 (Eng. Abstr.) (Jpn)

TOXICITY

The time course of hematological response to experimental exposures of carbon monoxide. Ramsey JM. Arch Environ Health 1969 Mar;18(3):323–9
Cardiomegaly in neonatal rats exposed to 500 ppm carbon monoxide. Clubb FJ Jr, et al. J Mol Cell Cardiol 1989 Sep; 21(9):945–55
Smoke inhalation injury and the effect of carbon monoxide in the sheep model. Shimazu T, et al. J Trauma 1990 Feb; 30(2):170–5
Carbon monoxide (CO)–induced hypoxia in mice: evaluation as an experimental model of cerebral ischemia for drug screening. Koida M, et al. Jpn J Pharmacol 1989 Oct; 51(2):273–8
Effect of chronic carbon monoxide exposure on experimental alcoholic liver injury in rats. Nanji AA, et al. Life Sci 1989; 45(10):885–90
Carbon monoxide and myocardial ischemia [letter; comment] N Engl J Med 1990 Apr 12;322(15):1086–7 Comment on: N Engl J Med 1989 Nov 23;321(21):1426–32.
Short–term effects of carbon monoxide exposure on the exercise performance of subjects with coronary artery disease [published erratum appears in N Engl J Med 1990 Apr 5;322(14):1019] [see comments] Allred EN, et al. N Engl J Med 1989 Nov 23;321(21):1426–32 Comment in: N Engl J Med 1989 Nov 23;321(21):1474–5. Comment in: N Engl J Med 1990 Apr 12;322(15):1086–7.
Effects of carbon monoxide in combination with behaviorally active drugs on fixed–ratio performance in the mouse. Knisely JS, et al. Neurotoxicol Teratol 1989 Sep–Oct; 11(5):447–52
Neurotoxicologic evaluation of rats after 13 weeks of inhalation exposure to dichloromethane or carbon monoxide. Mattsson JL, et al. Pharmacol Biochem Behav 1990 Jul;36(3):671–81
The effect of carbon monoxide on the function of a crustacean sensory receptor is no different to the effect of hypoxia. Parsons DW, et al. Res Commun Chem Pathol Pharmacol 1990 Feb; 67(2):229–40
Acute effects of carbon monoxide exposure on individuals with coronary artery disease. Allred EN, et al. Res Rep Health Eff Inst 1989 Nov;(25):1–79
Cardiovascular effects of chronic carbon monoxide and high–altitude exposure. McGrath JJ. Res Rep Health Eff Inst 1989 Jul;(27):1–23
Influence of experimental pulmonary emphysema on the toxicological effects from inhaled nitrogen dioxide and diesel exhaust. Mauderly JL, et al. Res Rep Health Eff Inst 1989 Oct;(30):1–47
Ergometer within a whole–body plethysmograph to evaluate performance of guinea pigs under toxic atmospheres. Malek DE, et al. Toxicol Appl Pharmacol 1989 Nov;101(2):340–55
[Legal aspects of regulation of atmospheric air quality in various foreign countries] Bushtueva KA, et al. Gig Sanit 1989 Nov;(11):53–7 (Rus)

CARBON MONOXIDE POISONING

Clinical aspects of carbon monoxide poisoning.
Lowe-Ponsford FL, et al.
Adverse Drug React Acute Poisoning Rev 1989 Winter; 8(4):217-40 (105 ref.)

Management of carbon monoxide poisoning. Ilano AL, et al. **Chest** 1990 Jan;97(1):165-9 (8 ref.)

Carbon monoxide poisoning: a review epidemiology, pathophysiology, clinical findings, and treatment options including hyperbaric oxygen therapy. Thom SR, et al.
J Toxicol Clin Toxicol 1989;27(3):141-56 (73 ref.)

BLOOD

Sensitivity analysis applied to Coburn-Forster-Kane models of carboxyhemoglobin formation. McCartney ML.
Am Ind Hyg Assoc J 1990 Mar;51(3):169-77

Carboxyhemoglobin and pulse oximetry [letter] González A, et al. **Anesthesiology** 1990 Sep;73(3):573

The role of hydrogen cyanide and carbon monoxide in fire casualties: a prospective study. Lundquist P, et al.
Forensic Sci Int 1989 Sep;43(1):9-14

Alteration in carboxyhemoglobin concentrations during exposure to 9 ppm carbon monoxide for 8 hours at sea level and 2134 m altitude in a hypobaric chamber. Horvath SM, et al. **JAPCA** 1989 Oct;39(10):1323-7

Effect of ethanol on fatal carbon monoxide poisoning in awake mice [correction of rats]. Tomita M, et al.
Toxicol Lett 1990 Feb;50(2-3):151-7

[Relation of the pulse oximetry value in dyshemoglobinemias] Forstner K, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:81-2 **(Ger)**

COMPLICATIONS

Alpha coma and barbiturate poisoning [see comments] de Boer WB, et al. **Anaesth Intensive Care** 1989 Nov; 17(4):503-4 Comment in: Anaesth Intensive Care 1990 May;18(2):278-9.

Alpha coma--comment [letter; comment] Sutton D.
Anaesth Intensive Care 1990 May;18(2):278-9 Comment on: Anaesth Intensive Care 1989 Nov;17(4):503-4.

Urban angina, urban arrhythmias: carbon monoxide and the heart [editorial; comment] Walden SM, et al.
Ann Intern Med 1990 Sep 1;113(5):337-8 Comment on: Ann Intern Med 1990 Sep 1;113(5):343-51.

Unilateral diaphragmatic paralysis secondary to carbon monoxide poisoning. Joiner TA, et al. **Chest** 1990 Feb; 97(2):498-9

Myocardial infarction with normal coronary arteries after acute exposure to carbon monoxide. Marius-Nunez AL. **Chest** 1990 Feb;97(2):491-4

'Psychic akinesia' following carbon monoxide poisoning. Lugaresi A, et al. **Eur Neurol** 1990;30(3):167-9

Psychic akinesia following bilateral pallidal lesions. Starkstein SE, et al. **Int J Psychiatry Med** 1989;19(2):155-64 (37 ref.)

A case of transient choreoathetosis with amnesic syndrome after acute monoxide poisoning [published erratum appears in Ital J Neurol Sci 1990 Feb;11(1):88] Meucci G, et al. **Ital J Neurol Sci** 1989 Oct;10(5):513-7

Subacute sequelae of carbon monoxide poisoning [letter] Vishwanathan KA, et al. **J Assoc Physicians India** 1989 May;37(5):349

Carbon monoxide poisoning in smoke inhalation [letter] Moon RE, et al. **J Clin Anesth** 1990 Jul-Aug;2(4):288-90

Carbon monoxide, carbon disulfide, lead and cadmium--four examples of occupational toxic agents linked to cardiovascular disease. Wojtczak-Jaroszowa J, et al.
Med Hypotheses 1989 Oct;30(2):141-50 (164 ref.)

Occult carbon monoxide poisoning in an infant. Piatt JP, et al. **Pediatr Emerg Care** 1990 Mar;6(1):21-3

Hypothermia following acute carbon-monoxide poisoning increases mortality. Sutariya BB, et al. **Toxicol Lett** 1990 Jul;52(2):201-8

Effects of ethanol in acute carbon monoxide poisoning. Sharma P, et al. **Toxicology** 1990 May 31;62(2):213-26

[A case of delayed post-anoxic encephalopathy after acute carbon monoxide poisoning] Ernotte D, et al.
Acta Neurol Belg 1989 Mar-Apr;89(2):67-70 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Screening hospital admissions from the emergency department for occult carbon monoxide poisoning. Heckerling PS, et al. **Am J Emerg Med** 1990 Jul;8(4):301-4

Carbon monoxide poisoning: bilateral lesions in the thalamus on MR imaging of the brain. Tuchman RF, et al.
Pediatr Radiol 1990;20(6):478-9

Rapid estimation of carboxyhemoglobin by breath sampling in an emergency setting. Kurt TL, et al.
Vet Hum Toxicol 1990 Jun;32(3):227-9

EPIDEMIOLOGY

Weather influence on the prevalence of carbon monoxide intoxications. Gijsenbergh FP, et al. **Hum Toxicol** 1989 Sep; 8(5):355-8

An examination of the intra-SMSA distribution of carbon monoxide exposure. Schwab M.
J Air Waste Manage Assoc 1990 Mar;40(3):331-6

[Carbon monoxide poisoning: analysis of situation and intervention strategies] Tissot B, et al.
J Toxicol Clin Exp 1989 Sep-Oct;9(5):371-4 **(Fre)**

ETIOLOGY

Carbon monoxide poisoning during the summer in an air-conditioned vehicle: a case report [letter] Ng AY, et al. **J Emerg Med** 1989 Jul-Aug;7(4):414

Occult carbon monoxide poisoning in patients with neurologic illness. Heckerling PS, et al.
J Toxicol Clin Toxicol 1990;28(1):29-44

[CO intoxication in dogs following smoke inhalation injury] Li ZZ.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Dec;1(4):274-7 (Eng. Abstr.) **(Chi)**

[Carbon monoxide poisoning caused by a hot plate] Bauer G, et al. **Arch Kriminol** 1989 Nov-Dec;184(5-6):161-7 (Eng. Abstr.) **(Ger)**

METABOLISM

Carbon monoxide-mediated brain lipid peroxidation in the rat. Thom SR. **J Appl Physiol** 1990 Mar;68(3):997-1003

MORTALITY

Fatal unintended carbon monoxide poisoning in West Virginia from nonvehicular sources. Baron RC, et al.
Am J Public Health 1989 Dec;79(12):1656-8

Changing rates of suicide by car exhaust in men and women in the United States after car exhaust was detoxified. Lester D. **Crisis** 1989 Oct;10(2):164-8

PATHOLOGY

[A gas water heater as a means of suicide] Breindl D, et al. **Beitr Gerichtl Med** 1989;47:649-55 (Eng. Abstr.) **(Ger)**

[Optimizing carbon monoxide detection in biological material] Iffland R, et al. **Beitr Gerichtl Med** 1989;47:87-94 (Eng. Abstr.) **(Ger)**

[Negligent death caused by careless autopsy. Cause of death not recognized: 2d death] Bayer M, et al. **Fortschr Med** 1989 Nov 30;107(34):71 **(Ger)**

[Fatal and survived acute carbon monoxide poisoning caused by wood burning stoves as a source of warmth] Tiess D, et al. **Z Arztl Fortbild (Jena)** 1989;83(23):1179-81 **(Ger)**

PHYSIOPATHOLOGY

The pathophysiology of carbon monoxide poisoning and acute respiratory failure in a sheep model with smoke inhalation injury. Wang CZ, et al. **Chest** 1990 Mar; 97(3):736-42

Impact of carbon monoxide on cardiopulmonary dysfunction after smoke inhalation injury. Sugi K, et al. **Circ Res** 1990 Jan;66(1):69-75

Acute and chronic effects of carbon monoxide on mitochondrial function. Shigezane J, et al.
Igaku Kenkyu 1989 Mar;59(1):35-45

An avoidable pitfall in donor selection for heart transplantation. Utah Heart Transplant Program. Karwande SV, et al. **J Heart Transplant** 1989 Sep-Oct; 8(5):422-4

Carbon monoxide poisoning: clinical, neurophysiological, and brain imaging observations in acute disease and follow-up. Vieregge P, et al. **J Neurol** 1989 Dec;236(8):478-81

Compensatory tracking in humans with elevated carboxyhemoglobin. Benignus VA, et al.
Neurotoxicol Teratol 1990 Mar-Apr;12(2):105-10

Dose-effects functions for carboxyhemoglobin and behavior. Benignus VA, et al. **Neurotoxicol Teratol** 1990 Mar-Apr; 12(2):111-8 (50 ref.)

Carbon monoxide exposure and human visual detection thresholds. Hudnell HK, et al. **Neurotoxicol Teratol** 1989 Jul-Aug;11(4):363-71

Chronic exposure to carbon monoxide at high altitude: effects on mean electrical axis. Cooper R, et al. **Physiol Behav** 1989 Jul;46(1):75-9

Responses of the working rat heart to carbon monoxide. Lin H, et al. **Physiol Behav** 1989 Jul;46(1):81-4

Acute carbon monoxide poisoning: animal models: a review. Penney DG. **Toxicology** 1990 May 31;62(2):123-60 (133 ref.)

[Cerebral hemodynamics in workers subjected to combined exposure to methanol and carbon monoxide vapors] Panchenko EN, et al. **Vrach Delo** 1989 Jul;(7):99-102 (Eng. Abstr.) **(Rus)**

[Familial poisoning by carbon monoxide with different ECG changes] Milosavljević J, et al. **Arh Hig Rada Toksikol** 1989 Dec;40(4):355-62 (Eng. Abstr.) **(Scr)**

PREVENTION & CONTROL

[Carbon monoxide poisoning in the Brussels metropolitan area. Home survey technics and proposals for action] Milis L, et al. **Arch Belg** 1989;47(1-4):24-8 (Eng. Abstr.) **(Fre)**

[Prevention of carbon monoxide poisoning in the Herault district] Passeron D, et al. **J Toxicol Clin Exp** 1989 Sep-Oct;9(5):325-6 **(Fre)**

PSYCHOLOGY

CO and suicide [letter] Spencer J, et al.
Aust N Z J Psychiatry 1989 Sep;23(3):312-3

THERAPY

Acute carbon monoxide poisoning: emergency management and hyperbaric oxygen therapy. Severance HW, et al.
J Miss State Med Assoc 1989 Oct;30(10):321-5 (10 ref.)

Hyperbaric oxygen for carbon monoxide poisoning [letter; comment] **Lancet** 1990 Mar 3;335(8688):549-50 Comment on: Lancet 1989 Dec 23-30;2(8678-8679):1529.

Hyperbaric for carbon monoxide poisoning [letter; comment] **Lancet** 1989 Oct 28;2(8670):1032-3 Comment on: Lancet 1989 Aug 19;2(8660):414-9.

Hyperbaric oxygen for carbon monoxide poisoning [letter] [see comments] Broome JR, et al. **Lancet** 1989 Dec 23-30; 2(8678-8679):1529 Comment in: Lancet 1990 Mar 3;335(8688):549-50.

[Characteristics and experiences in treatment of acute CO intoxication combined with a burn] Jia XM.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1985 Dec;1(4):288 **(Chi)**

[A case of "interval" form of acute carbon monoxide poisoning--brain MRI and therapeutic effect of hyperbaric oxygenation] Kodama K, et al. **Rinsho Shinkeigaku** 1990 Apr;30(4):420-6 (Eng. Abstr.) **(Jpn)**

VETERINARY

Toxicology of selected pesticides, drugs, and chemicals. Smoke inhalation. Beasley VR.
Vet Clin North Am Small Anim Pract 1990 Mar; 20(2):545-56 (24 ref.)

Reduced hatchability associated with engine fumes [letter] [see comments] Swarbrick O. **Vet Rec** 1989 Oct 21; 125(17):444-5 Comment in: Vet Rec 1989 Nov 25;125(22):560.

CARBON RADIOISOTOPES

Isotopic estimation of plasma glucose conversion to plasma lactate using [6-3H]glucose and [6-14C]glucose. Nurjhan N, et al. **Proc Soc Exp Biol Med** 1989 Oct;192(1):43-6

ADMINISTRATION & DOSAGE

[Ultrastructural changes in neurons of the arcuate nucleus-median eminence complex in rats irradiated with carbon ions and gamma rays] Gitsov LG, et al.
Kosm Biol Aviakosm Med 1990 Jan-Feb;24(1):34-6 (Eng. Abstr.) **(Rus)**

[Ultrastructural changes in the rat cerebellar cortex in the remote periods after exposure to accelerated carbon ions] Verbitskaia LB, et al. **Kosm Biol Aviakosm Med** 1989 Nov-Dec;23(6):71-7 (Eng. Abstr.) **(Rus)**

ANALYSIS

Atmospheric nuclear weapon test history as characterized by the deposition of 14C in human teeth. Nishizawa K, et al. **Health Phys** 1990 Aug;59(2):179-82

The use of radiocarbon (14C) to identify human skeletal materials of forensic science interest. Taylor RE, et al.
J Forensic Sci 1989 Sep;34(5):1196-205

DIAGNOSTIC USE

The accumulation of 11C-methionine in cerebral glioma patients studied with PET. Kameyama M, et al.
Acta Neurochir (Wien) 1990;104(1-2):8-12

Quantification of antibiotic drug potency by a two-compartment radioassay of bacterial growth. Boonkitticharoen V, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1035-40

Validation of [1-11C]acetate as a tracer for noninvasive assessment of oxidative metabolism with positron emission tomography in normal, ischemic, postischemic, and hyperemic canine myocardium. Armbrecht JJ, et al.
Circulation 1990 May;81(5):1594-605

Metabolic fate of L-[methyl-11C]methionine in human plasma. Ishiwata K, et al. **Eur J Nucl Med** 1989; 15(10):665-9

Tracer mixing: sites of tracer infusion and sampling. Wisneski JA, et al. **Horm Metab Res** 1990 Mar;22(3):157-62

Tissue distribution of 14C- and 3H-labelled misonidazole in the tumor-bearing mouse. Cobb LM, et al.
Int J Radiat Oncol Biol Phys 1990 Feb;18(2):347-51

Detection of carbon-14 eluting from a capillary gas chromatograph using chemical reaction interface-mass spectrometry. Chace DH, et al. **J Chromatogr** 1990 Apr 27;527(1):1-10

PET evaluation of spinal cord tumor using 11C-methionine. Higano S, et al. **J Comput Assist Tomogr** 1990 Mar-Apr; 14(2):297-9

Comparative dual-tracer studies of carbon-14 tryptophan and iodine-131 HIPDM in animal models of pancreatic diseases. Kubota K, et al. **J Nucl Med** 1989 Nov; 30(11):1848-55

Utilization of labeled thymidine in DNA synthesis: studies for PET. Shields AF, et al. **J Nucl Med** 1990 Mar; 31(3):337-42

Differential diagnosis of AH109A tumor and inflammation by radioscintigraphy with L-[methyl-11C]methionine. Kubota K, et al. **Jpn J Cancer Res** 1989 Aug;80(8):778-82

The 14C-urea breath-test for the detection of gastric Campylobacter pylori infection. Surveyor I, et al.
Med J Aust 1989 Oct 16;151(8):435-9

Detecting Campylobacter pylori with the 13C- and 14C-urea breath test. Rauws EA. **Scand J Gastroenterol Suppl** 1989; 160:25-6

[Value of 11C-methionine and PET in the diagnosis of low

grade gliomas] Shishido F, et al. **Kaku Igaku** 1990 Apr; 27(4):293–302 (Eng. Abstr.) **(Jpn)**

[Fatty acid metabolism using C-11 palmitate: (1). Resting study] Tamaki N, et al. **Kaku Igaku** 1990 Apr;27(4):313–21 (Eng. Abstr.) **(Jpn)**

[The use of markers for determination of the activity of microsomal enzymes connected with cytochrome p–450] Krajewska B, et al. **Wiad Lek** 1989 Jun 1;42(11):739–43 (25 ref.) (Eng. Abstr.) **(Pol)**

METABOLISM

The biological fate of 14C–dimercaptosuccinic acid in monkeys and rabbits. Tillotson JA, et al. **Milit Med** 1989 Sep;154(9):444–9

PHARMACOKINETICS

Lung retention and clearance classification of a 14C–containing aerosol produced during re–tubing of a nuclear reactor. Johnson JR. **Health Phys** 1989 Oct; 57(4):645–7

Critical analysis of the use of 14C–acetate for measuring in vivo rat cholesterol synthesis. Lutton C, et al. **Reprod Nutr Dev** 1990;30(1):71–84

CARBON TETRACHLORIDE

Development of a field method for evaluating the service life of organic vapor cartridges: results of laboratory testing using carbon tetrachloride. Cohen HJ, et al. **Am Ind Hyg Assoc J** 1989 Sep;50(9):486–95

Carbon tetrachloride–induced experimental cirrhosis in the rat: a reappraisal of the model. Ariosto F, et al. **Eur Surg Res** 1989;21(5):280–6

Adenosine partially prevents cirrhosis induced by carbon tetrachloride in rats. Hernández–Muñoz R, et al. **Hepatology** 1990 Aug;12(2):242–8

Hypoxia and CCl4–induced liver injury, but not acidosis, impair metabolism of cysteinyl leukotrienes in perfused rat liver. Wettstein M, et al. **Hepatology** 1990 May;11(5):866–73

Protective effect of colchiceine against acute liver damage. Mourelle M, et al. **Life Sci** 1989;45(10):891–900

Anesthesia cutoff phenomenon: interfacial hydrogen bonding. Chiou JS, et al. **Science** 1990 May 4;248(4955):583–5

ADMINISTRATION & DOSAGE

Fructose bisphosphatase activity in the serum of rats treated with carbon tetrachloride. Morata P, et al. **Biochem Int** 1989 Oct;19(4):863–9

Effect of oral dosing vehicles on the acute hepatotoxicity of carbon tetrachloride in rats. Kim HJ, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):34–49

Effect of dosing vehicles on the pharmacokinetics of orally administered carbon tetrachloride in rats. Kim HJ, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):50–60

ANALOGS & DERIVATIVES

Dimethyldisulfide formation during trichloromethyl radical attack on methionine. Castro GD, et al. **Biochem Pharmacol** 1989 Nov 15;38(22):4145–7

Mass spectroscopy and chromatography of the trichloromethyl radical adduct of phenyl tert–butyl nitrone. Janzen EG, et al. **Free Radic Res Commun** 1990; 9(3–6):353–60

ANALYSIS

[Gas chromatographic determination of organochlorine compounds and toluene in sewage waters] Kozeĭko TA, et al. **Gig Sanit** 1990 Apr;(4):80–1 **(Rus)**

ANTAGONISTS & INHIBITORS

Mechanism for the protective effects of silymarin against carbon tetrachloride–induced lipid peroxidation and hepatotoxicity in mice. Evidence that silymarin acts both as an inhibitor of metabolic activation and as a chain–breaking antioxidant. Lettéron P, et al. **Biochem Pharmacol** 1990 Jun 15;39(12):2027–34

Protection from chlordecone (Kepone)–potentiated CCl4 hepatotoxicity in rats by fructose 1,6–diphosphate. Rao SB, et al. **Int J Biochem** 1989;21(9):949–54

METABOLISM

Microsomal metabolism of carbon tetrachloride: participation of pyridine nucleotide synergism. Tortoriello P, et al. **Biochem Med Metab Biol** 1990 Aug;44(1):18–28

Coenzyme F430 as a possible catalyst for the reductive dehalogenation of chlorinated C1 hydrocarbons in methanogenic bacteria. Krone UE, et al. **Biochemistry** 1989 Dec 26;28(26):10061–5

Carbon tetrachloride metabolism in partially hepatectomized and sham–operated rats pre–exposed to chlordecone (Kepone). Young RA, et al. **J Biochem Toxicol** 1989 Winter;4(4):211–9

Reaction of glutathione with a free radical metabolite of carbon tetrachloride. Connor HD, et al. **Mol Pharmacol** 1990 Mar;37(3):443–51

PHARMACOKINETICS

Biotransformation of carbon tetrachloride and lipid peroxidation promotion by liver nuclear preparations from different animal species. Castro GD, et al. **Cancer Lett** 1990 Aug;53(1):9–15

Metabolic activation of carbon tetrachloride by the cervico–vaginal epithelium in rodents. Brittebo EB, et al. **Pharmacol Toxicol** 1989 Nov;65(5):336–42

The role of metabolism in carbon tetrachloride–mediated immunosuppression: in vivo studies. Kaminski NE, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):9–20

PHARMACOLOGY

Promethazine inhibits the formation of aldehydic products of lipid peroxidation but not covalent binding resulting from the exposure of rat liver fractions to CCl4. Poli G, et al. **Biochem J** 1989 Dec 1;264(2):527–32

Infrared spectra of phospholipid membranes: interfacial dehydration by volatile anesthetics and phase transition. Tsai YS, et al. **Biochim Biophys Acta** 1990 Feb 28; 1022(2):245–50

CCl4–induced increase of hepatocyte free arachidonate level: pathogenesis and contribution to cell death. Chiarpotto E, et al. **Chem Biol Interact** 1990;74(1–2):195–206

Carbon tetrachloride and the sorbitol pathway in the diabetic mouse. Gaynes BI, et al. **Comp Biochem Physiol [B]** 1989; 94(1):213–7

Effects of carbon tetrachloride administration to guinea pigs on cytochromes P–450 and antioxidant levels in the inner and outer zones of the adrenal cortex. Staats DA, et al. **Drug Metab Dispos** 1990 Jul–Aug;18(4):543–5

The in vitro NADPH–dependent inhibition by CCl4 of the ATP–dependent calcium uptake of hepatic microsomes from male rats. Studies on the mechanism of the inactivation of the hepatic microsomal calcium pump by the CCl3.radical. Srivastava SP, et al. **J Biol Chem** 1990 May 25;265(15):8392–9

Lipid peroxidation inactivates rat liver microsomal glycerol–3–phosphate acyl transferase. Effect of iron and copper salts and carbon tetrachloride. Thomas PD, et al. **J Biol Chem** 1990 Feb 15;265(5):2684–91

The degradation of haem by carbon tetrachloride: metabolic activation requires a free axial coordination site on the haem iron and electron donation. Manno M, et al. **Xenobiotica** 1989 Sep;19(9):1023–35

[The effect of a one–time administration of phenobarbital and carbon tetrachloride on comuton activity in the rat liver] Elbakidze GM, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Sep–Oct;(5):666–73 (Eng. Abstr.) **(Rus)**

TOXICITY

Marked increase of HGF mRNA in non–parenchymal liver cells of rats treated with hepatotoxins. Kinoshita T, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1229–34

Altered hepatic energy status in chlordecone (Kepone)–potentiated CCl4 hepatotoxicity. Kodavanti PR, et al. **Biochem Pharmacol** 1990 Aug 15;40(4):859–66

Effect of alpha–blockade on liver regeneration after carbon tetrachloride intoxication in the rat. Ochi Y, et al. **Biochem Pharmacol** 1990 Jun 15;39(12):2065–6

Biochemical mechanism of metallothionein—carbon tetrachloride interaction in vitro. Suntres ZE, et al. **Biochem Pharmacol** 1990 Mar 1;39(5):833–40

Enzyme leakage due to change of membrane permeability of primary cultured rat hepatocytes treated with various hepatotoxins and its prevention by glycyrrhizin. Nakamura T, et al. **Cell Biol Toxicol** 1985 Oct;1(4):285–95

Inhibition of the high affinity Ca2(+)–ATPase activity in rat liver plasma membranes following carbon tetrachloride intoxication. Parola M, et al. **Chem Biol Interact** 1990; 73(1):103–19

Modification of chronic carbon tetrachloride hepatic injury by N,N'–diphenyl–p–phenylenediamine. Hartman AD, et al. **Exp Mol Pathol** 1968 Dec;9(3):349–62

Early onset of lipoperoxidation in rat liver after carbon tetrachloride administration. Rao KS, et al. **Exp Mol Pathol** 1968 Oct;9(2):271–8

Regulation of TGF beta gene expression in rat liver intoxicated with carbon tetrachloride. Armendariz–Borunda J, et al. **FASEB J** 1990 Feb 1; 4(2):215–21

Effect in the rat of the interaction of dichloromaleic acid and carbon tetrachloride on renal and hepatic function. Christenson WR, et al. **Fundam Appl Toxicol** 1989 Oct; 13(3):493–9

A CCl4/CHCl3 interaction study in isolated hepatocytes: selection of a vehicle. O'Hara TM, et al. **Fundam Appl Toxicol** 1989 Oct;13(3):605–15

Reestablishment of the heterogeneous distribution of hepatic glutamine synthetase during regeneration after CCl4–intoxication. Schöls L, et al. **Histochemistry** 1990; 94(1):49–54

Effect of hepatoprotective ayurvedic drugs on lipases following CCl4 induced hepatic injury in rats. Patil S, et al. **Indian J Exp Biol** 1989 Nov;27(11):955–8

Potentiation by chlordecone of the defect in hepatic microsomal calcium sequestration induced by carbon tetrachloride. Hegarty JM, et al. **J Biochem Toxicol** 1986 Jun;1(2):73–8

Atrial natriuretic peptide, arginine vasopressin, aldosterone and plasma renin activity in carbon tetrachloride–induced cirrhosis in rats. Elias AN, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):438–41

Effect of carbon tetrachloride on hamster tracheal epithelial cells. Ahmadizadeh M, et al. **J Toxicol Environ Health** 1990 Aug;30(4):273–85

Effect of 2–butanol and 2–butanone on rat hepatic ultrastructure and drug metabolizing enzyme activity. Traiger GJ, et al. **J Toxicol Environ Health** 1989; 28(2):235–48

Potentiation of carbon tetrachloride induced hepatotoxicity by thinner inhalation. Toskulkao C, et al. **J Toxicol Sci** 1990 May;15(2):75–86

Protective value of a liver initiation–promotion regimen against the lethal effect of carbon tetrachloride in rats. Harris L, et al. **Lab Invest** 1989 Oct;61(4):467–70

In vivo studies on halogen compound interactions. II. Effects of carbon tetrachloride plus 1,2–dibromoethane on relative liver weight and hepatic steatosis. Aragno M, et al. **Res Commun Chem Pathol Pharmacol** 1989 Oct; 66(1):105–16

Kinetics of 3H–thymidine label in rat liver regenerating after partial hepatectomy and after damage with carbon tetrachloride or silica. Kanta J, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1989;32(4):395–401

Lethal effects of CCl4 and its metabolism by Mongolian gerbils pretreated with chlordecone, phenobarbital, or mirex. Cai ZW, et al. **Toxicol Appl Pharmacol** 1990 Jul; 104(3):511–20

Halomethane hepatotoxicity: induction of lipid peroxidation and inactivation of cytochrome P–450 in rat liver microsomes under low oxygen partial pressures. de Groot H, et al. **Toxicol Appl Pharmacol** 1989 Mar 1;97(3):530–7

Potentiation of carbon tetrachloride–induced lipid peroxidation by trichloroethylene in isolated rat hepatocytes: no role in enhanced toxicity. Kefalas V, et al. **Toxicol Appl Pharmacol** 1989 Oct;101(1):158–69

Interaction of carbon tetrachloride with beta–naphthoflavone–mediated cytochrome P450 induction in winter flounder (Pseudopleuronectes americanus). Kleinow KM, et al. **Toxicol Appl Pharmacol** 1990 Jun 15; 104(2):367–74

Toxic interactions between carbon tetrachloride and chloroform in cultured rat hepatocytes. Lamb RG, et al. **Toxicol Appl Pharmacol** 1989 Oct;101(1):106–13

Phenobarbital pretreatment alters the localization of CCl4–induced changes in rat liver microsomal fatty acids. Moody DE, et al. **Toxicol Appl Pharmacol** 1990 Mar 15; 103(1):16–27

Blood coagulation variations induced by carbon tetrachloride inhalation in Wistar rats. Vázquez C, et al. **Toxicol Appl Pharmacol** 1990 Apr;103(2):206–13

Mechanism of the lethal interaction of chlordecone and CCl4 at non–toxic doses. Mehendale HM. **Toxicol Lett** 1989 Dec; 49(2–3):215–41 (124 ref.)

Protection against carbon–tetrachloride–induced lymphoid organotoxicity in rats by protein A. Singh KP, et al. **Toxicol Lett** 1990 May;51(3):339–51

Modulation of the course of CCl4–induced liver injury by the anti–calmodulin drug thioridazine. Villarruel MC, et al. **Toxicol Lett** 1990 Mar;51(1):13–21

Evidence of clonal proliferation of hepatocytes after carbon–tetrachloride–induced hepatic injury in PGK–1 mosaic mice. Wada Y, et al. **Toxicol Lett** 1990 Jun; 52(1):81–90

Brain phenylalanine and tyrosine levels and hepatic encephalopathy induced by CCl4 in rats. Yamamoto H. **Toxicology** 1990 Apr 30;61(3):241–7

[Functional activity of fractionated chromatin from rat liver upon a single administration of carbon tetrachloride] Gubskiĭ IuI, et al. **Vopr Med Khim** 1989 Jul–Aug; 35(4):119–24 (Eng. Abstr.) **(Rus)**

CARBON TETRACHLORIDE POISONING

BLOOD

Protective role of fructose 1,6–bisphosphate during CCl4 hepatotoxicity in rats. Rao SB, et al. **Biochem J** 1989 Sep 15;262(3):721–5

DIAGNOSIS

Sodium–23 and proton nuclear magnetic resonance imaging studies of carbon tetrachloride–induced liver damage in the rat. Brauer M, et al. **Magn Reson Imaging** 1990; 8(4):459–65

[Acute carbon tetrachloride poisoning] Domnişoru L, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Apr–Jun;93(2):389–90 (Eng. Abstr.) **(Rum)**

DRUG THERAPY

The effect of phenyl tert–butyl nitrone (PBN) on CCl4–induced rat liver injury detected by proton magnetic resonance imaging (MRI) in vivo and electron microscopy (EM). Janzen EG, et al. **Free Radic Res Commun** 1990; 9(3–6):325–35

Prevention by silymarin of membrane alterations in acute CCl4 liver damage. Muriel P, et al. **J Appl Toxicol** 1990 Aug;10(4):275–9

[Experimental antioxidant therapy in toxic liver damage from CCl4 and chloxyl] Vinogradova LF, et al. **Patol Fiziol Eksp Ter** 1989 Jul–Aug;(4):52–6 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Beta-hexosaminidase activity in alcoholic fatty liver and in CCl4-induced liver fibrosis of the rat. Antoniello S, et al. **Enzyme** 1989;42(2):68-72

Interactions of water contaminants. I. Plasma enzyme activity and response surface methodology following gavage administration of CCl4 and CHCl3 or TCE singly and in combination in the rat. Borzelleca JF, et al. **Fundam Appl Toxicol** 1990 Apr;14(3):477-90

The role of membrane composition in ATPase activities of cirrhotic rat liver: effect of silymarin. Muriel P, et al. **J Appl Toxicol** 1990 Aug;10(4):281-4

GENETICS

Resurgence of aldolase A and C gene expression in acute carbon tetrachloride induced liver injury. Motomura M, et al. **Gastroenterol Jpn** 1990 Jun;25(3):402

Increased laminin B1 mRNA levels in carbon tetrachloride-induced liver fibrosis in rats. Motomura M, et al. **Gastroenterol Jpn** 1990 Jun;25(3):401

Cellular distribution of transforming growth factor-beta 1 and procollagen types I, III, and IV transcripts in carbon tetrachloride-induced rat liver fibrosis. Nakatsukasa H, et al. **J Clin Invest** 1990 Jun;85(6):1833-43

Transforming growth factor-beta 1 and type I procollagen transcripts during regeneration and early fibrosis of rat liver. Nakatsukasa H, et al. **Lab Invest** 1990 Aug; 63(2):171-80

METABOLISM

Promethazine inhibits the formation of aldehydic products of lipid peroxidation but not covalent binding resulting from the exposure of rat liver fractions to CCl4. Poli G, et al. **Biochem J** 1989 Dec 1;264(2):527-32

A factor from damaged rat kidney stimulates collagen biosynthesis by mesangial cells. Ohyama K, et al. **Biochim Biophys Acta** 1990 Jul 12;1053(2-3):173-8

In vivo and in vitro 31P-NMR spectroscopy of rat liver treated with halocarbons. Towner RA, et al. **Biochim Biophys Acta** 1989 Oct 13;993(1):92-9

Lipid peroxidation and covalent binding in the early functional impairment of liver Golgi apparatus by carbon tetrachloride. Poli G, et al. **Cell Biochem Funct** 1990 Jan; 8(1):1-10

Carbon tetrachloride-induced liver cell injury in the Mongolian gerbil (Meriones unguiculatus). de Perez OA, et al. **Comp Biochem Physiol [C]** 1989;94(2):357-64

Direct observation of spin-trapped carbon dioxide radicals in hepatocytes exposed to carbon tetrachloride. Rau JM, et al. **Free Radic Res Commun** 1990;9(3-6):197-204

Arachidonic acid metabolites in carbon tetrachloride-induced liver injury. Kawada N, et al. **Gastroenterol Jpn** 1990 Jun;25(3):363-8

CCl4-induced lipoperoxidation triggers a lethal defect in the liver plasma membranes. Mourelle M, et al. **J Appl Toxicol** 1990 Feb;10(1):23-7

Phospholipid hydroperoxide accumulation in liver of rats intoxicated with carbon tetrachloride and its inhibition by dietary alpha-tocopherol. Miyazawa T, et al. **J Biochem (Tokyo)** 1990 May;107(5):689-93

Pharmacokinetics of cefpiramide in rats acutely intoxicated with carbon tetrachloride. Li C, et al. **J Pharmacobiodyn** 1990 Mar;13(3):186-94

A 31P nuclear magnetic resonance study in vivo of metabolic abnormalities in rats with acute liver failure. Bates TE, et al. **NMR Biomed** 1988 Apr;1(2):67-73

Relation of Ca++ accumulation and lipid peroxidation with CCl4-induced toxicity in the rat liver. Yamamoto H. **Pharmacol Toxicol** 1990 Mar;66(3):213-6

The effects of thromboxane A2 inhibitors (OKY-046 and ONO-3708) and leukotriene inhibitors (AA-861 and LY-171883) on CCl4-induced chronic liver injury in mice. Shimazawa T, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 May; 40(1):67-71

The role of metabolism in carbon tetrachloride-mediated immunosuppression: in vivo studies. Kaminski NE, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):9-20

Modulation of the course of CCl4-induced liver injury by the anti-calmodulin drug thioridazine. Villarruel MC, et al. **Toxicol Lett** 1990 Mar;51(1):13-21

[Acute toxicity of flesh oil of Hippophae rhamnoides L. and its protection against experimental hepatic injury] Cheng T, et al. **Chung Kuo Chung Yao Tsa Chih** 1990 Jan; 15(1):45-7, 64 (Eng. Abstr.) (Chi)

[Fatty acids in striated muscle of the rat treated with toxic radicals] Rondinone R. **Boll Soc Ital Biol Sper** 1990 Jan; 66(1):75-81 (Eng. Abstr.) (Ita)

[The influence of enzymatic induction on the content of hydroxyproline in perfusion fluid of isolated liver in healthy rats and in rats after chronic intoxication with CCl4] Czarnecki J, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:53-9 (Eng. Abstr.) (Pol)

[Experimental examination of the interaction and inducing influence of Imuran (azathioprine) on healthy and injured parenchymatous cells of rat liver] Czarnecki J, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:45-52 (Eng. Abstr.) (Pol)

[Experimental examination of the influence of Imuran (azathioprine) on the content of hydroxyproline in perfusion fluid of isolated liver in healthy rats and after chronic CCl4 poisoning] Czarnecki J, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:37-44 (Eng. Abstr.) (Pol)

[The effect of infusion of the lipid emulsion infuzolipol on the structural-functional properties of erythrocyte membranes in rats with toxic liver damage] Korneva AM, et al. **Vopr Med Khim** 1990 Mar-Apr;36(2):20-2 (Eng. Abstr.) (Rus)

PATHOLOGY

Potentiation of carbon tetrachloride toxicity by aliphatic alcohols. Cornish HH, et al. **Arch Environ Health** 1967 Mar; 14(3):447-9

Site of reovirus replication in liver is determined by the type of hepatocellular insult. Rubin DH, et al. **J Virol** 1990 Sep; 64(9):4593-7

Chronic carbon tetrachloride and phospholipase D hepatotoxicity in rat: in vivo 1H magnetic resonance, total lipid analysis, and histology. Hazle JD, et al. **Magn Reson Med** 1990 Aug;15(2):211-28

[Tissue characterization of the liver using ultrasound attenuation in an animal experiment] Drescher T, et al. **Ultraschall Med** 1990 Apr;11(2):104-8 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Role of hepatocellular regeneration in chlordecone potentiated hepatotoxicity of carbon tetrachloride. Kodavanti PR, et al. **Arch Toxicol** 1989;63(5):367-75

Mitochondrial structure and function in CCl4-induced cirrhosis in the rat. Krähenbühl S, et al. **Hepatology** 1990 Sep;12(3 Pt 1):526-32

Chlordecone (Kepone)-potentiated carbon tetrachloride hepatotoxicity in partially hepatectomized rats—a histomorphometric study. Kodavanti PR, et al. **J Appl Toxicol** 1989 Dec;9(6):367-75

Protection of hepatotoxic and lethal effects of CCl4 by partial hepatectomy. Kodavanti PR, et al. **Toxicol Pathol** 1989; 17(3):494-505

[Lymphatic flow and blood coagulation in the liver in experimental carbon tetrachloride poisoning in the pre-cirrhotic stage] Iaroshenko IF, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;123:345-9 (Rus)

PREVENTION & CONTROL

Vitamin K protects cultured rat hepatocytes against carbon tetrachloride-induced damage. Itoh Y, et al. **Gastroenterol Jpn** 1990 Feb;25(1):131

Protective effect of S-adenosyl-L-methionine against CCl4-induced hepatotoxicity in cultured hepatocytes. Tsuji M, et al. **Jpn J Pharmacol** 1990 Feb;52(2):209-14

Protection by pantethine, pantothenic acid and cystamine against carbon tetrachloride-induced hepatotoxicity in the rat. Nagiel-Ostaszewski I, et al. **Res Commun Chem Pathol Pharmacol** 1990 Feb; 67(2):289-92

[Mechanism of the protective action of kopsinine against hepatotoxicity of carbon tetrachloride] Huang WY, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Sep;10(5):461-4 (Eng. Abstr.) (Chi)

RADIONUCLIDE IMAGING

Assessment of Kupffer cell function in rats with chronic liver injury caused by CCl4. Noda T, et al. **Hepatogastroenterology** 1990 Jun;37(3):319-23

THERAPY

[Detoxification with orthograde intestinal lavage in oral poisoning by tetrachloromethane (CCl4) in an animal experiment] Otto J, et al. **Gastroenterol J** 1989;49(2):71-5 (Eng. Abstr.) (Ger)

[A comparative study of Laennec by intravenous or subcutaneous injection on CCl4-induced acute or chronic liver injury in rats] Nakayama S, et al. **Nippon Yakurigaku Zasshi** 1989 Aug;94(2):137-44 (Eng. Abstr.) (Jpn)

CARBONATED BEVERAGES see under **BEVERAGES**

CARBONATES

Synthesis of well-defined phosphate-methylated DNA fragments: the application of potassium carbonate in methanol as deprotecting reagent. Kuijpers WH, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5197-205

[Effect of untreated and non-irritating purified coffee and carbonic acid hydroxytryptamides on the gastric mucosa in the rat] Fehlau R, et al. **Z Gastroenterol** 1990 May; 28(5):234-8 (Eng. Abstr.) (Ger)

ADMINISTRATION & DOSAGE

Successful chemical cholecystectomy: a laparoscopic guided technique. Cuschieri A, et al. **Gut** 1989 Dec;30(12):1786-94

[A method of increasing the effectiveness of anti-ulcer therapy] Mysh VG, et al. **Klin Med (Mosk)** 1989 Oct; 67(10):66-8 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Cations and anions in drinking water as putative contributory factors to endemic goitre in Plateau State, Nigeria. Das SC, et al. **Trop Geogr Med** 1989 Oct;41(4):346-52

ANALYSIS

Non-apatitic environments in bone mineral: FT-IR detection, biological properties and changes in several disease states. Rey C, et al. **Connect Tissue Res** 1989; 21(1-4):267-73

BLOOD

Relationship between the apparent dissociation constant of blood carbonic acid and severity of illness. Kruse JA, et al. **J Lab Clin Med** 1989 Nov;114(5):568-74

HISTORY

Therapeutics in retrospect: iron carbonate in chorea and tic douloureux. Cosnett JE. **J R Soc Med** 1990 Jun;83(6):390-1

METABOLISM

Electron spin echo envelope modulation evidence for carbonate binding to iron(III) and copper(II) transferrin and lactoferrin. Eaton SS, et al. **J Biol Chem** 1990 May 5;265(13):7138-41

PHARMACOLOGY

Free radicals and their interpretations. Jávor T, et al. **Acta Physiol Hung** 1989;73(2-3):323-30

Functional and metabolic responses of isolated hearts to acidosis: effects of sodium bicarbonate and Carbicarb. Shapiro JI. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1835-9

Gastric pH and endoscopic appearance after Algicon administration. Lambert JR, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:25-8; discussion 35-6

Comparative intragastric pH profile of Algicon versus Gaviscon. Stoddard CJ, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:29-34; discussion 35-6

Brain pH effects of NaHCO3 and Carbicarb in lactic acidosis. Kucera RR, et al. **Crit Care Med** 1989 Dec;17(12):1320-3

Cardiac effects of carbon dioxide-consuming and carbon dioxide-generating buffers during cardiopulmonary resuscitation. Gazmuri RJ, et al. **J Am Coll Cardiol** 1990 Feb;15(2):482-90

Extracorporeal bicarbonate space after bicarbonate or a bicarbonate-carbonate mixture in acidotic dogs. Kindig NB, et al. **J Appl Physiol** 1989 Dec;67(6):2331-4

Effects of sodium bicarbonate and sodium sesquicarbonate on animal performance, ruminal metabolism, and systemic acid-base status. Ghorbani GR, et al. **J Dairy Sci** 1989 Aug;72(8):2039-45

[Drug interactions during storage of mixtures of the antacid group. II. Effect of temperature on the formation of hydrotalcite in neutralizing suspensions] Pawlaczyk J, et al. **Acta Pol Pharm** 1989;46(2):165-9 (Eng. Abstr.) (Pol)

THERAPEUTIC USE

Treatment of duodenal ulcers by antacid (Al-Mg-hydroxy-carbonate). A controlled, randomized, prospective, multicentre clinical trial. Nagy L, et al. **Acta Physiol Hung** 1989;73(2-3):331-9

Management of gastro-oesophageal reflux disorders. Focus on algicon. Proceedings of a symposium. Sheffield, UK, 17th September 1988. **Br J Clin Pract Symp Suppl** 1989 Feb;66:1-64

Gastro-oesophageal pH measurements during reflux induced by provocative tests. Baldi F, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:10-4; discussion 35-6

Twenty-four-hour oesophageal pH monitoring of reflux episodes: effect of Algicon. Devis G, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:15-7; discussion 35-6

Management of gastro-oesophageal reflux disorders. Algicon: a product overview. Gimbol MJ. **Br J Clin Pract Symp Suppl** 1989 Feb;66:2-4; discussion 35-6

Algicon in the management of gastro-oesophageal reflux. Lambert JR, et al. **Br J Clin Pract Symp Suppl** 1989 Feb; 66:56-8; discussion 61-4

Efficacy and tolerance of Algicon in patients with reflux oesophagitis. Lancaster Smith MJ, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:38-42; discussion 61-4

Comparative study of Algicon suspension and magnesium trisilicate mixture in the treatment of reflux dyspepsia of pregnancy. Lang GD, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:48-51; discussion 61-4

The alginate raft: a scintigraphic evaluation. McKay AP, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:20-4; discussion 35-6

Comparison of Algicon and ranitidine in the therapy of reflux oesophagitis: preliminary results. Pace F, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:59-60; discussion 61-4

Effects of Algicon on the ultrastructure of the mucosa of

subjects with reflux oesophagitis. Trabucchi E, et al. **Br J Clin Pract Symp Suppl** 1989 Feb;66:43–7; discussion 61–4

Comparative study of Algicon versus Gaviscon in symptomatic gastro-oesophageal reflux. Ward AE. **Br J Clin Pract Symp Suppl** 1989 Feb;66:52–5; discussion 61–4

[The effect of sanatorium-health resort treatment using carbonate baths on the physical work capacity and the coronary and myocardial reserves of the heart in patients with ischemic heart disease] Makushkin AK, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1990 Jan-Feb;(1):47–8 **(Rus)**

CARBONIC ACID see under **CARBONATES**

CARBONIC ANHYDRASE

The role of the metal ion in the refolding of denatured bovine Co(II)-carbonic anhydrase II. Bergenhem N, et al. **Biochim Biophys Acta** 1989 Oct 19;998(3):277–85

13C and 15N NMR and time-resolved fluorescence depolarization study of bovine carbonic anhydrase—4-methylbenzenesulfonamide complex. Jarvet J, et al. **Eur J Biochem** 1989 Dec 8;186(1-2):287–90

Two slow stages in refolding of bovine carbonic anhydrase B are due to proline isomerization. Semisotnov GV, et al. **J Mol Biol** 1990 Jun 5;213(3):561–8

ANALYSIS

Immunohistochemical localization of carbonic anhydrase isozymes I, II and III in the bovine salivary glands and stomach. Asari M, et al. **Arch Histol Cytol** 1989 Oct; 52(4):337–44

Comparison of 18O exchange and pH stop-flow assays for carbonic anhydrase. Dodgson SJ, et al. **J Appl Physiol** 1990 Jun;68(6):2443–50

An immunohistochemical study of the topography and cellular localization of three neural proteins in the sheep nervous system. Jeffrey M, et al. **J Comp Pathol** 1990 Jul; 103(1):23–35

Localization of carbonic anhydrase in identified glial cells of the leech central nervous system: application of histochemical and immunocytochemical methods. Riehl B, et al. **J Histochem Cytochem** 1990 Aug;38(8):1173–8

Histoenzymological light and electron microscopic localization of carbonic anhydrase in the rat superficial pineal gland. Krstic R, et al. **J Pineal Res** 1990;8(2):123–8

Characterization of carbonic anhydrase-rich cells in the outer medullary collecting duct of rat kidney. Nitta K, et al. **Jpn J Exp Med** 1989 Oct;59(5):211–3

Localization of CAI and CAII isoenzymes in normal term human placenta by immunofluorescence techniques. Aliakbar S, et al. **Placenta** 1990 Jan-Feb;11(1):35–9

BIOSYNTHESIS

1 alpha,25-dihydroxyvitamin D3 regulates the expression of carbonic anhydrase II in nonerythroid avian bone marrow cells. Billecocq A, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6470–4

BLOOD

Enhancement of carbonic anhydrase activity by erythrocyte membranes. Parkes JL, et al. **Arch Biochem Biophys** 1989 Dec;275(2):459–68

Carbonic anhydrase III as a serum marker for diagnosis of rhabdomyolysis. Syrjälä H, et al. **Clin Chem** 1990 Apr; 36(4):696

Serum carbonic anhydrase III and myoglobin concentrations in acute myocardial infarction. Väänänen HK, et al. **Clin Chem** 1990 Apr;36(4):635–8

Partial amino acid sequence of erythrocyte carbonic anhydrase from tiger shark. Bergenhem N, et al. **Comp Biochem Physiol [B]** 1990;95(1):205–13

Carbonic anhydrase III and collagen markers in serum following cross-country skiing. Takala TE, et al. **Med Sci Sports Exerc** 1989 Oct;21(5):593–7

[Beta-enolase in blood plasma during open heart surgery—comparing with CK-MB and CA-III in blood plasma] Usui A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep;37(9):1945–9 (Eng. Abstr.) **(Jpn)**

DEFICIENCY

Variable clinical presentation of carbonic anhydrase deficiency: evidence for heterogeneity? Strisciuglio P, et al. **Eur J Pediatr** 1990 Feb;149(5):337–40 (18 ref.)

Carbonic anhydrase isozymes IV and II in urinary membranes from carbonic anhydrase II-deficient patients. Sato S, et al. **Proc Natl Acad Sci U S A** 1990 Aug; 87(16):6073–6

[Kidney tubular transport disorders. Carbonic anhydrase II deficiency] Yabuta K. **Nippon Rinsho** 1989 Jul;47(7):1646–8 **(Jpn)**

GENETICS

H(+)-K(+)-ATPase and carbonic anhydrase II gene expression in the developing rat fundus. Marino LR, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):G108–15

A single gel for determining genetic variants of equine erythrocyte carbonic anhydrase (CA) and catalase (Cat). Bowling AT, et al. **Anim Genet** 1990;21(2):191–7

The polymorphic human DNA sequence D8S8 assigned to 8q13–21.1, close to the carbonic anhydrase gene cluster, by isotopic and nonisotopic in situ hybridization and by linkage analysis. Edwards Y, et al. **Ann Hum Genet** 1990 May;54 (Pt 2):131–9

Regulation of CA II and H+,K(+)-ATPase gene expression in canine gastric parietal cells. Campbell VW, et al. **Ann N Y Acad Sci** 1989;574:159–64

Structure and expression of mammalian carbonic anhydrases. Edwards Y. **Biochem Soc Trans** 1990 Apr;18(2):171–5 (41 ref.)

The thyroglobulin gene is syntenic with the MYC and MOS protooncogenes and carbonic anhydrase II and maps to chromosome 14 in cattle. Threadgill DW, et al. **Cytogenet Cell Genet** 1990;53(1):32–6

Multiple GF-1 binding sites flank the erythroid specific transcription unit of the human carbonic anhydrase I gene. Brady HJ, et al. **FEBS Lett** 1989 Nov 6;257(2):451–6

Chronic stimulation-induced effects point to a coordinated expression of carbonic anhydrase III and slow myosin heavy chain in skeletal muscle. Jeffery S, et al. **FEBS Lett** 1990 Mar 26;262(2):225–7

Mapping of mouse carbonic anhydrase-3, Car-3: another locus in the homologous region of mouse chromosome 3 and human chromosome 8. Beechey C, et al. **Genomics** 1990 Apr;6(4):692–6

Spinach carbonic anhydrase primary structure deduced from the sequence of a cDNA clone. Fawcett TW, et al. **J Biol Chem** 1990 Apr 5;265(10):5414–7

The mouse carbonic anhydrase I gene contains two tissue-specific promoters. Fraser P, et al. **Mol Cell Biol** 1989 Aug;9(8):3308–13

Nucleotide and derived amino-acid sequence of a cDNA encoding a new mouse carbonic anhydrase. Amor-Gueret M, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1646

Utilization of the second polyadenylation signal at the 3' end of the chicken carbonic anhydrase II gene. Godbout R, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1049

Nucleotide sequence of pea cDNA encoding chloroplast carbonic anhydrase. Roeske CA, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3413

cDNA cloning, sequence, and expression of carbonic anhydrase in Chlamydomonas reinhardtii: regulation by environmental CO2 concentration. Fukuzawa H, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4383–7

Evolution, structure, and expression of the carbonic anhydrase multigene family. Tashian RE, et al. **Prog Clin Biol Res** 1990;344:159–75 (40 ref.)

IMMUNOLOGY

A monoclonal anti-HLA-B27 antibody which is reactive with a linear sequence of the HLA-B27 protein is useful for the study of molecular mimicry. Yong Z, et al. **Clin Exp Rheumatol** 1989 Sep-Oct;7(5):513–9

Metalloantibodies. Iverson BL, et al. **Science** 1990 Aug 10; 249(4969):659–62

ISOLATION & PURIFICATION

Purification of soluble enzymes from erythrocyte hemolysates by three phase partitioning. Pol MC, et al. **Int J Biochem** 1990;22(2):179–85

Carbonic anhydrase IV from human lung. Purification, characterization, and comparison with membrane carbonic anhydrase from human kidney. Zhu XL, et al. **J Biol Chem** 1990 May 25;265(15):8795–801

METABOLISM

Low oxygen cost of carbonic anhydrase-dependent sodium reabsorption in the dog kidney. Ostensen J, et al. **Acta Physiol Scand** 1989 Oct;137(2):189–98

Direct evaluation of acidification by rat testis and epididymis: role of carbonic anhydrase. Caflisch CR, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):E143–50

Mitochondrial carbonic anhydrase is involved in rat renal glucose synthesis. Dodgson SJ, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):E791–6

NBD-taurine uptake by alpha-type carbonic anhydrase cells of turtle bladder. Palmisano J, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):F1015–20

Determination of carbonic anhydrase activity by a pCO2 sensor. Botrè C, et al. **Anal Biochem** 1990 Mar; 185(2):254–64

Differential regulation of hepatic carbonic anhydrase isozymes in the streptozotocin-diabetic rat. Dodgson SJ, et al. **Arch Biochem Biophys** 1990 Mar;277(2):410–4

Sarcolemmal carbonic anhydrase in red and white rabbit skeletal muscle. Wetzel P, et al. **Arch Biochem Biophys** 1990 Jun;279(2):345–54

Immunohistochemical localization of sodium-potassium-stimulated adenosine triphosphatase and carbonic anhydrase in human colon and colonic neoplasms. Gramlich TL, et al. **Arch Pathol Lab Med** 1990 Apr; 114(4):415–9

The episodic secretory pattern of growth hormone regulates liver carbonic anhydrase III. Studies in normal and mutant growth-hormone-deficient dwarf rats. Jeffery S, et al. **Biochem J** 1990 Feb 15;266(1):69–74

Expression of membrane-bound carbonic anhydrase in developing human lung and kidney. Carter N, et al. **Biochem Soc Trans** 1989 Dec;17(6):1122–3

Acetazolamide-resistant carbonic anhydrase activity with expansion of the vascular bed in tonic skeletal muscle of rats. Moynihan JB. **Biochem Soc Trans** 1990 Apr; 18(2):268–9

Role of histidine 64 in the catalytic mechanism of human carbonic anhydrase II studied with a site-specific mutant. Tu CK, et al. **Biochemistry** 1989 Sep 19;28(19):7913–8

Membrane specific carbonic anhydrase (CAIV) expression in human tissues. Carter ND, et al. **Biochim Biophys Acta** 1990 Jul 9;1026(1):113–6

Introduction of sulfhydryl groups into proteins at carboxyl sites. Lin CM, et al. **Biochim Biophys Acta** 1990 May 8; 1038(3):382–5

Carbonic anhydrase activity in the trigeminal primary afferent neuronal cell bodies with peripheral axons innervating the mandibular molar tooth pulps of the rat. Sugimoto T, et al. **Brain Res** 1989 Dec 29;505(2):354–7

Transfer of carbonic anhydrase-positive particles from the follicle-associated epithelium to lymphocytes of Peyer's patches in foetal sheep and lambs. Landsverk T, et al. **Cell Tissue Res** 1990 Aug;261(2):239–47

Carbonic anhydrase and neuronal enzymes in cultured glomus cells of the carotid body of the rat. Nurse CA. **Cell Tissue Res** 1990 Jul;261(1):65–71

Coupling of 22Na and 36Cl uptake in cultured pigmented ciliary epithelial cells: a proposed role for the isoenzymes of carbonic anhydrase. Helbig H, et al. **Curr Eye Res** 1989 Nov;8(11):1111–9

Fine tuning of the catalytic properties of carbonic anhydrase. Studies of a Thr200——His variant of human isoenzyme II. Behravan G, et al. **Eur J Biochem** 1990 Jun 20; 190(2):351–7

Regional differences in the morphology and enzyme distribution of the spiny dogfish (Squalus acanthias) ciliary epithelium. Flügel C, et al. **Exp Eye Res** 1989 Dec; 49(6):1097–114

Immunolocalization of Na+,K(+)-ATPase and carbonic anhydrase in the gerbil's vestibular system. Spicer SS, et al. **Hear Res** 1990 Jan;43(2-3):205–17

Distribution of carbonic anhydrase among human photoreceptors. Nork TM, et al. **Invest Ophthalmol Vis Sci** 1990 Aug;31(8):1451–8

The 30 kDa abnormal protein in avian dystrophic muscle is indistinguishable from carbonic anhydrase III by physicochemical, immunological, and enzymological criteria. Kobayashi R, et al. **J Biochem (Tokyo)** 1990 Jan; 107(1):56–60

The R-state proinsulin and insulin hexamers mimic the carbonic anhydrase active site. Brader ML, et al. **J Biol Chem** 1990 Sep 15;265(26):15666–70

Effects of hyper- and hypothyroidism on carbonic anhydrase, Mg2(+)-dependent ATPase and Mg2(+)-dependent, HCO3(-)-stimulated ATPase activities of rat duodenal mucosa and kidney cortex. Suzuki S, et al. **J Endocrinol** 1990 Jul;126(1):119–29

Immunohistochemical localization of carbonic anhydrase isoenzymes VI, II, and I in human parotid and submandibular glands. Parkkila S, et al. **J Histochem Cytochem** 1990 Jul;38(7):941–7

Expression of carbonic anhydrase in neisseriae and other heterotrophic bacteria. Nafi BM, et al. **J Med Microbiol** 1990 May;32(1):1–7

Insights into the function of the zinc hydroxide-Thr199-Glu106 hydrogen bonding network in carbonic anhydrases. Merz KM Jr. **J Mol Biol** 1990 Aug 20;214(4):799–802

Acetazolamide inhibits the recovery from triethyl tin intoxication: putative role of carbonic anhydrase in dehydration of central myelin. Yanagisawa K, et al. **Neurochem Res** 1990 May;15(5):483–6

Quantitative histochemical analysis of cytochrome oxidase in rat dorsal root ganglia and its co-localization with carbonic anhydrase. Carr PA, et al. **Neuroscience** 1989; 33(2):351–62

Analysis of parvalbumin and calbindin D28k-immunoreactive neurons in dorsal root ganglia of rat in relation to their cytochrome oxidase and carbonic anhydrase content. Carr PA, et al. **Neuroscience** 1989; 33(2):363–71

Immunohistochemical localization of two types of carbonic anhydrase isozymes in oncocytoma and oncocytic epithelial cells. Kuwahara H, et al. **Osaka City Med J** 1989 Nov; 35(2):121–36

Binding of substrate CO2 to the active site of human carbonic anhydrase II: a molecular dynamics study [published erratum appears in Proc Natl Acad Sci U S A 1990 Aug;87(16):6475] Liang JY, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3675–9

Carbonic anhydrase activity in Madin Darby canine kidney cells. Evidence for intercalated cell properties. Pfaller W, et al. **Renal Physiol Biochem** 1989 Sep-Dec;12(5-6):328–37

[Regional differences in the ciliary body of cattle. An electron microscopy and histochemical study] Eichhorn M, et al. **Fortschr Ophthalmol** 1990;87(3):241–6 (Eng. Abstr.) **(Ger)**

PHARMACOKINETICS

Tissue distribution of 125I-labelled carbonic anhydrase isozymes I, II and III in the rat. Appelgren LE, et al. **Acta Physiol Scand** 1989 Nov;137(3):449–56

Comparative distribution of carbonic anhydrase isozymes III

and II in rodent tissues. Spicer SS, et al. **Am J Anat** 1990 Jan;187(1):55–64

Binding of sulfonamide and acetamide to the active-site Zn2+ in carbonic anhydrase: a theoretical study. Liang J, et al. **Biochemistry** 1989 Dec 12;28(25):9724–33

PHARMACOLOGY

Effect of acetazolamide (Diamox) on the endolymphatic sac. Takumida M, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(5):276–84

PHYSIOLOGY

Carbonic anhydrase activity in fetal rat bone resorbing cells: inhibition by acetazolamide infusion. Hott M, et al. **J Dev Physiol** 1989 Nov;12(5):277–81

[Carbonic anhydrase and its function in ion transport in cultivated pigmented ciliary body epithelial cells] Helbig H, et al. **Fortschr Ophthalmol** 1989;86(5):474–7 (Eng. Abstr.) **(Ger)**

CARBONIC ANHYDRASE INHIBITORS

Topically active carbonic anhydrase inhibitors. 1. O-acyl derivatives of 6-hydroxybenzothiazole-2-sulfonamide. Woltersdorf OW Jr, et al. **J Med Chem** 1989 Nov; 32(11):2486–92

ADMINISTRATION & DOSAGE

MK-927, a topical carbonic anhydrase inhibitor. Dose response and reproducibility. Serle JB, et al. **Arch Ophthalmol** 1990 Jun;108(6):838–41

[Decrease in intraocular pressure following administration of the local carbonic anhydrase inhibitor (MK-927)—comparison of the effect with pilocarpine] Pfeiffer N, et al. **Fortschr Ophthalmol** 1990;87(2):128–30 (Eng. Abstr.) **(Ger)**

ANALYSIS

Development of direct stereoselective and non-stereoselective assays in biological fluids for the enantiomers of a thieno[2,3-b]thiopyran-2-sulfonamide, a topically effective carbonic anhydrase inhibitor. Matuszewski BK, et al. **J Chromatogr** 1990 Apr 6; 526(2):461–73

CHEMICAL SYNTHESIS

Topically active carbonic anhydrase inhibitors. 3. Benzofuran- and indole-2-sulfonamides. Graham SL, et al. **J Med Chem** 1990 Feb;33(2):749–54

PHARMACOLOGY

Effects of carbonic anhydrase inhibitors on basolateral base transport of rabbit proximal straight tubule. Sasaki S, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):F947–52

MK-927: a topical carbonic anhydrase inhibitor. Dose response and duration of action. Higginbotham EJ, et al. **Arch Ophthalmol** 1990 Jan;108(1):65–8

The ocular hypotensive effect of the topical carbonic anhydrase inhibitor L-671,152 in glaucomatous monkeys. Wang RF, et al. **Arch Ophthalmol** 1990 Apr;108(4):511–3

Preclinical studies on L-671,152, a topically effective ocular hypotensive carbonic anhydrase inhibitor. Sugrue MF, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:820P

L-662,583 is a topically effective ocular hypotensive carbonic anhydrase inhibitor in experimental animals. Sugrue MF, et al. **Br J Pharmacol** 1990 Jan;99(1):59–64

Inhibiting carbonic anhydrase in brain tissue increases the respiratory response to rebreathing CO2. Adams JM, et al. **Brain Res** 1990 Jun 11;519(1-2):23–8

A comparison of L-671,152 and MK-927, two topically effective ocular hypotensive carbonic anhydrase inhibitors, in experimental animals. Sugrue MF, et al. **Curr Eye Res** 1990 Jun;9(6):607–15

The effect of MK-927, a topical carbonic anhydrase inhibitor, on IOP in glaucomatous monkeys. Wang RF, et al. **Curr Eye Res** 1990 Feb;9(2):163–8

Fine tuning of the catalytic properties of carbonic anhydrase. Studies of a Thr200——His variant of human isoenzyme II. Behravan G, et al. **Eur J Biochem** 1990 Jun 20; 190(2):351–7

Effects of ambient bicarbonate, phosphate and carbonic anhydrase inhibitors on fluid transport across rabbit corneal endothelium. Kuang KY, et al. **Exp Eye Res** 1990 May; 50(5):487–93

Chemical and pharmacological properties of MK-927, a sulfonamide carbonic anhydrase inhibitor that lowers intraocular pressure by the topical route. Maren TH, et al. **Exp Eye Res** 1990 Jan;50(1):27–36

Carbonic anhydrase inhibition and calcium transients in soleus fibers. Wetzel P, et al. **FEBS Lett** 1990 Jul 2; 267(1):66–70

Expression of carbonic anhydrase in neisseriae and other heterotrophic bacteria. Nafi BM, et al. **J Med Microbiol** 1990 May;32(1):1–7

Effects of inhibition of angiotensin converting enzyme and carbonic anhydrase on fluid production by ciliary process, choroid plexus, and pancreas. Vogh BP, et al. **J Ocul Pharmacol** 1989 Winter;5(4):303–11

Effects of carbonic anhydrase inhibitors on contraction, intracellular pH and energy-rich phosphates of rat skeletal muscle. Geers C, et al. **J Physiol (Lond)** 1990 Apr; 423:279–97

THERAPEUTIC USE

Carbonic anhydrase inhibitors: antisecretory and cytoprotective properties. Puscas I, et al. **Acta Physiol Hung** 1989;73(2-3):167–77 (40 ref.)

A single dose of the topical carbonic anhydrase inhibitor MK-927 decreases IOP in patients. Pfeiffer N, et al. **Br J Ophthalmol** 1990 Jul;74(7):405–8

Thienothiopyran-2-sulfonamides: novel topically active carbonic anhydrase inhibitors for the treatment of glaucoma. Baldwin JJ, et al. **J Med Chem** 1989 Dec; 32(12):2510–3

Topically active carbonic anhydrase inhibitors. 2. Benzo[b]thiophenesulfonamide derivatives with ocular hypotensive activity. Graham SL, et al. **J Med Chem** 1989 Dec;32(12):2548–54

[Stereospecificity of lowering intraocular pressure using a locally administered carbonic anhydrase inhibitor] Diestelhorst M, et al. **Fortschr Ophthalmol** 1990;87(2):131–3 (Eng. Abstr.) **(Ger)**

CARBONIC ANHYDRASE ISOENZYMES see **CARBONIC ANHYDRASE**

CARBONIC ANHYDRIDE see **CARBON DIOXIDE**

CARBONYL CYANIDE M-CHLOROPHENYL HYDRAZONE see under **NITRILES**

CARBONYL CYANIDE P-TRIFLUOROMETHOXYPHENYLHYDRAZONE see under **NITRILES**

CARBOPROST see under **PROSTAGLANDINS F, SYNTHETIC**

CARBOXIN see under **ANILIDES**

CARBOXY-LYASES

Complete amino acid sequence of alpha-acetolactate decarboxylase from Bacillus brevis. Svendsen I, et al. **Carlsberg Res Commun** 1989;54(4):157–63

An enzymatic method for oxalate automated with the Cobas Fara centrifugal analyzer. Allen LC, et al. **Clin Chem** 1989 Oct;35(10):2098–100

An X-ray solution scattering study of the cofactor and activator induced structural changes in yeast pyruvate decarboxylase (PDC). Hübner G, et al. **FEBS Lett** 1990 Jun 18;266(1-2):17–20

First crystallization of a phosphoenolpyruvate carboxylase from Escherichia coli. Inoue M, et al. **J Mol Biol** 1989 Aug 5;208(3):509–10

Crystallization and structure solution at 4 A resolution of the recombinant synthase domain of N-(5'-phosphoribosyl)anthranilate isomerase:indole-3-glycerol-phosphate synthase from Escherichia coli complexed to a substrate analogue. Wilmanns M, et al. **Protein Eng** 1990 Jan;3(3):173–80

ANALYSIS

Assays for amino acid decarboxylase enzymes using ion-exchange cartridges. Heerze LD, et al. **Anal Biochem** 1990 Mar;185(2):201–5

A spectrophotometric assay for meso-diaminopimelate decarboxylase and L-alpha-amino-epsilon-caprolactam hydrolase. Laber B, et al. **Anal Biochem** 1989 Sep; 181(2):297–301

Assay for phosphatidylserine decarboxylase utilizing DEAE-cellulose column chromatography. Overmeyer JH, et al. **Anal Biochem** 1989 Nov 1;182(2):452–6

A high-performance liquid chromatography method for the simultaneous assay of diaminopimelate epimerase and decarboxylase. Weir AN, et al. **Anal Biochem** 1989 Aug 1;180(2):298–302

Regulation of the aggregation state of maize phosphoenolpyruvate carboxylase: evidence from dynamic light-scattering measurements. Wu MX, et al. **Arch Biochem Biophys** 1990 Sep;281(2):324–9

Protein-decorated micelle structure of sodium-dodecyl-sulfate—protein complexes as determined by neutron scattering. Ibel K, et al. **Eur J Biochem** 1990 Jun 20;190(2):311–8

Histaminergic cells in the choroid plexus of rat. Nilsson C, et al. **J Chem Neuroanat** 1988 Jan-Feb;1(1):53–7

ANTAGONISTS & INHIBITORS

Synthesis and study of (Z)-3-chlorophosphoenolpyruvate. Liu J, et al. **Arch Biochem Biophys** 1990 Feb 15; 277(1):143–8

Inactivation of rat gastric mucosal histidine decarboxylase by phosphatase. Savany A, et al. **Biochem Int** 1989 Aug; 19(2):429–38

Inhibition of uroporphyrinogen decarboxylase activity. The role of cytochrome P-450-mediated uroporphyrinogen oxidation. Lambrecht RW, et al. **Biochem J** 1990 Jul 15; 269(2):437–41

Combined regulation of ornithine and S-adenosylmethionine decarboxylases by spermine and the spermine analogue N1 N12-bis(ethyl)spermine. Porter CW, et al. **Biochem J** 1990 May 15;268(1):207–12

Inactivation of pyruvate decarboxylase by 3-hydroxypyruvate. Thomas G, et al. **Biochem J** 1990 Feb 15;266(1):305–8

Inhibition of pyruvate:ferredoxin oxidoreductase from Trichomonas vaginalis by pyruvate and its analogues. Comparison with the pyruvate decarboxylase component of the pyruvate dehydrogenase complex. Williams KP, et al. **Biochem J** 1990 May 15;268(1):69–75

Pyridoxal 5'-phosphate-dependent histidine decarboxylase. Mechanism of inactivation by alpha-fluoromethylhistidine. Bhattacharjee MK, et al. **J Biol Chem** 1990 Apr 25; 265(12):6664–8

Controlled-release levodopa/benserazide (Madopar HBS): clinical observations and levodopa and dopamine plasma concentrations in fluctuating parkinsonian patients. Ceballos-Baumann AO, et al. **J Neurol** 1990 Feb; 237(1):24–8

Severity of Parkinson's disease is a risk factor for peak-dose dyskinesia. Horstink MW, et al. **J Neurol Neurosurg Psychiatry** 1990 Mar;53(3):224–6

A comparison of the effects of controlled-release levodopa (Madopar CR) with conventional levodopa in late Parkinson's disease. MacMahon DG, et al. **J Neurol Neurosurg Psychiatry** 1990 Mar;53(3):220–3

Central versus peripheral effects on temperature preference and body temperature following alteration of 5-HT in maturing mice. Goodrich C, et al. **Physiol Behav** 1989 Aug; 46(2):203–9

[The concentration of homovanillic acid and leucine-enkephalin in the lumbar CSF of patients with Parkinson's disease before and after madopar treatment] Liu DK. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Apr; 22(2):95–8, 126–7 (Eng. Abstr.) **(Chi)**

BIOSYNTHESIS

Induction of ornithine decarboxylase and S-adenosylmethionine decarboxylase by sulfobromophthalein in rats. Oguro T, et al. **Life Sci** 1989; 45(11):963–70

[Conditions of the L-lysine decarboxylase biosynthesis in a culture of Vibrio sp.] Ruzgene AV, et al. **Prikl Biokhim Mikrobiol** 1990 Jan-Feb;26(1):81–4 (Eng. Abstr.) **(Rus)**

BLOOD

Indicators of biotin status: a study of patients on prolonged total parenteral nutrition. Velázquez A, et al. **Eur J Clin Nutr** 1990 Jan;44(1):11–6

Photodynamic and non-photodynamic action of several porphyrins on the activity of some heme-enzymes. Afonso SG, et al. **J Enzym Inhib** 1990;3(4):303–10

DEFICIENCY

Reproductive consequences of deficiency of uridine monophosphate synthase in Holstein cattle. Shanks RD. **Am J Vet Res** 1990 May;51(5):800–2

Uroporphyrinogen decarboxylase deficiency in hepatoerythropoietic porphyria: further evidence for genetic heterogeneity. Kószó F, et al. **Br J Dermatol** 1990 Mar;122(3):365–70

Deficiency of uridine monophosphate synthase among Holstein cattle. Shanks RD, et al. **Cornell Vet** 1990 Apr; 80(2):119–22

Embryonic mortality attributed to inherited deficiency of uridine monophosphate synthase. Shanks RD, et al. **J Dairy Sci** 1989 Nov;72(11):3035–9

[Lipid storage myopathies—carnitine deficiency, carnitine palmitoyltransferase deficiency, pyruvate decarboxylase deficiency] Itagaki Y, et al. **Nippon Rinsho** 1990 Jul; 48(7):1510–6 **(Jpn)**

GENETICS

Molecular cloning of human UMP synthase. Suchi M, et al. **Adv Exp Med Biol** 1989;253A:511–8

Application of a ribosomal DNA integration vector in the construction of a brewer's yeast having alpha-acetolactate decarboxylase activity. Fujii T, et al. **Appl Environ Microbiol** 1990 Apr;56(4):997–1003

Isolation of genes highly expressed in early and late stages of Friend virus-induced erythroleukemia in mice. Misawa Y, et al. **Biochem Biophys Res Commun** 1990 Jul 16; 170(1):39–45

Specific regulation by endogenous polyamines of translational initiation of S-adenosylmethionine decarboxylase mRNA in Swiss 3T3 fibroblasts. White MW, et al. **Biochem J** 1990 Jun 15;268(3):657–60

Pyridoxal 5'-phosphate dependent histidine decarboxylase: overproduction, purification, biosynthesis of soluble site-directed mutant proteins, and replacement of conserved residues. Vaaler GL, et al. **Biochemistry** 1989 Sep 5;28(18):7306–13

Cloning, sequencing, expression, and site-directed mutagenesis of the gene from Clostridium perfringens encoding pyruvoyl-dependent histidine decarboxylase. van Poelje PD, et al. **Biochemistry** 1990 Jan 9;29(1):132–9

A gene transfer system based on the homologous pyrG gene and efficient expression of bacterial genes in Aspergillus oryzae. de Ruiter-Jacobs YM, et al. **Curr Genet** 1989 Sep; 16(3):159–63

Sequence and transcript analysis of the C. albicans URA3 gene encoding orotidine-5'-phosphate decarboxylase. Losberger C, et al. **Curr Genet** 1989 Sep;16(3):153–8

Cloning of the pyr4 gene encoding orotidine-5'-phosphate decarboxylase in Cephalosporium acremonium. Vian A, et al. **Curr Genet** 1990 Mar;17(3):223–7

Autoregulation may control the expression of yeast pyruvate decarboxylase structural genes PDC1 and PDC5. Hohmann S, et al. **Eur J Biochem** 1990 Mar 30;188(3):615–21

A common structural motif in thiamin pyrophosphate-binding enzymes. Hawkins CF, et al. **FEBS Lett** 1989 Sep 11;255(1):77–82

Expression of catalytically active rat S-adenosylmethionine decarboxylase in Escherichia coli. Salmikangas P, et al. **FEBS Lett** 1989 Nov 20;258(1):123–6

The molecular cloning, sequence and expression of the hdcB gene from Lactobacillus 30A. Copeland WC, et al. **Gene** 1989 Dec 21;85(1):259–65

Sequence analysis of the URA1 gene encoding orotidine-5'-monophosphate decarboxylase of Schizophyllum commune. Froeliger EH, et al. **Gene** 1989 Nov 30;83(2):387–93

Nucleotide sequence of rat S-adenosylmethionine decarboxylase cDNA. Comparison with an intronless rat pseudogene. Pulkka A, et al. **Gene** 1990 Feb 14;86(2):193–9

Cloning of aldB, which encodes alpha-acetolactate decarboxylase, an exoenzyme from Bacillus brevis. Diderichsen B, et al. **J Bacteriol** 1990 Aug;172(8):4315–21

Development of an integrative DNA transformation system for the yeast Candida tropicalis. Haas LO, et al. **J Bacteriol** 1990 Aug;172(8):4571–7

Nucleotide sequence and analysis of the speA gene encoding biosynthetic arginine decarboxylase in Escherichia coli. Moore RC, et al. **J Bacteriol** 1990 Aug;172(8):4631–40

pdc1(0) mutants of Saccharomyces cerevisiae give evidence for an additional structural PDC gene: cloning of PDC5, a gene homologous to PDC1. Seeboth PG, et al. **J Bacteriol** 1990 Feb;172(2):678–85

Phosphoenolpyruvate carboxylase prevalent in maize roots: isolation of a cDNA clone and its use for analyses of the gene and gene expression. Kawamura T, et al. **J Biochem (Tokyo)** 1990 Jan;107(1):165–8

Maize phosphoenolpyruvate carboxylase involved in C4 photosynthesis: nucleotide sequence analysis of the 5' flanking region of the gene. Yanagisawa S, et al. **J Biochem (Tokyo)** 1989 Dec;106(6):982–7

Pseudomonas cepacia 2,2-dialkylglycine decarboxylase. Sequence and expression in Escherichia coli of structural and repressor genes. Keller JW, et al. **J Biol Chem** 1990 Apr 5;265(10):5531–9

Site of pyruvate formation and processing of mammalian S-adenosylmethionine decarboxylase proenzyme. Stanley BA, et al. **J Biol Chem** 1989 Dec 15;264(35):21073–9

Localization of the adenosine deaminase, transferrin, and UMP synthetase genes on Chinese hamster chromosomes 4 and 6 by in situ hybridization. Qumsiyeh MB, et al. **J Hered** 1990 Mar-Apr;81(2):111–6

cis- and trans-acting regulatory elements of the yeast URA3 promoter. Roy A, et al. **Mol Cell Biol** 1990 Oct; 10(10):5257–70

Physical and genetic analysis of the phosphoenolpyruvate carboxykinase (pckA) locus from Escherichia coli K12. Goldie H, et al. **Mol Gen Genet** 1990 Jan;220(2):191–6

Complete genomic sequence encoding trpC from Aspergillus niger var. awamori. Adams RR, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4931

The alpha chain of human propionyl CoA carboxylase (PCCA) mapped to chromosome 13) detects an RFLP with XmnI. Bowcock AM, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8400

Complete cDNA sequence of sorghum phosphoenolpyruvate carboxylase involved in C4 photosynthesis. Cretin C, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):658

Nucleotide sequence of the diaminopimelate-decarboxylase gene from Bacillus subtilis. Yamamoto J, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10105

Characterization and expression of the complementary DNA encoding rat histidine decarboxylase. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7346

Cloning of a chicken liver cDNA encoding 5-aminoimidazole ribonucleotide carboxylase and 5-aminoimidazole-4-N-succinocarboxamide ribonucleotide synthetase by functional complementation of Escherichia coli pur mutants. Chen ZD, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3097–101

Transcriptional effects of polyamines on ribosomal proteins and on polyamine-synthesizing enzymes in Escherichia coli. Huang SC, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3464–8

Characterization and expression of the complementary DNA encoding rat histidine decarboxylase. Joseph DR, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):733–7

Site-directed alteration of Glu197 and Glu66 in a pyruvoyl-dependent histidine decarboxylase. McElroy HE, et al. **Protein Eng** 1989 Oct;3(1):43–8

Cytogenetic analysis of amplification and deamplification of UMP synthase genes in Chinese hamster cells. Qumsiyeh MB, et al. **Somat Cell Mol Genet** 1989 Nov;15(6):503–12

[Propionic acidemia] Ohura T. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):575–8 **(Jpn)**

[Cloning the pyruvate decarboxylase gene of Zymomonas mobilis and its expression in Escherichia coli] Zverlov VV, et al. **Mol Gen Mikrobiol Virusol** 1989 Sep;(9):11–3 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Specific antiserum and monoclonal antibodies against the taurine biosynthesis enzyme cysteine sulfinate decarboxylase: identity of brain and liver enzyme. Remy A, et al. **J Neurochem** 1990 Mar;54(3):870–9

ISOLATION & PURIFICATION

The dimeric form of phosphoenolpyruvate carboxylase isolated from maize: physical and kinetic properties. Jawali N. **Arch Biochem Biophys** 1990 Feb 15;277(1):61–8

The influence of pH on substrate form specificity of phosphoenolpyruvate carboxylase purified from Crassula argentea. Meyer CR, et al. **Arch Biochem Biophys** 1990 May 1;278(2):365–72

Isolation and characterization of oxaloacetate decarboxylase of Salmonella typhimurium, a sodium ion pump. Wifling K, et al. **Arch Microbiol** 1989;152(6):584–8

Purification and properties of uroporphyrinogen decarboxylase from Saccharomyces cerevisiae. Yeast uroporphyrinogen decarboxylase. Felix F, et al. **Eur J Biochem** 1990 Mar 10;188(2):393–403

Purification and characterization of l-histidine decarboxylase from mouse mastocytoma P-815 cells. Ohmori E, et al. **J Biochem (Tokyo)** 1990 Jun;107(6):834–9

The anaplerotic phosphoenolpyruvate carboxylase of the tricarboxylic acid cycle deficient Acholeplasma laidlawii B-PG9. Manolukas JT, et al. **J Gen Microbiol** 1989 Feb; 135 (Pt 2):251–6

Purification and some properties of a novel L-2,4-diaminobutyric acid decarboxylase from Vibrio alginolyticus. Nakao H, et al. **J Gen Microbiol** 1989 Feb; 135 (Pt 2):345–51

Histidine decarboxylase from rat and rabbit brain: partial purification and characterization. Chudomelka PJ, et al. **Neurochem Res** 1990 Jan;15(1):17–24

METABOLISM

Effect of triton X-100 on the activity and solubilization of rat liver mitochondrial phosphatidylserine decarboxylase. Dygas A, et al. **Acta Biochim Pol** 1989;36(2):131–41

Regulation of phosphoenolpyruvate carboxylase: an example of signal transduction via protein phosphorylation in higher plants. Nimmo HG, et al. **Adv Enzyme Regul** 1990; 30:121–31

Histamine content, diamine oxydase and histidine decarboxylase activities along the intestinal tract of the rat. Huneau JF, et al. **Agents Actions** 1989 Nov;28(3-4):231–4

Vitamin B6 and decarboxylation of histidine. Snell EE. **Ann N Y Acad Sci** 1990;585:1–12 (36 ref.)

Mammalian histidine decarboxylase and dopa decarboxylase. Wada H, et al. **Ann N Y Acad Sci** 1990;585:145–61

Recent topics in pyridoxal 5'-phosphate enzyme studies. Hayashi H, et al. **Annu Rev Biochem** 1990;59:87–110 (193 ref.)

Pyruvoyl-dependent enzymes. van Poelje PD, et al. **Annu Rev Biochem** 1990;59:29–59 (118 ref.)

Hysteretic nature of phosphoenolpyruvate carboxylase isolated from maize. Jawali N. **Arch Biochem Biophys** 1990 Feb 15;277(1):69–73

Kinetic evidence of the existence of a regulatory phosphoenolpyruvate binding site in maize leaf phosphoenolpyruvate carboxylase [published erratum appears in Arch Biochem Biophys 1990 May 1;278(2):492] Rodríguez-Sotres R, et al. **Arch Biochem Biophys** 1990 Jan; 276(1):180–90

Partial characterization of guard-cell phosphoenolpyruvate carboxylase: kinetic datum collection in real time from single-cell activities. Tarczynski MC, et al. **Arch Biochem Biophys** 1990 Jul;280(1):153–8

Plants contain multiple biotin enzymes: discovery of 3-methylcrotonyl-CoA carboxylase, propionyl-CoA carboxylase and pyruvate carboxylase in the plant kingdom. Wurtele ES, et al. **Arch Biochem Biophys** 1990 Apr; 278(1):179–86

Enzyme catalysed non-oxidative decarboxylation of aromatic acids. II. Identification of active site residues of 2,3-dihydroxybenzoic acid decarboxylase from Aspergillus niger. Kamath AV, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):20–6

Relationship between the multiple forms of rat gastric histidine decarboxylase: effects of conditions favouring phosphorylation and dephosphorylation. Savany A, et al. **Biochem Int** 1990;20(2):363–74

Decarboxylation of uroporphyrinogen III by erythrocyte uroporphyrinogen decarboxylase. Evidence for a random decarboxylation mechanism. Luo J, et al. **Biochem J** 1990 Jun 1;268(2):513–5

Histidine decarboxylase in human basophilic leukemia (KU-812-F) cells. Characterization and induction by phorbol myristate acetate. Mamune-Sato R, et al. **Biochem Pharmacol** 1990 Sep 1;40(5):1125–9

Orotidine-5'-monophosphate decarboxylase catalysis: kinetic isotope effects and the state of hybridization of a bound transition-state analogue. Acheson SA, et al. **Biochemistry** 1990 Apr 3;29(13):3198–202

Gastrointestinal histamine and histamine formation capacity after gastric irradiation in mice. Man WK, et al. **Br J Radiol** 1990 Mar;63(747):209–13

L-2,4-diaminobutyric acid decarboxylase activity responsible for the formation of 1,3-diaminopropane in Enterobacter aerogenes. Nakao H, et al. **FEMS Microbiol Lett** 1990 Jun 15;58(1):61–6

o-Phthalaldehyde as a probe in the active site of phosphoenolpyruvate carboxylase. Maralihalli GB, et al. **Indian J Biochem Biophys** 1990 Jun;27(3):141–5

Activation of rat liver S-adenosylmethionine decarboxylase by putrescine and 2-substituted 1,4-butanediamines. Dezeure F, et al. **Int J Biochem** 1989;21(8):889–99

Regulation of S-adenosyl-L-methionine decarboxylase by 1-aminooxy-3-aminopropane: enzyme kinetics and effects on the enzyme activity in cultured cells. Hyvönen T, et al. **J Biochem (Tokyo)** 1990 Mar;107(3):339–42

Studies on the mechanism of formation of the pyruvate prosthetic group of phosphatidylserine decarboxylase from Escherichia coli. Li QX, et al. **J Biol Chem** 1990 Mar 5; 265(7):4111–5

The localization of histidine decarboxylase-immunoreactive cell bodies in the guinea-pig brain. Smits RP, et al. **J Chem Neuroanat** 1990 Mar-Apr;3(2):85–100

Hepatic cysteine sulfinic acid decarboxylase activity in rats fed various levels of dietary casein. Jerkins AA, et al. **J Nutr** 1989 Nov;119(11):1593–7

Histamine synthesis in rat hypothalamus is not acutely regulated via histidine decarboxylase. Chudomelka PJ, et al. **Neurosci Lett** 1989 Dec 15;107(1-3):216–20

Autoradiography of 3H-alpha-fluoromethyl histidine in mice: correlation with the kidney histidine decarboxylase activity. Hammar L, et al. **Pharmacol Toxicol** 1990 Jul; 67(1):61–8

[Effects of the anti-ulcer agents on the amine contents and regulating enzyme activity of gastric mucosa during the healing process of acetic acid induced gastric ulcer in rats] Omata T, et al. **Nippon Yakurigaku Zasshi** 1990 Jan; 95(1):15–20 (Eng. Abstr.) **(Jpn)**

[Changes in the pool of polyamines [correction of polyvitamins] during transition from anaerobic to aerobic conditions and localization of enzymes for their synthesis in Escherichia coli cells] Tkachenko AG, et al. **Mikrobiologiia** 1989 Nov-Dec;58(6):885–91 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Uroporphyrinogen decarboxylase and protoporphyrinogen oxidase in dual porphyria. Sturrock ED, et al. **S Afr Med J** 1989 Oct 21;76(8):405–8

CARBOXYBENZYL PENICILLIN see **CARBENICILLIN**

CARBOXYDISMUTASE see **RIBULOSEBIPHOSPHATE CARBOXYLASE**

1-CARBOXYGLUTAMIC ACID

Evidence for a common metal ion-dependent transition in the 4-carboxyglutamic acid domains of several vitamin K-dependent proteins. Church WR, et al. **J Biol Chem** 1989 Oct 25;264(30):17882–7

The gamma-carboxyglutamic acid domain of human factor VIIa is essential for its interaction with cell surface tissue factor. Sakai T, et al. **J Biol Chem** 1990 Feb 5;265(4):1890–4

In vitro gamma-carboxylation of a 59-residue recombinant peptide including the propeptide and the gamma-carboxyglutamic acid domain of coagulation factor IX. Effect of mutations near the propeptide cleavage site. Wu SM, et al. **J Biol Chem** 1990 Aug 5;265(22):13124–9

ANALYSIS

A colorimetric assay specific for gamma-carboxyglutamic acid-containing proteins: its utility in protein purification procedures. Nishimoto SK. **Anal Biochem** 1990 May 1; 186(2):273–9

Conantokin-T. A gamma-carboxyglutamate containing peptide with N-methyl-d-aspartate antagonist activity. Haack JA, et al. **J Biol Chem** 1990 Apr 15;265(11):6025–9

Immunocytochemical localization of BGP in human bones in various developmental stages and pathological conditions. Ohta T, et al. **Virchows Arch [A]** 1989; 415(5):459–66

[Preparation of monoclonal antibodies against human bone gamma-carboxyglutamic acid containing protein (BGP) and its immunohistochemical application to various human tissues] Takada J, et al. **Nippon Seikeigeka Gakkai Zasshi** 1990 May;64(5):453–60 (Eng. Abstr.) **(Jpn)**

BLOOD

Serum markers of bone formation in parenteral nutrition patients. Lipkin EW, et al. **Calcif Tissue Int** 1990 Aug; 47(2):75–81

Serum bone-gla protein after fracture. Obrant KJ, et al. **Clin Orthop** 1990 Sep;(258):300–3

Reduced axial bone mineral content in patients taking an oral anticoagulant. Fiore CE, et al. **South Med J** 1990 May; 83(5):538–42

METABOLISM

Dicoumarol-induced prothrombins containing 6, 7, and 8 gamma-carboxyglutamic acid residues: isolation and characterization. Malhotra OP. **Biochem Cell Biol** 1989 Aug;67(8):411-21

Gamma-carboxyglutamate-containing proteins and the vitamin K-dependent carboxylase. Vermeer C. **Biochem J** 1990 Mar 15;266(3):625-36 (160 ref.)

Protein structural requirements and properties of membrane binding by gamma-carboxyglutamic acid-containing plasma proteins and peptides. Schwalbe RA, et al. **J Biol Chem** 1989 Dec 5;264(34):20288-96

URINE

Effect of vitamin K deficiency on urinary gamma-carboxyglutamic acid excretion in rats. Yamano M, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Sep; 52(6):1078-86

CARBOXYHEMOGLOBIN

Influence of globin structure on the heme in dromedary carbonmonoxyhemoglobin. Amiconi G, et al. **Biochemistry** 1989 Oct 17;28(21):8547-53

ADVERSE EFFECTS

The theoretical effect of carboxyhemoglobin on the pulse oximeter. Raemer DB, et al. **J Clin Monit** 1989 Oct; 5(4):246-9

ANALYSIS

Fire fighters' exposure to carbon monoxide during Australian bushfires. Brotherhood JR, et al. **Am Ind Hyg Assoc J** 1990 Apr;51(4):234-40

Incidence and range of carboxyhaemoglobin in blood for transfusion. Freeman R, et al. **Anaesthesia** 1990 Jul; 45(7):581-3

Carboxyhaemoglobin [letter] Freeman R, et al. **Anaesthesia** 1990 Jan;45(1):57

Improved second-derivative spectrophotometric determination of carboxyhaemoglobin. Moody AP, et al. **Ann Clin Biochem** 1989 Sep;26 (Pt 5):451-2

Comparison of three methods for the determination of carboxyhaemoglobin in blood. Stonecka A, et al. **Bull Inst Marit Trop Med Gdynia** 1989;40(1-2):97-103

Measurement of carboxyhaemoglobin by spectrophotometry and gas chromatography. Johansson MB, et al. **Clin Physiol** 1989 Dec;9(6):581-6

Errors in sheep carboxyhemoglobin measurements [letter; comment] Torrington KG, et al. **J Appl Physiol** 1990 Apr; 68(4):1763-4 Comment on: J Appl Physiol 1988 May;64(5):1870-7.

Carboxyhemoglobin in the rat: improvements in the spectrophotometric measurement and comparison to other studies. Verma K, et al. **J Appl Toxicol** 1989 Oct; 9(5):323-30

Carboxyhemoglobin and methemoglobin levels in banked blood. Uchida I, et al. **J Clin Anesth** 1990 Mar-Apr; 2(2):86-90

Analysis of carboxyhemoglobin and cyanide in blood from victims of the Dupont Plaza Hotel fire in Puerto Rico. Levin BC, et al. **J Forensic Sci** 1990 Jan;35(1):151-68

Methylene chloride intoxication in a furniture refinisher. A comparison of exposure estimates utilizing workplace air sampling and blood carboxyhemoglobin measurements. Shusterman D, et al. **J Occup Med** 1990 May;32(5):451-4

Occult carbon monoxide poisoning in patients with neurologic illness. Heckerling PS, et al. **J Toxicol Clin Toxicol** 1990;28(1):29-44

Rapid estimation of carboxyhemoglobin by breath sampling in an emergency setting. Kurt TL, et al. **Vet Hum Toxicol** 1990 Jun;32(3):227-9

[Determination and interpretation of carboxyhemoglobin in traces of biological material] Vaněrková H, et al. **Soud Lek** 1989 Nov;34(4):61-3 (Eng. Abstr.) (Cze)

[Optimizing carbon monoxide detection in biological material] Iffland R, et al. **Beitr Gerichtl Med** 1989;47:87-94 (Eng. Abstr.) (Ger)

[Relation of the pulse oximetry value in dyshemoglobinemias] Forstner K, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:81-2 (Ger)

[Exposure of children to benzene and other motor vehicle emissions] Jermann E, et al. **Zentralbl Hyg Umweltmed** 1989 Oct;189(1):50-61 (Eng. Abstr.) (Ger)

[Clinical significance of carboxyhemoglobin analysis in blood cell chemical tests] Miyaji T, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:960-2 (Jpn)

DIAGNOSTIC USE

Screening hospital admissions from the emergency department for occult carbon monoxide poisoning. Heckerling PS, et al. **Am J Emerg Med** 1990 Jul;8(4):301-4

METABOLISM

Carboxyhemoglobin measurements in the diagnosis of ABO hemolytic disease. Uetani Y, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Apr;31(2):171-6

Sensitivity analysis applied to Coburn-Forster-Kane models of carboxyhemoglobin formation. McCartney ML. **Am Ind Hyg Assoc J** 1990 Mar;51(3):169-77

Production of arrhythmias by elevated carboxyhemoglobin in patients with coronary artery disease [see comments] Sheps DS, et al. **Ann Intern Med** 1990 Sep 1;113(5):343-51 Comment in: Ann Intern Med 1990 Sep 1;113(5):337-8.

A 35Cl(-)-NMR study of the singular anion-binding properties of dromedary hemoglobin. Lundberg P, et al. **Biochim Biophys Acta** 1989 Nov 9;999(1):12-8

Rate of allosteric change in hemoglobin measured by modulated excitation using fluorescence detection. Martino AJ, et al. **Biophys J** 1989 Oct;56(4):781-94

Ligand dynamics in the photodissociation of carboxyhemoglobin by subpicosecond transient infrared spectroscopy. Rothberg L, et al. **Biophys J** 1990 Feb; 57(2):369-73

Effect of blood in the gut on measurements of endogenous carbon monoxide production. Brouillard RP, et al. **Blood** 1975 Jan;45(1):67-9

Carboxyhaemoglobin and serum cholesterol levels in smokers. Singh N, et al. **J Assoc Physicians India** 1989 Oct;37(10):649-51

A novel mechanism of heme-heme interaction in the homodimeric hemoglobin from Scapharca inaequivalvis as manifested upon cleavage of the proximal Fe-N epsilon bond at low pH. Coletta M, et al. **J Biol Chem** 1990 Mar 25;265(9):4828-30

Alteration in carboxyhemoglobin concentrations during exposure to 9 ppm carbon monoxide for 8 hours at sea level and 2134 m altitude in a hypobaric chamber. Horvath SM, et al. **JAPCA** 1989 Oct;39(10):1323-7

Dose-effects functions for carboxyhemoglobin and behavior. Benignus VA, et al. **Neurotoxicol Teratol** 1990 Mar-Apr; 12(2):111-8 (50 ref.)

Compensatory tracking in humans with elevated carboxyhemoglobin. Benignus VA, et al. **Neurotoxicol Teratol** 1990 Mar-Apr;12(2):105-10

Direct observations of ligand dynamics in hemoglobin by subpicosecond infrared spectroscopy. Anfinrud PA, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8387-91

RADIATION EFFECTS

Changes in the apparent quantum efficiency for photolysis of Hb(CO)1. Zahroon IA, et al. **Biophys J** 1989 Nov; 56(5):947-53

Transient and time-resolved optical studies of photolyzed carbonmonoxy hemoglobin and myoglobin. Findsen EW, et al. **Photochem Photobiol** 1990 Jun;51(6):741-8 (66 ref.)

ULTRASTRUCTURE

Stereochemistry of carbon monoxide binding to normal human adult and Cowtown haemoglobins [published erratum appears in J Mol Biol 1990 Aug 20;214(4):949] Derewenda Z, et al. **J Mol Biol** 1990 Feb 5;211(3):515-9

CARBOXYLASE DEFICIENCY, MULTIPLE see **MULTIPLE CARBOXYLASE DEFICIENCY**

CARBOXYLESTERASES see **CARBOXYLIC ESTER HYDROLASES**

CARBOXYLIC ACIDS

[Radioimmunological characterization of anti lithocholic acid antisera elicited by [C-6] carboxylic acid N-succinimidyl esters as haptenic derivatives] Ikegawa S, et al. **Yakugaku Zasshi** 1989 May;109(5):306-11 (Eng. Abstr.) (Jpn)

ANALYSIS

N-(9-acridinyl)-bromoacetamide--a powerful reagent for phase-transfer-catalyzed fluorescence labeling of carboxylic acids for liquid chromatography. Allenmark S, et al. **Anal Biochem** 1990 Mar;185(2):279-85

Early amniocentesis and amniotic fluid organic acid levels in the prenatal diagnosis of organic acidemias. Coude M, et al. **Clin Chim Acta** 1990 Mar 15;187(3):329-32

Identification of carboxylic acid residues in glucoamylase G2 from Aspergillus niger that participate in catalysis and substrate binding. Svensson B, et al. **Eur J Biochem** 1990 Feb 22;188(1):29-38

The gamma subunit of brain G-proteins is methyl esterified at a C-terminal cysteine. Fung BK, et al. **FEBS Lett** 1990 Jan 29;260(2):313-7

New ultraviolet labelling agents for high-performance liquid chromatographic determination of monocarboxylic acids. Funazo K, et al. **J Chromatogr** 1989 Nov 3;481:211-9

Capillary gas chromatography mass spectrometry and identification of substituted carboxylic acids in lipids extracted from a 4000-year-old Nubian burial. Gülaçar FO, et al. **J Chromatogr** 1989 Sep 22;479(1):61-72

Florisil sorbent sampling and ion chromatographic determination of airborne aliphatic carboxylic acids. Simon P, et al. **J Chromatogr** 1989 Oct 6;479(2):445-51

Effect of pH and temperature on the solubility of a surface active carboxylic acid. Pandit NK, et al. **J Pharm Sci** 1989 Sep;78(9):767-70

BLOOD

Substrate and inhibitor specificity of monocarboxylate transport into heart cells and erythrocytes. Further evidence for the existence of two distinct carriers. Poole RC, et al. **Biochem J** 1990 Aug 1;269(3):827-9

[Behavior of ketone bodies and some carbohydrate metabolism indicators in the blood of patients with cerebral infarction in the earliest and later stages after intravenous glucose loading] Kawiak W, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:285-92 (Eng. Abstr.) (Pol)

[Behavior of ketone bodies and some carbohydrate metabolism indicators in the blood of patient with various features of stroke after intravenous glucose loading] Nowicki J. **Ann Univ Mariae Curie Sklodowska [Med]** 1985; 40:275-83 (Eng. Abstr.) (Pol)

[Behavior of ketone bodies and some carbohydrate metabolism indicators in the blood of patients with various features of paralytic stroke] Nowicki J. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:257-65 (Eng. Abstr.) (Pol)

CEREBROSPINAL FLUID

Rapid diagnosis of tuberculous meningitis by frequency-pulsed electron-capture gas-liquid chromatography detection of carboxylic acids in cerebrospinal fluid. Brooks JB, et al. **J Clin Microbiol** 1990 May;28(5):989-97

[Behavior of ketone bodies and some carbohydrate metabolism indicators in the cerebrospinal fluid of patients with various features of stroke] Nowicki J. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:267-73 (Eng. Abstr.) (Pol)

CHEMICAL SYNTHESIS

Glutathione monoesters. Anderson ME, et al. **Anal Biochem** 1989 Nov 15;183(1):16-20

Connecting hindered amines with aminoxyl radicals. I. One-step synthesis of spin-labelled esters. Drăgutan I. **Free Radic Res Commun** 1990;9(3-6):379-82

5-Hydroxytryptamine (5-HT3) receptor antagonists. 1. Indazole and indolizine-3-carboxylic acid derivatives. Bermudez J, et al. **J Med Chem** 1990 Jul;33(7):1924-9

Inhibition of human leukocyte elastase. 1. Inhibition by C-7-substituted cephalosporin tert-butyl esters. Doherty JB, et al. **J Med Chem** 1990 Sep;33(9):2513-21

Inhibition of human leukocyte elastase. 2. Inhibition by substituted cephalosporin esters and amides. Finke PE, et al. **J Med Chem** 1990 Sep;33(9):2522-8

Synthesis and structure-activity relationships of anti-inflammatory 9,10-dihydro-9-oxo-2-acridine-alkanoic acids and 4-(2-carboxyphenyl)aminobenzenealkanoic acids. Taraporewala IB, et al. **J Pharm Sci** 1990 Feb;79(2):173-8

Synthesis and biological evaluation of omega-(N,N,N-trialkylammonium)alkyl esters and thioesters of carboxylic acid nonsteroidal antiinflammatory agents. Venuti MC, et al. **Pharm Res** 1989 Oct;6(10):867-73

Structure-activity relationship investigation of bis(2-chloroethyl)aminoethyl esters of some carboxylic acids. Pajeva I, et al. **Pharmazie** 1990 May;45(5):361-3

[Synthesis and bronchodilator action of 4-(methoxycarbonylalkylsulfinyl)-4-pyrrol carboxylic esters] Eiden F, et al. **Arch Pharm (Weinheim)** 1989 Nov; 322(11):807-10 (Eng. Abstr.) (Ger)

[4-(3-Oxo-1,2-benzisothiazolin-2-yl)alkanoic, phenyl and phenoxyalkanoic acids: synthesis and anti-inflammatory, analgesic, and antipyretic properties] Bordi F, et al. **Farmaco** 1989 Sep;44(9):795-807 (Eng. Abstr.) (Ita)

METABOLISM

C4 acid decarboxylation and photosynthesis in bundle sheath cells of NAD-malic enzyme-type C4 plants: mechanism and the role of malate and orthophosphate. Furbank RT, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):374-81

Hepatic microsomal oxygenation of aldehydes to carboxylic acids. Watanabe K, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1308-12

Diazepam-binding inhibitor: a neuropeptide and/or an acyl-CoA ester binding protein? Knudsen J, et al. **Biochem J** 1990 Feb 1;265(3):927-9

Analyses of fermentation products of Listeria species by frequency-pulsed electron-capture gas-liquid chromatography. Daneshvar MI, et al. **Can J Microbiol** 1989 Aug;35(8):786-93

The synthesis of an active derivative of cyclomaltoheptaose for the hydrolysis of esters and the formation of amide bonds. Ekberg B, et al. **Carbohydr Res** 1989 Oct 23; 192:111-7

Synthesis and characterization of 1,1,4,4-butanetetracarboxylic acid. A di-gamma-carboxyglutamic acid (GlaGla) analogue. Cabaniss SE, et al. **Int J Pept Protein Res** 1990 Jul; 36(1):79-85

Increased expression of a gene coding for NAD:glyceraldehyde-3-phosphate dehydrogenase during the transition from C3 photosynthesis to crassulacean acid metabolism in Mesembryanthemum crystallinum. Ostrem JA, et al. **J Biol Chem** 1990 Feb 25;265(6):3497-502

Functional characteristics of the cardiac sarcolemmal monocarboxylate transporter. Trosper TL, et al. **J Membr Biol** 1989 Nov;112(1):15-23

Transepithelial transport of aliphatic carboxylic acids studied in Madin Darby canine kidney (MDCK) cell monolayers. Cho MJ, et al. **Pharm Res** 1990 Apr;7(4):325-31

Functional roles of carboxyl groups in human red blood cell

anion exchange. Jennings ML, et al. **Soc Gen Physiol Ser** 1988;43:163–80 (53 ref.)

[Transport processes through the blood–brain barrier] Lefauconnier JM. **Reprod Nutr Dev** 1989;29(6):689–702 (95 ref.) (Eng. Abstr.) **(Fre)**

PHARMACOKINETICS

Heteroarylalkanoic acids with possible antiinflammatory activities, Note IX. The binding to human serum albumin. Costantino L, et al. **Boll Chim Farm** 1989 Oct;128(10):315–8

PHARMACOLOGY

Inhibition of proline endopeptidase activity by acyl–coenzyme A esters. Yamakawa N, et al. **Biochim Biophys Acta** 1990 Mar 1;1037(3):302–6

1,2–dithiol–3–thione and dithioester analogues: potential radioprotectors. Teicher BA, et al. **Br J Cancer** 1990 Jul; 62(1):17–22

Turbinaric acid, a cytotoxic secosqualene carboxylic acid from the brown alga Turbinaria ornata. Asari F, et al. **J Nat Prod** 1989 Sep–Oct;52(5):1167–9

Potentiation of radiation–induced bacterial cell killing by binuclear rhodium(II) carboxylates. Richmond RC, et al. **Radiat Res** 1989 Dec;120(3):403–15

[Mutagenic activity of organic esters are likely to form from bromo–2 ethanol generated during fumigation using ethylene oxide] Min S, et al. **Ann Pharm Fr** 1989; 47(5):266–75 (Eng. Abstr.) **(Fre)**

[Activation of 5–lipoxygenase by lipophilic n–alkyl–containing acids—an allosteric process] Butovich IA, et al. **Bioorg Khim** 1990 Feb;16(2):270–1 (Eng. Abstr.) **(Rus)**

[Effects of naphthenic acids on the training and synthesis of brain proteins in mice] Omarov IA. **Biull Eksp Biol Med** 1990 Jan;109(1):47–9 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Prevention of iron deficiency with carbonyl iron in female blood donors. Gordeuk VR, et al. **Transfusion** 1990 Mar–Apr;30(3):239–45

TOXICITY

Studies of the developmental toxicity of polycarboxylate dispersing agents. Nolen GA, et al. **Drug Chem Toxicol** 1989 Jun;12(2):95–110

URINE

High–performance liquid chromatographic determination of zinc protoporphyrin and porphyrin carboxylic acids in urine. Ho JW. **Anal Biochem** 1989 Nov 15;183(1):134–8

Laser fluorometric detection of porphyrin methyl esters for high–performance thin–layer chromatography. Huie CW, et al. **Anal Chem** 1989 Oct 15;61(20):2288–92

3–Methylisoxazol–5–one, an artefact from acetoacetic acid formed during urinary organic acid analysis. Mills GA, et al. **Clin Chim Acta** 1989 Sep 15;184(1):93–7

Urinary organic acids in elderly Japanese patients with ketosis and encephalopathy who have taken panto–yl–gamma–aminobutyrate, calcium salt (calcium hopantenate, HOPA). Nakanishi T, et al. **Clin Chim Acta** 1990 Apr 13;188(1):85–90

Electrokinetic energy conversion by aqueous oxalic acid, citric acid, ascorbic acid, hippuric acid, and acetyl salicylic acid across urinary bladder membranes. Shukla PC, et al. **Indian J Biochem Biophys** 1990 Jun;27(3):179–82

Urinary organic acids: retention indices on two capillary gas chromatography columns. Wurth C, et al. **J Chromatogr** 1989 Jun 30;491(1):186–92

CARBOXYLIC ESTER HYDROLASES

International meeting on carboxylesterases and lipases. 77. Konferenz der Gesellschaft für Biologische Chemie. Osnabrück, September 11/12, 1989. Abstracts. **Biol Chem Hoppe Seyler** 1989 Sep;370(9):979–1006

Refined structure of dienelactone hydrolase at 1.8 A. Pathak D, et al. **J Mol Biol** 1990 Jul 20;214(2):497–525

[Cholesterol esterases: properties and possible diagnostic value (review of the literature)] Kovaleva GG. **Lab Delo** 1989;(8):4–9 (50 ref.) **(Rus)**

ANALYSIS

The use of nonspecific esterase in assessing the effectivity of cryotherapy on the uterine cervix. Matányi S, et al. **Acta Chir Hung** 1989;30(3):205–9

A rapid technique for the fluorescent location of pleomorphic adenoma cells in frozen sections of human salivary glands. Steven FS, et al. **Anticancer Res** 1990 Jan–Feb;10(1):91–6

Evidence for cells possessing t–PA like activity in smears obtained from patients with oral squamous cell carcinoma. Steven FS, et al. **Anticancer Res** 1990 Jul–Aug;10(4):995–9

Differentiation of mite species by using cellulose acetate and equilibrium polyacrylamide gel electrophoresis of isoenzymes. Hart BJ, et al. **Exp Appl Acarol** 1990 Jan; 8(1–2):97–104

Comparative distribution of four lysosomal enzymes within various structures of the human placenta. Mirecka J, et al. **Gegenbaurs Morphol Jahrb** 1989;135(5):747–59

Carboxyl ester lipase in human tissues and in acute pancreatitis. Aho HJ, et al. **Int J Pancreatol** 1989 Sep; 5(2):123–34

The status of trypsin–like enzymes in squamous–cell carcinoma of the head and neck region. Steven FS, et al. **J Cancer Res Clin Oncol** 1990;116(1):57–64

[The identification of esterase D isoenzyme (EsD) phenotypes in the dental pulp by isoelectric focusing] De Leo D, et al. **Minerva Stomatol** 1990 Jun;39(6):435–8 (Eng. Abstr.) **(Ita)**

[An arginine esterase in the human sperm] Matsuda Y, et al. **Yakugaku Zasshi** 1989 May;109(5):312–7 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

In vivo and in vitro regional differential sensitivity of neuropathy target esterase to di–n–butyl–2,2–dichlorovinyl phosphate. Moretto A, et al. **Arch Toxicol** 1989; 63(6):469–73

Liver esterases and soman toxicity in the rat following partial hepatectomy. Jokanović M. **Biochem Pharmacol** 1990 Feb 15;39(4):797–9

Inhibitors of the cell surface protease guanidinobenzoatase. Steven FS, et al. **Biol Chem Hoppe Seyler** 1990 May;371 Suppl:89–94

Effects of diisopropylfluorophosphate on brain acetylcholinesterase, butyrylcholinesterase, and neurotoxic esterase in rats. Lim DK, et al. **Biomed Environ Sci** 1989 Sep;2(3):295–304

Lipoprotein lipase in rat heart—III. Effects of sex steroid hormones on tri–, di– and monoacylglycerol lipase activities in post–heparin effluents. Benkirane M, et al. **Comp Biochem Physiol [B]** 1989;94(1):27–30

Ebelactones inhibit cutinases produced by fungal plant pathogens [letter] Köller W, et al. **J Antibiot (Tokyo)** 1990 Jun;43(6):734–5

Glucagon– and dibutyryl cyclic AMP–produced inhibition of cholesterol ester hydrolase in isolated rat hepatocytes: role of calcium. Ruiz MB, et al. **J Biochem (Tokyo)** 1990 Mar;107(3):476–9

Juvenile hormone esterase activity repressive factor in the plasma of parasitized insect larvae. Hayakawa Y. **J Biol Chem** 1990 Jul 5;265(19):10813–6

Inhibitory pattern of tissue esterases in rats fed dietary pirimiphos–methyl. Rajini PS, et al. **J Environ Sci Health [B]** 1989 Oct;24(5):509–24

Direct evidence for the cell surface location of a protease–inhibitor complex on intact leukaemia cells. Steven FS, et al. **J Enzym Inhib** 1990;3(4):311–6

The protective role of a natural inhibitor in the fluorescent location of cells possessing a latent form of cell surface protease. Steven FS, et al. **J Enzym Inhib** 1990;3(4):317–22

Effect of bile salts on the interfacial inactivation of pancreatic carboxylester lipase. Tsujita T, et al. **J Lipid Res** 1990 May; 31(5):831–8

Time course of inhibition of acetylcholinesterase and aliesterases following parathion and paraoxon exposures in rats. Chambers JE, et al. **Toxicol Appl Pharmacol** 1990 May;103(3):420–9

BIOSYNTHESIS

Pancreatic cholesterol esterases. 1. Pancreatic cholesterol esterase induction during maturation. Cox DG, et al. **Biochemistry** 1990 Apr 24;29(16):3842–8

Evidence for the induction of protease activity on cultured tumour cells as a consequence of implantation into nude mice. Steven FS, et al. **Cancer Lett** 1990 Apr 30;50(3):191–6

Inhibitory effect of tumor necrosis factor on gene expression of hormone sensitive lipase in 3T3–L1 adipocytes. Sumida M, et al. **J Biochem (Tokyo)** 1990 Jan;107(1):1–2

[Gene–dosage effect of esterase D enzyme on erythrocytes in a patient with Patau's syndrome] Spano B, et al. **Pediatr Med Chir** 1990 Jan–Feb;12(1):67–9 (Eng. Abstr.) **(Ita)**

BLOOD

Activity of "nonspecific pancreatic carboxylesterase" in rat serum in experimentally induced acute pancreatitis (preliminary results). Kálmán A, et al. **Acta Physiol Hung** 1989;73(2–3):315–7

The kinetics of plasma aspirin esterase in relation to old age and frailty. Summerbell J, et al. **Age Ageing** 1990 Mar; 19(2):128–30

Spectrophotometric assays for the enzymatic hydrolysis of the active metabolites of chlorpyrifos and parathion by plasma paraoxonase/arylesterase. Furlong CE, et al. **Anal Biochem** 1989 Aug 1;180(2):242–7

Serum carboxylesterase activity in various strains of rats: sensitivity to inhibition by CBDP (2–/o–cresyl/4H:1:3:2–benzodioxaphosphorin–2–oxide). Clement JG, et al. **Arch Toxicol** 1990;64(5):414–6

Improved specific assay for serum arylesterase using a water–soluble substrate. Kawai H, et al. **Clin Chim Acta** 1990 Apr 30;188(2):177–82

Whole blood staining in suspension for nonspecific esterase and alkaline phosphatase analyzed with a Technicon H–1. Ross DW, et al. **Cytometry** 1990;11(4):552–5

Simultaneous phenotyping of erythrocyte acid phosphatase and esterase D by nonequilibrium agarose isoelectric focusing. Dimo–Simonin N, et al. **Electrophoresis** 1989 Oct; 10(10):718–21

Phenotyping of erythrocyte acid phosphatase and esterase D by high field strength isoelectric focusing on cellulose acetate membrane. Kane M, et al. **Electrophoresis** 1990 Apr; 11(4):318–21

Selective purification of sex–influenced esterase from rat serum by immunoaffinity chromatographies. Hirose T, et al. **Eur J Biochem** 1990 Apr 30;189(2):431–5

The effect of 2–(o–cresyl)–4H–1:3:2–benzodioxaphosphorin–2–oxide on tissue cholinesterase and carboxylesterase activities of the rat. Jimmerson VR, et al. **Fundam Appl Toxicol** 1989 Oct; 13(3):568–75

Probable pseudocholinesterase induction by valproic acid, carbamazepine and phenytoin leading to increased serum aspirin–esterase activity in epileptics. Puche E, et al. **Int J Clin Pharmacol Res** 1989;9(5):309–11

Sex dependence of naphthyl butyrate esterase activity in rat serum. Biró L, et al. **J Clin Chem Clin Biochem** 1990 Feb; 28(2):119–20

Evaluation of a nonequilibrium isoelectric focusing (IEF) method for the simultaneous typing of esterase D (EsD), red cell acid phosphatase (AcP1), phosphoglucomutase (PGM1), adenylate kinase (AK), and adenosine deaminase (ADA). Stockwell DC, et al. **J Forensic Sci** 1990 Jan; 35(1):46–61

Serum paraoxonase and its influence on paraoxon and chlorpyrifos–oxon toxicity in rats. Costa LG, et al. **Toxicol Appl Pharmacol** 1990 Mar 15;103(1):66–76

Specific effect of the amount of dietary fat on esterase–1 (ES–1) activity of rat plasma. Van Lith HA, et al. **Z Ernahrungswiss** 1990 Jun;29(2):129–34

[Clinical significance of arylesterase analysis in biochemical laboratory tests] Ikeda K. **Nippon Rinsho** 1989 Dec;48 Suppl:218–21 **(Jpn)**

[Non–specific esterase positive neutrophils in a case of refractory anemia with excess of blasts] Nakamura K, et al. **Rinsho Ketsueki** 1990 Mar;31(3):386–90 (Eng. Abstr.) **(Jpn)**

[Determination of the activity of neurotoxic esterase in the peripheral blood lymphocytes for assessing the action of organophosphorus compounds] Tkachenko II, et al. **Vrach Delo** 1989 Sep;(9):107–10 (Eng. Abstr.) **(Rus)**

DEFICIENCY

Esterase D assay in Brazilian retinoblastoma families. Costanzi E, et al. **Am J Med Genet** 1989 Nov;34(3):391–6

A family of homozygous familial hyperalphalipoproteinemia with complete deficiency of cholesteryl ester transfer activity. Eto M, et al. **Artery** 1990;17(4):202–12

Absence of "A"–esterase activity in the serum of a patient with Tangier disease. Mackness MI, et al. **Clin Biochem** 1989 Dec;22(6):475–8

GENETICS

Regulation of juvenile hormone esterase gene expression in the tobacco budworm (Heliothis virescens). Wroblewski VJ, et al. **Arch Biochem Biophys** 1990 May 1;278(2):461–6

The evidence of a null allele in the esterase D in the Polish population. Turowska B, et al. **Arch Immunol Ther Exp (Warsz)** 1989;37(3–4):283–5

Cloning of the bovine pancreatic cholesterol esterase/lysophospholipase. Kyger EM, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1302–9

Genetic variation and biochemical properties of esterase–18 (ES–18) in the laboratory rat (Rattus norvegicus): a new locus of esterase cluster 2 in linkage group V. Kluge R, et al. **Biochem Genet** 1990 Feb;28(1–2):57–68

An analysis of molecular polymorphism of esterase M produced by motile Aeromonas strains. Picard B, et al. **Biochem Genet** 1990 Feb;28(1–2):69–81

Amplification of various esterase B's responsible for organophosphate resistance in Culex mosquitoes. Raymond M, et al. **Biochem Genet** 1989 Aug;27(7–8):417–23

Nucleotide sequence of cDNA coding for rat liver pI 6.1 esterase (ES–10), a carboxylesterase located in the lumen of the endoplasmic reticulum. Robbi M, et al. **Biochem J** 1990 Jul 15;269(2):451–8

Molecular cloning and expression of cDNA for rat pancreatic cholesterol esterase. Kissel JA, et al. **Biochim Biophys Acta** 1989 Nov 28;1006(2):227–36

Glutactin, a novel Drosophila basement membrane–related glycoprotein with sequence similarity to serine esterases. Olson PF, et al. **EMBO J** 1990 Apr;9(4):1219–27

Chromosomal organization of the amplified esterase B1 gene in organophosphate–resistant Culex pipiens quinquefasciatus Say (Diptera, Culicidae). Nance E, et al. **Genome** 1990 Feb;33(1):148–52

Molecular population genetics of structural variants of esterase 6 in Drosophila melanogaster. Oakeshott JG, et al. **Genome** 1989;31(2):788–96

Prp (proline–rich protein) genes linked to markers Es–12 (esterase–12), Ea–10 (erythrocyte alloantigen), and loci on distal mouse chromosome 6 [published erratum appears in Genomics 1990 May;7(1):142] Azen EA, et al. **Genomics** 1989 Oct;5(3):415–22

The number and distribution of esterase 6 alleles in populations of Drosophila melanogaster [published erratum appears in Heredity (Edinburgh) 1990 Apr;64(Pt 2):following 287] Labate J, et al. **Heredity (Edinburgh)** 1989 Oct;63 (Pt 2):203–8

Frequency of the ESD*5 allele in a Spanish population. Moreno P, et al. **Hum Hered** 1989;39(3):182–4

Is there a sex-phenotype association for esterase D (EC 3.1.1.1)? Moro-Furlani AM, et al. **Hum Hered** 1990; 40(2):118-20

No support for sex-esterase D phenotype association. Philipps S, et al. **Hum Hered** 1989;39(6):361-3

O-acetylation and de-O-acetylation of sialic acids. Sialic acid esterases of diverse evolutionary origins have serine active sites and essential arginine residues. Hayes BK, et al. **J Biol Chem** 1989 Nov 15;264(32):19443-8

Genetic identification of non-specific esterases of the mouse cauda epididymidis and description of esterase-28, a new carboxylesterase isoenzyme (EC 3.1.1.1). von Deimling O, et al. **J Reprod Fertil** 1990 Jan;88(1):41-50

Nucleotide and derived amino acid sequence of a pectinesterase cDNA isolated from Aspergillus niger strain RH 5344. Khanh NQ, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4262

[Genetic study of retinoblastoma] Sun YJ. **Chung Hua Yen Ko Tsa Chih** 1989 May;25(3):152-5 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Partial purification, and some properties and reactivities of cetraxate benzyl ester hydrochloride-hydrolyzing enzyme. Kuroda H, et al. **Chem Pharm Bull (Tokyo)** 1989 Nov; 37(11):2929-32

Purification and molecular properties of rabbit liver esterase ES-1A. van Lith HA, et al. **Eur J Biochem** 1989 Oct 1; 184(3):545-51

Purification and characterization of two human liver carboxylesterases. Ketterman AJ, et al. **Int J Biochem** 1989; 21(12):1303-12

Sialate 9-O-acetylesterase from rat liver. Higa HH, et al. **Methods Enzymol** 1989;179:409-15

Isolation and properties of carboxylesterase P4 from Yersinia pseudotuberculosis. Goullet P, et al. **Res Microbiol** 1989 Mar-Apr;140(3):221-34

METABOLISM

Increased activities of lipolytic enzymes in Alzheimer's disease. Farooqui AA, et al. **Adv Neurol** 1990;51:127-9

Fatty acid alterations and carboxylase deficiencies in the skin of biotin-deficient rats. Proud VK, et al. **Am J Clin Nutr** 1990 May;51(5):853-8

Leukocyte esterase activity in amniotic fluid: normal values during pregnancy. Hoskins IA, et al. **Am J Perinatol** 1990 Apr;7(2):130-2

The targeting of agmatine-liganded mitomycin C to an enzyme on the surface of tumour cells. Steven FS, et al. **Anticancer Res** 1990 May-Jun;10(3):583-9

Characterization of molecular species of liver microsomal carboxylesterases of several animal species and humans. Hosokawa M, et al. **Arch Biochem Biophys** 1990 Mar; 277(2):219-27

Stimulation of mono- and diacylglycerol lipase activities by bradykinin in neural cultures. Farooqui AA, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):1001-9

Observation of tissue prokallikrein activation by some serine protcases, arginine esterases in rat submandibular gland. Kamada M, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):231-7

Differences in plasma carboxylesterase activity: relevance to anticholinesterase sensitivity. Overstreet DH, et al. **Biochem Pharmacol** 1990 Jun 15;39(12):2063-4

12-[(5-iodo-4-azido-2-hydroxybenzoyl)amino]dodecanoic acid: biological recognition by cholesterol esterase and acyl-CoA:cholesterol O-acyltransferase. Kinnunen PM, et al. **Biochemistry** 1990 Feb 13;29(6):1648-54

Pancreatic cholesterol esterases. 3. Kinetic characterization of cholesterol ester resynthesis by the pancreatic cholesterol esterases. Kyger EM, et al. **Biochemistry** 1990 Apr 24;29(16):3853-8

Pancreatic cholesterol esterases. 2. Purification and characterization of human pancreatic fatty acid ethyl ester synthase. Riley DJ, et al. **Biochemistry** 1990 Apr 24; 29(16):3848-52

Stimulation of a neutral cholesteryl ester hydrolase by cAMP system in P388D1 macrophages. Goldberg DI, et al. **Biochim Biophys Acta** 1990 Jan 16;1042(1):132-7

Effect of substrate physical state on the activity of acid cholesteryl ester hydrolase. Lundberg BB, et al. **Biochim Biophys Acta** 1990 Feb 23;1042(3):301-9

Regulation of cholesteryl ester metabolism in the hamster liver. Ochoa B, et al. **Biochim Biophys Acta** 1990 May 1; 1044(1):133-8

Hormone-sensitive lipase--a multipurpose enzyme in lipid metabolism. Yeaman SJ. **Biochim Biophys Acta** 1990 Apr 9;1052(1):128-32 (48 ref.)

Protein phosphorylation in the bacterial chemotaxis system. Simon MI, et al. **Biochimie** 1989 Sep-Oct;71(9-10):1013-9 (31 ref.)

Vitamin A metabolism in the baboon eye. Cammer TJ, et al. **Brain Res Bull** 1990 Jun;24(6):755-7

Activation of myelin-associated cholesteryl ester hydrolase in developing rat brain. Ghosh S, et al. **Brain Res Dev Brain Res** 1990 Jun 1;54(1):147-9

Lipoprotein lipase in rat heart--I. Characterization of tri-, di- and monoacylglycerol lipase activities in post-heparin effluents. Benkirane M, et al. **Comp Biochem Physiol [B]** 1989;94(1):13-8

Lipoprotein lipase in rat heart--II. Influence of apolipoproteins and nutritional factors on tri-, di- and monoacylglycerol lipase activities in post-heparin effluents. Verine A, et al. **Comp Biochem Physiol [B]** 1989;94(1):19-25

Hormone-sensitive cholesterol ester hydrolase in adrenal tumor cells: activation by corticotropin and tetradecanoyl phorbol acetate. Balkow C, et al. **Endocr Res** 1990; 16(2):205-19

Carboxylic ester hydrolases in mitochondria from rat skeletal muscle. Kirkeby S, et al. **Histochem J** 1990 Feb; 22(2):95-101

A comparative study of drug metabolizing enzymes in adrenal glands and livers of rats and chickens. Gay L, et al. **Int J Biochem** 1990;22(1):15-8

Evidence for a retinyl ester hydrolase activity in the pig vascular endothelium. Schindler R, et al. **Int J Vitam Nutr Res** 1989;59(4):419-20

Different types of dienelactone hydrolase in 4-fluorobenzoate-utilizing bacteria. Schlömann M, et al. **J Bacteriol** 1990 Sep;172(9):5112-8

Stereoselective formation of a cholesterol ester conjugate from fenvalerate by mouse microsomal carboxyesterase(s). Miyamoto J, et al. **J Biochem Toxicol** 1986 Jun;1(2):79-93

The effects of nonadecafluoro-n-decanoic acid on serum retinol and hepatic retinyl palmitate hydrolase activity in male Sprague-Dawley rats. Powers RH, et al. **J Biochem Toxicol** 1986 Jun;1(2):27-42

Deacylation of structurally diverse lipopolysaccharides by human acyloxyacyl hydrolase. Erwin AL, et al. **J Biol Chem** 1990 Sep 25;265(27):16444-9

Hydrolysis of retinyl palmitate by enzymes of rat pancreas and liver. Differentiation of bile salt-dependent and bile salt-independent, neutral retinyl ester hydrolases in rat liver. Harrison EH, et al. **J Biol Chem** 1989 Oct 15; 264(29):17142-7

O-acetylation and de-O-acetylation of sialic acids. Purification, characterization, and properties of a glycosylated rat liver esterase specific for 9-O-acetylated sialic acids. Higa HH, et al. **J Biol Chem** 1989 Nov 15; 264(32):19435-42

Sodium cholate-induced changes in the conformation and activity of rat pancreatic cholesterol esterase. Jacobson PW, et al. **J Biol Chem** 1990 Jan 5;265(1):515-21

Phosphorylation of an N-terminal regulatory domain activates the CheB methylesterase in bacterial chemotaxis. Lupas A, et al. **J Biol Chem** 1989 Oct 15;264(29):17337-42

Co-localization of a kallikrein-like serine protease (arginine esterase A) and atrial natriuretic peptide in rat atrium. Simson JA, et al. **J Histochem Cytochem** 1989 Dec; 37(12):1913-7

Enzymatic distinction between two subgroups of autosomal recessive lamellar ichthyosis. Bergers M, et al. **J Invest Dermatol** 1990 Apr;94(4):407-12

Regulation of hepatic cholesterol ester hydrolase and acyl-coenzyme A:cholesterol acyltransferase in the rat. Stone BG, et al. **J Lipid Res** 1989 Nov;30(11):1681-90

p-nitrophenyl butyrate hydrolyzing activity of hormone-sensitive lipase from bovine adipose tissue. Tsujita T, et al. **J Lipid Res** 1989 Jul;30(7):997-1004

Soluble and particulate forms of the organophosphorus neuropathy target esterase in hen sciatic nerve. Vilanova E, et al. **J Neurochem** 1990 Oct;55(4):1258-65

Separation and differential activation of rat liver cytosolic cholesteryl ester hydrolase, triglyceride lipase and retinyl palmitate hydrolase by cholestyramine and protein kinases. Ghosh S, et al. **Lipids** 1990 Apr;25(4):221-5

Activation of rat liver cholesterol ester hydrolase by cAMP-dependent protein kinase and protein kinase C. Ghosh S, et al. **Lipids** 1989 Aug;24(8):733-6

Incorporation of hormone-sensitive lipase into phosphatidylcholine vesicles. Holm C, et al. **Lipids** 1990 May;25(5):254-9

Temperature lability and cAMP-dependent protein kinase activation of cholesteryl ester hydrolase as a function of age in developing rat testis. Wee SF, et al. **Lipids** 1989 Sep;24(9):824-8

Glycosylation and isoform variation of juvenile hormone esterase in the fat body and hemolymph during metamorphosis of Trichoplusia ni (Lepidoptera). Wozniak M, et al. **Mol Cell Endocrinol** 1990 May 7;70(3):255-62

A versiconal hemiacetal acetate converting enzyme in aflatoxin biosynthesis. Hsieh DP, et al. **Mycopathologia** 1989 Sep;107(2-3):121-6

Activity of the proteolytic enzyme guanidinobenzoatase in human basal cell carcinoma. Steven FS, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(6):360-4

Carboxylic ester hydrolase activity in hairless and athymic nude mouse skin. Ghosh MK, et al. **Pharm Res** 1990 Mar; 7(3):251-5

Effects of androgen and antiandrogen treatment on canine prostatic arginine esterase. Juniewicz PE, et al. **Prostate** 1990;17(2):101-11

Strain differences of rat liver carboxylesterase activities related to the phenotype difference of esterase-3 (egasyn). Nakamura T, et al. **Res Commun Chem Pathol Pharmacol** 1989 Dec;66(3):451-9

Acid cholesteryl ester hydrolase activity of mononuclear leukocyte in type 2 (non-insulin-dependent) diabetic patients. Onuma T, et al. **Tohoku J Exp Med** 1990 Apr; 160(4):375-81

Organophosphates and delayed neuropathy--is NTE alive and well? Johnson MK. **Toxicol Appl Pharmacol** 1990 Mar 1;102(3):385-99 (71 ref.)

[Effect of radix Paeoniae rubra 801 on the induction of cardiac and hepatic microsomal carboxylesterases activities in male rats] Du GY. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Aug;9(8):491-3, 454 (Eng. Abstr.) **(Chi)**

[The kallikrein-kinin system in experimental uveitis] Aktasheva EL. **Vestn Oftalmol** 1990 Mar-Apr;106(2):50-3 (Eng. Abstr.) **(Rus)**

[Proteolytic enzymes of the lacrimal fluid as pathogenesis factors of chronic corneal ulcer] Dotsenko VL, et al. **Vopr Med Khim** 1990 May-Jun;36(3):73-6 (Eng. Abstr.) **(Rus)**

[A comparative study of the effect of vinyl phosphoric acid esters on cholinesterase and carboxylesterase activities in mammals and arthropods] Kugusheva LI, et al. **Zh Evol Biokhim Fiziol** 1990 Jan-Feb;26(1):30-4 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Effects of human pancreatic lipase-colipase and carboxyl ester lipase on eicosapentaenoic and arachidonic acid ester bonds of triacylglycerols rich in fish oil fatty acids. Chen Q, et al. **Biochim Biophys Acta** 1990 May 1;1044(1):111-7

Effect of endogenous carboxylesterase on HI-6 protection against soman toxicity. Maxwell DM, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):440-4

PHYSIOLOGY

Mutations that affect control of the methylesterase activity of CheB, a component of the chemotaxis adaptation system in Escherichia coli. Stewart RC, et al. **J Bacteriol** 1990 Jun;172(6):3388-99

Lipolytic enzymes of the human pancreas. III. Auxiliary function of lipase in the cholesterol-esterase-dependent oral test on exocrine pancreatic output. Meyer JG, et al. **Klin Wochenschr** 1990 Jan 19;68(2):60-4

Role of carboxylesterase in soman, sarin and tabun poisoning in rats. Jokanović M. **Pharmacol Toxicol** 1989 Sep; 65(3):181-4

CARBOXYMETHYLCELLULOSE see under **METHYLCELLULOSE**

CARBOXYPEPTIDASE TRANSPEPTIDASE

Enzymatic synthesis of dipeptide units of the D-D-configuration in aqueous media [published erratum appears in Int J Pept Protein Res 1990 Jun;35(6):574] Kempe M, et al. **Int J Pept Protein Res** 1990 Feb; 35(2):147-52

ANALYSIS

Biological characterization of a new radioactive labeling reagent for bacterial penicillin-binding proteins. Preston DA, et al. **Antimicrob Agents Chemother** 1990 May; 34(5):718-21

Penicillin-binding proteins in Listeria monocytogenes. Gutkind GO, et al. **APMIS** 1989 Nov;97(11):1013-7

PBP profiles of Haemophilus influenzae, H. aegyptius, and the H. influenzae biogroup aegyptius associated with Brazilian Purpuric Fever. Mendelman PM, et al. **Diagn Microbiol Infect Dis** 1989 Sep-Oct;12(5):445-7

Methicillin resistance in Staphylococcus epidermidis. Relationship between the additional penicillin-binding protein and an attachment transpeptidase. Gaisford WC, et al. **Eur J Biochem** 1989 Oct 20;185(1):211-8

Identification of coagulase-negative staphylococci by electrophoretic profile of total proteins and analysis of penicillin-binding proteins. Pierre J, et al. **J Clin Microbiol** 1990 Mar;28(3):443-6

HIV-reverse transcriptase and human DNA polymerase alpha share amino acid sequence homologies to bacterial penicillin-binding proteins. Hafkemeyer P, et al. **Methods Find Exp Clin Pharmacol** 1990 Jan-Feb;12(1):43-6

GENETICS

Expression in Escherichia coli of the carboxy terminal domain of the BLAR sensory-transducer protein of Bacillus licheniformis as a water-soluble Mr 26,000 penicillin-binding protein. Joris B, et al. **FEMS Microbiol Lett** 1990 Jun 15;58(1):107-13

Cloning and expression of the ponB gene, encoding penicillin-binding protein 1B of Escherichia coli, in heterologous systems. Plá J, et al. **J Bacteriol** 1990 Aug; 172(8):4448-55

Identification of BlaR, the signal transducer for beta-lactamase production in Bacillus licheniformis, as a penicillin-binding protein with strong homology to the OXA-2 beta-lactamase (class D) of Salmonella typhimurium. Zhu YF, et al. **J Bacteriol** 1990 Feb; 172(2):1137-41

Nucleotide sequences of the pbpX genes encoding the penicillin-binding proteins 2x from Streptococcus pneumoniae R6 and a cefotaxime-resistant mutant, C506. Laible G, et al. **Mol Microbiol** 1989 Oct;3(10):1337-48

Nucleotide sequence of the penicillin-binding protein 2B gene of Streptococcus pneumoniae strain R6. Dowson CG, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7518

Horizontal transfer of penicillin-binding protein genes in penicillin-resistant clinical isolates of Streptococcus

pneumoniae. Dowson CG, et al.
Proc Natl Acad Sci U S A 1989 Nov;86(22):8842–6

Penicillin–resistant viridans streptococci have obtained altered penicillin–binding protein genes from penicillin–resistant strains of Streptococcus pneumoniae. Dowson CG, et al. **Proc Natl Acad Sci U S A** 1990 Aug; 87(15):5858–62

ISOLATION & PURIFICATION

Active–site and membrane topology of the DD–peptidase/penicillin–binding protein no. 6 of Enterococcus hirae (Streptococcus faecium) A.T.C.C. 9790. el Kharroubi A, et al. **Biochem J** 1989 Sep 1; 262(2):457–62

Separation of Escherichia coli penicillin–binding proteins into different membrane vesicles by agarose electrophoresis and sizing chromatography. Leidenix MJ, et al. **J Bacteriol** 1989 Oct;171(10):5680–6

METABOLISM

Identification of a group of Haemophilus influenzae penicillin–binding proteins that may have complementary physiological roles. Malouin F, et al.
Antimicrob Agents Chemother 1990 Feb;34(2):363–5

Further characterization of borderline methicillin–resistant Staphylococcus aureus and analysis of penicillin–binding proteins. Montanari MP, et al.
Antimicrob Agents Chemother 1990 May;34(5):911–3

Affinities of SM–7338 for penicillin–binding proteins and its release from these proteins in Staphylococcus aureus. Sumita Y, et al. **Antimicrob Agents Chemother** 1990 Mar; 34(3):484–6

New mechanism for methicillin resistance in Staphylococcus aureus: clinical isolates that lack the PBP 2a gene and contain normal penicillin–binding proteins with modified penicillin–binding capacity. Tomasz A, et al.
Antimicrob Agents Chemother 1989 Nov;33(11):1869–74

Penicillin–binding protein 3 of Listeria monocytogenes as the primary lethal target for beta–lactams. Vicente MF, et al.
Antimicrob Agents Chemother 1990 Apr;34(4):539–42

In vitro antibacterial activity and interactions with beta–lactamases and penicillin–binding proteins of the new monocarbam antibiotic U–78608. Zurenko GE, et al.
Antimicrob Agents Chemother 1990 May;34(5):884–8

Chromogenic depsipeptide substrates for beta–lactamases and penicillin–sensitive DD–peptidases. Adam M, et al.
Biochem J 1990 Sep 1;270(2):525–9

Penicillin–binding proteins and beta–lactamases: their effects on the use of cephalosporins and other new beta–lactams. Neu HC. **Curr Clin Top Infect Dis** 1987;8:37–61 (103 ref.)

pH–induced insertion of the amphiphilic alpha–helical anchor of Escherichia coli penicillin–binding protein 5. Phoenix DA, et al. **Eur J Biochem** 1990 Jun 20;190(2):365–9

Mechanisms of resistance of enterococci to beta–lactam antibiotics. Fontana R, et al.
Eur J Clin Microbiol Infect Dis 1990 Feb;9(2):103–5 (21 ref.)

Comparison of two carbapenems, SM–7338 and imipenem: affinities for penicillin–binding proteins and morphological changes. Sumita Y, et al. **J Antibiot (Tokyo)** 1990 Mar; 43(3):314–20

Participation of PBP 3 in the acquisition of dicloxacillin resistance in Listeria monocytogenes. Gutkind GO, et al.
J Antimicrob Chemother 1990 May;25(5):751–8

Penicillin–binding proteins and ampicillin resistance in Haemophilus influenzae. Mendelman PM, et al.
J Antimicrob Chemother 1990 Apr;25(4):525–34

Properties of cell wall–associated DD–carboxypeptidase of Enterococcus hirae (Streptococcus faecium) ATCC 9790 extracted with alkali. Kariyama R, et al. **J Bacteriol** 1990 Jul;172(7):3718–24

Inhibition of the binding of penicillin to the pneumococcal penicillin–binding proteins (PBPs) by exogenous cell wall peptides. Tuomanen E, et al. **J Gen Microbiol** 1989 Mar; 135 (Pt 3):639–43

Binding of beta–lactam antibiotics to penicillin–binding proteins in methicillin–resistant Staphylococcus aureus. Chambers HF, et al. **J Infect Dis** 1990 Jun;161(6):1170–6

Altering enzymatic activity: recruitment of carboxypeptidase activity into an RTEM beta–lactamase/penicillin–binding protein 5 chimera. Chang YH, et al.
Proc Natl Acad Sci U S A 1990 Apr;87(7):2823–7

Machinery for cell growth and division: penicillin–binding proteins and other proteins. Matsuhashi M, et al.
Res Microbiol 1990 Jan;141(1):89–103 (48 ref.)

[Affinity of penicillin–binding proteins of Escherichia coli K–12 for furbenicillin and other beta–lactam antibiotics] Lei Y, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar; 10(2):177–80 (Eng. Abstr.) **(Chi)**

[Effect of aminoglycosides on the binding of C14–benzylpenicillin by penicillin–binding proteins in Escherichia coli] Beliavskaia IV, et al.
Antibiot Khimioter 1989 Jul;34(7):510–4 (Eng. Abstr.) **(Rus)**

CARBOXYPEPTIDASES

1H–n.m.r. studies of the isolated activation segment from pig procarboxypeptidase A. Vendrell J, et al. **Biochem J** 1990 Apr 1;267(1):213–20

Crystal structure of the complex of carboxypeptidase A with a strongly bound phosphonate in a new crystalline form: comparison with structures of other complexes. Kim H, et al. **Biochemistry** 1990 Jun 12;29(23):5546–55

Structure and conformation of the nitroxyl spin–label ethyl 3–(2,2,5,5–tetramethylpyrrolinyl–1–oxyl)–propen–2–oate determined by electron nuclear double resonance: comparison with the structure of a spin–label substrate of carboxypeptidase A. Mustafi D, et al. **Biopolymers** 1990 Jan;29(1):45–55

Structure of wheat serine carboxypeptidase II at 3.5–A resolution. A new class of serine proteinase. Liao DI, et al. **J Biol Chem** 1990 Apr 25;265(12):6528–31

The deduced protein sequence of the human carboxypeptidase N high molecular weight subunit reveals the presence of leucine–rich tandem repeats [published erratum appears in J Biol Chem 1990 Jul 25;265(21):12749] Tan F, et al. **J Biol Chem** 1990 Jan 5;265(1):13–9

Crystallographic mapping of beta–lactams bound to a D–alanyl–D–alanine peptidase target enzyme. Kelly JA, et al. **J Mol Biol** 1989 Sep 20;209(2):281–95

Procarboxypeptidase A activation segment compared to structures of other proteins. Vendrell J, et al.
Protein Seq Data Anal 1989 Dec;2(6):461–2

ANALYSIS

Studies on coagulation–fibrinolysis and kallikrein–kinin systems and kininase activity and kininase II quantity in amniotic fluid. Mutoh S, et al. **Adv Exp Med Biol** 1989; 247B:559–67

Comparison of a spectrophotometric, a fluorometric, and a novel radiometric assay for carboxypeptidase E (EC 3.4.17.10) and other carboxypeptidase B–like enzymes. Fricker LD, et al. **Anal Biochem** 1990 Jan;184(1):21–7

Ultracytochemical localization of the vacuolar marker enzymes alkaline phosphatase, adenosine triphosphatase, carboxypeptidase Y and aminopeptidase reveal new concept of vacuole biogenesis in Saccharomyces cerevisiae. Vořišek J. **Histochemistry** 1989;92(5):421–32

The amino acid sequence of zinc–carboxypeptidase from Streptomyces griseus. Narahashi Y. **J Biochem (Tokyo)** 1990 Jun;107(6):879–86

Rat aortic smooth muscle cells in culture express kallikrein, kininogen, and bradykininase activity. Oza NB, et al.
J Clin Invest 1990 Feb;85(2):597–600

ANTAGONISTS & INHIBITORS

Inhibition of enzymatic degradation of angiotensin II in membrane binding assays: utility of 1,10–phenanthroline. Koziarz P, et al. **Biochem Cell Biol** 1990 Jan;68(1):218–20

Phosphonate analogues of carboxypeptidase A substrates are potent transition–state analogue inhibitors. Hanson JE, et al. **Biochemistry** 1989 Jul 25;28(15):6294–305

Carboxypeptidase A: mechanism of zinc inhibition. Larsen KS, et al. **Biochemistry** 1989 Dec 12;28(25):9620–5

Inactivation of carboxypeptidase Y by mutational removal of the putative essential histidyl residue. Bech LM, et al.
Carlsberg Res Commun 1989;54(5):165–71

Design of an effective mechanism–based inactivator for a zinc protease. Mobashery S, et al.
Proc Natl Acad Sci U S A 1990 Jan;87(2):578–82

BLOOD

Utilization of kininase activities as indicators of malignant disease. Amato A, et al. **Adv Exp Med Biol** 1989;247B:483–4

Aldosterone, kallikrein, kininase I and II in normal and hypertension complicated pregnancy. Ferrazzani S, et al.
Adv Exp Med Biol 1989;247B:455–61

Serum kininases I and II in patients with extrinsic and intrinsic asthma. Schweisfurth H. **Adv Exp Med Biol** 1989; 247A:599–602

Post synthetic modification of CK–MM by kininase I. van Sande M, et al. **Adv Exp Med Biol** 1989;247A:319–24

Increased serum kininase I activity in pregnancy complicated by pre–eclampsia. Ito Y, et al. **Horm Metab Res** 1990 Apr; 22(4):252–5

An arginine carboxypeptidase generated during coagulation is diminished or absent in patients with rheumatoid arthritis. Campbell W, et al. **J Lab Clin Med** 1990 May;115(5):610–2

Contributions of various rat plasma peptidases to kinin hydrolysis. Ishida H, et al. **J Pharmacol Exp Ther** 1989 Dec;251(3):817–20

[Measurement of angiotensin I convertase activity in the serum of the rat] Dudkiewicz J, et al. **Acta Pol Pharm** 1989; 46(4):391–5 (Eng. Abstr.) **(Pol)**

GENETICS

cDNA cloning of kininase 1. Gebhard W, et al.
Adv Exp Med Biol 1989;247B:261–4

Human carboxypeptidase A identifies a BglII RFLP and maps to 7q31–qter. Stewart EA, et al.
Am J Hum Genet 1990 Apr;46(4):795–800

Human carboxypeptidase E. Isolation and characterization of the cDNA, sequence conservation, expression and processing in vitro. Manser E, et al. **Biochem J** 1990 Apr 15;267(2):517–25

Primary structure of carboxypeptidase III from malted barley. Sørensen SB, et al. **Carlsberg Res Commun** 1989; 54(5):193–202

The functional efficiency of a mammalian signal peptide is directly related to its hydrophobicity. Bird P, et al.
J Biol Chem 1990 May 25;265(15):8420–5

Isolation and molecular cloning of mast cell carboxypeptidase A. A novel member of the carboxypeptidase gene family. Reynolds DS, et al. **J Biol Chem** 1989 Nov 25; 264(33):20094–9

Yeast carboxypeptidase Y vacuolar targeting signal is defined by four propeptide amino acids. Valls LA, et al.
J Cell Biol 1990 Aug;111(2):361–8

Reflex splanchnic nerve stimulation increases levels of carboxypeptidase E mRNA and enzymatic activity in the rat adrenal medulla. Fricker LD, et al. **J Neurochem** 1990 Aug;55(2):461–7

Carboxypeptidase E (enkephalin convertase): mRNA distribution in rat brain by in situ hybridization. MacCumber MW, et al. **J Neurosci** 1990 Aug;10(8):2850–60

Regulation of carboxypeptidase H gene expression in magnocellular neurons: response to osmotic stimulation. Bondy CA, et al. **Mol Endocrinol** 1989 Dec;3(12):2086–92

Revision of the oligosaccharide structures of yeast carboxypeptidase Y. Ballou L, et al.
Proc Natl Acad Sci U S A 1990 May;87(9):3368–72

Cloning of cDNAs that encode human mast cell carboxypeptidase A, and comparison of the protein with mouse mast cell carboxypeptidase A and rat pancreatic carboxypeptidases. Reynolds DS, et al.
Proc Natl Acad Sci U S A 1989 Dec;86(23):9480–4

ISOLATION & PURIFICATION

Structure of the lysosomal neuraminidase–beta–galactosidase–carboxypeptidase multienzymic complex. Potier M, et al. **Biochem J** 1990 Apr 1;267(1):197–202

Purification and characterization of the D–alanyl–D–alanine–adding enzyme from Escherichia coli. Duncan K, et al. **Biochemistry** 1990 Mar 6;29(9):2379–86

Purification and characterization of a new arginine carboxypeptidase in human serum. Hendriks D, et al.
Biochim Biophys Acta 1990 Apr 23;1034(1):86–92

The separation of pancreatic procarboxypeptidases by high–performance liquid chromatography and chromatofocusing. Burgos FJ, et al. **J Chromatogr** 1989 Nov 3;481:233–43

Crystallization of serine carboxypeptidases. Wilson KP, et al. **J Mol Biol** 1990 Jan 20;211(2):301–3

METABOLISM

Physiologic role of the peripheral enkephalinergic system in regulating cardiovascular homeostasis: evidence of interactions with the renin–angiotensin and kallikrein–kinin systems. Carmignani M, et al. **Adv Exp Med Biol** 1989; 247B:477–81

A new type of ultrasensitive bioluminescence enzyme substrates for kininases. Geiger R, et al.
Adv Exp Med Biol 1989;247B:383–8

Structure of human carboxypeptidase N (kininase I). Skidgel RA, et al. **Adv Exp Med Biol** 1989;247A:325–9

Effects of mineralocorticoid on kininase activity along the distal nephron segments of the rat. Tomita K, et al.
Adv Exp Med Biol 1989;247A:181–4

Different modes of vancomycin and D–alanyl–D–alanine peptidase binding to cell wall peptide and a possible role for the vancomycin resistance protein. Knox JR, et al.
Antimicrob Agents Chemother 1990 Jul;34(7):1342–7

Preparation, characterization, and application of a novel immobilized carboxypeptidase B. Südi P, et al.
Appl Biochem Biotechnol 1989 Oct;22(1):31–43

Deficient lysosomal carboxypeptidase activity in galactosialidosis. Tranchemontagne J, et al.
Biochem Biophys Res Commun 1990 Apr 16;168(1):22–9

Apocarboxypeptidase B–sepharose: a specific adsorbent for peptides. Yasuhara T, et al.
Biochem Biophys Res Commun 1990 Jan 15;166(1):330–5

Effect of chronic enalapril treatment on enzymes responsible for the catabolism of angiotensin I and formation of angiotensin II. Drummer OH, et al. **Biochem Pharmacol** 1990 Feb 1;39(3):513–8

Fragmentation of isoaspartyl peptides and proteins by carboxypeptidase Y: release of isoaspartyl dipeptides as a result of internal and external cleavage. Johnson BA, et al. **Biochemistry** 1990 May 8;29(18):4373–80

Effect of polyanions and polycations on detyrosination of tubulin and microtubules at steady state. Lopez RA, et al.
Biochim Biophys Acta 1990 Jun 19;1039(2):209–17

Distribution of carboxypeptidase H messenger RNA in rat brain using in situ hybridization histochemistry: implications for neuropeptide biosynthesis. Birch NP, et al. **Brain Res Mol Brain Res** 1990 Jan;7(1):53–9

Angiotensin II–producing proteases from granulomatous tissue reaction in mice infected with Schistosoma mansoni. Hirayama K, et al. **Comp Biochem Physiol [B]** 1990; 96(3):553–7

Further studies on the human pancreatic binary complexes involving procarboxypeptidase A. Moulard M, et al.
FEBS Lett 1990 Feb 12;261(1):179–83

Identification of the pH–dependent membrane anchor of carboxypeptidase E (EC 3.4.17.10). Fricker LD, et al.
J Biol Chem 1990 Feb 15;265(5):2476–82

The tryptic activation pathway of monomeric procarboxypeptidase A. Vendrell J, et al. **J Biol Chem** 1990 Apr 25;265(12):6949–53

Kinetic analysis of the carboxypeptidase A hydrolysis of

oligopeptides by reversed-phase high-performance liquid chromatography. Serra MA, et al. **J Chromatogr** 1989 Sep 22;479(1):27–37

Cultured astrocytes and neurons synthesize and secrete carboxypeptidase E, a neuropeptide-processing enzyme. Vilijn MH, et al. **J Neurochem** 1989 Nov;53(5):1487–93

Carboxypeptidase E (CPE): immunocytochemical localization in the rat central nervous system and pituitary gland. Lynch DR, et al. **J Neurosci** 1990 May;10(5):1592–9

Yeast mutants with enhanced ability to secrete human lysozyme: isolation and identification of a protease-deficient mutant. Suzuki K, et al. **Mol Gen Genet** 1989 Oct;219(1–2):58–64

Comparison of the regulation of carboxypeptidase E and prolactin in GH4C1 cells, a rat pituitary cell line. Fricker LD, et al. **Neuroendocrinology** 1990 Jun;51(6):658–63

PHARMACOLOGY

Carboxypeptidase G2 and trimetrexate cause growth delay of human colonic cancer cells in vitro. Searle F, et al. **Biochem Pharmacol** 1990 Jun 1;39(11):1787–91

PHYSIOLOGY

Mast cell carboxypeptidase: biochemistry and biology. Goldstein SM, et al. **Prog Clin Biol Res** 1989;297:145–54 (40 ref.)

SECRETION

Co-secretion of carboxypeptidase H and insulin from isolated rat islets of Langerhans. Guest PC, et al. **Biochem J** 1989 Dec 1;264(2):503–8

URINE

A sensitive method for differential determination of kininase I, II and neutral endopeptidase (NEP) in human urine. Ogata H, et al. **Adv Exp Med Biol** 1989;247B:343–8

Kallikrein-kinin system in newborns of the drug addicted. Salvaggio E, et al. **Adv Exp Med Biol** 1989;247B:471–6

Kinin-kininase system in drug addict woman in pregnancy and puerperium. Virgolino A, et al. **Adv Exp Med Biol** 1989;247B:463–9

Carboxypeptidase activity in human urine from healthy subjects and renal disease patients. Hamai K, et al. **Clin Chim Acta** 1990 May;188(3):233–41

CARBUTAMIDE

PHARMACOLOGY

Insulin release by fetal calf pancreas in vitro: influence of glucose or carbutamide. Corrêa PR, et al. **Am J Physiol** 1967 Jun;212(6):1402–4

CARCINOEMBRYONIC ANTIGEN

A carcinoembryonic antigen (CEA) binding protein from ascites influences CEA uptake by macrophages. Toth CA, et al. **Biochem Biophys Res Commun** 1990 Sep 14; 171(2):633–40

Mouse-human chimeric monoclonal antibody to carcinoembryonic antigen (CEA): in vitro and in vivo activities. Koga H, et al. **Hybridoma** 1990 Feb;9(1):43–56

Carcinoembryonic antigen functions as an accessory adhesion molecule mediating colon epithelial cell-collagen interactions. Pignatelli M, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1541–5

[A function for carcinoembryonic antigen?] Burtin P. **Bull Cancer (Paris)** 1990;77(2):107–8 **(Fre)**

[Tumor diagnosis by immunoscintigraphy with anti-CEA antibodies (Tc-99m MAK BW 431/26)] Kroiss A, et al. **Wien Klin Wochenschr** 1989 Sep 29;101(18):621–6 (Eng. Abstr.) **(Ger)**

[Antigenic and molecular structure of CEA—its cancer specificity problem] Matsuoka Y. **Seikagaku** 1990 May; 62(5):352–8 **(Jpn)**

ANALYSIS

Identification of adenocarcinoma in effusions: a comparison of immunoperoxidase staining for monoclonal antibody B72.3 and carcinoembryonic antigen. Marsella RC, et al. **Acta Cytol** 1990 Jul-Aug;34(4):578–80

Fine needle aspiration of cystic liver lesions. Cytologic examination and carcinoembryonic antigen assay of cyst contents. Pinto MM, et al. **Acta Cytol** 1989 Nov-Dec; 33(6):852–6

Hepatocellular carcinoma versus carcinoma metastatic to the liver. Value of stains for carcinoembryonic antigen and naphthylamidase in fine needle aspiration biopsy material. Wong MA, et al. **Acta Cytol** 1990 Mar-Apr;34(2):192–6

Immunohistochemical demonstration of nonspecific cross-reacting antigen in normal and neoplastic human tissues using a monoclonal antibody. Comparison with carcinoembryonic antigen localization. Tsutsumi Y, et al. **Acta Pathol Jpn** 1990 Feb;40(2):85–97

Relationship between colorectal liver metastases and CEA levels in gallbladder bile. Yeatman TJ, et al. **Ann Surg** 1989 Oct;210(4):505–12

Carcinoembryonic antigen as differentiation marker for small cell lung cancer in vitro and its clinical relevance. Bepler G, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1525–30

Carcinoembryonic antigen, CA 19-9 and CA 50 in monitoring human squamous cell carcinoma of the esophagus. Munck-Wikland E, et al. **Anticancer Res** 1990 May-Jun;10(3):703–8

Ovarian tumors of low malignant potential (borderline tumors): immune morphology and current status. Neunteufel W, et al. **Anticancer Res** 1989 Jul-Aug; 9(4):993–7

Carcinoembryonic antigen, alpha 1-antitrypsin, and alpha-fetoprotein in the pancreas of patients with cystic fibrosis. Scheele PM, et al. **Arch Pathol Lab Med** 1989 Oct; 113(10):1142–6

Immunohistochemical staining of pancreatic cancer with CA19-9, KM01, unabsorbed CEA, and absorbed CEA. A comparison with normal pancreas and chronic pancreatitis. Shimizu M, et al. **Arch Pathol Lab Med** 1990 Feb; 114(2):195–200

Indium 111 ZCE-025 immunoscintigraphy in occult recurrent colorectal cancer with elevated carcinoembryonic antigen level. Doerr RJ, et al. **Arch Surg** 1990 Feb;125(2):226–9

Radioimmune localization of occult carcinoma. Duda RB, et al. **Arch Surg** 1990 Jul;125(7):866–70

Value of tissue carcinoembryonic antigen in patients with colorectal carcinoma. Suwanagool P, et al. **Asian Pac J Allergy Immunol** 1990 Jun;8(1):33–7

Tissue carcinoembryonic antigen in the prognosis of early invasive breast cancer. Hegg R, et al. **Breast Cancer Res Treat** 1990 May;15(3):213–6

Serum alpha(1——3)-L-fucosyltransferase, carcinoembryonic antigen, and sialyl Lewis X-i antigen levels in lung cancer. Asao T, et al. **Cancer** 1989 Dec 15; 64(12):2541–5

Detection of occult nodal metastases in patients with colorectal carcinoma. Davidson BR, et al. **Cancer** 1990 Feb 15;65(4):967–70

Adenocarcinoma of the uterine cervix. Prognostic significance of pretreatment serum CA 125, squamous cell carcinoma antigen, and carcinoembryonic antigen levels in relation to clinical and histopathologic tumor characteristics. Duk JM, et al. **Cancer** 1990 Apr 15; 65(8):1830–7

Tissue carcinoembryonic antigen and DNA aneuploidy in precancerous and cancerous colorectal lesions. Fischbach W, et al. **Cancer** 1990 Apr 15;65(8):1820–4

Utility and cost of carcinoembryonic antigen monitoring in colon cancer follow-up evaluation. A Markov analysis. Kievit J, et al. **Cancer** 1990 Jun 1;65(11):2580–7

Normal bronchial mucus contains high levels of cancer-associated antigens, CA125, CA19-9, and carcinoembryonic antigen. Matsuoka Y, et al. **Cancer** 1990 Feb 1;65(3):506–10

Carcinoembryonic antigen immunocytochemistry in primary breast cancer. Robertson JF, et al. **Cancer** 1989 Oct 15; 64(8):1638–45

Value of serum acute-phase reactant proteins and carcinoembryonic antigen in the preoperative staging of colorectal cancer. A multivariate analysis. Stamatiadis AP, et al. **Cancer** 1990 May 1;65(9):2055–7

CEA levels in peritoneal washings from gastric cancer patients as a prognostic guide. Asao T, et al. **Cancer Lett** 1989 Sep 15;47(1–2):79–81

Carcinoembryonic antigen and alpha-fetoprotein expression and monoclonal antibody targeting in a human hepatoma/nude mouse model. Wang ZF, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):869s–872s

Tumour markers: from carcinoembryonic antigen to products of hybridoma technology. Begent R, et al. **Cancer Surv** 1989;8(1):107–21 (68 ref.)

Diagnostic value of carcinoembryonic antigen in bronchoalveolar lavage fluid of peripheral lung cancer [letter] de Diego A, et al. **Chest** 1990 Mar;97(3):767–8

Airway carcinoembryonic antigen concentrations in patients with central lung cancer or chronic bronchitis. Wesselius LJ, et al. **Chest** 1990 Aug;98(2):393–7

Sugar-chain multiformity of human carcinoembryonic antigen: difference between normal and tumor-associated subfractions [letter] Miura M, et al. **Clin Chem** 1990 Mar; 36(3):583–4

Serial measurements of Ca antigen in sera from patients with advanced malignant breast disease. Searle F, et al. **Clin Chim Acta** 1990 Jan 31;186(3):351–8

Measurement of CA125, carcinoembryonic antigen, and alpha-fetoprotein in ovarian cyst fluid: diagnostic adjunct to cytology. Pinto MM, et al. **Diagn Cytopathol** 1990; 6(3):160–3

The expression of carcinoembryonic antigen and secretory component in adenomas of the human colon and rectum. Griffioen G, et al. **Dis Colon Rectum** 1989 Nov;32(11):954–9

A comparison between pregnancy-associated alpha 2-glycoprotein (alpha 2-PAG), carcino-embryonic antigen (CEA), CA-125, and CA-15-3 as tumor markers in breast cancer. Bersinger NA, et al. **Eur J Gynaecol Oncol** 1990; 11(2):135–9

Evaluation of diagnostic usefulness of CEA, hCG and SCC antigens in cervical cancer patients. Kornafel J, et al. **Eur J Gynaecol Oncol** 1989;10(5):319–22

Contents of tissue CEA and CA19-9 in colonic polyp and colorectal cancer, and their clinical significance. Imamura Y, et al. **Gastroenterol Jpn** 1990 Apr;25(2):186–92

Comparative study of carcinoembryonic antigen and epithelial membrane antigen expression in normal colon, adenomas and adenocarcinomas of the colon and rectum. Davidson BR, et al. **Gut** 1989 Sep;30(9):1260–5

Transformation of histological tumor type of the cervix expressed in different tumor markers in the serum. Aalders JG, et al. **Gynecol Oncol** 1990 Jan;36(1):110–2

Squamous cell carcinoma antigen and carcinoembryonic antigen levels as prognostic factors for the response of cervical carcinoma to chemotherapy. Meier W, et al. **Gynecol Oncol** 1990 Jul;38(1):6–11

Serum CEA and CA 19-9: potential future diagnostic or screening tests for gallbladder cancer? Strom BL, et al. **Int J Cancer** 1990 May 15;45(5):821–4

The use of monoclonal anti-CEA antibody immunohistochemistry in detecting the origin of oral cavity metastasis. Nitzan DW, et al. **Int J Oral Maxillofac Surg** 1990 Jun;19(3):162–4

Carcinoembryonic antigen in basal cell neoplasms in black patients: an immunohistochemical study. Kidd MK, et al. **J Am Acad Dermatol** 1989 Nov;21(5 Pt 1):1007–10

D-14 monoclonal antibody to carcinoembryonic antigen: immunohistochemical analysis of formalin-fixed, paraffin-embedded human colorectal carcinoma, tumors of non-colorectal origin and normal tissues. Pavelic ZP, et al. **J Cancer Res Clin Oncol** 1990;116(1):51–6

Limited improvement of tumour diagnosis by the simultaneous determination of carcinoembryonic antigen (CEA) and of a tumour-associated CEA-related antigen of Mr 128,000 in serum. Wagener C, et al. **J Clin Chem Clin Biochem** 1989 Sep;27(9):643–52

Imaging with indium111-labeled anticarcinoembryonic antigen monoclonal antibody ZCE-025 of recurrent colorectal or carcinoembryonic antigen-producing cancer in patients with rising serum carcinoembryonic antigen levels and occult metastases. Patt YZ, et al. **J Clin Oncol** 1990 Jul;8(7):1246–54

Selection of monoclonal antibodies for use in an immunometric assay for carcinoembryonic antigen. Börmer OP, et al. **J Immunol Methods** 1990 Mar 9;127(2):171–8

Use of bispecific hybrid antibodies for the development of a homogeneous enzyme immunoassay. Görög G, et al. **J Immunol Methods** 1989 Sep 29;123(1):131–40

Pathophysiology of tumor progression in human gallbladder: flow cytometry, CEA, and CA 19-9 levels in bile and serum in different stages of gallbladder disease. Strom BL, et al. **J Natl Cancer Inst** 1989 Oct 18;81(20):1575–80

Immunohistochemical analysis of the relationship between CEA localization and mononuclear cell infiltration in human colorectal carcinoma. Tanaka K, et al. **J Surg Oncol** 1990 Feb;43(2):106–16

Cystadenocarcinoma of the pancreas: neo-adjuvant therapy and CEA monitoring. Wood D, et al. **J Surg Oncol** 1990 Jan;43(1):56–60

Characterization of carcinoembryonic antigen-related antigens in normal adult feces. Matsuoka Y, et al. **Jpn J Cancer Res** 1990 May;81(5):514–9

Detection of increased fecal carcinoembryonic antigen and its characterization as a membrane-bound form in colorectal carcinoma and other gastrointestinal disorders. Sugano K, et al. **Jpn J Cancer Res** 1989 Dec;80(12):1156–60

Evaluation of dot-immunobinding assay for carcinoembryonic antigen determination in nipple discharge as an adjunct in the diagnosis of early breast cancer. Research Group for Carcinoembryonic Antigen in Nipple Discharge. Mori T, et al. **Jpn J Clin Oncol** 1989 Dec;19(4):373–9

Comparison of serum assays for TAG-72, CA19-9 and CEA in gastrointestinal carcinoma patients. Ohuchi N, et al. **Jpn J Clin Oncol** 1989 Sep;19(3):242–8

The significance of immunochemically staining calcitonin and CEA in fine-needle aspiration biopsy materials from medullary carcinoma of the thyroid. Takeichi N, et al. **Jpn J Surg** 1989 Nov;19(6):674–8

Quantification of carcinoembryonic antigen in serum and analysis of epitope specificities of monoclonal antibodies. Wagener C, et al. **Methods Enzymol** 1990;184:507–18

Selective precipitation of biotin-labeled antigens or monoclonal antibodies by avidin for determining epitope specificities and affinities in solution-phase assays. Wagener C, et al. **Methods Enzymol** 1990;184:518–29

Monoclonal antibodies against carcinoembryonic antigen (CEA) discriminate between CEA produced by gastrointestinal tumors and CEA produced by other tumors. Catane R, et al. **Nat Immun Cell Growth Regul** 1990;9(3):203–8

Advanced colon cancer: staging and prognosis by CEA test. Barone C, et al. **Oncology** 1990;47(2):128–32

Do CA 19-9 and TPA play a minor role as compared to AFP in diagnosing primary hepatocellular carcinoma? Leandro G, et al. **Oncology** 1989;46(6):381–5

Immunohistochemical localization of carcinoembryonic antigen (CEA) in salivary gland tumors. Alfaro M, et al. **Oral Surg Oral Med Oral Pathol** 1990 Apr;69(4):479–82

Comparison of CA 72-4 with CA 19-9 and carcinoembryonic antigen in the serodiagnostics of gastrointestinal malignancies. Heptner G, et al. **Scand J Gastroenterol** 1989 Aug;24(6):745–50

99mTc-labeled monoclonal anti-carcinoembryonic antigen antibody (BW 431/26). Clinical results in the detection of colorectal carcinomas and recurrences. Lind P, et al. **Scand J Gastroenterol** 1989 Dec;24(10):1205–11

Radioimmunoguided surgery in recurrent colorectal cancer: the role of carcinoembryonic antigen, computerized

tomography, and physical examination. Sardi A, et al. **South Med J** 1989 Oct;82(10):1235–44

Immunoperoxidase staining for tumor markers in patients with carcinoma of the breast. Cox CE, et al. **Surg Forum** 1978;29:160–2

Prospective monitoring trial for carcinoma of colon and rectum after surgical resection. Wanebo HJ, et al. **Surg Gynecol Obstet** 1989 Dec;169(6):479–87

Serum macro creatine kinase type 2 as a tumor marker in lung cancer: comparison with carcinoembryonic antigen. Lee YC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Feb; 89(2):104–9

Tumor markers of lung cancer: carcinoembryonic antigen and TuMark. Yang PC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Aug;88(8):791–6

Differential expression of carcinoembryonic antigens and non cross-reacting antigens in the human thymus. Analysis on frozen sections and cultured epithelial cells using monoclonal antibodies. Aubry J, et al. **Thymus** 1990 Mar; 15(2):107–23

Carcinoembryonic antigen, arginine vasopressin and calcitonin as markers of early small-cell lung cancer relapse. Biran H, et al. **Tumour Biol** 1989;10(5):258–67

Pre-operative tumour marker levels in patients with breast cancer and their prognosis. van Dalen A. **Tumour Biol** 1990; 11(4):189–95

[Study of the tissue localization of carcinoembryonic antigen in tumors of the colonic mucosa] Markova E, et al. **Eksp Med Morfol** 1989;28(4):12–6 (Eng. Abstr.) **(Bul)**

[Diagnostic value of the determination of carcinoembryonic antigens with monoclonal antibodies in abdominal and pleural effusion] Fei XF. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1990 Feb; 13(1):28–9, 62 (Eng. Abstr.) **(Chi)**

[Comparative study of serum lipid-bound sialic acid and carcinoembryonic antigen in patients with lung cancer] Zhu X. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1990 Feb;13(1):25–7, 61 (Eng. Abstr.) **(Chi)**

[Clinical significance of serum CEA determination in the diagnosis of colo-rectal cancer] Jiang R. **Chung Hua Chung Liu Tsa Chih** 1989 Sep;11(5):348–51 (Eng. Abstr.) **(Chi)**

[Characteristics of mucins and CEA in globoid dysplastic cells of human stomach and its relationship with signet ring cell carcinoma] Liu SQ. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):176–9 (Eng. Abstr.) **(Chi)**

[Imaging and biodistribution of 111In-labeled anti-carcinoembryonic antigen monoclonal antibodies in nude mice bearing human colon cancer xenografts] Wu H. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):254–6 (Eng. Abstr.) **(Chi)**

[Distribution and ultrastructural localization of carcino-embryonic antigen (CEA) in signet-ring cells of gastric cancer] Yang GL. **Chung Hua Chung Liu Tsa Chih** 1989 Mar;11(2):111–3 (Eng. Abstr.) **(Chi)**

[Detection of carcinoembryonic antigen of endometrial carcinoma and hyperplasia] Shen JB. **Chung Hua Fu Chan Ko Tsa Chih** 1990 Jan;25(1):29–30, 62 (Eng. Abstr.) **(Chi)**

[Histochemical and immunohistochemical studies of gastric carcinoma and pertaining gastric mucosa] Zhang JZ. **Chung-hua Ping Li Hsueh Tsa Chih** 1990 Mar;19(1):53–6 (Eng. Abstr.) **(Chi)**

[Biologic significance and clinical value of carcinoembryonic antigen in tissues in transitional cell carcinoma of the urinary tract] Yang SC. **Chung Hua Wai Ko Tsa Chih** 1989 Apr;27(4):228–30, 254 (Eng. Abstr.) **(Chi)**

[Carcinoembryonal antigen and the follow up of patients after resection of colon carcinoma with curative intent: a Markov process in decision analysis] Kievit J, et al. **Ned Tijdschr Geneeskd** 1989 Sep 9;133(36):1784–9 (Eng. Abstr.) **(Dut)**

[Clinical relevance of tumor markers for follow-up and therapy planning in ovarian cancer] Böhm W, et al. **Arch Gynecol Obstet** 1989;245(1–4):640–2 **(Ger)**

[The value of tumor markers CA 15-3 and CEA in breast cancer] Buck I, et al. **Arch Gynecol Obstet** 1989; 245(1–4):674–7 (Eng. Abstr.) **(Ger)**

[Carcinoma with low malignant potential (borderline tumor) of the ovary: immunomorphology and clinical aspects] Neunteufel W, et al. **Arch Gynecol Obstet** 1989; 245(1–4):600–2 (Eng. Abstr.) **(Ger)**

[The course of squamous cell carcinoma antigen and CEA as prognostic criteria for response to chemotherapy in cervix cancer] Meier W, et al. **Geburtshilfe Frauenheilkd** 1989 Dec;49(12):1050–5 (Eng. Abstr.) **(Ger)**

[Differential diagnosis of destructive processes of the skull base. Aggressive polypoid eosinophilic pansinusitis with expression of carcinoembryonic antigen (CEA)] Schöttke H, et al. **HNO** 1990 May;38(5):170–3 (Eng. Abstr.) **(Ger)**

[The significance of the preoperative CEA value for the prognosis of rectal cancer] Mentges B, et al. **Langenbecks Arch Chir** 1990;375(2):106–11 (Eng. Abstr.) **(Ger)**

[Tumor markers in breast cancer: on the diagnostic value of serum determinations in clinical freedom from tumor and manifest disease] Günczler P, et al. **Onkologie** 1989 Oct;12(5):209–14 (Eng. Abstr.) **(Ger)**

[CEA as a tumor marker on the cell surface and in the exudate. Comparison in thoracoscopy examined pleural effusions] Grosser H, et al. **Pneumologie** 1990 Feb;44 Suppl 1:529–30 (Eng. Abstr.) **(Ger)**

[Leu-M1, CEA and intermediate filament proteins in histochemical differential diagnosis of malignant pleural mesothelioma] Heckmayr M, et al. **Pneumologie** 1990 Feb; 44 Suppl 1:618–9 (Eng. Abstr.) **(Ger)**

[Diagnostic significance of the tumor markers CEA, SCC and NSE in serum and bronchoalveolar lavage] von Eiff M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:462–4 (Eng. Abstr.) **(Ger)**

[Tumor markers in colorectal neoplasm pathology: our experience of the diagnostic and prognostic importance of CEA antigen] Tessera G, et al. **Chir Ital** 1988 Dec; 40(6):377–87 (Eng. Abstr.) **(Ita)**

[Assessment of CEA values in patients with malignant neoplasms] Alkilani M, et al. **Minerva Med** 1989 Aug; 80(8):923–5 **(Ita)**

[Medullary carcinoma of the breast. Co-expression of keratin intermediate filaments and protein S-100 in tumor cells] Puzzo L, et al. **Pathologica** 1989 Jul-Aug;81(1074):433–9 (Eng. Abstr.) **(Ita)**

[Immunohistochemical study of the localization and distributional patterns of CA 19-9 and CEA in primary and metastatic nodal lesions of gastrointestinal cancer] Deguchi H, et al. **Gan No Rinsho** 1990 Jul;36(8):890–4 (Eng. Abstr.) **(Jpn)**

[The relation between serum carcinoembryonic antigen (CEA) and response to chemotherapy in patients with advanced colorectal cancer] Shimano T, et al. **Gan To Kagaku Ryoho** 1990 Mar;17(3 Pt 2):423–8 (Eng. Abstr.) **(Jpn)**

[Urachal carcinoma producing carcinoembryonic antigen: a case report] Arai Y, et al. **Hinyokika Kiyo** 1989 Jun; 35(6):1065–8 (Eng. Abstr.) **(Jpn)**

[Isoantigens ABH in bladder tumors as an indicator of malignant potential: a combined study with CEA, BMG, Leu-M1 and H-Ag] Saegusa M. **Hinyokika Kiyo** 1989 Aug; 35(8):1311–21 (Eng. Abstr.) **(Jpn)**

[A case of solitary bronchial papilloma with elevated serum CEA concentration] Kaneda M, et al. **Kyobu Geka** 1990 May;43(5):419–22 (Eng. Abstr.) **(Jpn)**

[A clinicopathological study on carcinoembryonic antigen in breast cancer] Asagoe T, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Apr 20;25(4):793–8 (Eng. Abstr.) **(Jpn)**

[A study of localizations and serum data; four tumor markers (CA125, CA19-9, CEA and TPA) in ovarian cancers] Kataoka A, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Jan 20;25(1):47–54 (Eng. Abstr.) **(Jpn)**

[The preoperative and postoperative carcinoembryonic antigen test in the diagnosis, staging, and prognosis of gastric cancer. Tumor Marker Committee, Japanese Foundation for Multidisciplinary Treatment of Cancer] Sakamoto J, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Jun 20;25(6):1095–104 (Eng. Abstr.) **(Jpn)**

[Comparative study between carcinoembryonic antigen (CEA) in breast cancer tissue and morphological regional immunoreaction: preliminary report] Asagoe T, et al. **Nippon Geka Gakkai Zasshi** 1990 Apr;91(4):534 **(Jpn)**

[Histogenesis of gallbladder cancer with special reference to metaplastic changes and distribution of various mucins and CEA] Inada A, et al. **Nippon Geka Gakkai Zasshi** 1989 Jun;90(6):894–906 (Eng. Abstr.) **(Jpn)**

[A study of growth and malignancy grading of stomach and colorectal cancers by serial serum carcinoembryonic antigen levels analysis] Umehara Y, et al. **Nippon Geka Gakkai Zasshi** 1990 Jun;91(6):661–6 (Eng. Abstr.) **(Jpn)**

[Study of carcinoembryonic antigen (CEA) in the epidermis of psoriasis vulgaris] Inoue S, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Jun;99(7):801–9 (Eng. Abstr.) **(Jpn)**

[A monoclonal antibody study of carcinoembryonic antigen (CEA) in skin and skin tumors] Tezuka M, et al. **Nippon Hifuka Gakkai Zasshi** 1989 May;99(6):697–707 (Eng. Abstr.) **(Jpn)**

[Adjuvant chemotherapy to gastric cancer and colonic cancer. Association with immunotherapy and carcinoembryonic antigen] Sachira, et al. **Nippon Ika Daigaku Zasshi** 1989 Dec;56(6):622–4 **(Jpn)**

[Measurement of carcinoembryonic antigen, squamous cell carcinoma related antigen and neuron-specific enolase in the bronchoalveolar lavage fluid in patients with peripheral lung cancer] Fujii M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Apr;27(4):452–5 (Eng. Abstr.) **(Jpn)**

[A case of thymic cyst with elevated CEA in the cystic fluid] Mashimoto H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Sep; 27(9):1087–91 (Eng. Abstr.) **(Jpn)**

[CEA and CA19-9 in BALF from patients with idiopathic interstitial pneumonia] Shiota Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Aug; 27(8):887–93 (Eng. Abstr.) **(Jpn)**

[A case of pulmonary alveolar proteinosis accompanied with the elevation of CEA (carcinoembryonic antigen) in bronchoalveolar lavage fluid] Tanaka F, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Aug; 27(8):968–73 (Eng. Abstr.) **(Jpn)**

[Clinical significance of carcinoembryonic antigen assay as a tumor marker] Fujino M, et al. **Nippon Rinsho** 1990 Feb; 48 Suppl:907–11 **(Jpn)**

[Clinical study on the serum carcinoembryonic antigen, immunosuppressive acidic protein and C-reactive protein levels in patients with adult T cell leukemia] Kumagai E, et al. **Rinsho Byori** 1989 Jul;37(7):769–73 (Eng. Abstr.) **(Jpn)**

[Basic and clinical aspects of tumor markers--with special reference to CEA] Matsuoka Y. **Rinsho Byori** 1990 Jan; 38(1):31–4 (Eng. Abstr.) **(Jpn)**

[Analysis of pathological state of benign monoclonal gammopathy by beta 2-microglobulin and CEA] Michibayashi T, et al. **Rinsho Byori** 1989 Sep;37(9):1033–7 (Eng. Abstr.) **(Jpn)**

[Interference in double-determinant monoclonal antibody-based assay for carcinoembryonic antigen (CEA)] Sekiguchi H, et al. **Rinsho Byori** 1989 Aug;37(8):893–8 (Eng. Abstr.) **(Jpn)**

[Usefulness of biological tumor markers for early detection of neoplastic changes in the bladder of persons exposed to aromatic amines] Hanke J, et al. **Med Pr** 1989; 40(6):376–80 (26 ref.) (Eng. Abstr.) **(Pol)**

[Ultrastructural study of carcinoembryonic antigen (CEA) using the peroxidase-antiperoxidase (PAP) complex technic in patients with breast cancer] Grzanka A, et al. **Patol Pol** 1989;40(3):325–33 (Eng. Abstr.) **(Pol)**

[Ultrastructural evaluation of carcinoembryonic antigen (CEA) using an immunocytochemical method with the peroxidase-antiperoxidase (PAP) complex technic in patients with laryngeal cancer] Grzanka A, et al. **Patol Pol** 1989;40(3):335–41 (Eng. Abstr.) **(Pol)**

[Concentration of carcinoembryonic antigen in the serum and bronchoalveolar lavage fluid in patients with lung cancer] Płusa T, et al. **Pneumonol Pol** 1989 May;57(5):277–82 (Eng. Abstr.) **(Pol)**

[Carcinoembryonic antigen (CEA) in the blood serum of patients with bronchogenic carcinoma and selected diseases of the respiratory tract] Szklarz E, et al. **Pneumonol Pol** 1989 Apr;57(4):217–21 (Eng. Abstr.) **(Pol)**

[Plasma levels of alpha-fetoprotein and carcinoembryonic antigen in patients with malignant gastrointestinal tumors] Monteiro JC, et al. **Acta Med Port** 1989 Nov-Dec; 2(6):245–52 (85 ref.) (Eng. Abstr.) **(Por)**

[The paraneoplastic phenotype of human gastric glands studied using the carcinoembryonic antigen-specific lectin crustacin] Pugachev KK, et al. **Biull Eksp Biol Med** 1990 Mar;109(3):287–9 (Eng. Abstr.) **(Rus)**

[Diagnostic value of tumor markers in pancreatic pathology] Kadoshchuk TA, et al. **Klin Khir** 1989;(11):50–4 (70 ref.) **(Rus)**

[Determination of the level of carcinoembryonic antigen--a prognostic test of the effectiveness of radical treatment in cancer of the large intestine] Moroz GS, et al. **Klin Khir** 1990;(5):41–2 **(Rus)**

[Value of CEA determination in the bile of cancer patients] Kuznetsov VV, et al. **Vopr Onkol** 1990;36(3):365–6 **(Rus)**

[The interrelationship of proliferative activity and carcinoembryonic antigen expression in gastric carcinomas] Sergeeva NS, et al. **Vopr Onkol** 1990;36(6):735–6 **(Rus)**

[Tissue carcinoembryonic antigen: a screening test for increased cell proliferation?] Rosandić-Pilaš M, et al. **Lijec Vjesn** 1989 Aug;111(8):249–53 (Eng. Abstr.) **(Scr)**

[Human chorionic gonadotropin and carcinoembryonic antigen in small cell carcinoma (oat cell) of the urinary bladder] Bonet Palau I, et al. **Actas Urol Esp** 1989 Nov-Dec;13(6):476–9 (Eng. Abstr.) **(Spa)**

[Clinical application of radioimmunolocalization in colorectal cancer] Germà JR, et al. **Med Clin (Barc)** 1990 Mar 10; 94(9):325–8 (Eng. Abstr.) **(Spa)**

[Monoclonal antibodies. Their usefulness in the diagnosis of malignant tumors of the digestive system] Campos Campos F, et al. **Rev Gastroenterol Mex** 1989 Oct-Dec;54(4):193–8 (Eng. Abstr.) **(Spa)**

BIOSYNTHESIS

Carcinoembryonic antigen gene family members in submandibular salivary gland: demonstration of pregnancy-specific glycoproteins by cDNA cloning. Zoubir F, et al. **Biochem Biophys Res Commun** 1990 May 31;169(1):203–16

Induction of carcinoembryonic antigen and its crossreactive gene products in human colonic adenomas and carcinomas by transforming growth factor-beta. Chakrabarty S, et al. **Mol Biother** 1990 Mar;2(1):27–31

BLOOD

Carcinoembryonic antigen directed multiple surgical procedures for recurrent colon cancer confined to the liver. Sardi A, et al. **Am Surg** 1990 Apr;56(4):255–9

Serum levels of CA-50, CA-19.9, CA-125, neuron specific enolase and carcinoembryonic antigen in lung cancer and benign diseases of the lung. Berthiot G, et al. **Biomed Pharmacother** 1989;43(8):613–20

Circulating tumor marker levels in advanced breast carcinoma correlate with the extent of metastatic disease. Colomer R, et al. **Cancer** 1989 Oct 15;64(8):1674–81

Tumor marker kinetics in the monitoring of breast cancer. Kiang DT, et al. **Cancer** 1990 Jan 15;65(2):193–9

Serum carcinoembryonic antigen level increases correlate with tumor progression in patients with differentiated

gastric carcinoma following noncurative resection. Maehara Y, et al. **Cancer Res** 1990 Jul 1;50(13):3952–5

A double monoclonal time–resolved immunofluorometric assay of carcinoembryonic antigen in serum. Bhayana V, et al. **Clin Biochem** 1989 Dec;22(6):433–8

Serum sialic acid and carcinoembryonic levels in the detection and monitoring of colorectal cancer. Verazin G, et al. **Dis Colon Rectum** 1990 Feb;33(2):139–42

Comparison of serum CA 19–9 and CEA levels in a population at high risk for colorectal cancer. Goldberg EM, et al. **Hybridoma** 1989 Oct;8(5):569–75

Comparison of CA 15–3 and CEA in diagnosis and monitoring of breast cancer. Safi F, et al. **Int J Biol Markers** 1989 Oct–Dec;4(4):207–14

The role of CEA, TPA and CA 19–9 in the early detection of recurrent colorectal cancer. Barillari P, et al. **Int J Colorectal Dis** 1989 Dec;4(4):230–3

The diagnostic value of neuron–specific enolase and carcino–embryonic antigen analyses in patients with carcinoma of the lung. Wielders JP, et al. **J Clin Chem Clin Biochem** 1990 Apr;28(4):225–31

Plasma carcinoembryonic antigen as an indicator of cerebral metastases. Eden EA, et al. **J Neurooncol** 1990 Jun; 8(3):281–7

Coeliac disease—a new cause for a high carcinoembryonic antigen. Melville DM, et al. **J R Soc Med** 1990 Jun; 83(6):399

Serum CA 12–5 concentrations and CA 12–5/CEA ratios in patients with epithelial ovarian cancer. Buamah PK, et al. **J Surg Oncol** 1990 Jun;44(2):97–9

A case of intralobar pulmonary sequestration with calcification and elevated serum values of carcinoembryonic antigen and carbohydrate antigen 19–9. Uyama T, et al. **J Thorac Imaging** 1989 Oct;4(4):74–6

A proposal of indices to describe the carcinoembryonic antigen time course in in order to assess the effects of treating recurrent colo–rectal carcinoma. Iwama T, et al. **Jpn J Surg** 1990 Jan;20(1):123–6

Serial determinations of serum CEA in monitoring management of patients with colorectal carcinoma. Behbehani AI, et al. **Oncology** 1990;47(4):303–7

Monitoring of hormonal therapy in patients with metastatic breast carcinoma by plasma marker protein profiles. Haagensen DE Jr, et al. **Surg Forum** 1978;29:162–4

Surveillance strategies after resection of carcinoma of the colon and rectum. Fantini GA, et al. **Surg Gynecol Obstet** 1990 Sep;171(3):267–73 (58 ref.)

[Value of neopterin as an oncologic laboratory parameter—observations in gynecologic tumors] von Broen B, et al. **Z Gesamte Inn Med** 1990 Apr 15;45(8):223–5 (Eng. Abstr.) **(Ger)**

[Statistic correlation of carcinoembryonal antigen (CEA), alpha–feto protein (AFP) and isoenzymes of mitochondrial and BB creatine phosphokinase (CK+–BB and CK–MT) in patients with neoplasms] Scarazatti E, et al. **Boll Soc Ital Biol Sper** 1990 Apr;66(4):381–5 (Eng. Abstr.) **(Ita)**

[Expression and secretion of carcinoembryonic antigen in tumors of the large intestine] Kulevich EE, et al. **Arkh Patol** 1989;51(7):20–5 (Eng. Abstr.) **(Rus)**

[The concentration of carcinoembryonic antigen and carbohydrate antigen Ca–19–9 in the blood serum in cancerous diseases of the gastrointestinal tract] Mit'kov VV, et al. **Med Radiol (Mosk)** 1989 Nov;34(11):22–4 (Eng. Abstr.) **(Rus)**

GENETICS

Assignment of the coding sequence for carcinoembryonic antigen (CEA) and normal cross–reacting antigen (NCA) to human chromosome 19q13. Willcocks TC, et al. **Ann Hum Genet** 1989 May;53 (Pt 2):141–8

Characterization of a cDNA clone encoding a new species of the nonspecific cross–reacting antigen (NCA), a member of the CEA gene family. Arakawa F, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1063–71

Expression of complementary DNA and genomic clones for carcinoembryonic antigen and nonspecific cross–reacting antigen in Chinese hamster ovary and mouse fibroblast cells and characterization of the membrane–expressed products. Hefta LJ, et al. **Cancer Res** 1990 Apr 15;50(8):2397–403

cDNA and gene analyses imply a novel structure for a rat carcinoembryonic antigen–related protein. Rebstock S, et al. **J Biol Chem** 1990 May 15;265(14):7872–9

Molecular cloning of CD31, a putative intercellular adhesion molecule closely related to carcinoembryonic antigen. Simmons DL, et al. **J Exp Med** 1990 Jun 1;171(6):2147–52

Intra– and interspecies analyses of the carcinoembryonic antigen (CEA) gene family reveal independent evolution in primates and rodents. Rudert F, et al. **J Mol Evol** 1989 Aug;29(2):126–34

Cloning of the complete gene for carcinoembryonic antigen: analysis of its promoter indicates a region conveying cell type–specific expression. Schrewe H, et al. **Mol Cell Biol** 1990 Jun;10(6):2738–48

Abstracts presented by members of the ISOBM. International Society for Oncodevelopmental Biology and Medicine. XVIIth meeting. Freiburg, September 18–22, 1989. **Tumour Biol** 1990;11(1–2):64–112

Workshop report: proposed nomenclature for the carcinoembryonic antigen (CEA) gene family. Barnett T, et al. **Tumour Biol** 1990;11(1–2):59–63

Recent developments concerning the carcinoembryonic antigen gene family and their clinical implications. Report on the XVIIth meeting of the International Society for Oncodevelopmental Biology and Medicine, Freiburg, FRG (September 18–22, 1989). Zimmermann W, et al. **Tumour Biol** 1990;11(1–2):1–4

[Carcinoembryonic antigen gene family and its clinical application] Hinoda Y, et al. **Gan To Kagaku Ryoho** 1990 Jul;17(7):1274–80 (19 ref.) (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Imaging of tumours in the parotid region with indium–111 labelled monoclonal antibody reacting with carcinoembryonic antigen. Kairemo KJ, et al. **Acta Oncol** 1990;29(4):539–43

Diagnosis of tumors of the parotid gland with anti–CEA immunoscintigraphy. Kairemo KJ, et al. **AJR Am J Roentgenol** 1990 Jun;154(6):1259–62

Differential reactivities of carcinoembryonic antigen (CEA) and CEA–related monoclonal and polyclonal antibodies in common epithelial malignancies. Sheahan K, et al. **Am J Clin Pathol** 1990 Aug;94(2):157–64

Coupling a preactivated daunorubicin derivative to antibody. A new approach. Pagé M, et al. **Anticancer Res** 1990 Mar–Apr;10(2A):353–7

Radioimmunotherapy of human colon cancer in nude mice. Buras RR, et al. **Arch Surg** 1990 May;125(5):660–4

Cell adhesion activity of non–specific cross–reacting antigen (NCA) and carcinoembryonic antigen (CEA) expressed on CHO cell surface: homophilic and heterophilic adhesion. Oikawa S, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):39–45

Comparison of anti–fetal colonic microvillus and anti–CEA antibodies in peroperative radioimmunolocalisation of colorectal cancer. Blair SD, et al. **Br J Cancer** 1990 Jun; 61(6):891–4

The effect of serum CEA on the distribution and clearance of anti–CEA antibody in a pancreatic tumour xenograft model. Pedley RB, et al. **Br J Cancer** 1989 Oct;60(4):549–54

Inactivation and clearance of an anti–CEA carboxypeptidase G2 conjugate in blood after localisation in a xenograft model. Sharma SK, et al. **Br J Cancer** 1990 May; 61(5):659–62

Tumour imaging of bladder carcinomas and their metastases with 111indium–labelled monoclonal anti–CEA antibody BW 431/26. Boeckmann W, et al. **Br J Cancer Suppl** 1990 Jul;10:81–4

Immunoscintigraphy using a technetium–99m labelled monoclonal anti–CEA antibody in the follow–up of colorectal cancer and other tumours producing CEA. Hertel A, et al. **Br J Cancer Suppl** 1990 Jul;10:34–6

Selective killing of carcinoembryonic–antigen (CEA)–producing cells in vitro by the immunoconjugate cytorhodin–S and CEA–reactive cytorhodin–S antibody CA208. Iwahashi T, et al. **Cancer Immunol Immunother** 1989;30(4):239–46

Relative positions of some epitopes on carcinoembryonic antigen. Larsson A, et al. **Cancer Immunol Immunother** 1989;30(2):92–6

Effects of methotrexate–carcinoembryonic–antigen–antibody immunoconjugates on GW–39 human tumors in nude mice. Shih LB, et al. **Cancer Immunol Immunother** 1990; 31(4):197–201

Mechanism of decreasing liver uptake of 111In–labeled anti–carcinoembryonic antigen monoclonal antibody by specific antibody pretreatment in tumor bearing mice. Beatty BG, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):846s–851s

Presurgical imaging with indium–labeled anti–carcinoembryonic antigen for colon cancer staging. Beatty JD, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):922s–926s

Radioimmunotherapy of human colon carcinomatosis xenograft with 90Y–ZCE025 monoclonal antibody: toxicity and tumor phenotype studies. Esteban JM, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):989s–992s

Clinical studies of cancer radioimmunodetection with carcinoembryonic antigen monoclonal antibody fragments labeled with 123I or 99mTc. Goldenberg DM, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):909s–921s

Immunolymphoscintigraphy with 99mTc–labeled monoclonal antibody (BW 431/26) reacting with carcinoembryonic antigen in breast cancer. Kairemo KJ. **Cancer Res** 1990 Feb 1;50(3 Suppl):949s–954s

Human immune response to anti–carcinoembryonic antigen murine monoclonal antibodies. Losman MJ, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):1055s–1058s

Cloning of the genes for T84.66, an antibody that has a high specificity and affinity for carcinoembryonic antigen, and expression of chimeric human/mouse T84.66 genes in myeloma and Chinese hamster ovary cells. Neumaier M, et al. **Cancer Res** 1990 Apr 1;50(7):2128–34

Murine monoclonal antibodies against carcinoembryonic antigen: immunological, pharmacokinetic, and targeting properties in humans. Sharkey RM, et al. **Cancer Res** 1990 May 1;50(9):2823–31

Tumor, red marrow, and organ dosimetry for 131I–labeled anti–carcinoembryonic antigen monoclonal antibody. Siegel JA, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):1039s–1042s

Monoclonal antibody recognizing a carcinoembryonic antigen epitope differentially expressed in human colonic carcinoma versus normal adult colon tissues. Zhang HZ, et al. **Cancer Res** 1989 Oct 15;49(20):5766–73

Unusual granular reactivity for carcinoembryonic antigen in malignant mesothelioma. Stirling JW, et al. **Hum Pathol** 1990 Jun;21(6):678–9

Baboon anti–idiotype antibodies mimic a carcinoembryonic antigen epitope. Losman MJ, et al. **Int J Cancer** 1990 Aug 15;46(2):310–4

Immunoscintigraphy of melanoma and of CEA–secreting carcinomas. Multicenter studies of the Italian National Research Council. Siccardi AG. **Int J Rad Appl Instrum [B]** 1989;16(6):637–9 (14 ref.)

An optimized antibody–chelator conjugate for imaging of carcinoembryonic antigen with indium–111. Sumerdon GA, et al. **Int J Rad Appl Instrum [B]** 1990;17(2):247–54

Prognostic factors in colorectal carcinoma: significance of peripheral T lymphocytes. Yamaguchi K, et al. **Int Surg** 1989 Oct–Dec;74(4):232–9

Carbohydrate structures of nonspecific cross–reacting antigen–2, a glycoprotein purified from meconium as an antigen cross–reacting with anticarcinoembryonic antigen antibody. Occurrence of complex–type sugar chains with the Gal beta 1——3GlcNAc beta 1——3Gal beta 1——4GlcNAc beta 1——outer chains. Yamashita K, et al. **J Biol Chem** 1989 Oct 25;264(30):17873–81

Effect of acetylation on monoclonal antibody ZCE–025 Fab' distribution in normal and tumor–bearing mice. Tarburton JP, et al. **J Biol Response Mod** 1990 Apr;9(2):221–30

Expression and characterization of a chimeric bifunctional antibody with therapeutic applications. Phelps JL, et al. **J Immunol** 1990 Aug 15;145(4):1200–4

Bispecific antibody that binds carcinoembryonic antigen and ricin toxin A chain cytotoxic for gastrointestinal tract tumor cells [letter] Robins RA, et al. **J Natl Cancer Inst** 1990 Aug 1;82(15):1295–6

Iodine–131–labeled MAb F(ab')2 fragments are more efficient and less toxic than intact anti–CEA antibodies in radioimmunotherapy of large human colon carcinoma grafted in nude mice [see comments] Buchegger F, et al. **J Nucl Med** 1990 Jun;31(6):1035–44 Comment in: J Nucl Med 1990 Jun;31(6):1045–7.

F(ab')2 fragments versus intact antibody—an isodose comparison [comment] Humm JL, et al. **J Nucl Med** 1990 Jun;31(6):1045–7 (18 ref.) Comment on: J Nucl Med 1990 Jun;31(6):1035–44.

Localization of intraperitoneal xenografts of human colon cancer by radiolabeled anti–CEA antibodies. Duda RB, et al. **J Surg Oncol** 1990 Jun;44(2):73–7

A novel CEA–cross–reacting antigen of molecular weight 140,000 expressed on human lymphoid cell lines. Kuroki M, et al. **Mol Immunol** 1990 Jul;27(7):689–96

An experimental immunoscintigraphic study with anti–CEA monoclonal antibody (DG2). Kopřivová H, et al. **Neoplasma** 1990;37(1):3–11

Radioimmunoscintigraphy with 111In labelled monoclonal antibody fragments (F(ab')2 BW 431/31) against CEA: radiolabelling, antibody kinetics and distribution, findings in tumour and non–tumour patients. Bares R, et al. **Nucl Med Commun** 1989 Sep;10(9):627–41

Blood and tissue kinetics of radiolabelled anti–CEA monoclonal antibody and F(ab)2 and Fab fragments in nude mice with human tumour xenografts: implications for tumour imaging and radioimmunotherapy. Pimm MV, et al. **Nucl Med Commun** 1989 Aug;10(8):585–93

Metastatic colorectal cancer: radioimmunoscintigraphy with a stabilized In–111–labeled F(ab')2 fragment of an anti–CEA monoclonal antibody. Lamki LM, et al. **Radiology** 1990 Jan;174(1):147–51

Oncoprecipitins from marine invertebrates are glycoproteins with a higher specificity to carcinoembryonic antigen. Pavlenko AF, et al. **Tumour Biol** 1990;11(3):137–44

Tumor specificity of monoclonal antibodies to carcinoembryonic antigen. Immunohistochemical analysis. Zoubir F, et al. **Tumour Biol** 1990;11(1–2):5–19

[Successful immunoscintigraphic tumor detection with technetium 99m marked monoclonal anti–CEA antibodies] Baum RP, et al. **Onkologie** 1989 Aug;12 Suppl 1:26–9 (Eng. Abstr.) **(Ger)**

[A fundamental study of immunoscintigraphy with 131I–labeled anti–CA 19–9 and anti–CEA monoclonal antibodies—imaging of tumor–bearing mice by IMACIS–1 and cell ELISA with human tumor cells] Nogami T, et al. **Kaku Igaku** 1990 May;27(5):427–36 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of immunoscintigraphy with 131I anti–CEA and 131I anti–CA 19–9 monoclonal antibody cocktail (IMACIS–1)—report of the phase II study] Sasaki Y, et al. **Kaku Igaku** 1990 Apr;27(4):349–62 (Eng. Abstr.) **(Jpn)**

[Radioimmunodetection of colorectal cancer, using anti–CEA monoclonal antibodies] Murayama H, et al. **Nippon Geka Gakkai Zasshi** 1989 Oct;90(10):1732–41 (Eng. Abstr.) **(Jpn)**

[The immunohistochemical evaluation of kinetic and functional activity on gastric cancer using anti–BrdU and anti–CEA antibody: preliminary report] Sekihara T, et al. **Nippon Geka Gakkai Zasshi** 1989 Dec;90(12):2051 **(Jpn)**

[Comparative studies on monoclonal antibody KM10 and anti–CEA monoclonal antibodies] Soyama N, et al. **Nippon Geka Gakkai Zasshi** 1989 Nov;90(11):1834–9 (Eng. Abstr.) **(Jpn)**

[CA 19–9 like epitope(s) on carcinoembryonic antigen molecules] Nagata A, et al. **Radioisotopes** 1989 Dec;

38(12):513–5 (Eng. Abstr.) (Jpn)
[The carcinoembryonic antigen (CEA)—its biology and implications in pathology] Ionescu D, et al. **Rev Ig [Bacteriol]** 1989 Jul–Sep;34(3):199–206 (23 ref.) (Rum)
[The isolation of anti-carcinoembryonic antigen (CEA) immunoglobulins and their use in immunocytochemical and immunoenzyme (ELISA) technics] Niculescu F, et al. **Rev Ig [Bacteriol]** 1989 Jul–Sep;34(3):233–40 (Eng. Abstr.) (Rum)
[Chemical modification of antibodies against carcino-embryonal antigen] Guzov VM, et al. **Biokhimiia** 1989 Dec;54(12):2010–22 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

[The use of immunoaffinity chromatography for isolation of carcinoembryonal antigen] Shcherban' AI, et al. **Vopr Med Khim** 1989 Nov–Dec;35(6):121–4 (Eng. Abstr.) (Rus)

METABOLISM

Carcinoembryonic antigen and nonspecific cross-reacting antigen in medullary carcinoma of the thyroid. Kakudo K, et al. **Acta Pathol Jpn** 1990 Apr;40(4):261–6
CEA in colonic adenocarcinomas and precancerous lesions. An immunohistochemical study with a novel monoclonal antibody. Tormo BR, et al. **APMIS** 1989 Dec; 97(12):1073–80
Carcinoembryonic antigen binding to Kupffer cells is via a peptide located at the junction of the N-terminal and first loop domains. Thomas P, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):391–6
Site of carcinoembryonic antigen binding to Kupffer cells. Thomas P, et al. **Biochem Soc Trans** 1989 Dec;17(6):1121–2
Homogeneous penetration but heterogeneous binding of antibodies to carcinoembryonic antigen in human colon carcinoma HT-29 spheroids. Carlsson J, et al. **Cancer Immunol Immunother** 1989;30(5):269–76
CA 19-9, CA 125 and CEA in the endometrial mucosa during the menstrual cycle, in atypical hyperplasia and endometrial carcinoma. Neunteufel W, et al. **Cancer Lett** 1989 Nov 15;48(1):77–83
Regulation of carcinoembryonic antigen expression in different human colorectal tumor cells by interferon-gamma. Guadagni F, et al. **Cancer Res** 1990 Oct 1;50(19):6248–55
Escherichia coli of human origin binds to carcinoembryonic antigen (CEA) and non-specific crossreacting antigen (NCA). Leusch HG, et al. **FEBS Lett** 1990 Feb 26; 261(2):405–9
Impaired carcinoembryonic antigen release during the process of suramin-induced differentiation of the human colonic adenocarcinoma cell clone HT29-D4. Fantini J, et al. **J Cell Physiol** 1990 Jun;143(3):468–74
Changes in serum and tissue carcinoembryonic antigen with growth of a human gastric cancer xenograft in nude mice. Kiyama T, et al. **Jpn J Cancer Res** 1990 Jan;81(1):58–62
Discrimination of tuberculous from carcinomatous pleural effusion by biochemical markers: adenosine deaminase, lysozyme, fibronectin and carcinoembryonic antigen. Moriwaki Y, et al. **Jpn J Med** 1989 Jul–Aug;28(4):478–84
Carcinoembryonic antigen in medullary thyroid carcinoma: an immunohistochemical study applying six novel monoclonal antibodies. Dasović-Knežević M, et al. **Mod Pathol** 1989 Nov;2(6):610–7
[The changes in tumor markers such as serum CEA, CA 19-9, TPA and CA 125 in the chemotherapy of patients with advanced gastric cancer] Imamura Y, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 1):1501–7 (Eng. Abstr.) (Jpn)
[CEA levels of draining venous blood and draining-peripheral CEA gradient in colorectal cancer patients: correlation with postoperative survival] Deguchi H, et al. **Nippon Geka Gakkai Zasshi** 1990 May;91(5):575–80 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

Carcinoembryonic antigen enhances metastatic potential of human colorectal carcinoma. Hostetter RB, et al. **Arch Surg** 1990 Mar;125(3):300–4

PHYSIOLOGY

Carcinoembryonic antigen: function in metastasis by human colorectal carcinoma. Jessup JM, et al. **Cancer Metastasis Rev** 1989 Dec;8(3):263–80 (109 ref.)
CEA as a cell adhesion molecule. Lance MP. **Gastroenterology** 1990 Jul;99(1):277–8
Carcinoembryonic antigen as a selective enhancer of colorectal cancer metastasis. Hostetter RB, et al. **J Natl Cancer Inst** 1990 Mar 7;82(5):380–5

SECRETION

The effects of adverse growth conditions on the shedding of carcinoembryonic antigen from cultured LS180 colon cancer cells. Adams GL, et al. **Cancer Commun** 1990; 2(2):73–80
Increase in carcinoembryonic antigen release from cancer cells by combined treatment with retinoic acid and low-temperature hyperthermia. Kobayashi T, et al. **Int J Hyperthermia** 1990 Jul–Aug;6(4):785–92
Metastasizing neuroendocrine carcinoma of the larynx with calcitonin and somatostatin secretion and CEA production, resembling medullary thyroid carcinoma. Smets G, et al. **Virchows Arch [A]** 1990;416(6):539–43

CARCINOGEN MARKERS see **TUMOR MARKERS, BIOLOGICAL**

CARCINOGENICITY TESTS

see related
MUTAGENICITY TESTS

General and genetic toxicology of paroxetine. Kelvin AS, et al. **Acta Psychiatr Scand Suppl** 1989;350:34–6
Ability of short-term tests to predict carcinogenesis in rodents. Mason JM, et al. **Annu Rev Pharmacol Toxicol** 1990;30:149–68 (129 ref.)
Detection of associations between diseases in animal carcinogenicity experiments. Mitchell TJ, et al. **Biometrics** 1990 Jun;46(2):359–74
Occurrence of thymic lymphoma in carcinogenesis bioassay specimens of the Japanese medaka (Oryzias latipes). Battalora MS, et al. **Cancer Res** 1990 Sep 1;50(17 Suppl):5675S–5678S
Correlation between medium-term liver bioassay system data and results of long-term testing in rats. Ogiso T, et al. **Carcinogenesis** 1990 Apr;11(4):561–6
Quantitative relationship between mutagenic potency in the Ara test of Salmonella typhimurium and carcinogenic potency in rodents. A study of 11 direct-acting monofunctional alkylating agents. Roldán-Arjona T, et al. **Carcinogenesis** 1990 Jun;11(6):975–80
The interpretation of equivocal or marginal animal carcinogenicity tests. Squire RA. **Cell Biol Toxicol** 1989 Dec;5(4):371–6
Quantitative predictability of carcinogenicity of the covalent binding index of chemicals to DNA: comparison of the in vivo and in vitro assays. Taningher M, et al. **Environ Health Perspect** 1990 Mar;84:183–92
Comment: carcinogenicity studies of AZO dyes. Haseman JK. **Fundam Appl Toxicol** 1990 Jul;15(1):207–11
Use of statistical decision rules for evaluating laboratory animal carcinogenicity studies. Haseman JK. **Fundam Appl Toxicol** 1990 May;14(4):637–48 (30 ref.)
Variability of safe dose estimates when using complicated models of the carcinogenic process. A case study: methylene chloride. Portier CJ, et al. **Fundam Appl Toxicol** 1989 Oct;13(3):533–44
Does everything "cause" cancer: an alternative interpretation of the "carcinogenesis" bioassay. Salsburg D. **Fundam Appl Toxicol** 1989 Oct;13(3):351–8 (20 ref.)
Workshop of the Umweltbundesamt on Environmental chemical risk factors of cancer: mechanisms of action and assay systems for detection, Berlin, 23–24 November 1989. Schlatterer B. **J Cancer Res Clin Oncol** 1990;116(4):401–8
Biological assays for irritant, tumor-initiating and tumor-promoting activities. II. Standardized initiation/promotion protocol and semiquantitative estimation of promoting (or initiating) potencies in skin of NMRI mice. Schmidt R, et al. **J Cancer Res Clin Oncol** 1989;115(6):516–24
Prediction of probability of carcinogenicity for a set of ongoing NTP bioassays. Enslein K, et al. **Mutagenesis** 1990 Jul;5(4):305–6
Demythifiers: short-term tests and intelligence (human or otherwise). Rosenkranz HS. **Mutagenesis** 1990 May; 5(3):299–300
Prediction of the outcome of rodent carcinogenicity bioassays currently being conducted on 44 chemicals by the National Toxicology Program. Tennant RW, et al. **Mutagenesis** 1990 Jan;5(1):3–14 (36 ref.)
Prediction of cancer potency using a battery of mutation and toxicity data. Travis CC, et al. **Mutagenesis** 1990 May; 5(3):213–9
Distribution of methyl and ethyl adducts following alkylation with monofunctional alkylating agents. Beranek DT. **Mutat Res** 1990 Jul;231(1):11–30 (110 ref.)
Salmonella mutagenicity and rodent carcinogenicity: quantitative structure-activity relationships. Blake BW, et al. **Mutat Res** 1990 Jul;241(3):261–71
Consideration of both genotoxic and nongenotoxic mechanisms in predicting carcinogenic potential. Butterworth BE. **Mutat Res** 1990 Sep;239(2):117–32 (144 ref.)
Prediction of carcinogenic potency from toxicological data. Travis CC, et al. **Mutat Res** 1990 May;241(1):21–36
Structure-activity relationships in the rat hepatocyte DNA-repair test for 300 chemicals. Williams GM, et al. **Mutat Res** 1989 Nov;221(3):263–86 (114 ref.)
Use of mouse liver tumor data in risk assessments performed by the U.S. Environmental Protection Agency. Beal DD. **Prog Clin Biol Res** 1990;331:5–18 (8 ref.)
Carcinogenic potency and interspecies extrapolation. Krewski D, et al. **Prog Clin Biol Res** 1990;340D:323–34 (35 ref.)
Some observations on mouse liver tumors. Stevenson DE. **Prog Clin Biol Res** 1990;331:43–51 (34 ref.)
Chlordane: 24-month tumorigenicity and chronic toxicity test in mice. Khasawinah AM, et al. **Regul Toxicol Pharmacol** 1989 Dec;10(3):244–54
Guidelines for the testing of chemicals for carcinogenicity. Committee on Carcinogenicity of Chemicals in Food, Consumer Products and the Environment. **Rep Health Soc Subj (Lond)** 1982;25:1–30
Metabolism and biological effects of nitropyrene and related compounds. King CM. **Res Rep Health Eff Inst** 1988 Feb; (16):1–22
Long-term assays for carcinogenicity. Della Porta G, et al. **Teratogenesis Carcinog Mutagen** 1990;10(2):137–45 (47 ref.)
Prediction of toxicological interactions in a binary mixture by using pattern recognition techniques: proposed approach with a developed model. Trieff NM, et al. **Teratogenesis Carcinog Mutagen** 1990;10(2):165–75
Genetic activity profiles in the testing and evaluation of chemical mixtures. Waters MD, et al. **Teratogenesis Carcinog Mutagen** 1990;10(2):147–64 (19 ref.)
Contemporary initiatives in quantitative toxicology. Proceedings of the 18th Conference on Toxicology. November 1–3, 1988, Dayton, Ohio. **Toxicol Lett** 1989 Dec; 49(2–3):101–392
A computer-assisted procedure for the assembly and analysis of short-term genotoxicity test data. Brusick D. **Toxicol Lett** 1989 Dec;49(2–3):123–38
Significance of foci of cellular alteration in the rat liver. A symposium. Research Triangle Park, North Carolina, May 22–23, 1989. Proceedings. **Toxicol Pathol** 1989;17(4 Pt 1):557–735
Observations on altered hepatocellular foci in National Toxicology Program two-year carcinogenicity studies in rats. Harada T, et al. **Toxicol Pathol** 1989;17(4 Pt 1):690–706; discussion 707–8
Documenting foci of hepatocellular alteration in two-year carcinogenicity studies: current practices of the National Toxicology Program. Maronpot RR, et al. **Toxicol Pathol** 1989;17(4 Pt 1):675–83; discussion 683–4 (21 ref.)
Defining foci of cellular alteration in short-term and medium-term rat liver tumor models. Popp JA, et al. **Toxicol Pathol** 1989;17(4 Pt 1):561–8 (62 ref.)
Evaluation and grading of rat liver foci in carcinogenicity tests. Squire RA. **Toxicol Pathol** 1989;17(4 Pt 1):685–8; discussion 688–9 (9 ref.)
The significance of chemically-induced hepatocellular altered foci in rat liver and application to carcinogen detection. Williams GM. **Toxicol Pathol** 1989;17(4 Pt 1):663–72; discussion 673–4 (114 ref.)
The problem of carcinogenic hazard evaluation for new chemicals: general considerations about the carcinogenic process. Parodi S, et al. **Tumori** 1989 Aug 31;75(4):299–304 (21 ref.)
[Endogenous and exogenous determinants in the evaluation of carcinogenic risks] Rüdiger HW. **Off Gesundheitswes** 1990 May;52 Suppl 1:19–22 (Ger)
[Value of animal experiments in risk assessment in the human] Zbinden G. **Off Gesundheitswes** 1990 May;52 Suppl 1:16–8 (Ger)
[Animal experiment and in vitro studies with inhaled environmental pollutants] Mohr U, et al. **Pneumologie** 1990 Feb;44 Suppl 1:390–6 (19 ref.) (Eng. Abstr.) (Ger)
[The AMES test in environmental and occupational medicine] Clonfero E, et al. **Med Lav** 1990 Jan–Feb; 81(1):3–10 (78 ref.) (Eng. Abstr.) (Ita)
[Effects of tumor promoters and related compounds on electric relations between giant cells of the salivary glands of Chironomus tentans larvae] Mizgirev IV. **Eksp Onkol** 1990;12(1):22–5 (Eng. Abstr.) (Rus)
[Determination of potential carcinogenicity of nickel-containing dust using a micronuclear test] Kiseleva AA, et al. **Gig Tr Prof Zabol** 1989;(9):31–2 (Eng. Abstr.) (Rus)

ECONOMICS

Value-of-information analysis of testing strategies: estimating the effect of uncertainty about the proportion of chemicals that are true human carcinogens. Ennever FK, et al. **Prog Clin Biol Res** 1990;340D:295–304

INSTRUMENTATION

32P-postlabeling assay for carcinogen-DNA adducts: description of beta shielding apparatus and semi-automatic spotting and washing devices that facilitate the handling of multiple samples. Reddy MV, et al. **Carcinogenesis** 1990 Apr;11(4):683–7

METHODS

Establishment of a highly reproducible transformation assay of a ras-transfected BALB 3T3 clone by treatment with promoters. Sasaki K, et al. **Basic Life Sci** 1990;52:411–6
Animal species and strains used to test chemical carcinogens: results of a preliminary study. Bucchi AR, et al. **Biomed Environ Sci** 1988 Aug;1(2):171–83
Reproducibility of low-dose extrapolation procedure: comparison of estimates obtained using different rodent species and strains. Zapponi GA, et al. **Biomed Environ Sci** 1988 Aug;1(2):160–70
Studies of the carcinogenesis and tumorigenesis of skin applications of dodecylbenzene on hairless mice [letter; comment] Assogne CB. **Br J Ind Med** 1990 May; 47(5):356–8 Comment on: Br J Ind Med 1989 Sep;46(9):608–16.
Estimation of the dermal carcinogenic activity of petroleum fractions using a modified Ames assay. Blackburn GR, et al. **Cell Biol Toxicol** 1984 Oct;1(1):67–80

Invited contribution: an objective approach to the development of short-term tests predictive of carcinogenicity. Rosenkranz HS, et al. **Cell Biol Toxicol** 1986 Dec;2(4):425–40 (35 ref.)

An overview of prechronic and chronic toxicity/carcinogenicity experimental study designs and criteria used by the National Toxicology Program. Chhabra RS, et al. **Environ Health Perspect** 1990 Jun;86:313–21 (37 ref.)

Dual controls, p-value plots, and the multiple testing issue in carcinogenicity studies. Selwyn MR. **Environ Health Perspect** 1989 Jul;82:337–44

Induction of prophage lambda by chlorophenols. DeMarini DM, et al. **Environ Mol Mutagen** 1990;15(1):1–9

Employment of adult mammalian primary cells in toxicology: in vivo and in vitro genotoxic effects of environmentally significant N-nitrosodialkylamines in cells of the liver, lung, and kidney. Pool BL, et al. **Environ Mol Mutagen** 1990;15(1):24–35

The use of cytoenzymological changes in some parasitic protozoa for screening the carcinogenicity of chemicals. el-Mofty MM, et al. **Folia Morphol (Praha)** 1989; 37(4):394–401

Two-stage models of carcinogenesis, classification of agents, and design of experiments. Portier CJ, et al. **Fundam Appl Toxicol** 1990 Apr;14(3):444–60

The short-term effects of carcinogens and sulphur dioxide on the nuclear size of rat nasal epithelial cells. Fowlie AJ, et al. **J Appl Toxicol** 1990 Feb;10(1):29–38

A host-mediated in vivo/in vitro assay with peritoneal murine macrophages for the detection of carcinogenic chemicals. Massa T, et al. **J Cancer Res Clin Oncol** 1990; 116(4):357–64

Comparison of different computerized classification methods for predicting carcinogenicity from short-term test results. Benigni R, et al. **J Toxicol Environ Health** 1989; 28(4):427–44

Rapid screening of potential human bladder carcinogens: genotoxicity in meiosis repair deficient Drosophila melanogaster. Lamm LM, et al. **J Urol** 1989 Nov; 142(5):1356–8

International Commission for Protection Against Environmental Mutagens and Carcinogens. ICPEMC Working Paper 1/2. A multi-factor ranking scheme for comparing the carcinogenic activity of chemicals. Nesnow S. **Mutat Res** 1990 Sep;239(2):83–115

Mouse liver carcinogenesis: mechanisms and species comparisons. Proceedings of a symposium. Austin, Texas, November 30–December 3, 1988. **Prog Clin Biol Res** 1990; 331:1–427

Electrophilicity of nongenotoxic carcinogens and genotoxic noncarcinogens as measured by the ke test. Bakale G, et al. **Prog Clin Biol Res** 1990;340D:355–65

Do mouse liver tumors predict rat tumors? A study of concordance between tumors induced at different sites in rats and mice. Byrd DM 3d, et al. **Prog Clin Biol Res** 1990; 331:19–41

Combined in vivo DNA binding and tumor dose-response studies to investigate the molecular dosimetry concept. Dashwood RH, et al. **Prog Clin Biol Res** 1990;340D:335–44

Transfection of cytochrome P450 cDNAs into mammalian cells used in mutation and transformation assays. Langenbach R, et al. **Prog Clin Biol Res** 1990;340D:239–48

Enhanced morphological and neoplastic transformation of Syrian hamster embryo cells cultured at pH 6.70. LeBoeuf RA, et al. **Prog Clin Biol Res** 1990;340D:219–28

In vitro mammalian cell genotoxicity assays: their use and interpretation. McGregor D. **Prog Clin Biol Res** 1990; 340B:159–69 (26 ref.)

Chemical-induced transformation in BALB/c-3T3 cells: relationship between in vitro transformation and cytotoxicity, carcinogenesis, and genotoxicity. Matthews EJ. **Prog Clin Biol Res** 1990;340D:229–38

Organochlorine insecticides and mouse liver tumors: an analysis of responses and mechanisms. Stevenson DE. **Prog Clin Biol Res** 1990;331:367–83 (64 ref.)

Liver tumor promoters and other mouse liver carcinogens. Ward JM, et al. **Prog Clin Biol Res** 1990;331:85–108 (81 ref.)

Strategies for the identification of rodent carcinogens by in vitro short-term tests. Zeiger E. **Prog Clin Biol Res** 1990; 340D:261–71

Testing for carcinogens with rodents [editorial] Abelson PH. **Science** 1990 Sep 21;249(4975):1357

The further development of a mammalian DNA alkaline unwinding bioassay with potential application to hazard identification for contaminants from environmental samples. Daniel FB, et al. **Toxicol Ind Health** 1989 Oct; 5(5):647–65

Emerging methodologies for assessment of complex mixtures: application of bioassays in the Integrated Air Cancer Project. Lewtas J. **Toxicol Ind Health** 1989 Oct;5(5):839–50 (31 ref.)

[Measurement of DNA damage in forestomach squamous epithelium by alkaline elution assay] Morimoto K, et al. **Eisei Shikenjo Hokoku** 1989;(107):25–8 (Eng. Abstr.) **(Jpn)**

STANDARDS

Refinement of long-term toxicity and carcinogenesis studies. Rao GN, et al. **Fundam Appl Toxicol** 1990 Jul;15(1):33–43 (27 ref.)

Current status of the Gene-Tox Program. Auletta AE, et al. **Prog Clin Biol Res** 1990;340D:273–81

An industrial and UK perspective on short-term testing. Gatehouse DG. **Prog Clin Biol Res** 1990;340D:249–59

STATISTICS & NUMERICAL DATA

The interpretation of equivocal or marginal animal carcinogenicity tests. Squire RA. **Cell Biol Toxicol** 1989 Dec;5(4):371–6

Types and amounts of carcinogens as potential human cancer hazards. Weisburger JH, et al. **Cell Biol Toxicol** 1989 Dec; 5(4):377–91

Mutagenic and carcinogenic potency indices and their correlation. Parodi S, et al. **Teratogenesis Carcinog Mutagen** 1990;10(2):177–97 (60 ref.)

CARCINOGENS

see related
AMINOBIPHENYL COMPOUNDS
COCARCINOGENESIS
ONCOGENIC VIRUSES

Carcinogenicity of dark liquor. Rothman KJ, et al. **Am J Public Health** 1989 Nov;79(11):1516–20

The significance of induced forestomach tumors. Clayson DB, et al. **Annu Rev Pharmacol Toxicol** 1990;30:441–63 (84 ref.)

Chloroethylenes: a mechanistic approach to human risk evaluation. Green T. **Annu Rev Pharmacol Toxicol** 1990; 30:73–89 (87 ref.)

Ability of short-term tests to predict carcinogenesis in rodents. Mason JM, et al. **Annu Rev Pharmacol Toxicol** 1990;30:149–68 (129 ref.)

The effect of iron on experimental colorectal carcinogenesis. Nelson RL, et al. **Anticancer Res** 1989 Nov-Dec; 9(6):1477–82

Monoclonal antibody to 2-amino-3-methylimidazo(4,5-f)quinoline, a dietary carcinogen. Yanagisawa H, et al. **Appl Biochem Biotechnol** 1990 Jan;23(1):1–13

Evidence for human antibodies that recognize an aflatoxin epitope in groups with high and low exposure to aflatoxins. Autrup H, et al. **Arch Environ Health** 1990 Jan-Feb; 45(1):31–4

Cumulative damage models of additional exposures and host factors. Becker N. **Arch Environ Health** 1989 Sep-Oct; 44(5):331–6

Dietary fructose enhances the development of atypical acinar cell nodules in the pancreas of rats pretreated with N-nitrosomorpholine. Enzmann H, et al. **Arch Geschwulstforsch** 1990;60(4):283–7

Antimutagenesis and anticarcinogenesis mechanisms II. Proceedings of the second international conference. December 4–9, 1988, Ohito, Japan. **Basic Life Sci** 1990; 52:1–485

The non-phorbol ester tumor promoter okadaic acid does not promote morphological transformation or inhibit junctional communication in hamster embryo cells. Rivedal E, et al. **Biochem Biophys Res Commun** 1990 Mar 30; 167(3):1302–8

Mechanisms of anti-carcinogenesis by indole-3-carbinol. Studies of enzyme induction, electrophile-scavenging, and inhibition of aflatoxin B1 activation. Fong AT, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):19–26

Induction of cytochrome P 450 I and its influences in chemical carcinogenesis. Ioannides C. **Biochem Soc Trans** 1990 Feb;18(1):32–4 (9 ref.)

O6-ethylguanine carcinogenic lesions in DNA: an NMR study of O6etG.T pairing in dodecanucleotide duplexes. Kalnik MW, et al. **Biochemistry** 1989 Jul 25;28(15):6170–81

O6-ethylguanine carcinogenic lesions in DNA: an NMR study of O6etG.C pairing in dodecanucleotide duplexes. Kalnik MW, et al. **Biochemistry** 1989 Jul 25;28(15):6182–92

Effects of the tumor promoter 12-O-tetradecanoylphorbol 13-acetate on peroxisomal activities and enzyme activities involved in lipid metabolism in rat liver. Aarsaether N, et al. **Biochim Biophys Acta** 1990 Jan 16;1042(1):86–93

Hexavalent chrome: threshold concept for carcinogenicity. Jones RE. **Biomed Environ Sci** 1990 Mar;3(1):20–34 (69 ref.)

The uniform carcinogenic action of alkylnitrosoureas in Syrian hamsters. Lijinsky W, et al. **Biomed Environ Sci** 1989 Jun;2(2):167–73

Studies of the carcinogenesis and tumorigenesis of skin applications of dodecylbenzene on hairless mice [letter; comment] Assogne CB. **Br J Ind Med** 1990 May; 47(5):356–8 Comment on: Br J Ind Med 1989 Sep;46(9):608–16.

Multistage theory of carcinogenesis: the epidemiological evidence for liver cancer. Kaldor JM, et al. **Bull Cancer (Paris)** 1990;77(5):515–9

Experimental pancreatic cancer: role of species, sex and diet. Longnecker D. **Bull Cancer (Paris)** 1990;77(1):27–37

The effect of endotoxin on 1,2-dimethylhydrazine-induced colonic tumors in rats. Chen MF, et al. **Cancer** 1990 Apr 15;65(8):1748–52

Mechanisms of action of oxidant carcinogens. Cerutti PA. **Cancer Detect Prev** 1989;14(2):281–4 (45 ref.)

Synergistic interactions between chemical carcinogens, tumor promoters, and viruses and their relevance to human liver cancer. Weinstein IB. **Cancer Detect Prev** 1989; 14(2):253–9 (80 ref.)

Tumor growth-promoting effect of immunosuppressive substance in mice. Fujii M, et al. **Cancer Invest** 1989; 7(4):333–8

Comparative tumor initiating activities of cyclopentano and methyl derivatives of 5-methylchrysene and chrysene. Amin S, et al. **Cancer Lett** 1990 May 15;51(1):17–20

Effect of pretreatment with beta-naphthoflavone on tumorigenesis by N-nitrosoethylurea in five mouse strains. Anderson LM, et al. **Cancer Lett** 1990 Jul 16;52(2):91–4

Carcinogenicity studies with deltamethrin in mice and rats. Cabral JR, et al. **Cancer Lett** 1990 Feb;49(2):147–52

Effect of DL-buthionine-S,R-sulfoximine on 1,2-dimethyl-hydrazine-induced colonic tumors in rats. Chen MF, et al. **Cancer Lett** 1990 Mar;49(3):237–42

Mouse skin ornithine decarboxylase induction and tumor promotion by cyclohexane. Gupta KP, et al. **Cancer Lett** 1990 Jun 15;51(3):227–33

Liver tumor promoting ability of corn oil gavage in B6C3F1 male mice. Klaunig JE, et al. **Cancer Lett** 1990 Apr 30; 50(3):215–9

Effect of dietary aromatic isothiocyanates fed subsequent to the administration of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone on lung tumorigenicity in mice. Morse MA, et al. **Cancer Lett** 1990 Mar;49(3):225–30

A study of tobacco carcinogenesis XLIV. Bioassay in A/J mice of some N-nitrosamines. Rivenson A, et al. **Cancer Lett** 1989 Sep 15;47(1-2):111–4

The carcinogenic potential of cocaine. Rosenkranz HS, et al. **Cancer Lett** 1990 Jul 31;52(3):243–6

Enhancing effect of oxymetholone, an anabolic steroid, on development of liver cell foci in rats initiated with N-diethylnitrosamine. Shimoji N, et al. **Cancer Lett** 1990 Feb;49(2):165–8

Carcinogenicity tests of fecapentaene-12 in mice and rats. Weisburger JH, et al. **Cancer Lett** 1990 Feb;49(2):89–98

Enhancement of hydroxylation and deglycosylation of 2'-deoxyguanosine by carcinogenic nickel compounds. Kasprzak KS, et al. **Cancer Res** 1989 Nov 1;49(21):5964–8

Independent mechanisms for tumor promoters phenobarbital and 12-O-tetradecanoylphorbol-13-acetate in reduction of epidermal growth factor binding by rat hepatocytes. Meyer SA, et al. **Cancer Res** 1989 Nov 1;49(21):5907–12

DNA synthesis, apoptosis, and phenotypic expression as determinants of growth of altered foci in rat liver during phenobarbital promotion. Schulte-Hermann R, et al. **Cancer Res** 1990 Aug 15;50(16):5127–35

Mutational activation of the cellular Harvey ras oncogene in rat esophageal papillomas induced by methylbenzylnitrosamine. Wang Y, et al. **Cancer Res** 1990 Mar 1;50(5):1591–5

Mechanisms of action of N-nitroso compounds. Archer MC. **Cancer Surv** 1989;8(2):241–50 (44 ref.)

Are nitrates a significant risk factor in human cancer? Forman D. **Cancer Surv** 1989;8(2):443–58 (77 ref.)

The experimental basis for the role of nitroso compounds in human cancer. Magee PN. **Cancer Surv** 1989;8(2):207–39 (170 ref.)

Adenomatous hyperplasia and adenomas in the lung induced by chronic feeding of butylated hydroxyanisole of Japanese house musk shrew (Suncus murinus). Amo H, et al. **Carcinogenesis** 1990 Jan;11(1):151–4

Malignant conversion of UV radiation and chemically induced mouse skin benign tumors by free-radical-generating compounds. Athar M, et al. **Carcinogenesis** 1989 Oct;10(10):1841–5

Differences in conformations of covalent adducts derived from the binding of 5- and 6-methylchrysene diol epoxide stereoisomers to DNA. Geacintov NE, et al. **Carcinogenesis** 1990 Jun;11(6):985–9

Rapid single-dose model for lung tumor induction in A/J mice by 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone and the effect of diet. Hecht SS, et al. **Carcinogenesis** 1989 Oct;10(10):1901–4

Effects of dietary perilla oil, soybean oil and safflower oil on 7,12-dimethylbenz[a]anthracene (DMBA) and 1,2-dimethyl-hydrazine (DMH)-induced mammary gland and colon carcinogenesis in female SD rats. Hirose M, et al. **Carcinogenesis** 1990 May;11(5):731–5

Steric strain and tumorigenicity: the molecular structure of 3,6-dimethylcholanthrene. Jones DW, et al. **Carcinogenesis** 1989 Oct;10(10):1829–31

Initiation by nickel acetate and promotion by sodium barbital of renal cortical epithelial tumors in male F344 rats. Kasprzak KS, et al. **Carcinogenesis** 1990 Apr;11(4):647–52

Biochemical microanalysis of pyruvate kinase activity in preneoplastic and neoplastic liver lesions induced in rats by N-nitrosomorpholine. Klimek F, et al. **Carcinogenesis** 1990 Aug;11(8):1377–80

Non-B DNA structure: preferential target for the chemical carcinogen glycidaldehyde. Kohwi Y. **Carcinogenesis** 1989 Nov;10(11):2035–42

Differential effects of renal carcinogens and tumor promoters on growth promotion and inhibition of gap junctional communication in two rat renal epithelial cell lines. Konishi N, et al. **Carcinogenesis** 1990 Jun;11(6):903–8

Enhancement of murine hepatocarcinogenesis by all-trans-retinoic acid and two synthetic retinamides. McCormick DL, et al. **Carcinogenesis** 1990 Sep; 11(9):1605–9

Lack of hepatocarcinogenic potential of acetaminophen in rats with liver damage associated with a choline-devoid

diet. Maruyama H, et al. **Carcinogenesis** 1990 Jun; 11(6):895–901

Mutagenic effects of ferric nitrilotriacetate (Fe-NTA) on V79 Chinese hamster cells and its inhibitory effects on cell–cell communication. Nakatsuka S, et al. **Carcinogenesis** 1990 Feb;11(2):257–60

Monoclonal antibody–based immunoassay for the determination of cellular enzymatic activity for repair of specific carcinogen–DNA adducts (O6–alkylguanine). Nehls P, et al. **Carcinogenesis** 1990 Jan;11(1):81–7

Correlation between medium–term liver bioassay system data and results of long–term testing in rats. Ogiso T, et al. **Carcinogenesis** 1990 Apr;11(4):561–6

Detection of (3'-hydroxy)-3,N4–benzetheno–2'–deoxycytidine–3'–phosphate by 32P–postlabeling of DNA reacted with p–benzoquinone. Pongracz K, et al. **Carcinogenesis** 1990 Sep;11(9):1469–72

32P–postlabeling assay for carcinogen–DNA adducts: description of beta shielding apparatus and semi–automatic spotting and washing devices that facilitate the handling of multiple samples. Reddy MV, et al. **Carcinogenesis** 1990 Apr;11(4):683–7

Procarbazine carcinogenicity in methotrexate–treated or lipotrope–deficient male rats. Rogers AE, et al. **Carcinogenesis** 1990 Sep;11(9):1491–5

Carcinogenic properties of N–nitrodimethylamine and N–nitromethylamine in the rat. Scherf HR, et al. **Carcinogenesis** 1989 Nov;10(11):1977–81

Effects produced by the non–genotoxic hepatocarcinogen methylclofenapate in dwarf mice: peroxisome induction uncoupled from DNA synthesis and nuclearity changes. Styles JA, et al. **Carcinogenesis** 1990 Mar;11(3):387–91

Effects on intercellular communication in human keratinocytes and liver–derived cells of polychlorinated biphenyl congeners with differing in vivo promotion activities. Swierenga SH, et al. **Carcinogenesis** 1990 Jun; 11(6):921–6

Effect of resiniferatoxin pretreatment on the inflammatory response to phorbol–12–myristate–13–acetate in mouse strains with different susceptibilities to phorbol ester tumor promotion. Szallasi A, et al. **Carcinogenesis** 1990 Apr; 11(4):583–7

Effects of various prostaglandin synthesis inhibitors on pancreatic carcinogenesis in hamsters after initiation with N–nitrosobis(2–oxopropyl)amine. Takahashi M, et al. **Carcinogenesis** 1990 Mar;11(3):393–5

Detection and characterization of carcinogen–DNA adducts in exfoliated urothelial cells from 4–aminobiphenyl–treated dogs by 32P–postlabelling and subsequent thin–layer and high–pressure liquid chromatography. Talaska G, et al. **Carcinogenesis** 1990 Apr;11(4):639–46

Comparison of initiation potential of 2–amino–3–methylimidazo[4,5–f]quinoline and 2–amino–3,8–dimethylimidazo[4,5–f]quinoxaline in an in vivo carcinogen bioassay system. Tsuda H, et al. **Carcinogenesis** 1990 Apr;11(4):549–52

Formation of 8–hydroxydeoxyguanosine (8–OH–dG) in rat kidney DNA after intraperitoneal administration of ferric nitrilotriacetate (Fe–NTA). Umemura T, et al. **Carcinogenesis** 1990 Feb;11(2):345–7

Correlation between clastogenicity and promotion activity in liver carcinogenesis by N–hydroxy–2–acetylaminofluorene, N–hydroxy–4'–fluoro–4–acetylaminobiphenyl and N–hydroxy–4–acetylaminobiphenyl. van de Poll ML, et al. **Carcinogenesis** 1990 Feb;11(2):333–9

Overexpression of P–glycoprotein in rat hepatocellular carcinomas induced with N–nitrosomorpholine. Volm M, et al. **Carcinogenesis** 1990 Jan;11(1):169–72

Estimation of the dermal carcinogenic activity of petroleum fractions using a modified Ames assay. Blackburn GR, et al. **Cell Biol Toxicol** 1984 Oct;1(1):67–80

Assessment of the carcinogenic potential of a proposed food coloring additive, laccaic acid, using short–term assays. Dube DK, et al. **Cell Biol Toxicol** 1984 Oct;1(1):111–25

Modulation of genotoxic and cytotoxic effects of aromatic amines in monolayers of rat hepatocytes. Holme JA, et al. **Cell Biol Toxicol** 1984 Oct;1(1):95–110

Characterisation of metabolites of the food mutagens 2–amino–3–methylimidazo[4,5–f]quinoline and 2–amino–3,4–dimethylimidazo[4,5–f]quinoline formed after incubation with isolated rat liver cells. Alexander J, et al. **Chem Biol Interact** 1989;72(1–2):125–42

Nucleophilic selectivity and reaction kinetics of chloroethylene oxide assessed by the 4–(p–nitrobenzyl)pyridine assay and proton nuclear magnetic resonance spectroscopy. Barbin A, et al. **Chem Biol Interact** 1990;73(2–3):261–77

Hyperketonaemia markedly modulates the metabolic activation of chemical carcinogens. Barnett CR, et al. **Chem Biol Interact** 1990;74(3):281–9

Studies on the antitumor–promoting activity of naturally occurring substances. II. Inhibition of tumor–promoter–enhanced phospholipid metabolism by umbelliferous materials. Okuyama T, et al. **Chem Pharm Bull (Tokyo)** 1990 Apr;38(4):1084–6

Skin chemical carcinogenesis. Mukhtar H, et al. **Clin Dermatol** 1989 Jul–Sep;7(3):1–10 (35 ref.)

Caution urged in interpretation of zidovudine carcinogenicity study results [news] **Clin Pharm** 1990 Feb;9(2):79, 87

The Ah locus: genetic differences in toxicity, cancer, mutation, and birth defects. Nebert DW. **Crit Rev Toxicol** 1989;20(3):153–74 (192 ref.)

The morphological oncogenic signature. Reorganization of epithelial cytoarchitecture and metabolic regulation by tumor promoters and by transformation. Fey EG, et al. **Dev Biol (N Y 1985)** 1986;3:81–100 (29 ref.)

Tumorigenicity of nickel subsulfide in Strain A/J mice. McNeill DA, et al. **Drug Chem Toxicol** 1990;13(1):71–86

Bioalkylation of benz[a]anthracene as a biochemical probe for carcinogenic activity. Lack of bioalkylation in a series of six noncarcinogenic polynuclear aromatic hydrocarbons. Flesher JW, et al. **Drug Metab Dispos** 1990 Mar–Apr; 18(2):163–7

Possible mechanisms in hepatocarcinogenesis by the peroxisome proliferator di(2–ethylhexyl)phthalate. Conway JG, et al. **Drug Metab Rev** 1989;21(1):65–102 (142 ref.)

Carcinogenicity of general–purpose phthalates: structure–activity relationships. Hirzy JW. **Drug Metab Rev** 1989;21(1):55–63 (8 ref.)

Metabolite–based internal doses used in a risk assessment of benzene. Bailer AJ, et al. **Environ Health Perspect** 1989 Jul;82:177–84

Cancer risk assessment of 1,3–butadiene. Cote IL, et al. **Environ Health Perspect** 1990 Jun;86:149–53 (32 ref.)

Hematotoxicity and carcinogenicity of inhaled benzene. Cronkite EP, et al. **Environ Health Perspect** 1989 Jul; 82:97–108

Multiple–site carcinogenicity of benzene in Fischer 344 rats and B6C3F1 mice. Huff JE, et al. **Environ Health Perspect** 1989 Jul;82:125–63 (219 ref.)

Critical assessment of epidemiologic studies on the human carcinogenicity of 1,3–butadiene. Landrigan PJ. **Environ Health Perspect** 1990 Jun;86:143–7 (27 ref.)

Benzene, an experimental multipotential carcinogen: results of the long–term bioassays performed at the Bologna Institute of Oncology. Maltoni C, et al. **Environ Health Perspect** 1989 Jul;82:109–24

Inhalation toxicology and carcinogenicity of 1,3–butadiene in B6C3F1 mice following 65 weeks of exposure. Melnick RL, et al. **Environ Health Perspect** 1990 Jun;86:27–36

Morphology of neoplastic lesions induced by 1,3–butadiene in B6C3F1 mice. Miller RA, et al. **Environ Health Perspect** 1990 Jun;86:37–48

Inhalation toxicity and carcinogenicity of 1,3–butadiene in Sprague–Dawley rats. Owen PE, et al. **Environ Health Perspect** 1990 Jun;86:19–25

Assessment of the potential risk to workers from exposure to 1,3–butadiene. Turnbull D, et al. **Environ Health Perspect** 1990 Jun;86:159–71 (52 ref.)

Antimutagens and anticarcinogens: a survey of putative interceptor molecules. Hartman PE, et al. **Environ Mol Mutagen** 1990;15(3):145–82 (553 ref.)

Induction of mutagenesis and transformation in BALB/c–3T3 clone A31–1 cells by diverse chemical carcinogens. Lubet RA, et al. **Environ Mol Mutagen** 1990; 16(1):13–20

Measurement of unscheduled DNA synthesis and S–phase synthesis in rodent hepatocytes following in vivo treatment: testing of 24 compounds. Mirsalis JC, et al. **Environ Mol Mutagen** 1989;14(3):155–64

On the question of the carcinogenic action of hydrazine—evaluation on the basis of new experimental results. Steinhoff D, et al. **Exp Pathol** 1990;39(1):1–9

Role of oxygen free radicals in carcinogenesis and brain ischemia. Floyd RA. **FASEB J** 1990 Jun;4(9):2587–97 (51 ref.)

Lifetime toxicity/carcinogenicity study of FD & C Red No. 40 (allura red) in Sprague–Dawley rats. Borzelleca JF, et al. **Food Chem Toxicol** 1989 Nov;27(11):701–5

Two–year oral chronic toxicity and carcinogenicity study in rats of diets fumigated with methyl bromide. Mitsumori K, et al. **Food Chem Toxicol** 1990 Feb;28(2):109–19

Carcinogenic tobacco–specific nitrosamines in Indian tobacco products. Nair J, et al. **Food Chem Toxicol** 1989 Nov; 27(11):751–3

Evidence of potential tumour–initiating and tumour–promoting activities of hickory smoke condensate when given alone or with nitrite to rats. Ohshima H, et al. **Food Chem Toxicol** 1989 Aug;27(8):511–6

Carcinogenicity study of 3,3'-dimethylbenzidine dihydrochloride in BALB/c mice. Schieferstein GJ, et al. **Food Chem Toxicol** 1989 Dec;27(12):801–6

Carcinogenicity study of doxefazepam administered in the diet to Sprague–Dawley rats. Borelli G, et al. **Fundam Appl Toxicol** 1990 Jul;15(1):82–92

Ethylene dichloride: the influence of disulfiram or ethanol on oncogenicity, metabolism, and DNA covalent binding in rats. Cheever KL, et al. **Fundam Appl Toxicol** 1990 Feb; 14(2):243–61

Carcinogenic potential of gasoline and diesel engine oils. McKee RH, et al. **Fundam Appl Toxicol** 1989 Oct; 13(3):545–53

Variability of safe dose estimates when using complicated models of the carcinogenic process. A case study: methylene chloride. Portier CJ, et al. **Fundam Appl Toxicol** 1989 Oct;13(3):533–44

Carcinogenicity of metal alloys in orthopedic prostheses: clinical and experimental studies. Sunderman FW Jr. **Fundam Appl Toxicol** 1989 Aug;13(2):205–16 (102 ref.)

Selective necrosis in dimethylhydrazine–induced rat colon tumors using phthalocyanine photodynamic therapy. Barr H, et al. **Gastroenterology** 1990 Jun;98(6):1532–7

Inhalation carcinogenesis of repeated exposures to high–fired 244CmO2 in rats. Sanders CL, et al. **Health Phys** 1990 May;58(5):631–8

Tumorigenicity study of sodium erythorbate administered orally to mice. Inai K, et al. **Hiroshima J Med Sci** 1989 Sep;38(3):135–9

Some organic solvents, resin monomers and related compounds, pigments and occupational exposures in paint manufacture and painting. **IARC Monogr Eval Carcinog Risks Hum** 1989;47:1–442

3,7–dinitrofluoranthene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:189–94 (12 ref.)

Disperse Blue 1. **IARC Monogr Eval Carcinog Risks Hum** 1990;48:139–48 (19 ref.)

3,9–dinitrofluoranthene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:195–200 (13 ref.)

Xylene. **IARC Monogr Eval Carcinog Risks Hum** 1989; 47:125–56 (198 ref.)

1,3–dinitropyrene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:201–13 (60 ref.)

Disperse Yellow 3. **IARC Monogr Eval Carcinog Risks Hum** 1990;48:149–59 (38 ref.)

1,6–dinitropyrene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:215–30 (82 ref.)

Cyclohexanone. **IARC Monogr Eval Carcinog Risks Hum** 1989;47:157–69 (65 ref.)

1,8–dinitropyrene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:231–46 (91 ref.)

Vat Yellow 4. **IARC Monogr Eval Carcinog Risks Hum** 1990; 48:161–8 (18 ref.)

7–nitrobenz[a]anthracene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:247–53

Dimethylformamide. **IARC Monogr Eval Carcinog Risks Hum** 1989;47:171–97 (178 ref.)

6–nitrobenzo[a]pyrene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:255–66 (54 ref.)

5–Nitro–ortho–toluidine. **IARC Monogr Eval Carcinog Risks Hum** 1990;48:169–77 (32 ref.)

6–nitrochrysene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:267–76 (34 ref.)

Morpholine. **IARC Monogr Eval Carcinog Risks Hum** 1989; 47:199–213 (64 ref.)

2–nitrofluorene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:277–89 (77 ref.)

Nitrilotriacetic acid and its salts. **IARC Monogr Eval Carcinog Risks Hum** 1990;48:181–212 (113 ref.)

1–nitronaphthalene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:291–301 (55 ref.)

1,2–Epoxybutane. **IARC Monogr Eval Carcinog Risks Hum** 1989;47:217–28 (61 ref.)

1–nitronaphthalene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:303–12 (52 ref.)

Chlorendic acid. **IARC Monogr Eval Carcinog Risks Hum** 1990;48:45–53 (25 ref.)

3–nitroperylene. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:313–9 (22 ref.)

Bis(2,3–epoxycyclopentyl)ether. **IARC Monogr Eval Carcinog Risks Hum** 1989;47:231–6

1–nitropyrene. **IARC Monogr Eval Carcinog Risks Hum** 1989; 46:321–58 (208 ref.)

Chlorinated paraffins. **IARC Monogr Eval Carcinog Risks Hum** 1990;48:55–72 (38 ref.)

2–nitropyrene. **IARC Monogr Eval Carcinog Risks Hum** 1989; 46:359–65 (17 ref.)

Some glycidyl ethers. **IARC Monogr Eval Carcinog Risks Hum** 1989;47:237–61 (99 ref.)

4–nitropyrene. **IARC Monogr Eval Carcinog Risks Hum** 1989; 46:367–73 (17 ref.)

Decabromodiphenyl oxide. **IARC Monogr Eval Carcinog Risks Hum** 1990;48:73–84 (35 ref.)

Phenol. **IARC Monogr Eval Carcinog Risks Hum** 1989; 47:263–87 (167 ref.)

Dimethyl hydrogen phosphite. **IARC Monogr Eval Carcinog Risks Hum** 1990;48:85–93 (20 ref.)

Antimony trioxide and antimony trisulfide. **IARC Monogr Eval Carcinog Risks Hum** 1989;47:291–305 (164 ref.)

Tetrakis(hydroxymethyl) phosphonium salts. **IARC Monogr Eval Carcinog Risks Hum** 1990;48:95–107 (26 ref.)

Titanium dioxide. **IARC Monogr Eval Carcinog Risks Hum** 1989;47:307–26 (82 ref.)

Some flame retardants and textile chemicals, and exposures in the textile manufacturing industry.

IARC Monogr Eval Carcinog Risks Hum 1990;48:1–278
Toluene. **IARC Monogr Eval Carcinog Risks Hum** 1989; 47:79–123 (319 ref.)
Tris(2–chloroethyl) phosphate.
IARC Monogr Eval Carcinog Risks Hum 1990;48:109–20 (44 ref.)
para–Chloro–ortho–toluidine and its strong acid salts.
IARC Monogr Eval Carcinog Risks Hum 1990;48:123–37 (56 ref.)
Cross index of synonyms and trade names in volumes 1 to 46. **IARC Monogr Eval Carcinog Risks Hum Suppl** 1989; 8:1–346
Comparative transplacental carcinogenesis by directly acting and metabolism–dependent alkylating agents in rodents and nonhuman primates. Rice JM, et al. **IARC Sci Publ** 1989; (96):17–34
Epidemiological aspects of the relationship between exposure to silica dust and lung cancer. Simonato L, et al.
IARC Sci Publ 1990;(97):1–5 (11 ref.)
Animal models of prenatal exposure to diethylstilboestrol. Walker BE. **IARC Sci Publ** 1989;(96):349–64 (104 ref.)
Differences in c–myc and pvt–1 amplification in SEWA sarcoma sublines selected for adherent or non–adherent growth. Minarovits J, et al. **Int J Cancer** 1990 Mar 15; 45(3):514–20
Carcinogenicity of trioxsalen bath PUVA [letter] Hannuksela M, et al. **J Am Acad Dermatol** 1989 Oct;21(4 Pt 1):813–4
An evaluation of the epidermal carcinogenic potential of cutting fluids. McKee RH, et al. **J Appl Toxicol** 1990 Aug; 10(4):251–6
Energy minimized structures of carcinogen–DNA adducts: 2–acetylaminofluorene and 2–aminofluorene. Hingerty BE, et al. **J Biomol Struct Dyn** 1986 Dec;4(3):365–72
Long–term persistence of DNA alkylation in hamster tissues after N–nitrosobis(2–oxopropyl)amine. Bax J, et al.
J Cancer Res Clin Oncol 1990;116(2):149–55
Effects of tobacco–specific nitrosamines and snuff extract on cell proliferation and activities of ornithine decarboxylase and aryl hydrocarbon hydroxylase in mouse tongue primary epithelial cell cultures. Gijare PS, et al.
J Cancer Res Clin Oncol 1989;115(6):558–63
A host–mediated in vivo/in vitro assay with peritoneal murine macrophages for the detection of carcinogenic chemicals. Massa T, et al. **J Cancer Res Clin Oncol** 1990; 116(4):357–64
Inhibition of benzoyl peroxide–mediated tumor promotion in 7,12–dimethylbenz(a)anthracene–initiated skin of Sencar mice by antioxidants nordihydroguaiaretic acid and diallyl sulfide. Athar M, et al. **J Invest Dermatol** 1990 Feb; 94(2):162–5
Pancreatic response in rats and mice to trypsin inhibitors from soy and potato after short– and long–term dietary exposure. Gumbmann MR, et al. **J Nutr** 1989 Nov;119(11):1598–609
Toxicology and carcinogenesis studies of dietary titanium dioxide–coated mica in male and female Fischer 344 rats [corrected and republished article originally printed in J Toxicol Environ Health 1990;29(4):415–26] Bernard BK, et al. **J Toxicol Environ Health** 1990;29(4):417–29
Comparison of the effects of bilobol and 12–O–tetradecanoylphorbol–13–acetate on skin, and test of tumor promoting potential of bilobol in CD–1 mice. Matsumoto K, et al. **J Toxicol Sci** 1990 Feb;15(1):39–46
Carcinogenicity of
2–amino–3–methylimidazo[4,5–f]quinoline in nonhuman primates: induction of tumors in three macaques. Adamson RH, et al. **Jpn J Cancer Res** 1990 Jan;81(1):10–4
Molecular basis of 4–nitroquinoline 1–oxide carcinogenesis. Bailleul B, et al. **Jpn J Cancer Res** 1989 Aug;80(8):691–7 (56 ref.)
Dose–response carcinogenicity in rats on low–dose levels of N–ethyl–N–nitrosourethane. Maekawa A, et al.
Jpn J Cancer Res 1989 Jul;80(7):632–6
Early gastric cancer induced by
N–ethyl–N'–nitro–N–nitrosoguanidine in a cynomolgus monkey six years after initial diagnosis of the lesion. Szentirmay Z, et al. **Jpn J Cancer Res** 1990 Jan;81(1):6–9
Synergism between sodium chloride and sodium taurocholate and development of pepsinogen–altered pyloric glands: relevance to a medium–term bioassay system for gastric carcinogens and promoters in rats. Tatematsu M, et al.
Jpn J Cancer Res 1989 Nov;80(11):1035–40
Induction of growth factor–receptor and metalloproteinase genes by epidermal growth factor and/or transforming growth factor–alpha in human gastric carcinoma cell line MKN–28. Yoshida K, et al. **Jpn J Cancer Res** 1990 Aug; 81(8):793–8
Is excess iron carcinogenic? [editorial] Reizenstein P.
Med Oncol Tumor Pharmacother 1990;7(1):1–2
Chemical carcinogens and ras gene activation. Brookes P. **Mol Carcinog** 1989;2(6):305–7
Induction of –2 frameshift mutations within alternating GC sequences by carcinogens that bind to the C8 position of guanine residues: development of a specific mutation assay. Bintz R, et al. **Mol Gen Genet** 1990 May;221(3):331–8
Analysis of the National Toxicology Program data on in vitro genetic toxicity tests using multivariate statistical methods. Benigni R. **Mutagenesis** 1989 Nov;4(6):412–9
Prediction of probability of carcinogenicity for a set of ongoing NTP bioassays. Enslein K, et al. **Mutagenesis** 1990 Jul;5(4):305–6
Genotoxic carcinogenic risk of a new non–tobacco–burning cigarette. Rosenkranz HS, et al. **Mutagenesis** 1989 Sep; 4(5):377–80
'Cryptic' mutagens and carcinogenicity. Rosenkranz HS, et al. **Mutagenesis** 1990 Mar;5(2):199–202 (19 ref.)
Structural alerts to genotoxicity: the interaction of human and artificial intelligence. Rosenkranz HS, et al.
Mutagenesis 1990 Jul;5(4):333–61
Prediction of the outcome of rodent carcinogenicity bioassays currently being conducted on 44 chemicals by the National Toxicology Program. Tennant RW, et al. **Mutagenesis** 1990 Jan;5(1):3–14 (36 ref.)
European Environmental Mutagen Society. Selected abstracts of the 18th annual meeting. 3–8 October 1988, Varna (Bulgaria). **Mutat Res** 1989 Oct;216(5):267–317
Studies on the genotoxicity of beryllium sulphate in vitro and in vivo. Ashby J, et al. **Mutat Res** 1990 Mar; 240(3):217–25
Quantitative structure–activity relationships: principles, and applications to mutagenicity and carcinogenicity. Benigni R, et al. **Mutat Res** 1989 Nov;221(3):197–216 (88 ref.)
Rodent tumor profiles, Salmonella mutagenicity and risk assessment. Benigni R. **Mutat Res** 1990 May;244(1):77–91
Mutagenic activity in regional foods and beverages from the Venezuelan Andean region. Brito MT, et al. **Mutat Res** 1990 Feb;243(2):115–20
Correlations between bioassay dose–level, mutagenicity to Salmonella, chemical structure and sites of carcinogenesis among 226 chemicals evaluated for carcinogenicity by the U.S. NTP. Brown LP, et al. **Mutat Res** 1990 May; 244(1):67–76
Evaluation of the mutagenicity and the tumor–promoting activity of parasite extracts: Schistosoma japonicum and Clonorchis sinensis. Ishii A, et al. **Mutat Res** 1989 Oct; 224(2):229–33
Genotoxic effects of estrogens. Liehr JG. **Mutat Res** 1990 May;238(3):269–76 (42 ref.)
Review of the genotoxicity and carcinogenicity of 4,4'–methylene–dianiline and
4,4'–methylene–bis–2–chloroaniline. McQueen CA, et al. **Mutat Res** 1990 Sep;239(2):133–42 (90 ref.)
Induction of anchorage–independent growth in human diploid fibroblasts by the cyclopenta–polycyclic aromatic hydrocarbon, benz[l]aceanthrylene. Nesnow S, et al.
Mutat Res 1990 Jul;244(3):221–5
An association between mutagenicity and carcinogenic potency. Rosenkranz HS, et al. **Mutat Res** 1990 May; 244(1):61–5
Novel structural concepts in elucidating the potential genotoxicity and carcinogenicity of tetrandrine, a traditional herbal drug. Rosenkranz HS, et al.
Mutat Res 1990 Aug;244(4):265–71
Genotoxic effects of fluoride [letter] Smith GE.
Mutat Res 1990 Jul;241(3):339–40
Antimutagenicity profiles for some model compounds. Waters MD, et al. **Mutat Res** 1990 Jan;238(1):57–85 (135 ref.)
Structure–activity relationships in the rat hepatocyte DNA–repair test for 300 chemicals. Williams GM, et al.
Mutat Res 1989 Nov;221(3):263–86 (114 ref.)
Dealing with data. Lennard PR. **Nature** 1990 Sep 6; 347(6288):104–6
Dietary olive and safflower oils in promotion of DMBA–induced mammary tumorigenesis in rats. Lasekan JB, et al. **Nutr Cancer** 1990;13(3):153–63
v–myc and v–raf act synergistically to induce B–cell tumors in pristane–primed adult BALBC mice. Kurie JM, et al.
Oncogene 1990 Apr;5(4):577–82
Influence of incomplete bile duct obstruction on the occurrence of cholangiocarcinoma induced by diisopropanolnitrosamine in hamsters. Kinami Y, et al.
Oncology 1990;47(2):170–6
Genetic and cellular basis of multistep carcinogenesis. Boyd JA, et al. **Pharmacol Ther** 1990;46(3):469–86 (248 ref.)
Carcinogenic potential of cooked food mutagens (IQ and MeIQ) in Wistar rats after short–term exposure. Kristiansen E, et al. **Pharmacol Toxicol** 1989 Nov;65(5):332–5
Photolytic covalent binding of indoleacrylic acid to DNA. Farrow SJ, et al. **Photochem Photobiol** 1990 Mar; 51(3):263–71
Electrophilicity of nongenotoxic carcinogens and genotoxic noncarcinogens as measured by the ke test. Bakale G, et al. **Prog Clin Biol Res** 1990;340D:355–65
Research opportunities and reducing uncertainty. Farland WH. **Prog Clin Biol Res** 1990;331:409–14
Carcinogenesis of foods. Knudsen I, et al.
Prog Clin Biol Res 1990;340E:179–87 (11 ref.)
Organ specific genotoxicity and carcinogenicity. Pool BL, et al. **Prog Clin Biol Res** 1990;340D:33–41
Identification of rodent carcinogens by an expert system. Rosenkranz HS, et al. **Prog Clin Biol Res** 1990;340B:23–48
Do rats comply with EPA policy on cancer risk assessment for formaldehyde? Brown LP. **Regul Toxicol Pharmacol** 1989 Oct;10(2):196–200
Important recent advances in the practice of health risk assessment: implications for the 1990s. Paustenbach DJ.
Regul Toxicol Pharmacol 1989 Dec;10(3):204–43 (233 ref.)
Tumor induction in mice administered neonatally with 1,2–dimethylhydrazine. Fujii K, et al.
Sci Rep Res Inst Tohoku Univ [Med] 1989 Dec; 36(1–4):46–50
Chromium carcinogenicity: California strategies. Alexeeff GV, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):159–68
Carcinogenic risk assessment criteria associated with inhalation of airborne particulates containing chromium (VI/III). Friess SL. **Sci Total Environ** 1989 Oct 1; 86(1–2):109–12
Evaluation of issues relating to the carcinogen risk assessment of chromium. Gibb H, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):181–6 (17 ref.)
Development of the revised drinking water standard for chromium. Goldhaber S, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):43–51
Role of epidemiologic studies in evaluating the carcinogenicity of chromium compounds. Hathaway JA.
Sci Total Environ 1989 Oct 1;86(1–2):169–79 (37 ref.)
Carcinogenic effects of some polycyclic aromatic hydrocarbons on the Japanese medaka and guppy in waterborne exposures. Hawkins WE, et al.
Sci Total Environ 1990 May 1;94(1–2):155–67
Inorganic chemistry of chromium and its speciation in Whetlerite. Katz SA, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):53–7
Current carcinogen perspectives: De minimis, Delaney and decisions. Weisburger EK. **Sci Total Environ** 1989 Oct 1; 86(1–2):5–13 (22 ref.)
Molecular basis of hexavalent chromium carcinogenicity: effect on gene expression. Wetterhahn KE, et al.
Sci Total Environ 1989 Oct 1;86(1–2):113–29
Testing for carcinogens with rodents [editorial] Abelson PH.
Science 1990 Sep 21;249(4975):1357
Too many rodent carcinogens: mitogenesis increases mutagenesis. Ames BN, et al. **Science** 1990 Aug 31; 249(4972):970–1 (9 ref.)
Nitrous oxide: a cause of cancer or chemotherapeutic adjuvant? Koblin DD. **Semin Surg Oncol** 1990;6(3):141–7 (56 ref.)
H2–receptor blockade induces peptide YY and enteroglucagon–secreting gastric carcinoids in mastomys. Bilchik AJ, et al. **Surgery** 1989 Dec;106(6):1119–26; discussion 1026–7
Development and application of biomarkers exploitable for human exposure monitoring. De Flora S.
Teratogenesis Carcinog Mutagen 1990;10(3):211–4 (29 ref.)
Tumor promotion: models and assay systems. Fitzgerald DJ, et al. **Teratogenesis Carcinog Mutagen** 1990;10(2):89–102 (105 ref.)
Species differences in carcinogenicity: the role of metabolism in human risk evaluation. Green T.
Teratogenesis Carcinog Mutagen 1990;10(2):103–13 (41 ref.)
Micronucleus formation by benzene, cyclophosphamide, benzo(a)pyrene, and benzidine in male, female, pregnant female, and fetal mice. Harper BL, et al.
Teratogenesis Carcinog Mutagen 1989;9(4):239–52
Biochemical studies of promoters of carcinogenesis in rat liver. Kitchin KT, et al.
Terstogenesis Carcinog Mutagen 1989;9(5):273–85
Cytotoxicity, anchorage–independent growth, and DNA adduct formation in human neonatal fibroblasts by 1,2,3,4–tetrahydro–7,12–dimethylbenz(a)–anthracene (TH–DMBA), its six aryl fluoro regioisomers, and an exo methylene tautomer. Kumari HL, et al.
Teratogenesis Carcinog Mutagen 1990;10(3):247–62
Biological monitoring—consider the alternatives. Legator MS. **Teratogenesis Carcinog Mutagen** 1990;10(3):209–10 (4 ref.)
Induction of sister chromatid exchange in multiple murine tissues in vivo by various methylating agents. Neft RE, et al. **Teratogenesis Carcinog Mutagen** 1989;9(4):219–37
New structural concepts for predicting carcinogenicity in rodents: an artificial intelligence approach. Rosenkranz HS, et al. **Teratogenesis Carcinog Mutagen** 1990;10(2):73–88 (51 ref.)
Cytogenetic surveillance of workers exposed to genotoxic chemicals: preliminary experiences from a prospective cancer study in a cytogenetic cohort. Sorsa M, et al.
Teratogenesis Carcinog Mutagen 1990;10(3):215–21 (13 ref.)
Absence of DNA damage–mediated induction of human methyltransferase specific for precarcinogenic O6–methylguanine. Wani G, et al.
Teratogenesis Carcinog Mutagen 1989;9(5):259–72
Species and strain sensitivity to the induction of peroxisome proliferation by chloroacetic acids. DeAngelo AB, et al.
Toxicol Appl Pharmacol 1989 Nov;101(2):285–98
Formaldehyde: an experimental multipotential carcinogen. Soffritti M, et al. **Toxicol Ind Health** 1989 Oct;5(5):699–730
Selecting experimental data for use in quantitative risk assessment: an expert–judgement approach. Wolff SK, et al. **Toxicol Ind Health** 1990 Mar;6(2):275–91
Evaluation of uncertainty in input parameters to pharmacokinetic models and the resulting uncertainty in output. Farrar D, et al. **Toxicol Lett** 1989 Dec; 49(2–3):371–85 (14 ref.)
Use of rat liver altered focus models for testing chemicals that have completed two–year carcinogenicity studies. Maronpot RR, et al. **Toxicol Pathol** 1989;17(4 Pt 1):651–62
Hemangioendothelial sarcoma in brown adipose tissue of mouse induced by carcinogenic heterocyclic amine, Glu–P–1. Sakamoto M, et al. **Toxicol Pathol** 1989;17(4 Pt 2):754–8
Effects of non–genotoxic hepatocarcinogens phenobarbital and nafenopin on phenotype and growth of different populations of altered foci in rat liver. Schulte–Hermann R, et al. **Toxicol Pathol** 1989;17(4 Pt 1):642–9; discussion 649–50
Aflatoxin production in cultures of Aspergillus flavus

incubated in atmospheres containing selected cotton leaf-derived volatiles. Zeringue HJ Jr, et al. **Toxicon** 1990; 28(4):445–8

Age-related changes in biotransformation of azoxymethane and methylazoxymethanol in vitro. McMahon TF, et al. **Xenobiotica** 1990 May;20(5):501–13

[Role of tumor-promotors—mechanisms and inhibition] Yu LJ, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jun;69(6):355–7 (20 ref.) **(Chi)**

[Expression of cellular oncogenes during hepatocarcinogenesis in rats] Li S. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1990 Apr; 12(2):121–5 (Eng. Abstr.) **(Chi)**

[A new approach to predict carcinogenicity of chemicals quantitatively—ratio estimate method] Xu LL. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Mar;20(1):13–6 (Eng. Abstr.) **(Chi)**

[Possibilities of chemical detoxification of aflatoxin] Dvořák M. **Vet Med (Praha)** 1990 Jan;35(1):37–42 (Eng. Abstr.) **(Cze)**

[Cancer in children—relationship with the occupational exposure to physical, chemical and/or biological agents of the parents?] De Quint P. **Arch Belg** 1989;47(1–4):113–7 (Eng. Abstr.) **(Dut)**

[Dietary lipids and experimental colonic carcinogenesis. Critical review of the literature] Wilpart M. **Acta Gastroenterol Belg** 1989 Jul–Oct;51(4–5):357–64 (25 ref.) (Eng. Abstr.) **(Fre)**

[The relation between carcinogenesis and mutagenesis: a re-evaluation] Bartsch H, et al. **Bull Acad Natl Med** 1989 Nov;173(8):1005–12; discussion 1013–5 (Eng. Abstr.) **(Fre)**

[A survey of carcinogenic chemical agents and their dangers in modern life] Truhaut R. **Bull Acad Natl Med** 1989 Nov; 173(8):991–6; discussion 1013–5 (23 ref.) **(Fre)**

[Carcinogenesis in humans: a multistage and multifactorial process] Tubiana M. **Bull Acad Natl Med** 1989 Nov; 173(8):997–1002; discussion 1002–4, 1013–5 (11 ref.) (Eng. Abstr.) **(Fre)**

[Hepatic tumor promotion—role of environmental factors. A symposium. Paris, April 27–28, 1989. Proceedings] **Bull Cancer (Paris)** 1990;77(5):453–519 **(Fre)**

[Role of protein kinase C in cell regulation and tumor promotion] Castagna M, et al. **Bull Cancer (Paris)** 1990; 77(5):489–94 (Eng. Abstr.) **(Fre)**

[Value of iron in tumor promotion] Mitjavila S. **Bull Cancer (Paris)** 1990;77(5):503–4 **(Fre)**

[Recent progress in the evaluation of the dangers of chemical carcinogens] Truhaut R. **J Pharm Belg** 1990 Mar–Apr; 45(2):131–40 (23 ref.) (Eng. Abstr.) **(Fre)**

[Carcinogens] Bonard EC. **Rev Med Suisse Romande** 1989 Oct;109(10):841–2 **(Fre)**

[Attempts at analyzing the initiation of the initial processes of carcinogenesis based on the Xiphophorus melanoma model] Anders A, et al. **Arch Geschwulstforsch** 1990; 60(4):249–63 (Eng. Abstr.) **(Ger)**

[Evaluation of the relative potency of carcinogens: a critique of the HERP index] Boffetta P, et al. **Med Lav** 1989 Nov–Dec;80(6):458–66 (27 ref.) (Eng. Abstr.) **(Ita)**

[Clinical problems in patients who were exposed to carcinogens] Kotake T. **Hinyokika Kiyo** 1989 Dec; 35(12):2063–7 (Eng. Abstr.) **(Jpn)**

[Modifying effects of beraprost sodium (TRK-100) on N-methyl-N-nitrosourea (MNU) carcinogenesis in F344 rats] Kurata Y, et al. **J Toxicol Sci** 1989 Aug;14 Suppl 1:1–39 (Eng. Abstr.) **(Jpn)**

[Characteristics of genotoxic and carcinogenic action of metals] Maksimchuk TP, et al. **Eksp Onkol** 1990;12(4):3–9 (50 ref.) (Eng. Abstr.) **(Rus)**

[Effects of cortiphen and cyclophosphamide in uterine sarcoma induced primarily by 1,2-dimethylhydrazine and estradiol dipropionate in CBA mice] Merkulova IB, et al. **Eksp Onkol** 1990;12(1):68–70 (Eng. Abstr.) **(Rus)**

[Mutagenicity of natural-origin agents carcinogenic to humans] Nersesian AK. **Eksp Onkol** 1990;12(1):3–6 (50 ref.) (Eng. Abstr.) **(Rus)**

[1,2-dimethylhydrazine induction of epithelial tumors of the kidneys in CBA strain mice] Turusov VS, et al. **Eksp Onkol** 1990;12(3):71–4 (Eng. Abstr.) **(Rus)**

[Inhibiting effect of the polyphenolic complex from Plantago major (plantastine) on the carcinogenic effect of endogenously synthesized nitrosodimethylamine] Karpilovskaia ED, et al. **Farmakol Toksikol** 1989 Jul–Aug; 52(4):64–7 (Eng. Abstr.) **(Rus)**

[Mutagenicity, genotoxicity and carcinogenicity of ZM anion brown dye] Kulagina TF, et al. **Gig Tr Prof Zabol** 1990; (3):26–8 **(Rus)**

[Characteristics of action of precursors of carcinogenic nitroso-compounds on cell cultures] Osin'kovskaia ND, et al. **Tsitologiia** 1989 Jul;31(7):818–23 (Eng. Abstr.) **(Rus)**

[Induction of renal tumors in monkeys as a result of probable prenatal effects of 1,2-dimethylhydrazine] Beniashvili DSh. **Vopr Onkol** 1989;35(12):1450–4 (Eng. Abstr.) **(Rus)**

[Statistical methods in the study of carcinogenicity in animal experiments] Maksimovich DM, et al. **Vopr Onkol** 1990; 36(3):276–85 (38 ref.) **(Rus)**

[The inhibitory effect of ascorbic acid on the estrogen-stimulated promotion of uterine sarcoma development in mice] Trukhanova LS, et al. **Vopr Onkol** 1990;36(5):563–7 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Dose-response relationships in rodents of promoter carcinogens: a tentative interpretation of some downward trends. Bucchi AR, et al. **Biomed Environ Sci** 1988 Aug; 1(2):184–93

Inhibition of morphological transformation of C3H10T1/2CL8 mouse embryo cells by multiple carcinogen treatments. Nesnow S, et al. **Cancer Lett** 1989 Sep 15;47(1–2):91–7

Choice of dose measure for extrapolating carcinogenic risk from animals to humans: an empirical investigation of 23 chemicals. Crump K, et al. **Health Phys** 1989;57 Suppl 1:387–93

Combination effects of forty carcinogens administered at low doses to male rats. Takayama S, et al. **Jpn J Cancer Res** 1989 Aug;80(8):732–6

Sustained-release endobronchial carcinogenic implants. Shors EC, et al. **Surg Forum** 1978;29:205–7

[Selective induction of dog esophageal carcinomas by the restricted oral administration of N-ethyl-N-'-nitro-N-nitrosoguanidine with a projecting spout] Tsukahara Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Aug;90(8):1161–9 (Eng. Abstr.) **(Jpn)**

ANALYSIS

On borderline statistical significance [letter; comment] Reasor MJ. **Am J Public Health** 1990 Aug;80(8):1002–3 Comment on: Am J Public Health 1989 Oct;79(10):1381–4.

Fluorescence line-narrowing spectroscopy in the study of chemical carcinogenesis. Jankowiak R, et al. **Anal Chem** 1989 Sep 15;61(18):1023A–1024A, 1026A–1029A, 1031A–103

Gas chromatographic-mass spectrometric investigation of four commercial pristane (2.6.10.14-tetramethylpentadecane) preparations used for plasmacytoma induction in BALB/c mice. Janz S, et al. **Arch Geschwulstforsch** 1989;59(6):415–22

Distribution of tumor promoters in lipid membranes and changes in membrane structure. Nam KY, et al. **Biophys Chem** 1989 Sep 15;34(1):43–53

Mass spectrometric analysis of tobacco-specific nitrosamine hemoglobin adducts in snuff dippers, smokers, and nonsmokers. Carmella SG, et al. **Cancer Res** 1990 Sep 1; 50(17):5438–45

Screening prescription drugs for possible carcinogenicity: eleven to fifteen years of follow-up. Selby JV, et al. **Cancer Res** 1989 Oct 15;49(20):5736–47

Polycyclic aromatic hydrocarbon-DNA adducts in spontaneously aborted fetal tissue. Hatch MC, et al. **Carcinogenesis** 1990 Sep;11(9):1673–5

Detection of carcinogenic glutamic acid pyrolysis products in cigarette smoke condensate. Kanai Y, et al. **Carcinogenesis** 1990 Jun;11(6):1001–3

Alkyl and aryl carcinogen adducts detected in human peripheral lung. Wilson VL, et al. **Carcinogenesis** 1989 Nov; 10(11):2149–53

Identification of carcinogenic tryptophan pyrolysis products in human bile by high-performance liquid chromatography. Manabe S, et al. **Environ Mol Mutagen** 1990;15(4):229–35

Polycyclic aromatic hydrocarbons in Dutch total diet samples (1984–1986). de Vos RH, et al. **Food Chem Toxicol** 1990 Apr;28(4):263–8

Aflatoxin B1 formamidopyrimidine adducts in human hepatocarcinogenesis: a preliminary report. Lee HS, et al. **Gastroenterology** 1989 Nov;97(5):1281–7

Analysis of a carcinogen, 4,4'-methylenedianiline, from thermosetting polyurethane during sterilization. Shintani H, et al. **J Anal Toxicol** 1989 Nov–Dec;13(6):354–7

Improved immunocytochemical staining of carcinogen-DNA adducts by a capillary slot block system. Scherer E, et al. **J Histochem Cytochem** 1990 Mar; 38(3):433–6

Immunologic methods for the detection of carcinogen adducts in humans. Santella RM, et al. **Prog Clin Biol Res** 1990;340C:247–57 (26 ref.)

Quantitative pattern recognition for structure-carcinogenic activity relationship of N-nitroso compounds based upon Di-region theory. Dai QH, et al. **Sci China [B]** 1989 Jul; 32(7):776–90

Carcinogenic and genotoxic activity of extracts from contaminated sediments in western Lake Ontario. Metcalfe CD, et al. **Sci Total Environ** 1990 May 1;94(1–2):125–41

[A rapid and simple approach for radioimmunochemical determination of aflatoxin B1 in cereals and feed using a commercial analysis kit] Fukal L. **Vet Med (Praha)** 1990 Feb;35(2):113–7 (Eng. Abstr.) **(Cze)**

[Cultured biliary tract epithelial cells/alkaline and neutral elution as a model for the detection of carcinogens to the biliary tract epithelium] Miyazaki K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Nov;86(11):2540–4 (Eng. Abstr.) **(Jpn)**

CHEMICAL SYNTHESIS

Synthesis of heterocyclic N-acetoxyarylamines and their reactivity with DNA. Lutgerink JT, et al. **Carcinogenesis** 1989 Oct;10(10):1957–60

CLASSIFICATION

Value-of-information analysis of testing strategies: estimating the effect of uncertainty about the proportion of chemicals that are true human carcinogens. Ennever FK, et al. **Prog Clin Biol Res** 1990;340D:295–304

Carcinogenic potency and interspecies extrapolation. Krewski D, et al. **Prog Clin Biol Res** 1990;340D:323–34 (35 ref.)

[Evaluation of carcinogenic risk at the international (International Agency for Research on Cancer—World Health Organization) and the Czechoslovak level. A basis for consideration prior to amending Guideline no. 64/1984 on hygienic principles in working with chemical carcinogens] Srb V. **Cas Lek Cesk** 1989 Aug 18; 128(34):1057–64 (Eng. Abstr.) **(Cze)**

HISTORY

Environmental carcinogens—Percivall Pott revisited. Greene FL. **J S C Med Assoc** 1990 May;86(5):328

ISOLATION & PURIFICATION

Assay of suntan lotions for the carcinogenic, non-volatile N-nitrosamine N-nitrosodiethanolamine [published erratum appears in Cancer Lett 1990 Aug;53(1):79] Westin JB, et al. **Cancer Lett** 1990 Apr 20;50(2):157–60

[Effectiveness of a device for reducing the level of carcinogenic pollution caused by automobile exhaust] Kireev GV, et al. **Gig Sanit** 1989 Dec;(12):81–2 **(Rus)**

METABOLISM

Interconversion of aflatoxin B1 and aflatoxicol by several fungi. Nakazato M, et al. **Appl Environ Microbiol** 1990 May; 56(5):1465–70

Prevention of formation of important mutagens/carcinogens in the human food chain. Weisburger JH, et al. **Basic Life Sci** 1990;52:105–18 (71 ref.)

Photoaffinity labeling of protein phosphatase 2A, the receptor for a tumor promoter okadaic acid, by [27-3H]methyl 7-O-(4-azidobenzoyl)okadaate. Nishiwaki S, et al. **Biochem Biophys Res Commun** 1990 Aug 16; 170(3):1359–64

Effect of ethanol on hepatotoxicity and hepatic DNA-binding of aflatoxin B1 in rats. Wang CJ, et al. **Biochem Pharmacol** 1990 Aug 15;40(4):715–21

Simulation of the hepatic metabolism of stilbene and its tricyclic derivatives by Fenton and Ruff reagents: models for cytochrome P-450 activation of chemical carcinogens. Zbaida S, et al. **Biopharm Drug Dispos** 1990 Jan–Feb; 11(1):39–51

Effect of tobacco extract and N'-nitrosonornicotine on the carcinogen metabolising enzymes under different dietary vitamin B status [published erratum appears in Cancer Lett 1990 Aug;53(1):79] Ammigan N, et al. **Cancer Lett** 1990 Jul 16;52(2):153–9

Modulation by some natural carotenoids of DNA adduct formation by aflatoxin B1 in vitro. Goswami UC, et al. **Cancer Lett** 1989 Sep 15;47(1–2):127–32

Effect of enzyme inducers on the metabolism of 2-amino-3-methylimidazo[4,5-f]quinoline (IQ) in the rat. Vavrek MT, et al. **Cancer Lett** 1989 Dec;48(3):183–8

Comparative formation and removal of aflatoxin B1-DNA adducts in cultured mammalian tracheal epithelium. Ball RW, et al. **Cancer Res** 1990 Aug 15;50(16):4918–22

Evaluation of cysteine adduct formation in rat hemoglobin by 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone and related compounds. Carmella SG, et al. **Cancer Res** 1990 Sep 1;50(17):5453–9

Androgen-dependent renal microsomal cytochrome P-450 responsible for N-hydroxylation and mutagenic activation of 3-methoxy-4-aminoazobenzene in the BALB/c mouse. Degawa M, et al. **Cancer Res** 1990 May 1;50(9):2729–33

Metabolic activation of aflatoxin B1 and 2-amino-3-methylimidazo[4,5-f]-quinoline by human adult and fetal livers. Kitada M, et al. **Cancer Res** 1990 May 1;50(9):2641–5

Metabolism and DNA single strand breaks induced by 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone and its analogues in primary culture of rat hepatocytes. Liu LL, et al. **Cancer Res** 1990 Mar 15;50(6):1810–6

Oxidation and DNA binding of (+)-7,8-dihydroxy-7,8-dihydrobenzo(a)pyrene in mouse epidermis in vivo and effects of coadministration of catechol. Melikian AA, et al. **Cancer Res** 1990 Mar 15; 50(6):1795–9

Effects of indole-3-carbinol on lung tumorigenesis and DNA methylation induced by 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) and on the metabolism and disposition of NNK in A/J mice. Morse MA, et al. **Cancer Res** 1990 May 1; 50(9):2613–7

Comparative metabolism of N'-nitrosonornicotine and 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone by cultured F344 rat oral tissue and esophagus. Murphy SE, et al. **Cancer Res** 1990 Aug 1;50(15):4685–91

Dose-response study of DNA and hemoglobin adduct formation by 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone in F344 rats. Murphy SE, et al. **Cancer Res** 1990 Sep 1; 50(17):5446–52

Evaluation of methods for quantitation of aflatoxin-albumin adducts and their application to human exposure assessment. Wild CP, et al. **Cancer Res** 1990 Jan 15; 50(2):245–51

Alpha-oxidative metabolism of the bladder carcinogens

N-nitrosobutyl(4-hydroxybutyl)amine and N-nitrosobutyl(3-carboxypropyl)amine within the rat isolated bladder. Airoldi L, et al. **Carcinogenesis** 1990 Aug; 11(8):1437–40

Carcinogen metabolism in cultured human tissues and cells. Autrup H. **Carcinogenesis** 1990 May;11(5):707–12 (73 ref.)

Characterization of oxidative and reductive metabolism in vitro of nitrofluoranthenes by rat liver enzymes. Belisario MA, et al. **Carcinogenesis** 1990 Feb;11(2):213–8

Competitive binding affinity of carcinogenic aromatic amines to the rat hepatic aromatic hydrocarbon (Ah) receptor in vitro and potency to induce monooxygenase activity in vivo. Cikryt P, et al. **Carcinogenesis** 1990 Aug; 11(8):1359–66

Bioactivation of N-nitrosomethylbenzylamine and N-nitrosomethyl-amylamine in oesophageal papillomas. Dirsch OR, et al. **Carcinogenesis** 1990 Sep;11(9):1583–6

The metabolism of 1-nitropyrene by human cytochromes P450. Howard PC, et al. **Carcinogenesis** 1990 Sep; 11(9):1539–42

Covalent binding of dibenzpyrenes and benzo[a]pyrene to DNA: evidence for synergistic and inhibitory interactions when applied in combination to mouse skin. Hughes NC, et al. **Carcinogenesis** 1990 Sep;11(9):1611–9

Binding of 7H-dibenzo[c,g]carbazole to polynucleotides and DNA in vitro. Lindquist BE, et al. **Carcinogenesis** 1989 Dec;10(12):2187–95

Non-mutagenic carcinogens are primarily hydrophobic. McCoy GD, et al. **Carcinogenesis** 1990 Jul;11(7):1111–7

Metabolism and activation of the pancreatic carcinogen N-nitrosobis(2-oxopropyl)amine by isolated hepatocytes and pancreatic cells of the Syrian hamster. Mangino MM, et al. **Carcinogenesis** 1990 Apr;11(4):625–31

Ketonitrosamines as metabolites of methyl-n-amylnitrosamine (MNAN) and its hydroxy derivatives in the rat. Mirvish SS, et al. **Carcinogenesis** 1989 Dec;10(12):2209–14

Effect of nicotine and tobacco-specific nitrosamines on the metabolism of N'-nitrosonornicotine and 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone by rat oral tissue. Murphy SE, et al. **Carcinogenesis** 1990 Sep; 11(9):1663–6

32P-post-labeling analysis of DNA adducts in mouse embryo fibroblasts treated with dibenzo[a,e]fluoranthene and its major metabolites. Périn-Roussel O, et al. **Carcinogenesis** 1990 Feb;11(2):301–6

Investigations of metabolic precursors to hemoglobin and DNA adducts of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone. Peterson LA, et al. **Carcinogenesis** 1990 Aug;11(8):1329–33

32P-postlabelling analysis of the DNA adducts formed by aristolochic acid I and II. Pfau W, et al. **Carcinogenesis** 1990 Sep;11(9):1627–33

Aristolochic acid binds covalently to the exocyclic amino group of purine nucleotides in DNA. Pfau W, et al. **Carcinogenesis** 1990 Feb;11(2):313–9

Intestinal first-pass metabolism of nitrosamines. 4. Metabolism of N-nitrosodibutylamine in vascularly autoperfused jejunal and ileal loops of rats. Richter E, et al. **Carcinogenesis** 1990 Sep;11(9):1517–21

Aflatoxin–DNA adduct formation in chronically dosed rats fed a choline-deficient diet. Schrager TF, et al. **Carcinogenesis** 1990 Jan;11(1):177–80

Capability of human blood cells to form the DNA adduct, C8-(N2-aminofluorenyl)-deoxyguanosine-3'-5'-diphosphate from 2-aminofluorene. Shen JH, et al. **Carcinogenesis** 1990 Aug;11(8):1441–4

Protein adducts in the molecular dosimetry of chemical carcinogens. Skipper PL, et al. **Carcinogenesis** 1990 Apr; 11(4):507–18 (67 ref.)

Involvement of singlet oxygen in photoactivation of aflatoxins B1 and B2 to DNA-binding forms in vitro. Stark AA, et al. **Carcinogenesis** 1990 Apr;11(4):529–34

The role of sulfation in the metabolic activation of N-hydroxy-4'-fluoro-4-acetylaminobiphenyl. van de Poll ML, et al. **Carcinogenesis** 1989 Dec;10(12):2285–91

Base and sequence specificities of aflatoxin B1 binding to single- and double-stranded DNAs. Yu FL, et al. **Carcinogenesis** 1990 Mar;11(3):475–8

Formation of reactive 1-nitropyrene metabolites by lung microsomes and isolated lung cells. Dybing E, et al. **Cell Biol Toxicol** 1986 Sep;2(3):341–55

V79 Chinese hamster cells deacetylate trans-N-acetoxy-4-acetylaminostilbene and trans-N-hydroxy-4-acetylaminostilbene to mutagenic and cytotoxic metabolites. Glatt H, et al. **Cell Biol Toxicol** 1986 Jun;2(2):213–21

In vitro and in vivo modulation of the bioactivation of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone in hamster lung tissues. Charest M, et al. **Chem Biol Interact** 1989;71(2-3):265–78

Chemical and physical properties of the major serum albumin adduct of aflatoxin B1 and their implications for the quantification in biological samples. Sabbioni G. **Chem Biol Interact** 1990;75(1):1–15

The tentative identification of DNA-adducts generated by trans-4-dimethylaminostilbene and trans-4-acetylaminostilbene in rats. Wildschütte M, et al. **Chem Biol Interact** 1990;76(1):47–62

In vitro metabolism of the pro-carcinogen aflatoxin B1 by liver preparations of the calf, nurse shark and clearnose skate. Bodine AB, et al. **Comp Biochem Physiol [C]** 1989; 94(2):447–53

The role of glutathione and glutathione transferases in chemical carcinogenesis. Coles B, et al. **Crit Rev Biochem Mol Biol** 1990;25(1):47–70 (220 ref.)

Bacterial enzymes: their role in the formation of mutagens and carcinogens in the intestine. Mallett AK, et al. **Dig Dis** 1990;8(2):71–9 (74 ref.)

Inhibition of the metabolism of ethyl carbamate by acetaldehyde. Kurata N, et al. **Drug Metab Dispos** 1990 Jul-Aug;18(4):504–7

A method for in vitro culture of rat Zymbal gland: use in mechanistic studies of benzene carcinogenesis in combination with 32P-postlabeling. Reddy MV, et al. **Environ Health Perspect** 1989 Jul;82:239–47

Quantitative predictability of carcinogenicity of the covalent binding index of chemicals to DNA: comparison of the in vivo and in vitro assays. Taningher M, et al. **Environ Health Perspect** 1990 Mar;84:183–92

Metabolism of 2-amino-3-methylimidazo[4,5-f]quinoline in the male rat. Inamasu T, et al. **Food Chem Toxicol** 1989 Jun;27(6):369–76

Enzymatic and non-enzymatic formation of free radicals from aflatoxin B1. Kodama M, et al. **Free Radic Res Commun** 1990;10(3):137–42

Metabolism of transplacental carcinogens. Anderson LM, et al. **IARC Sci Publ** 1989;(96):155–88 (111 ref.)

Use of the 32P-postlabelling assay to study transplacental carcinogens and transplacental carcinogenesis. Randerath K, et al. **IARC Sci Publ** 1989;(96):189–205 (59 ref.)

Glucose and sulfate conjugation of phenolic compounds by the spiny lobster (Panulirus argus). Schell JD Jr, et al. **J Biochem Toxicol** 1989 Summer;4(2):133–8

A new class of rat glutathione S-transferase Yrs-Yrs inactivating reactive sulfate esters as metabolites of carcinogenic arylmethanols. Hiratsuka A, et al. **J Biol Chem** 1990 Jul 15;265(20):11973–81

Preparation and characterization in solution of oligonucleotides alkylated by activated carcinogenic polycyclic aromatic hydrocarbons. Stezowski JJ, et al. **J Biomol Struct Dyn** 1987 Dec;5(3):615–37

Carcinogen-nucleic acid interactions: equilibrium binding studies of aflatoxins B1 and B2 with DNA and the oligodeoxynucleotide d(ATGCAT)2. Stone MP, et al. **J Biomol Struct Dyn** 1988 Apr;5(5):1025–41

Intercellular variation in levels of adducts of aflatoxin B1 and G1 in DNA from rat tissues: a quantitative immunocytochemical study. Wild CP, et al. **J Cancer Res Clin Oncol** 1990;116(2):134–40

Binding and uptake of N-nitrosonornicotine by oral epithelial cells. Schuster GS, et al. **J Oral Pathol Med** 1990 Mar; 19(3):114–8

Effects of various inducers on diethylstilbestrol metabolism, drug-metabolizing enzyme activities and the aromatic hydrocarbon (Ah) receptor in male Syrian golden hamster liver. Blaich G, et al. **J Steroid Biochem** 1990 Feb; 35(2):201–4

Molecular orbital study on the metabolic pathway through the diol epoxide form of carcinogenic benzene in comparison with benzo[a]pyrene. Imamura A, et al. **J Theor Biol** 1988 Nov 21;135(2):215–8

The importance of intercalation in the covalent binding of benzo(a)pyrene diol epoxide to DNA. Macleod MC. **J Theor Biol** 1990 Jan 9;142(1):113–22

Effect of butylated hydroxyanisole on the level of DNA adduction by aristolochic acid in the rat forestomach and liver. Routledge MN, et al. **Jpn J Cancer Res** 1990 Mar; 81(3):220–4

Human cytochrome P-450PA (P-450IA2), the phenacetin O-deethylase, is primarily responsible for the hepatic 3-demethylation of caffeine and N-oxidation of carcinogenic arylamines. Butler MA, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7696–700

Accelerator mass spectrometry in biomedical dosimetry: relationship between low-level exposure and covalent binding of heterocyclic amine carcinogens to DNA. Turteltaub KW, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5288–92

Role of cytochromes P-450 in mouse liver tumor production. Parke DV, et al. **Prog Clin Biol Res** 1990;331:215–30 (46 ref.)

Genetic polymorphisms in carcinogen metabolism predict substrate-induced cytogenetic damage in humans. Wiencke JK, et al. **Prog Clin Biol Res** 1990;340B:137–47

Metabolism of the liver tumor promoter ethinyl estradiol by primary cultures of rat hepatocytes. Standeven AM, et al. **Toxicol Appl Pharmacol** 1990 Mar 1;102(3):486–96

The metabolism of the carcinogen dibenz[a,j]acridine in isolated rat hepatocytes and in vivo in rats. Robinson HK, et al. **Xenobiotica** 1990 May;20(5):457–70

PHARMACOKINETICS

Dietary effects of pristane on rat lymphoid tissues. Garrett LR, et al. **Agents Actions** 1989 Nov;28(3-4):272–8

Interaction of ethanol with drugs, hepatotoxic agents, carcinogens and vitamins. Lieber CS. **Alcohol Alcohol** 1990; 25(2-3):157–76 (170 ref.)

Comparative uptake, vascular transport, and cellular internalization of aflatoxin-B1 and benzo(a)pyrene. Busbee DL, et al. **Arch Toxicol** 1990;64(4):285–90

Cytochrome P450 activity and distribution in the human colon mucosa. Stralka DJ, et al. **Cancer** 1989 Nov 15; 64(10):2111–6

In vitro metabolism of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone by lung cells isolated from Syrian golden hamster. Alaoui-Jamali MA, et al. **Cancer Lett** 1990 Jun 30;52(1):49–55

Efficient method for the isolation by HPLC, of a major metabolite of the carcinogen 2-amino-3-methylimidazo [4,5-f]quinoline (IQ), the 5-hydroxy derivative. Vavrek MT, et al. **Cancer Lett** 1990 May 15;51(1):79–83

Biotransformation of aflatoxin B1 in rabbit lung and liver microsomes. Daniels JM, et al. **Carcinogenesis** 1990 May; 11(5):823–7

Tissue distribution of DNA adducts in CDF1 mice fed 2-amino-3-methylimidazo[4,5-f]quinoline (IQ) and 2-amino-3,4-dimethylimidazo[4,5-f]quinoline (MeIQ). Hall M, et al. **Carcinogenesis** 1990 Jun;11(6):1005–11

Pharmacokinetics of N-nitrodimethylamine and N-nitromethylamine in the rat. Hassel M, et al. **Carcinogenesis** 1990 Mar;11(3):357–60

Formation and persistence of DNA adducts in rats following intraperitoneal administration of 1,8-dinitropyrene. Norman CA, et al. **Carcinogenesis** 1990 Jun;11(6):1037–40

Tissue dosimetry, physiologically-based pharmacokinetic modeling, and cancer risk assessment. Andersen ME. **Cell Biol Toxicol** 1989 Dec;5(4):405–15

Decrease in the metabolic activating capacities of arylamines in livers bearing hyperplastic nodules: association with the selective changes in hepatic P-450 isozymes. Ozawa S, et al. **Jpn J Cancer Res** 1990 Mar;81(3):247–52

Pharmacokinetic principles for dose-rate extrapolation of carcinogenic risk from genetically active agents. Hattis D. **Risk Anal** 1990 Jun;10(2):303–16 (46 ref.)

Distribution and excretion of 1,8-dinitro[14C]pyrene in the mouse. Shah AB, et al. **Toxicol Lett** 1990 May;51(3):303–13

The role of intestinal microflora in the metabolic activation of 6-nitrochrysene to DNA-binding derivatives in mice. Delclos KB, et al. **Toxicology** 1990 Jan-Feb;60(1-2):137–50

Investigations on organ-specific metabolism and genotoxic effects of the urinary bladder carcinogen N-nitrosobutyl-3-carboxypropylamine (BCPN) and its analogs N-nitrosodibutylamine (NDBA) and N-nitrosobutyl-4-hydroxybutylamine (4-OH-NDBA). Janzowski C, et al. **Toxicology** 1989 Dec 1;59(2):195–209

[A pathophysiologic thesis of the development of laryngeal cancer] Deitmer T. **Laryngorhinootologie** 1990 Feb; 69(2):98–101 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Transformation of primate cells by chemicals and oncogenes: requirements for multiple factors. Khoobyarian N, et al. **Anticancer Res** 1989 Sep-Oct;9(5):1367–76 (92 ref.)

Suppression by protein kinase C inhibitors of tumor promoter enhancement of Epstein-Barr virus-induced growth transformation. Kinoshita T, et al. **Anticancer Res** 1990 Jul-Aug;10(4):1051–4

Inhibitory effects of Kampo medicine on Epstein-Barr virus antigen induction by tumor promoter. Furukawa M, et al. **Auris Nasus Larynx** 1990;17(1):49–54

Antimutagenic effects of tumor promoters—co-mutagenic effects of co-carcinogens. Fahrig R. **Basic Life Sci** 1990; 52:385–8

Establishment of a highly reproducible transformation assay of a ras-transfected BALB 3T3 clone by treatment with promoters. Sasaki K, et al. **Basic Life Sci** 1990;52:411–6

Effects of okadaic acid on mouse hemopoietic cells. Oka S, et al. **Biochem Biophys Res Commun** 1989 Nov 30; 165(1):539–46

Protein kinase C activation in a 3T3 cell variant morphologically unresponsive to tumor-promoting phorbol esters. Nakamori S, et al. **Biochem Int** 1989 Dec; 19(6):1419–26

Zinc increases EGF-stimulated DNA synthesis in primary mouse hepatocytes. Studies in tumor promoter-treated cell cultures. Kobusch AB, et al. **Biochem Pharmacol** 1990 Feb 1;39(3):555–8

Cell type specific, receptor-mediated modulation of growth kinetics in human lung cancer cell lines by nicotine and tobacco-related nitrosamines. Schuller HM. **Biochem Pharmacol** 1989 Oct 15;38(20):3439–42

Carcinogenicity of peroxisome proliferators: evaluation and mechanisms. Reddy JK. **Biochem Soc Trans** 1990 Feb; 18(1):92–4 (38 ref.)

Okadaic acid and dinophysistoxin-1, non-TPA-type tumor promoters, stimulate prostaglandin E2 production in rat peritoneal macrophages. Ohuchi K, et al. **Biochim Biophys Acta** 1989 Sep 4;1013(1):86–91

Effects of the tumor promoter 2-acetylaminofluorene and of 4-acetylaminofluorene on rat liver growth. Gerlyng P, et al. **Bull Cancer (Paris)** 1990;77(5):461–6

Nutrition and enzyme inducers in liver tumor promotion in human and rat. McLean EM, et al. **Bull Cancer (Paris)** 1990;77(5):505–8

Modulation of neoplastic development: concepts and examples. Roberfroid M, et al. **Bull Cancer (Paris)** 1990; 77(5):467–73

Pristane induced changes in rat lymphocyte membrane fluidity. Bly JE, et al. **Cancer Biochem Biophys** 1990 Apr; 11(2):145–54

Tumor promoters stimulate the formation of 1,2-diacylglycerol in murine peritoneal macrophages: a possible mechanism for stimulating superoxide anion radical production. Czerniecki BJ, et al. **Cancer Lett** 1989 Nov 15;48(1):29–36

Modulatory interaction between initial clofibrate treatment and subsequent administration of 2-acetylaminofluorene or sodium phenobarbital on glutathione S-transferase positive lesion development. Mutai M, et al. **Cancer Lett** 1990 Feb; 49(2):127–32

Nonrandom chromosomal alterations in nickel-transformed Chinese hamster embryo cells. Conway K, et al. **Cancer Res** 1989 Nov 1;49(21):6032–8

Development of an in vitro analogue of initiated mouse epidermis to study tumor promoters and antipromoters. Hennings H, et al. **Cancer Res** 1990 Aug 1;50(15):4794–800

Structure-activity studies of the nonphorbol tumor promoter palytoxin in Swiss 3T3 cells. Wattenberg EV, et al. **Cancer Res** 1989 Nov 1;49(21):5837–42

Comparative action of aflatoxin B1 in mammalian airway epithelium. Wilson DW, et al. **Cancer Res** 1990 Apr 15; 50(8):2493–8

Arachidonic acid potentiates superoxide anion radical production by murine peritoneal macrophages stimulated with tumor promoters. Czerniecki BJ, et al. **Carcinogenesis** 1989 Oct;10(10):1769–75

Cytogenetic effects caused by phorbol ester tumor promoters in HeLa cells: mechanistic aspects. Färber B, et al. **Carcinogenesis** 1989 Dec;10(12):2345–50

Effect of tumour promoters and non-genotoxic carcinogens on terminal differentiation and proliferation in mouse teratoma XB2 cells cultured in low calcium medium. Hewitt SD, et al. **Carcinogenesis** 1990 Mar;11(3):371–5

Differential mechanism for the inhibition of epidermal growth factor binding to its receptor on mouse keratinocytes by anthrones and phorbol esters. Imamoto A, et al. **Carcinogenesis** 1990 Sep;11(9):1543–9

Contribution of DNA methylation and benzylation to N-nitroso-N-benzyl-methylamine-induced mutagenesis in bacteria: effects of rat liver cytochrome P450 isozymes and glutathione transferases. Lin DX, et al. **Carcinogenesis** 1990 Sep;11(9):1653–8

Mutations induced by aminofluorene-DNA adducts during replication in human cells. Mah MC, et al. **Carcinogenesis** 1989 Dec;10(12):2321–8

The effects of teleocidin and aplysiatoxin tumor promoters on epithelial tight junctions and transepithelial permeability: comparison to phorbol esters. Mullin JM, et al. **Carcinogenesis** 1990 Mar;11(3):377–85

Effects of retinoic acid on epidermal DNA synthesis induced by 12-O-tetradecanoylphorbol-13-acetate, mezerein or ethylphenylpropiolate in hairless mice. Paulsen JE. **Carcinogenesis** 1990 Aug;11(8):1255–8

Comparison of octahydromezerein and mezerein as protein kinase C activators and as mouse skin tumor promoters. Sharkey NA, et al. **Carcinogenesis** 1989 Oct;10(10):1937–41

Metabolic activation of 9-hydroxymethyl-10-methylanthracene and 1-hydroxymethylpyrene to electrophilic, mutagenic and tumorigenic sulfuric acid esters by rat hepatic sulfotransferase activity. Surh YJ, et al. **Carcinogenesis** 1990 Sep;11(9):1451–60

Effect of chemical carcinogens on cholesterol biosynthetic pathways in the skin of mice. Tanimoto Y, et al. **Carcinogenesis** 1990 Sep;11(9):1647–51

Nucleophilic selectivity of carcinogens as a determinant of enhanced mutational response in excision repair-defective strains in Drosophila: effects of 30 carcinogens. Vogel EW. **Carcinogenesis** 1989 Nov;10(11):2093–106

Stimulation of DNA synthesis in primary rat hepatocyte cultures by liver tumor promoters: interactions with other growth factors. Yusof YA, et al. **Carcinogenesis** 1990 May; 11(5):761–70

Cocarcinogenesis in vitro using Balb/3T3 cells and aromatic hydrocarbon cocarcinogens. Atchison M, et al. **Cell Biol Toxicol** 1985 Oct;1(4):323–31

Pyrene acts as a cocarcinogen with the carcinogens benzo[a]pyrene, beta-propiolactone and radiation in the induction of malignant transformation in cultured mouse fibroblasts; soybean extract containing the Bowman-Birk inhibitor acts as an anticarcinogen. Baturay N, et al. **Cell Biol Toxicol** 1986 Mar;2(1):21–32

Effects of phorbol myristate acetate, phorbol dibutyrate, ethanol, dimethylsulfoxide, phenol, and seven metabolites of phenol on metabolic cooperation between Chinese hamster V79 lung fibroblasts. Malcolm AR, et al. **Cell Biol Toxicol** 1985 Oct;1(4):269–83

Enhancement of aldehyde dehydrogenase activity in human and rat hepatocyte cultures by 3-methylcholanthrene. Marselos M, et al. **Cell Biol Toxicol** 1986 Jun;2(2):257–69

Histopathology and cell culture characteristics of liver cells from grc- and grc+ rats given diethylnitrosamine. Smith GJ, et al. **Cell Biol Toxicol** 1990 Apr;6(2):205–17

The effect of tumor promoters and antagonists on in vitro directional migration of 10T1/2 mouse embryo cells. Verschueren H. **Cell Biol Toxicol** 1985 Jun;1(3):145–57

Types and amounts of carcinogens as potential human cancer hazards. Weisburger JH, et al. **Cell Biol Toxicol** 1989 Dec; 5(4):377–91

Differential effects of teleocidin on TNF alpha receptor regulation in human B cell lines: relationship to coexpression of IL-2 and IL-1 receptors and to lymphokine secretion. Benjamin D, et al. **Cell Immunol** 1990 Feb;125(2):480–97

Benzene-mediated protein kinase C activation. Da Silva C, et al. **Environ Health Perspect** 1989 Jul;82:91–5 (19 ref.)

Differential effects of various skin tumor-promoting agents on prostaglandin E2 release from primary cultures of mouse epidermal cells. Aizu E, et al. **Eur J Pharmacol** 1990 Jun 21;182(1):19–28

Tumor promoter-dependent phosphorylation of a Triton X-100 extractable form of lipocortin I in T51B rat liver cells. Campos-Gonzalez R, et al. **Exp Cell Res** 1989 Oct; 184(2):287–96

Theory (or model) of the joint influence of occupational exposure to carcinogenic dust and to cigarette smoke and occupational lung cancer. Sterling TD. **Exp Pathol** 1989; 37(1-4):181–5 (21 ref.)

Carcinogenic risk assessment: some comparisons between risk estimates derived from human and animal data. Zapponi GA, et al. **Exp Pathol** 1989;37(1-4):210–8

Promoting effect of citrulline in hepatocarcinogenesis: possible mechanism in hypercitrullinemia. Nakayama M, et al. **Hepatology** 1990 May;11(5):819–23

Liver tumor promoters stimulate growth of transplanted hepatocellular carcinomas. Seglen PO, et al. **Hepatology** 1990 Aug;12(2):295–300

Comparative properties of untreated and N-nitrosobenzylmethyl-amine-transformed rat esophageal epithelial cell lines. Stoner GD, et al. **In Vitro Cell Dev Biol** 1989 Oct;25(10):899–908

Effect of Emblica officinalis Gaertn. (Indian gooseberry) fruit extract on sodium azide and 4-nitro-o-phenylenediamine induced mutagenesis in Salmonella typhimurium. Grover IS, et al. **Indian J Exp Biol** 1989 Mar;27(3):207–9

Plasminogen activator gene expression is induced by the src oncogene product and tumor promoters. Bell SM, et al. **J Biol Chem** 1990 Jan 25;265(3):1333–8

Tumor promoters retard the loss of a transient subpopulation of cells in low passage Syrian hamster cell cultures. Ueo H, et al. **J Cell Physiol** 1990 Mar;142(3):505–13

Methods for the isolation and detection of etheno adducts in nucleotide pools in vivo following exposure to ethyl carbamate. Mayernik JA, et al. **J Chromatogr** 1990 Apr 6;526(2):407–22

Altered cellular responses to chemical carcinogens in aged animals. Zimmerman JA, et al. **J Gerontol** 1989 Nov; 44(6):19–24 (89 ref.)

Synergistic effects of low-dose hepatocarcinogens in induction of glutathione S-transferase P-positive foci in the rat liver. Hasegawa R, et al. **Jpn J Cancer Res** 1989 Oct;80(10):945–51

Okadaic acid and phorbol esters: comparative effects of these tumor promoters on cell transformation, intercellular communication and differentiation in vitro. Katoh F, et al. **Jpn J Cancer Res** 1990 Jun-Jul;81(6-7):590–7

Significant increase of 8-hydroxydeoxyguanosine in liver DNA of rats following short-term exposure to the peroxisome proliferators di(2-ethylhexyl)phthalate and di(2-ethylhexyl)adipate. Takagi A, et al. **Jpn J Cancer Res** 1990 Mar;81(3):213–5

Mechanism of suppression of footpad reaction in mice by 12-tetradecanoylphorbol 13-acetate and 7,12-dimethylbenz[a]anthracene. Tabara M, et al. **Jpn J Exp Med** 1990 Feb;60(1):5–11

Relationship between magnesium, carcinogenic metals and ionic permeability of the human amnion. Bara M, et al. **Magnes Res** 1988 Dec;1(3-4):231–7

Theoretical mechanisms for synthesis of carcinogen-induced embryonic proteins: XXII. Key theory—a mechanism for enhancer function. Hancock RL. **Med Hypotheses** 1989 Oct;30(2):111–4

Codon 61 mutations in the c-Harvey-ras gene in mouse skin tumors induced by 7,12-dimethylbenz[a]anthracene plus okadaic acid class tumor promoters. Fujiki H, et al. **Mol Carcinog** 1989;2(4):184–7

Ras genes may not always be targets of chemical carcinogen action [letter] Garte SJ. **Mol Carcinog** 1990;3(3):115–6

Non-genotoxic carcinogenesis: implications for testing and extrapolation to man. Roe FJ. **Mutagenesis** 1989 Nov; 4(6):407–11 (37 ref.)

Comparison of single-, double- or triple-exposure protocols for the rodent bone marrow/peripheral blood micronucleus assay using 4-aminobiphenyl and treosulphan. Gulati DK, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):135–9

Activity of the human carcinogens benzidine and 2-naphthylamine in triple- and single-dose mouse bone marrow micronucleus assays: results for a combined test protocol. Mirkova E. **Mutat Res** 1990 Jun-Aug; 234(3-4):161–3

Lack of DNA single-strand breaks in rat liver cells exposed to 4-acetylaminofluorene, in vivo and in vitro. Nizard C, et al. **Mutat Res** 1990 Jul;244(3):245–50

Structural basis of carcinogenicity in rodents of genotoxicants and non-genotoxicants. Rosenkranz HS, et al. **Mutat Res** 1990 Feb;228(2):105–24

Improvement of carcinogen identification in BALB/3T3 cell transformation by application of a 2-stage method. Sakai A, et al. **Mutat Res** 1989 Oct;214(2):285–96

Activity of human carcinogens in the Salmonella and rodent bone-marrow cytogenetics tests. Shelby MD, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):257–61

The induction of micronucleated polychromatic erythrocytes in mice using single and multiple treatments. Tice RR, et al. **Mutat Res** 1990 Jun-Aug;234(3-4):187–93

Regulation of ornithine decarboxylase in rat kidney. Hise MK, et al. **Nephron** 1990;55(4):414–8

Analysis of the rearrangements associated with carcinogen-induced activation of the hamster thymidine kinase gene. Barr FG, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):129–35

Carcinogen-induced mutations in the mouse c-Ha-ras gene provide evidence of multiple pathways for tumor progression. Brown K, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):538–42

Structural basis of protein kinase C activation by tumor promoters. Nakamura H, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9672–6

Thapsigargin, a tumor promoter, discharges intracellular Ca2+ stores by specific inhibition of the endoplasmic reticulum Ca2(+)-ATPase. Thastrup O, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2466–70

DNA adduct formation in relation to tumorigenesis in mice continuously administered 4-aminobiphenyl. Beland FA, et al. **Prog Clin Biol Res** 1990;340A:81–90

Promotion and progression in carcinogenesis. Burns FJ. **Prog Clin Biol Res** 1990;340D:65–80 (32 ref.)

Cell proliferation and promotion in the hepatocarcinogenicity of peroxisome proliferating chemicals. Cattley RC, et al. **Prog Clin Biol Res** 1990;340D:123–32 (34 ref.)

Microtubular proteins as cellular targets for carcinogenic estrogens and other carcinogens. Epe B, et al. **Prog Clin Biol Res** 1989;318:345–51

Oval cells and liver carcinogenesis: an analysis of cell lineages in hepatic tumors using oncogene transfection techniques. Fausto N. **Prog Clin Biol Res** 1990;331:325–34

Gap junctional intercellular communication in hepatic carcinogenesis. Klaunig JE, et al. **Prog Clin Biol Res** 1990; 340D:165–74

Malignant transformation of human fibroblasts by oncogene transfection or carcinogen treatment. McCormick JJ, et al. **Prog Clin Biol Res** 1990;340D:195–205 (30 ref.)

The role of hyperplasia in liver carcinogenesis. Mirsalis JC, et al. **Prog Clin Biol Res** 1990;331:149–61 (23 ref.)

The role of cell proliferation in chemical carcinogenesis. Mirsalis JC, et al. **Prog Clin Biol Res** 1990;340D:113–22 (19 ref.)

Regulation of glutathione transferase P (GST-P) gene expression during chemical hepatocarcinogenesis. Sakai M, et al. **Prog Clin Biol Res** 1990;344:123–38

Inhibitory effects of carcinogenic tryptophan pyrolysis products on phytohemagglutinin-induced blast transformation of human lymphocytes. Yanagisawa H, et al. **Toxicol Lett** 1990 Apr;51(2):227–31

Induction of the P-450 I family of proteins by polycyclic aromatic hydrocarbons: possible relationship to their carcinogenicity. Ayrton AD, et al. **Toxicology** 1990 Jan-Feb;60(1-2):173–86

Lipid peroxidation in rat liver microsomes: influence of carcinogenic N-nitrosocarbaryl. Beraud M, et al. **Toxicology** 1989 Oct 16;58(3):299–311

Effect of flavonoids on tumor promoter-induced basophil histamine release and protein kinase C. Middleton E Jr, et al. **Trans Am Clin Climatol Assoc** 1988;100:47–56

[Is hypomethylation of cellular DNA a step required in the initiation process of chemical carcinogenesis?] Shi ZZ, et al. **Shih Yen Sheng Wu Hsueh Pao** 1989 Sep;22(3):305–11 (Eng. Abstr.) **(Chi)**

[Modification of the cellular cytoskeleton and hepatic tumor promotion] Decloître F, et al. **Bull Cancer (Paris)** 1990; 77(5):479–83 (Eng. Abstr.) **(Fre)**

[Concept of tumor promoters in hepatocarcinogenesis] Frayssinet C, et al. **Bull Cancer (Paris)** 1990;77(5):455–9 (Eng. Abstr.) **(Fre)**

[Oncogenes and tumor promotion] Lafarge-Frayssinet C, et al. **Bull Cancer (Paris)** 1990;77(5):475–8 (Eng. Abstr.) **(Fre)**

[Modulation of mRNAs P450 and hepatocarcinogenesis promotion] Lechner MC, et al. **Bull Cancer (Paris)** 1990; 77(5):509–14 (Eng. Abstr.) **(Fre)**

[In vitro use of a model for studying the effects of tumor promoters in food] Martel P, et al. **Bull Cancer (Paris)** 1990; 77(5):495–9 (Eng. Abstr.) **(Fre)**

[Action of carcinogenesis promoters on the adhesive force of cells in the liver, lung and thyroid gland in rats and mice] Kolotygina IM, et al. **Eksp Onkol** 1990;12(4):22–4 (Eng. Abstr.) **(Rus)**

[Changes in the adhesiveness between enterocytes after short-term blastomogenic exposures] Matveev VV. **Tsitologiia** 1989 Dec;31(12):1459–65 (Eng. Abstr.) **(Rus)**

[Regaine again. A carcinogen?] Rehnlund SO. **Lakartidningen** 1989 Nov 29;86(48):4207–8 **(Swe)**

TOXICITY

Mechanisms of induction of enzymes that protect against chemical carcinogenesis. Talalay P. **Adv Enzyme Regul** 1989;28:237–50 (49 ref.)

Italo-Hungarian Meeting on Genotoxicity of Environmental Chemicals: Scientific and Regulatory Aspects. Rome, April 28–29, 1988. **Ann Ist Super Sanita** 1989;25(4):541–612

Short-term tests, genotoxicity and carcinogenicity in light of a multivariate statistical exploration. Benigni R. **Ann Ist Super Sanita** 1989;25(4):573–5

Inhibition of 1,2-dimethylhydrazine-induced nuclear damage in rat colonic epithelium by chlorophyllin. Robins EW, et al. **Anticancer Res** 1989 Jul-Aug;9(4):981–5

Immunoassays for proteins alkylated by nicotine-derived N-nitrosamines. Talbot B, et al. **Arch Toxicol** 1990; 64(5):360–4

Carcinogenicity and modification of carcinogenic response by antioxidants. Ito N, et al. **Basic Life Sci** 1990;52:183–94

Inhibition of tumor promotion by DL-alpha-difluoromethylornithine, a specific irreversible inhibitor of ornithine decarboxylase. Verma AK. **Basic Life Sci** 1990;52:195-204 (50 ref.)

Clonal adaptation during carcinogenesis. Farber E. **Biochem Pharmacol** 1990 Jun 15;39(12):1837-46 (100 ref.)

Lipid peroxidation in the liver of carcinogen-resistant rats. Hammad H, et al. **Biochim Biophys Acta** 1990 Jul 16; 1045(2):99-106

The effect of Chinese tea on occurrence of esophageal tumor induced by N-nitrosomethylbenzylamine in rats. Han C, et al. **Biomed Environ Sci** 1990 Mar;3(1):35-42

Effect of selenium on aflatoxin hepatocarcinogenesis in the rat. Lei DN, et al. **Biomed Environ Sci** 1990 Mar;3(1):65-80

Risk assessment of carcinogens: present status and future directions. Munro IC. **Biomed Environ Sci** 1988 Jun; 1(1):51-8 (45 ref.)

Reversible alteration in the expression of the gap junctional protein connexin 32 during tumor promotion in rat liver and its role during cell proliferation. Neveu MJ, et al. **Cancer Commun** 1990;2(1):21-31

Relative tumor initiating activity of benzo[a]fluoranthene, benzo[b]fluoranthene, naphtho[1,2-b]fluoranthene and naphtho[2,1-a]fluoranthene on mouse skin. Weyand EH, et al. **Cancer Lett** 1990 Jul 31;52(3):229-33

Enzyme-altered foci in colons of carcinogen-treated rats. Barrow BJ, et al. **Cancer Res** 1990 Mar 15;50(6):1911-6

Apoptosis (cell death) induced in mouse bowel by 1,2-dimethylhydrazine, methylazoxymethanol acetate, and gamma-rays. Ijiri K. **Cancer Res** 1989 Nov 15; 49(22):6342-6

Characterization of the hydroperoxide response observed in mouse skin treated with tumor promoters in vivo. Perchellet EM, et al. **Cancer Res** 1989 Nov 15; 49(22):6193-201

Aristolochic acid activates ras genes in rat tumors at deoxyadenosine residues. Schmeiser HH, et al. **Cancer Res** 1990 Sep 1;50(17):5464-9

Pathobiology of lung tumors induced in hamsters by 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone and the modulating effect of hyperoxia. Schuller HM, et al. **Cancer Res** 1990 Mar 15;50(6):1960-5

DNA synthesis, apoptosis, and phenotypic expression as determinants of growth of altered foci in rat liver during phenobarbital promotion. Schulte-Hermann R, et al. **Cancer Res** 1990 Aug 15;50(16):5127-35

Promoting effects of unleaded gasoline and 2,2,4-trimethylpentane on the development of atypical cell foci and renal tubular cell tumors in rats exposed to N-ethyl-N-hydroxyethylnitrosamine. Short BG, et al. **Cancer Res** 1989 Nov 15;49(22):6369-78

Modification by catechol and resorcinol of upper digestive tract carcinogenesis in rats treated with methyl-N-amylnitrosamine. Yamaguchi S, et al. **Cancer Res** 1989 Nov 1;49(21):6015-8

Mutational specificity of the carcinogen 3-amino-1-methyl-5H-pyrido[4,3-b]-indole in mammalian cells. Akagi T, et al. **Carcinogenesis** 1990 May;11(5):841-6

Comparative histomorphometric changes in SENCAR mouse epidermis in response to multiple treatments with complete and stage-specific tumor promoting agents. Baxter CS, et al. **Carcinogenesis** 1989 Oct;10(10):1855-61

Lung tumorigenicity of benzene oxide, benzene dihydrodiols and benzene diolepoxides in the BLU:Ha newborn mouse assay. Busby WF Jr, et al. **Carcinogenesis** 1990 Sep; 11(9):1473-8

Effects of azobenzene and aniline in the rodent bone marrow micronucleus test. George E, et al. **Carcinogenesis** 1990 Sep;11(9):1551-6

Sex and organ differences in oxidative DNA and RNA damage due to treatment of Sprague-Dawley rats with acetoxime or 2-nitropropane. Guo N, et al. **Carcinogenesis** 1990 Sep;11(9):1659-62

Effects of deuterium substitution on the tumorigenicity of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone and 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanol in A/J mice. Hecht SS, et al. **Carcinogenesis** 1990 Jun; 11(6):1017-20

Modifying effects of simultaneous treatment with butylated hydroxyanisole (BHA) on rat tumor induction by 3,2'-dimethyl-4-aminobiphenyl, 2,2'-dihydroxy-di-n-propylnitrosamine and N-methylnitrosourea. Ito N, et al. **Carcinogenesis** 1989 Dec; 10(12):2255-9

Enhancing effects of sodium phenobarbital and N,N-dibutylnitrosamine on tumor development in a rat wide-spectrum organ carcinogenesis model. Shibata MA, et al. **Carcinogenesis** 1990 Jun;11(6):1027-31

Immunohistochemical demonstration of carcinogen-DNA adducts in target and non-target tissues of rats given a prostate carcinogen, 3,2'-dimethyl-4-aminobiphenyl. Shirai T, et al. **Carcinogenesis** 1990 Apr;11(4):653-7

Predicting carcinogenicity of petroleum distillation fractions using a modified Salmonella mutagenicity assay. Blackburn GR, et al. **Cell Biol Toxicol** 1986 Mar;2(1):63-84

The effect of complete carcinogens on intercellular transfer of lucifer yellow in fibroblast culture. Budunova IV, et al. **Cell Biol Toxicol** 1990 Jan;6(1):47-61

Correlation of carcinogenic potency in animals and humans. Crump K. **Cell Biol Toxicol** 1989 Dec;5(4):393-403

Quantitative evaluation of the effects of human carcinogens and related chemicals on human foreskin fibroblasts. Kurian P, et al. **Cell Biol Toxicol** 1990 Apr;6(2):171-84

Invited contribution: an objective approach to the development of short-term tests predictive of carcinogenicity. Rosenkranz HS, et al. **Cell Biol Toxicol** 1986 Dec;2(4):425-40 (35 ref.)

Effects of tumor promoters, genotoxic carcinogens and hepatocytotoxins on mouse hepatocyte intercellular communication. Ruch RJ, et al. **Cell Biol Toxicol** 1986 Dec; 2(4):469-83

Ellagic acid toxicity and interaction with benzo[a]pyrene and benzo[a]pyrene 7,8-dihydrodiol in human bronchial epithelial cells. Teel RW, et al. **Cell Biol Toxicol** 1986 Mar; 2(1):53-62

Risk assessment of carcinogenic and noncarcinogenic chemicals. Johannsen FR. **Crit Rev Toxicol** 1990; 20(5):341-67 (221 ref.)

The relevance of peroxisome proliferation and cell proliferation in peroxisome proliferator-induced hepatocarcinogenesis. Rao MS, et al. **Drug Metab Rev** 1989; 21(1):103-10 (52 ref.)

Chemical strategies for the inactivation of bay-region diol epoxides, ultimate carcinogens derived from polycyclic aromatic hydrocarbons. Sayer JM, et al. **Drug Metab Rev** 1989;20(2-4):155-82 (76 ref.)

Third chronological supplement to the carcinogenic potency database: standardized results of animal bioassays published through December 1986 and by the National Toxicology Program through June 1987. Gold LS, et al. **Environ Health Perspect** 1990 Mar;84:215-6

Protection against chemical-induced lung injury by inhibition of pulmonary cytochrome P-450. Verschoyle RD, et al. **Environ Health Perspect** 1990 Apr;85:95-100

Assays of three carcinogen/non-carcinogen chemical pairs for in vivo induction of chromosome aberrations, sister chromatid exchanges and micronuclei. McFee AF, et al. **Environ Mol Mutagen** 1989;14(4):207-20

1,2-Dimethylhydrazine-induced carcinogenesis influenced by different colonic anastomoses in rats. Rokitansky A, et al. **Eur Surg Res** 1989;21(3-4):184-9

The ranking of laboratory animal carcinogens. Hopkins J. **Food Chem Toxicol** 1989 Jun;27(6):417-20

Chronic toxicity/carcinogenicity studies of sulphamethazine in Fischer 344/N rats: two-generation exposure. Littlefield NA, et al. **Food Chem Toxicol** 1990 Mar;28(3):157-67

The carcinogenic potential of ethyl carbamate (urethane): risk assessment at human dietary exposure levels. Schlatter J, et al. **Food Chem Toxicol** 1990 Mar;28(3):205-11 (50 ref.)

Participation of urinary Na+, K+, pH, and L-ascorbic acid in the proliferative response of the bladder epithelium after the oral administration of various salts and/or ascorbic acid to rats. Shibata MA, et al. **Food Chem Toxicol** 1989 Jun; 27(6):403-13

Chronic toxicity and carcinogenicity of bis(tri-n-butyltin)oxide (TBTO) in the rat. Wester PW, et al. **Food Chem Toxicol** 1990 Mar;28(3):179-96

Toxicity of 4-vinyl-1-cyclohexene diepoxide after 13 weeks of dermal or oral exposure in rats and mice. Chhabra RS, et al. **Fundam Appl Toxicol** 1990 May;14(4):745-51

Dermal toxicity and carcinogenicity of 4-vinyl-1-cyclohexene diepoxide in Fischer rats and B6C3F1 mice. Chhabra RS, et al. **Fundam Appl Toxicol** 1990 May;14(4):752-63

Re: A blind reanalysis of a random subset of NCI bioassay studies: agreement between rats and mice, a series of papers published in the February 1989 issue of Fundamental and Applied Toxicology (Fundam. Appl. Toxicol. 12, 189-241, 1989) [letter] Goodman JI. **Fundam Appl Toxicol** 1989 Nov; 13(4):865-7

Two-stage models of carcinogenesis, classification of agents, and design of experiments. Portier CJ, et al. **Fundam Appl Toxicol** 1990 Apr;14(3):444-60

Effects of postnatal administration of tumour-promoting barbiturates on the development of tumours initiated by prenatal exposure of fetal rats and mice to N-alkylnitrosoureas. Diwan BA, et al. **IARC Sci Publ** 1989; (96):75-80

Cell-specific brain tumour induction in neural transplants: evidence for multistep carcinogenesis in the nervous system. Kleihues P, et al. **IARC Sci Publ** 1989;(96):121-9

Possible role of genetic predisposition in multigeneration carcinogenesis. Mohr U, et al. **IARC Sci Publ** 1989; (96):93-103 (44 ref.)

Review of experiments on multigeneration carcinogenicity: of design, experimental models and analyses. Turusov VS, et al. **IARC Sci Publ** 1989;(96):105-20 (105 ref.)

Inhibitory effect of selenium on hamster pancreatic cancer induction by N'-nitrosobis(2-oxopropyl)amine. Kise Y, et al. **Int J Cancer** 1990 Jul 15;46(1):95-100

Carcinogenic oil fractionation and nuclear enlargement in mouse skin. Ingram AJ. **J Appl Toxicol** 1990 Apr; 10(2):113-8

Influence of liver tumor promoters and structurally related chemicals on survival of normal adult rat hepatocytes in primary culture. Miyazaki M, et al. **J Cancer Res Clin Oncol** 1990;116(3):259-63

Selective induction of prostate carcinomas in F344 rats treated with intraperitoneal injections of N-hydroxy-3,2'-dimethyl-4-aminobiphenyl. Shirai T, et al. **Jpn J Cancer Res** 1990 Apr;81(4):320-3

Role of inhibition of intercellular communication in carcinogenesis. Klaunig JE, et al. **Lab Invest** 1990 Feb; 62(2):135-46 (181 ref.)

Genes and carcinogens [letter; comment] Spigelman AD, et al. **Lancet** 1989 Nov 18;2(8673):1210 Comment on: Lancet 1989 Oct 7;2(8667):840-2.

Effect of pretreatment with hepatic mixed-function oxidase inducers on the genotoxicity of four rat carcinogens in the hepatocyte/DNA repair assay. Shaddock JG, et al. **Mutagenesis** 1990 Jul;5(4):387-91

Nucleophilic selectivity as a determinant of carcinogenic potency (TD50) in rodents: a comparison of mono- and bi-functional alkylating agents and vinyl chloride metabolites. Barbin A, et al. **Mutat Res** 1989 Nov; 215(1):95-106

Salmonella mutagenicity and rodent carcinogenicity: quantitative structure-activity relationships. Blake BW, et al. **Mutat Res** 1990 Jul;241(3):261-71

Dietary fat modifies the in vivo mutagenicity of some food-borne carcinogens. Brennan-Craddock WE, et al. **Mutat Res** 1990 May;230(1):49-54

Consideration of both genotoxic and nongenotoxic mechanisms in predicting carcinogenic potential. Butterworth BE. **Mutat Res** 1990 Sep;239(2):117-32 (144 ref.)

International Commission for Protection Against Environmental Mutagens and Carcinogens. ICPEMC Working Paper 1/2. A multi-factor ranking scheme for comparing the carcinogenic activity of chemicals. Nesnow S. **Mutat Res** 1990 Sep;239(2):83-115

Prediction of carcinogenic potency from toxicological data. Travis CC, et al. **Mutat Res** 1990 May;241(1):21-36

Use of shuttle vectors to study the molecular processing of defined carcinogen-induced DNA damage: mutagenicity of single O4-ethylthymine adducts in HeLa cells. Klein JC, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4131-7

Organ-specific genotoxic effects of chemicals: the use of alkaline elution to detect DNA damage in various organs of in vivo-exposed animals. Brunborg G, et al. **Prog Clin Biol Res** 1990;340D:43-52

How to address human interindividual variation in the process of animal extrapolation. Calabrese EJ. **Prog Clin Biol Res** 1990;340D:315-22

Human DNA adducts due to smoking and other exposures to carcinogens. Phillips DH, et al. **Prog Clin Biol Res** 1990; 340C:283-92 (15 ref.)

The role of protein adducts in the study of chemical carcinogenesis. Skipper PL, et al. **Prog Clin Biol Res** 1990; 340C:301-10 (14 ref.)

Role of free radicals in tumor promotion and progression by benzoyl peroxide. Swauger JE, et al. **Prog Clin Biol Res** 1990;340D:143-52 (21 ref.)

Liver tumor promoters and other mouse liver carcinogens. Ward JM, et al. **Prog Clin Biol Res** 1990;331:85-108 (81 ref.)

Epigenetic mechanisms of liver tumor promotion. Williams GM. **Prog Clin Biol Res** 1990;331:131-45; discussion 147-8 (73 ref.)

Relevance of maximum tolerated dose to human carcinogenic risk. Apostolou A. **Regul Toxicol Pharmacol** 1990 Feb; 11(1):68-80 (33 ref.)

Comparison of teratogenic and carcinogenic risks. Gaylor DW. **Regul Toxicol Pharmacol** 1989 Oct;10(2):138-43

The classification of chemical carcinogens. Matula TI, et al. **Regul Toxicol Pharmacol** 1989 Oct;10(2):174-82

Hazard evaluation for complex mixtures: relative comparisons to improve regulatory consistency. Owen BA, et al. **Regul Toxicol Pharmacol** 1990 Apr;11(2):132-48 (23 ref.)

Chronic bioassays: relevance to quantitative risk assessment of carcinogens. Rieth JP, et al. **Regul Toxicol Pharmacol** 1989 Oct;10(2):160-73

Regulation of food-related carcinogens in Japan. Sato S. **Regul Toxicol Pharmacol** 1990 Apr;11(2):149-57 (21 ref.)

Human risk assessment of carcinogens from an administrative perspective. Tesseraux I, et al. **Regul Toxicol Pharmacol** 1990 Feb;11(1):63-7 (9 ref.)

Cell proliferation in carcinogenesis. Cohen SM, et al. **Science** 1990 Aug 31;249(4972):1007-11 (37 ref.)

Chromosomal aberrations as a contributing factor for tumor promotion in the mouse skin. Kaina B. **Teratogenesis Carcinog Mutagen** 1989;9(6):331-48 (88 ref.)

Liver, kidney and islet cell tumors in spontaneously hypertensive and normotensive rats treated neonatally with streptozotocin. Iwase M, et al. **Tohoku J Exp Med** 1989 Oct;159(2):83-90

Toxicity of N-nitrosodimethylamine, N-nitrosomethylbenzylamine, and 1,2-dimethylhydrazine in isolated rat hepatocytes. Catz-Biro L, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):191-4

Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on I-compounds in hepatic DNA of Sprague-Dawley rats: sex-specific effects and structure-activity relationships. Randerath K, et al. **Toxicol Appl Pharmacol** 1990 Apr; 103(2):271-80

Scientific trends in risk assessment research. Anderson EL. **Toxicol Ind Health** 1989 Oct;5(5):777-90 (29 ref.)

Effect of aflatoxin B1 treatment in vivo on the in vitro activity of hepatic and extrahepatic glutathione S-transferase. Carrillo MC, et al. **Toxicol Lett** 1990 Jan; 50(1):107-16

A QSAR model for the estimation of carcinogenicity: example application to an azo-dye. Enslein K, et al. **Toxicol Lett** 1989 Dec;49(2-3):107-21

Stem cell theory of carcinogenesis. Trosko JE, et al.

Toxicol Lett 1989 Dec;49(2-3):283-95 (75 ref.)
Tumor promoting effect of goitrogens on the rat thyroid. Kanno J, et al. **Toxicol Pathol** 1990;18(2):239-46
Cellular and molecular aspects of neurocarcinogenesis. Kleihues P, et al. **Toxicol Pathol** 1990;18(1 Pt 2):193-203 (41 ref.)
Biological activity of 2,4,8-trichlorodibenzofuran: promotion of rat liver foci and induction of cytochrome P-450-dependent monooxygenases. Deml E, et al. **Toxicology** 1989 Dec 15;59(3):229-38
The use of tracheal implants in toxicology and carcinogenesis research. Everitt JI, et al. **Toxicology** 1990 Jan-Feb; 60(1-2):27-40 (43 ref.)
Genotoxic and epigenetic chemical carcinogenesis: one process, different mechanisms. Lutz WK, et al. **Trends Pharmacol Sci** 1988 Sep;9(9):322-6 (35 ref.)
[Genotoxicity of carcinogenic substances in humans and animals] Malaveille C, et al. **J Toxicol Clin Exp** 1989;9(2 Pt 2):15-25 (0 ref.) (Eng. Abstr.) **(Fre)**
[Complexes of phorbol tumor promoters with protein kinase C] Kozhemiakina OV, et al. **Biokhimiia** 1990 Apr; 55(4):595-607 (41 ref.) (Eng. Abstr.) **(Rus)**
[Effects of tumor promoters and related compounds on electric relations between giant cells of the salivary glands of Chironomus tentans larvae] Mizgirev IV. **Eksp Onkol** 1990;12(1):22-5 (Eng. Abstr.) **(Rus)**
[The induction of cancer of the large intestine in Macaca fascicularis monkeys with 1,2-dimethylhydrazine] Beniashvili DSh, et al. **Vopr Onkol** 1990;36(7):854-8 (Eng. Abstr.) **(Rus)**
[The effect of sodium selenite on the butyl butanol nitrosamine induction of bladder tumors in rats] Frolov AG. **Vopr Onkol** 1990;36(6):697-700 (Eng. Abstr.) **(Rus)**
[The methodology of an experimental study of the carcinogenicity of jointly acting chemical agents] Katul'skiĭ IuN. **Vopr Onkol** 1990;36(7):785-91 **(Rus)**

CARCINOGENS, ENVIRONMENTAL

Diesel and gasoline engine exhausts. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:41-185 (454 ref.)
Environmental cancer in the Indian context--an overview. Krishna Murti CR. **Indian J Cancer** 1989 Jun;26(2):102-14 (16 ref.)
Workshop of the Umweltbundesamt on Environmental chemical risk factors of cancer: mechanisms of action and assay systems for detection, Berlin, 23-24 November 1989. Schlatterer B. **J Cancer Res Clin Oncol** 1990;116(4):401-8
Carcinogenicity and teratogenicity vs. psychogenicity: psychological characteristics associated with self-reported Agent Orange exposure among Vietnam combat veterans who seek treatment for substance abuse. Robinowitz R, et al. **J Clin Psychol** 1989 Sep;45(5):718-28
Serum oncogene proteins in foundry workers. Brandt-Rauf PW, et al. **J Soc Occup Med** 1990 Spring;40(1):11-4
Bracken and leukaemia [letter; comment] [see comments] Evans IA, et al. **Lancet** 1990 Jan 27;335(8683):231 Comment on: Lancet 1989 Nov 11;2(8672):1145-7. Comment in: Lancet 1990 Mar 24;335(8691):736.
Mutagenicity, carcinogenicity and teratogenicity of cobalt metal and cobalt compounds. Léonard A, et al. **Mutat Res** 1990 Jul;239(1):17-27 (119 ref.)
Mutation and the environment. Part A: basic mechanisms. Proceedings of the Fifth International Conference on Environmental Mutagens. Cleveland, Ohio, July 10-15, 1989. **Prog Clin Biol Res** 1990;340A:1-398
Mutation and the environment. Proceedings of the fifth international conference on Environmental Mutagens. Cleveland, Ohio, July 10-15, 1989. **Prog Clin Biol Res** 1990; 340D:1-387
Mutation and the environment. Part C: Somatic and heritable mutation, adduction, and epidemiology. Proceedings of the Fifth International Conference on Environmental Mutagens. Cleveland, Ohio, July 10-15, 1989. **Prog Clin Biol Res** 1990;340C:1-413
Mutation and the environment. Part E: Environmental genotoxicity,risk, and modulation. Proceedings of the Fifth International Conference on Environmental Mutagens. Cleveland, Ohio, July 10-15, 1989. **Prog Clin Biol Res** 1990; 340E:1-370
Mutation and the environment. Part B: metabolism, testing methods, and chromosomes. Proceedings of the Fifth International Conference on Environmental Mutagens. Cleveland, Ohio, July 10-15, 1989. **Prog Clin Biol Res** 1990; 340B:1-475
Study on mutagenesis and carcinogenesis of productive nickel dust. Zhong BZ, et al. **Prog Clin Biol Res** 1990;340E:41-6
Two-event model for carcinogenesis: biological, mathematical, and statistical considerations. Moolgavkar SH, et al. **Risk Anal** 1990 Jun;10(2):323-41 (49 ref.)
Assessment of population exposure and carcinogenic risk posed by volatile organic compounds in indoor air. Stolwijk JA. **Risk Anal** 1990 Mar;10(1):49-57 (13 ref.)
Genetic activity profiles in the testing and evaluation of chemical mixtures. Waters MD, et al. **Teratogenesis Carcinog Mutagen** 1990;10(2):147-64 (19 ref.)
Regulation of carcinogens in terms of life shortening. Albert RE, et al. **Toxicol Ind Health** 1989 Oct;5(5):791-5
Carcinogenic risk assessment of complex mixtures. Krewski D, et al. **Toxicol Ind Health** 1989 Oct;5(5):851-67 (67 ref.)
Emerging methodologies for assessment of complex mixtures: application of bioassays in the Integrated Air Cancer Project. Lewtas J. **Toxicol Ind Health** 1989 Oct;5(5):839-50 (31 ref.)
Abstracts of papers presented at the Second European Meeting of Environmental Hygiene. Düsseldorf, May 31-June 2, 1989. **Zentralbl Hyg Umweltmed** 1989 Oct; 189(1):62-101
[Present and future of carcinogenic tryptophan pyrolysis products in the environment] Manabe S, et al. **Nippon Eiseigaku Zasshi** 1989 Oct;44(4):821-30 (42 ref.) (Eng. Abstr.) **(Jpn)**
[Carcinogenic nitroso compounds in the industrial environment (review of the literature)] Melamed DB, et al. **Gig Tr Prof Zabol** 1990;(4):35-9 (65 ref.) **(Rus)**

ADVERSE EFFECTS

Role of environmental factors in cancer etiology. Pötzsch J, et al. **Arch Geschwulstforsch** 1990;60(3):235-9
Natural anticarcinogens, carcinogens, and changing patterns in cancer: some speculation. Davis DL. **Environ Res** 1989 Dec;50(2):322-40 (141 ref.)
Environmental cancer risks--real and unreal. Lijinsky W. **Environ Res** 1989 Dec;50(2):207-9
Potential exposure of cooks to airborne mutagens and carcinogens. Teschke K, et al. **Environ Res** 1989 Dec; 50(2):296-308
Limitations of epidemiology in assessing cancer risk from environmental sources. Flesch-Janys D, et al. **Exp Pathol** 1989;37(1-4):205-9
IARC monographs on the evaluation of carcinogenic risks to humans. Diesel and gasoline engine exhausts and some nitroarenes. International Agency for Research on Cancer. **IARC Monogr Eval Carcinog Risks Hum** 1989;46:1-458
Environmental causes of cancer. Shields PG, et al. **Med Clin North Am** 1990 Mar;74(2):263-77
Estimation of the joint risk for multiple-compound exposure based on single-compound experiments. Chen JJ, et al. **Risk Anal** 1990 Jun;10(2):285-90
[Correlation of the toxic effects of the environment and the genetic information of the individual] Roser M, et al. **Internist (Berl)** 1989 Sep;30(9):587-95 (50 ref.) **(Ger)**
[Dose-response relations in chemical carcinogenesis] Lutz WK. **Off Gesundheitswes** 1990 May;52 Suppl 1:12-5 **(Ger)**
[Endogenous and exogenous determinants in the evaluation of carcinogenic risks] Rüdiger HW. **Off Gesundheitswes** 1990 May;52 Suppl 1:19-22 **(Ger)**
[Organic-chemical air pollutants indoors--aspects of environmental toxicologic evaluation] Sagunski H, et al. **Off Gesundheitswes** 1990 Mar;52(3):113-22 (38 ref.) (Eng. Abstr.) **(Ger)**
[Value of animal experiments in risk assessment in the human] Zbinden G. **Off Gesundheitswes** 1990 May;52 Suppl 1:16-8 **(Ger)**

ANALYSIS

Human biomonitoring in exposure to environmental genotoxicants. Sorsa M, et al. **Basic Life Sci** 1990;52:79-86 (14 ref.)
Interaction of 7,10-dimethylbenz[c]acridine with deoxyribonucleic acid. Kamata K, et al. **Bull Environ Contam Toxicol** 1989 Oct;43(4):534-40
Molecular epidemiology: a new tool in assessing risks of environmental carcinogens [see comments] Perera FP. **CA** 1990 Sep-Oct;40(5):277-88 (62 ref.) Comment in: CA 1990 Sep-Oct;40(5):261-4.
Risk assessment for carcinogens under California's Proposition 65. Pease WS, et al. **Risk Anal** 1990 Jun; 10(2):255-71
Determining compliance with PCB standards [editorial] Rodricks JV. **Risk Anal** 1989 Sep;9(3):275-7
Concentration- and time-dependent formation of DNA adducts in lungs of rats exposed to diesel exhaust. Bond JA, et al. **Toxicology** 1990 Jan-Feb;60(1-2):127-35
[The AMES test in environmental and occupational medicine] Clonfero E, et al. **Med Lav** 1990 Jan-Feb; 81(1):3-10 (78 ref.) (Eng. Abstr.) **(Ita)**

METABOLISM

Effects of temperature and incubation period on production of fumonisin B1 by Fusarium moniliforme. Alberts JF, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1729-33

PHARMACOKINETICS

Development of a physiologically based pharmacokinetic model for risk assessment with 1,4-dioxane. Reitz RH, et al. **Toxicol Appl Pharmacol** 1990 Aug;105(1):37-54

PHARMACOLOGY

Antigenotoxic activity of carotenoids in carcinogen-exposed populations. Rosin MP. **Basic Life Sci** 1990;52:45-59 (49 ref.)
Enhanced proliferation of cells from human tissue explants following irradiation in the presence of environmental carcinogens. Mothersill C, et al. **Radiat Environ Biophys** 1989;28(3):203-12

STANDARDS

Occupational exposure limits for carcinogens--variant approaches by different countries. Cook WA. **Am Ind Hyg Assoc J** 1989 Sep;50(9):A680-4

TOXICITY

Histological changes in the nasal mucosa in rats after long-term exposure to formaldehyde and wood dust. Holmström M, et al. **Acta Otolaryngol (Stockh)** 1989 Sep-Oct;108(3-4):274-83
Natural inhalation exposure to coal smoke and wood smoke induces lung cancer in mice and rats. Liang CK, et al. **Biomed Environ Sci** 1988 Jun;1(1):42-50
Natural pesticides present in edible plants are predicted to be carcinogenic. Rosenkranz HS, et al. **Carcinogenesis** 1990 Feb;11(2):349-53
Losing the war against cancer: who's to blame and what to do about it. Epstein SS. **Int J Health Serv** 1990; 20(1):53-71 (48 ref.)
Human carcinogens so far identified. Tomatis L, et al. **Jpn J Cancer Res** 1989 Sep;80(9):795-807 (50 ref.)
The boring story of Agent Orange already is outdated [letter; comment] Barr M. **Med J Aust** 1989 Sep 18;151(6):356 Comment on: Med J Aust 1989 May 15;150(10):602.
Mutational specificities of environmental carcinogens in the lacI gene of Escherichia coli. III: The cyclic nitrosamine N-nitrosopyrrolidine is a complex mutagen. Zielenska M, et al. **Mol Carcinog** 1990;3(3):122-5
How much cancer can EPA regulate away? Gough M. **Risk Anal** 1990 Mar;10(1):1-6
[Age-related changes in the sensitivity to carcinogens and the prevention of cancer] Anisimov VN. **Vestn Akad Med Nauk SSSR** 1989;(8):84-91 (38 ref.) **(Rus)**

CARCINOID HEART DISEASE see under **MALIGNANT CARCINOID SYNDROME**

CARCINOID TUMOR

Carcinoid tumor of the transverse colon [letter] Shah P, et al. **Am J Gastroenterol** 1989 Oct;84(10):1337
Carcinoid tumors of the thymus [see comments] Economopoulos GC, et al. **Ann Thorac Surg** 1990 Jul; 50(1):58-61 (24 ref.) Comment in: Ann Thorac Surg 1990 Jul;50(1):5-6.
Clinical features, diagnosis, and localization of carcinoid tumors and their management. Vinik AI, et al. **Gastroenterol Clin North Am** 1989 Dec;18(4):865-96 (122 ref.)
Carcinoid tumour of the male breast. Gill IS. **J R Soc Med** 1990 Jun;83(6):401
Laryngeal carcinoid. Sizeland AM, et al. **Otolaryngol Head Neck Surg** 1989 Oct;101(4):480-4
Carcinoid tumors of the gastrointestinal tract: a 44-year experience. Saha S, et al. **South Med J** 1989 Dec; 82(12):1501-5
[Primary mucinous carcinoid of the ovary] Ammaturo C, et al. **Minerva Chir** 1990 Apr 15;45(7):535-7 (Eng. Abstr.) **(Ita)**
[Gastric carcinoid: a clinical case] Vuolo G, et al. **Minerva Chir** 1990 May 31;45(10):715-20 (Eng. Abstr.) **(Ita)**
[A case of carcinoid tumor of the common hepatic duct] Yoshida N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Nov;86(11):2617-21 (25 ref.) **(Jpn)**
[Carcinoid tumors of the gastrointestinal tract (review of the literature)] Kurguzov OP, et al. **Khirurgiia (Mosk)** 1989 Dec;(12):126-33 (171 ref.) **(Rus)**

ANALYSIS

Neurofilament and chromogranin expression in normal and neoplastic neuroendocrine cells of the human gastrointestinal tract and pancreas. Perez MA, et al. **Cancer** 1990 Mar 1;65(5):1219-27
Detection of somatostatin receptors in surgical and percutaneous needle biopsy samples of carcinoids and islet cell carcinomas. Reubi JC, et al. **Cancer Res** 1990 Sep 15; 50(18):5969-77
Increased expression of mutant forms of p53 oncogene in primary lung cancer. Iggo R, et al. **Lancet** 1990 Mar 24; 335(8691):675-9
Amidated joining peptide in the human pituitary, gut, adrenal gland and bronchial carcinoids. Immunocytochemical and immunochemical evidence. Bjartell A, et al. **Peptides** 1990 Jan-Feb;11(1):149-61
Significance of gastric endocrine tumor and age-related gut peptide alterations in Mastomys. Bilchik AJ, et al. **Regul Pept** 1990 Feb 4;27(2):195-207
[Bronchial carcinoid and small cell lung cancer--neuroendocrine tumors. Immunohistochemical studies] Maryniak R, et al. **Pneumonol Pol** 1989 Oct-Dec; 57(10-12):489-95 (Eng. Abstr.) **(Pol)**

BLOOD

Gastric carcinoid tumour and hypergastrinaemia. Vandenplas O, et al. **Acta Clin Belg** 1989;44(6):409-13
A polyclonal antiserum against chromogranin A and B--a new sensitive marker for neuroendocrine tumours. Eriksson B, et al. **Acta Endocrinol (Copenh)** 1990 Feb;122(2):145-55
Plasma substance-P in neuroendocrine tumors and idiopathic flushing: the value of pentagastrin stimulation tests and the effects of somatostatin analog. Vinik AI, et al. **J Clin Endocrinol Metab** 1990 Jun;70(6):1702-9

Occult retroperitoneal carcinoid tumor with flushing and solitary lung metastasis. Jackson JA, et al. **West J Med** 1989 Oct;151(4):461–3

CHEMICALLY INDUCED

Duodenal carcinoid tumour in a patient with rheumatoid arthritis receiving long term ranitidine treatment. Duane PD, et al. **BMJ** 1990 Jan 13;300(6717):124–5

Enterochromaffin-like cell carcinoids in the rat gastric mucosa following long-term administration of ranitidine. Havu N, et al. **Digestion** 1990;45(4):189–95

H2-receptor blockade induces peptide YY and enteroglucagon-secreting gastric carcinoids in mastomys. Bilchik AJ, et al. **Surgery** 1989 Dec;106(6):1119–26; discussion 1026–7

CLASSIFICATION

[A new classification of endocrine hyperplasia, dysplasia and neoplasia of the stomach] Heitz H, et al. **Leber Magen Darm** 1989 Dec;19(6):281, 284, 287 **(Ger)**

COMPLICATIONS

Carcinoid tumor presenting as central nervous system symptoms. Case report and review of the literature. Hussein AM, et al. **Am J Clin Oncol** 1990 Jun;13(3):251–5 (30 ref.)

Neuroendocrine tumor of the pancreas in a patient with pernicious anemia. Caggiano AV, et al. **Am Surg** 1990 Jun; 56(6):347–51

Limitations of angiography for mesenteric ischemia caused by midgut carcinoid tumors. Rose SC, et al. **Cardiovasc Intervent Radiol** 1989 May–Jun;12(3):131–5

Carcinoid tumor complicating ulcerative colitis [letter] Farr CM, et al. **Gastrointest Endosc** 1990 May–Jun;36(3):315–6 (10 ref.)

Carcinoid tumour of the common bile duct—a novel complication of von Hippel–Lindau syndrome. Fellows IW, et al. **Gut** 1990 Jun;31(6):728–9

Severe hypoxemia in a case of midgut carcinoid tumor. Robert R, et al. **Intensive Care Med** 1989;15(8):536–7

Carcinoid tumors in Meckel's diverticula. Weber JD, et al. **J Clin Gastroenterol** 1989 Dec;11(6):682–6 (37 ref.)

Thoracic duct lymph in a patient with chylous ascites and a carcinoid tumor. Dumont AE, et al. **Lymphology** 1989 Dec;22(4):199–201

Mediastinal carcinoid tumour with unusual manifestations. Aggarwal P, et al. **Postgrad Med J** 1989 May;65(763):327–8 (9 ref.)

Multiple gastric carcinoid tumours associated with atrophic gastritis. Stewart DA, et al. **Scott Med J** 1990 Feb; 35(1):19–20

[An appendix with a tail] Meijer S, et al. **Ned Tijdschr Geneeskd** 1990 Jun 9;134(23):1121–2 **(Dut)**

[Carcinoid tumor of the ileum associated with retroperitoneal fibrosis and right heart involvement (letter)] Zinelabidine Y, et al. **Presse Med** 1989 Nov 11;18(37):1847 **(Fre)**

[Cushing's syndrome in CRF-producing mediastinal carcinoid] Gerl H, et al. **Dtsch Med Wochenschr** 1990 Mar 2;115(9):332–6 (Eng. Abstr.) **(Ger)**

[A case of malignant carcinoid arising in chronic ulcerative colitis] Provera P, et al. **Pathologica** 1989 Jul–Aug; 81(1074):447–52 (Eng. Abstr.) **(Ita)**

[A case report of ruptured thymic carcinoid] Kasugai H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Aug; 37(8):1602–7 (Eng. Abstr.) **(Jpn)**

[Giant carcinoid of the ileum as the source of profuse intestinal hemorrhage] Fishchenko Ala, et al. **Khirurgiia (Mosk)** 1989 Dec;(12):114–5 **(Rus)**

[Complicated carcinoid tumor of the small intestine] Uspenskiĭ LV, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):89–90 **(Rus)**

[Primary carcinoid tumor of the liver with ulcerogenic syndrome] Bulgakov GA, et al. **Vestn Khir** 1989 Jun; 142(6):48–51 **(Rus)**

[Stomach and duodenal ulcer in endocrine tumors] Derizhanova IS, et al. **Vopr Onkol** 1989;35(8):956–61 (Eng. Abstr.) **(Rus)**

[Carcinoid of the bronchi and adenoma of the parathyroid: is it a fortuitous association or a multiple endocrine neoplasm? (letter)] Pedro-Botet ML, et al. **Rev Clin Esp** 1989 Oct;185(5):268 **(Spa)**

[Multiple gastric carcinoids, atrophic gastritis, hypergastrinemia: a confirmed association (a new case)] González Martín JA, et al. **Rev Esp Enferm Apar Dig** 1989 Aug;76(2):161–4 (29 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Pulmonary spindle cell carcinoid. Needle aspiration biopsy, histologic and immunohistochemical findings. Fekete PS, et al. **Acta Cytol** 1990 Jan–Feb;34(1):50–6

Cytologic and hormonal findings in a carcinoid tumor of the uterine cervix. Hirahatake K, et al. **Acta Cytol** 1990 Mar–Apr;34(2):119–24

Multiple small-bowel carcinoids presenting with gastrointestinal hemorrhage: a case report. McNamee CJ, et al. **Can J Surg** 1990 Aug;33(4):291–3

Aspiration cytology of neuroendocrine tumors below the diaphragm. Leiman G, et al. **Diagn Cytopathol** 1989; 5(3):263–8

Spontaneous regression of large gastric carcinoid. Sawant PD, et al. **Indian J Gastroenterol** 1989 Oct;8(4):289–90

Failure of bronchial lavage to detect elevated levels of adrenocorticotropin (ACTH) in patients with ACTH-producing bronchial carcinoids. Doppman JL, et al. **J Clin Endocrinol Metab** 1989 Dec;69(6):1302–4

Bronchopulmonary carcinoids in Iceland 1955–1984. A retrospective clinical and histopathologic study. Hallgrímsson JG, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(3):275–8

Carcinoid tumorlet of the bronchus in a child. Rael J, et al. **South Med J** 1990 Sep;83(9):1104–5

Pulmonary carcinoid presenting as multiple subcutaneous nodules. Oleksowicz L, et al. **Tumori** 1990 Feb 28; 76(1):44–7

Thymic carcinoid and multiple endocrine neoplasia [letter; comment] Blayney DW. **West J Med** 1990 Apr;152(4):426 Comment on: West J Med 1990 Jan;152(1):72–4.

Carcinoid tumors of the thymus [see comments] Venkatesh S, et al. **West J Med** 1990 Jan;152(1):72–4 Comment in: West J Med 1990 Apr;152(4):426.

[Diagnosis of a round calcified opacity of the left lung hilum] Lechapt E, et al. **Rev Pneumol Clin** 1990;46(1):25–7 **(Fre)**

[Cases of pulmonary carcinoid with different clinical presentation in 15-year-old females] Grzegorczyk-Skibińska T, et al. **Pneumonol Pol** 1990 Feb–Mar;58(2–3):123–8 (Eng. Abstr.) **(Pol)**

[Appendicular carcinoid] Tircoveanu E, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Apr–Jun;93(2):385–6 (Eng. Abstr.) **(Rum)**

[Malignant tumors of the small intestine (review of the literature)] Kurguzov OP, et al. **Khirurgiia (Mosk)** 1990 Mar;(3):128–35 (152 ref.) **(Rus)**

[The diagnosis of Gottron's carcinoid papillomatosis of the skin] Olovianishnikov OV. **Vestn Dermatol Venerol** 1989; (11):46–7 (Eng. Abstr.) **(Rus)**

[Carcinoid of the rectum] Knysh VI, et al. **Vopr Onkol** 1990; 36(6):675–8 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Long term treatment with tamoxifen for metastatic carcinoid tumor. Arganini M, et al. **Acta Chir Belg** 1989 Jul–Aug; 89(4):209–11

Partial remission of carcinoid tumor in response to cyproheptadine. Leitner SP, et al. **Ann Intern Med** 1989 Nov 1;111(9):760–1

Carboplatin in the treatment of metastatic carcinoid tumours and paraganglioma: a phase II study. Jodrell DI, et al. **Cancer Chemother Pharmacol** 1990;26(1):62–4

Sandostatin and carcinoid tumours in France: experience in the Lyon area. Chayvialle JA. **Digestion** 1990;45 Suppl 1:23–6

Chronic treatment with a long-acting somatostatin analogue in a patient with intestinal carcinoid tumor: occurrence of cholelithiasis. Roti E, et al. **J Endocrinol Invest** 1990 Jan; 13(1):69–72

An important new treatment for carcinoid tumors and VIPomas [news] **Oncology (Williston Park)** 1988 Dec; 2(12):35–6

[Enteral hyperoxalosis due to therapy with a somatostatin analog] Ranft K, et al. **Dtsch Med Wochenschr** 1990 Feb 2;115(5):179–81 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

Interferon-induced enhancement of 2',5'-oligoadenylate synthetase in mid-gut carcinoid tumours. Grandér D, et al. **Lancet** 1990 Aug 11;336(8711):337–40

EPIDEMIOLOGY

Abdominal carcinoid tumours in Sheffield. Woods HF, et al. **Digestion** 1990;45 Suppl 1:17–22

Primary gastric lymphoma: incidence and role of surgery. Kerin M, et al. **Ir Med J** 1989 Dec;82(4):163–4

ETHNOLOGY

Somatostatin-producing duodenal carcinoids in patients with von Recklinghausen's neurofibromatosis. A predilection for black patients. Burke AP, et al. **Cancer** 1990 Apr 1; 65(7):1591–5

ETIOLOGY

Periampullary neoplasms in von Recklinghausen's disease. Klein A, et al. **Surgery** 1989 Nov;106(5):815–9 (37 ref.)

IMMUNOLOGY

Expression of epithelial membrane antigen by carcinoid tumours [letter] Gledhill A, et al. **J Clin Pathol** 1990 Aug; 43(8):696–7

Carcinoid granule extract contains antigenic determinants common to peptide hormone-producing cells and endocrine tumours. Larsson L, et al. **Virchows Arch [A]** 1990;416(6):465–72

Monoclonal antibodies raised against mid-gut carcinoid tumor cells. Juhlin C, et al. **World J Surg** 1990 May–Jun; 14(3):386–91; discussion 392

METABOLISM

Somatostatinoma of the rectum. Kitagawa M, et al. **Am J Gastroenterol** 1989 Nov;84(11):1452–5

Human chorionic gonadotropin alpha-subunit in rectal carcinoids. Its mode of presence and the change of granule morphology. Fukayama M, et al. **Am J Pathol** 1989 Dec; 135(6):1065–72

Carcinoid tumors with focal mucin production. Alameda F, et al. **Appl Pathol** 1989;7(6):361–6

Expression of platelet-derived growth factor beta-receptors on stromal tissue cells in human carcinoid tumors. Funa K, et al. **Cancer Res** 1990 Feb 1;50(3):748–53

Immunohistochemical and ultrastructural studies of twelve argentaffin and six argyrophil carcinoids of the appendix vermiformis. Iwafuchi M, et al. **Hum Pathol** 1990 Jul; 21(7):773–80

Coexistence of delta sleep-inducing peptide and serotonin in midgut carcinoid tumour cells in vivo and in vitro. Ahlman H, et al. **Int J Cancer** 1989 Oct 15;44(4):641–7

PATHOLOGY

A carcinoid tumor of the ileum. A case report and a brief review of the relevant literature. Case report. Borghol M, et al. **Acta Chir Scand** 1989 Oct;155(10):557–9

Fine needle aspiration cytology of pulmonary carcinoid tumors. Anderson C, et al. **Acta Cytol** 1990 Jul–Aug; 34(4):505–10

Rectal carcinoid tumor metastasizing to the thyroid and pancreas. An autopsy case exploiting immunohistochemistry for differentiation from tumors involving multiple endocrine organs. Lertprasertsuke N, et al. **Acta Pathol Jpn** 1990 May;40(5):352–60

Goblet cell carcinoids and related tumors of the vermiform appendix. Burke AP, et al. **Am J Clin Pathol** 1990 Jul; 94(1):27–35

Endocrine cell hyperplasia of the uterine cervix. A precursor of neuroendocrine carcinoma of the cervix? Chan JK, et al. **Am J Clin Pathol** 1989 Dec;92(6):825–30

Gastric argyrophil carcinoidosis in patients with Zollinger-Ellison syndrome due to type 1 multiple endocrine neoplasia. A newly recognized association. Solcia E, et al. **Am J Surg Pathol** 1990 Jun;14(6):503–13 (39 ref.)

Atrophic gastritis and gastric carcinoid tumours. Borch K. **Ann Med** 1989 Aug;21(4):291–7

Review of neuroendocrine carcinomas of the larynx. Ferlito A, et al. **Ann Otol Rhinol Laryngol** 1989 Oct;98(10):780–90 (55 ref.)

Carcinoid tumors of the middle ear. Krouse JH, et al. **Ann Otol Rhinol Laryngol** 1990 Jul;99(7 Pt 1):547–52 (13 ref.)

Rounding of cultured human carcinoid tumor cells by forskolin. Tsugawa M, et al. **Anticancer Res** 1990 Jan–Feb; 10(1):63–6

The histological spectrum of bronchial carcinoid tumours. Hasleton PS, et al. **Appl Pathol** 1989;7(4):205–18

Carcinoid tumors of the duodenum. A clinicopathologic study of 99 cases. Burke AP, et al. **Arch Pathol Lab Med** 1990 Jul;114(7):700–4

Concurrent spindle cell peripheral pulmonary carcinoid tumor and Merkel cell tumor of the skin. Nelson EL, et al. **Arch Pathol Lab Med** 1990 Apr;114(4):420–3

Primary renal carcinoid. Unger PD, et al. **Arch Pathol Lab Med** 1990 Jan;114(1):68–71 (21 ref.)

Dual primary carcinoid and carcinoma of the rectum. Turner L, et al. **Br J Surg** 1966 Feb;53(2):120–2

Bilateral malignant testicular carcinoid. Saxena A, et al. **Br J Urol** 1990 Mar;65(3):302–3

A clinicopathologic study of primary hepatic carcinoid tumors. Andreola S, et al. **Cancer** 1990 Mar 1;65(5):1211–8

Rectal and colonic carcinoids. A clinicopathologic study of 84 cases. Federspiel BH, et al. **Cancer** 1990 Jan 1; 65(1):135–40

Carcinoid tumors of the vermiform appendix. Moertel CG, et al. **Cancer** 1968 Feb;21(2):270–8

Effects of interferon on tumor tissue content in liver metastases of human carcinoid tumors. Andersson T, et al. **Cancer Res** 1990 Jun 1;50(11):3413–5

Composite (adenocarcinoid) tumors of the gastrointestinal tract. Levendoglu H, et al. **Dig Dis Sci** 1990 Apr; 35(4):519–25 (32 ref.)

Proposal for a new carcinoid tumour staging system based on tumour tissue infiltration and primary metastasis; a prospective multicentre carcinoid tumour evaluation study. West German Surgical Oncologists' Group. Moesta KT, et al. **Eur J Surg Oncol** 1990 Aug;16(4):280–8

Goblet cell carcinoid of the appendix. Park K, et al. **Gut** 1990 Mar;31(3):322–4

Carcinoid of the cystic duct. Chittal SM, et al. **Histopathology** 1989 Dec;15(6):643–6

Carcinoid tumour of Meckel's diverticulum associated with caecal adenocarcinoma. Venizelos ID, et al. **Histopathology** 1990 Apr;16(4):395–6

Adenocarcinoid (goblet cell carcinoid) of the duodenum presenting as gastric outlet obstruction [letter] Burke A, et al. **Hum Pathol** 1990 Feb;21(2):238–9

Neurofibromatosis associated with periampullary carcinoid tumour of duodenum [letter] Bapat RD, et al. **Indian J Gastroenterol** 1989 Oct;8(4):306–7

Collision tumour of stomach. Chodankar CM, et al. **Indian J Gastroenterol** 1989 Oct;8(4):297–8

Carcinoid tumours of the anorectum. Sharma SC, et al. **Indian J Pathol Microbiol** 1989 Apr;32(2):111–6

Minute gastric carcinoid tumor with regional lymph node metastasis. Kumashiro R, et al. **Int Surg** 1989 Jul–Sep; 74(3):198–200

Carcinoid tumor of skin: report of a possible primary case. Bart RS, et al. **J Am Acad Dermatol** 1990 Feb;22(2 Pt 2):366–70

Carcinoid tumours of the larynx: report of two cases. Casolino D, et al. **J Laryngol Otol** 1990 Mar;104(3):264–6

Intra-ocular transplantation of carcinoid tumours from mastomys and humans. Nilsson O, et al. **J Pathol** 1990 Apr; 160(4):347–56

Argyrophilic carcinoma "carcinoid tumor" of the breast: case report with electron microscopic and immunohistochemical investigations. Kurosumi M, et al. **Jpn J Clin Oncol** 1989 Dec;19(4):397–401

An unusual case of bronchial carcinoid predominantly consisting of large cells. Shinoda M, et al. **Jpn J Clin Oncol** 1989 Dec;19(4):409–11

A case of rectal carcinoid with extensive sacral breakage. Noshiro H, et al. **Jpn J Surg** 1990 Jul;20(4):443–7

A rectal carcinoid tumor of less than 1 cm in diameter with lymph node metastasis: a case report and a review of the literature. Tomoda H, et al. **Jpn J Surg** 1990 Jul; 20(4):468–71 (14 ref.)

Appendiceal carcinoids: correlation of histology and immunohistochemistry. Burke AP, et al. **Mod Pathol** 1989 Nov;2(6):630–7

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 50–1989. A 17-year-old boy with right-lower-lobe pneumonitis and asthma. **N Engl J Med** 1989 Dec 14;321(24):1665–72

Bronchial carcinoids with S-100 positive sustentacular cells. A comparative study with gastrointestinal carcinoids, pheochromocytomas and paragangliomas. Barbareschi M, et al. **Pathol Res Pract** 1990 Apr;186(2):212–22

Unusual prostatic carcinomas. Dhom G. **Pathol Res Pract** 1990 Feb;186(1):28–36 (55 ref.)

Splenic metastasis in an ileal carcinoid tumor. Falk S, et al. **Pathol Res Pract** 1989 Aug;185(2):238–42; discussion 242–4

Typical and atypical bronchial carcinoids. Torre M, et al. **Respir Med** 1989 Jul;83(4):305–8

Gastrointestinal carcinoid tumor metastatic to the orbit. Harris GJ, et al. **South Med J** 1989 Dec;82(12):1549–52 (9 ref.)

Adenoid cystic carcinoma metastasizing before detection of the primary lesion. Warren CJ, et al. **South Med J** 1989 Oct;82(10):1277–9

The unusual spectrum of neuroendocrine lung neoplasms. Hammar S, et al. **Ultrastruct Pathol** 1989 Sep–Dec; 13(5–6):515–60

Ultrastructural and morphometric features of poorly differentiated and undifferentiated lung tumors. Mackay B, et al. **Ultrastruct Pathol** 1989 Sep–Dec;13(5–6):561–71

Adenocarcinoma and carcinoid developing spontaneously in the stomach of mutant strains of Mastomys natalensis. Kumazawa H, et al. **Virchows Arch [A]** 1989;416(2):141–51

Primary carcinoid tumor of the larynx. Kim KM, et al. **Yonsei Med J** 1989;30(2):193–7

Studies into gastrinomas and combined carcinomatous carcinoid tumors. Optical light- and electron microscopy and immunohistochemistry. Lászik Z, et al. **Zentralbl Allg Pathol** 1989;135(7):657–65

[Pulmonary neuroendocrine tumors] Moro D, et al. **Ann Chir** 1989;43(7):513–5 **(Fre)**

[Liver transplantation in metastases of carcinoid tumor] Bizouarn P, et al. **Ann Fr Anesth Reanim** 1990;9(2):180–2 (Eng. Abstr.) **(Fre)**

[Amphicrine carcinoid of the stomach. Histo and immunohistologic study] Delecluse HJ, et al. **Ann Pathol** 1990;10(3):207–8 **(Fre)**

[Cutaneous metastasis revealing carcinoid tumor in a 82-year-old patient (letter)] Sicsic JC, et al. **J Chir (Paris)** 1989 Dec;126(12):699 **(Fre)**

[Morphology and clinical picture of thymus carcinoid] Wöckel W, et al. **Dtsch Med Wochenschr** 1990 Mar 16; 115(11):412–7 (Eng. Abstr.) **(Ger)**

[Struma ovarii and carcinoid: a case report of a rare ovarian tumor] Butterwegge M, et al. **Geburtshilfe Frauenheilkd** 1989 Sep;49(9):832–3 (Eng. Abstr.) **(Ger)**

[Carcinoid tumor of the middle ear. Morphology, immunohistochemistry, clinical aspects and differential diagnosis] Ruck P, et al. **Laryngorhinootologie** 1990 Feb; 69(2):74–6 (Eng. Abstr.) **(Ger)**

[Thymus carcinoid and mediastinal paraganglioma. Differential diagnosis and immunohistologic study] Hartmann CA, et al. **Pathologe** 1989 Nov;10(6):323–31 **(Ger)**

[The tumorlet carcinoid in bronchiectasis-changed lungs. An example of a multifocal, endocrine tumor] Klinke F, et al. **Pneumologie** 1990 Feb;44 Suppl 1:607–9 (Eng. Abstr.) **(Ger)**

[Carcinoid tumor of the esophagus. A rare differential diagnosis in submucosal esophageal tumor] Höring E, et al. **Z Gastroenterol** 1990 Jan;28(1):10–3 (Eng. Abstr.) **(Ger)**

[Bilateral strumal ovarian carcinoid] Zahradka W, et al. **Zentralbl Gynakol** 1990;112(3):171–4 (Eng. Abstr.) **(Ger)**

[Abdominal pain, diarrhea, loss of weight, tricuspid insufficiency (clinical conference)] **Harefuah** 1989 Jun 15; 116(12):662–7 **(Heb)**

[Various rare tumors of the lung] Callegari P, et al. **Ann Ital Chir** 1989 Nov–Dec;60(6):515–21; discussion 521–2 (Eng. Abstr.) **(Ita)**

[A case of gastric carcinoid tumor with coexisting adenocarcinoma in the same tumor] Ishida M, et al. **Gan No Rinsho** 1989 Nov;35(14):1687–92 (27 ref.) (Eng. Abstr.) **(Jpn)**

[A case of gastric carcinoid with transient features of tubular adenocarcinoma] Miura K, et al. **Gan No Rinsho** 1989 Nov; 35(14):1693–8 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Carcinoid of the esophagus] Hirata M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Aug;86(8):1692–6 (18 ref.) **(Jpn)**

[Pathogenesis and histologic diagnosis of carcinoid tumor of the stomach] Dubiel-Bigaj M, et al. **Patol Pol** 1989; 40(1):109–22 (Eng. Abstr.) **(Pol)**

[Several parameters of growth of heterografts of human lung tumor in the subrenal capsule of CBA mice] Skotnikova OI, et al. **Eksp Onkol** 1990;12(1):41–3 (Eng. Abstr.) **(Rus)**

[Carcinoid tumors of infrequent localization (letter)] Cantero Hinojosa J, et al. **Rev Clin Esp** 1990 Apr;186(6):307 **(Spa)**

[Neoplasms of the Meckel diverticulum. Apropos of 2 new cases] Morcillo Rodenas MA, et al. **Rev Esp Enferm Dig** 1990 Feb;77(2):143–6 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Carcinoid tumors and the carcinoid syndrome. Feldman JM. **Curr Probl Surg** 1989 Dec;26(12):829–918 (168 ref.)

Hypoglycemia after administration of somatostatin analog (SMS 201–995) in metastatic carcinoid. Brunner JE, et al. **Henry Ford Hosp Med J** 1989;37(2):60–2

RADIOGRAPHY

"Jejunized colon" in a patient with colonic carcinoid [letter] Li KC, et al. **AJR Am J Roentgenol** 1989 Dec;153(6):1314

Neuroendocrine carcinomas of the lung. Müller NL, et al. **Semin Roentgenol** 1990 Jan;25(1):96–104 (8 ref.)

[Carcinoid tumors of the bronchi. Our experience of these during the last 10 years, with a review of the literature] Van Damme H, et al. **Acta Chir Belg** 1989 May-Jun; 89(3):166–74 (58 ref.) (Eng. Abstr.) **(Fre)**

[Laminar atelectasis in an adult with episodes of dyspnea and hemoptysis] Alvarez Sanz C, et al. **Rev Clin Esp** 1990 Jan;186(1):38–40 **(Spa)**

RADIONUCLIDE IMAGING

Treatment with Sandostatin and in vivo localization of tumors with radiolabeled somatostatin analogs. Lamberts SW, et al. **Metabolism** 1990 Sep;39(9 Suppl 2):152–5

Accumulation of 99mTc-DPD and 201Tl in thyroid metastasis from carcinoid tumour. Vorne M, et al. **ROFO** 1990 Aug;153(2):219–20

SECONDARY

A hyperdense intracranial metastatic carcinoid tumor. Gordon DL, et al. **Am J Med** 1990 Mar;88(3):314–6

Malignant carcinoid within a recurrent sacrococcygeal teratoma in childhood. Stringer DA, et al. **Can Assoc Radiol J** 1990 Apr;41(2):105–7

Cerebral deposits of carcinoid tumour. Butler EG, et al. **Clin Exp Neurol** 1989;26:213–7

Metastatic intracranial carcinoid with immunohistochemical observation. Case report. Ozawa T, et al. **J Neurosurg** 1990 Jul;73(1):130–4

Metastatic carcinoid tumour in association with small bowel ischaemia and infarction. Payne-James JJ, et al. **J R Soc Med** 1990 Jan;83(1):54

A clinicopathologic study of three carcinoid tumors metastatic to the orbit. Immunohistochemical, ultrastructural, and DNA flow cytometric studies. Shetlar DJ, et al. **Ophthalmology** 1990 Feb;97(2):257–64 (47 ref.)

Fatal carcinoid crisis after percutaneous fine-needle biopsy of hepatic metastasis: case report and literature review. Bissonnette RT, et al. **Radiology** 1990 Mar;174(3 Pt 1):751–2 (14 ref.)

[Bone localization of carcinoid tumors] Haettich B, et al. **Ann Med Interne (Paris)** 1989;140(5):383–6 **(Fre)**

[Bony metastases of a bronchial carcinoid tumor. A new form revealed by dorsal epidural inflammation] Bruno MC, et al. **Rev Rhum Mal Osteoartic** 1989 Jul-Sep;56(8–9):593–5 **(Fre)**

[Ascites in metastatic neuroendocrine tumor of the intestine. Cytologic and immunocytochemistry diagnosis] Dirsch O, et al. **Leber Magen Darm** 1990 Mar;2(2):76, 78, 81 (Eng. Abstr.) **(Ger)**

[Metastatic carcinoid of the small intestine as a secondary tumor accompanied by an inadvertent effect of a puncture. Case report] Held P, et al. **Rontgenpraxis** 1990 Jul; 43(7):260–3 **(Ger)**

[Skin tumor, the first distant manifestation of a carcinoid tumor of the bronchi (letter)] Panisello J, et al. **Rev Clin Esp** 1989 Nov;185(8):430–1 **(Spa)**

SECRETION

Bronchial and thymic carcinoids and the ectopic ACTH syndrome [editorial; comment] Odell WD. **Ann Thorac Surg** 1990 Jul;50(1):5–6 Comment on: Ann Thorac Surg 1990 Jul;50(1):52–7. Comment on: Ann Thorac Surg 1990 Jul;50(1):58–61.

Management of the ectopic ACTH syndrome due to thoracic carcinoids [see comments] Pass HI, et al. **Ann Thorac Surg** 1990 Jul;50(1):52–7 (38 ref.) Comment in: Ann Thorac Surg 1990 Jul;50(1):5–6.

Successful treatment by chemotherapy for acromegaly associated with ectopic growth hormone releasing hormone secretion from a carcinoid tumour. Harris PE, et al. **Clin Endocrinol (Oxf)** 1990 Mar;32(3):315–21

[Ectopic ACTH syndrome] Kasperlik-Załuska A, et al. **Pol Arch Med Wewn** 1987 Dec;78(6):355–62 **(Pol)**

SURGERY

Treatment of rectal carcinoid tumors. Shirouzu K, et al. **Am J Surg** 1990 Sep;160(3):262–5

Carcinoid tumor of the bile duct. A case report and literature review. Brown WM 3d, et al. **Am Surg** 1990 Jun;56(6):343–6 (18 ref.)

Experience with 647 consecutive tumors of the duodenum, ampulla, head of the pancreas, and distal common bile duct. Michelassi F, et al. **Ann Surg** 1989 Oct;210(4):544–54; discussion 554–6 (68 ref.)

Anorectal carcinoid tumors. Is aggressive surgery warranted? Sauven P, et al. **Ann Surg** 1990 Jan;211(1):67–71

Nd:YAG laser photoresection of low-grade malignant tumors of the tracheobronchial tree. Díaz-Jiménez JP, et al. **Chest** 1990 Apr;97(4):920–2

Conservative and bronchoplastic resection for bronchial carcinoid tumours. Toledo J, et al. **Eur J Cardiothorac Surg** 1989;3(4):288–91

Goblet cell carcinoid of the appendix [letter] Smith JA. **Gut** 1990 Jul;31(7):840

The policy of surgery for small carcinoid tumors of the rectum. Tomoda H, et al. **Jpn J Surg** 1989 Sep;19(5):544–8

Bronchoplastic procedures in the treatment of endobronchial carcinoid tumors. Salminen US, et al. **Scand J Thorac Cardiovasc Surg** 1990;24(1):27–32

Surgical treatment of mid-gut carcinoid tumors. Makridis C, et al. **World J Surg** 1990 May-Jun;14(3):377–83; discussion 384–5

[Resection of carcinoid tumors of the small intestine is still indicated in the presence of disseminated hepatic metastases] Partensky C, et al. **Ann Chir** 1990;44(1):34–8 (Eng. Abstr.) **(Fre)**

[Carcinoid liver tumors. Apropos of a case] Taghy A, et al. **J Chir (Paris)** 1990 May;127(5):290–3 (Eng. Abstr.) **(Fre)**

[Treatment of semi-malignant tumors in children and adolescents using the neodymium YAG laser—indications and differentiation from surgical procedures] Nowak W. **Z Kinderchir** 1988 Sep;43 Suppl 1:30–2 **(Ger)**

[Surgical treatment of bronchial carcinoid] Stobernack A, et al. **Zentralbl Chir** 1990;115(1):23–34 (Eng. Abstr.) **(Ger)**

[Carcinoid tumor of the duodenum. Presentation of a clinical case] Ghisotti E, et al. **Minerva Chir** 1990 Mar 15; 45(5):315–8 **(Ita)**

[A case of thymic carcinoid] Ishikawa M, et al. **Kyobu Geka** 1990 May;43(5):413–5 (Eng. Abstr.) **(Jpn)**

[A case report of widely recurrent carcinoid tumor of the thymus] Shimizu N, et al. **Kyobu Geka** 1990 Apr; 43(4):309–12 (Eng. Abstr.) **(Jpn)**

[Endoscopic laser destruction of malignant tracheal tumors] Gerasin VA, et al. **Vopr Onkol** 1989;35(9):1104–6 **(Rus)**

THERAPY

Bronchial carcinoid with a twenty-four-year natural history. A case report. Maasilta P, et al. **Acta Oncol** 1989; 28(5):715–6

Hepatic arterial embolization for metastatic hormone-secreting tumors. Technique, effectiveness, and complications. Marlink RG, et al. **Cancer** 1990 May 15; 65(10):2227–32

Autoantibodies to epithelial cells in patients on long-term therapy with leucocyte-derived interferon-alpha (IFN-alpha). Karlsson-Parra A, et al. **Clin Exp Immunol** 1990 Jul;81(1):72–5

Inadvertent pancreatic embolization as a complication of hepatic carcinoid treatment—computed tomography appearance. Mendelson DS, et al. **Clin Imaging** 1989 Sep; 13(3):212–4

Possible induction of systemic lupus erythematosus by interferon-alpha treatment in a patient with a malignant carcinoid tumour. Rönnblom LE, et al. **J Intern Med** 1990 Mar;227(3):207–10

Interferon-induced enhancement of 2',5'-oligoadenylate synthetase in mid-gut carcinoid tumours [letter] Galvani DW. **Lancet** 1990 Sep 29;336(8718):824

Treatment of malignant metastatic midgut carcinoid tumours with recombinant human alpha2b interferon with or without prior hepatic artery embolization. Hanssen LE, et al. **Scand J Gastroenterol** 1989 Sep;24(7):787–95

[2 year interferon therapy of metastatic carcinoid tumor] von Scheidt W, et al. **Klin Wochenschr** 1990 Feb 15;68(4):241–6 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Carcinoid tumour in the lacrimal gland. Harris DC, et al. **Doc Ophthalmol** 1989 Sep;73(1):43–51

Inability of AgNOR counts to differentiate between bronchial carcinoid tumours and small cell carcinoma of the bronchus [letter] Benbow EW, et al. **J Clin Pathol** 1989 Sep; 42(9):1003–4

[Carcinoid tumor of the rectum: report of a case with histochemical and ultrastructural study] Fonio de Gijón

T, et al. **Acta Gastroenterol Latinoam** 1988;18(3):203–14 (Eng. Abstr.) **(Spa)**

CARCINOMA

The use of monoclonal antibody anticytokeratins for detecting lymph node micrometastases from breast carcinoma [letter; comment] Pelosi G. **Arch Pathol Lab Med** 1990 May;114(5):450–1 Comment on: Arch Pathol Lab Med 1989 Jul;113(7):786–9.

Mucoepidermoid carcinoma of the parotid as a second malignant neoplasm in children. Loy TS, et al. **Cancer** 1989 Nov 15;64(10):2174–7

Functional adrenal cortical carcinoma in a child. Case report. Gupta HL, et al. **Clin Pediatr (Phila)** 1970 Oct;9(10):629–30

Synchronisation of cancer cell lines of human origin using methotrexate. Sen S, et al. **Cytometry** 1990;11(5):595–602

Destructive thyrotoxicosis in a patient with anaplastic thyroid cancer. Murakami T, et al. **Endocrinol Jpn** 1989 Dec; 36(6):905–7

Brain metastases in epithelial ovarian carcinoma; two case reports. Piura B, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jul–Aug; 36(1–2):203–8 (11 ref.)

Pancreatic head carcinoma. Lygidakis NJ, et al. **Hepatogastroenterology** 1989 Dec;36(6):409–11 (32 ref.)

A case of undifferentiated carcinoma arising in the mandible. Ishii T, et al. **J Nihon Univ Sch Dent** 1990 Jun;32(2):93–8

Acinic cell carcinoma of the nasal cavity: a case report. Takimoto T, et al. **Rhinology** 1989 Sep;27(3):191–6

Lobular carcinoma in situ. Pathology and treatment. Gump FE. **Surg Clin North Am** 1990 Aug;70(4):873–83

The adenoma to carcinoma sequence. Tierney RP, et al. **Surg Gynecol Obstet** 1990 Jul;171(1):81–94 (116 ref.)

Pathophysiology and management of endometrial hyperplasia and carcinoma [see comments] Fu YS, et al. **West J Med** 1990 Jul;153(1):50–61 (125 ref.) Comment in: West J Med 1990 Jul;153(1):78–9.

[Neuroendocrine carcinoma of the larynx with cutaneous metastasis] Zambruno G, et al. **Ann Dermatol Venereol** 1989;116(11):855–8 **(Fre)**

[Primary malignant tumors of the small intestine. A clinical report] Cabano F, et al. **Minerva Chir** 1990 Jun 15; 45(11):821–6 (Eng. Abstr.) **(Ita)**

[Papillary cystic tumor of the pancreas] Lucev M, et al. **Minerva Chir** 1990 Apr 15;45(7):527–30 (Eng. Abstr.) **(Ita)**

[Mucoepidermoid cancer of the larynx] Zhumabaev AR, et al. **Vestn Otorinolaringol** 1990 May–Jun;(3):66–7 **(Rus)**

[Medullary carcinoma of the thyroid gland] Antić M, et al. **Srp Arh Celok Lek** 1987 May–Jun;115(5–6):547–63 (Eng. Abstr.) **(Scc)**

[Synchronous multiple carcinomas of the colon and rectum. Presentation of 18 cases and review of the literature] Gómez Iglesias S, et al. **Rev Esp Enferm Apar Dig** 1989 Oct;76(4):316–20 (20 ref.) (Eng. Abstr.) **(Spa)**

[An infrequent association: carcinoma of the colon and hypernephroma] López de Tejada Cabeza I, et al. **Rev Esp Enferm Apar Dig** 1989 Oct;76(4):405–7 (Eng. Abstr.) **(Spa)**

ANALYSIS

Cytochemical assessments of the nuclear DNA distribution pattern by means of image and flow cytometry in thyroid neoplasms and in non-neoplastic thyroid lesions. A comparative methodological study. Wallin G, et al. **Acta Chir Scand** 1989 Apr–May;155(4–5):251–8

The use of fine needle aspirates in the evaluation of progesterone receptor content in breast cancer. Lozowski M, et al. **Acta Cytol** 1990 Jan–Feb;34(1):27–30

Nuclear DNA measurements on thyroid carcinoma in young patients. Ekman ET, et al. **Acta Oncol** 1989;28(4):475–9

Breast carcinoma with positive results for melanoma marker (HMB–45). HMB–45 immunoreactivity in normal and neoplastic breast. Bonetti F, et al. **Am J Clin Pathol** 1989 Oct;92(4):491–5

A monoclonal antibody against nerve growth factor receptor. Immunohistochemical analysis of normal and neoplastic human tissue. Thompson SJ, et al. **Am J Clin Pathol** 1989 Oct;92(4):415–23

Estrogen receptor in normal and neoplastic human thyroid tissue. Chaudhuri PK, et al. **Am J Otolaryngol** 1989 Sep–Oct;10(5):322–6

Comparative assessment of proliferation and DNA content in breast carcinoma by image analysis and flow cytometry. Dawson AE, et al. **Am J Pathol** 1990 May;136(5):1115–24

A marker for primary choroid plexus neoplasms. Herbert J, et al. **Am J Pathol** 1990 Jun;136(6):1317–25

Flow cytometric analysis of DNA content of deparaffinized nuclei in urinary bladder carcinomas. Comparison of different isolation methods and relation to histological grade and stage. Malmström PU, et al. **APMIS** 1989 Sep; 97(9):811–9

Microcystic adnexal carcinoma. An immunohistochemical comparison with other cutaneous appendage tumors. Wick MR, et al. **Arch Dermatol** 1990 Feb;126(2):189–94

Impact of diagnostic immunohistochemistry on the recognition and management of two cases of thyroid cancer with protracted courses. Cramer SF, et al. **Arch Pathol Lab Med** 1989 Nov;113(11):1236–8

Immunocytochemical analysis of estrogen receptors in human breast carcinomas. Evaluation of 130 cases and review of the literature regarding concordance with biochemical assay and clinical relevance. Allred DC, et al. **Arch Surg** 1990 Jan;125(1):107–13 (62 ref.)

The use of fine-needle aspirates of breast cancers to evaluate hormone-receptor status. Lundy J, et al. **Arch Surg** 1990 Feb;125(2):174–6

Improved detection of metastases to lymph nodes and estrogen receptor determination. Schurman SH, et al. **Arch Surg** 1990 Feb;125(2):179–82

Corticotropin-releasing hormone, luteinizing hormone-releasing hormone, growth hormone-releasing hormone, and somatostatin-like immunoreactivities in biopsies from breast cancer patients. Ciocca DR, et al. **Breast Cancer Res Treat** 1990 May;15(3):175–84

Comparison of immunocytochemical and biochemical assays for estrogen receptor in fine needle aspirates and histologic sections from breast carcinomas. Katz RL, et al. **Breast Cancer Res Treat** 1990 May;15(3):191–203

The prognostic significance of nuclear DNA content in malignant epithelial tumors of the ovary. Brescia RJ, et al. **Cancer** 1990 Jan 1;65(1):141–7

Steroid-hormone receptors in nonpalpable and more advanced stages of breast cancer. A contribution to the biology and natural history of carcinoma of the female breast. Tinnemans JG, et al. **Cancer** 1990 Sep 15; 66(6):1165–7

Low molecular weight fibrinolytic inhibitor from Guerin epithelioma. Mirowski M, et al. **Cancer Lett** 1989 Sep 15; 47(1–2):57–62

The role of tumour markers in ovarian cancer. Gargano G, et al. **Clin Exp Obstet Gynecol** 1990;17(1):23–9 (79 ref.)

Accumulation of hyaluronate in human lung carcinoma as measured by a new hyaluronate ELISA. Li XQ, et al. **Connect Tissue Res** 1989;19(2–4):243–53

Intracellular pH, esterase activity, and DNA measurements of human lung carcinomas by flow cytometry. Liewald F, et al. **Cytometry** 1990;11(3):341–8

Immunocytochemical analysis of receptors for estrogen and progesterone in fine-needle aspirates from human breast carcinomas. Skoog L, et al. **Diagn Cytopathol** 1990; 6(2):95–8

Local infiltration of T-lymphocyte subsets as a prognostic indicator in patients with nasopharyngeal carcinoma. Hsu MM. **Ear Nose Throat J** 1990 Aug;69(8):543–7

Three quantitative assays for human erythroid burst-promoting activity of recombinant growth factors and of omentum-conditioned medium. Sasaki H, et al. **Exp Hematol** 1990 Feb;18(2):84–8

The distribution of amosite asbestos fibers in the lungs of workers with mesothelioma or carcinoma. Churg A, et al. **Exp Lung Res** 1989 Sep;15(5):771–83

Low molecular weight cytokeratin in a spindle cell squamous carcinoma [letter; comment] Chetty R, et al. **Hum Pathol** 1990 May;21(5):569–70 Comment on: Hum Pathol 1989 Jan;20(1):92.

Prognostic significance of alpha-1-antitrypsin in early stage of colorectal carcinomas. Karashima S, et al. **Int J Cancer** 1990 Feb 15;45(2):244–50

Methane production in patients with colorectal carcinoma. Kashtan H, et al. **Isr J Med Sci** 1989 Nov;25(11):614–6

Flow cytometric DNA content analysis of a case of pilomatrix carcinoma showing multiple recurrences and invasion of the cranial vault. Rabkin MS, et al. **J Am Acad Dermatol** 1990 Jul;23(1):104–8

Non-sulphated cholecystokinin in human medullary thyroid carcinomas. Rehfeld JF, et al. **J Endocrinol** 1990 Mar; 124(3):501–6

Immunohistochemical demonstration of altered intracellular localization of the C-Myc oncogene product in human colorectal neoplasms. Williams AR, et al. **J Pathol** 1990 Apr;160(4):287–93

Immunoreactive atrial natriuretic peptide in the thyroid gland. Sellitti DF, et al. **Regul Pept** 1990 Mar 5;27(3):285–98

[Correlation of steroid hormone receptors (SR) with clinical and pathological features of human breast cancer] Wu Q. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Dec;18(4):247–9 (Eng. Abstr.) **(Chi)**

[Immunohistochemical study on colorectal carcinoma] Tseng HH, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Sep; 88(9):945–9 **(Chi)**

[Endometrial cancer and steroid hormone receptors] Nyholm HC. **Ugeskr Laeger** 1990 Feb 26;152(9):593–7 (30 ref.) (Eng. Abstr.) **(Dan)**

[Detection of medullary cancer of the thyroid. Contribution of calcitonin determination by an immunoradiometric method using 2 monoclonal antibodies (letter)] Bigorgne JC, et al. **Presse Med** 1989 Oct 28;18(35):1754 **(Fre)**

[Medullary carcinoma of the breast. Co-expression of keratin intermediate filaments and protein S-100 in tumor cells] Puzzo L, et al. **Pathologica** 1989 Jul–Aug;81(1074):433–9 (Eng. Abstr.) **(Ita)**

[The relationship between the receptor status and the mammographic picture in operable breast cancer] Ventrella V, et al. **Radiol Med (Torino)** 1990 May;79(5):483–8 (Eng. Abstr.) **(Ita)**

[Immunohistochemical study on oncogene product ras p 21 in thyroid carcinoma] Mochizuki Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Aug 20;24(8):1539–44 (Eng. Abstr.) **(Jpn)**

[Testosterone in saliva: application to the follow-up of prostate cancer] Navarro-Moreno MA, et al. **Rev Esp Fisiol** 1990 Mar;46(1):63–8 (36 ref.) (Eng. Abstr.) **(Spa)**

BLOOD

Melatonin and steroid-dependent carcinomas. Oosthuizen JM, et al. **Andrologia** 1989 Sep–Oct;21(5):429–31

Simultaneous evaluation of epithelial cell function by CA 125 and stromal cell activity by aminoterminal propeptide of type III procollagen (PIIINP) in ovarian carcinoma. Tomás C, et al. **Ann Med** 1990 Apr;22(2):115–21

The clinical significance of the serum haptoglobin concentration in patients with invasive cervical carcinoma. Neale EJ, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug; 29(3 Pt 1):197–9

Fibrinolytic activity of rat plasma during development of Guerin epithelioma. Tomasiuk R, et al. **Cancer Lett** 1990 Aug;53(1):55–9

Efficacy and discriminative ability of prostate-specific antigen as a tumor marker. Leitenberger A, et al. **Eur Urol** 1990;17(1):12–6

Tumor markers in human prostatic carcinoma. An optimation of reference values. Lewenhaupt A, et al. **Eur Urol** 1990; 17(1):7–11

Secretory protein 7B2. A novel tumor marker of medullary carcinoma of the thyroid. Ohashi M, et al. **Horm Metab Res** 1990 Feb;22(2):114–6

Cancer procoagulant in serum of rats during development of experimental epithelioma. Mielicki W, et al. **Int J Cancer** 1990 Jan 15;45(1):125–6

Circulating levels of calcitonin gene-related peptide in patients with medullary thyroid carcinoma. Kim S, et al. **J Clin Chem Clin Biochem** 1989 Jul;27(7):423–7

PDN-21: possible tumor marker for medullary thyroid carcinoma. Takami H, et al. **J Surg Oncol** 1990 Aug; 44(4):205–7

Comparison of serum assays for TAG-72, CA19-9 and CEA in gastrointestinal carcinoma patients. Ohuchi N, et al. **Jpn J Clin Oncol** 1989 Sep;19(3):242–8

Serum 25-hydroxyvitamin D and colon cancer: eight-year prospective study [see comments] Garland CF, et al. **Lancet** 1989 Nov 18;2(8673):1176–8 Comment in: Lancet 1990 Jan 13;335(8681):111–2.

Hypocholesterolaemia and increased elimination of low-density lipoproteins in metastatic cancer of the prostate. Henriksson P, et al. **Lancet** 1989 Nov 18; 2(8673):1178–80

Plasma somatostatin activity in medullary cancer of the thyroid. Neradilová M, et al. **Oncology** 1989;46(6):378–80

Surveillance strategies after resection of carcinoma of the colon and rectum. Fantini GA, et al. **Surg Gynecol Obstet** 1990 Sep;171(3):267–73 (58 ref.)

Prospective monitoring trial for carcinoma of colon and rectum after surgical resection. Wanebo HJ, et al. **Surg Gynecol Obstet** 1989 Dec;169(6):479–87

[Alpha 1-antitrypsin, alpha 2-macroglobulin and reactive protein C in gastric cancer] Dumitrașcu D, et al. **Rev Med Interna [Med Interna]** 1989 Jan–Feb;41(1):57–61 (Eng. Abstr.) **(Rum)**

[Gangliosides in the serum in lung carcinoma] Fumić K, et al. **Lijec Vjesn** 1990 Jan–Feb;112(1–2):7–12 (Eng. Abstr.) **(Scr)**

[Determination of prostatic specific antigen and prostatic acid phosphatase as tumor markers of cancer of the prostate] Morote Robles J, et al. **Arch Esp Urol** 1989;42 Suppl 2:124–30 (Eng. Abstr.) **(Spa)**

BLOOD SUPPLY

Vascular markers for murine tumours. Murray JC, et al. **Radiother Oncol** 1989 Nov;16(3):221–34

Differing microvasculature in the two major types of gastric carcinoma: a conventional, ultrastructural and ultrastructural immunolocalization study of von Willebrand factor. Ohtani H, et al. **Virchows Arch [A]** 1990;417(1):29–35

CHEMICALLY INDUCED

Effect of dietary cellulose on cell proliferation and progression of 1,2-dimethylhydrazine-induced colon carcinogenesis in rats. Heitman DW, et al. **Cancer Res** 1989 Oct 15;49(20):5581–5

Sensitivity of subpopulations of mouse skin papillomas to malignant conversion by urethane or 4-nitroquinoline N-oxide. Hennings H, et al. **Cancer Res** 1990 Feb 1; 50(3):653–7

Tumor promotion by the peroxisome proliferator nafenopin involving a specific subtype of altered foci in rat liver. Kraupp-Grasl B, et al. **Cancer Res** 1990 Jun 15; 50(12):3701–8

Enhancement by somatostatin of experimental gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Cancer Res** 1989 Oct 15;49(20):5534–6

Modification by catechol and resorcinol of upper digestive tract carcinogenesis in rats treated with methyl-N-amylnitrosamine. Yamaguchi S, et al. **Cancer Res** 1989 Nov 1;49(21):6015–8

Multistage chemical carcinogenesis protocols produce spindle cell carcinomas of the mouse skin. Klein-Szanto AJ, et al. **Carcinogenesis** 1989 Nov;10(11):2169–72

Lack of a protective effect of menhaden oil on skin tumor promotion by 12-O-tetradecanoylphorbol-13-acetate. Locniskar M, et al. **Carcinogenesis** 1990 Sep;11(9):1641–5

Volatile nitrosamine levels and genotoxicity of food samples

from high-risk areas for nasopharyngeal carcinoma before and after nitrosation. Poirier S, et al. **Int J Cancer** 1989 Dec 15;44(6):1088–94

Tissue norepinephrine depletion as a mechanism for cysteamine inhibition of colon carcinogenesis induced by azoxymethane in Wistar rats. Tatsuta M, et al. **Int J Cancer** 1989 Dec 15;44(6):1008–11

Epithelial ovarian cancer and combined oral contraceptives. The WHO Collaborative Study of Neoplasia and Steroid Contraceptives. **Int J Epidemiol** 1989 Sep;18(3):538–45

Enhanced malignant conversion of benign mouse skin tumors by cisplatin. Hennings H, et al. **J Natl Cancer Inst** 1990 May 16;82(10):836–40

Beta-radiation-induced resistance to MNNG initiation of papilloma but not carcinoma formation in mouse skin. Mitchel RE, et al. **Radiat Res** 1990 Feb;121(2):180–6

Chronic toxicity of 2-methyl-4-chlorophenoxyacetic acid (MCPA) in mice. Takagi S. **Tohoku J Exp Med** 1990 Feb; 160(2):97–107

[1,2-dimethylhydrazine induction of epithelial tumors of the kidneys in CBA strain mice] Turusov VS, et al. **Eksp Onkol** 1990;12(3):71–4 (Eng. Abstr.) **(Rus)**

[Effects of forced diuresis on butylbutanolnitrosamine induction of bladder tumors in rats] Pliss GB, et al. **Vopr Onkol** 1990;36(1):33–6 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Classification of gastric carcinoma. Borchard F. **Hepatogastroenterology** 1990 Apr;37(2):223–32 (32 ref.)

Is the neuroendocrine carcinoma of the skin a Merkel cell tumor? What we can learn from immunohistochemical and ultrastructural studies. Merot Y. **Int J Dermatol** 1990 Mar; 29(2):102–4 (12 ref.)

Multicentric adult secretory breast carcinoma: DNA flow cytometric findings, prognostic features, and review of the world literature. Richard G, et al. **J Surg Oncol** 1990 Aug; 44(4):238–44 (18 ref.)

COMPLICATIONS

Effect of superoxide dismutase in rabbits with peritumoral edema. Ikeda Y, et al. **Adv Neurol** 1990;52:441–7

Anaplastic thyroid carcinoma in a retrosternal goiter presenting as fever of unknown origin. Glikson M, et al. **Am J Med** 1990 Jan;88(1):81–2

Cutaneous lichen amyloidosis and familial medullary thyroid carcinoma [letter; comment] Ferrer JP, et al. **Ann Intern Med** 1990 Apr 1;112(7):551–2 Comment on: Ann Intern Med 1989 Nov 15;111(10):802–6.

Nucleus caudalis DREZ for facial pain due to cancer [see comments] Rossitch E Jr, et al. **Br J Neurosurg** 1989; 3(1):45–9 Comment in: Br J Neurosurg 1990;4(1):81–2.

Treatment outcome of spinal cord compression by nasopharyngeal carcinoma. Leung SF, et al. **Br J Radiol** 1990 Sep;63(753):716–9

Cystic prostatic carcinoma. Wyatt MG, et al. **Br J Urol** 1989 Oct;64(4):430–1

Massive left atrial thrombus: a possible paraneoplastic complication of breast carcinoma. Wrisley D, et al. **Clin Cardiol** 1989 Oct;12(10):607–8

Pyoderma gangrenosum and adrenocortical carcinoma. Cole HG, et al. **Cutis** 1989 Sep;44(3):205–8

Intestinal surgery in patients with ovarian carcinoma. Paganelli AM, et al. **Eur J Gynaecol Oncol** 1990; 11(2):157–60

Diarrhea in medullary carcinoma of thyroid [letter; comment] Misra SC, et al. **Indian J Gastroenterol** 1989 Oct;8(4):308 Comment on: Indian J Gastroenterol 1989 Jul;8(3):195–6.

Chronic urticaria associated with internal malignancy [letter] Lindelöf B, et al. **Int J Dermatol** 1990 Jun;29(5):384

Carcinoma of the cervix and pregnancy. Baltzer J, et al. **Int J Gynaecol Obstet** 1990 Apr;31(4):317–23

Utilization of therapeutic embolization in haemorrhage caused by carcinoma of the tongue. Masuda G, et al. **J Craniomaxillofac Surg** 1989 Oct;17(7):323–5

Unusual varicella zoster virus infection in a patient with colon carcinoma and Evans syndrome—delayed virus shedding generalized recurrent necrotic herpes zoster. Hata S, et al. **J Dermatol** 1990 May;17(5):326–8

Malignant change in perianal condylomata acuminata [letter; comment] Scholefield JH, et al. **J R Coll Surg Edinb** 1989 Jun;34(3):169–70 Comment on: J R Coll Surg Edinb 1988 Oct;33(5):282.

Clinical experience of biliary tract carcinoma associated with anomalous union of the pancreaticobiliary ductal system. Ohta T, et al. **Jpn J Surg** 1990 Jan;20(1):36–43

Polyclonal increase of HTLV-I provirus-carrying lymphocytes in HTLV-I-carrier rabbits transplanted with Shope carcinoma cells. Ogawa K, et al. **Leuk Res** 1989; 13(11):1009–17

Von Recklinghausen neurofibromatosis with carcinoid tumor and submucous leiomyomas of the duodenum. Fernández MT, et al. **Neurofibromatosis** 1988;1(5–6):294–8

Complex partial status epilepticus in a patient with leptomeningeal carcinomatosis. Dexter DD Jr, et al. **Neurology** 1990 May;40(5):858–9

Prolonged remission of lymphangitis carcinomatosis from breast cancer [letter] Bourke S, et al. **Respir Med** 1989 Mar; 83(2):169

Hypertrophic non-pulmonary osteoarthropathy in a patient with nasopharyngeal carcinoma. Wollner A, et al. **Respiration** 1989;55(3):186–8

Palliation for nonpancreatic malignant obstruction of the biliary tract. Finch MD, et al. **Surg Gynecol Obstet** 1990 May;170(5):437–40

Synchronous occurrence of parathyroid carcinoma and adenoma in an elderly woman. Shapiro DM, et al. **Surgery** 1989 Nov;106(5):929–33

[Elective sclerotherapy in hepatocellular carcinoma complicated by digestive hemorrhage] Ink O, et al. **Gastroenterol Clin Biol** 1990;14(6–7):524–8 (Eng. Abstr.) **(Fre)**

[An uncommon occlusive syndrome (letter)] Lamy P, et al. **Gastroenterol Clin Biol** 1989 Oct;13(10):848 **(Fre)**

[Ascites with cachexia revealing prostatic carcinoma (letter)] Disdier P, et al. **Presse Med** 1990 Feb 10;19(5):220 **(Fre)**

[Adrenocortical carcinoma with Cushing syndrome: report of a case] Kunimi K, et al. **Hinyokika Kiyo** 1989 Jun; 35(6):1015–9 (Eng. Abstr.) **(Jpn)**

[Three cases of primary hyperparathyroidism associated with nonmedullary thyroid neoplasm] Kobayashi K, et al. **Nippon Geka Gakkai Zasshi** 1990 Jul;91(7):907–9 (10 ref.) (Eng. Abstr.) **(Jpn)**

[A case of DOC-producing adrenocortical cancer causing right chest pain] Sakurai Y, et al. **Nippon Naika Gakkai Zasshi** 1989 Jul;78(7):996–7 **(Jpn)**

[Duplicate origin of vertebral artery combined with brain tumor] Mashiyama S, et al. **Rinsho Hoshasen** 1989 Jun; 34(6):727–30 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Triple association: polymyositis, rheumatoid arthritis and neoplasia (letter)] García-Ruiz PJ, et al. **Neurologia** 1988 Jan-Feb;3(1):35–6 **(Spa)**

[The incidence of neoplasms of the epithelium associated with monoclonal gammopathy at a general hospital. A 6-year analysis] Campillo Fuentes J, et al. **Rev Clin Esp** 1989 Oct; 185(6):306–7 (Eng. Abstr.) **(Spa)**

[Duodenocolonic fistula caused by carcinoma of the cecum] García Rodríguez JF, et al. **Rev Esp Enferm Apar Dig** 1989 Jul;76(1):79–81 (11 ref.) (Eng. Abstr.) **(Spa)**

[Pseudotumor cerebri as the initial manifestation of a carcinoma of the colon (letter)] Mur Villacampa M, et al. **Rev Esp Enferm Apar Dig** 1989 Aug;76(2):195–6 **(Spa)**

DIAGNOSIS

Fine needle aspiration biopsy diagnosis of mucoepidermoid carcinoma. Statistical analysis. Cohen MB, et al. **Acta Cytol** 1990 Jan-Feb;34(1):43–9

Columnar cell carcinoma of the thyroid. Fine needle aspiration findings in a case. Hui PK, et al. **Acta Cytol** 1990 May-Jun;34(3):355–8

Adrenal cortical carcinoma metastatic to the lung: report of a case diagnosed by fine needle aspiration biopsy [letter] Varma S, et al. **Acta Cytol** 1990 Jan-Feb;34(1):104–5

A review of immunohistochemical techniques for cutaneous carcinoma. Robinson JK. **Adv Dermatol** 1987;2:187–205 (88 ref.)

Gallbladder carcinoma. Diagnostic procedures with emphasis on ultrasound diagnosis. Elvin A, et al. **Ann Radiol (Paris)** 1989;32(4):282–7

The clinical management of a normal contralateral breast in patients with lobular breast cancer. Baker RR, et al. **Ann Surg** 1989 Oct;210(4):444–7; discussion 447–8

DNA cytometry and morphometry by TV based image analysis system (TAS) in the diagnosis of gastric carcinoma. Sugár J, et al. **Anticancer Res** 1990 Jan-Feb;10(1):237–9

A CA125 score as a prognostic index in patients with ovarian cancer. Rosen A, et al. **Arch Gynecol Obstet** 1990; 247(3):125–9

Multiple endocrine neoplasia. Wortham E 5th, et al. **Arch Ophthalmol** 1990 Sep;108(9):1338

The clinical spectrum of malignant nasal tumors. Komorn RM, et al. **Arch Otolaryngol** 1976 Dec;102(12):732–4

Medullary thyroid carcinoma. The need for early diagnosis and total thyroidectomy. Duh QY, et al. **Arch Surg** 1989 Oct;124(10):1206–10

The impact of computed tomography and ultrasonography on the management of patients with carcinoma of the ovary. Gore ME, et al. **Br J Cancer** 1989 Nov;60(5):751–4

Ultrasonographic appearances of parathyroid carcinoma. Daly BD, et al. **Br J Radiol** 1989 Nov;62(743):1017–9

Inter- and intraobserver variability in the histopathological diagnosis of medullary carcinoma of the breast, and its prognostic implications. Pedersen L, et al. **Breast Cancer Res Treat** 1989 Oct;14(1):91–9

The clinical relevance of the tumor marker CA 19-9 in the diagnosing and monitoring of pancreatic carcinoma. Safi F, et al. **Bull Cancer (Paris)** 1990;77(1):83–91 (29 ref.)

Inflammatory symptoms in breast cancer. Correlations with growth rate, clinicopathologic variables, and evolution. Tabbane F, et al. **Cancer** 1989 Nov 15;64(10):2081–9

Spindle cell carcinoma of cornea and conjunctiva with pseudosarcomatous metaplasia. Light microscopic, electron microscopic and immunohistochemical findings in 2 patients. Ni C, et al. **Chin Med J [Engl]** 1989 May; 102(5):387–91

Routine pretreatment evaluation in cervical carcinoma. Chang CY, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Apr; 43(4):264–8

Colposcopic assessment in microinvasive carcinoma of the cervix. Liu WM, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Mar;43(3):171–6

Monoclonal immunoradiometric assay of calcitonin improves investigation of familial medullary thyroid carcinoma. Perdrisot R, et al. **Clin Chem** 1990 Feb;36(2):381–3

A comparison of calcium pentagastrin and TRH tests in screening for medullary carcinoma of the thyroid in MEN IIA. O'Connell JE, et al. **Clin Endocrinol (Oxf)** 1990 Apr; 32(4):417–21

Magnetic resonance imaging in the preoperative assessment of clinical stage I endometrial carcinoma. Harrill CD, et al. **Comput Med Imaging Graph** 1990 May-Jun;14(3):191–5

Effect of mucosal thickening near gastric carcinoma on the endoscopic diagnosis of malignancy. Awad JA, et al. **Dig Dis Sci** 1990 Mar;35(3):317–20

Endoscopic diagnosis of small flat carcinoma of the colon. Report of three cases. Hunt DR, et al. **Dis Colon Rectum** 1990 Feb;33(2):143–7

The value of cytologic examination for nasopharyngeal carcinoma. Chan MK, et al. **Ear Nose Throat J** 1990 Apr; 69(4):268–71

Radiology of nasopharyngeal carcinoma. Kreel L. **Ear Nose Throat J** 1990 Apr;69(4):253–60

Nasopharyngeal carcinoma: methods of presentation. Skinner DW, et al. **Ear Nose Throat J** 1990 Apr;69(4):237–40

Diagnosis of nasopharyngeal carcinoma. Woo JK, et al. **Ear Nose Throat J** 1990 Apr;69(4):241–2, 251–2

Parietal cell carcinoma. A new differential diagnosis for submucosal gastric tumors. Hedenbro JL, et al. **Endoscopy** 1990 Jan;22(1):47–8

Monoclonal antibodies that discriminate between human ovarian carcinomas and benign ovarian tumours. Boerman OC, et al. **Eur J Cancer** 1990 Feb;26(2):117–27

Cervix uteri cancer and pregnancy. Bokhman JV, et al. **Eur J Gynaecol Oncol** 1989;10(6):406–11 (3 ref.)

Ultrasonic assessment of efficacy of radiotherapy in cases of carcinoma of the cervix uteri by using rectosonography. Kochi T, et al. **Eur J Gynaecol Oncol** 1989;10(6):367–78

Endoscopic ultrasonography in the diagnosis of pancreatic tumors. Boyce GA, et al. **Gastrointest Endosc** 1990 Mar-Apr;36(2 Suppl):S28–32 (12 ref.)

Neutropenic typhlitis simulating carcinoma of the cecum. Musher DR, et al. **Gastrointest Endosc** 1989 Sep-Oct; 35(5):449–51

Transvaginal ultrasound evaluation of myometrial invasion in endometrial carcinoma. Conte M, et al. **Gynecol Obstet Invest** 1990;29(3):224–6

A comparative study of computerized tomography, magnetic resonance imaging, and clinical staging for the detection of early cervix cancer. Brodman M, et al. **Gynecol Oncol** 1990 Mar;36(3):409–12

Correlation of abdominal ultrasound and computed tomography scans with second- or third-look laparotomy in patients with ovarian carcinoma. Lund B, et al. **Gynecol Oncol** 1990 May;37(2):279–83

Comparison of three tumor markers—CA-125, lipid-associated sialic acid (LSA), and NB/70K—in monitoring ovarian cancer. Petru E, et al. **Gynecol Oncol** 1990 Aug;38(2):181–6

Postoperative pentagastrin-stimulated serum calcitonin concentrations in patients with medullary thyroid carcinoma: reoperations in patients with concentrations bordering the detection limit. Meybier H, et al. **Henry Ford Hosp Med J** 1989;37(3–4):138–40

Comparison of sporadic and hereditary forms of medullary thyroid carcinoma. Rosenberg-Bourgin M, et al. **Henry Ford Hosp Med J** 1989;37(3–4):141–3

Prognostic value of ovarian carcinoma grading methods—a method comparison study. Haapasalo H, et al. **Histopathology** 1990 Jan;16(1):1–7

Incidence and distribution of carcinoma in situ in testes removed for germ cell tumour: possible inadequacy of random testicular biopsy in detecting the condition. Loy V, et al. **Histopathology** 1990 Feb;16(2):198–200

Sarcomatoid carcinoma mimicking sarcoma [letter; comment] Young RH. **Histopathology** 1990 Jan;16(1):105 Comment on: Histopathology 1989 Jul;15(1):93–6.

A young woman with pituitary-tumor, Cushing's syndrome and medullary thyroid carcinoma—a rare case of MEN II? Kotzerke J, et al. **Horm Metab Res Suppl** 1989;21:43–5

Diagnostic procedure before reoperation in patients with medullary thyroid carcinoma. Raue F, et al. **Horm Metab Res Suppl** 1989;21:31–4

Nasopharyngeal carcinoma in children—a retrospective review and demonstration of Epstein-Barr viral genomes in tumor cell cytoplasm: a report of the Pediatric Oncology Group. Hawkins EP, et al. **Hum Pathol** 1990 Aug; 21(8):805–10

Population screening for cervical cancer in The Netherlands. A report by the Evaluation Committee. **Int J Epidemiol** 1989 Dec;18(4):775–81

In vitro NMR evaluation of human thyroid lesions. Johnson M, et al. **Invest Radiol** 1989 Sep;24(9):666–71

Measurement of ultrasonic velocity and attenuation in bone tumors, in vitro. Singh VR, et al. **J Acoust Soc Am** 1990 Feb;87(2):908–9

Pancreatic involvement by lymphoma simulates pancreatic carcinoma [letter] Kondo T, et al. **J Clin Gastroenterol** 1989 Oct;11(5):594–6

Adrenocortical carcinoma in children: a study of 40 cases. Ribeiro RC, et al. **J Clin Oncol** 1990 Jan;8(1):67–74

Use of CA-125 to predict survival of patients with ovarian carcinoma. North Thames Cooperative Group. Rustin GJ, et al. **J Clin Oncol** 1989 Nov;7(11):1667–71

CT and ultrasound of gallbladder adenomyomatosis mimicking carcinoma. Gerard PS, et al.

J Comput Assist Tomogr 1990 May–Jun;14(3):490–1
Primary carcinoma of the fallopian tube: a 20–year review at Ramathibodi Hospital. Bhamarapravati Y, et al. J Med Assoc Thai 1990 Feb;73 Suppl 1:2–6
Early diagnosis in colorectal cancer. Still no benefit? Ratcliffe R, et al. J R Coll Surg Edinb 1989 Jun;34(3):152–5
Prostate cancer: correlation of digital rectal examination, transrectal ultrasound and prostate specific antigen levels with tumor volumes in radical prostatectomy specimens [published erratum appears in J Urol 1990 Aug;144(2 Pt 1):364] Palken M, et al. J Urol 1990 Jun;143(6):1155–62
Deoxyribonucleic acid ploidy and the direct assay of prostatic acid phosphatase and prostate specific antigen in fine needle aspiration biopsies as diagnostic methods in prostatic carcinoma. Stege R, et al. J Urol 1990 Aug;144(2 Pt 1):299–302
Occult anaplastic thyroid carcinoma associated with marked hypercalcemia. Takashima S, et al. JCU 1990 Jun; 18(5):438–41
Discrimination of tuberculous from carcinomatous pleural effusion by biochemical markers: adenosine deaminase, lysozyme, fibronectin and carcinoembryonic antigen. Moriwaki Y, et al. Jpn J Med 1989 Jul–Aug;28(4):478–84
Colonic sonography [letter; comment] Lancet 1990 Jun 16; 335(8703):1457–8 Comment on: Lancet 1990 Jan 20;335(8682):144–6.
First catch your deer. Lancet 1990 Jul 21;336(8708):147–9 (29 ref.)
Vaginal ultrasound and endometrial carcinoma [letter] Leusley DM. Lancet 1990 Jul 28;336(8709):256
Diagnosis of large bowel tumours by colonic sonography [see comments] Limberg B. Lancet 1990 Jan 20; 335(8682):144–6 Comment in: Lancet 1990 Jun 16;335(8703):1457–8.
Giant–cell tumor of the tibia in a child presenting as an expansile metaphyseal lesion with fluid–fluid levels on MR. Buetow PC, et al. Magn Reson Imaging 1990;8(3):341–4 (23 ref.)
A comparative study of manganese meso–sulfonatophenyl porphyrins: contrast–enhancing agents for tumors. Fiel RJ, et al. Magn Reson Imaging 1990;8(3):255–9
Prostate cancer: comparison of pre–operative 0.35 T MRI with whole–mount histopathology. Thickman D, et al. Magn Reson Imaging 1990;8(3):205–11
Detection of hepatic malignancies using Mn–DPDP (manganese dipyridoxal diphosphate) hepatobiliary MRI contrast agent. Young SW, et al. Magn Reson Imaging 1990; 8(3):267–76
Inflammatory carcinoma of the breast: Part I. Elias EG. Md Med J 1989 Dec;38(12):1069
Microlaryngology: an update on its modern use in laryngology—malignant early and advanced glottic carcinoma. Hicks JN. Microsurgery 1989;10(4):321–4 (7 ref.)
Cystic hypersecretory breast carcinoma. An unusual breast cancer. Adams GD, et al. Nebr Med J 1990 May; 75(5):104–8
Circulating tumor–associated antigen detected by the murine monoclonal antibody CF511 in human epithelial ovarian carcinoma. Murae M, et al. Nippon Sanka Fujinka Gakkai Zasshi 1989 Nov; 41(11):1841–8
A question on the specificity of the CA 125 assay [letter] Volk SA. Oncology (Williston Park) 1989 Feb;3(2):17
Hürthle cell neoplasms of the thyroid. McLeod MK, et al. Otolaryngol Clin North Am 1990 Jun;23(3):441–52 (56 ref.)
Magnetic resonance imaging in the diagnosis of intracranial spread of carcinoma via the trigeminal nerve. Medina JE, et al. Otolaryngol Head Neck Surg 1990 Apr;102(4):416–9
Carcinoid tumour of the middle ear. A morphological and immunohistochemical study with comments on histogenesis and differential diagnosis. Ruck P, et al. Pathol Res Pract 1989 Oct;185(4):496–503; discussion 504–5
Correlation between bone scans and serum levels of osteocalcin, prostate–specific antigen, and prostatic acid phosphatase in monitoring patients with disseminated cancer of the prostate. Tarle M, et al. Prostate 1989; 15(3):211–9
MR imaging of uterine carcinoma: correlation with clinical and pathologic findings. Posniak HV, et al. Radiographics 1990 Jan;10(1):15–27
Endobronchial metastases simulating primary carcinoma of the lung. Bourke SJ, et al. Respir Med 1989 Mar;83(2):151–2
MRI of cervical carcinoma. Waggenspack GA, et al. Semin Ultrasound CT MR 1988 Apr;9(2):158–66 (22 ref.)
Inflammatory bowel disease and cancer surveillance [editorial] Farmer RG. Singapore Med J 1989 Dec; 30(6):517–8
Surveillance colonoscopy after resection for colon carcinoma. Brady PG, et al. South Med J 1990 Jul; 83(7):765–8
Immunoperoxidase staining for tumor markers in patients with carcinoma of the breast. Cox CE, et al. Surg Forum 1978;29:160–2
Spindle cell carcinoma of the nose and paranasal sinuses. Howell JH, et al. Surg Forum 1978;29:565–8
Anaplastic thyroid carcinoma: review of 24 cases, with emphasis on cytodiagnosis and leukocytosis. Chang TC, et al. Taiwan I Hsueh Hui Tsa Chih 1989 Jun;88(6):551–6
Serum levels of CA 125 in patients with gastrointestinal cancers. Omar YT, et al. Tumour Biol 1989;10(6):316–23
Diagnostic value of transrectal ultrasound in tumor staging and in the detection of incidental prostatic cancer. Grups JW, et al. Urol Int 1990;45(1):38–40
MRI of carcinoma of the cervix. Thornbury JR. Urol Radiol 1989;11(4):230–2 (8 ref.)
Immunohistochemical reclassification of anaplastic carcinoma reveals small and giant cell lymphoma. Hölting T, et al. World J Surg 1990 May–Jun;14(3):291–4; discussion 295
DNA analysis and parathyroid pathology. Shenton BK, et al. World J Surg 1990 May–Jun;14(3):296–301; discussion 302
[10 cases of parathyroid carcinoma—the clinical and surgical aspects] Banduvas E, et al. Khirurgiia (Sofiia) 1990; 43(1):59–63 (Bul)
[Modern diagnosis and treatment of epithelial tumors of the upper urinary tract] Kumanov Kh, et al. Khirurgiia (Sofiia) 1989;42(5):60–1 (Bul)
[Primary research on saliva and serum CA125 assays for detecting malignant ovarian tumors] Chen DX, et al. Chung Hua Fu Chan Ko Tsa Chih 1990 Mar;25(2):84–5, 123–4 (Eng. Abstr.) (Chi)
[Immunohistochemical study on differential diagnosis between NPC and malignant lymphoma] Dai YR. Chung–hua Ping Li Hsueh Tsa Chih 1989 Dec;18(4):296–8 (Eng. Abstr.) (Chi)
[Parathyroid gland carcinoma or the importance of the 'small print'] van Vroonhoven TJ, et al. Ned Tijdschr Geneeskd 1989 Nov 18;133(46):2265–7 (Dut)
[Echoendoscopy: a new technic for studying esophago–gastric subepithelial tumors and extrinsic compression] Amouyal P, et al. Gastroenterol Clin Biol 1990;14(1):8–14 (Eng. Abstr.) (Fre)
[Colonic endoscopic screening and familial antecedent of sporadic rectocolonic cancer. Controlled prospective study] Ink O, et al. Gastroenterol Clin Biol 1989 Dec; 13(12):1060–4 (Eng. Abstr.) (Fre)
[Carcinoma in situ of the testis (CIST). Apropos of 7 cases] Mougharbel S, et al. J Urol (Paris) 1990;96(1):25–9 (Eng. Abstr.) (Fre)
[Intrarectal ultrasonography in the preoperative assessment of the depth of infiltration of rectal tumors] Heintz A, et al. Dtsch Med Wochenschr 1990 Jul 13;115(28–29):1083–7 (Eng. Abstr.) (Ger)
[The diagnosis of pancreatic carcinoma] Rösch T, et al. Dtsch Med Wochenschr 1990 Feb 23;115(8):304–8 (36 ref.) (Ger)
[Paranasal sinus tumors with orbital involvement] Mann W, et al. Laryngorhinootologie 1989 Dec;68(12):667–70 (Eng. Abstr.) (Ger)
[A comparison of imaging procedures in the diagnosis of gallbladder and bile duct carcinomas] Kersjes W, et al. ROFO 1990 Aug;153(2):174–80 (Eng. Abstr.) (Ger)
[T2*–weighted MR images of gynecologic tumors with the FLASH sequence: the initial experiences at 1.5 T] Schmidt B, et al. ROFO 1989 Sep;151(3):306–10 (Eng. Abstr.) (Ger)
[The imaging diagnosis of peritoneal carcinosis] Thelen M, et al. ROFO 1990 Jun;152(6):654–61 (Eng. Abstr.) (Ger)
[The case from general practice (143). Patient: Mr. F.–S. H. P., a 51–year–old baker] Suter F. Schweiz Rundsch Med Prax 1989 Aug 2;78(31–32):857–9 (Ger)
[Possibilities of diagnostic errors in paralysis of the 7th cranial nerve] Stomeo F. Acta Otorhinolaryngol Ital 1989 Nov–Dec;9(6):629–33 (Eng. Abstr.) (Ita)
[Critical reflections on differentiated carcinoma of the thyroid: difficulties, doubts and differential–diagnosis problems] Autelitano F, et al. Ann Ital Chir 1989 Jul–Aug; 60(4):267–80; discussion 280–1 (96 ref.) (Eng. Abstr.) (Ita)
[The multicentricity of minimal breast cancer. The observations and therapeutic implications apropos 30 cases] Cervi GC, et al. Minerva Med 1989 Aug;80(8):895–9 (Ita)
[Early gastric cancer. Our experience] Formisano C, et al. Minerva Med 1989 Aug;80(8):833–6 (Ita)
[Inflammatory carcinoma of the breast. Our experience] Punzo C, et al. Minerva Med 1989 Aug;80(8):907–11 (Ita)
[Role of the markers PAP–PSA in the diagnosis of cancer of the prostate] Petrone U, et al. Minerva Urol Nefrol 1990 Apr–Jun;42(2):73–5 (Eng. Abstr.) (Ita)
[Histological, ultrastructural and clinical study of a malignant adrenal neoplasm producing minor mineralocorticoids] Panizzo R, et al. Pathologica 1990 Mar–Apr; 82(1078):173–86 (15 ref.) (Eng. Abstr.) (Ita)
[Two cases of mucoepidermoid carcinoma of the bronchus] Kato M, et al. Bull Chest Dis Res Inst Kyoto Univ 1988 Mar;21(1–2):8–16 (Eng. Abstr.) (Jpn)
[Prostatic carcinoma in a young adult: a case report] Yamamoto S, et al. Hinyokika Kiyo 1990 May;36(5):617–22 (30 ref.) (Eng. Abstr.) (Jpn)
[Role of manganese superoxide dismutase in ovarian carcinoma] Ishikawa M, et al. Nippon Sanka Fujinka Gakkai Zasshi 1990 Apr;42(4):363–4 (Jpn)
[A case of giant cell tumor of the temporal bone and the region of the temporomandibular joint] Kowalska B. Otolaryngol Pol 1989;43(5–6):415–9 (Eng. Abstr.) (Pol)
[Anaplastic carcinoma of the thyroid gland with the clinical course suggesting subacute thyroiditis—personal observations] Mizan–Kalisiak K, et al. Pol Arch Med Wewn 1988 May;79(5):278–82 (Eng. Abstr.) (Pol)
[Analysis of calcitonin level in the diagnosis and evaluation of the results of the treatment of medullary carcinoma of the thyroid gland] Krassowski J, et al. Pol Tyg Lek 1989 Aug 7–14;44(32–33):757–9 (Pol)
[Carcinoma of the lacrimal sac] Stefănescu–Dima A, et al. Rev Chir [Oftalmol] 1989 Jul–Sep;33(3):231–4 (Eng. Abstr.) (Rum)
[Endometrial carcinoma in cases under 45 years of age] Pricop M, et al. Rev Med Chir Soc Med Nat Iasi 1989 Jul–Sep;93(3):539–44 (Eng. Abstr.) (Rum)
[Quantitative characterization of nuclear polymorphism of the epithelial cells in fibroadenomatosis and cancer of the breast] Ganina KP, et al. Vopr Onkol 1989;35(12):1444–9 (Eng. Abstr.) (Rus)
[Adrenal masses discovered incidentally] López Costea MA, et al. Actas Urol Esp 1989 Sep–Oct;13(5):368–70 (Eng. Abstr.) (Spa)

DRUG THERAPY

Management of peritoneal carcinomatosis. Sugarbaker PH. Acta Med Austriaca 1989;16(3–4):57–60 (8 ref.)
Weekly doxorubicin in the treatment of metastatic breast carcinoma. Nylén U, et al. Acta Oncol 1989;28(4):515–7
Aminothiadiazole (NSC 4728) in patients with advanced carcinoma of the endometrium. A phase II study of the Gynecologic Oncology group. Asbury RF, et al. Am J Clin Oncol 1990 Feb;13(1):39–41
Aminothiadiazole (NSC 4728) in patients with advanced nonsquamous carcinoma of the cervix. A phase II study of the Gynecologic Oncology Group. Asbury RF, et al. Am J Clin Oncol 1989 Oct;12(5):375–7
Phase II trial of 10–Edam in patients with advanced colorectal carcinoma. Kemeny N, et al. Am J Clin Oncol 1990 Feb;13(1):42–4
Echinomycin (NSC 526417) in advanced ovarian cancer. A phase II trial of the Gynecologic Oncology Group. Muss HB, et al. Am J Clin Oncol 1990 Aug;13(4):299–301
Methotrexate in advanced endometrial carcinoma. A phase II trial of the Gynecologic Oncology Group. Muss HB, et al. Am J Clin Oncol 1990 Feb;13(1):61–3
Teniposide (VM–26) in patients with non–squamous–cell carcinoma of the cervix. A phase II trial of the Gynecologic Oncology Group. Muss HB, et al. Am J Clin Oncol 1990 Apr;13(2):117–8
Electrochemical treatment of cancer. II: Effect of electrophoretic influence on adriamycin. Nordenström BE, et al. Am J Clin Oncol 1990 Feb;13(1):75–88
Treatment of advanced refractory ovarian carcinoma with a gonadotropin–releasing hormone analogue. Bruckner HW, et al. Am J Obstet Gynecol 1989 Nov;161(5):1216–8
Carcinoma of the prostate. Guidelines for treatment: the role of antiandrogens. Pavone–Macaluso M, et al. Ann N Y Acad Sci 1990;595:328–33
High dose melphalan and autologous marrow rescue in advanced epithelial ovarian carcinomas: a retrospective analysis of 35 patients treated in France. Viens P, et al. Bone Marrow Transplant 1990 Apr;5(4):227–33
First line combination chemotherapy with cisplatin and etoposide in advanced ovarian cancer. Athanassiou AE, et al. Br J Cancer 1989 Nov;60(5):755–8
Cisplatin/carboplatin cross–resistance in ovarian cancer. Gore ME, et al. Br J Cancer 1989 Nov;60(5):767–9
The role of glutathione in resistance to cisplatin in a human small cell lung cancer cell line. Meijer C, et al. Br J Cancer 1990 Jul;62(1):72–7
Megestrol acetate in relapsed carcinoma of prostate. Daniel F, et al. Br J Urol 1990 Mar;65(3):275–7
Prognostic factors in locally advanced noninflammatory breast cancer. Long–term results following primary chemotherapy. Valagussa P, et al. Breast Cancer Res Treat 1990 May;15(3):137–47
Ifosfamide is an inactive substance in the treatment of pancreatic carcinoma. The Gastrointestinal Tumor Study Group. Cancer 1989 Nov 15;64(10):2010–3
Results of initial doxorubicin, 5–fluorouracil, and cyclophosphamide combination chemotherapy for inflammatory carcinoma of the breast. Maloisel F, et al. Cancer 1990 Feb 15;65(4):851–5
Reduced cardiotoxicity of doxorubicin by a 6–hour infusion regimen. A prospective randomized evaluation. Shapira J, et al. Cancer 1990 Feb 15;65(4):870–3
Evaluation of continuous–infusion alpha–difluoromethylornithine therapy for colorectal carcinoma. Ajani JA, et al. Cancer Chemother Pharmacol 1990;26(3):223–6
Efficacy and safety of high–dose cisplatin and cyclophosphamide with glutathione protection in the treatment of bulky advanced epithelial ovarian cancer. Di Re F, et al. Cancer Chemother Pharmacol 1990;25(5):355–60
Effects of 5–fluorouracil on cytotoxicity and RNA metabolism in human colonic carcinoma cells. Greenhalgh DA, et al. Cancer Chemother Pharmacol 1989;25(1):37–44
A phase II study of etoposide combined with ifosfamide as second–line therapy in cisplatin–resistant ovarian carcinomas. Tropé C, et al. Cancer Chemother Pharmacol 1990;26 Suppl:S45–7
Preliminary correlations of clinical outcome with in vitro chemosensitivity of second passage human breast cancer cells. Smith HS, et al. Cancer Res 1990 May 15;

50(10):2943–8
Combined effect in vitro of chemotherapy with agents acting on the cell membrane of Lewis lung carcinoma. Siegal A, et al. **Chemotherapy** 1990;36(3):230–9
Hepatic microsomal enzyme induction and adrenal crisis due to o,p'DDD therapy for metastatic adrenocortical carcinoma. Hague RV, et al. **Clin Endocrinol (Oxf)** 1989 Jul;31(1):51–7
Rapid in vitro bromodeoxyuridine labeling method for monitoring of therapy response in solid human tumors. Hemmer J. **Cytometry** 1990;11(5):603–9
Relationship of DNA ploidy to chemoresistance of tumors as measured by in vitro tests. Volm M, et al. **Cytometry** 1990;11(3):406–10
Phase II study of 5-aza-2'-deoxycytidine in advanced ovarian carcinoma. The EORTC Early Clinical Trials Group. Sessa C, et al. **Eur J Cancer** 1990 Feb;26(2):137–8
Photodynamic therapy in the treatment of malignant tumours of the skin and head and neck. Buchanan RB, et al. **Eur J Surg Oncol** 1989 Oct;15(5):400–6
Estramustine phosphate in secondary hormone-resistant carcinoma of the prostate. Maier U, et al. **Eur Urol** 1990; 17(3):216–8
Neoadjuvant chemotherapy in stage X ovarian carcinoma. Chambers JT, et al. **Gynecol Oncol** 1990 Jun;37(3):327–31
Treatment of relapsed carcinoma of the ovary with cisplatin or carboplatin following initial treatment with these compounds. Gore ME, et al. **Gynecol Oncol** 1990 Feb; 36(2):207–11
Adjuvant effects of calmodulin antagonists on antitumor activity of 1-(2-tetrahydrofuryl)-5-fluorouracil (ftorafur) and a mixture of ftorafur and uracil (UFT) in nude mice bearing human ovarian carcinomas. Kikuchi Y, et al. **Gynecol Oncol** 1989 Nov;35(2):172–6
Adjuvant chemotherapy after radical hysterectomy for cervical carcinoma. Lai CH, et al. **Gynecol Oncol** 1989 Nov;35(2):193–8
A five-drug alternating chemotherapy regimen for patients with advanced epithelial ovarian cancer. Lawton F, et al. **Gynecol Oncol** 1990 Jan;36(1):19–22
Teniposide in recurrent or advanced cervical carcinoma: a phase II trial in patients not previously treated with cytotoxic therapy. Pfeiffer P, et al. **Gynecol Oncol** 1990 May;37(2):230–3
Therapeutic and metabolic effects of high (greater than 1 g/m2) systemic cumulative doses of cis-platinum in patients with ovarian carcinoma. Plaxe SC, et al. **Gynecol Oncol** 1990 May;37(2):250–3
A phase II trial of cisplatin and 5-fluorouracil with allopurinol for recurrent or metastatic carcinoma of the uterine cervix: a Southwest Oncology Group trial. Weiss GR, et al. **Gynecol Oncol** 1990 Jun;37(3):354–8
Use of somatostatin analog SMS 201-995 in medullary thyroid carcinoma. Libroia A, et al. **Henry Ford Hosp Med J** 1989;37(3-4):151–3
Effects of short-term subcutaneous administration of SMS 201-995 on calcitonin plasma levels in patients suffering from medullary thyroid carcinoma. Guliana JM, et al. **Horm Metab Res** 1989 Oct;21(10):584–6
Tumor necrosis factor induces necrosis of human carcinoma xenografts in the presence of tricyclodecan-9-yl-xanthogenate and lauric acid. Amtmann E, et al. **Int J Cancer** 1990 Jun 15;45(6):1113–8
Increased drug cytotoxicity at reduced pH counteracts cyclophosphamide resistance in cultured rat mammary carcinoma cells. Jähde E, et al. **Int J Cancer** 1989 Dec 15;44(6):1082–7
Anti-proliferative effects of tumor necrosis factor, gamma interferon and 5-fluorouracil on human colorectal carcinoma cell lines. Schiller JH, et al. **Int J Cancer** 1990 Jul 15;46(1):61–6
Phase II study of esorubicin (4'-deoxydoxorubicin) in advanced epithelial carcinoma of the ovary: a Gynecologic Oncology Group study. McGuire WP, et al. **Invest New Drugs** 1989 Nov;7(4):333–6
The role of adjuvant therapy in the management of node negative breast cancer. Young V, et al. **Ir Med J** 1990 Mar;83(1):34–5
Tuftsin increases survival in murine peritoneal carcinomatosis. Chu DZ, et al. **J Biol Response Mod** 1990 Apr;9(2):264–7
Combination chemotherapy of advanced medullary and differentiated thyroid cancer. Phase II study. Scherübl H, et al. **J Cancer Res Clin Oncol** 1990;116(1):21–3
The tumor-inhibiting effect of diethylstilbestrol and its diphosphate on the Nb-H and Nb-R prostatic carcinomas of the rat. Schneider MR, et al. **J Cancer Res Clin Oncol** 1990;116(2):159–67
Combined chemotherapy for recurrent and metastatic nasopharyngeal carcinoma. Airoldi M, et al. **J Chemother** 1989 Aug;1(4):272–6
Analysis of dose intensity in doxorubicin-containing adjuvant chemotherapy in stage II and III breast carcinoma. Ang PT, et al. **J Clin Oncol** 1989 Nov;7(11):1677–84
High-dose cisplatin combination chemotherapy in the treatment of advanced epithelial ovarian carcinoma [see comments] Hainsworth JD, et al. **J Clin Oncol** 1990 Mar; 8(3):502–8 Comment in: J Clin Oncol 1990 Jul;8(7):1287–8.
A phase II trial of intraperitoneal cisplatin and etoposide for primary treatment of ovarian epithelial cancer. Howell SB, et al. **J Clin Oncol** 1990 Jan;8(1):137–45
Phase II trial of intraperitoneal mitoxantrone in the management of refractory ovarian cancer. Markman M, et al. **J Clin Oncol** 1990 Jan;8(1):146–50
Phase II trial of ifosfamide and mesna in advanced ovarian carcinoma: a Gynecologic Oncology Group Study. Sutton GP, et al. **J Clin Oncol** 1989 Nov;7(11):1672–6
Fluorouracil and recombinant alfa-2a-interferon: an active regimen against advanced colorectal carcinoma [see comments] Wadler S, et al. **J Clin Oncol** 1989 Dec; 7(12):1769–75 Comment in: J Clin Oncol 1989 Dec;7(12):1764–5.
Pharmacology and clinical toxicity of 4'-iodo-4'-deoxydoxorubicin: an example of successful application of pharmacokinetics to dose escalation in phase I trials [see comments] Gianni L, et al. **J Natl Cancer Inst** 1990 Mar 21;82(6):469–77 Comment in: J Natl Cancer Inst 1990 Mar 21;82(6):446–7.
Striking increase of survival of mice bearing M109 Madison carcinoma treated with a novel protein from amphibian embryos. Mikulski SM, et al. **J Natl Cancer Inst** 1990 Jan 17;82(2):151–3
Irreversible renal failure after intraperitoneal cisplatin administration. A case report. Gouge SF, et al. **J Reprod Med** 1989 Nov;34(11):931–3
Antitumor activity of 7-N-(2-((2-(gamma-L-glutamylamino) ethyl) dithio) ethyl) mitomycin C (KW2149) against human tumor xenografts serially transplanted into nude mice. Kubota T, et al. **Jpn J Clin Oncol** 1989 Sep;19(3):216–21
Prediction of the resistance of human tumors to adriamycin by chemosensitivity tests and DNA analysis of the multidrug resistance gene. Kim R, et al. **Jpn J Surg** 1990 Mar;20(2):192–6
Breast cancer and hormone replacement therapy [letter; comment] **Lancet** 1990 Feb 3;335(8684):297–8 Comment on: Lancet 1989 Nov 11;2(8672):1164.
Duration of chemotherapy in advanced breast carcinoma [letter; comment] Glaholm J, et al. **Lancet** 1990 Apr 28; 335(8696):1033 Comment on: Lancet 1990 Jan 27;335(8683):186–90.
Pharmacokinetics of 4' epi-adriamycin after morning and afternoon intravenous administration. Eksborg S, et al. **Med Oncol Tumor Pharmacother** 1989;6(3):195–7
Primary treatment of regional and disseminated pancreatic cancer with hexamethylmelamine, mitomycin C and 5-fluorouracil infusion. Bruckner HW, et al. **Oncology** 1989;46(6):366–71
Cisplatin-containing versus cisplatin-free adjuvant chemotherapy in ovarian carcinoma. Results after second-look laparotomy. Schneider J, et al. **Oncology** 1990; 47(2):109–11
Report from ASCO on taxol as second-line therapy for ovarian Ca [news] **Oncology (Williston Park)** 1990 Jul; 4(7):16
Clinical trials referral resource. Adjuvant treatment of colon cancer. Cheson BD. **Oncology (Williston Park)** 1989 Sep; 3(9):98–101, 106–8
Systemic therapy of locally advanced breast cancer: review and guidelines. Swain SM, et al. **Oncology (Williston Park)** 1989 Jan;3(1):21–8; discussion 28–30, 34 (50 ref.)
Chemotherapy and multimodality treatment in thyroid carcinoma. Ekman ET, et al. **Otolaryngol Clin North Am** 1990 Jun;23(3):523–7 (21 ref.)
Tamoxifen and breast cancer: indications and response. Hughes R, et al. **Practitioner** 1989 Jun 8;233(1470):810, 813, 815
[1,2-Bis(2,6-dichloro-4-hydroxyphenyl)ethylenediamine] dichloro-platinum(II): an endocrine-active platinum complex with a specific prostatic tumor-inhibiting activity. Schneider MR, et al. **Prostate** 1989;15(2):135–48
Current status of endocrine treatment of carcinoma of the breast. Buzdar AU. **Semin Surg Oncol** 1990;6(2):77–82 (60 ref.)
Chemosensitivity test for carcinoma of digestive organs. Maehara Y, et al. **Semin Surg Oncol** 1990;6(1):42–7
Prognostic factors in stage IV ovarian carcinoma treated with platinum-based regimens. Repetto L, et al. **Tumori** 1990 Jun 30;76(3):274–7
Results of combined modality treatment in poorly differentiated and anaplastic thyroid carcinoma. Auersperg M, et al. **Wien Klin Wochenschr** 1990 Apr 27;102(9):267–70
[Preoperative intensive chemotherapy of operable breast cancer] Zhang B. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):228–30 (Eng. Abstr.) **(Chi)**
[Preliminary results of cytotoxic monoclonal antibody treatment in pancreatic adenocarcinomas and biliary tract carcinomas] Leborgne J, et al. **Ann Chir** 1990;44(5):338–41 (Eng. Abstr.) **(Fre)**
[Effects of subcutaneous administration of sandostatine (SMS 201.995) in 18 cases of thyroid medullary cancer] Modigliani E, et al. **Ann Endocrinol (Paris)** 1989;50(6):483–8 (Eng. Abstr.) **(Fre)**
[Intraperitoneal hyperthermic chemotherapy in the treatment of peritoneal carcinosis of digestive origin. A case report and physiopathology] Gilly FN, et al. **J Chir (Paris)** 1990 Feb;127(2):95–8 (Eng. Abstr.) **(Fre)**
[Combination therapy with adriamycin, cisplatin and vindesine in C cell carcinoma of the thyroid] Scherübl H, et al. **Onkologie** 1990 Jun;13(3):198–202 (Eng. Abstr.) **(Ger)**
[Chemotherapy of highly malignant thyroid tumors] Kober F, et al. **Wien Klin Wochenschr** 1990 Apr 27;102(9):274–6 (Eng. Abstr.) **(Ger)**
[Neoadjuvant systemic chemotherapy with VMC (vinblastine, methotrexate and cisplatin) in locally advanced carcinoma of the bladder] Maffezzini M, et al. **Arch Ital Urol Nefrol Androl** 1990 Jun;62(2):219–21 (Eng. Abstr.) **(Ita)**
[Second line chemotherapy of carcinoma of the ovary. Current approaches] Sesti F, et al. **G Ital Oncol** 1989 Oct-Dec;9(4):121–4 (35 ref.) (Eng. Abstr.) **(Ita)**
[Chemotherapy of carcinoma of the cervix uteri. Current approaches] Sesti F, et al. **G Ital Oncol** 1989 Oct-Dec; 9(4):125–8 (32 ref.) (Eng. Abstr.) **(Ita)**
[Adjuvant M-VEC in advanced urotheliomas of the bladder] Cocimano V, et al. **Minerva Urol Nefrol** 1989 Jul-Sep; 41(3):195–7 (Eng. Abstr.) **(Ita)**
[An evaluation of two postoperative chemotherapy protocols in ovarian common epithelial cancer: a comparison of continuous and intermittent hospitalization] Sakamoto H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Sep; 41(9):1491–4 **(Jpn)**
[Immunotherapy with transfer factor in hormone-resistant metastasized carcinoma of the prostate] Corrado F, et al. **Arch Esp Urol** 1989;42 Suppl 2:191–6 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Depletion of O6-alkylguanine-DNA alkyltransferase activity in mammalian tissues and human tumor xenografts in nude mice by treatment with O6-methylguanine. Dolan ME, et al. **Cancer Chemother Pharmacol** 1989;25(2):103–8
Expression of UDP-GalNAc:NeuAc alpha 2,3Gal beta-R beta 1,4(GalNAc to Gal) N-acetylgalactosaminyltransferase involved in the synthesis of Sda antigen in human large intestine and colorectal carcinomas. Malagolini N, et al. **Cancer Res** 1989 Dec 1;49(23):6466–70
Human ovarian carcinoma beta-N-acetylglucosaminidase isoenzymes and their role in extracellular matrix degradation. Woynarowska B, et al. **Cancer Res** 1989 Oct 15;49(20):5598–604
Characterization of a cathepsin L-like enzyme secreted from human pancreatic cancer cell line HPC-YP. Yamaguchi N, et al. **Cancer Res** 1990 Feb 1;50(3):658–63
Changes in aldehyde dehydrogenase during rat urinary bladder carcinogenesis. Campbell P, et al. **Carcinogenesis** 1989 Nov;10(11):2081–7
Immunolocalization of collagenase in neoplastic epithelial cells. Whitelock JM, et al. **Immunol Cell Biol** 1989 Dec; 67 (Pt 6):349–57
Maintenance on extracellular matrix and expression of heparanase activity by human ovarian carcinoma cells from biopsy specimens. Peretz T, et al. **Int J Cancer** 1990 Jun 15;45(6):1054–60
Glucose-6-phosphate dehydrogenase and 6-phosphogluconate dehydrogenase activities in normal canine mammary gland and in mammary tumours and their correlation with oestrogen receptors. Nerurkar VR, et al. **J Comp Pathol** 1990 Feb;102(2):191–5
TPA and CK-BB: new tumor markers in leptomeningeal carcinomatosis secondary to breast cancer [letter] Bach F, et al. **J Natl Cancer Inst** 1990 Feb 21;82(4):320–2
Altered regulation of the cytochrome P4501A1 gene: novel inducer-independent gene expression in pulmonary carcinoma cell lines. McLemore TL, et al. **J Natl Cancer Inst** 1989 Dec 6;81(23):1787–94
Positive correlation of serum uridine diphosphate-galactosyltransferase levels with breast carcinoma. Paone JF, et al. **Surg Forum** 1978;29:158–60
Significance of alkaline phosphatase isozymes in the monitoring of patients with colorectal carcinoma. Harmenberg U, et al. **Tumour Biol** 1989;10(5):225–31

EPIDEMIOLOGY

Incidence of sporadic and familial medullary thyroid carcinoma in Sweden 1959 through 1981. A nationwide study in 126 patients. Swedish MCT Study Group. Bergholm U, et al. **Acta Oncol** 1990;29(1):9–15
Increased incidence of carcinoma of the breast associated with abdominal adiposity in postmenopausal women. Folsom AR, et al. **Am J Epidemiol** 1990 May; 131(5):794–803
Oral contraceptive use and liver cancer. Palmer JR, et al. **Am J Epidemiol** 1989 Nov;130(5):878–82
Esophageal carcinoma in young patients. Mori M, et al. **Ann Thorac Surg** 1990 Feb;49(2):284–6
Breast cancer in Papua New Guinea: a survey of 10 years. SenGupta SK, et al. **Aust N Z J Surg** 1990 Jan;60(1):41–4
Nasopharyngeal carcinoma in Auckland: a study of racial factors. Morton RP, et al. **Australas Radiol** 1990 Feb; 34(1):17–8
Second non-germ cell malignancies after radiotherapy of testicular cancer with or without chemotherapy. Fossa SD, et al. **Br J Cancer** 1990 Apr;61(4):639–43
Results of a screening program for C-cell disease (medullary thyroid cancer and C-cell hyperplasia). Simpson WJ, et al. **Cancer** 1990 Apr 1;65(7):1570–6
Association of incident carcinoma of the endometrium with body weight and fat distribution in older women: early findings of the Iowa Women's Health Study. Folsom AR, et al. **Cancer Res** 1989 Dec 1;49(23):6828–31
The epidemiology of malignant neoplasia of the larynx in

Canada: 1931–1984. Ayiomamitis A. **Clin Otolaryngol** 1989 Aug;14(4):349–55
Epidemiology of nasopharyngeal carcinoma. Huang DP. **Ear Nose Throat J** 1990 Apr;69(4):222–5 (30 ref.)
Case–control study of in situ and invasive carcinoma of the vagina. Brinton LA, et al. **Gynecol Oncol** 1990 Jul; 38(1):49–54
Screening for medullary cancer of the thyroid in France. Calmettes C. **Horm Metab Res Suppl** 1989;21:1–2
Family history of ovarian cancer patients: a case–control study. Koch M, et al. **Int J Epidemiol** 1989 Dec;18(4):782–5
Silica exposure and lung cancer in ceramic workers: a case–control study. Meijers JM, et al. **Int J Epidemiol** 1990 Mar;19(1):19–25
Thyroid cancer: incidence, mortality and histological pattern in Denmark. Sprøgel P, et al. **Int J Epidemiol** 1989 Dec; 18(4):990–2
Ovarian cancer in Oriental women from Singapore: disease pattern and survival. Singh P, et al. **Int Surg** 1990 Apr–Jun; 75(2):115–22
Consumption of salted fish and other risk factors for nasopharyngeal carcinoma (NPC) in Tianjin, a low–risk region for NPC in the People's Republic of China. Ning JP, et al. **J Natl Cancer Inst** 1990 Feb 21;82(4):291–6
Breast cancer as seen in King Fahd University Hospital, Al–Khobar, 1983–1986. Anim JT, et al. **J R Coll Surg Edinb** 1989 Aug;34(4):201–4
Prostate cancer detection in a clinical urological practice by ultrasonography, digital rectal examination and prostate specific antigen. Cooner WH, et al. **J Urol** 1990 Jun; 143(6):1146–52; discussion 1152–4
Oesophageal cancer in China [letter] Clarke CA, et al. **Lancet** 1989 Dec 23–30;2(8678–8679):1525
Thyroid cancer: a computer–assisted review of 5287 cases. Jensen MH, et al. **Otolaryngol Head Neck Surg** 1990 Jan; 102(1):51–65 (24 ref.)
Carcinoma of the gallbladder: a risk associated with gallbladder–preserving treatments for cholelithiasis. So CB, et al. **Radiology** 1990 Jan;174(1):127–30
Carcinoma of the thyroid gland in Auckland, New Zealand. Shaw JH, et al. **Surg Gynecol Obstet** 1990 Jul;171(1):27–32
[Carcinoma of the cervical stump. Retrospective analysis of 43 cases] Calais G, et al. **Bull Cancer (Paris)** 1989; 76(10):1103–10 (Eng. Abstr.) **(Fre)**
[Cancer of the breast in Cote–d'Or (1982–1987). The Burgundian register of gynecologic diseases] Chaplain G, et al. **Bull Cancer (Paris)** 1990;77(1):5–14 (Eng. Abstr.) **(Fre)**
[A registry of medullary thyroid cancer in West Germany] Raue F, et al. **Med Klin** 1990 Mar 15;85(3):113–6, 169 (Eng. Abstr.) **(Ger)**
[Bilateral carcinoma of the breast. Our experience] De Leo G, et al. **Minerva Med** 1989 Aug;80(8):901–5 **(Ita)**

ETIOLOGY

Changes in patterns of cigarette smoking and lung cancer risk: results of a case–control study. Benhamou E, et al. **Br J Cancer** 1989 Oct;60(4):601–4
Risk factors for ovarian cancer: a case–control study. Booth M, et al. **Br J Cancer** 1989 Oct;60(4):592–8
Pulmonary giant cell carcinoma: the relation to smoking. Depue RH, et al. **Br J Cancer** 1989 Oct;60(4):599–600
Human papillomaviruses and cervical carcinoma. Vousden KH. **Cancer Cells** 1989 Oct;1(2):43–50 (89 ref.)
Usefulness of rapid production model for pancreatic carcinoma in male hamsters. Mizumoto K, et al. **Cancer Lett** 1990 Mar;49(3):211–5
Hazard rates for dysplasia and cancer in ulcerative colitis. Results from a surveillance program. Lashner BA, et al. **Dig Dis Sci** 1989 Oct;34(10):1536–41
Association of Candida with carcinoma of esophagus [letter; comment] Misra SP, et al. **Indian J Gastroenterol** 1989 Oct; 8(4):308–9 Comment on: Indian J Gastroenterol 1989 Jul;8(3):171–2.
Breast carcinoma around a silicone prosthesis—back to basics. Fraser S, et al. **J R Coll Surg Edinb** 1989 Jun; 34(3):164
Colorectal carcinoma in patients under the age of 30 years: a review of 11 cases [letter; comment] Loefler IJ. **J R Coll Surg Edinb** 1989 Jun;34(3):169 Comment on: J R Coll Surg Edinb 1988 Oct;33(5):277–9.
Long–term maintenance of human distal airway epithelial cells in nude mice: a potentially useful model for the study of pulmonary carcinogenesis and lung cell biology. Kitamura H, et al. **Lab Invest** 1990 Mar;62(3):383–9
Salted fish and nasopharyngeal carcinoma [see comments] **Lancet** 1989 Oct 7;2(8667):840–2 (21 ref.) Comment in: Lancet 1989 Nov 18;2(8673):1210. Comment in: Lancet 1989 Nov 18;2(8673):1210–1.
Cancer of the opposite breast: what risk from radiation therapy? [letter] **Oncology (Williston Park)** 1989 Apr; 3(4):22–5
Diet and nasopharyngeal carcinoma. Yu MC. **Prog Clin Biol Res** 1990;346:93–105 (47 ref.)
Diet and epithelial cancer of the thyroid gland. Franceschi S, et al. **Tumori** 1990 Aug 31;76(4):331–8 (52 ref.)
[Primitive cutaneous neuroendocrine carcinoma. A review of recent literature] Bayrou O, et al. **Ann Med Interne (Paris)** 1989;140(7):631–6 (83 ref.) **(Fre)**
[The regulation mechanism of tumor growth. Estrogen dependence of breast carcinoma] Ammon A, et al. **Dtsch Med Wochenschr** 1989 Nov 10;114(45):1760–4 (33 ref.) **(Ger)**
[Medullary carcinoma of the thyroid and cervical radiotherapy (letter)] Galofré M. **Med Clin (Barc)** 1989 Oct 21;93(12):479 **(Spa)**
[Medullary carcinoma of the thyroid and radiotherapy (letter)] Gómez–Morales M, et al. **Med Clin (Barc)** 1989 Oct 7;93(10):399 **(Spa)**

GENETICS

Nuclear DNA content in anaplastic giant–cell thyroid carcinoma. Ekman ET, et al. **Am J Clin Oncol** 1989 Oct; 12(5):442–6
C–myc proto–oncogene amplification detected by polymerase chain reaction in archival human ovarian carcinomas. Schreiber G, et al. **Am J Pathol** 1990 Sep; 137(3):653–8
Cellular DNA profiles of benign and malignant adrenocortical tumors. Cibas ES, et al. **Am J Surg Pathol** 1990 Oct;14(10):948–55
C–myc, N–myc, N–ras, and c–erb–B: lack of amplification or rearrangement in human medullary thyroid carcinoma and a derivative cell line. Yang KP, et al. **Anticancer Res** 1990 Jan–Feb;10(1):189–92
Cloning and characterization of two alternatively spliced rat alpha–amidating enzyme cDNAs from rat medullary thyroid carcinoma. Bertelsen AH, et al. **Arch Biochem Biophys** 1990 May 15;279(1):87–96
cHa–ras proto–oncogene. Amplification and overexpression in UV–B–induced mouse skin papillomas and carcinomas. Husain Z, et al. **Arch Dermatol** 1990 Mar;126(3):324–30
Increase in calcitonin mRNA levels in rats at high risk of C cell tumours is genetically determined. Delehaye MC, et al. **Biochem Biophys Res Commun** 1990 Feb 28; 167(1):232–7
Genomic DNA analysis of the estrogen receptor gene in breast cancer. Parl FF, et al. **Breast Cancer Res Treat** 1989 Oct;14(1):57–64
Nuclear DNA content and survival in medullary thyroid carcinoma. Swedish Medullary Thyroid Cancer Study Group. Ekman ET, et al. **Cancer** 1990 Feb 1;65(3):511–7
Cytophotometric DNA measurements in medullary thyroid carcinoma. Galera–Davidson H, et al. **Cancer** 1990 May 15;65(10):2255–60
Pheochromocytoma and medullary carcinoma of thyroid. Huang SN, et al. **Cancer** 1968 Feb;21(2):302–11
Diploid predominance in hereditary nonpolyposis colorectal carcinoma evaluated by flow cytometry. Kouri M, et al. **Cancer** 1990 Apr 15;65(8):1825–9
Flow cytometric DNA analysis of parathyroid tumors with special reference to its diagnostic and prognostic value in parathyroid carcinoma. Obara T, et al. **Cancer** 1990 Apr 15;65(8):1789–93
Cytogenetic investigations on a cell line derived from a carcinoma arising in a salivary gland pleomorphic adenoma. Bullerdiek J, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):253–62
Simple numerical chromosome aberrations in well–differentiated malignant epithelial tumors. Pejovic T, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):95–101
Hypodiploid, pseudodiploid, and normal karyotypes prevail in cytogenetic studies of medullary carcinomas of the thyroid and metastatic tissues. Wurster–Hill DH, et al. **Cancer Genet Cytogenet** 1990 Jul 15;47(2):227–41
Inhibition of growth and modulation of gene expression in human lung carcinoma in athymic mice by site–selective 8–Cl–cyclic adenosine monophosphate. Ally S, et al. **Cancer Res** 1989 Oct 15;49(20):5650–5
Amplification of the c–myc oncogene during progression of radiation–induced rat skin tumors. Garte SJ, et al. **Cancer Res** 1990 May 15;50(10):3073–7
Joining of the c–myc gene and a line 1 family member on chromosome 8 in a human primary giant cell carcinoma of the lung. Iizuka M, et al. **Cancer Res** 1990 Jun 1; 50(11):3345–50
Frequent alteration of the DF3 tumor–associated antigen gene in primary human breast carcinomas. Merlo GR, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):6966–71
Changes in calcitonin gene RNA processing during growth of a human medullary thyroid carcinoma cell line. Nelkin BD, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):6949–52
Amplification, overexpression, and rearrangement of the erbB–2 protooncogene in primary human stomach carcinomas. Park JB, et al. **Cancer Res** 1989 Dec 1; 49(23):6605–9
Analysis of c–erbB–2 expression in breast carcinomas with clinical follow–up. Thor AD, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):7147–52
High incidence of coamplification of hst–1 and int–2 genes in human esophageal carcinomas. Tsuda T, et al. **Cancer Res** 1989 Oct 15;49(20):5505–8
Retrospective analysis of the prognostic significance of DNA ploidy patterns and S–phase fraction in gastric carcinoma. Yonemura Y, et al. **Cancer Res** 1990 Feb 1;50(3):509–14
Identification of Alu transposition in human lung carcinoma cells: a correction [letter] Lin CS, et al. **Cell** 1989 Oct 6; 59(1):9
A comparison of the number of X–chromatin bodies and of X chromosomes in carcinomas of the cervix uteri. Atkin NB, et al. **Cytobios** 1989;60(241):111–4
Effect of sonication on paraffin–embedded tissue preparation for DNA flow cytometry. Gonchoroff NJ, et al. **Cytometry** 1990;11(5):642–6
Malignancies in families of women with medullary, tubular and invasive ductal breast cancer. Bürki N, et al. **Eur J Cancer** 1990 Mar;26(3):295–303
Subtraction hybridization cDNA libraries from colon carcinoma and hepatic cancer. Schweinfest CW, et al. **Genet Anal Tech Appl** 1990 May;7(3):64–70
Human–mouse hybrids carrying fragments of single human chromosomes selected by tumor growth. Porteous DJ, et al. **Genomics** 1989 Nov;5(4):680–4
Hereditary carcinoma of the ovary and associated cancers: a study of two families. Lynch HT, et al. **Gynecol Oncol** 1990 Jan;36(1):48–55
Flow cytometric measurement of ploidy and proliferation in effusions of ovarian carcinoma and their possible prognostic significance. Sahni K, et al. **Gynecol Oncol** 1989 Nov;35(2):240–5
The importance of screening for medullary thyroid carcinoma in families of patients with MEN 2. Frilling A, et al. **Henry Ford Hosp Med J** 1989;37(3–4):122–3
Allele loss on chromosome 10 and point mutation of ras oncogenes are infrequent in tumors of MEN 2A. Okazaki M, et al. **Henry Ford Hosp Med J** 1989;37(3–4):112–5
Diagnosis, management, and pathogenetic studies in medullary thyroid carcinoma syndrome. Samaan NA, et al. **Henry Ford Hosp Med J** 1989;37(3–4):132–7
Hereditary medullary thyroid carcinoma: genetic annalysis of three related syndromes. Groupe d'Etude des Tumeurs a Calcitonine. Sobol H, et al. **Henry Ford Hosp Med J** 1989;37(3–4):109–11
Post–translation processing of neurohormonal peptide precursors in a human medullary thyroid carcinoma. Conlon JM. **Horm Metab Res Suppl** 1989;21:12–5
Multiple endocrine neoplasia type II: clinical, biological and epidemiological features. French Medullary Study Group. Calmettes C. **Horm Res** 1989;32(1–3):41–6
Genetic screening of endocrine tumour syndromes with DNA probes: the example of medullary thyroid carcinoma. Sobol H, et al. **Horm Res** 1989;32(1–3):34–40 (32 ref.)
Linkage analysis of hereditary thyroid carcinoma with and without pheochromocytoma. Narod SA, et al. **Hum Genet** 1989 Nov;83(4):353–8
Coding region structure of interleukin–8 gene of human lung giant cell carcinoma LU65C cells that produce LUCT/interleukin–8: homogeneity in interleukin–8 genes. Hotta K, et al. **Immunol Lett** 1990 Jun;24(3):165–9
Transforming activity of nasopharyngeal carcinoma DNA detectable in mouse JB6 cells. Colburn NH, et al. **Int J Cancer** 1989 Dec 15;44(6):1012–6
Tumor progression by DNA flow cytometry in human colorectal cancer. Giaretti W, et al. **Int J Cancer** 1990 Apr 15;45(4):597–603
EGF stimulates anchorage–independent growth of a human bladder carcinoma cell line (KU1) with an amplified and over–expressed EGF receptor gene. Ishikawa J, et al. **Int J Cancer** 1989 Dec 15;44(6):1000–4
Frequency and degree of aneuploidy in benign and malignant thyroid neoplasms. Schelfhout LJ, et al. **Int J Cancer** 1990 Jan 15;45(1):16–20
Growth factors and oncogenes in human gastrointestinal carcinomas. Tahara E. **J Cancer Res Clin Oncol** 1990; 116(2):121–31 (99 ref.)
Diagnosis of medullary carcinoma of the thyroid (MCT) by calcitonin assay using monoclonal antibodies: criteria for the pentagastrin stimulation test in hereditary MCT. Guilloteau D, et al. **J Clin Endocrinol Metab** 1990 Oct; 71(4):1064–7
Acetylcholinesterase and butyrylcholinesterase genes coamplify in primary ovarian carcinomas. Zakut H, et al. **J Clin Invest** 1990 Sep;86(3):900–8
DNA flow cytometry of acinic cell carcinomas of major salivary glands. el–Naggar AK, et al. **J Laryngol Otol** 1990 May;104(5):410–6
Increased expression of the retinoblastoma gene in human colorectal carcinomas relative to normal colonic mucosa. Gope R, et al. **J Natl Cancer Inst** 1990 Feb 21;82(4):310–4
Expression of multidrug–resistance (MDR1) gene in normal epithelia and in invasive carcinomas of the uterine cervix. Riou GF, et al. **J Natl Cancer Inst** 1990 Sep 19; 82(18):1493–6
Choroid plexus carcinoma in siblings [letter; comment] Munoz DG. **J Neuropathol Exp Neurol** 1990 Mar; 49(2):192–3 Comment on: J Neuropathol Exp Neurol 1989 Jul;48(4):483–93.
Epidermal growth factor receptor mRNA levels in human prostatic tumors and cell lines. Morris GL, et al. **J Urol** 1990 Jun;143(6):1272–4
Presence of aberrant transcripts of ret proto–oncogene in a human papillary thyroid carcinoma cell line. Ishizaka Y, et al. **Jpn J Cancer Res** 1989 Dec;80(12):1149–52
Induction of growth factor–receptor and metalloproteinase genes by epidermal growth factor and/or transforming growth factor–alpha in human gastric carcinoma cell line MKN–28. Yoshida K, et al. **Jpn J Cancer Res** 1990 Aug; 81(8):793–8
Multiple endocrine neoplasia. Decker RA, et al. **Jpn J Surg** 1989 Nov;19(6):645–57 (52 ref.)
Multiparametric deoxyribonucleic acid and cell cycle analysis of breast carcinomas by flow cytometry. Clinicopathologic correlations. Visscher DW, et al. **Lab Invest** 1990 Mar; 62(3):370–8
Evidence implicating at least two genes on chromosome 17p

in breast carcinogenesis. Coles C, et al. **Lancet** 1990 Sep 29;336(8718):761–3

High frequency of APC loss in sporadic colorectal carcinoma due to breaks clustered in 5q21–22. Ashton-Rickardt PG, et al. **Oncogene** 1989 Oct;4(10):1169–74

Loss of heterozygosity on chromosomal segments 3p, 6q and 11p in human ovarian carcinomas. Ehlen T, et al. **Oncogene** 1990 Feb;5(2):219–23

An oncogenic chromosome 8–9 gene fusion isolated following transfection of human ovarian carcinoma cell line DNA. Halverson D, et al. **Oncogene** 1990 Jul; 5(7):1085–9

Unique expression of the human Evi-1 gene in an endometrial carcinoma cell line: sequence of cDNAs and structure of alternatively spliced transcripts. Morishita K, et al. **Oncogene** 1990 Jul;5(7):963–71

Detection of ras gene mutations in human lung cancers by single-strand conformation polymorphism analysis of polymerase chain reaction products. Suzuki Y, et al. **Oncogene** 1990 Jul;5(7):1037–43

Association between tumor DNA aneuploidy and in vitro tetraploidy of skin fibroblasts in patients with colorectal neoplasms. Svendsen LB, et al. **Scand J Gastroenterol** 1989 Aug;24(6):755–60

Flow cytometry and prognostic implications in patients with solid tumors. Williams NN, et al. **Surg Gynecol Obstet** 1990 Sep;171(3):257–66 (107 ref.)

DNA ploidy and cell-cycle analysis in pancreatic and ampullary carcinoma: flow cytometric study of formalin-fixed paraffin-embedded tissue. Baisch H, et al. **Virchows Arch [A]** 1990;417(2):145–50

[A familial case of multiple endocrine neoplasia (MEN IIb). Diagnosis of medullary thyroid cancer] Rochiccioli P, et al. **J Genet Hum** 1989 Sep;37(3):207–14 (Eng. Abstr.) **(Fre)**

[Familial medullary thyroid cancer. Contribution of genealogy and genetics to the study of two families] Houdent C, et al. **Presse Med** 1990 Mar 31;19(12):549–52 (Eng. Abstr.) **(Fre)**

[Frequency and rearrangements of alleles of proto-oncogene c-Ha-ras-1 and their association with development of various malignant tumors in man] Nikiforova IF, et al. **Genetika** 1990 Mar;26(3):531–40 (Eng. Abstr.) **(Rus)**

[Medullary carcinoma of the thyroid. Familial variety] Lamela Estévez P, et al. **Rev Clin Esp** 1989 Jul–Aug; 185(3):131–5 (Eng. Abstr.) **(Spa)**

HISTORY

Of historical interest. General Grant fights cancer. Butler F. **CA** 1990 Jan–Feb;40(1):A9–14

IMMUNOLOGY

Comparison of the effects of peritoneal and spleen cells of syngeneic or allogeneic origin on the take of transplantable murine tumours. Karczag E, et al. **Acta Microbiol Hung** 1989;36(1):25–31

Characterization of activated peritoneal cells inhibiting the take of transplantable murine tumours. Minárovits J, et al. **Acta Microbiol Hung** 1989;36(1):33–9

Carcinoembryonic antigen and nonspecific cross-reacting antigen in medullary carcinoma of the thyroid. Kakudo K, et al. **Acta Pathol Jpn** 1990 Apr;40(4):261–6

Immunohistochemical and ultrastructural localization of T antigen in ovarian tumors. Ghazizadeh M, et al. **Am J Clin Pathol** 1990 Mar;93(3):315–21

Immunopathology of adrenal and renal cortical tumors. Coordinated change in antigen expression is associated with neoplastic conversion in the adrenal cortex. Cote RJ, et al. **Am J Pathol** 1990 May;136(5):1077–84

CA-549: immunohistochemistry and serum levels in breast carcinoma and other neoplasms. Shurbaji MS, et al. **Ann Clin Lab Sci** 1989 Nov-Dec;19(6):408–14

Human leukocyte antigens -A, -B, -C, and -DR and nasopharyngeal carcinoma in northern China. Zhu XN, et al. **Ann Otol Rhinol Laryngol** 1990 Apr;99(4 Pt 1):286–7

Induction of the expression of differentiation-related antigens on human colon carcinoma cells by stimulating protein kinase C. Baron PL, et al. **Arch Surg** 1990 Mar; 125(3):344–50

Carcinoembryonic antigen enhances metastatic potential of human colorectal carcinoma. Hostetter RB, et al. **Arch Surg** 1990 Mar;125(3):300–4

The clinical correlates of serum CA125 in 169 patients with epithelial ovarian carcinoma. Hawkins RE, et al. **Br J Cancer** 1989 Oct;60(4):634–7

Rat serum antibodies binding to high-molecular-weight glycoprotein(s) on syngeneic colon carcinomas, demonstrated by competition with rat monoclonal antibody. Jansson B, et al. **Cancer Immunol Immunother** 1989;30(2):105–12

Major-histocompatibility-complex-class-II-positive cells and interleukin-2-dependent proliferation of immune T cells are required to reject carcinoma cells in the guinea pig. Steerenberg PA, et al. **Cancer Immunol Immunother** 1990;31(5):297–304

Highly tumor-reactive, internalizing, mouse monoclonal antibodies to Le(y)-related cell surface antigens. Hellström I, et al. **Cancer Res** 1990 Apr 1;50(7):2183–90

Immunochemical and biochemical characterizations of two monoclonal antibody-reacting antigens associated with human bladder carcinoma. Zhang DS, et al. **Cancer Res** 1989 Dec 1;49(23):6621–8

Monoclonal antibody recognizing a carcinoembryonic antigen epitope differentially expressed in human colonic carcinoma versus normal adult colon tissues. Zhang HZ, et al. **Cancer Res** 1989 Oct 15;49(20):5766–73

Lymphoproliferative response to fusion proteins of human papillomaviruses in patients with cervical intraepithelial neoplasia. Cubie HA, et al. **Epidemiol Infect** 1989 Dec; 103(3):625–32

A transcribed gene, containing a variable number of tandem repeats, codes for a human epithelial tumor antigen. cDNA cloning, expression of the transfected gene and over-expression in breast cancer tissue. Hareuveni M, et al. **Eur J Biochem** 1990 May 20;189(3):475–86

A comparative evaluation of the ability of serum CA 125, CA 19-9, CA 15-3, CA 50, CA 72-4 and TATI assays in reflecting the course of disease in patients with ovarian carcinoma. Gadducci A, et al. **Eur J Gynaecol Oncol** 1990; 11(2):127–33

Impairment of macrophage antiviral activity by soluble tumor products. Effects of bacterial immunomodulators. Bonina L, et al. **G Batteriol Virol Immunol** 1988 Jan–Dec; 81(1–12):10–24

New immunohistochemical assay to detect human monoclonal antibody reactive with gastrointestinal carcinoma. Soyama N, et al. **Gastroenterol Jpn** 1989 Oct; 24(5):581

Mucosal immunodeficiency in smokers, and in patients with epithelial head and neck tumours. Barton JR, et al. **Gut** 1990 Apr;31(4):378–82

Effector function of lymphokine-activated killer cells and cytotoxic T lymphocytes in ovarian epithelial carcinoma. Lentz SS, et al. **Gynecol Oncol** 1990 Aug;38(2):191–6

Clinical value of sialyl SSEA-1 antigen in patients with ovarian cancer. Suzuki M, et al. **Gynecol Oncol** 1990 Mar; 36(3):371–5

Serial measurement of CA 125 in patients with primary carcinoma of the fallopian tube. Tokunaga T, et al. **Gynecol Oncol** 1990 Mar;36(3):335–7

An immunohistochemical study of colon-ovarian tumor antigen and colon-specific antigen in gynecologic tumors. Ueda G, et al. **Gynecol Oncol** 1989 Oct;35(1):90–2

Antigenic heterogeneity in human ovarian cancer. Welch WR, et al. **Gynecol Oncol** 1990 Jul;38(1):12–6

Recognition of a high molecular weight glycoprotein (HMW-GP) associated with rat colon cancer cells by rat monoclonal antibodies. Jansson B, et al. **Hybridoma** 1989 Oct;8(5):493–505

HLA-DR antigens in gastric carcinoma. Jayanthi M, et al. **Immunol Lett** 1990 Jul;24(4):265–6

Influence of animal host and tumor implantation site on radio-antibody uptake in the GW-39 human colonic cancer xenograft. Blumenthal RD, et al. **Int J Cancer** 1989 Dec 15;44(6):1041–7

Biodistribution and histological localization of anti-human colon cancer monoclonal antibody (MAb) 1A3: the influence of administered MAb dose on tumor uptake. Fenwick JR, et al. **Int J Cancer** 1989 Dec 15;44(6):1017–27

Serum and salivary IgA antibodies against a defined epitope of the Epstein-Barr virus nuclear antigen (EBNA) are elevated in nasopharyngeal carcinoma. Foong YT, et al. **Int J Cancer** 1990 Jun 15;45(6):1061–4

Antigenic modulation and internalization of monoclonal antibody to human colonic carcinoma cells detected by enzyme-linked immunosorbent assay. Yokota T, et al. **Int J Cancer** 1989 Dec 15;44(6):1095–9

Changes of lymphocyte subsets in peripheral blood before and after operation of patients with advanced ovarian carcinoma. Kikuchi Y, et al. **J Cancer Res Clin Oncol** 1990; 116(3):283–7

D-14 monoclonal antibody to carcinoembryonic antigen: immunohistochemical analysis of formalin-fixed, paraffin-embedded human colorectal carcinoma, tumors of non-colorectal origin and normal tissues. Pavelic ZP, et al. **J Cancer Res Clin Oncol** 1990;116(1):51–6

Serological screening for a mucine-like carcinoma-associated antigen (MCA) in patients with gastrointestinal tract malignancies. Scheithauer W, et al. **J Cancer Res Clin Oncol** 1989;115(5):474–5

Serological responses to papillomavirus group-specific antigens in women with neoplasia of the cervix uteri. Dillner L, et al. **J Clin Microbiol** 1990 Mar;28(3):624–7

Ultrastructural localization of milk fat globule membrane antigens in human breast carcinomas. Corcoran D, et al. **J Pathol** 1990 Jun;161(2):161–6

Carcinoma of breast presenting as gastric cancer: diagnosis by immunoperoxidase staining patterns. Finch PJ, et al. **J R Coll Surg Edinb** 1989 Aug;34(4):225–6

Immunohistochemical demonstration of human papilloma virus antigen in human colon neoplasms. Kirgan D, et al. **J Surg Res** 1990 May;48(5):397–402

Circulating immune complexes in patients with nasopharyngeal carcinoma. Wolf GT, et al. **Laryngoscope** 1990 Mar;100(3):302–8

In vitro interrelations between axillary lymph nodes and breast carcinomas from patients immunostimulated before surgery. Kiricuță I, et al. **Morphol Embryol (Bucur)** 1989 Apr-Jun;35(2):129–37

Expression of MHC class I and class II antigens in colonic carcinomas. Norazmi M, et al. **Pathology** 1989 Oct; 21(4):248–53

HLA antigens on colorectal adenoma and cancer cells. Horie Y, et al. **Tohoku J Exp Med** 1990 Apr;160(4):311–22

Immunohistochemical analysis of pulmonary and pleural tumors with the monoclonal antibody HYB-612 directed against the multidrug resistance (MDR-1) gene product, P-glycoprotein. Radosevich JA, et al. **Tumour Biol** 1989; 10(5):252–7

[Monoclonal antibodies against gastric cancer and their selective reaction on various tissues] Wei SM. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):162–4 (Eng. Abstr.) **(Chi)**

[Pancreatic cancer with acinar cells. Apropos of 1 case with immunocytochemical study] Le Borgne J, et al. **Chirurgie** 1989;115(4–5):322–7 (12 ref.) (Eng. Abstr.) **(Fre)**

[Sensitivity and specificity of CEA, Ca 15-3 and MCA levels in visceral breast carcinoma metastasis] Delbrück H, et al. **Strahlenther Onkol** 1990 Jul;166(7):457–9 (Eng. Abstr.) **(Ger)**

[Thyroid carcinoma with elevated antithyroidal antibodies] Moltó Santonja E, et al. **An Esp Pediatr** 1990 Mar; 32(3):273–4 **(Spa)**

METABOLISM

Is thyrotropin-releasing hormone as reliable a calcitonin stimulant as pentagastrin in medullary thyroid carcinoma? Ahuja S. **Acta Endocrinol (Copenh)** 1990 May;122(5):640–2

Heterogeneity of estrogen receptor in primary breast carcinoma evaluated by computed image analysis [letter; comment] Simony J, et al. **Am J Clin Pathol** 1989 Oct; 92(4):559 Comment on: Am J Clin Pathol 1988 Sep;90(3):233–9.

Malignant hemangioendothelioma of the thyroid. Its immunohistochemical discrimination from undifferentiated thyroid carcinoma. Tötsch M, et al. **Am J Surg Pathol** 1990 Jan;14(1):69–74

DNA distribution pattern and comparison of quantitative data in breast tumours. Megyesi J, et al. **Arch Geschwulstforsch** 1990;60(3):217–22

Lectin histochemistry and ultrastructure of medullary carcinoma of the thyroid gland. Sobrinho-Simoes M, et al. **Arch Pathol Lab Med** 1990 Apr;114(4):369–75

Human tumor cell lines express low levels of oncomodulin. Huber S, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):905–9

In vitro effect of eicosapentaenoic and docosahexaenoic acids on prostaglandin E2 synthesis in a human lung carcinoma. de Antueno RJ, et al. **Biochem Int** 1989 Sep;19(3):489–96

Immunohistochemical determination of tumour growth fraction in human ovarian carcinoma. Wong WS, et al. **Br J Obstet Gynaecol** 1989 Jun;96(6):720–4

Establishment of a human undifferentiated thyroid cancer cell line producing several growth factors and cytokines. Enomoto T, et al. **Cancer** 1990 May 1;65(9):1971–9

The intratumoral immunoassayable somatostatin concentration is frequently elevated in medullary thyroid carcinoma. Results in 34 cases. Modigliani E, et al. **Cancer** 1990 Jan 15;65(2):224–8

Alpha-fetoprotein (AFP)-producing gastric carcinoma. Is it hepatoid differentiation? Ooi A, et al. **Cancer** 1990 Apr 15;65(8):1741–7

Cell kinetics and hormonal receptor status in inflammatory breast carcinoma. Comparison with locally advanced disease. Paradiso A, et al. **Cancer** 1989 Nov 1;64(9):1922–7

Relationship between epidermal growth factor receptor status and various prognostic factors in human breast cancer. Toi M, et al. **Cancer** 1990 May 1;65(9):1980–4

Tissue distribution of [18F]-5-fluorouracil in mice: effects of route of administration, strain, tumour and dose. Visser GW, et al. **Cancer Chemother Pharmacol** 1990;26(3):205–9

Evidence for deficiency of low density lipoprotein receptor on human colonic carcinoma cell lines. Fabricant M, et al. **Cancer Res** 1990 Feb 1;50(3):632–6

Disposition of amsacrine and its analogue 9-([2-methoxy-4-[(methylsulfonyl)amino]phenyl]amino)-N,5-dimethyl-4-acridinecarboxamide (CI-921) in plasma, liver, and Lewis lung tumors in mice. Kestell P, et al. **Cancer Res** 1990 Feb 1;50(3):503–8

Relationship of hepatic glucose production to growth hormone and severity of malnutrition in a population with colorectal carcinoma. Tayek JA, et al. **Cancer Res** 1990 Apr 1;50(7):2119–22

Lectin-resistant variants of mouse Lewis lung carcinoma cells. II. Altered glycosylation of membrane glycoproteins. Debray H, et al. **Clin Exp Metastasis** 1990 May-Jun; 8(3):287–98

Quantitative imaging of immunocytochemical (PAP) estrogen receptor staining patterns in breast cancer sections. Sklarew RJ, et al. **Cytometry** 1990;11(3):359–78

Differential response to L-triiodothyronine of anterior pituitary growth hormone messenger ribonucleic acid (mRNA) and beta-thyrotropin mRNA in a hypothyroid Walker 256 carcinoma-bearing rat model of nonthyroidal disease. Hupart KH, et al. **Endocrinology** 1990 Jan; 126(1):616–21

Human HT-29 colon carcinoma cells contain muscarinic M3 receptors coupled to phosphoinositide metabolism. Kopp R, et al. **Eur J Pharmacol** 1989 Oct 17;172(4–5):397–405

Human medullary thyroid carcinoma: cell cultures and xenotransplants in nude mice. Immunocytochemistry and calcitonin secretion. Andry G, et al. **Eur J Surg Oncol** 1989 Dec;15(6):556–63

Immunohistology of gastrointestinal carcinoid tumors.

Stachura J, et al. **Folia Histochem Cytobiol** 1989; 27(4):227–31

The transport of vitamin B12 through polarized monolayers of Caco–2 cells. Dix CJ, et al. **Gastroenterology** 1990 May; 98(5 Pt 1):1272–9

Increased epidermal growth factor receptors in gastric carcinomas. Pfeiffer A, et al. **Gastroenterology** 1990 Apr; 98(4):961–7

Opioid–like immunoreactants in human cervical cancer. Ottesen B, et al. **Gynecol Oncol** 1990 Feb;36(2):250–5

Steroid hormone receptors in carcinoma of the cervix: lack of response to an antiestrogen. Scambia G, et al. **Gynecol Oncol** 1990 Jun;37(3):323–6

Melanin production in black medullary thyroid carcinoma (MTC). Beerman H, et al. **Histopathology** 1990 Mar; 16(3):227–33

Oestrogen receptors in benign epithelial lesions and intraduct carcinomas of the breast: an immunohistological study. Giri DD, et al. **Histopathology** 1989 Dec;15(6):575–84

Immunohistochemistry and lectin histochemistry in sarcomatoid renal cell carcinoma: a comparison with classical renal cell carcinoma. Harris SC, et al. **Histopathology** 1989 Dec;15(6):607–16

Mucins in prostatic carcinoma. Pinder SE, et al. **Histopathology** 1990 Jan;16(1):43–6

The expression of cytokeratin 19 in cervical neoplasia. Raju GC. **Histopathology** 1990 Mar;16(3):297–300

Breast cancers with extremely high oestrogen receptor protein status. Wong SY, et al. **Histopathology** 1990 Feb; 16(2):125–32

The development of a two–site enzyme immunometric assay (EIA) for calcitonin and its application in the measurement of the hormone in normal subjects, MTC–patients and post–menopausal women. Seth R, et al. **Horm Metab Res Suppl** 1989;21:3–5

Immunocytochemical localization and identification of prosomatostatin gene products in medullary carcinoma of human thyroid gland. Scopsi L, et al. **Hum Pathol** 1990 Aug;21(8):820–30

Increased fucosylation of high–molecular–weight glycoproteins accompanies retinoic–acid–induced differentiation of F–9 embryonal carcinoma cells. Amos B, et al. **Int J Cancer** 1990 Jul 15;46(1):86–94

In vivo tumor targeting of a recombinant single–chain antigen–binding protein. Colcher D, et al. **J Natl Cancer Inst** 1990 Jul 18;82(14):1191–7

Metabolic activation of 4–ipomeanol in human lung, primary pulmonary carcinomas, and established human pulmonary carcinoma cell lines. McLemore TL, et al. **J Natl Cancer Inst** 1990 Sep 5;82(17):1420–6

The histochemistry of oestradiol–17 beta and isocitric dehydrogenases in endometrial carcinoma. Lane G, et al. **J Steroid Biochem** 1989 Nov;33(5):853–8

Changes in the hormone receptors of human breast carcinoma xenografts in nude mice by treatment with cytotoxic agents. Koh J, et al. **Jpn J Surg** 1990 Jan;20(1):89–96

Evidence for a nutritional need for glutamine in catabolic patients. Fürst P, et al. **Kidney Int Suppl** 1989 Nov; 27:S287–92 (44 ref.)

Receptors for and bioresponses to 1,25–dihydroxyvitamin D in a human colon carcinoma cell line (HT–29). Harper KD, et al. **Metabolism** 1989 Nov;38(11):1062–9

Phenolic and tyrosyl ring iodothyronine deiodination by the Caco–2 human colon carcinoma cell line. Lee JK, et al. **Metabolism** 1989 Dec;38(12):1154–61

Carcinoembryonic antigen in medullary thyroid carcinoma: an immunohistochemical study applying six novel monoclonal antibodies. Dasović–Knežević M, et al. **Mod Pathol** 1989 Nov;2(6):610–7

Insulin–induced phosphorylation of the beta–4 integrin subunit expressed on murine metastatic carcinoma cells. Falcioni R, et al. **Mol Carcinog** 1989;2(6):361–8

Expression of phosphorylated and non–phosphorylated neurofilament subunits and cytokeratins in neuroendocrine lung tumors. Leoncini P, et al. **Pathol Res Pract** 1989 Dec; 185(6):848–55

Glial fibrillary acidic protein and cytokeratin in choroid plexus tumors. An immunohistochemical study. Lopes MB, et al. **Pathol Res Pract** 1989 Sep;185(3):339–41

Expression of endogenous receptors for neoglycoproteins in Dunning R3327 rat prostatic carcinoma. Sinowatz F, et al. **Prostate** 1990;16(2):173–84

Hypocalcemia and an inappropriate endocrine response in osteoblastic metastatic breast cancer. Bouvier DP. **South Med J** 1989 Dec;82(12):1574–6 (9 ref.)

Diamide reduces cadmium accumulation by human lung carcinoma A549 cells. Kang YJ, et al. **Toxicology** 1990 May 14;62(1):53–8

Immunocytochemical reactivity of breast cancer tissue with antibodies to neuron–specific enolase and an adenocarcinoma–associated glycolipid antigen. Ingelman–Sundberg H, et al. **Virchows Arch [A]** 1989; 415(6):539–44

Significance of keratin 13 and 6 expression in normal, dysplasic and malignant squamous epithelium of pyriform fossa. Klijanienko J, et al. **Virchows Arch [A]** 1989; 416(2):121–4

Expression of epidermal growth factor receptor in normal colorectal mucosa, adenoma, and carcinoma. Koretz K, et al. **Virchows Arch [A]** 1990;416(4):343–9

Mucoepidermoid mammary carcinoma. Immunohistochemical and biochemical analyses of intermediate filaments. Lüchtrath H, et al. **Virchows Arch [A]** 1989;416(2):105–13

Steroid receptors and proliferative activity in non–neoplastic and neoplastic endometria. Pickartz H, et al. **Virchows Arch [A]** 1990;417(2):163–71

[Fixation of fluorescent estrone derivative on human breast cancer cells. Correlation with age, menopause status and histopathology] Baltali E, et al. **Bull Cancer (Paris)** 1990; 77(4):363–9 (Eng. Abstr.) **(Fre)**

[Immunohistochemical studies on laminin in gastric cancer: relationship to histological type and metastasis: preliminary report] Matsuda T, et al. **Nippon Geka Gakkai Zasshi** 1989 Jul;90(7):1126 **(Jpn)**

[Localization of sex steroid hormone and sex steroid hormone receptors in human ovarian epithelial tumor] Ino Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jan;42(1):9–15 (Eng. Abstr.) **(Jpn)**

[Estrogen production in epithelial tumors of the ovary—clinical and endocrinological study in postmenopausal women] Yamagata S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Nov; 41(11):1761–8 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Human papillomaviruses and carcinomas. Galloway DA, et al. **Adv Virus Res** 1989;37:125–71 (324 ref.)

The hamster polyomavirus—a brief review of recent knowledge. Scherneck S, et al. **Arch Geschwulstforsch** 1990; 60(4):271–8 (49 ref.)

Purification of Epstein–Barr virus associated DNase with affinity chromatography of nasopharyngeal carcinoma patient serum. Chiou JF, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1990 Feb;23(1):34–43

A comparison of methods for the detection of human papillomavirus DNA by in situ hybridization with biotinylated probes on human carcinoma cell lines. Application to wart sections. Guérin–Reverchon I, et al. **J Immunol Methods** 1989 Oct 24;123(2):167–76

Rearranged Epstein–Barr virus genomes and clonal origin in nasopharyngeal carcinoma. Shimakage M, et al. **Jpn J Cancer Res** 1989 Jul;80(7):612–6

The prevalence of Campylobacter pylori in gastric biopsies from cancer patients. Robey–Cafferty SS, et al. **Mod Pathol** 1989 Sep;2(5):473–6

MORTALITY

Long–term survival in sporadic and familial medullary thyroid carcinoma with special reference to clinical characteristics as prognostic factors. The Swedish MTC Study Group. Bergholm U, et al. **Acta Chir Scand** 1990 Jan;156(1):37–46

Survival of patients with ovarian epithelial carcinomas after second–look laparotomy. Podczaski E, et al. **Gynecol Oncol** 1990 Jan;36(1):43–7

Histopathologic evaluation of survival time in patients with colorectal carcinoma. Adachi Y, et al. **J Surg Oncol** 1989 Dec;42(4):219–24

Prognosis of patients with stage D1 prostate carcinoma following radical prostatectomy with and without early endocrine therapy. deKernion JB, et al. **J Urol** 1990 Sep; 144(3):700–3

Prognosis of nonpalpable infiltrating carcinoma of the breast. Ciatto S, et al. **Surg Gynecol Obstet** 1990 Jan;170(1):61–4

[The probability of survival of patients with bronchial carcinoma] Melissant CF, et al. **Ned Tijdschr Geneeskd** 1989 Dec 16;133(50):2504–9 (Eng. Abstr.) **(Dut)**

[Diagnosis and treatment of epithelial cancer of the ovary. Apropos of 102 cases] Villet R, et al. **Chirurgie** 1989; 115(3):178–83; discussion 183–4 (15 ref.) (Eng. Abstr.) **(Fre)**

[Effect of administration of hormonal contraceptives on prognostic factors in breast cancer] Schönborn I, et al. **Zentralbl Gynakol** 1990;112(5):263–6 (Eng. Abstr.) **(Ger)**

[Prognosis factors in epithelial tumors of the ovary] Frigerio L, et al. **Ann Ostet Ginecol Med Perinat** 1989 Nov–Dec; 110(6):283–9 (Eng. Abstr.) **(Ita)**

[The role of inflammatory infiltrate as a prognostic criterion in cerebral metastases. Preliminary results] Bucciero A, et al. **Minerva Med** 1990 Mar;81(3):139–46 (Eng. Abstr.) **(Ita)**

PATHOLOGY

In situ carcinomas of the female breast. Diagnostic and therapeutic aspects with special reference to histological growth patterns. Clinical review. Blichert–Toft M, et al. **Acta Chir Scand** 1990 Feb;156(2):113–9 (38 ref.)

Cytomorphologic features of the rare epithelial–myoepithelial carcinoma of the salivary gland. Arora VK, et al. **Acta Cytol** 1990 Mar–Apr;34(2):239–42

Osteoclastomalike anaplastic carcinoma of the thyroid. Diagnosis by fine needle aspiration cytology. Berry B, et al. **Acta Cytol** 1990 Mar–Apr;34(2):248–50

Polyomavirus infection versus high–grade bladder carcinoma. The importance of cytologic and comparative morphometric studies of plastic–embedded voided urine sediments. Boon ME, et al. **Acta Cytol** 1989 Nov–Dec; 33(6):887–93

Epithelial–myoepithelial carcinoma of the salivary gland. Fine needle aspiration cytologic findings. Carrillo R, et al. **Acta Cytol** 1990 Mar–Apr;34(2):243–7

Value of the cytologic analysis of fine needle aspiration biopsy specimens in the diagnosis of pancreatic carcinomas. Soudah B, et al. **Acta Cytol** 1989 Nov–Dec;33(6):875–80

Neuroendocrine differentiation in a case of acinic cell carcinoma of the parotid gland. Ito K, et al. **Acta Pathol Jpn** 1990 Apr;40(4):279–87

Undifferentiated carcinoma of the parotid gland in a 10–month–old child. Ito M, et al. **Acta Pathol Jpn** 1990 Feb;40(2):149–52 (16 ref.)

Squamous differentiation in thyroid carcinoma. With special reference to histogenesis of squamous cell carcinoma of the thyroid. Katoh R, et al. **Acta Pathol Jpn** 1989 May; 39(5):306–12

C cell carcinoma of the thyroid. Follicular variant. Lertprasertsuke N, et al. **Acta Pathol Jpn** 1989 Jun; 39(6):393–9

Histochemical and immunohistochemical evidence of glandular differentiation in thymic carcinoma. Matsuno Y, et al. **Acta Pathol Jpn** 1989 Jul;39(7):433–8

Osteosarcoma with prominent epithelioid features. Yoshida H, et al. **Acta Pathol Jpn** 1989 Jul;39(7):439–45

Differential reactivities of carcinoembryonic antigen (CEA) and CEA–related monoclonal and polyclonal antibodies in common epithelial malignancies. Sheahan K, et al. **Am J Clin Pathol** 1990 Aug;94(2):157–64

Cutaneous adnexal carcinomas with divergent differentiation. Nakhleh RE, et al. **Am J Dermatopathol** 1990 Aug; 12(4):325–34

Intraepithelial neoplasia of the conjunctiva with mucoepidermoid differentiation. Margo CE, et al. **Am J Ophthalmol** 1989 Nov 15;108(5):600–1

Neoplastic involvement of nipple–areolar complex in invasive breast cancer. Santini D, et al. **Am J Surg** 1989 Nov; 158(5):399–403

Lymphoepitheliomalike carcinoma of lung [letter; comment] Bégin LR. **Am J Surg Pathol** 1990 Jul;14(7):698 Comment on: Am J Surg Pathol 1989 Aug;13(8):632–9.

Chromophobe cell carcinoma: analysis of five cases. Bonsib SM, et al. **Am J Surg Pathol** 1990 Mar;14(3):260–7

Prognosis in infiltrating lobular carcinoma. An analysis of "classical" and variant tumors. DiCostanzo D, et al. **Am J Surg Pathol** 1990 Jan;14(1):12–23

Thymic carcinomas: histopathological varieties and immunohistochemical study. Kuo TT, et al. **Am J Surg Pathol** 1990 Jan;14(1):24–34

Immunohistochemical evidence that lung carcinomas grow on alveolar basement membranes. Pääkkö P, et al. **Am J Surg Pathol** 1990 May;14(5):464–73

Immunohistochemical staining with monoclonal Ab B72.3 in benign and malignant breast disease. Tavassoli FA, et al. **Am J Surg Pathol** 1990 Feb;14(2):128–33

Carcinoma arising in oncocytic Schneiderian papilloma. Ward BE, et al. **Am J Surg Pathol** 1990 Apr;14(4):364–9

Carcinoma of the breast: pathological criteria as an aid in treatment. Finney GG Jr, et al. **Am Surg** 1975 Jan;41(1):1–3

Neuroendocrine differentiation in "poorly differentiated" colon carcinomas. Staren ED, et al. **Am Surg** 1990 Jul; 56(7):412–9

Undifferentiated carcinoma with lymphoid stroma of the major salivary glands. Cleary KR, et al. **Ann Otol Rhinol Laryngol** 1990 Mar;99(3 Pt 1):236–8 (13 ref.)

Non–Warthin's tumor oncocytic lesions. Hartwick RW, et al. **Ann Otol Rhinol Laryngol** 1990 Aug;99(8):674–7 (26 ref.)

Influence of oestrogen on growth of endometrial carcinoma. Boman K, et al. **Anticancer Res** 1990 Jan–Feb;10(1):173–6

Fibronectin: a discrimination marker between small invasive carcinomas and benign proliferative lesions of the breast. Christensen L. **APMIS** 1990 Jul;98(7):615–23

Spindle cell carcinoma of the larynx. Hellquist H, et al. **APMIS** 1989 Dec;97(12):1103–13

Endomandibular acinic cell carcinoma. Bondi R, et al. **Appl Pathol** 1989;7(4):260–4

Morphological aspects of lymphocyte–macrophage interactions in human tumoral effusions "in vivo" and "in vitro". Gotzos V, et al. **Arch Ital Anat Embriol** 1989 Jul–Sep;94(3):249–55

Bilateral diffuse uveal melanocytic proliferation in patients with occult carcinoma. Gass JD, et al. **Arch Ophthalmol** 1990 Apr;108(4):527–33

Pathologic quiz case 1. Spindle cell carcinoma (spindle cell variant of squamous cell carcinoma). Mitchell DA, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jan;116(1):110–2

The relationship between nuclear DNA content in salivary gland tumors and prognosis. Comparison of mucoepidermoid tumors and acinic cell tumors. Hamper K, et al. **Arch Otorhinolaryngol** 1989;246(5):328–32

Oncocytic carcinoma of the male breast. Costa MJ, et al. **Arch Pathol Lab Med** 1989 Dec;113(12):1396–9

Auerbach's myenteric plexus. A possible site of origin for gastrointestinal stromal tumors in von Recklinghausen's neurofibromatosis. Walsh NM, et al. **Arch Pathol Lab Med** 1990 May;114(5):522–5

Clarifying the role of fine–needle aspiration cytologic evaluation and frozen section examination in the operative management of thyroid cancer. Kopald KH, et al. **Arch Surg** 1989 Oct;124(10):1201–4; discussion 1204–5

Medullary carcinoma of the breast. Overdiagnosis of a prognostically favorable neoplasm. Rubens JR, et al. **Arch Surg** 1990 May;125(5):601–4

A comparative study of proliferating (borderline) and invasive epithelial ovarian tumours in young women.

Carter J, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 Pt 1):245–9

Invasive lobular carcinomas of the breast—the prognosis of histopathological subtypes. du Toit RS, et al. **Br J Cancer** 1989 Oct;60(4):605–9

Tumour cell activity markers in epithelial ovarian cancer: are biochemical and cytometric indices complementary? Redman CW, et al. **Br J Cancer** 1990 May;61(5):755–8

Metastatic breast carcinoma in the pelvis. Taylor WG, et al. **Br J Clin Pract** 1990 May;44(5):205–6

Spindle-cell carcinoma: a case report. Middlehurst RJ, et al. **Br J Oral Maxillofac Surg** 1990 Apr;28(2):114–6

Pleomorphic (giant cell) carcinoma of the intestine. An immunohistochemical and electron microscopic study. Bak M, et al. **Cancer** 1989 Dec 15;64(12):2557–64

Stage D1 prostate carcinoma. The histologic appearance of nodal metastases and its relationship to survival. Brawn P, et al. **Cancer** 1990 Feb 1;65(3):538–43

Pathologic findings in clinical stage A2 prostate cancer. Relation of tumor volume, grade, and location to pathologic stage. Christensen WN, et al. **Cancer** 1990 Feb 15;65(4):1021–7 (22 ref.)

Colorectal adenomas containing invasive carcinoma. Pathologic assessment of lymph node metastatic potential. Coverlizza S, et al. **Cancer** 1989 Nov 1;64(9):1937–47 (69 ref.)

An evaluation of the prognostic significance of HLA-DR expression in gastric carcinoma. Hilton DA, et al. **Cancer** 1990 Sep 15;66(6):1154–7

Medullary carcinoma of the breast. An unusual cytologic finding in cyst fluid aspirates. Howell LP, et al. **Cancer** 1990 Jan 15;65(2):277–82

Evaluation of cell proliferation in breast carcinoma. Comparison of Ki-67 immunohistochemical study, DNA flow cytometric analysis, and mitotic count. Isola JJ, et al. **Cancer** 1990 Mar 1;65(5):1180–4

Mucoepidermoid carcinoma of the thyroid gland. Katoh R, et al. **Cancer** 1990 May 1;65(9):2020–7 (21 ref.)

Medullary carcinoma with lymphocytic infiltration of the stomach. Clinicopathologic study of 27 cases and immunohistochemical analysis of the subpopulations of infiltrating lymphocytes in the tumor. Minamoto T, et al. **Cancer** 1990 Sep 1;66(5):945–52

Diffuse intrasinusoidal metastasis of gastric carcinoma to the liver leading to fulminant hepatic failure. A case report. Sawabe M, et al. **Cancer** 1990 Jan 1;65(1):169–73

Investigations on the significance of the adenoma–carcinoma sequence in the small bowel. Sellner F. **Cancer** 1990 Aug 15;66(4):702–15 (272 ref.)

Fiberoptic endoscopic examination and biopsy in determining the extent of nasopharyngeal carcinoma. Sham JS, et al. **Cancer** 1989 Nov 1;64(9):1838–42

A comparison of the results of long-term follow-up for atypical intraductal hyperplasia and intraductal hyperplasia of the breast. Tavassoli FA, et al. **Cancer** 1990 Feb 1; 65(3):518–29

Correlation between histologic grade of malignancy and copy number of c-erbB-2 gene in breast carcinoma. A retrospective analysis of 176 cases. Tsuda H, et al. **Cancer** 1990 Apr 15;65(8):1794–800

Anaplastic carcinoma of the thyroid. A clinicopathologic study of 121 cases. Venkatesh YS, et al. **Cancer** 1990 Jul 15;66(2):321–30

Scar carcinomas of the lung in a histoplasmosis endemic area. Yoneda K. **Cancer** 1990 Jan 1;65(1):164–8

Expression of transforming growth factor beta 1 by human endometrial carcinoma cell lines: inverse correlation with effects on growth rate and morphology. Boyd JA, et al. **Cancer Res** 1990 Jun 1;50(11):3394–9

An exponential–Gompertzian description of LoVo cell tumor growth from in vivo and in vitro data. Demicheli R, et al. **Cancer Res** 1989 Dec 1;49(23):6543–6

Proliferation of the human colon carcinoma cell line HT29: autocrine growth and deregulated expression of the c-myc oncogene. Forgue-Lafitte ME, et al. **Cancer Res** 1989 Dec 1;49(23):6566–71

Peripheral airway cell differentiation in human lung cancer cell lines. Gazdar AF, et al. **Cancer Res** 1990 Sep 1; 50(17):5481–7

Effect of steroidal and nonsteroidal antiestrogens on the growth of a tamoxifen-stimulated human endometrial carcinoma (EnCa101) in athymic mice. Gottardis MM, et al. **Cancer Res** 1990 Jun 1;50(11):3189–92

Metastatic potential of human colorectal carcinomas implanted into nude mice: prediction of clinical outcome in patients operated upon for cure. Jessup JM, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):6906–10

Growth adaptation to methotrexate of HT-29 human colon carcinoma cells is associated with their ability to differentiate into columnar absorptive and mucus-secreting cells. Lesuffleur T, et al. **Cancer Res** 1990 Oct 1; 50(19):6334–43

Establishment and characterization of continuous cell line MTC-SK derived from a human medullary thyroid carcinoma. Pfragner R, et al. **Cancer Res** 1990 Jul 1; 50(13):4160–6

Role of transforming growth factor beta 1 in induction of colon carcinoma differentiation by hexamethylene bisacetamide. Schroy P, et al. **Cancer Res** 1990 Jan 15; 50(2):261–5

Neoplastic transformation of a human colonic epithelial cell line: in vitro evidence for the adenoma to carcinoma sequence. Williams AC, et al. **Cancer Res** 1990 Aug 1; 50(15):4724–30

Association of a functional prostaglandin E2–protein kinase A coupling with responsiveness of metastatic Lewis lung carcinoma variants to prostaglandin E2 and to prostaglandin E2–producing nonmetastatic Lewis lung carcinoma variants. Young MR, et al. **Cancer Res** 1990 May 15;50(10):2973–8

Alteration of the metastatic potential of line 1 lung carcinoma cells: opposite effects of class I antigen induction by interferons versus DMSO or gene transfection. Cerosaletti KM, et al. **Cell Immunol** 1990 May;127(2):299–310

Transplantable polyoma virus–induced epitheliomas harbor immature T lymphocytes. Harrod FA, et al. **Cell Immunol** 1990 Jan;125(1):29–41

Simultaneous endometrioid carcinoma of the uterine corpus and ovary. Liu WM, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jul;44(1):38–44

Sclerosing-sweat-duct (microcystic adnexal) carcinoma—a tumor from a single eccrine origin. Requena L, et al. **Clin Exp Dermatol** 1990 May;15(3):222–4

Neoplastic invasion in experimental carcinoma of the colon: abnormal differentiation and release of mucus. Carr I, et al. **Clin Exp Metastasis** 1990 Jul–Aug;8(4):299–304

Lectin-resistant variants of mouse Lewis lung carcinoma cells. I. Selection and in vivo properties. Dus D, et al. **Clin Exp Metastasis** 1990 May–Jun;8(3):277–86

Microcystic adnexal carcinoma. Electron microscopic and immunohistochemical study. Miyamoto T, et al. **Dermatologica** 1990;180(1):40–3

Transbronchial needle aspiration biopsy in the diagnosis of pulmonary neoplasms. Bhat N, et al. **Diagn Cytopathol** 1990; 6(1):14–7

Rapid microwave-stimulated fixation of fine-needle aspiration biopsies for transmission electron microscopy. Gove DW, et al. **Diagn Cytopathol** 1990;6(1):68–71

Fine-needle aspiration biopsy of mucus-producing medullary carcinoma of thyroid: report of a case with cytologic, histologic, and ultrastructural correlations. Haleem A, et al. **Diagn Cytopathol** 1990;6(2):112–7

The significance of atypical apocrine cells in fine-needle aspirates of the breast. Johnson TL, et al. **Diagn Cytopathol** 1989;5(3):248–54

Metaplastic carcinoma of the breast—diagnosis by aspiration biopsy cytology: report of two cases and literature review. Kline TS, et al. **Diagn Cytopathol** 1990;6(1):63–7 (16 ref.)

Urothelial grade I atypia [letter] Mincione GP. **Diagn Cytopathol** 1990;6(1):76

Tissue imprints in surgical pathology: a rapid intraoperative diagnostic aid. Scopa CD, et al. **Diagn Cytopathol** 1990; 6(1):5–8

Morbidity and mortality of hepatic resection for metastatic colorectal carcinoma. Vetto JT, et al. **Dis Colon Rectum** 1990 May;33(5):408–13

Tracheal invasion by thyroid carcinoma. Lydiatt DD, et al. **Ear Nose Throat J** 1990 Mar;69(3):145–9

The histopathologic diagnosis of nasopharyngeal carcinoma. McGuire LJ, et al. **Ear Nose Throat J** 1990 Apr; 69(4):229–36

Mucoepidermoid carcinoma of the esophagus: report of two cases and review of the literature. Sasajima K, et al. **Endoscopy** 1990 May;22(3):140–3 (14 ref.)

Ploidy level, histopathological differentiation and response to chemotherapy in serious ovarian cancer. Jakobsen A, et al. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1589–93

Correlation of proliferative activity with pathological features in breast carcinoma. Betta PG, et al. **Eur J Gynaecol Oncol** 1989;10(6):433–7

Intravascular bronchioloalveolar tumour. De-Luca S, et al. **Eur Respir J** 1990 Mar;3(3):346–8

The effect of 1.25 dihydroxyvitamin D3 on binding and internalization of epidermal growth factor in cultures cells. Studies on BT-20 cells using quantitative electron microscope autoradiography. Frappart L, et al. **Exp Cell Res** 1989 Oct;184(2):329–41

Differential effects of sodium butyrate and hyperosmolality on the modulation of alkaline phosphatases of LoVo cells. Herz F, et al. **Exp Cell Res** 1990 May;188(1):50–4

Differential effects of cigarette smoke condensate and its fractions on cultured normal and malignant human bronchial epithelial cells. Miyashita M, et al. **Exp Pathol** 1990;38(1):19–29

Morphometry of normal, regenerating and cancerous hepatocytes. Rudzki Z, et al. **Folia Histochem Cytobiol** 1989;27(3):141–8

Growth effects of regulatory peptides on human pancreatic cancer lines PANC-1 and MIA PaCa-2. Liehr RM, et al. **Gastroenterology** 1990 Jun;98(6):1666–74

Carcinoma of the cervix with extensive endometrial and myometrial involvement. de Jesus M, et al. **Gynecol Oncol** 1990 Feb;36(2):263–70 (29 ref.)

Carcinoma of the vulva involving the perianal or anal skin. Hoffman MS, et al. **Gynecol Oncol** 1989 Nov;35(2):215–8

Ovarian epithelial tumors of borderline malignancy in Japan. Nakashima N, et al. **Gynecol Oncol** 1990 Jul;38(1):90–8

The inherent cellular radiosensitivity of epithelial ovarian carcinoma. Rotmensch J, et al. **Gynecol Oncol** 1989 Dec; 35(3):282–5

Prognostic value of the rupture of the capsule in stage I epithelial ovarian carcinoma. Sevelda P, et al. **Gynecol Oncol** 1989 Dec;35(3):321–2

DNA ploidy, morphometry, and nuclear grade as prognostic factors in endometrial carcinoma. Sorbe B, et al. **Gynecol Oncol** 1990 Jul;38(1):22–7

Reasons for incomplete surgical staging in early ovarian carcinoma. Trimbos JB, et al. **Gynecol Oncol** 1990 Jun; 37(3):374–7

Cribriform endometrioid adenocarcinoma, not adenoid cystic carcinoma, of the endometrium [letter; comment] Chan JK. **Histopathology** 1990 Mar;16(3):317–8 Comment on: Histopathology 1989 Aug;15(2):197–8.

Weddellite calcification in the breast: eighteen cases with implications for breast cancer screening. Going JJ, et al. **Histopathology** 1990 Feb;16(2):119–24

Spindle cell carcinoma of the breast. Raju GC, et al. **Histopathology** 1990 May;16(5):497–9

Basement membrane continuity in benign, premalignant and malignant epithelial conditions of the uterine cervix. Richards CJ, et al. **Histopathology** 1990 Jan;16(1):47–52

Nucleolar organizer regions in gastric carcinoma and its precursor stages. Rosa J, et al. **Histopathology** 1990 Mar; 16(3):265–9

Multiple atypical adenomatous hyperplasia of type II pneumonocytes and bronchiolo-alveolar carcinoma. Weng S, et al. **Histopathology** 1990 Jan;16(1):101–3

Medullary thyroid carcinoma: prognosis of familial versus nonfamilial disease and the role of radiotherapy. Samaan NA, et al. **Horm Metab Res Suppl** 1989;21:21–5

Calcitonin secretion and cyclic AMP-efflux from C-cells, stimulated by glucagon and either calcium or Bay K 8644. Scherübl H, et al. **Horm Metab Res Suppl** 1989;21:18–21

Prognostic factors in medullary thyroid carcinomas. Schröder S, et al. **Horm Metab Res Suppl** 1989;21:26–8

The effects of hormonal and chemotherapy on tumoral and nonneoplastic breast tissue. Kennedy S, et al. **Hum Pathol** 1990 Feb;21(2):192–8

Serous surface carcinoma of the peritoneum: a clinicopathologic study of 22 cases. Truong LD, et al. **Hum Pathol** 1990 Jan;21(1):99–110

Carcinoma of stomach [editorial] **Indian J Pathol Microbiol** 1989 Apr;32(2):73

Serum leucine aminopeptidase estimation: a sensitive prognostic indicator of invasiveness in breast carcinoma. Gupta SK, et al. **Indian J Pathol Microbiol** 1989 Oct; 32(4):301–5

Intestinal metaplasia in benign and malignant gastric lesions. Kini U, et al. **Indian J Pathol Microbiol** 1990 Apr; 33(2):137–43

Histological and functional correlation of thyroid carcinoma by immunohistochemistry. Prathiba D, et al. **Indian J Pathol Microbiol** 1990 Jan;33(1):35–40

Pre-cancerous lesions of stomach. Usha, et al. **Indian J Pathol Microbiol** 1989 Apr;32(2):75–80

Clinicopathological studies of carcinoma oesophagus with special reference to changes in surrounding epithelium. Usha, et al. **Indian J Pathol Microbiol** 1989 Apr; 32(2):125–32

Multiple mucosal neuromatosis. Sachdev Y. **Indian Pediatr** 1990 Jan;27(1):27–32

Phenotypic and cytogenetic characterization of a cell line derived from primary prostatic carcinoma. Brothman AR, et al. **Int J Cancer** 1989 Nov 15;44(5):898–903

Unique patterns of brain metastasis produced by different human carcinomas in athymic nude mice. Schackert G, et al. **Int J Cancer** 1989 Nov 15;44(5):892–7

Characterization of the synergistic effect of insulin and transferrin and the regulation of their receptors on a human colon carcinoma cell line. Watkins LF, et al. **Int J Cancer** 1990 Feb 15;45(2):372–5

Effects of disseminative route on the liver- and lung-colonizing efficiencies of B16 melanoma and colon-26 carcinoma in mice. Weiss L, et al. **Int J Cancer** 1989 Dec 15;44(6):1104–7

Endorectal ultrasonography with a 7.5 MHz linear array scanner for the assessment of invasion of rectal carcinoma. Konishi F, et al. **Int J Colorectal Dis** 1990 Feb;5(1):15–20

Non-invasive ovarian carcinoma. Lauchlan SC. **Int J Gynecol Pathol** 1990;9(2):158–69 (35 ref.)

Hürthle cell lesions in thyroid neoplasms. Khan MS, et al. **Int Surg** 1989 Oct–Dec;74(4):261–6

Unusual extension of lung cancer into the left atrium via the pulmonary vein. Kodama K, et al. **Int Surg** 1990 Jan–Mar;75(1):22–6

The role of cell adhesion and migration in the in vitro invasiveness of mouse adrenal carcinoma cells. Fridman R, et al. **Invasion Metastasis** 1990;10(4):208–24

Thymic carcinoma. Report of five cases and review of the literature. Hartmann CA, et al. **J Cancer Res Clin Oncol** 1990;116(1):69–82 (68 ref.)

Calcium-independent growth of human ovarian carcinoma cells. Chan TC. **J Cell Physiol** 1989 Dec;141(3):461–6

Small intestinal differentiation in human colon carcinoma HT29 cells has distinct effects on the lateral diffusion of lipids (ganglioside GM1) and proteins (HLA class 1, HLA class 2, and neoplastic epithelial antigens) in the apical cell membrane. Magnusson KE, et al. **J Cell Physiol** 1990 May; 143(2):381–90

Epithelial tumor cells in bone marrow of patients with colorectal cancer: immunocytochemical detection, phenotypic characterization, and prognostic significance. Schlimok G, et al. **J Clin Oncol** 1990 May;8(5):831–7

Microcystic adnexal carcinoma: a light microscopic, immunohistochemical and ultrastructural study. Kato H, et al. **J Cutan Pathol** 1990 Apr;17(2):87–95

Bowen's disease with invasive carcinoma showing sweat gland differentiation. Saida T, et al. **J Cutan Pathol** 1989 Aug;16(4):222–6

Two cases of pilomatrix carcinoma. Miyahara H, et al. **J Dermatol** 1990 May;17(5):322–5

Bilharzial role in staging bladder carcinoma histopathological–transurethral sonography and computerized tomography. Mangoud AM, et al. **J Egypt Soc Parasitol** 1990 Jun;20(1):273–9

Primary composite squamous cell carcinoma and large cell neuroendocrine carcinoma of the hypopharynx. Milroy CM, et al. **J Laryngol Otol** 1989 Nov;103(11):1093–6

Central mucoepidermoid carcinoma of the jaws: report of four cases with analysis of the literature and discussion of the relationship to mucoepidermoid, sialodontogenic, and glandular odontogenic cysts. Waldron CA, et al. **J Oral Maxillofac Surg** 1990 Aug;48(8):871–7 (26 ref.)

Acinic cell carcinoma of salivary glands: 16 cases with clinicopathologic correlation. Guimaraes DS, et al. **J Oral Pathol Med** 1989 Aug;18(7):396–9

Mucoepidermoid carcinoma of the mandible. Lepore ML, et al. **J Otolaryngol** 1990 Apr;19(2):147–9

Intraoperative pancreatic biopsy—a diagnostic dilemma. Witz M, et al. **J Surg Oncol** 1989 Oct;42(2):117–9

Ultrasound-guided transvaginal biopsy of malignant cystic pelvic mass. Fornage BD, et al. **J Ultrasound Med** 1990 Jan;9(1):53–5

Lymph node metastasis within the pectoralis major muscle in breast cancer—a case report. Mochinaga N, et al. **Jpn J Surg** 1990 Mar;20(2):221–4

The significance of immunochemically staining calcitonin and CEA in fine-needle aspiration biopsy materials from medullary carcinoma of the thyroid. Takeichi N, et al. **Jpn J Surg** 1989 Nov;19(6):674–8

Prognostic importance of occult axillary lymph node micrometastases from breast cancers. International (Ludwig) Breast Cancer Study Group. **Lancet** 1990 Jun 30;335(8705):1565–8 (18 ref.)

Retrospective analysis of breast histology and indication for surgical intervention [letter] Schröcksnadel H, et al. **Lancet** 1990 Sep 15;336(8716):693

Detection of subclinical nasopharyngeal carcinoma by fibreoptic endoscopy and multiple biopsy. Sham JS, et al. **Lancet** 1990 Feb 17;335(8686):371–4

Nasopharyngeal carcinomas and malignant lymphomas: an immunohistochemical analysis of 74 cases. Sugimoto T, et al. **Laryngoscope** 1990 Jul;100(7):742–8

Multiple endocrine neoplasia type 2b: long-term follow-up of a case. Roberts JM, et al. **Med J Aust** 1990 Sep 3; 153(5):292–5

Tumor immunophenotype: comparison between primary neoplasm and its metastases. Esteban JM, et al. **Mod Pathol** 1990 Mar;3(2):192–7

Serous carcinoma in endometrial polyps. Silva EG, et al. **Mod Pathol** 1990 Mar;3(2):120–8

Induction of carcinoembryonic antigen and its crossreactive gene products in human colonic adenomas and carcinomas by transforming growth factor-beta. Chakrabarty S, et al. **Mol Biother** 1990 Mar;2(1):27–31

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 21–1990. A 21-year-old man with recurrent left-sided pneumonia. **N Engl J Med** 1990 May 24;322(21):1512–21

The clinical value of fine needle aspiration biopsy in a patient with medullary thyroid carcinoma and pseudofollicular carcinoma. Bauman A, et al. **N Y State J Med** 1989 Sep; 89(9):527–9

Sarcoidosis of the breast coexisting with mammary carcinoma. Shah AK, et al. **N Y State J Med** 1990 Jun; 90(6):331–3

Percutaneous transfacial needle biopsy of a middle cranial fossa mass: case report and technical note. Stechison MT, et al. **Neurosurgery** 1989 Dec;25(6):996–9

Medullary carcinoma of the thyroid: differentiating the types and current management. Samaan NA, et al. **Oncology (Williston Park)** 1987 Dec;1(10):21–8 (22 ref.)

A rare variant of acinic cell carcinoma of the upper lip: a case report and review of the literature. Eda S, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jan;69(1):84–8 (16 ref.)

Undifferentiated carcinomas of the major salivary glands. Hui KK, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jan; 69(1):76–83

Mucoepidermoid tumor: a case report involving the operculum of an erupting permanent second molar. Kahn MA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Oct; 68(4):375–9

The course of neuroendocrine differentiation in prostatic carcinomas. An immunohistochemical study testing chromogranin A as an "endocrine marker". Abrahamsson PA, et al. **Pathol Res Pract** 1989 Sep;185(3):373–80

Stromal changes in early invasive breast carcinoma. An immunohistochemical, histoenzymological and ultrastructural study. Chomette G, et al. **Pathol Res Pract** 1990 Feb;186(1):70–9

Unusual prostatic carcinomas. Dhom G. **Pathol Res Pract** 1990 Feb;186(1):28–36 (55 ref.)

Haemorheological study during the process of tumor development after subcutaneous transplantation of mouse forestomach carcinoma (FC) cells. Gao J, et al. **Pathol Res Pract** 1989 Aug;185(2):194–9

Alveolar variant of infiltrating lobular carcinoma of the breast with stromal osteoclast-like giant cells. Pettinato G, et al. **Pathol Res Pract** 1989 Sep;185(3):388–94; discussion 394–6

Pathological features of multiple endocrine neoplasia type IIb in childhood. Byard RW, et al. **Pediatr Pathol** 1990; 10(4):581–92

Adrenocortical carcinoma with extension into inferior vena cava and right atrium: report of 3 cases in children. Godine LB, et al. **Pediatr Radiol** 1990;20(3):166–8; discussion 169

Familial malignant retroperitoneal paraganglioma. Sebastian JP, et al. **Postgrad Med J** 1989 Oct;65(768):781–4 (17 ref.)

Fibroblast-mediated acceleration of human epithelial tumor growth in vivo. Camps JL, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):75–9

Incidence and prognostic significance of lymphatic and vascular invasion in radical prostatectomy specimens. Bahnson RR, et al. **Prostate** 1989;15(2):149–55

Crystalloids in latent prostatic carcinoma. Furusato M, et al. **Prostate** 1989;15(3):259–62

Changes in tumor characteristics during progression of the R3327 HI experimental prostatic carcinoma. Mobbs BG, et al. **Prostate** 1990;16(2):127–36

Tumor-associated retinal pigment epithelial proliferation simulating retinal pigment epithelial tear. Leff SR, et al. **Retina** 1989;9(4):267–9

Clinical applications of the pathological properties of small cell carcinoma, large cell carcinoma, and adenoid cystic carcinoma of the lung. Ishida T, et al. **Semin Surg Oncol** 1990;6(1):53–63

Clinicopathologic studies of gastric carcinoma. Mori M, et al. **Semin Surg Oncol** 1990;6(1):19–27 (33 ref.)

Relationship of dysplasia to prostate carcinoma. Epstein JI. **Semin Urol** 1990 Feb;8(1):2–8

Fine-needle aspiration biopsy in prostate cancer. Koizumi JH. **Semin Urol** 1990 Feb;8(1):19–30 (69 ref.)

New developments in grading prostate cancer. Miller GJ. **Semin Urol** 1990 Feb;8(1):9–18 (68 ref.)

Prostate carcinoma: an autopsy evaluation of the influence of age, tumor grade, and therapy on tumor biology. Gatling RR. **South Med J** 1990 Jul;83(7):782–4

The role of Tru-Cut needle biopsy in the diagnosis of carcinoma of the breast. Cusick JD, et al. **Surg Gynecol Obstet** 1990 May;170(5):407–10 (26 ref.)

Needle-localized biopsy of the breast. Griffen MM, et al. **Surg Gynecol Obstet** 1990 Feb;170(2):145–8

Contralateral breast carcinoma: an assessment of risk and prognosis in stage I (T1N0M0) and stage II (T1N1M0) patients with 20-year follow-up. Rosen PP, et al. **Surgery** 1989 Nov;106(5):904–10

Endoscopic ultrasonographic detection of carcinomatous invasion and of lymph nodes in the thoracic esophagus. Sugimachi K, et al. **Surgery** 1990 Apr;107(4):366–71

Evaluation of prognostic features in thymic epithelial tumors. Kirchner T, et al. **Thymus** 1989;14(1-3):195–203

Ki-67 labeling index in breast cancer. Crispino S, et al. **Tumori** 1989 Dec 31;75(6):557–62

Ultrastructural and morphometric features of poorly differentiated and undifferentiated lung tumors. Mackay B, et al. **Ultrastruct Pathol** 1989 Sep-Dec;13(5-6):561–71

Spindle cell reaction to nontuberculous mycobacteriosis in AIDS mimicking a spindle cell neoplasm. Evidence for dual histiocytic and fibroblast-like characteristics of spindle cells. Brandwein M, et al. **Virchows Arch [A]** 1990; 416(4):281–6

An epithelial and spindle cell breast tumour of myoepithelial origin. An immunohistochemical and ultrastructural study. Enghardt MH, et al. **Virchows Arch [A]** 1989;416(2):177–84

An autopsy case of a cystic variant of thymic carcinoma mimicking a thymic cyst. Katoh Y, et al. **Virchows Arch [A]** 1990;417(1):85–7

Colonic pericryptal fibroblasts. Differentiation pattern in embryogenesis and phenotypic modulation in epithelial proliferative lesions. Sappino AP, et al. **Virchows Arch [A]** 1989;415(6):551–7

Colonic mucosal changes in nude mice associated with orthotopic xenografts of human colon cancer cells. Sekikawa K, et al. **Virchows Arch [A]** 1990;416(5):393–6

Metastasizing neuroendocrine carcinoma of the larynx with calcitonin and somatostatin secretion and CEA production, resembling medullary thyroid carcinoma. Smets G, et al. **Virchows Arch [A]** 1990;416(6):539–43

Fine needle aspiration biopsy in the diagnosis of breast cancer. McDonald AH, et al. **West Indian Med J** 1990 Jun;39(2):71–3

Carcinoma of the breast in children. Eskelinen M, et al. **Z Kinderchir** 1990 Feb;45(1):52–5

[Cancer of the pancreas. V.The characteristics of the histological forms and of local complications in carcinoma of the pancreas in both sexes] Iakimov A, et al. **Khirurgiia (Sofiia)** 1990;43(1):56–9 (Eng. Abstr.) **(Bul)**

[Cancer of the pancreas. VI. The characteristics of the localization and metastasis of tumors of the gland in both sexes] Iakimov A, et al. **Khirurgiia (Sofiia)** 1990;43(2):6–11 (Eng. Abstr.) **(Bul)**

[Cancer of the pancreas. II. The histological forms and local complications of carcinoma of the pancreas] Iakimov A, et al. **Khirurgiia (Sofiia)** 1990;43(1):18–9 (Eng. Abstr.) **(Bul)**

[Functionally inactive carcinoma of the adrenal gland] Tachev S, et al. **Khirurgiia (Sofiia)** 1989;42(4):64–6 **(Bul)**

[Pathologic analysis of lobular carcinoma of the breast—report of 36 cases] Qian H. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):278–81 (Eng. Abstr.) **(Chi)**

[Mucoepidermoid tumor as a less common form of bronchial adenoma] Hlad J, et al. **Cesk Pediatr** 1989 Oct;44(10):631–2 **(Cze)**

[Meningeal carcinomatosis in occult gastric cancer] Grove A, et al. **Ugeskr Laeger** 1989 Sep 11;151(37):2377–9 (Eng. Abstr.) **(Dan)**

[Sarcomatoid carcinoma of the larynx] Sucs CM, et al. **Acta Otorhinolaryngol Belg** 1988;42(6):709–15 (Eng. Abstr.) **(Fre)**

[Epithelial tumors with melanocytes] Piérard GE, et al. **Ann Dermatol Venereol** 1990;117(4):291–3 **(Fre)**

[Carcinosarcoma and spindle cell carcinoma of the bladder. A comparison of 2 cases with an immunohistochemical study] Lesourd A, et al. **Ann Urol (Paris)** 1990;24(3):206–10 (Eng. Abstr.) **(Fre)**

[Intra-mandibular salivary tumors. Apropos of 3 cases of malignant tumor] Breton P, et al. **Rev Stomatol Chir Maxillofac** 1990;91(4):266–70 (22 ref.) (Eng. Abstr.) **(Fre)**

[Cell receptors and proliferation markers in breast cancer] Czerwenka KF, et al. **Gynakol Rundsch** 1989;29 Suppl 2:400–1 **(Ger)**

[Micrometastases in axillary lymph nodes in breast cancer] Ronay G, et al. **Gynakol Rundsch** 1989;29 Suppl 2:234–6 **(Ger)**

[Mucoepidermoid tumor of the lung in children. A case report and review of the literature] Hofmann WJ, et al. **Pathologe** 1990 Jan;11(1):35–40 (26 ref.) **(Ger)**

[Papilla carcinoma and adenoma—diagnosis and therapy] Bosseckert H, et al. **Schweiz Rundsch Med Prax** 1990 Apr 24;79(17):530–2 (Eng. Abstr.) **(Ger)**

[Value of preoperative fine needle puncture cytology in the diagnosis of highly malignant thyroid tumors] Pimpl W, et al. **Wien Klin Wochenschr** 1990 Apr 27;102(9):244–7 (Eng. Abstr.) **(Ger)**

[Fibrolamellar liver carcinoma] Lapis K, et al. **Zentralbl Allg Pathol** 1990;136(1-2):135–49 (Eng. Abstr.) **(Ger)**

[Predominantly mucous-differentiated acinic cell adenocarcinoma of the trachea] Martin H, et al. **Zentralbl Allg Pathol** 1989;135(8):751–6 (Eng. Abstr.) **(Ger)**

[Duct-oriented classification of exocrine pancreatic carcinoma] Schulz HJ. **Zentralbl Allg Pathol** 1990; 136(1-2):113–26 (Eng. Abstr.) **(Ger)**

[Differentiated thyroid cancer. Their peculiarities in typing and assessment of invasiveness] Kühne W, et al. **Zentralbl Chir** 1990;115(1):15–22 (13 ref.) (Eng. Abstr.) **(Ger)**

[Various rare tumors of the lung] Callegari P, et al. **Ann Ital Chir** 1989 Nov-Dec;60(6):515–21; discussion 521–2 (Eng. Abstr.) **(Ita)**

[Secretory carcinoma of the breast: clinicotherapeutic considerations and a review of the literature] Arcidiaco M, et al. **Chir Ital** 1988 Dec;40(6):392–9 (8 ref.) (Eng. Abstr.) **(Ita)**

[Retrospective study of 41 cases of pulmonary carcinoma diagnosed from 1983 to 1986] Donato GM, et al. **Clin Ter** 1989 Aug 15–31;130(3–4):197–204 (Eng. Abstr.) **(Ita)**

[A mucoepidermoid tumor of an ectopic salivary gland. A case report] Lari G, et al. **Minerva Stomatol** 1990 Jun; 39(6):461–2 (Eng. Abstr.) **(Ita)**

[An undifferentiated carcinoma of the esophagus—a case of an elderly patient] Ito M, et al. **Gan No Rinsho** 1990 Aug; 36(9):1014–8 (16 ref.) (Eng. Abstr.) **(Jpn)**

[Changes in the index of atypia in large intestinal adenoma and cancer —an objective pathological diagnosis] Nakamura K, et al. **Gan No Rinsho** 1989 May;Spec No:109–26 **(Jpn)**

[Microcystic adnexal carcinoma—a light and electron microscopic studies] Hayashi Y, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Aug;99(9):1027–34 (Eng. Abstr.) **(Jpn)**

[Obstructive jaundice and advanced gastric carcinoma—correlation with its histopathology] Saida Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Apr 25; 49(4):399–406 (Eng. Abstr.) **(Jpn)**

[A case of neoplastic diathesis] Marzec B, et al. **Wiad Lek** 1990 Apr 1;43(7):291–4 (Eng. Abstr.) **(Pol)**

[Atypical picture of familial medullary thyroid carcinoma] Mierzwa T, et al. **Wiad Lek** 1989 Jun 1;42(11):759–62 (Eng. Abstr.) **(Pol)**

[Morphology and differential diagnosis of oncocytic kidney tumors] Vlodavskii EA. **Arkh Patol** 1989;51(7):25–30 (Eng. Abstr.) **(Rus)**

[Micrometastases of the axillary lymph nodes in breast cancer. An immunohistochemical study] Ronay G, et al. **Pathologe** 1989 Sep;10(5):289–93 **(Rus)**

[The cytological characteristics of Malherbe's necrotizing epithelioma] Arzumanian GA, et al. **Vestn Dermatol Venerol** 1989;(6):42–4 (Eng. Abstr.) **(Rus)**

[Immunohistochemical study of cells of invasive cancer of the vaginal part of the cervix uteri] Raĭchlin NT, et al. **Vopr Onkol** 1990;36(3):314–8 (Eng. Abstr.) **(Rus)**

[Malignant changes in the pilonidal sinus] Mirčeva D, et al. **Acta Chir Iugosl** 1989;36 Suppl 2:778–9 **(Scr)**

[Histologic type and tumor maturity as prognostic factors in malignant epithelial tumors of the ovary] Jukić S, et

al. **Jugosl Ginekol Perinatol** 1989 May-Aug;29(3-4):137-9 (Eng. Abstr.) **(Scr)**

[The importance of clinical and histologic variables in the prognosis of medullary carcinoma of the thyroid gland] Separović V, et al. **Lijec Vjesn** 1989 Sep-Oct; 111(9-10):304-9 (Eng. Abstr.) **(Scr)**

[Detection of malignant disease in the eye and adnexa] Cupić S. **Med Arh** 1989;43(1):51-3 (Eng. Abstr.) **(Scr)**

[Anaplastic tumor of the bladder with neurosecretory granules and benign courses] Vera-Román JM, et al. **Arch Esp Urol** 1989 Jun;42(5):437-40 (Eng. Abstr.) **(Spa)**

[Bronchial mucoepidermoid carcinoma in a child] Ramírez-Mendoza P, et al. **Bol Med Hosp Infant Mex** 1989 Nov;46(11):728-31 (16 ref.) (Eng. Abstr.) **(Spa)**

[Carcinoma of the gallbladder. Presentation of the findings on a series of surgical samples and autopsy cases] Suárez Peñaranda JM, et al. **Rev Esp Enferm Apar Dig** 1989 Jul; 76(1):13-7 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Epidural sufentanil for cancer pain. Patt R, et al. **Am J Nurs** 1990 May;90(5):122

Hypoxia enhances the lethality of mitomycin C and carboquone against human malignant tumor cells in vitro. Kusumoto T, et al. **Eur Surg Res** 1989;21(3-4):224-31

IL-1 and IL-6 release by tumor-associated macrophages from human ovarian carcinoma. Erroi A, et al. **Int J Cancer** 1989 Nov 15;44(5):795-801

Isolation of human colon carcinoma cells for resistance to a single interferon associated with cross-resistance to multiple recombinant interferons: alpha, beta, and gamma. Morikawa K, et al. **J Natl Cancer Inst** 1990 Mar 21; 82(6):517-22

[The pH and acidity of feces in colorectal neoplasms] Bech K, et al. **Ugeskr Laeger** 1990 Jan 15;152(3):161-2 (Eng. Abstr.) **(Dan)**

PREVENTION & CONTROL

Pathology and breast screening. Elston CW, et al. **Histopathology** 1990 Feb;16(2):109-18 (53 ref.)

Motivational factors for participation in breast cancer screening. Frazier TG, et al. **J Cancer Educ** 1990;5(1):51-4

Long-term mass screening in uterine cervical carcinoma eradication strategy. Shiromizu K, et al. **Jpn J Clin Oncol** 1990 Jun;20(2):134-8

Edinburgh trial of screening for breast cancer: mortality at seven years [see comments] Roberts MM, et al. **Lancet** 1990 Feb 3;335(8684):241-6 Comment in: Lancet 1990 Apr 21;335(8695):968-9. Comment in: Lancet 1990 May 26;335(8700):1290-1.

Patient-initiated mobile mammography: analysis of the patients and the problems. Rubin E, et al. **South Med J** 1990 Feb;83(2):178-84

Breast cancer detected by screening: the importance of long-term follow-up. Lopez MJ, et al. **Surgery** 1989 Oct; 106(4):590-4; discussion 594-5

[Problems in the prevention of stomach carcinoma] Ivanov S, et al. **Khirurgiia (Sofiia)** 1989;42(6):27-8 **(Bul)**

[Adriamycin versus ftorafur in the prevention of recurrence of superficial carcinoma of the bladder] Unda Urzaiz M, et al. **Arch Esp Urol** 1990 Mar;43(2):143-6 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

CT evaluation of anaplastic thyroid carcinoma. Takashima S, et al. **AJNR** 1990 Mar-Apr;11(2):361-7

CT demonstration of calcification in carcinoma of the lung. Mahoney MC, et al. **AJR Am J Roentgenol** 1990 Feb; 154(2):255-8

CT evaluation of anaplastic thyroid carcinoma. Takashima S, et al. **AJR Am J Roentgenol** 1990 May;154(5):1079-85

The role of mammography in detecting breast cancer in augmented breasts. Grace GT, et al. **Ann Plast Surg** 1990 Aug;25(2):119-23

Computed tomographic findings of nasopharyngeal carcinoma with skull base and intracranial involvement. Miura T, et al. **Cancer** 1990 Jan 1;65(1):29-37

Calcified endobronchial mass in a 28-year-old man. Underwood GA, et al. **Chest** 1990 Jul;98(1):209-10

CT scanning as an adjunct to screening for medullary carcinoma of the thyroid. Heron CW, et al. **Clin Radiol** 1990 Mar;41(3):209-10

The role of computed tomography in assessing the operability of oesophageal carcinoma. Markland CG, et al. **Eur J Cardiothorac Surg** 1989;3(1):33-6

Predictability of esophagus- and cardiatumor resectability by preoperative computed tomography. Rasch L, et al. **Eur J Radiol** 1990 Jul-Aug;11(1):42-5

Opacification of the portal system during ERCP: demonstration of an anomalous pancreatico-portal connection in a patient with pancreatic carcinoma. Ben-Zvi JS, et al. **Gastrointest Endosc** 1989 Sep-Oct;35(5):445-7

Giant hyperplastic polyps of the gastric remnant simulating carcinoma. Glick SN, et al. **Gastrointest Radiol** 1990 Spring;15(2):151-5 (24 ref.)

Extramedullary hematopoiesis mimicking the appearance of carcinomatosis or peritoneal mesothelioma: computed tomography demonstration. Scott WW Jr, et al. **Gastrointest Radiol** 1990 Winter;15(1):82-3

Computed tomography in the evaluation of clinical stage IB carcinoma of the cervix. Parker LA, et al. **Gynecol Oncol** 1990 Jun;37(3):332-4

A review of mammography. Rasmussen EP, et al. **J Med Assoc Ga** 1990 Jun;79(6):359-61

False alarms of breast cancer [letter; comment] Garstin WI, et al. **Lancet** 1990 Feb 3;335(8684):299 Comment on: Lancet 1989 Nov 25;2(8674):1257-8.

The price of a false-negative result of mammography and an overenthusiastic lay press [letter; comment] Sillar B, et al. **Med J Aust** 1989 Oct 2;151(7):418 Comment on: Med J Aust 1989 Jun 5;150(11):664.

Carcinoma within fibroadenomas: mammographic features. Baker KS, et al. **Radiology** 1990 Aug;176(2):371-4

Invasive lobular carcinoma. Mammographic pattern. Adler OB, et al. **ROFO** 1990 Apr;152(4):460-2

Plain film evaluation of carcinoma of the lung. Romney BM, et al. **Semin Roentgenol** 1990 Jan;25(1):45-63 (51 ref.)

[The interval carcinoma in periodic breast screening, a new concept] Wobbes T, et al. **Ned Tijdschr Geneeskd** 1989 Nov 11;133(45):2209-12 **(Dut)**

[Subclinical identification of cancer of the breast. Radiologic progress, proposition for treatment (see comments)] Goumot PA, et al. **Chirurgie** 1989;115(7):424-31 (Eng. Abstr.) Comment in: Chirurgie 1989;115(7):480-1. **(Fre)**

[Assessment of non-palpable mammographic changes of the breast] Diergarten K, et al. **Arch Gynecol Obstet** 1989; 245(1-4):681-3 **(Ger)**

[Radiologic aspects of metastasis to the colon. Description of 4 cases] Boccardi A, et al. **Minerva Dietol Gastroenterol** 1989 Jul-Sep;35(3):205-10 (Eng. Abstr.) **(Ita)**

[Localization by needle insertion of occult breast carcinomas. An evaluation of the method via acquired experience] Asteria CR, et al. **Minerva Med** 1989 Aug;80(8):893 **(Ita)**

RADIONUCLIDE IMAGING

Imaging of tumours in the parotid region with indium-111 labelled monoclonal antibody reacting with carcinoembryonic antigen. Kairemo KJ, et al. **Acta Oncol** 1990;29(4):539-43

Radioimmunoscintigraphy of xenografted human thyroid carcinoma. Koizumi K, et al. **Ann Nucl Med** 1988 May; 2(1):21-5

Iodinated hydroxyphenyl and hydroxynaphthyl porphyrins as tumour localisers. Zanelli GD, et al. **Br J Cancer** 1990 May;61(5):687-8

Medullary carcinoma of the thyroid: management of persistent hypercalcitonaemia utilizing [99mTc] (v) dimercaptosuccinic acid scintigraphy. Udelsman R, et al. **Br J Surg** 1989 Dec;76(12):1278-81

Experience in imaging medullary thyroid carcinoma using 99mTc (V) dimercaptosuccinic acid (DMSA). Clarke S, et al. **Henry Ford Hosp Med J** 1989;37(3-4):167-8

Contribution of different scintigraphic techniques to the management of medullary thyroid carcinoma. Sandrock D, et al. **Henry Ford Hosp Med J** 1989;37(3-4):173-4

Diagnostic and therapeutic potential of new radiopharmaceutical agents in medullary thyroid carcinoma. Troncone L, et al. **Henry Ford Hosp Med J** 1989;37(3-4):178-84

The role of radiopharmaceuticals MIBG and (V) DMSA in the diagnosis of medullary thyroid carcinoma. Verga U, et al. **Henry Ford Hosp Med J** 1989;37(3-4):175-7

Tc-99m-(V)-DMSA: the new sensitive and specific radiopharmaceutical for imaging metastases of medullary thyroid carcinomas? Becker W, et al. **Horm Metab Res Suppl** 1989;21:38-42

Breast cancer imaging with radioiodinated oestradiol [letter] Schober O, et al. **Lancet** 1990 Jun 23;335(8704):1522

[The detection of metastases of ovarian carcinoma by immunoscintigraphy with monoclonal antibodies] Peking A, et al. **Akush Ginekol (Sofiia)** 1990;29(1):57-60 (Eng. Abstr.) **(Bul)**

[Value of radioimmunoscintigraphy compared to computed tomography in the diagnosis and follow-up of primary ovarian carcinoma] Barzen G, et al. **ROFO** 1990 Jul; 153(1):85-91 (Eng. Abstr.) **(Ger)**

[Tumor diagnosis by immunoscintigraphy with anti-CEA antibodies (Tc-99m MAK BW 431/26)] Kroiss A, et al. **Wien Klin Wochenschr** 1989 Sep 29;101(18):621-6 (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

Radiation therapy in early glottic cancer. Analysis of 177 consecutive cases. Fernberg JO, et al. **Acta Otolaryngol (Stockh)** 1989 Nov-Dec;108(5-6):478-81

Split-palate approach for gold grain implantation in nasopharyngeal carcinoma. Wei WI, et al. **Arch Otolaryngol Head Neck Surg** 1990 May;116(5):578-82

The management of metastases to eye and orbit from carcinoma of the breast. Burmeister BH, et al. **Aust N Z J Ophthalmol** 1990 May;18(2):187-90

Early post-irradiation bowel obstruction managed by longitudinal serotomy. Wilkinson S. **Aust N Z J Surg** 1990 Feb;60(2):136-8

The uptake of 3H-vincristine by a mouse carcinoma during a course of fractionated radiotherapy. Zanelli GD, et al. **Br J Cancer** 1989 Sep;60(3):310-4

Neoplastic meningitis from a pineal tumour treated by antibody-guided irradiation via the intrathecal route. Coakham HB, et al. **Br J Neurosurg** 1988;2(2):199-209

The treatment of uterine carcinoma using the Cathetron. Part III. Clinical considerations and preliminary reports on treatment results. Joslin CA, et al. **Br J Radiol** 1967 Dec; 40(480):895-904

The treatment of uterine carcinoma using the Cathetron. Part II. Physical measurements. Liversage WE, et al. **Br J Radiol** 1967 Dec;40(480):887-94

The treatment of uterine carcinoma using the Cathetron. Part I. Technique. O'Connell D, et al. **Br J Radiol** 1967 Dec; 40(480):882-7

Nasopharyngeal carcinoma. Pattern of tumor regression after radiotherapy. Sham JS, et al. **Cancer** 1990 Jan 15; 65(2):216-20

The impact of mammography on the patterns of patients referred for definitive breast irradiation [published erratum appears in Cancer 1990 Jun 1;65(11):2464] Solin LJ, et al. **Cancer** 1990 Mar 1;65(5):1085-9

The detection of local recurrence after definitive irradiation for early stage carcinoma of the breast. An analysis of the results of breast biopsies performed in previously irradiated breasts. Solin LJ, et al. **Cancer** 1990 Jun 1;65(11):2497-502

Individualization of indications for postoperative irradiation in stage I endometrial cancer. Bokhman JV, et al. **Eur J Gynaecol Oncol** 1990;11(1):27-32

Abdominopelvic radiation for stage I-II ovarian cancer. The effect of grade on outcome. Hart S, et al. **Eur J Gynaecol Oncol** 1989;10(6):416-20

Multicentric primaries and residual tumor masses following wide excision in breast cancer: a basis for irradiation. Müller A, et al. **Eur J Gynaecol Oncol** 1989;10(5):310-8

Fever, haemoglobin and smoking as prognostic factors during the treatment of cervical carcinoma by radiotherapy. Solberger O, et al. **Eur J Gynaecol Oncol** 1990;11(2):97-102

Whole-abdomen radiation as a second-line therapy for epithelial ovarian cancer. Hoffman MS, et al. **Gynecol Oncol** 1989 Oct;35(1):73-4

Benefit of external irradiation in pathologic stage I endometrial carcinoma: a prospective clinical trial of 605 patients who received postoperative vaginal irradiation and additional pelvic irradiation in the presence of unfavorable prognostic factors. Kucera H, et al. **Gynecol Oncol** 1990 Jul;38(1):99-104

Endometrial response to endogenous hormones after pelvic irradiation for genital malignancies. Larson JE, et al. **Gynecol Oncol** 1990 Jan;36(1):106-9

Palliative benefit of radiation therapy in advanced ovarian cancer. May LF, et al. **Gynecol Oncol** 1990 Jun; 37(3):408-11

Outcome of recurrent cervical carcinoma following definitive irradiation. Sommers GM, et al. **Gynecol Oncol** 1989 Nov; 35(2):150-5

Radiation therapy for carcinoma of the prostate gland: experience at a community hospital. Boyer CW Jr, et al. **Hawaii Med J** 1990 Jun;49(6):185-6, 188-90, 193-4

Impact of surgical staging in evaluating the radiotherapeutic outcome in RTOG phase III study for A2 and B prostate carcinoma. Asbell SO, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):945-51

T2/T3 bladder carcinomas treated with definitive radiotherapy with emphasis on flow cytometric DNA ploidy values. Jacobsen AB, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):923-9

Postoperative radiotherapy in the management of cancer of the maxillary sinus. Zaharia M, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):967-71

Postradiation polymorphic dermatitis. Rongioletti F, et al. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):844-5

125iodine reimplantation for locally progressive prostatic carcinoma. Wallner KE, et al. **J Urol** 1990 Sep;144(3):704-6

Prospective hormone study of hypothalamic-pituitary function in patients with nasopharyngeal carcinoma after high dose irradiation. Chen MS, et al. **Jpn J Clin Oncol** 1989 Sep;19(3):265-70

Calculation of radiation doses in critical organs compared with in vivo dosimetry during brachytherapy of carcinoma of the uterine cervix. Rašovská O, et al. **Neoplasma** 1990; 37(2):205-11

Radioiodine and radiotherapy in the management of thyroid cancers. Simpson WJ. **Otolaryngol Clin North Am** 1990 Jun; 23(3):509-21 (30 ref.)

Retreatment of recurrent pelvic tumors with iodine-125. Kumar PP, et al. **Radiat Med** 1989 May-Jun;7(3):150-9 (57 ref.)

Breast carcinoma en cuirasse: pathophysiology and rotational subtotal skin electron beam therapy (SSEBT), a new technique. Kumar PP, et al. **Radiat Med** 1989 Mar-Apr; 7(2):95-104

Considerations in fractionated proton radiation therapy: clinical potential and results. Austin-Seymour M, et al. **Radiother Oncol** 1990 Jan;17(1):29-35

Radiation dose assessment in radioiodine therapy. 2. Practical implementation using quantitative scanning and PET, with initial results on thyroid carcinoma. Flower MA, et al. **Radiother Oncol** 1989 Aug;15(4):345-57

The effect of 3-aminobenzamide in the radiation response of three human cervix carcinoma xenografts. Kelland LR, et al. **Radiother Oncol** 1989 Aug;15(4):363-9

Endometrial carcinoma: high dose-rate brachytherapy in combination with external irradiation; a multivariate analysis of relapses. Lybeert ML, et al. **Radiother Oncol** 1989 Dec;16(4):245-52

Adjuvant postoperative radiotherapy for gastric carcinoma with poor prognostic signs. Slot A, et al. **Radiother Oncol** 1989 Dec;16(4):269–74

Variations in dose distributions by the use of independent asymmetric jaws. A new technique for irradiation of localized carcinoma of the prostate. Strnad V, et al. **Strahlenther Onkol** 1989 Sep;165(9):665–71

Monitoring of prostate-specific antigen during external beam radiotherapy for carcinoma of the prostate. van Eijkeren M, et al. **Strahlenther Onkol** 1990 Aug;166(8):557–61

The role of radiotherapy in the management of choroid plexus neoplasms. Palazzi M, et al. **Tumori** 1989 Oct 31; 75(5):463–9 (58 ref.)

Ultrasonically guided 125iodine seed implantation with external radiation in management of localized prostatic carcinoma. Iversen P, et al. **Urology** 1989 Oct;34(4):181–6

Granular cell tumour of the appendix in a patient irradiated for a rectal carcinoma. Pipeleers-Marichal M, et al. **Virchows Arch [A]** 1990;417(2):177–80

[Curietherapy of epithelioma of the external ear. A series of 140 patients] Debois JM, et al. **Acta Otorhinolaryngol Belg** 1989;43(3):239–50 (Eng. Abstr.) (Dut)

[Radiotherapy of carcinoma of the nasopharynx] Belgadi B, et al. **Ann Otolaryngol Chir Cervicofac** 1990;107(1):53–8 (27 ref.) (Eng. Abstr.) (Fre)

[Therapeutic results in a series of 73 cases of nasopharyngeal carcinoma] Meyer P, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(8):567–76 (17 ref.) (Eng. Abstr.) (Fre)

[Inflammatory carcinoma of the uterine cervix. Review of 9 cases] Bolla M, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(2):187–91 (Eng. Abstr.) (Fre)

[Endoluminal radiotherapy of high biliary tract carcinomas] Fromme M, et al. **Dtsch Med Wochenschr** 1990 Jun 29; 115(26):1026–30 (36 ref.) (Ger)

[Experiences with simultaneous cytostatic and radiotherapy treatment of advanced cancer of the head and neck] Ehr R, et al. **Laryngorhinootologie** 1990 Jun;69(6):312–5 (Eng. Abstr.) (Ger)

[Autopsy results in surgical-radiotherapeutic treatment of bladder carcinoma—conclusions for optimal radiologic therapy] Füller J, et al. **Radiobiol Radiother (Berl)** 1989; 30(5):465–71 (Eng. Abstr.) (Ger)

[Percutaneous radiotherapy for thyroid gland carcinoma] Kleinert G. **Radiobiol Radiother (Berl)** 1989;30(5):473–80 (Eng. Abstr.) (Ger)

[The therapy of endometrial carcinoma with the high-dose-rate selectron] Rattka P. **Radiobiol Radiother (Berl)** 1989;30(5):481–6 (Eng. Abstr.) (Ger)

[Long-term results of postoperative and primary radiotherapy of carcinoma of the salivary glands: importance of dosage and target volume] Glanzmann C. **Strahlenther Onkol** 1990 Mar;166(3):183–9 (Eng. Abstr.) (Ger)

[Hyperfractionated irradiation with simultaneous cisplatin chemotherapy in patients with far-advanced carcinoma of the head and neck] Glanzmann C, et al. **Strahlenther Onkol** 1990 Jun;166(6):397–401 (Eng. Abstr.) (Ger)

[Results of percutaneous transluminal irradiation of biliary tract carcinoma with 192Iridium] Hendrickx P, et al. **Strahlenther Onkol** 1990 Jun;166(6):392–6 (Eng. Abstr.) (Ger)

[A therapeutic concept for the treatment of inoperable esophageal carcinoma] Pakisch B, et al. **Strahlenther Onkol** 1990 Apr;166(4):247–50 (Eng. Abstr.) (Ger)

[Radiotherapy technics and results in nasopharyngeal carcinoma at the Cologne University Clinics from 1974 to 1985] Roth SL, et al. **Strahlenther Onkol** 1989 Sep; 165(9):633–40 (Eng. Abstr.) (Ger)

[Secondary malignomas following radiotherapy of breast carcinoma: a case report] Waller M, et al. **Strahlenther Onkol** 1990 Feb;166(2):140–2 (Eng. Abstr.) (Ger)

[Interstitial radiotherapy with 125I seeds in non-operable and non-radioiodine retaining local recurrences of differentiated and undifferentiated thyroid cancers] Kanitz W, et al. **Wien Klin Wochenschr** 1990 Apr 27;102(9):277–80 (Eng. Abstr.) (Ger)

[The role of radiotherapy in the multimodal treatment of locally advanced breast carcinoma] Guenzi M, et al. **Radiol Med (Torino)** 1990 May;79(5):534–8 (Eng. Abstr.) (Ita)

[Analysis of prognostic factors in 106 cases of carcinoma of the rhinopharynx treated with cobalt teletherapy] Zini G, et al. **Radiol Med (Torino)** 1989 Nov;78(5):430–4 (Eng. Abstr.) (Ita)

REHABILITATION

Achievements of physical therapy in patients after modified radical mastectomy compared with quadrantectomy, axillary dissection, and radiation for carcinoma of the breast. Gutman H, et al. **Arch Surg** 1990 Mar;125(3):389–91

SECONDARY

Hepatocellular carcinoma versus carcinoma metastatic to the liver. Value of stains for carcinoembryonic antigen and naphthylamidase in fine needle aspiration biopsy material. Wong MA, et al. **Acta Cytol** 1990 Mar-Apr;34(2):192–6

Choroid plexus carcinoma—report of a case with metastases within the central nervous system. Bennedbaek O, et al. **Acta Oncol** 1990;29(2):241–3 (32 ref.)

Ovarian carcinoma metastasis to the little finger. A case report. Turan I, et al. **Acta Orthop Scand** 1990 Apr; 61(2):185–6

Mesothelial cell inclusions in mediastinal lymph nodes mimicking metastatic carcinoma. Brooks JS, et al. **Am J Clin Pathol** 1990 Jun;93(6):741–8

Potentiation of cyclophosphamide-induced enhancement of experimental metastasis by splenectomy. Strządała L, et al. **Arch Immunol Ther Exp (Warsz)** 1989;37(3–4):399–403

Discrete metastasis of solid tumors to extraocular muscles. Capone A Jr, et al. **Arch Ophthalmol** 1990 Feb; 108(2):237–43 (55 ref.)

Current results of treatment for distant metastatic well-differentiated thyroid carcinoma. Wood WJ Jr, et al. **Arch Surg** 1989 Dec;124(12):1374–7

The distribution of bone metastases as shown on isotope scanning: proposed modes of spread. Styles C. **Australas Radiol** 1989 Aug;33(3):226–8

Reactivation of rheumatoid arthritis during continuous infusion of interleukin 2: evidence of lymphocytic control of rheumatoid disease. Lavelle-Jones M, et al. **BMJ** 1990 Jul 14;301(6743):97

Metastasis of parotid acinic cell carcinoma to an internal carotid aneurysm: a case report. Chumas PD, et al. **Br J Neurosurg** 1988;2(3):411–3

Single brain metastasis of non-small cell lung carcinoma. Study of survival among 54 patients. Demange L, et al. **Br J Neurosurg** 1989;3(1):81–7

Subdural haematoma caused by metastatic dural carcinomatosis. Jamjoom AB, et al. **Br J Neurosurg** 1987; 1(3):385–8

Metastatic carcinoma to the pituitary gland. McCormick PC, et al. **Br J Neurosurg** 1989;3(1):71–9

Metastatic carcinoid tumour of the CNS from two different primary sites. Saleh J, et al. **Br J Neurosurg** 1987;1(2):281–4

Lymphangiography in the diagnosis of retroperitoneal node metastases in rectal cancer. Chiappa S, et al. **Br J Radiol** 1967 Aug;40(476):584–93

Silent testicular metastasis from carcinoma of the prostate. Kirkali Z, et al. **Br J Urol** 1990 Aug;66(2):205–7

Mammary ovarian metastases with stroma cell hyperplasia and postmenopausal virilization. Caron P, et al. **Cancer** 1990 Sep 15;66(6):1221–4

Lung cancer with skin metastasis. Coslett LM, et al. **Chest** 1990 Mar;97(3):757–9

Endobronchial metastasis from Hurthle cell thyroid carcinoma [letter] Lossos IS, et al. **Chest** 1990 Mar; 97(3):768

Correlation of prostate-specific antigen and technetium-99m HMDP bone imaging. Shih WJ, et al. **Clin Nucl Med** 1989 Oct;14(10):750–5

Metastatic metaplastic carcinoma of the breast: diagnosis by bronchial brush cytology. Selvaggi SM, et al. **Diagn Cytopathol** 1989;5(4):396–9

Creatine kinase-BB in the cerebrospinal fluid as a marker of CNS metastases and leptomeningeal carcinomatosis in patients with breast cancer. Bach F, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1703–9

Metastases to the endometrium from breast carcinoma. Ben-Baruch G, et al. **Eur J Gynaecol Oncol** 1990;11(1):61–6

Hyperparathyroidism in metastases of prostatic carcinoma: a biochemical, hormonal and histomorphometric study. Rico H, et al. **Eur Urol** 1990;17(1):35–9

Loss of the H-2.33 private specificity by 3LL tumor cells correlates with the tumor potential to metastasize across the H-2K region genetic barriers. Isakov N, et al. **Exp Clin Immmunogenet** 1984;1(3):170–4

Retroorbital metastases in ovarian cancer. Malviya VK, et al. **Gynecol Oncol** 1989 Oct;35(1):120–3

Metastatic carcinoma in the cervical lymph nodes from an occult primary: a conservative approach to the role of radiotherapy. Glynne-Jones RG, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb;18(2):289–94

Skin involvement as the presenting sign of internal carcinoma. A retrospective study of 7316 cancer patients. Lookingbill DP, et al. **J Am Acad Dermatol** 1990 Jan; 22(1):19–26

Randomized study of continuous infusion fluorouracil versus fluorouracil plus cisplatin in patients with metastatic colorectal cancer. Kemeny N, et al. **J Clin Oncol** 1990 Feb;8(2):313–8 (27 ref.)

Metastatic lobular carcinoma [letter; comment] Cross PA. **J Clin Pathol** 1990 Apr;43(4):350 Comment on: J Clin Pathol 1989 Nov;42(11):1223–4.

Breast carcinoma metastatic to the gallbladder [see comments] Rubin A, et al. **J Clin Pathol** 1989 Nov; 42(11):1223–4 Comment in: J Clin Pathol 1990 Apr;43(4):350.

Fatal pontine metastasis: clinical, CT, MRI and pathological correlates. Zachariah SB, et al. **J Fla Med Assoc** 1989 May; 76(5):457–60

Ovarian carcinoma metastatic to the larynx. Cullen JR. **J Laryngol Otol** 1990 Jan;104(1):48–9

Nasopharyngeal carcinoma with secondaries at the porta hepatis presenting as obstructive jaundice. Elango S, et al. **J Laryngol Otol** 1990 Jan;104(1):41–2

Decompression of epidural metastases from germ cell tumors with chemotherapy. Cooper K, et al. **J Neurooncol** 1990 Jun;8(3):275–80

Plasma carcinoembryonic antigen as an indicator of cerebral metastases. Eden EA, et al. **J Neurooncol** 1990 Jun; 8(3):281–7

Metastatic thyroid carcinoma of the mandible: case report. Kahn MA, et al. **J Oral Maxillofac Surg** 1989 Dec; 47(12):1314–6

Central mucoepidermoid carcinoma of the jaw with distant metastasis: a case report and review of the literature. Lebsack JP, et al. **J Oral Maxillofac Surg** 1990 May; 48(5):518–22 (31 ref.)

Role of intraoperative ultrasound in the screening of liver metastases from colorectal carcinoma: initial experiences. Russo A, et al. **J Surg Oncol** 1989 Dec;42(4):249–55

Heterogeneity of potential for hematogenous metastasis in a human pancreatic carcinoma. Vezeridis MP, et al. **J Surg Res** 1990 Jan;48(1):51–5

Metastatic cancer to the testes: a report of 20 cases and review of the literature. Patel SR, et al. **J Urol** 1989 Oct; 142(4):1003–5 (60 ref.)

A right ventricular metastasis of a large cell cancer: a case of multiple cancer. Ohsaki Y, et al. **JCU** 1990 Jan; 18(1):39–42

Case records of the Massachusetts general Hospital. Weekly clinicopathological exercises. Case 31–1990. A 42-year-old woman with dyspnea and diffuse interstitial pulmonary disease. **N Engl J Med** 1990 Aug 2;323(5):327–34

Spontaneous epidural hematoma secondary to dural metastasis from an ovarian carcinoma—case report. Anegawa S, et al. **Neurol Med Chir (Tokyo)** 1989 Sep; 29(9):854–6

Brain metastasis from transitional cell carcinoma of the bladder—case report. Wakisaka S, et al. **Neurol Med Chir (Tokyo)** 1990 Mar;30(3):188–90

Imaging of brain metastases. Comparison of computerized tomography (CT) and magnetic resonance imaging (MRI). Taphoorn MJ, et al. **Neuroradiology** 1989;31(5):391–5

A case of concomitant association of duodenal carcinoma and jejunal carcinoma with cerebral metastasis. Miyamoto M, et al. **Nippon Geka Hokan** 1989 Jul 1;58(4):360–7

The sphenoid sinus—a site for metastasis. Mickel RA, et al. **Otolaryngol Head Neck Surg** 1990 Jun;102(6):709–16 (21 ref.)

Carcinoma of the lung with metastases to skeletal muscles. Cheong TH, et al. **Singapore Med J** 1989 Dec;30(6):605–6

Carcinoma of prostate metastasizing to vocal cord. Grignon DJ, et al. **Urology** 1990 Jul;36(1):85–8 (15 ref.)

[Testicular metastasis of carcinoma of the rectum (letter)] Bozza F, et al. **J Chir (Paris)** 1989 Aug-Sep;126(8–9):474–5 (Fre)

[Obesity, heart failure and pulmonary insufficiency in a 26-year-old female (clinical conference)] Ritter MM, et al. **Med Klin** 1990 Jun 15;85(6):371–5 (Ger)

[Disseminated sclerosing bone marrow carcinosis with peripheral expansion in undifferentiated gastric carcinoma] Borgis KJ, et al. **ROFO** 1990 Jul;153(1):99–100 (Ger)

[Computed tomographic signs of peritoneal carcinosis] Stetter G, et al. **Rontgenpraxis** 1990 Mar;43(3):95–9 (Ger)

[Iterative pulmonary metastasis. Considerations on 28 surgically treated cases] Briccoli A, et al. **Minerva Chir** 1989 Sep 30;44(18):1985–8 (Eng. Abstr.) (Ita)

[Screening for liver metastases of colorectal carcinoma by the routine use of intraoperative echography] Russo A, et al. **Minerva Chir** 1989 Sep 15;44(17):1893–900 (Eng. Abstr.) (Ita)

[The role of inflammatory infiltrate as a prognostic criterion in cerebral metastases. Preliminary results] Bucciero A, et al. **Minerva Med** 1990 Mar;81(3):139–46 (Eng. Abstr.) (Ita)

[Etiopathogenetic aspects of central diabetes insipidus. Report of a clinical case] Coppola A, et al. **Minerva Med** 1989 Oct;80(10):1119–24 (Eng. Abstr.) (Ita)

[Neck metastases from an unknown primary tumor] Loven JO, et al. **Tidsskr Nor Laegeforen** 1990 Mar 30; 110(9):1099–102 (Eng. Abstr.) (Nor)

[Metastatic renal carcinoma of the breast. Presentation of 2 cases diagnosed by fine-needle aspiration puncture] Sáenz de Santamaría Morales FJ, et al. **Arch Esp Urol** 1990 Jan-Feb;43(1):75–7 (Eng. Abstr.) (Spa)

[Multiple pilomatrixomas associated with myotonic dystrophy and medullary carcinoma of the thyroid] Ribera M, et al. **Med Cutan Ibero Lat Am** 1989;17(6):395–8 (Eng. Abstr.) (Spa)

[Leptomeningeal carcinomatosis as the primary manifestation of a carcinoma of probable renal origin] Camps C, et al. **Neurologia** 1989 Apr;4(3):103–6 (Eng. Abstr.) (Spa)

[Metastatic infiltration of the cavernous sinus (letter)] Castillo J, et al. **Neurologia** 1988 Jan-Feb;3(1):39–40 (Spa)

[Yield of diagnostic tests in neoplasms of unknown origin. A retrospective study] Gil Gil M, et al. **Rev Clin Esp** 1990 Apr;186(6):252–8 (Eng. Abstr.) (Spa)

SECRETION

Secretory carcinoma coexistent with mucinous carcinoma in the breast. Report of a case. Tamura G, et al. **Acta Pathol Jpn** 1989 Sep;39(9):593–8

Estrogen producing activity in epithelial ovarian tumors and dermoid cysts. Sekiguchi I, et al. **Asia Oceania J Obstet Gynaecol** 1989 Dec;15(4):367–74

Expression of beta human chorionic gonadotrophin by non-trophoblastic non-endocrine 'normal' and malignant epithelial cells. Iles RK, et al. **Br J Cancer** 1990 May; 61(5):663-6

Sulphomucin-secreting intestinal metaplasia in the human gastric mucosa. An association with intestinal-type gastric carcinoma. Matsukuma A, et al. **Cancer** 1990 Aug 15; 66(4):689-94

HPLC analysis of supernatant soluble factors from tumor cell variants with defined metastatic status. Barbero MC, et al. **Cell Mol Biol** 1989;35(4):441-7

Use of adrenal arterial embolization in severe ACTH-dependent Cushing's syndrome. Blunt SB, et al. **Postgrad Med J** 1989 Aug;65(766):575-9

[Dynamics of calcitonin secretion in tissue culture of medullary thyroid carcinoma] Martin RC, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Jan-Feb;44(1):36-9 (Eng. Abstr.) **(Por)**

SURGERY

Invasive carcinoma of the vulva. Changing trends in surgical management. Cavanagh D, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):1007-15

Treatment of cervical intraepithelial neoplasia: experience with the low-voltage diathermy loop. Whiteley PF, et al. **Am J Obstet Gynecol** 1990 May;162(5):1272-7

Follow-up of patients operated on for colorectal carcinoma. Ovaska J, et al. **Am J Surg** 1990 Jun;159(6):593-6

Management of advanced glottic carcinomas. Razack MS, et al. **Am J Surg** 1989 Oct;158(4):318-20

Carcinoembryonic antigen directed multiple surgical procedures for recurrent colon cancer confined to the liver. Sardi A, et al. **Am Surg** 1990 Apr;56(4):255-9

Surgical treatment of pleomorphic carcinoma of the pancreas. Solis MM, et al. **Am Surg** 1990 Jun;56(6):352-4 (12 ref.)

Sialomucin at the resection margins and likelihood of local recurrence of carcinoma of the rectum after anterior resection. Wang Q, et al. **Ann Med** 1990 Feb;22(1):31-3

A comparison between sternum and rib in osteomyocutaneous reconstruction of major mandibular defects. Robertson GA. **Ann Plast Surg** 1986 Nov; 17(5):421-33

Malignant epithelial parotid tumours. Ball AB, et al. **Ann R Coll Surg Engl** 1990 Jul;72(4):247-9

Tissue adhesive in bronchial closure. Eng J, et al. **Ann Thorac Surg** 1989 Nov;48(5):683-5

Predicted pulmonary function and survival after pneumonectomy for primary lung carcinoma. Putnam JB Jr, et al. **Ann Thorac Surg** 1990 Jun;49(6):909-14; discussion 915

Extended en bloc resection of a primary mediastinal parathyroid carcinoma. Putnam JB Jr, et al. **Ann Thorac Surg** 1990 Jul;50(1):138-40

Carcinoma of the gallbladder. Does radical resection improve outcome? Donohue JH, et al. **Arch Surg** 1990 Feb; 125(2):237-41

The role of bowel surgery in the primary treatment of epithelial ovarian cancer. Hammond RH, et al. **Aust N Z J Obstet Gynaecol** 1990 May;30(2):166-9

Perioperative blood transfusion and gastric cancer: adverse effects or unfavourable conditions of pretreatment? Yamaguchi K, et al. **Aust N Z J Surg** 1990 Oct; 60(10):765-72

Computerised tomography guided preoperative localisation of small intracranial lesions. Chan KH, et al. **Br J Neurosurg** 1989;3(1):127-30

Measurement of serum thyroglobulin is of value in detecting tumour recurrence following treatment of differentiated thyroid carcinoma by lobectomy. Harvey RD, et al. **Br J Surg** 1990 Mar;77(3):324-6

Time-related changes in characteristics of prognostic significance in carcinomas of the oesophagus and cardia. Lund O, et al. **Br J Surg** 1989 Dec;76(12):1301-7

Association between transfusion with plasma and the recurrence of colorectal carcinoma. Marsh J, et al. **Br J Surg** 1990 Jun;77(6):623-6

Management of high grade parotid carcinomas. Wyatt MG, et al. **Br J Surg** 1989 Dec;76(12):1275-7

Chest-wall tumours. Evans KG, et al. **Can J Surg** 1990 Jun; 33(3):229-32

Conservative operations for breast cancer: current issues and controversies [editorial; comment] Hermann RE. **Cleve Clin J Med** 1990 Mar-Apr;57(2):176-7 Comment on: Cleve Clin J Med 1990 Mar-Apr;57(2):143-6.

Management of patients with invasive carcinoma removed by colonoscopic polypectomy. Sugihara K, et al. **Dis Colon Rectum** 1989 Oct;32(10):829-34

The role of operations in the treatment of nasopharyngeal carcinoma. Van Hasselt CA. **Ear Nose Throat J** 1990 Apr; 69(4):279-81

Prognosis and morbidity after total thyroidectomy for papillary, follicular and medullary thyroid cancer. Hamming JF, et al. **Eur J Cancer Clin Oncol** 1989 Sep; 25(9):1317-23

Surgical treatment of lung carcinoma involving the chest wall. Casillas M, et al. **Eur J Cardiothorac Surg** 1989; 3(5):425-9

Tracheobronchial mucoepidermoid carcinoma in childhood with a ten year follow-up. Watterson KG, et al. **Eur J Cardiothorac Surg** 1990;4(2):112-3

Clinical and pathologic findings at second-look surgery for ovarian carcinoma. Rorat E, et al. **Eur J Gynaecol Oncol** 1983;4(3):175-81

New operative strategy in the treatment of metastasizing medullary carcinoma of the thyroid. Buhr HJ, et al. **Eur J Surg Oncol** 1990 Aug;16(4):366-9

Tumor reduction surgery and long-term survival in advanced ovarian cancer: a DACOVA study. Bertelsen K. **Gynecol Oncol** 1990 Aug;38(2):203-9

Role of centralization of surgery in Stage IB carcinoma of the cervix: a review of 498 cases. Monaghan JM, et al. **Gynecol Oncol** 1990 May;37(2):206-9

Surgical intervention following multimodality therapy for advanced cervical cancer. Potish RA, et al. **Gynecol Oncol** 1990 Aug;38(2):175-80

Therapy of in situ cancer. Recht A, et al. **Hematol Oncol Clin North Am** 1989 Dec;3(4):691-708 (71 ref.)

Surgical treatment of medullary thyroid carcinoma in a thirteen-year-old girl with MEN 2B. Tisell LE, et al. **Henry Ford Hosp Med J** 1989;37(3-4):157-9

Surgical treatment of medullary carcinoma of the thyroid. Tisell LE, et al. **Horm Metab Res Suppl** 1989;21:29-31

Thyroid carcinoma. Sarda AK, et al. **Indian J Pediatr** 1989 May-Jun;56(3):379-83

Surgery for carcinoma of the colon in people aged 75 years and older. Ozoux JP, et al. **Int J Colorectal Dis** 1990 Feb; 5(1):25-30 (22 ref.)

Transhiatal oesophagectomy--its role for tumours of the middle third of the intrathoracic oesophagus. Hurley JP, et al. **Ir Med J** 1990 Mar;83(1):23-5

Transhiatal blunt esophagectomy for carcinoma of the esophagus. Benedetto JC, et al. **J Am Osteopath Assoc** 1990 Jan;90(1):54, 57-60

Undifferentiated primary malignant soft tissue tumor. Cohen M, et al. **J Foot Surg** 1989 Sep-Oct;28(5):395-404

Predictors of recurrent disease after negative second-look laparotomy for epithelial ovarian cancer. Ayhan A, et al. **J Surg Oncol** 1990 Jun;44(2):119-21

Feasibility and outcome of complete secondary tumor resection for patients with advanced ovarian cancer. Lawton F, et al. **J Surg Oncol** 1990 Sep;45(1):14-9

Invited letter concerning: surgical treatment of carcinoma of the thoracic esophagus and cardia [letter] Ellis FH Jr, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):370-1

Operative ultrasonography for lung cancer surgery. Machi J, et al. **J Thorac Cardiovasc Surg** 1989 Oct;98(4):540-5

A retrospective study on the efficacy of cervical lymph node dissection in well-differentiated carcinoma of the thyroid. Noguchi M, et al. **Jpn J Surg** 1990 Mar;20(2):143-50

Mid-mediastinal parathyroid lesions: preoperative localization and surgical approach in two cases. Obara T, et al. **Jpn J Surg** 1990 Jul;20(4):481-6 (14 ref.)

Should liver metastasis from colorectal cancers be treated surgically? [letter] Benhamou G, et al. **Lancet** 1990 Feb 24;335(8687):482-3

Total pancreatectomy with celiac artery occlusion. Karp N, et al. **N Y State J Med** 1990 Aug;90(8):416-8

Stereotactic guiding tube for open-system endoscopy: a new approach for the stereotactic endoscopic resection of intra-axial brain tumors. Otsuki T, et al. **Neurosurgery** 1990 Aug;27(2):326-30

Role of cryotherapy in treating sebaceous carcinoma of the eyelid [letter; comment] Kass LG. **Ophthalmology** 1990 Jan; 97(1):2-4 Comment on: Ophthalmology 1989 Jul;96(7):1021-6.

Completion thyroidectomy for initially misdiagnosed thyroid cancer. Auguste LJ, et al. **Otolaryngol Clin North Am** 1990 Jun;23(3):429-39 (19 ref.)

Surgical treatment of medullary carcinoma of the thyroid. Block MA. **Otolaryngol Clin North Am** 1990 Jun; 23(3):453-73 (37 ref.)

The treatment of metastatic thyroid disease. Lee KY, et al. **Otolaryngol Clin North Am** 1990 Jun;23(3):475-93 (49 ref.)

Surgical treatment of lung cancer. Martini N. **Semin Oncol** 1990 Aug;17(4 Suppl 7):9-10

Development of diagnosis and surgical treatment for patients with carcinoma of the esophagus. Sugimachi K, et al. **Semin Surg Oncol** 1990;6(1):3-7

Omental transposition flap and split skin graft for locally advanced breast carcinoma. Lee SH, et al. **Singapore Med J** 1990 Jun;31(3):217-20

Bronchogenic carcinoma treated by concomitant resection of lung and chest wall. Warner R, et al. **South Med J** 1990 Jun;83(6):621-3, 633

A new technique of total three-stage esophagectomy for carcinoma with a combined right cervical and thoracic approach. Domergue J, et al. **Surg Gynecol Obstet** 1989 Dec;169(6):555-7

Surgical treatment of the elderly patient with gynecologic cancer. Kirschner CV, et al. **Surg Gynecol Obstet** 1990 May;170(5):379-84

Preoperative portal embolization to increase safety of major hepatectomy for hilar bile duct carcinoma: a preliminary report. Makuuchi M, et al. **Surgery** 1990 May;107(5):521-7

Carcinoma of the main hepatic duct junction: indications, operative morbidity and mortality, and long-term survival. Tsuzuki T, et al. **Surgery** 1990 Sep;108(3):495-501

Enteroliths in association with right hemicolectomy for cecal carcinoma. Gordin SJ, et al. **W V Med J** 1990 Jul; 86(7):292-3

Thyroid carcinoma in Graves' disease. Ozaki O, et al. **World J Surg** 1990 May-Jun;14(3):437-40; discussion 440-1

[A comparative study of the effect of epidural analgesia on the hormonal status and humoral immunity in patients with bladder carcinoma and prostatic adenoma] Bovianska N, et al. **Khirurgiia (Sofiia)** 1990;43(1):9-14 **(Bul)**

[The results of using necessarily low anterior resections for carcinoma of the lower half of the middle third of the rectum] Dimitrov V, et al. **Khirurgiia (Sofiia)** 1989; 42(3):98-103 (Eng. Abstr.) **(Bul)**

[The use of a transabdominal method in treating inguinofemoral hernia simultaneously with surgery of the rectum or sigmoid in carcinoma] Dimitrov V, et al. **Khirurgiia (Sofiia)** 1989;42(4):87-90 (Eng. Abstr.) **(Bul)**

[A modified technic of preoperative acute normovolemic hemodilution--the advantages and economic effect of its use in planned colorectal surgery] Nikolov K, et al. **Khirurgiia (Sofiia)** 1990;43(1):30-7 (Eng. Abstr.) **(Bul)**

[Continent urinary diversion following cystectomy in bladder carcinoma] Petrov P, et al. **Khirurgiia (Sofiia)** 1989; 42(5):74-7 (37 ref.) **(Bul)**

[Bladder diverticula combined with bladder carcinoma] Petrov P, et al. **Khirurgiia (Sofiia)** 1989;42(5):85-6 **(Bul)**

[Clinical study of surgically treated parotid tumors during 1981-1985] Devue E, et al. **Acta Otorhinolaryngol Belg** 1989;43(3):213-9 (Eng. Abstr.) **(Dut)**

[Flare phenomenon: favorable or unfavorable?] Peters-Christodoulou MN, et al. **Ned Tijdschr Geneeskd** 1990 Jun 16;134(24):1161-3 **(Dut)**

[Differentiated cancer of the thyroid. Prognostic factors and therapeutic attitude] Almou M, et al. **Acta Chir Belg** 1989 Sep-Oct;89(5):271-5 (Eng. Abstr.) **(Fre)**

[Epithelial cancer of the ovary in adults: prognostic and therapeutic study of 95 cases] Fignon A, et al. **Ann Chir** 1990;44(4):283-9 (33 ref.) (Eng. Abstr.) **(Fre)**

[Cancer of the stomach: an epidemiologic, diagnostic and therapeutic study] Yacoubi A, et al. **Chirurgie** 1989;115 Suppl 1:74-7; discussion 77-8 (Eng. Abstr.) **(Fre)**

[Epithelial cancer of the ovary. Contribution of the experiences of a treatment facility to the current data of prognosis and treatment] Dauplat J, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(3):247-60 (62 ref.) (Eng. Abstr.) **(Fre)**

[Local and lymph node recurrence of epitheliomas starting in the glottis, treated by partial laryngeal surgery: apropos of 432 patients] Laccourreye O, et al. **J Otolaryngol** 1990 Apr;19(2):130-5 (Eng. Abstr.) **(Fre)**

[Stage III and IV epithelial cancer of the ovary. Prognostic role of surgical tumor reduction] Le Bouedec G, et al. **Presse Med** 1990 Mar 24;19(11):506-10 (Eng. Abstr.) **(Fre)**

[Transanal endoscopic microsurgery in rectal cancer] Buess G, et al. **Chirurg** 1989 Dec;60(12):901-4 **(Ger)**

[Primary wound healing of the sacral cavity following rectum amputation, also a comment on the discussion contribution by G. Jatzko and D. Schlapper, Chirurg (1988) 59: 855] Hüskes KP, et al. **Chirurg** 1989 Dec;60(12):878-80; discussion 880-1 (Eng. Abstr.) **(Ger)**

[Bilio-duodenal jejunum interposition as a technical alternative to Roux-Y reconstruction following reconstruction of cancer of the fork of the hepatic duct] Kremer B, et al. **Chirurg** 1989 Sep;60(9):599-602 (Eng. Abstr.) **(Ger)**

[Reinterventions in anaplastic cancers and sarcomas of the thyroid gland] Hermann M, et al. **Wien Klin Wochenschr** 1990 Apr 27;102(9):260-4 (Eng. Abstr.) **(Ger)**

[Status of tracheotomy in treatment of the respiratory emergency in anaplastic thyroid cancer] Hölting T, et al. **Wien Klin Wochenschr** 1990 Apr 27;102(9):264-6 (Eng. Abstr.) **(Ger)**

[The value of surgical staging in the early stages of ovarian carcinoma] Salzer H, et al. **Wien Klin Wochenschr** 1990 Aug 3;102(15):437-40 (Eng. Abstr.) **(Ger)**

[Radical surgical intervention with conventional radiation versus multimodality therapy protocol in undifferentiated thyroid cancer] Scheumann GF, et al. **Wien Klin Wochenschr** 1990 Apr 27;102(9):271-3 (Eng. Abstr.) **(Ger)**

[The value of cytoreductive second-look surgery in advanced epithelial ovarian carcinoma] Sevelda P, et al. **Wien Klin Wochenschr** 1990 Aug 3;102(15):441-3 (Eng. Abstr.) **(Ger)**

[Occurrence of 3 primary carcinomas within 26 months] Petru G, et al. **Wien Med Wochenschr** 1990 Apr 30; 140(8):212-3 (Eng. Abstr.) **(Ger)**

[Treatment of semi-malignant tumors in children and adolescents using the neodymium YAG laser--indications and differentiation from surgical procedures] Nowak W. **Z Kinderchir** 1988 Sep;43 Suppl 1:30-2 **(Ger)**

["Secondary surgery" in the oncologic concept of malignant struma] Keminger K, et al. **Zentralbl Chir** 1989; 114(18):1209-16 (Eng. Abstr.) **(Ger)**

[Surgical therapy of thyroid cancer] Wolff H, et al. **Zentralbl Chir** 1989;114(18):1202-8 (Eng. Abstr.) **(Ger)**

[Significance and prognosis of positive surgical section margins in surgery of laryngeal cancer] Fini-Storchi O, et al. **Acta Otorhinolaryngol Ital** 1989 Nov-Dec;9(6):587-98 (26 ref.) (Eng. Abstr.) **(Ita)**

[Solitary metastasis of the appendicular bones: role of orthopedic surgery] Rosa MA, et al. **Arch Putti Chir Organi Mov** 1989;37(2):345-54 (Eng. Abstr.) **(Ita)**

[Radical surgery and loco-regional chemotherapy in the treatment of liver metastases of stomach and colorectal

cancer] Di Giorgio A, et al. **Minerva Chir** 1989 Oct 15; 44(19):2065–71 (Eng. Abstr.) **(Ita)**

[Primary carcinoma of the gallbladder] Ghilardi G, et al. **Minerva Chir** 1990 Jan;45(1–2):67–74 (37 ref.) (Eng. Abstr.) **(Ita)**

[Reconstruction of the thoracic wall using a Marlex sandwich. Presentation of a clinical case] Paolini A, et al. **Minerva Chir** 1989 Sep 30;44(18):2037–41 (11 ref.) (Eng. Abstr.) **(Ita)**

[Stage IB (FIGO) cervical carcinoma. Treatment and prognosis] Beretta P, et al. **Minerva Ginecol** 1989 Aug; 41(8):405–8 (Eng. Abstr.) **(Ita)**

[Early gastric cancer. Surgical treatment strategies with reference to the histological grading and the localization of the lesion] Purri P, et al. **Minerva Med** 1989 Aug; 80(8):837–9 **(Ita)**

[Malignant neoplasm of the parotid gland. A caseload contribution] Caldarola F, et al. **Minerva Stomatol** 1989 Aug;38(8):869–72 (Eng. Abstr.) **(Ita)**

[The surgical treatment of carcinoma of the lip. A report on cases] Caldarola F, et al. **Minerva Stomatol** 1990 Mar; 39(3):193–6 (Eng. Abstr.) **(Ita)**

[Clinical evaluation of extended neck differentiated thyroid carcinoma] Asanuma K, et al. **Nippon Geka Gakkai Zasshi** 1990 Feb;91(2):255–61 (Eng. Abstr.) **(Jpn)**

[Medical or surgical castration in prostatic cancer? Experience of 100 orchiectomies] Johansen TE, et al. **Tidsskr Nor Laegeforen** 1990 Feb 10;110(4):467–9 (Eng. Abstr.) **(Nor)**

[Total phonatory laryngectomy (Herrmann's technic). Our clinical experience] Ruiz Franco M, et al. **Acta Otorrinolaringol Esp** 1989 Sep–Oct;40(5):354–5 (Eng. Abstr.) **(Spa)**

[Is the use of transurethral resection adequate in the therapy of carcinoma of the prostate?] Valdivia Uría JG, et al. **Arch Esp Urol** 1989;42 Suppl 2:179–86 (Eng. Abstr.) **(Spa)**

[Radical prostatectomy in cancer of the prostate. Preliminary adjuvant therapy and previous considerations] Villanueva Benedicto A, et al. **Arch Esp Urol** 1989;42 Suppl 2:141–53 (Eng. Abstr.) **(Spa)**

THERAPY

Radiotherapy additional to surgery in the management of primary rectal carcinoma. Påhlman L, et al. **Acta Chir Scand** 1990 Jun–Jul;156(6–7):475–85 (71 ref.)

Intraoperative radiation therapy and hyperthermia. Morbidity and mortality from this combined treatment modality for unresectable intra-abdominal carcinomas. Colacchio TA, et al. **Arch Surg** 1990 Mar;125(3):370–5

Combined therapy for inflammatory breast cancer. Donegan WL, et al. **Arch Surg** 1990 May;125(5):578–82

Choices in treating carcinoma of the esophagus. Skinner DB. **Can J Surg** 1989 Nov;32(6):420–3

Predicting the rate and extent of locoregional failure after breast conservation therapy for early breast cancer. Stotter AT, et al. **Cancer** 1989 Dec 1;64(11):2217–25

Effectiveness of peanut agglutinin–binding glyco–related antigen and cyclophosphamide on metastasis of Lewis lung carcinoma. Kiba M, et al. **Cancer Invest** 1989;7(3):237–42

Inhibition of a transplantable pancreatic carcinoma by castration and estradiol administration in rats. Sumi C, et al. **Cancer Res** 1989 Dec 1;49(23):6687–92

Nasopharyngeal cancer, undifferentiated type: the medical oncologist's viewpoint. Cvitkovic E, et al. **Cancer Treat Res** 1989;42:175–211 (122 ref.)

Hepatic arterial embolization utilizing a coaxial catheter system: technical note. Coldwell DM. **Cardiovasc Intervent Radiol** 1990 Feb–Mar;13(1):53–4

Primary carcinoma of the bulbo–membranous urethra. Yang CR, et al. **Chung Hua I Hsueh Tsa Chih** 1989 May; 43(5):331–4

Radiotherapy and chemotherapy for nasopharyngeal carcinoma. Tsao SY, et al. **Ear Nose Throat J** 1990 Apr; 69(4):272–8

Stage III carcinoma of the endometrium. Results of treatment. Ahmad K, et al. **Eur J Gynaecol Oncol** 1989; 10(6):383–9 (34 ref.)

Carcinoma of the vulva (1981–1985): analysis of a radio–surgical approach. Atlante G, et al. **Eur J Gynaecol Oncol** 1989;10(5):341–8

Percutaneous catheterization of the peritoneal cavity guided by ultrasonography in the treatment of intraabdominal carcinoma of the ovary. Bennedbaek O, et al. **Eur J Gynaecol Oncol** 1989;10(5):300–1

Cervix uteri cancer and pregnancy. Bokhman JV, et al. **Eur J Gynaecol Oncol** 1989;10(6):406–11 (3 ref.)

Stage II endometrial carcinoma: prognostic factors and the results of treatment. Andersen ES. **Gynecol Oncol** 1990 Aug;38(2):220–3

Salvage whole–abdominal irradiation following chemotherapy failure in epithelial ovarian carcinoma. Linstadt DE, et al. **Gynecol Oncol** 1990 Mar;36(3):327–30

In vitro cytotoxicity of human recombinant tumor necrosis factor alpha in association with radiotherapy in a human ovarian carcinoma cell line. Manetta A, et al. **Gynecol Oncol** 1990 Aug;38(2):200–2

Comparison of short–lived high–LET alpha–emitting radionuclides lead–212 and bismuth–212 to low–LET X–rays on ovarian carcinoma. Rotmensch J, et al. **Gynecol Oncol** 1989 Dec;35(3):297–300

Paradoxical effects of tumour necrosis factor in experimental ovarian cancer. Malik ST, et al. **Int J Cancer** 1989 Nov 15;44(5):918–25

Carcinoma of the cervix and pregnancy. Baltzer J, et al. **Int J Gynaecol Obstet** 1990 Apr;31(4):317–23

Poly I:C activated macrophages are tumoricidal for TNF–alpha–resistant 3LL tumor cells. Remels L, et al. **J Immunol** 1990 Jun 1;144(11):4477–86

Determinants of primary therapy of early stage breast cancer. Ferguson CM, et al. **J Med Assoc Ga** 1990 Jun;79(6):351–4

Hydroxyurea plus pelvic irradiation versus placebo plus pelvic irradiation in nonsurgically staged stage IIIB cervical cancer. Piver M, et al. **J Surg Oncol** 1989 Oct; 42(2):120–5

Palliative treatments for rectal carcinoma [letter] **Lancet** 1990 Sep 29;336(8718):807

Effect of psychosocial treatment on survival of patients with metastatic breast cancer [see comments] Spiegel D, et al. **Lancet** 1989 Oct 14;2(8668):888–91 Comment in: Lancet 1989 Nov 18;2(8673):1209–10.

Carcinoma of the pancreas: are we making progress? Cameron JL. **Md Med J** 1990 Apr;39(4):361–3

Adjuvant therapy for carcinoma of the rectum. Elias EG. **Md Med J** 1990 Aug;39(8):711–2

Does adjuvant therapy work in colon cancer? [editorial; comment] Mayer RJ. **N Engl J Med** 1990 Feb 8; 322(6):399–401 Comment on: N Engl J Med 1990 Feb 8;322(6):352–8.

Levamisole and fluorouracil for adjuvant therapy of resected colon carcinoma [see comments] Moertel CG, et al. **N Engl J Med** 1990 Feb 8;322(6):352–8 Comment in: N Engl J Med 1990 Feb 8;322(6):399–401. Comment in: N Engl J Med 1990 Jul 19;323(3):197–8.

Effect of combined treatment with magnetic induction hyperthermia and chemotherapy in a rabbit brain tumor model. Tanaka T, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):377–81

Clinical status of monoclonal antibodies in the treatment of colorectal carcinoma. Mellstedt H, et al. **Oncology (Williston Park)** 1989 Dec;3(12):25–32; discussion 37–9, 42 (32 ref.)

Biological effects of recombinant human GM–CSF. Shadduck RK, et al. **Prog Clin Biol Res** 1990;352:365–74

Primary treatment of carcinoma of the anus by combined radiotherapy and chemotherapy. Tveit KM, et al. **Scand J Gastroenterol** 1989 Dec;24(10):1243–7

LHRH analogue as a depot preparation (Zoladex) in the treatment of advanced carcinoma of the prostate followed by orchiectomy as a second line therapy—a phase II study. Iversen P, et al. **Scand J Urol Nephrol** 1989;23(3):177–83

Clinical update on the role of fluorouracil and recombinant interferon alfa–2a in the treatment of colorectal carcinoma. Wadler S, et al. **Semin Oncol** 1990 Feb;17(1 Suppl 1):16–21; discussion 38–41

Ovarian cancer. Eriksson JH, et al. **Semin Oncol Nurs** 1990 Aug;6(3):214–27 (68 ref.)

Preoperative hyperthermochemoradiotherapy for patients with esophageal carcinoma or rectal carcinoma [published erratum appears in Semin Surg Oncol 1990;6(3):199] Ueo H, et al. **Semin Surg Oncol** 1990;6(1):8–13

Monitoring of hormonal therapy in patients with metastatic breast carcinoma by plasma marker protein profiles. Haagensen DE Jr, et al. **Surg Forum** 1978;29:162–4

The role of pre–resectional laser recanalization for obstructing carcinomas of the colon and rectum. Eckhauser ML, et al. **Surgery** 1989 Oct;106(4):710–6; discussion 716–7

Alpha–2 interferon and 5–fluorouracil in advanced colorectal cancer. Fornasiero A, et al. **Tumori** 1990 Aug 31; 76(4):385–8

[Cancer of the lips. Results of the treatment of 299 patients] Cowen D, et al. **Ann Otolaryngol Chir Cervicofac** 1990; 107(2):121–5 (Eng. Abstr.) **(Fre)**

[Multidisciplinary approach. Disagreement in a case of cavum cancer] **Bull Cancer (Paris)** 1989;76(9):1041–8 **(Fre)**

[Long–term results of radio–surgical treatment of operable carcinoma of the cervix uteri] Lasry S, et al. **Bull Cancer (Paris)** 1990;77(4):355–62 (Eng. Abstr.) **(Fre)**

[Systemic B.C.G. infection after intravesical B.C.G. therapy of in situ carcinoma of the bladder (letter)] Gatfosse M, et al. **Rev Med Interne** 1990 Mar–Apr;11(2):181–2 **(Fre)**

[Treatment of advanced pancreatic cancer] Lersch C, et al. **Dtsch Med Wochenschr** 1990 Mar 2;115(9):340–2 (21 ref.) **(Ger)**

[Integrated radiotherapy–surgery of advanced carcinoma of the rectum] Puglionisi A, et al. **Chir Patol Sper** 1986 Jun–Aug;34(3–4):31–54 (108 ref.) **(Ita)**

[Carcinoma of the palate. Clinical cases] Caldarola F, et al. **Minerva Stomatol** 1990 Apr;39(4):315–7 (Eng. Abstr.) **(Ita)**

[Carcinoma of the tonsil. Case contributions] Caldarola F, et al. **Minerva Stomatol** 1990 Jun;39(6):463–5 (Eng. Abstr.) **(Ita)**

[The therapy of carcinomas in the oromaxillofacial area. IV. Carcinomas of the buccal mucosa] Tartaro S, et al. **Minerva Stomatol** 1990 Jan;39(1):53–6 (Eng. Abstr.) **(Ita)**

[Carcinoma of the oral cavity: integrated treatment] Vercellino V, et al. **Minerva Stomatol** 1989 Aug;38(8):863–8 (35 ref.) (Eng. Abstr.) **(Ita)**

[Prognostic factors of common epithelial ovarian cancer treated by surgery and cisplatin based combination chemotherapy] Sasaki H, et al. **Gan No Rinsho** 1989 Oct; 35(13):1615–20 (Eng. Abstr.) **(Jpn)**

[Penile cancer] Fosså SD, et al. **Tidsskr Nor Laegeforen** 1990 Apr 30;110(11):1354–6 (22 ref.) (Eng. Abstr.) **(Nor)**

[The degree of malignancy and late treatment results in epithelial tumors of the lacrimal gland] Poliakova SI. **Oftalmol Zh** 1989;(3):162–6 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Hepatic giant cell carcinoma. An ultrastructural and immunohistochemical study. Hood DL, et al. **Am J Clin Pathol** 1990 Jan;93(1):111–6

Nucleolar organizer regions, proliferative activity and DNA index in gastric carcinoma. Rosa J, et al. **Histopathology** 1990 Jun;16(6):614–6

Fibrillary cytoplasmic inclusions in neoplastic Paneth cells. Watson PH. **Histopathology** 1990 Jan;16(1):69–74

Immunohistochemical expression of epidermal growth factor receptors in human adrenocortical carcinoma. Kamio T, et al. **Hum Pathol** 1990 Mar;21(3):277–82

Diversity in immunoreactivity of tumor–derived cytokeratin monoclonal antibodies. Sundström BE, et al. **J Histochem Cytochem** 1989 Dec;37(12):1845–54

Ultrastructural study of the histogenesis of salivary gland mucoepidermoid carcinoma. Chaudhry AP, et al. **J Oral Pathol Med** 1989 Aug;18(7):400–9 (33 ref.)

Computer assisted efficiency testing of different sampling methods for selective nuclear graphic tablet morphometry. Fleege JC, et al. **Lab Invest** 1990 Aug;63(2):270–5

Gastric parietal cell carcinoma with an unusual, lymphoma–like histologic appearance: report of a case. Robey–Cafferty SS, et al. **Mod Pathol** 1989 Sep;2(5):536–40

In situ distribution of oncogene products and growth factor receptors in breast carcinoma: c–erbB–2 oncoprotein, EGFr, and PDGFr–beta–subunit. Kommoss F, et al. **Mol Cell Probes** 1990 Feb;4(1):11–23

Spindle cell carcinoma of the conjunctiva. An immunohistochemical and ultrastructural study of six cases. Huntington AC, et al. **Ophthalmology** 1990 Jun;97(6):711–7

Hürthle–cell neoplasms of the thyroid gland. Flint A, et al. **Pathol Annu** 1990;25 Pt 1:37–52 (69 ref.)

Ultrastructural characterization of enterochromaffin–type cells in human gastric carcinoma. Ohtani H. **Tohoku J Exp Med** 1990 Apr;160(4):333–42

Nucleolar organizer regions in normal, hyperplastic and neoplastic parathyroid glands. Boquist LL. **Virchows Arch [A]** 1990;417(3):237–41

Collagen secretion granules in reactive stromal myofibroblasts, with preliminary observations on their occurrence in spindle cell tumours [published erratum appears in Virchows Arch [A] 1990;416(3):280] Eyden BP. **Virchows Arch [A]** 1989;415(5):437–45

Nucleolar grading of breast cancer. Comparative studies on frequency and localization of nucleoli and histology, stage, hormonal receptor status and lectin histochemistry. Helpap B. **Virchows Arch [A]** 1989;415(6):501–8

[Scanning electronic microscopy study of nasopharyngeal carcinoma] Dallai S, et al. **Boll Soc Ital Biol Sper** 1990 Mar;66(3):303–8 (Eng. Abstr.) **(Ita)**

URINE

Steroid profile in urine: a useful tool in the diagnosis and follow up of adrenocortical carcinoma. Gröndal S, et al. **Acta Endocrinol (Copenh)** 1990 May;122(5):656–63

Detection of a small molecular species of human chorionic gonadotropin in the urine of patients with carcinoma of the cervix and cervical intraepithelial neoplasia: comparison with other assays for human chorionic gonadotropin and its fragments. Norman RJ, et al. **Gynecol Oncol** 1990 May;37(2):254–9

New urine test for diagnosis of urothelial carcinoma [news] **Oncology (Williston Park)** 1990 Mar;4(3):70

[Flow cytometry in micturitional urine: its clinical application in cases of bladder cancer] Dadone C, et al. **Minerva Urol Nefrol** 1990 Apr–Jun;42(2):77–80 (Eng. Abstr.) **(Ita)**

VETERINARY

Immunohistochemical detection of intermediate filament proteins in formalin fixed normal and neoplastic canine tissues. Desnoyers MM, et al. **Can J Vet Res** 1990 Jun; 54(3):360–5

Surgical excision of ectopic thyroid carcinoma involving the base of the tongue in dogs: three cases (1980–1987). Lantz GC, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1606–8

Incidence and morphology of spontaneous thyroid tumours in different strains of rats. Kaspareit–Rittinghausen J, et al. **J Comp Pathol** 1990 May;102(4):421–32

Mandibular mucoepidermoid carcinoma in a rabbit. Gillett CS, et al. **Lab Anim Sci** 1990 Jul;40(4):422–3

Adjuvant chemotherapy for sarcomas and carcinomas. Hammer AS, et al. **Vet Clin North Am Small Anim Pract** 1990 Jul; 20(4):1015–36 (59 ref.)

Canine lingual acinic cell carcinoma (clear cell variant) of minor salivary gland. Brunnert SR, et al. **Vet Pathol** 1990 May;27(3):203–5

Esophageal neuroendocrine carcinoma in a cat. Patnaik AK, et al. **Vet Pathol** 1990 Mar;27(2):128–30

Canine perineal tumours. Berrocal A, et al. **Zentralbl Veterinarmed [A]** 1989 Dec;36(10):739–49

CARCINOMA 256, WALKER

ANALYSIS

Ultrastructural studies on RNA and DNA components of isolated nucleoli of Walker 256 carcinosarcoma. Narayan KS, et al. **Exp Cell Res** 1966 Jan;41(1):81–98

DRUG THERAPY

Thiol and thioether suppression of cis-platinum-induced nephrotoxicity in rats bearing the Walker 256 carcinosarcoma. Jones MM, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1937–41

Methotrexate increases the activation and cytotoxicity of 5-fluorouracil: detected by 19F n.m.r. in vivo. McSheehy PM, et al. **Biochem Soc Trans** 1989 Dec;17(6):1050

Prediction of 5-fluorouracil cytotoxicity towards the Walker carcinosarcoma using peak integrals of fluoronucleotides measured by MRS in vivo. McSheehy PM, et al. **Br J Cancer** 1989 Sep;60(3):303–9

Effects of a somatostatin analogue (SMS 201–995) on the growth and development of hepatic tumour derived by intraportal injection of Walker cells in the rat. Nott DM, et al. **Br J Surg** 1989 Nov;76(11):1149–51

Effects of somatostatin analogue SMS 201–995 [letter] Poston GJ, et al. **Br J Surg** 1990 Jun;77(6):714–5

Brain uptake and anticancer activities of vincristine and vinblastine are restricted by their low cerebrovascular permeability and binding to plasma constituents in rat. Greig NH, et al. **Cancer Chemother Pharmacol** 1990; 26(4):263–8

The antitumor activity of Cu(II)KTS, the copper (II) chelate of 3-ethoxy-2-oxobutyraldehyde bis(thiosemicarbazone). Crim JA, et al. **Cancer Res** 1967 Jul;27(7):1278–85

Antitumor effect of GPA1734 in rat Walker 256 carcinoma. Missirlis E, et al. **Invest New Drugs** 1990 May;8(2):145–7

Anticancer-agent-linked phosphonates with antiosteolytic and antineoplastic properties: a promising perspective in the treatment of bone-related malignancies? Klenner T, et al. **J Cancer Res Clin Oncol** 1990;116(4):341–50

[Influences of antitumoral chemotherapy on body composition and nitrogen balance: experimental study] Lima-Gonçalves E, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Jan–Feb;44(1):1–6 (Eng. Abstr.) **(Por)**

[Thiol-dependent protective systems in alimentary prevention of the toxic effect of carminomycin] Lenskaia EG, et al. **Antibiot Khimioter** 1990 Apr;35(4):36–9 (Eng. Abstr.) **(Rus)**

[The effect of ferromagnet particles on the growth of Walker carcinosarcoma 256 in Wistar rats] Volkonskiĭ VA. **Eksp Onkol** 1990;12(2):74–6 (Eng. Abstr.) **(Rus)**

[The influence on tumor growth and the function of the thiol-dependent systems of the liver of excess cooking fat and vitamin E in the diet. The effects of carminomycin] Tazhibaev ShS, et al. **Vopr Pitan** 1990 May–Jun;(3):47–51 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Basement membrane collagen-degrading activity from a malignant tumor is inhibited by anthracycline antibiotics. Karakiulakis G, et al. **Biochim Biophys Acta** 1990 Aug 17; 1035(2):218–22

[Biorhythm study of the alpha-glycerophosphate dehydrogenase activity of the peripheral blood lymphocytes in rats with Walker carcinosarcoma] Strigun LM, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):731–5 (Eng. Abstr.) **(Rus)**

METABOLISM

Decreased anterior pituitary T3 nuclear receptors in a Walker 256 carcinoma-bearing rat model of nonthyroidal disease. Hupart KH, et al. **Acta Endocrinol (Copenh)** 1989 Dec; 121(6):811–6

Increased liver alanine in the tumour-bearing host. Altered levels of some enzymes involved in alanine metabolism. Goodlad GA, et al. **Biochem Int** 1990;21(2):279–87

Tentative identification of the toxohormones of cancer cachexia: roles of vasopressin, prostaglandin E2 and cachectin-TNF. Siddiqui RA, et al. **Biochem Int** 1990; 20(4):787–97

The oxidation of leucine in tumour-bearing rats. Argilés JM, et al. **Biochem J** 1990 May 15;268(1):241–4

Lipid metabolism during the initiation of lactation in the rat. The effects of starvation and tumour growth. Evans RD, et al. **Biochem J** 1989 Sep 15;262(3):887–95

Oxidation of branched-chain amino acids in tumor-bearing rats. Argilés JM, et al. **Biochem Soc Trans** 1989 Dec; 17(6):1044–5

Effect of the Walker 256 carcinoma in rats on insulin-stimulated glucose metabolism in soleus muscle in vitro. Leighton B, et al. **Biochem Soc Trans** 1989 Dec; 17(6):1043–4

Evidence of 1,25-dihydroxyvitamin D synthesis by the rat Walker carcinosarcoma 256. Traba ML, et al. **Cancer Lett** 1990 Aug;53(1):5–8

Short-term metabolic fate of L-[13N]glutamate in the Walker 256 carcinosarcoma in vivo. Filc-DeRicco S, et al. **Cancer Res** 1990 Aug 15;50(16):4839–44

Disposition of anticancer drugs after bolus arterial administration in a tissue-isolated tumor perfusion system. Ohkouchi K, et al. **Cancer Res** 1990 Mar 1;50(5):1640–4

Effects of tumor necrosis factor alpha on skeletal muscle and Walker 256 carcinosarcoma protein metabolism studied in vivo. Tayek JA, et al. **Cancer Res** 1990 May 1;50(9):2765–8

Imaging peripheral benzodiazepine receptors in brain tumors in rats: in vitro binding characteristics. Ikezaki K, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):580–7

[Body composition changes in cancer: an experimental study] Waitzberg DL, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 May–Jun; 44(3):104–10 (Eng. Abstr.) **(Por)**

[The pharmacokinetics of hematoporphyrin, its derivative and fluorescein during the development of carcinosarcoma] Barabash RD, et al. **Farmakol Toksikol** 1990 May–Jun; 53(3):24–6 (Eng. Abstr.) **(Rus)**

PATHOLOGY

The effects of tumour necrosis factor-alpha (cachectin) and tumour growth on hepatic amino acid utilization in the rat. Argilés JM, et al. **Biochem J** 1990 Feb 15;266(1):123–6

Effects of aspirin-like drugs on Walker 256 tumor growth and cachexia in rats. Homem-de-Bittencourt Júnior PI, et al. **Braz J Med Biol Res** 1989;22(8):1039–42

Effect of diets with different protein levels on the growth of Walker 256 carcinosarcoma in rats. Waitzberg DL, et al. **Braz J Med Biol Res** 1989;22(4):447–55

The influence of prosthetic materials on the growth of Walker 256 tumour in the rat. Law NW. **Eur J Surg Oncol** 1990 Jun;16(3):237–9

Diacylglycerols and the protein kinase inhibitor H-7 suppress cell polarity and locomotion of Walker 256 carcinosarcoma cells. Keller HU, et al. **Int J Cancer** 1989 Nov 15; 44(5):934–9

Chemotactic activity of bone and platelet-derived TGF-beta for bone-metastasizing rat Walker 256 carcinosarcoma cells. Orr FW, et al. **Invasion Metastasis** 1990;10(4):241–52

Macrophages and carcinoma cells migrate at the same pace to the lymph nodes. Verhoeven D, et al. **Lymphology** 1989 Sep;22(3):141–3

Bone invasion by Walker 256 carcinoma, line A in young and adult rats: effects of etidronate. Bassani D, et al. **Oncology** 1990;47(2):160–5

PHYSIOPATHOLOGY

Insulin secretion in Walker 256 tumor cachexia. Fernandes LC, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):E1033–6

Interstitial pressure gradients in tissue-isolated and subcutaneous tumors: implications for therapy. Boucher Y, et al. **Cancer Res** 1990 Aug 1;50(15):4478–84

RADIONUCLIDE IMAGING

Tumor visualization with a radioiodinated phospholipid ether. Counsell RE, et al. **J Nucl Med** 1990 Mar;31(3):332–6

RADIOTHERAPY

[The effect of whole-body and local irradiation, modified by hyperglycemia, on the metastasis of Walker carcinosarcoma 256 in rats] Kutlimuratov AB, et al. **Eksp Onkol** 1990;12(2):76–9 (Eng. Abstr.) **(Rus)**

SURGERY

[Sequential MRI and CT monitoring in cryosurgery—an experimental study in rats] Isoda H. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Dec 25; 49(12):1499–508 (Eng. Abstr.) **(Jpn)**

THERAPY

[Enhancing hyperthermic cytotoxicity in Walker-256 by intraarterial injection of warmed saline] Sato T. **Gan To Kagaku Ryoho** 1990 Mar;17(3 Pt 2):464–7 (Eng. Abstr.) **(Jpn)**

[Warm drug solution injected into tumor vessel may enhance antitumor effect] Satou T. **Gan To Kagaku Ryoho** 1990 Aug; 17(8 Pt 2):1763–7 (Eng. Abstr.) **(Jpn)**

[The use of magnetically controlled microcapsules in the combined (chemothermomagnetic) therapy of experimental tumors] Volkonskiĭ VA, et al. **Biull Eksp Biol Med** 1990 Mar;109(3):295–6 **(Rus)**

ULTRASTRUCTURE

Formation of microspherules in nucleoli of tumor cells treated with high doses of actinomycin D. Unuma T, et al. **Cancer Res** 1967 Jul;27(7):1232–42

CARCINOMA, BASAL CELL

Basal cell carcinoma of the head and neck region—a five-year study (1984–88). Foo CL, et al. **Ann Acad Med Singapore** 1990 Mar;19(2):182–5

Invasive basal cell carcinoma of the temporal bone. Gussack GS, et al. **Ear Nose Throat J** 1989 Aug;68(8):605–6, 609–11

Giant basal cell carcinoma of the back. Canterbury TD, et al. **W V Med J** 1990 Jul;86(7):291–2

[The basal cell nevus syndrome] Semrádová V, et al. **Cas Lek Cesk** 1990 Mar 9;129(10):312–4 (Eng. Abstr.) **(Cze)**

ANALYSIS

Amyloid deposits in basal cell carcinoma of the skin. A pathologic study of 199 cases. Satti MB, et al. **J Am Acad Dermatol** 1990 Jun;22(6 Pt 1):1082–7

Constitutive absence and interferon-gamma-induced expression of adhesion molecules in basal cell carcinoma. Taylor RS, et al. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):721–6

Localization of integrin receptors for fibronectin, collagen, and laminin in human skin. Variable expression in basal and squamous cell carcinomas. Peltonen J, et al. **J Clin Invest** 1989 Dec;84(6):1916–23

BLOOD

Hemoglobin Hope found in a patient with basal cell carcinoma of the genial region. Araki E, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Sep;52(6):972–6

COMPLICATIONS

Spectrum of histological lesions in 185 consecutive prostatic specimens. Mittal BV, et al. **J Postgrad Med** 1989 Jul; 35(3):157–61

Metastatic basal cell carcinoma causing cord compression. Quin JD, et al. **Scott Med J** 1990 Jun;35(3):85

[Facial paralysis caused by retroauricular basal cell carcinoma] Ramos Macías A, et al. **Acta Otorrinolaringol Esp** 1990 Jan–Feb;41(1):57–60 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Juvenile basal cell carcinoma. Cullen KW, et al. **Br J Clin Pract** 1989 Nov;43(11):419–20

Non-melanomatous skin cancer in the elderly: diagnosis and management. Proper SA, et al. **Geriatrics** 1990 Jul; 45(7):57–62, 65 (29 ref.)

Pigmented basal cell carcinoma developing on the lower extremities—three cases masquerading as malignant melanoma. Ono T, et al. **J Dermatol** 1989 Aug;16(4):325–9

The Gorlin-Goltz syndrome: case report. Manzi G, et al. **Ophthalmologica** 1990;200(2):104–6

Cutaneous odontogenic sinus simulating a basal cell carcinoma: case report and literature review. Cohen PR, et al. **Plast Reconstr Surg** 1990 Jul;86(1):123–7 (34 ref.)

[Digital 20 MHz sonography of basalioma in the B-scan] Hoffmann K, et al. **Hautarzt** 1990 Jun;41(6):333–9 (Eng. Abstr.) **(Ger)**

[Detection of basal-cell nevus syndrome in patients with multiple skin basiliomas] Chudina AP, et al. **Vopr Onkol** 1989;35(10):1166–9 (Eng. Abstr.) **(Rus)**

[Basal cell carcinoma of the external auditory canal] Nieto A, et al. **An Otorrinolaringol Ibero Am** 1989;16(6):641–8 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Photodynamic therapy by topical meso-tetraphenylporphinesulfonate tetrasodium salt administration in superficial basal cell carcinomas. Santoro O, et al. **Cancer Res** 1990 Aug 1;50(15):4501–3

Systemic cytotoxic therapy of basal cell carcinoma. A review of the literature. Pfeiffer P, et al. **Eur J Cancer** 1990 Jan; 26(1):73–7 (24 ref.)

Cisplatin-based chemotherapy in advanced basal and squamous cell carcinomas of the skin: results in 28 patients including 13 patients receiving multimodality therapy. Guthrie TH Jr, et al. **J Clin Oncol** 1990 Feb;8(2):342–6

Hyposensitivity of basal cell naevus syndrome dermal fibroblasts to ultraviolet A [letter] Bassukus ID, et al. **Lancet** 1990 Sep 29;336(8718):825

Curaderm—or is it? [letter; comment] Cham B, et al. **Med J Aust** 1990 Mar 19;152(6):329–30 Comment on: Med J Aust 1989 Nov 6;151(9):541–2.

Curaderm—or is it? [letter] [see comments] Francis DB, et al. **Med J Aust** 1989 Nov 6;151(9):541–2 Comment in: Med J Aust 1990 Mar 19;152(6):329–30.

[The importance of local administration of 5% 5-fluorouracil in the therapy of senile keratoses and basocellular carcinoma] Poljački M, et al. **Med Pregl** 1989; 42(3–4):149–51 (Eng. Abstr.) **(Scr)**

ENZYMOLOGY

Activity of the proteolytic enzyme guanidinobenzoatase in human basal cell carcinoma. Steven FS, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(6):360–4

EPIDEMIOLOGY

Incidence of non-melanoma skin cancer in West Glamorgan, South Wales. Roberts DL. **Br J Dermatol** 1990 Mar; 122(3):399–403

Association of nonmelanoma skin cancer and actinic keratosis with cumulative solar ultraviolet exposure in Maryland watermen. Vitasa BC, et al. **Cancer** 1990 Jun 15; 65(12):2811–7

Incidence and determinants of skin cancer in a high-risk Australian population. Green A, et al. **Int J Cancer** 1990 Sep 15;46(3):356–61

Basal cell carcinoma. A population-based incidence study in Rochester, Minnesota. Chuang TY, et al. **J Am Acad Dermatol** 1990 Mar;22(3):413–7

Skin cancer in Geraldton, Western Australia: a survey of incidence and prevalence. Kricker A, et al. **Med J Aust** 1990 Apr 16;152(8):399–407

Incidence of skin cancer after renal transplantation in The

Netherlands. Hartevelt MM, et al. **Transplantation** 1990 Mar;49(3):506–9

[Basal cell epithelioma of the lip. Analysis of 42 cases] Bussani R, et al. **Pathologica** 1989 Sep–Oct;81(1075):499–504 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Facial reconstruction for radiation–induced skin cancer. Panje WR, et al. **Arch Otolaryngol Head Neck Surg** 1990 Apr;116(4):470–4

Risk factors for basal cell carcinoma. Hogan DJ, et al. **Int J Dermatol** 1989 Nov;28(9):591–4

The relationship of sun exposure and solar elastosis to skin cancer in a high risk population. Carey FA, et al. **Ir J Med Sci** 1990 Feb;159(2):44–7

[Basal cell carcinoma of the scalp caused by contact with chewing tobacco] Sassolas B, et al. **Ann Dermatol Venereol** 1989;116(9):663–5 (27 ref.) **(Fre)**

[Radiation–induced malignant skin tumors in the hands of five doctors] Hashizume S, et al. **Gan No Rinsho** 1990 Feb; 36(2):224–8 (Eng. Abstr.) **(Jpn)**

GENETICS

Sister chromatid exchange and chromosome fragility in the nevoid basal cell carcinoma syndrome. Bale AE, et al. **Cancer Genet Cytogenet** 1989 Oct 15;42(2):273–9

Multiple clonal chromosome abnormalities in a superficial basal cell epithelioma. Scappaticci S, et al. **Cancer Genet Cytogenet** 1989 Oct 15;42(2):309–11

Nevoid basal cell carcinoma syndrome and acrokeratosis verruciformis. Occurrence of two rare inherited autosomal dominant conditions in the same patient. Humbert P, et al. **Dermatologica** 1990;180(3):169–70

Ras oncogene mutations in basal cell carcinomas and squamous cell carcinomas of human skin. van der Schroeff JG, et al. **J Invest Dermatol** 1990 Apr;94(4):423–5

Deletion of the c–Ha–ras–1 allele in human skin cancers. Ananthaswamy HN, et al. **Mol Carcinog** 1989;2(5):298–301

[Multiple basaloid follicular hamartomas in 2 members of a family with Gorlin–Goltz syndrome] Gartmann H, et al. **Z Hautkr** 1989 Oct 15;64(10):915–8 (Eng. Abstr.) **(Ger)**

[Analysis of point mutations of Ha–ras gene in basaliomas and spinaliomas usiang the polymerase chain reaction (PCR) technic] Peris K, et al. **G Ital Dermatol Venereol** 1989 Oct;124(10):429–34 (Eng. Abstr.) **(Ita)**

[Disruption of DNA replication in non–irradiated cells in basal cell nevus syndrome and the effect of ionizing radiation] Barenfeld LS, et al. **Tsitologiia** 1989 Jul; 31(7):775–84 (Eng. Abstr.) **(Rus)**

HISTORY

[Chalazion or basalioma in an oil painting of the National Portraits Gallery in London] Roth W, et al. **Hautarzt** 1989 Dec;40(12):787–8 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Abnormal expression of G71 antibody at the epidermal basement membrane in basal cell carcinoma. Tidman MJ, et al. **Cancer** 1990 May 1;65(9):1955–9

METABOLISM

Immunohistochemical study on keratin expression in certain cutaneous epithelial neoplasms. Basal cell carcinoma, pilomatricoma, and seborrheic keratosis. Shimizu N, et al. **Am J Dermatopathol** 1989 Dec;11(6):534–40

Expression of 38–kD cell–surface glycoprotein in transformed human keratinocyte cell lines, basal cell carcinomas, and epithelial germs. Klein CE, et al. **J Invest Dermatol** 1990 Jul;95(1):74–82

Tenascin distribution in basal cell carcinomas. Stamp GW. **J Pathol** 1989 Nov;159(3):225–9

MORTALITY

Long–term survival following nodal metastases from basal cell carcinoma. Raszewski RL, et al. **Ann Plast Surg** 1990 Feb;24(2):170–5 (38 ref.)

PATHOLOGY

Basal cell carcinoma with follicular differentiation. Reed RJ. **Am J Dermatopathol** 1989 Oct;11(5):497–505

Basal cell carcinoma with follicular differentiation. Rosai J. **Am J Dermatopathol** 1989 Oct;11(5):479–97

Basal cell carcinoma with follicular differentiation [letter] Sánchez Yus E, et al. **Am J Dermatopathol** 1989 Oct; 11(5):505–7

Basal cell burn carcinoma. Stromberg BV, et al. **Ann Plast Surg** 1990 Feb;24(2):186–8

Basal cell epithelioma of the sole. Berger RA, et al. **Arch Dermatol** 1966 Sep;94(3):317–9 (8 ref.)

Basal cell epithelioma of the penis. Hartman DL. **Arch Dermatol** 1966 Sep;94(3):326–7 (8 ref.)

Histologic changes in superficial basal cell epithelioma and Bowen's disease by intralesional injection of recombinant interleukin 2: recombinant interleukin 2 may induce redifferentiation of malignant tumor cells in vivo [letter] Mihara M, et al. **Arch Dermatol** 1990 Aug;126(8):1107

Multiple neck papules in a child with acute lymphocytic leukemia. Multiple basal cell carcinomas (BCCs). Whitmore SE, et al. **Arch Dermatol** 1990 Jan;126(1):102, 104–5 (6 ref.)

Non–melanoma skin cancer [letter] Pickles T. **BMJ** 1989 Dec 9;299(6713):1464

Intraneuronal spread of a basal–cell carcinoma. Rigg BM. **Br J Surg** 1966 May;53(5):479–81

Comparative morphometric analysis of aggressive and ordinary basal cell carcinoma of the skin. de Rosa G, et al. **Cancer** 1990 Feb 1;65(3):544–9

Desmoplastic trichoepithelioma nosology. Reappraisal about a case developed on a varicella scar. Blanc D, et al. **Dermatologica** 1990;180(1):44–7

Morphea–like basal cell epithelioma [letter] Cohen HJ. **Int J Dermatol** 1989 Dec;28(10):684

Neurotropic basal cell carcinoma [letter] Grunwald MH, et al. **Int J Dermatol** 1989 Oct;28(8):555–6

Linear basal cell epithelioma [letter] Lewis JE. **Int J Dermatol** 1989 Dec;28(10):682–4

Basal cell carcinoma of the nipple. Report of two cases. Cain RJ, et al. **J Am Acad Dermatol** 1990 Feb;22(2 Pt 1):207–10 (12 ref.)

Carcinoembryonic antigen in basal cell neoplasms in black patients: an immunohistochemical study. Kidd MK, et al. **J Am Acad Dermatol** 1989 Nov;21(5 Pt 1):1007–10

Fluorescence in pigmented basal cell carcinoma caused by formaldehyde [letter] Deshmukh SD, et al. **J Clin Pathol** 1989 Sep;42(9):1002

Desmoplastic trichilemmoma: histologic variant resembling invasive carcinoma. Hunt SJ, et al. **J Cutan Pathol** 1990 Feb;17(1):45–52

Altered expression of major histocompatibility complex (MHC) antigens by epidermal tumours. Markey AC, et al. **J Cutan Pathol** 1990 Apr;17(2):65–71

Pigmented BCC and LMM in a single lesion [letter] Miori L, et al. **J Dermatol Surg Oncol** 1989 Dec;15(12):1301–2

Basal cell carcinoma and infundibuloma arising in separate sebaceous nevi during childhood. Piansay–Soriano EF, et al. **J Dermatol Surg Oncol** 1989 Dec;15(12):1283–6

Basal cell carcinoma: an infrequent pedal reality. Chavis M, et al. **J Foot Surg** 1989 Jul–Aug;28(4):346–51

Basal cell adenocarcinoma of the parotid gland. Murty GE, et al. **J Laryngol Otol** 1990 Feb;104(2):150–1

Characteristics and behavior of eyelid carcinoma (basal cell, squamous cell sebaceous gland, and malignant melanoma). Loeffler M, et al. **Ophthalmic Surg** 1990 Jul;21(7):513–8 (22 ref.)

Basal cell adenocarcinomas of the major salivary glands. Ellis GL, et al. **Oral Surg Oral Med Oral Pathol** 1990 Apr; 69(4):461–9

The histogenesis of the microinvasive basal cell carcinoma of the esophagus. Rubio CA, et al. **Pathol Res Pract** 1990 Apr;186(2):223–7

Basal cell carcinoma in a 12–year–old boy. Comstock J, et al. **Pediatrics** 1990 Sep;86(3):460–3

Basal cell carcinoma in an elderly woman. Hood C. **Practitioner** 1989 Sep 8;233(1474):1160

Non–melanoma skin cancer. Mora RG. **Prim Care** 1989 Sep; 16(3):665–84 (45 ref.)

Histopathologic considerations in the management of basal cell carcinoma. Metcalf JS, et al. **Semin Dermatol** 1989 Dec; 8(4):259–65 (24 ref.)

The nevoid basal cell carcinoma syndrome—Gorlin's syndrome. Multiple jaw cysts and skin cancer. Gustafson G, et al. **Swed Dent J** 1989;13(4):131–9

[Basal cell carcinoma and mast cells] Yang ML. **Chung Hua Chung Liu Tsa Chih** 1989 Nov;11(6):404–6 (Eng. Abstr.) **(Chi)**

[Clinicopathologic observation of 36 cases of basal cell carcinoma of the facial region] Zhao YF. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1990 Jan; 25(1):32–4, 62 (Eng. Abstr.) **(Chi)**

[Basocellular carcinoma of the skin with metastases to lymph glands and the parotid] Bennedbaek O, et al. **Ugeskr Laeger** 1990 Apr 9;152(15):1096–8 (Eng. Abstr.) **(Dan)**

[Giant basocellular carcinoma of the eyelid] D'Hermies F, et al. **J Fr Ophtalmol** 1989;12(3):240–3 **(Fre)**

[Architectonics of fibrillary elements of the stroma in carcinomas of the chin area] Frîncu DL, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Apr–Jun;93(2):329–34 (Eng. Abstr.) **(Fre)**

[Basocellular epithelioma] Laso–Dosal F, et al. **Rev Med Liege** 1989 Dec 1;44(23):705–16 (64 ref.) **(Fre)**

[Metastatic basal cell carcinoma] Wengler U, et al. **Dtsch Med Wochenschr** 1990 Mar 16;115(11):418–21 (Eng. Abstr.) **(Ger)**

[The dermatoscope. A simplification of epiluminescent microscopy of pigmented skin changes] Braun–Falco O, et al. **Hautarzt** 1990 Mar;41(3):131–6 (Eng. Abstr.) **(Ger)**

[Desmoplastic trichoepithelioma with nevus cell nevi] Winzer M, et al. **Hautarzt** 1989 Oct;40(10):636–9 (Eng. Abstr.) **(Ger)**

[Determination of epidermal growth factor (EGF) receptors in basal cell carcinomas, squamous cell carcinomas and melanomas] Hagedorn M, et al. **Z Hautkr** 1990 Jun; 65(6):568–70 (Eng. Abstr.) **(Ger)**

[Digital 20 mhz sonography of the skin in preoperative diagnosis] Hoffmann K, et al. **Z Hautkr** 1989 Oct 15; 64(10):851–2, 855–8 (Eng. Abstr.) **(Ger)**

[Proliferating patterns of basal cell carcinoma—immunohistological study by means of anti–BrdU monoclonal antibody] Yoshimura K, et al. **Nippon Hifuka Gakkai Zasshi** 1990 Apr;100(5):575–80 (Eng. Abstr.) **(Jpn)**

[Uncommon location of basal cell epithelioma] Bogdanowski T, et al. **Przegl Dermatol** 1989 Jan–Mar;76(1):50–3 (Eng. Abstr.) **(Pol)**

[The fibroepithelial variant of basal–cell skin cancer (Pincus' "premalignant" fibroepithelioma)] Galil–Ogly GA, et al. **Arkh Patol** 1990;52(3):25–9 (Eng. Abstr.) **(Rus)**

[Nodular basalioma of the skin] Prikhod'ko SG, et al. **Vestn Dermatol Venerol** 1990;(3):67–9 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Hypersensitivity of skin fibroblasts from basal cell nevus syndrome patients to killing by ultraviolet B but not by ultraviolet C radiation. Applegate LA, et al. **Cancer Res** 1990 Feb 1;50(3):637–41

PREVENTION & CONTROL

A clinical trial of beta carotene to prevent basal–cell and squamous–cell cancers of the skin. The Skin Cancer Prevention Study Group [see comments] Greenberg ER, et al. **N Engl J Med** 1990 Sep 20;323(12):789–95 Comment in: N Engl J Med 1990 Sep 20;323(12):825–7.

PSYCHOLOGY

A psychosocial assessment of patients with basal cell carcinoma. Holfeld KI, et al. **J Dermatol Surg Oncol** 1990 Aug;16(8):750–3

RADIOTHERAPY

External irradiation of epithelial skin cancer [editorial; comment] Brady LW. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):491–2 Comment on: Int J Radiat Oncol Biol Phys 1990 Aug;19(2):235–42.

Interstitial iridium 192 for cutaneous carcinoma of the external nose. Crook JM, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan;18(1):243–8

External irradiation of epithelial skin cancer [see comments] Lovett RD, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug; 19(2):235–42 Comment in: Int J Radiat Oncol Biol Phys 1990 Aug;19(2):491–2.

The sensitivity of Langerhans cells to simulated solar radiation in basal cell carcinoma patients. Alcalay J, et al. **J Invest Dermatol** 1989 Dec;93(6):746–50

[Use of the TDF factor in soft roentgen radiotherapy] Landthaler M, et al. **Hautarzt** 1989 Dec;40(12):774–7 (Eng. Abstr.) **(Ger)**

SECONDARY

Basal cell carcinoma with hepatic metastases. Postlethwaite KR, et al. **Br J Oral Maxillofac Surg** 1990 Apr;28(2):111–3

Metastatic basal cell carcinoma of the vulva. Winkelmann SE, et al. **Gynecol Oncol** 1990 Jul;38(1):138–40 (12 ref.)

Orbital infiltration by eyelid skin carcinoma. Amoaku WM, et al. **Int Ophthalmol** 1990 Jul;14(4):285–94

Metastatic basal cell carcinoma: response to chemotherapy. Bason MM, et al. **J Am Acad Dermatol** 1990 May;22(5 Pt 2):905–8

SURGERY

Cryosurgery of eyelid basal cell carcinomas. Gunnarson G, et al. **Acta Ophthalmol (Copenh)** 1990 Jun;68(3):241–5

Spontaneous repair of lower eyelid after tumour excision. Hoppenreijs VP, et al. **Acta Ophthalmol (Copenh)** 1989 Aug; 67(4):447–54

Use of frozen section analysis in the treatment of basal cell carcinoma. Cataldo PA, et al. **Am J Surg** 1990 Jun; 159(6):561–3

Delayed pedicle separation in forehead flap nasal reconstruction. Kroll SS, et al. **Ann Plast Surg** 1989 Oct; 23(4):327–34; discussion 335–6

Secondary intention healing. The primary approach for management of selected wounds. Diwan R, et al. **Arch Otolaryngol Head Neck Surg** 1989 Oct;115(10):1248–9

Rotation flap. Powell V. **Aust Fam Physician** 1990 Mar; 19(3):388

Multidisciplinary surgical approach to the treatment of perinasal nonmelanoma skin cancer. Siegle RJ, et al. **Dermatol Clin** 1989 Oct;7(4):711–31 (36 ref.)

Micrographic (MOHS') surgery in the management of periocular basal cell epitheliomas. Downes RN, et al. **Eye** 1990;4 (Pt 1):160–8

Mohs micrographic surgery for nonmelanoma skin cancer. Frankel DH. **Hosp Pract [Off]** 1990 Feb 28;25(2A):15–6, 19–22

Twelve years' experience with the Mohs–Tromovitch technique of skin cancer removal. Callahan MA, et al. **Int Ophthalmol Clin** 1989 Winter;29(4):247–51

Immediate intraoperative tissue expansion. Johnson TM, et al. **J Am Acad Dermatol** 1990 Feb;22(2 Pt 1):283–7

Know your anatomy: perineural involvement of basal and squamous cell carcinoma on the face. Carlson KC, et al. **J Dermatol Surg Oncol** 1990 Sep;16(9):827–33

The principle of cosmetic junctions as applied to reconstruction of defects following Mohs surgery. Dzubow LM, et al. **J Dermatol Surg Oncol** 1990 Apr;16(4):353–5

The needle–scratch technique. Goldberg LH, et al. **J Dermatol Surg Oncol** 1990 Aug;16(8):719–20

Intraoperative tissue expansion using a Foley catheter following excision of a basal cell carcinoma. Greenbaum

SS, et al. **J Dermatol Surg Oncol** 1990 Jan;16(1):45–8
Reconstruction of the medical canthal area [letter; comment] Rodriguez-Sains RS. **J Dermatol Surg Oncol** 1989 Oct; 15(10):1124 Comment on: J Dermatol Surg Oncol 1989 May;15(5):524–30.
False-negative margins [letter] Zimmerman MC. **J Dermatol Surg Oncol** 1989 Oct;15(10):1124–5
Rhinectomy: timing and reconstruction. Teichgraeber JF, et al. **Otolaryngol Head Neck Surg** 1990 Apr;102(4):362–9 (30 ref.)
Lower eyelid reconstruction with the upper eyelid rotation flap. Papp C, et al. **Plast Reconstr Surg** 1990 Sep; 86(3):563–5; discussion 566–8
The chondrocutaneous postauricular free flap. Park C. **Plast Reconstr Surg** 1989 Nov;84(5):761–71
Mohs' micrographic surgery of the head and neck [see comments] Darmstadt GL, et al. **West J Med** 1990 Feb; 152(2):153–8 Comment in: West J Med 1990 Jun;152(6):722.
[Cryosurgical treatment of basal cell carcinoma of the eyelids] Faber WR, et al. **Ned Tijdschr Geneeskd** 1990 May 19;134(20):1002–5 (Eng. Abstr.) **(Dut)**
[Island flaps of the face] Darsonval V, et al. **Ann Otolaryngol Chir Cervicofac** 1990;107(2):115–20 (Eng. Abstr.) **(Fre)**
[Cryosurgery in the treatment of basal cell epithelioma of the eyelids] Caujolle JP, et al. **J Fr Ophtalmol** 1989; 12(4):279–86 (17 ref.) (Eng. Abstr.) **(Fre)**
[The "kite" flap in the reconstruction after excision of a basal cell carcinoma of the face. Our experience with 45 cases] Ducours JL, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(5):345–8 (Eng. Abstr.) **(Fre)**
[The margin of safety and depth of excision in surgical treatment of basalioma. Use of 3-dimensional histologic study of 2,016 tumors] Breuninger H, et al. **Hautarzt** 1989 Nov;40(11):693–700 (Eng. Abstr.) **(Ger)**
[Covering circular skin defects using 4 rhombic transposition flaps] Grimm HW, et al. **Z Hautkr** 1990 Feb;65(2):167–8, 173 (Eng. Abstr.) **(Ger)**
[Ocular side effects of added sympathomimetics in local anesthetics] Häberle M, et al. **Z Hautkr** 1990 Jun;65(6):582, 585–8 (Eng. Abstr.) **(Ger)**
[Cryosurgery of basalioma. Results of a retrospective study. Histologic study of the cryogenic lesion] Luther H, et al. **Z Hautkr** 1989 Sep 15;64(9):748–50, 753–5 (Eng. Abstr.) **(Ger)**
[Resection of invasive orbital tumors and reconstruction with temporalis muscle flap] Orenstein A, et al. **Harefuah** 1989 Jun 1;116(11):573–6 (Eng. Abstr.) **(Heb)**
[Basal cell carcinoma among the cases of Dermatology Clinic I of the Silesian Medical Academy in Katowice] Bogdanowski T, et al. **Przegl Dermatol** 1988 Nov–Dec; 75(6):415–9 (Eng. Abstr.) **(Pol)**
[Surgical treatment of tumors of the external ear] Kotarba E. **Przegl Dermatol** 1990 Jan–Feb;77(1):61–7 (Eng. Abstr.) **(Pol)**
[Possibilities of the cryosurgical method in the treatment of skin carcinoma] Gyrdev P, et al. **Vopr Onkol** 1989; 35(12):1484–5 **(Rus)**
[Basal cell epithelioma of the external auditory canal] Viscasillas Seguí S, et al. **An Otorrinolaringol Ibero Am** 1990;17(2):165–70 **(Spa)**

THERAPY

The effect of an intralesional sustained-release formulation of interferon alfa-2b on basal cell carcinomas. Edwards L, et al. **Arch Dermatol** 1990 Aug;126(8):1029–32
Interferon. Coming of age. Greenway HT Jr, et al. **Arch Dermatol** 1990 Aug;126(8):1080–2 (9 ref.)
The effect of intralesional interferon gamma on basal cell carcinomas. Edwards L, et al. **J Am Acad Dermatol** 1990 Mar;22(3):496–500
Intralesional treatment of basal cell carcinoma with low-dose recombinant interferon gamma. Tank B, et al. **J Am Acad Dermatol** 1989 Oct;21(4 Pt 1):734–5
[Long-term results of the treatment of commissural forms of primary localized basalioma of the facial skin] Budiak VA, et al. **Klin Khir** 1990;(5):29–30 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Hemidesmosomes, collagen VII, and intermediate filaments in basal cell carcinoma. Jones JC, et al. **J Invest Dermatol** 1989 Nov;93(5):662–71

CARCINOMA, BASOSQUAMOUS

DIAGNOSIS

Basosquamous carcinoma, a wolf in sheep's clothing? Report of 3 cases. Johnson BF, et al. **Postgrad Med J** 1989 Oct; 65(768):750–1

PATHOLOGY

Basaloid-squamous carcinomas of the upper aerodigestive tracts. Batsakis JG, et al. **Ann Otol Rhinol Laryngol** 1989 Nov;98(11):919–20
Intraneuronal spread of a basal-cell carcinoma. Rigg BM. **Br J Surg** 1966 May;53(5):479–81

SECONDARY

Basosquamous cell carcinoma with leptomeningeal carcinomatosis. Peña YM, et al. **Arch Dermatol** 1990 Feb; 126(2):195–8

SURGERY

Cutaneous mixed tumors of the head and neck. Werber JL, et al. **Otolaryngol Head Neck Surg** 1989 Nov; 101(5):598–600
[Surgical treatment of tumors of the external ear] Kotarba E. **Przegl Dermatol** 1990 Jan–Feb;77(1):61–7 (Eng. Abstr.) **(Pol)**

CARCINOMA, BRONCHIAL see **CARCINOMA, BRONCHOGENIC**

CARCINOMA, BRONCHIOLAR

DIAGNOSIS

[Diagnosis of alveolar cell carcinoma (letter)] Pedersen U. **Ugeskr Laeger** 1990 Mar 5;152(10):687–8 **(Dan)**
[A case illustrating diagnostic difficulties in bronchiolo-alveolar cancer] Ponahajba A, et al. **Pneumonol Pol** 1990 Apr–May;58(4–5):234–5 **(Pol)**

ETIOLOGY

Alveolar cell carcinoma complicating sickle cell anemia: a chance occurrence? Labi M, et al. **Am J Hematol** 1989 Nov;32(3):222–5

GENETICS

Cytogenetic profile of in vitro spontaneously transformed and chemical tumor-derived cell lines related to the mouse lung alveolegenic carcinoma. Markus I, et al. **Cancer Res** 1990 Jan 1;50(1):164–8

PATHOLOGY

Clinicopathologic and immunohistochemical characteristics of bronchial gland cell type adenocarcinoma of the lung. Hirata H, et al. **Am J Clin Pathol** 1990 Jan;93(1):20–5
Bilateral bronchioloalveolar carcinoma of the lungs in a 7 year old girl treated for Hodgkin's disease. Kowalski P, et al. **Tumori** 1989 Oct 31;75(5):449–51
[Flow cytometric analysis of the effect of activated macrophages on alveolar cell carcinoma of lung in vitro] Wang BM. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Sep; 18(3):207–10 (Eng. Abstr.) **(Chi)**
[Bronchiolo-alveolar carcinomas] Capron F. **Rev Mal Respir** 1989;6(4):289 **(Fre)**
[Bronchiolo-alveolar carcinoma. Anatomo-pathological and evolutional study of a series of 52 operated cases] Dumont P, et al. **Rev Mal Respir** 1989;6(4):329–34 (Eng. Abstr.) **(Fre)**
[Natural history of bronchiolo-alveolar cancer. Apropos of 38 cases] Carles P, et al. **Rev Pneumol Clin** 1989;45(2):64–70 (Eng. Abstr.) **(Fre)**
[Cytomorphologic criteria of bronchioloalveolar cell cancer] de Masi D, et al. **Pneumologie** 1990 Feb;44 Suppl 1:610–1 (Eng. Abstr.) **(Ger)**
[Rare lung tumors ("sclerosing hemangioma" and "intravascular sclerosing bronchioloalveolar tumor")] Kireeva SG. **Arkh Patol** 1990;52(3):38–43 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Chest case of the day. Bronchoalveolar carcinoma of the lung. Clark LR, et al. **AJR Am J Roentgenol** 1990 Jun; 154(6):1318–9
Roentgenographic appearance of bronchogenic adenocarcinoma. Lehar TJ, et al. **Am Rev Respir Dis** 1967 Aug;96(2):245–8
Lobar bronchioloalveolar carcinoma: "angiogram sign" on CT scans. Im JG, et al. **Radiology** 1990 Sep;176(3):749–53
Radiographic features and prognosis in bronchioloalveolar carcinoma; a local experience. Sutton LN, et al. **Respir Med** 1989 Nov;83(6):471–7
Bronchioloalveolar carcinoma. Epstein DM. **Semin Roentgenol** 1990 Jan;25(1):105–11 (18 ref.)
[Bronchoalveolar cancer (clinical, x-ray and morphologic characterization)] Kharchenko VP, et al. **Vestn Rentgenol Radiol** 1989 May-Jun;(3):5–14 (Eng. Abstr.) **(Rus)**
[Roentgenologic characteristics of small bronchoalveolar cancer of the lung under conditions of image processing using linear filtration (roentgenomorphologic comparison)] Shekhteer AI, et al. **Vestn Rentgenol Radiol** 1989 May-Jun; (3):14–21 (Eng. Abstr.) **(Rus)**

SURGERY

[Value of repeated thoracic scanning in the surveillance of operated bronchial cancers] Breton JL, et al. **Rev Mal Respir** 1989;6(4):369–71 (Eng. Abstr.) **(Fre)**

THERAPY

Effect of inhaled natural interferon-alpha on diffuse bronchioalveolar carcinoma. Kinnula V, et al. **Eur J Cancer** 1990;26(6):740–1
Aerosol application of interferon-alpha in the treatment of bronchioloalveolar carcinoma. van Zandwijk N, et al. **Eur J Cancer** 1990;26(6):738–40

ULTRASTRUCTURE

[The ultrastructural characteristics of different histological types of bronchiolar-alveolar cancer] Smirnova EA, et al. **Vopr Onkol** 1990;36(2):187–92 (Eng. Abstr.) **(Rus)**

VETERINARY

Bronchioalveolar carcinoma with renal and hepatic metastases in a degu (Octodon degus). Anderson WI, et al. **J Wildl Dis** 1990 Jan;26(1):129–31

CARCINOMA, BRONCHOGENIC

Imaging and staging of lung cancer. Libshitz HI. **Curr Opin Radiol** 1989 Jun;1(1):21–4 (14 ref.)
Lung cancer: the American view. Sanderson DR, et al. **Eur Respir J** 1989 Nov;2(10):1002–7 (25 ref.)
Malignant brachial artery embolism. Lazarides M, et al. **Vasa** 1989;18(4):316–7
[Bronchogenic carcinoma in women] Polák J, et al. **Cas Lek Cesk** 1990 Mar 16;129(11):329–33 (Eng. Abstr.) **(Cze)**
[Diagnostic strategy and treatment planning in bronchial cancer] Drings P. **Radiologe** 1990 Apr;30(4):149–54 (23 ref.) (Eng. Abstr.) **(Ger)**
[Bronchial carcinoma at the Zadar Medical Center 1982–1986] Mazzi A, et al. **Plucne Bolesti** 1989 Jan–Jun; 41(1–2):95–8 (Eng. Abstr.) **(Ser)**

ANALYSIS

[Asbestos and bronchogenic carcinoma: a search for fibers in the pulmonary tissue of 3 patients with bronchogenic carcinoma] Algranti E, et al. **Rev Paul Med** 1989 May–Jun; 107(3):133–8 (Eng. Abstr.) **(Por)**

BLOOD

Plasma glutamate levels, lymphocyte reactivity and death rate in patients with bronchial carcinoma. Eck HP, et al. **J Cancer Res Clin Oncol** 1989;115(6):571–4
Serum leucine-enkephalin in bronchial carcinoma and its relation to tumour location. Gosney JR, et al. **Thorax** 1990 Jan;45(1):9–11
Plasma growth hormone and digital clubbing in carcinoma of the bronchus. Gosney MA, et al. **Thorax** 1990 Jul; 45(7):545–7

CHEMICALLY INDUCED

[Comment on the contribution by B. Wiemann and L. Bergmann. "Development of bronchial cancer at the site of siderofibrosis"] Schneider WD, et al. **Z Erkr Atmungsorgane** 1989;173(2):186–90 **(Ger)**

CLASSIFICATION

Investigation of the applicability of histological classification of bronchial carcinoma according to the World Health Organization. Čačić M, et al. **Tumori** 1989 Dec 31; 75(6):580–2

COMPLICATIONS

Superior vena cava syndrome. The myth—the facts. Yellin A, et al. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1114–8
Spontaneous pneumopericardium: case report and review of the literature. Katzir D, et al. **Cardiology** 1989;76(4):305–8 (16 ref.)
Isolation of Legionella pneumophila serogroup 3 from pericardial fluid in a case of pericarditis. Lück PC, et al. **Infection** 1989 Nov–Dec;17(6):388–90
Cardiac tamponade as a presentation of mucoepidermoid bronchogenic carcinoma. Sharma S, et al. **J Assoc Physicians India** 1989 Feb;37(2):183–5
Acquired hypertrichosis terminalis in bronchial carcinoma. Finlay I, et al. **J R Soc Med** 1990 Mar;83(3):189–90
[Early paralysis of the recurrent nerve in bronchogenic carcinoma] Podhola K, et al. **Cesk Otolaryngol** 1990 Feb; 39(1):33–6 (Eng. Abstr.) **(Cze)**
[The association of bronchial carcinoma and rheumatoid purpura (letter)] Pfitzenmeyer P, et al. **Ann Med Interne (Paris)** 1989;140(5):423–4 **(Fre)**
[Stent implantation as a palliative measure in an inoperable bronchial tumor. Initial experiences with an endoscopically implanted stent (published erratum appears in Radiologe 1989 Nov;29(11):576)] Beck A, et al. **Radiologe** 1989 Aug; 29(8):399–405 (Eng. Abstr.) **(Ger)**
[Netilmicin in single daily doses for the bacterial bronchopulmonary complications in patients with advanced bronchogenic carcinoma] Zubiani M, et al. **Clin Ter** 1989 Sep 15;130(5):267–70 (Eng. Abstr.) **(Ita)**
[Polyarteritis nodosa and pulmonary neoplasms. Report of a clinical case] Carella G, et al. **Minerva Med** 1989 Oct; 80(10):1135–8 (Eng. Abstr.) **(Ita)**
[Morphine combined with marcaine in long-term epidural analgesia in patients with Pancoast's syndrome caused by bronchogenic carcinoma of the apex of the lung] Cremonte LG, et al. **Minerva Med** 1989 Sep;80(9):1029–30 (Eng. Abstr.) **(Ita)**
[Pulmonary infarction associated with bronchogenic carcinoma] Tsunoda HS, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Sep 25; 49(9):1112–21 (Eng. Abstr.) **(Jpn)**
[Bronchogenic carcinoma of the lungs in 3 workers with

asbestosis employed in the same factory] Herceg Z, et al. **Lijec Vjesn** 1989 Sep-Oct;111(9-10):331-5 (Eng. Abstr.) **(Scr)**

[Pulmonary tuberculosis in patients with primary bronchial carcinoma] Karabegović N, et al. **Plucne Bolesti** 1989 Jan-Jun;41(1-2):25-8 (Eng. Abstr.) **(Scr)**

DIAGNOSIS

False-positive transcarinal needle aspirate in the evaluation of bronchogenic carcinoma. Carlin BW, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1800-2

Efficacy and benefit of mediastinal computed tomography as a selection method for mediastinoscopy [see comments] Thermann M, et al. **Ann Thorac Surg** 1989 Oct;48(4):565-7 Comment in: Ann Thorac Surg 1990 Jul;50(1):163.

Carcinoma of the bronchus presenting as mastoid swelling. Campbell JB, et al. **Br J Clin Pract** 1989 Nov;43(11):424-6

Airway carcinoembryonic antigen concentrations in patients with central lung cancer or chronic bronchitis. Wesselius LJ, et al. **Chest** 1990 Aug;98(2):393-7

Intrathoracic lymph node evaluation by CT and MRI with histopathologic correlation in non-small cell bronchogenic carcinoma. Georgian D, et al. **Clin Imaging** 1990 Mar; 14(1):35-40

Mediastinoscopy in bronchogenic carcinoma. Eriksen H, et al. **Dan Med Bull** 1989 Sep;36(4):393-5

Bronchogenic carcinoma staging: CT versus MR imaging. Assessment with surgery. Laurent F, et al. **Eur J Cardiothorac Surg** 1988;2(1):31-6

Transesophageal sonography in central bronchial carcinoma. Müller LC, et al. **Eur J Cardiothorac Surg** 1990;4(4):226-8

Bronchogenic carcinoma presenting as neuromusculoskeletal pain. Downs SE. **J Manipulative Physiol Ther** 1990 May; 13(4):221-4

Infected aortitis masquerading as bronchogenic carcinoma. Paradowski LJ, et al. **N Y State J Med** 1990 Aug; 90(8):415-6

Presentation of bronchial mucoepidermoid carcinoma as unilateral hyperlucent lung. Allen ED, et al. **Pediatr Pulmonol** 1990;8(4):294-7

Mediastinoscopy in relation to clinical evaluation. Puhakka HJ, et al. **Scand J Thorac Cardiovasc Surg** 1990;24(1):43-5

[Evaluation of transbronchial needle aspiration in the diagnosis of bronchogenic carcinoma] Xing ZL. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Dec; 12(6):356-8, 382 (Eng. Abstr.) **(Chi)**

[Multiple primary bronchial carcinoma. A case report of three separate synchronous primary cancers and a review of literature] Lin YG, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jul;28(7):423-5, 445 (Eng. Abstr.) **(Chi)**

[Examination of the mediastinum in staging of primary bronchial carcinoma] Rooyackers JM, et al. **Ned Tijdschr Geneeskd** 1990 Jun 9;134(23):1145-9 (23 ref.) (Eng. Abstr.) **(Dut)**

[Choice of examination methods in bronchial cancer] Leuenberger P. **Helv Chir Acta** 1990 Jan;56(5):701-10 (13 ref.) (Eng. Abstr.) **(Fre)**

[The importance of bronchologic procedures in the diagnosis of bronchial carcinoma] Wiesner B. **Arch Geschwulstforsch** 1989;59(6):449-54 (11 ref.) (Eng. Abstr.) **(Ger)**

[Determining the prognosis in bronchial carcinoma by intraoperative pleural lavage] Buhr J, et al. **Dtsch Med Wochenschr** 1989 Oct 20;114(42):1597-601 (Eng. Abstr.) **(Ger)**

[The endoscopic diagnosis of bronchial carcinoma] Lorenz J. **Dtsch Med Wochenschr** 1990 Mar 23;115(12):460-2 (15 ref.) **(Ger)**

[Oleothorax 40 years later] Haberkorn U, et al. **Pneumologie** 1989 Dec;43(12):715-8 (Eng. Abstr.) **(Ger)**

[Detection of bronchial cancer recurrence in fibrothorax using nuclear magnetic resonance tomography] Herborn B, et al. **Pneumologie** 1990 Feb;44 Suppl 1:598-600 (Eng. Abstr.) **(Ger)**

[Alpha tumor necrosis factor in the serum of patients with sarcoidosis, tuberculosis or bronchial cancer] Theilmann L, et al. **Pneumologie** 1990 Apr;44(4):735-8 (Eng. Abstr.) **(Ger)**

[Diagnostic significance of the tumor markers CEA, SCC and NSE in serum and bronchoalveolar lavage] von Eiff M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:462-4 (Eng. Abstr.) **(Ger)**

[Determination of placental protein 12 (insulin-like growth factor binding protein 25) in pleural effusion of various origins] Strache RR, et al. **Z Gesamte Inn Med** 1990 Mar 15;45(6):164-6 (Eng. Abstr.) **(Ger)**

[Staging of bronchogenic cancer. Determination of mediastinal lymphatic involvement using magnetic resonance] Crisci R, et al. **Minerva Chir** 1990 Feb; 45(3-4):147-52 (Eng. Abstr.) **(Ita)**

[Magnetic tomography in lung cancer] Myhre KI, et al. **Tidsskr Nor Laegeforen** 1989 Aug 30;109(24):2450-2 (Eng. Abstr.) **(Nor)**

[Bronchogenic cancer in patients in the diagnostic department of a tuberculosis hospital] Kratule RV, et al. **Probl Tuberk** 1989;(9):70-1 **(Rus)**

DRUG THERAPY

Ifosfamide with mesna uroprotection in the management of lung cancer. Holoye PY, et al. **Am J Clin Oncol** 1990 Apr; 13(2):148-55

Failure of the perioperative PCV neoadjuvant polychemotherapy in resectable bronchogenic non-small cell carcinoma. Results from a randomized phase II trial. Dautzenberg B, et al. **Cancer** 1990 Jun 1;65(11):2435-41

Bronchoscopic photodynamic therapy of bronchial carcinoma. Häussinger K, et al. **Endoscopy** 1989 Nov; 21(6):285-8

Combination chemotherapy in inoperable lung cancer--a trial of 2 regimens. Behera D, et al. **Indian J Chest Dis Allied Sci** 1989 Jan-Mar;31(1):21-4

Phase II trial of 4' deoxydoxorubicin (DXDX) for unresectable non-small cell bronchogenic carcinoma. An Illinois Cancer Council study. Rose C, et al. **Invest New Drugs** 1990 Feb;8(1):97-9

Small cell bronchogenic carcinoma: a cyclical alternating combination of epirubicin plus cisplatin and cyclophosphamide plus etoposide. Casadio M, et al. **J Chemother** 1990 Jun;2(3):199-202

[The role of selective bronchial arterial infusion in the comprehensive treatment of advanced bronchial carcinoma] Sun SL. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Oct; 12(5):286-7, 319 (Eng. Abstr.) **(Chi)**

[Investigation on the complications in bronchial artery infusion with chemotherapeutic agent to treat bronchogenic carcinoma] Qian MS. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Jun;23(3):143-5 (Eng. Abstr.) **(Chi)**

[Photodynamic therapy of bronchial cancer] Häussinger K, et al. **Pneumologie** 1990 Mar;44(3):687-93 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

[Usefulness of determining 2 cell membrane enzymes in bronchial aspirate and lung tissue in patients with cancer of the lung] Ruiz Moral R, et al. **Rev Clin Esp** 1989 Oct; 185(6):291-4 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Atypical metaplasia and incidence of bronchogenic carcinoma. Vine MF, et al. **Am J Epidemiol** 1990 May; 131(5):781-93

Clinicopathological profile of bronchogenic carcinoma in Bangladesh. Khan NA, et al. **Bangladesh Med Res Counc Bull** 1989 Jun;15(1):27-33

Carcinoma of the bronchus in young adults. Seddon DJ, et al. **Br J Clin Pract** 1990 Jan;44(1):24-5

A case-control study of lung cancer with special reference to the effect of air pollution in Poland. Jedrychowski W, et al. **J Epidemiol Community Health** 1990 Jun;44(2):114-20

[Current incidence and treatment of bronchogenic carcinoma in Czechoslovakia] Novák K. **Cas Lek Cesk** 1990 Feb 9; 129(6):172-4 (Eng. Abstr.) **(Cze)**

[Bronchial carcinoma in subjects under 40] Ardissone F, et al. **Minerva Med** 1989 Dec;80(12):1301-4 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Bronchial carcinoma following pulmonary and thoracic wall actinomycosis: report on one case with emphasis on CT findings. de Verbizier G, et al. **Comput Med Imaging Graph** 1990 Jul-Aug;14(4):277-9

Cellular and molecular biological aspects of human bronchogenic carcinogenesis. Willey JC, et al. **Crit Rev Oncol Hematol** 1990;10(2):181-209 (244 ref.)

[Radiologic diagnosis of silicotic cicatricial cancer. Incidence and correlation with pathologic-anatomic results] Tschakert H, et al. **Radiologe** 1990 Apr;30(4):172-7 (Eng. Abstr.) **(Ger)**

GENETICS

Loss of heterozygosity for genes on 11p and the clinical course of patients with lung carcinoma. Skinner MA, et al. **Cancer Res** 1990 Apr 15;50(8):2303-6

Molecular biology and respiratory disease. 4. Cancer genes. Sikora K, et al. **Thorax** 1990 May;45(5):409-13 (23 ref.)

[Genetic factors in the predisposition for bronchogenic carcinoma] Pešut D. **Plucne Bolesti** 1989 Jan-Jun; 41(1-2):35-8 (Eng. Abstr.) **(Scr)**

HISTORY

Small cell carcinoma of the bronchus: historical perspective of a treatable disease. Watkin SW, et al. **J R Soc Med** 1990 Feb;83(2):108-10

IMMUNOLOGY

Bronchoalveolar T-lymphocytes and subsets in pulmonary tuberculosis and bronchogenic carcinoma. Pushpakom R, et al. **J Med Assoc Thai** 1990 Jan;73(1):1-11

HLA antigens and bronchogenic carcinoma. Pražák J, et al. **Neoplasma** 1989;36(5):599-602

Lymphocyte subsets in bronchoalveolar lavage fluid and in circulating blood in epidermoid bronchogenic carcinoma. Piazza G, et al. **Respiration** 1990;57(1):28-36

[Multitest evaluation of the immune status of patients with bronchogenic carcinoma before and after radiotherapy] Gava A, et al. **Minerva Med** 1990 Mar;81(3):135-8 (Eng. Abstr.) **(Ita)**

[Carcinoembryonic antigen (CEA) in the blood serum of patients with bronchogenic carcinoma and selected diseases of the respiratory tract] Szklarz E, et al. **Pneumonol Pol** 1989 Apr;57(4):217-21 (Eng. Abstr.) **(Pol)**

[Determination of secretory immunoglobulin A, IgG and IgM in bronchial lavage from patients with primary and metastatic lung neoplasms] Viramontes L, et al. **Arch Invest Med (Mex)** 1989 Apr-Jun;20(2):175-81 (Eng. Abstr.) **(Spa)**

METABOLISM

Lectin histochemistry of normal bronchopulmonary tissues and common forms of bronchogenic carcinoma. Alvarez-Fernandez E, et al. **Arch Pathol Lab Med** 1990 May;114(5):475-81

MORTALITY

[The spontaneous course of bronchial cancer. A study of survival time] Rosenthal R, et al. **Versicherungsmedizin** 1989 Sep 1;41(5):149-50 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Transbronchial fine needle aspiration of the mediastinum. Importance of lymphocytes as an indicator of specimen adequacy. Baker JJ, et al. **Acta Cytol** 1990 Jul-Aug; 34(4):517-23

c-myc oncoprotein in bronchial carcinoma: expression in all major morphological types. Gosney JR, et al. **Anticancer Res** 1990 May-Jun;10(3):623-8

Tumor cells in intraoperative pleural lavage. An indicator for the poor prognosis of bronchogenic carcinoma. Buhr J, et al. **Cancer** 1990 Apr 15;65(8):1801-4

Extrathoracic staging of bronchogenic carcinoma. Salvatierra A, et al. **Chest** 1990 May;97(5):1052-8

Scar cancer of the lung. Prasad US, et al. **Indian J Chest Dis Allied Sci** 1989 Apr-Jun;31(2):125-8

Bronchogenic carcinoma. A study of 109 cases. Jain NK, et al. **J Assoc Physicians India** 1989 Jun;37(6):379-82

Direct metastasis to abdominal lymph nodes in bronchogenic carcinoma [letter] Riquet M, et al. **J Thorac Cardiovasc Surg** 1990 Jul;100(1):153-4

DNA-content, inflammatory tissue response and tumour size in human lung carcinoma. Kayser K, et al. **Pathol Res Pract** 1989 Nov;185(5):584-8

Vacuole sign and nodule sign in early peripheral bronchogenic carcinoma. Diagnostic value and pathologic correlation. Yang XM, et al. **Radiologe** 1990 Apr; 30(4):169-71

A contribution on the prognostic significance of the tumor formula (pTNM) in squamous cell carcinoma of the bronchus. Huwer H, et al. **Thorac Cardiovasc Surg** 1989 Oct;37(5):281-4

[Testing bronchogenic carcinoma cells for sensitivity to cytostatics in vitro and in cell cultures] Zatloukal P, et al. **Sb Lek** 1990 Apr;92(4):118-22 (Eng. Abstr.) **(Cze)**

[Bronchus cancer: pathologic-anatomic principles] Dalquen P. **Helv Chir Acta** 1990 Jan;56(5):689-700 (42 ref.) (Eng. Abstr.) **(Ger)**

[Correlation of lymph node size and metastatic involvement of lymph nodes in bronchial cancer] Vogel P, et al. **Langenbecks Arch Chir** 1990;375(3):141-4 (Eng. Abstr.) **(Ger)**

[Mediastinal lymph node metastases in bronchial cancer--CT analog horizontal section of an autopsy patient sample] Junker K, et al. **Pneumologie** 1990 Feb;44 Suppl 1:261-2 (Eng. Abstr.) **(Ger)**

[The status of computerized tomography and conventional tomography in the assessment of endobronchial growth and extension of central bronchial cancer] Steppling H, et al. **Pneumologie** 1990 Feb;44 Suppl 1:603-4 (Eng. Abstr.) **(Ger)**

[Staging of non-small cell bronchial carcinoma using CT and MRT] Layer G, et al. **Radiologe** 1990 Apr;30(4):155-63 (59 ref.) (Eng. Abstr.) **(Ger)**

[Mediastinal staging of non-small cell bronchial carcinoma. The place of computed tomography and mediastinoscopy] Vestring T, et al. **Radiologe** 1990 Apr;30(4):178-84 (Eng. Abstr.) **(Ger)**

[NMR evaluation of neoplastic invasion of the pulmonary artery] Tack D, et al. **ROFO** 1990 Jan;152(1):23-9 (Eng. Abstr.) **(Ger)**

[The enlargement of mediastinal lymph nodes in patients with bronchial carcinoma--a retrospective evaluation of computed tomographic and histologic studies] Schmidt G, et al. **Rontgenpraxis** 1990 May;43(5):170-3 **(Ger)**

PHYSIOPATHOLOGY

Increased amplitude of F-response in Lambert-Eaton myasthenic syndrome [letter] Henriet M, et al. **J Neurol Neurosurg Psychiatry** 1990 Feb;53(2):174

[An automated evaluation of the functional status of the lungs in patients with central bronchial carcinoma] Fomin JA, et al. **Radiol Diagn (Berl)** 1990;31(3):237-45 (Eng. Abstr.) **(Ger)**

[Evaluation of regional perfusion as an indicator of resectability in patients with centrally located bronchogenic carcinoma] Ratto GB, et al. **Minerva Chir** 1989 Sep 15;44(17):1921-5 (Eng. Abstr.) **(Ita)**

PREVENTION & CONTROL

[The effect of mass chest x-ray on early detection of bronchial cancer] Schildge J, et al. **Pneumologie** 1989 Sep; 43(9):500–6 (Eng. Abstr.) (Ger)

[Mass chest x-ray of at-risk probands] Mucke H, et al. **Z Erkr Atmungsorgane** 1990;174(3):196–203 (Eng. Abstr.) (Ger)

RADIOGRAPHY

Nodular pulmonary opacities in patients with rheumatoid arthritis. A diagnostic dilemma. Jolles H, et al. **Chest** 1989 Nov;96(5):1022–5

Evaluation of recurrent bronchogenic carcinoma by computed tomography. Görich J, et al. **Clin Imaging** 1990 May;14(2):131–7

Radiographic manifestations of primary bronchogenic carcinoma. Sider L. **Radiol Clin North Am** 1990 May; 28(3):583–97 (65 ref.)

Computed tomography in bronchogenic carcinoma. Libshitz HI. **Semin Roentgenol** 1990 Jan;25(1):64–72 (43 ref.)

[Bifocal pulmonary opacities] Benhamou D, et al. **Rev Mal Respir** 1989;6(4):389–90 (Fre)

[Computed tomographic determination of the target volume and the evaluation of remission after radiation of bronchial carcinoma] Feyerabend T, et al. **Strahlenther Onkol** 1990 Jun;166(6):405–10 (Eng. Abstr.) (Ger)

[Roentgenographic manifestations of peripheral bronchogenic carcinomas] Kuriyama K, et al. **Rinsho Hoshasen** 1990 Jul;35(7):795–802 (Eng. Abstr.) (Jpn)

[Airbronchogram sign in small peripheral bronchogenic carcinomas] Kuriyama K, et al. **Rinsho Hoshasen** 1990 Feb; 35(2):189–93 (Eng. Abstr.) (Jpn)

RADIONUCLIDE IMAGING

131I-metaiodobenzylguanidine (mIBG) for bronchial oat cell cancer and melanoma detection? Osei-Bonsu A, et al. **Eur J Nucl Med** 1989;15(9):629–31

[Bronchial carcinoma. Nuclear medical diagnosis] Clorius JH, et al. **Radiologe** 1990 Apr;30(4):164–8 (29 ref.) (Eng. Abstr.) (Ger)

RADIOTHERAPY

Analysis of the influence of elective nodal irradiation on postirradiation pulmonary function. Curran WJ Jr, et al. **Cancer** 1990 Jun 1;65(11):2488–93

A randomized study on survival of bronchogenic carcinoma treated with conventional or short fractionation radiation. Johnson RJ, et al. **Clin Radiol** 1973 Oct;24(4):494–7 (15 ref.)

Endobronchial radiation therapy (EBRT) in the management of lung cancer. Roach M 3d, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1449–54

Intermediate dose rate remote afterloading brachytherapy for intraluminal control of bronchogenic carcinoma. Speiser B, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1443–8

[Automatic adaptation of stationary field dose distributions to the individual geometry of the patient. III: Practical application] Keiner P, et al. **Radiobiol Radiother (Berl)** 1990;31(2):129–33 (Eng. Abstr.) (Ger)

SECONDARY

Mediastinal spread of metastatic lymph nodes in bronchogenic carcinoma. Mediastinal nodal metastases in lung cancer. Watanabe Y, et al. **Chest** 1990 May; 97(5):1059–65

En bloc resection for T3 bronchogenic carcinoma with chest wall invasion. Ricci C, et al. **Eur J Cardiothorac Surg** 1987; 1(1):23–8

Gastric metastasis and ectopic amylase production in bronchogenic carcinoma. Bhasin DK, et al. **J Assoc Physicians India** 1989 Apr;37(4):289–90

Mediastinal lymph node metastases from nonsmall cell bronchogenic carcinoma: reevaluation with CT. Ikezoe J, et al. **J Comput Assist Tomogr** 1990 May–Jun;14(3):340–4

Surgery in bronchial carcinoma with metastasis. Hasse J. **Lung** 1990;168 Suppl:1145–52

Conventional radiography of the hilum and mediastinum in bronchogenic carcinoma. Swensen SJ, et al. **Radiol Clin North Am** 1990 May;28(3):521–38 (54 ref.)

[A solitary metastasis in the trapezium bone] Lederer A, et al. **Radiologe** 1990 Feb;30(2):79–80 (Eng. Abstr.) (Ger)

SURGERY

Operability versus resectability in bronchogenic carcinoma [editorial] Paulson DL. **Ann Thorac Surg** 1967 Feb; 3(2):177–8

High frequency jet ventilation via a tracheoscope for endobronchial laser surgery. Schneider M, et al. **Can J Anaesth** 1990 Apr;37(3):372–6

Right upper lobectomy twenty years after left pneumonectomy. Preoperative evaluation and follow-up. Barker JA, et al. **Chest** 1990 Jan;97(1):248–50

Surgical alternatives in ipsilateral recurrence of bronchogenic carcinoma. Kulka F, et al. **Eur J Cardiothorac Surg** 1988; 2(6):430–2

En bloc resection for T3 bronchogenic carcinoma with chest wall invasion. Ricci C, et al. **Eur J Cardiothorac Surg** 1987; 1(1):23–8

Bronchial stump recurrence after surgery for bronchial carcinoma. Verleden G, et al. **Eur Respir J** 1990 Jan; 3(1):97–100

The role of adjuvant surgery in the combined modality therapy of small-cell bronchogenic carcinoma after a chemotherapy-induced partial remission. Holoye PY, et al. **J Clin Oncol** 1990 Mar;8(3):416–22

Comments on: The Importance of Surgical and Multimodality Treatment for Small Cell Bronchial Carcinoma [letter] Salzer GM, et al. **J Thorac Cardiovasc Surg** 1990 Mar;99(3):562–3

Cardiopulmonary function after lobectomy or pneumonectomy for pulmonary neoplasm. Van Mieghem W, et al. **Respir Med** 1989 May;83(3):199–206

Surgical prognosis in stage I bronchogenic carcinoma of the middle lobe. Bedini AV, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(3):283–4

Bronchogenic carcinoma treated by concomitant resection of lung and chest wall. Warner R, et al. **South Med J** 1990 Jun;83(6):621–3, 633

Bronchoscopic cryotherapy for advanced bronchial carcinoma. Walsh DA, et al. **Thorax** 1990 Jul;45(7):509–13

[Multiple primary lung cancers. The importance of early diagnosis and survival after a new surgical excision] Mousset X, et al. **Ann Chir** 1989;43(8):658–62 (Eng. Abstr.) (Fre)

[Surgery of primary bronchial cancer. Different types of excisions: technical problems, follow-up results—status of pneumonectomies extended to the carina and bronchial resection-anastomoses] Levasseur P, et al. **Helv Chir Acta** 1990 Jan;56(5):711–7 (Eng. Abstr.) (Fre)

[Recurrence of bronchial cancer after surgery. Radiologic data] Bergonzini R, et al. **J Radiol** 1990 Apr;71(4):265–9 (Eng. Abstr.) (Fre)

[Pulse oximetry monitoring of single lung anesthesia in non-cardiac thoracic surgery] Brendle BC, et al. **Anasth Intensivther Notfallmed** 1989 Dec;24(6):323–6 (Eng. Abstr.) (Ger)

[Fiber bronchoscopy as an aid in placing and monitoring double lumen tubes in thoracic anesthesia] Schottke-Hennings H, et al. **Anasth Intensivther Notfallmed** 1989 Dec;24(6):327–33 (Eng. Abstr.) (Ger)

[Stapler and manual bronchial anastomosis—results of a consecutive trial series] Junginger T, et al. **Langenbecks Arch Chir** 1989;374(6):323–8 (Eng. Abstr.) (Ger)

[Bronchoplastic surgery in bronchial cancer] Baroš B, et al. **Pneumologie** 1990 Feb;44 Suppl 1:591–2 (Eng. Abstr.) (Ger)

[Peripheral round lesion of the lung: diagnosis, therapy, prognosis] Eigel P, et al. **Pneumologie** 1990 Feb;44 Suppl 1:265–6 (Eng. Abstr.) (Ger)

[Perioperative management of thoracic surgery patients] Hallfeldt K, et al. **Pneumologie** 1990 Feb;44 Suppl 1:199–200 (Eng. Abstr.) (Ger)

[Preoperative autologous blood donation in thoracic surgery] Sültz J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:197–8 (Eng. Abstr.) (Ger)

[After-care following heart and thoracic surgery] Stulz P. **Ther Umsch** 1989 Jul;46(7):460–7 (19 ref.) (Eng. Abstr.) (Ger)

[The effect of lung diminishing interventions on immediate postoperative lung function and their modification by various forms of analgesia] Horch R, et al. **Z Erkr Atmungsorgane** 1990;174(2):113–20 (Eng. Abstr.) (Ger)

[Chylothorax following pneumonectomy] Plate H, et al. **Zentralbl Chir** 1989;114(19):1290–2 (Ger)

[Surgical treatment of bronchial carcinoid] Stobernack A, et al. **Zentralbl Chir** 1990;115(1):23–34 (Eng. Abstr.) (Ger)

[Clinical study of limited operation of lung cancer with reference to the operative procedure] Akaogi E, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jul;37(7):1334–40 (Eng. Abstr.) (Jpn)

[Surgical experience of bronchogenic early squamous cell carcinoma detected by sputum cytology in lung cancer screening] Saito Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Apr;38(4):560–6 (Eng. Abstr.) (Jpn)

[Results of pulmonary angioplastic operations for cases of bronchogenic carcinoma] Ayabe H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb; 28(2):278–83 (Eng. Abstr.) (Jpn)

THERAPY

Neodymium:YAG laser and brachytherapy in the management of inoperable bronchogenic carcinoma. Miller JI Jr, et al. **Ann Thorac Surg** 1990 Aug;50(2):190–5; discussion 195–6

Investigation, treatment and prognosis of bronchial carcinoma in the Yorkshire Region of England 1976–1983. Connolly CK, et al. **Br J Cancer** 1990 Apr;61(4):579–83

Combined radiotherapy and chemotherapy versus radiotherapy alone in locally advanced epidermoid bronchogenic carcinoma. A randomized study. Trovò MG, et al. **Cancer** 1990 Feb 1;65(3):400–4

Partial remission and resectability [letter] Cohen MH. **J Clin Oncol** 1990 Aug;8(8):1443–4

[Survey of the attitude of specialists faced with bronchial small cell carcinoma] Quoix E, et al. **Rev Mal Respir** 1990; 7(3):255–9 (Eng. Abstr.) (Fre)

[Palliative endoscopic therapy of bronchial carcinoma] Lorenz J. **Dtsch Med Wochenschr** 1990 Mar 23; 115(12):463–6 (12 ref.) (Ger)

[A comparison of systemic radiotherapy, chemotherapy or local radiotherapy in the treatment of extensive small-cell bronchial carcinoma. Results of a randomized series] Hüttner J, et al. **Radiobiol Radiother (Berl)** 1990;31(1):25–31 (Eng. Abstr.) (Ger)

[Problems in the treatment and care of bronchogenic carcinoma] Dangubić V, et al. **Vojnosanit Pregl** 1989 May–Jun;46(3):179–82 (Eng. Abstr.) (Ser)

ULTRASTRUCTURE

Basement membranes in bronchogenic squamous cell carcinoma: an immunohistochemical and ultrastructural study. Havenith MG, et al. **Ultrastruct Pathol** 1990 Jan–Feb;14(1):51–63

CARCINOMA, BROWN-PEARCE

PHYSIOPATHOLOGY

[Changes in the level of the permanent potential of the deep brain structures in rabbits with a Brown–Pearce carcinoma] Prokopovich SK, et al. **Eksp Onkol** 1990;12(2):79–81 (Eng. Abstr.) (Rus)

CARCINOMA, COLLOID see CARCINOMA, MUCINOUS

CARCINOMA, DUCTAL

Paget's disease of the nipple. A continuing enigma. Osther PJ, et al. **Acta Chir Scand** 1990 May;156(5):343–52 (67 ref.)

Four case reports presenting new acquisitions on the association between breast and endometrial carcinoma. Atlante G, et al. **Gynecol Oncol** 1990 Jun;37(3):378–80

Noninvasive breast cancer: Part 1. Ductal carcinoma in situ—incidence, presentation, guidelines to treatment. Swain SM. **Oncology (Williston Park)** 1989 Mar;3(3):25–31; discussion 40, 42, 44 passim (0 ref.)

Noninvasive breast cancer: Part 2. Lobular carcinoma in situ—incidence, presentation, guidelines to treatment. Swain SM. **Oncology (Williston Park)** 1989 Mar;3(3):35–40; discussion 40, 42, 44 passim (80 ref.)

ANALYSIS

Nuclear DNA content, histological grade, and clinical course in patients with nonpalpable mammographically detected breast adenocarcinomas. Azavedo E, et al. **Am J Clin Oncol** 1990 Feb;13(1):23–7

A prospective comparison of DNA quantitation by image and flow cytometry. Bauer TW, et al. **Am J Clin Pathol** 1990 Mar;93(3):322–6

Breast carcinoma with positive results for melanoma marker (HMB-45). HMB-45 immunoreactivity in normal and neoplastic breast. Bonetti F, et al. **Am J Clin Pathol** 1989 Oct;92(4):491–5

Estrogen receptors in ductal carcinoma in situ of breast. Malafa M, et al. **Am Surg** 1990 Jul;56(7):436–9

An evaluation of immunoreactivity for c-erbB-2 protein as a marker of poor short-term prognosis in breast cancer. Walker RA, et al. **Br J Cancer** 1989 Sep;60(3):426–9

Tenascin distribution in the normal human breast is altered during the menstrual cycle and in carcinoma. Ferguson JE, et al. **Differentiation** 1990 Feb;42(3):199–207

Epidermal growth factor receptor in human breast cancer: correlation with cytosolic and nuclear ER receptors and with biological and histological tumor characteristics. Bolufer P, et al. **Eur J Cancer** 1990 Mar;26(3):283–90

Immunohistochemical localization of sex hormone-binding globulin in normal and neoplastic breast tissue. Sinnecker G, et al. **Horm Metab Res** 1990 Jan;22(1):47–50

The neu-oncogene protein as a predictive factor for haematogenous metastases in breast cancer patients. De Potter CR, et al. **Int J Cancer** 1990 Jan 15;45(1):55–8

Oestrogen receptor staining of paraffin-embedded breast carcinomas following short fixation in formalin: a comparison with cytosolic and frozen section receptor analyses. Raymond WA, et al. **J Pathol** 1990 Apr; 160(4):295–303

Analysis of the tumour-associated antigen TAG-12 by monoclonal antibody 7A9 in normal, benign and malignant mammary tissues. Werner M, et al. **Virchows Arch [A]** 1990; 416(5):411–6

[Vasoactive intestinal peptide receptor in a human pancreatic carcinoma cell line] Chen Y. **Chung Hua I Hsueh Tsa Chih** 1990 Mar;70(3):135–7, 12 (Eng. Abstr.) (Chi)

BLOOD

Carcinocythemia. Report of two cases, one simulating a Burkitt lymphoma. Lugassy G, et al. **Acta Cytol** 1990 Mar–Apr;34(2):265–8

Individual and combined usefulness of lipid associated sialic acid, mucoid proteins and hexoses as tumor markers in breast carcinoma. Patel PS, et al. **Cancer Lett** 1990 Jun 15;51(3):203–8

COMPLICATIONS

Lipoma of the midbrain. Post-mortem finding in a patient with breast cancer. Gouvea VM, et al.

Arq Neuropsiquiatr 1989 Sep;47(3):371–4
Placental site trophoblastic tumor associated with immature ovarian teratoma. Stetler-Stevenson W, et al. Int J Gynaecol Obstet 1990 Jul;32(3):275–9
Synchrony of malignant lymphoma and breast cancer. Stierer M, et al. JAMA 1990 Jun 6;263(21):2922–3
Breast cancer in a patient with gynecomastia. Fodor PB. Plast Reconstr Surg 1989 Dec;84(6):976–9
Erythrocytosis caused by an erythropoietin–producing breast adenocarcinoma. Bohnen RF, et al. West J Med 1990 Apr; 152(4):417–8
[Cancer of the male breast with atypical ductal hyperplasia and contralateral gynecomastia] Turi V, et al. Minerva Chir 1990 Feb;45(3–4):203–5 (11 ref.) (Eng. Abstr.) (Ita)
[Carcinoma of the papilla of Vater associated with pancreatolithiasis—a case report] Ogiso S, et al. Nippon Shokakibyo Gakkai Zasshi 1989 Oct;86(10):2456–9 (Jpn)

DIAGNOSIS

The clinical management of a normal contralateral breast in patients with lobular breast cancer. Baker RR, et al. Ann Surg 1989 Oct;210(4):444–7; discussion 447–8
Expression of ras p21 in mammary and extramammary Paget's disease. Mori O, et al. Arch Pathol Lab Med 1990 Aug;114(8):858–61
A screened breast cancer. Thomas P. Br J Hosp Med 1990 May;43(5):390–1
Breast cancer diagnosis and prognosis in women augmented with silicone gel–filled implants. Silverstein MJ, et al. Cancer 1990 Jul 1;66(1):97–101
Paget's disease or erosive adenomatosis of the nipple? [letter; comment] Piérard G. Dermatologica 1990;180(1):55 Comment on: Dermatologica 1989;179(1):42–4.
In situ ductal carcinoma of the breast—analysis of clinical presentation and outcome in 156 consecutive cases. Ciatto S, et al. Eur J Surg Oncol 1990 Jun;16(3):220–4
Immunohistology is valuable in distinguishing between Paget's disease, Bowen's disease and superficial spreading malignant melanoma. Reed W, et al. Histopathology 1990 Jun;16(6):583–8
Breast cancer metastatic to the lung. Amir J, et al. J Arkansas Med Soc 1990 Jan;86(8):320–1
The non–palpable, radiographically suspicious breast lesion: an analysis of 101 cases. Perre CI, et al. Neth J Surg 1990 Jun;42(3):69–71
Prognostic significance of morphological parameters and flow cytometric DNA analysis in carcinoma of the breast. Visscher DW, et al. Pathol Annu 1990;25 Pt 1:171–210 (88 ref.)
Breast cancer: mammographic and sonographic findings after augmentation mammoplasty. Leibman AJ, et al. Radiology 1990 Jan;174(1):195–8
[Initial experiences with CA–15–3 determination in the serum of patients with breast cancer] Bartel U, et al. Zentralbl Gynakol 1989;111(21):1417–24 (Eng. Abstr.) (Ger)

DRUG THERAPY

Long–term complete remission of stage IV breast cancer after high–dose chemotherapy and autologous bone marrow transplantation. Dunphy FR 2d, et al. Am J Clin Oncol 1990 Aug;13(4):364–6
Growth–inhibitory effects of epidermal growth factor on human breast cancer and carcinoma of the esophagus transplanted into nude mice. Murayama Y. Ann Surg 1990 Mar;211(3):263–8
Facial ulcerations in an immunocompromised patient. Ecthyma gangrenosum. Blumenthal NC, et al. Arch Dermatol 1990 Apr;126(4):529, 532
Results of initial doxorubicin, 5–fluorouracil, and cyclophosphamide combination chemotherapy for inflammatory carcinoma of the breast. Maloisel F, et al. Cancer 1990 Feb 15;65(4):851–5
A response in advanced post–menopausal breast cancer during treatment with the luteinising hormone releasing hormone agonist—Zoladex. Cassano A, et al. Cancer Lett 1989 Nov 30;48(2):123–4
Antitumor efficacy of PD115934 (NSC 366140) against solid tumors of mice. LoRusso P, et al. Cancer Res 1990 Aug 15;50(16):4900–5
Immunohistochemical analysis of P–glycoprotein expression correlated with chemotherapy resistance in locally advanced breast cancer [see comments] Ro J, et al. Hum Pathol 1990 Aug;21(8):787–91 Comment in: Hum Pathol 1990 Aug;21(8):785–6.
Cystic ovarian necrosis complicating tamoxifen therapy for breast cancer in a premenopausal woman. A case report. Jolles CJ, et al. J Reprod Med 1990 Mar;35(3):299–300
Acute leukemia after adjuvant chemotherapy for breast cancer. Gabrail NY. Mo Med 1989 Oct;86(10):689–90
The anticancer effect of antineoplaston A–10 on human breast cancer serially transplanted to athymic mice. Hashimoto K, et al. Nippon Gan Chiryo Gakkai Shi 1990 Jan 20;25(1):1–5
Effect of somatostatin and tamoxifen on the growth of human pancreatic cancers in nude mice. Poston GJ, et al. Pancreas 1990 Mar;5(2):151–7
[Preoperative intensive chemotherapy of operable breast cancer] Zhang B. Chung Hua Chung Liu Tsa Chih 1989 May;11(3):228–30 (Eng. Abstr.) (Chi)
[Pneumo– and cardiotoxic side effects following combination chemotherapy with epirubicin and ifosfamide] Franzen D, et al. Med Klin 1990 Mar;85 Suppl 1:133–6, 170 (Ger)

ENZYMOLOGY

Casein kinase II is elevated in solid human tumours and rapidly proliferating non–neoplastic tissue. Münstermann U, et al. Eur J Biochem 1990 Apr 30;189(2):251–7
[Relationship between cyclic nucleotide phosphodiesterases (cPDE) and some patho–biologic behaviors of stomach cancer—I. Histochemical studies of CPDE in stomach cancer tissues] Xin Y. Chung Hua Chung Liu Tsa Chih 1989 Mar;11(2):117–20 (Eng. Abstr.) (Chi)

EPIDEMIOLOGY

Breast cancer in Papua New Guinea: a survey of 10 years. SenGupta SK, et al. Aust N Z J Surg 1990 Jan;60(1):41–4
What can a woman do about her risk of dying of breast cancer? Henderson IC. Curr Probl Cancer 1990 Jul–Aug; 14(4):161–230 (225 ref.)
Breast cancer in West Indian women in Trinidad. Raju GC, et al. Trop Geogr Med 1989 Jul;41(3):257–60

ETIOLOGY

The histogenesis of mammary and extramammary Paget's disease [letter; comment] Heyderman E. Histopathology 1989 Nov;15(5):553–4 Comment on: Histopathology 1989 Apr;14(4):409–16.

GENETICS

Chromosome analysis of in situ breast cancer. Nielsen KV, et al. Acta Oncol 1989;28(6):919–22
Amplification of the c–erb B–2 oncogene and prognosis of breast adenocarcinoma. Heintz NH, et al. Arch Pathol Lab Med 1990 Feb;114(2):160–3
c–erbB–2/c–erbA co–amplification indicative of lymph node metastasis, and c–myc amplification of high tumour grade, in human breast carcinoma. Tavassoli M, et al. Br J Cancer 1989 Oct;60(4):505–10
A cytogenetic study of male breast cancer. Mitchell EL. Cancer Genet Cytogenet 1990 Jul 1;47(1):107–12
Elastin gene expression in elastotic human breast cancers and epithelial cell lines. Krishnan R, et al. Cancer Res 1990 Apr 1;50(7):2164–71
Presence of two members of c–erbA receptor gene family (c–erbA beta and c–erbA2) in smallest region of somatic homozygosity on chromosome 3p21–p25 in human breast carcinoma [see comments] Ali IU, et al. J Natl Cancer Inst 1989 Dec 6;81(23):1815–20 Comment in: J Natl Cancer Inst 1989 Dec 6;81(23):1764–5.
Karyometric and DNA content analyses of cancer cells in stage III breast cancer with reference to prognosis. Tamura G, et al. Jpn J Clin Oncol 1990 Mar;20(1):78–82

IMMUNOLOGY

Breast carcinoma kinetics. Argyrophilic nucleolar organizer region counts correlate with Ki67 scores. Dervan PA, et al. Am J Clin Pathol 1989 Oct;92(4):401–7
Characterization and distribution in normal and tumoral human tissues of breast cancer–associated antigen defined by monoclonal antibody 7B10. Pancino GF, et al. Cancer Res 1989 Dec 15;49(24 Pt 1):7078–85
Monoclonal antibodies reactive with mucin expressed in breast cancer. Xing PX, et al. Immunol Cell Biol 1989 Jun; 67 (Pt 3):183–95
S100 protein in human mammary tissue—immunoreactivity in breast carcinoma, including Paget's disease of the nipple, and value as a marker of myoepithelial cells. Gillett CE, et al. J Pathol 1990 Jan;160(1):19–24
Carcinoma of breast presenting as gastric cancer: diagnosis by immunoperoxidase staining patterns. Finch PJ, et al. J R Coll Surg Edinb 1989 Aug;34(4):225–6
[Monoclonal antibodies against gastric cancer and their selective reaction on various tissues] Wei SM. Chung Hua Chung Liu Tsa Chih 1989 May;11(3):162–4 (Eng. Abstr.) (Chi)
[The expression of leukocytic and related antigens on the cells of human breast cancer cells] Tupitsyn NN, et al. Eksp Onkol 1990;12(2):54–8 (Eng. Abstr.) (Rus)

METABOLISM

Vimentin is preferentially expressed in human breast carcinomas with low estrogen receptor and high Ki–67 growth fraction. Domagala W, et al. Am J Pathol 1990 Jan;136(1):219–27
Immunohistochemical distribution of type IV collagenase in normal, benign, and malignant breast tissue. Monteagudo C, et al. Am J Pathol 1990 Mar;136(3):585–92
DNA distribution pattern and comparison of quantitative data in breast tumours. Megyesi J, et al. Arch Geschwulstforsch 1990;60(3):217–22
Direct adhesion to type I and homotrimer collagens by breast carcinoma and embryonic epithelial cells in culture: a comparative study. Ghersi G, et al. Eur J Cell Biol 1989 Dec;50(2):279–84
An immunohistochemical study of the presence of c–erbB–2 protein in Paget's disease of the nipple. Lammie GA, et al. Histopathology 1989 Nov;15(5):505–14
Parathyroid hormone–related protein and transforming growth factor activities in an extract from a breast cancer associated with humoral hypercalcemia of malignancy. Nagata N, et al. Jpn J Clin Oncol 1989 Dec;19(4):353–9
Growth fractions of breast cancer in relation to epidermal growth factor receptor and estrogen receptor. Toi M, et al. Jpn J Surg 1990 May;20(3):327–30
Studies of the metabolism of human breast cancer spheroids by NMR. Ronen S, et al. Magn Reson Med 1989 Nov; 12(2):274–81

MORTALITY

The importance of DNA flow cytometry in node–negative breast cancer. Winchester DJ, et al. Arch Surg 1990 Jul; 125(7):886–9
Tissue carcinoembryonic antigen in the prognosis of early invasive breast cancer. Hegg R, et al. Breast Cancer Res Treat 1990 May;15(3):213–6
[Effect of administration of hormonal contraceptives on prognostic factors in breast cancer] Schönborn I, et al. Zentralbl Gynakol 1990;112(5):263–6 (Eng. Abstr.) (Ger)

PATHOLOGY

In situ carcinomas of the female breast. Diagnostic and therapeutic aspects with special reference to histological growth patterns. Clinical review. Blichert–Toft M, et al. Acta Chir Scand 1990 Feb;156(2):113–9 (38 ref.)
Relationship between the extent of intraductal component and that of the invasive component in ductal carcinomas of the breast. Ichihara S, et al. Acta Pathol Jpn 1989 Dec; 39(12):786–94
Prostatic comedocarcinoma: correlation of sonograms with pathologic specimens in three cases. Lile R, et al. AJR Am J Roentgenol 1990 Aug;155(2):303–6
Cellularity in breast carcinoma [see comments] Ambros RA, et al. Am J Clin Pathol 1990 Jan;93(1):98–100 Comment in: Am J Clin Pathol 1990 Jul;94(1):121.
Signet ring cell sinus histiocytosis. A previously unrecognized histologic condition mimicking metastatic adenocarcinoma in lymph nodes. Gould E, et al. Am J Clin Pathol 1989 Oct;92(4):509–12
Demonstration of two ovarian tumor–associated antigens in primary and metastatic breast, gastric, and colonic tumors. McGuckin MA, et al. Am J Clin Pathol 1990 Aug; 94(2):137–41
Juvenile papillomatosis of the breast. A follow–up study of 41 patients having biopsies before 1979 [see comments] Rosen PP, et al. Am J Clin Pathol 1990 May;93(5):599–603 Comment in: Am J Clin Pathol 1990 May;93(5):713.
Comparative features of ductal carcinoma in situ and infiltrating ductal carcinoma of the breast on fine–needle aspiration biopsy. Wang HH, et al. Am J Clin Pathol 1989 Dec;92(6):736–40
Prognosis in infiltrating lobular carcinoma. An analysis of "classical" and variant tumors. DiCostanzo D, et al. Am J Surg Pathol 1990 Jan;14(1):12–23
Pancreatic microcystic adenoma coexistent with pancreatic ductal carcinoma. A report of two cases. Montag AG, et al. Am J Surg Pathol 1990 Apr;14(4):352–5
Anti–estradiol immunoperoxidase labeling of nuclei, not cytoplasm, in paraffin sections, determines estrogen receptor status of breast cancer. O'Keane JC, et al. Am J Surg Pathol 1990 Feb;14(2):121–7
Epitheliosis of the breast. An immunohistochemical characterization and comparison to malignant intraductal proliferations of the breast. Raju U, et al. Am J Surg Pathol 1990 Oct;14(10):939–47
Prospective evaluation of the role of fine–needle aspiration biopsy in the diagnosis and management of patients with palpable solid breast lesions. Gelabert HA, et al. Am Surg 1990 Apr;56(4):263–7 (23 ref.)
Relationship between computerized morphonuclear image analysis and histopathologic grading of breast cancer. Larsimont D, et al. Anal Quant Cytol Histol 1989 Dec; 11(6):433–9
Relationship between progesterone receptor, axillary node status and productive fibrosis in ductal infiltrating carcinoma of the breast. Giani C, et al. Appl Pathol 1989; 7(4):225–32
Predictors of local recurrence following conservative breast surgery and radiation therapy. The influence of tumor size. Eberlein TJ, et al. Arch Surg 1990 Jun;125(6):771–5; discussion 775–7
Improved detection of metastases to lymph nodes and estrogen receptor determination. Schurman SH, et al. Arch Surg 1990 Feb;125(2):179–82
An assessment of extensive intraductal component as a risk factor for local recurrence after breast–conserving therapy. Jacquemier J, et al. Br J Cancer 1990 Jun;61(6):873–6
DNA index, S–phase fraction, histological grade and prognosis in breast cancer. O'Reilly SM, et al. Br J Cancer 1990 May;61(5):671–4
The prognostic significance of nuclear DNA content in invasive breast cancer—a study with long–term follow–up. Toikkanen S, et al. Br J Cancer 1989 Nov;60(5):693–700
Paget's disease without a palpable mass in the breast. Aktan AO, et al. Br J Surg 1990 Feb;77(2):226–7
Flow cytometric and histological analysis of ductal carcinoma in situ of the breast. Locker AP, et al. Br J Surg 1990 May;77(5):564–7
Salivary duct carcinoma (cribriform salivary carcinoma of excretory ducts). A clinicopathologic and

immunohistochemical study of 12 cases. Brandwein MS, et al. **Cancer** 1990 May 15;65(10):2307–14

DNA index and S-phase fraction and their combination as prognostic factors in operable ductal breast carcinoma. Joensuu H, et al. **Cancer** 1990 Jul 15;66(2):331–40

Risk factors for breast recurrence in premenopausal and postmenopausal patients with ductal cancers treated by conservation therapy. Kurtz JM, et al. **Cancer** 1990 Apr 15;65(8):1867–78

Prognostic value of histologic grade nuclear components of Scarff–Bloom–Richardson (SBR). An improved score modification based on a multivariate analysis of 1262 invasive ductal breast carcinomas. Le Doussal V, et al. **Cancer** 1989 Nov 1;64(9):1914–21

Topographic criteria in the diagnosis of tumor emboli in intramammary lymphatics. Orbo A, et al. **Cancer** 1990 Sep 1;66(5):972–7

Metaplastic carcinomas of the breast. IV. Squamous cell carcinoma of ductal origin. Wargotz ES, et al. **Cancer** 1990 Jan 15;65(2):272–6

In vitro sensitivity testing of human breast cancer cells to hormones and chemotherapeutic agents. Emerman JT, et al. **Cancer Chemother Pharmacol** 1990;26(4):245–9

Differential tumorigenicity of two autologous human breast carcinoma cell lines, HMT-3909S1 and HMT-3909S8, established in serum-free medium. Petersen OW, et al. **Cancer Res** 1990 Feb 15;50(4):1257–70

Ductal carcinoma-in-situ of the breast: fine-needle aspiration cytology of 12 cases. Sneige N, et al. **Diagn Cytopathol** 1989;5(4):371–7

Adhesion, growth and cytoskeletal characteristics of 8701-BC breast carcinoma cells cultured in the presence of type V collagen. Luparello C, et al. **Eur J Cancer** 1990 Mar;26(3):231–40

Rarities in breast pathology. Bilateral Paget's disease of the breast—a case report. Fernandes FJ, et al. **Eur J Surg Oncol** 1990 Apr;16(2):172–4

The effects of hormonal and chemotherapy on tumoral and nonneoplastic breast tissue. Kennedy S, et al. **Hum Pathol** 1990 Feb;21(2):192–8

Can the clinical and mammographic findings at presentation predict the presence of an extensive intraductal component in early stage breast cancer? Healey EA, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1217–21

Pigmented Paget's disease of the male breast. Ho TC, et al. **J Am Acad Dermatol** 1990 Aug;23(2 Pt 2):338–41

The presence of an extensive intraductal component following a limited excision correlates with prominent residual disease in the remainder of the breast. Holland R, et al. **J Clin Oncol** 1990 Jan;8(1):113–8

Salivary duct carcinoma in major and minor salivary glands [letter] **J Craniomaxillofac Surg** 1989 Nov;17(8):373

Paget's disease of the male breast—report of a case and histopathologic study. Sano Y, et al. **J Dermatol** 1989 Jun; 16(3):237–41

Interleukin 6 decreases cell–cell association and increases motility of ductal breast carcinoma cells. Tamm I, et al. **J Exp Med** 1989 Nov 1;170(5):1649–69

An observation of DNA ploidy, histological grade, and immunoreactivity for tumour-related antigens in primary and metastatic breast carcinoma. Hitchcock A, et al. **J Pathol** 1989 Oct;159(2):129–34

Extent, distribution, and mammographic/histological correlations of breast ductal carcinoma in situ. Holland R, et al. **Lancet** 1990 Mar 3;335(8688):519–22

Infiltrating ductal carcinoma of the breast in South Australia. Implications of trends in tumour diameter, nodal status and case-survival rates for cancer control. Bonett A, et al. **Med J Aust** 1990 Jan 1;152(1):19–23

Genetic and immunochemical analysis of mutant p53 in human breast cancer cell lines. Bartek J, et al. **Oncogene** 1990 Jun;5(6):893–9

Quantitative aspects in defining prognostic factors of breast cancer. Komitowski D, et al. **Pathol Res Pract** 1989 Nov; 185(5):621–4

Grading and prognosis of invasive ductal mammary carcinoma by nuclear image analysis in tissue sections. Kunze KD, et al. **Pathol Res Pract** 1989 Nov;185(5):689–93

Quantitative evaluation of morphological parameters for infiltrating ductal breast cancer prognosis. Mariuzzi GM, et al. **Pathol Res Pract** 1989 Nov;185(5):698–700

Nucleolar organizer regions and Ki-67 immunostaining in ductal breast cancer: a comparative study. Canepa M, et al. **Pathologica** 1990 Mar–Apr;82(1078):125–32

Stereotactic breast biopsy with a biopsy gun [see comments] Parker SH, et al. **Radiology** 1990 Sep;176(3):741–7 Comment in: Radiology 1990 Sep;176(3):615–6.

Presentation of axillary lymphadenopathy without detectable breast primary (T0 N1b breast cancer): experience at Institut Curie. Campana F, et al. **Radiother Oncol** 1989 Aug; 15(4):321–5

Duct carcinoma in situ. Pathology and treatment. Lagios MD. **Surg Clin North Am** 1990 Aug;70(4):853–71

Nonendocrine cancer of the pancreas in patients under age forty years. Ivy EJ, et al. **Surgery** 1990 Sep;108(3):481–7

In situ and microinvasive carcinoma with squamoid differentiation arising in a phyllodes tumor: report of a case. de Rosa G, et al. **Tumori** 1989 Oct 31;75(5):514–7 (20 ref.)

[Factors influencing long-term prognosis after pancreatoduodenectomy in cancer of the pancreas head] Liang XM. **Chung Hua Wai Ko Tsa Chih** 1989 Apr; 27(4):211–4, 253 (Eng. Abstr.) **(Chi)**

[Prognostically relevant factors in ductal pancreatic cancer] Böttger T, et al. **Chirurg** 1989 Aug;60(8):521–8 (Eng. Abstr.) **(Ger)**

[Cell receptors and proliferation markers in breast cancer] Czerwenka KF, et al. **Gynakol Rundsch** 1989;29 Suppl 2:400–1 **(Ger)**

[Micrometastases in axillary lymph nodes in breast cancer] Ronay G, et al. **Gynakol Rundsch** 1989;29 Suppl 2:234–6 **(Ger)**

[Value of preoperative diagnosis in assessing tumor extension of ductal pancreatic carcinoma] Böttger T, et al. **Langenbecks Arch Chir** 1990;375(1):33–8 (Eng. Abstr.) **(Ger)**

[Endoscopy and biopsy of the pancreatic duct—a new method of pancreas diagnosis] Stömmer P, et al. **Leber Magen Darm** 1989 Dec;19(6):311–8 (Eng. Abstr.) **(Ger)**

[Microglandular pancreatic cancer. Histological, immunocytochemical and electron microscopy findings] Stömmer P, et al. **Pathologe** 1989 Nov;10(6):354–8 **(Ger)**

[Immunohistochemical studies of breast and extra-mammary Paget's disease indicate an apocrine differentiation] Lautier R, et al. **Z Hautkr** 1990 Jun;65(6):571–4 (Eng. Abstr.) **(Ger)**

[Grading, staging, DNA content and prognosis of invasive ductal breast cancer] Theissig F, et al. **Zentralbl Chir** 1990; 115(7):433–9 (Eng. Abstr.) **(Ger)**

[Nuclear morphometry and estrogen receptors in infiltrating ductal carcinoma of the breast] Giardina C, et al. **Boll Soc Ital Biol Sper** 1990 Feb;66(2):135–41 (Eng. Abstr.) **(Ita)**

[Comedocarcinoma: a tumor histotype to be reevaluated] Bongiorni G, et al. **Radiol Med (Torino)** 1990 Jun; 79(6):590–2 (Eng. Abstr.) **(Ita)**

[Papillary carcinoma of the male breast] de Araújo PM, et al. **Acta Med Port** 1989 Aug–Oct;2(4–5):221–3 (Eng. Abstr.) **(Por)**

[Micrometastases of the axillary lymph nodes in breast cancer. An immunohistochemical study] Ronay G, et al. **Pathologe** 1989 Sep;10(5):289–93 **(Rus)**

PREVENTION & CONTROL

Treatment of screen detected ductal carcinoma in situ: a silver lining within a grey cloud? [editorial] Fentiman IS. **Br J Cancer** 1990 Jun;61(6):795–6

RADIOGRAPHY

Nonpalpable breast masses: radiologic predictability of malignancy. Hermann G, et al. **Can Assoc Radiol J** 1990 Jun;41(3):130–2

Semilunar osteoblastic metastases in breast carcinoma. A new radiological sign. Cochrane LB, et al. **J Belge Radiol** 1989 Dec;72(6):497–500

Biopsy of occult breast lesions. Analysis of 1261 abnormalities. Meyer JE, et al. **JAMA** 1990 May 2; 263(17):2341–3

Usefulness of galactography for minimal noninvasive ductal carcinoma of the breast. Nishida M, et al. **Nippon Geka Hokan** 1989 Mar 1;58(2):250–6

Mammography and the primary care management of breast lumps. Banerjee A, et al. **Practitioner** 1989 May 8; 233(1468):652–5

Ductal carcinoma in situ: atypical mammographic appearances [letter; comment] Sullivan DC. **Radiology** 1990 Apr;175(1):285 Comment on: Radiology 1989 Sep;172(3):661–6.

[A correlative study of sex hormonal receptor status and mammographic appearance in primary breast cancer] He ZY. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Dec; 23(6):350–3 (Eng. Abstr.) **(Chi)**

[The interval carcinoma in periodic breast screening, a new concept] Wobbes T, et al. **Ned Tijdschr Geneeskd** 1989 Nov 11;133(45):2209–12 **(Dut)**

[Assessment of non-palpable mammographic changes of the breast] Diergarten K, et al. **Arch Gynecol Obstet** 1989; 245(1–4):681–3 **(Ger)**

[Computed tomography of pancreatic carcinoma] Schild H, et al. **Rontgenblatter** 1989 Sep;42(9):384–7 (27 ref.) (Eng. Abstr.) **(Ger)**

[Clinical x-ray and morphological changes in breast carcinomas during radiothermotherapy] Pugachev VF, et al. **Vopr Onkol** 1989;35(11):1352–4 (Eng. Abstr.) **(Rus)**

[A woman with a palpable breast mass] García Pérez M, et al. **Rev Clin Esp** 1989 Jul–Aug;185(3):162–3 **(Spa)**

RADIONUCLIDE IMAGING

Uptake of technetium-99m sulfur colloid by a breast carcinoma. Calandra JD, et al. **Clin Nucl Med** 1990 Jun; 15(6):432–3

RADIOTHERAPY

Radiotherapy for ductal carcinoma in situ detected by screening. Hamilton CR, et al. **BMJ** 1990 Jul 28; 301(6745):224–5

Local control of operable breast cancer after radiotherapy alone. Van Limbergen E, et al. **Eur J Cancer** 1990; 26(6):674–9

Radiotherapy enhances the toxicity of aminoglutethimide. Vanek N, et al. **Med Pediatr Oncol** 1990;18(2):162–4

Breast conserving treatment of Paget's disease. Bulens P, et al. **Radiother Oncol** 1990 Apr;17(4):305–9

SECONDARY

Flow cytometric analysis of cell surface carbohydrates in metastatic human breast cancer. Alam SM, et al. **Br J Cancer** 1990 Aug;62(2):238–42

N-6 polyunsaturated fatty acids in human breast carcinoma phosphatidylethanolamine and early relapse. Lanson M, et al. **Br J Cancer** 1990 May;61(5):776–8

Multiple cutaneous metastases from breast carcinoma. Tianco EA, et al. **Cutis** 1990 Mar;45(3):171–5

Metastases to the endometrium from breast carcinoma. Ben-Baruch G, et al. **Eur J Gynaecol Oncol** 1990;11(1):61–6

Radioimmune imaging of bone marrow in patients with suspected bone metastases from primary breast cancer. Duncker CM, et al. **J Nucl Med** 1990 Sep;31(9):1450–5

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 51-1989. A 72-year-old woman with bronchospasm and a pleural effusion after treatment of breast carcinoma. N **Engl J Med** 1989 Dec 21;321(25):1738–49

The role of malignancy in lactic acidosis and shock [letter; comment] Odeh M, et al. **Postgrad Med J** 1989 Oct; 65(768):801 Comment on: Postgrad Med J 1989 Feb;65(760):120.

[Ablative hormone therapy and chemotherapy of metastatic breast cancer] Kasch R, et al. **Zentralbl Gynakol** 1989; 111(23):1584–7 (Eng. Abstr.) **(Ger)**

[Temporal bone metastasis of adenocarcinoma of the breast: personal observations and a review of the literature] Piantanida R, et al. **Acta Otorhinolaryngol Ital** 1989 Jul–Aug;9(4):421–6 (14 ref.) (Eng. Abstr.) **(Ita)**

SURGERY

Results of breast conserving treatment of breast cancer. Hamilton CS, et al. **Acta Oncol** 1990;29(2):137–42

Recurrence after lumpectomy for comedo-type intraductal carcinoma of the breast. Baird RM, et al. **Am J Surg** 1990 May;159(5):479–81

Pregnancy after breast reconstruction with a transverse rectus abdominis musculocutaneous flap. Lawrence WT, et al. **Ann Plast Surg** 1986 Apr;16(4):354–5

Surgical palliation for pancreatic cancer. The UCLA experience. Singh SM, et al. **Ann Surg** 1990 Aug; 212(2):132–9

Duct carcinoma in situ: predictors of local recurrence and progression in patients treated by surgery alone. Price P, et al. **Br J Cancer** 1990 Jun;61(6):869–72

Calcifectomy for ductal carcinoma in situ [letter; comment] Shetty MR. **Br J Surg** 1989 Jun;76(6):655 Comment on: Br J Surg 1989 Feb;76(2):185–6.

Factors influencing local recurrence of cancer after partial mastectomy [see comments] Crile G Jr, et al. **Cleve Clin J Med** 1990 Mar–Apr;57(2):143–6 Comment in: Cleve Clin J Med 1990 Mar–Apr;57(2):176–7.

The basis for surgical decisions in the management of in situ breast cancer. Yeatman TJ, et al. **Compr Ther** 1990 May; 16(5):12–7 (32 ref.)

Therapy of in situ cancer. Recht A, et al. **Hematol Oncol Clin North Am** 1989 Dec;3(4):691–708 (71 ref.)

Current trends in the management of carcinoma of the pancreatic head. Funovics JM, et al. **Hepatogastroenterology** 1989 Dec;36(6):450–5

Prognostic factors for local recurrence in patients with limited surgery and irradiation of breast cancer. Stadler B, et al. **Strahlenther Onkol** 1990 Jul;166(7):453–6

[Paget's disease of the nipple] Zhang BN. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):216–8 (Eng. Abstr.) **(Chi)**

[Surgical treatment for intraductal proliferative lesions] Kimijima I, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep; 90(9):1406–9 (Eng. Abstr.) **(Jpn)**

[Breast-preserving surgery in breast cancer. Experiences from Haukeland Hospital 1983–1988] Aas T, et al. **Nord Med** 1990;105(4):109–12 (Eng. Abstr.) **(Nor)**

[Breast conserving surgery in breast cancer. Experiences from the Haukeland Hospital 1983–88] Aas T, et al. **Tidsskr Nor Laegeforen** 1990 Jan 20;110(2):196–200 (Eng. Abstr.) **(Nor)**

THERAPY

Intraductal carcinoma of the breast (208 cases). Clinical factors influencing treatment choice. Silverstein MJ, et al. **Cancer** 1990 Jul 1;66(1):102–8

Conservative treatment of early breast cancer: prognostic value of the ductal in situ component and other pathological variables on local control and survival. Long-term results. Zafrani B, et al. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1645–50

Clinical results of thermoradiotherapy for locally advanced and/or recurrent breast cancer—comparison of results with radiotherapy alone. Masunaga S, et al. **Int J Hyperthermia** 1990 May–Jun;6(3):487–97

The role of limited surgery with irradiation in primary treatment of ductal in situ breast cancer. Stotter AT, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb;18(2):283–7

Successful pre-embryo donation in ovarian failure after treatment for breast carcinoma [letter] Sauer MV, et al. **Lancet** 1990 Mar 24;335(8691):723

Intraductal noninvasive breast cancer: a comparison of three

local treatments. Fowble B. **Oncology (Williston Park)** 1989 Jun;3(6):51–8; discussion 63–4, 66, 69 (47 ref.)
Early breast cancer: detection of recurrence after conservative surgery and radiation therapy. Hassell PR, et al. **Radiology** 1990 Sep;176(3):731–5
Cutaneous angiosarcoma of the breast 7 years after lumpectomy and radiation therapy. Rubin E, et al. **Radiology** 1990 Jan;174(1):258–60
[Tumor recurrence in the salvaged breast; a second chance?] Roukema JA, et al. **Ned Tijdschr Geneeskd** 1989 Dec 30; 133(52):2593–5 **(Dut)**

ULTRASTRUCTURE

A comparative study of nuclear morphometric features of intraduct carcinoma and ductal epitheliosis of the breast. Delides GS, et al. **Arch Geschwulstforsch** 1990;60(3):231–3
An ultrastructural evaluation of cell heterogeneity in invasive ductal carcinomas of the human breast. I. An in vivo study. Pucci–Minafra I, et al. **J Submicrosc Cytol Pathol** 1989 Jul; 21(3):475–88
An ultrastructural evaluation of cell heterogeneity in invasive ductal carcinomas of the human breast. II. An in vitro study. Pucci–Minafra I, et al. **J Submicrosc Cytol Pathol** 1989 Jul;21(3):489–99
In situ distribution of oncogene products and growth factor receptors in breast carcinoma: c–erbB–2 oncoprotein, EGFr, and PDGFr–beta–subunit. Kommoss F, et al. **Mol Cell Probes** 1990 Feb;4(1):11–23
Freeze–fracture morphometry on normal and cancer breast tissues. Losa GA. **Pathol Res Pract** 1989 Nov;185(5):572–8
[Ductal carcinoma of the breast. Electron microscopic study] Mroczka B, et al. **Patol Pol** 1989;40(2):171–9 (Eng. Abstr.) **(Pol)**

CARCINOMA, EHRLICH TUMOR

ANALYSIS

Calcium–binding protein from mouse Ehrlich ascites–tumour cells is homologous to human calcyclin. Kuźnicki J, et al. **Biochem J** 1989 Nov 1;263(3):951–6
Simultaneous analysis of mitochondrial activity and DNA content in Ehrlich ascites tumor cells by dual parameter flow cytometry. Hämmerle T, et al. **Histochemistry** 1989; 93(2):207–12
The in vitro DNA–binding properties of purified nuclear lamin proteins and vimentin. Shoeman RL, et al. **J Biol Chem** 1990 Jun 5;265(16):9055–61
[Angiogenesis activity of tissues and cells of different malignancies] Jiang ZG. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):165–7 (Eng. Abstr.) **(Chi)**
[A fluorometric method of determining DNA in cells] Ogievetskaia MM, et al. **Prikl Biokhim Mikrobiol** 1989 Jul–Aug;25(4):558–64 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Studies on inflammatory response induced by Ehrlich tumor in mice peritoneal cavity. Fecchio D, et al. **Inflammation** 1990 Feb;14(1):125–32

DIAGNOSIS

[Laser–induced fluorescence diagnosis of tumors exemplified by solid Ehrlich carcinoma] König K, et al. **Arch Geschwulstforsch** 1990;60(1):1–9 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Photoradiation therapy of animal tumors and nasopharyngeal carcinoma. Zhao SP, et al. **Ann Otol Rhinol Laryngol** 1990 Jun;99(6 Pt 1):454–60
The first organoantimony(III) compounds possessing antitumor properties: diphenylantimony(III) derivatives of dithiophosphorus ligands. Silvestru C, et al. **Anticancer Res** 1990 May–Jun;10(3):803–4
Modulating effect of alpha–[N,N–[bis(2–hydroxyethyl)]–amino–N–(o–methoxyphenyl)–pyrrolidin–2,5–dione on the chemotherapy of murine tumours. Ambaye RY, et al. **Cancer Lett** 1990 May 30;51(2):119–25
Tumour reducing and anticarcinogenic activity of selected spices. Unnikrishnan MC, et al. **Cancer Lett** 1990 May 15; 51(1):85–9
Inhibition of Ehrlich ascites tumor in vivo by PAF–antagonists. Fecchio D, et al. **Int J Immunopharmacol** 1990;12(1):57–65
Enhancement of cytotoxicity of bleomycin by dithiocarbamates: formation of bis(dithiocarbamato) cu(II). Ujjani B, et al. **J Inorg Biochem** 1990 Jan;38(1):81–93
Synthesis and biological activities of novel 5–(2–acylethynyl)uracils. Kundu NG, et al. **J Med Chem** 1990 Jul;33(7):1975–9
The effect of nitroimidazole and photochemotherapy on solid Ehrlich carcinomas. König K, et al. **Radiobiol Radiother (Berl)** 1989;30(6):535–9
Antitumoral property of ethanolic extract of propolis in mice–bearing Ehrlich carcinoma, as compared to bleomycin. Scheller S, et al. **Z Naturforsch [C]** 1989 Nov–Dec;44(11–12):1063–5
[Enhancement of the therapeutic effect and red cell immune function by radix Trichosanthis in mice bearing Ehrlich ascites carcinoma] Guo F. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jul;9(7):418–20, 390 (Eng. Abstr.) **(Chi)**
[Antitumor effect of methylene blue in vivo] Lai BT. **Chung Hua Chung Liu Tsa Chih** 1989 Mar;11(2):98–100 (Eng. Abstr.) **(Chi)**
[Photochemotherapy of experimental tumors in animals using various photosensitizers] König K, et al. **Z Urol Nephrol** 1989 Nov;82(11):601–7 (Eng. Abstr.) **(Ger)**
[Relation of the antitumor activity of 4'–epidoxorubicin and cytogenetic disorders of tumor cells in experimental studies] Nersesian AK, et al. **Antibiot Khimioter** 1990 Apr; 35(4):39–40 (Eng. Abstr.) **(Rus)**
[Chronobiological analysis of thyroxine action on cell proliferation in the hypotetraploid strain of Ehrlich's ascitic tumor] Romanov IuA, et al. **Biull Eksp Biol Med** 1989 Nov;108(11):610–2 (Eng. Abstr.) **(Rus)**
[An evaluation of the toxic and antitumor action of farmorubicin administered to H–strain mice with Ehrlich ascitic cancer] Karaivanova MKh, et al. **Eksp Onkol** 1990; 12(2):71–3, 81 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

The effect of Mg2+ upon 6–phosphofructokinase activity in Ehrlich ascites tumor cells in vivo. Bossi D, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):174–80
Glycosidases of Ehrlich ascites tumor cells and ascitic fluid––purification and substrate specificity of alpha–N–acetylgalactosaminidase and alpha–galactosidase: comparison with coffee bean alpha–galactosidase. Yagi F, et al. **Arch Biochem Biophys** 1990 Jul;280(1):61–7
Deficiency of methionine synthesis enzyme activity in ascites tumor cells. Shimizu K, et al. **Biochem Int** 1990; 20(6):1105–10
Pyruvate kinase from cytosolic fractions of the Ehrlich ascites tumour, normal mouse liver and skeletal muscle. Kędryna T, et al. **Biochim Biophys Acta** 1990 May 31; 1039(1):130–3
Control by hyperthermia of ornithine decarboxylase in Ehrlich ascites tumor cells. Matsui–Yuasa I, et al. **Biochim Biophys Acta** 1989 Dec 14;1014(3):225–8
Suppression of nuclear ADP–ribosyltransferase activity in Ehrlich ascites tumor cells by 5–azacytidine. Modification of DNA as a cause of suppression. Hoshino J, et al. **FEBS Lett** 1990 Mar 12;262(1):61–3
[The action of triftorfenazin on the Ca–ATPase activity of fibroblasts and Ehrlich ascites cells] Chikvashvili DV, et al. **Biull Eksp Biol Med** 1989 Dec;108(12):718–9 (Eng. Abstr.) **(Rus)**
[Microsomal monooxygenases of the liver in mice with transplanted tumors] Iakubovskaia MG, et al. **Vopr Onkol** 1989;35(12):1461–4 (Eng. Abstr.) **(Rus)**

GENETICS

The growth–related protein P23 of the Ehrlich ascites tumor: translational control, cloning and primary structure. Böhm H, et al. **Biochem Int** 1989 Aug;19(2):277–86
Mar–A of Ehrlich–Lettré mouse tumor is actually a "dic". Chakrabarti S, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):23–9
Differential screening of murine ascites cDNA libraries by means of in vitro transcripts of cell–cycle–phase–specific cDNA and digital image processing. Lu X, et al. **Gene** 1990 Feb 14;86(2):185–92
[Effects of intracellular Na+/K+ ratio on expression of c–fos oncogene and beta–actin gene in ascitic cells of leukemia P–388 and Ehrlich tumor] Smirnova NV, et al. **Eksp Onkol** 1990;12(4):31–5 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Nonspecific stimulation of host defense by Corynebacterium kutscheri. I. Antitumor effect. Kita E, et al. **Nat Immun Cell Growth Regul** 1989;8(6):313–24

METABOLISM

Calcyclin–like protein from Ehrlich ascites tumour cells–Ca2(+)–binding properties, distribution and target protein. Kuźnicki J, et al. **Adv Exp Med Biol** 1990; 269:149–52 (8 ref.)
TPA stimulates S6 phosphorylation but not protein synthesis in Ehrlich cells. Montine KS, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1340–5
Influence of ADP–ribosyltransferase inhibitors on the intracellular NAD and ATP levels in Ehrlich ascites tumor cells: implication for the altered NAD + ATP–dependent cellular sensitivity to the cytotoxic agents. Hoshino J, et al. **Biochem Int** 1990;20(1):135–45
Mutual effect of glucose and glutamine on their utilization by tumour cells. Luque P, et al. **Biochem Int** 1990; 21(1):9–15
Balancing of mitochondrial and glycolytic ATP production and of the ATP–consuming processes of Ehrlich mouse ascites tumour cells in a high phosphate medium. Schmidt H, et al. **Biochem Int** 1989 Nov;19(5):985–92
Solubilization and reconstitution of a nucleoside–transport system from Ehrlich ascites–tumour cells. Hammond JR, et al. **Biochem J** 1989 Aug 15;262(1):109–18
Protein metabolism in the tumour–bearing mouse. Rates of protein synthesis in host tissues and in an Ehrlich ascites tumour at different stages in tumour growth. Lopes MN, et al. **Biochem J** 1989 Dec 15;264(3):713–9
Energetics of Ehrlich ascites mitochondria: membrane potential of isolated mitochondria and mitochondria within digitonin–permeabilized cells. Bogucka K, et al. **Biochim Biophys Acta** 1990 Feb 22;1015(3):503–9
Regulatory volume increase in Ehrlich ascites tumor cells. Levinson C. **Biochim Biophys Acta** 1990 Jan 15;1021(1):1–8
Serum growth factors cause rapid stimulation of protein synthesis and dephosphorylation of eIF–2 in serum deprived Ehrlich cells. Montine KS, et al. **Biochim Biophys Acta** 1989 Dec 14;1014(3):282–8
Short–term effect of glutamine on the incorporation of glucose–carbon into nucleic acids in Ehrlich ascites tumor cells. Medina MA, et al. **Biochimie** 1990 Apr;72(4):291–3
Tissue distribution of radioiodinated neoglycoproteins and mammalian lectins. Kojima S, et al. **Biol Chem Hoppe Seyler** 1990 Apr;371(4):331–8
The expression of the growth–related 25kDa protein (p25) of Ehrlich ascites tumor cells is increased by hyperthermic treatment (heat shock). Oesterreich S, et al. **Biomed Biochim Acta** 1990;49(4):219–26
Metabolism of purine and pyrimidine compounds in erythrocytes of tumor–bearing mice. Tikhonov YV, et al. **Biomed Biochim Acta** 1990;49(2–3):S125–8
Transport of the multidrug resistance modulators verapamil and azidopine in wild type and daunorubicin resistant Ehrlich ascites tumour cells. Sehested M, et al. **Br J Cancer** 1990 Jul;62(1):37–41
Inhibition of vincristine binding to plasma membrane vesicles from daunorubicin–resistant Ehrlich ascites cells by multidrug resistance modulators. Sehested M, et al. **Br J Cancer** 1989 Dec;60(6):809–14
Choline uptake is increased by Ca++ and liposomes+ Ca++ in ascites tumor cells. Ritter C, et al. **Cancer Biochem Biophys** 1989 Oct;10(4):329–35
Studies of the mode of action of N–isopropyl–alpha–(2–methylhydrazino)–p–toluamide. Gale GR, et al. **Cancer Res** 1967 Jul;27(7):1186–91
A growth–dependent transcription initiation factor (TIF–IA) interacting with RNA polymerase I regulates mouse ribosomal RNA synthesis. Schnapp A, et al. **EMBO J** 1990 Sep;9(9):2857–63
Implications for a reduced DNA–elongation rate in polyamine–depleted cells. Oredsson SM, et al. **Eur J Biochem** 1990 Jul 5;190(3):483–9
Lipid peroxidation in liver and Ehrlich ascites cell mitochondria. Szabados G, et al. **Free Radic Res Commun** 1989;7(3–6):161–70 (40 ref.)
Effects of iron–binding proteins on in vitro uptake of 67Ga–citrate by tumor cells. Anghileri LJ, et al. **Int J Rad Appl Instrum [B]** 1990;17(3):331–4
Cap binding protein complex that restores protein synthesis in heat–shocked Ehrlich cell lysates contains highly phosphorylated eIF–4E. Lamphear BJ, et al. **J Biol Chem** 1990 Apr 5;265(10):5333–6
Changes of the surface proteolytic activity in synchronized Ehrlich ascites tumor cells grown in vivo. Adamietz IA, et al. **J Cancer Res Clin Oncol** 1990;116(1):65–8
Binding properties of biotinylated epidermal growth factor to its receptor on cultured cells and tissue sections. Spitzer E, et al. **J Cell Biochem** 1989 Oct;41(2):47–56
Membrane potential, anion and cation conductances in Ehrlich ascites tumor cells. Lambert IH, et al. **J Membr Biol** 1989 Oct;111(2):113–31
Cytoplasmic acidification and activation of Na+/H+ exchange during regulatory volume decrease in Ehrlich ascites tumor cells. Livne A, et al. **J Membr Biol** 1990 Mar;114(2):153–7
Difference in cytotoxicity of (22R)–cholest–5–ene–3 beta,7 alpha,22–triol and (22R)–cholest–5–ene–3 beta,7 beta,22–triol is not explained by different patterns of metabolites. Boberg KM, et al. **J Steroid Biochem** 1989 Dec;33(6):1087–9
Ribose–transfer activity from uridine to 5–fluorouracil in Ehrlich ascites tumor cells. Nabeya Y, et al. **Jpn J Cancer Res** 1990 Jun–Jul;81(6–7):692–700
Altered ornithine metabolism in tumor–bearing mice. Márquez J, et al. **Life Sci** 1989;45(20):1877–84
Inhibition of Na–K–Cl cotransport in Ehrlich ascites cells by antiserum against purified proteins of the cotransporter. Dunham PB, et al. **Proc Natl Acad Sci U S A** 1990 Sep; 87(17):6828–32
[Influence of local anesthetics and narcotics on the energy metabolism of Ehrlich ascites tumor cells.] Buttgereit F, et al. **Biomed Biochim Acta** 1990;49(1):3–10 (Eng. Abstr.) **(Ger)**
[The role of protein binding with single–stranded DNA (SSB–protein) in DNA replication in Ehrlich ascites carcinoma cells] Koterov AN, et al. **Biokhimiia** 1990 May; 55(5):911–6 (Eng. Abstr.) **(Rus)**
[Protein composition of DNA–matrix complexes with "strong" and "weak" types of bonds, isolated from Ehrlich ascites carcinoma cells] S'iakste NI, et al. **Biokhimiia** 1989 Jul;54(7):1217–23 (Eng. Abstr.) **(Rus)**
[Structural dynamic properties of the cell membranes of Ehrlich ascites tumor associated with a polyamine deficiency caused by DL–difluoromethylornithine] Kozak VV, et al. **Eksp Onkol** 1989;11(5):36–9 (Eng. Abstr.) **(Rus)**
[Effects of intracellular Na+/K+ ratio on histone gene expression in ascitic cells of leukemia P–388 and Ehrlich

cancer] Smirnova NV, et al. **Eksp Onkol** 1990;12(3):34–7 (Eng. Abstr.) **(Rus)**

[The mechanism of the interaction of the pH-dependent cytostatic cauloside C with the membranes of tumor cells and liposomes] Prokof'eva NG, et al. **Izv Akad Nauk SSSR [Biol]** 1990 May-Jun;(3):338–42 (Eng. Abstr.) **(Rus)**

[DNA degradation and changes in the permeability and form of Ehrlich ascites tumor cells when incubated in an anaerobic medium without glucose] Proskurikov SIa, et al. **Tsitologiia** 1989 Jun;31(6):690–5 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Histochemical demonstration of primary amino groups with 2-hydroxy-1-naphthaldehyde (HNA): optimization of the method. Nöhammer G. **Acta Histochem (Jena)** 1989; 86(2):167–76

Histochemical probes for the detection of hypoxic tumour cells. Freitas I, et al. **Anticancer Res** 1990 May-Jun; 10(3):613–22

Morphometric patterns and functional activity of the ascites tumour cells at different cell cycle stages. Pinchuk VG, et al. **Anticancer Res** 1990 Jul-Aug;10(4):943–7

Activity of bleomycin in iron- and copper-deficient cells. Lyman S, et al. **Biochem Pharmacol** 1989 Dec 1; 38(23):4273–82

Neoplastic cell spreading in rodent transplantable tumor models. I. Ehrlich tumor. Roveta G. **Boll Soc Ital Biol Sper** 1990 Mar;66(3):287–93

Antitumor effects of rhodium (II) citrate in mice bearing Ehrlich tumors. Zyngier S, et al. **Braz J Med Biol Res** 1989;22(3):397–401

Delayed tumors of mice immunized against the Ehrlich ascites tumor. Ballif RN, et al. **Cancer** 1968 Feb; 21(2):178–83

Intracellular DNA strand scission and growth inhibition of Ehrlich ascites tumor cells by bleomycins. Byrnes RW, et al. **Cancer Res** 1990 Sep 1;50(17):5275–86

Studies on cancer dissemination. Rosso R, et al. **Cancer Res** 1967 Jul;27(7):1225–31

Growth acceleration of Ehrlich ascites tumor cells treated by proteinase in vitro. Adamietz IA, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1837–41

Increased level of histone H1(0) messenger RNA in hypoxic Ehrlich ascites tumor cells. Bouterfa H, et al. **Exp Cell Res** 1990 May;188(1):160–3

Mechanisms influencing cytokinesis in hamster ascites multinucleated cells. The effect of some citrate cycle inhibitors and nucleotides. Stevens DF. **Exp Cell Res** 1966 Mar;41(3):492–501

Effects of vinblastine, leucine, and histidine, and 3-methyladenine on autophagy in Ehrlich ascites cells. Punnonen EL, et al. **Exp Mol Pathol** 1990 Feb;52(1):87–97

The effects of hyperthermia on the cell cycle of Ehrlich ascites cancer cells in vivo. Hirooka Y, et al. **Jpn J Surg** 1990 Jul;20(4):437–42

Induction of mitotic synchrony by intermittent hyperthermia in Ehrlich carcinoma in vivo. Sapozink MD, et al. **Nature** 1973 Aug 3;244(5414):299–300

[Effect of glycosides of betulafolientriol and its 3-epimer on the growth of tumor cells in vitro] Shentsova EB, et al. **Antibiot Khimioter** 1989 Nov;34(11):831–3 (Eng. Abstr.) **(Rus)**

[Changes in growth characteristics of mouse ascites tumor AISM during the process of passage in vivo] Bogoeva MV. **Biull Eksp Biol Med** 1990 Feb;109(2):176–7 (Eng. Abstr.) **(Rus)**

[Effects of DL-difluoromethylornithine on the cell surface charge of Ehrlich ascitic cancer during different phases of the mitotic cycle] Kozak VV, et al. **Eksp Onkol** 1990; 12(1):50–3 (Eng. Abstr.) **(Rus)**

[The effect of prolonged administration of lactates on the growth rate of transplantable Ehrlich ascites tumor in the C3H strain of mice] Hrabač B. **Med Arh** 1983;37(5–6):55–9 (Eng. Abstr.) **(Scr)**

PHYSIOPATHOLOGY

[Decrease in the growth rate of Ehrlich's tumor and Pliss' lymphosarcoma with partial hepatectomy] Udintsev SN, et al. **Vopr Onkol** 1989;35(9):1072–5 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

[The effect of mitochondrial Ca 2+-transporting Ca 2+-binding glycoprotein on development of Ehrlich ascites carcinoma] Sirota TV, et al. **Vopr Med Khim** 1990 Mar-Apr;36(2):52–3 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Chemical properties of technetium-99m-DL-homocysteine, a possible tumor-imaging agent. Takeda A, et al. **Ann Nucl Med** 1988 Nov;2(2):55–8

Determination of the lysosomal role in tumor accumulation of 67Ga by dual-tracer studies. Ando A, et al. **Int J Rad Appl Instrum [A]** 1989;40(6):521–4

Intensification of tumor affinity of 99mTc-DL-homocysteine by cooperative use of SH-containing compounds. Takeda A, et al. **Int J Rad Appl Instrum [B]** 1989;16(6):581–5

RADIOTHERAPY

Effects of intratumoral injection of I-125 iododeoxyuridine on Ehrlich ascites carcinoma. Hong SS, et al. **J Surg Oncol** 1989 Nov;42(3):187–91

Repair inhibition in tumours irradiated with fast protons and negative pions. Jüling-Pohlit L, et al. **Strahlenther Onkol** 1990 Jan;166(1):6–9

[Effects of At-211 alpha irradiation on Ehrlich ascites tumor cells] Shmakova NL, et al. **Eksp Onkol** 1990;12(3):58–60 (Eng. Abstr.) **(Rus)**

[Polyradiomodification. The efficacy of the postradiation use of hyperglycemia and hyperthermia in treating tumors of different sizes] Kozin SV, et al. **Med Radiol (Mosk)** 1990 Jul;35(7):52–4 (Eng. Abstr.) **(Rus)**

THERAPY

Cure of murine Ehrlich ascites tumors with chronic oral indomethacin therapy combined with intraperitoneal administration of LAK cells and IL-2. Lala PK, et al. **Cancer Lett** 1990 May 15;51(1):27–35

[Ultrasonic hyperthermia during radiotherapy of experimental tumors] Gerchikov AN, et al. **Med Radiol (Mosk)** 1990 Aug;35(8):13–7 (Eng. Abstr.) **(Rus)**

[Hyperglycemia as a means of increasing the efficacy of hyperthermia in radiotherapy of tumors] Kozin SV, et al. **Med Radiol (Mosk)** 1990 Mar;35(3):3–6 (Eng. Abstr.) **(Rus)**

[Possibility of lowering the dose of metronidazole during the irradiation of tumors using subsequent artificial hyperglycemia] Vinskaia NP, et al. **Med Radiol (Mosk)** 1989 Oct;34(10):61–5 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Formation of microspherules in nucleoli of tumor cells treated with high doses of actinomycin D. Unuma T, et al. **Cancer Res** 1967 Jul;27(7):1232–42

CARCINOMA, EPIDERMOID see **CARCINOMA, SQUAMOUS CELL**

CARCINOMA, HYPERNEPHROID see **CARCINOMA, RENAL CELL**

CARCINOMA IN SITU

Re: Carcinoma in situ of the testis [letter] Dieckmann KP, et al. **J Urol** 1990 Aug;144(2 Pt 1):364

Noninvasive breast cancer: Part 2. Lobular carcinoma in situ--incidence, presentation, guidelines to treatment. Swain SM. **Oncology (Williston Park)** 1989 Mar;3(3):35–40; discussion 40, 42, 44 passim (80 ref.)

Noninvasive breast cancer: Part 1. Ductal carcinoma in situ--incidence, presentation, guidelines to treatment. Swain SM. **Oncology (Williston Park)** 1989 Mar;3(3):25–31; discussion 40, 42, 44 passim (0 ref.)

Lobular carcinoma in situ. Pathology and treatment. Gump FE. **Surg Clin North Am** 1990 Aug;70(4):873–83

[Breast carcinoma in situ. Diagnostic and therapeutic aspects with special reference to growth patterns] Blichert-Toft M, et al. **Ugeskr Laeger** 1990 Jun 18;152(25):1803–6 (30 ref.) (Eng. Abstr.) **(Dan)**

[Cytologic and histopathologic clinical correlation in cervicouterine cancer] Martínez Alcalá FO, et al. **Ginecol Obstet Mex** 1977 Jul;42(249):21–32 (Eng. Abstr.) **(Spa)**

ANALYSIS

Estrogen receptors in ductal carcinoma in situ of breast. Malafa M, et al. **Am Surg** 1990 Jul;56(7):436–9

In situ hybridization analysis of HPV DNA in cervical precancer and cervical cancers from China. Ji HX, et al. **Arch Gynecol Obstet** 1990;247(1):21–9

Mapping of linear epitopes of human papillomavirus type 16: the L1 and L2 open reading frames. Dillner J, et al. **Int J Cancer** 1990 Mar 15;45(3):529–35

Immunohistochemical distribution of c-erbB-2 in in situ breast carcinoma--a detailed morphological analysis. Ramachandra S, et al. **J Pathol** 1990 May;161(1):7–14

Comparative flow cytometric deoxyribonucleic acid studies on exophytic tumor and random mucosal biopsies in untreated carcinoma of the bladder. Norming U, et al. **J Urol** 1989 Dec;142(6):1442–7

BLOOD

[Prostatic specific antigen and prostatic pathology. Value of preoperative blood assay. Preliminary study apropos of 709 case reports] Bordes M, et al. **Ann Urol (Paris)** 1989; 23(4):295–300 (Eng. Abstr.) **(Fre)**

CHEMICALLY INDUCED

The stimulating effect of acetic acid, alcohol and thermal burn injury on esophagus and forestomach carcinogenesis induced by N-nitrososarcosin ethyl ester in rats. Alexandrov VA, et al. **Cancer Lett** 1989 Oct;47(3):179–85

Induction of squamous metaplasia, dysplasia and carcinoma in situ of the mouse tracheal mucosa by inhalation of sodium chloride mist following subcutaneous injection of 4-nitroquinoline 1-oxide. Karube T, et al. **Jpn J Cancer Res** 1989 Aug;80(8):698–701

CLASSIFICATION

Bowenoid papulosis. Classification as a low-grade in situ carcinoma of the epidermis on the basis of histomorphologic and DNA ploidy studies. Böcking A, et al. **Anal Quant Cytol Histol** 1989 Dec;11(6):419–25

COMPLICATIONS

Verrucous carcinoma in situ of the bladder, not associated with urinary schistosomiasis. Pierangeli T, et al. **Int Urol Nephrol** 1989;21(6):597–602

Carcinoma in situ of the testis in infertile men [letter] Loy V, et al. **J Pathol** 1990 Jun;161(2):184

Bilateral prepubertal carcinoma in situ of the testis and ambiguous external genitalia. Cortes D, et al. **J Urol** 1989 Oct;142(4):1065–9

Prevalence of carcinoma in situ and other histopathological abnormalities in testes of men with a history of cryptorchidism. Giwercman A, et al. **J Urol** 1989 Oct; 142(4):998–1001: discussion 1001–2

[Cryptorchism and cancer of the testis] Leo JP, et al. **Chir Pediatr** 1989;30(3):146–7 (13 ref.) **(Fre)**

[Infection of Chlamydia trachomatis and dysplasia lesions of the cervix uteri (CIN)] Alberico S, et al. **Minerva Ginecol** 1989 Jul;41(7):343–7 (Eng. Abstr.) **(Ita)**

[Eosinophilic polypoid cystitis with flat carcinoma in situ of the overlying epithelium] Spitale L, et al. **Arch Esp Urol** 1989 Oct;42(8):809–11 (12 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Diagnostic value of an abnormal smear in non-pregnant women. Evaluation of positive smear from the surface of the portio obtained by the cottonswab method or by the dry wooden Ayre spatula and the relevance of positive smear from the endocervix and/or from the surface of the portio. Lundvall L, et al. **Acta Obstet Gynecol Scand** 1990; 69(2):147–51

Late-stage diagnosis of breast cancer in women of lower socioeconomic status: public health implications. Farley TA, et al. **Am J Public Health** 1989 Nov;79(11):1508–12

The clinical management of a normal contralateral breast in patients with lobular breast cancer. Baker RR, et al. **Ann Surg** 1989 Oct;210(4):444–7; discussion 447–8

Vexed surgeons, perplexed patients, and breast cancers which may not be cancer. Ketcham AS, et al. **Cancer** 1990 Feb 1;65(3):387–93 (37 ref.)

Detection of early lung cancer using low dose Photofrin II. Lam S, et al. **Chest** 1990 Feb;97(2):333–7

Octadeca-9,11-dienoic acid in cervical intraepithelial neoplasia: a colposcopic study. Fairbank J, et al. **Clin Chim Acta** 1989 Dec 29;186(1):53–8

Detection of bladder carcinoma in females by flow cytometry and cytology. Hermansen DK, et al. **Cytometry** 1989 Nov; 10(6):739–42

Vulvar carcinoma: natural history. Becagli L, et al. **Eur J Gynaecol Oncol** 1983;4(3):229–33

The microcolposcopy in the management of the cervical intraepithelial neoplasia. Mencaglia L, et al. **Eur J Gynaecol Oncol** 1983;4(3):216–9

In situ ductal carcinoma of the breast--analysis of clinical presentation and outcome in 156 consecutive cases. Ciatto S, et al. **Eur J Surg Oncol** 1990 Jun;16(3):220–4

Unusual presentation of squamous cell carcinoma of the anal canal. Wade DS, et al. **Eur J Surg Oncol** 1990 Jun; 16(3):256–7

Reporting cervical intra-epithelial neoplasia (CIN): intra- and interpathologist variation and factors associated with disagreement. Ismail SM, et al. **Histopathology** 1990 Apr; 16(4):371–6

The Nd:YAG laser and methylene blue staining in the diagnosis and treatment of premalignant vesical lesions and carcinoma in situ (CIS). Gaboardi F, et al. **Int Urol Nephrol** 1989;21(3):289–97

The non-palpable, radiographically suspicious breast lesion: an analysis of 101 cases. Perre CI, et al. **Neth J Surg** 1990 Jun;42(3):69–71

MRI of cervical carcinoma. Waggenspack GA, et al. **Semin Ultrasound CT MR** 1988 Apr;9(2):158–66 (22 ref.)

[Image-producing detection of porphyrin-marked tumors in the early stage] Baumgartner R, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:24–5 **(Ger)**

[A case of coexistence of Bowen's disease of the vulva with pre-invasive cancer of the cervix uteri] Popiela A, et al. **Ginekol Pol** 1989 Feb;60(2):123–7 (Eng. Abstr.) **(Pol)**

[Differential diagnosis of breast tumors with limited growth] Rozhkova NI, et al. **Vestn Rentgenol Radiol** 1989 Jul-Aug; (4):50–3 (Eng. Abstr.) **(Rus)**

[Evaluation of severe dysplasia and carcinoma in situ detected by directed biopsy] Milojković M, et al. **Jugosl Ginekol Perinatol** 1989 Sep-Dec;29(5–6):198–200 (Eng. Abstr.) **(Scr)**

DRUG THERAPY

Long-term experience with integral photodynamic therapy of TIS bladder carcinoma. Jocham D, et al. **Ciba Found Symp** 1989;146:198–205; discussion 205–8

Topical mitomycin C therapy for carcinoma in situ of the bladder: a followup. Stricker PD, et al. **J Urol** 1990 Jan; 143(1):34–5; discussion 35–6

Phase I/II study of intravesical epirubicin in patients with

carcinoma in situ of the bladder. Kurth KH, et al. **Prog Clin Biol Res** 1990;350:41–59

Intravesical mitomycin C for carcinoma in situ of the urinary bladder. Hellsten S, et al. **Scand J Urol Nephrol** 1990; 24(1):35–8

Beta-carotene and reversal of urothelial dysplasia [letter] Holmquist N, et al. **Urology** 1990 Jan;35(1):98–9

[Chemotherapy of carcinoma of the vulva and vagina. Current approaches] Sesti F, et al. **G Ital Oncol** 1989 Oct–Dec;9(4):117–20 (14 ref.) (Eng. Abstr.) **(Ita)**

[Mitomycin C in the topical treatment of superficial neoplasms of the bladder] Milani C, et al. **Arch Esp Urol** 1989 Oct;42(8):761–7 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Risk factors related to biological behaviour of precancerous lesions of the uterine cervix. Murthy NS, et al. **Br J Cancer** 1990 May;61(5):732–6

An analysis of epidemic factors in cervical cancer by conditional logistic regression model. Chen YX, et al. **Chin Med J [Engl]** 1990 Jan;103(1):55–60

What can a woman do about her risk of dying of breast cancer? Henderson IC. **Curr Probl Cancer** 1990 Jul–Aug; 14(4):161–230 (225 ref.)

Discordance of risk factors for invasive and non-invasive melanoma [letter] Moore DH, et al. **Lancet** 1990 Jun 23; 335(8704):1523–4

The prevalence of abnormal cervical cytology in a group of New Zealand women using contraception: a preliminary report. The New Zealand Contraception and Health Study Group. **N Z Med J** 1989 Jul 26;102(872):369–71

[Results of the Leiden mass screening for cervix uteri carcinoma; the 'young' (24–34 years) versus the 'old' (35–54 years) group of women] Boon ME, et al. **Ned Tijdschr Geneeskd** 1990 Aug 11;134(32):1545–9 (Eng. Abstr.) **(Dut)**

ETHNOLOGY

Cervix and breast cancer incidence in immigrant Caribbean women. Fruchter RG, et al. **Am J Public Health** 1990 Jun; 80(6):722–4

ETIOLOGY

Coarse fishing and urothelial cancer: a regional case–control study. Sorahan T, et al. **Br J Cancer** 1990 Jul;62(1):138–41

Risk factors for in situ cervical cancer: results from a case–control study. Jones CJ, et al. **Cancer Res** 1990 Jun 15;50(12):3657–62

Comparison of the effects of dietary beef tallow and corn oil on pancreatic carcinogenesis in the hamster model. Birt DF, et al. **Carcinogenesis** 1990 May;11(5):745–8

Possible cofactors in the etiology of cervical intraepithelial neoplasia. An immunopathologic study. Barton SE, et al. **J Reprod Med** 1989 Sep;34(9):613–6

Cervical intraepithelial neoplasia. The role of age at first coitus in its etiology. Edebiri AA. **J Reprod Med** 1990 Mar; 35(3):256–9

Histogenesis of cervical adenocarcinoma with reference to human papillomavirus–18 as a carcinogen. Okagaki T, et al. **J Reprod Med** 1989 Sep;34(9):639–44

Human papillomavirus and cervical cancer in Indian women [letter] Das BC, et al. **Lancet** 1989 Nov 25;2(8674):1271

Scar-associated malignant melanoma and squamous carcinoma in situ. Walker AN, et al. **South Med J** 1989 Nov;82(11):1419–21

[Intra-epithelial cancer of the anal canal. Pathogenic study apropos of 5 cases] Charlotte F, et al. **Gastroenterol Clin Biol** 1990;14(3):224–9 (36 ref.) (Eng. Abstr.) **(Fre)**

[Carcinoma in situ in localized Caroli's disease] Joly I, et al. **Gastroenterol Clin Biol** 1990;14(1):90–2 (Eng. Abstr.) **(Fre)**

[Radiation-induced malignant skin tumors in the hands of five doctors] Hashizume S, et al. **Gan No Rinsho** 1990 Feb; 36(2):224–8 (Eng. Abstr.) **(Jpn)**

GENETICS

Chromosome analysis of in situ breast cancer. Nielsen KV, et al. **Acta Oncol** 1989;28(6):919–22

Flow DNA analysis in the characterization of carcinoma of the renal pelvis and ureter. Oldbring J, et al. **Cancer** 1989 Nov 15;64(10):2141–5

Human papillomavirus type 16 DNA is integrated into chromosome region 12q14–q15 in a cell line derived from a vulvar intraepithelial neoplasia. Sastre-Garau X, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):243–51

Cytogenetics of carcinoma in situ of the testis. Vos A, et al. **Cancer Genet Cytogenet** 1990 May;46(1):75–81

Primary invasive and in situ vaginal carcinoma. Flow cytometric analysis of DNA aneuploidy and cell proliferation from archival paraffin-embedded tissue. Punnonen R, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Sep;32(3):247–51

METABOLISM

Squamous cell carcinoma in situ developing in dermoid cyst of the ovary. Report of a case with laminin immunohistochemical staining demonstrating basement membrane integrity. Peuchmaur M, et al. **Pathol Res Pract** 1989 Aug;185(2):251–4; discussion 255–6

MICROBIOLOGY

Association of human papillomavirus and colon neoplasms. Kirgan D, et al. **Arch Surg** 1990 Jul;125(7):862–5

Human papillomavirus type 16/18 in uterine cervical adenocarcinoma in situ and adenocarcinoma. A study by in situ hybridization with biotinylated DNA probes. Nielsen AL. **Cancer** 1990 Jun 1;65(11):2588–93

Detection of human papillomavirus DNA before and after development of invasive vulvar cancer. Van Sickle M, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):540–2

[Human papillomaviruses in uterine cervix pathology: clinical implications, detection and type] Laval C, et al. **Bull Cancer (Paris)** 1990;77(4):321–30 (Eng. Abstr.) **(Fre)**

[Bladder carcinoma in situ which harbored human papilloma virus. A case report] Kitamura T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Aug;80(8):1224–7 (Eng. Abstr.) **(Jpn)**

MORTALITY

Prognostic factors for survival in stage I epithelial ovarian carcinoma. Sevelda P, et al. **Cancer** 1990 May 15; 65(10):2349–52

Factors affecting survival in primary superficial bladder cancer. Flamm J, et al. **Eur Urol** 1990;17(2):113–8

[Malignant neoplasms of the breast and female genital organs and carcinoma in situ of the uterine cervix in East Germany 1986. Statistical data of the national cancer register] Mehnert WH, et al. **Zentralbl Gynakol** 1990;112(7):395–401 (Eng. Abstr.) **(Ger)**

PATHOLOGY

In situ carcinomas of the female breast. Diagnostic and therapeutic aspects with special reference to histological growth patterns. Clinical review. Blichert-Toft M, et al. **Acta Chir Scand** 1990 Feb;156(2):113–9 (38 ref.)

Comparative features of ductal carcinoma in situ and infiltrating ductal carcinoma of the breast on fine-needle aspiration biopsy. Wang HH, et al. **Am J Clin Pathol** 1989 Dec;92(6):736–40

Carcinoma in situ of the testis. Detection of malignant germ cells in seminal fluid by means of in situ hybridization. Giwercman A, et al. **Am J Pathol** 1990 Mar;136(3):497–502

Dysplasia, in situ carcinoma, and progression to invasive squamous cell carcinoma of the upper aerodigestive tract. Crissman JD, et al. **Am J Surg Pathol** 1989;13 Suppl 1:5–16 (44 ref.)

Epithelioisis of the breast. An immunohistochemical characterization and comparison to malignant intraductal proliferations of the breast. Raju U, et al. **Am J Surg Pathol** 1990 Oct;14(10):939–47

Natural history of in situ breast cancer in a defined population. Temple WJ, et al. **Ann Surg** 1989 Nov; 210(5):653–7

The CIN saga—the biological and clinical significance of cervical intraepithelial neoplasia. Chanen W. **Aust N Z J Obstet Gynaecol** 1990 Feb;30(1):18–23

Natural history of cervical neoplasia: consistent results obtained by an identification technique. Gustafsson L, et al. **Br J Cancer** 1989 Jul;60(1):132–41

An assessment of extensive intraductal component as a risk factor for local recurrence after breast-conserving therapy. Jacquemier J, et al. **Br J Cancer** 1990 Jun;61(6):873–6

Flow cytometric and histological analysis of ductal carcinoma in situ of the breast. Locker AP, et al. **Br J Surg** 1990 May;77(5):564–7

In situ adenocarcinoma ex pleomorphic adenoma of the lacrimal gland. Hartwick RW, et al. **Can J Ophthalmol** 1990 Jun;25(4):213–7 (37 ref.)

Monoclonal antibody 43–9F as a sensitive immunohistochemical marker of carcinoma in situ of human testis. Giwercman A, et al. **Cancer** 1990 Mar 1; 65(5):1135–42

A useful monoclonal antibody (BL2–10D1) to identify tumor cells in urine cytology. Longin A, et al. **Cancer** 1990 Mar 15;65(6):1412–7

Endoscopic localization of the squamocolumnar junction before cervical cone biopsy in 284 patients. Saunders N, et al. **Cancer** 1990 Mar 15;65(6):1312–7

Effects of calcium and bile acid feeding on colon tumors in the rat. McSherry CK, et al. **Cancer Res** 1989 Nov 1; 49(21):6039–43

Ductal carcinoma-in-situ of the breast: fine-needle aspiration cytology of 12 cases. Sneige N, et al. **Diagn Cytopathol** 1989;5(4):371–7

Multiple mucosal biopsies and postoperative urinary cytology in patients with bladder cancer. Gil-Salom M, et al. **Eur Urol** 1990;17(4):281–5

Adenocarcinoma in situ of the uterine cervix: a clinico-pathologic study of 36 cases. Andersen ES, et al. **Gynecol Oncol** 1989 Oct;35(1):1–7

The topography and invasive potential of cervical adenocarcinoma in situ, with and without associated squamous dysplasia. Colgan TJ, et al. **Gynecol Oncol** 1990 Feb;36(2):246–9

An adenocarcinoma in situ of the uterine cervix that developed into invasive adenocarcinoma after 5 years. Kashimura M, et al. **Gynecol Oncol** 1990 Jan;36(1):128–33

Early adenocarcinoma of the uterine cervix—its histologic and immunohistologic study. Matsukuma K, et al. **Gynecol Oncol** 1989 Oct;35(1):38–43

Attenuated cells in breast stroma: the missing lymphatic system of the breast. Hartveit E. **Histopathology** 1990 Jun; 16(6):533–43

Carcinoma in situ of the testis: intratubular germ cell neoplasia or testicular intraepithelial neoplasia? [letter; comment] Loy V, et al. **Hum Pathol** 1990 Apr;21(4):457–8 Comment on: Hum Pathol 1989 May;20(5):493–5.

In situ and infiltrating lobular carcinoma of the male breast. Nance KV, et al. **Hum Pathol** 1989 Dec;20(12):1220–2

Carcinoma in situ in testicular biopsies. Mazanec K, et al. **Int Urol Nephrol** 1989;21(6):635–42 (30 ref.)

Premalignant changes in nasal and sinus polyps: a retrospective 10 year study (1979–1988). de la Cruz Mera A, et al. **J Laryngol Otol** 1990 Mar;104(3):210–2

Carcinoma in situ of the testis in infertile men. A histological, immunocytochemical, and cytophotometric study of DNA content. Nistal M, et al. **J Pathol** 1989 Nov;159(3):205–10

Necessity for endocervical curettage in elderly women undergoing colposcopy. Dinh TA, et al. **J Reprod Med** 1989 Sep;34(9):621–4

Carcinoma in situ of the testes: diagnosis by aspiration flow cytometry. Nagler HM, et al. **J Urol** 1990 Feb; 143(2):359–61

Carcinoma arising in fibroadenoma of the breast—a case report and review of the literature. Fukuda M, et al. **Jpn J Surg** 1989 Sep;19(5):593–6

Extent, distribution, and mammographic/histological correlations of breast ductal carcinoma in situ. Holland R, et al. **Lancet** 1990 Mar 3;335(8688):519–22

Vulvar intraepithelial neoplasia and skin appendage involvement. Shatz P, et al. **Obstet Gynecol** 1989 Nov; 74(5):769–74

Stromal changes in early invasive breast carcinoma. An immunohistochemical, histoenzymological and ultrastructural study. Chomette G, et al. **Pathol Res Pract** 1990 Feb;186(1):70–9

Urinary cytology in the detection of bladder tumours. Influence of concomitant urothelial atypia. Harving N, et al. **Scand J Urol Nephrol Suppl** 1989;125:127–31

Duct carcinoma in situ. Pathology and treatment. Lagios MD. **Surg Clin North Am** 1990 Aug;70(4):853–71

In situ and microinvasive carcinoma with squamoid differentiation arising in a phyllodes tumor: report of a case. de Rosa G, et al. **Tumori** 1989 Oct 31;75(5):514–7 (20 ref.)

Testicular carcinoma in situ and nonpalpable seminoma eight years after contralateral teratocarcinoma. Gleich P. **Urology** 1990 Aug;36(2):181–2

[Pathologic analysis of lobular carcinoma of the breast—report of 36 cases] Qian H. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):278–81 (Eng. Abstr.) **(Chi)**

[Tumors of the bladder. The pathologist's point of view] Vieillefond A, et al. **Ann Pathol** 1989;9(4):249–64 (83 ref.) **(Fre)**

[Lobular carcinoma in situ of the breast] Chapron C, et al. **Rev Fr Gynecol Obstet** 1990 Mar;85(3):174–81 (78 ref.) (Eng. Abstr.) **(Fre)**

[Microinvasive stage Ia cancer of the uterine cervix—results of a multicenter clinic based analysis] Ebeling K, et al. **Geburtshilfe Frauenheilkd** 1989 Sep;49(9):776–81 (Eng. Abstr.) **(Ger)**

[Cervical intraepithelial glandular neoplasia (adenocarcinoma in situ) of the cervix] Heim K, et al. **Gynakol Rundsch** 1989; 29 Suppl 2:407–9 **(Ger)**

[Carcinoma in situ of the testis: clinical significance, diagnosis and therapy] Dieckmann KP, et al. **Urologe [A]** 1989 Sep; 28(5):271–80 (106 ref.) (Eng. Abstr.) **(Ger)**

[Early detection of a contralateral second carcinoma in patients with testicular tumors caused by testicular carcinoma in situ] Kleinschmidt K, et al. **Urologe [A]** 1989 Sep;28(5):281–4 (Eng. Abstr.) **(Ger)**

[Quantitative immunocytology as a marker for indications and follow-up of recurrence prevention of superficial urinary bladder cancers] Schneider AW, et al. **Urologe [A]** 1989 Sep;28(5):289–91 (Eng. Abstr.) **(Ger)**

[Histomorphologic and catamnestic studies of 226 patients with cervical carcinoma in stage Ia in the years 1966 to 1986] Schumacher A, et al. **Zentralbl Allg Pathol** 1989; 135(7):639–48 (Eng. Abstr.) **(Ger)**

[Follow-up in cervix intra-epithelial neoplasia and condylomatous lesions of the uterine cervix] Barten G. **Zentralbl Gynakol** 1990;112(2):99–108 (Eng. Abstr.) **(Ger)**

[Colposcopic evaluation of cervical epithelium during oral contraception. A controlled clinical study] Stillo A, et al. **Ann Ostet Ginecol Med Perinat** 1989 Nov–Dec; 110(6):296–304 (Eng. Abstr.) **(Ita)**

[A case of urothelial tumor involving renal pelvis, ureter and bladder in a patient receiving hemodialysis] Kaneko Y, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1179–81 (Eng. Abstr.) **(Jpn)**

[Coexistence of multifocal bowen disease of the vulva and cervix carcinoma] Czekanowski R, et al. **Ginekol Pol** 1989 Apr;60(4):229–34 (Eng. Abstr.) **(Pol)**

[The role of morphologic studies in the diagnosis of malignant neoplasms] Smoliannikov AV. **Sov Med** 1989;(9):42–5 **(Rus)**

[Cytology by lavage in the follow-up of bladder neoplasms] Salinas Sánchez AS, et al. **Arch Esp Urol** 1989 Jul–Aug; 42(6):523–31 (Eng. Abstr.) **(Spa)**

[Microinvasive carcinoma of the cervix and pregnancy. Diagnosis and treatment in 13 cases] Puente González H,

et al. **Ginecol Obstet Mex** 1977 Jul;42(249):61–71 (16 ref.) (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Treatment of screen detected ductal carcinoma in situ: a silver lining within a grey cloud? [editorial] Fentiman IS. **Br J Cancer** 1990 Jun;61(6):795–6

Cytologic screening for cancer of the uterine cervix in Sweden evaluated by identification and simulation. Gustafsson L, et al. **Br J Cancer** 1990 Jun;61(6):903–8

Long-term mass screening in uterine cervical carcinoma eradication strategy. Shiromizu K, et al. **Jpn J Clin Oncol** 1990 Jun;20(2):134–8

Edinburgh trial of screening for breast cancer [letter; comment] Nicholson S, et al. **Lancet** 1990 May 26; 335(8700):1290–1 Comment on: Lancet 1990 Feb 3;335(8684):241–6.

RADIOGRAPHY

The accuracy of mammographic diagnosis in surgically occult breast lesions. Moskovic E, et al. **Clin Radiol** 1990 May;41(5):344–6

Biopsy of occult breast lesions. Analysis of 1261 abnormalities. Meyer JE, et al. **JAMA** 1990 May 2; 263(17):2341–3

Ductal carcinoma in situ: atypical mammographic appearances [letter; comment] Sullivan DC. **Radiology** 1990 Apr;175(1):285 Comment on: Radiology 1989 Sep;172(3):661–6.

[Assessment of non-palpable mammographic changes of the breast] Diergarten K, et al. **Arch Gynecol Obstet** 1989; 245(1–4):681–3 **(Ger)**

RADIOTHERAPY

Radiation therapy in early glottic cancer. Analysis of 177 consecutive cases. Fernberg JO, et al. **Acta Otolaryngol (Stockh)** 1989 Nov–Dec;108(5–6):478–81

Radiotherapy for ductal carcinoma in situ detected by screening. Hamilton CR, et al. **BMJ** 1990 Jul 28; 301(6745):224–5

The role of radiation therapy in laryngeal cancer. Mendenhall WM, et al. **CA** 1990 May–Jun;40(3):150–65 (43 ref.)

The role of radiotherapy in in-situ carcinoma of the larynx. MacLeod PM, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan;18(1):113–7

Carcinoma in situ and T-1 squamous cell carcinoma of the glottis: the Mississippi Baptist Medical Center experience. Smith RA Jr, et al. **J Miss State Med Assoc** 1989 Nov; 30(11):365–70

Conjunctival intraepithelial and invasive squamous cell carcinomas treated with strontium-90. Cerezo L, et al. **Radiother Oncol** 1990 Mar;17(3):191–7

SURGERY

The mons pubis: an excellent graft donor site in gynecologic surgery. Dudzinski MR, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):722–5

Recurrence after lumpectomy for comedo-type intraductal carcinoma of the breast. Baird RM, et al. **Am J Surg** 1990 May;159(5):479–81

Alternatives in the surgical management of in situ breast cancer. A meta-analysis of outcome. Bradley SJ, et al. **Am Surg** 1990 Jul;56(7):428–32

How frequently need vaginal smears be taken after hysterectomy for cervical intraepithelial neoplasia? Gemmell J, et al. **Br J Obstet Gynaecol** 1990 Jan; 97(1):58–61

Calcifectomy for ductal carcinoma in situ [letter; comment] Shetty MR. **Br J Surg** 1989 Jun;76(6):655 Comment on: Br J Surg 1989 Feb;76(2):185–6.

The basis for surgical decisions in the management of in situ breast cancer. Yeatman TJ, et al. **Compr Ther** 1990 May; 16(5):12–7 (32 ref.)

CO2-laser therapy in patients with vulvar intraepithelial neoplasia. Helmerhorst TJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jan–Feb; 34(1–2):149–55

Therapy of in situ cancer. Recht A, et al. **Hematol Oncol Clin North Am** 1989 Dec;3(4):691–708 (71 ref.)

Diathermy loop excision and the cervix [letter; comment] Hallam N, et al. **Lancet** 1989 Nov 11;2(8672):1160 Comment on: Lancet 1989 Aug 19;2(8660):453–4.

[Lobular carcinoma in situ—what is the best treatment] Meyer TS, et al. **S Afr J Surg** 1990 Jun;28(2):66–7 (Eng. Abstr.) **(Afr)**

[Electro-conization of the cervix uteri] Boulanger JC, et al. **Rev Fr Gynecol Obstet** 1989 Oct;84(10):663–72 (Eng. Abstr.) **(Fre)**

[The treatment of carcinoma in situ of the breast] Raudrant D, et al. **Rev Fr Gynecol Obstet** 1990 Feb;85(2):91–6 (21 ref.) (Eng. Abstr.) **(Fre)**

[Carcinoma of the urethra in patients having undergone cystectomy for neoplasm of the bladder] Vicini D, et al. **Arch Ital Urol Nefrol Androl** 1989 Sep;61(3):217–21 (Eng. Abstr.) **(Ita)**

[The diathermy loop and diathermic coagulation in the ambulatory treatment of intraepithelial cervical neoplasia] Zannoni E, et al. **Minerva Ginecol** 1990 Jan–Feb; 42(1–2):7–9 (Eng. Abstr.) **(Ita)**

[A case of bladder cancer with bilateral ureteral carcinoma in situ] Ishibashi Y, et al. **Hinyokika Kiyo** 1990 Mar; 36(3):333–6 (Eng. Abstr.) **(Jpn)**

[A resected case of triple cancer in the uterus, lung and thyroid] Arimura T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jun;37(6):1233–7 (22 ref.) (Eng. Abstr.) **(Jpn)**

[Intraepithelial neoplasms of the vulva: treatment by skinning vulvectomy] Barrena N, et al. **Rev Chil Obstet Ginecol** 1987;52(5):281–5 (Eng. Abstr.) **(Spa)**

THERAPY

Second primary cancer after treatment of invasive carcinoma of the uterine cervix, compared with those arising after treatment for in situ carcinomas. An effect of irradiation? A cancer registry study. Pettersson F, et al. **Acta Obstet Gynecol Scand** 1990;69(2):161–74

The treatment of in situ breast cancer. Fentiman IS. **Acta Oncol** 1989;28(6):923–6 (31 ref.)

Laryngeal cancer: new directions in treatment [editorial] Spiro R. **CA** 1990 May–Jun;40(3):133

Conservative treatment of early breast cancer: prognostic value of the ductal in situ component and other pathological variables on local control and survival. Long-term results. Zafrani B, et al. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1645–50

The role of limited surgery with irradiation in primary treatment of ductal in situ breast cancer. Stotter AT, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb;18(2):283–7

The preparation, handling and use of intravesical bacillus Calmette-Guerin for the management of stage Ta, T1, carcinoma in situ and transitional cell cancer. Brosman SA, et al. **J Urol** 1990 Aug;144(2 Pt 1):313–5

Long-term followup of patients treated with 1 or 2, 6-week courses of intravesical bacillus Calmette-Guerin: analysis of possible predictors of response free of tumor. Coplen DE, et al. **J Urol** 1990 Sep;144(3):652–7

A randomized controlled study of intravesical alpha-2b-interferon in carcinoma in situ of the bladder. Glashan RW. **J Urol** 1990 Sep;144(3):658–61

Percutaneous bacillus Calmette-Guerin perfusion of the upper urinary tract for carcinoma in situ. Studer UE, et al. **J Urol** 1989 Oct;142(4):975–7

From the Food and Drug Administration. Nightingale SL. **JAMA** 1990 Aug 8;264(6):677

BCG product approved for CIS of the bladder [news] **Oncology (Williston Park)** 1990 Jul;4(7):106

Percutaneous BCG perfusion of the upper urinary tract for carcinoma in situ. Studer UE, et al. **Prog Clin Biol Res** 1990;350:81–6

Invasive carcinoma of the uterine cervix following diagnosis and treatment of in situ carcinoma. Record linkage study within a National Cancer Registry. Pettersson F, et al. **Radiother Oncol** 1989 Oct;16(2):115–20

Intraepithelial neoplasia of the lower genital tract. Nolte S, et al. **Semin Oncol Nurs** 1990 Aug;6(3):181–9 (57 ref.)

Bacillus Calmette-Guérin and superficial bladder cancer. Clinical experience and mechanism of action. Catalona WJ, et al. **Surg Annu** 1990;22:363–78 (63 ref.)

Intravesical interferon treatment of superficial bladder cancer. Chodak GW. **Urology** 1989 Oct;34(4 Suppl):84–6; discussion 87–96 (7 ref.)

BCG in management of transitional cell carcinoma invasive to prostate. Siami P, et al. **Urology** 1989 Dec;34(6):381–2

Breast cancer in situ: a retrospective review of 23 cases with a minimum of 10-year followup. Jubelirer SJ. **W V Med J** 1990 Apr;86(4):141–4

[Treatment of carcinoma in situ of the urinary bladder with BCG] Schnyder von Wartensee M, et al. **Helv Chir Acta** 1989 Aug;56(3):351–4 (Eng. Abstr.) **(Ger)**

[Intravesical bacillus Calmette-Guerin therapy for superficial bladder tumor: experience of 13 cases] Okuno H, et al. **Hinyokika Kiyo** 1989 Sep;35(9):1503–7 (Eng. Abstr.) **(Jpn)**

[Low-dose BCG in the therapy of superficial neoplasms of the bladder] Francesco Bassi P, et al. **Arch Esp Urol** 1990 Jun;43(5):503–7 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Ultrastructural and immunohistochemical study of infiltration in microinvasive carcinoma of the uterine cervix. Kudo R, et al. **Gynecol Oncol** 1990 Jan;36(1):23–9

CARCINOMA, KREBS 2

DRUG THERAPY

[Antitumor effectiveness and nephrotoxicity of oxoplatinum] Aref'eva AK, et al. **Vopr Onkol** 1990;36(3):331–4 (Eng. Abstr.) **(Rus)**

RADIOTHERAPY

Treatment of mice bearing a Krebs ascitic tumor by means of a protocol based on radioactive copper (64Cu). III. Efficiency of the anticancer treatment according to the stage of tumor development. Apelgot S, et al. **Anticancer Res** 1989 Jul–Aug;9(4):955–60

Treatment of mice bearing a Krebs ascitic tumor by means of a protocol based on radioactive copper (64Cu). I. The "cancer animal": a new concept leading to an effective antitumoral treatment. Apelgot S, et al. **Anticancer Res** 1989 Jul–Aug;9(4):941–6

Treatment of mice bearing a Krebs ascitic tumor by means of a protocol based on radioactive copper (64Cu). II. Analysis of the treatment. Guillé E, et al. **Anticancer Res** 1989 Jul–Aug;9(4):947–53

CARCINOMA, MERKEL CELL

Merkel cell tumor: a review of the literature. Phillips TW, et al. **J Med Assoc Ga** 1990 Apr;79(4):253–4

Merkel cell tumour of the eyelid [letter] Hayes MM, et al. **S Afr Med J** 1990 Jan 20;77(2):112–3

CLASSIFICATION

Is the neuroendocrine carcinoma of the skin a Merkel cell tumor? What we can learn from immunohistochemical and ultrastructural studies. Merot Y. **Int J Dermatol** 1990 Mar; 29(2):102–4 (12 ref.)

DIAGNOSIS

[Lymph node metastases of a Merkel-cell tumor of unknown origin: possibilities and limitations of fine-needle aspiration cytology] Briani G, et al. **Pathologica** 1990 Mar–Apr; 82(1078):161–5 (Eng. Abstr.) **(Ita)**

DRUG THERAPY

The use of VP16 and cisplatin in the treatment of Merkel cell carcinoma. Davis MP, et al. **J Dermatol Surg Oncol** 1990 Mar;16(3):276–8

[A metastatic Merkel cell carcinoma successfully treated with chemotherapy] Miyagishima T, et al. **Gan No Rinsho** 1990 Jan;36(1):75–9 (17 ref.) (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Serum marker for Merkel cell tumour [letter; comment] Plowman PN. **Clin Radiol** 1989 Sep;40(5):542 Comment on: Clin Radiol 1989 Jan;40(1):85–7.

GENETICS

Detection of somatic mutations in tumours of diverse types by DNA fingerprinting with M13 phage DNA. Hayward N, et al. **Int J Cancer** 1990 Apr 15;45(4):687–90

METABOLISM

Neuroendocrine (Merkel-cell) carcinoma of the skin: immunocytochemical and cytomorphologic analysis on fine-needle aspirates. Skoog L, et al. **Diagn Cytopathol** 1990;6(1):53–7

PATHOLOGY

Primary cutaneous neuroendocrine carcinoma (Merkel cell tumor). An adnexal epithelial neoplasm. Heenan PJ, et al. **Am J Dermatopathol** 1990 Feb;12(1):7–16

Merkel cell carcinoma: the clinical course. Mercer D, et al. **Ann Plast Surg** 1990 Aug;25(2):136–41 (35 ref.)

Concurrent spindle cell peripheral pulmonary carcinoid tumor and Merkel cell tumor of the skin. Nelson EL, et al. **Arch Pathol Lab Med** 1990 Apr;114(4):420–3

Merkel cell carcinoma of the vulva: a case report. Chandeying V, et al. **Asia Oceania J Obstet Gynaecol** 1989 Sep;15(3):261–5

Merkel cell tumor. Beck L, et al. **Cutis** 1989 Oct;44(4):295–9

Neuroendocrine (Merkel cell) carcinoma of the skin: a clinico-morphological study of 13 cases. Szadowska A, et al. **Histopathology** 1989 Nov;15(5):483–93

Primary neuroendocrine (Merkel cell) carcinoma presenting in the calvarium: case report. Wojak JC, et al. **Neurosurgery** 1990 Jan;26(1):137–9

Merkel cell tumor of the back detected during pregnancy. Chao TC, et al. **Plast Reconstr Surg** 1990 Aug;86(2):347–51

The unusual spectrum of neuroendocrine lung neoplasms. Hammar S, et al. **Ultrastruct Pathol** 1989 Sep–Dec; 13(5–6):515–60

[Palpebral Merkel cell tumors apropos of 3 cases] Arnaud B, et al. **Bull Soc Ophtalmol Fr** 1989 Aug–Sep; 89(8–9):979–84 (Eng. Abstr.) **(Fre)**

[Primary palpebral localization of a trabecular Merkel cell carcinoma (1 case)] Madelain J, et al. **Bull Soc Ophtalmol Fr** 1989 Feb;89(2):311–4 (Eng. Abstr.) **(Fre)**

[Neuroendocrine carcinoma of the skin or Merkel cell tumor] Ben Romdhane K, et al. **Tunis Med** 1990 Jan;68(1):55–8 (12 ref.) (Eng. Abstr.) **(Fre)**

[Cytokeratin expression of tumor tissue in cutaneous merkeliomatosis (disseminated cutaneous Merkel cell carcinomas)] Wollina U, et al. **Z Hautkr** 1990 Feb;65(2):178, 183–4 (Eng. Abstr.) **(Ger)**

[Merkel cell carcinoma of the skin. 2 clinical cases] Mazzoni A, et al. **Minerva Chir** 1990 Apr 30;45(8):603–6 (Eng. Abstr.) **(Ita)**

[A case of recurrent, metastatic Merkel's tumor localized in the gluteal region] Turi V, et al. **Minerva Chir** 1990 Feb; 45(3–4):199–201 (Eng. Abstr.) **(Ita)**

[A case of Merkel carcinoma with facial localization] Donati L, et al. **Pathologica** 1989 Nov–Dec;81(1076):671–7 (Eng. Abstr.) **(Ita)**

[A case of Merkel cell carcinoma of the eyelid] Otsuka S, et al. **Nippon Ganka Gakkai Zasshi** 1990 Jun;94(6):615–22

(Eng. Abstr.) (Jpn)
[Intracranial invasion of neuroendocrine carcinoma: a case report] Manome Y, et al. **No Shinkei Geka** 1990 May; 18(5):483–7 (Eng. Abstr.) (Jpn)

RADIOTHERAPY

Radiotherapy as an adjunct in the management of Merkel cell carcinoma. Marks ME, et al. **Cancer** 1990 Jan 1; 65(1):60–4

SECONDARY

Presumed choroidal metastasis of Merkel cell carcinoma. Small KW, et al. **Ann Ophthalmol** 1990 May;22(5):187–90
Merkel cell carcinoma. Long term survival in a patient with proven brain metastasis and presumed choroid metastasis. Alexander E 3d, et al. **Clin Neurol Neurosurg** 1989; 91(4):317–20

SURGERY

[Merkel cell carcinoma: a treacherous skin tumor] Boersma GA, et al. **Ned Tijdschr Geneeskd** 1989 Sep 30; 133(39):1933–5 (Eng. Abstr.) (Dut)

ULTRASTRUCTURE

Primary neuroendocrine carcinoma of the eyelid, immunohistochemical and ultrastructural study. Proença R, et al. **Int Ophthalmol** 1990 Jul;14(4):251–8
Anemone cell tumor with neuroendocrine differentiation (presumed Merkel cell carcinoma). Wills EJ. **Ultrastruct Pathol** 1990 Mar–Apr;14(2):161–71

CARCINOMA, MUCINOUS

Re: Primary signet ring cell adenocarcinoma of the bladder [letter; comment] Sagalowsky AI. **J Urol** 1990 Jan; 143(1):135 Comment on: J Urol 1989 Jan;141(1):17–21.
Primary mucinous adenocarcinoma of the eyelid. Sanke RF. **Ophthalmic Surg** 1989 Sep;20(9):668–71
Colorectal adenocarcinoma in childhood and adolescent. Report of 11 cases and review of the literature. Lamego CM, et al. **Pediatr Radiol** 1989;19(8):504–8 (13 ref.)
[Mucinous carcinoma of the prostate] Ben-Itzhak O, et al. **Harefuah** 1989 Oct;117(7–8):219–21 (24 ref.) (Heb)
[Primary bladder adenocarcinoma of the signet-ring cell type] Fernández Fernández A, et al. **Arch Esp Urol** 1990 May;43(4):355–8 (20 ref.) (Eng. Abstr.) (Spa)

ANALYSIS

Oestrogen receptors in mucinous carcinoma of the breast: an immunohistological study using paraffin wax sections. Shousha S, et al. **J Clin Pathol** 1989 Sep;42(9):902–5

CLASSIFICATION

Mucinous carcinoma of the breast: further characterization of its three subtypes. Coady AT, et al. **Histopathology** 1989 Dec;15(6):617–26

COMPLICATIONS

Hydronephrosis caused by carcinoma of the vermiform appendix [letter] Wakhloo AK, et al. **AJR Am J Roentgenol** 1990 Mar;154(3):654–5
Lymphoepithelial cystic lesion related to adenocarcinoma in the mediastinum. Ishimaru Y, et al. **Am J Clin Pathol** 1989 Dec;92(6):808–13
Carcinoma of the appendix presenting as biliary colic. Straughn JC, et al. **Am J Gastroenterol** 1989 Oct; 84(10):1334–5
Hypercalcemia in association with mucinous adenocarcinoma of the ovary: a case report. Boyer M, et al. **Gynecol Oncol** 1989 Dec;35(3):387–90
Pseudomyxoma peritonei. A report of three cases. Kochhar R, et al. **J Assoc Physicians India** 1989 Oct;37(10):670–1
Urachal cyst complicated with carcinoma: diagnosis by magnetic resonance imaging. Suzuki M, et al. **Radiat Med** 1990 Jan–Feb;8(1):17–9
[Mucin-producing signet ring cell carcinoma of stomach accompanied by microangiopathic hemolytic anemia and disseminated intravascular coagulation: a case report] Tsuchiya Y, et al. **Fukuoka Igaku Zasshi** 1989 Oct; 80(10):477–81 (Eng. Abstr.) (Jpn)
[Multiple familial polyposis. Report of 4 cases and association with mucinous adenocarcinoma of the colon] Velázquez-Macías RF, et al. **Rev Gastroenterol Mex** 1989 Oct–Dec;54(4):231–7 (Eng. Abstr.) (Spa)

DIAGNOSIS

Plasma alpha-L-fucosidase activity and the risk of borderline epithelial ovarian tumors. Harlow BL, et al. **Cancer Res** 1990 Aug 1;50(15):4702–3
[A case of mucinous adenocarcinoma of the prostate] Ezura M, et al. **Gan No Rinsho** 1990 Mar;36(4):563–6 (Eng. Abstr.) (Jpn)
[Urachal carcinoma producing carcinoembryonic antigen: a case report] Arai Y, et al. **Hinyokika Kiyo** 1989 Jun; 35(6):1065–8 (Eng. Abstr.) (Jpn)
[Correlation between ultrasonographic findings and pathological diagnosis of mucin producing tumor of the pancreas] Kobayashi G, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Feb;87(2):235–42 (Eng. Abstr.) (Jpn)
[Diagnosis and follow-up of treatment in early stomach cancer] Kan Ch, et al. **Vopr Onkol** 1989;35(8):949–53 (Eng. Abstr.) (Rus)
[Mucinous adenocarcinoma of the urachus] Barros Rodríguez JM, et al. **Actas Urol Esp** 1989 Sep–Oct;13(5):399–401 (Eng. Abstr.) (Spa)

DRUG THERAPY

The effect of UFTM therapy on primary and metastatic colon cancer from the same human xenotransplanted into nude mice. Takahashi Y, et al. **Jpn J Surg** 1990 Jul;20(4):406–10
Doxorubicin and cyclophosphamide, alternated with bleomycin and mitomycin C as a second-line regimen in advanced ovarian carcinoma resistant to cisplatin-based chemotherapy. Benedetti Panici P, et al. **Oncology** 1990; 47(4):296–8

EPIDEMIOLOGY

Colorectal cancer in young patients. Barillari P, et al. **Int Surg** 1989 Oct–Dec;74(4):240–3

ETIOLOGY

Trousseau's syndrome caused by malignant degeneration of a choledochal cyst. Poole GV. **South Med J** 1989 Oct; 82(10):1283–4
Signet ring cell adenocarcinoma of bladder secondary to long-term catheterization. Goble NM, et al. **Urology** 1990 Mar;35(3):279–81

GENETICS

Detection of chromosome aberrations in interphase tumor nuclei by nonradioactive in situ hybridization. Nederlof PM, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):87–98
Protooncogene amplification and tumor ploidy in human ovarian neoplasms. Sasano H, et al. **Hum Pathol** 1990 Apr; 21(4):382–91
Isolation of an amplified DNA sequence in stomach cancer. Nakatani H, et al. **Jpn J Cancer Res** 1990 Aug;81(8):707–10

IMMUNOLOGY

Murine monoclonal antibodies to colon-specific antigen p. Gold DV, et al. **Cancer Res** 1990 Oct 1;50(19):6405–9
[Distribution and ultrastructural localization of carcino-embryonic antigen (CEA) in signet-ring cells of gastric cancer] Yang GL. **Chung Hua Chung Liu Tsa Chih** 1989 Mar;11(2):111–3 (Eng. Abstr.) (Chi)

METABOLISM

Ovarian tumors with functioning stroma. An immunohistochemical study of 100 cases with human chorionic gonadotropin monoclonal and polyclonal antibodies. Matias-Guiu X, et al. **Cancer** 1990 May 1; 65(9):2001–5
Behaviour of some steroids in postmenopausal women with coelomic ovarian tumors. Pelusi G, et al. **Eur J Gynaecol Oncol** 1983;4(3):224–8
[Peanut lectin-binding sites in gastric carcinoma and the adjacent mucosa] Gan RL. **Chung-hua Ping Li Hsueh Tsa Chih** 1990 Jun;19(2):109–11 (Eng. Abstr.) (Chi)
[Distribution and lateral mobility of concanavalin A receptors in the course of cell cycle of human gastric cancer cells] Wang DS, et al. **Shih Yen Sheng Wu Hsueh Pao** 1989 Dec; 22(4):407–15 (Eng. Abstr.) (Chi)

MORTALITY

Relationship of symptom duration and survival in patients with colorectal carcinoma. Barillari P, et al. **Eur J Surg Oncol** 1989 Oct;15(5):441–5

PATHOLOGY

Secretory carcinoma coexistent with mucinous carcinoma in the breast. Report of a case. Tamura G, et al. **Acta Pathol Jpn** 1989 Sep;39(9):593–8
Signet ring cell sinus histiocytosis. A previously unrecognized histologic condition mimicking metastatic adenocarcinoma in lymph nodes. Gould E, et al. **Am J Clin Pathol** 1989 Oct;92(4):509–12
Anorectal mucinous adenocarcinoma associated with latent perianal Paget's disease. Sasaki M, et al. **Am J Gastroenterol** 1990 Feb;85(2):199–202 (24 ref.)
Pathologic quiz case 2. Signet-ring cell adenocarcinoma of the ethmoid sinuses. Costantino PD, et al. **Arch Otolaryngol Head Neck Surg** 1989 Oct; 115(10):1256–7, 1259
Regional ploidy variations in signet ring cell carcinomas of the stomach. Sugihara H, et al. **Cancer** 1990 Jan 1; 65(1):122–9
Human monoclonal antibody against a tissue polypeptide antigen-related protein from a patient with a signet-ring cell carcinoma of the stomach. Pfaff M, et al. **Cancer Res** 1990 Aug 15;50(16):5192–8
Clinicopathologic impact of colloid in colorectal carcinoma. Minsky BD. **Dis Colon Rectum** 1990 Aug;33(8):714–9 (17 ref.)
Delayed, massive hemorrhage following electrocoagulating biopsy ("hot biopsy") of a diminutive colonic polyp. Quigley EM, et al. **Gastrointest Endosc** 1989 Nov–Dec; 35(6):559–63
Ovarian mucinous tumor with mural nodules of anaplastic carcinoma. Chan YF, et al. **Gynecol Oncol** 1989 Oct; 35(1):112–9 (10 ref.)
Histologic sampling requirements in ovarian carcinoma: a review of 51 tumors. Gramlich T, et al. **Gynecol Oncol** 1990 Aug;38(2):249–56
The value of tumor markers in a mixed tumor, mucinous and neuroendocrine carcinoma of the ovary. Ngan HY, et al. **Gynecol Oncol** 1989 Nov;35(2):272–4
Mucoid carcinoma of the breast with choriocarcinoma in its metastases. Green DM. **Histopathology** 1990 May; 16(5):504–6
Paneth cell-rich carcinoma of the stomach. Kazzaz BA, et al. **Histopathology** 1989 Sep;15(3):303–5
The effects of hormonal and chemotherapy on tumoral and nonneoplastic breast tissue. Kennedy S, et al. **Hum Pathol** 1990 Feb;21(2):192–8
Primary mucinous adenocarcinoma of the lung with signet-ring cells: a histochemical comparison with signet-ring cell carcinomas of other sites [see comments] Kish JK, et al. **Hum Pathol** 1989 Nov;20(11):1097–102 Comment in: Hum Pathol 1990 Apr;21(4):459–60.
Mucinous adenocarcinoma of the prostate: histochemical and immunohistochemical studies. Ro JY, et al. **Hum Pathol** 1990 Jun;21(6):593–600
Primary signet-ring cell carcinoma of the lung [letter; comment] Sarma DP, et al. **Hum Pathol** 1990 Apr; 21(4):459–60 Comment on: Hum Pathol 1989 Nov;20(11):1097–102.
Correlation between tumor histology, steroid receptor status, and adenosine deaminase complexing protein immunoreactivity in ovarian cancer. Rao BR, et al. **Int J Gynecol Pathol** 1990;9(1):47–54
Intraepithelial stage of signet-ring cell carcinoma of the stomach [letter] Caruso RA. **J Clin Pathol** 1990 Aug; 43(8):695–6
Malignant change in rectal duplication. Springall RG, et al. **J R Soc Med** 1990 Mar;83(3):185–7
Primary adenocarcinoma of the vagina apparently originating from cloacal remnant. Upadhyaya NB, et al. **J Tenn Med Assoc** 1990 May;83(5):227–9
Signet ring cell carcinoma in adenomatous polyp at site of ureterosigmoidostomy 16 years after conversion to ileal conduit. Sohn M, et al. **J Urol** 1990 Apr;143(4):805–7 (29 ref.)
Early gastric cancer induced by N-ethyl-N'-nitro-N-nitrosoguanidine in a cynomolgus monkey six years after initial diagnosis of the lesion. Szentirmay Z, et al. **Jpn J Cancer Res** 1990 Jan;81(1):6–9
Mucinous adenocarcinoma of the orbit arising from a stable, benign-appearing eyelid nodule. Holds JB, et al. **Ophthalmic Surg** 1990 Mar;21(3):163–6
Primary mucinous sweat gland carcinoma of the eyelid. Shuster AR, et al. **Ophthalmic Surg** 1989 Nov;20(11):808–10
Prostate mucinous adenocarcinoma with signet ring cell. Uchijima Y, et al. **Urology** 1990 Sep;36(3):267–8
[Chemosensitivity of MGc 80-3 human gastric adenocarcinoma cells and its clinical significance] Li XT. **Chung Hua Chung Liu Tsa Chih** 1989 Sep;11(5):332–4 (Eng. Abstr.) (Chi)
[Characteristics of mucins and CEA in globoid dysplastic cells of human stomach and its relationship with signet ring cell carcinoma] Liu SQ. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):176–9 (Eng. Abstr.) (Chi)
[Establishment and studies of two human pancreatic carcinoma in vivo lines by transplanting the tumor into nude mice] Chen J. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Sep;18(3):197–200 (Eng. Abstr.) (Chi)
[Relationship between malignant transformation of ovarian mucinous cystadenoma and intestinal epithelial metaplasia] Zhong CQ. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Jun; 18(2):134–6 (Eng. Abstr.) (Chi)
[Muco-epidermoid cancer of the esophagus. Review of the literature. Report of a case with 9 years' follow-up] Leborgne J, et al. **Ann Chir** 1989;43(7):580–3 (11 ref.) (Eng. Abstr.) (Fre)
[Cutaneous eccrine mucinous adenocarcinoma] Verola O, et al. **Ann Dermatol Venereol** 1989;116(11):853–5 (Fre)
[Tumors of the ovary of borderline malignancy. What have they become 60 years after their identification?] Duvillard P, et al. **Ann Pathol** 1990;10(2):73–5 (36 ref.) (Fre)
[Mucoepidermoid cancer of the esophagus with 9 years' follow-up (letter)] Leborgne J, et al. **Gastroenterol Clin Biol** 1989 Dec;13(12):1091–2 (Fre)
[Pseudomyxoma peritonei caused by proliferating mucinous adenoma of the fimbria mucosa] Friedmann W, et al. **Geburtshilfe Frauenheilkd** 1990 Jul;50(7):579–80 (Eng. Abstr.) (Ger)
[Mucourothelial cancer of the urinary bladder and ureter] Goertchen R, et al. **Pathologe** 1990 May;11(3):166–70 (Ger)
[An unusual precancerous lesion of the gallbladder] Weber G, et al. **Pathologe** 1989 Sep;10(5):315–7 (Ger)
[Incidence of isolated metastatic organ involvement in rectal cancer in an autopsy sample] Slisow W, et al. **Zentralbl Chir** 1990;115(7):399–406 (Eng. Abstr.) (Ger)
[Cystic mucinous neoplasms of the pancreas] Moroni M, et al. **Chir Ital** 1989 Aug–Dec;41(4–6):223–31 (Eng. Abstr.)

(Ita)

[Progress in the evaluation of lymphatic involvement in cancer of the rectum: endoscopic rectal lymphoscintigraphy] Arnaud JP, et al. **Minerva Chir** 1990 Feb;45(3–4):137–40 (Eng. Abstr.) (Ita)

[A calcified mucinous adenocarcinoma of the stomach—case report] Ohsaki A, et al. **Gan No Rinsho** 1990 Feb; 36(2):187–92 (23 ref.) (Eng. Abstr.) (Jpn)

[A clinicopathological study of signet-ring cell carcinomas of the stomach] Yamagiwa H, et al. **Gan No Rinsho** 1990 Jan;36(1):45–9 (Eng. Abstr.) (Jpn)

[A case of primary signet ring cell carcinoma of the bladder] Sato K, et al. **Hinyokika Kiyo** 1990 Apr;36(4):457–60 (14 ref.) (Eng. Abstr.) (Jpn)

[A case of signet ring cell carcinoma of the urinary bladder] Yamada Y, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1207–11 (21 ref.) (Eng. Abstr.) (Jpn)

[A case of mucinous carcinoma of the skin] Moriwaki S, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Jun;99(7):827–32 (26 ref.) (Eng. Abstr.) (Jpn)

[An autopsy case of adenocarcinoma of the lung with signet ring cells, manifesting with aphasia and hemiparesis due to nonbacterial thrombotic endocarditis] Hanazono Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Nov; 27(11):1349–54 (Eng. Abstr.) (Jpn)

[An autopsy case of pulmonary asbestosis with synchronous multiprimary lung cancers, early gastric cancer and atypical mycobacteriosis] Yamamoto S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jun;27(6):724–9 (Eng. Abstr.) (Jpn)

[A case of calcified gastric cancer—review of Japanese literature] Kunieda K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 May;87(5):1236–42 (9 ref.) (Jpn)

[Mucinous carcinoma of the breast (clinico-morphological characteristics)] Ermilova VD, et al. **Arkh Patol** 1989; 51(7):38–44 (Eng. Abstr.) (Rus)

[A 2-component tumor of the breast with carcinoid syndrome] Serezhin BS. **Arkh Patol** 1989;51(11):66–70 (Eng. Abstr.) (Rus)

[The interrelationship of proliferative activity and carcinoembryonic antigen expression in gastric carcinomas] Sergeeva NS, et al. **Vopr Onkol** 1990;36(6):735–6 (Rus)

[Signet ring cell adenocarcinoma of the bladder] Casanueva T, et al. **Arch Esp Urol** 1989 Oct;42(8):802–5 (16 ref.) (Eng. Abstr.) (Spa)

[Signet-ring cell carcinoma of the urinary bladder: study of 4 cases and review of the literature] Valérdiz Casasola S, et al. **Arch Esp Urol** 1989 Jul–Aug;42(6):519–22 (20 ref.) (Eng. Abstr.) (Spa)

RADIOGRAPHY

Adenocarcinoma of the urachus: CT features. Lee SH, et al. **J Comput Assist Tomogr** 1990 Mar–Apr;14(2):232–5

[Cystic mucinous adenocarcinoma of the pancreas in a young patient. Description of a case] Boccardi A, et al. **Radiol Med (Torino)** 1989 Sep;78(3):253–5 (Ita)

SECONDARY

Gastric carcinoma metastasis to a knee with a newly inserted prosthesis. A case report. Kolstad K, et al. **Acta Orthop Scand** 1990 Aug;61(4):369–70

Administration of CDDP via the superior mesenteric artery for peritoneal carcinomatosis due to gastric cancer [letter] Taniguchi H, et al. **Am J Gastroenterol** 1990 Jul;85(7):899

Rare secondary carcinoma from colon to testis. Review of literature and report of a new case. Blefari F, et al. **Arch Ital Urol Nefrol Androl** 1989 Sep;61(3):275–8 (22 ref.)

Focal cerebral infarctions associated with perivascular tumor infiltrates in carcinomatous leptomeningeal metastases. Klein P, et al. **Arch Neurol** 1989 Oct;46(10):1149–52

The use of corium porcine graft for a malignant enterovaginal fistula. Jobling TW, et al. **Aust N Z J Obstet Gynaecol** 1990 May;30(2):185–6

Mucinous adenocarcinoma metastatic to the iris, ciliary body, and choroid. Lieb WE, et al. **Br J Ophthalmol** 1990 Jun; 74(6):373–6

Mucin leakage into the cervical stroma may increase lymph node metastasis in mucin-producing cervical adenocarcinomas. Konishi I, et al. **Cancer** 1990 Jan 15; 65(2):229–37

Pulmonary tumor thrombotic microangiopathy with pulmonary hypertension. von Herbay A, et al. **Cancer** 1990 Aug 1;66(3):587–92

Elephantiasis-like cutaneous metastases from signet-ring cell carcinoma of the stomach. Heidenheim M, et al. **Cutis** 1989 Dec;44(6):455–8

Metastatic cancer spread at the laparoscopic puncture site. Report of a case in a patient with carcinoma of the ovary. Case report. Miralles RM, et al. **Eur J Gynaecol Oncol** 1989;10(6):442–4

Subcutaneous metastasis following laparoscopy in gastric adenocarcinoma. Cava A, et al. **Eur J Surg Oncol** 1990 Feb;16(1):63–7 (37 ref.)

Fatal cerebral herniation from brain metastasis following fiberoptic endoscopy [letter] Mohandas KM, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):587–8

Abnormal cervical cytology leading to the diagnosis of gastric cancer. McGill F, et al. **Gynecol Oncol** 1990 Jan; 36(1):101–5 (15 ref.)

The consequences of unsuspected secondary ovarian neoplasia: a clinical presentation of four case histories. Roley KM, et al. **Gynecol Oncol** 1990 Feb;36(2):277–80

Isolated breast metastases from gastrointestinal carcinomas: report of two cases. Alexander HR, et al. **J Surg Oncol** 1989 Dec;42(4):264–6

The management of diaphragmatic lesions in ovarian carcinoma. Fiorica JV, et al. **Obstet Gynecol** 1989 Dec; 74(6):927–9

Exuberant periosteal reaction in solitary skeletal metastases: a mimic of primary skeletal neoplasm. Pope TL Jr, et al. **Orthopedics** 1990 Feb;13(2):261–4

[Lymphangiosis carcinomatosa of the lung complicated by interstitial inflammation as in pulmonary sarcoidosis] Entzian P, et al. **Med Klin** 1990 Mar 15;85(3):166–8 (Ger)

[Two cases of advanced gastric cancer with diffuse carcinomatosis of the bone marrow showing a widespread osteoplastic bone metastasis] Kato M, et al. **Gan No Rinsho** 1990 Mar;36(4):551–6 (Eng. Abstr.) (Jpn)

[A case of early gastric carcinoma with disseminated carcinomatosis of bone marrow] Yasutake K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jun;86(6):1304–9 (25 ref.) (Jpn)

SECRETION

Enhanced expression and secretion of an epithelial membrane antigen (MA5) in a human mucinous breast tumor line (BT549). Williams CJ, et al. **Tumour Biol** 1990;11(3):145–57

SURGERY

The management of diaphragmatic lesions in ovarian carcinoma. Fiorica JV, et al. **Obstet Gynecol** 1989 Dec; 74(6):927–9

Management of massive ovarian tumors. Pretorius RG, et al. **Surg Gynecol Obstet** 1989 Dec;169(6):532–6 (26 ref.)

Surgical approach to early gastric cancer with lymph node metastasis. Sowa M, et al. **World J Surg** 1989 Sep–Oct; 13(5):630–5; discussion 635–6

Borderline ovarian tumors: a review of treatment. Chambers JT. **Yale J Biol Med** 1989 Jul–Aug;62(4):351–65 (43 ref.)

[Appendix cancer] Blauensteiner W, et al. **Zentralbl Chir** 1990;115(1):61–2 (Ger)

[Clinical investigation of 7 cases of urachal carcinoma] Iizawa H, et al. **Hinyokika Kiyo** 1989 Jun;35(6):975–9 (Eng. Abstr.) (Jpn)

[Combined operations in colorectal cancer with bladder resection] Bondar' GV, et al. **Vopr Onkol** 1990;36(7):875–8 (Eng. Abstr.) (Rus)

THERAPY

Clinical aspects of ovarian tumors of low malignant potential. Dgani R, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 May-Jun;35(2–3):251–8

[High doses of alkylating agents and bone marrow autograft in ovarian cancer with poor prognosis: a retrospective analysis of 40 patients treated in France] Maraninchi D, et al. **Bull Cancer (Paris)** 1990;77(2):149–57 (Eng. Abstr.) (Fre)

ULTRASTRUCTURE

Nucleolar organizer regions in mucinous tumours of the ovary. Mauri FA, et al. **Histopathology** 1990 Apr; 16(4):396–8

In situ distribution of oncogene products and growth factor receptors in breast carcinoma: c-erbB-2 oncoprotein, EGFr, and PDGFr-beta-subunit. Kommoss F, et al. **Mol Cell Probes** 1990 Feb;4(1):11–23

CARCINOMA, NON-SMALL CELL LUNG

ANALYSIS

Expression of the neu gene-encoded protein (P185neu) in human non-small cell carcinomas of the lung. Weiner DB, et al. **Cancer Res** 1990 Jan 15;50(2):421–5

Somatostatin receptors are present in small-cell but not in non-small-cell primary lung carcinomas: relationship to EGF-receptors. Reubi JC, et al. **Int J Cancer** 1990 Feb 15;45(2):269–74

BLOOD

Blood analyses as prognostic factors in primary lung cancer. Engan T, et al. **Acta Oncol** 1990;29(2):151–4

Increased levels of soluble interleukin-2 receptors in serum of patients with lung cancer. Marino P, et al. **Br J Cancer** 1990 Mar;61(3):434–5

[Catecholamines in the erythrocytes of cancer patients] Kashulina AP, et al. **Patol Fiziol Eksp Ter** 1990 Jan–Feb; (1):39–40 (Eng. Abstr.) (Rus)

CLASSIFICATION

APACHE II in surgical lung carcinoma patients. Giangiuliani G, et al. **Chest** 1990 Sep;98(3):627–30

Clinical characterization of non-small-cell lung cancer tumors showing neuroendocrine differentiation features. Berendsen HH, et al. **J Clin Oncol** 1989 Nov;7(11):1614–20

DIAGNOSIS

Intrathoracic lymph node evaluation by CT and MRI with histopathologic correlation in non-small cell bronchogenic carcinoma. Georgian D, et al. **Clin Imaging** 1990 Mar; 14(1):35–40

Combined measurements of neuron specific enolase and bombesin/gastrin releasing peptide in lung cancer. Scagliotti GV, et al. **Eur Respir J** 1989 Sep;2(8):746–50

The diagnostic value of neuron-specific enolase and carcino-embryonic antigen analyses in patients with carcinoma of the lung. Wielders JP, et al. **J Clin Chem Clin Biochem** 1990 Apr;28(4):225–31

[Studies of the mediastinum in staging of primary bronchial carcinoma (letter)] Bollen EC, et al. **Ned Tijdschr Geneeskd** 1990 Jul 21;134(29):1420 (Dut)

[Value of the early diagnosis of cerebral metastasis in non-small cell lung cancers (letter)] Demange L, et al. **Presse Med** 1989 Oct 7;18(31):1523 (Fre)

[Analysis of tumor markers in lung biopsies and in bronchial lavage] Vogel J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:465–6 (Eng. Abstr.) (Ger)

[Diagnostic significance of the tumor markers CEA, SCC and NSE in serum and bronchoalveolar lavage] von Eiff M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:462–4 (Eng. Abstr.) (Ger)

DRUG THERAPY

A phase II trial of carboplatin (CBDCA) in small-cell and non-small-cell lung cancer with correlation to in vitro analysis of cytotoxicity. Dmitrovsky E, et al. **Am J Clin Oncol** 1990 Aug;13(4):285–9

The clinical effect of medroxyprogesterone (MPA) in elderly patients with lung cancer. Niiranen A, et al. **Am J Clin Oncol** 1990 Apr;13(2):113–6

Phase II study of idarubicin in extensive-disease non-small-cell lung cancer. Umsawasdi T, et al. **Am J Clin Oncol** 1989 Dec;12(6):519–20

5-Fluorouracil infusion and mitomycin combination chemotherapy in the management of patients with advanced non-small-cell lung cancer. Weir AB 3d, et al. **Am J Clin Oncol** 1989 Dec;12(6):521–3

Symptom relief with moderate dose chemotherapy (mitomycin-C, vinblastine and cisplatin) in advanced non-small cell lung cancer. Hardy JR, et al. **Br J Cancer** 1989 Nov;60(5):764–6

Phase II study of lonidamine in non-small cell lung cancer: final report. Kokron O, et al. **Br J Cancer** 1990 Feb; 61(2):316–8

Relationship between chemoresistance of lung tumours and cigarette smoking. Volm M, et al. **Br J Cancer** 1990 Aug; 62(2):255–6

Chemotherapy of non-small cell lung cancer. Williams CJ. **Br J Cancer** 1989 Jul;60(1):9–11 (21 ref.)

A randomised trial of cisplatin and vindesine versus supportive care only in advanced non-small cell lung cancer. Woods RL, et al. **Br J Cancer** 1990 Apr; 61(4):608–11

Failure of the perioperative PCV neoadjuvant polychemotherapy in resectable bronchogenic non-small cell carcinoma. Results from a randomized phase II trial. Dautzenberg B, et al. **Cancer** 1990 Jun 1;65(11):2435–41

Combination chemotherapy with mitomycin, vindesine, and cisplatin for non-small cell lung cancer. Association of antitumor activity with initial tumor burden and treatment center. Joss RA, et al. **Cancer** 1990 Jun 1;65(11):2426–34

Cisplatin, etoposide, and ifosfamide in non-small cell lung carcinoma. A phase II randomized study with cisplatin and etoposide as the control arm. Paccagnella A, et al. **Cancer** 1990 Jun 15;65(12):2631–4

A randomized study of two vindesine plus cisplatin-containing regimens with the addition of mitomycin C or ifosfamide in patients with advanced non-small cell lung cancer. Roselli R, et al. **Cancer** 1990 Apr 15;65(8):1692–9 (37 ref.)

Etoposide versus etoposide plus high-dose cisplatin in the management of advanced non-small cell lung cancer. Results of a prospective randomized FONICAP trial. Italian Lung Cancer Task Force. Rosso R, et al. **Cancer** 1990 Jul 1;66(1):130–4

Weekly doxorubicin versus doxorubicin every 3 weeks in cyclophosphamide, doxorubicin, and cisplatin chemotherapy for non-small cell lung cancer. Umsawasdi T, et al. **Cancer** 1989 Nov 15;64(10):1995–2000

A phase II trial of high-dose cytarabine and cisplatin in previously untreated non-small cell carcinoma of the lung. A Piedmont Oncology Association Study. White DR, et al. **Cancer** 1990 Apr 15;65(8):1700–3

Acute nonlymphocytic leukemia following chemotherapy with cisplatin and etoposide for non-small-cell carcinoma of the lung: case report. Brenez D, et al. **Cancer Chemother Pharmacol** 1990;26(3):235–6

A randomized trial fo three cisplatin-containing regimens in advanced non-small-cell lung cancer (NSCLC): a study of the Umbrian Lung Cancer Group. Crino L, et al. **Cancer Chemother Pharmacol** 1990;26(1):52–6

Mitomycin, ifosfamide and cisplatin in non-small-cell lung cancer. Currie DC, et al. **Cancer Chemother Pharmacol** 1990;25(5):380–1

Phase I clinical comparative study of monoclonal antibody KS1/4 and KS1/4-methotrexate immunconjugate in patients with non-small cell lung carcinoma. Elias DJ, et

al. **Cancer Res** 1990 Jul 1;50(13):4154–9
Photodynamic therapy in the palliation of late stage obstructing non-small cell lung cancer. LoCicero J 3d, et al. **Chest** 1990 Jul;98(1):97–100
Quality of life assessment during chemotherapy for non-small cell lung cancer. Maasilta PK, et al. **Eur J Cancer** 1990; 26(6):706–8
Phase II study of trimetrexate and cyclophosphamide in previously untreated patients with inoperable non-small cell lung cancer [letter] Mattson K, et al. **Eur J Cancer** 1990 Apr;26(4):544
Phase II study of pirarubicin in advanced non-small cell lung cancer. Berthaud P, et al. **Eur J Cancer Clin Oncol** 1989 Oct;25(10):1507–8
Phase II study of pirarubicin in advanced non-small cell lung cancer. Berthaud P, et al. **Eur J Cancer Clin Oncol** 1989 Sep;25(9):1337–8
Phase II trial of spirogermanium in advanced non-small cell lung cancer. An Illinois Cancer Council Study. Lad TE, et al. **Invest New Drugs** 1989 Jul;7(2–3):223–4
Phase II trial of 4' deoxydoxorubicin (DXDX) for unresectable non-small cell bronchogenic carcinoma. An Illinois Cancer Council study. Rose C, et al. **Invest New Drugs** 1990 Feb;8(1):97–9
Phase II study of 4-demethoxydaunorubicin in previously untreated extensive disease non-small cell lung cancer. Umsawasdi T, et al. **Invest New Drugs** 1990;8 Suppl 1:S73–8
The effectiveness of combination chemotherapy with cisplatinum and etoposide in the treatment of advanced non-small cell lung cancer. Gebbia V, et al. **J Chemother** 1989 Jun;1(3):203–6
A novel pharmacodynamically based approach to dose optimization of carboplatin when used in combination with etoposide [see comments] Belani CP, et al. **J Clin Oncol** 1989 Dec;7(12):1896–902 Comment in: J Clin Oncol 1990 Jul;8(7):1283–5.
Modification of cisplatin toxicity with diethyldithiocarbamate. Berry JM, et al. **J Clin Oncol** 1990 Sep;8(9):1585–90
Combination chemotherapy versus single agents followed by combination chemotherapy in stage IV non-small-cell lung cancer: a study of the Eastern Cooperative Oncology Group. Bonomi PD, et al. **J Clin Oncol** 1989 Nov; 7(11):1602–13
Hydrazine sulfate influence on nutritional status and survival in non-small-cell lung cancer. Chlebowski RT, et al. **J Clin Oncol** 1990 Jan;8(1):9–15
Hydrazine sulfate in nonsmall-cell lung cancer [letter; comment] Gold J. **J Clin Oncol** 1990 Jun;8(6):1117–8 Comment on: J Clin Oncol 1990 Jan;8(1):1–3.
Phase I trial of murine monoclonal antibody L6 in breast, colon, ovarian, and lung cancer. Goodman GE, et al. **J Clin Oncol** 1990 Jun;8(6):1083–92
Counting the costs of chemotherapy in a National Cancer Institute of Canada randomized trial in nonsmall-cell lung cancer. Jaakkimainen L, et al. **J Clin Oncol** 1990 Aug; 8(8):1301–9
A randomized study comparing cisplatin or carboplatin with etoposide in patients with advanced non-small-cell lung cancer: European Organization for Research and Treatment of Cancer Protocol 07861. Klastersky J, et al. **J Clin Oncol** 1990 Sep;8(9):1556–62
Stage IV non-small-cell lung cancer: the guides are perplexed. Livingston RB. **J Clin Oncol** 1989 Nov; 7(11):1591–3
Randomized comparison of two combination regimens versus minimal chemotherapy in nonsmall-cell lung cancer: a Southeastern Cancer Study Group Trial. Luedke DW, et al. **J Clin Oncol** 1990 May;8(5):886–91
Is chemotherapy for metastatic non-small cell lung cancer "worth it"? Ruckdeschel JC. **J Clin Oncol** 1990 Aug; 8(8):1293–6 (16 ref.)
Five-year survival of nonsmall-cell lung cancer patients after treatment with chemotherapy alone [letter] Stathopoulos GP. **J Clin Oncol** 1990 Mar;8(3):565–6
Randomized phase II–III trial of combination beta and gamma interferons and etoposide and cisplatin in inoperable non-small cell cancer of the lung. Schiller JH, et al. **J Natl Cancer Inst** 1989 Nov 15;81(22):1739–43
Chemotherapy for non-small-cell lung cancer--new horizons. Reed CE, et al. **J S C Med Assoc** 1990 May; 86(5):270–4
Serial measurement of sister chromatid exchanges in the peripheral lymphocytes of patients with lung cancer receiving chemotherapy in relation to bone marrow toxicity. Shinkai T, et al. **Jpn J Cancer Res** 1989 Aug; 80(8):783–6
Platinum-based combination chemotherapy in advanced non-small cell lung cancer: a randomized phase II trial of the Cancer and Leukemia Group B. Green MR, et al. **Med Pediatr Oncol** 1990;18(3):197–202
Clinical effects of cepharanthin (Ceph.) on leukopenia by chemotherapy in lung cancer patients. Saito R, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Dec 20;24(11):2587–93
Preliminary experience with quality of life evaluation in patients with lung cancer. Hopwood P, et al. **Oncology (Williston Park)** 1990 May;4(5):158–62; discussion 171 (21 ref.)
Pirarubicin in advanced non-small cell lung cancer. A trial of the Phase I/II Study Group of the Association for Medical Oncology of the German Cancer Society. Drings P, et al. **Onkologie** 1990 Jun;13(3):180–4
Chemotherapy with tauromustine in advanced non-small cell lung cancer. A trial of the Phase II Study Group of the Association for Medical Oncology of the German Cancer Society. Gatzemeier U, et al. **Onkologie** 1990 Jun; 13(3):186–8
Chemotherapy in lung cancer. Price CG, et al. **Postgrad Med J** 1989 May;65(763):291–8 (60 ref.)
Chemotherapy for metastatic non-small-cell lung cancer. A case report. Abratt RP, et al. **S Afr Med J** 1990 Feb 3; 77(3):161–2
A new in vitro screening system for anticancer drugs for the treatment of non-small cell lung cancer. Hanauske U, et al. **Sel Cancer Ther** 1989;5(3):97–111
Multidisciplinary management of non-small cell lung cancer in the community. Folman RS. **Semin Oncol** 1990 Aug;17(4 Suppl 7):30–2
Phase II studies with carboplatin in non-small cell lung cancer. Gatzemeier U, et al. **Semin Oncol** 1990 Feb;17(1 Suppl 2):25–31
Overview of ifosfamide in small cell and non-small cell lung cancer. Johnson DH. **Semin Oncol** 1990 Apr;17(2 Suppl 4):24–30 (49 ref.)
Chemotherapy for unresectable non-small cell lung cancer. Johnson DH. **Semin Oncol** 1990 Aug;17(4 Suppl 7):20–9 (40 ref.)
A randomized trial of two platinum combinations in patients with advanced non-small cell lung cancer: a preliminary report. European Organization for the Research and Treatment of Cancer--Lung Cancer Working Party. Klastersky J, et al. **Semin Oncol** 1990 Feb;17(1 Suppl 2):20–4
Rationale for the use of chemotherapy in non-small cell lung cancer. Miller TP. **Semin Oncol** 1990 Aug;17(4 Suppl 7):11–3 (11 ref.)
A phase II study of ifosfamide, cisplatin, etoposide in patients with advanced non-small cell lung cancer: a preliminary report. Shepherd FA, et al. **Semin Oncol** 1990 Apr;17(2 Suppl 4):19–23
Dose-finding studies with carboplatin, ifosfamide, etoposide, and mesna in non-small cell lung cancer. van Zandwijk N, et al. **Semin Oncol** 1990 Feb;17(1 Suppl 2):16–9
Phase II trial of cytarabine, cisplatin and vindesine for advanced non-small cell lung cancer. Bianco A, et al. **Tumori** 1990 Feb 28;76(1):35–7
Phase II trial with alternating two drug schedules, CAP/MEC', for advanced (stage III Mo/M1) non-small-cell lung cancer. Tummarello D, et al. **Tumori** 1989 Oct 31;75(5):486–8
[Chemotherapy of cancer of the lung] Klastersky J. **Recenti Prog Med** 1989 Sep;80(9):477–84 (56 ref.) (Eng. Abstr.) (Fre)
[Chemotherapy of advanced non-small cell bronchial cancer with mitomycin C/ifosfamide versus mitomycin C/vindesine versus cisplatin/etoposide--a prospective randomized study] Gatzemeier U, et al. **Pneumologie** 1990 Feb;44 Suppl 1:258–60 (Eng. Abstr.) (Ger)
[Carboplatin-Vepeside in the treatment of non-small cell bronchial cancers. A phase II study] Heckmayr M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:588–9 (Eng. Abstr.) (Ger)
[Polychemotherapy of non-small cell bronchial cancer with mitomycin C, ifosfamide and vindesine] Laumen R, et al. **Pneumologie** 1990 Feb;44 Suppl 1:590 (Eng. Abstr.) (Ger)
[Radiotherapy combined with cis-diammine-dichloro platinum (II) plus vindesine in the treatment of non-small cell lung cancer: a comparison with treatment by radiation alone] Koga K, et al. **Gan No Rinsho** 1990 Apr;36(5):593–7 (Eng. Abstr.) (Jpn)
[A combined anti-emesis therapy of oral prednisolone and alprazolam for cisplatin-induced delayed emesis] Watanabe A, et al. **Gan No Rinsho** 1990 Jul;36(8):881–4 (Eng. Abstr.) (Jpn)
[Phase II study of ifosfamide and vindesine combination of non-small cell lung cancer in elderly patients and patients with reduced renal function] Fujii M, et al. **Gan To Kagaku Ryoho** 1990 May;17(5):1021–5 (Eng. Abstr.) (Jpn)
[Combination chemotherapy including cisplatinum, vindesine and mitomycin C for non-small cell lung cancer] Hayashi Y, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 1):1455–60 (Eng. Abstr.) (Jpn)
[Combination chemotherapy of ifosfamide, cisplatin and vindesine for non-small cell lung cancer] Itami S, et al. **Gan To Kagaku Ryoho** 1990 May;17(5):1015–20 (Eng. Abstr.) (Jpn)
[Combination chemotherapy of non-small cell lung cancer (NSCLC) with cisplatin (CDDP), carboquone (CQ) and prednisolone (PDN)(PPQ therapy)] Nakao I, et al. **Gan To Kagaku Ryoho** 1990 Feb;17(2):217–20 (Eng. Abstr.) (Jpn)
[Pilot combination phase II study of mitomycin C plus cisplatin for non-small cell lung cancer] Shimizu E, et al. **Gan To Kagaku Ryoho** 1989 Dec;16(12):3719–23 (Eng. Abstr.) (Jpn)
[Prognostic factors affecting survival and response in patients with advanced non-small cell lung cancer treated with combination chemotherapy] Takifuji N, et al. **Gan To Kagaku Ryoho** 1990 Mar;17(3 Pt 2):429–34 (Eng. Abstr.) (Jpn)
[Clinical studies of bronchial arterial infusion of CDDP for the treatment of lung cancer--research on the platinum concentration in the tumor and pulmonary parenchyma] Murakami M. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jul 25;49(7):880–91 (Eng. Abstr.) (Jpn)
[Current results of chemotherapy in non-small cell lung cancer] Fukuoka M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb;28(2):203–9 (Eng. Abstr.) (Jpn)
[Surgical adjuvant therapy, especially neoadjuvant therapy of lung cancer] Ohta M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb;28(2):232–7 (Eng. Abstr.) (Jpn)

GENETICS

Non-P-glycoprotein-mediated multidrug resistance with reduced EGF receptor expression in a human large cell lung cancer cell line. Reeve JG, et al. **Br J Cancer** 1990 Jun;61(6):851–5
DNA alterations at proto-oncogene loci and their clinical significance in operable non-small cell lung cancer. Hajj C, et al. **Cancer** 1990 Aug 15;66(4):733–9
Prognostic and therapeutic significance of the flow cytometric nuclear DNA content in non-small cell lung cancer. Isobe H, et al. **Cancer** 1990 Mar 15;65(6):1391–5
Flow cytometric analysis of the DNA content of non-small cell lung cancer. Ploidy as a significant prognostic indicator in squamous cell carcinoma of the lung. Sahin AA, et al. **Cancer** 1990 Feb 1;65(3):530–7
Restriction fragment length polymorphism of chromosome 3 (3p) and the epidermal growth factor receptor gene in human non-small cell lung carcinomas. Grunberger D, et al. **Cancer Lett** 1990 May 30;51(2):133–41
DNA flow cytometric studies of 66 human lung tumors analyzed before treatment. Prognostic implications. Salvati F, et al. **Chest** 1989 Nov;96(5):1092–8
Elevated serum levels of calcitonin gene-related peptide (CGRP) but no evidence for CGRP gene expression in non-small cell lung carcinomas. Schifter S, et al. **Clin Endocrinol (Oxf)** 1989 Aug;31(2):137–42
Different pattern of expression of cellular oncogenes in human non-small-cell lung cancer cell lines. Kiefer PE, et al. **J Cancer Res Clin Oncol** 1990;116(1):29–37
Cytogenetic analysis in 28 radically operated non-small-cell lung cancer: preliminary considerations. Clerici M, et al. **Tumori** 1989 Oct 31;75(5):483–5

IMMUNOLOGY

Lymphokine-activated killer (LAK) cell activity in tumor-infiltrating lymphocytes from non-small cell lung cancer. Pisani RJ, et al. **Am J Clin Pathol** 1989 Oct; 92(4):435–46
Murine monoclonal antibodies raised against human non-small cell carcinoma of the lung: specificity and tumor targeting. Stein R, et al. **Cancer Res** 1990 Feb 15; 50(4):1330–6
A prospective pilot study evaluating the effectiveness of secretory IgA measurements in bronchoalveolar lavage to detect non-small cell lung cancer. Pisani RJ, et al. **Chest** 1990 Mar;97(3):586–9
Assessment of local cellular immunity in lung cancer by bronchoalveolar lavage. Lorenz J, et al. **Klin Wochenschr** 1990 Jul 17;68(14):728–34

METABOLISM

Monoclonal antibody targeting of human non-small cell carcinoma of the lung. Stein R, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):866s–868s
Thymidine labelling index as prognostic factor in resected non-small cell lung cancer. Alama A, et al. **Eur J Cancer** 1990;26(5):622–5

MORTALITY

Longer survival after resection of non-small cell lung cancer in Japanese women. Mitsudomi T, et al. **Ann Thorac Surg** 1989 Nov;48(5):639–42
The significance of ipsilateral mediastinal lymph node metastasis (N2 disease) in non-small cell carcinoma of the lung. A commentary. Shields TW. **J Thorac Cardiovasc Surg** 1990 Jan;99(1):48–53
[Influence of blood transfusion on postoperative prognosis of stage I (No) lung cancer] Wu HS. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):297–9 (Eng. Abstr.) (Chi)
[Non-small cell bronchial cancer: experience in Liège based on a retrospective study extending over 14 years] Radermecker MA, et al. **Rev Med Liege** 1989 Sep 15; 44(18):546–54 (Fre)
[An analysis of the cumulative survival curve of unresectable non-small cell lung cancers (NSCLC) in stage I–III after radiotherapy] Morita K, et al. **Gan No Rinsho** 1990 Feb; 36(2):135–41 (Eng. Abstr.) (Jpn)

PATHOLOGY

Immunocytochemical study of RAS oncoprotein in cytologic specimens of primary lung tumours. Koutselini H, et al. **Anticancer Res** 1990 May-Jun;10(3):597–603
Study of the heterogeneity of a human non-small cell bronchopulmonary epidermoid primary carcinoma: determination of the DNA content of NSCLCN6L2 cells and of cloned sub-populations. Gratas C, et al. **Biol Cell** 1990;68(2):133–8

Establishment of a camptothecin analogue (CPT-11)-resistant cell line of human non-small cell lung cancer: characterization and mechanism of resistance. Kanzawa F, et al. **Cancer Res** 1990 Sep 15;50(18):5919-24

In situ evaluation of growth fraction determined by monoclonal antibody Ki-67 and ploidy in surgically resected non-small cell lung cancers. Simony J, et al. **Cancer Res** 1990 Jul 15;50(14):4382-7

The distinction of small cell and non-small cell lung cancer by growth in native-state histoculture. Vescio RA, et al. **Cancer Res** 1990 Sep 15;50(18):6095-9

Clinical staging of patients with non-small cell lung cancer. Little AG, et al. **Chest** 1990 Jun;97(6):1431-8

Differentiation capacity of human non-small-cell lung cancer cell lines after exposure to phorbol ester. Salge U, et al. **Int J Cancer** 1990 Jun 15;45(6):1143-50

v-rasH induces non-small cell phenotype, with associated growth factors and receptors, in a small cell lung cancer cell line. Falco JP, et al. **J Clin Invest** 1990 Jun;85(6):1740-5

Expression of the embryonal neural cell adhesion molecule N-CAM in lung carcinoma. Diagnostic usefulness of monoclonal antibody 735 for the distinction between small cell lung cancer and non-small cell lung cancer. Kibbelaar RE, et al. **J Pathol** 1989 Sep;159(1):23-8

Mediastinal staging in non-small-cell lung cancer. Malenka DJ, et al. **Med Decis Making** 1989 Oct-Dec;9(4):231-42

[The staging of bronchial cancer] Milleron B, et al. **Presse Med** 1989 Sep 16;18(28):1387-9 (Eng. Abstr.) **(Fre)**

[Differential lung cancer diagnosis--progress or fiasco?] Müller KM. **Fortschr Med** 1990 Apr 15;108(11):17-9 (0 ref.) **(Ger)**

[Bronchus cancer: pathologic-anatomic principles] Dalquen P. **Helv Chir Acta** 1990 Jan;56(5):689-700 (42 ref.) (Eng. Abstr.) **(Ger)**

[Staging of non-small cell bronchial carcinoma using CT and MRT] Layer G, et al. **Radiologe** 1990 Apr;30(4):155-63 (59 ref.) (Eng. Abstr.) **(Ger)**

[Mediastinal staging of non-small cell bronchial carcinoma. The place of computed tomography and mediastinoscopy] Vestring T, et al. **Radiologe** 1990 Apr;30(4):178-84 (Eng. Abstr.) **(Ger)**

[Histology and prognosis in lung cancer treatment] Kodama T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb; 28(2):216-24 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Body composition in cancer cachexia. Fearon KC, et al. **Infusionstherapie** 1990 Apr;17 Suppl 3:63-6

RADIOGRAPHY

Computed tomography to stage lung cancer. Approaching a controversy using meta-analysis. Dales RE, et al. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1096-101 (50 ref.)

Meta-analysis of computed tomography for staging non-small cell lung cancer [editorial] Fontana RS. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1093-4

Improving clinical efficacy of computed tomographic scan in the preoperative assessment of patients with non-small cell lung cancer. Ratto GB, et al. **J Thorac Cardiovasc Surg** 1990 Mar;99(3):416-25

[Computed tomographic determination of the target volume and the evaluation of remission after radiation of bronchial carcinoma] Feyerabend T, et al. **Strahlenther Onkol** 1990 Jun;166(6):405-10 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

99Tcm-labelled meso-HMPAO and glutathione content of human lung tumours. Rowell NP, et al. **Nucl Med Commun** 1989 Jul;10(7):503-8

RADIOTHERAPY

Effectiveness of treatment for non-small cell lung cancer [letter] Curran WJ Jr. **Ann Intern Med** 1990 Oct 15; 113(8):637-8

Thoracic radiotherapy does not prolong survival in patients with locally advanced, unresectable non-small cell lung cancer. Johnson DH, et al. **Ann Intern Med** 1990 Jul 1; 113(1):33-8

Analysis of the influence of elective nodal irradiation on postirradiation pulmonary function. Curran WJ Jr, et al. **Cancer** 1990 Jun 1;65(11):2488-93

Radiation therapy for medically inoperable stage I and II non-small cell lung cancer. Armstrong JG, et al. **Cancer Treat Rev** 1989 Dec;16(4):247-55 (26 ref.)

Intraoperative radiation with external irradiation: an alternative for nonresectable non-small-cell lung cancer? Juettner FM, et al. **Eur J Cardiothorac Surg** 1990;4(2):85-9; discussion 90

Intraoperative radiation therapy combined with external irradiation in nonresectable non-small-cell lung cancer: preliminary report. Juettner FM, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1143-50

Preoperative radiation therapy in regionally localized stage III non-small cell lung carcinoma: long-term results and patterns of failure. Reddy S, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):287-92

The influence of tumor size and pre-treatment staging on outcome following radiation therapy alone for stage I non-small cell lung cancer. Sandler HM, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul;19(1):9-13

Curative radiotherapy in non-small cell carcinoma of the lung. Talton BM, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul;19(1):15-21

A randomized phase I/II trial of hyperfractionated radiation therapy with total doses of 60.0 Gy to 79.2 Gy: possible survival benefit with greater than or equal to 69.6 Gy in favorable patients with Radiation Therapy Oncology Group stage III non-small-cell lung carcinoma: report of Radiation Therapy Oncology Group 83-11. Cox JD, et al. **J Clin Oncol** 1990 Sep;8(9):1543-55

Lack of apparent difference in outcome between clinically staged IIIA and IIIB non-small-cell lung cancer treated with radiation therapy. Curran WJ Jr, et al. **J Clin Oncol** 1990 Mar;8(3):409-15

More on radiation for lung cancer [letter] Green N. **Oncology (Williston Park)** 1987 Oct;1(8):52

Status of radiotherapy in the management of non-small-cell lung cancer. Hilaris BS, et al. **Oncology (Williston Park)** 1987 Apr;1(2):25-31 (23 ref.)

Initial tumor size and local control in stage III non-small cell lung cancer treated by radio-chemotherapy. Karstens JH, et al. **Onkologie** 1990 Apr;13(2):144-5

Radical "en Bloc" irradiation of inoperable non-small cell lung cancer in a special position of patient. Marzecki Z, et al. **Radiobiol Radiother (Berl)** 1989;30(4):371-3

[Curative radiotherapy of unresectable bronchial cancer. Apropos of 266 cases without metastasis with 4 to 6 years follow-up (oat cell carcinoma excluded)] Baillet F, et al. **Ann Med Interne (Paris)** 1989;140(5):353-5 (Eng. Abstr.) **(Fre)**

[Combination radiotherapy and chemotherapy in bronchial cancer: benefits and limitations] Mirimanoff RO. **Schweiz Med Wochenschr** 1990 May 5;120(18):680-6 (40 ref.) (Eng. Abstr.) **(Fre)**

[The role of radio-oncology in the treatment of bronchial cancer] Sauer R, et al. **Helv Chir Acta** 1990 Jan; 56(5):749-62 (39 ref.) (Eng. Abstr.) **(Ger)**

[Intraoperative radiotherapy (IORT) at the Graz University Clinics: results of a pilot study on non-small cell lung carcinoma] Arian-Schad K, et al. **Strahlenther Onkol** 1990 Mar;166(3):199-203 (Eng. Abstr.) **(Ger)**

[Role of radiotherapy in the treatment of patients with non-small-cell lung cancer] Reinfuss M. **Nowotwory** 1989 Jul-Dec;39(3-4):185-90 (Eng. Abstr.) **(Pol)**

[The combined treatment of lung cancer with one-time large-fraction preoperative irradiation] Kharchenko VP, et al. **Vopr Onkol** 1990;36(7):863-6 (Eng. Abstr.) **(Rus)**

SECONDARY

Preoperative examination to detect distant metastasis is not advocated for asymptomatic patients with stages 1 and 2 non-small cell lung cancer. Preoperative examination for lung cancer. Ichinose Y, et al. **Chest** 1989 Nov;96(5):1104-9

Mediastinal lymph node metastases from nonsmall cell bronchogenic carcinoma: reevaluation with CT. Ikezoe J, et al. **J Comput Assist Tomogr** 1990 May-Jun;14(3):340-4

The role of prophylactic cranial irradiation in regionally advanced non-small cell lung cancer. A Southwest Oncology Group Study. Rusch VW, et al. **J Thorac Cardiovasc Surg** 1989 Oct;98(4):535-9

Surgery in bronchial carcinoma with metastasis. Hasse J. **Lung** 1990;168 Suppl:1145-52

CT of mediastinal lymph nodes in patients with non-small cell lung carcinoma. Aronchick JM. **Radiol Clin North Am** 1990 May;28(3):573-81 (31 ref.)

SURGERY

Non small cell lung carcinoma (NSCLC) at stage 3. A fourteen years retrospective study of 449 patients. Indications of surgery in a multidisciplinary management. Radermecker MA, et al. **Acta Chir Belg** 1989 May-Jun; 89(3):153-8

Blood transfusion and lung cancer recurrence [letter; comment] Keller SM, et al. **Ann Thorac Surg** 1989 Nov; 48(5):746-7 Comment on: Ann Thorac Surg 1989 Mar;47(3):346-51.

Survival after conservative resection for T1 N0 M0 non-small cell lung cancer. Read RC, et al. **Ann Thorac Surg** 1990 Mar;49(3):391-8; discussion 399-400

Cancer recurrence after resection: T1 N0 non-small cell lung cancer. Lung Cancer Study Group. Thomas P, et al. **Ann Thorac Surg** 1990 Feb;49(2):242-6; discussion 246-7

Expanded possibilities for surgical treatment of lung cancer. Survival in stage IIIa disease. Mountain CF. **Chest** 1990 May;97(5):1045-51

Results of radical treatment of stage IIIa non-small-cell carcinoma of the lung. Maggi G. **Eur J Cardiothorac Surg** 1988;2(5):329-35

Surgical therapy in lung cancer with single brain metastasis. Torre M, et al. **Eur J Cardiothorac Surg** 1988;2(5):336-9

Adjuvant therapy of lung cancer. Joss RA, et al. **Helv Chir Acta** 1990 Jan;56(5):735-47 (37 ref.)

Locally advanced lung cancer treatment: personal experience of 588 stage III operated on patients. Pezzuoli G, et al. **Helv Chir Acta** 1990 Jan;56(5):719-24

New trends in the surgical treatment of non-small cell lung cancer. Wright CD, et al. **Indiana Med** 1990 Mar; 83(3):192-4

Surgical treatment of patients with nonsmall-cell lung cancer and mediastinal lymph node involvement. Ishida T, et al. **J Surg Oncol** 1990 Mar;43(3):161-6

Carcinoma of the lung. Who will benefit from surgery? Landreneau RJ. **Postgrad Med** 1990 Jan;87(1):117-20, 125-35 (57 ref.)

Selection and surgical treatment options in carcinoma of the lung. Johnston MR. **Semin Roentgenol** 1990 Jan;25(1):112-6 (18 ref.)

Results of conservative surgery for stage I lung cancer. Pastorino U, et al. **Tumori** 1990 Feb 28;76(1):38-43

[Stage III non-small cell lung cancer. Indications for surgery in a multidisciplinary approach] Radermecker MA, et al. **Rev Med Liege** 1990 Feb 1;45(2):49-56 **(Fre)**

[Atypical lung cancer resection? A clinical observation pro and contra] Weber J. **Zentralbl Chir** 1990;115(1):35-42 (Eng. Abstr.) **(Ger)**

[Postoperative recurrence of the patients with the stage I, II non small cell lung cancer] Iwamoto I, et al. **Kyobu Geka** 1990 Apr;43(4):267-70 (Eng. Abstr.) **(Jpn)**

[Present status and problems of surgical treatment of non-small cell lung cancer] Fujisawa T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb;28(2):210-5 (Eng. Abstr.) **(Jpn)**

[Surgical procedures in multiple primary synchronous bilateral tumors of the lungs] Naryshkin VL, et al. **Grudn Khir** 1989 Sep-Oct;(5):94-5 **(Rus)**

[The combined treatment of lung cancer with one-time large-fraction preoperative irradiation] Kharchenko VP, et al. **Vopr Onkol** 1990;36(7):863-6 (Eng. Abstr.) **(Rus)**

THERAPY

Phase I trial of high-dose etoposide, high-dose cisplatin, and reinfusion of autologous bone marrow for lung cancer. Lazarus HM, et al. **Am J Clin Oncol** 1990 Apr;13(2):107-12

The influence of patient age on the diagnosis and treatment of lung and colorectal cancer. Guadagnoli E, et al. **Arch Intern Med** 1990 Jul;150(7):1485-90

Two cycles of cisplatin-vindesine and radiotherapy for localized nonsmall cell carcinoma of the lung (stage III). Results of a prospective trial with 149 patients. Tourani JM, et al. **Cancer** 1990 Apr 1;65(7):1472-7

5-Fluorouracil with oral leucovorin and hydroxyurea and concomitant radiotherapy for stage III non-small cell lung cancer. Vokes EE, et al. **Cancer** 1990 Aug 1;66(3):437-42

Combined modality treatment for non-small cell lung cancer. Lung Cancer Study Group. Perng RP, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Apr;43(4):217-22

Fluosol and oxygen breathing as an adjuvant to radiation therapy in the treatment of locally advanced non-small cell carcinoma of the lung: results of a phase I/II study. Lustig R, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul; 19(1):97-102

Results of combination chemotherapy and thoracic radiation therapy for unresectable non-small cell carcinoma of the lung. Robinow JS, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1203-10

New modes of palliative therapy for patients with lung cancer--a review. Krieger BP. **J Fla Med Assoc** 1989 Sep; 76(9):763-6 (14 ref.)

Combination immunotherapy for non-small cell lung cancer. Results with interleukin-2 and tumor necrosis factor-alpha. Yang SC, et al. **J Thorac Cardiovasc Surg** 1990 Jan; 99(1):8-12; discussion 12-3

Systemic and combined modality therapy for lung cancer. Ettinger DS. **Md Med J** 1990 Apr;39(4):315-6

Primary lung cancer [letter] Graham P. **Med J Aust** 1990 Sep 3;153(5):303-4

Multimodality therapy for lung cancer [editorial] Perry MC. **Mo Med** 1989 Nov;86(11):733-4

Active specific immunotherapy with an autologous tumor cell vaccine in patients with resected non-small cell lung cancer. Schulof RS, et al. **Mol Biother** 1988;1(1):30-6

A randomized trial of induction chemotherapy plus high-dose radiation versus radiation alone in stage III non-small-cell lung cancer [see comments] Dillman RO, et al. **N Engl J Med** 1990 Oct 4;323(14):940-5 Comment in: N Engl J Med 1990 Oct 4;323(14):989-90.

Clinical trials referral resource. Non-small-cell lung cancer. Cheson BD. **Oncology (Williston Park)** 1990 Feb;4(2):51-63

Sequential combination of 5-fluorouracil, cis-platinum and irradiation in unresectable non-small cell lung cancer. Nagy-Mignotte H, et al. **Radiother Oncol** 1989 Aug; 15(4):333-9

New directions in non-small cell lung cancer. Gralla RJ. **Semin Oncol** 1990 Aug;17(4 Suppl 7):14-9 (40 ref.)

Future directions in the treatment of non-small cell lung cancer. Ihde DC. **Semin Oncol** 1990 Aug;17(4 Suppl 7):33-6 (17 ref.)

The nonsurgical management of lung cancer: a 1989 perspective for small cell and the non-small cell histologies. Turrisi AT 3d. **Semin Roentgenol** 1990 Jan;25(1):117-22 (38 ref.)

[Therapy of bronchus carcinoma: therapeutic possibilities and current molecular biology trials] Ludwig CU. **Schweiz Med Wochenschr** 1990 Aug 7;120(31-32):1143-8 (28 ref.) (Eng. Abstr.) **(Ger)**

[Long-term survivors of non-small cell lung cancer treated with non-surgical therapeutic modalities] Fujii M, et al. **Gan No Rinsho** 1990 Apr;36(5):589-92 (Eng. Abstr.) **(Jpn)**

[Radiation-induced esophageal stricture in patients with non-small cell lung cancer treated with chemoradiotherapy] Kataoka M, et al.

Nippon Igaku Hoshasen Gakkai Zasshi 1989 Oct 25; 49(10):1272–80 (Eng. Abstr.) **(Jpn)**

[Advances in the diagnosis and treatment of lung cancer. I. Management of non-small cell carcinoma] Spiro SG. **Pneumonol Pol** 1990 Apr–May;58(4–5):239–43 (8 ref.) **(Pol)**

[Current problems of multimodal treatment in non-small cell cancer of the lung] Chernichenko AV, et al. **Sov Med** 1990; (6):46–53 (72 ref.) **(Rus)**

ULTRASTRUCTURE

Frequent expression of receptors for granulocyte-macrophage colony-stimulating factor on human nonhematopoietic tumor cell lines. Miyagawa K, et al. **J Cell Physiol** 1990 Jun;143(3):483–7

CARCINOMA, OAT CELL

Small cell carcinoma of the esophagus. Report of three cases and review of the literature. Attar BM, et al. **Dig Dis Sci** 1990 Jan;35(1):145–52 (27 ref.)

Small cell lung cancer. Goodman GE, et al. **Dis Mon** 1989 Dec;35(12):769–861 (191 ref.)

Biology of small cell lung cancer: an overview. Weynants P, et al. **Eur Respir J** 1990 Jun;3(6):699–714 (187 ref.)

Imaging of an oat cell metastasis to the testicle: case report and review of the literature. Kravitz JR, et al. **JCU** 1990 Feb;18(2):121–3 (17 ref.)

Small cell carcinoma of the pleura. Bouvier DP, et al. **South Med J** 1989 Nov;82(11):1437–8 (7 ref.)

Small cell carcinoma of the oesophagus: report of three cases and review of published cases. Eccles DM, et al. **Thorax** 1989 Sep;44(9):749–50 (9 ref.)

Malignant brachial artery embolism. Lazarides M, et al. **Vasa** 1989;18(4):316–7

[Metachronic squamous carcinoma of the tonsils to microcytic carcinoma of the esophagus (letter)] Navarro M, et al. **Med Clin (Barc)** 1990 Jan 20;94(2):77–8 **(Spa)**

ANALYSIS

NCAM: a surface marker for human small cell lung cancer cells. Aletsee-Ufrecht MC, et al. **FEBS Lett** 1990 Jul 16; 267(2):295–300

Somatostatin receptors are present in small-cell but not in non-small-cell primary lung carcinomas: relationship to EGF-receptors. Reubi JC, et al. **Int J Cancer** 1990 Feb 15;45(2):269–74

Increased expression of mutant forms of p53 oncogene in primary lung cancer. Iggo R, et al. **Lancet** 1990 Mar 24; 335(8691):675–9

[Bronchial carcinoid and small cell lung cancer—neuroendocrine tumors. Immunohistochemical studies] Maryniak R, et al. **Pneumonol Pol** 1989 Oct–Dec; 57(10–12):489–95 (Eng. Abstr.) **(Pol)**

[Human chorionic gonadotropin and carcinoembryonic antigen in small cell carcinoma (oat cell) of the urinary bladder] Bonet Palau I, et al. **Actas Urol Esp** 1989 Nov–Dec;13(6):476–9 (Eng. Abstr.) **(Spa)**

BLOOD

Correlation between erythrocyte CR1 reduction and other blood proteinase markers in patients with malignant and inflammatory disorders. Currie MS, et al. **Blood** 1990 Apr 15;75(8):1699–704

Increased levels of soluble interleukin-2 receptors in serum of patients with lung cancer. Marino P, et al. **Br J Cancer** 1990 Mar;61(3):434–5

Clinical and serologic markers of stage and prognosis in small cell lung cancer. A multivariate analysis. Gronowitz JS, et al. **Cancer** 1990 Aug 15;66(4):722–32

Abnormal regulation of coagulation/fibrinolysis in small cell carcinoma of the lung. Wojtukiewicz MZ, et al. **Cancer** 1990 Feb 1;65(3):481–5

An enzyme-linked immunosorbent assay for cancer procoagulant and its potential as a new tumor marker. Gordon SG, et al. **Cancer Res** 1990 Oct 1;50(19):6229–34

Immunoradiometric assay for alpha gamma- and gamma gamma-enolase (neuron-specific enolase), with use of monoclonal antibodies and magnetizable polymer particles. Paus E, et al. **Clin Chem** 1989 Oct;35(10):2034–8

Plasma glutamate levels, lymphocyte reactivity and death rate in patients with bronchial carcinoma. Eck HP, et al. **J Cancer Res Clin Oncol** 1989;115(6):571–4

Elevated plasma concentrations of C-flanking gastrin-releasing peptide in small-cell lung cancer. Holst JJ, et al. **J Clin Oncol** 1989 Dec;7(12):1831–8

Plasma growth hormone and digital clubbing in carcinoma of the bronchus. Gosney MA, et al. **Thorax** 1990 Jul; 45(7):545–7

[Circulating hematopoietic stem cells in patients with small cell lung cancer] Shimizu E, et al. **Gan To Kagaku Ryoho** 1989 Oct;16(10):3499–501 **(Jpn)**

[Gastrin-releasing peptide as a specific tumor marker in patients with small cell lung carcinoma, compared with neuron-specific enolase] Maruno K. **Nippon Geka Gakkai Zasshi** 1990 Jun;91(6):760–5 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

"Idiopathic thrombocytopenic purpura-like syndrome" treated with interferon in a patient with lung cancer. Rapoport BL, et al. **Am J Hematol** 1990 May;34(1):71–2

Reflex sympathetic dystrophy associated with large cell lung carcinoma [letter] Regan M, et al. **Ann Rheum Dis** 1989 Dec;48(12):1031

Three opportunistic infections associated with ectopic corticotropin syndrome. Sieber SC, et al. **Arch Intern Med** 1989 Nov;149(11):2589–91

Palisading granulomas associated with lung cancer. Kolin A, et al. **Arch Pathol Lab Med** 1990 Jul;114(7):697–9

Anaplastic small cell carcinoma of the larynx. Takeuchi K, et al. **Auris Nasus Larynx** 1989;16(2):127–32

Small cell carcinoma of the cervix with inappropriate antidiuretic hormone secretion. Case report. Kothe MJ, et al. **Br J Obstet Gynaecol** 1990 Jul;97(7):647–8

Autonomic function and motility in intestinal pseudoobstruction caused by paraneoplastic syndrome. Sodhi N, et al. **Dig Dis Sci** 1989 Dec;34(12):1937–42 (19 ref.)

Limbic encephalitis. A rare presentation of the small-cell lung carcinoma. den Hollander AM, et al. **Gen Hosp Psychiatry** 1989 Nov;11(6):388–92

Jaccoud's-type arthropathy: an association with malignancy. Johnson JJ, et al. **J Rheumatol** 1989 Sep;16(9):1278–80

Evolution of brain MRI abnormalities in limbic encephalitis. Dirr LY, et al. **Neurology** 1990 Aug;40(8):1304–6

Small cell lung cancer in a patient with neutropenia due to Felty's syndrome. Avery AD, et al. **South Med J** 1989 Nov;82(11):1452–3

[Small cell lung cancer with Lambert-Eaton myasthenic syndrome] Tang XF. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Feb; 22(1):17–9, 61 (Eng. Abstr.) **(Chi)**

[A multidisciplinary consensus: small cell cancer and AIDS] **Bull Cancer (Paris)** 1990;77(1):93–9 **(Fre)**

[Investigation of two cases of a clinically unknown large cell carcinoma of the lung involved with severe stenosis of the bilateral main bronchi] Umeki S, et al. **Gan No Rinsho** 1989 Oct;35(12):1432–8 (Eng. Abstr.) **(Jpn)**

[A case of pulmonary tuberculosis in a long-term survivor with small cell carcinoma of the lung] Ino M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Sep; 27(9):1082–6 (Eng. Abstr.) **(Jpn)**

[A case report of large cell lung cancer detected in the course of antituberculous therapy after a giant bullectomy] Nakahara K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Aug; 27(8):984–8 (Eng. Abstr.) **(Jpn)**

[Dilated cardiomyopathy associated with tumor pulmonary microembolism of small cell lung cancer, an elderly case report] Yamada M, et al. **Nippon Ronen Igakkai Zasshi** 1989 Sep;26(5):521–2 **(Jpn)**

[Antineuronal antibody in carcinomatous neuropathy] Imamura K, et al. **Rinsho Shinkeigaku** 1989 Nov; 29(11):1331–7 (Eng. Abstr.) **(Jpn)**

[Subacute sensory neuropathy manifestated by tonic pupils associated with small cell carcinoma of the lung] Inoue Y, et al. **Rinsho Shinkeigaku** 1989 Oct;29(10):1302–5 (Eng. Abstr.) **(Jpn)**

[A case of small cell carcinoma of the lung with marked hemorrhagic syndrome] Simochkina ZA, et al. **Klin Med (Mosk)** 1989 Nov;67(11):125–6 **(Rus)**

[Pemphigus herpetiformis associated with neoplasm of the lung] Vicente MA, et al. **Med Cutan Ibero Lat Am** 1989; 17(6):373–8 (Eng. Abstr.) **(Spa)**

[Chin neuropathy and cancer of the lung (letter)] Martí J, et al. **Neurologia** 1988 Jan–Feb;3(1):36–7 **(Spa)**

[Transient global amnesia as a manifestation of cerebellar metastasis (letter)] Olivé JM, et al. **Neurologia** 1989 Nov; 4(9):341–2 **(Spa)**

DIAGNOSIS

Aspiration cytology of neuroendocrine tumors below the diaphragm. Leiman G, et al. **Diagn Cytopathol** 1989; 5(3):263–8

Tumour markers in the clinical management of patients with small cell lung cancer [editorial] Hansen M, et al. **Eur Respir J** 1989 Sep;2(8):700–1

Combined measurements of neuron specific enolase and bombesin/gastrin releasing peptide in lung cancer. Scagliotti GV, et al. **Eur Respir J** 1989 Sep;2(8):746–50

Tetanus toxin as a marker for small-cell lung cancer cell lines. Heymanns J, et al. **J Cancer Res Clin Oncol** 1989; 115(6):537–42

The diagnostic value of neuron-specific enolase and carcino-embryonic antigen analyses in patients with carcinoma of the lung. Wielders JP, et al. **J Clin Chem Clin Biochem** 1990 Apr;28(4):225–31

Neurologic, computed cranial tomographic, and magnetic resonance imaging abnormalities in patients with small-cell lung cancer: further follow-up of 6- to 13-year survivors. Johnson BE, et al. **J Clin Oncol** 1990 Jan;8(1):48–56

Small cell carcinoma of the large intestine presenting as central nervous systems signs and symptoms. Two case reports with literature review. Hussein AM, et al. **J Neurooncol** 1990 Jun;8(3):269–74 (17 ref.)

Clinical decision making. Conference on therapeutic and diagnostic options [clinical conference] Holtz H, et al. **N J Med** 1990 Aug;87(8):641–4

Lung cancer. Difference in age at diagnosis between men and women. Scheinok PA, et al. **N J Med** 1989 Dec; 86(12):951–7 (9 ref.)

A case of small cell carcinoma with ectopic ACTH syndrome. Yeo CT, et al. **Singapore Med J** 1990 Jun; 31(3):283–5

Carcinoembryonic antigen, arginine vasopressin and calcitonin as markers of early small-cell lung cancer relapse. Biran H, et al. **Tumour Biol** 1989;10(5):258–67

[Alpha tumor necrosis factor in the serum of patients with sarcoidosis, tuberculosis or bronchial cancer] Theilmann L, et al. **Pneumologie** 1990 Apr;44(4):735–8 (Eng. Abstr.) **(Ger)**

[Analysis of tumor markers in lung biopsies and in bronchial lavage] Vogel J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:465–6 (Eng. Abstr.) **(Ger)**

[Diagnostic significance of the tumor markers CEA, SCC and NSE in serum and bronchoalveolar lavage] von Eiff M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:462–4 (Eng. Abstr.) **(Ger)**

[Plasma gastrin-releasing peptide analysis and the clinical significance] Maruno K, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:100–3 **(Jpn)**

[Detection of patients with lung cancer in a tuberculosis hospital] Khanin AL, et al. **Probl Tuberk** 1990;(2):20–4 (Eng. Abstr.) **(Rus)**

[T1–2N0M0-stage lung cancer, its diagnosis and treatment results] Perel'man MI, et al. **Ter Arkh** 1989;61(7):128–31 **(Rus)**

[The potentials of fiber bronchoscopy with immediate cytological study in the diagnosis of lung cancer under outpatient conditions] Gorbacheva LM, et al. **Vopr Onkol** 1990;36(5):579–82 (Eng. Abstr.) **(Rus)**

[Endoscopic evaluation of the therapeutic results in patients with small cell lung cancer] Poddubnyĭ BK, et al. **Vopr Onkol** 1989;35(9):1083–6 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Vincristine, doxorubicin and cyclophosphamide with and without etoposide in limited small cell lung cancer. Nikkanen V, et al. **Acta Oncol** 1990;29(4):421–4

Induction chemo-radiotherapy and maintenance alternating chemotherapy for small cell lung cancer. Tummarello D, et al. **Acta Oncol** 1990;29(4):417–20

A phase II trial of carboplatin (CBDCA) in small-cell and non-small-cell lung cancer with correlation to in vitro analysis of cytotoxicity. Dmitrovsky E, et al. **Am J Clin Oncol** 1990 Aug;13(4):285–9

Tumor lysis syndrome after induction chemotherapy in small-cell lung carcinoma. Hussein AM, et al. **Am J Clin Oncol** 1990 Feb;13(1):10–3

Spinal cord toxicity complicating treatment with cisplatin and etoposide. List AF, et al. **Am J Clin Oncol** 1990 Jun; 13(3):256–8

Phase II study of high-dose epirubicin in untreated patients with small-cell lung cancer. Macchiarini P, et al. **Am J Clin Oncol** 1990 Aug;13(4):302–7

The clinical effect of medroxyprogesterone (MPA) in elderly patients with lung cancer. Niiranen A, et al. **Am J Clin Oncol** 1990 Apr;13(2):113–6

Oral chemotherapy for poor risk small-cell lung cancer patients with combined idarubicin and etoposide. Ardizzoni A, et al. **Anticancer Res** 1989 Jul–Aug;9(4):937–9

Optimal treatment for T1–3NOMO small cell lung cancer: surgery plus adjuvant chemotherapy. Macchiarini P, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1623–5

Teniposide (VM26) as second-line treatment for small cell lung cancer. Tummarello D, et al. **Anticancer Res** 1990 Mar–Apr;10(2A):397–9

Maintenance chemotherapy in limited small cell lung cancer: a randomised controlled clinical trial. Byrne MJ, et al. **Br J Cancer** 1989 Sep;60(3):413–8

Dose intensity in cancer chemotherapy. Dodwell DJ, et al. **Br J Cancer** 1990 Jun;61(6):789–94 (42 ref.)

The formation and removal of cisplatin (CDDP) induced DNA adducts in a CDDP sensitive and resistant human small cell lung carcinoma (HSCLC) cell line. Hospers GA, et al. **Br J Cancer** 1990 Jan;61(1):79–82

In vitro evaluation of the potential of aclarubicin in the treatment of small cell carcinoma of the lung (SCCL). Jensen PB, et al. **Br J Cancer** 1989 Dec;60(6):838–44

Carboplatin, ifosfamide and etoposide with mid-course vincristine and thoracic radiotherapy for 'limited' stage small cell carcinoma of the bronchus. Thatcher N, et al. **Br J Cancer** 1989 Jul;60(1):98–101

Addition of verapamil and tamoxifen to the initial chemotherapy of small cell lung cancer. A phase I/II study. Figueredo A, et al. **Cancer** 1990 May 1;65(9):1895–902

Combination chemotherapy with or without radiation therapy in small cell lung cancer. An analysis of a 5-year follow-up. Fukuoka M, et al. **Cancer** 1990 Apr 15; 65(8):1678–84

Evaluation of high-dose etoposide combined with cisplatin for treating relapsed small cell lung cancer. Masuda N, et al. **Cancer** 1990 Jun 15;65(12):2635–40

Complete remission of refractory small cell carcinoma of the pancreas with cisplatin and etoposide. Morant R, et al. **Cancer** 1989 Nov 15;64(10):2007–9

Comparison of etoposide and cisplatin with bis-chloro-ethylnitrosourea, thiotepa, vincristine, and cyclophosphamide for salvage treatment in small cell lung cancer. A Southwest Oncology Group Study. O'Bryan RM, et al. **Cancer** 1990 Feb 15;65(4):856–60

Chemotherapy as treatment of choice in extrapulmonary undifferentiated small cell carcinomas. Van Der Gaast A, et al. **Cancer** 1990 Feb 1;65(3):422–4

Phase II study of carboplatin in patients with nonresected lung cancer. Japan Cooperative Oncology Group on Lung Cancer. **Cancer Chemother Pharmacol** 1990;26(2):101–4

Therapy for poor-risk patients with small-cell lung cancer using bolus ifosfamide and oral etoposide. Anderson H, et al. **Cancer Chemother Pharmacol** 1990;26(1):71–4

Etoposide, carboplatin, cyclophosphamide and vincristine in previously untreated patients with small-cell lung cancer. Bishop JF, et al. **Cancer Chemother Pharmacol** 1990; 25(5):367–70

Combination chemotherapy with cisplatin and etoposide associated with radiotherapy in the treatment of small-cell lung cancer. Figoli F, et al.
Cancer Chemother Pharmacol 1989;24(6):381–5

Clinical pharmacodynamics of continuous-infusion etoposide. Miller AA, et al.
Cancer Chemother Pharmacol 1990;25(5):361–6

A phase II study of carboplatin and vincristine in previously treated patients with small-cell lung cancer. Smit EF, et al. **Cancer Chemother Pharmacol** 1989;25(3):202–4

Antagonistic effect of aclarubicin on the cytotoxicity of etoposide and 4'-(9-acridinylamino)methanesulfon-m-anisidide in human small cell lung cancer cell lines and on topoisomerase II-mediated DNA cleavage. Jensen PB, et al.
Cancer Res 1990 Jun 1;50(11):3311–6

Quality of life during chemotherapy for small cell lung cancer: assessment and use of a daily diary card in a randomized trial. Geddes DM, et al. **Eur J Cancer** 1990 Apr;26(4):484–92

Ifosfamide, doxorubicin and etoposide in small cell lung cancer patients with poor prognosis. Kamthan AG, et al. **Eur J Cancer** 1990;26(6):691–4

Treatment of small-cell carcinoma of the cervix with weekly combination chemotherapy. Tabbara IA, et al.
Eur J Cancer 1990;26(6):748–9

A phase II trial of TCNU in patients with squamous, adeno and large cell carcinoma of the lung. Vibe-Petersen J, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1881–5

Enhancement of the antiproliferative activity of cis-diamminedichloroplatinum(II) by quercetin. Hofmann J, et al. **Int J Cancer** 1990 Mar 15;45(3):536–9

A study of human small-cell lung carcinoma (hSCLC) cell lines with different sensitivities to detect relevant mechanisms of cisplatin (CDDP) resistance. Hospers GA, et al. **Int J Cancer** 1990 Jul 15;46(1):138–44

Phase II study of n-methylformamide (NSC 3051) and spirogermanium (NSC 192965) in the treatment of advanced small cell lung cancer. Ettinger DS, et al.
Invest New Drugs 1990 May;8(2):183–5

Ifosfamide and mesna in combination with other cytostatic drugs in the treatment of patients with advanced cancer. Falkson G, et al. **Invest New Drugs** 1990 May;8(2):215–9

Phase II trial of methylglyoxal bis-guanylhydrazone (MGBG) in refractory small cell lung cancer. Simon MS, et al. **Invest New Drugs** 1990;8 Suppl 1:S79–81

Resolution of small cell lung cancer intracranial metastases with standard dose chemotherapy. Kearns F, et al.
Ir J Med Sci 1989 Dec;158(12):308–9

Small cell bronchogenic carcinoma: a cyclical alternating combination of epirubicin plus cisplatin and cyclophosphamide plus etoposide. Casadio M, et al.
J Chemother 1990 Jun;2(3):199–202

Combination chemotherapy with cyclophosphamide, doxorubicin and vincristine in the treatment of stage III-IV small-cell lung cancer. Palmeri S, et al. **J Chemother** 1989 Oct;1(5):346–9

Epirubicin in extensive small-cell lung cancer: a phase II study in previously untreated patients: a National Cancer Institute of Canada Clinical Trials Group Study [see comments] Blackstein M, et al. **J Clin Oncol** 1990 Mar; 8(3):385–9 Comment in: J Clin Oncol 1990 Mar;8(3):374–7.

A randomized comparison of standard chemotherapy versus alternating chemotherapy and maintenance versus no maintenance therapy for extensive-stage small-cell lung cancer: a phase III study of the Eastern Cooperative Oncology Group. Ettinger DS, et al. **J Clin Oncol** 1990 Feb;8(2):230–40

Evaluation of new drugs in untreated patients with small-cell lung cancer: its time has come [comment] Ettinger DS. **J Clin Oncol** 1990 Mar;8(3):374–7 Comment on: J Clin Oncol 1990 Mar;8(3):385–9. Comment on: J Clin Oncol 1990 Mar;8(3):390–5.

Phase II study of amonafide: results of treatment and lessons learned from the study of an investigational agent in previously untreated patients with extensive small-cell lung cancer [see comments] Evans WK, et al. **J Clin Oncol** 1990 Mar;8(3):390–5 Comment in: J Clin Oncol 1990 Mar;8(3):374–7.

Treatment of limited small-cell lung cancer with etoposide and cisplatin alternating with vincristine, doxorubicin, and cyclophosphamide versus concurrent etoposide, vincristine, doxorubicin, and cyclophosphamide and chest radiotherapy: a Southwest Oncology Group Study. Goodman GE, et al. **J Clin Oncol** 1990 Jan;8(1):39–47

Treatment of limited-stage small-cell lung cancer with cyclophosphamide, doxorubicin, and vincristine with or without etoposide: a randomized trial of the North Central Cancer Treatment Group. Jett JR, et al. **J Clin Oncol** 1990 Jan;8(1):33–8

Concurrent chemotherapy/radiotherapy for limited small-cell lung carcinoma: a Southwest Oncology Group Study. McCracken JD, et al. **J Clin Oncol** 1990 May; 8(5):892–8

Warfarin anticoagulation for small-cell lung cancer: evidence against a cytotoxic or anticoagulant mechanism [letter; comment] Silberberg JM, et al. **J Clin Oncol** 1990 Jan; 8(1):182–4 Comment on: J Clin Oncol 1989 Aug;7(8):993–1002.

Carboplatin, etoposide, and ifosfamide as intensive chemotherapy for small-cell lung cancer. Smith IE, et al. **J Clin Oncol** 1990 May;8(5):899–905

Warfarin for small-cell lung cancer: why not? [letter; comment] Zacharski LR, et al. **J Clin Oncol** 1990 Jul; 8(7):1282–3 Comment on: J Clin Oncol 1989 Aug;7(8):985–7.

Correlation of in vitro drug-sensitivity testing results with response to chemotherapy and survival in extensive-stage small cell lung cancer: a prospective clinical trial [see comments] Gazdar AF, et al. **J Natl Cancer Inst** 1990 Jan 17;82(2):117–24 Comment in: J Natl Cancer Inst 1990 Jan 17;82(2):82–3.

Chemo-radioresistance of small cell lung cancer cell lines derived from untreated primary tumors obtained by diagnostic bronchofiberscopy. Tanio Y, et al.
Jpn J Cancer Res 1990 Mar;81(3):289–97

Reappraisal of bronchial arterial infusion therapy for advanced lung cancer. Watanabe Y, et al. **Jpn J Surg** 1990 Jan;20(1):27–35

Treatment of small cell lung cancer by eight weeks chemotherapy. Crawford SM, et al.
Med Oncol Tumor Pharmacother 1989;6(4):279–83

Phase II study of 4'-epi-doxorubicin in patients with untreated, extensive small cell lung cancer. South-East European Oncology Group (SEEOG). Eckhardt S, et al. **Med Oncol Tumor Pharmacother** 1990;7(1):19–23

Treatment of small cell lung cancer with induction chemotherapy followed by late intensification. Hardman PD, et al. **Med Oncol Tumor Pharmacother** 1989; 6(3):227–32

Carboplatin in association with etoposide and either adriamycin or epirubicin for untreated small cell lung cancer: a dose escalation study of carboplatin. UCL Clinical Oncology Group. Humblet Y, et al.
Med Oncol Tumor Pharmacother 1989;6(3):207–12

Combination cyclophosphamide and etoposide in treatment of small cell lung cancer. Leung WT, et al.
Med Oncol Tumor Pharmacother 1990;7(1):31–4

Small cell carcinoma of the pancreas in association with a choledochal cyst: immunohistochemical characterization and complete response to combination chemotherapy. Duggan DB, et al. **Med Pediatr Oncol** 1989;17(6):506–9

Phase II trial of etoposide and cisplatin for refractory small cell lung cancer: a Cancer and Leukemia Group B Study. Graziano SL, et al. **Med Pediatr Oncol** 1990;18(1):22–6 (24 ref.)

Treatment of small cell carcinoma of the lung. Foley JF, et al. **Nebr Med J** 1989 Nov;74(11):330–2

Etoposide effective against small cell lung cancer [news] **Oncology (Williston Park)** 1988 May;2(5):12

Clinical trials referral resource. Small-cell lung cancer. Cheson BD. **Oncology (Williston Park)** 1990 Jan;4(1):43–56

Epirubicin weekly in combination chemotherapy with cyclophosphamide and vincristine in untreated small cell lung cancer: a phase II trial. Kretzschmar A, et al.
Onkologie 1990 Apr;13(2):141–2

Alternating chemotherapy in small cell lung cancer. Wolf M, et al. **Onkologie** 1990 Jun;13(3):157–64 (28 ref.)

Chemotherapy in lung cancer. Price CG, et al.
Postgrad Med J 1989 May;65(763):291–8 (60 ref.)

Small cell lung cancer: single agents revisited. Clark PI, et al. **Respir Med** 1989 Sep;83(5):381–2

Single-agent oral etoposide for elderly small cell lung cancer patients. Carney DN, et al. **Semin Oncol** 1990 Feb;17(1 Suppl 2):49–53

Phase II trial of daily oral VP-16 in refractory small cell lung cancer: a Hoosier Oncology Group study. Einhorn LH, et al. **Semin Oncol** 1990 Feb;17(1 Suppl 2):32–5

Overview of ifosfamide in small cell and non-small cell lung cancer. Johnson DH. **Semin Oncol** 1990 Apr;17(2 Suppl 4):24–30 (49 ref.)

Carboplatin in small cell lung cancer. Thatcher N, et al.
Semin Oncol 1990 Feb;17(1 Suppl 2):40–8 (35 ref.)

Preliminary experience with mitomycin, vinblastine and cisplatin (MVP) combination chemotherapy in the treatment of advanced non-small cell lung cancer at University Hospital, Kuala Lumpur. Lee SM.
Singapore Med J 1990 Jun;31(3):228–32

Apparent response of small cell lung cancer to an extract of mistletoe and homoeopathic treatment. Bradley GW, et al. **Thorax** 1989 Dec;44(12):1047–8

A phase II study of oral etoposide in elderly patients with small cell lung cancer. Smit EF, et al. **Thorax** 1989 Aug; 44(8):631–3

Duration of chemotherapy in small cell lung cancer. Spiro SG, et al. **Thorax** 1990 Jan;45(1):1–2 (13 ref.)

[Prolonging of life with cytostatic treatment: is it worthwhile?] Burghouts JT. **Ned Tijdschr Geneeskd** 1989 Nov 4;133(44):2153–5 **(Dut)**

[Results of a phase II study of the combination of cis-platinum and 5-FU in epidermoid or undifferentiated large cell bronchial cancer] Rivière A, et al.
Bull Cancer (Paris) 1989;76(10):1095–102 (Eng. Abstr.) **(Fre)**

[Chemotherapy of cancer of the lung] Klastersky J.
Recenti Prog Med 1989 Sep;80(9):477–84 (56 ref.) (Eng. Abstr.) **(Fre)**

[Perspectives on chemotherapy of cancer of the bronchi] Chauvergne J, et al. **Rev Mal Respir** 1989;6(5):409–16 (42 ref.) (Eng. Abstr.) **(Fre)**

[Intensive chemotherapy treatment of small-cell bronchial cancer] Sculier JP. **Rev Med Brux** 1990 Apr;11(4):96–108 (57 ref.) (Eng. Abstr.) **(Fre)**

[Sequential induction chemotherapy and radiation treatment of inoperable small cell bronchial cancer. Results of a prospective randomized study] Schütte J, et al.
Klin Wochenschr 1989 Dec 4;67(23):1182–93 (Eng. Abstr.) **(Ger)**

[Nerve conduction velocity following high-dose vincristine in the treatment of small cell bronchial cancer] Eich F, et al. **Pneumologie** 1990 Feb;44 Suppl 1:574–5 (Eng. Abstr.) **(Ger)**

[Chemotherapy of small cell bronchial cancer with a combination of carboplatin, vincristine and etoposide] Gatzemeier U, et al. **Pneumologie** 1990 Feb;44 Suppl 1:584–5 (Eng. Abstr.) **(Ger)**

[Cisplatin-Vepeside versus Endoxan-Vepeside in the treatment of small cell bronchial cancer. A randomized study] Heckmayr M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:256–7 (Eng. Abstr.) **(Ger)**

[Phase II study with etoposide/vincristine in small cell bronchial cancer (extensive disease)] von Pawel J, et al.
Pneumologie 1990 Feb;44 Suppl 1:582–3 (Eng. Abstr.) **(Ger)**

[Experiences with cytostatic treatment of small cell bronchial cancer] Wurbs W. **Z Erkr Atmungsorgane** 1990; 174(3):204–14 (Eng. Abstr.) **(Ger)**

[A case of intra-arterial infusion chemotherapy in small cell lung cancer with liver metastases] Fujii S, et al.
Gan To Kagaku Ryoho 1989 Nov;16(11):3627–30 (Eng. Abstr.) **(Jpn)**

[A combination phase II study of adriamycin, CDDP and etoposide in small cell lung cancer] Honda R, et al.
Gan To Kagaku Ryoho 1990 Mar;17(3 Pt 1):375–9 (Eng. Abstr.) **(Jpn)**

[An elderly case of small cell lung cancer showing complete response by oral administration of etoposide] Takigawa K, et al. **Gan To Kagaku Ryoho** 1990 Jan;17(1):141–5 (Eng. Abstr.) **(Jpn)**

[Acute myocardial infarction induced by lung cancer chemotherapy with cisplatin and etoposide] Tsutsumi T, et al. **Gan To Kagaku Ryoho** 1990 Mar;17(3 Pt 1):413–7 (Eng. Abstr.) **(Jpn)**

[Progress and obstacles in chemotherapy and combined modality treatment of small cell lung cancer] Ohnoshi T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb; 28(2):190–6 (Eng. Abstr.) **(Jpn)**

[Small cell lung cancer; a retrospective analysis of results of chemotherapy and chemo-radiotherapy] Ohnoshi T, et al. **Rinsho Hoshasen** 1990 Jul;35(7):779–87 (Eng. Abstr.) **(Jpn)**

[Evaluation of the second line of treatment of patients with small cell carcinoma of the lung] Roszkowski K, et al.
Pneumonol Pol 1989 Apr;57(4):240–8 (Eng. Abstr.) **(Pol)**

[Usefulness of bronchoscopic examination during the treatment of small cell carcinoma of the lung] Zajączkowska J, et al. **Pneumonol Pol** 1990 Apr–May; 58(4–5):199–204 (Eng. Abstr.) **(Pol)**

ENZYMOLOGY

Neurone specific enolase (NSE) in small cell lung cancer: a tumour marker of prognostic significance? Harding M, et al. **Br J Cancer** 1990 Apr;61(4):605–7

Serum neuron-specific enolase is a useful tumor marker for small cell lung cancer. Burghuber OC, et al. **Cancer** 1990 Mar 15;65(6):1386–90

Neuron-specific enolase as a follow-up marker in small cell bronchial carcinoma. A prospective study in an unselected series. Nōu E, et al. **Cancer** 1990 Mar 15;65(6):1380–5

Serum neuron-specific enolase as a marker of small-cell carcinoma of the esophagus. Sasajima K, et al.
J Clin Gastroenterol 1990 Aug;12(4):384–8

Neuron-specific enolase during chemotherapy of small cell lung cancer. Buamah PK, et al. **J Surg Oncol** 1990 May; 44(1):1–4

[Serum level of neuron-specific enolase: value as tumor marker of microcellular bronchial cancer] Weynants P, et al. **Acta Clin Belg** 1989;44(3):161–8 (Eng. Abstr.) **(Fre)**

EPIDEMIOLOGY

Carcinoma of the bronchus in young adults. Seddon DJ, et al. **Br J Clin Pract** 1990 Jan;44(1):24–5

The use of biomarkers in the prediction of survival in patients with pulmonary carcinoma. Walop W, et al. **Cancer** 1990 May 1;65(9):2033–46

ETIOLOGY

Rectal small cell cancer in an HIV-positive man. Smitherman MH, et al. **Am J Med** 1990 Aug;89(2):239–40

[Synchronous small cell bronchial cancers (letter)] Breton JL, et al. **Rev Pneumol Clin** 1989;45(6):281 **(Fre)**

[A case of Recklinghausen's disease associated with multiple emphysematous bullae and lung cancer] Nagai H, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1989 May; 27(5):625–9 (Eng. Abstr.) **(Jpn)**

GENETICS

Expression in lung cancer of a transcribed sequence at the DNF15S2 locus at chromosome 3P21. Harbour JW, et al. **Anticancer Res** 1990 Jan–Feb;10(1):23–7

Amplification and expression of mdr1 gene in a multidrug resistant variant of small cell lung cancer cell line NCI–H69. Reeve JG, et al. **Br J Cancer** 1989 Sep; 60(3):339–42

Patterns of cross–resistance in a multidrug–resistant small–cell lung carcinoma cell line. Cole SP. **Cancer Chemother Pharmacol** 1990;26(4):250–6

Patients with different lung cancers show normal expression of fra(3)(p14.2) in aphidicolin–treated lymphocyte cultures. Porfirio B, et al. **Cancer Genet Cytogenet** 1989 Nov; 43(1):95–101

Analysis of the activation of the myc family oncogene and of its stability over time in xenografted human lung carcinomas. Gazzeri S, et al. **Cancer Res** 1990 Mar 1; 50(5):1566–70

Altered structure and expression of the human retinoblastoma susceptibility gene in small cell lung cancer. Hensel CH, et al. **Cancer Res** 1990 May 15;50(10):3067–72

Abnormalities in structure and expression of the retinoblastoma gene in small cell lung cancer cell lines and xenografts in nude mice. Rygaard K, et al. **Cancer Res** 1990 Sep 1;50(17):5312–7

Spontaneous induction of malignancy in mouse cells by a human small cell lung cancer implanted in nude mice. Gupta V, et al. **Carcinogenesis** 1990 May;11(5):713–22

DNA flow cytometric studies of 66 human lung tumors analyzed before treatment. Prognostic implications. Salvati F, et al. **Chest** 1989 Nov;96(5):1092–8

Initiation of pro–opiomelanocortin mRNA from a normally quiescent promoter in a human small cell lung cancer cell line. Chang AC, et al. **Gene** 1989 Dec 7;84(1):115–26

Defective glucocorticoid regulation of proopiomelanocortin gene expression and peptide secretion in a small cell lung cancer cell line. Clark AJ, et al. **J Clin Endocrinol Metab** 1990 Feb;70(2):485–90

Identification of intronic point mutations as an alternative mechanism for p53 inactivation in lung cancer. Takahashi T, et al. **J Clin Invest** 1990 Jul;86(1):363–9

Expression of the atrial natriuretic factor gene in small cell lung cancer tumors and tumor cell lines. Bliss DP Jr, et al. **J Natl Cancer Inst** 1990 Feb 21;82(4):305–10

Expression of gastrin–releasing peptide (human bombesin) gene in large cell undifferentiated carcinoma of the lung. Hamid QA, et al. **J Pathol** 1990 Jun;161(2):145–51

Differential utilization of calcitonin gene regulatory DNA sequences in cultured lines of medullary thyroid carcinoma and small–cell lung carcinoma. de Bustros A, et al. **Mol Cell Biol** 1990 Apr;10(4):1773–8

Altered expression of the retinoblastoma (RB) gene in small–cell carcinoma of the lung. Yokota J, et al. **Oncogene** 1988 Oct;3(4):471–5

[The types and breakpoints of somatic chromosome aberrations in small cell lung cancer (SCLC) patients and heavy smokers] Su YA, et al. **I Chuan Hsueh Pao** 1988; 15(2):150–60 (Eng. Abstr.) **(Chi)**

HISTORY

Small cell carcinoma of the bronchus: historical perspective of a treatable disease. Watkin SW, et al. **J R Soc Med** 1990 Feb;83(2):108–10

IMMUNOLOGY

Detection of the anti–Hu antibody in the serum of patients with small cell lung cancer—a quantitative western blot analysis. Dalmau J, et al. **Ann Neurol** 1990 May; 27(5):544–52

Histocompatibility antigen expression in pulmonary carcinomas as indication of differentiation and of special subtypes. Dämmrich J, et al. **Cancer** 1990 May 1; 65(9):1942–54

Antigens associated with multidrug resistance in H69AR, a small cell lung cancer cell line. Mirski SE, et al. **Cancer Res** 1989 Oct 15;49(20):5719–24

Expression of neural cell adhesion molecule–related sialoglycoprotein in small cell lung cancer and neuroblastoma cell lines H69 and CHP–212. Moolenaar CE, et al. **Cancer Res** 1990 Feb 15;50(4):1102–6

Radiolocalization of human small cell lung cancer and antigen–positive normal tissues using monoclonal antibody LS2D617. Wilson BS, et al. **Cancer Res** 1990 May 15; 50(10):3124–30

Preservation of cluster 1 small cell lung cancer antigen in zinc–formalin fixative and its application to immunohistological diagnosis. Tome Y, et al. **Histopathology** 1990 May;16(5):469–74

Establishment of human monoclonal antibody recognizing a new tumor–associated antigen from a patient with small cell lung carcinoma. Iizasa T, et al. **Hybridoma** 1990 Jun; 9(3):211–9

Neural cell adhesion molecule (NCAM) is the antigen recognized by monoclonal antibodies of similar specificity in small–cell lung carcinoma and neuroblastoma. Patel K, et al. **Int J Cancer** 1989 Oct 15;44(4):573–8

Brain–associated small–cell lung cancer antigen (BASCA) is expressed in developing lung: an immunohistochemical and immunoelectron microscopic study. Fukayama M, et al. **J Histochem Cytochem** 1990 Jan;38(1):51–7

Assessment of local cellular immunity in lung cancer by bronchoalveolar lavage. Lorenz J, et al. **Klin Wochenschr** 1990 Jul 17;68(14):728–34

Calcium channel autoantibody and non–small–cell lung cancer in patients with Lambert–Eaton syndrome [letter] Sher E, et al. **Lancet** 1990 Feb 17;335(8686):413

Autoantibodies bind solubilized calcium channel–omega–conotoxin complexes from small cell lung carcinoma: a diagnostic aid for Lambert–Eaton myasthenic syndrome. Lennon VA, et al. **Mayo Clin Proc** 1989 Dec; 64(12):1498–504

Observations on the immunology of small cell lung cancer with implications for future management. Leonard RC, et al. **Pneumonol Pol** 1989 Oct–Dec;57(10–12):457–9

Relationship between CaMBr1 expression and tumor progression in small cell lung carcinomas. Martignone S, et al. **Tumori** 1989 Aug 31;75(4):373–7

[McAb LC–1 against human lung cancer] Ge XR, et al. **Shih Yen Sheng Wu Hsueh Pao** 1989 Sep;22(3):359–65 (Eng. Abstr.) **(Chi)**

[Pure sensory neuropathy. Restriction of the Hu antibody to the sensory neuropathy associated with small cell carcinoma of the lung] Graus F, et al. **Neurologia** 1986 Jan–Feb;1(1):11–5 (Eng. Abstr.) **(Spa)**

METABOLISM

Multiple neuropeptides mobilise calcium in small cell lung cancer: effects of vasopressin, bradykinin, cholecystokinin, galanin and neurotensin. Woll PJ, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):66–73

Small cell carcinoma of the major salivary glands. An immunohistochemical study. Gnepp DR, et al. **Cancer** 1990 Jul 1;66(1):185–92

Reduced DNA topoisomerase II activity and drug–induced DNA cleavage activity in an adriamycin–resistant human small cell lung carcinoma cell line. de Jong S, et al. **Cancer Res** 1990 Jan 15;50(2):304–9

A human monocyte growth factor produced by lung cancer cells. Okabe T, et al. **Cancer Res** 1990 Jul 1;50(13):3863–5

Voltage–operated calcium channels in small cell lung carcinoma cell lines: pharmacological, functional, and immunological properties. Sher E, et al. **Cancer Res** 1990 Jul 1;50(13):3892–6

Stimulation of calcium mobilization but not proliferation by bombesin and tachykinin neuropeptides in human small cell lung cancer cells. Takuwa N, et al. **Cancer Res** 1990 Jan 15;50(2):240–4

Production of insulin–like growth factor binding proteins by small–cell lung cancer cell lines. Jaques G, et al. **Exp Cell Res** 1989 Oct;184(2):396–406

Activation of M3 muscarinic acetylcholine receptors inhibits voltage–dependent calcium influx in small cell lung carcinoma. Williams CL, et al. **J Biol Chem** 1990 Jan 25; 265(3):1443–7

Production of gastrin–releasing peptide–(18–27) and a stable fragment of its precursor in small cell lung carcinoma cells. Vangsted AJ, et al. **J Clin Endocrinol Metab** 1990 Jun; 70(6):1586–93

Diphtheria toxin effects on brain–tumor xenografts. Implications for protein–based brain–tumor chemotherapy. Wrobel CJ, et al. **J Neurosurg** 1990 Jun;72(6):946–50

Ectopic hormone production by small cell undifferentiated carcinomas. Russell PJ, et al. **Mol Cell Endocrinol** 1990 May 28;71(1):1–12 (122 ref.)

Alterations in glutathione and glutathione–related enzymes in a multidrug–resistant small cell lung cancer cell line. Cole SP, et al. **Mol Pharmacol** 1990 Feb;37(2):192–7

Expression of phosphorylated and non–phosphorylated neurofilament subunits and cytokeratins in neuroendocrine lung tumors. Leoncini P, et al. **Pathol Res Pract** 1989 Dec; 185(6):848–55

Neurotensin elevates cytosolic calcium in small cell lung cancer cells. Staley J, et al. **Peptides** 1989 Nov–Dec; 10(6):1217–21

Calcitonin free oat–cell carcinoma of the thyroid gland. Eusebi V, et al. **Virchows Arch [A]** 1990;417(3):267–71

MORTALITY

An overview of prognostic factors in small cell lung cancer. A report from the Subcommittee for the Management of Lung Cancer of the United Kingdom Coordinating Committee on Cancer Research. Rawson NS, et al. **Br J Cancer** 1990 Apr;61(4):597–604

Longevity in small cell lung cancer. A report to the Lung Cancer Subcommittee of the United Kingdom Coordinating Committee for Cancer Research. Souhami RL, et al. **Br J Cancer** 1990 Apr;61(4):584–9

RECPAM: a computer program for recursive partition amalgamation for censored survival data and other situations frequently occurring in biostatistics. II. Applications to data on small cell carcinoma of the lung (SCCL). Ciampi A, et al. **Comput Methods Programs Biomed** 1989 Dec;30(4):283–96

Prognosis at presentation of small cell carcinoma of the lung. Allan SG, et al. **Eur J Cancer** 1990;26(6):703–5

Outcome of patients with small–cell lung cancer: effect of changes in staging procedures and imaging technology on prognostic factors over 14 years. Dearing MP, et al. **J Clin Oncol** 1990 Jun;8(6):1042–9

Ten–year survival of patients with small–cell lung cancer treated with combination chemotherapy with or without irradiation. Johnson BE, et al. **J Clin Oncol** 1990 Mar; 8(3):396–401

Long term survival after pulmonary resection for small cell carcinoma of the lung. Prasad US, et al. **Thorax** 1989 Oct; 44(10):784–7

[Small cell lung cancer: survival analysis of 96 cases] Ding SL, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Mar; 43(3):197–204 (Eng. Abstr.) **(Chi)**

[Prognostic factors in small cell bronchial cancer] Manegold C, et al. **Onkologie** 1989 Oct;12(5):240–5 (Eng. Abstr.) **(Ger)**

[Long–term survival of patients with small cell lung cancer] Jassem J, et al. **Pneumonol Pol** 1989 Oct–Dec; 57(10–12):496–503 (Eng. Abstr.) **(Pol)**

PATHOLOGY

Host–supplied connective tissue as a guide for proliferating tumor cells in human tumor xenografts. Köpf–Maier P, et al. **Acta Anat (Basel)** 1989;135(4):289–95

Diagnostic value of crush artifact in cytologic specimens. Occurrence in small cell carcinoma of the lung. Davenport RD. **Acta Cytol** 1990 Jul–Aug;34(4):502–4

Malignant pleural effusions due to small cell carcinoma of the lung. An immunocytochemical cell–surface analysis of lymphocytes and tumor cells. Guzman J, et al. **Acta Cytol** 1990 Jul–Aug;34(4):497–501

Endocrine cell hyperplasia of the uterine cervix. A precursor of neuroendocrine carcinoma of the cervix? Chan JK, et al. **Am J Clin Pathol** 1989 Dec;92(6):825–30

Large cell carcinoma of the lung. Prognostic implications of histopathologic and immunohistochemical subtyping. Ishida T, et al. **Am J Clin Pathol** 1990 Feb;93(2):176–82

Thymic carcinoma. A clinicopathologic study of 13 cases. Truong LD, et al. **Am J Surg Pathol** 1990 Feb;14(2):151–66

Small–cell neuroendocrine carcinoma of the ampullary region. A clinicopathologic, immunohistochemical, and ultrastructural study of three cases. Zamboni G, et al. **Am J Surg Pathol** 1990 Aug;14(8):703–13

Review of neuroendocrine carcinomas of the larynx. Ferlito A, et al. **Ann Otol Rhinol Laryngol** 1989 Oct;98(10):780–90 (55 ref.)

Lymphoid cells, small cell lung cancer cells and epithelial cells share a membrane determinant which effects cell proliferation. Armitage RJ, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1825–33

Carcinoembryonic antigen as differentiation marker for small cell lung cancer in vitro and its clinical relevance. Bepler G, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1525–30

Neuron–specific enolase in small–cell carcinoma of the lung: the value of combined immunocytochemistry and serum determination. Esscher T, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1717–20

Immunocytochemical study of RAS oncoprotein in cytologic specimens of primary lung tumours. Koutselini H, et al. **Anticancer Res** 1990 May–Jun;10(3):597–603

Small–cell carcinoma of the vagina. A clinicopathologic study. Rusthoven JJ, et al. **Arch Pathol Lab Med** 1990 Jul; 114(7):728–31

Human granulocyte colony–stimulating factor: biologic activities and receptor characterization on hematopoietic cells and small cell lung cancer cell lines. Avalos BR, et al. **Blood** 1990 Feb 15;75(4):851–7

Neuroepithelial small cell carcinoma of the vagina. Chafe W. **Cancer** 1989 Nov 1;64(9):1948–51

Predictors of 5–year survival and curability in small cell lung cancer. Crown JP, et al. **Cancer** 1990 Jul 15;66(2):382–6

Small cell lung cancer presenting as a solitary pulmonary nodule. Quoix E, et al. **Cancer** 1990 Aug 1;66(3):577–82

The role of the histologic subclassification of tumor cells in patients with small cell carcinoma of the lung and central nervous system metastases. Twijnstra A, et al. **Cancer** 1990 Apr 15;65(8):1812–5

Reevaluation of pulmonary neoplasms resected as small cell carcinomas. Significance of distinguishing between well–differentiated and small cell neuroendocrine carcinomas. Warren WH, et al. **Cancer** 1990 Feb 15; 65(4):1003–10

Differentiation of human variant small cell lung cancer cell lines to a classic morphology by retinoic acid. Doyle LA, et al. **Cancer Res** 1989 Dec 1;49(23):6745–51

Autocrine function for insulin–like growth factor I in human small cell lung cancer cell lines and fresh tumor cells. Macaulay VM, et al. **Cancer Res** 1990 Apr 15;50(8):2511–7

The distinction of small cell and non–small cell lung cancer by growth in native–state histoculture. Vescio RA, et al. **Cancer Res** 1990 Sep 15;50(18):6095–9

A neuropeptide antagonist that inhibits the growth of small cell lung cancer in vitro. Woll PJ, et al. **Cancer Res** 1990 Jul 1;50(13):3968–73

Small cell carcinoma of the stomach. Case report and review of the literature. Hussein AM, et al. **Dig Dis Sci** 1990 Apr; 35(4):513–8 (13 ref.)

Small cell carcinoma of the oesophagus: a clinical and immunohistopathological review. Tennvall J, et al. **Eur J Surg Oncol** 1990 Apr;16(2):109–15

Small cell neuroendocrine carcinoma of the rectum associated with chronic ulcerative colitis. Rubin A, et al. **Histopathology** 1990 Jan;16(1):95–7

Small cell undifferentiated ('neuroendocrine') carcinoma of the colon. Sarsfield P, et al. **Histopathology** 1990 Apr; 16(4):357–63

Small cell neuroendocrine (oat cell) tumour of the common

bile duct. van der Wal AC, et al. **Histopathology** 1990 Apr; 16(4):398–400

Comparison of DNA cleavage induced by etoposide and doxorubicin in two human small–cell lung cancer lines with different sensitivities to topoisomerase II inhibitors. Binaschi M, et al. **Int J Cancer** 1990 Feb 15;45(2):347–52

Unusual extension of lung cancer into the left atrium via the pulmonary vein. Kodama K, et al. **Int Surg** 1990 Jan–Mar;75(1):22–6

Reduced variation in the clonogenic assay obtained by standardization of the cell culture conditions prior to drug testing on human small cell lung cancer cell lines. Jensen PB, et al. **Invest New Drugs** 1989 Nov;7(4):307–15

The case of the confused man [clinical conference] Phillips B, et al. **Iowa Med** 1990 May;80(5):254–6

The clinical significance of variant–morphology small–cell carcinoma of the lung. Aisner SC, et al. **J Clin Oncol** 1990 Mar;8(3):402–8

Determinants of improved outcome in small–cell lung cancer: an analysis of the 2,580–patient Southwest Oncology Group data base. Albain KS, et al. **J Clin Oncol** 1990 Sep; 8(9):1563–74

Neuro–endocrine tumours of the head and neck. Soussi AC, et al. **J Laryngol Otol** 1990 Jun;104(6):504–7

Expression of the embryonal neural cell adhesion molecule N–CAM in lung carcinoma. Diagnostic usefulness of monoclonal antibody 735 for the distinction between small cell lung cancer and non–small cell lung cancer. Kibbelaar RE, et al. **J Pathol** 1989 Sep;159(1):23–8

Small cell carcinoma of the renal pelvis: a clinicopathological, morphological and immunohistochemical study of 2 cases. Essenfeld H, et al. **J Urol** 1990 Aug;144(2 Pt 1):344–7

Inhibition of in vitro tumor cell invasion by transmethylation inhibitors. Shinkai K, et al. **Jpn J Cancer Res** 1989 Aug; 80(8):716–9

An immunohistochemical study of lung carcinomas using a monoclonal antibody which specifically reacts to basal cells. Maeda K, et al. **Mod Pathol** 1990 Jan;3(1):43–8

Development of multiple carcinomas in a long term survivor of Wegener's granulomatosis treated with immunosuppressive drugs. Choy DS, et al. **N Y State J Med** 1989 Dec;89(12):680–2 (25 ref.)

Para–endocrine hypercalcemia and ovarian small cell carcinoma [see comments] Malfetano JH, et al. **N Y State J Med** 1990 Apr;90(4):206–7 Comment in: N Y State J Med 1990 Apr;90(4):171–2. Comment in: N Y State J Med 1990 Apr;90(4):172–3.

Ovarian small cell carcinoma [editorial; comment] Ulbright TM. **N Y State J Med** 1990 Apr;90(4):171–2 Comment on: N Y State J Med 1990 Apr;90(4):206–7.

A better way to stage small–cell lung cancer: radiolabeled monoclonal antibody imaging [news] **Oncology (Williston Park)** 1990 Jul;4(7):131–2

Vascular changes and inflammatory infiltrations in primary lung cancers. Parafiniuk M, et al. **Patol Pol** 1989; 40(3):293–309

Reconstituted basement membrane (matrigel) and laminin can enhance the tumorigenicity and the drug resistance of small cell lung cancer cell lines. Fridman R, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6698–702

Clinical applications of the pathological properties of small cell carcinoma, large cell carcinoma, and adenoid cystic carcinoma of the lung. Ishida T, et al. **Semin Surg Oncol** 1990;6(1):53–63

Benign fibrous pleural tumor with elevation of insulin–like growth factor and hypoglycemia. Cole FH Jr, et al. **South Med J** 1990 Jun;83(6):690–4 (20 ref.)

Culture and changes in dynamics of proliferation of pulmonary small cell carcinoma cells. Kobayashi S, et al. **Tohoku J Exp Med** 1989 Sep;159(1):1–14

Large cell neuroendocrine carcinoma of the lung. Barbareschi M, et al. **Tumori** 1989 Dec 31;75(6):583–8

Bone marrow biopsy in the staging of small cell lung cancer. Franciosi V, et al. **Tumori** 1989 Dec 31;75(6):576–9 (32 ref.)

In vivo and in vitro growth of SCLC cells derived from biopsies. Gianì S, et al. **Tumori** 1989 Dec 31;75(6):570–5

The unusual spectrum of neuroendocrine lung neoplasms. Hammar S, et al. **Ultrastruct Pathol** 1989 Sep–Dec; 13(5–6):515–60

[Primary small cell carcinoma of the kidney: report of a case] Chang JL, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Mar; 89(3):242–6 (Eng. Abstr.) **(Chi)**

[The staging of bronchial cancer] Milleron B, et al. **Presse Med** 1989 Sep 16;18(28):1387–9 (Eng. Abstr.) **(Fre)**

[Small cell lung carcinoma. Value of the evaluation of extension for the therapeutic strategy] Trillet V, et al. **Presse Med** 1990 Apr 7;19(14):655–60 (35 ref.) (Eng. Abstr.) **(Fre)**

[Differential lung cancer diagnosis—progress or fiasco?] Müller KM. **Fortschr Med** 1990 Apr 15;108(11):17–9 (0 ref.) **(Ger)**

[Bronchus cancer: pathologic–anatomic principles] Dalquen P. **Helv Chir Acta** 1990 Jan;56(5):689–700 (42 ref.) (Eng. Abstr.) **(Ger)**

[Immunocytochemical characterization of malignant pleural effusions of small cell bronchial cancer] Guzman J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:601–2 (Eng. Abstr.) **(Ger)**

[Cytomorphologic criteria of small cell bronchial cancer and its value in the determination of malignancy and histogenesis] Kocak D, et al. **Pneumologie** 1990 Feb;44 Suppl 1:612–3 (Eng. Abstr.) **(Ger)**

[Bronchial cancer and asbestos: comparison of anamnestic exposure to asbestos, detection of asbestos bodies in bronchoalveolar lavage and in lung tissue] Schildge J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:333–4 (Eng. Abstr.) **(Ger)**

[Analysis of autopsied cases of primary lung cancer. Second Part: The diagnostic accuracy] Oida K. **Bull Chest Dis Res Inst Kyoto Univ** 1988 Mar;21(1–2):29–32 (Eng. Abstr.) **(Jpn)**

[Analyses of autopsied cases of primary lung cancer. First Part: The distribution of metastasis] Oida K. **Bull Chest Dis Res Inst Kyoto Univ** 1988 Mar;21(1–2):17–28 (Eng. Abstr.) **(Jpn)**

[A case of asynchronous triple primary malignant tumors of bladder, stomach and lung] Harima M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):630–3 (10 ref.) (Eng. Abstr.) **(Jpn)**

[A case report of superior vena cava reconstruction using a heparin–coated temporary bypass tube] Koike T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Feb;38(2):298–302 (Eng. Abstr.) **(Jpn)**

[Suspected primary tumor in the diaphragm revealing large cell carcinoma in the lung with sarcomatous change] Tou Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jun; 38(6):1083–7 (Eng. Abstr.) **(Jpn)**

[An autopsy case of pulmonary asbestosis with synchronous multiprimary lung cancers, early gastric cancer and atypical mycobacteriosis] Yamamoto S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jun;27(6):724–9 (Eng. Abstr.) **(Jpn)**

[Pathologic findings in amylase–producing lung cancer detected by immunohistochemistry in an aged patient] Ikeda T, et al. **Nippon Naika Gakkai Zasshi** 1990 Feb 10; 79(2):231–2 **(Jpn)**

[A case of small cell carcinoma of the pancreas] Niimi M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Sep; 86(9):2265–8 (6 ref.) **(Jpn)**

[Analysis of neoplasm metastases to the bone marrow in patients with lung cancer] Dzięcioł J, et al. **Pneumonol Pol** 1989 Apr;57(4):235–9 (Eng. Abstr.) **(Pol)**

[Several parameters of growth of heterografts of human lung tumor in the subrenal capsule of CBA mice] Skotnikova OI, et al. **Eksp Onkol** 1990;12(1):41–3 (Eng. Abstr.) **(Rus)**

[Carcinomatous ventricolitis (letter)] Palomo F, et al. **Med Clin (Barc)** 1989 Nov 25;93(17):679 **(Spa)**

[Oat cell carcinoma of the esophagus (published erratum appears in Rev Esp Enferm Apar Dig 1989 Dec;76(6 Pt 2):114)] Ruiz M, et al. **Rev Esp Enferm Apar Dig** 1989 Nov; 76(5):475–8 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Voltage–dependent ion channels in small–cell lung cancer cells. Pancrazio JJ, et al. **Cancer Res** 1989 Nov 1; 49(21):5901–6

Selection of radioresistant cells by vitamin A deficiency in a small cell lung cancer cell line. Terasaki T, et al. **Jpn J Cancer Res** 1990 Aug;81(8):780–5

SFEMG improvement with remission in the cancer–associated Lambert–Eaton myasthenic syndrome. Oh SJ. **Muscle Nerve** 1989 Oct;12(10):844–8

PREVENTION & CONTROL

[THe experience of detecting lung cancer in an industrial district] Nechaeva OB. **Vopr Onkol** 1990;36(5):575–9 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Paraneoplastic limbic encephalitis: neuropsychiatric presentation. Newman NJ, et al. **Biol Psychiatry** 1990 Mar 1;27(5):529–42 (53 ref.)

RADIOGRAPHY

The positive bronchus sign in patients with known lung cancer. Zacharopoulos G, et al. **Eur J Radiol** 1990 Mar–Apr;10(2):130–3

Neuroendocrine carcinomas of the lung. Müller NL, et al. **Semin Roentgenol** 1990 Jan;25(1):96–104 (8 ref.)

[Lung cancer in the young—X–ray manifestations in 135 cases] Lu GM. **Chung Hua Chung Liu Tsa Chih** 1990 Mar; 12(2):148–9 (Eng. Abstr.) **(Chi)**

[Askin's tumor in a 67 year–old man with cancer of the prostate. X–ray computed tomographic aspects] Ravaux S, et al. **J Radiol** 1990 Mar;71(3):233–6 (10 ref.) (Eng. Abstr.) **(Fre)**

[Efficacy of chest CT on the staging and re–staging in patients with small cell lung cancer] Eguchi K, et al. **Rinsho Hoshasen** 1990 Jul;35(7):821–4 (Eng. Abstr.) **(Jpn)**

[The expectation of diagnostic radiology in the therapy of lung cancer] Shibata K, et al. **Rinsho Hoshasen** 1990 Jul; 35(7):789–94 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Imaging and therapy of small cell carcinoma xenografts using 131I–labeled monoclonal antibody SWA11. Smith A, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):980s–984s

Pulmonary tumor associated with diffuse bilateral lung uptake of bone imaging agent. Antar MA, et al. **Clin Nucl Med** 1990 Jan;15(1):46–7

131I–metaiodobenzylguanidine (mIBG) for bronchial oat cell cancer and melanoma detection? Osei–Bonsu A, et al. **Eur J Nucl Med** 1989;15(9):629–31

Imaging of small cell carcinoma using 131I–labelled antibodies to vasopressin associated human neurophysin (VP–HNP) [published erratum appears in Nucl Med Commun 1990 Jan;11(1):54] North WG, et al. **Nucl Med Commun** 1989 Sep;10(9):643–52

RADIOTHERAPY

Early effects of radiotherapy in small cell lung cancer xenografts monitored by 31P magnetic resonance spectroscopy and biochemical analysis. Kristjansen PE, et al. **Cancer Res** 1990 Aug 15;50(16):4880–4

Systemic (hemibody) irradiation in small cell lung cancer [letter] Eichhorn HJ. **Eur J Cancer** 1990 Mar;26(3):409–10

Is prophylactic cranial irradiation indicated in small–cell lung cancer? Fleck JF, et al. **J Clin Oncol** 1990 Feb;8(2):209–14 (32 ref.)

Late neurological complications after prophylactic cranial irradiation in patients with small–cell lung cancer: the Toronto experience. Lishner M, et al. **J Clin Oncol** 1990 Feb;8(2):215–21

Brain irradiation and systemic chemotherapy for small–cell lung cancer: dangerous liaisons? Turrisi AT. **J Clin Oncol** 1990 Feb;8(2):196–9

Small cell undifferentiated carcinoma of the maxillary sinus: technical considerations for radiation therapy. Janjan NA, et al. **Med Dosim** 1989 Dec;14(4):273–6

Limited small cell lung cancer—the role of radiotherapy. Turrisi AT 3d. **Oncology (Williston Park)** 1988 Jul; 2(7):19–25, 28–9, 32

Sequential combination chemotherapy and radiotherapy in locally advanced non–small cell carcinoma of the bronchus. Watkin SW, et al. **Respir Med** 1989 May;83(3):227–31

Lung cancer metastases—management. Wee J, et al. **Singapore Med J** 1989 Jun;30(3):279–81

Prognostic factors in patients with brain metastases from lung carcinoma: preliminary result of the second trial. Chatani M, et al. **Strahlenther Onkol** 1990 Aug;166(8):562–7

[Role of radiotherapy in the treatment of small cell lung carcinoma] Pellae–Cosset B, et al. **Rev Pneumol Clin** 1989; 45(5):194–8 (Eng. Abstr.) **(Fre)**

[The role of radio–oncology in the treatment of bronchial cancer] Sauer R, et al. **Helv Chir Acta** 1990 Jan; 56(5):749–62 (39 ref.) (Eng. Abstr.) **(Ger)**

SECONDARY

Intramedullary spinal cord metastasis detected through intrathecal contrast medium computerized tomography. Lazzarino LG, et al. **Acta Neurol (Napoli)** 1989 Oct; 11(5):365–8

Bone marrow metastases in small cell lung cancer: detection with magnetic resonance imaging and monoclonal antibodies. Trillet V, et al. **Br J Cancer** 1989 Jul;60(1):83–8

The response of cerebral metastases in small cell lung cancer to systemic chemotherapy. Twelves CJ, et al. **Br J Cancer** 1990 Jan;61(1):147–50

Management of metastases–induced acute pancreatitis in small cell carcinoma of the lung. Chowhan NM, et al. **Cancer** 1990 Mar 15;65(6):1445–8 (17 ref.)

Brain metastases in patients with limited small cell lung cancer achieving complete remission. Correlation with TNM staging. Ichinose Y, et al. **Chest** 1989 Dec; 96(6):1332–5

Uptake of Tc–99m MDP by adrenal metastases from undifferentiated large–cell carcinoma of the lung. Desai MB, et al. **Clin Nucl Med** 1989 Sep;14(9):704–5

Small cell lung cancer cell line from histologically and immunocytochemically negative bone marrow [letter] Everard MJ, et al. **Eur J Cancer** 1990;26(6):766–7

Value of neuron specific enolase in early detection of relapse in small cell lung carcinoma. van Zandwijk N, et al. **Eur J Cancer** 1990 Mar;26(3):373–6

Scintigraphy with nanocolloid Tc 99m in patients with small cell lung cancer, with special reference to bone marrow and hepatic metastasis. Widding A, et al. **Eur J Nucl Med** 1990;16(8–10):717–9

Rapidly enlarging gingival mass. Svirsky JA, et al. **J Am Dent Assoc** 1989 Nov;119(5):657–9

A case of skin metastasis of lung carcinoma associated with superior vena cava syndrome. Matsukawa A, et al. **J Dermatol** 1989 Dec;16(6):508–10

Large cell carcinoma of the lung with isolated jejunal metastasis. Dalton ML, et al. **J Miss State Med Assoc** 1989 Nov;30(11):361–3

Multifocal skeletal uptake of labeled leukocytes: infection versus tumor metastasis. Wahner–Roedler DL. **J Nucl Med** 1990 Sep;31(9):1543–7

Bilateral parotid gland metastasis as the initial presentation of a small cell lung carcinoma. Cantera JM, et al. **J Oral Maxillofac Surg** 1989 Nov;47(11):1199–201 (29 ref.)

Tonsillar metastasis at presentation of small cell carcinoma of the lung. Seddon DJ. **J R Soc Med** 1989 Nov;82(11):688

Surgery in bronchial carcinoma with metastasis. Hasse J. **Lung** 1990;168 Suppl:1145–52

Metastatic small cell carcinoma to the pineal body: case report. Kashiwagi S, et al. **Neurosurgery** 1989 Nov; 25(5):810–3

Mondor's disease associated with metastatic lung cancer in the breast. Courtney SP, et al. **Postgrad Med J** 1989 Oct; 65(768):779–80

Bilateral uveal metastases from small-cell carcinoma of the lung. Ampil F, et al. **South Med J** 1990 Jun;83(6):678–80

Adrenal failure due to bilateral metastases as the sole manifestation of relapsing lung carcinoma. Report of two cases. Guzzini F, et al. **Tumori** 1989 Dec 31;75(6):634–6

[What is your diagnosis? Vertebrogenic lumbar syndrome caused by peri- and intradural metastases of a small-cell bronchial carcinoma] Brückle W. **Schweiz Rundsch Med Prax** 1990 May 2;79(18):545–6 (Ger)

[Bone metastases of small cell bronchial cancer—a differential diagnosis of acute leukemia] Wolf H, et al. **Z Aratl Fortbild (Jena)** 1990;84(3):93–5 (Ger)

[Metastasis from tumor to tumor] Alexiev B, et al. **Zentralbl Allg Pathol** 1990;136(4):323–7 (Eng. Abstr.) (Ger)

[Evaluation of recurrent metastatic brain tumor of lung cancer origin] Kitaoka K, et al. **Neurol Med Chir (Tokyo)** 1989 Oct;29(10):895–901 (Eng. Abstr.) (Jpn)

[A case report of small cell lung cancer with extrahepatic biliary obstruction and intramedullary spinal cord metastasis] Murate T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Apr;27(4):513–7 (Eng. Abstr.) (Jpn)

SECRETION

The release of chromogranin A and B like activity from human lung cancer cell lines. A potential marker for a subset of small cell lung cancer. Bergh J, et al. **Acta Oncol** 1989;28(5):651–4

Small cell lung cancer cell lines secrete predominantly ACTH precursor peptides not ACTH. Stewart MF, et al. **Br J Cancer** 1989 Jul;60(1):20–4

Establishment of a G-CSF and GM-CSF producing cell line from human large cell carcinoma of the lung [letter] Shibuya T. **Eur J Haematol** 1989 Aug;43(2):182–3

[Ectopic ACTH syndrome] Kasperlik-Załuska A, et al. **Pol Arch Med Wewn** 1987 Dec;78(6):355–62 (Pol)

SURGERY

Surgical treatment of extensive, metastazing and small cell carcinoma of the lung. Hájek M, et al. **Acta Univ Carol [Med Monogr] (Praha)** 1989;132:1–100 (52 ref.)

Contralateral tension pneumothorax during thoracotomy for lung resection. Gabbott DA, et al. **Anaesthesia** 1990 Mar; 45(3):229–31

Operation for stage IIIa small cell lung cancer? [editorial; comment] Bunn PA Jr. **Ann Thorac Surg** 1990 May; 49(5):691 Comment on: Ann Thorac Surg 1990 May;49(5):759–62.

Operation for small cell lung cancer—where are we? [editorial; comment] Ginsberg RJ. **Ann Thorac Surg** 1990 May;49(5):692–3 Comment on: Ann Thorac Surg 1990 May;49(5):759–62.

Operation for N2 small cell lung carcinoma [see comments] Salzer GM, et al. **Ann Thorac Surg** 1990 May;49(5):759–62 Comment in: Ann Thorac Surg 1990 May;49(5):691. Comment in: Ann Thorac Surg 1990 May;49(5):692–3.

Small cell lung cancer [letter; comment] **BMJ** 1990 Feb 24; 300(6723):535 Comment on: BMJ 1990 Jan 27;300(6719):209–10.

Small cell lung cancer [editorial] [see comments] Crompton G. **BMJ** 1990 Jan 27;300(6719):209–10 Comment in: BMJ 1990 Feb 24;300(6723):535.

Advanced small cell carcinoma of the bladder. Successful treatment with combined radical cystoprostatectomy and adjuvant methotrexate, vinblastine, doxorubicin, and cisplatin chemotherapy. Oesterling JE, et al. **Cancer** 1990 May 1;65(9):1928–36

Rationale for surgery as the first step in the multimodality treatment of small cell lung cancer (SCLC). Karrer K. **J Chemother** 1989 Jun;1(3):147–50 (12 ref.)

Small cell carcinoma of the larynx. Landry MM, et al. **J La State Med Soc** 1990 Mar;142(3):24–7

Malignant small-cell tumor of the thoracopulmonary region: 'Askin tumor'. Bourque MD, et al. **J Pediatr Surg** 1989 Oct;24(10):1079–83

Comments on: The Importance of Surgical and Multimodality Treatment for Small Cell Bronchial Carcinoma [letter] Salzer GM, et al. **J Thorac Cardiovasc Surg** 1990 Mar;99(3):562–3

Surgery for small-cell lung cancer [letter] Müller LC, et al. **Lancet** 1989 Nov 11;2(8672):1152

Small cell carcinoma of the ovary: a therapeutic challenge [editorial; comment] Scully RE, et al. **N Y State J Med** 1990 Apr;90(4):172–3 Comment on: N Y State J Med 1990 Apr;90(4):206–7.

Role of surgical resection in small cell carcinoma of the lung. Shields TW. **Nippon Kyobu Geka Gakkai Zasshi** 1988 May; 36(5):665–73 (43 ref.)

Cancer of the gallbladder. Friedman MD, et al. **South Med J** 1990 Apr;83(4):485–6 (6 ref.)

[Neuroendocrine carcinoma of the esophagus] Paraf F, et al. **Ann Chir** 1990;44(3):249–51 (17 ref.) (Eng. Abstr.) (Fre)

[Small cell cancer of the bronchi: what is the role of surgery?] Crisci R. **Rev Mal Respir** 1989;6(6):507–10 (Eng. Abstr.) (Fre)

[Small cell bronchial carcinoma: what is the role of surgery? (letter)] Depierre A. **Rev Mal Respir** 1990;7(4):378 (Fre)

[Atypical lung cancer resection? A clinical observation pro and contra] Weber J. **Zentralbl Chir** 1990;115(1):35–42 (Eng. Abstr.) (Ger)

[The skin tests in operability evaluation of patients with non-small cell cancer of the lungs] Biondo FG, et al. **Arch Monaldi Mal Torace** 1988 May-Jun;43(3):265–70 (Eng. Abstr.) (Ita)

[Surgical treatment of small cell lung cancer] Wada H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb; 28(2):197–202 (Eng. Abstr.) (Jpn)

[Segmental and atypical resections in lung cancer] Kotliarov EV, et al. **Vopr Onkol** 1990;36(4):458–60 (Eng. Abstr.) (Rus)

[Pancreatic necrosis after surgical interventions in lung cancer] Kotliarov EV, et al. **Vopr Onkol** 1989;35(8):990–1 (Rus)

[The role of the surgical approach in the treatment of microcellular carcinoma of the lung] Vraneš N, et al. **Lijec Vjesn** 1989 Aug;111(8):279–81 (Eng. Abstr.) (Scr)

[Neuroendocrine carcinoma of the larynx. Apropos of two cases. Preliminary note] Aguila Artal AF, et al. **Acta Otorrinolaringol Esp** 1988 Nov-Dec;39(6):407–9 (Spa)

THERAPY

Small cell lung cancer. McVie JG, et al. **Acta Oncol** 1989; 28(5):729–41 (91 ref.)

Treatment of small cell lung cancer. Two-drug versus four-drug chemotherapy and loco-regional irradiation with or without prophylactic cranial irradiation. Niiranen A, et al. **Acta Oncol** 1989;28(4):501–5

Phase I trial of high-dose etoposide, high-dose cisplatin, and reinfusion of autologous bone marrow for lung cancer. Lazarus HM, et al. **Am J Clin Oncol** 1990 Apr;13(2):107–12

Bronchoesophageal fistula in small cell lung cancer [letter] Koval JC, et al. **Chest** 1990 Aug;98(2):512–3

Hyperfractionated radiotherapy alternating with multidrug chemotherapy in the treatment of limited small cell lung cancer (SCLC). Groupe Lyonnais d'Oncologie Thoracique. Mornex F, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul;19(1):23–30

Partial remission and resectability [letter] Cohen MH. **J Clin Oncol** 1990 Aug;8(8):1443–4

Treatment of SCLC: consensus needed [news] Autoine FS. **J Natl Cancer Inst** 1989 Dec 20;81(24):1856–8

Management of small cell lung cancer: a summary of the Third International Association for the Study of Lung Cancer Workshop on Small Cell Lung Cancer. Kristjansen PE, et al. **J Natl Cancer Inst** 1990 Feb 21;82(4):263–6

Enhanced killing of human small cell lung cancer by hyperthermia and indium-111-bleomycin complex. Hou DY, et al. **J Surg Oncol** 1990 May;44(1):5–9

High dose chemotherapy with autologous bone marrow transplantation for limited small cell lung cancer. Nomura F, et al. **Jpn J Clin Oncol** 1990 Mar;20(1):94–8

Multimodality therapy for small cell carcinoma of the lung—the role of surgical treatment. Hara N, et al. **Jpn J Surg** 1989 Nov;19(6):699–707

Systemic and combined modality therapy for lung cancer. Ettinger DS. **Md Med J** 1990 Apr;39(4):315–6

Multimodality therapy for lung cancer [editorial] Perry MC. **Mo Med** 1989 Nov;86(11):733–4

Purging of small cell lung cancer-contaminated bone marrow by monoclonal antibodies and magnetic beads. Elias AD, et al. **Prog Clin Biol Res** 1990;333:263–75

Survival, adverse reactions and quality of life during combination chemotherapy compared with selective palliative treatment for small-cell lung cancer. Report to the Medical Research Council by its Lung Cancer Working Party. **Respir Med** 1989 Jan;83(1):51–8

The nonsurgical management of lung cancer: a 1989 perspective for small cell and the non-small cell histologies. Turrisi AT 3d. **Semin Roentgenol** 1990 Jan;25(1):117–22 (38 ref.)

Small-cell carcinoma of the esophagus. Treatment by endoscopy. Di Felice G, et al. **Surg Endosc** 1990; 4(2):118–21

Duration of chemotherapy in small cell lung cancer [letter] Cullen MH. **Thorax** 1990 Jul;45(7):571

Long term survival after pulmonary resection for small cell carcinoma of the lung [letter] Pujol JL, et al. **Thorax** 1990 Jun;45(6):496

Treatment of oesophageal small cell carcinoma by combined chemotherapy and surgical resection: report of two cases and review of published cases. Walker SJ, et al. **Thorax** 1989 Sep;44(9):751–2 (10 ref.)

[Treatment of 100 patients with small cell lung cancer] Ren H. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Apr; 12(2):76–8, 125 (Eng. Abstr.) (Chi)

[Clinical and biological aspects of intensive chemotherapy with autologous bone marrow grafts in small-cell bronchial cancer] Symann M, et al. **Bull Mem Acad R Med Belg** 1989;144(3-4):213–21; discussion 222–3 (Eng. Abstr.) (Fre)

[Survey of the attitude of specialists faced with bronchial small cell carcinoma] Quoix E, et al. **Rev Mal Respir** 1990; 7(3):255–9 (Eng. Abstr.) (Fre)

[Initial results of a controlled study of small cell and squamous epithelial bronchial cancer: polychemotherapy and interferons] Zabel P, et al. **Pneumologie** 1990 Feb;44 Suppl 1:586–7 (Eng. Abstr.) (Ger)

[A comparison of systemic radiotherapy, chemotherapy or local radiotherapy in the treatment of extensive small-cell bronchial carcinoma. Results of a randomized series] Hüttner J, et al. **Radiobiol Radiother (Berl)** 1990;31(1):25–31 (Eng. Abstr.) (Ger)

[Therapy of bronchus carcinoma: therapeutic possibilities and current molecular biology trials] Ludwig CU. **Schweiz Med Wochenschr** 1990 Aug 7;120(31–32):1143–8 (28 ref.) (Eng. Abstr.) (Ger)

[Combined treatment of esophageal small cell carcinoma with radiation and chemotherapy] Kobayashi H, et al. **Gan No Rinsho** 1990 Jun;36(7):824–30 (18 ref.) (Eng. Abstr.) (Jpn)

[Interstitial pneumonia developed after combination chemotherapy with (CDDP, VDS, MMC) and radiotherapy] Koga K, et al. **Gan No Rinsho** 1990 May; 36(6):733–5 (Eng. Abstr.) (Jpn)

[Antitumor effects of cisplatin, cyclophosphamide and interferon-gamma (gamma-IFN) against argyrophil small cell carcinoma of the uterine cervix heterotransplanted into nude mice] Shimizu H, et al. **Gan To Kagaku Ryoho** 1989 Dec;16(12):3777–80 (Eng. Abstr.) (Jpn)

[A case of a pulmonary large cell carcinoma patient who has still been surviving for four years even with triple carcinoma developed on different occasions (rectum, stomach: resected; lung: nonresected)] Usui M, et al. **Gan To Kagaku Ryoho** 1990 May;17(5):1065–8 (Eng. Abstr.) (Jpn)

[Acute myeloblastic leukemia development in a patient with small cell lung cancer in complete remission] Igari Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Dec; 27(12):1528–33 (20 ref.) (Eng. Abstr.) (Jpn)

[Advances in the diagnosis and treatment of lung cancer. II. Treatment of small cell cancer of the lung] Spiro SG. **Pneumonol Pol** 1990 Apr-May;58(4–5):244–50 (12 ref.) (Pol)

[Chemoradiotherapy of disseminated small-cell carcinoma of the lung] Bychkov MB, et al. **Sov Med** 1989;(6):89–91 (Rus)

[Survival of patients with disseminated small cell cancer of the lungs] Orel NF, et al. **Sov Med** 1990;(2):79–81 (Rus)

[Tactics in treating patients with small cell cancer of the lung with superior vena cava obstruction syndrome] Motorina LI, et al. **Vopr Onkol** 1989;35(10):1222–5 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Implications of nuclear diameter in small cell lung carcinoma. Lee TK, et al. **Anal Quant Cytol Histol** 1990 Apr; 12(2):78–84

Inability of AgNOR counts to differentiate between bronchial carcinoid tumours and small cell carcinoma of the bronchus [letter] Benbow EW, et al. **J Clin Pathol** 1989 Sep; 42(9):1003–4

Morphometric and flow cytometric analysis of small cell undifferentiated carcinoma of the bladder. Blomjous CE, et al. **J Clin Pathol** 1989 Oct;42(10):1032–9

CARCINOMA, PAPILLARY

Verrucous carcinoma of the base of the skull. Diengdoh JV, et al. **Br J Neurosurg** 1990;4(1):73–6

Oral verrucous carcinoma. An analysis of 37 cases. Kamath VV, et al. **J Craniomaxillofac Surg** 1989 Oct;17(7):309–14

[Primary or secondary malignant tumors of tonsillar cysts. Apropos of a case of occult papillary cancer of the thyroid disclosed by intracystic metastasis] Rodier JF, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(7):485–9 (30 ref.) (Eng. Abstr.) (Fre)

ANALYSIS

Cytochemical assessments of the nuclear DNA distribution pattern by means of image and flow cytometry in thyroid neoplasms and in non-neoplastic thyroid lesions. A comparative methodological study. Wallin G, et al. **Acta Chir Scand** 1989 Apr-May;155(4–5):251–8

Type II estrogen receptors in the papillary cystic tumor of the pancreas. Carbone A, et al. **Am J Clin Pathol** 1989 Nov;92(5):572–6

RAS oncogene product expression in normal and malignant oral mucosa. Freer E, et al. **Aust Dent J** 1990 Apr; 35(2):141–6

[Immunohistochemical study and lectin distribution of thyroid carcinoma originated from follicular epithelium] Wang RL, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1990 Jun;19(2):90–3 (Eng. Abstr.) (Chi)

[Flow cytometric DNA analysis of papillary carcinoma of the thyroid using paraffin-embedded specimens] Yamashita T, et al. **Gan No Rinsho** 1990 Apr;36(5):569–73 (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Induction of thyroid neoplasms in the rat. A histochemical, immunohistochemical, autoradiographic and ultrastructural study. Sturm U, et al. **Arch Geschwulstforsch** 1989; 59(6):423–31

COMPLICATIONS

Tumor-associated tissue eosinophilia in the urinary bladder: is it a real relationship? Dworák O, et al. **Appl Pathol** 1989; 7(5):294–7

Verrucous carcinoma in situ of the bladder, not associated with urinary schistosomiasis. Pierangeli T, et al. **Int Urol Nephrol** 1989;21(6):597–602

Survival after malignant pericardial effusion and cardiac tamponade in advanced ovarian cancer. Levitan Z, et al. **South Med J** 1990 Feb;83(2):241–2

Multiple cutaneous myxomas coinciding with repeated cardiac myxomas. A syndrome. Bier B, et al. **Thorac Cardiovasc Surg** 1989 Oct;37(5):317–9

[Paraneoplastic syndromes associated with bladder carcinoma. Apropos of 2 cases of hypercalcemia] Mottola A, et al. **Minerva Urol Nefrol** 1990 Apr–Jun;42(2):99–101 (22 ref.) (Eng. Abstr.) **(Ita)**

[Three cases of primary hyperparathyroidism associated with nonmedullary thyroid neoplasm] Kobayashi K, et al. **Nippon Geka Gakkai Zasshi** 1990 Jul;91(7):907–9 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Clinicopathologic characteristics of laryngeal neoplasms in the region of Cartagena from 1972 to 1984] Redondo Luciáñez ER, et al. **Acta Otorrinolaringol Esp** 1989 May–Jun;40(3):163–6 (Eng. Abstr.) **(Spa)**

[Paraneoplastic eosinophilia: hypereosinophilic syndrome and disseminated carcinoma (letter)] Rodríguez Ramírez J, et al. **Rev Clin Esp** 1990 Jan;186(1):41–2 **(Spa)**

[Hematuria in young people should be investigated. Bladder cancer could be the cause of symptoms] Bergman B. **Lakartidningen** 1990 May 30;87(22):1966 **(Swe)**

DIAGNOSIS

Expression of keratin 19 distinguishes papillary thyroid carcinoma from follicular carcinomas and follicular thyroid adenoma. Schelfhout LJ, et al. **Am J Clin Pathol** 1989 Nov; 92(5):654–8

Thyroglobulin measurement vs iodine 131 total-body scan for follow-up of well-differentiated thyroid cancer. Aiello DP, et al. **Arch Intern Med** 1990 Feb;150(2):437–9

Diagnosis of peripapillary carcinoma: endoscopic findings. Takeda Y, et al. **Biomed Pharmacother** 1989;43(6):439–46 (18 ref.)

Diffuse sclerosing papillary carcinoma of thyroid: a wolf in sheep's clothing. Wu PS, et al. **Clin Endocrinol (Oxf)** 1989 Nov;31(5):535–40

Detection of bladder carcinoma in females by flow cytometry and cytology. Hermansen DK, et al. **Cytometry** 1989 Nov; 10(6):739–42

Calcification and thyroid carcinoma [letter] [published erratum appears in Ear Nose Throat J 1989 Oct;68(10):798] Ophir D. **Ear Nose Throat J** 1989 Aug;68(8):636–8

Papillary carcinoma of the sphenoid sinus associated with sphenoid sinus abscess presenting as cavernous sinus syndrome. A case report. Colak A, et al. **J Clin Neuro Ophthalmol** 1990 Mar;10(1):18–20

Benign papillary mesothelioma of the peritoneum: a consideration in the differential diagnosis of peritoneal implants. Tzanakakis G, et al. **South Med J** 1989 Dec; 82(12):1579–80

[Diagnosis and surgical treatment of primary tumors of the renal pelvis and ureter] Patrashkov T, et al. **Khirurgiia (Sofiia)** 1989;42(5):56–60 (Eng. Abstr.) **(Bul)**

[Papillary renal carcinoma—a difficult diagnosis] Schneider S, et al. **Radiologe** 1990 Feb;30(2):84–6 (Eng. Abstr.) **(Ger)**

[Critical reflections on differentiated carcinoma of the thyroid: difficulties, doubts and differential-diagnosis problems] Autelitano F, et al. **Ann Ital Chir** 1989 Jul–Aug; 60(4):267–80; discussion 280–1 (96 ref.) (Eng. Abstr.) **(Ita)**

[The differential diagnosis of thyroid cancer using radioimmunologic analysis] Ametov AS, et al. **Med Radiol (Mosk)** 1990 Feb;35(2):11–4 (Eng. Abstr.) **(Rus)**

[Ultrasonic tomography in the diagnosis of diseases of the thyroid gland] Bal'ter SA, et al. **Vopr Onkol** 1989; 35(8):920–4 (Eng. Abstr.) **(Rus)**

[Verrucous carcinoma of the larynx] Municio Martín JA, et al. **Acta Otorrinolaringol Esp** 1988 Jul–Aug;39(4):259–62 (Eng. Abstr.) **(Spa)**

[Papillary tumor of the pancreas] Belloso R, et al. **GEN** 1988 Oct–Dec;42(4):137–46 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Papillary serous carcinoma of the peritoneum. A review of 33 cases treated with platin-based chemotherapy. Ransom DT, et al. **Cancer** 1990 Sep 15;66(6):1091–4

Intravesical mitomycin C for carcinoma in situ of the urinary bladder. Hellsten S, et al. **Scand J Urol Nephrol** 1990; 24(1):35–8

[Cases of the regression of advanced bladder tumors (T2–T4) after the use of chemotherapy] Kumanov Kh, et al. **Khirurgiia (Sofiia)** 1990;43(1):87–93 (Eng. Abstr.) **(Bul)**

[Mitomycin C in the topical treatment of superficial neoplasms of the bladder] Milani C, et al. **Arch Esp Urol** 1989 Oct;42(8):761–7 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Hyperamylasemia associated with progression of a serous surface papillary carcinoma. O'Riordan T, et al. **Gynecol Oncol** 1990 Mar;36(3):432–4

EPIDEMIOLOGY

Papillary thyroid carcinoma in Iceland. A study of the occurrence in families and the coexistence of other primary tumours. Hrafnkelsson J, et al. **Acta Oncol** 1989;28(6):785–8

Occult papillary carcinoma of the thyroid. A study of 408 autopsy cases. Yamamoto Y, et al. **Cancer** 1990 Mar 1; 65(5):1173–9

Thyroid cancer: incidence, mortality and histological pattern in Denmark. Sprøgel P, et al. **Int J Epidemiol** 1989 Dec; 18(4):990–2

Carcinoma of the thyroid gland in Auckland, New Zealand. Shaw JH, et al. **Surg Gynecol Obstet** 1990 Jul;171(1):27–32

High prevalence of occult papillary thyroid carcinoma in a surgical series for benign thyroid disease. Pelizzo MR, et al. **Tumori** 1990 Jun 30;76(3):255–7

[Prognostic factors of differentiated thyroid cancers. 536 cases] Tourniaire J, et al. **Ann Endocrinol (Paris)** 1989; 50(3):219–24 (20 ref.) (Eng. Abstr.) **(Fre)**

ETIOLOGY

[Papillary carcinoma of the thyroid after radiotherapy for Hodgkin's disease (letter)] Simó Canonge R, et al. **Rev Clin Esp** 1990 Apr;186(7):361 **(Spa)**

GENETICS

cDNA cloning and characterization of ret activated in a human papillary thyroid carcinoma cell line. Ishizaka Y, et al. **Biochem Biophys Res Commun** 1990 Apr 30; 168(2):402–8

Papillary and follicular thyroid carcinomas show a different pattern of ras oncogene mutation. Wright PA, et al. **Br J Cancer** 1989 Oct;60(4):576–7

Cytogenetic analyses of three papillary carcinomas and a follicular adenoma of the thyroid. Olah E, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):119–29

Papillary carcinoma of the thyroid: additional evidence in support of a familial component [see comments] Fischer DK, et al. **Cancer Invest** 1989;7(4):323–5 Comment in: Cancer Invest 1989;7(4):399–400.

Papillary carcinoma of the thyroid: hereditary or radiation-induced? [editorial; comment] Samaan NA. **Cancer Invest** 1989;7(4):399–400 Comment on: Cancer Invest 1989;7(4):323–5.

PTC is a novel rearranged form of the ret proto-oncogene and is frequently detected in vivo in human thyroid papillary carcinomas. Grieco M, et al. **Cell** 1990 Feb 23; 60(4):557–63

Co-expression of the genes encoding transforming growth factor-alpha and its receptor in papillary carcinomas of the thyroid. Aasland R, et al. **Int J Cancer** 1990 Sep 15; 46(3):382–7

Frequency and degree of aneuploidy in benign and malignant thyroid neoplasms. Schelfhout LJ, et al. **Int J Cancer** 1990 Jan 15;45(1):16–20

Application of molecular cytogenetic techniques to the evaluation of renal parenchymal tumors. Kovacs G. **J Cancer Res Clin Oncol** 1990;116(4):318–23 (49 ref.)

High frequency of activation of tyrosine kinase oncogenes in human papillary thyroid carcinoma. Bongarzone I, et al. **Oncogene** 1989 Dec;4(12):1457–62

Coincidental papillary carcinoma of the thyroid in two sisters. Szántó J, et al. **Oncology** 1990;47(1):92–4

IMMUNOLOGY

Distribution of basement membrane antigens in bladder carcinomas: an additional prognostic parameter. Immunohistochemical study. Alampi G, et al. **Arch Anat Cytol Pathol** 1989;37(5–6):224–30

HLA-DR expression is associated with excellent prognosis in squamous cell carcinoma of the larynx. Esteban F, et al. **Clin Exp Metastasis** 1990 Jul–Aug;8(4):319–28

Aberrant expression of HLA-DR antigen in diffuse sclerosing variant of papillary carcinoma of thyroid [letter] Matias-Guiu X, et al. **J Clin Pathol** 1989 Dec;42(12):1309

METABOLISM

[Immunohistochemical studies of collagen types I, III and IV distribution and the expression of procollagen III peptide in papillary carcinomas of the thyroid] Katoh R, et al. **Gan No Rinsho** 1990 Aug;36(9):967–72 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Two new human papillomavirus types (HPV54 and 55) characterized from genital tumours illustrate the plurality of genital HPVs. Favre M, et al. **Int J Cancer** 1990 Jan 15;45(1):40–6

DNA dot-blot hybridization implicates human papillomavirus type 11-DNA in epithelioma cuniculatum. Knobler RM, et al. **J Med Virol** 1989 Sep;29(1):33–7

Detection of human papillomavirus DNA before and after development of invasive vulvar cancer. Van Sickle M, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):540–2

MORTALITY

Comparison of flow cytometry with static densitometry in papillary thyroid carcinoma. Cusick EL, et al. **Br J Surg** 1990 Aug;77(8):913–6

PATHOLOGY

The prognosis in early endometrial carcinoma. The importance of uterine papillary serous carcinoma (UPSC), age, FIGO grade and nuclear grade. Rosenberg P, et al. **Acta Obstet Gynecol Scand** 1989;68(2):157–63

Diffuse sclerosing variant of papillary carcinoma of the thyroid. A histopathological study of four cases. Hayashi Y, et al. **Acta Pathol Jpn** 1990 Mar;40(3):193–8

A unique verrucous anogenital tumor associated with type 6b–related human papillomavirus. Nakajima T, et al. **Acta Pathol Jpn** 1989 Aug;39(8):528–32

Aspiration cytology of papillary cystic neoplasm of the pancreas. Katz LB, et al. **Am J Clin Pathol** 1990 Sep; 94(3):328–33

Diffuse sclerosing variant of papillary thyroid carcinoma. Clinicopathologic study of 15 cases. Carcangiu ML, et al. **Am J Surg Pathol** 1989 Dec;13(12):1041–9

Carcinoma cuniculatum of the hand. Collison DW, et al. **Arch Dermatol** 1989 Oct;125(10):1335–6

Penile verrucous carcinoma. Yeager JK, et al. **Arch Dermatol** 1990 Sep;126(9):1208–10

Verrucous carcinoma of the cervix. Wong WS, et al. **Arch Gynecol Obstet** 1990;247(1):47–51

Nonpigmented papillary carcinoma in a black thyroid gland. Landas SK, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jun;116(6):735–7

Cribriform variant of papillary thyroid carcinoma. Chan JK, et al. **Arch Pathol Lab Med** 1990 Jun;114(6):622–4

Bilateral cervical lymph node metastases in well-differentiated thyroid cancer. Noguchi M, et al. **Arch Surg** 1990 Jun;125(6):804–6

The prevalence of unsuspected thyroid pathology in 300 sequential autopsies, with special reference to the incidental carcinoma. Bisi H, et al. **Cancer** 1989 Nov 1;64(9):1888–93 (22 ref.)

Serous ovarian tumors of low malignant potential with peritoneal implants. Gershenson DM, et al. **Cancer** 1990 Feb 1;65(3):578–85

Papillary-cystic neoplasm of the pancreas. A clinicopathologic study concerning the tumor aging and malignancy of nine cases. Matsunou H, et al. **Cancer** 1990 Jan 15;65(2):283–91

Papillary carcinoma of a thyroglossal duct remnant with Hashimoto's thyroiditis. Prasad ML, et al. **Ear Nose Throat J** 1990 May;69(5):358–60

Virulence of papillary endometrial carcinoma. O'Hanlan KA, et al. **Gynecol Oncol** 1990 Apr;37(1):112–9

Histological and functional correlation of thyroid carcinoma by immunohistochemistry. Prathiba D, et al. **Indian J Pathol Microbiol** 1990 Jan;33(1):35–40

Papillary serous carcinoma of the ovary with squamous differentiation. Ulbright TM, et al. **Int J Gynecol Pathol** 1990;9(1):86–94

Lymph node metastases from an occult sclerosing carcinoma of the thyroid. A case report. Santini L, et al. **Ital J Surg Sci** 1989;19(3):277–9

Cutaneous papillary squamous cell carcinoma. A report of two cases. Landman G, et al. **J Cutan Pathol** 1990 Apr; 17(2):105–10

Papillary pineocytoma. Case report. Vaquero J, et al. **J Neurosurg** 1990 Jul;73(1):135–7

Thyroid carcinoma infiltrating the trachea: clinical, histologic, and morphometric analyses. Nomori H, et al. **J Surg Oncol** 1990 Jun;44(2):78–83

Papillary neoplasia of the breast: immunohistochemically defined myoepithelial cells in the diagnosis of benign and malignant papillary breast neoplasms. Raju UB, et al. **Mod Pathol** 1989 Nov;2(6):569–76

Papillary serous carcinoma of the peritoneum. Fromm GL, et al. **Obstet Gynecol** 1990 Jan;75(1):89–95

Nuclear chromatin texture to differentiate follicular and papillary carcinoma of the thyroid. Ferrer-Roca O, et al. **Pathol Res Pract** 1989 Nov;185(5):561–6

Papillary tumour of the vagina resembling transitional cell carcinoma. Fetissof F, et al. **Pathol Res Pract** 1990 Jun; 186(3):358–64

Diffuse sclerosing variant of papillary thyroid carcinoma. A clinicopathologic study of 10 cases. Soares J, et al. **Pathol Res Pract** 1989 Aug;185(2):200–6

Benign and low-grade papillary lesions of the urinary bladder: a review of the papilloma-papillary carcinoma controversy, and a report of five typical papillomas. Eble JN, et al. **Semin Diagn Pathol** 1989 Nov;6(4):351–71 (125 ref.)

Solid and papillary epithelial neoplasms of the pancreas. Zinner MJ, et al. **Surgery** 1990 Sep;108(3):475–80

Diffuse sclerosing variant of papillary thyroid carcinoma. S-100 protein immunocytochemistry and prognosis. Schröder S, et al. **Virchows Arch [A]** 1990;416(4):367–71

[A comparison between clinical and echographic staging in bladder tumors] Chakürov S, et al. **Khirurgiia (Sofiia)** 1989; 42(6):33–6 (Eng. Abstr.) **(Bul)**

[Verrucous carcinoma of the larynx] Veselý J, et al. **Cesk Otolaryngol** 1989 Sep;38(5):284–8 (Eng. Abstr.) **(Cze)**

[Atypical metastases disclosing vesicular carcinoma of the thyroid] Ennouri A, et al. **Ann Otolaryngol Chir Cervicofac** 1990;107(1):59–61 (13 ref.) (Eng. Abstr.) **(Fre)**

[Immunohistochemical studies of the differential diagnosis of papillary tumors of the breast] Katzer B, et al. **Pathologe** 1990 Jul;11(4):201–7 **(Ger)**

[Differentiated thyroid cancer. Their peculiarities in typing and assessment of invasiveness] Kühne W, et al. **Zentralbl Chir** 1990;115(1):15–22 (13 ref.) (Eng. Abstr.) **(Ger)**

[Verrucous carcinoma of the penis] Korczak D, et al. **Harefuah** 1989 Dec 15;117(12):436–7 (Eng. Abstr.) **(Heb)**

[Buprenorphine in the analgesic treatment of patients subjected to bladder mapping] Altomare M, et al. **Minerva Urol Nefrol** 1989 Jul–Sep;41(3):199–200 (Eng. Abstr.) **(Ita)**

[Cystic papillary carcinoma of the thyroid—sonographic-pathologic correlation] Hiromura T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Jan 25; 50(1):40–7 (Eng. Abstr.) **(Jpn)**

[Magnetic resonance imaging of bladder tumors: superiority of serial "Fast SE" assisted by Gd-DTPA in tumor staging] Tanimoto A, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Dec 25; 49(12):1552–66 (Eng. Abstr.) **(Jpn)**

[Papillary carcinoma of the male breast] de Araújo PM, et al. **Acta Med Port** 1989 Aug–Oct;2(4–5):221–3 (Eng. Abstr.) **(Por)**

[Papillary cancer of the breast (clinico-morphological aspects)] Ermilova VD, et al. **Sov Med** 1990;(4):26–8 (Eng. Abstr.) **(Rus)**

[Verrucous carcinoma of the larynx] Figuerola E, et al. **Acta Otorrinolaringol Esp** 1989 Nov–Dec;40(6):443–5 (Eng. Abstr.) **(Spa)**

[Thyroid cancer in children and adolescents] Philippi V, et al. **Rev Chil Pediatr** 1988 Nov–Dec;59(6):364–8 (Eng. Abstr.) **(Spa)**

[Left retroparathyroid mass in a patient with surgically treated thyroid papillary carcinoma 4 years earlier (clinical conference)] Castrillo JM, et al. **Rev Clin Esp** 1990 Feb; 186(2):91–5 **(Spa)**

PHYSIOPATHOLOGY

Natural history, treatment, and course of papillary thyroid carcinoma. DeGroot LJ, et al. **J Clin Endocrinol Metab** 1990 Aug;71(2):414–24

RADIOGRAPHY

Mammographic features of intracystic papillary lesions. Estabrook A, et al. **Surg Gynecol Obstet** 1990 Feb; 170(2):113–6

[A woman with a palpable breast mass] García Pérez M, et al. **Rev Clin Esp** 1989 Jul–Aug;185(3):162–3 **(Spa)**

RADIONUCLIDE IMAGING

Sialadenitis mimicking metastatic thyroid carcinoma. Kolla IS, et al. **Clin Nucl Med** 1989 Aug;14(8):564–6

Value of post-therapy whole-body I-131 imaging in the evaluation of patients with thyroid carcinoma having undergone high-dose I-131 therapy. Spies WG, et al. **Clin Nucl Med** 1989 Nov;14(11):793–800

Misinterpretation of iodine uptake in papillary thyroid carcinoma and primary lung adenocarcinoma. Langsteger W, et al. **J Cancer Res Clin Oncol** 1990;116(1):8–12

Detection of metastatic thyroid carcinoma by 99mTc-pertechnetate in the presence of hyperfunctioning thyroid tissue. Krausz Y, et al. **J Surg Oncol** 1990 Jun; 44(2):132–4

RADIOTHERAPY

Radioiodine and radiotherapy in the management of thyroid cancers. Simpson WJ. **Otolaryngol Clin North Am** 1990 Jun; 23(3):509–21 (30 ref.)

Selective postoperative radioactive iodine treatment of thyroid carcinoma. McHenry C, et al. **Surgery** 1989 Dec; 106(6):956–8; discussion 958–9

SECONDARY

Insensitivity of Tc-99m pertechnetate for detecting metastases of differentiated thyroid carcinoma. Campbell CM, et al. **Clin Nucl Med** 1990 Jan;15(1):1–4

Neglected cases of papillary and follicular thyroid carcinoma. Occurrence of subcutaneous scalp metastases. Pavlidis NA, et al. **Eur J Surg Oncol** 1990 Apr;16(2):175–9

Severe hyperthyroidism due to metastatic papillary thyroid carcinoma with favorable outcome. Girelli ME, et al. **J Endocrinol Invest** 1990 Apr;13(4):333–7

Thyroid carcinoma invading the upper aerodigestive system. McCaffrey TV, et al. **Laryngoscope** 1990 Aug; 100(8):824–30

Solitary cerebral metastasis from a papillary carcinoma of the thyroid. Goolden AW, et al. **Postgrad Med J** 1990 Feb; 66(772):127–9

[Solid and cystic metastatic tumor of the pancreas. A case report] Herzog U, et al. **Chirurg** 1990 Apr;61(4):326–9 **(Ger)**

[Metastatic lung tumor of a thyroid cancer origin detected by a periodic health examination—a case of a complete response] Usui M, et al. **Gan No Rinsho** 1990 Jan; 36(1):87–90 (Eng. Abstr.) **(Jpn)**

[Coexistence of multiple metastatic brain tumors from thyroid carcinoma and cerebral aneurysms] Yamamoto F, et al. **No Shinkei Geka** 1990 Apr;18(4):361–5 (Eng. Abstr.) **(Jpn)**

SURGERY

Thyroid cancer in pediatric patients: the University Pediatric Hospital experience. Cintrón-Ortiz CJ, et al. **Bol Asoc Med P R** 1990 May;82(5):204–6

Completion thyroidectomy for initially misdiagnosed thyroid cancer. Auguste LJ, et al. **Otolaryngol Clin North Am** 1990 Jun;23(3):429–39 (19 ref.)

The treatment of papillary and follicular carcinoma of the thyroid. Block BL, et al. **Otolaryngol Clin North Am** 1990 Jun;23(3):403–11 (34 ref.)

Total versus subtotal thyroidectomy. Arguments, approaches, and recommendations. Friedman M, et al. **Otolaryngol Clin North Am** 1990 Jun;23(3):413–27 (36 ref.)

The treatment of metastatic thyroid disease. Lee KY, et al. **Otolaryngol Clin North Am** 1990 Jun;23(3):475–93 (49 ref.)

Borderline ovarian tumors: a review of treatment. Chambers JT. **Yale J Biol Med** 1989 Jul–Aug;62(4):351–65 (43 ref.)

Papillary cystic tumor of the pancreas. de Agustín JC, et al. **Z Kinderchir** 1989 Dec;44(6):379–81

Papillary carcinoma of thyroglossal duct cyst. A case report. Muñoz M, et al. **Zentralbl Chir** 1990;115(1):57–9

[Bladder diverticula combined with bladder carcinoma] Petrov P, et al. **Khirurgiia (Sofiia)** 1989;42(5):85–6 **(Bul)**

[Surgical treatment of differentiated thyroid carcinoma] Xu HZ. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Mar; 20(1):112–4 (Eng. Abstr.) **(Chi)**

[Differentiated cancer of the thyroid. Prognostic factors and therapeutic attitude] Almou M, et al. **Acta Chir Belg** 1989 Sep–Oct;89(5):271–5 (Eng. Abstr.) **(Fre)**

[Prospective therapy study of differentiated thyroid cancer] Gemsenjäger E, et al. **Helv Chir Acta** 1989 Dec;56(4):481–5 (Eng. Abstr.) **(Ger)**

["Secondary surgery" in the oncologic concept of malignant struma] Keminger K, et al. **Zentralbl Chir** 1989; 114(18):1209–16 (Eng. Abstr.) **(Ger)**

[Surgical therapy of thyroid cancer] Wolff H, et al. **Zentralbl Chir** 1989;114(18):1202–8 (Eng. Abstr.) **(Ger)**

[Papillary-cystic carcinoma of the pancreas: an infrequent tumor with favorable prognosis] Domínguez Comesaña E, et al. **Rev Esp Enferm Apar Dig** 1989 Aug;76(2):185–7 (11 ref.) (Eng. Abstr.) **(Spa)**

THERAPY

Bacillus Calmette-Guérin and superficial bladder cancer. Clinical experience and mechanism of action. Catalona WJ, et al. **Surg Annu** 1990;22:363–78 (63 ref.)

Improving postoperative recurrence rates for carcinoma of the thyroid gland. McHenry C, et al. **Surg Gynecol Obstet** 1989 Nov;169(5):429–34

[Low-dose BCG in the therapy of superficial neoplasms of the bladder] Francesco Bassi P, et al. **Arch Esp Urol** 1990 Jun;43(5):503–7 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Quantitative light and electron microscopic correlations of nuclear features in papillary thyroid and ovarian carcinomas. Graham AR, et al. **Anal Quant Cytol Histol** 1989 Oct;11(5):331–40

URINE

[Clinical study of urinary cytology in bladder tumors—analysis of factors related with positivity of urinary cytology] Tanaka K, et al. **Hinyokika Kiyo** 1990 Jan;36(1):7–11 (Eng. Abstr.) **(Jpn)**

VETERINARY

A tubulopapillary renal carcinoma and a renal calculus in a baboon. Witt CJ, et al. **Lab Anim Sci** 1989 Sep;39(5):443–5

CARCINOMA, RENAL CELL

Human renal cell carcinoma in the six day subrenal capsule assay. Weissglas MG, et al. **J Urol** 1989 Oct;142(4):1106–9

Gamma knife surgery for recurrent solitary metastasis of a cerebral hypernephroma: case report. Lindquist C. **Neurosurgery** 1989 Nov;25(5):802–4

Renal cell carcinoma. **Semin Urol** 1989 Nov;7(4):199–273

Renal cell carcinoma. **Semin Urol** 1989 Aug;7(3):139–98

Animal models of renal cell carcinoma. Rangel MC, et al. **Semin Urol** 1989 Nov;7(4):237–46 (43 ref.)

The natural history of renal cell carcinoma. Stenzl A, et al. **Semin Urol** 1989 Aug;7(3):144–8 (26 ref.)

Renal cell carcinoma. Overview. Whitmore WF Jr. **Semin Urol** 1989 Nov;7(4):271–3

[A case of bilateral renal cell carcinoma] Yasunaga Y, et al. **Hinyokika Kiyo** 1989 Oct;35(10):1745–7 (Eng. Abstr.) **(Jpn)**

[An infrequent association: carcinoma of the colon and hypernephroma] López de Tejada Cabeza I, et al. **Rev Esp Enferm Apar Dig** 1989 Oct;76(4):405–7 (Eng. Abstr.) **(Spa)**

ANALYSIS

Expression of transforming growth factor alpha in normal human adult kidney and enhanced expression of transforming growth factors alpha and beta 1 in renal cell carcinoma. Gomella LG, et al. **Cancer Res** 1989 Dec 15; 49(24 Pt 1):6972–5

Southern blot analysis of transformed growth factor alpha and beta DNA in normal kidney and in renal cell carcinoma. Wade TP, et al. **Curr Surg** 1989 Sep–Oct; 46(5):401–3

Detection of drug resistance and P-glycoprotein in human renal cell carcinomas. Bak M Jr, et al. **Eur Urol** 1990; 17(1):72–5

[Fluorocytophotometic DNA studies in kidney carcinoma] Vogel J, et al. **Verh Dtsch Ges Pathol** 1989;73:405–8 (Eng. Abstr.) **(Ger)**

[The study of plasminogen activator in renal cell carcinoma with special remarks on urokinase type plasminogen activator] Hata M. **Nippon Hinyokika Gakkai Zasshi** 1989 Nov;80(11):1558–65 (Eng. Abstr.) **(Jpn)**

BLOOD

Serum basic fetoprotein in patients with renal cell carcinoma. Gohji K, et al. **Cancer** 1990 Mar 15;65(6):1405–11

[Serum concentration of laminin in renal cell carcinoma] Iwata S, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jun; 80(6):870–4 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

Fiberoptic examination of the inferior vena cava during circulatory arrest for complete removal of renal cell carcinoma thrombus. Hartman AR, et al. **Surgery** 1990 Jun; 107(6):695–7

[Study of blood flow in hyperthermia using human renal cell carcinoma heterotransplanted in nude mice—differences in histological tumour pattern upon the effects of hyperthermia] Ohnishi T, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Mar;81(3):386–93 (Eng. Abstr.) **(Jpn)**

CHEMICALLY INDUCED

Kidney cancer in utility workers exposed to polychlorinated biphenyls (PCBs) [see comments] Shalat SL, et al. **Br J Ind Med** 1989 Nov;46(11):823–4 Comment in: Br J Ind Med 1990 May;47(5):358.

Morphology and anatomic localization of renal microneoplasms and proximal tubule dysplasias induced by four different estrogens in the hamster. Goldfarb S, et al. **Cancer Res** 1990 Jan 1;50(1):113–9

CLASSIFICATION

Evaluation of the new tumor, nodes and metastases classification of renal cell carcinoma. Hermanek P, et al. **J Urol** 1990 Aug;144(2 Pt 1):238–41; discussion 241–2

COMPLICATIONS

Resection of cavoatrial renal cell carcinoma employing total circulatory arrest. Shahian DM, et al. **Arch Surg** 1990 Jun; 125(6):727–31; discussion 731–2

Renal carcinoma with adjacent retroperitoneal fibrosis. Forsythe JL, et al. **Br J Urol** 1989 Dec;64(6):651–2

Coincident tuberculous perinephric abscess and carcinoma of the kidney. Steyn JH, et al. **Br J Urol** 1966 Feb;38(1):7–8

Clostridial infection of a locally recurrent renal cell carcinoma with sepsis. Bogucki MS, et al. **Cancer** 1990 Aug 1;66(3):601–3

Xanthogranulomatous pyelonephritis associated with renal cell carcinoma. Report on two cases and review of the literature. Papadopoulos I, et al. **Eur Urol** 1990;18(1):74–6 (22 ref.)

Renal cell carcinoma: presenting with congestive hepatosplenomegaly and rare haematological complications. Lalani AP, et al. **J Assoc Physicians India** 1990 Feb;38(2):179–80

Contralateral pleural effusion secondary to nonmetastatic renal cell carcinoma. Dinney CP, et al. **J Urol** 1990 May; 143(5):1002–3

Renal cell carcinoma in a renal cyst: a case report and review of the literature. Ljungberg B, et al. **J Urol** 1990 Apr; 143(4):797–9 (19 ref.)

Multiple cutaneous haemangiomas in patient with disseminated renal cell carcinoma and polycythaemia [letter] Graham D, et al. **Lancet** 1990 Sep 1;336(8714):574

Dose of bisphosphonate for hypercalcaemia of malignancy [letter] Morton AR, et al. **Lancet** 1990 Jun 16; 335(8703):1469–70

Neoplastic thrombosis of the inferior vena cava and right atrium due to kidney cancer. Three surgically treated cases. Odero A, et al. **Panminerva Med** 1989 Jul–Sep;31(3):140–3

Renal cancer associated with acquired cystic disease of the kidney and chronic renal failure. Fallon B, et al. **Semin Urol** 1989 Nov;7(4):228–36 (38 ref.)

Embolic mesenteric infarction: a unique initial manifestation of renal cell carcinoma. Low DE, et al. **Surgery** 1989 Nov; 106(5):925–8 (11 ref.)

Relationship of thyroid disease to renal cell carcinoma. An epidemiologic study. Rosenberg AG, et al. **Urology** 1990 Jun;35(6):492–8

[A case of renal cell carcinoma in a horseshoe kidney: a case report] Kita Y, et al. **Hinyokika Kiyo** 1989 Nov; 35(11):1903–6 (16 ref.) (Eng. Abstr.) **(Jpn)**

[A case of renal cell carcinoma on chronic hemodialysis] Saito M, et al. **Hinyokika Kiyo** 1989 Aug;35(8):1379–81 (Eng. Abstr.) **(Jpn)**

[Renal cell carcinoma associated with tuberous sclerosis: a

case report] Yasukawa S, et al. **Hinyokika Kiyo** 1989 Dec; 35(12):2135–8 (16 ref.) (Eng. Abstr.) **(Jpn)**

[Pure red cell aplasia associated with renal cell carcinoma] Maekawa K, et al. **Nippon Naika Gakkai Zasshi** 1989 Jul; 78(7):1002–3 **(Jpn)**

[Wunderlich syndrome: presentation of a case] Eres Saez FJ, et al. **Actas Urol Esp** 1989 Jul–Aug;13(4):281–2 (Eng. Abstr.) **(Spa)**

[Renal adenocarcinoma thrombosis in vena cava] Estebanez Zarranz MJ, et al. **Actas Urol Esp** 1990 Jan–Feb;14(1):72–5 (Eng. Abstr.) **(Spa)**

[The association of hypernephroma and dysfunction of the pyeloureteral junction. Apropos of a case] Baldo Sierra C, et al. **Arch Esp Urol** 1990 Jan–Feb;43(1):68–71 (Eng. Abstr.) **(Spa)**

[Cancer of the colon and hypernephroma: an association not so infrequent (letter)] Bianchi A, et al. **Rev Esp Enferm Dig** 1990 May;77(5):386 **(Spa)**

DIAGNOSIS

Case from the aerospace medicine residents' teaching file. Case #35. Renal cell carcinoma in an aviator with a long history of renal lithiasis [clinical conference] Drehner DM. **Aviat Space Environ Med** 1990 Feb;61(2):183–6

Renal masses. Aspelin P. **Curr Opin Radiol** 1989 Oct; 1(3):242–7 (19 ref.)

Detection of renal and renal pelvic tumours with urography and ultrasonography. Aslaksen A, et al. **Eur J Radiol** 1990 Jul–Aug;11(1):54–8

Contrast MRI in multiple endocrine neoplasia type 1 (MEN) associated with renal cell carcinoma. Mallek R, et al. **Eur J Radiol** 1990 Mar–Apr;10(2):105–8

Giant renal cell carcinoma: CT and MR characteristics. Rofsky NM, et al. **J Comput Assist Tomogr** 1989 Nov–Dec; 13(6):1078–80

Ultrasound demonstration of endocaval extension of tumour thrombus from renal cell carcinoma. Basu A, et al. **J Indian Med Assoc** 1989 Nov;87(11):262–4

Partially calcified renal cell carcinoma mimicking renal calculus. Sarma DP, et al. **J La State Med Soc** 1990 Jan; 142(1):24–6

Monoclonal antibody against rat renal cell tumor–associated antigen as a new tool for the analysis of renal tumorigenesis. Konishi N, et al. **Jpn J Cancer Res** 1989 Aug;80(8):771–7

Rectal bleeding as the first clinical symptom of renal cell carcinoma. Roumen RM, et al. **Neth J Surg** 1989 Oct; 41(5):117

Renal cell carcinoma: earlier discovery and increased detection [letter; comment] Black WC, et al. **Radiology** 1990 Jan;174(1):280–1 Comment on: Radiology 1989 Mar;170(3 Pt 1):699–703.

Renal masses: characterization with Doppler US. Kier R, et al. **Radiology** 1990 Sep;176(3):703–7

Diagnostic approaches to the renal mass. Fleischmann J, et al. **Semin Urol** 1989 Aug;7(3):153–7 (22 ref.)

Current state of MRI in renal mass diagnosis and staging of RCC. Fritzsche PJ. **Urol Radiol** 1989;11(4):210–4 (9 ref.)

Use of magnetic resonance imaging to determine surgical approach to renal cell carcinoma with vena caval extension. Hockley NM, et al. **Urology** 1990 Jul;36(1):55–60

[A case of tumors of the kidney and bladder with differing histology] Donovski L, et al. **Khirurgiia (Sofiia)** 1990; 43(1):85–7 (Eng. Abstr.) **(Bul)**

[An evaluation of urinary Tamm–Horsfall protein coating cell in the diagnosis of urologic neoplasms] Cai BJ. **Chung Hua Wai Ko Tsa Chih** 1990 Jan;28(1):37–9, 61–2 (Eng. Abstr.) **(Chi)**

[Asymptomatic renal cell carcinoma and small renal cell carcinoma] Wang GY. **Chung Hua Wai Ko Tsa Chih** 1989 Nov;27(11):656–7, 700–1 (Eng. Abstr.) **(Chi)**

[Papillary renal carcinoma—a difficult diagnosis] Schneider S, et al. **Radiologe** 1990 Feb;30(2):84–6 (Eng. Abstr.) **(Ger)**

[Biological markers in renal cell carcinoma] Ebert T, et al. **Urologe [A]** 1990 Mar;29(2):65–70 (71 ref.) (Eng. Abstr.) **(Ger)**

[Clinical value of new rapid nuclear magnetic resonance tomography in preoperative assessment of hypernephroma. A prospective comparative study of CT and MR] Vorreuther R, et al. **Urologe [A]** 1990 Jan;29(1):39–42 (Eng. Abstr.) **(Ger)**

[Echography vs urography in the study of small–size renal carcinoma] Stasi G, et al. **Radiol Med (Torino)** 1989 Sep; 78(3):225–30 (Eng. Abstr.) **(Ita)**

[Sarcomatoid nephrocarcinoma. Correlation of radiological, histopathological and prognostic features] Veneziano S, et al. **Radiol Med (Torino)** 1989 Oct;78(4):343–7 (Eng. Abstr.) **(Ita)**

[Significance of ultrasonography in detecting renal cell carcinoma] Esa A, et al. **Hinyokika Kiyo** 1989 Jun; 35(6):963–7 (Eng. Abstr.) **(Jpn)**

[Study on serum levels of immunosuppressive acidic protein (IAP) as a marker of renal cell carcinoma] Hoshino M, et al. **Hinyokika Kiyo** 1989 Oct;35(10):1647–52 (Eng. Abstr.) **(Jpn)**

[Renal cell carcinomas. Clinical studies on diagnostic opportunities] Kobayashi M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 May;81(5):686–93 (Eng. Abstr.) **(Jpn)**

[A study on six cases of renal cell carcinoma detected by renal ultrasound during health screening] Terada Y, et al. **Nippon Jinzo Gakkai Shi** 1989 Jul;31(7):783–90 (Eng. Abstr.) **(Jpn)**

[Inflammatory reaction and laboratory tests: IAP (immunosuppressive acidic protein)] Sato T, et al. **Rinsho Byori** 1990 Mar;38(3):255–9 (13 ref.) (Eng. Abstr.) **(Jpn)**

[The ultrasonic picture of hypernephromas] Pkhakadze EG, et al. **Vestn Rentgenol Radiol** 1990 Jan–Feb;(1):41–4 (Eng. Abstr.) **(Rus)**

[Errors and difficulties in the clinical diagnosis of kidney cancer] Antonov AA, et al. **Vrach Delo** 1989 Jul;(7):19–21 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Prediction of objective response to recombinant interferon–alpha with or without vinblastine in metastatic renal cell carcinoma. Fosså SD, et al. **Acta Oncol** 1990; 29(3):303–6

Phase II evaluation of 4'deoxydoxorubicin in advanced renal cell carcinoma. Kish JA, et al. **Am J Clin Oncol** 1990 Feb; 13(1):17–8

Endocrine effects of a 24–hour intravenous infusion of interleukin–2 in the immunotherapy of cancer. Lissoni P, et al. **Anticancer Res** 1990 May–Jun;10(3):753–7

Treatment of renal cell carcinoma with intra–arterial administration of SMANCS dissolved in Lipiodol. Noda S, et al. **Anticancer Res** 1990 May–Jun;10(3):709–15

Cyclic interferon gamma treatment of patients with metastatic renal carcinoma. Grups JW, et al. **Br J Urol** 1989 Sep;64(3):218–20

Circadian continuous chemotherapy of renal cell carcinoma with an implantable, programmable infusion pump. Damascelli B, et al. **Cancer** 1990 Jul 15;66(2):237–41

Recombinant interferon–alpha combined with prednisone in metastatic renal cell carcinoma. Reduced toxicity without reduction of the response rate—a phase II study. Fosså SD, et al. **Cancer** 1990 Jun 1;65(11):2451–4

Phase I/II study of recombinant interferon alpha and gamma in advanced progressive renal–cell carcinoma. de Mulder PH, et al. **Cancer Immunol Immunother** 1990;31(5):321–4

Effects of calcium antagonists in multidrug resistance primary human renal cell carcinomas. Mickisch GH, et al. **Cancer Res** 1990 Jun 15;50(12):3670–4

Antiproliferative and antitumor effects of alpha–interferon in renal cell carcinomas: correlation with the expression of a kidney–associated differentiation glycoprotein. Nanus DM, et al. **Cancer Res** 1990 Jul 15;50(14):4190–4

TCNU in advanced renal cancer. Phase II study in previously untreated patients from the EORTC Genito–Urinary Tract Cancer Cooperative Group. Van Oosterom AT, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1889–90

Treatment of cancer patients with recombinant interferon–gamma induces release of endogenous tumor necrosis factor–alpha. Aulitzky WE, et al. **Immunobiology** 1990 Jun;180(4–5):385–94

Phase II trial of fludarabine phosphate in advanced renal cell carcinoma: an Illinois Cancer Council Study. Shevrin DH, et al. **Invest New Drugs** 1989 Jul;7(2–3):251–3

Evaluation of menogaril in renal cell carcinoma. A Southwest Oncology Group phase II study (8504). Stephens RL, et al. **Invest New Drugs** 1990;8 Suppl 1:S69–71

Evaluation of carboplatin (NSC 241240) in patients with recurrent or metastatic renal cell carcinoma. Trump DL, et al. **Invest New Drugs** 1990 May;8(2):201–3

Monitoring of interferon treatment in patients with renal cell carcinoma and bladder carcinoma by oligo–A synthetase assay and determination of immunological parameters. Grups JW, et al. **J Biol Regul Homeost Agents** 1989 Jul–Sep;3(3):98–101

Phase II study of recombinant human interferon–gamma in metastatic renal cell carcinoma. Bruntsch U, et al. **J Biol Response Mod** 1990 Jun;9(3):335–8

Hormonal and metabolic effects of chronic interleukin–2 infusion in cancer patients. Chambrier C, et al. **J Biol Response Mod** 1990 Apr;9(2):251–5

Recombinant interferon–alpha 2a and vinblastine in advanced renal cell cancer: a clinical phase I–II study. Kellokumpu–Lehtinen P, et al. **J Biol Response Mod** 1990 Aug;9(4):439–44

Treatment of renal cell carcinoma with daily low–dose alpha–interferon. Marshall ME, et al. **J Biol Response Mod** 1989 Oct;8(5):453–61

Interferon–alpha–n1 and continuous infusion vinblastine for treatment of advanced renal cell carcinoma. Trump DL, et al. **J Biol Response Mod** 1990 Feb;9(1):108–11

Phase II trial of 5–fluorouracil and high–dose folinic acid in advanced renal cell cancer. Zaniboni A, et al. **J Chemother** 1989 Oct;1(5):350–1

Circadian–shaped infusions of floxuridine for progressive metastatic renal cell carcinoma. Hrushesky WJ, et al. **J Clin Oncol** 1990 Sep;8(9):1504–13

Circadian patterning of continuous floxuridine infusion reduces toxicity and allows higher dose intensity in patients with widespread cancer. von Roemeling R, et al. **J Clin Oncol** 1989 Nov;7(11):1710–9

High–dose recombinant interleukin–2 alone: a regimen with limited activity in the treatment of advanced renal cell carcinoma. Abrams JS, et al. **J Natl Cancer Inst** 1990 Jul 18;82(14):1202–6

Phase II trial of high–dose intermittent interleukin–2 in metastatic renal cell carcinoma: a Southwest Oncology Group study. Bukowski RM, et al. **J Natl Cancer Inst** 1990 Jan 17;82(2):143–6

Mechanisms and modulation of multidrug resistance in primary human renal cell carcinoma [see comments] Mickisch GH, et al. **J Urol** 1990 Sep;144(3):755–9 Comment in: J Urol 1990 Sep;144(3):754.

Re: Deoxyribonucleic acid content and medroxyprogesterone acetate treatment in metastatic renal cell carcinoma [letter] Neuwirth H, et al. **J Urol** 1990 Sep;144(3):749–50

TNF–induced cardiomyopathy [letter] Hegewisch S, et al. **Lancet** 1990 Feb 3;335(8684):294–5

Low–dose regimen of interleukin–2 for metastatic renal carcinoma [letter] [published erratum appears in Lancet 1990 Jul 7;336(8706):64] Sleijfer DT, et al. **Lancet** 1990 Jun 23;335(8704):1522–3

Interleukin–2. **Med Lett Drugs Ther** 1990 Sep 7;32(826):85–6

Circadian FUDR—an alternative method of administration [letter] Bowman RM. **Oncol Nurs Forum** 1990 Jul–Aug; 17(4):483

Systemic treatment for renal cell carcinoma: an overview. Swanson DA. **Prog Clin Biol Res** 1990;350:201–25 (80 ref.)

Phase II cytotoxic chemotherapy trials in renal cell carcinoma: 1983–1988. Yagoda A. **Prog Clin Biol Res** 1990; 350:227–41 (73 ref.)

Chemotherapy of renal cell carcinoma: 1983–1989. Yagoda A. **Semin Urol** 1989 Nov;7(4):199–206 (82 ref.)

A new animal model for testing the effectiveness of chemotherapeutic agents on renal adenocarcinoma. White RD, et al. **Surg Forum** 1978;29:629–31

Vinblastine and interferon–alpha–2a regimen in the treatment of metastatic renal cell carcinoma. Palmeri S, et al. **Tumori** 1990 Feb 28;76(1):64–5

Failure of cytotoxic chemotherapy, 1983–1988, and the emerging role of monoclonal antibodies for renal cancer. Yagoda A, et al. **Urol Int** 1989;44(6):338–45 (84 ref.)

Chemosensitivity testing of primary human renal cell carcinoma by a tetrazolium based microculture assay (MTT). Mickisch G, et al. **Urol Res** 1990;18(2):131–6

Phase II trial of combination chemotherapy with dacarbazine, cyclophosphamide, cisplatin, doxorubicin, and vindesine (DECAV) in advanced renal cell cancer. Lupera H, et al. **Urology** 1989 Nov;34(5):281–3

[Comparative clinical study of single and combination therapy of human lymphoblastoid interferon (HLBI) with 5–FU in the treatment of advanced renal cell carcinoma] Asakawa M, et al. **Hinyokika Kiyo** 1989 Aug;35(8):1451–5 (Eng. Abstr.) **(Jpn)**

[Clinical effects and immunological changes in interferon therapy for advanced renal cell carcinoma] Kudo T, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Jan 20;25(1):40–6 (Eng. Abstr.) **(Jpn)**

[A case of recurrence of a metastatic brain tumor which disappeared due to chemotherapy only] Sato K, et al. **No Shinkei Geka** 1990 Jan;18(1):63–6 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Assessment of serum gamma glutamyl transpeptidase levels in low stage renal cell carcinoma. Speights VO Jr, et al. **Am J Clin Pathol** 1990 Apr;93(4):560–2

Expression of aldolase C isozyme in renal cell carcinoma. Takashi M, et al. **Am J Clin Pathol** 1990 May;93(5):631–6

Renin–producing renal cell carcinoma. Steffens J, et al. **Eur Urol** 1990;18(1):56–60

Elevated concentrations of brain–type glycogen phosphorylase in renal cell carcinoma. Takashi M, et al. **Jpn J Cancer Res** 1989 Oct;80(10):975–80

[Immunohistochemical demonstration of L– and M2–pyruvate kinase in primary renal cell carcinomas and their metastases] Fischer G, et al. **Verh Dtsch Ges Pathol** 1989;73:422–7 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Acquired cystic kidney disease: occurrence, prevalence, and renal cancers. Matson MA, et al. **Medicine (Baltimore)** 1990 Jul;69(4):217–26

Epidemiology of renal cell cancer. Dayal HH, et al. **Semin Urol** 1989 Aug;7(3):139–43 (47 ref.)

[A clinical study of 124 cases of renal cell carcinoma] Homma Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 May; 81(5):726–31 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Smoking and renal cell carcinoma. La Vecchia C, et al. **Cancer Res** 1990 Sep 1;50(17):5231–3

Renal cell carcinoma in dialysis patients with acquired renal cysts. Noronha IL, et al. **Nephrol Dial Transplant** 1989; 4(9):763–9 (85 ref.)

Acquired cystic disease of the kidneys and renal cell carcinoma in chronic renal insufficiency without dialysis treatment. Chung–Park M, et al. **Nephron** 1989;53(2):157–61

Renal cell carcinoma and acquired cystic kidney disease after renal transplantation. Almirall J, et al. **Transpl Int** 1990 May;3(1):49

Neoplasia and acquired renal cystic disease in patients undergoing chronic ambulatory peritoneal dialysis. Trabucco AF, et al. **Urology** 1990 Jan;35(1):1–4

[Renal cell carcinoma with a long–term hemodialysis patient: a case report] Ikegami M, et al. **Hinyokika Kiyo** 1989 Oct; 35(10):1737–40 (Eng. Abstr.) **(Jpn)**

GENETICS

Cytogenetic characterization of renal cell carcinoma in von Hippel–Lindau syndrome. Goodman MD, et al. **Cancer** 1990 Mar 1;65(5):1150–4

Renal cell carcinoma. A clinicopathologic and DNA flow cytometric analysis of 103 cases. Grignon DJ, et al. **Cancer** 1989 Nov 15;64(10):2133–40

del(3p)(p13p21) in renal cell adenoma and del(4p)(p14) in bilateral renal cell carcinoma in two unrelated patients with von Hippel–Lindau disease. Bergerheim US, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):125–31

Chromosomal changes in renal cell carcinoma. No evidence for correlation with clinical stage. Teyssier JR, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):197–205

Characterization of two cell lines with distinct phenotypes and genotypes established from a patient with renal cell carcinoma. Hashimura T, et al. **Cancer Res** 1989 Dec 15; 49(24 Pt 1):7064–71

Modulation of pro-epidermal growth factor, pro-transforming growth factor alpha and epidermal growth factor receptor gene expression in human renal carcinomas. Petrides PE, et al. **Cancer Res** 1990 Jul 1; 50(13):3934–9

Inverse relationship of epidermal growth factor receptor and HER2/neu gene expression in human renal cell carcinoma. Weidner U, et al. **Cancer Res** 1990 Aug 1;50(15):4504–9

Amplification and overexpression of the epidermal growth factor receptor gene in human renal–cell carcinoma. Ishikawa J, et al. **Int J Cancer** 1990 Jun 15;45(6):1018–21

Application of molecular cytogenetic techniques to the evaluation of renal parenchymal tumors. Kovacs G. **J Cancer Res Clin Oncol** 1990;116(4):318–23 (49 ref.)

Statistical analysis of the two stage mutation model in von Hippel–Lindau disease, and in sporadic cerebellar haemangioblastoma and renal cell carcinoma. Maher ER, et al. **J Med Genet** 1990 May;27(5):311–4

Epidermal growth factor receptor gene analysis in renal cell carcinoma. Gomella LG, et al. **J Urol** 1990 Jan; 143(1):191–3

Familial renal cell carcinoma: hereditary or coincidental? Levinson AK, et al. **J Urol** 1990 Oct;144(4):849–51

Infrequent ras oncogene point mutations in renal cell carcinoma. Nanus DM, et al. **J Urol** 1990 Jan;143(1):175–8

Epidermal growth factor receptor gene expression in normal human kidney and renal cell carcinoma. Sargent ER, et al. **J Urol** 1989 Nov;142(5):1364–8

A gene near the D3F15S2 site on 3p is expressed in normal human kidney but not or only at a severely reduced level in 11 of 15 primary renal cell carcinomas (RCC). Erlandsson R, et al. **Oncogene** 1990 Aug;5(8):1207–11

Introduction of normal chromosome 3p modulates the tumorigenicity of a human renal cell carcinoma cell line YCR. Shimizu M, et al. **Oncogene** 1990 Feb;5(2):185–94

Heterogeneity of DNA index in renal–cell carcinoma. Devonec M, et al. **Prog Clin Biol Res** 1990;348:35–48

Genetics of renal cell carcinoma. Daniel LN, et al. **Semin Urol** 1989 Nov;7(4):258–63 (32 ref.)

The multidrug resistance gene in renal cell carcinoma. Klein EA. **Semin Urol** 1989 Nov;7(4):207–14 (32 ref.)

Von Hippel–Lindau syndrome with unusual presentations in two brothers. Saranga R, et al. **Urology** 1989 Nov; 34(5):301–4

[Gene transfer into renal cancer cell by electroporation] Ishibashi Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Sep;80(9):1357–61 (Eng. Abstr.) **(Jpn)**

[Chromosome analysis of renal cell carcinoma] Yoshida MA. **Rinsho Byori** 1989 Feb;Spec No 80:209–17 **(Jpn)**

IMMUNOLOGY

Immunologic studies of alveolar macrophages from patients with metastatic renal cell carcinoma. Thomassen MJ, et al. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1256–8

Immunosuppression in murine renal cell carcinoma. I. Characterization of extent, severity and sources. Gregorian SK, et al. **Cancer Immunol Immunother** 1990;31(6):325–34

Immunosuppression in murine renal cell carcinoma. II. Identification of responsible lymphoid cell phenotypes and examination of elimination of suppression. Gregorian SK, et al. **Cancer Immunol Immunother** 1990;31(6):335–41

Analysis of a mouse monoclonal antibody that reacts with a specific region of the human proximal tubule and subsets renal cell carcinomas. Bander NH, et al. **Cancer Res** 1989 Dec 1;49(23):6774–80

Characterization of the cytolytic activity of CD4+ and CD8+ tumor–infiltrating lymphocytes in human renal cell carcinoma. Finke JH, et al. **Cancer Res** 1990 Apr 15; 50(8):2363–70

Clonal analysis of lymphocytes from tumor, peripheral blood, and nontumorous kidney in primary renal cell carcinoma. Kim TY, et al. **Cancer Res** 1990 Sep 1;50(17):5263–8

Blockage of autonomous growth of ACHN cells by anti–renal cell carcinoma monoclonal antibody 5F4. Kochevar J. **Cancer Res** 1990 May 15;50(10):2968–72

Increased immunogenicity of human renal carcinoma cells following treatment with cholesterol derivatives. Ludes B, et al. **Eur Urol** 1990;17(2):166–72

TIL from renal–cell carcinoma: restimulation with tumor influences proliferation and cytolytic activity. Alexander J, et al. **Int J Cancer** 1990 Jan 15;45(1):119–24

Heteroconjugate antibody-directed killing of autologous human renal carcinoma cells by in vitro-activated lymphocytes. Kerr L, et al. **J Immunol** 1990 May 15; 144(10):4060–7

Induction by interleukin–2 of oligoclonal expansion of cultured tumor–infiltrating lymphocytes. Fishleder AJ, et al. **J Natl Cancer Inst** 1990 Jan 17;82(2):124–8

In situ demonstration of immunological heterogeneity in vascular endothelial cells of renal cell carcinoma. Kinjo T, et al. **J Surg Oncol** 1990 Feb;43(2):73–8

Immunophenotypic markers in renal cell carcinoma. Banner BF, et al. **Mod Pathol** 1990 Mar;3(2):129–34

Monoclonal antibodies to renal cancer antigens. Bander NH. **Semin Urol** 1989 Nov;7(4):264–70 (29 ref.)

Immunosuppressive factor derived from renal cancer cells. Muraki J, et al. **Urology** 1989 Oct;34(4):205–9

[Production of monoclonal antibody to renal cell carcinoma] Terashima Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jun;80(6):838–46 (Eng. Abstr.) **(Jpn)**

METABOLISM

Lectin– and immunohistochemical studies on acquired cystic kidney and associated renal cell carcinoma. Kikuchi Y. **Acta Pathol Jpn** 1989 Jun;39(6):373–80

Relationship of the 1 alpha, 25–dihydroxyvitamin D3 receptor concentration and the DNA content in renal cell carcinomas. Trydal T, et al. **Anticancer Res** 1989 Nov–Dec; 9(6):1951–5

Fibrinogen–fibrin transformation in situ in renal cell carcinoma. Wojtukiewicz MZ, et al. **Anticancer Res** 1990 May–Jun;10(3):579–82

Tumor cells are the site of erythropoietin synthesis in human renal cancers associated with polycythemia. Da Silva JL, et al. **Blood** 1990 Feb 1;75(3):577–82

Expression of intermediate–sized filaments in developing and adult human kidney and in renal cell carcinoma. Oosterwijk E, et al. **J Histochem Cytochem** 1990 Mar;38(3):385–92

Biodistribution and radioimmunoscintigraphy studies of renal cell carcinoma using tumor–preferential monoclonal antibodies and F(ab')2 fragments. Chiou RK. **J Urol** 1989 Dec;142(6):1584–8

Lectin reactivity of alpha–fetoprotein in a case of renal cell carcinoma. Taketa K, et al. **Tumour Biol** 1989;10(5):275–80

P–170 glycoprotein, glutathione and associated enzymes in relation to chemoresistance of primary human renal cell carcinomas. Mickisch G, et al. **Urol Int** 1990;45(3):170–6

Immunohistochemical distribution of CA19–9 in normal and tumor tissues of the kidney. Ohshio G, et al. **Urol Int** 1990; 45(1):1–3

[A case of erythropoietin–producing renal cancer] Ishibashi Y, et al. **Hinyokika Kiyo** 1990 May;36(5):577–80 (Eng. Abstr.) **(Jpn)**

[Use of quantitative histochemistry in the prognosis of renal cell cancer] Vlodavskiĭ EA, et al. **Vopr Onkol** 1990; 36(3):309–14 (Eng. Abstr.) **(Rus)**

MORTALITY

Outcome of end–stage renal disease in patients with rare causes of renal failure. II. Renal or systemic neoplasms. Port FK, et al. **Q J Med** 1989 Dec;73(272):1161–5

Five–year survival following excision of renal cell carcinoma extending into inferior vena cava. Belis JA, et al. **Urology** 1990 Mar;35(3):228–30

[Survivals of incidental renal cell carcinoma] Igarashi T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Sep;80(9):1310–5 (Eng. Abstr.) **(Jpn)**

[A clinical study of 92 cases of renal cell carcinoma—statistical analysis of prognosis according to the new TNM classification] Sato K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec;80(12):1802–8 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Hemangioblastoma and renal clear cell carcinoma distinguished by means of the AgNOR method. Crocker J, et al. **Am J Clin Pathol** 1990 Apr;93(4):555–7

Acridine orange flow cytometric analysis of renal cell carcinoma. Clinicopathologic implications of RNA content. el–Naggar AK, et al. **Am J Pathol** 1990 Aug; 137(2):275–80

Reciprocal correlation between expression of P–glycoprotein and accumulation of rhodamine 123 in human tumors. Efferth T, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1633–7

Patterns of human tumor–infiltrating lymphocytes in 120 human cancers. Balch CM, et al. **Arch Surg** 1990 Feb; 125(2):200–5

Sonographic demonstration of renal tumour extension into the contralateral renal vein. Carvalho P. **Br J Radiol** 1989 Dec;62(744):1093–5

A prospective study of the value of conventional CT, dynamic CT, ultrasonography and arteriography for staging renal carcinoma. London NJ, et al. **Br J Urol** 1989 Sep;64(3):209–17

Staging of renal carcinoma using magnetic resonance imaging at 1.5 Tesla. Amendola MA, et al. **Cancer** 1990 Jul 1; 66(1):40–4

Clonal stimulation or inhibition of human colon carcinomas and human renal carcinomas mediated by transforming growth factor–beta 1. Fan D, et al. **Cancer Commun** 1989; 1(2):117–25

Simultaneous renal cell carcinoma and angiomyolipoma in a kidney—a case report and literature review. Wei CH, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Feb;45(2):126–9 (17 ref.)

Comments on 'In vivo selection of human renal carcinoma cells with high metastatic potenital in nude mice' [letter; comment] Weiss L. **Clin Exp Metastasis** 1990 Jan–Feb; 8(1):103–9 Comment on: Clin Exp Metastasis 1989 Jul–Aug;7(4):381–9.

Staging of renal cell carcinoma by dynamic computed tomography: a prospective comparison of two techniques. Miles KA, et al. **Clin Radiol** 1990 Aug;42(2):122–7

Neoplastic thrombosis in the renal cancer. Ferrari P, et al. **Eur Urol** 1990;17(1):27–9

Prognostic parameters in renal cell carcinoma—a new approach. Störkel S, et al. **Eur Urol** 1989;16(6):416–22

Late presentation of metastatic renal cell carcinoma as a bleeding ampullary mass. Robertson GS, et al. **Gastrointest Endosc** 1990 May–Jun;36(3):304–6

Sinusoidal dilatation of the liver as a paraneoplastic manifestation of renal cell carcinoma. Aoyagi T, et al. **Hum Pathol** 1989 Dec;20(12):1193–7

Collecting duct carcinoma of the kidney. Kennedy SM, et al. **Hum Pathol** 1990 Apr;21(4):449–56

Flow cytometric assessment of deoxyribonucleic acid content in renal adenocarcinoma: does ploidy status enhance prognostic stratification over stage alone? Currin SM, et al. **J Urol** 1990 Mar;143(3):458–63

Urothelial carcinoma occurring within an inverted papilloma of the ureter. Grainger R, et al. **J Urol** 1990 Apr; 143(4):802–4

Enlargement of regional lymph nodes in renal cell carcinoma is often not due to metastases. Studer UE, et al. **J Urol** 1990 Aug;144(2 Pt 1):243–5

Basic research and treatment of renal cell carcinoma metastasis. Proceedings of an EORTC Genitourinary Group meeting. Strasbourg, France, November 4, 1988. **Prog Clin Biol Res** 1990;348:1–194

Circulating cancer cells in renal–cell carcinoma. Pontes JE, et al. **Prog Clin Biol Res** 1990;348:1–12

Metastasis of renal–cell carcinoma: a pathologist's theoretical view. Vetter JM. **Prog Clin Biol Res** 1990;348:13–22 (22 ref.)

Kidney–derived cell lines. Ebert T, et al. **Semin Urol** 1989 Nov;7(4):247–51 (22 ref.)

Clinical implications of pathologic subtypes in renal cell carcinoma. Fromowitz FB, et al. **Semin Urol** 1990 Feb; 8(1):31–50 (147 ref.)

Early site of lymphatic involvement from right renal cell carcinoma: CT demonstration and method of lymphadenectomy. Komatsu H, et al. **Urol Int** 1990; 45(1):50–3

Establishment of three human renal cell carcinoma cell lines (SMKT–R–1, SMKT–R–2, and SMKT–R–3) and their characters. Miyao N, et al. **Urol Res** 1989;17(5):317–24

[Flow cytometric analysis of renal cell carcinoma] Lü GH. **Chung Hua Chung Liu Tsa Chih** 1990 Jan;12(1):27–9 (Eng. Abstr.) **(Chi)**

[Cancer of the kidney: venous staging using magnetic resonance imaging] Di Stefano D, et al. **Ann Urol (Paris)** 1990;24(2):122–6 (Eng. Abstr.) **(Fre)**

[Establishment and characterization of phenotypically distinct cell lines from a single chromophilic renal cell carcinoma] Gerharz CD, et al. **Verh Dtsch Ges Pathol** 1989; 73:396–9 (Eng. Abstr.) **(Ger)**

[Histological and cytological (nucleolar) grading of renal cell carcinoma] Helpap B, et al. **Verh Dtsch Ges Pathol** 1989; 73:400–4 (Eng. Abstr.) **(Ger)**

[Morphology and growth characteristics of human renal cell carcinoma in correlation to cytogenetic data] Krech RH, et al. **Verh Dtsch Ges Pathol** 1989;73:409–14 (Eng. Abstr.) **(Ger)**

[Classification, histogenesis, and prognosis of renal cell carcinoma and renal oncocytoma] Störkel S, et al. **Verh Dtsch Ges Pathol** 1989;73:321–38 (Eng. Abstr.) **(Ger)**

[Chemosensitivity test utilizing in vivo–like growing of renal cell carcinoma] Onishi T, et al. **Gan No Rinsho** 1989 Oct; 35(13):1581–6 (Eng. Abstr.) **(Jpn)**

[Antiproliferative effect of interferon–alpha on human renal cell carcinoma in clonogenic assay—single and combination effect with cancer chemotherapeutic agent] Ohmura K, et al. **Hinyokika Kiyo** 1989 May;35(5):737–47 (Eng. Abstr.) **(Jpn)**

[A case of renal cell carcinoma which was left untouched for five years] Taki Y, et al. **Hinyokika Kiyo** 1989 Sep; 35(9):1561–4 (Eng. Abstr.) **(Jpn)**

[Multilocular cystic renal cell carcinoma: a report of 2 cases] Tamura Y, et al. **Hinyokika Kiyo** 1990 Apr;36(4):437–41 (18 ref.) (Eng. Abstr.) **(Jpn)**

[A clinicopathological analysis of renal cell carcinoma in solitary kidney] Gohji K, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 May 20;25(5):965–71 (Eng. Abstr.) **(Jpn)**

[Clinical analysis of renal cell carcinoma with extension into the inferior vena cava] Gohji K, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jun 20;24(6):1266–76 (Eng. Abstr.) **(Jpn)**

[Development of a serum–free medium and primary culture of human renal cell carcinomas by serum–free culture] Ito H, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec; 80(12):1741–8 (Eng. Abstr.) **(Jpn)**

[Study on chemosensitivity of colony forming cells] Morimitus H. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb; 81(2):215–20 (Eng. Abstr.) **(Jpn)**

[Tumor heterogeneity of renal cell carcinoma as analyzed by flow cytometry] Nagamori S. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):593–600 (Eng. Abstr.) **(Jpn)**

[The effects of immuno-chemotherapy, hyperthermia and irradiation on the growth of human renal cell carcinoma] Obama T. **Nippon Hinyokika Gakkai Zasshi** 1989 Sep; 80(9):1286–93 (Eng. Abstr.) **(Jpn)**

[Study on clinical characteristics in relation to size of renal cell carcinoma] Ohnishi T, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):569–76 (Eng. Abstr.) **(Jpn)**

[Renal cell carcinoma and angiomyolipoma in tuberous sclerosis. Case report] Yamanaka N, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb;81(2):304–7 (Eng. Abstr.) **(Jpn)**

[Background and precancerous processes in renal cell carcinoma] Ganzen TN, et al. **Arkh Patol** 1989;51(7):30–8 (Eng. Abstr.) **(Rus)**

[Hypernephroma cells in pleural effusions] Pongrac I, et al. **Plucne Bolesti** 1989 Jul–Dec;41(3–4):178–9 (Eng. Abstr.) **(Scr)**

[Sarcomatoid renal carcinoma] Llarena Ibarguren R, et al. **Arch Esp Urol** 1990 May;43(4):409–11 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Increased secretion of erythropoietin in human renal carcinoma cells in response to atrial natriuretic factor. Ueno M, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):C427–31

PSYCHOLOGY

Paraneoplastic limbic encephalitis: neuropsychiatric presentation. Newman NJ, et al. **Biol Psychiatry** 1990 Mar 1;27(5):529–42 (53 ref.)

Interferon-related mental deterioration and behavioral changes in patients with renal cell carcinoma. Merimsky O, et al. **Eur J Cancer** 1990;26(5):596–600

Psychological support for cancer patients [letter; comment] **Lancet** 1989 Nov 18;2(8673):1209–10 Comment on: Lancet 1989 Oct 14;2(8668):888–91.

RADIOGRAPHY

Synchronous colon and renal cancers: six cases of a clinical entity. O'Boyle KP, et al. **Am J Med** 1989 Dec;87(6):691–3 (27 ref.)

Pyelotumour backflow: a manifestation of renal cell carcinoma. Kyaw MM. **Clin Radiol** 1973 Oct;24(4):459–63

CT features of renal cell carcinoma with emphasis on relation to tumor size. Zagoria RJ, et al. **Invest Radiol** 1990 Mar; 25(3):261–6

Renal cell carcinoma and osseous metastases. Case report and literature review. Goldman FD, et al. **J Am Podiatr Med Assoc** 1989 Dec;79(12):618–25 (40 ref.)

Small pediatric renal neoplasms detected by CT. Levine C, et al. **J Comput Assist Tomogr** 1990 Jul–Aug;14(4):615–8

The detection of renal carcinoma extension into the renal vein and inferior vena cava: a prospective comparison of venacavography and magnetic resonance imaging. Horan JJ, et al. **J Urol** 1989 Oct;142(4):943–7; discussion 947–8

Inferior vena caval invasion by renal cell carcinoma: false positive diagnosis by venacavography. Selby JB Jr, et al. **J Urol** 1990 Mar;143(3):464–7

Perinephric xanthogranulomatous pyelonephritis simulating a renal or retroperitoneal tumor on X-ray CT and angiography. Kimura I, et al. **Radiat Med** 1989 May–Jun; 7(3):111–7

Observations on the growth of renal neoplasms. Birnbaum BA, et al. **Radiology** 1990 Sep;176(3):695–701

RADIOTHERAPY

Radiobiological comparison of external beam irradiation and radioimmunotherapy in renal cell carcinoma xenografts. Wessels BW, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec; 17(6):1257–63

The role of radiation therapy in the management of carcinoma of the kidney. Forman JD. **Semin Urol** 1989 Aug;7(3):195–8 (34 ref.)

[Effects of radiation on the human renal cell carcinoma transplantable to the nude mice] Hishikawa-Itoh Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Apr 25; 50(4):435–7 (Eng. Abstr.) **(Jpn)**

SECONDARY

Hypernephroma presenting as a lump in the breast. Masters A. **Aust N Z J Surg** 1990 Apr;60(4):305–6

Embolization of paraspinal masses. Coldwell DM. **Cardiovasc Intervent Radiol** 1989 Sep–Oct;12(5):252–4

Metastatic renal cell carcinoma. An unusual cause of syncope. Fogel RI, et al. **Chest** 1990 Aug;98(2):481–2

Recurrent renal cell carcinoma presenting as skin nodules: two case reports and review of the literature. Menter A, et al. **Cutis** 1989 Oct;44(4):305–8 (20 ref.)

Interleukin-2 with or without LAK cells in metastatic renal cell carcinoma: a report of a European multicentre study. Negrier S, et al. **Eur J Cancer Clin Oncol** 1989;25 Suppl 3:S21–8

Endoscopic resection of an endobronchial hypernephroma metastasis using a polypectomy snare. Themelin D, et al. **Eur Respir J** 1990 Jun;3(6):732–3

Vascular metastatic renal carcinoma of the maxilla. Report of two cases. Ord RA, et al. **Int J Oral Maxillofac Surg** 1990 Apr;19(2):106–9

Tumour DNA content and skeletal metastases in renal cell carcinoma. A preliminary report. Ljungberg B, et al. **J Bone Joint Surg [Br]** 1990 Jan;72(1):111–5

Phase II study of coumarin and cimetidine in patients with metastatic renal cell carcinoma. Dexeus FH, et al. **J Clin Oncol** 1990 Feb;8(2):325–9

Renal cell carcinoma presenting as Garcin's syndrome. Mubaidin SI, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):613–4

Metastatic renal cell carcinoma arising in a congenital solitary kidney. Treatment with interferon-containing combinations. A case report and a review of the literature. Merimsky O, et al. **J Urol (Paris)** 1989;95(4):243–5

Radiation therapy in the treatment of metastatic renal-cell carcinoma. Cutuli BF, et al. **Prog Clin Biol Res** 1990; 348:179–86

Operative treatment of bone metastases secondary to renal carcinoma. Katzner M, et al. **Prog Clin Biol Res** 1990; 348:151–68

Surgery for intrathoracic metastases from renal-cell carcinoma. Witz JP, et al. **Prog Clin Biol Res** 1990; 348:169–78

Solitary cervical node metastasis in renal cell carcinoma. Tzanakakis GN, et al. **R I Med J** 1990 Mar;73(3):113–5

Vascular metastatic lesions of the spine: preoperative embolization. Gellad FE, et al. **Radiology** 1990 Sep; 176(3):683–6

Recurrent solitary metastasis of renal cell carcinoma in skeletal muscles. Merimsky O, et al. **Tumori** 1990 Aug 31; 76(4):407–9

Recombinant interleukin-2-induced regression of pulmonary metastasis of renal cell carcinoma. Fujioka T, et al. **Urol Int** 1990;45(1):58–62

Multiple pulmonary metastases from renal cell carcinoma treated effectively by recombinant interleukin-2. Ikemoto S, et al. **Urol Int** 1990;45(1):54–7

Isolated testicular metastases from renal cell carcinoma. Indudhara R, et al. **Urol Int** 1990;45(3):186–7

Solitary metastasis of renal cell carcinoma to urethra. Goldberg MG, et al. **Urology** 1990 Apr;35(4):351–3

[A case of metastasis of a kidney carcinoma to the epididymis] Panchev P, et al. **Khirurgiia (Sofiia)** 1989;42(4):74–5 **(Bul)**

[Tangencies between urology and gastroenterology] Mathus-Vliegen EM, et al. **Ned Tijdschr Geneeskd** 1990 Jun 23;134(25):1201–4 **(Dut)**

[Coincidence of thyroid autonomy and metastasis of hypernephroid kidney cancer] Müller C, et al. **Acta Med Austriaca** 1990;17 Suppl 1:74–5 **(Ger)**

[Intestinal manifestations of renal cell cancer (clinical conference)] Tromm A, et al. **Med Klin** 1990 Jan 15; 85(1):28–31 **(Ger)**

[A rare form of metastasis of renal cell cancer. A case report of intra-oral soft tissue metastasis] Müller-Mattheis V, et al. **Urologe [A]** 1989 Nov;28(6):355–8 (24 ref.) (Eng. Abstr.) **(Ger)**

[The incidence of recurrence of intra- and extra-lesional operated metastases of long tubular bones] Windhager R, et al. **Z Orthop** 1989 Jul–Aug;127(4):402–5 (Eng. Abstr.) **(Ger)**

[Adjuvant therapy with vinblastine and interferon in metastatic renal carcinoma] Cocimano V, et al. **Minerva Urol Nefrol** 1989 Jul–Sep;41(3):187–9 (Eng. Abstr.) **(Ita)**

[A case of metastatic tumor of spermatic cord from renal cell carcinoma] Hiura M, et al. **Hinyokika Kiyo** 1989 Jun; 35(6):1021–4 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Clinical study of renal cell carcinoma with bony metastasis: comparative study with lung metastasis] Onishi T, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1113–8 (Eng. Abstr.) **(Jpn)**

[Intracranial hemorrhage in metastasis of hypernephroma] Gubskii LV, et al. **Sov Med** 1990;(4):121–2 **(Rus)**

[Metastasis of hypernephroid cancer to the organ of vision] Galimova RZ, et al. **Vestn Oftalmol** 1989 Nov–Dec; 105(6):68–71 **(Rus)**

SURGERY

Locally recurrent renal carcinoma after partial nephrectomy: report of a case. Cecchi M, et al. **Acta Urol Belg** 1989; 57(3):729–33

Enucleation of tumor versus partial nephrectomy as conservative treatment of renal cell carcinoma. Stephens R, et al. **Cancer** 1990 Jun 15;65(12):2663–7

Remission of nephrotic syndrome in amyloidosis associated with a hypernephroma. Tang AL, et al. **Clin Nephrol** 1989 Nov;32(5):225–8

Surgical treatment of renal cell carcinoma with a tumor thrombus extending into the right atrium. Taniguchi S, et al. **Heart Vessels** 1990;5(2):123–7

Partial nephrectomy for tumour. Puigvert A, et al. **Int Urol Nephrol** 1989;21(6):563–73

Radical extensive surgery for renal cell carcinoma: long-term results and prognostic factors. Giuliani L, et al. **J Urol** 1990 Mar;143(3):468–73; discussion 473–4

Progression and survival after renal-conserving surgery for renal cell carcinoma: experience in 104 patients and extended followup. Morgan WR, et al. **J Urol** 1990 Oct; 144(4):852–7; discussion 857–8

On the necessity of adrenal extirpation combined with radical nephrectomy. Winter P, et al. **J Urol** 1990 Oct;144(4):842–3; discussion 844

Surgical management of renal cell carcinoma extended into the vena cava and the right atrium. Cho M, et al. **Jpn J Clin Oncol** 1989 Dec;19(4):384–90

Paraneoplastic motor neuron disease and renal cell carcinoma: improvement after nephrectomy. Evans BK, et al. **Neurology** 1990 Jun;40(6):960–2 (11 ref.)

Is there a rationale for large lymphadenectomy in adenocarcinoma of the kidney? Blom JH. **Prog Clin Biol Res** 1990;348:127–35 (19 ref.)

Role of surgery in metastatic renal cell carcinoma. Flanigan RC. **Semin Urol** 1989 Aug;7(3):191–4 (23 ref.)

Surgery of renal cell carcinoma with inferior vena caval involvement. Marshall FF. **Semin Urol** 1989 Aug; 7(3):186–90

Lymphadenectomy for renal cell carcinoma. Montie JE. **Semin Urol** 1989 Aug;7(3):181–5 (24 ref.)

The evolving role of surgery in the management of renal cell carcinoma. Wood DP Jr, et al. **Semin Urol** 1989 Aug; 7(3):172–80 (66 ref.)

Pancreatic metastasis 25 years after nephrectomy for renal cancer. Temellini F, et al. **Tumori** 1989 Oct 31;75(5):503–4

Late, solitary metastatic renal carcinoma in the pancreas. Simpson NS, et al. **Ulster Med J** 1989 Oct;58(2):198–9

Surgical treatment of brain metastases from renal cell carcinoma. Badalament RA, et al. **Urology** 1990 Aug; 36(2):112–7

Anatomic considerations in extraperitoneal approach to radical nephrectomy. Droller MJ. **Urology** 1990 Aug; 36(2):118–23

Surgery for pulmonary metastases from renal cell carcinoma. Army experience from 1977–1987. Thrasher JB, et al. **Urology** 1990 Jun;35(6):487–91

Results of radical nephrectomy for peripheral well-circumscribed renal cell carcinoma. Wishnow KI, et al. **Urology** 1989 Oct;34(4):171–4

Long-term serum creatinine values after radical nephrectomy. Wishnow KI, et al. **Urology** 1990 Feb; 35(2):114–6

[Nephrectomy in kidney tumor following pyelolithotomy and extracorporeal lithotripsy for recurrence] Panchev P, et al. **Khirurgiia (Sofiia)** 1989;42(5):91–2 **(Bul)**

[The conservative surgical treatment of kidney tumors] Petrov P, et al. **Khirurgiia (Sofiia)** 1989;42(6):63–5 (Eng. Abstr.) **(Bul)**

[A modified maneuver in radical nephrectomy] Li YT. **Chung Hua Wai Ko Tsa Chih** 1989 Nov;27(11):658–9, 701 (Eng. Abstr.) **(Chi)**

[Detecting recurrence by computer-assisted tumor after-care in renal cell carcinoma] Hienert G, et al. **Z Urol Nephrol** 1989 Aug;82(8):429–31 (Eng. Abstr.) **(Ger)**

[Surgical treatment of bone metastasis in advanced renal cell carcinoma] Nakazono M, et al. **Gan No Rinsho** 1990 Jun; 36(7):810–4 (Eng. Abstr.) **(Jpn)**

[A clinical study of 55 cases of renal cell carcinoma] Saito K, et al. **Hinyokika Kiyo** 1989 Nov;35(11):1847–52 (Eng. Abstr.) **(Jpn)**

[Clinical study of undifferentiated renal cell carcinoma in comparison with well differentiated cases] Onishi T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jun 20;24(6):1223–8 (Eng. Abstr.) **(Jpn)**

[A case of quadruple cancer composed of the breast, kidney, liver and uterus carcinomas] Haba Y, et al. **Nippon Geka Gakkai Zasshi** 1990 May;91(5):649–51 (Eng. Abstr.) **(Jpn)**

[Translumbar radical nephrectomy of renal cell carcinoma] Fukui I, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Aug; 80(8):1207–10 (Eng. Abstr.) **(Jpn)**

[Experience of the parenchyma saving procedure in the surgical management of renal cell carcinoma] Togashi M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec; 80(12):1783–9 (Eng. Abstr.) **(Jpn)**

THERAPY

Recombinant leukocyte interferon alpha-2a and medroxyprogesterone in advanced renal cell carcinoma. A randomized trial. Steineck G, et al. **Acta Oncol** 1990; 29(2):155–62

Differential effects of human natural interferon-alpha and mismatched double-stranded RNA against a human renal cell carcinoma xenograft. Hubbell HR, et al. **Anticancer Res** 1990 May–Jun;10(3):795–801

The immunotherapy and cellular biology of renal cell carcinoma. Klein EA. **Cancer Cells** 1990 Feb;2(2):58–61

IL-2: efficacy in renal cell carcinoma and overall safety profile. Louie A. **Cancer Invest** 1990;8(2):315–6

Antiproliferative and cytotoxic effects of single and combined treatment with tumor necrosis factor alpha and/or alpha interferon on a human renal cell carcinoma xenotransplanted into nu/nu mice: cell kinetic studies. Baisch H, et al. **Cancer Res** 1990 Oct 1;50(19):6389–95

Correlation between clinical response to interleukin 2 therapy and sustained production of tumor necrosis factor. Blay JY, et al. **Cancer Res** 1990 Apr 15;50(8):2371–4

Phase I clinical trial of interleukin 2 and alpha-interferon: toxicity and immunologic effects. Budd GT, et al. **Cancer Res** 1989 Nov 15;49(22):6432–6

Progress in therapy of renal cell cancer. Rugarli C. **Eur J Cancer Clin Oncol** 1989;25 Suppl 3:S19–20 (3 ref.)

Clinical application of continuous infusion of recombinant interleukin-2. West WH. **Eur J Cancer Clin Oncol** 1989; 25 Suppl 3:S11-5

Arterial embolization in patients with renal carcinoma. Christensen SW, et al. **Int Urol Nephrol** 1989;21(6):575-8 (28 ref.)

Functional and immunophenotypic modifications induced by interleukin-2 did not predict response to therapy in patients with renal cell carcinoma. Favrot MC, et al. **J Biol Response Mod** 1990 Apr;9(2):167-77

Treatment of patients with advanced cancer using multiple long-term cultured lymphokine-activated killer (LAK) cell infusions and recombinant human interleukin-2. Mittelman A, et al. **J Biol Response Mod** 1989 Oct;8(5):468-78

Successful treatment of metastatic renal cell carcinoma with a biologically active dose of recombinant interferon-gamma. Aulitzky W, et al. **J Clin Oncol** 1989 Dec;7(12):1875-84

Phase II trial of interferon-beta-serine in metastatic renal cell carcinoma. Kinney P, et al. **J Clin Oncol** 1990 May; 8(5):881-5

Renal cell carcinoma: treatment with recombinant interleukin-2 plus beta-interferon. Krigel RL, et al. **J Clin Oncol** 1990 Mar;8(3):460-7

A phase II clinical trial of adoptive immunotherapy for advanced renal cell carcinoma using mitogen-activated autologous leukocytes and continuous infusion interleukin-2. Wang JC, et al. **J Clin Oncol** 1989 Dec; 7(12):1885-91

Phase I study of high-dose continuous-infusion recombinant interleukin-2 and autologous lymphokine-activated killer cells in patients with metastatic or unresectable malignant melanoma and renal cell carcinoma. Gaynor ER, et al. **J Natl Cancer Inst** 1990 Sep 5;82(17):1397-402

In vivo effects of high energy shock waves on urological tumors: an evaluation of treatment modalities. Oosterhof GO, et al. **J Urol** 1990 Sep;144(3):785-9

Preparative cytoreductive surgery in patients with metastatic renal cell carcinoma treated with adoptive immunotherapy with interleukin-2 or interleukin-2 plus lymphokine activated killer cells. Robertson CN, et al. **J Urol** 1990 Sep;144(3):614-7; discussion 617-8

In vivo antiproliferative effects of gamma-interferon and tumor necrosis factor alpha in a rat renal cell carcinoma model system. van Moorselaar RJ, et al. **J Urol** 1990 Jun; 143(6):1247-51

Combination therapy for renal cell carcinoma using IFN-gamma and OK-432: in vitro study. Muraki J. **Keio J Med** 1990 Mar;39(1):21-5

Home therapy with recombinant interleukin-2 and interferon-alpha 2b in advanced human malignancies. Atzpodien J, et al. **Lancet** 1990 Jun 23;335(8704):1509-12

Preparation of lymphocytes for autolymphocyte therapy in metastatic renal carcinoma [letter; comment] Mor F. **Lancet** 1990 Jul 7;336(8706):62 Comment on: Lancet 1990 Apr 28;335(8696):994-8.

Effect of autolymphocyte therapy on survival and quality of life in patients with metastatic renal-cell carcinoma [see comments] Osband ME, et al. **Lancet** 1990 Apr 28; 335(8696):994-8 Comment in: Lancet 1990 Jul 7;336(8706):62.

Immunotherapy of disseminated renal cell carcinoma [news] Javapour N. **Md Med J** 1989 Nov;38(11):963

A phase 2 study of surveillance in patients with metastatic renal cell carcinoma and assessment of response of such patients to therapy on progression. Oliver RT, et al. **Mol Biother** 1988;1(1):14-20

Interleukin-2 in combination with interferon-alpha in disseminated malignant melanoma and advanced renal cell carcinoma. A phase I/II study. Bergmann L, et al. **Onkologie** 1990 Apr;13(2):137-40

Recombinant alpha-interferon plus vinblastine in metastatic renal-cell cancer: analysis of response and survival in 58 evaluable patients. Bergerat JP, et al. **Prog Clin Biol Res** 1990;348:137-50

New prospects in the management of metastatic renal cell carcinoma. Experimental and clinical data. Debruyne FM, et al. **Prog Clin Biol Res** 1990;350:243-55 (17 ref.)

Interferons in renal-cell carcinoma: status and prospects. De Mulder PH, et al. **Prog Clin Biol Res** 1990;348:49-59 (25 ref.)

Cyclic interferon gamma application in patients with renal cell carcinoma. Grups JW, et al. **Prog Clin Biol Res** 1990; 350:257-62

Interferon-alpha and interleukin-2 in the treatment of renal cell cancer. Holdener EE, et al. **Prog Clin Biol Res** 1990; 348:61-9 (19 ref.)

Anti-tumor effects of interleukin 2 against renal cell carcinoma. In vitro study and clinical application. Marumo K, et al. **Prog Clin Biol Res** 1990;350:263-73

Recombinant alpha-2 or gamma interferon in the treatment of metastatic renal cell carcinoma: results of two phase II/III trials. Otto U, et al. **Prog Clin Biol Res** 1990; 350:275-82

Interleukin-2 therapy for advanced renal cell carcinoma: radiographic evaluation of response and complications. Davis SD, et al. **Radiology** 1990 Oct;177(1):127-31

Blood coagulation alterations after embolic occlusion of the renal circulation. Törngren S, et al. **Scand J Urol Nephrol** 1990;24(2):141-4

Immunotherapy of renal cell carcinoma. Graham SD Jr. **Semin Urol** 1989 Nov;7(4):215-27 (112 ref.)

Surveillance as a possible option for management of metastatic renal cell carcinoma. Oliver RT. **Semin Urol** 1989 Aug;7(3):149-52

Recombinant interleukin-2-induced regression of pulmonary metastasis of renal cell carcinoma. Fujioka T, et al. **Urol Int** 1990;45(1):58-62

Influence of cyclic interferon gamma on lymphocytes and their subpopulations in patients with renal carcinoma. Grups JW, et al. **Urology** 1990 Feb;35(2):111-3

Treatment of metastatic renal cell carcinoma with autolymphocyte therapy. Low toxicity outpatient approach to adoptive immunotherapy without use of in vivo interleukin-2. Krane RJ, et al. **Urology** 1990 May; 35(5):417-22

Role of interferons in the therapy of metastatic renal cell carcinoma. Quesada JR. **Urology** 1989 Oct;34(4 Suppl):80-3; discussion 87-96 (24 ref.)

[Alpha 2-interferon in kidney cancer. Experiences with 6 patients] Weidmann B, et al. **Onkologie** 1990 Jun; 13(3):217-20 (Eng. Abstr.) **(Ger)**

[Long-term results in the treatment of 100 metastatic hypernephroid carcinomas] Falk W, et al. **Strahlenther Onkol** 1990 Apr;166(4):256-64 (Eng. Abstr.) **(Ger)**

[Effect of kidney occlusion on survival in renal cell carcinoma: a 10-year retrospective study] Latal D, et al. **Z Urol Nephrol** 1990 Jan;83(1):27-31 (Eng. Abstr.) **(Ger)**

[Various questions concerning the treatment of renal cell carcinoma] Ueda T. **Fukuoka Igaku Zasshi** 1990 Jan; 81(1):1-4 **(Jpn)**

[Arterial chemoembolization using microencapsulated anticancer drugs] Sato K, et al. **Gan To Kagaku Ryoho** 1990 Jun;17(6):1105-10 (Eng. Abstr.) **(Jpn)**

[Renal abscess: complication of transcatheter arterial embolization of renal cell carcinoma] Goubara M, et al. **Hinyokika Kiyo** 1989 Oct;35(10):1741-4 (Eng. Abstr.) **(Jpn)**

[Combination chemotherapy of human renal cell carcinoma in athymic nude mice with human lymphoblastoid interferon (HLBI) and UFT, 5-Fu] Yamada Y, et al. **Hinyokika Kiyo** 1990 May;36(5):527-34 (Eng. Abstr.) **(Jpn)**

[Combination therapy of renal cell carcinoma with interferon-alpha and UFT (or FT-207)] Kobayashi M, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jul 20;24(7):1437-46 (Eng. Abstr.) **(Jpn)**

[Giant renal cell carcinoma: a case report] Kogawa T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jul 20;24(7):1467-71 (Eng. Abstr.) **(Jpn)**

[Clinical efficacy of recombinant interleukin-2 for renal cell carcinoma and the effect of blood transfusion upon the immune response of these patients] Fujioka T, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb;81(2):296-303 (Eng. Abstr.) **(Jpn)**

[Study on adoptive immunotherapy with tumor-infiltrating lymphocytes (TIL) for renal cell carcinoma—amplification of IL-2-elicited TIL proliferation by OKT3-monoclonal antibody] Hayakawa M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):103-9 (Eng. Abstr.) **(Jpn)**

[Study of cytotoxicity of recombinant interleukin-2 (rIL-2) expanded tumor infiltrating lymphocytes (TIL) in renal cell cancer] Nishimura T, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jun;81(6):835-40 (Eng. Abstr.) **(Jpn)**

[Current status of treatment of renal cell carcinoma and future problems] Satomi Y. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):1-13 (85 ref.) (Eng. Abstr.) **(Jpn)**

[Interferon alpha and gamma in the treatment of renal cell carcinoma] Kawai K, et al. **Nippon Jinzo Gakkai Shi** 1990 Feb;32(2):231-6 (16 ref.) (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Nuclear shape analysis for assessment of prognosis in renal cell carcinoma. Murphy GF, et al. **J Urol** 1990 Jun; 143(6):1103-7

Role of nuclear grading in stage I renal cell carcinoma. Green LK, et al. **Urology** 1989 Nov;34(5):310-5

[Immunohistochemical analysis of 42 renal cell carcinomas and one oncocytoma with mono- and polyclonal antibodies against vimentin and cytokeratin] Beham A, et al. **Verh Dtsch Ges Pathol** 1989;73:392-5 (Eng. Abstr.) **(Ger)**

URINE

[Urinary excretion of glycine.prolile dipeptidile aminopeptidase, N-acetyl-beta-D-glucosaminidase, alanine aminopeptidase and low molecular protein in patients with renal cell carcinoma] Kitamura Y, et al. **Hinyokika Kiyo** 1990 May;36(5):535-9 (Eng. Abstr.) **(Jpn)**

CARCINOMA, RESERVE CELL see CARCINOMA, OAT CELL

CARCINOMA, SCIRRHOUS

COMPLICATIONS

Sweet's syndrome and chronic lymphocytic leukemia associated with scirrhous breast cancer. A case report. Visani G, et al. **Haematologica** 1990 Mar-Apr;75(2):173-5

Synchrony of malignant lymphoma and breast cancer. Stierer M, et al. **JAMA** 1990 Jun 6;263(21):2922-3

DIAGNOSIS

Scirrhous carcinoma of the stomach: radiologic and endoscopic diagnosis. Levine MS, et al. **Radiology** 1990 Apr;175(1):151-4

[Diffuse linitis plastica] Cherviak PI, et al. **Klin Khir** 1990; (1):72-3 **(Rus)**

ENZYMOLOGY

[Activity of the enzymes of DNA metabolism in the blood of patients with breast cancer] Borzenko BG, et al. **Vopr Onkol** 1990;36(1):17-23 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Scirrhous carcinoma of the stomach: a clinical and pathological study of 106 surgical cases. Hirose S, et al. **Gastroenterol Jpn** 1989 Oct;24(5):481-7

Breast cancer as seen in King Fahd University Hospital, Al-Khobar, 1983-1986. Anim JT, et al. **J R Coll Surg Edinb** 1989 Aug;34(4):201-4

IMMUNOLOGY

Stability and localization of biotin-labeled murine monoclonal antibody to human gastric cancer in normal mice and nude mice-human tumor models. Yokota T, et al. **J Histochem Cytochem** 1990 Apr;38(4):585-8

A tumor-associated antigen in the scirrhous gastric carcinoma cell line MK-01 defined by monoclonal antibody S202. Yokota T, et al. **Jpn J Surg** 1989 Jul; 19(4):452-8

[Immunomodulation by leukocytolysis. On the significance of lectin-polysaccharide complexes] Heine H. **Onkologie** 1989 Jun;12 Suppl 3:5-8 (Eng. Abstr.) **(Ger)**

METABOLISM

Enhancement of mucus accumulation in a human gastric scirrhous carcinoma cell line (KATO-III) by fibroblast-tumor cell interaction. Yamamoto R, et al. **Virchows Arch [B]** 1990;59(1):26-31

[Immunohistochemical studies on laminin in gastric cancer: relationship to histological type and metastasis: preliminary report] Matsuda T, et al. **Nippon Geka Gakkai Zasshi** 1989 Jul;90(7):1126 **(Jpn)**

PATHOLOGY

Primary linitis plastica of the descending colon: a case report. Yamashita H, et al. **Jpn J Surg** 1990 Mar;20(2):229-33

[Two cases of primary, diffusely infiltrating carcinoma (linitis plastica) of the colon] Kunieda K, et al. **Gan No Rinsho** 1990 Apr;36(5):657-62 (Eng. Abstr.) **(Jpn)**

[Breast carcinoma with features of osteosarcoma--a light and electron microscopic and immunohistochemical study] Suzuki T, et al. **Gan No Rinsho** 1989 Oct;35(12):1453-60 (Eng. Abstr.) **(Jpn)**

[An experimental study on the fibrosis of scirrhous gastric carcinoma] Morita K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Jan;87(1):16-24 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Linitis plastica of the colon: computed tomography findings. Howell EJ, et al. **Gastrointest Radiol** 1990 Winter; 15(1):69-71

Linitis plastica of the alimentary tract and scrotum. Zalev AH, et al. **Gastrointest Radiol** 1990 Winter;15(1):72-5

Differentiation of radial scar from scirrhous carcinoma of the breast: mammographic-pathologic correlation. Mitnick JS, et al. **Radiology** 1989 Dec;173(3):697-700

RADIONUCLIDE IMAGING

Thallium-201 single photon emission computed tomograms of double cancers: lung and breast. Tonami N, et al. **Clin Nucl Med** 1989 Aug;14(8):594-6

SECONDARY

Metastatic breast carcinoma of the orbit. Jacobs M, et al. **Aust N Z J Ophthalmol** 1989 Nov;17(4):357-61

Metastatic breast carcinoma in the pelvis. Taylor WG, et al. **Br J Clin Pract** 1990 May;44(5):205-6

Gastric linitis plastica with metastases to the colon: a mimic of Crohn's disease. Katon RM, et al. **J Clin Gastroenterol** 1989 Oct;11(5):555-60

Carcinoma of breast presenting as gastric cancer: diagnosis by immunoperoxidase staining patterns. Finch PJ, et al. **J R Coll Surg Edinb** 1989 Aug;34(4):225-6

[A case of Borrmann type 4 colon cancer with a metastasis into hepatoma] Maruyama C, et al. **Gan No Rinsho** 1990 Aug;36(9):1047-52 (Eng. Abstr.) **(Jpn)**

[A case of secondary bladder tumor the origin (gastric cancer) of which could not be identified before autopsy] Mizutani Y, et al. **Hinyokika Kiyo** 1990 May;36(5):605–8 (11 ref.) (Eng. Abstr.) **(Jpn)**

SURGERY

Gastric linitis plastica is not a surgical disease. Aranha GV, et al. **Surgery** 1989 Oct;106(4):758–62; discussion 762–3

[Occurrence of 3 primary carcinomas within 26 months] Petru G, et al. **Wien Med Wochenschr** 1990 Apr 30; 140(8):212–3 (Eng. Abstr.) **(Ger)**

THERAPY

Clinical aspects of ovarian tumors of low malignant potential. Dgani R, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 May–Jun;35(2–3):251–8

CARCINOMA, SMALL CELL see CARCINOMA, OAT CELL

CARCINOMA, SQUAMOUS CELL

An aggressive anaplastic squamous cell carcinoma of the floor of the mouth in a young patient: report of a case. Awang MN, et al. **Ann Dent** 1989 Winter;48(2):31–4, 46

Bowen's disease. Lee MM, et al. **CA** 1990 Jul–Aug; 40(4):237–42 (32 ref.)

Bronchoscopic localization and treatment of occult lung cancer. Edell ES, et al. **Chest** 1989 Oct;96(4):919–21 (16 ref.)

Anal carcinoma. Leichman LP, et al. **Curr Probl Cancer** 1990 May–Jun;14(3):117–59 (99 ref.)

Primary squamous cell carcinoma of the neovagina. Baltzer J, et al. **Gynecol Oncol** 1989 Oct;35(1):99–103 (19 ref.)

Primary vaginal squamous cell carcinoma in the young patient. Di Domenico A. **Gynecol Oncol** 1989 Nov; 35(2):181–7 (81 ref.)

Lingering death from squamous cell carcinoma of the face [clinical conference] Luce EA, et al. **Hosp Pract [Off]** 1989 Oct 30;24(10A):60, 1; 65–6, 71–2

Erythroplastic lesion on the mandibular marginal gingiva. Craig RM Jr, et al. **J Am Dent Assoc** 1989 Oct;119(4):543–4

Adenosquamous carcinoma of the thyroid gland. Nicolaides AR, et al. **J Laryngol Otol** 1989 Oct;103(10):978–9

Squamous cell carcinoma of the temporomandibular joint: report of a case with long-term follow-up. Catone GA, et al. **J Oral Maxillofac Surg** 1990 May;48(5):515–7

Characterization of two new cell lines derived from oral cavity human squamous cell carcinomas—OC1 and OC2. Wong DY, et al. **J Oral Maxillofac Surg** 1990 Apr; 48(4):385–90

Spontaneous regression of esophageal carcinoma with pulmonary metastases: case report. Ohwada S, et al. **Jpn J Clin Oncol** 1990 Jun;20(2):193–8

Cerebellopontine angle epidermoid tumor extending into the upper cervical spinal canal—case report. Hasegawa T, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):614–8

Primary intracranial epidermoid carcinoma—case report. Nishiura I, et al. **Neurol Med Chir (Tokyo)** 1989 Jul; 29(7):600–5 (32 ref.)

A surgeon looks at cervical lymph nodes. Johnson JT. **Radiology** 1990 Jun;175(3):607–10 (35 ref.)

Squamous cell carcinoma of the nail bed. Lombardi LJ, et al. **South Med J** 1990 Sep;83(9):1098–101

[An animal model of human laryngeal carcinoma and its biological characteristics] Zhang K. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1990;25(1):25–7, 62–3 (Eng. Abstr.) **(Chi)**

[Study of factors affecting prognosis of cervical cancer using a microcomputer] Yu SY. **Chung Hua I Hsueh Tsa Chih** 1989 Nov;69(11):614–6, 42 (Eng. Abstr.) **(Chi)**

[Metastatic splenomegaly revealing epidermoid carcinoma of the esophagus. Diagnosis by puncture directed by echography (letter)] Rudelli A, et al. **Gastroenterol Clin Biol** 1990;14(2):192–3 **(Fre)**

[Lymphoma of the thyroid and associated bronchial epidermoid cancer (letter)] Breton JL, et al. **Rev Pneumol Clin** 1989;45(2):94 **(Fre)**

[Primary epidermoid carcinoma of the mandible. Apropos of a case] Vaillant JM, et al. **Rev Stomatol Chir Maxillofac** 1990;91(3):207–8 (Eng. Abstr.) **(Fre)**

[Reliability of exfoliative cytology in neoplasms of the oral cavity] Belli E, et al. **Minerva Stomatol** 1989 Nov; 38(11):1197–9 (Eng. Abstr.) **(Ita)**

[A case of squamous cell carcinoma of the thymus] Hirata T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jul; 37(7):1376–80 (Eng. Abstr.) **(Jpn)**

[A case of three episodes of primary squamous cell carcinoma in different locations] Bestyńska A. **Wiad Lek** 1989 Jun 15;42(12):836–8 (Eng. Abstr.) **(Pol)**

[Squamous cell cancer of the sigmoid] Simonov NN, et al. **Khirurgiia (Mosk)** 1989 Dec;(12):115–6 **(Rus)**

[Descriptive study of cancer of the cavum, particularly epidermoid carcinoma (I)] Abad Iglesias R. **Acta Otorrinolaringol Esp** 1989 Mar–Apr;40(2):81–99 (Eng. Abstr.) **(Spa)**

[Descriptive study of cancer of the cavum, especially of epidermoid carcinoma (II)] Abad Iglesias R. **Acta Otorrinolaringol Esp** 1989 May–Jun;40(3):195–220 (0 ref.) (Eng. Abstr.) **(Spa)**

[Cancer of the nasopharynx: our experience with 34 cases] de Miguel García F, et al. **Acta Otorrinolaringol Esp** 1989 Nov–Dec;40(6):419–24 (Eng. Abstr.) **(Spa)**

[Multiple symmetrical lipomatosis. Pharyngeal carcinoma] Figuerola E, et al. **Acta Otorrinolaringol Esp** 1988 Mar–Apr;39(2):106–8 (10 ref.) (Eng. Abstr.) **(Spa)**

[Multiple carcinoma of the upper aerodigestive tract of metachronic onset] Menoyo A, et al. **Acta Otorrinolaringol Esp** 1989 Jul–Aug;40(4):293–6 (Eng. Abstr.) **(Spa)**

[Warthin's tumor and epidermoid carcinoma of the larynx. Apropos of a case] Lahoz Zamarro MT, et al. **An Otorrinolaringol Ibero Am** 1989;16(5):519–26 (Eng. Abstr.) **(Spa)**

[Epidermoid carcinoma of the bladder. An uncommon tumor] Ricos Torrent JV, et al. **Arch Esp Urol** 1989 Apr; 42(3):205–8 (Eng. Abstr.) **(Spa)**

[Metachronic squamous carcinoma of the tonsils to microcytic carcinoma of the esophagus (letter)] Navarro M, et al. **Med Clin (Barc)** 1990 Jan 20;94(2):77–8 **(Spa)**

ANALYSIS

Effects of hypercalcemia-producing tumor extract and parathyroid hormone on osteoclast ultrastructure. Barengolts E, et al. **Acta Anat (Basel)** 1990;137(2):160–4

Vimentin-positive squamous cell carcinoma arising in a burn scar. A highly malignant neoplasm composed of acantholytic round keratinocytes. Ikegawa S, et al. **Arch Dermatol** 1989 Dec;125(12):1672–6

In situ hybridization analysis of HPV DNA in cervical precancer and cervical cancers from China. Ji HX, et al. **Arch Gynecol Obstet** 1990;247(1):21–9

Human papillomavirus DNA in a recurrent squamous carcinoma of the eyelid. McDonnell JM, et al. **Arch Ophthalmol** 1989 Nov;107(11):1631–4

RAS oncogene product expression in normal and malignant oral mucosa. Freer E, et al. **Aust Dent J** 1990 Apr; 35(2):141–6

An immunohistochemical assessment of cellular proliferation markers in head and neck squamous cell cancers. Kearsley JH, et al. **Br J Cancer** 1990 Jun;61(6):821–7

Nuclear and "cytoplasmic" estrogen and progesterone receptors in squamous cell carcinoma of the cervix. Darne J, et al. **Gynecol Oncol** 1990 Aug;38(2):216–9

Studies of lectin binding to the human cervix uteri: II. Cervical intraepithelial neoplasia and invasive squamous carcinoma. Byrne P, et al. **Histochem J** 1989 Jun; 21(6):323–36

Low molecular weight cytokeratin in a spindle cell squamous carcinoma [letter; comment] Chetty R, et al. **Hum Pathol** 1990 May;21(5):569–70 Comment on: Hum Pathol 1989 Jan;20(1):92.

EGF and TGF-alpha, the ligands of hyperproduced EGFR in human esophageal carcinoma cells, act as autocrine growth factors. Yoshida K, et al. **Int J Cancer** 1990 Jan 15;45(1):131–5

Prognostic implications of DNA ploidy in squamous cell carcinomas of the tongue assessed by flow cytometry. Hemmer J, et al. **J Cancer Res Clin Oncol** 1990;116(1):83–6

Esophageal carcinoma-associated proteins detected by two-dimensional polyacrylamide gel electrophoresis. Isoda N, et al. **J Chromatogr** 1990 May 18;527(2):315–25

Localization of integrin receptors for fibronectin, collagen, and laminin in human skin. Variable expression in basal and squamous cell carcinomas. Peltonen J, et al. **J Clin Invest** 1989 Dec;84(6):1916–23

DNA hybridisation of routinely processed tissue for detecting HPV DNA in anal squamous cell carcinomas over 40 years. Scholefield JH, et al. **J Clin Pathol** 1990 Feb;43(2):133–6

Fatty acid composition of clinically healthy and malignant oral epithelium. Macleod RI, et al. **J Oral Pathol Med** 1990 Apr;19(4):149–51

Immunohistochemical localization of c-myc oncogene product and EGF receptor in oral squamous cell carcinoma. Sakai H, et al. **J Oral Pathol Med** 1990 Jan; 19(1):1–4

Comparison of cytokeratin, filaggrin and involucrin profiles in oral leukoplakias and squamous carcinomas. Vigneswaran N, et al. **J Oral Pathol Med** 1989 Aug; 18(7):377–90

Expression of ras oncogene p21 protein in esophageal squamous cell carcinoma. Ruol A, et al. **J Surg Oncol** 1990 Jul;44(3):142–5

Ha-ras oncogene product in human oral squamous cell carcinoma. Oku N, et al. **Kobe J Med Sci** 1989 Dec; 35(5–6):277–86

Increased expression of mutant forms of p53 oncogene in primary lung cancer. Iggo R, et al. **Lancet** 1990 Mar 24; 335(8691):675–9

Association between poor prognosis in early-stage invasive cervical carcinomas and non-detection of HPV DNA. Riou G, et al. **Lancet** 1990 May 19;335(8699):1171–4

In situ hybridization analysis of human papillomavirus in anal squamous cell carcinoma. Gal AA, et al. **Mod Pathol** 1989 Sep;2(5):439–43

Pulmonary adenosquamous carcinomas with amyloid-like stroma. Yousem SA. **Mod Pathol** 1989 Sep;2(5):420–6

Human papillomavirus DNA in invasive carcinoma of the vagina. Ikenberg H, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 1):432–8

Coexpression of cytokeratins, involucrin, and blood group antigens in oral squamous cell carcinomas. Toto PD, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jul;70(1):75–80

Whole cell preparation of squamous cell carcinoma for cytometric analysis of DNA. Lampe H, et al. **Otolaryngol Head Neck Surg** 1990 Jul;103(1):72–9

Tumor associated proteins of rat skin tumor induced by 7,12-dimethylbenz[a]anthracene. Park KK, et al. **Yonsei Med J** 1989 Sep;30(3):219–34

[Cellular DNA content of human cervical carcinoma] Zuo XL, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Sep; 24(5):288–90, 317 (Eng. Abstr.) **(Chi)**

[Establishment of immunohistochemical technique for polyamine and its application in research of lung cancer] Jia XS. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Jun; 18(2):105–7 (Eng. Abstr.) **(Chi)**

[The relationship between DNA content in cervical carcinoma cell and the clinicopathological features] Zhang H. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Jun;18(2):137–9 (Eng. Abstr.) **(Chi)**

[Squamous cell carcinoma-associated antigen (SCC) as a tumor marker in the initial diagnosis of carcinomas of the head and neck region. Results of a prospective study after 24 months] Clasen B, et al. **Laryngorhinootologie** 1990 May; 69(5):275–80 (Eng. Abstr.) **(Ger)**

[Immunohistochemical study of cytokeratin in esophageal carcinoma: preliminary report] Mio H, et al. **Nippon Geka Gakkai Zasshi** 1989 May;90(5):793 **(Jpn)**

[Nuclear DNA cytofluorometry of normal human laryngeal epithelia and squamous cell carcinoma] Yasuda N, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Nov;92(11):1876–83 (Eng. Abstr.) **(Jpn)**

[Flow cytometry for the determination of DNA in head and neck carcinomas] Labella T, et al. **Acta Otorrinolaringol Esp** 1989 Dec;40 Suppl 2:295–7 (Eng. Abstr.) **(Spa)**

BLOOD

Elevated concentration of soluble interleukin-2 receptors in serum of smokers and patients with lung cancer. Correlation with clinical activity. Ginns LC, et al. **Am Rev Respir Dis** 1990 Aug;142(2):398–402

Carcinoembryonic antigen, CA 19-9 and CA 50 in monitoring human squamous cell carcinoma of the esophagus. Munck-Wikland E, et al. **Anticancer Res** 1990 May–Jun;10(3):703–8

Increased plasma concentration of atrial natriuretic factor with squamous cell carcinoma invasion of the right and left atria of the heart. Bradford DS, et al. **Cancer** 1989 Nov 1;64(9):1909–13

An enzyme-linked immunosorbent assay for cancer procoagulant and its potential as a new tumor marker. Gordon SG, et al. **Cancer Res** 1990 Oct 1;50(19):6229–34

High level of serum squamous cell carcinoma-related antigen in a case of Bowen's disease. Yamamoto T, et al. **Dermatologica** 1990;180(4):244–6

Proton nuclear magnetic resonance spectroscopy of serum lipoproteins in rabbits with implanted VX-2 carcinoma. Gadeholt G, et al. **Eur J Cancer** 1990;26(5):611–5

Decrease in interferon-gamma production by peripheral blood mononuclear cells in patients with uterine cervical cancer. Mori H, et al. **J Clin Immunol** 1990 Jan;10(1):45–51

[Plasma prostaglandins E, E2 and F2a in nasopharyngeal carcinoma (NPC)] Chen BS. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):248–50 (Eng. Abstr.) **(Chi)**

[Assay of the laminin P1 using a radioimmunologic technic: applications in oncology] Larbre H, et al. **Bull Cancer (Paris)** 1989;76(9):947–53 (Eng. Abstr.) **(Fre)**

[A clinical study on multiple tumor markers following therapy in patients with uterine cervical carcinoma] Hiura M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 May; 42(5):471–8 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

A morphometric study of the vascularity of oral squamous cell carcinomas and its relation to outcome of radiation therapy. Lauk S, et al. **Eur J Cancer Clin Oncol** 1989 Oct; 25(10):1431–40

CHEMICALLY INDUCED

Lye ingestion and carcinoma of the esophagus. Isolauri J, et al. **Acta Chir Scand** 1989 Apr–May;155(4–5):269–71

Arsenical cancer of skin. Histologic study with special reference to Bowen's disease. Yeh S, et al. **Cancer** 1968 Feb;21(2):312–39

The stimulating effect of acetic acid, alcohol and thermal burn injury on esophagus and forestomach carcinogenesis induced by N-nitrososarcosin ethyl ester in rats. Alexandrov VA, et al. **Cancer Lett** 1989 Oct;47(3):179–85

Changes in keratin expression during 7,12-dimethylbenz[a]anthracene-induced hamster cheek pouch carcinogenesis. Gimenez-Conti IB, et al. **Cancer Res** 1990 Jul 15;50(14):4441–5

A relationship found between intra-oral sites of 4NQO reductase activity and chemical carcinogenesis. Booth DR. **Cell Tissue Kinet** 1990 Jul;23(4):331–40

Dose-response study of N-nitrosomethyl(2-hydroxypropyl)amine-induced nasal cavity carcinogenesis in rats. Yamamoto K, et al. **Exp Pathol** 1990;38(1):53–9

Invasive squamous cell carcinoma of the vagina in a diethylstilbestrol-exposed woman. Faber K, et al. **Gynecol Oncol** 1990 Apr;37(1):125–8 (11 ref.)

Oral contraceptive use and risk of invasive cervical cancer. Brinton LA, et al. **Int J Epidemiol** 1990 Mar;19(1):4–11

Conference report: Special Symposium, Scientific Update on Fluoride and the Public Health. Wei SH. **J Dent Res** 1990 Jun;69(6):1343–4

Pulmonary carcinogenesis in rats given implants of shale oil in beeswax pellets. Dagle GE, et al. **J Toxicol Environ Health** 1990;29(4):399–407

Squamous cell carcinoma of the lung in a dry battery worker. Rab SM, et al. **JPMA** 1990 Feb;40(2):49–50

[Esophageal carcinoma in human fetus induced by N-methyl-N-benzylnitrosamine (NMBzA)] Lu SX. **Chung Hua Chung Liu Tsa Chih** 1989 Nov;11(6):401–3 (Eng. Abstr.) **(Chi)**

[Selective induction of dog esophageal carcinomas by the restricted oral administration of N-ethyl-N-'-nitro-N-nitrosoguanidine with a projecting spout] Tsukahara Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Aug;90(8):1161–9 (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

A comparative study of the JJC, AJC and UICC T classifications of squamous cell carcinoma of the maxillary sinus. Okawa T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jun 20;24(6):1277–87

COMPLICATIONS

Induction of oral cancer by 7,12-dimethylbenz[a]anthracene in rats with liver cirrhosis. Lekholm U, et al. **Acta Odontol Scand** 1989 Oct;47(5):265–9

Ocular cicatricial pemphigoid and oesophageal carcinoma. Hope-Ross M, et al. **Acta Ophthalmol (Copenh)** 1990 Jun; 68(3):361–3

HIV infection and squamous cell carcinoma of sun-exposed skin [letter] de Boer WA, et al. **AIDS** 1990 Jan;4(1):91

Unusual presentation of carcinoma of the esophagus [letter] Vaswani S, et al. **Am J Gastroenterol** 1990 May;85(5):621

Necrotizing scleritis secondary to conjunctival squamous cell carcinoma in acquired immunodeficiency syndrome. Kim RY, et al. **Am J Ophthalmol** 1990 Feb 15;109(2):231–3

Squamous cell carcinoma of the conjunctiva associated with benign mucous membrane pemphigoid. Sivalingam V, et al. **Ann Ophthalmol** 1990 Mar;22(3):106–9

External compression by metastatic squamous cell carcinoma: a rare cause of left main coronary artery narrowing. Weinberg BA, et al. **Clin Cardiol** 1990 May;13(5):360–6

Shunt between right subclavian vein and the left heart in superior vena cava obstruction due to lung cancer. Taki J, et al. **Clin Nucl Med** 1990 Apr;15(4):251–3

Tumor resection and antibodies to parathyroid hormone-related protein cause similar changes on bone histomorphometry in hypercalcemia of cancer. Kukreja SC, et al. **Endocrinology** 1990 Jul;127(1):305–10

Self-expanding mesh stent for esophageal cancer stenosis. Domschke W, et al. **Endoscopy** 1990 May;22(3):134–6

Aplastic anemia as a paraneoplastic syndrome in lung cancer [letter] Koistinen P, et al. **Eur J Cancer** 1990;26(5):651

Lymphedema of legs and truncus as a complication of cancer colli uteri and treatment. Matthiesen L, et al. **Eur J Gynaecol Oncol** 1990;11(1):23–5

Squamous cell carcinoma of the vulva in a patient with androgen insensitivity syndrome. Haefner HK, et al. **Gynecol Oncol** 1990 Jul;38(1):132–4

Pulmonary tumor embolism from squamous cell carcinoma of the vulva. Soares FA, et al. **Gynecol Oncol** 1990 Jul; 38(1):141–3

Cervical cancers in uterus didelphys. Sugimori H, et al. **Gynecol Oncol** 1990 Mar;36(3):439–43

Squamous cell carcinoma arising in a cystic teratoma presenting as a vulvar mass. Tsukamoto N, et al. **Gynecol Oncol** 1990 Aug;38(2):257–61

Isolation of Legionella pneumophila serogroup 3 from pericardial fluid in a case of pericarditis. Lück PC, et al. **Infection** 1989 Nov-Dec;17(6):388–90

Bowen's disease and internal malignancy. A meta-analysis. Lycka BA. **Int J Dermatol** 1989 Oct;28(8):531–3

Pemphigus vulgaris and squamous cell carcinoma of the lung. Barnadas MA, et al. **J Am Acad Dermatol** 1989 Oct;21(4 Pt 1):793–5

Cardiac tamponade as a presentation of mucoepidermoid bronchogenic carcinoma. Sharma S, et al. **J Assoc Physicians India** 1989 Feb;37(2):183–5

Response to retreatment of malignant hypercalcemia with the bisphosphonate AHPrBP (APD): respective role of kidney and bone. Thiebaud D, et al. **J Bone Miner Res** 1990 Mar;5(3):221–6

Giant cell arteritis of the tongue associated with squamous cell carcinoma [letter] [see comments] Misselevitch I, et al. **J Clin Pathol** 1989 Sep;42(9):1001 Comment in: J Clin Pathol 1990 Apr;43(4):349.

Perineural tumour spread: an unusual cause of carpal tunnel syndrome. Mackay IR, et al. **J Hand Surg [Br]** 1990 Feb; 15(1):104–5

Diabetes insipidus and hypercalcaemia secondary to nasopharyngeal carcinoma. Christmas HE, et al. **J Laryngol Otol** 1990 Jan;104(1):43–4

Squamous cell carcinoma arising in a plunging ranula. Ali MK, et al. **J Oral Maxillofac Surg** 1990 Mar;48(3):305–8

Hypercalcemia related to the poor prognosis of patients with squamous cell carcinoma of the esophagus. Kuwano H, et al. **J Surg Oncol** 1989 Dec;42(4):229–33

Lung cancer coexisting with bullae. Koike R, et al. **Jpn J Surg** 1989 Jul;19(4):459–61 (9 ref.)

Anal and cervical intraepithelial neoplasia [letter; comment] Dixon AR, et al. **Lancet** 1989 Nov 25;2(8674):1285 Comment on: Lancet 1989 Sep 30;2(8666):765–9.

Covered expandable metal stent for recurrent tracheal obstruction. George PJ, et al. **Lancet** 1990 Mar 10; 335(8689):582–4

HIV and conjunctival malignancies [letter] Kestelyn P, et al. **Lancet** 1990 Jul 7;336(8706):51–2

Epidural gas: an unusual complication of metastatic oesophageal carcinoma. Kennedy C, et al. **Neuroradiology** 1990;32(1):67–9

Epidermoid tumor presenting with trigeminal neuralgia and ipsilateral hemifacial spasm: a case report. Otsuka S, et al. **Nippon Geka Hokan** 1989 Mar 1;58(2):245–9 (9 ref.)

Three cases of oral squamous cancer associated with leukocytosis, hypercalcemia, or both. Yoneda T, et al. **Oral Surg Oral Med Oral Pathol** 1989 Nov;68(5):604–11

Thyroglossal duct cyst [letter] Turhal N, et al. **South Med J** 1990 Aug;83(8):983–4

Squamous cell carcinoma of the pleura following bronchopleural fistula. Prabhakar G, et al. **Thorax** 1989 Dec;44(12):1053–4

Systemic amyloid associated with carcinoma of the bronchus. Richmond I, et al. **Thorax** 1990 Feb;45(2):156–7

Spontaneous peripelvic extravasation due to squamous cell carcinoma of the ureter. Murai M, et al. **Urol Int** 1989; 44(6):370–2 (7 ref.)

[Spinocellular carcinoma as a rare complication in pilonidal cyst] Adámek J, et al. **Rozhl Chir** 1990 Mar;69(3):139–43 (Eng. Abstr.) **(Cze)**

[Hypercalcemia associated with malignant epidermoid degeneration of a dermoid cyst of the ovary (letter)] Beuzeboc P, et al. **Presse Med** 1990 Mar 10;19(9):429–30 **(Fre)**

[Polyradiculoneuritis revealing broncho-pulmonary cancer. A case report and brief review of the literature] M'Raihi ML, et al. **Rev Mal Respir** 1989;6(5):465–7 (6 ref.) (Eng. Abstr.) **(Fre)**

[Sézary's syndrome appearing 2 years before bronchial epidermoid cancer (letter)] Bouillet T, et al. **Rev Pneumol Clin** 1989;45(5):224–5 **(Fre)**

[Porokeratosis palmaris et plantaris disseminata with squamous cell carcinoma] Ruocco V, et al. **G Ital Dermatol Venereol** 1990 Feb;125(1-2):53–8 (Eng. Abstr.) **(Ita)**

[Paraneoplastic syndromes associated with bladder carcinoma. Apropos of 2 cases of hypercalcemia] Mottola A, et al. **Minerva Urol Nefrol** 1990 Apr-Jun;42(2):99–101 (22 ref.) (Eng. Abstr.) **(Ita)**

[A case of squamous cell carcinoma of the renal pelvis accompanying an ectopic opening with vesicoureteral reflux of complete duplication of uretero pelvis] Mikuriya H, et al. **Hinyokika Kiyo** 1989 May;35(5):847–50 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Three cases of pneumothorax due to lung cancer] Takagi O, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb; 28(2):330–5 (Eng. Abstr.) **(Jpn)**

[A case of pernicious anemia associated with early gastric cancer (Type IIa + IIc) and squamous cell carcinoma of the oral mucosa] Kawasaki E, et al. **Nippon Naika Gakkai Zasshi** 1989 Oct;78(10):1482–3 **(Jpn)**

[Cerebello-pontine angle epidermoid with cerebellar atrophy; report of a case] Fuse T, et al. **No Shinkei Geka** 1989 Jul; 17(7):673–7 (Eng. Abstr.) **(Jpn)**

[Fanconi's anemia with squamous cell carcinoma—a case report and a review of literature] Fukuoka K, et al. **Rinsho Ketsueki** 1989 Nov;30(11):1992–6 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Granular lymphocyte proliferative disorder with penis cancer] Sano M, et al. **Rinsho Ketsueki** 1990 Jan;31(1):105–9 (12 ref.) (Eng. Abstr.) **(Jpn)**

[An autopsy case of carcinomatous sensory neuropathy associated with gastric adenosquamous carcinoma] Yamamoto K, et al. **Rinsho Shinkeigaku** 1989 Apr; 29(4):493–6 (Eng. Abstr.) **(Jpn)**

[Clinicopathologic characteristics of laryngeal neoplasms in the region of Cartagena from 1972 to 1984] Redondo Luciáñez ER, et al. **Acta Otorrinolaringol Esp** 1989 May-Jun;40(3):163–6 (Eng. Abstr.) **(Spa)**

[Intra-diverticular neoplasms of the bladder. Apropos of a squamous carcinoma] Pellice C Jr, et al. **Actas Urol Esp** 1990 Mar-Apr;14(2):161–2 (Eng. Abstr.) **(Spa)**

[High amylase concentrations in malignant pleural effusions: is the incidence overestimated? (letter)] Romero S, et al. **Med Clin (Barc)** 1989 Dec 2;93(18):716–7 **(Spa)**

[Hemiparesis and respiratory insufficiency in a 74-year-old man with a pulmonary neoplasm (clinical conference)] Villalta J, et al. **Med Clin (Barc)** 1989 Jun 17;93(3):108–16 **(Spa)**

[Painful ophthalmology secondary to metastatic infiltration of the cavernous sinus (letter)] Vendrell J, et al. **Neurologia** 1987 May-Jun;2(3):145–6 **(Spa)**

DIAGNOSIS

Proliferation-associated monoclonal antibodies: a useful tool for prognosis in squamous cell carcinomas of head and neck? Lörz M, et al. **Acta Otorhinolaryngol Belg** 1989; 43(1):41–6

Tumors of the nasopharynx and adjacent areas: MR imaging with Gd-DTPA. Vogl T, et al. **AJNR** 1990 Jan-Feb; 11(1):187–94

Intraoperative use of the Lugol test facilitates resection of a malignant tumor in the esophagus [letter] Mori M, et al. **Am J Gastroenterol** 1989 Nov;84(11):1461

Esophageal cancer mimicking squamous cell carcinoma of the lung: presentation with positive sputum cytology [letter] Raymond PL. **Am J Gastroenterol** 1990 Mar; 85(3):325

Stage IA2 squamous carcinoma of the cervix: difficult diagnosis and therapeutic dilemma. Greer BE, et al. **Am J Obstet Gynecol** 1990 Jun;162(6):1406–9; discussion 1409–11

Use of health services before diagnosis of head and neck cancer among Boston residents. Prout MN, et al. **Am J Prev Med** 1990 Mar-Apr;6(2):77–83

Impact of esophageal screening in patients with head and neck cancer. Atabek U, et al. **Am Surg** 1990 May; 56(5):289–92

Juvenile laryngeal carcinoma: correlation of computed tomography and magnetic resonance imaging with pathology. Schwartz DA, et al. **Ann Clin Lab Sci** 1990 May-Jun;20(3):225–30

Maxillary sinus neoplasm. Bettez M, et al. **Ann Otol Rhinol Laryngol** 1989 Dec;98(12 Pt 1):988–90

Magnetic resonance imaging to distinguish tumor persistence from delayed fibrosis in carcinoma of the tongue and floor of the mouth. Piollet H, et al. **Ann Otol Rhinol Laryngol** 1990 Sep;99(9 Pt 1):753–5

Early diagnosis of esophageal cancer. Analysis of 11 cases of esophageal mucosal cancer. Misumi A, et al. **Ann Surg** 1989 Dec;210(6):732–9

Evaluation of mandibular tumor invasion with magnetic resonance imaging. Ator GA, et al. **Arch Otolaryngol Head Neck Surg** 1990 Apr;116(4):454–9

Pathologic quiz case 2. Laryngeal trichinosis with simultaneous squamous cell carcinoma. Josephson JS, et al. **Arch Otolaryngol Head Neck Surg** 1989 Nov; 115(11):1384–5, 1387

Esophagography and esophagoscopy. Comparison in the examination of patients with head and neck carcinoma. Nino-Murcia M, et al. **Arch Otolaryngol Head Neck Surg** 1990 Aug;116(8):917–9

Pattern of oral cytokeratins. III. SDS-electrophoretic analysis and immunoblotting of cytokeratins in leukoplakias and squamous cell carcinomas of the oral mucosa. Ermich T, et al. **Biomed Biochim Acta** 1989;48(7):393–401

Cardiological manifestation of carcinoma of the oesophagus. Dzik-Jurasz A, et al. **Br J Clin Pract** 1990 Mar;44(3):112–3

Mycosis fungoides. Fox PA. **Br J Clin Pract** 1989 Dec; 43(12):458–60

Carcinoma of the penis in a Jew circumcised in infancy. Melmed EP, et al. **Br J Surg** 1967 Aug;54(8):729–31

Primary squamous carcinoma of the male urethra presenting as a periurethral abscess. Dickinson AJ, et al. **Br J Urol** 1990 Feb;65(2):217

Cytologic diagnosis in bronchoalveolar lavage specimens. A diagnostic technique for lung neoplasmas with a peripheral location [letter] Bellmunt J, et al. **Chest** 1990 Aug; 98(2):513–4

Detection of early lung cancer using low dose Photofrin II. Lam S, et al. **Chest** 1990 Feb;97(2):333–7

Magnetic resonance imaging of intracranial epidermoid tumours [letter; comment] Hadley DM, et al. **Clin Radiol** 1989 Nov;40(6):654–5 Comment on: Clin Radiol 1989 May;40(3):282–5.

Role of Lugol dye endoscopy in the diagnosis of early esophageal cancer. Misumi A, et al. **Endoscopy** 1990 Jan; 22(1):12–6

Unusual presentation of squamous cell carcinoma of the anal canal. Wade DS, et al. **Eur J Surg Oncol** 1990 Jun; 16(3):256–7

Non-melanomatous skin cancer in the elderly: diagnosis and management. Proper SA, et al. **Geriatrics** 1990 Jul; 45(7):57–62, 65 (29 ref.)

Radiologic assessment of tumor and the carotid artery: correlation of magnetic resonance imaging, ultrasound, and computed tomography with surgical findings. Langman AW, et al. **Head Neck** 1989 Sep-Oct;11(5):443–9

Gadolinium-enhanced MRI of tumors of the head and neck. Phillips CD, et al. **Head Neck** 1990 Jul-Aug;12(4):308–15

Immunohistology is valuable in distinguishing between Paget's disease, Bowen's disease and superficial spreading malignant melanoma. Reed W, et al. **Histopathology** 1990 Jun;16(6):583–8

Monoclonal antibody MAb C-50 in buccal mucosa cancer cells. Pokhrel DP, et al. **Indian J Cancer** 1989 Dec; 26(4):217–21

Malignant degeneration of a mature ovarian teratoma. Christopherson WA, et al. **Int J Gynaecol Obstet** 1989 Dec; 30(4):379–84

Detection and characterization of metastatic cervical adenopathy by MR imaging: comparison of different MR techniques. van den Brekel MW, et al. **J Comput Assist Tomogr** 1990 Jul-Aug;14(4):581–9

Enhancement of the clinical margins of Bowen's disease by acetowhitening. Baker EJ, et al. **J Dermatol Surg Oncol** 1990 Sep;16(9):846–50

Infiltrative squamous cell carcinoma of right temporal bone. Basu S, et al. **J Indian Med Assoc** 1989 Aug;87(8):194–5

The delayed diagnosis of invasive carcinoma of the uterine cervix. Holmquist ND. **J La State Med Soc** 1990 Feb; 142(2):37–9

Opsoclonus as a presenting symptom in thymic carcinoma [letter] Schwartz M, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):534

Contralateral acoustic–reflex growth function in a patient with a cerebellar tumor: a case study. Harrison T, et al. **J Speech Hear Disord** 1989 Nov;54(4):505–9

Detection of human papillomavirus type 16 DNA in cervical swabs and formalin–fixed, paraffin–embedded squamous cell carcinomas of non–genital tissues using a synthetic oligodeoxynucleotide probe. Rakoczy P, et al. **J Virol Methods** 1989 Sep;25(3):325–36

Ultrasound of lung masses, a possibility? Akhtar M, et al. **JPMA** 1989 Nov;39(11):295

Uterine cervical punch biopsy specimens can be analyzed by 1H MRS. Mountford CE, et al. **Magn Reson Med** 1990 Feb;13(2):324–31

Lung cancer. Difference in age at diagnosis between men and women. Scheinok PA, et al. **N J Med** 1989 Dec; 86(12):951–7 (9 ref.)

99Tcm (v) DMSA and 67Ga–citrate imaging in patients with head and neck squamous carcinoma: a clinical and scintigraphic study. Watkinson JC, et al. **Nucl Med Commun** 1990 Feb;11(2):103–10

99Tcm (v) DMSA: a clinical, planar and SPECT study to evaluate patients with head and neck squamous carcinoma. Watkinson JC, et al. **Nucl Med Commun** 1990 Feb; 11(2):111–20

Carcinoma in situ of the cornea. Steinhorst U, et al. **Ophthalmologica** 1990;200(2):107–10

Panendoscopy: a valuable procedure? Hordijk GJ, et al. **Otolaryngol Head Neck Surg** 1989 Oct;101(4):426–8

Pediatric bowenoid papulosis: risks and management. Weitzner JM, et al. **Pediatr Dermatol** 1989 Dec;6(4):303–5

Squamous cell carcinoma of the tongue associated with Fanconi's anemia: MR characteristics. Murayama S, et al. **Pediatr Radiol** 1990;20(5):347

Neck masses: benign or malignant? Sorting out the causes by age–group. Otto RA, et al. **Postgrad Med** 1990 Jul; 88(1):199–204

What is Bowen's disease? Graham R. **Practitioner** 1989 Oct 8;233(1476):1282

MR findings of cartilage invasion by laryngeal cancer: value in predicting outcome of radiation therapy. Castelijns JA, et al. **Radiology** 1990 Mar;174(3 Pt 1):669–73

Perineural tumor extension through the foramen ovale: evaluation with MR imaging. Laine FJ, et al. **Radiology** 1990 Jan;174(1):65–71

DNA ploidy in oesophageal cancer. A preliminary report. Mannell A, et al. **S Afr J Surg** 1990 Jun;28(2):55–8

Case report 600: Post–radiation dermatitis with radiation–induced squamous cell carcinoma (well differentiated) of right third finger. Nelson MC, et al. **Skeletal Radiol** 1990;19(2):150–3

Serum copper and zinc levels in patients with nasopharyngeal carcinoma. Lian SL, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Mar;88(3):236–9

Integrated magnetic resonance and 31p spectroscopy. Hendrix RA, et al. **Trans Pa Acad Ophthalmol Otolaryngol** 1989;41:893–6

Ultrasound in penile cancer. Yamashita T, et al. **Urol Radiol** 1989;11(3):174–7

[An analysis of 23 cases of early primary lung cancer] Ma FC. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Apr; 12(2):79–81, 125–6 (Eng. Abstr.) **(Chi)**

[Analysis of 27 patients with lung cancer misdiagnosed as tuberculosis] Feng TC. **Chung Hua Chung Liu Tsa Chih** 1989 Nov;11(6):458–60 (Eng. Abstr.) **(Chi)**

[Imaging diagnosis in preoperative TNM staging of lung cancer] Lu GM. **Chung Hua Chung Liu Tsa Chih** 1989 Nov; 11(6):448–51 (Eng. Abstr.) **(Chi)**

[Diagnosis and surgical treatment of early esophageal carcinoma—analysis of 7 cases] Shao LF. **Chung Hua Chung Liu Tsa Chih** 1989 Mar;11(2):154–6 (Eng. Abstr.) **(Chi)**

[Epidermoid carcinoma of the kidney] Chen CH, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Nov;44(5):318–21 (Eng. Abstr.) **(Chi)**

[Multiple primary bronchial carcinoma. A case report of three separate synchronous primary cancers and a review of literature] Lin YG, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jul;28(7):423–5, 445 (Eng. Abstr.) **(Chi)**

[Epithelioma of the maxillary sinus with inguinal metastases. Case report and literature review of multiple tumors in gastroenterology] Debois JM, et al. **Acta Gastroenterol Belg** 1990 Jan–Feb;53(1):22–33 (58 ref.) (Eng. Abstr.) **(Dut)**

['Globus'; real or virtual?] Gerritsen GJ, et al. **Ned Tijdschr Geneeskd** 1990 Jul 21;134(29):1385–7 **(Dut)**

[Bowenoid papulosis] Barrasso R. **Ann Dermatol Venereol** 1990;117(5):401–3 **(Fre)**

[Epidermoid cancer of the esophagus: overview] Arlettaz Y, et al. **Schweiz Med Wochenschr** 1990 Mar 10; 120(10):325–34 (50 ref.) (Eng. Abstr.) **(Fre)**

[Dystrophy of the vulva—nomenclature and clinical picture] Riss P, et al. **Gynakol Rundsch** 1989;29 Suppl 2:378–80 **(Ger)**

[Value of sonomorphologic criteria in the identification of regional metastases of squamous cell cancers of the ENT area] Grasl MC, et al. **HNO** 1989 Aug;37(8):333–7 (Eng. Abstr.) **(Ger)**

[Relevance of the new tumor marker SCC (squamous cell carcinoma antigen) for the diagnosis and follow–up control of squamous epithelial carcinoma of the head and neck] Koch T, et al. **HNO** 1989 Nov;37(11):454–9 (Eng. Abstr.) **(Ger)**

[Differential diagnosis of malignant ulcer of the mouth mucosa—the Sutton aphthae (periadenitis mucosa necrotica recurrens)] Abrams J. **Laryngorhinootologie** 1990 Feb; 69(2):84–7 (Eng. Abstr.) **(Ger)**

[Sonographic detection of osteodestruction of the mandible] Prayer L, et al. **Laryngorhinootologie** 1989 Dec; 68(12):690–3 (Eng. Abstr.) **(Ger)**

[Detection of bronchial cancer recurrence in fibrothorax using nuclear magnetic resonance tomography] Herborn B, et al. **Pneumologie** 1990 Feb;44 Suppl 1:598–600 (Eng. Abstr.) **(Ger)**

[Sonography in malignant tonsillar tumors] Helmer M, et al. **ROFO** 1990 Jun;152(6):713–7 (Eng. Abstr.) **(Ger)**

[Reliability of exfoliative cytology in neoplasms of the oral cavity] Belli E, et al. **Minerva Stomatol** 1989 Nov; 38(11):1197–9 (Eng. Abstr.) **(Ita)**

[An endoscopy–guided plan of radiotherapy for detecting esophageal cancer using a lugol staining] Kobayashi H, et al. **Gan No Rinsho** 1990 Apr;36(5):584–8 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of tumor markers in head and neck squamous cell carcinomas] Yoneda K, et al. **Gan No Rinsho** 1990 Mar;36(4):458–64 (Eng. Abstr.) **(Jpn)**

[Clinical significance of serum levels of SCC antigen in cancers of the oral cavity] Yoshida H, et al. **Gan To Kagaku Ryoho** 1989 Nov;16(11):3595–601 (Eng. Abstr.) **(Jpn)**

[Production of hemidesmosome–specific monoclonal antibody: its application for the diagnosis of oral squamous cell carcinoma] Negishi A. **Kokubyo Gakkai Zasshi** 1990 Mar;57(1):70–82 (Eng. Abstr.) **(Jpn)**

[Cytological changes in endocrine therapies of prostatic carcinoma] Ichijo S, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 May;81(5):701–6 (Eng. Abstr.) **(Jpn)**

[Clinical significance of SCC antigen assay as a tumor marker] Kato H. **Nippon Rinsho** 1990 Feb;48 Suppl:1057–9 **(Jpn)**

[A case of epidermoid in the fourth ventricle associated with bronchial asthma–like symptom] Sakamoto M, et al. **No Shinkei Geka** 1989 Jul;17(7):663–8 (Eng. Abstr.) **(Jpn)**

[Immunocytochemical detection of antigen associated with squamous cell cancer of the cervix uteri in women] Ievleva ES, et al. **Eksp Onkol** 1990;12(4):65–7 (Eng. Abstr.) **(Rus)**

[Determination of soluble tissue–specific antigens of the human skin epithelium in neoplasms of different histogenesis] Potapenkova LS, et al. **Eksp Onkol** 1990; 12(3):37–40 (Eng. Abstr.) **(Rus)**

[A case of metachronous cancer in one lung with a 24–year detection period] Voronov AA, et al. **Grudn Khir** 1989 Jul–Aug;(4):89–91 **(Rus)**

[Differential diagnostic cytochemical signs of dysplasia of the bronchial epithelium and squamous cell carcinoma of the lung] Tikhomirova EE, et al. **Lab Delo** 1989;(9):51–3 (Eng. Abstr.) **(Rus)**

[Detection of patients with lung cancer in a tuberculosis hospital] Khanin AL, et al. **Probl Tuberk** 1990;(2):20–4 (Eng. Abstr.) **(Rus)**

[The potentials of fiber bronchoscopy with immediate cytological study in the diagnosis of lung cancer under outpatient conditions] Gorbacheva LM, et al. **Vopr Onkol** 1990;36(5):579–82 (Eng. Abstr.) **(Rus)**

[Prognostic significance of metastatic involvement of regional lymph nodes in lung cancer] Zharkov VV. **Vopr Onkol** 1990;36(1):58–62 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

A randomized EORTC study on the effect of preoperative polychemotherapy in pyriform sinus carcinoma treated by pharyngolaryngectomy and irradiation. Results from 5 to 10 years. Jortay A, et al. **Acta Chir Belg** 1990 May–Jun; 90(3):115–22

Efficacy of traditional Chinese herbs on squamous cell carcinoma of the esophagus: histopathologic analysis of 240 cases. Xian MS, et al. **Acta Med Okayama** 1989 Dec; 43(6):345–51

A phase II study of 5–fluorouracil/cisplatinum in recurrent cervical cancer. Kaern J, et al. **Acta Oncol** 1990;29(1):25–8

Radiosensitizing with cis–platin in advanced head and neck cancer. Results and problems. Klima A, et al. **Acta Otorhinolaryngol Belg** 1989;43(3):231–8

Phase II trial of carboplatin and tegafur (Ftorafur) as induction therapy in squamous–cell carcinoma of the head and neck. Gonzalez–Baron M, et al. **Am J Clin Oncol** 1990 Aug;13(4):277–9

Phase II trial of cisplatin and tegafur (Ftorafur) as initial therapy in squamous–cell carcinoma of the head and neck. Gonzalez–Baron M, et al. **Am J Clin Oncol** 1990 Aug; 13(4):312–4

Combination chemotherapy with cytosine arabinoside (Ara–C) and cis–diamminedichloroplatinum (CDDP) for squamous cancers of the upper aerodigestive tract. Margolin K, et al. **Am J Clin Oncol** 1989 Dec;12(6):494–7

5–Fluorouracil and high–dose folinic acid as second–line chemotherapy in head and neck cancer. Merlano M, et al. **Am J Clin Oncol** 1990 Feb;13(1):1–3

Echinomycin (NSC 526417) in squamous–cell carcinoma of the cervix. A phase II trial of the Gynecologic Oncology Group. Muss HB, et al. **Am J Clin Oncol** 1990 Jun; 13(3):191–3

Response and toxicity of cisplatin and 120–h 5–fluorouracil infusion in pretreated and untreated patients with advanced epidermoid cancer of the head and neck. Paccagnella A, et al. **Am J Clin Oncol** 1990 Jun;13(3):194–8

Induction chemotherapy with cisplatin and continuous infusion 5–fluorouracil in locally far–advanced head and neck cancer. Verweij J, et al. **Am J Clin Oncol** 1989 Oct; 12(5):420–4

Verdins in photodynamic therapy of squamous cell carcinoma. Hayden RE, et al. **Am J Otolaryngol** 1990 Mar–Apr;11(2):125–30

Appearance of drug–resistant tumor cells in a maxillary cancer patient undergoing chemotherapy and chemoradiotherapy. Kudoh S, et al. **Am J Otolaryngol** 1990 May–Jun;11(3):165–9

Superselective intraarterial chemotherapy in combination with irradiation: preliminary report. Shimizu T, et al. **Am J Otolaryngol** 1990 Mar–Apr;11(2):131–6

The effects of the bioflavonoid quercetin on squamous cell carcinoma of head and neck origin. Castillo MH, et al. **Am J Surg** 1989 Oct;158(4):351–5

Combined chemotherapy and radiotherapy for carcinomas of the anus. Knecht BH. **Am J Surg** 1990 May; 159(5):518–21

Continuous infusion high–dose leucovorin with 5–fluorouracil and cisplatin for untreated stage IV carcinoma of the head and neck. Dreyfuss AI, et al. **Ann Intern Med** 1990 Feb 1;112(3):167–72

Growth–inhibitory effects of epidermal growth factor on human breast cancer and carcinoma of the esophagus transplanted into nude mice. Murayama Y. **Ann Surg** 1990 Mar;211(3):263–8

Activity of the folate analog 10–ethyl, 10–deaza–aminopterin (10–EdAM) against human head and neck cancer xenografts. Brown DH, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1549–52

Chemotherapy consisting of cisplatin, doxorubicin and cyclophosphamide as an adjunct to surgery in stage Ic–II epithelial ovarian carcinoma. Gynecologic Oncology Group of the Comprehensive Cancer Center Limburg. De Pree N, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1873–5

Intrinsic and acquired multidrug resistance in human lung carcinomas grown in nude mice. Mattern J, et al. **Anticancer Res** 1990 Jan–Feb;10(1):177–80

Squamous cell carcinoma of the lower lip involving a large cutaneous surface. Photodynamic therapy as an alternative therapy. Gross DJ, et al. **Arch Dermatol** 1990 Sep; 126(9):1148–50

Tumor necrosis factor and cytotoxic agents. Effect on squamous carcinoma lines. Gapany M, et al. **Arch Otolaryngol Head Neck Surg** 1990 Apr;116(4):436–9

Neutropenic enterocolitis. A new complication of head and neck cancer chemotherapy. Petruzzelli GJ, et al. **Arch Otolaryngol Head Neck Surg** 1990 Feb;116(2):209–11

Induction chemotherapy with cisplatinum, 5–fluorouracil, bleomycin, mitomycin C and hydroxyurea for previously untreated locally advanced squamous cell carcinomas of the head and neck. Fountzilas G, et al. **Arch Otorhinolaryngol** 1989;246(5):373–7

In vitro and in vivo induction of squamous cell carcinoma antigen (SCC) in a uterine cervical cancer cell line (SKG–IIIa) with peplomycin and sodium butyrate. Nozawa S, et al. **Asia Oceania J Obstet Gynaecol** 1990 Jun;16(2):153–60

Treatment of advanced squamous cell carcinoma [letter; comment] Kearsley JH. **Aust N Z J Med** 1989 Dec; 19(6):745–6 Comment on: Aust N Z J Med 1989 Feb;19(1):83–4.

A phase III randomised trial of cisplatinum, methotrextate, cisplatinum + methotrexate and cisplatinum + 5–FU in end stage squamous carcinoma of the head and neck. Liverpool Head and Neck Oncology Group [published erratum appears in Br J Cancer 1990 Jul;62(1):171] **Br J Cancer** 1990 Feb;61(2):311–5

Adjuvant chemotherapy in head and neck cancer. Stell PM, et al. **Br J Cancer** 1990 May;61(5):779–87

Complete response to pre–operative chemotherapy in stage III B cervical carcinoma. Case report [letter; comment] Divers MJ. **Br J Obstet Gynaecol** 1989 Jun;96(6):753–4 Comment on: Br J Obstet Gynaecol 1988 Sep;95(9):946–8.

Sustained complete remission of stage IVb carcinoma of the cervix with cis–platinum, methotrexate and bleomycin chemotherapy. Burnet NG, et al. **Br J Radiol** 1989 Sep; 62(741):856–9

Simultaneous versus sequential combined technique therapy for squamous cell head and neck cancer. Adelstein DJ, et al. **Cancer** 1990 Apr 15;65(8):1685–91

Chemotherapy with cisplatin and 5–fluorouracil for penile and urethral squamous cell carcinomas. Hussein AM, et al. **Cancer** 1990 Feb 1;65(3):433–8

Squamous cell carcinoma in epidermolysis bullosa. Treatment with systemic chemotherapy. Lentz SR, et al. **Cancer** 1990

Sep 15;66(6):1276–8 (15 ref.)
Low prevalence of cisplatin–induced neuropathy after 4–day continuous infusion in head and neck cancer. Sebille A, et al. **Cancer** 1990 Jun 15;65(12):2644–7
Inoperable nonmetastatic squamous cell carcinoma of the esophagus managed by concomitant chemotherapy (5–fluorouracil and cisplatin) and radiation therapy. Seitz JF, et al. **Cancer** 1990 Jul 15;66(2):214–9
A phase II study of cisplatin and continuous infusion of vindesine in metastatic head and neck squamous cell cancer. Tellez–Bernal E, et al. **Cancer** 1990 Aug 15;66(4):640–4
A phase II study of ifosfamide in endometrial cancer. Barton C, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S4–6
The potential for adjuvant therapy in early–stage cervical cancer. Buxton EJ, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S17–21
Ifosfamide and mesna at high doses for the treatment of cancer of the cervix: a GETLAC study. Cervellino JC, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S1–3
Cisplatin–ifosfamide as neoadjuvant chemotherapy in stage IIIB cervical uterine squamous–cell carcinoma. Lara PC, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S36–8
Antitumor activity of brequinar sodium (Dup–785) against human head and neck squamous cell carcinoma xenografts. Braakhuis BJ, et al. **Cancer Lett** 1990 Feb;49(2):133–7
The role of chemotherapy in the treatment of squamous cell tumors of the esophagus. Leichman L. **Cancer Treat Res** 1989;42:127–49 (74 ref.)
Balloon–occluded arterial infusion therapy in the treatment of primary and recurrent gynecologic malignancies. Yamashita Y, et al. **Cardiovasc Intervent Radiol** 1989 Jul–Aug;12(4):188–95
Photodynamic therapy of early–stage lung cancer. Kato H, et al. **Ciba Found Symp** 1989;146:183–94; discussion 195–7
Endoscopic photodynamic therapy with hematoporphyrin derivative for primary treatment of gastrointestinal neoplasms in inoperable patients. Patrice T, et al. **Dig Dis Sci** 1990 May;35(5):545–52
Phase II multicentre study of the nitrosourea fotemustine in inoperable squamous cell lung carcinoma. Le Chevalier T, et al. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1651–2
96–hour continuous infusion of cis–platinum, 5–fluorouracil and bleomycin in recurrent or metastatic head and neck squamous cell carcinoma, unexpected anemia. Recondo G, et al. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1529–33
A phase II trial of TCNU in patients with squamous, adeno and large cell carcinoma of the lung. Vibe–Petersen J, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1881–5
Neoadjuvant chemotherapy with cisplatin, methotrexate, bleomycin and vincristine (CABO) in patients with stage III and IV squamous cell carcinoma of the head and neck. Recioux P, et al. **Eur J Surg Oncol** 1989 Dec;15(6):568–74
Bleomycin, methotrexate, and CCNU in advanced inoperable squamous cell carcinoma of the vulva: a phase II study of the EORTC Gynaecological Cancer Cooperative Group (GCCG). Durrant KR, et al. **Gynecol Oncol** 1990 Jun; 37(3):359–62
Histologic disappearance of locally advanced vaginal cancer after combination chemotherapy. Kim DS, et al. **Gynecol Oncol** 1990 Jul;38(1):144–5
Effective chemotherapy consisting of bleomycin, vincristine, mitomycin C, and cisplatin (BOMP) for a patient with inoperable vulvar cancer. Shimizu Y, et al. **Gynecol Oncol** 1990 Mar;36(3):423–7
Circulating immune complexes and chemotherapy response in patients with head and neck cancer. Blazar BA, et al. **Head Neck** 1989 Sep–Oct;11(5):431–6
Preclinical chemotherapy on human head and neck cancer xenografts grown in athymic nude mice. Braakhuis BJ, et al. **Head Neck** 1989 Nov–Dec;11(6):511–5
Response to chemotherapy as justification for modification of the therapeutic strategy for pharyngolaryngeal carcinomas. Demard F, et al. **Head Neck** 1990 May–Jun; 12(3):225–31
Heavy water enhances the antineoplastic effect of 5–fluoro–uracil and bleomycin in nude mice bearing human carcinoma. Altermatt HJ, et al. **Int J Cancer** 1990 Mar 15;45(3):475–80
Inefficacy of methylglyoxal bis(guanylhydrazone) (MGBG) in patients with recurrent head and neck squamous cell carcinoma. Arteaga CL, et al. **Invest New Drugs** 1989 Jul; 7(2–3):281–3
Phase II study of esorubicin (4'–deoxydoxorubicin) in advanced or metastatic squamous carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. McGuire WP, et al. **Invest New Drugs** 1989 Jul;7(2–3):235–8
Phase II study of N–methylformamide (N–MF) (NSC 3051) in patients with advanced squamous cancer of the cervix. A Gynecologic Oncology Group study. McGuire WP 3d, et al. **Invest New Drugs** 1990 May;8(2):195–7
Evaluation of homoharringtonine efficacy in the treatment of squamous cell carcinoma of the head and neck: a phase II Illinois Cancer Council Study. Runge–Morris MA, et al. **Invest New Drugs** 1989 Jul;7(2–3):269–73
A phase II clinical trial of diaziquone (AZQ) in the treatment of patients with recurrent adenocarcinoma and adenosquamous carcinoma of the cervix. A Gynecologic Oncology Group study. Slayton RE, et al. **Invest New Drugs** 1989 Nov;7(4):337–40
Phase II study of ifosfamide and mesna in patients with previously–treated carcinoma of the cervix. A Gynecologic Oncology Group study. Sutton GP, et al. **Invest New Drugs** 1989 Nov;7(4):341–3
A phase II study of mitoxantrone in advanced squamous cell cancer of the head and neck. Wheeler H, et al. **Invest New Drugs** 1990 Feb;8(1):109–11
Effect of low doses of interleukin–2 injected perilymphatically and peritumorally in patients with advanced primary head and neck squamous cell carcinoma. Musiani P, et al. **J Biol Response Mod** 1989 Dec;8(6):571–8
Treatment of advanced and/or metastatic epidermoid carcinoma of the head and neck: an effective combination chemotherapy with bleomycin, methotrexate and ftorafur. Adamo V, et al. **J Chemother** 1989 Oct;1(5):338–41
Modulation of the antitumor effect of methotrexate by low–dose leucovorin in squamous cell head and neck cancer: a randomized placebo–controlled clinical trial. Browman GP, et al. **J Clin Oncol** 1990 Feb;8(2):203–8 (22 ref.)
Cisplatin–based chemotherapy in advanced basal and squamous cell carcinomas of the skin: results in 28 patients including 13 patients receiving multimodality therapy. Guthrie TH Jr, et al. **J Clin Oncol** 1990 Feb;8(2):342–6
Efficacy of adjuvant chemotherapy for patients with resectable head and neck cancer: a subset analysis of the Head and Neck Contracts Program. Jacobs C, et al. **J Clin Oncol** 1990 May;8(5):838–47
A phase II evaluation of mitolactol in patients with advanced squamous cell carcinoma of the cervix: a Gynecologic Oncology Group Study. Stehman FB, et al. **J Clin Oncol** 1989 Dec;7(12):1892–5
Regional chemotherapy of inoperable maxillofacial tumours combined with radiotherapy. Long–term results. Hollmann K, et al. **J Craniomaxillofac Surg** 1990 Feb;18(2):88–90
Cisplatin combination chemotherapy in squamous cell carcinoma and adenoid cystic carcinoma of the skin. Ikegawa S, et al. **J Dermatol** 1989 Jun;16(3):227–30
A comparison of the effects of antitumor agents upon normal human epidermal keratinocytes and human squamous cell carcinoma. Firestone WM, et al. **J Invest Dermatol** 1990 May;94(5):657–61
Chemotherapy for squamous cell carcinoma of the head and neck: an overview. Espinola TE, et al. **J La State Med Soc** 1990 Jul;142(7):15–8 (11 ref.)
Carcinoma of the nasal vestibule: report of 12 cases. Barzan L, et al. **J Laryngol Otol** 1990 Jan;104(1):9–11
Cis–platinum and mitomycin–C in treatment of recurrent, metastatic, or residual uterine cervical cancer post radiation. Senapad S, et al. **J Med Assoc Thai** 1989 Jul; 72(7):382–6
High complete response in advanced nasopharyngeal carcinoma with bleomycin, epirubicin, and cisplatin before radiotherapy. Bachouchi M, et al. **J Natl Cancer Inst** 1990 Apr 4;82(7):616–20
A phase II study of vindesine in the treatment of esophageal carcinoma. Japanese Esophageal Oncology Group. Lizuka T, et al. **Jpn J Clin Oncol** 1989 Dec;19(4):380–3
Reappraisal of bronchial arterial infusion therapy for advanced lung cancer. Watanabe Y, et al. **Jpn J Surg** 1990 Jan;20(1):27–35
Tamoxifen therapy in patients with recurrent laryngeal squamous carcinoma. Urba SG, et al. **Laryngoscope** 1990 Jan;100(1):76–8 (11 ref.)
Long–term survival of a lung cancer patient treated with photodynamic therapy. Nelson JS, et al. **Lasers Surg Med** 1990;10(2):208–10
Curaderm—or is it? [letter; comment] Cham B, et al. **Med J Aust** 1990 Mar 19;152(6):329–30 Comment on: Med J Aust 1989 Nov 6;151(9):541–2.
Phase II study of mitozolomide (M & B 39,565) in head and neck cancer. Herait P, et al. **Med Oncol Tumor Pharmacother** 1989;6(4):267–9
Systemic therapy of head and neck cancer: most effective agents, areas of promise. Urba SG, et al. **Oncology (Williston Park)** 1989 Apr;3(4):79–88; discussion 88, 90, 97–8 (67 ref.)
Phase II evaluation of carboplatin in advanced esophageal carcinoma. A trial of the Phase I/II Study Group of the Association for Medical Oncology of the German Cancer Society. Queisser W, et al. **Onkologie** 1990 Jun;13(3):190–3
Photodynamic therapy for treatment of head and neck cancer. Schweitzer VG. **Otolaryngol Head Neck Surg** 1990 Mar;102(3):225–32 (35 ref.)
Retinoids as potential chemopreventive agents in squamous cell carcinoma of the head and neck. Lippman SM, et al. **Prev Med** 1989 Sep;18(5):740–8 (58 ref.)
Hemolytic uremic syndrome following cisplatin, bleomycin, and vincristine chemotherapy: a report of a case and a review of the literature. Gardner G, et al. **Ren Fail** 1989; 11(2–3):133–7 (23 ref.)
Induction chemotherapy in head and neck cancer: present status and future. Advani SH, et al. **Semin Surg Oncol** 1989; 5(5):337–40
Preliminary experience with mitomycin, vinblastine and cisplatin (MVP) combination chemotherapy in the treatment of advanced non–small cell lung cancer at University Hospital, Kuala Lumpur. Lee SM. **Singapore Med J** 1990 Jun;31(3):228–32
[Adjuvant chemotherapy with biocisplatin, methotrexate and biocarbazine in advanced bladder tumors] Ormanov I, et al. **Khirurgiia (Sofiia)** 1989;42(6):45–8 (Eng. Abstr.) **(Bul)**
[The role of selective bronchial arterial infusion in the comprehensive treatment of advanced bronchial carcinoma] Sun SL. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Oct; 12(5):286–7, 319 (Eng. Abstr.) **(Chi)**
[Hematoporphyrin derivative (HPD) plus laser photodynamic therapy for nasopharyngeal carcinoma—analysis of 57 cases] Sun ZQ. **Chung Hua Chung Liu Tsa Chih** 1990 Mar;12(2):120–2 (Eng. Abstr.) **(Chi)**
[Effects of pingyangmycin on the growth and differentiation of the transplantable squamous cell carcinoma of forestomach (GS–742) in mice] Wang FR. **Chung Hua Chung Liu Tsa Chih** 1989 Sep;11(5):326–8 (Eng. Abstr.) **(Chi)**
[A preliminary experience of chemotherapy using cisplatin (CDDP) in oral and maxillofacial carcinoma] Qiu WL. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Mar; 24(2):69–71, 127 (Eng. Abstr.) **(Chi)**
[Intra–arterial chemotherapy of ORL cancer. Value of an implantable infusion system and scintigraphic monitoring] Santini J, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(8):557–60 (Eng. Abstr.) **(Fre)**
[Results of a phase II study of the combination of cis–platinum and 5–FU in epidermoid or undifferentiated large cell bronchial cancer] Rivière A, et al. **Bull Cancer (Paris)** 1989;76(10):1095–102 (Eng. Abstr.) **(Fre)**
[Neo–adjuvant radio–chemotherapy of epidermoid carcinoma of the esophagus] Hellbardt A, et al. **Helv Chir Acta** 1989 Dec;56(4):435–41 (Eng. Abstr.) **(Fre)**
[Epidermoid carcinoma of the esophagus: preliminary results of combined treatment] Merlini M, et al. **Helv Chir Acta** 1989 Dec;56(4):431–4 (Eng. Abstr.) **(Fre)**
[Results of treatment of squamous cell carcinoma of the mouth and the oropharynx] Tiedemann R. **Auris Nasus Larynx** 1989;16 Suppl 1:S111–8 **(Ger)**
[The course of squamous cell carcinoma antigen and CEA as prognostic criteria for response to chemotherapy in cervix cancer] Meier W, et al. **Geburtshilfe Frauenheilkd** 1989 Dec;49(12):1050–5 (Eng. Abstr.) **(Ger)**
[The course of squamous cell cancer antigen in chemotherapy as a prognostic criterion in cervix cancer] Meier W, et al. **Gynakol Rundsch** 1989;29 Suppl 2:411–2 **(Ger)**
[Photodynamic laser tumor therapy with a hematoporphyrin derivative in spinocellular carcinoma of the external ear] Feyh J, et al. **Laryngorhinootologie** 1989 Oct;68(10):563–5 (Eng. Abstr.) **(Ger)**
[Phase II study with pirarubicin in pretreated progressive head–neck neoplasms] Iro H, et al. **Laryngorhinootologie** 1990 Mar;69(3):131–4 (Eng. Abstr.) **(Ger)**
[Factors modifying remission in cytostatic chemotherapy of squamous cell carcinoma recurrence in the area of the head and neck] Scherlacher A, et al. **Laryngorhinootologie** 1989 Aug;68(8):425–32 (Eng. Abstr.) **(Ger)**
[Application of the 6–day subrenal capsule assay for sensitivity testing of antineoplastic chemotherapy in oral mucosa carcinoma] Fröhlich M, et al. **Zahn Mund Kieferheilkd** 1989;77(5):427–32 (Eng. Abstr.) **(Ger)**
[Perilymphatic injection of interleukin–2 (IL–2) in recurrent squamous cell carcinoma of the head and neck] Cortesina G, et al. **Acta Otorhinolaryngol Ital** 1989 Sep–Oct; 9(5):453–61 (Eng. Abstr.) **(Ita)**
[Adjuvant and first line chemotherapy of carcinoma of the ovary. Current approaches] Sesti F, et al. **G Ital Oncol** 1989 Oct–Dec;9(4):113–6 (33 ref.) (Eng. Abstr.) **(Ita)**
[Chemotherapy of carcinoma of the vulva and vagina. Current approaches] Sesti F, et al. **G Ital Oncol** 1989 Oct–Dec;9(4):117–20 (14 ref.) (Eng. Abstr.) **(Ita)**
[Results of combined therapy of irradiation and intra–arterial one–shot injection of cisplatin for head and neck cancers] Mariya Y, et al. **Gan No Rinsho** 1990 May;36(6):675–9 (Eng. Abstr.) **(Jpn)**
[Case report of a patient with advanced pelvic and ureteral cancer whose primary lesion could be enucleated after cytoreduction by modified CAP regimen] Mikata N, et al. **Gan No Rinsho** 1989 Dec;35(15):1807–11 (Eng. Abstr.) **(Jpn)**
[Successful treatment of advanced hypopharyngeal cancer with combination chemotherapy (VPCP regimen) followed by subsequent radiotherapy: a case report] Kawaida M, et al. **Gan To Kagaku Ryoho** 1989 Dec;16(12):3787–90 (Eng. Abstr.) **(Jpn)**
[Chemosensitivity testing of anticancer agents in head and neck tumors. I: Comparison between head and neck squamous cell cancers and thyroid cancers] Nakashima T, et al. **Gan To Kagaku Ryoho** 1990 Jan;17(1):79–84 (Eng. Abstr.) **(Jpn)**
[Combination chemotherapy with bleomycin ointment and lysozyme ointment against mouse WHT squamous cell carcinoma] Sakai M, et al. **Gan To Kagaku Ryoho** 1990 Jan;17(1):103–7 (Eng. Abstr.) **(Jpn)**
[A case of recurrent lung cancer complicated acute interstitial pneumonia, just after injected peplomycin] Shimizu T, et al. **Gan To Kagaku Ryoho** 1990 Sep;17(9):1941–4 (Eng. Abstr.) **(Jpn)**
[Clinical and pathological evaluations of methotrexate, vinblastine, adriamycin and cisplatin (M–VAC) chemotherapy for advanced urothelial cancers] Takenaka A, et al. **Gan To Kagaku Ryoho** 1990 Sep;17(9):1909–15 (Eng. Abstr.) **(Jpn)**
[A case of advanced thoracic esophageal cancer with marked

response to bleomycin absorbed on activated carbon particles (BLM-CH44), methotrexate, and cisplatin] Yokoyama Y, et al. **Gan To Kagaku Ryoho** 1990 Jun; 17(6):1217-20 (Eng. Abstr.) **(Jpn)**

[Transcatheter intra-arterial injection of combination drugs in case of advanced uterine cervical cancer] Kinashi Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 May 20; 25(5):946-51 (Eng. Abstr.) **(Jpn)**

[Intravaginal administration of CDDP in cervical cancer] Nakayama K, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Apr 20;25(4):826-9 (Eng. Abstr.) **(Jpn)**

[Experimental study relating to the anti-cancer effect of doxifluridine] Zhao L, et al.
Nippon Gan Chiryo Gakkai Shi 1990 Jun 20;25(6):1182-9 (Eng. Abstr.) **(Jpn)**

[Combination chemotherapy of M-VAC (methotrexate, vinblastine, adriamycin and cisplatin) for advanced uroepithelial cancer] Hatachi K, et al.
Nippon Hinyokika Gakkai Zasshi 1990 Mar;81(3):433-8 (Eng. Abstr.) **(Jpn)**

[Feasibility of subrenal capsule assay as chemosensitivity test for primary esophageal cancer] Fukui H.
Nippon Kyobu Geka Gakkai Zasshi 1989 Jun;37(6):1121-30 (Eng. Abstr.) **(Jpn)**

[Photodynamic therapy in early stage lung cancer using an excimer dye laser] Hayata Y, et al. **Nippon Rinsho** 1990 Jan;48(1):201-7 (18 ref.) **(Jpn)**

[Studies on renal dysfunction after intra-arterial hypertensive chemotherapy (CDDP, PEP) for advanced cancer of the uterine cervix--serum.urinary alpha 1-microglobulin, beta 2-microglobulin and urinary lysozyme, albumin] Iwanari O, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Feb; 42(2):115-20 (Eng. Abstr.) **(Jpn)**

[Assessment of individual sensitivity to chemotherapy of human pulmonary tumors transplanted to subrenal capsule of CBA mice] Skotinkova OI, et al. **Eksp Onkol** 1990; 12(4):71-3 (Eng. Abstr.) **(Rus)**

[Polychemotherapy with platidiam and prospidin in disseminated squamous-cell lung cancer] Mishin IuB, et al. **Vopr Onkol** 1990;36(7):866-70 (Eng. Abstr.) **(Rus)**

[Rational approaches to selective synthesis of antimetastatic agents] Nifontov VI, et al. **Vopr Onkol** 1990;36(1):37-40 (Eng. Abstr.) **(Rus)**

[Role of systemic chemotherapy in the treatment of infiltrating cancer of the bladder (editorial)] Gardella S, et al. **Med Clin (Barc)** 1989 Dec 2;93(18):693-5 **(Spa)**

ENZYMOLOGY

Evidence for cells possessing t-PA like activity in smears obtained from patients with oral squamous cell carcinoma. Steven FS, et al. **Anticancer Res** 1990 Jul-Aug;10(4):995-9

Comparison of pyrimidine nucleotide synthetic enzymes involved in 5-fluorouracil metabolism between human adenocarcinomas and squamous cell carcinomas. Maehara Y, et al. **Cancer** 1990 Jul 1;66(1):156-61

Plasminogen activator mediated degradation of subendothelial extracellular matrix by human squamous carcinoma cell lines. Niedbala MJ, et al.
Cancer Commun 1990;2(5):189-99

The status of trypsin-like enzymes in squamous-cell carcinoma of the head and neck region. Steven FS, et al. **J Cancer Res Clin Oncol** 1990;116(1):57-64

Lactate dehydrogenase isoenzymes in squamous cell carcinomas of the oral cavity. Görögh T, et al.
J Oral Pathol Med 1990 Feb;19(2):56-9

Neuron-specific enolase during chemotherapy of small cell lung cancer. Buamah PK, et al. **J Surg Oncol** 1990 May; 44(1):1-4

EPIDEMIOLOGY

Occupation and squamous cell cancers of the pharynx and sinonasal cavity. Vaughan TL. **Am J Ind Med** 1989; 16(5):493-510

Clinical features of adenosquamous lung carcinoma in 127 patients. Sridhar KS, et al. **Am Rev Respir Dis** 1990 Jul; 142(1):19-23

Squamous cell carcinoma. A population-based incidence study in Rochester, Minn. Chuang TY, et al.
Arch Dermatol 1990 Feb;126(2):185-8

Blood transfusion and other risk factors for recurrence of cancer of the head and neck. Jones KR, et al.
Arch Otolaryngol Head Neck Surg 1990 Mar;116(3):304-9

Esophageal reflux and secondary malignant neoplasia at laryngoesophagectomy. Price JC, et al.
Arch Otolaryngol Head Neck Surg 1990 Feb;116(2):163-4

Cervical cancer in South Australia: trends in incidence, mortality and case survival. Bonett A, et al.
Aust N Z J Obstet Gynaecol 1989 Aug;29(3 Pt 1):193-6

Trends in invasive cancer of the cervix uteri in New South Wales, 1973-1982. McCredie M, et al.
Aust N Z J Obstet Gynaecol 1989 Aug;29(3 (Pt 2)):335-9

Carcinoma of the bronchus in young adults. Seddon DJ, et al. **Br J Clin Pract** 1990 Jan;44(1):24-5

Incidence of non-melanoma skin cancer in West Glamorgan, South Wales. Roberts DL. **Br J Dermatol** 1990 Mar; 122(3):399-403

Multiple primaries in mouth cancer--the price of success. Carr RJ, et al. **Br J Oral Maxillofac Surg** 1989 Oct; 27(5):394-9

Bladder tumours in Enugu, Nigeria. Aghaji AE, et al.
Br J Urol 1989 Oct;64(4):399-402

Intraoral squamous cell carcinoma. Epidemiologic patterns in Connecticut from 1935 to 1985. Chen JK, et al.
Cancer 1990 Sep 15;66(6):1288-96

Association of nonmelanoma skin cancer and actinic keratosis with cumulative solar ultraviolet exposure in Maryland watermen. Vitasa BC, et al. **Cancer** 1990 Jun 15; 65(12):2811-7

The use of biomarkers in the prediction of survival in patients with pulmonary carcinoma. Walop W, et al. **Cancer** 1990 May 1;65(9):2033-46

An analysis of epidemic factors in cervical cancer by conditional logistic regression model. Chen YX, et al.
Chin Med J [Engl] 1990 Jan;103(1):55-60

Prognosis in laryngeal carcinoma: tumour factors. Stell PM.
Clin Otolaryngol 1990 Feb;15(1):69-81

Barrier methods of contraception and the risk of cervical neoplasia. Parazzini F, et al. **Contraception** 1989 Nov; 40(5):519-30 (17 ref.)

A prospective surgical pathological study of stage I squamous carcinoma of the cervix: a Gynecologic Oncology Group Study. Delgado G, et al. **Gynecol Oncol** 1989 Dec; 35(3):314-20

Relapse patterns in FIGO stage IB carcinoma of the cervix. Look KY, et al. **Gynecol Oncol** 1990 Jul;38(1):114-20

Epidemiologic study of oral cancer in eastern India. Chattopadhyay A. **Indian J Dermatol** 1989 Sep;34(3):59-65

A 10 year retrospective study of esophageal cancer from 1974-1983 in Punjab. Prabhakar BR, et al.
Indian J Pathol Microbiol 1987 Apr;30(2):219-25

Incidence and determinants of skin cancer in a high-risk Australian population. Green A, et al. **Int J Cancer** 1990 Sep 15;46(3):356-61

A case-control investigation of cancer of the oral tongue and the floor of the mouth in southern India. Sankaranarayanan R, et al. **Int J Cancer** 1989 Oct 15; 44(4):617-21

Increased risk of urothelial cancer in Stockholm during 1985-87 after exposure to benzene and exhausts. Steineck G, et al. **Int J Cancer** 1990 Jun 15;45(6):1012-7

Vitamin A supplements, fried foods, fat and urothelial cancer. A case-referent study in Stockholm in 1985-87. Steineck G, et al. **Int J Cancer** 1990 Jun 15;45(6):1006-11

Silica exposure and lung cancer in ceramic workers: a case-control study. Meijers JM, et al. **Int J Epidemiol** 1990 Mar;19(1):19-25

Cellular radiosensitivity of primary head and neck squamous cell carcinomas and local tumor control. Brock WA, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1283-6

Colorectal cancer in young patients. Barillari P, et al.
Int Surg 1989 Oct-Dec;74(4):240-3

Epidemiologic and demographic update in oral cancer: California and national data--1973 to 1985. Silverman S Jr, et al. **J Am Dent Assoc** 1990 May;120(5):495-9

Sex ratio of laryngeal cancer by anatomical site [letter]
J Clin Epidemiol 1990;43(7):729-31

The relationship between solar keratoses and squamous cell carcinomas among Japanese. Takemiya M, et al.
J Dermatol 1990 Jun;17(6):342-6

The emerging epidemic of melanoma and squamous cell skin cancer [see comments] Glass AG, et al. **JAMA** 1989 Oct 20;262(15):2097-100 Comment in: JAMA 1990 Apr 4;263(13):1766-7.

The epidemic of squamous cell carcinoma. Weinstock MA. **JAMA** 1989 Oct 20;262(15):2138-40

Squamous cell carcinoma of the thyroid--a report of three cases. Tsuchiya A, et al. **Jpn J Surg** 1990 May;20(3):341-5 (21 ref.)

Skin cancer in Geraldton, Western Australia: a survey of incidence and prevalence. Kricker A, et al.
Med J Aust 1990 Apr 16;152(8):399-407

The role of childhood exposure to sunlight in the development of solar keratoses and non-melanocytic skin cancer [see comments] Marks R, et al. **Med J Aust** 1990 Jan 15;152(2):62-6 Comment in: Med J Aust 1990 Jan 15;152(2):60-1.

Oral cancer in India: an epidemiologic and clinical review. Sankaranarayanan R. **Oral Surg Oral Med Oral Pathol** 1990 Mar;69(3):325-30 (51 ref.)

Incidence of skin cancer after renal transplantation in The Netherlands. Hartevelt MM, et al. **Transplantation** 1990 Mar;49(3):506-9

[Results of the Leiden mass screening for cervix uteri carcinoma; the 'young' (24-34 years) versus the 'old' (35-54 years) group of women] Boon ME, et al.
Ned Tijdschr Geneeskd 1990 Aug 11;134(32):1545-9 (Eng. Abstr.) **(Dut)**

[Hypopharyngeal cancer in the Northern region and Pas-de-Calais. Epidemiological factors] Lefebvre JL, et al. **Acta Chir Belg** 1990 May-Jun;90(3):123-8 (Eng. Abstr.) **(Fre)**

[Prevalence of squamous carcinoma of the larynx] Sartoris A, et al. **Acta Otorhinolaryngol Ital** 1990;10 Suppl 27:19-29 (Eng. Abstr.) **(Ita)**

[Prevalence of cancer of the oral cavity and oropharynx] Succo G, et al. **Acta Otorhinolaryngol Ital** 1990;10 Suppl 27:31-40 (Eng. Abstr.) **(Ita)**

[Squamous carcinoma of the lip. Review of 98 cases] Silvestri F, et al. **Pathologica** 1989 Sep-Oct;81(1075):505-14 (Eng. Abstr.) **(Ita)**

[Multiple primary cancers of the head and neck] Aibara R, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1990 Mar; 93(3):381-7 (Eng. Abstr.) **(Jpn)**

[The incidence of bladder tumor recurrences after transurethral resection during combined treatment] Matveev BP, et al. **Urol Nefrol (Mosk)** 1990 May-Jun; (3):53-6 (Eng. Abstr.) **(Rus)**

[The determination of the level of antibodies to Epstein-Barr virus antigens in organizing groups at high risk for lung cancer disease] Zyrianov BN, et al. **Vopr Onkol** 1990; 36(5):545-9 (Eng. Abstr.) **(Rus)**

[Descriptive study of cancer of the larynx in Guadalajara (1975-1985)] Núñez Martí MJ, et al.
Acta Otorrinolaringol Esp 1988 Jan-Feb;39(1):5-11 (Eng. Abstr.) **(Spa)**

[Peristomal recurrence after total laryngectomy] Lahoz Zamarro MT, et al. **An Otorrinolaringol Ibero Am** 1989; 16(6):649-57 (Eng. Abstr.) **(Spa)**

ETHNOLOGY

Cervical cancer in Jewish women. Glezerman M, et al.
Am J Obstet Gynecol 1989 Nov;161(5):1186-90

ETIOLOGY

Xeroderma pigmentosum: squamous cell carcinoma of the tongue. Keukens F, et al. **Acta Derm Venereol (Stockh)** 1989;69(6):530-1

Smoking and cervical cancer--current status: a review. Winkelstein W Jr. **Am J Epidemiol** 1990 Jun;131(6):945-57; discussion 958-60 (73 ref.)

Diet and the risk of invasive cervical cancer among white women in the United States. Ziegler RG, et al.
Am J Epidemiol 1990 Sep;132(3):432-45

Squamous cell carcinoma after endoscopic injection sclerotherapy for esophageal varices. Kokudo N, et al.
Am J Gastroenterol 1990 Jul;85(7):861-4 (17 ref.)

Radiation-induced esophageal injury: a spectrum from esophagitis to cancer. Vanagunas A, et al.
Am J Gastroenterol 1990 Jul;85(7):808-12

The association of chronic inflammatory disease in lichen planus with cancer of the oral cavity. Deeb ZE, et al.
Am J Otolaryngol 1989 Sep-Oct;10(5):314-6

Epidemiology of human papillomavirus (HPV) infections and their associations with genital squamous cell cancer. Review article. Syrjänen KJ. **APMIS** 1989 Nov; 97(11):957-70 (72 ref.)

Human papillomavirus DNA in squamous cell carcinoma of the upper aerodigestive tract. Ishibashi T, et al.
Arch Otolaryngol Head Neck Surg 1990 Mar;116(3):294-8

Squamous cell carcinoma in a patient on clean intermittent self-catheterisation. Sene AP, et al. **Br J Urol** 1990 Feb; 65(2):213-4

Marijuana smoking and carcinoma of the tongue. Is there an association? Caplan GA, et al. **Cancer** 1990 Sep 1; 66(5):1005-6 (15 ref.)

Cutaneous and mucosal neoplasms in bone marrow transplant recipients. Lishner M, et al. **Cancer** 1990 Feb 1;65(3):473-6

Mate drinking, alcohol, tobacco, diet, and esophageal cancer in Uruguay. De Stefani E, et al. **Cancer Res** 1990 Jan 15; 50(2):426-31

Pathohistogenetic approach on the etiology of Yunnan tin miner's lung cancer. Sun SQ, et al. **Chin Med J [Engl]** 1989 May;102(5):347-55

High cumulative dose of ultraviolet radiation is a contraindication for cyclosporin therapy [letter] Korstanje MJ, et al. **Clin Exp Dermatol** 1990 Jan;15(1):76

Reticulate pigmented anomaly of the flexures (Dowling-Degos disease): a case report associated with hidradenitis suppurativa and squamous cell carcinoma. Weber LA, et al. **Cutis** 1990 Jun;45(6):446-50

Bilateral squamous cell carcinomas arising in long-standing necrobiosis lipoidica. Beljaards RC, et al. **Dermatologica** 1990;180(2):96-8

Squamous cell carcinoma arising on a congenital fissure of the lower lip. Serrano S, et al. **Dermatologica** 1990; 180(3):171-3

Human papillomaviruses and anal cancer. Oriel JD.
Genitourin Med 1989 Aug;65(4):213-5 (35 ref.)

Vulvar adenosquamous carcinoma arising in a hidradenoma papilliferum, with rapidly fatal outcome: case report. Bannatyne P, et al. **Gynecol Oncol** 1989 Dec;35(3):395-8

Carcinoma of the esophagus in a hemophiliac infected with the human immunodeficiency virus [letter] Cavanna L, et al. **Haematologica (Pavia)** 1989 Jul-Aug;74(4):411-2

Risk factors for simultaneous carcinoma of the head and neck. Hsairi M, et al. **Head Neck** 1989 Sep-Oct;11(5):426-30

Enhancement of u.v.-induced skin carcinogenesis in the hairless mouse by inoculation with cell-free extracts of skin tumours. Reeve VE, et al. **Immunol Cell Biol** 1989 Dec; 67 (Pt 6):421-7

Squamous cell carcinoma developing in trophic ulcers of leprosy--report of 2 cases. Girdhar M, et al.
Indian J Lepr 1990 Jan-Mar;62(1):126-8

Tobacco and alcohol as risk factors in cancer of the larynx in Kerala, India. Sankaranarayanan R, et al.
Int J Cancer 1990 May 15;45(5):879-82

The relationship of sun exposure and solar elastosis to skin cancer in a high risk population. Carey FA, et al.
Ir J Med Sci 1990 Feb;159(2):44-7

Two distinct squamous cell carcinomas in a psoriasis patient receiving low-dose cyclosporine maintenance treatment. Bos JD, et al. **J Am Acad Dermatol** 1989 Dec;21(6):1305-6

Radioactive gold ring dermatitis. Miller RA, et al.
J Am Acad Dermatol 1990 Aug;23(2 Pt 2):360-2

Disseminated porokeratosis accompanying multicentric Bowen's disease. Characterization of porokeratotic lesions progressing to Bowen's disease. Otsuka F, et al. **J Am Acad Dermatol** 1990 Aug;23(2 Pt 2):355–9

Post-traumatic squamous-cell carcinoma. Lifeso RM, et al. **J Bone Joint Surg [Am]** 1990 Jan;72(1):12–8

Squamous cell carcinoma in situ (Bowen's disease) arising in seborrheic keratosis: three lesions in two patients. Monteagudo JC, et al. **J Cutan Pathol** 1989 Dec; 16(6):348–52

Anal cancer incidence: genital warts, anal fissure or fistula, hemorrhoids, and smoking. Holly EA, et al. **J Natl Cancer Inst** 1989 Nov 15;81(22):1726–31

Radiation-induced esophageal cancer: a case report and a review of the literature. Shimizu T, et al. **Jpn J Surg** 1990 Jan;20(1):97–100

Squamous carcinoma of the head and neck in organ transplant recipients: possible role of oncogenic viruses. Bradford CR, et al. **Laryngoscope** 1990 Feb;100(2 Pt 1):190–4

Phototherapy and photochemotherapy [editorial; comment] Epstein JH. **N Engl J Med** 1990 Apr 19;322(16):1149–51 Comment on: N Engl J Med 1990 Apr 19;322(16):1093–7.

Genital tumors among men with psoriasis exposed to psoralens and ultraviolet A radiation (PUVA) and ultraviolet B radiation. The Photochemotherapy Follow-up Study [see comments] Stern RS. **N Engl J Med** 1990 Apr 19;322(16):1093–7 Comment in: N Engl J Med 1990 Apr 19;322(16):1149–51.

Wound infections and recurrence in head and neck cancer. Jackson RM, et al. **Otolaryngol Head Neck Surg** 1990 Apr; 102(4):331–3

Cutaneous horn. Graham R. **Practitioner** 1989 Aug 8; 233(1473):1054

Association between human papillomavirus and carcinoma of the oesophagus in South African blacks. A histochemical and immunohistochemical study. Hale MJ, et al. **S Afr Med J** 1989 Oct 7;76(7):329–30

Scar-associated malignant melanoma and squamous carcinoma in situ. Walker AN, et al. **South Med J** 1989 Nov;82(11):1419–21

[Correlation of human papilloma virus (HPV) and herpes simplex virus-2 (HSV-2)in the viral etiology of carcinoma of uterine cervix] Meng XJ. **Chung Hua Chung Liu Tsa Chih** 1989 Mar;11(2):108–10 (Eng. Abstr.) **(Chi)**

[Viral etiology of cancer of the uterine cervix. II. Detection of human cytomegalovirus DNA sequence and antigen in cervical lesions] Meng XJ. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):263–5 (Eng. Abstr.) **(Chi)**

[A study on the relationship between human papilloma virus (HPV) and cervical cancer] Zhang G. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1990 Feb; 11(1):31–3 (Eng. Abstr.) **(Chi)**

[Cancer of the esophagus after mediastinal radiotherapy for Hodgkin's disease. Apropos of a case] Renard P, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Dec;25(7):299–300 (Eng. Abstr.) **(Fre)**

[Neoplastic development of laryngeal amyloidosis. Apropos of a case] Koskas G, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(6):338–41 (Eng. Abstr.) **(Fre)**

[Cancer of the esophagus and endoscopic sclerosing treatment of esophageal varices (letter)] Claudel-Bonvoisin S, et al. **Gastroenterol Clin Biol** 1990;14(2):189 **(Fre)**

[Atrophicus sclerosis lichen and cancer of the glans] Dore B, et al. **J Urol (Paris)** 1989;95(7):415–8 (20 ref.) (Eng. Abstr.) **(Fre)**

[Remission of Lambert-Eaton syndrome over a 10-year period. Recurrence without evidence of tumor at autopsy] Ferroir JP, et al. **Rev Neurol (Paris)** 1989;145(12):851–2 (Eng. Abstr.) **(Fre)**

[Risk factors for squamous epithelial carcinoma of the mouth, the oropharynx, the hypopharynx and the larynx] Maier H, et al. **Dtsch Med Wochenschr** 1990 Jun 1;115(22):843–50 (Eng. Abstr.) **(Ger)**

[A rare complication of ulcerative colitis: Bowen's disease in perianal condyloma acuminatum] Balázs M. **Orv Hetil** 1989 Dec 10;130(50):2693–5 (32 ref.) (Eng. Abstr.) **(Hun)**

[Radiation-induced malignant skin tumors in the hands of five doctors] Hashizume S, et al. **Gan No Rinsho** 1990 Feb; 36(2):224–8 (Eng. Abstr.) **(Jpn)**

[Cancer of the dermal implant after plastic surgery of the esophagus using the small intestine] Gulevskil BA, et al. **Khirurgiia (Mosk)** 1989 Oct;(10):127 **(Rus)**

GENETICS

Flow cytometric DNA analysis of primary and concurrent metastatic squamous cell carcinoma of the head and neck. Kim JA, et al. **Am J Surg** 1989 Oct;158(4):288–91

A case of squamous cell lung carcinoma with tetrasomy 7 and chromosome 1 C-band polymorphism. Rønne M, et al. **Anticancer Res** 1989 Jul-Aug;9(4):1101–3

Detection of herpes simplex virus DNA in a cutaneous squamous cell carcinoma by in situ hybridization. Claudy AL, et al. **Arch Dermatol Res** 1989;281(5):333–5

A multifactorial study (cell kinetics, cytogenetics, DNA content) of lung tumours: basic information for prognostic evaluation. Matturri L, et al. **Basic Appl Histochem** 1989; 33(4):331–6

cDNA cloning of a novel cell adhesion protein expressed in human squamous carcinoma cells. Wong YC, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):984–92

Ploidy as a prognostic indicator in end stage squamous cell carcinoma of the head and neck region treated with cisplatinum. Cooke LD, et al. **Br J Cancer** 1990 May; 61(5):759–62

Low incidence of ras oncogene activation in human squamous cell carcinomas. Rumsby G, et al. **Br J Cancer** 1990 Mar;61(3):365–8

Restriction fragment length polymorphism of the L-myc gene in oral cancer patients. Saranath D, et al. **Br J Cancer** 1990 Apr;61(4):530–3

Flow cytometric DNA ploidy analysis of squamous cell carcinoma of the oral cavity. Comparison with clinical staging and histologic grading. Hemmer J, et al. **Cancer** 1990 Jul 15;66(2):317–20

Prognostic and therapeutic significance of the flow cytometric nuclear DNA content in non-small cell lung cancer. Isobe H, et al. **Cancer** 1990 Mar 15;65(6):1391–5

Flow cytometric DNA analysis of squamous cell carcinoma of the esophagus. Ruol A, et al. **Cancer** 1990 Mar 1; 65(5):1185–8

Flow cytometric analysis of the DNA content of non-small cell lung cancer. Ploidy as a significant prognostic indicator in squamous cell carcinoma of the lung. Sahin AA, et al. **Cancer** 1990 Feb 1;65(3):530–7

Chromosome changes in 43 carcinomas of the cervix uteri. Atkin NB, et al. **Cancer Genet Cytogenet** 1990 Feb; 44(2):229–41

Clonal duplication of the Y chromosome and fra(X)(q28) in a case of epidermoid carcinoma of the esophagus. Casalone R, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):269–71

Multiple clonal chromosome aberrations in squamous cell carcinomas of the larynx. Jin YS, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):209–16

Patients with different lung cancers show normal expression of fra(3)(p14.2) in aphidicolin-treated lymphocyte cultures. Porfirio B, et al. **Cancer Genet Cytogenet** 1989 Nov; 43(1):95–101

A clonal t(9;12)(q32;q21) in cultured fibroblasts from a case of Bowen's disease [letter; comment] Scappaticci S, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):249–50 Comment on: Cancer Genet Cytogenet 1988 Dec;36(2):149–53.

Two simple translocations in a primary squamous cell carcinoma of the head and neck. Tharapel SA, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):131–4

Recurrent chromosome aberrations in human lung squamous cell carcinomas. Viegas-Péquignot E, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):37–49

Cytogenetic studies of esophageal carcinoma cell lines. Whang-Peng J, et al. **Cancer Genet Cytogenet** 1990 Mar; 45(1):101–20

Characterization of human laryngeal primary and metastatic squamous cell carcinoma cell lines UM-SCC-17A and UM-SCC-17B. Carey TE, et al. **Cancer Res** 1989 Nov 1; 49(21):6098–107

Comparison of anatomical location of squamous cell carcinoma within the oral cavity and oropharynx with the incidence of in vitro hyperdiploidy. Danes BS, et al. **Clin Genet** 1990 Mar;37(3):188–93

Genetic convergence during serial in vitro passage of a polyclonal squamous cell carcinoma. Heim S, et al. **Cytogenet Cell Genet** 1989;52(3–4):133–5

DNA ploidy and cytophotometric analysis of cervical intraepithelial neoplasia grade III and invasive squamous cell carcinoma. Hanselaar AG, et al. **Cytometry** 1990; 11(5):624–9

Primary invasive and in situ vaginal carcinoma. Flow cytometric analysis of DNA aneuploidy and cell proliferation from archival paraffin-embedded tissue. Punnonen R, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Sep;32(3):247–51

Reduction of EGF receptor levels in human tumor cells transfected with an antisense RNA expression vector. Yamada H, et al. **Exp Cell Res** 1989 Sep;184(1):90–8

Epidermal growth factor receptor gene amplification and expression in head and neck cancer cell lines. Weichselbaum RR, et al. **Head Neck** 1989 Sep-Oct; 11(5):437–42

Human papillomavirus (HPV) DNA in esophageal precancer lesions and squamous cell carcinomas from China. Chang F, et al. **Int J Cancer** 1990 Jan 15;45(1):21–5

c-fos transfection of 3LL tumor cells turns on MHC gene expression and consequently reduces their metastatic competence. Kushtai G, et al. **Int J Cancer** 1990 Jun 15; 45(6):1131–6

Presence of HPV 16 sequences in laryngeal carcinomas. Pérez-Ayala M, et al. **Int J Cancer** 1990 Jul 15;46(1):8–11

Ras oncogene mutations in basal cell carcinomas and squamous cell carcinomas of human skin. van der Schroeff JG, et al. **J Invest Dermatol** 1990 Apr;94(4):423–5

Oncogene expressions detected by in situ hybridization of squamous metaplasia, dysplasia and primary lung cancer in human. Lee JD, et al. **J Korean Med Sci** 1989 Sep; 4(3):121–7

Flow cytometric analysis of DNA content in laryngeal cancer. Feinmesser R, et al. **J Laryngol Otol** 1990 Jun; 104(6):485–7

Ki-ras oncogene mutations in non-HPV-associated anal carcinoma. Hiorns LR, et al. **J Pathol** 1990 Jun; 161(2):99–103

Flow cytometric DNA content analysis in primary lung cancer: comparison of results from fresh and paraffin-embedded specimens. Isobe H, et al. **J Surg Oncol** 1990 Jan;43(1):36–9

Squamous cell carcinoma of the renal pelvis: nuclear deoxyribonucleic acid ploidy studied by flow cytometry. Nativ O, et al. **J Urol** 1990 Jul;144(1):23–6

Characterization of squamous cell bladder tumors by flow cytometric deoxyribonucleic acid analysis: a report of 100 cases. Shaaban AA, et al. **J Urol** 1990 Oct;144(4):879–83

Young adults with head and neck cancer express increased susceptibility to mutagen-induced chromosome damage. Schantz SP, et al. **JAMA** 1989 Dec 15;262(23):3313–5

Deletion of the c-Ha-ras-1 allele in human skin cancers. Ananthaswamy HN, et al. **Mol Carcinog** 1989;2(5):298–301

Chromosome abnormalities in squamous cell carcinoma of the human oral cavity. Ravindran A, et al. **Neoplasma** 1990; 37(2):191–7

Elevated expression of the c-myc oncoprotein correlates with poor prognosis in head and neck squamous cell carcinoma. Field JK, et al. **Oncogene** 1989 Dec; 4(12):1463–8

Amplification of the int-2 gene in human head and neck squamous cell carcinomas. Somers KD, et al. **Oncogene** 1990 Jun;5(6):915–20

Nonrandom duplication of the chromosome bearing a mutated Ha-ras-1 allele in mouse skin tumors. Bianchi AB, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6902–6

Two oncogenes, v-fos and v-ras, cooperate to convert normal keratinocytes to squamous cell carcinoma. Greenhalgh DA, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):643–7

Isolation and characterization of the human homologue of rig and its pseudogenes: the functional gene has features characteristic of housekeeping genes. Shiga K, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3594–8

Noncorrelative c-myc and ras oncogene expression in squamous cell carcinoma cells with tumorigenic potential. Shuler C, et al. **Teratogenesis Carcinog Mutagen** 1990; 10(1):53–65

[Study on molecular hybridization with biotin-labelled HPV 16 DNA probe in human cervical carcinoma] Li Y, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Sep;20(3):246–8 (Eng. Abstr.) **(Chi)**

[Analysis of point mutations of Ha-ras gene in basaliomas and spinaliomas usiang the polymerase chain reaction (PCR) technic] Peris K, et al. **G Ital Dermatol Venereol** 1989 Oct;124(10):429–34 (Eng. Abstr.) **(Ita)**

[Studies on DNA content in ploidy patterns of esophageal cancer] Rikitake H. **Nippon Geka Gakkai Zasshi** 1990 May; 91(5):564–74 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Natural killer cells and metastases from pharyngeal carcinoma. Schantz SP, et al. **Am J Surg** 1989 Oct; 158(4):361–6

Immune restoration with interleukin-2 in patients with squamous cell carcinoma of the head and neck. Wanebo HJ, et al. **Am J Surg** 1989 Oct;158(4):356–60

Serum squamous cell carcinoma antigen levels in women with neoplasms of the lower genital tract and in healthy controls. Neunteufel W, et al. **Arch Gynecol Obstet** 1989; 246(4):243–50

Calcium regulation of antigen expression on normal and malignant human squamous cells in vitro. Hoffman HT, et al. **Arch Otolaryngol Head Neck Surg** 1990 Mar; 116(3):299–303

Production of monoclonal antibodies to squamous cell carcinoma antigens. Quak JJ, et al. **Arch Otolaryngol Head Neck Surg** 1990 Feb;116(2):181–5

Natural killer cell lysis of head and neck cancer. Racz T, et al. **Arch Otolaryngol Head Neck Surg** 1989 Nov; 115(11):1322–8

Beta-tubulin epitope expression in normal and malignant epithelial cells. Scott CA, et al. **Arch Otolaryngol Head Neck Surg** 1990 May;116(5):583–9

Acquired factor VIII inhibitor with squamous cell cancer of the epiglottis. Shastri KA, et al. **Arch Otolaryngol Head Neck Surg** 1990 Mar;116(3):350–3

Interleukin 2 receptor expression in patients with head and neck squamous carcinoma. Effects of thymosin alpha 1 in vitro. Wolf GT, et al. **Arch Otolaryngol Head Neck Surg** 1989 Nov; 115(11):1345–9

Cellular localisation of tumour antigen (TA-4) in normal, dysplastic and neoplastic squamous epithelia of the upper aerodigestive tract. Kearsley JH, et al. **Br J Cancer** 1990 Apr;61(4):631–5

Binding of bullous pemphigoid and pemphigus vulgaris sera to SCaBER cell line in an ELISA. Cook AL, et al. **Br J Dermatol** 1989 Jan;120(1):59–69

Evaluation of squamous cell carcinoma antigen as a new marker for lung cancer. Body JJ, et al. **Cancer** 1990 Apr 1;65(7):1552–6

Histocompatibility antigen expression in pulmonary carcinomas as indication of differentiation and of special subtypes. Dämmrich J, et al. **Cancer** 1990 May 1; 65(9):1942–54

Adenocarcinoma of the uterine cervix. Prognostic significance of pretreatment serum CA 125, squamous cell carcinoma antigen, and carcinoembryonic antigen levels in relation to clinical and histopathologic tumor

characteristics. Duk JM, et al. **Cancer** 1990 Apr 15; 65(8):1830–7

Elevated levels of squamous cell carcinoma antigen in patients with a benign disease of the skin. Duk JM, et al. **Cancer** 1989 Oct 15;64(8):1652–6

Squamous cell carcinoma antigen in the diagnosis and treatment follow–up of oral and facial squamous cell carcinoma. Fischbach W, et al. **Cancer** 1990 Mar 15; 65(6):1321–4

Immunohistochemical evaluation of squamous cell carcinoma antigen and S–100 protein–positive cells in human malignant esophageal tissues. Matsuda H, et al. **Cancer** 1990 May 15;65(10):2261–5

Activated CD4–positive T–lymphocytes and impaired cell–mediated immunity in patients with carcinoma of the urinary bladder with schistosomiasis. Raziuddin S, et al. **Cancer** 1990 Feb 15;65(4):931–9

Immunogenicity and cross–reactivity of syngeneic murine melanomas. Donawho C, et al. **Cancer Commun** 1990; 2(3):101–7

Inhibition of lymphokine–activated killer cell generation by blocking factors in sera of patients with head and neck cancer. Bugis SP, et al. **Cancer Immunol Immunother** 1990; 31(3):176–81

Lysing of fresh human tumor by a cytotoxic factor derived from autologous large granular lymphocytes independently of other known cytokines. Uchida A, et al. **Cancer Immunol Immunother** 1990;31(1):60–4

Increased susceptibility to inoculated Lewis lung carcinoma (3LL) but unaltered tumor growth in mice treated with monoclonal antibody to L3T4 on mouse T–helper cells. Ershler WB, et al. **Cancer Invest** 1989;7(4):339–43

Interleukin 2 production in lymphocyte cultures: a rapid test for cancer–associated immunodeficiency in malignant cervical neoplasia. Radhakrishna Pillai M, et al. **Cancer Lett** 1989 Oct;47(3):205–10

Evaluation of tetrazolium–based semiautomatic colorimetric assay for measurement of human antitumor cytotoxicity. Heo DS, et al. **Cancer Res** 1990 Jun 15;50(12):3681–90

HLA–DR expression is associated with excellent prognosis in squamous cell carcinoma of the larynx. Esteban F, et al. **Clin Exp Metastasis** 1990 Jul–Aug;8(4):319–28

Experiences with SCC antigen, a new tumor marker for cervical carcinoma. Meier W, et al. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1555–9

Squamous cell carcinoma (SCC) antigen in patients with invasive cervical carcinoma during primary irradiation. Neunteufel W, et al. **Gynecol Obstet Invest** 1990;29(2):154–7

Comparison between squamous cell carcinoma–associated antigen and CA–125 in patients with carcinoma of the cervix. Lehtovirta P, et al. **Gynecol Oncol** 1990 May; 37(2):276–8

Significance of serum SCC antigen as a tumor marker in patients with squamous cell carcinoma of the vulva. van der Sijde R, et al. **Gynecol Oncol** 1989 Nov;35(2):227–32

Clinical implications of natural killer (NK) cytotoxicity in patients with squamous cell carcinoma of the uterine cervix. Vaquer S, et al. **Gynecol Oncol** 1990 Jan;36(1):90–2

Immunological status of patients in carcinoma head and neck. Vasenwala SM, et al. **Indian J Cancer** 1989 Sep; 26(3):137–44

Squamous cell carcinoma antigen in genitourinary tumors. Wishnow KI, et al. **Int J Biol Markers** 1989 Oct–Dec; 4(4):226–8

Monoclonal antibody against human squamous–cell–carcinoma–associated antigen. Tatake RJ, et al. **Int J Cancer** 1989 Nov 15;44(5):840–5

Expression of TAG–72 in normal colon, transitional mucosa, and colon cancer. Xu M, et al. **Int J Cancer** 1989 Dec 15;44(6):985–9

An expression of squamous cell carcinoma–related antigen in oral cancers. Tsuji T, et al. **Int J Oral Maxillofac Surg** 1989 Aug;18(4):241–3

Squamous cell carcinoma antigen in patients with cutaneous disorders. Campbell B, et al. **J Am Acad Dermatol** 1990 Apr;22(4):639–42

Immunoglobulin allotypes in myasthenia gravis patients with a thymoma. Gilhus NE, et al. **J Autoimmun** 1990 Jun; 3(3):299–305

Immunoreactivity of lymphocytes from draining lymph nodes, peripheral blood and tumor infiltrates from oral cancer patients. Mukhopadhyaya R, et al. **J Clin Lab Immunol** 1989 Sep;30(1):21–5

Immunosuppression in patients with metastatic squamous cell carcinoma from the skin. Dinehart SM, et al. **J Dermatol Surg Oncol** 1990 Mar;16(3):271–4

Interleukin–2 mediated regulation of mitogen–activated T cell reactivity from different lymphoid sources in patients with squamous cell carcinoma of the oral cavity. Murali PS, et al. **J Oral Pathol Med** 1989 Jul;18(6):327–32

Monocyte/macrophage functions in patients with squamous cell carcinoma of the oral cavity. Murali PS, et al. **J Oral Pathol Med** 1989 Dec;18(10):539–43

Immunohistochemical localization of Leu–M1 carbohydrate antigen in human oral squamous cell carcinoma. Teng YT, et al. **J Oral Pathol Med** 1989 Oct;18(9):502–5

Establishment of an esophageal squamous cell carcinoma tumor line and development of serum squamous cell carcinoma–related antigen in athymic nude mice. Terashima M, et al. **J Surg Oncol** 1990 Aug;44(4):225–8

Differential sensitivity of head and neck cancers to non–major histocompatibility–restricted killer cell activity. Schantz SP, et al. **J Surg Res** 1990 Feb;48(2):154–64

A novel monoclonal antibody against squamous cell carcinoma. Inoue M, et al. **Jpn J Cancer Res** 1990 Feb; 81(2):176–82

Production of monoclonal antibody to human esophageal cancer cell line. Naito M, et al. **Jpn J Surg** 1990 Mar; 20(2):170–9

Monitoring the course of cervical carcinoma with the squamous cell carcinoma serum radioimmunoassay [letter; comment] Fuith LC. **Obstet Gynecol** 1990 Jul;76(1):156–7 Comment on: Obstet Gynecol 1989 Dec;74(6):944–9.

Does preoperative serum squamous cell carcinoma antigen level predict occult extracervical disease in patients with stage Ib invasive squamous cell carcinoma of the cervix? Patsner B, et al. **Obstet Gynecol** 1989 Nov;74(5):786–8

Potentiation of human natural killer cell activity by recombinant interleukin–2 towards multidrug–resistant human epidermoid carcinoma. Ades EW, et al. **Pathobiology** 1990;58(2):84–7

Lymphocyte subsets in bronchoalveolar lavage fluid and in circulating blood in epidermoid bronchogenic carcinoma. Piazza G, et al. **Respiration** 1990;57(1):28–36

Serum squamous cell carcinoma antigen in gynecologic malignancies with special reference to cervical cancer. Hsieh CY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Aug; 88(8):797–800

Tumor markers in serum of patients with primary squamous cell carcinoma of the esophagus. Gion M, et al. **Tumori** 1989 Oct 31;75(5):489–93

[Study of pulmonary T cell subsets and killer activity in lung cancer] Zhang DX. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1990 Apr; 13(2):78–81, 126 (Eng. Abstr.) **(Chi)**

[Study of NK cell activity in patients with oral maxillofacial squamous cell carcinoma] Wang JM. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Mar; 24(2):101–3, 128 (Eng. Abstr.) **(Chi)**

[McAb LC–1 against human lung cancer] Ge XR, et al. **Shih Yen Sheng Wu Hsueh Pao** 1989 Sep;22(3):359–65 (Eng. Abstr.) **(Chi)**

[Immunosuppression in psoriasis patients (letter)] Weismann K. **Ugeskr Laeger** 1989 Oct 30;151(44):2902–3 **(Dan)**

[Pre–treatment serum levels of SCC antigen in epidermoid carcinoma of the upper respiratory and digestive tract] Prades JM, et al. **Ann Otolaryngol Chir Cervicofac** 1990; 107(1):47–52 (30 ref.) (Eng. Abstr.) **(Fre)**

[Tumor markers in patients with head–neck carcinomas] Walther EK, et al. **Laryngorhinootologie** 1990 May; 69(5):271–4 (Eng. Abstr.) **(Ger)**

[Sequential study of the immunologic picture in neoplasm patients before and after surgical intervention] Albertino B, et al. **Minerva Chir** 1989 Sep 15;44(17):1917–20 (Eng. Abstr.) **(Ita)**

[Phenotype study of varieties of carcinomas originating in the oro–pharyngo–laryngeal mucosa. Anatomo–clinical considerations] Nelken A, et al. **Minerva Stomatol** 1989 Nov;38(11):1165–74 (Eng. Abstr.) **(Ita)**

[Immunohistochemical study on the MHC class I antigen expression on squamous cell carcinoma of the uterine cervix] Honma S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jul;41(7):813–8 (Eng. Abstr.) **(Jpn)**

[A case of squamous cell carcinoma of the stomach—immunohistochemical analysis] Sugiyama T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jul;86(7):1525–8 **(Jpn)**

[The localization of structurally specific antigens in squamous cell skin cancer using monoclonal antibodies to epidermal antigens] Kogan MG, et al. **Vopr Onkol** 1989;35(9):1032–6 (Eng. Abstr.) **(Rus)**

METABOLISM

Decreased retinyl ester concentrations in UV–induced murine squamous cell carcinomas. Berne B, et al. **Acta Derm Venereol (Stockh)** 1989;69(6):503–8

Serum copper concentration as an index of clinical lung injury. Molteni A, et al. **Adv Exp Med Biol** 1989;258:273–85

A 22–kd surface antigen detected by monoclonal antibody E 48 is exclusively expressed in stratified squamous and transitional epithelia. Quak JJ, et al. **Am J Pathol** 1990 Jan; 136(1):191–7

Immunohistochemical localization of filaggrin in benign and malignant lesions of the human oral mucosa. Grosso M, et al. **Basic Appl Histochem** 1990;34(1):51–8

Production of TGF–alpha and TGF–beta by cultured keratinocytes, skin and oral squamous cell carcinomas—potential autocrine regulation of normal and malignant epithelial cell proliferation. Partridge M, et al. **Br J Cancer** 1989 Oct;60(4):542–8

Modulation of the production of a parathyroid hormone–like protein in human squamous carcinoma cell lines by interaction with fibroblasts. Hoekman K, et al. **Cancer Res** 1990 Jun 15;50(12):3589–94

Modulation of epidermal growth factor receptors by retinoic acid in ME180 cells. Zheng ZS, et al. **Cancer Res** 1990 Feb 15;50(4):1201–5

Absence of differentiation–related expression of keratin 10 in early stages of vulvar squamous carcinoma. Ivanyi D, et al. **Differentiation** 1989 Dec;42(2):124–9

Tissue–specific expression of murine keratin K13 in internal stratified squamous epithelia and its aberrant expression during two–stage mouse skin carcinogenesis is associated with the methylation state of a distinct CpG site in the remote 5'–flanking region of the gene. Winter H, et al. **Differentiation** 1990 Apr;43(2):105–14

Androgen receptors in laryngeal carcinoma. Toral I, et al. **Eur Arch Otorhinolaryngol** 1990;247(4):244–6

Epidermal growth factor stimulates DNA synthesis while inhibiting cell multiplication of A–431 carcinoma cells. Polet H. **Exp Cell Res** 1990 Feb;186(2):390–3

Human papillomavirus infection and filaggrin expression in paraffin–embedded biopsy specimens of extragenital Bowen's disease and genital bowenoid papulosis. Guerin–Reverchon I, et al. **J Cancer Res Clin Oncol** 1990; 116(3):295–300

Lung carcinoid cell lines have bombesin–like peptides and EGF receptors. Moody TW, et al. **J Cell Biochem** 1990 Jun;43(2):139–47

Augmented desensitization to epidermal growth factor (EGF) immediate actions: a novel mechanism for altered EGF growth response in mutant A431 cells. Karasik A, et al. **J Cell Physiol** 1990 Feb;142(2):231–5

Resting metabolic rate of esophageal carcinoma patients: a model for energy expenditure measurement in a homogenous cancer population. Thomson SR, et al. **JPEN J Parenter Enteral Nutr** 1990 Mar–Apr;14(2):119–21

Expression of human epidermal growth factor and its receptor in esophageal cancer. Mukaida H, et al. **Jpn J Surg** 1990 May;20(3):275–82

Coexpression of intermediate filaments in squamous cell carcinomas of upper aerodigestive tract before and after radiation and chemotherapy. Fischer HP, et al. **Lab Invest** 1989 Oct;61(4):433–9

Reduced membrane protein associated with resistance of human squamous carcinoma cells to methotrexate and cis–platinum. Bernal SD, et al. **Mol Cell Biochem** 1990 Jun 1;95(1):61–70

Pharmacokinetics, biodistribution and dosimetry of 99Tcm(V)DMSA in humans with squamous cell carcinoma. Watkinson JC, et al. **Nucl Med Commun** 1990 May;11(5):343–59

Squamous cell carcinoma in situ developing in dermoid cyst of the ovary. Report of a case with laminin immunohistochemical staining demonstrating basement membrane integrity. Peuchmaur M, et al. **Pathol Res Pract** 1989 Aug;185(2):251–4; discussion 255–6

Polypoid squamous cell carcinoma of the larynx. An immunohistochemical study for ras p21 and cytokeratin. Toda S, et al. **Pathol Res Pract** 1989 Dec;185(6):860–6

Comparison of the inhibitory effect of polyunsaturated fatty acids on prostaglandin synthesis I oral squamous carcinoma cells. Elattar TM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Nov; 38(2):119–25

Prostaglandins in squamous cell carcinoma of the larynx: tumor and peritumor synthesis. Pinto S, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Jan; 39(1):53–7

Polyamines in human gastric and esophageal cancer. Löser C, et al. **Scand J Gastroenterol** 1989 Dec;24(10):1193–9

Immunohistochemical distribution of epithelial membrane antigen in bladder carcinomas as detected with a monoclonal antibody. Asamoto M, et al. **Urol Res** 1989; 17(5):273–7

Involucrin expression in urinary bladder carcinoma. Asamoto M, et al. **Urol Res** 1989;17(5):279–83

Significance of keratin 13 and 6 expression in normal, dysplasic and malignant squamous epithelium of pyriform fossa. Klijanienko J, et al. **Virchows Arch [A]** 1989; 416(2):121–4

The distribution of immuno–reactive tenascin in the epithelial–mesenchymal junctional areas of benign and malignant squamous epithelia. Anbazhagan R, et al. **Virchows Arch [B]** 1990;59(1):59–63

[Immunohistochemical and immunoelectron microscopic observation of human lung carcinomas using biotinized peanut lectin (PNA)] Hou WY. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1990 Apr; 13(2):85–7, 126–7 (Eng. Abstr.) **(Chi)**

[Conditioned medium of human nasopharyngeal carcinoma epithelioid cell line CNE 1 contained the activities of transformed growth–inhibiting factor(s)] Lu YL, et al. **Shih Yen Sheng Wu Hsueh Pao** 1990 Mar;23(1):95–103 (Eng. Abstr.) **(Chi)**

[Transition of oxic cells to hypoxic cells in a murine squamous cell carcinoma] Takai Y. **Gan No Rinsho** 1989 Oct; 35(13):1543–7 (Eng. Abstr.) **(Jpn)**

[Relationship of oral leukoplakia and cancer by immunohistochemical expression of EGF–receptor] Yamada T. **Kokubyo Gakkai Zasshi** 1990 Mar;57(1):187–200 (Eng. Abstr.) **(Jpn)**

[Lectin histochemistry of primary and metastatic tumor cells of laryngeal cancer] Jin CS. **Nippon Jibiinkoka Gakkai Kaiho** 1990 Feb;93(2):190–8 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Lichen sclerosus, invasive squamous cell carcinoma, and human papillomavirus [letter] Neill SM, et al. **Am J Obstet Gynecol** 1990 Jun;162(6):1633–4

Human papillomavirus in squamous cell carcinoma, leukoplakia, lichen planus, and clinically normal epithelium of the oral cavity. Kashima HK, et al. **Ann Otol Rhinol Laryngol** 1990 Jan;99(1):55–61

Integration of HPV-16 DNA in cervical carcinoma cell line CC3/CUHK3 and its xenografts. Yiu KC, et al. **Anticancer Res** 1990 Jul-Aug;10(4):917-22

Detection of human papillomavirus in nongenital Bowen's disease by in situ DNA hybridization. Kettler AH, et al. **Arch Dermatol** 1990 Jun;126(6):777-81

Anal cancer. Microscopic condyloma and tissue demonstration of human papillomavirus capsid antigen and viral DNA. Taxy JB, et al. **Arch Pathol Lab Med** 1989 Oct;113(10):1127-31

The demonstration of human papillomavirus 16 genomes in the nuclei of genital cancers using two different methods of in situ hybridization. Grussendorf-Conen EI, et al. **Cancer** 1990 Jan 15;65(2):238-41

The subtypes, distribution and location of human papillomavirus DNA in genital warts and genital Bowen's disease--a study using in situ DNA.DNA hybridization. Jee SH, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1989 Nov;22(4):267-77

Papillomavirus common antigen in Bowen's disease. Grussendorf-Conen EI, et al. **Dermatologica** 1990; 181(1):11-5

Anal cancer and human papillomaviruses. Palmer JG, et al. **Dis Colon Rectum** 1989 Dec;32(12):1016-22

HPV 16-positive bowenoid papulosis and squamous-cell carcinoma of the anus in an HIV-positive man. Rüdlinger R, et al. **Dis Colon Rectum** 1989 Dec;32(12):1042-5

Human papillomavirus associated with adenocarcinoma and adenosquamous carcinoma of the cervix: analysis by in situ hybridization. Gordon AN, et al. **Gynecol Oncol** 1989 Dec; 35(3):345-8

Detection of human papillomavirus DNA in squamous bronchial metaplasia and squamous cell carcinomas of the lung by in situ hybridization using biotinylated probes in paraffin-embedded specimens. Béjui-Thivolet F, et al. **Hum Pathol** 1990 Jan;21(1):111-6

Detection of five different human papillomavirus types in cervical lesions by in situ hybridization. A study of 110 cases using sulfonated probes. Jacquemier J, et al. **Hum Pathol** 1990 Sep;21(9):911-7

General primer-mediated polymerase chain reaction permits the detection of sequenced and still unsequenced human papillomavirus genotypes in cervical scrapes and carcinomas. van den Brule AJ, et al. **Int J Cancer** 1990 Apr 15;45(4):644-9

Demonstration of multiple HPV types in normal cervix and in cervical squamous cell carcinoma using the polymerase chain reaction on paraffin wax embedded material. Griffin NR, et al. **J Clin Pathol** 1990 Jan;43(1):52-6

Use of anticontamination primers in the polymerase chain reaction for the detection of human papilloma virus genotypes in cervical scrapes and biopsies. van den Brule AJ, et al. **J Med Virol** 1989 Sep;29(1):20-7

Scientists study cofactors of HPV-associated cervical cancer [news] Glover J. **J Natl Cancer Inst** 1990 Jul 4; 82(13):1096-7

Human papilloma virus type 16 periungual carcinoma [letter; comment] Gordon M, et al. **JAMA** 1989 Dec 22-29; 262(24):3407-8 Comment on: **JAMA** 1989 May 12;261(18):2669-73.

Detection of human papillomavirus DNA in laryngeal squamous cell carcinomas by polymerase chain reaction. Hoshikawa T, et al. **Laryngoscope** 1990 Jun;100(6):647-50

Lymphoepithelial carcinoma of the stomach with Epstein-Barr virus demonstrated by polymerase chain reaction. Burke AP, et al. **Mod Pathol** 1990 May; 3(3):377-80

Detection of human papillomavirus DNA before and after development of invasive vulvar cancer. Van Sickle M, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):540-2

Human papillomavirus genotype as a prognostic indicator in carcinoma of the uterine cervix. Walker J, et al. **Obstet Gynecol** 1989 Nov;74(5):781-5

Two epithelial tumor cell lines (HNE-1 and HONE-1) latently infected with Epstein-Barr virus that were derived from nasopharyngeal carcinomas. Glaser R, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9524-8

Detection of human papillomavirus DNA in cytologic specimens derived from esophageal precancer lesions and cancer. Chang F, et al. **Scand J Gastroenterol** 1990 Apr; 25(4):383-8

HSV-2-induced tumorigenicity in HPV16-immortalized human genital keratinocytes. DiPaolo JA, et al. **Virology** 1990 Aug;177(2):777-9

[Studies on the physical state of human papillomavirus 16 DNA in biopsies of patients with cervical carcinoma] Han RC. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Jun;11(3):234-6 (Eng. Abstr.) **(Chi)**

MORTALITY

Five-year survival in resected T3/N2 lung cancer. Deneffe G, et al. **Acta Chir Belg** 1989 May-Jun;89(3):159-60

Prognostic factors in squamous cell carcinoma of the larynx. Elband JD, et al. **Am J Surg** 1989 Oct;158(4):314-7

Natural history of treated T1N0 squamous cell carcinoma of the glottis [letter] Mendenhall WM, et al. **Ann Otol Rhinol Laryngol** 1990 May;99(5 Pt 1):419-20

Carcinoma of the gallbladder. The Roswell Park experience. Silk YN, et al. **Ann Surg** 1989 Dec;210(6):751-7

Longer survival after resection of non-small cell lung cancer in Japanese women. Mitsudomi T, et al. **Ann Thorac Surg** 1989 Nov;48(5):639-42

Parameters linked to ten-year survival in Japan of resected esophageal carcinoma. Japanese Committee for Registration of Esophageal Carcinoma Cases. Iizuka T, et al. **Chest** 1989 Nov;96(5):1005-11

Ten-year survival after esophagectomy for carcinoma. Surgical triumph or biologic variation? [editorial] Orringer MB. **Chest** 1989 Nov;96(5):970-1

Adjuvant chemotherapy in head and neck cancer. Stell PM. **Clin Otolaryngol** 1990 Jun;15(3):193-5

Prognosis in laryngeal carcinoma: host factors. Stell PM. **Clin Otolaryngol** 1990 Apr;15(2):111-9

Relationship of symptom duration and survival in patients with colorectal carcinoma. Barillari P, et al. **Eur J Surg Oncol** 1989 Oct;15(5):441-5

Evaluation of some prognostic factors in small squamous cell carcinoma of the mobile tongue: a multicenter study in Sweden [see comments] Nathanson A, et al. **Head Neck** 1989 Sep-Oct;11(5):387-92 Comment in: Head Neck 1990 May-Jun;12(3):273-4.

Risk factors for survival in patients performed radical hysterectomy for cervical carcinoma. Pengsaa P, et al. **J Med Assoc Thai** 1989 Aug;72(8):427-32

Lymph node metastasis in resectable esophageal cancer [see comments] Abe S, et al. **J Thorac Cardiovasc Surg** 1990 Aug;100(2):287-91 Comment in: J Thorac Cardiovasc Surg 1990 Aug;100(2):314-6.

Epidermal growth factor prolongs survival time of tumor-bearing mice. Amagase H, et al. **Jpn J Cancer Res** 1990 May;81(5):495-500

The predictive value of tumor classification compared with results of the British Institute of Radiology fractionation trial in the treatment of laryngopharyngeal carcinoma. Wiernik G, et al. **Laryngoscope** 1990 Aug;100(8):863-72

Long-term survival of patients with paranasal sinus carcinoma. Anniko M, et al. **ORL J Otorhinolaryngol Relat Spec** 1990;52(3):187-93

Incident lung cancer survival. Long-term follow-up of a population-based study in Italy. Pastorino U, et al. **Tumori** 1990 Apr 30;76(2):199-204

[Invasive cancer of the uterine cervix in young women: retrospective study of 236 cases] Fenton J, et al. **Bull Cancer (Paris)** 1990;77(2):109-16 (Eng. Abstr.) **(Fre)**

[Multifactorial analysis in the prognostication of the incidence of recurrences, metastases and survival of patients with squamous cell cancer of the skin] Argun VM, et al. **Vopr Onkol** 1989;35(12):1430-6 (Eng. Abstr.) **(Rus)**

[Descriptive study of cancer of the cavum, especially of epidermoid carcinoma (III)] Abad Iglesias R. **Acta Otorrinolaringol Esp** 1989 Jul-Aug;40(4):255-68 (69 ref.) (Eng. Abstr.) **(Spa)**

PATHOLOGY

Squamous cell carcinoma of the vulva with cutaneous metastases. Santala M, et al. **Acta Obstet Gynecol Scand** 1989;68(3):271-3

Radiation-induced morphological changes and radiocurability in squamous cell carcinoma of the head and neck region. A preliminary report. Kellokumpu-Lehtinen P, et al. **Acta Oncol** 1990;29(4):517-20

Image cytometry DNA analysis of diethylnitrosamine-induced dysplasias and invasive squamous cell carcinomas of the esophagus in mice. Munck-Wikland E, et al. **Acta Otolaryngol (Stockh)** 1990 Jan-Feb;109(1-2):155-60

Squamous differentiation in thyroid carcinoma. With special reference to histogenesis of squamous cell carcinoma of the thyroid. Katoh R, et al. **Acta Pathol Jpn** 1989 May; 39(5):306-12

Squamous cell carcinoma of the esophagus with cartilaginous metaplasia at metastatic lesions. Terada N, et al. **Acta Pathol Jpn** 1990 Jun;40(6):435-41

Staging of esophageal carcinoma: comparison of results with endoscopic sonography and CT. Vilgrain V, et al. **AJR Am J Roentgenol** 1990 Aug;155(2):277-81

Signet-ring squamous cell carcinoma of the pyriform sinus [letter; comment] Klijanienko J, et al. **Am J Clin Pathol** 1990 Apr;93(4):592-3 Comment on: Am J Clin Pathol 1989 Apr;91(4):488-91.

DNA content and proliferative index in cutaneous squamous cell carcinoma and keratoacanthoma. Randall MB, et al. **Am J Clin Pathol** 1990 Feb;93(2):259-62

AE1 cytokeratin reaction patterns in different differentiation states of squamous cell carcinoma of the esophagus. Yang K, et al. **Am J Clin Pathol** 1990 Sep;94(3):261-9

Utility of peanut agglutinin (PNA) in the diagnosis of squamous cell carcinoma and keratoacanthoma. Kannon G, et al. **Am J Dermatopathol** 1990 Feb;12(1):31-6

Differentiation patterns in two- and three-dimensional culture systems of human squamous carcinoma cell lines. Knuechel R, et al. **Am J Pathol** 1990 Sep;137(3):725-36

Recognition of N-glycosidic carbohydrates on esophageal carcinoma cells by macrophage cell line THP-1. Takano R, et al. **Am J Pathol** 1990 Aug;137(2):393-401

Lymphoepitheliomalike carcinoma of lung [letter; comment] Bégin LR. **Am J Surg Pathol** 1990 Jul;14(7):698 Comment on: Am J Surg Pathol 1989 Aug;13(8):632-9.

Dysplasia, in situ carcinoma, and progression to invasive squamous cell carcinoma of the upper aerodigestive tract. Crissman JD, et al. **Am J Surg Pathol** 1989;13 Suppl 1:5-16 (44 ref.)

Thymic carcinoma. A clinicopathologic study of 13 cases. Truong LD, et al. **Am J Surg Pathol** 1990 Feb;14(2):151-66

Anal cloacogenic and squamous carcinomas. Comparative histologic analysis using in situ hybridization for human papillomavirus DNA. Wolber R, et al. **Am J Surg Pathol** 1990 Feb;14(2):176-82

Small-cell-type poorly differentiated squamous cell carcinoma of the lung. Cytologic, immunohistochemical and nuclear DNA content analysis. Abe S, et al. **Anal Quant Cytol Histol** 1990 Apr;12(2):73-7

Bowenoid papulosis. Classification as a low-grade in situ carcinoma of the epidermis on the basis of histomorphologic and DNA ploidy studies. Böcking A, et al. **Anal Quant Cytol Histol** 1989 Dec;11(6):419-25

Staging proposal for external auditory meatus carcinoma based on preoperative clinical examination and computed tomography findings. Arriaga M, et al. **Ann Otol Rhinol Laryngol** 1990 Sep;99(9 Pt 1):714-21

Squamous carcinomas with glandlike (adenoid) features. Batsakis JG, et al. **Ann Otol Rhinol Laryngol** 1990 Jan; 99(1):87-8

Supraglottic carcinoma: patterns of recurrence. Lutz CK, et al. **Ann Otol Rhinol Laryngol** 1990 Jan;99(1):12-7

Squamous carcinoma in scars: clinicopathological correlations. Visuthikosol V, et al. **Ann Plast Surg** 1986 Jan;16(1):42-8

Characteristics of a cell line established from a Chinese patient with a squamous carcinoma of the uterine cervix. Chew EC, et al. **Anticancer Res** 1990 Jan-Feb;10(1):213-8

Cytotoxic drug sensitivity of squamous cell carcinoma as predicted by an in vitro testing model. Elprana D, et al. **Anticancer Res** 1989 Jul-Aug;9(4):1089-94

Stereological estimation of nuclear volume and other quantitative histopathological parameters in the prognostic evaluation of supraglottic laryngeal squamous cell carcinoma. Sørensen FB, et al. **APMIS** 1989 Nov; 97(11):987-95

A case of gastric carcinoma with massive eosinophilia and squamous differentiation. Histochemical, immunohistochemical and ultrastructural aspects. Grigolato PG, et al. **Arch Anat Cytol Pathol** 1990; 38(1-2):43-7

Histologic changes in superficial basal cell epithelioma and Bowen's disease by intralesional injection of recombinant interleukin 2: recombinant interleukin 2 may induce redifferentiation of malignant tumor cells in vivo [letter] Mihara M, et al. **Arch Dermatol** 1990 Aug;126(8):1107

Langerhans cells in squamous cell carcinoma [letter; comment] Rees J, et al. **Arch Dermatol** 1990 Feb; 126(2):247-8 Comment on: Arch Dermatol 1989 Jul;125(7):917-20.

Precocious appearance of markers of squamous differentiation in metaplastic cells of human endocervix. Serra V, et al. **Arch Gynecol Obstet** 1989;246(4):233-42

Perineural spread of cutaneous head and neck cancer. Its orbital and central neurologic complications. Clouston PD, et al. **Arch Neurol** 1990 Jan;47(1):73-7

The expression of anchorage independence by malignant rat oral keratinocytes after colony formation in vitro and tumour formation in vivo. Luker J, et al. **Arch Oral Biol** 1989;34(11):867-73

Quiz #1. Carcinoma of right submaxillary gland. Chandler JR. **Arch Otolaryngol** 1967 Nov;86(5):590, 593

Microvascular invasion and survival in cancer of the oral cavity and oropharynx. Close LG, et al. **Arch Otolaryngol Head Neck Surg** 1989 Nov; 115(11):1304-9

Peripheral vs central squamous cell carcinoma of the lung. A comparison of clinical features, histopathology, and survival. Tomashefski JF Jr, et al. **Arch Pathol Lab Med** 1990 May;114(5):468-74

Bowen's disease: a rare condition in an unusual extension. Ribeiro PC, et al. **Arq Gastroenterol** 1988 Oct-Dec; 25(4):203-6

The CIN saga--the biological and clinical significance of cervical intraepithelial neoplasia. Chanen W. **Aust N Z J Obstet Gynaecol** 1990 Feb;30(1):18-23

Site predilection of oral cancer and its correlation with chewing and smoking habit--a study of 103 cases. Ahmed F, et al. **Bangladesh Med Res Counc Bull** 1990 Jun; 16(1):17-25

Epidermal growth factor stimulates the anchorage-independent growth of human squamous cell carcinomas overexpressing its receptors. Lee K, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):905-11

Induction of a 70 kD protein associated with the selective cytotoxicity of beta-carotene in human epidermal carcinoma. Schwartz JL, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):941-6

Study of the heterogeneity of a human non-small cell bronchopulmonary epidermoid primary carcinoma: determination of the DNA content of NSCLCN6L2 cells and of cloned sub-populations. Gratas C, et al. **Biol Cell** 1990;68(2):133-8

Bowenoid papulosis. Martín RF, et al. **Bol Asoc Med P R** 1990 Mar;82(3):104-6

Growth of cells from esophageal squamous cell carcinoma biopsies in a reconstituted basement membrane. Percario M, et al. **Boll Soc Ital Biol Sper** 1989 Aug;65(8):775-81

Neoplastic cell spreading in rodent transplantable tumor models. II. Santamaria tumor (syngeneic keratinizing squamous cell carcinoma). Roveta G.

Boll Soc Ital Biol Sper 1990 Mar;66(3):295–302

Oral cancer and precancer: establishing a diagnosis. Bramley PA, et al. **Br Dent J** 1990 Feb 10;168(3):103–7

Hydroethidine: a fluorescent redox probe for locating hypoxic cells in spheroids and murine tumours. Olive PL. **Br J Cancer** 1989 Sep;60(3):332–8

Squamous cell carcinoma of the nail bed: a clinicopathological study of 12 cases. Guitart J, et al. **Br J Dermatol** 1990 Aug;123(2):215–22

Basaloid squamous carcinoma of the upper aerodigestive tract. Clinicopathologic and DNA flow cytometric analysis. Luna MA, et al. **Cancer** 1990 Aug 1;66(3):537–42

A clinicopathologic study of intrahepatic cholangiocarcinoma containing a component of squamous cell carcinoma. Nakajima T, et al. **Cancer** 1990 Mar 15; 65(6):1401–4

Metaplastic carcinomas of the breast. IV. Squamous cell carcinoma of ductal origin. Wargotz ES, et al. **Cancer** 1990 Jan 15;65(2):272–6

Squamous cell carcinoma of the head and neck heterotransplanted to nude mice. Take rate in relation to patient survival. Zätterström UK, et al. **Cancer** 1990 Jul 1;66(1):145–51

Cell cycle phases of two human lung tumor cell lines derived from squamous cell carcinoma and pulmonary metastasis of a rhabdomyosarcoma (HS 24 and HS 57) and N-acetylalanine aminopeptidase activity. Schoenberger OL, et al. **Cancer Biochem Biophys** 1989 Oct;10(4):337–43

Distribution, oxygenation, and clonogenicity of macrophages in a murine tumor. Olive PL. **Cancer Commun** 1989; 1(2):93–100

Enhancement of fluoropyrimidine inhibition of cell growth by leucovorin and deoxynucleosides in a human squamous cell carcinoma cell line. Chang YM, et al. **Cancer Invest** 1989;7(6):557–63

Establishment and characterization of a tumor cell line from human nasopharyngeal carcinoma tissue. Chang YS, et al. **Cancer Res** 1989 Dec 1;49(23):6752–7

In vitro assessment of the effects of granulocyte–macrophage colony-stimulating factor on primary human tumors and derived lines. Foulke RS, et al. **Cancer Res** 1990 Oct 1; 50(19):6264–7 (20 ref.)

Cross-linked envelope-related markers for squamous differentiation in human lung cancer cell lines. Levitt ML, et al. **Cancer Res** 1990 Jan 1;50(1):120–8

Monocyte killing of human squamous epithelial cells: role for thrombospondin. Riser BL, et al. **Cancer Res** 1989 Nov 1;49(21):6123–9

Use of intracellular H3 messenger RNA as a marker to determine the proliferation pattern of normal and 7,12–dimethylbenz[a]anthracene-transformed hamster oral epithelium. Wong DT, et al. **Cancer Res** 1990 Aug 15; 50(16):5107–11

Effects of reoxygenation on cells from hypoxic regions of solid tumors: analysis of transplanted murine tumors for evidence of DNA overreplication. Young SD, et al. **Cancer Res** 1990 Aug 15;50(16):5031–8

Inhibition of high-density growth arrest in human squamous carcinoma cells by 2,3,7,8–tetrachlorodibenzo–p–dioxin (TCDD). Hébert CD, et al. **Carcinogenesis** 1990 Aug; 11(8):1335–42

Undifferentiated carcinoma with prominent lymphocytic infiltration (so–called lymphoepithelioma) in the trachea. Onizuka M, et al. **Chest** 1990 Jul;98(1):236–7

Adenosquamous cell carcinoma of the cervix—a clinical analysis of 23 cases. Liu FS, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Apr;45(4):261–5

Incidence of growth of syngeneic oral squamous cell carcinoma in C57B1 bg/bg beige mice. Wong DY, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Jan;45(1):53–9

Thymostimuline and uterine cancer satellite lymph nodes. Morphometric comparison between an 8–day–before–surgery and a 14–day–before–surgery single treatment. Cappello F, et al. **Clin Exp Obstet Gynecol** 1990; 17(1):51–2

Diffuse uptake of osteotropic radionuclide in the breast secondary to superior vena caval obstruction. Swayne LC, et al. **Clin Nucl Med** 1990 Feb;15(2):110–1

Patterns and mechanisms of spread of squamous carcinomas of the oral cavity. Carter RL. **Clin Otolaryngol** 1990 Apr; 15(2):185–91 (40 ref.)

Squamous cell carcinoma of the oral cavity. A review of 176 cases with application of malignancy grading and DNA measurements. Tytor M, et al. **Clin Otolaryngol** 1990 Jun; 15(3):235–52

Malignant transformation of oral lichen planus: case report and review of the literature. Massa MC, et al. **Cutis** 1990 Jan;45(1):45–7 (5 ref.)

Cutaneous horn. Srebrnik A, et al. **Cutis** 1990 Jul;46(1):25

False-positive diagnosis in fine–needle aspiration of an atypical Warthin's tumor: histochemical differential stains for cytodiagnosis. Laucirica R, et al. **Diagn Cytopathol** 1989;5(4):412–5

Malignant transformation of anorectal giant condyloma acuminatum (Buschke–Loewenstein tumor). Creasman C, et al. **Dis Colon Rectum** 1989 Jun;32(6):481–7

Mobility of the vocal cord and arytenoid in squamous cell carcinoma of the larynx and hypopharynx: an anatomical and clinical comparative study. Brasnu D, et al. **Ear Nose Throat J** 1990 May;69(5):324–30

In vitro bromodeoxyuridine labelling of squamous cell carcinomas of the oral cavity. Hemmer J. **Eur J Cancer** 1990 Feb;26(2):113–5

Clinico–pathological profile of endometrial carcinoma in young women (under 40 years of age). Colafranceschi M, et al. **Eur J Gynaecol Oncol** 1989;10(5):353–6

Squamous cell carcinoma of the renal pelvis presenting with a loin sinus. Giannopoulos A, et al. **Eur Urol** 1989; 16(6):466–8

Clinical staging of cancer of the penis: by size? By localization? Or by depth of infiltration? Maiche AG, et al. **Eur Urol** 1990;18(1):16–22

Involvement of protein kinase C in translocation of desmoplakins from cytosol to plasma membrane during desmosome formation in human squamous cell carcinoma cells grown in low to normal calcium concentration. Sheu HM, et al. **Exp Cell Res** 1989 Nov;185(1):176–90

The growth of human fibroblasts and A431 epidermoid carcinoma cells on gamma–irradiated human amnion collagen substrata. Liu B, et al. **Experientia** 1989 Oct 15; 45(10):1002–6

Esophageal carcinoma: pre–operative staging and evaluation of anastomotic recurrence. Lightdale CJ, et al. **Gastrointest Endosc** 1990 Mar–Apr;36(2 Suppl):S11–6 (37 ref.)

Transformation of histological tumor type of the cervix expressed in different tumor markers in the serum. Aalders JG, et al. **Gynecol Oncol** 1990 Jan;36(1):110–2

Endometrial squamous cell carcinoma: report of three cases and review of the literature. Abeler V, et al. **Gynecol Oncol** 1990 Mar;36(3):321–6 (36 ref.)

Superficially invasive carcinoma of the vagina following treatment for cervical cancer: a report of six cases. Eddy GL, et al. **Gynecol Oncol** 1990 Mar;36(3):376–9

Glassy cell carcinoma of the endometrium. Hachisuga T, et al. **Gynecol Oncol** 1990 Jan;36(1):134–8

Prognostic factors and the significance of cytologic grading in invasive squamous cell carcinoma of the vulva: a clinicopathologic study. Husseinzadeh N, et al. **Gynecol Oncol** 1990 Feb;36(2):192–9

Early adenocarcinoma of the uterine cervix—its histologic and immunohistologic study. Matsukuma K, et al. **Gynecol Oncol** 1989 Oct;35(1):38–43

Primary squamous carcinoma of the ovary [letter; comment] Menczer J, et al. **Gynecol Oncol** 1989 Dec;35(3):281 Comment on: Gynecol Oncol 1989 Aug;34(2):240–3.

Development of an immunological staging system to prognosticate disease course in malignant cervical neoplasia. Radhakrishna Pillai M, et al. **Gynecol Oncol** 1990 May;37(2):200–5

Rapidly progressing cervical cancer in a patient with human immunodeficiency virus infection. Rellihan MA, et al. **Gynecol Oncol** 1990 Mar;36(3):435–8

Age as a prognostic factor in carcinoma of the cervix. Spanos WJ Jr, et al. **Gynecol Oncol** 1989 Oct;35(1):66–8

Immunohistologic study of mononuclear cell infiltrates in oral squamous cell carcinomas. Hirota J, et al. **Head Neck** 1990 Mar–Apr;12(2):118–25

Patterns of spread of squamous cell carcinoma within the mandible. McGregor AD, et al. **Head Neck** 1989 Sep–Oct; 11(5):457–61

Metastatic squamous cell carcinoma of the parotid: a case of an occult primary. Marvel JB, et al. **Head Neck** 1990 Mar–Apr;12(2):174–7

Prognostic factors in anal squamous carcinoma: a multivariate analysis of clinical, pathological and flow cytometric parameters in 235 cases. Shepherd NA, et al. **Histopathology** 1990 Jun;16(6):545–55

Squamous cell carcinoma with prominent myxoid stroma. Foschini MP, et al. **Hum Pathol** 1990 Aug;21(8):859–65

Role of confluent monolayer surfaces on the growth of a newly established human esophageal carcinoma cell line. Matsuoka H, et al. **In Vitro Cell Dev Biol** 1990 Aug; 26(8):741–2

Temperature sensitivity on proliferation and morphologic alteration of human esophageal carcinoma cells in culture. Saito M, et al. **In Vitro Cell Dev Biol** 1990 Feb;26(2):181–6

Primary squamous cell carcinoma of breast (a case report). Chakraborty P, et al. **Indian J Pathol Microbiol** 1987 Apr; 30(2):163–6

A case of squamous cell carcinoma arising in an epidermal cyst. Shah LK, et al. **Indian J Pathol Microbiol** 1989 Apr; 32(2):138–40

Adeno–squamous carcinoma pancreas—a case report with literature review. Shariff S, et al. **Indian J Pathol Microbiol** 1989 Jan;32(1):62–5 (7 ref.)

Clinicopathological studies of carcinoma oesophagus with special reference to changes in surrounding epithelium. Usha, et al. **Indian J Pathol Microbiol** 1989 Apr; 32(2):125–32

Cell lines of human oral squamous–cell carcinomas retaining their differentiated phenotype. Crooijmans RP, et al. **Int J Cancer** 1990 May 15;45(5):945–51

Inhibition of growth and squamous–cell differentiation markers in cultured human head and neck squamous carcinoma cells by beta–all–trans retinoic acid. Jetten AM, et al. **Int J Cancer** 1990 Jan 15;45(1):195–202

Modulation of growth, differentiation and glycoprotein synthesis by beta–all–trans retinoic acid in a multicellular tumor spheroid model for squamous carcinoma of the head and neck. Sacks PG, et al. **Int J Cancer** 1989 Nov 15; 44(5):926–33

Adenoid (pseudoglandular) squamous cell carcinoma at the base of cutaneous horn [letter] Grunwald MH, et al. **Int J Dermatol** 1989 Oct;28(8):554–5

Linear bowenoid papulosis of the genitalia. A possible Koebner phenomenon. Sweidan NA, et al. **Int J Dermatol** 1990 Jul–Aug;29(6):430–1

Recurrent oral carcinoma in Ferguson–Smith disease. Malins TJ, et al. **Int J Oral Maxillofac Surg** 1990 Jun;19(3):165–6

Radiosensitivity of human head and neck squamous cell carcinomas in primary culture and its potential as a predictive assay of tumor radiocurability. Brock WA, et al. **Int J Radiat Biol** 1989 Nov;56(5):751–60

Radiobiological characterization of head and neck and sarcoma cells derived from patients prior to radiotherapy. Weichselbaum RR, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):313–9

Deeply invasive squamous cell carcinoma of the conjunctiva: case report. De Felice GP, et al. **Int Ophthalmol** 1990 Jul; 14(4):241–4

Unusual extension of lung cancer into the left atrium via the pulmonary vein. Kodama K, et al. **Int Surg** 1990 Jan–Mar;75(1):22–6

Intrabronchial implantation of the Lewis lung tumor cell does not favor tumorigenicity and metastasis. Li LM, et al. **Invasion Metastasis** 1990;10(3):129–41

Lymphoepithelioma–like carcinoma in the skin. Walker AN, et al. **J Am Acad Dermatol** 1990 Apr;22(4):691–3

The contribution of CT to the T–staging of laryngeal carcinoma. Deschepper C, et al. **J Belge Radiol** 1989 Jun; 72(3):191–7

Growth regulation of A431 cells. Modulation of expression of transforming growth factor–alpha mRNA and 2',5'–oligoadenylate synthetase activity. Kumar R, et al. **J Biol Chem** 1990 Mar 15;265(8):4578–82

Establishment and characterization of four new squamous cell carcinoma cell lines derived from oral tumors. Tatake RJ, et al. **J Cancer Res Clin Oncol** 1990;116(2):179–86

Receptor specific for certain nucleotides stimulates inositol phosphate metabolism and Ca2+ fluxes in A431 cells. Gonzalez FA, et al. **J Cell Physiol** 1989 Dec;141(3):606–17

Role of lipocortin I in the glucocorticoid induction of the terminal differentiation of a human squamous carcinoma. Violette SM, et al. **J Cell Physiol** 1990 Jan;142(1):70–7

Clinical importance of squamous metaplasia in invasive transitional cell carcinoma of the bladder [letter; comment] Coulson WF. **J Clin Pathol** 1989 Nov;42(11):1227–8 Comment on: J Clin Pathol 1989 Mar;42(3):250–3.

Mandibular invasion by oral squamous cell carcinoma. Clinical aspects. Müller H, et al. **J Craniomaxillofac Surg** 1990 Feb;18(2):80–4

Achromic verrucous large cell acanthoma. Ambrojo P, et al. **J Cutan Pathol** 1990 Jun;17(3):182–4

Altered expression of major histocompatibility complex (MHC) antigens by epidermal tumours. Markey AC, et al. **J Cutan Pathol** 1990 Apr;17(2):65–71

Bowen's disease with invasive carcinoma showing sweat gland differentiation. Saida T, et al. **J Cutan Pathol** 1989 Aug;16(4):222–6

Ultrastructure of the epidermal–dermal junction and cutaneous basal lamina in Bowen's disease. Warfel KA, et al. **J Cutan Pathol** 1989 Aug;16(4):203–6

Human squamous cell carcinoma from skin: establishment and characterization of a new cell line (HSC–5). Hozumi Y, et al. **J Dermatol** 1990 Mar;17(3):143–8

Malignant hidroacanthoma simplex. Takano Y, et al. **J Dermatol** 1989 Oct;16(5):405–8

Aggressive keratoacanthoma of the eyelid: "malignant" keratoacanthoma or squamous cell carcinoma? Requena L, et al. **J Dermatol Surg Oncol** 1990 Jun;16(6):564–8

Localization of cathepsin B in two human lung cancer cell lines. Erdel M, et al. **J Histochem Cytochem** 1990 Sep; 38(9):1313–21

Primary composite squamous cell carcinoma and large cell neuroendocrine carcinoma of the hypopharynx. Milroy CM, et al. **J Laryngol Otol** 1989 Nov;103(11):1093–6

Altered antigen expression predicts outcome in squamous cell carcinoma of the head and neck. Wolf GT, et al. **J Natl Cancer Inst** 1990 Oct 3;82(19):1566–72

Differences in incidence rates of cancers of the respiratory tract by anatomic subsite and histologic type: an etiologic implication. Yang CP, et al. **J Natl Cancer Inst** 1989 Dec 6;81(23):1828–31

New malignancy grading is a better prognostic indicator than Broders' grading in oral squamous cell carcinomas. Bryne M, et al. **J Oral Pathol Med** 1989 Sep;18(8):432–7

Lectin binding patterns in squamous epithelium in experimentally induced hamster buccal pouch carcinoma. Jin YT, et al. **J Oral Pathol Med** 1989 Sep;18(8):446–50

Histopathologic study of squamous cell carcinoma of the gingiva in edentulous and dentulous jaws of hamsters treated with N–methylnitrosourea. Kohgo T, et al. **J Oral Pathol Med** 1990 May;19(5):202–7

Differential lectin–bindings in normal and precancerous epithelium and squamous cell carcinoma of the oral mucosa. Saku T, et al. **J Oral Pathol Med** 1989 Sep; 18(8):438–45

Ploidy as a prognostic indicator in oesophageal squamous carcinoma and its relationship to various histological criteria. Edwards JM, et al. **J Pathol** 1989 Sep;159(1):35–41

The behaviour of human oral squamous cell carcinoma in cell culture. Prime SS, et al. **J Pathol** 1990 Mar; 160(3):259–69

Carcinoma of the vulva. Significance of surgical margin involvement in assessing prognosis. Lewandowski G, et

al. **J Reprod Med** 1989 Nov;34(11):884–6
Induction of the terminal differentiation of a human squamous cell carcinoma by steroids with glucocorticoid activity. Violette SM, et al. **J Steroid Biochem** 1989 Nov; 33(5):1001–5
Squamous cell carcinoma with cyst of the thyroid. Harada T, et al. **J Surg Oncol** 1989 Oct;42(2):136–43
The role of ilioinguinal lymphadenectomy and significance of histological differentiation in treatment of carcinoma of the penis. Fraley EE, et al. **J Urol** 1989 Dec;142(6):1478–82
Prediction of lymph node metastases in bladder carcinoma with deoxyribonucleic acid flow cytometry. Shaaban AA, et al. **J Urol** 1990 Oct;144(4):884–7
Mucoepidermoid carcinoma arising in a lymphoepithelial cyst—report of a case and review of the literature on branchiogenic carcinoma. Misonou J, et al. **Jpn J Surg** 1989 Jul;19(4):474–9 (17 ref.)
Establishment and characterization of a cell line (KU–8) from squamous cell carcinoma of the penis. Tsukamoto T. **Keio J Med** 1989 Sep;38(3):277–93
Establishment and characterization of two nasopharyngeal carcinoma cell lines. Lin CT, et al. **Lab Invest** 1990 Jun; 62(6):713–24
Rationale for elective neck dissection in 1990. Friedman M, et al. **Laryngoscope** 1990 Jan;100(1):54–9
Relation of lymph–node metastasis to histopathologic appearance in oral cavity and oropharyngeal carcinoma: a case series and literature review. Rasgon BM, et al. **Laryngoscope** 1989 Nov;99(11):1103–10 (32 ref.)
Primary squamous cell carcinoma of the parotid gland. Sterman BM, et al. **Laryngoscope** 1990 Feb;100(2 Pt 1):146–8
Case report: rapidly progressive systemic sclerosis associated with carcinoma of the lung. Enzenauer RJ, et al. **Milit Med** 1989 Nov;154(11):574–7
An immunohistochemical study of lung carcinomas using a monoclonal antibody which specifically reacts to basal cells. Maeda K, et al. **Mod Pathol** 1990 Jan;3(1):43–8
Psammoma bodies in metastatic carcinoma to the thyroid. Satoh Y, et al. **Mod Pathol** 1990 May;3(3):267–70
"Activated" keratinocyte phenotype is unifying feature in conditions which predispose to squamous cell carcinoma of the skin. Smoller BR, et al. **Mod Pathol** 1990 Mar; 3(2):171–5
Development of multiple carcinomas in a long term survivor of Wegener's granulomatosis treated with immunosuppressive drugs. Choy DS, et al. **N Y State J Med** 1989 Dec;89(12):680–2 (25 ref.)
Adenosquamous carcinoma of the cervix: prognosis in stage IB. Yazigi R, et al. **Obstet Gynecol** 1990 Jun;75(6):1012–5
Characteristics and behavior of eyelid carcinoma (basal cell, squamous cell sebaceous gland, and malignant melanoma). Loeffler M, et al. **Ophthalmic Surg** 1990 Jul;21(7):513–8 (22 ref.)
Progesterone receptors in carcinomas of the upper aerodigestive tract. Berg NJ, et al. **Otolaryngol Head Neck Surg** 1989 Nov;101(5):527–36
Hyperthermia effects on the growth of a laryngeal squamous cell carcinoma cell line treated with recombinant human interferons alpha and gamma. Park RI, et al. **Otolaryngol Head Neck Surg** 1989 Nov;101(5):542–8
Histological grading of therapy induced regression in squamous cell carcinomas of the oral cavity. A morphological and immunohistochemical study. Braun OM, et al. **Pathol Res Pract** 1989 Sep;185(3):368–72
Morphometric analysis, ploidy and response to chemotherapy in squamous carcinomas of the head and neck. Helliwell TR, et al. **Pathol Res Pract** 1989 Nov;185(5):755–9
Vascular changes and inflammatory infiltrations in primary lung cancers. Parafiniuk M, et al. **Patol Pol** 1989; 40(3):293–309
Cyclic–AMP in human lung preparations. Ali B, et al. **Physiol Behav** 1989 Jul;46(1):107–8
Non–melanoma skin cancer. Mora RG. **Prim Care** 1989 Sep; 16(3):665–84 (45 ref.)
Prediction of the radiation sensitivity of human squamous cell carcinoma cells using DNA filter elution. Schwartz JL, et al. **Radiat Res** 1990 Jul;123(1):1–6
Pleural myxoma associated with a pulmonary squamous cell carcinoma. Hasleton PS, et al. **Respir Med** 1989 Sep; 83(5):443–4
Spindle cell neoplasms of the skin: a comprehensive diagnostic approach. Argenyi ZB. **Semin Dermatol** 1989 Dec;8(4):283–97 (50 ref.)
"Undifferentiated" neoplasms of the sinonasal region: differential diagnosis based on clinical, light microscopic, immunohistochemical, and ultrastructural features. Mills SE, et al. **Semin Diagn Pathol** 1989 Nov;6(4):316–28 (104 ref.)
Surgical pathology of squamous carcinoma of the oral cavity: its impact on management. Borges AM, et al. **Semin Surg Oncol** 1989;5(5):310–7
Reflections on the nature of lung cancer. Fonde EC. **South Med J** 1990 Feb;83(2):218–20
A contribution on the prognostic significance of the tumor formula (pTNM) in squamous cell carcinoma of the bronchus. Huwer H, et al. **Thorac Cardiovasc Surg** 1989 Oct;37(5):281–4
Carcinoma oesophagus in a 14 year old child: report of a case and review of literature. Shahi UP, et al. **Trop Gastroenterol** 1989 Oct–Dec;10(4):225–8 (12 ref.)
Carcinoma of the urachus. Report of a case. Boscaino A, et al. **Tumori** 1989 Oct 31;75(5):518–9 (8 ref.)
Oesophageal squamous cell carcinoma with lymphoid stroma. A case report. Mori M, et al. **Virchows Arch [A]** 1989; 415(5):473–9
[Flow cytometric analysis of nasopharyngeal carcinoma] Chen XJ. **Chung Hua Chung Liu Tsa Chih** 1990 Mar; 12(2):82–4 (Eng. Abstr.) **(Chi)**
[Cytomorphological features of fine needle biopsy cytology of mediastinal lesions] Liu SF. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):269–71 (Eng. Abstr.) **(Chi)**
[Establishment of a novel cell line derived from nasopharyngeal carcinoma] Yao KT. **Chung Hua Chung Liu Tsa Chih** 1990 Jan;12(1):34–6 (Eng. Abstr.) **(Chi)**
[DNA content and its distribution pattern of poorly differentiated nasopharyngeal carcinoma measured by Feulgen cytophotometry] Zong YS. **Chung Hua Chung Liu Tsa Chih** 1990 Mar;12(2):85–8 (Eng. Abstr.) **(Chi)**
[Pathological survey of lung cancer induced by tin mine dust in Yunnan] Jin KW. **Chung–hua Ping Li Hsueh Tsa Chih** 1989 Sep;18(3):204–6 (Eng. Abstr.) **(Chi)**
[Meibomian gland adenocarcinoma with regional lymph node metastasis] Yuan NF. **Chung Hua Yen Ko Tsa Chih** 1989 May;25(3):144–5 (Eng. Abstr.) **(Chi)**
[Squamous cell carcinoma of the conjunctiva] Yuan NF. **Chung Hua Yen Ko Tsa Chih** 1989 Nov;25(6):343–5 (Eng. Abstr.) **(Chi)**
[Muco–epidermoid cancer of the esophagus. Review of the literature. Report of a case with 9 years' follow–up] Leborgne J, et al. **Ann Chir** 1989;43(7):580–3 (11 ref.) (Eng. Abstr.) **(Fre)**
[The value of endo–anorectal echography in the evaluation of the loco–regional extension and the monitoring of cancers of the anal canal] Giovannini M, et al. **Ann Gastroenterol Hepatol (Paris)** 1990 Jan–Feb;26(1):3–4 (Eng. Abstr.) **(Fre)**
[The association of neuro–endocrine carcinoma of the skin and Bowen's disease. Review of the literature apropos of 4 cases] Avesti C, et al. **Ann Pathol** 1990;10(2):86–98 (72 ref.) (Eng. Abstr.) **(Fre)**
[Malignant transformation of an intracranial epidermoid cyst] Michenet P, et al. **Ann Pathol** 1989;9(5):360–2 (Eng. Abstr.) **(Fre)**
[Biopsy guided by intravaginal echography. Diagnosis of pelvic recurrence of surgically treated anal canal cancer. Apropos of 3 cases (letter)] Giovannini M, et al. **Gastroenterol Clin Biol** 1989 Oct;13(10):852 **(Fre)**
[Mucoepidermoid cancer of the esophagus with 9 years' follow–up (letter)] Leborgne J, et al. **Gastroenterol Clin Biol** 1989 Dec;13(12):1091–2 **(Fre)**
[Endoscopic ultrasonic diagnosis and cancer of the esophagus. Results of a prospective comparative study with x–ray computed tomography in 51 surgically treated patients] Palazzo L, et al. **Gastroenterol Clin Biol** 1990; 14(5):428–36 (Eng. Abstr.) **(Fre)**
[Cancer of the anus arising within condylomata acuminata. Apropos of 2 cases. Review of the literature] Solovei G, et al. **J Chir (Paris)** 1989 Nov;126(11):603–7 (24 ref.) (Eng. Abstr.) **(Fre)**
[Correlation of diameters measured by x–ray computed tomography and intraparietal extension of squamous cell carcinoma of the thoracic esophagus. Apropos of 101 anatomoradiologic comparisons] Wurtz A, et al. **J Chir (Paris)** 1990 Feb;127(2):63–7 (Eng. Abstr.) **(Fre)**
[Architectonics of fibrillary elements of the stroma in carcinomas of the chin area] Frincu DL, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Apr–Jun;93(2):329–34 (Eng. Abstr.) **(Fre)**
[Perineural dissemination in labial carcinoma] Naval L, et al. **Rev Stomatol Chir Maxillofac** 1990;91(1):65–9 (Eng. Abstr.) **(Fre)**
[Contribution of endosonography to preoperative staging in esophageal and stomach cancer] Grimm H, et al. **Chirurg** 1989 Oct;60(10):684–9 (Eng. Abstr.) **(Ger)**
[Cornu cutaneum] Petzelbauer P, et al. **Hautarzt** 1989 Sep; 40(9):556–8 (Eng. Abstr.) **(Ger)**
[Neoplastic ulcus cruris. Spinocellular carcinoma of the left lower leg with lymph node metastases of the popliteal, inguinal and iliac areas] Riess C. **Hautarzt** 1989 Sep; 40(9):592–3 (Eng. Abstr.) **(Ger)**
[Multicentric cancer spread in the mouth cavity and oropharynx] Brandau P, et al. **HNO** 1989 Dec;37(12):485–9 (Eng. Abstr.) **(Ger)**
[Results of impulse cytophotometry in malignant tumors of the head and neck. A prognostic parameter?] Brauneis JW, et al. **HNO** 1989 Sep;37(9):369–72 (Eng. Abstr.) **(Ger)**
[Occurrence of non–metaplastic squamous epithelium within the larynx and its relation to the development of cancer] Arnhold–Schneider M, et al. **Laryngorhinootologie** 1990 Feb;69(2):91–7 (Eng. Abstr.) **(Ger)**
[Increasing chemosensitivity to cisplatin by glutathione depletion with buthionine sulfoximine. In vitro and in vivo studies with a human squamous cell cancer line] Bier H. **Laryngorhinootologie** 1990 Jan;69(1):16–20 (Eng. Abstr.) **(Ger)**
[Detection of muscle, vein and artery infiltrations of cervical lymphatic metastases] Heppt W, et al. **Laryngorhinootologie** 1989 Aug;68(8):419–24 (Eng. Abstr.) **(Ger)**
[An unusual differential diagnosis of cancer of the base of the tongue: malacoplakia] Seifert E, et al. **Laryngorhinootologie** 1990 Feb;69(2):88–90 (Eng. Abstr.) **(Ger)**
[Ulcerated anal tumors. Freiburg gastroenterology discussions (clinical conference)] Krüger HJ, et al. **Med Klin** 1989 Jul 15;84(7):344–6 **(Ger)**
[Standardized patho–anatomic documentation of findings on forms from the German Society of Tumor Centers for malignancies of the mouth, jaw and face] Howaldt HP, et al. **Pathologe** 1989 Nov;10(6):364–8 **(Ger)**
[Pulmonary blastoma. Immunohistochemical characterization of heteromorphic tumor components] Brockmann M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:605–6 (Eng. Abstr.) **(Ger)**
[Dust deposits in lung tumors—cause and significance] Fisseler–Eckhoff A, et al. **Pneumologie** 1990 Feb;44 Suppl 1:325–6 (Eng. Abstr.) **(Ger)**
[Bronchial cancer and asbestos: comparison of anamnestic exposure to asbestos, detection of asbestos bodies in bronchoalveolar lavage and in lung tissue] Schildge J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:333–4 (Eng. Abstr.) **(Ger)**
[The value of computed tomography for the staging of esophageal carcinoma] Lanfermann H, et al. **Rontgenblatter** 1990 Jun;43(6):241–4 (Eng. Abstr.) **(Ger)**
[Cervical intra–epithelial neoplasia] Heinzl S. **Ther Umsch** 1989 Dec;46(12):839–46 (25 ref.) (Eng. Abstr.) **(Ger)**
[Report of a spinalioma of the right hand] Bochmann C. **Z Arztl Fortbild (Jena)** 1989;83(20):1019–20 **(Ger)**
[Primary squamous cell cancer of the thyroid] Zahradka W, et al. **Z Gesamte Inn Med** 1989 Sep 15;44(18):562–3 (Eng. Abstr.) **(Ger)**
[Determination of epidermal growth factor (EGF) receptors in basal cell carcinomas, squamous cell carcinomas and melanomas] Hagedorn M, et al. **Z Hautkr** 1990 Jun; 65(6):568–70 (Eng. Abstr.) **(Ger)**
[Digital 20 mhz sonography of the skin in preoperative diagnosis] Hoffmann K, et al. **Z Hautkr** 1989 Oct 15; 64(10):851–2, 855–8 (Eng. Abstr.) **(Ger)**
[Histomorphologic and catamnestic studies of 226 patients with cervical carcinoma in stage Ia in the years 1966 to 1986] Schumacher A, et al. **Zentralbl Allg Pathol** 1989; 135(7):639–48 (Eng. Abstr.) **(Ger)**
[Solar keratosis. Morphometric observations on atypia and polarity of keratinocytes of the basal stratum] Noto G, et al. **G Ital Dermatol Venereol** 1989 May;124(5):203–5 (Eng. Abstr.) **(Ita)**
[A case of a particularly destructive carcinoma of the lip] Dei P, et al. **G Ital Oncol** 1990 Jan–Jun;10(1–2):38–40 (Eng. Abstr.) **(Ita)**
[Adenosquamous carcinoma of the gallbladder] Stamatiadis AN, et al. **Minerva Chir** 1989 Oct 15;44(19):2085–7 (Eng. Abstr.) **(Ita)**
[Pure squamous cell carcinoma and mixed transitional and squamous carcinoma of the bladder. A clinico–histopathological comparative study] Bussani R, et al. **Minerva Urol Nefrol** 1989 Jul–Sep;41(3):177–81 (Eng. Abstr.) **(Ita)**
[Analyses of autopsied cases of primary lung cancer. First Part: The distribution of metastasis] Oida K. **Bull Chest Dis Res Inst Kyoto Univ** 1988 Mar;21(1–2):17–28 (Eng. Abstr.) **(Jpn)**
[Analysis of autopsied cases of primary lung cancer. Second Part: The diagnostic accuracy] Oida K. **Bull Chest Dis Res Inst Kyoto Univ** 1988 Mar;21(1–2):29–32 (Eng. Abstr.) **(Jpn)**
[Effect of vitamin A deficiency on PNUR–induced carcinogenesis in the rat upper digestive tract] Toyoda K, et al. **Eisei Shikenjo Hokoku** 1989;(107):73–7 (Eng. Abstr.) **(Jpn)**
[A primary adenosquamous carcinoma of the stomach difficult to differentiate from gastric ulcer] Honda H, et al. **Gan No Rinsho** 1990 Feb;36(2):193–7 (Eng. Abstr.) **(Jpn)**
[An autopsy case of quadruple carcinoma] Kobayashi K, et al. **Gan No Rinsho** 1990 Jun;36(7):842–6 (Eng. Abstr.) **(Jpn)**
[Prognosis of gastric carcinoma sited in the cardiac part determined by the type of esophageal invasion] Kumagai K, et al. **Gan No Rinsho** 1990 Aug;36(9):979–84 (Eng. Abstr.) **(Jpn)**
[Adenosquamous carcinoma and squamous cell carcinoma of the liver: a resected case and three autopsied cases] Mandai K, et al. **Gan No Rinsho** 1989 Oct;35(12):1439–47 (29 ref.) (Eng. Abstr.) **(Jpn)**
[A clinico–pathological study of the intraepithelial spreading of esophageal carcinomas] Maruyama M. **Gan No Rinsho** 1990 Apr;36(5):574–83 (Eng. Abstr.) **(Jpn)**
[An associated concomitant early multiple esophageal carcinoma and gastric carcinoma] Ogawa Y, et al. **Gan No Rinsho** 1990 Mar;36(4):543–50 (31 ref.) (Eng. Abstr.) **(Jpn)**
[A polypoidal adenosquamous cell carcinoma of the esophagus with a pseudosarcomatous stromal reaction] Tanimura A, et al. **Gan No Rinsho** 1990 May;36(6):728–32 (Eng. Abstr.) **(Jpn)**
[Histological malignancy grading of oral squamous cell carcinomas] Yamamoto E, et al. **Gan No Rinsho** 1989 Nov; 35(14):1665–72 (Eng. Abstr.) **(Jpn)**
[In vitro combined effects of pirarubicin (THP) and various

antitumor drugs on human tumor cell lines] Nagasawa M, et al. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 1):633–8 (Eng. Abstr.) **(Jpn)**

[A case of primary right ureteral squamous cell carcinoma with intraperitoneal invasion] Ohoka H, et al. **Hinyokika Kiyo** 1989 Nov;35(11):1915–9 (28 ref.) (Eng. Abstr.) **(Jpn)**

[Squamous cell carcinoma co-existing vesical leukoplakia—case study and its clinicopathological analysis of the pathogenesis] Yoshida K, et al. **Hinyokika Kiyo** 1989 May;35(5):885–9 (Eng. Abstr.) **(Jpn)**

[Primary lung cancer presenting as a solitary thin-wall cavity] Umeki S, et al. **Kokyu To Junkan** 1990 Feb; 38(2):141–5 **(Jpn)**

[A case of double primary cancer of lung and trachea] Hoshi E, et al. **Kyobu Geka** 1989 Nov;42(12):1050–3 (Eng. Abstr.) **(Jpn)**

[Immunological investigation of lymph node metastasis in oral squamous cell carcinomas] Osaki T, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Mar 20;25(3):621–31 (Eng. Abstr.) **(Jpn)**

[Immunohistochemical approach to reveal the growth potential of uterine cancers using anti-BrdU antibody and Ki-67] Yoshinouchi M. **Nippon Gan Chiryo Gakkai Shi** 1989 Dec 20;24(11):2513–21 (Eng. Abstr.) **(Jpn)**

[Diagnosis of lymph node metastasis in esophageal carcinoma: detecting with coronal magnetic resonance imaging] Ariga T. **Nippon Geka Gakkai Zasshi** 1990 Jul; 91(7):797–807 (Eng. Abstr.) **(Jpn)**

[Two cases of squamous cell carcinoma arising from erythema ab igne] Akasaka T, et al. **Nippon Hifuka Gakkai Zasshi** 1989 May;99(6):735–42 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Pilomatrix carcinoma—report of the second case in Japan and a review of the literature] Masahashi T, et al. **Nippon Hifuka Gakkai Zasshi** 1990 Mar;100(4):533–9 (25 ref.) (Eng. Abstr.) **(Jpn)**

[The effects of etretinate and anticancer drugs on the cell line of a squamous cell carcinoma of human skin (HSC-1)] Tokuhashi K. **Nippon Hifuka Gakkai Zasshi** 1989 May; 99(6):673–82 (Eng. Abstr.) **(Jpn)**

[Correlation between electron microscopic nuclear irregularity index and malignancy of epidermal tumors] Toriyama F. **Nippon Hifuka Gakkai Zasshi** 1990 Jan; 100(1):37–47 (Eng. Abstr.) **(Jpn)**

[Establishment of a human skin squamous cell carcinoma cell line (SCC-1CB) in vitro and its characteristics] Watanabe F, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Jun; 99(7):793–800 (Eng. Abstr.) **(Jpn)**

[Correlation of proliferation index with submucosal invasion of hypopharyngeal cancer] Murakami Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1990 Jan;93(1):71–9 (Eng. Abstr.) **(Jpn)**

[TNF sensitivity of the established cell lines derived from esophageal squamous cell carcinomas and combined effect of TNF and IFN gamma] Suzuki H, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Aug;92(8):1192–6 (Eng. Abstr.) **(Jpn)**

[A case report of synchronous double cancer of the lung and esophagus] Fukuda H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jun;38(6):1053–8 (14 ref.) (Eng. Abstr.) **(Jpn)**

[An autopsy case of pulmonary asbestosis with synchronous multiprimary lung cancers, early gastric cancer and atypical mycobacteriosis] Yamamoto S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jun;27(6):724–9 (Eng. Abstr.) **(Jpn)**

[An autopsy case of esophageal carcinoma with esophago-pericardial fistula caused by artificial esophageal tube] Kim YC, et al. **Nippon Naika Gakkai Zasshi** 1989 Jun;78(6):831–4 **(Jpn)**

[Primary squamous cell carcinoma of the thyroid gland possibly transformed from papillary adenocarcinoma after irradiation] Onai T, et al. **Nippon Naika Gakkai Zasshi** 1989 Dec;78(12):1775–6 **(Jpn)**

[In vitro studies of 5-FU sensitivity on uterine cervical cancer cell lines—comparison between squamous cell carcinoma and adenocarcinoma] Ueda M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Sep; 41(9):1423–30 (Eng. Abstr.) **(Jpn)**

[A case of adenosquamous cell carcinoma of the cecum] Takemura K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Mar;87(3):857–60 **(Jpn)**

[An autopsy case of primary intracranial squamous cell carcinoma] Ebisudani D, et al. **No Shinkei Geka** 1990 Feb; 18(2):193–8 (17 ref.) (Eng. Abstr.) **(Jpn)**

[Diagnosis of invasion to thoracic aorta and superior vena cava in lung cancer; comparative studies on CT and MRI in resected or autopsied cases] Adachi S, et al. **Rinsho Hoshasen** 1990 Jul;35(7):803–10 (Eng. Abstr.) **(Jpn)**

[A case of primary adenosquamous carcinoma of the stomach showing Borrmann 4 type] Tsukino H, et al. **Rinsho Hoshasen** 1990 May;35(5):649–52 (Eng. Abstr.) **(Jpn)**

[Coexistence of multifocal bowen disease of the vulva and cervix carcinoma] Czekanowski R, et al. **Ginekol Pol** 1989 Apr;60(4):229–34 (Eng. Abstr.) **(Pol)**

[Analysis of neoplasm metastases to the bone marrow in patients with lung cancer] Dzięcioł J, et al. **Pneumonol Pol** 1989 Apr;57(4):235–9 (Eng. Abstr.) **(Pol)**

[Spontaneous remission of cancer of the esophagus. A case report] Lacerda Filho A, et al. **Arq Gastroenterol** 1989 Jul-Sep;26(3):65–7 (Eng. Abstr.) **(Por)**

[Adenosquamous early gastric carcinoma] Butov IuL, et al. **Arkh Patol** 1989;51(7):76–7 (Eng. Abstr.) **(Rus)**

[Several parameters of growth of heterografts of human lung tumor in the subrenal capsule of CBA mice] Skotnikova OI, et al. **Eksp Onkol** 1990;12(1):41–3 (Eng. Abstr.) **(Rus)**

[Characteristics of the metastasis of lung cancer in young patients] Vagner RI, et al. **Vestn Khir** 1989 Nov; 143(11):11–4 (Eng. Abstr.) **(Rus)**

[Squamous cell breast cancer] Ermilova VD, et al. **Vopr Onkol** 1989;35(9):1040–4 (Eng. Abstr.) **(Rus)**

[Carcinoma of the oral cavity—analysis of local metastases and results of therapy] Satko I, et al. **Bratisl Lek Listy** 1990 Jan;91(1):57–61 (Eng. Abstr.) **(Slo)**

[Quantitative study of the glands in the larynx of patients with laryngeal cancer] Basterra J. **An Otorrinolaringol Ibero Am** 1989;16(5):505–10 (Eng. Abstr.) **(Spa)**

[Bowenoid papulosis] Lobos Bert P. **Med Cutan Ibero Lat Am** 1989;17(4):229–33 (48 ref.) (Eng. Abstr.) **(Spa)**

[A 67-year-old male patient diagnosed with low-grade lymphoma, readmitted because of sciatic syndrome (clinical conference)] **Rev Clin Esp** 1989 Oct;185(6):319–29 (41 ref.) **(Spa)**

PHYSIOPATHOLOGY

Labelling index of gynaecological tumours assessed by bromodeoxyuridine staining in vitro using flow cytometry and histochemistry. Gasinska A, et al. **Int J Radiat Biol** 1989 Nov;56(5):793–6

Smooth muscle-derived factor stimulates mobility of human tumor cells. Rosen EM, et al. **Invasion Metastasis** 1990; 10(1):49–64

A study of an in vitro model for invasion of oral squamous cell carcinoma. Matsumoto K, et al. **J Oral Pathol Med** 1989 Oct;18(9):498–501

Relationship between radiosensitivity and metallothionein content in clones from a mouse squamous cell carcinoma. Miura M, et al. **Radiat Res** 1990 Aug;123(2):171–5

[The capping of receptors for the epidermal growth factor and the participation of the cytoskeleton in this process in A-431 cells] Khrebtukova IA, et al. **Tsitologiia** 1989 Oct; 31(10):1211–20 (Eng. Abstr.) **(Rus)**

[Activation of the calcium channels of A-431 cells by epidermal growth factor] Mozhaeva GN, et al. **Tsitologiia** 1989 Sep;31(9):1064–73 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

The effect of short-term application of PABA on photocarcinogenesis. Flindt-Hansen H, et al. **Acta Derm Venereol (Stockh)** 1990;70(1):72–5

The administration of beta carotene to prevent and regress oral carcinoma in the hamster cheek pouch and the associated enhancement of the immune response. Schwartz JL, et al. **Adv Exp Med Biol** 1990;262:77–93

The inhibiting effect of PABA on photocarcinogenesis. Flindt-Hansen H, et al. **Arch Dermatol Res** 1990; 282(1):38–41

Chemoprevention of upper aerodigestive tract cancers: a report of the third Upper Aerodigestive Cancer Task Force workshop. Lippman SM, et al. **Head Neck** 1990 Jan-Feb; 12(1):5–20 (83 ref.)

Retinoids as chemopreventive agents in head and neck cancer. Greval RS, et al. **Indian J Med Sci** 1990 Jan; 44(1):1–4

Cytological screening history of patients with early invasive cervical cancer. Turner MJ, et al. **Ir Med J** 1990 Jun; 83(2):61–2

Radiation induced tumours of the pharynx—can they be avoided? Nigam A, et al. **J Laryngol Otol** 1990 Feb; 104(2):129–30

Prevention of experimental cancer and immunostimulation by vitamin E (immunosurveillance). Shklar G, et al. **J Oral Pathol Med** 1990 Feb;19(2):60–4

A clinical trial of beta carotene to prevent basal-cell and squamous-cell cancers of the skin. The Skin Cancer Prevention Study Group [see comments] Greenberg ER, et al. **N Engl J Med** 1990 Sep 20;323(12):789–95 Comment in: N Engl J Med 1990 Sep 20;323(12):825–7.

[General aspects of secondary prevention and possible interventions applicable to squamous carcinoma of the upper respiratory-digestive tract] Terracini B, et al. **Acta Otorhinolaryngol Ital** 1990;10 Suppl 27:11–8 (33 ref.) (Eng. Abstr.) **(Ita)**

[THe experience of detecting lung cancer in an industrial district] Nechaeva OB. **Vopr Onkol** 1990;36(5):575–9 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Host moderator variables in the promotion of cervical neoplasia—II. Dimensions of life stress. Antoni MH, et al. **J Psychosom Res** 1989;33(4):457–67

RADIOGRAPHY

The positive bronchus sign in patients with known lung cancer. Zacharopoulos G, et al. **Eur J Radiol** 1990 Mar-Apr;10(2):130–3

Cystic pelvic mass in a patient having recurrent carcinoma of the cervix. Eising EG, et al. **Invest Radiol** 1990 Feb; 25(2):205–8

Carcinoma of the hypopharynx: CT staging. Aspestrand F, et al. **J Comput Assist Tomogr** 1990 Jan-Feb;14(1):72–6

Squamous cell carcinoma of the uroepithelium: CT evaluation. Narumi Y, et al. **Radiology** 1989 Dec; 173(3):853–6

[Roentgeno-pathologic studies of peripheral pulmonary carcinoma] JI WK. **Chung Hua Chung Liu Tsa Chih** 1989 Sep;11(5):386–8 (Eng. Abstr.) **(Chi)**

[Value of chest CT scans for predicting surgical resectability of lung cancer] Chang CL. **Chung Hua Wai Ko Tsa Chih** 1990 Feb;28(2):98–9, 127 (Eng. Abstr.) **(Chi)**

[The X-ray characteristic feature of the multiple primary malignant tumor of digestive tract] Yang K, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Jun;21(2):209–12 (Eng. Abstr.) **(Chi)**

[Value of x-ray computed tomography in evaluating the operability of esophageal cancer. Results of a prospective study] Lozac'h P, et al. **Ann Chir** 1989;43(6):443–6 (Eng. Abstr.) **(Fre)**

[The clinical value of contrast CT in lymph node staging in the neck region] Bongers H, et al. **ROFO** 1990 Apr; 152(4):398–404 (Eng. Abstr.) **(Ger)**

[Computed tomography of the soft tissues of the neck. Lymph node metastases and their differential diagnosis. I. Methods and the principal CT criteria for lymph node metastases] Lenz M. **Rontgenblatter** 1990 Jun;43(6):270–81 (Eng. Abstr.) **(Ger)**

[What is your diagnosis? Hypertrophic osteoarthropathy] Meyer JL, et al. **Schweiz Rundsch Med Prax** 1989 Oct 10; 78(41):1117–8 **(Ger)**

[Computed tomographic determination of the target volume and the evaluation of remission after radiation of bronchial carcinoma] Feyerabend T, et al. **Strahlenther Onkol** 1990 Jun;166(6):405–10 (Eng. Abstr.) **(Ger)**

[Preoperative evaluation of digital subtraction pulmonary angiography in primary lung cancer] Miyamoto H, et al. **Kokyu To Junkan** 1989 Nov;37(11):1209–14 (Eng. Abstr.) **(Jpn)**

[The expectation of diagnostic radiology in the therapy of lung cancer] Shibata K, et al. **Rinsho Hoshasen** 1990 Jul; 35(7):789–94 (Eng. Abstr.) **(Jpn)**

[Potentials of orthopantomography in the diagnosis of the late stages of cancer of the maxilla] Vorob'ev IuI, et al. **Stomatologiia (Mosk)** 1990 Jan-Feb;69(1):46–8 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Lymphoscintigraphy in the detection of cervical metastases from oral carcinoma: a pilot study. Sri-Pathmanathan R, et al. **Ann R Coll Surg Engl** 1989 Sep;71(5):281–4

Immunoscintigraphy of human lung squamous cell carcinoma using an iodine-131 labelled monoclonal antibody (Po66). Bourguet P, et al. **Br J Cancer** 1990 Feb;61(2):230–4

Oropharynx carcinoma: irradiation alone versus induction chemotherapy plus irradiation—5 year results. Calais G, et al. **Br J Radiol** 1990 May;63(749):340–5

Gallium imaging of esophageal carcinoma: increased sensitivity with lateral views of the thorax. Sostre S, et al. **Clin Nucl Med** 1990 Mar;15(3):163–7

Bone scanning for evaluating mandibular bone extension of oral squamous cell carcinoma. Söderholm AL, et al. **J Oral Maxillofac Surg** 1990 Mar;48(3):252–7

99Tcm-labelled meso-HMPAO and glutathione content of human lung tumours. Rowell NP, et al. **Nucl Med Commun** 1989 Jul;10(7):503–8

99Tcm(v)-DMSA planar scintigraphy: does it have a role in the management of patients with head and neck squamous carcinoma? Watkinson JC, et al. **Nucl Med Commun** 1989 Dec;10(12):859–70

What is the optimal imaging time for 99Tcm-(V)-DMSA planar scintigraphy in the detection of squamous carcinoma? A comparative study in humans and in an animal tumour model. Watkinson JC, et al. **Nucl Med Commun** 1989 Oct;10(10):741–50

RADIOTHERAPY

Three new primary pelvic carcinomas in a patient following radiotherapy for carcinoma of the cervix. Case report. Gatzen C, et al. **Acta Chir Scand** 1990 Feb;156(2):183–6

Survival and esophageal passage after radiotherapy of inoperable esophageal carcinoma. A retrospective study of 106 cases. Kellokumpu-Lehtinen P, et al. **Acta Oncol** 1990;29(2):175–8

Advanced squamous cell carcinoma of the larynx. Lindelöv B, et al. **Acta Oncol** 1990;29(4):505–8

Iridium 192 implantation of squamous cell carcinomas of the oropharynx. Mazeron JJ, et al. **Am J Otolaryngol** 1989 Sep-Oct;10(5):317–21 (21 ref.)

101 oesophageal cancers: a surgeon uses radiotherapy. Earlam RJ, et al. **Ann R Coll Surg Engl** 1990 Jan; 72(1):32–40

Intraoperative radiotherapy (IORT) for locally advanced carcinoma of the base of the tongue. Technique - preliminary results. Schmitt T, et al. **Ann Radiol (Paris)** 1989;32(6):505–8

Reaction of neoplasm and brain to laser. Rosomoff HL, et al. **Arch Neurol** 1966 Feb;14(2):143–8

T2 glottic cancer. Recurrence, salvage, and survival after definitive radiotherapy. Howell-Burke D, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jul;116(7):830-5

Squamous cell carcinoma of the base of the tongue: results of treatment in 115 cases. Calais G, et al. **Br J Radiol** 1989 Sep;62(741):849-53

The influence of tumour type, persistent precancerous lesions and lymph node involvement on the results of radiotherapy in oral cancers. Cherry CP, et al. **Br J Radiol** 1967 Aug; 40(476):612-8

Complete remission of metastatic squamous carcinoma after cisplatinum chemotherapy without sustained control, following primary tumor control by californium-252 brachytherapy [letter] Maruyama Y, et al. **Br J Radiol** 1990 Aug;63(752):661-3

Sublethal damage repair and radiosensitivity of human squamous cell carcinoma cells grown with different culture techniques. Schwachöfer JH, et al. **Br J Radiol** 1989 Dec; 62(744):1084-8

Final report of the general clinical results of the British Institute of Radiology fractionation study of 3F/wk versus 5F/wk in radiotherapy of carcinoma of the laryngo-pharynx [see comments] Wiernik G, et al. **Br J Radiol** 1990 Mar;63(747):169-80 Comment in: Br J Radiol 1990 Apr;63(748):315-6.

The role of radiation therapy in laryngeal cancer. Mendenhall WM, et al. **CA** 1990 May-Jun;40(3):150-65 (43 ref.)

Cancer of the esophagus and cardia: overview of radiotherapy. Flores AD. **Can J Surg** 1989 Nov;32(6):404-9

Pathologic findings in total esophagectomy specimens after intracavitary and external-beam radiotherapy. Berry B, et al. **Cancer** 1989 Nov 1;64(9):1833-7

Extended-field radiation therapy for carcinoma of the cervix. Podczaski E, et al. **Cancer** 1990 Jul 15;66(2):251-8

Rhabdomyosarcoma following radiation therapy for cervical carcinoma--a case report. Lee CL, et al. **Chang Keng I Hsueh** 1990 Mar 20;13(1):65-71

The treatment of squamous-cell carcinoma of the lower lip by rigid implants. Durrant KR, et al. **Clin Radiol** 1973 Oct; 24(4):502-5

Linear pemphigus vulgaris after X-ray irradiation. Crovato F, et al. **Dermatologica** 1989;179(3):135-6

Chlamydia trachomatis in cervical uterine irradiated cancer patients. Maeda MY, et al. **Diagn Cytopathol** 1990;6(2):86-8

Laser treatment of upper gastrointestinal tract carcinoma: determinants of survival. Stange EF, et al. **Endoscopy** 1989 Nov;21(6):254-7

Radiation-induced changes of fibroblasts in the squamous cell carcinoma of the head and neck. Kellokumpu-Lehtinen P, et al. **Folia Histochem Cytobiol** 1989;27(3):169-73

What does radiotherapy add to survival over endoscopic intubation alone in inoperable squamous cell oesophageal cancer? Oliver SE, et al. **Gut** 1990 Jul;31(7):750-2

Effect of intracavitary radiotherapy on tumor-associated trypsin inhibitor (TATI) in patients with cervical and endometrial cancer. Lehtovirta P, et al. **Gynecol Oncol** 1990 Jul;38(1):110-3

Serum squamous cell carcinoma antigen in the monitoring of radiotherapy treatment response in carcinoma of the cervix. Ngan HY, et al. **Gynecol Oncol** 1990 May; 37(2):260-3

Vaginal radiation brachytherapy to reduce central recurrence after radical hysterectomy for cervical carcinoma. Photopulos GJ, et al. **Gynecol Oncol** 1990 Aug;38(2):187-90

Preoperative radiotherapy followed by radical vulvectomy with inguinal lymphadenectomy for advanced vulvar carcinomas. Rotmensch J, et al. **Gynecol Oncol** 1990 Feb; 36(2):181-4

Radiation therapy for primary squamous cell carcinoma of the vagina: Stanford University experience. Spirtos NM, et al. **Gynecol Oncol** 1989 Oct;35(1):20-6

Significance and therapeutic implications of tumor regression following radiotherapy in patients treated for squamous cell carcinoma of the oropharynx and pharyngolarynx. Bataini JP, et al. **Head Neck** 1990 Jan-Feb;12(1):41-9 (27 ref.)

Interstitial brachytherapy and early tongue squamous cell carcinoma management. Lefebvre JL, et al. **Head Neck** 1990 May-Jun;12(3):232-6

Carcinoma of the supraglottic larynx: a basis for comparing the results of radiotherapy and surgery. Mendenhall WM, et al. **Head Neck** 1990 May-Jun;12(3):204-9

Radiation therapy alone and in combination with bleomycin and 5-fluorouracil in advanced carcinoma esophagus. Hukku S, et al. **Indian J Cancer** 1989 Sep;26(3):131-6

External irradiation of epithelial skin cancer [editorial; comment] Brady LW. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):491-2 Comment on: Int J Radiat Oncol Biol Phys 1990 Aug;19(2):235-42.

Bilateral squamous cell carcinoma of the middle ear [letter] Carlsöö B, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug; 19(2):506-7

Dose-response for local control with hyperfractionated radiation therapy in advanced carcinomas of the upper aerodigestive tracts: preliminary report of radiation therapy oncology group protocol 83-13. Cox JD, et al. **Int J Radiat Oncol Biol Phys** 1990 Mar;18(3):515-21

Interstitial iridium 192 for cutaneous carcinoma of the external nose. Crook JM, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan;18(1):243-8

The treatment of anal cancer [comment] [see comments] Cummings BJ. **Int J Radiat Oncol Biol Phys** 1989 Dec; 17(6):1359-61 Comment on: Int J Radiat Oncol Biol Phys 1989 Dec;17(6):1141-51. Comment on: Int J Radiat Oncol Biol Phys 1989 Dec;17(6):1153-60. Comment on: Int J Radiat Oncol Biol Phys 1989 Dec;17(6):1161-9. Comment in: Int J Radiat Oncol Biol Phys 1990 Mar;18(3):710.

The role of hemoglobin concentration in the outcome of misonidazole-sensitized radiotherapy of head and neck cancers: based on RTOG trial #79-15. Fazekas JT, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1177-81

Is interstitial implantation essential for successful radiotherapeutic treatment of base of tongue carcinoma? Foote RL, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun; 18(6):1293-8

Irradiation alone for supraglottic larynx carcinoma: can CT findings predict treatment results? [see comments] Freeman DE, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug; 19(2):485-90 Comment in: Int J Radiat Oncol Biol Phys 1990 Aug;19(2):497-8.

Mixed neutron/photon irradiation of unresectable squamous cell carcinomas of the head and neck: the final report of a randomized cooperative trial. Griffin TW, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):959-65

Brachytherapy as part of the definitive management of squamous cancer of the base of tongue. Harrison LB, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1309-12

Primary radiotherapy of T1 squamous cell carcinoma of the larynx: analysis of 478 patients treated from 1963 to 1985. Johansen LV, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1307-13

The results of radiotherapy of cancer of the middle ear. Korzeniowski S, et al. **Int J Radiat Oncol Biol Phys** 1990 Mar;18(3):631-3

External irradiation of epithelial skin cancer [see comments] Lovett RD, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug; 19(2):235-42 Comment in: Int J Radiat Oncol Biol Phys 1990 Aug;19(2):491-2.

Radiation therapy for head and neck cancers in the elderly. Lusinchi A, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr; 18(4):819-23

Dose fractionation and regeneration in radiotherapy for cancer of the oral cavity and oropharynx. Part 2. Normal tissue responses: acute and late effects. Maciejewski B, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan;18(1):101-11

Prognostic factors of local outcome for T1, T2 carcinomas of oral tongue treated by iridium 192 implantation. Mazeron JJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):281-5

Effect of dose rate on local control and necrosis in the reirradiation of faucial arch squamous cell carcinomas with interstitial iridium 192 [letter] Mazeron JJ, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1275

Iridium-192 curietherapy for T1 and T2 epidermoid carcinomas of the floor of mouth. Mazeron JJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1299-306

Continuous hyperfractionated accelerated radiotherapy in locally advanced carcinoma of the head and neck region. Saunders MI, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1287-93

Epidermoid carcinoma of the anal canal treatment results and prognostic variables in a series of 242 cases [see comments] Schlienger M, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1141-51 Comment in: Int J Radiat Oncol Biol Phys 1989 Dec;(17):1359-61.

Radiation response of xenografts of a human squamous cell carcinoma and a glioblastoma multiforme: a progress report. Suit HD, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb;18(2):365-73

Postoperative irradiation for squamous cell carcinoma of the head and neck [letter] Vikram B. **Int J Radiat Oncol Biol Phys** 1990 Jan;18(1):267-8

Hyperfractionated radiotherapy in the treatment of squamous cell carcinomas of the supraglottic larynx. Wendt CD, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):1057-62

Primary radiotherapy in the treatment of stage I and II oral tongue cancers: importance of the proportion of therapy delivered with interstitial therapy [see comments] Wendt CD, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun; 18(6):1287-92 Comment in: Int J Radiat Oncol Biol Phys 1990 Jun;18(6):1529-30; discussion 1535.

Retinopathy secondary to radiation therapy for squamous cell carcinoma. Groomer AE, et al. **J Am Optom Assoc** 1989 Sep;60(9):664-7

Carcinoma in situ and T-1 squamous cell carcinoma of the glottis: the Mississippi Baptist Medical Center experience. Smith RA Jr, et al. **J Miss State Med Assoc** 1989 Nov; 30(11):365-70

Effect of nicotinamide on the microregional heterogeneity of oxygen delivery within a murine tumor. Chaplin DJ, et al. **J Natl Cancer Inst** 1990 Apr 18;82(8):672-6

Radiation-induced bilateral cystic temporal lobe necrosis: reversal of memory deficit after fenestration and internal shunting. Case report. Bederson JB, et al. **J Neurosurg** 1990 Mar;72(3):503-5

Impact of cervical disease and its definitive radiotherapeutic management on survival: experience in 2013 patients with squamous cell carcinomas of the oropharynx and pharyngolarynx. Bataini JP, et al. **Laryngoscope** 1990 Jul; 100(7):716-23

Treatment-related toxicities with Fluosol-DA 20% infusion during radiation in advanced head and neck malignancies. Campbell BH, et al. **Laryngoscope** 1990 Mar;100(3):237-9

Squamous cell carcinoma of the oropharynx: an analysis of 213 consecutive patients scheduled for primary radiotherapy. Johansen LV, et al. **Laryngoscope** 1990 Sep; 100(9):985-90

Clinical patterns and treatment complications of 1000 cases of carcinoma of the uterine cervix. Azhar T, et al. **Med J Malaysia** 1989 Jun;44(2):104-10

Radiotherapy T1 glottic carcinoma. Zablow AI, et al. **N J Med** 1989 Nov;86(11):879-82

Radiation associated eosinophilia and monocytosis in carcinoma of the uterine cervix: a simple reliable clinical and prognostic indicator. Radhakrishna Pillai M, et al. **Neoplasma** 1990;37(1):91-6

Application of the immunohistochemical method as a predictive assay in radiotherapy of squamous cell carcinoma of oropharynx and hypopharynx. Ogawa Y, et al. **Oncology** 1990;47(2):155-9

Evaluation of local control, survival and pattern of failure with radiotherapy in cancer of the tongue. Padmanabhan TK, et al. **Oncology** 1990;47(2):121-3

Interstitial irradiation for carcinoma of tongue complicated by chronic renal failure undergoing hemodialysis--a case report. Hareyama M, et al. **Radiat Med** 1989 Jul-Aug; 7(4):193-6

A case of carcinoma of the rectum after radiotherapy for carcinoma of the cervix. Hareyama M, et al. **Radiat Med** 1989 Jul-Aug;7(4):197-200

Postoperative radiation therapy for esophageal cancer. Nishimura Y, et al. **Radiat Med** 1989 Mar-Apr;7(2):88-94

Radiation therapy of carcinoma of the oropharynx. Sakata K, et al. **Radiat Med** 1989 Jul-Aug;7(4):189-92

Carcinoma of the maxillary sinus: the role of radiotherapy. Sakata K, et al. **Radiat Med** 1989 Nov-Dec;7(6):293-7

Conjunctival intraepithelial and invasive squamous cell carcinomas treated with strontium-90. Cerezo L, et al. **Radiother Oncol** 1990 Mar;17(3):191-7

Continuous, hyperfractionated, accelerated radiotherapy (CHART): an interim report upon late morbidity. Dische S, et al. **Radiother Oncol** 1989 Sep;16(1):65-72

Accelerated fractionation radiotherapy for advanced head and neck cancer. Lamb DS, et al. **Radiother Oncol** 1990 Jun;18(2):107-16

Radiation therapy in the treatment of early glottic carcinoma: the experience of Villejuif. Lusinchi A, et al. **Radiother Oncol** 1989 Aug;15(4):313-9

T2 oral tongue carcinoma treated with radiotherapy: analysis of local control and complications. Mendenhall WM, et al. **Radiother Oncol** 1989 Dec;16(4):275-81

Neoadjuvant chemotherapy and irradiation in multiple synchronous squamous cell carcinoma of the upper aero digestive tract. Nguyen TD, et al. **Radiother Oncol** 1989 Dec;16(4):283-8

Dose-time considerations of head and neck squamous cell carcinomas treated with irradiation. Taylor JM, et al. **Radiother Oncol** 1990 Feb;17(2):95-102

A comparison of the in vivo and in vitro radiation response of three human cervix carcinomas [published erratum appears in Radiother Oncol 1989 Oct;16(2):157] Tonkin KS, et al. **Radiother Oncol** 1989 Sep;16(1):55-63

Radiotherapy of carcinoma of the buccal mucosa. Chaudhary AJ, et al. **Semin Surg Oncol** 1989;5(5):322-6

Lung cancer metastases--management. Wee J, et al. **Singapore Med J** 1989 Jun;30(3):279-81

Early glottic carcinoma: patterns and predictors of relapse after definitive radiotherapy [see comments] Kersh CR, et al. **South Med J** 1990 Apr;83(4):374-8 Comment in: South Med J 1990 Apr;83(4):373.

Prognostic factors in patients with brain metastases from lung carcinoma: preliminary result of the second trial. Chatani M, et al. **Strahlenther Onkol** 1990 Aug;166(8):562-7

Neutron therapy for locally advanced head and neck squamous cell carcinoma: optimum dose search. Clubb B, et al. **Strahlenther Onkol** 1990 Jan;166(1):111-3

Radiosensitivity of drug-resistant human tumour xenografts. Mattern J, et al. **Strahlenther Onkol** 1989 Dec;165(12):870-2

Neutron therapy of locally advanced uterine cervix carcinoma at Louvain-la-Neuve. Richard F, et al. **Strahlenther Onkol** 1990 Jan;166(1):69-71

External radiotherapy in the treatment of tonsillar carcinomas. Analysis of 183 cases. Di Marco A, et al. **Tumori** 1990 Jun 30;76(3):244-9

Bartholin's gland mixed carcinoma predominantly of the transitional cell type following radiotherapy for a cervical carcinoma. Sieiński W, et al. **Zentralbl Allg Pathol** 1990; 136(3):265-8

[Nasopharyngeal carcinoma in childhood] Huang TB. **Chung Hua Chung Liu Tsa Chih** 1990 Mar;12(2):123-6 (Eng. Abstr.) **(Chi)**

[Afterloading technique for carcinoma of the uterine cervix] Sun JH. **Chung Hua Chung Liu Tsa Chih** 1989 May; 11(3):211-2 (Eng. Abstr.) **(Chi)**

[Surgery and radiotherapy of early glottic carcinoma] Zhao LC. **Chung Hua Chung Liu Tsa Chih** 1989 May;11(3):231-2 (Eng. Abstr.) **(Chi)**

[Conservative treatment of epidermoid cancer of the anal canal combining radiotherapy and curietherapy. Experience at the Antoine-Lacassagne Center] Lagrange JL, et al. **Ann Gastroenterol Hepatol (Paris)** 1990 Mar-Apr; 26(2):45-9 (37 ref.) (Eng. Abstr.) **(Fre)**

[Radiotherapy of cancer limited to the vocal cords] Lusinchi A, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(8):577-82 (27 ref.) (Eng. Abstr.) **(Fre)**

[Therapeutic results in a series of 73 cases of nasopharyngeal carcinoma] Meyer P, et al.

Ann Otolaryngol Chir Cervicofac 1989;106(8):567–76 (17 ref.) (Eng. Abstr.) **(Fre)**

[Peroperative radiotherapy and cancer of the base of tongue. Technic, indications and preliminary results] Prades JM, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(8):561–5 (21 ref.) (Eng. Abstr.) **(Fre)**

[Cancer of the tonsillar region. Role of irradiation in treatment] Calais G, et al. **Ann Radiol (Paris)** 1989; 32(7–8):555–9 (Eng. Abstr.) **(Fre)**

[Postoperative external irradiation of epidermoid epitheliomas of the larynx and hypopharynx. Analysis of tumor control factors in and outside of the neck] Daly NJ, et al. **Bull Cancer (Paris)** 1989;76(7):745–55 (Eng. Abstr.) **(Fre)**

[Results of radiotherapy of carcinomas of the tonsillar area. Study of 137 cases] Calais G, et al. **Rev Stomatol Chir Maxillofac** 1990;91(1):60–4 (Eng. Abstr.) **(Fre)**

[Lingual necrosis after radiotherapy. Radiation arteritis?] David JM, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(5):334–6 (Eng. Abstr.) **(Fre)**

[Effect of inguinal lymph node irradiation on the treatment result of vulvar cancer with different risk factors] Vavra N, et al. **Geburtshilfe Frauenheilkd** 1990 Jun;50(6):470–6 **(Ger)**

[The value of primary irradiation of invasive adenocarcinoma of the uterine cervix] Vavra N, et al. **Geburtshilfe Frauenheilkd** 1989 Sep;49(9):793–6 (Eng. Abstr.) **(Ger)**

[Use of the TDF factor in soft roentgen radiotherapy] Landthaler M, et al. **Hautarzt** 1989 Dec;40(12):774–7 (Eng. Abstr.) **(Ger)**

[Nutrition of ENT tumor patients treated with radiotherapy. Comparison of oral and enteral nutrition using percutaneous gastrostomy] Iro H, et al. **HNO** 1989 Aug; 37(8):343–8 (Eng. Abstr.) **(Ger)**

[Radiation-induced osteomyelitis of the mandible] Bünger B. **Laryngorhinootologie** 1990 Jun;69(6):316–9 (Eng. Abstr.) **(Ger)**

[Experiences with simultaneous cytostatic and radiotherapy treatment of advanced cancer of the head and neck] Ehr R, et al. **Laryngorhinootologie** 1990 Jun;69(6):312–5 (Eng. Abstr.) **(Ger)**

[Primary curative radiotherapy of small vocal cord cancers. A long-term study with 2 to 14 year follow-up] Schwerdtfeger FP, et al. **Laryngorhinootologie** 1990 Jun; 69(6):308–11 (Eng. Abstr.) **(Ger)**

[Long-term follow-up of 52 endoluminal irradiated patients with central lung tumors] Huber RM, et al. **Pneumologie** 1990 Feb;44 Suppl 1:593–4 (Eng. Abstr.) **(Ger)**

[Autopsy results in surgical-radiotherapeutic treatment of bladder carcinoma—conclusions for optimal radiologic therapy] Füller J, et al. **Radiobiol Radiother (Berl)** 1989; 30(5):465–71 (Eng. Abstr.) **(Ger)**

[Radium contact irradiation of vocal cord carcinoma—a possible treatment method?] Balla M, et al. **Strahlenther Onkol** 1990 Feb;166(2):132–4 (Eng. Abstr.) **(Ger)**

[Long-term results of postoperative and primary radiotherapy of carcinoma of the salivary glands: importance of dosage and target volume] Glanzmann C. **Strahlenther Onkol** 1990 Mar;166(3):183–9 (Eng. Abstr.) **(Ger)**

[Radiotherapy technics and results in nasopharyngeal carcinoma at the Cologne University Clinics from 1974 to 1985] Roth SL, et al. **Strahlenther Onkol** 1989 Sep; 165(9):633–40 (Eng. Abstr.) **(Ger)**

[Results of temporary interstitial iridium 192 implantation in head and neck tumors] Thiel HJ, et al. **Strahlenther Onkol** 1989 Nov;165(11):791–6 (Eng. Abstr.) **(Ger)**

[The monitoring of gynecological radiotherapy using serial tumor marker determinations] Wagner RK, et al. **Strahlenther Onkol** 1990 Jul;166(7):446–52 (Eng. Abstr.) **(Ger)**

[Combined radiotherapy with cis- or carboplatin in advanced head and neck tumours] Zamboglou N, et al. **Strahlenther Onkol** 1989 Sep;165(9):647–51 (Eng. Abstr.) **(Ger)**

[Comparison of transcutaneous radiotherapy and cordectomy in the treatment of T1a glottic carcinoma] Cosentino D, et al. **Acta Otorhinolaryngol Ital** 1989 Nov–Dec;9(6):605–17 (Eng. Abstr.) **(Ita)**

[The predictability of the radiotherapy response in epidermoid tumors of the head and neck. A review of the literature and mathematical models for choosing the fractionated doses] Corvò R, et al. **Radiol Med (Torino)** 1990 May;79(5):520–9 (43 ref.) (Eng. Abstr.) **(Ita)**

[The treatment of cancer of the anal area with radiotherapy. An analysis of the authors' personal experience] Pizzi G, et al. **Radiol Med (Torino)** 1990 May;79(5):530–3 (Eng. Abstr.) **(Ita)**

[Analysis of prognostic factors in 106 cases of carcinoma of the rhinopharynx treated with cobalt teletherapy] Zini G, et al. **Radiol Med (Torino)** 1989 Nov;78(5):430–4 (Eng. Abstr.) **(Ita)**

[Study of prognostic factors in patients with cervix carcinoma treated by radiotherapy] Fukuhisa K. **Gan No Rinsho** 1989 Oct;35(13):1603–9 (Eng. Abstr.) **(Jpn)**

[Results of radiotherapy in carcinoma of the larynx] Morita K, et al. **Gan No Rinsho** 1989 Oct;35(12):1387–93 (Eng. Abstr.) **(Jpn)**

[Influence of hemoglobin level, arterial oxygen partial pressure and arterial oxygen content on the results of radiation therapy in lung squamous cell cancer] Sasai K, et al. **Gan No Rinsho** 1989 Oct;35(13):1554–7 (Eng. Abstr.) **(Jpn)**

[Development of a cancer of the large bowel following radiotherapy for cancer of the uterine cervix] Tomoda H, et al. **Gan No Rinsho** 1989 Dec;35(15):1749–52 (Eng. Abstr.) **(Jpn)**

[Radiotherapy of uterine cervix carcinoma] Okuhata Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Oct 20; 24(10):2381–5 (Eng. Abstr.) **(Jpn)**

[Radiotherapy of carcinoma of the uterine cervix—high dose rate intracavitary irradiation using a linear source arrangement] Matsuoka Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Mar 25; 50(3):271–7 (Eng. Abstr.) **(Jpn)**

[Carcinoma of the uterine cervix treated with TAO low-dose rate intracavitary radiation] Horiuchi J, et al. **Rinsho Hoshasen** 1989 Nov;34(12):1483–6 (Eng. Abstr.) **(Jpn)**

[Pulmonary complications after radiotherapy in lung cancer] Li YM, et al. **Rinsho Hoshasen** 1989 Jul;34(7):827–30 (Eng. Abstr.) **(Jpn)**

[Radiotherapy of tonsillar cancer. II. Tumor repopulation and normal tissue tolerance] Maciejewski B, et al. **Nowotwory** 1989 Apr–Jun;39(2):99–110 (Eng. Abstr.) **(Pol)**

[Radiotherapy of tonsillar neoplasms. Evaluation of treatment results and late complications] Zajonc-Słowakiewicz A, et al. **Nowotwory** 1989 Jan–Mar;39(1):44–52 (Eng. Abstr.) **(Pol)**

[Radiation therapy of stage III laryngeal cancer] Alferov VS, et al. **Med Radiol (Mosk)** 1989 Dec;34(12):36–9 (Eng. Abstr.) **(Rus)**

[Combined radiomodification in the treatment of patients with disseminated laryngeal cancer] Andreev VG, et al. **Med Radiol (Mosk)** 1990 Jul;35(7):3–6 (Eng. Abstr.) **(Rus)**

[Radiation pathomorphosis of experimental squamous cell cancer during mono- and polyradiomodifications] Krashevskiĭ SV, et al. **Med Radiol (Mosk)** 1990 Feb; 35(2):35–8 (Eng. Abstr.) **(Rus)**

[Probit analysis in assessing the results of radiation therapy of disseminated cancer of the tongue and floor of the mouth] Vorob'ev IuI, et al. **Med Radiol (Mosk)** 1990 Jun; 35(6):17–20 (Eng. Abstr.) **(Rus)**

[The combined treatment of lung cancer with one-time large-fraction preoperative irradiation] Kharchenko VP, et al. **Vopr Onkol** 1990;36(7):863–6 (Eng. Abstr.) **(Rus)**

[Dynamics of neurological symptoms during immediate and long-term periods after radiotherapy of patients with brain metastases of malignant tumors] Shcherbenko OI, et al. **Zh Nevropatol Psikhiatr** 1989;89(12):36–8 (Eng. Abstr.) **(Rus)**

[Radiation treatment in advanced cancer of the lung] Zunino S, et al. **Rev Fac Cien Med Univ Nac Cordoba** 1987; 45(2):12–6 (Eng. Abstr.) **(Spa)**

SECONDARY

Right heart metastatic endocardial implants: echocardiographic and pathologic correlation. Rey M, et al. **Am Heart J** 1990 May;119(5):1217–20

Metastatic epidermotropic squamous carcinoma histologically simulating primary carcinoma. Youngberg GA, et al. **Am J Dermatopathol** 1989 Oct;11(5):457–65 (9 ref.)

Solitary palmar nodule. Metastatic squamous cell carcinoma of the lung. Werninghaus K. **Arch Dermatol** 1990 May; 126(5):665–6, 668–9

Patterns of cervical node metastases from squamous carcinoma of the larynx. Candela FC, et al. **Arch Otolaryngol Head Neck Surg** 1990 Apr;116(4):432–5

Secondary carcinoma from the cervix involving the large bowel. Fraser AM, et al. **Br J Surg** 1969 Apr;56(4):317–8

Metastatic tumours in the kidney. Newsam JE, et al. **Br J Urol** 1966 Feb;38(1):1–6

Ultrasonic evaluation of cervical lymph node metastasis of squamous cell carcinoma in oral cavity. Ishii J, et al. **Bull Tokyo Med Dent Univ** 1989 Dec;36(4):63–7

The patterns of cervical lymph node metastases from squamous carcinoma of the oral cavity. Shah JP, et al. **Cancer** 1990 Jul 1;66(1):109–13

Prognostic significance of intramural metastasis in patients with esophageal carcinoma. Takubo K, et al. **Cancer** 1990 Apr 15;65(8):1816–9

The management of cervical lymph node metastases by hyperbaric oxygen and radiotherapy. Churchill-Davidson I, et al. **Clin Radiol** 1973 Oct;24(4):498–501

Cutaneous metastatic lymphangitis from squamous cell carcinoma of the cervix. Bachaud JM, et al. **Dermatologica** 1990;180(3):163–5

Retrospective evaluation of recurrence after radical abdominal hysterectomy in patients with cervical carcinoma. Dave K, et al. **Eur J Gynaecol Oncol** 1990; 11(1):67–73

Risk factors for the development of lymph node metastasis in vulvar squamous cell carcinoma. Binder SW, et al. **Gynecol Oncol** 1990 Apr;37(1):9–16

Scalene lymph node sampling in cervical carcinoma: a reappraisal. Vasilev SA, et al. **Gynecol Oncol** 1990 Apr; 37(1):120–4

Comparative study of technetium-99m bone scans and orthopantomography in determining mandible invasion in intraoral squamous cell carcinoma. Ahuja RB, et al. **Head Neck** 1990 May–Jun;12(3):237–43

Cancer of distant primary site relapsing in the nasopharynx: a report of two cases and review of the literature. McKay MJ, et al. **Head Neck** 1989 Nov–Dec;11(6):534–7 (10 ref.)

Biological heterogeneity and radiation sensitivity of in vitro propagated lung metastatic lines originated from a transplantable squamous cell carcinoma of BALB/c mouse. Jamasbi RJ, et al. **In Vitro Cell Dev Biol** 1990 Mar;26(3 Pt 1):222–8

Carcinoma of the uterine cervix metastatic to breast—report of a case. Singh K, et al. **Indian J Med Sci** 1990 Jan; 44(1):5–7

Metastatic carcinoma in the cervical lymph nodes from an occult primary: a conservative approach to the role of radiotherapy. Glynne-Jones RG, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb;18(2):289–94

Choroidal metastasis of oesophageal squamous cell carcinoma. Mooy CM, et al. **Int Ophthalmol** 1990 Mar; 14(2):63–71

Metastases from squamous cell carcinoma of the skin and lip [letter] Lynfield Y. **J Am Acad Dermatol** 1990 Jun;22(6 Pt 1):1123–4

Squamous liver metastases from a carcinoma arising within a pleomorphic adenoma of the parotid gland. Garth RJ. **J Laryngol Otol** 1990 Feb;104(2):152–3

Variant sublines with different metastatic potentials selected in nude mice from human oral squamous cell carcinomas. Momose F, et al. **J Oral Pathol Med** 1989 Aug;18(7):391–5

Pericardial metastases in squamous cell cancer of the cervix. A report of two cases. Malviya VK, et al. **J Reprod Med** 1990 Jan;35(1):49–52

Metastases from squamous cell carcinoma of the skin. Wilson SM, et al. **J S C Med Assoc** 1990 May;86(5):311–4

Differential role of prostaglandin E1 on tumor metastasis. Ellis LM, et al. **J Surg Res** 1990 Apr;48(4):333–6

Long-term survival after brain metastases from tracheal carcinoma. Ichinose Y, et al. **Jpn J Clin Oncol** 1990 Mar; 20(1):107–9

Adjuvant methotrexate-5-fluorouracil for extracapsular squamous cell carcinoma in cervical metastasis. Johnson JT, et al. **Laryngoscope** 1990 Jun;100(6):590–2

So-called branchiogenic carcinoma is actually cystic metastases in the neck from a tonsillar primary. Micheau C, et al. **Laryngoscope** 1990 Aug;100(8):878–83

Tumor metastasis to an infusaport site [letter] Zelnick R, et al. **N Y State J Med** 1990 Apr;90(4):216

Calcified metastatic brain tumor. Tashiro Y, et al. **Neurosurgery** 1990 Jun;26(6):1065–70 (34 ref.)

Perineural invasion of the orbit by squamous cell carcinoma. Csaky KG, et al. **Ophthalmic Surg** 1990 Mar;21(3):218–20

Carcinoma of the lower lip with perineural extension to the middle cranial fossa. Anderson C, et al. **Oral Surg Oral Med Oral Pathol** 1990 May;69(5):614–8

A model for the study of lymph node metastasis from oral carcinoma by serial transplantation of metastatic tumor in hamsters. Ohtake K, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jun;69(6):701–7

Computed tomography and magnetic resonance imaging of cervical metastasis. Lydiatt DD, et al. **Otolaryngol Head Neck Surg** 1989 Oct;101(4):422–5

Local recurrence and intracerebral spread of squamous cell carcinoma of the scalp. Stern HS, et al. **Plast Reconstr Surg** 1990 Feb;85(2):284–8

Metastatic squamous cell carcinoma from the lung causing small bowel obstruction [letter] Yang CC, et al. **South Med J** 1990 Sep;83(9):1110

Analysis of 16 patients with metastatic squamous cell carcinoma of the head and neck: implications for treatment. Benasso M, et al. **Tumori** 1989 Dec 31;75(6):597–9

Cutaneous metastases from carcinoma of the cervix. Franciolini G, et al. **Tumori** 1990 Aug 31;76(4):410–2

[A radiologic study of metastatic pulmonary tumor originating in the oral and maxillofacial regions] Sun DX. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Sep; 24(5):261–3, 318 (Eng. Abstr.) **(Chi)**

[Late diagnosis of dysphonia] Baillot P, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(4):421–2 (Eng. Abstr.) **(Fre)**

[Interdisciplinary treatment measures in pulmonary metastasis of uterine cancer: initial results in 61 patients] Zink M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:271–2 (Eng. Abstr.) **(Ger)**

[Intra-parotid lymph node metastasis of malignant skin neoplasms of the head] Zanetti D, et al. **Acta Otorhinolaryngol Ital** 1989 Jul–Aug;9(4):381–90 (31 ref.) (Eng. Abstr.) **(Ita)**

[Metastatic tumors of the gingiva—report of 3 cases] Shimizu T, et al. **Gan No Rinsho** 1990 May;36(6):719–27 (Eng. Abstr.) **(Jpn)**

[A case of metastatic renal tumor: review of 74 cases reported in Japan] Fujimoto K, et al. **Hinyokika Kiyo** 1990 May; 36(5):581–5 (34 ref.) (Eng. Abstr.) **(Jpn)**

[Solitary ureteral metastasis from cervical cancer: a case report] Miura H, et al. **Hinyokika Kiyo** 1989 Sep; 35(9):1577–80 (17 ref.) (Eng. Abstr.) **(Jpn)**

[A case of esophageal cancer metastatic to the kidney presenting as renal pelvic cancer] Nagai T, et al. **Hinyokika Kiyo** 1989 Sep;35(9):1565–8 (13 ref.) (Eng.

Abstr.) (Jpn)
[Metastatic renal tumor of esophageal carcinoma: report of a case] Satoh S, et al. **Hinyokika Kiyo** 1989 Jun; 35(6):1025–9 (Eng. Abstr.) (Jpn)
[A case report of complete heart block by metastatic cardiac involvement from lung cancer] Morio S, et al. **Kyobu Geka** 1989 Oct;42(11):944–7 (Eng. Abstr.) (Jpn)
[Evaluation of recurrent metastatic brain tumor of lung cancer origin] Kitaoka K, et al. **Neurol Med Chir (Tokyo)** 1989 Oct;29(10):895–901 (Eng. Abstr.) (Jpn)
[A clinicopathological study of pulmonary metastases in carcinoma of the uterine cervix] Takemura M, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Apr 20;25(4):776–80 (Eng. Abstr.) (Jpn)
[Magnetic resonance imaging of the metastatic vertebral tumor] Sugimura K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 May 25; 49(5):555–61 (Eng. Abstr.) (Jpn)
[A case of mucosal esophageal carcinoma with a large intramural metastasis in the stomach] Yoshida K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jul;37(7):1430–5 (Eng. Abstr.) (Jpn)
[Granulomatous reaction associated with metastatic epidermoid carcinoma. The importance of the use of multiple methods in diagnostic pathology] Carneiro PC, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Jan–Feb; 44(1):29–32 (Eng. Abstr.) (Por)
[Unusual manifestations of squamous carcinoma of the lip] Figuerola E, et al. **Acta Otorrinolaringol Esp** 1990 Mar–Apr;41(2):136–8 (Eng. Abstr.) (Spa)
[Intestinal subocclusion as the first manifestation of cancer of the lung (letter)] Ramos Soria F, et al. **Rev Clin Esp** 1990 Apr;186(7):360–1 (Spa)

SECRETION

Parathyroid hormone–related protein in hypercalcaemia of malignancy. Martin TJ, et al. **Clin Endocrinol (Oxf)** 1989 Nov;31(5):631–47 (80 ref.)
Comparative study of the N–linked oligosaccharides released from normal human esophageal epithelium and esophageal squamous carcinoma. Hiraizumi S, et al. **Jpn J Cancer Res** 1990 Apr;81(4):363–71
Free alpha subunit of human chorionic gonadotropin in women with non–trophoblastic tumors. Huang SC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Mar;88(3):218–25

SURGERY

Complications of surgery in the treatment of lung cancer: their relationship with the extent of resection and preoperative respiratory function tests. Motta G, et al. **Acta Chir Belg** 1989 May–Jun;89(3):161–5
Current state of treatment of carcinoma of the oesophagus and gastro–oesophageal junction. Clinical review. Lundell L, et al. **Acta Chir Scand** 1990 Mar;156(3):193–202 (110 ref.)
Influence of blood transfusion on recurrence, survival and postoperative infections of laryngeal cancer. Böck M, et al. **Acta Otolaryngol (Stockh)** 1990 Jul–Aug; 110(1–2):155–60
Pelvic and paraaortic lymphocysts after radical surgery because of cervical and ovarian cancer. Petru E, et al. **Am J Obstet Gynecol** 1989 Oct;161(4):937–41
Partial vertical laryngectomy—indications and surgical technique. Olsen KD, et al. **Am J Otolaryngol** 1990 May–Jun;11(3):153–60
Elective versus therapeutic neck dissection in early carcinoma of the oral tongue. Fakih AR, et al. **Am J Surg** 1989 Oct;158(4):309–13
Thirty–year experience with 457 radical neck dissections in cancer of the mouth, pharynx, and larynx. Khafif RA, et al. **Am J Surg** 1989 Oct;158(4):303–7; discussion 308
Surgical management of squamous cell carcinoma of the floor of the mouth. Nason RW, et al. **Am J Surg** 1989 Oct; 158(4):292–6
Abdominoperineal resection for management of squamous cancer of the anal canal [letter] Quan SH. **Am J Surg** 1990 May;159(5):531
Distal–end esophagostomy of the excluded esophagus in the palliation of upper and mid–esophageal carcinoma. Ramirez Schon G, et al. **Am J Surg** 1990 Mar;159(3):287–90
Oncologic and functional considerations of total glossectomy. Sultan MR, et al. **Am J Surg** 1989 Oct;158(4):297–302
Cancer of the maxillary sinus treated with surgery and/or radiation therapy. Isaacs JH Jr, et al. **Am Surg** 1990 May; 56(5):327–30
Supracricoid laryngectomy with cricohyoidoepiglottopexy: a partial laryngeal procedure for glottic carcinoma. Laccourreye H, et al. **Ann Otol Rhinol Laryngol** 1990 Jun; 99(6 Pt 1):421–6
Surgery for high cervical esophageal carcinoma: experience with 11 patients. Mansour KA, et al. **Ann Thorac Surg** 1990 Apr;49(4):597–601; discussion 601–2
Chemotherapy and radiation therapy before transhiatal esophagectomy for esophageal carcinoma [see comments] Orringer MB, et al. **Ann Thorac Surg** 1990 Mar; 49(3):348–54; discussion 354–5 (31 ref.) Comment in: Ann Thorac Surg 1990 Mar;49(3):345–6.
Cancer of the hypopharynx. Analysis of treatment and results in 162 patients. Carpenter RJ 3d, et al. **Arch Otolaryngol** 1976 Dec;102(12):716–21
Lower trapezius myocutaneous island flap. Cummings CW, et al. **Arch Otolaryngol Head Neck Surg** 1989 Oct; 115(10):1181–5
Five–year results of functional neck dissection for cancer of the larynx. Gavilán C, et al. **Arch Otolaryngol Head Neck Surg** 1989 Oct;115(10):1193–6
Combined median mandibulotomy and Weber–Fergusson maxillectomy. Lawson W, et al. **Arch Otolaryngol Head Neck Surg** 1990 May;116(5):596–9
The role of hemilaryngectomy in the management of T1 vocal cord cancer [letter; comment] Mendenhall WD, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jan;116(1):107–8 Comment on: Arch Otolaryngol Head Neck Surg 1989 Jun;115(6):677–80.
Pulmonary atelectasis after reconstruction with pectoralis major flaps. Seikaly H, et al. **Arch Otolaryngol Head Neck Surg** 1990 May;116(5):575–7
Near–total laryngectomy with epiglottic reconstruction. Long–term results. Tucker HM, et al. **Arch Otolaryngol Head Neck Surg** 1989 Nov; 115(11):1341–4
The application of modified platysma pedicle flap and osteomyocutaneous flap in the head and neck reconstructive surgery. Zhang KW, et al. **Auris Nasus Larynx** 1989;16(3):185–90
Exploratory laparotomy alone in carcinoma of the oesophagus and gastric cardia. Lo CM, et al. **Aust N Z J Surg** 1989 Oct;59(10):795–9
Intracranial epidermoid tumours: thirty–seven years of diagnosis and treatment. Zhou LF. **Br J Neurosurg** 1990; 4(3):211–6
Reconstruction of the oral commissure by vascularised toe web transfer. Naasan A, et al. **Br J Plast Surg** 1990 May; 43(3):376–8
Abdominocervical (transhiatal) oesophagectomy in the management of oesophageal carcinoma. Gotley DC, et al. **Br J Surg** 1990 Jul;77(7):815–9
NdYAG laser treatment in the palliation of advanced oesophageal malignancy. Houghton A, et al. **Br J Surg** 1989 Sep;76(9):912–3
Management of superficial squamous cell carcinoma of the lip with Mohs micrographic surgery. Mehregan DA, et al. **Cancer** 1990 Aug 1;66(3):463–8
Nd:YAG laser bronchoscopy. Rigid or fiberoptic mode? Chan AL, et al. **Chest** 1990 Aug;98(2):271–5
Bronchoscopic laser photocoagulation of superficial cancer of the bronchi. Gerasin VA, et al. **Chest** 1990 Jul; 98(1):235–6
Situs inversus totalis and lung cancer [letter] Kodama K, et al. **Chest** 1990 May;97(5):1274–5
Preservation of laryngeal function after removal of carcinoma of the pyriform sinus. Wang TD. **Chin Med J [Engl]** 1989 Nov;102(11):825–30
Multiple clear cell acanthomas—treatment by cryotherapy. Williams RE, et al. **Clin Exp Dermatol** 1989 Jul;14(4):300–1
Radical surgery for lingual cancer. Pukander J, et al. **Clin Otolaryngol** 1990 Jun;15(3):229–34
Emergency laryngectomy. Wickham MH, et al. **Clin Otolaryngol** 1990 Feb;15(1):35–8
Multidisciplinary surgical approach to the treatment of perinasal nonmelanoma skin cancer. Siegle RJ, et al. **Dermatol Clin** 1989 Oct;7(4):711–31 (36 ref.)
Endoscopic Nd–YAG laser therapy as palliative treatment for esophageal and cardial cancer. Parameters affecting long–term outcome. Naveau S, et al. **Dig Dis Sci** 1990 Mar; 35(3):294–301
Giant malignant tumors of the anus. A strategy for management. Cobb JP, et al. **Dis Colon Rectum** 1990 Feb; 33(2):135–7; discussion 137–8
Auricular wedge resection and reconstruction. Kitchens GG. **Ear Nose Throat J** 1989 Sep;68(9):673–4, 677–9, 683
Craniofacial resection for large tumors of the paranasal sinuses. Lewis WJ, et al. **Ear Nose Throat J** 1989 Jul; 68(7):539–47 (13 ref.)
Experience of partial oesophagectomy in surgical treatment of lower and middle thoracic oesophageal cancer. From a follow–up of 366 cases. Couraud L, et al. **Eur J Cardiothorac Surg** 1989;3(2):99–103; discussion 104
Intraoperative assessment of nodal staging at thoracotomy for carcinoma of the bronchus. Gaer JA, et al. **Eur J Cardiothorac Surg** 1990;4(4):207–10
Free and pedicled flaps for head and neck reconstruction in radically irradiated fields: 6 years' experience at the Jules Bordet Institute. Deraemaecker R, et al. **Eur J Surg Oncol** 1989 Dec;15(6):575–81
Palliative therapy of malignant esophageal stricture with the bipolar tumor probe and prosthetic tube. McIntyre AS, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):531–5
Prospective comparison of contact with noncontact Nd:Yag laser therapy for palliation of esophageal carcinoma. Radford CM, et al. **Gastrointest Endosc** 1989 Sep–Oct; 35(5):394–7
Identification of prognostic factors and risk groups in patients found to have nodal metastasis at the time of radical hysterectomy for early–stage squamous carcinoma of the cervix. Alvarez RD, et al. **Gynecol Oncol** 1989 Nov; 35(2):130–5
Ovarian management at the time of radical hysterectomy for cancer of the cervix. Owens S, et al. **Gynecol Oncol** 1989 Dec;35(3):349–51
Renal agenesis with crossed ectopia diagnosed during radical hysterectomy. Patsner B, et al. **Gynecol Oncol** 1990 Jun; 37(3):443–4
Recurrent vulvar carcinoma in the intervening tissue bridge in early invasive stage I disease treated by radical vulvectomy and bilateral groin dissection through separate incisions. Schulz MJ, et al. **Gynecol Oncol** 1989 Dec; 35(3):383–6
Patterns of cervical node metastases from squamous carcinoma of the oropharynx and hypopharynx. Candela FC, et al. **Head Neck** 1990 May–Jun;12(3):197–203
A modified single flap for neck dissection in oral cancer. Dissanayaka L. **Head Neck** 1990 Jan–Feb;12(1):74–6
Tongue mobility in speech after partial glossectomy. Hamlet SL, et al. **Head Neck** 1990 May–Jun;12(3):210–7
Carcinoma of the supraglottic larynx: a basis for comparing the results of radiotherapy and surgery. Mendenhall WM, et al. **Head Neck** 1990 May–Jun;12(3):204–9
Conservation surgery for radiation–failure carcinoma of the glottic larynx. Shah JP, et al. **Head Neck** 1990 Jul–Aug; 12(4):326–31
Nutritional concepts and considerations in head and neck surgery. Williams EF 3d, et al. **Head Neck** 1989 Sep–Oct; 11(5):393–9 (50 ref.)
Results of esophagectomy and gastric bypass for cancer of the esophagus. Müller JM, et al. **Hepatogastroenterology** 1989 Dec;36(6):522–8
Distant metastases following surgical treatment of cervical carcinoma. Foley M, et al. **Ir Med J** 1990 Jun;83(2):62–4
Laser surgery for the treatment of squamous cell carcinoma of the penis. Blatstein LM, et al. **J Am Osteopath Assoc** 1990 Apr;90(4):338–44
The platysma myocutaneous flap for oral reconstruction. Experience with MacFee's cervical incision. Handa Y, et al. **J Craniomaxillofac Surg** 1989 Oct;17(7):318–22
The radial forearm free flap in orofacial reconstruction. Personal experience in 120 consecutive cases. Vaughan ED. **J Craniomaxillofac Surg** 1990 Jan;18(1):2–7
Know your anatomy: perineural involvement of basal and squamous cell carcinoma on the face. Carlson KC, et al. **J Dermatol Surg Oncol** 1990 Sep;16(9):827–33
Reconstruction of the medical canthal area [letter; comment] Rodriguez–Sains RS. **J Dermatol Surg Oncol** 1989 Oct; 15(10):1124 Comment on: J Dermatol Surg Oncol 1989 May;15(5):524–30.
False–negative margins [letter] Zimmerman MC. **J Dermatol Surg Oncol** 1989 Oct;15(10):1124–5
Our experience in the surgical treatment of T1 carcinoma of the vocal cord. Daniilidis J, et al. **J Laryngol Otol** 1990 Mar;104(3):222–4
Total glossectomy: reconstruction and rehabilitation. Tiwari RM, et al. **J Laryngol Otol** 1989 Oct;103(10):917–21
Radical hysterectomy: Srinagarind Hospital. Pothinam S, et al. **J Med Assoc Thai** 1989 Aug;72(8):441–7
Carcinoma of the esophagus seen in a 12–year period at Queens Hospital Center. Cordice JW Jr. **J Natl Med Assoc** 1990 Apr;82(4):273–9 (29 ref.)
Small plate osteosynthesis for mandibular reconstruction following osteotomy for tumor resection. Postlethwaite KR, et al. **J Oral Maxillofac Surg** 1989 Oct;47(10):1102–5
Resection of the extra cranial carotid artery in head and neck cancer. East CA, et al. **J Otolaryngol** 1989 Oct; 18(6):298–302
Vocal function following vertical hemilaryngectomy: a preliminary investigation. Leeper HA, et al. **J Otolaryngol** 1990 Feb;19(1):62–7
Lamellar sclerokeratoplasty of epibulbar tumor in xeroderma pigmentosum. Arora R, et al. **J Pediatr Ophthalmol Strabismus** 1990 Mar–Apr;27(2):80–3
Stomal recurrence: a separate entity? Barr GD, et al. **J Surg Oncol** 1990 Jul;44(3):176–9
Free jejunal graft for repair of cervical esophagus. Sohrabi A, et al. **J Surg Oncol** 1989 Nov;42(3):165–9
Safety of EEA staplers for anastomosis between upper esophagus and the gastric tube. Sugimachi K, et al. **J Surg Oncol** 1990 Jan;43(1):40–4
Treatment for synchronous and metachronous carcinomas of the head and neck and esophagus. Tachimori Y, et al. **J Surg Oncol** 1990 Sep;45(1):43–5
Risk stratification and long–term results after surgical treatment of carcinomas of the thoracic esophagus and cardia. A 25–year retrospective study. Lund O, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):200–9
Invited letter concerning: lymph node metastasis in resectable esophageal disease [letter; comment] McElvein RB. **J Thorac Cardiovasc Surg** 1990 Aug;100(2):314–6 Comment on: J Thorac Cardiovasc Surg 1990 Aug;100(2):287–9.
Management of nonsmall cell lung carcinoma with solitary brain metastasis. Read RC, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 2):884–90; discussion 890–1
Resection of carcinoma in the cervical esophagus following prior removal of a thoracic esophageal carcinoma—a case report. Konishi T, et al. **Jpn J Surg** 1989 Sep;19(5):570–5
Autologous oral keratinocyte grafts in the mouth [letter; comment] Langdon JD, et al. **Lancet** 1990 Jun 16; 335(8703):1472–3 Comment on: Lancet 1990 Feb 17;335(8686):365–7.
Supracricoid laryngectomy with cricohyoidopexy: a partial laryngeal procedure for selected supraglottic and transglottic carcinomas. Laccourreye H, et al. **Laryngoscope** 1990 Jul;100(7):735–41
Squamous cell carcinoma of the paranasal sinuses: the Cleveland Clinic experience 1977–1986. Lavertu P, et al.

Laryngoscope 1989 Nov;99(11):1130–6
1989 Ogura memorial lecture: mediastinal dissection. Sisson GA Sr. **Laryngoscope** 1989 Dec;99(12):1262–6
Endoscopic Nd–YAG laser therapy for palliation of upper gastrointestinal malignancy. Brennan FN, et al. **Med J Aust** 1990 Jul 2;153(1):27–31
The surgical management of recurrent squamous cell carcinoma of the vulva. Hopkins MP, et al. **Obstet Gynecol** 1990 Jun;75(6):1001–5
Effects of incision and irradiation on regional lymph node metastasis in carcinoma of the hamster tongue. Ohtake K, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jul;70(1):62–9
Squamous cell carcinoma of the external auditory meatus (canal). Arriaga M, et al. **Otolaryngol Head Neck Surg** 1989 Sep;101(3):330–7
Rhinectomy: timing and reconstruction. Teichgraeber JF, et al. **Otolaryngol Head Neck Surg** 1990 Apr;102(4):362–9 (30 ref.)
Use of a trypsin, Peru balsam, and castor oil spray on the oral mucosa: case report and review of the literature. Noble TA, et al. **Pharmacotherapy** 1989;9(6):386–8 (13 ref.)
Unilateral gate flap for reconstruction of the lower lip. Alic B, et al. **Plast Reconstr Surg** 1989 Nov;84(5):814–9
Bilateral vermilion flaps for lower lip repair. Ohtsuka H, et al. **Plast Reconstr Surg** 1990 Mar;85(3):453–6
Prophylactic neck dissection in squamous cell carcinoma of oral tongue: a prospective randomized study. Fakih AR, et al. **Semin Surg Oncol** 1989;5(5):327–30
Two team synchronous esophagectomy. Chung SC, et al. **Surg Gynecol Obstet** 1990 Jan;170(1):68–9
Bronchoscopic cryotherapy for advanced bronchial carcinoma. Walsh DA, et al. **Thorax** 1990 Jul;45(7):509–13
Development of upper tract carcinoma after cystectomy for bladder carcinoma. Malkowicz SB, et al. **Urology** 1990 Jul; 36(1):20–2
Mohs' micrographic surgery of the head and neck [see comments] Darmstadt GL, et al. **West J Med** 1990 Feb; 152(2):153–8 Comment in: West J Med 1990 Jun;152(6):722.
[Cervical anastomosis of the stomach transposed through the esophageal bed—report of 536 cases] Feng XF. **Chung Hua Chung Liu Tsa Chih** 1989 Sep;11(5):374–6 (Eng. Abstr.) **(Chi)**
[Prognostic significance of lymph node metastasis in the neck from squamous cell carcinoma in the oral cavity—analysis of 122 cases] Jiang PJ. **Chung Hua Chung Liu Tsa Chih** 1990 Mar;12(2):141–2 (Eng. Abstr.) **(Chi)**
[Squamous cell carcinoma of the bladder. Report of 19 cases] Wu KR. **Chung Hua Wai Ko Tsa Chih** 1989 May; 27(5):289–91, 317 (Eng. Abstr.) **(Chi)**
[The surgical treatment of the Pancoast tumor] van Son JA, et al. **Ned Tijdschr Geneeskd** 1990 Mar 3;134(9):434–8 (Eng. Abstr.) **(Dut)**
[Island flaps of the face] Darsonval V, et al. **Ann Otolaryngol Chir Cervicofac** 1990;107(2):115–20 (Eng. Abstr.) **(Fre)**
[Epidermoid cancer of the esophagus: is the combination of chemotherapy then surgery beneficial?] Elias D, et al. **Bull Cancer (Paris)** 1989;76(7):717–27 (Eng. Abstr.) **(Fre)**
[Tumors of the upper excretory urinary tract. A homogeneous series of 108 patients] Cukier J, et al. **Chirurgie** 1989;115(9):687–93 (Eng. Abstr.) **(Fre)**
[Value of repeated thoracic scanning in the surveillance of operated bronchial cancers] Breton JL, et al. **Rev Mal Respir** 1989;6(4):369–71 (Eng. Abstr.) **(Fre)**
[Results of electrosurgical vulvectomy with postoperative irradiation of the inguinal lymph nodes in vulvar cancer] Vavra N, et al. **Arch Gynecol Obstet** 1989;245(1–4):525–8 (Eng. Abstr.) **(Ger)**
[Reconstruction of the irradiated oropharynx: musculocutaneous pectoralis major island flap versus microanastomosis of latissimus dorsi flap] Mommaerts MY, et al. **Fortschr Kiefer Gesichtschir** 1990;35:50–2 **(Ger)**
[Significance of microsurgical transplantation of iliac crest in tumor surgery and pre-prosthetic surgery] Riediger D. **Fortschr Kiefer Gesichtschir** 1990;35:71–4 **(Ger)**
[Results of surgical treatment of vulvar cancer] Kreienberg R, et al. **Geburtshilfe Frauenheilkd** 1990 May;50(5):375–82 (Eng. Abstr.) **(Ger)**
[Fistula carcinoma 62 years following roller crush trauma of the hand] Martens K, et al. **Handchir Mikrochir Plast Chir** 1990 Mar;22(2):103–6 (Eng. Abstr.) **(Ger)**
[Therapy and prognosis in 360 laryngeal and hypopharyngeal cancers at the Erfurt ENT clinic 1978–1987] Heiss P, et al. **HNO** 1990 Apr;38(4):125–8 (Eng. Abstr.) **(Ger)**
[Treatment of carcinoma of the piriform sinus] Kleinsasser O, et al. **HNO** 1989 Nov;37(11):460–4 (Eng. Abstr.) **(Ger)**
[Progress in surgical treatment of squamous cell cancer of the esophagus] Siewert JR, et al. **Internist (Berl)** 1990 Feb; 31(2):131–42 (44 ref.) **(Ger)**
[Extra-pleural approaches in the management of bronchial stump insufficiency following pneumonectomy] Hoffmann E, et al. **Langenbecks Arch Chir** 1990;375(1):46–50 (Eng. Abstr.) **(Ger)**
[En bloc esophagectomy—when should the digestive tract be reconstructed?] Siewert JR, et al. **Langenbecks Arch Chir** 1990;375(3):166–70 (Eng. Abstr.) **(Ger)**
[The effect of tumor positive resection margins on the prognosis of squamous cell carcinoma of the mouth, pharynx and larynx] Wolfensberger M. **Laryngorhinootologie** 1989 Oct;68(10):566–8 (Eng. Abstr.) **(Ger)**
[100 consecutive cases of surgical esophagus–cardia carcinoma] Kuhrmeier A, et al. **Schweiz Med Wochenschr** 1990 Apr 7;120(14):502–4 (Eng. Abstr.) **(Ger)**
[Surgery in esophageal carcinoma: risks and results] von Flüe M, et al. **Schweiz Med Wochenschr** 1990 Apr 7; 120(14):515–7 (Eng. Abstr.) **(Ger)**
[Buschke–Löwenstein tumor] Danuser H, et al. **Urologe [A]** 1989 Sep;28(5):300–2; discussion 302–3 (Eng. Abstr.) **(Ger)**
[Risk factors in stage I squamous cell epithelial cancer of the vulva and their effect on results of therapy] Vavra N, et al. **Wien Klin Wochenschr** 1990 May 11;102(10):289–94 (Eng. Abstr.) **(Ger)**
[Chylothorax following pneumonectomy] Plate H, et al. **Zentralbl Chir** 1989;114(19):1290–2 **(Ger)**
[Laryngo–pharygo–esophagectomy in the surgical excision of multicentric esophageal–laryngeal cancer] Kupcsulik P, et al. **Orv Hetil** 1989 Nov 12;130(46):2475–7 (Eng. Abstr.) **(Hun)**
[The skin tests in operability evaluation of patients with non-small cell cancer of the lungs] Biondo FG, et al. **Arch Monaldi Mal Torace** 1988 May–Jun;43(3):265–70 (Eng. Abstr.) **(Ita)**
[Tumors of the anus] Giordanello V, et al. **Minerva Chir** 1990 May 15;45(9):639–43 (13 ref.) (Eng. Abstr.) **(Ita)**
[Critical review of 121 squamous cell epitheliomas of the lip. Role of surgery in the treatment of primary lesions and of the loco-regional lymph nodes] Giuliani M, et al. **Minerva Chir** 1989 Jul 31;44(13–14):1745–9 (Eng. Abstr.) **(Ita)**
[Two cases of wedge pneumonectomy in primary lung cancer involved into carina] Hoshi E, et al. **Kyobu Geka** 1990 Mar; 43(3):226–30 (Eng. Abstr.) **(Jpn)**
[Postoperative recurrence of the patients with the stage I, II non small cell lung cancer] Iwamoto I, et al. **Kyobu Geka** 1990 Apr;43(4):267–70 (Eng. Abstr.) **(Jpn)**
[Resected cases of middle lobe primary cancer] Iwanami H, et al. **Kyobu Geka** 1990 Mar;43(3):211–4 (Eng. Abstr.) **(Jpn)**
[A case report of chest wall reconstruction utilizing microvascular surgery] Satoh M, et al. **Kyobu Geka** 1990 Jun;43(6):475–8 (Eng. Abstr.) **(Jpn)**
[A case of quadruple cancer composed of the breast, kidney, liver and uterus carcinomas] Haba Y, et al. **Nippon Geka Gakkai Zasshi** 1990 May;91(5):649–51 (Eng. Abstr.) **(Jpn)**
[The standard to indicate operations for esophageal cancer based upon quantitative evaluation of physical conditions] Saito T, et al. **Nippon Geka Gakkai Zasshi** 1990 May; 91(5):556–63 (Eng. Abstr.) **(Jpn)**
[Reconstruction of the trachea invaded by advanced carcinoma of the esophagus, using the omental pedicle flap] Tsubota N, et al. **Nippon Geka Gakkai Zasshi** 1990 Jan; 91(1):142–5 (Eng. Abstr.) **(Jpn)**
[Application of laser surgery to the treatment of laryngeal cancer] Yumoto E, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1990 Apr;93(4):611–4 (Eng. Abstr.) **(Jpn)**
[Clinical study of limited operation of lung cancer with reference to the operative procedure] Akaogi E, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jul;37(7):1334–40 (Eng. Abstr.) **(Jpn)**
[A resected case of triple cancer in the uterus, lung and thyroid] Arimura T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jun;37(6):1233–7 (22 ref.) (Eng. Abstr.) **(Jpn)**
[A case of tracheal stenosis following surgery of esophageal cancer] Oizumi H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Nov; 37(11):2407–10 (Eng. Abstr.) **(Jpn)**
[Results of pulmonary resections in elderly patients with primary lung cancer] Osada H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Mar;38(3):435–41 (Eng. Abstr.) **(Jpn)**
[Surgical experience of bronchogenic early squamous cell carcinoma detected by sputum cytology in lung cancer screening] Saito Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Apr;38(4):560–6 (Eng. Abstr.) **(Jpn)**
[Successful resection and reconstruction of the left atrium, right atrium and atrial septum under extracorporeal circulation in a patient with invasive pulmonary carcinoma] Yamato Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jun;38(6):1088–92 (10 ref.) (Eng. Abstr.) **(Jpn)**
[Surgical management of pulmonary metastasis from carcinoma of the uterine cervix] Matsukuma K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Dec; 41(12):1911–5 (Eng. Abstr.) **(Jpn)**
[Stump recurrence after radical hysterectomy for patients with uterine cervical cancer] Nakayama K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Mar;42(3):241–5 (Eng. Abstr.) **(Jpn)**
[Surgical treatment of tumors of the external ear] Kotarba E. **Przegl Dermatol** 1990 Jan–Feb;77(1):61–7 (Eng. Abstr.) **(Pol)**
[Esophagoplasty with bypass using an isoperistaltic gastric tube in the treatment of cancer of the thoracic esophagus: study of 13 cases] Speranzini MB, et al. **AMB Rev Assoc Med Bras** 1989 May–Jun;35(3):91–8 (Eng. Abstr.) **(Por)**
[Multiple squamous cell cancer of the esophagus and proximal stomach] Cherniavskii AA, et al. **Grud Serdechnososudistaia Khir** 1990;(2):77–8 **(Rus)**
[Garlock's operation in cancer of the esophagus] Davydov MI, et al. **Grud Serdechnososudistaia Khir** 1990;(4):52–4 (Eng. Abstr.) **(Rus)**
[Results of combined operations in patients with lung cancer] Zharkov VV, et al. **Grud Serdechnososudistaia Khir** 1990; (1):64–7 (Eng. Abstr.) **(Rus)**
[Experience in the surgical treatment of patients with cancer of the proximal stomach] Kochegarov AA, et al. **Grudn Khir** 1989 Sep–Oct;(5):74–7 (Eng. Abstr.) **(Rus)**
[Squamous cell keratinizing cancer of the scalp] Bizhko IP, et al. **Klin Khir** 1990;(5):49 **(Rus)**
[Prognostic factors in operable non-small cell cancer of the lungs] Zakharychev VD. **Klin Khir** 1989;(10):7–9 (Eng. Abstr.) **(Rus)**
[Immediate results of the use of prospidin in a cyanoacrylate glue compound in cancer of the esophagus] Chissov VI, et al. **Sov Med** 1989;(7):28–31 (Eng. Abstr.) **(Rus)**
[Indications for function–preserving surgery in locally disseminated squamous cell cancer of the oral mucosa and oropharynx] Liubaev VL. **Stomatologiia (Mosk)** 1990 Mar–Apr;69(2):46–9 (Eng. Abstr.) **(Rus)**
[Surgical treatment of patients with cancer of the larynx with lesions of the anterior commissure] Bariliak IuR. **Vestn Otorinolaringol** 1990 Jan–Feb;(1):58–61 (Eng. Abstr.) **(Rus)**
[Low–frequency ultrasonic surgery of cancer of the external nose in a 14–year–old boy] Dashkevich IuM, et al. **Vestn Otorinolaringol** 1990 May–Jun;(3):55–6 **(Rus)**
[Endoscopic laser destruction of malignant tracheal tumors] Gerasin VA, et al. **Vopr Onkol** 1989;35(9):1104–6 **(Rus)**
[Possibilities of the cryosurgical method in the treatment of skin carcinoma] Gyrdev P, et al. **Vopr Onkol** 1989; 35(12):1484–5 **(Rus)**
[The combined treatment of lung cancer with one–time large–fraction preoperative irradiation] Kharchenko VP, et al. **Vopr Onkol** 1990;36(7):863–6 (Eng. Abstr.) **(Rus)**
[Endoscopic laser coagulation of the tumor in patients with cancer of the esophagus and proximal portion of the stomach] Kochegarov AA, et al. **Vopr Onkol** 1990; 36(5):587–91 (Eng. Abstr.) **(Rus)**
[Segmental and atypical resections in lung cancer] Kotliarov EV, et al. **Vopr Onkol** 1990;36(4):458–60 (Eng. Abstr.) **(Rus)**
[Pancreatic necrosis after surgical interventions in lung cancer] Kotliarov EV, et al. **Vopr Onkol** 1989;35(8):990–1 **(Rus)**
[Tracheal injury during transhiatal esophagectomy without thoracotomy. Anesthesiologic management] Fernández Núñez JA, et al. **Rev Esp Anestesiol Reanim** 1990 Jan–Feb; 37(1):32–6 (Eng. Abstr.) **(Spa)**
[Bone gammagraphy for evaluating free vascularized bone grafts in mandibular reconstruction] Serra JM, et al. **Rev Esp Fisiol** 1989;45 Suppl:323–8 (Eng. Abstr.) **(Spa)**
[Palliative treatment of esophageal cancer by endoscopic implantation of an endoprosthesis] Kirberg A, et al. **Rev Med Chil** 1988 Nov;116(11):1181–5 (Eng. Abstr.) **(Spa)**

THERAPY

Combined bleomycin and radiation treatment of penile carcinoma [letter] Maiche AG. **Acta Oncol** 1989; 28(4):548–9
Combined effect of radiation and YM–881 (SMANCS) on murine tumors and bone marrow. Ono K, et al. **Acta Oncol** 1990;29(4):455–9
Glottic laryngeal carcinoma with fixed vocal cord treated with full–dose radiation, total laryngectomy or combined treatment. Sandberg N, et al. **Acta Oncol** 1990;29(4):509–11
Primary irradiation, surgery or combined therapy in squamous cell carcinoma of the larynx. A comparison of treatment results from two centers. Vermund H, et al. **Acta Oncol** 1990;29(4):489–503
Concurrent radiation therapy, cis–platinum, and mitomycin C in patients with poor prognosis cancer of the cervix: a pilot study. Malviya VK, et al. **Am J Clin Oncol** 1989 Oct;12(5):434–7
An analysis of adjuvant treatment strategies for carcinoma of the cervix. Potish RA, et al. **Am J Clin Oncol** 1989 Oct;12(5):430–3
Advanced cervical cancer therapy: concurrent radiation therapy and cisplatin chemotherapy for advanced cervical cancer—a toxicity report. Suggs CL 3d, et al. **Am J Clin Oncol** 1989 Dec;12(6):461–6
Squamous carcinoma of the nasal cavity and paranasal sinuses. Spiro JD, et al. **Am J Surg** 1989 Oct;158(4):328–32
Treatment of 570 cases of oral squamous cell carcinoma. Zhao FY, et al. **Ann Acad Med Singapore** 1989 Sep; 18(5):533–6
Natural history of treated T1N0 squamous carcinoma of the glottis [letter; comment] Perez CA. **Ann Otol Rhinol Laryngol** 1990 Jun;99(6 Pt 1):504–5 Comment on: Ann Otol Rhinol Laryngol 1989 Mar;98(3):217–9.
Experience with the Souttar tube in esophageal carcinoma. Alford WC Jr, et al. **Ann Thorac Surg** 1967 Feb;3(2):166–71
Prognostic indicators in head and neck cancer patients receiving combined therapy. Davis RK, et al.

Arch Otolaryngol Head Neck Surg 1989 Dec;115(12):1443–6
Combination effect of hyperthermia and photodynamic therapy on carcinoma. Matsumoto N, et al.
Arch Otolaryngol Head Neck Surg 1990 Jul;116(7):824–9
Carcinoma of the tonsillar fossa. An update. Spiro JD, et al. **Arch Otolaryngol Head Neck Surg** 1989 Oct; 115(10):1186–9
Oral cancer and precancer: after-care and terminal care. Morton M, et al. **Br Dent J** 1990 Apr 7;168(7):283–7
Heat sensitivity and thermotolerance in vitro of human breast carcinoma, malignant melanoma and squamous cell carcinoma of the head and neck. Rofstad EK.
Br J Cancer 1990 Jan;61(1):22–8
Laryngeal cancer: new directions in treatment [editorial] Spiro R. CA 1990 May–Jun;40(3):133
Thermo–chemo–radiotherapy of esophageal cancer. A preliminary report of 34 cases. Hou BS, et al. **Cancer** 1989 Nov 1;64(9):1777–82
Combined radiotherapy and chemotherapy versus radiotherapy alone in locally advanced epidermoid bronchogenic carcinoma. A randomized study. Trovò MG, et al. **Cancer** 1990 Feb 1;65(3):400–4
Local adoptive immunotherapy of human head and neck cancer xenografts in nude mice with lymphokine–activated killer cells and interleukin 2. Sacchi M, et al.
Cancer Res 1990 May 15;50(10):3113–8
Cutaneous lymphangiectases after therapy for carcinoma of the cervix—a case with unusual clinical and histological features. Ambrojo P, et al. **Clin Exp Dermatol** 1990 Jan; 15(1):57–9
Head and neck squamous cancers. Jacobs CD, et al.
Curr Probl Cancer 1990 Jan–Feb;14(1):1–72 (224 ref.)
Traditional and new treatment strategies for oral squamous cell carcinomas. Kirkegaard J, et al. **Ear Nose Throat J** 1989 Aug;68(8):592–4, 600–4
Gastric metastasis of squamous cell carcinoma of the head and neck after percutaneous endoscopic gastrostomy—report of a case [letter] Preyer S, et al.
Endoscopy 1989 Nov;21(6):295
A pilot study of endoscopic injection chemo/sclerotherapy of esophageal carcinoma. Wright RA, et al.
Gastrointest Endosc 1990 Jan–Feb;36(1):47–8
Morbidity and survival patterns in patients after radical hysterectomy and postoperative adjuvant pelvic radiotherapy. Fiorica JV, et al. **Gynecol Oncol** 1990 Mar; 36(3):343–7
20–year experience of follow–up of the abnormal smear with colposcopy and histology and treatment by conization or cryosurgery. Hellberg D, et al. **Gynecol Oncol** 1990 Aug; 38(2):166–9
Adjunctive radiation after radical hysterectomy in stage IB squamous cell carcinoma of the cervix. Remy JC, et al. **Gynecol Oncol** 1990 Aug;38(2):161–5
Integration of chemotherapy in an MFD—radiotherapy plan for advanced inoperable squamous cell carcinoma of the head and neck. Corvò R, et al. **Head Neck** 1990 Jan–Feb; 12(1):60–5
Evaluation of some prognostic factors in small squamous cell carcinoma of the mobile tongue: a multicenter study in Sweden [letter; comment] Prein J. **Head Neck** 1990 May–Jun;12(3):273–4 Comment on: Head Neck 1989 Sep–Oct;11(5):387–92.
Management of anal epidermoid carcinoma—an evaluation of treatment results in two population–based series. Goldman S, et al. **Int J Colorectal Dis** 1989 Dec;4(4):234–43
Head and neck cancers: results of thermoradiotherapy versus radiotherapy. Datta NR, et al. **Int J Hyperthermia** 1990 May–Jun;6(3):479–86
Squamous cell carcinoma of the supraglottic larynx without clinically detectable lymph node metastases: problem of local relapse and influence of overall treatment time [see comments] Hoekstra CJ, et al.
Int J Radiat Oncol Biol Phys 1990 Jan;18(1):13–21 Comment in: Int J Radiat Oncol Biol Phys 1990 Jan;18(1):263–5.
Relation between responses to induction chemotherapy and subsequent radiotherapy in advanced or multicentric squamous cell carcinomas of the head and neck. Panis X, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1315–8
Mechanisms of heat removal during local hyperthermia. Waterman FM, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):1049–55
Management of esophageal cancer [letter] Coia L, et al.
J Clin Oncol 1990 Jul;8(7):1285–6
Combined modality therapy in esophageal cancer [letter] Einhorn LH. **J Clin Oncol** 1990 Jul;8(7):1286–7
Concurrent chemotherapy and radiation therapy followed by transhiatal esophagectomy for local–regional cancer of the esophagus. Forastiere AA, et al. **J Clin Oncol** 1990 Jan;8(1):119–27
Treatment of oral squamous cell carcinoma with simultaneous chemotherapy and radiation: results and surgical implications. Earle AS, et al.
J Oral Maxillofac Surg 1990 Apr;48(4):367–72
Decision making in advanced cancer of the head and neck: variation in the views of medical specialists. Maher EJ, et al. **J R Soc Med** 1990 Jun;83(6):356–9
Multimodality treatment of advanced head and neck carcinoma. Carlson LS, et al. **J S C Med Assoc** 1989 Sep; 85(9):409–11
Hydroxyurea plus pelvic irradiation versus placebo plus pelvic irradiation in nonsurgically staged stage IIIB cervical cancer. Piver M, et al. **J Surg Oncol** 1989 Oct; 42(2):120–5
Impact of the time interval between surgery and postoperative radiation therapy on locoregional control in advanced head and neck cancer. Schiff PB, et al.
J Surg Oncol 1990 Apr;43(4):203–8
Three decades of treatment of esophageal squamous carcinoma at the Massachusetts General Hospital. Katlic MR, et al. **J Thorac Cardiovasc Surg** 1990 May;99(5):929–38
Supraglottic laryngectomy for intermediate–stage cancer: U.T. M.D. Anderson Cancer Center experience with combined therapy. Lee NK, et al. **Laryngoscope** 1990 Aug; 100(8):831–6
Lymphokine–activated killing of autologous and allogeneic short–term cultured head and neck squamous carcinomas. Leess FR, et al. **Laryngoscope** 1989 Dec;99(12):1255–61
Randomized comparison of two chemotherapy, radiotherapy schemes for stage III and IV unresectable squamous cell carcinoma of the head and neck. Merlano M, et al.
Laryngoscope 1990 May;100(5):531–5
Percutaneous feeding gastrostomy in patients with head and neck tumors: a 5–year review. O'Dwyer TP, et al.
Laryngoscope 1990 Jan;100(1):29–32
Prevention of second primary tumors with isotretinoin in squamous–cell carcinoma of the head and neck [see comments] Hong WK, et al. **N Engl J Med** 1990 Sep 20; 323(12):795–801 Comment in: N Engl J Med 1990 Sep 20;323(12):825–7.
Anal cancer: current concepts and treatment results. Horch R, et al. **Nippon Geka Hokan** 1989 Sep 1;58(5):391–7
Accelerated fractionated irradiation with simultaneous cisplatin infusion in advanced head and neck cancer. Karstens JH, et al. **Onkologie** 1989 Aug;12(4):187–9
Antitumor activity in mice of an immunotoxin made with anti–transferrin receptor and a recombinant form of Pseudomonas exotoxin. Batra JK, et al.
Proc Natl Acad Sci U S A 1989 Nov;86(21):8545–9
Clinical and laboratory changes following plasmapheresis in 12 patients with squamous cancer of the head and neck. Seder RH, et al. **Prog Clin Biol Res** 1990;337:347–9
Adjuvant intralesional and systemic Corynebacterium parvum immunotherapy for surgically treated head and neck cancer. Beatty JD, et al. **Surg Forum** 1978;29:155–7
Sequential and synchronous chemo–radiotherapy in the management of locally advanced carcinoma of the head and neck. Antognoni P, et al. **Tumori** 1990 Jun 30; 76(3):238–43
Chemo–radiotherapeutic management of advanced head and neck cancer. Pirtoli L, et al. **Tumori** 1989 Dec 31; 75(6):600–4
[Epidermoid cancer of the esophagus. Does the efficacy of chemoradiotherapy justify surgical abstention?] Elias D, et al. **Ann Chir** 1989;43(6):447–50 (Eng. Abstr.) **(Fre)**
[Treatment of cancer of the anal canal with combination radiochemotherapy: apropos of 12 cases] Bourry J, et al.
Bull Cancer (Paris) 1990;77(2):117–21 (Eng. Abstr.) **(Fre)**
[Epidermoid carcinoma of the anal canal. Value of a multidisciplinary approach] Marti MC, et al. **Chirurgie** 1989;115(10):717–22 (Eng. Abstr.) **(Fre)**
[Initial results of a controlled study of small cell and squamous epithelial bronchial cancer: polychemotherapy and interferons] Zabel P, et al. **Pneumologie** 1990 Feb;44 Suppl 1:586–7 (Eng. Abstr.) **(Ger)**
[Interleukin–2 and LAK cells in the local immunotherapy of tumors of the head and neck: an experimental model] Sacchi M, et al. **Acta Otorhinolaryngol Ital** 1989 Jul–Aug; 9(4):391–8 (Eng. Abstr.) **(Ita)**
[Therapy of carcinoma of the oro–maxillo–facial region. 3. Hard palate and upper gums] Tartaro S, et al.
Minerva Stomatol 1989 Jul;38(7):729–33 (19 ref.) (Eng. Abstr.) **(Ita)**
[Assessment of cisplatin in concurrent use with radiotherapy in esophageal carcinoma—joint research among nationwide multi–facilities, primary results. Research Committee for Radiation and Cisplatin Treatment of Esophageal Carcinoma] Ishikawa T, et al. **Gan No Rinsho** 1990 Jan; 36(1):1–6 (Eng. Abstr.) **(Jpn)**
[A phase 2 study of recombinant interleukin 2 (S–6820) for head and neck cancer] Sawaki S. **Gan No Rinsho** 1990 Feb; 36(2):111–20 (Eng. Abstr.) **(Jpn)**
[Feasibility and radicality of PEP–chemoradiation therapy in oral squamous cell carcinoma] Hibi G, et al.
Gan To Kagaku Ryoho 1990 Aug;17(8 Pt 2):1692–5 (Eng. Abstr.) **(Jpn)**
[Preoperative intraarterial infusion chemotherapy in combination with angiotensin II pressor by BOAI method in cervical cancer] Kondoh T, et al.
Gan To Kagaku Ryoho 1990 Aug;17(8 Pt 2):1788–92 (Eng. Abstr.) **(Jpn)**
[Cytological and histological effects of regional hyperthermia and radiation in cancer of the uterine cervix] Hasegawa K, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Aug 20; 24(8):1526–38 (Eng. Abstr.) **(Jpn)**
[Evaluation of multidisciplinary treatment involving chemotherapy with cis–diamminedichloroplatinum, bleomycin (peplomycin) and 5–fluorouracil for advanced esophageal carcinoma] Nakamura J, et al.
Nippon Gan Chiryo Gakkai Shi 1990 May 20;25(5):939–45 (Eng. Abstr.) **(Jpn)**
[The effect of IL–2 injection around the metastatic cervical lymphnode] Ogasawara H, et al.
Nippon Gan Chiryo Gakkai Shi 1990 Jun 20;25(6):1119–22 (Eng. Abstr.) **(Jpn)**
[Anti–tumor effects of epidermal growth factors in carcinoma of the esophagus transplanted to nude mice: preliminary report] Murayama Y, et al. **Nippon Geka Gakkai Zasshi** 1989 May;90(5):796 **(Jpn)**
[Clinical study on laryngeal cancer] Ikarashi F, et al.
Nippon Jibiinkoka Gakkai Kaiho 1990 May;93(5):772–8 (Eng. Abstr.) **(Jpn)**
[Combination effect of photodynamic therapy and microwave hyperthermia on experimental squamous cell carcinoma in vivo] Matsumoto N, et al.
Nippon Jibiinkoka Gakkai Kaiho 1989 Dec;92(12):2079–88 (Eng. Abstr.) **(Jpn)**
[Experimental and clinical studies on preoperative combined therapy using hyperthermia in carcinoma of the esophagus] Hanaoka A. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jun; 37(6):1094–104 (Eng. Abstr.) **(Jpn)**
[The current treatment of maxillary carcinoma] Shibuya H.
Rinsho Hoshasen 1989 Oct;34(11):1359–63 (Eng. Abstr.) **(Jpn)**
[Comparative evaluation of radiotherapy and chemoradiotherapy in inoperable cancer of the esophagus] Aliev BM, et al. **Med Radiol (Mosk)** 1990 Apr;35(4):24–7 (Eng. Abstr.) **(Rus)**
[Comparative evaluation of the effectiveness of radiotherapy, surgery and combined treatment of stage I–II laryngeal cancer (T1–2NoMo) based on the data of a cooperative randomized study] Ogol'tsova ES, et al.
Vestn Otorinolaringol 1990 May–Jun;(3):3–7 (Eng. Abstr.) **(Rus)**
[Treatment of patients with vulvar cancer] Bokhman IaV, et al. **Vopr Onkol** 1990;36(4):472–6 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Cytophotometric and interference microscopic investigations in carcinomas of the oral cavity. Taubert G, et al.
Arch Geschwulstforsch 1989;59(5):353–60
Lectin–binding sites in clear cell acanthoma. Akiyama M, et al. **J Cutan Pathol** 1990 Aug;17(4):197–201
Comparative study of the sensitivity of head and neck cell lines to methotrexate (MTX) and the analog 10–ethyl, 10–deazaaminopterin (10–EdAM). Brown DH, et al.
Otolaryngol Head Neck Surg 1990 Jan;102(1):20–5
Basement membranes in bronchogenic squamous cell carcinoma: an immunohistochemical and ultrastructural study. Havenith MG, et al. **Ultrastruct Pathol** 1990 Jan–Feb;14(1):51–63
Altered serous granules in acinar cells of a human parotid gland. Tandler B, et al. **Ultrastruct Pathol** 1990 Jan–Feb; 14(1):11–9
[Ultrastructural study of the parenchyma of lung carcinoma] Hang Z, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Jun;21(2):189–92 (Eng. Abstr.) **(Chi)**
[Scanning electronic microscopy study of nasopharyngeal carcinoma] Dallai S, et al. **Boll Soc Ital Biol Sper** 1990 Mar;66(3):303–8 (Eng. Abstr.) **(Ita)**

URINE

[Urinary magnesium levels in precancerous conditions and various stages of squamous cell carcinoma of the larynx] Szmeja Z, et al. **Otolaryngol Pol** 1989;43(4):268–72 (Eng. Abstr.) **(Pol)**

VETERINARY

Glossal squamous cell carcinoma with pulmonary metastasis in a kowari (Dasyuroides byrnei) [letter] Anderson WI, et al. **Aust Vet J** 1990 Jan;67(1):29
Primary glossal squamous–cell carcinoma in a Spanish Cochin hen. Anderson WI, et al. **Avian Dis** 1989 Oct–Dec; 33(4):827–8
Spontaneous squamous carcinoma of the esophagus in chickens. Rubio CA, et al. **Cancer** 1989 Dec 15; 64(12):2511–4
Local interleukin–2 therapy in bovine ocular squamous cell carcinoma. A pilot study. Rutten VP, et al.
Cancer Immunol Immunother 1989;30(3):165–9
Pseudohyperparathyroidism in a mare associated with squamous cell carcinoma of the vulva. Karcher LF, et al.
Cornell Vet 1990 Apr;80(2):153–62
Controlled localized heating and isotretinoin effects in canine squamous cell carcinoma. Levine N, et al.
J Am Acad Dermatol 1990 Jul;23(1):68–72
Circumocular pigmentation and incidence of ocular squamous cell tumors in Bos taurus and Bos indicus X Bos taurus cattle. Bailey CM, et al. **J Am Vet Med Assoc** 1990 May 15;196(10):1605–8
Squamous cell carcinoma originating from an epithelial scar in a horse. Baird AN, et al. **J Am Vet Med Assoc** 1990 Jun 15;196(12):1999–2000
Carbon dioxide laser ablation for treatment of limbal squamous cell carcinoma in horses [see comments] English RV, et al. **J Am Vet Med Assoc** 1990 Feb 1;196(3):439–42 Comment in: J Am Vet Med Assoc 1990 Apr 1;196(7):1007.
Hypercalcemia in two cats with squamous cell carcinomas. Klausner JS, et al. **J Am Vet Med Assoc** 1990 Jan 1; 196(1):103–5
Squamous cell carcinoma of the vulva in a cow. Meyers SA, et al. **J Am Vet Med Assoc** 1990 May 15;196(10):1644–6
Squamous cell carcinoma causing blindness and

ophthalmoplegia in a cat. Murphy CJ, et al. **J Am Vet Med Assoc** 1989 Oct 1;195(7):965–8

Combined treatment of ocular squamous cell carcinoma in a horse, using radiofrequency hyperthermia and interstitial 198Au implants. Wilkie DA, et al. **J Am Vet Med Assoc** 1990 Jun 1;196(11):1831–3

Squamous cell carcinoma in a puppy. Haziroğlu R, et al. **J Comp Pathol** 1989 Aug;101(2):221–3

The Harvey ras 1 gene is activated in papillomavirus-associated carcinomas of the upper alimentary canal in cattle. Campo MS, et al. **Oncogene** 1990 Mar;5(3):303–8

Local hyperthermia and canine tumours [letter] Dobson JM, et al. **Vet Rec** 1989 Aug 12;125(7):162

Squamous cell carcinoma of the nail bed in three related giant schnauzers. Paradis M, et al. **Vet Rec** 1989 Sep 16; 125(12):322–4

Skeletal metastasis of a penile squamous cell carcinoma. Patterson LJ, et al. **Vet Rec** 1990 Jun 9;126(23):579–80

Treatment of advanced squamous cell carcinomas involving the equine cornea. Rebhun WC. **Vet Surg** 1990 Jul–Aug; 19(4):297–302

[An unusual occurrence of spinaliomas in schnauzers] Halouzka R, et al. **Vet Med (Praha)** 1990 Jan;35(1):49–56 (Eng. Abstr.) **(Cze)**

[Jaw tumors in dogs] Nap RC. **Tijdschr Diergeneeskd** 1989 Jul 1;114(13):733–5 **(Dut)**

CARCINOMA, TRANSITIONAL CELL

Carcinoma of the female urethra. Hudson CN. **Br J Urol** 1966 Feb;38(1):96–8

Re: Impact of endourology on diagnosis and management of upper urinary tract urothelial cancer [letter] Martínez-Piñeiro JA. **J Urol** 1990 Sep;144(3):750

[A case of primary transitional cell carcinoma of the prostate] Hashimoto H, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1235–8 (7 ref.) (Eng. Abstr.) **(Jpn)**

[Transitional cell carcinoma of the urethra in a male] Gonzalvo Pérez V, et al. **Actas Urol Esp** 1990 Jan–Feb; 14(1):78–9 (Eng. Abstr.) **(Spa)**

[Association of 2 prostatic tumors] Zabala-Egurrola JA, et al. **Arch Esp Urol** 1989 Jul–Aug;42(6):583–6 (Eng. Abstr.) **(Spa)**

ANALYSIS

Flow cytometric analysis of primary and metastatic bladder cancer. Badalament RA, et al. **J Urol** 1990 May; 143(5):912–5; discussion 915–6

[The DNA content of bladder carcinoma in relation to pathologic grading, staging and prognosis: a flow cytometric study] Xue J. **Chung Hua Wai Ko Tsa Chih** 1989 Nov;27(11):650–3, 700 (Eng. Abstr.) **(Chi)**

[Blood and urine determinations of tissue polypeptide antigen in patients with bladder carcinoma] Tizzani A, et al. **Minerva Urol Nefrol** 1990 Apr–Jun;42(2):69–71 (Eng. Abstr.) **(Ita)**

[Flow cytometric bromodeoxyuridine (BrdU)/DNA analysis--study with urogenital tumors] Shimabukuro T, et al. **Hinyokika Kiyo** 1989 Oct;35(10):1653–7 (Eng. Abstr.) **(Jpn)**

[Flow cytometry for the determination of DNA in head and neck carcinomas] Labella T, et al. **Acta Otorrinolaringol Esp** 1989 Dec;40 Suppl 2:295–7 (Eng. Abstr.) **(Spa)**

BLOOD

B5 tumour marker and urine cytology in diagnosis and follow-up of transitional cell bladder cancer. Malpani K, et al. **Br J Urol** 1989 Sep;64(3):257–62

Correlation of tumor necrosis factor and prostaglandin E2 production of monocytes in bladder cancer patients. Ikemoto S, et al. **Cancer** 1989 Nov 15;64(10):2076–80

ABO blood groups and bladder carcinoma. Llopis B, et al. **Eur Urol** 1990;17(4):289–92

Relationship between blood groups and bladder tumors. Kvist E, et al. **Scand J Urol Nephrol** 1989;23(4):279–81

Antigenic detection and prognosis of patients with transitional cell carcinoma of the urinary bladder. Tan LB, et al. **Urol Int** 1989;44(5):264–71

[Serum concentration of laminin in transitional cell carcinoma] Iwata S, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):518–23 (Eng. Abstr.) **(Jpn)**

CHEMICALLY INDUCED

[Induction of urinary bladder urothelial cancers in the rabbit by dibutylnitrosamine with an artificial bladder calculus as cocarcinogen] Bornhof C, et al. **Urologe [A]** 1989 Nov; 28(6):339–43 (Eng. Abstr.) **(Ger)**

[Present status and background of occupational uroepithelial tumors] Tachibana M, et al. **Hinyokika Kiyo** 1989 Dec; 35(12):2003–9 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Tumor-associated tissue eosinophilia in the urinary bladder: is it a real relationship? Dworák O, et al. **Appl Pathol** 1989; 7(5):294–7

Acute retention due to multiple urethral calculi—an unusual presentation of bladder tumour. Hastie KJ, et al. **Br J Urol** 1989 Sep;64(3):316

Transitional cell carcinoma associated with retrocaval ureter. Varma KT. **J Okla State Med Assoc** 1989 Sep;82(9):463–5

Serial bone scintigrams demonstrating obstructive uropathy and nephropathy due to transitional cell carcinoma of the urinary bladder. Shih WJ, et al. **Radiat Med** 1989 Sep–Oct; 7(5):203–8

Congenital ureteropelvic junction obstruction with calcified renal pelvis and superimposed spindle cell urothelial carcinoma. Gold RP, et al. **Urol Radiol** 1990;12(1):15–7

Microbiological study of bladder tumors, their histology and infective complications. Badenoch DF, et al. **Urology** 1990 Jan;35(1):5–8

Bladder carcinoma presenting with rectal obstruction. Stillwell TJ, et al. **Urology** 1989 Nov;34(5):238–40

[Leukemoid reaction and hypercalcemia in carcinoma of the bladder] Alamé T, et al. **Rev Med Brux** 1990 Mar; 11(3):59–62 (21 ref.) (Eng. Abstr.) **(Fre)**

[Xanthogranulomatous pyelonephritis with urothelial carcinoma] Kreft B, et al. **ROFO** 1989 Dec;151(6):745–6 **(Ger)**

[A case of transitional cell carcinoma in a pyelocaliceal diverticulum] Adachi T, et al. **Hinyokika Kiyo** 1989 Aug; 35(8):1383–6 (9 ref.) (Eng. Abstr.) **(Jpn)**

[Urinary amebiasis: a parasitosis of exceptional presentation] Castiñeiras Fernández J, et al. **Arch Esp Urol** 1990 Mar; 43(2):190–2 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Transitional cell carcinoma of the pelvicalices and ureter. Leder RA, et al. **AJR Am J Roentgenol** 1990 Oct; 155(4):713–22 (66 ref.)

Diagnosis of clinically occult bladder cancer by in vivo staining with methylene blue. Mufti GR, et al. **Br J Urol** 1990 Feb;65(2):173–5

Transitional cell carcinoma of a simple ureterocele. A specific sonographic appearance. Forer LE, et al. **J Ultrasound Med** 1990 May;9(5):301–3

A clinically applicable method to preserve urine and bladder washing cells for flow cytometric monitoring of bladder cancer patients. Deitch AD, et al. **J Urol** 1990 Apr; 143(4):700–5

Quantitative immunocytology in the management of patients with superficial bladder carcinoma. I. A marker to identify patients who do not require prophylaxis. Huland E, et al. **J Urol** 1990 Sep;144(3):637–9; discussion 639–40

The use of transrectal ultrasound in the detection and evaluation of local pelvic recurrences after a radical urological pelvic operation. Parra RO, et al. **J Urol** 1990 Sep;144(3):707–9

Transrectal ultrasound appearance of transitional cell carcinoma involving the prostate. Terris MK, et al. **J Urol** 1990 May;143(5):952–6

A new 180 kDa. urine protein marker associated with bladder cancer. Zhau HY, et al. **J Urol** 1990 Jul;144(1):47–52

Sonographic features of a renal pelvic neurofibroma. Le Cheong L, et al. **JCU** 1990 Feb;18(2):129–31

[Indirect immunofluorescence in bladder tumors] Charůrov S, et al. **Khirurgiia (Sofiia)** 1989;42(4):92–5 (Eng. Abstr.) **(Bul)**

[A case of tumors of the kidney and bladder with differing histology] Donovski L, et al. **Khirurgiia (Sofiia)** 1990; 43(1):85–7 (Eng. Abstr.) **(Bul)**

[Use of flow cytometry in the diagnosis of bladder tumor] Ling CH. **Chung Hua Wai Ko Tsa Chih** 1989 May; 27(5):286–8, 317 (Eng. Abstr.) **(Chi)**

[Cytologic diagnostic value of voided urine in 60 cases of primary transitional cell carcinoma of the renal pelvis and ureter] Xia TL. **Chung Hua Wai Ko Tsa Chih** 1989 Dec; 27(12):753–5, 782 (Eng. Abstr.) **(Chi)**

[Comparison of MRI and CT X-ray in the evaluation of bladder cancer. Apropos of 26 cases] Chiche JF, et al. **J Radiol** 1989 Oct;70(10):529–39 (Eng. Abstr.) **(Fre)**

[Tumor markers and prognostic parameters in urinary bladder cancer] Schneider AW, et al. **Urologe [A]** 1990 Mar;29(2):71–6 (51 ref.) (Eng. Abstr.) **(Ger)**

[Simultaneous, bilateral transitional-cell carcinoma of the ureters] Garritano A, et al. **Minerva Urol Nefrol** 1990 Apr–Jun;42(2):105–7 (Eng. Abstr.) **(Ita)**

[Calcified kidney masses. Study of 23 cases] Romero Martín JA, et al. **Actas Urol Esp** 1989 Nov–Dec;13(6):447–50 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Cytohistologic correlation of urothelial lesions secondary to photodynamic therapy. Broghamer WL Jr, et al. **Acta Cytol** 1989 Nov–Dec;33(6):881–6

Combined chemotherapy and radiotherapy for carcinomas of the anus. Knecht BH. **Am J Surg** 1990 May; 159(5):518–21

Long-term follow-up of intravesical Epodyl therapy for superficial bladder cancer. Mufti GR, et al. **Br J Urol** 1990 Jan;65(1):32–5

Phase II study of carboplatin in locally advanced and metastatic transitional cell carcinoma of the urinary bladder. Raabe NK, et al. **Br J Urol** 1989 Dec;64(6):604–7

Neo-adjuvant chemotherapy for invasive bladder cancer. Experience with the M-VAC regimen. Scher H, et al. **Br J Urol** 1989 Sep;64(3):250–6

Treatment of bladder carcinoma using a germ cell chemotherapy protocol. Williams G, et al. **Br J Urol** 1990 May;65(5):473–7

A phase II study of mitoguazone and vinblastine in advanced transitional cell carcinoma of the urinary tract. Barrett JT, et al. **Cancer** 1989 Dec 15;64(12):2445–7

Neoadjuvant methotrexate, vinblastine, doxorubicin, and cisplatin for locally advanced transitional cell carcinoma of the bladder. Miller RJ Jr, et al. **Cancer** 1990 Jan 15; 65(2):207–10

Methotrexate, vinblastine, doxorubicin, and cisplatin for advanced transitional cell carcinoma of the urothelium. Efficacy and patterns of response and relapse. Sternberg CN, et al. **Cancer** 1989 Dec 15;64(12):2448–58

ThioTEPA pharmacokinetics during intravesical chemotherapy and the influence of Tween 80. **Masters JR**, et al. **Cancer Chemother Pharmacol** 1990;25(4):267–73

Systemic chemotherapy of transitional cell carcinoma of the urothelium. Chun HG, et al. **Cancer Treat Res** 1989; 42:151–74 (162 ref.)

A multi-centre phase two study of intravesical epirubicin in the treatment of superficial bladder tumour. Cumming JA, et al. **Eur Urol** 1990;17(1):20–2

Long-term versus short-term doxorubicin hydrochloride instillation after transurethral resection of superficial bladder cancer. Flamm J. **Eur Urol** 1990;17(2):119–24

Systemic chemotherapy in tumor-bearing rats using high-dose cis-diamminedichloroplatinum(II) with low nephrotoxicity in combination with angiotensin II and sodium thiosulfate. Kobayashi H, et al. **Int J Cancer** 1990 May 15;45(5):940–4

Low dose intermittent 5-fluorouracil, epirubicin and cyclophosphamide (FEC) in poor risk patients with advanced transitional cell bladder cancer: a pilot study. Lelli G, et al. **J Chemother** 1989 Aug;1(4):269–71

Bladder wall calcification after intravesical mitomycin C treatment of superficial bladder cancer. Drago PC, et al. **J Urol** 1989 Oct;142(4):1071–2

Neoadjuvant intra-arterial chemotherapy in the treatment of advanced transitional cell carcinoma of the bladder: results and followup. Galetti TP, et al. **J Urol** 1989 Nov; 142(5):1211–4; discussion 1214–5

Usefulness and limitations of methotrexate, vinblastine, doxorubicin and cisplatin for the treatment of advanced urothelial cancer. Igawa M, et al. **J Urol** 1990 Sep; 144(3):662–5

The effect of verapamil on a multi-drug resistant bladder carcinoma cell line and its potential as an intravesical chemotherapeutic agent. Long JP Jr, et al. **J Urol** 1990 May;143(5):1053–6

Microscopic changes of the urinary bladder in patients with primary tumors locally treated with Corynebacterium parvum. Raica M, et al. **Morphol Embryol (Bucur)** 1989 Oct–Dec;35(4):275–7

Current status of chemotherapy for urothelial tract tumors. Sternberg CN, et al. **Oncology (Williston Park)** 1987 Jul; 1(5):41–50, 60 (53 ref.)

Neoadjuvant therapy of carcinoma of the bladder. deVere White RW. **Semin Urol** 1990 Aug;8(3):197–200

Neoadjuvant chemotherapy for bladder cancer: the MSKCC experience. Fair WR, et al. **Semin Urol** 1990 Aug;8(3):190–6

Bladder-sparing approach in the treatment of invasive bladder cancer. Wajsman Z, et al. **Semin Urol** 1990 Aug; 8(3):210–5

Partial response to lonidamine of advanced bladder carcinoma: a case report. Lo Re G, et al. **Tumori** 1990 Jun 30;76(3):290–1

Neoadjuvant therapy for locally invasive bladder cancer. Okajima E, et al. **Urol Int** 1989;44(6):332–7

Adjuvant systemic chemotherapy after complete transurethral resection of superficially invasive bladder carcinoma (T1 G3–4 and T2 G2–4). Rübben H, et al. **Urol Int** 1990;45(2):78–83

Experimental studies of chemosensitivity testing of urothelial cancer grown in nude mice. Kyriazis AP, et al. **Urol Res** 1990;18(3):201–5

Dose response relationship of methotrexate in combination with cisplatin in murine bladder cancer. Brausi M, et al. **Urology** 1990 Mar;35(3):253–6

Long-term follow-up in patients treated with methotrexate, vinblastine, doxorubicin, and cisplatin (M-VAC) for transitional cell carcinoma of urinary bladder: cause for concern. Connor JP, et al. **Urology** 1989 Dec;34(6):353–6

Beta-carotene and reversal of urothelial dysplasia [letter] Holmquist N, et al. **Urology** 1990 Jan;35(1):98–9

Effect of systemic glutathione depletion by buthionine sulfoximine on sensitivity of murine bladder cancer to cytotoxic agents. Lee KE, et al. **Urology** 1989 Dec; 34(6):376–80

Primary transitional cell carcinoma of prostate: case with lymph node metastasis eradicated by neoadjuvant methotrexate, vinblastine, doxorubicin, and cisplatin (M-VAC) therapy. Takashi M, et al. **Urology** 1990 Jul; 36(1):96–8

[The M-VEC chemotherapy of advanced bladder tumors] Kumanov Kh, et al. **Khirurgiia (Sofiia)** 1989;42(6):39–45 (Eng. Abstr.) **(Bul)**

[Cases of the regression of advanced bladder tumors (T2–T4) after the use of chemotherapy] Kumanov Kh, et al. **Khirurgiia (Sofiia)** 1990;43(1):87–93 (Eng. Abstr.) **(Bul)**

[Adjuvant chemotherapy with biocisplatin, methotrexate and biocarbazine in advanced bladder tumors] Ormanov I, et al. **Khirurgiia (Sofiia)** 1989;42(6):45–8 (Eng. Abstr.) **(Bul)**

[Improved argon laser photodynamic therapy for superficial bladder tumor—experimental research and clinical analysis]

Guo YC. **Chung Hua Chung Liu Tsa Chih** 1990 Jan; 12(1):75–7 (Eng. Abstr.) **(Chi)**

[Photodynamic therapy with hematoporphyrin derivative for transitional-cell carcinoma of the urinary bladder—report of 30 cases] Tian ME. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):304–6 (Eng. Abstr.) **(Chi)**

[Effects of mitomycin C perfusion after bladder tumor surgery] Zhou CL. **Chung Hua Wai Ko Tsa Chih** 1989 Nov; 27(11):654–5, 700 (Eng. Abstr.) **(Chi)**

[Neoadjuvant chemotherapy with MVC (methotrexate, vinblastine, cisplatin)in the treatment of infiltrating transitional carcinoma of the bladder] Campo B, et al. **Arch Ital Urol Nefrol Androl** 1990 Jun;62(2):237–42 (16 ref.) (Eng. Abstr.) **(Ita)**

[Neoadjuvant chemotherapy using cisplatin (CDDP) and methotrexate (MTX) in carcinoma of the bladder] Rocco F, et al. **Arch Ital Urol Nefrol Androl** 1990 Jun;62(2):249–55 (Eng. Abstr.) **(Ita)**

[Case report of a patient with advanced pelvic and ureteral cancer whose primary lesion could be enucleated after cytoreduction by modified CAP regimen] Mikata N, et al. **Gan No Rinsho** 1989 Dec;35(15):1807–11 (Eng. Abstr.) **(Jpn)**

[A case of right renal pelvic and ureter cancer with hepatic metastasis showing complete response by M-VAC] Sumiyoshi Y, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 1):1521–3 (Eng. Abstr.) **(Jpn)**

[A case of advanced bladder cancer successfully treated with intraarterial chemotherapy] Takahashi Y, et al. **Gan To Kagaku Ryoho** 1989 Dec;16(12):3801–4 (Eng. Abstr.) **(Jpn)**

[Clinical and pathological evaluations of methotrexate, vinblastine, adriamycin and cisplatin (M-VAC) chemotherapy for advanced urothelial cancers] Takenaka A, et al. **Gan To Kagaku Ryoho** 1990 Sep;17(9):1909–15 (Eng. Abstr.) **(Jpn)**

[Neoadjuvant chemoradiotherapy in locally invasive transitional cell carcinoma of the urinary bladder: early results of PVB and CAP therapy] Momose H, et al. **Hinyokika Kiyo** 1989 May;35(5):781–8 (Eng. Abstr.) **(Jpn)**

[Early clinical result of modified M-VAC (methotrexate, vinblastine, doxorubicin, and cisplatin) for advanced transitional cell carcinoma of renal pelvis and ureter] Shishido S, et al. **Hinyokika Kiyo** 1990 Apr;36(4):401–5 (Eng. Abstr.) **(Jpn)**

[Combination chemotherapy of M-VAC (methotrexate, vinblastine, adriamycin and cisplatin) for advanced uroepithelial cancer] Hatachi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Mar;81(3):433–8 (Eng. Abstr.) **(Jpn)**

[Usefulness of ATP-sensitivity-assay of intravesical instillation therapy of anti-cancer agents for superficial bladder cancer] Yamashita M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):554–60 (Eng. Abstr.) **(Jpn)**

[Polychemotherapy treatment with cisplatin, adriamycin, 5-fluorouracil (FAP) and cisplatin, adriamycin and cyclophosphamide (CISCA) in advanced transitional carcinoma of the bladder] Sánchez Romero JA, et al. **Actas Urol Esp** 1989 Jul-Aug;13(4):240–2 (7 ref.) (Eng. Abstr.) **(Spa)**

[Role of systemic chemotherapy in the treatment of infiltrating cancer of the bladder (editorial)] Gardella S, et al. **Med Clin (Barc)** 1989 Dec 2;93(18):693–5 **(Spa)**

ENZYMOLOGY

Protease and plasminogen activator activity in human bladder carcinoma. Gorelik U, et al. **Br J Urol** 1990 Aug; 66(2):170–4

Glutathione-S-transferase activity in human superficial transitional cell carcinoma of the bladder. Comparison with healthy controls. Lafuente A, et al. **Cancer** 1990 May 1; 65(9):2064–8

Galactosyl transferase in benign and neoplastic human bladder mucosa. Hagen-Cook K, et al. **Surg Forum** 1978; 29:627–9

EPIDEMIOLOGY

Bladder tumours in Enugu, Nigeria. Aghaji AE, et al. **Br J Urol** 1989 Oct;64(4):399–402

On the regression analysis of tumour recurrence rates. Seeber GU. **Stat Med** 1989 Nov;8(11):1363–9

Transitional cell carcinoma of bladder in children. Khasidy LR, et al. **Urology** 1990 Feb;35(2):142–4 (14 ref.)

[Carcinoma of the renal pelvis: a 17-year review] Tan LB, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Mar;88(3):294–7 **(Chi)**

[The incidence of bladder tumor recurrences after transurethral resection during combined treatment] Matveev BP, et al. **Urol Nefrol (Mosk)** 1990 May-Jun; (3):53–6 (Eng. Abstr.) **(Rus)**

ETHNOLOGY

Urothelial cancer in white and Japanese patients in Hawaii: pathology. Stemmermann GN, et al. **J Urol** 1990 Jul; 144(1):44–6

ETIOLOGY

Coarse fishing and urothelial cancer: a regional case-control study. Sorahan T, et al. **Br J Cancer** 1990 Jul;62(1):138–41

[Renal pelvic tumor in chronic renal failure: report of a case] Kojima Y, et al. **Hinyokika Kiyo** 1990 May;36(5):587–91 (23 ref.) (Eng. Abstr.) **(Jpn)**

[The pathogenesis of urothelial cancer] Marković B, et al. **Urol Nefrol (Mosk)** 1990 May-Jun;(3):42–8 (33 ref.) **(Rus)**

GENETICS

Detection of numerical chromosome aberrations in bladder cancer by in situ hybridization. Hopman AH, et al. **Am J Pathol** 1989 Dec;135(6):1105–17

Flow DNA analysis in the characterization of carcinoma of the renal pelvis and ureter. Oldbring J, et al. **Cancer** 1989 Nov 15;64(10):2141–5

Flow cytometric DNA analysis after immunoselection of bladder tumor cells with monoclonal antibody DU83.21. Wright GL Jr, et al. **Cancer** 1990 Sep 15;66(6):1242–52

Allelic losses of chromosomes 9, 11, and 17 in human bladder cancer. Tsai YC, et al. **Cancer Res** 1990 Jan 1;50(1):44–7

Upper urothelial tumours and the Balkan nephropathy. Inference from the study of a family pedigree. Radovanovic Z, et al. **Eur J Cancer** 1990 Mar;26(3):391–2

Centromere splitting in bladder cancer. Berrozpe G, et al. **Hum Genet** 1990 Jul;85(2):184–6

DNA ploidy and S phase fraction in human bladder cancer. Relation to survival and histological grade (WHO). Lipponen PK, et al. **Urol Int** 1990;45(1):4–9

[Significance and application of DNA ploidy of bladder cancer cells in studying the malignancy of tumors] Cao S. **Chung Hua I Hsueh Tsa Chih** 1990 Mar;70(3):143–5 **(Chi)**

IMMUNOLOGY

Immunohistochemical and immunocytochemical study of bladder carcinomas using the epithelium-specific, tumour-associated monoclonal antibodies HMFG1 and AUA1. Anagnostaki E, et al. **Br J Cancer Suppl** 1990 Jul; 10:52–6

Clinical studies on cell-mediated immunity in patients with urinary bladder carcinoma: blastogenic response, interleukin-2 production and interferon-gamma production of lymphocytes. Ikemoto S, et al. **Br J Urol** 1990 Apr; 65(4):333–8

Defective interleukin-1 production of monocytes in patients with bladder cancer. Ikemoto S, et al. **Br J Urol** 1990 Feb; 65(2):181–5

The study on cell surface antigens in epithelial tumor of the upper urinary tract: ABH-isoantigen and Thomsen-Friedenreich antigen. Fukatsu H, et al. **Hinyokika Kiyo** 1989 Jun;35(6):949–54

Expression of CD15 antigen in urinary bladder transitional cell carcinoma. Parham DM, et al. **J Clin Pathol** 1990 Jul; 43(7):541–3

Clinical studies on bladder tumor-associated antigen in serum of patients with bladder cancer by using monoclonal antibody and sandwich ELISA. Zhu SS, et al. **J Tongji Med Univ** 1990;10(1):48–51

Clinical significance of natural killer activity in patients with transitional cell carcinoma of the bladder. Carballido J, et al. **J Urol** 1990 Jan;143(1):29–33

HLA antigens and transitional cell carcinoma of the bladder. Eryigit M, et al. **Urol Int** 1990;45(2):75–7

Urine-TPA (tissue polypeptide antigen), flow cytometry and cytology as markers for tumor invasiveness in urinary bladder carcinoma. Carbin BE, et al. **Urol Res** 1989; 17(5):269–72

Flow cytometric evaluation of Thomsen-Friedenreich antigen on transitional cell cancer using monoclonal antibody. Oda H, et al. **Urol Res** 1990;18(2):107–11

[Biologic significance and clinical value of carcinoembryonic antigen in tissues in transitional cell carcinoma of the urinary tract] Yang SC. **Chung Hua Wai Ko Tsa Chih** 1989 Apr;27(4):228–30, 254 (Eng. Abstr.) **(Chi)**

[A transitional cell carcinoma of the urinary bladder with a high level of serum CA 19-9—a case report] Saito B, et al. **Gan No Rinsho** 1990 Aug;36(9):1063–5 (Eng. Abstr.) **(Jpn)**

[Immunohistochemical study of tissue polypeptide antigen (TPA) in human urinary bladder tumors] Kaneko K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Oct; 80(10):1430–5 (Eng. Abstr.) **(Jpn)**

[Study of a monoclonal antibody against new epithelial membrane antigens of transitional cell carcinoma] Oda H, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr; 81(4):618–25 (Eng. Abstr.) **(Jpn)**

METABOLISM

Distribution of cytokeratin polypeptides in human transitional cell carcinomas, with special emphasis on changing expression patterns during tumor progression. Schaafsma HE, et al. **Am J Pathol** 1990 Feb;136(2):329–43

Polymorphic oxidation of debrisoquine in bladder cancer. Benítez J, et al. **Ann Med** 1990 Jun;22(3):157–60

Clinical implications of the expression of epidermal growth factor receptors in human transitional cell carcinoma. Messing EM. **Cancer Res** 1990 Apr 15;50(8):2530–7

Proteoglycan synthesis by normal and neoplastic human transitional epithelial cells. Knudson W, et al. **J Cell Biochem** 1990 Jul;43(3):265–79

Growth fractions of transitional cell carcinomas of the bladder defined by the monoclonal antibody Ki-67. Okamura K, et al. **J Urol** 1990 Oct;144(4):875–8

Expression of ras p21 oncogene product on human bladder tumors. Moriyama N, et al. **Urol Int** 1989;44(5):260–3

Involucrin expression in urinary bladder carcinoma. Asamoto M, et al. **Urol Res** 1989;17(5):279–83

Immunohistochemical distribution of epithelial membrane antigen in bladder carcinomas as detected with a monoclonal antibody. Asamoto M, et al. **Urol Res** 1989; 17(5):273–7

Detection of tumor-associated membrane proteins in prostate and bladder carcinomas by means of protein blotting. Ford SA, et al. **Urol Res** 1989;17(5):305–10

MICROBIOLOGY

Human papillomavirus type 6 in grade 'I transitional cell carcinoma of the urethra. Mevorach RA, et al. **J Urol** 1990 Jan;143(1):126–8

[Bladder carcinoma in situ which harbored human papilloma virus. A case report] Kitamura T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Aug;80(8):1224–7 (Eng. Abstr.) **(Jpn)**

MORTALITY

Computerisation of urothelial carcinoma records: 16 years' experience with the TNM system. Hendry WF, et al. **Br J Urol** 1990 Jun;65(6):583–8

Factors affecting survival in primary superficial bladder cancer. Flamm J, et al. **Eur Urol** 1990;17(2):113–8

Prognostic factors in patients with primary transitional cell carcinoma of the upper urinary tract. Badalament RA, et al. **J Urol** 1990 Oct;144(4):859–63

[Urothelial carcinoma of the upper urinary tract. 10 years' material from a central hospital] Markset AC, et al. **Tidsskr Nor Laegeforen** 1990 Feb 20;110(5):591–4 (Eng. Abstr.) **(Nor)**

PATHOLOGY

Three new primary pelvic carcinomas in a patient following radiotherapy for carcinoma of the cervix. Case report. Gatzen C, et al. **Acta Chir Scand** 1990 Feb;156(2):183–6

Osseous metaplasia of transitional cell carcinoma within a duplicated ureter [letter] Gassner JR, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):1101–2

Primary ovarian transitional cell carcinoma. Diagnostic and prognostic considerations [comment] Gersell DJ. **Am J Clin Pathol** 1990 Apr;93(4):586–8 (48 ref.) Comment on: Am J Clin Pathol 1990 Apr;93(4):457–65.

Ovarian carcinomas with transitional cell carcinoma pattern [see comments] Silva EG, et al. **Am J Clin Pathol** 1990 Apr;93(4):457–65 Comment in: Am J Clin Pathol 1990 Apr;93(4):586–8.

Neurologic complications of cloacogenic carcinoma. Garofalo M Jr, et al. **Am J Gastroenterol** 1990 Sep; 85(9):1189–91

Aggressive bladder carcinoma in an adolescent. Report of a case with immunohistochemical, cytogenetic, and flow cytometric characterization. Scott AA, et al. **Am J Surg Pathol** 1989 Dec;13(12):1057–63

Anal cloacogenic and squamous carcinomas. Comparative histologic analysis using in situ hybridization for human papillomavirus DNA. Wolber R, et al. **Am J Surg Pathol** 1990 Feb;14(2):176–82

A comparative study in morphometric grading of transitional cell carcinoma of the urinary bladder. Blomjous CE, et al. **Anal Quant Cytol Histol** 1989 Dec;11(6):426–32

Nucleolar organizer regions in transitional cell tumors of the bladder. Cairns P, et al. **Arch Pathol Lab Med** 1989 Nov; 113(11):1250–2

Clonal analysis of a bladder cancer cell line: an experimental model of tumour heterogeneity. Brown JL, et al. **Br J Cancer** 1990 Mar;61(3):369–76

Immunohistochemical staining with monoclonal antibody 32-2B to desmosomal glycoprotein 1. Its role in the histological assessment of urothelial carcinomas. Conn IG, et al. **Br J Urol** 1990 Feb;65(2):176–80

Comparison of morphometry and DNA flow cytometry with standard prognostic factors in bladder cancer. Lipponen PK, et al. **Br J Urol** 1990 Jun;65(6):589–97

Transitional cell carcinoma of the urachus. Lyth DR, et al. **Br J Urol** 1990 May;65(5):544–5

DNA ploidy and the prognosis of stage pT1 bladder cancer. Masters JR, et al. **Br J Urol** 1989 Oct;64(4):403–8

Estimation of growth fraction in situ in human bladder cancer with bromodeoxyuridine labelling. Nemoto R, et al. **Br J Urol** 1990 Jan;65(1):27–31

Estimations of the S phase fraction in situ in transitional cell carcinoma of the renal pelvis and ureter with bromodeoxyuridine labelling. Nemoto R, et al. **Br J Urol** 1989 Oct;64(4):339–44

Inverted papilloma of the ureter with malignant change. Stower MJ, et al. **Br J Urol** 1990 Jan;65(1):13–6

A useful monoclonal antibody (BL2-10D1) to identify tumor cells in urine cytology. Longin A, et al. **Cancer** 1990 Mar 15;65(6):1412–7

Basaloid squamous carcinoma of the upper aerodigestive tract. Clinicopathologic and DNA flow cytometric analysis. Luna MA, et al. **Cancer** 1990 Aug 1;66(3):537–42

Stereologic estimates of nuclear volume in noninvasive bladder tumors (Ta) correlated with the recurrence pattern. Nielsen K, et al. **Cancer** 1989 Dec 1;64(11):2269–74

The usefulness of the level of the muscularis mucosae in the staging of invasive transitional cell carcinoma of the urinary bladder. Younes M, et al. **Cancer** 1990 Aug 1;66(3):543–8

Papillary transitional-cell carcinoma of the upper urinary tract: a cytological review. Kannan V. **Diagn Cytopathol** 1990;6(3):204–9 (27 ref.)

Multiple mucosal biopsies and postoperative urinary cytology in patients with bladder cancer. Gil-Salom M, et al. **Eur Urol** 1990;17(4):281–5

Potential of nuclear morphometry and volume-corrected mitotic index in grading transitional cell carcinoma of the urinary bladder. Lipponen PK, et al. **Eur Urol** 1990; 17(4):333–7

Lobulated polypoid tumor of the ureter showing histologically high grade malignancy: report of a case. Takeuchi H, et al. **Hinyokika Kiyo** 1989 Aug;35(8):1401–4

Mixed mesonephric adenocarcinoma and transitional cell carcinoma of the bladder. Butterworth DM, et al. **Histopathology** 1990 Jun;16(6):601–4

The prognostic significance of selective nuclear morphometry in urinary bladder carcinoma. Blomjous CE, et al. **Hum Pathol** 1990 Apr;21(4):409–13

Clear-cell carcinoma of the anal canal: a variant of anal transitional zone carcinoma. Watson PH. **Hum Pathol** 1990 Mar;21(3):350–2

Reversible transition towards a fibroblastic phenotype in a rat carcinoma cell line. Boyer B, et al. **Int J Cancer Suppl** 1989;4:69–75

Clinical importance of squamous metaplasia in invasive transitional cell carcinoma of the bladder [letter; comment] Coulson WF. **J Clin Pathol** 1989 Nov;42(11):1227–8 Comment on: J Clin Pathol 1989 Mar;42(3):250–3.

Observer variability in histopathological reporting of transitional cell carcinoma and epithelial dysplasia in bladders. Robertson AJ, et al. **J Clin Pathol** 1990 Jan; 43(1):17–21

Carcinoma of the prostate simulating primary bladder cancer. Amin M, et al. **J Ky Med Assoc** 1990 Jan;88(1):13–6

Small urothelial carcinoma: diagnosis and treatment by cold forceps biopsy. Bianchi G, et al. **J Urol** 1990 Oct; 144(4):872–4

Small cell carcinoma of the renal pelvis: a clinicopathological, morphological and immunohistochemical study of 2 cases. Essenfeld H, et al. **J Urol** 1990 Aug;144(2 Pt 1):344–7

Right renal mass with vena caval thrombus [clinical conference] Goldfarb DA, et al. **J Urol** 1990 Mar; 143(3):574–7

Re: The importance of marker chromosomes in superficial transitional cell carcinoma of the bladder: 50 patients followed up to 17 years [letter] Kleer E, et al. **J Urol** 1989 Nov;142(5):1333

Prediction of lymph node metastases in bladder carcinoma with deoxyribonucleic acid flow cytometry. Shaaban AA, et al. **J Urol** 1990 Oct;144(4):884–7

Mechanisms of human bladder tumor invasion: role of protease cathepsin B. Weiss RE, et al. **J Urol** 1990 Sep; 144(3):798–804

Use of Ulex europaeus agglutinin I (UEAI) to distinguish vascular and "pseudovascular" invasion in transitional cell carcinoma of bladder with lamina propria invasion. Larsen MP, et al. **Mod Pathol** 1990 Jan;3(1):83–8

Papillary tumour of the vagina resembling transitional cell carcinoma. Fetissof F, et al. **Pathol Res Pract** 1990 Jun; 186(3):358–64

Potential of morphometry in grading transitional cell carcinoma of the urinary bladder. Lipponen P, et al. **Pathol Res Pract** 1989 Nov;185(5):617–20

Volume corrected mitotic index (M/V index) in human bladder cancer; relation to histological grade (WHO), clinical stage (UICC) and prognosis. Lipponen PK, et al. **Scand J Urol Nephrol** 1990;24(1):39–45

Urinary cytology in the detection of bladder tumours. Influence of concomitant urothelial atypia. Harving N, et al. **Scand J Urol Nephrol Suppl** 1989;125:127–31

Mixed cell agglutination test: correlation with invasive potential of superficial transitional cell carcinoma. Johnson JD, et al. **Surg Forum** 1978;29:619–20

T-zone histiocytes and recurrence of papillary urothelial bladder carcinoma. Lopez-Beltran A, et al. **Urol Int** 1989; 44(4):205–9

The value of tumor-associated tissue inflammatory reaction in primary superficial bladder cancer. Flamm J. **Urol Res** 1990;18(2):113–7

Histopathologic changes of transitional cell carcinoma of bladder after M-VAC chemotherapy. Javadpour N, et al. **Urology** 1989 Dec;34(6):357–9

Endourologic management of filling defect in renal pelvis: limited value of cold cup biopsy. Ohigashi T, et al. **Urology** 1990 Jan;35(1):51–3

Comparison of quantitative and classic prognosticators in urinary bladder carcinoma. A multivariate analysis of DNA flow cytometric, nuclear morphometric and clinicopathological features. Blomjous CE, et al. **Virchows Arch [A]** 1989;415(5):421–8

Bartholin's gland mixed carcinoma predominantly of the transitional cell type following radiotherapy for a cervical carcinoma. Sieiński W, et al. **Zentralbl Allg Pathol** 1990; 136(3):265–8

[Tumors of the female urethra—a review of the literature and a clinical case] Donovski L, et al. **Khirurgiia (Sofiia)** 1989;42(4):26–7 (13 ref.) **(Bul)**

[A case of nephrogenic adenoma of the bladder. Clinical and anatomopathological aspects] Giannotti P, et al. **Acta Urol Belg** 1989;57(3):763–8 (Eng. Abstr.) **(Fre)**

[Cloacogenic cancers of the anal canal: a retrospective study of 17 cases] Gallot D, et al. **Ann Gastroenterol Hepatol (Paris)** 1990 Jun;26(4):141–5 (Eng. Abstr.) **(Fre)**

[Tumors of the bladder. The pathologist's point of view] Vieillefond A, et al. **Ann Pathol** 1989;9(4):249–64 (83 ref.) **(Fre)**

[Developmental and prognostic aspects of bladder tumors: apropos of 114 cases] Mzabi Regaya S, et al. **Tunis Med** 1989 Aug–Sep;67(8–9):499–504 (Eng. Abstr.) **(Fre)**

[Mucourothelial cancer of the urinary bladder and ureter] Goertchen R, et al. **Pathologe** 1990 May;11(3):166–70 **(Ger)**

[Quantitative immunocytology as a marker for indications and follow-up of recurrence prevention of superficial urinary bladder cancers] Schneider AW, et al. **Urologe [A]** 1989 Sep;28(5):289–91 (Eng. Abstr.) **(Ger)**

[Pure squamous cell carcinoma and mixed transitional and squamous carcinoma of the bladder. A clinico-histopathological comparative study] Bussani R, et al. **Minerva Urol Nefrol** 1989 Jul–Sep;41(3):177–81 (Eng. Abstr.) **(Ita)**

[Carcinoma of the bladder with pseudosarcomatous stroma. Presentation of a case] Colonna A, et al. **Pathologica** 1989 Sep–Oct;81(1075):551–8 (Eng. Abstr.) **(Ita)**

[An autopsy case of quadruple carcinoma] Kobayashi K, et al. **Gan No Rinsho** 1990 Jun;36(7):842–6 (Eng. Abstr.) **(Jpn)**

[A case of urothelial tumor involving renal pelvis, ureter and bladder in a patient receiving hemodialysis] Kaneko Y, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1179–81 (Eng. Abstr.) **(Jpn)**

[The clinical study of 23 cases in patients with bladder cancer over 85 years old] Owada F, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1141–4 (Eng. Abstr.) **(Jpn)**

[Primary carcinoma of the female urethra] Takahashi H, et al. **Hinyokika Kiyo** 1989 Nov;35(11):1943–5 (Eng. Abstr.) **(Jpn)**

[A clinicopathological study on tumor of the renal pelvis and ureter] Yoneda F, et al. **Hinyokika Kiyo** 1989 Oct; 35(10):1665–71 (Eng. Abstr.) **(Jpn)**

[A clinical study on transitional cell carcinoma of the renal pelvis and ureter] Yoshino S, et al. **Hinyokika Kiyo** 1990 May;36(5):541–7 (Eng. Abstr.) **(Jpn)**

[Studies on biological characteristics of transitional cell carcinoma of the bladder in patients under 30 years of age] Asakura H, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Aug;80(8):1218–23 (Eng. Abstr.) **(Jpn)**

[A case of asynchronous triple primary malignant tumors of bladder, stomach and lung] Harima M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):630–3 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Subrenal capsule assay for chemosensitivity test of urinary tract cancers] Hasegawa J, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jun;80(6):856–60 (Eng. Abstr.) **(Jpn)**

[Primary culture of human bladder carcinomas and establishment of human bladder carcinoma cell line by serum-free culture] Ito H, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec;80(12):1749–54 (Eng. Abstr.) **(Jpn)**

[Tumor factors concerned with primary culture of transitional cell carcinomas] Kakizaki H, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb;81(2):204–9 (Eng. Abstr.) **(Jpn)**

[Multiple urothelial cancers accompanied by acquired cystic disease of the kidney in a long-term hemodialysis patient] Kawakami S, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):130–3 (17 ref.) (Eng. Abstr.) **(Jpn)**

[A study of intercellular communication of human transitional cell carcinoma cell lines] Kihara K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jul;80(7):988–94 (Eng. Abstr.) **(Jpn)**

[Chemosensitivity study using subrenal capsule assay in urinary transitional cell carcinomas] Kobashi K. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec;80(12):1755–62 (Eng. Abstr.) **(Jpn)**

[Cellular architecture of papillary and nonpapillary transitional cell carcinoma] Moriyama M. **Nippon Hinyokika Gakkai Zasshi** 1989 Jul;80(7):1017–24 (Eng. Abstr.) **(Jpn)**

[Ultrastructure of cultured normal bladder transitional epithelial cell and BBN induced rat bladder tumor cell lines] Nagata Y. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb;81(2):188–95 (Eng. Abstr.) **(Jpn)**

[S-phase cells of human bladder tumors by in vivo bromodeoxyuridine labeling] Ohyama C, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):524–31 (Eng. Abstr.) **(Jpn)**

[Chemosensitivity testing on human bladder cancer cell lines, using MTT-assay] Sawamura M, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Aug;80(8):1195–202 (Eng. Abstr.) **(Jpn)**

[Monoclonal antibody to desmosome associated 34 kD protein and immunohistochemical study in relation to the malignancy of transitional cell carcinomas of urinary bladder] Takenaka A, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec;80(12):1769–75 (Eng. Abstr.) **(Jpn)**

[A case of inverted papilloma with subsequent heterotopical recurrence of transitional cell carcinoma] Tomita K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Sep;80(9):1374–7 (Eng. Abstr.) **(Jpn)**

[Chronic myelogenous leukemia maintained in remission by interferon alpha presenting with bladder cancer] Kobayashi H, et al. **Rinsho Ketsueki** 1989 Jul;30(7):1093–4 (Eng. Abstr.) **(Jpn)**

[Infiltrating transitional carcinoma of the bladder. Prognostic value of anatomopathologic staging and therapeutic possibilities] Escudero Barrilero A, et al. **Arch Esp Urol** 1989 Apr;42(3):217–24 (21 ref.) (Eng. Abstr.) **(Spa)**

[Infiltrating transitional carcinoma of the bladder. Is the P/T ratio a reliable index to evaluate the effectiveness of preoperative radiotherapy on tumors of the bladder?] Escudero Barrilero A, et al. **Arch Esp Urol** 1989 Apr; 42(3):229–35 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Kinetics of transitional tumor cell line 4909 adherence to injured urothelial surfaces in F-344 rats. See WA, et al. **Cancer Res** 1990 Apr 15;50(8):2499–504

PREVENTION & CONTROL

Protection from carcinogen-induced murine bladder carcinoma by interferons and an oral interferon-inducing pyrimidinone, bropirimine. Borden EC, et al. **Cancer Res** 1990 Feb 15;50(4):1071–4

Low dose intravesical heparin as prophylaxis against recurrent noninvasive (stage Ta) bladder cancer. Bitsch M, et al. **J Urol** 1990 Sep;144(3):635–6

Inhibition of implantation of murine bladder tumor by thiotepa in cauterized bladder. Pan JS, et al. **J Urol** 1989 Dec;142(6):1589–93

[Effect of etoposide orally administered every other day for the prevention of recurrence of bladder tumor] Miura K, et al. **Gan To Kagaku Ryoho** 1990 Jul;17(7):1375–7 **(Jpn)**

[Prophylactic effect of UFT on the recurrence of bladder cancer] Naito K, et al. **Hinyokika Kiyo** 1990 Apr; 36(4):487–94 (Eng. Abstr.) **(Jpn)**

[Intravesical bacillus Calmette-Guerin instillation therapy in superficial bladder cancers—clinical study on prognostic factors] Shinka T, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Mar;81(3):425–32 (Eng. Abstr.) **(Jpn)**

[Clinicopathological study on microscopic urinalysis as screening for malignant cells] Kawabe T, et al. **Rinsho Byori** 1989 Oct;37(10):1167–72 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Coincidental renal angiomyolipoma and urothelial carcinoma of the renal pelvis in the same kidney diagnosed by CT. Veiga FG, et al. **Br J Urol** 1990 Aug;66(2):216–7

Large infiltrating renal transitional cell carcinomas: CT and ultrasound features. Bree RL, et al. **J Comput Assist Tomogr** 1990 May–Jun;14(3):381–5

Conventionally administered preoperative radiotherapy in urinary bladder cancer. Salminen E. **Strahlenther Onkol** 1990 Jul;166(7):443–5

Computerized tomography in evaluation of transitional cell carcinoma in bladder diverticula. Lowe FC, et al. **Urology** 1989 Dec;34(6):390–5

Routine excretory urography in follow-up of superficial transitional cell carcinoma of bladder. Smith H, et al. **Urology** 1989 Oct;34(4):193–6

[Transitional cell carcinoma in a retrocaval ureter] Sanromá Ortueta I, et al. **Arch Esp Urol** 1989 Nov–Dec;42(9):919–21 (Eng. Abstr.) **(Spa)**

RADIOTHERAPY

Prediction of response to radiotherapy in invasive bladder cancer. Jenkins BJ, et al. **Br J Urol** 1990 Apr;65(4):345–8

Use of the tetrazolium assay in measuring the response of human tumor cells to ionizing radiation. Price P, et al. **Cancer Res** 1990 Mar 1;50(5):1392–6

Treatment of advanced transitional cell carcinoma of the bladder with irradiation and concomitant 5-fluorouracil infusion. Rotman M, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1131–7

Radical radiotherapy for muscle invasive transitional cell carcinoma of the bladder: failure analysis. Gospodarowicz MK, et al. **J Urol** 1989 Dec;142(6):1448–53; discussion 1453–4

Deoxyribonucleic acid flow cytometry in predicting response to radical radiotherapy of bladder cancer. Wijkström H, et al. **J Urol** 1990 Sep;144(3):646–50; discussion 650–1

Split-course radiotherapy for urinary bladder cancer. Salminen E. **Radiother Oncol** 1989 Aug;15(4):327–31

[The treatment of cancer of the anal area with radiotherapy. An analysis of the authors' personal experience] Pizzi G, et al. **Radiol Med (Torino)** 1990 May;79(5):530–3 (Eng. Abstr.) **(Ita)**

SECONDARY

Cavitary pulmonary metastases in transitional cell carcinoma of urinary bladder. Alexander PW, et al. **AJR Am J Roentgenol** 1990 Mar;154(3):493–4

Transitional cell carcinoma of the prostate metastatic to penis as cause of priapism. Rodrigues Netto N Jr, et al. **Arch Esp Urol** 1990 Apr;43(3):321–2

Superior vena caval obstruction due to atrial metastasis. Greyson ND, et al. **Clin Nucl Med** 1989 Sep;14(9):698–9

Bone biopsy in solitary lesions on bone scan in genitourinary malignancy. Zungri E. **Eur Urol** 1990;17(4):293–5

Partial obstruction of the sigmoid colon by surgical implantation. Corfitsen MT, et al. **Int Urol Nephrol** 1989; 21(5):479–83

Orbital metastasis, by transitional cell carcinoma of the bladder. Prats J, et al. **Int Urol Nephrol** 1989;21(4):389–92

A prospective randomized trial comparing MVAC and CISCA chemotherapy for patients with metastatic urothelial tumors. Logothetis CJ, et al. **J Clin Oncol** 1990 Jun;8(6):1050–5

Carcinomatous meningitis from transitional cell carcinoma of the bladder: case report. Hussein AM, et al. **J Neurooncol** 1989 Sep;7(3):255–60

Flow cytometric analysis of primary and metastatic bladder cancer. Badalament RA, et al. **J Urol** 1990 May; 143(5):912–5; discussion 915–6

Ureteral stump transitional cell carcinoma in a patient with recurrent superficial bladder cancer: an argument for complete nephroureterectomy in selected patients. Klee LW, et al. **J Urol** 1990 Oct;144(4):972–3 (9 ref.)

Exuberant periosteal reaction in solitary skeletal metastases: a mimic of primary skeletal neoplasm. Pope TL Jr, et al. **Orthopedics** 1990 Feb;13(2):261–4

Arcuate line integrity: an important sign in sacral metastatic disease. Whitford L, et al. **Radiogr Today** 1988 Dec; 54(619):50

[Metastasis of cancer of the renal pelvis and ureter to the adrenal gland] Iwasa A, et al. **Hinyokika Kiyo** 1989 Sep; 35(9):1573–6 (11 ref.) (Eng. Abstr.) **(Jpn)**

[Penile and urethral metastases from superficial bladder tumor after TUR: a case report] Takahashi S, et al. **Hinyokika Kiyo** 1989 Jun;35(6):1055–9 (Eng. Abstr.) **(Jpn)**

[Cutaneous metastases from transitional cell carcinoma of the bladder] Takigawa H, et al. **Hinyokika Kiyo** 1989 Jun; 35(6):1061–3 (Eng. Abstr.) **(Jpn)**

[A very rare autopsy case of metastatic brain tumor originating from ureteral cancer] Sakuma S, et al. **No Shinkei Geka** 1989 Sep;17(9):883–6 (Eng. Abstr.) **(Jpn)**

[Neoplasm invasion of the renal vein by transitional cell carcinoma of the kidney pelvis] Calahorra Fernández FJ, et al. **Actas Urol Esp** 1990 Mar–Apr;14(2):133–6 (Eng. Abstr.) **(Spa)**

[Skin metastasis as the first manifestation of dissemination of bladder cancer] Jara J, et al. **Actas Urol Esp** 1989 Nov–Dec;13(6):480–1 (Eng. Abstr.) **(Spa)**

SURGERY

Neodymium–YAG laser irradiation of stage T2 muscle–invasive bladder cancer. Long–term results. Beisland HO, et al. **Br J Urol** 1990 Jan;65(1):24–6

Pyelo–intestino–cutaneous conduit in the treatment of renal carcinoma of solitary kidneys. Haapiainen RK, et al. **Br J Urol** 1990 Feb;65(2):134–6

Conservative management for transitional cell carcinoma of the upper urinary tract. Moldwin RM, et al. **Clin Geriatr Med** 1990 Feb;6(1):163–71 (19 ref.)

Bladder cancer in geriatric patients. Alternatives to radical cystectomy. Nitti VW, et al. **Clin Geriatr Med** 1990 Feb; 6(1):173–84 (54 ref.)

Treatment of transitional cell carcinoma of the ureter: is the controversy justified? Zungri E, et al. **Eur Urol** 1990; 17(4):276–80

Small urothelial carcinoma: diagnosis and treatment by cold forceps biopsy. Bianchi G, et al. **J Urol** 1990 Oct; 144(4):872–4

Urethral recurrence following radical cystectomy. Hardeman SW, et al. **J Urol** 1990 Sep;144(3):666–9

Indications for urethrectomy in an era of continent urinary diversion. Levinson AK, et al. **J Urol** 1990 Jul;144(1):73–5

The role of radical cystectomy in the management of high grade superficial bladder cancer (PA, P1, PIS and P2). Malkowicz SB, et al. **J Urol** 1990 Sep;144(3):641–5

Urethral remnant tumors following simultaneous partial urethrectomy and cystectomy for bladder carcinoma. Shinka T, et al. **J Urol** 1989 Oct;142(4):983–7

The case for a percutaneous approach to transitional cell carcinoma of the renal pelvis. Tasca A, et al. **J Urol** 1990 May;143(5):902–4; discussion 904–5

Large–bowel perforation. A rare complication of intravesical Nd–YAG laser irradiation of bladder tumors. D'Hallewin MA, et al. **Urol Int** 1989;44(6):373–4

Intravesical Bacillus Calmette–Guérin prophylactic treatment for superficial bladder tumors: results of a controlled prospective study. Melekos MD. **Urol Int** 1990; 45(3):137–41

Post–surgical necrobiotic granulomas of urinary bladder. Eble JN, et al. **Urology** 1990 May;35(5):454–7

Development of upper tract carcinoma after cystectomy for bladder carcinoma. Malkowicz SB, et al. **Urology** 1990 Jul; 36(1):20–2

[A severe complication following laser phototherapy of bladder carcinoma] Kaloianov D, et al. **Khirurgiia (Sofiia)** 1989;42(5):87–90 **(Bul)**

[Primary cancer of the ureter: report of 31 cases] Wu KR. **Chung Hua Wai Ko Tsa Chih** 1990 Apr;28(4):222–4, 253 (Eng. Abstr.) **(Chi)**

[Primary tumor of the female urethra—a report of two cases] Tan LB, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 Feb; 6(2):104–7 (Eng. Abstr.) **(Chi)**

[Treatment of distal urethral cancer by laser coagulation] Dann T, et al. **Urologe [A]** 1989 Sep;28(5):296–9 (Eng. Abstr.) **(Ger)**

[Laser treatment for transitional cell cancer of the bladder] Silber N, et al. **Harefuah** 1990 Jan 1;118(1):8–10 (Eng. Abstr.) **(Heb)**

[Carcinoma of the urethra in patients having undergone cystectomy for neoplasm of the bladder] Vicini D, et al. **Arch Ital Urol Nefrol Androl** 1989 Sep;61(3):217–21 (Eng. Abstr.) **(Ita)**

[Cloacogenic carcinoma] Armaroli R, et al. **G Chir** 1989 Oct; 10(10):591–4 (21 ref.) (Eng. Abstr.) **(Ita)**

[Cloacogenic carcinoma of the anus. Description of a clinical case] Corno F, et al. **Minerva Chir** 1989 Oct 15; 44(19):2093–6 (Eng. Abstr.) **(Ita)**

[Tumors of the anus] Giordanello V, et al. **Minerva Chir** 1990 May 15;45(9):639–43 (13 ref.) (Eng. Abstr.) **(Ita)**

[A case of fused pelvic kidney (lump kidney) with invasive bladder tumor] Iritani Y, et al. **Hinyokika Kiyo** 1989 Jun; 35(6):1041–5 (Eng. Abstr.) **(Jpn)**

[A case of bladder cancer with bilateral ureteral carcinoma in situ] Ishibashi Y, et al. **Hinyokika Kiyo** 1990 Mar; 36(3):333–6 (Eng. Abstr.) **(Jpn)**

[Transurethral microwave coagulation of bladder cancer in elderly patients] Kigure T, et al. **Hinyokika Kiyo** 1989 May; 35(5):789–93 (Eng. Abstr.) **(Jpn)**

[Results of the treatment of carcinoma of the renal pelvis and ureter] Maruoka M, et al. **Hinyokika Kiyo** 1989 Oct; 35(10):1673–7 (Eng. Abstr.) **(Jpn)**

[Analysis of histopathological prognostic factors in patients who underwent radical cystectomy in cancer of the bladder] Tachibana M, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Apr;81(4):601–7 (Eng. Abstr.) **(Jpn)**

[Urothelial carcinoma of the ureter excised using percutaneous nephrostomy] Fernández del Busto E, et al. **Arch Esp Urol** 1990 Apr;43(3):273–6 (Eng. Abstr.) **(Spa)**

THERAPY

Results of cystectomy with and without preoperative radiotherapy in carcinoma of the urinary bladder. Nurmi MJ, et al. **Acta Oncol** 1990;29(1):39–42

Intravesical therapy in the management of superficial transitional cell carcinoma of the bladder: the experience of the EORTC GU Group. Newling D. **Br J Cancer** 1990 Apr;61(4):497–9 (19 ref.)

BCG pyelonephritis following intravesical BCG. Kondratowicz GM. **Br J Urol** 1989 Dec;64(6):649

Presence of interleukin–2 in urine of superficial bladder cancer patients after intravesical treatment with bacillus Calmette–Guérin. De Jong WH, et al. **Cancer Immunol Immunother** 1990;31(3):182–6

Intravesical treatment of bladder cancer with recombinant human interferon–beta. Intravesical GKT–beta Chemotherapy Research Group. Niijima T. **Cancer Immunol Immunother** 1989;30(2):81–5

Rhodamine 123 phototoxicity in laser–irradiated MGH–U1 human carcinoma cells studied in vitro by electron microscopy and confocal laser scanning microscopy. Shea CR, et al. **Cancer Res** 1990 Jul 1;50(13):4167–72

Urothelial malignancy. Fowler CG. **Chirurgie** 1989; 115(9):694–7

High–stage bladder cancer: bladder preservation or reconstruction? Montie JE. **Cleve Clin J Med** 1990 May; 57(3):280–4

Bladder tumors invading the lamina propria (stage A/T1): influence of endovesical bacillus Calmette–Guérin therapy on recurrence and progression. Boccon–Gibod L, et al. **Eur Urol** 1989;16(6):401–4

Bacillus Calmette–Guérin treatment and vesicorenal reflux. Böhle A, et al. **Eur Urol** 1990;17(2):125–8

Immunohistochemical markers defined by monoclonal antibodies and response to bacillus Calmette–Guérin endovesical immunotherapy for superficial bladder tumors. Flam TA, et al. **Eur Urol** 1990;17(4):338–42

Comparison between short–course high–dose preoperative irradiation with immediate radical cystectomy and salvage cystectomy after full–dose irradiation. Nissenkorn I, et al. **Eur Urol** 1990;18(1):23–6

Miliary tuberculosis secondary to transurethral bacillus Calmette–Guérin administration for superficial transitional cell carcinoma of the bladder [letter] Skoutelis A, et al. **J Natl Cancer Inst** 1990 Jul 18;82(14):1219–20

A combined therapy of hyperthermia and tumor necrosis factor for nude mice bearing KK–47 bladder cancer. Amano T, et al. **J Urol** 1990 Aug;144(2 Pt 1):370–4

Elevations of cytokines interleukin–1, interleukin–2 and tumor necrosis factor in the urine of patients after intravesical bacillus Calmette–Guerin immunotherapy. Böhle A, et al. **J Urol** 1990 Jul;144(1):59–64

Effects of local bacillus Calmette–Guerin therapy in patients with bladder carcinoma on immunocompetent cells of the bladder wall. Böhle A, et al. **J Urol** 1990 Jul;144(1):53–8

The response of patients with superficial bladder cancer to a second course of intravesical bacillus Calmette–Guerin. Bretton PR, et al. **J Urol** 1990 Apr;143(4):710–2; discussion 712–3

The preparation, handling and use of intravesical bacillus Calmette–Guerin for the management of stage Ta, T1, carcinoma in situ and transitional cell cancer. Brosman SA, et al. **J Urol** 1990 Aug;144(2 Pt 1):313–5

Long–term followup of patients treated with 1 or 2, 6–week courses of intravesical bacillus Calmette–Guerin: analysis of possible predictors of response free of tumor. Coplen DE, et al. **J Urol** 1990 Sep;144(3):652–7

Recurrent superficial transitional cell carcinoma of the bladder: adjuvant topical chemotherapy versus immunotherapy. A prospective randomized trial. Flamm J, et al. **J Urol** 1990 Aug;144(2 Pt 1):260–3

The development of liposomes containing interferon alpha for the intravesical therapy of human superficial bladder cancer. Frangos DN, et al. **J Urol** 1990 Jun;143(6):1252–6

A randomized prospective comparison of oral versus intravesical and percutaneous bacillus Calmette–Guerin for superficial bladder cancer. Lamm DL, et al. **J Urol** 1990 Jul;144(1):65–7

Bacillus Calmette–Guerin versus doxorubicin versus thiotepa: a randomized prospective study in 202 patients with superficial bladder cancer. Martínez–Piñeiro JA, et al. **J Urol** 1990 Mar;143(3):502–6

Instillation of bacillus Calmette–Guerin into the renal pelvis of a solitary kidney for the treatment of transitional cell carcinoma. Ramsey JC, et al. **J Urol** 1990 Jun;143(6):1220–2

Systemic bacillus–Calmette Guerin infection after transurethral administration for superficial bladder carcinoma. Sakamoto GD, et al. **J Urol** 1989 Oct; 142(4):1073–4; discussion 1074–5

Anal cancer: current concepts and treatment results. Horch R, et al. **Nippon Geka Hokan** 1989 Sep 1;58(5):391–7

Follow up of patients receiving treatment for superficial bladder cancer with mitomycin C and BCG. Soloway MS. **Prog Clin Biol Res** 1990;350:71–9

Neoadjuvant chemotherapy in deeply invasive bladder cancer: the Italian experience. The Lombard Urologists. **Semin Urol** 1990 Aug;8(3):205–9

Nutritional support for cancer patients receiving abdominal and pelvic radiotherapy: a randomized prospective clinical experiment of intravenous versus oral feeding. Valerio D, et al. **Surg Forum** 1978;29:145–8

Antigenic relationship between streptococcal preparation OK–432 and tumors and its effect on immunotherapy with OK–432 in patients with superficial bladder tumor. Fujioka T, et al. **Urol Int** 1989;44(4):198–204

Use of intravesical bacillus Calmette–Guérin in the treatment of superficial transitional cell carcinoma of the bladder: an overview. Witjes JA, et al. **Urol Int** 1990;45(3):129–36 (67 ref.)

Analysis of mucosal bladder leucocyte subpopulations in patients treated with intravesical Bacillus Calmette–Guerin. Peuchmaur M, et al. **Urol Res** 1989;17(5):299–303

Intravesical interferon treatment of superficial bladder cancer. Chodak GW. **Urology** 1989 Oct;34(4 Suppl):84–6; discussion 87–96 (7 ref.)

Conservative treatment of superficial transitional cell carcinoma of prostatic urethra with intravesical BCG. Orihuela E, et al. **Urology** 1989 Nov;34(5):231–7

Maintenance intravesical bacillus calmette–guerin for superficial transitional cell carcinoma of bladder. A retrospective study. Schwalb DM, et al. **Urology** 1990 Sep; 36(3):222–5

BCG in management of transitional cell carcinoma invasive to prostate. Siami P, et al. **Urology** 1989 Dec;34(6):381–2

[Intravesical BCG as a treatment for superficial and in situ transitional cell carcinoma of the bladder] Schmidt AC, et al. **S Afr Med J** 1990 Apr 7;77(7):354–7 (Eng. Abstr.) **(Afr)**

[A case of cloacogenic carcinoma with extra–visceral localization] Mentasti A, et al. **Minerva Chir** 1990 May 15; 45(9):687–90 (Eng. Abstr.) **(Ita)**

[Balloon–occluded arterial infusion as chemotherapy in bladder cancer—long–term results] Mitsuzane K, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1701–4 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Inhibitory effect of testosterone on gap junctional intercellular communication of human transitional cell carcinoma cell lines. Kihara K, et al. **Cancer Res** 1990 May 1;50(9):2848–52

Morphometry in human transitional cell bladder cancer. Nuclear area and standard deviation of nuclear area—relation to tumor grade (WHO) and prognosis. Lipponen PK, et al. **Eur Urol** 1990;17(2):155–60

URINE

Asymptomatic haematuria and abnormal urine cytology. Rao A, et al. **Br J Radiol** 1989 Sep;62(741):864–6

Detection of malignant cells in voided urine from patients with bladder cancer, a novel monoclonal assay. Walker KZ, et al. **J Urol** 1989 Dec;142(6):1578–83

Immunocytology as a possible marker to identify patients who require prophylaxis. Huland H, et al. **Prog Clin Biol Res** 1990;350:35–9

Eosinophil cationic protein in urine in patients with urinary bladder tumors. Lose G, et al. **Urol Res** 1989;17(5):295–7

VETERINARY

What is your diagnosis? Thick bladder wall and an irregular mixed echoic density consistent with an infiltrative bladder mass. Love NE, et al. **J Am Vet Med Assoc** 1989 Nov 15;195(10):1409–10

Epidemiologic study of insecticide exposures, obesity, and risk of bladder cancer in household dogs. Glickman LT, et al. **J Toxicol Environ Health** 1989;28(4):407–14

Cisplatin (cisdiamminedichloroplatinum) for treatment of transitional cell carcinoma of the urinary bladder or urethra. A retrospective study of 15 dogs. Moore AS, et al. **J Vet Intern Med** 1990 May–Jun;4(3):148–52

Transitional cell carcinomas of the urinary tract in a colony of beagle dogs. Nikula KJ, et al. **Vet Pathol** 1989 Nov; 26(6):455–61

CARCINOSARCOMA

[Primary carcinosarcoma of the esophagus] Mamontov AS, et al. **Sov Med** 1989;(12):120–3 **(Rus)**

DIAGNOSIS

Uterine carcinosarcoma. Case report. Germano A, et al. **Eur J Gynaecol Oncol** 1989;10(6):411–6

[Carcinoma of the bladder with pseudosarcomatous stroma. Presentation of a case] Colonna A, et al. **Pathologica** 1989 Sep–Oct;81(1075):551–8 (Eng. Abstr.) **(Ita)**

[A case of metastasis of cancer of the kidney to the heart simulating myocardial infarction] Paliszewska L, et al. **Wiad Lek** 1989 Feb 15;42(4):249–52 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

In vivo targets of recombinant human tumour necrosis factor-alpha: blood flow, oxygen consumption and growth of isotransplanted rat tumours. Kallinowski F, et al. **Br J Cancer** 1989 Oct;60(4):555–60

Chemosensitisation by verapamil and cyclosporin A in mouse tumour cells expressing different levels of P-glycoprotein and CP22 (sorcin). Twentyman PR, et al. **Br J Cancer** 1990 Jul;62(1):89–95

METABOLISM

Malignant mixed müllerian tumors. Lessons learned from immunohistochemistry [editorial; comment] Swanson PE. **Am J Clin Pathol** 1990 Jul;94(1):113–4 Comment on: Am J Clin Pathol 1990 Jul;94(1):1–7.

An immunohistological comparison of primary lung carcinosarcoma and sarcoma. Cupples J, et al. **Pathol Res Pract** 1990 Jun;186(3):326–9

[DNA synthesis and content in the macrophage nuclei of normal mice, during carcinogenesis and during the administration of retinoids to the animals] Karalova EM, et al. **Tsitologiia** 1990;32(1):47–53 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Carcinosarcoma of the lung. Report of two cases and review of the literature. Heremans A, et al. **Acta Clin Belg** 1989; 44(2):110–5 (15 ref.)

True malignant mixed tumor of the submandibular gland. Yamashita T, et al. **Acta Pathol Jpn** 1990 Feb;40(2):137–42

Carcinosarcoma arising in eccrine spiradenoma. A clinicopathologic and immunohistochemical study of two cases. McKee PH, et al. **Am J Dermatopathol** 1990 Aug; 12(4):335–43 (17 ref.)

Sarcomatoid carcinoma of the stomach. A report of three cases with immunohistochemical and ultrastructural observations. Robey-Cafferty SS, et al. **Cancer** 1990 Apr 1;65(7):1601–6

Two homologous mixed müllerian tumor lines of the ovary and their characteristics. van Haaften-Day C, et al. **Cancer** 1990 Apr 15;65(8):1753–61

Carcinosarcoma of the prostate in combination with adenocarcinoma of the prostate and adenocarcinoma of the seminal vesicles. A case report with immunocytochemical analysis and review of the literature. Zenklusen HR, et al. **Cancer** 1990 Sep 1;66(5):998–1001 (12 ref.)

Bladder carcinosarcomas: three cases with diverse histogenesis. Bloxham CA, et al. **Histopathology** 1990 Jan; 16(1):63–7

Malignant mixed müllerian tumor of the ovary with prominent neuroectodermal differentiation (teratoid carcinosarcoma). Ehrmann RL, et al. **Int J Gynecol Pathol** 1990;9(3):272–82

Carcinosarcoma (malignant mixed mesodermal tumor) of the uterus. A Gynecologic Oncology Group pathologic study of 203 cases. Silverberg SG, et al. **Int J Gynecol Pathol** 1990;9(1):1–19

Carcinosarcoma of the esophagus: a twenty-case study. Iyomasa S, et al. **Jpn J Clin Oncol** 1990 Mar;20(1):99–106

True carcinosarcoma of the maxillary sinus. Sonobe H, et al. **Pathol Res Pract** 1989 Oct;185(4):488–92; discussion 493–5 (14 ref.)

Thyroid carcinosarcoma. A case report. Cooper K, et al. **S Afr J Surg** 1989 Dec;27(5):192–3

[Carcinosarcoma of the lung: a report of 3 cases and a review of the literature] Cai ZM. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Jun; 12(3):164–6, 192 (14 ref.) (Eng. Abstr.) **(Chi)**

[Carcinosarcoma and spindle cell carcinoma of the bladder. A comparison of 2 cases with an immunohistochemical study] Lesourd A, et al. **Ann Urol (Paris)** 1990;24(3):206–10 (Eng. Abstr.) **(Fre)**

[Small cell carcinoma with sarcomatous stroma. Immunohistochemical study of an unusual carcinosarcoma of the bladder] Wrba F, et al. **Pathologe** 1990 Jul; 11(4):248–50 **(Ger)**

[Carcinosarcoma of the lung] Rizzi A, et al. **Minerva Chir** 1990 Mar 15;45(5):323–5 (13 ref.) (Eng. Abstr.) **(Ita)**

[A case of so-called carcinosarcoma of the lung] Ishikuro A, et al. **Gan No Rinsho** 1989 Dec;35(15):1764–8 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Hepatic carcinosarcoma demonstrated by Ga-67 scintigraphy. Jinnouchi S, et al. **Ann Nucl Med** 1989 Jul; 3(2):99–102

SECONDARY

Retrospective evaluation of recurrence after radical abdominal hysterectomy in patients with cervical carcinoma. Dave K, et al. **Eur J Gynaecol Oncol** 1990; 11(1):67–73

SURGERY

Our experience in the surgical treatment of T1 carcinoma of the vocal cord. Daniilidis J, et al. **J Laryngol Otol** 1990 Mar;104(3):222–4

ULTRASTRUCTURE

Carcinosarcoma of the gallbladder. A case report with immunohistochemical and ultrastructural studies. Ishihara T, et al. **Cancer** 1990 Sep 1;66(5):992–7

Ultrastructural and immunohistochemical observations of a true malignant mixed tumor (carcinosarcoma) of the tongue. Takata T, et al. **J Oral Pathol Med** 1990 Jul; 19(6):261–5 (12 ref.)

CARCINOSARCOMA 256, WALKER see **CARCINOMA 256, WALKER**

CARDENOLIDES

PHARMACOKINETICS

The pharmacokinetics and tissue distribution of gomphoside in Wistar rats. Mutlib AE, et al. **Eur J Drug Metab Pharmacokinet** 1989 Apr–Jun; 14(2):117–25

POISONING

[Digitalis intoxication: diagnosis and treatment] Candau LA. **Arq Bras Cardiol** 1989 Mar;52(3):163–6 (6 ref.) **(Por)**

CARDIA

Cancer of the gastric cardia and the habit of smoking. Unakami M, et al. **Acta Pathol Jpn** 1989 Jul;39(7):420–4

Descriptive epidemiology of adenocarcinomas of the cardia and distal stomach in the Swiss Canton of Vaud. Levi F, et al. **Tumori** 1990 Apr 30;76(2):167–71

[Endotube insertion for palliation of esophageal and cardia cancer: experiences with a new endoprosthesis] Van Maercke P, et al. **Z Gastroenterol** 1989 Dec;27(12):703–7 (Eng. Abstr.) **(Ger)**

[Pericardial stenosis caused by infiltration in chronic granulomatous disease] Okrzeja D. **Wiad Lek** 1990 Apr 15;43(8):365–8 (Eng. Abstr.) **(Pol)**

[Multiple squamous cell cancer of the esophagus and proximal stomach] Cherniavskiĭ AA, et al. **Grud Serdechnososudistaia Khir** 1990;(2):77–8 **(Rus)**

[Cancer of the stomach associated with perforated duodenal ulcer and pyloric stenosis] Gausman BIa, et al. **Vestn Khir** 1989 Sep;143(9):53 **(Rus)**

ANATOMY & HISTOLOGY

[Anatomo-topographic studies of the esophagogastric junction in humans] Kolesnikov LL. **Arkh Anat Gistol Embriol** 1990 Mar;98(3):76–84 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

[Intraorganic venous bed of the stomach cardia in children during the first 3 years of life] Zabolotko LA. **Arkh Anat Gistol Embriol** 1990 Mar;98(3):42–7 (Eng. Abstr.) **(Rus)**

[A method of suturing of dilated cardial veins in patients with portal hypertension] Ershov IuA, et al. **Vestn Khir** 1989 Sep;143(9):44–7 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Phylogenetic diversity of cellular organization in the cardia of muscoid flies (Diptera: Schizophora). King DG. **J Morphol** 1989 Dec;202(3):435–55

INJURIES

[Reconstructive surgery of the esophagus in patients with combined chemical burns of the esophagus and stomach] Chernousov AF, et al. **Grud Serdechnososudistaia Khir** 1990;(3):48–52 (Eng. Abstr.) **(Rus)**

[Selection of the method of operation on the stomach in the complex treatment of esophageal and gastric burns] Chernousov AF, et al. **Khirurgiia (Mosk)** 1990 Feb; (2):55–60 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Fibrosis of gastric cardia after endoscopic sclerosis. Mechanism for control of experimental reflux? Carvalho PJ, et al. **Am Surg** 1990 Mar;56(3):163–6

Double cardia. An unusual sequela of reflux esophagitis with ulcer. Hoshino E, et al. **Dig Dis Sci** 1990 May;35(5):638–40 (11 ref.)

PHYSIOPATHOLOGY

Is yield pressure at the cardia increased by effective fundoplication? McGouran RC, et al. **Gut** 1989 Oct; 30(10):1309–12

Endoscopic and manometric study of the cardia in post-gastrectomy patients. Sodeyama H, et al. **Jpn J Surg** 1990 Jan;20(1):64–9

[The recurrence of dysphagia in patients with neuromuscular diseases of the esophagus with normal or low pressure indices in the physiological cardia] Chernousov AF, et al. **Grudn Khir** 1989 Sep–Oct;(5):64–8 (Eng. Abstr.) **(Rus)**

[State of the valvular function of the cardia in patients with duodenal ulcer before and after vagotomy and methods of its correction] Rychagov GP, et al. **Khirurgiia (Mosk)** 1989 Oct;(10):34–7 (Eng. Abstr.) **(Rus)**

[Function of the esophagogastric junction after trans-gastric selective proximal vagotomy] Gorbashko AI, et al. **Vestn Khir** 1990 Mar;144(3):23–6 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[Morphological evaluation of post-irradiation changes in the proximal part of the stomach after concentrated preoperative irradiation] Kanaev SV, et al. **Sov Med** 1989; (11):117–8 **(Rus)**

RADIOGRAPHY

Gastric varices presenting as "pseudotumors" of the cardia. Swischuk LE. **Am J Dig Dis** 1967 Aug;12(8):839–44

[The role of computerized tomography in preoperative evaluation of disseminated esophageal cancer] Rabkin IKh, et al. **Grud Serdechnososudistaia Khir** 1990;(3):52–5 (Eng. Abstr.) **(Rus)**

SURGERY

Transabdominal operation for carcinoma of the gastric cardia: application of pulling-up retractor and EEA stapler. Misumi A, et al. **Int Surg** 1989 Oct–Dec;74(4):223–8

Invited letter concerning: surgical treatment of carcinoma of the thoracic esophagus and cardia [letter] Ellis FH Jr, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):370–1

[Endoscopic palliative tube and laser therapy in advanced cancer of the esophagus and cardia] Paolucci V, et al. **Chirurg** 1990 Jan;61(1):43–8 (Eng. Abstr.) **(Ger)**

[Comparative evaluation of various surgical and combined methods of treatment of patients with esophageal cancer] Kochegarov AA, et al. **Grud Serdechnososudistaia Khir** 1990;(1):70–3 (Eng. Abstr.) **(Rus)**

[Medical expert testimony regarding work capacity of patients with stomach cancer of cardial and cardioesophageal locations] Dovgaliuk AZ, et al. **Vestn Khir** 1989 Nov;143(11):111–5 **(Rus)**

[Selection of the method of creating anastomoses during gastrectomy and resection of the proximal part of the stomach] Dzhaubaev MKh, et al. **Vestn Khir** 1989 Jun; 142(6):130–2 (Eng. Abstr.) **(Rus)**

[New modifications of the Heller operation in surgical treatment of cardiospasm] Orfanidi AKh. **Vestn Khir** 1989 Nov;143(11):127 **(Rus)**

[Surgical treatment of ulcers of the cardial part of the stomach] Zemlianoĭ AG, et al. **Vestn Khir** 1989 Jun; 142(6):111–3 **(Rus)**

CARDIAC ARREST see **HEART ARREST**

CARDIAC ARREST, INDUCED see **HEART ARREST, INDUCED**

CARDIAC CARE FACILITIES see under **HOSPITALS, SPECIAL**

CARDIAC DEPRESSANTS see **ANTI-ARRHYTHMIA AGENTS**

CARDIAC ELECTROVERSION see **ELECTRIC COUNTERSHOCK**

CARDIAC GLYCOSIDES

Structural studies on the biosides of Digitalis lanata: bisdigitoxosides of digitoxigenin, gitoxigenin and digoxigenin [published erratum appears in Acta Crystallogr B 1990 Apr 1;46(Pt 2):288] Go KT, et al. **Acta Crystallogr B** 1989 Jun 1;45 (Pt 3):306–12

Structure of a 3 alpha-(D-methylglycoside) of 7,8 beta-epoxysinogenin--a cardioactive steroid. Nethaji M,

et al. **Acta Crystallogr C** 1988 Jun 15;44 (Pt 6):1066–70

Chronotropic effect of the methanolic extracts of the plants of the Paris species and steroidal glycosides isolated from P. vietnamensis on spontaneous beating of myocardial cells. Nambu T, et al. **Planta Med** 1989 Dec;55(6):501–5

ADVERSE EFFECTS

[Side effects of cardiac glycosides, calcium antagonists and beta blockers in the secondary data of the legal health insurance] Krappweis J, et al. **Verh Dtsch Ges Inn Med** 1989;95:693–9 **(Ger)**

ANALYSIS

Specific binding of cardiac glycoside drugs and endogenous digitalis–like substances to particulate membrane fractions from human placenta. Paci A, et al. **Clin Chem** 1989 Oct; 35(10):2093–7

CHEMICAL SYNTHESIS

Synthesis of 17 beta–(3'–thiophenyl)–5 beta–androstane–3 beta,14 beta–diol 3–D–glucopyranoside, an anti–inotropic cardiac glucoside. Pati UK, et al. **Steroids** 1990 Feb; 55(2):65–8

PHARMACOKINETICS

Cardiac glycosides. New/old ideas about old drugs. Heller M. **Biochem Pharmacol** 1990 Sep 1;40(5):919–25 (50 ref.)

PHARMACOLOGY

Pulmonary and systemic hemodynamic effects of cardiac glycosides. Linde LM, et al. **Am Heart J** 1968 Sep; 76(3):356–64

Cross–resistance and biochemical characteristics of second–step mutants of HeLa cells resistant to cardiac glycosides. Chopra A, et al. **Biochem Cell Biol** 1990 May; 68(5):852–7

Comparative ability of digoxin and an aminosugar cardiac glycoside to bind to and inhibit Na+,K+–adenosine triphosphatase. Effect of potassium. Songu–Mize E, et al. **Biochem Pharmacol** 1989 Nov 1;38(21):3689–95

Cardiac glycosides and pregnanes from Adenium obesum (studies on the constituents of Adenium. I). Yamauchi T, et al. **Chem Pharm Bull (Tokyo)** 1990 Mar;38(3):669–72

Ca2+ entry blockers, force staircase and the onset of the positive inotropic action of cardiotonic steroids in isolated cardiac muscle. Kyosuke T, et al. **Gen Pharmacol** 1990; 21(1):33–9

Age–dependent change in myocardial cardiac glycoside receptor (Na,K–pump) concentration in children. Kjeldsen K, et al. **J Cardiovasc Pharmacol** 1990 Feb;15(2):332–7

Effectiveness of cardiac glycosides in human myocardium with and without "downregulated" beta–adrenoceptors. Schwinger RH, et al. **J Cardiovasc Pharmacol** 1990 May; 15(5):692–7

Biochemical studies on ghalakinoside, a possible antitumor agent from Pergularia tomentosa. al–Said MS, et al. **J Ethnopharmacol** 1989 Nov;27(1–2):235–40

Different patterns of autonomic nerve activity produced by a polar vs. a neutral cardiac glycoside. Rebagay WR, et al. **J Pharmacol Exp Ther** 1990 Apr;253(1):180–4

[Effects of cardiac glycosides on RNA content in cardio–regulating structures of the hindbrain] Mikhailov IB, et al. **Biull Eksp Biol Med** 1990 Jan;109(1):49–50 (Eng. Abstr.) **(Rus)**

[Changes in the neuronal membrane potential of the mollusk Planorbarius corneus under the action of cardiac glycosides] Gapon SA, et al. **Zh Evol Biokhim Fiziol** 1989 Sep–Oct;25(5):672–4 (Eng. Abstr.) **(Rus)**

POISONING

The toxicity for cattle of bufadienolide cardiac glycosides from Bryophyllum tubiflorum flowers. McKenzie RA, et al. **Aust Vet J** 1989 Nov;66(11):374–6

[Poisoning with oleander leaves] Romano GA, et al. **Schweiz Med Wochenschr** 1990 Apr 21;120(16):596–7 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

[Digitalis therapy in clinical practice] Weinbergová O, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;122:203–12 **(Ger)**

[Digitalis in the therapy of cardiac insufficiency] Weinbergová O. **Acta Univ Palacki Olomuc Fac Med** 1989; 122:193–201 **(Ger)**

[Chronosensitivity to cardiac glycosides in patients with circulatory insufficiency in relation to the parameters of central and peripheral hemodynamics] Zaslavskaia RM, et al. **Klin Med (Mosk)** 1990 Apr;68(4):42–6 **(Rus)**

TOXICITY

Extracellular magnesium and cardiotonic steroid toxicity in isolated myocardial preparations. Kafiluddi R, et al. **J Pharmacol Exp Ther** 1989 Dec;251(3):1120–7

[Animal experiment studies of the ocular toxicity of cardiac glycosides] Schneider T, et al. **Fortschr Ophthalmol** 1989; 86(6):751–5 (Eng. Abstr.) **(Ger)**

CARDIAC NEUROSIS see **NEUROCIRCULATORY ASTHENIA**

CARDIAC OUTPUT

Measurement of cardiac output by the thermodilution method during left thoracotomy in the lateral position in the dog. Landais A, et al. **Acta Anaesthesiol Scand** 1990 Feb; 34(2):158–61

Repeatability of the acetylene rebreathing method in measuring cardiac output: influence of acetylene concentration. Wendelboe Nielsen O, et al. **Acta Anaesthesiol Scand** 1990 Jul;34(5):354–7

Duplex versus unguided pulsed Doppler measurements of right ventricular output in newborn infants. Walther FJ, et al. **Acta Paediatr Scand** 1990 Jan;79(1):41–6

Accuracy of mitral Doppler echocardiographic cardiac output determinations in adults. Miller WE, et al. **Am Heart J** 1990 Apr;119(4):905–10

Failure of balloon aortic valvuloplasty to result in sustained clinical improvement in patients with depressed left ventricular function. Davidson CJ, et al. **Am J Cardiol** 1990 Jan 1;65(1):72–7

Role of peripheral resistance in the control of cardiac output. Evans GL, et al. **Am J Cardiol** 1967 Aug;20(2):216–21

Effect of tricuspid regurgitation on the reliability of the thermodilution cardiac output technique in congestive heart failure. Hamilton MA, et al. **Am J Cardiol** 1989 Oct 15;64(14):945–8

Noninvasive measurement of cardiac output during surgery using a new continuous–wave Doppler esophageal probe. Kumar A, et al. **Am J Cardiol** 1989 Oct 1;64(12):793–8

Limitations of the metabolic rate meter for measuring oxygen consumption and cardiac output. Lange RA, et al. **Am J Cardiol** 1989 Oct 1;64(12):783–6

Prevalence and clinical characteristics of a high cardiac output state in patients with multiple myeloma. McBride W, et al. **Am J Med** 1990 Jul;89(1):21–4

Measurement of cardiac output by impedance technique [letter] Easterling TR, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):1104–6

Measurement of cardiac output with impedance cardiography [letter] Lechner W. **Am J Obstet Gynecol** 1990 Sep; 163(3):1096

Measurement of cardiac output in pregnancy by Doppler technique. Easterling TR, et al. **Am J Perinatol** 1990 Jul; 7(3):220–2

Use of conjunctival oxygen index for evaluation of cardiac output in dogs. Faulkner JE, et al. **Am J Vet Res** 1989 Sep;50(9):1516–9

Mechanism of reduced cardiac output during positive end–expiratory pressure in the dog. Johnston WE, et al. **Am Rev Respir Dis** 1989 Nov;140(5):1257–64

Effect of opposite changes in cardiac output and arterial PO2 on the relationship between mixed venous PO2 and oxygen transport [letter; comment] Russell JA. **Am Rev Respir Dis** 1990 Mar;141(3):800–1 Comment on: Am Rev Respir Dis 1989 Oct;140(4):891–8.

A possible hazard [letter] Gupta A, et al. **Anaesthesia** 1990 Apr;45(4):342

Inconsistent esophageal Doppler cardiac output during acute blood loss. Kamal GD, et al. **Anesthesiology** 1990 Jan; 72(1):95–9

Noninvasive cardiac output: simultaneous comparison of two different methods with thermodilution [see comments] Wong DH, et al. **Anesthesiology** 1990 May;72(5):784–92 Comment in: Anesthesiology 1990 May;72(5):781–3.

Comparison of two impedance cardiographic techniques for measuring cardiac output. Gotshall RW, et al. **Ann Biomed Eng** 1989;17(5):495–505

Red cell volume and cardiac output in anaemic preterm infants. Hudson I, et al. **Arch Dis Child** 1990 Jul;65(7 Spec No):672–5

Reproducibility of measurements of cardiac output in newborn infants by Doppler ultrasound. Hudson I, et al. **Arch Dis Child** 1990 Jan;65(1 Spec No):15–9

Intrinsic heart function and food intake. Kelbaek H. **Arch Mal Coeur** 1989 Aug;82 Spec No 2:45–8

Pulsed Doppler measurement of left ventricular output as early predictor of symptomatic patent ductus arteriosus in very preterm infants. Walther FJ, et al. **Biol Neonate** 1989; 56(3):121–8

Understanding techniques for measuring cardiac output. Taylor BC, et al. **Biomed Instrum Technol** 1990 May–Jun; 24(3):188–97 (16 ref.)

A dynamic method for the calibration of dye dilution curves in a physiological system. Emanuel R, et al. **Br Heart J** 1966 Mar;28(2):143–6

Use of a computer in the calibration of dye dilution curves by a dynamic method. Hamer J, et al. **Br Heart J** 1966 Mar;28(2):147–51

Automated non–invasive measurement of cardiac output by the carbon dioxide rebreathing method: comparisons with dye dilution and thermodilution. Russell AE, et al. **Br Heart J** 1990 Mar;63(3):195–9

Evidence of redistribution of cardiac output in asymmetrical growth retardation [letter] Beeby AR, et al. **Br J Obstet Gynaecol** 1989 Dec;96(12):1453–4

Evidence of redistribution of cardiac output in asymmetrical growth retardation. al–Ghazali W, et al. **Br J Obstet Gynaecol** 1989 Jun;96(6):697–704

Measurement of cardiac output in pregnancy by thermodilution and impedence techniques [letter; comment] Sramek BB. **Br J Obstet Gynaecol** 1990 Jan;97(1):90–2 Comment on: Br J Obstet Gynaecol 1989 Jan;96(1):67–9.

Cardiopulmonary effects of the volume recruitment manoeuvre in infant swine. Shulman DL, et al. **Can J Anaesth** 1989 Sep;36(5):533–8

The influence of high–velocity circuit resistance training on VO2max and cardiac output. Petersen SR, et al. **Can J Sport Sci** 1989 Sep;14(3):158–63

The circulation of the fetus in utero. Methods for studying distribution of blood flow, cardiac output and organ blood flow. Rudolph AM, et al. **Circ Res** 1967 Aug;21(2):163–84

Effect of changes in circulating blood volume on cardiac output and arterial and ventricular blood pressure in the stage 18, 24, and 29 chick embryo. Wagman AJ, et al. **Circ Res** 1990 Jul;67(1):187–92

Acute respiratory acidosis decreases left ventricular contractility but increases cardiac output in dogs. Walley KR, et al. **Circ Res** 1990 Sep;67(3):628–35

Autoregulation of cardiac output by passive elastic characteristics of the vascular capacitance system. Rothe CF, et al. **Circulation** 1990 Jan;81(1):360–8

Cardiac output and oxygen uptake in patients with renal failure. Kong CH, et al. **Clin Sci** 1990 Jun;78(6):591–6

CARDIO—a Lotus 1–2–3 based computer program for rapid calculation of cardiac output from dye or thermal dilution curves. Brill RW, et al. **Comput Biol Med** 1989;19(5):361–6

Changes in cardiac output, hepatic and renal functions in rats with isoprenaline–induced heart damage. Hrdina R, et al. **Cor Vasa** 1990;32(2):149–56

Determination of cardiac output during positive end–expiratory pressure—noninvasive electrical bioimpedance compared with standard thermodilution. Castor G, et al. **Crit Care Med** 1990 May;18(5):544–6

Thermodilution cardiac output values obtained by using a centrally placed introducer sheath and right atrial port of a pulmonary artery catheter. Hunn D, et al. **Crit Care Med** 1990 Apr;18(4):438–9

Cardiac output determinations in the pig—thoracic electrical bioimpedance versus thermodilution. Jivegård L, et al. **Crit Care Med** 1990 Sep;18(9):995–8

Noninvasive determination of cardiac output by thoracic electrical bioimpedance [letter] Masaki DI, et al. **Crit Care Med** 1990 Jan;18(1):121–2

Effects of dextran infusion on cardiac output, oxygen delivery, and oxygen utilization in piglets during the first month of life. Meadow WL, et al. **Crit Care Med** 1990 Sep;18(9):980–4

Clinical evaluation of a diameter sensing Doppler cardiac output meter. Niclou R, et al. **Crit Care Med** 1990 Apr; 18(4):428–32

Hemodynamic status susceptible to slowing of heart rate during thermodilution cardiac output determination in anesthetized patients. Nishikawa T, et al. **Crit Care Med** 1990 Aug;18(8):841–4

Concentric beam Doppler: should we be going in circles? [editorial] Perrino AC Jr, et al. **Crit Care Med** 1990 Apr; 18(4):456–7

Left and right ventricular output in newborn infants undergoing extracorporeal membrane oxygenation. Walther FJ, et al. **Crit Care Med** 1990 Feb;18(2):148–51

Two–beam pulsed Doppler cardiac output measurement: reproducibility and agreement with thermodilution. Wong DH, et al. **Crit Care Med** 1990 Apr;18(4):433–7

Thoracic bioimpedance and Doppler cardiac output measurement: learning curve and interobserver reproducibility. Wong DH, et al. **Crit Care Med** 1989 Nov; 17(11):1194–8

Changes in cardiac output after acute blood loss and position change in man. Wong DH, et al. **Crit Care Med** 1989 Oct; 17(10):979–83

Intravascular plastic catheters potentiate tumor necrosis factor release and cardiac dysfunction secondary to infection. Davis PK, et al. **Curr Surg** 1989 Nov–Dec; 46(6):486–9

Cardiac output measured by Doppler echocardiography in patients with aortic prosthetic valves. Ihlen H, et al. **Eur Heart J** 1990 May;11(5):399–402

Cardiac output in patients with acute lower limb ischaemia of presumed embolic origin—a predictor of severity and outcome? Jivegård L, et al. **Eur J Vasc Surg** 1990 Aug; 4(4):401–7

Exercise Doppler echocardiography in patients with pure mitral stenosis. Moro E, et al. **G Ital Cardiol** 1989 Jun; 19(6):477–82

Left ventricular performance in the natural history and after corrective surgery of isolated ventricular septal defect. Puviani G, et al. **G Ital Cardiol** 1989 Jun;19(6):491–6

Thermal dilution and ultrasound: alternative techniques for measuring cardiac output. **Health Devices** 1988 Jun–Jul; 17(6–7):175–94

Thermal dilution cardiac output units. **Health Devices** 1988 Dec;17(12):370

Ultrasound cardiac output units. **Health Devices** 1988 Jun–Jul;17(6–7):195–211

Cardiac output by electrical bioimpedance. Handelsman H. **Health Technol Assess Rep** 1989;(3):1–5

Assessment of hemodynamic changes in the early phase of uncomplicated acute myocardial infarction. Zimlichman R, et al. **Int J Cardiol** 1989 Dec;25(3):303–11

Cardiac stroke work output during a short term very low calorie diet, noradrenaline–induced thermogenesis and T3 supplementation. Stokholm KH, et al. **Int J Obes** 1989;13 Suppl 2:151

Comparison of a modified Fick method with thermodilution

for determining cardiac output in critically ill patients on mechanical ventilation. Lynch J, et al. **Intensive Care Med** 1990;16(4):248–51

Measurement of extravascular lung water by thermal–dye dilution technique: mechanisms of cardiac output dependence. Wickerts CJ, et al. **Intensive Care Med** 1990; 16(2):115–20

Use of continuous wave Doppler echocardiography to evaluate the hemodynamic importance of atrial systole in patients with mitral stenosis. Stojnić B, et al. **J Am Soc Echocardiogr** 1989 May–Jun;2(3):172–6

Impedance cardiography by use of a spot–electrode array to track changes in cardiac output in anesthetized dogs. Kiesler TW, et al. **J Am Vet Med Assoc** 1990 Jun 1; 196(11):1804–10

Increased gut blood flow with early enteral feeding in burned guinea pigs. Inoue S, et al. **J Burn Care Rehabil** 1989 Jul–Aug;10(4):300–8

Systemic leakage of 15 micron radioactive microspheres over a period of 24 hours, in awake late–pregnant guinea pigs. Verkeste CM, et al. **J Dev Physiol** 1990 Jan;13(1):37–9

Relationship between cardiac output and cerebral blood flow in patients with intact and with impaired autoregulation. Bouma GJ, et al. **J Neurosurg** 1990 Sep;73(3):368–74

A comparison of thermodilution and pulsed Doppler cardiac output measurement in critically ill children. Notterman DA, et al. **J Pediatr** 1989 Oct;115(4):554–60

Doppler estimates of cardiac output [letter] Rennie J, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):165–6

Transfemoral balloon aortic occlusion during open cardiopulmonary resuscitation improves myocardial and cerebral blood flow. Spence PA, et al. **J Surg Res** 1990 Sep;49(3):217–21

Cardiodynamic factors affecting hyperpnea during steady–state exercise in man. Miyamoto Y, et al. **Jpn J Physiol** 1989;39(3):411–20

A comparison between cardiac output determined by impedance cardiography and the rebreathing method during exercise in man. Niizeki K, et al. **Jpn J Physiol** 1989;39(3):441–6

Technique for cardiovascular monitoring in awake tethered rats. Parker GW, et al. **Lab Anim Sci** 1989 Sep;39(5):463–7

Mapping the cardiogenic impedance signal on the thoracic surface. Patterson RP, et al. **Med Biol Eng Comput** 1990 May;28(3):212–6

Cardiac output, renal blood flow and hepatic blood flow in rats with glycerol–induced acute renal failure. Kishimoto T, et al. **Nephron** 1989;53(4):353–7

Cardiac output responses of primigravid women during exercise determined by the direct Fick technique [see comments] Pivarnik JM, et al. **Obstet Gynecol** 1990 Jun; 75(6):954–9 Comment in: Obstet Gynecol 1990 Jun;75(6):1041–2.

The use of electrically stimulated skeletal muscle to pump blood. Geddes LA, et al. **PACE** 1990 Mar;13(3):344–62

Stroke volume and the three phase cardiac output rate relationship with ventricular pacing. Wessale JL, et al. **PACE** 1990 May;13(5):673–80

Hemodialysis or continuous ambulatory peritoneal dialysis before transplantation: prospective comparison of clinical and hemodynamic outcome. Odor–Morales A, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2197–9

[Measuring the right heart output by pulsed Doppler echocardiography] Jing ZG. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Aug; 17(4):224–6 **(Chi)**

[Variations in cardiac output in the early phase of liver declamping in a liver graft] Zetlaoui P, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R51 **(Fre)**

[Noninvasive measurement of cardiac output by pulsed Doppler echocardiography. Correlation with thermodilution] Dericbourg C, et al. **Arch Mal Coeur** 1990 Feb;83(2):237–44 (30 ref.) (Eng. Abstr.) **(Fre)**

[Hemodynamic measurements by Doppler echocardiography] Touche T. **Arch Mal Coeur** 1990 May; 83(6):815–21 (19 ref.) (Eng. Abstr.) **(Fre)**

[Continuous measurement of cardiac output based on the Fick principle in cardiac anesthesia] Rieke H, et al. **Anaesthesist** 1990 Jan;39(1):13–21 (Eng. Abstr.) **(Ger)**

[Vector cardiography parameters in assessing changing loads of the heart ventricles] Kuhtz JP, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:213–4 **(Ger)**

[Clinical importance of cardiac output dissociation between the right and left ventricle without evidence of an anatomical shunt] Herpai Z, et al. **Orv Hetil** 1990 Mar 4; 131(9):451–2, 455–9 (Eng. Abstr.) **(Hun)**

[Reversibility of left ventricular functional damage after valve replacement in patients with chronic aortic valve insufficiency] Glieca F, et al. **Minerva Cardioangiol** 1989 Jun;37(6):281–7 (Eng. Abstr.) **(Ita)**

[Left and right ventricular cardiac outputs in early neonatal periods examined using Doppler echocardiography] Shiraishi H, et al. **J Cardiol** 1988 Dec;18(4):1127–37 (Eng. Abstr.) **(Jpn)**

[Complications and practical problems in the measurements with the use of Swan–Ganz catheter] Nishikawa T, et al. **Kokyu To Junkan** 1989 Aug;37(8):835–43 (171 ref.) **(Jpn)**

[Comparative investigation of cardiac output using impedance rheography and invasive methods] Kleinrok A, et al. **Kardiol Pol** 1989;32(10–12):440–5 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

Acid–base balance and cardiac index in SO2–bronchitic, papaine–emphysematous and paraquat–fibrotic rats after isoproterenol treatment. Vértes K, et al. **Acta Physiol Hung** 1990;75(1):45–52

Changes in cardiac output determined by continuous–wave Doppler echocardiography during propafenone or mexiletine drug testing. Lange H, et al. **Am J Cardiol** 1990 Feb 15;65(7):458–62

Redistribution of cardiac output to the kidneys by tertatolol does not involve prostaglandins. Naeije R, et al. **Am J Hypertens** 1989 Nov;2(11 Pt 2):241S–244S

Comparison of end–systolic pressure–length relations and preload recruitable stroke work as indices of myocardial contractility in the conscious and anesthetized, chronically instrumented dog. Pagel PS, et al. **Anesthesiology** 1990 Aug; 73(2):278–90

Effect of neuropeptide Y on cardiac output, its distribution, regional blood flow and organ vascular resistances in the pithed rat. MacLean MR, et al. **Br J Pharmacol** 1990 Feb; 99(2):340–2

Nimodipine has no effect on the cerebral circulation in conscious pigs, despite an increase in cardiac output. van der Giessen WJ, et al. **Br J Pharmacol** 1990 Jun; 100(2):277–82

A comparison of the cerebral pressure–flow relationship for halothane and isoflurane at haemodynamically equivalent end–tidal concentrations in the rabbit. Mutch WA, et al. **Can J Anaesth** 1990 Mar;37(2):223–30

Ventilation–perfusion distributions and central hemodynamics in chronic obstructive pulmonary disease. Effects of terbutaline administration. Ringsted CV, et al. **Chest** 1989 Nov;96(5):976–83

Effect of isosorbide dinitrate on cardiac output in severe cardiac failure: relation to initial hemodynamics, ventricular volume, and the preload reserve mechanism. Lewis BS, et al. **Clin Cardiol** 1989 Sep;12(9):514–20

Regional distribution of the cardiac output and renal responses to atrial natriuretic peptide infusion in rabbits with congestive heart failure. Langton D, et al. **Clin Exp Pharmacol Physiol** 1989 Dec;16(12):939–51

Acute haemodynamic effects of the beta 1–adrenoceptor partial agonist xamoterol at rest and during supine exercise in patients with left ventricular dysfunction due to ischaemic heart disease: a double–blind randomized trial. de Feyter PJ, et al. **Eur Heart J** 1990 Apr;11 Suppl A:48–9

Iodinated contrast media effects on extravascular lung water, central blood volume, and cardiac output in humans. Böck JC, et al. **Invest Radiol** 1990 Aug;25(8):938–41

Effects of diltiazem and long–term beta 1–adrenergic blockade on hemodynamics and blood flow during exercise in patients with stable angina pectoris. Ogasawara S, et al. **J Am Coll Cardiol** 1990 Jan;15(1):184–8

Decreased O2 consumption and cardiac output during normobaric hyperoxia in conscious dogs. Lodato RF. **J Appl Physiol** 1989 Oct;67(4):1551–9

Cardiac output effects of endothelin–1, –2 and –3 and sarafotoxin S6b in conscious rats. Gardiner SM, et al. **J Auton Nerv Syst** 1990 Jun;30(2):143–7

Effects of the novel coronary selective calcium channel blocker, McN–6186, on cardiocirculatory dynamics, coronary vascular resistance, and cardiac output distribution in normal, conscious rats. Flaim SF, et al. **J Cardiovasc Pharmacol** 1990 May;15(5):780–90

Regulation of cardiac output during aldosterone–induced hypertension. Montani JP, et al. **J Hypertens Suppl** 1989 Dec;7(6):S206–7

The cardiorespiratory effects of intrathecal xylazine in the conscious rabbit. Nolan AM, et al. **J Vet Pharmacol Ther** 1990 Mar;13(1):29–35

Oxygen delivery and cardiac output during exercise following oral phosphate–glucose. Mannix ET, et al. **Med Sci Sports Exerc** 1990 Jun;22(3):341–7

Decreased cardiac output in infants of mothers who abused cocaine. van de Bor M, et al. **Pediatrics** 1990 Jan;85(1):30–2

[Non–invasive regional and cardiac output determination in healthy volunteers. Predictive value] Thuillez C, et al. **Arch Mal Coeur** 1989 Jul;82(7):1275–9 (Eng. Abstr.) **(Fre)**

[Anti–arrhythmia therapy in transition?] **Internist (Berl)** 1990 Mar;31(3 Suppl [Anniv No TIARRH):2 **(Ger)**

[Hemodynamic effects of anti–arrhythmia therapy on left ventricular function] Scheininger M. **Internist (Berl)** 1990 Mar;31(3 Suppl [Anniv No TIARRH):9–11 **(Ger)**

[Thrombolytic therapy in acute myocardial infarct. 1. Markers for evaluating effectiveness and thrombolytic substances] Kothe K. **Z Gesamte Inn Med** 1990 Apr 1; 45(7):177–83 (50 ref.) (Eng. Abstr.) **(Ger)**

[Use of nitrates in hypertension. Cardiac and peripheral effects before and during antihypertensive therapy at rest and during stress] Frille J, et al. **Z Kardiol** 1989;78 Suppl 2:102–5; discussion 115–7 (Eng. Abstr.) **(Ger)**

[Diastolic ventricular function in hypertrophic, obstructive and non–obstructive cardiomyopathy—effect of gallopamil] Olbrich HG, et al. **Z Kardiol** 1989;78 Suppl 5:29–35 (Eng. Abstr.) **(Ger)**

[Combination therapy with isosorbide dinitrate and verapamil in patients with coronary heart disease and hypertension: effect on blood pressure, ischemia and left ventricular function] Vogler AC, et al. **Z Kardiol** 1989;78 Suppl 2:183–7; discussion 188–9 (Eng. Abstr.) **(Ger)**

[Effects of slow–release isosorbide–5–mononitrate on ergometric parameters and cardiac output in stable effort angina pectoris: a double–blind randomized placebo study] Romeo F, et al. **Cardiologia** 1989 Jul;34(7):643–50 (Eng. Abstr.) **(Ita)**

[Propofol versus thiopentone. A hemodynamic study] Paoletti F, et al. **Minerva Anestesiol** 1989 Jul–Aug; 55(7–8):319–23 (Eng. Abstr.) **(Ita)**

[Effect of a single dose of captopril on left–ventricular function in patients with chronic congestive cardiomyopathy] Markiewicz K, et al. **Kardiol Pol** 1989; 32(3):142–7 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Alpha–adrenergic regulation of splanchnic volume and cardiac output in the dog. Bell L, et al. **Acta Physiol Scand** 1990 Mar;138(3):321–9

Influence of splanchnic intravascular volume changes on cardiac output during muscarinic receptor stimulation in the anaesthetized dog. Morse MA, et al. **Acta Physiol Scand** 1990 Mar;138(3):331–6

The simultaneous right and left ventricular outputs in bilharzial cor pulmonale. Abdel–Fattah MM, et al. **Am Heart J** 1966 Apr;71(4):473–80

Geometry and pump function in cardiac ventricular hypertrophy. Elzinga G, et al. **Am J Cardiol** 1990 Apr 3; 65(14):23G–29G

Cardiac output by Fick principle in infants and young children. Lees MH, et al. **Am J Dis Child** 1967 Aug; 114(2):144–9

Left ventricular stroke volume and output in healthy term infants. Winberg P, et al. **Am J Perinatol** 1990 Jul;7(3):223–6

Effect of opposite changes in cardiac output and arterial PO2 on the relationship between mixed venous PO2 and oxygen transport [see comments] Carlile PV, et al. **Am Rev Respir Dis** 1989 Oct;140(4):891–8 Comment in: Am Rev Respir Dis 1990 Mar;141(3):800–1.

Coronary flow limits right ventricular performance during positive end–expiratory pressure. Schulman DS, et al. **Am Rev Respir Dis** 1990 Jun;141(6):1531–7

Hemodynamic and hemorheological profiles in women with proteinuric hypertension of pregnancy and in pregnant controls. Heilmann L, et al. **Arch Gynecol Obstet** 1989; 246(3):159–68 (59 ref.)

Residence time distributions in artificial ventricles. Shettigar UR, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):708–12

The ballistocardiogram and left ventricular ejection in the dog. Winter PJ, et al. **Bibl Cardiol** 1967;(19):33–5

Doppler ultrasound echocardiographic measurement of cardiac output. Advantages and drawbacks. Orlando E, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12 Suppl):37–48 (30 ref.)

Non–invasive determination of cardiac output by Doppler echocardiography and electrical bioimpedance. Northridge DB, et al. **Br Heart J** 1990 Feb;63(2):93–7

What is meant by a "controlled" ventricular rate in atrial fibrillation? Rawles JM. **Br Heart J** 1990 Mar;63(3):157–61

Measurement of cardiac reserve in cardiogenic shock: implications for prognosis and management. Tan LB, et al. **Br Heart J** 1990 Aug;64(2):121–8

Comparison of bioimpedance and thermodilution measurements of cardiac output during aortic surgery. Sullivan PJ, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S78

Intraoperative cardiac output monitoring by transtracheal Doppler tube. Yoshitake S, et al. **Can J Anaesth** 1990 May; 37(4 Pt 2):S110

Doppler evaluation [letter; comment] Faber J. **Chest** 1990 Mar;97(3):765–6 Comment on: Chest 1989 Mar;95(3):525–9.

Effect of cardiac output on gas exchange in one–lung atelectasis. Mathru M, et al. **Chest** 1990 May;97(5):1121–4

Effects of neuropeptide Y on cardiac performance and renal blood flow in conscious normotensive and renal hypertensive rabbits. Minson RB, et al. **Clin Exp Hypertens [A]** 1990;12(2):267–84

Noninvasive measurement of blood flow and perfusion. Rumberger JA. **Curr Opin Radiol** 1990 Aug;2(4):567–74 (9 ref.)

Patency of foramen ovale—does it influence haemodynamics in newborn infants? Hannu H, et al. **Early Hum Dev** 1989 Dec;20(3–4):281–7

Haemodynamics of induced atrial fibrillation: a comparative assessment with sinus rhythm, atrial and ventricular pacing. Lau CP, et al. **Eur Heart J** 1990 Mar;11(3):219–24

Effective pulmonary flow, aortic flow and cardiac output: in vitro and in vivo comparisons in the dog. Franks PJ, et al. **Exp Physiol** 1990 Jan;75(1):95–106

Oxygen transport system before and after exposure to chronic hypoxia. Ferretti G, et al. **Int J Sports Med** 1990 Feb;11 Suppl 1:S15–20

Portal blood flow in beef steers: comparison of techniques and relation to hepatic blood flow, cardiac output and oxygen uptake. Huntington GB, et al. **J Anim Sci** 1990 Jun;68(6):1666–73

Alveolar dead space does not affect indirect Fick cardiac output determinations. Badgwell JM, et al. **J Appl Physiol** 1990 Feb;68(2):787–91

Ventilatory effects of high and pulsatile blood flow in the pulmonary circulation. Giesbrecht GG, et al. **J Appl Physiol** 1990 Jan;68(1):181–6

Inspiratory and expiratory muscle perfusion in maximally exercised ponies. Manohar M. **J Appl Physiol** 1990 Feb; 68(2):544–8

Multigated radionuclide ventriculography during in–hospital

phase of acute myocardial infarction. Jain RS, et al. **J Assoc Physicians India** 1989 Sep;37(9):575–7

Non-invasive evaluation of global ventricular functions in coronary artery disease by exercise radionuclide angiocardiography. Khanna CM, et al. **J Assoc Physicians India** 1989 Oct;37(10):635–8

Frequently repeated Fick cardiac output measurements during anesthesia. Doi M, et al. **J Clin Monit** 1990 Apr; 6(2):107–12

Evaluation of heavy water for indicator dilution cardiac output measurement. Schreiner MS, et al. **J Clin Monit** 1989 Oct;5(4):236–42

First Björn Folkow Award lecture. The role of cardiac output in the control of blood pressure. Conway J. **J Hypertens Suppl** 1989 Dec;7(6):S3–7 (35 ref.)

Bioimpedance measurement of cardiac output after open heart surgery [letter] Ikegaki J, et al. **J Pediatr** 1990 Apr; 116(4):668–9

Estimation of cardiac output by bioimpedance cardiography. World MJ. **J R Army Med Corps** 1990 Jun;136(2):92–9

Exercise-induced changes in left ventricular function after phlebotomy in patients with polycythemic COPD. Milne N, et al. **J Thorac Imaging** 1990 Jul;5(3):68–72

Phasic flow in the left ventricular inflow tract: the importance of Doppler sample volume position. Delemarre BJ, et al. **JCU** 1988 May;16(4):227–32

Circulatory and respiratory responses to lower body negative pressure in man. Ahn B, et al. **Jpn J Physiol** 1989; 39(6):919–29

Cardiac output and heart rate in man during simulated swimming while breath-holding. Paulev PE, et al. **Jpn J Physiol** 1990;40(1):117–25

Determination of diastolic function by radionuclide ventriculography. Clements IP, et al. **Mayo Clin Proc** 1990 Jul;65(7):1007–19 (54 ref.)

Stroke volume and left ventricular output in preterm infants with patent ductus arteriosus. Lindner W, et al. **Pediatr Res** 1990 Mar;27(3):278–81

Role of the glycine sensitive area in the regulation of cardiac output. Campos Júnior RR, et al. **Prog Brain Res** 1989; 81:243–51

Cardiovascular control by the rostral ventrolateral medulla in the conscious dog. Dormer KJ, et al. **Prog Brain Res** 1989;81:265–77

The effect of blood oxygen stores and changes in cardiac output on the rate of fall of arterial oxyhemoglobin saturation during obstructive apnea. Fletcher EC. **Prog Clin Biol Res** 1990;345:303–13; discussion 314–5

[A computer-assisted noninvasive monitoring system with graphic display of online determination of cardiovascular parameters] Castor G, et al. **Biomed Tech (Berlin)** 1989 Nov;34(11):262–7 (Eng. Abstr.) (Ger)

[Left ventricular function: significance for the development of malignant arrhythmia and sudden heart death] Bethge KP. **Internist (Berl)** 1990 Mar;31(3 Suppl [Anniv No TIARRH):3–5 (Ger)

[Pathophysiology of cardiovascular disorders in artificial ventilation] Kluge R. **Z Gesamte Inn Med** 1989 Oct 1; 44(19):586–9 (19 ref.) (Eng. Abstr.) (Ger)

[Localization and type of acute myocardial infarct in relation to myocardial infarct size—patients with acute re-infarct] Kothe K, et al. **Z Gesamte Inn Med** 1990 Apr 1; 45(7):188–90 (Eng. Abstr.) (Ger)

[Creatine kinase risk groups in acute myocardial infarct] Kothe K, et al. **Z Gesamte Inn Med** 1989 Nov 1; 44(21):649–52 (Eng. Abstr.) (Ger)

[Site and type of acute myocardial infarct in relation to myocardial infarct size—dynamics of global ejection fraction in acute myocardial infarct] Kothe K, et al. **Z Gesamte Inn Med** 1990 Mar 1;45(5):146–8 (Eng. Abstr.) (Ger)

[Possibilities and limits of quantitative analyses using Doppler echocardiography] Curtius JM. **Z Kardiol** 1989;78 Suppl 7:143–52 (83 ref.) (Eng. Abstr.) (Ger)

[Comparative measurement of oxygen uptake and cardiac output at rest and during stress—evaluation of a new monitor for continuous determination of oxygen uptake and carbon dioxide release] Kreymann G, et al. **Z Kardiol** 1990 May;79(5):341–6 (Eng. Abstr.) (Ger)

[Interobserver and spontaneous variability of Doppler echocardiography measured cardiac output in children with congenital heart defects] Stern H, et al. **Z Kardiol** 1990 Feb;79(2):89–95 (Eng. Abstr.) (Ger)

[Roentgenologic heart volume determination for the diagnosis of fatal heart failure] Schmidt G, et al. **Z Rechtsmed** 1990;103(3):155–62 (Eng. Abstr.) (Ger)

[Cardiocirculatory changes during sleep] Shiomi T, et al. **Kokyu To Junkan** 1990 Jul;38(7):641–7 (Jpn)

[Cardiac output monitoring by impedance cardiography in cardiac surgery] Shimizu H, et al. **Masui** 1990 Apr; 39(4):508–12 (Eng. Abstr.) (Jpn)

[Carbon dioxide level in pulmonary alveoli as an indicator of a patient's condition during surgery] Shitikov II, et al. **Anesteziol Reanimatol** 1990 Mar–Apr;(2):22–5 (Rus)

[The interrelations of arterial pressure, cardiac output and coronary blood flow during orthostatic reactions] Osadchiĭ LI, et al. **Fiziol Zh SSSR** 1989 Aug;75(8):1126–32 (Eng. Abstr.) (Rus)

[Effect of mechanical properties of the aorta on the accuracy of measuring cardiac output by the rheographic method] Lollini VA. **Kardiologiia** 1990 Jan;30(1):79–81 (Rus)

[Hemodynamics of arterial hypertension] Navarro Salas E, et al. **Rev Esp Cardiol** 1990;43 Suppl 1:34–6 (7 ref.) (Eng. Abstr.) (Spa)

CARDIAC OUTPUT, LOW

Patient education. Heart failure. Murtagh J. **Aust Fam Physician** 1989 Sep;18(9):1149

[Heart failure] Stejfa M. **Zdrav Aktual** 1983;204:16–21 (Cze)

[Cardiac insufficiency in childhood] Voříšková M. **Zdrav Aktual** 1985;205:76–9 (Cze)

BLOOD

Plasma concentrations of atrial natriuretic factor during positive end-expiratory pressure ventilation in dogs with normal or impaired left ventricular function. Hevrøy O, et al. **Acta Anaesthesiol Scand** 1989 Oct;33(7):549–53

Hyperosmolality related to propylene glycol in an infant treated with enoximone infusion. Huggon I, et al. **BMJ** 1990 Jul 7;301(6742):19–20

Action of endogenous atrial natriuretic peptide in calves with experimental acute central venous congestion and low cardiac output. Rokitansky AM, et al. **Cardiovasc Res** 1990 May;24(5):345–51

Substrate utilization during exercise in chronic cardiac failure. Riley M, et al. **Clin Sci** 1990 Jul;79(1):89–95

Interactions among the effects of aging, chronic disease, and stress on adrenocortical function in Syrian hamsters. Ottenweller JE, et al. **Endocrinology** 1990 Jan;126(1):102–9

Effect of xamoterol on haemodynamics and plasma catecholamines in chronic heart failure. Ollivier JP, et al. **Eur Heart J** 1990 Apr;11 Suppl A:59–60

Increase in plasma noradrenaline concentration after the administration of phentolamine in the patients with "latent" left-sided heart failure. Watanabe H, et al. **Jpn Circ J** 1989 Dec;53(12):1497–505

Plasma atrial natriuretic factor in low output heart failure syndromes. Fontana F, et al. **Klin Wochenschr** 1990 Mar 16;68(6):313–9

Converting enzyme inhibition by enalapril in experimental heart failure. Holtz J, et al. **Nephron** 1990;55 Suppl 1:73–6

[Atrial natriuretic factor in cardiogenic shock, in hypovolemic shock and in the bradycardia-hypotension syndrome following acute myocardial infarction] Fontana F, et al. **G Ital Cardiol** 1989 Aug;19(8):686–93 (Eng. Abstr.) (Ita)

[Plasma noradrenaline response to phentolamine in "latent" left-sided heart failure] Ito H, et al. **Rinsho Byori** 1990 Feb;38(2):135–42 (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Cardiorespiratory collapse and pulmonary oedema due to intravascular absorption of prostaglandin F2 alpha administered extraamniotically for midtrimester termination of pregnancy. Wein P, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 Pt 1):261–3

Cardiac failure following Irukandji envenomation. Martin JC, et al. **Med J Aust** 1990 Aug 6;153(3):164–6

COMPLICATIONS

Arrhythmias and their treatment in patients with heart failure. Rehnqvist N. **Am J Cardiol** 1989 Dec 5;64(20):61J–64J (42 ref.)

Mortality associated with ischaemic hepatitis. Hickman PE, et al. **Aust N Z J Med** 1990 Feb;20(1):32–4

Unilateral megalencephaly associated with neonatal high output cardiac failure. Walters BC, et al. **Childs Nerv Syst** 1990 May;6(3):123–5

Breathing abnormalities during sleep in patients with chronic heart failure. Yasuma F, et al. **Jpn Circ J** 1989 Dec; 53(12):1506–10

[Left ventricular function: significance for the development of malignant arrhythmia and sudden heart death] Bethge KP. **Internist (Berl)** 1990 Mar;31(3 Suppl [Anniv No TIARRH):3–5 (Ger)

[An urgent successful operation for aortic regurgitation with chronic renal failure, low cardiac function and recurrent ventricular tachycardia] Kayanagi T, et al. **Kyobu Geka** 1989 Sep;42(10):865–8 (Eng. Abstr.) (Jpn)

DIAGNOSIS

In utero detection of cardiac failure from an aneurysm of the vein of Galen. Jeanty P, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):50–1

A patient-powered treadmill—a simple alternative means of assessing heart failure and treatment in family practice. Tweed JA, et al. **Eur Heart J** 1990 Apr;11 Suppl A:65–6

Evaluation and intervention in systolic heart failure [editorial; comment] Wilson JR. **Hosp Pract [Off]** 1990 Sep 30; 25(9A):6–8 Comment on: Hosp Pract [Off] 1990 Sep 30;25(9A):66–70, 77–9, 82–4.

[Aortocoronary venous bypass operation in the elderly] Kothe VK, et al. **ZFA** 1989 Sep–Oct;44(5):273–9 (Eng. Abstr.) (Ger)

[Echocardiography in primary hemochromatosis] Scieszka J, et al. **Pol Arch Med Wewn** 1987 Dec;78(6):328–32 (Eng. Abstr.) (Pol)

DRUG THERAPY

Techniques for assessing inotropic effects of drugs in patients with heart failure: application to the evaluation of nicardipine. Fifer MA, et al. **Am Heart J** 1990 Feb;119(2 Pt 2):451–6 (46 ref.)

Role of tricuspid regurgitation and left ventricular damage in the treatment of right ventricular infarction-induced low cardiac output syndrome. Dhainaut JF, et al. **Am J Cardiol** 1990 Aug 1;66(3):289–95

Management of low cardiac output syndrome after cardiac surgery using enoximone. White DA, et al. **Anaesthesia** 1990 May;45(5):386–9

Use of enoximone in patients awaiting cardiac transplant. Bristow MR, et al. **Br J Clin Pract Symp Suppl** 1988 Dec; 64:69–72

Enoximone in heart failure: mechanisms of action. Chatterjee K. **Br J Clin Pract Symp Suppl** 1988 Dec;64:19–25 (19 ref.)

Enoximone, a pharmacological bridge to transplantation. Dubois-Randé JL, et al. **Br J Clin Pract Symp Suppl** 1988 Dec;64:73–9

Efficacy of enoximone in the management of refractory low output states following cardiac surgery. Gonzalez M, et al. **Br J Clin Pract Symp Suppl** 1988 Dec;64:53–64

Basis of treatment of myocardial failure. Vincent JL. **Br J Clin Pract Symp Suppl** 1988 Dec;64:15–8 (14 ref.)

Treatment of patients with heart failure [letter; comment] Cohn JN. **Circulation** 1990 Apr;81(4):1440–1 Comment on: Circulation 1989 Sep;80(3):693–9.

Role of dopamine receptors and the utility of dopamine agonists in heart failure. Rajfer SI, et al. **Circulation** 1990 Aug;82(2 Suppl):I97–102 (77 ref.)

ACE inhibitors in the treatment of heart failure. DiBianco R. **Clin Cardiol** 1990 Jun;13(6 Suppl 7):VII32–8 (26 ref.)

Comparative effects of xamoterol and digoxin in patients with mild to moderate heart failure. The Italian Xamoterol Multicenter Research Group. **Eur Heart J** 1990 Apr;11 Suppl A:50–1

Heart failure—the options for therapy. Campbell RW. **Eur Heart J** 1990 May;11 Suppl C:44–7 (25 ref.)

Central and peripheral adrenergic receptor agonists in heart failure. Chatterjee K, et al. **Eur Heart J** 1989 Jun;10 Suppl B:55–63 (26 ref.)

Changes in exercise tolerance and resting haemodynamics during long-term treatment of heart failure with xamoterol. Kayanakis JG, et al. **Eur Heart J** 1990 Apr;11 Suppl A:52–3

Sympathetic modulation in practice: the German clinical experience. Kupper W, et al. **Eur Heart J** 1990 Apr;11 Suppl A:19–25

Diastolic function as a target of therapeutic interventions in chronic heart failure. Packer M. **Eur Heart J** 1990 May; 11 Suppl C:35–40 (50 ref.)

Xamoterol monotherapy in heart failure. The European 'Corwin' Group. Timewell RM, et al. **Eur Heart J** 1990 Apr;11 Suppl A:62–4

Inotropic effect of triiodothyronine (T3) in low cardiac output following cardioplegic arrest and cardiopulmonary bypass: an initial experience in patients undergoing open heart surgery. Novitzky D, et al. **Eur J Cardiothorac Surg** 1989;3(2):140–5

Is addition of prazosin beneficial in chronic heart failure refractory to angiotensin converting enzyme inhibition? [letter] Boman K, et al. **Eur J Clin Pharmacol** 1989; 37(4):431–2

ANP infusion in the treatment of heart failure and comparison with ACE inhibition. Fitzpatrick MA, et al. **J Cardiovasc Pharmacol** 1990 Apr;15(4):536–43

Effect of combined dopamine and bunazosin on the ischemic heart after occlusion of the coronary artery. Katoh T, et al. **Jpn J Surg** 1990 Jul;20(4):429–36

Xamoterol and the failing heart [letter; comment] Davies MK. **Lancet** 1990 Jan 13;335(8681):117–8 Comment on: Lancet 1989 Nov 18;2(8673):1213–4.

Heart failure and ACE inhibitors. Davies M. **Practitioner** 1989 Mar 22;233(1465):436–42 (4 ref.)

[Dopexamine, a new inotropic agent for treatment of low output syndromes after cardiac surgery] du Gres B, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R232 (Fre)

[Comparison of enoximone versus tobutamine in the treatment of low cardiac output after cardiac surgery] Lançon JP, et al. **Ann Fr Anesth Reanim** 1990;9(3):289–94 (Eng. Abstr.) (Fre)

[Prostaglandin E1, as a vasodilator therapy, for low output syndrome after cardiac surgery] Hirose M, et al. **Kokyu To Junkan** 1989 Aug;37(8):915–7 (Eng. Abstr.) (Jpn)

[Personal observations of dobutamine effectiveness after surgery with extracorporeal circulation] Iwaszkiewicz A, et al. **Pol Tyg Lek** 1989 Feb 6;44(6):153–5 (Eng. Abstr.) (Pol)

[Digitalis in the treatment of heart insufficiency at the end of the 80's (editorial)] Ramalhão C. **Rev Port Cardiol** 1989 Dec;8(12):833–4 (Por)

[Pharmacotherapy of cardiac insufficiency in chronic pulmonary heart disease] Zharov EI, et al. **Klin Med (Mosk)** 1989 Jul;67(7):9–13 (43 ref.) (Rus)

[Treatment of chronic heart insufficiency. A controversial therapy] Iriarte Ezkurdia MM. **Rev Clin Esp** 1989 Sep; 185(4):173–4 (9 ref.) (Spa)

[Hemodynamic effect of isosorbide-5-mononitrate in acute cardiac insufficiency secondary to myocardial infarct] López-Sendón J, et al. **Rev Esp Cardiol** 1989 Jan; 42(1):16–24 (Eng. Abstr.) (Spa)

ENZYMOLOGY

Increased cardiac angiotensin-converting enzyme in rats with chronic heart failure. Fabris B, et al. **Clin Exp Pharmacol Physiol** 1990 Apr;17(4):309-14

ETIOLOGY

Cardiac failure in coronary heart disease. Cheng TO. **Am Heart J** 1990 Aug;120(2):396-412 (81 ref.)

Long-term predictors of sudden and low output death in chronic congestive heart failure secondary to coronary artery disease. Rockman HA, et al. **Am J Cardiol** 1989 Dec 1;64(19):1344-8

Significance of coronary circulation in hypertensive heart disease for development and prevention of heart failure. Strauer BE. **Am J Cardiol** 1990 Apr 3;65(14):34G-41G

Dialysis fistula and heart failure [letter] Hurwich BJ. **Ann Intern Med** 1974 Apr;80(4):561-2

Shock, transfusion, and pneumonectomy. Death is due to right heart failure and increased pulmonary vascular resistance. Cryer HG, et al. **Ann Surg** 1990 Aug; 212(2):197-201

Refractory right ventricular failure due to granulocytic sarcoma. Tillawi IS, et al. **Arch Pathol Lab Med** 1990 Sep; 114(9):983-5

Delayed diagnosis of thyrotoxic heart disease. Cronin CC, et al. **Br J Clin Pract** 1989 Aug;43(8):304-5

Does the heart fail in endotoxin shock? Abel FL. **Circ Shock** 1990 Jan;30(1):5-13 (30 ref.)

When does the heart fail during shock? Raymond RM. **Circ Shock** 1990 Jan;30(1):27-41 (66 ref.)

Energetic correlates of cardiac failure: changes in the creatine kinase system in the failing myocardium. Ingwall JS, et al. **Eur Heart J** 1990 Apr;11 Suppl B:108-15

Right heart failure as the sole presentation of carcinoid syndrome. Lachter JH, et al. **Int J Cardiol** 1989 Oct; 25(1):129-30

Fracture of the Duromedics mitral valve housing with leaflet escape. Dimitri WR, et al. **J Cardiovasc Surg (Torino)** 1990 Jan-Feb;31(1):41-6 (40 ref.)

A case of postnephrectomy arteriovenous fistula. Shida T, et al. **Jpn J Surg** 1989 Nov;19(6):738-9

Kyphoscoliosis as a cause of cardio-respiratory failure--pitfalls of diagnosis. Simonds AK, et al. **Respir Med** 1989 Mar;83(2):149-50

Serological and immunochemical specificity of a human autoanti-Gerbich-like antibody. Poole J, et al. **Vox Sang** 1990;58(4):287-91

[Acute cardiac insufficiency and toxoplasmosis] Guillot JP, et al. **Arch Mal Coeur** 1989 Oct;82(10):1767-70 (Eng. Abstr.) **(Fre)**

[Heart failure and complete atrio-ventricular block in a patient with acute myocardial infarct] Santos RM, et al. **Rev Port Cardiol** 1988 May-Jun;7(3):327-30 (Eng. Abstr.) **(Por)**

[Disorders of hemodynamics and respiration in pulmonary emphysema] Simbirtsev SA, et al. **Grud Serdechnososudistaia Khir** 1990;(5):61-3 **(Rus)**

[Evaluation of clinical heart insufficiency in patients with acute myocardial infarct treated with intravenous streptokinase] Torres Martínez G, et al. **Rev Esp Cardiol** 1990 May;43(5):300-9 (Eng. Abstr.) **(Spa)**

[Cardio-respiratory complications after major abdominal surgery in elderly patients. Risk factors and prognosis] Ramírez Guerrero A, et al. **Rev Invest Clin** 1989 Jul-Sep; 41(3):215-21 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

[Changes in lymphocyte subsets, neutrophil function and complement levels in patients with complications following open heart surgery] Sakai H, et al. **Rinsho Byori** 1990 Mar; 38(3):295-300 (Eng. Abstr.) **(Jpn)**

METABOLISM

ANF and postprandial control of sodium excretion in dogs with compensated heart failure. Villarreal D, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R232-9

Influence of drugs on diseased states of the heart. A 31P NMR and [Ca]i study. Wikman-Coffelt J, et al. **Invest Radiol** 1989 Dec;24(12):976-9

Skeletal muscle beta-receptors and isoproterenol-stimulated vasodilation in canine heart failure. Frey MJ, et al. **J Appl Physiol** 1989 Nov;67(5):2026-31

Effects of vagal blockade on neurohumoral systems in conscious dogs with heart failure. Elsner D, et al. **J Cardiovasc Pharmacol** 1990 Apr;15(4):586-91

Response to low cardiac output: developmental differences in metabolism during oxygen deficit and recovery in lambs. Fahey JT, et al. **Pediatr Res** 1989 Sep;26(3):180-7

[The concentration of atrial natriuretic peptide (ANP) in plasma and atrial tissue of canines with acute heart failure induced by reversible aortic or mitral regurgitation] Satoh K, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Aug 20; 65(8):794-806 (Eng. Abstr.) **(Jpn)**

MORTALITY

[Heart insufficiency in acute myocardial infarct. Long-term prognostic implications. Study of 213 cases of myocardial infarct] Santos AL. **Rev Port Cardiol** 1989 Sep;8(9):631-6 (Eng. Abstr.) **(Por)**

NURSING

[Nursing care of low cardiac output syndrome following open heart surgery] Liu LH. **Chung Hua Hu Li Tsa Chih** 1990 Feb;25(2):65-7 **(Chi)**

PHYSIOPATHOLOGY

Constant-flow ventilation during experimental left ventricular failure. Hachenberg T, et al. **Acta Anaesthesiol Scand** 1990 Apr;34(3):206-11

Effect of converting-enzyme inhibition on renal response to ANF in rats with experimental heart failure. Abassi Z, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):R84-9

Hemodynamic and hormonal effects of renin inhibition in ovine heart failure. Fitzpatrick MA, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1625-31

Left ventricular function and beta-adrenoceptors in rabbit failing heart. Gilson N, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H634-41

Restoration of renal response to atrial natriuretic factor in experimental low-output heart failure. Redfield MM, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R917-23

Positive inotropic stimulation in the normal and insufficient human myocardium. Erdmann E, et al. **Basic Res Cardiol** 1989;84 Suppl 1:125-33

Modulation of the autonomic control of the failing heart. Snow HM. **Basic Res Cardiol** 1989;84 Suppl 1:163-76

Dobutamine potentiates amrinone's beneficial effects in moderate but not in advanced heart failure. 31P-MRS in isolated hamster hearts. Buser PT, et al. **Circ Res** 1990 Mar; 66(3):747-53

Vasodilatory action of endogenous atrial natriuretic factor in a rat model of chronic heart failure as determined by monoclonal ANF antibody. Drexler H, et al. **Circ Res** 1990 May;66(5):1371-80

Angiotensins and the failing heart. Enhanced positive inotropic response to angiotensin I in cardiomyopathic hamster heart in the presence of captopril. Hirakata H, et al. **Circ Res** 1990 Apr;66(4):891-9

Subendomyocardial exhaustion of blood flow reserve and increased fibrosis in conscious dogs with heart failure. Hittinger L, et al. **Circ Res** 1989 Oct;65(4):971-80

Angiotensin II-forming pathways in normal and failing human hearts. Urata H, et al. **Circ Res** 1990 Apr; 66(4):883-90

Muscle blood flow during forearm exercise in patients with severe heart failure. Arnold JM, et al. **Circulation** 1990 Aug; 82(2):465-72

Beta-adrenergic pathways in nonfailing and failing human ventricular myocardium. Bristow MR, et al. **Circulation** 1990 Aug;82(2 Suppl):I12-25 (106 ref.)

Myocardial catecholamines and the pathophysiology of heart failure. Daly PA, et al. **Circulation** 1990 Aug;82(2 Suppl):I35-43 (107 ref.)

Attenuated forearm vasodilative response to intra-arterial atrial natriuretic peptide in patients with heart failure. Hirooka Y, et al. **Circulation** 1990 Jul;82(1):147-53

Pathophysiological mechanisms underlying the effects of beta-adrenergic agonists and antagonists on functional capacity and survival in chronic heart failure. Packer M. **Circulation** 1990 Aug;82(2 Suppl):I77-88 (141 ref.)

Role of the sympathetic nervous system in chronic heart failure. A historical and philosophical perspective. Packer M. **Circulation** 1990 Aug;82(2 Suppl):I1-6 (80 ref.)

The peripheral circulation and lactic acid metabolism in heart, or cardiovascular, failure. Wasserman K. **Circulation** 1989 Oct;80(4):1084-6

Septic shock: particular type of acute circulatory failure. Vincent JL, et al. **Crit Care Med** 1990 Jan;18(1 Pt 2):S70-4 (46 ref.)

Sympathetic activity and regional blood flow in heart failure. Dargie H. **Eur Heart J** 1990 Apr;11 Suppl A:39-43 (20 ref.)

Reproducibility of cardiopulmonary parameters during exercise in patients with chronic cardiac failure. The need for a preliminary test. Elborn JS, et al. **Eur Heart J** 1990 Jan;11(1):75-81

Abnormal intracellular calcium handling in acute and chronic heart failure: role in systolic and diastolic dysfunction. Perreault CL, et al. **Eur Heart J** 1990 May;11 Suppl C:8-21 (44 ref.)

Effects of contrast media on myocardial function during acute left ventricular failure in the dog. Kløw NE, et al. **Invest Radiol** 1990 Jan;25(1):41-5

[Hemodynamic changes in the decompensated heart during left ventricular assist using a diaphragmatic pneumatic pump] Pi KD, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Dec; 17(6):367-8, 383 (Eng. Abstr.) **(Chi)**

[Chronic left heart insufficiency and physical exercise] Maeder JP. **Rev Med Suisse Romande** 1989 Aug; 109(8):613-6 (15 ref.) **(Fre)**

[Heart insufficiency. Physiology and physiopathology of muscle contraction of the heart] Carvalho LS. **Rev Port Cardiol** 1989 Feb;8(2):121-7 (10 ref.) (Eng. Abstr.) **(Por)**

PREVENTION & CONTROL

[Possibilities of controlling low cardiac output after open-heart surgery] Vojtíšková J, et al. **Cesk Fysiol** 1990; 39(1):79-82 **(Cze)**

[Dobutamine during anesthesia of patients at risk for heart failure. A controlled prospective multicenter study of 93 surgical patients over 64 years of age] Lehot JJ, et al. **Can Anesthesiol** 1989 Sep;37(5):319-26 (Eng. Abstr.) **(Fre)**

PSYCHOLOGY

A measure of similarity for response curves based on ranks. Schulgen G. **Stat Med** 1989 Nov;8(11):1401-11

SURGERY

[A successful biventricular assist for postoperative patient with severe heart failure and hepatorenal dysfunction after mitral and tricuspid valve surgery] Moro H, et al. **Kyobu Geka** 1989 Aug;42(9):795-800 (Eng. Abstr.) **(Jpn)**

[Effectiveness and limitations of IABP or LVAD in right ventricular dysfunction] Hata H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Feb;38(2):207-14 (Eng. Abstr.) **(Jpn)**

THERAPY

Exercise capacity for survivors of cardiac transplantation or sustained medical therapy for stable heart failure. Stevenson LW, et al. **Circulation** 1990 Jan;81(1):78-85

Improving exercise tolerance in patients with chronic heart failure: should we treat the heart or the periphery? VO2 French Study Group. Cohen-Solal A. **Eur Heart J** 1989 Oct;10(10):866-71 (59 ref.)

Emergency coronary angioplasty in patients with severe left ventricular dysfunction or cardiogenic shock after acute myocardial infarction. Verna E, et al. **Eur Heart J** 1989 Nov;10(11):958-66

Right ventricular assist and prostacyclin infusion for allograft failure in the presence of high pulmonary vascular resistance. Esmore DS, et al. **J Heart Transplant** 1990 Mar-Apr;9(2):136-41

Extracorporeal membrane oxygenation for pediatric cardiopulmonary failure. Anderson HL 3d, et al. **J Thorac Cardiovasc Surg** 1990 Jun;99(6):1011-9; discussion 1019-21

Pulmonary artery balloon counterpulsation for right ventricular failure after right ventriculotomy in the swine. Gonzalez-Lavin L, et al. **J Thorac Cardiovasc Surg** 1990 Jan;99(1):153-60

Cardiac assistance with electrically stimulated skeletal muscle. Badylak SF, et al. **Med Biol Eng Comput** 1989 Mar; 27(2):159-62

Mechanisms and management of heart failure in active rheumatic carditis. Barlow JB, et al. **S Afr Med J** 1990 Aug 18;78(4):181-6 (36 ref.)

[The centrifugal pump--a new method of assisting the failing heart following open heart surgery] Feilberg VL, et al. **Ugeskr Laeger** 1990 Jan 29;152(5):324-6 (Eng. Abstr.) **(Dan)**

[Effect of RVAD for right heart failure involved with right ventricular infarction--especially studies of myocardial regional blood flow and epicardial mapping electrocardiography] Suzuki O. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Aug;37(8):1517-25 (Eng. Abstr.) **(Jpn)**

[Development and evaluation of ventricular assist blood pump to salvage patients with profound heart failure] Takano H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Oct;37(10):2072-81 (Eng. Abstr.) **(Jpn)**

[Treatment of left ventricular failure following extracorporeal circulation using ventricular assistance with centrifugal pump] Díez Lobo AI, et al. **Rev Esp Anestesiol Reanim** 1990 May-Jun;37(3):176-8 (Eng. Abstr.) **(Spa)**

CARDIAC PACEMAKER, ARTIFICIAL see **PACEMAKER, ARTIFICIAL**

CARDIAC PACING, ARTIFICIAL

see related **PACEMAKER, ARTIFICIAL**

Comparison of QRS morphologies of spontaneous premature ventricular complexes and ventricular tachycardia induced by programmed stimulation. Anderson KP, et al. **Am Heart J** 1990 Jun;119(6):1302-11

The effects of atrial pacing on the signal-averaged electrocardiogram in patients with coronary artery disease. Greenspon AJ, et al. **Am Heart J** 1990 Jan;119(1):29-34

Temporal dispersion of recovery of excitability in atrium and ventricle as a function of heart rate. Han J, et al. **Am Heart J** 1966 Apr;71(4):481-7

Pharmacodynamics of amlodipine: hemodynamic effects and antianginal efficacy after atrial pacing. Hogg KJ, et al. **Am Heart J** 1989 Nov;118(5 Pt 2):1107-13

Developmental sequelae of fixed-rate ventricular pacing in the immature canine heart: an electrophysiologic, hemodynamic, and histopathologic evaluation. Karpawich PP, et al. **Am Heart J** 1990 May;119(5):1077-83

Conversion of apparent complete AV block to second-degree block by atrial pacing. Koulizakis NG, et al. **Am Heart J** 1989 Nov;118(5 Pt 1):1053-6

Effect of acute hemodynamic decompensation on electrical inducibility of ventricular arrhythmias in patients with dilated cardiomyopathy and complex nonsustained ventricular arrhythmias. Kulick DL, et al. **Am Heart J** 1990 Apr;119(4):878-83

Baseline and post-atrial pacing release of atrial natriuretic factor in mitral stenosis. Malatino LS, et al. **Am Heart J** 1990 Jan;119(1):97-101

Selecting therapy for sustained ventricular tachycardias: importance of the sensitivity and specificity of programmed electrical stimulation for predicting arrhythmia recurrences. Stevenson WG, et al. **Am Heart J** 1990 Apr; 119(4):871-7

The in vivo response of ouabain-induced arrhythmias to pacing: acceleration instead of termination. Vos MA, et al. **Am Heart J** 1990 Sep;120(3):604-11

Effects of intravenous isradipine on left ventricular performance during rapid atrial pacing in coronary artery disease. Bedotto JB, et al. **Am J Cardiol** 1990 Jan 15; 65(3):189-94

Characteristic variation in evoked potential amplitude with changes in pacing stimulus strength. Curtis AB, et al. **Am J Cardiol** 1990 Aug 15;66(4):416-22

Effects of atrial pacing and dipyridamole administration on coronary hemodynamics of collateralized myocardial regions in stable angina pectoris. De Servi S, et al. **Am J Cardiol** 1990 Mar 15;65(11):703-8

New insights into pacemaker syndrome gained from hemodynamic, humoral and vascular responses during ventriculo-atrial pacing. Ellenbogen KA, et al. **Am J Cardiol** 1990 Jan 1;65(1):53-9

Electrophysiologic determinants of recurrent atrial flutter after successful termination by overdrive pacing. Gössinger HD, et al. **Am J Cardiol** 1990 Feb 15;65(7):463-6

Influence of ventricular function and presence or absence of coronary artery disease on results of electrophysiologic testing for asymptomatic nonsustained ventricular tachycardia. Hammill SC, et al. **Am J Cardiol** 1990 Mar 15;65(11):722-8

Sequelae of nonsustained polymorphic ventricular tachycardia induced during programmed ventricular stimulation. Kou WH, et al. **Am J Cardiol** 1989 Nov 15; 64(18):1148-51

Value of electrophysiologic testing in patients with previous myocardial infarction and nonsustained ventricular tachycardia. Philadelphia Arrhythmia Group. Kowey PR, et al. **Am J Cardiol** 1990 Mar 1;65(9):594-8

Day-to-day reproducibility of antiarrhythmic drug trials using programmed extrastimulus techniques for ventricular tachyarrhythmias associated with coronary artery disease. Kudenchuk PJ, et al. **Am J Cardiol** 1990 Sep 15; 66(7):725-30

Benefits of physiologic atrioventricular synchronization for pacing with an exercise rate response. Landzberg JS, et al. **Am J Cardiol** 1990 Jul 15;66(2):193-7

Value of programmed ventricular stimulation in the evaluation and management of patients with nonsustained ventricular tachycardia associated with coronary artery disease. Manolis AS, et al. **Am J Cardiol** 1990 Jan 15; 65(3):201-5

Prevention of creatine kinase-MB release in coronary artery disease and pacing-induced myocardial ischemia by isosorbide dinitrate spray. Marmor A, et al. **Am J Cardiol** 1990 Jun 4;65(21):36J-38J

Effects of sotalol on ventricular tachycardia and fibrillation produced by programmed electrical stimulation: comparison with other antiarrhythmic agents. Nademanee K, et al. **Am J Cardiol** 1990 Jan 2;65(2):53A-57A; discussion 65A-66A

Effects of upright posture on atrioventricular accessory pathway conduction. Reiter MJ, et al. **Am J Cardiol** 1990 Mar 1;65(9):623-7

Coronary sinus lysophosphatidylcholine accumulation during rapid atrial pacing. Sedis SP, et al. **Am J Cardiol** 1990 Sep 15;66(7):695-8

Prognostic value of atrial pacing and thallium-201 scintigraphy in patients with stable chest pain. Stratmann HG, et al. **Am J Cardiol** 1989 Nov 1;64(16):985-90

Risk stratification and management of patients with organic heart disease and nonsustained ventricular tachycardia: role of programmed stimulation, left ventricular ejection fraction, and the signal-averaged electrocardiogram. Turitto G, et al. **Am J Med** 1990 Jan;88(1N):35N-41N

Pacing during reperfusion elevates regional myocardial oxygen consumption. Kedem J, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H872-8

Changes in phase analysis patterns of radionuclide ventriculograms obtained from baboons during atrial pacing, septic shock, and induced myocardial infarction. Dormehl IC, et al. **Am J Physiol Imaging** 1989;4(4):117-23

Left ventricular volume and function changes during beta-blockade and accompanying atrial pacing. Dormehl IC, et al. **Am J Physiol Imaging** 1989;4(4):151-4

Syndrome of diminished vasodilator reserve of the coronary microcirculation (microvascular angina or syndrome X): diagnosis by combined atrial pacing and thallium 201 imaging—a case report. Magarian GJ, et al. **Angiology** 1990 Aug;41(8):667-72

Cardiac pacemaker inhibition by transcutaneous electrical nerve stimulation [published erratum appears in Arch Phys Med Rehabil 1990 May;71(6):388] Chen D, et al. **Arch Phys Med Rehabil** 1990 Jan;71(1):27-30

Antiischemic effects of alinidine in paced isolated rat hearts. Strelter I, et al. **Basic Res Cardiol** 1990 Jan-Feb;85(1):71-7

Prognostic significance of programmed ventricular stimulation in survivors of acute myocardial infarction [letter; comment] Cripps TR, et al. **Br Heart J** 1989 Dec; 62(6):489-90 Comment on: Br Heart J 1989 May;61(5):410-6.

A portable microprocessor-based triggering device for cardiac muscle electrical stimulation. Bassani JW, et al. **Braz J Med Biol Res** 1990;23(1):87-91

Rapid ventricular pacing of dogs to heart failure: biochemical and physiological studies. O'Brien PJ, et al. **Can J Physiol Pharmacol** 1990 Jan;68(1):34-9

Invasive electrophysiologic evaluation of patients with supraventricular tachycardia. Leitch J, et al. **Cardiol Clin** 1990 Aug;8(3):465-77 (52 ref.)

Increased myocardial microvascular utilisation and flow during atrial pacing. Acad BA, et al. **Cardiovasc Res** 1989 Dec;23(12):1027-33

Effects of atrioventricular interval on left ventricular diastolic filling assessed with pulsed Doppler echocardiography. Masuyama T, et al. **Cardiovasc Res** 1989 Dec;23(12):1034-42

Acetylcholine reverses effects of beta-agonists on pacemaker current in canine cardiac Purkinje fibers but has no direct action. A difference between primary and secondary pacemakers. Chang F, et al. **Circ Res** 1990 Mar;66(3):633-6

Guidelines for Clinical Intracardiac Electrophysiologic Studies. A report of the American College of Cardiology/American Heart Association Task Force on Assessment of Diagnostic and Therapeutic Cardiovascular Procedures (Subcommittee to Assess Clinical Intracardiac Electrophysiologic Studies). **Circulation** 1989 Dec; 80(6):1925-39 (116 ref.)

Comparative effects of pacing-induced and flow-limited ischemia on left ventricular function [see comments] Applegate RJ, et al. **Circulation** 1990 Apr;81(4):1380-92 Comment in: Circulation 1990 Apr;81(4):1436-9.

Slow and long-lasting modulation of myocardial repolarization produced by ectopic activation in isolated rabbit hearts. Evidence for cardiac "memory". Costard-Jäckle A, et al. **Circulation** 1989 Nov; 80(5):1412-20

Effect of asynchrony on left ventricular relaxation. Heyndrickx GR, et al. **Circulation** 1990 Feb;81(2 Suppl):III41-7

Frequency-dependent effects of quinidine on the ventricular action potential and QRS duration in humans. Nademanee K, et al. **Circulation** 1990 Mar;81(3):790-6

Upward shift and outward bulge. Divergent myocardial effects of pacing angina and brief coronary occlusion [comment] Paulus WJ. **Circulation** 1990 Apr;81(4):1436-9 Comment on: Circulation 1990 Apr;81(4):1380-92.

Programmed electrical stimulation at potential ventricular reentry circuit sites. Comparison of observations in humans with predictions from computer simulations. Stevenson WG, et al. **Circulation** 1989 Oct;80(4):793-806

Premature escape beats induced by overdrive pacing in canine Purkinje fibers. Evidence for the role of normal automaticity as an underlying cellular mechanism. Viamonte VA, et al. **Circulation** 1990 Jul;82(1):234-43

Premature escape beats. A model for triggered activity in the intact heart? Vos MA, et al. **Circulation** 1990 Jul; 82(1):213-24

Atrial pacing for sick sinus syndrome. Rosenqvist M. **Clin Cardiol** 1990 Jan;13(1):43-7 (30 ref.)

Three-dimensional computer model of the heart: fibrillation induced by extrastimulation. Thakor NV, et al. **Comput Biomed Res** 1989 Dec;22(6):532-45

A method of extended myoventriculoplasty with programmable cardiosynchronized electroneurostimulation: description and initial clinical results. Dumcius AS, et al. **Cor Vasa** 1989;31(5):394-401

Pulmonary circulation and thyroid hormone levels in pacemaker patients with and without atrial fibrillation. Usov VYu, et al. **Cor Vasa** 1989;31(4):294-8

Implantable cardioverters and defibrillators [published erratum appears in Curr Probl Cardiol 1990 Mar;15(3):119] Troup PJ. **Curr Probl Cardiol** 1989 Dec;14(12):673-843 (265 ref.)

Programmed stimulation in patients with minor forms of right ventricular dysplasia. Di Biase M, et al. **Eur Heart J** 1989 Sep;10 Suppl D:49-53

Control of antiarrhythmic drug therapy by electrophysiologic testing. Steinbeck G, et al. **Eur Heart J** 1989 Sep;10 Suppl E:61-5 (29 ref.)

Hypertension-induced cardiac hypertrophy. Oxygen supply and consumption with pacing. Cimini CM, et al. **Hypertension** 1990 Jul;16(1):35-42

Usefulness of transesophageal atrial pacing in hyperkalemia-induced impulse formation and conduction disturbances. Di Biase M, et al. **Int J Cardiol** 1989 Nov; 25(2):213-8

External pacing for the termination of sustained supraventricular tachycardia in children. Grubb BP, et al. **Int J Cardiol** 1990 Aug;28(2):159-62

Prediction of cardiac events after uncomplicated myocardial infarction by cross-sectional echocardiography during transesophageal atrial pacing. Iliceto S, et al. **Int J Cardiol** 1990 Jul;28(1):95-103

The prognostic value of right atrial pacing after acute myocardial infarction. Martínez Martínez JA, et al. **Int J Cardiol** 1990 Jul;28(1):43-9

Artificial cardiac pacemakers. Das G, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 May;28(5):177-89 (56 ref.)

Silent myocardial ischemia during right atrial pacing in patients recovering from acute myocardial infarction. Tzivoni D, et al. **Isr J Med Sci** 1989 Sep;25(9):538-41

Alterations in left ventricular relaxation during atrioventricular pacing in humans. Bedotto JB, et al. **J Am Coll Cardiol** 1990 Mar 1;15(3):658-64

Day to day reproducibility of electrically inducible ventricular arrhythmias in survivors of acute myocardial infarction. Bhandari AK, et al. **J Am Coll Cardiol** 1990 Apr;15(5):1075-81

Effect of pacing rate on the human atrial strength-duration curve. Kay GN, et al. **J Am Coll Cardiol** 1990 Jun; 15(7):1618-23

Surgical coronary revascularization in survivors of prehospital cardiac arrest: its effect on inducible ventricular arrhythmias and long-term survival [see comments] Kelly P, et al. **J Am Coll Cardiol** 1990 Feb;15(2):267-73 Comment in: J Am Coll Cardiol 1990 Feb;15(2):274.

Management of survivors of cardiac arrest: is electrophysiologic testing obsolete in the era of implantable defibrillators? [comment] Kim SG. **J Am Coll Cardiol** 1990 Sep;16(3):756-62 (48 ref.) Comment on: J Am Coll Cardiol 1990 Sep;16(3):657-65.

Effect of pacing current strength on indexes of myocardial activation in humans: influence of chronic infarction and polarity of pacing. Meesmann M, et al. **J Am Coll Cardiol** 1990 Feb;15(2):393-401

Long-term outcome in patients who survive out of hospital ventricular fibrillation and undergo electrophysiologic studies: evaluation by electrophysiologic subgroups [see comments] Poole JE, et al. **J Am Coll Cardiol** 1990 Sep; 16(3):657-65 Comment in: J Am Coll Cardiol 1990 Sep;16(3):756-62.

Pericardiocentesis guided by a pulse generator. Tweddell JS, et al. **J Am Coll Cardiol** 1989 Oct;14(4):1074-83

Phenotypic variation of Staphylococcus epidermidis in infection of transvenous endocardial pacemaker electrodes. Baddour LM, et al. **J Clin Microbiol** 1990 Apr;28(4):676-9

A system for simultaneous esophageal atrial pacing and ventricular recording in computer analysis of posterior ischemia. Jadvar H, et al. **J Electrocardiol** 1989;22 Suppl:248-52

Rate-responsive pacing using an impedance lead. McGoon MD. **J Electrocardiol** 1989;22 Suppl:223

Simultaneous bipolar pacing and sensing during EPs. Snoeck J, et al. **J Electrocardiol** 1989;22 Suppl:224-9

Evidence for a further stimulation of atrial natriuretic factor release by atrial pacing in patients with mitral stenosis. Malatino LS, et al. **J Hypertens Suppl** 1989 Dec;7(6):S242-3

Programmed electrical stimulation after myocardial infarction and reperfusion in conscious dogs. Krumpl G, et al. **J Pharmacol Methods** 1990 Apr;23(2):155-69

Preoperative evaluation of cardiac risk by means of atrial pacing and thallium 201 scintigraphy. Stratmann HG, et al. **J Vasc Surg** 1989 Oct;10(4):385-91

Increased secretion of atrial natriuretic polypeptide in response to cardiac pacing. Obata K, et al. **Jpn Circ J** 1989 Sep;53(9):1055-60

The second messenger system(s) mediating the secretion of atrial natriuretic peptide (ANP) from the isolated rat heart during rapid cardiac pacing. Doubell AF. **Life Sci** 1989; 45(23):2193-200

Microvascular perfusion during atrial pacing in renal hypertension induced cardiac hypertrophy. Cimini CM, et al. **Microcirc Endothelium Lymphatics** 1989 Dec; 5(6):457-84

Recommendations of the North American Society for Pacing and Electrophysiology for Pacemaker & Electrophysiology Procedure Codes—1989. **PACE** 1990 Apr;13(4):388-98

Cumulative 12-year index. Volumes 1-12. 1978-1989. **PACE** 1989 Dec;12(12 Suppl):1-60

Atrial natriuretic peptide during different pacing modes in a comparison with hemodynamic changes. Baratto MT, et al. **PACE** 1990 Apr;13(4):432-42

Correlation between programmed ventricular stimulation and signal-averaged electrocardiograms in the identification of patients at high risk for serious ventricular arrhythmias. Breithardt G, et al. **PACE** 1990 May;13(5):685-91

The tall R wave in lead V1 in posterior myocardial infarction: a reciprocal sign or a His-Purkinje conduction disturbance? Brembilla-Perrot B, et al. **PACE** 1989 Oct;12(10):1650-9

Analysis of the morphology of the unipolar endocardial paced evoked response. Brouwer J, et al. **PACE** 1990 Mar; 13(3):302-13 (27 ref.)

Daily bedside electrophysiological testing following surgery for the WPW syndrome. Fisher JD, et al. **PACE** 1990 Mar; 13(3):293-301

Indications for cardiac pacing [editorial] Furman S. **PACE** 1990 Jul;13(7):829

The ECG interpretation channel [editorial] Furman S. **PACE** 1990 Mar;13(3):255

Atrioventricular synchrony [letter] Irnich W. **PACE** 1989 Dec;12(12):1962

Rate-dependent threshold changes during atrial pacing: clinical and experimental studies. Katsumoto K, et al. **PACE** 1990 Aug;13(8):1009-19

Entrainment onset in a pacemaker model of reentrant ventricular tachycardia: insight into localization of critical elements of a reentrant circuit. Kremers MS, et al. **PACE** 1990 May;13(5):631-8

Entrainment of ventricular tachycardia by sinus rhythm. Kremers MS, et al. **PACE** 1989 Oct;12(10):1660-6

Mechanism of double ventricular response to a single atrial

extrastimulus in patients with Wolff-Parkinson-White syndrome. Matsuhisa M, et al. **PACE** 1990 Apr; 13(4):443–52

Propafenone induced acute variation of chronic atrial pacing threshold: a case report. Montefoschi N, et al. **PACE** 1990 Apr;13(4):480–3

Effect of the intertrain pause on the ventricular effective refractory period measured by the extrastimulus technique. Morady F, et al. **PACE** 1990 Apr;13(4):405–9

Localization of accessory pathways in the Wolff–Parkinson–White syndrome. Szabo TS, et al. **PACE** 1989 Oct;12(10):1691–705 (52 ref.)

The effect of external cardiac pacing on stroke volume. Talit U, et al. **PACE** 1990 May;13(5):598–602

Exercise electrophysiology testing: the effect of exercise on the induction of ventricular arrhythmias by programmed ventricular stimulation. Thomas GS, et al. **PACE** 1990 Jan; 13(1):17–22

Paroxysmal bundle branch block of supraventricular origin: a possible source of misdiagnosis in detecting ventricular tachycardia using time domain analyses of intraventricular electrograms. Throne RD, et al. **PACE** 1990 Apr; 13(4):453–68

Left ventricular pressure measurement during noninvasive transcutaneous cardiac pacing. Trigano JA, et al. **PACE** 1989 Nov;12(11):1717–9

Three–dimensional electrocardiography of cardiac pacing. Trigano JA. **PACE** 1990 Aug;13(8):961–5

Stroke volume and the three phase cardiac output rate relationship with ventricular pacing. Wessale JL, et al. **PACE** 1990 May;13(5):673–80

The effect of transcutaneous electrical nerve stimulation (TENS) on catecholamine metabolism during pacing–induced angina pectoris and the influence of naloxone. Mannheimer C, et al. **Pain** 1990 Apr;41(1):27–34

Use of demand pacemaker in children with Guillain–Barré syndrome and cardiac arrhythmias. Maytal J, et al. **Pediatr Neurol** 1989 Sep–Oct;5(5):303–5

Temporary transvenous cardiac pacing: 6 years experience in one coronary care unit. Jowett NI, et al. **Postgrad Med J** 1989 Apr;65(762):211–5

Evaluation of cardiac vulnerability and antifibrillatory properties of anti–arrhythmic drugs. Smailys A, et al. **Resuscitation** 1989 Oct;18(1):21–30

"Physiological pacing": comparison of DDD and VVI programming by three different non–invasive methods. Providência LA, et al. **Rev Port Cardiol** 1988 May–Jun; 7(3):299–303

[Observations on the effect of exercise, propranolol and atropine on Q–T interval and QTa under esophageal atrial pacing] Chang XM. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Aug; 17(4):229–31 **(Chi)**

[Comparative study of transesophageal atrial pacing and intracardiac electrophysiology in patients with supraventricular tachycardia] Song YC, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Aug; 17(4):208–9, 252–3 (Eng. Abstr.) **(Chi)**

[Clinical uses of external noninvasive temporary pacing] Wang JM. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Jun;17(3):167 **(Chi)**

[Standard of transesophageal atrial pacing to diagnose dual atrioventricular node pathway] Fu H, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Mar;20(1):99–102 (Eng. Abstr.) **(Chi)**

[Clinical significance of intracardiac electrocardiography in the diagnosis of syncope] Chytil V. **Vnitr Lek** 1990 Feb; 36(2):113–20 (Eng. Abstr.) **(Cze)**

[The effect of procainamide on the inducibility of ventricular tachycardia using programmed stimulation] Lukl J, et al. **Vnitr Lek** 1989 Nov;35(11):1049–56 (Eng. Abstr.) **(Cze)**

[Treatment of postinfarction ventricular tachycardia based on the results of programmed stimulation] Lukl J, et al. **Vnitr Lek** 1990 Feb;36(2):121–7 (Eng. Abstr.) **(Cze)**

[Sensitivity and specificity of programmed stimulation of the cardiac ventricles] Pleskot M, et al. **Vnitr Lek** 1989 Oct; 35(10):959–66 (Eng. Abstr.) **(Cze)**

[The effect of temporary cardiac stimulation on the course of acute myocardial infarct] Souček M, et al. **Vnitr Lek** 1989 Oct;35(10):945–51 (Eng. Abstr.) **(Cze)**

[Carotid sinus hypersensitivity. Medium and long–term development in patients treated by ventricular pacing] Deschamps D, et al. **Arch Mal Coeur** 1990 Jan;83(1):63–7 (Eng. Abstr.) **(Fre)**

[Doppler echocardiographic study of hemodynamic changes of double stimulation mode and atrial detection in patients with dual chamber pacemaker. Value of hysteresis of the atrioventricular delay] Rey JL, et al. **Arch Mal Coeur** 1990 Jun;83(7):961–6 (Eng. Abstr.) **(Fre)**

[Temporary external transthoracic electrosystolic pacing at a surgery department] Karoubi P, et al. **Cah Anesthesiol** 1989 Oct;37(6):455–6 **(Fre)**

[Indication of myocardial "memory". Gradual, persisting modulation of myocardial decrease in excitation following change in the activation sequence] Costard–Jäckle A, et al. **Z Kardiol** 1989 Dec;78(12):797–803 (Eng. Abstr.) **(Ger)**

[Hemodynamic and medicamentous modification of stimulated atrial natriuretic factor secretion] Haufe MC, et al. **Z Kardiol** 1989 Aug;78(8):532–7 (Eng. Abstr.) **(Ger)**

[Acute effects of propionyl–L–carnitine on anomalies of parietal kinetics of the left ventricle induced by atrial pacing in patients with ischemic heart disease. A bidimensional echocardiographic study] Ricci A, et al. **Cardiologia** 1989 Jul;34(7):651–5 (Eng. Abstr.) **(Ita)**

[Usefulness of an electrophysiological study in the management of patients with tachyarrhythmias] Sugimoto T. **J Cardiol** 1989 Mar;19(1):317–21 (Eng. Abstr.) **(Jpn)**

[A case of Pickwickian syndrome treated by implantation of a cardiac permanent pacemaker] Ogata N, et al. **Kokyu To Junkan** 1989 Jul;37(7):791–5 (Eng. Abstr.) **(Jpn)**

[A case of corrected transposition of the great arteries with permanent endocardial pacemaker implantation] Shibata T, et al. **Nippon Naika Gakkai Zasshi** 1989 Jul;78(7):934–8 **(Jpn)**

[Functional comparison of respective antitachycardia pacemakers] Kasanuki H, et al. **Nippon Rinsho** 1990 Feb; 48(2):329–39 **(Jpn)**

[Electrophysiologic study for pacemaker implantation] Mitsuoka T, et al. **Nippon Rinsho** 1990 Feb;48(2):240–8 **(Jpn)**

[Respiratory rate dependent pacemaker] Nakajima H. **Nippon Rinsho** 1990 Feb;48(2):376–9 **(Jpn)**

[Patient care for cardiac pacing—longevity and quality of life] Shoji T, et al. **Nippon Rinsho** 1990 Feb;48(2):304–9 **(Jpn)**

[The causes of heart rate variation and determinant for rate responsive pacing] Toyoshima T. **Nippon Rinsho** 1990 Feb; 48(2):363–9 **(Jpn)**

[Bradycardia following reserpine injection requiring cardiac pacing] Grodzicki T, et al. **Wiad Lek** 1990 Feb 1–15; 43(3–4):153–5 (Eng. Abstr.) **(Pol)**

[Computerized registry of cardiac pacing] Faria H, et al. **Rev Port Cardiol** 1988 Sep–Oct;7(5):493–7 (Eng. Abstr.) **(Por)**

[The cardioprotective action of captopril during atrial electrostimulation] Cosovanu A, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Apr–Jun;93(2):251–5 (Eng. Abstr.) **(Rum)**

[Electrocardiographic loading tests in persons with various ECG changes (findings of epidemiological studies)] Nikitin IuP, et al. **Kardiologiia** 1989 Dec;29(12):77–81 (Eng. Abstr.) **(Rus)**

[Use of transesophageal stimulation of the left atrium in the diagnosis of ischemia and cicatricial myocardial changes in patients with complete block of the left fascicle of the bundle of His] Shul'man VA, et al. **Kardiologiia** 1989 Jul; 29(7):43–6 (Eng. Abstr.) **(Rus)**

[Diagnostic possibilities of transesophageal electric stimulation in middle–aged and elderly patients with ischemic heart disease] Zhivoderov VM, et al. **Kardiologiia** 1989 Oct;29(10):111–2 **(Rus)**

[Transesophageal electric stimulation of the heart in the early period after myocardial infarction] Anikin VV, et al. **Sov Med** 1989;(12):55–7 **(Rus)**

[Socioeconomic effectiveness of the use of transesophageal electrocardiostimulation in polyclinics] Anikin VV, et al. **Sov Med** 1990;(6):56–9 **(Rus)**

[Evaluation of the antianginal effects of foridon by transesophageal stimulation of the left atrium] Vishnevskiĭ VI, et al. **Sov Med** 1990;(6):75–7 **(Rus)**

ADVERSE EFFECTS

Ventricular pacing for sick sinus syndrome—a risky business? Camm AJ, et al. **PACE** 1990 Jun;13(6):695–9 (41 ref.)

Clinical utility of telemetered intracardiac electrograms in diagnosing a design dependent lead malfunction. Sarmiento JJ. **PACE** 1990 Feb;13(2):188–95

[Management of complications in cardiac pacing] Mitsui T. **Nippon Rinsho** 1990 Feb;48(2):294–303 **(Jpn)**

[The indication, complications and contraindication for DDD pacing] Miyawaki F, et al. **Nippon Rinsho** 1990 Feb; 48(2):356–62 **(Jpn)**

[Cerebrovascular circulation in patients with ischemic heart disease during stenocardia attack induced by transesophageal atrial stimulation] Dudko VA, et al. **Kardiologiia** 1990 Feb;30(2):94–5 **(Rus)**

[Changes in electric stability and ultrastructure of the myocardium in heart rate–decreasing paired stimulation] Makarychev VA, et al. **Kardiologiia** 1989 Jul;29(7):81–5 (Eng. Abstr.) **(Rus)**

[Development of acute focal myocardial dystrophy during diagnostic transesophageal electric stimulation of the heart] Shabaeva EN, et al. **Kardiologiia** 1989 Sep;29(9):100–1 **(Rus)**

HISTORY

Transvenous pacing: a seminal transition from the research laboratory. Parsonnet V, et al. **Ann Thorac Surg** 1989 Nov; 48(5):738–40

[History of cardiac pacing and pacemaker update] Hori M. **Nippon Rinsho** 1990 Feb;48(2):227–32 **(Jpn)**

METHODS

The potential utility of sensor–driven pacing in DDD pacemakers. Leman RB, et al. **Am Heart J** 1989 Nov;118(5 Pt 1):919–23

Programmed ventricular stimulation using up to two extrastimuli and repetition of double extrastimulation for induction of ventricular tachycardia: a new highly sensitive and specific protocol. Belhassen B, et al. **Am J Cardiol** 1990 Mar 1;65(9):615–22

Utility of a stimulus artifact suppressor for transesophageal pacing. Benson DW Jr, et al. **Am J Cardiol** 1990 Feb 1; 65(5):393–4

Value of esophageal pacing in evaluation of supraventricular tachycardia. Brembilla–Perrot B, et al. **Am J Cardiol** 1990 Feb 1;65(5):322–30

Influence of cardiac pacing mode on the long–term development of atrial fibrillation. Feuer JM, et al. **Am J Cardiol** 1989 Dec 1;64(19):1376–9

Termination of atrial flutter by rapid electrical pacing of the atrium. Haft JI, et al. **Am J Cardiol** 1967 Aug;20(2):239–44

A new pacing method for rapid regularization and rate control in atrial fibrillation. Lau CP, et al. **Am J Cardiol** 1990 May 15;65(18):1198–203

A transmural approach for endocardial ventricular pacing. McCallister BD Jr, et al. **Am J Cardiol** 1990 Jan 15; 65(3):263–4

Usefulness of esophageal pill electrode atrial pacing with quantitative two–dimensional echocardiography for diagnosing coronary artery disease. Matthews RV, et al. **Am J Cardiol** 1989 Oct 1;64(12):730–5

Effect of basic drive cycle length on the yield of ventricular tachycardia during programmed ventricular stimulation. Summitt J, et al. **Am J Cardiol** 1990 Jan 1;65(1):49–52

Rapid ventricular pacing in pigs: an experimental model of congestive heart failure. Chow E, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1603–5

Near–fatal yew berry intoxication treated with external cardiac pacing and digoxin–specific FAB antibody fragments. Cummins RO, et al. **Ann Emerg Med** 1990 Jan; 19(1):38–43

Transvenous pacing in infants and children with congenital heart disease. Spotnitz HM. **Ann Thorac Surg** 1990 Mar; 49(3):495–6

Importance of preexcited QRS morphology during induced atrial fibrillation to the diagnosis and localization of multiple accessory pathways. Fananapazir L, et al. **Circulation** 1990 Feb;81(2):578–85

Rate–modulated pacing. Furman S. **Circulation** 1990 Oct; 82(4):1081–94 (83 ref.)

In vivo induction of "focal" triggered ventricular arrhythmias and responses to overdrive pacing in the canine heart. Furukawa T, et al. **Circulation** 1990 Aug; 82(2):549–59

Symptomatology and quality of life in patients with rate–responsive pacemakers: a double–blind, randomized, crossover study. Lau CP, et al. **Clin Cardiol** 1989 Sep; 12(9):505–12

Transoesophageal atrial pacing in the diagnosis of myocardial ischaemia assessed with the 12–lead electrocardiogram and precordial ST segment mapping. Janota M, et al. **Cor Vasa** 1990;32(2):89–98

Atrial rate–responsive pacing in sinus node disease. Rosenqvist M, et al. **Eur Heart J** 1990 Jun;11(6):537–42

Simplified peroperative placement of temporary right atrial pacing leads. Walker WS. **Eur J Cardiothorac Surg** 1988; 2(1):61–2

Diagnostic and therapeutic use of transesophageal atrial pacing in children. Janoušek J. **Int J Cardiol** 1989 Oct; 25(1):7–14

Rate–modulated cardiac pacing based on transthoracic impedance measurements of minute ventilation: correlation with exercise gas exchange. Kay GN, et al. **J Am Coll Cardiol** 1989 Nov 1;14(5):1283–9

The feasibility of utilizing the systolic pre–ejection interval as a determinant of pacing rate. McGoon MD, et al. **J Am Coll Cardiol** 1989 Dec;14(7):1753–8

Experience with activity sensing rate responsive ventricular pacing. A study based upon assessment of exercise tolerance. Kaul U, et al. **J Assoc Physicians India** 1989 May;37(5):318–22

Atrioventricular sequential pacing with transluminal atrial and ventricular pacing probes inserted via a pulmonary artery catheter: a preliminary comparison with epicardial wires. Lumb PD. **J Clin Anesth** 1989;1(4):292–6

Treatment of atrial flutter and rapid atrial tachycardia with transesophageal atrial pacing. Kaneda S, et al. **Jpn Heart J** 1989 Jul;30(4):471–8

Transchest magnetic (eddy–current) stimulation of the dog heart. Bourland JD, et al. **Med Biol Eng Comput** 1990 Mar; 28(2):196–8

Emergency ventricular pacing using a J–electrode catheter without fluoroscopy. Davis MJ. **Med J Aust** 1990 Feb 19; 152(4):194–5

The basis for activity controlled rate variable cardiac pacemakers: an analysis of mechanical forces on the human body induced by exercise and environment. Alt E, et al. **PACE** 1989 Oct;12(10):1667–80

DDI pacing in the bradycardia–tachycardia syndrome. Bana G, et al. **PACE** 1990 Mar;13(3):264–70

Comparison of low rate dual chamber pacing to activity responsive rate variable ventricular pacing. Batey RL, et al. **PACE** 1990 May;13(5):646–52

Atrial and ventricular stimulation threshold development: a comparative study in patients with a DDD pacemaker and two identical carbon–tip leads. Brandt J, et al. **PACE** 1990 Jul;13(7):859–66

Successful treatment of congenital atrial flutter with antitachycardia pacing. Case CL, et al. **PACE** 1990 May; 13(5):571–3

Pacing modalities for tachycardia termination. De Belder

MA, et al. PACE 1990 Feb;13(2):231–48 (163 ref.)
Sensor–modulated dual chamber cardiac pacing: too much of a good thing too fast? Feuer JM, et al. PACE 1990 Jun; 13(6):816–8
A technique for intraoperative arrhythmia induction during automatic implantable defibrillator placement. Grubb BP, et al. PACE 1990 Aug;13(8):958–60
Summation and inhibition by ultrarapid train pulses in dogs: effects of frequency and duration of trains, lidocaine, and beta blockade. Inoue H, et al. PACE 1989 Nov; 12(11):1777–86
Rate responsive pacing with a minute ventilation sensing pacemaker during pregnancy and delivery. Lau CP, et al. PACE 1990 Feb;13(2):158–63
A new algorithm to solve endless loop tachycardia in DDD pacing: a multi–center study of 91 patients. Limousin M, et al. PACE 1990 Jul;13(7):867–74
Experience and implantation techniques with a new single–pass lead VDD pacing system. Longo E, et al. PACE 1990 Jul;13(7):927–36
Termination of macro–reentrant tachycardia by a single extrastimulus delivered during the 'effective' refractory period: a computer modeled 'case report'. Malik M, et al. PACE 1990 Jan;13(1):103–9
Relationship of the effective refractory period and monophasic action potential duration after a step increase in pacing frequency. Morgan JM, et al. PACE 1990 Aug; 13(8):1002–8
Influence of pacing mode and rate on peripheral levels of atrial natriuretic peptide (ANP). Noll B, et al. PACE 1989 Nov;12(11):1763–8
Lack of influence of atrioventricular delay on stroke volume at rest in patients with complete atrioventricular block and dual chamber pacing. Occhetta E, et al. PACE 1990 Jul; 13(7):916–26
Closed loop control of rate adaptive pacing: clinical assessment of a system analyzing the ventricular depolarization gradient. Paul V, et al. PACE 1989 Dec; 12(12):1896–902
Termination of ventricular tachycardia by nonpropagated local depolarization: further observations on entrainment of ventricular tachycardia from an area of slow conduction. Ruffy R. PACE 1990 Jul;13(7):852–8
Subthreshold stimulation of the heart: small but important. Ruffy R. PACE 1990 Jan;13(1):110–8 (30 ref.)
Reappraisal of inhibition and summation with a single conditioning stimulus in man. Saihara S, et al. PACE 1990 Feb;13(2):151–7
Summation of excitation with a single conditioning stimulus in the canine heart. Saihara S, et al. PACE 1990 Jan; 13(1):52–8
Inappropriate rate response of the minute ventilation rate responsive pacemaker in a patient with Cheyne–Stokes dyspnea [letter] Scanu P, et al. PACE 1989 Dec;12(12):1963
Short–term and long–term changes of left ventricular volumes during rate–adaptive and single–rate pacing. Sedney MI, et al. PACE 1989 Dec;12(12):1863–8
Impaired activity rate responsiveness of an atrial activity–triggered pacemaker: the role of differential atrial sensing in its prevention. Shandling AH, et al. PACE 1989 Dec;12(12):1927–37
Atrial standstill: an indication for rate responsive pacing. Solti F, et al. PACE 1990 Jul;13(7):830–2
Is accurate rate response programming necessary? Sulke N, et al. PACE 1990 Aug;13(8):1031–44
DDDR pacing. Sutton R. PACE 1990 Apr;13(4):385–7
The ventricular excitability–interval relationship in early diastole in humans: the influence of the electrode configuration during bipolar stimulation. Toivonen LK, et al. PACE 1990 Jul;13(7):875–81
Single–lead VDD pacing system. Varriale P, et al. PACE 1990 Jun;13(6):757–66
Role of transcutaneous pacing in the setting of a failing permanent pacemaker. Kissoon N, et al. **Pediatr Emerg Care** 1989 Sep;5(3):178–80
[Controlled frequency pacers] Mahaux V, et al. **Rev Med Liege** 1990 Mar;45(3):93–8 **(Fre)**
[The importance of two–dimensional echocardiography in conjunction with trans–esophageal stimulation of the left atrium for the diagnosis of myocardial ischemia] Gawor Z, et al. **Z Gesamte Inn Med** 1989 Dec 15;44(24):736–40 (Eng. Abstr.) **(Ger)**
[A mechanism of terminating atrial flutter using programmed atrial stimulation] Werner PC, et al. **Z Kardiol** 1990 May; 79(5):359–65 (Eng. Abstr.) **(Ger)**
[Therapeutic value of programmed stimulation in atrial flutter] Werner PC, et al. **Z Kardiol** 1990 May;79(5):366–73 (Eng. Abstr.) **(Ger)**
[Predictive value of programmed electrostimulation in patients with spontaneous idiopathic ventricular tachycardia] Zehender M, et al. **Z Kardiol** 1990 May; 79(5):374–9 (Eng. Abstr.) **(Ger)**
[Asymptomatic pre–excitation. Identification of potential risk using transesophageal pacing] Patruno N, et al. **Cardiologia** 1989 Sep;34(9):777–81 (Eng. Abstr.) **(Ita)**
[Usefulness of transesophageal electrophysiological study during the ergometric test in the evaluation of supraventricular paroxysmal tachycardia occurring during exertion] Delise P, et al. **G Ital Cardiol** 1989 Dec; 19(12):1094–104 (Eng. Abstr.) **(Ita)**
[Noninvasive evaluation of changes in stroke volume and left ventricular filling dynamics. Produced by atrioventricular interval manipulation] Waki H, et al. **Kokyu To Junkan** 1989 Dec;37(12):1315–9 (Eng. Abstr.) **(Jpn)**
[Effectiveness of optimally timed atrial contraction in shock and bradyarrhythmia accompany right ventricular infarction] Ishikawa Y, et al. **Nippon Naika Gakkai Zasshi** 1989 Jul;78(7):974–5 **(Jpn)**
[Optimal pacing for termination of paroxysmal supraventricular tachycardia] Fujiki A. **Nippon Rinsho** 1990 Feb;48(2):340–5 **(Jpn)**
[T wave sensing problems with rate responsive pacemaker using Q–T interval and clinical experience] Kodama Y, et al. **Nippon Rinsho** 1990 Feb;48(2):380–5 **(Jpn)**
[Hemodynamic concept of physiological pacing and clinical benefits with DDD pacemaker] Nakamura A. **Nippon Rinsho** 1990 Feb;48(2):346–50 **(Jpn)**
[Electrophysiologic study of tachyarrhythmias and antitachycardia pacing] Ogawa S. **Nippon Rinsho** 1990 Feb; 48(2):318–23 **(Jpn)**
[Indication for cardiac pacing in A–V block and fascicular block] Sagara K, et al. **Nippon Rinsho** 1990 Feb; 48(2):269–76 **(Jpn)**
[Temporary pacing for bradycardia—indication, method and technique] Saitoh H, et al. **Nippon Rinsho** 1990 Feb; 48(2):288–93 **(Jpn)**
[Electrophysiologic mechanisms of termination of reentrant tachycardias by anti–tachycardiac pacemaker] Yamaguchi I, et al. **Nippon Rinsho** 1990 Feb;48(2):324–8 **(Jpn)**
[Heart function and hemodynamics in DDD pacing] Yamamoto K, et al. **Nippon Rinsho** 1990 Feb;48(2):351–5 **(Jpn)**
[Transcutaneous stimulation of the heart ventricles: its effectiveness, comfort during the examination and new diagnostic possibility] Prochaczek F, et al. **Kardiol Pol** 1989;32(6):351–7 (Eng. Abstr.) **(Pol)**
[Cardiac trans–esophageal pacing: significance of systemic damping of artifacts from stimulating impulses for ECG trace recordings recorded from a pacing trans–esophageal electrode. III] Prochaczek F, et al. **Kardiol Pol** 1989; 32(7–9):372–9 (Eng. Abstr.) **(Pol)**
[Transesophageal stimulation of the left atrium in children with arrhythmia (preliminary report)] Bieganowska K, et al. **Pediatr Pol** 1989 May;64(5):295–303 (Eng. Abstr.) **(Pol)**
[The use of transesophageal electrical stimulation of the heart in acute tests for evaluating the efficacy of korinfar in patients with ischemic heart disease] Mironova IIu. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(2):100 **(Rus)**
[A comparison of the results of endocardial and transesophageal electrostimulation of the heart in assessing sinus node function and atrioventricular conduction] Sokolov SF, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(2):15–20 (Eng. Abstr.) **(Rus)**
[Comparative evaluation of various methods of continuous electric stimulation of the heart in bradycardia] Drogaltsev AD. **Kardiologiia** 1990 Feb;30(2):5–11 (Eng. Abstr.) **(Rus)**
[First experiences with the effect of low–energy electric impulse on the atrioventricular junction in various types of paroxysmal supraventricular tachycardia] Gimrikh EO, et al. **Kardiologiia** 1989 Jul;29(7):40–3 (Eng. Abstr.) **(Rus)**
[Various diagnostic criteria for abnormal signs of the artificial pacemaker examined by transesophageal electric stimulation of the left atrium] Ivanov AP, et al. **Kardiologiia** 1990 Feb;30(2):16–20 (Eng. Abstr.) **(Rus)**
[A new non–invasive method of electric stimulation of the heart] Kuz'menkov DV, et al. **Kardiologiia** 1990 Mar; 30(3):91–2 **(Rus)**
[Correction of paroxysmal tachycardia using methods of electric cardiac stimulation] Popov SV, et al. **Kardiologiia** 1990 Feb;30(2):109–14 (84 ref.) **(Rus)**
[Relation of parameters of frequent transesophageal electric stimulation of the atria during the treatment of atrial flutter and electrophysiologic characteristics of the myocardium] Zubrin IuV. **Kardiologiia** 1989 Jul;29(7):46–9 (Eng. Abstr.) **(Rus)**
[The potentials for curing atrial flutter by the combined use of transesophageal electrical stimulation and anti–arrhythmia preparations] Grosu AA, et al. **Ter Arkh** 1990;62(1):36–9 (Eng. Abstr.) **(Rus)**
[Programming VTIM physiologic pacemakers (evoked QT)] Trabucco HO, et al. **Medicina (B Aires)** 1989;49(1):37–42 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

Emotion profiles and quality–of–life of paced patients. Catipović–Veselica K, et al. PACE 1990 Apr;13(4):399–404

TRENDS

Current status of sensor–modulated rate–adaptive cardiac pacing. Tyers GF. **J Am Coll Cardiol** 1990 Feb;15(2):412–8 (49 ref.)
[Progress in permanent cardiac electrostimulation] Ungureanu G, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Jul–Sep;93(3):441–52 (31 ref.) **(Rum)**

VETERINARY

A simple technique for artificial cardiac pacing in closed chest anesthetized rats. Hoffman A, et al. **Lab Anim Sci** 1990 Jul;40(4):426–7

CARDIAC RUPTURE see **HEART RUPTURE**

CARDIAC RUPTURE, TRAUMATIC see **HEART INJURIES**

CARDIAC STIMULANTS see **CARDIOTONIC AGENTS**

CARDIAC TAMPONADE

BLOOD

Atrial pressure and hormonal and renal responses to acute cardiac tamponade. Hynynen M, et al. **Ann Thorac Surg** 1990 Apr;49(4):632–7
Humoral changes in shock induced by cardiac tamponade. Kaszaki J, et al. **Circ Shock** 1989 Oct;29(2):143–53
Atrial natriuretic peptide release responds to atrial stretch and not to atrial pressure: observations during pericardiocentesis in a young woman. Ong AC, et al. **Eur Heart J** 1990 Apr;11(4):368–71
Effect of cardiac tamponade on plasma concentrations of atrial natriuretic peptide (ANP) in calves. Vierhapper H, et al. **Exp Clin Endocrinol** 1989;94(3):324–8

CHEMICALLY INDUCED

Fatal cardiac tamponade in systemic lupus erythematosus—a hazard of anticoagulation. Leung WH, et al. **Am Heart J** 1990 Feb;119(2 Pt 1):422–3
Delayed cardiac tamponade following accidental injection of non–ionic contrast medium into the pericardium. Gallant MJ, et al. **Clin Radiol** 1990 Feb;41(2):139–40

COMPLICATIONS

Frequency and significance of chamber collapses during cardiac tamponade. Reydel B, et al. **Am Heart J** 1990 May; 119(5):1160–3
An unusual presentation of cardiac tamponade. Bellamy MC, et al. **Anaesthesia** 1990 Feb;45(2):135–6
Hypotension due to unexpected cardiac tamponade. Cyna AM, et al. **Anaesthesia** 1990 Feb;45(2):140–2
Cardiac tamponade in juvenile chronic arthritis: report of two cases and review of publications. Goldenberg J, et al. **Ann Rheum Dis** 1990 Jul;49(7):549–53 (29 ref.)
Gonococcal pericarditis with tamponade in a patient with systemic lupus erythematosus. Coe MD, et al. **Arthritis Rheum** 1990 Sep;33(9):1438–41
Early nonhemorrhagic cardiac tamponade complicating acute myocardial infarction: a case report and review of the literature. Lakhani ZM, et al. **Can J Cardiol** 1989 Nov–Dec;5(8):373–4 (12 ref.)
Cardiac tamponade in left ventricular dysfunction. Hoit BD, et al. **Circulation** 1990 Oct;82(4):1370–6
Cardiac tamponade as a presentation of mucoepidermoid bronchogenic carcinoma. Sharma S, et al. **J Assoc Physicians India** 1989 Feb;37(2):183–5
Anesthesia for bone marrow harvesting in the prone position in a patient with preexisting pericardial tamponade. Boucek CD. **J Clin Anesth** 1990 Mar–Apr;2(2):133–7
Cardiac tamponade complicating cytomegalovirus pericarditis in a patient with AIDS [letter] Scott PJ, et al. **J Infect** 1990 Jan;20(1):92–3
[Pericardial tamponade and systemic sclerosis] Astigarraga B, et al. **Rev Esp Cardiol** 1990 May;43(5):356–8 (8 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Left ventricular pseudohypertrophy in pericardial effusion as a sign of cardiac tamponade. Di Segni E, et al. **Am J Cardiol** 1990 Aug 15;66(4):508–11
Low pressure cardiac tamponade: diagnosis facilitated by Doppler echocardiography. Hayes SN, et al. **Br Heart J** 1990 Feb;63(2):136–40
Doppler echocardiography in pericardial disease. Borganelli M, et al. **Cardiol Clin** 1990 May;8(2):333–48 (43 ref.)
Echocardiographic diagnosis of right atrial tamponade. Chamoun G, et al. **Chest** 1990 Apr;97(4):1012–4
Pericardiocentesis guided by a pulse generator. Tweddell JS, et al. **J Am Coll Cardiol** 1989 Oct;14(4):1074–83
ECG of the month. The swinging heart. Electrical alternans. Martinez–Lopez JI. **J La State Med Soc** 1990 Apr; 142(4):5–8
[A case of cardiac tamponade showing respiratory variation in inflow and outflow velocities in both ventricles and venous return] Shimamoto Y, et al. **Kokyu To Junkan** 1990 May;38(5):497–500 (Eng. Abstr.) **(Jpn)**
[Clinical symptoms of cardiac tamponade caused by mediastinal emphysema in a 3–year–old child with obstructive bronchitis and pneumonia] Iwańczak F, et al. **Pediatr Pol** 1989 Feb;64(2):112–6 **(Pol)**

DRUG THERAPY

Intrapericardial bleomycin for the management of cardiac tamponade secondary to malignant pericardial effusion. Cormican MC, et al. **Br Heart J** 1990 Jan;63(1):61–2

ETIOLOGY

Cardiac perforation after Kirschner wire migration. Tubbax

H, et al. **Acta Chir Belg** 1989 Nov-Dec;89(6):309-11

Cholesterol pericarditis and cardiac tamponade with congenital hypothyroidism in adulthood. Van Buren PC, et al. **Am Heart J** 1990 Mar;119(3 Pt 1):697-700

Left atrial diastolic compression in a patient with a large pericardial effusion and pulmonary hypertension. Brodyn NE, et al. **Am J Med** 1990 Jan;88(1N):64N-66N

Cardiac lymphoma associated with superior vena caval syndrome and cardiac tamponade: case history. Hwang MH, et al. **Angiology** 1990 Apr;41(4):328-32

Salmonella pericarditis with tamponade in systemic lupus erythematosus. Sánchez-Guerrero J, et al. **Br J Rheumatol** 1990 Feb;29(1):69-71 (18 ref.)

Pericardial tamponade and limited cutaneous systemic sclerosis (CREST syndrome). Sattar MA, et al. **Br J Rheumatol** 1990 Aug;29(4):306-7

A case of delayed postoperative cardiac tamponade with unusual echocardiographic findings. Otto CM, et al. **Chest** 1990 Apr;97(4):1003-4

Resolution of cardiac tamponade in systemic lupus erythematosus with indomethacin. Porcel JM, et al. **Chest** 1989 Nov;96(5):1193-4

Cardiac tamponade following open-heart surgery. Engelman RM, et al. **Circulation** 1970 May;41(5 Suppl):II165-71

Cardiac tamponade as a result of American Burkitt's lymphoma of the heart and pericardium. Helfand J. **Conn Med** 1990 Apr;54(4):186-9

Oesophago-pericardial fistula and cardiac tamponade after oesophagoscopy. Mellon JK, et al. **Eur J Cardiothorac Surg** 1988;2(4):282-3

Rhabdomyoma of the heart with intrapericardial expansion. Pillgram-Larsen J, et al. **Eur J Cardiothorac Surg** 1987; 1(3):183-5

Benign mediastinal teratoma causing pericardial tamponade and pleural effusion. Prabhakar G, et al. **Eur J Cardiothorac Surg** 1987;1(1):53-4

Improvement in left ventricular systolic function after pericardiocentesis [letter; comment] Lam CR. **Henry Ford Hosp Med J** 1989;37(2):88 Comment on: Henry Ford Hosp Med J 1989;37(1):45-6.

Cardiac tamponade--an unusual presentation of lymphoma. Kulpati DD, et al. **Indian J Chest Dis Allied Sci** 1989 Apr-Jun;31(2):121-4

Right atrial compression in postoperative cardiac patients: detection by transesophageal echocardiography. Kochar GS, et al. **J Am Coll Cardiol** 1990 Aug;16(2):511-6

An unusual case presentation: pericardial tamponade complicating central venous catheter. Garg M, et al. **J Perinatol** 1989 Dec;9(4):456-7

Cardiac tamponade as an initial manifestation of systemic lupus erythematosus. Reiner JS, et al. **J Rheumatol** 1989 Aug;16(8):1127-9 (20 ref.)

Extrapericardial tamponade with herniated omentum after transhiatal esophagectomy. Granke K, et al. **J Surg Oncol** 1990 Aug;44(4):273-5

Right ventricular myocardial infarction and late cardiac tamponade due to right coronary artery aneurysm--a case report. Koike R, et al. **Jpn J Surg** 1990 Jul;20(4):463-7 (10 ref.)

Malignant pericardial tamponade. Rinkevich D, et al. **Med Pediatr Oncol** 1990;18(4):287-91

Dissecting aneurysm of coronary artery presenting as cardiac tamponade. Cheung A, et al. **N Z Med J** 1990 Mar 28; 103(886):129-30

Survival after malignant pericardial effusion and cardiac tamponade in advanced ovarian cancer. Levitan Z, et al. **South Med J** 1990 Feb;83(2):241-2

[Cardiac tamponade as a complication of acute myocardial infarct. (Clinical and pathologico-anatomic analysis of patients with acute myocardial infarct and cardiac tamponade)] Baštecký J, et al. **Vnitr Lek** 1989 Jun; 35(6):530-7 (Eng. Abstr.) **(Cze)**

[Tamponade disclosing purulent pericarditis associated with acute lobar pneumonia (letter)] Falque B, et al. **Presse Med** 1990 Jun 16;19(24):1154 **(Fre)**

[Pericardial tamponade following extraction of a pacemaker electrode] Jelen-Esselborn S, et al. **Anasth Intensivther Notfallmed** 1989 Aug;24(4):236-40 (Eng. Abstr.) **(Ger)**

[Pericardial tamponade as a complication of the use of peripheral percutaneous silastic catheters] Scharf J, et al. **Klin Padiatr** 1990 Jan-Feb;202(1):57-9 (Eng. Abstr.) **(Ger)**

[Postoperative cardiac tamponade limited to the left ventricle] Sanguinetti M, et al. **G Ital Cardiol** 1989 Aug; 19(8):705-9 (Eng. Abstr.) **(Ita)**

[Septic shock in a case of purulent pericarditis. Usefulness of hemodynamic study with Swan-Ganz catheterization] Maione M, et al. **Minerva Anestesiol** 1989 Jul-Aug; 55(7-8):329-30 (Eng. Abstr.) **(Ita)**

[A case of the right atrium-originating hemangiosarcoma manifested by cardiac tamponade] Amaki S, et al. **Nippon Naika Gakkai Zasshi** 1989 Oct;78(10):1488-9 **(Jpn)**

[Cardiac tamponade as an initial manifestation of acute myeloblastic leukemia] Kawasaki M, et al. **Rinsho Ketsueki** 1990 Feb;31(2):224-8 (Eng. Abstr.) **(Jpn)**

[Cardiac tamponade in children as a complication of central venous catheterization. Report of four cases] Escribano Subías J, et al. **An Esp Pediatr** 1990 May;32(5):441-4 (Eng. Abstr.) **(Spa)**

[Coronary vessels aneurysm and cardiac tamponade] Boman K, et al. **Lakartidningen** 1989 Sep 6;86(36):2965 **(Swe)**

PATHOLOGY

Distension of the oblique pericardial sinus in tamponade due to loculated posterior pericardial effusion. D'Cruz IA, et al. **Am J Cardiol** 1990 Jun 15;65(22):1520-1

Three cases of fatal cardiac tamponade following ventricular endocardial biopsy. Craven CM, et al. **Arch Pathol Lab Med** 1990 Aug;114(8):836-9

Chylopericardium and chylothorax, resulting from a catheter to the left subclavian vein: an autopsy report. Smedts F, et al. **Klin Wochenschr** 1989 Dec 4;67(23):1214-7

[Fatal myocardial rupture as a complication in removal of a pacemaker catheter] Denk W, et al. **Beitr Gerichtl Med** 1989;47:635-40 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Hemodynamic findings in extrapericardial atrial tamponade. Minella RA, et al. **Am Heart J** 1990 May;119(5):1221-2

Superior vena cava Doppler flow velocity patterns in pericardial disease. Byrd BF 3d, et al. **Am J Cardiol** 1990 Jun 15;65(22):1464-70

Influence of naloxone on response to acute cardiac tamponade in conscious dogs. Klopfenstein HS, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):H512-7

The pathophysiology of atypical tamponade in infants undergoing cardiac surgery. Kay PH, et al. **Eur J Cardiothorac Surg** 1989;3(3):255-60; discussion 260-1

Increasing atrial pressure during cardiac tamponade does not elevate plasma levels of the peptide ANP in conscious dogs. Klopfenstein HS, et al. **J Physiol (Lond)** 1990 Feb; 421:309-19

SURGERY

Successful surgical management of a case of pulmonary and pericardial melioidosis. Majid AA. **Aust N Z J Surg** 1990 Feb;60(2):139-41

[Penetrating heart injury] Jäger M, et al. **Beitr Orthop Traumatol** 1990 Jan;37(1):71-4 (Eng. Abstr.) **(Ger)**

[A surgical case report of acute pyogenic pericarditis in a 9-month infant] Hamaguchi N, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Feb;38(2):289-93 (Eng. Abstr.) **(Jpn)**

[Pericardiocentesis] Pillgram-Larsen J, et al. **Tidsskr Nor Laegeforen** 1990 Jan 20;110(2):230-1 **(Nor)**

[Diagnosis and treatment of acute cardiac tamponade] Vasil'ev ZhKh. **Khirurgiia (Mosk)** 1990 May;(5):126-30 **(Rus)**

[Treatment of penetrating wounds of the heart] Bisenkov LN, et al. **Vestn Khir** 1989 Aug;144(8):68-71 (Eng. Abstr.) **(Rus)**

THERAPY

Reversal of echocardiographic signs of pericardial tamponade by transfusion. Tunick PA, et al. **Am Heart J** 1990 Jan;119(1):199-201

Efficacy of high-frequency jet ventilation in cardiac tamponade. Goto K, et al. **Anesth Analg** 1990 Apr; 70(4):375-81

New two-dimensional, echocardiographically directed pericardiocentesis in cardiac tamponade. Hanaki Y, et al. **Crit Care Med** 1990 Jul;18(7):750-3

Cardiac tamponade complicating leukaemia: immediate chemotherapy or pericardiocentesis? Leung WH, et al. **Postgrad Med J** 1989 Oct;65(768):773-5

[Pericardial puncture at a myocardial infarction unit is of value for treatment and palliative measures] Gustafsson G, et al. **Lakartidningen** 1990 Mar 7;87(10):747-8 **(Swe)**

CARDIAC TRANSPLANTATION see **HEART TRANSPLANTATION**

CARDIAC VOLUME

Geometry of the conduit coronary artery in diastole is determined by the volume of the left and right ventricles. Gerová M, et al. **Basic Res Cardiol** 1989 Nov-Dec; 84(6):583-90

Left ventricular volume measurement using cardiac axis nuclear magnetic resonance imaging. Validation by calibrated ventricular angiography. Cranney GB, et al. **Circulation** 1990 Jul;82(1):154-63

Volume conductance catheter [letter; comment] Glantz SA, et al. **Circulation** 1990 Jun;81(6):2028 Comment on: Circulation 1990 Feb;81(2):703-6.

Determination of right ventricular mass in humans and dogs with ultrafast cardiac computed tomography. Hajduczok ZD, et al. **Circulation** 1990 Jul;82(1):202-12

New echocardiographic and angiographic methods for right atrial volume determination: in vitro validation and in vivo results. Lambertz H, et al. **Int J Card Imaging** 1989; 5(1):39-51

Treadmill ergometry and heart-volumes in elite biathletes: a longitudinal study. Baumgartl P. **Int J Sports Med** 1990 Jun;11(3):223-7

Relationship between systolic blood pressure, ventricular volume and ischemic pain perception in patients with angina pectoris: a potential role for baroreceptors. Sheps DS, et al. **Isr J Med Sci** 1989 Sep;25(9):482-7

Determination of left ventricular volumes with use of a new nongeometric echocardiographic method: clinical validation and potential application. Zoghbi WA, et al. **J Am Coll Cardiol** 1990 Mar 1;15(3):610-7

Reduced supine cardiac volumes and diastolic filling rates in elderly patients with chronic medical conditions. Implications for postural blood pressure homeostasis. Lipsitz LA, et al. **J Am Geriatr Soc** 1990 Feb;38(2):103-7

Determinants of atrial natriuretic factor levels in coronary heart disease: significance of central pressures, heart chamber volumes and left ventricular mass. Keller N, et al. **J Intern Med** 1989 Sep;226(3):195-200

Active cross-bridge model. Reproduction of the myocardial force-length-time relation and the left ventricular pressure-length-time relation in systole. Takeda K. **Jpn Heart J** 1990 Jan;31(1):43-69

Short-term and long-term changes of left ventricular volumes during rate-adaptive and single-rate pacing. Sedney MI, et al. **PACE** 1989 Dec;12(12):1863-8

[The importance of a teleradiographic evaluation of cardiac volume in subjects with the long QT syndrome] Costa S. **Radiol Med (Torino)** 1990 Mar;79(3):171-4 (Eng. Abstr.) **(Ita)**

[Response of cardiac patients to dynamic exercise: analysis with "systolic" pressure-volume area] Yagi Y, et al. **J Cardiol** 1989 Sep;19(3):921-31 (Eng. Abstr.) **(Jpn)**

[Estimation of left ventricular volume determined by minor axis diameter--compared with left ventricular stroke volume determined by electromagnetic flowmeter at aortic root and at mitral valvular ring] Ikegawa T, et al. **Kokyu To Junkan** 1990 Jan;38(1):49-52 **(Jpn)**

[Left ventricular volume characteristics and its relationship with right ventricle after repair of tetralogy of Fallot] Kobayashi J, et al. **Kokyu To Junkan** 1989 Sep;37(9):983-9 (Eng. Abstr.) **(Jpn)**

[Relationship between postoperative atrial volumes and prognosis after modified Fontan operation in patients with complex cardiac anomalies] Kato H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Apr;38(4):543-50 (Eng. Abstr.) **(Jpn)**

[Intraoperative echocardiographic assessment of left ventricular muscle volume changes after intracardiac operation under cardiopulmonary bypass] Matsuwaka R, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Nov; 37(11):2245-9 (Eng. Abstr.) **(Jpn)**

[Heart growth in the human embryonic period (a study related to the 2d month of gestation)] Mandarim-de-Lacerda CA. **Arq Bras Cardiol** 1989 Apr; 52(4):185-7 (Eng. Abstr.) **(Por)**

DRUG EFFECTS

Left ventricular filling in hypertensive blacks and whites following adrenergic blockade. Dianzumba SB, et al. **Am J Hypertens** 1990 Jan;3(1):48-51

Cardiac hypertrophy in hypertension. Cífková R, et al. **Cor Vasa** 1990;32(1):3-12

The development of coronary insufficiency during prolonged treatment of essential hypertension. Kalnins UV, et al. **Cor Vasa** 1990;32(1):64-71

Patients with essential hypertension [editorial] Widimský J. **Cor Vasa** 1990;32(1):1-2

PHYSIOLOGY

The effects of right ventricular hemodynamics on left ventricular configuration. Ascah KJ, et al. **Can J Cardiol** 1990 Apr;6(3):99-106

Adrenergic nervous system and left ventricular mass in primary hypertension. Ferrara LA, et al. **Eur Heart J** 1989 Nov;10(11):1036-40

Atrial volume in cirrhosis: relationship to blood volume and plasma concentration of atrial natriuretic factor. Rector WG Jr, et al. **Gastroenterology** 1990 Sep;99(3):766-70

Left ventricular dimensions and function in athletes: cardiac or cardiovascular adaptations, or both? [editorial; comment] Bruce RA. **J Am Coll Cardiol** 1990 Mar 1;15(3):589-90 Comment on: J Am Coll Cardiol 1990 Mar 1;15(3):582-8.

Altered left ventricular volume and ejection fraction responses to supine dynamic exercise in athletes [see comments] Fisman EZ, et al. **J Am Coll Cardiol** 1990 Mar 1;15(3):582-8 Comment in: J Am Coll Cardiol 1990 Mar 1;15(3):589-90.

Coarctation of the aorta and ventricular septal defect in infancy: left ventricular volume and management issues. Gersony WM. **J Am Coll Cardiol** 1989 Nov 15;14(6):1553-4

Absence of left ventricular volume loading in infants with coarctation of the aorta and a large ventricular septal defect. Graham TP Jr, et al. **J Am Coll Cardiol** 1989 Nov 15;14(6):1545-52

Predictive value of two-dimensional echocardiographic and hemodynamic measurements on admission with acute myocardial infarction. Jaarsma W, et al. **J Am Soc Echocardiogr** 1988 May-Jun;1(3):187-93

Interrelationship of atrial natriuretic peptide, atrial volume, and renal function in premature infants. Bierd TM, et al. **J Pediatr** 1990 May;116(5):753-9

Determination of diastolic function by radionuclide ventriculography. Clements IP, et al. **Mayo Clin Proc** 1990 Jul;65(7):1007-19 (54 ref.)

Cardiac left ventricular hypertrophy and chamber dilatation in panic disorder patients: implications for idiopathic dilated cardiomyopathy. Kahn JP, et al. **Psychiatry Res**

1990 Apr;32(1):55–61
[Roentgenologic heart volume determination for the diagnosis of fatal heart failure] Schmidt G, et al.
Z Rechtsmed 1990;103(3):155–62 (Eng. Abstr.) **(Ger)**
[An assessment of the reserve potentials of the heart by using volume loading with the exclusion of a portion of the left ventricular myocardium from contraction] Sokolov MV, et al. **Patol Fiziol Eksp Ter** 1990 May–Jun;(3):30–3 (Eng. Abstr.) **(Rus)**

CARDIOGRAPHY, IMPEDANCE see under **PLETHYSMOGRAPHY, IMPEDANCE**

CARDIOLIPINS

The effect of cholesterol on the morphology and reactivity of the mixture of lipids used in syphilis serology. Orum O, et al. **APMIS** 1990 Jan;98(1):9–18
S-100b protein regulates aggregation and fusion of cardiolipin vesicles. Zolese G, et al. **Cell Calcium** 1990 Jan; 11(1):35–46
Fusion of small unilamellar vesicles with viable EDTA-treated Escherichia coli cells. Marvin HJ, et al. **J Bacteriol** 1989 Oct;171(10):5268–75

ANALYSIS

Cytochrome c oxidase and cardiolipin alterations in response to skeletal muscle ischaemia and reperfusion. Soussi B, et al. **Acta Physiol Scand** 1990 Feb;138(2):107–14
Cerebrovascular accident and myocardial infarction associated with anticardiolipin antibodies in a young woman with systemic lupus erythematosus. Maaravi Y, et al. **Ann Rheum Dis** 1989 Oct;48(10):853–5
Cardiolipin molecular species in rat heart mitochondria are sensitive to essential fatty acid–deficient dietary lipids. Yamaoka S, et al. **J Nutr** 1990 May;120(5):415–21

BLOOD

Quantitative profile of cardiolipin and group treponemal IgD antibodies in syphilis estimated by single radial immunodiffusion technique (SRID). Ionescu AD, et al. **Arch Roum Pathol Exp Microbiol** 1989 Jan–Mar; 48(1):19–31

IMMUNOLOGY

Serum IgG and IgM anticardiolipin antibodies in neurological diseases. Rombos A, et al.
Acta Neurol Scand 1990 Mar;81(3):243–5
Anticardiolipin antibody associated ischaemic strokes in elderly patients without systemic lupus erythematosus. Chakravarty KK, et al. **Age Ageing** 1990 Mar;19(2):114–8
Prevalence of anticardiolipin antibodies in coronary artery disease. De Caterina R, et al. **Am J Cardiol** 1990 Apr 1; 65(13):922–3
Protein C deficiency and anticardiolipin antibodies in a family with premature stroke. Haire WD, et al. **Am J Hematol** 1990 Jan;33(1):61–3
Glomerulonephritis in a patient with anticardiolipin antibody. Wilkowski M, et al. **Am J Kidney Dis** 1990 Feb;15(2):184–6
Clinical significance of anti-cardiolipin antibodies in systemic lupus [letter; comment] **Am J Med** 1989 Nov;87(5):600–1 Comment on: Am J Med 1988 Nov;85(5):602–8.
Correlation between lupus anticoagulants and anticardiolipin antibodies in patients with prolonged activated partial thromboplastin times. Alving BM, et al. **Am J Med** 1990 Feb;88(2):112–6
Clinical and immunologic features of livedo reticularis in lupus: a case-control study [see comments] Englert HJ, et al. **Am J Med** 1989 Oct;87(4):408–10 Comment in: Am J Med 1990 Jun;88(6):699.
Cryoglobulins in a patient with SLE, livedo reticularis, and elevated level of anticardiolipin antibodies [letter; comment] Yancey WB Jr, et al. **Am J Med** 1990 Jun; 88(6):699 Comment on: Am J Med 1989 Oct;87(4):408–10.
Systemic and renal fibrinolytic activity in a patient with anticardiolipin syndrome and renal thrombotic microangiopathy. Becquemont L, et al. **Am J Nephrol** 1990; 10(3):254–8
Antiphospholipid antibodies and recurrent pregnancy loss: correlation between the activated partial thromboplastin time and antibodies against phosphatidylserine and cardiolipin. Rote NS, et al. **Am J Obstet Gynecol** 1990 Aug; 163(2):575–84
Prenatal screening for anticardiolipin antibody. Bendon RW, et al. **Am J Perinatol** 1990 Jul;7(3):245–50
Antiphospholipid antibodies: anticardiolipin and the lupus anticoagulant in systemic lupus erythematosus (SLE) and in non-SLE disorders. Prevalence and clinical significance. Love PE, et al. **Ann Intern Med** 1990 May 1;112(9):682–98 (178 ref.)
Antiphospholipid antibodies. Levine SR, et al.
Ann Neurol 1989 Sep;26(3):386–9 (26 ref.)
Infective endocarditis, rheumatoid factor, and anticardiolipin antibodies. Asherson RA, et al. **Ann Rheum Dis** 1990 Feb; 49(2):107–8
Isotype distribution of anticardiolipin antibodies in systemic lupus erythematosus: prospective analysis of a series of 100 patients. Cervera R, et al. **Ann Rheum Dis** 1990 Feb; 49(2):109–13
Anticardiolipin antibody negative occlusive vascular retinopathy in systemic lupus erythematosus [letter] Dessein PH, et al. **Ann Rheum Dis** 1990 Feb;49(2):133–4
Neuropsychiatric lupus erythematosus, cerebral infarctions, and anticardiolipin antibodies. Fields RA, et al.
Ann Rheum Dis 1990 Feb;49(2):114–7
Clinical importance of persistence of anticardiolipin antibodies in systemic lupus erythematosus. Ishii Y, et al. **Ann Rheum Dis** 1990 Jun;49(6):387–90
Fluctuations of anticardiolipin antibody levels in patients with systemic lupus erythematosus: a prospective study. Out HJ, et al. **Ann Rheum Dis** 1989 Dec;48(12):1023–8
Cutaneous histopathologic findings in 'antiphospholipid syndrome'. Correlation with disease, including human immunodeficiency virus disease. Smith KJ, et al.
Arch Dermatol 1990 Sep;126(9):1176–83
Antiphospholipid antibodies associated with human immunodeficiency virus infection [letter] Taillan B, et al. **Arch Intern Med** 1990 Sep;150(9):1975
Catastrophic arterial thrombosis associated with an unsuspected anticardiolipin antibody, following pyelography [letter] Collins RD Jr. **Arthritis Rheum** 1989 Nov;32(11):1490–2
Comment on the letter by Hughes et al [letter; comment] Fort JG, et al. **Arthritis Rheum** 1990 Apr;33(4):607 Comment on: Arthritis Rheum 1989 Jun;32(6):813.
HLA-DR antigens and anticardiolipin antibodies in patients with systemic lupus erythematosus [letter; comment] McHugh NJ, et al. **Arthritis Rheum** 1989 Dec;32(12):1623–4 Comment on: Arthritis Rheum 1988 Dec;31(12):1568–70.
Prevalence of lupus anticoagulant and anticardiolipin antibodies in a healthy population. Shi W, et al.
Aust N Z J Med 1990 Jun;20(3):231–6
Raised concentrations of antibodies to cardiolipin in patients receiving dialysis. Grönhagen-Riska C, et al. **BMJ** 1990 Jun 30;300(6741):1696–7
Anticardiolipin antibody [see comments] Hughes GR, et al. **BMJ** 1989 Dec 9;299(6713):1414–5 (18 ref.) Comment in: BMJ 1990 Feb 10;300(6721):399.
Anticardiolipin antibody [letter; comment] Joss AW, et al. **BMJ** 1990 Feb 10;300(6721):399 Comment on: BMJ 1989 Dec 9;299(6713):1414–5.
Anticardiolipin antibodies and lupus anticoagulants comprise separate antibody subgroups with different phospholipid binding characteristics. McNeil HP, et al.
Br J Haematol 1989 Dec;73(4):506–13
The relationship of anticardiolipin antibodies to disease activity in systemic lupus erythematosus. Cooper RC, et al. **Br J Rheumatol** 1989 Oct;28(5):379–82
Lupus-like anticoagulants and lower extremity arterial occlusive disease. Eldrup-Jorgensen J, et al. **Circulation** 1989 Nov;80(5 Pt 2):III54–8
Cardiac abnormalities in systemic lupus erythematosus. Association with raised anticardiolipin antibodies [see comments] Nihoyannopoulos P, et al. **Circulation** 1990 Aug; 82(2):369–75 Comment in: Circulation 1990 Aug;82(2):636–8.
Thrombotic cutaneous nodules and hepatic vein thrombosis in the anticardiolipin syndrome. Farrant JM, et al.
Clin Exp Dermatol 1989 Jul;14(4):306–8
Anti-cardiolipin antibodies and HIV infection. Maclean C, et al. **Clin Exp Immunol** 1990 Aug;81(2):263–6
Kienböck's disease and antiphospholipid antibodies. Alijotas J, et al. **Clin Exp Rheumatol** 1990 May–Jun;8(3):297–8
Late thrombotic events in patients with temporal arteritis and anticardiolipin antibodies. Cid MC, et al.
Clin Exp Rheumatol 1990 Jul–Aug;8(4):359–63
Recurrent deep vein thrombosis, thromboembolic pulmonary hypertension and the 'primary' antiphospholipid syndrome. Jeffrey PJ, et al. **Clin Exp Rheumatol** 1989 Sep–Oct; 7(5):567–9
HLA-DR antigens and anticardiolipin antibodies [letter] McNeil HP, et al. **Clin Exp Rheumatol** 1990 Jul–Aug; 8(4):425–6
Anticardiolipin syndrome in childhood: a report of two cases. Ravelli A, et al. **Clin Exp Rheumatol** 1990 Jan–Feb; 8(1):95–8
Anticardiolipin antibodies possess anticoagulant activity which is blocked by a monoclonal antibody against a cross reacting idiotype of antiphospholipid antibodies. Valesini G, et al. **Clin Exp Rheumatol** 1989 Nov–Dec;7(6):615–8
The structural requirements for anti-cardiolipin antibody binding in sera from patients with syphilis and SLE. Costello PB, et al. **Clin Immunol Immunopathol** 1990 Sep; 56(3):393–400
Thrombocytopenia in systemic lupus erythematosus: association with antiplatelet and anticardiolipin antibodies. Rupin A, et al. **Clin Immunol Immunopathol** 1990 Jun; 55(3):418–26
Anticardiolipin antibodies in patients with rheumatoid arthritis. de Brum-Fernandes AJ, et al. **Clin Rheumatol** 1989 Dec;8(4):484–8
Anticardiolipin antibodies in patients with autoimmune diseases: isotype distribution and clinical associations. Font J, et al. **Clin Rheumatol** 1989 Dec;8(4):475–83
Anticardiolipin antibodies and autoimmune diseases. Harris EN. **Curr Opin Rheumatol** 1989 Aug;1(2):215–20 (27 ref.)
Biological true and false serological tests for syphilis: their relationship with anticardiolipin antibodies. Bernard C, et al. **Dermatologica** 1990;180(3):151–3
Cardiolipin antibody levels in endometriosis and systemic lupus erythematosus. Kennedy SH, et al. **Fertil Steril** 1989 Dec;52(6):1061–2
Occlusion of small hepatic veins associated with systemic lupus erythematosus with the lupus anticoagulant and anti-cardiolipin antibody. Nakamura H, et al.
Hepatogastroenterology 1989 Oct;36(5):393–7
The antiphospholipid syndrome. Many A, et al.
Isr J Med Sci 1989 Dec;25(12):674–7 (13 ref.)
Determination of anti-cardiolipin and other antibodies in HIV-1-infected patients. Bernard C, et al.
J Acquir Immune Defic Syndr 1990;3(5):536–9
Widespread cutaneous necrosis associated with cardiolipin antibodies. O'Neill A, et al. **J Am Acad Dermatol** 1990 Feb; 22(2 Pt 2):356–9
IgG class anti-cardiolipin antibody as a possible marker for evaluating fetal risk in patients with systemic lupus erythematosus. Shimada K, et al. **J Autoimmun** 1989 Dec; 2(6):843–9
Cardiolipin liposomes: a novel flow reagent for detection of anticardiolipin antibodies. Pirruccello SJ, et al.
J Clin Lab Anal 1990;4(3):236–40
Clinical neurology and brain histopathology in NZB/NZW F1 lupus mice. Kier AB. **J Comp Pathol** 1990 Feb; 102(2):165–77
Anticardiolipin antibodies in Behçet's disease. Bergman R, et al. **J Dermatol** 1990 Mar;17(3):164–7
Heat inactivation of serum potentiates anti-cardiolipin antibody binding in ELISA. Cheng HM, et al.
J Immunol Methods 1989 Nov 30;124(2):235–8
Anticardiolipin antibodies and Pneumocystis carinii pneumonia in patients with AIDS [letter] Coll J, et al.
J Infect 1990 Jul;21(1):120
Evidence for shared epitopes between cardiolipin and Pneumocystis carinii [letter] Masala C, et al.
J Infect Dis 1989 Oct;160(4):736–7
Anticardiolipin antibodies in patients with rabies vaccination induced neurological complications and other neurological diseases. Chaleomchan W, et al. **J Neurol Sci** 1990 May; 96(2–3):143–51
Heat treatment of serum and plasma induces false positive results in the antiphospholipid antibody ELISA. Hasselaar P, et al. **J Rheumatol** 1990 Feb;17(2):186–91
Retinal vein thrombosis in a patient with pernicious anemia and anticardiolipin antibodies. Heckerling PS, et al.
J Rheumatol 1989 Aug;16(8):1144–6
Anticardiolipin antibodies are no marker for survived myocardial infarction. Eber B, et al. **Klin Wochenschr** 1990 Jun 19;68(12):594–6
Anticardiolipin co-inhibitor in normal human serum [letter] Cheng HM. **Lancet** 1990 Sep 29;336(8718):822
Interlaboratory inconsistencies in detection of anticardiolipin antibodies [letter] [see comments] Coulam CB, et al. **Lancet** 1990 Apr 7;335(8693):865 Comment in: Lancet 1990 Jun 9;335(8702):1405.
Clinical relevance of specific IgG antibodies of cardiolipin [letter; comment] Faux JA, et al. **Lancet** 1989 Dec 16; 2(8677):1457–8 Comment on: Lancet 1989 Oct 21;2(8669):987–8.
Anticardiolipin antibodies (ACA) directed not to cardiolipin but to a plasma protein cofactor. Galli M, et al. **Lancet** 1990 Jun 30;335(8705):1544–7
Anticardiolipin antibodies and binding of anionic phospholipids and serum protein [letter] Harris EN, et al. **Lancet** 1990 Aug 25;336(8713):505–6
Anti-phospholipid antibody syndrome and pre-eclampsia [letter] [see comments] Kilpatrick DC, et al. **Lancet** 1989 Oct 21;2(8669):987–8 Comment in: Lancet 1989 Dec 16;2(8677):1457–8.
Lack of association between anticardiolipin antibodies and heart valve disease in Chinese patients with systemic lupus erythematosus [letter] Li EK, et al. **Lancet** 1990 Aug 25; 336(8713):504–5
Anticardiolipin cofactor(s) and differential diagnosis of autoimmune disease [letter] Matsuura E, et al. **Lancet** 1990 Jul 21;336(8708):177–8
Cardiolipin antibody assays [letter; comment] Peter JB. **Lancet** 1990 Jun 9;335(8702):1405 Comment on: Lancet 1990 Apr 7;335(8693):865.
Anti-phospholipid antibodies and ischaemic optic neuropathy [letter] Watts MT, et al. **Lancet** 1990 Mar 10; 335(8689):613–4
Antiphospholipid antibodies and the antiphospholipid syndrome in systemic lupus erythematosus. A prospective analysis of 500 consecutive patients. Alarcón-Segovia D, et al. **Medicine (Baltimore)** 1989 Nov;68(6):353–65
The "primary" antiphospholipid syndrome: major clinical and serological features. Asherson RA, et al.
Medicine (Baltimore) 1989 Nov;68(6):366–74
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 11-1990. A 38-year-old woman with fever, skin lesions, thrombocytopenia, and venous thromboses. **N Engl J Med** 1990 Mar 15; 322(11):754–69
Antiphospholipid antibodies and cerebral ischemia in young people. Brey RL, et al. **Neurology** 1990 Aug;40(8):1190–6
Anticardiolipin antibodies in Sneddon's syndrome. Kalashnikova LA, et al. **Neurology** 1990 Mar;40(3 Pt 1):464–7
Cerebrovascular and neurologic disease associated with antiphospholipid antibodies: 48 cases. Levine SR, et al.
Neurology 1990 Aug;40(8):1181–9
Heparin therapy for pregnant women with lupus anticoagulant or anticardiolipin antibodies. Rosove MH, et al. **Obstet Gynecol** 1990 Apr;75(4):630–4
Anticardiolipin antibody levels in diabetic subjects with and

without coronary artery disease. Hendra TJ, et al. **Postgrad Med J** 1989 Mar;65(761):140–3

Recurrent thrombosis and anticardiolipin antibodies associated with adenocarcinoma of the lung. Shaukat MN, et al. **Postgrad Med J** 1990 Apr;66(774):316–8

Antiphospholipid antibodies and Mycoplasma pneumoniae infection. Snowden N, et al. **Postgrad Med J** 1990 May; 66(775):356–62

Anti–phospholipid antibodies are directed against a complex antigen that includes a lipid–binding inhibitor of coagulation: beta 2–glycoprotein I (apolipoprotein H). McNeil HP, et al. **Proc Natl Acad Sci U S A** 1990 Jun; 87(11):4120–4

Association of anti–DNA and anticardiolipin antibodies in systemic lupus erythematosus. de Oliveira RM, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Mar–Apr; 44(2):73–5

Cyclophosphamide use in a young woman with antiphospholipid antibodies and recurrent cerebrovascular accident. Perez MC, et al. **South Med J** 1989 Nov; 82(11):1421–4

Prospective study of anticardiolipin antibodies in stroke. Kushner MJ. **Stroke** 1990 Feb;21(2):295–8

Crossreactivity of antibodies directed against cardiolipin, DNA, endothelial cells and blood platelets. Hasselaar P, et al. **Thromb Haemost** 1990 Apr 12;63(2):169–73

Impairment of the protein C anticoagulant pathway in a patient with systemic lupus erythematosus, anticardiolipin antibodies and thrombosis. Amer L, et al. **Thromb Res** 1990 Jan 15;57(2):247–58

Anticardiolipin antibodies and thrombosis: buffer's influence on the detection and quantitation of anticardiolipin antibody measured by ELISA. Reber G, et al. **Thromb Res** 1990 Jan 15;57(2):215–26

Anticardiolipin antibodies by an enzyme–linked immunosorbent assay: fundamental studies on the conditions for antigen–application and specificity of the assay. Ichikawa Y, et al. **Tokai J Exp Clin Med** 1989 Apr; 14(2):103–12

[The anticardiolipin syndrome after plastic surgery of the breasts] Alušík S, et al. **Rozhl Chir** 1990 Apr;69(4):298–301 (Eng. Abstr.) **(Cze)**

[Renal cortex ischemia, right atrial thrombosis and coronary occlusion in anti–phospholipid antibody syndrome] Ramdane M, et al. **Nephrologie** 1989;10(4):189–93 (Eng. Abstr.) **(Fre)**

[Value of anticardiolipin antibody assay in human immunodeficiency virus infection] Lafeuillade A, et al. **Presse Med** 1990 Jun 30;19(26):1225–7 (Eng. Abstr.) **(Fre)**

[A case from practice (168). Lupus–like syndrome with partial C2 and C4 deficiency – positive anticardiolipin antibodies] Müller R. **Schweiz Rundsch Med Prax** 1990 Mar 20;79(12):375–6 **(Ger)**

[Significance of anticardiolipin antibodies in connective tissue diseases] Scagliusi P, et al. **Minerva Med** 1989 Oct; 80(10):1059–68 (Eng. Abstr.) **(Ita)**

[Clinical analysis of anti–cardiolipin antibody positive patients with systemic lupus erythematosus] Otoyama K, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Apr;99(5):537–41 (Eng. Abstr.) **(Jpn)**

[Clinical significance of anti–phospholipids antibody assay] Akizuki M, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:624–6 **(Jpn)**

[Fundamental examination and the reference values of anticardiolipin antibodies] Hayama K, et al. **Rinsho Byori** 1989 Oct;37(10):1181–6 (Eng. Abstr.) **(Jpn)**

[The antiphospholipid syndrome] Omdal R, et al. **Tidsskr Nor Laegeforen** 1989 Nov 10;109(31):3214–5 (Eng. Abstr.) **(Nor)**

[Anticardiolipin antibodies. Clinical significance and limits of the method] Bañales JL, et al. **Arch Inst Cardiol Mex** 1989 Jul–Aug;59(4):393–7 (Eng. Abstr.) **(Spa)**

[Analysis of cardiolipin antibodies should be done before penicillamine treatment] Kjernsmo A. **Lakartidningen** 1989 Nov 29;86(48):4208 **(Swe)**

[Anticardiolipin antibodies in autoimmune rheumatic diseases] Ergüven S, et al. **Mikrobiyol Bul** 1989 Jan; 23(1):1–11 (Eng. Abstr.) **(Tur)**

METABOLISM

Mechanism and localization of cardiolipin biosynthesis revisited: evidence for the identical mechanism and different localization in mitochondrial and submitochondrial membranes isolated from guinea pig and rat liver. Stuhne–Sekalec L, et al. **Biochem Cell Biol** 1990 Jun;68(6):922–35

Relationship between lipid saturation and lipid–protein interaction in liver mitochondria modified by catalytic hydrogenation with reference to cardiolipin molecular species. Schlame M, et al. **Biochem J** 1990 Jan 1; 265(1):79–85

1H–n.m.r. evaluation of the ferricytochrome c–cardiolipin interaction. Effect of superoxide radicals. Soussi B, et al. **Biochem J** 1990 Jan 1;265(1):227–32

Incorporation of cytochrome oxidase into cardiolipin bilayers and induction of nonlamellar phases. Powell GL, et al. **Biochemistry** 1990 May 29;29(21):5127–32

Structure of the adriamycin–cardiolipin complex. Role in mitochondrial toxicity. Goormaghtigh E, et al. **Biophys Chem** 1990 Apr;35(2–3):247–57 (49 ref.)

A spin–label electron spin resonance study of the binding of mitochondrial creatine kinase to cardiolipin. Cheneval D, et al. **Eur J Biochem** 1989 Dec 8;186(1–2):415–9

Modification of the biosynthesis and composition of polyglycerophosphatides in outer and inner mitochondrial membranes by cytidine liponucleotides. Stuhne–Sekalec L, et al. **Membr Biochem** 1989;8(3):165–75

PHARMACOLOGY

Cardiolipin–sensitive phospholipase C in subcellular fractions of rabbit myocardium. Wolf RA. **Am J Physiol** 1989 Nov; 257(5 Pt 1):C926–35

Expression of protein kinase CI in NIH 3T3 cells increases its growth response to specific activators. Cuadrado A, et al. **FEBS Lett** 1990 Jan 29;260(2):281–4

Comparative studies on lipid and colony–stimulating factor–induced macrophage growth. Yui S, et al. **J Immunol** 1990 Feb 15;144(4):1461–5

CARDIOLOGY

see related
CARDIOVASCULAR DISEASES
HEART DISEASES
VASCULAR DISEASES

Myocardial infarction rehabilitation in 1990. Role of the general practitioner, cardiologist and paramedical team. Messin R. **Acta Cardiol** 1990;45(2):95–9

Partnership of Federal agencies and the cardiologist in research, teaching and practice. **Am J Cardiol** 1967 Aug; 20(2):270–84

Glossary of cardiologic terms related to physical diagnosis and history. **Am J Cardiol** 1967 Aug;20(2):285–6

Editorial board meeting of the American Journal of Cardiology—March 1990. Roberts WC. **Am J Cardiol** 1990 May 1;65(16):1162–8

The carpal tunnel syndrome in cardiologists [letter] Stevens K. **Ann Intern Med** 1990 May 15;112(10):796

An integrated model of cardiological consultation and primary care medicine [letter] Flugelman AA, et al. **Br J Gen Pract** 1990 Jun;40(335):259

Humane cardiology—melting the ice in the heart. Beamish RE. **Can J Cardiol** 1990 May;6(4):137–9

Legal issues in cardiopulmonary medicine [letter] Vevaina JR. **Chest** 1990 Sep;98(3):781

The report of the American Heart Association task force on strategies to increase federal research funding. Rosen MR, et al. **Circulation** 1990 Oct;82(4):1549–59

The current position of cardiac radiology in the United Kingdom. Murphy KP, et al. **Clin Radiol** 1989 Sep; 40(5):455–6

Predicting 1–year outcome following acute myocardial infarction: physicians versus computers. Gilpin EA, et al. **Comput Biomed Res** 1990 Feb;23(1):46–63

Why so many congresses? Do we really have to go to this one? [editorial] Hugenholtz PG. **Eur Heart J** 1990 May; 11(5):378–9

The faith in the future. Fontan F. **Eur J Cardiothorac Surg** 1988;2(1):1–7

Why so many congresses? Do we really have to go to this one? [editorial] Hugenholtz PG. **Int J Cardiol** 1990 Aug; 28(2):137–8

21st Bethesda conference: Ethics in cardiovascular medicine. October 5–6, 1989, Bethesda, Maryland. **J Am Coll Cardiol** 1990 Jul;16(1):1–36

The American College of Cardiology and our affiliate–in–training members. Conti CR. **J Am Coll Cardiol** 1990 Mar 15;15(4):910–2

Benefiting through strategic alliances. Conti CR. **J Am Coll Cardiol** 1990 Apr;15(5):1196–7

21st Bethesda conference: Ethics in cardiovascular medicine. Task Force V: The relation of cardiovascular specialists to industry, institutions and organizations. Conti CR, et al. **J Am Coll Cardiol** 1990 Jul;16(1):30–3

Clinical competence in hemodynamic monitoring. A statement for physicians from the ACP/ACC/AHA Task Force on Clinical Privileges in Cardiology. Friesinger GC 2d, et al. **J Am Coll Cardiol** 1990 Jun;15(7):1460–4

21st Bethesda conference: Ethics in cardiovascular medicine. Task Force I: Background and general principles. Parmley WW, et al. **J Am Coll Cardiol** 1990 Jul;16(1):7–10

Clinical competence in adult echocardiography. A statement for physicians from the ACP/ACC/AHA Task Force on Clinical Privileges in Cardiology. Popp RL, et al. **J Am Coll Cardiol** 1990 Jun;15(7):1465–8

21st Bethesda conference: Ethics in cardiovascular medicine. Task Force III: Perspective on the allocation of limited resources in cardiovascular medicine. Ryan TJ, et al. **J Am Coll Cardiol** 1990 Jul;16(1):17–23

Clinical competence in percutaneous transluminal coronary angioplasty. A statement for physicians from the ACP/ACC/AHA Task Force on Clinical Privileges in Cardiology. Ryan TJ, et al. **J Am Coll Cardiol** 1990 Jun; 15(7):1469–74

21st Bethesda conference: Ethics in cardiovascular medicine. Keynote address. Thier SO. **J Am Coll Cardiol** 1990 Jul; 16(1):5–6

21st Bethesda conference: Ethics in cardiovascular medicine. Task Force II: The relation of cardiovascular specialists to patients, other physicians and physician–owned organizations. Winters WL Jr, et al. **J Am Coll Cardiol** 1990 Jul;16(1):11–6

Viewpoint on the echocardiographic presentations at the American College of Cardiology Annual Scientific Sessions. Armstrong WF. **J Am Soc Echocardiogr** 1988 Jul–Aug;1(4):308–10

The human face of computers: necessary at present [editorial] Tonkin A. **Med J Aust** 1989 Oct 16;151(8):425

A heart–to–heart talk with an English friend [interview by Richard L. Reece] Anderson RH. **Minn Med** 1989 Oct; 72(10):565–9, 571

Computers in cardiology [letter; comment] Cheng TO. **N Z Med J** 1989 Jul 26;102(872):390 Comment on: N Z Med J 1989 Apr 12;102(865):154–5.

[Cardiovascular disease prevention. Strategy of the French Federation of Cardiology] Vacheron A. **Bull Acad Natl Med** 1990 Feb;174(2):219–25; discussion 225–30 (Eng. Abstr.) **(Fre)**

[What is the position of atherogenesis in current clinical cardiology?] Kreuzer H. **Arzneimittelforschung** 1990 Mar; 40(3A):373–6 (0 ref.) (Eng. Abstr.) **(Ger)**

[The Italian Society of Cardiology in 1989 (editorial)] Magnani B. **Cardiologia** 1990 Jan;35(1):5–8 **(Ita)**

[1st National Meeting on Recommendations, Competencies, and Consensus in Cardiology. 26–27 November 1988, Lisbon] **Rev Port Cardiol** 1989 Sep;8 Suppl 2:1–493 **(Por)**

[Cardiology in rural areas] Cintrón G, et al. **Bol Asoc Med P R** 1990 Jan;82(1):2–5 (Eng. Abstr.) **(Spa)**

ECONOMICS

Limited research funds and cardiac medicine without cardiac surgery [editorial] Roberts WC. **Am J Cardiol** 1990 Feb 15;65(7):536–7

Political action and the future of cardiology. Goodman J. **Hospitals** 1989 Oct 20;63(20):44

Hospitals pursue heart programs—despite pitfalls. Souhrada L. **Hospitals** 1989 Oct 20;63(20):40–6, 49–52, 54–5

EDUCATION

The effect of level of expertise on answer key development. Norcini JJ, et al. **Acad Med** 1990 Sep;65(9 Suppl):S15–6

Teaching preventive cardiology through community programs. Davidson DM. **Am J Prev Med** 1990;6(2 Suppl):93–7

Evaluation of an educational program in preventive cardiology. Dismuke SE, et al. **Am J Prev Med** 1990 Mar–Apr;6(2):99–105

Teaching preventive cardiology in primary care: an integrated curricular approach. McBride PE. **Am J Prev Med** 1990;6(2 Suppl):70–6

Preventive cardiology education and practice in residency training: residents' attitudes, perceptions, and practices. Scott CS, et al. **Am J Prev Med** 1990;6(2 Suppl):60–9

Teaching preventive cardiology in the pediatric setting. Williams CL, et al. **Am J Prev Med** 1990;6(2 Suppl):84–92

Cardiopulmonary physicians' preferred formats for continuing medical education. Breeling JL, et al. **Chest** 1990 Sep;98(3):746–8

Clinical skill–building simulations in cardiology: HeartLab and EkgLab. Bergeron BP, et al. **Comput Methods Programs Biomed** 1989 Oct–Nov; 30(2–3):111–26

Training programs in the United States in adult cardiology, pediatric cardiology and cardiothoracic surgery. **J Am Coll Cardiol** 1989 Oct;14(4):1100–24

Prevention and treatment of heart disease in China. Sloman G. **Med J Aust** 1990 Sep 3;153(5):289–90

Advanced formation of cardiologists specialising in nuclear cardiology a personal view. Ferreira R. **Rev Port Cardiol** 1989 Dec;8(12):879–82

[Recommendations on echocardiography training (editorial)] **Rev Esp Cardiol** 1990 Mar;43(3):135–6 **(Spa)**

HISTORY

The roots of modern British cardiology. Krikler DM. **Br Heart J** 1989 Sep;62(3):230–4

Samuel A Levine's first world war encounters with Mackenzie and Lewis. Wooley CF, et al. **Br Heart J** 1990 Aug;64(2):166–70

Cardiovascular medicine at the University of Calgary: a vignette of recent history. Wyse DG, et al. **Can J Cardiol** 1990 Mar;6(2):50–2

Clinical cardiology. Conn HL Jr. **Clin Cardiol** 1989 Oct; 12(10):581–4

Profiles in cardiology. Edward F. Bland. Friedlich AL. **Clin Cardiol** 1990 Jul;13(7):513–5

Sir John Parkinson—a leader in cardiology. McDonald L. **Clin Cardiol** 1989 Sep;12(9):546–8

Carl J. Wiggers—the inventive physiologist, 1883–1963. Silverman B. **Clin Cardiol** 1989 Dec;12(12):731–4

[August Hoffmann—a pioneer in heart diagnosis] Schwartze D. **Z Gesamte Inn Med** 1989 Dec 1;44(23):714–7 (Eng. Abstr.) **(Ger)**

[Pavel Evgenevich Lukomskiĭ and his school (on the 90th anniversary of his birth)] **Kardiologiia** 1989 Oct;29(10):5–9 **(Rus)**

[Founder of the Ural school of therapeutists and cardiologists (on the centennial of B. P. Kushelevskiĭ's birthday)] Barats SS, et al. **Kardiologiia** 1990 May;30(5):127–8 **(Rus)**

[Development of A. L. Miasnikov's concepts in present–day studies on the role of lipids in the pathogenesis of

atherosclerosis (editorial)] Gerasimova EN. **Kardiologiia** 1989 Nov;29(11):20–5 **(Rus)**

[Eminent cardiologist (on the 90th anniversary of A. L. Miasnikov's birthday)] Shkhvatsabaia IK, et al. **Kardiologiia** 1989 Nov;29(11):6–10 **(Rus)**

[A. L. Miasnikov's views on atherosclerosis and their influence on several further studies (editorial)] Vikhert AM. **Kardiologiia** 1989 Nov;29(11):15–20 **(Rus)**

[The 450th anniversary of printing in Mexico: cardiology works in New Spain] de Micheli A. **Arch Inst Cardiol Mex** 1989 Nov–Dec;59(6):545–50 **(Spa)**

INSTRUMENTATION

Transvenous atrial septal defect occlusion in piglets with a "buttoned" double-disk device. Sideris EB, et al. **Circulation** 1990 Jan;81(1):312–8

Computerized electrocardiographic interpretation: an analysis of clinical utility in 5110 electrocardiograms. Thomson A, et al. **Med J Aust** 1989 Oct 16;151(8):428–30

[Computerized precordial mapping—the Mapcard system] Gil V, et al. **Rev Port Cardiol** 1989 Jun;8(6):447–53 (Eng. Abstr.) **(Por)**

LEGISLATION & JURISPRUDENCE

Medical malpractice claims in cardiology. Kuehm SL, et al. **N J Med** 1990 May;87(5):393–8

MANPOWER

Staffing in cardiology in the United Kingdom 1988. Fifth biennial survey [published erratum appears in Br Heart J 1990 Apr;63(4):262] Chamberlain D, et al. **Br Heart J** 1989 Dec;62(6):482–7

Staffing in cardiology in the United Kingdom 1988: Fifth biennial survey [letter] Chamberlain D. **Br Heart J** 1990 Apr;63(4):262

METHODS

Doppler echocardiography in modern cardiology. O'Shea JP, et al. **Chest** 1989 Dec;96(6):1390–2 (11 ref.)

The case of GISSI in changing the attitudes and practice of Italian cardiologists. Tognoni G, et al. **Stat Med** 1990 Jan–Feb;9(1–2):17–26; discussion 26–7

[Methodologic and methodical problems of hygiene in cardiologic studies] Stolbyn BM. **Gig Sanit** 1989 Dec;(12):47–50 **(Rus)**

STANDARDS

Beyond efficacy testing: introducing preventive cardiology into primary care. Kottke TE, et al. **Am J Prev Med** 1990; 6(2 Suppl):77–83

Clinical competence in adult echocardiography. A statement for physicians from the ACP/ACC/AHA Task Force on Clinical Privileges in Cardiology. **Circulation** 1990 Jun; 81(6):2032–5

Clinical competence in hemodynamic monitoring. A statement for physicians from the ACP/ACC/AHA Task Force on Clinical Privileges in Cardiography. **Circulation** 1990 Jun;81(6):2036–40

Clinical competence in percutaneous transluminal coronary angioplasty. A statement for physicians from the ACP/ACC/AHA Task Force on Clinical Privileges in Cardiology. **Circulation** 1990 Jun;81(6):2041–6

Invited letter concerning: certification of perfusionists [letter] Fosburg RG, et al. **J Thorac Cardiovasc Surg** 1990 Sep; 100(3):455

Cardiology and cardiothoracic surgery in Cape Town [editorial] Commerford PJ, et al. **S Afr Med J** 1990 Apr 21;77(8):381–2

[Basic principles of the prevention of cardiovascular diseases in light of knowledge and opinions of the Polish community. III. Possibilities of the use of cardiologic services and their quality in the opinion of the Polish community] Rywik S, et al. **Kardiol Pol** 1989;32 Suppl 2:56–61 (Eng. Abstr.) **(Pol)**

STATISTICS & NUMERICAL DATA

[Algorithms for automatic recognition of basic points in the rheogram] Demina GN, et al. **Kosm Biol Aviakosm Med** 1990 Jan–Feb;24(1):44–7 **(Rus)**

[Cardiovascular surgery in Spain in 1988. Registry of operations of the Spanish Society of Cardiovascular Surgery] **Rev Esp Cardiol** 1990 Apr;43(4):205–11 (Eng. Abstr.) **(Spa)**

TRENDS

A symposium: New trends in the treatment of rhythm disorders. February 6–7, 1989, Acapulco, Mexico. Proceedings. **Am J Cardiol** 1989 Dec 5;64(20):1J–97J

An outlook on future trends in the treatment of rhythm disorders. Dreifus LS. **Am J Cardiol** 1989 Dec 5; 64(20):2J–4J

Is there a future for preventive cardiology? Luepker RV. **Am J Prev Med** 1990;6(2 Suppl):98–100

The coming of age of cardiology in Singapore [editorial] Tan AT, et al. **Ann Acad Med Singapore** 1990 Jan;19(1):1–2

The time has come for vascular medicine. Cooke JP, et al. **Ann Intern Med** 1990 Jan 15;112(2):138–9

Crisis in cardiovascular research in Britain. Oliver MF. **Br Heart J** 1989 Oct;62(4):325–7

Current concepts in cardiac imaging. Evolving concepts in clinical cardiology. Satellite symposia to the annual meeting of the Canadian Cardiovascular Society, Vancouver, British Columbia, October 24, 1989, Abstracts. **Can J Cardiol** 1990 Jan;6 Suppl A:1A–10A

What is the future for cardiac radiology? Wilde P. **Clin Radiol** 1989 Sep;40(5):451–2

Confessions of creeping obsolescence. Weisse AB. **Hosp Pract [Off]** 1990 Jul 15;25(7):21, 25, 28

New directions for microvascular research in hypertension [editorial; comment] Bohlen HG. **Hypertension** 1990 Apr; 15(4):427–8 Comment on: Hypertension 1990 Apr;15(4):415–9. Comment on: Hypertension 1990 Apr;15(4):420–6.

The future of adult cardiology. Council on Long Range Planning and Development in cooperation with the American College of Cardiology. **JAMA** 1989 Nov 24; 262(20):2874–8

Caution: clear and engaged mind at work [interview by Richard L. Reece] Edwards JE. **Minn Med** 1989 Oct; 72(10):564, 600–2

Cardiology. Smith LD, et al. **Postgrad Med J** 1990 Apr; 66(774):263–79 (142 ref.)

Preventive cardiology: a progress report. Pyörälä K. **Prev Med** 1990 Jan;19(1):78–96 (87 ref.)

Preventive cardiology: what lies ahead? Rose G. **Prev Med** 1990 Jan;19(1):97–104

[Heart diseases in children and congenital heart defects. The past, present and future from 20 years' experience] Normand J. **Arch Mal Coeur** 1990 May;83(5):611–3 **(Fre)**

[Creating models of the development of a computer-assisted system of cardiovascular services] Baran-Jarosz B, et al. **Kardiol Pol** 1989;32 Suppl 2:71–82 (14 ref.) (Eng. Abstr.) **(Pol)**

[The state of the art in cardiology: realities and perspectives of ischemic cardiopathy for the 90's] Ferreira R. **Acta Med Port** 1989 Nov;Suppl 2:S23–31 (119 ref.) **(Por)**

[The state of the art in pediatric cardiology] Sampayo F. **Acta Med Port** 1989 Nov;Suppl 2:S21–2 **(Por)**

[Impressions of an international congress of cardiology: current trends in research] da Luz PL. **Arq Bras Cardiol** 1989 Feb;52(2):55–7 **(Por)**

[Cardiology as an art. In honor of an old concept] Lobo AF. **Rev Port Cardiol** 1989 Oct;8(10):721–2 **(Por)**

[Genetic control of cardiac function and the new prospects of clinical cardiology] Meerson FZ. **Kardiologiia** 1990 Apr; 30(4):126–8 **(Rus)**

[Priority trends in scientific research on the problem of ischemic disorders of cerebrovascular circulation] Vereshchagin NV, et al. **Zh Nevropatol Psikhiatr** 1990; 90(1):3–8 (Eng. Abstr.) **(Rus)**

[Scope of the cardiology specialty: point of view of the Andalusian Health Service (AHS) (letter)] Piñero Gálvez C. **Rev Esp Cardiol** 1989 Nov;42(9):627–8 **(Spa)**

CARDIOMYOPATHIES see MYOCARDIAL DISEASES

CARDIOMYOPATHY, ALCOHOLIC

BLOOD

[Dynamics of blood viscosity indices in patients with alcoholic myocardiodystrophy] Kochua IN, et al. **Ter Arkh** 1989;61(11):108–11 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

[Specific immunologic diagnosis of alcoholic myocardial dystrophy] Moskalenko EP, et al. **Kardiologiia** 1989 Nov; 29(11):113–6 (Eng. Abstr.) **(Rus)**

[Laboratory diagnosis of visceral disorders in alcoholism] Staroverov AT, et al. **Klin Med (Mosk)** 1990 Jan; 68(1):26–35 (49 ref.) **(Rus)**

DRUG THERAPY

[Therapeutic effect of antioxidant dibunol in experimental alcoholic cardiomyopathy] Antonenkov VD, et al. **Biull Eksp Biol Med** 1990 May;109(5):446–9 (Eng. Abstr.) **(Rus)**

ETIOLOGY

[Alcoholic cardiomyodystrophy] Schmidt K. **Z Arztl Fortbild (Jena)** 1989;83(15):751–7 (59 ref.) **(Ger)**

[The relation of abstinence analgesia to the development of cardiac disorders in the ethanol withdrawal syndrome in rats] Nuzhnyĭ VP. **Biull Eksp Biol Med** 1989 Sep; 108(9):274–6 (Eng. Abstr.) **(Rus)**

[Alcohol and cerebrovascular and cardiac pathology (review of the literature)] Voloshin PV, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):122–6 (55 ref.) **(Rus)**

METABOLISM

[Characteristics of final stages of glycolysis in the myocardium of rats with various alcohol motivation] Kiselevskiĭ IuV, et al. **Vopr Med Khim** 1990 May–Jun; 36(3):78–9 (Eng. Abstr.) **(Rus)**

MORTALITY

Relationship between morbidity and mortality due to alcoholic cardiomyopathy and alcohol consumption in Australia. Smith DI. **Adv Alcohol Subst Abuse** 1990; 8(3–4):57–65

[Prognostic factors in dilated cardiomyopathy] Sachs RN, et al. **Ann Med Interne (Paris)** 1989;140(8):683–6 (Eng. Abstr.) **(Fre)**

[Catecholamine levels in various regions of the heart in sudden cardiac death] Smirnova EP, et al. **Kardiologiia** 1990 Feb;30(2):98–100 **(Rus)**

PATHOLOGY

Sudden death in an alcoholic with intramyocardial small vessel disease. Burns J, et al. **Med Sci Law** 1990 Apr; 30(2):106–8

[Ultrastructural characteristics of the myocardium of newborn minipigs in long-term parental alcohol intake] Mardanova GV, et al. **Biull Eksp Biol Med** 1990 Apr; 109(4):398–400 **(Rus)**

[Disorders of myocardial morphology in rats after 20-week alcoholization and 6-week abstention] Shol'ts DM, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):244–7 (Eng. Abstr.) **(Rus)**

[The localization of the components of the extracellular matrix and cytoskeleton in myocardial biopsies in alcoholic cardiomyopathy] Rukosuev VS, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(2):88–94 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Alcoholic cardiomyopathy. Kosinski RM. **N J Med** 1989 Oct; 86(10):773–5

[Functional state of the left and right heart ventricles in chronic alcoholic damage to the heart (findings of two-dimensional echocardiography)] Sobol' IuS, et al. **Kardiologiia** 1989 Nov;29(11):107–11 (Eng. Abstr.) **(Rus)**

[Pharmacologic analysis of the role of catecholamines in the mechanism of alcoholic affection of the heart] Nuzhnyĭ VP, et al. **Patol Fiziol Eksp Ter** 1989 May–Jun;(3):36–8 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Importance of abstention from alcohol in alcoholic heart disease. Mølgaard H, et al. **Int J Cardiol** 1990 Mar; 26(3):373–5

THERAPY

[Reversibility of alcoholic myocardiopathy (letter)] Arranz Caso JA, et al. **Med Clin (Barc)** 1989 Sep 23;93(8):316–7 **(Spa)**

CARDIOMYOPATHY, CHAGAS see CHAGAS CARDIOMYOPATHY

CARDIOMYOPATHY, CONGESTIVE

Asymptomatic cardiomyopathy presenting as cardiac arrest in the Day Surgical Unit [see comments] Hanson CW 3d. **Anesthesiology** 1989 Dec;71(6):982–4 Comment in: Anesthesiology 1990 Apr;72(4):771–2. Comment in: Anesthesiology 1990 Apr;72(4):772–3. Comment in: Anesthesiology 1990 Jun;72(6):1102.

Idiopathic dilated cardiomyopathy [letter] Poole-Wilson PA. **BMJ** 1990 May 19;300(6735):1340–1

A model of myocarditis in humans [comment] Mason JW, et al. **Circulation** 1990 Mar;81(3):1154–6 Comment on: Circulation 1990 Mar;81(3):922–8.

Peripartum myocarditis and cardiomyopathy [see comments] Midei MG, et al. **Circulation** 1990 Mar;81(3):922–8 Comment in: Circulation 1990 Mar;81(3):1154–6.

Systolic heart failure and the cardiomyopathy of overload [see comments] Messineo FC. **Hosp Pract [Off]** 1990 Sep 30;25(9A):66–70, 77–9, 82–4 (6 ref.) Comment in: Hosp Pract [Off] 1990 Sep 30;25(9A):6–8.

Congestive cardiomyopathy in children [editorial; comment] Guntheroth WG. **J Am Coll Cardiol** 1990 Jan;15(1):194–5 Comment on: J Am Coll Cardiol 1990 Jan;15(1):189–93.

The natural history of dilated cardiomyopathy in New Zealand. Ikram H, et al. **N Z Med J** 1989 Nov 8; 102(879):581–2

Image interpretation session. Hypereosinophilic syndrome. **Radiographics** 1990 Jan;10(1):136–8

[Cardiomyopathies. Clinical and experimental studies for the past 25 years and prospective views] Kawai C. **Nippon Naika Gakkai Zasshi** 1989 Aug;78(8):1119–29 **(Jpn)**

[Progress in the treatment of myocardial diseases] Toshima H. **Nippon Naika Gakkai Zasshi** 1990 Mar 10;79(3):363–6 **(Jpn)**

[Dilated cardiomyopathy: clinical aspects, diagnosis and treatment] Serbin VI, et al. **Pediatriia** 1989;(10):86–91 (82 ref.) **(Rus)**

[Dilated myocardiopathy in children] Cabrera A, et al. **Rev Esp Cardiol** 1990 Apr;43(4):246–50 (Eng. Abstr.) **(Spa)**

BLOOD

Correlation of selenium, glutathione peroxidase activity and lipoperoxidation rates in dilated cardiomyopathy. Li Y, et

al. **Chin Med J [Engl]** 1989 Sep;102(9):670–1
[Changes in antioxidative enzyme activity in patients with chronic heart failure] Saifutdinov RI, et al. **Kardiologiia** 1990 Mar;30(3):65–8 (Eng. Abstr.) **(Rus)**
[Serum neopterin in dilated cardiomyopathy] Nasonov EL, et al. **Ter Arkh** 1990;62(4):72–5 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Reversible cardiomyopathy associated with cocaine intoxication. Chokshi SK, et al. **Ann Intern Med** 1989 Dec 15;111(12):1039–40
Reversible dilated cardiomyopathy induced by methamphetamine. Jacobs LJ. **Clin Cardiol** 1989 Dec; 12(12):725–7
[Congestive cardiomyopathy after chronic inhalation of trichloroethylene] Delepoulle F, et al. **Arch Fr Pediatr** 1989 Oct;46(8):599–600 (Eng. Abstr.) **(Fre)**

CLASSIFICATION

[The necessity of a precise definition of dilated cardiomyopathies (letter)] Juillière Y, et al. **Arch Mal Coeur** 1989 Jul–Aug;82(8):1479–80 **(Fre)**

COMPLICATIONS

Low atrial tachycardia as primary cause of the heart failure complicating congestive cardiomyopathy. Antonelli Incalzi R, et al. **Acta Cardiol** 1989;44(4):335–9
Idiopathic dilated cardiomyopathy and atopic disease: epidemiologic evidence for an association with asthma. Coughlin SS, et al. **Am Heart J** 1989 Oct;118(4):768–74
Effect of acute hemodynamic decompensation on electrical inducibility of ventricular arrhythmias in patients with dilated cardiomyopathy and complex nonsustained ventricular arrhythmias. Kulick DL, et al. **Am Heart J** 1990 Apr;119(4):878–83
Changes in regional adrenergic tone during sustained ventricular tachycardia associated with coronary artery disease or idiopathic dilated cardiomyopathy. Ellenbogen KA, et al. **Am J Cardiol** 1990 Jun 1;65(20):1334–8
Fractal clustering of ventricular ectopy in dilated cardiomyopathy. Stein KM, et al. **Am J Cardiol** 1990 Jun 15;65(22):1512–5
Dilated cardiomyopathy associated with chylous ascites. Hurley MK, et al. **Am J Gastroenterol** 1989 Dec; 84(12):1567–9
Marked cardiac involvement in limb–girdle muscular dystrophy. Kawashima S, et al. **Am J Med Sci** 1990 Jun; 299(6):411–4
Arterial microembolisation: an unusual presentation of dilated cardiomyopathy. Gillespie RL, et al. **Br Heart J** 1990 Jan; 63(1):63–5
Effects of milrinone treatment in cardiomyopathic hamsters (CHF 147) with severe congestive heart failure. Desjardins S, et al. **Cardiovasc Res** 1989 Jul;23(7):620–30
Anomalous aortic origin of the left anterior descending coronary artery with dilated cardiomyopathy. Okura T, et al. **Cathet Cardiovasc Diagn** 1990 Jan;19(1):45–8
Cardiomyopathy unrecognized as a cause of hepatic failure. Hoffman BJ, et al. **J Clin Gastroenterol** 1990 Jun; 12(3):306–9
Superior vena caval thrombosis in a child: an uncommon presentation of idiopathic dilated cardiomyopathy. Kelly HA, et al. **J Paediatr Child Health** 1990 Feb;26(1):62–4
Analysis of ventricular arrhythmias in patients with dilated cardiomyopathy—relationship between the effects of antiarrhythmic agents and severity of myocardial lesions. Takarada A, et al. **Jpn Circ J** 1990 Mar;54(3):260–71
The automatic implantable cardioverter/defibrillator for a life threatening arrhythmia in a case of post–partum cardiomyopathy. Bower M, et al. **Postgrad Med J** 1989 Dec;65(770):932–5
Arrhythmias in idiopathic dilated cardiomyopathy. A preliminary study. Chetty S, et al. **S Afr Med J** 1990 Feb 17;77(4):190–3
[Recurrent syncope in dilated cardiomyopathy] Bach P, et al. **Internist (Berl)** 1990 Jul;31(7):481–5 **(Ger)**
[Prevention of thromboembolism in heart infarct, cardiomyopathy and atrial fibrillation] Straub PW. **Schweiz Med Wochenschr** 1990 Mar 17;120(11):365–71 (49 ref.) (Eng. Abstr.) **(Ger)**
[Right ventricular thrombosis in association with dilated cardiomyopathy: diagnosis by echocardiography and nuclear magnetic resonance] Galanti G, et al. **Cardiologia** 1989 Oct;34(10):889–91 (Eng. Abstr.) **(Ita)**
[A case of acromegaly associated with heart diseases] Morgera T, et al. **G Clin Med** 1990 Mar;71(3):225–8 **(Ita)**
[An anesthetic experience of a patient with congestive cardiomyopathy] Amano N, et al. **Masui** 1989 Sep; 38(9):1201–5 (Eng. Abstr.) **(Jpn)**
[Anesthetic management of patients with cardiomyopathies] Takenaka T, et al. **Masui** 1990 May;39(5):644–50 (Eng. Abstr.) **(Jpn)**
[Dilated cardiomyopathy associated with tumor pulmonary microembolism of small cell lung cancer, an elderly case report] Yamada M, et al. **Nippon Ronen Igakkai Zasshi** 1989 Sep;26(5):521–2 **(Jpn)**
[A case of the patient with ulcerative colitis associated with dilated cardiomyopathy] Fukushima K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jul;86(7):1529–33 **(Jpn)**
[Prognostic factors in acute myocardial infarction] Stasiński T. **Wiad Lek** 1990 Apr 1;43(7):254–8 (20 ref.) (Eng. Abstr.) **(Pol)**
[Fibrosing reaction of nutmeg liver] Zvenigorodskaia LA, et al. **Kardiologiia** 1990 Jan;30(1):58–61 (Eng. Abstr.) **(Rus)**
[Thrombi in the left ventricle in idiopathic dilated cardiomyopathy. Detection using 2–dimensional echocardiography] Nadaždin A. **Med Arh** 1986;40(3):95–7 (Eng. Abstr.) **(Scr)**
[Prognostic indexes in primary dilated cardiomyopathy] Almazán A, et al. **Arch Inst Cardiol Mex** 1990 Jan–Feb; 60(1):53–8 (Eng. Abstr.) **(Spa)**
[Myocardiopathy, alcoholism and systemic embolism (letter)] Estruch R, et al. **Rev Clin Esp** 1990 Apr;186(7):358 **(Spa)**
[Anomalous origin of the left coronary artery from the right sinus of Valsalva with retro–aortic path] Barrios Alonso V, et al. **Rev Esp Cardiol** 1990 May;43(5):341–4 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Interstudy reproducibility of dimensional and functional measurements between cine magnetic resonance studies in the morphologically abnormal left ventricle. Semelka RC, et al. **Am Heart J** 1990 Jun;119(6):1367–73
Comparison of echocardiographic quantitation of left ventricular ejection fraction to radionuclide angiography in patients with regional wall motion abnormalities. Albin G, et al. **Am J Cardiol** 1990 Apr 15;65(15):1031–2
Non–invasive evaluation of the myopathy of coronary artery disease. Noah MS. **Br J Clin Pract** 1989 Jul;43(7):249–51
Doppler echocardiography in dilated and restrictive cardiomyopathies. Acquatella H, et al. **Cardiol Clin** 1990 May;8(2):349–67 (109 ref.)
Mildly dilated congestive cardiomyopathy. Use of prospective diagnostic criteria and description of the clinical course without heart transplantation. Keren A, et al. **Circulation** 1990 Feb;81(2):506–17
Clinical profile of congestive cardiomyopathy in children [see comments] Chen SC, et al. **J Am Coll Cardiol** 1990 Jan; 15(1):189–93 Comment in: J Am Coll Cardiol 1990 Jan;15(1):194–5.
Differences in the shape of the normal, cardiomyopathic, and volume overloaded human left ventricle. D'Cruz IA, et al. **J Am Soc Echocardiogr** 1989 Nov–Dec;2(6):408–14
Echocardiography in congestive or dilated cardiomyopathy. Shah PM. **J Am Soc Echocardiogr** 1988 Jan–Feb;1(1):20–30 (55 ref.)
Value of vectorcardiography in predicting progress in dilated cardiomyopathy. Tomono S, et al. **Jpn Circ J** 1989 Oct; 53(10):1199–204
Clinical and histopathologic correlation in patients with dilated cardiomyopathy. Value of force–velocity product. Kurozumi H, et al. **Jpn Heart J** 1989 Jul;30(4):431–41
Aneurysmal deep vein neck dilatation in congestive cardiomyopathy—a new diagnostic sign [letter] Campbell GD. **S Afr Med J** 1990 May 5;77(9):487
Epidural fentanyl for cesarean section in postpartal cardiomyopathy. Garla PG, et al. **W V Med J** 1990 Jan; 86(1):11–3
[Value of the isoprenaline test in arrhythmogenic heart diseases] Haissaguerre M, et al. **Arch Mal Coeur** 1989 Nov; 82(11):1845–53 (Eng. Abstr.) **(Fre)**
[Combined echo– and Doppler echocardiography determination of diastolic function parameters of the left ventricle] Wallrabe D. **Z Gesamte Inn Med** 1990 May 15; 45(10):277–80 (Eng. Abstr.) **(Ger)**
[Functional evaluation of the left ventricle using 2–dimensional and color–coded Doppler echocardiography] Mohr–Kahaly S, et al. **Z Kardiol** 1989 Nov;78(11):719–25 (Eng. Abstr.) **(Ger)**
[Dilated cardiomyopathy. Multivariate discriminant analysis of main hemodynamic–angiographic indices] Zanchetta M, et al. **G Ital Cardiol** 1990 Jan;20(1):15–9 (Eng. Abstr.) **(Ita)**
[Observations of dilated cardiomyopathy with marked clinical improvement] Kurozumi H, et al. **J Cardiol** 1988 Dec;18(4):1027–31 (Eng. Abstr.) **(Jpn)**
[Mitral valve prolapse as an initial clinical feature of dilated cardiomyopathy: report of two cases] Miki T, et al. **J Cardiol Suppl** 1990;23:113–26; discussion 127–9 (Eng. Abstr.) **(Jpn)**
[Differentiation of ischemic cardiomyopathy from dilated cardiomyopathy by analysis of early diastolic time intervals] Sekiya T, et al. **J Cardiol Suppl** 1989;22:66–8 **(Jpn)**
[Electrocardiogram in dilated cardiomyopathy] Barbosa Filho J, et al. **Rev Port Cardiol** 1989 Nov;8(11):769–74 (Eng. Abstr.) **(Por)**
[The ECG in dilated cardiomyopathy with different degrees of the manifestation of cardiosclerosis] Gadzhaeva FU, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(2):81–8 (Eng. Abstr.) **(Rus)**
[Clinical aspects and diagnosis of dilated cardiomyopathy] Amosova EN, et al. **Klin Med (Mosk)** 1990 Jan;68(1):42–7 (Eng. Abstr.) **(Rus)**
[Diagnosis of the preclinical stage of cardiac insufficiency in patients with stable stenocardia] Gembitskiĭ EV, et al. **Klin Med (Mosk)** 1989 Oct;67(10):28–32 (Eng. Abstr.) **(Rus)**
[Value of cardiospecific immunologic tests in the diagnosis of myocardial lesions of autoimmune nature] Tereshchenko SE, et al. **Klin Med (Mosk)** 1989 Nov;67(11):36–40 **(Rus)**
[Diagnosis of dilated cardiomyopathy using patient blood serum and myocardial tissue culture] Charchoglian RA, et al. **Ter Arkh** 1990;62(4):75–8 (Eng. Abstr.) **(Rus)**
[Heart involvement in hypereosinophilia: the restrictive or the dilated type?] Moiseev SV, et al. **Ter Arkh** 1989; 61(9):79–81 (Eng. Abstr.) **(Rus)**
[Pathomorphologic data in the differential diagnosis of dilated cardiomyopathy] Rozenberg VD. **Vrach Delo** 1989 Dec;(12):18–20 (Eng. Abstr.) **(Rus)**
[Usefulness of endomyocardial biopsy in myocarditis and dilated cardiomyopathy] Almazán A, et al. **Arch Inst Cardiol Mex** 1989 Nov–Dec;59(6):573–7 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Ketanserin in congestive heart failure [letter] Lambert M, et al. **Acta Clin Belg** 1989;44(2):140–1
Daily administration of furosemide in dilated cardiomyopathy—yes or no? Nikolić VH, et al. **Acta Med Austriaca** 1990;17(1):15, 17–22
Improvement in exercise performance and hemodynamics by labetalol in patients with idiopathic dilated cardiomyopathy. Leung WH, et al. **Am Heart J** 1990 Apr; 119(4):884–90
Myocardial energetics and efficiency in patients with idiopathic cardiomyopathy: response to dobutamine and amrinone. Sundram P, et al. **Am Heart J** 1990 Apr; 119(4):891–8
A plea for a clinical trial of anticoagulation in dilated cardiomyopathy. Falk RH. **Am J Cardiol** 1990 Apr 1; 65(13):914–5
Assessment of the hemodynamic response to acetyl–strophanthidin by Doppler echocardiography in normal subjects and in those with coronary artery disease or idiopathic dilated cardiomyopathy. Lange HW, et al. **Am J Cardiol** 1990 Mar 15;65(11):804–7
Long–term efficacy and safety of coenzyme Q10 therapy for idiopathic dilated cardiomyopathy. Langsjoen PH, et al. **Am J Cardiol** 1990 Feb 15;65(7):521–3
Long–term beta–blocker vasodilator therapy improves cardiac function in idiopathic dilated cardiomyopathy: a double–blind, randomized study of bucindolol versus placebo. Gilbert EM, et al. **Am J Med** 1990 Mar;88(3):223–9
Onset of cardiovascular action after oral ibopamine. Early hemodynamic effects of single and repeated doses in patients with idiopathic dilated myocardiopathy. Di Mario C, et al. **Arzneimittelforschung** 1990 Jun;40(6):661–6
Exercise testing of the chronic effects of bunazosin hydrochloride on dilated cardiomyopathy. Nakano A, et al. **Arzneimittelforschung** 1989 Dec;39(12):1590–2
Short term haemodynamic effects of converting enzyme inhibition before and after eating in patients with moderate heart failure caused by dilated cardiomyopathy: a double blind study [see comments] Herrlin B, et al. **Br Heart J** 1990 Jan;63(1):26–31 Comment in: Br Heart J 1990 Jan;63(1):5–6.
Comparative effects of enoximone and nitroglycerin on left ventricular performance and regional wall motion in ischaemic cardiomyopathy. Rigaud M, et al. **Br J Clin Pract Symp Suppl** 1988 Dec;64:26–34
Should all patients with congestive heart failure and dilated cardiomyopathy be treated with vasodilators? Massie BM. **Cardiovasc Clin** 1990;21(1):251–62; discussion 263–4 (53 ref.)
Metoprolol in patients with dilated cardiomyopathy [letter; comment] Elkayam U. **Circulation** 1990 Jun;81(6):2028–9 Comment on: Circulation 1989 Sep;80(3):551–63.
Lymphocytic myocarditis and dilated cardiomyopathy: treatment with immunosuppressive agents. Hobbs RE, et al. **Cleve Clin J Med** 1989 Sep;56(6):628–35
Steroid responsive cardiomyopathy. Probert CS, et al. **Int J Cardiol** 1990 Aug;28(2):257–8
Influence of positive inotropic therapy on pulsatile hydraulic load and ventricular–vascular coupling in congestive heart failure [see comments] Binkley PF, et al. **J Am Coll Cardiol** 1990 Apr;15(5):1127–35 Comment in: J Am Coll Cardiol 1990 Apr;15(5):1136–7.
Xamoterol in patients with dilated cardiomyopathy: an increase in beta–receptors in lymphocytes. Watanabe K, et al. **J Cardiol** 1988 Dec;18(4):1015–25
Clinical efficacy of pimobendan (UD–CG 115 BS) in patients with chronic congestive heart failure. Baumann G, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 2:S23–30
Cardiovascular effects of forskolin (HL 362) in patients with idiopathic congestive cardiomyopathy—a comparative study with dobutamine and sodium nitroprusside. Baumann G, et al. **J Cardiovasc Pharmacol** 1990 Jul;16(1):93–100
Effect of intravenous pimobendan (UDCG 115 BS) on hemodynamics and left ventricular volumes in idiopathic dilative cardiomyopathy. Permanetter B, et al. **J Cardiovasc Pharmacol** 1989 Dec;14(6):803–9
Effect of xamoterol on exercise capacity and left ventricular function in angina pectoris and in dilated cardiomyopathy. Boström PA, et al. **J Intern Med** 1989 Nov;226(5):331–5
Metolazone for severe dilated cardiomyopathy refractory to conventional therapy [letter; comment] Kröger N, et al. **Lancet** 1990 Apr 28;335(8696):1031–2 Comment on: Lancet 1990 Jan 6;335(8680):29–31.

Immunosuppression for dilated cardiomyopathy [editorial; comment] O'Connell JB. **N Engl J Med** 1989 Oct 19; 321(16):1119–21 Comment on: N Engl J Med 1989 Oct 19;321(16):1061–8.

A prospective, randomized, controlled trial of prednisone for dilated cardiomyopathy [see comments] Parrillo JE, et al. **N Engl J Med** 1989 Oct 19;321(16):1061–8 Comment in: N Engl J Med 1989 Oct 19;321(16):1119–21.

Captopril in children with dilated cardiomyopathy: acute and long-term effects in a prospective study of hemodynamic and hormonal effects. Stern H, et al. **Pediatr Cardiol** 1990 Jan;11(1):22–8

[Sympathetic activity in patients with heart failure due to idiopathic dilated cardiomyopathy: effect of ACE inhibitors and other vasodilators] Langes K, et al. **Herz** 1990 Jun;15(3):164–70 (78 ref.) (Eng. Abstr.) **(Ger)**

[Sympathetic activity in patients with heart failure due to idiopathic dilated cardiomyopathy: modification by beta receptor blockers—a therapeutic approach?] Lohmann FW. **Herz** 1990 Jun;15(3):202–6 (18 ref.) (Eng. Abstr.) **(Ger)**

[Enoximone as an alternative to mechanical circulatory support prior to heart transplantation] Schmid ER, et al. **Schweiz Med Wochenschr** 1989 Sep 9;119(36):1231–6 (Eng. Abstr.) **(Ger)**

[Beneficial long-term effects of diltiazem on the course of dilated cardiomyopathy] Figulla HR, et al. **Z Kardiol** 1989; 78 Suppl 5:36–42 (Eng. Abstr.) **(Ger)**

[Acute reduction of increased atrial natriuretic peptide level and cyclic guanosine monophosphate in patients with chronic heart failure caused by beta-adrenergic stimulation with dopexamine hydrochloride. Correlation with hemodynamic parameters] Stangl K, et al. **Z Kardiol** 1990 Jun;79(6):417–23 (Eng. Abstr.) **(Ger)**

[Effects of infusions of different doses of dopamine in dilated cardiomyopathy. Observations during and after treatment with beta-blockers] Modena MG, et al. **Cardiologia** 1989 Jun;34(6):531–6 (Eng. Abstr.) **(Ita)**

[Severe hyponatremia associated with captopril therapy in dilated cardiomyopathy: a case report] Inoue S, et al. **Kokyu To Junkan** 1989 Oct;37(10):1143–6 (Eng. Abstr.) **(Jpn)**

[Exercise testing of the chronic effects of bunazosin hydrochloride on dilated cardiomyopathy] Nakano A, et al. **Kokyu To Junkan** 1989 Oct;37(10):1097–101 (Eng. Abstr.) **(Jpn)**

[Treatment of cardiomyopathy using Ca blockers] Matsumori A, et al. **Nippon Rinsho** 1989 Aug;47(8):1825–30 **(Jpn)**

[Effect of a single dose of captopril on left-ventricular function in patients with chronic congestive cardiomyopathy] Markiewicz K, et al. **Kardiol Pol** 1989; 32(3):142–7 (Eng. Abstr.) **(Pol)**

[Digitalis—selected problems and controversies] Nartowicz E, et al. **Wiad Lek** 1989 Oct 1–Nov 1;42(19–21):1080–5 (Eng. Abstr.) **(Pol)**

[Immunosuppression therapy in peripartum myocardiopathy] Macieira-Coelho E, et al. **Acta Med Port** 1990 Jan–Feb; 3(1):34–8 (Eng. Abstr.) **(Por)**

[Role of beta-blockers in the pharmacologic treatment of congestive heart failure] Longo A. **Rev Port Cardiol** 1989 Jul–Aug;8(7–8):563–8 (40 ref.) (Eng. Abstr.) **(Por)**

[Use of prazosin and capoten in the treatment of heart failure in patients with ischemic heart disease] Burduli FU, et al. **Kardiologiia** 1989 Sep;29(9):49–52 (Eng. Abstr.) **(Rus)**

[Use of mindronate in cardiac insufficiency in patients with ischemic heart disease] Ol'binskaia LI, et al. **Klin Med (Mosk)** 1990 Jan;68(1):39–42 (Eng. Abstr.) **(Rus)**

[Long-term administration of peripheral vasodilators in myocardial infarction and cardiac insufficiency] Kots IaI, et al. **Sov Med** 1989;(6):48–51 **(Rus)**

[Captopril in circulatory insufficiency in patients with dilated cardiomyopathy] Shatkovskiĭ NP, et al. **Sov Med** 1990; (5):82–4 **(Rus)**

[Comparative characteristics of the arrhythmic syndrome and the possibility for its coenzyme correction in dilated and hypertrophic cardiomyopathy] Kubyshkin VF, et al. **Ter Arkh** 1989;61(9):82–5 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Influence of anti-beta-receptor antibodies on cardiac adenylate cyclase in patients with idiopathic dilated cardiomyopathy. Limas CJ, et al. **Am Heart J** 1990 Jun; 119(6):1322–8

Alterations of the mitochondrial respiratory chain in human dilated cardiomyopathy. Buchwald A, et al. **Eur Heart J** 1990 Jun;11(6):509–16

[A case of mitochondrial encephalomyopathy with cardiomyopathy due to decreased complex I and IV activities] Kajiyama M, et al. **No To Hattatsu** 1989 Jul; 21(4):369–73 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

The epidemiology of idiopathic dilated cardiomyopathy in a biracial community. Coughlin SS, et al. **Am J Epidemiol** 1990 Jan;131(1):48–56

[Cardiomyopathy in Italy today: extent of the problem] Dolara A, et al. **G Ital Cardiol** 1989 Nov;19(11):1074–9 (14 ref.) (Eng. Abstr.) **(Ita)**

ETIOLOGY

Cardiomyopathy and pulmonary emboli in terminal Duchennne's muscular dystrophy. Riggs T. **Am Heart J** 1990 Mar;119(3 Pt 1):690–3

Small vessel disease (SVD) in patients with unexplained ventricular arrhythmia and dilated congestive cardiomyopathy. Tanganelli P, et al. **Am J Cardiovasc Pathol** 1989;3(1):13–9

Chronic cocaine abuse associated with dilated cardiomyopathy. Hogya PT, et al. **Am J Emerg Med** 1990 May;8(3):203–4

Alcohol abuse in patients with dilated cardiomyopathy. Laboratory vs clinical detection. Wang RY, et al. **Arch Intern Med** 1990 May;150(5):1079–82

Hypoxic cardiomyopathy: acute myocardial dysfunction after severe hypoxia. Smith F, et al. **Aust N Z J Med** 1989 Oct; 19(5):488–92

End-stage dilated cardiomyopathy. Persistence of enterovirus RNA in myocardium at cardiac transplantation and lack of immune response. Bowles NE, et al. **Circulation** 1989 Nov;80(5):1128–36

Congestive heart failure in a middle-aged man. Krumholz HM. **Hosp Pract [Off]** 1990 Apr 15;25(4):63, 66

Reversibility of tachycardia-induced cardiomyopathy after cure of incessant supraventricular tachycardia. Cruz FE, et al. **J Am Coll Cardiol** 1990 Sep;16(3):739–44

Cardiomyopathy with hypothyroidism [letter] Chaturvedi A, et al. **J Assoc Physicians India** 1990 Jun;38(6):454–6

Effects of pimobendan on hemodynamics and myocardial energetics in patients with idiopathic dilated cardiomyopathy: comparison with nitroprusside. Hasenfuss G, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 2:S31–5

Cardiomyopathy in a patient undergoing laparoscopy for oocyte retrieval during in vitro fertilization/embryo transfer. A case report. Hill GA, et al. **J Reprod Med** 1990 Jul;35(7):741–3

Selenium deficiency and cardiomyopathy [letter] Bolhack SM. **JPEN J Parenter Enteral Nutr** 1990 Jul–Aug;14(4):433

Reversible cardiomyopathy due to selenium deficiency. Reeves WC, et al. **JPEN J Parenter Enteral Nutr** 1989 Nov–Dec;13(6):663–5

Role of cadmium and magnesium in pathogenesis of idiopathic dilated cardiomyopathy. Müller KD. **Magnes Res** 1989 Sep;2(3):232–3

Peripartum cardiomyopathy. A role for cardiac stress determinants other than pregnancy? Stamler J, et al. **Mt Sinai J Med** 1989 Sep;56(4):285–9 (25 ref.)

Reversible cardiac dysfunction associated with interferon alfa therapy in AIDS patients with Kaposi's sarcoma [see comments] Deyton LR, et al. **N Engl J Med** 1989 Nov 2;321(18):1246–9 Comment in: N Engl J Med 1990 May 17;322(20):1469.

Severe congestive heart failure and cardiomyopathy as a complication of myotonic dystrophy in pregnancy. Fall LH, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):481–5

Can dilated cardiomyopathy be an expression of hypertensive heart disease? Nielsen I. **Scand J Clin Lab Invest Suppl** 1989;196:16–21 (7 ref.)

[Refsum's disease. Apropos of 2 cases disclosed by myocardiopathy] Millaire A, et al. **Ann Cardiol Angeiol (Paris)** 1990 Mar;39(3):173–8 (32 ref.) (Eng. Abstr.) **(Fre)**

[Chronic supraventricular rhythm disorders and reversible dilated cardiomyopathies] Allal J, et al. **Ann Med Interne (Paris)** 1989;140(7):621–4 (25 ref.) (Eng. Abstr.) **(Fre)**

[Hypokinetic dilated myocardiopathy complicating thyrotoxicosis. Hemodynamic study, myocardial histopathologic data, rapidly favorable effect of plasma exchange] Valensi P, et al. **Ann Med Interne (Paris)** 1989; 140(6):491–3 **(Fre)**

[Progression from hypertrophic obstructive cardiomyopathy to dilated cardiomyopathy. Apropos of 4 cases] Bourmayan C, et al. **Arch Mal Coeur** 1990 Apr;83(4):537–42 (18 ref.) (Eng. Abstr.) **(Fre)**

[GM1 gangliosidosis and dilated cardiomyopathy] Simma B, et al. **Klin Padiatr** 1990 May–Jun;202(3):183–5 (Eng. Abstr.) **(Ger)**

[Dilated cardiomyopathy—heart muscle disease of unknown origin or an autoimmune disease? New aspects of etiology, pathogenesis and clinical practice] Müller S. **Z Gesamte Inn Med** 1989 Aug 15;44(16):469–76 (86 ref.) (Eng. Abstr.) **(Ger)**

[Dilated cardiomyopathy secondary to idiopathic hypoparathyroidism in adults. Description of a case] Palazzuoli V, et al. **Recenti Prog Med** 1990 Apr;81(4):263–5 (Eng. Abstr.) **(Ita)**

[A case of Becker muscular dystrophy presenting cardiac failure as an initial symptom] Sakata C, et al. **Rinsho Shinkeigaku** 1990 Feb;30(2):210–3 (10 ref.) (Eng. Abstr.) **(Jpn)**

[The main causes of disorders of the early phase of diastolic relaxation in ischemic heart disease] Ciszewski A. **Pol Arch Med Wewn** 1988 Jun;79(6):326–31 (39 ref.) **(Pol)**

[Predicting postoperative acute heart failure after surgical treatment of patients with post-infarction heart aneurysm] Vasilidze TV. **Grud Serdechnososudistaia Khir** 1990; (5):22–6 (Eng. Abstr.) **(Rus)**

[Characteristics of the course of complicated myocarditis] Gordienko BV, et al. **Kardiologiia** 1990 Feb;30(2):61–6 (Eng. Abstr.) **(Rus)**

[Dilated cardiomyopathy: sequela of viral myocarditis?] Kipshidze NN. **Kardiologiia** 1989 Nov;29(11):75–9 (Eng. Abstr.) **(Rus)**

[Characteristics of the development of congestive heart failure in patients with post-infarction cardiosclerosis and arrhythmia] Zharov EI, et al. **Kardiologiia** 1989 Oct; 29(10):79–83 (Eng. Abstr.) **(Rus)**

[Results of surgical treatment of aortic coarctation in patients over 35 years of age] Spiridonov AA, et al. **Khirurgiia (Mosk)** 1990 May;(5):25–30 (Eng. Abstr.) **(Rus)**

[Long-term outcomes of non-rheumatic myocarditis] Gritsiuk Ai, et al. **Revmatologiia (Moskva)** 1989 Apr–Jun; (2):49–54 (Eng. Abstr.) **(Rus)**

[Dilated cardiomyopathy and Abramov-Fiedler myocarditis] Amosova EN. **Ter Arkh** 1990;62(5):127–30 (45 ref.) **(Rus)**

[The role of Coxsackie B viruses in the etiology of dilated cardiomyopathy] Novikov IuI, et al. **Ter Arkh** 1989; 61(11):97–102 (Eng. Abstr.) **(Rus)**

[The role of Coxsackie B viruses in the etiology of dilated cardiomyopathy] Shirobokov VP, et al. **Ter Arkh** 1990; 62(3):107–10 (Eng. Abstr.) **(Rus)**

[The etiology and pathogenesis of dilated cardiomyopathy] Gandzha IM, et al. **Vrach Delo** 1989 Nov;(11):68–70 (Eng. Abstr.) **(Rus)**

[Dilated cardiomyopathy in the acquired immunodeficiency syndrome (letter)] Sierra G, et al. **Med Clin (Barc)** 1989 Jun 24;93(4):157–8 **(Spa)**

[Dilated cardiomyopathy and tachycardia—cause and effect?] Pehrson S, et al. **Lakartidningen** 1990 Mar 21;87(12):951–3 **(Swe)**

[Immunologically disturbed energy and calcium homeostasis as a possible pathogenesis of dilated cardiomyopathy] Sylvén C. **Lakartidningen** 1989 Aug 30;86(35):2856–8 **(Swe)**

GENETICS

HLA-A, B, DR, and DQ antigens in black patients with idiopathic dilated cardiomyopathy. Maharaj B, et al. **Am J Cardiol** 1990 Jun 1;65(20):1402–3

Clinical and pathologic study of familial dilated cardiomyopathy. Mestroni L, et al. **Am J Cardiol** 1990 Jun 15;65(22):1449–53

Multiple mitochondrial DNA deletions exist in cardiomyocytes of patients with hypertrophic or dilated cardiomyopathy. Ozawa T, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):830–6

Familial dilated cardiomyopathy complicated by left ventricular aneurysm. Hirakawa Y, et al. **Jpn Heart J** 1990 Mar;31(2):245–9

IMMUNOLOGY

Anti-beta-receptor antibodies in human dilated cardiomyopathy and correlation with HLA-DR antigens. Limas CJ, et al. **Am J Cardiol** 1990 Feb 15;65(7):483–7

HLA antigens in idiopathic dilated cardiomyopathy. Limas CJ, et al. **Br Heart J** 1989 Nov;62(5):379–83

Antibodies to ADP-ATP carrier—an autoantigen in myocarditis and dilated cardiomyopathy—impair cardiac function. Schulze K, et al. **Circulation** 1990 Mar; 81(3):959–69

Cellular immune response in patients with dilated cardiomyopathy. Dąbrowski M, et al. **Cor Vasa** 1989; 31(6):476–84

Novel organ-specific circulating cardiac autoantibodies in dilated cardiomyopathy [see comments] Caforio AL, et al. **J Am Coll Cardiol** 1990 Jun;15(7):1527–34 Comment in: J Am Coll Cardiol 1990 Jun;15(7):1535–6.

New serologic marker of cardiac autoimmunity in dilated cardiomyopathy [editorial; comment] Goodwin JF. **J Am Coll Cardiol** 1990 Jun;15(7):1535–6 Comment on: J Am Coll Cardiol 1990 Jun;15(7):1527–34.

Inappropriate major histocompatibility complex expression on cardiac tissue in dilated cardiomyopathy. Relevance for autoimmunity? Caforio AL, et al. **J Autoimmun** 1990 Apr; 3(2):187–200

Immunological disorders in patients with dilated cardiomyopathy. With special reference to the production of interleukin-2 and the expression of interleukin-2 receptors in the patients' peripheral blood lymphocytes. Koike S. **Jpn Heart J** 1989 Nov;30(6):799–807

[Dilated myocarditis and cardiomyopathies. The dysimmune hypothesis] Sachs RN. **Arch Mal Coeur** 1990 Mar; 83(3):407–11 (45 ref.) (Eng. Abstr.) **(Fre)**

[Immunological aspects of primary cardiomyopathies] Kardaszewicz B, et al. **Pol Arch Med Wewn** 1988 Apr; 79(4):213–8 (31 ref.) **(Pol)**

METABOLISM

Localization of a "postreceptor" defect in human dilated cardiomyopathy. Böhm M, et al. **Am J Cardiol** 1989 Oct 1;64(12):812–4

Defective myocardial carnitine metabolism in congestive heart failure secondary to dilated cardiomyopathy and to coronary, hypertensive and valvular heart diseases. Regitz V, et al. **Am J Cardiol** 1990 Mar 15;65(11):755–60

Idiopathic dilated cardiomyopathy—an evidence of abnormal lipid accumulation accumulation in myocardium. Tomita T, et al. **Am J Cardiovasc Pathol** 1989;3(1):81–5

Separation between vasodilation and positive inotropism by assessment of myocardial energetics in patients with dilated cardiomyopathy. Holubarsch C, et al. **Basic Res Cardiol**

1989;84 Suppl 1:257–65
Calcium antagonist binding sites in failing and nonfailing human ventricular myocardium. Rasmussen RP, et al. **Biochem Pharmacol** 1990 Feb 15;39(4):691–6
Ca2+ uptake by cardiac sarcoplasmic reticulum from patients with idiopathic dilated cardiomyopathy. Movsesian MA, et al. **Circ Res** 1989 Oct;65(4):1141–4
Increase of Gi alpha in human hearts with dilated but not ischemic cardiomyopathy. Böhm M, et al. **Circulation** 1990 Oct;82(4):1249–65
Detection of enterovirus RNA in myocardial biopsies from patients with myocarditis and cardiomyopathy using gene amplification by polymerase chain reaction [see comments] Jin O, et al. **Circulation** 1990 Jul;82(1):8–16 Comment in: Circulation 1990 Jul;82(1):294–5.
Ventricular expression of atrial natriuretic polypeptide and its relations with hemodynamics and histology in dilated human hearts. Immunohistochemical study of the endomyocardial biopsy specimens. Takemura G, et al. **Circulation** 1989 Nov;80(5):1137–47
Atrial natriuretic peptide in the ventricles of patients with dilated cardiomyopathy and human foetuses. Jougasaki M, et al. **Histochem J** 1989 Dec;21(12):715–20
Influence of enoximone on myocardial energetics in patients with idiopathic dilated cardiomyopathy: comparison with nitroprusside. Hasenfuss G, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 1:S69–74
Evolution of cardiac involvement in progressive ophthalmoplegia with deleted mitochondrial DNA. Melacini P, et al. **Jpn Heart J** 1990 Jan;31(1):115–20

MICROBIOLOGY

Isolation of Borrelia burgdorferi from the myocardium of a patient with longstanding cardiomyopathy. Stanek G, et al. **N Engl J Med** 1990 Jan 25;322(4):249–52

MORTALITY

Prediction of outcome in late-stage cardiomyopathy. Kelly TL, et al. **Am Heart J** 1990 May;119(5):1111–21
Outcome of congestive heart failure, dilated cardiomyopathy, hypertrophic hyperkinetic disease, and ischemic heart disease in dialysis patients. Parfrey PS, et al. **Am J Nephrol** 1990;10(3):213–21
Sudden death in hypertrophic and dilated cardiomyopathy. Koga Y, et al. **Jpn Circ J** 1989 Dec;53(12):1546–56
Good prognosis for dilated cardiomyopathy without severe heart failure or arrhythmia. Stewart RA, et al. **Q J Med** 1990 Mar;74(275):309–18
[Prognostic factors in dilated cardiomyopathy] Sachs RN, et al. **Ann Med Interne (Paris)** 1989;140(8):683–6 (Eng. Abstr.) **(Fre)**
[Analysis of predictive factors of mortality in dilated cardiomyopathy. A cooperative study by the Cardiomyopathy Working Group] Komajda M, et al. **Arch Mal Coeur** 1990 Jun;83(7):899–906 (29 ref.) (Eng. Abstr.) **(Fre)**
[Mortality in dilated cardiomyopathies as a function of the pursuing of alcohol drinking habit (letter)] Sachs RN, et al. **Presse Med** 1989 Sep 30;18(30):1483 **(Fre)**

NURSING

Peripartum cardiomyopathy. Schmidt J, et al. **J Obstet Gynecol Neonatal Nurs** 1989 Nov–Dec; 18(6):465–72 (12 ref.)

PATHOLOGY

Percutaneous left ventricular endomyocardial biopsy with angioscopic guidance in patients with dilated cardiomyopathy. Uchida Y, et al. **Am Heart J** 1990 Apr; 119(4):949–52
Percutaneous fiberoptic angioscopy of the left ventricle in patients with dilated cardiomyopathy and acute myocarditis. Uchida Y, et al. **Am Heart J** 1990 Sep; 120(3):677–87
The morphologic spectrum of dilated cardiomyopathy and its relation to immune-response genes. Arbustini E, et al. **Am J Cardiol** 1989 Nov 1;64(16):991–5
Histopathologic and electrophysiologic correlations in idiopathic dilated cardiomyopathy and sustained ventricular tachyarrhythmia. Lo YS, et al. **Am J Cardiol** 1989 Nov 1;64(16):1063–6
Histopathological assessment of endomyocardial biopsy in children: I. Semiquantitative study on the hypertrophy of cardiac myocytes. Nishikawa T, et al. **Am J Cardiovasc Pathol** 1989;3(1):5–11
Myocarditis and dilated cardiomyopathy: twins or distant relatives? Shabetai R. **Cardiology** 1989;76(5):332–7 (20 ref.)
Immuno-electron microscopy of atrial natriuretic factor secretory pathways in atria and ventricles of control and cardiomyopathic hamsters with heart failure. Cantin M, et al. **Cell Tissue Res** 1990 Aug;261(2):313–22
A 22-year-old woman with palpitation, shortness of breath and cough for five months and aggravation of symptoms for four days [clinical conference] **Chin Med J [Engl]** 1989 Sep;102(9):726–32
Hypertrophic cardiomyopathy evolving into a hypokinetic and dilated left ventricle: coronary embolization as a probable pathogenetic mechanism. Gravanis MB, et al. **Clin Cardiol** 1990 Jul;13(7):500–5
Structure and function of contractile proteins in human dilated cardiomyopathy. Wiegand V, et al. **Clin Cardiol** 1989 Nov;12(11):656–60
Right ventricular dysplasia vs idiopathic dilated cardiomyopathy. Frustaci A. **Eur Heart J** 1989 Sep;10 Suppl D:92–4
Congenital nemaline myopathy with dilated cardiomyopathy: an autopsy study. Ishibashi-Ueda H, et al. **Hum Pathol** 1990 Jan;21(1):77–82
Coexistence of skeletal muscle abnormalities in cardiomyopathy [comment] Benditt DG, et al. **J Am Coll Cardiol** 1989 Nov 15;14(6):1474–5 Comment on: J Am Coll Cardiol 1989 Nov 15;14(6):1464–73.
Type 1 fiber abnormalities in skeletal muscle of patients with hypertrophic and dilated cardiomyopathy: evidence of subclinical myogenic myopathy [see comments] Caforio AL, et al. **J Am Coll Cardiol** 1989 Nov 15;14(6):1464–73 Comment in: J Am Coll Cardiol 1989 Nov 15;14(6):1474–5.
Features of mildly dilated congestive cardiomyopathy compared with idiopathic restrictive cardiomyopathy and typical dilated cardiomyopathy. Keren A, et al. **J Am Soc Echocardiogr** 1988 Jan–Feb;1(1):78–87
Histopathological criteria of myocarditis—a study based on normal heart, chagasic heart and dilated cardiomyopathy. Higuchi M de L, et al. **Jpn Circ J** 1990 Apr;54(4):391–400
The role of late potentials in the assessment of myocardial degeneration in idiopathic dilated cardiomyopathy. Konta T, et al. **Jpn Circ J** 1990 Jan;54(1):14–20
Dilated cardiomyopathy in infancy. Ultrastructural image analysis for diagnostic purpose. Bosman C, et al. **Pathol Res Pract** 1989 Nov;185(5):807–17
Endomyocardial biopsy in infants and children: experience in 60 patients. Schmaltz AA, et al. **Pediatr Cardiol** 1990 Jan;11(1):15–21
Cardiac left ventricular hypertrophy and chamber dilatation in panic disorder patients: implications for idiopathic dilated cardiomyopathy. Kahn JP, et al. **Psychiatry Res** 1990 Apr;32(1):55–61
Morphometric comparison of mitochondria and myofibrils of cardiomyocytes between hypertrophic and dilated cardiomyopathies. Tashiro A, et al. **Virchows Arch [A]** 1990;416(6):473–8
The conduction system in dilated cardiomyopathy. A pathomorphological study. Paramio A, et al. **Zentralbl Allg Pathol** 1989;135(6):631–5
[Histologic and microscopic study of striated skeletal muscles in primary dilated and hypertrophic cardiomyopathies] Firminhac P, et al. **Ann Med Interne (Paris)** 1989; 140(6):471–2 (Eng. Abstr.) **(Fre)**
[Morphologic findings in dilated cardiomyopathy] Meyer R, et al. **Z Gesamte Inn Med** 1989 Aug 15;44(16):476–7 (Eng. Abstr.) **(Ger)**
[Myocardial catecholamine content in heart failure—II: Measurement in endomyocardial biopsies, reference systems, normal values] Regitz V, et al. **Z Kardiol** 1989 Dec;78(12):759–63 (Eng. Abstr.) **(Ger)**
[Myocardial catecholamine content in heart failure—I: Regional distribution in explanted hearts. Comparison between dilated cardiomyopathy and coronary heart disease] Regitz V, et al. **Z Kardiol** 1989 Dec;78(12):751–8 (Eng. Abstr.) **(Ger)**
[Morphologic findings in dilated cardiomyopathy and their relation to hemodynamics and catecholamine concentrations in the plasma and myocardium] Schofer J, et al. **Z Kardiol** 1990 Apr;79(4):302–7 (Eng. Abstr.) **(Ger)**
[An autopsied case of juvenile myocarditis which showed a remarkable cardiac enlargement during the course of six months] Hara K, et al. **Kokyu To Junkan** 1990 Feb; 38(2):185–9 (Eng. Abstr.) **(Jpn)**
[Endomyocardial biopsy in children and adolescents] Różyłło W, et al. **Kardiol Pol** 1989;32(2):87–96 (Eng. Abstr.) **(Pol)**
[Comparison of histologic changes in Chagas' cardiomyopathy and dilated cardiomyopathy] Barretto AC, et al. **Arq Bras Cardiol** 1989 Feb;52(2):79–83 (Eng. Abstr.) **(Por)**
[The characteristics of cardiosclerosis in dilated cardiomyopathy] Zhdanov VS, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(2):75–81 (Eng. Abstr.) **(Rus)**
[Changes in the cardiac vascular bed in dilated and hypertrophic cardiomyopathy] Rozenberg VD. **Kardiologiia** 1989 Nov;29(11):116–20 (Eng. Abstr.) **(Rus)**
[Value of endomyocardial biopsy in the diagnosis of cardiomyopathies] Rozenberg VD. **Klin Med (Mosk)** 1989 Aug;67(8):21–6 (52 ref.) **(Rus)**

PHYSIOPATHOLOGY

Comparison of Doppler indexes of left ventricular diastolic function with simultaneous high fidelity left atrial and ventricular pressures in idiopathic dilated cardiomyopathy. David D, et al. **Am J Cardiol** 1989 Nov 15;64(18):1173–9
Ability of left ventricular stress-shortening relations, end-systolic stress/volume ratio and indirect indexes to detect severe contractile failure in ischemic or idiopathic dilated cardiomyopathy. Roman MJ, et al. **Am J Cardiol** 1989 Dec 1;64(19):1338–43
Regional left ventricular wall motion abnormalities in idiopathic dilated cardiomyopathy. Sunnerhagen KS, et al. **Am J Cardiol** 1990 Feb 1;65(5):364–70
Left ventricular performance during the course of a day and meals in dilated cardiomyopathy and heart failure. Rome MP, et al. **Am J Med Sci** 1989 Nov;298(5):289–94
Reversal of left ventricular dysfunction after renal transplantation. Burt RK, et al. **Ann Intern Med** 1989 Oct 15;111(8):635–40
Influence of the calcium-sensitizer UDCG-115 on hemodynamics and myocardial energetics in patients with idiopathic dilated cardiomyopathy. Comparison with nitroprusside. Hasenfuss G, et al. **Basic Res Cardiol** 1989; 84 Suppl 1:225–33
Coronary flow reserve in patients with chest pain, angiographically normal coronary arteries and normal left ventricle, dilated cardiomyopathy, and hypertrophic cardiomyopathy. Cannon RO 3d. **Bibl Cardiol** 1989; (44):25–38; discussion 38–9 (33 ref.)
Endothelium-dependent dilation of the coronary microvasculature is impaired in dilated cardiomyopathy. Treasure CB, et al. **Circulation** 1990 Mar;81(3):772–9
Diurnal change of giant negative T wave in patients with hypertrophic cardiomyopathy. Iida K, et al. **Clin Cardiol** 1990 Apr;13(4):272–8
Coronary vasodilation induced by intracoronary enalaprilat: an argument for the role of a local renin-angiotensin system in patients with dilated cardiomyopathy. Foult JM, et al. **Eur Heart J** 1989 Nov;10 Suppl F:97–100
Echocardiographic and electrocardiographic correlation in cases of congestive cardiomyopathy. Samdarshi TE, et al. **Indian Heart J** 1989 Jul–Aug;41(4):252–5
Left ventricular filling in dilated cardiomyopathy: relation to functional class and hemodynamics. Vanoverschelde JL, et al. **J Am Coll Cardiol** 1990 May;15(6):1288–95
Assessments of left ventricular function during exercise in patients with dilated cardiomyopathy: comparison with ischemic cardiomyopathy. Konishi T, et al. **J Cardiol** 1989 Sep;19(3):797–804
Cardiomyopathy [letter] **J Natl Med Assoc** 1990 Aug; 82(8):554
Regional wall motion abnormality and its relation to myocardial histopathological change and clinical prognosis in dilated cardiomyopathy—usefulness of dobutamine loading echocardiographic study. Nakanishi M, et al. **Jpn Circ J** 1990 Mar;54(3):249–59
Value of the signal-averaged electrocardiogram as a predictor of sudden death in myocardial infarction and dilated cardiomyopathy. Ohnishi Y, et al. **Jpn Circ J** 1990 Feb;54(2):127–36
Cardiomyopathy of overload. A major determinant of prognosis in congestive heart failure [see comments] Katz AM. **N Engl J Med** 1990 Jan 11;322(2):100–10 (142 ref.) Comment in: N Engl J Med 1990 Jun 14;322(24):1749–50.
Cardiomyopathy of overload [letter; comment] Rose C. **N Engl J Med** 1990 Jun 14;322(24):1749–50 Comment on: N Engl J Med 1990 Jan 11;322(2):100–10.
Kearns-Sayre syndrome and dilated cardiomyopathy. Tveskov C, et al. **Neurology** 1990 Mar;40(3 Pt 1):553–4
Coupling between myocardial oxygen consumption and mechanics in patients with dilative cardiomyopathy. Influence of vasodilation and positive inotropism. Hasenfuss G, et al. **Prog Clin Biol Res** 1989;315:613–5
[Physiopathology of dilated cardiomyopathy] Sachs RN, et al. **Ann Med Interne (Paris)** 1989;140(8):679–82 (38 ref.) **(Fre)**
[Effect of cardioversion of atrial fibrillation on left ventricular function in dilated cardiomyopathy. A multicenter study] Sacrez A, et al. **Arch Mal Coeur** 1990 Jan;83(1):15–21 (Eng. Abstr.) **(Fre)**
[Ventricular function in dilated cardiopathy] Caponnetto S, et al. **Clin Ter** 1990 Jan 31;132(2):85–99 (51 ref.) (Eng. Abstr.) **(Ita)**
[Left ventricular diastolic reserve during acute pressure loading in hypertrophic cardiomyopathy and dilated cardiomyopathy] Yokote Y, et al. **J Cardiol** 1988 Dec; 18(4):1051–60 (Eng. Abstr.) **(Jpn)**
[New method to detect late potential with fast Fourier transform analysis] Shinozaki T, et al. **Kokyu To Junkan** 1990 May;38(5):457–62 (Eng. Abstr.) **(Jpn)**
[Collapse of the aortic valve in dilated myocardiopathies: echocardiographic study] Martins RM, et al. **Acta Med Port** 1989 Mar–Apr;2(2):61–4 (Eng. Abstr.) **(Por)**
[Cardiac performance and hemodynamic response under the effect of isoproterenol and D-isosorbitol in patients with dilated cardiomyopathy] Romão N, et al. **Arq Bras Cardiol** 1989 Nov;53(5):271–4 (Eng. Abstr.) **(Por)**
[Changes in the pituitary-adrenal system in elderly patients with ischemic heart disease and chronic circulatory failure during treatment with hyperbaric oxygenation] Khaidarova GKh, et al. **Kardiologiia** 1990 Mar;30(3):98–9 **(Rus)**
[Catheterization of the right heart and pulmonary artery: the main parameters of central hemodynamics] Kosminskiĭ PG, et al. **Kardiologiia** 1990 Jan;30(1):90–5 **(Rus)**
[Characteristics of cardiac hemodynamics and right ventricular function in patients with various types of cardiomyopathy and ischemic heart disease] Mamedova FA. **Kardiologiia** 1989 Jul;29(7):70–3 (Eng. Abstr.) **(Rus)**
[Left-ventricular relaxation in patients with ischemic heart disease, congestive cardiomyopathy and mitral and aortic valve defects] Petrosian IuS, et al. **Kardiologiia** 1989 Oct; 29(10):102–6 (Eng. Abstr.) **(Rus)**
[Characteristics of psycho-autonomic regulation in patients with myocardial infarction and circulatory failure] Volkov

VS, et al. **Kardiologiia** 1990 Apr;30(4):76–80 (Eng. Abstr.) **(Rus)**

[Morphofunctional state of the heart in dilated cardiomyopathy in children] Ivanov AP, et al. **Pediatriia** 1989;(12):25–9 (Eng. Abstr.) **(Rus)**

[Characteristics of blood coagulation changes in patients with dilated cardiomyopathy] Amosova EN, et al. **Vrach Delo** 1989 Sep;(9):32–5 (Eng. Abstr.) **(Rus)**

[Segmental abnormalities in left ventricular wall motion in idiopathic dilated (congestive) cardiomyopathies—detection using 2-dimensional echocardiography] Nadaždin A. **Med Arh** 1986;40(6):305–8 (Eng. Abstr.) **(Ser)**

[Left ventricular mechanics in Chagas' disease and dilated cardiomyopathy: echocardiographic study] Guerrero L, et al. **Arq Bras Cardiol** 1989 Jul;53(1):23–7 (Eng. Abstr.) **(Spa)**

[Clinical and paraclinical differences between chronic Chagas' cardiomyopathy and primary dilated cardiomyopathies] Parada H, et al. **Arq Bras Cardiol** 1989 Aug;53(2):99–104 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

The prevention of congestive heart failure: left ventricular dilation and its management. Firth BG, et al. **Am J Med Sci** 1990 Apr;299(4):276–90 (113 ref.)

Importance of abstention from alcohol in alcoholic heart disease. Mølgaard H, et al. **Int J Cardiol** 1990 Mar; 26(3):373–5

[Methodologic approach to the discontinuation of long-term artificial ventilation in cardiosurgical patients with postoperative cardiac insufficiency] Novikov GA, et al. **Anesteziol Reanimatol** 1990 Mar–Apr;(2):9–12 (Eng. Abstr.) **(Rus)**

[Actual problems of the treatment of acute myocardial infarction] Popov VG, et al. **Kardiologiia** 1989 Oct; 29(10):31–6 **(Rus)**

PSYCHOLOGY

Cognitive function in patients with symptomatic dilated cardiomyopathy before and after cardiac transplantation. Schall RR, et al. **J Am Coll Cardiol** 1989 Dec;14(7):1666–72

RADIOGRAPHY

Diagnostic accuracy of right ventriculography in arrhythmogenic right ventricular cardiomyopathy. Daliento L, et al. **Am J Cardiol** 1990 Sep 15;66(7):741–5

[Coronary calcification in cinefluoroscopy: the noninvasive diagnosis of ischemic myocardial disease masquerading as dilated cardiomyopathy] Yamanaka O. **Nippon Naika Gakkai Zasshi** 1989 Jul;78(7):899–904 **(Jpn)**

RADIONUCLIDE IMAGING

[Study of dilated cardiomyopathies using gallium 67 myocardial scintigraphy] Lanfranchi J, et al. **Ann Med Interne (Paris)** 1989;140(6):486–8 (Eng. Abstr.) **(Fre)**

[Assessment of prognosis in dilated cardiomyopathy by myocardial scintigraphy] Takata J, et al. **J Cardiol Suppl** 1989;22:108–10 **(Jpn)**

[Functional scintigraphy of radioactive cardiac blood pool: amplitude and phase analysis and conventional parameters of left-ventricular wall motion at rest] Gosiewska-Marcinkowska E, et al. **Kardiol Pol** 1989; 32(3):148–58 (Eng. Abstr.) **(Pol)**

[Congestive heart insufficiency. Evaluation using isotopic methods] Ferreira R, et al. **Rev Port Cardiol** 1989 Apr; 8(4):313–21 (55 ref.) (Eng. Abstr.) **(Por)**

[Radionuclide ventriculography in the diagnosis of dilated cardiomyopathy] Stroganova NP, et al. **Med Radiol (Mosk)** 1990 Feb;35(2):17–20 (Eng. Abstr.) **(Rus)**

REHABILITATION

[Rehabilitation measures in patients following recovery in myocarditis and dilated cardiomyopathy] Förster A, et al. **ZFA** 1989 Nov–Dec;44(6):325–9 (Eng. Abstr.) **(Ger)**

SURGERY

Heart-transplant and mono-amine oxidase inhibitors. Fobe F, et al. **Acta Anaesthesiol Belg** 1989;40(2):131–8

Prognostic guides in patients with idiopathic or ischemic dilated cardiomyopathy assessed for cardiac transplantation. Keogh AM, et al. **Am J Cardiol** 1990 Apr 1;65(13):903–8

Optimal timing of pediatric heart transplantation. Addonizio LJ, et al. **Circulation** 1989 Nov;80(5 Pt 2):III84–9

Dynamic cardiomyoplasty for treatment of heart failure. Hill AB, et al. **Clin Cardiol** 1989 Dec;12(12):681–8 (42 ref.)

[The hyperventilation syndrome as psychosomatic components of heart transplantation: case study] Bunzel B, et al. **Psychother Psychosom Med Psychol** 1990 Feb; 40(2):57–63 (Eng. Abstr.) **(Ger)**

[Toxoplasmosis in the heart transplant patient] Waser M, et al. **Ther Umsch** 1990 Feb;47(2):152–6 (Eng. Abstr.) **(Ger)**

[The first clinical experience in extended myoventriculoplasty with programmed cardiosynchronized electroneurostimulation] Dumchus AS, et al. **Grud Serdechnososudistaia Khir** 1990;(1):35–8 (Eng. Abstr.) **(Rus)**

[Peroperative management of the orthotopic implant of a Jarvik-7 total cardiac prosthesis] Fraile JR, et al. **Rev Esp Anestesiol Reanim** 1989 Jul–Aug;36(4):225–8 (Eng. Abstr.) **(Spa)**

THERAPY

Usefulness of physiologic dual-chamber pacing in drug-resistant idiopathic dilated cardiomyopathy [see comments] Hochleitner M, et al. **Am J Cardiol** 1990 Jul 15;66(2):198–202 Comment in: Am J Cardiol 1990 Jul 15;66(2):223–4.

Idiopathic dilated cardiomyopathy. Caforio AL, et al. **BMJ** 1990 Apr 7;300(6729):890–1 (21 ref.)

Reversibility of catecholamine-induced cardiomyopathy in a woman with pheochromocytoma [see comments] Sadowski D, et al. **Can Med Assoc J** 1989 Nov 1; 141(9):823–4 Comment in: Can Med Assoc J 1990 Jan 15;142(2):99–100.

A method of extended myoventriculoplasty with programmable cardiosynchronized electroneurostimulation: description and initial clinical results. Dumcius AS, et al. **Cor Vasa** 1989;31(5):394–401

Implantation of an external biventricular assist device: role of transesophageal two-dimensional echocardiography. Faggian G, et al. **J Heart Transplant** 1990 Jul–Aug; 9(4):441–3

Peripartum cardiomyopathy in a rural Nigerian hospital. Boomsma LJ. **Trop Geogr Med** 1989 Jul;41(3):197–200

[The effect of human recombinant interleukin-2 on natural cytotoxicity in patients with dilated cardiomyopathy] Aleksandrova EN, et al. **Ter Arkh** 1989;61(11):111–4 **(Rus)**

VETERINARY

Dilated (congestive) cardiomyopathy in a Friesian heifer. McLennan MW, et al. **Aust Vet J** 1990 Feb;67(2):75–6

Naturally occurring cardiomyopathy in the Doberman pinscher: a possible large animal model of human cardiomyopathy? Smucker ML, et al. **J Am Coll Cardiol** 1990 Jul;16(1):200–6

Efficacy of digoxin for treatment of cats with dilated cardiomyopathy. Atkins CE, et al. **J Am Vet Med Assoc** 1990 May 1;196(9):1463–9

Effects of compensated heart failure on digoxin pharmacokinetics in cats. Atkins CE, et al. **J Am Vet Med Assoc** 1989 Oct 1;195(7):945–50

Myocardial biochemical changes in furazolidone-induced cardiomyopathy of turkeys. Mirsalimi SM, et al. **J Comp Pathol** 1990 Feb;102(2):139–47

Acute cardiomyopathy in heifers [letter; comment] Barlow RM, et al. **Vet Rec** 1990 Jan 20;126(3):67 Comment on: Vet Rec 1989 Dec 23–30;125(26–27):656–7.

[Veterinary ultrasonics: more than music for the future] Garretsen JW. **Tijdschr Diergeneeskd** 1989 Nov 1; 114(21):1112–6 **(Dut)**

CARDIOMYOPATHY, DILATED see **CARDIOMYOPATHY, CONGESTIVE**

CARDIOMYOPATHY, HYPERTROPHIC

VT and sudden death in HCM patients [letter] Fananapazir L, et al. **Circulation** 1989 Dec;80(6):1923

Current perspectives in hypertrophic cardiomyopathy: diagnosis, clinical management, and prevention of disability and sudden cardiac death. von Dohlen TW, et al. **Clin Cardiol** 1990 Apr;13(4):247–52 (34 ref.)

Apical hypertrophic cardiomyopathy: the continuing saga [comment] Maron BJ. **J Am Coll Cardiol** 1990 Jan; 15(1):91–3 Comment on: J Am Coll Cardiol 1990 Jan;15(1):83–90.

[Cardiomyopathies. Clinical and experimental studies for the past 25 years and prospective views] Kawai C. **Nippon Naika Gakkai Zasshi** 1989 Aug;78(8):1119–29 **(Jpn)**

[Progress in the treatment of myocardial diseases] Toshima H. **Nippon Naika Gakkai Zasshi** 1990 Mar 10;79(3):363–6 **(Jpn)**

COMPLICATIONS

Acute mitral regurgitation with cardiogenic shock in a patient with hypertrophic cardiomyopathy: a critical management dilemma. Hilton T, et al. **Am Heart J** 1990 May; 119(5):1205–7

Hypertrophic cardiomyopathy as a cause of massive cardiomegaly (greater than 1,000 g). Roberts CS, et al. **Am J Cardiol** 1989 Nov 15;64(18):1209–10

Sudden death in young people due to hypertrophic cardiomyopathy. Gourdie AL, et al. **Arch Emerg Med** 1989 Sep;6(3):220–4

Aortic regurgitation associated with hypertrophic cardiomyopathy: a colour Doppler echocardiographic study. Shiota T, et al. **Br Heart J** 1989 Sep;62(3):171–6

Pulmonary oedema in two parturients with hypertrophic obstructive cardiomyopathy (HOCM). Tessler MJ, et al. **Can J Anaesth** 1990 May;37(4 Pt 1):469–73

Apical hypertrophic cardiomyopathy with spontaneous post partum coronary artery dissection. Lette J, et al. **Can J Cardiol** 1989 Sep;5(6):311–4

Asymmetric septal hypertrophy in a 41-year-old woman with Noonan's syndrome. Doyama K, et al. **Chest** 1990 Jun;97(6):1480–1

Use of Doppler echocardiography and amyl nitrite inhalation to characterize left ventricular outflow obstruction in hypertrophic cardiomyopathy. Sheikh KH, et al. **Chest** 1990 Feb;97(2):389–95

Electrophysiologic abnormalities in patients with hypertrophic cardiomyopathy. A consecutive analysis in 155 patients. Fananapazir L, et al. **Circulation** 1989 Nov; 80(5):1259–68

Sudden death in hypertrophic cardiomyopathy. Assessment of patients at high risk. McKenna WJ, et al. **Circulation** 1989 Nov;80(5):1489–92

Hypertrophic obstructive cardiomyopathy and lentiginosis. Havaldar PV, et al. **Indian Pediatr** 1990 Jan;27(1):79–81

Asymmetric septal hypertrophy associated with hypothyroidism. Vazirani P, et al. **Indian Pediatr** 1990 Jan; 27(1):76–8

Endocarditis caused by Gemella haemolysans. Kaufhold A, et al. **Infection** 1989 Nov–Dec;17(6):385–7

Hypertrophic cardiomyopathy and atrial fibrillation: a change of perspective [comment] Greenspan AM. **J Am Coll Cardiol** 1990 May;15(6):1286–7 Comment on: J Am Coll Cardiol 1990 May;15(6):1279–85.

Syncope in hypertrophic cardiomyopathy: multivariate analysis of prognostic determinants [see comments] Nienaber CA, et al. **J Am Coll Cardiol** 1990 Apr; 15(5):948–55 Comment in: J Am Coll Cardiol 1990 Apr;15(5):962–4.

Atrial fibrillation in hypertrophic cardiomyopathy: a longitudinal study [see comments] Robinson K, et al. **J Am Coll Cardiol** 1990 May;15(6):1279–85 Comment in: J Am Coll Cardiol 1990 May;15(6):1286–7.

Relationship between mitral regurgitation and left ventricular outflow obstruction in hypertrophic cardiomyopathy. Hasegawa I, et al. **J Am Soc Echocardiogr** 1989 May–Jun; 2(3):177–86

A case of hemiparesis with systolic murmur at left sternal border. Anjaneyulu AV, et al. **J Assoc Physicians India** 1989 Jun;37(6):407–9

Progressive systemic sclerosis presenting as recurrent ventricular tachycardia and hypertrophic cardiomyopathy—a case report. Nambiar CA, et al. **J Assoc Physicians India** 1989 Feb;37(2):179–81

Left ventricular reserve of the hypertrophied heart in patients with systemic hypertension and hypertrophic cardiomyopathy—relation to age and left ventricular relative wall thickness. Chou HT, et al. **Jpn Circ J** 1990 Apr;54(4):373–82

Congenital cardiac toxoplasmosis in a newborn with acquired immunodeficiency syndrome. Medlock MD, et al. **Pediatr Infect Dis J** 1990 Feb;9(2):129–32

Unilateral pulmonary oedema in a patient with hypertrophic cardiomyopathy and severe narrowing of the left pulmonary artery. Turberg Y, et al. **Thorax** 1990 Aug; 45(8):641–2

[Disorders of heart rhythm in hypertrophic cardiomyopathy] Gregor P, et al. **Vnitr Lek** 1989 Jul;35(7):625–31 (Eng. Abstr.) **(Cze)**

[Progression from hypertrophic obstructive cardiomyopathy to dilated cardiomyopathy. Apropos of 4 cases] Bourmayan C, et al. **Arch Mal Coeur** 1990 Apr;83(4):537–42 (18 ref.) (Eng. Abstr.) **(Fre)**

[Causes of sudden death in athletes] Fontaine G, et al. **Arch Mal Coeur** 1989 Aug;82 Spec No 2:107–11 (Eng. Abstr.) **(Fre)**

[Apical hypertrophic myocardiopathy with mid-ventricular obstruction and apical necrosis] Slama MA, et al. **Arch Mal Coeur** 1989 Sep;82(9):1623–7 (9 ref.) (Eng. Abstr.) **(Fre)**

[Risk of syncope in hypertrophic cardiomyopathy: a multivariate analysis of prognostic variables] Nienaber CA, et al. **Z Kardiol** 1990 Apr;79(4):286–96 (Eng. Abstr.) **(Ger)**

[Clinical diagnosis and pathogenesis of myocardial infarction complicated by hypertrophic cardiomyopathy: review of eight cases] Komiyama N, et al. **J Cardiol** 1989 Sep; 19(3):805–13 (Eng. Abstr.) **(Jpn)**

[Evaluation of mid-ventricular obstruction of hypertrophic cardiomyopathy by real-time two-dimensional Doppler flow imaging: a case report] Matsuno Y, et al. **J Cardiol** 1989 Jun;19(2):627–35 (Eng. Abstr.) **(Jpn)**

[Prevalence and clinical significance of development of conduction disturbances in patients with hypertrophic cardiomyopathy] Suwa M, et al. **J Cardiol** 1989 Mar; 19(1):147–53 (Eng. Abstr.) **(Jpn)**

[Effect of hypertension on asymmetrical septal hypertrophy: an echocardiographic study] Uchida M, et al. **J Cardiol** 1988 Dec;18(4):1043–50 (Eng. Abstr.) **(Jpn)**

[Cardiac arrest episodes by cardiomyopathy following total pancreatectomy, a case report] Ozaki S, et al. **Kokyu To Junkan** 1990 Mar;38(3):265–8 (Eng. Abstr.) **(Jpn)**

[Anesthetic management of adrenalectomy in a patient with aldosteronism complicated with hypertrophic cardiomyopathy] Kasai H, et al. **Masui** 1990 Jun; 39(6):786–91 (Eng. Abstr.) **(Jpn)**

[Anesthetic management of patients with cardiomyopathies] Takenaka T, et al. **Masui** 1990 May;39(5):644–50 (Eng. Abstr.) **(Jpn)**

[A case report of hypertrophic obstructive cardiomyopathy after the correction of atrioventricular septal defect] Kasegawa H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Oct;37(10):2223–8 (Eng. Abstr.) **(Jpn)**

[Cardiac rhythm disorders in patients with hypertrophic cardio- myopathy detected by ECG monitoring by the Holter method] Borowiecka E, et al. **Kardiol Pol** 1989; 32(2):66–72 (Eng. Abstr.) **(Pol)**

CONGENITAL

Infantile hypertrophic cardiomyopathy with QT prolongation. Zalzstein E, et al. **Can J Cardiol** 1989 Oct; 5(7):337–9

Posterior d-transposition of the great arteries with an unusual form of aortic obstruction. Benatar A, et al. **Pediatr Cardiol** 1990 Jul;11(3):170–2

Anomalous portal venous connection to the suprahepatic vena cava: sonographic demonstration. Bellah RD, et al. **Pediatr Radiol** 1989;20(1–2):115–7

DIAGNOSIS

The probability of detecting a subaortic ridge in children with ventricular septal defect or coarctation of the aorta. Cassidy SC, et al. **Am J Cardiol** 1990 Aug 15;66(4):505–8

Effect of preload change on resting and exercise cardiac performance in hypertrophic cardiomyopathy. Chan WL, et al. **Am J Cardiol** 1990 Sep 15;66(7):746–51

Usefulness of total 12-lead QRS voltage compared with other criteria for determining left ventricular hypertrophy in hypertrophic cardiomyopathy: analysis of 57 patients studied at necropsy. Dollar AL, et al. **Am J Med** 1989 Oct;87(4):377–81

Idiopathic hypertrophic subaortic stenosis and ischemic mitral regurgitation: the value of intraoperative transesophageal echocardiography and Doppler color flow imaging in guiding operative therapy. Stanley TE 3d, et al. **Anesthesiology** 1990 Jun;72(6):1083–5

Intraoperative transesophageal echocardiography for hypertrophic cardiomyopathy [letter] Eng J, et al. **Ann Thorac Surg** 1990 Sep;50(3):513–4

Non-obstructive apical hypertrophic cardiomyopathy—emergence of clinical features within three years in a Chinese. Woo KS, et al. **Aust N Z J Med** 1990 Feb;20(1):78–80

Hypertrophic cardiomyopathy in identical twins. Reid JM, et al. **Br Heart J** 1989 Nov;62(5):384–8

Echocardiographic and Doppler studies in hypertrophic cardiomyopathy. Sasson Z, et al. **Cardiol Clin** 1990 May; 8(2):217–32 (46 ref.)

Morphological quantification and differentiation of left ventricular hypertrophy in hypertrophic cardiomyopathy and hypertensive heart disease. A two dimensional echocardiographic study. Keller H, et al. **Eur Heart J** 1990 Jan;11(1):65–74

Hypertrophic cardiomyopathy: is a left ventricular outflow tract gradient a major prognostic determinant? Romeo F, et al. **Eur Heart J** 1990 Mar;11(3):233–40

Relation between extent of left ventricular hypertrophy and diastolic filling abnormalities in hypertrophic cardiomyopathy [see comments] Spirito P, et al. **J Am Coll Cardiol** 1990 Mar 15;15(4):808–13 Comment in: J Am Coll Cardiol 1990 Mar 15;15(4):814–5.

Apical hypertrophic cardiomyopathy: clinical follow-up and diagnostic correlates [see comments] Webb JG, et al. **J Am Coll Cardiol** 1990 Jan;15(1):83–90 Comment in: J Am Coll Cardiol 1990 Jan;15(1):91–3.

Impaired left ventricular relaxation in hypertrophic cardiomyopathy: relation to extent of hypertrophy [comment] Wigle ED. **J Am Coll Cardiol** 1990 Mar 15; 15(4):814–5 Comment on: J Am Coll Cardiol 1990 Mar 15;15(4):808–13.

Echocardiographic and Doppler assessment of hypertrophic cardiomyopathy. Rakowski H, et al. **J Am Soc Echocardiogr** 1988 Jan–Feb;1(1):31–47 (44 ref.)

Apical hypertrophic cardiomyopathy, a clinical and noninvasive study of 11 cases. Das JP. **J Assoc Physicians India** 1990 Feb;38(2):133–6

Electrocardiographic findings in patients with hypertrophic cardiomyopathy. Relation to presenting features and prognosis. Pelliccia F, et al. **J Electrocardiol** 1990 Jul; 23(3):213–22

Prognosis in hypertrophic cardiomyopathy—echocardiographic follow-up and histopathological study. Emoto R, et al. **Jpn Circ J** 1989 Sep;53(9):1031–44

Serial electrocardiographic and angiographic changes of patients with hypertrophic cardiomyopathy. Horita Y, et al. **Jpn Circ J** 1989 Nov;53(11):1327–42

Prognostic significance of conduction disturbance and reduction of left precordial voltage of electrocardiogram in hypertrophic cardiomyopathy. Suwa M, et al. **Jpn Circ J** 1989 Sep;53(9):1045–54

Reversible obstructive hypertrophic cardiomyopathy in the Beckwith–Wiedemann syndrome. Ryan CA, et al. **Pediatr Cardiol** 1989 Fall;10(4):225–8

Small aortic valve annulus in children with fixed subaortic stenosis. Thilenius OG, et al. **Pediatr Cardiol** 1989 Fall; 10(4):195–8

[Magnetic resonance imaging in hypertrophic cardiomyopathy (preliminary experience of 6 cases)] Zhang L. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1990 Feb; 18(1):13–4, 60–1 (Eng. Abstr.) **(Chi)**

[Dermatoglyphic analysis of patients with hypertrophic cardiomyopathy] Smahel Z, et al. **Cas Lek Cesk** 1989 Nov 24;128(48):1509–12 (Eng. Abstr.) **(Cze)**

[Contribution of electrovectorcardiography in the diagnosis of hypertrophic cardiomyopathy. Comparative study with an echocardiographic score] Melacini P, et al. **Ann Cardiol Angeiol (Paris)** 1990 Apr;39(4):203–6 (Eng. Abstr.) **(Fre)**

[Hypertrophic cardiomyopathy. Data from Doppler echocardiography] Dubourg O, et al. **Arch Mal Coeur** 1990 May;83(6):783–92 (Eng. Abstr.) **(Fre)**

[Magnetocardiography: technical progress by a multichannel SQUID system] Moshage W, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:205–6 **(Ger)**

[Hypertrophic obstructive cardiomyopathy] Goos H, et al. **Z Gesamte Inn Med** 1990 May 1;45(9):261–3 (5 ref.) (Eng. Abstr.) **(Ger)**

[Ventricular arrhythmia and late potentials in patients with hypertrophic cardiomyopathy] Fleischmann C, et al. **Z Kardiol** 1990 Feb;79(2):113–9 (Eng. Abstr.) **(Ger)**

[Clinical significance of electrocardiographic P-terminal force in V1 in patients with hypertrophic cardiomyopathy] Nezuo S, et al. **J Cardiol** 1988 Dec;18(4):1061–7 (Eng. Abstr.) **(Jpn)**

[Clinical implication of transesophageal echocardiography] Ogawa S, et al. **J Cardiol Suppl** 1989;22:100–3 **(Jpn)**

[Differentiation of ischemic cardiomyopathy from dilated cardiomyopathy by analysis of early diastolic time intervals] Sekiya T, et al. **J Cardiol Suppl** 1989;22:66–8 **(Jpn)**

[Membranous subvalvular aortic stenosis—echocardiographic image] Szaroszyk W, et al. **Kardiol Pol** 1989;32 Suppl 1:1–6 (Eng. Abstr.) **(Pol)**

[Relation between cchocardiographic image and the electrocardiogram in hypertrophic cardiomyopathy] Tendera M, et al. **Kardiol Pol** 1989;32(2):73–7 (Eng. Abstr.) **(Pol)**

[Apical hypertrophic cardiomyopathy—clinical, electrocardiographic, echocardiographic and hemodynamic evaluation] Kuśnierz B, et al. **Pol Arch Med Wewn** 1988 May;79(5):238–47 (Eng. Abstr.) **(Pol)**

[Use of transesophageal stimulation of the left atrium in the diagnosis of ischemia and cicatricial myocardial changes in patients with complete block of the left fascicle of the bundle of His] Shu'lman VA, et al. **Kardiologiia** 1989 Jul; 29(7):43–6 (Eng. Abstr.) **(Rus)**

[Value of cardiospecific immunologic tests in the diagnosis of myocardial lesions of autoimmune nature] Tereshchenko SE, et al. **Klin Med (Mosk)** 1989 Nov;67(11):36–40 **(Rus)**

[The differential diagnosis of various forms of hypertrophic cardiomyopathy and hypertension with inadequate left ventricular hypertrophy] Krylov AA, et al. **Ter Arkh** 1989; 61(9):20–4 (Eng. Abstr.) **(Rus)**

[Infectious endocarditis in hypertrophic cardiomyopathy] Novikov IuI, et al. **Ter Arkh** 1990;62(5):85–9 (Eng. Abstr.) **(Rus)**

[Electrocardiographic signs of hypertrophy of the interventricular septum in patients with hypertrophic cardiomyopathy] Ianovskil GV, et al. **Vrach Delo** 1990 Mar; (3):60–2 (Eng. Abstr.) **(Rus)**

[The importance of echocardiography in differentiating between cardiac amyloidosis and hypertrophic cardiomyopathy] Puchala M. **Vnitr Lek** 1989 Jul; 35(7):639–44 (Eng. Abstr.) **(Slo)**

[Apical hypertrophic myocardiopathy: differential diagnosis with ischemic cardiopathy] Castells L, et al. **Med Clin (Barc)** 1990 May 12;94(18):704–5 (Eng. Abstr.) **(Spa)**

[Multiple aneurysms of the left auricula, ascending aorta and sinuses of Valsalva with interventricular communication, fibromuscular subaortic stenosis and a single coronary artery] Cabrera A, et al. **Rev Esp Cardiol** 1990 Mar; 43(3):189–91 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Pulmonary edema with diltiazem in hypertrophic obstructive cardiomyopathy. Natarajan D, et al. **Am Heart J** 1990 Jul; 120(1):229–32

Disopyramide in hypertrophic cardiomyopathy [letter] van der Wall E. **Am J Cardiol** 1990 Jan 15;65(3):266

The new calcium antagonist isradipine. Effect on blood pressure and the left ventricle in black hypertensive patients. Carr AA, et al. **Am J Hypertens** 1990 Jan;3(1):8–15

Changes of the degree of hypertrophy in hypertrophic obstructive cardiomyopathy under medical and surgical treatment. Curtius JM, et al. **Cardiology** 1989;76(4):255–63 (33 ref.)

Use of propranolol for severe dynamic infundibular obstruction prior to balloon pulmonary valvuloplasty (a brief communication). Thapar MK, et al. **Cathet Cardiovasc Diagn** 1990 Apr;19(4):240–1

The effects of calcium entry blockade on normal and ischemic ventricular diastolic function. Walsh RA. **Circulation** 1989 Dec;80(6 Suppl):IV52–8 (48 ref.)

Effects of nifedipine on left ventricular diastolic function in patients with asymptomatic or minimally symptomatic hypertrophic cardiomyopathy. Yamakado T, et al. **Circulation** 1990 Feb;81(2):593–601

Reversal of cardiogenic shock and asystole in a septic patient with hypertrophic cardiomyopathy on verapamil. Cohen IL, et al. **Crit Care Med** 1990 Jul;18(7):775–6

[Effects of nicardipine on left ventricular function in patients with hypertrophic cardiomyopathy] Chen M, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Dec;28(12):711–3, 766–7 (Eng. Abstr.) **(Chi)**

[Sinus rhythm and standard deviation in cardiac cycles. Influence of myocardial status and beta-blocker treatment] Hermida JS, et al. **Arch Mal Coeur** 1989 Dec; 82(12):1993–2000 (Eng. Abstr.) **(Fre)**

[Diastolic ventricular function in hypertrophic, obstructive and non-obstructive cardiomyopathy—effect of gallopamil] Olbrich HG, et al. **Z Kardiol** 1989;78 Suppl 5:29–35 (Eng. Abstr.) **(Ger)**

[Gallopamil and chlorthalidone versus atenolol and chlorthalidone in the treatment of obstructive hypertrophic cardiomyopathy in patients with arterial hypertension: polycardiographic evaluation of the systolic and diastolic function of the left ventricle] Chieppa S, et al. **Cardiologia** 1989 Aug;34(8):695–9 (Eng. Abstr.) **(Ita)**

[Therapeutic effects of oral dipyridamole on myocardial perfusion and left ventricular function in patients with hypertrophic cardiomyopathy] Kihara K. **Kaku Igaku** 1990 Feb;27(2):107–15 (Eng. Abstr.) **(Jpn)**

[Treatment of cardiomyopathy using Ca blockers] Matsumori A, et al. **Nippon Rinsho** 1989 Aug;47(8):1825–30 **(Jpn)**

[Results of long-term verapamil treatment of patients with hypertrophic cardiomyopathy] Dąbrowski M, et al. **Kardiol Pol** 1989;32 Suppl 2:6–16 (Eng. Abstr.) **(Pol)**

[Use of magnesium sulfate in hypertrophic cardiomyopathy with stenosis of the outflow route] Szyszka A, et al. **Kardiol Pol** 1989;32(2):78–86 (Eng. Abstr.) **(Pol)**

[Comparative characteristics of the arrhythmic syndrome and the possibility for its coenzyme correction in dilated and hypertrophic cardiomyopathy] Kubyshkin VF, et al. **Ter Arkh** 1989;61(9):82–5 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Persistent elevation of cardiac enzymes in a patient with hypertrophic cardiomyopathy—with special reference to electrocardiographic, echocardiographic and 201-thallium myocardial scintigraphic findings. Hamada M, et al. **Jpn Circ J** 1990 Apr;54(4):354–60

EPIDEMIOLOGY

Hypertrophic cardiomyopathy in the black population of South Africa [letter] Colyn HJ, et al. **S Afr Med J** 1990 Feb 3;77(3):165

[Cardiomyopathy in Italy today: extent of the problem] Dolara A, et al. **G Ital Cardiol** 1989 Nov;19(11):1074–9 (14 ref.) (Eng. Abstr.) **(Ita)**

ETIOLOGY

Adaptive myocardial hypertrophy in the renal ablation model. Meggs LG, et al. **Am J Hypertens** 1990 Jan; 3(1):33–8

Asymmetric septal hypertrophy and left atrial dilatation in patients with end-stage renal disease on long-term hemodialysis. Hüting J, et al. **Clin Nephrol** 1989 Dec; 32(6):276–83

Tetralogy of Fallot with hypertrophic cardiomyopathy—an unknown combination. Rao AS, et al. **Indian Heart J** 1989 Sep–Oct;41(5):344–7 (6 ref.)

Mechanism of development of asymmetric septal hypertrophy in patients with essential systemic hypertension. Yokota Y, et al. **Jpn Circ J** 1989 Oct; 53(10):1173–84

[Fabry's disease with isolated disease of the cardiac muscle, manifesting as hypertrophic cardiomyopathy] Elleder M, et al. **Cas Lek Cesk** 1990 Mar 23;129(12):369–72 (Eng. Abstr.) **(Cze)**

[An unusual right heart and chronic respiratory flow obstruction] Lang I, et al. **Wien Med Wochenschr Suppl** 1989;104:suppl 7–8 **(Ger)**

[Postoperative behavior of pulmonary artery pressure and right ventricular remodeling following orthotopic heart transplantation] Zenker G, et al. **Wien Med Wochenschr Suppl** 1989;104:suppl 53–5 **(Ger)**

[A case of hypertrophic cardiomyopathy associated with amphetamine abuse] Tanaka Y, et al. **Nippon Naika Gakkai Zasshi** 1989 Jul;78(7):944–8 **(Jpn)**

[Hypothyroid cardiomyopathy—an underdiagnosed cause of heart failure] Gundersen T, et al. **Tidsskr Nor Laegeforen** 1990 Jun 10;110(15):1948–51 (Eng. Abstr.) **(Nor)**

GENETICS

Genetic evidence of dissociation (generational skips) of electrical from morphologic forms of hypertrophic cardiomyopathy. Epstein ND, et al. **Am J Cardiol** 1990 Sep 1;66(5):627–31

A locus for familial hypertrophic cardiomyopathy is closely linked to the cardiac myosin heavy chain genes, CRI-L436, and CRI-L329 on chromosome 14 at q11–q12. Solomon SD, et al. **Am J Hum Genet** 1990 Sep;47(3):389–94

Multiple mitochondrial DNA deletions exist in cardiomyocytes of patients with hypertrophic or dilated cardiomyopathy. Ozawa T, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):830–6

Familial hypertrophic cardiomyopathy is a genetically

heterogeneous disease. Solomon SD, et al. **J Clin Invest** 1990 Sep;86(3):993–9

Cosegregation of hypertrophic cardiomyopathy and a fragile site on chromosome 16 in a large Italian family. Ferraro M, et al. **J Med Genet** 1990 Jun;27(6):363–6

Familial hypertrophic cardiomyopathy and muscle carnitine deficiency. Bautista J, et al. **Muscle Nerve** 1990 Mar; 13(3):192–4

Mapping a gene for familial hypertrophic cardiomyopathy to chromosome 14q1. Jarcho JA, et al. **N Engl J Med** 1989 Nov 16;321(20):1372–8

[Hypertrophic cardiomyopathy—examination findings, family histories and results of close examinations of a family in two autopsied cases] Tatsuno Y, et al. **Nippon Hoigaku Zasshi** 1989 Dec;43(6):502–10 (Eng. Abstr.) **(Jpn)**

[The role of heredity in the development of hypertrophic cardiomyopathy] Minakov AI. **Vrach Delo** 1989 Aug; (8):16–7 **(Rus)**

IMMUNOLOGY

[Immunological aspects of primary cardiomyopathies] Kardaszewicz B, et al. **Pol Arch Med Wewn** 1988 Apr; 79(4):213–8 (31 ref.) **(Pol)**

METABOLISM

Quantitative analysis of 123I-meta-iodobenzylguanidine (MIBG) uptake in hypertrophic cardiomyopathy. Nakajima K, et al. **Am Heart J** 1990 Jun;119(6):1329–37

31P NMR spectroscopy of hypertrophied rat heart: effect of graded global ischemia. Clarke K, et al. **J Mol Cell Cardiol** 1989 Dec;21(12):1315–25

[Are there abnormalities of parathormone, calcium and phosphorus metabolism in hypertrophic cardiomyopathy?] Gregor P, et al. **Vnitr Lek** 1990 May;36(5):446–52 (Eng. Abstr.) **(Cze)**

MORTALITY

Long-term prognosis in children with hypertrophic cardiomyopathy: an analysis of 37 patients aged less than or equal to 14 years at diagnosis. Romeo F, et al. **Clin Cardiol** 1990 Feb;13(2):101–7

Sudden death in hypertrophic and dilated cardiomyopathy. Koga Y, et al. **Jpn Circ J** 1989 Dec;53(12):1546–56

[Sudden death risk factors in patients with hypertrophic cardiomyopathy] Dąbrowski M, et al. **Kardiol Pol** 1989; 32(2):57–65 (Eng. Abstr.) **(Pol)**

PATHOLOGY

Lipomatous hypertrophy of the interatrial septum: diagnosis by percutaneous transvenous biopsy. Stone GW, et al. **Am Heart J** 1990 Feb;119(2 Pt 1):406–8

Comparison of proximal left anterior descending and circumflex coronary artery dimensions in aortic valve stenosis and hypertrophic cardiomyopathy. Kimball BP, et al. **Am J Cardiol** 1990 Mar 15;65(11):767–71

Histopathological assessment of endomyocardial biopsy in children: I. Semiquantitative study on the hypertrophy of cardiac myocytes. Nishikawa T, et al. **Am J Cardiovasc Pathol** 1989;3(1):5–11

Hypertrophic cardiomyopathy evolving into a hypokinetic and dilated left ventricle: coronary embolization as a probable pathogenetic mechanism. Gravanis MB, et al. **Clin Cardiol** 1990 Jul;13(7):500–5

Sudden unexpected death due to familial hypertrophic obstructive cardiomyopathy. Fernando R. **Forensic Sci Int** 1990 Jul;46(3):285–8

Coexistence of skeletal muscle abnormalities in cardiomyopathy [comment] Benditt DG, et al. **J Am Coll Cardiol** 1989 Nov 15;14(6):1474–5 Comment on: J Am Coll Cardiol 1989 Nov 15;14(6):1464–73.

Fibrosis in hypertrophic cardiomyopathy: its possible pathogenesis [letter] Beranek JT. **J Am Coll Cardiol** 1990 Aug;16(2):519

Type 1 fiber abnormalities in skeletal muscle of patients with hypertrophic and dilated cardiomyopathy: evidence of subclinical myogenic myopathy [see comments] Caforio AL, et al. **J Am Coll Cardiol** 1989 Nov 15;14(6):1464–73 Comment in: J Am Coll Cardiol 1989 Nov 15;14(6):1474–5.

Relation between extent of left ventricular hypertrophy and occurrence of sudden cardiac death in hypertrophic cardiomyopathy. Spirito P, et al. **J Am Coll Cardiol** 1990 Jun;15(7):1521–6

Clinical and morphological features of hypertrophic cardiomyopathy in Korean patients. Park YB, et al. **J Korean Med Sci** 1989 Dec;4(4):163–9

Cardiac lentiginosis [letter] [see comments] Murdoch DR, et al. **N Z Med J** 1990 Feb 14;103(883):53 Comment in: N Z Med J 1990 May 23;103(890):252.

Endomyocardial biopsy in infants and children: experience in 60 patients. Schmaltz AA, et al. **Pediatr Cardiol** 1990 Jan;11(1):15–21

Morphometric comparison of mitochondria and myofibrils of cardiomyocytes between hypertrophic and dilated cardiomyopathies. Tashiro A, et al. **Virchows Arch [A]** 1990;416(6):473–8

[Relation between disorders of cardiac rhythm to the symptomatology and extent of hypertrophic cardiomyopathy] Gregor P, et al. **Vnitr Lek** 1989 Jul; 35(7):632–8 (Eng. Abstr.) **(Cze)**

[Somatometric characteristics of patients with hypertrophic cardiomyopathies] Smahel Z, et al. **Vnitr Lek** 1990 Jan; 36(1):52–8 (Eng. Abstr.) **(Cze)**

[Histologic and microscopic study of striated skeletal muscles in primary dilated and hypertrophic cardiomyopathies] Firminhac P, et al. **Ann Med Interne (Paris)** 1989; 140(6):471–2 (Eng. Abstr.) **(Fre)**

[Obstructive-restrictive cardiomyopathy. On the clinical aspects and pathology of Löffler endocarditis] Adler CP. **Versicherungsmedizin** 1989 Sep 1;41(5):151–4 (Eng. Abstr.) **(Ger)**

[Left ventricular wall thickness in hypertrophic cardiomyopathy: comparisons of measurements by magnetic resonance imaging, cineangiography, and echocardiography] Matsuda T, et al. **J Cardiol** 1988 Dec; 18(4):1033–41 (Eng. Abstr.) **(Jpn)**

[A case of right-sided obstructive cardiomyopathy] Morita H, et al. **J Cardiol Suppl** 1989;22:63–5 **(Jpn)**

[Fatal hypertrophic cardiomyopathy in a newborn infant. A case report] Amaral FT, et al. **Arq Bras Cardiol** 1989 Jun; 52(6):333–5 (Eng. Abstr.) **(Por)**

[Morphologic and morphometric characteristics of hypertrophic cardiomyopathy] Kostin SI. **Arkh Patol** 1989; 51(11):47–53 (Eng. Abstr.) **(Rus)**

[Clinico-pathomorphologic evaluation of changes of the interventricular heart septum in hypertrophic cardiomyopathy] Rozenberg VD. **Kardiologiia** 1990 Feb; 30(2):66–9 (Eng. Abstr.) **(Rus)**

[Changes in the cardiac vascular bed in dilated and hypertrophic cardiomyopathy] Rozenberg VD. **Kardiologiia** 1989 Nov;29(11, 116–20 (Eng. Abstr.) **(Rus)**

[Value of endomyocardial biopsy in the diagnosis of cardiomyopathies] Rozenberg VD. **Klin Med (Mosk)** 1989 Aug;67(8):21–6 (52 ref.) **(Rus)**

PHYSIOPATHOLOGY

Mechanocardiographic evaluation of left ventricular diastolic function in hypertrophic cardiomyopathy and hypertensive cardiomyopathy. Brandt CM, et al. **Acta Cardiol** 1990; 45(3):181–7

Apical hypertrophic cardiomyopathy [letter; comment] Gold S, et al. **Am Heart J** 1989 Dec;118(6):1351–2 Comment on: Am Heart J 1988 Dec;116(6 Pt 1):1469–74.

Severity of arrhythmias and extent of hypertrophy in hypertrophic cardiomyopathy. Lazzeroni E, et al. **Am Heart J** 1989 Oct;118(4):734–8

Assessment of diastolic filling indexes obtained by radionuclide ventriculography. Stewart RA, et al. **Am J Cardiol** 1990 Jan 15;65(3):226–30

Evaluation of myocardial function. Jochim KE, et al. **Ann Thorac Surg** 1975 Jul;20(1):30–8

Coronary flow reserve in patients with chest pain, angiographically normal coronary arteries and normal left ventricle, dilated cardiomyopathy, and hypertrophic cardiomyopathy. Cannon RO 3d. **Bibl Cardiol** 1989; (44):25–38; discussion 38–9 (33 ref.)

The A wave of the apex cardiogram in idiopathic hypertrophic subaortic stenosis. Wolfe AD. **Br Heart J** 1966 Mar;28(2):179–83

Regional left ventricular nonuniformity. Effects on left ventricular diastolic function in ischemic heart disease, hypertrophic cardiomyopathy, and the normal heart. Bonow RO. **Circulation** 1990 Feb;81(2 Suppl):III54–65 (131 ref.)

Giant P wave in a patient with right ventricular cardiomyopathy. Martini B, et al. **Clin Cardiol** 1990 Feb; 13(2):143–5

Adrenergic nervous system and left ventricular mass in primary hypertension. Ferrara LA, et al. **Eur Heart J** 1989 Nov;10(11):1036–40

Limited maximal vasodilator capacity of forearm resistance vessels in patients with hypertrophic cardiomyopathy. Imaizumi T, et al. **Heart Vessels** 1990;5(3):159–65

Electrophysiologic evaluation of patients with hypertrophic cardiomyopathy. Bahl VK, et al. **Int J Cardiol** 1989 Oct; 25(1):87–92

The progression of hypertrophic cardiomyopathy: dilatation of the left ventricle with supernormal systolic function. Pelliccia F, et al. **Int J Cardiol** 1990 Feb;26(2):232–4

Clinical significance of giant negative T waves in hypertrophic cardiomyopathy [see comments] Alfonso F, et al. **J Am Coll Cardiol** 1990 Apr;15(5):965–71 Comment in: J Am Coll Cardiol 1990 Apr;15(5):972–3.

Syncope and sudden death in hypertrophic cardiomyopathy [comment] Brandenburg RO. **J Am Coll Cardiol** 1990 Apr; 15(5):962–4 Comment on: J Am Coll Cardiol 1990 Apr;15(5):948–55. Comment on: J Am Coll Cardiol 1990 Apr;15(5):956–61.

Signal-averaged electrocardiography in hypertrophic cardiomyopathy [see comments] Cripps TR, et al. **J Am Coll Cardiol** 1990 Apr;15(5):956–61 Comment in: J Am Coll Cardiol 1990 Apr;15(5):962–4.

"Acquired" discrete subvalvular aortic stenosis: natural history and hemodynamics. Leichter DA, et al. **J Am Coll Cardiol** 1989 Nov 15;14(6):1539–44

Q waves in hypertrophic cardiomyopathy in relation to the distribution and severity of right and left ventricular hypertrophy [see comments] Lemery R, et al. **J Am Coll Cardiol** 1990 Aug;16(2):368–74 Comment in: J Am Coll Cardiol 1990 Aug;16(2):375–6.

The giant negative T wave revisited ... in hypertrophic cardiomyopathy [comment] Maron BJ. **J Am Coll Cardiol** 1990 Apr;15(5):972–3 Comment on: J Am Coll Cardiol 1990 Apr;15(5):965–71.

Q waves in hypertrophic cardiomyopathy: a reassessment [editorial; comment] Maron BJ. **J Am Coll Cardiol** 1990 Aug;16(2):375–6 Comment on: J Am Coll Cardiol 1990 Aug;16(2):368–74.

Doppler echocardiographic measurement of outflow tract gradient in hypertrophic cardiomyopathy. Ryan TJ. **J Am Soc Echocardiogr** 1988 Nov–Dec;1(6):471–2

Abnormal diastolic flow patterns in hypertrophic cardiomyopathy: evaluation by simultaneous Doppler echocardiography, cineangiography, and hemodynamics. Silverman PR, et al. **J Am Soc Echocardiogr** 1989 Sep–Oct; 2(5):346–9

IHSS—an insight into various findings [letter] Turakhia DP. **J Assoc Physicians India** 1990 Jun;38(6):450–2

ECG of the month. Is there a message? "Infarct-pattern" premature ventricular impulses. Martinez-Lopez JI. **J La State Med Soc** 1989 Sep;141(9):5–8

Electrophysiologic characteristics of single myocytes isolated from hypertrophied guinea-pig hearts. Nordin C, et al. **J Mol Cell Cardiol** 1989 Jul;21(7):729–39

Cardiomyopathy [letter] **J Natl Med Assoc** 1990 Aug; 82(8):554

Significance of ultrafast computed tomography in cardiac imaging: usefulness in assessment of myocardial characteristics and cardiac function. Naito H, et al. **Jpn Circ J** 1990 Mar;54(3):322–7

Relation between regional contractile dynamics and myocardial lesions in patients with hypertrophic cardiomyopathy. Usuki S, et al. **Jpn Circ J** 1989 Nov; 53(11):1343–55

Natural history of hypertrophic cardiomyopathy [letter; comment] Webb NC. **N Engl J Med** 1989 Nov 16; 321(20):1414 Comment on: N Engl J Med 1989 Mar 23;320(12):749–55.

[Effect of the duration of reperfusion on metabolic recovery during unloading of the hypertrophic heart following induced heart arrest] Görlach G, et al. **Z Kardiol** 1990 Jan; 79(1):28–31 (Eng. Abstr.) **(Ger)**

[A study on the pattern of myocardial distribution and its relationship to the genesis of giant negative T wave in patients with hypertrophic cardiomyopathy] Anzai T. **Hokkaido Igaku Zasshi** 1990 Mar;65(2):170–7 (Eng. Abstr.) **(Jpn)**

[Regional left ventricular diastolic function in hypertrophic cardiomyopathy: application of "sector analysis" to ECG forward and reverse gated radionuclide ventriculography] Ishida Y, et al. **J Cardiol** 1989 Jun;19(2):473–85 (Eng. Abstr.) **(Jpn)**

[Intraventricular flow dynamics in hypertrophic cardiomyopathy with midventricular obstruction investigated by Doppler echocardiography] Nakamura T, et al. **J Cardiol** 1989 Jun;19(2):455–71 (Eng. Abstr.) **(Jpn)**

[Contribution of hypertension to left ventricular diastolic function in patients with asymmetrical apical hypertrophy] Shiotani M, et al. **J Cardiol** 1989 Mar;19(1):135–45 (Eng. Abstr.) **(Jpn)**

[Left ventricular diastolic reserve during acute pressure loading in hypertrophic cardiomyopathy and dilated cardiomyopathy] Yokote Y, et al. **J Cardiol** 1988 Dec; 18(4):1051–60 (Eng. Abstr.) **(Jpn)**

[Influence of elevation of lower extremities on the left ventricular function in hypertrophic cardiomyopathy and essential hypertension] Mukai M, et al. **J Cardiol Suppl** 1989;22:83–4 **(Jpn)**

[Clinical investigation on childhood HCM; long-term follow-up study with special reference to electrophysiology, histopathology by endomyocardial biopsy and ambulatory and exercise electrocardiography] Yonesaka S, et al. **Kokyu To Junkan** 1990 Jul;38(7):677–82 (Eng. Abstr.) **(Jpn)**

[Effect of isoproterenol on left-ventricular systolic time interval in primary hypertrophic cardiomyopathy] Cibor E, et al. **Folia Med Cracov** 1989;30(3–4):83–91 (Eng. Abstr.) **(Pol)**

[Possibilities of echocardiographic evaluation of hemodynamic disorders in hypertrophic cardiomyopathy] Tendera M, et al. **Kardiol Pol** 1989;32 Suppl 1:16–22 (Eng. Abstr.) **(Pol)**

[Vector electrocardiographic features in patients with hypertrophic cardiomyopathy] Gadzhaeva FU, et al. **Kardiologiia** 1989 Nov;29(11):120–4 (Eng. Abstr.) **(Rus)**

[Functional status of the endocrine system in patients with hypertrophic cardiomyopathy] Iakovlev GM, et al. **Kardiologiia** 1989 Sep;29(9):59–63 (Eng. Abstr.) **(Rus)**

[Characteristics of cardiac hemodynamics and right ventricular function in patients with various types of cardiomyopathy and ischemic heart disease] Mamedova FA. **Kardiologiia** 1989 Jul;29(7):70–3 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Prognostic significance of radionuclide-assessed diastolic function in hypertrophic cardiomyopathy. Chikamori T, et al. **Am J Cardiol** 1990 Feb 15;65(7):478–82

Decreased coronary vasodilatory capacity in hypertrophic cardiomyopathy determined by split-dose thallium-dipyridamole myocardial scintigraphy. Koga Y, et al. **Am J Cardiol** 1990 May 1;65(16):1134–9

Measurement of regional myocardial blood flow in hypertrophic cardiomyopathy: application of the first-pass

flow model using [13N]ammonia and PET. Yoshida K, et al. **Am J Physiol Imaging** 1989;4(3):97–104

[Nuclear cardiological examination for evaluation of hypertrophic cardiomyopathy with midventricular obstruction and apical aneurysm: a case report] Katahira T, et al. **Kaku Igaku** 1989 Jul;26(7):891–6 (Eng. Abstr.) **(Jpn)**

[Evaluation of hypertrophic cardiomyopathy with 123I-metaiodobenzylguanidine] Nakajima K, et al. **Kaku Igaku** 1990 Jan;27(1):33–8 (Eng. Abstr.) **(Jpn)**

[Significance of decreased washout rate in hypertrophic cardiomyopathy by exercise Tl-201 myocardial scintigraphy] Inoue S, et al. **Kokyu To Junkan** 1989 Sep; 37(9):1003–7 (Eng. Abstr.) **(Jpn)**

SURGERY

Operation for hypertrophic cardiomyopathy [letter; comment] Browdie DA, et al. **Ann Thorac Surg** 1990 Jun; 49(6):1024–5 Comment on: Ann Thorac Surg 1989 Oct;48(4):528–34; discussion 535.

Subvalvar aortic stenosis: timing of operation. Douville EC, et al. **Ann Thorac Surg** 1990 Jul;50(1):29–33; discussion 33–4

Reappraisal of localized resection for subvalvar aortic stenosis. Stewart JR, et al. **Ann Thorac Surg** 1990 Aug; 50(2):197–202; discussion 202–3

Comparison of ventricular septal surgery and mitral valve replacement for hypertrophic obstructive cardiomyopathy [see comments] Walker WS, et al. **Ann Thorac Surg** 1989 Oct;48(4):528–34; discussion 535 Comment in: Ann Thorac Surg 1990 Jun;49(6):1024–5.

Percutaneous transcatheter myectomy of subvalvar pulmonary stenosis in tetralogy of Fallot: a new palliative technique with an atherectomy catheter. Qureshi SA, et al. **Br Heart J** 1990 Aug;64(2):163–5

Changes of the degree of hypertrophy in hypertrophic obstructive cardiomyopathy under medical and surgical treatment. Curtius JM, et al. **Cardiology** 1989;76(4):255–63 (33 ref.)

Hypertrophic obstructive cardiomyopathy. Late follow-up after ventricular myotomy-myectomy. Luisi VS, et al. **Eur J Cardiothorac Surg** 1989;3(1):20–5

Late results after resection of discrete and tunnel subaortic stenosis. Stellin G, et al. **Eur J Cardiothorac Surg** 1989; 3(3):235–9; discussion 240

Perforation of the heart in a newborn with critical valvar pulmonary stenosis during balloon valvoplasty. Robida A, et al. **Int J Cardiol** 1990 Jan;26(1):111–2

Improvement in left ventricular diastolic filling by septal myectomy in hypertrophic cardiomyopathy. Masuyama T, et al. **J Am Soc Echocardiogr** 1990 May-Jun;3(3):196–204

Surgical treatment of subvalvular aortic stenosis. Long-term results. Jaumin P, et al. **J Cardiovasc Surg (Torino)** 1990 Jan-Feb;31(1):31–5

The results of operation in patients with hypertrophic cardiomyopathy and pulmonary hypertension. Stone CD, et al. **J Thorac Cardiovasc Surg** 1990 Sep;100(3):343–51; discussion 352

Late results after resection of fixed subaortic stenosis. Ivert T, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(3):211–8

Fixed subaortic stenosis: an acquired secondary obstruction? A twenty-seven year experience with 168 patients. Vogt J, et al. **Thorac Cardiovasc Surg** 1989 Aug;37(4):199–206

[Echocardiography evaluation of the surgical result in hypertrophic obstructive cardiomyopathy] Krosse B, et al. **Z Gesamte Inn Med** 1990 May 1;45(9):263–6 (Eng. Abstr.) **(Ger)**

[A case of supravalvular aortic stenosis treated by Doty's operation] Asai T, et al. **Kyobu Geka** 1990 Mar;43(3):223–5 (Eng. Abstr.) **(Jpn)**

[A case report of isolated infundibular pulmonary stenosis with pouch of the infundibular chamber] Takahashi T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jun; 37(6):1197–201 (18 ref.) (Eng. Abstr.) **(Jpn)**

[A case of supravalvular aortic stenosis with spontaneous remission of peripheral pulmonary stenosis] Teramachi M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Nov; 37(11):2393–7 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of aortic subvalvular stenosis] Selivanenko VT, et al. **Grud Serdechnososudistaia Khir** 1990;(2):73–4 **(Rus)**

THERAPY

Management of hypertrophic cardiomyopathy. Hopf R, et al. **Annu Rev Med** 1990;41:75–83 (30 ref.)

Double balloon dilatation for discrete sub-aortic stenosis: immediate results and short term follow-up. Ribeiro PA, et al. **Rev Port Cardiol** 1988 Nov-Dec;7(6):585–8

[Thrombolysis in patients with hypertrophic cardiomyopathy or: the tree must not hide the wood (letter)] Chagnon A. **Presse Med** 1990 Apr 28;19(17):819 **(Fre)**

[Long-term course of hypertrophic cardiomyopathy: drug versus surgical therapy] Seiler C, et al. **Schweiz Med Wochenschr** 1989 Oct 28;119(43):1511–4 (Eng. Abstr.) **(Ger)**

VETERINARY

Use of relaxation half-time as an index of ventricular relaxation in clinically normal cats and cats with hypertrophic cardiomyopathy. Golden AL, et al. **Am J Vet Res** 1990 Sep;51(9):1352–6

CARDIOMYOPATHY, HYPERTROPHIC OBSTRUCTIVE see **CARDIOMYOPATHY, HYPERTROPHIC**

CARDIOMYOPATHY, RESTRICTIVE

[Idiopathic restrictive cardiomyopathy: clinical, hemodynamic, histologic and prognostic profile] Ortolani P, et al. **Cardiologia** 1989 Sep;34(9):759–68 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Myocardial tuberculosis presenting as restrictive cardiomyopathy. Bali HK, et al. **Am Heart J** 1990 Sep; 120(3):703–6

Restrictive cardiomyopathy. Wilmshurst PT, et al. **Br Heart J** 1990 Jun;63(6):323–4 (34 ref.)

Doppler echocardiography in dilated and restrictive cardiomyopathies. Acquatella H, et al. **Cardiol Clin** 1990 May;8(2):349–67 (109 ref.)

[Heart involvement in hypereosinophilia: the restrictive or the dilated type?] Moiseev SV, et al. **Ter Arkh** 1989; 61(9):79–81 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Spectrum of restrictive cardiomyopathy: report of the national survey in Japan. Hirota Y, et al. **Am Heart J** 1990 Jul;120(1):188–94

[Cardiomyopathy in Italy today: extent of the problem] Dolara A, et al. **G Ital Cardiol** 1989 Nov;19(11):1074–9 (14 ref.) (Eng. Abstr.) **(Ita)**

ETIOLOGY

Restrictive cardiomyopathy following acute myocarditis--a case report. Katayama T, et al. **Angiology** 1990 Jan; 41(1):76–81

[Restrictive cardiomyopathy] Moiseev VS, et al. **Kardiologiia** 1990 Feb;30(2):114–8 (96 ref.) **(Rus)**

[Restrictive myocardiopathy caused by endomyocardial fibrosis] Mayor Molina G, et al. **Rev Esp Cardiol** 1990 Feb; 43(2):119–22 (Eng. Abstr.) **(Spa)**

GENETICS

Familial restrictive cardiomyopathy with atrioventricular block and skeletal myopathy. Fitzpatrick AP, et al. **Br Heart J** 1990 Feb;63(2):114–8

PATHOLOGY

Features of mildly dilated congestive cardiomyopathy compared with idiopathic restrictive cardiomyopathy and typical dilated cardiomyopathy. Keren A, et al. **J Am Soc Echocardiogr** 1988 Jan-Feb;1(1):78–87

[Obstructive-restrictive cardiomyopathy. On the clinical aspects and pathology of Löffler endocarditis] Adler CP. **Versicherungsmedizin** 1989 Sep 1;41(5):151–4 (Eng. Abstr.) **(Ger)**

[Endomyocardial biopsy in children and adolescents] Ruzyłło W, et al. **Kardiol Pol** 1989;32(2):87–96 (Eng. Abstr.) **(Pol)**

[Value of endomyocardial biopsy in the diagnosis of cardiomyopathies] Rozenberg VD. **Klin Med (Mosk)** 1989 Aug;67(8):21–6 (52 ref.) **(Rus)**

SURGERY

Optimal timing of pediatric heart transplantation. Addonizio LJ, et al. **Circulation** 1989 Nov;80(5 Pt 2):III84–9

CARDIONATRIN I see **NATRIURETIC PEPTIDES, ATRIAL**

CARDIOPLEGIA see **HEART ARREST, INDUCED**

CARDIOPLEGIC SOLUTIONS

Oxygenated cardioplegia: blood is a many splendored thing [comment] Buckberg GD. **Ann Thorac Surg** 1990 Aug; 50(2):175–7 Comment on: Ann Thorac Surg 1990 Aug;50(2):230–7.

Preservation of myocardial function and biochemistry after blood and oxygenated crystalloid cardioplegia during cardiac arrest [see comments] Coetzee A, et al. **Ann Thorac Surg** 1990 Aug;50(2):230–7 Comment in: Ann Thorac Surg 1990 Aug;50(2):175–7.

Potassium-induced cardioplegia. Gay WA Jr. **Ann Thorac Surg** 1975 Jul;20(1):95–100

Cardioplegia for transplantation: failure of extracellular solution compared with Stanford or UW solution. Gott JP, et al. **Ann Thorac Surg** 1990 Sep;50(3):348–54

Assessment of ischemic injury and protective interventions: the Langendorff versus the working rat heart preparation. Galinanes M, et al. **Can J Cardiol** 1990 Mar;6(2):83–91

Clinical validation of St. Thomas' Hospital cardioplegic solution No. 2 (Plegisol). Chambers DJ, et al. **Eur J Cardiothorac Surg** 1989;3(4):346–52

Protection of the heart by nifedipine cardioplegia during coronary artery surgery. A clinical-haemodynamic evaluation. Donegani E, et al. **Eur J Cardiothorac Surg** 1988;2(6):442–7

Hemoglobin solutions in experimental cardioplegia. Pristoupil TI, et al. **Int J Artif Organs** 1989 Oct;12(10):668–72

The efficacy of blood cardioplegia is not due to oxygen delivery. Illes RW, et al. **J Thorac Cardiovasc Surg** 1989 Dec;98(6):1051–6

Comparison of three cardioplegic solutions during hypothermic ischemic arrest in neonatal blood-perfused rabbit hearts. Konishi T, et al. **J Thorac Cardiovasc Surg** 1989 Dec;98(6):1132–7

Branched chain amino acid perfusion [letter] McMillin JB. **J Thorac Cardiovasc Surg** 1989 Oct;98(4):632–3

Determination of the optimal dose of crystalloid cardioplegia using volume per myocardial weight [letter; comment] Matsuda H. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 1):800 Comment on: J Thorac Cardiovasc Surg 1988 Nov;96(5):730–40.

Adenosine cardioplegia. Adenosine versus potassium cardioplegia: effects on cardiac arrest and postischemic recovery in the isolated rat heart. Schubert T, et al. **J Thorac Cardiovasc Surg** 1989 Dec;98(6):1057–65

The effect of amino acids on the ischemic heart. Improvement of oxygenated crystalloid cardioplegic solution by an enriched branched chain amino acid formulation. Schwalb H, et al. **J Thorac Cardiovasc Surg** 1989 Oct;98(4):551–6

Adjuvant N-(2-mercaptopropionyl)-glycine in blood cardioplegia does not improve myocardial protection in ischemically damaged hearts. Vinten-Johansen J, et al. **J Thorac Cardiovasc Surg** 1990 Jul;100(1):65–76

Multidose cardioplegia for myocardial preservation during prolonged ischemic arrest. O'Donoghue MJ, et al. **Surg Forum** 1978;29:274–6

The effect of controlled reperfusion in porcine hearts submitted to three hours of cold global ischemia. Haverich A, et al. **Transpl Int** 1989 Aug;2(2):78–83

Adenosine and its role in cardioplegia: effects on postischemic recovery in the baboon. Boehm DH, et al. **Transplant Proc** 1990 Apr;22(2):545–6

Optimal cardioplegia and 24-hour heart storage with simplified UW solution containing polyethylene glycol. Wicomb WN, et al. **Transplantation** 1990 Feb;49(2):261–4

[Experimental study on myocardial protection with verapamil and salvia miltiorrhiza Bunge cardioplegia] Zhu P. **Chung Hua Wai Ko Tsa Chih** 1990 Jan;28(1):9–12, 60 (Eng. Abstr.) **(Chi)**

[Clinical and metabolic evaluation of myocardial protection by oxygenated cardioplegia (Hamburg solution) in multiple coronary bypass surgery or polyvalvular replacement] Jegaden O, et al. **Ann Chir** 1989;43(8):636–41 (Eng. Abstr.) **(Fre)**

[Clinical study on the use of retrograde cardioplegia with St. Thomas' Hospital solution] Sakurada T, et al. **Kyobu Geka** 1990 May;43(5):342–7; discussion 348–51 (Eng. Abstr.) **(Jpn)**

[Experimental study on myocardial preservation with perfluorochemical] Tsukamoto S. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep;37(9):1880–8 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Myocardial protection by retrograde cardioplegia in arterial switch operation. Yonenaga K, et al. **Ann Thorac Surg** 1990 Aug;50(2):238–42

A new technique for delivering antegrade/retrograde blood cardioplegia without right heart isolation. Buckberg GD, et al. **Eur J Cardiothorac Surg** 1990;4(3):163–7; discussion 168

Cardioplegia: relation of myocardial protection to infusion volume and duration. Takahashi A, et al. **Eur J Cardiothorac Surg** 1989;3(2):130–3; discussion 134

Preservation of myocardial energy-rich phosphates by retrograde application of Bretschneider cardioplegia during aortocoronary bypass surgery. Walter PJ, et al. **Eur J Cardiothorac Surg** 1988;2(1):25–30

Low potassium cardioplegia: its effect on the incidence of complete heart block following cardiac surgery. O'Riordáin DS, et al. **Ir J Med Sci** 1989 Oct;158(10):257–9

Comparison of blood-based and asanguineous cardioplegic solutions administered at 4 degrees C. An ultrastructural morphometric study in the dog. Axford-Gatley RA, et al. **J Thorac Cardiovasc Surg** 1990 Sep;100(3):400–9

Is protection of ischemic neonatal myocardium by cardioplegia species dependent? Baker JE, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):280–7

Combined antegrade/retrograde cardioplegia for myocardial protection: a clinical trial. Bhayana JN, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 2):956–60

A new simplified method of optimizing cardioplegic delivery without right heart isolation. Antegrade/retrograde blood cardioplegia. Drinkwater DC, et al. **J Thorac Cardiovasc Surg** 1990 Jul;100(1):56–63; discussion 63–4

Protection of the immature heart. Temperature-dependent beneficial or detrimental effects of multidose crystalloid cardioplegia in the neonatal rabbit heart. Kempsford RD, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):269–79

A new method of retrograde cardioplegic administration. Right ventricular protection by right atrial perfusion cooling. Nakamura Y, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):335–44

Distribution of cardioplegic solution infused antegradely and retrogradely in normal canine hearts. Stirling MC, et al. **J Thorac Cardiovasc Surg** 1989 Dec;98(6):1066–76

HTK-solution (Bretschneider) for human liver

transplantation. First clinical experiences. Gubernatis G, et al. **Langenbecks Arch Chir** 1990;375(2):66–70

A new technical approach for retrograde administration of cardioplegic solutions. Martinez-Leon J, et al. **Thorac Cardiovasc Surg** 1989 Dec;37(6):372–3

[Energy reserves and the extent of heart injury in ischemia and reperfusion during single and repeated administration of cardioplegic solutions] Vavřínková H, et al. **Cesk Fysiol** 1989;38(6):565–8 **(Cze)**

[Right ventricular function in retrograde cardioplegia for myocardial protection—an experimental study] Hoshino R. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jul;37(7):1287–96 (Eng. Abstr.) **(Jpn)**

[The protective effect of diltiazem, a calcium channel blocker on myocardial ischemia during open heart surgery—an analysis of electrolyte changes in myocardial cells] Koike R. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Mar; 38(3):358–69 (Eng. Abstr.) **(Jpn)**

[Retrograde continuous cold blood cardioplegia for aortic valve surgery] Yamamoto S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jan;38(1):78–85 (Eng. Abstr.) **(Jpn)**

[Pre-ischemic protection of the myocardium with glutamic acid during heart valve prosthesis under artificial circulation] Shmerel'son MB, et al. **Anesteziol Reanimatol** 1990 Mar–Apr;(2):3–7 **(Rus)**

[Hyperkalemic normothermic hypoperfusion of the isolated heart] Oleĭnikov OD, et al. **Fiziol Zh** 1989 Sep–Oct; 35(5):72–5 (Eng. Abstr.) **(Rus)**

[Retrograde cardioplegia: advantages and shortcomings] Sokolov VV, et al. **Grud Serdechnososudistaia Khir** 1990; (5):63–7 (71 ref.) **(Rus)**

[Ion-balanced cardioplegic solutions in cardiac surgery] Zorin AB, et al. **Vestn Khir** 1989 Sep;143(9):104–7 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Is cold, cardioplegic solution harmful to the lungs? Lindberg H, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(3):241–6

ANALYSIS

The concentration of calcium in neonatal cardioplegia. Zweng TN, et al. **Ann Thorac Surg** 1990 Aug;50(2):262–7

[Optimal potassium concentration in cardioplegic solutions] Yu G, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1990 Feb; 18(1):42–6, 62 (Eng. Abstr.) **(Chi)**

PHARMACOKINETICS

Heterogeneous delivery of cardioplegic solution in the absence of coronary artery disease. Aldea GS, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):345–53

PHARMACOLOGY

Protection of the immature myocardium during ischemic arrest: dose dependent effects of glucose and mannitol when added to St Thomas' cardioplegic solution. Yang SS, et al. **Can J Cardiol** 1989 Nov–Dec;5(8):401–7

A comparison of blood, crystalloid and oxygenated crystalloid cardioplegia solutions on myoglobin and creatine kinase release following cardiac surgery. Gerrish SP, et al. **Eur J Cardiothorac Surg** 1988;2(6):438–41

31P-NMR spectroscopy of phosphate compartmentation during ischaemia in hearts protected by cardioplegic treatment. Stier A, et al. **Free Radic Res Commun** 1989; 7(3–6):293–300

Paradoxical effects of cardiac arrest by multidose potassium cardioplegia on myocardial lysosome integrity and phospholipid content. Ambrosio G, et al. **J Surg Res** 1990 Aug;49(2):132–7

Coronary vascular responsiveness to 5-hydroxytryptamine before and after infusion of hyperkalemic crystalloid cardioplegic solution in the rat heart. Possible evidence of endothelial damage. Saldanha C, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 1):783–7

Harvesting hearts for long-term preservation. Detrimental effects of initial hypothermic infusion of cardioplegic solutions. Takahashi A, et al. **J Thorac Cardiovasc Surg** 1990 Sep;100(3):371–8

The cardioplegic solution HTK: effects on membrane potential, intracellular K+ and Na+ activities in sheep cardiac Purkinje fibres. Krohn E, et al. **Pflugers Arch** 1989 Dec;415(3):269–75

Clinical evaluation of hypothermic ventricular fibrillation, multi-dose blood cardioplegia, and single-dose Bretschneider cardioplegia in coronary surgery. Beyersdorf F, et al. **Thorac Cardiovasc Surg** 1990 Feb;38(1):20–9

European versus North American cardioplegia: comparison of Bretschneider's and Roe's cardioplegic solutions in a canine model of cardiopulmonary bypass. Wilson GJ, et al. **Thorac Cardiovasc Surg** 1990 Feb;38(1):10–4

[Ischemic-reperfusion injury of the heart: comparison of intra- and extracellular types of cardioplegic solutions] Tutterová M, et al. **Cesk Fysiol** 1989;38(6):569–72 **(Cze)**

[Clinical study of the effect to myocardial protection with crystalloid cardioplegic solution during open heart surgery in infants under age 3 months] Ando F, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Oct; 37(10):2175–80 (Eng. Abstr.) **(Jpn)**

[Comparison of myocardial protective effects between GIK solution and St. Thomas solution by use of canine isolated heart-lung preparations] Ina H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Nov; 37(11):2318–27 (Eng. Abstr.) **(Jpn)**

[Comparative study of the protective effects of a cold potassium cardioplegic solution verses the Collins solution in the preservation of canine hearts for 24 hours by simple immersion method] Noda H. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Oct; 37(10):2064–71 (Eng. Abstr.) **(Jpn)**

[Functional and metabolic effects of nicardipine on ischemic rat hearts with multidose potassium cardioplegia] Tachibana H. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Apr; 38(4):630–40 (Eng. Abstr.) **(Jpn)**

[Effects of cardioplegic solutions on coronary artery and myocardium—comparison of the glucose-insulin-potassium solution and the St. Thomas' Hospital cardioplegic solution] Watanabe H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Oct;37(10):2142–9 (Eng. Abstr.) **(Jpn)**

[Effects of cardioplegic solution and calcium entry blockers on coronary artery contraction] Yoshida K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jan;38(1):86–92 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Clinical trial of nicardipine cardioplegia in pediatric cardiac surgery. Mori F, et al. **Ann Thorac Surg** 1990 Mar; 49(3):413–7; discussion 417–8

Free radicals and cardioplegia: organic anti-oxidants as additives to the St Thomas' Hospital cardioplegic solution. Chambers DJ, et al. **Cardiovasc Res** 1989 Apr;23(4):351–8

L-aspartate improves the functional recovery of explanted hearts stored in St. Thomas' Hospital cardioplegic solution at 4 degrees C. Choong YS, et al. **J Thorac Cardiovasc Surg** 1990 Mar;99(3):510–7

Histochemical investigation of myocardial proteases in heart anoxia, under protection with cardioplegic solution and protease inhibitors. Gabrielescu E, et al. **Physiologie** 1989 Apr–Jun;26(2):101–10

[Efficacy of crystalloid cardioplegia against immature myocardium] Aeba R. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jun;37(6):1131–42 (Eng. Abstr.) **(Jpn)**

[Experimental study on myocardial preservation by perfluorochemical "comparison of myocardial preservation effect between continuous perfusion and intermittent perfusion"] Endo M. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jun;38(6):989–98 (Eng. Abstr.) **(Jpn)**

[Experimental study of coronary reactive hyperemia—effects of hypothermia and potassium cardioplegia] Umebayashi Y. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep; 37(9):1901–7 (Eng. Abstr.) **(Jpn)**

CARDIOPULMONARY ARREST see **HEART ARREST**

CARDIOPULMONARY BYPASS

see related
HEART, MECHANICAL

Emergency aortic valve replacement in the 24th-week of pregnancy. Korsten HH, et al. **Acta Anaesthesiol Belg** 1989; 40(3):201–5

Effect of sternotomy and cardiopulmonary bypass on airway pressures and respiratory mechanics during high frequency ventilation. Harris CE, et al. **Acta Anaesthesiol Scand** 1989 Aug;33(6):502–7

Augmentation of kallikrein and plasmin inhibition capacity by aprotinin using a new assay to monitor therapy. Gallimore MJ, et al. **Adv Exp Med Biol** 1989;247B:55–60

Elastase release in plasma with increased C1-inhibition capacity during recirculation of blood. Heller W, et al. **Adv Exp Med Biol** 1989;247B:579–84

Detection of microbubbles released by oxygenators during cardiopulmonary bypass by intraoperative transesophageal echocardiography. Meloni L, et al. **Am J Cardiol** 1990 Aug 15;66(4):511–4

Emergency cardiopulmonary bypass for resuscitation from prolonged cardiac arrest. Safar P, et al. **Am J Emerg Med** 1990 Jan;8(1):55–67 (130 ref.)

Sinusoidal fetal heart rate pattern during cardiopulmonary bypass. Burke AB, et al. **Am J Obstet Gynecol** 1990 Jul; 163(1 Pt 1):17–8

Successful treatment of postpartum shock caused by amniotic fluid embolism with cardiopulmonary bypass and pulmonary artery thromboembolectomy. Esposito RA, et al. **Am J Obstet Gynecol** 1990 Aug;163(2):572–4

Blackout during cardiopulmonary bypass [letter] Greenhalgh DL, et al. **Anaesthesia** 1990 Feb;45(2):175

Prediction of neurological damage after cardiopulmonary bypass surgery. Use of the cerebral function analysing monitor. Nevin M, et al. **Anaesthesia** 1989 Sep;44(9):725–9

Effect of cardiopulmonary bypass on plasma levels of nifedipine. Katz RI, et al. **Anesth Analg** 1990 Oct; 71(4):411–4

Electrocardiographic artifacts during cardiopulmonary bypass. Khambatta HJ, et al. **Anesth Analg** 1990 Jul; 71(1):88–91

Effect of combined infusion of nitroglycerin and nicardipine on femoral-to-radial arterial pressure gradient after cardiopulmonary bypass. Maruyama K, et al. **Anesth Analg** 1990 Apr;70(4):428–32

Hemodynamic effects of rapid vancomycin infusion in critically ill patients. Stier GR, et al. **Anesth Analg** 1990 Oct;71(4):394–9

A randomized study of carbon dioxide management during hypothermic cardiopulmonary bypass [see comments] Bashein G, et al. **Anesthesiology** 1990 Jan;72(1):7–15 Comment in: Anesthesiology 1990 Jan;72(1):3–6. Comment in: Anesthesiology 1990 Jun;72(6):1100–1.

"Heparin-free" cardiopulmonary bypass: first reported use of heparinoid (Org 10172) to provide anticoagulation for cardiopulmonary bypass. Doherty DC, et al. **Anesthesiology** 1990 Sep;73(3):562–5

Does cardiopulmonary bypass alter enflurane requirements for anesthesia? Hall RI, et al. **Anesthesiology** 1990 Aug; 73(2):249–55

A comparison of washed red blood cells versus packed red blood cells (AS-1) for cardiopulmonary bypass prime and their effects on blood glucose concentration in children. Hosking MP, et al. **Anesthesiology** 1990 Jun;72(6):987–90

Temperature measurement and blood gas reporting in studies of hypothermic cardiopulmonary bypass [letter; comment] Murkin JM. **Anesthesiology** 1990 Jun;72(6):1100–1 Comment on: Anesthesiology 1990 Jan;72(1):7–15.

Washin and washout of isoflurane administered via bubble oxygenators during hypothermic cardiopulmonary bypass. Nussmeier NA, et al. **Anesthesiology** 1989 Oct;71(4):519–25

PaCO2 management during cardiopulmonary bypass: intriguing physiologic rationale, convincing clinical data, evolving hypothesis? [comment] Prough DS, et al. **Anesthesiology** 1990 Jan;72(1):3–6 Comment on: Anesthesiology 1990 Jan;72(1):7–15.

Aortic-to-radial arterial pressure gradient after bypass [letter; comment] Urzua J. **Anesthesiology** 1990 Jul;73(1):191 Comment on: Anesthesiology 1989 Jun;70(6):935–41.

Ancrod (Arvin) as an alternative to heparin anticoagulation for cardiopulmonary bypass. Zulys VJ, et al. **Anesthesiology** 1989 Dec;71(6):870–7

Rewarming after cardiopulmonary bypass—a comparison of two methods. Tan S. **Ann Acad Med Singapore** 1990 May; 19(3):350–3

Cardiopulmonary bypass in a model of acute myocardial infarction and cardiac arrest. Angelos MG, et al. **Ann Emerg Med** 1990 Aug;19(8):874–80

Cardiac resuscitability with cardiopulmonary bypass after increasing ventricular fibrillation times in dogs. Reich H, et al. **Ann Emerg Med** 1990 Aug;19(8):887–90

Lower oesophageal contractility monitoring during anaesthesia for cardiac surgery: preliminary observations [letter; comment] Alston RP. **Ann R Coll Surg Engl** 1990 Jan;72(1):69–70 Comment on: Ann R Coll Surg Engl 1989 Sep;71(5):311–5.

Mechanical determinants of myocardial blood flow and its distribution. Archie JP Jr. **Ann Thorac Surg** 1975 Jul; 20(1):39–45 (15 ref.)

Hypoxemia during cardiopulmonary bypass [letter] Belcher P, et al. **Ann Thorac Surg** 1990 Aug;50(2):336

Reduction of complement activation during bypass by prime manipulation. Bonser RS, et al. **Ann Thorac Surg** 1990 Feb; 49(2):279–83

Ventricular fibrillation. Its effect on myocardial flow, distribution, and performance. Buckberg GD, et al. **Ann Thorac Surg** 1975 Jul;20(1):76–85

Platelet and neutrophil activation in cardiopulmonary bypass. Colman RW. **Ann Thorac Surg** 1990 Jan;49(1):32–4 (12 ref.)

Hypoxemia after intraluminal oxygen line obstruction during cardiopulmonary bypass [letter] Dickinson TA. **Ann Thorac Surg** 1990 Mar;49(3):512–3

New outlook on pericardial substitution after open heart operations. Gabbay S, et al. **Ann Thorac Surg** 1989 Dec; 48(6):803–12

Cerebral vasoreactivity to carbon dioxide during cardiopulmonary perfusion at normothermia and hypothermia [see comments] Johnsson P, et al. **Ann Thorac Surg** 1989 Dec;48(6):769–75 Comment in: Ann Thorac Surg 1989 Dec;48(6):752–4.

Low activated coagulation time during cardiopulmonary bypass does not increase postoperative bleeding. Metz S, et al. **Ann Thorac Surg** 1990 Mar;49(3):440–4

Emboli (debris) produced by bubble oxygenators. Removal by filtration. Page US, et al. **Ann Thorac Surg** 1974 Aug; 18(2):164–71

Improved patient survival after cardiac arrest using a cardiopulmonary support system. Reichman RT, et al. **Ann Thorac Surg** 1990 Jan;49(1):101–4; discussion 104–5

Cerebral blood flow during cardiopulmonary bypass: some new answers to old questions [comment] Reves JG, et al. **Ann Thorac Surg** 1989 Dec;48(6):752–4 Comment on: Ann Thorac Surg 1989 Dec;48(6):769–75.

Cardiopulmonary bypass for resection of low tracheal haemangioma. Franks R, et al. **Arch Dis Child** 1990 Jun; 65(6):630–2

Heparin-coated equipment reduces complement activation during cardiopulmonary bypass in the pig. Nilsson L, et al. **Artif Organs** 1990 Feb;14(1):46–8

Changes in neutrophil oxidative potential in patients undergoing cardiopulmonary bypass with polypropylene hollow fiber oxygenators. Roccatello D, et al. **Artif Organs** 1990 Feb;14(1):69–72

Percutaneous cardiopulmonary bypass to support angioplasty and valvuloplasty. Technical considerations. Gundry SR, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):725–7

The role of the protein C-thrombomodulin system in physiologic anticoagulation during cardiopulmonary bypass. Tanaka K, et al. **ASAIO Trans** 1989 Jul-Sep; 35(3):373-5

A simple method for rapid and precise estimation of the protamine dose required for clinical heparin reversal. Yang VC. **ASAIO Trans** 1989 Jul-Sep;35(3):274-7

EEG monitoring using aperiodic analysis during carotid and open heart surgery. Koumoundouros E, et al. **Australas Phys Eng Sci Med** 1989 Sep;12(3):149-54

Less peri- and postoperative inotropic support in open-heart patients with vasomotor waves during cardiopulmonary bypass? Vainionpää V. **Basic Res Cardiol** 1989 Nov-Dec; 84(6):653-60

Percutaneous transluminal coronary angioplasty with cardiopulmonary bypass for stenosis of the most proximal part of the left anterior descending coronary artery. Ueda O, et al. **Br Heart J** 1990 Mar;63(3):178-9

Clinical evaluation of the augmented delta quotient monitor for intraoperative electroencephalographic monitoring of children during surgery and cardiopulmonary bypass for repair of congenital cardiac defects. Burrows FA, et al. **Br J Anaesth** 1989 Nov;63(5):565-73

Management of difficult intracranial aneurysms by deep hypothermia and elective cardiac arrest using cardiopulmonary bypass. Richards PG, et al. **Br J Neurosurg** 1987;1(2):261-9

PAF-acether, superoxide anion and beta-glucuronidase as parameters of polymorphonuclear cell activation associated with cardiac surgery and cardiopulmonary bypass. Hoshikawa-Fujimura AY, et al. **Braz J Med Biol Res** 1989; 22(9):1077-82

Atrial natriuretic factor and cardiopulmonary bypass [letter; comment] Hynynen M. **Can J Anaesth** 1990 May;37(4 Pt 1):488-9 Comment on: Can J Anaesth 1989 Sep;36(5):545-53.

Changes of antithrombin III and antithrombin III-heparin complex levels, and ACT in cardiac surgery. Inada E, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S75

Factors affecting hypomagnesemia after cardiopulmonary bypass. Irita K, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S120

Influence of hypothermic cardiopulmonary bypass on atrial natriuretic factor levels [published erratum appears in Can J Anaesth 1990 Jan;37(1):147] [see comments] Kharasch ED, et al. **Can J Anaesth** 1989 Sep;36(5):545-53 Comment in: Can J Anaesth 1990 May;37(4 Pt 1):488-9.

Autoregulation and the CO2 responsiveness of cerebral blood flow after cardiopulmonary bypass. McNeill BR, et al. **Can J Anaesth** 1990 Apr;37(3):313-7

Cerebral haemodynamics in infants during cardiopulmonary bypass. Taylor RH, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S153

Metabolic and haemodynamic changes in the heart during the early phase of cardiopulmonary bypass: I. Clinical observations. van der Veen FH, et al. **Cardiovasc Res** 1989 Jun;23(6):468-71

Metabolic and haemodynamic changes in the heart during the early phase of cardiopulmonary bypass: II. Animal experiments. van der Veen FH, et al. **Cardiovasc Res** 1989 Jun;23(6):472-7

Successful resuscitation of a patient with critical aortic stenosis and cardiac arrest by peripheral cardiopulmonary support system. Pavlides GS, et al. **Cathet Cardiovasc Diagn** 1990 Jun;20(2):120-2

Emergency cardiopulmonary bypass support in patients with cardiac arrest in the catheterization laboratory. Shawl FA, et al. **Cathet Cardiovasc Diagn** 1990 Jan;19(1):8-12

Increase of alveolar pressure reduces systemic-to-pulmonary bronchial blood flow in humans. Agostoni P, et al. **Chest** 1989 Nov;96(5):1081-5

Fine structural change in the lung following cardiopulmonary bypass. Its relationship to early postoperative course. Asada S, et al. **Chest** 1971 May; 59(5):478-83

Efficacy of the phosphodiesterase inhibitor enoximone in complicated cardiac surgery [see comments] Boldt J, et al. **Chest** 1990 Jul;98(1):53-8 Comment in: Chest 1990 Jul;98(1):7-9.

Beta-2-microglobulin as an index of renal function after cardiopulmonary bypass surgery in children. Fernandez F, et al. **Child Nephrol Urol** 1988-89;9(6):326-30

Pharmacokinetics of superoxide dismutase during hypothermic cardiopulmonary bypass. Lee RB, et al. **Circulation** 1989 Nov;80(5 Pt 2):III25-9

Pulmonary effects of ventilatory pattern following cardiopulmonary bypass. Downs JB, et al. **Crit Care Med** 1976 Nov-Dec;4(6):295-300

Use of ranitidine in children undergoing cardiopulmonary bypass [letter; comment] Splittgerber F, et al. **Crit Care Med** 1990 Mar;18(3):345-6 Comment on: Crit Care Med 1989 Jan;17(1):26-9.

Polymorphonuclear leukocyte filtration in a porcine model of cardiopulmonary bypass. Finney RS, et al. **Curr Surg** 1989 Nov-Dec;46(6):474-6

Complement activation before, during and after cardiopulmonary bypass. Bonser RS, et al. **Eur J Cardiothorac Surg** 1990;4(6):291-6

Clinical validation of St. Thomas' Hospital cardioplegic solution No. 2 (Plegisol). Chambers DJ, et al. **Eur J Cardiothorac Surg** 1989;3(4):346-52

Assessment of risk factors for spinal cord ischaemia in surgery of thoracoabdominal aneurysms without use of adjuncts. de Mol B, et al. **Eur J Cardiothorac Surg** 1989;3(5):449-54; discussion 455

Systolic and diastolic interaction in the assessment of left ventricular function following surgical cardioplegia. Fabri BM, et al. **Eur J Cardiothorac Surg** 1989;3(4):335-45 (48 ref.)

Inotropic effect of triiodothyronine (T3) in low cardiac output following cardioplegic arrest and cardiopulmonary bypass: an initial experience in patients undergoing open heart surgery. Novitzky D, et al. **Eur J Cardiothorac Surg** 1989;3(2):140-5

Low energy level internal defibrillation during cardiopulmonary bypass. Pugsley WB, et al. **Eur J Cardiothorac Surg** 1989;3(3):273-5

A newly designed venous cannula for use during total cardiac bypass in the closed chest by femoro-femoral perfusion. Scheld HH, et al. **Eur J Cardiothorac Surg** 1990;4(2):114

"Sore buttock syndrome": aseptic inflammation of the gluteal region following cardiopulmonary bypass. Shafei H, et al. **Eur J Cardiothorac Surg** 1989;3(1):79-80

Cerebral blood flow during cardiopulmonary bypass. Venn GE, et al. **Eur J Cardiothorac Surg** 1988;2(5):360-3

Platelet preservation during cardiopulmonary bypass with aprotinin. Wildevuur CR, et al. **Eur J Cardiothorac Surg** 1989;3(6):533-7; discussion 537-8

Perioperative assessment of cardiac energy metabolism by means of arterio-coronary venous difference in lactate concentration (acDL). A parameter for optimizing ventricular function of the postcardioplegic myocardium. Wollert HG, et al. **Eur J Cardiothorac Surg** 1990; 4(5):278-83

Recovery from coma that results as a complication of cardiac arrest followed by cardiopulmonary bypass. Hall LT. **Heart Lung** 1989 Nov;18(6):559-64

Vasoactive pressure hormones during and after cardiopulmonary bypass. Kaul TK, et al. **Int J Artif Organs** 1990 May;13(5):293-9

A prospective study of the risk of an immediate adverse reaction to protamine sulfate during cardiopulmonary bypass surgery. Weiler JM, et al. **J Allergy Clin Immunol** 1990 Apr;85(4):713-9

Cardiopulmonary support: the risk and benefits of assisted coronary angioplasty [editorial; comment] Myler RK, et al. **J Am Coll Cardiol** 1990 Jan;15(1):30-1 Comment on: J Am Coll Cardiol 1990 Jan;15(1):23-9.

Initial report of the National Registry of Elective Cardiopulmonary Bypass Supported Coronary Angioplasty [see comments] Vogel RA, et al. **J Am Coll Cardiol** 1990 Jan;15(1):23-9 Comment in: J Am Coll Cardiol 1990 Jan;15(1):30-1.

Nonocclusive intestinal ischemia and necrosis after correction of interatrial communication with cardiopulmonary bypass. A rare and catastrophic complication. Evora PR, et al. **J Cardiovasc Surg (Torino)** 1989 Nov-Dec;30(6):1002-5

An improved technique for venous drainage and right heart decompression. McNicholas KW, et al. **J Cardiovasc Surg (Torino)** 1989 Sep-Oct;30(5):801-2

Management of concomitant occlusive disease of coronary and carotid arteries using cardiopulmonary bypass for both procedures. Minami K, et al. **J Cardiovasc Surg (Torino)** 1989 Sep-Oct;30(5):723-8

Protein C deficiency associated with massive cerebral thrombosis following open heart surgery. Ridley PD, et al. **J Cardiovasc Surg (Torino)** 1990 Mar-Apr;31(2):249-51

Apicoaortic conduit implanted without cardiopulmonary bypass: a useful contingency technique. Salas J, et al. **J Cardiovasc Surg (Torino)** 1989 Sep-Oct;30(5):798-800

Characterization of cerebral energetics and brain pH by 31P spectroscopy after graded canine cardiac arrest and bypass reperfusion. Martin GB, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):221-6

Thiopental sodium by single bolus dose compared to infusion for cerebral protection during cardiopulmonary bypass [see comments] Metz S, et al. **J Clin Anesth** 1990 Jul-Aug; 2(4):226-31 Comment in: J Clin Anesth 1990 Jul-Aug;2(4):221-5.

Use of pre-operatively obtained platelets and plasma in patients undergoing cardiopulmonary bypass. Noon GP, et al. **J Clin Apheresis** 1990;5(2):91-6

Pulse oximetry and finger blood pressure measurement during open-heart surgery [published erratum appears in J Clin Monit 1990 Jan;6(1):9] Kurki TS, et al. **J Clin Monit** 1989 Oct;5(4):221-8

Responses of vasopressin release in patients with cardiopulmonary bypass anesthetized with enflurane and morphine. Lee WJ, et al. **J Korean Med Sci** 1989 Jun; 4(2):71-6

Modification of cardiopulmonary hemodynamics and vasoactive mediators by extracorporeal membrane oxygenation in newborn lambs. Stolar CJ, et al. **J Pediatr Surg** 1990 Jan;25(1):33-7

Mechanical support: assist or nemesis? Adamson RM, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 2):915-20; discussion 920-1

Changes in hemodynamic variables during hypothermic cardiopulmonary bypass. Effects of flow rate, flow character, and arterial pH. Alston RP, et al. **J Thorac Cardiovasc Surg** 1990 Jul;100(1):134-44

Systemic oxygen uptake during hypothermic cardiopulmonary bypass. Effects of flow rate, flow character, and arterial pH. Alston RP, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 1):757-68

Influence of oxygenator type on the prevalence and extent of microembolic retinal ischemia during cardiopulmonary bypass. Assessment by digital image analysis. Blauth CI, et al. **J Thorac Cardiovasc Surg** 1990 Jan;99(1):61-9

Separation of craniopagus Siamese twins using cardiopulmonary bypass and hypothermic circulatory arrest. Cameron DE, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 2):961-7

Platelet-rich plasma reduces postoperative blood loss after cardiopulmonary bypass. DelRossi AJ, et al. **J Thorac Cardiovasc Surg** 1990 Aug;100(2):281-6

Transfusion of fresh whole blood stored (4 degrees C) for short period fails to improve platelet aggregation on extracellular matrix and clinical hemostasis after cardiopulmonary bypass. Golan M, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):354-60

Regional cerebrovascular reactivity to carbon dioxide during cardiopulmonary bypass in patients with cerebrovascular disease. Gravlee GP, et al. **J Thorac Cardiovasc Surg** 1990 Jun;99(6):1022-9

Heparin dosing and monitoring for cardiopulmonary bypass. A comparison of techniques with measurement of subclinical plasma coagulation. Gravlee GP, et al. **J Thorac Cardiovasc Surg** 1990 Mar;99(3):518-27

Induction of interleukin-1 production in patients undergoing cardiopulmonary bypass. Haeffner-Cavaillon N, et al. **J Thorac Cardiovasc Surg** 1989 Dec;98(6):1100-6

Any value for desmopressin acetate (DDAVP) in cardiopulmonary bypass operation? [letter; comment] LoCicero J 3d, et al. **J Thorac Cardiovasc Surg** 1990 May; 99(5):945 Comment on: J Thorac Cardiovasc Surg 1989 Aug;98(2):217-9.

Does the addition of albumin to the prime solution in cardiopulmonary bypass affect clinical outcome? A prospective randomized study. Marelli D, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 1):751-6

Effects of pulsatile perfusion on plasma catecholamine levels and hemodynamics during and after cardiac operations with cardiopulmonary bypass. Minami K, et al. **J Thorac Cardiovasc Surg** 1990 Jan;99(1):82-91

Triiodothyronine as an inotropic agent after open heart surgery. Novitzky D, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 2):972-7; discussion 977-8

Changes in triiodothyronine during cardiopulmonary bypass: a clinical problem? [letter] Salati M, et al. **J Thorac Cardiovasc Surg** 1990 Sep;100(3):464-5

Natriuresis during and early after cardiopulmonary bypass: relationship to atrial natriuretic factor, aldosterone, and antidiuretic hormone. Schaff HV, et al. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 2):979-86

The effect of arterial pH on whole body oxygen uptake during hypothermic cardiopulmonary bypass in man. Tuppurainen T, et al. **J Thorac Cardiovasc Surg** 1989 Nov; 98(5 Pt 1):769-73

Changes in myocardial high-energy phosphate stores and carbohydrate metabolism during intermittent aortic crossclamping in dogs on cardiopulmonary bypass at 34 degrees and 25 degrees C. van der Veen FH, et al. **J Thorac Cardiovasc Surg** 1990 Sep;100(3):389-99

Aprotinin protects platelets against the initial effect of cardiopulmonary bypass. van Oeveren W, et al. **J Thorac Cardiovasc Surg** 1990 May;99(5):788-96; discussion 796-7

Brain tissue pH, oxygen tension, and carbon dioxide tension in profoundly hypothermic cardiopulmonary bypass. Pulsatile assistance for circulatory arrest, low-flow perfusion, and moderate-flow perfusion. Watanabe T, et al. **J Thorac Cardiovasc Surg** 1990 Aug;100(2):274-80

Reply to: Blood Platelets and Bypass. Zilla P. **J Thorac Cardiovasc Surg** 1989 Nov;98(5 Pt 1):797-800

Resection of nonrenal retroperitoneal tumors with large vena caval thrombi using cardiopulmonary bypass and hypothermic circulatory arrest. Angermeier KW, et al. **J Urol** 1990 Sep;144(3):735-9

Microvascular perfusion and resistance in extracorporeal cardiopulmonary bypass under hypothermia with high-dose narcotic anesthesia—animal model. Huang FY, et al. **Ma Tsui Hsueh Tsa Chi** 1990 Mar;28(1):1-8

Nitroprusside in children after cardiopulmonary bypass: a study of thiocyanate toxicity. Kunathai S, et al. **Pediatr Cardiol** 1989 Summer;10(3):121-4

Pharmacokinetics of methylprednisolone sodium succinate and methylprednisolone in patients undergoing cardiopulmonary bypass. Kong AN, et al. **Pharmacotherapy** 1990;10(1):29-34

Changes in urinary thromboxane level in man during cardiopulmonary bypass: effect of thromboxane on renal tubules. Arima T, et al. **Prostaglandins** 1990 Mar; 39(3):319-38

Biochemical indicators of myocardial ischaemia during coronary artery bypass grafting. Kaukinen S, et al. **Scand J Thorac Cardiovasc Surg** 1990;24(1):71-3

Blood cell trauma and postoperative bleeding: comparison of bubble and membrane oxygenators and observations on coronary suction. Nilsson L, et al. **Scand J Thorac Cardiovasc Surg** 1990;24(1):65-9

Bubble and membrane oxygenators—comparison of postoperative organ dysfunction with special reference to inflammatory activity. Nilsson L, et al. **Scand J Thorac Cardiovasc Surg** 1990;24(1):59-64

Hypercarbia depresses cerebral oxygen consumption during

cardiopulmonary bypass. Prough DS, et al. **Stroke** 1990 Aug;21(8):1162–6

Does left ventricular distension really alter coronary blood flow and myocardial metabolism? Arom KV, et al. **Surg Forum** 1978;29:253–6

Detrimental effects of premature use of inotropic drugs to discontinue cardiopulmonary bypass. Lazar HL, et al. **Surg Forum** 1978;29:276–8

Plasma vasopressin levels and urinary Na+ excretion during cardiopulmonary bypass: a comparison of pulsatile and nonpulsatile flow. Levine FH, et al. **Surg Forum** 1978; 29:320–2

Effects of multidose potassium-induced cardioplegia during prolonged aortic cross-clamping: comparison of continuous and intermittent clamping techniques. Roberts AJ, et al. **Surg Forum** 1978;29:279–81

Mechanical cardiac actuation achieves hemodynamics similar to cardiopulmonary bypass. Anstadt MP, et al. **Surgery** 1990 Aug;108(2):442–9; discussion 449–51

A new technical approach for retrograde administration of cardioplegic solutions. Martinez-Leon J, et al. **Thorac Cardiovasc Surg** 1989 Dec;37(6):372–3

Fatal progression of Behçet's disease after cardiac surgery. Paccagnella A, et al. **Thorac Cardiovasc Surg** 1989 Oct; 37(5):320–1

European versus North American cardioplegia: comparison of Bretschneider's and Roe's cardioplegic solutions in a canine model of cardiopulmonary bypass. Wilson GJ, et al. **Thorac Cardiovasc Surg** 1990 Feb;38(1):10–4

Adenosine and its role in cardioplegia: effects on postischemic recovery in the baboon. Boehm DH, et al. **Transplant Proc** 1990 Apr;22(2):545–6

Immediate graft failure treated with partial cardiopulmonary bypass and emergency cardiac retransplantation. Morris JS, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2497–9

[Influence of atrial and ventricular temperature during cardiac arrest for open heart surgery on postoperative arrhythmias] Gao SZ. **Chung Hua Wai Ko Tsa Chih** 1990 Jan;28(1):13–5, 60 (Eng. Abstr.) **(Chi)**

[Myocardial protection in cardiac surgery with extracorporeal circulation] Lan HJ. **Chung Hua Wai Ko Tsa Chih** 1990 Jan;28(1):2–4 **(Chi)**

[Changes of creatine phosphokinase and malondialdehyde in the serum and clinical use of large doses of vitamin C following open heart surgery] Li CC. **Chung Hua Wai Ko Tsa Chih** 1990 Jan;28(1):16–7, 60–1 (Eng. Abstr.) **(Chi)**

[Open mitral valvuloplasty under cardiopulmonary bypass. Report of 24 cases] Li ZZ. **Chung Hua Wai Ko Tsa Chih** 1989 Jun;27(6):367–8, 382 (Eng. Abstr.) **(Chi)**

[Myocardial protection by retrograde cardioplegic perfusion through the right atrium] Sun Q. **Chung Hua Wai Ko Tsa Chih** 1990 Jan;28(1):5–8, 60 (Eng. Abstr.) **(Chi)**

[Surgical treatment of patient ductus arteriosus associated with pulmonary hypertension under cardiopulmonary bypass] Yu YX. **Chung Hua Wai Ko Tsa Chih** 1989 Jul; 27(7):428–9, 446 (Eng. Abstr.) **(Chi)**

[Application of ultrafiltration during cardiopulmonary bypass] Zhang E, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Mar;21(1):71–5 (Eng. Abstr.) **(Chi)**

[Results of the differentiated use of catecholamines and vasodilators in the early post-bypass phase] Krüger AD, et al. **Anaesthesiol Reanim** 1989;14(4):195–206 (Eng. Abstr.) **(Ger)**

[Pharmacokinetic studies on the causes of increased neurotoxicity of lidocaine during heart surgery] Olthoff D, et al. **Anaesthesiol Reanim** 1989;14(4):207–14 (Eng. Abstr.) **(Ger)**

[Blood saving measures in heart surgery] Egloff L, et al. **Helv Chir Acta** 1989 Aug;56(3):399–403 (Eng. Abstr.) **(Ger)**

[Acute chorea following heart surgery with hypothermia and total bypass] Kececioglu D, et al. **Klin Padiatr** 1990 Mar-Apr;202(2):115–6 (Eng. Abstr.) **(Ger)**

[Percutaneous coronary transluminal angioplasty with extracorporeal circulation: preliminary results] Barragan P, et al. **Cardiologia** 1989 Dec;34(12):989–92 (Eng. Abstr.) **(Ita)**

[Experimental studies on platelet preservation with prostaglandin I2 and its derivative (OP-41483) during cardiopulmonary bypass] Takeda H. **Hokkaido Igaku Zasshi** 1989 Jul;64(4):500–11 (Eng. Abstr.) **(Jpn)**

[Atrial septal defect with idiopathic thrombocytopenic purpura: a case of open-heart surgery] Yamashita M, et al. **Kyobu Geka** 1990 May;43(5):401–3 (9 ref.) (Eng. Abstr.) **(Jpn)**

[Changes in urinary prostaglandins during cardiopulmonary bypass in man] Arima T, et al. **Masui** 1989 Jul;38(7):908–12 (Eng. Abstr.) **(Jpn)**

[Increased fibrinolytic activity during surgery with cardiopulmonary bypass] Gando S, et al. **Masui** 1990 Jun; 39(6):751–6 (Eng. Abstr.) **(Jpn)**

[Emergency cardiopulmonary bypass for cardiopulmonary-cerebral resuscitation] Kano T, et al. **Masui** 1989 Jul;38(7):932–40 (Eng. Abstr.) **(Jpn)**

[Effects of prostaglandin E1 infusion during cardiopulmonary bypass] Okuda M, et al. **Masui** 1989 Aug;38(8):1036–41 (Eng. Abstr.) **(Jpn)**

[Continuous infusion of prostaglandin E1 facilitates weaning from cardiopulmonary bypass] Sakuragi T, et al. **Masui** 1990 Mar;39(3):343–8 (Eng. Abstr.) **(Jpn)**

[Effect of nafamostat mesilate on serum activities of pancreatic enzymes and plasma hormone levels] Wakayama S, et al. **Masui** 1990 Jun;39(6):734–40 (Eng. Abstr.) **(Jpn)**

[Portal and hepatic circulation during cardio-pulmonary bypass in chronic congestive liver—an experimental study] Shimokawa S. **Nippon Geka Gakkai Zasshi** 1989 May; 90(5):695–704 (Eng. Abstr.) **(Jpn)**

[Study on CAZ levels in serum, urine and myocardial tissue during and after open-heart surgery with cardiopulmonary bypass] Murata S, et al. **Nippon Geka Hokan** 1989 Mar 1;58(2):236–44 (Eng. Abstr.) **(Jpn)**

[Right ventricular function in retrograde cardioplegia for myocardial protection—an experimental study] Hoshino R. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jul;37(7):1287–96 (Eng. Abstr.) **(Jpn)**

[Adrenomedullary epinephrine excretion and myocardial norepinephrine release during cardiopulmonary bypass] Konno S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Aug;37(8):1451–8 (Eng. Abstr.) **(Jpn)**

[A clinical study on brain perfusion during cardiopulmonary bypass] Kono M. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jun;38(6):970–81 (Eng. Abstr.) **(Jpn)**

[Intraoperative echocardiographic assessment of left ventricular muscle volume changes after intracardiac operation under cardiopulmonary bypass] Matsuwaka R, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Nov; 37(11):2245–9 (Eng. Abstr.) **(Jpn)**

[Effects of ulinastatin on plasma polymorphonuclear leukocyte elastase activity and respiratory function in patients undergoing cardiopulmonary bypass] Mishima A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Apr; 38(4):607–12 (Eng. Abstr.) **(Jpn)**

[Influence of cardiopulmonary bypass on plasma lipid peroxides] Murakami H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Oct; 37(10):2117–25 (Eng. Abstr.) **(Jpn)**

[The immune response following open-heart surgery] Sasaki T. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jul; 37(7):1297–305 (Eng. Abstr.) **(Jpn)**

[Investigation of Limulus test during and after cardiopulmonary bypass—analysis of Limulus positive substance and particles in the cardiopulmonary bypass circuit] Tomiyasu S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Dec; 37(12):2489–94 (Eng. Abstr.) **(Jpn)**

[An attempt to monitor parameters of glycolysis and degradation of nucleotides in patients during heart surgery] Pecháň I, et al. **Cesk Fysiol** 1989;38(6):520–2 **(Slo)**

[Treatment of left ventricular failure following extracorporeal circulation using ventricular assistance with centrifugal pump] Díez Lobo AI, et al. **Rev Esp Anestesiol Reanim** 1990 May-Jun;37(3):176–8 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Anisocoria in cardiopulmonary bypass [letter; comment] Pierce JM, et al. **Anaesthesia** 1990 May;45(5):410 Comment on: Anaesthesia 1989 Nov;44(11):885–8.

Pupillary signs during cardiac surgery. Their use in the prediction of major cerebral deficit following cardiopulmonary bypass [see comments] Woodall NM, et al. **Anaesthesia** 1989 Nov;44(11):885–8 Comment in: Anaesthesia 1990 May;45(5):410.

Obstruction of venous return by a pulmonary artery catheter during cardiopulmonary bypass [letter] Meluch AM, et al. **Anesth Analg** 1990 Jan;70(1):121

Fentanyl dosage is associated with reduced blood glucose in pediatric patients after hypothermic cardiopulmonary bypass. Ellis DJ, et al. **Anesthesiology** 1990 May;72(5):812–5

Infection and Cell-Saver use [letter] Nessly ML. **Ann Thorac Surg** 1990 Sep;50(3):509–10

Intraoperative use of dual-chamber demand pacemakers for open heart operations. Wallenhaupt SL, et al. **Ann Thorac Surg** 1989 Oct;48(4):579–81

Use of desmopressin in the management of aspirin-related and intractable haemorrhage after cardiopulmonary bypass. Chard RB, et al. **Aust N Z J Surg** 1990 Feb;60(2):125–8 (13 ref.)

Weaning from cardiopulmonary bypass. Theory and practice [editorial; comment] Jessup M. **Chest** 1990 Jul;98(1):7–9 Comment on: Chest 1990 Jul;98(1):53–8.

Hemorrhage after bypass surgery [letter; comment] Spiess BD, et al. **Chest** 1990 Jul;98(1):255–6 Comment on: Chest 1989 Jul;96(1):27–30.

Pulmonary shunting after cardiopulmonary bypass. Korsten HH, et al. **Eur Heart J** 1989 Dec;10 Suppl H:17–21

Retinal microembolism and neuropsychological deficit following clinical cardiopulmonary bypass: comparison of a membrane and a bubble oxygenator. A preliminary communication. Blauth C, et al. **Eur J Cardiothorac Surg** 1989;3(2):135–8; discussion 139

Ultrasound detection of micro-emboli in the middle cerebral artery during cardiopulmonary bypass surgery. Deverall PB, et al. **Eur J Cardiothorac Surg** 1988;2(4):256–60

A comparative study of prostacyclin infusion given before and during cardiopulmonary bypass to assess the first pass effect of the circuit on platelet number and function. Jestice HK, et al. **Eur J Cardiothorac Surg** 1990;4(1):40–4

Brain histology, blood-brain barrier and brain water after normothermic and hypothermic cardiopulmonary bypass in pigs. Laursen H, et al. **Eur J Cardiothorac Surg** 1989; 3(6):539–43

The use of fresh blood to control severe haemorrhage associated with massive blood transfusion after cardiopulmonary bypass. Macfie A, et al. **Eur J Cardiothorac Surg** 1990;4(3):171–3

Coronary artery spasm during mitral valve replacement. Shafei H, et al. **Eur J Cardiothorac Surg** 1990;4(7):398–400

Hypothermia and the stress response to cardiopulmonary bypass. Taggart DP, et al. **Eur J Cardiothorac Surg** 1989; 3(4):359–63; discussion 364

Impairment of cerebral function following cardiac and other major surgery. Treasure T, et al. **Eur J Cardiothorac Surg** 1989;3(3):216–21

Compartment syndrome in a five-year-old child following femoral cannulation for cardiopulmonary bypass. Williams PH, et al. **Eur J Cardiothorac Surg** 1989;3(5):474–5

Platelet function in cardiopulmonary bypass and artificial organs. Addonizio VP. **Hematol Oncol Clin North Am** 1990 Feb;4(1):145–55 (50 ref.)

Perfusion pressure and electroencephalographic changes during cardiopulmonary bypass [letter] Jones BR, et al. **J Clin Monit** 1989 Oct;5(4):288

Leukocyte depletion ameliorates free radical-mediated lung injury after cardiopulmonary bypass. Bando K, et al. **J Thorac Cardiovasc Surg** 1990 May;99(5):873–7

Invited letter concerning: hemolysis after cardiopulmonary bypass [letter; comment] Lamon EW, et al. **J Thorac Cardiovasc Surg** 1990 Apr;99(4):751–2 Comment on: J Thorac Cardiovasc Surg 1990 Apr;99(4):735–40.

Unorthodox use of aprotinin to control life-threatening bleeding after cardiopulmonary bypass [letter] [see comments] Angelini GD, et al. **Lancet** 1990 Mar 31; 335(8692):799–800 Comment in: Lancet 1990 Jun 23;335(8704):1535–6.

Aprotinin for bleeding after cardiopulmonary bypass [letter; comment] Bidstrup B. **Lancet** 1990 Jun 23;335(8704):1535–6 Comment on: Lancet 1990 Mar 31;335(8692):799–800.

Cerebral dysfunction after cardiopulmonary bypass—report of one case. Wang YP, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Sep;27(3):287–91

Leukocyte phagocytosis during cardiopulmonary bypass in adolescents. Demircioğlu FF. **Turk J Pediatr** 1989 Apr-Jun;31(2):127–35

[The centrifugal pump—a new method of assisting the failing heart following open heart surgery] Feilberg VL, et al. **Ugeskr Laeger** 1990 Jan 29;152(5):324–6 (Eng. Abstr.) **(Dan)**

[Complement activation during cardiopulmonary bypass: mechanism and prevention] Togashi K, et al. **Kyobu Geka** 1989 Jul;42(7):529–32 (Eng. Abstr.) **(Jpn)**

[Heart failure due to rapid right ventricular volume overload in patients with pulmonary hypertension] Sako S, et al. **Masui** 1989 Aug;38(8):1076–82 (Eng. Abstr.) **(Jpn)**

[Hemolysis and red cell deformability during cardiopulmonary bypass—the effect of prostaglandin E1 for prevention of hemolysis] Yamaguchi H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Apr;38(4):625–9 (Eng. Abstr.) **(Jpn)**

HISTORY

The Lériche memorial lecture 1989. A history of open heart surgery in Japan. Experience at the University of Tokyo. Asano K. **J Cardiovasc Surg (Torino)** 1990 Mar-Apr; 31(2):197–201

INSTRUMENTATION

Beware centrifugal pumps: not a one-way street, but a potentially dangerous "siphon" [letter] Kolff J, et al. **Ann Thorac Surg** 1990 Sep;50(3):512

Hypoxemia after intraluminal oxygen line obstruction during cardiopulmonary bypass [see comments] Robblee JA, et al. **Ann Thorac Surg** 1989 Oct;48(4):575–6 Comment in: Ann Thorac Surg 1989 Oct;48(4):467–8.

Activation of neutrophil oxidative metabolism during cardiopulmonary bypass with membrane oxygenators. Giordano G, et al. **ASAIO Trans** 1989 Jul-Sep;35(3):368–9

Emergency use of portable cardiopulmonary bypass. Overlie PA. **Cathet Cardiovasc Diagn** 1990 May;20(1):27–31 (13 ref.)

Use of percutaneously inserted cardiopulmonary bypass in the cardiac catheterization laboratory. Tommaso CL. **Cathet Cardiovasc Diagn** 1990 May;20(1):32–8 (24 ref.)

Heparinless extracorporeal bypass for treatment of hypothermia. DelRossi AJ, et al. **J Trauma** 1990 Jan; 30(1):79–82

METHODS

Thiopentone pharmacokinetics during cardiopulmonary bypass with a nonpulsatile or pulsatile flow. Hynynen M, et al. **Acta Anaesthesiol Scand** 1989 Oct;33(7):554–60

Percutaneous cardiopulmonary bypass support in the catheterization laboratory: technique and complications. Shawl FA, et al. **Am Heart J** 1990 Jul;120(1):195–203

Percutaneous cardiopulmonary bypass support in high-risk patients undergoing percutaneous transluminal coronary angioplasty. Shawl FA, et al. **Am J Cardiol** 1989 Dec 1; 64(19):1258–63

Emergency percutaneous cardiopulmonary bypass support in cardiogenic shock from acute myocardial infarction.

Shawl FA, et al. **Am J Cardiol** 1989 Nov 1;64(16):967–70
Effect of intraoperative intervention on neurological outcome based on electroencephalographic monitoring during cardiopulmonary bypass. Arom KV, et al. **Ann Thorac Surg** 1989 Oct;48(4):476–83
Acute preoperative plasmapheresis and established blood conservation techniques. Boldt J, et al. **Ann Thorac Surg** 1990 Jul;50(1):62–8
Postbypass treatment. Feinberg H, et al. **Ann Thorac Surg** 1975 Jul;20(1):106–13 (36 ref.)
Clinical experience with portable cardiopulmonary bypass in cardiac arrest patients. Hartz R, et al. **Ann Thorac Surg** 1990 Sep;50(3):437–41
Preservation of pancreatic beta cell function with pulsatile cardiopulmonary bypass. Nagaoka H, et al. **Ann Thorac Surg** 1989 Dec;48(6):798–802
Comparative study of cell saver and ultrafiltration nontransfusion in cardiac surgery. Nakamura Y, et al. **Ann Thorac Surg** 1990 Jun;49(6):973–8
Leukocyte depletion results in excellent heart–lung function after 12 hours of storage. Pillai R, et al. **Ann Thorac Surg** 1990 Aug;50(2):211–4
Ancrod anticoagulation for cardiopulmonary bypass in heparin–induced thrombocytopenia and thrombosis. Teasdale SJ, et al. **Ann Thorac Surg** 1989 Nov;48(5):712–3
Reduction of myocardial injury with verapamil before aortic cross–clamping. Weinstein GS, et al. **Ann Thorac Surg** 1990 Mar;49(3):419–23
Percutaneous cardiopulmonary support in high–risk angioplasty. Shawl FA. **Cardiol Clin** 1989 Nov;7(4):865–75
Elective supported angioplasty: initial report of the National Registry. Vogel RA, et al. **Cathet Cardiovasc Diagn** 1990 May;20(1):22–6
Superior hemodynamics in left heart bypass without systemic heparinization. von Segesser LK, et al. **Eur J Cardiothorac Surg** 1990;4(7):384–8; discussion 389
Accidental deep hypothermia with cardiopulmonary arrest: extracorporeal blood rewarming in 11 patients. Walpoth BH, et al. **Eur J Cardiothorac Surg** 1990;4(7):390–3
A comparative clinical study on the effects of cardiopulmonary bypass with different flows and pressures on skeletal muscle cell metabolism in patients undergoing coronary bypass grafting. Del Canale S, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):327–34
Elective hypothermic cardiopulmonary bypass and circulatory arrest for spinal cord protection during operations on the thoracoabdominal aorta. Kouchoukos NT, et al. **J Thorac Cardiovasc Surg** 1990 Apr;99(4):659–64
Quality control of perfusion: monitoring venous blood oxygen tension to prevent hypoxic acidosis. Swan H, et al. **J Thorac Cardiovasc Surg** 1990 May;99(5):868–72
Changes in the plasma protease systems during open–heart surgery with dextran vs. Ringer acetate as priming solution. Kongsgaard UE, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(3):253–8
Inflammatory system activation during cardiopulmonary bypass as an indicator of biocompatibility: a randomized comparison of bubble and membrane oxygenators. Nilsson L, et al. **Scand J Thorac Cardiovasc Surg** 1990;24(1):53–8
[Study of peripheral blood circulation during continuous and pulsatile perfusion based on the data of transcutaneous pO2 and pCO2 monitoring] Divonin AL, et al. **Anesteziol Reanimatol** 1990 Mar–Apr;(2):12–6 (Eng. Abstr.) **(Rus)**

NURSING

[The scrub nurse's work in open–heart surgery in infants under 2 years of age] Gao Y, et al. **Chung Hua Hu Li Tsa Chih** 1990 Mar;25(3):125–6 **(Chi)**
[Management of cardiopulmonary bypass in infants and young children] Yang X. **Chung Hua Hu Li Tsa Chih** 1990 Mar;25(3):129–30 **(Chi)**

CARDIOPULMONARY RESUSCITATION see **RESUSCITATION**

CARDIOSPASM see **ESOPHAGEAL ACHALASIA**

CARDIOTOCOGRAPHY

Diagnostic potential of cardiotocography (CTG) for silent uterine rupture. Klein M, et al. **Acta Obstet Gynecol Scand** 1989;68(7):653–6
A case of intrapartum fetal arrhythmia creating difficulties in cardiotocograph interpretation. Gray J. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 Pt 1):265–7
Birth asphyxia and the intrapartum cardiotocograph. Murphy KW, et al. **Br J Obstet Gynaecol** 1990 Jun;97(6):470–9
Predictive values of umbilical artery waveforms and repeat cardiotocography in pregnancies complicated by nonreactive cardiotocography. Hastie SJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jan–Feb;34(1–2):67–72
Clinical features of long contraction wave recorded by an external tocodynamometer. Kawarabayashi T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jun;42(6):627–30
Interrelationships among abnormal cardiotocograms in labor, meconium staining of the amniotic fluid, arterial cord blood pH, and Apgar scores. Steer PJ, et al. **Obstet Gynecol** 1989 Nov;74(5):715–21
[The past and future of cardiotocography in Czechoslovakia] Baran P. **Cesk Gynekol** 1989 Sep;54(8):601–3 **(Cze)**
[Use of antepartum monitoring of the fetal echo] Horská S, et al. **Cesk Gynekol** 1989 Aug;54(7):506–10 **(Cze)**
[Cardiotocography in premature labor] Koleška T, et al. **Cesk Gynekol** 1989 Jul;54(6):424–9 **(Cze)**
[Cardiotocographic examination, pH values in the umbilical artery and the Apgar score in the diagnosis and prognosis in fetal and neonatal hypoxia] Zapadlo M, et al. **Cesk Gynekol** 1989 Jun;54(5):327–31 (Eng. Abstr.) **(Cze)**
[Fetal monitoring during parturition] Cleton J, et al. **Ned Tijdschr Geneeskd** 1989 Aug 19;133(33):1627–9 **(Dut)**
[Fetal development and ante partum cardiotocogram] Quass L, et al. **Arch Gynecol Obstet** 1989;245(1–4):76–8 **(Ger)**
[Sinusoidal CTG in feto–maternal transfusion—case report] Brühwiler H, et al. **Z Geburtshilfe Perinatol** 1989 Jul–Aug;193(4):193–4 (Eng. Abstr.) **(Ger)**
[The effect of noise on the feto–placental unit (epidemiologic and experimental study)] Dennler G, et al. **Z Gesamte Hyg** 1989 Dec;35(12):712–4 (Eng. Abstr.) **(Ger)**
[The validity of parameters in neonatal diagnosis and fetal monitoring of breech deliveries. 2. Problems in fetal monitoring in the breech position—a proposal for a standardized biochemical diagnosis] Bellée H, et al. **Zentralbl Gynakol** 1989;111(19):1300–7 (Eng. Abstr.) **(Ger)**
[Description of cardiogram potentials of fetal movements in labor] Gross W, et al. **Zentralbl Gynakol** 1989;111(13):871–80 (Eng. Abstr.) **(Ger)**
[Qualitative description of cardiogram potentials of fetal body and respiratory movements in the non–contracting uterus] Gross W, et al. **Zentralbl Gynakol** 1989;111(13):881–90 (Eng. Abstr.) **(Ger)**
[The rectal–digital fetal stimulation test—an alternative to fetal blood analysis?] Müller R, et al. **Zentralbl Gynakol** 1989;111(22):1469–75 (Eng. Abstr.) **(Ger)**
[Mathematical foundations for biophysical methods in fetal monitoring. II. Cardiotocography] Moczko J, et al. **Ginekol Pol** 1989 Jun;60(6):343–9 (14 ref.) (Eng. Abstr.) **(Pol)**

INSTRUMENTATION

Assessment of cardiotocographs. Carter MC, et al. **J Biomed Eng** 1990 May;12(3):267–70
Monitoring intrauterine pressure during active labor. A prospective comparison of two methods. Devoe LD, et al. **J Reprod Med** 1989 Oct;34(10):811–4
[Initial experience with the use of the Tesla tocography apparatus in the diagnosis of threatened abortion] Baran P, et al. **Cesk Gynekol** 1990 Jun;55(5):337–42 **(Cze)**
[Early postpartum monitoring of newborn infants] Schrader I, et al. **Arch Gynecol Obstet** 1989;245(1–4):346–8 **(Ger)**
[Heat flux measurements of the fetal scalp and cardiotocography in predicting acidosis states sub partu—a comparison of 2 methods] Rudelstorfer R, et al. **Geburtshilfe Frauenheilkd** 1990 Apr;50(4):278–85 (Eng. Abstr.) **(Ger)**

METHODS

Transmission of cardiotocograph material by facsimile for expert interpretation [letter] Boyd W. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 (Pt 2)):368–9
Cardiotocographs at a distance [letter; comment] **BMJ** 1989 Nov 18;299(6710):1280–1 Comment on: BMJ 1989 Oct 14;299(6705):933–4.
Cardiotocographs at a distance [see comments] Steer PJ, et al. **BMJ** 1989 Oct 14;299(6705):933–4 (25 ref.) Comment in: BMJ 1989 Nov 18;299(6710):1280–1.
Spectral analysis of antepartum heart rate variability. Cerutti S, et al. **Clin Phys Physiol Meas** 1989;10 Suppl B:27–31
Vibroacoustic stimulation and fetal heart rate in nonstress tests. Sleutel MR. **J Obstet Gynecol Neonatal Nurs** 1990 May–Jun;19(3):199–204
Augmentation of labor: does internal tocography result in better obstetric outcome than external tocography? Chua S, et al. **Obstet Gynecol** 1990 Aug;76(2):164–7
Ambulatory tocodynamometry data interpretation: evaluating variability and reliability. Scheerer LJ, et al. **Obstet Gynecol** 1990 Jul;76(1 Suppl):67S–70S
[Comparison of the FIGO method and some intrapartum scoring systems used in the evaluation of intrapartum cardiotocography] Petránek J, et al. **Cesk Gynekol** 1990 Apr;55(3):179–87 **(Cze)**
[Diastolic flow compromise in the umbilical artery and fetal aorta; correlation of cardiotocography and neonatal status] Lassmann R, et al. **Gynakol Rundsch** 1990;30(2):126–30 **(Ger)**
[The prognostic value of the acoustic stimulation test for fetal wellbeing and neonatal status. Controlled acoustic stimulation of the fetus in the last pregnancy trimester] Stelzer E, et al. **Z Geburtshilfe Perinatol** 1990 May–Jun;194(3):104–9 (Eng. Abstr.) **(Ger)**
[Effect of intensive cardiotocographic monitoring on the time and method of completion of labor] Marković A, et al. **Ginekol Pol** 1989 Jan;60(1):12–20 (Eng. Abstr.) **(Pol)**
[Intranatal computerized cardiotocography] Chernukha EA, et al. **Akush Ginekol (Mosk)** 1990 Jan;(1):60–3 (44 ref.) **(Rus)**

STANDARDS

Domiciliary fetal monitoring in a district maternity unit. Moore KH, et al. **Aust N Z J Obstet Gynaecol** 1990 Feb;30(1):36–40

CARDIOTONIC AGENTS

Dopamine, dopexamine and dobutamine as inotropic and automatotropic agents. Lengyel C, et al. **Acta Physiol Hung** 1990;75 Suppl:193–4
Effects of inhibition of cardiac potassium and calcium channels on the digoxin–induced cardiotonic arrhythmogenic and toxic actions. Szegi J, et al. **Acta Physiol Hung** 1990;75 Suppl:263–4
Lack of cardiostimulant effects of bamifylline in in vitro and in vivo models. Bongrani S, et al. **Arzneimittelforschung** 1990 Feb;40(2 Pt 1):169–74
Inotropic stimulation and myocardial energetics. The second Gargellen–Conference. Gargellen/Montafon, Austria, June 16, 1988. Proceedings. **Basic Res Cardiol** 1989;84 Suppl 1:1–265
A sensitive high performance liquid chromatography microassay for bemoradan, a novel cardiotonic agent, in plasma/serum using a semi–automatic liquid/solid extraction sample preparation system—AASP. Huang SM, et al. **Biomed Chromatogr** 1990 Mar;4(2):52–5
Immunological, biochemical and physiological analyses of cardioacceleratory peptide 2 (CAP2) activity in the embryo of the tobacco hawkmoth Manduca sexta. Broadie KS, et al. **Development** 1990 Jan;108(1):59–71
Study of the effects and mechanisms of berberine on slow–response action potentials. Huang WM, et al. **J Electrocardiol** 1990 Jul;23(3):231–4
6–Benzoxazinylpyridazin–3–ones: potent, long–acting positive inotrope and peripheral vasodilator agents. Combs DW, et al. **J Med Chem** 1990 Jan;33(1):380–6
Synthesis and cardiotonic activity of novel biimidazoles. Matthews DP, et al. **J Med Chem** 1990 Jan;33(1):317–27
Purification and characterisation of proteins with cardiac stimulatory and haemolytic activity from the anemone Actinia tenebrosa. Norton RS, et al. **Toxicon** 1990;28(1):29–41

ADMINISTRATION & DOSAGE

Effect of injection site on circulation times during cardiac arrest [letter; comment] Martens P. **Crit Care Med** 1989 Dec;17(12):1365 Comment on: Crit Care Med 1988 Nov;16(11):1138–41.
Efficacy of ibopamine treatment in patients with advanced heart failure: purpose of a new therapeutic scheme with multiple daily administrations. Dei Cas L, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 8:S111–7

ADVERSE EFFECTS

Pathologic changes in blood vessels following administration of an inotropic vasodilator (ICI 153,110) to the rat. Westwood FR, et al. **Fundam Appl Toxicol** 1990 May;14(4):797–809
Absence of proarrhythmic effects of ibopamine in patients with congestive heart failure. Caponnetto S, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 8:S104–10
Long–term therapy of chronic congestive heart failure with ibopamine: a multicenter trial. Rolandi E, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 8:S93–103
Detrimental effects of premature use of inotropic drugs to discontinue cardiopulmonary bypass. Lazar HL, et al. **Surg Forum** 1978;29:276–8

ANALYSIS

High–performance liquid chromatographic determination of milrinone in biological tissues and fluids [letter] Verrijk R, et al. **J Chromatogr** 1989 Jun 30;491(1):265–8
[Determination of enoximone and its principle metabolite in serum and urine using high pressure liquid chromatography] Tarral E, et al. **Therapie** 1990 Jan–Feb;45(1):1–6 (Eng. Abstr.) **(Fre)**

ANTAGONISTS & INHIBITORS

Antagonism of novel inotropic agents at A1 adenosine receptors and m–cholinoceptors in human myocardium. Ungerer M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jun;341(6):577–85

BLOOD

High–performance liquid chromatographic assay for RA 642, a compound with cardiovascular effect, in human and rabbit serum alpha. Boswell GW, et al. **J Chromatogr** 1989 Jul 21;491(2):513–8
Analysis of a novel cardiac stimulant, UK–61 260, in human plasma by gas chromatography–mass spectrometry with selected–ion monitoring. Macrae PV, et al. **J Chromatogr** 1989 Jul 21;491(2):439–47
Determination of saterinone in plasma by high–performance liquid chromatography. Rudolph M. **J Chromatogr** 1989 Dec 29;497:342–8
Direct enantiomeric separation of saterinone by high–performance liquid chromatography. Rudolph M. **J Chromatogr** 1990 Jan 26;525(1):161–8

CHEMICAL SYNTHESIS

Organic nitrates.

O-(2,3-dihydroxypropyl)-1,4:3,6-dianhydro-hexitol-nitrates. Stoss P, et al. **Arzneimittelforschung** 1990 Jan; 40(1):13-8

Studies on bi-heterocyclic compounds. II. 5-substituted thiazolones. Yamazaki H, et al.
Chem Pharm Bull (Tokyo) 1990 Jan;38(1):45-8

Cardiotonic agents. 6. Histamine analogues as potential cardiovascular selective H2 agonists. Lampe JW, et al.
J Med Chem 1990 Jun;33(6):1688-97

Pyridazine analogues of biologically active compounds. Part 5: Novel potential cardiotonics of the amrinone type. Haider N, et al. **Pharmazie** 1989 Sep;44(9):598-601

[Potential cardiotonic agents. 8. 2-acyloxyalkylamino-, 2-acyloxyalkoxy-, and 2-acylaminoalkylamino-3-cyan-5-(pyrid-4-yl) pyridine] Hagen V, et al. **Pharmazie** 1990 May;45(5):343-5 (Eng. Abstr.) (Ger)

[Potential cardiotonic agents. 6. Synthesis and cardiovascular properties of 5-(4-pyridinyl)-, 6-methyl-5-(4-pyridinyl)- and 6-methyl-5-phenyl-substituted 3-cyano-2-oxaalkyoxy-pyridines] Hagen V, et al. **Pharmazie** 1990 Mar;45(3):189-90 (Eng. Abstr.) (Ger)

[Potential cardiotonic agents. 4. Synthesis, cardiovascular activity, molecular and crystal structure of 5-phenyl- and 4-(4-pyridinyl)-substituted 2(1H)-pyridinethiones] Hagen V, et al. **Pharmazie** 1989 Dec;44(12):809-13 (Eng. Abstr.) (Ger)

[Potential cardiotonics. 7. Synthesis and cardiovascular effects of 5-(4-pyridinyl)-, 6-methyl-4-(4-pyridinyl) and 6-methyl-5-phenyl-substituted 3-cyano-2-aminoalkylamino-pyridines] Hagen V, et al. **Pharmazie** 1990 Apr;45(4):240-1 (Eng. Abstr.) (Ger)

[Potential cardiotonics. 9. Synthesis and cardiovascular effects of 2-(pyrid-3-yl)-methylamino-, 2-(3-amino-pyrazolidino)- and 2-hetarylamino-substituted 3-cyan-5-(pyrid-4-yl)-pyridines] Roloff B, et al. **Pharmazie** 1989 Dec;44(12):859-60 (Ger)

[Potential cardiotonics. 5. Preparation and properties of 6-unsubstituted and 6-methyl-substituted 3-cyan-5-(pyrid-4-yl)pyridine] Roloff B, et al. **Pharmazie** 1989 Sep;44(9):643-4 (Ger)

[Synthesis of chlormadinol acetate-3-beta-O-alpha-1-arabinofuranosides with positive inotropic action] Schwabe K. **Pharmazie** 1990 Apr; 45(4):250-1 (Eng. Abstr.) (Ger)

ISOLATION & PURIFICATION

Inotropic response elicited by nematocyst contents of Hydra oligactis (Coelenterata: Hydrozoa). Lesh-Laurie GE, et al. **Comp Biochem Physiol [C]** 1989;94(1):249-54

Complete amino acid sequence of tenebrosin-C, a cardiac stimulatory and haemolytic protein from the sea anemone Actinia tenebrosa. Simpson RJ, et al. **Eur J Biochem** 1990 Jun 20;190(2):319-28

Novel secoiridoid lactones from Jasminum multiflorum. Shen YC, et al. **J Nat Prod** 1989 Sep-Oct;52(5):1060-70

PHARMACOKINETICS

Pharmacokinetics of intravenous enoximone in dialysis patients. Fiegel P, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 1:S20-3

PHARMACOLOGY

Positive inotropic effects of GYKI-52 713 in conscious and anaesthetized animals. Kürthy M, et al.
Acta Physiol Hung 1990;75 Suppl:191-2

Chronotropic and inotropic responses to ASL-7022 on isolated rat atria. Gende OA, et al.
Acta Physiol Pharmacol Latinoam 1989;39(2):119-26

Influence of positive inotropic agents on intracellular calcium transients. Part I. Normal rat heart. Auffermann W, et al.
Am Heart J 1989 Dec;118(6):1219-27

Influence of positive inotropic agents on intracellular calcium transients. Part II. Cardiomyopathic hamster hearts. Stefenelli T, et al. **Am Heart J** 1989 Dec;118(6):1228-36

Effect of milrinone on steady-state digoxin levels in congestive heart failure. Ferrick KJ, et al.
Am J Cardiol 1989 Nov 1;64(16):1057

Assessment of the hemodynamic response to acetyl-strophanthidin by Doppler echocardiography in normal subjects and in those with coronary artery disease or idiopathic dilated cardiomyopathy. Lange HW, et al.
Am J Cardiol 1990 Mar 15;65(11):804-7

Acute effects of milrinone on the electrocardiogram and the cardiac hemodynamics of rats with pressure overload-induced congestive heart failure. Desjardins S, et al. **Arch Int Pharmacodyn Ther** 1989 Sep-Oct;301:182-99

Positive chronotropic and inotropic effects of pimobendan (UD-CG 115 BS) in isolated, cross-circulated canine heart preparations. Furukawa Y, et al.
Arch Int Pharmacodyn Ther 1989 Jul-Aug;300:159-73

Lack of stereoselectivity in the inotropic and phosphodiesterase inhibitory effects of saterinone enantiomers. Armah BI, et al. **Arzneimittelforschung** 1989 Nov;39(11):1384-92

Hemodynamic response to ibopamine in acute myocardial infarction. Taniguchi H, et al. **Arzneimittelforschung** 1990 Apr;40(4):428-31

Ca-agonists: a new class of inotropic drugs. Bechem M, et al. **Basic Res Cardiol** 1989;84 Suppl 1:105-16

Positive inotropic stimulation in the normal and insufficient human myocardium. Erdmann E, et al.
Basic Res Cardiol 1989;84 Suppl 1:125-33

Studies on the mechanism of action of the bipyridine milrinone on the heart. Farah AE, et al.
Basic Res Cardiol 1989;84 Suppl 1:85-103 (72 ref.)

Influence of the calcium-sensitizer UDCG-115 on hemodynamics and myocardial energetics in patients with idiopathic dilated cardiomyopathy. Comparison with nitroprusside. Hasenfuss G, et al. **Basic Res Cardiol** 1989; 84 Suppl 1:225-33

Myofibrillar Ca++ activation and heart failure--Ca++ sensitization by the cardiotonic agent APP 201-533. Herzig JW, et al. **Basic Res Cardiol** 1989;84 Suppl 1:117-24

Separation between vasodilation and positive inotropism by assessment of myocardial energetics in patients with dilated cardiomyopathy. Holubarsch C, et al. **Basic Res Cardiol** 1989;84 Suppl 1:257-65

Mechanisms of positive inotropic effects. Scholz H.
Basic Res Cardiol 1989;84 Suppl 1:3-7 (10 ref.)

Studies on the cellular mechanisms of action of positive and negative inotropic agents. Watanabe AM, et al.
Basic Res Cardiol 1989;84 Suppl 1:19-22

The cardiac sodium channel shows a regular substate pattern indicating synchronized activity of several ion pathways instead of one. Schreibmayer W, et al.
Biochim Biophys Acta 1989 Nov 17;986(1):172-86

Effects of enoximone in patients with low ejection fraction undergoing coronary artery bypass graft surgery. Oduro A, et al. **Br J Clin Pract Symp Suppl** 1988 Dec;64:50-2

A study of the comparative effects of enoximone and dobutamine on urinary output after open heart surgery. Zeplin HE, et al. **Br J Clin Pract Symp Suppl** 1988 Dec; 64:65-8

A comparison of the inotropic activity of Org 30029, IBMX, milrinone and rolipram in rat papillary muscles. Nicholson CD, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:802P

Species differences in the positive inotropic response to DPI 201-106, a novel cardiotonic agent. Haleen SJ, et al.
Can J Physiol Pharmacol 1989 Nov;67(11):1460-3

Relation between the O2 supply:demand ratio, MVO2, and adenosine formation in hearts stimulated with inotropic agents [published erratum appears in Can J Physiol Pharmacol 1990 Jun;68(6):752] Headrick JP, et al.
Can J Physiol Pharmacol 1990 Jan;68(1):110-8

Control of mitochondrial ATP synthase in heart cells: inactive to active transitions caused by beating or positive inotropic agents. Das AM, et al. **Cardiovasc Res** 1990 May; 24(5):411-7

Electrophysiological effects of FK664, a new cardiotonic agent, on preparations from guinea pig ventricle and from rabbit sino-atrial node. Kodama I, et al. **Cardiovasc Res** 1989 May;23(5):369-77

Platelet aggregation inhibitory effects of the new positive inotropic agents pimobendan and UD CG 212 in whole blood. Saniabadi AR, et al. **Cardiovasc Res** 1989 Mar; 23(3):184-90

Comparison of the effects of different inotropic interventions on force, velocity, and power in rabbit myocardium. Chiu YC, et al. **Circ Res** 1989 Nov;65(5):1161-71

Structure-function relationships in the polypeptide cardiac stimulant, anthopleurin-A. Effects of limited proteolysis by trypsin. Gould AR, et al. **Eur J Biochem** 1990 Apr 20; 189(1):145-53

Comparative effects of enoximone and theophylline on plasma catecholamines and haemodynamics in cardiosurgical patients. Boldt J, et al.
Eur J Clin Pharmacol 1990;38(5):431-6

Effects of MCI-i54, a novel cardiotonic agent, on mean circulatory filling pressure in anesthetized dogs. Satoh N, et al. **Eur J Pharmacol** 1990 Jan 17;175(3):317-22

Cytotoxic interactions of cardioactive cationic amphiphilic compounds in primary rat hepatocytes in culture. Bandyopadhyay S, et al. **Hepatology** 1990 Jul;12(1):48-58

Muscarinic receptor subtypes mediating negative chrono- and inotropic responses in isolated, blood-perfused dog right atria. Akahane K, et al. **J Auton Pharmacol** 1990 Feb; 10(1):39-48

Inotropic and chronotropic profile of MCI-154: comparison with isoproterenol and imazodan in guinea pig cardiac preparations. Allert JA, et al. **J Cardiovasc Pharmacol** 1990 Jul;16(1):59-67

Hemodynamic effects of enoximone in cardiac surgery patients. Boldt J, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 1:S50-6

Present and future trends in research and clinical applications of inodilators. Cargnelli G, et al.
J Cardiovasc Pharmacol 1989;14 Suppl 8:S124-32 (64 ref.)

Clinical pharmacology of inodilators. Dei Cas L, et al.
J Cardiovasc Pharmacol 1989;14 Suppl 8:S60-71 (122 ref.)

The role of cyclic AMP and the dihydropyridine-sensitive channels on the mechanism of action of milrinone (Corotrope). Frangakis CJ, et al.
J Cardiovasc Pharmacol 1989 Jun;13(6):915-24

Correlations between the cardiovascular effects of pimobendan and plasma concentrations of the parent compound and of its major active metabolite, UD-CG 212 CL, in patients with congestive heart failure. Hagemeijer F, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 2:S57-64

Influence of enoximone on myocardial energetics in patients with idiopathic dilated cardiomyopathy: comparison with nitroprusside. Hasenfuss G, et al.
J Cardiovasc Pharmacol 1989;14 Suppl 1:S69-74

Effects of pimobendan on hemodynamics and myocardial energetics in patients with idiopathic dilated cardiomyopathy: comparison with nitroprusside. Hasenfuss G, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 2:S31-5

Acute and long-term hemodynamic effects of pimobendan (UD-CG 115 BS) in comparison with captopril. Hauf GF, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 2:S49-56

Influence of enoximone on mechanics and energetics of right ventricular guinea pig papillary muscles. Holubarsch C, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 1:S24-8

Influence of the positive inotropic substance pimobendan (UD-CG 115 BS) on contractile economy of guinea pig papillary muscles. Holubarsch C, et al.
J Cardiovasc Pharmacol 1989;14 Suppl 2:S13-7

Characterization of MS-857, a new and potent cardiotonic agent, in isolated mammalian cardiac muscles. Kamiya J, et al. **J Cardiovasc Pharmacol** 1989 Nov;14(5):790-7

Effects of the positive inotropic agents milrinone and pimobendan on the development of lethal ischemic arrhythmias in conscious dogs with recent myocardial infarction. Lynch JJ Jr, et al. **J Cardiovasc Pharmacol** 1989 Oct;14(4):585-97

Profile of cardiac and coronary vasodilator effects of MS-857, a novel cardiotonic agent, assessed in isolated, blood-perfused heart preparations of the dog. Maruyama M, et al. **J Cardiovasc Pharmacol** 1989 Nov;14(5):777-82

Effects of amrinone and enoximone on the subclasses of cyclic AMP phosphodiesterase from human heart and kidney. Masuoka H, et al. **J Cardiovasc Pharmacol** 1990 Feb;15(2):302-7

Arterial and venous vasodilator actions of RS-1893, a novel cardiotonic agent, in the hindlimb preparation of the dog. Miyake S, et al. **J Cardiovasc Pharmacol** 1989 Oct; 14(4):526-33

Acute effects of intravenous UD-CG 115 BS (pimobendan) on the cardiovascular system and left ventricular pump function. Permanetter B, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 2:S36-40

Voltage-gated cardiac Ca channels as a target for new positive inotropic drugs. Porzig H.
J Cardiovasc Pharmacol 1989;14 Suppl 3:S15-9 (38 ref.)

Effects of pimobendan (UD-CG 115 BS) on left ventricular inotropic state in conscious dogs and in patients with heart failure. Pouleur H, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 2:S18-22

Hemodynamic effects of intravenous pimobendan in patients with left ventricular dysfunction. Remme WJ, et al.
J Cardiovasc Pharmacol 1989;14 Suppl 2:S41-4

Comparative positive inotropic effects of TA-064 (denopamine), a new cardiotonic agent, and isoproterenol and ouabain on guinea pig ventricular muscles. Sato T, et al. **J Cardiovasc Pharmacol** 1989 Oct;14(4):519-25

Cardiac Na+ channel activation as a positive inotropic principle. Scholtysik G. **J Cardiovasc Pharmacol** 1989;14 Suppl 3:S24-9 (65 ref.)

Acute hemodynamic response to intravenous enoximone: an animal study and preliminary report in infants after cardiac surgery. Schranz D, et al. **J Cardiovasc Pharmacol** 1989; 14 Suppl 1:S62-8

Hemodynamic effects of inosine in combination with positive and negative inotropic drugs: studies on rats in vivo. Seesko RC, et al. **J Cardiovasc Pharmacol** 1990 Aug;16(2):249-56

The positive inotropic effect of pimobendan involves stereospecific increases in the calcium sensitivity of cardiac myofilaments. Solaro RJ, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 2:S7-12

Hemodynamic profile of the cardiotonic agent pimobendan. van Meel JC, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 2:S1-6

New positive inotropic agent OPC-8212 modulates single Ca2+ channels in ventricular myocytes of guinea pig. Yatani A, et al. **J Cardiovasc Pharmacol** 1989 Jun; 13(6):812-9

An explanation of bell-shaped, dose-positive inotropic effect curves for denopamine in canine right ventricular muscle. Yokoyama H, et al. **J Cardiovasc Pharmacol** 1989 Oct; 14(4):570-6

Inotropic "A" ring substituted sulmazole and isomazole analogues. Barraclough P, et al. **J Med Chem** 1990 Aug; 33(8):2231-9

Inotropic and lusitropic effects of MCI-154 (6-[4-(4-pyridyl)aminophenyl]-4,5-dihydro-3(2H)-pyridazinone) on human myocardium. Warren SE, et al.
J Mol Cell Cardiol 1989 Oct;21(10):1037-45

Effects of a new positive inotropic agent with a vasodilatory action, 5-methyl-6-(4-pyridyl)-2H-1,4-thiazin-3(4H)-one (ZSY-27), on calcium-movement and mechanical response in rabbit thoracic aorta. Yoshioka K, et al.
J Pharmacobiodyn 1989 Nov;12(11):667-70

Relationship between cyclic nucleotide levels and 5-methyl-6-(4-pyridyl)-2H-1,4-thiazin-3(4H)-one (ZSY-27), a new positive inotropic agent with a vasodilatory action, -induced relaxation of rabbit thoracic aorta. Yoshioka K, et al. **J Pharmacobiodyn** 1989 Nov; 12(11):660-6

Effects of a new positive inotropic agent with a vasodilatory action, 5-methyl-6-(4-pyridyl)-2H-1,4-thiazin-3(4H)-one (ZSY-27), on agonists-induced contractions in the isolated rabbit thoracic aorta. Yoshioka K, et al.
J Pharmacobiodyn 1989 Nov;12(11):653-9

Tedisamil blocks the transient and delayed rectifier K+ currents in mammalian cardiac and glial cells. Dukes ID,

et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):560–9

Effects of pimobendan, a cardiotonic and vasodilating agent with phosphodiesterase inhibiting properties, on isolated arteries and veins of rats. Fujimoto S, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1304–11

Positive inotropic and negative chronotropic effects of OPC-8490, a newly developed cardiotonic, in isolated, blood-perfused canine heart preparations. Furukawa Y, et al. **Jpn Heart J** 1989 May;30(3):387–98

Pharmacological analysis of positive chrono- and inotropic responses to denopamine (TA-064) in dog cross-circulated atrial and ventricular preparations. Akahane K, et al. **Jpn J Pharmacol** 1990 Jan;52(1):69–79

Effects of RS-1893, a novel cardiotonic agent, on central and peripheral hemodynamics in anesthetized rats. Miyake S, et al. **Jpn J Pharmacol** 1989 Dec;51(4):577–80

Effects of a new cardiotonic agent 1,2-dihydro-6-methyl-2-oxo-5-[imidazo (1,2-a) pyridin-6-yl]-3-pyridine carbonitrile hydrochloride monohydrate (E-1020) on contractile force and cyclic AMP metabolism in canine ventricular muscle. Satoh H, et al. **Jpn J Pharmacol** 1990 Feb;52(2):215–24

Effect of inotropic stimulation on cytosolic Mg2+ in isolated rat heart: a 31P magnetic resonance study. Headrick JP, et al. **Magn Reson Med** 1989 Dec;12(3):328–38

Effects of positive inotropic drugs on the frequency of contraction of the isolated atria: influence of dose regimen and age. Sørensen EV. **Pharmacol Toxicol** 1990 Jul; 67(1):69–72

Direct effects of pimobendan on cardiac myofilaments. Fujino K, et al. **Prog Clin Biol Res** 1989;315:602–3

Coupling between myocardial oxygen consumption and mechanics in patients with dilative cardiomyopathy. Influence of vasodilation and positive inotropism. Hasenfuss G, et al. **Prog Clin Biol Res** 1989;315:613–5

Energetic consequences of positive inotropic interventions in guinea pig papillary muscles. Holubarsch C, et al. **Prog Clin Biol Res** 1989;315:608–9

A comparison of the effects of three positive inotropic agents (amrinone, milrinone and medorinone) on platelet aggregation in human whole blood. Pattison A, et al. **Thromb Res** 1990 Mar 15;57(6):909–18

Biochemical and pharmacological studies of the mechanism of action of tenebrosin-C, a cardiac stimulatory and haemolytic protein from the sea anemone, Actinia tenebrosa. Galettis P, et al. **Toxicon** 1990;28(6):695–706

New cardiotonics may act via adenosine receptors. Mechanisms of action of the new cardiotonic drugs [letter; comment] Paton DM, et al. **Trends Pharmacol Sci** 1988 Dec;9(12):431–2 Comment on: Trends Pharmacol Sci 1988 May;9(5):166–70.

[Effect of a new positive inotropic agent (OPC-8212) on intracellular potential of isolated canine ventricular papillary muscle] Zha Z, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Jun;21(2):159–62 (Eng. Abstr.) **(Chi)**

[Vasodilation and position inotropism in cardiac: insufficiency] **Internist (Berl)** 1990 Apr;31(4 Suppl):1–20 **(Ger)**

[The effect of cardioactive drugs on the proteolytic activity of the rat heart muscle] Karapetian RG, et al. **Vopr Med Khim** 1990 May-Jun;36(3):54–7 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Effects of captopril versus milrinone therapy in modulating the adrenergic nervous system response to exercise in congestive heart failure. Corbalán R, et al. **Am J Cardiol** 1990 Mar 1;65(9):644–9

Effect of milrinone on ventricular arrhythmias in congestive heart failure. Ferrick KJ, et al. **Am J Cardiol** 1990 Aug 15;66(4):431–4

Differential hemodynamic effects of oral enoximone in severe congestive heart failure. Murali S, et al. **Am J Cardiol** 1990 Feb 15;65(7):515–9

Management of low cardiac output syndrome after cardiac surgery using enoximone. White DA, et al. **Anaesthesia** 1990 May;45(5):386–9

Less peri- and postoperative inotropic support in open-heart patients with vasomotor waves during cardiopulmonary bypass? Vainionpää V. **Basic Res Cardiol** 1989 Nov-Dec; 84(6):653–60

Hyperosmolality related to propylene glycol in an infant treated with enoximone infusion. Huggon I, et al. **BMJ** 1990 Jul 7;301(6742):19–20

Calcium sensitisers. Lee JA, et al. **BMJ** 1990 Mar 3; 300(6724):551–2 (44 ref.)

Enoximone in intensive care. Proceedings of a symposium. Brussels, Belgium, 21st March 1988. **Br J Clin Pract Symp Suppl** 1988 Dec;64:1–87

Basis of treatment of myocardial failure. Vincent JL. **Br J Clin Pract Symp Suppl** 1988 Dec;64:15–8 (14 ref.)

Comparison of the effects of isobutylmethylxanthine and milrinone on ischaemia-induced arrhythmias and platelet aggregation in anaesthetized rabbits. Holbrook M, et al. **Br J Pharmacol** 1989 Sep;98(1):318–24

The appropriate use of inotropes in shock. Rosenthal MH. **Can J Anaesth** 1990 May;37(4 Pt 2):S1xiv-S1xx (13 ref.) **(Eng, Fre)**

Exercise as a means of assessing heart failure and its response to treatment. Poole-Wilson PA. **Cardiology** 1989; 76(5):347–56 (26 ref.)

Effects of milrinone treatment in cardiomyopathic hamsters (CHF 147) with severe congestive heart failure. Desjardins S, et al. **Cardiovasc Res** 1989 Jul;23(7):620–30

Lack of beneficial effects of milrinone in severe septic shock. Lindgren S, et al. **Circ Shock** 1990 Aug;31(4):365–75

Use of inotropes in the critical care setting. Löllgen H, et al. **Crit Care Med** 1990 Jan;18(1 Pt 2):S56–60 (32 ref.)

Myocardial and vascular actions of milrinone. Colucci WS. **Eur Heart J** 1989 Aug;10 Suppl C:32–8 (17 ref.)

Pharmacology of positive inotropic phosphodiesterase III inhibitors. Honerjäger P. **Eur Heart J** 1989 Aug;10 Suppl C:25–31 (59 ref.)

Acute effects of intravenous milrinone in heart failure. Rettig GF, et al. **Eur Heart J** 1989 Aug;10 Suppl C:39–43 (15 ref.)

Therapeutic targets and expectations for the treatment of heart failure. Taylor SH. **Eur Heart J** 1989 Aug;10 Suppl C:19–24

Pharmacological bridge to cardiac transplantation. Loisance D, et al. **Eur J Cardiothorac Surg** 1989;3(3):196–202

Pharmacotherapy of congestive heart failure: pimobendan, a new approach to inotropic stimulation. Proceedings of a satellite symposium to the Xth European Congress of Cardiology. Vienna, Austria, August 31, 1988. **J Cardiovasc Pharmacol** 1989;14 Suppl 2:S1–64

Inodilators: a new strategy in the therapy of heart failure. Proceedings of a symposium held during the 24th National Congress of the Italian Society for Pharmacology. Brescia, Italy, September 28, 1988. **J Cardiovasc Pharmacol** 1989; 14 Suppl 8:S1–132

Treatment of heart failure with enoximone, a new phosphodiesterase inhibitor. Düsseldorf, Federal Republic of Germany. September 25–27, 1987. Proceedings. **J Cardiovasc Pharmacol** 1989;14 Suppl 1:S1–S83

Ibopamine vs. digoxin in chronic heart failure: a double-blind, crossover study. Alicandri C, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 8:S77–82

Clinical efficacy of pimobendan (UD-CG 115 BS) in patients with chronic congestive heart failure. Baumann G, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 2:S23–30

The long-term efficacy of ibopamine in treating patients with severe heart failure: a multicenter investigation. Condorelli M, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 8:S83–92

Beneficial hemodynamic effects of milrinone in conscious rabbits with chronic aortic regurgitation. DeFelice A, et al. **J Cardiovasc Pharmacol** 1989 Oct;14(4):659–65

The value of positive inotropy in acute and chronic heart failure. Erdmann E. **J Cardiovasc Pharmacol** 1989;14 Suppl 3:S36–41 (47 ref.)

Chronic therapy of severe heart failure with enoximone. Gilfrich HJ, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 1:S75–7

Electrophysiologic effects of enoximone in patients with congestive heart failure. Hohnloser SH, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 1:S29–32

The influence of various degrees of cardiac failure, chronic medical treatment, and acute additional enoximone application on the parameters of the vasopressor system. Mitrovic V, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 1:S40–9

Effect of intravenous pimobendan (UDCG 115 BS) on hemodynamics and left ventricular volumes in idiopathic dilative cardiomyopathy. Permanetter B, et al. **J Cardiovasc Pharmacol** 1989 Dec;14(6):803–9

Acute effects of enoximone in chronic heart failure. Saborowski F, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 1:S57–61

Present use of positive inotropic drugs in heart failure. Schlepper M, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 1:S9–19 (21 ref.)

Pharmacotherapeutic profile of ibopamine in heart failure. Taylor SH. **J Cardiovasc Pharmacol** 1989;14 Suppl 8:S118–23 (24 ref.)

Long-term enoximone therapy in unstable chronic heart failure. Treese N, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 1:S78–83

Milrinone. A clinical trial in 29 dogs with moderate to severe congestive heart failure. Keister DM, et al. **J Vet Intern Med** 1990 Mar-Apr;4(2):79–86

[Monitoring and treatment hemodynamics] Hartikainen M. **Duodecim** 1990;106(1):69–78 (22 ref.) **(Fin)**

[Cardiovascular study of enoximone in the treatment of acute postoperative circulatory insufficiency] Dass G, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R231 **(Fre)**

[Dopexamine, a new inotropic agent for treatment of low output syndromes after cardiac surgery] du Gres B, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R232 **(Fre)**

[Comparison of enoximone versus tobutamine in the treatment of low cardiac output after cardiac surgery] Lançon JP, et al. **Ann Fr Anesth Reanim** 1990;9(3):289–94 (Eng. Abstr.) **(Fre)**

[Comparison of enoximone and dobutamine treatment on cardiac output after cardiac surgery] Lançon JP, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R230 **(Fre)**

[Enoximone and the therapeutic strategy in patients awaiting emergency cardiac graft] Dubois-Randé JL, et al. **Arch Mal Coeur** 1989 Jul-Aug;82(8):1433–8 (Eng. Abstr.) **(Fre)**

[Treatment of chronic heart failure with positive inotropic agents] Lechat P. **Therapie** 1989 Nov-Dec;44(6):437–45 (62 ref.) (Eng. Abstr.) **(Fre)**

[Drug therapy of heart failure in the elderly] Michel D. **Fortschr Med** 1989 Oct 30;107(31):657–61 (36 ref.) (Eng. Abstr.) **(Ger)**

[Chronic heart failure: effect and evaluation of therapy with positive inotropic substances] Thormann J, et al. **Herz** 1990 Jun;15(3):190–201 (39 ref.) (Eng. Abstr.) **(Ger)**

[Enoximone as an alternative to mechanical circulatory support prior to heart transplantation] Schmid ER, et al. **Schweiz Med Wochenschr** 1989 Sep 9;119(36):1231–6 (Eng. Abstr.) **(Ger)**

[Acute and chronic effects of a new oral inotropic agent, ibopamine hydrochloride, on hemodynamic and metabolic responses to ergometer exercise in patients with severe congestive heart failure] Morimoto Y, et al. **Kokyu To Junkan** 1989 Jul;37(7):773–8 (Eng. Abstr.) **(Jpn)**

[Non-digitalis inotropic agents in the treatment of congestive heart insufficiency] Correia JF. **Rev Port Cardiol** 1989 Jun; 8(6):473–81 (129 ref.) (Eng. Abstr.) **(Por)**

TOXICITY

Toxicological evaluation of the cardiotonic isomazole in the dog. Means JR, et al. **Fundam Appl Toxicol** 1989 Oct; 13(3):418–28

Acute, subchronic, and chronic toxicity of the cardiotonic isomazole in rats. Sandusky GE, et al. **Fundam Appl Toxicol** 1989 Oct;13(3):409–17

CARDIOTONIC STEROIDS see **CARDIAC GLYCOSIDES**

CARDIOVASCULAR AGENTS

Conformationally constrained congeners of 6-aryl-5-methyl-4,5-dihydro-3(2H)-pyridazinones active on the cardiovascular system: conformational studies by molecular mechanics calculations and 1H NMR spectroscopy. Toma L, et al. **J Med Chem** 1990 Jun; 33(6):1591–4

Cardiovascular properties of hydroxylated docosahexaenoates. Karanian JW, et al. **Prog Clin Biol Res** 1989;301:511–5

[Effect of dehydrocorydaline on formation of thromboxane B2 in platelets and 6-keto-pgf1 alpha in rabbit aorta] Yang J, et al. **Yao Hsueh Hsueh Pao** 1989;24(6):472–5 (Eng. Abstr.) **(Chi)**

[Bronchomotor effects of cardioselective beta 1-adrenoblockaders in patients with bronchial asthma] Sinopal'nikov AI, et al. **Ter Arkh** 1989;61(8):43–6 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

[Congestive heart failure treated by a combination of cyclovirobuxine D with digoxin] Yan M. **Chung Hsi I Chieh Ho Tsa Chih** 1990 Feb;10(2):88–9, 69 (Eng. Abstr.) **(Chi)**

[Chronopharmacology--significance for clinical treatment?] Lemmer B. **Klin Wochenschr** 1989 Sep 15;67(18):963–5 (22 ref.) **(Ger)**

[The therapy of chronic heart failure] Trenckmann H. **Z Gesamte Inn Med** 1990 Jun 15;45(12):342–7 (31 ref.) (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Drug-related syncope. Davidson E, et al. **Clin Cardiol** 1989 Oct;12(10):577–80

Medication-induced performance decrements: cardiovascular medications. Kruyer WB, et al. **J Occup Med** 1990 Apr; 32(4):342–9 (18 ref.)

Inappropriate long-term medication in patients admitted to a coronary care unit. O'Sullivan JJ, et al. **J R Coll Physicians Lond** 1989 Oct;23(4):232–5

Clinical toxicology of cardiovascular drugs. Hamlin RL. **Vet Clin North Am Small Anim Pract** 1990 Mar; 20(2):469–81 (47 ref.)

[Side effects of cardiovascular drugs] Koleva T, et al. **Vutr Boles** 1989;28(5):24–30 (Eng. Abstr.) **(Bul)**

ANALYSIS

[An analytical study of 2 dimethylxanthine derivatives with action at the level of the cardiovascular system] Dorneanu V, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Jul-Sep; 93(3):577–80 (Eng. Abstr.) **(Rum)**

CHEMICAL SYNTHESIS

Specific bradycardic agents. 1. Chemistry, pharmacology, and structure-activity relationships of substituted benzazepinones, a new class of compounds exerting antiischemic properties. Reiffen M, et al. **J Med Chem** 1990 May;33(5):1496–504

Synthesis and pharmacological properties of phenoxyethylpiperazine derivatives. Ryznerski Z, et al. **Pol J Pharmacol Pharm** 1989 Mar-Apr;41(2):191–9

PHARMACOKINETICS

Pharmacokinetics of falipamil after intravenous administration to humans. Roth W, et al. **J Pharm Sci** 1990 May;79(5):415–9

PHARMACOLOGY

Esorubicin cardiotoxicity in vitro: antagonism by

pimobendan. Galatulas I, et al. **Acta Physiol Hung** 1990; 75 Suppl:123–4

Hemodynamic effects of epinephrine, dopamine, nitroglycerin, and nitroprusside in a patient with a total artificial heart (TAH). Liska J, et al. **Anesthesiology** 1990 Apr;72(4):757–60

Differentiation of various cardiovascular drugs by means of specific myocardial and vascular load tests. Experiments at the isolated perfused heart. Döring HJ. **Arzneimittelforschung** 1989 Dec;39(12):1535–42

Prevention of myocardial enzyme release by ranolazine in a primate model of ischaemia with reperfusion. Allely MC, et al. **Br J Pharmacol** 1990 Jan;99(1):5–6

Interactions of iloprost and sodium nitroprusside on vascular smooth muscle and platelet aggregation. Lidbury PS, et al. **Br J Pharmacol** 1989 Dec;98(4):1275–80

Chronotropic and inotropic actions of amrinone, carbazeran and isobutylmethyl xanthine: role of phosphodiesterase inhibition. Shahid M, et al. **Br J Pharmacol** 1989 Sep; 98(1):291–301

Altered pharmacodynamics of cardiovascular drugs and their relation to altered pharmacokinetics in elderly patients. Abernethy DR. **Clin Geriatr Med** 1990 May;6(2):285–92 (79 ref.)

The influence of nifedipine and mioflazine on mitochondrial calcium overload in normoxic and ischaemic guinea-pig hearts. Hugtenburg JG, et al. **Eur J Pharmacol** 1990 Mar 13;178(1):71–8

Reversal of changes of lipid peroxide, xanthine oxidase and superoxide dismutase by cardio-protective drugs in isoproterenol induced myocardial necrosis in rats. Kaul S, et al. **Indian J Exp Biol** 1989 Jul;27(7):625–7

Comparative pharmacology of cardiac and vascular tissues in heart failure. Godfraind T. **J Cardiovasc Pharmacol** 1989; 14 Suppl 8:S1–20 (101 ref.)

How does posture influence the haemodynamic assessment of a cardiovascular drug? Experience with nicardipine. Silke B, et al. **J Cardiovasc Pharmacol** 1990 Jul;16(1):87–92

The inotropic effect of 4-aminopyridine and pH changes in rabbit papillary muscle. Shahid M, et al. **J Pharm Pharmacol** 1989 Sep;41(9):601–6

Comparative study of cardiovascular effects of clonidine and alinidine in cross-perfused dog atrial preparations. Chiba S, et al. **Jpn Heart J** 1989 Nov;30(6):895–902

On the mechanism of the "specific bradycardic action" of the verapamil derivative UL-FS 49. Doerr T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Apr; 341(4):331–40

Effects of antianginal drugs on myocardial energy metabolism in coronary artery disease. Bagger JP. **Pharmacol Toxicol** 1990;66 Suppl 4:1–31 (227 ref.)

Effect of iloprost on spreading of ischaemic necrosis in the hairless mouse ear. Müller B, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Jan; 39(1):63–4

[Drugs of plant origin and the vascular system] Reuter HD. **J Pharm Belg** 1989 Nov–Dec;44(6):420–32 (0 ref.) **(Fre)**

THERAPEUTIC USE

H2 antagonist—cardiac drug interactions [letter; comment] Shinn AF. **Am Heart J** 1990 Jun;119(6):1442–4 Comment on: Am Heart J 1989 Jul;118(1):144–54.

Beneficial effect of tan-shen, an extract from the root of Salvia, on post-hypoxic recovery of cardiac contractile force. Takeo S, et al. **Biochem Pharmacol** 1990 Sep 1; 40(5):1137–43

ST/HR slope during prostacyclin treatment: an improved method to identify patients with advanced coronary artery disease. Bugiardini R, et al. **Eur Heart J** 1989 Nov; 10(11):991–7

The protective role of neocuproine against cardiac damage in isolated perfused rat hearts. Applebaum YJ, et al. **Free Radic Biol Med** 1990;8(2):133–43

Controversies in congestive heart failure therapy. Nicklas JM. **Hosp Pract [Off]** 1990 Jan;25 Suppl 1:22–9; discussion 30–1 (20 ref.)

A randomized, double-blind, crossover comparison of iloprost with dextran in patients with peripheral arterial occlusive disease. Ylitalo P, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 May;28(5):197–204

Combined tissue-type plasminogen activator and prostacyclin therapy for acute myocardial infarction. Thrombolysis and Angioplasty in Myocardial Infarction (TAMI) 4 Study Group. Topol EJ, et al. **J Am Coll Cardiol** 1989 Oct;14(4):877–84

Anti-ischemic activity of the novel benzazepine calcium antagonist SQ 31,486. Grover GJ, et al. **J Cardiovasc Pharmacol** 1990 Aug;16(2):219–27

Protection of the myocardium against postischemic reperfusion damage. van Gilst WH. **J Cardiovasc Pharmacol** 1989;14 Suppl 9:S49–54 (94 ref.)

Iloprost infusion decreases skeletal muscle ischemia-reperfusion injury. Belkin M, et al. **J Vasc Surg** 1990 Jan;11(1):77–82; discussion 82–3

Stable angina pectoris: 3. Medical treatment. Shub C. **Mayo Clin Proc** 1990 Feb;65(2):256–73 (98 ref.)

[Therapy of angina pectoris—state of the art] Nager F. **Schweiz Rundsch Med Prax** 1990 Mar 6;79(10):267–76 (50 ref.) (Eng. Abstr.) **(Ger)**

[Clinical use of prostacyclin and its analogs in coronary vasculopathy] Lenzi S, et al. **Ann Ital Med Int** 1986 Jun; 1(2):141–51 (Eng. Abstr.) **(Ita)**

[Use of cardiovascular drugs in pregnancy] Halawa B. **Wiad Lek** 1989 Jan 15;42(2):94–100 (64 ref.) **(Pol)**

[A preclinical evaluation of the antianginal activity of energy metabolism intermediates] Kostin VI. **Farmakol Toksikol** 1989 Nov–Dec;52(6):49–52 (Eng. Abstr.) **(Rus)**

[The cardioprotective action of carnitine and its structural analog 3-(2,2,2-trimethylhydrazine)propionate on cardiac energy metabolism in experimental occlusion of the coronary artery in rats] Ratunova TM, et al. **Farmakol Toksikol** 1989 Sep–Oct;52(5):24–7 (Eng. Abstr.) **(Rus)**

[The cardioprotective effect of a new Soviet synthetic analog of the endogenous opioids in stress due to total myocardial ischemia and its mechanisms] Dvortsin GF. **Patol Fiziol Eksp Ter** 1990 Mar–Apr;(2):13–6 (Eng. Abstr.) **(Rus)**

[The use of mildronat with stenocardia patients] Dudko VA, et al. **Vrach Delo** 1989 Oct;(10):64–7 (Eng. Abstr.) **(Rus)**

[The use of mildronat in heart failure in patients with chronic ischemic heart disease] Sakharchuk II, et al. **Vrach Delo** 1989 Sep;(9):21–3 (Eng. Abstr.) **(Rus)**

[The efficacy of quinazopyrine, preparation E and riboxin in experimental myocardial infarct] Stets VR, et al. **Vrach Delo** 1989 Dec;(12):13–4 (Eng. Abstr.) **(Rus)**

CARDIOVASCULAR DISEASE (SPECIALTY) see **CARDIOLOGY**

CARDIOVASCULAR DISEASES

The use of midazolam and flumazenil in cardiovascular diagnostic and therapeutic procedures. Marty J, et al. **Acta Anaesthesiol Scand Suppl** 1990;92:33–4

Cardiovascular disease in women. Satellite symposium to the annual meeting of the Canadian Cardiovascular Society. Vancouver, British Columbia, October 27, 1989. **Can J Cardiol** 1990 May;6 Suppl B:1B–35B

Cardiovascular disease in women. **Cardiology** 1990;77 Suppl 2:1–139

Dilemmas in clinical cardiology. **Cardiovasc Clin** 1990; 21(1):1–306

Abstracts from the 63rd scientific sessions. American Heart Association. Dallas, Texas, November 12–15, 1990. **Circulation** 1990 Oct;82(4 Suppl):III1–918

Abstracts from the 62nd scientific sessions: American Heart Association. New Orleans, Louisiana, November 13–16, 1989. **Circulation** 1989 Oct;80(4 Pt 2):II1–II808

Proceedings of the joint WHO/ISH Symposium on Hypertension and Cardiovascular Disease. Melbourne, Australia, December 4th to 7th, 1988. **Clin Exp Hypertens [A]** 1989;11(5–6):753–1216

Recent advances in cardiovascular medicine. **Crit Care Med** 1990 Jan;18(1 Pt 2):S1–83

XIIth Congress of the European Society of Cardiology. 16–20 September 1990, Stockholm, Sweden. Abstracts. **Eur Heart J** 1990 Aug;11 Suppl:1–487

Modeling in biomedical research: an assessment of current and potential approaches. Applications to studies in cardiovascular/pulmonary function and diabetes [news] **FASEB J** 1989 Dec;3(14):2679–80

Joint annual conference of CSI & ATCVSI. Madras, Dec. 27–29, 1989. Abstracts. **Indian Heart J** 1989 Nov–Dec; 41(6):353–547

Clinical cardiovascular research: a role for the private practitioner. Conti CR. **J Am Coll Cardiol** 1990 Jan; 15(1):248–9

Clinical judgment and therapeutic decision making. Hlatky MA, et al. **J Am Coll Cardiol** 1990 Jan;15(1):1–14 (151 ref.)

Program and abstracts of the 7th G.R.R.C. meeting. Dijon, France, 26–27 April 1990. **J Mol Cell Cardiol** 1990 Jun;22 Suppl 4:S1–62

Proceedings of the 53d annual scientific meeting of the Japanese Circulation Society. March 1989, Nagoya. Abstracts. **Jpn Circ J** 1989 Aug;53(8):825–993

Proceedings of the 53d annual scientific meeting of the Japanese Circulation Society. March 1989, Nagoya. Abstracts. **Jpn Circ J** 1989 Jun;53(6):477–675

Proceedings of the Cardiac Society of Australia and New Zealand. Christchurch, New Zealand, August 1989. Abstracts. **N Z Med J** 1990 May 23;103(890):245–9

Trends in cardiovascular risk factors in Auckland, 1982 to 1987. Jackson R, et al. **N Z Med J** 1990 Aug 8; 103(895):363–5

[Recent advances in cardiology and angiology in China] Editorial B. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Oct; 17(5):258–67 (0 ref.) **(Chi)**

[Nationwide health programs. I] Rybka J, et al. **Zdrav Aktual** 1989;219:3–131 **(Cze)**

[Regression of cardiovascular diseases: prevention, surgical and pharmacologic advances (interview)] Bourassa M. **Union Med Can** 1989 Sep–Oct;118(5):174–8, 181 **(Fre)**

[Angiology '89. Current advances. 7th Dreiländer meeting of the DGA, OGA, and SGA/SSA. 1st German-/French-speaking meeting. Montreux, 6–9 September 1989. Proceedings] **Vasa Suppl** 1989;27:1–414 **(Ger, Fre)**

[Relations of intracardiac dimensions as measured by echocardiography and plasma atrial natriuretic peptide levels in various cardiovascular diseases] Tomoda H. **J Cardiol** 1989 Mar;19(1):247–55 (Eng. Abstr.) **(Jpn)**

[Abstracts of papers presented at meetings of local sections of the Japanese Circulation Society] **Jpn Circ J** 1989;53 Suppl 2:257–457 **(Jpn)**

[1st National Meeting on Recommendations, Competencies, and Consensus in Cardiology. 26–27 November 1988, Lisbon] **Rev Port Cardiol** 1989 Sep;8 Suppl 2:1–493 **(Por)**

[Cardiology '89. Present trends in cardiovascular medicine at the Congress of Cardiology '89 in London April 1989] Hatala R. **Bratisl Lek Listy** 1990 Feb;91(2):134–41 (Eng. Abstr.) **(Slo)**

BLOOD

Treating hypertension and cardiovascular risk: are there trade-offs? Grimm RH Jr. **Am Heart J** 1990 Mar;119(3 Pt 2):729–32; discussion 732 (18 ref.)

Interrelationships between plasma levels of plasminogen activator inhibitor, tissue plasminogen activator, lipoprotein (a), and established cardiovascular risk factors in a north Swedish population. Sundell IB, et al. **Atherosclerosis** 1989 Nov;80(1):9–16

Thromboxane in cardiovascular disease. Sinzinger H, et al. **Eicosanoids** 1990;3(1):59–64

High density lipoprotein cholesterol distribution and predictive power in some Italian populations studies. Spagnolo A, et al. **Eur J Epidemiol** 1989 Sep;5(3):328–35 (22 ref.)

Review of lipids, cardiovascular disease, and oral contraceptives [letter] Corson SL. **Fertil Steril** 1990 Aug; 54(2):363–4

Plasma fibrinogen—an independent cardiovascular risk factor. Ernst E. **J Intern Med** 1990 Jun;227(6):365–72 (114 ref.)

Acid-base status in circulatory failure [letter] **N Engl J Med** 1989 Dec 7;321(23):1611–3

Requirements for drug monitoring of verapamil: experience from an unselected group of patients with cardiovascular disease. Husum D, et al. **Pharmacol Toxicol** 1990 Mar; 66(3):163–9

[Blood levels of middle molecule peptides in cardiovascular diseases] Mikunis RI, et al. **Klin Med (Mosk)** 1990 May; 68(5):124–6 **(Rus)**

[Risk factors for cardiovascular diseases in childhood] Vršanská V, et al. **Bratisl Lek Listy** 1989 Sep;90(9):670–5 (Eng. Abstr.) **(Slo)**

CHEMICALLY INDUCED

A case-control study of circulatory, malignant, and respiratory morbidity in carbon black workers in the United States. Robertson JM, et al. **Am Ind Hyg Assoc J** 1989 Oct;50(10):510–5

Thrombotic and cardiovascular complications related to nonionic contrast media during cardiac catheterization: analysis of 8,517 patients. Davidson CJ, et al. **Am J Cardiol** 1990 Jun 15;65(22):1481–4

Toxic effects associated with the administration of deferoxamine in the premature baboon with hyaline membrane disease. deLemos RA, et al. **Am J Dis Child** 1990 Aug;144(8):915–9

Clinical aspects of the relationship between oral contraceptives, abnormalities in carbohydrate metabolism, and the development of cardiovascular disease. Gaspard UJ, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):334–43 (62 ref.)

Oral contraceptives in risk groups: exclusion or monitoring? Guillebaud J. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):443–6 (11 ref.)

Clinical aspects of the relationship between oral contraceptives and abnormalities of the hemostatic system: relation to the development of cardiovascular disease. Kelleher CC. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):392–5 (25 ref.)

Some aspects of the relationship between oral contraceptives, lipid abnormalities, and cardiovascular disease. Samsioe G, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):354–8 (22 ref.)

Past use of oral contraceptives and cardiovascular disease: a meta-analysis in the context of the Nurses' Health Study. Stampfer MJ, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):285–91

Esmolol in the management of epinephrine- and cocaine-induced cardiovascular toxicity. Pollan S, et al. **Anesth Analg** 1989 Nov;69(5):663–4

Death after flumazenil [letter] [published erratum appears in BMJ 1989 Aug 26;299(6698):570] [comment] Bodenham AR. **BMJ** 1989 Aug 12;299(6696):457 Comment on: BMJ 1989 Jun 24;298(6689):1713.

Ischaemic chest pain after abuse of a topical nasal vasodilator. Whittet HB, et al. **BMJ** 1989 Sep 30;299(6703):860

Cardiovascular disease and use of oral contraceptives. WHO Collaborative Study. **Bull World Health Organ** 1989; 67(4):417–23

Severe cardiovascular adverse effects in association with acute, high-dose corticosteroid administration. Erstad BL. **DICP** 1989 Dec;23(12):1019–23 (36 ref.)

Results of oral contraceptive epidemiologic studies regarding neoplastic and cardiovascular effects. Grimes DA. **Int J Fertil** 1989;34 Suppl:27–33 (8 ref.)

Cardiovascular effects of oral contraceptives: a review. Stubblefield PG. **Int J Fertil** 1989;34 Suppl:40–9 (53 ref.)

Cardiovascular manifestations of aluminium phosphide

poisoning [letter] Khosla SN. **J Assoc Physicians India** 1990 Jun;38(6):443–4

Marked QRS complex abnormalities and sodium channel blockade by propoxyphene reversed with lidocaine. Whitcomb DC, et al. **J Clin Invest** 1989 Nov;84(5):1629–36

Possible cocaine predisposition to adverse cerebrovascular and cardiovascular sequelae of bromocriptine administered postpartum. Miller LG, et al. **J Clin Pharmacol** 1989 Sep; 29(9):781–5

Oral contraception for women in their 40s [clinical conference] Mishell DR Jr, et al. **J Reprod Med** 1990 Apr; 35(4 Suppl):447–81 (40 ref.)

Environmentally related disorders of the cardiovascular system. Rosenman KD. **Med Clin North Am** 1990 Mar; 74(2):361–75

Cardiopulmonary complications of selective beta 2 adrenergic tocolytic therapy. Suidan JS.
Middle East J Anesthesiol 1989 Oct;10(3):247–59 (25 ref.)

Vascular complications in women using the low steroid content combined oral contraceptive pills: case reports and review of the literature. Frohlich EP.
Obstet Gynecol Surv 1990 Sep;45(9):578–84 (63 ref.)

Oral contraceptives and cardiovascular risk. Taking a safe course of action. Derman RJ. **Postgrad Med** 1990 Sep 15; 88(4):119–22 (21 ref.)

Re: "Cardiovascular diseases and the work environment: a critical review of the epidemiologic literature on chemical factors" [letter; comment] Volpe RA.
Scand J Work Environ Health 1990 Apr;16(2):147–8 Comment on: Scand J Work Environ Health 1989 Aug;15(4):245–64.

Cardiovascular effects of alcohol. Davidson DM.
West J Med 1989 Oct;151(4):430–9 (164 ref.)

Alcohol and the cardiovascular system [editorial] Regan TJ. **West J Med** 1989 Oct;151(4):454–6

[Drug–induced cardiovascular complications] Le Feuvre C, et al. **Ann Med Interne (Paris)** 1989;140(7):597–9 (Eng. Abstr.) **(Fre)**

[Cardiovascular diseases with oral contraceptives: risks and benefits] Heinemann L. **Z Arztl Fortbild (Jena)** 1990; 84(1–2):43–6 (13 ref.) **(Ger)**

[The effect of air pollution on human health] Sroczyński J. **Pol Arch Med Wewn** 1989 Jul;82(1):45–62 **(Pol)**

[The Fuenlabrada study: smoking habits in children and adolescents. Effect on various cardiovascular risk factors] Muñoz Calvo MT, et al. **An Esp Pediatr** 1989 Oct; 31(4):331–5 (33 ref.) (Eng. Abstr.) **(Spa)**

CLASSIFICATION

Study on the accuracy of official recording of nosological codes in an Italian regional hospital registry. Lovison G, et al. **Methods Inf Med** 1989 Jul;28(3):142–7

COMPLICATIONS

Ischaemic cerebral infarction in young adults. Federico F, et al. **Acta Neurol (Napoli)** 1990 Apr;12(2):101–8

Perioperative cardiac morbidity. Mangano DT.
Anesthesiology 1990 Jan;72(1):153–84 (349 ref.)

Diabetic autonomic neuropathy and cardiovascular risk. Pittsburgh Epidemiology of Diabetes Complications Study III. Maser RE, et al. **Arch Intern Med** 1990 Jun; 150(6):1218–22

Parental history of diabetes is associated with increased cardiovascular risk factors. Haffner SM, et al.
Arteriosclerosis 1989 Nov–Dec;9(6):928–33

Neurological complications of heart disease in childhood. Puntis JW, et al. **Br J Clin Pract** 1989 Jun;43(6):217–20

Daytime sleepiness and vascular morbidity at seven–year follow–up in obstructive sleep apnea patients. Partinen M, et al. **Chest** 1990 Jan;97(1):27–32

Noncardiac surgery in the elderly patient with cardiovascular disease. Weitz HH. **Clin Geriatr Med** 1990 Aug;6(3):511–29 (77 ref.)

Cardiovascular disease and hypertension in diabetes mellitus. Jarrett RJ. **Diabetes Metab Rev** 1989 Nov;5(7):547–58 (89 ref.)

Perspectives on the relationship between cardiovascular disease and affective disorder. Dalack GW, et al.
J Clin Psychiatry 1990 Jul;51 Suppl:4–9; discussion 10–1 (59 ref.)

Caffeine–modified electroconvulsive therapy in depressed patients with medical illness. Lurie SN, et al.
J Clin Psychiatry 1990 Apr;51(4):154–7

Left ventricular hypertrophy. Significance in cardiac morbidity and mortality. Aronow WS. **Postgrad Med** 1990 Mar;87(4):147–50, 155–8

[Hyperlipoproteinemia and the genetic epidemiology of diabetes mellitus] Sobra J, et al. **Cas Lek Cesk** 1989 Dec 8;128(50):1575–9 (Eng. Abstr.) **(Cze)**

[Angiodysplasias in the digestive tract and associated cardiovascular diseases (published erratum appears in Ned Tijdschr Geneeskd 1989 Sep 23;133(38):1912)] Noach LA, et al. **Ned Tijdschr Geneeskd** 1989 Aug 26;133(34):1696–700 (41 ref.) (Eng. Abstr.) **(Dut)**

[Nalbuphine versus pentazocine in the period following surgery of the digestive system in patients with cardiovascular disease] de la Coussaye JE, et al.
Cah Anesthesiol 1989 Dec;37(8):565–70 **(Fre)**

[Sudden death in athletes] Jaeger M.
Rev Med Suisse Romande 1990 Feb;110(2):155–9 (15 ref.) **(Fre)**

[The effect of cardiovascular, endocrine and metabolic diseases on hearing] Brusis T. **Laryngorhinootologie** 1989 Oct;68(10):557–60 (20 ref.) (Eng. Abstr.) **(Ger)**

[What can the additional diagnosis contribute in sudden deafness?] Luckhaupt H. **Laryngorhinootologie** 1989 Nov; 68(11):632–3 (Eng. Abstr.) **(Ger)**

[The microbiology laboratory potentials in the etiologic diagnosis and therapeutic monitoring of febrile cardiovascular patients] Duca E.
Rev Med Chir Soc Med Nat Iasi 1989 Jan–Mar;93(1):37–52 (55 ref.) **(Rum)**

[Changes in arterial blood pressure of women using hormonal contraceptives in relation to their cardiovascular history] Manuilova IA, et al. **Akush Ginekol (Mosk)** 1989 Jul; (7):48–51 (Eng. Abstr.) **(Rus)**

[Secondary prolapse of heart valves] Korytnikov KI.
Klin Med (Mosk) 1990 Apr;68(4):50–3 (Eng. Abstr.) **(Rus)**

[The risk of reactivation of post–tuberculosis changes in patients with severe somatic diseases] Biron MG.
Probl Tuberk 1990;(3):13–6 (Eng. Abstr.) **(Rus)**

[Combined pathology in the practice of physicians] Petrov MN. **Sov Med** 1990;(2):50–3 **(Rus)**

[Pathology of the cardiovascular system and early ventricular repolarization syndrome] Skorobogatyĭ AM, et al.
Ter Arkh 1990;62(4):33–5 (Eng. Abstr.) **(Rus)**

[The detection of concomitant pulmonary pathology in cardiology patients at a sanatorium] Kliachkin LM, et al. **Voen Med Zh** 1989 Nov;(11):41–3 **(Rus)**

DIAGNOSIS

The prevalence of abnormal esophageal test results in patients with cardiovascular disease and unexplained chest pain. Hewson EG, et al. **Arch Intern Med** 1990 May;150(5):965–9

The importance of the electrocardiogram in ambulatory electroencephalographic recordings. Nousiainen U, et al. **Arch Neurol** 1989 Nov;46(11):1171–4

Magnetic tape recording of ballistocardiograms and other physiologic variables from subjects with and without cardiovascular "disease". Scarborough WR, et al.
Bibl Cardiol 1967;(19):72–98

Computer search for ballistocardiographic indices of cardiovascular disease. Tolles WE. **Bibl Cardiol** 1967; (19):126–35

The second derivative of the carotid pulse as an aid in high–frequency ("acceleration") direct body BCG segment notation. Winer NJ. **Bibl Cardiol** 1967;(19):103–9

Role of transesophageal echocardiography in diagnosis and management of cardiovascular disease. Kuecherer HF, et al. **Cardiol Clin** 1990 May;8(2):377–88 (47 ref.)

Cardiovascular magnetic resonance imaging—state of the art 1988. Proceedings of a symposium held at the North American Society of Cardiac Radiology annual meeting. April 30–May 1, 1988. Abstracts.
Cardiovasc Intervent Radiol 1989 Jul–Aug;12(4):213–25

Abnormal diffuse coronary vasomotion. Lablanche JM, et al. **Eur Heart J** 1989 Nov;10 Suppl F:111–8

Automated cardiovascular analysis and treatment (ACAT). Vincent JL, et al. **Int J Clin Monit Comput** 1989 Jul; 6(3):181–3

Cardiovascular manifestations in Kawasaki disease. Cullen S, et al. **Ir J Med Sci** 1989 Oct;158(10):253–6

Selected abstracts from the Sixteenth Interntional Congress on Electrocardiology. **J Electrocardiol** 1990 Jul; 23(3):275–84

Micro–albuminuria as a predictor of cardiovascular damage in essential hypertension. Cerasola G, et al.
J Hypertens Suppl 1989 Dec;7(6):S332–3

Cardiovascular studies in the mucopolysaccharidoses. Nelson J, et al. **J Med Genet** 1990 Feb;27(2):94–100

Open access exercise electrocardiography: does it improve the management of cardiovascular disease in the community? Paul VE, et al. **J R Soc Med** 1990 Mar; 83(3):143–5

Symposium on progress of diagnostic imaging of the cardiovascular system. 53rd annual scientific session of the Japanese Circulation Society. March 31, 1989, Nagoya. Proceedings. **Jpn Circ J** 1990 Mar;54(3):273–343

Magnetic resonance imaging of the cardiovascular system: application in function and tissue characterization. Masuda Y, et al. **Jpn Circ J** 1990 Mar;54(3):276–82

Biplanar transesophageal echocardiography: anatomic correlations, image orientation, and clinical applications. Seward JB, et al. **Mayo Clin Proc** 1990 Sep;65(9):1193–213 (13 ref.)

Dynamic cardiac MR imaging. Techniques and applications. Pettigrew RI. **Radiol Clin North Am** 1989 Nov; 27(6):1183–203 (75 ref.)

Cardiac evaluation of the patient with stroke. Sirna S, et al. **Stroke** 1990 Jan;21(1):14–23

Cardiovascular system. **Top Magn Reson Imaging** 1990 Mar; 2(2):1–71

Functional cardiovascular evaluation by magnetic resonance imaging. White RD, et al. **Top Magn Reson Imaging** 1990 Mar;2(2):31–48 (78 ref.)

[Correlation of autopsy findings with the clinical diagnosis in common diseases of the circulatory system in a general hospital] Koukolík F. **Cas Lek Cesk** 1990 Jun 1; 129(22):689–92 (Eng. Abstr.) **(Cze)**

[The diagnosis and treatment of cardiovascular disorders in Marfan syndrome] van Son JA, et al.
Ned Tijdschr Geneeskd 1989 Aug 19;133(33):1633–8 (39 ref.) **(Dut)**

[Complementary examination or systematic examination? Or the art of prescribing in cardiology] Grosgogeat Y.
Presse Med 1990 Jan 20;19(2):55–7 **(Fre)**

[Ergometric assessment of functional performance deficit in psychosomatic patients] Ruppli M, et al.
Schweiz Med Wochenschr 1990 Mar 10;120(10):339–44 (Eng. Abstr.) **(Ger)**

[55th annual meeting of the German Society for Cardiovascular Research. Mannheim, 31 March–2 April 1989. Proceedings. Congenital heart defects. Imaging procedures in cardiology. A comparison of methods and a critique of methods. Hypertension and the heart]
Z Kardiol 1989;78 Suppl 7:1–240 **(Ger)**

[Cardiovascular applications of magnetic resonance imaging] Casolo F, et al. **G Ital Cardiol** 1989 Nov;19(11):1032–4 (35 ref.) **(Ita)**

[Use of automated systems in medical practice] Shcherbatkin DD, et al. **Kardiologiia** 1989 Oct;29(10):22–6 **(Rus)**

[Problems of the organization of outpatient cardiac consultation services for patients with cardiovascular diseases in a large city] Poliakov IV, et al.
Sov Zdravookhr 1990;(2):8–12 (Eng. Abstr.) **(Rus)**

[Potentials of transesophageal echocardiography in cardiology and cardiac surgery] Sukernik MR, et al.
Ter Arkh 1990;62(4):8–12 (Eng. Abstr.) **(Rus)**

[Physical stress tests in cardiology] Hadži–Pešić Lj, et al.
Srp Arh Celok Lek 1987 Jul;115(7):765–72 **(Scc)**

[Agreement analysis of the results of examinations performed by a physician and automated results in the preventive care system] Scheidová L, et al. **Vnitr Lek** 1989 Sep;35(9):833–7 (Eng. Abstr.) **(Slo)**

DIET THERAPY

[Clinical and metabolic aspects of using dietary fibers] Dubinin AV, et al. **Klin Med (Mosk)** 1990 Jan;68(1):15–21 (16 ref.) **(Rus)**

DRUG THERAPY

Lipid abnormalities and diuretics. Moser M.
Am Fam Physician 1989 Oct;40(4):213–20 (45 ref.)

Antithrombotic therapy in cardiac disease: an approach based on pathogenesis and risk stratification. Fuster V, et al.
Am J Cardiol 1990 Feb 2;65(6):38C–44C (45 ref.)

Evolving role of angiotensin–converting enzyme inhibitors in cardiovascular therapy. Second International Symposium on Cilazapril. February 9 to 11, 1989, Basel, Switzerland. Proceedings. **Am J Med** 1989 Dec 26; 87(6B):1S–99S

Calcium antagonists in cardiovascular disease. Purcell H, et al. **Br J Clin Pract** 1989 Oct;43(10):369–79 (44 ref.)

Anticoagulants in cardiovascular diseases. John RM, et al. **Br J Hosp Med** 1990 Mar;43(3):207–14 (43 ref.)

Preliminary clinical studies with thromboxane synthase inhibitors and thromboxane receptor blockers. A review. Fiddler GI, et al. **Circulation** 1990 Jan;81(1 Suppl):I69–78; discussion I79–80 (98 ref.)

Angiotensin converting enzyme inhibition and its impact on cardiovascular disease. Gavras H. **Circulation** 1990 Jan; 81(1):381–8 (108 ref.)

Inhibitors of ANF metabolism. Potential therapeutic agents in cardiovascular disease [comment] Granger JP.
Circulation 1990 Jul;82(1):313–5 Comment on: Circulation 1990 Jul;82(1):196–201.

Drug–related syncope. Davidson E, et al. **Clin Cardiol** 1989 Oct;12(10):577–80

Aspirin in chronic cardiovascular disease and acute myocardial infarction. Hennekens CH. **Clin Cardiol** 1990 Mar;Suppl 5:V62–6; discussion V67–72 (12 ref.)

Effects of antihypertensive drugs on cardiovascular risk factors. Howes LG, et al. **Clin Exp Pharmacol Physiol** 1988 Mar;15(3):199–202 (10 ref.)

Intravenous nicardipine: cardiovascular effects and clinical relevance. Pepine CJ. **Clin Ther** 1988;10(3):316–25 (32 ref.)

Calcium–channel blockers and the elderly. Ryan C.
Compr Ther 1990 Jun;16(6):51–4

Symposium on Enalapril: ACE inhibitors in the treatment of cardiovascular disease in the older patient. San Juan, Puerto Rico, 13–18 May, 1989. Proceedings. **Drugs** 1990; 39 Suppl 2:1–82

Isradipine. A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic use in cardiovascular disease. Fitton A, et al. **Drugs** 1990 Jul; 40(1):31–74 (215 ref.)

Platelet inhibitor therapy. Agents and clinical implications. Webster MW, et al. **Hematol Oncol Clin North Am** 1990 Feb;4(1):265–89 (180 ref.)

Platelet inhibitor agents in cardiovascular disease: an update. Stein B, et al. **J Am Coll Cardiol** 1989 Oct;14(4):813–36 (205 ref.)

Management of hypertension: considerations involving cardiovascular risk reduction. Hollenberg NK.
J Cardiovasc Pharmacol 1990;15 Suppl 5:S73–8 (79 ref.)

The effect of calcium channel blocking on immune capacity of cardiovascular patients. Lehtonen LA, et al.
J Clin Lab Immunol 1989 Oct;30(2):75–80

Co–enzyme Q10: a new drug for cardiovascular disease. Greenberg S, et al. **J Clin Pharmacol** 1990 Jul;30(7):596–608 (133 ref.)

Metoprolol CR/ZOK—its role and efficacy: a review article. Kendall M. **J Clin Pharmacol** 1990 Feb;30(2 Suppl):S57–60

(19 ref.)
Low dose acetylsalicylic acid and thromboxane release at the site of plug formation in vivo in elderly patients with cardiovascular disease. Thorngren M, et al. **J Intern Med** 1990 Mar;227(3):189–93
Cardiovascular disease. Gore JM, et al. **JAMA** 1990 May 16;263(19):2629–31
Chelation therapy [letter] Thompson LJ. **N Z Med J** 1990 Jul 11;103(893):326–7
Superoxide dismutase: possible therapeutic use in cardiovascular disease. Ferrari R, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 2:57–65 (63 ref.)
Aspirin in cardiovascular disease; biochemical pharmacology and clinical trials. FitzGerald GA, et al. **Prog Clin Biol Res** 1989;301:97–106 (38 ref.)
Role of thromboxane receptor antagonists in cardiovascular disease. Smith EF 3d. **Prog Clin Biol Res** 1989;301:29–38 (14 ref.)
[Cardiovascular study of enoximone in the treatment of acute postoperative circulatory insufficiency] Dass G, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R231 **(Fre)**
[Chronopharmacology—significance for clinical treatment?] Lemmer B. **Klin Wochenschr** 1989 Sep 15;67(18):963–5 (22 ref.) **(Ger)**
[Medication compliance in cardiovascular disease] Seki A. **Nippon Ronen Igakkai Zasshi** 1989 Mar;26(2):115–9 (Eng. Abstr.) **(Jpn)**
[Use of cardiovascular drugs in pregnancy] Halawa B. **Wiad Lek** 1989 Jan 15;42(2):94–100 (64 ref.) **(Pol)**
[Prospective trends in the study of the therapeutic action of angiotensin-converting enzyme inhibitors in cardiovascular diseases] Novikova LS, et al. **Ter Arkh** 1990; 62(1):118–23 (60 ref.) **(Rus)**
[Calcium antagonists in cardiologic practice (a review of the literature)] Andrushchenko EV, et al. **Vrach Delo** 1990 May;(5):31–6 (65 ref.) **(Rus)**
[Nifedipine in the treatment of diseases of the circulatory organs (a review of the literature)] Revutskiĭ EL, et al. **Vrach Delo** 1989 Nov;(11):62–7 (59 ref.) **(Rus)**
[Preoperative preparation and anesthesia in patients with cardiovascular diseases undergoing surgical treatment of hepatic echinococcosis] Lugonja V, et al. **Acta Chir Iugosl** 1989;36 Suppl 2:546–9 **(Scr)**
[Platelet antiaggregants in the treatment of vasculopathies] Honorato J, et al. **Angiologia** 1990 Jan–Feb;42(1):1–10 (31 ref.) (Eng. Abstr.) **(Spa)**

ECONOMICS

Outcome assessment in cardiovascular cost–benefit studies. O'Brien B, et al. **Am Heart J** 1990 Mar;119(3 Pt 2):740–7; discussion 747–8 (44 ref.)
Technologic innovation and care of elderly patients with cardiovascular disease: how will the diagnosis-related group system respond? Hlatky MA, et al. **Am J Med** 1990 Jan;88(1N):1N–2N
PET, PTCA, and economic priorities. Gould KL, et al. **Clin Cardiol** 1990 Mar;13(3):153–64 (69 ref.)
A review of cost–effectiveness analyses. Hurley S. **Med J Aust** 1990 Aug 6;153 Suppl:S20–3

ENZYMOLOGY

[A histochemical study of enzyme activity in the myocardium of victims of sudden death with small-focal cardiosclerosis] Cherpachenko NM, et al. **Arkh Patol** 1989;51(9):10–3 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Nutrition and cardiovascular risk: the Hungarian experience [see comments] Biró G. **Acta Cardiol** 1990;45(1):3–14 Comment in: Acta Cardiol 1990;45(1):1–2.
Nutrition and cardiovascular risk in Hungary [editorial; comment] Kesteloot H. **Acta Cardiol** 1990;45(1):1–2 Comment on: Acta Cardiol 1990;45(1):3–14.
Nutrition and cardiovascular risk: the Mediterranean experience. Mancini M, et al. **Acta Cardiol** 1989;44(6):466–7
Nutrition and cardiovascular risk: a Swedish experience. Wilhelmsen L. **Acta Cardiol** 1989;44(6):478–81
Ischemic stroke in young adults. II. Analysis of risk factors in the etiological subgroups. Matías-Guiu J, et al. **Acta Neurol Scand** 1990 Apr;81(4):314–7
Ultradian, circadian and infradian periodicity of some cardiovascular emergencies. Cugini P, et al. **Am J Cardiol** 1990 Jul 15;66(2):240–3
Cardiovascular risk factors and impaired glucose tolerance: the San Luis Valley Diabetes Study. Burchfiel CM, et al. **Am J Epidemiol** 1990 Jan;131(1):57–70
Cardiovascular disease risk factors prior to the diagnosis of impaired glucose tolerance and non-insulin-dependent diabetes mellitus in a community of older adults. McPhillips JB, et al. **Am J Epidemiol** 1990 Mar;131(3):443–53
Continued decline in cardiovascular disease risk factors: results of the Minnesota Heart Survey, 1980–1982 and 1985–1987. Sprafka JM, et al. **Am J Epidemiol** 1990 Sep; 132(3):489–500
An epidemiologic survey of cardiovascular disease in women taking oral contraceptives. Thorogood M, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):274–81 (9 ref.)
Risk factors for cardiovascular disease in U.S. medical students: the Preventive Cardiology Academic Award Collaborative Data Project. Eaton CB, et al. **Am J Prev Med** 1990;6(2 Suppl):14–22
The epidemiology of cardiovascular disease in postmenopausal women. Bush TL. **Ann N Y Acad Sci** 1990; 592:263–71; discussion 334–45 (23 ref.)
Passive smoking and cardiorespiratory health in a general population in the west of Scotland [see comments] Hole DJ, et al. **BMJ** 1989 Aug 12;299(6696):423–7 Comment in: BMJ 1989 Sep 16;299(6701):742.
Cardiovascular disease in women. Mahon WA. **Can J Cardiol** 1990 May;6 Suppl B:1B–2B
The public health approach: the Nova Scotia experience. Canadian Atherosclerosis Society [see comments] MacLean DR. **Can Med Assoc J** 1989 Oct 15;141(8):797 Comment in: Can Med Assoc J 1990 Jan 1;142(1):13–4.
Cardiovascular disease in women. Introductory article. Clinical highlights and future directions. Becker RC. **Cardiology** 1990;77 Suppl 2:1–5
Cardiovascular disease in women: scope of the problem. Becker RC, et al. **Cardiology** 1990;77 Suppl 2:6–7 (7 ref.)
Abstracts of the 30th annual Conference on Cardiovascular Disease Epidemiology. March 29–31, 1990, San Diego, California. **Circulation** 1990 Feb;81(2):711–29
Diabetic heart disease: the clinical and pathological spectrum—Part I. van Hoeven KH, et al. **Clin Cardiol** 1989 Oct;12(10):600–4 (62 ref.)
Exercise, cardiovascular disease and blood pressure. Jennings GL, et al. **Clin Exp Hypertens [A]** 1989;11(5–6):1035–52 (25 ref.)
Cerebrovascular disease in Scotland during 1959 to 1983: its geographical distribution and associations. Williams FL, et al. **Community Med** 1989 Nov;11(4):306–15
Validity of a postal questionnaire with regard to the prevalence of myocardial infarction in a general population sample. Olsson L, et al. **Eur Heart J** 1989 Nov; 10(11):1011–6
The association between physical fitness and cardiovascular disease risk factors in children in a five-year follow-up study. Hofman A, et al. **Int J Epidemiol** 1989 Dec; 18(4):830–5
Epidemiology of cardiovascular diseases in Warsaw Pol-MONICA area. Rywik S, et al. **Int J Epidemiol** 1989; 18(3 Suppl 1):S129–36
Bishop lecture. Contribution of the Framingham Study to preventive cardiology. Kannel WB. **J Am Coll Cardiol** 1990 Jan;15(1):206–11
Prevalence of selected cardiovascular disease risk factors in 35–54-year-old males and females in eight Iowa counties. Schafer E. **J Am Coll Nutr** 1990 Jun;9(3):205–13
Projected incidence of cardiovascular disease in male firefighters based on current risk factor prevalence. Licciardone JC, et al. **J Am Osteopath Assoc** 1989 Oct; 89(10):1293–4, 1297–301
Cardiovascular disease in Edinburgh and north Glasgow—a tale of two cities. Smith WC, et al. **J Clin Epidemiol** 1990; 43(7):637–43
Eighty-year-old men without cardiovascular disease in the community of Malmö. Part II. Smoking characteristics and ultrasound findings, with special reference to glutathione transferase and pyridoxal-5-phosphate. Pessah-Rasmussen H, et al. **J Intern Med** 1990 Jul;228(1):17–22
Eighty-year-old men without cardiovascular disease in the community of Malmö. Part I. Social and medical factors, with special reference to the lipoprotein pattern. Stavenow L, et al. **J Intern Med** 1990 Jul;228(1):9–15
The frequency distribution of cardiovascular diseases in 13 hospital admitted patients in Korea. Korean Society of Circulation. Bae JH, et al. **J Korean Med Sci** 1987 Sep; 2(3):141–50
Epidemiology of cardiac diseases and need for cardiovascular application of nuclear medicine in Italy. Pirelli S, et al. **J Nucl Med Allied Sci** 1989 Oct–Dec;33(4):359–62
Regression dilution bias [letter; comment] **Lancet** 1990 May 19;335(8699):1230–1 Comment on: Lancet 1990 Mar 31;335(8692):765–74.
Oestrogen replacement therapy and cardiovascular disease in post-menopausal women. A review. Sitruk-Ware R, et al. **Maturitas** 1989 Dec;11(4):259–74 (64 ref.)
Cardiovascular disease in Missouri: mortality, hospital discharges and risk factors. Brownson RC, et al. **Mo Med** 1990 Apr;87(4):225–7
Absence of cardiovascular disease in a rural community using soft water [letter] van Staden DA. **S Afr Med J** 1990 Aug 18;78(4):219
The use of probability theory to improve communication and underwrite medical impairments. Iacovino JR. **Trans Assoc Life Insur Med Dir Am** 1990;73:87–96
[Diseases of the circulatory system as a cause of disability in machine-works factories] Zikmundová K. **Cesk Zdrav** 1989 Dec;37(12):535–41 (Eng. Abstr.) **(Cze)**
[Epidemiology of cardiovascular risk factors in women working at hospitals (letter)] D'Anglejan-Châtillon J. **Presse Med** 1990 May 26;19(21):1012 **(Fre)**
[Epidemiology of cardiovascular risk factors in 1505 females working in hospitals] Estryn-Behar M, et al. **Presse Med** 1989 Dec 2;18(40):1960–4 (Eng. Abstr.) **(Fre)**
[Estrogens and cardiovascular risk in postmenopausal women. I. Epidemiologic data] Sitruk-Ware R. **Presse Med** 1990 Jun 30;19(26):1230–5 (33 ref.) (Eng. Abstr.) **(Fre)**
[Morbidity of respiratory and cardiovascular diseases in smog conditions. Studies of 1,995 patients] Schöttes C, et al. **Pneumologie** 1990 Feb;44 Suppl 1:243–4 (Eng. Abstr.) **(Ger)**
[Serum lipids levels and some risk factors of cardiovascular diseases in a population of the municipality of São Paulo, SP (Brazil)] Martins IS, et al. **Rev Saude Publica** 1989 Feb; 23(1):26–38 (Eng. Abstr.) **(Por)**
[Study of the functional status of miners working in deep coal mines based on the results of mass screening] Nekhorosheva MA, et al. **Gig Tr Prof Zabol** 1990;(1):14–7 (Eng. Abstr.) **(Rus)**
[Clinical and statistical characteristics of patients with cardiovascular diseases] Maksimova TM, et al. **Sov Zdravookhr** 1990;(5):27–31 (Eng. Abstr.) **(Rus)**
[Actual nutrition, metabolic and cardiovascular disorders in sailors] Khandzhiev S, et al. **Vopr Pitan** 1990 May–Jun; (3):73–4 **(Rus)**
[Prevalence of breast feeding and its relation to cardiovascular risk factors in the pediatric population of Fuenlabrada] Cobaleda Rodrigo A, et al. **An Esp Pediatr** 1989 Oct;31(4):350–5 (32 ref.) (Eng. Abstr.) **(Spa)**
[Cardiovascular risk factors in children (editorial)] Hernández M. **An Esp Pediatr** 1989 Oct;31(4):329–30 **(Spa)**
[Incidental screening—a rational basis for integrated prevention of cardiovascular diseases] Ovhed I, et al. **Nord Med** 1989;104(10):258–9 (Eng. Abstr.) **(Swe)**

ETHNOLOGY

Hemostatic variables in Japanese and Caucasian men. Plasma fibrinogen, factor VIIc, factor VIIIc, and von Willebrand factor and their relations to cardiovascular disease risk factors. Iso H, et al. **Am J Epidemiol** 1989 Nov; 130(5):925–34
Cardiovascular deaths among Alaskan Natives, 1980–86. Middaugh JP. **Am J Public Health** 1990 Mar;80(3):282–5
The prevalence of cardiovascular risk factors among elderly Chinese Americans. Choi ES, et al. **Arch Intern Med** 1990 Feb;150(2):413–8
Cardiovascular diseases in Chinese, Malays, and Indians in Singapore. I. Differences in mortality. Hughes K, et al. **J Epidemiol Community Health** 1990 Mar;44(1):24–8
Cardiovascular diseases in Chinese, Malays, and Indians in Singapore. II. Differences in risk factor levels. Hughes K, et al. **J Epidemiol Community Health** 1990 Mar;44(1):29–35

ETIOLOGY

A prospective study of risk factors and cardiopulmonary complications associated with anaesthesia and surgery: risk indicators of cardiopulmonary morbidity. Pedersen T, et al. **Acta Anaesthesiol Scand** 1990 Feb;34(2):144–55
Is there a common denominator between fetal growth retardation and cardiovascular disease? Crawford MA. **Acta Cardiol** 1989;44(6):449–53
Diabetes, fibrinogen, and risk of cardiovascular disease: the Framingham experience. Kannel WB, et al. **Am Heart J** 1990 Sep;120(3):672–6
Predictive value of quantitative dipyridamole-thallium scintigraphy in assessing cardiovascular risk after vascular surgery in diabetes mellitus. Lane SE, et al. **Am J Cardiol** 1989 Dec 1;64(19):1275–9
Relation of body fatness and its distribution to cardiovascular risk factors in young blacks and whites. The role of insulin. Folsom AR, et al. **Am J Epidemiol** 1989 Nov;130(5):911–24
Risk factors for cardiovascular mortality in Mexican Americans and non-Hispanic whites. San Antonio Heart Study. Mitchell BD, et al. **Am J Epidemiol** 1990 Mar; 131(3):423–33
Impairment of glucose tolerance: mechanism of action and impact on the cardiovascular system. Beck-Nielsen H, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):292–5 (17 ref.)
Interrelations between carbohydrates, lipids, and the hemostatic system in relation to the risk of thrombotic and cardiovascular disease. Juhan-Vague I, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):313–5 (20 ref.)
Cardiovascular collapse during laparoscopy [letter; comment] Lip H, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):873 Comment on: Am J Obstet Gynecol 1988 Sep;159(3):735–7.
Nongenetic influences of obesity on other cardiovascular disease risk factors: an analysis of identical twins. Newman B, et al. **Am J Public Health** 1990 Jun;80(6):675–8
Long-term prosthesis-related and sudden cardiac-related complications after valve replacement for aortic stenosis. Lund O, et al. **Ann Thorac Surg** 1990 Sep;50(3):396–406
Combined mortality and morbidity of direct surgical treatment of abdominal aortic aneurysm. Branchereau A, et al. **Ann Vasc Surg** 1990 Jan;4(1):10–4
Evaluation of prenosologic states in man in the Arctic. Davidenko VI. **Arctic Med Res** 1988;47 Suppl 1:246–8
Risk factors associated with cardiovascular disease among the Cree Indians of northern Quebec. Foggin PM, et al. **Arctic Med Res** 1988;47 Suppl 1:455–7 (17 ref.)
Microalbuminuria. Potential marker for increased cardiovascular risk factors in nondiabetic subjects? Haffner SM, et al. **Arteriosclerosis** 1990 Sep–Oct;10(5):727–31
Factor VII assays, plasma triglyceride levels, and cardiovascular disease risk [comment] Mann KG. **Arteriosclerosis** 1989 Nov–Dec;9(6):783–4 Comment on: Arteriosclerosis 1989 Nov–Dec;9(6):798–801.
Effect of alteration in triglyceride levels on factor VII–phospholipid complexes in plasma [see comments] Skartlien AH, et al. **Arteriosclerosis** 1989 Nov–Dec; 9(6):798–801 Comment in: Arteriosclerosis 1989

Nov-Dec;9(6):783-4.
Relation of body fat distribution to serum lipids and lipoproteins in elderly women. Haarbo J, et al. **Atherosclerosis** 1989 Nov;80(1):57-62
Plasma lipids and geriatric assessment in a very aged population of south Italy. Postiglione A, et al. **Atherosclerosis** 1989 Nov;80(1):63-8
Determining risk of heart disease and obesity with a hand-held programmable calculator. Everett WD. **Aviat Space Environ Med** 1989 Oct;60(10 Pt 2):B106-9
Passive smoking and cardiorespiratory health in Scotland [letter] Hole DJ, et al. **BMJ** 1989 Oct 28;299(6707):1100-1
Passive smoking and cardiorespiratory health in Scotland [letter] Lee PN. **BMJ** 1990 Jan 13;300(6717):120-1
Social influences and cardiovascular risk factors as determinants of plasma fibrinogen concentration in a general population sample of middle aged men. Rosengren A, et al. **BMJ** 1990 Mar 10;300(6725):634-8
Smoking, the unnecessary risk factor. Dagenais GR. **Can J Cardiol** 1990 May;6(4):VI
Hypertension as a risk factor. Roccella EJ, et al. **Cardiovasc Clin** 1990;20(3):49-63 (34 ref.)
Effects of smoking on the cardiovascular system. Strong JP, et al. **Cardiovasc Clin** 1990;20(3):205-21 (75 ref.)
Cardiovascular effects of sleep disorders. Parish JM, et al. **Chest** 1990 May;97(5):1220-6 (78 ref.)
Heightened risks for women cited in Heart and Stroke Facts [news] **Circ Res** 1990 Apr;66(4):A1172-3
Triggers of onset of acute cardiovascular disease [letter; comment] Soloff LA. **Circulation** 1990 Jan;81(1):394-5 Comment on: Circulation 1989 Apr;79(4):733-43.
Diabetic heart disease--Part II: The clinical and pathological spectrum. van Hoeven KH, et al. **Clin Cardiol** 1989 Nov; 12(11):667-71 (109 ref.)
Preliminary report of cardiac study: cross-sectional multicenter study on dietary factors of cardiovascular diseases. CARDIAC Study Group. Yamori Y. **Clin Exp Hypertens [A]** 1989;11(5-6):957-72
Dyslipoproteinemia in women. Special considerations. Miller VT. **Endocrinol Metab Clin North Am** 1990 Jun; 19(2):381-98 (83 ref.)
Selections from current literature: the cholesterol controversy. Froom J. **Fam Pract** 1989 Sep;6(3):232-7 (7 ref.)
Lipids, cardiovascular disease, and oral contraceptives: a practical perspective. Upton GV. **Fertil Steril** 1990 Jan; 53(1):1-12 (65 ref.)
Blood pressure and other cardiovascular disease risk factors in black adults with sickle cell trait or glucose-6-phosphate dehydrogenase deficiency. Nwankwo MU, et al. **Genet Epidemiol** 1990;7(3):211-8
Epidemiology and risk factors of macrovascular disease in diabetes mellitus. Janka HU. **Horm Metab Res Suppl** 1990; 22:8-11 (35 ref.)
Are lipid abnormalities reliable cardiovascular risk factors in dialysis patients? Bergesio F, et al. **Int J Artif Organs** 1989 Nov;12(11):677-82
Cardiovascular disease risk factors, CHD morbidity and mortality in the Federal Republic of Germany. Greiser E, et al. **Int J Epidemiol** 1989;18(3 Suppl 1):S118-24
Fat distribution in European women: a comparison of anthropometric measurements in relation to cardiovascular risk factors. Seidell JC, et al. **Int J Epidemiol** 1990 Jun; 19(2):303-8
Biochemical and anthropometric evaluation of the nutritional status of 35-year-old Dutch men with reference to smoking and drinking habits. van Poppel G, et al. **Int J Vitam Nutr Res** 1989;59(4):381-7
The health and risk factor status of industrial employees. Mulcahy R, et al. **Ir Med J** 1990 Mar;83(1):8-10
Serum zinc and copper: associations with cholesterol and triglyceride levels in children and adolescents. Cardiovascular risk in young Finns. Laitinen R, et al. **J Am Coll Nutr** 1989 Oct;8(5):400-6
On matters of the heart: past, present, and future. Neville JN. **J Am Diet Assoc** 1990 Feb;90(2):211-3 (17 ref.)
Relation between leisure time exercise and cardiovascular risk factors among 15-year-olds in eastern Finland. Marti B, et al. **J Epidemiol Community Health** 1989 Sep; 43(3):228-33
Elevated fibrinogen and plasminogen activator inhibitor (PAI-1) in hypertension are related to metabolic risk factors for cardiovascular disease [see comments] Landin K, et al. **J Intern Med** 1990 Apr;227(4):273-8 Comment in: J Intern Med 1990 Apr;227(4):219-20.
Autonomic neuropathy in type II diabetes mellitus: the influence of obesity [letter] Neil HA, et al. **J Intern Med** 1990 Sep;228(3):293
Insulin resistance--a major hazard for cardiovascular disease? [comment] Smith U. **J Intern Med** 1990 Apr;227(4):219-20 Comment on: J Intern Med 1990 Apr;227(4):273-8.
Serum creatinine and its relation to cardiovascular disease risk variables in children and young adults from a biracial community. The Bogalusa Heart Study. Agamah ES, et al. **J Lab Clin Med** 1990 Sep;116(3):327-34
Oral contraceptives and cardiovascular risk. Current perspectives. Derman RJ. **J Reprod Med** 1989 Sep;34(9 Suppl):747-65 (48 ref.)
Epidemiology of cardiovascular disease in women and the role of sex steroid hormone use. Knopp RH. **J Reprod Med** 1989 Sep;34(9 Suppl):691-715 (32 ref.)
Effects of communitywide education on cardiovascular disease risk factors. The Stanford Five-City Project. Farquhar JW, et al. **JAMA** 1990 Jul 18;264(3):359-65
Cardiovascular risk factors in confirmed prediabetic individuals. Does the clock for coronary heart disease start ticking before the onset of clinical diabetes? [see comments] Haffner SM, et al. **JAMA** 1990 Jun 6;263(21):2893-8 Comment in: JAMA 1990 Jun 6;263(21):2934.
Alcohol and the cardiovascular system. Regan TJ. **JAMA** 1990 Jul 18;264(3):377-81 (58 ref.)
Carbon monoxide, carbon disulfide, lead and cadmium--four examples of occupational toxic agents linked to cardiovascular disease. Wojtczak-Jaroszowa J, et al. **Med Hypotheses** 1989 Oct;30(2):141-50 (164 ref.)
Plasma oxalate concentration, oxalate clearance and cardiac function in patients receiving haemodialysis. Tomson CR, et al. **Nephrol Dial Transplant** 1989;4(9):792-9
Differences in modifiable cardiovascular disease risk factors in Australian schoolchildren: the results of a nationwide survey. Gliksman MD, et al. **Prev Med** 1990 May; 19(3):291-304
The value of current nutrition information. Schapira DV, et al. **Prev Med** 1990 Jan;19(1):45-53
Social class disparities in risk factors for disease: eight-year prevalence patterns by level of education. Winkleby MA, et al. **Prev Med** 1990 Jan;19(1):1-12
Cardiovascular disease, menopause, and the influence of hormone replacement therapy. Lobo RA. **Prog Clin Biol Res** 1989;320:313-32 (50 ref.)
Menopause and the epidemiology of cardiovascular disease in women. Perlman J, et al. **Prog Clin Biol Res** 1989; 320:283-312
Diet and cardiovascular disease. Committee on Medical Aspects of Food Policy. Report of the Panel on Diet in Relation to Cardiovascular Disease. **Rep Health Soc Subj (Lond)** 1984;28:1-32
Cardiovascular and bacteremic manifestations of Campylobacter fetus infection: case report and review. Morrison VA, et al. **Rev Infect Dis** 1990 May-Jun; 12(3):387-92 (67 ref.)
Hyperlipoproteinaemia (a)--a major risk factor in arterial disease [published erratum appears in S Afr Med J 1990 Aug 18;78(4):222] Morris R. **S Afr Med J** 1990 Jul 21; 78(2):58-60 (13 ref.)
Cardiovascular emergencies. Helms SR, et al. **Semin Oncol** 1989 Dec;16(6):463-70 (33 ref.)
[Cardiovascular manifestations of systemic lupus erythematosus] Alušík S, et al. **Cas Lek Cesk** 1990 Mar 2;129(9):270-2 (Eng. Abstr.) **(Cze)**
[Evaluation of information sources and the effectiveness of health education in the North Bohemian Region, as indicated by knowledge of risk factors for cardiovascular diseases] Masopust V. **Cesk Zdrav** 1989 Aug;37(8-9):357-62 (Eng. Abstr.) **(Cze)**
[Distribution of serum total cholesterol in a population with varying risks of cardiovascular disease] Anderson P, et al. **Ugeskr Laeger** 1990 Feb 19;152(8):523-6 (29 ref.) (Eng. Abstr.) **(Dan)**
[Assessment of the risk of cardiovascular disease on the basis of total serum cholesterol in a population of young Danish women and men] Voss A, et al. **Ugeskr Laeger** 1990 Feb 19;152(8):526-9 (Eng. Abstr.) **(Dan)**
[Eurothemes. Are citizens of Europe-1992 being smoked out?] Spanjer JM. **Ned Tijdschr Geneeskd** 1990 Jun 30; 134(26):1269-71 **(Dut)**
[Cardiovascular deconditioning syndrome during space flight] Güell A, et al. **Ann Cardiol Angeiol (Paris)** 1989 Oct;38(8):499-502 (Eng. Abstr.) **(Fre)**
[Pathogenic role of hyperinsulinemia and/or moderated or declared hyperglycemia. Epidemiologic data] Eschwege E, et al. **Journ Annu Diabetol Hotel Dieu** 1990;:193-200 **(Fre)**
[Rubric: Viewpoint--Revue médicale de la Suisse Romande 109: 1051-1052, 1989. Response to Dr. F. Pilet (letter)] **Rev Med Suisse Romande** 1990 Mar;110(3):297-9 **(Fre)**
[Risk factors and hypertension--new insights into an old malady] Liebau H. **Fortschr Med** 1990 Apr 30; 108(13):254-5 **(Ger)**
[Aortic calcification in CT. Correlation with risk factors and cardiovascular diseases] Görich J, et al. **Radiologe** 1989 Dec;29(12):614-9 (Eng. Abstr.) **(Ger)**
[Shift work and cardiovascular risk factors] Wagner U. **Z Arztl Fortbild (Jena)** 1990;84(7):303-6 (32 ref.) **(Ger)**
[Stress and heart] Marino A, et al. **Clin Ter** 1990 May 31; 133(4):245-9 (11 ref.) (Eng. Abstr.) **(Ita)**
[Basic principles of the prevention of cardiovascular diseases in light of knowledge and opinions of the Polish community. I. Knowledge of the causes of the spreading epidemic of cardiovascular diseases] Piwoński J, et al. **Kardiol Pol** 1989;32 Suppl 2:41-6 (Eng. Abstr.) **(Pol)**
[Platelet activating factor (PAF) and its inhibitors] Rydzewska G, et al. **Pol Arch Med Wewn** 1988 Jul; 80(1):36-43 (40 ref.) **(Pol)**
[Effect of magnesium on the development of arteriosclerosis and the status of the cardiovascular system] Dabrowski L, et al. **Przegl Lek** 1989;46(8):654-8 (39 ref.) **(Pol)**
[Cardiovascular effects of familial amyloidotic polyneuropathy of the Portuguese type] de Freitas F. **Rev Port Cardiol** 1989 May;8(5):355-7 (15 ref.) **(Por)**
[Study of the effects of combined environmental and hereditary factors on the health status of 6-year-old children in Yerevan] Aslanian SA, et al. **Gig Sanit** 1989 Sep;(9):10-3 **(Rus)**
[Hygienic evaluation of the effect of tobacco smoke on the body] Dmitriev MT, et al. **Gig Sanit** 1989 Dec;(12):40-3 **(Rus)**
[Methodologic approach to predicting the health status of the population in relation to environmental factors] Osipian VA, et al. **Gig Sanit** 1989 Dec;(12):43-7 **(Rus)**
[Methodological approach to the evaluation of health status of white-collar workers] Stolbun BM, et al. **Gig Sanit** 1990 Mar;(3):47-51 (Eng. Abstr.) **(Rus)**
[The role of multiple physical environmental factors on health of the population] Zviniatskovskiĭ IaI, et al. **Gig Sanit** 1989 Oct;(10):8-10 (Eng. Abstr.) **(Rus)**
[Closed thoracic trauma and concomitant diseases] Milkov BO, et al. **Klin Khir** 1989;(10):19-20 (Eng. Abstr.) **(Rus)**
[Morbidity of workers of deep coal mines] Kozhemiakin SV. **Sov Med** 1990;(5):72-3 **(Rus)**
[Cardiovascular system involvement in lipid metabolic disorders (a review)] Eliseev OM. **Ter Arkh** 1989; 61(10):94-103 (149 ref.) **(Rus)**
[Cardiovascular system involvement in toxic goiter and primary hypothyrosis] Slavina LS. **Ter Arkh** 1989; 61(10):87-93 **(Rus)**
[Acute disorders of the blood circulation and cardiac insufficiency following open heart surgery] Burakovskiĭ VI, et al. **Vestn Akad Med Nauk SSSR** 1989;(10):3-14 (Eng. Abstr.) **(Rus)**
[Cardiovascular disorders in patients with chronic tonsillitis] Detsik IuI, et al. **Vrach Delo** 1989 Dec;(12):20-2 (Eng. Abstr.) **(Rus)**
[The role of neuroendocrine factors in the pathogenesis of cardiovascular disorders in chronic tonsillitis] Dutka RIa, et al. **Vrach Delo** 1990 Jun;(6):15-6 (Eng. Abstr.) **(Rus)**
[The Fuenlabrada study: relationship between anthropometric variables and cardiovascular risk factors] Plaza I, et al. **Rev Esp Cardiol** 1990 May;43(5):282-92 (Eng. Abstr.) **(Spa)**
[The work environment and cardiovascular disease. Do psychosocial factors have an influence? Continued research is important] Werkö L. **Lakartidningen** 1990 Mar 14; 87(11):841-2, 847-8 (15 ref.) (Eng. Abstr.) **(Swe)**

GENETICS

Recessive inheritance of a high number of sodium pump sites. Hasstedt SJ, et al. **Am J Med Genet** 1989 Nov;34(3):332-7
Cardiovascular risk factors in a French Canadian population: resolution of genetic and familial environmental effects on blood pressure using twins, adoptees, and extensive information on environmental correlates. Rice T, et al. **Genet Epidemiol** 1989;6(5):571-88
[Adipose tissue distribution in children with excessive body weight and the possibility of development of complications of obesity. II. Positive family history in relation to arteriosclerosis risk factor and the constitutional type of obesity in children] Krawczuk-Rybakowa M, et al. **Pediatr Pol** 1989 Jul;64(7):467-73 (Eng. Abstr.) **(Pol)**
[Possibilities of using genealogical analysis in the screening of children for detection of risk factors] Ishkabulov DI, et al. **Pediatriia** 1990;(3):81-3 **(Rus)**

IMMUNOLOGY

[Characteristics of polymorphic variants of the 3d component od the complement system. Association of C3F with various diseases] Rak K. **Pol Arch Med Wewn** 1988 Jul; 80(1):28-35 (40 ref.) **(Pol)**

METABOLISM

"Portal" adipose tissue as a generator of risk factors for cardiovascular disease and diabetes. Björntorp P. **Arteriosclerosis** 1990 Jul-Aug;10(4):493-6
Regional distribution of body fat, plasma lipoproteins, and cardiovascular disease. Després JP, et al. **Arteriosclerosis** 1990 Jul-Aug;10(4):497-511 (131 ref.)
Cyclic nucleotides and disease. Wolfe L, et al. **Curr Opin Cell Biol** 1989 Apr;1(2):215-9 (36 ref.)
Changes in prostaglandin renal synthesis in cardiovascular disease. Fontana F, et al. **Riv Eur Sci Med Farmacol** 1989 Apr;11(2):129-36 (33 ref.)
[Selenium and cardiovascular pathology] Neve J. **Pathol Biol (Paris)** 1989 Dec;37(10):1102-6 (41 ref.) (Eng. Abstr.) **(Fre)**
[Dietetic effects on the prostanoid system in cardiovascular diseases] Markov KhM. **Vopr Pitan** 1989 Jul-Aug;(4):4-12 (93 ref.) **(Rus)**

MORTALITY

Changes in dietary habits, cardiovascular risk factors and mortality in Japan. Ueshima H. **Acta Cardiol** 1989; 44(6):475-7
Diet and 20-y mortality in two rural population groups of middle-aged men in Italy. Farchi G, et al. **Am J Clin Nutr** 1989 Nov;50(5):1095-103
Spontaneous changes of systolic blood pressure as predictors of future fatal events. Italian Research Group of the Seven Countries Study. Menotti A, et al. **Am J Hypertens** 1990 Jul;3(7):549-54
Cardiovascular death among women under 40 years of age using low-estrogen oral contraceptives and intrauterine devices in Finland from 1975 to 1984. Hirvonen E, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 2):281-4
The association of corneal arcus with coronary heart disease

and cardiovascular disease mortality in the Lipid Research Clinics Mortality Follow-up Study [see comments] Chambless LE, et al. **Am J Public Health** 1990 Oct; 80(10):1200-4 Comment in: Am J Public Health 1990 Oct;80(10):1170-1.

Passive smoking and 20-year cardiovascular disease mortality among nonsmoking wives, Evans County, Georgia. Humble C, et al. **Am J Public Health** 1990 May; 80(5):599-601

Mortality from cardiovascular diseases in Chinese, Malays and Indians in Singapore, in comparison with England and Wales, USA and Japan. Hughes K.
Ann Acad Med Singapore 1989 Nov;18(6):642-5

Mortality rates after multifactorial primary prevention of cardiovascular diseases. Naukkarinen VA, et al.
Ann Med 1989 Dec;21(6):441-6

The Nashville Air Pollution Study. VI. Cardiovascular disease mortality in relation to air pollution. Zeidberg LD, et al. **Arch Environ Health** 1967 Aug;15(2):225-36

The potential contribution of cardiac replacement to the control of cardiovascular diseases. A population-based estimate. Kottke TE, et al. **Arch Surg** 1990 Sep; 125(9):1148-51

Mortality among oral contraceptive users [letter; comment] **BMJ** 1990 Feb 3;300(6720):330-1 Comment on: BMJ 1989 Dec 16;299(6714):1487-91.

Mortality among oral contraceptive users: 20 year follow up of women in a cohort study [see comments] Vessey MP, et al. **BMJ** 1989 Dec 16;299(6714):1487-91 Comment in: BMJ 1990 Feb 3;300(6720):330-1.

Cardiovascular mortality among pulp mill workers. Jäppinen P, et al. **Br J Ind Med** 1990 Apr;47(4):259-62

Mortality from circulatory diseases, especially ischaemic heart disease in sea pilots and boatmen in Sweden 1951-84: a retrospective cohort study. Nyström L, et al.
Br J Ind Med 1990 Feb;47(2):122-6

How far should blood pressure be lowered? What is the importance of the J-curve phenomenon? Hansson L.
G Ital Cardiol 1990 Jan;20(1):1-4 (13 ref.)

WHO MONICA Project: objectives and design. Böthig S. **Int J Epidemiol** 1989;18(3 Suppl 1):S29-37

Trends and determinants of cardiovascular mortality in the Soviet Union. Deev AD, et al. **Int J Epidemiol** 1989;18(3 Suppl 1):S137-44

WHO MONICA Project: risk factors. Keil U, et al.
Int J Epidemiol 1989;18(3 Suppl 1):S46-55

Risk of death from cardiovascular disease and chronic bronchitis determined by place of birth in England and Wales. Osmond C, et al.
J Epidemiol Community Health 1990 Jun;44(2):139-41

Cardiovascular death after radiotherapy for benign bleeding disorders. The Radiumhemmet metropathia cohort 1912-1977. Ryberg M, et al. **J Intern Med** 1990 Feb; 227(2):95-9

Serum proteins and mortality [letter] Phillips A, et al.
Lancet 1990 Apr 7;335(8693):858

Association between serum albumin and mortality from cardiovascular disease, cancer, and other causes [published erratum appears in Lancet 1990 Jan 20;335(8682):180] [see comments] Phillips A, et al. **Lancet** 1989 Dec 16; 2(8677):1434-6 Comment in: Lancet 1990 Feb 10;335(8685):348-51. Comment in: Lancet 1990 Feb 24;335(8687):482.

Premature mortality due to cardiovascular disease in hypopituitarism. Rosén T, et al. **Lancet** 1990 Aug 4; 336(8710):285-8

Ten-year mortality from cardiovascular disease in relation to cholesterol level among men with and without preexisting cardiovascular disease. Pekkanen J, et al.
N Engl J Med 1990 Jun 14;322(24):1700-7

Changes in risk factors and the decline in mortality from cardiovascular disease. The Framingham Heart Study. Sytkowski PA, et al. **N Engl J Med** 1990 Jun 7; 322(23):1635-41

Systolic blood pressure and cardiovascular mortality among 13,740 Dutch women. van der Giezen AM, et al.
Prev Med 1990 Jul;19(4):456-65

The relationship between the hardness of treated water and cardiovascular disease mortality in South African urban areas. Derry CW, et al. **S Afr Med J** 1990 May 19; 77(10):522-4

Cardiac causes of death in hypertension. Falk E.
Scand J Clin Lab Invest Suppl 1989;196:33-41 (21 ref.)

Sex differentials in cardiovascular mortality: an ecological analysis. Park KA, et al. **Soc Sci Med** 1989;29(7):869-76

Trends in the geographic inequality of cardiovascular disease mortality in the United States, 1962-1982. Wing S, et al.
Soc Sci Med 1990;30(3):261-6

Cardiovascular mortality trends in Harris County, Texas: 1980 to 1986. Yoon GY, et al. **Tex Med** 1989 Oct; 85(10):27-31

Risk factors and mortality among female Riga population. An autopsy study. Volkov VA, et al.
Zentralbl Allg Pathol 1989;135(6):561-4

[Hypertension--data, facts, analysis] Keil U. **Fortschr Med** 1990 Apr 30;108(13):247-9 **(Ger)**

[Risk counseling] Heinzl S. **Med Monatsschr Pharm** 1989 Oct; 12(10):297 **(Ger)**

[Supplementary comments on the health effects of the 1985 smog period] Wichmann HE, et al. **Off Gesundheitswes** 1990 Jun;52(6):260-6 (Eng. Abstr.) **(Ger)**

[Long-term results with the CARE classification for assessing operability before thoracic surgery] Schlimmer P. **Pneumologie** 1990 Feb;44 Suppl 1:195-6 (Eng. Abstr.) **(Ger)**

[A femur head preserving osteosynthesis procedure in para-articular femoral fracture of the hip in cardiopulmonary at-risk patients] Miller K, et al.
Unfallchirurg 1990 May;93(5):208-11 (Eng. Abstr.) **(Ger)**

[Mortality among patients with diabetes mellitus in Warsaw--a 10-year prospective study] Janeczko D, et al.
Pol Arch Med Wewn 1989 Mar;81(3):144-55 (Eng. Abstr.) **(Pol)**

[Mortality risk factors in cardiovascular diseases in patients with diabetes mellitus in Warsaw--a 10-year prospective study] Janeczko D, et al. **Pol Arch Med Wewn** 1989 Mar; 81(3):156-67 (Eng. Abstr.) **(Pol)**

[Preventive cardiology in Brazil. Perspectives of reducing cardiovascular mortality (letter)] Laurenti R.
Arq Bras Cardiol 1989 Jun;52(6):366-7 **(Por)**

[Impact of influenza epidemics on cardiovascular disease mortality] Kolodkin VV, et al. **Sov Zdravookhr** 1989; (11):35-8 (Eng. Abstr.) **(Rus)**

[Standardization of the pathologicoanatomic diagnosis of the causes of death from the most prevalent diseases of the cardiovascular system] Avtandilov GG, et al. **Ter Arkh** 1989;61(12):50-2 **(Rus)**

[Is our cardiovascular program effective?] Hrnčiar J.
Vnitr Lek 1990 Mar;36(3):209-18 (Eng. Abstr.) **(Slo)**

[Mortality caused by cardiovascular diseases in Spain: where are we going?] Banegas Banegas JR, et al.
Med Clin (Barc) 1989 Oct 28;93(13):486-9 (Eng. Abstr.) **(Spa)**

[Comparison of the trends in mortality from ischemic heart disease and other cardiovascular diseases between Spain and other developed countries, 1970-1980] García-Gil C, et al. **Med Clin (Barc)** 1989 Dec 16;93(20):790-8 (9 ref.) **(Spa)**

NURSING

Balance of nurses' working time as exemplified by the nurses employed in intensive cardiological care units and cardiological wards. Lenartowicz H.
Ann Univ Mariae Curie Sklodowska [Med] 1985;40:299-303

Utilization of working time by nurses in intensive cardiological care units. Lenartowicz H.
Ann Univ Mariae Curie Sklodowska [Med] 1985;40:305-13

PATHOLOGY

Predictive and preventive pathology of cardiovascular diseases. Yamori Y. **Acta Pathol Jpn** 1989 Nov; 39(11):683-705 (70 ref.)

Cardiac valve prostheses at autopsy. Zeien LB, et al.
Arch Pathol Lab Med 1990 Sep;114(9):933-7

Histopathology of clinical phases of human Lyme disease. Duray PH. **Rheum Dis Clin North Am** 1989 Nov; 15(4):691-710 (39 ref.)

[Fatalities in Alpine skiing--autopsy results and forensic medicine conclusions] Ambach E, et al.
Beitr Gerichtl Med 1989;47:591-5 (Eng. Abstr.) **(Ger)**

[Unexpected natural death in street traffic] Penttilä A, et al.
Beitr Gerichtl Med 1989;47:579-87 (Eng. Abstr.) **(Ger)**

[Color-coded Doppler sonography of the kidney blood vessels in childhood. II. Pathological findings] Deeg KH, et al. **Monatsschr Kinderheilkd** 1990 Jun;138(6):337-48 (Eng. Abstr.) **(Ger)**

[Non-traumatic fatalities in sports activity] Israel S.
Z Arztl Fortbild (Jena) 1990;84(3):97-100 (32 ref.) **(Ger)**

[Lysosomes in cellular activity. Physiology and pathology] Tutel'ian VA, et al. **Vestn Akad Med Nauk SSSR** 1990; (2):14-21 (Eng. Abstr.) **(Rus)**

[Morphoenzymatic changes of the optic nerve in cardiovascular diseases] Antonova AI, et al. **Vrach Delo** 1989 Aug;(8):92-3 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Influence of cardiovascular diseases upon the results of the cardiovascular reflex tests in diabetic and nondiabetic subjects. Krönert K, et al. **Acta Diabetol Lat** 1990 Jan-Mar; 27(1):1-10

Catecholamines and cardiovascular disorders: pathophysiologic considerations. Ganguly PK.
Am Heart J 1989 Oct;118(4):868-72 (40 ref.)

Circadian rhythms in cardiovascular disease. Quyyumi AA.
Am Heart J 1990 Sep;120(3):726-33

Hypokalemia and cardiovascular disease. Schulman M, et al. **Am J Cardiol** 1990 Mar 6;65(10):4E-9E; discussion 22E-23E (37 ref.)

Disorders of the hemostatic system and the risk of the development of thrombotic and cardiovascular diseases: limitations of laboratory diagnosis. Kluft C.
Am J Obstet Gynecol 1990 Jul;163(1 Pt 2):305-12 (81 ref.)

A non-invasive method for testing neural circulatory control in man. Lindqvist A, et al. **Cardiovasc Res** 1989 Mar; 23(3):262-72

Platelet adhesion and aggregation mechanisms: importance in acute cardiovascular syndromes and effects of thromboxane A2 antagonism. Proceedings of a symposium. London, England, December 17, 1987. **Circulation** 1990 Jan;81(1 Suppl):I1-82

Relation of blood viscosity to demographic and physiologic variables and to cardiovascular risk factors in apparently normal adults. de Simone G, et al. **Circulation** 1990 Jan; 81(1):107-17

Circadian variations in cardiovascular disease. Becker RC, et al. **Cleve Clin J Med** 1989 Oct;56(7):676-80 (60 ref.)

Atrial natriuretic factor in human pathophysiology. Crozier IG, et al. **Clin Exp Pharmacol Physiol** 1988 Mar; 15(3):173-83 (42 ref.)

Microalbuminuria and cardiovascular risk factors in type 2 diabetes mellitus. Allawi J, et al. **Diabetic Med** 1990 Feb; 7(2):115-8

Thromboxane A2 in cardiovascular and renal disorders: is there a defined role for thromboxane receptor antagonists or thromboxane synthase inhibitors? Smith EF 3d.
Eicosanoids 1989;2(4):199-212 (100 ref.)

Obesity and adipose tissue distribution as risk factors for the development of disease. A review. Björntorp P.
Infusionstherapie 1990 Feb;17(1):24-7 (32 ref.)

Defining the role of atrial natriuretic factor in health and disease [comment] Giles TD. **J Am Coll Cardiol** 1990 May; 15(6):1331-3 (36 ref.) Comment on: J Am Coll Cardiol 1990 May;15(6):1318-30.

Sexual function among male hemiparetic post-CVA patients [letter] Habot B, et al. **J Am Geriatr Soc** 1989 Oct; 37(10):1003-4

Circadian variation of cardiovascular disease and sympathetic activity. Muller JE, et al. **J Cardiovasc Pharmacol** 1987;10 Suppl 2:S104-9; discussion S110-1

Simple bedside aid to cardiac auscultation [letter] Tan LB, et al. **Lancet** 1990 Apr 28;335(8696):1031

Carbon monoxide and cardiovascular disease [editorial; comment] Dwyer EM Jr, et al. **N Engl J Med** 1989 Nov 23;321(21):1474-5 Comment on: N Engl J Med 1989 Nov 23;321(21):1426-32.

Simulation of steady cardiovascular flow in the presence of stenosis using a finite element method. Sud VK, et al.
Phys Med Biol 1990 Jul;35(7):947-59

Hypothesis: lipoprotein(a) is a surrogate for ascorbate. Rath M, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6204-7

Cardiovascular consequences of sleep apnea.
Schmidt-Nowara WW. **Prog Clin Biol Res** 1990; 345:377-85; discussion 386 (13 ref.)

[Smoking cessation using nicotine chewing gum in smokers with chronic diseases] Kozák J. **Cas Lek Cesk** 1990 Jan 5;129(1):26-9 (Eng. Abstr.) **(Cze)**

[Consensus heart and vascular diseases and sports] Pool J, et al. **Ned Tijdschr Geneeskd** 1989 Jul 29;133(30):1501-5 (3 ref.) (Eng. Abstr.) **(Dut)**

[The marmoset in biomedical research. Value of this primate model for cardiovascular studies] Michel JB, et al.
Pathol Biol (Paris) 1990 Mar;38(3):197-204 (69 ref.) (Eng. Abstr.) **(Fre)**

[Non-prostanoid endothelium-derived factors. Physiologic roles and possible implications in cardiovascular pathology] Dinh Xuan AT, et al. **Therapie** 1990 Mar-Apr;45(2):111-8 (80 ref.) (Eng. Abstr.) **(Fre)**

[Noninvasive studies of the left ventricular systolic function in patients over 65 years old] Schuster P, et al.
Dtsch Med Wochenschr 1990 Jun 8;115(23):883-8 (Eng. Abstr.) **(Ger)**

[Hyperinsulinemia. Current thinking on cardiovascular risks] Bühler FR, et al. **Fortschr Med** 1990;108 Suppl 93:3-11 **(Ger)**

[Stress on the cardiovascular system of airplane pilots] Rödig E. **Verh Dtsch Ges Inn Med** 1989;95:605-13 (38 ref.) **(Ger)**

[The integrative cardiorespiratory exercise test: 2. Response to maximal exercise in heart and lung diseases] Oren A, et al. **Harefuah** 1989 Jun 1;116(11):561-9 (Eng. Abstr.) **(Heb)**

[Circulatory and respiratory parameters in children at cardiovascular risk] Czinner A, et al. **Orv Hetil** 1990 Jan 21;131(3):129-31 (Eng. Abstr.) **(Hun)**

[Renin-angiotensin system and heart function] Milazzotto F, et al. **G Ital Cardiol** 1990 Mar;20(3):256-60 (11 ref.) **(Ita)**

[Possibilities of using impedance rheography in pediatrics] Wójtowicz J, et al. **Pediatr Pol** 1989 Jul;64(7):505-12 **(Pol)**

[Evaluation of clinical and neurophysiological markers of depressive disorder with symptoms of peripheral and brain circulation disturbance] Strzyżewski W, et al.
Psychiatr Pol 1989 Mar-Apr;23(2):89-96 (Eng. Abstr.) **(Pol)**

[Physiopathological mechanisms of fever in cardiovascular patients] Datcu G. **Rev Med Chir Soc Med Nat Iasi** 1989 Jan-Mar;93(1):31-5 **(Rum)**

[Adrenergic receptors in the cardiovascular system (their topography, function and regulation)] Korkushko OV, et al. **Kardiologiia** 1989 Jul;29(7):124-8 (74 ref.) **(Rus)**

[Diseases of the cardiovascular system and the function of the endocrine glands in veterans of Soviet Antarctic expeditions] Iakovlev VA, et al. **Ter Arkh** 1990;62(4):47-51 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Prevention of cardiovascular risk in women. A new concern for the obstetrician/gynecologist. Kafrissen ME.
Acta Obstet Gynecol Scand Suppl 1990;152:13-20 (44 ref.)

A simplified Master's two-step test for preschool children. Yoshinaga M, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Oct;31(5):578-86

Monoclonal antibody to lipid A prevents the development of haemodynamic disorders in endotoxemia. Shnyra AA,

et al. **Adv Exp Med Biol** 1990;256:681–4
Preparticipation echocardiographic screening for cardiovascular disease in a large, predominantly black population of collegiate athletes. Lewis JF, et al. **Am J Cardiol** 1989 Nov 1;64(16):1029–33
Fish-oil concentrate: effects on variables related to cardiovascular disease. Flaten H, et al. **Am J Clin Nutr** 1990 Aug;52(2):300–6
Dietary n–3 polyunsaturated fatty acids and amelioration of cardiovascular disease: possible mechanisms. Kinsella JE, et al. **Am J Clin Nutr** 1990 Jul;52(1):1–28 (418 ref.)
Management of cardiovascular disease risk factors in children. A national survey of primary care physicians. Kimm SY, et al. **Am J Dis Child** 1990 Sep;144(9):967–72
Survey suggests education objectives to improve practice activities [editorial] Strong WB. **Am J Dis Child** 1990 Sep; 144(9):961–2
Estrogen replacement and cardiovascular disease: serum lipids and blood pressure effects. Hazzard WR. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 2):1847–53 (80 ref.)
Preventive cardiology: perspectives in physician education. **Am J Prev Med** 1990;6(2 Suppl):1–100
Is cardiovascular risk factor knowledge sufficient to influence behavior? Avis NE, et al. **Am J Prev Med** 1990 May–Jun; 6(3):137–44
Evaluation of an educational program in preventive cardiology. Dismuke SE, et al. **Am J Prev Med** 1990 Mar–Apr;6(2):99–105
Cardiovascular health promotion in children: "Heart Smart" and the changing role of physicians. Downey AM, et al. **Am J Prev Med** 1989 Sep–Oct;5(5):279–95 (92 ref.)
A program for health behavior change in a preventive cardiology center. Sallis JF, et al. **Am J Prev Med** 1990; 6(2 Suppl):43–50
Pharmacologic and nutritional treatment of mild hypertension: changes in cardiovascular risk status [see comments] Oberman A, et al. **Ann Intern Med** 1990 Jan 15;112(2):89–95 Comment in: Ann Intern Med 1990 Jun 1;112(11):879.
Estrogen and cardiovascular disease. Lobo RA. **Ann N Y Acad Sci** 1990;592:286–94; discussion 334–45 (39 ref.)
A public health model for cardiovascular risk reduction. Impact of cholesterol screening with brief nonphysician counseling. Gemson DH, et al. **Arch Intern Med** 1990 May; 150(5):985–9
Some possible effects of dietary monounsaturated fatty acids on cardiovascular disease. Elvevoll EO, et al. **Atherosclerosis** 1990 Feb;81(1):71–4
Health checks in general practice: another example of inverse care? Waller D, et al. **BMJ** 1990 Apr 28;300(6732):1115–8
Cholesterol caveats. Ramírez EA. **Bol Asoc Med P R** 1989 Dec;81(12):477–9
Garlic and cardiovascular risk factors [letter; comment] Grünwald J. **Br J Clin Pharmacol** 1990 May;29(5):582–3 Comment on: Br J Clin Pharmacol 1989 Nov;28(5):535–44.
Garlic, onions and cardiovascular risk factors. A review of the evidence from human experiments with emphasis on commercially available preparations [see comments] Kleijnen J, et al. **Br J Clin Pharmacol** 1989 Nov; 28(5):535–44 (39 ref.) Comment in: Br J Clin Pharmacol 1990 May;29(5):582–3.
Aspirin and cardiovascular disease. Hennekens CH, et al. **Bull N Y Acad Med** 1989 Jan;65(1):57–68 (14 ref.)
Recommendations of the Canadian Consensus Conference on Non-Pharmacological Approaches to the Management of High Blood Pressure, Mar. 21–23, 1989, Halifax, Nova Scotia [published erratum appears in Can Med Assoc J 1990 Aug 1;143(3):177] Chockalingam A, et al. **Can Med Assoc J** 1990 Jun 15;142(12):1397–409 (114 ref.)
Fish oils and cardiovascular disease. Holub BJ. **Can Med Assoc J** 1989 Nov 15;141(10):1063
Prevention of adult heart disease beginning in the pediatric age. Berenson GS, et al. **Cardiovasc Clin** 1990;20(3):21–45 (94 ref.)
Aspirin and other antiplatelet agents in the secondary and primary prevention of cardiovascular disease. Hennekens CH, et al. **Circulation** 1989 Oct;80(4):749–56 (67 ref.)
Dietary fish oils in the prevention and management of cardiovascular and other diseases. Bang HO. **Compr Ther** 1990 May;16(5):31–5 (30 ref.)
Prevention of risk factors for cardiovascular diseases. A community intervention project. Ruskin H, et al. **Hygie** 1989 Sep;8(3):29–33
Optimizing cardiovascular risk reduction during antihypertensive therapy [clinical conference] Weinberger MH. **Hypertension** 1990 Aug;16(2):201–11
Behavioral risk factor surveillance system. **Iowa Med** 1989 Sep;79(9):436, 438
Effects of exercise training in the elderly on the occurrence and time to onset of cardiovascular diagnoses. Posner JD, et al. **J Am Geriatr Soc** 1990 Mar;38(3):205–10
Lipid screening in paediatrics for early detection of cardiovascular risks. Buser F, et al. **J Clin Chem Clin Biochem** 1990 Feb;28(2):107–11
Therapeutic progress—review XXXV. Aspirin in the next decade. Horton RC, et al. **J Clin Pharm Ther** 1989 Aug; 14(4):249–61 (34 ref.)
Primary prevention trials in cardiovascular disease. Pocock SJ, et al. **J Epidemiol Community Health** 1990 Mar; 44(1):3–6 (16 ref.)
A community-oriented primary care project in a rural population: reducing cardiovascular risk. Gold MR, et al. **J Fam Pract** 1990 Jun;30(6):639–44
Epidemiological and cost implications of antihypertensive treatment for the prevention of cardiovascular disease. Grimm RH Jr. **J Hum Hypertens** 1989 Dec;3 Suppl 2:55–60; discussion 60–1 (22 ref.)
A conceptual framework for interactive patient education in practice and clinic settings. Grueninger UJ, et al. **J Hum Hypertens** 1990 Feb;4 Suppl 1:21–31 (55 ref.)
Addressing the entire risk profile. Strasser T. **J Hum Hypertens** 1990 Feb;4 Suppl 1:51–3
Reduced plasminogen activator inhibitor activity in high consumers of fruits, vegetables and root vegetables. Nilsson TK, et al. **J Intern Med** 1990 Apr;227(4):267–71
Identifying families at high risk of cardiovascular disease: alternative work site approaches. Lairson DR, et al. **J Occup Med** 1990 Jul;32(7):586–93
Dentists' and physicians' attitudes on the role of the dental health care team in a cardiovascular risk factor reduction program. Young SL, et al. **J Public Health Dent** 1990 Winter;50(1):38–41
Garlic and circulatory disorders. Turner M. **J R Soc Health** 1990 Jun;110(3):90–3 (34 ref.)
Prevention and management of cardiovascular risk in women. Based on a symposium. Washington, D.C., June 1988. **J Reprod Med** 1989 Sep;34(9 Suppl):673–777
Role of obstetrician–gynecologist in cardiovascular risk reduction. Linn ES. **J Reprod Med** 1989 Sep;34(9 Suppl):766–77
Modifying cardiovascular risk factors in the workplace [letter; comment] Rissel C. **Med J Aust** 1989 Nov 6; 151(9):542–3 Comment on: Med J Aust 1989 May 15;150(10):574, 576–8, 581.
The awareness of the risk of elevated cholesterol levels and knowledge about cholesterol-lowering action in Australia. Rushworth RL, et al. **Med J Aust** 1990 Jan 15;152(2):72–5
Economic factors in formulating a national policy on the prevention by drugs of cardiovascular disease. Malcolm L. **N Z Med J** 1990 Aug 22;103(896):402–4 (41 ref.)
Sociomedical factors affecting participation in screening program on cerebro- and cardio- vascular disease. Katsuda N, et al. **Nagoya J Med Sci** 1990 Mar;52(1–4):27–35
Cardiovascular implications of estrogen replacement therapy. Lobo RA. **Obstet Gynecol** 1990 Apr;75(4 Suppl):18S–25S; discussion 31S–35S (43 ref.)
Protective effect of a specific platelet-activating factor antagonist, BN 52021, on bupivacaine-induced cardiovascular impairments in rats. Lagente V, et al. **Pharmacol Res** 1989 Sep–Oct;21(5):577–85
Heartbeat Wales—a community programme. Smail S, et al. **Practitioner** 1989 Mar 8;233(1464):343–4, 346–7
Dietary patterns of U.S. children: implications for disease prevention. Kimm SY, et al. **Prev Med** 1990 Jul; 19(4):432–42
Physical activity and cardiovascular risk: a cross-sectional study of middle-aged premenopausal women. Owens JF, et al. **Prev Med** 1990 Mar;19(2):147–57
Preventive cardiology: a progress report. Pyörälä K. **Prev Med** 1990 Jan;19(1):78–96 (87 ref.)
From preventive policy to preventive practice. Remington RD. **Prev Med** 1990 Jan;19(1):105–13
Preventive cardiology: what lies ahead? Rose G. **Prev Med** 1990 Jan;19(1):97–104
Primary prevention of cardiovascular diseases in childhood: changes in serum total cholesterol, high density lipoprotein, and body mass index after 2 years of intervention in Jerusalem schoolchildren age 7–9 years. Tamir D, et al. **Prev Med** 1990 Jan;19(1):22–30
Knowledge, attitudes, treatment practices, and health behaviors of nurses regarding blood cholesterol and cardiovascular disease. Wilt S, et al. **Prev Med** 1990 Jul; 19(4):466–75
The need for frequent and better dietary assessment of children [editorial] Wynder EL. **Prev Med** 1990 Jul; 19(4):489–90
Nutritional recommendations for n–3 polyunsaturated fatty acids and the challenge to the food industry. Barlow SM, et al. **Proc Nutr Soc** 1990 Feb;49(1):13–21 (18 ref.)
Mass media approaches to reducing cardiovascular disease risk. Bellicha T, et al. **Public Health Rep** 1990 May–Jun; 105(3):245–52 (28 ref.)
Changing medical attitudes on exercise [editorial] Van Demark RE Sr. **S D J Med** 1989 Nov;42(11):13
Antihypertensive therapy and blood lipids: ACE inhibitors. Agner E. **Scand J Clin Lab Invest Suppl** 1990;199:55–9 (14 ref.)
Cardiovascular screening in Army personnel over age 40 in the State of Hawaii. Wortham DC, et al. **South Med J** 1990 Apr;83(4):395–402
Is it possible to reduce the risk of cardiovascular events in subjects suffering from intermittent claudication of the lower limbs? Boissel JP, et al. **Thromb Haemost** 1989 Sep 29;62(2):681–5
Prevention in childhood and youth of adult cardiovascular diseases: time for action. Report of a WHO Expert Committee. **WHO Tech Rep Ser** 1990;792:1–105 (179 ref.)
[The relation between economics and medicine in the implementation of a nationwide cardiovascular program] Květenský J, et al. **Cas Lek Cesk** 1990 Jan 19;129(3):67–70 (Eng. Abstr.) (Cze)
[What does the reduction of cholesterol benefit? (letter)] **Ugeskr Laeger** 1990 Feb 19;152(8):546–52 (Dan)
[Cholesterol should be treated seriously] Agner E, et al. **Ugeskr Laeger** 1990 Feb 19;152(8):538–40 (Dan)
[Benefits of cholesterol reduction] Gerdes LU, et al. **Ugeskr Laeger** 1990 Feb 19;152(8):540–4 (Dan)
[Cardiovascular disease prevention. Strategy of the French Federation of Cardiology] Vacheron A. **Bull Acad Natl Med** 1990 Feb;174(2):219–25; discussion 225–30 (Eng. Abstr.) (Fre)
[Recommendations for sensible eating: scientific principles 1] **Soz Praventivmed** 1989;34(3):136–7 (Fre)
[The medical team and the campaign for primary prevention of cardiovascular diseases in the Tessin canton] Domenighetti G, et al. **Soz Praventivmed** 1989;34(3):115–8 (Eng. Abstr.) (Fre)
[From science to general practice. Founding a common organization for the prevention of cardiovascular diseases] Pötschke-Langer M. **Fortschr Med** 1990 Apr 30; 108(13):250 (Ger)
[Our non-humanoid contemporaries of cardiovascular protective value] Leu HJ. **Vasa** 1990;19(2):174–5 (Ger)
[Significance and value of epidemiologic studies for assessing the effectiveness of measures in primary prevention] Knappe J, et al. **Z Arztl Fortbild (Jena)** 1989;83(21):1043–5 (Ger)
[Basic principles of the prevention of cardiovascular diseases in light of knowledge and opinions of the Polish community. II. Knowledge of coronary disease risk factors] Wagrowska H, et al. **Kardiol Pol** 1989;32 Suppl 2:47–55 (Eng. Abstr.) (Pol)
[Methodologic and methodical problems of hygiene in cardiologic studies] Stolbyn BM. **Gig Sanit** 1989 Dec; (12):47–50 (Rus)
[Activities of a student medical team in the mass screening of a rural population] Cherkas VIa, et al. **Sov Zdravookhr** 1989;(7):36–7 (Rus)
[Attitude of rural populations to health] Plotnikova ND, et al. **Sov Zdravookhr** 1989;(10):9–12 (Eng. Abstr.) (Rus)
[The initial work experience of offices for the control of risk factors] Eganian RA, et al. **Ter Arkh** 1989;61(11):137–40 (Rus)
[Heart Beat Wales: a wide-spread cardiovascular project] Björkman S. **Lakartidningen** 1990 Feb 21;87(8):570–1 (Swe)

PSYCHOLOGY

Biobehavioral research on cardiovascular disorders. Krantz DS, et al. **Health Psychol** 1989;8(6):737–46 (48 ref.)
Biobehavioral aspects of cardiovascular disease: progress and prospects. Schneiderman N, et al. **Health Psychol** 1989; 8(6):649–76 (150 ref.)
[Clinical aspects of functional cardiovascular disorders] Schonecke OW. **Fortschr Med** 1990 Mar 20;108(8):157–60 (14 ref.) (Eng. Abstr.) (Ger)
[Multicenter study of the effectiveness and tolerance of clotiazepam in cardiology] Colonna L, et al. **Minerva Cardioangiol** 1990 Jan–Feb;38(1–2):45–9 (Eng. Abstr.) (Ita)
[Quality of life—an important dimension in cardiovascular disease] Wiklund I, et al. **Lakartidningen** 1990 Apr 18; 87(16):1375–6 (Swe)

RADIOGRAPHY

Popliteal artery entrapment: an evolving syndrome. Collins PS, et al. **J Vasc Surg** 1989 Nov;10(5):484–9; discussion 489–90

RADIOTHERAPY

[Intravascular laser irradiation of the blood] Gamaleia NF, et al. **Vestn Khir** 1989 Apr;142(4):143–6 (33 ref.) (Rus)

REHABILITATION

Self-efficacy and in-patient cardiac rehabilitation. Oldridge NB, et al. **Am J Cardiol** 1990 Aug 1;66(3):362–5
Cardiovascular, pulmonary, and cancer rehabilitation. 1. General principles of cardiovascular rehabilitation. Flores AM, et al. **Arch Phys Med Rehabil** 1990 Mar; 71(4–S):S230–3
Cardiovascular, pulmonary, and cancer rehabilitation. 2. Cardiovascular considerations in the rehabilitation of the disabled. Moldover JR, et al. **Arch Phys Med Rehabil** 1990 Mar;71(4–S):S234–7
Cardiovascular rehabilitation: status, 1990. Squires RW, et al. **Mayo Clin Proc** 1990 May;65(5):731–55 (137 ref.)
[Organization of the activities of a department for rehabilitation treatment at a polyclinic] Khrapylina LP, et al. **Sov Zdravookhr** 1990;(1):15–8 (Eng. Abstr.) (Rus)

SURGERY

Use of lasers in vascular disease discussed at International Congress. Cruz LD. **AORN J** 1990 May;51(5):1160–72
39th congress of the European Society for Cardiovascular Surgery. September 9–12, 1990, Budapest, Hungary. Abstracts. **J Cardiovasc Surg (Torino)** 1990 Jul–Aug;31(4 Suppl):1–136
XIX World Congress of the International Society for Cardiovascular Surgery. September 5–9, 1989, Toronto, Ontario (Canada). Abstracts. **J Cardiovasc Surg (Torino)** 1989 Sep–Oct;30(5 Suppl):1–116
The 37th scientific meeting of the International Society for

Cardiovascular Surgery—North American Chapter. New York, N.Y., June 19 and 20, 1989. Abstracts. **J Cardiovasc Surg (Torino)** 1990 May-Jun;31(3):385–98

Lateral plantar artery bypass grafting: defining the limits of foot revascularization. Andros G, et al. **J Vasc Surg** 1989 Nov;10(5):511–9; discussion 520–1

THERAPY

Cardiovascular intervention [editorial] Myler RK. **Cardiol Clin** 1989 Nov;7(4):739–42

Percutaneous cardiopulmonary support in high-risk angioplasty. Shawl FA. **Cardiol Clin** 1989 Nov;7(4):865–75

Interventional cardiovascular therapy by laser and thermal angioplasty. Litvack F, et al. **Circulation** 1990 Mar;81(3 Suppl):IV109–16 (31 ref.)

Gene therapy. A new approach to the treatment of cardiovascular disease [comment] Swain JL. **Circulation** 1989 Nov;80(5):1495–6 Comment on: Circulation 1989 Nov;80(5):1347–53.

Health promotion and self-care in the case of cardiovascular disease. Schulte MB, et al. **J Clin Epidemiol** 1990; 43(8):817–25

Report from the first meeting of the International Society for Applied Cardiovascular Biology [letter] Fasol R. **J Vasc Surg** 1989 Dec;10(6):705

The association of payer with utilization of cardiac procedures in Massachusetts [see comments] Wenneker MB, et al. **JAMA** 1990 Sep 12;264(10):1255–60 Comment in: JAMA 1990 Sep 12;264(10):1294–5.

Advances in interventional cardiology. Holmes DR Jr, et al. **Mayo Clin Proc** 1990 Apr;65(4):565–83 (79 ref.)

Hospital care for elderly patients with diseases of the circulatory system. A comparison of hospital use in the United States and Canada. Anderson GM, et al. **N Engl J Med** 1989 Nov 23;321(21):1443–8

New genes for ailing hearts [news] Marx J. **Science** 1990 Jun 22;248(4962):1492–4

Subcommittee on Clinical Trials. Registry of multicenter clinical trials. Tenth report—1988. Boissel JP. **Thromb Haemost** 1989 Dec 29;62(4):1126–42

[Effect of environmental factors on the number of demands on emergency medical services in respiratory and cardiovascular diseases] Marcinkowski JT, et al. **Z Gesamte Hyg** 1990 Mar;36(3):178–9 (Eng. Abstr.) **(Ger)**

[1st meeting of the Angiology Working Group of the German Society for Cardiovascular Research. Düsseldorf, 16 September 1989. Abstracts] **Z Kardiol** 1990 Feb;79(2):145–8 **(Ger)**

[Creating models of the development of a computer-assisted system of cardiovascular services] Baran-Jarosz B, et al. **Kardiol Pol** 1989;32 Suppl 2:71–82 (14 ref.) (Eng. Abstr.) **(Pol)**

[Mobile Intensive Cardiological Care Unit. 12-month experience] Ceremużyński L, et al. **Kardiol Pol** 1989; 32(2):107–13 (Eng. Abstr.) **(Pol)**

[Basic principles of the prevention of cardiovascular diseases in light of knowledge and opinions of the Polish community. III. Possibilities of the use of cardiologic services and their quality in the opinion of the Polish community] Rywik S, et al. **Kardiol Pol** 1989;32 Suppl 2:56–61 (Eng. Abstr.) **(Pol)**

[Hemoperfusion—its prospects and use other than those in clinical toxicology] Bakula S, et al. **Pol Tyg Lek** 1989 Aug 7–14;44(32–33):739–42 **(Pol)**

[A method of evaluating the severity of children's condition at a department of intensive therapy and resuscitation] Misharev OS, et al. **Anesteziol Reanimatol** 1990 Mar-Apr; (2):42–4 (Eng. Abstr.) **(Rus)**

[Status of sanatorium and health resort services for children with non-tuberculous diseases and the problems of their further improvement] Sarycheva SIa. **Pediatriia** 1989; (9):5–9 **(Rus)**

[Experience with intensive therapy and observation of patients at a central regional hospital] Sigal ES. **Sov Med** 1990;(1):38–40 **(Rus)**

[The influence of music on the effectiveness of therapeutic physical exercises in patients with cardiovascular and respiratory pathologies] Dzhuraeva LA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Sep-Oct; (5):19–22 (Eng. Abstr.) **(Rus)**

[Use of an integrated assessment of the level of medical care of patients with cardiovascular diseases at a central district hospital] Sokolov AM. **Vrach Delo** 1990 Mar;(3):117–9 (Eng. Abstr.) **(Rus)**

VETERINARY

Chronic myocarditis and circulatory syndrome in a White Leghorn strain induced by an avian leukosis virus: light and electron microscopic study. Gilka F, et al. **Avian Dis** 1990 Jan-Mar;34(1):174–84

Studies on cardiovascular fluke (Digenea: Spirorchiidae) infections in sea turtles from the Great Barrier Reef, Queensland, Australia. Glazebrook JS, et al. **J Comp Pathol** 1989 Oct;101(3):231–50

Experimental acute selenium intoxication in lambs. Smyth JB, et al. **J Comp Pathol** 1990 Feb;102(2):197–209

Clinical toxicology of cardiovascular drugs. Hamlin RL. **Vet Clin North Am Small Anim Pract** 1990 Mar; 20(2):469–81 (47 ref.)

Hypercalcaemia and soft tissue mineralisation associated with lymphosarcoma in two horses. Mair TS, et al. **Vet Rec** 1990 Feb 3;126(5):99–101

CARDIOVASCULAR SYSTEM

Uninvited guests: cardiovascular foreign bodies [comment] Henry DA. **N Y State J Med** 1990 Jul;90(7):347–8 Comment on: N Y State J Med 1990 Jul;90(7):368–71.

Prostaglandins in clinical research. Cardiovascular system. Proceedings of the fourth international symposium. Düsseldorf, Federal Republic of Germany, October 5–7, 1988. **Prog Clin Biol Res** 1989;301:1–637

ABNORMALITIES

The significance of the lung biopsy in congenital cardiovascular malformations. Simu G, et al. **Morphol Embryol (Bucur)** 1989 Apr-Jun;35(2):97–101

ANATOMY & HISTOLOGY

Status of cardiovascular education. Carney DK. **J Am Soc Echocardiogr** 1988 Nov-Dec;1(6):466–9

Symposium on progress of diagnostic imaging of the cardiovascular system. 53rd annual scientific session of the Japanese Circulation Society. March 31, 1989, Nagoya. Proceedings. **Jpn Circ J** 1990 Mar;54(3):273–343

Magnetic resonance imaging of the cardiovascular system. Soulen RL, et al. **Magn Reson Annu** 1985;:27–43 (36 ref.)

[Anatomical aspects of the use of nuclear magnetic resonance methods] Nikitiuk BA. **Arkh Anat Gistol Embriol** 1989 Aug; 97(8):73–80 (54 ref.) **(Rus)**

DRUG EFFECTS

Comparison of effect of levoprotiline and dosulepine on cardial functions. Ryšánek R, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):283

Cardiovascular effects of propofol [editorial; comment] Van Aken H. **Acta Anaesthesiol Belg** 1990;41(1):7 Comment on: Acta Anaesthesiol Belg 1990;41(1):13–6.

Excitatory amino acids and cardiovascular apparatus: experimental studies on conscious rats with L-glutamate, N-methyl-D-aspartate, kainate and quisqualate. Berrino L, et al. **Acta Physiol Hung** 1990;75 Suppl:31–2

Opiate peptidergic neurotransmission and cardiovascular and respiratory apparatus: experimental research with beta-endorphin and dermorphin on normotensive and hypertensive rats. Filippelli A, et al. **Acta Physiol Hung** 1990;75 Suppl:105–6

Effects of histamine H2-receptor blockade on the cardiovascular reflex response to lower-body negative pressure in man. Sjövall H, et al. **Acta Physiol Scand** 1990 May;139(1):161–72

The cardiovascular and endocrine effects of cilazapril, a new angiotensin-converting enzyme inhibitor, in man. Ajayi AA, et al. **Afr J Med Med Sci** 1990 Mar;19(1):33–8

Adverse effects of cocaine on cardiovascular dynamics, myocardial blood flow, and coronary artery diameter in an experimental model. Hale SL, et al. **Am Heart J** 1989 Nov;118(5 Pt 1):927–33

Cardiovascular effects of intracoronary atrial natriuretic peptide administration in man. Herrmann HC, et al. **Am Heart J** 1990 Aug;120(2):308–15

Some effects of the hypotensive drug diazoxide on the cardiovascular system. Nayler WG, et al. **Am Heart J** 1968 Feb;75(2):223–32

The hypotensive action of Desmodium styracifolium and Clematis chinensis. Ho CS, et al. **Am J Chin Med** 1989; 17(3–4):189–202

Calcium attenuates cardiovascular reactivity to sodium and stress in blacks. Ernst FA, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 1):451–7

Microinjection of substance P and ACh into rat intermediolateral nucleus elicits cardiovascular responses. Calaresu FR, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R357–61

Cardiovascular and renal actions of endothelin: effects of calcium-channel blockers. Cao LQ, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):F254–8

ACTH-(4–10) through gamma-MSH: evidence for a new class of central autonomic nervous system-regulating peptides. Gruber KA, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R681–94 (77 ref.)

Cardiovascular effects of opioid antagonist naloxone in rostral ventrolateral medulla of rabbits. Morilak DA, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):R325–31

Central nervous system cardiovascular actions of CRF in sinoaortic-denervated rats. Overton JM, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):R596–601

Effect of epinephrine on central nervous system and cardiovascular system toxicity of bupivacaine in pigs. Bernards CM, et al. **Anesthesiology** 1989 Nov;71(5):711–7

Cardiovascular and intraocular pressure effects and plasma concentrations of apraclonidine. Coleman AL, et al. **Arch Ophthalmol** 1990 Sep;108(9):1264–7

General pharmacology of beraprost sodium. 2nd communication: effect on the autonomic, cardiovascular and gastrointestinal systems, and other effects. Murata T, et al. **Arzneimittelforschung** 1989 Aug;39(8):867–76

Effects of carbon disulfide on cardiovascular function after acute and subacute exposure of rats. Hoffmann P, et al. **Biomed Biochim Acta** 1990;49(1):121–8

Importance of spinal noradrenergic pathways in cardiovascular reflexes and central actions of clonidine and alpha-methyldopa in the rabbit. Elghozi JL, et al. **Brain Res** 1989 Oct 9;499(1):39–52

Paraventricular nucleus injections of noradrenaline: cardiovascular effects in conscious Long-Evans and Brattleboro rats. Harland D, et al. **Brain Res** 1989 Sep 4; 496(1–2):14–24

Cardiovascular changes induced by the local application of glutamate-related drugs in the rat nucleus tractus solitarii. Le Galloudec E, et al. **Brain Res** 1989 Dec 4;503(2):322–5

Cardiovascular autonomic function in anthracycline-treated breast cancer patients. Viniegra M, et al. **Cancer Chemother Pharmacol** 1990;26(3):227–31

Differential cardiovascular effects of centrally administered vasopressin in conscious Long Evans and Brattleboro rats. Harland D, et al. **Circ Res** 1989 Oct;65(4):925–33

Role of thromboxane A2 in the cardiovascular response to intracoronary C5a. Stahl GL, et al. **Circ Res** 1990 Apr; 66(4):1103–11

Cardiovascular effects of fish oils. Beyond the platelet. Leaf A. **Circulation** 1990 Aug;82(2):624–8 (42 ref.)

The cardiovascular effects of octreotide treatment in acromegaly: an echocardiographic study. Thuesen L, et al. **Clin Endocrinol (Oxf)** 1989 Jun;30(6):619–25

Cardiovascular responses to alpha adrenergic agents in chronically-exercised spontaneously hypertensive rats. Bennett CH, et al. **Clin Exp Hypertens [A]** 1989; 11(8):1607–25

Cardiovascular effects of nicotine during physical activity and following meal consumption. Perkins KA, et al. **Clin Exp Pharmacol Physiol** 1990 May;17(5):327–34

The effect of octanoic fatty acid on the cardiovascular system of the guinea pig. Kristev A, et al. **Cor Vasa** 1989; 31(4):321–7

Pharmacodynamic response to ionized calcium during acute sepsis [see comments] Steinhorn DM, et al. **Crit Care Med** 1990 Aug;18(8):851–7 Comment in: Crit Care Med 1990 Aug;18(8):895–6.

Comparative cardiovascular effects of drugs used for hypertension. Burnier M, et al. **Drugs** 1990;39 Suppl 1:32–8 (32 ref.)

Further studies on the mechanism of the cardiovascular effects of L-tyrosine. Ekholm S. **Eur J Pharmacol** 1989 Sep 13;168(2):145–52

N-methyl D-aspartate (NMDA) evoked changes in blood pressure and heart rate from the rat superior colliculus. Keay KA, et al. **Exp Brain Res** 1990;80(1):148–56

Effects of physostigmine on the cardiopulmonary system of conscious pigs. Stemler FW, et al. **Fundam Appl Toxicol** 1990 Jan;14(1):96–103

Cardiovascular actions of vasopressin at the ventrolateral medulla. Andreatta-Van Leyen S, et al. **Hypertension** 1990 Feb;15(2 Suppl):I102–6

Cardiovascular depression and stabilization by central vasopressin in rats. Imai Y, et al. **Hypertension** 1990 Mar; 15(3):291–300

Effects of alcohol on psychophysiological hyperreactivity to nonaversive and aversive stimuli in men at high risk for alcoholism. Finn PR, et al. **J Abnorm Psychol** 1990 Feb;99(1):79–85

Safety of desipramine [letter; comment] **J Am Acad Child Adolesc Psychiatry** 1989 Nov;28(6):964–5 Comment on: J Am Acad Child Adolesc Psychiatry 1989 May;28(3):376–9.

A double-blind placebo controlled study of desipramine in the treatment ADD: II. Serum drug levels and cardiovascular findings. Biederman J, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Nov; 28(6):903–11

Cardiovascular responses to exercise in the rat: role of corticotropin-releasing factor. Kregel KC, et al. **J Appl Physiol** 1990 Feb;68(2):561–7

Cardiovascular responses to 5-HT in the ventrolateral medulla of the rat. Lovick TA. **J Auton Nerv Syst** 1989 Oct;28(1):35–41

Cardiovascular effects and toxicity of anxiolytics and antidepressants. Jefferson JW. **J Clin Psychiatry** 1989 Oct; 50(10):368–78 (109 ref.)

The cardiovascular effect of intracerebroventricular endothelin in rats. Kawano Y, et al. **J Hypertens Suppl** 1989 Dec;7(6):S22–3

Effects of the N-methyl-D-aspartate receptor blocker MK-801 on neurologic function after experimental brain injury. Mcintosh TK, et al. **J Neurotrauma** 1989 Winter; 6(4):247–59

Hypertension and associated cardiovascular abnormalities induced by chronic barium feeding. Perry HM Jr, et al. **J Toxicol Environ Health** 1989;28(3):373–88

Modulating effect of body temperature on the toxic response produced by the pesticide chlordimeform in rats. Watkinson WP, et al. **J Toxicol Environ Health** 1989; 28(4):483–500

Modulatory effects of rat endothelin on central cardiovascular control in rats. Kuwaki T, et al. **Jpn J Physiol** 1990;40(1):97–116

Cardiovascular effects of n-6 fatty acids. Adam O. **Klin Wochenschr** 1990;68 Suppl 20:16–22 (69 ref.)

Cardiac and vascular actions of sarafotoxin S6b and endothelin-1. Han SP, et al. **Life Sci** 1990;46(11):767–75

Characterization of the peripheral action of neurokinins and neurokinin receptor selective agonists on the rat cardiovascular system. Couture R, et al.

Naunyn Schmiedebergs Arch Pharmacol 1989 Nov; 340(5):547–57

Cardiovascular effects of flesinoxan in anaesthetized and conscious dogs. Grohs JG, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 May; 341(5):472–5

Effects of endothelin on the cardiovascular system and on smooth muscle preparations in different species. Lembeck F, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Dec; 340(6 Pt 2):744–51

Systemic and regional haemodynamic responses to microinjection of 5–HT agonists in the rostral ventrolateral medulla in the rat. Lovick TA. **Neurosci Lett** 1989 Dec 15;107(1–3):157–61

Analysis of the cardiovascular changes evoked by microinjection of NaCl into the nucleus tractus solitarii of rats: evidence for a Na+/Ca2+ relationship. Lukovic L, et al. **Neurosci Lett** 1990 Mar 2;110(1–2):46–51

Fetal cardiovascular effects of nifedipine in rats. Momma K, et al. **Pediatr Res** 1989 Nov;26(5):442–7

Intravenous cocaine infusions in humans: dose responsivity and correlations of cardiovascular vs. subjective effects. Muntaner C, et al. **Pharmacol Biochem Behav** 1989 Dec; 34(4):697–703

Measurement and cardiovascular relevance of partial agonist activity (PAA) involving beta 1– and beta 2–adrenoceptors. Cruickshank JM. **Pharmacol Ther** 1990;46(2):199–242 (470 ref.)

Interactions of nimodipine and cocaine on endogenous catecholamines in the squirrel monkey. Trouvé R, et al. **Proc Soc Exp Biol Med** 1990 Mar;193(3):171–5

Cardiovascular action of methionine enkephalin (met–enkephalin) in conscious and anesthetized rabbits. Rhee HM, et al. **Prog Clin Biol Res** 1990;328:291–4

Fish and the cardiovascular system. Burr ML. **Prog Food Nutr Sci** 1989;13(3–4):291–316 (72 ref.)

The cardiovascular effects of antidepressants. Warrington SJ, et al. **Psychol Med Monogr Suppl** 1989;16:i–iii, 1–40 (425 ref.)

Acute and chronic effects of eicosapentaenoic acid (EPA) on the cardiovascular system. Bayorh MA, et al. **Res Commun Chem Pathol Pharmacol** 1989 Dec; 66(3):355–74

Cardiovascular effects of chronic carbon monoxide and high–altitude exposure. McGrath JJ. **Res Rep Health Eff Inst** 1989 Jul;(27):1–23

Neural factors in acute emetic, cardiovascular, and respiratory effects of T–2 toxin in cats. Borison HL, et al. **Toxicol Appl Pharmacol** 1989 Dec;101(3):399–413

Cardiovascular effects of anatoxin–A in the conscious rat. Sirén AL, et al. **Toxicol Appl Pharmacol** 1990 Jan; 102(1):91–100

Sequence of cardiorespiratory effects of soman altered by route of administration. Franz DR, et al. **Toxicol Lett** 1990 Apr;51(2):221–5

Comparative cardiovascular toxicity in dogs given inotropic agents by continuous intravenous infusion. Sandusky GE, et al. **Toxicol Pathol** 1990;18(2):268–78

More selective ligands at eicosanoid receptor subtypes improve prospects in inflammatory and cardiovascular research. Giles H. **Trends Pharmacol Sci** 1990 Aug; 11(8):301–4 (11 ref.)

Remodeling of the vascular tree in hypertension: drug effects. Struyker Boudier HA, et al. **Trends Pharmacol Sci** 1990 Jun;11(6):240–5 (39 ref.)

[Cardiovascular effects of calcium antagonists] Pasanisi F, et al. **Clin Ter** 1989 Jul 15;130(1):3–10 (74 ref.) (Eng. Abstr.) **(Ita)**

[Systemic cardiorespiratory effects induced by doxofylline] Bagnato GF, et al. **Riv Eur Sci Med Farmacol** 1989 Feb; 11(1):29–35 (Eng. Abstr.) **(Ita)**

[Effects of atrial natriuretic factor on the cardiovascular system and several parameters of renal excretory function in spontaneously hypertensive rats] Frolov VA, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):24–6 (Eng. Abstr.) **(Rus)**

[The effect of parathormone on the reactivity of the cardiovascular system to angiotensin–2 in normotensive and spontaneously hypertensive rats] Brin VB, et al. **Fiziol Zh SSSR** 1990 Mar;76(3):345–50 (Eng. Abstr.) **(Rus)**

[Effects of moderate alcohol consumption on the cardiovascular system of male operators] Grebniak VP, et al. **Gig Tr Prof Zabol** 1989;(11):9–12 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Central opioid modulation of fetal cardiovascular function: role of mu– and delta–receptors. Szeto HH, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1453–8

Alteration of early vascular development after ablation of cranial neural crest. Bockman DE, et al. **Anat Rec** 1989 Nov;225(3):209–17

Hemodynamics of the developing cardiovascular system. Clark EB, et al. **Ann N Y Acad Sci** 1990;588:41–7 (11 ref.)

Cardiovascular responses to forskolin in the ovine fetus. Rankin JH, et al. **J Dev Physiol** 1989 Jan;11(1):7–10

An embryological view about cholinergic innervation in the cardiovascular system. Shigei T. **Prog Clin Biol Res** 1990; 327:591–3 (15 ref.)

[Development of the avian and mammalian heart prior to the onset of blood circulation, studied in chick and mouse embryos] Virágh S. **Morphol Igazsagugyi Orv Sz** 1989 Oct; 29(4):255–62 (Eng. Abstr.) **(Hun)**

ENZYMOLOGY

Physiological role of cGMP and cGMP–dependent protein kinase in the cardiovascular system. Walter U. **Rev Physiol Biochem Pharmacol** 1989;113:41–88 (227 ref.)

GROWTH & DEVELOPMENT

Growth regulation of the vascular system: evidence for a metabolic hypothesis. Adair TH, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):R393–404 (129 ref.)

Cardiac responses to head up tilt during early extrauterine life: relevance of active acquisition of erect posture. Magrini F, et al. **Cardiovasc Res** 1989 May;23(5):460–4

Infant feeding and cardiorespiratory maturation. Daniels H, et al. **Neuropediatrics** 1990 Feb;21(1):9–10

[Postnatal development of regulatory function of the circulation] Shimizu T. **Nippon Seirigaku Zasshi** 1989; 51(5):137–52 (99 ref.) **(Jpn)**

INJURIES

Fatal arterial gas embolism: detection by chest radiography and imaging before autopsy [see comments] Williamson JA, et al. **Med J Aust** 1990 Jul 16;153(2):97–100 Comment in: Med J Aust 1990 Jul 16;153(2):65.

INNERVATION

Cardiovascular adrenergic activity of dopamine in the dog. Black WL, et al. **Am Heart J** 1968 Feb;75(2):233–9

Synaptic mechanisms regulating cardiovascular afferent inputs to solitary tract nucleus. Mifflin SW, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H653–61 (44 ref.)

Effects of chemical and electrical stimulation of the midbrain on feline T2–T6 spinoreticular and spinal cell activity evoked by cardiopulmonary afferent input. Chandler MJ, et al. **Brain Res** 1989 Sep 4;496(1–2):148–64

Cardiovascular responses to intrathecal administration of strychnine in the rat. Hong YG, et al. **Brain Res** 1989 Oct 9;499(1):169–73

Cardiovascular and muscle tone changes produced by microinjection of cholinergic and glutamatergic agonists in dorsolateral pons and medial medulla. Lai YY, et al. **Brain Res** 1990 Apr 23;514(1):27–36

Connection, a microcomputer program for storing and analyzing structural properties of neural circuits. Nicolelis MA, et al. **Comput Biomed Res** 1990 Feb;23(1):64–81

A comparison of peripheral vasoconstrictor responses and cardiovascular autonomic function tests in diabetic patients. Gilmore JE, et al. **Diabetologia** 1990 Jun;33(6):350–6

Which battery of cardiovascular autonomic function tests? Ryder RE, et al. **Diabetologia** 1990 Mar;33(3):177–9; discussion 180–1

Excitatory amino acid receptors in the caudal ventrolateral medulla mediate a vagal cardiopulmonary reflex in the rat. Verberne AJ, et al. **Exp Brain Res** 1989;78(1):185–92

Group I afferent fibers: effects on cardiorespiratory system. Orani GP, et al. **J Appl Physiol** 1990 Mar;68(3):932–7

Marked increases in calcitonin gene–related peptide–containing nerves in the developing rat following long–term sympathectomy with guanethidine. Aberdeen J, et al. **Neuroscience** 1990;35(1):175–84

Autonomic control of the cardiovascular system. Allert JA. **Semin Vet Med Surg (Small Anim)** 1990 Feb;5(1):17–23 (6 ref.)

[The role of neurons of the caudal ventrolateral region of the medulla oblongata of cats in the mechanism of realization of the cardio–hemodynamic reaction] Vereskun SB, et al. **Fiziol Zh** 1990 May–Jun;36(3):20–5 (Eng. Abstr.) **(Rus)**

[Cerebro–autonomic correlations in patients with early stages of hypertension during reflexotherapy] Dmitriev VK, et al. **Kardiologiia** 1990 Jan;30(1):35–8 (Eng. Abstr.) **(Rus)**

[Evaluation of sympathetic and parasympathetic mechanisms of regulation in autonomic paroxysms] Khaspekova NB, et al. **Sov Med** 1989;(9):25–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Leukotrienes in the cardiovascular system. Piper PJ, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1990; 20:146–52 (25 ref.)

Cardiovascular lipid accumulation with Coxsackie B virus infection in mice. Ilbäck NG, et al. **Am J Pathol** 1990 Jan; 136(1):159–67

Prostaglandin receptors in the cardiovascular system: potential selectivity from receptor subtypes or modified responsiveness. Keen M, et al. **Eicosanoids** 1989;2(4):193–7 (34 ref.)

Pattern of lipid profiles in cardiovascular tissues of hysterectomized albino rats. Umadevi G, et al. **Indian J Exp Biol** 1989 Feb;27(2):190–2

Metabolic and cardiorespiratory parameters during three consecutive days of exhaustive running. Knapik J, et al. **J Sports Med Phys Fitness** 1990 Jun;30(2):132–7

Cardiovascular, respiratory, and metabolic responses to upper body exercise. Pendergast DR. **Med Sci Sports Exerc** 1989 Oct;21(5 Suppl):S121–5 (31 ref.)

5–HT receptor subtype–specific drugs and the cardiovascular system. van Heuven–Nolsen D. **Trends Pharmacol Sci** 1988 Dec;9(12):423–5 (3 ref.)

[Metabolic and cardiovascular profile in antihypertensive treatment with urapidil] Gerber A, et al. **Therapie** 1990 Mar–Apr;45 Suppl 2:219–27 (42 ref.) **(Fre)**

[Adrenal regeneration hypertension—effects of vascular connective tissue protein and plasma corticosterone on hypertension in rats with adrenal regeneration hypertension] Nakada T, et al. **Nippon Hinyokika Gakkai Zasshi** 1990 Jan;81(1):49–53 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Biplanar transesophageal echocardiography: anatomic correlations, image orientation, and clinical applications. Seward JB, et al. **Mayo Clin Proc** 1990 Sep;65(9):1193–213 (13 ref.)

Cardiovascular system. **Top Magn Reson Imaging** 1990 Mar; 2(2):1–71

New directions in cardiac magnetic resonance imaging. Zerhouni EA. **Top Magn Reson Imaging** 1990 Mar; 2(2):67–71

PHYSIOLOGY

Evaluation of the effects of noise exposure on various body functions in low–birthweight newborns. Jurkovičová J, et al. **Act Nerv Super (Praha)** 1989 Oct;31(3):228–9

Type A behavior and its relations to psychophysiological reactivity: a review. Pfiffner D, et al. **Act Nerv Super (Praha)** 1989 Oct;31(3):183–208 (182 ref.)

Short–lasting neurovegetative arousal reactions in neurotic patients and healthy controls. Richter A, et al. **Act Nerv Super (Praha)** 1990 Mar;32(1):42–4

The heart rate response to psychological challenge is higher in children displaying lower physical activity. Solcová I, et al. **Act Nerv Super (Praha)** 1990 Mar;32(1):40–2

Role of the substantia nigra in the behavioural–cardiovascular integration in the cat. Angyán L. **Acta Physiol Hung** 1989; 74(2):175–87

Effects of stimulus parameters on cardiovascular responses to medullary stimulation in the cat. Angyán L. **Acta Physiol Hung** 1989;74(3–4):243–51

Cardiovascular regulation in the acute decerebrate rat. Futuro–Neto H de A, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(4):445–53

Cardiovascular and sympathetic effects of 240–fold salt intake variations—studies in rats, with comparisons to man. Folkow B, et al. **Acta Physiol Scand Suppl** 1989;583:89–96

Physiologic role of the peripheral enkephalinergic system in regulating cardiovascular homeostasis: evidence of interactions with the renin–angiotensin and kallikrein–kinin systems. Carmignani M, et al. **Adv Exp Med Biol** 1989; 247B:477–81

Cardiovascular studies on former endurance athletes. Pyörälä K, et al. **Am J Cardiol** 1967 Aug;20(2):191–205

Tissue renin–angiotensin systems in the heart and vasculature: possible involvement in the cardiovascular actions of converting enzyme inhibitors. Unger T, et al. **Am J Cardiol** 1990 May 22;65(19):3I–10I (87 ref.)

Overfeeding: cardiovascular and metabolic response during continuous formula infusion in adult humans. Casper K, et al. **Am J Clin Nutr** 1990 Oct;52(4):602–9

Gastrointestinal and cardiac response to refeeding after low–calorie semistarvation. Young EA, et al. **Am J Clin Nutr** 1989 Nov;50(5):922–9

Ovine fetal cardiovascular responses to packed red blood cell transfusions. Brace RA. **Am J Obstet Gynecol** 1989 Nov;161(5):1367–74

Cardiovascular changes in early phase of pregnancy. Capeless EL, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1449–53

Cardiovascular effects of posterior hypothalamic stimulation in baroreflex–denervated rats. Barron KW, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H720–7

Resource sharing in rat gestation: role of maternal cardiovascular hemodynamics. Blizard DA, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1299–307 (39 ref.)

Cardiovascular effects of microinjection of ANF and brain natriuretic peptide into ventrolateral medulla. Ermirio R, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):R32–7

Association between cardiovascular reactivity to stress and hypertension or behavior. Knardahl S, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H248–57

Arginine vasopressin increases apparent whole body capacity in anesthetized cats. Martin DS, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H722–8

Cardiovascular and neuroendocrine responses to baroreceptor denervation in baboons. Shade RE, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):R930–8

Cardiovascular changes after closure of uterine circulation during pregnancy. Valenzuela GJ, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1431–5

The young lamb can increase cardiovascular performance during isoflurane anesthesia. Brett CM, et al. **Anesthesiology** 1989 Nov;71(5):751–6

Cardiovascular responses to noxious stimuli in experimental animals: "pressor or depressor"? [letter] Fukunaga AF, et al. **Anesthesiology** 1990 Apr;72(4):769–71

Physiological and biochemical consequences of electroimobilisation in conscious sheep. Kuchel TR, et al. **Aust Vet J** 1990 Feb;67(2):33–8

Cardiovascular response to 4 hours of 6 degrees head–down tilt or of 30 degrees head–up tilt bed rest. Butler GC, et

al. **Aviat Space Environ Med** 1990 Mar;61(3):240–6
Dynamic cardiovascular response to +Gz stress in aerobically trained individuals. Forster EM, et al. **Aviat Space Environ Med** 1990 Apr;61(4):303–6
Hormonal effects on circulatory changes during the perinatal period. Birk E, et al. **Bailliere's Clin Endocrinol Metab** 1989 Nov;3(3):795–815 (127 ref.)
Cardiovascular effects of acute normovolemic hemodilution in rats with disopyramide-induced myocardial depression. Estafanous FG, et al. **Basic Res Cardiol** 1990 May–Jun; 85(3):227–36
Recurring discharge patterns in multiple spike trains. II. Application in forebrain areas related to cardiac and respiratory control during different sleep–waking states. Frostig RD, et al. **Biol Cybern** 1990;62(6):495–502
Clinical studies of cranial and spinal compliance and the craniospinal flow of cerebrospinal fluid. Magnaes B. **Br J Neurosurg** 1989;3(6):659–68
Cardiovascular fitness and thermoregulation during prolonged exercise in man. Greenhaff PL. **Br J Sports Med** 1989 Jun;23(2):109–14
Cardiorespiratory function is altered by picomole injections of 5'-N-ethylcarboxamidoadenosine into the nucleus tractus solitarius of rats. Barraco RA, et al. **Brain Res** 1990 Jan 22;507(2):234–46
Lesions of rostral ventrolateral medulla abolish some cardio- and cerebrovascular components of the cerebellar fastigial pressor and depressor responses. Chida K, et al. **Brain Res** 1990 Jan 29;508(1):93–104
Specific alterations in cardiovascular function and in glucose utilisation within lower brainstem nuclei following intracisternal neuropeptide Y in the conscious rat. Macrae IM, et al. **Brain Res** 1990 May 7;515(1–2):99–103
Intrathecal administration of delta receptor agonists in the urethane anesthetized rat provokes an increase in arterial pressure via a non-opioid mechanism. Rochford J, et al. **Brain Res** 1990 Apr 2;512(2):259–68
Evidence for an excitatory amino acid pathway in the brainstem and for its involvement in cardiovascular control. Somogyi P, et al. **Brain Res** 1989 Sep 4;496(1–2):401–7
L-glutamate mapping of cardioreactive areas in the rat posterior hypothalamus. Spencer SE, et al. **Brain Res** 1990 Mar 12;511(1):149–57
Cerebellar vermis: essential for classically conditioned bradycardia in the rat. Supple WF Jr, et al. **Brain Res** 1990 Feb 12;509(1):17–23
Convergence of cardiovascular and vestibular inputs on neurons in the medullary paramedian reticular formation. Yates BJ, et al. **Brain Res** 1990 Apr 9;513(1):166–70
Cardiorespiratory response patterns elicited by microinjections of neuropeptide Y in the nucleus tractus solitarius. Barraco RA, et al. **Brain Res Bull** 1990 Mar; 24(3):465–85
Cardiorespiratory responses following electrical stimulation of caudal sites in the rat medulla. Barraco RA, et al. **Brain Res Bull** 1989 Oct–Nov;23(4–5):299–310
The effects of stimulation of the A5 region on blood pressure and heart rate in rabbits. Drye RG, et al. **Brain Res Bull** 1990 Jan;24(1):33–9
Relative effects of different spinal autonomic nuclei on cardiac sympathoexcitatory function. Murugaian J, et al. **Brain Res Bull** 1990 Apr;24(4):537–42
Cardiorespiratory responses to stimulation of the nucleus reticularis gigantocellularis. Stremel RW, et al. **Brain Res Bull** 1990 Jan;24(1):1–6
Contribution between dorsal and ventrolateral regions of medulla oblongata in vasomotor function of cats. Su CK, et al. **Brain Res Bull** 1989 Dec;23(6):447–56
Dopamine D2 receptors in the posterior region of the nucleus tractus solitarius mediate the central pressor action of quinpirole (LY171555). Yang RH, et al. **Brain Res Bull** 1990 Jan;24(1):97–103
The state of the circulatory system in hard working dockers in 1975–1976 and 1987–1988 (ECG evaluation by means of the Minnesota Code 1982). Waśkiewicz J. **Bull Inst Marit Trop Med Gdynia** 1989;40(1–2):73–85
Cardiovascular responses of rats to electrical stimulation of the fastigial nucleus and local microinjection of amino acids. Huang TF, et al. **Chin J Physiol** 1989;32(1):31–9
Experimental and clinical chronocardiology. Otsuka K, et al. **Chronobiologia** 1990 Apr–Jun;17(2):135–63 (172 ref.)
Importance of endogenous angiotensin II in the cardiovascular responses to sympathetic stimulation in conscious rabbits. Isaacson JS, et al. **Circ Res** 1990 Mar; 66(3):662–71
Abstracts from the 62nd scientific sessions: American Heart Association. New Orleans, Louisiana, November 13–16, 1989. **Circulation** 1989 Oct;80(4 Pt 2):II1–II808
Statement on exercise. A position statement for health professionals by the Committee on Exercise and Cardiac Rehabilitation of the Council on Clinical Cardiology, American Heart Association. **Circulation** 1990 Jan; 81(1):396–8
Abstracts from the 63rd scientific sessions. American Heart Association. Dallas, Texas, November 12–15, 1990. **Circulation** 1990 Oct;82(4 Suppl):III1–918
Non-invasive investigations of cardiovascular reflexes in humans. Hainsworth R. **Clin Sci** 1990 May;78(5):437–43 (103 ref.)
Cardiovascular and pupillary light reflexes in subjects with abnormal glucose tolerance. Kuroda N, et al. **Diabetes Res Clin Pract** 1989 Sep 18;7(3):213–8
The assessment of cardiovascular reflex activity: standardization is needed. Wieling W, et al. **Diabetologia** 1990 Mar;33(3):182–3
Peptidergic control of cardiovascular function: the angiotensin paradigm. Ganten D. **Eur Heart J** 1990 Apr; 11 Suppl B:72–8 (48 ref.)
Measuring the cardiovascular endurance of persons with mental retardation: a critical review. Lavay B, et al. **Exerc Sport Sci Rev** 1990;18:263–90 (76 ref.)
Cardiovascular system and tissue oxygen pressure (ptO2) in bilaterally nephrectomized rats. Hohenegger M, et al. **Exp Pathol** 1990;39(1):18–24
Animal experimental model for studying respiratory and cardiovascular parameters in unanaesthetized rabbits. Islam MS, et al. **Exp Pathol** 1989;37(1–4):67–71
Steroid hormones and the cardiovascular system: direct actions of estradiol, progesterone, testosterone, gluco- and mineralcorticoids, and soltriol [vitamin D] on central nervous regulatory and peripheral tissues. Stumpf WE. **Experientia** 1990 Jan 15;46(1):13–25 (115 ref.)
Vasopressor and depressor effects of native angiotensins and inhibition of these effects in the Japanese quail. Takei Y, et al. **Gen Comp Endocrinol** 1990 Jul;79(1):12–22
Central role for vasopressin in cardiovascular regulation and the pathogenesis of hypertension. Berecek KH, et al. **Hypertension** 1990 Sep;16(3):213–24 (118 ref.)
Effect of chronic sodium loading on cardiovascular response in young blacks and whites. Falkner B, et al. **Hypertension** 1990 Jan;15(1):36–43
Cardiovascular reactivity to the cold pressor test as a predictor of hypertension. Menkes MS, et al. **Hypertension** 1989 Nov;14(5):524–30
Lower-body suction and cardiovascular reflexes: physiological and applied considerations. Dikshit MB. **Indian J Physiol Pharmacol** 1990 Jan;34(1):3–12 (60 ref.)
Dynamics of central nervous activation during motor imagination. Beyer L, et al. **Int J Psychophysiol** 1990 Jul; 9(1):75–80
Conditioned diastolic blood pressure: the effects of magnitude of acquired response and feedback schedules on resistance to extinction. Gamble EH, et al. **Int J Psychophysiol** 1990 Jul;9(1):13–20
Effect of endurance training on cardiovascular response to static exercise performed with untrained muscles. Krzeminski K, et al. **Int J Sports Med** 1989 Oct;10(5):363–7
Beat to beat variability in cardiovascular variables: noise or music? Appel ML, et al. **J Am Coll Cardiol** 1989 Nov 1; 14(5):1139–48 (37 ref.)
Left ventricular dimensions and function in athletes: cardiac or cardiovascular adaptations, or both? [editorial; comment] Bruce RA. **J Am Coll Cardiol** 1990 Mar 1;15(3):589–90 Comment on: J Am Coll Cardiol 1990 Mar 1;15(3):582–8.
Cardiovascular and respiratory responses to slow ramp carotid sinus pressures in the dog. Jung R, et al. **J Appl Physiol** 1990 Apr;68(4):1465–74
Afferent and cardiodynamic drives in the early phase of exercise hyperpnea in humans. Morikawa T, et al. **J Appl Physiol** 1989 Nov;67(5):2006–13
Ventral medulla sites of muscarinic receptor subtypes involved in cardiorespiratory control. Nattie EE, et al. **J Appl Physiol** 1990 Jul;69(1):33–41
Role of sympathoadrenomedullary system in cardiovascular response to stress in rats. Barron BA, et al. **J Auton Nerv Syst** 1989 Nov;28(2):179–87
Dissociation of autonomic controls of heart rate in weaning-aged borderline hypertensive rats by perinatal NaCl. Domino JV, et al. **J Auton Nerv Syst** 1990 Mar; 29(3):219–26
Autonomic nerve and cardiovascular responses to changing blood oxygen and carbon dioxide levels in the rat. Fukuda Y, et al. **J Auton Nerv Syst** 1989 Oct;28(1):61–74
The effect of supranodose vagotomy on the hexamethonium-resistant bradycardia in the anaesthetized rabbit. McWilliam PN, et al. **J Auton Nerv Syst** 1990 Mar; 29(3):227–30
Cardiovascular and motor components of the defence reaction elicited in rats by electrical and chemical stimulation in amygdala. al Maskati HA, et al. **J Auton Nerv Syst** 1989 Nov;28(2):127–31
Stimulation in prefrontal cortex area inhibits cardiovascular and motor components of the defence reaction in rats. al Maskati HA, et al. **J Auton Nerv Syst** 1989 Nov; 28(2):117–25
Evaluation of cardiovascular control by neurons in the dorsal medulla of rats. Yardley CP, et al. **J Auton Nerv Syst** 1989 Dec 30;29(1):1–11
Short- and long-term determinants of cardiovascular function and therapy: contributions of circulating and tissue renin-angiotensin systems. Dzau VJ. **J Cardiovasc Pharmacol** 1989;14 Suppl 4:S1–5 (34 ref.)
Systemic hypotension and pressor responsiveness in cholestasis. A study in conscious 3-day bile duct ligated rats. Bomzon A, et al. **J Hepatol** 1990 Jul;11(1):70–6
Program and abstracts of the 7th G.R.R.C. meeting. Dijon, France, 26–27 April 1990. **J Mol Cell Cardiol** 1990 Jun;22 Suppl 4:S1–62
The cellular biology of angiotensin: paracrine, autocrine and intracrine actions in cardiovascular tissues. Re RN. **J Mol Cell Cardiol** 1989 Dec;21 Suppl 5:63–9 (48 ref.)
Cardio-respiratory responses to cool ambient temperature differ with sleep state in neonatal lambs. Berger PJ, et al. **J Physiol (Lond)** 1989 May;412:351–63
Influences on the cardiovascular response to graded levels of systemic hypoxia of the accompanying hypocapnia in the rat. Marshall JM, et al. **J Physiol (Lond)** 1989 Mar; 410:381–94
Cardiovascular correlates of type A behavior components during social interaction. Delamater AM, et al. **J Psychosom Res** 1989;33(5):641–50
Cardiovascular responses in the laboratory and in the natural environment: is blood pressure reactivity to laboratory-induced mental stress related to ambulatory blood pressure during everyday life? Fredrikson M, et al. **J Psychosom Res** 1989;33(6):753–62
Relationship of expressed anger to forearm muscle vascular resistance. Goldstein HS, et al. **J Psychosom Res** 1989; 33(4):497–504
Anger assessment and reactivity to stress. Mills PJ, et al. **J Psychosom Res** 1989;33(3):379–82
Seat height in handrim wheelchair propulsion. van der Woude LH, et al. **J Rehabil Res Dev** 1989 Fall;26(4):31–50
Cardiorespiratory and hemodynamic responses to inversion and inversion with sit-ups. Boone T, et al. **J Sports Med Phys Fitness** 1989 Dec;29(4):346–57
Proceedings of the 53d annual scientific meeting of the Japanese Circulation Society. March 1989, Nagoya. Abstracts. **Jpn Circ J** 1989 Jun;53(6):477–675
Proceedings of the 53d annual scientific meeting of the Japanese Circulation Society. March 1989, Nagoya. Abstracts. **Jpn Circ J** 1989 Aug;53(8):825–993
Cardiopulmonary fitness in a sample of Malaysian population. Singh R, et al. **Jpn J Physiol** 1989;39(4):475–85
Interactions between non-symmetric mechanical vector forces in the body and the autonomic nervous system: basic requirements for any mechanical technique to engender long-term improvements in autonomic function as well as in the functional efficiency of the respiratory, cardiovascular, and brain systems. Kullok S, et al. **Med Hypotheses** 1990 Feb;31(2):91–7 (38 ref.)
Cardio-vascular events at defecation: are they unavoidable? Sikirov BA. **Med Hypotheses** 1990 Jul;32(3):231–3
Effects of hydraulic circuit training on cardiovascular function. Haennel R, et al. **Med Sci Sports Exerc** 1989 Oct; 21(5):605–12
Physiological responses to different roller skiing techniques. Hoffman MD, et al. **Med Sci Sports Exerc** 1990 Jun; 22(3):391–6
Cardiovascular responses to upper body exercise in normals and cardiac patients. Miles DS, et al. **Med Sci Sports Exerc** 1989 Oct;21(5 Suppl):S126–31 (35 ref.)
J.B. Wolffe memorial lecture. Neural control of the circulation during exercise. Mitchell JH. **Med Sci Sports Exerc** 1990 Apr;22(2):141–54 (72 ref.)
Modeling the effect of alterations in hemoglobin concentration on VO2max. Warren GL, et al. **Med Sci Sports Exerc** 1989 Oct;21(5):526–31 (40 ref.)
Role of the medullary vasomotor centre in the development of plateau waves. Ishii H, et al. **Neurol Res** 1989 Sep; 11(3):186–90
Serotonin receptors: clinical implications. Glennon RA. **Neurosci Biobehav Rev** 1990 Spring;14(1):35–47 (183 ref.)
Regional hemodynamic effects produced following application of L-glutamic acid to the ventral medullary surface of the cat. Gatti PJ, et al. **Neurosci Lett** 1990 Jan 22;108(3):284–8
Vasomotor neurons in the rostral ventrolateral medulla are organized topographically with respect to type of vascular bed but not body region. McAllen RM, et al. **Neurosci Lett** 1990 Mar 2;110(1–2):91–6
Evidence that neurons of the central amygdaloid nucleus directly project to the site concerned with circulatory and respiratory regulation in the ventrolateral nucleus of the cat: a WGA-HRP study. Takayama K, et al. **Neurosci Lett** 1990 Feb 16;109(3):241–6
Activation of brainstem endorphinergic neurons causes cardiovascular depression and facilitates baroreflex bradycardia. Mastrianni JA, et al. **Neuroscience** 1989; 33(3):559–66
Age differences in cardiovascular and cognitive performance under noise conditions. Harrison DW, et al. **Percept Mot Skills** 1989 Oct;69(2):547–54
Cardiovascular responses in ageing: a review. Docherty JR. **Pharmacol Rev** 1990 Jun;42(2):103–25 (263 ref.)
Ultrasound technology and space cardio-vascular medicine. Arbeille P, et al. **Physiologist** 1990 Feb;33(1 Suppl):S159–62 (6 ref.)
Physiologic bases for increased G-level and G-duration tolerances. Burton RR. **Physiologist** 1990 Feb;33(1 Suppl):S125–7 (10 ref.)
The effects of a 10-day period of head-down tilt on the cardiovascular responses to intravenous saline loading. Gaffney FA, et al. **Physiologist** 1990 Feb;33(1 Suppl):S171–2
Cardiovascular responses to sustained acceleration. Glaister DH. **Physiologist** 1990 Feb;33(1 Suppl):S121–4 (15 ref.)
Cardiovascular deconditioning during weightlessness simulation and the use of lower body negative pressure as a countermeasure to orthostatic intolerance. Güell A, et al. **Physiologist** 1990 Feb;33(1 Suppl):S31–3
Microcomputer-based monitoring of cardiovascular responses to microgravity simulation (–7 degrees HDT). Länsimies E, et al. **Physiologist** 1990 Feb;33(1 Suppl):S59–62

Fluid/electrolyte balance and cardiovascular responses: head-down tilted rats. Musacchia XJ, et al. **Physiologist** 1990 Feb;33(1 Suppl):S46-7

Cardiovascular responses to moderate exercise during water immersion in woman. Nagano J, et al. **Physiologist** 1990 Feb;33(1 Suppl):S44-5

Toward an univocous interpretation of cardiovascular biomechanics in hyper and microgravity. Quandieu P, et al. **Physiologist** 1990 Feb;33(1 Suppl):S73-6 (199 ref.)

Effects of lower body negative pressure on cardiovascular adaptation to one month head-down bedrest. Riviere D, et al. **Physiologist** 1990 Feb;33(1 Suppl):S36-7

Cardiovascular function of man exposed to LBNP tests. Savilov AA, et al. **Physiologist** 1990 Feb;33(1 Suppl):S128-32

Comparative study of cardiovascular responses in primates exposed to tilt test and LBPP. Tran CC, et al. **Physiologist** 1990 Feb;33(1 Suppl):S50-1

The central neural organization of cardiovascular control. **Prog Brain Res** 1989;81:1-334

Role of the ventrolateral medulla in the cardiovascular responses to changes in the carbon dioxide tension in the arterial blood. Lioy F. **Prog Brain Res** 1989;81:205-13 (57 ref.)

The relationship between cardiovascular responses in the laboratory and in the field. Johnston DW, et al. **Psychophysiology** 1990 Jan;27(1):34-44

Interaction between angiotensin III and alpha 2-adrenoceptors of the medulla oblongata involved in cardiovascular regulation in the rat. Yin DC, et al. **Regul Pept** 1990 Jun;29(1):59-72

Comparison of cardiovascular responses to noise during waking and sleeping in humans. Di Nisi J, et al. **Sleep** 1990 Apr;13(2):108-20

Neural mechanisms involved in cardiovascular control during affective behaviour. Spyer KM. **Trends Neurosci** 1989 Dec;12(12):506-13 (32 ref.)

Hormonal and cardiorespiratory changes following simulated saturation dives to 4 and 11 ATA. Mateev G, et al. **Undersea Biomed Res** 1990 Jan;17(1):1-11

[Maternal cardiovascular adaptation in pregnancy] Hohmann M, et al. **Geburtshilfe Frauenheilkd** 1990 Apr;50(4):255-62 (65 ref.) (Eng. Abstr.) **(Ger)**

[Atrial natriuretic peptide. I: Biochemistry, general pharmacology and physiology. A review] Vollmar AM. **Tierarztl Prax** 1990 Jun;18(3):219-23 (29 ref.) (Eng. Abstr.) **(Ger)**

[Our non-humanoid contemporaries of cardiovascular protective value] Leu HJ. **Vasa** 1990;19(2):174-5 **(Ger)**

[Reactions of the cardiopulmonary and the motor system in work with medium-sized muscles] Frauendorf H, et al. **Z Gesamte Hyg** 1990 Jul;36(7):357-60 (Eng. Abstr.) **(Ger)**

[Reaction of the cardiovascular system with lifting and lowering of loads] Peikert D, et al. **Z Gesamte Hyg** 1990 May;36(5):266-8 (Eng. Abstr.) **(Ger)**

[Cardiocirculatory adaptations during the initial phases of pregnancy. An echo-Doppler assessment] Gaddi O, et al. **Minerva Cardioangiol** 1989 Nov;37(11):481-7 (Eng. Abstr.) **(Ita)**

[The role of reflexes from the coronary vessels in the regulation of the circulatory system] Sendur R. **Folia Med Cracov** 1989;30(3-4):147-61 (60 ref.) (Eng. Abstr.) **(Pol)**

[Blood circulation and blood gas composition in various sections of the cardiovascular system in the healthy subject during measured physical loading] Chestukhin VV, et al. **Fiziol Cheloveka** 1989 Sep-Oct;15(5):75-9 **(Rus)**

[Indices of respiration and the cardiovascular system during the bicycle ergometry test in boys 10-11 years of age] Korol' VM, et al. **Fiziol Cheloveka** 1989 Jul-Aug;15(4):48-55 **(Rus)**

[A computer method for finding the amplitude-frequency characteristics of the cardiorespiratory system in the task of adaptation to alpine conditions] Nidekker IG, et al. **Fiziol Cheloveka** 1989 Nov-Dec;15(6):154-8 **(Rus)**

[The participation of cardiac, vascular and coronary components in the shaping of cardiovascular reactions to head-down tilt exposures] Osadchiĭ LI, et al. **Fiziol Zh SSSR** 1990 Feb;76(2):219-26 (Eng. Abstr.) **(Rus)**

[Hygienic substantiation of the information and energy models of variable noise] Kolganov AV. **Gig Sanit** 1989 Oct;(10):15-8 (Eng. Abstr.) **(Rus)**

[Study of the effect of noise of varying intensity and duration on human body by using mathematical planning] Sidorenko ZhG, et al. **Gig Sanit** 1989 Oct;(10):18-21 (Eng. Abstr.) **(Rus)**

[Individual typological characteristics of the cardiovascular reaction to partial body cooling in workers on field-watch assignments] Divert GM, et al. **Gig Tr Prof Zabol** 1989;(10):25-8 (Eng. Abstr.) **(Rus)**

[Use of the tetrapolar chest rheography method and Starr's formula in physiological studies] Mazaĭ GG, et al. **Gig Tr Prof Zabol** 1989;(11):52-3 **(Rus)**

[Adrenergic receptors in the cardiovascular system (their topography, function and regulation)] Korkushko OV, et al. **Kardiologiia** 1989 Jul;29(7):124-8 (74 ref.) **(Rus)**

[Medical studies during an 8-month flight on the orbital complex "Saliut-7"—"Soiuz-T"] Gazenko OG, et al. **Kosm Biol Aviakosm Med** 1990 Jan-Feb;24(1):9-14 (Eng. Abstr.) **(Rus)**

[Medical studies concerning the program of long-term manned space flights on "Saliut-7"-"Soiuz-T" orbital complex] Gazenko OG, et al. **Kosm Biol Aviakosm Med** 1990 Mar-Apr;24(2):9-15 (Eng. Abstr.) **(Rus)**

[Ways and means of creating optimal functional conditions for pilot trainees before flight activities] Ivanov VI, et al. **Kosm Biol Aviakosm Med** 1990 Mar-Apr;24(2):18-21 (Eng. Abstr.) **(Rus)**

[Effect of low-frequency electromagnetic fields on the individual functional systems of the body] Zagorskaia EA, et al. **Kosm Biol Aviakosm Med** 1990 May-Jun;24(3):3-11 (116 ref.) (Eng. Abstr.) **(Rus)**

[Functional mechanisms of the adaptation of the cardiovascular system in premature children] Dashichev VV, et al. **Pediatriia** 1989;(10):28-30 (Eng. Abstr.) **(Rus)**

[Characteristics of adaptation of the cardiovascular system of newborn infants born to mothers with hypertension syndrome] Titchenko LI, et al. **Pediatriia** 1990;(6):108-9 **(Rus)**

[Daily rhythms as indicators of the human cardiopulmonary system] Stepanova SI. **Probl Kosm Biol** 1989;64:34-60 (85 ref.) **(Rus)**

[Chronobiological aspects of studying the cardiovascular system] Komarov FI, et al. **Ter Arkh** 1990;62(4):151-6 (84 ref.) **(Rus)**

[The effect of tobacco smoking on the function of the cardiorespiratory system of operators] Filimonova GA, et al. **Vrach Delo** 1989 Nov;(11):106-8 (Eng. Abstr.) **(Rus)**

[Mathematical methods of analysing the heart rhythm in assessing the function of the cardiovascular system in workers manufacturing kormolizin] Grigorovich VD, et al. **Vrach Delo** 1990 May;(5):95-7 (Eng. Abstr.) **(Rus)**

[Hemodynamics and mechanisms of the regulation of the cardiovascular system in workers in hot shops] Mazaĭ GG, et al. **Vrach Delo** 1990 Mar;(3):113-5 (Eng. Abstr.) **(Rus)**

[The use of the orthostatic test for determining the work capacity of convalescents] Reshetiuk AL, et al. **Vrach Delo** 1990 Jun;(6):100-3 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Variability of heart rate in students before examinations. Broniš M, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):256-7

Hathayogic exercise jalandharabandha in its effect on cardiovascular response to apnoea. Lepičovská V, et al. **Act Nerv Super (Praha)** 1990 Jun;32(2):99-114

High cardiovascular reactivity to psychological challenge associated alternatively with high density of beta-adrenergic receptors or with high resting level of catecholamines. Pacák K, et al. **Act Nerv Super (Praha)** 1989 Jun;31(2):96-9

Wake and sleep cardiovascular reflex tests and GH profiles in diabetic patients. Silvestri R, et al. **Acta Diabetol Lat** 1989 Jul-Sep;26(3):237-44

Non-invasive cardiovascular monitoring in Shy-Drager syndrome. Bellomo G, et al. **Acta Neurol (Napoli)** 1989 Aug;11(4):279-84

Cardiovascular reflexes in Parkinson's disease: long-term effects of levodopa treatment on de novo patients. Camerlingo M, et al. **Acta Neurol Scand** 1990 Apr;81(4):346-8

Somatic findings in children and adolescents with anorexia nervosa. Marcus A, et al. **Acta Paedopsychiatr** 1989;52(1):1-11

Cardiovascular and sympathoadrenal responses to mental stress: a study of sensory intake and rejection reactions. Freyschuss U, et al. **Acta Physiol Scand** 1990 May;139(1):173-83

Reduced cardiovascular efficiency and increased reactivity during exercise in borderline and established hypertension. Marraccini P, et al. **Am J Hypertens** 1989 Dec;2(12 Pt 1):913-6

Role of beta 2-adrenoceptors in cardiovascular response of rats to acute stressors. Kirby RF, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H683-8

Effects of hypercapnia and hypoxia on the cardiovascular system: vascular capacitance and aortic chemoreceptors. Rothe CF, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H932-9

Cardiovascular, renal, and endocrine responses in male quadriplegics during head-out water immersion. Tajima F, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1424-30

Cardiovascular response to acute airway obstruction and hypoxia. Chapman KR, et al. **Am Rev Respir Dis** 1989 Nov;140(5):1222-7

Cardiovascular reactions and respiratory events during platelet activating factor-induced shock. Felix SB, et al. **Basic Res Cardiol** 1990 May-Jun;85(3):217-26

Restricted cardiovascular and cerebral performance of intra-uterine growth retarded newborn piglets during severe hypoxia. Bauer R, et al. **Biomed Biochim Acta** 1989;48(9):697-705

The effect of endurance running training on asthmatic adults. Freeman W, et al. **Br J Sports Med** 1989 Jun;23(2):115-22

Sexual dimorphism in vasopressin and cardiovascular response to hemorrhage in the rat. Crofton JT, et al. **Circ Res** 1990 May;66(5):1345-53

Cardiovascular reactivity in acute and chronic renal hypertensive dogs. Page IH, et al. **Circ Res** 1966 Apr;18(4):379-87

Cardiac dysfunction in a rat model of chronic bacteremia. Pawlush DG, et al. **Circ Shock** 1990 Jul;31(3):269-79

Altered cardiovascular and neurohumoral responses to head-up tilt after heart-lung transplantation. Banner NR, et al. **Circulation** 1990 Sep;82(3):863-71

Cardiovascular correlates of predisposition to hypertension in pups of one kidney: one clip renal hypertensive dams. Jimenez AE, et al. **Clin Exp Hypertens [A]** 1990;12(2):227-41

Studies using a canine model to investigate the cardiovascular abnormality of and potential therapies for septic shock. Natanson C. **Clin Res** 1990 Apr;38(2):206-14 (23 ref.)

The effects of mechanical ventilation on the cardiovascular system. Pinsky MR. **Crit Care Clin** 1990 Jul;6(3):663-78 (87 ref.)

Incidence, physiologic description, compensatory mechanisms, and therapeutic implications of monitored events. Shoemaker WC, et al. **Crit Care Med** 1989 Dec;17(12):1277-85

Cough test to assess cardiovascular autonomic reflexes in diabetes. Cardone C, et al. **Diabetes Care** 1990 Jul;13(7):719-24

Oesophageal transit time and cardiovascular autonomic neuropathy in type 1 (insulin-dependent) diabetes mellitus. Vannini P, et al. **Diabetes Res** 1989 May;11(1):21-5

Cardiac and respiratory correlations with unit discharge in epileptic human temporal lobe. Frysinger RC, et al. **Epilepsia** 1990 Mar-Apr;31(2):162-71

Autonomic nervous system function in Baltic myoclonus epilepsy. Kälviäinen R, et al. **Epilepsy Res** 1990 Apr;5(3):251-4

Type of diabetic sensory neuropathy and autonomic involvement. Idiaquez J. **Funct Neurol** 1989 Oct-Dec;4(4):399-402

Pharmacologic evaluation of cardiovascular reflex responses in migraine patients: lack of central sympathetic modulation? Munari L, et al. **Funct Neurol** 1989 Oct-Dec;4(4):375-8

Cytoreductive surgery for advanced ovarian cancer: cardiovascular evaluation with pulmonary artery catheters. Eisner RF, et al. **Gynecol Oncol** 1990 Jun;37(3):311-4

Effect of the alpha 2-adrenergic antagonist yohimbine on orthostatic tolerance. Farrow S, et al. **Hypertension** 1990 Jun;15(6 Pt 2):877-80

Arterial baroreceptor reflex modulation of sympathetic-cardiovascular adjustments to heat stress [see comments] Kregel KC, et al. **Hypertension** 1990 May;15(5):497-504 Comment in: Hypertension 1990 May;15(5):505-7.

Cardiovascular dysautonomia in patients with lepromatous leprosy. Shah PK, et al. **Indian J Lepr** 1990 Jan-Mar;62(1):91-7

Cardiovascular reactivity to stress: an examination of familial trends. Glass JC, et al. **Int J Psychophysiol** 1990 Jul;9(1):1-11

Muscular, respiratory and cardiovascular responses of quadriplegic persons to an F. E. S. bicycle ergometer conditioning program. Phillips CA, et al. **Int J Rehabil Res** 1989;12(2):147-57

Assessment of autonomic nerve function in myotonic dystrophy. Olofsson BO, et al. **J Auton Nerv Syst** 1990 Mar;29(3):187-92

Anxiety and coronary heart disease in midlife. Rahe RH. **J Clin Psychiatry** 1989 Nov;50 Suppl:36-9 (14 ref.)

Cardiopulmonary baroreflex control of brachial artery diameter in sustained essential hypertension. London GM, et al. **J Hypertens** 1989 Nov;7(11):879-83

Effect of angiotensin converting enzyme inhibition on cardiovascular regulation during reflex sympathetic activation in sodium-replete patients with essential hypertension. Morganti A, et al. **J Hypertens** 1989 Oct;7(10):825-35

Cardiovascular, biochemical and hormonal changes during food-induced hypotension in chronic autonomic failure. Mathias CJ, et al. **J Neurol Sci** 1989 Dec;94(1-3):255-69

Type A behavior, personality hardiness, and cardiovascular responses to stress. Contrada RJ. **J Pers Soc Psychol** 1989 Nov;57(5):895-903

Analysis of factors that contribute to cardiovascular changes induced in the cat by graded levels of systemic hypoxia. Marshall JM, et al. **J Physiol (Lond)** 1989 May;412:429-48

Interpersonal behavior and cardiovascular reactivity in pharmacologically-treated hypertensives. Delamater AM, et al. **J Psychosom Res** 1989;33(3):335-45

An effect of trauma on human cardiovascular control: baroreflex suppression. Anderson ID, et al. **J Trauma** 1990 Aug;30(8):974-81; discussion 981-2

Cardiovascular reflexes during vibration stress. Matoba T, et al. **Kurume Med J** 1990;37 Suppl:S61-71 (43 ref.)

Cardiovascular reflexes in workers exposed to hand-arm vibration. Virokannas H. **Kurume Med J** 1990;37 Suppl:S101-7

Cardiovascular responses during upright and semi-recumbent cycle ergometry testing. Walsh-Riddle M, et al. **Med Sci Sports Exerc** 1989 Oct;21(5):581-5

Excitotoxic lesions of the paraventricular hypothalamus: metabolic and cardiac effects. Rockhold RW, et al. **Neuropharmacology** 1990 Jul;29(7):663-73

Cardiovascular and metabolic responses to severe head injury. Clifton GL, et al. **Neurosurg Rev** 1989;12 Suppl 1:465-73

Heart rate variability and the reaction of heart rate to atropine in brain dead patients. Siemens P, et al. **Neurosurg Rev** 1989;12 Suppl 1:282-4

Maturation of cardiorespiratory interactions in spontaneous recovery from hypoxic apnea (autoresuscitation). Gershan WM, et al. **Pediatr Res** 1990 Aug;28(2):87–93

Blood flow velocity waveforms in the fetal cardiac outflow tract as a measure of fetal well–being in intrauterine growth retardation. Groenenberg IA, et al. **Pediatr Res** 1990 Apr; 27(4 Pt 1):379–82

Simulation of steady cardiovascular flow in the presence of stenosis using a finite element method. Sud VK, et al. **Phys Med Biol** 1990 Jul;35(7):947–59

Cardiovascular reactivity, hostility, and family history of hypertension. Jorgensen RS, et al. **Psychother Psychosom** 1988;50(4):216–22

Attenuation of the acute cardiovascular responses to haemorrhage by tissue injury in the conscious rat. Little RA, et al. **Q J Exp Physiol** 1989 Nov;74(6):825–33

Functional cardiovascular evaluation by magnetic resonance imaging. White RD, et al. **Top Magn Reson Imaging** 1990 Mar;2(2):31–48 (78 ref.)

How low can we go? Is there a way to know? [editorial] Stehling L, et al. **Transfusion** 1990 Jan;30(1):1–3

[Dynamic changes in indices of cardiovascular hemodynamics in patients with chronic obstructive lung disease] Marinov Kh, et al. **Vutr Boles** 1989;28(4):28–33 **(Bul)**

[The hemodynamics of the lung circulation of minipigs after experimentally–caused Sedlarik's pulmonary embolism. II. Modification of the hemodynamics of the heart and circulation by thoracotomy] Ebner E, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(6):347–50 (Eng. Abstr.) **(Ger)**

[The effect of a psychoemotional load on the cardiovascular system and catecholamines in subjects with different levels of arterial pressure] Kruchinina NA, et al. **Fiziol Zh SSSR** 1990 Jan;76(1):33–40 (Eng. Abstr.) **(Rus)**

[Cardiovascular reflexes in acute occlusion of the coronary artery] Syrenskii AV, et al. **Fiziol Zh SSSR** 1989 Oct; 75(10):1417–23 (Eng. Abstr.) **(Rus)**

[Energy expenditure and response of the cardiovascular system during performance of everyday exercises by patients with ischemic heart disease of various functional classes] Aronov DM, et al. **Kardiologiia** 1989 Nov; 29(11):79–83 (Eng. Abstr.) **(Rus)**

[Response of the cardiovascular system to acetylcholine test in patients with bronchial asthma] Khamzamulin RO, et al. **Klin Med (Mosk)** 1990 Apr;68(4):66–9 (Eng. Abstr.) **(Rus)**

[Assessment of functional reserves of the body and the prognosis in the early postoperative period] Man'kov IuU, et al. **Voen Med Zh** 1989 Jul;(7):32–4 **(Rus)**

[Changes in the interrelationships between the autonomic nervous and cardiovascular systems during different weather and heliogeophysical conditions in patients with myocardial infarct and hypertension] Tsibadze AD. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 May–Jun; (3):22–5 (Eng. Abstr.) **(Rus)**

[A comparative assessment of changes in cardiovascular function under the influence of sodium chloride baths and underwater douche–massage for optimizing programs for the sanatorium treatment of patients with ischemic heart disease] Turgenev VV, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Sep–Oct;(5):13–6 **(Rus)**

[The effect of peloid therapy on cardiovascular function in patients with pulmonary tuberculosis] Strelis AK, et al. **Vrach Delo** 1989 Sep;(9):56–8 (Eng. Abstr.) **(Rus)**

[Function of the cardiovascular system and treatment outcomes in arterial brain aneurysms in the hemorrhagic period] Lebedev VV, et al. **Zh Vopr Neirokhir** 1989 May–Jun;(3):3–8 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Normal tissue tolerance to irradiation of the cardiovascular system. Stewart JR. **Front Radiat Ther Oncol** 1989;23:302–9 (26 ref.)

[Biological effect and hygienic standardization of constant magnetic fields as the environmental and occupational factors] Pa'ltsev IuP. **Gig Sanit** 1989 Oct;(10):55–9 (37 ref.) **(Rus)**

[Methodologic approaches to the study of the effect of low levels of non–ionizing radiation on the health status of humans in populated areas] Stoian EF, et al. **Gig Sanit** 1989 Jun;(6):30–1 **(Rus)**

[Hygienic evaluation and the problems of standardization of magnetic fields with the frequency of 50 Hz] Ziubanova LF, et al. **Gig Sanit** 1989 Oct;(10):30–2 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Chronological history of the Society of Cardiovascular and Interventional Radiology from 1973 to 1989. Crummy AB. **Radiology** 1990 Mar;174(3 Pt 2):932–6

RADIONUCLIDE IMAGING

Epidemiology of cardiac diseases and need for cardiovascular application of nuclear medicine in Italy. Pirelli S, et al. **J Nucl Med Allied Sci** 1989 Oct–Dec;33(4):359–62

SURGERY

The 37th scientific meeting of the International Society for Cardiovascular Surgery—North American Chapter. New York, N.Y., June 19 and 20, 1989. Abstracts. **J Cardiovasc Surg (Torino)** 1990 May–Jun;31(3):385–98

An outbreak of non–A, non–B hepatitis associated with the infusion of a commercial factor IX complex during cardiovascular surgery. Gerber AR, et al. **Vox Sang** 1990; 58(4):270–5

ULTRASTRUCTURE

Cardiovascular purinoceptors. Olsson RA, et al. **Physiol Rev** 1990 Jul;70(3):761–845 (1468 ref.)

CARDIOVERSION see ELECTRIC COUNTERSHOCK

CAREER CHOICE

The role of partners in selecting a residency. Arnold RM, et al. **Acad Med** 1990 Mar;65(3):211–5

Racial–ethnic background and specialty choice: a study of U.S. medical school graduates in 1987. Babbott D, et al. **Acad Med** 1989 Oct;64(10):595–9

Characteristics of medical schools related to the choice of family medicine as a specialty. Campos–Outcalt D, et al. **Acad Med** 1989 Oct;64(10):610–5

Early and final preferences for pediatrics as a specialty: a study of U.S. medical school graduates in 1983. Coffin SE, et al. **Acad Med** 1989 Oct;64(10):600–5

Does an ambulatory–care experience influence third–year students to select a career in internal medicine? Fincher RM, et al. **Acad Med** 1990 Jun;65(6):421

Initial career choices of medical school honors graduates in the early 1970s and 1980s. Golden WE. **Acad Med** 1989 Oct;64(10):616–21

Major changes in medical careers following medical school graduation: when, how often, and why. Jennett PA, et al. **Acad Med** 1990 Jan;65(1):48–9

Specialty choices at one medical school: recent trends and analysis of predictive factors. Lieu TA, et al. **Acad Med** 1989 Oct;64(10):622–9

Likelihood of contact with AIDS patients as a factor in medical students' residency selections. Ness R, et al. **Acad Med** 1989 Oct;64(10):588–94

Effective use of medical school alumni to improve career counseling for students. Regan–Smith M, et al. **Acad Med** 1989 Oct;64(10):574–5

Factors influencing medical students to choose primary care or non–primary care specialties. Rogers LQ, et al. **Acad Med** 1990 Sep;65(9 Suppl):S47–8

Controllable lifestyle: a new factor in career choice by medical students. Schwartz RW, et al. **Acad Med** 1989 Oct; 64(10):606–9

The controllable lifestyle factor and students' attitudes about specialty selection. Schwartz RW, et al. **Acad Med** 1990 Mar;65(3):207–10

The effect of the Vietnam War on numbers of medical school applicants. Singer A. **Acad Med** 1989 Oct;64(10):567–73 (16 ref.)

Specialty choice. Swanson AG. **Acad Med** 1989 Oct; 64(10):583

Personality types of family practice residents in the 1980s. Taylor AD, et al. **Acad Med** 1990 Mar;65(3):216–8

Do person–oriented medical students choose person–oriented specialties? Do technology–oriented medical students avoid person–oriented specialties? Zeldow PB, et al. **Acad Med** 1990 Sep;65(9 Suppl):S45–6

Career change in early adulthood: developmental considerations. Kaplan EH. **Adolesc Psychiatry** 1989; 16:259–77

Educational and career aspirations of secondary school students in Grenada following the American intervention. Chadwick BA, et al. **Adolescence** 1989 Fall;24(95):523–40

Problems, plans, and ambitions of German and foreign adolescents. Malhotra MK. **Adolescence** 1989 Fall; 24(95):741–53

Career stability in public service professionals: a longitudinal investigation based on biographical interviews. Cherniss C. **Am J Community Psychol** 1989 Aug;17(4):399–422

Career counseling practices in pediatric residency training programs. Greenberg LW, et al. **Am J Dis Child** 1990 Apr; 144(4):497–501

A career path in emergency and critical care medicine: the time is ripe. Crippen D. **Am J Emerg Med** 1990 Mar; 8(2):162–4

Factors influencing pharmacists' selection of their first practice setting. Carter EA, et al. **Am J Hosp Pharm** 1989 Nov;46(11):2294–300

Pursuing a career in clinical pharmacy [letter] D'Achille KM. **Am J Hosp Pharm** 1990 May;47(5):1016–7

Career activities of women involved in two California pharmacy associations. Sauer BL, et al. **Am J Hosp Pharm** 1989 Sep;46(9):1826–8

The bottom line. Green J. **Am J Nurs** 1990 Jan;90(1):142

Variables affecting specialty choice in occupational therapy. Wittman PP, et al. **Am J Occup Ther** 1989 Sep;43(9):602–6

Career choices of general preventive medicine residency graduates: 1981–1986. Baca CT, et al. **Am J Prev Med** 1990 Mar–Apr;6(2):112–6

A new breed of psychiatrist? [editorial] Funkenstein DH. **Am J Psychiatry** 1967 Aug;124(2):226–8

Controllable lifestyle as a factor in choosing a medical career [editorial] Griffen WO Jr, et al. **Am J Surg** 1990 Feb; 159(2):189–90

Comparison of women pharmacy and nursing students. Rascati KL. **Am Pharm** 1990 Jun;NS30(6):49–53

Reforms needed in medical practice and education [letter; comment] **Ann Intern Med** 1989 Nov 15;111(10):854–5 Comment on: Ann Intern Med 1989 Sep 1;111(5):433–6.

Recruiting for medicine [letter] **Ann Intern Med** 1989 Dec 15;111(12):1046–7

Primary care internal medicine: a challenging career choice for the 1990s [see comments] Lipkin M Jr, et al. **Ann Intern Med** 1990 Mar 1;112(5):371–8 Comment in: Ann Intern Med 1990 Jun 1;112(11):884–5.

Recruiting for occupational medicine [letter; comment] Teichman R. **Ann Intern Med** 1989 Dec 1;111(11):953–4 Comment on: Ann Intern Med 1989 Sep 1;111(5):433–6.

The beginning of baccalaureate nursing education at the University of Kansas: a midwestern experience. Veith S. **ANS** 1990 Jul;12(4):63–73

Performance appraisal and career counselling for senior house officers. Ward Platt M, et al. **Arch Dis Child** 1990 Jul;65(7):796–801

Psychiatry as a career choice. Mowbray RM, et al. **Aust N Z J Psychiatry** 1990 Mar;24(1):57–64

Factors that determine medical student interest in psychiatry. Ney PG, et al. **Aust N Z J Psychiatry** 1990 Mar;24(1):65–76

Today's students and doctors need career counselling as well as vocation [letter] **Br J Hosp Med** 1989 Dec;42(6):509

Doctor on the field. Webb J. **Br J Sports Med** 1989 Dec; 23(4):209–10

The world of youth and work. Halperin S. **Bull N Y Acad Med** 1989 Mar;65(3):367–72

Educating native MDs: "always go back and serve your people in some larger way". Gilmore A. **Can Med Assoc J** 1990 Jan 15;142(2):160–2

Why are some specialties so unpopular? [letter] Leader A. **Can Med Assoc J** 1990 Feb 15;142(4):287

Specialty career decision making of third–year medical students. Nieman LZ, et al. **Fam Med** 1989 Sep–Oct; 21(5):359–63

Nebraska premedical family practice course elective [letter] Paulman PM, et al. **Fam Med** 1990 May–Jun;22(3):240

The change in specialty preference by medical students over time: an analysis of students who prefer family medicine. Rabinowitz HK. **Fam Med** 1990 Jan–Feb;22(1):62–3

Physician satisfaction with career choices in geriatrics. Siu AL, et al. **Gerontologist** 1990 Aug;30(4):529–34

Psychiatrists choosing psychoanalytic training at mid–career. Goodwin J, et al. **Hillside J Clin Psychiatry** 1989; 11(1):43–54

Managed care industry offers career alternatives. Droste T. **Hospitals** 1989 Nov 20;63(22):81

The careers of women dentists in the university. Ahlberg K. **Int Dent J** 1990 Jun;40(3):135–8

A look at the careers of women dentists in developing countries. Mmembe CK. **Int Dent J** 1990 Jun;40(3):145–8

Career identification and women's attitudes toward retirement. Erdner RA, et al. **Int J Aging Hum Dev** 1990; 30(2):129–39

Factors influencing radiologists to choose research careers. Hillman BJ, et al. **Invest Radiol** 1989 Nov;24(11):842–8

Factors influencing choice of academic or practice careers in radiology. Wood PS, et al. **Invest Radiol** 1990 Jun; 25(6):675–7

Identity status research: implications for career counseling. Raskin PM. **J Adolesc** 1989 Dec;12(4):375–88 (51 ref.)

Male and female nurses in intensive–care wards in The Netherlands. Dassen TW, et al. **J Adv Nurs** 1990 Apr; 15(4):387–93

Nursing: a career of yesterday? Firby PA. **J Adv Nurs** 1990 Jun;15(6):732–7

Commentary leaves reader with several questions [letter; comment] Harder JD. **J Am Diet Assoc** 1990 Jun;90(6):790 Comment on: J Am Diet Assoc 1989 Oct;89(10):1441–3.

Career–related psychological preferences of dietetic and restaurant/hotel and institution management students. Houtz CJ, et al. **J Am Diet Assoc** 1990 Jan;90(1):104–6

Relief veterinarian: a flexible alternative. D'Orazio DH. **J Am Vet Med Assoc** 1990 Aug 1;197(3):340–1

Industrial medicine in the land of Oz. Hodgkins EM. **J Am Vet Med Assoc** 1989 Oct 1;195(7):922–3

The long–term impact of a training program in maxillofacial prosthodontics. Gotay CC, et al. **J Cancer Educ** 1988; 3(3):181–6

Career opportunities for physicians in the pharmaceutical industry. Spilker B. **J Clin Pharmacol** 1989 Dec; 29(12):1069–76

Who goes into family medicine? [see comments] Rezler AG, et al. **J Fam Pract** 1989 Dec;29(6):652–6 Comment in: J Fam Pract 1990 May;30(5):520.

Specialty selection: trends over time in one medical school. Senf JH. **J Fam Pract** 1990 Feb;30(2):217–8

On premedical advice. Dockery JL. **J Fla Med Assoc** 1989 Sep;76(9):809

Medicine as a vocation—1990. Manson A. **J Gen Intern Med** 1990 Mar–Apr;5(2):175–7

Medical student interest in combined internal medicine–pediatrics. Schubiner H, et al. **J Gen Intern Med** 1990 May–Jun;5(3):225–8

The road we have taken. Wartman SA. **J Gen Intern Med** 1989 Nov–Dec;4(6):522–6

Women chiropractors: issues of career and family. Mannington JV, et al. **J Manipulative Physiol Ther** 1989 Dec;12(6):434–9
An innovative strategy leads to funding. Corcoran LM, et al. **J Nurs Adm** 1990 Feb;20(2):9, 26
An innovative recruitment approach: day with a nurse. Andrews-Beard C, et al. **J Nurs Educ** 1990 Jan;29(1):40–2
Effect of a career decision-making course on the career planning of nursing students. Hay CL, et al. **J Nurs Educ** 1989 Sep;28(7):298–301
Nursing summer camp: a recruitment experience for high school students. Jaffe-Ruiz M, et al. **J Nurs Educ** 1989 Sep;28(7):322–3
High school students' perceptions of nursing as a career choice. Kohler PA, et al. **J Nurs Educ** 1990 Jan;29(1):26–30
Young scholars' program: an innovative educational recruitment strategy. Kowatsch J, et al. **J Nurs Educ** 1989 Nov;28(9):425–6
Midwifery. An international career. Vansintejan GA. **J Nurse Midwifery** 1989 Nov–Dec;34(6):355–8
Advice to a young scientist—regardless of age [editorial] Copp LA. **J Prof Nurs** 1989 Nov–Dec;5(6):295–6
Careers in nursing. McClure ML. **J Prof Nurs** 1990 May–Jun; 6(3):139
Sibling correlates of young adults' status attainment: ethnic group differences. Marjoribanks K. **J Psychol** 1989 Sep; 123(5):507–16
Correcting correctional nursing [letter] Moore EG. **J Psychosoc Nurs Ment Health Serv** 1990 Jun;28(6):36–7
Women doctors' career choice and commitment to medicine: implications for general practice. Wakeford RE, et al. **J R Coll Gen Pract** 1989 Mar;39(320):91–5
Effects of a persuasive communication on beliefs, attitudes, and career choice. Strader MK, et al. **J Soc Psychol** 1990 Apr;130(2):141–50
A piece of my mind. About 'face' [see comments] Richmond MA. **JAMA** 1989 Nov 10;262(18):2598 Comment in: JAMA 1990 May 2;263(17):2300–1.
Preference of anaesthesia as a career [letter] Jakhrani NK, et al. **JPMA** 1990 May;40(5):121–2
Scientists leaving science [letter] Horrobin DF. **Lancet** 1990 Mar 31;335(8692):796–7
Psychiatry as compared to other career choices: a survey of medical students in Hong Kong. Pan PC, et al. **Med Educ** 1990 May;24(3):251–7
Anaesthetics: career choices and experiences. Parkhouse J, et al. **Med Educ** 1990 Jan;24(1):52–67
The effect of first clinical clerkship on medical students' specialty choices. Potts MJ, et al. **Med Educ** 1989 Sep; 23(5):413–5
Women, families, and academic medicine. Bennett NM, et al. **N Y State J Med** 1990 Jun;90(6):284–5
Parenthood and practice. Scanlon AT. **N Y State J Med** 1990 Jun;90(6):326–7
Academic discipline, handedness and immune disorders. Temple CM. **Neuropsychologia** 1990;28(3):303–8
Why do physicians stop practicing obstetrics? The impact of malpractice claims. Rosenblatt RA, et al. **Obstet Gynecol** 1990 Aug;76(2):245–50
The pediatrician as a role model in the career choice of medical students. Strain JE. **Pediatrics** 1990 Mar; 85(3):364–5
Information-processing differences and laterality of students from different colleges and disciplines. Monfort M, et al. **Percept Mot Skills** 1990 Feb;70(1):163–72
Factors physical therapists use to make career decisions [see comments] Pearl MJ. **Phys Ther** 1990 Feb;70(2):105–7 Comment in: Phys Ther 1990 Jun;70(6):396–7.
Happiness revisited [letter; comment] Bennett DR. **Postgrad Med** 1990 Jan;87(1):37 Comment on: Postgrad Med 1989 Sep 15;86(4):13–5.
Effect of experience with nontraditional workers on psychological and social dimensions of occupational sex-role stereotyping by elementary school children. Bailey BA, et al. **Psychol Rep** 1990 Jun;66(3 Pt 2):1273–82
Relationship between response style on the Strong-Campbell Interest Inventory and Occupational Scales (for men). Broday SF. **Psychol Rep** 1990 Apr;66(2):374
Temporal stability of occupational interest inventories. Zarrella KL, et al. **Psychol Rep** 1990 Jun;66(3 Pt 2):1067–74
Influences affecting radiologists' choices of academic or private practice careers. Hillman BJ, et al. **Radiology** 1990 Feb;174(2):561–4
The influence of inborn athletic potential on choice of profession and exercise habits of paramedical students. Kruss J, et al. **S Afr Med J** 1989 Nov 18;76(10):538–41
Practice location factors influencing South Dakota School of Medicine graduates (1977–85). Jarratt LG, et al. **S D J Med** 1989 Dec;42(12):15–21
Male and female physicians: family and career comparisons. Uhlenberg P, et al. **Soc Sci Med** 1990;30(3):373–8
Medicine as a career: choices and consequences. Eschenbach K, et al. **Theor Med** 1989 Sep;10(3):217–29
Malpractice litigation as a factor in choosing a medical specialty. Pyskoty CE, et al. **West J Med** 1990 Mar; 152(3):309–12
[Occupational medicine references for career choice for students with chronic diseases of the spine] Hartmann H. **Beitr Orthop Traumatol** 1989 Jul;36(7):322–8 (Eng. Abstr.) **(Ger)**
[Woman physicians in the year 2000: new strategies for managing changing responsibilities in career and personal planning. Females in surgical specialties] Hasselblatt-Diedrich I. **Chirurg** 1989 Oct;60(10):suppl 163–6 **(Ger)**
[Professional prospects of young surgeons] Schade G. **Chirurg** 1990 Apr;61(4):suppl 61–2 **(Ger)**
[Preventive vocational measures for adolescents with asthma and allergies—a model project] Dorsch U, et al. **Pneumologie** 1990 Jul;44(7):905–8 (Eng. Abstr.) **(Ger)**
[Career choice of youths with chronic diseases] Hartmann H, et al. **Z Gesamte Hyg** 1989;35(8):510–1 (Eng. Abstr.) **(Ger)**
[Relation of vocational orientation/vocational education and illness status] Kolbe B. **Z Gesamte Hyg** 1990 Apr; 36(4):215–8 (Eng. Abstr.) **(Ger)**
[Effect of internship on the Israeli medical graduate] Maymon R. **Harefuah** 1990 Feb 15;118(4):237–40 (Eng. Abstr.) **(Heb)**
[Evaluation of the visual system of ophthalmic specialists to assess suitability for the profession] Kotania W. **Klin Oczna** 1989 Feb–Mar;91(2–3):67–8 (Eng. Abstr.) **(Pol)**
[Development of motivation among schoolchildren aged 12–14 years] Sergeta VN, et al. **Gig Sanit** 1990 Mar; (3):39–41 **(Rus)**
[Motivation for medical studies] Junas J, et al. **Cesk Zdrav** 1990 Feb;38(2):57–65 (Eng. Abstr.) **(Slo)**

CAREER MOBILITY

Major changes in medical careers following medical school graduation: when, how often, and why. Jennett PA, et al. **Acad Med** 1990 Jan;65(1):48–9
Evaluating clinical teachers for promotion. Rothman AI, et al. **Acad Med** 1989 Dec;64(12):774–5
Career change in early adulthood: developmental considerations. Kaplan EH. **Adolesc Psychiatry** 1989; 16:259–77
Comparing two causal models of career maturity for hearing-impaired adolescents. King S. **Am Ann Deaf** 1990 Spring;135(1):43–9
Career stability in public service professionals: a longitudinal investigation based on biographical interviews. Cherniss C. **Am J Community Psychol** 1989 Aug;17(4):399–422
Clinical career ladders: the Washington Hospital Center. Barbaccia JG, et al. **Am J Hosp Pharm** 1989 Nov; 46(11):2276–9
Clinical career ladders: the Moses H. Cone Memorial Hospital. Crouch JB, et al. **Am J Hosp Pharm** 1989 Nov; 46(11):2272–5
Clinical career ladders: Jewish Hospital of St. Louis. Manchester RF. **Am J Hosp Pharm** 1989 Nov; 46(11):2283–5
Clinical career ladders: Hamot Medical Center. Meyer JD, et al. **Am J Hosp Pharm** 1989 Nov;46(11):2268–71
Clinical career ladders: application to hospital pharmacy practice. Smith JE, et al. **Am J Hosp Pharm** 1989 Nov; 46(11):2259–62
Clinical career ladders: Thomas Jefferson University Hospital. Smith JE, et al. **Am J Hosp Pharm** 1989 Nov; 46(11):2263–7
Clinical career ladders: St. Vincent Hospital and Health Care Center. Wills TM, et al. **Am J Hosp Pharm** 1989 Nov; 46(11):2279–82
Career development in academic medicine. Applegate WB, et al. **Am J Med** 1990 Mar;88(3):263–7
Progressive career patterns versus mandated entry-level education. Donohue MV. **Am J Occup Ther** 1990 Aug; 44(8):759–62
The paradox of commencements and continuity [editorial] Bogdonoff MD. **Arch Intern Med** 1970 Jun;125(6):1078–9
Appointing directors: a new approach. Bilodeau M. **Dimens Health Serv** 1990 Feb;67(1):13–4
Anticipating the future: a national survey of family practice residency directors. Day TW, et al. **Fam Med** 1989 Sep–Oct;21(5):355–8
Testing a model of academic career development. Swee DE, et al. **Fam Med** 1989 Sep–Oct;21(5):350–4
NY nursing career ladder creates a win–win situation. Eubanks P. **Hospitals** 1990 Jun 5;64(11):59
Execs who switch careers get mixed results. Moran EJ. **Hospitals** 1990 Aug 20;64(16):44
Advanced degrees: where execs can go wrong. Moran EJ. **Hospitals** 1990 Jun 5;64(11):50
Faculty practice as a requirement for promotion and tenure: receptivity, risk, and threats perceived. Herr KA. **J Nurs Educ** 1989 Oct;28(8):347–53
How well is nursing coping with the balancing act? Rogers MA. **J Prof Nurs** 1989 Sep–Oct;5(5):247, 294
Upward mobility, status inconsistency, and psychological health. Ashford S. **J Soc Psychol** 1990 Feb;130(1):71–6
The status of women at one academic medical center. Breaking through the glass ceiling [see comments] Nickerson KG, et al. **JAMA** 1990 Oct 10;264(14):1813–7 Comment in: JAMA 1990 Oct 10; 264(14):1854–5.
The advancement of women in academic medicine [comment] Schaller JG. **JAMA** 1990 Oct 10;264(14):1854–5 Comment on: JAMA 1990 Oct 10;264(14):1813–7.
Lack of altruism questioned [letter; comment] Matthews D. **Phys Ther** 1990 Jun;70(6):396–7 Comment on: Phys Ther 1990 Feb;70(2):105–7.
What are you going to do about tail coverage [editorial] Griffin GC. **Postgrad Med** 1990 Sep 1;88(3):13, 16
Career paths of geriatric nurse practitioners employed in nursing homes. Radosevich DM, et al. **Public Health Rep** 1990 Jan–Feb;105(1):65–71
Patient careers in end-stage renal failure. Gerhardt U. **Soc Sci Med** 1990;30(11):1211–24
[Professional prospects of young surgeons] Schade G. **Chirurg** 1990 Apr;61(4):suppl 61–2 **(Ger)**

CARFECILLIN see under **CARBENICILLIN**

CARIBOU see under **REINDEER**

CARICATURES

Caricature: some considerations. Carroll M. **J Biocommun** 1989;16(4):8–13
Cartoons vs. realistic illustration: picture preferences of adolescent patients. Dirr KL, et al. **J Biocommun** 1989; 16(4):2–7
Cartooning: a humorous approach to medical and health education. McDermott TJ. **J Biocommun** 1989;16(4):20–7
Use of Chernoff faces to follow trends in laboratory data. Lott JA, et al. **J Clin Lab Anal** 1990;4(1):59–63
Very young infants yawn or cry after watching animated programs [letter] Mizukami K, et al. **J Dev Behav Pediatr** 1990 Jun;11(3):163
[Comics for traffic education: evaluation of a traffic safety campaign] Bonfadelli H. **Soz Praventivmed** 1989; 34(3):124–30 (Eng. Abstr.) **(Ger)**

HISTORY

The doctor dissected. Saffron MH. **Ohio Med** 1990 Jan; 86(1):4–6

CARIOGENIC AGENTS

see related
DIET, CARIOGENIC

PHARMACOLOGY

Simulation of natural enamel caries in vitro with methylcellulose acid gels: effect of addition of calcium and phosphate ions. Kotsanos N, et al. **J Biol Buccale** 1989 Sep;17(3):159–65

CARIOSTATIC AGENTS

see related
FLUORIDATION

[Fluoride with small children. Fluoride via salt or tablets? Prenatal up to the 8th year] Marthaler TM. **Schweiz Monatsschr Zahnmed** 1990;100(7):864–71 **(Ger, Fre)**

ADMINISTRATION & DOSAGE

Cariostatic efficacy of the combined use of fluorides. Marthaler TM. **J Dent Res** 1990 Feb;69 Spec No:797–800; discussion 820–3

METABOLISM

Tooth-bound fluoride and dental caries. Chow LC. **J Dent Res** 1990 Feb;69 Spec No:595–600; discussion 634–6 (52 ref.)

PHARMACOLOGY

Physicochemical perspectives on the cariostatic mechanisms of systemic and topical fluorides. Margolis HC, et al. **J Dent Res** 1990 Feb;69 Spec No:606–13; discussion 634–6 (70 ref.)
[Caries inhibiting effect of ammonium fluoride varnish in vitro] Shi ST. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Nov;24(6):353–5, 386 (Eng. Abstr.) **(Chi)**

THERAPEUTIC USE

[The comparative efficacy of local anticaries agents] Ivanova EN. **Stomatologiia (Mosk)** 1990 Mar–Apr;69(2):60–1 (Eng. Abstr.) **(Rus)**

CARISOPRODATE see **CARISOPRODOL**

CARISOPRODOL

Mail-order (veterinary) drug dependence [letter] Luehr JG, et al. **JAMA** 1990 Feb 2;263(5):657

CARMINE see under **ANTHRAQUINONES**

CARMUSTINE

ADMINISTRATION & DOSAGE

Palliative radio-chemotherapy with ifosfamide and BCNU for breast cancer patients with cerebral metastases. A 5-year experience. Lange OF, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S78–80
Comparisons between sensitive and resistant human tumor cell lines regarding effects of polyamine depletion on chloroethylnitrosourea efficacy. Seidenfeld J, et al. **Cancer Res** 1990 Feb 1;50(3):521–6
Early metabolic changes following chemotherapy of human

gliomas in vivo demonstrated by phosphorus magnetic resonance spectroscopy. Arnold DL, et al. **Invest Radiol** 1989 Dec;24(12):958–61

More on the question of chemotherapy for CNS glioma [letter] Ransohoff J. **Oncology (Williston Park)** 1987 Dec; 1(10):19

[Internal carotid arterial BCNU perfusion in the treatment of cerebral glioma] Wu ZL. **Chung Hua Wai Ko Tsa Chih** 1989 Jul;27(7):421–3, 446 (Eng. Abstr.) **(Chi)**

ADVERSE EFFECTS

Fatal necrotizing encephalopathy complicating treatment of malignant gliomas with intra-arterial BCNU and irradiation: a pathological study. Rosenblum MK, et al. **J Neurooncol** 1989 Sep;7(3):269–81

Delayed pulmonary fibrosis after nitrosourea therapy [editorial; comment] Limper AH, et al. **N Engl J Med** 1990 Aug 9;323(6):407–9 Comment on: N Engl J Med 1990 Aug 9;323(6):378–82.

Active lung fibrosis up to 17 years after chemotherapy with carmustine (BCNU) in childhood [see comments] O'Driscoll BR, et al. **N Engl J Med** 1990 Aug 9; 323(6):378–82 Comment in: N Engl J Med 1990 Aug 9;323(6):407–9.

ANALOGS & DERIVATIVES

Transport of amino acid amide sarcosinamide and sarcosinamide chloroethylnitrosourea in human glioma SK–MG–1 cells. Skalski V, et al. **Cancer Res** 1990 May 15;50(10):3062–6

Mechanisms of resistance to (2-chloroethyl)-3-sarcosinamide-1-nitrosourea (SarCNU) in sensitive and resistant human glioma cells. Skalski V, et al. **Mol Pharmacol** 1990 Sep;38(3):299–305

PHARMACOKINETICS

Permeability of two nitrosoureas, carmustine and fotemustine in rat cortex. Meulemans A, et al. **Chemotherapy** 1989; 35(5):313–9

The physiological disposition of the carcinostatic 1,3-bis(2-chloroethyl)-1-nitrosourea (BCNU) in man and animals. DeVita VT, et al. **Clin Pharmacol Ther** 1967 Jul–Aug;8(4):566–77

PHARMACOLOGY

DNA interstrand crosslinking and strand break repair in human glioma cell lines of varying [1,3-bis(2-chloroethyl)-1-nitrosourea] resistance. Ali-Osman F, et al. **Anticancer Res** 1990 May–Jun; 10(3):677–82

Pigmentation due to a new antitumor agent. Effects of topical application of BCNU [1,3-bis(2-chloroethyl)-1-nitrosourea] Frost P, et al. **Arch Dermatol** 1966 Sep;94(3):265–8

Base sequence specificity of three 2-chloroethylnitrosoureas. Briscoe WT, et al. **Biochem Pharmacol** 1990 Sep 15; 40(6):1201–9

Potentiation of the cell specific toxicity of paraquat by 1,3-bis(2-chloroethyl)-1-nitrosourea (BCNU). Implications for the heterogeneous distribution of glutathione (GSH) in rat lung. Hardwick SJ, et al. **Biochem Pharmacol** 1990 Feb 1;39(3):581–9

Stimulation and inhibition of 1,3-bis(2-chloroethyl)-1-nitrosourea-induced strand breaks and interstrand cross-linking in Col E1 plasmid deoxyribonucleic acid by polyamines and inorganic cations. Srivenugopal KS, et al. **Biochem Pharmacol** 1990 Aug 1; 40(3):473–9

Combined effect of pH and sodium cyanate on the inhibition of tumor cell proliferation and metabolism by BCNU and hyperthermia. Hu JJ, et al. **Cancer Chemother Pharmacol** 1990;26(4):269–72

BCNU-induced quantitative and qualitative changes in hepatic cytochrome P-450 can be correlated with cholestasis. Stolzenbach JC, et al. **Cancer Chemother Pharmacol** 1990;25(4):227–35

Inhibition of a specific DNA repair system and nitrosourea cytotoxicity in resistant human cancer cells. Futscher BW, et al. **Cancer Commun** 1989;1(1):65–73

Enhanced in vitro cytotoxicity of 1,3-bis-(2-chloroethyl)-1-nitrosourea or buthionine sulfoximine combined with a reactive oxygen-generating enzyme immunotoxin. Ito H, et al. **Cancer Lett** 1990 Feb; 49(2):169–73

Decreased DNA interstrand cross-linking and cytotoxicity induced in human brain tumor cells by 1,3-bis(2-chloroethyl)-1-nitrosourea after in vitro reaction with glutathione. Ali-Osman F, et al. **Cancer Res** 1989 Nov 1;49(21):5954–8

Effect of alpha-difluoromethylornithine on 1,3-bis(2-chloroethyl)-1-nitrosourea and cis-diamminedichloroplatinum(II) cytotoxicity, DNA interstrand cross-linking, and growth in human brain tumor cell lines in vitro. Hunter KJ, et al. **Cancer Res** 1990 May 1;50(9):2769–72

Effect of hypoxia on 1,3-bis(2-chloroethyl)-1-nitrosourea cytotoxicity in 9L cells. Sarkar A, et al. **Cancer Res** 1990 May 1;50(9):2719–23

Carmustine augments the effects of tert-butyl hydroperoxide on calcium signaling in cultured pulmonary artery endothelial cells. Elliott SJ, et al. **J Biol Chem** 1990 Jan 5;265(1):103–7

Use of verapamil to enhance the antiproliferative activity of BCNU in human glioma cells: an in vitro and in vivo study. Bowles AP Jr, et al. **J Neurosurg** 1990 Aug; 73(2):248–53

Evidence that covalent complex formation between BCNU-treated oligonucleotides and E. coli alkyltransferases requires the O6-alkylguanine function. Gonzaga PE, et al. **Nucleic Acids Res** 1990 Jul 11; 18(13):3961–6

THERAPEUTIC USE

Chemotherapy for malignant gliomas of the brain: a review of ten-years experience. Paoletti P, et al. **Acta Neurochir (Wien)** 1990;103(1–2):35–46

High dose cyclophosphamide, BCNU and VP-16 with autologous blood stem cell support for refractory multiple myeloma. Ventura GJ, et al. **Bone Marrow Transplant** 1990 Apr;5(4):265–8

Immunomodulation by various nitrosoureas and its effect on the survival of the murine host bearing a syngeneic tumor. Nagarkatti M, et al. **Cancer Res** 1989 Dec 1;49(23):6587–92

Changes in pH and blood flow induced by glucose, and their effects on hyperthermia with or without BCNU in RIF-1 tumours. Hiraoka M, et al. **Int J Hyperthermia** 1990 Jan–Feb;6(1):97–103

Fractionated hyperthermia in vivo: thermotolerance, sensitivity to BCNU and thermochemosensitivity in the BT4An rat glioma. Mella O. **Int J Hyperthermia** 1990 Mar–Apr;6(2):253–60

Potentiation of combined BCNU and hyperthermia by pH reduction in vitro and hypertonic glucose in vivo in the BT4 rat glioma. Schem BC, et al. **Int J Hyperthermia** 1989 Nov–Dec;5(6):707–15

Trimodality therapy (drug/hyperthermia/radiation) with BCNU or mitomycin C. Herman TS, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb;18(2):375–82

Superiority of post-radiotherapy adjuvant chemotherapy with CCNU, procarbazine, and vincristine (PCV) over BCNU for anaplastic gliomas: NCOG 6G61 final report. Levin VA, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb; 18(2):321–4

Topical carmustine (BCNU) for cutaneous T cell lymphoma: a 15-year experience in 143 patients. Zackheim HS, et al. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):802–10

Chemosensitivity testing of human gliomas using a fluorescent microcarrier technique. Bowles AP Jr, et al. **J Neurooncol** 1990 Apr;8(2):103–12

Sensitivity of human malignant intracranial tumors against MCNU in vitro in comparison to ACNU and BCNU. Tonn JC, et al. **J Neurooncol** 1990 Feb;8(1):41–5

Intra-arterial BCNU in the treatment of recurrent medulloblastoma. Watne K, et al. **J Neurooncol** 1990 Apr; 8(2):139–43

TOXICITY

Mutagenic and recombinogenic consequences of DNA-repair inhibition during treatment with 1,3-bis(2-chloroethyl)-1-nitrosourea in Saccharomyces cerevisiae. Ferguson LR. **Mutat Res** 1990 Aug; 241(4):369–77

The effect of 1,3 bis-(2-chloroethyl)-1-nitrosourea on rat brain glutathione status under conditions of normoxia and hyperoxia. Powell SR, et al. **Res Commun Chem Pathol Pharmacol** 1990 Mar; 67(3):361–74

CARNITINE

Reexamination of the 1H NMR assignments and solution conformations of L-carnitine and O-acetyl-L-carnitine using C-2 stereospecifically labeled monodeuterated isomers. Brewer F, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):495–9

Palmitoyl carnitine can exist in lamellar and hexagonal phases. Stinson RH. **Chem Phys Lipids** 1990 Jan;52(1):29–39

Carnitine: biochemical, analytical, experimental and clinical aspects. Workshop Conference of the Austrian and German Societies for Clinical Chemistry. Vienna, December 4–5, 1988. Proceedings. **J Clin Chem Clin Biochem** 1990 May; 28(5):289–363

[Pondocillin, Selexid and carnitine (letter)] Midtvedt T. **Tidsskr Nor Laegeforen** 1989 Nov 30;109(33):3475–6 **(Nor)**

ADMINISTRATION & DOSAGE

Feeding preterm infants with L-carnitine supplemented formula. Melegh B, et al. **Acta Paediatr Hung** 1990; 30(1):27–41

Effect of orally administered L-carnitine on blood ammonia and L-carnitine concentrations in portacaval-shunted rats. Hearn TJ, et al. **Hepatology** 1989 Nov;10(5):822–8

Metabolic effects of supplementation of L-carnitine in the dialysate of patients treated with acetate hemodialysis. Guarnieri G, et al. **Kidney Int Suppl** 1989 Nov;27:S247–55

[Premature rupture of the fetal membranes and fetal lung maturity] Salzer H. **Gynakol Rundsch** 1989;29 Suppl 2:132–6 **(Ger)**

[Ultrastructural characteristics of the cerebellar cortex in the postnatal development of animals with protein-calorie malnutrition and in subsequent rehabilitation] Medvedev DI, et al. **Arkh Anat Gistol Embriol** 1989 Oct;97(10):20–5 (Eng. Abstr.) **(Rus)**

[Correction of metabolic changes in neutrophils with carnitine chloride in newborn infants at risk of developing bacterial infections] Gadzhiev AA, et al. **Pediatriia** 1990; (1):65–9 **(Rus)**

ADVERSE EFFECTS

[Pondocillin, Selexin and carnitine (letter)] Midtvedt T. **Tidsskr Nor Laegeforen** 1989 Dec 10;109(34–36):3647–8 **(Nor)**

ANALOGS & DERIVATIVES

L-acetylcarnitine attenuates the age-dependent decrease of NMDA-sensitive glutamate receptors in rat hippocampus. Fiore L, et al. **Acta Neurol (Napoli)** 1989 Oct;11(5):346–50

Secondary carnitine deficiency in handicapped patients receiving valproic acid and/or elemental diet. Igarashi N, et al. **Acta Paediatr Jpn Overseas Ed** 1990 Apr;32(2):139–45

Electrophysiological effects of L-palmitoylcarnitine in single ventricular myocytes. Mészáros J, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H931–8

High-performance liquid chromatographic separation of acylcarnitines following derivatization with 4'-bromophenacyl trifluoromethanesulfonate. Minkler PE, et al. **Anal Biochem** 1990 Feb 15;185(1):29–35

Simple and unambiguous method for identifying urinary acylcarnitines using gas chromatography—mass spectrometry. Lowes S, et al. **Analyst** 1990 May; 115(5):511–6

Effects of L-acetylcarnitine (LAC) on the post-injury recovery of mouse spermatogenesis monitored by flow cytometry. 1. Recovery after X-irradiation. Amendola R, et al. **Andrologia** 1989 Nov–Dec;21(6):568–75

Reduced lipofuscin accumulation in senescent rat brain by long-term acetyl-L-carnitine treatment. Amenta F, et al. **Arch Gerontol Geriatr** 1989 Sep–Oct;9(2):147–53

Effect of palmitoyl-DL-carnitine on the 3H-dihydroergotoxine intestinal absorption in rat. Martinková J, et al. **Arzneimittelforschung** 1990 Feb;40(2 Pt 1):145–9

Effects of lysophosphatidylcholine and palmitylcarnitine—lipid metabolites produced in ischemia—on porcine coronary and rabbit femoral arteries. Vedernikov YuP, et al. **Basic Res Cardiol** 1989 Jul–Aug; 84(4):371–7

Isovalerylcarnitine is a specific activator of the high calcium requiring calpain forms. Pontremoli S, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):373–80

Effect of aging and acetyl-L-carnitine on the lipid composition of rat plasma and erythrocytes. Ruggiero FM, et al. **Biochem Biophys Res Commun** 1990 Jul 31; 170(2):621–6

Acyl-CoA chain length affects the specificity of various carnitine palmitoyltransferases with respect to carnitine analogues. Possible application in the discrimination of different carnitine palmitoyltransferase activities. Murthy MS, et al. **Biochem J** 1990 Apr 1;267(1):273–6

Free carnitine and acylcarnitine levels in sera of alcoholics. Alonso de la Peña C, et al. **Biochem Med Metab Biol** 1990 Aug;44(1):77–83

Plasma and urinary levels of carnitine in different experimental models of hyperammonemia and the effect of sodium benzoate treatment. Michalak A, et al. **Biochem Med Metab Biol** 1990 Apr;43(2):163–74

Palmitoyl-L-carnitine increases the release of prostacyclin from vascular endothelial cells. Boeynaems JM, et al. **Biochem Pharmacol** 1989 Oct 1;38(19):3261–6

Effects of L-carnitine and palmitoylcarnitine on membrane fluidity of human erythrocytes. Kobayashi A, et al. **Biochim Biophys Acta** 1989 Nov 17;986(1):83–8

The metabolism of acetylcarnitine and acetate by bovine and hamster epididymal spermatozoa. Bruns KA, et al. **Biol Reprod** 1989 Aug;41(2):218–26

Interactions of palmitoyl carnitine with the endothelium in rat aorta. Dainty IA, et al. **Br J Pharmacol** 1990 Jun; 100(2):241–6

Mechanism of arrhythmias induced by palmitylcarnitine in guinea pig papillary muscle. Sakata K, et al. **Cardiovasc Res** 1989 Jun;23(6):505–11

Measurement of L-carnitine and acylcarnitines in body fluids and tissues in children and in adults. de Sousa C, et al. **Clin Chim Acta** 1990 Mar 15;187(3):317–28

Human forearm arteriovenous differences of carnitine, short-chain acylcarnitine and long-chain acylcarnitine. Bartlett K, et al. **Clin Sci** 1989 Oct;77(4):413–6

Double-blind, placebo controlled study of acetyl-l-carnitine in patients with Alzheimer's dementia. Rai G, et al. **Curr Med Res Opin** 1990;11(10):638–47

Effect of acetyl-L-carnitine treatment on the density of muscarinic receptors in the brain of methylazoxymethanol-microencephalic rats. Albertini P, et al. **Drugs Exp Clin Res** 1989;15(9):421–7

Effect of acetyl-L-carnitine treatment on brain ribonucleic acid levels in methylazoxymethanol-microencephalic rats. Albertini P, et al. **Drugs Exp Clin Res** 1989;15(9):429–34

Neurophysiological studies of L-acetylcarnitine administration in man. Gambi D, et al. **Drugs Exp Clin Res** 1989;15(9):435–46

Evaluation of the effects of L-acetylcarnitine on senile patients suffering from depression. Garzya G, et al. **Drugs Exp Clin Res** 1990;16(2):101–6

Changes in muscle free carnitine and acetylcarnitine with increasing work intensity in the Thoroughbred horse. Harris RC, et al. **Eur J Appl Physiol** 1990;60(2):81–5

Reduced transcription of mitochondrial DNA in the senescent rat. Tissue dependence and effect of L-carnitine. Gadaleta MN, et al. **Eur J Biochem** 1990 Feb 14; 187(3):501–6

Pharmacokinetics of oral acetyl-L-carnitine in renal impairment. Kelly JG, et al. **Eur J Clin Pharmacol** 1990; 38(3):309–12

Metabolism and disposition of intravenously administered acetyl-L-carnitine in healthy volunteers. Marzo A, et al. **Eur J Clin Pharmacol** 1989;37(1):59–63

Single-photon emission computed tomography studies with 99mTc-hexamethylpropyleneamine oxime in dementia: effects of acute administration of L-acetylcarnitine. Battistin L, et al. **Eur Neurol** 1989;29(5):261–5

The effects of acetyl-l-carnitine on experimental models of learning and memory deficits in the old rat. Valerio C, et al. **Funct Neurol** 1989 Oct-Dec;4(4):387–90

Effects of acetyl-L-carnitine on reaction times in patients with cerebrovascular insufficiency. Arrigo A, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):133–7

Physiological effects of acetyl-levo-carnitine in the central nervous system. Bodis-Wollner I. **Int J Clin Pharmacol Res** 1990;10(1–2):109–14 (29 ref.)

Studies on the degenerative and regenerative phenomena occurring after transection and repair of the sciatic nerve in rats: effects of acetyl-L-carnitine. Fernandez E, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):85–99

Pharmaco-electroencephalographic and clinical effects of the cholinergic substance—acetyl-L-carnitine—in patients with organic brain syndrome. Herrmann WM, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):81–4

Ultrastructural aspects of aging rat hippocampus after long-term administration of acetyl-L-carnitine. Laschi R, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):59–63 (9 ref.)

Modifications of the cerebral electric activity induced by the intracerebroventricular injection of acetyl-L-carnitine in cats. Mancia M, et al. **Int J Clin Pharmacol Res** 1990; 10(1–2):115–21

Dietary acetyl-L-carnitine improves spatial behaviour of old rats. Markowska AL, et al. **Int J Clin Pharmacol Res** 1990; 10(1–2):65–8

Acetyl-L-carnitine in the treatment of mildly demented elderly patients. Passeri M, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):75–9

Cerebral blood flow in patients with chronic cerebrovascular disease: effect of acetyl L-carnitine. Postiglione A, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):129–32

Clinical pharmacodynamics of acetyl-L-carnitine in patients with Parkinson's disease. Puca FM, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):139–43

Acute effects of acetyl-L-carnitine on regional cerebral blood flow in patients with brain ischaemia. Rosadini G, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):123–8

Neuropsychological changes in demented patients treated with acetyl-L-carnitine. Sinforiani E, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):69–74

Role of acetyl-L-carnitine in the treatment of cognitive deficit in chronic alcoholism. Tempesta E, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):101–7

Association between muscle acetyl-CoA and acetylcarnitine levels in the exercising horse. Carlin JI, et al. **J Appl Physiol** 1990 Jul;69(1):42–5

Carnitine and acylcarnitine metabolism during exercise in humans. Dependence on skeletal muscle metabolic state. Hiatt WR, et al. **J Clin Invest** 1989 Oct;84(4):1167–73

Comparison of urinary acylglycines and acylcarnitines as diagnostic markers of medium-chain acyl-CoA dehydrogenase deficiency. Rinaldo P, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:325–8

Nonmediated flip-flop of phospholipid analogues in the erythrocyte membrane as probed by palmitoylcarnitine: basic properties and influence of membrane modification. Classen J, et al. **J Membr Biol** 1989 Oct;111(2):169–78

Enhancement of recurrent inhibition by intravenous administration of L-acetylcarnitine in spastic patients. Mazzocchio R, et al. **J Neurol Neurosurg Psychiatry** 1990 Apr;53(4):321–6

L-acetyl-carnitine in Huntington's disease: double-blind placebo controlled crossover study of drug effects on movement disorder and dementia [letter] Goety CG, et al. **Mov Disord** 1990;5(3):263–5

Acetyl-L-carnitine enhances acetylcholine release in the striatum and hippocampus of awake freely moving rats. Imperato A, et al. **Neurosci Lett** 1989 Dec 15; 107(1–3):251–5

Further evidence for Renshaw inhibition in man. A combined electrophysiological and pharmacological approach. Mazzocchio R, et al. **Neurosci Lett** 1989 Nov 20; 106(1–2):131–6

Differential effect of acetyl-l-carnitine on open field behavior in young and old rats. Blokland A, et al. **Physiol Behav** 1990 Apr;47(4):783–5

An example of a clinical trial in patients with Alzheimer's disease: some methodological issues. Lucca U, et al. **Prog Clin Biol Res** 1989;317:1301–10

Age-dependent deficits in radial maze performance in the rat: effect of chronic treatment with acetyl-L-carnitine. Caprioli A, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(3):359–69

Effects of l-carnitine on membrane potential derangements induced by palmitoylcarnitine and anoxia in isolated superfused guinea-pig papillary muscle. Yokota S, et al. **Res Commun Chem Pathol Pharmacol** 1989 Nov; 66(2):179–90

Identification of benzoylcarnitine in the urine of a patient of hyperammonemia. Sakuma T, et al. **Tohoku J Exp Med** 1989 Oct;159(2):147–51

[Acute effects of propionyl-L-carnitine on anomalies of parietal kinetics of the left ventricle induced by atrial pacing in patients with ischemic heart disease. A bidimensional echocardiographic study] Ricci A, et al. **Cardiologia** 1989 Jul;34(7):651–5 (Eng. Abstr.) **(Ita)**

[Methodological premises of statistical analysis of the data] Bamfi F, et al. **Clin Ter** 1990 Mar 31;132(6 Suppl):475–8 (Eng. Abstr.) **(Ita)**

[Effects of L-acetylcarnitine on mental deterioration in the aged: initial results] Cipolli C, et al. **Clin Ter** 1990 Mar 31;132(6 Suppl):479–510 (Eng. Abstr.) **(Ita)**

[A controlled clinical study on the efficacy of L-acetylcarnitine in the treatment of mild-to-moderate mental deterioration in the aged. Conclusions] Genazzani E. **Clin Ter** 1990 Mar 31;132(6 Suppl):511–2 **(Ita)**

[Methodology of a clinical controlled study of L-acetylcarnitine] Neri M, et al. **Clin Ter** 1990 Mar 31; 132(6 Suppl):457–68 (Eng. Abstr.) **(Ita)**

[Aging of the population: the 2d demographic revolution] Recchia G. **Clin Ter** 1990 Mar 31;132(6 Suppl):443–50 (Eng. Abstr.) **(Ita)**

[Center monitoring and management of data bases] Roncolato M, et al. **Clin Ter** 1990 Mar 31;132(6 Suppl):469–73 (Eng. Abstr.) **(Ita)**

[Clinical development of a drug for brain aging. Current limitations and future prospects] Zerbini O, et al. **Clin Ter** 1990 Mar 31;132(6 Suppl):451–5 (Eng. Abstr.) **(Ita)**

ANALYSIS

Plasma, tissue, and urine carnitine concentrations in healthy adult cats and kittens. Jacobs G, et al. **Am J Vet Res** 1990 Sep;51(9):1345–8

Comparison of plasma, liver, and skeletal muscle carnitine concentrations in cats with idiopathic hepatic lipidosis and in healthy cats. Jacobs G, et al. **Am J Vet Res** 1990 Sep; 51(9):1349–51

Application of fast atom bombardment with tandem mass spectrometry and liquid chromatography/mass spectrometry to the analysis of acylcarnitines in human urine, blood, and tissue. Millington DS, et al. **Anal Biochem** 1989 Aug 1;180(2):331–9

Measurement of L-carnitine and acylcarnitines in body fluids and tissues in children and in adults. de Sousa C, et al. **Clin Chim Acta** 1990 Mar 15;187(3):317–28

Levels of carnitines in brain and other tissues of rats of different ages: effect of acetyl-L-carnitine administration. Maccari F, et al. **Exp Gerontol** 1990;25(2):127–34

Chromatographic and non-chromatographic assay of L-carnitine family components. Marzo A, et al. **J Chromatogr** 1990 May 18;527(2):247–58 (46 ref.)

Determination of L-carnitine in biological fluids and tissues. Deufel T. **J Clin Chem Clin Biochem** 1990 May; 28(5):307–11

Quantitation of urinary carnitine esters in a patient with medium-chain acyl-coenzyme A dehydrogenase deficiency: effect of metabolic state and L-carnitine therapy. Schmidt-Sommerfeld E, et al. **J Pediatr** 1989 Oct; 115(4):577–82

BIOSYNTHESIS

Butyrobetaine availability in liver is a regulatory factor for carnitine biosynthesis in rat. Flux through butyrobetaine hydroxylase in fasting state. Sandor A, et al. **Eur J Biochem** 1989 Nov 20;185(3):671–5

In vivo evidence for a vitamin B-6 requirement in carnitine synthesis. Cho YO, et al. **J Nutr** 1990 Mar;120(3):258–65

Utilization of dietary precursors for carnitine synthesis in human adults. Rebouche CJ, et al. **J Nutr** 1989 Dec; 119(12):1907–13

[The effect of methylation on the carnitine synthesis] Podlepa EM, et al. **Prikl Biokhim Mikrobiol** 1990 Mar-Apr; 26(2):179–83 (Eng. Abstr.) **(Rus)**

BLOOD

Acylcarnitine is low in cord blood in cystic fibrosis. Lloyd-Still JD, et al. **Acta Paediatr Scand** 1990 Apr; 79(4):427–30

Effect of genetic diabetes and alcohol on tissue carnitine and inositol concentrations in mice. Reddi AS, et al. **Alcohol Alcohol** 1990;25(2-3):137–41

Carnitine status of pediatric patients on continuous ambulatory peritoneal dialysis. Warady BA, et al. **Am J Nephrol** 1990;10(2):109–14

Medium-chain triglycerides induce alterations in carnitine metabolism. Rössle C, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):E944–7

Free carnitine and acylcarnitine levels in sera of alcoholics. Alonso de la Peña C, et al. **Biochem Med Metab Biol** 1990 Aug;44(1):77–83

Plasma and urinary levels of carnitine in different experimental models of hyperammonemia and the effect of sodium benzoate treatment. Michalak A, et al. **Biochem Med Metab Biol** 1990 Apr;43(2):163–74

Effect of exogenous insulin on plasma free carnitine levels during exercise in normal man. Broderick TL, et al. **Can J Physiol Pharmacol** 1989 Dec;67(12):1589–601

Human forearm arteriovenous differences of carnitine, short-chain acylcarnitine and long-chain acylcarnitine. Bartlett K, et al. **Clin Sci** 1989 Oct;77(4):413–6

Hypocarnitinaemia in Menkes disease [letter] Kamoun P, et al. **Eur J Pediatr** 1989 Aug;148(8):788

Decreased carnitine and increased ammonia—which comes first? Riely CA. **Gastroenterology** 1990 Jun;98(6):1713–5

Effect of deproteinization and reagent buffer on the enzymatic assay of L-carnitine in serum. Tegelaers FP, et al. **J Clin Chem Clin Biochem** 1989 Dec;27(12):967–72

Subnormal carnitine levels and their correction in artificially fed patients from a neurological intensive care unit: a pilot study. Schäfer J, et al. **J Neurol** 1990 Jun;237(3):213–5

Plasma carnitine concentration and lipid metabolism in infants receiving parenteral nutrition. Christensen ML, et al. **J Pediatr** 1989 Nov;115(5 Pt 1):794–8

Low plasma carnitine in patients on prolonged total parenteral nutrition: association with low plasma lysine. Berner YN, et al. **JPEN J Parenter Enteral Nutr** 1990 May-Jun;14(3):255–8

Improved selenium, carnitine and taurine status in an enterally fed population. Fischer MH, et al. **JPEN J Parenter Enteral Nutr** 1990 May-Jun;14(3):270–4

L-carnitine [letter] [published erratum appears in Lancet 1990 Jun 30;335(8705):1604] [comment] **Lancet** 1990 May 19; 335(8699):1215 Comment on: Lancet 1990 Mar 17;335(8690):631–3.

Metabolic effects of carnitine supplementation in subjects with low plasma carnitine levels. **Nutr Rev** 1990 Mar; 48(3):159–61

[The carnitine level of the umbilical cord blood in relation to the course of labor] Kühn HJ, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Oct; 41(10):621–4 (Eng. Abstr.) **(Ger)**

[Preliminary results on blood carnitine levels in children with hepatic pathology] Ceccarelli M, et al. **Minerva Pediatr** 1989 May;41(5):247–51 (Eng. Abstr.) **(Ita)**

[Significance of carnitine analysis in clinical tests] Kuwajima M, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:393–6 **(Jpn)**

[Levels of L-carnitine in the Venezuelan infant population] Ortega R, et al. **Bol Med Hosp Infant Mex** 1989 Oct; 46(10):663–6 (Eng. Abstr.) **(Spa)**

DEFICIENCY

Relative carnitine insufficiency in children with type I diabetes mellitus. Winter SC, et al. **Am J Dis Child** 1989 Nov;143(11):1337–9

Anesthetic management of a patient with systemic carnitine deficiency. Rowe RW, et al. **Anesth Analg** 1990 Sep; 71(3):295–7

An animal model of systemic carnitine deficiency produced by haemodialysis of sheep. Snoswell AM, et al. **Comp Biochem Physiol [B]** 1989;93(4):741–5

Cytochrome c oxidase deficiency in muscle with dicarboxylic aciduria and renal tubular acidosis. Pintos-Morell G, et al. **J Child Neurol** 1990 Apr;5(2):147–52

Role of the liver in carnitine metabolism: the mechanism of development of carnitine-deficient status in guinea-pigs. Alkonyi I, et al. **J Clin Chem Clin Biochem** 1990 May; 28(5):319–21

Secondary carnitine deficiency. Duran M, et al. **J Clin Chem Clin Biochem** 1990 May;28(5):359–63 (23 ref.)

Primary carnitine deficiency. Scholte HR, et al. **J Clin Chem Clin Biochem** 1990 May;28(5):351–7 (89 ref.)

Carnitine deficiency with cardiomyopathy presenting as neonatal hydrops: successful response to carnitine therapy. Steenhout P, et al. **J Inherited Metab Dis** 1990;13(1):69–75

Secondary carnitine deficiency in the newborn period in twins of a mother with partial ornithine transcarbamylase deficiency. Nagao M, et al. **J Pediatr** 1989 Oct;115(4):611–4

Carnitine deficiency in surgical neonates receiving total parenteral nutrition. Tibboel D, et al. **J Pediatr Surg** 1990 Apr;25(4):418–21

Carnitine deficiency [see comments] **Lancet** 1990 Mar 17; 335(8690):631–3 (36 ref.) Comment in: Lancet 1990 Apr 21;335(8695):981–2. Comment in: Lancet 1990 May 19;335(8699):1215.

Carnitine deficiency [letter; comment] **Lancet** 1990 Apr 21; 335(8695):981–2 Comment on: Lancet 1990 Mar 17;335(8690):631–3.

Carnitine supplementation in pivampicillin treatment [letter; comment] Melegh B. **Lancet** 1989 Nov 4;2(8671):1096 Comment on: Lancet 1989 Aug 26;2(8661):469–73.

Familial hypertrophic cardiomyopathy and muscle carnitine deficiency. Bautista J, et al. **Muscle Nerve** 1990 Mar; 13(3):192–4

Carnitine deficiency syndromes. Breningstall GN. **Pediatr Neurol** 1990 Mar-Apr;6(2):75–81 (37 ref.)

A genetic defect in carnitine transport causing primary carnitine deficiency. Stanley CA, et al. **Prog Clin Biol Res** 1990;321:457–64

Neonatal hyperammonemia associated with carnitine deficiency. Nagao M, et al. **Tohoku J Exp Med** 1989 Aug; 158(4):317–23

[Secondary muscular carnitine deficiency following immunosuppressive treatment] Lössner J, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Oct; 41(10):614–20 (Eng. Abstr.) **(Ger)**

[Alterations of mitochondria in metabolic diseases. Carnitine deficiency, carnitine palmitoyltransferase deficiency and beta oxidation.] Angelini C. **Acta Neurol (Napoli)** 1989 Oct; 11(5):330–4 (Eng. Abstr.) **(Ita)**

[Lipid storage myopathies—carnitine deficiency, carnitine palmitoyltransferase deficiency, pyruvate decarboxylase deficiency] Itagaki Y, et al. **Nippon Rinsho** 1990 Jul; 48(7):1510–6 **(Jpn)**

[Pivampicillin (Pondocillin) and pivmecillinam (Selexid) can result in carnitine deficiency] Bøhmer T, et al. **Tidsskr Nor Laegeforen** 1990 Jun 20;110(16):2090–1 (17 ref.) **(Nor)**

[Clinical aspects of disorders of lipid metabolism in humans. I. Carnitine deficiency] Czyżewski K. **Neurol Neurochir Pol** 1988 Nov–Dec;22(6):543–7 (31 ref.) **(Pol)**

[The National Board of Health and Welfare's warning: antibiotics containing pivalin acid cause carnitine deficiency] **Lakartidningen** 1990 Jul 25;87(30–31):2436 **(Swe)**

METABOLISM

Muscle carnitine metabolism during incremental dynamic exercise in humans. Sahlin K. **Acta Physiol Scand** 1990 Mar; 138(3):259–62

Defective myocardial carnitine metabolism in congestive heart failure secondary to dilated cardiomyopathy and to coronary, hypertensive and valvular heart diseases. Regitz V, et al. **Am J Cardiol** 1990 Mar 15;65(11):755–60

Radioisotopic assays of CoASH and carnitine and their acetylated forms in human skeletal muscle. Cederblad G, et al. **Anal Biochem** 1990 Mar;185(2):274–8

Effect of dietary lysine level and protein restriction on the lipids and carnitine levels in the liver of pregnant rats. Fernández Ortega MF. **Ann Nutr Metab** 1989;33(3):162–9

The involvement of carnitine intermediates in peroxisomal fatty acid oxidation: a study with 2-bromofatty acids. Buechler KF, et al. **Arch Biochem Biophys** 1990 Sep; 281(2):233–8

Effect of hydroxycobalamin[c-lactam] on propionate and carnitine metabolism in the rat. Brass EP, et al. **Biochem J** 1990 Mar 15;266(3):809–15

Differential excretion of xenobiotic acyl-esters of carnitine due to administration of pivampicillin and valproate. Melegh B, et al. **Biochem Med Metab Biol** 1990 Feb; 43(1):30–8

Effects of acute valproate administration on carnitine metabolism in mouse serum and tissues. Rozas I, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):181–5

Carnitine transport and tissue carnitine accretion in rats. Rebouche CJ. **Biochim Biophys Acta** 1990 Jan 29; 1033(1):111–3

Plasma and muscle carnitine in healthy and hemodialyzed children. Glöggler A, et al. **Child Nephrol Urol** 1988–89; 9(5):277–82

Carnitine levels in painful muscles of patients with fibromyalgia [letter] Bengtsson A, et al. **Clin Exp Rheumatol** 1990 Mar–Apr;8(2):197–8

Effect of testosterone propionate on levels of carnitine and testicular androgen binding protein (ABP) in rat epididymis. Böhmer T, et al. **Endocrinology** 1977 Mar; 100(3):835–8

Valproate, carnitine metabolism, and biochemical indicators of liver function. Collaborative Group for the Study of Epilepsy. Beghi E, et al. **Epilepsia** 1990 May–Jun; 31(3):346–52

Changes in muscle free carnitine and acetylcarnitine with increasing work intensity in the Thoroughbred horse. Harris RC, et al. **Eur J Appl Physiol** 1990;60(2):81–5

Muscle carnitine level in endurance training and running a marathon. Janssen GM, et al. **Int J Sports Med** 1989 Oct; 10 Suppl 3:S153–5

Purification and reconstitution of the carnitine carrier from rat liver mitochondria. Indiveri C, et al. **Ital J Biochem** 1990 May–Jun;39(3):165A–167A

Plasma and urinary carnitine of obese subjects on very-low-calorie diets. Davis AT, et al. **J Am Coll Nutr** 1990 Jun;9(3):261–4

Use of anion-exchange resin in F- form in sample processing for determination of carnitine. Sandor A, et al. **J Chromatogr** 1989 Dec 29;497:250–7

The role of carnitine in intracellular metabolism. Bremer J. **J Clin Chem Clin Biochem** 1990 May;28(5):297–301 (40 ref.)

The role of the kidney in carnitine metabolism. Guder WG, et al. **J Clin Chem Clin Biochem** 1990 May;28(5):347–50 (18 ref.)

Carnitine: metabolism, function and clinical application. Haeckel R, et al. **J Clin Chem Clin Biochem** 1990 May; 28(5):291–5 (37 ref.)

Transport and functions of carnitine in muscles. Siliprandi N, et al. **J Clin Chem Clin Biochem** 1990 May;28(5):303–6 (33 ref.)

Carnitine and acylcarnitine metabolism during exercise in humans. Dependence on skeletal muscle metabolic state. Hiatt WR, et al. **J Clin Invest** 1989 Oct;84(4):1167–73

Tissue trimethyllysine biosynthesis and carnitine content in pregnant and lactating rats fed a lysine-limiting diet. Davis AT. **J Nutr** 1990 Aug;120(8):846–56

An improved high-performance liquid chromatographic assay for the determination of free and esterified carnitine in animal tissues. Arakawa N, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Oct;35(5):475–9

Carnitine status and blood ammonium levels in low birth weight infants. Nakamura T, et al. **J Pediatr Gastroenterol Nutr** 1990 Jan;10(1):66–70

Carnitine and carnitine esters in acute renal failure. Wanner C, et al. **Nephrol Dial Transplant** 1989;4(11):951–6

L-carnitine replacement therapy in chronic valproate treatment. Melegh B, et al. **Neuropediatrics** 1990 Feb; 21(1):40–3

Carnitine homeostasis in the organic acidurias. Roe CR, et al. **Prog Clin Biol Res** 1990;321:383–402 (21 ref.)

[Various aspects of lipid metabolism in the human body with special reference to the role of carnitine] Czyżewski K. **Wiad Lek** 1989 Jul 1–15;42(13–15):884–7 (24 ref.) (Eng. Abstr.) **(Pol)**

PHARMACOKINETICS

Carnitine and deoxycarnitine concentration in rat tissues and urine after their administration. Sartorelli L, et al. **Biochim Biophys Acta** 1989 Nov 6;1006(1):15–8

Uptake of L-carnitine by rat jejunal brush border microvillous membrane vesicles. Evidence of passive diffusion. Li BU, et al. **Dig Dis Sci** 1990 Mar;35(3):333–9

PHARMACOLOGY

L-carnitine delays the killing of cultured hepatocytes by 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine. Snyder JW, et al. **Arch Biochem Biophys** 1990 Jan;276(1):132–8

Effects of L-carnitine and palmitoylcarnitine on membrane fluidity of human erythrocytes. Kobayashi A, et al. **Biochim Biophys Acta** 1989 Nov 17;986(1):83–8

Metabolic changes induced by maximal exercise in human subjects following L-carnitine administration. Siliprandi N, et al. **Biochim Biophys Acta** 1990 Apr 23;1034(1):17–21

Effect of L-carnitine and L-aminocarnitine on calcium transport, motility, and enzyme release from ejaculated bovine spermatozoa. Deana R, et al. **Biol Reprod** 1989 Nov; 41(5):949–55

The effects of novel vasodilator long chain acyl carnitine esters in the isolated perfused heart of the rat. Criddle DN, et al. **Br J Pharmacol** 1990 Mar;99(3):477–80

Effect of D,L-carnitine on the response of the isolated heart of the rat to ischaemia and reperfusion: relation to mitochondrial function. Duan JM, et al. **Br J Pharmacol** 1989 Dec;98(4):1319–27

Effects of in vivo and in vitro treatment with L-carnitine on isolated hearts from chronically diabetic rats. Rodrigues B, et al. **Can J Physiol Pharmacol** 1990 Aug;68(8):1085–92

Effects of L-carnitine administration on VO2max and the aerobic-anaerobic threshold in normoxia and acute hypoxia. Wyss V, et al. **Eur J Appl Physiol** 1990;60(1):1–6

Effect of L-carnitine and stimulated lipolysis on muscle substrates in the exercising rat. Décombaz JE, et al. **Experientia** 1990 May 15;46(5):457–8

A comparative study of cyproheptadine and DL carnitine on psychomotor performance and memory in healthy volunteers. Hakkou F, et al. **Fundam Clin Pharmacol** 1990; 4(2):191–200

Effect of carnitine on malondialdehyde, taurine and glutathione levels in heart of rats subjected to myocardial stress by isoproterenol. Sushamakumari S, et al. **Indian J Exp Biol** 1989 Feb;27(2):134–7

L-carnitine supplementation in humans. The effects on physical performance. Cerretelli P, et al. **Int J Sports Med** 1990 Feb;11(1):1–14 (63 ref.)

Effect of carnitine on foetal rat lung dipalmitoyl phosphatidylcholine content and lung morphology. Carnitine and lung surfactant, I. Lohninger A, et al. **J Clin Chem Clin Biochem** 1990 May;28(5):313–8

Effect of L-carnitine on glycogen synthesis and ATP production in cultured hepatocytes of the newborn rat. Nishida N, et al. **J Nutr** 1989 Nov;119(11):1705–8

Pulmonary surfactant in bronchoalveolar lavage after canine lung transplantation: effect of L-carnitine application. Klepetko W, et al. **J Thorac Cardiovasc Surg** 1990 Jun; 99(6):1048–58

Effects of nonglucose substrates (xylitol, medium-chain triglycerides, long-chain triglycerides) and carnitine on nitrogen metabolism in stressed rats. Fried RC, et al. **JPEN J Parenter Enteral Nutr** 1990 Mar–Apr;14(2):134–8

L-carnitine and platelet aggregation in uremic patients subjected to hemodialysis. Bellinghieri G, et al. **Nephron** 1990;55(1):28–32

Morphometric evidence of the trophic effect of L-carnitine on human skeletal muscle. Spagnoli LG, et al. **Nephron** 1990;55(1):16–23

Acceleration of the onset of liver regeneration by carnitine in partially hepatectomized rats. Holeček M, et al. **Physiol Bohemoslov** 1989;38(6):503–8

Studies concerning chronic and acute effects of L-carnitina in elite athletes. Drăgan IG, et al. **Physiologie** 1989 Apr–Jun;26(2):111–29

Effects of l-carnitine on membrane potential derangements induced by palmitoylcarnitine and anoxia in isolated superfused guinea-pig papillary muscle. Yokota S, et al. **Res Commun Chem Pathol Pharmacol** 1989 Nov; 66(2):179–90

Carnitine treatment for stroke in rats. Slivka A, et al. **Stroke** 1990 May;21(5):808–11

[The effect of L-carnitine on the energy metabolism of isolated rat heart perfused by Langendorff's method using 31P-NMR spectroscopy] Löster H, et al. **Z Med Lab Diagn** 1990;31(3):123–7 (Eng. Abstr.) **(Ger)**

[Effects of levocarnitine chloride, a new mitochondrial function reactivating agent, on fatty acid and glucose oxidation under hypoxic condition in homogenates from rat heart] Yamada H, et al. **Yakugaku Zasshi** 1990 Mar; 110(3):225–34 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Carnitine: vitamin for an insect, vital for man. Pande SV, et al. **Biochem Cell Biol** 1989 Oct;67(10):671–3 (15 ref.)

THERAPEUTIC USE

Transient carnitine-responsive medium-chain dicarboxylic aciduria in an infant with cholestasis, hypoglycemia and cardiac failure. Matsuo M, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Apr;31(2):211–5

Carnitine supplementation in uremia. Fürst P, et al. **Adv Exp Med Biol** 1989;260:69–77 (41 ref.)

Plasma and red blood cell carnitine and carnitine esters during L-carnitine therapy in hemodialysis patients. Wanner C, et al. **Am J Clin Nutr** 1990 Mar;51(3):407–10

Effect of L-carnitine on the reactive hyperemia in patients affected by peripheral vascular disease: a double-blind, crossover study. Brevetti G, et al. **Angiology** 1989 Oct; 40(10):857–62

L-carnitine for leg ulcers [letter] Harrell HL Jr. **Ann Intern Med** 1990 Sep 1;113(5):412

Cultured cells as a screen for novel treatments of Alzheimer's disease. Malow BA, et al. **Arch Neurol** 1989 Nov; 46(11):1201–3

A case of carbamylphosphate synthetase-I deficiency associated with secondary carnitine deficiency--L-carnitine treatment of CPS-I deficiency. Mori T, et al. **Eur J Pediatr** 1990 Jan;149(4):272–4

Quantitation of urinary carnitine esters in a patient with medium-chain acyl-coenzyme A dehydrogenase deficiency: effect of metabolic state and L-carnitine therapy. Schmidt-Sommerfeld E, et al. **J Pediatr** 1989 Oct; 115(4):577–82

Fatty acid abnormalities in hemodialysis patients: effect of L-carnitine administration. Ahmad S, et al. **Kidney Int Suppl** 1989 Nov;27:S243–6

Effect of low dose supplementation of L-carnitine on lipid metabolism in hemodialyzed children. Glöggler A, et al. **Kidney Int Suppl** 1989 Nov;27:S256–8

Ketogenic and antiketogenic effects of L-carnitine in hemodialysis patients. Wanner C, et al. **Kidney Int Suppl** 1989 Nov;27:S264–8

Effect of dialysate composition on the lipid response to L-carnitine supplementation. Zilleruelo G, et al. **Kidney Int Suppl** 1989 Nov;27:S259–63

[Serum myoglobin in pregnant women treated with tocolytics and carnitine] Giorgino FL, et al. **Minerva Ginecol** 1989 Sep;41(9):433–9 (Eng. Abstr.) **(Ita)**

[The cardioprotective action of carnitine and its structural analog 3-(2,2,2-trimethylhydrazine)propionate on cardiac energy metabolism in experimental occlusion of the coronary artery in rats] Ratunova TM, et al. **Farmakol Toksikol** 1989 Sep–Oct;52(5):24–7 (Eng. Abstr.) **(Rus)**

URINE

Organic acid and acylcarnitine profiles of glutaric aciduria type I. Matsumoto M, et al. **Acta Paediatr Jpn Overseas Ed** 1990 Feb;32(1):76–82

Quantitative assay of free and total carnitine using tandem mass spectrometry. Kodo N, et al. **Clin Chim Acta** 1990 Jan 31;186(3):383–90

Comparison of urinary acylglycines and acylcarnitines as diagnostic markers of medium-chain acyl-CoA dehydrogenase deficiency. Rinaldo P, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:325–8

Acylcarnitines in the urine of a patient with medium chain acyl-CoA dehydrogenase (MCAD) deficiency and in normal children. Schmidt-Sommerfeld E, et al. **Prog Clin Biol Res** 1990;321:403–9

CARNITINE ACETYLTRANSFERASE see under **ACETYLTRANSFERASES**

CARNITINE ACYLTRANSFERASES see under **ACYLTRANSFERASES**

CARNITINE PALMITOYLTRANSFERASE see under **ACYLTRANSFERASES**

CARNIVORA

Ferret model for acquired subglottic stenosis. Alexander KJ, et al. **Ann Otol Rhinol Laryngol** 1989 Nov;98(11):910–5

Salmonella isolates from wild animals in Cornwall. Euden PR. **Br Vet J** 1990 May–Jun;146(3):228–32

Osgood-Schlatter disease in an African lion in the Middle East. Lewis JC. **Br Vet J** 1989 Sep–Oct;145(5):494–5

Skunk lung [letter] Snyder RW, et al. **Chest** 1990 May; 97(5):1277–8

Detection of canine distemper viral antigen in formalin-fixed

and paraffin-embedded tissue of a fitch (Mustela putorius), using an immunoperoxidase technique. Hewicker M, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Feb;97(2):85–8

A case report: encephalitis in lions. Pathological and virological findings. Truyen U, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Feb;97(2):89–91

Helicobacter mustelae-associated gastritis in ferrets. An animal model of Helicobacter pylori gastritis in humans. Fox JG, et al. **Gastroenterology** 1990 Aug;99(2):352–61

Medical and surgical management of esophageal foreign body in a ferret. Caligiuri R, et al. **J Am Vet Med Assoc** 1989 Oct 1;195(7):969–71

Proven or potential zoonotic diseases of ferrets. Marini RP, et al. **J Am Vet Med Assoc** 1989 Oct 1;195(7):990–4 (55 ref.)

Evaluation of an inactivated rabies virus vaccine in domestic ferrets. Rupprecht CE, et al. **J Am Vet Med Assoc** 1990 May 15;196(10):1614–6

Mast cell tumors in three ferrets. Stauber E, et al. **J Am Vet Med Assoc** 1990 Mar 1;196(5):766–7

Measurement of dietary and dentifrice effects upon calculus accumulation rates in the domestic ferret. Harper DS, et al. **J Dent Res** 1990 Feb;69(2):447–50

Reduction of calculus accumulation in domestic ferrets with two dentifrices containing pyrophosphate. Mann PH, et al. **J Dent Res** 1990 Feb;69(2):451–3

Use of the ferret for a myocardial ischemia/salvage model. Gomoll AW, et al. **J Pharmacol Methods** 1990 May; 23(3):213–23

Acute gastric dilatation and volvulus in a free-living polar bear. Amstrup SC, et al. **J Wildl Dis** 1989 Oct;25(4):601–4

Use of recombinant vaccinia-rabies glycoprotein virus for oral vaccination of wildlife against rabies: innocuity to several non-target bait consuming species. Brochier B, et al. **J Wildl Dis** 1989 Oct;25(4):540–7

Anthrax in cheetahs (Acinonyx jubatus) in Namibia. Jäger HG, et al. **J Wildl Dis** 1990 Jul;26(3):423–4

Serological survey of the Iriomote cat (Felis iriomotensis) in Japan. Mochizuki M, et al. **J Wildl Dis** 1990 Apr; 26(2):236–45

Intramuscular vaccination of skunks and raccoons against rabies. Rosatte RC, et al. **J Wildl Dis** 1990 Apr;26(2):225–30

Ineffectiveness and comparative pathogenicity of attenuated rabies virus vaccines for the striped skunk (Mephitis mephitis). Rupprecht CE, et al. **J Wildl Dis** 1990 Jan; 26(1):99–102

Serologic survey for infectious canine hepatitis virus in grizzly bears (Ursus arctos) from Alaska, 1973 to 1987. Zarnke RL, et al. **J Wildl Dis** 1989 Oct;25(4):568–73

Leiomyosarcoma in a domestic ferret: morphologic and immunocytochemical diagnosis. Brunnert SR, et al. **Lab Anim Sci** 1990 Mar;40(2):208–10

Real-time ultrasonographic determination of pregnancy and gestational age in ferrets. Peter AT, et al. **Lab Anim Sci** 1990 Jan;40(1):91–2

Study on in vitro sperm capacitation and egg-penetration of giant panda. Chen DY, et al. **Sci China [B]** 1989 Apr; 32(4):435–41

Toxicology of selected pesticides, drugs, and chemicals. Zinc. Robinette CL. **Vet Clin North Am Small Anim Pract** 1990 Mar;20(2):539–44 (13 ref.)

Ethylene glycol (antifreeze) poisoning in a free-ranging polar bear. Amstrup SC, et al. **Vet Hum Toxicol** 1989 Aug; 31(4):317–9

Immunocytochemistry of pancreatic endocrine tumors in three domestic ferrets (Mustela putorius furo). Fix AS, et al. **Vet Pathol** 1990 May;27(3):199–201

Proliferative colitis in ferrets: epithelial dysplasia and translocation. Fox JG, et al. **Vet Pathol** 1989 Nov; 26(6):515–7

Immunohistochemical and morphologic features of chordomas in ferrets (Mustela putorius furo). Herron AJ, et al. **Vet Pathol** 1990 Jul;27(4):284–6

Ferrets and the profession [letter] Cooper JE. **Vet Rec** 1989 Oct 7;125(15):404–5

Toxoplasmosis in a Siberian tiger (Panthera tigris altaica). Dorny P, et al. **Vet Rec** 1989 Dec 23–30;125(26–27):647

Vaccines authorized for use in ferrets [letter; comment] Hardy BD. **Vet Rec** 1990 Mar 10;126(10):250 Comment on: Vet Rec 1990 Jan 20;126(3):67.

Aleutian disease in the ferret [letter] Oxenham M. **Vet Rec** 1990 Jun 9;126(23):585

Distemper vaccination in ferrets [letter] [see comments] Oxenham M. **Vet Rec** 1990 Jan 20;126(3):67 Comment in: Vet Rec 1990 Mar 10;126(10):250.

Suspected Aleutian disease in a wild otter (Lutra lutra). Wells GA, et al. **Vet Rec** 1989 Aug 26;125(9):232–5

Vaccine-associated canine distemper infection in a litter of African hunting dogs (Lycaon pictus). Durchfeld B, et al. **Zentralbl Veterinarmed [B]** 1990 May;37(3):203–12

[Determination of bile acids in bear gall drainage by thin layer chromatographic scanning] Wang FS, et al. **Yao Hsueh Hsueh Pao** 1989;24(5):397–400 (Eng. Abstr.) **(Chi)**

[Distemper as the cause of death in badgers in Austria] Kölbl S, et al. **Tierarztl Prax** 1990 Feb;18(1):81–4 (Eng. Abstr.) **(Ger)**

[The efficacy of antirabies treatment in human bites by a rabid wolf in Chernigov Province] Misenko LI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Aug;(8):107–9 **(Rus)**

ANATOMY & HISTOLOGY

Ultrastructure of the ferret sublingual gland. Jacob S, et al. **Acta Anat (Basel)** 1989;135(4):344–6

The thickness, shape and arrangement of elastic fibres within the nuchal ligament from various animal species. Bianchi M. **Anat Anz** 1989;169(1):53–66

Early monocular enucleations in fetal ferrets produce a decrease of uncrossed and an increase of crossed retinofugal components: a possible model for the albino abnormality. Guillery RW. **J Anat** 1989 Jun;164:73–84

Changes in airway length after unilateral pneumonectomy in weanling ferrets. Kirchner KK, et al. **J Appl Physiol** 1990 Jan;68(1):187–92

Synaptic organization in the adult ferret medial superior olive. Brunso-Bechtold JK, et al. **J Comp Neurol** 1990 Apr 15;294(3):389–98

Terminal arbors of single ON-center and OFF-center X and Y retinal ganglion cell axons within the ferret's lateral geniculate nucleus. Roe AW, et al. **J Comp Neurol** 1989 Oct 8;288(2):208–42

Differential scaling of the long bones in the terrestrial carnivora and other mammals. Bertram JE, et al. **J Morphol** 1990 May;204(2):157–69

Growth of the ferret tracheobronchial tree. Oldham MJ, et al. **Lab Anim Sci** 1990 Mar;40(2):186–91

The facial artery of the lion (Panthera leo). Lin RT, et al. **Okajimas Folia Anat Jpn** 1990 Mar;66(6):417–31

Refractive state, ocular anatomy, and accommodative range of the sea otter (Enhydra lutris). Murphy CJ, et al. **Vision Res** 1990;30(1):23–32

[The rete mirabile of the maxillary artery of the lion (Panthera leo, L. 1758)] Frackowiak H. **Anat Histol Embryol** 1989 Dec;18(4):342–8 (Eng. Abstr.) **(Ger)**

[The origin, growth, use, size and form of the ligamentum phrenicopericardium of Canis lupus (L. 1758) compared to Canis lupus f. familiaris] Kräling C, et al. **Gegenbaurs Morphol Jahrb** 1990;136(3):327–32 (Eng. Abstr.) **(Ger)**

[Histological pattern of the tongue in the Japanese weasels, Mustela itatsi, with special reference to the morphology and distribution of papillae, taste buds and lingual glands] Furubayashi R, et al. **Kaibogaku Zasshi** 1989 Jun; 64(3):210–4 (Eng. Abstr.) **(Jpn)**

[Quantitative characteristics of the endocrine cells of the duodenal glands of Carnivora] Iatskovskiĭ AN, et al. **Arkh Anat Gistol Embriol** 1989 Aug;97(8):49–55 (Eng. Abstr.) **(Rus)**

BLOOD

Carnivora: the primary structure of the alpha-chains of ferret (Mustela putorius furo, Mustelidae) hemoglobins. Hombrados I, et al. **Biol Chem Hoppe Seyler** 1989 Oct; 370(10):1133–8

Seasonal serum urea-creatinine ratios in wild and captive American badgers, Taxidea taxus. Harlow HJ, et al. **Comp Biochem Physiol [A]** 1990;95(1):65–8

The majority of vitamin A is transported as retinyl esters in the blood of most carnivores. Schweigert FJ, et al. **Comp Biochem Physiol [A]** 1990;95(4):573–8

Membrane transport of potassium ions in erythrocytes of the American black bear, Ursus americanus. Willis JS, et al. **Comp Biochem Physiol [A]** 1990;96(1):97–105

Membrane transport of sodium ions in erythrocytes of the American black bear, Ursus americanus. Willis JS, et al. **Comp Biochem Physiol [A]** 1990;96(1):91–6

The chloride shift may facilitate oxygen loading and unloading to/from the hemoglobin from the brown bear (Ursus arctos L.). Brix O, et al. **Comp Biochem Physiol [B]** 1990;95(4):865–8

Lack of detectable blood groups in domestic ferrets: implications for transfusion. Manning DD, et al. **J Am Vet Med Assoc** 1990 Jul 1;197(1):84–6

Comparison of serum and plasma taurine values in Bengal tigers with values in taurine-sufficient and -deficient domestic cats. Pickett JP, et al. **J Am Vet Med Assoc** 1990 Jan 15;196(2):342–6

Carnivora: the primary structure of hemoglobin from adult coati (Nasua nasua rufa, Procyonidae). Ahmed A, et al. **J Protein Chem** 1990 Feb;9(1):23–9

Stoichiometry of net sodium and potassium fluxes mediated by the Na-K-Cl co-transport system in ferret red cells. Flatman PW. **Q J Exp Physiol** 1989 Nov;74(6):939–41

EMBRYOLOGY

[Late embryonic development of the vomeronasal complex of the cat (Felis silvestris)] Wöhrmann-Repenning A, et al. **Gegenbaurs Morphol Jahrb** 1989;135(6):917–27 (Eng. Abstr.) **(Ger)**

GENETICS

Electron microscopic observations on the synaptonemal complex of spermatocytes of the giant panda (Ailluropoda melanoleuca). Ma CX, et al. **Genetica** 1990;81(1):43–50

Genetic and morphological divergence among sympatric canids. Wayne RK, et al. **J Hered** 1989 Nov-Dec; 80(6):447–54

DNA/DNA hybridization studies of the carnivorous marsupials. I: The intergeneric relationships of bandicoots (Marsupialia: Perameloidea). Kirsch JA, et al. **J Mol Evol** 1990 May;30(5):434–48

Derivation of gnotobiotic ferrets: perinatal diet and hand-rearing requirements. Manning DD, et al. **Lab Anim Sci** 1990 Jan;40(1):51–5

Satellite 1 DNA sequence from genomic DNA of the giant panda Ailuropoda melanoleuca. Wu ZA, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1054

Molecular phylogeny of Rodentia, Lagomorpha, Primates, Artiodactyla, and Carnivora and molecular clocks. Li WH, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6703–7

Large sequence divergence among mitochondrial DNA genotypes within populations of eastern African black-backed jackals. Wayne RK, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1772–6

[EcoRI- and BamHI-families of repeated sequences in mustelids] :isjmolpva TP, et al. **Genetika** 1989 Aug; 25(8):1449–61 (Eng. Abstr.) **(Rus)**

[Phylogenetic relations of closely related species of Mustelidae. Interspecies variability of localization of restriction sites of BamHI-repeats] Lushnikova TP, et al. **Genetika** 1989 Jun;25(6):1089–94 (Eng. Abstr.) **(Rus)**

[Genome mapping in silver fox. Syntenic genes in Carnivora] Rubtsov NB, et al. **Genetika** 1989 Dec;25(12):2199–208 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Dendritic morphology and development in the ferret medial superior olivary nucleus. Henkel CK, et al. **J Comp Neurol** 1990 Apr 15;294(3):377–88

Development of glial cells in the cerebral wall of ferrets: direct tracing of their transformation from radial glia into astrocytes. Voigt T. **J Comp Neurol** 1989 Nov 1; 289(1):74–88

Effects of group and sex combination on productive performance of farmed polecats (Mustela putorius). Korhonen H, et al. **Z Versuchstierkd** 1990;33(2):79–83

IMMUNOLOGY

Mutants of rabies viruses in skunks: immune response and pathogenicity. Tolson ND, et al. **Can J Vet Res** 1990 Jan; 54(1):178–83

A domestic ferret model of immunity to Campylobacter jejuni-induced enteric disease. Bell JA, et al. **Infect Immun** 1990 Jun;58(6):1848–52

Evidence for a Fel d I-like molecule in the "big cats" (Felidae species). de Groot H, et al. **J Allergy Clin Immunol** 1990 Jul;86(1):107–16

Antibodies to mycobacteria in healthy and tuberculous badgers from two English counties. Stainsby K, et al. **Tubercle** 1989 Dec;70(4):287–92

METABOLISM

Kinins are generated in nasal secretions during influenza A infections in ferrets. Barnett JK, et al. **Am Rev Respir Dis** 1990 Jul;142(1):162–6

Carnivora: the primary structure of the beach marten (Martes foina, Mustelidae) hemoglobin. Rücknagel KP, et al. **Biol Chem Hoppe Seyler** 1990 Jun;371(6):503–9

Relationships between organochlorine concentrations in liver and muscle of otters. Mason CF. **Bull Environ Contam Toxicol** 1989 Oct;43(4):548–9

Peptide-containing nerve fibers in the respiratory tract of the ferret. Luts A, et al. **Cell Tissue Res** 1989 Nov; 258(2):259–67

Calcium and bone metabolic homeostasis in active and denning black bears (Ursus americanus). Floyd T, et al. **Clin Orthop** 1990 Jun;(255):301–9 (62 ref.)

Retention and metabolic fate of [3H]-melatonin in the spotted skunk. Berria M, et al. **J Pineal Res** 1990;8(2):129–36

The amino-acid sequence of the double-headed proteinase inhibitor from badger (Meles meles) submandibular glands. Hochstrasser K, et al. **Protein Seq Data Anal** 1989 Dec; 2(6):453–6

Feeding ecology of the stone and pine marten revealed by element analysis of their skeletons. Grupe G, et al. **Sci Total Environ** 1990 Jan;90:227–40

MICROBIOLOGY

Helicobacter pylori-like microorganisms and chronic active gastritis in ferrets. Gottfried MR, et al. **Am J Gastroenterol** 1990 Jul;85(7):813–8

Eradication of Helicobacter mustelae from the ferret stomach: an animal model of Helicobacter (Campylobacter) pylori chemotherapy. Otto G, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1232–6

Formation of a clear zone on tannin-treated brain heart infusion agar by a Streptococcus sp. isolated from feces of koalas. Osawa R. **Appl Environ Microbiol** 1990 Mar; 56(3):829–31

Mutants of rabies viruses in skunks: immune response and pathogenicity. Tolson ND, et al. **Can J Vet Res** 1990 Jan; 54(1):178–83

The faecal flora of the giant panda (Ailuropoda melanoleuca). Hirayama K, et al. **J Appl Bacteriol** 1989 Oct;67(4):411–5

Prevalence and implications of feline coronavirus infections of captive and free-ranging cheetahs (Acinonyx jubatus). Heeney JL, et al. **J Virol** 1990 May;64(5):1964–72

[An unusual infection of carnivorous animals] Martynov VF. **Vopr Virusol** 1989 May-Jun;34(3):354–8 **(Rus)**

PARASITOLOGY

Myofibre changes and capsule formation in mice infected with different strains of Trichinella. Evensen O, et al. **Acta Vet Scand** 1989;30(3):341–6

Dracunculus insignis in ferrets: comparison of inoculation routes. Brandt FH, et al. **J Parasitol** 1990 Feb;76(1):93–5

Two new nematodes from the Iriomote cat, Prionailurus iriomotensis, from Okinawa: Uncinaria (Uncinaria) maya n. sp. (Ancylostomatoidea) and Molineus springsmithi yayeyamanus n. subsp. (Trichostrongyloidea). Hasegawa H. **J Parasitol** 1989 Dec;75(6):863–9

Prevalence of hematozoans in lions (Panthera leo) and cheetah (Acinonyx jubatus) in Serengeti National Park and Ngorongoro Crater, Tanzania. Averbeck GA, et al. **J Wildl Dis** 1990 Jul;26(3):392–4

Sarcocystis sp. in muscles of free-ranging Florida panthers and cougars (Felis concolor). Greiner EC, et al. **J Wildl Dis** 1989 Oct;25(4):623–8

Prevalence of Toxoplasma gondii antibodies in dingoes. Johnson AM, et al. **J Wildl Dis** 1990 Jul;26(3):383–6

Dirofilaria immitis in a river otter (Lutra canadensis) from Louisiana. Snyder DE, et al. **J Wildl Dis** 1989 Oct;25(4):629

Parasites from the Asiatic black bear (Ursus thibetanus) on Kyushu Island, Japan. Yokohata Y, et al. **J Wildl Dis** 1990 Jan;26(1):137–8

Time of repletion of subadult Ixodes ricinus ticks feeding on diverse hosts. Matuschka FR, et al. **Parasitol Res** 1990; 76(6):540–4

PHYSIOLOGY

Thyroid and adrenal function tests in adult male ferrets. Heard DJ, et al. **Am J Vet Res** 1990 Jan;51(1):32–5

A comparison of the biomechanical properties of the periodontal ligaments of erupting and erupted teeth of non-continuous growth (ferret mandibular canines). Moxham BJ, et al. **Arch Oral Biol** 1989;34(10):763–6

Hibernation activates glyoxylate cycle and gluconeogenesis in black bear brown adipose tissue. Davis WL, et al. **Biochim Biophys Acta** 1990 Mar 9;1051(3):276–8

Pituitary responsiveness to luteinizing hormone-releasing hormone in prepubertal and postpubertal male ferrets. Berglund LA, et al. **Biol Reprod** 1990 Aug;43(2):335–9

Auditory brainstem of the ferret: bilateral cochlear lesions in infancy do not affect the number of neurons projecting from the cochlear nucleus to the inferior colliculus. Moore DR. **Brain Res Dev Brain Res** 1990 Jun 1;54(1):125–30

Auditory brainstem of the ferret: maturation of the brainstem auditory evoked response. Morey AL, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1–2):279–88

Lesions to the anterior hypothalamus prevent the melatonin-induced lengthening of delayed implantation. Berria M, et al. **Endocrinology** 1989 Dec;125(6):2897–904

Optokinetic nystagmus in the ferret: including selected comparisons with the cat. Hein A, et al. **Exp Brain Res** 1990;79(3):623–32

Endocrine correlates of mating-induced reductions in estrous behaviour in an induced ovulator, the ferret. Villars TA, et al. **Horm Behav** 1990 Jun;24(2):198–214

Control of pH of airway surface liquid of the ferret trachea in vitro. Kyle H, et al. **J Appl Physiol** 1990 Jan;68(1):135–40

Electromechanical effects of endothelin on ferret bronchial and tracheal smooth muscle. Lee HK, et al. **J Appl Physiol** 1990 Jan;68(1):417–20

Lung volumes after an increase in lung distension in pneumonectomized ferrets. McBride JT. **J Appl Physiol** 1989 Oct;67(4):1418–21

Does leukotriene C4 mediate hypoxic vasoconstriction in isolated ferret lungs? Tseng CM, et al. **J Appl Physiol** 1990 Jan;68(1):253–9

Responses of vagal efferent fibres to stimulation of gastric mechano- and chemoreceptors in the anaesthetized ferret. Blackshaw LA, et al. **J Auton Nerv Syst** 1989 Jun; 27(1):39–45

Calcium-sensitivity modulation of cardiac myofibrillar proteins. Rüegg JC, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 3:S20–3

Testicular response to melatonin or suprachiasmatic nuclei ablation in the spotted skunk. Berria M, et al. **J Exp Zool** 1990 Jul;255(1):72–9

In vitro fertilization of gonadotropin-stimulated leopard cat (Felis bengalensis) follicular oocytes. Goodrowe KL, et al. **J Exp Zool** 1989 Oct;252(1):89–95

Photomanipulation of sexual maturation and breeding cycle of the steppe polecat (Mustela eversmanni) and other techniques for more rapid propagation of the species. Mead RA, et al. **J Exp Zool** 1990 Aug;255(2):232–8

The ferret as a model for studying the sexual differentiation of behavioral and reproductive function. Baum MJ. **J Exp Zool Suppl** 1990;4:213–4 (7 ref.)

The effects of bathing sodium ions upon the intracellular sodium activity in calcium-free media and the calcium paradox of isolated ferret ventricular muscle. Bhojani IH, et al. **J Mol Cell Cardiol** 1990 May;22(5):507–22

Characterization of axonal injury produced by controlled cortical impact. Lighthall JW, et al. **J Neurotrauma** 1990 Summer;7(2):65–76

Calcium-force coupling mechanisms during vasodilator-induced relaxation of ferret aorta. DeFeo TT, et al. **J Physiol (Lond)** 1989 May;412:123–33

Secretion of protein from salivary glands in the ferret in response to vasoactive intestinal peptide. Ekström J, et al. **J Physiol (Lond)** 1989 Aug;415:131–41

Reproductive cycle of the steppe polecat (Mustela eversmanni). Mead RA, et al. **J Reprod Fertil** 1990 Jan; 88(1):353–60

Oocyte recovery, maturation and fertilization in vitro in the puma (Felis concolor). Miller AM, et al. **J Reprod Fertil** 1990 Jan;88(1):249–58

Physiological and behavioral responses of gray wolves (Canis lupus) to immobilization with tiletamine and zolazepam. Kreeger TJ, et al. **J Wildl Dis** 1990 Jan;26(1):90–4

The ferret as a model for vasomotor biocompatibility testing of medical devices. Hoglind J, et al. **Lab Anim Sci** 1989 Sep;39(5):450–2

Effects of yohimbine on bradycardia and duration of recumbency in ketamine/xylazine anesthetized ferrets. Sylvina TJ, et al. **Lab Anim Sci** 1990 Mar;40(2):178–82

Ejaculate-hormonal traits in the leopard cat (Felis bengalensis) and sperm function as measured by in vitro penetration of zona-free hamster ova and zona-intact domestic cat oocytes. Howard J, et al. **Mol Reprod Dev** 1990 Jun;26(2):163–74

Amphibious nature of visual acuity in the Asian "Clawless" otter. Schusterman RJ, et al. **Nature** 1973 Aug 24; 244(5417):518–9

Is the polar bear (Ursus maritimus) a hibernator? Continued studies on opioids and hibernation. Bruce DS, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):705–11

Electromechanical effects of endothelin in ferret bronchial and tracheal smooth muscle. Lee HK, et al. **Prog Clin Biol Res** 1990;327:683–5

Oestrus control in the ferret [letter] [published erratum appears in Vet Rec 1990 Feb 17;126(7):178] Oxenham M. **Vet Rec** 1990 Feb 10;126(6):148

The visual acuity of the lynx. Maffei L, et al. **Vision Res** 1990;30(4):527–8

PSYCHOLOGY

Food-caching in timber wolves, and the question of rules of action syntax. Phillips DP, et al. **Behav Brain Res** 1990 Apr 16;38(1):1–6

Prenatal and neonatal testosterone exposure interact to affect differentiation of sexual behavior and partner preference in female ferrets. Baum MJ, et al. **Behav Neurosci** 1990 Feb;104(1):183–98

CARNOSINE see under **DIPEPTIDES**

CAROTENE

Lycopene as the most efficient biological carotenoid singlet oxygen quencher. Di Mascio P, et al. **Arch Biochem Biophys** 1989 Nov 1;274(2):532–8

Dietary fiber, beta-carotene and breast cancer: results from a case-control study. Van 't Veer P, et al. **Int J Cancer** 1990 May 15;45(5):825–8

ADMINISTRATION & DOSAGE

A case-control study of diet and benign proliferative epithelial disorders of the breast. Rohan TE, et al. **Cancer Res** 1990 Jun 1;50(11):3176–81

Beta-carotene in tube feeding. Wüst B, et al. **Int J Vitam Nutr Res** 1990;60(1):19–25

Effects of chronic beta-carotene supplementation on vitamin K status in adults. Canfield LM, et al. **Nutr Cancer** 1990; 13(4):263–9

Regression of experimental cancer by oral administration of combined alpha-tocopherol and beta-carotene. Shklar G, et al. **Nutr Cancer** 1989;12(4):321–5

Development and relative validity of a food frequency questionnaire for the estimation of intake of retinol and beta-carotene. Stiggelbout AM, et al. **Nutr Cancer** 1989; 12(4):289–99

[Provision of workers and employees of Kuzbass industrial enterprises with vitamins C, E, A and beta-carotene] Pozniakovskiĭ VM, et al. **Vopr Pitan** 1989 Nov-Dec; (6):20–2 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

[Carotene jaundice in infants with "sugar nursing bottle syndrome"] Wetzel WE, et al. **Monatsschr Kinderheilkd** 1989 Oct;137(10):659–61 (11 ref.) (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES

Induction of a 70 kD protein associated with the selective cytotoxicity of beta-carotene in human epidermal carcinoma. Schwartz JL, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):941–6

Enhanced resistance to an antigenic tumor in immunosuppressed mice by dietary retinyl palmitate plus canthaxanthin. Gensler HL, et al. **Cancer Lett** 1990 Mar; 49(3):231–6

Cumulative reduction of primary skin tumor growth in UV-irradiated mice by the combination of retinyl palmitate and canthaxanthin. Gensler HL, et al. **Cancer Lett** 1990 Aug;53(1):27–31

Monitoring of patients taking canthaxanthin and carotene: an electroretinographic and ophthalmological survey. Arden GB, et al. **Hum Toxicol** 1989 Nov;8(6):439–50

The effects of vitamin A, beta-carotene and canthaxanthin on vitamin A metabolism and immune responses in the chick. Sklan D, et al. **Int J Vitam Nutr Res** 1989; 59(3):245–50

Photoreceptor-specific efficiencies of beta-carotene, zeaxanthin and lutein for photopigment formation deduced from receptor mutant Drosophila melanogaster. Stark WS, et al. **J Comp Physiol [A]** 1990 Feb;166(4):429–36

Aplastic anemia associated with canthaxanthin ingested for 'tanning' purposes. Bluhm R, et al. **JAMA** 1990 Sep 5; 264(9):1141–2

Effect of chronic ethanol consumption and retroviral infection on carcinogenesis and its possible inhibition by an immunostimulant, canthaxanthin: definition of a murine model. Mufti SI, et al. **Prog Clin Biol Res** 1990;325:283–304 (79 ref.)

Prevention and inhibition of oral cancer in the hamster buccal pouch model associated with carotenoid immune enhancement. Schwartz JL, et al. **Tumour Biol** 1989; 10(6):297–309

[Canthaxanthin retinopathy and macular pucker] Bopp S, et al. **J Fr Ophtalmol** 1989;12(12):891–6 (Eng. Abstr.) **(Fre)**

[Canthaxanthin retinopathy and macular pucker—clinical picture and ultrastructural findings of macular pucker] Bopp S, et al. **Fortschr Ophthalmol** 1989;86(5):456–60 (Eng. Abstr.) **(Ger)**

ANALYSIS

Decreased beta-carotene tissue levels in uterine leiomyomas and cancers of reproductive and nonreproductive organs. Palan PR, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1649–52

Effect of sampling site on retinol, carotenoid, tocopherol, and tocotrienol concentration of adipose tissue of human breast with cancer. Rautalahti M, et al. **Ann Nutr Metab** 1990;34(1):37–41

Distribution of carotene and vitamin A in liver, pancreas and body fat of Ghanaians. Dagadu JM. **Br J Nutr** 1967; 21(2):453–6

Endogenous levels of beta-carotene in human buccal mucosa cells by reversed-phase high-performance liquid chromatography. Newcomb SA, et al. **J Chromatogr** 1990 Mar 16;526(1):47–58

Separation of carotenes on cyclodextrin-bonded phases. Stalcup AM, et al. **J Chromatogr** 1990 Jan 19;499:627–35

BLOOD

Plasma vitamin E and beta-carotene concentrations during radiochemotherapy preceding bone marrow transplantation. Clemens MR, et al. **Am J Clin Nutr** 1990 Feb;51(2):216–9

Plasma concentrations of carotenoids after large doses of beta-carotene. Mathews-Roth MM. **Am J Clin Nutr** 1990 Sep;52(3):500–1

'Mangoism' [letter] Palevsky S, et al. **Am J Dis Child** 1989 Oct;143(10):1131–2

Determinants of plasma retinol, beta-carotene, and alpha-tocopherol [letter] Herbeth B, et al. **Am J Epidemiol** 1990 Aug;132(2):394–6

Food predictors of plasma beta-carotene and alpha-tocopherol: validation of a food frequency questionnaire. Romieu I, et al. **Am J Epidemiol** 1990 May; 131(5):864–76

Diet, plasma levels of beta-carotene and alpha-tocopherol, and risk of malignant melanoma. Stryker WS, et al. **Am J Epidemiol** 1990 Apr;131(4):597–611

Effects of smoking and oral contraception on plasma beta-carotene levels in healthy women. Palan PR, et al. **Am J Obstet Gynecol** 1989 Oct;161(4):881–5

Selenium, lycopene, alpha-tocopherol, beta-carotene, retinol, and subsequent bladder cancer. Helzlsouer KJ, et al. **Cancer Res** 1989 Nov 1;49(21):6144–8

Hypercarotenemia associated with an oral contraceptive [letter] Malnick SD, et al. **DICP** 1989 Oct;23(10):811

Beta-carotene serum response in young and elderly females. Maiani G, et al. **Eur J Clin Nutr** 1989 Nov;43(11):749–61

Decreased essential antioxidants and increased lipid hydroperoxides following high-dose radiochemotherapy. Clemens MR, et al. **Free Radic Res Commun** 1989; 7(3–6):227–32

Serum vitamins A and E, beta-carotene, and selenium in patients with breast cancer. Basu TK, et al. **J Am Coll Nutr** 1989 Dec;8(6):524–9

Normal serum response to oral beta-carotene in humans. Henderson CT, et al. **J Am Coll Nutr** 1989 Dec;8(6):625–35

Hypercarotenemia in children with Down's syndrome. Storm W. **J Ment Defic Res** 1990 Jun;34 (Pt 3):283–6

Changes in serum concentrations of beta-carotene and changes in the dietary intake frequency of green-yellow vegetables among healthy male inhabitants of Japan. Suzuki S, et al. **Jpn J Cancer Res** 1990 May;81(5):463–9

Investigation of the relationships between plasma levels of ascorbate, vitamin E and beta-carotene and the frequency of sister-chromatid exchanges and release of reactive oxidants by blood leucocytes from cigarette smokers. van Rensburg CE, et al. **Mutat Res** 1989 Dec;215(2):167–72

Effects of alcohol drinking and cigarette smoking on serum alpha- and beta-carotene concentrations in healthy adults. Ito Y, et al. **Nippon Eiseigaku Zasshi** 1989 Jun;44(2):607–14

[A case report of carotenemia] Wu MT, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Jul;5(7):412–5 (Eng. Abstr.) **(Chi)**

[The development of beta-carotenemia in dairy cows 1975–1987] Lebeda M, et al. **Vet Med (Praha)** 1989 Sep;

34(9):527–36 (Eng. Abstr.) (Cze)
[Hypercarotenemia, amenorrhea and a vegetarian diet] Martin–Du Pan RC, et al.
J Gynecol Obstet Biol Reprod (Paris) 1990;19(3):290–4 (Eng. Abstr.) (Fre)
[The value of determining anti–gliadin antibodies as well as carotene and xylose blood levels in various phases of celiac disease] Caiulo VA, et al. **Minerva Pediatr** 1989 Sep; 41(9):473–5 (Eng. Abstr.) (Ita)

METABOLISM

Variations in the uptake of beta–carotene in the oral mucosa of individuals after 3 days of supplementation. Gilbert AM, et al. **Int J Cancer** 1990 May 15;45(5):855–9
Photoreceptor–specific efficiencies of beta–carotene, zeaxanthin and lutein for photopigment formation deduced from receptor mutant Drosophila melanogaster. Stark WS, et al. **J Comp Physiol [A]** 1990 Feb;166(4):429–36
The metabolism of [14C]beta–carotene and the presence of other carotenoids in rats and monkeys. Krinsky NI, et al. **J Nutr** 1990 Jan;120(1):81–7
Enzymatic conversion of all–trans–beta–carotene to retinal by a cytosolic enzyme from rabbit and rat intestinal mucosa. Lakshman MR, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(23):9124–8
Physiological potential of ascorbate, beta–carotene and alpha–tocopherol individually and in combination in the prevention of tissue damage, carcinogenesis and immune dysfunction mediated by phagocyte–derived reactive oxidants. Anderson R, et al. **World Rev Nutr Diet** 1990; 62:27–58 (127 ref.)

PHARMACOKINETICS

Absorption, storage, and distribution of beta–carotene in normal and beta–carotene–fed rats: roles of parenchymal and stellate cells. Lakshman MR, et al. **J Lipid Res** 1989 Oct;30(10):1545–50
Accumulation in chick livers of 9–cis versus all–trans beta–carotene. Mokady S, et al. **J Nutr** 1990 Aug; 120(8):889–92

PHARMACOLOGY

Biochemical background of beta–carotene–induced gastric cytoprotection in rats treated with HCl. Vincze A, et al. **Acta Physiol Hung** 1990;75 Suppl:293–4
Investigation of the effects of oral administration of vitamin E and beta–carotene on the chemiluminescence responses and the frequency of sister chromatid exchanges in circulating leukocytes from cigarette smokers. Richards GA, et al. **Am Rev Respir Dis** 1990 Sep;142(3):648–54
Rabbits fed on beta–carotene have higher serum levels of all–trans retinoic acid than those receiving no beta–carotene. Folman Y, et al. **Br J Nutr** 1989 Jul; 62(1):195–201
Beta–carotene supplementation of turkey diets varying in fat and retinol. Stevens VI, et al. **Br Poult Sci** 1989 Dec; 30(4):877–87
Modulation by some natural carotenoids of DNA adduct formation by aflatoxin B1 in vitro. Goswami UC, et al. **Cancer Lett** 1989 Sep 15;47(1–2):127–32
Effects of beta–carotene on chemically–induced skin tumors in HRA/Skh hairless mice. Steinel HH, et al.
Cancer Lett 1990 May 30;51(2):163–8
Monitoring of patients taking canthaxanthin and carotene: an electroretinographic and ophthalmological survey. Arden GB, et al. **Hum Toxicol** 1989 Nov;8(6):439–50
The effects of vitamin A, beta–carotene and canthaxanthin on vitamin A metabolism and immune responses in the chick. Sklan D, et al. **Int J Vitam Nutr Res** 1989; 59(3):245–50
Beta–carotene induces morphological differentiation and decreases adenylate cyclase activity in melanoma cells in culture. Hazuka MB, et al. **J Am Coll Nutr** 1990 Apr; 9(2):143–9
Chronic beta–carotene supplementation does not alter the gastric mucosal response to acute aspirin ingestion. Moses FM, et al. **J Clin Gastroenterol** 1990 Jun;12(3):267–70
Effect of dietary vitamin A and beta–carotene on polymorphonuclear leukocyte and lymphocyte function in dairy cows during the early dry period. Tjoelker LW, et al. **J Dairy Sci** 1990 Apr;73(4):1017–22
Inhibitory effects of alpha–carotene on proliferation of the human neuroblastoma cell line GOTO. Murakoshi M, et al. **J Natl Cancer Inst** 1989 Nov 1;81(21):1649–52
In vivo effects of single or combined dietary antimutagens on mutagen–induced chromosomal aberrations. Renner HW. **Mutat Res** 1990 Jun;244(2):185–8
Antitumor activity in skin of Skh and Sencar mice by two dietary beta–carotene formulations. Lambert LA, et al. **Nutr Cancer** 1990;13(4):213–21
Secretion pattern of retinol–binding protein in blood of goats: effect of vitamin A, provitamin A and their dosing schedule. Goyal KC, et al. **Z Ernahrungswiss** 1989 Sep; 28(3):225–30

THERAPEUTIC USE

Effect of atropine, PGF2 alpha and cimetidine on the beta–carotene induced cytoprotection in ethanol–treated rats. Garamszegi M, et al. **Acta Physiol Hung** 1989; 73(2–3):221–4
Similarities and differences in the cytoprotection induced by PGI2 and beta–carotene in experimental ulcer. Sütö G, et al. **Acta Physiol Hung** 1989;73(2–3):155–8
The free radical mechanisms in beta–carotene induced gastric cytoprotection in HCl model. Vincze A, et al.
Acta Physiol Hung 1989;73(2–3):351–5
The administration of beta carotene to prevent and regress oral carcinoma in the hamster cheek pouch and the associated enhancement of the immune response. Schwartz JL, et al. **Adv Exp Med Biol** 1990;262:77–93
Beta–carotene supplementation associated with intermittent retinol administration in the treatment of premenopausal mastodynia. Santamaria L, et al. **Boll Chim Farm** 1989 Sep; 128(9):284–7
Inhibition of AFB1–induced liver cancer and induction of increased microsomal enzyme activity by dietary constituents. Nyandieka HS, et al. **East Afr Med J** 1989 Dec;66(12):796–803
Beta–carotene didn't prevent cancer: What's up, doc [news] Smigel K. **J Natl Cancer Inst** 1990 Jun 6;82(11):899–900
Zone II flexor tendon repair: effects of vitamins A, E, beta–carotene. Greenwald DP, et al. **J Surg Res** 1990 Jul; 49(1):98–102
A clinical trial of beta carotene to prevent basal–cell and squamous–cell cancers of the skin. The Skin Cancer Prevention Study Group [see comments] Greenberg ER, et al. **N Engl J Med** 1990 Sep 20;323(12):789–95 Comment in: N Engl J Med 1990 Sep 20;323(12):825–7.
Coming of age—the chemoprevention of cancer [editorial; comment] Meyskens FL Jr. **N Engl J Med** 1990 Sep 20; 323(12):825–7 Comment on: N Engl J Med 1990 Sep 20;323(12):789–95. Comment on: N Engl J Med 1990 Sep 20;323(12):795–801.
In vivo and in vitro effects of beta–carotene and algae extracts in murine tumor models. Combs W, et al.
Nutr Cancer 1989;12(4):371–80
Dietary beta–carotene and 13–cis–retinoic acid are not effective in preventing some features of UVB–induced dermal damage in hairless mice. Kligman LH, et al.
Photochem Photobiol 1990 Jun;51(6):733–5
Prevention and inhibition of oral cancer in the hamster buccal pouch model associated with carotenoid immune enhancement. Schwartz JL, et al. **Tumour Biol** 1989; 10(6):297–309
Beta–carotene and reversal of urothelial dysplasia [letter] Holmquist N, et al. **Urology** 1990 Jan;35(1):98–9
[Biological aspects and perspectives applicable to the chemoprevention of cancer of the upper respiratory–digestive tract] Toma S, et al.
Acta Otorhinolaryngol Ital 1990;10 Suppl 27:41–54 (55 ref.) (Eng. Abstr.) (Ita)
[Anti–necrosogenic action of natural and synthetic antioxidants in coronary occlusive myocardial infarct] Konovalova GG, et al. **Biull Eksp Biol Med** 1989 Oct; 108(10):466–8 (Eng. Abstr.) (Rus)

TOXICITY

Induction of a 70 kD protein associated with the selective cytotoxicity of beta–carotene in human epidermal carcinoma. Schwartz JL, et al.
Biochem Biophys Res Commun 1990 Jun 29;169(3):941–6

CAROTENOIDS

The contribution of the carotenoid to the visible circular dichroism of the light–harvesting antenna of Rhodospirillum rubrum. Lozano RM, et al. **Biochem J** 1990 Sep 1;270(2):469–72
Going in the red [news] **Nature** 1973 May 4;243(5401):7

ADMINISTRATION & DOSAGE

[(Chemo–) prevention of second tumors in patients with head and neck neoplasms] de Vries N, et al. **HNO** 1990 Jun; 38(6):208–13 (36 ref.) (Eng. Abstr.) (Ger)

ANALYSIS

High–performance liquid chromatography and capillary supercritical–fluid chromatography separation of vegetable carotenoids and carotenoid isomers. Schmitz HH, et al. **J Chromatogr** 1989 Oct 6;479(2):261–8
Carotenoids and retinoids in Finnish foods: dairy products and eggs. Ollilainen V, et al. **J Dairy Sci** 1989 Sep; 72(9):2257–65
Carotenoid analyses of selected raw and cooked foods associated with a lower risk for cancer [published erratum appears in J Natl Cancer Inst 1990 Apr 18;82(8):715] Micozzi MS, et al. **J Natl Cancer Inst** 1990 Feb 21; 82(4):282–5
The metabolism of [14C]beta–carotene and the presence of other carotenoids in rats and monkeys. Krinsky NI, et al. **J Nutr** 1990 Jan;120(1):81–7
Carotenoids of human colostrum. Patton S, et al. **Lipids** 1990 Mar;25(3):159–65
[A rapid method for determining carotenoids in mycoplasmas] Skripal' IG, et al. **Mikrobiol Zh** 1985 Mar–Apr;47(2):106–7 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Influence of light on growth and pigmentation of the yeast Phaffia rhodozyma. An GH, et al.
Antonie Van Leeuwenhoek 1990 May;57(4):191–203
Co–ordination of chromophore–apoprotein synthesis in the developing leaf of Avena sativa L. Bennett AP, et al.
Biochem Soc Trans 1990 Jun;18(3):499–500
Genetic and biochemical characterization of carotenoid biosynthesis mutants of Rhodobacter capsulatus. Armstrong GA, et al. **J Biol Chem** 1990 May 15; 265(14):8329–38

BLOOD

Plasma concentrations of carotenoids after large doses of beta–carotene. Mathews–Roth MM. **Am J Clin Nutr** 1990 Sep;52(3):500–1
Serum retinol and airway obstruction. Morabia A, et al.
Am J Epidemiol 1990 Jul;132(1):77–82
Low plasma prealbumin and carotenoid levels in sickle cell disease patients. Jain SK, et al. **Am J Med Sci** 1990 Jan; 299(1):13–5
Preventive potential of antioxidative vitamins and carotenoids on cancer. Stähelin HB, et al.
Int J Vitam Nutr Res Suppl 1989;30:232–41 (35 ref.)
Serologic precursors of cancer. Retinol, carotenoids, and tocopherol and risk of prostate cancer. Hsing AW, et al. **J Natl Cancer Inst** 1990 Jun 6;82(11):941–6
[Significance of carotenoid analysis in clinical tests] Honda T, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:575–7 (Jpn)

ISOLATION & PURIFICATION

Structure of spheroidene in the photosynthetic reaction center from Y Rhodobacter sphaeroides. Arnoux B, et al.
FEBS Lett 1989 Nov 20;258(1):47–50

METABOLISM

The action of free radicals on Deinococcus radiodurans carotenoids. Carbonneau MA, et al.
Arch Biochem Biophys 1989 Nov 15;275(1):244–51
Alternative ligands as probes for the carotenoid–binding site of lobster carapace crustacyanin. Clarke JB, et al.
Biochem J 1990 Feb 1;265(3):919–21
Monomeric bacteriochlorophyll is required for the triplet energy transfer between the primary donor and the carotenoid in photosynthetic bacterial reaction centers. Frank HA, et al. **Biochim Biophys Acta** 1989 Sep 28; 976(2–3):222–32
Purification of anterogin, a protein factor necessary for the dispersion of carotenoid droplets in permeabilized xanthophores of goldfish. Zeng ZC, et al.
Cell Motil Cytoskeleton 1989;14(4):485–90
Carotenoid composition, concentrations, and relationships in various human organs. Kaplan LA, et al.
Clin Physiol Biochem 1990;8(1):1–10
Quinone compounds are able to replace molecular oxygen as terminal electron acceptor in phytoene desaturation in chromoplasts of Narcissus pseudonarcissus L. Mayer MP, et al. **Eur J Biochem** 1990 Jul 31;191(2):359–63
Metabolism of carotenoid pigments in birds. Brush AH.
FASEB J 1990 Sep;4(12):2969–77
In vitro characterization of two different Phycomyces blakesleeanus mutants with impaired phytoene desaturation. Schmidt A, et al. **J Bacteriol** 1990 Jul; 172(7):4103–5
Enhancing the carotenoid content of atherosclerotic plaque: implications for laser therapy [letter; comment] Leclerc BS. **J Vasc Surg** 1990 Feb;11(2):359–60 Comment on: J Vasc Surg 1989 Apr;9(4):563–7.
[Effect of space flight factors on the pigment and lipid composition of wheat] Rumiantseva VB, et al.
Kosm Biol Aviakosm Med 1990 Jan–Feb;24(1):53–5 (Rus)

PHARMACOKINETICS

The role of serum and tissue pharmacology studies in the design and interpretation of chemoprevention trials. Plezia PM, et al. **Prev Med** 1989 Sep;18(5):680–7

PHARMACOLOGY

The effect of carotenoids on the antitumor immune response in vivo and in vitro with hamster and mouse immune effectors. Schwartz JL, et al. **Ann N Y Acad Sci** 1990; 587:92–109 (44 ref.)
Antigenotoxic activity of carotenoids in carcinogen–exposed populations. Rosin MP. **Basic Life Sci** 1990;52:45–59 (49 ref.)
Modulation by some natural carotenoids of DNA adduct formation by aflatoxin B1 in vitro. Goswami UC, et al.
Cancer Lett 1989 Sep 15;47(1–2):127–32
Antioxidant functions of carotenoids. Krinsky NI.
Free Radic Biol Med 1989;7(6):617–35 (130 ref.)
Effects of carotenoids on aflatoxin B1–induced mutagenesis in S. typhimurium TA 100 and TA 98. He Y, et al.
Nutr Cancer 1990;13(4):243–53
Carotenoids as chemopreventive agents. Krinsky NI.
Prev Med 1989 Sep;18(5):592–602 (40 ref.)
Inhibitory effects of carotenoids and retinoids on the in vitro growth of rat C–6 glioma cells. Wang CJ, et al.
Proc Natl Sci Counc Repub China [B] 1989 Jul;13(3):176–83
Secretion pattern of retinol–binding protein in blood of goats: effect of vitamin A, provitamin A and their dosing schedule. Goyal KC, et al. **Z Ernahrungswiss** 1989 Sep; 28(3):225–30

PHYSIOLOGY

The role of vitamin E and carotenoids in preventing oxidation of low density lipoproteins. Esterbauer H, et al. **Ann N Y Acad Sci** 1989;570:254–67 (33 ref.)

Partial characterization of a carotenoid droplet ATPase and its possible significance in carotenoid droplet dispersion in goldfish xanthophores. Wu BY, et al. **Cell Motil Cytoskeleton** 1990;15(3):147–55

Actin-dependent carotenoid droplet dispersion in permeabilized cultured goldfish xanthophores. Yu FX, et al. **Cell Motil Cytoskeleton** 1990;15(3):139–46

Carotenoids: recent progress, problems and prospects. Karnaukhov VN. **Comp Biochem Physiol [B]** 1990; 95(1):1–20

THERAPEUTIC USE

Inhibition of growth and development of the transplantable C-6 glioma cells inoculated in rats by retinoids and carotenoids. Wang CJ, et al. **Cancer Lett** 1989 Nov 30; 48(2):135–42

Development of in vitro systems for chemoprevention research. Bertram JS, et al. **Prev Med** 1989 Sep; 18(5):562–75

Cancer chemoprevention by supplemental carotenoids in animals and humans. Santamaria L, et al. **Prev Med** 1989 Sep;18(5):603–23 (80 ref.)

Prevention and inhibition of oral cancer in the hamster buccal pouch model associated with carotenoid immune enhancement. Schwartz JL, et al. **Tumour Biol** 1989; 10(6):297–309

[The correction with hepatic protectors of structural metabolic disorders in the liver in D-galactosamine poisoning] Saratikov AS, et al. **Farmakol Toksikol** 1990 Mar–Apr;53(2):38–40 (Eng. Abstr.) **(Rus)**

[The use of prolonged-action karotilin in the combined treatment of periodontitis] Derelko LV, et al. **Stomatologiia (Mosk)** 1990 Mar–Apr;69(2):25–7 (Eng. Abstr.) **(Rus)**

CAROTID ARTERIES

Prospective clinicopathophysiologic follow-up study of asymptomatic neck bruit. AbuRahma AF, et al. **Am Surg** 1990 Feb;56(2):108–13

Spontaneous arteriovenous shunts of the cavernous sinus—ophthalmological considerations. Halmagyi GM, et al. **Aust N Z J Ophthalmol** 1989 Nov;17(4):439–43

Radiologic assessment of tumor and the carotid artery: correlation of magnetic resonance imaging, ultrasound, and computed tomography with surgical findings. Langman AW, et al. **Head Neck** 1989 Sep–Oct;11(5):443–9

Carotid artery approach for balloon dilation of aortic valve stenosis in the neonate: a preliminary report. Fischer DR, et al. **J Am Coll Cardiol** 1990 Jun;15(7):1633–6

Stroke syndrome in the young due to obliterative arteritis of extracranial carotid arteries. Clinical pathological profiles. Aghaji MA, et al. **J Neurosurg Sci** 1989 Oct–Dec; 33(4):333–7

Radiotherapy of dural arteriovenous malformation in the cavernous sinus. Hidaka H, et al. **Radiat Med** 1989 May–Jun;7(3):160–4

The occipital–vertebral anastomosis as a collateral pathway: hemodynamic patterns—case report. Miyachi S, et al. **Surg Neurol** 1989 Nov;32(5):350–5 (25 ref.)

Cryopreserved venous homografts as vascular conduits in canine carotid arteries. Showalter D, et al. **Surgery** 1989 Oct;106(4):652–8; discussion 658–9

[Oculomotor nerve paralysis secondary to dural carotido-cavernous sinus fistula] Bordat B, et al. **Ophtalmologie** 1989 Apr–May;3(2):129–32 (Eng. Abstr.) **(Fre)**

ABNORMALITIES

Isolated left carotid artery in CHARGE association: diagnosis and repair. Ghalili K, et al. **Ann Thorac Surg** 1990 Jul;50(1):130–2

A case of epidermal nevus syndrome with carotid malformation. David P, et al. **Ital J Neurol Sci** 1990 Jun; 11(3):293–6

Dural arteriovenous malformation. Sowka JW. **J Am Optom Assoc** 1989 Nov;60(11):846–8

The anomaly of a non-bifurcating cervical carotid artery. Case report. Morimoto T, et al. **J Neurosurg** 1990 Jan; 72(1):130–2

Unilateral sudden hearing loss as a result of anomalous carotid anatomy. Snyder SO Jr. **J Vasc Surg** 1990 Sep; 12(3):341–4

Congenital aneurysmal dilatation of the petrous-cavernous carotid artery and vertebral basilar junction in a child. Guha A, et al. **Neurosurgery** 1990 Feb;26(2):322–7

[Carotid-vertebrobasilar anastomosis] Nekula J. **Cesk Radiol** 1989 Oct;43(5):339–43 (Eng. Abstr.) **(Cze)**

[Anatomical interpretation of arterial anomalies] Stolić E. **Arch Ital Anat Embriol** 1989 Jul–Sep;94(3):305–8 **(Fre)**

[A rare thyroid vascular anomaly: a unique thyroid artery arising from the right carotid bifurcation] Arcuri V, et al. **Minerva Chir** 1990 Apr 15;45(7):503–4 (Eng. Abstr.) **(Ita)**

[A variant of persistent trigeminal artery associated with a petroclival meningioma. Case report] Minokura K, et al. **Neurol Med Chir (Tokyo)** 1989 Aug;29(8):767–71 (46 ref.) (Eng. Abstr.) **(Jpn)**

[Profuse auricular hemorrhage caused by lesion of the sigmoid sinus associated with arterio-sinus anastomosis] Blagoveshchenskaia NS, et al. **Vestn Otorinolaringol** 1990 Jan–Feb;(1):80–1 **(Rus)**

ANALYSIS

Thrombospondin deposition in rat carotid artery injury. Raugi GJ, et al. **Am J Pathol** 1990 Jul;137(1):179–85

The biochemical composition of hemodynamically stressed vascular tissue: the insoluble elastin of experimental arteriovenous fistulae. Davis PF, et al. **Exp Mol Pathol** 1989 Oct;51(2):103–10

ANATOMY & HISTOLOGY

Comparative study of ultrasonography and arteriography of the carotid artery of xylazine-sedated and halothane-anesthetized goats. Lee SW, et al. **Am J Vet Res** 1990 Jan;51(1):109–13

Structure of the carotid sinus of the dromedary camel (Camelus dromedarius). Abdel-Magied EM, et al. **Anat Histol Embryol** 1989 Dec;18(4):316–26

Cross-sectional internal diameters of human cervical and femoral blood vessels: relationship to subject's sex, age, body size. Mortensen JD, et al. **Anat Rec** 1990 Jan; 226(1):115–24

Increase in endothelial cell density before artery enlargement in flow-loaded canine carotid artery. Masuda H, et al. **Arteriosclerosis** 1989 Nov–Dec;9(6):812–23

Pathological-anatomical study concerning the geometry and atherosclerosis of the carotid bifurcation. Spelde AG, et al. **Eur J Vasc Surg** 1990 Aug;4(4):345–8

Development and evolution of the carotid circulation in geomyoid rodents in relationship to their craniomorphology. Brylski P. **J Morphol** 1990 Apr; 204(1):33–45

Comparative studies on the vascular organization of carotid labyrinths of anurans and caudates. Kusakabe T. **J Morphol** 1990 Apr;204(1):47–55

The petrous carotid artery: anatomic relationships in skull base surgery. Leonetti JP, et al. **Otolaryngol Head Neck Surg** 1990 Jan;102(1):3–12

MR angiography with oblique gradient-recalled echo technique. Brown DG, et al. **Radiology** 1990 Aug; 176(2):461–6

CYTOLOGY

Distribution of serotonin-immunoreactive cells around arteries arising from the common carotid artery in the chicken. Kameda Y. **Anat Rec** 1990 May;227(1):87–96

DRUG EFFECTS

Effects of indapamide on the mechanical properties of the arterial wall in deoxycorticosterone acetate-salt hypertensive rats. Levy BI, et al. **Am J Cardiol** 1990 May 2;65(17):28H–32H

Vascular effects of cyclosporine A in vivo and in vitro. Ferns G, et al. **Am J Pathol** 1990 Aug;137(2):403–13

Effect of beta-adrenoceptor agents on the blood flow in carotid arteries in normal volunteers. Fitzgerald DE, et al. **Br J Clin Pharmacol** 1989;28 Suppl 1:73S–74S

The 5-HT1-like receptor mediating reduction of porcine carotid arteriovenous shunting by RU 24969 is not related to either the 5-HT1A or the 5-HT1B subtype. Bom AH, et al. **Eur J Pharmacol** 1989 Nov 14;171(1):87–96

Verapamil and nebivolol improve carotid artery distensibility in hypertensive patients. van Merode T, et al. **J Hypertens Suppl** 1989 Dec;7(6):S262–3

The effect of prostaglandins E2 and F2 alpha on carotid blood flow in rats with renovascular hypertension. Vacek L, et al. **Physiol Bohemoslov** 1989;38(6):481–7

Effects of Hydergine on platelet deposition on "active" human carotid artery lesions and platelet function. Steurer G, et al. **Thromb Res** 1989 Sep 1;55(5):577–89

EMBRYOLOGY

Circle of Willis variant analogous to fetal type primitive trigeminal artery. Wismer GL. **Neuroradiology** 1989; 31(4):366–8

ENZYMOLOGY

[Angiotensin converting enzyme activity in the tissue of the carotid arteries and pulmonary arteries in man and animals] Ostojić L, et al. **Med Arh** 1987;41(3):103–6 (Eng. Abstr.) **(Ser)**

INJURIES

Increased venous hemoglobin saturation during percutaneous right internal jugular vein cannulation in a patient with a mature right forearm arteriovenous hemodialysis fistula. Yee LL, et al. **Anesthesiology** 1990 Jul;73(1):184–6

Smooth muscle cells express urokinase during mitogenesis and tissue-type plasminogen activator during migration in injured rat carotid artery. Clowes AW, et al. **Circ Res** 1990 Jul;67(1):61–7

Hirudin, heparin, and placebo during deep arterial injury in the pig. The in vivo role of thrombin in platelet-mediated thrombosis. Heras M, et al. **Circulation** 1990 Oct; 82(4):1476–84

Avoiding unintentional arterial cannulation [letter] Silverman SM, et al. **Crit Care Med** 1990 Apr;18(4):460

Anaesthetic management of carotid artery rupture: case report. Ngumi ZW. **East Afr Med J** 1989 Aug;66(8):548–50

Common carotid artery injury from an airgun pellet. Psaila JV, et al. **Injury** 1989 May;20(3):173–4

Carotid artery trauma: management based on mechanism of injury. Fabian TC, et al. **J Trauma** 1990 Aug;30(8):953–61; discussion 961–3

[Accidental gunshot injury of the common carotid artery in a 19-year-old man] Vobořil Z, et al. **Soud Lek** 1990 May;35(2):17–21 (Eng. Abstr.) **(Cze)**

[Injuries of the large brain-feeding arteries] Laske A, et al. **Schweiz Med Wochenschr** 1990 Jul 21;120(29):1050–5 (Eng. Abstr.) **(Ger)**

INNERVATION

The role of vasopressin in the pressor response to bilateral carotid occlusion. DiCarlo SE, et al. **J Auton Nerv Syst** 1989 Jun;27(1):1–10

Innervation of the serotonin-immunoreactive cells distributed in the wall of the common carotid artery and its branches in the chicken. Kameda Y. **J Comp Neurol** 1990 Feb 22; 292(4):537–50

[So-called atypical facial neuralgias] Kaeser HE. **Schweiz Rundsch Med Prax** 1989 Sep 19;78(38):1018–22 (31 ref.) (Eng. Abstr.) **(Ger)**

[A glyoxylic acid method of detecting adrenergic neural elements using pontamine sky blue] Shvalev VN, et al. **Arkh Anat Gistol Embriol** 1990 Mar;98(3):85–6 **(Rus)**

METABOLISM

Albumin and Cr-EDTA uptake by systemic arteries, veins, and pulmonary artery of rabbit. Lever MJ, et al. **Arteriosclerosis** 1990 Jul–Aug;10(4):551–8

Immunohistochemical demonstration of tyrosine hydroxylase, serotonin and neuropeptide tyrosine in the epithelioid cells within arterial walls and carotid bodies of chicks. Yamamoto M, et al. **J Anat** 1989 Dec;167:137–46

Decrease in cyclosporin-mediated prostacyclin production in renal versus carotid arteries: a mechanism for cyclosporin-induced hypertension. Hoover EL, et al. **J Surg Res** 1990 May;48(5):481–4

Hemodynamics alter arterial low-density lipoprotein metabolism. Warty VS, et al. **J Vasc Surg** 1989 Oct; 10(4):392–9

PATHOLOGY

An improved immunofluorescence technique for the histological examination of blood vessel tissue. Kittelberger R, et al. **Acta Histochem (Jena)** 1989;86(2):137–42

Invasion of the carotid artery and jugular vein by lymph node metastases: detection with sonography. Gritzmann N, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):411–4

Decreases of vascular hypertrophy in four different types of arteries in spontaneously hypertensive rats. Clozel JP, et al. **Am J Med** 1989 Dec 26;87(6B):92S–95S

Cerebral arteritis with unusual distribution. Husein AM, et al. **Clin Radiol** 1990 May;41(5):353–4

Cerebral angiography and ultrasonic quantitative flow measurement of common carotid artery in patients with cerebral infarction. Imamura S, et al. **Clin Ther** 1989 Nov–Dec;11(6):727–35

Ultrasonographic evaluation of the carotid arteries. Merritt CR. **Curr Opin Radiol** 1990 Apr;2(2):223–8 (12 ref.)

Intravascular ultrasonic imaging: histologic and echographic correlation. Gussenhoven EJ, et al. **Eur J Vasc Surg** 1989 Dec;3(6):571–6

Cellular and immunologic features of carotid artery disease in man and experimental animal models. Holm J, et al. **Eur J Vasc Surg** 1990 Feb;4(1):49–55

Duplex ultrasound analysis of operated carotid arteries in baboons. Bass A, et al. **J Ultrasound Med** 1990 May; 9(5):267–73

Common carotid artery aneurysm: ultrasonic diagnosis. Wang AM, et al. **JCU** 1988 May;16(4):262–4

Spin-labeling angiography of the carotids by presaturation and simplified adiabatic inversion. Sardashti M, et al. **Magn Reson Med** 1990 Aug;15(2):192–200

Magnetic resonance angiography of the extracranial carotid arteries and intracranial vessels: a review. Ross JS, et al. **Neurology** 1989 Oct;39(10):1369–76 (22 ref.)

Effect of controlled adventitial heparin delivery on smooth muscle cell proliferation following endothelial injury. Edelman ER, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(10):3773–7

Dedicated coil for carotid MR angiography. Anderson CM, et al. **Radiology** 1990 Sep;176(3):868–72

Extracranial carotid arteries: evaluation with "black blood" MR angiography. Edelman RR, et al. **Radiology** 1990 Oct; 177(1):45–50

MR angiography with two-dimensional acquisition and three-dimensional display. Work in progress. Keller PJ, et al. **Radiology** 1989 Nov;173(2):527–32

The origin and distribution of vasa vasorum at the bifurcation of the common carotid artery with atherosclerosis. Bo WJ, et al. **Stroke** 1989 Nov;20(11):1484–7

Bilateral intracavernous carotid aneurysms presenting as pseudo-ocular myasthenia gravis. Mindel JS, et al. **Trans Am Ophthalmol Soc** 1990;87:445–57; discussion 457–62

Morphological characterization of carotid artery stenoses by ultrasound duplex scanning. Widder B, et al. **Ultrasound Med Biol** 1990;16(4):349–54

Injury and repair of smaller muscular and elastic arteries. Immunohistochemical demonstration of fibronectin and fibrinogen/fibrin and their degradation products in rabbit femoral and common carotid arteries following a dilatation injury. Rasmussen LH, et al. **Virchows Arch [A]** 1989; 415(6):579–85

PHYSIOLOGY

Effect of pregnancy on uterine and carotid artery response to norepinephrine, epinephrine, and phenylephrine in vessels with documented functional endothelium [published erratum appears in Am J Obstet Gynecol 1990 Apr;162(4):1133] Weiner CP, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1605–10

Reductions in central venous pressure improve carotid baroreflex responses in conscious men. Pawelczyk JA, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1389–95

Latch–bridge model in smooth muscle: [Ca2+]i can quantitatively predict stress. Rembold CM, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):C251–7

The endothelium inhibits activation by calcium of vascular neurotransmission. Tesfamariam B, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):H1871–7

Pulsed and color Doppler analysis of normal carotid bifurcation flow dynamics using an in–vitro model. Polak JF, et al. **Angiology** 1990 Mar;41(3):241–7

The natural history of carotid bruits in elderly persons [published erratum appears in Ann Intern Med 1990 Jan 15;112(12):967] Van Ruiswyk J, et al. **Ann Intern Med** 1990 Mar 1;112(5):340–3

Blood flow velocity in the middle cerebral artery during carotid cross–clamping: loss of regulatory response to carbon dioxide partial pressure. A transcranial Doppler intraoperative study. Faccenda F, et al. **Artery** 1990; 17(3):159–69

Stroboscopic nuclear magnetic resonance microscopy of arterial blood flow. Behling RW, et al. **Biophys J** 1990 Jul;58(1):267–71

A two–dimensional numerical analysis of unsteady flow in the carotid artery bifurcation. A comparison with three–dimensional in–vitro measurements and the influence of minor stenoses. Van de Vosse FN, et al. **Biorheology** 1990;27(2):163–89

Endothelium–dependent mechanical properties of the carotid artery in WKY and SHR. Role of angiotensin converting enzyme inhibition. Levy BI, et al. **Circ Res** 1990 Feb; 66(2):321–8

The measurement of time–averaged flow by magnetic resonance imaging using continuous acquisition in the carotid arteries and its comparison with Doppler ultrasound. Tarnawski M, et al. **Clin Phys Physiol Meas** 1990 Feb;11(1):27–36

Effects of carotid occlusion and angiotensin II on vasopressin secretion in intact and vagotomized conscious rabbits. Hreash F, et al. **Endocrinology** 1990 Sep;127(3):1160–6

Carotid baroreflex sensitivity at rest and during exercise is not influenced by opioid receptor antagonism. Staessen J, et al. **Eur J Appl Physiol** 1989;59(1–2):131–7

Realtime colour flow mapping and Doppler studies of normal carotid vertebral system. Shah KD, et al. **J Assoc Physicians India** 1989 Feb;37(2):167–71

Experimental determination of wall shear rate in canine carotid arteries perfused in vitro. Johnson GA, et al. **J Biomech** 1989;22(11–12):1141–50

A numerical analysis of steady flow in a three–dimensional model of the carotid artery bifurcation. Rindt CC, et al. **J Biomech** 1990;23(5):461–73

Numerical flow studies in human carotid artery bifurcations: basic discussion of the geometric factor in atherogenesis. Perktold K, et al. **J Biomed Eng** 1990 Mar;12(2):111–23

Increased pulse pressure and carotid vascular resistance in normotensive black African subjects. Toto–Moukouo JA, et al. **J Hum Hypertens** 1990 Jun;4(3):247–51

Chronic progressive changes in brachial and carotid artery circulations under the combined effects of aging and hypertension. Nguyen PC, et al. **J Hypertens** 1990 May; 8(5):449–55

Endothelium–dependent mechanical properties of the carotid artery in Wistar–Kyoto and spontaneously hypertensive rats. Levy BI, et al. **J Hypertens Suppl** 1989 Dec; 7(6):S118–9

Implantable sensor for intraoperative and postoperative monitoring of blood flow: a preliminary report. Rabinovitz RS, et al. **J Vasc Surg** 1990 Aug;12(2):148–57

Mesenteric flow velocity variations as a function of angle of insonation. Rizzo RJ, et al. **J Vasc Surg** 1990 May; 11(5):688–94

Regeneration of endothelial cells after balloon denudation of the rabbit carotid artery and changes in responsiveness. Azuma H, et al. **Jpn J Pharmacol** 1990 Apr;52(4):541–52

Experimental and numerical analysis of carotid artery blood flow. van Steenhoven AA, et al. **Monogr Atheroscler** 1990; 15:250–60

Stroboscopic NMR microscopy of the carotid artery. Behling RW, et al. **Nature** 1989 Sep 28;341(6240):321–3

Carotid baroreceptor cardiac–vagal reflex responses during 10 days of head–down tilt. Eckberg DL, et al. **Physiologist** 1990 Feb;33(1 Suppl):S177

Study of aortic and carotid blood flow by pulsed Doppler with implantable microprobes in hypergravity. Langeron O, et al. **Physiologist** 1990 Feb;33(1 Suppl):S151–2

Role of platelets in smooth muscle cell proliferation and migration after vascular injury in rat carotid artery. Fingerle J, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(21):8412–6

Position modifies carotid artery blood flow velocity during straining. Therrien B. **Res Nurs Health** 1990 Apr; 13(2):69–76

[The relation of flow velocity in the carotid vessels to age] Kallmünzer B, et al. **Cas Lek Cesk** 1989 Nov 17; 128(47):1496–8 (Eng. Abstr.) **(Cze)**

[The Bayliss effect (its effect on the properties of the carotid wall)] Jaeger M. **Angiologica** 1967;4(3–4):216–24 (Eng. Abstr.) **(Fre)**

[The carotid diastolic index: predictive factor for acute fetal distress] Cynober E, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(1):53–9 (Eng. Abstr.) **(Fre)**

[Variations of carotid flow at altitude and during modifications of respiratory conditions] Bailliart D, et al. **Physiologie** 1989 Apr–Jun;26(2):81–93 **(Fre)**

[Cerebral blood flow in infants: comparison of carotid blood flow and cerebral blood velocity] Tatsuno M, et al. **No To Hattatsu** 1990 Jul;22(4):336–40 (Eng. Abstr.) **(Jpn)**

[Determination of the blood flow in the common carotid arteries by Echo–Doppler ultrasonography in healthy subjects] Sipoş C, et al. **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1989 Apr–Jun;34(2):155–9 **(Rum)**

[Regulation of regional circulation in the basins of the common carotid arteries] Aleksandrov VG, et al. **Fiziol Cheloveka** 1989 Sep–Oct;15(5):70–4 **(Rus)**

[Effect of unilateral occlusion of the carotid artery on cerebral blood flow of rats under hypoxia] Iripkhanov BB, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1585–8 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Autonomic pathophysiology in heart failure: carotid baroreceptor–cardiac reflexes. Sopher SM, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H689–96

Evaluation of pulsed Doppler common carotid blood flow as a noninvasive method for brain death diagnosis: a prospective study. Payen DM, et al. **Anesthesiology** 1990 Feb;72(2):222–9

Comparison of color flow and 3D image by computer graphics for the evaluation of carotid disease. Houi K, et al. **Angiology** 1990 Apr;41(4):305–12

Carotid artery stump pressure: how reliable is it in predicting the need for a shunt? Gnanadev DA, et al. **Ann Vasc Surg** 1989 Oct;3(4):313–7

Evaluation of carotid artery compression in cerebrovascular disease. An electroencephalographic–clinical correlation. Solomon S. **Arch Neurol** 1966 Feb;14(2):165–71

Further experience with simultaneous records of ULF force and carotid pulse derivative. Starr I. **Bibl Cardiol** 1967; (19):99–102

The second derivative of the carotid pulse as an aid in high–frequency ("acceleration") direct body BCG segment notation. Winer NJ. **Bibl Cardiol** 1967;(19):103–9

The role of hypertension and hypercholesterolemia on aortic sudanophilia and carotid distensibility in rabbits. Roach MR, et al. **Biorheology** 1989;26(2):131–42

Correlation between carotid blood flow and brain atrophy in patients with multi–infarct dementia. Yamashita K, et al. **Gerontology** 1989;35(4):192–7

Augmented adrenergic contractions of carotid arteries from cholesterol–fed rabbits due to endothelial cell dysfunction. Tesfamariam B, et al. **J Cardiovasc Pharmacol** 1989 Jun; 13(6):820–5

The effect of verapamil on carotid artery distensibility and cross–sectional compliance in hypertensive patients. Van Merode T, et al. **J Cardiovasc Pharmacol** 1990 Jan; 15(1):109–13

Threshold of carotid artery back pressure for delayed neuronal injury in the hippocampus after bilateral common carotid artery occlusion in gerbils. Kuroiwa T, et al. **J Neurol Sci** 1990 Jul;97(2–3):251–9

Right carotid artery ligation in neonates: classification of collateral flow with color Doppler imaging. Mitchell DG, et al. **Radiology** 1990 Apr;175(1):117–23

Duplex examination of the carotid arteries. Zwiebel WJ, et al. **Semin Ultrasound CT MR** 1990 Apr;11(2):97–135 (60 ref.)

Correlation of carotid bruits and carotid atherosclerosis [letter; comment] Mercuri MF, et al. **Stroke** 1990 Apr; 21(4):678–9 Comment on: Stroke 1989 Oct;20(10):1331–5.

Correlation of carotid bruits and carotid atherosclerosis detected by B–mode real–time ultrasonography [letter] White AD, et al. **Stroke** 1990 Apr;21(4):677

Prospective comparison of a cohort with asymptomatic carotid bruit and a population–based cohort without carotid bruit. Wiebers DO, et al. **Stroke** 1990 Jul;21(7):984–8

[Arterial sequelae of pregnancy hypertension. Detection by carotid piezogram] Meyer–Heine A, et al. **J Mal Vasc** 1989; 14(4):321–5 (Eng. Abstr.) **(Fre)**

[Simultaneous measurement of blood volume in the arteries of the neck and stroke volume] Chufarev VN. **Vestn Khir** 1989 Sep;143(9):107–10 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

The rhesus monkey as an animal model for training in interventional neuroradiology. terBrugge K, et al. **AJNR** 1989 Nov–Dec;10(6):1203–8

Carotid artery disease assessed by color Doppler flow imaging: correlation with standard Doppler sonography and angiography. Steinke W, et al. **AJR Am J Roentgenol** 1990 May;154(5):1061–8

Carotico–cavernous fistula after trans–sphenoidal hypophysectomy. Pigott TJ, et al. **Br J Neurosurg** 1989; 3(5):613–6

Iliopsoas abscess: an unusual complication of femoral artery catheterization. Loveday EJ, et al. **Br J Radiol** 1990 Mar; 63(747):224–6

Organ doses from cardiac and carotid digital subtraction angiography. Mustafa AA, et al. **Br J Radiol** 1989 Sep; 62(741):838–42

Anatomical variations of the carotid bifurcation: implications for digital subtraction angiography and ultrasonography. Trigaux JP, et al. **Br J Radiol** 1990 Mar;63(747):181–5

Throwing out the baby with the bathwater [letter] Stevens JM, et al. **Br J Surg** 1990 Jul;77(7):835

Evaluation of ulceration in the extracranial carotid artery with ultrasonography: a comparison with arteriography. Hansen F, et al. **Eur J Vasc Surg** 1989 Oct;3(5):443–8

Anatomoradiological correlation of the intersection of the carotid siphon with the dura mater. Kraemer JL, et al. **Neuroradiology** 1989;31(5):408–12

[Selective ambulant transbrachial intra–arterial DSA of the supra–aortic arteries] Tomac B, et al. **ROFO** 1990 Feb; 152(2):191–5 (Eng. Abstr.) **(Ger)**

[Distribution pattern of atheromatous lesions of the carotid circulation—significance for the angiographic strategy of cerebrovascular insufficiency] Neufang KF, et al. **Vasa** 1989;18(4):304–11 (Eng. Abstr.) **(Ger)**

[Translumbar carotid arteriography] Stranin VG, et al. **Khirurgiia (Mosk)** 1989 Sep;(9):62–4 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

The cerebral circulation in cases of carotid cavernous fistula. Findings of single photon emission computed tomography. Watanabe A, et al. **Neuroradiology** 1990;32(2):108–13

[Radiocirculography in patients with cerebrovascular disorders] Ivanchev V, et al. **Zh Nevropatol Psikhiatr** 1990; 90(1):32–4 (Eng. Abstr.) **(Rus)**

SURGERY

Continuous conjunctival oxygen tension (PcjO2) monitoring for assessment of cerebral oxygenation and metabolism during carotid artery surgery. Haljamäe H, et al. **Acta Anaesthesiol Scand** 1989 Oct;33(7):610–6

Carotid artery reconstruction following extracorporeal membrane oxygenation. Crombleholme TM, et al. **Am J Dis Child** 1990 Aug;144(8):872–4

Hydrostatic pressure reduces thrombogenicity of polytetrafluoroethylene vascular grafts. Ritter EF, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1076–81

Risk of carotid endarterectomy in the elderly. Fisher ES, et al. **Am J Public Health** 1989 Dec;79(12):1617–20

Carotid endarterectomy. Gaspar MR. **Am J Surg** 1990 Feb; 159(2):252–5

Mechanism of long–term degeneration of arterialized vein grafts. Kohler TR, et al. **Am J Surg** 1990 Sep;160(3):257–61

Combined carotid endarterectomy and myocardial revascularization. Maki HS, et al. **Am J Surg** 1989 Nov; 158(5):443–5

Arteriotomy patching—a new technic. Sundt TM, et al. **Am Surg** 1966 Mar;32(3):207–12

An evaluation of external jugular vein patch angioplasty after carotid endarterectomy. Whereatt N, et al. **Am Surg** 1990 Aug;56(8):455–9

Carotid endarterectomy under cervical plexus block—a prospective clinical audit. Davies MJ, et al. **Anaesth Intensive Care** 1990 May;18(2):219–23

Another complication of carotid artery shunting during carotid endarterectomy [letter] Waring PH, et al. **Anesthesiology** 1990 Jun;72(6):1099

A comparison of the cerebral hemodynamic effects of sufentanil and isoflurane in humans undergoing carotid endarterectomy. Young WL, et al. **Anesthesiology** 1989 Dec;71(6):863–9

Carotid endarterectomy [letter; comment] Lederle FA. **Ann Intern Med** 1990 Mar 1;112(5):383–4 Comment on: Ann Intern Med 1989 Oct 15;111(8):675–7.

Simplified technique for aortic arch replacement. First–stage right subclavian–to–left carotid artery bypass. Panday SR, et al. **Ann Thorac Surg** 1974 Aug;18(2):186–90

Carotid endarterectomy in community practice: surgeon–specific versus institutional results. Gibbs BF, et al. **Ann Vasc Surg** 1989 Oct;3(4):307–12

Safe extracranial vascular evaluation and surgery without preoperative arteriography. Hill JC, et al. **Ann Vasc Surg** 1990 Jan;4(1):34–8

Carotid endarterectomy in patients with contralateral carotid occlusion: is the risk increased? McKittrick JE, et al. **Ann Vasc Surg** 1989 Oct;3(4):324–7

Polyurethane arterial prosthesis: experimental evaluation. Martin–Mondiere C, et al. **Ann Vasc Surg** 1990 Jan; 4(1):52–7

Intraoperative electroencephalographic monitoring during carotid surgery with routine shunting. Scheyvaerts M, et

al. **Ann Vasc Surg** 1990 Jul;4(4):318–22
Carotid artery endarterectomy in patients over seventy years–of–age. Schröe H, et al. **Ann Vasc Surg** 1990 Mar; 4(2):133–7
The risk of carotid endarterectomy for the asymptomatic patient: an argument for prophylactic operation. Treiman RL, et al. **Ann Vasc Surg** 1990 Jan;4(1):29–33
The evolution of a clinically relevant experimental model for the realistic evaluation of long–length (80–cm) arterial prostheses. Wu HD, et al. **Ann Vasc Surg** 1990 Jan; 4(1):58–64
Seizures following carotid endarterectomy. Kieburtz K, et al. **Arch Neurol** 1990 May;47(5):568–70
EEG monitoring using aperiodic analysis during carotid and open heart surgery. Koumoundouros E, et al. **Australas Phys Eng Sci Med** 1989 Sep;12(3):149–54
Unruptured aneurysms of the intracavernous internal carotid artery: outcome following carotid ligation or conservative treatment. Lye RH, et al. **Br J Neurosurg** 1989;3(2):181–8
Impact of duplex scanning on carotid endarterectomy. Chant AD, et al. **Br J Surg** 1990 Feb;77(2):188–9
Cervical epidural anaesthesia for carotid artery surgery. Bonnet F, et al. **Can J Anaesth** 1990 Apr;37(3):353–8
Preoperative hypertension does predict post–carotid endarterectomy hypertension [letter; comment] Gelb AW, et al. **Can J Neurol Sci** 1990 Feb;17(1):95–7 Comment on: Can J Neurol Sci 1989 Aug;16(3):345–7.
The carotid endarterectomy trial [letter] Del Campo C. **Can Med Assoc J** 1990 Feb 1;142(3):205, 208–9
Reexploration for thrombosis in carotid endarterectomy. Koslow AR, et al. **Circulation** 1989 Nov;80(5 Pt 2):III73–8
Ventilatory effects of hypoxia and adenosine infusion in patients after bilateral carotid endarterectomy. Griffiths TL, et al. **Clin Sci** 1990 Jan;78(1):25–31
Pharyngeal function after carotid endarterectomy. Ekberg O, et al. **Dysphagia** 1989;4(3):151–4
An external carotid artery shunt to prevent cerebral ischaemia during carotid surgery. Faraglia V, et al. **Eur J Vasc Surg** 1990 Aug;4(4):385–9
Pressure measurements as predictors for peroperative neurologic deficits in carotid surgery. Forssell C, et al. **Eur J Vasc Surg** 1990 Apr;4(2):133–8
Stroke–related EEG changes during carotid surgery. Krul JM, et al. **Eur J Vasc Surg** 1989 Oct;3(5):423–8
Influence of contralateral carotid artery on neurologic outcome after carotid endarterectomy. Floriani M, et al. **Ital J Surg Sci** 1989;19(4):381–6
Airway compromise after carotid surgery in patients with cervical irradiation. Francfort JW, et al. **J Cardiovasc Surg (Torino)** 1989 Nov–Dec;30(6):877–81
Fresh venous femoral autografts and allografts as carotid substitutes in matched dogs from the same litter. Merhi Y, et al. **J Cardiovasc Surg (Torino)** 1990 Mar–Apr; 31(2):147–55
Cerebral vasoconstriction as a complication of carotid endarterectomy. Case report. Brick JF, et al. **J Neurosurg** 1990 Jul;73(1):151–3
SPECT quantification of cerebral ischemia before and after carotid endarterectomy. Maurer AH, et al. **J Nucl Med** 1990 Aug;31(8):1412–20
Resection of the extra cranial carotid artery in head and neck cancer. East CA, et al. **J Otolaryngol** 1989 Oct; 18(6):298–302
Carotid artery repair after pediatric extracorporeal membrane oxygenation. Adolph V, et al. **J Pediatr Surg** 1990 Aug; 25(8):867–9; discussion 869–70
The early and late responses of the arterial wall to graft placement. Mason RA, et al. **J Surg Res** 1989 Nov; 47(5):383–8
Distention promotes platelet and leukocyte adhesion and reduces short–term patency in pig arteriovenous bypass grafts. Angelini GD, et al. **J Thorac Cardiovasc Surg** 1990 Mar;99(3):433–9
Malfunction of a double–balloon carotid shunt as a result of herniation of the proximal balloon. Eidt JF, et al. **J Vasc Surg** 1990 Jul;12(1):62–4
Fate of the carotid artery contralateral to endarterectomy. Hatsukami TS, et al. **J Vasc Surg** 1990 Feb;11(2):244–50; discussion 250–1
Carotid endarterectomy in patients with intracranial vascular disease: short–term risk and long–term outcome. Mackey WC, et al. **J Vasc Surg** 1989 Oct;10(4):432–8
Cardiac risk in patients undergoing carotid endarterectomy: impact on perioperative and long–term mortality. Mackey WC, et al. **J Vasc Surg** 1990 Feb;11(2):226–33; discussion 233–4
Carotid endarterectomy contralateral to an occluded carotid artery: perioperative risk and late results. Mackey WC, et al. **J Vasc Surg** 1990 Jun;11(6):778–83; discussion 784–5
Should patient age be a consideration in carotid endarterectomy? Pinkerton JA Jr, et al. **J Vasc Surg** 1990 May;11(5):650–8 (13 ref.)
Timing of carotid endarterectomy after acute stroke. Piotrowski JJ, et al. **J Vasc Surg** 1990 Jan;11(1):45–51; discussion 51–2
Carotid patch angioplasty: immediate and long–term results. Rosenthal D, et al. **J Vasc Surg** 1990 Sep;12(3):326–33
Hollenhorst plaques: retinal manifestations and the role of carotid endarterectomy. Schwarcz TH, et al. **J Vasc Surg** 1990 May;11(5):635–41
Effectiveness of carotid endarterectomy for asymptomatic carotid stenosis: design of a clinical trial. Mayo Asymptomatic Carotid Endarterectomy Study Group. **Mayo Clin Proc** 1989 Aug;64(8):897–904
Carotid endarterectomy clinical trials [editorial] Marler JR. **Mayo Clin Proc** 1989 Aug;64(8):1026–9
Magnification angiography and histology for the evaluation of microvascular anastomosis. Banic A, et al. **Microsurgery** 1990;11(2):102–7
Sutureless microvascular anastomosis using the THC:YAG laser: a preliminary report. Bass LS, et al. **Microsurgery** 1989;10(3):189–93
In search of the "perfect" anastomosis. Guity A, et al. **Microsurgery** 1990;11(1):5–11
Morphological studies of cellular responses to experimental arterial grafts. Kischer CW, et al. **Microsurgery** 1990; 11(1):34–9
Interposition of a saphenous vein graft for early recurrent carotid stenosis--report of two cases. Abiko S, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):583–7
Effect of flunarizine on arterial thrombosis after endarterectomy in rats. Kobayashi H, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):563–7
Interim assessment: carotid endarterectomy. Report of the American Academy of Neurology, Therapeutics and Technology Assessment Subcommittee. **Neurology** 1990 Apr;40(4):682–3
Transcranial Doppler ultrasound as a guide to graded therapeutic occlusion of the carotid artery. Giller CA, et al. **Neurosurgery** 1990 Feb;26(2):307–11
Hyperperfusion syndrome after carotid endarterectomy: a transcranial Doppler evaluation. Powers AD, et al. **Neurosurgery** 1990 Jan;26(1):56–9; discussion 59–60
Microvascular end–to–side arterial anastomosis using the Nd: YAG laser [see comments] Shapiro S, et al. **Neurosurgery** 1989 Oct;25(4):584–8; discussion 588–9 Comment in: Neurosurgery 1990 May;26(5):892–3.
The perioperative management of the petrous carotid artery in contemporary surgery of the skull base. Leonetti JP, et al. **Otolaryngol Head Neck Surg** 1990 Jul;103(1):46–51
Right common carotid artery ligation for extracorporeal membrane oxygenation: cerebral blood flow velocity measurement with Doppler duplex US. Matsumoto JS, et al. **Radiology** 1990 Jun;175(3):757–60
Arrogance re–revisited [letter] Friedmann P. **Stroke** 1989 Dec;20(12):1755
Cerebral vasoreactivity and blood flow before and 3 months after carotid endarterectomy. Russell D, et al. **Stroke** 1990 Jul;21(7):1029–32
Assessing risks associated with carotid endarterectomy [letter] Smith RR. **Stroke** 1990 Apr;21(4):677
Detection of middle cerebral artery emboli during carotid endarterectomy using transcranial Doppler ultrasonography. Spencer MP, et al. **Stroke** 1990 Mar; 21(3):415–23
Review of 272 consecutive carotid endarterectomies in a smaller community. Hoyne RF. **Surg Gynecol Obstet** 1990 Jun;170(6):522–6
Carotid endarterectomy under local anesthesia supplemented with neuroleptic analgesia. Slutzki S, et al. **Surg Gynecol Obstet** 1990 Feb;170(2):141–4
Postoperative somnolence in patients after carotid endarterectomy. Akers DL, et al. **Surgery** 1990 Jun; 107(6):684–7
Saphenous vein rupture pressure, rupture stress, and carotid endarterectomy vein patch reconstruction. Archie JP Jr, et al. **Surgery** 1990 Apr;107(4):389–96
Rupture of the vein patch: a rare complication of carotid endarterectomy. Riles TS, et al. **Surgery** 1990 Jan; 107(1):10–2
Use of the internal jugular vein for carotid patch angioplasty. Seabrook GR, et al. **Surgery** 1989 Oct;106(4):633–7; discussion 637–8
Subclavian artery revascularization: a comparison between carotid–subclavian artery bypass and subclavian–carotid transposition. Sterpetti AV, et al. **Surgery** 1989 Oct; 106(4):624–31; discussion 631–2
The value of cerebral blood flow measurement in carotid surgery. Grossmann W. **Thorac Cardiovasc Surg** 1989 Aug; 37(4):246–52 (28 ref.)
Alternative management of carotid kinking. Surgical technique. Benes V Jr, et al. **Zentralbl Neurochir** 1989; 50(2):97–8
[Treatment of transient ischemic attack by carotid endarterectomy] Zhou DB. **Chung Hua Wai Ko Tsa Chih** 1989 Dec;27(12):743–5, 781 (Eng. Abstr.) **(Chi)**
[Median nerve somatosensory evoked potential monitoring during carotid endarterectomy–report of one case] Yu CL, et al. **Ma Tsui Hsueh Tsa Chi** 1990 Mar;28(1):83–90 (Eng. Abstr.) **(Chi)**
[Pharmacokinetics of bupivacaine after cervical block in carotid surgery] Debaene B, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R150 **(Fre)**
[Hemodynamic, gasometric and hormonal study in cervical peridural anesthesia in carotid surgery] Levrel A, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R185 **(Fre)**
[Does clonidine as premedication prevent instability of contractions in carotid surgery?] Pluskwa F, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R197 **(Fre)**
[Per– and postoperative control of increases in arterial pressure during carotid surgery] Lawkoune JD, et al. **Cah Anesthesiol** 1990 Jan;38(1):25–33 (40 ref.) **(Fre)**
[A "non–narrowing" patch using the superior thyroid artery in surgery of carotid arteries] Obadia JF, et al. **Presse Med** 1990 Jun 16;19(24):1150–1 (Eng. Abstr.) **(Fre)**
[Early and late results of subclavian transposition] Brandl R, et al. **Chirurg** 1990 Mar;61(3):171–7 (Eng. Abstr.) **(Ger)**
[False aneurysm: a complication of carotid endarterectomy] Nobel M, et al. **Harefuah** 1990 Mar 1;118(5):260–2 (Eng. Abstr.) **(Heb)**
[A carotid resection in cervical tumors without a vascular reconstruction] Lee SL, et al. **Gan No Rinsho** 1989 Oct; 35(12):1395–8 (Eng. Abstr.) **(Jpn)**
[Surgical treatment of combined extra– and intracranial lesions of the carotid arteries] Grozovskiĭ IuL, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):12–9 (Eng. Abstr.) **(Rus)**
[Carotid–subclavian bypass in subclavian artery occlusion] Lotina S, et al. **Acta Chir Iugosl** 1989;36 Suppl 2:664–7 **(Scr)**
[Thrombendarterectomy of the carotid artery in the prevention of cerebrovascular insult] Solaković E. **Acta Chir Iugosl** 1989;36 Suppl 2:684–6 **(Scr)**
[Perioperative complications in carotid endarterectomy with respect to the stage of the cerebrovascular disease] De Syo D, et al. **Lijec Vjesn** 1989 Nov;111(11):371–4 (Eng. Abstr.) **(Scr)**

TRANSPLANTATION

[Immunocytochemical investigations of cardiac and vessel allograft arteriosclerosis using smooth muscle cell and macrophage–specific monoclonal antibodies] Sasaguri S. **Nippon Geka Gakkai Zasshi** 1989 Nov;90(11):1840–7 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Intimal thickening of jugular and femoral veins vs arteries in the rabbit following investment. Funaki C, et al. **Angiology** 1990 Jul;41(7):565–72
Effects of pressure on vesicle size, density, and distribution in the canine carotid arterial endothelium. Lee MM, et al. **J Ultrastruct Mol Struct Res** 1988 Nov–Dec; 101(2–3):236–42
Scanning electron microscopic study of hemodynamically induced tears in the internal elastic lamina of rabbit arteries. Martin BJ, et al. **Pathology** 1989 Jul;21(3):207–12

CAROTID ARTERY DISEASES

Diagnosis and management of patients with asymptomatic carotid artery bruit. Moore WS. **Compr Ther** 1990 Jun; 16(6):46–50
Alcohol consumption and carotid atherosclerosis in the Lausanne Stroke Registry. Bogousslavsky J, et al. **Stroke** 1990 May;21(5):715–20
[Incidence, clinical picture, treatment and sequelae of the stenotic–occlusive process in the carotid artery. I. Incidence, clinical picture and diagnosis of the stenotic–occlusive process in the carotid artery] Stampalija J, et al. **Neurologija** 1989;38(1):33–42 (Eng. Abstr.) **(Scr)**

CLASSIFICATION

Contralateral internal carotid artery stenosis or occlusion: pitfall of correct ipsilateral classification--a study performed with color–flow imaging. Spadone DP, et al. **J Vasc Surg** 1990 May;11(5):642–9

COMPLICATIONS

Arterial aneurysms associated with human immunodeficiency virus (HIV) infection. Sinzobahamvya N, et al. **Acta Chir Belg** 1989 Jul–Aug;89(4):185–8
Ruptured intracranial aneurysm associated with spontaneous occlusion of internal carotid artery. Experience with 5 cases. Bidziński J, et al. **Acta Neurochir (Wien)** 1989; 100(1–2):43–5
Stenosis of one carotid artery with occlusion of the contralateral carotid. Cantore GP, et al. **Acta Neurochir (Wien)** 1989;101(1–2):42–5
Effects of STA–MCA anastomosis for ischaemic oculopathy due to occlusion of the internal carotid artery. Shibuya M, et al. **Acta Neurochir (Wien)** 1990;103(1–2):71–5
The carotid artery and stroke. Sherman DG. **Am Fam Physician** 1989 Nov;40(5 Suppl):41S–44S, 47S–49S (20 ref.)
Induced hypertension for cerebral aneurysm surgery in a patient with carotid occlusive disease. Wasnick JD, et al. **Anesth Analg** 1990 Mar;70(3):331–3
Intracavernous carotid aneurysm--an unusual cause of isolated abducens nerve palsy. O'Dell KB, et al. **Ann Emerg Med** 1990 Sep;19(9):1063–5
Rhinocerebral mucormycosis: management and survival after carotid occlusion. Galetta SL, et al. **Ann Neurol** 1990 Jul; 28(1):103–7
Intimal fibroplasia: an unusual etiology of stroke. Schwartz RA, et al. **Ann Vasc Surg** 1989 Oct;3(4):384–6
The natural history of amaurosis fugax with minor degrees of internal carotid artery stenosis. Torem S, et al. **Ann Vasc Surg** 1990 Jan;4(1):46–51
Noninvasive evaluation of the extracranial carotid arteries in patients with cerebrovascular events and atrial fibrillation [letter; comment] Lynfield J. **Arch Intern Med** 1990 Feb;150(2):458, 460 Comment on:

Arch Intern Med 1988 Aug;148(8):1785–8.

Small deep cerebral infarcts associated with occlusive internal carotid artery disease. A hemodynamic phenomenon? Waterston JA, et al. **Arch Neurol** 1990 Sep; 47(9):953–7

Severe optochiasmatic arachnoiditis after rupture of an internal carotid artery aneurysm. Ramina R, et al. **Arq Neuropsiquiatr** 1989 Jun;47(2):192–6

Extracranial carotid atherosclerosis in patients with and without transient ischemic attacks and coronary artery disease. Howard G, et al. **Arteriosclerosis** 1990 Sep–Oct; 10(5):714–9

Spontaneous dissection of the internal carotid artery in a patient with polyarteritis nodosa [letter] Lomeo RM, et al. **Arthritis Rheum** 1989 Dec;32(12):1625–6

Evaluation of the associations between carotid artery atherosclerosis and coronary artery stenosis. A case–control study. Craven TE, et al. **Circulation** 1990 Oct; 82(4):1230–42

Transient visual symptoms and carotid artery disease. Exploration by real–time B–mode echotomography. Maiuri F, et al. **Clin Neurol Neurosurg** 1990;92(1):43–7

Asymptomatic carotid bruit in patients who undergo coronary artery surgery. Skotnicki SH, et al. **Eur J Cardiothorac Surg** 1987;1(1):11–5

"Haemorrhagic" carotid plaque does not contain haemorrhage. Leen EJ, et al. **Eur J Vasc Surg** 1990 Apr; 4(2):123–8

Ischemic infarct in childhood secondary to internal carotid artery dissection. Report of a case. Karoutas G, et al. **Funct Neurol** 1989 Jul–Sep;4(3):287–91

Strokes and the carotid: myths and realities. Corman LC. **Geriatrics** 1990 Jul;45(7):28–32 (36 ref.)

Advanced carotid stenosis in TIA and minor stroke as a predictor of coronary heart disease: a 3–year follow–up. Falke P, et al. **Int Angiol** 1989 Oct–Dec;8(4):175–8

The ocular ischemic syndrome. II. Mortality and systemic morbidity. Sivalingam A, et al. **Int Ophthalmol** 1989 May; 13(3):187–91

Anterior segment ischemia secondary to carotid occlusive disease. Mills RP. **J Clin Neuro Ophthalmol** 1989 Sep; 9(3):200–4 (23 ref.)

Subarachnoid hemorrhage during computed tomography from presumed aneurysm in a case of painless oculomotor palsy. Slavin ML. **J Clin Neuro Ophthalmol** 1990 Jun; 10(2):157–8

Bitemporal hemianopia associated with dolichoectasia of the intracranial carotid arteries. Slavin ML. **J Clin Neuro Ophthalmol** 1990 Mar;10(1):80–1

Sellar enlargement due to ectatic carotid arteries: CT and MR demonstration. Fine M, et al. **J Comput Assist Tomogr** 1990 May–Jun;14(3):488

Mucormycosis associated with carotid cavernous fistula and cavernous carotid mycotic aneurysm. Saff G, et al. **J Fla Med Assoc** 1989 Oct;76(10):863–5

Pericarotid cluster headache. Appelbaum J, et al. **J Neurol** 1989 Oct;236(7):430–1

Spontaneous ICA dissection presenting with 12th nerve palsy. Clinical and radiological considerations. Bradac GB, et al. **J Neuroradiol** 1989;16(3):197–202 **(Eng, Fre)**

Subarachnoid hemorrhage possibly caused by a saccular carotid artery aneurysm within the cavernous sinus. Case report. Nishioka T, et al. **J Neurosurg** 1990 Aug;73(2):301–4

Superior orbital fissure syndrome and bilateral internal carotid pseudoaneurysms. Postma MP, et al. **J Oral Maxillofac Surg** 1990 May;48(5):503–8

Asymptomatic high–grade internal carotid artery stenosis: is stratification according to risk factors or duplex spectral analysis possible? Moneta GL, et al. **J Vasc Surg** 1989 Nov; 10(5):475–82; discussion 482–3

Neurologic sequelae of unilateral carotid artery occlusion: immediate and late. Nicholls SC, et al. **J Vasc Surg** 1989 Nov;10(5):542–7; discussion 547–8

Common carotid occlusion [letter; comment] Gilbert GJ. **Neurology** 1989 Oct;39(10):1406–7 Comment on: Neurology 1989 Feb;39(2 Pt 1):178–86.

Ocular stroke and carotid artery dissection. Newman NJ, et al. **Neurology** 1989 Nov;39(11):1462–4

Asymmetric proliferative diabetic retinopathy and carotid artery disease. Duker JS, et al. **Ophthalmology** 1990 Jul; 97(7):869–74

Severe epistaxis from a false aneurysm of the external carotid artery. Mauldin FW, et al. **Otolaryngol Head Neck Surg** 1989 Nov;101(5):588–90

A case of "young stroke" with ICA intracranial occlusion: pathogenetic implication for dissection in migraine. Casto L, et al. **Riv Neurol** 1989 Sep–Oct;59(5):172–5

Evaluation of extracranial carotid system with duplex scanner HR in hemiplegic patients. Pistarini C, et al. **Riv Neurol** 1989 Jul–Aug;59(4):150–7

Atherosclerosis—multi–organ involvement the rule rather than the exception. Travers AM, et al. **S Afr Med J** 1990 Feb 3;77(3):140–3

Ipsilateral leg weakness associated with carotid stenosis. Chimowitz MI, et al. **Stroke** 1990 Sep;21(9):1362–4

Occipital infarction with hemianopsia from carotid occlusive disease [letter; comment] Cohen SN. **Stroke** 1989 Oct; 20(10):1433–4 Comment on: Stroke 1989 Mar;20(3):409–11.

Noninvasive study of arterial hypertension and carotid atherosclerosis. Lusiani L, et al. **Stroke** 1990 Mar; 21(3):410–4

Multiple cranial neuropathy as a feature of internal carotid artery dissection. Panisset M, et al. **Stroke** 1990 Jan; 21(1):141–7

Role of carotid stenosis in ischemic stroke. Zhu CZ, et al. **Stroke** 1990 Aug;21(8):1131–4

[Vascular pathology in the extracranial segment of the carotid arteries in patients with various stages of vascular hypertension] Modravý V, et al. **Cesk Neurol Neurochir** 1990 Mar;53(2):123–9 (Eng. Abstr.) **(Cze)**

[Transient ischemic attacks in the carotid drainage area] Melcherová L, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1989;32(5):543–51 (Eng. Abstr.) **(Cze)**

[Obliterative disease of the carotid and peripheral arteries in hyperlipoproteinemia] Sčudlová M, et al. **Vnitr Lek** 1990 Apr;36(4):355–62 (Eng. Abstr.) **(Cze)**

[Callosal disconnection syndrome caused by left hemisphere infarction] Habib M, et al. **Rev Neurol (Paris)** 1990; 146(1):19–24 (Eng. Abstr.) **(Fre)**

[Tonic pupil caused by ischemia] Wilhelm H. **Fortschr Ophthalmol** 1989;86(4):380–2 (Eng. Abstr.) **(Ger)**

[Carotid–subclavian steal syndrome] Tomac B, et al. **ROFO** 1990 Jul;153(1):107–8 **(Ger)**

[Recurrent episodes of central retinal artery occlusion] Friling R, et al. **Harefuah** 1990 Mar 1;118(5):249–50 (Eng. Abstr.) **(Heb)**

[Peripheral vascular disease of the legs associated with diseases of the coronary and carotid systems] Tóth K, et al. **Orv Hetil** 1990 Apr 14;131(15):783–6 (22 ref.) (Eng. Abstr.) **(Hun)**

[Hypopituitarism secondary to suprasellar giant carotido–ophthalmic aneurysm. Normalization of the hypophyseal function after neurosurgical depression of the aneurysm] Giustina A, et al. **Minerva Endocrinol** 1989 Oct–Dec;14(4):255–8 (Eng. Abstr.) **(Ita)**

[Fibromuscular dysplasia with cerebral infarction in children. Case report] Takenaka K, et al. **Neurol Med Chir (Tokyo)** 1989 Oct;29(10):912–6 (Eng. Abstr.) **(Jpn)**

[Oculomotor nerve paralysis in intracranial aneurysm] Orłowska E, et al. **Neurol Neurochir Pol** 1988 Nov–Dec; 22(6):513–7 (Eng. Abstr.) **(Pol)**

[Aneurysm of the internal carotid artery with fatal epistaxis] Szabo V, et al. **Rev Chir [Otorinolaringol]** 1989 Apr–Jun; 34(2):157–60 (Eng. Abstr.) **(Rum)**

[Ophthalmologic lesions in stenosis and occlusion of the internal carotid arteries] Buiuc S, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Apr–Jun;93(2):217–21 **(Rum)**

[Exacerbation of chronic suppurative otitis media associated with carotid–cavernous anastomosis] Klochikhin AL, et al. **Vestn Otorinolaringol** 1989 Jul–Aug;(4):80–1 **(Rus)**

[Incidence, clinical picture, treatment and sequelae of the stenotic–occlusive process in the carotid artery. II. Analysis of therapy and follow–up of patients with stenotic–occlusive process in the carotid artery] Pancić B, et al. **Neurologija** 1989;38(1):43–52 (Eng. Abstr.) **(Ser)**

[Ischemic optic neuropathy. Blindness which can be reversed by carotid endarterectomy] Ferrero Arias J, et al. **Neurologia** 1988 Sep–Oct;3(5):193–6 (Eng. Abstr.) **(Spa)**

CONGENITAL

[Congenital aneurysm of the internal carotid artery with a clinical course of a peritonsillar and retropharyngeal abscess] Gurin MA. **Vestn Otorinolaringol** 1990 Jan–Feb; (1):79–80 **(Rus)**

DIAGNOSIS

Routine MR imaging of the internal carotid artery siphone: angiographic correlation with cervical carotid lesions. Brant–Zawadzki M. **AJNR** 1990 May;11(3):467–71

Carotid artery disease assessed by color Doppler flow imaging: correlation with standard Doppler sonography and angiography. Steinke W, et al. **AJNR** 1990 Mar–Apr; 11(2):259–66

Carotid artery disease assessed by color Doppler flow imaging: correlation with standard Doppler sonography and angiography. Steinke W, et al. **AJR Am J Roentgenol** 1990 May;154(5):1061–8

Prospective clinicopathophysiologic follow–up study of asymptomatic neck bruit. AbuRahma AF, et al. **Am Surg** 1990 Feb;56(2):108–13

Significance of transcranial Doppler CO2. Reactivity measurements for the diagnosis of hemodynamically relevant carotid obstructions. Reith W, et al. **Ann Vasc Surg** 1990 Jul;4(4):359–64

Computerized topographic brain mapping during carotid endarterectomy. Elmore JR, et al. **Arch Surg** 1990 Jun; 125(6):734–7; discussion 738

Symptomatic carotid ischaemic events [letter] Cole SE, et al. **BMJ** 1990 Jul 28;301(6745):239

Symptomatic carotid ischaemic events: safest and most cost effective way of selecting patients for angiography, before carotid endarterectomy. Hankey GJ, et al. **BMJ** 1990 Jun 9;300(6738):1485–91

Selecting patients for cerebral angiography before carotid endarterectomy [letter] Humphrey P. **BMJ** 1990 Jul 21; 301(6744):181

Impact of duplex scanning on carotid endarterectomy. Chant AD, et al. **Br J Surg** 1990 Feb;77(2):188–9

Intraoperative internal carotid artery restenosis detected by transcranial Doppler monitoring. Laman DM, et al. **Br J Surg** 1989 Dec;76(12):1315–6

Metastatic renal carcinoma mimicking carotid artery aneurysm. Stonebridge PA, et al. **Br J Urol** 1990 Jan; 65(1):104–6

Aneurysm of the internal carotid artery simulating pituitary tumor with panhypopituitarism—a case report. Chien WY, et al. **Chang Keng I Hsueh** 1989 Sep 20;12(3):161–6

Recent advances in carotid artery evaluation. Phillips DJ. **Clin Diagn Ultrasound** 1990;26:25–44 (21 ref.)

Ultrasonographic evaluation of the carotid arteries. Merritt CR. **Curr Opin Radiol** 1990 Apr;2(2):223–8 (12 ref.)

Intracranial haemodynamics in patients with spontaneous carotid dissection. Transcranial Doppler ultrasound follow–up studies. Kaps M, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(4):246–56

Carotid artery stenosis—reassessment of the Doppler criteria. Hartnell GG, et al. **Eur J Radiol** 1990 Mar–Apr; 10(2):147–53

Evaluation of ulceration in the extracranial carotid artery with ultrasonography: a comparison with arteriography. Hansen F, et al. **Eur J Vasc Surg** 1989 Oct;3(5):443–8

Echodensitometry: a methodologic approach to the non–invasive diagnosis of carotid atherosclerotic plaques. Spagnoli LG, et al. **Int Angiol** 1989 Oct–Dec;8(4):216–23

MRI in internal carotid artery dissection. Savoiardo M, et al. **Ital J Neurol Sci** 1989 Aug;10(4):429–32

Venous stasis retinopathy of stenotic or occlusive carotid origin. McCrary JA 3d. **J Clin Neuro Ophthalmol** 1989 Sep;9(3):195–9 (16 ref.)

Noninvasive testing of suspected carotid artery disease. Savino PJ. **J Clin Neuro Ophthalmol** 1989 Sep;9(3):205–8 (6 ref.)

Lower cranial nerve palsy due to dissection of the internal carotid artery: CT and MR imaging. Dal Pozzo G, et al. **J Comput Assist Tomogr** 1989 Nov–Dec;13(6):989–95

High flow carotid cavernous fistula on magnetic resonance imaging with excellent angiographic correlation. Nalls G, et al. **J Natl Med Assoc** 1990 May;82(5):373–6

Dissection of the cervical internal carotid artery. The role of Doppler/Duplex studies and conservative management. Eljamel MS, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):379–83

Stroke risk and critical carotid stenosis. Norris JW, et al. **J Neurol Neurosurg Psychiatry** 1990 Mar;53(3):235–7

MR imaging in carotid artery dissection [letter; comment] Herman JM, et al. **J Neurosurg** 1990 Jun;72(6):987–8 Comment on: J Neurosurg 1989 Dec;71(6):854–7.

Duplex sonography in patients with hemispheric symptoms. Carroll BA. **J Ultrasound Med** 1989 Oct;8(10):535–40

Diagnosis of carotid–cavernous fistula by periorbital color Doppler imaging and pulsed Doppler volume flow analysis. Kotval PS, et al. **J Ultrasound Med** 1990 Feb;9(2):101–6

Duplex carotid sonography. Peak systolic velocity in quantifying internal carotid artery stenosis. Withers CE, et al. **J Ultrasound Med** 1990 Jun;9(6):345–9

Total occlusion of the common carotid artery with a patent internal carotid artery; identification by duplex ultrasonography: report of a case [letter] [see comments] Bebry AJ, et al. **J Vasc Surg** 1989 Oct;10(4):469–70 Comment in: J Vasc Surg 1990 May;11(5):729.

Correlation of transcranial Doppler and noninvasive tests with angiography in the evaluation of extracranial carotid disease. Cantelmo NL, et al. **J Vasc Surg** 1990 Jun; 11(6):786–91; discussion 791–2

Total occlusion of the common carotid artery with a patent internal carotid artery; identification by duplex ultrasonography: report of a case [letter; comment] Carney EK. **J Vasc Surg** 1990 May;11(5):729 Comment on: J Vasc Surg 1989 Oct;10(4):469–70.

The preoperative diagnosis of the ulcerated carotid atheroma. Comerota AJ, et al. **J Vasc Surg** 1990 Apr;11(4):505–10

Asymptomatic high–grade internal carotid stenosis and ocular pneumoplethysmography [letter] Gee W. **J Vasc Surg** 1990 Jul;12(1):107

Variability of Doppler ophthalmic pressure index with occlusive carotid artery disease. Strauss AL, et al. **J Vasc Surg** 1990 Jul;12(1):50–5

Common carotid artery aneurysm: ultrasonic diagnosis. Wang AM, et al. **JCU** 1988 May;16(4):262–4

Carotid–CNS MR flow imaging. Masaryk TJ, et al. **Magn Reson Med** 1990 May;14(2):308–14

Current applications of duplex and color Doppler ultrasound imaging: carotid and peripheral vascular system. Lewis BD, et al. **Mayo Clin Proc** 1989 Sep;64(9):1147–57

Asymmetry of Doppler spectrum in stenosis differentiation. Kaluzynski K, et al. **Med Biol Eng Comput** 1989 Sep; 27(5):456–62

Diagnosis of carotid artery occlusion by duplex scanning. Maiuri F, et al. **Neurol Res** 1990 Jun;12(2):75–7

Carotid dissection presenting as posterior ischemic optic neuropathy. Rivkin MJ, et al. **Neurology** 1990 Sep; 40(9):1469

Giant aneurysm of the petrous carotid artery presenting with facial numbness. Gibson RD, et al. **Neuroradiology** 1989; 31(5):440–1

Transient ischaemic attacks. Wade J. **Practitioner** 1989 Aug 8;233(1473):1089–92

Dedicated coil for carotid MR angiography. Anderson CM, et al. **Radiology** 1990 Sep;176(3):868–72

Extracranial carotid arteries: evaluation with "black blood" MR angiography. Edelman RR, et al. **Radiology** 1990 Oct;

177(1):45–50
Internal carotid artery stenosis: accuracy and reproducibility of color–Doppler–assisted duplex imaging. Polak JF, et al. **Radiology** 1989 Dec;173(3):793–8
Duplex examination of the carotid arteries. Zwiebel WJ, et al. **Semin Ultrasound CT MR** 1990 Apr;11(2):97–135 (60 ref.)
Correlation of carotid bruits and carotid atherosclerosis detected by B-mode real-time ultrasonography [see comments] Howard VJ, et al. **Stroke** 1989 Oct; 20(10):1331–5 Comment in: Stroke 1990 Apr;21(4):678–9.
Accurate noninvasive method to diagnose minor atherosclerotic lesions in carotid artery bulb. van Merode T, et al. **Stroke** 1989 Oct;20(10):1336–40
Use of color–flow imaging technique in carotid artery disease. Sumner DS. **Surg Clin North Am** 1990 Feb; 70(1):201–11 (17 ref.)
The value of cw–Doppler ultrasonography and DSA in the diagnosis of extra- and intracranial stenosis—a comparison with intraoperative findings. Fürst H, et al. **Thorac Cardiovasc Surg** 1989 Aug;37(4):243–5
Carotid sinus massage in carotid sinus syndrome. Kenny RA, et al. **Ulster Med J** 1990 Apr;59(1):93–5
Morphological characterization of carotid artery stenoses by ultrasound duplex scanning. Widder B, et al. **Ultrasound Med Biol** 1990;16(4):349–54
[Correlation of Doppler echocardiography and EEG findings in stenotic processes in the carotid arteries] Spaček M, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1989;32(5):605–9 (Eng. Abstr.) (Cze)
[Hemodynamic assessment of cerebrovascular circulation using transcranial Doppler ultrasound in patients with carotid stenosis] Schroeder T, et al. **Ugeskr Laeger** 1990 Jul 16;152(29):2110–3 (Eng. Abstr.) (Dan)
[Dissection of the extracranial internal carotid artery. 62 cases] d'Anglejan Chatillon J, et al. **Presse Med** 1990 Apr 7;19(14):661–7 (Eng. Abstr.) (Fre)
[Ultrasonic study of 22 cases of carotid artery dissection] de Bray JM, et al. **Rev Neurol (Paris)** 1989;145(10):702–9 (Eng. Abstr.) (Fre)
[Texture analysis of ultrasound B-images of human carotid artery stenoses using co-occurrence matrices] Bressmer H, et al. **Biomed Tech (Berlin)** 1989;34 Suppl:140–1 (Ger)
[Diagnosis and progress of carotid artery dissecting aneurysm] Steinke W, et al. **Dtsch Med Wochenschr** 1989 Dec 1;114(48):1869–75 (Eng. Abstr.) (Ger)
[Retinal hemodynamics and morphologic findings in patients with occlusion of the internal carotid artery] Wolf S, et al. **Fortschr Ophthalmol** 1989;86(4):339–42 (Eng. Abstr.) (Ger)
[Ulrich oculo-oscillodynamography in carotid artery stenosis and temporal arteritis] Hofmann H, et al. **Klin Monatsbl Augenheilkd** 1989 Sep;195(3):172–3 (Eng. Abstr.) (Ger)
[Dissecting carotid artery aneurysm—3 cases] Zagórski A, et al. **Med Klin** 1990 Mar;85 Suppl 1:125–8 (Ger)
[Carotid dissections] Müller-Forell W, et al. **Radiologe** 1989 Sep;29(9):432–6 (Eng. Abstr.) (Ger)
[Diagnosis of atherosclerotic lesions of the extracranial carotid artery using duplex sonography and IA-DSA. A prospective pathologically and anatomically controlled study] Eckmann A, et al. **ROFO** 1990 Jul;153(1):48–55 (Eng. Abstr.) (Ger)
[Intracranial MR flow signal changes in extracranial occlusions of the internal carotid artery] Forsting M, et al. **ROFO** 1990 Mar;152(3):333–5 (Eng. Abstr.) (Ger)
[Early B-scan sonographic recognition of extracranial carotid atherosclerosis in patients at risk and its significance from the preventive medicine viewpoint] Kuhn FP, et al. **ROFO** 1989 Sep;151(3):360–4 (Eng. Abstr.) (Ger)
[Reproducibility of ultrasound criteria for characterizing carotid artery stenoses] Widder B, et al. **Ultraschall Med** 1990 Apr;11(2):56–61 (Eng. Abstr.) (Ger)
[Traumatic dissection of the internal carotid artery] Kaech D, et al. **Unfallchirurg** 1990 Jan;93(1):6–10 (Eng. Abstr.) (Ger)
[Color Doppler ultrasound of the carotid artery] Fürst H, et al. **Vasa Suppl** 1989;27:358–9 (Ger)
[Magnetic resonance angiography: the neck and head] Kaiser WA. **Vasa Suppl** 1989;27:389–92 (Ger)
[Duplex ultrasound of the cerebrovascular area] Marosi L, et al. **Vasa Suppl** 1989;27:397–400 (Ger)
[Diagnosis and therapy of cerebrovascular insufficiency] Raithel D. **Versicherungsmedizin** 1989 Sep 1;41(5):165–8 (Eng. Abstr.) (Ger)
[The patient with carotid reversible cerebral ischemic attack. Clinico-instrumental pathogenetic diagnosis] Landini GC, et al. **G Clin Med** 1989 Aug-Sep;70(8–9):503, 506–8 (Eng. Abstr.) (Ita)
[Magnetic resonance in the characterization of atherosclerotic lesions (published erratum appears in Radiol Med (Torino) 1989 Nov;78(5):543)] Di Cesare E, et al. **Radiol Med (Torino)** 1989 Sep;78(3):190–5 (Eng. Abstr.) (Ita)
[MRI of internal carotid occlusion and high-grade carotid stenosis] Uchino A, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Nov 25; 49(11):1366–71 (Eng. Abstr.) (Jpn)
[Duplex examination of the carotid artery] Lode OI. **Tidsskr Nor Laegeforen** 1990 Jan 30;110(3):380–3 (Eng. Abstr.) (Nor)
[Value of Doppler ultrasonography in the diagnosis of minor and moderate changes of the internal carotid arteries] Rozenfeld A, et al. **Neurol Neurochir Pol** 1989 May-Jun; 23(3):182–7 (Eng. Abstr.) (Pol)
[Ultrasonic noninvasive examination of the human cerebrovascular system using the vascular impedance method] Powałowski T, et al. **Pol Tyg Lek** 1989 Jan 30; 44(5):120–3 (Eng. Abstr.) (Pol)
[Dynamics of changes in the thickness of the choroid in patients with stenosis of the internal carotid artery] Ivashina AI, et al. **Vestn Oftalmol** 1989 Jul-Aug;105(4):65–7 (Eng. Abstr.) (Rus)
[Computer-assisted spectrum analysis of Doppler ultrasonograms in occlusive lesions of the carotid arteries] Pokrovskiĭ AV, et al. **Zh Nevropatol Psikhiatr** 1990; 90(1):9–12 (Eng. Abstr.) (Rus)
[Recent ultrasonographic advances in the early diagnosis of carotid stenosis] Oliveras Ley C, et al. **Arch Neurobiol (Madr)** 1989 Sep-Oct;52(5):211–6 (21 ref.) (Eng. Abstr.) (Spa)

DRUG THERAPY

Interventional clinical trials using noninvasive ultrasound end points: the Multicenter Isradipine/Diuretic Atherosclerosis Study. The MIDAS Research Group. Bond MG, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S30–3
Carotid sinus syndrome. Jan A. **JPMA** 1989 Nov; 39(11):292–3
Patterns of failure of aspirin treatment in symptomatic atherosclerotic carotid artery disease. Chyatte D, et al. **Neurosurgery** 1990 Apr;26(4):565–9
Localized release of perivascular heparin inhibits intimal proliferation after endothelial injury without systemic anticoagulation. Okada T, et al. **Neurosurgery** 1989 Dec; 25(6):892–8
[Severe first dose reaction after administration of captopril to patients with carotid artery stenosis] Fruergaard P, et al. **Ugeskr Laeger** 1990 Jul 23;152(30):2179–80 (Eng. Abstr.) (Dan)
[Diagnosis and treatment of carotid artery stenoses] Knoll P, et al. **Acta Med Austriaca** 1989;16(5):104–9 (68 ref.) (Eng. Abstr.) (Ger)
[Effect of calcium antagonists on cerebral and systemic hemodynamics in patients with ischemic disorders of cerebrovascular circulation] Ishchenko MM, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):52–6 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Asymptomatic carotid artery disease detected by duplex scanning incidence and correlation with risk factors, cerebral blood flow and CT findings. Niederkorn K. **Eur Neurol** 1990;30(2):61–6
Risk factors in extracranial carotid disease. Nagaraja D, et al. **J Assoc Physicians India** 1989 Apr;37(4):253–4
A rational approach to recurrent carotid stenosis. Atnip RG, et al. **J Vasc Surg** 1990 Apr;11(4):511–6
Carotid artery blood flow velocity related to transient ischemic attack and stroke in a population study of 69-year-old men. Jungquist G, et al. **Stroke** 1989 Oct; 20(10):1327–30
[High prevalence of obstructive lesions of the extracranial carotid arteries in reno-vascular hypertension] Rossi A, et al. **G Ital Cardiol** 1990 Apr;20(4):291–9 (Eng. Abstr.) (Ita)

ETIOLOGY

Duplex imaging and incidence of carotid radiation injury after high-dose radiotherapy for tumors of the head and neck. Moritz MW, et al. **Arch Surg** 1990 Sep;125(9):1181–3
Carotid artery atherosclerosis in cholesterol-fed female cynomolgus monkeys. Effects of oral contraceptive treatment, social factors, and regional adiposity. Shively CA, et al. **Arteriosclerosis** 1990 May-Jun;10(3):358–66
Establishment of a vascular graft infection model in the sheep carotid artery. Fletcher JP, et al. **Aust N Z J Surg** 1990 Oct;60(10):801–3
Internal carotid artery aneurysm and Marfan's syndrome. Latter DA, et al. **Can J Surg** 1989 Nov;32(6):463–6
Traumatic aneurysm of the extracranial internal carotid artery due to hyperextension of the neck. Stonebridge PA, et al. **Eur J Vasc Surg** 1990 Aug;4(4):423–5
Migraine—a risk factor for dissection of cervical arteries. D'Anglejan-Chatillon J, et al. **Headache** 1989 Oct; 29(9):560–1
Carotid artery pseudoaneurysm following internal jugular vein cannulation. Nayeem SA, et al. **J Cardiovasc Surg (Torino)** 1990 Mar-Apr;31(2):182–3
Carotid-cavernous sinus fistula accompanying facial trauma. Report of a case with a review of the literature. Takenoshita Y, et al. **J Craniomaxillofac Surg** 1990 Jan; 18(1):41–5 (22 ref.)
An unusual complication of mourning [letter] Harrop-Griffiths AW, et al. **J Neurol Neurosurg Psychiatry** 1990 Apr;53(4):358
Carotid-cavernous sinus fistula accompanying an isolated mandibular fracture. Walls RD, et al. **J Oral Maxillofac Surg** 1989 Nov;47(11):1215–21 (37 ref.)
Carotid artery dissection secondary to seatbelt trauma: case report. Reddy K, et al. **J Trauma** 1990 May;30(5):630–3
Blunt injuries of the extracranial internal carotid artery. Höllerhage HG, et al. **Neurosurg Rev** 1989;12 Suppl 1:514–8
Traumatic aneurysm of the internal carotid artery with fracture dislocation at C 5: case report. Wada H, et al. **Neurosurg Rev** 1989;12 Suppl 1:600–1
Retropharyngeal abscess and carotid hemorrhage following tracheoesophageal puncture and voice prosthesis insertion: a case report. Spiro JD, et al. **Otolaryngol Head Neck Surg** 1990 Jun;102(6):762–3
Anterior choroidal artery territory infarction and small-vessel disease [letter; comment] Fisher M, et al. **Stroke** 1989 Nov;20(11):1591–2 Comment on: Stroke 1989 May;20(5):616–9.
[Internal carotid occlusion and essential thrombocythemia. 2 cases] Muller JP, et al. **Rev Neurol (Paris)** 1990; 146(5):361–4 (17 ref.) (Eng. Abstr.) (Fre)
[False aneurysm: a complication of carotid endarterectomy] Nobel M, et al. **Harefuah** 1990 Mar 1;118(5):260–2 (Eng. Abstr.) (Heb)
[Traumatic occlusion of the extracranial internal carotid artery. Report of two cases] Yamaura I, et al. **Neurol Med Chir (Tokyo)** 1989 Dec;29(12):1144–7 (Eng. Abstr.) (Jpn)
[Carotid artery disease induced by irradiation] Alvarez Sabín J, et al. **Neurologia** 1989 May;4(4):115–8 (Eng. Abstr.) (Spa)

HISTORY

[Treatment of the carotid-cavernous fistula: a historical review] Amâncio EJ, et al. **Arq Neuropsiquistr** 1990 Mar; 48(1):119–30 (Eng. Abstr.) (Por)

METABOLISM

Procoagulant activity expression by macrophages from atheromatous vascular plaques. Tipping PG, et al. **Atherosclerosis** 1989 Oct;79(2–3):237–43
Cellular and immunologic features of carotid artery disease in man and experimental animal models. Holm J, et al. **Eur J Vasc Surg** 1990 Feb;4(1):49–55
Carotid occlusion increases the release of endogenous GABA in the nucleus of the solitary tract. Klausmair A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Dec;340(6 Pt 2):764–6

NURSING

Carotid endarterectomy: nursing care and controversies. Fode NC. **J Neurosci Nurs** 1990 Feb;22(1):25–31

PATHOLOGY

An improved immunofluorescence technique for the histological examination of blood vessel tissue. Kittelberger R, et al. **Acta Histochem (Jena)** 1989;86(2):137–42
Atherosclerosis dissection of the cervical internal carotid artery—a case report [published erratum appears in Angiology 1990 Jun;41(6):478] De Baets P, et al. **Angiology** 1990 Feb;41(2):161–3
The influence of contralateral disease on the natural history of nonoperated significant carotid stenosis. Satiani B, et al. **Ann Vasc Surg** 1990 Jul;4(4):313–7
Clinical significance of carotid plaque hemorrhage. Bornstein NM, et al. **Arch Neurol** 1990 Sep;47(9):958–9
Pathological-anatomical study concerning the geometry and atherosclerosis of the carotid bifurcation. Spelde AG, et al. **Eur J Vasc Surg** 1990 Aug;4(4):345–8
Evolution of carotid atheromatous lesions in endarterectomized patients. Arosio E, et al. **Int Angiol** 1989 Oct-Dec;8(4):194–9
Influence of contralateral carotid artery on neurologic outcome after carotid endarterectomy. Floriani M, et al. **Ital J Surg Sci** 1989;19(4):381–6
Antiplatelet therapy and carotid plaque hemorrhage and its clinical implications. AbuRahma AF, et al. **J Cardiovasc Surg (Torino)** 1990 Jan-Feb;31(1):66–70
Growth of carotid plaques [letter; comment] Weinberger J, et al. **Neurology** 1990 Jun;40(6):1007 Comment on: Neurology 1989 Oct;39(10):1325–31.
The origin and distribution of vasa vasorum at the bifurcation of the common carotid artery with atherosclerosis. Bo WJ, et al. **Stroke** 1989 Nov;20(11):1484–7
Carotid plaque morphology and risk for stroke. Gomez CR. **Stroke** 1990 Jan;21(1):148–51 (33 ref.)
Neuropathologic consequences of internal carotid artery occlusion and hemorrhagic hypotension in baboons. Graham DI, et al. **Stroke** 1990 Mar;21(3):428–34
Effects of Hydergine on platelet deposition on "active" human carotid artery lesions and platelet function. Steurer G, et al. **Thromb Res** 1989 Sep 1;55(5):577–89
In vivo biomicroscopy with ultrasound 2. Santosh K, et al. **Ultrasonics** 1990 Jan;28(1):40–9
[Lateralization of lesions in the carotid bed in patients with sudden cerebrovascular stroke] Spaček M, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1989;32(5):597–603 (Eng. Abstr.) (Cze)
[Anatomo-clinical correlations of carotid plaques] Van Damme H, et al. **Acta Chir Belg** 1989 Nov-Dec; 89(6):293–300 (Eng. Abstr.) (Fre)
[Anatomoclinical study of carotid artery stenosis. Effects on surgical indications] Jegaden O, et al. **Presse Med** 1990 Jul 7–14;19(27):1271–5 (Eng. Abstr.) (Fre)
[Clinical picture and background for progression of

peripheral arteriosclerosis in Japanese patients with coronary artery disease] Takita T. **Nippon Ika Daigaku Zasshi** 1990 Apr;57(2):147–59 (Eng. Abstr.) **(Jpn)**

[A combination of multiple meningiomas of the sellar area and saccular carotid–ophthalmic aneurysm] Serova NK, et al. **Zh Vopr Neirokhir** 1989 May–Jun;(3):49–52 **(Rus)**

PHYSIOPATHOLOGY

Hemodynamics of carotid occlusive disease. Nyberg-Hansen R, et al. **Acta Chir Scand Suppl** 1990;555:201–4

Epidural pressure and cerebral metabolism in rat internal carotid artery occlusion by silicone cylinder embolus. Takeda T, et al. **Adv Neurol** 1990;52:547

Comparison of color flow and 3D image by computer graphics for the evaluation of carotid disease. Houi K, et al. **Angiology** 1990 Apr;41(4):305–12

Regional cerebral blood flow in patients with leuko-araiosis and atherosclerotic carotid artery disease. Herholz K, et al. **Arch Neurol** 1990 Apr;47(4):392–6

Transcranial Doppler ultrasonography of the middle cerebral artery in the hemodynamic assessment of internal carotid artery stenosis. Kelley RE, et al. **Arch Neurol** 1990 Sep; 47(9):960–4

Progression of carotid atherosclerosis and its determinants: a population-based ultrasonography study. Salonen R, et al. **Atherosclerosis** 1990 Feb;81(1):33–40

A model of the pathophysiology of cerebral arteriovenous malformations by a carotid-jugular fistula in the rat. Morgan MK, et al. **Brain Res** 1989 Sep 4;496(1–2):241–50

Pressor responses to common carotid occlusion in female rats: effects of gonadectomy and treatment with gonadal steroid hormones. Bedran-de-Castro MT, et al. **Braz J Med Biol Res** 1989;22(7):885–7

Cerebral perfusion pressure and CO2-reactivity in the evaluation of carotid obstructions. Strik F. **Clin Neurol Neurosurg** 1990;92(2):137–41

Unilateral suppression of vertex sharp waves in the sleep electroencephalogram (case report). Niedermeyer E, et al. **Electroencephalogr Clin Neurophysiol** 1966 Apr;20(4):401–4

Reverse flow in arterial dissection [letter; comment] Kotval PS. **J Ultrasound Med** 1990 Mar;9(3):181–2 Comment on: J Ultrasound Med 1989 Mar;8(3):149–53.

The clinical role of the cerebral collateral circulation in carotid occlusion. Norris JW, et al. **J Vasc Surg** 1990 Aug; 12(2):113–8

Inhibition by 1,3-dipropyl-8(p-sulfophenyl)xanthine of the respiratory stimulation induced by common carotid occlusion in rats. Monteiro EC, et al. **Life Sci** 1989; 45(10):939–45

Cerebral blood flow and common carotid flow in neurologically asymptomatic carotid endarterectomy patients. Gratzl O, et al. **Neurol Res** 1990 Mar;12(1):26–8

Compensatory mechanisms in patients with asymptomatic carotid artery occlusion. Kuwert T, et al. **Neurol Res** 1990 Jun;12(2):89–93

Carotid artery disease and low cerebral perfusion pressure: symptomatology, operative risk and outcome. Schroeder T, et al. **Neurol Res** 1990 Mar;12(1):35–40

Prediction of carotid stenosis progression by lipid and hematologic measurements [see comments] Grotta JC, et al. **Neurology** 1989 Oct;39(10):1325–31 Comment in: Neurology 1990 Jun;40(6):1007.

Hemodynamic role of ophthalmic artery collateral in internal carotid artery occlusion. Tatemichi TK, et al. **Neurology** 1990 Mar;40(3 Pt 1):461–4

Collateral development after carotid artery occlusion in Fischer 344 rats. Coyle P, et al. **Stroke** 1990 Feb; 21(2):316–21

Cerebral blood flow, glucose utilization, and electrocorticograms following common carotid artery occlusion in gerbils. Hasegawa Y, et al. **Stroke** 1990 Jan; 21(1):112–8

Increasing doses of intracarotid air and cerebral blood flow in rabbits. Helps SC, et al. **Stroke** 1990 Sep;21(9):1340–5

Correlation of carotid bruits and carotid atherosclerosis [letter; comment] Mercuri MF, et al. **Stroke** 1990 Apr; 21(4):678–9 Comment on: Stroke 1989 Oct;20(10):1331–5.

Local cerebral blood flow during and after bilateral carotid artery occlusion in unanesthetized gerbils. Nadasy GL, et al. **Stroke** 1990 Jun;21(6):901–7

Long-term follow-up of occlusive cervical carotid dissection. Pozzati E, et al. **Stroke** 1990 Apr;21(4):528–31

Acoustic recordings from experimental saccular aneurysms in dogs. Sekhar LN, et al. **Stroke** 1990 Aug;21(8):1215–21

Correlation of carotid bruits and carotid atherosclerosis detected by B-mode real-time ultrasonography [letter] White AD, et al. **Stroke** 1990 Apr;21(4):677

The occipital-vertebral anastomosis as a collateral pathway: hemodynamic patterns--case report. Miyachi S, et al. **Surg Neurol** 1989 Nov;32(5):350–5 (25 ref.)

[Electrical impedance of the carotid artery in relation to arterial blood pressure and following balloon catheterization] Apfel H, et al. **Biomed Tech (Berlin)** 1989; 34 Suppl:225–6 **(Ger)**

[Transcranial Doppler curve analysis. On the pathophysiology of unilateral carotid stenoses] Fürst H, et al. **Chirurg** 1990 Mar;61(3):178–82 (Eng. Abstr.) **(Ger)**

[Doppler sonography measurement of jugular vein blood flow] Brunhölzl C, et al. **Vasa** 1990;19(1):26–9 (Eng. Abstr.) **(Ger)**

[Carotid and vertebral artery circulation in forearm choke holds in Doppler sonography] Denk W, et al. **Z Rechtsmed** 1990;103(5):369–77 (Eng. Abstr.) **(Ger)**

[Evaluation of cerebral circulation in the presence of carotid vessel changes] Fiermonte G, et al. **Riv Neurol** 1989 May–Jun;59(3):99–102 (Eng. Abstr.) **(Ita)**

[PET study on cerebral hemodynamics in internal carotid artery occlusion—the pathogenesis of watershed infarction] Yamauchi H, et al. **Rinsho Shinkeigaku** 1990 May; 30(5):492–8 (Eng. Abstr.) **(Jpn)**

[Intracerebral hemodynamic changes in lesions of the internal carotid arteries] Pendefunda L, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Apr–Jun;93(2):319–23 (Eng. Abstr.) **(Rum)**

[The interaction of humoral, metabolic and myogenic regulation of the cerebral circulation in unilateral occlusion of the internal carotid artery] Shakhnovich AR, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1521–6 (Eng. Abstr.) **(Rus)**

[Cerebral hemodynamics in occlusive diseases of major extracranial arteries] Pyshkina LI, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):86–8 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Residual lesions and early recurrent stenosis after carotid endarterectomy [letter; comment] Gale SS. **J Vasc Surg** 1989 Dec;10(6):705–7 Comment on: J Vasc Surg 1987 May;5(5):731–7.

[Retrograde carotid angiography. Reassessment of safety measures against stenotic changes in the internal carotid artery] Kurimoto M, et al. **Rinsho Hoshasen** 1989 Sep; 34(9):1063–5 **(Jpn)**

RADIOGRAPHY

Occlusion of the extracranial internal carotid artery in the acute stroke; angiographic findings within 6 hours. Bozzao L, et al. **Acta Neurochir (Wien)** 1989;100(1–2):39–42

A comparison of normal intraarterial digital subtraction angiography with standard angiography in patients with symptomatic cerebrovascular ischemia. Lipchik EO, et al. **AJNR** 1990 Jul–Aug;11(4):837–8

Routine MR imaging of the internal carotid artery siphon: angiographic correlation with cervical carotid lesions. Brant-Zawadzki M. **AJR Am J Roentgenol** 1990 Aug; 155(2):359–63

Intra-arterial digital subtraction angiography for suspected cerebrovascular disease—current status. Hoe J, et al. **Ann Acad Med Singapore** 1989 Nov;18(6):696–701

Metastasis of parotid acinic cell carcinoma to an internal carotid aneurysm: a case report. Chumas PD, et al. **Br J Neurosurg** 1988;2(3):411–3

A radiological study of degenerative vascular changes in the external carotid region and carotid bifurcation. Wolf J, et al. **Br J Oral Maxillofac Surg** 1989 Oct;27(5):362–70

Aneurysms involving the intrapetrous internal carotid artery: a rare cause of Horner's syndrome. Rawlinson J, et al. **Br J Radiol** 1990 Jan;63(745):69–72

Intravenous digital subtraction angiography for extracranial carotid artery disease. Turner WH, et al. **Br J Surg** 1989 Dec;76(12):1247–50 (43 ref.)

Intravenous digital subtraction angiography in patients with cerebral ischaemia. Evaluation of extracranial carotid lesions. Mantoni M, et al. **Eur J Radiol** 1989 Nov;9(4):221–3

Carotid cavernous fistula. Mishra GK, et al. **J Indian Med Assoc** 1989 Jul;87(7):163–4

Spontaneous dissection of the intrapetrous internal carotid artery. Saeed SR, et al. **J Laryngol Otol** 1990 Jun; 104(6):491–3

Complications of cerebral angiography for patients with mild carotid territory ischaemia being considered for carotid endarterectomy. Hankey GJ, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):542–8

Internal carotid artery dissection and ipsilateral hypoglossal nerve palsy [letter] Vighetto A, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):530–1

Spontaneous dissection of both extracranial internal carotid arteries. Milandre L, et al. **Neuroradiology** 1989;31(5):435–9 (28 ref.)

Traumatic pseudoaneurysm of the cervical carotid artery: the value of arteriography. Applegate LJ, et al. **Neurosurgery** 1990 Feb;26(2):312–5

Aneurysms of the intracavernous carotid artery: clinical presentation, radiographic features, and pathogenesis. Linskey ME, et al. **Neurosurgery** 1990 Jan;26(1):71–9

Mapping of rCBF and cerebrovascular reserve capacity by stable xenon CT in cerebrovascular disease: pathophysiological aspects and effects of operative therapy. Gaab MR, et al. **Psychiatry Res** 1989 Sep;29(3):309–12

Computed tomographic study of cervical carotid calcification. Culebras A, et al. **Stroke** 1989 Nov; 20(11):1472–6

Geometric factors of the bifurcation in carotid atherogenesis. Fisher M, et al. **Stroke** 1990 Feb;21(2):267–71

Implications of the angiographic string sign in carotid atherosclerosis. Fredericks RK, et al. **Stroke** 1990 Mar; 21(3):476–9

Arterial disease risk factors and angiographic evidence of atheroma of the carotid artery [see comments] Schneidau A, et al. **Stroke** 1989 Nov;20(11):1466–71 Comment in: Stroke 1990 Jul;21(7):1092.

Carotid transient ischemic attacks and normal investigations: a follow-up study. Shuaib A, et al. **Stroke** 1990 Apr; 21(4):525–7

Imaging techniques in suspected internal carotid artery dissection [letter] Tomsick TA. **Stroke** 1990 Sep; 21(9):1378–80

Duration of cigarette smoking is the strongest predictor of severe extracranial carotid artery atherosclerosis. Whisnant JP, et al. **Stroke** 1990 May;21(5):707–14

Two pediatric cases with occlusions of the ipsilateral internal carotid and posterior cerebral arteries associated with moyamoya vessels: "unilateral" moyamoya disease. Matsushima T, et al. **Surg Neurol** 1990 Apr;33(4):276–80

[Radiologic diagnosis of fibromuscular dysplasia of the carotid system in the African black (apropos of 8 cases)] Badiane M, et al. **Dakar Med** 1988;33(1–4):79–84 (Eng. Abstr.) **(Fre)**

[Spontaneous dissection of the internal carotid artery. Apropos of 7 cases and a review of the literature] Van Damme H, et al. **J Mal Vasc** 1990;15(1):14–22 (19 ref.) (Eng. Abstr.) **(Fre)**

[Effect of the geometry of atherosclerotic carotid artery lesions on their angiography image—an arteriography study] Neufang KF, et al. **Rontgenblatter** 1990 Jan; 43(1):11–5 (Eng. Abstr.) **(Ger)**

[Differences in CT findings between embolic and thrombotic cerebral artery occlusion of the internal carotid arterial system] Takano K, et al. **Rinsho Shinkeigaku** 1989 Nov; 29(11):1370–6 (Eng. Abstr.) **(Jpn)**

[Radiological image of aneurysm of the internal carotid artery as a complication of angiography] Gołąbek R, et al. **Wiad Lek** 1989 Feb 15;42(4):263–6 (Eng. Abstr.) **(Pol)**

RADIONUCLIDE IMAGING

Cerebral hemodynamics in patients with chronic obstructive carotid disease by rCBF, rCBV, and rCBV/rCBF ratio using SPECT. Toyama H, et al. **J Nucl Med** 1990 Jan; 31(1):55–60

[Visualization of carotid and femoral atherosclerotic lesions using autologous lipoprotein reinjection containing apo-B marked with 131I: preliminary data] Lupattelli G, et al. **Medicina (Firenze)** 1989 Oct–Dec;9(4):398–400 (Eng. Abstr.) **(Ita)**

[Measurement of cerebral blood flow by single photon emission computed tomography in cases of internal carotid artery occlusion] Sunada I. **Neurol Med Chir (Tokyo)** 1989 Jun;29(6):496–502 (Eng. Abstr.) **(Jpn)**

SURGERY

How to predict which patient with carotid atherosclerosis is "high risk". Schroeder T. **Acta Chir Scand Suppl** 1990; 555:209–22 (123 ref.)

Technical details in carotid endarterectomy. Welten RJ, et al. **Acta Chir Scand Suppl** 1990;555:205–8

Intolerable pulse-synchronous tinnitus caused by occlusion of the contralateral common carotid artery. A successful treatment by aorto-carotid bypass surgery. Nishikawa M, et al. **Acta Neurochir (Wien)** 1989;101(1–2):80–3

Results of microsurgical carotid endarterectomy. A prospective study with transcranial Doppler and EEG monitoring, and elective shunting. Steiger HJ, et al. **Acta Neurochir (Wien)** 1989;100(1–2):31–8

Assessment of risk of carotid occlusion with balloon Matas testing and dynamic computed tomography. Terada T, et al. **Acta Neurochir (Wien)** 1990;103(3–4):122–7

Carotid endarterectomy. Warlow C. **Acta Neurol Belg** 1989 Nov–Dec;89(5):325–30 (3 ref.)

Patency and flow velocity profiles in the internal carotid artery assessed by digital subtraction angiography and Doppler studies two years after endarterectomy. Russell D, et al. **Acta Neurol Scand** 1990 Mar;81(3):193–6

The training of carotid endarterectomy during an era of controversy. A personal experience. Dalsing MC. **Am Surg** 1990 Aug;56(8):476–86

Cost effectiveness of regional anesthesia in carotid endarterectomy. Godin MS, et al. **Am Surg** 1989 Nov; 55(11):656–9

Indications for carotid endarterectomy. American College of Physicians [see comments] **Ann Intern Med** 1989 Oct 15;111(8):675–7 Comment in: Ann Intern Med 1990 Mar 1;112(5):383–4.

Carotid endarterectomy. Cebul RD, et al. **Ann Intern Med** 1989 Oct 15;111(8):660–70 (108 ref.)

Antiplatelet treatment prolongs survival after carotid bifurcation endarterectomy. Analysis of the clinical series followed by a controlled trial. Kretschmer G, et al. **Ann Surg** 1990 Mar;211(3):317–22

Carotid and aortic arch endarterectomy using hypothermic arrest with coronary bypass. Nishida H, et al. **Ann Thorac Surg** 1989 Dec;48(6):865–6

Safe extracranial vascular evaluation and surgery without preoperative arteriography. Hill JC, et al. **Ann Vasc Surg** 1990 Jan;4(1):34–8

The suitability of expanded PTFE for carotid patch angioplasty. LeGrand DR, et al. **Ann Vasc Surg** 1990 May; 4(3):209–12

Carotid endarterectomy in patients with contralateral carotid occlusion: is the risk increased? McKittrick JE, et al. **Ann Vasc Surg** 1989 Oct;3(4):324–7

Safety and long-term benefit of carotid endarterectomy in the asymptomatic patient. Park Y, et al. **Ann Vasc Surg** 1990 May;4(3):218–22

Vocal cord paralysis following carotid endarterectomy: the paradox of return of function. Sannella NA, et al. **Ann Vasc Surg** 1990 Jan;4(1):42–5

The risk of carotid endarterectomy for the asymptomatic patient: an argument for prophylactic operation. Treiman RL, et al. **Ann Vasc Surg** 1990 Jan;4(1):29–33

Closure of the internal carotid artery after endarterectomy: the advantages of patch angioplasty without its disadvantages. Vanmaele R, et al. **Ann Vasc Surg** 1990 Jan; 4(1):81–4

Long-term results after carotid endarterectomy for carotid artery stenosis with contralateral occlusion. Vermassen F, et al. **Ann Vasc Surg** 1990 Jul;4(4):323–7

Analysis of risk factors for myocardial infarction following carotid endarterectomy. Yeager RA, et al. **Arch Surg** 1989 Oct;124(10):1142–5

Role of duplex scanning in the selection of patients for carotid endarterectomy. Farmilo RW, et al. **Br J Surg** 1990 Apr; 77(4):388–90

Transient ischaemic attacks: controversies in treatment. A review. Gilligan BS. **Clin Exp Neurol** 1988;25:33–42 (23 ref.)

Is there still a place for carotid endarterectomy? Matalanis G, et al. **Clin Exp Neurol** 1988;25:17–26 (15 ref.)

Prospective evaluation of combined carotid and coronary surgery. Lusiani L, et al. **Eur J Cardiothorac Surg** 1987; 1(1):16–9

Simultaneous extensive extracranial and coronary revascularization. Long-term follow-up up to 13 years. Vermeulen FE, et al. **Eur J Cardiothorac Surg** 1988; 2(2):113–23

Extracranial carotid artery aneurysms. de Jong KP, et al. **Eur J Vasc Surg** 1989 Dec;3(6):557–62

Should proximal saphenous vein be used for carotid patch angioplasty: a clinical study of the need for vein in subsequent operations. de Vries AC, et al. **Eur J Vasc Surg** 1990 Jun;4(3):301–4

Local versus general anaesthesia in carotid surgery. A prospective, randomised study. Forssell C, et al. **Eur J Vasc Surg** 1989 Dec;3(6):503–9

Eight to ten years follow-up after carotid endarterectomy: clinical evaluation and Doppler examination of patients operated on between 1978–1980. Knudsen L, et al. **Eur J Vasc Surg** 1990 Jun;4(3):259–64

Angiographic long-term outcome of carotid endarterectomy. Lepojärvi MV. **Eur J Vasc Surg** 1989 Dec;3(6):549–55

Carotid artery surgery. Local versus general anaesthesia as related to sympathetic activity and cardiovascular effects. Takolander R, et al. **Eur J Vasc Surg** 1990 Jun;4(3):265–70

Heparin kinetics in vascular surgery. Williams NN, et al. **Eur J Vasc Surg** 1989 Dec;3(6):493–6

The use of electroencephalography in carotid endarterectomy. Chemtob G, et al. **Int Anesthesiol Clin** 1990 Summer;28(3):143–6 (30 ref.)

Dissection of the thoracic aorta following partial clamping. Banchini E, et al. **Int Angiol** 1989 Jul–Sep;8(3):157–60

Carotid surgery under cervical block anesthesia. A simple method of heart and brain protection in high risk patients. Bergeron P, et al. **Int Angiol** 1989 Apr–Jun;8(2):70–80

Extracranial carotid artery aneurysms. Report of two cases. Agrifoglio M, et al. **J Cardiovasc Surg (Torino)** 1989 Nov–Dec;30(6):942–4

Management of concomitant occlusive disease of coronary and carotid arteries using cardiopulmonary bypass for both procedures. Minami K, et al. **J Cardiovasc Surg (Torino)** 1989 Sep–Oct;30(5):723–8

Early cerebral complications in carotid endarterectomy: risk factors. Salenius JP, et al. **J Cardiovasc Surg (Torino)** 1990 Mar–Apr;31(2):162–7

The impact of vein patch angioplasty on long-term surgical outcome after carotid endarterectomy. A prospective follow-up study with serial duplex scanning. Ten Holter JB, et al. **J Cardiovasc Surg (Torino)** 1990 Jan–Feb; 31(1):58–65

Cerebral hemodynamic changes and electroencephalography during carotid endarterectomy. Algotsson L, et al. **J Clin Anesth** 1990 May–Jun;2(3):143–51

Retrograde suction decompression of giant paraclinoidal aneurysms. Technical note. Batjer HH, et al. **J Neurosurg** 1990 Aug;73(2):305–6

Saphenous vein graft bypass of the cavernous internal carotid artery. Sekhar LN, et al. **J Neurosurg** 1990 Jan;72(1):35–41

Risk of late stroke and survival following carotid endarterectomy procedures for symptomatic patients. Turner DA, et al. **J Neurosurg** 1990 Aug;73(2):193–200

Asymptomatic occlusion of the internal carotid artery at the skull base. De Jong T, et al. **J Neurosurg Sci** 1990 Jan–Mar; 34(1):21–7

Surgical angioplasty of the left main coronary artery. Dion R, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):241–9; discussion 249–50

Is routine duplex examination after carotid endarterectomy justified? Cook JM, et al. **J Vasc Surg** 1990 Sep;12(3):334–40

Long-term follow-up and clinical outcome of carotid restenosis. Healy DA, et al. **J Vasc Surg** 1989 Dec; 10(6):662–8; discussion 668–9

Carotid endarterectomy contralateral to an occluded carotid artery: perioperative risk and late results. Mackey WC, et al. **J Vasc Surg** 1990 Jun;11(6):778–83; discussion 784–5

Recurrent carotid stenosis: a consequence of local or systemic factors? The influence of unrepaired technical defects. Reilly LM, et al. **J Vasc Surg** 1990 Mar;11(3):448–59; discussion 459–60

Carotid patch angioplasty: immediate and long-term results. Rosenthal D, et al. **J Vasc Surg** 1990 Sep;12(3):326–33

First phase report of cooperative Veterans Administration asymptomatic carotid stenosis study—operative morbidity and mortality. Towne JB, et al. **J Vasc Surg** 1990 Feb; 11(2):252–8; discussion 258–9

Common sense and carotid endarterectomy. Wheeler HB. **J Vasc Surg** 1990 Jun;11(6):735–44

Relevance of cerebral vasomotor reactivity to prospects for successful endarterectomy [letter] Fürst H, et al. **Lancet** 1990 Jan 20;335(8682):166–7

Effectiveness of carotid endarterectomy for asymptomatic carotid stenosis: design of a clinical trial. Mayo Asymptomatic Carotid Endarterectomy Study Group. **Mayo Clin Proc** 1989 Aug;64(8):897–904

Decision making in the face of uncertainty: the case of carotid endarterectomy. Matchar DB. **Mayo Clin Proc** 1990 May; 65(5):756–60

Prospective study of the effectiveness and durability of carotid endarterectomy. Sundt TM Jr, et al. **Mayo Clin Proc** 1990 May;65(5):625–35

Interposition of a saphenous vein graft for early recurrent carotid stenosis—report of two cases. Abiko S, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):583–7

Congenital fistula of the dural carotid-cavernous sinus: case report and review of the literature. Konishi Y, et al. **Neurosurgery** 1990 Jul;27(1):120–6 (36 ref.)

Evaluation of somatosensory evoked potentials in temporary occlusion of cerebral artery 2. Intraoperative monitoring during internal carotid and middle cerebral artery aneurysm surgery. Nakasu Y. **Nippon Geka Hokan** 1989 Mar 1; 58(2):206–16

Median sternotomy for cervical thorotrast granuloma and carotid hemorrhage. Selesnick SH, et al. **Otolaryngol Head Neck Surg** 1990 Apr;102(4):405–8

Cerebral vasoreactivity and blood flow before and 3 months after carotid endarterectomy. Russell D, et al. **Stroke** 1990 Jul;21(7):1029–32

Role of transcranial Doppler in carotid surgery. Bernstein EF. **Surg Clin North Am** 1990 Feb;70(1):225–34

Carotid endarterectomy without angiography. Gelabert HA, et al. **Surg Clin North Am** 1990 Feb;70(1):213–23 (28 ref.)

Carotid endarterectomy under local anesthesia supplemented with neuroleptic analgesia. Slutzki S, et al. **Surg Gynecol Obstet** 1990 Feb;170(2):141–4

Direct surgery for carotid bifurcation artery aneurysms. Laranjeira M, et al. **Surg Neurol** 1990 Oct;34(4):250–4

Rupture of a giant aneurysm of the inferior wall of the internal carotid artery after saphenous vein interposition graft to the middle cerebral artery. Plangger CA, et al. **Zentralbl Neurochir** 1989;50(2):61–3

[Neurologic complications in connection with the surgical treatment of 577 cases of carotid artery stenosis] Nielsen TG, et al. **Ugeskr Laeger** 1990 Apr 2;152(14):1005–8 (Eng. Abstr.) **(Dan)**

[Transient monocular blindness and carotid surgery] Fabiani JN. **Bull Soc Ophtalmol Fr** 1989 Dec;89(12):1357 **(Fre)**

[Aneurysm of the internal carotid artery bifurcation. Technical reflections apropos of a series of 10 cases] Reynier Y, et al. **Neurochirurgie** 1989;35(4):242–5 (Eng. Abstr.) **(Fre)**

[Carotid surgery under locoregional anesthesia] Goëau-Brissonnière O, et al. **Presse Med** 1989 Nov 11; 18(37):1831–5 (Eng. Abstr.) **(Fre)**

[Surgical strategy in polyarterial disease. Value and results of combined surgery] Nataf P, et al. **Presse Med** 1990 Mar 17;19(10):460–4 (Eng. Abstr.) **(Fre)**

[Should certain carotid artery stenoses be surgically treated?] Rosa A. **Rev Neurol (Paris)** 1990;146(5):319–29 (80 ref.) (Eng. Abstr.) **(Fre)**

[Carotid endarterectomy. A justifiable risk for the prevention of ischemic infarct?] Marx P. **Fortschr Med** 1989 Nov 30; 107(34):727–32 (0 ref.) (Eng. Abstr.) **(Ger)**

[Therapy of carotid stenosis in contralateral occlusion of the internal carotid artery] Wandschneider W, et al. **Vasa** 1990; 19(2):134–7 (Eng. Abstr.) **(Ger)**

[Cerebral artery aneurysm of the para-ophthalmic artery segment of the internal carotid artery (C4 section)] Synowitz HJ. **Zentralbl Neurochir** 1989;50(1):39–41 (Eng. Abstr.) **(Ger)**

[Peroperative morbidity and mortality in thromboendarterectomy of the carotid bifurcation in patients with a previous stabilized stroke. Our results and review of the literature] Floriani M, et al. **Ann Ital Chir** 1989;60(2):101–8 (48 ref.) (Eng. Abstr.) **(Ita)**

[Block of the cervical plexus in surgery of the carotid artery. Our experience with 142 cases] Cantanna R, et al. **Minerva Anestesiol** 1989 Jul–Aug;55(7–8):301–5 (Eng. Abstr.) **(Ita)**

[Extracranial aneurysm of the internal carotid artery] De Majo A, et al. **Minerva Chir** 1989 Oct 15;44(19):2109–12 (Eng. Abstr.) **(Ita)**

[Intraoperative monitoring of cerebral function and carotid hemodynamics during carotid endarterectomy] Okada Y, et al. **No Shinkei Geka** 1989 Oct;17(10):925–31 (Eng. Abstr.) **(Jpn)**

[A case of a basilar bifurcation aneurysm associated with common carotid artery occlusion] Shirakawa N, et al. **No Shinkei Geka** 1990 Jun;18(6):581–5 (Eng. Abstr.) **(Jpn)**

[A case of epidural hematoma occurring on the opposite site of craniotomy after clipping surgery performed on internal carotid giant aneurysm] Yuki K, et al. **No Shinkei Geka** 1990 Jun;18(6):567–70 (Eng. Abstr.) **(Jpn)**

[Indications for and results of treatment of carotid artery stenosis] Noszczyk W, et al. **Pol Tyg Lek** 1990 Jan 1–15; 45(1–3):21–5 (Eng. Abstr.) **(Pol)**

[Emergency surgery of carotid and vertebral arteries in acute cerebral ischemia] Portnoĭ IM, et al. **Khirurgiia (Mosk)** 1990 May;(5):92–5 (Eng. Abstr.) **(Rus)**

[Surgical treatment of combined extra- and intracranial lesions of the carotid arteries] Grozovskiĭ IuL, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):12–9 (Eng. Abstr.) **(Rus)**

[Surgical treatment of extracranial lesions of the carotid arteries in the prevention of cerebral ischemia] Solaković E. **Med Arh** 1989;43(2–3):131–5 (Eng. Abstr.) **(Scr)**

[Evaluation of pre- and postoperative cerebral hemodynamics in extracranial carotid surgery using transcranial Doppler. Preliminary note] Raso AM, et al. **Angiologia** 1989 Jul–Aug;41(4):161–5 (Eng. Abstr.) **(Spa)**

THERAPY

Surgical versus medical treatment for symptomatic carotid atherosclerosis. Warlow C. **Acta Chir Scand Suppl** 1990; 555:223–4

Balloon occlusion of the carotid artery prior to surgery for neck tumors. Gonzalez CF, et al. **AJNR** 1990 Jul–Aug; 11(4):649–52

Treatment of carotid artery aneurysms with platinum coils: an experimental study in dogs. Graves VB, et al. **AJNR** 1990 Mar–Apr;11(2):249–52

Aneurysms of the petrous portion of the internal carotid artery: results of treatment with endovascular or surgical occlusion. Halbach VV, et al. **AJNR** 1990 Mar–Apr; 11(2):253–7

Ferromagnetism and MR imaging: safety of carotid vascular clamps. Teitelbaum GP, et al. **AJNR** 1990 Mar–Apr; 11(2):267–72

Carotid traumatic aneurysm treated by detachable balloon. Crandon IW, et al. **Br J Neurosurg** 1988;2(4):507–11

Percutaneous supra-aortic angioplasty in a high risk coronary patient. Sharma S, et al. **Clin Radiol** 1990 Jul;42(1):57–9

Antiplatelet therapy following carotid bifurcation endarterectomy. Evaluation of a controlled clinical trial. Prognostic significance of histologic plaque examination on behalf of survival. Pratschner T, et al. **Eur J Vasc Surg** 1990 Jun;4(3):285–9

Late results of surgical and nonoperative treatment of carotid stenosis. Eighty-four patients documented by angiography in 1974–1976. Salenius JP, et al. **J Cardiovasc Surg (Torino)** 1990 Mar–Apr;31(2):156–61

Feasibility of percutaneous transluminal angioplasty for carotid artery stenosis. Brown MM, et al. **J Neurol Neurosurg Psychiatry** 1990 Mar;53(3):238–43

Endovascular detachable balloon embolization therapy of cavernous carotid artery aneurysms: results in 87 cases. Higashida RT, et al. **J Neurosurg** 1990 Jun;72(6):857–63

Late paraophthalmic aneurysm rupture following endovascular treatment. Case report. Strother CM, et al. **J Neurosurg** 1989 Nov;71(5 Pt 1):777–80

Traumatic carotid artery dissection: diagnosis and treatment [see comments] Watridge CB, et al. **J Neurosurg** 1989 Dec; 71(6):854–7 Comment in: J Neurosurg 1990 Jun;72(6):987–8.

Treatment of carotid-cavernous fistulas associated with Ehlers-Danlos syndrome. Halbach VV, et al. **Neurosurgery** 1990 Jun;26(6):1021–7

Aneurysms of the intracavernous carotid artery: natural history and indications for treatment. Linskey ME, et al. **Neurosurgery** 1990 Jun;26(6):933–7; discussion 937–8

Bacterial cavernous sinus aneurysm treated by detachable balloon technique. Micheli F, et al. **Stroke** 1989 Dec; 20(12):1751–4

Dural carotid-cavernous sinus fistula and central retinal vein occlusion: a case report and a review of the literature. Komiyama M, et al. **Surg Neurol** 1990 Oct;34(4):255–9 (20 ref.)

Intraoperative angiography and temporary balloon occlusion facilitating surgical obliteration of a traumatic carotid cavernous fistula: a case report. LeRoux PD, et al. **Surg Neurol** 1990 Oct;34(4):260–5

[Clinical aspects and treatment of spontaneous carotid artery-cavernous sinus fistula] Möbius E, et al. **Fortschr Neurol Psychiatr** 1989 Dec;57(12):518–26 (Eng. Abstr.) **(Ger)**

[Clinical and MRT follow-up of carotid aneurysm following balloon embolization] Triebel HJ, et al. **Radiologe** 1989 Sep; 29(9):427–31 (Eng. Abstr.) **(Ger)**

[Carotid lesion associated with contralateral occlusion: diagnostic and therapeutic approach] Bonelli U, et al. **Minerva Chir** 1989 Sep 30;44(18):2001–4 (Eng. Abstr.) **(Ita)**

[Percutaneous transluminal angioplasty for experimental carotid artery stenosis. Mechanism and long-term results] Maemura E. **Neurol Med Chir (Tokyo)** 1989 Aug; 29(8):715–23 (Eng. Abstr.) **(Jpn)**

[Percutaneous transluminal angioplasty for multiple brachiocephalic artery stenosis: case report] Inomori S, et al. **No Shinkei Geka** 1990 Mar;18(3):295–9 (Eng. Abstr.) **(Jpn)**

[A successful treatment of spontaneous carotid cavernous

fistula causing hemorrhagic infarction treated by detachable balloon] Kasama A, et al. **No Shinkei Geka** 1990 Jul;18(7):631–6 (Eng. Abstr.) **(Jpn)**

CAROTID ARTERY, EXTERNAL

ABNORMALITIES

The anomaly of a non–bifurcating cervical carotid artery. Case report. Morimoto T, et al. **J Neurosurg** 1990 Jan; 72(1):130–2

ANATOMY & HISTOLOGY

Study on atherosclerosis of extracranial portion of carotid artery system in healthy persons. Wang XD. **Chin Med J [Engl]** 1989 Jun;102(6):441–4

Direct branch of external carotid: a masseteric artery. Saadeh FA, et al. **Gegenbaurs Morphol Jahrb** 1990;136(1):75–7

INJURIES

Severe epistaxis from a false aneurysm of the external carotid artery. Mauldin FW, et al. **Otolaryngol Head Neck Surg** 1989 Nov;101(5):588–90

PATHOLOGY

Are clinical differences between black and white stroke patients caused by variations in the atherosclerotic involvement of the arterial tree? Joubert J, et al. **S Afr Med J** 1990 Mar 3;77(5):248–51

[Studies on the compression of the external carotid artery in the region of the styloid process of the temporal bone] Loch C, et al. **Laryngorhinootologie** 1990 May;69(5):260–6 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Carotid arteries in central retinal vessel occlusion as assessed by Doppler ultrasound. Peternel P, et al. **Br J Ophthalmol** 1989 Nov;73(11):880–3

RADIATION EFFECTS

Duplex imaging and incidence of carotid radiation injury after high–dose radiotherapy for tumors of the head and neck. Moritz MW, et al. **Arch Surg** 1990 Sep;125(9):1181–3

RADIOGRAPHY

External carotid artery embolization of dural arteriovenous malformations involving the cavernous sinus. Outcome and role of venous thrombosis. Hirabuki N, et al. **Acta Radiol** 1990 Mar;31(2):197–201

RADIONUCLIDE IMAGING

Use of indium–111–labelled platelets in black stroke patients. A pilot study. Joubert J, et al. **S Afr Med J** 1990 Mar 3;77(5):246–8

SURGERY

Intraarterial chemotherapy through carotid transposition in advanced head and neck cancer. Claudio F, et al. **Cancer** 1990 Apr 1;65(7):1465–71

Claudication on mastication following bilateral external carotid ligation. Liston SL, et al. **Head Neck** 1990 May–Jun; 12(3):269–71

Double–donor, single–lumen, end–to–side anastomosis. Orbay T, et al. **Surg Neurol** 1990 Apr;33(4):253–5

CAROTID ARTERY, INTERNAL

Unilateral double carotid cavernous fistula treated with detachable balloons. Wilms G. **AJNR** 1990 May;11(3):517

Carotico–cavernous fistula presenting as a late complication of facial trauma. Jones GM, et al. **Br J Oral Maxillofac Surg** 1989 Dec;27(6):481–6

Vascular complication of neck space infection: case report and literature review. Stevens HE. **J Otolaryngol** 1990 Jun; 19(3):206–10

Management of the internal carotid artery in surgery of the skull base. Andrews JC, et al. **Laryngoscope** 1989 Dec; 99(12):1224–9

Aneurysms of the intracavernous carotid artery: clinical presentation, radiographic features, and pathogenesis. Linskey ME, et al. **Neurosurgery** 1990 Jan;26(1):71–9

The dural shunt syndrome. I. Management of glaucoma. Fiore PM, et al. **Ophthalmology** 1990 Jan;97(1):56–62

Indirect carotid–cavernous sinus fistula: transvenous embolization from the external jugular vein using a superior ophthalmic vein approach. A case report. Komiyama M, et al. **Surg Neurol** 1990 Jan;33(1):57–63

Repeatability of Doppler ultrasound measurement of blood flow velocity and its variability in the supraclinoid segment of the internal carotid artery in preterm newborns. Mullaart RA, et al. **Ultrasound Med Biol** 1989;15(6):545–53

[Analysis using transcranial Doppler of hemodynamic consequences in 58 severe obstructions of the internal carotid artery. Preliminary results] de Bray JM, et al. **Ann Cardiol Angeiol (Paris)** 1989 Oct;38(8):473–6 (Eng. Abstr.) **(Fre)**

[Abnormal postural movements: transient ischemic episodes of the carotid?] Michel B, et al. **Rev Neurol (Paris)** 1989; 145(12):853–5 (17 ref.) (Eng. Abstr.) **(Fre)**

[Clinical aspects and treatment of spontaneous carotid artery–cavernous sinus fistula] Möbius E, et al. **Fortschr Neurol Psychiatr** 1989 Dec;57(12):518–26 (Eng. Abstr.) **(Ger)**

ABNORMALITIES

Bilateral hypoplastic internal carotid arteries with multiple cerebral aneurysms. Kawai K, et al. **Clin Neuropathol** 1989 Nov–Dec;8(6):272–5

Aberrant intratympanic internal carotid artery: a potentially hazardous anomaly. Jacobsson M, et al. **J Laryngol Otol** 1989 Dec;103(12):1202–5

The surgical management of large glomus jugular tumours: infra and trans–temporal approach [letter] Phelps P, et al. **J Laryngol Otol** 1990 Apr;104(4):367

The anomaly of a non–bifurcating cervical carotid artery. Case report. Morimoto T, et al. **J Neurosurg** 1990 Jan; 72(1):130–2

Anterior choroidal artery territory infarction and small–vessel disease [letter; comment] Fisher M, et al. **Stroke** 1989 Nov;20(11):1591–2 Comment on: Stroke 1989 May;20(5):616–9.

[Association of a triple artery and acute cerebrovascular attack with hemolytic anemia in a 4–year–old child] Khaldi F, et al. **Tunis Med** 1989 Nov;67(11):723–6 (Eng. Abstr.) **(Fre)**

[Indication for surgery in the variant courses of the extracranial A. carotis interna?] Berlit P, et al. **Dtsch Med Wochenschr** 1990 Feb 2;115(5):198 **(Ger)**

[Neurovascular compression of the optic nerve as a cause of progressive visual dysfunctions and decompression treatment] von Wild K, et al. **Klin Monatsbl Augenheilkd** 1990 Jun;196(6):460–5 (Eng. Abstr.) **(Ger)**

[Agenesis of the right internal carotid artery with intracerebral hemorrhage: case report] Uehara H, et al. **No Shinkei Geka** 1990 Jan;18(1):77–81 (19 ref.) (Eng. Abstr.) **(Jpn)**

[Agenesis of left internal carotid artery associated with megadolichobasilar anomaly and olivopontocerebellar atrophy] Okabe S, et al. **Rinsho Shinkeigaku** 1989 Nov; 29(11):1395–400 (Eng. Abstr.) **(Jpn)**

[Coexistence of several arteriovenous fistulas in the pia mater. Case report] Majchrzak H, et al. **Neurol Neurochir Pol** 1988 Nov–Dec;22(6):563–6 (Eng. Abstr.) **(Pol)**

[Aberrant internal carotid artery in the middle ear] Figuerola E, et al. **Acta Otorrinolaringol Esp** 1989 Jan–Feb; 40(1):47–50 (17 ref.) (Eng. Abstr.) **(Spa)**

ANATOMY & HISTOLOGY

Anatomical variations of the intracavernous branches of the internal carotid artery with reference to the relationship of the internal carotid artery and sixth cranial nerve. A microsurgical study. Nuza AB, et al. **Acta Anat (Basel)** 1990;138(3):238–45

Localization of the carotid artery within the tonsillar fossa by Doppler flow mapping. Hendrix RA, et al. **Laryngoscope** 1990 Aug;100(8):853–6

The perforating branches of the internal carotid artery: the microsurgical anatomy of their extracerebral segments. Marinković SV, et al. **Neurosurgery** 1990 Mar;26(3):472–8; discussion 478–9

[Variability of the course of the anterior cerebral artery and its branches in humans] Mierzwa A. **Ann Acad Med Stetin** 1989;35:37–56 (Eng. Abstr.) **(Pol)**

INJURIES

Internal carotid artery dissection and ipsilateral hypoglossal nerve palsy [letter] Vighetto A, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):530–1

Lesion of the internal carotid artery caused by a car safety belt. Benito MC, et al. **J Trauma** 1990 Jan;30(1):116–7

Carotid artery dissection secondary to seatbelt trauma: case report. Reddy K, et al. **J Trauma** 1990 May;30(5):630–3

Strangulation of the internal carotid artery by the hypoglossal nerve. Wozasek GE, et al. **J Trauma** 1990 Mar;30(3):332–5

False aneurysm of the cavernous carotid artery: a complication of transsphenoidal surgery. Reddy K, et al. **Surg Neurol** 1990 Feb;33(2):142–5

[Traumatic dissection of the internal carotid artery] Kaech D, et al. **Unfallchirurg** 1990 Jan;93(1):6–10 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Routine MR imaging of the internal carotid artery siphon: angiographic correlation with cervical carotid lesions. Brant–Zawadzki M. **AJR Am J Roentgenol** 1990 Aug; 155(2):359–63

Intimal fibroplasia: an unusual etiology of stroke. Schwartz RA, et al. **Ann Vasc Surg** 1989 Oct;3(4):384–6

Duplex carotid sonography. Peak systolic velocity in quantifying internal carotid artery stenosis. Withers CE, et al. **J Ultrasound Med** 1990 Jun;9(6):345–9

Spontaneous dissection of both extracranial internal carotid arteries. Milandre L, et al. **Neuroradiology** 1989;31(5):435–9 (28 ref.)

[Diagnosis and progress of carotid artery dissecting aneurysm] Steinke W, et al. **Dtsch Med Wochenschr** 1989 Dec 1;114(48):1869–75 (Eng. Abstr.) **(Ger)**

[Value of Doppler ultrasonography in the diagnosis of minor and moderate changes of the internal carotid arteries] Rozenfeld A, et al. **Neurol Neurochir Pol** 1989 May–Jun; 23(3):182–7 (Eng. Abstr.) **(Pol)**

[Changes in the internal carotid artery in its loop–shaped kinking and their clinical significance] Pauliukas PA, et al. **Khirurgiia (Mosk)** 1989 Sep;(9):47–51 (Eng. Abstr.) **(Rus)**

[Dopplerographic study of the internal carotid and vertebral arteries in middle–aged and elderly patients with a chronic cervical pain syndrome] Kobzar' IV, et al. **Vrach Delo** 1990 Jun;(6):92–5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Biomechanical properties of canine vertebral and internal carotid arteries. Bérczi V, et al. **Acta Physiol Hung** 1990; 75(2):133–45

Assessment of cerebral hemodynamics in pregnant women by internal carotid artery pulsed Doppler velocimetry. Ikeda T, et al. **Am J Obstet Gynecol** 1990 Aug;163(2):494–8

In vitro reactivity of dog cavernous carotid artery to stretch and adrenergic stimulation. Valle J, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1335–44

Fetal umbilical and internal carotid artery blood flow velocity waveforms during maternal fenoterol administration. Cheung K, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 May–Jun; 35(2–3):147–51

Acute and protracted effects of intratracheal surfactant application on internal carotid blood flow velocity, blood pressure and carbondioxide tension in very low birth weight infants. Jorch G, et al. **Eur J Pediatr** 1989 Aug; 148(8):770–3

Long–term neurophysiologic outcome after neonatal extracorporeal membrane oxygenation. Lott IT, et al. **J Pediatr** 1990 Mar;116(3):343–9

[Evaluation of the internal carotid artery blood flow velocity waveforms using continuous–wave Doppler ultrasound in pregnant women] Ikeda T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jul;41(7):845–51 (Eng. Abstr.) **(Jpn)**

[Feto–maternal Doppler–duplex in the evaluation of fetal health] Ruiz M, et al. **Rev Chil Obstet Ginecol** 1987; 52(3):182–92 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Balloon test occlusion of the internal carotid artery with monitoring of compressed spectral arrays (CSAs) of electroencephalogram. Morioka T, et al. **Acta Neurochir (Wien)** 1989;101(1–2):29–34

Importance of spectral analysis indices for assessment of the grade of stenosis of the arteria carotis interna. Ščudlová M, et al. **Acta Univ Palacki Olomuc Fac Med** 1989; 123:253–63

Carotid arteries in central retinal vessel occlusion as assessed by Doppler ultrasound. Peternel P, et al. **Br J Ophthalmol** 1989 Nov;73(11):880–3

Occlusion of major cerebral arteries: new concepts. Kassell NF, et al. **Surg Forum** 1978;29:527–9

[Variability of the indices of vascular resistance in carotid Doppler sonography. Study of influencing factors in healthy vascular probands] Hänsgen K, et al. **Z Gesamte Inn Med** 1989 Oct 1;44(19):577–80 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Epistaxis due to traumatic intracavernous aneurysm: case report. Lee JP, et al. **J Trauma** 1990 May;30(5):619–22

[Retrograde carotid angiography. Reassessment of safety measures against stenotic changes in the internal carotid artery] Kurimoto M, et al. **Rinsho Hoshasen** 1989 Sep; 34(9):1063–5 **(Jpn)**

[Radiological image of aneurysm of the internal carotid artery as a complication of angiography] Gołąbek R, et al. **Wiad Lek** 1989 Feb 15;42(4):263–6 (Eng. Abstr.) **(Pol)**

SURGERY

Salvage after postoperative thrombosis of the carotid artery. Dooner J, et al. **Am J Surg** 1990 May;159(5):525–6

Closure of the internal carotid artery after endarterectomy: the advantages of patch angioplasty without its disadvantages. Vanmaele R, et al. **Ann Vasc Surg** 1990 Jan; 4(1):81–4

Long–term results after carotid endarterectomy for carotid artery stenosis with contralateral occlusion. Vermassen F, et al. **Ann Vasc Surg** 1990 Jul;4(4):323–7

Long–term results of endarterectomy of the internal carotid artery for cerebral ischemia and infarction. Heyman A, et al. **Circulation** 1967 Aug;36(2):212–21

A pupil–sparing oculomotor palsy from a contralateral giant intracavernous carotid aneurysm. Terry JE, et al. **J Am Optom Assoc** 1990 Aug;61(8):640–5

Monitoring cerebral perfusion during carotid endarterectomy. Padayachee TS, et al. **J Cardiovasc Surg (Torino)** 1990 Jan–Feb;31(1):112–4

Aneurysms of the ophthalmic segment. A clinical and anatomical analysis. Day AL. **J Neurosurg** 1990 May; 72(5):677–91

Resection of high–cervical paraganglioma with cervical–to–petrous internal carotid artery saphenous vein bypass. Report of two cases. Miyazaki S, et al.

J Neurosurg 1990 Jul;73(1):141–6

Management of giant intracranial ICA aneurysms with combined extracranial–intracranial anastomosis and endovascular occlusion. Serbinenko FA, et al. J Neurosurg 1990 Jul;73(1):57–63

Petrous carotid–to–intradural carotid saphenous vein graft for intracavernous giant aneurysm, tumor, and occlusive cerebrovascular disease. Spetzler RF, et al. J Neurosurg 1990 Oct;73(4):496–501

Small aneurysm clips for surgery of neck vessels. Santoro A, et al. J Neurosurg Sci 1990 Jan–Mar;34(1):13–5

Distal internal carotid exposure: a simplified technique for temporary mandibular subluxation. Dossa C, et al. J Vasc Surg 1990 Sep;12(3):319–25

Clinical observations on the effect of carotid artery occlusion on cerebral blood flow mapped by xenon computed tomography and its correlation with carotid artery back pressure. Steed DL, et al. J Vasc Surg 1990 Jan;11(1):38–43; discussion 43–4

A new method to predict safe resection of the internal carotid artery. de Vries EJ, et al. Laryngoscope 1990 Jan; 100(1):85–8

Angioplasty of persistent "stump" of internal carotid artery. Smith H, et al. Mo Med 1990 Jan;87(1):34–6

Intra–extracranial thrombosis of the internal carotid artery associated with meningioma. Oppido PA, et al. Neurochirurgia (Stuttg) 1989 Nov;32(6):195–9

Treatment of a giant aneurysm of the cavernous internal carotid artery associated with a persistent primitive trigeminal artery: case report. Miyatake S, et al. Neurosurgery 1990 Feb;26(2):315–9

Double–donor, single–lumen, end–to–side anastomosis. Orbay T, et al. Surg Neurol 1990 Apr;33(4):253–5

Alternative management of carotid kinking. Surgical technique. Benes V Jr, et al. Zentralbl Neurochir 1989; 50(2):97–8

Rupture of a giant aneurysm of the inferior wall of the internal carotid artery after saphenous vein interposition graft to the middle cerebral artery. Plangger CA, et al. Zentralbl Neurochir 1989;50(2):61–3

[Hemodynamic assessment of cerebrovascular circulation using transcranial Doppler ultrasound in patients with carotid stenosis] Schroeder T, et al. Ugeskr Laeger 1990 Jul 16;152(29):2110–3 (Eng. Abstr.) (Dan)

[Therapy of carotid stenosis in contralateral occlusion of the internal carotid artery] Wandschneider W, et al. Vasa 1990; 19(2):134–7 (Eng. Abstr.) (Ger)

[Cerebral artery aneurysm of the para–ophthalmic artery segment of the internal carotid artery (C4 section)] Synowitz HJ. Zentralbl Neurochir 1989;50(1):39–41 (Eng. Abstr.) (Ger)

[Surgical technic of straightening kinks of the internal carotid arteries] Paulinkas PA, et al. Khirurgiia (Mosk) 1989 Dec; (12):12–8 (Eng. Abstr.) (Rus)

[Emergency surgery of carotid and vertebral arteries in acute cerebral ischemia] Portnoĭ IM, et al. Khirurgiia (Mosk) 1990 May;(5):92–5 (Eng. Abstr.) (Rus)

[Surgical treatment of tumors of the carotid body with reconstruction of the internal carotid artery] Reparaz L, et al. Angiologia 1990 Jan–Feb;42(1):23–7 (Eng. Abstr.) (Spa)

CAROTID ARTERY THROMBOSIS

Ocular manifestations of carotid artery occlusive disease. Panel discussion. Van Dyk HJ. J Clin Neuro Ophthalmol 1989 Sep;9(3):209–10

COMPLICATIONS

Ocular manifestations of carotid artery occlusive disease. Panel discussion. Van Dyk HJ. J Clin Neuro Ophthalmol 1989 Sep;9(3):209–10

[Dysplasia and spontaneous bilateral dissection of the internal carotid arteries: apropos of a case. Value of surgical treatment] Rossillon R, et al. Acta Chir Belg 1990 May–Jun; 90(3):97–101 (Eng. Abstr.) (Fre)

[Carotid artery occlusion disclosed by cerebral ischemia. Lesional, etiologic and developing aspects] Milandre L, et al. Ann Med Interne (Paris) 1990;141(2):115–22 (43 ref.) (Eng. Abstr.) (Fre)

[A case of crossed aphasia in a right–handed person] Jankowicz E, et al. Neurol Neurochir Pol 1989 Mar–Apr; 23(2):142–4 (Eng. Abstr.) (Pol)

DIAGNOSIS

Importance of spectral analysis indices for assessment of the grade of stenosis of the arteria carotis interna. Sčudlová M, et al. Acta Univ Palacki Olomuc Fac Med 1989; 123:253–63

Transient ischemic attacks resulting from carotid duplex imaging. Friedman SG. Surgery 1990 Feb;107(2):153–5

[Combined echocardiographic and Doppler ultrasonic diagnosis of carotid bifurcation—reliability and error] Keski-Nisula L, et al. Duodecim 1989;105(21):1715–20 (Fin)

[Sonography of the cervical vessels. Value in the differential diagnosis of dementia syndromes] Müller M, et al. Fortschr Med 1989 Nov 30;107(34):733–5 (Eng. Abstr.) (Ger)

[Ultrasonic methods used in the diagnosis of changes in the carotid artery system] Csiba L. Orv Hetil 1990 Jul 8; 131(27):1455–60, 1463 (49 ref.) (Eng. Abstr.) (Hun)

DRUG THERAPY

Cooperative action of the prostacyclin analogue taprostene and the fibrinolytic prourokinase (r-scu-PA) in experimental artery thrombosis. Groves R, et al. Prog Clin Biol Res 1989;301:603–7

[Diagnosis and treatment of carotid artery stenoses] Knoll P, et al. Acta Med Austriaca 1989;16(5):104–9 (68 ref.) (Eng. Abstr.) (Ger)

[An experimental study of local fibrinolysis using tissue plasminogen activator and urokinase in a canine common carotid artery thrombus model] Kawakami K, et al. No To Shinkei 1990 Feb;42(2):193–201 (Eng. Abstr.) (Jpn)

ETIOLOGY

Rhinocerebral mucormycosis and internal carotid artery thrombosis in a previously healthy patient. Quattrocolo G, et al. Acta Neurol Belg 1990;90(1):20–6

Bilateral carotid artery thrombosis [letter] Wilkins CJ, et al. Anaesthesia 1989 Sep;44(9):785–6

Polyurethane arterial prosthesis: experimental evaluation. Martin–Mondiere C, et al. Ann Vasc Surg 1990 Jan; 4(1):52–7

Reexploration for thrombosis in carotid endarterectomy. Koslow AR, et al. Circulation 1989 Nov;80(5 Pt 2):III73–8

Carotid thrombosis following neck irradiation. Call GK, et al. Int J Radiat Oncol Biol Phys 1990 Mar;18(3):635–40 (18 ref.)

Discussion of "Fatal thrombosis of internal carotid artery following minor blunt trauma to the neck" [letter] Aragona F. J Forensic Sci 1990 Jul;35(4):783

Internal carotid artery thrombosis: a complication of closed craniocervical trauma. Mittal RS, et al. J Indian Med Assoc 1989 Aug;87(8):190–2

Thrombosis of the carotid artery following blunt trauma. Price DB, et al. Trans Pa Acad Ophthalmol Otolaryngol 1989;41:880–4

[Carotid artery thrombosis and myocardial infarction in nephrotic syndrome] Nigond J, et al. Arch Mal Coeur 1990 Jan;83(1):105–8 (Eng. Abstr.) (Fre)

PATHOLOGY

Pathogenesis of carotid thrombosis. Torvik A, et al. Stroke 1989 Nov;20(11):1477–83

PHYSIOPATHOLOGY

The role of thromboxane (TX) A2 in rabbit arterial thrombosis induced by endothelial damage. Imura Y, et al. Thromb Res 1990 Jul 1;59(1):195–205

[Characteristics of intracerebral hemodynamics in occlusive diseases of major arteries of the brain] Pokrovskiĭ AV, et al. Zh Nevropatol Psikhiatr 1989;89(9):7–11 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

An animal model for the study of arterial thrombosis. Ubatuba FB. Braz J Med Biol Res 1989;22(8):993–1000

Effect of flunarizine on arterial thrombosis after endarterectomy in rats. Kobayashi H, et al. Neurol Med Chir (Tokyo) 1989 Jul;29(7):563–7

Inhibition of platelet and red blood cell accumulation on damaged arterial surfaces with albumin pretreatment. Morley D, et al. Thromb Res 1989 Oct 15;56(2):265–76

SURGERY

Salvage after postoperative thrombosis of the carotid artery. Dooner J, et al. Am J Surg 1990 May;159(5):525–6

Angioplasty of persistent "stump" of internal carotid artery. Smith H, et al. Mo Med 1990 Jan;87(1):34–6

Intra–extracranial thrombosis of the internal carotid artery associated with meningioma. Oppido PA, et al. Neurochirurgia (Stuttg) 1989 Nov;32(6):195–9

Alternative management of carotid kinking. Surgical technique. Benes V Jr, et al. Zentralbl Neurochir 1989; 50(2):97–8

[Evaluation of coronary risk in arterial surgery] Piquet P, et al. J Mal Vasc 1990;15(1):63–6 (Eng. Abstr.) (Fre)

[Late results following thrombendarterectomy of the carotid artery] Wille B, et al. Med Klin 1990 May 15;85(5):308–9 (Ger)

[Importance of intraoperative H/R ultrasonography in the immediate evaluation of the results of thromboendarterectomy of the carotid bifurcation] Mascoli F, et al. Minerva Cardioangiol 1989 Sep;37(9):395–8 (Eng. Abstr.) (Ita)

[Thrombendarterectomy of the carotid artery in the prevention of cerebrovascular insult] Solaković E. Acta Chir Iugosl 1989;36 Suppl 2:684–6 (Scr)

CAROTID BODY

Carotid body disease and the physician—chronic carotid glomitis. Heath D, et al. Postgrad Med J 1989 Jun; 65(764):353–7 (17 ref.)

ANATOMY & HISTOLOGY

The carotid body of the mini–pig. Clarke JA, et al. Anat Anz 1990;170(5):339–47

Study of the carotid body in the cat with special reference to its innervation. I. Light microscopy. Bengoechea ME, et al. Folia Morphol (Warsz) 1988;47(1–4):59–70

BLOOD SUPPLY

Comparison of the size of the vascular compartment of the carotid body of the fetal, neonatal and adult cat. Clarke JA, et al. Acta Anat (Basel) 1990;138(2):166–74

CYTOLOGY

Peptidergic innervation of arterial chemoreceptors. Kummer W, et al. Arch Histol Cytol 1989;52 Suppl:361–4

DRUG EFFECTS

Fentanyl inhibits the canine carotid chemoreceptor reflex. Mayer N, et al. Anesth Analg 1989 Dec;69(6):756–62

Cobalt stimulates carotid body chemoreceptors. Di Giulio C, et al. J Appl Physiol 1990 May;68(5):1844–9

Effects of estrogen and progesterone on carotid body neural output responsiveness to hypoxia. Hannhart B, et al. J Appl Physiol 1990 May;68(5):1909–16

Ventilatory effects of substance P, vasoactive intestinal peptide, and nitroprusside in humans. Maxwell DL, et al. J Appl Physiol 1990 Jan;68(1):295–301

Chronic CO exposure stimulates erythropoiesis but not glomus cell growth. Sherpa AK, et al. J Appl Physiol 1989 Oct;67(4):1383–7

Gangliоglomerular nerves influence responsiveness of cat carotid body chemoreceptors to almitrine. McQueen DS, et al. J Auton Nerv Syst 1989 Jun;27(1):57–66

Electrophysiological responses of dissociated type I cells of the rabbit carotid body to cyanide. Biscoe TJ, et al. J Physiol (Lond) 1989 Jun;413:447–68

Interactions between hypoxia, acetylcholine and dopamine in the carotid body of rabbit and cat. Ponte J, et al. J Physiol (Lond) 1989 Mar;410:395–410

EMBRYOLOGY

Ultrastructural study on cell differentiation of the rabbit carotid body. Kariya I, et al. Arch Histol Cytol 1990 Jul; 53(3):245–58

ENZYMOLOGY

Occurrence of neutral endopeptidase activity in the cat carotid body and its significance in chemoreception. Kumar GK, et al. Brain Res 1990 May 28;517(1–2):341–3

Immunocytochemical localization of choline acetyltransferase in the carotid body of the cat and rabbit. Wang ZZ, et al. Brain Res 1989 Sep 25;498(1):131–4

Carbonic anhydrase and neuronal enzymes in cultured glomus cells of the carotid body of the rat. Nurse CA. Cell Tissue Res 1990 Jul;261(1):65–71

Indications to an NADPH oxidase as a possible pO2 sensor in the rat carotid body. Acker H, et al. FEBS Lett 1989 Oct 9;256(1–2):75–8

METABOLISM

Veratridine stimulation of sodium influx in carotid body cells from newborn rabbits in primary culture. Sato M, et al. Brain Res 1989 Dec 11;504(1):132–5

Distribution of CGRP–, somatostatin–, galanin–, VIP–, and substance P–immunoreactive nerve fibers in the chicken carotid body. Kameda Y. Cell Tissue Res 1989 Sep; 257(3):623–9

Immunohistochemical demonstration of tyrosine hydroxylase, serotonin and neuropeptide tyrosine in the epithelioid cells within arterial walls and carotid bodies of chicks. Yamamoto M, et al. J Anat 1989 Dec;167:137–46

Evidence for second metabolic pathway for O2 from PtiO2 measurements in denervated cat carotid body. Buerk DG, et al. J Appl Physiol 1989 Oct;67(4):1578–84

Effects of different types of stimulation on cyclic AMP content in the rabbit carotid body: functional significance. Pérez-García MT, et al. J Neurochem 1990 Oct; 55(4):1287–93

Measurements of intracellular Ca2+ in dissociated type I cells of the rabbit carotid body. Biscoe TJ, et al. J Physiol (Lond) 1989 Sep;416:421–34

Carotid body amine levels in goats exposed to hypoxia or hypercapnia. Engwall MJ, et al. Neurosci Lett 1989 Dec 15;107(1–3):221–6

PATHOLOGY

Carotid body paragangliomas. A clinicopathologic and DNA analysis of 13 tumors. Barnes L, et al. Arch Otolaryngol Head Neck Surg 1990 Apr;116(4):447–53

Carotid and aortic bodies in chronically anemic normotensive and spontaneously hypertensive rats. Habeck JO, et al. J Auton Nerv Syst 1989 Dec;28(3):219–25

Focal chronic thyroiditis and chronic carotid glomitis. Heath D, et al. J Pathol 1989 Sep;159(1):29–34

Structure and function of the carotid body in New Zealand genetically hypertensive rats. Bee D, et al. Q J Exp Physiol 1989 Sep;74(5):691–701

PHYSIOLOGY

Cellular basis of transduction in carotid chemoreceptors. Biscoe TJ, et al. Am J Physiol 1990 Jun;258(6 Pt 1):L271–8

(87 ref.)
Effect of hypobaric hypoxia and almitrine on voluntary salt and water intake in carotid body denervated spontaneously hypertensive rats. Behm R, et al. **Biomed Biochim Acta** 1989;48(9):689–95
Effects of denervation on the glomus cell membrane. Eyzaguirre C, et al. **Brain Res** 1990 Jul 30;524(1):164–70
Carotid bodies and expiratory muscle recruitment. Smith CA, et al. **Chest** 1990 Mar;97(3 Suppl):58S
Lessons from high altitude. Weil JV. **Chest** 1990 Mar;97(3 Suppl):70S–76S (43 ref.)
Effects of hypoxia on thermal polypnea in intact and carotid body–denervated conscious cats. Bonora M, et al. **J Appl Physiol** 1989 Aug;67(2):578–83
Prolonged apnea and impaired survival in piglets after sinus and aortic nerve section. Donnelly DF, et al. **J Appl Physiol** 1990 Mar;68(3):1048–52
Influence of pregnancy on ventilatory and carotid body neural output responsiveness to hypoxia in cats. Hannhart B, et al. **J Appl Physiol** 1989 Aug;67(2):797–803
Ventilatory control during exercise with peripheral chemoreceptor stimulation: hypoxia vs. domperidone. Schaefer SL, et al. **J Appl Physiol** 1989 Dec;67(6):2438–46
Influence of carotid–denervation on the arousal and cardiopulmonary responses to alveolar hypercapnia in lambs. Fewell JE, et al. **J Dev Physiol** 1989 Oct;12(4):193–9
Differential modulation by pulmonary stretch afferents of some reflex cardioinhibitory responses in the cat. Daly MB, et al. **J Physiol (Lond)** 1989 Oct;417:323–41
Effect of lowered extracellular pH on Ca2(+)–dependent K+ currents in type I cells from the neonatal rat carotid body. Peers C. **J Physiol (Lond)** 1990 Mar;422:381–95
Effect of adenosine on isolated and superfused cat carotid body activity. Runold M, et al. **Neurosci Lett** 1990 May 18;113(1):111–4
Stimulation of carotid body chemoreceptors does not influence the discharge of A1 neurons projecting to the forebrain. Jamieson SM, et al. **Neuroscience** 1989; 32(1):227–34
The effects of carotid body hypocapnia on ventilation in goats. Daristotle L, et al. **Respir Physiol** 1990 Feb; 79(2):123–35
The role of carotid bodies in the establishment of oral breathing during nasal obstruction in lambs and ewes. Harding R, et al. **Respir Physiol** 1990 Apr;80(1):71–81

PHYSIOPATHOLOGY

Carotid chemoreceptor function and structure in the atherosclerotic rabbit: respiratory and cardiovascular responses to hyperoxia, hypoxia and hypercapnia. Angell-James JE, et al. **Cardiovasc Res** 1989 Jun; 23(6):541–53
Bronchoscopy–induced fatal asystole in tetanus: the result of combined carotid–body chemoreceptor and vasovagal reflexes. Riggs JE. **South Med J** 1990 Aug;83(8):955–6

SECRETION

Biochemical studies on the release of catecholamines from the rat carotid body in vitro. Shaw K, et al. **Biochim Biophys Acta** 1989 Sep 4;1013(1):42–6

SURGERY

Carotid body resections [letter] Shek JL. **Chest** 1990 Jul; 98(1):251
[Glomectomy, plasmapheresis and plasmacytapheresis in the treatment of bronchial asthma patients] Pakhomov VN, et al. **Vrach Delo** 1990 Mar;(3):35–7 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Ultrastructure of calcitonin gene–related peptide– and substance P–like immunoreactive nerve fibres in the carotid body and carotid sinus of the guinea pig. Kummer W, et al. **Histochemistry** 1989;92(5):433–9

CAROTID BODY TUMOR

The carotid body tumor. Warshawski SJ, et al. **J Otolaryngol** 1989 Oct;18(6):306–10 (25 ref.)
Carotid body tumour—a case report. Mohamad AS, et al. **Med J Malaysia** 1989 Jun;44(2):174–7

DIAGNOSIS

Multiple paragangliomas. DeMarino DP, et al. **Ann Otol Rhinol Laryngol** 1990 Jan;99(1):85–6
Unusual presentation of tuberculosis of the head and neck region. Report of three cases. el-Hakim IE, et al. **Int J Oral Maxillofac Surg** 1989 Aug;18(4):194–6
Pulsed Doppler–ultrasonic diagnosis of carotid body tumor. Tihansky DP, et al. **N Y State J Med** 1989 Oct;89(10):580–2
[Diagnosis of carotid body tumor by imaging procedures] Koch T, et al. **HNO** 1990 Apr;38(4):148–53 (Eng. Abstr.) **(Ger)**

GENETICS

Familial multiple cervical paragangliomas: report of a kindred and review of the literature. Sobol SM, et al. **Otolaryngol Head Neck Surg** 1990 Apr;102(4):382–90 (45 ref.)

NURSING

[Pre– and post operative nursing care in carotid body tumor surgery] Wu JH. **Chung Hua Hu Li Tsa Chih** 1989 Aug; 24(8):461–2 **(Chi)**
[The role of the nurse in the operating room during carotid body tumor resection] Zhang ZL. **Chung Hua Hu Li Tsa Chih** 1989 Aug;24(8):463–5 **(Chi)**

PATHOLOGY

Histomorphometric and morphologic studies of the carotid body and aortic paragangliomas. Mauri MF, et al. **Appl Pathol** 1989;7(5):310–7
Carotid body paragangliomas. A clinicopathologic and DNA analysis of 13 tumors. Barnes L, et al. **Arch Otolaryngol Head Neck Surg** 1990 Apr;116(4):447–53
Multiple malignant paragangliomas. A case report. Pantanowitz D, et al. **S Afr Med J** 1989 Oct 21;76(8):441–3
Doppler color flow imaging of carotid body tumors. Steinke W, et al. **Stroke** 1989 Nov;20(11):1574–7

RADIOTHERAPY

Radiation therapy of carotid body tumors. Valdagni R, et al. **Am J Clin Oncol** 1990 Feb;13(1):45–8 (32 ref.)

SECONDARY

Spinal metastases of carotid paraganglioma. One case and review of the literature. Crouzet G, et al. **J Neuroradiol** 1989;16(2):172–8 (16 ref.) **(Eng, Fre)**
Case report 577. Metastatic paraganglioma. Khurana JS, et al. **Skeletal Radiol** 1989;18(7):565–7

SURGERY

Surgical management of carotid body tumor. Lamis PA, et al. **Am Surg** 1975 Jan;41(1):41–4
Treatment of carotid body tumors. McCabe DP, et al. **J Cardiovasc Surg (Torino)** 1990 May–Jun;31(3):356–8
[Surgical treatment of carotid chemodectoma] Barile C, et al. **Minerva Chir** 1990 May 31;45(10):699–704 (Eng. Abstr.) **(Ita)**
[Tumor of the carotid body (paraganglioma)] Franklin J, et al. **Acta Med Port** 1990 Mar–Apr;3(2):89–93 (Eng. Abstr.) **(Por)**
[Surgical treatment of tumors of the carotid body] Panasenko VI, et al. **Khirurgiia (Mosk)** 1990 Apr;(4):41–3 (Eng. Abstr.) **(Rus)**
[Surgical treatment of tumors of the carotid body with reconstruction of the internal carotid artery] Reparaz L, et al. **Angiologia** 1990 Jan–Feb;42(1):23–7 (Eng. Abstr.) **(Spa)**

THERAPY

Carotid body tumours: report of six cases and a review of management. Keating JF, et al. **J R Coll Surg Edinb** 1990 Jun;35(3):172–4

CAROTID SINUS

see related

PRESSORECEPTORS

Carotid sinus massage for treatment of A–V junctional rhythm [letter] McConachie IW. **Anesthesiology** 1989 Oct; 71(4):621
Carotid–cavernous sinus thrombosis caused by Aspergillus fumigatus: magnetic resonance imaging with pathologic correlation—a case report. Dyken ME, et al. **Angiology** 1990 Aug;41(8):652–7
Carotid sinus syncope induced by an orthodontic appliance [letter] Achiron A, et al. **Lancet** 1989 Dec 2;2(8675):1339
Discordant effects of carotid sinus massage and intravenous adenosine in atypical (fast–slow) atrioventricular nodal reentrant tachycardia. Milchak MA, et al. **PACE** 1989 Dec; 12(12):1903–9
[Carotid sinus syndrome and sick sinus syndrome: 2 frequent and distinct indications for pacemaker implantation] Brignole M, et al. **G Ital Cardiol** 1990 Jan;20(1):5–11 (Eng. Abstr.) **(Ita)**
[Pacemaker implantation in sick sinus syndrome and carotid sinus syndrome (editorial)] Piccolo E. **G Ital Cardiol** 1990 Jan;20(1):12–4 **(Ita)**
[Carotid sinus syndrome with no response to carotid massage. Apropos of a case (letter)] Ayuso Gatell A, et al. **Med Clin (Barc)** 1989 Oct 21;93(12):476–7 **(Spa)**

ANATOMY & HISTOLOGY

Structure of the carotid sinus of the dromedary camel (Camelus dromedarius). Abdel-Magied EM, et al. **Anat Histol Embryol** 1989 Dec;18(4):316–26

DRUG EFFECTS

Carotid sinus syndrome. Jan A. **JPMA** 1989 Nov; 39(11):292–3

INJURIES

[Traumatic carotid sinus reflex death] Sigrist T, et al. **Beitr Gerichtl Med** 1989;47:257–66 (Eng. Abstr.) **(Ger)**

INNERVATION

Pulsatile pressure can prevent rapid baroreflex resetting. Mendelowitz D, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):H92–100
Time course of recovery of arterial pressure control after carotid denervation. O'Leary DS, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):H73–9
Right–left asymmetry of tyrosine hydroxylase in rat median eminence: influence of arterial baroreflex nerves. Alexander N, et al. **Brain Res** 1990 Jul 23;523(2):195–8
Circulatory effects of carotid sinus nerve stimulation in dogs with reference to coronary flow and resistance. Falicov RE, et al. **Circulation** 1970 May;41(5 Suppl):II172–8
Ultrastructure of calcitonin gene–related peptide– and substance P–like immunoreactive nerve fibres in the carotid body and carotid sinus of the guinea pig. Kummer W, et al. **Histochemistry** 1989;92(5):433–9
Changes in blood pressure and heart rate during passive upright tilt upon electrical carotid sinus nerve stimulation. Peters TK, et al. **Int J Cardiol** 1990 Jan;26(1):31–5
Sinoaortic deafferentation reduces intrapulmonary shunt in dogs with oleic acid lung injury. Leeman M, et al. **J Appl Physiol** 1989 Aug;67(2):833–8
Influence of carotid–denervation on the arousal and cardiopulmonary responses to alveolar hypercapnia in lambs. Fewell JE, et al. **J Dev Physiol** 1989 Oct;12(4):193–9
Studies on the regenerated carotid sinus nerve of the rabbit. Ponte J, et al. **J Physiol (Lond)** 1989 Mar;410:411–24
Activation of carotid sinus baroreceptors reduces pain sensations evoked by electrical and cold stimulation of human teeth. Apkarian AV, et al. **Proc Finn Dent Soc** 1989; 85(4–5):409–13
[Comparative study on the reflex responses of carotid and aortic baroreceptors in the rabbit] Li Z, et al. **Sheng Li Hsueh Pao** 1989 Aug;41(4):328–37 (Eng. Abstr.) **(Chi)**
[Baroreceptor regulation of blood circulation in healthy persons and in patients with hypertension] Babaev AA, et al. **Kardiologiia** 1990 Jan;30(1):26–30 (Eng. Abstr.) **(Rus)**

METABOLISM

Acute baroreflex resetting and its control of blood pressure in an open loop model. Tan W, et al. **Basic Res Cardiol** 1989 Jul–Aug;84(4):431–41

PHYSIOLOGY

Effects of diazepam on the carotid sinus baroreflex control of circulation in rabbits. Sakamoto M, et al. **Acta Physiol Scand** 1990 Jun;139(2):281–7
Increased vagal cardiac nerve traffic prolongs ventricular refractoriness in patients undergoing electrophysiology testing. Ellenbogen KA, et al. **Am J Cardiol** 1990 Jun 1; 65(20):1345–50
Carotid sinus pressure, blood volume, and vasopressin in the anaesthetized rabbit. Courneya CA, et al. **Can J Physiol Pharmacol** 1989 Nov;67(11):1386–90
Firing characteristics of single–fiber carotid sinus baroreceptors. Seagard JL, et al. **Circ Res** 1990 Jun; 66(6):1499–509
Experimental and modeling study of the excitability of carotid sinus baroreceptors. van Brederode JF, et al. **Circ Res** 1990 Jun;66(6):1510–25
Interplay and interference of the carotid baroreceptors, central command, ergoreceptors on the peripheral vascular responses during static exercise. Duprez D, et al. **Clin Exp Pharmacol Physiol Suppl** 1989;15:121–4
Functional asymmetry in carotid sinus cardiac reflexes in humans. Tafil-Klawe M, et al. **Eur J Appl Physiol** 1990; 60(5):402–5
Carotid sinus baroreceptor responses to recurrent trapezoidal pressure pulses. Nudelman HB, et al. **Exp Neurol** 1974 Sep; 44(3):483–92
The effects of lower body negative pressure on baroreceptor responses in humans. Vukasovic JL, et al. **Exp Physiol** 1990 Jan;75(1):81–93
Postural baroreflex stimuli may affect EEG arousal and sleep in humans. Cole RJ. **J Appl Physiol** 1989 Dec;67(6):2369–75
Cardiovascular and respiratory responses to slow ramp carotid sinus pressures in the dog. Jung R, et al. **J Appl Physiol** 1990 Apr;68(4):1465–74
Species dependence of baroreceptor effects on ventilation in the cat and the dog. Maass-Moreno R, et al. **J Appl Physiol** 1989 Nov;67(5):2116–24
Effects of small changes in carotid sinus pressure on renal haemodynamics and function in dogs. Karim F, et al. **J Physiol (Lond)** 1989 Oct;417:295–305
Acute carotid baroreflex resetting in conscious dogs. Tan W, et al. **J Physiol (Lond)** 1989 Sep;416:557–69
Baroreceptor reflex to neck suction and its modification by diltiazem in man. Kawashima S, et al. **Jpn Heart J** 1989 May;30(3):343–51
Differential sensitivity to hypoxic inhibition of respiratory processes in the anesthetized rat. Maruyama R, et al. **Jpn J Physiol** 1989;39(6):857–71
The effect of distension of the urinary bladder on activity in efferent vagal fibres in anaesthetized dogs. Ramadan MR, et al. **Q J Exp Physiol** 1989 Jul;74(4):493–501
The influence of left ventricular pressure on the vascular responses to changes in carotid sinus pressure in anaesthetized dogs. Vukasovic JL, et al. **Q J Exp Physiol** 1989 Sep;74(5):735–46
[Progress in research on locating the first synapse of

baroreceptor afferents] Lin RJ.
Sheng Li Ko Hsueh Chin Chan 1990 Jan;21(1):41–4 (49 ref.) **(Chi)**

PHYSIOPATHOLOGY

Carotid gustatory syndrome in a patient with Holmes–Adie syndrome [letter] Shibasaki H, et al.
J Neurol Neurosurg Psychiatry 1990 Apr;53(4):359

A case of syncope in the church choir. Thomas AL, et al.
J Tenn Med Assoc 1990 Jan;83(1):23

Quantification of the heart rate–independent vasodepressor component in carotid sinus syndrome. Griebenow R, et al. **Klin Wochenschr** 1989 Nov 17;67(22):1132–7

[Carotid sinus hypersensitivity. Medium and long-term development in patients treated by ventricular pacing] Deschamps D, et al. **Arch Mal Coeur** 1990 Jan;83(1):63–7 (Eng. Abstr.) **(Fre)**

SURGERY

Carotidynia managed by surgical denervation of the carotid bulb. de Vries AC, et al. **Eur J Vasc Surg** 1990 Jun; 4(3):325–6

CARP see under **CYPRINIDAE**

CARPAL BONES

Giant cell tumor of the hamate bone. Vaccari A, et al.
Chir Organi Mov 1990 Jan–Mar;75(1):77–80 **(Eng, Ita)**

Aseptic necrosis of the capitate secondary to Gaucher's disease: a case report. Wounlund J, et al.
J Hand Surg [Br] 1989 Aug;14(3):336–7

Diagnostic problems of scaphoid fractures: the value of radionuclide bone scintigraphy. van Beek EJ, et al.
Neth J Surg 1990 Apr;42(2):50–2

Growing bone cysts in long–term hemodialysis. Gielen JL, et al. **Skeletal Radiol** 1990;19(1):43–9

[The most ancient case of synostosis of the carpal bones: pyramido–lunate synostosis in La Ferrassie man] Oberlin C, et al. **Ann Chir Main** 1989;8(3):269–72 (Eng. Abstr.) **(Fre)**

[Primary total aseptic osteonecrosis of the scaphoid bone. Apropos of 3 cases] Alnot JY, et al.
Ann Chir Main Memb Super 1990;9(3):221–5 (10 ref.) (Eng. Abstr.) **(Fre)**

[Scapho–trapezo–trapezoid arthrosis. Its effects on the carpus] Oberlin C, et al. **Ann Chir Main Memb Super** 1990; 9(3):163–7 **(Fre)**

[Surgical treatment of trapeziometacarpal arthrosis. Report of a multicenter series (336 cases)] Oberlin C.
Ann Chir Main Memb Super 1990;9(3):168–71 **(Fre)**

[A solitary metastasis in the trapezium bone] Lederer A, et al. **Radiologe** 1990 Feb;30(2):79–80 (Eng. Abstr.) **(Ger)**

[MR study of the carpal scaphoid. Normal anatomy] Grazioli L, et al. **Radiol Med (Torino)** 1990 Jan–Feb;79(1–2):99–102 **(Ita)**

[Carpal cysts in hemodialysis patients] Viglietta G, et al.
Radiol Med (Torino) 1989 Oct;78(4):305–10 (Eng. Abstr.) **(Ita)**

ABNORMALITIES

Symptomatic scapholunatotriquetral carpal coalition with fusion of the capitatometacarpal joint. Report of a case. Knezevich S, et al. **Clin Orthop** 1990 Feb;(251):153–6

Case report 598: Os centrale carpi. Gerscovich EO, et al.
Skeletal Radiol 1990;19(2):143–5

ANALYSIS

Grip strength and forearm bone mineral content [letter; comment] Hodkinson HM, et al. **BMJ** 1989 Aug 26; 299(6698):569 Comment on: BMJ 1989 Jul 22;299(6693):233–5.

ANATOMY & HISTOLOGY

Dental development, skeletal maturation and body weight at birth in pig–tail macaques (Macaca nemestrina). Swindler DR, et al. **Arch Oral Biol** 1990;35(4):289–94

The lunatohamate articulation of the midcarpal joint. Viegas SF. **Arthroscopy** 1990;6(1):5–10

Determining carpal collapse. An improved method. Stahelin A, et al. **J Bone Joint Surg [Am]** 1989 Oct;71(9):1400–5

Reliability of carpal angle determinations. Garcia–Elias M, et al. **J Hand Surg [Am]** 1989 Nov;14(6):1017–21

Taxeopody in the carpus and tarsus of Oligocene Pliohyracidae (Mammalia: Hyracoidea) and the phyletic position of hyraxes. Rasmussen DT, et al.
Proc Natl Acad Sci U S A 1990 Jun;87(12):4688–91

[Clinical examination of the wrist] Masquelet AC.
Ann Chir Main 1989;8(2):159–75 (16 ref.) (Eng. Abstr.) **(Fre)**

BLOOD SUPPLY

Evaluation of ischaemic necrosis of carpal bones by magnetic resonance imaging. Cristiani G, et al. **J Hand Surg [Br]** 1990 May;15(2):249–55

GROWTH & DEVELOPMENT

Skeletal maturation and craniofacial growth. Moore RN, et al. **Am J Orthod Dentofacial Orthop** 1990 Jul;98(1):33–40

INJURIES

Bone scan screening for occult fractures of carpals and metacarpals [letter; comment] Sisler WJ.
AJR Am J Roentgenol 1990 May;154(5):1127–8 Comment on: AJR Am J Roentgenol 1989 Sep;153(3):529–32.

Fracture of the carpal navicular—efficacy of clinical findings and improved diagnosis with six–view radiography. Mehta M, et al. **Ann Emerg Med** 1990 Mar;19(3):255–7

Triquetral fracture associated with hamate dislocation: a case report. Wanadurongwan W, et al.
Bull Hosp Jt Dis Orthop Inst 1990 Spring;50(1):54–8

Fractures of the scaphoid. Barton N. **Chirurgie** 1989; 115(9):664–74 (39 ref.)

Tendon ruptures with scaphoid nonunion. A case report. McLain RF, et al. **Clin Orthop** 1990 Jun;(255):117–20

Diagnosis of fracture of the carpal scaphoid with 4 oblique projections. Just SL, et al. **Eur J Radiol** 1989 Aug; 9(3):152–4

Fractures of the hook of the hamate. Gupta A, et al.
Injury 1989 Sep;20(5):284–6

Symptomatic non–union of the carpal scaphoid: Matti–Russe bone grafting versus Herbert screw fixation. Parkinson RW, et al. **Injury** 1989 May;20(3):164–6

Peri–pyramidal semilunar dislocation of the carpus. Ruano MA, et al. **Ital J Orthop Traumatol** 1988 Dec;14(4):513–8

Fractures and non–unions of the carpal scaphoid. Gelberman RH, et al. **J Bone Joint Surg [Am]** 1989 Dec;71(10):1560–5 (65 ref.)

Isolated palmar dislocation of the trapezoid associated with attritional rupture of the flexor tendon. A case report. Inoue G, et al. **J Bone Joint Surg [Am]** 1990 Mar;72(3):446–8

Scaphotrapezial dislocation. A case report. Stevanovic MV, et al. **J Bone Joint Surg [Am]** 1990 Mar;72(3):449–52

Comparison of short and long thumb–spica casts for non–displaced fractures of the carpal scaphoid [letter; comment] Thompson JS. **J Bone Joint Surg [Am]** 1990 Feb; 72(2):309–10 Comment on: J Bone Joint Surg [Am] 1989 Mar;71(3):354–7.

Suspected scaphoid fractures. The value of radiographs. Dias JJ, et al. **J Bone Joint Surg [Br]** 1990 Jan;72(1):98–101

Forty degree angled coronal CT scanning of scaphoid fractures through plaster and fiberglass casts. Friedman L, et al. **J Comput Assist Tomogr** 1989 Nov–Dec;13(6):1101–4

Forearm and wrist radiology—Part I. Propp DA, et al.
J Emerg Med 1989 Jul–Aug;7(4):393–9

The fate of failed bone graft surgery for scaphoid nonunions. Carrozzella JC, et al. **J Hand Surg [Am]** 1989 Sep; 14(5):800–6

Retrograde Herbert screw fixation for treatment of proximal pole scaphoid nonunions. DeMaagd RL, et al.
J Hand Surg [Am] 1989 Nov;14(6):996–1003

A new method of evaluating angulation of scaphoid nonunions. Engdahl DE, et al. **J Hand Surg [Am]** 1989 Nov;14(6):1033–4

Anterior bone grafting and conventional lag screw fixation to treat scaphoid nonunions. Fernandez DL.
J Hand Surg [Am] 1990 Jan;15(1):140–7

An unusual combination of simultaneous fracture of the tuberosity of the trapezium and the hook of the hamate. Jensen BV, et al. **J Hand Surg [Am]** 1990 Mar;15(2):285–7

Nonunion of a fractured scaphoid tubercle. Jonsson K.
J Hand Surg [Am] 1990 Mar;15(2):283–5

Acute scaphoid fracture with scapholunate gap. Vender MI, et al. **J Hand Surg [Am]** 1989 Nov;14(6):1004–7

Experience with the Herbert screw in the treatment of scaphoid fractures [letter; comment] Herbert TJ.
J Hand Surg [Br] 1989 Nov;14(4):463 Comment on: J Hand Surg [Br] 1988 Nov;13(4):453–5.

Incidence of post–traumatic arthrosis after primary healing of scaphoid fractures: a clinical and radiological study. Lindström G, et al. **J Hand Surg [Br]** 1990 Feb;15(1):11–3

Delayed diagnosis in non–union of the body of the hamate: a case report. Terrono A, et al. **J Hand Surg [Br]** 1989 Aug;14(3):329–31

Occult scaphoid fracture: a diagnostic enigma. Mittal RL, et al. **J Orthop Trauma** 1989;3(4):306–8

Scaphoid fractures and Kienbock's disease of the lunate: MR imaging with histopathologic correlation. Desser TS, et al. **Magn Reson Imaging** 1990;8(4):357–61

Carpometacarpal dislocation: report of three cases. De Waard JW, et al. **Neth J Surg** 1990 Feb;42(1):20–3

Hook of the hamate fractures. Diagnosis, treatment, and complications. Boulas HJ, et al. **Orthop Rev** 1990 Jun; 19(6):518–29

The use of electricity in bone healing. Uhl RL.
Orthop Rev 1989 Oct;18(10):1045–50 (44 ref.)

Dorsal lunate tilt (DISI configuration): sign of scaphoid fracture displacement. Smith DK, et al. **Radiology** 1990 Aug;176(2):497–9

Scaphoid fracture: evaluation with flexion–extension tomography. Tehranzadeh J, et al. **Radiology** 1990 Jul; 176(1):167–70

An unusual combination of fractures of the hand [letter] Rodseth D, et al. **S Afr Med J** 1990 Sep 1;78(5):288

Management of scaphoid fractures: a review and update. Gumucio CA, et al. **South Med J** 1989 Nov;82(11):1377–88 (28 ref.)

[Fracture of the trapezoid bone] Jensen BV.
Ugeskr Laeger 1990 Mar 5;152(10):676–7 (26 ref.) (Eng. Abstr.) **(Dan)**

[Treatment of fractures of the carpal scaphoid with Herbert's bone screw. Review of 21 clinical cases] Recht J, et al.
Acta Orthop Belg 1989;55(2):183–90 (Eng. Abstr.) **(Fre)**

[Anterior trans–scapho–perilunate dislocation of the wrist] Goaied B, et al. **Ann Chir Main** 1989;8(3):242–5 (10 ref.) (Eng. Abstr.) **(Fre)**

[Surgical treatment of complex lesions of the wrist] Mora R, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989; 82(2):112–5 (Eng. Abstr.) **(Fre)**

[Recent peri–lunate dislocations of the wrist] Vichard P, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989; 82(2):106–11 (Eng. Abstr.) **(Fre)**

[Instability of the wrist joint—diagnosis and therapy] Martini AK, et al. **Aktuel Traumatol** 1989 Dec;19(6):287–93 (Eng. Abstr.) **(Ger)**

[Late results of operated scaphoid pseudarthroses] Steiger R, et al. **Handchir Mikrochir Plast Chir** 1990 May; 22(3):152–5 (Eng. Abstr.) **(Ger)**

[Reconstructive surgical procedures in scaphoid pseudarthrosis] Pechlaner S, et al. **Unfallchirurg** 1990 Apr; 93(4):150–6 (22 ref.) (Eng. Abstr.) **(Ger)**

[Metachronous 2d fracture of the scaphoid bone of the hand] Starke W. **Unfallchirurg** 1989 Dec;92(12):604–5 (Eng. Abstr.) **(Ger)**

[Dislocation of the scaphoid bone of the hand] Habernek H, et al. **Unfallchirurgie** 1989 Dec;15(6):285–8 (Eng. Abstr.) **(Ger)**

[Treatment of scaphoido–trapezial arthrosis by arthrodesis using small–size Ender plates] Tóth K, et al.
Magy Traumatol Orthop Helyreallito Sebesz 1989; 32(4):315–8 (Eng. Abstr.) **(Hun)**

[Delayed consolidation and pseudarthrosis in posttraumatic pathology of the carpal scaphoid. A magnetic resonance study] Borelli P, et al. **Radiol Med (Torino)** 1990 May; 79(5):493–501 (Eng. Abstr.) **(Ita)**

[CT study of fractures and pseudarthroses of the carpal scaphoid] Borelli PP, et al. **Radiol Med (Torino)** 1990 Mar; 79(3):163–6 (Eng. Abstr.) **(Ita)**

[Isolated fractures of the pisiform bone] Pizio Z, et al.
Chir Narzadow Ruchu Ortop Pol 1989;54(2):150–3 (11 ref.) (Eng. Abstr.) **(Pol)**

PATHOLOGY

Magnetic resonance imaging of avascular necrosis of the lunate. Jackson MD, et al. **Arch Phys Med Rehabil** 1990 Jun;71(7):510–3

Application of magnetic resonance imaging to ischemic necrosis of the lunate. Sowa DT, et al.
J Hand Surg [Am] 1989 Nov;14(6):1008–16

Avascular necrosis after scaphoid fracture: a correlation of magnetic resonance imaging and histology. Trumble TE.
J Hand Surg [Am] 1990 Jul;15(4):557–64

Medial (hamate) facet of the lunate. Viegas SF, et al.
J Hand Surg [Am] 1990 Jul;15(4):564–71

Avascular necrosis of the capitate demonstrated on a 0.064 T magnet. Haygood TM, et al. **Magn Reson Imaging** 1989 Sep–Oct;7(5):571–3

Test and teach. Number Sixty–two. Chondroblastoma of the scaphoid. Ng JP, et al. **Pathology** 1990 Jan;22(1):10, 49

[Osteoid osteoma recurrence/persistence of the hamate bone. A case report] Helzel MV, et al. **Rontgenblatter** 1990 Aug; 43(8):362–4 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Delayed carpal ossification in Notophthalmus viridescens Efts: Relation to the progress of mesopodial completion in newt forelimb regenerates. Libbin RM, et al.
J Exp Zool 1989 Nov;252(2):207–11

Segmental motion of the proximal carpal row: their global effect on the wrist motion. Seradge H, et al.
J Hand Surg [Am] 1990 Mar;15(2):236–9

PHYSIOPATHOLOGY

Radiocarpal articular contact characteristics with scaphoid instability. Blevens AD, et al. **J Hand Surg [Am]** 1989 Sep; 14(5):781–90

[Lunar–triquetral instability] Mathoulin C, et al.
Ann Chir Main Memb Super 1990;9(1):22–8 (Eng. Abstr.) **(Fre)**

RADIOGRAPHY

Three–point arthrography of the wrist. Mespreuve M, et al.
Acta Orthop Belg 1989;55(2):197–202

Computed tomography of the scaphoid in the longitudinal axis of the bone. Muren C, et al. **Acta Radiol** 1990 Jan; 31(1):110–1

CT of the wrist: what is abnormal? [letter; comment] Pierce ME. **AJR Am J Roentgenol** 1990 May;154(5):1127 Comment on: AJR Am J Roentgenol 1989 Sep;153(3):529–32.

Roentgenographic examination of the wrist: a systematic study of the normal, lax and injured wrist. Part 1: The standard and positional views. Schernberg F.
J Hand Surg [Br] 1990 May;15(2):210–9

Demonstration of the scapholunate space with radiography. Kindynis P, et al. **Radiology** 1990 Apr;175(1):278–80

[Intraosseous ganglia of the carpal bones] Lundkvist L, et al. **Ugeskr Laeger** 1989 Dec 4;151(49):3322–3 (Eng. Abstr.) **(Dan)**

[The carpal–metacarpal joint. A radio–dynamic study] Schuhl JF, et al. **Ann Chir Main** 1989;8(2):179–81 (Eng. Abstr.) **(Fre)**

[Three-dimensional imaging of the carpus] Moutet F, et al. **Ann Chir Main Memb Super** 1990;9(1):32–7 (Eng. Abstr.) **(Fre)**

[Instability of the carpus] Simonetta C. **Rev Med Suisse Romande** 1989 Jul;109(7):519–22 **(Fre)**

[The position of the os triquetrum in the classical roentgen picture. Clinical relevance] Lehner M, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989;82(3):177–81 (Eng. Abstr.) **(Ger)**

[CT study of fractures and pseudarthroses of the carpal scaphoid] Borelli PP, et al. **Radiol Med (Torino)** 1990 Mar; 79(3):163–6 (Eng. Abstr.) **(Ita)**

[CT study of the carpal tunnel. The carpal tunnel syndrome] Martelli A, et al. **Radiol Med (Torino)** 1990 Apr; 79(4):308–13 (Eng. Abstr.) **(Ita)**

SURGERY

Translocation of the fifth finger by intracarpal osteotomy. Le Viet D. **Ann Plast Surg** 1986 Sep;17(3):228–38

Recalcitrant non-union of the scaphoid treated with a vascularized bone graft based on the ulnar artery. Guimberteau JC, et al. **J Bone Joint Surg [Am]** 1990 Jan; 72(1):88–97

Two modifications for insertion of the Herbert screw in the fractured scaphoid. Chun S, et al. **J Hand Surg [Am]** 1990 Jul;15(4):669–71

Fascial implant arthroplasty for treatment of radioscaphoid degenerative disease. Eaton RG, et al. **J Hand Surg [Am]** 1989 Sep;14(5):766–74

Palmar approach for treatment of scapho-trapezio-trapezoid arthrodesis. Essman JA, et al. **J Hand Surg [Am]** 1990 Jul; 15(4):672–4

Allograft bone for arthrodesis and repair of skeletal hand problems. Anderson WJ. **J Hand Surg [Br]** 1989 Aug; 14(3):332–5

Bone formation following carpal interposition arthroplasty. Lovelock JE, et al. **Skeletal Radiol** 1990;19(1):31–2

[Trapeziometacarpal arthrodesis in arthritis. Review of the literature (142 cases)] Coene N. **Ann Chir Main Memb Super** 1990;9(3):205–6 **(Fre)**

[Trapezectomies. Results of a multicenter study (96 cases)] Ebelin M, et al. **Ann Chir Main Memb Super** 1990; 9(3):176–9 **(Fre)**

[Treatment of arthrosis with Swanson's silastic trapezius implant. Technical aspects] Iselin F, et al. **Ann Chir Main Memb Super** 1990;9(3):195–7 **(Fre)**

[Partial trapezectomies with interposition. Results of a multicenter study (16 cases)] Lemaréchal P. **Ann Chir Main Memb Super** 1990;9(3):203–4 **(Fre)**

[The history of total trapeziometacarpal prostheses] Lignon J, et al. **Ann Chir Main Memb Super** 1990;9(3):180–8 **(Fre)**

[Swanson's trapezius implants. Results of a multicenter study] Lussiez B, et al. **Ann Chir Main Memb Super** 1990; 9(3):198–202 **(Fre)**

[Total trapeziometacarpal prostheses. Results of a multicenter study (106 cases)] Moutet F, et al. **Ann Chir Main Memb Super** 1990;9(3):189–94 **(Fre)**

[PTFE silastic trapezius implant in peritrapezial arthrosis. Preliminary report (9 cases)] Saiveau M, et al. **Ann Chir Main Memb Super** 1990;9(3):207–11 **(Fre)**

[Technics of total trapezectomy] Schernberg F. **Ann Chir Main Memb Super** 1990;9(3):172–5 **(Fre)**

[Silastic implant and synovitis] Sennwald G. **Schweiz Med Wochenschr** 1989 Jul 22;119(29):1010–2 (Eng. Abstr.) **(Fre)**

[Roentgenological follow-up studies of silicone joint surface replacement in hand surgery as exemplified by scaphoid total and partial prosthesis] Wilhelm K. **Handchir Mikrochir Plast Chir** 1990 Jul;22(4):177–82 (Eng. Abstr.) **(Ger)**

[Modification of the Matti-Russe operation] Sántha E. **Magy Traumatol Orthop Helyreallito Sebesz** 1990; 33(1):44–5 (Eng. Abstr.) **(Hun)**

CARPAL TUNNEL SYNDROME

see related
MEDIAN NERVE

Carpal tunnel syndrome: the risk to educational interpreters. Stedt JD. **Am Ann Deaf** 1989 Jul;134(3):223–6 (13 ref.)

BLOOD

Vitamin B6 levels in patients with carpal tunnel syndrome. Fuhr JE, et al. **Arch Surg** 1989 Nov;124(11):1329–30

[Tunnel syndromes and blood glucose anomalies] Isselin J, et al. **Ann Chir Main** 1989;8(4):344–6 (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Dermatitis-sympathetic dysfunction in carpal tunnel syndrome. A case report. Fast A, et al. **Clin Orthop** 1989 Oct;(247):124–6

Clinical management of carpal tunnel syndrome in patients with long-term sequelae of poliomyelitis. Waring WP 3d, et al. **J Hand Surg [Am]** 1989 Sep;14(5):865–9

[Evaluation of digital vibration threshold for asymptomatic ulnar neuropathy in patients with carpal tunnel syndrome] Imai T, et al. **Rinsho Shinkeigaku** 1989 Jul;29(7):866–70 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Congenital carpal tunnel syndrome: case report of autosomal dominant inheritance and review of the literature. Michaud LJ, et al. **Arch Phys Med Rehabil** 1990 May;71(6):430–2 (19 ref.)

DIAGNOSIS

Differences in sensory conduction velocity between different sensory branches and segments of the median and ulnar nerves. Joynt RL. **Am J Phys Med Rehabil** 1989 Oct; 68(5):210–4

The carpal tunnel syndrome [letter] Bohr T. **Ann Intern Med** 1990 Aug 1;113(3):254

The carpal tunnel syndrome: diagnostic utility of the history and physical examination findings. Katz JN, et al. **Ann Intern Med** 1990 Mar 1;112(5):321–7

The carpal tunnel syndrome [letter] Pease WS. **Ann Intern Med** 1990 Sep 1;113(5):409

Thermography in carpal tunnel syndrome (CTS) [letter] Reilly PA, et al. **Br J Rheumatol** 1989 Dec;28(6):553–4

Carpal tunnel syndrome. Evaluation of a quantitative provocational diagnostic test. Koris M, et al. **Clin Orthop** 1990 Feb;(251):157–61

Clinical validation of antidromic stimulation of the ring finger in early electrodiagnosis of mild carpal tunnel syndrome. Charles N, et al. **Electroencephalogr Clin Neurophysiol** 1990 Aug;76(2):142–7

A self-administered hand diagram for the diagnosis of carpal tunnel syndrome. Katz JN, et al. **J Hand Surg [Am]** 1990 Mar;15(2):360–3

Magnetic resonance imaging of the carpal tunnel. Healy C, et al. **J Hand Surg [Br]** 1990 May;15(2):243–8

Location of impaired sensory conduction of the median nerve in carpal tunnel syndrome. Nathan PA, et al. **J Hand Surg [Br]** 1990 Feb;15(1):89–92

Carpal tunnel syndrome in pregnancy and lactation. Wand JS. **J Hand Surg [Br]** 1990 Feb;15(1):93–5

Efficacy of provocative tests for diagnosis of carpal tunnel syndrome [see comments] de Krom MC, et al. **Lancet** 1990 Feb 17;335(8686):393–5 Comment in: Lancet 1990 Mar 24;335(8691):727.

Efficacy of provocative tests for diagnosis of carpal tunnel syndrome [letter; comment] Macfarlane DG, et al. **Lancet** 1990 Mar 24;335(8691):727 Comment on: Lancet 1990 Feb 17;335(8686):393–5.

Carpal tunnel syndrome: which finger should be tested? An analysis of sensory conduction in digital branches of the median nerve. Macdonell RA, et al. **Muscle Nerve** 1990 Jul;13(7):601–6

Median to radial latency difference test in mild carpal tunnel syndrome. Pease WS, et al. **Muscle Nerve** 1989 Nov; 12(11):905–9

Ring finger testing in carpal tunnel syndrome [letter; comment] Simpson CA. **Muscle Nerve** 1990 Jun;13(6):560 Comment on: Muscle Nerve 1989 Sep;12(9):735–41.

Ring finger testing in carpal tunnel syndrome: a comparative study of diagnostic utility [see comments] Uncini A, et al. **Muscle Nerve** 1989 Sep;12(9):735–41 Comment in: Muscle Nerve 1990 Jun;13(6):560.

Carpal tunnel area as a risk factor for carpal tunnel syndrome. Winn FJ Jr, et al. **Muscle Nerve** 1990 Mar;13(3):254–8

Thermography [letter; comment] Herrick RT. **Neurology** 1990 Jul;40(7):1146 Comment on: Neurology 1989 Nov;39(11):1465–9.

Liquid crystal thermography: quantitative studies of abnormalities in carpal tunnel syndrome [see comments] Meyers S, et al. **Neurology** 1989 Nov;39(11):1465–9 Comment in: Neurology 1990 Jul;40(7):1146.

A regression model for carpal tunnel syndrome. Winn FJ Jr, et al. **Proc Soc Exp Biol Med** 1989 Nov;192(2):161–5

Imaging the carpal tunnel. Marshall J, et al. **Radiogr Today** 1990 Feb;56(633):11–3

[The carpal tunnel syndrome in pregnancy with a report on our cases] Despodova Ts, et al. **Akush Ginekol (Sofiia)** 1990; 29(1):75–6 **(Bul)**

[Sensory action potentials of ring finger in the diagnosis of carpal tunnel syndrome] Lin JC, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Nov;44(5):313–7 (Eng. Abstr.) **(Chi)**

[The centimetric test: a diagnostic conformation test of very limited forms of carpal tunnel syndrome?] Seror P. **Ann Chir Main** 1989;8(3):254–64 (25 ref.) (Eng. Abstr.) **(Fre)**

[The centimeter test: diagnostic test for beginning carpal tunnel syndrome] Seror P. **Neurophysiol Clin** 1990 May; 20(2):137–44 (Eng. Abstr.) **(Fre)**

[The inching test in the diagnosis of carpal tunnel syndrome. Apropos of 20 cases] Seror P. **Rev Rhum Mal Osteoartic** 1990 Feb;57(2):113–7 **(Fre)**

[A deep palmar muscle as a cause for carpal tunnel syndrome] Piza-Katzer H, et al. **Handchir Mikrochir Plast Chir** 1989 Nov;21(6):302–4 (Eng. Abstr.) **(Ger)**

[Diagnosis and treatment of carpal tunnel syndrome with special reference to the results of electrophysiologic study] Cruz Martínez A. **Neurologia** 1989 Sep;4(7):238–52 (146 ref.) **(Spa)**

DRUG THERAPY

Clinical aspects of treatment of carpal tunnel syndrome with vitamin B6. Ellis JM, et al. **Ann N Y Acad Sci** 1990; 585:302–20

Successful therapy with vitamin B6 and vitamin B2 of the carpal tunnel syndrome and need for determination of the RDAs for vitamins B6 and B2 for disease states. Folkers K, et al. **Ann N Y Acad Sci** 1990;585:295–301

Intraneural steroid injection as a complication in the management of carpal tunnel syndrome. A report of three cases. McConnell JR, et al. **Clin Orthop** 1990 Jan; (250):181–4

Median nerve injury from local steroid injection in carpal tunnel syndrome. Linskey ME, et al. **Neurosurgery** 1990 Mar;26(3):512–5

[The effect of corticoid injections in relation to the duration of the disease and distal motor latency in the carpal tunnel syndrome] Matulová H, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1989;32(5):589–96 (Eng. Abstr.) **(Cze)**

EPIDEMIOLOGY

The carpal tunnel syndrome in cardiologists [letter] Stevens K. **Ann Intern Med** 1990 May 15;112(10):796

Carpal tunnel syndrome in black South Africans. Goga IE. **J Hand Surg [Br]** 1990 Feb;15(1):96–9

Work-related carpal tunnel syndrome [letter; comment] Nathan PA. **JAMA** 1990 Jan 12;263(2):236–7 Comment on: JAMA 1989 Aug 18;262(7):886, 889.

The occurrence of carpal tunnel syndrome in frozen food factory employees. Chiang HC, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 Feb; 6(2):73–80

[Carpal tunnel syndrome in shoe hemmers] Fortuna R, et al. **Chir Organi Mov** 1989 Jul–Dec;74(3–4):79–82 (Eng. Abstr.) **(Ita)**

[Occurrence of carpal tunnel syndrome among workers engaged in manual labor] Berzin'sh IuE, et al. **Gig Tr Prof Zabol** 1990;(6):51–4 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Carpal tunnel syndrome and pancytopenia in a 63-year-old woman [clinical conference] **Am J Med** 1990 May; 88(5):522–8

Carpal tunnel syndrome and gout. O'Hara LJ, et al. **Arch Intern Med** 1967 Aug;120(2):180–4

Neurologic sequelae of minor electric burns. Rosenberg DB. **Arch Phys Med Rehabil** 1989 Dec;70(13):914–5

Median nerve compression in the palm of the hand by an anomalously enlarged ulnar artery. Hankey GJ. **Aust N Z J Surg** 1988 Jun;58(6):511–3

Carpal tunnel syndrome in vibration disease. Koskimies K, et al. **Br J Ind Med** 1990 Jun;47(6):411–6

Intestinal pseudo-obstruction due to dialysis amyloidosis. Shinoda T, et al. **Clin Nephrol** 1989 Dec;32(6):284–9

Carpal tunnel syndrome in hemodialyzed patients [letter] Bordoni E, et al. **Int J Artif Organs** 1989 Dec;12(12):811–2

Bilateral palmaris profundus causing bilateral carpal tunnel syndrome. Floyd T, et al. **J Hand Surg [Am]** 1990 Mar; 15(2):364–6

Distal rupture of the palmaris longus tendon and fascia as a cause of acute carpal tunnel syndrome. Lourie GM, et al. **J Hand Surg [Am]** 1990 Mar;15(2):367–9

Upper extremity entrapment neuropathy and tourniquet use in patients undergoing hemodialysis. Semer NB, et al. **J Hand Surg [Am]** 1989 Sep;14(5):897–900

Perineural tumour spread: an unusual cause of carpal tunnel syndrome. Mackay IR, et al. **J Hand Surg [Br]** 1990 Feb; 15(1):104–5

Carpal tunnel syndrome in association with vibration white finger. Savage R, et al. **J Hand Surg [Br]** 1990 Feb; 15(1):100–3

Carpal tunnel syndrome in childhood: report of five new cases. Poilvache P, et al. **J Pediatr Orthop** 1989 Nov–Dec; 9(6):687–90 (54 ref.)

The natural history of carpal tunnel syndrome in lactation [see comments] Wand JS. **J R Soc Med** 1989 Jun; 82(6):349–50 Comment in: J R Soc Med 1989 Dec;82(12):776.

Profundus tendon disruption resulting in carpal tunnel syndrome. Jackson SH. **Orthopedics** 1990 Aug;13(8):887–9

Finger receptor dysfunction in dental technicians exposed to high-frequency vibration. Hjortsberg U, et al. **Scand J Work Environ Health** 1989 Oct;15(5):339–44

Pigmented villonodular synovitis of flexor tendon sheath at wrist causing pseudo-carpal-tunnel syndrome: report of a case. Chen WS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Jan;89(1):44–6

[Multiple osteoarticular complications (dialysis-associated spondyloarthropathy) and carpal tunnel syndrome in chronic hemodialysis] Hermann E, et al. **Dtsch Med Wochenschr** 1989 Sep 22;114(38):1436–40 (Eng. Abstr.) **(Ger)**

[Carpal tunnel syndrome in acromegaly—4-case report and review of literature] Imamura H, et al. **Hokkaido Igaku Zasshi** 1989 Sep;64(5):642–7 (Eng. Abstr.) **(Jpn)**

[Carpal tunnel syndrome and cervical "whiplash" (letter)] Roquer J, et al. **Neurologia** 1988 Sep-Oct;3(5):202–3 **(Spa)**

[Carpal tunnel syndrome—easy to treat but the etiology is unclear] Lundborg G, et al. **Lakartidningen** 1990 Aug 8; 87(32–33):2485–7 (37 ref.) **(Swe)**

PATHOLOGY

Idiopathic carpal tunnel syndrome: histologic study of flexor tendon synovium. Schuind F, et al. **J Hand Surg [Am]** 1990 May;15(3):497–503

Collagen dysplasia in idiopathic carpal tunnel syndrome. Stransky G, et al. **Pathol Res Pract** 1989 Nov;185(5):795–8

[Carpal tunnel syndrome before 20 years of age. A report of 7 cases] Tropet Y, et al. **Ann Chir Main Memb Super** 1990;9(1):29–31 (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

Carpal-tunnel pressure. Luchetti R, et al. **Acta Orthop Scand** 1989 Aug;60(4):397–9

First lumbrical latency and amplitude. Control values and findings in carpal tunnel syndrome. Fitz WR, et al. **Am J Phys Med Rehabil** 1990 Aug;69(4):198–201

Current perception threshold. Reproducibility and comparison with nerve conduction in evaluation of carpal tunnel syndrome. Katims JJ, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):280–4

Proximal slowing of nerve conduction velocity in carpal tunnel syndrome. Tzeng SS, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Mar;45(3):186–90

Quantitative sensory thresholds in carpal tunnel syndrome. Merchut MP, et al. **Electromyogr Clin Neurophysiol** 1990 Feb–Mar;30(2):119–24

Differential diagnosis of arm pain. Stabile MJ, et al. **Hosp Pract [Off]** 1990 Jan 15;25(1):55–8, 61, 64

Electrophysiologic evaluation for carpal tunnel syndrome in patients with angioaccess for haemodialysis. Radhakrishnan K, et al. **Int Urol Nephrol** 1989;21(4):425–7

Pressures in the carpal tunnel. A comparison between patients with carpal tunnel syndrome and normal subjects. Rojviroj S, et al. **J Bone Joint Surg [Br]** 1990 May;72(3):516–8

Reliability of sensory threshold measurement using a digital vibrogram. Grunert BK, et al. **J Occup Med** 1990 Feb; 32(2):100–2

Effects of elevation on nerve function in an acute upper extremity nerve compression model. Chidgey LK, et al. **J Orthop Res** 1989;7(6):783–91

Carpal tunnel syndrome [letter; comment] Bohr T. **Mayo Clin Proc** 1990 Jan;65(1):122–4 Comment on: Mayo Clin Proc 1989 Jul;64(7):829–36.

The refractory period of transmission in patients with carpal tunnel syndrome. Gilliatt RW, et al. **Muscle Nerve** 1990 May;13(5):445–50

Orthodromic median and ulnar fourth digit sensory conductions in mild carpal tunnel syndrome. Uncini A, et al. **Neurophysiol Clin** 1990 Apr;20(1):53–61

PREVENTION & CONTROL

Preventing the work-related carpal tunnel syndrome: physician reporting and diagnostic criteria. Baker EL, et al. **Ann Intern Med** 1990 Mar 1;112(5):317–9 (11 ref.)

Ergonomic design protects hands from repetitive motion stress, vibration. Eisma TL. **Occup Health Saf** 1990 Apr; 59(4):75–7, 80–2

Square wrists and carpal tunnel syndrome. Edwards KS. **Ohio Med** 1990 Jun;86(6):432–3

RADIOGRAPHY

Inflammation as the possible cause of cystic radiolucencies in carpal bones of patients on hemodialysis. Ogawa H, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):317–9

[CT study of the carpal tunnel. The carpal tunnel syndrome] Martelli A, et al. **Radiol Med (Torino)** 1990 Apr; 79(4):308–13 (Eng. Abstr.) **(Ita)**

SURGERY

Analysis of pinch and grip strength after carpal tunnel release. Gellman H, et al. **J Hand Surg [Am]** 1989 Sep;14(5):863–4

Deep postoperative wound infection after carpal tunnel release. Hanssen AD, et al. **J Hand Surg [Am]** 1989 Sep; 14(5):869–73

Carpal tunnel syndrome: morphologic changes after release of the transverse carpal ligament. Richman JA, et al. **J Hand Surg [Am]** 1989 Sep;14(5):852–7

Intraoperative assessment of median nerve blood flow during carpal tunnel release with laser Doppler flowmetry. Seiler JG 3d, et al. **J Hand Surg [Am]** 1989 Nov;14(6):986–91

Median innervated hypothenar muscle: anomalous branch of median nerve in the carpal tunnel. Seradge H, et al. **J Hand Surg [Am]** 1990 Mar;15(2):356–9

Piso-triquetral pain syndrome after carpal tunnel release. Seradge H, et al. **J Hand Surg [Am]** 1989 Sep;14(5):858–62

Carpal tunnel decompression under local anaesthesia [letter; comment] Gibson M. **J Hand Surg [Br]** 1989 Aug;14(3):359 Comment on: J Hand Surg [Br] 1988 Nov;13(4):395–6.

Internal neurolysis and flexor tenosynovectomy: adjuncts in the treatment of chronic median nerve compression at the wrist in hemodialysis patients. Corradi M, et al. **Microsurgery** 1989;10(3):248–50

The treatment of carpal tunnel syndrome caused by hypertrophied lumbrical muscles. Case reports. Robinson D, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989; 23(2):149–51

[Immediate active mobilization or rigid postoperative immobilization of the wrist in carpal tunnel syndrome. Comparative analysis of a series of 50 patients] Chaise F. **Rev Rhum Mal Osteoartic** 1990 May;57(5):435–9 **(Fre)**

[Decompression of the carpal tunnel. Apropos of 16 reoperated cases] Sennwald G, et al. **Schweiz Med Wochenschr** 1990 Jun 23;120(25):931–5 (Eng. Abstr.) **(Fre)**

[Narrow tunnel and compression syndromes of the hand] Belusa M. **Beitr Orthop Traumatol** 1990 Jun;37(6):341–7; discussion 348 (Eng. Abstr.) **(Ger)**

[Is mere surgical division of the transverse carpal ligament in treatment of carpal tunnel syndrome adequate?] Rosen HR, et al. **Chirurg** 1990 Feb;61(2):130–2 (Eng. Abstr.) **(Ger)**

[Compression neuropathy of the median nerve at the wrist joint caused by chondroma] Hofmann AK, et al. **Handchir Mikrochir Plast Chir** 1990 Mar;22(2):96–8 (Eng. Abstr.) **(Ger)**

[Carpal tunnel syndrome. Late results following surgical treatment] Mayer M, et al. **Zentralbl Chir** 1989; 114(21):1401–10 (Eng. Abstr.) **(Ger)**

[Carpal tunnel syndrome associated with long-term hemodialysis: case report] Suwa H, et al. **No Shinkei Geka** 1989 Aug;17(8):747–50 (Eng. Abstr.) **(Jpn)**

[Surgery cures numbness of the hand. Long-term follow-up of carpal tunnel decompression] Boström L, et al. **Lakartidningen** 1990 Aug 8;87(32–33):2497–500 (Eng. Abstr.) **(Swe)**

THERAPY

Predictive factors in the non-surgical treatment of carpal tunnel syndrome. Kaplan SJ, et al. **J Hand Surg [Br]** 1990 Feb;15(1):106–8

Carpal tunnel syndrome in lactation [letter; comment] Morrison MC. **J R Soc Med** 1989 Dec;82(12):776 Comment on: J R Soc Med 1989 Jun;82(6):349–50.

[Carpal tunnel syndrome] Mikhailenko VV, et al. **Ortop Travmatol Protez** 1990 May;(5):70–3 **(Rus)**

CARPUS, ANIMAL see under **FORELIMB**

CARRAGEENAN

Inhibitory effect of indomethacin farnesil, a novel antiinflammatory prodrug, on carrageenin-induced inflammation in rats. Kumakura S, et al. **Agents Actions** 1990 Mar;29(3–4):286–91

Effect of carrageenan-induced acute inflammation on corticosterone levels in mice. Sin YM, et al. **Agents Actions** 1990 Mar;29(3–4):196–200

Evidence for peripheral serotonergic mechanisms in the early sensitization after carrageenin-induced inflammation: electrophysiological studies in the ventrobasal complex of the rat thalamus using a potent specific antagonist of peripheral 5-HT receptors. Guilbaud G, et al. **Brain Res** 1989 Nov 13;502(1):187–97

Carrageenan inflammation increases bradykinin sensitivity of rat cutaneous nociceptors. Kirchhoff C, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):206–10

The rat paw formalin test: comparison of noxious agents. Wheeler-Aceto H, et al. **Pain** 1990 Feb;40(2):229–38

Sex-related differences in drug-metabolizing enzyme activity of rats in carrageenan-induced inflammation. Ishikawa M, et al. **Res Commun Chem Pathol Pharmacol** 1990 Aug; 69(2):229–32

ADVERSE EFFECTS

[Hyperthyroidism during treatment with kelp tablets] de Smet PA, et al. **Ned Tijdschr Geneeskd** 1990 May 26; 134(21):1058–9 (Eng. Abstr.) **(Dut)**

[Hyperthyroidism during administration of kelp tablets (letter)] Hartman AA. **Ned Tijdschr Geneeskd** 1990 Jul 14; 134(28):1373 **(Dut)**

IMMUNOLOGY

Inhibition of carrageenan induced inflammation in the rat knee joint by substance P antagonist. Lam FY, et al. **Ann Rheum Dis** 1989 Nov;48(11):928–32

PHARMACOKINETICS

Intestinal uptake and immunological effects of carrageenan—current concepts. Nicklin S, et al. **Food Addit Contam** 1989 Oct–Dec;6(4):425–36 (64 ref.)

PHARMACOLOGY

Effect of i.v. administered hyperosmotic sodium chloride on carrageenan-induced pleurisy in adrenalectomized and intact rats. Cara DC, et al. **Braz J Med Biol Res** 1989; 22(2):265–7

Do lymphocytes play a pro-inflammatory role in any pharmacological type of rat paw edema? Engrácia-de-Moraes JR, et al. **Braz J Med Biol Res** 1989; 22(2):179–87

Immunoregulatory processes induced by carrageenan in BALB/C mice. Vijayakumar RK, et al. **Immunol Invest** 1990 Apr;19(2):163–83

Influence of carrageenan on peritoneal macrophages. Vijayakumar RK, et al. **Immunol Lett** 1989 Nov;23(1):55–9

Analysis of carrageenan-induced suppression of antibody response. Vijayakumar RK, et al. **Immunology** 1990 Jun; 70(2):181–5

Strain dependent & selective modulation of murine humoral immune response by carrageenan. Palanivel V, et al. **Indian J Med Res** 1989 Dec;90:463–7

In vivo depletion of macrophages by desulfated iota-carrageenan in mice. Ishizaka S, et al. **J Immunol Methods** 1989 Nov 13;124(1):17–24

Antibodies to calcitonin-gene related peptide reduce inflammation induced by topical mustard oil but not that due to carrageenin in the rat. Louis SM, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):257–60

[A model of mononuclear phagocyte block using carrageenan-kappa] Golberg ED, et al. **Patol Fiziol Eksp Ter** 1990 Jan–Feb;(1):10–1 (Eng. Abstr.) **(Rus)**

TOXICITY

The histology of experimental pleural injury with tetracycline, empyema, and carrageenan. Strange C, et al. **Exp Mol Pathol** 1989 Dec;51(3):205–19

CARRIER PROTEINS

Conjugation of synthetic peptides to proteins: quantitation from S-carboxymethylcysteine released upon acid hydrolysis. Kolodny N, et al. **Anal Biochem** 1990 May 15; 187(1):136–40

The amino terminal sequence of the developmentally regulated Ch21 protein shows homology with amino terminal sequences of low molecular weight proteins binding hydrophobic molecules. Descalzi Cancedda F, et al. **Biochem Biophys Res Commun** 1990 May 16; 168(3):933–8

Possible role of rat fatty acid-binding proteins in the intestine as carriers of phenol and phthalate derivatives. Kanda T, et al. **Biochem Biophys Res Commun** 1990 May 16; 168(3):1053–8

Removal of apoprotein-B-containing lipoproteins by plasmapheresis using immobilized phosphorylcholine-binding protein affinity adsorbent. Saxena U, et al. **Biochem Cell Biol** 1990 Jan;68(1):255–9

Conformational analysis of PKI(5–22)amide, the active inhibitory fragment of the inhibitor protein of the cyclic AMP-dependent protein kinase. Reed J, et al. **Biochem J** 1989 Dec 1;264(2):371–80

Primary structure of the hyaluronic acid-binding region of porcine laryngeal cartilage proteoglycan. Harris M, et al. **Biochem Soc Trans** 1990 Apr;18(2):299

1H NMR studies on bovine cyclophilin: preliminary structural characterization of its complex with cyclosporin A. Heald SL, et al. **Biochemistry** 1990 May 8; 29(18):4466–78

Limited proteolysis as a probe of the conformation and nucleic acid binding regions of nucleolin. Olson MO, et al. **Biochemistry** 1990 Jun 19;29(24):5682–6

Hydrostatic pressure studies of native and synthetic thick filaments: in vitro myosin aggregates at pH 7.0 with and without C-protein. Tumminia SJ, et al. **Biochim Biophys Acta** 1989 Dec 21;999(3):300–12

Conformations of proline residues in membrane environments. Deber CM, et al. **Biopolymers** 1990 Jan; 29(1):149–57

Low expression of collagen receptors in moderate and poorly differentiated colorectal adenocarcinomas. Pignatelli M, et al. **Br J Cancer** 1990 Apr;61(4):636–8

A collagen-binding 59-kd protein (fibromodulin) is structurally related to the small interstitial proteoglycans PG-S1 and PG-S2 (decorin). Oldberg A, et al. **EMBO J** 1989 Sep;8(9):2601–4

Cellular lipid binding proteins: expression, function, and nutritional regulation. Clarke SD, et al. **FASEB J** 1989 Nov;3(13):2480–7 (42 ref.)

Identification of 17-18 kDa zona pellucida binding proteins from boar spermatozoa. Moos J, et al. **FEBS Lett** 1990 May 21;264(2):243–5

Export and one-step purification from Escherichia coli of a MalE-CD4 hybrid protein that neutralizes HIV in vitro. Szmelcman S, et al. **J Acquir Immune Defic Syndr** 1990; 3(9):859–72

Primary structure of glycolipid transfer protein from pig brain. Abe A. **J Biol Chem** 1990 Jun 15;265(17):9634–7

Secondary structure of the human membrane-associated folate binding protein using a joint prediction approach. Viswanadhan VN, et al. **J Biomol Struct Dyn** 1990 Feb; 7(4):985–1001

Can glutathione-S-transferases function as intracellular heme carriers? Kirschner-Zilber I, et al. **J Cell Biochem** 1989 Nov;41(3):113–23

The structure and function of vertebrate mannose lectin-like proteins. Ezekowitz RA, et al. **J Cell Sci Suppl** 1988; 9:121–33 (59 ref.)

Identification of immunoglobulin heavy chain binding protein as glucose-regulated protein 78 on the basis of amino acid sequence, immunological cross-reactivity, and functional activity. Kozutsumi Y, et al. **J Cell Sci Suppl** 1989; 11:115–37

Similarities between putative transport proteins of plant viruses. Melcher U. **J Gen Virol** 1990 May;71 (Pt 5):1009–18

Preliminary X-ray data for the periplasmic ribose receptor from Escherichia coli. Mahendroo M, et al. **J Mol Biol** 1990 Feb 20;211(4):689–90

Fluorescence spectroscopic studies on tryptophan at the

saccharide-binding site of castor bean hemagglutinin. Yamasaki N, et al. **J Mol Recognit** 1989 Apr;1(4):153-7
On the nomenclature of the insulin-like growth factor binding proteins. Drop SL. **Mol Cell Endocrinol** 1989 Dec; 67(2-3):243-4
Possible role for salivary gland protein in taste reception indicated by homology to lipophilic-ligand carrier proteins. Schmale H, et al. **Nature** 1990 Jan 25;343(6256):366-9
Insulin-like growth factors and their binding proteins. Sara VR, et al. **Physiol Rev** 1990 Jul;70(3):591-614 (265 ref.)
Refined apoprotein structure of rat intestinal fatty acid binding protein produced in Escherichia coli. Sacchettini JC, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7736-40
Mammalian tissue culture growth, viral replication, and cultivation using serum replacement factor. Candal FJ, et al. **Proc Soc Exp Biol Med** 1989 Oct;192(1):1-5
Activin-binding protein from rat ovary is follistatin. Nakamura T, et al. **Science** 1990 Feb 16;247(4944):836-8
[Structure and function of fatty acid binding proteins] Ono T, et al. **Tanpakushitsu Kakusan Koso** 1990 Mar; 35(3):236-47 (111 ref.) **(Jpn)**
[Structure of carbohydrate chains of the riboflavin-binding glycoprotein of chicken egg protein. II. 1H-NMR (500 MHz) spectroscopy of the major neutral oligosaccharides] Piskarev VE, et al. **Bioorg Khim** 1989 Nov;15(11):1546-54 (Eng. Abstr.) **(Rus)**
[Studies on tissue distribution of unusual estrogen-binding protein in rats with the help of immunoblotting] Kazanova EG, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):221-4 (Eng. Abstr.) **(Rus)**

ANALYSIS

Glial hyaluronate-binding protein in dysmyelinating mice mutants: jimpy, quaking and shiverer. Bignami A, et al. **Acta Neuropathol (Berl)** 1989;79(3):326-9
Visualization of folate transport proteins by covalent labeling with fluorescein methotrexate. Fan J, et al. **Adv Enzyme Regul** 1990;30:3-12 (17 ref.)
Investigation of endotoxin binding cationic proteins from granulocytes; agglutination of erythrocytes sensitized with Re-LPS. Hirata M, et al. **Adv Exp Med Biol** 1990; 256:287-99
An immunohistologic study of the feto-acinar pancreatic protein (FAP) in the normal pancreas, chronic pancreatitis, pancreatic adenocarcinoma, and intraabdominal metastases of adenocarcinomas. Albers GH, et al. **Am J Clin Pathol** 1990 Jan;93(1):14-9
The Na-K-Cl cotransporter in the kidney. Kinne RK. **Ann N Y Acad Sci** 1989;574:63-74 (43 ref.)
Regulation of distribution, amount and ligand affinity of sugar receptors in human colon carcinoma cells by treatment with sodium butyrate, retinoic acid and phorbol ester. Gabius S, et al. **Anticancer Res** 1990 Jul-Aug;10(4):1005-12
Biological characterization of a new radioactive labeling reagent for bacterial penicillin-binding proteins. Preston DA, et al. **Antimicrob Agents Chemother** 1990 May; 34(5):718-21
Penicillin-binding proteins in Listeria monocytogenes. Gutkind GO, et al. **APMIS** 1989 Nov;97(11):1013-7
Demonstration of lipid A-binding proteins on murine lymphoma cells using R-mutant gram-negative bacteria as a detector. Nakashima I, et al. **APMIS** 1990 Jan; 98(1):87-94
Immunohistochemical analysis of human skin using antispectrin and anti-beta-fodrin antibodies. Shimizu T, et al. **Arch Dermatol Res** 1990;282(4):274-7
Expression of cellular retinoic acid binding protein II (chick-CRABP II) in the chick embryo. Kitamoto T, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):531-6
Retinoic acid receptor in the chick limb buds in the early developmental stages. Momoi T, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):544-50
Detection of 300-kilodalton membrane protein in adriamycin-resistant human tumor cells by a monoclonal antibody MRK18. Sugimoto Y, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):686-91
Calsequestrin, an intracellular calcium-binding protein of skeletal muscle sarcoplasmic reticulum, is homologous to aspartactin, a putative laminin-binding protein of the extracellular matrix. Yazaki PJ, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):898-903
Neoglycolipids as probes of oligosaccharide recognition by recombinant and natural mannose-binding proteins of the rat and man. Childs RA, et al. **Biochem J** 1989 Aug 15; 262(1):131-8
Recognition of insulin-like-growth-factor-binding proteins in serum and amniotic fluid by an antiserum against a low-molecular-mass insulin-like-growth-factor-inhibitor/binding protein. Ooi GT, et al. **Biochem J** 1990 May 1;267(3):615-20
Identification of an Mr 75000 component of the H+/D-glucose cotransporter from Zea mays with monoclonal antibodies directed against the mammalian Na+/D-glucose cotransporter. Rausch T, et al. **Biochim Biophys Acta** 1989 Oct 16;985(2):133-8
An analog of Xenopus N1N2 protein in Pleurodeles waltl. Moreau N, et al. **Biol Cell** 1989;67(1):19-26
Low expression of collagen receptors in moderate and poorly differentiated colorectal adenocarcinomas. Pignatelli M, et al. **Br J Cancer** 1990 Apr;61(4):636-8
Immunohistochemical demonstration of a mRNA-transport protein in rat liver putative preneoplastic foci. Hanausek-Walaszek M, et al. **Cancer Lett** 1989 Dec; 48(3):213-21
Intracellular distribution of a 32-KDa calcium-dependent phospholipid-binding protein from human placenta. Giga-Hama Y, et al. **Cell Struct Funct** 1989 Oct; 14(5):587-95
Comparative studies of carbohydrate-binding proteins from Xenopus laevis skin and eggs. Sugar-binding specificities and affinity purification. Nitta K, et al. **Chem Pharm Bull (Tokyo)** 1990 Apr;38(4):975-81
Photoaffinity labeling of the electroplax sodium channel with tetrodotoxin derivatives. II. Comparison of the photoreactivity of different photoactivable groups in the tetrodotoxin binding site. Yoshida E, et al. **Chem Pharm Bull (Tokyo)** 1990 Apr;38(4):982-7
Insulin-like growth factor binding proteins in follicular fluid from normal dominant and cohort follicles, polycystic and multicystic ovaries. Holly JM, et al. **Clin Endocrinol (Oxf)** 1990 Jul;33(1):53-64
Hyaluronate-binding proteins in weakly and highly metastatic variants of rat rhabdomyosarcoma cells. Moczar M, et al. **Clin Exp Metastasis** 1990 Mar-Apr;8(2):129-40
Characterization of multiple forms of small collagenous apatite-binding proteins in bone. Sodek J, et al. **Connect Tissue Res** 1989;20(1-4):233-40
Differential localization of villin and fimbrin during development of the mouse visceral endoderm and intestinal epithelium. Ezzell RM, et al. **Development** 1989 Jun; 106(2):407-19
PBP profiles of Haemophilus influenzae, H. aegyptius, and the H. influenzae biogroup aegyptius associated with Brazilian Purpuric Fever. Mendelman PM, et al. **Diagn Microbiol Infect Dis** 1989 Sep-Oct;12(5):445-7
Developmental changes in protein composition and the actin-binding protein ponticulin in Dictyostelium discoideum plasma membranes purified by an improved method. Ingalls HM, et al. **Differentiation** 1989 Aug; 41(2):87-98
Polyacrylamide gradient gel electrophoresis of cytosolic retinol- and retinoic acid-binding proteins: application to rat testis and liver. Melin AM, et al. **Electrophoresis** 1989 Nov;10(11):766-71
Methicillin resistance in Staphylococcus epidermidis. Relationship between the additional penicillin-binding protein and an attachment transpeptidase. Gaisford WC, et al. **Eur J Biochem** 1989 Oct 20;185(1):211-8
A hyaluronan-binding protein shows a partial and temporally regulated codistribution with actin on locomoting chick heart fibroblasts. Turley EA, et al. **Exp Cell Res** 1990 Apr; 187(2):243-9
Localization of cellular retinoic acid-binding protein to amacrine cells of rat retina. Gaur VP, et al. **Exp Eye Res** 1990 May;50(5):505-11
Identification of an interleukin-1 beta binding protein in human plasma. Eastgate JA, et al. **FEBS Lett** 1990 Jan 29;260(2):213-6
Orientation of the carboxyl terminus of the Na+/proline symport carrier in Escherichia coli. Komeiji Y, et al. **FEBS Lett** 1989 Oct 9;256(1-2):135-8
Calcium-dependent phospholipid binding proteins associated with the membranes of rabbit skeletal muscle. Melgunov VI, et al. **FEBS Lett** 1990 Jan 15;260(1):79-82
Photoaffinity labeling of thiamin-binding component in yeast plasma membrane with [3H]4-azido-2-nitrobenzoylthiamin. Nishimura H, et al. **FEBS Lett** 1989 Sep 11;255(1):154-8
Photoaffinity labeling of the mammalian dopamine transporter. Sallee FR, et al. **FEBS Lett** 1989 Oct 9; 256(1-2):219-24
Immunological characterization of the mitochondrial 2-oxoglutarate carrier from liver and heart. Organ specificity. Zara V, et al. **FEBS Lett** 1990 Apr 24; 263(2):295-8
Identification of carbohydrate-binding proteins in mammalian spermatozoa (human, bull, boar, ram, stallion and hamster) using [125I]fucoidin and [125I]neoglycoprotein probes. Jones R. **Hum Reprod** 1989 Jul;4(5):550-7
Na(+)-H+ antiport activity in skin fibroblasts from blacks and whites. Hatori N, et al. **Hypertension** 1990 Feb; 15(2):140-5
Variations in the apparent pH set point for activation of platelet Na-H antiport. Tokudome G, et al. **Hypertension** 1990 Aug;16(2):180-9
Identification of lectin-binding proteins in Chlamydia species. Swanson AF, et al. **Infect Immun** 1990 Feb;58(2):502-7
Detection of the surface-exposed 18-kilodalton binding protein in Chlamydia trachomatis by immunogold staining. Gray GJ, et al. **J Bacteriol** 1990 Jun;172(6):3524-8
Identification of lipopolysaccharide-binding proteins in 70Z/3 cells by photoaffinity cross-linking. Kirkland TN, et al. **J Biol Chem** 1990 Jun 5;265(16):9520-5
Identification of a membrane-cytoskeletal complex containing the cell adhesion molecule uvomorulin (E-cadherin), ankyrin, and fodrin in Madin-Darby canine kidney epithelial cells. Nelson WJ, et al. **J Cell Biol** 1990 Feb;110(2):349-57
Regulatory subunits of cyclic AMP-dependent protein kinase: presence in granules and secretion by exocrine and endocrine cells. Hand AR, et al. **J Cell Sci** 1989 Aug;93 (Pt 4):675-81
A Ca2(+)-sensitive glycoprotein, GP90, associated with the cytoskeleton from brain and gizzard. Moss DJ, et al. **J Cell Sci** 1989 May;93 (Pt 1):85-94
The structure and function of a mannose 6-phosphate receptor-enriched, pre-lysosomal compartment in animal cells. Griffiths G. **J Cell Sci Suppl** 1989;11:139-47 (33 ref.)
Heterogeneity of binding subunits of the human 150K insulin-like growth factor binding protein. Gelato MC, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):879-87
Identification of insulin-like growth factor-binding protein-2 (IGF-BP-2) and a low molecular weight IGF-BP in human seminal plasma. Rosenfeld RG, et al. **J Clin Endocrinol Metab** 1990 Feb;70(2):551-3
Diurnal pattern of plasma growth hormone-binding protein in man. Snow KJ, et al. **J Clin Endocrinol Metab** 1990 Feb;70(2):417-20
Wegener's granulomatosis autoantibodies identify a novel diisopropylfluorophosphate-binding protein in the lysosomes of normal human neutrophils. Goldschmeding R, et al. **J Clin Invest** 1989 Nov;84(5):1577-87
Identification of coagulase-negative staphylococci by electrophoretic profile of total proteins and analysis of penicillin-binding proteins. Pierre J, et al. **J Clin Microbiol** 1990 Mar;28(3):443-6
Light microscopic localization of hepatic fatty acid binding protein mRNA in jejunal epithelia of rats using in situ hybridization, immunohistochemical, and autoradiographic techniques. Iseki S, et al. **J Histochem Cytochem** 1990 Jan; 38(1):111-5
A monoclonal antibody-based immunoradiometric assay for low molecular weight insulin-like growth factor binding protein/placental protein 12. Pekonen F, et al. **J Immunoassay** 1989;10(4):325-37
Protein F. A novel F(ab)-binding factor, present in normal liver, and largely released in the digestive tract during hepatitis. Bouvet JP, et al. **J Immunol** 1990 Aug 15; 145(4):1176-80
Cyclophilin content of normal and psoriatic epidermis. Griffiths CE, et al. **J Invest Dermatol** 1990 Apr; 94(4):436-40
Distribution of fodrin in the keratinocyte in vivo and in vitro. Yoneda K, et al. **J Invest Dermatol** 1990 May;94(5):724-9
Immunohistochemical demonstration of liver fatty acid-binding protein in human hepatocellular malignancies. Suzuki T, et al. **J Pathol** 1990 May;161(1):79-83
A new method of detecting hormone-binding proteins electroblotted onto glass fiber filter: juvenile hormone-binding proteins from grasshopper hemolymph. Jefferies LS, et al. **J Steroid Biochem** 1990 Mar; 35(3-4):449-55
In vivo and in vitro estimations of the direct effect of estrogen on rat hepatocytes tested by the changes in the unusual estrogen-binding protein content. Smirnova OV, et al. **J Steroid Biochem** 1990 Mar;35(3-4):457-63
Subcellular compartmentalization of cAMP-dependent protein kinase regulatory subunits during palate ontogeny. Linask KK, et al. **Life Sci** 1989;45(20):1863-8
HIV-reverse transcriptase and human DNA polymerase alpha share amino acid sequence homologies to bacterial penicillin-binding proteins. Hafkemeyer P, et al. **Methods Find Exp Clin Pharmacol** 1990 Jan-Feb;12(1):43-6
The retinoic acid receptors alpha and beta are expressed in the human promyelocytic leukemia cell line HL-60. Hashimoto Y, et al. **Mol Endocrinol** 1989 Jul;3(7):1046-52
Detection of glia-derived nexin in the olfactory system of the rat. Reinhard E, et al. **Neuron** 1988 Jul;1(5):387-94
Protease nexin-1, an antithrombin with neurite outgrowth activity, is reduced in Alzheimer disease. Wagner SL, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8284-8
Protein blotting method for detection of nickel-binding proteins. Lin SM, et al. **Res Commun Chem Pathol Pharmacol** 1989 Sep; 65(3):275-88
5-iodo-2'-deoxyuridine-protein conjugates: synthesis and enzymatic degradation. Baranowska-Kortylewicz J, et al. **Sel Cancer Ther** 1990 Spring;6(1):1-13
[Clinical significance of C4-binding protein analysis] Fujita T. **Nippon Rinsho** 1990 Feb;48 Suppl:657-8 **(Jpn)**
[Histochemistry of copper and copper-binding protein in liver with a comparison between histologic sections and biochemical evaluation] Sato H, et al. **Sangyo Ika Daigaku Zasshi** 1989 Sep 1;11(3):327-32 (Eng. Abstr.) **(Jpn)**
[The application of multinuclear NMR to the active sites of flavoenzymes] Miura R, et al. **Tanpakushitsu Kakusan Koso** 1990 Apr;35(5):825-35 (69 ref.) **(Jpn)**
[Sex differences in the level of cytosol estrogen receptors in the rat liver] Ignatenko LL, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):183-6 (Eng. Abstr.) **(Rus)**
[Studies on tissue distribution of unusual estrogen-binding protein in rats with the help of immunoblotting] Kazanova EG, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):221-4 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Dopamine inhibits Na(+)-H+ exchanger activity in renal BBMV by stimulation of adenylate cyclase. Felder CC, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):F297-303
Irreversible inhibition of renal Na(+)-Pi cotransporter by alpha-bromophosphonoacetic acid. Szczepanska-Konkel M, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):C583-8

Affinity labelling of the folate-binding protein in pig intestine. Reisenauer AM. **Biochem J** 1990 Apr 1; 267(1):249-52

Competition of nucleoside transport inhibitors with binding of 6-[(4-nitrobenzyl)-mercapto]purine ribonucleoside to intact erythrocytes and ghost membranes from different species. Ogbunude PO, et al. **Biochem Pharmacol** 1990 Apr 1;39(7):1199-204

Structural requirement of monophosphates for inhibition of Na+-Pi cotransport in renal brush border membrane. Szczepanska-Konkel M, et al. **Biochem Pharmacol** 1989 Dec 1;38(23):4191-7

Lack of selectivity between anesthetic stereoisomers for an inhibitory site which is located on a membrane protein. Tas PW, et al. **Biochim Biophys Acta** 1990 Jul 9; 1026(1):40-2

Inhibition of Na-Ca exchange by general anesthetics. Haworth RA, et al. **Circ Res** 1989 Oct;65(4):1021-8

Thyroid hormone binding inhibition in critically ill patients--who is the inhibitor? Schifferdecker E, et al. **Exp Clin Endocrinol** 1990 Apr;95(2):267-70

Inhibition of the interactions of cofilin, destrin, and deoxyribonuclease I with actin by phosphoinositides. Yonezawa N, et al. **J Biol Chem** 1990 May 25; 265(15):8382-6

Inactivation of the rabbit parotid Na/K/Cl cotransporter by N-ethylmaleimide. George JN, et al. **J Membr Biol** 1989 Nov;112(1):51-8

Inhibition kinetics of carrier systems. Devés R, et al. **Methods Enzymol** 1989;171:113-32

Cadmium inhibition of L-alanine transport into renal brush border membrane vesicles isolated from the winter flounder (Pseudopleuronectes americanus). Bevan C, et al. **Toxicol Appl Pharmacol** 1989 Dec;101(3):461-9

BIOSYNTHESIS

Copper-induced production of copper-binding supernatant proteins by the marine bacterium Vibrio alginolyticus. Harwood-Sears V, et al. **Appl Environ Microbiol** 1990 May; 56(5):1327-32

Biosynthesis of a renin binding protein. Fukoshi K, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):265-70

Evidence that C4b-binding protein is an acute phase protein. Saeki T, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1446-51

cDNA cloning, primary structure and gene expression for H-protein, a component of the glycine-cleavage system (glycine decarboxylase) of pea (Pisum sativum) leaf mitochondria. Macherel D, et al. **Biochem J** 1990 Jun 15; 268(3):783-9

The sequence of the mouse 14 kDa beta-galactoside-binding lectin and evidence for its synthesis on free cytoplasmic ribosomes. Wilson TJ, et al. **Biochem J** 1989 Aug 1; 261(3):847-52

Induction of fatty acid binding protein by peroxisome proliferators in primary hepatocyte cultures and its relationship to the induction of peroxisomal beta-oxidation. Brandes R, et al. **Biochim Biophys Acta** 1990 Apr 23; 1034(1):53-61

Heat shock induces a decrease in incorporation of 8-azidoadenosine 5'-triphosphate into a 42 kilodalton protein in Drosophila salivary glands. Rooney RD, et al. **Biochim Biophys Acta** 1990 Apr 23;1034(1):102-6

Regulation of insulin-like growth factor (IGF)-binding protein synthesis by insulin and IGF-I in cultured bovine fibroblasts. Conover CA. **Endocrinology** 1990 Jun; 126(6):3139-45

Inhibitors of glucose uptake stimulate the production of insulin-like growth factor-binding protein (IGFBP-1) by human fetal liver. Lewitt MS, et al. **Endocrinology** 1990 Mar;126(3):1527-33

Endometrial protein secretion with respect to endometrial and ovarian function. Seppälä M, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Sep;36(3):250-7 (60 ref.)

Norepinephrine-induced synthesis of the uncoupling protein thermogenin (UCP) and its mitochondrial targeting in brown adipocytes differentiated in culture. Herron D, et al. **FEBS Lett** 1990 Jul 30;268(1):296-300

Expression of villin in the mouse oviduct and the seminiferous ducts. Horvat B, et al. **Histochemistry** 1990;93(6):661-3

Biosynthesis of nonspecific lipid transfer protein (sterol carrier protein 2) on free polyribosomes as a larger precursor in rat liver. Fujiki Y, et al. **J Biochem (Tokyo)** 1989 Dec;106(6):1126-31

Expression of the bile acid transport protein during liver development and in hepatoma cells. von Dippe P, et al. **J Biol Chem** 1990 Apr 15;265(11):5942-5

Mapping enteroendocrine cell populations in transgenic mice reveals an unexpected degree of complexity in cellular differentiation within the gastrointestinal tract. Roth KA, et al. **J Cell Biol** 1990 May;110(5):1791-801

Insulin regulation of insulin-like growth factor-binding protein production in cultured HepG2 cells. Conover CA, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):1062-7

Decreased expression of the growth hormone receptor and growth hormone binding protein in rat liver nodules. Levinovitz A, et al. **Mol Carcinog** 1990;3(3):157-64

Identification of rat cell lines that preferentially express insulin-like growth factor binding proteins rIGFBP-1, 2, or 3. Yang YW, et al. **Mol Endocrinol** 1990 Jan;4(1):29-38

The Salmonella typhimurium glycine cleavage enzyme system. Stauffer GV, et al. **Mol Gen Genet** 1989 Dec; 220(1):154-6

Induction of glia-derived nexin after lesion of a peripheral nerve. Meier R, et al. **Nature** 1989 Nov 30;342(6249):548-50

Biosynthesis of lipopolysaccharide-binding protein in rabbit hepatocytes. Ramadori G, et al. **Pathobiology** 1990; 58(2):89-94

Localization of antigen defined by a monoclonal antibody to human 32-kDa insulin-like growth factor-binding protein in the sheep uterus at preimplantation stages of pregnancy. Waites GT, et al. **Placenta** 1990 May-Jun; 11(3):233-40

BLOOD

Identification and partial characterization of a growth hormone-binding protein in rat serum. Emtner M, et al. **Acta Endocrinol (Copenh)** 1990 Mar;122(3):296-302

Human kallistatin, a new tissue kallikrein-binding protein: purification and characterization. Wang MY, et al. **Adv Exp Med Biol** 1989;247B:1-8

Red blood cell Na+/H+ and Li+/Na+ exchange in patients with essential hypertension. Semplicini A, et al. **Am J Hypertens** 1989 Dec;2(12 Pt 1):903-8

Expression of Zn-alpha 2-glycoprotein and PSP-94 in prostatic adenocarcinoma. An immunohistochemical study of 88 cases. Gagnon S, et al. **Am J Pathol** 1990 May; 136(5):1147-52

Plasma protein-mediated transport of steroid and thyroid hormones: further comment. Ekins P, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E394-7

Role of Mg in the activation of Na-H exchange in dog red cells. Parker JC, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):C1038-41

Human serum steroid-binding proteins and malignancy (review). Englebienne P. **Anticancer Res** 1989 Nov-Dec; 9(6):1769-76 (97 ref.)

Copper and cadmium binding proteins from liver and kidney of moose and reindeer. Wikner M, et al. **Arctic Med Res** 1988;47 Suppl 1:179-84

Effect of a high fat/cholesterol diet with or without eicosapentaenoic acid on plasma lipids, lipoproteins and lipid transfer protein activity in the marmoset. Abbey M, et al. **Atherosclerosis** 1990 Apr;81(3):163-74

Circulating levels of insulin-like growth factors increase and molecular forms of their serum binding proteins change with human pregnancy. Gargosky SE, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1157-63

Purification and measurement of calpromotin, the cytoplasmic protein which activates calcium-dependent potassium transport. Moore RB, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):146-53

Interaction between rat serum phosphorylcholine binding protein and platelet activating factor. Randell E, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):444-9

Identification of a novel binding protein for insulin-like growth factors in adult rat serum. Shimonaka M, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):189-95

Corticotropin-releasing factor-binding protein is a glycoprotein. Suda T, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):703-7

Fast effects of aldosterone on electrolytes in human lymphocytes are mediated by the sodium-proton-exchanger of the cell membrane. Wehling M, et al. **Biochem Biophys Res Commun** 1989 Nov 15; 164(3):961-7

Enkephalin-binding protein in human blood. Nakajima S, et al. **Biochem Int** 1989 Sep;19(3):529-36

Purification and characterization of a major phosphatidylserine-binding phosphoprotein from human platelets. Burgener R, et al. **Biochem J** 1990 Aug 1; 269(3):729-34

Identification of phosphatidylserine-binding proteins in human white blood cells. Wolf M, et al. **Biochem J** 1990 Aug 1;269(3):723-8

Association of plasma insulin-like growth factor 1 carrier protein in vivo. Ryan J, et al. **Biochem Soc Trans** 1990 Apr;18(2):335-6

Effects of blood storage on carrier mobility of the system L amino acid transporter in human erythrocytes. Ward HL, et al. **Biochem Soc Trans** 1989 Dec;17(6):1133-4

The interaction of cholesteryl ester transfer protein and unesterified fatty acids promotes a reduction in the particle size of high-density lipoproteins. Barter PJ, et al. **Biochim Biophys Acta** 1990 Jun 28;1045(1):81-9

Alteration of the aminophospholipid translocase activity during in vivo and artificial aging of human erythrocytes. Herrmann A, et al. **Biochim Biophys Acta** 1990 Aug 10; 1027(1):41-6

Presence of villin, a tissue-specific cytoskeletal protein, in sera of patients and an initial clinical evaluation of its value for the diagnosis and follow-up of colorectal cancers. Dudouet B, et al. **Cancer Res** 1990 Jan 15;50(2):438-43

Changes in iron, zinc, and copper concentrations in serum and in their binding to transport proteins after cholecystectomy and cardiac surgery. Fraser WD, et al. **Clin Chem** 1989 Nov;35(11):2243-7

Elevation of hormone-binding globulins in acute intermittent porphyria. Herrick AL, et al. **Clin Chim Acta** 1990 Feb 28;187(2):141-8

Diurnal variation of erythrocyte sodium-lithium countertransport rate and intracellular cation concentrations. Siebers RW, et al. **Clin Chim Acta** 1990 May;188(3):227-32

Serum growth hormone binding protein activity in healthy neonates, children and young adults: correlation with age, height and weight. Silbergeld A, et al. **Clin Endocrinol (Oxf)** 1989 Sep;31(3):295-303

The growth hormone independent insulin-like growth factor-I binding protein BP-28 is associated with serum insulin-like growth factor-I inhibitory bioactivity in adolescent insulin-dependent diabetics. Taylor AM, et al. **Clin Endocrinol (Oxf)** 1990 Feb;32(2):229-39

Leucocyte Na+/H+ antiport activity in type 1 (insulin-dependent) diabetic patients with nephropathy. Ng LL, et al. **Diabetologia** 1990 Jun;33(6):371-7

Effect of protein kinase C modulators on the leucocyte Na+/H+ antiport in type 1 (insulin-dependent) diabetic subjects with albuminuria. Ng LL. et al. **Diabetologia** 1990 May;33(5):278-84

The interrelationship of growth hormone (GH), liver membrane GH receptor, serum GH-binding protein activity, and insulin-like growth factor I in the male rat. Bick T, et al. **Endocrinology** 1990 Apr;126(4):1914-20

Insulin-like growth factor-I (IGF-I) infusion into hypophysectomized or protein-deprived rats induces specific IGF-binding proteins in serum. Clemmons DR, et al. **Endocrinology** 1989 Dec;125(6):2967-72

Regulation of serum insulin-like growth factor-I (IGF-I) and IGF binding proteins during rat pregnancy. Davenport ML, et al. **Endocrinology** 1990 Sep;127(3):1278-86

Human liver growth hormone receptor and plasma binding protein: characterization and partial purification. Hocquette JF, et al. **Endocrinology** 1990 Oct;127(4):1665-72

Dexamethasone increases hepatic insulin-like growth factor binding protein-1 (IGFBP-1) mRNA and serum IGFBP-1 concentrations in the rat. Luo J, et al. **Endocrinology** 1990 Sep;127(3):1456-62

Initial characterization and sexual dimorphism of serum growth hormone-binding protein in adult rats. Massa G, et al. **Endocrinology** 1990 Apr;126(4):1976-80

Hypophysectomy eliminates and growth hormone (GH) maintains the midpregnancy elevation in GH receptor and serum binding protein in the mouse. Sanchez-Jimenez F, et al. **Endocrinology** 1990 Feb;126(2):1270-5

Circulating levels of insulin-like growth factor binding protein-1 (IGFBP-1) and hepatic mRNA are increased in the small for gestational age (SGA) fetal rat. Unterman T, et al. **Endocrinology** 1990 Oct;127(4):2035-7

Regulation of low molecular weight insulin-like growth factor binding proteins in experimental diabetes mellitus. Unterman TG, et al. **Endocrinology** 1990 May; 126(5):2614-24

Exercise-induced changes in insulin-like growth factors and their low molecular weight binding protein in healthy subjects and patients with growth hormone deficiency. Bang P, et al. **Eur J Clin Invest** 1990 Jun;20(3):285-92

Serum TBG and thyroid hormone levels of patients on regular haemodialysis. Djurica SN, et al. **Exp Clin Endocrinol** 1989;94(3):313-8

Partial purification and characterization of the human erythrocyte Mg2(+)-ATPase. A candidate aminophospholipid translocase. Morrot G, et al. **FEBS Lett** 1990 Jun 18;266(1-2):29-32

Effect of naloxone on plasma insulin, insulin-like growth factor I, and its binding protein 1 in patients with polycystic ovarian disease. Laatikainen T, et al. **Fertil Steril** 1990 Sep; 54(3):434-7

Serum concentrations of two endometrial proteins are not useful for monitoring postmenopausal estrogen/progesterone therapy. Ren SG, et al. **Fertil Steril** 1990 Sep;54(3):532-4

A serum lectin (mannan-binding protein) has complement-dependent bactericidal activity. Kawasaki N, et al. **J Biochem (Tokyo)** 1989 Sep;106(3):483-9

Affinity of lipid transfer protein for lipid and lipoprotein particles as influenced by lecithin-cholesterol acyltransferase. Nishida HI, et al. **J Biol Chem** 1990 Mar 25;265(9):4876-83

The mechanism of carbohydrate-mediated complement activation by the serum mannan-binding protein. Ohta M, et al. **J Biol Chem** 1990 Feb 5;265(4):1980-4

[3H]bumetanide binding to avian erythrocyte membranes. Correlation with activation and deactivation of Na/K/2Cl cotransport. Pewitt EB, et al. **J Biol Chem** 1990 Aug 25; 265(24):14364-70

Sodium fluoride prevents receptor- and protein kinase C-mediated activation of the human platelet Na+/H+ exchanger without inhibiting its basic pHi-regulating activity. Siffert W, et al. **J Biol Chem** 1990 Sep 15; 265(26):15441-8

Role of the membrane skeleton in preventing the shedding of procoagulant-rich microvesicles from the platelet plasma membrane. Fox JE, et al. **J Cell Biol** 1990 Aug; 111(2):483-93

A new and convenient assay of growth hormone-binding protein activity in human serum. Amit T, et al. **J Clin Endocrinol Metab** 1990 Aug;71(2):474-80

Plasma transport of human growth hormone in vivo. Baumann G, et al. **J Clin Endocrinol Metab** 1990 Aug; 71(2):470-3

Circulating levels and molecular distribution of the acid-labile (alpha) subunit of the high molecular weight insulin-like growth factor-binding protein complex. Baxter RC. **J Clin Endocrinol Metab** 1990 May;70(5):1347-53

A specific radioimmunoassay for the growth hormone (GH)-dependent somatomedin-binding protein: its use for diagnosis of GH deficiency. Blum WF, et al. **J Clin Endocrinol Metab** 1990 May;70(5):1292–8

Age-related changes in serum insulin-like growth factor-binding proteins in women. Donahue LR, et al. **J Clin Endocrinol Metab** 1990 Sep;71(3):575–9

Insulin-like growth factor binding proteins in maternal serum throughout gestation and in the puerperium: effects of a pregnancy-associated serum protease activity. Giudice LC, et al. **J Clin Endocrinol Metab** 1990 Oct;71(4):806–16

Distribution and concentration of cholesteryl ester transfer protein in plasma of normolipemic subjects. Marcel YL, et al. **J Clin Invest** 1990 Jan;85(1):10–7

Glutaraldehyde fixation of the cAMP-dependent Na+/H+ exchanger in trout red cells. Motais R, et al. **J Gen Physiol** 1989 Aug;94(2):385–400

Effect of a neutralizing monoclonal antibody to cholesteryl ester transfer protein on the redistribution of apolipoproteins A-IV and E among human lipoproteins [published erratum appears in J Lipid Res 1989 Sep;30(9):1476] Bisgaier CL, et al. **J Lipid Res** 1989 Jul; 30(7):1025–31

Transport domain of the erythrocyte anion exchange protein. Bar-Noy S, et al. **J Membr Biol** 1990 May;115(3):217–28

Na+/H+ exchange is increased in sickle cell anemia and young normal red cells. Canessa M, et al. **J Membr Biol** 1990 Jun;116(2):107–15

Interaction among anion, cation and glucose transport proteins in the human red cell. Janoshazi A, et al. **J Membr Biol** 1989 Nov;112(1):25–37

Two affinity states for [3H]imipramine binding to the human platelet 5-hydroxytryptamine carrier: an explanation for the allosteric interaction between 5-hydroxytryptamine and imipramine. O'Riordan C, et al. **J Neurochem** 1990 Apr; 54(4):1275–80

Identification of transferrin as the major plasma carrier protein for manganese introduced orally or intravenously or after in vitro addition in the rat. Davidsson L, et al. **J Nutr** 1989 Oct;119(10):1461–4

Association of low levels of mannan-binding protein with a common defect of opsonisation. Super M, et al. **Lancet** 1989 Nov 25;2(8674):1236–9

Cholesteryl ester analogs inhibit cholesteryl ester but not triglyceride transfer catalyzed by the plasma cholesteryl ester-triglyceride transfer protein. Busch SJ, et al. **Lipids** 1990 Apr;25(4):216–20

Plasma lipid transfer activities in hyper-high-density lipoprotein cholesterolemic and healthy control subjects. Nakanishi T, et al. **Metabolism** 1990 Mar;39(3):225–30

Mannose/N-acetylglucosamine-binding proteins from mammalian sera. Kawasaki T, et al. **Methods Enzymol** 1989; 179:310–21

Identification of growth hormone binding protein in rat serum. Amit T, et al. **Mol Cell Endocrinol** 1990 Apr 17; 70(2):197–202

Detection of glycosylated growth hormone-binding proteins in rat serum. Haldosén LA, et al. **Mol Cell Endocrinol** 1990 Jan 22;68(2-3):187–94

Insulin-like growth factor 1 and its binding protein 1 during normal and diabetic pregnancies. Whittaker PG, et al. **Obstet Gynecol** 1990 Aug;76(2):223–9

Bovine and mouse serum beta inhibitors of influenza A viruses are mannose-binding lectins. Anders EM, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4485–9

Stoichiometry of net sodium and potassium fluxes mediated by the Na-K-Cl co-transport system in ferret red cells. Flatman PW. **Q J Exp Physiol** 1989 Nov;74(6):939–41

Protease nexin-II (amyloid beta-protein precursor): a platelet alpha-granule protein. Van Nostrand WE, et al. **Science** 1990 May 11;248(4956):745–8

Cyclophilin binding: a receptor-mediated approach to monitoring cyclosporine immunosuppressive activity following organ transplantation. Lorber MI, et al. **Transplant Proc** 1990 Jun;22(3):1240–4

[Placental protein 12 (PP 12)/insulin-like growth factor binding protein (IGF-bp) in pregnancy in metabolically healthy patients and diabetic patients with retinopathy] Briese V, et al. **Zentralbl Gynakol** 1989;111(18):1215–9 (Eng. Abstr.) **(Ger)**

[Significance of lipid transfer protein analysis in clinical tests] Sasaki N. **Nippon Rinsho** 1989 Dec;48 Suppl:534–7 **(Jpn)**

[Cation transport and calcium-induced hemolysis in the erythrocytes of patients with hypertension and in spontaneously hypertensive rats (comparative analysis)] Orlov SN, et al. **Kardiologiia** 1989 Jul;29(7):89–95 (Eng. Abstr.) **(Rus)**

[Transport of monovalent cations and calcium in erythrocytes of rats with spontaneous hypertension: study with fractions enriched with young and old cells] Pokudin NI, et al. **Kardiologiia** 1989 Aug;29(8):83–8 (Eng. Abstr.) **(Rus)**

[Increased Na+/H+ and Na+/Li+ erythrocyte metabolism in essential hypertension and in acid-induced peptic ulcer] Postnov IIu, et al. **Kardiologiia** 1990 Mar; 30(3):50–3 **(Rus)**

CHEMICAL SYNTHESIS

A simplified method for synthesizing juvenile hormone-protein conjugates. Goodman WG. **J Lipid Res** 1990 Feb;31(2):354–7

DEFICIENCY

Total deficiency of plasma cholesteryl ester transfer protein in subjects homozygous and heterozygous for the intron 14 splicing defect. Yamashita S, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1346–51

Accumulation of apolipoprotein E-rich high density lipoproteins in hyperalphalipoproteinemic human subjects with plasma cholesteryl ester transfer protein deficiency. Yamashita S, et al. **J Clin Invest** 1990 Sep;86(3):688–95

DIAGNOSTIC USE

Biotin-binding proteins: overview and prospects. Bayer EA, et al. **Methods Enzymol** 1990;184:49–51 (10 ref.)

DRUG EFFECTS

Activation of Cl-/OH- exchange by parachloromercuribenzoic acid in rabbit renal brush-border membranes. Karniski LP. **J Membr Biol** 1989 Nov; 112(1):59–66

Subcellular distribution of cyclic adenosine 3',5'-monophosphate-binding protein and estrogen receptors in control pituitaries and estrogen-induced pituitary tumors. Piroli G, et al. **J Natl Cancer Inst** 1990 Apr 4;82(7):596–601

GENETICS

Genetically determined alcohol preference and cyclic AMP binding proteins in mouse brain. Beeker KR, et al. **Alcoholism** 1990 Apr;14(2):158–64

Impaired cell volume regulation in Na(+)-H+ exchange-deficient mutants. Rotin D, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):C1158–65

Expression of the mammalian Na+-independent L system amino acid transporter in Xenopus laevis oocytes. Tate SS, et al. **Arch Biochem Biophys** 1989 Dec;275(2):591–6

Genetic variation in the cholesteryl ester transfer protein and apolipoprotein A-I genes and its relation to coronary heart disease in a Sri Lankan population. Mendis S, et al. **Atherosclerosis** 1990 Jul;83(1):21–7

Cloning and characterization of the growth hormone-dependent insulin-like growth factor binding protein (IGFBP-3) in the rat. Albiston AL, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):892–7

Several mammalian ubiquitin carrier proteins, but not E2(20K), are related to the 20-kDa yeast E2, RAD6. Berleth ES, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):705–10

Coordinated induction of two unrelated glucose-regulated protein genes by a calcium ionophore: human BiP/GRP78 and GAPDH. Chao CC, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):431–8

Expression of retinoic acid receptor genes and the ligand-binding selectivity of retinoic acid receptors (RAR's). Hashimoto Y, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1300–7

High level expression of p55, a thyroid hormone binding protein which is homologous to protein disulfide isomerase in a retroviral vector. Kato H, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):238–44

Molecular cloning of the cDNA coding for proline-rich protein (PRP): identity of PRP as C4b-binding protein. Matsuguchi T, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):138–44

The amino acid sequence of rat liver non-specific lipid transfer protein (sterol carrier protein 2) is present in a high molecular weight protein: evidence from cDNA analysis. Ossendorp BC, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):631–6

Complementary DNA structure of the high molecular weight rat insulin-like growth factor binding protein (IGF-BP3) and tissue distribution of its mRNA. Shimasaki S, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):907–12

A retinoic acid responsive gene, MK, produces a secreted protein with heparin binding activity. Tomomura M, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):603–9

Isolation and analysis of the human MEKA gene encoding a retina-specific protein. Watanabe Y, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):951–6

Amino acid sequence of chicken calsequestrin deduced from c DNA: comparison of calsequestrin and aspartactin. Yazaki PJ, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1089–95

Chromosomal assignment of the gene for the ubiquinone-binding protein of human mitochondrial cytochrome bc1 complex. Hosokawa Y, et al. **Biochem Int** 1990;21(1):41–4

Expression of rat liver Na+/L-alanine co-transport in Xenopus laevis oocytes. Effect of glucagon in vivo. Palacin M, et al. **Biochem J** 1990 Aug 15;270(1):189–95

Structure and evolutionary origin of the gene encoding a human serum mannose-binding protein. Taylor ME, et al. **Biochem J** 1989 Sep 15;262(3):763–71

Organization of the human cholesteryl ester transfer protein gene. Agellon LB, et al. **Biochemistry** 1990 Feb 13; 29(6):1372–6

Molecular analysis of the murine C4b-binding protein gene. Chromosome assignment and partial gene organization. Barnum SR, et al. **Biochemistry** 1989 Oct 17;28(21):8312–7

Homologous membrane folate binding proteins in human placenta: cloning and sequence of a cDNA. Ratnam M, et al. **Biochemistry** 1989 Oct 3;28(20):8249–54

Activation of the glucose-regulated gene (grp78) in regenerating rat liver is nonspecific and is related to acute phase response. Krawczyk Z, et al. **Biochim Biophys Acta** 1989 Dec 22;1009(3):237–43

Positive and negative regulation of gene transcription by a retinoic acid-thyroid hormone receptor heterodimer. Glass CK, et al. **Cell** 1989 Nov 17;59(4):697–708

Transcriptional antitermination in the bgl operon of E. coli is modulated by a specific RNA binding protein. Houman F, et al. **Cell** 1990 Sep 21;62(6):1153–63

A finger protein structurally similar to TFIIIA that binds exclusively to 5S RNA in Xenopus. Joho KE, et al. **Cell** 1990 Apr 20;61(2):293–300

TGF-beta 1 binding protein: a component of the large latent complex of TGF-beta 1 with multiple repeat sequences. Kanzaki T, et al. **Cell** 1990 Jun 15;61(6):1051–61

A putative GTP binding protein homologous to interferon-inducible Mx proteins performs an essential function in yeast protein sorting. Rothman JH, et al. **Cell** 1990 Jun 15;61(6):1063–74

Human granulosa cells contain insulin-like growth factor-binding protein (IGF BP-1) mRNA. Koistinen R, et al. **Clin Endocrinol (Oxf)** 1990 May;32(5):635–40

Characterization of a cDNA encoding rat sterol carrier protein2. Billheimer JT, et al. **DNA Cell Biol** 1990 Apr; 9(3):159–65

The predicted amino acid sequence of alpha-internexin is that of a novel neuronal intermediate filament protein. Fliegner KH, et al. **EMBO J** 1990 Mar;9(3):749–55

The amplified H circle of methotrexate-resistant leishmania tarentolae contains a novel P-glycoprotein gene. Ouellette M, et al. **EMBO J** 1990 Apr;9(4):1027–33

An abundant and ubiquitous homo-oligomeric ring-shaped ATPase particle related to the putative vesicle fusion proteins Sec18p and NSF. Peters JM, et al. **EMBO J** 1990 Jun;9(6):1757–67

Molecular characterization of two proteins involved in the excision of the conjugative transposon Tn1545: homologies with other site-specific recombinases. Poyart-Salmeron C, et al. **EMBO J** 1989 Aug;8(8):2425–33

The human ubiquitin carrier protein E2(Mr = 17,000) is homologous to the yeast DNA repair gene RAD6. Schneider R, et al. **EMBO J** 1990 May;9(5):1431–5

Overproduction of the regulatory subunit of the cAMP-dependent protein kinase blocks the differentiation of Dictyostelium discoideum. Simon MN, et al. **EMBO J** 1989 Jul;8(7):2039–43

Expression of insulin-like growth factor-I and insulin-like growth factor-binding protein-1 in the rat uterus during decidualization. Croze F, et al. **Endocrinology** 1990 Oct; 127(4):1995–2000

Effect of dietary protein deprivation on insulin-like growth factor (IGF)-I and -II, IGF binding protein-2, and serum albumin gene expression in rat. Straus DS, et al. **Endocrinology** 1990 Oct;127(4):1849–60

Characterization of the human cyclophilin gene and of related processed pseudogenes. Haendler B, et al. **Eur J Biochem** 1990 Jul 5;190(3):477–82

Analysis of the regulatory region of the Escherichia coli nupG gene, encoding a nucleoside-transport protein. Munch-Petersen A, et al. **Eur J Biochem** 1990 Jul 5; 190(3):547–51

DNA sequence of a citrate carrier of Klebsiella pneumoniae. van der Rest ME, et al. **Eur J Biochem** 1990 Apr 30; 189(2):401–7

Transfection of a mutant regulatory subunit gene of cAMP-dependent protein kinase causes increased drug sensitivity and decreased expression of P-glycoprotein. Abraham I, et al. **Exp Cell Res** 1990 Jul;189(1):133–41

Phenotypic similarity between T-cell antigen binding molecules. Cone RE, et al. **Exp Clin Immmunogenet** 1986; 3(4):208–18

Analysis of the DNA of patients with retinitis pigmentosa with a cellular retinaldehyde binding protein cDNA. Cotran PR, et al. **Exp Eye Res** 1990 Jul;51(1):15–9

Functional modes of retinoic acid in mouse osteoblastic clone MC3T3-E1, proved as a target cell for retinoic acid. Nakayama Y, et al. **FEBS Lett** 1990 Feb 12;261(1):93–6

Expression of retinoic acid receptor genes in keratinizing front of skin. Noji S, et al. **FEBS Lett** 1989 Dec 18; 259(1):86–90

Spatial and temporal expression pattern of retinoic acid receptor genes during mouse bone development. Noji S, et al. **FEBS Lett** 1989 Oct 23;257(1):93–6

Expression of retinoic acid receptor genes in neural crest-derived cells during mouse facial development. Osumi-Yamashita N, et al. **FEBS Lett** 1990 May 7; 264(1):71–4

Molecular cloning of an insect pheromone-binding protein. Raming K, et al. **FEBS Lett** 1989 Oct 9;256(1-2):215–8

Expression in Escherichia coli of the carboxy terminal domain of the BLAR sensory-transducer protein of Bacillus licheniformis as a water-soluble Mr 26,000 penicillin-binding protein. Joris B, et al. **FEMS Microbiol Lett** 1990 Jun 15;58(1):107–13

Yeast cyclophilin: isolation and characterization of the protein, cDNA and gene. Haendler B, et al. **Gene** 1989 Nov 15;83(1):39–46

Differential screening of a cDNA library with cDNA probes amplified in a heterologous host: isolation of murine GRP78 (BiP) and other serum-regulated low-abundance mRNAs.

Parfett CL, et al. **Gene** 1989 Oct 30;82(2):291–300
Synthesis of glia–derived nexin in yeast. Sommer J, et al. **Gene** 1989 Dec 28;85(2):453–9
The human RD protein is closely related to nuclear RNA–binding proteins and has been highly conserved. Surowy CS, et al. **Gene** 1990 Jun 15;90(2):299–302
The growth hormone–binding protein in rat serum is an alternatively spliced form of the rat growth hormone receptor. Baumbach WR, et al. **Genes Dev** 1989 Aug; 3(8):1199–205
Retinoic acid receptor expression vector inhibits differentiation of F9 embryonal carcinoma cells. Espeseth AS, et al. **Genes Dev** 1989 Nov;3(11):1647–56
The gene for insulin–like growth factor–binding protein–1 is localized to human chromosomal region 7p14–p12. Ekstrand J, et al. **Genomics** 1990 Mar;6(3):413–8
Cloning of the human genomic amiloride–sensitive Na+/H+ antiporter gene, identification of genetic polymorphisms, and localization on the genetic map of chromosome 1p. Lifton RP, et al. **Genomics** 1990 May; 7(1):131–5
Cloning and expression of human insulin–like growth factor binding protein 3. Spratt SK, et al. **Growth Factors** 1990; 3(1):63–72
The gene encoding human low–molecular weight insulin–like growth–factor binding protein (IGF–BP25): regional localization to 7p12–p13 and description of a DNA polymorphism. Alitalo T, et al. **Hum Genet** 1989 Nov; 83(4):335–8
Sequence analysis of the gene for the glucan–binding protein of Streptococcus mutans Ingbritt. Banas JA, et al. **Infect Immun** 1990 Mar;58(3):667–73
Nucleotide sequences of the sfuA, sfuB, and sfuC genes of Serratia marcescens suggest a periplasmic–binding–protein–dependent iron transport mechanism. Angerer A, et al. **J Bacteriol** 1990 Feb; 172(2):572–8
Nucleotide sequence and regulation of the Escherichia coli gene for ferrienterobactin transport protein FepB. Elkins MF, et al. **J Bacteriol** 1989 Oct;171(10):5443–51
Identification and sequence analysis of the Rhizobium meliloti dctA gene encoding the C4–dicarboxylate carrier. Engelke T, et al. **J Bacteriol** 1989 Oct;171(10):5551–60
Physiological consequences of the complete loss of phosphoryl–transfer proteins HPr and FPr of the phosphoenolpyruvate:sugar phosphotransferase system and analysis of fructose (fru) operon expression in Salmonella typhimurium. Feldheim DA, et al. **J Bacteriol** 1990 Sep; 172(9):5459–69
Cloning and nucleotide sequence of braC, the structural gene for the leucine–, isoleucine–, and valine–binding protein of Pseudomonas aeruginosa PAO. Hoshino T, et al. **J Bacteriol** 1989 Nov;171(11):6300–6
Sulfate and thiosulfate transport in Escherichia coli K–12: identification of a gene encoding a novel protein involved in thiosulfate binding. Hryniewicz M, et al. **J Bacteriol** 1990 Jun;172(6):3358–66
Rhizobium meliloti and Rhizobium leguminosarum dctD gene products bind to tandem sites in an activation sequence located upstream of sigma 54–dependent dctA promoters. Ledebur H, et al. **J Bacteriol** 1990 Jul; 172(7):3888–97
Overproduction of acetate kinase activates the phosphate regulon in the absence of the phoR and phoM functions in Escherichia coli. Lee TY, et al. **J Bacteriol** 1990 May; 172(5):2245–9
Topology of the Escherichia coli uhpT sugar–phosphate transporter analyzed by using TnphoA fusions. Lloyd AD, et al. **J Bacteriol** 1990 Apr;172(4):1688–93
In vivo cloning and characterization of the gabCTDP gene cluster of Escherichia coli K–12. Metzer E, et al. **J Bacteriol** 1990 Jun;172(6):3250–6
Export of FepA::PhoA fusion proteins to the outer membrane of Escherichia coli K–12. Murphy CK, et al. **J Bacteriol** 1989 Nov;171(11):5894–900
Surface topology of the Escherichia coli K–12 ferric enterobactin receptor. Murphy CK, et al. **J Bacteriol** 1990 May;172(5):2736–46
Cloning and expression of the ponB gene, encoding penicillin–binding protein 1B of Escherichia coli, in heterologous systems. Plá J, et al. **J Bacteriol** 1990 Aug; 172(8):4448–55
Fine–structure genetic map of the maltose transport operon of Salmonella typhimurium. Schneider E, et al. **J Bacteriol** 1989 Nov;171(11):5860–5
Sulfate and thiosulfate transport in Escherichia coli K–12: nucleotide sequence and expression of the cysTWAM gene cluster. Sirko A, et al. **J Bacteriol** 1990 Jun;172(6):3351–7
Glycerol facilitator of Escherichia coli: cloning of glpF and identification of the glpF product. Sweet G, et al. **J Bacteriol** 1990 Jan;172(1):424–30
Cloning and sequencing of a gene encoding a glutamate and aspartate carrier of Escherichia coli K–12. Wallace B, et al. **J Bacteriol** 1990 Jun;172(6):3214–20
Identification of BlaR, the signal transducer for beta–lactamase production in Bacillus licheniformis, as a penicillin–binding protein with strong homology to the OXA–2 beta–lactamase (class D) of Salmonella typhimurium. Zhu YF, et al. **J Bacteriol** 1990 Feb; 172(2):1137–41
Cloning and nucleotide sequences of livB and livC, the structural genes encoding binding proteins of the high–affinity branched–chain amino acid transport in Salmonella typhimurium. Ohnishi K, et al. **J Biochem (Tokyo)** 1990 Feb;107(2):202–8
The gene encoding the phosphatidylinositol transfer protein is essential for cell growth. Aitken JF, et al. **J Biol Chem** 1990 Mar 15;265(8):4711–7
Molecular analysis of the Escherichia coli ferric enterobactin receptor FepA. Armstrong SK, et al. **J Biol Chem** 1990 Aug 25;265(24):14536–43
Cloning of murine adipocyte lipid binding protein in Escherichia coli. Its purification, ligand binding properties, and phosphorylation by the adipocyte insulin receptor. Chinander LL, et al. **J Biol Chem** 1989 Nov 25; 264(33):19564–72
Insulin–like growth factor binding protein–3. Organization of the human chromosomal gene and demonstration of promoter activity. Cubbage ML, et al. **J Biol Chem** 1990 Jul 25;265(21):12642–9
Maturation of Escherichia coli maltose–binding protein by signal peptidase I in vivo. Sequence requirements for efficient processing and demonstration of an alternate cleavage site. Fikes JD, et al. **J Biol Chem** 1990 Feb 25; 265(6):3417–23
Gastrotropin: not an enterooxyntin but a member of a family of cytoplasmic hydrophobic ligand binding proteins. Gantz I, et al. **J Biol Chem** 1989 Dec 5;264(34):20248–54
Plasmids encoding PKI(1–31), a specific inhibitor of cAMP–stimulated gene expression, inhibit the basal transcriptional activity of some but not all cAMP–regulated DNA response elements in JEG–3 cells. Grove JR, et al. **J Biol Chem** 1989 Nov 25;264(33):19506–13
Expression of the hepatocyte Na+/bile acid cotransporter in Xenopus laevis oocytes. Hagenbuch B, et al. **J Biol Chem** 1990 Apr 5;265(10):5357–60
The inhibition of the iron responsive element RNA–protein interaction by heme does not mimic in vivo iron regulation. Haile DJ, et al. **J Biol Chem** 1990 Aug 5;265(22):12786–9
Molecular cloning and sequence analysis of cDNA encoding the macrophage lectin specific for galactose and N–acetylgalactosamine. Ii M, et al. **J Biol Chem** 1990 Jul 5;265(19):11295–8
Molecular cloning and sequence analysis of a cDNA encoding a porcine kidney renin–binding protein. Inoue H, et al. **J Biol Chem** 1990 Apr 25;265(12):6556–61
The 70–kDa peroxisomal membrane protein is a member of the Mdr (P–glycoprotein)–related ATP–binding protein superfamily. Kamijo K, et al. **J Biol Chem** 1990 Mar 15; 265(8):4534–40
Identification of the polyamine–induced protein as a periplasmic oligopeptide binding protein. Kashiwagi K, et al. **J Biol Chem** 1990 May 25;265(15):8387–91
Molecular cloning, transcriptional characterization, and sequencing of cDNA encoding the H–protein of the mitochondrial glycine decarboxylase complex in peas. Kim Y, et al. **J Biol Chem** 1990 Jan 15;265(2):848–53
cDNA cloning and tissue distribution of mRNAs for two proteins that are related to the band 3 Cl–/HCO3– exchanger. Kudrycki KE, et al. **J Biol Chem** 1990 Jan 5; 265(1):462–71
Tissue–specific expression in transgenic mice directed by the 5'–flanking sequences of the human gene encoding interphotoreceptor retinoid–binding protein. Liou GI, et al. **J Biol Chem** 1990 May 25;265(15):8373–6
Generation of diversity in nonerythroid spectrins. Multiple polypeptides are predicted by sequence analysis of cDNAs encompassing the coding region of human nonerythroid alpha–spectrin. Moon RT, et al. **J Biol Chem** 1990 Mar 15;265(8):4427–33
Destrin, a mammalian actin–depolymerizing protein, is closely related to cofilin. Cloning and expression of porcine brain destrin cDNA. Moriyama K, et al. **J Biol Chem** 1990 Apr 5;265(10):5768–73
A possible role of the beta–subunit of (Na,K)–ATPase in facilitating correct assembly of the alpha–subunit into the membrane. Noguchi S, et al. **J Biol Chem** 1990 Sep 15; 265(26):15991–5
Cloning, structure, and expression of a rat binding protein for polychlorinated biphenyls. Homology to the hormonally regulated progesterone–binding protein uteroglobin. Nordlund–Möller L, et al. **J Biol Chem** 1990 Jul 25;265(21):12690–3
Alpha– and beta–adrenergic induction of the expression of the uncoupling protein thermogenin in brown adipocytes differentiated in culture. Rehnmark S, et al. **J Biol Chem** 1990 Sep 25;265(27):16464–71
Common protein–binding sites in the 5'–flanking regions of human genes for cytochrome c1 and ubiquinone–binding protein. Suzuki H, et al. **J Biol Chem** 1990 May 15; 265(14):8159–63
Expression of the mammalian system A neutral amino acid transporter in Xenopus oocytes. Tarnuzzer RW, et al. **J Biol Chem** 1990 Aug 15;265(23):13914–7
Chinese hamster ovary cells deficient in peroxisomes lack the nonspecific lipid transfer protein (sterol carrier protein 2). van Heusden GP, et al. **J Biol Chem** 1990 Mar 5; 265(7):4105–10
A Pro to Gly mutation in the hinge of the arabinose–binding protein enhances binding and alters specificity. Sugar–binding and crystallographic studies. Vermersch PS, et al. **J Biol Chem** 1990 Sep 25;265(27):16592–603
Metal–tetracycline/H+ antiporter of Escherichia coli encoded by a transposon, Tn10. The role of the conserved dipeptide, Ser65–Asp66, in tetracycline transport. Yamaguchi A, et al. **J Biol Chem** 1990 Sep 15; 265(26):15525–30
Defective cation–coupling mutants of Escherichia coli Na+/proline symport carrier. Characterization and localization of mutations. Yamato I, et al. **J Biol Chem** 1990 Feb 15;265(5):2450–5
Atherogenic diet increases cholesteryl ester transfer protein messenger RNA levels in rabbit liver. Quinet EM, et al. **J Clin Invest** 1990 Feb;85(2):357–63
The Mac–2 antigen is a galactose–specific lectin that binds IgE. Cherayil BJ, et al. **J Exp Med** 1989 Dec 1; 170(6):1959–72
The human mannose–binding protein gene. Exon structure reveals its evolutionary relationship to a human pulmonary surfactant gene and localization to chromosome 10. Sastry K, et al. **J Exp Med** 1989 Oct 1;170(4):1175–89
The gene sequence and some properties of protein H. A novel IgG–binding protein. Gomi H, et al. **J Immunol** 1990 May 15;144(10):4046–52
Characterization and cloning of a bovine insulin–like growth factor–binding protein. Upton FZ, et al. **J Mol Endocrinol** 1990 Aug;5(1):77–84
The herpes simplex virus Us11 open reading frame encodes a sequence–specific RNA–binding protein. Roller RJ, et al. **J Virol** 1990 Jul;64(7):3463–70
Molecular cloning of a complementary DNA to rat cyclophilin–like protein mRNA. Iwai N, et al. **Kidney Int** 1990 Jun;37(6):1460–5
Expression of retinoic acid receptor mRNA in hematopoietic cells. Kizaki M, et al. **Leuk Res** 1990;14(7):645–55
Expression of retinoic acid receptor–alpha mRNA in human leukemia cells with variable responsiveness to retinoic acid. Gallagher RE, et al. **Leukemia** 1989 Nov;3(11):789–95
Amino acid sequence homology between cyclophilin and a cDNA–cloned antigen of Echinococcus granulosus. Lightowlers MW, et al. **Mol Biochem Parasitol** 1989 Oct; 36(3):287–9
Sequence conservation of a functional domain of erythrocyte binding antigen 175 in Plasmodium falciparum. Sim BK. **Mol Biochem Parasitol** 1990 Jun;41(2):293–5
Involvement of cyclic AMP–dependent protein kinases in the signal transduction pathway for interleukin–1. Chedid M, et al. **Mol Cell Biol** 1990 Jul;10(7):3824–7
Identification of a novel isoform of the retinoic acid receptor gamma expressed in the mouse embryo. Giguère V, et al. **Mol Cell Biol** 1990 May;10(5):2335–40
Cyclic AMP analogs and retinoic acid influence the expression of retinoic acid receptor alpha, beta, and gamma mRNAs in F9 teratocarcinoma cells. Hu L, et al. **Mol Cell Biol** 1990 Jan;10(1):391–6
Two chicken erythrocyte band 3 mRNAs are generated by alternative transcriptional initiation and differential RNA splicing. Kim HR, et al. **Mol Cell Biol** 1989 Nov; 9(11):5198–206
Characterization of phytochrome–regulated gene expression in a photoautotrophic cell suspension: possible role for calmodulin. Lam E, et al. **Mol Cell Biol** 1989 Nov; 9(11):4819–23
Hemin–induced transcriptional activation of the HSP70 gene during erythroid maturation in K562 cells is due to a heat shock factor–mediated stress response. Theodorakis NG, et al. **Mol Cell Biol** 1989 Aug;9(8):3166–73
Molecular cloning of a tissue–specific protein kinase (C gamma) from human testis—representing a third isoform for the catalytic subunit of cAMP–dependent protein kinase. Beebe SJ, et al. **Mol Endocrinol** 1990 Mar; 4(3):465–75
The expression of cAMP–dependent protein kinase subunits in primary rat hepatocyte cultures. Cyclic AMP down–regulates its own effector system by decreasing the amount of catalytic subunit and increasing the mRNAs for the inhibitory (R) subunits of cAMP–dependent protein kinase. Houge G, et al. **Mol Endocrinol** 1990 Mar;4(3):481–8
The rat 78,000 dalton glucose–regulated protein (GRP78) as a precursor for the rat steroidogenesis–activator polypeptide (SAP): the SAP coding sequence is homologous with the terminal end of GRP78. Li XA, et al. **Mol Endocrinol** 1989 Dec;3(12):1944–52
Identification and characterization of a rat decidual insulin–like growth factor–binding protein complementary DNA. Murphy LJ, et al. **Mol Endocrinol** 1990 Feb; 4(2):329–36
Different tissue distribution and hormonal regulation of messenger RNAs encoding rat insulin–like growth factor–binding proteins–1 and –2. Ooi GT, et al. **Mol Endocrinol** 1990 Feb;4(2):321–8
Sequence and chromosomal assignment of a novel cDNA identified by immunoscreening of a thyroid expression library: similarity to a family of mitochondrial solute carrier proteins. Zarrilli R, et al. **Mol Endocrinol** 1989 Sep; 3(9):1498–505
Cloning and nucleotide sequence of the gene braB coding for the sodium–coupled branched–chain amino acid carrier in Pseudomonas aeruginosa PAO. Hoshino T, et al. **Mol Gen Genet** 1990 Feb;220(3):461–7
The ami locus of the gram–positive bacterium Streptococcus pneumoniae is similar to binding protein–dependent transport operons of gram–negative bacteria. Alloing G, et al. **Mol Microbiol** 1990 Apr;4(4):633–44
Characterization of the hlyB gene and its role in the production of the El Tor haemolysin of Vibrio cholerae

O1. Alm RA, et al. **Mol Microbiol** 1990 Mar;4(3):413–25
Nucleotide sequences of the pbpX genes encoding the penicillin-binding proteins 2x from Streptococcus pneumoniae R6 and a cefotaxime-resistant mutant, C506. Laible G, et al. **Mol Microbiol** 1989 Oct;3(10):1337–48
The purine-cytosine permease gene of Saccharomyces cerevisiae: primary structure and deduced protein sequence of the FCY2 gene product. Weber E, et al. **Mol Microbiol** 1990 Apr;4(4):585–96
Multidrug resistance gene expression is controlled by steroid hormones in the secretory epithelium of the uterus. Arceci RJ, et al. **Mol Reprod Dev** 1990 Feb;25(2):101–9
Differential regulation of protein biosynthesis at translational level in the fat body cells of adult Locusta migratoria. Glinka AV, et al. **Mol Reprod Dev** 1989;1(4):278–82
Molecular basis of lipid transfer protein deficiency in a family with increased high-density lipoproteins. Brown ML, et al. **Nature** 1989 Nov 23;342(6248):448–51
Identification of a retinoic acid responsive element in the retinoic acid receptor beta gene. de Thé H, et al. **Nature** 1990 Jan 11;343(6254):177–80
Differential expression of genes encoding alpha, beta and gamma retinoic acid receptors and CRABP in the developing limbs of the mouse. Dollé P, et al. **Nature** 1989 Dec 7;342(6250):702–5
Structural model of ATP-binding proteins associated with cystic fibrosis, multidrug resistance and bacterial transport [see comments] Hyde SC, et al. **Nature** 1990 Jul 26; 346(6282):362–5 Comment in: Nature 1990 Jul 26;346(6282):312–3.
Nuclear receptor that identifies a novel retinoic acid response pathway. Mangelsdorf DJ, et al. **Nature** 1990 May 17; 345(6272):224–9
Relationship between the product of the Drosophila ultraspiracle locus and the vertebrate retinoid X receptor. Oro AE, et al. **Nature** 1990 Sep 20;347(6290):298–301
Identification of a novel retinoic acid receptor in regenerative tissues of the newt. Ragsdale CW Jr, et al. **Nature** 1989 Oct 19;341(6243):654–7
Structure and associated DNA-helicase activity of a general transcription initiation factor that binds to RNA polymerase II. Sopta M, et al. **Nature** 1989 Oct 5; 341(6241):410–4
Distinct patterns of cAMP-dependent protein kinase gene expression in mouse brain. Cadd G, et al. **Neuron** 1989 Jul; 3(1):71–9
The retinoic acid receptors. de Thé H, et al. **Nouv Rev Fr Hematol** 1990;32(1):30–2 (28 ref.)
Nucleotide sequence of the gene encoding a 20 kDa protein associated with the cap binding protein eIF-4E from Saccharomyces cerevisiae. Altmann M, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7520
A Chinese hamster ovary cyclophilin cDNA sequence. Bergsma DJ, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):200
RFLP for the human retinoic acid receptor gene RAR-beta. Datson NA, et al. **Nucleic Acids Res** 1989 Nov 11; 17(21):8897
The gene for cyclophilin (peptidyl-prolyl cis-trans isomerase) from Schizosaccharomyces pombe. de Martin R, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4917
Nucleotide sequence of a full-length cDNA coding for cyclophilin (peptidyl-prolyl cis-trans isomerase) of Saccharomyces cerevisiae. Dietmeier K, et al. **Nucleic Acids Res** 1990 Jan 25;18(2):373
Nucleotide sequence of the penicillin-binding protein 2B gene of Streptococcus pneumoniae strain R6. Dowson CG, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7518
Polymorphism in the APNH gene, detected by denaturing gradient gel electrophoresis. Dudley CR, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5326
Nucleotide sequence of a cDNA coding for mouse cyclophilin. Hasel KW, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):4019
Nucleotide sequence of the aroP gene encoding the general aromatic amino acid transport protein of Escherichia coli K-12: homology with yeast transport proteins [published erratum appears in Nucleic Acids Res 1990 Mar 11;18(5):1332] Honoré N, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):653
A second cyclophilin-related gene in Saccharomyces cerevisiae. Koser PL, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1643
Developmentally regulated transporter in Leishmania is encoded by a family of clustered genes. Stein DA, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1549–57
Nucleotide sequence of the gene coding for cyclophilin/peptidyl-prolyl cis-trans isomerase of Neurospora crassa. Tropschug M. **Nucleic Acids Res** 1990 Jan 11;18(1):190
EcoN I polymorphism in the human cholesteryl ester transfer protein (CEPT) gene. Zuliani G, et al. **Nucleic Acids Res** 1990 May 11;18(9):2834
Identification of cytosolic peroxisome proliferator binding protein as a member of the heat shock protein HSP70 family. Alvares K, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5293–7
Plasma membrane fatty acid-binding protein and mitochondrial glutamic-oxaloacetic transaminase of rat liver are related. Berk PD, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3484–8
Positively charged amino acid residues can act as topogenic determinants in membrane proteins. Boyd D, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9446–50
Developmentally regulated gene from Leishmania encodes a putative membrane transport protein. Cairns BR, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7682–6
Characterization of a genetically reconstituted high-affinity system for serotonin transport. Chang AS, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9611–5
Penicillin-resistant viridans streptococci have obtained altered penicillin-binding protein genes from penicillin-resistant strains of Streptococcus pneumoniae. Dowson CG, et al. **Proc Natl Acad Sci U S A** 1990 Aug; 87(15):5858–62
Horizontal transfer of penicillin-binding protein genes in penicillin-resistant clinical isolates of Streptococcus pneumoniae. Dowson CG, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8842–6
An interferon gamma-regulated protein that binds the interferon-inducible enhancer element of major histocompatibility complex class I genes. Driggers PH, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3743–7
Molecular cloning of cDNA encoding a second cellular retinoic acid-binding protein. Giguère V, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6233–7
Cloning of cDNA coding for the beta chain of human complement component C4b-binding protein: sequence homology with the alpha chain. Hillarp A, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1183–7
Murine isoforms of retinoic acid receptor gamma with specific patterns of expression. Kastner P, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2700–4
Cytosolic thyroid hormone-binding protein is a monomer of pyruvate kinase [published erratum appears in Proc Natl Acad Sci U S A 1990 Feb;87(4):1625] Kato H, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7861–5
Potential for two isoforms of the A1 ribonucleoprotein in Xenopus laevis. Kay BK, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1367–71
Physiological role during export for the retardation of folding by the leader peptide of maltose-binding protein. Liu G, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9213–7
Cloning, expression, and purification of human cyclophilin in Escherichia coli and assessment of the catalytic role of cysteines by site-directed mutagenesis. Liu J, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2304–8
Complementary DNA encoding the human T-cell FK506-binding protein, a peptidylprolyl cis-trans isomerase distinct from cyclophilin. Maki N, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5440–3
Retinoic acid, dibutyryl-cAMP, and differentiation affect the expression of retinoic acid receptors in F9 cells. Martin CA, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4804–8
Selective amplification of an mRNA and related pseudogene for a human ADP-ribosylation factor, a guanine nucleotide-dependent protein activator of cholera toxin. Monaco L, et al. **Proc Natl Acad Sci U S A** 1990 Mar; 87(6):2206–10
An essential member of the HSP70 gene family of Saccharomyces cerevisiae is homologous to immunoglobulin heavy chain binding protein. Nicholson RC, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1159–63
Expression and nucleotide sequence of a plasmid-determined divalent cation efflux system from Alcaligenes eutrophus. Nies DH, et al. **Proc Natl Acad Sci U S A** 1989 Oct; 86(19):7351–5
Human genes for the alpha and beta chains of complement C4b-binding protein are closely linked in a head-to-tail arrangement. Pardo-Manuel F, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4529–32
Identification and characterization of a Neisseria gonorrhoeae gene encoding a glycolipid-binding adhesin. Paruchuri DK, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):333–7
Spatial and temporal pattern of expression of the cellular retinoic acid-binding protein and the cellular retinol-binding protein during mouse embryogenesis [published erratum appears in Proc Natl Acad Sci U S A 1990 Feb;87(4):1626–7] Perez-Castro AV, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8813–7
Resistance to juvenile hormone and an insect growth regulator in Drosophila is associated with an altered cytosolic juvenile hormone-binding protein. Shemshedini L, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2072–6
Characterization of an autoregulated response element in the mouse retinoic acid receptor type beta gene. Sucov HM, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5392–6
A ubiquitin carrier protein from wheat germ is structurally and functionally similar to the yeast DNA repair enzyme encoded by RAD6. Sullivan ML, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9861–5
Sequence and structural similarities between the leucine-specific binding protein and leucyl-tRNA synthetase of Escherichia coli. Williamson RM, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4561–5
Size selected mRNA induces expression of P-aminohippurate transport in Xenopus oocytes. Kwon O, et al. **Proc Soc Exp Biol Med** 1989 Nov;192(2):205–8
Cloning and expression of a rat brain GABA transporter. Guastella J, et al. **Science** 1990 Sep 14;249(4974):1303–6
Structure and function of lipopolysaccharide binding protein. Schumann RR, et al. **Science** 1990 Sep 21; 249(4975):1429–31

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Synthetic peptide representing a T-cell epitope of CRM197 substitutes as carrier molecule in a Haemophilus influenzae type B (Hib) conjugate vaccine. Bixler GS Jr, et al. **Adv Exp Med Biol** 1989;251:175–80 (14 ref.)
Monoclonal antibodies to human secretory "pregnancy-associated endometrial alpha 1-globulin," an insulin-like growth factor binding protein: characterization and use in radioimmunoassay, Western blots, and immunohistochemistry. Bell SC, et al. **Am J Reprod Immunol** 1989 Jul;20(3):87–96
Small nuclear RNA associated proteins: autoantigens in connective tissue diseases. Van Venrooij WJ, et al. **Clin Exp Rheumatol** 1989 Nov-Dec;7(6):635–45 (73 ref.)
Immunization of sheep against modified peptides of gonadotropin releasing hormone conjugated to carriers. Goubau S, et al. **Domest Anim Endocrinol** 1989 Oct; 6(4):339–47
Generation and characterization of monoclonal antibodies to prostate secretory protein. Wright GL Jr, et al. **Int J Cancer** 1990 Jul 15;46(1):39–49
Serum antibodies to cow's milk folate-binding protein in patients with chronic inflammatory bowel disease. Høier-Madsen M, et al. **Int J Tissue React** 1989; 11(6):327–32
The rat hepatocyte plasma membrane organic anion binding protein is immunologically related to the mitochondrial F1 adenosine triphosphatase beta-subunit. Goeser T, et al. **J Clin Invest** 1990 Jul;86(1):220–7
Characterization of the growth hormone-binding protein of human serum using a panel of monoclonal antibodies. Barnard R, et al. **J Endocrinol** 1989 Nov;123(2):327–32
C4b-binding protein and a 60,000-Dalton plasma protein share antigenic determinants with membrane cofactor protein of complement. Seya T, et al. **J Immunol** 1990 Mar 15;144(6):2312–20
Anti-idiotypic antibodies derived against C8, C9 and perforin bind homologous restriction factor. Young JD, et al. **J Immunol Methods** 1990 Mar 27;128(1):133–42
Preparation and characterization of monoclonal antibodies to serotonin binding protein. Liu KP, et al. **J Neurochem** 1990 Sep;55(3):1013–21
Griffonia simplicifolia agglutinin-2-binding glycoprotein as a novel carbohydrate antigen of human colonic carcinoma. Nakayama J, et al. **Jpn J Cancer Res** 1990 Apr;81(4):388–95
Effect of priming with carrier on response to conjugate vaccine. Di John D, et al. **Lancet** 1989 Dec 16; 2(8677):1415–8
Structural characteristics influencing the carrier function of synthetic branched polypeptides based on poly[Lys-(DL-Ala)3)]backbone. Rajnavölgyi E, et al. **Mol Immunol** 1989 Oct;26(10):949–58
Insulin-like growth factor binding proteins (BP) from human placenta are immunologically related to the growth hormone dependent binding protein in adult human serum (BP-53). Fant M. **Placenta** 1990 Mar-Apr;11(2):123–33
CD14, a receptor for complexes of lipopolysaccharide (LPS) and LPS binding protein. Wright SD, et al. **Science** 1990 Sep 21;249(4975):1431–3
[Antigenic similarity of tetrodotoxin-sensitive cytoplasmic protein and nerve cell membrane proteins] Malysheva MK, et al. **Neirofiziologiia** 1989;21(4):485–9 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Isolation and characterization of the canalicular membrane bile acid transport protein of rat liver. Sippel CJ, et al. **Am J Physiol** 1990 May;258(5 Pt 1):G728–37
Tocopherol-binding proteins of hepatic cytosol. Kaplowitz N, et al. **Ann N Y Acad Sci** 1989;570:85–94 (10 ref.)
Characterization of an S-type lectin purified from porcine heart. Merkle RK, et al. **Arch Biochem Biophys** 1989 Nov 1;274(2):404–16
Purification and identification of a cytosolic factor required for import of precursors of mitochondrial proteins into mitochondria. Ono H, et al. **Arch Biochem Biophys** 1990 Aug 1;280(2):299–304
The fatty acid-binding protein from human skeletal muscle. Peeters RA, et al. **Arch Biochem Biophys** 1989 Nov 1; 274(2):556–63
Isolation of two novel adenosine binding proteins from bovine brain. Bembenek ME. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):702–8
Chromobindin A, a Ca2+- and ATP-dependent chromaffin granule-binding protein, is found in a variety of tissues and in yeast. Martin WH, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):37–42
Isolation and identification of a polypeptide in the Hsp 70 family that binds substance P. Oblas B, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):978–83
Study of estramustine binding protein (EMBP): purification of rat EMBP and establishment of RIA. Shiina H, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):947–55
The purification and characterization of a fatty acid binding protein specific to pig (Sus domesticus) adipose tissue. Armstrong MK, et al. **Biochem J** 1990 Apr 15;267(2):373–8
Purification of an apolipoprotein A binding protein from mouse adipose cells. Barbaras R, et al. **Biochem J** 1990 Aug 1;269(3):767–73
Active-site and membrane topology of the DD-peptidase/penicillin-binding protein no. 6 of

Enterococcus hirae (Streptococcus faecium) A.T.C.C. 9790. el Kharroubi A, et al. **Biochem J** 1989 Sep 1; 262(2):457–62

Acyl–CoA–binding protein in the rat. Purification, binding characteristics, tissue concentrations and amino acid sequence. Knudsen J, et al. **Biochem J** 1989 Sep 1; 262(2):513–9

A novel preparative method for the isolation of avidin and riboflavin–binding glycoprotein from chicken egg–white by the use of high–performance liquid chromatography. Piskarev VE, et al. **Biochem J** 1990 Jan 1;265(1):301–4

Affinity purification of cellular retinoic acid–binding protein on 14–carboxy–13–cis–retinamide–sepharose 4B. Singh RK, et al. **Biochem J** 1989 Sep 15;262(3):917–22

Human adipocyte lipid–binding protein: purification of the protein and cloning of its complementary DNA. Baxa CA, et al. **Biochemistry** 1989 Oct 31;28(22):8683–90

Purification and reconstitution of the sodium– and potassium–coupled glutamate transport glycoprotein from rat brain. Danbolt NC, et al. **Biochemistry** 1990 Jul 17; 29(28):6734–40

Heparin–binding lectin from human placenta: purification and partial molecular characterization and its relationship to basic fibroblast growth factors. Kohnke–Godt B, et al. **Biochemistry** 1989 Aug 8;28(16):6531–8

Identification and purification of the tricarboxylate carrier from rat liver mitochondria. Bisaccia F, et al. **Biochim Biophys Acta** 1989 Nov 23;977(2):171–6

Purification and characterization of glycolipid transfer protein from bovine brain. Brown RE, et al. **Biochim Biophys Acta** 1990 May 1;1044(1):77–83

Identification and reconstitution of the nucleoside transporter of CEM human leukemia cells. Crawford CR, et al. **Biochim Biophys Acta** 1990 May 24;1024(2):289–97

Purification and partial characterization of platelet–derived adherence–inhibiting factor in guinea pig. Iwabuchi K, et al. **Biochim Biophys Acta** 1989 Nov 30;999(2):183–91

Purification and partial characterization of a novel cellular retinol–binding protein, type three, from the piscine eyes. Nishiwaki S, et al. **Biochim Biophys Acta** 1990 Feb 9; 1037(2):192–9

Isolation and functional characterization of a mitogenic lectin from the marine sponge Cinachyrella alloclada. Atta AM, et al. **Braz J Med Biol Res** 1989;22(3):379–85

Active opioid binding protein from rat brain—a glycoprotein containing alpha–methyl–D–mannoside residues. Wang F, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Nov;10(6):481–4

Rabbit heart fatty acid–binding protein. Isolation, characterization, and application of a monoclonal antibody. Knowlton AA, et al. **Circ Res** 1989 Oct;65(4):981–8

Isolation and characterization of a fatty acid binding protein in adipose tissue of Gallus domesticus. Sams GH, et al. **Comp Biochem Physiol [B]** 1990;96(3):585–90

Insulin–like growth factor–binding proteins from vascular endothelial cells: purification, characterization, and intrinsic biological activities. Bar RS, et al. **Endocrinology** 1989 Oct;125(4):1910–20

Purification and characterization of angiotensin–binding protein from porcine liver cytosolic fraction. Hagiwara H, et al. **Eur J Biochem** 1989 Nov 6;185(2):405–10

Purification and characterization of lipopolysaccharide–binding protein from hemolymph of American cockroach Periplaneta americana. Jomori T, et al. **Eur J Biochem** 1990 May 31;190(1):201–6

Purification and characterization of a fatty–acid–binding protein from the gastric mucosa of rats. Possible identity with heart fatty–acid–binding protein and its parietal cell localization. Kanda T, et al. **Eur J Biochem** 1989 Oct 20; 185(1):27–33

Fatty–acid–binding protein from bovine brain. Amino acid sequence and some properties. Schoentgen F, et al. **Eur J Biochem** 1989 Oct 20;185(1):35–40

A novel peroxisomal nonspecific lipid–transfer protein from Candida tropicalis. Gene structure, purification and possible role in beta–oxidation. Tan H, et al. **Eur J Biochem** 1990 May 31;190(1):107–12

Complete amino acid sequence of pyrazine–binding protein from cow nasal mucosa. Tirindelli R, et al. **Eur J Biochem** 1989 Nov 20;185(3):569–72

Protein kinase C inhibitor proteins. Purification from sheep brain and sequence similarity to lipocortins and 14–3–3 protein. Toker A, et al. **Eur J Biochem** 1990 Jul 31; 191(2):421–9

Novel hyperglycosylated weak gelatin–binding fibronectin from human fetal placenta. Fractionation of a high poly(N–acetyllactosamine) fragment by tomato lectin affinity chromatography. Zhu BC, et al. **Eur J Biochem** 1990 Feb 22;188(1):67–71

Heme–binding plasma membrane proteins of K562 erythroleukemia cells: adsorption to heme–microbeads, isolation with affinity chromatography. Majuri R. **Eur J Haematol** 1989 Sep;43(3):220–5

RNA–binding protein–related sequence in a malaria antigen, clustered–asparagine–rich protein. Kuma K, et al. **FEBS Lett** 1990 Jan 15;260(1):67–9

What's all the FLAP about? A new 5–lipoxygenase–binding protein identified! Barrett TA, et al. **Gastroenterology** 1990 Oct;99(4):1185–6

Identification and purification of a 62,000–dalton protein that binds specifically to the polypyrimidine tract of introns. García–Blanco MA, et al. **Genes Dev** 1989 Dec; 3(12A):1874–86

Purification of 45 KDa estramustine binding protein (EMBP) and preparation of its antibody. Yuasa H, et al. **Hinyokika Kiyo** 1990 Feb;36(2):121–5

Purification and characterization of a novel phospholipid transfer protein from filamentous fungi. Grondin P, et al. **Int J Biochem** 1990;22(1):93–8

Purification and reconstitution of the tricarboxylate carrier from rat liver mitochondria. Bisaccia F, et al. **Ital J Biochem** 1990 May–Jun;39(3):167A–169A

Purification and reconstitution of the carnitine carrier from rat liver mitochondria. Indiveri C, et al. **Ital J Biochem** 1990 May–Jun;39(3):165A–167A

Purification and characterization of virginiae butanolide C–binding protein, a possible pleiotropic signal–transducer in Streptomyces virginiae. Kim HS, et al. **J Antibiot (Tokyo)** 1990 Jun;43(6):692–706

Separation of Escherichia coli penicillin–binding proteins into different membrane vesicles by agarose electrophoresis and sizing chromatography. Leidenix MJ, et al. **J Bacteriol** 1989 Oct;171(10):5680–6

A novel blood coagulation factor IX/factor X–binding protein with anticoagulant activity from the venom of Trimeresurus flavoviridis (Habu snake): isolation and characterization. Atoda H, et al. **J Biochem (Tokyo)** 1989 Nov;106(5):808–13

Identical properties of aldosterone and corticosterone binders and their presence in rat brain and kidney. Tashima Y, et al. **J Biochem (Tokyo)** 1989 Sep;106(3):446–54

Monocarboxylate and alpha–ketoglutarate carriers from bovine heart mitochondria. Purification by affinity chromatography on immobilized 2–cyano–4–hydroxycinnamate. Bolli R, et al. **J Biol Chem** 1989 Oct 25;264(30):18024–30

Tissue kallikrein–binding protein is a serpin. I. Purification, characterization, and distribution in normotensive and spontaneously hypertensive rats. Chao J, et al. **J Biol Chem** 1990 Sep 25;265(27):16394–401

Purification and characterization of a beta–1,3–glucan binding protein from plasma of the crayfish Pacifastacus leniusculus. Duvic B, et al. **J Biol Chem** 1990 Jun 5; 265(16):9327–32

Purification and molecular characterization of FAP, a feto–acinar protein associated with the differentiation of human pancreas. Escribano MJ, et al. **J Biol Chem** 1989 Dec 25;264(36):21865–71

Characterization of the catalytic subunit of an anion pump. Hsu CM, et al. **J Biol Chem** 1989 Oct 15;264(29):17349–54

Purification and crystallization of a retinoic acid–binding protein from rat epididymis. Identity with the major androgen–dependent epididymal proteins. Newcomer ME, et al. **J Biol Chem** 1990 Aug 5;265(22):12876–9

Identification and purification of a functional amine transporter from bovine chromaffin granules. Stern–Bach Y, et al. **J Biol Chem** 1990 Mar 5;265(7):3961–6

Cardiac fatty acid–binding proteins. Isolation and characterization of the mitochondrial fatty acid–binding protein and its structural relationship with the cytosolic isoforms. Unterberg C, et al. **J Biol Chem** 1990 Sep 25; 265(27):16255–61

The covalent structure of Acanthamoeba actobindin. Vandekerckhove J, et al. **J Biol Chem** 1990 Aug 5; 265(22):12801–5

Immunopurification and protease inhibitory properties of protease nexin–2/amyloid beta–protein precursor. Van Nostrand WE, et al. **J Biol Chem** 1990 Jun 15; 265(17):9591–4

Isolation and reconstitution of the chloride transporter of clathrin–coated vesicles. Xie XS, et al. **J Biol Chem** 1989 Nov 15;264(32):18870–3

Chromatographic method for the preparation of apo–cellular retinol–binding protein and apo–cellular retinoic acid–binding protein from their holo–types. Fukai F, et al. **J Chromatogr** 1989 Nov 17;482(1):107–15

Affinity chromatographic isolation of a major polyamine binding protein from serum and placenta, identified as serum albumin. Houen G. **J Chromatogr** 1990 Apr 27; 527(1):146–51

TSK–Toyopearl gels for the preparative separation of sterol carrier protein2 from rat liver. Oeda T, et al. **J Chromatogr** 1989 Nov 17;482(1):117–23

A second, lower affinity growth hormone–binding protein in human plasma. Baumann G, et al. **J Clin Endocrinol Metab** 1990 Mar;70(3):680–6

Characterization of insulin–like growth factor–binding proteins in human serum from patients with chronic renal failure. Liu F, et al. **J Clin Endocrinol Metab** 1990 Mar; 70(3):620–8

A human endothelial cell membrane protein that binds Staphylococcus aureus in vitro. Tompkins DC, et al. **J Clin Invest** 1990 Apr;85(4):1248–54

Characterization of insulin–like growth factor–binding proteins secreted by isolated sheep thyroid epitheliial cells. Wang JF, et al. **J Endocrinol** 1990 Jun;125(3):439–48

Lipid transfer particle in locust hemolymph: purification and characterization. Hirayama Y, et al. **J Lipid Res** 1990 May; 31(5):793–9

Rapid purification of human plasma lipid transfer proteins. Ohnishi T, et al. **J Lipid Res** 1990 Mar;31(3):397–406

Isolation of argiopinin–binding protein from bovine brain. Volkova TM, et al. **J Protein Chem** 1989 Jun;8(3):322–4

Solubilization and partial purification of S–adenosyl–L–homocysteine binding proteins from the rat brain. Fonlupt P, et al. **Membr Biochem** 1987–88; 7(4):219–30

Use of monoclonal antibodies to purify oligomycin sensitivity–conferring protein and to study its interactions with F0 and F1. Archinard P, et al. **Methods Enzymol** 1986; 126:455–60

Purification and characterization of polyadenylate–binding protein. Sachs AB, et al. **Methods Enzymol** 1990;181:332–52

Isolation of bilitranslocase, the anion transporter from liver plasma membrane for bilirubin and other organic anions. Sottocasa GL, et al. **Methods Enzymol** 1989;174:50–7

A 60 kDa protein from rabbit reticulocytes binds specifically to (part of) the leader sequence of beta–globin mRNA in a cap dependent manner. Schwemmle M, et al. **Mol Biol Rep** 1990;14(2–3):77–8

Affinity chromatography of HeLa splicing extracts on m7 GTP–sepharose and photoaffinity–labeling of cap–binding proteins with gamma–[(4–benzoylphenyl) methylamido]–7–methyl–guanosine–5'–triphosphate. Thalmann E, et al. **Mol Biol Rep** 1990;14(2–3):207

Telomere structure in Euplotes crassus: characterization of DNA–protein interactions and isolation of a telomere–binding protein. Price CM. **Mol Cell Biol** 1990 Jul;10(7):3421–31

Partial separation of platelet and placental adenosine receptors from adenosine A2–like binding protein. Zolnierowicz S, et al. **Mol Pharmacol** 1990 Apr;37(4):554–9

Molecular structure of the chick cerebellar kainate–binding subunit of a putative glutamate receptor. Gregor P, et al. **Nature** 1989 Dec 7;342(6250):689–92

A high yield affinity purification method for specific RNA–binding proteins: isolation of the iron regulatory factor from human placenta. Neupert B, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):51–5

Fatty acid–binding renal proteins. **Nutr Rev** 1989 Sep; 47(9):279–80 (3 ref.)

Solubilization and functional reconstitution of the branched–chain alpha–keto acid transporter from rat heart mitochondria. Hutson SM, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1028–31

Isolation of an inhibitory insulin–like growth factor (IGF) binding protein from bone cell–conditioned medium: a potential local regulator of IGF action. Mohan S, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8338–42

Structural and immunological identity of p65 tumor–associated factors from rat and mouse hepatocarcinomas. Hanausek–Walaszek M, et al. **Prog Clin Biol Res** 1990;331:109–20

[Isolation of polynectin and its comparison with fibronectin] Lin PN, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Dec; 11(6):412–6 (Eng. Abstr.) **(Chi)**

[Sodium conductin of the human brain: purification and functional characterization] Materne–De Rycker C. **Bull Mem Acad R Med Belg** 1989;144(8–9):426–33 (Eng. Abstr.) **(Fre)**

[Purification and characterization of insulin–like growth factor binding proteins (IGF–BP) in amniotic fluid—existence of a 160K IGF–BP] Iwashita M, et al. **Nippon Naibunpi Gakkai Zasshi** 1990 Jun 20;66(6):636–48 (Eng. Abstr.) **(Jpn)**

[A selective inhibitor of cAMP–dependent protein kinase isolated from an alkalophilic strain of Bacillus species] Murakami K, et al. **Nippon Saikingaku Zasshi** 1989 Nov; 44(6):789–96 (Eng. Abstr.) **(Jpn)**

[Purification and reconstitution of transport proteins from Escherichia coli] Hanada K. **Seikagaku** 1990 Jan; 62(1):49–52 **(Jpn)**

[Solubilization and various properties of NAD–binding receptor protein from rat brain synaptic membranes] Chichkovskaia GV, et al. **Ukr Biokhim Zh** 1990 Mar–Apr; 62(2):36–40 (Eng. Abstr.) **(Rus)**

[Tocopherol–binding proteins in membranes of rat liver mitochondria] Petrova GV, et al. **Ukr Biokhim Zh** 1990 Mar–Apr;62(2):29–35 (Eng. Abstr.) **(Rus)**

METABOLISM

An immunocytochemical study on the occurrence of liver fatty–acid–binding protein in the digestive organs of rats: specific localization in the D cells and brush cells. Iseki S, et al. **Acta Anat (Basel)** 1990;138(1):15–23

Folate coenzyme and antifolate transport proteins in normal and neoplastic cells. Freisheim JH, et al. **Adv Enzyme Regul** 1989;29:13–26

Mechanism and biological significance of the Ha–ras–induced activation of the Na+/H(+)–antiporter. Maly K, et al. **Adv Enzyme Regul** 1990;30:63–74

Visualization of membrane–associated folate transport proteins. Pope LE, et al. **Adv Enzyme Regul** 1989;28:3–11

Urate binding globulin, interactions with immunoglobulins. Mazzoni MR, et al. **Adv Exp Med Biol** 1989;253A:233–7

Oligosaccharide–mediated interactions of the envelope glycoprotein gp120 of HIV–1 that are independent of CD4 recognition. Larkin M, et al. **AIDS** 1989 Dec;3(12):793–8

In vivo estimates of hepatic binding protein concentration: correlation with classical indicators of hepatic functional reserve. Kudo M, et al. **Am J Gastroenterol** 1990 Sep; 85(9):1142–8

Fodrin as a differentiation marker. Redistributions in colonic neoplasia. Younes M, et al. **Am J Pathol** 1989 Dec; 135(6):1197–212

Gastrointestinal peptides activate Na(+)–H+ exchanger in

AR42J cells by increasing its affinity for intracellular H+. Bastié MJ, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):G958–66

Intracellular Ca transients in rat cardiac myocytes: role of Na–Ca exchange in excitation–contraction coupling. Bers DM, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C944–54

Basolateral cell membrane Ca–Na exchange in single rabbit connecting tubules. Bourdeau JE, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):F1497–503

Osmotic stimulation of Na(+)-K(+)-Cl- cotransport in squid giant axon is [Cl-]i dependent. Breitwieser GE, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):C749–53

Cl–HCO3 exchange and anion conductance in rat duodenal apical membrane vesicles. Brown CD, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):G661–7

Expression of the Na(+)-K(+)-2Cl- cotransporter in Xenopus oocytes. Burnham CE, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):F383–8

High-affinity paroxetine binding to the human placental serotonin transporter. Cool DR, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):C196–204

Na+–H+ antiporter of rat colonic basolateral membrane vesicles. Dudeja PK, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):G624–32

Intracellular pH regulates Na(+)-independent Cl(-)-base exchange in JTC-12 (proximal tubule) cells. Fineman I, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):F883–92

Hormonal interactions with the proximal Na(+)-H+ exchanger. Gesek FA, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):F514–21

Effects of alpha-adrenergic agonists on intracellular and intramitochondrial pH in rat proximal nephrons. Gesek FA, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):F623–30

Dual interactions between alpha 2-adrenoceptor agonists and the proximal Na(+)-H+ exchanger. Gesek FA, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):F636–42

Na(+)-H+ exchange in basolateral plasma membrane vesicles from neonatal rat liver. Goodrich AL, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):G334–9

Parathyroid hormone-induced translocation of Na–H antiporters in rat proximal tubules. Hensley CB, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):C637–45

Na(+)-H+ exchange, but not Na(+)-K(+)-ATPase, is present in endosome-enriched microsomes from rabbit renal cortex. Hilden SA, et al. **Am J Physiol** 1990 May; 258(5 Pt 2):F1311–9

Adaptation of rabbit renal cortical Na+–H+ exchange activity in chronic hypocapnia. Hilden SA, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):F615–22

Kinetic mechanism of ATP action in Na(+)-K(+)-Cl- cotransport of HeLa cells determined by Rb+ influx studies. Ikehara T, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):C599–609

Na(+)-K(4)-Cl- cotransport in cultured cells derived from human retinal pigment epithelium. Kennedy BG. **Am J Physiol** 1990 Jul;259(1 Pt 1):C29–34

Characteristics of apical Cl–HCO3 exchanger of bicarbonate-secreting cells in turtle bladder. Kohn OF, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):F9–14

Direct evidence for apical Na+:2Cl-:K+ cotransport in macula densa cells. Lapointe JY, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1466–9

Transport characteristics of renal brush border Na(+)- and K(+)-dependent uridine carriers. Lee CW, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1203–10

Early selective effects of gentamicin on renal brush-border membrane Na–Pi cotransport and Na–H exchange. Levi M, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1379–87

Calcium and alpha-adrenergic regulation of Na–Cl(K) cotransport in rabbit tracheal epithelial cells. Liedtke CM. **Am J Physiol** 1990 Aug;259(2 Pt 1):L66–72

Regulatory volume increase in mammalian jejunal villus cells is due to bumetanide-sensitive NaKCl2 cotransport. MacLeod RJ, et al. **Am J Physiol** 1990 May;258(5 Pt 1):G665–74

Polarity and kinetics of Na(+)-H+ exchange in cultured opossum kidney cells. Montrose MH, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):C121–33

Na(+)-H+ exchange in choroid plexus and CSF in acute metabolic acidosis or alkalosis. Murphy VA, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):F1528–37

Intracellular pH regulation in rabbit S3 proximal tubule: basolateral Cl–HCO3 exchange and Na–HCO3 cotransport. Nakhoul NL, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):F371–81

Mechanism of angiotensin II stimulation of Na–K–Cl cotransport of vascular smooth muscle cells. Owen NE, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):C629–36

Na(+)-H+ exchange in cardiac sarcolemmal vesicles isolated from diabetic rats. Pierce GN, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):H255–61

cAMP-binding proteins in epithelial cells cultured from human sweat glands. Pon DJ, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1036–43

Sodium-phosphate cotransport in OK cells: inhibition by PTH and "adaptation" to low phosphate. Quamme G, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):F967–73

Essential activation of Na(+)-H+ exchange by [H+]i in HL-60 cells. Restrepo D, et al. **Am J Physiol** 1990 Sep; 259(3 Pt 1):C490–502

Regional localization of renal Na(+)-H+ antiporter: response to respiratory acidosis. Ruiz OS, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):F512–8

Na+(Li+)-H+ exchange in rat renal cortical vesicles with endosomal characteristics. Sabolić I, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1245–53

Angiotensin II stimulation of Na(+)-H+ exchange in proximal tubule cells. Saccomani G, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1188–95

Sulfated bile acids inhibit Na(+)-H+ antiport in human kidney brush-border membrane vesicles. Sellinger M, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):F986–91

Electrogenic sodium-proton exchange in membrane vesicles from crab (Carcinus maenas) gill. Shetlar RE, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R924–31

Identification of taurocholate binding sites in ileal plasma membrane. Simon FR, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):G394–401

Expression of Na(+)-H+ exchange and ATP-dependent proton extrusion in growing rat IMCD cells. Stanton RC, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):C416–20

Ontogenetic development of nutrient transporters in bullfrog intestine. Toloza EM, et al. **Am J Physiol** 1990 May;258(5 Pt 1):G760–9

Ontogenetic development of transporter regulation in bullfrog intestine. Toloza EM, et al. **Am J Physiol** 1990 May;258(5 Pt 1):G770–3

Role of Na(+)-H+ and Cl(-)-HCO3- antiports in the regulation of cytosolic pH near neutrality. Tønnessen TI, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1117–26

Identification of a 50-kDa Ca-, cAMP-, and cGMP-dependent epithelial phosphoprotein as a cAMP regulatory protein. Toskulkao C, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C889–901

Vasoactive intestinal peptide stimulates active K+ transport and Na(+)-K(+)-Cl- cotransport in HT-29 cells. Turner JT, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C266–73

Acidification and intracellular sodium ion activity during stimulated myocardial ischemia. Vanheel B, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):C169–79

Regulation of renal Na(+)-H+ exchanger by cAMP-dependent protein kinase. Weinman EJ, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1254–8

Stimulation by thyroid hormone of Na+-H+ exchange activity in cultured opossum kidney cells. Yonemura K, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):F333–8

Heparin inhibits Na(+)-H+ exchange in vascular smooth muscle cells. Zaragoza R, et al. **Am J Physiol** 1990 Jan; 258(1 Pt 1):C46–53

In vitro binding of retinoids to the nuclear retinoic acid receptor alpha. Cavey MT, et al. **Anal Biochem** 1990 Apr; 186(1):19–23

Hepatocellular fatty acid uptake is mediated by a plasma membrane fatty acid binding protein closely related to mitochondrial glutamic oxaloacetic transaminase. Berk PD, et al. **Ann N Y Acad Sci** 1990;585:379–85

Cytotactin and cytotactin-binding proteoglycan. An interactive pair of extracellular matrix proteins. Hoffman S, et al. **Ann N Y Acad Sci** 1990;580:288–301 (30 ref.)

Protease nexin I immunostaining in Alzheimer's disease. Rosenblatt DE, et al. **Ann Neurol** 1989 Nov;26(5):628–34

Carbohydrates and carbohydrate-binding proteins in the nervous system. Jessell TM, et al. **Annu Rev Neurosci** 1990; 13:227–55 (169 ref.)

Folate-binding proteins. Henderson GB. **Annu Rev Nutr** 1990;10:319–35 (98 ref.)

Identification of a group of Haemophilus influenzae penicillin-binding proteins that may have complementary physiological roles. Malouin F, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):363–5

Further characterization of borderline methicillin-resistant Staphylococcus aureus and analysis of penicillin-binding proteins. Montanari MP, et al. **Antimicrob Agents Chemother** 1990 May;34(5):911–3

Affinities of SM-7338 for penicillin-binding proteins and its release from these proteins in Staphylococcus aureus. Sumita Y, et al. **Antimicrob Agents Chemother** 1990 Mar; 34(3):484–6

New mechanism for methicillin resistance in Staphylococcus aureus: clinical isolates that lack the PBP 2a gene and contain normal penicillin-binding proteins with modified penicillin-binding capacity. Tomasz A, et al. **Antimicrob Agents Chemother** 1989 Nov;33(11):1869–74

Penicillin-binding protein 3 of Listeria monocytogenes as the primary lethal target for beta-lactams. Vicente MF, et al. **Antimicrob Agents Chemother** 1990 Apr;34(4):539–42

In vitro antibacterial activity and interactions with beta-lactamases and penicillin-binding proteins of the new monocarbam antibiotic U-78608. Zurenko GE, et al. **Antimicrob Agents Chemother** 1990 May;34(5):884–8

Streptozotocin-induced alterations in the levels of functional mitochondrial anion transport proteins. Kaplan RS, et al. **Arch Biochem Biophys** 1990 Jul;280(1):181–91

Cooperative regulation of the Na+/H(+)-antiporter in Halobacterium halobium by delta pH and delta phi. Murakami N, et al. **Arch Biochem Biophys** 1990 Aug 15; 281(1):13–20

The dopamine transporter and cytochrome P45OIID1 (debrisoquine 4-hydroxylase) in brain: resolution and identification of two distinct [3H]GBR-12935 binding proteins. Niznik HB, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):424–32

Enhanced activity of the tricarboxylate carrier and modification of lipids in hepatic mitochondria from hyperthyroid rats. Paradies G, et al. **Arch Biochem Biophys** 1990 May 1;278(2):425–30

Lactate transport is mediated by a membrane-bound carrier in rat skeletal muscle sarcolemmal vesicles. Roth DA, et al. **Arch Biochem Biophys** 1990 Jun;279(2):377–85

Fatty acid binding proteins in bovine intestinal mucosa. Palacios A, et al. **Arch Int Physiol Biochim** 1989 Dec; 97(6):441–6

Effect of fish oil on lipoproteins, lecithin:cholesterol acyltransferase, and lipid transfer protein activity in humans. Abbey M, et al. **Arterioscler Thromb** 1990 Jan–Feb; 10(1):85–94

Investigation of lipid transfer in human serum leading to the development of an isotopic method for the determination of endogenous cholesterol esterification and transfer. Channon KM, et al. **Atherosclerosis** 1990 Jan;80(3):217–26

Interaction of some antiarrhythmic drugs with the heart sarcolemmal Na+-Ca2+ exchange system. Eyolfson DA, et al. **Basic Res Cardiol** 1989 Jul–Aug;84(4):414–20

Regulation of thyroid hormone binding to its cytosolic binding protein by L-alpha-alanine. Ashizawa K, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):587–92

Separate regulatory control of apical and basolateral Na+/H+ exchange in renal epithelial cells. Casavola V, et al. **Biochem Biophys Res Commun** 1989 Dec 15; 165(2):833–7

The presence of a 33–40 KDa gastrin binding protein on human and mouse colon cancer. Chicone L, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):512–9

Apical plasma membrane vesicles formed from organ donor colon demonstrate Na+ and H+ conductances and Na+/H+ exchange. Harig JM, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):438–43

Thyroid hormone binding protein contains glycosylation site binding protein activity. Kimura H, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1319–24

cAMP activates Na+/H+ antiporter in murine macrophages. Kong SK, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):131–7

Solubilization and functional reconstitution of the DCCD-sensitive Na+/H(+)-antiporter from Halobacterium halobium. Konishi T, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1339–45

Interrelationship between growth factor-induced activation of the Na+/H(+)-antiporter and mobilization of intracellular Ca2+ in NIH3T3-fibroblasts. Maly K, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):1206–13

Spatial and temporal expression of cellular retinoic acid binding protein (CRABP) along the anteroposterior axis in the central nervous system of mouse embryos. Momoi T, et al. **Biochem Biophys Res Commun** 1990 Jun 29; 169(3):991–6

Effect of anthracycline antibiotics on the reconstituted mitochondrial tricarboxylate carrier. Stipani I, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1281–7

Normal molecular size of the Na(+)-phosphate cotransporter and normal Na(+)-dependent binding of phosphonoformic acid in renal brush border membranes of X-linked Hyp mice. Tenenhouse HS, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1288–93

A carcinoembryonic antigen (CEA) binding protein from ascites influences CEA uptake by macrophages. Toth CA, et al. **Biochem Biophys Res Commun** 1990 Sep 14; 171(2):633–40

Taipoxin-binding protein on synaptic membranes: identification by affinity labeling. Tzeng MC, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):689–94

Effects of inhibition of N-linked glycosylation by tunicamycin on nucleoside transport polypeptides of L1210 leukemia cells. Hogue DL, et al. **Biochem Cell Biol** 1990 Jan;68(1):199–209

Evidence for an essential sulfhydryl group at the substrate binding site of the A-system transporter of Ehrlich cell plasma membranes. McCormick J, et al. **Biochem Cell Biol** 1990 Feb;68(2):512–9

Molecular sizes of amino acid transporters in the luminal membrane from the kidney cortex, estimated by the radiation-inactivation method. Béliveau R, et al. **Biochem J** 1990 May 15;268(1):195–200

Differential interactions of human kallikrein-binding protein and alpha 1-antitrypsin with human tissue kallikrein. Chen LM, et al. **Biochem J** 1990 Apr 1;267(1):79–84

The sequence of the major protein stored in ovine ceroid lipofuscinosis is identical with that of the dicyclohexylcarbodiimide-reactive proteolipid of mitochondrial ATP synthase. Fearnley IM, et al. **Biochem J** 1990 Jun 15;268(3):751–8

Oxidation--reduction midpoint potentials of the flavin, haem and Mo-pterin centres in spinach (Spinacia oleracea L.) nitrate reductase. Kay CJ, et al. **Biochem J** 1989 Oct 1; 263(1):285–7

Diazepam-binding inhibitor: a neuropeptide and/or an acyl-CoA ester binding protein? Knudsen J, et al. **Biochem J** 1990 Feb 1;265(3):927–9

Extracellular Na+, but not Na+/H+ exchange, is necessary for receptor-mediated arachidonate release in platelets. Krishnamurthi S, et al. **Biochem J** 1990 Jan 1;265(1):155–60

Cytosolic copper-binding proteins in rat and mouse hepatocytes incubated continuously with Cu(II). Palida FA, et al. **Biochem J** 1990 Jun 1;268(2):359–66

Comparison of the binding affinities of acyl-CoA-binding protein and fatty-acid-binding protein for long-chain

acyl-CoA esters. Rasmussen JT, et al. **Biochem J** 1990 Feb 1;265(3):849-55

Granulocyte-macrophage colony-stimulating factor can stimulate macrophage proliferation via persistent activation of Na+/H+ antiport. Evidence for two distinct roles for Na+/H+ antiport activation. Vallance SJ, et al. **Biochem J** 1990 Jan 15;265(2):359-64

Binding affinities of retinoids to fetal cellular retinoic acid-binding protein (CRABP) in relation to their teratogenic potency in hamsters. Howard WB, et al. **Biochem Pharmacol** 1990 Aug 1;40(3):643-8

Structural elements pertinent to the interaction of cyclosporin A with its specific receptor protein, cyclophilin. Hsu VL, et al. **Biochem Pharmacol** 1990 Jul 1;40(1):131-40

Effects of insulin-like growth factors on protein metabolism: why are some molecular variants more potent? Ballard FJ, et al. **Biochem Soc Symp** 1989;55:91-104

HABP102: a hyaluronan-binding protein from Swarm rat chondrosarcoma. Crossman M, et al. **Biochem Soc Trans** 1990 Apr;18(2):295-6

Synthesis of azidotubulin: a photoaffinity label for tubulin-binding proteins. Balczon RD, et al. **Biochemistry** 1989 Oct 17;28(21):8490-6

Affinity labeling of the folate-methotrexate transporter from Leishmania donovani. Beck JT, et al. **Biochemistry** 1989 Aug 22;28(17):6931-7

Kinetic properties of the K+/H+ antiport of heart mitochondria. Brierley GP, et al. **Biochemistry** 1990 Jan 16;29(2):408-15

Acidic phospholipids strikingly potentiate sterol carrier protein 2 mediated intermembrane sterol transfer. Butko P, et al. **Biochemistry** 1990 May 1;29(17):4070-7

Transbilayer movement of phosphatidylserine in nonhuman erythrocytes: evidence that the aminophospholipid transporter is a ubiquitous membrane protein. Connor J, et al. **Biochemistry** 1989 Dec 12;28(25):9680-5

Substrate specificities of the peptidyl prolyl cis-trans isomerase activities of cyclophilin and FK-506 binding protein: evidence for the existence of a family of distinct enzymes. Harrison RK, et al. **Biochemistry** 1990 Apr 24; 29(16):3813-6

Intramolecular electron transfer in proteins. Radiolysis study of the reductive activation of daunorubicin complexed in egg white apo-riboflavin binding protein. Houée-Levin C, et al. **Biochemistry** 1989 Dec 12;28(25):9848-54

Soluble and membrane-associated human low-affinity adenosine binding protein (adenotin): properties and homology with mammalian and avian stress proteins. Hutchison KA, et al. **Biochemistry** 1990 May 29; 29(21):5138-44

Distinction between the two basic mechanisms of cation transport in the cardiac Na(+)-Ca2+ exchange system. Khananshvili D. **Biochemistry** 1990 Mar 13;29(10):2437-42

An amphitropic cAMP-binding protein in yeast mitochondria. 1. Synergistic control of the intramitochondrial location by calcium and phospholipid. Müller G, et al. **Biochemistry** 1989 Dec 26;28(26):9957-67

An amphitropic cAMP-binding protein in yeast mitochondria. 2. Phospholipid nature of the membrane anchor. Müller G, et al. **Biochemistry** 1989 Dec 26; 28(26):9968-73

An amphitropic cAMP-binding protein in yeast mitochondria. 3. Membrane release requires both Ca2(+)-dependent phosphorylation of the cAMP-binding protein and a phospholipid-activated mitochondrial phospholipase. Müller G, et al. **Biochemistry** 1989 Dec 26; 28(26):9974-81

Escherichia coli initiation factor 3 protein binding to 30S ribosomal subunits alters the accessibility of nucleotides within the conserved central region of 16S rRNA. Muralikrishna P, et al. **Biochemistry** 1989 Sep 19; 28(19):7505-10

Identification of the sodium-calcium exchanger as the major ricin-binding glycoprotein of bovine rod outer segments and its localization to the plasma membrane. Reid DM, et al. **Biochemistry** 1990 Feb 13;29(6):1601-7

p10 single-stranded nucleic acid binding protein from murine leukemia virus binds metal ions via the peptide sequence Cys26-X2-Cys29-X4-His34-X4-Cys39. Roberts WJ, et al. **Biochemistry** 1989 Dec 26;28(26):10043-7

Energetics of reserpine binding and occlusion by the chromaffin granule biogenic amine transporter. Rudnick G, et al. **Biochemistry** 1990 Jan 23;29(3):603-8

Affinity of interactions between human glucocorticoid receptors and DNA: at physiologic ionic strength, stable binding occurs only with DNAs containing partially symmetric glucocorticoid response elements. Tully DB, et al. **Biochemistry** 1990 Jul 17;29(28):6662-70

The small molecular mass ubiquinone-binding protein (QPc-9.5 kDa) in mitochondrial ubiquinol-cytochrome c reductase: isolation, ubiquinone-binding domain, and immunoinhibition. Usui S, et al. **Biochemistry** 1990 May 15;29(19):4618-26

13C and 15N NMR studies on the interaction between 6,7-dimethyl-8-ribityllumazine and lumazine protein. Vervoort J, et al. **Biochemistry** 1990 Feb 20;29(7):1823-8

Sulfhydryl groups in glycolipid transfer protein: formation of an intramolecular disulfide bond and oligomers by Ca2+-catalyzed oxidation. Abe A, et al. **Biochim Biophys Acta** 1989 Oct 2;985(1):38-44

Formation of an intramolecular disulfide bond of glycolipid transfer protein. Abe A, et al. **Biochim Biophys Acta** 1989 Oct 2;985(1):45-50

Lipid transfer between human plasma low-density lipoprotein and a triolein/phospholipid microemulsion catalyzed by insect hemolymph lipid transfer particle. Ando S, et al. **Biochim Biophys Acta** 1990 Apr 17; 1043(3):289-94

Unique tissue distribution of two distinct cellular retinoic acid binding proteins in neonatal and adult rat. Bailey JS, et al. **Biochim Biophys Acta** 1990 Mar 26;1033(3):267-72

Effect of staurosporine on the phorbol ester-induced activation of the Na+/H+ antiporter in smooth muscle cells. Boscoboinik DO, et al. **Biochim Biophys Acta** 1990 May 22;1052(3):499-502

Uptake and phosphorylation of phosphatidylinositol by rat liver nuclei. Role of phosphatidylinositol transfer protein. Capitani S, et al. **Biochim Biophys Acta** 1990 May 22; 1044(2):193-200

Loss of membrane phospholipid asymmetry in platelets and red cells may be associated with calcium-induced shedding of plasma membrane and inhibition of aminophospholipid translocase. Comfurius P, et al. **Biochim Biophys Acta** 1990 Jul 24;1026(2):153-60

Multiple modifications in the phosphoproteins bound to stored messenger RNA in Xenopus oocytes. Cummings A, et al. **Biochim Biophys Acta** 1989 Dec 14;1014(3):319-26

Uptake of the cephalosporin, cephalexin, by a dipeptide transport carrier in the human intestinal cell line, Caco-2. Dantzig AH, et al. **Biochim Biophys Acta** 1990 Sep 7; 1027(3):211-7

Regulation of LTP-I secretion from human monocyte-derived macrophages by differentiation and cholesterol accumulation in vitro. Faust RA, et al. **Biochim Biophys Acta** 1990 Feb 23;1042(3):404-9

Kinetic evidence that arachidonate-induced calcium efflux from platelet microsomes involves a carrier-type ionophoric mechanism. Fischer TH, et al. **Biochim Biophys Acta** 1990 Feb 28;1022(2):215-28

Substrate-dependent adaptive regulation and trans-inhibition of System A-mediated amino acid transport. Studies using rat hepatoma plasma membrane vesicles. Fong AD, et al. **Biochim Biophys Acta** 1990 Mar;1022(3):325-32

New insights into mechanisms of anion uniport through the uncoupling protein of brown adipose tissue mitochondria. Garlid KD. **Biochim Biophys Acta** 1990 Jul 25; 1018(2-3):151-4

Kinetics of the reconstituted dicarboxylate carrier from rat liver mitochondria. Indiveri C, et al. **Biochim Biophys Acta** 1989 Nov 23;977(2):187-93

Kinetic discrimination of two substrate binding sites of the reconstituted dicarboxylate carrier from rat liver mitochondria. Indiveri C, et al. **Biochim Biophys Acta** 1989 Nov 23;977(2):194-9

Stimulation of human platelets by collagen occurs by a Na+/H+ exchanger independent mechanism. Joseph S, et al. **Biochim Biophys Acta** 1990 Aug 13;1054(1):26-32

Enzyme specificity of proteinase inhibitor region in amyloid precursor protein of Alzheimer's disease: different properties compared with protease nexin I. Kitaguchi N, et al. **Biochim Biophys Acta** 1990 Mar 29;1038(1):105-13

An essential role for vicinal dithiol groups in the catalytic activity of the human placental Na(+)-H+ exchanger. Kulanthaivel P, et al. **Biochim Biophys Acta** 1990 May 24; 1024(2):385-9

Tyrosine residues are essential for the activity of the human placental taurine transporter. Kulanthaivel P, et al. **Biochim Biophys Acta** 1989 Oct 16;985(2):139-46

The Na(+)-dependent proline carrier, of eel intestinal brush-border membrane, sequentially binds proline and then Na+. Maffia M, et al. **Biochim Biophys Acta** 1990 Aug 10;1027(1):8-16

Significance and redox state of SH groups in pyruvate carrier isolated from bovine heart mitochondria. Nałęcz KA, et al. **Biochim Biophys Acta** 1990 Apr 5;1016(2):272-9

The phosphatidylcholine-transfer protein catalyzed import of phosphatidylcholine into isolated rat liver mitochondria. Nicolay K, et al. **Biochim Biophys Acta** 1990 Jun 11; 1025(1):49-59

High affinity of acid phosphatase encoded by PHO3 gene in Saccharomyces cerevisiae for thiamin phosphates. Nosaka K. **Biochim Biophys Acta** 1990 Feb 9; 1037(2):147-54

Developmental patterns in rat brain of phosphatidylinositol synthetic enzymes and phosphatidylinositol transfer protein. Nyquist DA, et al. **Biochim Biophys Acta** 1989 Dec 28;987(2):165-70

Structural and functional properties of mitochondrial anion carriers. Palmieri F, et al. **Biochim Biophys Acta** 1990 Jul 25;1018(2-3):147-50

Age-related changes in the activity of the pyruvate carrier and in the lipid composition in rat-heart mitochondria. Paradies G, et al. **Biochim Biophys Acta** 1990 Apr 5; 1016(2):207-12

Effects of DNA and synthetic oligodeoxyribonucleotides on the binding properties of a cGMP-binding protein from Dictyostelium discoideum. Parissenti AM, et al. **Biochim Biophys Acta** 1990 Sep 3;1040(2):294-300

Amiloride activation of hepatic microsomal glucose-6-phosphatase; activation of T1? Pears J, et al. **Biochim Biophys Acta** 1989 Dec 8;993(2-3):224-7

Hybridization analysis of RNA transported from rat liver nuclei in response to 35 kDa normal and 60 kDa messenger RNA transport factors. Schumm DE, et al. **Biochim Biophys Acta** 1989 Sep 21;1009(1):54-60

Characterization of a Na(+)-K(+)-2Cl- cotransport system in oocytes from Xenopus laevis. Shetlar RE, et al. **Biochim Biophys Acta** 1990 Apr 13;1023(2):184-90

Fatty acid uptake by human hepatoma cell lines represents a carrier-mediated uptake process. Stremmel W, et al. **Biochim Biophys Acta** 1989 Oct 9;1013(3):218-22

Cellular influx of sulfobromophthalein by the biliary epithelium carcinoma cell line Sk-Cha-1 reveals kinetic criteria of a carrier-mediated uptake mechanism. Stremmel W, et al. **Biochim Biophys Acta** 1989 Nov 20;1014(2):108-11

Membrane properties modulate the activity of a phosphatidylinositol transfer protein from the yeast, Saccharomyces cerevisiae. Szolderits G, et al. **Biochim Biophys Acta** 1989 Nov 27;986(2):301-9

Passive and carrier-mediated permeation of different nucleosides through the reconstituted nucleoside transporter. Tse CM, et al. **Biochim Biophys Acta** 1989 Nov 3;985(3):343-6

Mapping the binding site of the nucleoside transporter protein: a 3D-QSAR study. Viswanadhan VN, et al. **Biochim Biophys Acta** 1990 Jul 6;1039(3):356-66

Identification of the calmodulin binding domain of alpha-fodrin and implications for folding. Sri Widada J, et al. **Biochimie** 1990 Jan;72(1):19-24

Immunoelectron microscopical identification of the uncoupling protein in brown adipose tissue mitochondria. Cinti S, et al. **Biol Cell** 1989;67(3):359-62

Interaction of lipophorin with the plasma membrane of locust flight muscles. Van Antwerpen R, et al. **Biol Chem Hoppe Seyler** 1990 Feb;371(2):159-65

Decreased binding of calmodulin to bull sperm proteins during heparin-induced capacitation [published erratum appears in Biol Reprod 1990 Aug;43(2):following 362] Leclerc P, et al. **Biol Reprod** 1990 Mar;42(3):483-9

A high-affinity folate binding protein in human amniotic fluid. Radioligand binding characteristics, immunological properties and molecular size. Holm J, et al. **Biosci Rep** 1990 Feb;10(1):79-85

Cytoplasmic pH is regulated in isolated avian osteoclasts by a Cl-/HCO3- exchanger. Teti A, et al. **Boll Soc Ital Biol Sper** 1989 Jul;65(7):589-95

Cyclic AMP binding proteins and prognosis in breast cancer. Miller WR, et al. **Br J Cancer** 1990 Feb;61(2):263-6

Production of immunoreactive insulin-like growth factor-I (IGF-I) and IGF-I binding proteins by human lung tumours. Reeve JG, et al. **Br J Cancer** 1990 May; 61(5):727-31

Decreased hepatic function in patients with hepatoma or liver metastasis monitored by a hepatocyte specific galactosylated radioligand. Virgolini I, et al. **Br J Cancer** 1990 Jun;61(6):937-41

99mTc-neoglycoalbumin (NGA)-binding to human hepatic binding protein (HBP) in vitro. Virgolini I, et al. **Br J Clin Pharmacol** 1990 Feb;29(2):207-14

Voltage-dependent sodium channels in synaptoneurosomes: studies with 22Na+ influx and [3H]saxitoxin and [3H]batrachotoxinin-A 20-alpha-benzoate binding. Effects of proparacaine isothiocyanate. Gusovsky F, et al. **Brain Res** 1990 Jun 4;518(1-2):101-6

Glial hyaluronate-binding protein (GHAP) in optic nerve and retina. Perides G, et al. **Brain Res** 1990 Apr 2; 512(2):309-16

Induction of the vesicular monoamine transporter by elevated potassium concentration in cultures of rat sympathetic neurons. Desnos C, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1-2):161-6

Expression of cellular retinoic acid binding protein in the developing nervous system of mouse embryo. Momoi M, et al. **Brain Res Dev Brain Res** 1990 Jul 1;54(2):161-7

Serpin inhibitors of urokinase and thrombin in normal rat brain and the 9L brain tumor: evidence for elevated expression of protease nexin I-like inhibitor and a novel sodium dodecyl sulfate-activated tumor antithrombin. Rao JS, et al. **Cancer Res** 1990 Aug 15;50(16):5039-44

SNAPs, a family of NSF attachment proteins involved in intracellular membrane fusion in animals and yeast. Clary DO, et al. **Cell** 1990 May 18;61(4):709-21

Uncoating protein (hsc70) binds a conformationally labile domain of clathrin light chain LCa to stimulate ATP hydrolysis. DeLuca-Flaherty C, et al. **Cell** 1990 Sep 7; 62(5):875-87

Cytoplasmic anchoring proteins and the control of nuclear localization. Hunt T. **Cell** 1989 Dec 22;59(6):949-51 (21 ref.)

The cardiac Na(+)-Ca2+ exchanger: dependence on membrane environment. Philipson KD. **Cell Biol Int Rep** 1990 Apr;14(4):305-9 (20 ref.)

Specific localization of hepatic fatty acid-binding protein in the gastric brush cells of rats. Iseki S, et al. **Cell Tissue Res** 1989 Sep;257(3):545-8

Biologically active aromatic retinoids bearing azido photoaffinity-labeling groups and their binding to cellular retinoic acid-binding protein. Sani BP, et al. **Chem Biol Interact** 1990;75(3):293-304

Hyaluronan and hyaluronectin in the nervous system. Delpech B, et al. **Ciba Found Symp** 1989;143:208-20; discussion 221-32, 281-5 (33 ref.)

Hyaluronan and hyaluronan-binding proteins in cartilaginous tissues. Mason RM, et al. **Ciba Found Symp** 1989; 143:107-16; discussion 117-20, 281-5 (25 ref.)

Canine cardiac sarcolemmal vesicles demonstrate rapid initial

Na(+)-Ca2+ exchange activity. Gruver CL, et al. **Circ Res** 1990 May;66(5):1171–7

Insulin-like growth factor-I (IGF-I) and IGF-I binding protein in the follicular fluids of growth hormone treated patients. Barreca A, et al. **Clin Endocrinol (Oxf)** 1990 Apr; 32(4):497–505

Effects of hyperthyroidism on binding proteins for steroid hormones. Caron P, et al. **Clin Endocrinol (Oxf)** 1989 Aug; 31(2):219–24

Relationship between the pubertal fall in sex hormone binding globulin and insulin-like growth factor binding protein-I. A synchronized approach to pubertal development? Holly JM, et al. **Clin Endocrinol (Oxf)** 1989 Sep;31(3):277–84

Iron-binding proteins and free iron in synovial fluids of rheumatoid arthritis patients. Ahmadzadeh N, et al. **Clin Rheumatol** 1989 Sep;8(3):345–51

Ligand binding characteristics of homologous rat and mouse urinary proteins and pyrazine-binding protein of calf. Cavaggioni A, et al. **Comp Biochem Physiol [B]** 1990; 96(3):513–20

Penicillin-binding proteins and beta-lactamases: their effects on the use of cephalosporins and other new beta-lactams. Neu HC. **Curr Clin Top Infect Dis** 1987;8:37–61 (103 ref.)

Antiporters. Fröhlich O. **Curr Opin Cell Biol** 1989 Aug; 1(4):729–34 (23 ref.)

Uniport carriers for metabolites. Jarvis SM. **Curr Opin Cell Biol** 1989 Aug;1(4):721–8 (32 ref.)

Ion-coupled neurotransmitter transport. Kanner BI. **Curr Opin Cell Biol** 1989 Aug;1(4):735–8 (13 ref.)

The cotransport systems. Stein WD. **Curr Opin Cell Biol** 1989 Aug;1(4):739–45 (21 ref.)

C3 binding proteins of foreign origin. Dierich MP, et al. **Curr Top Microbiol Immunol** 1990;153:163–80 (106 ref.)

Apparent absence of Na+/H+ antiport activity in the two-cell mouse embryo. Baltz JM, et al. **Dev Biol** 1990 Apr;138(2):421–9

Laminin neural activity and binding proteins. Sephel GC, et al. **Dev Neurosci** 1989;11(4–5):313–31 (118 ref.)

Specific spatial and temporal distribution of retinoic acid receptor gamma transcripts during mouse embryogenesis. Ruberte E, et al. **Development** 1990 Feb;108(2):213–22

Possible role for increased C4b-binding-protein level in acquired protein S deficiency in type I diabetes. Ceriello A, et al. **Diabetes** 1990 Apr;39(4):447–9

Cytoplasmic retinoid-binding proteins and retinoid effects on insulin release in RINm5F beta-cells. Chertow BS, et al. **Diabetes** 1989 Dec;38(12):1544–8

Spectrin, fodrin and protein 4.1-like proteins in differentiating rat germ cells. De Cesaris P, et al. **Differentiation** 1989 Sep;41(3):216–22

Differential effects of dehydroepiandrosterone and clofibrate on the binding of 7,12-dimethyl benz(a)anthracene to hepatic DNA in vivo—a preliminary study. Prasanna HR, et al. **Drug Chem Toxicol** 1989 Sep–Dec;12(3–4):327–35

Three pure chaperone proteins of Escherichia coli—SecB, trigger factor and GroEL—form soluble complexes with precursor proteins in vitro. Lecker S, et al. **EMBO J** 1989 Sep;8(9):2703–9

The role of FIS in trans activation of stable RNA operons of E. coli. Nilsson L, et al. **EMBO J** 1990 Mar;9(3):727–34

Follicle-stimulating hormone inhibits the constitutive release of insulin-like growth factor binding proteins by cultured rat ovarian granulosa cells. Adashi EY, et al. **Endocrinology** 1990 Feb;126(2):1305–7

Characterization of insulin-like growth factor-binding proteins from sheep thyroid cells. Bachrach LK, et al. **Endocrinology** 1989 Dec;125(6):2831–8

Insulin differentially alters transcapillary movement of intravascular IGFBP-1, IGFBP-2 and endothelial cell IGF-binding proteins in the rat heart. Bar RS, et al. **Endocrinology** 1990 Jul;127(1):497–9

Transcapillary permeability and subendothelial distribution of endothelial and amniotic fluid insulin-like growth factor binding proteins in the rat heart. Bar RS, et al. **Endocrinology** 1990 Sep;127(3):1078–86

Na(+)-H+ exchanger kinetics in adrenal glomerulosa cells and its activation by angiotensin II. Conlin PR, et al. **Endocrinology** 1990 Jul;127(1):236–44

Detection of a 58-kilodalton high density lipoprotein-binding protein in the membrane fraction of luteinized rat ovaries. Ferreri K, et al. **Endocrinology** 1990 Apr;126(4):2137–44

Pituitary control of growth in the neonatal rat: effects of neonatal hypophysectomy on somatic and organ growth, serum insulin-like growth factors (IGF)-I and -II levels, and expression of IGF binding proteins. Glasscock GF, et al. **Endocrinology** 1990 Oct;127(4):1792–803

Development of valid methods to measure insulin-like growth factors-I and -II in bone cell-conditioned medium. Mohan S, et al. **Endocrinology** 1990 May;126(5):2534–42

Characterization of insulin-like growth factor binding proteins produced in the rat central nervous system. Ocrant I, et al. **Endocrinology** 1990 Sep;127(3):1260–7

Glucose transporters: what's in a name? Pilch PF. **Endocrinology** 1990 Jan;126(1):3–5

Tissue distribution of the AMP-activated protein kinase, and lack of activation by cyclic-AMP-dependent protein kinase, studied using a specific and sensitive peptide assay. Davies SP, et al. **Eur J Biochem** 1989 Dec 8;186(1–2):123–8

Glutathione-protein mixed disulfide decreases the affinity of rat liver fatty acid-binding protein for unsaturated fatty acid. Hitomi M, et al. **Eur J Biochem** 1990 Feb 14; 187(3):713–9

ADP-ribosylation of the 78-kDa glucose-regulated protein during nutritional stress. Leno GH, et al. **Eur J Biochem** 1989 Dec 8;186(1–2):205–11

pH-induced insertion of the amphiphilic alpha-helical anchor of Escherichia coli penicillin-binding protein 5. Phoenix DA, et al. **Eur J Biochem** 1990 Jun 20;190(2):365–9

Characterization of the coated vesicle uncoating ATPase: tissue distribution, association with and activity on intact coated vesicles. Paddenberg R, et al. **Eur J Cell Biol** 1990 Jun;52(1):60–6

Mechanisms of resistance of enterococci to beta-lactam antibiotics. Fontana R, et al. **Eur J Clin Microbiol Infect Dis** 1990 Feb;9(2):103–5 (21 ref.)

Chronic Li+ attenuates agonist- and phorbol ester-mediated Na+/H+ antiporter activity in HL-60 cells. Bitran JA, et al. **Eur J Pharmacol** 1990 Apr 25;188(4–5):193–202

Age-related changes in rat liver phospholipid transfer activity. Markovska TT, et al. **Exp Gerontol** 1990; 25(1):55–60

Lipid transfer in plants. Arondel V, et al. **Experientia** 1990 Jun 15;46(6):579–85 (51 ref.)

Glycolipid transfer protein and intracellular traffic of glucosylceramide. Sasaki T. **Experientia** 1990 Jun 15; 46(6):611–6 (59 ref.)

Dopamine receptors and transporters in Parkinson's disease and schizophrenia. Seeman P, et al. **FASEB J** 1990 Jul; 4(10):2737–44 (58 ref.)

BiP expression is not increased by the accumulation of PiZ alpha 1-antitrypsin in the endoplasmic reticulum. Cresteil D, et al. **FEBS Lett** 1990 Jul 16;267(2):277–80

Palytoxin acidifies chick cardiac cells and activates the Na+/H+ antiporter. Frelin C, et al. **FEBS Lett** 1990 May 7;264(1):63–6

Calcium mobilization and Na+/H+ antiport activation by endothelin in human skin fibroblasts. Gardner JP, et al. **FEBS Lett** 1989 Oct 9;256(1–2):38–42

A conserved cleavage-site motif in chloroplast transit peptides. Gavel Y, et al. **FEBS Lett** 1990 Feb 26; 261(2):455–8

Carnitine palmitoyltransferase (CPT2) from liver mitochondrial inner membrane becomes inhibitable by malonyl-CoA if reconstituted with outer membrane malonyl-CoA binding protein. Ghadiminejad I, et al. **FEBS Lett** 1990 Sep 3;269(2):406–8

Protein S binding in relation to the subunit composition of human C4b-binding protein. Hillarp A, et al. **FEBS Lett** 1989 Dec 18;259(1):53–6

Evidence for leukotriene C4 transport mediated by an ATP-dependent glutathione S-conjugate carrier in rat heart and liver plasma membranes. Ishikawa T, et al. **FEBS Lett** 1989 Dec 18;259(1):95–8

Anti-idiotypic antibody identifies the structural similarity between the phosphatidylcholine-specific monoclonal antibody and phosphatidylcholine-specific lipid transfer protein. Nam KS, et al. **FEBS Lett** 1990 Sep 3;269(2):394–7

The involvement of fatty acid binding protein in peroxisomal fatty acid oxidation. Reubsaet FA, et al. **FEBS Lett** 1990 Jul 16;267(2):229–30

Immunochemical detection of photoaffinity-labelled capsaicin-binding proteins from sensory neurons. Wood JN, et al. **FEBS Lett** 1990 Sep 3;269(2):381–5

A possible role for acid phosphatase with thiamin-binding activity encoded by PHO3 in yeast. Nosaka K, et al. **FEMS Microbiol Lett** 1989 Jul 1;51(1):55–9

pH homeostasis and bioenergetic work in alkalophiles. Krulwich TA, et al. **FEMS Microbiol Rev** 1990 Jun; 6(2–3):271–8 (43 ref.)

Periplasmic binding protein dependent transport system for maltose and maltodextrins: some recent studies. Saurin W, et al. **FEMS Microbiol Rev** 1989 Jun;5(1–2):53–60 (64 ref.)

Free radical scavenging by myocardial fatty acid binding protein. Samanta A, et al. **Free Radic Res Commun** 1989; 7(2):73–82

Mitogens control Na+/H+ antiporter activity by phosphorylation. Barrett KE, et al. **Gastroenterology** 1990 Aug;99(2):565–6

Rabbit esophageal cells possess an Na+,H+ antiport. Layden TJ, et al. **Gastroenterology** 1990 Oct;99(4):909–17

Folic acid transport in organ-cultured mucosa of human intestine. Evidence for distinct carriers. Zimmerman J. **Gastroenterology** 1990 Oct;99(4):964–72

Insulin-like growth factor-I and insulin-like growth factor-binding protein in the toad, Bufo woodhousei. Pancak-Roessler MK, et al. **Gen Comp Endocrinol** 1990 May;78(2):263–72

A role for cAMP-dependent protein kinase A in early Dictyostelium development. Firtel RA, et al. **Genes Dev** 1990 Jan;4(1):18–28

Glial hyaluronate-binding protein in Wallerian degeneration of dog spinal cord. Bignami A, et al. **GLIA** 1989;2(5):391–5

Functional expression of the human receptor for colony-stimulating factor 1 (CSF-1) in hamster fibroblasts: CSF-1 stimulates Na+/H+ exchange and DNA-synthesis in the absence of phosphoinositide breakdown. Hartmann T, et al. **Growth Factors** 1990;2(4):289–300

B12 binding proteins. Neale G. **Gut** 1990 Jan;31(1):59–63 (26 ref.)

Nonerythroid spectrin (fodrin) is a prominent component of the cochlear hair cells. Ylikoski J, et al. **Hear Res** 1990 Jan;43(2–3):199–203

Localization of the heme-binding protein in the cytoplasm and of a heme-binding protein-like immunoreactive protein in the nucleus of rat liver parenchymal cells: immunocytochemical evidence of the subcellular distribution corroborated by radioimmunoassay and immunoblotting. Fahimi HD, et al. **Hepatology** 1990 May; 11(5):859–65

Abnormal hepatic uptake of low doses of sulfobromophthalein in Gilbert's syndrome: the role of reduced affinity of the plasma membrane carrier of organic anions. Gentile S, et al. **Hepatology** 1990 Aug;12(2):213–7

Interaction of hemopexin, albumin and liver fatty acid-binding protein with protoporphyrin. Knobler E, et al. **Hepatology** 1989 Dec;10(6):995–7

Monitoring of sodium:proton exchange in isolated hepatocytes by electronic cell sizing. Stewart DJ. **Hepatology** 1989 Dec;10(6):986–94

Racial differences in ion regulation and their possible links to hypertension in blacks. Aviv A, et al. **Hypertension** 1989 Dec;14(6):584–9 (86 ref.)

Ion transport defects and hypertension. Where is the link? Ives HE. **Hypertension** 1989 Dec;14(6):590–7 (83 ref.)

Sodium-lithium countertransport in microalbuminuric insulin-dependent diabetic patients. Jones SL, et al. **Hypertension** 1990 Jun;15(6 Pt 1):570–5

A 101-kilodalton heme-binding protein associated with congo red binding and virulence of Shigella flexneri and enteroinvasive Escherichia coli strains. Stugard CE, et al. **Infect Immun** 1989 Nov;57(11):3534–9

Endogenous carbohydrate-binding proteins in Pneumocystis carinii. Vierbuchen M, et al. **Infect Immun** 1990 Sep; 58(9):3143–6

Immunochemical quantitation of fatty acid-binding proteins. Tissue distribution of liver and heart FABP types in human and porcine tissues. Paulussen RJ, et al. **Int J Biochem** 1990; 22(4):393–8

The role of autophosphorylation of cAMP-dependent protein kinase II in the inhibition of protein phosphatase-1. Vereb G, et al. **Int J Biochem** 1989;21(10):1137–41

Studies on cholesterol accumulation in radicular cyst fluid—origin of heat-stable cholesterol-binding protein. Yashima M, et al. **Int J Biochem** 1990;22(2):165–9

The Na-K-Cl cotransport in essential hypertension: cellular functions and genetic environment interactions. Canessa ML. **Int J Cardiol** 1989;25 Suppl 1:S37–45 (50 ref.)

The role of transferrin and other receptors in the mechanism of 67Ga localization. Weiner R. **Int J Rad Appl Instrum [B]** 1990;17(1):141–9 (98 ref.)

Lipid transfer activity in human follicular fluid: relation to human sperm capacitation. Ravnik SE, et al. **J Androl** 1990 May–Jun;11(3):216–26

Comparison of two carbapenems, SM-7338 and imipenem: affinities for penicillin-binding proteins and morphological changes. Sumita Y, et al. **J Antibiot (Tokyo)** 1990 Mar; 43(3):314–20

Participation of PBP 3 in the acquisition of dicloxacillin resistance in Listeria monocytogenes. Gutkind GO, et al. **J Antimicrob Chemother** 1990 May;25(5):751–8

Effects of sub-inhibitory concentrations of antibiotics on surface expression of ferripyochelin-binding protein in Pseudomonas aeruginosa. LeVatte MA, et al. **J Antimicrob Chemother** 1989 Dec;24(6):881–95

Penicillin-binding proteins and ampicillin resistance in Haemophilus influenzae. Mendelman PM, et al. **J Antimicrob Chemother** 1990 Apr;25(4):525–34

Electrochemical potential releases a membrane-bound secretion intermediate of maltose-binding protein in Escherichia coli. Geller BL. **J Bacteriol** 1990 Sep; 172(9):4870–6

The folding properties of the Escherichia coli maltose-binding protein influence its interaction with SecB in vitro. Weiss JB, et al. **J Bacteriol** 1990 Jun;172(6):3023–9

Characterization of calpain I-binding proteins in human erythrocyte plasma membrane. Kuboki M, et al. **J Biochem (Tokyo)** 1990 May;107(5):776–80

A nuclear magnetic resonance study of the cyclic AMP receptor protein (CRP): assignments of the NH protons of histidine and tryptophan residues and the effect of binding of cAMP to CRP. Lee BJ, et al. **J Biochem (Tokyo)** 1990 Feb;107(2):304–9

Identification of a crotoxin-binding protein in membranes from guinea pig brain by photoaffinity labeling. Hseu MJ, et al. **J Bioenerg Biomembr** 1990 Feb;22(1):39–50

Identification of a clathrin binding subunit in the HA2 adaptor protein complex. Ahle S, et al. **J Biol Chem** 1989 Nov 25;264(33):20089–93

UhpT, the sugar phosphate antiporter of Escherichia coli, functions as a monomer. Ambudkar SV, et al. **J Biol Chem** 1990 Jul 25;265(21):12287–92

Characterization of lysosomal monoiodotyrosine transport in rat thyroid cells. Evidence for transport by system h. Andersson HC, et al. **J Biol Chem** 1990 Jul 5; 265(19):10950–4

Regulation of reversible binding of smg p25A, a ras p21-like GTP-binding protein, to synaptic plasma membranes and vesicles by its specific regulatory protein, GDP dissociation inhibitor. Araki S, et al. **J Biol Chem** 1990 Aug 5; 265(22):13007–15

Evidence for the allosteric regulation of the mitochondrial K+/H+ antiporter by matrix protons. Beavis AD, et al. **J Biol Chem** 1990 Feb 15;265(5):2538–45

Voltage sensitivity of H+/Ca2+ antiport in higher plant tonoplast suggests a role in vacuolar calcium accumulation.

Blackford S, et al. J Biol Chem 1990 Jun 15;265(17):9617–20
Identification of a short sequence essential for actin binding by Dictyostelium ABP-120. Bresnick AR, et al. J Biol Chem 1990 Jun 5;265(16):9236–40
Stimulation of the Na+/H+ exchanger in human endothelial cells activated by granulocyte- and granulocyte-macrophage-colony-stimulating factor. Evidence for a role in proliferation and migration. Bussolino F, et al. J Biol Chem 1989 Nov 5;264(31):18284–7
Mutant of Escherichia coli K-12 with defective phosphorylation of two periplasmic transport proteins. Celis RT. J Biol Chem 1990 Jan 25;265(3):1787–93
Characterization of the interaction between calpactin I and fodrin (non-erythroid spectrin). Cheney RE, et al. J Biol Chem 1989 Oct 25;264(30):18068–75
Discrete alterations of the insulin-like growth factor I molecule which alter its affinity for insulin-like growth factor-binding proteins result in changes in bioactivity. Clemmons DR, et al. J Biol Chem 1990 Jul 25; 265(21):12210–6
A newly identified iron binding protein in duodenal mucosa of rats. Purification and characterization of mobilferrin. Conrad ME, et al. J Biol Chem 1990 Mar 25;265(9):5273–9
Isolation and characterization of an L1210 cell line retaining the sodium-dependent carrier cif as its sole nucleoside transport activity. Crawford CR, et al. J Biol Chem 1990 Aug 15;265(23):13730–4
High affinity interaction between C4b-binding protein and vitamin K-dependent protein S in the presence of calcium. Suggestion of a third component in blood regulating the interaction. Dahlbäck B, et al. J Biol Chem 1990 Sep 25; 265(27):16082–7
Overproduction, solubilization, and reconstitution of the maltose transport system from Escherichia coli. Davidson AL, et al. J Biol Chem 1990 Mar 15;265(8):4254–60
Mapping the binding sites of human erythrocyte ankyrin for the anion exchanger and spectrin. Davis LH, et al. J Biol Chem 1990 Jun 25;265(18):10589–96
Solubilization and reconstitution of the Na(+)-dependent citrate carrier of Klebsiella pneumoniae. Dimroth P, et al. J Biol Chem 1990 May 15;265(14):7721–4
Regulation of adrenocortical pregnenolone-binding protein activity by phosphorylation/dephosphorylation. Phosphatase-mediated inactivation is reversed by cytosolic kinase. Driscoll WJ, et al. J Biol Chem 1990 Jul 25; 265(21):12306–11
Variations in cap-binding complexes from uninfected and poliovirus-infected HeLa cells. Etchison D, et al. J Biol Chem 1990 May 5;265(13):7492–500
Multiple receptors coupled to adenylate cyclase regulate Na-H exchange independent of cAMP. Ganz MB, et al. J Biol Chem 1990 Jun 5;265(16):8989–92
Dissociation of clathrin from coated vesicles by the uncoating ATPase. Greene LE, et al. J Biol Chem 1990 Apr 25; 265(12):6682–7
Calmodulin regulates fodrin susceptibility to cleavage by calcium-dependent protease I. Harris AS, et al. J Biol Chem 1989 Oct 15;264(29):17401–8
Thrombin induces a calcium transient that mediates an activation of the Na+/H+ exchanger in human fibroblasts. Hendey B, et al. J Biol Chem 1989 Nov 25;264(33):19540–7
A new DNA binding mode for CAP [published erratum appears in J Biol Chem 1990 May 15;265(14):8346] Hudson JM, et al. J Biol Chem 1990 Feb 25;265(6):3219–25
Reconstitution of the beef heart and rat liver mitochondrial K+/H+ (Na+/H+) antiporter. Quantitation of K+ transport with the novel fluorescent probe, PBFI. Ježek P, et al. J Biol Chem 1990 Jun 25;265(18):10522–6
Purification and characterization of the reconstitutively active tricarboxylate transporter from rat liver mitochondria. Kaplan RS, et al. J Biol Chem 1990 Aug 5;265(22):13379–85
Selective affinity labeling of a 27-kDa integral membrane protein in rat liver and kidney with N-bromoacetyl derivatives of L-thyroxine and 3,5,3'-triiodo-L-thyronine. Köhrle J, et al. J Biol Chem 1990 Apr 15;265(11):6146–54
The Na(+)-H+ exchanger of the placental brush-border membrane is pharmacologically distinct from that of the renal brush-border membrane. Kulanthaivel P, et al. J Biol Chem 1990 Jan 25;265(3):1249–52
Cap binding protein complex that restores protein synthesis in heat-shocked Ehrlich cell lysates contains highly phosphorylated eIF-4E. Lamphear BJ, et al. J Biol Chem 1990 Apr 5;265(10):5333–6
Regulation and ligand-binding specificities of two sex-specific bile acid-binding proteins of rat liver cytosol. LeBlanc GA, et al. J Biol Chem 1990 Apr 5; 265(10):5654–61
Purification of a reconstitutively active K+/H+ antiporter from rat liver mitochondria. Li XQ, et al. J Biol Chem 1990 Sep 5;265(25):15316–22
Identification of cytosolic and microsomal bile acid-binding proteins in rat ileal enterocytes. Lin MC, et al. J Biol Chem 1990 Sep 5;265(25):14986–95
Sphingosine differentially inhibits activation of the Na+/H+ exchanger by phorbol esters and growth factors. Lowe JH, et al. J Biol Chem 1990 May 5;265(13):7188–94
A human membrane-associated folate binding protein is anchored by a glycosyl-phosphatidylinositol tail. Luhrs CA, et al. J Biol Chem 1989 Dec 25;264(36):21446–9
Glucose transport in lysosomal membrane vesicles. Kinetic demonstration of a carrier for neutral hexoses. Mancini GM, et al. J Biol Chem 1990 Jul 25;265(21):12380–7
Agonist-induced activation of Na+/H+ exchange in rat parotid acinar cells is dependent on calcium but not on protein kinase C. Manganel M, et al. J Biol Chem 1990 Mar 15;265(8):4284–9
Kinetic asymmetry of renal Na+-L-lactate cotransport. Characteristic parameters and evidence for a ping pong mechanism of the trans-stimulating exchange by pyruvate. Mengual R, et al. J Biol Chem 1990 Jan 5;265(1):292–9
Intracellular pH-regulatory mechanisms in pancreatic acinar cells. 1. Characterization of H+ and HCO3- transporters. Muallem S, et al. J Biol Chem 1990 Aug 5;265(22):12806–12
Inhibition of cofactor activity of protein S by a complex of protein S and C4b-binding protein. Evidence for inactive ternary complex formation between protein S, C4b-binding protein, and activated protein C. Nishioka J, et al. J Biol Chem 1990 Jun 5;265(16):9072–6
Calcium stimulates ATP-Mg/Pi carrier activity in rat liver mitochondria. Nosek MT, et al. J Biol Chem 1990 May 25;265(15):8444–50
[3H]bumetanide binding in vascular endothelial cells. Quantitation of Na-K-Cl cotransporters. O'Donnell ME. J Biol Chem 1989 Dec 5;264(34):20326–30
Deletion of ant in Escherichia coli reveals its function in adaptation to high salinity and an alternative Na+/H+ antiporter system(s). Padan E, et al. J Biol Chem 1989 Dec 5;264(34):20297–302
Expression of rat liver canalicular sulfate carrier in Xenopus laevis oocytes. Palacín M, et al. J Biol Chem 1990 May 5;265(13):7142–4
Steady-state measurements of Escherichia coli sodium and proton potentials at alkaline pH support the hypothesis of electrogenic antiport. Pan JW, et al. J Biol Chem 1990 Jun 5;265(16):9247–50
Mitogen-stimulated activation of the Na+/H+ antiporter does not regulate S6 phosphorylation or protein synthesis in murine thymocytes or Swiss 3T3 fibroblasts. Pennington SR, et al. J Biol Chem 1990 Feb 15;265(5):2456–61
Ion specificity of cardiac sarcolemmal Na+/H+ antiporter. Periyasamy SM, et al. J Biol Chem 1990 Apr 15; 265(11):6035–41
Surfactant protein D is a divalent cation-dependent carbohydrate-binding protein. Persson A, et al. J Biol Chem 1990 Apr 5;265(10):5755–60
Odorant-binding protein. Characterization of ligand binding. Pevsner J, et al. J Biol Chem 1990 Apr 15;265(11):6118–25
Poly(A) binding proteins located at the inner surface of rescaled nuclear envelopes. Prochnow D, et al. J Biol Chem 1990 Apr 25;265(12):6536–9
Characterization of Na-H exchange in apical membrane vesicles of rat colon. Rajendran VM, et al. J Biol Chem 1990 May 25;265(15):8408–14
A photoactivatable probe for the Na+/H+ exchanger cross-links a 66-kDa renal brush border membrane protein. Ross W, et al. J Biol Chem 1990 Apr 5;265(10):5341–4
Manduca sexta lipid transfer particle acts upon a lipoprotein to catalyze lipid and apoprotein disproportionation. Ryan RO, et al. J Biol Chem 1990 Jan 5;265(1):546–52
Insect lipid transfer particle catalyzes bidirectional vectorial transfer of diacylglycerol from lipophorin to human low density lipoprotein. Ryan RO, et al. J Biol Chem 1990 Jun 25;265(18):10551–5
Interaction of fluorescent delta 5,7,9(11),22-ergostatetraen-3 beta-ol with sterol carrier protein-2. Schroeder F, et al. J Biol Chem 1990 Jan 5;265(1):151–7
Assembly of protein S and C4b-binding protein on membranes. Schwalbe R, et al. J Biol Chem 1990 Sep 25; 265(27):16074–81
Evidence for a juvenile hormone receptor involved in protein synthesis in Drosophila melanogaster. Shemshedini L, et al. J Biol Chem 1990 Feb 5;265(4):1913–8
Cholesterol is required for the reconstruction of the sodium- and chloride-coupled, gamma-aminobutyric acid transporter from rat brain. Shouffani A, et al. J Biol Chem 1990 Apr 15;265(11):6002–8
Na+/H+ exchange modulates Ca2+ mobilization in human platelets stimulated by ADP and the thromboxane mimetic U 46619. Siffert W, et al. J Biol Chem 1990 Jan 15; 265(2):719–25
Function of plastid mRNA 3' inverted repeats. RNA stabilization and gene-specific protein binding. Stern DB, et al. J Biol Chem 1989 Nov 5;264(31):18742–50
Transfer of fluorescent fatty acids from liver and heart fatty acid-binding proteins to model membranes. Storch J, et al. J Biol Chem 1990 May 15;265(14):7827–31
Relationship between the newly identified bile acid binder and bile acid oxidoreductases in human liver. Takikawa H, et al. J Biol Chem 1990 Feb 5;265(4):2132–6
Kinetic evidence for a common transporter for glycylsarcosine and phenylalanylprolylalanine in renal brush-border membrane vesicles. Tiruppathi C, et al. J Biol Chem 1990 Sep 5;265(25):14870–4
Protein D2 channel of the Pseudomonas aeruginosa outer membrane has a binding site for basic amino acids and peptides. Trias J, et al. J Biol Chem 1990 Sep 15; 265(26):15680–4
Association of initiation factor eIF-4E in a cap binding protein complex (eIF-4F) is critical for and enhances phosphorylation by protein kinase C. Tuazon PT, et al. J Biol Chem 1990 Jun 25;265(18):10617–21
Difference in sodium requirement of branched chain amino acid carrier between Pseudomonas aeruginosa PAO and PML strains is due to substitution of an amino acid at position 292. Uratani Y, et al. J Biol Chem 1989 Nov 15; 264(32):18944–50
Purification and properties of a kinase from Escherichia coli K-12 that phosphorylates two periplasmic transport proteins. Urban C, et al. J Biol Chem 1990 Jan 25; 265(3):1783–6
Reconstitution of the immunopurified 49-kDa sodium-dependent bile acid transport protein derived from hepatocyte sinusoidal plasma membranes. von Dippe P, et al. J Biol Chem 1990 Sep 5;265(25):14812–6
The calcium-binding site in the galactose chemoreceptor protein. Crystallographic and metal-binding studies. Vyas MN, et al. J Biol Chem 1989 Dec 5;264(34):20817–21
In situ labeling of the adipocyte lipid binding protein with 3-[125I]iodo-4-azido-N-hexadecylsalicylamide. Evidence for a role of fatty acid binding proteins in lipid uptake. Waggoner DW, et al. J Biol Chem 1990 Jul 15; 265(20):11417–20
Characterization of a synthetic peptide that inhibits the interaction between protein S and C4b-binding protein. Walker FJ. J Biol Chem 1989 Oct 25;264(30):17645–8
Characterization of crystalline rat liver fatty acid binding protein produced in Escherichia coli. Winter NS, et al. J Biol Chem 1990 Jul 5;265(19):10955–8
Differential transport properties of two mdr gene products are distinguished by progesterone. Yang CP, et al. J Biol Chem 1990 Jun 25;265(18):10282–8
Hyaluronic acid associated with the surfaces of cultured fibroblasts is linked to a serum-derived 85-kDa protein. Yoneda M, et al. J Biol Chem 1990 Mar 25;265(9):5247–57
Binding properties of detergent-solubilized NCAM. Hall AK, et al. J Cell Biol 1990 Mar;110(3):817–24
Immunoglobulin heavy chain and binding protein complexes are dissociated in vivo by light chain addition. Hendershot LM. J Cell Biol 1990 Sep;111(3):829–37
Trimeric binding of the 70-kD uncoating ATPase to the vertices of clathrin triskelia: a candidate intermediate in the vesicle uncoating reaction. Heuser J, et al. J Cell Biol 1989 Oct;109(4 Pt 1):1457–66
Actin-binding proteins from Drosophila embryos: a complex network of interacting proteins detected by F-actin affinity chromatography. Miller KG, et al. J Cell Biol 1989 Dec; 109(6 Pt 1):2963–75
Intracellular maturation and transport of the SV5 type II glycoprotein hemagglutinin-neuraminidase: specific and transient association with GRP78-BiP in the endoplasmic reticulum and extensive internalization from the cell surface. Ng DT, et al. J Cell Biol 1989 Dec;109(6 Pt 2):3273–89
Fatty acylation promotes fusion of transport vesicles with Golgi cisternae. Pfanner N, et al. J Cell Biol 1990 Apr; 110(4):955–61
The glycophospholipid-linked folate receptor internalizes folate without entering the clathrin-coated pit endocytic pathway. Rothberg KG, et al. J Cell Biol 1990 Mar; 110(3):637–49
Dictyostelium discoideum plasma membranes contain an actin-nucleating activity that requires ponticulin, an integral membrane glycoprotein. Shariff A, et al. J Cell Biol 1990 Mar;110(3):681–92
Production of insulin-like growth factor II (IGF-II) and different forms of IGF-binding proteins by HT-29 human colon carcinoma cell line. Culouscou JM, et al. J Cell Physiol 1990 Jun;143(3):405–15
Plasminogen activators and their inhibitors in the neuromuscular system: II. Serpins and serpin: protease complex receptors increase during in vitro myogenesis. Festoff BW, et al. J Cell Physiol 1990 Aug;144(2):272–9
Evidence for probenecid-sensitive organic anion transporters on polarized thyroid cells in culture. Gérard C, et al. J Cell Physiol 1990 Aug;144(2):354–64
Na+/H+ antiporter is the primary proton transport system used by osteoclasts during bone resorption. Hall TJ, et al. J Cell Physiol 1990 Feb;142(2):420–4
Novel ATP-binding heat-inducible protein of Mr = 37,000 that is sensitive to transformation in BALB/3T3 cells. Nakai A, et al. J Cell Physiol 1990 Jun;143(3):577–89
Regulation of Na+/H+ and Cl-/HCO3- antiports in Vero cells. Tønnessen TI, et al. J Cell Physiol 1990 Apr; 143(1):178–87
Extended presence of antide (Nal-Lys GnRH antagonist) in circulation: prolonged duration of gonadotropin inhibition may derive from antide binding to serum proteins. Danforth DR, et al. J Clin Endocrinol Metab 1990 Feb;70(2):554–6
Evidence of enzymatic degradation of insulin-like growth factor-binding proteins in the 150K complex during pregnancy. Hossenlopp P, et al. J Clin Endocrinol Metab 1990 Oct;71(4):797–805
Evidence for carrier-mediated transport of glutathione across the blood-brain barrier in the rat. Kannan R, et al. J Clin Invest 1990 Jun;85(6):2009–13
Kinetic properties of the Na+/H+ antiporter of lymphocytes from the spontaneously hypertensive rat: role of intracellular pH. Saleh AM, et al. J Clin Invest 1990 Jun;85(6):1734–9
Basolateral membrane sodium-independent Cl-/HCO3- exchanger in rat inner medullary collecting duct cell. Star RA. J Clin Invest 1990 Jun;85(6):1959–66
Regulation of binding proteins for insulin-like growth factors (IGF) in humans. Increased expression of IGF binding protein 2 during IGF I treatment of healthy adults and

in patients with extrapancreatic tumor hypoglycemia. Zapf J, et al. **J Clin Invest** 1990 Sep;86(3):952–61

Immunolocalization of cellular retinoic acid binding protein to Müller cells and/or a subpopulation of GABA–positive amacrine cells in retinas of different species. Milam AH, et al. **J Comp Neurol** 1990 Jun 1;296(1):123–9

Resolution of ion translocating proteolipid subclasses active in bacterial calcification. Swain LD, et al. **J Dent Res** 1989 Jun;68(6):1094–7

Plasma clearance of chicken and human insulin–like growth factor–I and their association with circulating binding proteins in chickens. Francis GL, et al. **J Endocrinol** 1990 Mar;124(3):361–70

Changes in cytosolic 3,5,3'–tri–iodo–L–thyronine (T3) binding activity during administration of L–thyroxine to thyroidectomized rats: cytosolic T3–binding protein and its activator act as intracellular regulators for nuclear T3 binding. Nishii Y, et al. **J Endocrinol** 1989 Oct; 123(1):99–104

Human leukocyte C1q receptor binds other soluble proteins with collagen domains. Malhotra R, et al. **J Exp Med** 1990 Sep 1;172(3):955–9

Lipopolysaccharide (LPS) binding protein opsonizes LPS–bearing particles for recognition by a novel receptor on macrophages. Wright SD, et al. **J Exp Med** 1989 Oct 1;170(4):1231–41

Binding–protein–dependent glucose transport by Agrobacterium radiobacter grown in glucose–limited continuous culture. Cornish A, et al. **J Gen Microbiol** 1988 Dec;134 (Pt 12):3099–110

Binding–protein–dependent sugar transport by Agrobacterium radiobacter and A. tumefaciens grown in continuous culture. Cornish A, et al. **J Gen Microbiol** 1989 Nov;135 (Pt 11):3001–13

Inhibition of the binding of penicillin to the pneumococcal penicillin–binding proteins (PBPs) by exogenous cell wall peptides. Tuomanen E, et al. **J Gen Microbiol** 1989 Mar; 135 (Pt 3):639–43

Cellular uptake of conjugated bilirubin and sulfobromophthalein (BSP) by the human hepatoma cell line Hep G2 is mediated by a membrane BSP/bilirubin binding protein. Stremmel W, et al. **J Hepatol** 1990 Jan; 10(1):99–104

Immunocytochemical localization of BiP to the rough endoplasmic reticulum: evidence for protein sorting by selective retention. Bole DG, et al. **J Histochem Cytochem** 1989 Dec;37(12):1817–23

Distribution of adenosine deaminase complexing protein (ADCP) in human tissues. Dinjens WN, et al. **J Histochem Cytochem** 1989 Dec;37(12):1869–75

Retrieving vesicles in secretion–induced rat chromaffin cells contain fodrin. Fujimoto T, et al. **J Histochem Cytochem** 1989 Nov;37(11):1589–99

Kinetics of the human leucocyte Na(+)–H+ antiport in essential hypertension. Ng LL, et al. **J Hypertens** 1990 Jun; 8(6):533–7

IL–1 activates the Na+/H+ antiport in a murine T cell. Civitelli R, et al. **J Immunol** 1989 Dec 15;143(12):4000–8

The binding site of human C4b–binding protein on complement C4 is localized in the alpha'–chain. Hessing M, et al. **J Immunol** 1990 Apr 1;144(7):2632–7

The localization of heparin–binding fragments on human C4b–binding protein. Hessing M, et al. **J Immunol** 1990 Jan 1;144(1):204–8

Binding of the pentamer/hexamer forms of mannan–binding protein to zymosan activates the proenzyme C1r2C1s2 complex, of the classical pathway of complement, without involvement of C1q. Lu JH, et al. **J Immunol** 1990 Mar 15;144(6):2287–94

Binding of beta–lactam antibiotics to penicillin–binding proteins in methicillin–resistant Staphylococcus aureus. Chambers HF, et al. **J Infect Dis** 1990 Jun;161(6):1170–6

Priming of polymorphonuclear granulocytes by lipopolysaccharides and its complexes with lipopolysaccharide binding protein and high density lipoprotein. Vosbeck K, et al. **J Leukoc Biol** 1990 Feb; 47(2):97–104

Human low density lipoprotein subfractions separated by gradient gel electrophoresis: composition, distribution, and alterations induced by cholesteryl ester transfer protein. Gambert P, et al. **J Lipid Res** 1990 Jul;31(7):1199–210

Impaired plasma cholesteryl ester transfer with accumulation of larger high density lipoproteins in some families of baboons (Papio sp.). Kushwaha RS, et al. **J Lipid Res** 1990 Jun;31(6):965–73

Voronoi binding site model of a polycyclic aromatic hydrocarbon binding protein. Boulu LG, et al. **J Med Chem** 1990 Feb;33(2):771–5

Electrogenic 2 Na+/1 H+ exchange in crustaceans. Ahearn GA, et al. **J Membr Biol** 1990 Jul;116(3):215–26

Electrophysiological investigation of the amino acid carrier selectivity in epithelial cells from Xenopus embryo. Bergman J, et al. **J Membr Biol** 1989 Nov;111(3):241–51

Interactions between anion exchange and other membrane proteins in rabbit kidney medullary collecting duct cells. Janoshazi A, et al. **J Membr Biol** 1989 Nov;112(1):39–49

Ontogeny of the Na(+)–H+ exchanger in rat ileal brush–border membrane vesicles. Kikuchi K, et al. **J Membr Biol** 1990 Apr;114(3):257–65

Expression of substrate specificity in facilitated transport systems. Krupka RM. **J Membr Biol** 1990 Jul;117(1):69–78 (36 ref.)

Cytoplasmic acidification and activation of Na+/H+ exchange during regulatory volume decrease in Ehrlich ascites tumor cells. Livne A, et al. **J Membr Biol** 1990 Mar;114(2):153–7

Transport of potassium in Chara australis: II. Kinetics of a symport with sodium. McCulloch SR, et al. **J Membr Biol** 1990 May;115(2):129–43

Examination of the substrate stoichiometry of the intestinal Na+/phosphate cotransporter. Peerce BE. **J Membr Biol** 1989 Sep;110(2):189–97

Volume–activated Na/H exchange activity in fetal and adult pig red cells: inhibition by cyclic AMP. Sergeant S, et al. **J Membr Biol** 1989 Aug;109(3):209–20

Effect of limited trypsin digestion on the renal Na+–H+ exchanger and its regulation by cAMP–dependent protein kinase. Weinman EJ, et al. **J Membr Biol** 1989 Aug; 109(3):233–41

Rabbit distal colon epithelium: II. Characterization of (Na+,K+,Cl–)–cotransport and [3H]–bumetanide binding. Wiener H, et al. **J Membr Biol** 1989 Sep;110(2):163–74

Presteady–state kinetics and carrier–mediated transport: a theoretical analysis. Wierzbicki W, et al. **J Membr Biol** 1990 Jul;117(1):11–27

Mechanism of Na+/proline symport in Escherichia coli: reappraisal of the effect of cation binding to the Na+/proline symport carrier. Yamato I, et al. **J Membr Biol** 1990 Mar;114(2):143–51

Formation of intermolecular and intramolecular hydrogen bonds in histidine–binding protein J of Salmonella typhimurium upon binding L–histidine. A proton nuclear magnetic resonance study. Buckel SD, et al. **J Mol Biol** 1989 Aug 5;208(3):477–89

Genetic approach to the role of tryptophan residues in the activities and fluorescence of a bacterial periplasmic maltose–binding protein. Martineau P, et al. **J Mol Biol** 1990 Jul 5;214(1):337–52

Crystallization of genetically engineered active maltose–binding proteins, including an immunogenic viral epitope insertion. Rodseth LE, et al. **J Mol Biol** 1990 Jun 20;213(4):607–11

Developmental changes of sarcolemmal Na+–H+ exchange. Meno H, et al. **J Mol Cell Cardiol** 1989 Nov;21(11):1179–85

Are Ba2+ and Sr2+ ions transported by the Na+–Ca2+ exchanger in frog atrial cells? Richard S, et al. **J Mol Cell Cardiol** 1989 Sep;21(9):865–75

Multiple cAMP–binding proteins in Aplysia tissues. Palazzolo M, et al. **J Neurobiol** 1989 Dec;20(8):746–61

Expression of a human cocaine–sensitive dopamine transporter in Xenopus laevis oocytes. Bannon MJ, et al. **J Neurochem** 1990 Feb;54(2):706–8

Photoaffinity labeling of the two forms of serotonin binding protein: peptide mapping of the binding sites. Liu KP, et al. **J Neurochem** 1990 Mar;54(3):963–70

Hyaluronate–binding proteins of murine brain. Marks MS, et al. **J Neurochem** 1990 Jan;54(1):171–80

Interactions of the complex secretory vesicle binding protein chromobindin A with nucleotides. Martin WH, et al. **J Neurochem** 1990 Feb;54(2):612–9

Characterization of 3'–phosphoadenosine 5'–phospho[35S]sulfate transport carrier from rat brain microsomes. Vargas F. **J Neurochem** 1990 Mar; 54(3):809–14

Sodium/proton exchange in cultured bovine adrenal medullary cells. Yanagihara N, et al. **J Neurochem** 1990 May;54(5):1626–31

Phospholipid transverse diffusion in synaptosomes: evidence for the involvement of the aminophospholipid translocase. Zachowski A, et al. **J Neurochem** 1990 Oct;55(4):1352–6

Immunolocalization of cellular retinol–, retinaldehyde– and retinoic acid–binding proteins in rat retina during pre– and postnatal development. De Leeuw AM, et al. **J Neurocytol** 1990 Apr;19(2):253–64

Immunological characterization and localization of the Na+/Ca2(+)–exchanger in bovine retina. Haase W, et al. **J Neurosci** 1990 May;10(5):1486–94

Alpha–internexin, a novel neuronal intermediate filament protein, precedes the low molecular weight neurofilament protein (NF–L) in the developing rat brain. Kaplan MP, et al. **J Neurosci** 1990 Aug;10(8):2735–48

Expression of pheromone binding proteins during antennal development in the gypsy moth Lymantria dispar. Vogt RG, et al. **J Neurosci** 1989 Sep;9(9):3332–46

Covalent labeling of the cocaine–sensitive catecholamine transporter. Howard BD, et al. **J Neurosci Res** 1990 Jun; 26(2):149–58

Permissive and non–permissive reactive astrocytes: immunofluorescence study with antibodies to the glial hyaluronate–binding protein. Mansour H, et al. **J Neurosci Res** 1990 Mar;25(3):300–11

Prenatal diagnosis of nonketotic hyperglycinemia: enzymatic analysis of the glycine cleavage system in chorionic villi. Hayasaka K, et al. **J Pediatr** 1990 Mar;116(3):444–5

Sodium–calcium exchange in guinea–pig cardiac cells: exchange current and changes in intracellular Ca2+. Beuckelmann DJ, et al. **J Physiol (Lond)** 1989 Jul; 414:499–520

Is a water–soluble form of TTX–sensitive channel possible? Malysheva MK, et al. **J Protein Chem** 1989 Jun;8(3):390–1

Identification of Mycoplasma binding proteins utilizing a 100 kilodalton lung fibroblast receptor. Geary SJ, et al. **J Recept Res** 1989–90;9(6):465–78

The influence of various steroids on the binding of methyltrienolone (R1881) to human placenta: evidence for a second steroid–binding site which stabilizes the R1881 binding site. Murphy BE, et al. **J Steroid Biochem** 1989 Nov;33(5):923–6

Translation by the adenovirus tripartite leader: elements which determine independence from cap–binding protein complex [published erratum appears in J Virol 1990 Aug;64(8):4042] Dolph PJ, et al. **J Virol** 1990 Jun; 64(6):2669–77

Dual regulatory mechanisms of proton transport in rat papillary collecting duct cells in culture. Takeda K, et al. **Jpn J Physiol** 1989;39(3):397–410

Increased Na+/H+ antiport activity in the renal brush border membrane of SHR. Morduchowicz GA, et al. **Kidney Int** 1989 Oct;36(4):576–81

A simple method for measurement of the haemoglobin binding capacity of canine haptoglobin. Batchelor J, et al. **Lab Anim** 1989 Oct;23(4):365–9

Na(+)–Ca2+ exchanger and cardiac contraction [editorial] **Lancet** 1990 Jul 28;336(8709):219–20

Intestinal absorption of unconjugated dihydroxy bile acids: non–mediation by the carrier system involved in long chain fatty acid absorption. Stremmel W, et al. **Lipids** 1990 Jan; 25(1):11–6

Kinetics of ion movement mediated by carriers and channels. Andersen OS. **Methods Enzymol** 1989;171:62–112

Nonavidin biotin–binding proteins. Dakshinamurti K, et al. **Methods Enzymol** 1990;184:93–102

Survey of carrier methodology: strategy for identification, isolation, and characterization of transport systems. Klingenberg M. **Methods Enzymol** 1989;171:12–23 (29 ref.)

Identification of bile acid transport protein in hepatocyte sinusoidal plasma membranes. Levy D, et al. **Methods Enzymol** 1989;174:25–31

Nuclear cap binding protein from HeLa cells. Ohno M, et al. **Methods Enzymol** 1990;181:209–15

Determination of RNA–protein and RNA–ribonucleoprotein interactions by nuclease probing. Parker KA, et al. **Methods Enzymol** 1989;180:454–68

Generation of steady–state rate equations for enzyme and carrier–transport mechanisms: a microcomputer program. Runyan KR, et al. **Methods Enzymol** 1989;171:164–90

Glycolipid transfer protein from pig brain. Sasaki T, et al. **Methods Enzymol** 1989;179:559–66

Inhibition of human erythrocyte and leukocyte Na+, K(+)–pump activity by lysophosphatidylcholines. Lijnen P, et al. **Methods Find Exp Clin Pharmacol** 1990 May; 12(4):281–6

Plant RNA–binding proteins. Goodall G, et al. **Mol Biol Rep** 1990;14(2–3):137

Complex formation between a cytoplasmic protein and the ferritin mRNA regulates translation initiation. Hentze MW, et al. **Mol Biol Rep** 1990;14(2–3):61

A selective review of RNA–protein interactions in eukaryotes. Mattaj IW. **Mol Biol Rep** 1990;14(2–3):151–5 (52 ref.)

Cytoplasmic pools of soluble mRNA binding proteins and particles in Xenopus laevis early development. Murray MT, et al. **Mol Biol Rep** 1990;14(2–3):69–70

The Met–tRNA binding factor eIF–2 coordinates the mRNA recognition by cap binding proteins. van Heugten HA, et al. **Mol Biol Rep** 1990;14(2–3):63

Interaction of (Na + K + 2 Cl) cotransport and the Na/K pump in cultured chick cardiac myocytes. Liu S, et al. **Mol Cell Biochem** 1989 Sep 7;89(2):147–50

Sodium–hydrogen exchange and its role in controlling contractility during acidosis in cardiac muscle. Vaughan–Jones RD, et al. **Mol Cell Biochem** 1989 Sep 7; 89(2):157–62

Sodium–calcium exchange in mammalian heart: current–voltage relation and intracellular calcium concentration. Wier WG, et al. **Mol Cell Biochem** 1989 Sep 7;89(2):97–102

Identification and characterization of the poly(A)–binding proteins from the sea urchin: a quantitative analysis. Drawbridge J, et al. **Mol Cell Biol** 1990 Aug; 10(8):3994–4006

Regulation of interaction of the iron–responsive element binding protein with iron–responsive RNA elements. Haile DJ, et al. **Mol Cell Biol** 1989 Nov;9(11):5055–61

Binding protein, radioreceptor and biological activities of recombinant methionyl insulin–like growth factor–I variants. Hodgkinson SC, et al. **Mol Cell Endocrinol** 1989 Sep;66(1):37–44

Na+/H+ exchange is responsible for intracellular pH regulation in insulin–secreting HIT–T15 cells. Trebilcock R, et al. **Mol Cell Endocrinol** 1990 May 28;71(1):21–5

A domain containing leucine–zipper–like motifs mediate novel in vivo interactions between the thyroid hormone and retinoic acid receptors. Forman BM, et al. **Mol Endocrinol** 1989 Oct;3(10):1610–26

Identification of nuclear factors that enhance binding of the thyroid hormone receptor to a thyroid hormone response element. Murray MB, et al. **Mol Endocrinol** 1989 Sep; 3(9):1434–42

Analysis of expression of hybrid yeast genes containing ARS elements. Kipling D, et al. **Mol Gen Genet** 1989 Sep; 218(3):531–5

Association of transport–defective light chains with immunoglobulin heavy chain binding protein. Ma J, et al. **Mol Immunol** 1990 Jul;27(7):623–30

2–Iodoimipramine, a novel ligand for the serotonin

transporter. Humphreys CJ, et al. **Mol Pharmacol** 1989 Oct; 36(4):620–6

Pharmacological characterization of the adenylate cyclase–coupled adenosine receptor in isolated guinea pig atrial myocytes. Wilken A, et al. **Mol Pharmacol** 1990 Jun; 37(6):916–20

Male accessory sex glands produce heparin–binding proteins that bind to cauda epididymal spermatozoa and are testosterone dependent. Nass SJ, et al. **Mol Reprod Dev** 1990 Mar;25(3):237–46

Kinetics, stoichiometry and role of the Na–Ca exchange mechanism in isolated cardiac myocytes. Crespo LM, et al. **Nature** 1990 Jun 14;345(6276):618–21

Specific binding of HIV–1 recombinant Rev protein to the Rev–responsive element in vitro. Daly TJ, et al. **Nature** 1989 Dec 14;342(6251):816–9

Immunosuppression. Convergence of drug action. [news] Freedman RB. **Nature** 1989 Oct 26;341(6244):692

A cytosolic binding protein for the immunosuppressant FK506 has peptidyl–prolyl isomerase activity but is distinct from cyclophilin. Siekierka JJ, et al. **Nature** 1989 Oct 26; 341(6244):755–7

Sensitivity to cyclosporin A is mediated by cyclophilin in Neurospora crassa and Saccharomyces cerevisiae. Tropschug M, et al. **Nature** 1989 Dec 21–28; 342(6252):953–5

The RII subunit of cAMP–dependent protein kinase binds to a common amino–terminal domain in microtubule–associated proteins 2A, 2B, and 2C. Obar RA, et al. **Neuron** 1989 Nov;3(5):639–45

Role of certain hormones with general metabolic action in the expression of sexual differentiation of the rat liver with respect to a special estrogen–binding protein. Smirnova OV, et al. **Neurosci Behav Physiol** 1990 Jan–Feb;20(1):51–6

All nucleoside transporters in bovine chromaffin cells are nitrobenzylthioinosine sensitive. Torres M, et al. **Neurosci Lett** 1990 May 4;112(2–3):343–7

Characterization of NMDA–coupled and dopoamine reuptake carrier coupled [3H]–TCP binding sites in guinea pig brain. Reid AA, et al. **NIDA Res Monogr** 1989;95:530–1

Structural requirements of iron–responsive elements for binding of the protein involved in both transferrin receptor and ferritin mRNA post–transcriptional regulation. Leibold EA, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1819–24

Interaction of a 3' RNA region of the mustard trnK gene with chloroplast proteins. Nickelsen J, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):9637–48

The mRNA–binding protein which controls ferritin and transferrin receptor expression is conserved during evolution. Rothenberger S, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1175–9

Immunohistochemical localization of nonerythroid spectrin (fodrin) in the sensory cells of the vestibular end organs of the rat and guinea pig. Pirvola U, et al. **ORL J Otorhinolaryngol Relat Spec** 1990;52(2):127–32

Na/Ca exchangers in collecting cells of rat kidney. A single tubule fura–2 study. Taniguchi S, et al. **Pflugers Arch** 1989 Nov;415(2):191–7

cAMP binding proteins after chronic treatment with antidepressants. Tinelli D, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:95–6

Homologous sugar transport proteins in Escherichia coli and their relatives in both prokaryotes and eukaryotes. Henderson PJ, et al. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30;326(1236):391–410 (105 ref.)

Periplasmic binding protein–dependent transport systems: the membrane–associated components. Higgins CF, et al. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):353–64; discussion 364–5 (53 ref.)

Resolution and reconstitution of anion exchange reactions. Maloney PC. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):437–54 (76 ref.)

Atomic structures of periplasmic binding proteins and the high–affinity active transport systems in bacteria. Quiocho FA. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):341–51; discussion 351–2

Intracellular–pH dependence of Na–H exchange and acid loading in quiescent and arginine vasopressin–activated mesangial cells. Boyarsky G, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5921–4

Functional expression of murine multidrug resistance in Xenopus laevis oocytes. Castillo G, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4737–41

Altering enzymatic activity: recruitment of carboxypeptidase activity into an RTEM beta–lactamase/penicillin–binding protein 5 chimera. Chang YH, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2823–7

Down–regulation of voltage–dependent sodium channels initiated by sodium influx in developing neurons. Dargent B, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5907–11

Inhibition of Na–K–Cl cotransport in Ehrlich ascites cells by antiserum against purified proteins of the cotransporter. Dunham PB, et al. **Proc Natl Acad Sci U S A** 1990 Sep; 87(17):6828–32

In vivo 23Na and 31P NMR measurement of a tonoplast Na+/H+ exchange process and its characteristics in two barley cultivars. Fan TW, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9856–60

A soluble, high–affinity, interleukin–4–binding protein is present in the biological fluids of mice. Fernandez–Botran R, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4202–6

Calmodulin and calcium–dependent protease I coordinately regulate the interaction of fodrin with actin. Harris AS, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3009–13

Preincubation in acid medium increases Na/H antiporter activity in cultured renal proximal tubule cells. Horie S, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4742–5

Are many Z–DNA binding proteins actually phospholipid–binding proteins? Krishna P, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1292–5

Charge isoforms of the adrenocortical pregnenolone–binding protein: influence of phosphorylation on isoformation and binding activity. Lee YC, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):2003–7

Tumor necrosis factor induces phosphorylation of a 28–kDa mRNA cap–binding protein in human cervical carcinoma cells. Marino MW, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8417–21

Energy coupling to periplasmic binding protein–dependent transport systems: stoichiometry of ATP hydrolysis during transport in vivo. Mimmack ML, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8257–61

Guanosine 3',5'–cyclic nucleotide binding proteins of bovine retina identified by photoaffinity labeling. Thompson DA, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2201–5

Refined estimation of kinetic parameters of the Na+/H+ antiport in human fibroblasts and platelets. Gardner JP, et al. **Proc Soc Exp Biol Med** 1990 Jun;194(2):165–71

Proteolytic cleavage of high–molecular–weight microtubule–associated proteins by the prostatic estramustine–binding protein. Rutberg M, et al. **Prostate** 1989;15(4):287–97

Chloride–bicarbonate exchange in isolated rat pancreatic acini. Gillespie JI, et al. **Q J Exp Physiol** 1989 Nov; 74(6):883–95

Evidence for separate carriers for purine nucleosides and for pyrimidine nucleosides in the renal brush border membrane. Le Hir M. **Renal Physiol Biochem** 1990 May–Jun; 13(3):154–61

Machinery for cell growth and division: penicillin–binding proteins and other proteins. Matsuhashi M, et al. **Res Microbiol** 1990 Jan;141(1):89–103 (48 ref.)

Effect of retinoids and 1,25(OH)2 vitamin D3 bound to their plasma transport proteins on growth and differentiation of HL–60 cells. Botilsrud M, et al. **Scand J Clin Lab Invest** 1990 May;50(3):309–17

Sodium current–induced release of calcium from cardiac sarcoplasmic reticulum [see comments] Leblanc N, et al. **Science** 1990 Apr 20;248(4953):372–6 Comment in: Science 1990 Apr 20;248(4953):283.

Sodium–calcium exchange in excitable cells: fuzzy space [comment] Lederer WJ, et al. **Science** 1990 Apr 20; 248(4953):283 Comment on: Science 1990 Apr 20;248(4953):372–6. Comment on: Science 1990 Apr 20;248(4953):376–8.

Identification of an AUUUA–specific messenger RNA binding protein. Malter JS. **Science** 1989 Nov 3; 246(4930):664–6

No specific recognition of leader peptide by SecB, a chaperone involved in protein export. Randall LL, et al. **Science** 1990 May 18;248(4957):860–3

Growth factors induce phosphorylation of the Na+/H+ antiporter, glycoprotein of 110 kD. Sardet C, et al. **Science** 1990 Feb 9;247(4943):723–6

Biological activity of retinoids correlates with affinity for nuclear receptors but not for cytosolic binding protein. Darmon M, et al. **Skin Pharmacol** 1988;1(3):161–75

The interaction of thrombin with platelet protease nexin. Knupp CL. **Thromb Res** 1989 Oct 1;56(1):77–90

Selective and transient association of Sendai virus HN glycoprotein with BiP. Roux L. **Virology** 1990 Mar; 175(1):161–6

[Affinity of penicillin–binding proteins of Escherichia coli K–12 for furbenicillin and other beta–lactam antibiotics] Lei Y, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Mar; 10(2):177–80 (Eng. Abstr.) **(Chi)**

[Retinoid receptors in epidermoid carcinoma of the ORL sphere] Rallet A, et al. **Bull Cancer (Paris)** 1989; 76(7):689–95 (Eng. Abstr.) **(Fre)**

[Enzymatic fluorometric determination of cortisol–binding proteins in plasma] Leybold K, et al. **Acta Endocrinol (Copenh)** 1967 Sep;56(1):99–106 (Eng. Abstr.) **(Ger)**

[Determination of placental protein 12 (insulin–like growth factor binding protein 25) in pleural effusion of various origins] Strache RR, et al. **Z Gesamte Inn Med** 1990 Mar 15;45(6):164–6 (Eng. Abstr.) **(Ger)**

[Studies on insulin–like growth factors (IGF–I, –II) and there binding proteins in normal human pregnancy] Funakoshi T, et al. **Nippon Naibunpi Gakkai Zasshi** 1990 Jul 20; 66(7):688–99 (Eng. Abstr.) **(Jpn)**

[Transport proteins for drugs and bile acids in the liver cytosol and plasma membrane—its multiplicity and functions] Sugiyama Y, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(6):941–56 (113 ref.) **(Jpn)**

[Effect of aminoglycosides on the binding of C14–benzylpenicillin by penicillin–binding proteins in Escherichia coli] Beliavskaia IV, et al. **Antibiot Khimioter** 1989 Jul;34(7):510–4 (Eng. Abstr.) **(Rus)**

[Penicillin–binding proteins of various strains of Lactobacillus] Griaznova NS, et al. **Antibiot Khimioter** 1990 Feb;35(2):15–9 (Eng. Abstr.) **(Rus)**

[Modulation of the inhibiting effect of long–chained acyl–CoA on oxidative phosphorylation of liver mitochondria in rats of various lines by Z–protein] Solov'ev VN, et al. **Biokhimiia** 1989 Oct;54(10):1681–5 (Eng. Abstr.) **(Rus)**

[Argiopinin–binding proteins from the membrane of the bull cerebral cortex] Volkova TM, et al. **Bioorg Khim** 1989 Aug; 15(8):1022–9 (Eng. Abstr.) **(Rus)**

[Binding of monoclonal antibodies to cerebral cytoplasmic tetrodotoxin–sensitive protein to human lymphocytes] Pinchuk GV, et al. **Biull Eksp Biol Med** 1989 Aug; 108(8):174–7 (Eng. Abstr.) **(Rus)**

[The role of Na+/H+–exchange and diffusion of lactic acid in acid–dependent uncoating of influenza virus] Kirillov VA, et al. **Dokl Akad Nauk SSSR** 1989;309(2):461–3 **(Rus)**

[The characteristics of the estrogen–binding protein from the pancreas of female and male rats] Kazanova EG, et al. **Probl Endokrinol (Mosk)** 1990 May–Jun;36(3):66–72 (Eng. Abstr.) **(Rus)**

[Age–related characteristics of corticosteroid interactions with blood transport proteins] Konoplia EF, et al. **Vopr Med Khim** 1989 Sep–Oct;35(5):40–5 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Comparison of diverse transport signals in synthetic peptide–induced nuclear transport. Lanford RE, et al. **Exp Cell Res** 1990 Jan;186(1):32–8

Improved estimates of clearance of 131I–labelled insulin–like growth factor–I carrier protein complexes from blood plasma of sheep. Davis SR, et al. **J Endocrinol** 1989 Dec; 123(3):469–75

In vivo tumor targeting of a recombinant single–chain antigen–binding protein. Colcher D, et al. **J Natl Cancer Inst** 1990 Jul 18;82(14):1191–7

The red cell anion–transport system: kinetics and physiological implications. Brahm J. **Soc Gen Physiol Ser** 1988;43:141–50 (34 ref.)

Mechanisms of anion net transport in the human erythrocyte. Fröhlich O, et al. **Soc Gen Physiol Ser** 1988;43:181–92 (35 ref.)

PHARMACOLOGY

Fatty acid binding protein (FABP) modulates prostaglandin E binding to rat epididymal adipocyte membrane similarly to albumin. Cohen–Luria R, et al. **Biochim Biophys Acta** 1990 Jan 15;1021(1):96–100

Synergistic effects of lipid transfers and hepatic lipase in the formation of very small high–density lipoproteins during incubation of human plasma. Newnham HH, et al. **Biochim Biophys Acta** 1990 May 1;1044(1):57–64

Protective role of intracoronary fatty acid binding protein in ischemic and reperfused myocardium. Srimani BN, et al. **Circ Res** 1990 Jun;66(6):1535–43

Glia–derived nexin potentiates neurite extension in hippocampal pyramidal cells in vitro. Farmer L, et al. **Dev Neurosci** 1990;12(2):73–80

Insulin–like growth factor–binding protein (IGF–BP) inhibition of granulosa cell function: effect on cyclic adenosine 3',5'–monophosphate, deoxyribonucleic acid synthesis, and comparison with the effect of an IGF–I antibody. Bicsak TA, et al. **Endocrinology** 1990 Apr; 126(4):2184–9

Regulation of growth hormone (GH) bioactivity by a recombinant human GH–binding protein. Lim L, et al. **Endocrinology** 1990 Sep;127(3):1287–91

Somatomedin–binding proteins: what role do they play in the growth process? Cianfarani S, et al. **Eur J Pediatr** 1989 Nov;149(2):76–9 (54 ref.)

Multiple pathways of rapid beta 2–adrenergic receptor desensitization. Delineation with specific inhibitors. Lohse MJ, et al. **J Biol Chem** 1990 Feb 25;265(6):3202–11

Neurite outgrowth activity of protease nexin–1 on neuroblastoma cells requires thrombin inhibition. Gurwitz D, et al. **J Cell Physiol** 1990 Jan;142(1):155–62

The 25–kilodalton insulin–like growth factor (IGF)–binding protein inhibits both basal and IGF–I–mediated growth of chick embryo pelvic cartilage in vitro. Burch WM, et al. **J Clin Endocrinol Metab** 1990 Jan;70(1):173–80

Human mannose–binding protein activates the alternative complement pathway and enhances serum bactericidal activity on a mannose–rich isolate of Salmonella. Schweinle JE, et al. **J Clin Invest** 1989 Dec;84(6):1821–9

Reciprocal modulation of astrocyte stellation by thrombin and protease nexin–1. Cavsanaugh KP, et al. **J Neurochem** 1990 May;54(5):1735–43

Arginine vasopressin–binding peptides derived from the bovine and rat genomes differ in their abilities to block arginine vasopressin modulation of murine immune function. Torres BA, et al. **J Neuroimmunol** 1990 May; 27(2–3):191–9

Inhibition by the protein kinase inhibitors, isoquinolinesulfonamides, of fluid accumulation induced by Escherichia coli heat–stable enterotoxin, 8–bromo–cGMP and 8–bromo–cAMP in suckling mice. Hirayama T, et al. **Microb Pathog** 1989 Oct;7(4):255–61

Regulation of steroidogenesis in subclones of the MA–10 mouse Leydig tumor cell line. Kilgore MW, et al. **Mol Cell Endocrinol** 1990 Feb 12;69(1):9–16

[Molecular pharmacologic approach to cell–communication

transduction] Hidaka H. **Nippon Hifuka Gakkai Zasshi** 1989 Dec;99(13):1293–7 **(Jpn)**

PHYSIOLOGY

Insulin-like growth factors and their binding proteins. Rutanen EM, et al. **Acta Endocrinol (Copenh)** 1990 Jul; 123(1):7–13 (57 ref.)

Plasma membrane mechanisms for intracellular calcium regulation in squid axons. DiPolo R, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(4):437–44 (29 ref.)

Functional role of the sodium-bicarbonate cotransport of glial cells in the leech central nervous system. Deitmer JW, et al. **Acta Physiol Scand Suppl** 1989;582:31

Characteristics of calcium currents and of pH regulation in Purkinje cells maintained in primary culture. Gaillard S, et al. **Acta Physiol Scand Suppl** 1989;582:38

Role of anions in platelet intra cellular calcium ion rise and arachidonic acid release induced by thrombin. Ozaki Y, et al. **Adv Exp Med Biol** 1989;255:455–60

The Na+/H+ exchange system in vascular smooth muscle cells. Frelin C, et al. **Adv Nephrol** 1990;19:17–29 (60 ref.)

Recovery of contractility and pHi during respiratory acidosis in ferret hearts: role of Na(+)-H+ exchange. Cingolani HE, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H843–8

Na(+)-H+ antiporter and Na(+)-(HCO3-)n symporter regulate intracellular pH in mouse medullary thick limbs of Henle. Kikeri D, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):F445–56

Phospholipid transfer proteins in mammalian lung. Lumb RH. **Am J Physiol** 1989 Oct;257(4 Pt 1):L190–4 (75 ref.)

Coming of age of insulin-like growth factor binding proteins: major players in a complex equation. Adashi EY. **Am J Reprod Immunol** 1989 Jul;20(3):97–9 (41 ref.)

Heterogeneity of anion exchangers mediating chloride transport in the proximal tubule. Aronson PS, et al. **Ann N Y Acad Sci** 1989;574:96–101

Role of the membrane-associated folate binding protein (folate receptor) in methotrexate transport by human KB cells. Deutsch JC, et al. **Arch Biochem Biophys** 1989 Nov 1;274(2):327–37

The role of sterol carrier protein 2 in stimulation of steroidogenesis in rat adrenal mitochondria by adrenal cytosol. McNamara BC, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):53–62

Possible role of rat fatty acid-binding proteins in the intestine as carriers of phenol and phthalate derivatives. Kanda T, et al. **Biochem Biophys Res Commun** 1990 May 16; 168(3):1053–8

Hepatobiliary transport of the anionic organomercury compound (mersalyl) is carrier mediated. Thalhammer T, et al. **Biochem Pharmacol** 1989 Oct 1;38(19):3223–31

Reconstitution of neurotransmitter carriers from synaptic vesicles. Maycox PR, et al. **Biochem Soc Trans** 1990 Jun; 18(3):381–4 (14 ref.)

The selectivity of secretion: protein sorting in the endoplasmic reticulum. Pelham HR. **Biochem Soc Trans** 1989 Oct;17(5):795–802 (73 ref.)

In squid nerve fibers monovalent activating cations are not cotransported during Na+/Ca2+ exchange. Condrescu M, et al. **Biochim Biophys Acta** 1990 May 9;1024(1):198–202

Disparity in the response of sex steroid-binding protein and corticosteroid-binding globulin to thyroxine in the primate [published erratum appears in Biol Reprod 1989 Aug;41(2):following 379] Stanczyk FZ, et al. **Biol Reprod** 1989 Jul;41(1):63–7

A role for protein kinase C in the membrane fusion necessary for platelet granule secretion. Gerrard JM, et al. **Blood** 1989 Nov 15;74(7):2405–13

Fodrin and band 4.1 in a plasma membrane-associated fraction of human neutrophils. Stevenson KB, et al. **Blood** 1989 Nov 1;74(6):2136–43

Glutamate uptake in mammalian retinal glia is voltage- and potassium-dependent. Sarantis M, et al. **Brain Res** 1990 May 21;516(2):322–5

Villin induces microvilli growth and actin redistribution in transfected fibroblasts. Friederich E, et al. **Cell** 1989 Nov 3;59(3):461–75

Ligand-activated thyroid hormone and retinoic acid receptors inhibit growth factor receptor promoter expression. Hudson LG, et al. **Cell** 1990 Sep 21; 62(6):1165–75

Trans-activation by HIV-1 Tat via a heterologous RNA binding protein. Selby MJ, et al. **Cell** 1990 Aug 24; 62(4):769–76

Cytotoxicity of S-(1,2,3,4,4-pentachlorobutadienyl)-L cysteine after apical and basolateral exposure of LLC-PK monolayers. Involvement of an amino acid transport system. Mertens JJ, et al. **Chem Biol Interact** 1990; 75(1):119–30

The role of a cell-associated hyaluronan-binding protein in fibroblast behaviour. Turley EA. **Ciba Found Symp** 1989; 143:121–33; discussion 133–7, 281–5 (23 ref.)

Effects of proton buffering and of amiloride derivatives on reperfusion arrhythmias in isolated rat hearts. Possible evidence for an arrhythmogenic role of Na(+)-H+ exchange. Dennis SC, et al. **Circ Res** 1990 Apr;66(4):1156–9

The level of mannan-binding protein regulates the binding of complement-derived opsonins to mannan and zymosan at low serum concentrations. Super M, et al. **Clin Exp Immunol** 1990 Feb;79(2):144–50

The erb-A family receptors for thyroid hormones, steroids, vitamin D and retinoic acid: characteristics and modulation. Nunez EA. **Curr Opin Cell Biol** 1989 Apr;1(2):177–85 (41 ref.)

The role of retinoid-binding proteins in the generation of pattern in the developing limb, the regenerating limb and the nervous system. Maden M, et al. **Development** 1989;107 Suppl:109–19

The nuclear conversion of pregnenolone to progesterone and subsequent binding to the nuclear progesterone-binding protein in the guinea pig adrenal cortex: a possible regulatory role for the pregnenolone-binding protein. Demura T, et al. **Endocrinology** 1990 Sep;127(3):1114–20

Functions of fatty acid binding proteins. Kaikaus RM, et al. **Experientia** 1990 Jun 15;46(6):617–30 (191 ref.)

Interaction of lipid transfer protein with plasma lipoproteins and cell membranes. Morton RE. **Experientia** 1990 Jun 15; 46(6):552–60 (81 ref.)

Properties and modes of action of specific and non-specific phospholipid transfer proteins. Wirtz KW, et al. **Experientia** 1990 Jun 15;46(6):592–9 (60 ref.)

Rhodopsin reconstitution in bleached rod outer segment membranes in the presence of a retinal-binding protein from the honeybee. Pepe IM, et al. **FEBS Lett** 1990 Jul 30;268(1):177–9

Na+/H+ exchange and Ca2+ influx. Siffert W, et al. **FEBS Lett** 1989 Dec 18;259(1):1–4 (28 ref.)

Cytotoxic activity of tumor necrosis factor is inhibited by amiloride derivatives without involvement of the Na+/H+ antiporter. Vanhaesebroeck B, et al. **FEBS Lett** 1990 Feb 26;261(2):319–22

Biotin transport is regulated. Urban E. **Gastroenterology** 1990 Jan;98(1):242–3

Modern approaches to bile acid transport proteins. Wilson FA. **Hosp Pract [Off]** 1990 Apr 15;25(4):95–9, 104–8, 110

Potential role of Cl-HCO3 exchange in regulating vascular tone [comment] Karniski LP. **Hypertension** 1990 Jan; 15(1):104–6 Comment on: Hypertension 1990 Jan;15(1):97–103.

The A-factor-binding protein of Streptomyces griseus negatively controls streptomycin production and sporulation. Miyake K, et al. **J Bacteriol** 1990 Jun; 172(6):3003–8

Physicochemical properties of 57 kDa thyroid hormone binding protein from rat liver nuclei. Okabe N, et al. **J Biochem (Tokyo)** 1989 Dec;106(6):1064–7

Altered membrane structure in transfected mouse L-cell fibroblasts expressing rat liver fatty acid-binding protein. Jefferson JR, et al. **J Biol Chem** 1990 Jul 5;265(19):11062–8

Stimulation of cholinephosphotransferase activity by phosphatidylcholine transfer protein. Regulation of membrane phospholipid synthesis by a cytosolic protein. Khan ZU, et al. **J Biol Chem** 1990 Jan 15;265(2):700–5

Paxillin: a new vinculin-binding protein present in focal adhesions. Turner CE, et al. **J Cell Biol** 1990 Sep; 111(3):1059–68

Role of Na+/H+ exchange in the granulocyte-macrophage colony-stimulating factor-dependent growth of a leukemic cell line. Caracciolo D, et al. **J Cell Physiol** 1990 Apr; 143(1):133–9

Activation of the Na+/H+ exchanger by phorbol ester and osmotic shock is dependent on the degree of neutrophilic maturation. Costa-Casnellie MR, et al. **J Cell Physiol** 1989 Nov;141(2):294–300

Epoxyeicosatrienoic acids activate Na+/H+ exchange and are mitogenic in cultured rat glomerular mesangial cells. Harris RC, et al. **J Cell Physiol** 1990 Sep;144(3):429–37

Regulation of the Na(+)-dependent and the Na(+)-independent polyamine transporters in renal epithelial cells (LLC-PK1). Parys JB, et al. **J Cell Physiol** 1990 Sep;144(3):365–75

Regulation of the cytoplasmic accumulation of 5-methyltetrahydrofolate in MA104 cells is independent of folate receptor regulation. Kamen BA, et al. **J Clin Invest** 1989 Nov;84(5):1379–86

The temperature dependence of the adrenergic Na+/H+ exchanger of trout erythrocytes. Cossins AR, et al. **J Exp Biol** 1990 Jan;148:303–12

A peptide binding protein having a role in antigen presentation is a member of the HSP70 heat shock family. Vanbuskirk A, et al. **J Exp Med** 1989 Dec 1; 170(6):1799–809

Asymmetrical properties of the Na-Ca exchanger in voltage-clamped, internally dialyzed squid axons under symmetrical ionic conditions. DiPolo R, et al. **J Gen Physiol** 1990 May;95(5):819–35

Na+-H+ exchange and other ion-transport systems in erythrocytes of essential hypertensives and spontaneously hypertensive rats: a comparative analysis. Orlov SN, et al. **J Hypertens** 1989 Oct;7(10):781–8

Cyclosporin A rapidly inhibits mediator release from human basophils presumably by interacting with cyclophilin. Cirillo R, et al. **J Immunol** 1990 May 15;144(10):3891–7

The influence of calcium, sodium, and the Na+/Ca2+ antiport on susceptibility to cytolysin/perforin-mediated cytolysis. Kraut RP, et al. **J Immunol** 1990 May 1; 144(9):3498–505

Expression of the alpha and beta retinoic acid receptors in skin. Rees JL, et al. **J Invest Dermatol** 1989 Dec; 93(6):818–20

Transfer of cholesteryl ester into high density lipoprotein by cholesteryl ester transfer protein: effect of HDL lipid and apoprotein content. Sparks DL, et al. **J Lipid Res** 1989 Oct;30(10):1491–8

Functional characteristics of the cardiac sarcolemmal monocarboxylate transporter. Trosper TL, et al. **J Membr Biol** 1989 Nov;112(1):15–23

Carrier-mediated transport of thyroid hormones into rat glial cells in primary culture. Francon J, et al. **J Neurochem** 1989 Nov;53(5):1456–63

Regulation of the renal Na+-H+ exchanger by protein phosphorylation. Weinman EJ, et al. **Kidney Int** 1989 Oct; 36(4):519–25 (53 ref.)

Physiology and molecular biology of the renal Na/H antiporter. Krapf R. **Klin Wochenschr** 1989 Sep 1; 67(17):847–51 (19 ref.)

Functional analyses of the Xenopus La protein. Moreau G, et al. **Mol Biol Rep** 1990;14(2–3):51

The poly(A)-binding protein is required for translation initiation and poly(A) tail shortening. Sachs A, et al. **Mol Biol Rep** 1990;14(2–3):73

Retinoic acid-induced granulocytic differentiation of HL-60 myeloid leukemia cells is mediated directly through the retinoic acid receptor (RAR-alpha). Collins SJ, et al. **Mol Cell Biol** 1990 May;10(5):2154–63

Insulin-like growth factor-binding proteins (IGFBPs): more than just 1, 2, 3. Ooi GT. **Mol Cell Endocrinol** 1990 Jun 18;71(2):C39–43 (66 ref.)

Na(+)-Ca2+ exchange activity in central nerve endings. I. Ionic conditions that discriminate 45Ca2+ uptake through the exchanger from that occurring through voltage-operated Ca2+ channels. Taglialatela M, et al. **Mol Pharmacol** 1990 Sep;38(3):385–92

Na(+)-Ca2+ exchange activity in central nerve endings. II. Relationship between pharmacological blockade by amiloride analogues and dopamine release from tuberoinfundibular hypothalamic neurons. Taglialatela M, et al. **Mol Pharmacol** 1990 Sep;38(3):393–400

Regulation and deregulation of cardiac Na(+)-Ca2+ exchange in giant excised sarcolemmal membrane patches. Hilgemann DW. **Nature** 1990 Mar 15;344(6263):242–5

Co-existence between receptors, carriers, and second messengers on astrocytes grown in primary cultures. Hansson E. **Neurochem Res** 1989 Sep;14(9):811–9 (60 ref.)

Evidence of chloride/bicarbonate exchange mediating bicarbonate efflux from S3 segments of rabbit renal proximal tubule. Kondo Y, et al. **Pflugers Arch** 1990 Mar; 415(6):726–33

Structures and functions of a supergene family of calcium and phospholipid binding proteins. Geisow MJ, et al. **Prog Clin Biol Res** 1990;349:111–21 (24 ref.)

Intracellular fatty acid trafficking and the role of cytosolic lipid binding proteins. Matarese V, et al. **Prog Lipid Res** 1989;28(4):245–72 (151 ref.)

Catecholamine release controlled by blood oxygen tension during deep hypoxia in trout: effect on red blood cell Na/H exchanger activity. Fiévet B, et al. **Respir Physiol** 1990 Jan;79(1):81–90

The relationship between charge movements associated with ICa and INa-Ca in cardiac myocytes [see comments] Bridge JH, et al. **Science** 1990 Apr 20;248(4953):376–8 Comment in: Science 1990 Apr 20;248(4953):283.

An RNA polymerase-binding protein that is required for communication between an enhancer and a promoter. Herendeen DR, et al. **Science** 1990 May 4;248(4955):573–8

Intracellular pH regulation in neutrophils: properties and distribution of the Na+/H+ antiporter. Grinstein S, et al. **Soc Gen Physiol Ser** 1988;43:303–14 (21 ref.)

Ionomycin, a Ca++ ionophore, increases platelet volume independently of the Na+/H+ exchanger. Ozaki Y, et al. **Thromb Res** 1990 Jan 1;57(1):87–95

Poly(A), poly(A) binding protein and the regulation of mRNA stability. Bernstein P, et al. **Trends Biochem Sci** 1989 Sep;14(9):373–7 (32 ref.)

Retinal-binding protein as a shuttle for retinal in the rhodopsin-retinochrome system of the squid visual cells. Terakita A, et al. **Vision Res** 1989;29(6):639–52

[Chemistry and biology of fertilization] Dietl J. **Arch Gynecol Obstet** 1989;245(1–4):866–8 (8 ref.) **(Ger)**

[Molecular mechanisms of the uptake of fatty acids and bilirubin by the liver cells] Stremmel W, et al. **Z Gastroenterol [Verh]** 1990 Apr;25:30–4 (19 ref.) **(Ger)**

[Function of thyroid hormone binding proteins in the cell] Ichikawa K, et al. **Seikagaku** 1990 Jun;62(6):401–16 (111 ref.) **(Jpn)**

RADIATION EFFECTS

Ultraviolet-induced cross-linking of RNA to proteins in vivo. Piñol-Roma S, et al. **Methods Enzymol** 1989; 180:410–8

SECRETION

Secretory proteins of the endometrium--potential markers for endometrial dysfunction. Bell SC, et al. **Baillieres Clin Obstet Gynaecol** 1989 Jun;3(2):271–91 (92 ref.)

Export of the periplasmic maltose-binding protein of Escherichia coli. Bassford PJ Jr. **J Bioenerg Biomembr** 1990 Jun;22(3):401–39 (95 ref.)

Differential regulation of insulin-like growth factor binding protein secretion from human decidual cells by IGF-I, insulin, and relaxin. Thraikill KM, et al. **J Clin Invest** 1990 Sep;86(3):878–83

Insulin and variation in glucose levels modify the secretion

rates of the growth hormone-independent insulin-like growth factor binding protein-1 in the human hepatoblastoma cell line Hep G2. Cotterill AM, et al. **J Endocrinol** 1989 Dec;123(3):R17-20

Effect of insulin-like growth factor-type I (IGF-I) and insulin on the secretion of sex hormone binding globulin and IGF-I binding protein (IBP-I) by human hepatoma cells. Singh A, et al. **J Endocrinol** 1990 Feb;124(2):R1-3

Truncation of the ectodomain of the human insulin receptor results in secretion of a soluble insulin binding protein from transfected CHO cells. Ellis L, et al. **J Mol Recognit** 1988 Feb;1(1):25-31

THERAPEUTIC USE

The efficacy and safety of pravastatin, compared to and in combination with bile acid binding resins, in familial hypercholesterolaemia [see comments] Hoogerbrugge N, et al. **J Intern Med** 1990 Sep;228(3):261-6 Comment in: J Intern Med 1990 Sep;228(3):201-5.

ULTRASTRUCTURE

Studies of the morphology and structure of the plasma lipid transfer particle from the tobacco hornworm, Manduca sexta. Ryan RO, et al. **J Lipid Res** 1990 May;31(5):871-9

Proton nuclear magnetic resonance studies on glutamine-binding protein from Escherichia coli. Formation of intermolecular and intramolecular hydrogen bonds upon ligand binding. Shen QC, et al. **J Mol Biol** 1989 Dec 20;210(4):849-57

Molecular genetic, biochemical and nuclear magnetic resonance studies on the role of the tryptophan residues of glutamine-binding protein from Escherichia coli. Shen QC, et al. **J Mol Biol** 1989 Dec 20;210(4):859-67

Opioid-binding protein (OBCAM) is rich in beta-sheets. Wu CS, et al. **J Protein Chem** 1990 Feb;9(1):3-7

URINE

Two tumor necrosis factor-binding proteins purified from human urine. Evidence for immunological cross-reactivity with cell surface tumor necrosis factor receptors. Engelmann H, et al. **J Biol Chem** 1990 Jan 25;265(3):1531-6

Growth hormone and growth hormone binding protein in human urine. Hattori N, et al. **Kidney Int** 1990 Mar; 37(3):951-4

Competitive idiotype-anti-idiotype enzyme immunoassay for adenosine deaminase binding protein. Nelles MJ. **Methods Enzymol** 1989;178:171-9

CARRIER STATE

Effects of booster HB vaccine in preventing hepatitis B virus infection from mother to child. Kunitomi T, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Dec;31(6):669-73

Prevention of neonatal HBV infection with the combination of HBIG and HBV vaccine and its long-term efficacy in infants born to HBeAg positive HBV carrier mothers. Tajiri H, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Dec; 31(6):663-8

Hepatitis B infection in a large municipal obstetrical population: characterization and prevention of perinatal transmission. Jonas MM, et al. **Am J Gastroenterol** 1990 Mar;85(3):277-80

Asymptomatic carriage of Cryptosporidium in two patients with leukemia [letter] Gentile G, et al. **Am J Infect Control** 1990 Apr;18(2):127-8

High Staphylococcus aureus nasal carriage rate in patients with acquired immunodeficiency syndrome or AIDS-related complex. Raviglione MC, et al. **Am J Infect Control** 1990 Apr;18(2):64-9

Prevalence of cryptosporidiosis in patients undergoing endoscopy: evidence for an asymptomatic carrier state. Roberts WG, et al. **Am J Med** 1989 Nov;87(5):537-9

Risk for non-A, non-B (type C) hepatitis through sexual or household contact with chronic carriers. Everhart JE, et al. **Ann Intern Med** 1990 Apr 1;112(7):544-5

Carriage and antibiotic susceptibility of Haemophilus influenzae type b and non b in Danish day-care attendees. Kristensen K. **APMIS** 1990 Jan;98(1):50-2

Duchenne muscular dystrophy manifesting carriers [letter] Boylan K. **Arch Neurol** 1990 Sep;47(9):951-2

Carriage of Staphylococcus aureus and local infections in diabetic outpatients treated with insulin pen [letter] Mey A, et al. **Diabetes Care** 1990 Apr;13(4):451-2

Isoniazid-rifampin-induced hepatitis in hepatitis B carriers. Wu JC, et al. **Gastroenterology** 1990 Feb;98(2):502-4

Investigation of a Streptococcus viridans pseudobacteremia epidemic at a university teaching hospital. Church DL, et al. **Infect Control Hosp Epidemiol** 1989 Sep;10(9):416-21

A cost-effectiveness analysis of a simple micromethod for hepatitis B screening in hepatitis B virus control programmes. Lansang MA, et al. **Int J Epidemiol** 1989;18(4 Suppl 2):S38-43

Cryptosporidiosis in children in Idukki District in southern India. Reinthaler FF, et al. **J Diarrhoeal Dis Res** 1989 Sep-Dec;7(3-4):89-91

Correlation of serum delta RNA with clinical course of acute hepatitis delta virus superinfection in Taiwan: a longitudinal study. Wu JC, et al. **J Infect Dis** 1990 Jun;161(6):1116-20

Persistence of hepatitis A virus in fulminant hepatitis and after liver transplantation. Fagan E, et al. **J Med Virol** 1990 Feb;30(2):131-6

Simulation of dynamic changes of human T-cell leukemia virus type I carriage rates. Oguma S. **Jpn J Cancer Res** 1990 Jan;81(1):15-21

Antibody to HTLV-I in indigenous inhabitants of the Andes and Amazon regions in Colombia. Zamora T, et al. **Jpn J Cancer Res** 1990 Aug;81(8):715-9

Membranous nephropathy in 52 hepatitis B surface antigen (HBsAg) carrier children in Taiwan. Hsu HC, et al. **Kidney Int** 1989 Dec;36(6):1103-7

Duration of mouse hepatitis virus infection: studies in immunocompetent and chemically immunosuppressed mice. Barthold SW, et al. **Lab Anim Sci** 1990 Mar; 40(2):133-7

Failure of Phyllanthus amarus to eradicate hepatitis B surface antigen from symptomless carriers [letter] Leelarasamee A, et al. **Lancet** 1990 Jun 30;335(8705):1600-1

Intravascular Salmonella typhi as a manifestation of the carrier state. Watson KC. **Lancet** 1967 Aug 12; 2(7511):332-4

Minimum number of cells required for reconstitution of a foot-and-mouth disease virus-carrier cell culture. de la Torre JC, et al. **Microbiologia** 1988 Dec;4(3):161-6

Hepatitis B screening and follow-up vaccination of infants of carrier mothers--Atlanta, 1988 and 1989. **MMWR** 1990 Jun 22;39(24):405-7

Increasing acceptance of hepatitis B vaccine by dental personnel but reluctance to accept hepatitis B carrier patients. Scully C, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jan;69(1):45-7

Acute liver decompensation on withdrawal of cytotoxic chemotherapy and immunosuppressive therapy in hepatitis B carriers [see comments] Bird GL, et al. **Q J Med** 1989 Oct;73(270):895-902 Comment in: Q J Med 1989 Oct;73(270):873-4.

Fatal reactivation of chronic hepatitis B virus infection following withdrawal of chemotherapy in lymphoma patients. Lau JY, et al. **Q J Med** 1989 Oct;73(270):911-7

Acute liver decompensation on withdrawal of cytotoxic chemotherapy and immunosuppressive therapy in hepatitis B carriers: implications for the treatment of chronic HBV carriers [editorial; comment] Thomas HC. **Q J Med** 1989 Oct;73(270):873-4 Comment on: Q J Med 1989 Oct;73(270):895-902.

[Immune response to hepatitis B vaccine in neonates born to mothers with various infection status of hepatitis B virus] Yin SR. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Aug;10(4):198-202 (Eng. Abstr.) **(Chi)**

[A cohort study on the relation of primary liver cancer and HBsAg positivity in Guangxi Province] Zhang ZQ. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 May; 23(3):141-2 **(Chi)**

[Prevalence of hepatitis B virus in women of childbearing age in Mali] Maiga YI, et al. **Bull Soc Pathol Exot Filiales** 1990;83(1):93-9 (Eng. Abstr.) **(Fre)**

[Healthy carriers] Levy G. **Rev Fr Gynecol Obstet** 1989 Mar 25;84(3 Pt 2):272-3; discussion 282-6 (0 ref.) (Eng. Abstr.) **(Fre)**

[Acute type A hepatitis and acute glomerulonephritis in a carrier of hepatitis B antigen] Heldenberg D, et al. **Harefuah** 1989 Jun 15;116(12):637-8 (Eng. Abstr.) **(Heb)**

[Cytogenetic studies of healthy HTLV-I carriers (Report 1): Cytogenetic studies of an ATL family] Itoyama T, et al. **Rinsho Ketsueki** 1989 Oct;30(10):1769-77 (Eng. Abstr.) **(Jpn)**

[Inbreeding coefficient in carriers of Schistosoma mansoni] Tavares-Neto J, et al. **Rev Soc Bras Med Trop** 1989 Jan-Mar;22(1):45-9 (Eng. Abstr.) **(Por)**

[The role of residual changes of the lungs after cured tuberculosis in severe somatic diseases] Biron MG. **Klin Med (Mosk)** 1989 Dec;67(12):56-61 (Eng. Abstr.) **(Rus)**

[The use of a test for anti-HBc for prevention of post-transfusion hepatitis B] Somova AV, et al. **Vopr Virusol** 1989 Nov-Dec;34(6):749-52 **(Rus)**

[What is the disease course in carriers of HBsAg?] González A, et al. **Med Clin (Barc)** 1989 Dec 9;93(19):737-40 (38 ref.) **(Spa)**

BLOOD

The absence of hepatitis B virus DNA in hepatitis B e antigen positive sera from chronic hepatitis B surface antigen carriers in China. Scott JS, et al. **J Med Virol** 1990 Feb; 30(2):103-6

Quantitative and qualitative differences in serum HBV DNA between HBeAg positive carriers and those positive for anti-HBe. Okamoto H, et al. **Jpn J Exp Med** 1989 Dec; 59(6):259-62

DIAGNOSIS

Latent listeriosis--its diagnosis by bacteriology and serology in five cases. Romaña C, et al. **Acta Microbiol Hung** 1989; 36(2-3):169-70

Latent listeriosis may cause habitual abortion intrauterine deaths, fetal malformations. When diagnosed and treated adequately normal children will be born. Romaña C, et al. **Acta Microbiol Hung** 1989;36(2-3):171-2

Extended spectrum of symptoms in cryptosporidiosis [letter] Flanigan TP, et al. **Am J Med** 1990 Aug;89(2):252

Cryptosporidial carriage without symptoms in the acquired immunodeficiency syndrome (AIDS) [letter] Janoff EN, et al. **Ann Intern Med** 1990 Jan 1;112(1):75-6

Lassa fever: the first confirmed case imported into Canada. Mahdy MS, et al. **Can Dis Wkly Rep** 1989 Sep 30; 15(39):193-8 **(Eng, Fre)**

Ways of post-transfusion hepatitis prevention. Pintera J. **Czech Med** 1989;12(3):149-57

HBV markers (HBsAg, HBSAb, HBCAb in 160 medical students at Kenyatta National Hospital. Lule GN, et al. **East Afr Med J** 1989 May;66(5):315-8

Detection of asymptomatic Clostridium difficile carriage by an alcohol shock procedure. Clabots CR, et al. **J Clin Microbiol** 1989 Oct;27(10):2386-7

Rapid assessment of haemophilia A carrier state by non-invasive techniques using the polymerase chain reaction. Ball J, et al. **J Clin Pathol** 1990 Jun;43(6):505-7

Detection of hepatitis B viral DNA by polymerase chain reaction in patients with hepatitis B surface antigen. Shih LN, et al. **J Med Virol** 1990 Mar;30(3):159-62

Carrier state in pertussis [letter; comment] Bass JW, et al. **J Pediatr** 1990 Mar;116(3):492-3 Comment on: J Pediatr 1989 Jun;114(6):934-9.

Carrier screening for Tay-Sachs disease and cystic fibrosis [letter; comment] ten Kate LP, et al. **Lancet** 1990 Jun 23; 335(8704):1527-8 Comment on: Lancet 1990 Apr 7;335(8693):856.

Quantification of nasopharyngeal bacteria for diagnosis of respiratory tract infection in children. Söderström M, et al. **Scand J Infect Dis** 1990;22(3):333-7

Persistent excretion of Salmonella in foreign-born adopted and native Swedish children. Svenungsson B, et al. **Scand J Infect Dis** 1990;22(1):37-42

Hepatitis C look-back: our next challenge [letter] Kolins J. **Transfusion** 1990 May;30(4):380

Is gamma glutamyl transferase a sensitive marker for detection of the non-A/non-B carrier state? [letter; comment] Rossetti F, et al. **Vox Sang** 1990;58(1):72-3 Comment on: Vox Sang 1988;54(3):144-7.

[Routine screening for serological markers of viral hepatitis B in pregnancy] Podroužek P, et al. **Cesk Gynekol** 1989 Sep;54(8):575-80 (Eng. Abstr.) **(Cze)**

[Pattern of distribution of pre S and S coded viral envelope proteins of hepatitis B virus on the molecular level in serum and liver tissue of chronic HBsAg carriers] Gerken G, et al. **Verh Dtsch Ges Inn Med** 1989;95:1-6 **(Ger)**

[Management of HBs antigen carriers] Kashiwagi S. **Fukuoka Igaku Zasshi** 1989 Aug;80(8):418-22 **(Jpn)**

[Markers of infection with hepatitis B virus in alcoholics] Laskus T, et al. **Pol Arch Med Wewn** 1988 Jul;80(1):23-7 (Eng. Abstr.) **(Pol)**

[Relation of hepatitis B virus markers in the serum and hepatic tissue in chronic carriers of HBsAg] Ferraz ML, et al. **AMB Rev Assoc Med Bras** 1989 Mar-Apr;35(2):63-6 (Eng. Abstr.) **(Por)**

[Combination of immunoblotting and radioimmunoprecipitation methods allows to reduce the number of doubtful results of serodiagnosis of AIDS and asymptomatic HIV carrier state] Kliushnik SIu, et al. **Dokl Akad Nauk SSSR** 1990;310(3):763-4 **(Rus)**

[Antibodies to human immunodeficiency virus (HIV) in blood donors] Golosova TV, et al. **Gematol Transfuziol** 1989 Oct;34(10):35-7 **(Rus)**

[Diagnosis of Campylobacter pylori based on the level of urea in the gastric juice] Rozhavin MA, et al. **Lab Delo** 1990;(4):6-9 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Nontyphoid Salmonella carrier state treated with norfloxin [letter] Cherubin CE, et al. **Am J Gastroenterol** 1990 Jan; 85(1):100-1

Human lymphoblastoid and fibroblast interferon in the treatment of chronic hepatitis B. Hayashi J, et al. **Clin Ther** 1990 Jan-Feb;12(1):12-21

The management of the carrier of methicillin-resistant Staphylococcus aureus. Fekety R. **Curr Clin Top Infect Dis** 1987;8:169-80 (48 ref.)

Elimination of mycoplasmas from the murine genital tract by hormone treatment. Taylor-Robinson D, et al. **Epidemiol Infect** 1990 Aug;105(1):163-8

Staphylococcus aureus nasal colonization in a nursing home: eradication with mupirocin. Cederna JE, et al. **Infect Control Hosp Epidemiol** 1990 Jan;11(1):13-6

Eradication of Salmonella dublin in an immunodeficient child by combined use of ceftriaxone and ciprofloxacin after failure of either agent alone [letter] Hoppe JE, et al. **Infection** 1989 Nov-Dec;17(6):399-400

Efficacy of the combination pivampicillin/pivmecillinam compared to placebo in the treatment of convalescent carriers of nontyphi Salmonella. Svenungsson B, et al. **Infection** 1990 May-Jun;18(3):163-5

Results of a combination treatment with natamycin and butylscopolamine in cases of intestinal Candida colonization. Gehring W, et al. **Mycoses** 1990 Mar; 33(3):140-5

[Prevention in bacterial meningitis] Spanjaard L, et al. **Ned Tijdschr Geneeskd** 1990 Mar 24;134(12):575-7 **(Dut)**

[Antibiotics for Campylobacter pylori colonization of the stomach (letter)] Schmidt G, et al. **Dtsch Med Wochenschr** 1989 Nov 17;114(46):1812-3 **(Ger)**

[Studies on the clinical and bacteriological effects of ofloxacin on the typhoid patients and carriers] Kurimura O, et al. **Kansenshogaku Zasshi** 1989 Jun;63(6):623-32 (Eng.

Abstr.) (Jpn)

ECONOMICS

[A Salmonella epidemic costs 583 days of health insurance and compensation of the carrier of the infection] Nolskog P, et al. **Lakartidningen** 1990 Mar 21;87(12):944–5 (Swe)

ENZYMOLOGY

Serum alanine transaminase levels in hospital personnel and effect before and after hepatitis B vaccination. Kietduriyakul V, et al. **J Med Assoc Thai** 1990 Apr; 73(4):198–201

EPIDEMIOLOGY

The epidemiology of hepatitis B virus among family members in the Middle East. Toukan AU, et al. **Am J Epidemiol** 1990 Aug;132(2):220–32

High hepatitis B carrier rate among non–Oriental patients with acute salpingitis. Smith LG Jr, et al. **Am J Obstet Gynecol** 1989 Oct;161(4):879–80

The present status of typhoid carriers in Kentucky. Moss KG, et al. **Arch Environ Health** 1967 Mar;14(3):407–11

Hepatitis B and Epstein–Barr virus serology in the Canadian Inuit. Minuk GY, et al. **Arctic Med Res** 1988;47 Suppl 1:708–10

Group A streptococcal pharyngeal carriage and impetigo in two northern native communities. Nicolle LE, et al. **Arctic Med Res** 1988;47 Suppl 1:669–71

Province of origin of hepatitis B surface antigen carriers among blood donors in Port Moresby. Iga T, et al. **Asia Pac J Public Health** 1989;3(3):237–41

Prevalence of hepatitis B surface antigen (HBsAg) among prostitutes at Dhaka. Mustafa M, et al. **Bangladesh Med Res Counc Bull** 1989 Dec;15(2):67–72

Detection of Salmonella typhi carriers in food handlers by Vi serology in Lima, Peru. Lanata CF, et al. **Bull Pan Am Health Organ** 1990;24(2):177–82

Hepatitis B control in Toronto classrooms for the mentally retarded: a seroprevalence survey. Ellis CE, et al. **Can J Public Health** 1990 Mar–Apr;81(2):156–60

The prevalence of hepatitis B surface antigen (HBsAg), anti–hepatitis B surface (anti–HBs) and anti–hepatitis B core (anti–HBc) in patients with acquired immuno–deficiency syndrome (AIDS). Ogutu EO, et al. **East Afr Med J** 1990 May;67(5):355–8

Intestinal spirochaetes in a Gulf Arab population. Barrett SP. **Epidemiol Infect** 1990 Apr;104(2):261–6

Secretor status, smoking and carriage of Neisseria meningitidis. Blackwell CC, et al. **Epidemiol Infect** 1990 Apr;104(2):203–9

Hospital dispersion of Staphylococcus epidermidis isolates resistant to a fluoroquinolone, pefloxacin. Etienne J, et al. **Epidemiol Infect** 1989 Dec;103(3):459–64

An outbreak of paratyphoid fever in the UK associated with a fish–and–chip shop. Francis S, et al. **Epidemiol Infect** 1989 Dec;103(3):445–8

Childhood carriers of Salmonella and Shigella species in the rural area of Ile–Ife, Nigeria. Olusanya O, et al. **Ethiop Med J** 1990 Apr;28(2):49–52

Prevalence of asymptomatic carriers of Chlamydia trachomatis among pregnant and non–pregnant women in south–western Greece. Arkoulis T, et al. **Eur J Epidemiol** 1989 Dec;5(4):526–8

Prevalence of hepatitis B infection among hospital personnel in Addis Ababa (Ethiopia). Kefenie H, et al. **Eur J Epidemiol** 1989 Dec;5(4):462–7

Prevalence of HBeAg, anti–HBe serological markers and HBV–DNA in asymptomatic carriers in Ethiopia. Rapicetta M, et al. **Eur J Epidemiol** 1989 Dec;5(4):481–5

Etiological spectrum of acute sporadic viral hepatitis amongst adults in Chandigarh. Khandelwal I, et al. **Indian J Med Res** 1990 Mar;91:91–3

Prevalence of hepatitis B surface antigen in Kashmiri blood donors. Makroo RN, et al. **Indian J Med Res** 1989 Sep; 89:310–3

Study of diphtheria carriers in Miraj. Udgaonkar US, et al. **Indian Pediatr** 1989 May;26(5):435–9

Epidemiology of group B streptococci colonization and disease in mothers and infants: update of ongoing 10–year Jerusalem study. Eidelman AI, et al. **Isr J Med Sci** 1990 Feb;26(2):71–3

Increase of the prevalence of hepatitis B virus surface antigen related to immunodeficiency inherent in acquired immune deficiency syndrome (AIDS). Ouattara SA, et al. **J Acquir Immune Defic Syndr** 1990;3(3):282–6

Evaluation of the adult carrier state in juvenile tinea capitis caused by Trichophyton tonsurans. Babel DE, et al. **J Am Acad Dermatol** 1989 Dec;21(6):1209–12

Incidence of hepatitis B carriers in Calcutta [letter; comment] Narendranathan M. **J Assoc Physicians India** 1989 Sep; 37(9):620 Comment on: J Assoc Physicians India 1989 Feb;37(2):160–1.

Clinical significance of Blastocystis hominis [see comments] Qadri SM, et al. **J Clin Microbiol** 1989 Nov;27(11):2407–9 Comment in: J Clin Microbiol 1990 May;28(5):1085–6.

An epidemiological study of hepatitis B virus amongst blood donors. Verma J, et al. **J Commun Dis** 1989 Mar;21(1):52–8

Prevalence of hepatitis B in an indigent, multi–ethnic community clinic prenatal population [see comments] Arevalo JA, et al. **J Fam Pract** 1989 Dec;29(6):615–9 Comment in: J Fam Pract 1990 Apr;30(4):392–3.

Risk factors for Clostridium difficile carriage and C. difficile–associated diarrhea in a cohort of hospitalized patients. McFarland LV, et al. **J Infect Dis** 1990 Sep; 162(3):678–84

Blastocystis hominis: epidemiology and natural history. Senay H, et al. **J Infect Dis** 1990 Oct;162(4):987–90

The pattern of childhood hepatitis B infection in two Gambian villages. Whittle H, et al. **J Infect Dis** 1990 Jun; 161(6):1112–5

Changes in HBsAg carrier rate in Goto Islands, Nagasaki Prefecture, Japan. Matsuo A, et al. **Lancet** 1990 Apr 21; 335(8695):955–7

Neisseria meningitidis in a school population in Queensland [letter] Ingram SB, et al. **Med J Aust** 1990 Mar 19; 152(6):332

Incidence and distribution of vaginal yeasts in Malaysian women. Ngeow YF, et al. **Mycoses** 1989 Nov;32(11):563–7

Dermatophytes in healthy Chilians. Zaror L, et al. **Mycoses** 1990 Feb;33(2):95–8

IgA nephropathy and hepatitis B virus. IgA nephropathy unrelated to hepatitis B surface antigenemia. Iida H, et al. **Nephron** 1990;54(1):18–20

Outbreak of Haemophilus influenzae type b meningitis in a day care center. Andersson von Rosen I, et al. **Pediatr Infect Dis J** 1990 May;9(5):326–32

Risk factors associated with a school–related outbreak of serogroup C meningococcal disease. Morrow HW, et al. **Pediatr Infect Dis J** 1990 Jun;9(6):394–8

Hepatitis B virus transmission between children in day care. Shapiro CN, et al. **Pediatr Infect Dis J** 1989 Dec; 8(12):870–5

Increased risk of primary invasive Haemophilus influenzae type B disease in twins. Takala AK, et al. **Pediatr Infect Dis J** 1989 Nov;8(11):799–800

Hepatitis B virus type 2 infection in France. Buisson Y, et al. **Res Virol** 1990 May–Jun;141(3):365–71

Prevalence of hepatitis–B surface antigen in the pregnant women of Brunei Darussalam. Sebastian VJ, et al. **Southeast Asian J Trop Med Public Health** 1990 Mar; 21(1):123–7

[The prevalence of the HBsAg carrier state among pregnant women and its effect on newborn infants. IV. Our experience in using hepatitis B vaccine and hepatitis B immunoglobulin to immunize infants born to mothers who carry HBsAg] Iliev B, et al. **Akush Ginekol (Sofiia)** 1989; 28(6):37–42 (Eng. Abstr.) (Bul)

[An epidemiological study on prevalence and risk factors of hepatitis B virus (HBV) infection in preschool children] Huang MJ. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1990 Jun; 11(3):129–32 (Eng. Abstr.) (Chi)

[Preliminary study on leprosy subclinical infection and its sero–epidemiology] Weng X. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1990 Feb; 11(1):16–9 (Eng. Abstr.) (Chi)

[Epidemiologic significance of persistent observation of serum HBV–DNA in asymptomatic HBsAg carriers] Zeng JP. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Dec; 10(6):328–30 (Eng. Abstr.) (Chi)

[Meningococcal disease: are patients carriers of meningococci after treatment with antibiotics?] Weis NM, et al. **Ugeskr Laeger** 1990 May 7;152(19):1362–5 (Eng. Abstr.) (Dan)

[Political prisoners: an important risk group for AIDS and hepatitis B?] Vranckx R, et al. **Arch Belg** 1989;47(1–4):34–7 (Eng. Abstr.) (Dut)

[Epidemiology of meningococcal infections and principles for the prevention of secondary cases] Olivares R, et al. **Ann Pediatr (Paris)** 1990 Apr;37(4):209–18 (99 ref.) (Eng. Abstr.) (Fre)

[Prevalence of HBsAG carriers in a population of Northern Italy in 1987] Calia F, et al. **Minerva Med** 1989 Oct; 80(10):1111–3 (Eng. Abstr.) (Ita)

[Seroepidemiological study on the horizontal infection of HBV in healthy students] Tokumoto S, et al. **Kansenshogaku Zasshi** 1990 Jan;64(1):112–7 (Eng. Abstr.) (Jpn)

[Incidence of HIV infections among the patients of the outpatient clinic of the Institute of Venereology] Stapiński A, et al. **Przegl Dermatol** 1989 Mar–Apr;76(2):156–62 (Eng. Abstr.) (Pol)

[Characteristics of localization and occurrence of tuberculous infection in rural areas] Lomachenkov VD, et al. **Probl Tuberk** 1989;(8):13–7 (Eng. Abstr.) (Rus)

[Detection rate of antibodies against delta virus among HBsAg carriers in a region with moderate prevalence of hepatitis B] Zhavoronok SV. **Vopr Virusol** 1989 Nov–Dec; 34(6):675–9 (Eng. Abstr.) (Rus)

[The spread of H. influenzae type B in familial contacts of children with with systemic infection by this agent] Trucco O, et al. **Rev Chil Pediatr** 1988 Sep–Oct;59(5):306–11 (Eng. Abstr.) (Spa)

[Typhoid fever in Santiago: the role of food handlers at elementary schools] Ferreccio C, et al. **Rev Med Chil** 1988 Sep;116(9):952–6 (Eng. Abstr.) (Spa)

[Children adopted from abroad are often Salmonella carriers for a long time] Svenungsson B, et al. **Lakartidningen** 1990 Mar 21;87(12):945–6 (Swe)

ETHNOLOGY

Hepatitis B–related sequelae. Prospective study in 1400 hepatitis B surface antigen–positive Alaska native carriers. McMahon BJ, et al. **Arch Intern Med** 1990 May; 150(5):1051–4

IMMUNOLOGY

The efficacy of additional revaccination with hepatitis B when anti–HBs became negative on long follow–up. Kobayashi M, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Dec;31(6):674–80

Spontaneous T cell proliferation and release of soluble interleukin–2 receptors in patients with HTLV–I–associated myelopathy. Matsumoto M, et al. **Am J Trop Med Hyg** 1990 Apr;42(4):365–73

Fulminant hepatitis as a consequence of reactivation of hepatitis B virus infection after discontinuation of low–dose methotrexate therapy. Flowers MA, et al. **Ann Intern Med** 1990 Mar 1;112(5):381–2

The time course of the humoral immune response to rhinovirus infection. Barclay WS, et al. **Epidemiol Infect** 1989 Dec;103(3):659–69

HBV–DNA, HBeAg/anti–HBe serological status in hepatitis B chronic individuals from central Italy. Rapicetta M, et al. **Epidemiol Infect** 1990 Jun;104(3):511–7

Prevalence of IgM anti–HBc among HBsAg carriers in Okinawa, Japan. Hayashi J, et al. **Gastroenterol Jpn** 1990 Feb;25(1):36–40

HBsAg–induced interferon–gamma secretion in T cells from asymptomatic HBsAg carriers and HB–immune donors in vitro. Sylvan SP, et al. **Immunology** 1990 Jun;70(2):197–202

Suppression of delayed–type hypersensitivity to PPD and PHA in elderly HTLV–I carriers. Murai K, et al. **J Acquir Immune Defic Syndr** 1990;3(10):1006–9

Vertical transmission of human T–cell leukemia virus type I (HTLV–I): detection of proviral DNA in HTLV–I carrier gravida. Saji F, et al. **J Clin Immunol** 1989 Sep; 9(5):409–14

Immunological functions and phenotypes of peripheral blood lymphocytes from human T–cell leukemia virus–I carriers. Tanaka Y, et al. **J Clin Immunol** 1989 Nov;9(6):477–84

Hepatitis delta virus antibodies in hepatitis B surface antigen asymptomatic carriers in Senegal [letter] Bacha A, et al. **J Infect Dis** 1990 Jan;161(1):150–1

Antibody to p40tax protein of human T cell leukemia virus 1 and infectivity. Kashiwagi S, et al. **J Infect Dis** 1990 Mar;161(3):426–9

The immune response in primary asymptomatic and symptomatic rotavirus infection in newborn infants. Losonsky GA, et al. **J Infect Dis** 1990 Feb;161(2):330–2

Peripheral blood CD4–mediated enhancement and CD8–mediated suppression in the presence of recombinant hepatitis B virus core antigen. Shirai M, et al. **J Infect Dis** 1990 Mar;161(3):420–5

Elimination of circulatory IgM anti–HSA precedes anti–HBe seroconversion in patients with CAH type B. Hellström UB, et al. **J Med Virol** 1989 Sep;29(1):53–8

Postpartum subsidence of hepatitis B viral replication in HBeAg–positive carrier mothers. Lin HH, et al. **J Med Virol** 1989 Sep;29(1):1–6

Hepatitis delta virus infections in intravenous drug abusers with hepatitis B in the west of Scotland. McCruden EA, et al. **J Med Virol** 1989 Sep;29(1):59–62

Hepatitis B carriers in a centre for the mentally retarded in Finland and immunogenicity of hepatitis B vaccine. Mölsä PK. **J Ment Defic Res** 1990 Aug;34 (Pt 4):379–83

Excretion of Haemophilus influenzae type b polysaccharide antigen in urine of healthy nasopharyngeal carriers. Murphy TV, et al. **Pediatr Res** 1989 Nov;26(5):491–5

Potential infectivity of blood from HBsAg asymptomatic carriers due to the presence of HBV–DNA and comparison with other markers of HBV infection. Tedeschi MV, et al. **Rev Inst Med Trop Sao Paulo** 1989 Nov–Dec; 31(6):377–83

Prevalence of hepatitis C virus antibodies in Italian blood donors. The Italian Cooperative Group. Sirchia G, et al. **Vox Sang** 1990;59(1):26–9

[Immunohistochemical analysis of HLA class I antigens of the hepatocyte membrane in hepatitis B virus carriers] Hou JL, et al. **Chung Hua Nei Ko Tsa Chih** 1990 Jan;29(1):29–31, 61 (Eng. Abstr.) (Chi)

[Markers of infectivity in carriers of the hepatitis B surface antigen] Sekerová Z, et al. **Cesk Epidemiol Mikrobiol Imunol** 1990 Jun;39(3):171–7 (Eng. Abstr.) (Cze)

[AIDS. HIV infection: the silent phase evokes hope] Marcus U. **Fortschr Med** 1989 Sep 30;107(28):10 (Ger)

[Immunogenetic factors influencing HBV carrier state, the seroconversion and the development of chronic liver disease] Shimbo M, et al. **Hokkaido Igaku Zasshi** 1990 Jan; 65(1):67–73 (Eng. Abstr.) (Jpn)

[Relationship of serum streptococcal antibodies to carrier state of beta–hemolytic streptococcus in throats of healthy schoolchildren] Okuyama M, et al. **Kansenshogaku Zasshi** 1989 Nov;63(11):1231–43 (Eng. Abstr.) (Jpn)

[Circulating mature NK (Leu11+) cells positive for IL2 receptor and HLA–DR in patients with various liver diseases and asymptomatic HBsAg carriers] Ishimaru H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Dec; 86(12):2721–7 (Eng. Abstr.) (Jpn)

[Hepatitis Delta virus infection] Karasińska M, et al. **Pediatr Pol** 1989 Aug–Sep;64(8–9):579–82 (Pol)

[Occurrence of HBs antigen and anti–HBs antibodies in analytical laboratory workers in Warsaw] Sośnierz L.

Pol Tyg Lek 1989 Apr 24;44(17):383–6 (Eng. Abstr.) (Pol)

[Prevalence of specific anti-HIV antibodies among the population of the Łódź province] Slaska M, et al. **Przegl Dermatol** 1989 Jul–Aug;76(4):313–6 (Eng. Abstr.) (Pol)

[Seroconversion of hepatitis B markers in exposed health service workers after 1 year] Lisowska B. **Przegl Epidemiol** 1989;43(3):309–14 (Eng. Abstr.) (Pol)

[Occurrence of anti-delta agent antibodies in the USSR and Czechoslovakia] Golosova TV, et al. **Gematol Transfuziol** 1990 Feb;35(2):33–4 (Rus)

[Screening carriers of the HBs-antigen with the use of a "group" passive hemagglutination reaction test] Fel'dman IuM, et al. **Lab Delo** 1989;(7):59–60 (Eng. Abstr.) (Rus)

[Changes in indicators of nonspecific humoral immunity in carriers of N. meningitidis] Tomášik E. **Cesk Epidemiol Mikrobiol Imunol** 1989 Sep;38(5):280–5 (Eng. Abstr.) (Slo)

[Specific antibody response in carriers of N. meningitidis] Tomášik E, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jul;38(4):221–7 (Eng. Abstr.) (Slo)

[Long-term course in asymptomatic carriers of HBsAg in an area of low prevalence of hepatocarcinoma] Jmelnitzky A, et al. **Acta Gastroenterol Latinoam** 1989;19(1):21–30 (Eng. Abstr.) (Spa)

[Increased prevalence of hepatitis B markers in persons caring for HBSAG carriers] Ahman M, et al. **Lakartidningen** 1990 Jan 17;87(3):110–2 (Swe)

[HBeAg and anti-HBe levels in HBsAg positive blood donors] Hasçelik G, et al. **Mikrobiyol Bul** 1989 Jan; 23(1):23–9 (Eng. Abstr.) (Tur)

[Prevalence of anti-delta antibodies in HBsAg carriers] Söyletir G, et al. **Mikrobiyol Bul** 1989 Apr;23(2):97–101 (Eng. Abstr.) (Tur)

METABOLISM

Variation in expression of class 1 and class 5 outer membrane proteins during nasopharyngeal carriage of Neisseria meningitidis. Woods JP, et al. **Infect Immun** 1990 Feb; 58(2):569–72

Estradiol receptors in the cytosol of peripheral blood mononuclear cells in hepatitis virus carriers. Mizoguchi Y, et al. **Osaka City Med J** 1989 Nov;35(2):93–100

MICROBIOLOGY

Nongranulomatous involvement of the bone marrow in lepromatous leprosy. Suster S, et al. **Am J Clin Pathol** 1989 Dec;92(6):797–801

Bacterial reservoirs in cystic fibrosis. Taylor CJ, et al. **Arch Dis Child** 1990 Feb;65(2):175–7

Antimicrobial susceptibilities of Staphylococcus aureus isolated from animal and human sources in Brazil. Lopes CA, et al. **Br Vet J** 1990 Jan–Feb;146(1):50–6

Transgenic mice as tools in the study of HBV-related liver diseases. Yamamura K, et al. **Cell Struct Funct** 1989 Oct; 14(5):509–13 (17 ref.)

HIV viral sequences in seronegative people at risk detected by insitu hybridisation and polymerase chain reaction. **Dis Markers** 1990 Jan–Feb;8(1):41–2

Drug-resistant coagulase-negative skin staphylococci. Evaluation of four marker systems and epidemiology in an orthopaedic ward. Thore M, et al. **Epidemiol Infect** 1990 Aug;105(1):95–105

Differentiation of three serovars of Malassezia furfur. Cunningham AC, et al. **J Appl Bacteriol** 1990 May; 68(5):439–46

Prospective survey of colonization and infection caused by expanded-spectrum-beta-lactamase-producing members of the family Enterobacteriaceae in an intensive care unit. De Champs C, et al. **J Clin Microbiol** 1989 Dec; 27(12):2887–90

Subgrouping of Pseudomonas cepacia by cellular fatty acid composition. Mukwaya GM, et al. **J Clin Microbiol** 1989 Dec;27(12):2640–6

Colonization of neonates in a nursery ward with enteropathogenic Escherichia coli and correlation to the clinical histories of the children. Senerwa D, et al. **J Clin Microbiol** 1989 Nov;27(11):2539–43

Rectal carriage of Chlamydia trachomatis in women [letter] Pratt BC, et al. **J Clin Pathol** 1989 Dec;42(12):1309–10

Presence of HBV-DNA in peripheral blood mononuclear cells from anti-HIV symptomless carriers. Bartolomé FJ, et al. **J Hepatol** 1990 Mar;10(2):186–90

Effect of mupirocin on nasal carriage of Staphylococcus aureus. Bulanda M, et al. **J Hosp Infect** 1989 Aug; 14(2):117–24

Longitudinal study of Epstein-Barr virus genotypes associated with infectious mononucleosis patients and healthy carriers [letter] Lung ML, et al. **J Infect Dis** 1990 Oct;162(4):994–5

Reappearance of hepatitis D virus (HDV) replication in chronic hepatitis B virus carrier chimpanzees rechallenged with HDV. Negro F, et al. **J Infect Dis** 1989 Oct; 160(4):567–71

Evaluation of the human T-cell leukemia virus type I seropositivity of blood donors by the particle agglutination inhibition test. Kwon KW, et al. **Jpn J Cancer Res** 1989 Sep;80(9):833–9

Clostridium difficile carriage after infection [letter] Issack MI, et al. **Lancet** 1990 Mar 10;335(8689):610–1

Demonstration of mother-to-infant transmission of hepatitis B virus by means of polymerase chain reaction [see comments] Mitsuda T, et al. **Lancet** 1989 Oct 14; 2(8668):886–8 Comment in: Lancet 1990 Feb 3;335(8684):302.

Reactivation of viral replication in anti-HBe positive chronic HBsAg carriers. Krogsgaard K, et al. **Liver** 1990 Feb; 10(1):54–8

Nucleotide sequence of core and envelope genes of the hepatitis C virus genome derived directly from human healthy carriers. Takeuchi K, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4626

Staphylococci as part of the normal flora of human skin. Marples RR, et al. **Soc Appl Bacteriol Symp Ser** 1990; 19:93S–99S (30 ref.)

[Carrier status of herpes viridae in pregnant women] Qi YH. **Chung Hua Fu Chan Ko Tsa Chih** 1989 May;24(3):133–5, 188 (Eng. Abstr.) (Chi)

[Salmonella carriers] Prins JM, et al. **Ned Tijdschr Geneeskd** 1989 Nov 4;133(44):2160–4 (61 ref.) (Dut)

[Enteropathogens detected in healthy children in 3 low income communities, in Recife, State of Pernambuco, Brazil] Leal NC, et al. **Mem Inst Oswaldo Cruz** 1989 Apr–Jun;83(2):153–9 (Eng. Abstr.) (Por)

[Simultaneous occurrence of enterotoxigenic Staphylococcus aureus on the hands, mouth and feces of asymptomatic carriers] de Andrade GP, et al. **Rev Saude Publica** 1989 Aug;23(4):277–84 (Eng. Abstr.) (Por)

[Antibiotic and phage sensitivity of cultures of Staphylococcus isolated from purulent foci and from carriers in a traumatological hospital] Gnetnev AM, et al. **Antibiot Khimioter** 1989 Jun;34(6):475–8 (Rus)

[Comparative analysis of antibiotic sensitivity of Streptococcus pneumoniae strains isolated from patients and carriers] Ivanov NA, et al. **Antibiot Khimioter** 1990 Apr;35(4):32–4 (Eng. Abstr.) (Rus)

[Bacterial carrier state in the personnel of a surgical clinic] Buianov VM, et al. **Sov Med** 1989;(6):3–5 (Rus)

[A comparative analysis of the Salmonella typhi strains isolated from patients and bacterial carriers] Riabchenko LE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Dec; (12):8–11 (Eng. Abstr.) (Rus)

PARASITOLOGY

Giardia lamblia: isoenzyme analysis of 19 axenic strains isolated from symptomatic and asymptomatic patients in Mexico. Cedillo-Rivera R, et al. **Trans R Soc Trop Med Hyg** 1989 Sep–Oct;83(5):644–6

PHYSIOPATHOLOGY

Asymptomatic giardiasis in children. Ish-Horowicz M, et al. **Pediatr Infect Dis J** 1989 Nov;8(11):773–9

[The impact of antituberculosis drugs upon liver function in patients with positive HBVM] Chen GQ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Apr; 12(2):89–90, 126 (Eng. Abstr.) (Chi)

PREVENTION & CONTROL

Hepatitis B vaccine in the prevention of perinatally transmitted hepatitis B virus infection: final report on a West Midlands pilot study. Wheeley SM, et al. **J Med Virol** 1990 Feb;30(2):113–6

Control of the carrier state of scalp dermatophytes. Neil G, et al. **Pediatr Infect Dis J** 1990 Jan;9(1):57–8

Comparison of a recombinant DNA hepatitis B vaccine alone or in combination with hepatitis B immune globulin for the prevention of perinatal acquisition of hepatitis B carriage. Poovorawan Y, et al. **Vaccine** 1990 Mar;8 Suppl:S56–9; discussion S60–2

[Prevention of carrier state of hepatitis B virus in newborn infants; current viewpoints and policy in The Netherlands] Reesink HW, et al. **Ned Tijdschr Geneeskd** 1989 Oct 14; 133(41):2015–6 (Dut)

[Vertical transmission of hepatitis B virus. 1: Hepatitis B screening in pregnancy in the Rostock district] Hülsse C, et al. **Z Arztl Fortbild (Jena)** 1990;84(5):203–6 (Ger)

THERAPY

Spontaneous production of tumour necrosis factor alpha and interleukin-1 beta during interferon-alpha treatment of chronic HBV infection. Daniels HM, et al. **Lancet** 1990 Apr 14;335(8694):875–7

[A case of hepatitis B virus carrier state with nephrotic syndrome treated with beta interferon] Kawarazaki N, et al. **Nippon Naika Gakkai Zasshi** 1990 May 10;79(5):682–3 (Jpn)

TRANSMISSION

Characteristics of HBsAg subtypes distribution in Beijing area. Huang XQ, et al. **Chin Med J [Engl]** 1989 Apr; 102(4):278–81

Mother to child transmission of hepatitis B virus in the Philippines. Lingao AL, et al. **Infection** 1989 Sep–Oct; 17(5):275–9

Vertical transmission of Ureaplasma urealyticum from mothers to preterm infants. Sánchez PJ, et al. **Pediatr Infect Dis J** 1990 Jun;9(6):398–401

Posttransfusion hepatitis B transmitted by blood from a hepatitis B surface antigen-negative hepatitis B virus carrier. Larsen J, et al. **Transfusion** 1990 Jun;30(5):431–2

[Family clustering analysis of HBV infection] Tan HZ. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 May; 23(3):135–8 (Eng. Abstr.) (Chi)

[HTLV-I carriers in ATL/L-nonendemic area—with reference to blood transfusions] Sakuma M, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Aug;52(5):869–79 (Eng. Abstr.) (Jpn)

[Detection of HTLV-I genome in infants born to HTLV-I seropositive mothers by polymerase chain reaction] Saito S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Mar; 42(3):234–40 (Eng. Abstr.) (Jpn)

URINE

[Detection of hepatitis B virus DNA in urine of asymptomatic HBsAg carriers] Dai ZS. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1990 Jun; 11(3):138–40 (Eng. Abstr.) (Chi)

VETERINARY

International aspects of the control of animal listeriosis. Bind JL. **Acta Microbiol Hung** 1989;36(2–3):91–4

Rapid detection of Streptococcus suis serotype 2 in weaned pigs. Moreau A, et al. **Am J Vet Res** 1989 Oct; 50(10):1667–71

The ear canal as a culture site for demonstration of mycoplasmas in clinically normal goats. DaMassa AJ. **Aust Vet J** 1990 Jul;67(7):267–9

Some observations on the faecal carriage of mesophilic Aeromonas species in cows and pigs. Gray SJ, et al. **Epidemiol Infect** 1989 Dec;103(3):523–37

Epidemiologic study of salmonellae shedding in the feces of horses and potential risk factors for development of the infection in hospitalized horses. Traub-Dargatz JL, et al. **J Am Vet Med Assoc** 1990 May 15;196(10):1617–22

Isolation of a Campylobacter-like organism from healthy Syrian hamsters (Mesocricetus auratus). Stills HF Jr, et al. **J Clin Microbiol** 1989 Nov;27(11):2497–501

Salmonellae in the African great cane rat (Thryonomys swinderianus). Oboegbulem SI, et al. **J Wildl Dis** 1990 Jan; 26(1):119–21

Clinical staging of feline immunodeficiency virus infection. Ishida T, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):645–8

Altered mitogen response of peripheral blood lymphocytes in different stages of feline immunodeficiency virus infection. Taniguchi A, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):513–8

Theilerial parasites isolated from carrier cattle after immunization with Theileria parva by the infection and treatment method. Maritim AC, et al. **Parasitology** 1989 Aug;99 Pt 1:139–47

Listeria monocytogenes colonization of broiler chickens. Bailey JS, et al. **Poult Sci** 1990 Mar;69(3):457–61

Distribution of Pasteurella haemolytica in the respiratory tracts of carrier calves and those subsequently infected experimentally with Dictyocaulus viviparus. Shoo MK, et al. **Res Vet Sci** 1990 May;48(3):383–5

Observations on mouse-infective stocks of Cowdria ruminantium: microscopical demonstration of the Kwanyanga stock in mouse tissue and the carrier-status of the Senegal stock in mice. Wassink LA, et al. **Res Vet Sci** 1990 May;48(3):389–90

Further studies on rabies virus isolated from healthy dogs in Nigeria. Aghomo HO, et al. **Vet Microbiol** 1990 Mar; 22(1):17–22

The carrier status of sheep, cattle and African buffalo recovered from heartwater. Andrew HR, et al. **Vet Parasitol** 1989 Dec;34(3):261–6

Mite infestation [letter] [see comments] Brown CJ. **Vet Rec** 1989 Dec 2;125(23):584 Comment in: Vet Rec 1989 Dec 16;125(25):629. Comment in: Vet Rec 1989 Dec 23–30;125(26–27):656.

A study of immunity against pasteurella multocida in buffalo calves and their carrier status [letter] Mohan K, et al. **Vet Rec** 1968 Aug 10;83(6):155–6

[Virus carriers in foot-and-mouth disease. Review] Wittmann G. **Berl Munch Tierarztl Wochenschr** 1990 May 1; 103(5):145–50 (65 ref.) (Eng. Abstr.) (Ger)

[The etiology and epidemiology of malignant catarrh—a review] Metzler AE, et al. **Schweiz Arch Tierheilkd** 1990; 132(4):161–72 (63 ref.) (Eng. Abstr.) (Ger)

CARRIERS, GENETIC see **HETEROZYGOTE**

CARRIERS, GENETIC, DETECTION see **HETEROZYGOTE DETECTION**

CARRION'S DISEASE see **BARTONELLA INFECTIONS**

CARSICKNESS see **MOTION SICKNESS**

CARTEOLOL see under **PROPANOLAMINES**

CARTICAINE see under **THIOPHENES**

CARTILAGE

see related
CHONDROITIN
LARYNGEAL CARTILAGES

Perspectives on cartilaginous tumors: nomenclature,

nosology, and neologism. Hough AJ Jr, et al. **Hum Pathol** 1989 Oct;20(10):927–9

Rehydration of lyophilised cartilage grafts sterilized by different methods. Bumann A, et al. **Int J Oral Maxillofac Surg** 1989 Dec;18(6):370–2

Ectopic induction of cartilage and bone by water-soluble proteins from bovine bone using a polyanhydride delivery vehicle. Lucas PA, et al. **J Biomed Mater Res** 1990 Jul; 24(7):901–11

[Cartilage tissue embolism as a cause of myelomalacia. A case report and review of the literature] Barz H, et al. **Pathologe** 1989 Sep;10(5):300–5 (32 ref.) **(Ger)**

[Description of cartilage tissue structure in solution by the mean field theory] Skvortsov AM, et al. **Biofizika** 1989 Sep–Oct;34(5):776–80 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Pulmonary hypoplasia in mice homozygous for the cartilage matrix deficiency (cmd) gene: a model for human congenital disorder. Houghton MJ, et al. **Pediatr Pathol** 1989;9(5):501–12

ANALYSIS

Glial fibrillary acidic protein immunoreactivity of chondrocytes in immature and mature teratomas. Notohara K, et al. **Acta Pathol Jpn** 1990 May;40(5):335–42

Isolation and analysis of ribonucleic acids from skeletal tissues. Nemeth GG, et al. **Anal Biochem** 1989 Dec; 183(2):301–4

Two linkage-region fragments isolated from skeletal keratan sulphate contain a sulphated N-acetylglucosamine residue. Dickenson JM, et al. **Biochem J** 1990 Jul 1;269(1):55–9

Characterization of the keratan sulphate domain of cartilage proteoglycan. Flannelly J, et al. **Biochem Soc Trans** 1990 Apr;18(2):296–7

Immunohistochemical localization of type II collagen in cartilage-forming tumors [published erratum appears in Bull Hosp Jt Dis Orthop Inst 1990 Spring;50(1):69] Huang GQ, et al. **Bull Hosp Jt Dis Orthop Inst** 1989 Spring; 49(1):94–102

Fractionation of whale cartilage chondroitin sulfate on Sepharose CL-4B in the presence of high concentration of ammonium sulfate. Relationship between molecular size and unit-disaccharide composition of the polysaccharide. Ogamo A, et al. **Carbohydr Res** 1990 Apr 2;198(1):157–162

An immunohistochemical study of localization of type I and type II collagens in mandibular condylar cartilage compared with tibial growth plate. Mizoguchi I, et al. **Histochemistry** 1990;93(6):593–9

Presence of osteonectin/SPARC in mandibular condylar cartilage of the rat. Copray JC, et al. **J Anat** 1989 Feb; 162:43–51

An 18-kDa glycoprotein from bovine nasal cartilage. Isolation and primary structure of small, cartilage-derived glycoprotein. Neame PJ, et al. **J Biol Chem** 1990 Jun 15; 265(17):9628–33

Micromechanical spectroscopy of cartilage proteoglycans: hydration. Lamure A, et al. **J Biomed Mater Res** 1990 Jun; 24(6):735–47

In situ cross-linking of cartilage proteoglycans. Phillips FM, et al. **J Orthop Res** 1990 Mar;8(2):189–98

Characterization of cytosolic glucocorticoid receptor of fetal rat epiphyseal chondrocytes. Carbone JP, et al. **J Steroid Biochem** 1990 Mar;35(3–4):495–505

Identification of an inhibitor of neovascularization from cartilage. Moses MA, et al. **Science** 1990 Jun 15; 248(4961):1408–10

[Structural characteristics of collagens from the skin and rib cartilage of patients with Ehlers-Danlos syndrome type II] Sokolov BP, et al. **Vopr Med Khim** 1990 Jan–Feb; 36(1):90–3 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Absence of cartilage canals in the long bone extremities of four species of skeletally immature marsupials. Thorp BH. **Anat Rec** 1990 Apr;226(4):440–6

Cartilage in the bony portion of the eustachian tube. Luntz M, et al. **Ear Arch Otorhinolaryngol** 1990;247(1):56–9

Anatomy of the upper lateral cartilages in the human newborn. Poublon RM, et al. **Rhinology** 1990 Mar; 28(1):41–5

The neurocentral vertebral cartilage: anatomy, physiology and physiopathology. Vital JM, et al. **Surg Radiol Anat** 1989;11(4):323–8

[Histologic studies of cartilaginous structures in the anterior region of the head of the sperm whale Physeter macrocephalus] Klima M. **Gegenbaurs Morphol Jahrb** 1990; 136(1):1–16 (Eng. Abstr.) **(Ger)**

BLOOD SUPPLY

Experimental evaluation of tissue revascularization using a transferred muscular-vascular pedicle. Hussl H, et al. **Ann Plast Surg** 1986 Oct;17(4):299–305

Demonstration of blood-vessellike structures in cartilaginous callus by antilaminin and antiheparin sulfate proteoglycan antibodies. Hulth A, et al. **Clin Orthop** 1990 May; (254):289–93

The effects of heparin and cortisone on an experimental model of pannus. Chander CL, et al. **Int J Tissue React** 1989;11(3):113–6

[Light microscopic studies of the cartilage in funnel chest. A new view of the pathogenesis] Rupprecht H, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(5):314–8 (Eng. Abstr.) **(Ger)**

[Vascularization of the matrix of hyaline rib cartilage in the human: changes with increasing age] Muss W. **Z Gerontol** 1990 May–Jun;23(3):143–6 (Eng. Abstr.) **(Ger)**

CYTOLOGY

Detection of GFAP in vertebral fibrocartilage in human fetal and newborn tissue. Kasper M, et al. **Acta Histochem (Jena)** 1990;88(1):25–7

Cartilage cells in cerebrospinal fluid. Chen KT, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):212

Third International Workshop on Cells and Cytokines in Bone and Cartilage. 8–11 April 1990, Davos, Switzerland. Abstracts. **Calcif Tissue Int** 1990;46 Suppl 2:A1–61

A chondrogenic cell line derived from a differentiating culture of AT805 teratocarcinoma cells. Atsumi T, et al. **Cell Differ Dev** 1990 May;30(2):109–16

A continuous line of chicken embryo cells derived from a chondrocyte culture infected with RSV. Gionti E, et al. **Cell Differ Dev** 1989 Sep;27(3):215–23

Stimulation of limb cartilage differentiation by cyclic AMP is dependent on cell density. Rodgers BJ, et al. **Cell Differ Dev** 1989 Dec;28(3):179–87

Growth and differentiation of murine cartilage cells in vitro following a short-term exposure to triamcinolone acetonide. Weiss A, et al. **Cell Tissue Res** 1990 May; 260(3):513–20

Recognition of cell surface modulation by elliptic Fourier analysis. Diaz G, et al. **Comput Methods Programs Biomed** 1990 Jan;31(1):57–62

Comparative morphological and biochemical analysis of hypertrophic, non-hypertrophic and 1,25(OH)2D3 treated non-hypertrophic chondrocytes. Gerstenfeld LC, et al. **Connect Tissue Res** 1990;24(1):29–39

Culture and growth characteristics of chondrocytes encapsulated in alginate beads. Guo JF, et al. **Connect Tissue Res** 1989;19(2–4):277–97

Transforming growth factor beta: an autocrine regulator of chondrocytes. Rosier RN, et al. **Connect Tissue Res** 1989; 20(1–4):295–301

Cartilage stem cells: regulation of differentiation. Solursh M. **Connect Tissue Res** 1989;20(1–4):81–9 (25 ref.)

Differentiation of cartilage and bone. Solursh M. **Curr Opin Cell Biol** 1989 Oct;1(5):989–94 (46 ref.)

Hypertrophy and calcification of rabbit permanent chondrocytes in pelleted cultures: synthesis of alkaline phosphatase and 1,25-dihydroxycholecalciferol receptor. Iwamoto M, et al. **Dev Biol** 1989 Dec;136(2):500–7

Bone formation following intrarenal transplantation of isolated murine chondrocytes: chondrocyte-bone cell transdifferentiation? Moskalewski S, et al. **Development** 1989 Nov;107(3):473–80

Gene regulation during cartilage differentiation: temporal and spatial expression of link protein and cartilage matrix protein in the developing limb. Stirpe NS, et al. **Development** 1989 Sep;107(1):23–33

Proteoglycan core protein and type II collagen gene expressions are not correlated with cell shape changes during low density chondrocyte cultures. Mallein-Gerin F, et al. **Differentiation** 1990 Jun;43(3):204–11

Effect of 1,25-dihydroxyvitamin D3 on induction of chondrocyte maturation in culture: extracellular matrix gene expression and morphology. Gerstenfeld LC, et al. **Endocrinology** 1990 Mar;126(3):1599–609

Effects of dexamethasone and vitamin D3 on cartilage differentiation in a clonal chondrogenic cell population. Grigoriadis AE, et al. **Endocrinology** 1989 Oct; 125(4):2103–10

Phorbol esters inhibit chondrogenesis in limb mesenchyme by mechanisms independent of PGE2 or cyclic AMP1. Biddulph DM, et al. **Exp Cell Res** 1989 Dec;185(2):541–5

1 alpha,25-dihydroxyvitamin D3 stimulates colony formation of chick embryo chondrocytes in soft agar. Sato K, et al. **Exp Cell Res** 1990 Apr;187(2):335–8

Chondrocyte-matrix interactions. Attachment to proteins isolated from cartilage. Sommarin Y, et al. **Exp Cell Res** 1989 Sep;184(1):181–92

The development of hyaline-cell cartilage in the head of the black molly, Poecilia sphenops. Evidence for secondary cartilage in a teleost. Benjamin M. **J Anat** 1989 Jun; 164:145–54

The structure and ultrastructure of the rostral cartilage in the spiny eel, Macrognathus siamensis (Teleostei: Mastacembeloidei). Benjamin M, et al. **J Anat** 1990 Apr; 169:37–47

The cranial cartilages of teleosts and their classification. Benjamin M. **J Anat** 1990 Apr;169:153–72

Fibroblast growth factor is an inhibitor of chondrocyte terminal differentiation. Kato Y, et al. **J Biol Chem** 1990 Apr 5;265(10):5903–9

Induction and prevention of chondrocyte hypertrophy in culture. Bruckner P, et al. **J Cell Biol** 1989 Nov; 109(5):2537–45

c-fos expression precedes osteogenic differentiation of cartilage cells in vitro. Closs EI, et al. **J Cell Biol** 1990 Sep;111(3):1313–23

In vitro development of hypertrophic chondrocytes starting from selected clones of dedifferentiated cells. Quarto R, et al. **J Cell Biol** 1990 Apr;110(4):1379–86

Resting chondrocytes in culture survive without growth factors, but are sensitive to toxic oxygen metabolites. Tschan T, et al. **J Cell Biol** 1990 Jul;111(1):257–60

Precursors of chondroitin sulfate proteoglycan are segregated within a subcompartment of the chondrocyte endoplasmic reticulum. Vertel BM, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1827–36

Reimplantation of growth plate chondrocytes into growth plate defects in sheep. Foster BK, et al. **J Orthop Res** 1990 Jul;8(4):555–64

Effects of NSAID on collagen and proteoglycan synthesis of cultured chondrocytes. Fujii K, et al. **J Rheumatol Suppl** 1989 Aug;18:28–31

Stimulation of the expression of osteogenic and chondrogenic phenotypes in vitro by osteogenin. Vukicevic S, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8793–7

A modified mallory-cason staining procedure for large cryosections. van Leeuwen MB, et al. **Stain Technol** 1990; 65(1):37–42

Chondroclasts in osteoneogenesis. Bettex-Galland M, et al. **Tissue Cell** 1990;22(1):93–100

[Characterization of a chondrocyte primary culture from rib cartilage of the rat] Favaretto AL, et al. **Rev Bras Biol** 1989 Aug;49(3):731–6 (Eng. Abstr.) **(Por)**

DRUG EFFECTS

Isolation of several fractions from human serum, inhibiting rabbit cartilage metabolism in vitro. Du Caju MV, et al. **Acta Endocrinol (Copenh)** 1990 Feb;122(2):277–82

Effects of D-glucose and beta-hydroxybutyric acid on the in vitro development of (pre)chondrocytes from embryos of normal and diabetic rats. Styrud J, et al. **Acta Endocrinol (Copenh)** 1990 Apr;122(4):487–98

Chondrogenic stimulation of embryonic chick limb mesenchymal cells by factors in bovine and human dentine extracts. Rabinowitz T, et al. **Arch Oral Biol** 1990; 35(1):49–54

Inhibitory effects of tumor necrosis factor alpha on fracture healing in rats. Hashimoto J, et al. **Bone** 1989;10(6):453–7

Hyaluronic acid promotes chick embryo fibroblast and chondroblast expression. Cortivo R, et al. **Cell Biol Int Rep** 1990 Feb;14(2):111–22

Collagen expression in quail embryo chondrocytes treated with retinoic acid. Sanchez M, et al. **Ital J Biochem** 1990 May–Jun;39(3):153A–156A

A preliminary investigation into the effect of thyroid hormones on the metamorphic changes in Meckel's cartilage in Xenopus laevis. Thomson DA. **J Anat** 1989 Feb;162:149–55

Effect of retinoic acid on proliferation and differentiation of cultured chondrocytes in terminal differentiation. Takishita Y, et al. **J Biochem (Tokyo)** 1990 Apr; 107(4):592–6

Potent mitogenic effects of parathyroid hormone (PTH) on embryonic chick and rabbit chondrocytes. Differential effects of age on growth, proteoglycan, and cyclic AMP responses of chondrocytes to PTH. Koike T, et al. **J Clin Invest** 1990 Mar;85(3):626–31

Acidic fibroblast growth factor (aFGF) injection stimulates cartilage enlargement and inhibits cartilage gene expression in rat fracture healing. Jingushi S, et al. **J Orthop Res** 1990 May;8(3):364–71

Hematoporphyrin can inhibit the metabolism and growth of embryonic chicken cartilage in vitro. Vassilopoulou-Sellin R, et al. **Metabolism** 1990 Mar;39(3):316–20

Responsiveness of adenylate cyclase to PGE2 and forskolin in isolated cells from micromass cultures of chick limb mesenchyme during chondrogenesis. Capehart AA, et al. **Prostaglandins** 1990 Feb;39(2):167–78

Exogenous glycosaminoglycans modulate chondrogenesis, cyclic AMP level and cell growth in limb bud mesenchyme cultures. Hadházy C, et al. **Tissue Cell** 1989;21(5):673–85

[Naproxen and cartilage. Protective non-steroidal anti-rheumatic for the joint? Report from the 12th World Congress for Rheumatology in Rio de Janeiro—"NSAIDs—are there long-term effects on joints?"] **Fortschr Med** 1989;107 Suppl 78:1–11 **(Ger)**

[A new chondroprotector—polyvinylpyrrolidone for treating osteoarthrosis patients] Matulis AA, et al. **Ter Arkh** 1990; 62(5):95–8 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Methylcarbamate effects on Meckel's cartilages in the chick embryo. Virgintino D, et al. **Biol Struct Morphog** 1989; 2(3):85–8

The behaviour of cells from the distal tips of quail wing buds when grafted back into chick wings after micromass culture. Cottrill CP, et al. **Cell Differ Dev** 1990 Jan; 29(1):67–80

Inhibition of sulphate incorporation by chondrocytes in intact cartilage by hyaluronate from foetal cartilage. Brown RA, et al. **Connect Tissue Res** 1990;24(2):157–68

Cartilage, bone and tooth induction during early embryonic mouse mandibular morphogenesis using serumless, chemically-defined medium. Slavkin HC, et al. **Connect Tissue Res** 1990;24(1):41–51 (55 ref.)

Latex beads as probes of cell surface-extracellular matrix interactions during chondrogenesis: evidence for a role for amino-terminal heparin-binding domain of fibronectin. Frenz DA, et al. **Dev Biol** 1989 Nov;136(1):87–96

The mechanism of precartilage mesenchymal condensation: a major role for interaction of the cell surface with the amino-terminal heparin-binding domain of fibronectin. Frenz DA, et al. **Dev Biol** 1989 Nov;136(1):97-103

Comparison between ectoderm-conditioned medium and fibronectin in their effects on chondrogenesis by limb bud mesenchymal cells. Zanetti NC, et al. **Dev Biol** 1990 Jun; 139(2):383-95

Independent deposition of collagen types II and IX at epithelial-mesenchymal interfaces. Fitch JM, et al. **Development** 1989 Jan;105(1):85-95

Ectodermal inhibition of cartilage differentiation in micromass culture of chick limb bud mesenchyme in relation to gene expression and cell shape. Gregg BC, et al. **Development** 1989 Apr;105(4):769-77

Fibronectin gene expression during limb cartilage differentiation. Kulyk WM, et al. **Development** 1989 Jul; 106(3):449-55

Temporal changes in the response of chick limb bud mesodermal cells to transforming growth factor beta-type 1. Carrington JL, et al. **Exp Cell Res** 1990 Feb; 186(2):368-73

Chondrogenesis of mandibular mesenchyme from the embryonic chick is inhibited by mandibular epithelium and by epidermal growth factor. Coffin-Collins PA, et al. **Int J Dev Biol** 1989 Jun;33(2):297-311

Long-term organ culture of embryonic chick femora: a system for investigating bone and cartilage formation at an intermediate level of organization. Roach HI. **J Bone Miner Res** 1990 Jan;5(1):85-100

In vitro reformation of the perichondrium from perichondrial-free Meckel's cartilages of the embryonic chick. Kavumpurath S, et al. **J Craniofac Genet Dev Biol** 1989;9(2):173-84

Computer-based image analysis of cartilage differentiation in embryonic limb bud micromass cultures. Garrison JC, et al. **J Microsc** 1989 Dec;156 (Pt 3):353-61

Possible recruitment of osteoblastic precursor cells from hypertrophic chondrocytes during initial osteogenesis in cartilaginous limbs of young rats. Franzen A, et al. **Matrix** 1989 Aug;9(4):261-5

Abnormal ambient glucose levels inhibit proteoglycan core protein gene expression and reduce proteoglycan accumulation during chondrogenesis: possible mechanism for teratogenic effects of maternal diabetes. Leonard CM, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10113-7

[Histogenesis and three-dimensional observation on condylar cartilage in prenatal mice] Tengan T. **Kokubyo Gakkai Zasshi** 1990 Mar;57(1):32-57 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Possible mechanism of inhibition of cartilage alkaline phosphatase by insulin. Gazzarrini C, et al. **Acta Diabetol Lat** 1989 Oct-Dec;26(4):321-7

Collagenolytic and phosphatase activity in the rat mandible after functional protrusion. Bollen AM, et al. **Arch Oral Biol** 1989;34(4):267-73

Hypertrophic chondrocytes produce immunoreactive collagenase in vivo [published erratum appears in Connect Tissue Res 1989;23(2-3):following 218] Blair HC, et al. **Connect Tissue Res** 1989;23(1):65-73

A human cartilage metalloproteinase with elastolytic activity. Granda JL, et al. **Connect Tissue Res** 1990;24(3-4):249-63

Altered chondrocytic oxidative metabolism during the restoration of depleted intercellular matrix. Boussidan F, et al. **J Exp Pathol (Oxford)** 1990 Jun;71(3):395-402

Distribution of protein disulfide isomerase in rat epiphyseal chondrocytes. Akagi S, et al. **J Histochem Cytochem** 1989 Dec;37(12):1835-44

[Effects of non-steroidal anti-inflammatory drugs on the enzymatic degradation of osteoarthritic cartilage] Vignon E, et al. **Rev Rhum Mal Osteoartic** 1990 Apr 10;57(3 (Pt 2)):255-9 (Eng. Abstr.) **(Fre)**

GROWTH & DEVELOPMENT

Effects of parathyroid hormone fragments on the growth of murine mandibular condylar cartilage in vitro. Shurtz-Swirski R, et al. **Acta Endocrinol (Copenh)** 1990 Feb;122(2):217-26

Hypertrophic cartilage matrix. Type X collagen, supramolecular assembly, and calcification. Schmid TM, et al. **Ann N Y Acad Sci** 1990;580:64-73 (29 ref.)

Skeletal growth and chondroid tissue. Dhem A, et al. **Arch Ital Anat Embriol** 1989 Jul-Sep;94(3):237-41 (26 ref.)

In vitro systems for inducers of cartilage and bone development. Silbermann M. **Biomaterials** 1990 Jul;11:47-9

Rat incisor dentine contains a factor which alters the phenotypic expression and stimulates chondrogenesis in fibroblast-like cells in vitro. Veis A, et al. **Biomaterials** 1990 Jul;11:35-7

Bone and cartilage formation in diffusion chambers by subcultured cells derived from the periosteum. Nakahara H, et al. **Bone** 1990;11(3):181-8

Bioassay of chondrocyte differentiation by bone morphogenetic protein. Nogami H, et al. **Clin Orthop** 1990 Sep;(258):295-9

Matrix vesicles as a marker of endochondral ossification. Boyan BD, et al. **Connect Tissue Res** 1990;24(1):67-75

Effects of different concentrations of serum on cartilage growth in an organ culture system. Shurtz-Swirski R, et al. **In Vitro Cell Dev Biol** 1989 Nov;25(11):995-9

Physiological role of vitamin A in growth cartilage cells: low concentrations of retinoic acid strongly promote the proliferation of rabbit costal growth cartilage cells in culture. Enomoto M, et al. **J Biochem (Tokyo)** 1990 May; 107(5):743-8

The 25-kilodalton insulin-like growth factor (IGF)-binding protein inhibits both basal and IGF-I-mediated growth of chick embryo pelvic cartilage in vitro. Burch WM, et al. **J Clin Endocrinol Metab** 1990 Jan;70(1):173-80

The mouse mandibular condyle: an investigative model in developmental biology. Livne E, et al. **J Craniofac Genet Dev Biol** 1990;10(1):95-8

Chondrocyte-like colony formation of mesenchymal cells by dentin extracts in agarose gel culture. Harada K, et al. **J Dent Res** 1990 Sep;69(9):1555-9

Developmental morphology of the solum nasi in the mouse lemur (Microcebus murinus). Lozanoff S, et al. **J Morphol** 1989 Dec;202(3):409-24

Recombinant human bone morphogenetic protein induces bone formation. Wang EA, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2220-4

[Y-shaped cartilage in the development of the normal pelvis and in congenital hip dislocation] Lokietek W, et al. **Acta Orthop Belg** 1990;56(1 (Pt A)):23-31 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Humoral autoimmunity to cartilage in rheumatoid arthritis? Enzmann H, et al. **Agents Actions** 1990 Jan;29(1-2):114-6

Natural anti-chondrocyte cytotoxic activity in the mouse: supportive role of macrophages. Malejczyk J. **Cell Immunol** 1990 May;127(2):420-31

A cartilage-mimicking T-cell epitope on a 65K mycobacterial heat-shock protein: adjuvant arthritis as a model for human rheumatoid arthritis. van Eden W, et al. **Curr Top Microbiol Immunol** 1989;145:27-43 (51 ref.)

Monoclonal antibodies to ROS 17/2.8 cells recognize antigens, some of which are restricted to osteoblasts and chondrocytes. Perry J, et al. **J Bone Miner Res** 1990 Feb; 5(2):187-200

[Antibodies against hyaline cartilage. Antigen isolation and their characterization] Surmíková E, et al. **Bratisl Lek Listy** 1990 Jun;91(6):446-53 (Eng. Abstr.) **(Slo)**

INJURIES

Rupture of the labra acetabularis as a cause of hip pain detected arthroscopically, and partial limbectomy for successful pain relief. Ueo T, et al. **Arthroscopy** 1990; 6(1):48-51

Interlocked stresses in human nasal septal cartilage. Fry HJ. **Br J Plast Surg** 1966 Jul;19(3):276-8

Fracture behaviour of cartilage-on-bone in response to repeated impact loading. Silyn-Roberts H, et al. **Connect Tissue Res** 1990;24(2):143-56

Repair of cartilaginous fractures during chick limb development. McCullagh JJ, et al. **J Orthop Re.** 1990 Jan; 8(1):127-31

METABOLISM

Glial fibrillary acidic protein and cartilage. Dolman CL. **Acta Neuropathol (Berl)** 1989;79(1):101-3

The effect of indomethacin on cartilage breakdown. Desa FM, et al. **Agents Actions** 1989 Jun;27(3-4):485-7

Inflammation-mediated chondrocyte unresponsiveness to insulin-like growth factor-1 is not caused by H_2O_2. Joosten LA, et al. **Agents Actions** 1990 Jan;29(1-2):100-2

Effect of interleukin-1-beta and tumor necrosis factor-alpha on cartilage proteoglycan metabolism in vitro. Pratta MA, et al. **Agents Actions** 1989 Jun;27(3-4):250-3

The effect of chronic paracetamol administration to rats on the glycosaminoglycan content of patellar cartilage. van der Kraan PM, et al. **Agents Actions** 1990 Mar; 29(3-4):218-23

The structure and macromolecular organization of type IX collagen in cartilage. Shimokomaki M, et al. **Ann N Y Acad Sci** 1990;580:1-7 (17 ref.)

Scorbutic and fasted guinea pig sera contain an insulin-like growth factor I-reversible inhibitor of proteoglycan and collagen synthesis in chick embryo chondrocytes and adult human skin fibroblasts. Oyamada I, et al. **Arch Biochem Biophys** 1990 Jan;276(1):85-93

Interrelationship between cyclic AMP level and chondrogenesis in vitro. Hadházy C, et al. **Arch Ital Anat Embriol** 1989 Jul-Sep;94(3):263-6

Arthritogenicity of minor cartilage collagens (types IX and XI) in mice. Boissier MC, et al. **Arthritis Rheum** 1990 Jan; 33(1):1-8

Early-onset primary osteoarthritis and mild chondrodysplasia. Radiographic and pathologic studies with an analysis of cartilage proteoglycans. Katzenstein PL, et al. **Arthritis Rheum** 1990 May;33(5):674-84

Inflammation and cartilage metabolism in rheumatoid arthritis. Studies of the blood markers hyaluronic acid, orosomucoid, and keratan sulfate. Poole AR, et al. **Arthritis Rheum** 1990 Jun;33(6):790-9

Effects of tissue compression on the hyaluronate-binding properties of newly synthesized proteoglycans in cartilage explants. Sah RL, et al. **Biochem J** 1990 May 1;267(3):803-8

Intermediary metabolism in the Swarm rat chondrosarcoma chondrocyte. Spencer CA, et al. **Biochem J** 1990 Feb 1; 265(3):911-4

Rat and human cartilage proteoglycan (aggrecan) gene structure. Doege K, et al. **Biochem Soc Trans** 1990 Apr; 18(2):200-2

Domain structure and sequence similarities in cartilage proteoglycan. Dudhia J, et al. **Biochem Soc Trans** 1990 Apr; 18(2):198-200

Primary structure of the hyaluronic acid-binding region of porcine laryngeal cartilage proteoglycan. Harris M, et al. **Biochem Soc Trans** 1990 Apr;18(2):299

Assembly of cartilage proteoglycan with hyaluronate and structure of the central filament in proteoglycan aggregate. Mörgelin M, et al. **Biochem Soc Trans** 1990 Apr;18(2):204-7

Domains in cartilage proteoglycans: do they define function? Neame PJ. **Biochem Soc Trans** 1990 Apr;18(2):202-4

Effect of interleukin-1 on the size distribution of cartilage proteoglycans as determined by sedimentation field flow fractionation. Arner EC, et al. **Biochim Biophys Acta** 1989 Oct 13;993(1):100-7

Effect of forskolin on synthesis of xyloside-initiated glycosaminoglycans in embryonic chick chondrocytes. Hu LM, et al. **Biochim Biophys Acta** 1990 Jan 23;1051(1):112-4

Metabolic effects of forskolin in chick chondrocytes. Hu LM, et al. **Biochim Biophys Acta** 1989 Oct 9;1013(3):294-9

Regulation of arachidonic acid turnover by 1,25-(OH)2D3 and 24,25-(OH)2D3 in growth zone and resting zone chondrocyte cultures. Schwartz Z, et al. **Biochim Biophys Acta** 1990 Sep 7;1027(3):278-86

Squid proteoglycans: isolation and characterization of three populations from cranial cartilage. Vynios DH, et al. **Biochim Biophys Acta** 1990 Feb 26;1033(2):139-47

Co-operation between interleukin-1 and the fibrinolytic system in the degradation of collagen by articular chondrocytes. Cruwys SC, et al. **Br J Pharmacol** 1990 Jul; 100(3):631-5

Swelling of cartilage and expansion of the collagen network [letter] Brown RA, et al. **Calcif Tissue Int** 1989 Oct; 45(4):260-1

A novel angiogenic inhibitor derived from Japanese shark cartilage (I). Extraction and estimation of inhibitory activities toward tumor and embryonic angiogenesis. Oikawa T, et al. **Cancer Lett** 1990 Jun 15;51(3):181-6

Evidence for a differential distribution of reducing equivalents from NADPH in cartilage. Nahir AM, et al. **Cell Biochem Funct** 1989 Oct;7(4):301-3

Binding of insulin-like growth factor-I (IGF-I) to primary cultures of chondrocytes from rat rib growth cartilage. Makower AM, et al. **Cell Biol Int Rep** 1989 Aug; 13(8):655-65

Nerve growth factor in skeletal tissues of the embryonic chick. Frenkel SR, et al. **Cell Tissue Res** 1990 May; 260(3):507-11

Hyaluronan and hyaluronan-binding proteins in cartilaginous tissues. Mason RM, et al. **Ciba Found Symp** 1989; 143:107-16; discussion 117-20, 281-5 (25 ref.)

Aggregation of proteoglycans in cephalic, epiphyseal and articular cartilages in growing sheep. Bollen AM, et al. **Connect Tissue Res** 1990;24(2):121-7

Regulation of matrix vesicle metabolism by vitamin D metabolites. Boyan BD, et al. **Connect Tissue Res** 1989; 22(1-4):3-16; discussion 53-61 (39 ref.)

Age-related changes in the composition of proteoglycans in sheep cartilages. Dziewiatkowski DD, et al. **Connect Tissue Res** 1989;19(2-4):103-20

Mechanism of de novo mineral formation by matrix vesicles. Wuthier RE. **Connect Tissue Res** 1989;22(1-4):27-33; discussion 53-61 (27 ref.)

Autoradiographic localization of osteogenin binding sites in cartilage and bone during rat embryonic development. Vukicevic S, et al. **Dev Biol** 1990 Jul;140(1):209-14

Synthesis and secretion of Ch 21 protein in embryonic chick skeletal tissues. Manduca P, et al. **Eur J Cell Biol** 1989 Oct;50(1):154-61

Effects of recombinant eel growth hormone on the uptake of [35S]sulfate by ceratobranchial cartilages of the Japanese eel, Anguilla japonica. Duan CM, et al. **Gen Comp Endocrinol** 1990 Aug;79(2):320-5

Complementary deoxyribonucleic acid cloning of an mRNA encoding transforming growth factor-beta 2 from chicken embryo chondrocytes. Jakowlew SB, et al. **Growth Factors** 1990;2(2-3):123-33

The protective effects of cell-free fluid exudate on cartilage degradation in vitro. Moore AR, et al. **Int J Tissue React** 1990;12(1):33-7

The chemotactic properties of cartilage glycosaminoglycans for polymorphonuclear neutrophils. Moore AR, et al. **Int J Tissue React** 1989;11(6):301-7

Penetration of ticarcillin/clavulanate into cartilage. Meier H, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:101-5

Identification of a cartilage-specific promoter within intron 2 of the chick alpha 2(I) collagen gene. Bennett VD, et al. **J Biol Chem** 1990 Feb 5;265(4):2223-30

Stabilization of the mRNA follows transcriptional activation of type II collagen gene in differentiating chicken chondrocyte. Dozin B, et al. **J Biol Chem** 1990 May 5; 265(13):7216-20

Chick cartilage chondroitin sulfate proteoglycan core protein. I. Generation and characterization of peptides and specificity for glycosaminoglycan attachment. Krueger RC Jr, et al. **J Biol Chem** 1990 Jul 15;265(20):12075-87

Chick cartilage chondroitin sulfate proteoglycan core

protein. II. Nucleotide sequence of cDNA clone and localization of the S103L epitope. Krueger RC Jr, et al. **J Biol Chem** 1990 Jul 15;265(20):12088–97

Ascorbic acid induces alkaline phosphatase, type X collagen, and calcium deposition in cultured chick chondrocytes. Leboy PS, et al. **J Biol Chem** 1989 Oct 15;264(29):17281–6

Stimulation by concanavalin A of cartilage–matrix proteoglycan synthesis in chondrocyte cultures. Yan WQ, et al. **J Biol Chem** 1990 Jun 15;265(17):10125–31

Bilirubin as an inhibitor of cartilage metabolism: effect on avian chondrocyte proliferation in cell culture. Vassilopoulou-Sellin R, et al. **J Bone Miner Res** 1990 Jul; 5(7):769–74

Decrease in the basal levels of cytosolic free calcium in chondrocytes during aging in culture: possible role as differentiation–signal. Beit-Or A, et al. **J Cell Physiol** 1990 Aug;144(2):197–203

Visual demonstration of growth hormone receptors on human growth plate chondrocytes. Werther GA, et al. **J Clin Endocrinol Metab** 1990 Jun;70(6):1725–31

Cartilage matrix glycoprotein is present in serum in experimental canine osteoarthritis. Fife RS, et al. **J Clin Invest** 1989 Nov;84(5):1432–9

A hormonally controlled serum factor which stimulates sulfate incorporation by cartilage in vitro. 1956 [classical article] Salmon WD Jr, et al. **J Lab Clin Med** 1990 Sep; 116(3):408–19

The effect of human interleukin 1 on proteoglycan metabolism in human and porcine cartilage explants. Nietfeld JJ, et al. **J Rheumatol** 1990 Jun;17(6):818–26

Cartilage derived proteoglycans in body fluids of children. Inverse correlation with age. Saxne T, et al. **J Rheumatol** 1989 Oct;16(10):1341–4

Mycobacterial antigens stimulate rheumatoid mononuclear cells to cartilage proteoglycan depletion. Wilbrink B, et al. **J Rheumatol** 1990 Apr;17(4):532–7

Large cartilage proteoglycan (PG–LA) influences the biosynthesis of macromolecules by isolated chondrocytes. Larsson T, et al. **Matrix** 1989 Nov;9(5):343–52

Effect of cytochrome c concentration on the ultrastructural appearance of bovine nasal cartilage proteoglycans. Front P, et al. **Stain Technol** 1989 May;64(3):113–9

[Respective roles of high and low molecular weight serum growth factors in the metabolism of proteoglycans and other cartilage macromolecules] Maachi F, et al. **Reprod Nutr Dev** 1990;30(3):409–15 (Eng. Abstr.) **(Fre)**

[Prostaglandins in bone and cartilage metabolism] Karbowski A, et al. **Z Orthop** 1990 Mar–Apr;128(2):115–22 (141 ref.) (Eng. Abstr.) **(Ger)**

[Molecular biological approach to orthopaedic research—analysis of cartilage collagens] Kimura T, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Sep;63(9):1132–44 **(Jpn)**

PATHOLOGY

Squamous cell carcinoma of the esophagus with cartilaginous metaplasia at metastatic lesions. Terada N, et al. **Acta Pathol Jpn** 1990 Jun;40(6):435–41

Cartilaginous metaplasia in calcific aortic valve disease. Groom DA, et al. **Am J Clin Pathol** 1990 Jun;93(6):809–12

Lumbo–sacral chordoma with high–grade malignant cartilaginous and spindle cell components. Hruban RH, et al. **Am J Surg Pathol** 1990 Apr;14(4):384–9 (24 ref.)

Diagnosis of tracheopathia osteochondroplastica [letter; comment] Pérez-Rodriguez E, et al. **Chest** 1990 Mar; 97(3):763 Comment on: Chest 1988 Oct;94(4):842–4.

Effects of cell shape on type X collagen gene expression in hypertrophic chondrocytes. Adams SL, et al. **Connect Tissue Res** 1989;20(1–4):223–32

Cellular interaction in cartilage degradation. Desa FM, et al. **Int J Tissue React** 1989;11(5):213–7

Chondrosarcoma of small bones of the hand arising from enchondroma. Nelson DL, et al. **J Hand Surg [Am]** 1990 Jul;15(4):655–9 (14 ref.)

Visualization of living terminal hypertrophic chondrocytes of growth plate cartilage in situ by differential interference contrast microscopy and time–lapse cinematography. Farnum CE, et al. **J Orthop Res** 1990 Sep;8(5):750–63 (85 ref.)

Effects of isolated rheumatoid synovial cells on cartilage degradation in vitro. Keller K, et al. **J Orthop Res** 1990 May;8(3):345–52

Rhabdomyosarcoma with heterologous cartilage of the uterine cervix: a clinicopathologic and immunohistochemical study of an aggressive neoplasm in a young female. Perrone T, et al. **Med Pediatr Oncol** 1990; 18(1):72–6

Sonography of the nonossified tarsal navicular cartilage in an infant with congenital vertical talus. Schlesinger AE, et al. **Pediatr Radiol** 1989;20(1–2):134–5

[Comparative morphometric analysis of the reaction of the rat bone to dehydration and burn trauma] Koveshnikov VG, et al. **Arkh Anat Gistol Embriol** 1989 Jul;97(7):47–53 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Similar regulation of chondrocyte functions by cellular stimulants of unknown mechanism. Retinoids, cytokines, and bacterial lipopolysaccharide. Benton HP. **Biochem Pharmacol** 1990 Jan 1;39(1):1–6 (65 ref.)

Neochondrogenesis in free intraarticular periosteal autografts in an immobilized and paralyzed limb. An experimental investigation in the rabbit. Delaney JP, et al. **Clin Orthop** 1989 Nov;(248):278–82

The healing of bone and cartilage. Motoki DS, et al. **Clin Plast Surg** 1990 Jul;17(3):527–44 (117 ref.)

Regenerating marrow induces systemic increase in osteo– and chondrogenesis. Gazit D, et al. **Endocrinology** 1990 May;126(5):2607–13

Contractile properties of bronchial smooth muscle with and without cartilage. Jiang H, et al. **J Appl Physiol** 1990 Jul; 69(1):120–6

A finite deformation theory for cartilage and other soft hydrated connective tissues—I. Equilibrium results. Kwan MK, et al. **J Biomech** 1990;23(2):145–55

Transforming growth factor–beta and the initiation of chondrogenesis and osteogenesis in the rat femur. Joyce ME, et al. **J Cell Biol** 1990 Jun;110(6):2195–207

The potential of adult human perichondrium to form hyalin cartilage in vitro. Bulstra SK, et al. **J Orthop Res** 1990 May;8(3):328–35

Growth–plate cartilage metabolic response to mechanical stress. Greco F, et al. **J Pediatr Orthop** 1989 Sep–Oct; 9(5):520–4

Physiological mechanisms adopted by chondrocytes in regulating longitudinal bone growth in rats. Hunziker EB, et al. **J Physiol (Lond)** 1989 Jul;414:55–71

Identification of positive and negative regulatory regions controlling expression of the cartilage matrix protein gene. Kiss I, et al. **Mol Cell Biol** 1990 May;10(5):2432–6

Developmental differences in tracheal cartilage mechanics. Penn RB, et al. **Pediatr Res** 1989 Nov;26(5):429–33

PHYSIOPATHOLOGY

The role of stromelysin in the cartilage destruction that accompanies inflammatory arthritis. Hasty KA, et al. **Arthritis Rheum** 1990 Mar;33(3):388–97

RADIATION EFFECTS

Effect of radiation on normal tissues in the head and neck. Bone, cartilage, and soft tissue. Million RR, et al. **Front Radiat Ther Oncol** 1989;23:221–37; discussion 251–4 (30 ref.)

Normal–tissue tolerance of skin, cartilage, and bone. Parker RG, et al. **Front Radiat Ther Oncol** 1989;23:215–20; discussion 251–4

Dose– and time–dependent radiation inhibition of RNA and glycosaminoglycan synthesis in embryonic cartilage: an in vitro study. Cornelissen M, et al. **Int J Radiat Biol** 1990 May;57(5):1007–16

SURGERY

Cartilage resurfacing of the rabbit knee. The use of an allogeneic demineralized bone matrix–autogeneic perichondrium composite implant. Billings E Jr, et al. **Acta Orthop Scand** 1990 Jun;61(3):201–6

Dome truncation for management of the overprojected nasal tip. Kridel RW, et al. **Ann Plast Surg** 1990 May; 24(5):385–96

Nasal cartilage fenestration in the application of full–thickness skin grafts. Adnot J, et al. **J Dermatol Surg Oncol** 1989 Nov;15(11):1231–4

Late surgical repair of a traumatic total stenosis of a left bronchus by free cartilage graft. Gallardo AF, et al. **J Pediatr Surg** 1989 Nov;24(11):1128–31

Comparison of the erbium–yttrium aluminum garnet and carbon dioxide lasers for in vitro bone and cartilage ablation. Gonzalez C, et al. **Laryngoscope** 1990 Jan; 100(1):14–7

TRANSPLANTATION

Cartilage palisade tympanoplasty. Amedee RG, et al. **Am J Otol** 1989 Nov;10(6):447–50

Use of cartilage graft for an orbital socket implant. Carraway JH, et al. **Ann Plast Surg** 1990 Feb;24(2):139–48

Re: Ohlsén: Closure of nasal septal perforation with a cutaneous flap and a perichondrocutaneous graft [letter; comment] Matton G. **Ann Plast Surg** 1990 Jan;24(1):98 Comment on: Ann Plast Surg 1988 Sep;21(3):276–88.

The iliac crest cartilaginous cap. Schendel SA, et al. **Ann Plast Surg** 1990 Jul;25(1):29–31

Endochondral calcification by hypertrophic chondrocytes in the Meckel's cartilage grafted into the isogenic mouse spleen. Ishizeki K, et al. **Arch Histol Cytol** 1990 May; 53(2):187–92

Follow–up study of reconstructed auricle in microtia: comparison of the results of the rib cartilage framework and the silicone rubber framework methods. Matsunaga T, et al. **Auris Nasus Larynx** 1989;16(2):75–88

Microwave treatment of xenogeneic cartilage transplants. Visser CE, et al. **Biomaterials** 1989 Oct;10(8):507–10

The use of adhesives in chondrocyte transplantation surgery: in–vivo studies. Pitman MI, et al. **Bull Hosp Jt Dis Orthop Inst** 1989 Fall;49(2):213–20

A retrospective analysis of growth of the constructed condyle–ramus in children with hemifacial microsomia. Mulliken JB, et al. **Cleft Palate J** 1989 Oct;26(4):312–7

Growth after construction of the temporomandibular joint in children with hemifacial microsomia. Munro IR, et al. **Cleft Palate J** 1989 Oct;26(4):303–11

The indications and techniques for autologous temporomandibular joint replacement. MacIntosh RB. **Fortschr Kiefer Gesichtschir** 1990;35:168–71

Technique for costal cartilage harvest for use in laryngotracheal reconstruction. Kearns DB, et al. **Int J Pediatr Otorhinolaryngol** 1989 Sep;18(1):73–5

Chondroplastic graft augmentation rhinoplasty. Spencer MG. **J Laryngol Otol** 1990 Jul;104(7):539–43

Autogenous transplantation of rib cartilage preserved in glycerol, after removal of the perichondrium, to the malar process of rats—a histological study (Part I). Okamoto T, et al. **J Nihon Univ Sch Dent** 1990 Jun;32(2):116–26

The use of autologous auricular cartilage for temporomandibular joint disc replacement: a preliminary report. Matukas VJ, et al. **J Oral Maxillofac Surg** 1990 Apr;48(4):348–53

Costochondral grafting for posttraumatic temporomandibular joint reconstruction: a review of six cases. Nelson CL, et al. **J Oral Maxillofac Surg** 1989 Oct;47(10):1030–6; discussion 1037–8

Autogenous auricular cartilage implantation following discectomy in the primate temporomandibular joint. Tucker MR, et al. **J Oral Maxillofac Surg** 1990 Jan; 48(1):38–44

Viability and metabolism of cartilage transplanted to physeal regions. Lalanandham T, et al. **J Pediatr Orthop** 1990 Jul–Aug;10(4):450–8

Composite autograft for tympanoplasty and tympanomastoid surgery. Adkins WY. **Laryngoscope** 1990 Mar;100(3):244–7

A comparison of the cartilaginous rib graft and Evans–Todd laryngotracheoplasties for subglottic stenosis. Muntz HR, et al. **Laryngoscope** 1990 Apr;100(4):415–6

A cancellous marrow bone–cartilage composite autograft for maxillofacial reconstructive surgery. A case report. Sinn DP, et al. **Oral Surg Oral Med Oral Pathol** 1989 Nov; 68(5):535–40 (29 ref.)

Microtia reconstruction: does the cartilage framework grow? Thomson HG, et al. **Plast Reconstr Surg** 1989 Dec; 84(6):908–15

Formation of chondroitin sulphate proteoglycan in cartilage regenerated from free perichondrial graft. Widenfalk B, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989; 23(3):163–8

Preparation of allogeneic cartilage and bone for grafting. Clark JL, et al. **Surg Forum** 1978;29:580–2

Epiglottic augmentation in the horse. Tulleners E, et al. **Vet Surg** 1990 May–Jun;19(3):181–90

[Experimental study of heterogeneous cartilage transplantation] Su L. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Sep;3(3):220–2, 239 (Eng. Abstr.) **(Chi)**

[Clinical application and experimental study of homologous–cartilage implantation] Zheng XM. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Jun;6(2):91–3, 156 (Eng. Abstr.) **(Chi)**

[Nursing care of young adults with aseptic necrosis of the head of the femur treated with fetal cartilage grafting] Wang X, et al. **Chung Hua Hu Li Tsa Chih** 1989 Jun; 24(6):331–2 **(Chi)**

[Reconstruction of the external ear in children. Contribution of the clay model cartilage sculpture] Disant F, et al. **Pediatrie** 1990;45(3):181–5 (6 ref.) (Eng. Abstr.) **(Fre)**

[Ear cartilage as tarsus replacement (with long–term results)] Meyer–Rüsenberg HW, et al. **Fortschr Ophthalmol** 1990; 87(1):99–104 (Eng. Abstr.) **(Ger)**

[Experiences with the palisade technic of tympanoplasty] Péré P. **Laryngorhinootologie** 1989 Oct;68(10):569–70 (Eng. Abstr.) **(Ger)**

[Radiographic course of inverted osteochondral graft using the Regnauld technic in the surgical treatment of hallux valgus] De Palma L, et al. **Arch Putti Chir Organi Mov** 1989;37(2):363–9 (Eng. Abstr.) **(Ita)**

[Surgical treatment of subglottic stenosis in children—laryngotracheal plastic surgery with autogenous costal cartilage graft] Kawashiro N, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Aug;92(8):1232–8 (Eng. Abstr.) **(Jpn)**

[Myelochondroplasty of bone cavities and defects of the jaw bones] Plotnikov NA, et al. **Stomatologiia (Mosk)** 1989 Sep–Oct;68(5):49–52 (Eng. Abstr.) **(Rus)**

[Surgical treatment of pathologic dislocation and ankylosis of the hip joint using demineralized bone and cartilage cups in children] Andrianov VL, et al. **Vestn Khir** 1989 May; 142(5):88–9 **(Rus)**

[Brephoplasty in pterygium] Mazeava NR. **Vestn Oftalmol** 1989 Jul–Aug;105(4):30–2 (Eng. Abstr.) **(Rus)**

[Functional results of tympanoplasty using autologous cartilage] Edrev G. **Vestn Otorinolaringol** 1989 Sep–Oct; (5):49–51 (Eng. Abstr.) **(Rus)**

[Comparison of the effectiveness of a mobile prosthesis created by the implantation of Hydron and cartilage after enucleation of the bulb] Oláh Z, et al. **Cesk Oftalmol** 1990 May;46(3):161–6 (Eng. Abstr.) **(Slo)**

[Reconstructive septal surgery: review of various implants in the nasal area] Montserrat JR, et al. **An Otorrinolaringol Ibero Am** 1989;16(5):475–83 (46 ref.) (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

An electron microscope study of the distal segment of the os penis of the rat. Yamamoto M. **Arch Histol Cytol** 1989 Dec;52(5):529–41

The podosomes of Rous sarcoma virus transformed chondrocytes show a peculiar ultrastructural organization. Nitsch L, et al. **Cell Biol Int Rep** 1989 Nov;13(11):919–26

Three-dimensional organization of extracellular matrix in elastic cartilage as viewed by quick freeze, deep etch electron microscopy. Mecham RP, et al. **Connect Tissue Res** 1990;24(2):83–93

Immunoelectron microscopy of type X collagen: supramolecular forms within embryonic chick cartilage. Schmid TM, et al. **Dev Biol** 1990 Mar;138(1):53–62

Comparative fine structure of the axial skeleton inside the regenerated tail of some lizard species and the tuatara (Sphenodon punctatus). Alibardi L, et al. **Gegenbaurs Morphol Jahrb** 1989;135(5):705–16

A system of interlacunar network and thick fibrils in human hyaline cartilage. Hwang WS, et al. **Histochem J** 1990 Apr; 22(4):201–8

Electron microscopic study of condylar cartilage of rat mandible stained with ruthenium red: proteoglycans and hypertrophic chondrocytes. Yoshioka C, et al. **J Craniofac Genet Dev Biol** 1989;9(3):303–14

The head cartilage of cephalopods. II. Ultrastructure of isolated native collagen fibrils and of polymeric aggregates obtained in vitro: comparison with the cartilage of mammals. Bairati A, et al. **J Ultrastruct Mol Struct Res** 1989 Aug;102(2):132–8

Ultrastructural abnormalities in bone and calcifying cartilage in two siblings with a newly described recessive lethal chondrodysplasia. Gruber HE, et al. **Ultrastruct Pathol** 1990 Jul–Aug;14(4):343–55

CARTILAGE, ARTICULAR

MR imaging of the knee: three-dimensional volume imaging combined with fast processing. Adam G, et al. **J Comput Assist Tomogr** 1989 Nov–Dec;13(6):984–8

Twenty cases of equine osteoarthrosis detected at autopsy. Ohshima K, et al. **Nippon Juigaku Zasshi** 1990 Feb; 52(1):129–36

Synovium transplantation onto the cartilage denuded patellar groove of the sheep knee joint. Rothwell AG. **Orthopedics** 1990 Apr;13(4):433–42

Arthroscopic treatment of posttraumatic chondromalacia patellae. Zorman D, et al. **Orthopedics** 1990 May; 13(5):585–8

Improved techniques for measuring the indentation and thickness of articular cartilage. Swann AC, et al. **Proc Inst Mech Eng [H]** 1989;203(H3):143–50 (15 ref.)

ABNORMALITIES

Congenital rudimentary medial meniscus—report of a case of development arrest of medial meniscus. Aranha A, et al. **Singapore Med J** 1990 Apr;31(2):189–90

ANALYSIS

Presence of type III collagen in disc attachments of human temporomandibular joints. Gage JP, et al. **Arch Oral Biol** 1990;35(4):283–8

A quantitative chemical study of glycosaminoglycans in the articular disc of the bovine temporomandibular joint. Nakano T, et al. **Arch Oral Biol** 1989;34(9):749–57

Low molecular weight serine proteinase inhibitors of human articular cartilage. Isolation, characterization, and biosynthesis. Andrews JL, et al. **Arthritis Rheum** 1990 Sep; 33(9):1384–93

Histaminergic H1, serotoninergic, beta adrenergic and dopaminergic receptors in human osteoarthritic cartilage. Vignon E, et al. **Biochem Int** 1990;20(2):251–5

Dermatan sulphate proteoglycans of human articular cartilage. The properties of dermatan sulphate proteoglycans I and II. Roughley PJ, et al. **Biochem J** 1989 Sep 15;262(3):823–7

Comparative analysis of collagens solubilized from human foetal, and normal and osteoarthritic adult articular cartilage, with emphasis on type VI collagen. Ronzière MC, et al. **Biochim Biophys Acta** 1990 Apr 19; 1038(2):222–30

Peculiar ultraviolet absorbing moieties of human osteoarthritic cartilage. Chayen J, et al. **Cell Biochem Funct** 1990 Apr;8(2):131–5

The influence of weight-bearing exercise on articular cartilage of meniscectomized joints. An experimental study in sheep. Ghosh P, et al. **Clin Orthop** 1990 Mar;(252):101–13

Non-linear statistical technique applied to data from baboon articular cartilage. Warskyj M, et al. **Comput Methods Programs Biomed** 1990 Jun;32(2):107–14

Chondrons from articular cartilage (II): Analysis of the glycosaminoglycans in the cellular microenvironment of isolated canine chondrons. Poole CA, et al. **Connect Tissue Res** 1990;24(3–4):319–30

Quantitation of autoradiographic grains in different zones of articular cartilage with image analyzer. Parkkinen JJ, et al. **Histochemistry** 1990;93(3):241–5

A pessimistic view of serologic markers for diagnosis and management of osteoarthritis. Biochemical, immunologic and clinicopathologic barriers. Brandt KD. **J Rheumatol Suppl** 1989 Aug;18:39–42 (36 ref.)

Proteoglycans of the articular disc of the bovine temporomandibular joint. I. High molecular weight chondroitin sulphate proteoglycan. Nakano T, et al. **Matrix** 1989 Aug;9(4):277–83

Proteoglycans of the articular disc of the bovine temporomandibular joint. II. Low molecular weight dermatan sulphate proteoglycan. Scott PG, et al. **Matrix** 1989 Aug;9(4):284–92

Use of histochemical techniques in the characterisation of osteochondroses affecting pigs. Hill MA, et al. **Vet Rec** 1990 Jul 14;127(2):29–37

Changes in the distribution of proteinpolysaccharide complexes within the articular cartilage in experimental osteoarthrosis. Vidinov N, et al. **Z Mikrosk Anat Forsch** 1990;104(1):140–6

ANATOMY & HISTOLOGY

Is MR better than arthrography for evaluating the ligaments of the wrist? In vitro study. Gundry CR, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):337–41

The synovium-cartilage junction of the normal human knee. Implications for joint destruction and repair. Allard SA, et al. **Arthritis Rheum** 1990 Aug;33(8):1170–9

A histological and biochemical assessment of the cartilage matrix obtained from in vitro storage of osteochondral allografts. Amiel D, et al. **Connect Tissue Res** 1989; 23(1):89–99

Ultrasonic propagation properties of articular cartilage at 100 MHz. Agemura DH, et al. **J Acoust Soc Am** 1990 Apr; 87(4):1786–91

Relationship of TMJ articular soft tissue to underlying bone in young adult condyles. Pullinger AG, et al. **J Dent Res** 1990 Aug;69(8):1512–8

Magnetic resonance imaging of the triangular fibrocartilage complex. Skahen JR 3d, et al. **J Hand Surg [Am]** 1990 Jul; 15(4):552–7

Influence of zygapophyseal joint orientation on hyaline cartilage at the thoracolumbar junction [published erratum appears in J Manipulative Physiol Ther 1990 Jul–Aug;13(6):following Table of Contents] Singer KP, et al. **J Manipulative Physiol Ther** 1990 May;13(4):207–14

A radiographic and histologic study of the topographic relations in the temporomandibular joint region: implications for a nerve entrapment mechanism. Johansson AS, et al. **J Oral Maxillofac Surg** 1990 Sep;48(9):953–61; discussion 962

Relation between form and function in the sacroiliac joint. Part I: Clinical anatomical aspects. Vleeming A, et al. **Spine** 1990 Feb;15(2):130–2

The human temporo-mandibular joint: current anatomic and physiologic status. Le Toux G, et al. **Surg Radiol Anat** 1989;11(4):283–8

[Imaging of the hip joint hyaline cartilage with MR tomography using a gradient echo sequence with fat–water phase coherence] Wrazidlo W, et al. **ROFO** 1990 Jan; 152(1):56–9 (Eng. Abstr.) **(Ger)**

[Various morphofunctional aspects of current arthrology] Pavlova VN. **Arkh Anat Gistol Embriol** 1989 Jul;97(7):5–11 (28 ref.) **(Rus)**

BLOOD SUPPLY

Necrosis of the femoral head in growing rats. Occlusion of lateral epiphyseal vessels. Hirano T, et al. **Acta Orthop Scand** 1989 Aug;60(4):407–10

Effects of exercise on blood flow to canine articular tissues. Simkin PA, et al. **J Orthop Res** 1990 Mar;8(2):297–303

[On the occurrence of blood vessels in the superficial layers of articular cartilage in bovine fetuses] Loeffler K, et al. **Anat Histol Embryol** 1989 Dec;18(4):334–41 (Eng. Abstr.) **(Ger)**

CYTOLOGY

Chondrocyte activation by interleukin-1: synergism with fibroblast growth factor and phorbol myristate acetate. Bandara G, et al. **Agents Actions** 1989 Jun;27(3–4):439–41

Protein kinase C and chondrocyte activation. Hulkower KI, et al. **Agents Actions** 1989 Jun;27(3–4):442–4

Phospholipase A2 (PLA2) activity in rabbit chondrocytes. Stevens TM, et al. **Agents Actions** 1989 Jun;27(3–4):385–7

Proteoglycan metabolism in isolated chondrocytes from human cartilage. Influence of niflumic acid. Verbruggen G, et al. **Clin Rheumatol** 1990 Mar;9(1):32–41

Bovine sesamoid bones: a culture system for anatomically intact articular cartilage. Korver GH, et al. **In Vitro Cell Dev Biol** 1989 Dec;25(12):1099–106

Gene expression during osteogenic differentiation in mandibular condyles in vitro. Strauss PG, et al. **J Cell Biol** 1990 Apr;110(4):1369–78

Effects of oxygen-free radicals on proliferation kinetics of cultured rabbit articular chondrocytes. Vincent F, et al. **J Cell Physiol** 1989 Nov;141(2):262–6

Differential effects of transforming growth factor-beta and epidermal growth factor on the cell cycle of cultured rabbit articular chondrocytes. Vivien D, et al. **J Cell Physiol** 1990 Jun;143(3):534–45

Stimulation of proteoglycan and DNA syntheses in chondrocytes by centrifugation. Inoue H, et al. **J Dent Res** 1990 Sep;69(9):1560–3

Stimulation of adult chondrocyte metabolism by a thyroid-derived factor. Jones DG, et al. **J Orthop Res** 1990 Mar;8(2):227–33

The role of cytokines in chondrocyte mediated cartilage degradation. Shinmei M, et al. **J Rheumatol Suppl** 1989 Aug;18:32–4

[The concept of cellular immortality, a myth or a reality. Example of "immortalized" articular chondrocytes] Adolphe M, et al. **Bull Acad Natl Med** 1990 Jan; 174(1):139–44; discussion 144–6 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

In vivo studies on the effects of human recombinant interleukin-1 beta on articular cartilage. Arner EC, et al. **Agents Actions** 1989 Jun;27(3–4):254–7

Decrease of inorganic blood sulfate following treatment with selected antirheumatic drugs: potential consequence for articular cartilage. de Vries BJ, et al. **Agents Actions** 1990 Mar;29(3–4):224–31

Changes in articular cartilage after intra-articular injections of methylprednisolone acetate in horses. Chunekamrai S, et al. **Am J Vet Res** 1989 Oct;50(10):1733–41

Stimulation of human chondrocyte prostaglandin E2 production by recombinant human interleukin-1 and tumour necrosis factor. Campbell IK, et al. **Biochim Biophys Acta** 1990 Mar 9;1051(3):310–8

Ultrastructural analysis of rat articular cartilage following treatment with dexamethasone and glycosaminoglycan–peptide complex. Annefeld M, et al. **Clin Exp Rheumatol** 1990 Mar–Apr;8(2):151–7

The effects of interleukin-1 on articular cartilage destruction as observed in arthritic diseases, and its therapeutic control. Verschure PJ, et al. **Clin Exp Rheumatol** 1990 May–Jun; 8(3):303–13 (164 ref.)

Effects of interleukin-1 and lipopolysaccharides on protein and carbohydrate metabolism in bovine articular cartilage organ cultures. Morales TI, et al. **Connect Tissue Res** 1989; 19(2–4):255–75

Biochemical and morphological studies of steady state and lipopolysaccaride treated bovine articular cartilage explant cultures. Tian XM, et al. **Connect Tissue Res** 1989; 19(2–4):195–218

Rhein reduces proteoglycan loss during the autolytic breakdown of cultured cartilage. Mian M, et al. **Int J Tissue React** 1989;11(3):117–22

Effects of proteoglycan extraction on the tensile behavior of articular cartilage. Schmidt MB, et al. **J Orthop Res** 1990 May;8(3):353–63

Clinical aspects of the effect of NSAID on cartilage. Calin A. **J Rheumatol Suppl** 1989 Aug;18:43–4 (6 ref.)

Potential influences of ketoprofen on human healthy and osteoarthritic cartilage in vitro. Huber-Bruning O, et al. **Scand J Rheumatol Suppl** 1989;83:29–32

Cartilage degradation: is there a place for chondroprotective agents? A symposium of the American College of Rheumatology. Cincinnati, Ohio, June 17, 1989. Proceedings. **Semin Arthritis Rheum** 1990 Feb;19(4 Suppl 1):1–32

Clinical aspects of chrondroprotection. Huskisson EC. **Semin Arthritis Rheum** 1990 Feb;19(4 Suppl 1):30–2

Histologic and histochemical changes in articular cartilages of immature beagle dogs dosed with difloxacin, a fluoroquinolone. Burkhardt JE, et al. **Vet Pathol** 1990 May; 27(3):162–70

[Changes in the articular and growth cartilage of young rats after the intra-articular injection of hydrocortisone] Misankov A, et al. **Eksp Med Morfol** 1990;29(1):17–22 (Eng. Abstr.) **(Bul)**

[Drug therapy and prevention of arthrosis] Miehlke K. **Internist (Berl)** 1989 Oct;30(10):643–5 (15 ref.) **(Ger)**

[The dose dependent effect of glycosaminoglycan peptide complex on corticosteroid-induced disordered metabolism in cartilage tissue of rats] Annefeld M. **Z Rheumatol** 1989 Jul–Aug;48(4):188–93 (Eng. Abstr.) **(Ger)**

[Current developments in antirheumatic medication. II. Metabolic and cartilage-protective medication] Bolosiu HD. **Rev Med Interna [Med Interna]** 1989 May–Jun; 41(3):193–208 (47 ref.) **(Rum)**

ENZYMOLOGY

Effects of antirheumatic drugs on the interleukin-1 alpha induced synthesis and activation of proteinases in articular cartilage explants in culture. Arsenis C, et al. **Agents Actions** 1989 Jun;27(3–4):261–4

Modulation of IL-1-induced collagenase production in articular chondrocytes by pertussis toxin. Crawford A, et al. **Agents Actions** 1989 Jun;27(3–4):242–4

Biochemical demonstration of calpains and calpastatin in osteoarthritic synovial fluid. Suzuki K, et al. **Arthritis Rheum** 1990 May;33(5):728–32

Septic arthritis. Staphylococcal induction of chondrocyte proteolytic activity. Williams RJ 3d, et al. **Arthritis Rheum** 1990 Apr;33(4):533–41

Effects of recombinant interleukin-1 beta on phospholipase A2 activity, phospholipase A2 mRNA levels, and eicosanoid formation in rabbit chondrocytes. Kerr JS, et al. **Biochem Biophys Res Commun** 1989 Dec 29; 165(3):1079–84

Interleukin-1 beta stimulates phospholipase A2 mRNA synthesis in rabbit articular chondrocytes. Lyons-Giordano B, et al. **Biochem Biophys Res Commun** 1989 Oct 16; 164(1):488–95

Fetal bovine serum inhibits chondrocyte collagenase production: interleukin 1 reverses this effect. Kandel RA, et al. **Biochim Biophys Acta** 1990 Jul 12;1053(2–3):130–4

Nonactivatability of latent proteoglycanases in intact adult articular cartilage. Müller G, et al. **Biomed Biochim Acta** 1990;49(4):243–8

Cathepsin B secretion by rabbit articular chondrocytes: modulation by cycloheximide and glycosaminoglycans. Baici A, et al. **Cell Tissue Res** 1990 Mar;259(3):567–73

Direct extraction and assay of collagenase from human osteoarthritic articular cartilage. Blanckaert A, et al. **Clin Chim Acta** 1989 Oct 31;185(1):73–9

Variation in the effects of mononuclear cell products from different individuals on metalloproteinase secretion from human articular cartilage. Campbell IK, et al. **J Rheumatol** 1989 Dec;16(12):1552–8

Phospholipase A2 in articular cartilage [letter; comment] Pruzanski W, et al. **J Rheumatol** 1990 Apr;17(4):569–70 Comment on: J Rheumatol Suppl 1989 Aug;18:35–8.

The research arena of this symposium and an outlook for future treatment of osteoarthritis. Howell DS. **J Rheumatol Suppl** 1989 Aug;18:1–4 (35 ref.)

Phospholipase A2 activity in human osteoarthritic cartilage [see comments] Vignon E, et al. **J Rheumatol Suppl** 1989 Aug;18:35–8 Comment in: J Rheumatol 1990 Apr;17(4):569–70.

Aldehyde dehydrogenase–2 deficiency and articular collagen [letter] Lewis WH, et al. **Lancet** 1989 Oct 21;2(8669):984

Biochemical aspects of osteoarthritis. Howell DS. **Scand J Rheumatol Suppl** 1990;81:5–7

Cartilage degradative enzymes in human osteoarthritis: effect of a nonsteroidal antiinflammatory drug administered orally. Vignon E, et al. **Semin Arthritis Rheum** 1990 Feb; 19(4 Suppl 1):26–9

GROWTH & DEVELOPMENT

Role of the lateral pterygoid muscle and meniscotemporomandibular frenum in spontaneous growth of the mandible and in growth stimulated by the postural hyperpropulsor. Stutzmann JJ, et al. **Am J Orthod Dentofacial Orthop** 1990 May;97(5):381–92

[Y–shaped cartilage in the development of the normal pelvis and in congenital hip dislocation] Lokietek W, et al. **Acta Orthop Belg** 1990;56(1 (Pt A)):23–31 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Immune deposits in articular cartilage of patients with rheumatoid arthritis have a granular pattern not seen in osteoarthritis. Vetto AA, et al. **Rheumatol Int** 1990; 10(1):13–9

INJURIES

Triangular fibrocartilage disorders: injury patterns and treatment. Palmer AK. **Arthroscopy** 1990;6(2):125–32

Articular cartilage lesions of the knee. Zamber RW, et al. **Arthroscopy** 1989;5(4):258–68

Osteochondral fragmentation of the distal aspect of the patella in horses. McIlwraith CW. **Equine Vet J** 1990 May; 22(3):157–63

Unique transchondral fracture of the talus. La Porta DM, et al. **J Foot Surg** 1990 Mar–Apr;29(2):109–13

Open reduction and internal fixation of comminuted, intraarticular fractures of the distal radius. Axelrod TS, et al. **J Hand Surg [Am]** 1990 Jan;15(1):1–11

Ulnar shortening for tears of the triangular fibrocartilaginous complex. Boulas HJ, et al. **J Hand Surg [Am]** 1990 May; 15(3):415–20

The arthroscopic appearance of acute temporomandibular joint trauma. Goss AN, et al. **J Oral Maxillofac Surg** 1990 Aug;48(8):780–3; discussion 784

Meniscal and articular cartilage injury in sport. Jackson RW. **J R Coll Surg Edinb** 1989;34(6 Suppl):S15–7

Tears of the triangular fibrocartilage of the wrist: MR imaging. Golimbu CN, et al. **Radiology** 1989 Dec; 173(3):731–3

[Advances in research on the repair of articular cartilage defects] Yang GY, et al. **Chung Hua Wai Ko Tsa Chih** 1989 Oct;27(10):594–6 (25 ref.) **(Chi)**

[Microtrauma and cartilage injury] Fengler H, et al. **Beitr Orthop Traumatol** 1989 Oct–Nov;36(10–11):498–502 (Eng. Abstr.) **(Ger)**

[Fibrin adhesion of cartilage surfaces] Passl R, et al. **Beitr Orthop Traumatol** 1989 Oct–Nov;36(10–11):503–7 (Eng. Abstr.) **(Ger)**

[The technic of the Bankart operation. A modified reinsertion technic] Resch H, et al. **Unfallchirurg** 1989 Aug; 92(8):407–13 (Eng. Abstr.) **(Ger)**

[The effect of electrical injuries on the bone and cartilage structures of the hands in childhood] Trippi D, et al. **Radiol Med (Torino)** 1990 Apr;79(4):384–6 (Eng. Abstr.) **(Ita)**

[An experimental study on the suitability of the prosthetic head to the acetabulum] Hokari Y. **Nippon Seikeigeka Gakkai Zasshi** 1989 Aug;63(8):830–41 (Eng. Abstr.) **(Jpn)**

INNERVATION

[The role of the sympathetic nervous system in the pathogenesis of osteoarthrosis deformans] Khroshin SA, et al. **Vestn Khir** 1990 Jan;144(1):60–1 **(Rus)**

METABOLISM

ATP–dependent mineralization of hyaline articular cartilage matrix vesicles. Wortmann RL, et al. **Adv Exp Med Biol** 1989;253A:81–5

The phosphatidylinositol response of chondrocytes in culture. Baragi VM, et al. **Agents Actions** 1989 Jun;27(3–4):428–30

Increased interleukin 1 beta production of macrophages by proteoglycan fragments deriving from articular cartilage in vitro. Gurr E, et al. **Agents Actions** 1990 Jan; 29(1–2):117–9

Effect of cytokines and anti–arthritic drugs on glycosaminoglycan synthesis by bovine articular chondrocytes. Kolibas LM, et al. **Agents Actions** 1989 Jun; 27(3–4):245–9

Polysulfated glycosaminoglycan accelerates net synthesis of collagen and glycosaminoglycans by arthritic equine cartilage tissues and chondrocytes. Glade MJ. **Am J Vet Res** 1990 May;51(5):779–85

Biochemical changes in articular cartilage opposing full– and partial–thickness cartilage lesions in horses. Richardson DW, et al. **Am J Vet Res** 1990 Jan;51(1):118–22

Does joint cartilage require energy? [letter] Ahlqvist J, et al. **Ann Rheum Dis** 1989 Oct;48(10):878

Chondrocyte activation by interleukin–1: analysis of the synergistic properties of fibroblast growth factor and phorbol myristate acetate. Bandara G, et al. **Arch Biochem Biophys** 1989 Nov 1;274(2):539–47

Effect of condylotomy on matrix synthesis and mineralization in the rat mandibular condylar cartilage. Hinton RJ. **Arch Oral Biol** 1989;34(12):1003–9

Effects of tumor necrosis factor alpha and beta on resorption of human articular cartilage and production of plasminogen activator by human articular chondrocytes. Campbell IK, et al. **Arthritis Rheum** 1990 Apr;33(4):542–52

Metalloproteinases and cartilage proteoglycan depletion in chronic arthritis. Comparison of antigen–induced and polycation–induced arthritis. Henderson B, et al. **Arthritis Rheum** 1990 Feb;33(2):241–6

Metabolic and ultrastructural changes in articular cartilage of rats fed dietary supplements of omega–3 fatty acids. Lippiello L, et al. **Arthritis Rheum** 1990 Jul;33(7):1029–36

Factors involved in the regulation of proteoglycan metabolism in articular cartilage. Morales TI, et al. **Arthritis Rheum** 1989 Oct;32(10):1197–201 (29 ref.)

Cartilage inorganic pyrophosphate elaboration is independent of sulfated glycosaminoglycan synthesis. Ryan LM, et al. **Arthritis Rheum** 1990 Feb;33(2):235–40

Levels of chondroitin–6–sulfate and nonaggregating proteoglycans at articular cartilage contact sites in the knees of young dogs subjected to moderate running exercise. Säämänen AM, et al. **Arthritis Rheum** 1989 Oct; 32(10):1282–92

Osteoarthritis–related changes in human articular cartilage. An immunologic study. Vilamitjana–Amedee J, et al. **Arthritis Rheum** 1990 Feb;33(2):219–27

Independent induction of interleukin 6 and prostaglandin E2 by interleukin 1 in human articular chondrocytes. Bunning RA, et al. **Biochem Biophys Res Commun** 1990 Feb 14; 166(3):1163–70

Expression of the ED B fibronectin isoform in adult human articular cartilage. Burton–Wurster N, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):782–7

Inverse correlation between tyrosine phosphorylation and collagenase production in chondrocytes. Cruz TF, et al. **Biochem J** 1990 Aug 1;269(3):717–21

Synthesis of hyaluronate in cultured bovine articular cartilage. Ng CK, et al. **Biochem J** 1989 Nov 1;263(3):761–7

Cartilage proteoglycan aggregate is degraded more extensively by cathepsin L than by cathepsin B. Nguyen Q, et al. **Biochem J** 1990 Mar 1;266(2):569–73

Passive loss of proteoglycan from articular cartilage explants. Bolis S, et al. **Biochim Biophys Acta** 1989 Dec 8; 993(2–3):157–67

Production of collagens, collagenase and collagenase inhibitor during the dedifferentiation of articular chondrocytes by serial subcultures. Lefebvre V, et al. **Biochim Biophys Acta** 1990 Mar 9;1051(3):266–75

Modulation by interleukin 1 and tumor necrosis factor alpha of production of collagenase, tissue inhibitor of metalloproteinases and collagen types in differentiated and dedifferentiated articular chondrocytes. Lefebvre V, et al. **Biochim Biophys Acta** 1990 May 22;1052(3):366–78

Studies on the interaction of newly secreted proteoglycan subunits with hyaluronate in human articular cartilage. Melching LI, et al. **Biochim Biophys Acta** 1990 Jul 20; 1035(1):20–8

Proteoglycan composition and biosynthesis by human osteochondrophytic spurs of the femoral head. Malemud CJ, et al. **Biomaterials** 1990 Jul;11:25–7

The effect of recombinant tumor necrosis factor–alpha on superoxide and metalloproteinase production by synovial cells and chondrocytes. Ahmadzadeh N, et al. **Clin Exp Rheumatol** 1990 Jul–Aug;8(4):387–91

Effect of nalidixic acid, pipemidic acid and cinoxacin on chondrocyte metabolism in explants of articular cartilage. Brand HS, et al. **Clin Exp Rheumatol** 1990 Jul–Aug; 8(4):393–5

The synthesis and immobilisation of cartilage–specific proteoglycan by human chondrocytes in different concentrations of agarose. Verbruggen G, et al. **Clin Exp Rheumatol** 1990 Jul–Aug;8(4):371–8

Changes in articular cartilage after meniscectomy. Lanzer WL, et al. **Clin Orthop** 1990 Mar;(252):41–8 (32 ref.)

Aggregation of proteoglycans in cephalic, epiphyseal and articular cartilages in growing sheep. Bollen AM, et al. **Connect Tissue Res** 1990;24(2):121–7

Proteoglycan synthesis in vitamin D–deficient cartilage: recovery from vitamin D deficiency. Carrino DA, et al. **Connect Tissue Res** 1989;19(2–4):135–47

An improved method for determining proteoglycans synthesized by chondrocytes in culture. Goldberg RL, et al. **Connect Tissue Res** 1990;24(3–4):265–75

Covalent interactions of type IX collagen in cartilage. Wu JJ, et al. **Connect Tissue Res** 1989;20(1–4):241–6

Contrasting modulation by transforming growth factor–beta–1 of insulin–like growth factor–I production in osteoblasts and chondrocytes. Elford PR, et al. **Endocrinology** 1990 Oct;127(4):1635–9

Interleukin–1 beta induces synthesis and secretion of interleukin–6 in human chondrocytes. Bender S, et al. **FEBS Lett** 1990 Apr 24;263(2):321–4

Altered patterns of protein phosphorylation in articular chondrocytes treated with interleukin–1 or synovial cytokines [published erratum appears in FEBS Lett 1990 Feb 12;261(1):218] Hulkower KI, et al. **FEBS Lett** 1989 Nov 6;257(2):228–32

Degradation of human cartilage by monocytes. Kumaratilake LM, et al. **Immunol Lett** 1990 Jul;24(4):243–5

Biosynthesis and processing of bovine cartilage link proteins. Hering TM, et al. **J Biol Chem** 1990 Feb 5;265(4):2375–82

Stimulation by concanavalin A of cartilage–matrix proteoglycan synthesis in chondrocyte cultures. Yan WQ, et al. **J Biol Chem** 1990 Jun 15;265(17):10125–31

IL–6 production by human articular chondrocytes. Modulation of its synthesis by cytokines, growth factors, and hormones in vitro. Guerne PA, et al. **J Immunol** 1990 Jan 15;144(2):499–505

Production of hydrogen peroxide by rabbit articular chondrocytes. Enhancement by cytokines. Tiku ML, et al. **J Immunol** 1990 Jul 15;145(2):690–6

Stimulation of pyrophosphate production in articular cartilage by a platelet–derived factor is independent of mitogenesis. Rosenthal AK, et al. **J Lab Clin Med** 1990 Mar;115(3):352–5

In vitro and in vivo effects of metal chelators on cartilage metabolism. Ehrlich MG, et al. **J Orthop Res** 1990 Jan; 8(1):72–7

The effect of maturation and aging on the structure and content of link proteins in rabbit articular cartilage. Flannery CR, et al. **J Orthop Res** 1990 Jan;8(1):78–85

High susceptibility of human articular cartilage glycosaminoglycan synthesis to changes in inorganic sulfate availability. van der Kraan PM, et al. **J Orthop Res** 1990 Jul;8(4):565–71

A Staphylococcus aureus factor exclusively removes large proteoglycan monomers from explants of articular cartilage. Brand HS, et al. **J Rheumatol** 1990 Apr; 17(4):538–43

The synthesis and accumulation of fibronectin by human articular cartilage. Brown RA, et al. **J Rheumatol** 1990 Jan;17(1):65–72

Spontaneous osteoarthritis in rhesus macaques. I. Chemical and biochemical studies. Châteauvert J, et al. **J Rheumatol** 1989 Aug;16(8):1098–104

Pentosan polysulfate (Cartrophen) prevents the hydrocortisone induced loss of hyaluronic acid and proteoglycans from cartilage of rabbit joints as well as normalizes the keratan sulfate levels in their serum. Kongtawelert P, et al. **J Rheumatol** 1989 Nov;16(11):1454–9

Distinct cartilage proteoglycan chromatographic elution patterns in advanced human hip osteoarthritis: correlations with histologic analysis. Shuckett R, et al. **J Rheumatol** 1990 Mar;17(3):357–63

Impact of NSAIDS on murine antigen induced arthritis. I. Investigation of antiinflammatory and chondroprotective effects. de Vries BJ, et al. **J Rheumatol Suppl** 1989 Aug; 18:10–8

Effects of hormones and drugs on cartilage repair. Franchimont P, et al. **J Rheumatol Suppl** 1989 Aug;18:5–9

Evidence for the involvement of interleukin 1 in human osteoarthritic cartilage degradation: protective effect of NSAID. Pelletier JP, et al. **J Rheumatol Suppl** 1989 Aug; 18:19–27

The role of serine proteinases and serine proteinase inhibitors in the pathobiology of connective tissues. Ghosh P. **Nippon Seikeigeka Gakkai Zasshi** 1989 May;63(5):643–52

Metabolism of articular cartilage chondrocytes. Kuettner KE, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 May; 63(5):621–9

Cartilage breakdown in equine osteoarthritis: measurement of keratan sulphate by an ELISA system. Alwan WH, et al. **Res Vet Sci** 1990 Jul;49(1):56–60

Structural and biochemical abnormalities of articular cartilage in rheumatoid arthritis. Mitrovic DR, et al. **Rheumatol Int** 1990;10(1):31–7

Proteoglycan metabolism in tissue–cultured human articular cartilage. Influence of niflumic acid. Verbruggen G, et al. **Scand J Rheumatol** 1990;19(4):257–68

In vitro assays of chondrocyte functions: the influence of drugs and hormones. Bassleer C, et al. **Scand J Rheumatol Suppl** 1990;81:13–20

The role of cytokines in the development of osteoarthritis. Loyau G, et al. **Scand J Rheumatol Suppl** 1990;81:8–12 (29 ref.)

Chondroprotection, myth or reality: an experimental approach. Ghosh P, et al. **Semin Arthritis Rheum** 1990 Feb; 19(4 Suppl 1):3–9

The mechanism of cartilage degradation in osteoarthritic

joints. Shinmei M, et al. **Semin Arthritis Rheum** 1990 Feb; 19(4 Suppl 1):16–20

Modern aspects of articular cartilage biochemistry. Kuettner KE, et al. **Verh Dtsch Ges Inn Med** 1989;95:436–47 (48 ref.)

In-vivo biosynthesis of acid glycosaminoglycans with radiosulfate and [3H]glucosamine in single joints from rats of different age. Kleine TO, et al. **Z Gerontol** 1990 May–Jun;23(3):123–5

PATHOLOGY

Osteochondritis dissecans of the knee: value of MR imaging in determining lesion stability and the presence of articular cartilage defects. De Smet AA, et al. **AJR Am J Roentgenol** 1990 Sep;155(3):549–53

Immobilization aggravates cartilage damage during antigen-induced arthritis in mice. Attachment of polymorphonuclear leukocytes to articular cartilage. van Lent PL, et al. **Am J Pathol** 1990 Jun;136(6):1407–16

Regression of bone and cartilage loss in adjuvant arthritic rats after treatment with cyclosporin A. del Pozo E, et al. **Arthritis Rheum** 1990 Feb;33(2):247–52

The first descriptions of chondrocalcinosis [letter] Dieppe P, et al. **Arthritis Rheum** 1989 Oct;32(10):1339–40

Chondral lesions of the patella evaluated with computed tomography, magnetic resonance imaging, and arthroscopy [see comments] Handelberg F, et al. **Arthroscopy** 1990; 6(1):24–9 Comment in: Arthroscopy 1990;6(1):1–2.

Sonographic evaluation of osteoarthritic femoral condylar cartilage. Correlation with operative findings. McCune WJ, et al. **Clin Orthop** 1990 May;(254):230–5

Inclination of the temporomandibular joint eminence and anterior disc displacement. Kerstens HC, et al. **Int J Oral Maxillofac Surg** 1989 Aug;18(4):228–32

The effect of intra-articular gadolinium-DTPA on synovial membrane and cartilage. Hajek PC, et al. **Invest Radiol** 1990 Feb;25(2):179–83

Articular chondrocytes lose their proliferative activity with aging yet can be restimulated by PTH-(1–84), PGE1, and dexamethasone. Livne E, et al. **J Bone Miner Res** 1989 Aug;4(4):539–48

Synovial chondromatosis. Sarma DP, et al. **J La State Med Soc** 1990 Jul;142(7):27–30

Histopathological study of human TMJ perforated discs with emphasis on synovial membrane response. Helmy ES, et al. **J Oral Maxillofac Surg** 1989 Oct;47(10):1048–52

Morphologic differences between superior and inferior disc surfaces in chronic internal derangement of the temporomandibular joint. Kirk WS Jr. **J Oral Maxillofac Surg** 1990 May;48(5):455–60

Arthroscopic TMJ surgery: effects on signs, symptoms, and disc position. Montgomery MT, et al. **J Oral Maxillofac Surg** 1989 Dec;47(12):1263–71

TMJ articular disc perforation—a new perspective [letter] Quinn JH. **J Oral Maxillofac Surg** 1989 Dec;47(12):1348

Bone and cartilage changes following experimental varus or valgus tibial angulation. Wu DD, et al. **J Orthop Res** 1990 Jul;8(4):572–85

Interaction of macrophages with rheumatoid articular cartilage. Harada T, et al. **Kobe J Med Sci** 1989 Aug; 35(4):201–16

Age-related changes in articular cartilage thickness of the third metacarpal bone in the thoroughbred. Oikawa MA, et al. **Nippon Juigaku Zasshi** 1989 Aug;51(4):839–42

A quantitative assessment of degenerative changes acceptable in the unoperated compartments of knees undergoing unicompartmental replacement. Corpe RS, et al. **Orthopedics** 1990 Mar;13(3):319–23

Patellar cartilage lesions: in vitro detection and staging with MR imaging and pathologic correlation. Hayes CW, et al. **Radiology** 1990 Aug;176(2):479–83

MRI demonstration of hypertrophic articular cartilage repair in osteoarthritis. Braunstein EM, et al. **Skeletal Radiol** 1990; 19(5):335–9

Articular cartilage and subchondral bone changes in an experimental osteoarthritic model. Shoji H, et al. **Surg Forum** 1978;29:554–6

Passive role of articular chondrocytes in quinolone-induced arthropathy in guinea pigs. Bendele AM, et al. **Toxicol Pathol** 1990;18(2):304–12

Changes in the hyaline articular cartilage after air exposure. Han CD, et al. **Yonsei Med J** 1990 Mar;31(1):53–9

[What becomes of the interposed capsule in Colonna's arthroplasty?] Litt R, et al. **Acta Orthop Belg** 1990;56(1 (Pt B)):339–43 (Eng. Abstr.) **(Fre)**

[Arthritis—fate or disease? New aspects of cartilage destruction] Mohr W, et al. **Internist (Berl)** 1989 Oct; 30(10):633–42 (57 ref.) **(Ger)**

[Clinical aspects of the detection of early arthrosis. Degenerative changes of the menisci of the knee joint] Herrmann J, et al. **Orthopade** 1990 Feb;19(1):36–42 (Eng. Abstr.) **(Ger)**

[Morphologic changes in the early stages of arthrosis] Hesse I, et al. **Orthopade** 1990 Feb;19(1):16–27 (93 ref.) (Eng. Abstr.) **(Ger)**

[Biochemical and molecular biologic aspects of early detection of human arthroses] von der Mark K, et al. **Orthopade** 1990 Feb;19(1):2–15 (177 ref.) (Eng. Abstr.) **(Ger)**

[MRT of the knee joint cartilage using 3D volume imaging in combination with a fast image processor] Adam G, et al. **Radiol Diagn (Berl)** 1989;30(5):605–13 (Eng. Abstr.) **(Ger)**

[Structural findings of the coraco-acromial ligament in rotator cuff rupture, tendinosis calcarea and supraspinatus syndrome] Putz R, et al. **Z Orthop** 1990 Jan–Feb; 128(1):46–50 (Eng. Abstr.) **(Ger)**

[The effect of spinal distraction and immobilization on the facet joint cartilage—experimental and clinical studies] Yoshida M. **Nippon Seikeigeka Gakkai Zasshi** 1989 Aug; 63(8):789–99 (Eng. Abstr.) **(Jpn)**

[Pathological changes in cartilage of the knees in rabbits immunized with Escherichia coli 0:14] Sakai N. **Ryumachi** 1989 Aug;29(4):259–67 (Eng. Abstr.) **(Jpn)**

[Chondrolysis of the hip joint in patients with juvenile epiphysiolysis of the femur head] Polozov IuG. **Ortop Travmatol Protez** 1989 Oct;(10):30–2 **(Rus)**

[Mechanisms of destruction and atrophy of the cartilage and bone from the point of view of a rheumatologist] Havelka S. **Revmatologia (Mosk)** 1989 Jul–Sep;(3):47–51 **(Rus)**

PHYSIOLOGY

Influence of cyclic loading on the nutrition of articular cartilage. O'Hara BP, et al. **Ann Rheum Dis** 1990 Jul; 49(7):536–9

Regenerating hyaline cartilage in articular defects of old chickens using implants of embryonal chick chondrocytes embedded in a new natural delivery substance. Robinson D, et al. **Calcif Tissue Int** 1990 Apr;46(4):246–53

Age-related changes in the synthesis of matrix macromolecules by bovine articular cartilage. Front P, et al. **Connect Tissue Res** 1989;19(2–4):121–33

Interaction between macrophages and articular surfaces: an in vitro transmission and scanning electron microscopy study. Stanescu R, et al. **Connect Tissue Res** 1990; 24(3–4):207–18

The early response of articular cartilage to ACL transection in a canine model. Johnson RG, et al. **Exp Pathol** 1990; 38(1):37–52

Interleukin 1 receptors on rabbit articular chondrocytes: relationship between biological activity and receptor binding kinetics. Chin JE, et al. **FASEB J** 1990 Mar; 4(5):1481–7

A method for measuring contact pressures instantaneously in articular joints. Inaba H, et al. **J Biomech** 1989; 22(11–12):1293–6

Biphasic indentation of articular cartilage—II. A numerical algorithm and an experimental study. Mow VC, et al. **J Biomech** 1989;22(8–9):853–61

A mechanical apparatus with microprocessor controlled stress profile for cyclic compression of cultured articular cartilage explants. Parkkinen JJ, et al. **J Biomech** 1989; 22(11–12):1285–91

Effects of friction on the unconfined compressive response of articular cartilage: a finite element analysis. Spilker RL, et al. **J Biomech Eng** 1990 May;112(2):138–46

Pulsing direct current-induced repair of articular cartilage in rabbit osteochondral defects. Lippiello L, et al. **J Orthop Res** 1990 Mar;8(2):266–75

The effect of shear fatigue on bovine articular cartilage. Simon WH, et al. **J Orthop Res** 1990 Jan;8(1):86–93

Stress in collagen fibrils of articular cartilage calculated from their measured orientations. Aspden RM, et al. **Matrix** 1990 Jan;9(6):486–8

Fatigue of articular cartilage. Weightman BO, et al. **Nature** 1973 Aug 3;244(5414):303–4

Effects of immobilization on cartilage formation after periosteal grafting in the rabbit stifle. Roush JK, et al. **Vet Surg** 1989 Sep–Oct;18(5):340–6

[Cartilage and synovial membrane] Miossec P, et al. **Rev Rhum Mal Osteoartic** 1989 Jul–Sep;56(8–9):605–8 (27 ref.) (Eng. Abstr.) **(Fre)**

[Load capacity of capsule and tendon tissue] Wilhelm K, et al. **Sportverletz Sportschaden** 1990 Mar;4(1):14–21 (52 ref.) (Eng. Abstr.) **(Ger)**

[Matrix vesicles in membranous ossification] Inage S, et al. **Kokubyo Gakkai Zasshi** 1990 Jun;57(2):335–52 (Eng. Abstr.) **(Jpn)**

[The biological role of the structural-deformable properties of the cartilage and of the synovial fluid in the reduction of intra- articular friction] Kupchinov BI, et al. **Ortop Travmatol Protez** 1989 Oct;(10):7–11 (Eng. Abstr.) **(Rus)**

[Mechanical properties of the bone tissue of the femur head] Shargorodskii VS, et al. **Ortop Travmatol Protez** 1989 Oct; (10):3–7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Mechanisms of disc displacement in the temporomandibular joint. Gage JP. **Aust Dent J** 1989 Oct;34(5):427–36 (54 ref.)

[Pathogenesis of the arthrosis process] Fassbender HG. **Verh Dtsch Ges Inn Med** 1989;95:447–9 **(Ger)**

RADIATION EFFECTS

Morphologic and histologic changes in canine temporomandibular joint tissues following arthroscopic guided neodymium:YAG laser exposure. Bradrick JP, et al. **J Oral Maxillofac Surg** 1989 Nov;47(11):1177–81

RADIOGRAPHY

Computed tomography versus single-contrast arthrotomography in evaluation of the temporomandibular joint disc. A study of autopsy specimens. Tanimoto K, et al. **Int J Oral Maxillofac Surg** 1989 Dec;18(6):354–8

Reliability of a negative clinical temporomandibular joint examination: prevalence of disk displacement in asymptomatic temporomandibular joints. Westesson PL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Nov;68(5):551–4

[Morphology of the hyoid bone joint] Kainz J, et al. **HNO** 1990 Apr;38(4):138–42 (Eng. Abstr.) **(Ger)**

[Supercilium acetabuli. A stress indicator of the hip joint cartilage] Bücheler E, et al. **ROFO** 1990 Jun;152(6):639–43 (Eng. Abstr.) **(Ger)**

SECRETION

Application of an enzyme-linked immunosorbent-inhibition assay to quantitate the release of KS peptides into fluids of the rat subcutaneous air-pouch model and the effects of chondroprotective drugs on the release process. Kongtawelert P, et al. **Rheumatol Int** 1989;9(2):77–83

SURGERY

Pulsed holmium:yttrium-aluminum-garnet (Ho:YAG) laser ablation of fibrocartilage and articular cartilage. Trauner K, et al. **Am J Sports Med** 1990 May–Jun;18(3):316–20

The use of the contact Nd:YAG laser in arthroscopic surgery: effects on articular cartilage and meniscal tissue. Miller DV, et al. **Arthroscopy** 1989;5(4):245–53

Arthroscopic debridement of triangular fibrocartilage complex tears. Osterman AL. **Arthroscopy** 1990;6(2):120–4

TMJ disk surgery: 8-year follow-up evaluation. Dolwick MF, et al. **Fortschr Kiefer Gesichtschir** 1990;35:162–3

Long-term results following surgical treatment of internal derangement of the temporomandibular joint. Gundlach KK. **J Craniomaxillofac Surg** 1990 Jul;18(5):206–9 (26 ref.)

Pan metatarsal head resection: retrospective analysis and literature review. Saltrick KR, et al. **J Foot Surg** 1989 Jul–Aug;28(4):340–5 (14 ref.)

Adaptive remodeling of the rabbit temporomandibular joint following discectomy and dietary variations. Block MS, et al. **J Oral Maxillofac Surg** 1990 May;48(5):482–6

Recommended use of Proplast [letter; comment] Homsy CA. **J Oral Maxillofac Surg** 1990 Mar;48(3):328–9 Comment on: J Oral Maxillofac Surg 1989 Jul;47(7):689–96.

Foreign body retrieval: a complication of TMJ arthroscopy. Report of a case. McCain JP, et al. **J Oral Maxillofac Surg** 1989 Nov;47(11):1221–5; discussion 1228–9

The use of autologous auricular cartilage for temporomandibular joint disc replacement: a preliminary report. Matukas VJ, et al. **J Oral Maxillofac Surg** 1990 Apr;48(4):348–53

Arthroscopic lavage and lysis of the temporomandibular joint: a change in perspective. Nitzan DW, et al. **J Oral Maxillofac Surg** 1990 Aug;48(8):798–801; discussion 802

Temporary silastic implantation following discectomy in the primate temporomandibular joint. Tucker MR, et al. **J Oral Maxillofac Surg** 1989 Dec;47(12):1290–5

Autogenous auricular cartilage implantation following discectomy in the primate temporomandibular joint. Tucker MR, et al. **J Oral Maxillofac Surg** 1990 Jan; 48(1):38–44

Retrospective analysis of 100 consecutive surgical arthroscopies of the temporomandibular joint. White RD. **J Oral Maxillofac Surg** 1989 Oct;47(10):1014–21

Double-layer closure for temporomandibular joint discoplasty. Zetz MR, et al. **J Oral Maxillofac Surg** 1990 Apr;48(4):427–9

The anatomical effects of surgically repositioning the disc in the temporomandibular joint of rats. An experimental study. Lekkas C, et al. **J Oral Rehabil** 1990 May; 17(3):249–55

Effect of Nd:YAG laser energy on articular cartilage healing in the dog. Hardie EM, et al. **Lasers Surg Med** 1989; 9(6):595–601

Osteophytic reaction to a polytetrafluoroethylene temporomandibular joint implant. Report of a case. Berman DN, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jan; 69(1):20–3

Osteoplasty of the mandibular condyle with preservation of the articular soft tissue cover: comparison of fibrin sealant and sutures for fixation of the articular soft tissue cover in rabbits. Kurita K, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jun;69(6):661–7

High condylar shave of the temporomandibular joint with preservation of the articular soft tissue cover: an experimental study on rabbits. Kurita K, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jan;69(1):10–4

[Arthroscopic surgery of the knee joint cartilage] Rose O, et al. **Beitr Orthop Traumatol** 1990 May;37(5):254–8 (Eng. Abstr.) **(Ger)**

[Repair of rabbit articular surfaces with allografts of chondrocytes embedded in collagen gels] Wakitani S, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 May;63(5):529–38 (Eng. Abstr.) **(Jpn)**

TRANSPLANTATION

Neochondrogenesis in free intra-articular, periosteal, and perichondrial autografts in horses. Vachon A, et al. **Am J Vet Res** 1989 Oct;50(10):1787–94

Morphological and biomechanical evaluations of neocartilage from the repair of full-thickness articular cartilage defects using rib perichondrium autografts: a long-term study.

Kwan MK, et al. **J Biomech** 1989;22(8-9):921-30

The viability of articular cartilage in fresh osteochondral allografts after clinical transplantation. Czitrom AA, et al. **J Bone Joint Surg [Am]** 1990 Apr;72(4):574-81

Osteoarticular allografts for reconstruction in the proximal part of the humerus after excision of a musculoskeletal tumor. Gebhardt MC, et al. **J Bone Joint Surg [Am]** 1990 Mar;72(3):334-45

The fate of articular cartilage after transplantation of fresh and cryopreserved tissue-antigen-matched and mismatched osteochondral allografts in dogs. Stevenson S, et al. **J Bone Joint Surg [Am]** 1989 Oct;71(9):1297-307

Reconstruction of the temporomandibular joint with cryopreserved cartilage and freeze-dried dura: a preliminary report. Hartog JM, et al. **J Oral Maxillofac Surg** 1990 Sep;48(9):919-25 (40 ref.)

Fate of allogeneic embryonal chick chondrocytes implanted orthotopically, as determined by the host's age. Robinson D, et al. **Mech Ageing Dev** 1989 Oct;50(1):71-80

Cryogenically preserved adult and juvenile goat mandibular condylar transplantation. Bifano CA, et al. **Oral Surg Oral Med Oral Pathol** 1990 Mar;69(3):291-8

[Ultrasonic evaluation of homologous bone and cartilage transplants of the femoral condyles] Reimer P, et al. **ROFO** 1990 Jul;153(1):6-8 (Eng. Abstr.) **(Ger)**

[Pedicled osteo-cartilaginous autoplasty of defects of the femoral head] Marakusha IG, et al. **Vestn Khir** 1989 Dec; 144(12):65-8 **(Rus)**

ULTRASTRUCTURE

Distribution of crystals in the superficial zone of elderly human articular cartilage of the femoral head in subcapital fracture. Stockwell RA. **Ann Rheum Dis** 1990 Apr; 49(4):231-5

Ultrastructural changes in synovium and cartilage in experimental hemarthrosis in dogs. Fabry G. **Arch Orthop Trauma Surg** 1990;109(1):21-9

Effect of various irrigating fluids on the ultrastructure of articular cartilage. Bert JM, et al. **Arthroscopy** 1990; 6(2):104-11

Ultrastructural study of hip joint osteoarthritis. Scanning electron microscopic study of articular cartilage of femoral head. Chai BF, et al. **Chin Med J [Engl]** 1990 Apr; 103(4):290-4

Articular cartilage preservation and storage. III. Quantitative zonal analysis of cytoplasmic components of stored versus in vivo articular cartilage chondrocytes. Brighton CT, et al. **Clin Orthop** 1990 Jan;(250):277-90

The three-dimensional 'knit' of collagen fibrils in articular cartilage. Broom ND, et al. **Connect Tissue Res** 1989; 23(4):261-77

The reaction of acridine orange with proteoglycans in the articular cartilage of the rat [published erratum appears in Histochem J 1990 Apr;22(4):247] Brandes G, et al. **Histochem J** 1990 Feb;22(2):106-12

Macroscopic, microscopic and ultrastructural findings in experimental haemarthrosis of rhesus monkeys. Zeman DH, et al. **J Comp Pathol** 1989 Aug;101(2):117-29

Short rib polydactyly syndrome type I: an autopsy approach to diagnosis of chondrodysplasias. Keating SJ, et al. **Mod Pathol** 1989 Sep;2(5):427-32

Ultrastructural study of articular cartilage in experimental pyogenic arthritis. Torisu T, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Dec;63(12):1479-85

Cellular basis and oncogene expression of rheumatoid joint destruction. Gay S, et al. **Rheumatol Int** 1989;9(3-5):105-13 (57 ref.)

[Scanning electron microscopic study of the coxofemoral articular surfaces in the human fetus] Labbe S, et al. **Bull Assoc Anat (Nancy)** 1989 Jun;73(221):21-8 (Eng. Abstr.) **(Fre)**

[The hydrodynamic components in joints: proof of a membrane-cistern system within the calcified zone of the femur head cartilage] Copf F, et al. **Acta Anat (Basel)** 1989; 136(3):248-54 (Eng. Abstr.) **(Ger)**

[Morphological studies on structure and function of the superficial zone of the articular cartilage] Kobayashi S. **Nippon Seikeigeka Gakkai Zasshi** 1989 Dec; 63(12):1486-501 (Eng. Abstr.) **(Jpn)**

[Structure of the interstitial space and ground substance of the human articular cartilage] Omel'ianenko NP. **Arkh Anat Gistol Embriol** 1990 Jun;98(6):77-83 (Eng. Abstr.) **(Rus)**

[Orientational analysis of the ultrastructural architecture of the fibrous base of human articular cartilage] Ome'lianenko NP. **Arkh Anat Gistol Embriol** 1989 Jul;97(7):39-47 (Eng. Abstr.) **(Rus)**

CARTILAGE DISEASES

see related
ELLIS-VAN CREVELD SYNDROME
EPIPHYSES, SLIPPED
OSTEOCHONDRITIS

[Chondritis and osteomyelitis of the ribs] Marchuk IK. **Klin Khir** 1989;(12):52 **(Rus)**

CHEMICALLY INDUCED

Passive role of articular chondrocytes in quinolone-induced arthropathy in guinea pigs. Bendele AM, et al. **Toxicol Pathol** 1990;18(2):304-12

COMPLICATIONS

[Chondrocostal and chondrosternal tuberculosis in 2 heroin addicts infected with the human immunodeficiency virus] Martos JA, et al. **Med Clin (Barc)** 1989 Oct 21; 93(12):467-70 (39 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Chondral lesions of the patella evaluated with computed tomography, magnetic resonance imaging, and arthroscopy [see comments] Handelberg F, et al. **Arthroscopy** 1990; 6(1):24-9 Comment in: Arthroscopy 1990;6(1):1-2.

Cysts of the semilunar cartilages of the knee: a new approach by ultrasound imaging. A study of six cases and review of the literature. Peetrons P, et al. **J Ultrasound Med** 1990 Jun;9(6):333-7 (30 ref.)

Tracheopathia osteoplastica: familial occurrence. Prakash UB, et al. **Mayo Clin Proc** 1989 Sep;64(9):1091-6

Magnetic resonance imaging of injuries to bone and articular cartilage. Emphasis on radiographically occult abnormalities. Deutsch AL, et al. **Orthop Rev** 1990 Jan; 19(1):66-75 (28 ref.)

Imaging of meniscal cyst of the knee in three cases. Coral A, et al. **Skeletal Radiol** 1989;18(6):451-5

[Very early diagnosis of chondrolysis phases in arthrosis] Amor B. **Rev Rhum Mal Osteoartic** 1990 Apr 10;57(3 (Pt 2)):253-4 **(Fre)**

[Definition of patellar chondropathy and patellar chondromalacia] Graf J, et al. **Z Orthop** 1990 May-Jun; 128(3):289-94 (64 ref.) (Eng. Abstr.) **(Ger)**

DRUG THERAPY

The effects of interleukin-1 on articular cartilage destruction as observed in arthritic diseases, and its therapeutic control. Verschure PJ, et al. **Clin Exp Rheumatol** 1990 May-Jun; 8(3):303-13 (164 ref.)

EMBRYOLOGY

Prenatal development around the sustentaculum tali and its relation to talocalcaneal coalitions. Kawashima T, et al. **J Pediatr Orthop** 1990 Mar-Apr;10(2):238-43

ETIOLOGY

Idiopathic chondrolysis of the hip. A distinct clinical entity? van der Hoeven H, et al. **Acta Orthop Scand** 1989 Dec; 60(6):661-3

Acute Pseudomonas chondritis as a sequel to ear piercing. Turkeltaub SH, et al. **Ann Plast Surg** 1990 Mar;24(3):279-82

Chondrolysis of the hip joint in a patient receiving long-term hemodialysis: histologic and biochemical evaluation. Mitrovic DR, et al. **Arthritis Rheum** 1989 Nov; 32(11):1477-83

Mechanisms of human neutrophil-mediated cartilage damage in vitro: the role of lysosomal enzymes, hydrogen peroxide and hypochlorous acid. Kowanko IC, et al. **Immunol Cell Biol** 1989 Oct;67 (Pt 5):321-9

Intra-articular fibrous bands. Patellar complications after total knee replacement. Thorpe CD, et al. **J Bone Joint Surg [Am]** 1990 Jul;72(6):811-4

Infective complications of brief nasotracheal intubation. Hariri MA, et al. **J Laryngol Otol** 1989 Dec;103(12):1217-8

Neutrophil-mediated cartilage injury in vitro is enhanced by tumour necrosis factor alpha. Kowanko IC, et al. **Rheumatol Int** 1990;10(2):85-90

[What is your diagnosis? Chronic nodular chondrodermatitis of the helix of the ear] Flückiger R. **Schweiz Rundsch Med Prax** 1990 Jun 26;79(26):817-8 **(Ger)**

[Osteo-articular involvement in microdrepanocytic anemia] De Palma L, et al. **Arch Putti Chir Organi Mov** 1989; 37(2):371-8 (13 ref.) (Eng. Abstr.) **(Ita)**

[Mechanisms of destruction and atrophy of the cartilage and bone from the point of view of a rheumatologist] Havelka S. **Revmatologiia (Mosk)** 1989 Jul-Sep;(3):47-51 **(Rus)**

GENETICS

Keutel syndrome: a report of four cases. Khosroshahi HE, et al. **Eur J Pediatr** 1989 Dec;149(3):188-91

PATHOLOGY

Tissue and cell studies of the growth plate in the chondrodysplasias. Horton WA, et al. **Am J Med Genet** 1989 Sep;34(1):91-5

Acquired chondronecrosis. Sokoloff L. **Ann Rheum Dis** 1990 Apr;49(4):262-4 (25 ref.)

Pathology of the meniscus. Hough AJ Jr, et al. **Clin Orthop** 1990 Mar;(252):32-40 (46 ref.)

Severe tracheobronchomalacia associated with laryngeal cleft. Mitchell DB, et al. **Int J Pediatr Otorhinolaryngol** 1989 Dec;18(2):181-5

Cellular interaction in cartilage degradation. Desa FM, et al. **Int J Tissue React** 1989;11(5):213-7

Effects of isolated rheumatoid synovial cells on cartilage degradation in vitro. Keller K, et al. **J Orthop Res** 1990 May;8(3):345-52

PHYSIOPATHOLOGY

Effect of lateral release on patellar motion in chondromalacia. An MRI study of 11 knees. Koskinen SK, et al. **Acta Orthop Scand** 1990 Aug;61(4):311-2

RADIOGRAPHY

Early-onset primary osteoarthritis and mild chondrodysplasia. Radiographic and pathologic studies with an analysis of cartilage proteoglycans. Katzenstein PL, et al. **Arthritis Rheum** 1990 May;33(5):674-84

SURGERY

Role of aortopexy in the management of primary tracheomalacia and tracheobronchomalacia. Malone PS, et al. **Arch Dis Child** 1990 Apr;65(4):438-40

Arthroscopic cartilage debridement by excimer laser in chondromalacia of the knee joint. A prospective randomized clinical study. Raunest J, et al. **Arch Orthop Trauma Surg** 1990;109(3):155-9

Insall proximal realignment for disorders of the patella. Abraham E, et al. **Clin Orthop** 1989 Nov;(248):61-5

Distal tracheal stenosis in two children with double aortic arch and associated tracheomalacia. Colquhoun IW, et al. **Eur J Cardiothorac Surg** 1990;4(5):287-9

Synovium transplantation onto the cartilage denuded patellar groove of the sheep knee joint. Rothwell AG. **Orthopedics** 1990 Apr;13(4):433-42

Arthroscopic treatment of posttraumatic chondromalacia patellae. Zorman D, et al. **Orthopedics** 1990 May; 13(5):585-8

[Arthroscopic surgery of the knee joint cartilage] Rose O, et al. **Beitr Orthop Traumatol** 1990 May;37(5):254-8 (Eng. Abstr.) **(Ger)**

[Results of surgical therapy of patellar chondropathy] Sprengel H, et al. **Beitr Orthop Traumatol** 1990 May; 37(5):266-73 (36 ref.) (Eng. Abstr.) **(Ger)**

[Indication for and technic in arthroscopic retinaculum division] Widow W, et al. **Beitr Orthop Traumatol** 1990 May;37(5):251-4 (Eng. Abstr.) **(Ger)**

[An experimental study on surgical treatment of tracheomalacia-- methods for making models of tracheomalacia and development of a new operative method] Hanawa T, et al. **Nippon Geka Gakkai Zasshi** 1989 Jul;90(7):1072-80 (Eng. Abstr.) **(Jpn)**

[Endoprosthesis of the trachea in the treatment of cicatricial stenosis with tracheomalacia] Biriukov IuV, et al. **Grud Serdechnososudistaia Khir** 1990;(3):29-34 (Eng. Abstr.) **(Rus)**

THERAPY

[Personal experiences in the conservative therapy of patellar chondropathy] Sprengel H, et al. **Beitr Orthop Traumatol** 1990 May;37(5):259-66 (Eng. Abstr.) **(Ger)**

VETERINARY

A new chondrodystrophy mutation in Japanese quail (Coturnix japonica). Hermes JC, et al. **J Hered** 1990 May-Jun;81(3):222-4

Dietary aspects of developmental orthopedic disease in young horses. Kronfeld DS, et al. **Vet Clin North Am Equine Pract** 1990 Aug;6(2):451-65 (43 ref.)

CARTILAGE, EPIPHYSEAL see **GROWTH PLATE**

CARTOONS see under **CARICATURES**

CARUBICIN see under **DAUNORUBICIN**

CASCARA see under **CATHARTICS**

CASE-BASE STUDIES see **CASE-CONTROL STUDIES**

CASE-COMPARISON STUDIES see **CASE-CONTROL STUDIES**

CASE-CONTROL STUDIES

The effects of sensitivity and specificity of case selection on validity, sample size, precision, and power in hospital-based case-control studies. Brenner H, et al. **Am J Epidemiol** 1990 Jul;132(1):181-92

Does nondifferential misclassification of exposure always bias a true effect toward the null value? Dosemeci M, et al. **Am J Epidemiol** 1990 Oct;132(4):746-8

Random digit dialing for control selection. A review and a caution on its use in studies of childhood cancer. Greenberg ER. **Am J Epidemiol** 1990 Jan;131(1):1-5 (17 ref.)

Re: "Comparing Proportion Exposed in Case-Control Studies Using Several Control Groups" [letter; comment] Greenland S, et al. **Am J Epidemiol** 1990 May;131(5):944 Comment on: Am J Epidemiol 1987 Aug;126(2):170-8.

Log-linear models for the analysis of matched cohort studies. Holford TR, et al. **Am J Epidemiol** 1989 Dec; 130(6):1247-53

Nested case-control and case-cohort methods of sampling from a cohort: a critical comparison. Langholz B, et al. **Am J Epidemiol** 1990 Jan;131(1):169-76

On power and sample size for studying features of the relative odds of disease. Lubin JH, et al. **Am J Epidemiol** 1990 Mar; 131(3):552-66

Selection of controls [letter] Childress JA, et al. **Am J Infect Control** 1990 Aug;18(4):292

Effects of cluster sampling on epidemiologic analysis in

population-based case-control studies. Graubard BI, et al. **Biometrics** 1989 Dec;45(4):1053-71
Reducing mean squared error in the analysis of pair-matched case-control studies. Kalish LA. **Biometrics** 1990 Jun; 46(2):493-9
A note on case-control sampling to estimate kappa coefficients. Kraemer HC, et al. **Biometrics** 1990 Mar; 46(1):49-59
Designs for synthetic case-control studies in open cohorts. Robins JM, et al. **Biometrics** 1989 Dec;45(4):1103-16
Reports of case-control studies: what editors want from authors and peer reviewers [editorial] Squires BP, et al. **Can Med Assoc J** 1990 Jul 1;143(1):17-8
Case-control studies. Herman JM, et al. **Fam Med** 1990 Jan-Feb;22(1):52-6
Bias arising in case-control studies from selection of controls from overlapping groups. Austin H, et al. **Int J Epidemiol** 1989 Sep;18(3):713-6
Case-control studies [letter; comment] Cumming RL, et al. **Int J Epidemiol** 1989 Sep;18(3):725-7 Comment on: Int J Epidemiol 1988 Sep;17(3):680-5.
Selection bias in case-control studies using relatives as the controls. Goldstein AM, et al. **Int J Epidemiol** 1989 Dec; 18(4):985-9
Hospital versus neighbourhood controls in the assessment of dietary risk factors. González CA, et al. **Int J Epidemiol** 1990 Jun;19(2):354-61
Incidence density matching with a simple SAS computer program. Pearce N. **Int J Epidemiol** 1989 Dec;18(4):981-4
Case-control designs in the study of common diseases: updates on the demise of the rare disease assumption and the choice of sampling scheme for controls. Rodrigues L, et al. **Int J Epidemiol** 1990 Mar;19(1):205-13 (23 ref.)
Practical issues of experimental ROC analysis. Selection of controls. Gur D, et al. **Invest Radiol** 1990 May;25(5):583-6
Behavior of the exposure odds ratio in a case-control study when the hazard function is not constant over time. Guess HA. **J Clin Epidemiol** 1989;42(12):1179-84
The validity of different control groups in a case-control study. Oral contraceptive use and breast cancer in young women. Lund E. **J Clin Epidemiol** 1989;42(10):987-93
Sample size determination for pair-matched case-control studies where the goal is interval estimation of the odds ratio. Satten GA, et al. **J Clin Epidemiol** 1990;43(1):55-9
Choosing cases and controls in neurological research [editorial] Martyn CN. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):453-4
Should we case-control? [editorial] [see comments] **Lancet** 1990 May 12;335(8698):1127-8 Comment in: Lancet 1990 Jul 7;336(8706):50.
The case control study. Elwood JM. **N Z Med J** 1990 Jan 24;103(882):7-8 (20 ref.)
Choice of controls [editorial] **Paediatr Perinat Epidemiol** 1990 Jan;4(1):1-3
The 'well control' artefact in case/control studies of specific psychiatric disorders. Schwartz S, et al. **Psychol Med** 1989 Aug;19(3):737-42
Dual responses to increase validity in case-control studies. Salmi LR, et al. **Rev Epidemiol Sante Publique** 1990; 38(1):41-6
Misclassification in more than one factor in a case-control study: a combination of Mantel-Haenszel and maximum likelihood approaches. Duffy SW, et al. **Stat Med** 1989 Dec; 8(12):1529-36
Bayesian analysis of case-control studies [letter; comment] Nurminen M, et al. **Stat Med** 1989 Aug;8(8):1023-4 Comment on: Stat Med 1988 Dec;7(12):1223-30.
[1:R matched case-control studies with fixed and varying numbers of controls] Wu GL. **Chung Hua Chung Liu Tsa Chih** 1990 Mar;12(2):104-7 (Eng. Abstr.) **(Chi)**
[Experimentation on a mail questionnaire for a case-control study] Ciccone G, et al. **Epidemiol Prev** 1989 Mar; 11(38):47-9 (Eng. Abstr.) **(Ita)**
[Response level of controls selected from the municipal registry] Mur Pastor P, et al. **Gac Sanit** 1989 Nov-Dec; 3(15):547-50 (Eng. Abstr.) **(Spa)**

CASE MANAGEMENT, INSURANCE see **MANAGED CARE PROGRAMS**

CASE MIX see **DIAGNOSTIC RELATED GROUPS**

CASE-REFERENT STUDIES see **CASE-CONTROL STUDIES**

CASEINS

Diet and faecal flora in the newborn: casein and whey proteins. Balmer SE, et al. **Arch Dis Child** 1989 Dec; 64(12):1678-84
Subunit structure of casein micelles from small-angle neutron-scattering. Stothart PH. **J Mol Biol** 1989 Aug 20; 208(4):635-8
[Milk casein as molecular assembly] Ono T. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(11):1351-8 (67 ref.) **(Jpn)**
[Production of anatoxin during the growing of Pseudomonas aeruginosa on a casein nutrient medium] Podgornaia LG, et al. **Mikrobiol Zh** 1985 Nov-Dec;47(6):40-3 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Effects of dl-fenfluramine on dextrin and casein intakes influenced by textural preferences. Baker BJ, et al. **Behav Neurosci** 1990 Feb;104(1):153-9
dl-fenfluramine challenge to nutrient-specific textural preference conditioned by concurrent presentation of two diets. Booth DA, et al. **Behav Neurosci** 1990 Feb; 104(1):226-9
Biliary lipid composition and gallstone formation in rabbits fed on soy protein, cholesterol, casein and modified casein. Ozben T. **Biochem J** 1989 Oct 1;263(1):293-6
Evaluation of a casein and a whey hydrolysate for treatment of cow's-milk-sensitive enteropathy. Walker-Smith JA, et al. **Eur J Pediatr** 1989 Oct;149(1):68-71
Effects of dietary protein degradability and casein or amino acid infusions on production and plasma amino acids in dairy cows. Seymour WM, et al. **J Dairy Sci** 1990 Mar; 73(3):735-48
Cholesterol metabolism, digestion rates and postprandial changes in serum of swine fed purified diets containing either casein or soybean protein. Beynen AC, et al. **J Nutr** 1990 May;120(5):422-30
Iron retention by rats from casein-legume test meals: effect of tannin level and previous diet. Garcia-Lopez JS, et al. **J Nutr** 1990 Jul;120(7):760-6
Hepatic cysteine sulfinic acid decarboxylase activity in rats fed various levels of dietary casein. Jerkins AA, et al. **J Nutr** 1989 Nov;119(11):1593-7
Plasma and brain ammonia and amino acids in rats measured after feeding 75% casein or 28% egg white. Semon BA, et al. **J Nutr** 1989 Nov;119(11):1583-92
Controlled trial of polymeric versus elemental diet in treatment of active Crohn's disease [see comments] Giaffer MH, et al. **Lancet** 1990 Apr 7;335(8693):816-9 Comment in: Lancet 1990 Jun 16;335(8703):1475-6.
[Ultrastructural characteristics of the cerebellar cortex in the postnatal development of animals with protein-calorie malnutrition and in subsequent rehabilitation] Medvedev DI, et al. **Arkh Anat Gistol Embriol** 1989 Oct;97(10):20-5 (Eng. Abstr.) **(Rus)**
[Effect of increased consumption of plant proteins during hypokinesia on various indicators of calcium metabolism in rats] Arustamov OV, et al. **Kosm Biol Aviakosm Med** 1989 Sep-Oct;23(5):85-6 **(Rus)**

ADVERSE EFFECTS

Late metabolic acidosis and poor weight gain in moderately pre-term babies fed with a casein-predominant formula: a continuing need for caution. Fok TF, et al. **Ann Trop Paediatr** 1989 Dec;9(4):243-7
Self-leveling mortar as a possible cause of symptoms associated with "sick building syndrome". Lundholm M, et al. **Arch Environ Health** 1990 May-Jun;45(3):135-40
Influence of dietary minerals on apolipoprotein B metabolism in rabbits fed semipurified diets containing casein. Samman S, et al. **Atherosclerosis** 1990 May;82(1-2):69-74
General and histopathological results of a two-year study of rats fed semi-purified diets containing casein and soya protein. Anastasia JV, et al. **Food Chem Toxicol** 1990 Mar; 28(3):147-56
A double-blind clinical trial comparing the gastrointestinal side effects of two enteral feeding formulas. Viall C, et al. **JPEN J Parenter Enteral Nutr** 1990 May-Jun; 14(3):265-9

ANALYSIS

Immunohistochemical study of beta- and kappa-casein in the human breast and breast carcinomas, using monoclonal antibodies. Earl HM, et al. **Cancer Res** 1989 Nov 1; 49(21):6070-6
Effect of rumen-protected methionine and lysine on casein in milk when diets high in fat or concentrate are fed. Chow JM, et al. **J Dairy Sci** 1990 Apr;73(4):1051-61
Preparative separation of small molecular weight peptides from casein hydrolysate using gel filtration and immobilized metal ion affinity chromatography. Gauthier J, et al. **Prep Biochem** 1990;20(1):23-50
[Composition of milk and electrophoretic analysis of milk casein in herbivorous voles (Microtus montebelli)] Sugawara M, et al. **Jikken Dobutsu** 1990 Apr;39(2):281-4 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Primary culture of normal rat mammary epithelial cells within a basement membrane matrix. II. Functional differentiation under serum-free conditions. Hahm HA, et al. **In Vitro Cell Dev Biol** 1990 Aug;26(8):803-14
Effects of amiloride on the induction of DNA synthesis and casein gene expression in rabbit mammary explants. Martel P, et al. **Reprod Nutr Dev** 1990;30(1):85-90

CHEMICAL SYNTHESIS

Synthetic fragments of beta-casein as model substrates for liver and mammary gland casein kinases. Meggio F, et al. **Eur J Biochem** 1989 Dec 22;186(3):459-64

GENETICS

Restriction fragment length polymorphism analysis of the kappa-casein locus in cattle. Damiani G, et al. **Anim Genet** 1990;21(2):107-14
Detection of bovine kappa-casein genomic variants by the polymerase chain reaction method. Denicourt D, et al. **Anim Genet** 1990;21(2):215-6
A method for kappa-casein genotyping of bulls. Rogne S, et al. **Anim Genet** 1989;20(3):317-21
Complete nucleotide sequence of the bovine beta-casein gene. Bonsing J, et al. **Aust J Biol Sci** 1988;41(4):527-37
Mechanisms by which prolactin and glucocorticoids regulate casein gene expression. Rosen JM, et al. **Biochem Soc Symp** 1989;55:115-23
Hormonal induction of beta-casein gene expression: requirement of ongoing protein synthesis for transcription. Yoshimura M, et al. **Endocrinology** 1990 Jan;126(1):427-33
In vitro and in vivo growth and casein gene expression of mouse mammary tumor epithelial cells in response to hormones. Chou JL, et al. **Exp Cell Res** 1990 Feb; 186(2):250-6
Cloning and sequencing of a cDNA encoding human milk beta-casein. Lönnerdal B, et al. **FEBS Lett** 1990 Aug 20; 269(1):153-6
Relationships of milk protein types to lifetime performance. Lin CY, et al. **J Dairy Sci** 1989 Nov;72(11):3085-90
Cloning and sequencing of a complementary deoxyribonucleic acid coding for a bovine alpha s1-casein A from mammary tissue of a homozygous B variant cow. McKnight RA, et al. **J Dairy Sci** 1989 Oct;72(10):2464-73
Epidermal growth factor receptor, but not c-erbB-2, activation prevents lactogenic hormone induction of the beta-casein gene in mouse mammary epithelial cells. Hynes NE, et al. **Mol Cell Biol** 1990 Aug;10(8):4027-34
Hormone-dependent beta-casein mRNA stabilization requires ongoing protein synthesis. Poyet P, et al. **Mol Endocrinol** 1989 Dec;3(12):1961-8
Nucleotide sequence of ovine kappa-casein cDNA. Furet JP, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5286
Casein expression in cytotoxic T lymphocytes. Grusby MJ, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6897-901
Transfection of beta-casein chimeric gene and hormonal induction of its expression in primary murine mammary epithelial cells. Yoshimura M, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3670-4
[The effect of cow genotype for beta-casein on the quantitative level of milk proteins] Khaertdinov RA. **Genetika** 1989 Aug;25(8):1462-72 (Eng. Abstr.) **(Rus)**
[The integration and expression of the beta-casein gene of Bos taurus in transgenic rats and mice] Mukha DV, et al. **Ontogenez** 1990 Mar-Apr;21(2):215-8 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Occupational asthma caused by inhalation of casein. Olaguibel JM, et al. **Allergy** 1990 May;45(4):306-8
Relative positioning of the T cell and B cell determinants on an immunogenic peptide: its influence on antibody response. Hachimura S, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):803-8
Quantification of total IgG levels against alpha-casein in human serum samples. Lovegrove JA, et al. **Biochem Soc Trans** 1989 Dec;17(6):1059-60
Antibodies raised against peptide fragments of bovine alpha s1-casein cross-react with the intact protein only when the peptides contain both B and T cell determinants. Enomoto A, et al. **Mol Immunol** 1990 Jun;27(6):581-6
Altered serum immunoglobulin response to model intestinal antigens during dietary exposure to vomitoxin (deoxynivalenol). Pestka JJ, et al. **Toxicol Lett** 1990 Jan; 50(1):75-84

ISOLATION & PURIFICATION

Human-milk proteins: analysis of casein and casein subunits by anion-exchange chromatography, gel electrophoresis, and specific staining methods. Kunz C, et al. **Am J Clin Nutr** 1990 Jan;51(1):37-46
Casein and casein subunits in preterm milk, colostrum, and mature human milk. Kunz C, et al. **J Pediatr Gastroenterol Nutr** 1990 May;10(4):454-61

METABOLISM

Absorption of beta-casomorphins from autoperfused lamb and piglet small intestine. Read LC, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):G443-52
Intermediate density lipoprotein-apolipoprotein B turnover in rabbits fed semipurified diets containing casein or soy protein. Samman S, et al. **Ann Nutr Metab** 1990; 34(2):98-103
Interactions of triply phosphorylated human beta-casein: monomer characterization and hydrodynamic studies of self-association. Sood SM, et al. **Arch Biochem Biophys** 1990 Mar;277(2):415-21
Protein requirement and amino acid imbalance in quail. Straznicka H. **Br Poult Sci** 1990 Mar;31(1):139-45
Net appearance of amino acids in portal blood during the digestion of casein or rapeseed proteins in the pig. Galibois I, et al. **Can J Physiol Pharmacol** 1989 Nov;67(11):1409-17
Comparative study of mammary gland development and differentiation between beef and dairy heifers. Keys JE, et al. **Domest Anim Endocrinol** 1989 Oct;6(4):311-9
Casein accumulation in mouse mammary epithelial cells after growth stimulated by different hormonal and nonhormonal agents. Levay-Young BK, et al. **Endocrinology** 1990 Feb;

126(2):1173–82
The effect of abomasal methionine supplementation on nitrogen retention of growing steers postruminally infused with casein or nonsulfur-containing amino acids. Titgemeyer EC, et al. **J Anim Sci** 1990 Mar;68(3):750–7
Peptide uptake is essential for growth of Lactococcus lactis on the milk protein casein. Smid EJ, et al. **J Bacteriol** 1989 Nov;171(11):6135–40
Changes of the surface proteolytic activity in synchronized Ehrlich ascites tumor cells grown in vivo. Adamietz IA, et al. **J Cancer Res Clin Oncol** 1990;116(1):65–8
Specificity of plasmin towards bovine alpha S2-casein. Le Bars D, et al. **J Dairy Res** 1989 Nov;56(5):817–21
Effects of feeding rats low protein diets containing casein or soy protein isolate supplemented with methionine or oligo-L-methionine. Chiji H, et al. **J Nutr** 1990 Feb; 120(2):166–71
Binding of drugs in milk: the role of casein in milk protein binding. Stebler T, et al. **Pharm Res** 1990 Jun;7(6):633–7
Permeability of milk protein antigens across the intestinal epithelium in vitro. Marcon-Genty D, et al. **Reprod Nutr Dev** 1989;29(6):717–23
Differences in substrate specificities for cysteine proteinases used in blood group serology, and the use of bromelain in a two-phase inhibitor technique. Ogasawara K, et al. **Vox Sang** 1989;57(1):72–6
[The structure and properties of casein kinases] Dobrowolska G. **Postepy Biochem** 1989;35(3):231–44 (105 ref.) **(Pol)**
[Enzymatic coagulation of casein micelles] Dziuba J, et al. **Postepy Biochem** 1988;34(4):429–43 (83 ref.) **(Pol)**
[Phosphorylation of casein and its properties] Zbikowska A, et al. **Postepy Biochem** 1988;34(4):445–59 (102 ref.) **(Pol)**
[The products of the enzymatic hydrolysis of casein and elastin by Bacillus subtilis protease] Kolchinskaia ID, et al. **Mikrobiol Zh** 1983 Sep-Oct;45(5):13–6 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Soy protein and casein in cholesterol-enriched diets: effects on plasma lipoproteins in normolipidemic subjects. Meinertz H, et al. **Am J Clin Nutr** 1989 Oct;50(4):786–93

PHARMACOLOGY

Intestinal glycosyl-transferase activities. Nutritional regulation by a chemically-modified protein: methionyl-casein. Biol MC, et al. **Biochem Int** 1990; 20(2):239–50
Digestibility of casein, formaldehyde-treated casein and soya-bean protein in relation to their effects on serum cholesterol in rabbits. Kuyvenhoven MW, et al. **Br J Nutr** 1989 Sep;62(2):331–42
Characterization of extracellular phospholipase A2 (PLA2) activity in fluid and peritoneal cells from casein-treated rats. Stevens TM, et al. **Inflammation** 1990 Aug; 14(4):389–99
Effect of casein and beta-casomorphins on gastrointestinal motility in rats. Daniel H, et al. **J Nutr** 1990 Mar; 120(3):252–7
Essential amino acids in relation to hypercholesterolemia induced in rabbits by dietary casein. Kurowska EM, et al. **J Nutr** 1990 Aug;120(8):831–6
Growth and metabolic response of premature infants fed whey- or casein-dominant formulas after hospital discharge. Bernbaum JC, et al. **J Pediatr** 1989 Oct; 115(4):652–6
Effect of beta-casomorphin on neonatal sleep in rats. Taira T, et al. **Peptides** 1990 Jan-Feb;11(1):1–4
Effects of iontophoretically applied alpha-casein exorphin on CA1 hippocampal field potentials in vivo. Angelopoulos EK, et al. **Prog Clin Biol Res** 1990;328:339–42
Multiple opioid receptors may mediate beta-casein-induced analgesia in neonatal rats. Giordano J, et al. **Prog Clin Biol Res** 1990;328:457–60
[Absence of effect of the incorporation of a milk phosphopeptide on the utilization of calcium and phosphorus in the young pig] Pointillart A, et al. **Reprod Nutr Dev** 1989;29(4):477–86 (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Combination treatment with irritant and recombinant interleukin 2 in the peritoneal cavity for evoking effective anti-tumor activity: generation of lymphokine-activated killer cells and tumor-specific killer cells. Uchida H, et al. **Jpn J Cancer Res** 1990 Apr;81(4):416–24
[Experimental study on the antigoiter effect of high casein nutrition] Yu B. **Chung Hua I Hsueh Tsa Chih** 1989 Jul; 69(7):378–81, 28 (Eng. Abstr.) **(Chi)**

ULTRASTRUCTURE

[Electron microscopic images of casein] Kimura T, et al. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(11):1359–69 (35 ref.) **(Jpn)**

CASSAVA see under **PLANTS, EDIBLE**

CASSIA see under **PLANTS, MEDICINAL**

CASTE see **SOCIAL CLASS**

CASTLEMAN'S DISEASE see **GIANT LYMPH NODE HYPERPLASIA**

CASTLEMAN'S TUMOR see **GIANT LYMPH NODE HYPERPLASIA**

CASTOR see **RODENTIA**

CASTOR BEAN see under **RICINUS**

CASTOR BEAN LECTIN see **RICIN**

CASTOR OIL

ADMINISTRATION & DOSAGE

[A comparative study of methods of preparing the colon for a double-contrast study: Prepacol versus ricinus capsules with a cleansing enema] Mundinger A, et al. **Radiologe** 1990 Jan;30(1):34–8 (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES

Effect of solubilizer on the metabolic fate of menaquinone-4 in rats. Tadano K, et al. **J Pharmacobiodyn** 1989 Oct; 12(10):646–51

THERAPEUTIC USE

Schistosoma mansoni: experimental chemoprophylaxis in mice using oral anti-penetration agents. Salafsky B, et al. **Exp Parasitol** 1989 Oct;69(3):263–71
Use of a trypsin, Peru balsam, and castor oil spray on the oral mucosa: case report and review of the literature. Noble TA, et al. **Pharmacotherapy** 1989;9(6):386–8 (13 ref.)

CASTRATION

see related
EUNUCHISM

Effects of neonatal and adult castration and of testosterone substitution in male rats on growth of enzyme-altered hepatic foci in the resistant hepatocyte model. Lindhe B, et al. **Cancer Res** 1990 May 1;50(9):2679–82
Clarification of a legal brief case [letter] Hannah HW. **J Am Vet Med Assoc** 1990 Jan 15;196(2):185
Effects of castration and testosterone treatment on the activity of testosterone-metabolizing enzymes in the brain of male and female zebra finches. Vockel A, et al. **J Neurobiol** 1990 Jul;21(5):808–25
The effects of intrastriatal hormones on the dorsal immobility response in gonadectomized male and female rats. Van Hartesveldt C, et al. **Pharmacol Biochem Behav** 1989 Nov; 34(3):459–63
[The influence of castration on the induction of gastric adenocarcinoma by N-methyl-N'-nitro-N-nitrosoguanidine (MNNG) in Wistar rats] Zhang RF. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Jun;18(2):128–30 (Eng. Abstr.) **(Chi)**
[Serotonin contents in the hypothalamus of adult males, females and males castrated during the neonatal period] Borisova NA, et al. **Biull Eksp Biol Med** 1989 Aug; 108(8):135–6 (Eng. Abstr.) **(Rus)**

VETERINARY

Tail docking [letter; comment] Weeks MH. **Vet Rec** 1990 Apr 28;126(17):442 Comment on: Vet Rec 1990 Mar 24;126(12):296.

CASTRATION COMPLEX see **ANXIETY, CASTRATION**

CASTRATION, FEMALE see **OVARIECTOMY**

CASTRATION, MALE see **ORCHIECTOMY**

CASTS, SURGICAL

Early knee mobilization after osteotomy for gonarthrosis. Odenbring S, et al. **Acta Orthop Scand** 1989 Dec; 60(6):699–702
External fixation or a cast for Colles' fracture. Solgaard S. **Acta Orthop Scand** 1989 Aug;60(4):387–91
A better "sky hook" for hand elevation. Sunde D, et al. **Ann Plast Surg** 1990 Feb;24(2):189–90
Open fractures of the femur treated by the pin-in-plaster technique. Contribution to the art and practice of trauma surgery in the Third World. Bassey LO. **Arch Orthop Trauma Surg** 1990;109(3):139–43
Effect of serial casting for the prevention of equinus in patients with acute head injury. Conine TA, et al. **Arch Phys Med Rehabil** 1990 Apr;71(5):310–2
Alleged negligence in treatment of fracture and dislocation. Fisher TL. **Can Med Assoc J** 1966 May 7;94(19):1011
High incidence of poor results in clubfoot surgery [letter] Altchek M. **Clin Orthop** 1990 Sep;(258):310–2
Distal femoral physeal problem fractures. Graham JM, et al. **Clin Orthop** 1990 Jun;(255):51–3
Plaster casts in the management of advanced ischaemic and neuropathic diabetic foot lesions. Borssén B, et al. **Diabetic Med** 1989 Nov;6(8):720–3
Biodynamics of the ankle in spastic children--effect of chronic stretching of the calf musculature. Walsh EG, et al. **Exp Physiol** 1990 May;75(3):423–5
Follow-up investigation of fresh lunate bone fracture. Teisen H, et al. **Handchir Mikrochir Plast Chir** 1990 Jan;22(1):20–2
Sidewind reinforcement for above-elbow plaster slabs. Muirhead AG, et al. **Injury** 1989 May;20(3):159–60
Backslabs and plaster casts: which will best accommodate increasing intracompartmental pressures? Younger AS, et al. **Injury** 1990 May;21(3):179–81
Patellar tendon bearing plaster casts in fractures of the tibia. Ahmad S, et al. **Int Orthop** 1989;13(4):247–51
Maguelone plaster braces for the reduction of scoliotic curves: methods and results. Becchetti S, et al. **Ital J Orthop Traumatol** 1990 Mar;16(1):53–60
Treatment of slipped capital femoral epiphysis. Spica-cast immobilization. Betz RR, et al. **J Bone Joint Surg [Am]** 1990 Apr;72(4):587–600
Comparison of short and long thumb-spica casts for non-displaced fractures of the carpal scaphoid [letter; comment] Thompson JS. **J Bone Joint Surg [Am]** 1990 Feb; 72(2):309–10 Comment on: J Bone Joint Surg [Am] 1989 Mar;71(3):354–7.
A double-blind trial of pulsed electromagnetic fields for delayed union of tibial fractures. Sharrard WJ. **J Bone Joint Surg [Br]** 1990 May;72(3):347–55
Serial casting: a method for treating burn contractures. Bennett GB, et al. **J Burn Care Rehabil** 1989 Nov-Dec; 10(6):543–5
Use of positive plaster impressions to facilitate measurement of anti-burn scar support gloves for severely burned hands. Ward RS, et al. **J Burn Care Rehabil** 1989 Jul-Aug; 10(4):351–3
Forty degree angled coronal CT scanning of scaphoid fractures through plaster and fiberglass casts. Friedman L, et al. **J Comput Assist Tomogr** 1989 Nov-Dec;13(6):1101–4
Documentation of the first web space angle. Bhattacharya S, et al. **J Hand Surg [Br]** 1989 Aug;14(3):298–300
A comparison of the mechanical properties of fiberglass cast materials and their clinical relevance. Berman AT, et al. **J Orthop Trauma** 1990;4(1):85–92
A modified pins-and-plaster technique incorporating early motion for fractures of the distal radius. Harper MC. **J Orthop Trauma** 1989;3(4):300–5
A prospective randomized trial of external fixation and plaster cast immobilization in the treatment of distal radial fractures. Horne JG, et al. **J Orthop Trauma** 1990;4(1):30–4
Internal fixation versus traction and casting of adolescent femoral shaft fractures. Reeves RB, et al. **J Pediatr Orthop** 1990 Sep-Oct;10(5):592–5
Use of pins and plaster in the treatment of unstable pediatric forearm fractures. Voto SJ, et al. **J Pediatr Orthop** 1990 Jan-Feb;10(1):85–9
Fascia lata and early spica casting as adjuncts in closure of bladder exstrophy. Scherz HC, et al. **J Urol** 1990 Aug;144(2 Pt 2):550–3; discussion 562–3
Low inertia, rigid limb fixation using glass fibre casting bandage. Morier RL, et al. **Med Biol Eng Comput** 1990 Jan;28(1):96–9
Use of serial casting in the management of knee joint contractures in an adolescent with cerebral palsy. Phillips WE, et al. **Phys Ther** 1990 Aug;70(8):521–3
Splints versus casts [letter; comment] Moeller M. **Postgrad Med** 1990 Feb 15;87(3):34 Comment on: Postgrad Med 1989 Oct;86(5):71–2, 74.
Fiberglass versus plaster casts. How to choose between them [see comments] Silfverskiold JP. **Postgrad Med** 1989 Oct; 86(5):71–2, 74 Comment in: Postgrad Med 1990 Feb 15;87(3):34.
External fixation versus traditional treatment for comminuted Colles fractures. Olerud C, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989;82(2):99–105
[Functional treatment of recent fractures of the humeral shaft using the Sarmiento method] Dufour O, et al. **Rev Chir Orthop** 1989;75(5):292–300 (13 ref.) (Eng. Abstr.) **(Fre)**
[Conservative treatment of classical radius fractures] Blatter G, et al. **Schweiz Rundsch Med Prax** 1990 Aug 21; 79(34):961–6 (Eng. Abstr.) **(Ger)**
[Sarmiento function fracture treatment of the tibia] Young R, et al. **Unfallchirurg** 1989 Aug;92(8):394–8 (Eng. Abstr.) **(Ger)**
[Distal fracture of the radius—indications and results of conservative and surgical management] Barisani GR. **Wien Klin Wochenschr** 1989 Sep 29;101(18):631–3 (Eng. Abstr.) **(Ger)**
[Distal radius fracture; fixation using Kirschner wire or only a cast? A retrospective comparative study] Babst R, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989;82(2):75–9 (Eng. Abstr.) **(Ger)**
[Value of functional treatment of severe calcaneus fractures] Winkler H, et al. **Zentralbl Chir** 1990;115(10):619–24 (Eng. Abstr.) **(Ger)**
[Treatment of compression fractures of the spine by repositioning and immobilization in hyperextensive plaster casts] Bohatyrewicz A, et al. **Chir Narzadow Ruchu Ortop Pol** 1989;54(3):188–94 (Eng. Abstr.) **(Pol)**
[Biomechanical substantiation of U-shaped plaster cast with elastic bandage in diaphyseal fractures of crural bones] Abdrakhmanov AZh, et al. **Ortop Travmatol Protez** 1990 Apr;(4):16–9 (Eng. Abstr.) **(Rus)**
[Experience in the treatment of fractures of the ankle with a functional plaster bandage] Diusupov AZ. **Ortop Travmatol Protez** 1989 Jun;(6):20–3 (Eng. Abstr.)

(Rus)
[Reposition and external immobilization in fractures of the clavicle, humerus and malleoli] Galdukov VI.
Ortop Travmatol Protez 1990 Apr;(4):38–9 (Rus)
[Personal experience with the Sarmiento method in the treatment of diaphyseal fractures of the lower leg] Vlajnić Z, et al. Med Arh 1988;42(4):193–6 (Eng. Abstr.) (Scr)

STANDARDS

Upper extremity inhibitive casting in a boy with spastic quadriplegia. Cruickshank DA, et al. Am J Occup Ther 1990 Jun;44(6):552–5
The stiffness of cylindrical casts enforced with splint laminations: biomechanical considerations. Cimino WR, et al. J Orthop Trauma 1989;3(4):338–44
A physiological comparison of the short-leg walking cast and an ankle-foot orthosis walker following 6 weeks of immobilization. Neumann H, et al. Orthopedics 1989 Nov; 12(11):1429–33; discussion 1433–4

VETERINARY

Fracture repair with transfixation pins and fiberglass cast in llamas and small ruminants. Kaneps AJ, et al.
J Am Vet Med Assoc 1989 Nov 1;195(9):1257–61

CAT DISEASES

Feline immunodeficiency virus is a lentivirus associated with an AIDS-like disease in cats. Sparger EE, et al. AIDS 1989; 3 Suppl 1:S43–9 (49 ref.)
Comparison of plasma, liver, and skeletal muscle carnitine concentrations in cats with idiopathic hepatic lipidosis and in healthy cats. Jacobs G, et al. Am J Vet Res 1990 Sep; 51(9):1349–51
Identification of gonadal steroid receptors in meningiomas from dogs and cats. Speciale J, et al. Am J Vet Res 1990 May;51(5):833–5
Demonstration of feline corona virus (FCV) antigen in organs of cats suspected of feline infectious peritonitis (FIP) disease. Hök K. APMIS 1990 Jul;98(7):659–64
Feline health studies funded by Winn Foundation [news]
J Am Vet Med Assoc 1990 Jul 1;197(1):27, 34
Extramedullary plasmacytoma and immunoglobulin-associated amyloidosis in a cat. Carothers MA, et al. J Am Vet Med Assoc 1989 Dec 1;195(11):1593–7
Ocular manifestations of a metastatic pulmonary adenocarcinoma in a cat. Gionfriddo JR, et al.
J Am Vet Med Assoc 1990 Aug 1;197(3):372–4
Megaesophagus in two cats. Hoenig M, et al.
J Am Vet Med Assoc 1990 Mar 1;196(5):763–5
Hypercalcemia in two cats with squamous cell carcinomas. Klausner JS, et al. J Am Vet Med Assoc 1990 Jan 1; 196(1):103–5
Hepatic myelolipomas in a cat. McCaw DL, et al.
J Am Vet Med Assoc 1990 Jul 15;197(2):243–4
Orbital neoplasia with enophthalmos in a cat. Pentlarge VW, et al. J Am Vet Med Assoc 1989 Nov 1;195(9):1249–51
Vertebral lymphosarcoma in a cat. Suess RP Jr, et al.
J Am Vet Med Assoc 1990 Jul 1;197(1):101–3
Urethral leiomyoma in a cat. Swalec KM, et al.
J Am Vet Med Assoc 1989 Oct 1;195(7):961–2
Plasma cell pododermatitis with chronic footpad hemorrhage in two cats. Taylor JE, et al. J Am Vet Med Assoc 1990 Aug 1;197(3):375–7
Lyme disease in small animals. Lissman BA. N J Med 1990 Jul;87(7):573–4 (7 ref.)
Gastrointestinal diseases.
Semin Vet Med Surg (Small Anim) 1989 Aug;4(3):177–254
Disorders of the neuromuscular junction and muscle [published erratum appears in Semin Vet Med Surg (Small Anim) 1989 Nov;4(4):322]
Semin Vet Med Surg (Small Anim) 1989 May;4(2):107–76
Parasitic myositis of dogs and cats. Craig TM.
Semin Vet Med Surg (Small Anim) 1989 May;4(2):161–7 (51 ref.)
Constipation: pathophysiology, diagnostic approach, and treatment. Dimski DS.
Semin Vet Med Surg (Small Anim) 1989 Aug;4(3):247–54 (35 ref.)
Megaesophagus in the dog and cat. Guilford WG.
Semin Vet Med Surg (Small Anim) 1990 Feb;5(1):37–45 (66 ref.)
Pancreatic APUDomas. Johnson SE.
Semin Vet Med Surg (Small Anim) 1989 Aug;4(3):202–11 (55 ref.)
Feline dysautonomia. Sharp NJ.
Semin Vet Med Surg (Small Anim) 1990 Feb;5(1):67–71 (26 ref.)
Diarrhea in the cat. Wolf AM.
Semin Vet Med Surg (Small Anim) 1989 Aug;4(3):212–8 (40 ref.)
Short bowel syndrome in dogs and cats. Yanoff SR, et al.
Semin Vet Med Surg (Small Anim) 1989 Aug;4(3):226–31 (29 ref.)
Small animal ophthalmology.
Vet Clin North Am Small Anim Pract 1990 May; 20(3):565–867
Glaucoma in the dog and cat. Brooks DE.
Vet Clin North Am Small Anim Pract 1990 May; 20(3):775–97 (64 ref.)
Lens luxation in the dog and cat. Curtis R.
Vet Clin North Am Small Anim Pract 1990 May; 20(3):755–73 (46 ref.)
Uveitis in the dog and cat. Håkanson N, et al.
Vet Clin North Am Small Anim Pract 1990 May; 20(3):715–35 (47 ref.)
Retinal degeneration in the dog and cat. Millichamp NJ.
Vet Clin North Am Small Anim Pract 1990 May; 20(3):799–835 (160 ref.)
Feline herpesvirus ocular disease. Nasisse MP.
Vet Clin North Am Small Anim Pract 1990 May; 20(3):667–80 (55 ref.)
Ocular manifestations of systemic disease in the dog and cat. Recent developments. Swanson JF.
Vet Clin North Am Small Anim Pract 1990 May; 20(3):849–67 (73 ref.)
Spongiform encephalopathy in a cat [letter] Vet Rec 1990 May 19;126(20):513
Respiratory distress in a cat [letter] Ellis C. Vet Rec 1989 Sep 23;125(13):357
Chronic lung disease in old dogs and cats. Ford RB.
Vet Rec 1990 Apr 21;126(16):399–402

BLOOD

Evaluation of antithrombin-III activity as a coindicator of disseminated intravascular coagulation in cats with induced feline infectious peritonitis virus infection. Boudreaux MK, et al. Am J Vet Res 1989 Nov;50(11):1910–3
Glucose tolerance and insulin response in normal-weight and obese cats. Nelson RW, et al. Am J Vet Res 1990 Sep; 51(9):1357–62
Observations on blood coagulation after snakebite in dogs and cats. Holloway SA, et al. Aust Vet J 1989 Nov; 66(11):364–6
Hematologic manifestations of feline immunodeficiency virus infection. Shelton GH, et al. Blood 1990 Sep 15; 76(6):1104–9
Comparison of serum and plasma taurine values in Bengal tigers with values in taurine-sufficient and -deficient domestic cats. Pickett JP, et al. J Am Vet Med Assoc 1990 Jan 15;196(2):342–6
Effects of propylene glycol-containing diets on acetaminophen-induced methemoglobinemia in cats. Weiss DJ, et al. J Am Vet Med Assoc 1990 Jun 1;196(11):1816–9
Cold agglutinins in cats with haemobartonellosis. Zulty JC, et al. J Am Vet Med Assoc 1990 Mar 15;196(6):907–10
Essential thrombocythemia in a cat. Hammer AS, et al.
J Vet Intern Med 1990 Mar–Apr;4(2):87–91
Propylene glycol-induced Heinz body formation and D-lactic acidosis in cats. Christopher MM, et al.
Prog Clin Biol Res 1989;319:69–87; discussion 88–92
Laboratory abnormalities in patients with cancer. Kruth SA, et al. Vet Clin North Am Small Anim Pract 1990 Jul; 20(4):897–917 (68 ref.)
Enhanced platelet reactivity in cats experimentally infected with feline infectious peritonitis virus. Boudreaux MK, et al. Vet Pathol 1990 Jul;27(4):269–73
Blood tests for FIP [letter] [see comments] Easton NJ.
Vet Rec 1990 Feb 10;126(6):150 Comment in: Vet Rec 1990 Mar 3;126(9):225. Comment in: Vet Rec 1990 Mar 17;126(11):272–3.
Clinical and laboratory findings in cats infected with feline immunodeficiency virus. Hopper CD, et al. Vet Rec 1989 Sep 23;125(13):341–6

CHEMICALLY INDUCED

Cholecalciferol rodenticide toxicity in a domestic cat. Thomas JB, et al. Aust Vet J 1990 Jul;67(7):274–5
Cutaneous drug reactions in small animals. Nesbitt GH.
Clin Dermatol 1986 Jan–Mar;4(1):190–3
Fenvalerate/N,N-diethyl-m-toluamide (Deet) toxicosis in two cats. Dorman DC, et al. J Am Vet Med Assoc 1990 Jan 1;196(1):100–2
Chlorpyrifos toxicosis in two cats. Jaggy A, et al.
J Vet Intern Med 1990 May–Jun;4(3):135–9
Diethyltoluamide (DEET) insect repellent toxicosis. Dorman DC. Vet Clin North Am Small Anim Pract 1990 Mar; 20(2):387–91 (19 ref.)
Toxicology of selected pesticides, drugs, and chemicals. Organophosphorus and carbamate insecticides. Fikes JD. Vet Clin North Am Small Anim Pract 1990 Mar; 20(2):353–67 (70 ref.)
Toxicology of selected pesticides, drugs, and chemicals. D-limonene, linalool, and crude citrus oil extracts. Hooser SB. Vet Clin North Am Small Anim Pract 1990 Mar; 20(2):383–5 (6 ref.)
Tricyclic antidepressant toxicosis. Johnson LR.
Vet Clin North Am Small Anim Pract 1990 Mar; 20(2):393–403 (24 ref.)
Toxicology of selected pesticides, drugs, and chemicals. Boric acid. Kiesche-Nesselrodt A, et al.
Vet Clin North Am Small Anim Pract 1990 Mar; 20(2):369–73 (12 ref.)
Toxicology of nonsteroidal antiinflammatory drugs. Kore AM. Vet Clin North Am Small Anim Pract 1990 Mar; 20(2):419–30 (32 ref.)
Toxicology of household cleaning products and disinfectants. Kore AM, et al. Vet Clin North Am Small Anim Pract 1990 Mar;20(2):525–37 (22 ref.)
Ivermectin and piperazine toxicoses in dogs and cats. Lovell RA. Vet Clin North Am Small Anim Pract 1990 Mar; 20(2):453–68 (108 ref.)
Toxicoses from over-the-counter human drugs. Papich MG. Vet Clin North Am Small Anim Pract 1990 Mar; 20(2):431–51 (27 ref.)
Toxicology of selected pesticides, drugs, and chemicals. Zinc. Robinette CL. Vet Clin North Am Small Anim Pract 1990 Mar;20(2):539–44 (13 ref.)
Toxicology of selected pesticides, drugs, and chemicals. Short-chain alcohols. Valentine WM.
Vet Clin North Am Small Anim Pract 1990 Mar; 20(2):515–23 (28 ref.)
Toxicology of selected pesticides, drugs, and chemicals. Pyrethrin and pyrethroid insecticides. Valentine WM.
Vet Clin North Am Small Anim Pract 1990 Mar; 20(2):375–82 (18 ref.)
A case of chlordane poisoning in two dogs and a cat. Staley E, et al. Vet Hum Toxicol 1990 Feb;32(1):57
Respiratory obstruction after anaesthesia [letter] [see comments] Hale GJ. Vet Rec 1989 Aug 19;125(8):211–2 Comment in: Vet Rec 1989 Sep 9;125(11):308–9.
Respiratory obstruction after anaesthesia [letter; comment] Taylor PC. Vet Rec 1989 Sep 9;125(11):308–9 Comment on: Vet Rec 1989 Aug 19;125(8):211–2.

CLASSIFICATION

Clinical staging of feline immunodeficiency virus infection. Ishida T, et al. Nippon Juigaku Zasshi 1990 Jun;52(3):645–8

CONGENITAL

Portosystemic shunts. Semin Vet Med Surg (Small Anim) 1990 May;5(2):75–141

DIAGNOSIS

Diagnosis of recent Toxoplasma gondii infection in cats by use of an enzyme-linked immunosorbent assay for immunoglobulin M. Lappin MR, et al. Am J Vet Res 1989 Sep;50(9):1580–5
Enzyme-linked immunosorbent assay for the detection of circulating antigens of Toxoplasma gondii in the serum of cats. Lappin MR, et al. Am J Vet Res 1989 Sep; 50(9):1586–90
Demonstration of feline infectious peritonitis virus in conjunctival epithelial cells from cats. A simple and reliable method for clinical veterinary virology screening. Hök K. APMIS 1989 Sep;97(9):820–4
Sensitivity, specificity, and predictive values of ClinEase-Virastat saliva test for feline leukemia virus infection. Lopez NA, et al. Cornell Vet 1990 Jan; 80(1):75–84
What is your diagnosis? Generalized enlargement of the kidneys with ventral displacement of abdominal viscera. Avgeris S, et al. J Am Vet Med Assoc 1990 Jul 15; 197(2):261–2
ECG of the month. Goodwin JK. J Am Vet Med Assoc 1990 Apr 1;196(7):1044–5
Clinical, echocardiographic, and radiographic findings of peritoneopericardial diaphragmatic hernia in two dogs and a cat. Hay WH, et al. J Am Vet Med Assoc 1989 Nov 1;195(9):1245–8
On interpretation of feline leukemia test results [letter; comment] Kass PH. J Am Vet Med Assoc 1989 Dec 15; 195(12):1680 Comment on: J Am Vet Med Assoc 1989 Oct 1;195(7):928–30.
False-positive reactions associated with anti-mouse activity in serotests for feline leukemia virus antigen. Lopez NA, et al. J Am Vet Med Assoc 1989 Sep 15;195(6):741–6
Sensitivity and specificity of blood test kits for feline leukemia virus antigen. Lopez NA, et al. J Am Vet Med Assoc 1989 Sep 15;195(6):747–51
What is your diagnosis? Mixed echoic parenchymal pattern and the presence of target lesions consistent with neoplastic masses. Love NE, et al. J Am Vet Med Assoc 1989 Nov 1;195(9):1285–6
Clinical evaluation of a cryptococcal antigen latex agglutination test for diagnosis of cryptococcosis in cats. Medleau L, et al. J Am Vet Med Assoc 1990 May 1; 196(9):1470–3
Interpreting feline leukemia test results [see comments] Romatowski J. J Am Vet Med Assoc 1989 Oct 1; 195(7):928–30 Comment in: J Am Vet Med Assoc 1989 Dec 15;195(12):1680. Comment in: J Am Vet Med Assoc 1990 Jan 1;196(1):10–1.
Acquired myasthenia gravis in a cat with thymoma. Scott-Moncrieff JC, et al. J Am Vet Med Assoc 1990 Apr 15;196(8):1291–3
Difficult dermatologic diagnosis. Pruritus caused by food hypersensitivity in a cat. White SD.
J Am Vet Med Assoc 1990 Jan 15;196(2):225
Fecal proteolytic activity in clinically normal cats and in a cat with exocrine pancreatic insufficiency. Williams DA, et al. J Am Vet Med Assoc 1990 Jul 15;197(2):210–2
BSE: spongiform encephalopathy found in cat [news] Aldhous P. Nature 1990 May 17;345(6272):194
Clinical management of the cancer patient. Taking a biopsy. Carter RF, et al. Vet Clin North Am Small Anim Pract 1990 Jul;20(4):939–68 (5 ref.)
Diagnostic parasitology. Foreyt WJ.
Vet Clin North Am Small Anim Pract 1989 Sep; 19(5):979–1000 (76 ref.)
Clinical approach to tumors of the skin and subcutaneous tissues. Moriello KA, et al.
Vet Clin North Am Small Anim Pract 1990 Jul;

20(4):1163–90 (23 ref.)
Cytology of the respiratory tract. Rakich PM, et al. **Vet Clin North Am Small Anim Pract** 1989 Sep;19(5):823–50 (59 ref.)
The cytologic diagnosis of neoplasia. Wellman ML. **Vet Clin North Am Small Anim Pract** 1990 Jul;20(4):919–38 (37 ref.)
Blood tests for FIP [letter; comment] Bartkoski MJ Jr. **Vet Rec** 1990 Mar 17;126(11):272–3 Comment on: Vet Rec 1990 Feb 10;126(6):150.
Skin diseases of old dogs and cats. Halliwell RE. **Vet Rec** 1990 Apr 21;126(16):389–94 (15 ref.)
Ultrasonographic diagnosis of peritoneopericardial diaphragmatic hernia in a Persian cat. Lamb CR, et al. **Vet Rec** 1989 Aug 19;125(8):186
[Poxvirus infection in a cat] Ballauf B, et al. **Tierarztl Prax** 1989;17(4):408–11 (Eng. Abstr.) **(Ger)**
[The clinical case. Corneal ulcer, superficial and deep keratitis and acute iritis] Köstlin R, et al. **Tierarztl Prax** 1989; 17(4):352, 430–1 **(Ger)**
[Abdominal sonography in small animals. II. Examination technics] Lohss E. **Tierarztl Prax** 1989;17(3):313–8 (Eng. Abstr.) **(Ger)**
[Esophagoscopy and gastroscopy in dogs and cats. Technics and indications] Münster M, et al. **Tierarztl Prax** 1990 Feb; 18(1):53–60 (Eng. Abstr.) **(Ger)**

DIET THERAPY

Medical dissolution of feline struvite urocystoliths. Osborne CA, et al. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1053–63

DRUG THERAPY

Evaluation of ketoconazole and itraconazole for treatment of disseminated cryptococcosis in cats. Medleau L, et al. **Am J Vet Res** 1990 Sep;51(9):1454–8
Evaluation of the efficacy and safety of two formulations of pyrantel pamoate in cats. Reinemeyer CR, et al. **Am J Vet Res** 1990 Jun;51(6):932–4
Efficacy of digoxin for treatment of cats with dilated cardiomyopathy. Atkins CE, et al. **J Am Vet Med Assoc** 1990 May 1;196(9):1463–9
Drug therapy in cats: mechanisms and avoidance of adverse drug reactions. Boothe DM. **J Am Vet Med Assoc** 1990 Apr 15;196(8):1297–305 (47 ref.)
Drug therapy in cats: a therapeutic category approach [published erratum appears in J Am Vet Med Assoc 1990 Jul 15;197(2):242] Boothe DM. **J Am Vet Med Assoc** 1990 May 15;196(10):1659–69 (102 ref.)
Drug therapy in cats: recommended dosing regimens. Boothe DM. **J Am Vet Med Assoc** 1990 Jun 1;196(11):1845–50 (78 ref.)
Drug therapy in cats: a systems approach [published erratum appears in J Am Vet Med Assoc 1990 Jul 1;197(1):83] Boothe DM. **J Am Vet Med Assoc** 1990 May 1; 196(9):1502–11 (71 ref.)
Infiltrative cardiomyopathy responsive to combination chemotherapy in a cat with lymphoma. Brummer DG, et al. **J Am Vet Med Assoc** 1989 Oct 15;195(8):1116–9
Efficacy of chlorpheniramine maleate for management of pruritus in cats. Miller WH Jr, et al. **J Am Vet Med Assoc** 1990 Jul 1;197(1):67–70
Medical management of recurrent seizures in dogs and cats. Lane SB, et al. **J Vet Intern Med** 1990 Jan–Feb;4(1):26–39 (189 ref.)
Medical management of recurrent seizures in dogs and cats [letter] Sisson A. **J Vet Intern Med** 1990 May–Jun;4(3):181
Clinical pharmacology of antiemetic and antiulcer drugs. Forrester SD, et al. **Semin Vet Med Surg (Small Anim)** 1989 Aug;4(3):194–201 (43 ref.)
Management of complications of cancer chemotherapy. Couto CG. **Vet Clin North Am Small Anim Pract** 1990 Jul;20(4):1037–53 (57 ref.)
Adjuvant chemotherapy for sarcomas and carcinomas. Hammer AS, et al. **Vet Clin North Am Small Anim Pract** 1990 Jul; 20(4):1015–36 (59 ref.)
Clinical management of the cancer patient. Principles and applications of chemotherapy. Helfand SC. **Vet Clin North Am Small Anim Pract** 1990 Jul; 20(4):987–1013 (61 ref.)
Control of ocular inflammation. Wilkie DA. **Vet Clin North Am Small Anim Pract** 1990 May; 20(3):693–713 (52 ref.)
Treatment of experimentally induced cytauxzoonosis in cats with parvaquone and buparvaquone. Motzel SL, et al. **Vet Parasitol** 1990 Feb;35(1–2):131–8
Use of ear drops [letter] Pott JM. **Vet Rec** 1990 Jul 21; 127(3):72
Treatment for FIV? [letter] Smyth NR, et al. **Vet Rec** 1990 Apr 21;126(16):409–10
Product advertisement [letter] Speak SC. **Vet Rec** 1990 May 26;126(21):537–8

ENZYMOLOGY

Enzymological characterization of a feline analogue of primary hyperoxaluria type 2: a model for the human disease. Danpure CJ, et al. **J Inherited Metab Dis** 1989; 12(4):403–14

EPIDEMIOLOGY

A survey of the feline leukaemia virus in Singapore. Chew-Lim M, et al. **Ann Acad Med Singapore** 1989 Nov; 18(6):646–8
Seroepidemiology of Q fever among cats in New Brunswick and Prince Edward Island. Higgins D, et al. **Ann N Y Acad Sci** 1990;590:271–4
Feline immunodeficiency virus: prevalence, disease associations and isolation. Friend SC, et al. **Aust Vet J** 1990 Jul;67(7):237–43
A review of cases submitted to Murdoch University for immunodiagnostic testing: 1978–1989. Penhale WJ, et al. **Aust Vet J** 1990 Apr;67(4):148–9
Epizootiologic association between feline immunodeficiency virus infection and feline leukemia virus seropositivity. Cohen ND, et al. **J Am Vet Med Assoc** 1990 Jul 15; 197(2):220–5
Epidemiologic factors, clinical findings, and vaccination status of rabies in cats and dogs in the United States in 1988. National Study Group on Rabies. Eng TR, et al. **J Am Vet Med Assoc** 1990 Jul 15;197(2):201–9
Risk factors for Haemobartonella felis infection in cats. Grindem CB, et al. **J Am Vet Med Assoc** 1990 Jan 1; 196(1):96–9
Epizootiologic evaluation and quantitative analysis of urinary calculi from 150 cats. Ling GV, et al. **J Am Vet Med Assoc** 1990 May 1;196(9):1459–62
A survey of helminths in domestic cats in the Pretoria area of Transvaal, Republic of South Africa. Part 1: The prevalence and comparison of burdens of helminths in adult and juvenile cats. Baker MK, et al. **J S Afr Vet Assoc** 1989 Sep;60(3):139–42
Prevalence of Cryptosporidium infection among domestic cats in the Tokyo Metropolitan District, Japan. Arai H, et al. **Jpn J Med Sci Biol** 1990 Feb;43(1):7–14
Existence of feline immunodeficiency virus infection in Japanese cat population since 1968. Furuya T, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):891–3
Retrospective serosurvey for feline immunodeficiency virus infection in Japanese cats. Ishida T, et al. **Nippon Juigaku Zasshi** 1990 Apr;52(2):453–4
Prevalence of Toxoplasma gondii infection in cats in Georgia using enzyme-linked immunosorbent assays for IgM, IgG, and antigens. Lappin MR, et al. **Vet Parasitol** 1989 Oct; 33(3–4):225–30
Cowpox in cats [letter; comment] **Vet Rec** 1989 Oct 28; 125(18):465 Comment on: Vet Rec 1989 Oct 14;125(16):426.
Cowpox in cats [letter] [see comments] Finn JP. **Vet Rec** 1989 Oct 14;125(16):426 Comment in: Vet Rec 1989 Oct 28;125(18):465.
Prevalence of feline leukaemia virus and antibodies to feline immunodeficiency virus in cats in the United Kingdom. Hosie MJ, et al. **Vet Rec** 1989 Sep 9;125(11):293–7
Feline immunodepressive retrovirus infections in France [letter] Moraillon A. **Vet Rec** 1990 Jan 20;126(3):68–9
[Feline immunodeficiency virus in Switzerland: clinical aspects and epidemiology in comparison with feline leukemia virus and coronaviruses] Lutz H, et al. **Schweiz Arch Tierheilkd** 1990;132(5):217–25 (Eng. Abstr.) **(Ger)**
[The dynamics of the epidemic process in weakly endemic foci of opisthorchiasis in Kazakhstan] Gorbunova LA, et al. **Med Parazitol (Mosk)** 1989 Sep–Oct;(5):57–60 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Clinicopathologic analysis of herpesvirus-induced urinary tract infection in specific-pathogen-free cats given methylprednisolone. Kruger JM, et al. **Am J Vet Res** 1990 Jun;51(6):878–85
Hypokalemia in the cat. Jones BR, et al. **Cornell Vet** 1990 Jan;80(1):13–6 (22 ref.)
Bone fragility in a kitten: an osteogenesis imperfecta-like syndrome. Cohn LA, et al. **J Am Vet Med Assoc** 1990 Jul 1;197(1):98–100
Questions wisdom of using modified-live virus vaccines as boosters [letter] Craige JE. **J Am Vet Med Assoc** 1990 Aug 1;197(3):297–8
Intraocular disease associated with feline immunodeficiency virus infection in cats. English RV, et al. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1116–9
Primary hypoparathyroidism in a cat. Forbes S, et al. **J Am Vet Med Assoc** 1990 Apr 15;196(8):1285–7
Tick parasitism and antibodies to Borrelia burgdorferi in cats. Magnarelli LA, et al. **J Am Vet Med Assoc** 1990 Jul 1; 197(1):63–6
Squamous cell carcinoma causing blindness and ophthalmoplegia in a cat. Murphy CJ, et al. **J Am Vet Med Assoc** 1989 Oct 1;195(7):965–8
Priapism after castration in a cat. Swalec KM, et al. **J Am Vet Med Assoc** 1989 Oct 1;195(7):963–4
Taurine and arterial thromboembolism [letter] Wysong RL. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1463–4
Hypertension in cats with chronic renal failure or hyperthyroidism. Kobayashi DL, et al. **J Vet Intern Med** 1990 Mar–Apr;4(2):58–62
Miscellaneous myopathies. Luttgen PJ. **Semin Vet Med Surg (Small Anim)** 1989 May;4(2):168–76 (27 ref.)
Qualitative tear film disease. Moore CP. **Vet Clin North Am Small Anim Pract** 1990 May; 20(3):565–81 (61 ref.)
The causes of glaucoma in cats. Wilcock BP, et al. **Vet Pathol** 1990 Jan;27(1):35–40
Investigation begins into cat encephalopathy case [news] **Vet Rec** 1990 May 19;126(20):492
Lameness in kittens after vaccination [letter; comment] Ashford A. **Vet Rec** 1990 Jan 27;126(4):93 Comment on: Vet Rec 1989 Dec 9;125(24):609.
Unusual cause of cat death [letter] Chennells DJ, et al. **Vet Rec** 1989 Aug 26;125(9):246
Lameness in kittens after vaccination [letter] [see comments] Church RE. **Vet Rec** 1989 Dec 9;125(24):609 Comment in: Vet Rec 1990 Jan 6;126(1):22. Comment in: Vet Rec 1990 Jan 27;126(4):93.
Clinical management of tumours in geriatric dogs and cats: systemic effects of tumours and paraneoplastic syndromes. Gorman NT. **Vet Rec** 1990 Apr 21;126(16):395–8
Dermatitis in a cat associated with Spilopsyllus cuniculi [see comments] Harvey RG. **Vet Rec** 1990 Jan 27;126(4):89–90 Comment in: Vet Rec 1990 Mar 10;126(10):249–50.
Lameness in kittens after vaccination [letter] Jones AK. **Vet Rec** 1990 Feb 17;126(7):174
Feline dysautonomia: a request for material [letter] Morgan KL, et al. **Vet Rec** 1989 Aug 19;125(8):213–4
Palatine arterial haemorrhage in a cat [letter] Wildgoose WH. **Vet Rec** 1990 Mar 17;126(11):273
Suspected malignant hyperthermia after halothane anesthesia in a cat. Bellah JR, et al. **Vet Surg** 1989 Nov–Dec; 18(6):483–8
[The Veterinary Service Board. BSE (bovine spongiform encephalopathy)] **Tijdschr Diergeneeskd** 1990 Jun 15; 115(12):603–4 **(Dut)**
[Aujeszky's disease in dogs and cats] Egberink HF. **Tijdschr Diergeneeskd** 1990 Apr 15;115(8):349–53 (26 ref.) (Eng. Abstr.) **(Dut)**
[Stress hyperglycemia in cats] Opitz M. **Berl Munch Tierarztl Wochenschr** 1990 May 1;103(5):151–8 (Eng. Abstr.) **(Ger)**
[Multimorbidity in aged dogs and cats] Kraft W, et al. **Tierarztl Prax** 1990 Apr;18(2):184–91 (Eng. Abstr.) **(Ger)**

GENETICS

Feline muscular dystrophy with dystrophin deficiency. Carpenter JL, et al. **Am J Pathol** 1989 Nov;135(5):909–19
Genetic and serologic analysis of feline cell-associated herpesvirus-induced infection of the urinary tract in conventionally reared cats. Kruger JM, et al. **Am J Vet Res** 1989 Dec;50(12):2023–7
Molecular cloning of feline leukemia provirus genomes integrated in the feline large granular lymphoma cells. Matsumoto Y, et al. **Arch Virol** 1990;111(3–4):177–85
Platelet aggregation and ATP secretion in whole blood of normal cats and cats homozygous and heterozygous for Chediak-Higashi syndrome. Colgan SP, et al. **Blood Cells** 1989;15(3):585–95; discussion 596–600
A combined deficiency of factor VIII and contact activation defect in a family of cats. Littlewood JD, et al. **Br Vet J** 1990 Jan–Feb;146(1):30–5
A household cluster of feline malignant lymphoma. Schneider R, et al. **Cancer Res** 1967 Jul;27(7):1316–22
Amino acid sequence variations in protein AA of cats with high and low incidences of AA amyloidosis. Johnson KH, et al. **Comp Biochem Physiol [B]** 1989;94(4):765–8
Polycystic kidney disease in a family of Persian cats. Biller DS, et al. **J Am Vet Med Assoc** 1990 Apr 15;196(8):1288–90
Cytogenetic analysis in nine leukaemic cats. Grindem CB, et al. **J Comp Pathol** 1989 Jul;101(1):21–30
Premature gonadal failure in female dogs and cats. Johnston SD. **J Reprod Fertil Suppl** 1989;39:65–72 (31 ref.)
flvi-1, a common integration domain of feline leukemia virus in naturally occurring lymphomas of a particular type. Levesque KS, et al. **J Virol** 1990 Jul;64(7):3455–62
Trisomy D2 in a feline neurofibroma. Kalat M, et al. **Res Vet Sci** 1990 Mar;48(2):256
Corneal dystrophy in the dog and cat. Cooley PL, et al. **Vet Clin North Am Small Anim Pract** 1990 May; 20(3):681–92 (38 ref.)

IMMUNOLOGY

Serological responses of cats to feline immunodeficiency virus. Hosie MJ, et al. **AIDS** 1990 Mar;4(3):215–20
An enzyme-linked immunosorbent assay using canine coronavirus-infected CRFK cells as antigen for detection of anti-coronavirus antibody in cat. Mochizuki M, et al. **Comp Immunol Microbiol Infect Dis** 1989;12(4):139–46
Prevalence of disease in nonviremic cats previously exposed to feline leukemia virus. Swenson CL, et al. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1049–52
Serum antibody response to antigens of oral gram-negative bacteria by cats with plasma cell gingivitis-pharyngitis. Sims TJ, et al. **J Dent Res** 1990 Mar;69(3):877–82
Decrease in mitogen-induced lymphocyte proliferative responses in cats infected with feline immunodeficiency virus. Hara Y, et al. **Nippon Juigaku Zasshi** 1990 Jun; 52(3):573–9
Enhancement of neutralizing activity of anti-feline herpesvirus type 1 sera by complement supplementation. Horimoto T, et al. **Nippon Juigaku Zasshi** 1989 Oct; 51(5):1025–7
Experimental feline toxoplasmosis: humoral immune

responses of cats inoculated orally with Toxoplasma gondii cysts and oocysts. Omata Y, et al.
Nippon Juigaku Zasshi 1990 Aug;52(4):865–7

Altered mitogen response of peripheral blood lymphocytes in different stages of feline immunodeficiency virus infection. Taniguchi A, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):513–8

Chemotactic responses of neutrophils in cats with spontaneous feline infectious peritonitis. Tsuji M, et al.
Nippon Juigaku Zasshi 1989 Oct;51(5):917–23

Effect of Toxoplasma lysate antigen (TLA) on feline cytotoxicity against FeLV positive lymphoma cells. Yang MP, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):735–42

Evaluation of immunity to feline infectious peritonitis in cats with cutaneous viral-induced delayed hypersensitivity. Weiss RC, et al. **Vet Immunol Immunopathol** 1989 Jul; 21(3–4):293–309

Vaccination during URT disease in kittens [letter] Morris TH. **Vet Rec** 1990 Mar 10;126(10):250

Blood tests for FIP [letter; comment] Sparkes AH, et al. **Vet Rec** 1990 Mar 3;126(9):225 Comment on: Vet Rec 1990 Feb 10;126(6):150.

METABOLISM

Effects of compensated heart failure on digoxin pharmacokinetics in cats. Atkins CE, et al.
J Am Vet Med Assoc 1989 Oct 1;195(7):945–50

Metabolic and endocrine myopathies of dogs and cats. LeCouteur RA, et al.
Semin Vet Med Surg (Small Anim) 1989 May;4(2):146–55 (92 ref.)

Nutrition and cancer. Recent developments. Ogilvie GK, et al. **Vet Clin North Am Small Anim Pract** 1990 Jul; 20(4):969–85 (55 ref.)

[The effect of management and psychosocial stress on the fetal and postnatal development of the domestic cat] Bilkei G. **DTW Dtsch Tierarztl Wochenschr** 1990 May;97(5):202–3 (Eng. Abstr.) **(Ger)**

MICROBIOLOGY

Preliminary comparisons of the biological properties of two strains of feline immunodeficiency virus (FIV) isolated in Japan with FIV Petaluma strain isolated in the United States. Miyazawa T, et al. **Arch Virol** 1989;108(1–2):59–68

Feline immunodeficiency virus [editorial] Studdert M.
Aust Vet J 1989 Nov;66(11):suppl 378–9

Isolation and characterisation of a myeloid leukaemia inducing strain of feline leukaemia virus. Tzavaras T, et al. **Hamatol Bluttransfus** 1989;32:347–51

Feline immunodeficiency virus: a neurotropic lentivirus. Dow SW, et al. **J Acquir Immune Defic Syndr** 1990; 3(7):658–68

Feline immunodeficiency virus and feline leukemia virus infections and their relationships to lymphoid malignancies in cats: a retrospective study (1968–1988). Shelton GH, et al. **J Acquir Immune Defic Syndr** 1990;3(6):623–30

Characterization of reverse transcriptase from feline immunodeficiency virus. North TW, et al. **J Biol Chem** 1990 Mar 25;265(9):5121–8

Argyrophilic, intracellular bacteria in some cats with idiopathic peripheral lymphadenopathy. Kirkpatrick CE, et al. **J Comp Pathol** 1989 Oct;101(3):341–9

Molecular cloning and characterization of a defective recombinant feline leukaemia virus associated with myeloid leukaemia. Tzavaras T, et al. **J Gen Virol** 1990 Feb;71 (Pt 2):343–54

Phaeohyphomycosis caused by Exophiala spinifera in two cats. Kettlewell P, et al. **J Med Vet Mycol** 1989; 27(4):257–64

The role of viruses in feline lower urinary tract disease. Kruger JM, et al. **J Vet Intern Med** 1990 Mar–Apr; 4(2):71–8 (45 ref.)

Early death after feline infectious peritonitis virus challenge due to recombinant vaccinia virus immunization. Vennema H, et al. **J Virol** 1990 Mar;64(3):1407–9

Induction of aplastic anemia by intra-bone marrow inoculation of a molecularly cloned feline retrovirus. Dorsaife RE, et al. **Leuk Res** 1989;13(9):745–55

Dermatophytes and keratinophilic fungi in cats and dogs. Caretta G, et al. **Mycoses** 1989 Dec;32(12):620–6

Horizontal transmission of feline leukaemia virus. Hardy WD Jr, et al. **Nature** 1973 Aug 3;244(5414):266–9

Clinico-microbiological study of the normal and otitic external ear canals in dogs and cats. Uchida Y, et al.
Nippon Juigaku Zasshi 1990 Apr;52(2):415–7

Sites of persistence of feline calicivirus. Dick CP, et al.
Res Vet Sci 1989 Nov;47(3):367–73

Microbiology of the canine and feline eye. Gerding PA Jr, et al. **Vet Clin North Am Small Anim Pract** 1990 May; 20(3):615–25 (44 ref.)

Feline retroviruses: a brief review. Lutz H. **Vet Microbiol** 1990 Jun;23(1–4):131–46 (93 ref.)

Feline anaemia associated with Ehrlichia-like bodies in three domestic short-haired cats. Buoro IB, et al. **Vet Rec** 1989 Oct 21;125(17):434–6

Lameness in kittens after vaccination [letter; comment] Dawson S, et al. **Vet Rec** 1990 Jan 6;126(1):22 Comment on: Vet Rec 1989 Dec 9;125(24):609.

[AIDS in cats harmless for people (news)]
Schweiz Rundsch Med Prax 1989 Oct 3;78(40):following 1100 **(Ger)**

[The occurrence of Clostridium difficile in fecal samples of dogs and cats] Weber A, et al.
Zentralbl Veterinarmed [B] 1989 Oct;36(8):568–76 (Eng. Abstr.) **(Ger)**

PARASITOLOGY

Echinococcus multilocularis: a rare cestode of the domestic cat in France. Deblock S, et al. **Int J Parasitol** 1989 Sep; 19(6):687–8

Ultrastructure of tachyzoites, bradyzoites and tissue cysts of Neospora caninum. Speer CA, et al. **J Protozool** 1989 Sep–Oct;36(5):458–63

Host association, on-host longevity and egg production of Ctenocephalides felis felis. Dryden MW. **Vet Parasitol** 1989 Nov;34(1–2):117–22

Spirometra sp. in a domestic cat in India. Saleque A, et al.
Vet Parasitol 1990 Mar;35(3):273–6

Feline pinnal dermatitis [letter; comment] White SM.
Vet Rec 1990 Mar 10;126(10):249–50 Comment on: Vet Rec 1990 Jan 27;126(4):89–90.

PATHOLOGY

Neurovisceral sphingomyelinosis in a Siamese cat. Yamagami T, et al. **Acta Neuropathol (Berl)** 1989;79(3):330–2

Niemann-Pick disease. Sphingomyelinosis of Siamese cats. Snyder SP, et al. **Am J Pathol** 1982 Aug;108(2):252–4

Effects of inflammation and aqueous tear film deficiency on conjunctival morphology and ocular mucus composition in cats. Johnson BW, et al. **Am J Vet Res** 1990 May; 51(5):820–4

Lack of autologous tissue transmission of eosinophilic plaques in cats. Moriello KA, et al. **Am J Vet Res** 1990 Jul; 51(7):995–8

Chordoma in a cat. Carpenter JL, et al.
J Am Vet Med Assoc 1990 Jul 15;197(2):240–2

Myelitis in a cat infected with Toxoplasma gondii and feline immunodeficiency virus. Heidel JR, et al.
J Am Vet Med Assoc 1990 Jan 15;196(2):316–8

Generalized lentigines in a silver cat. Nash S, et al.
J Am Vet Med Assoc 1990 May 1;196(9):1500–1

Extra-adrenal pheochromocytoma (paraganglioma) in a cat. Patnaik AK, et al. **J Am Vet Med Assoc** 1990 Jul 1; 197(1):104–6

Comparisons between endoscopic and histologic evaluation of the gastrointestinal tract in dogs and cats: 75 cases (1984–1987). Roth L, et al. **J Am Vet Med Assoc** 1990 Feb 15;196(4):635–8

An aortic body carcinoma with multifocal thoracic metastases in a cat. George C, et al. **J Comp Pathol** 1989 Nov;101(4):467–9

The dilated pore of Winer—an overlooked cutaneous lesion of cats. Luther PB, et al. **J Comp Pathol** 1989 Nov; 101(4):375–9

The ultrastructural pathology of five lipoprotein lipase-deficient cats. Thompson JC, et al.
J Comp Pathol 1989 Oct;101(3):251–62

The use of keratin antisera in the characterization of a feline thymoma. Vos JH, et al. **J Comp Pathol** 1990 Jan; 102(1):71–7

Tonsillar granular cell tumour in a cat. Wilson RB, et al.
J Comp Pathol 1989 Jul;101(1):109–12

Feline sporotrichosis: a case report. Gonzalez Cabo JF, et al. **Mycopathologia** 1989 Dec;108(3):149–54

Globule leukocyte neoplasm in a cat. Kariya K, et al.
Nippon Juigaku Zasshi 1990 Apr;52(2):403–5

Pathological observation of six cases of feline diabetes mellitus. Nakayama H, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):819–22

Clinical pathology: part II.
Vet Clin North Am Small Anim Pract 1989 Sep; 19(5):823–1006

Ocular neoplasia in small animals. Dubielzig RR.
Vet Clin North Am Small Anim Pract 1990 May; 20(3):837–48 (14 ref.)

Clinical and morphologic features of post-traumatic ocular sarcomas in cats. Dubielzig RR, et al. **Vet Pathol** 1990 Jan; 27(1):62–5

Esophageal neuroendocrine carcinoma in a cat. Patnaik AK, et al. **Vet Pathol** 1990 Mar;27(2):128–30

[Eosinophilic enteritis in a domestic cat] Badura A, et al.
Tierarztl Prax 1989;17(4):412–4 (Eng. Abstr.) **(Ger)**

[Myocardial infarction in the cat] Guarda F, et al.
Schweiz Arch Tierheilkd 1990;132(3):131–4 (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

Use of relaxation half-time as an index of ventricular relaxation in clinically normal cats and cats with hypertrophic cardiomyopathy. Golden AL, et al.
Am J Vet Res 1990 Sep;51(9):1352–6

Polyneuropathy in feline Niemann-Pick disease. Cuddon PA, et al. **Brain** 1989 Dec;112 (Pt 6):1429–43

ECG of the month. Idiopathic hypertrophic cardiomyopathy in a cat. Robbins MA, et al. **J Am Vet Med Assoc** 1990 Jun 1;196(11):1786–7

IL-6 activity in feline infectious peritonitis. Goitsuka R, et al. **J Immunol** 1990 Apr 1;144(7):2599–603

The autonomic nervous system: functions and dysfunctions.
Semin Vet Med Surg (Small Anim) 1990 Feb;5(1):1–74

Pathophysiology of hepatic encephalopathy. Hardy RM.
Semin Vet Med Surg (Small Anim) 1990 May;5(2):100–6 (27 ref.)

Biochemical evaluation of the hepatobiliary system in dogs and cats. Sutherland RJ.
Vet Clin North Am Small Anim Pract 1989 Sep; 19(5):899–927 (105 ref.)

PREVENTION & CONTROL

Effect of interferon or Propionibacterium acnes on the course of experimentally induced feline infectious peritonitis in specific-pathogen-free and random-source cats. Weiss RC, et al. **Am J Vet Res** 1990 May;51(5):726–33

Organophosphorus hazard to pet grooms [letter] Turner AJ.
Aust Vet J 1990 Apr;67(4):N121

Should cats be vaccinated for feline leukemia? Scarlett JM.
Cornell Vet 1990 Jul;80(3):237–42 (9 ref.)

Rabies prevention in Hawaii. Fishbein DB, et al.
Hawaii Med J 1990 Mar;49(3):98–101

Opposing viewpoints on efficacy of ultrasonic flea collars [letter; comment] Bonge NJ. **J Am Vet Med Assoc** 1990 May 1;196(9):1354–5 Comment on: J Am Vet Med Assoc 1989 Dec 15;195(12):1717–8.

Effects of ultrasonic flea collars on Ctenocephalides felis on cats [see comments] Dryden MW, et al.
J Am Vet Med Assoc 1989 Dec 15;195(12):1717–8 Comment in: J Am Vet Med Assoc 1990 Mar 15;196(6):833–4. Comment in: J Am Vet Med Assoc 1990 May 1;196(9):1354–5.

Randomized blind trial of a commercial FeLV vaccine. Pollock RV, et al. **J Am Vet Med Assoc** 1990 Feb 15; 196(4):611–6

Efficacy of a feline leukemia virus vaccine in a natural exposure challenge. Legendre AM, et al.
J Vet Intern Med 1990 Mar–Apr;4(2):92–8

Evaluation of immunosuppressive effect and efficacy of an improved-potency feline leukaemia vaccine. Haffer KN, et al. **Vaccine** 1990 Feb;8(1):12–6

Control of feline coronavirus infection in kittens. Addie DD, et al. **Vet Rec** 1990 Feb 17;126(7):164

[Parvovirus infections in dogs and cats: problems of immunization] Mayr A. **Tierarztl Prax** 1989;17(4):399–402 (9 ref.) (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Cross species applicability of psychiatric diagnosis and treatment [see comments] Montague LR. **BMJ** 1989 Dec 23–30;299(6715):1569 Comment in: BMJ 1990 Jan 20;300(6718):197.

Cross species applicability of psychiatric diagnosis and treatment [letter; comment] O'Farrell V. **BMJ** 1990 Jan 20;300(6718):197 Comment on: BMJ 1989 Dec 23–30;299(6715):1569.

RADIOGRAPHY

What is your diagnosis? Duodenal obstruction. Downs MO, et al. **J Am Vet Med Assoc** 1990 Jul 1;197(1):119–20

What is your diagnosis? Penile urethral stricture, with dilation of the proximal portion of the urethra. Fucci V.
J Am Vet Med Assoc 1989 Oct 1;195(7):999–1000

What is your diagnosis? Diaphragmatic hernia with displacement of the stomach into the thorax. Hodges CC, et al. **J Am Vet Med Assoc** 1989 Oct 1;195(7):1000–1

Acromegaly in 14 cats. Peterson ME, et al.
J Vet Intern Med 1990 Jul–Aug;4(4):192–201

Radiographic diagnosis of esophageal diseases in dogs and cats. Stickle RL, et al.
Semin Vet Med Surg (Small Anim) 1989 Aug;4(3):179–87 (22 ref.)

[A non-systemic skeletal disease in a cat—a case report] Röcken H. **Berl Munch Tierarztl Wochenschr** 1990 Mar 1;103(3):90–1 (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

Clinical indications and applications of radiotherapy and hyperthermia in veterinary oncology. Page RL, et al.
Vet Clin North Am Small Anim Pract 1990 Jul; 20(4):1075–92 (74 ref.)

SURGERY

Surgically induced tumor seeding in eight dogs and two cats. Gilson SD, et al. **J Am Vet Med Assoc** 1990 Jun 1; 196(11):1811–5

Long-term survival of a cat receiving a renal allograft from an unrelated donor. Gregory CR, et al.
J Vet Intern Med 1990 Jan–Feb;4(1):1–3

Surgical treatment of priapism observed in a dog and a cat. Orima H, et al. **Nippon Juigaku Zasshi** 1989 Dec; 51(6):1227–9

Aggressive surgery in the management of oral neoplasia. Birchard S, et al. **Vet Clin North Am Small Anim Pract** 1990 Jul;20(4):1117–40 (29 ref.)

Hiatus hernia in a cat [letter] Brinkley CH. **Vet Rec** 1990 Jul 14;127(2):46–7

Respiratory distress in a cat [letter] Lyons WR. **Vet Rec** 1989 Oct 7;125(15):406

Respiratory distress in a cat [letter] Townsend CJ, et al.
Vet Rec 1989 Dec 16;125(25):630

Enteric function in cats after subtotal colectomy for treatment of megacolon. Gregory CR, et al. **Vet Surg** 1990 May-Jun;19(3):216–20

Hiatal hernia repair by restoration and stabilization of normal

anatomy. An evaluation in four dogs and one cat. Prymak C, et al. **Vet Surg** 1989 Sep–Oct;18(5):386–91
Occurrence of problems after three techniques of bilateral thyroidectomy in cats. Welches CD, et al. **Vet Surg** 1989 Sep–Oct;18(5):392–6
[Enlargement of the transverse diameter of the pelvis in a cat] Huber E, et al. **Schweiz Arch Tierheilkd** 1990; 132(2):65–7 (Eng. Abstr.) **(Fre)**
[Fibrosarcoma of the nasal surface in a cat—cosmetically pleasing healing after surgical removal] Neumann W, et al. **Tierarztl Prax** 1990 Jun;18(3):289–92 (Eng. Abstr.) **(Ger)**

THERAPY

Mast cell tumor destruction by deionized water. Grier RL, et al. **Am J Vet Res** 1990 Jul;51(7):1116–20
Biological effects of staphylococcal protein A immunotherapy in cats with induced feline leukemia virus infection. Lafrado LJ, et al. **Am J Vet Res** 1990 Mar; 51(3):482–6
Small-volume resuscitation with hypertonic saline solution in hypovolemic cats. Muir WW 3d, et al. **Am J Vet Res** 1989 Nov;50(11):1883–8
Peritoneal dialysis in dogs and cats: 27 cases (1976–1987). Crisp MS, et al. **J Am Vet Med Assoc** 1989 Nov 1; 195(9):1262–6
Clarification of iodine lavage solution for treatment of peritonitis [letter] DiBartola SP. **J Am Vet Med Assoc** 1990 Jul 15;197(2):168
Enteral and parenteral nutritional support in dogs and cats with gastrointestinal disease. Lippert AC. **Semin Vet Med Surg (Small Anim)** 1989 Aug;4(3):232–40 (76 ref.)
Medical management of animals with portosystemic shunts. Taboada J. **Semin Vet Med Surg (Small Anim)** 1990 May; 5(2):107–19 (104 ref.)
Enteral nutrition by tube. Armstrong PJ, et al. **Vet Clin North Am Small Anim Pract** 1990 Jan;20(1):237–75 (109 ref.)
Fluid and electrolyte balance in critical patients. Garvey MS. **Vet Clin North Am Small Anim Pract** 1989 Nov; 19(6):1021–57 (60 ref.)
Ulcerative keratitis. Kern TJ. **Vet Clin North Am Small Anim Pract** 1990 May; 20(3):643–66 (39 ref.)
Biologic response modifiers: the future of cancer therapy? MacEwen EG. **Vet Clin North Am Small Anim Pract** 1990 Jul;20(4):1055–73 (78 ref.)
Brain hypoperfusion post-resuscitation. Muir WW. **Vet Clin North Am Small Anim Pract** 1989 Nov; 19(6):1151–66 (56 ref.)
[Small intestinal ileus in the dog and cat—catamnestic observations of 704 patients] Böhmer E, et al. **Tierarztl Prax** 1990 Apr;18(2):171–83 (Eng. Abstr.) **(Ger)**

TRANSMISSION

Ocular cowpox: transmission from the domestic cat to man. O'Connor GM, et al. **Br J Ophthalmol** 1990 Apr; 74(4):245–6
Cat—a source of human parasitic infection. Sur SK, et al. **Indian J Public Health** 1988 Oct–Dec;32(4):211
Intestinal cryptosporidiosis acquired from a cat. Egger M, et al. **Infection** 1990 May–Jun;18(3):177–8
Transmission of toxoplasmosis and the role of immunity in limiting transmission and illness. Frenkel JK. **J Am Vet Med Assoc** 1990 Jan 15;196(2):233–40 (49 ref.)
Transplacental Neospora caninum infection in cats. Dubey JP, et al. **J Parasitol** 1989 Oct;75(5):765–71
BSE in perspective [editorial] **Lancet** 1990 May 26; 335(8700):1252–3
Horizontal transmission of feline leukaemia virus. Hardy WD Jr, et al. **Nature** 1973 Aug 3;244(5414):266–9
Isospora felis: possible evidence for transmission of parasites from chronically infected mother cats to kittens. Omata Y, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):665–6
Human catpox/cowpox infection [letter] Yirrell DL, et al. **Vet Rec** 1990 Jul 7;127(1):24
[Feline sporotrichosis: clinical and zoonotic aspects] Larsson CE, et al. **Rev Inst Med Trop Sao Paulo** 1989 Sep–Oct; 31(5):351–8 (Eng. Abstr.) **(Por)**

CAT ENZYME see **CHLORAMPHENICOL ACETYLTRANSFERASE**

CAT LEUKEMIA VIRUS see **FELINE LEUKEMIA VIRUS**

CAT SCAN, RADIONUCLIDE see **TOMOGRAPHY, EMISSION-COMPUTED**

CAT SCAN, X-RAY see **TOMOGRAPHY, X-RAY COMPUTED**

CAT SCANNERS, X-RAY see **TOMOGRAPHY SCANNERS, X-RAY COMPUTED**

CAT-SCRATCH DISEASE

Cat-scratch disease: a review of the literature [published erratum appears in Pediatr Dermatol 1990 Jun;7(2);165] Shinall EA. **Pediatr Dermatol** 1990 Mar;7(1):11–8 (52 ref.)
[Cat-scratch disease] Veljkov N, et al. **Med Arh** 1984; 38(3):133–5 (Eng. Abstr.) **(Scr)**

COMPLICATIONS

Disseminated cat-scratch disease in a patient with AIDS. van der Wouw PA, et al. **AIDS** 1989 Nov;3(11):751–3
Epithelioid angiomatosis secondary to disseminated cat scratch disease involving the bone marrow and skin in a patient with acquired immune deficiency syndrome: a case report. Milam MW, et al. **Am J Med** 1990 Feb;88(2):180–3
Cat-scratch disease with reversible encephalopathy. Melis K, et al. **Eur J Pediatr** 1989 Oct;149(1):24–5
Infection-associated vascular lesions in acquired immunodeficiency syndrome patients. Abrams J, et al. **Hum Pathol** 1989 Oct;20(10):1025–6
Neuroretinitis in cat scratch disease. Chrousos GA, et al. **J Clin Neuro Ophthalmol** 1990 Jun;10(2):92–4
Unusual presentation of cat scratch disease in a patient positive for antibody to the human immunodeficiency virus [clinical conference] Marasco WA, et al. **Rev Infect Dis** 1989 Sep–Oct;11(5):793–803
Epithelioid angiomatosis or cat scratch disease with splenic and hepatic abnormalities in AIDS: case report and review of the literature. Schwartzman WA, et al. **Scand J Infect Dis** 1990;22(2):121–33 (36 ref.)
[Cat-scratch disease associated with osteomyelitis] Karpathios T, et al. **Arch Fr Pediatr** 1990 May;47(5):369–71 (Eng. Abstr.) **(Fre)**
[Corneal abscess caused by Pasteurella following cat scratch injury] Algan M, et al. **Bull Soc Ophtalmol Fr** 1989 Apr; 89(4):581–3 (Eng. Abstr.) **(Fre)**
[Splenic calcification following cat scratch disease] Baratte T, et al. **Pediatrie** 1990;45(5):307–9 (Eng. Abstr.) **(Fre)**
[Feline sporotrichosis: clinical and zoonotic aspects] Larsson CE, et al. **Rev Inst Med Trop Sao Paulo** 1989 Sep–Oct; 31(5):351–8 (Eng. Abstr.) **(Por)**
[Cat scratch disease in a patient with pulmonary tuberculosis] Abashev IM, et al. **Probl Tuberk** 1990;(2):65–7 **(Rus)**

DIAGNOSIS

Culture-proved disseminated cat-scratch disease in acquired immunodeficiency syndrome [letter] Schlossberg D. **Arch Intern Med** 1990 May;150(5):1116
Pathologic quiz case 1. Granulomatous and suppurative lymphadenitis consistent with cat-scratch disease. Boscia R, et al. **Arch Otolaryngol Head Neck Surg** 1990 Feb; 116(2):224–6
Cat scratch disease [letter; comment] Ryan D. **J R Soc Med** 1990 Jan;83(1):59 Comment on: J R Soc Med 1989 Jul;82(7):442.
Cat-scratch encephalopathy presenting as status epilepticus and lymphadenitis. Yagupsky P, et al. **Pediatr Emerg Care** 1990 Mar;6(1):43–5
[Cat-scratch disease] Read D, et al. **Rev Med Liege** 1990 Jan 1;45(1):12–5 (27 ref.) **(Fre)**
[A case report of cat scratch disease which mimicked a metastasis of lung cancer] Huang CL, et al. **Bull Chest Dis Res Inst Kyoto Univ** 1989 Mar;22(1–2):11–8 (Eng. Abstr.) **(Jpn)**
[Cat-scratch disease. Comments on a clinical case] Marin I, et al. **Rev Chir [Otorinolaringol]** 1989 Apr–Jun; 34(2):129–32 (Eng. Abstr.) **(Rum)**

DRUG THERAPY

Cat-scratch disease therapy [letter] Collipp PJ. **Am J Dis Child** 1989 Nov;143(11):1261
Response of HIV-associated disseminated cat scratch disease to treatment with doxycycline. Mui BS, et al. **Am J Med** 1990 Aug;89(2):229–31
[Pefloxacin and cat-scratch disease] Patey O, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):582–4 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Visceral bacillary epithelioid angiomatosis: possible manifestations of disseminated cat scratch disease in the immunocompromised host: a report of two cases. Kemper CA, et al. **Am J Med** 1990 Aug;89(2):216–22

MICROBIOLOGY

Cellular fatty acid compositions of an unidentified organism and a bacterium associated with cat scratch disease. Moss CW, et al. **J Clin Microbiol** 1990 May;28(5):1071–4
[Cat-scratch disease] Schädelin J. **Schweiz Med Wochenschr** 1990 May 19;120(20):738–41 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Cat-scratch disease presenting as abdominal visceral granulomas. Delahoussaye PM, et al. **J Infect Dis** 1990 Jan;161(1):71–8
Cat scratch disease presenting as a lump in the parctid region [see comments] Gallegos NC, et al. **J R Soc Med** 1989 Jul;82(7):442 Comment in: J R Soc Med 1990 Jan;83(1):59.

CATABOLIC GENE ACTIVATORS see **CATABOLITE GENE ACTIVATOR PROTEINS**

CATABOLITE ACTIVATOR PROTEIN see **CATABOLITE GENE ACTIVATOR PROTEINS**

CATABOLITE GENE ACTIVATOR PROTEIN see **CATABOLITE GENE ACTIVATOR PROTEINS**

CATABOLITE GENE ACTIVATOR PROTEINS

Comparative gel electrophoresis measurement of the DNA bend angle induced by the catabolite activator protein. Zinkel SS, et al. **Biopolymers** 1990 Jan;29(1):29–38
Crystallographic studies of protein–nucleic acid interaction: catabolite gene activator protein and the large fragment of DNA polymerase I. Steitz TA, et al. **J Biomol Struct Dyn** 1983 Dec;1(4):1023–37
Crystallization of Escherichia coli catabolite gene activator protein with its DNA binding site. The use of modular DNA. Schultz SC, et al. **J Mol Biol** 1990 May 5; 213(1):159–66

GENETICS

Semisynthetic promoters activated by cyclic AMP receptor protein of Escherichia coli. Aiba H, et al. **Gene** 1989 Dec 21;85(1):91–7
Substitution of 2 base pairs (1 base pair per DNA half-site) within the Escherichia coli lac promoter DNA site for catabolite gene activator protein places the lac promoter in the FNR regulon. Zhang XP, et al. **J Biol Chem** 1990 Jul 25;265(21):12400–3
Identification of a contact between arginine-180 of the catabolite gene activator protein (CAP) and base pair 5 of the DNA site in the CAP-DNA complex. Zhang XP, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4717–21

METABOLISM

Sequence determinants for H1 binding on Escherichia coli lac and gal promoters. Rimsky S, et al. **Biochemistry** 1990 Apr 17;29(15):3765–71
Involvement of activator protein in the activation of tryptophan hydroxylase by cAMP-dependent protein kinase. Makita Y, et al. **FEBS Lett** 1990 Jul 30;268(1):185–8
Induction of the nag regulon of Escherichia coli by N-acetylglucosamine and glucosamine: role of the cyclic AMP-catabolite activator protein complex in expression of the regulon. Plumbridge JA. **J Bacteriol** 1990 May; 172(5):2728–35
Co-operative interactions between the catabolite gene activator protein and the lac repressor at the lactose promoter. Hudson JM, et al. **J Mol Biol** 1990 Jul 20; 214(2):381–96
Consensus DNA site for the Escherichia coli catabolite gene activator protein (CAP): CAP exhibits a 450-fold higher affinity for the consensus DNA site than for the E. coli lac DNA site. Ebright RH, et al. **Nucleic Acids Res** 1989 Dec 25;17(24):10295–305
Lysine 188 of the catabolite gene activator protein (CAP) plays no role in specificity at base pair 7 of the DNA half site [published erratum appears in Nucleic Acids Res 1990 May 25;18(10):3133] Ebright RH, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1457–64
Modulation of the stability of a gene-regulatory protein dimer by DNA and cAMP. Brown AM, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7387–91
Conversion of a helix-turn-helix motif sequence-specific DNA binding protein into a site-specific DNA cleavage agent. Ebright RH, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):2882–6
Application of fluorescence energy transfer and polarization to monitor Escherichia coli cAMP receptor protein and lac promoter interaction. Heyduk T, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1744–8

PHARMACOLOGY

DNA bending induced by the catabolite activator protein allows ring formation of a 144 bp DNA. Dripps D, et al. **J Biomol Struct Dyn** 1987 Aug;5(1):1–13
Transcriptional regulation of the cytR repressor gene of Escherichia coli: autoregulation and positive control by the cAMP/CAP complex. Gerlach P, et al. **Mol Microbiol** 1990 Mar;4(3):479–88
Upstream activating sequences that are shared by two divergently transcribed operons mediate cAMP-CRP regulation of pilus-adhesin in Escherichia coli. Göransson M, et al. **Mol Microbiol** 1989 Nov;3(11):1557–65

CATALASE

Crystallization and preliminary X-ray diffraction analysis of catalase HPII from Escherichia coli. Tormo J, et al. **J Mol Biol** 1990 May 20;213(2):219–20

ADMINISTRATION & DOSAGE

Feline E. coli bacteremia—effects of misoprostol/scavengers or methylprednisolone on hemodynamic reactions and gastrointestinal mucosal injury. Arvidsson S, et al. **Acta Chir Scand** 1990 Mar;156(3):215–21
Evidence against the "early protection-delayed death" hypothesis of superoxide dismutase therapy in experimental myocardial infarction. Polyethylene glycol-superoxide dismutase plus catalase does not limit myocardial infarct size in dogs. Tanaka M, et al. **Circ Res** 1990 Sep; 67(3):636–44

ANALYSIS

Immunohistochemical localization of antioxidant enzymes in adult Syrian hamster tissues and during kidney development. Oberley TD, et al. **Am J Pathol** 1990 Jul; 137(1):199–214

Automated assays for superoxide dismutase, catalase, glutathione peroxidase, and glutathione reductase activity. Wheeler CR, et al. **Anal Biochem** 1990 Feb 1;184(2):193–9

Immunohistochemical localization of peroxidative enzymes in ocular tissue. Atalla LR, et al. **CLAO J** 1990 Jan–Mar; 16(1 Suppl):S30–3 (13 ref.)

Similarities between catalase and cytosolic epoxide hydrolase. Guenthner TM, et al. **Drug Metab Rev** 1989;20(2–4):733–48

Superoxol and aminopeptidase tests for identification of pathogenic Neisseria species and Moraxella (Branhamella) catarrhalis. Pérez JL, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jun;9(6):421–4

Prenatal diagnosis of Zellweger syndrome by direct visualization of peroxisomes in chorionic villus fibroblasts by immunofluorescence microscopy. Wanders RJ, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:301–4

Histochemical localization of catalase in cultured lens epithelial cells. Mancini MA, et al. **Ophthalmic Res** 1989; 21(5):369–73

ANTAGONISTS & INHIBITORS

The inhibition of catalase by glutathione. Sun Y, et al. **Free Radic Biol Med** 1989;7(6):595–602

Selective inhibition of cytosolic epoxide hydrolase activity in vitro by compounds that inhibit catalase. Guenthner TM, et al. **J Biochem Toxicol** 1989 Winter;4(4):241–9

Changes on cerebral antioxidant enzymes, peroxidation, and the glutathione system of frogs after aging and catalase inhibition. Barja de Quiroga G, et al. **J Neurosci Res** 1990 Jul;26(3):370–6

Inhibition of catalase and epoxide hydrolase by the renal cystogen 2-amino-4,5-diphenylthiazole and its metabolites. Hjelle JT, et al. **Toxicology** 1990 Mar 16;60(3):211–22

Effects of nickel on catalase activity in vitro and in vivo. Rodriguez RE, et al. **Toxicology** 1990 Jul;63(1):45–52

BIOSYNTHESIS

Biogenesis of catalase in glyoxysomes and leaf-type peroxisomes of sunflower cotyledons. Eising R, et al. **Arch Biochem Biophys** 1990 Apr;278(1):258–64

Two temporally synthesized charge subunits interact to form the five isoforms of cottonseed (Gossypium hirsutum) catalase. Ni W, et al. **Biochem J** 1990 Jul 1;269(1):233–8

Effects of hepatic peroxisome proliferators and 12-O-tetradecanoyl phorbol-13-acetate on catalase and other enzyme activities of embryonic cells in vitro. Mikalsen SO, et al. **Biochem Pharmacol** 1990 Feb 1; 39(3):527–35

Xanthine oxidase, superoxide dismutase, catalase and lipid peroxidation in Mastomys natalensis: effect of Dipetalonema viteae infection. Batra S, et al. **Indian J Exp Biol** 1989 Dec;27(12):1067–70

[Catalases, produced by microorganisms] Nikol'skaia EA, et al. **Mikrobiol Zh** 1984 Jul–Aug;46(4):83–93 (118 ref.) **(Rus)**

BLOOD

Red cell superoxide dismutase, glutathione peroxidase and catalase in Down syndrome patients with and without manifestations of Alzheimer disease. Percy ME, et al. **Am J Med Genet** 1990 Apr;35(4):459–67

Coupled-enzyme determination of catalase activity in erythrocytes. Van Lente F, et al. **Clin Chem** 1990 Jul; 36(7):1339–43

Origin of serum catalase activity in acute pancreatitis. Góth L. **Clin Chim Acta** 1989 Dec 29;186(1):39–44

Comparative studies of catalase and superoxide dismutase activity within salmon fish erythrocytes. Scott EM, et al. **Comp Biochem Physiol [B]** 1990;95(1):91–3

[Clinical significance of catalase analysis in biochemical laboratory tests] Kosaka A. **Nippon Rinsho** 1989 Dec;48 Suppl:250–2 **(Jpn)**

[Superoxide dismutase, catalase and glutathione peroxidase activities in mice with natural lymphocytic leukemia] Madej JA, et al. **Pol Arch Weter** 1988;28(1–2):25–34 (Eng. Abstr.) **(Pol)**

[The effect of benzylpenicillin on the activity of antioxidative enzymes in the erythrocytes and on methemoglobin formation in children] Sal'nikova LA, et al. **Antibiot Khimioter** 1989 Dec;34(12):912–5 (Eng. Abstr.) **(Rus)**

[Effects of hyperbaric oxygenation on several indices of the antioxidant system and lipid peroxidation in experimental chronic phosphorus poisoning] Orynbaev TO, et al. **Gig Tr Prof Zabol** 1990;(3):53–5 **(Rus)**

[Composition of exhaled air, gas and energy metabolism and bio- chemical indicators of the blood and urine in humans after long- term exposure to hypercapnia and hypoxia] Savina VP, et al. **Kosm Biol Aviakosm Med** 1990 Mar–Apr; 24(2):49–51 (Eng. Abstr.) **(Rus)**

[The action of insulin on the antioxidative enzymes and lipid peroxidation in the erythrocytes] Sal'nikova LA, et al. **Probl Endokrinol (Mosk)** 1990 Mar–Apr;36(2):32–4 (Eng. Abstr.) **(Rus)**

[Activity of antioxidative enzymes and lipid peroxidation in erythrocytes of children with diabetes mellitus] Sal'nikova LA, et al. **Vopr Med Khim** 1990 Jan–Feb;36(1):39–41 (Eng. Abstr.) **(Rus)**

[Glucose-6-phosphate dehydrogenase and catalase in the erythrocytes of patients with cerebral ischemia attacks] Klímová E, et al. **Cesk Neurol Neurochir** 1990 Mar; 53(2):73–7 (Eng. Abstr.) **(Slo)**

DEFICIENCY

The decrease of catalase or esterase D activity in patients with microdeletions of 11p or 13q does not increase their radiosensitivity. Sabatier L, et al. **Ann Genet** 1989; 32(3):144–8

Molecular analysis of human acatalasemia. Identification of a splicing mutation. Wen JK, et al. **J Mol Biol** 1990 Jan 20;211(2):383–93

Thiol and hydrogen peroxide modification of recA induction in UV-irradiated wild-type and catalase-deficient Escherichia coli K12. Claycamp HG, et al. **Mutat Res** 1990 Mar;235(2):101–9

Enzyme replacement therapy in acatalasemic mice by bone marrow transplantation. Hong C, et al. **Surg Forum** 1978; 29:333–5

GENETICS

A single gel for determining genetic variants of equine erythrocyte carbonic anhydrase (CA) and catalase (Cat). Bowling AT, et al. **Anim Genet** 1990;21(2):191–7

Changes in the expression of superoxide dismutase and catalase as a function of age and dietary restriction. Semsei I, et al. **Biochem Biophys Res Commun** 1989 Oct 31; 164(2):620–5

Resistance to hydrogen peroxide associated with altered catalase mRNA stability in MCF7 breast cancer cells. Akman SA, et al. **Biochim Biophys Acta** 1989 Sep 21; 1009(1):70–4

Characterization of a cDNA encoding cottonseed catalase. Ni W, et al. **Biochim Biophys Acta** 1990 Jun 21; 1049(2):219–22

Genetic mapping of katB, a locus that affects catalase 2 levels in Bacillus subtilis. Loewen PC. **Can J Microbiol** 1989 Aug; 35(8):807–10

Regulation of catalase-specific mRNA and its processing during development in mice. el-Hage S, et al. **Dev Genet** 1989;10(4):339–44

Temporal expression of genes encoding free radical-metabolizing enzymes is associated with higher mRNA levels during in utero development in mice. el-Hage S, et al. **Dev Genet** 1990;11(2):149–59

Differential expression of the maize catalase genes during kernel development: the role of steady-state mRNA levels. Wadsworth GJ, et al. **Dev Genet** 1989;10(4):304–10

Mutagenesis in Escherichia coli lacking catalase. Abril N, et al. **Environ Mol Mutagen** 1990;15(4):184–9

Isolation and characterization of the rat catalase-encoding gene. Nakashima H, et al. **Gene** 1990 May 14;89(2):295

Isolation and characterization of the rat catalase-encoding gene [published erratum appears in Gene 1990 May 14;89(2):295] Nakashima H, et al. **Gene** 1989 Jul 15; 79(2):279–88

Molecular characterization of a catalase null allele at the Cat3 locus in maize. Wadsworth GJ, et al. **Genetics** 1990 Aug; 125(4):867–72

Identification and molecular analysis of oxyR-regulated promoters important for the bacterial adaptation to oxidative stress. Tartaglia LA, et al. **J Mol Biol** 1989 Dec 20;210(4):709–19

An anonymous marker [HGM provisional #D11S415] maps to human chromosome 11 near the catalase (CAT) gene. Malhotra U, et al. **Nucleic Acids Res** 1990 Jan 25;18(2):386

cDNA and deduced amino acid sequence of Drosophila catalase. Orr EC, et al. **Nucleic Acids Res** 1990 Jun 25; 18(12):3663

Nucleotide and deduced amino acid sequences of mouse catalase: molecular analysis of a low activity mutant. Shaffer JB, et al. **Nucleic Acids Res** 1990 Aug 25; 18(16):4941

Isolation and characterization of a cDNA clone for the Cat2 gene in maize and its homology with other catalases. Bethards LA, et al. **Proc Natl Acad Sci U S A** 1990 Sep; 87(17):6927

Murine and human b locus pigmentation genes encode a glycoprotein (gp75) with catalase activity. Halaban R, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4809–13

Expression of the maize Cat3 catalase gene is under the influence of a circadian rhythm. Redinbaugh MG, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6853–7

Targeting, import, and processing of nuclear gene-encoded proteins into mitochondria and peroxisomes. Scandalios JG. **Prog Clin Biol Res** 1990;344:515–44 (67 ref.)

[Genes of peroxisomal enzymes] Osumi T, et al. **Tanpakushitsu Kakusan Koso** 1990 Jun;35(8):1439–46 **(Jpn)**

ISOLATION & PURIFICATION

Purification, partial characterization, and possible role of catalase in the bacterium Vitreoscilla. Abrams JJ, et al. **Arch Biochem Biophys** 1990 May 15;279(1):54–9

Purification and properties of goat liver catalase: two pH optima. Chatterjee U, et al. **Indian J Biochem Biophys** 1989 Jun;26(3):140–7

Purification of rat intestinal cinnabarinate synthase and its possible role in hyperplasia of the small intestine in diabetic rats. Rajurkar V, et al. **Indian J Biochem Biophys** 1989 Oct;26(5):334–9

Purification of soluble enzymes from erythrocyte hemolysates by three phase partitioning. Pol MC, et al. **Int J Biochem** 1990;22(2):179–85

Coisolation of glutathione peroxidase, catalase and superoxide dismutase from human erythrocytes. Stepanik TM, et al. **J Biochem Biophys Methods** 1990 Jan; 20(2):157–69

Purification and properties of recombinant rat catalase produced in Escherichia coli. Furuta S, et al. **J Biochem (Tokyo)** 1990 May;107(5):708–13

Purification, properties and immunological detection of a bromoperoxidase-catalase from Streptomyces venezuelae and from a chloramphenicol-nonproducing mutant. Knoch M, et al. **J Gen Microbiol** 1989 Sep;135 (Pt 9):2493–502

METABOLISM

Selective increase of antioxidant enzyme activity in the alveolar macrophages from cigarette smokers and smoke-exposed hamsters. McCusker K, et al. **Am Rev Respir Dis** 1990 Mar;141(3):678–82

Superoxide dismutase and catalase in skin flaps during venous occlusion and reperfusion. Goossens DP, et al. **Ann Plast Surg** 1990 Jul;25(1):21–5

Hydroxyl radicals is not a significant intermediate in the vanadate-stimulated oxidation of NAD(P)H by O2. Liochev SI, et al. **Arch Biochem Biophys** 1989 Nov 15; 275(1):40–3

Evidence for superoxide dismutase and catalase in mollicutes and release of reactive oxygen species. Meier B, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):74–9

Butyrate increases catalase activity and protects rat pulmonary artery smooth muscle cells against hyperoxia. Yano S, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1143–8

Characterization of antioxidant activities of pulmonary surfactant mixtures. Matalon S, et al. **Biochim Biophys Acta** 1990 Aug 17;1035(2):121–7

Response of fetal rat lung fibroblasts to elevated oxygen concentrations after liposome-mediated augmentation of antioxidant enzymes. Tanswell AK, et al. **Biochim Biophys Acta** 1990 May 22;1044(2):269–74

Activities of antioxidant enzymes in fibroblasts cultured in vitro in the presence of hydralazine. Węglarz L, et al. **Biomed Biochim Acta** 1989;48(8):489–93

Regional effects of 6-hydroxydopamine (6-OHDA) on free radical scavengers in rat brain. Perumal AS, et al. **Brain Res** 1989 Dec 11;504(1):139–41

A relative deficit in antioxidant reserve may contribute in cardiac failure. Singal PK, et al. **Can J Cardiol** 1990 Mar; 6(2):47–9

Catalase activity in Campylobacter jejuni: comparison of a wild-type strain with an aerotolerant variant. Vercellone PA, et al. **Can J Microbiol** 1990 Jun;36(6):449–51

Modulation of catalase activities in murine epidermal cells as a function of differentiation and exposure to 12-O-tetradecanoylphorbol-13-acetate. Reiners JJ Jr, et al. **Carcinogenesis** 1990 Jun;11(6):957–63

Relative importance of intracellular glutathione peroxidase and catalase in vivo for prevention of peroxidation to the heart. Simmons TW, et al. **Cardiovasc Res** 1989 Sep; 23(9):774–9

Morphological transformation and catalase activity of Syrian hamster embryo cells treated with hepatic peroxisome proliferators, TPA and nickel sulphate. Mikalsen SO, et al. **Cell Biol Toxicol** 1990 Jan;6(1):1–13

Modulation of the iodination reaction in normal human neutrophils and in whole blood by penicillamine, congeners and intracellular enzyme catalase and superoxide dismutase. Mahlis E, et al. **Clin Exp Rheumatol** 1989 Jul–Aug; 7(4):365–71

Catalase activity during the development of the parasitic nematode, Ascaris suum. Lesoon A, et al. **Comp Biochem Physiol [B]** 1990;95(4):811–5

Antioxidant enzyme status and lipid peroxidation in various tissues of diabetic and starved rats. Asayama K, et al. **Diabetes Res** 1989 Oct;12(2):85–91

New perspectives in catalase-dependent ethanol metabolism. Thurman RG, et al. **Drug Metab Rev** 1989;20(2–4):679–88 (37 ref.)

Effect of palosein (superoxide dismutase) and catalase upon oxygen derived free radical induced degradation of equine synovial fluid. Auer DE, et al. **Equine Vet J** 1990 Jan; 22(1):13–7

Antioxidant enzyme level response to prooxidant allelochemicals in larvae of the southern armyworm moth, Spodoptera eridania. Pritsos CA, et al. **Free Radic Res Commun** 1990;9(2):127–33

Catalase activity in human spermatozoa and seminal plasma. Jeulin C, et al. **Gamete Res** 1989 Oct;24(2):185–96

Effect of sodium selenite on antioxidative enzymes of banana fruitfly. Kaur M, et al. **Gerontology** 1989;35(4):188–91

Peroxisomes of the rat cardiac and soleus muscles increase after starvation. A biochemical and immunocytochemical study. Yokota S, et al. **Histochemistry** 1990;93(3):287–93

Responses of type II pneumocyte antioxidant enzymes to normoxic and hyperoxic culture. Panus PC, et al. **In Vitro Cell Dev Biol** 1989 Sep;25(9):821–9

Hepatic superoxide dismutase, catalase and lipid peroxidation

products in Mastomys natalensis infected with Plasmodium berghei. Chander R, et al. **Indian J Exp Biol** 1990 Feb; 28(2):195–7

Deficiency in catalase activity correlates with the appearance of tumor phenotype in human keratinocytes. Rabilloud T, et al. **Int J Cancer** 1990 May 15;45(5):952–6

Antioxidant enzyme activities in normal and transformed mouse liver cells. Sun Y, et al. **Int J Cancer** 1989 Dec 15;44(6):1028–33

Manganese(II) induces cell division and increases in superoxide dismutase and catalase activities in an aging deinococcal culture. Chou FI, et al. **J Bacteriol** 1990 Apr; 172(4):2029–35

Redox interactions between catalase and alcohol dehydrogenase pathways of ethanol metabolism in the perfused rat liver. Handler JA, et al. **J Biol Chem** 1990 Jan 25;265(3):1510–5

Immunoelectron microscopy of tissues processed by rapid freezing and freeze–substitution fixation without chemical fixatives: application to catalase in rat liver hepatocytes. Usuda N, et al. **J Histochem Cytochem** 1990 May; 38(5):617–23

Neonatal hyperthyroidism in the rat produces an increase in the activity of microperoxisomal marker enzymes coincident with biochemical signs of accelerated myelination. Adamo AM, et al. **J Neurosci Res** 1990 Mar; 25(3):353–9

Effect of vitamin E on linoleic acid–mediated induction of peroxisomal enzymes in cultured porcine endothelial cells. Hennig B, et al. **J Nutr** 1990 Apr;120(4):331–7

Effect of dietary restriction on the age–dependent changes in the expression of antioxidant enzymes in rat liver. Rao G, et al. **J Nutr** 1990 Jun;120(6):602–9

Short–term malnutrition in neonatal rabbits: effect on function and synthesis of free radical metabolizing enzymes in the gastrointestinal tract. Baker SS, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug;11(2):247–53

Role of intrinsic antioxidant enzymes in renal oxidant injury. Yoshioka T, et al. **Kidney Int** 1990 Aug;38(2):282–8

Age–related down regulation of hepatic cytochrome P1–450, P3–450, catalase and CuZn–superoxide dismutase RNA. Mote PL, et al. **Mech Ageing Dev** 1990 Mar 31;53(1):101–10

Glutathione peroxidase, superoxide dismutase, and catalase inactivation by peroxides and oxygen derived free radicals. Pigeolet E, et al. **Mech Ageing Dev** 1990 Feb 15; 51(3):283–97

Effect of age on the expression of antioxidant enzymes in male Fischer F344 rats. Rao G, et al. **Mech Ageing Dev** 1990 Mar 31;53(1):49–60

Constitutive and phorbol–myristate–acetate regulated antioxidant defense of mouse epidermal JB6 cells. Crawford DR, et al. **Mol Carcinog** 1989;2(3):136–43

Antioxidant enzymatic systems in neuronal and glial cell–enriched fractions of rat brain during aging. Geremia E, et al. **Neurochem Res** 1990 Jul;15(7):719–23

Anti–oxidant enzymes in the brain of newborn piglets during ischemia followed by reperfusion. Mishra OP, et al. **Neuroscience** 1990;35(1):211–5

The changes of antioxidative enzyme activities in equine erythrocytes following exercise. Ono K, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):759–65

Prenatal development of antioxidant enzymes in rat lung, kidney, and heart: marked increase in immunoreactive superoxide dismutases, glutathione peroxidase, and catalase in the kidney. Hayashibe H, et al. **Pediatr Res** 1990 May; 27(5):472–5

Aminotriazole effects on lung and heart H2O2 detoxifying enzymes and TBA–RS at two pO2. López–Torres M, et al. **Pharmacol Toxicol** 1990 Jan;66(1):27–31

Changes in catalase, glutathione peroxidase and glutathione–S–transferase activities in the liver of newts exposed to 2–methyl–4–chlorophenoxyacetic acid (MCPA). Santagostino A, et al. **Pharmacol Toxicol** 1989 Aug;65(2):136–9

Isozymes and the micro organization of organellar structure and function. Masters C, et al. **Prog Clin Biol Res** 1990; 344:101–22 (15 ref.)

[Catalytic properties and stability of catalase in reversed micelles of aerosol OT in octane] Artemchik VD, et al. **Biokhimiia** 1990 Feb;55(2):293–8 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Scavengers of active oxygen species prevent cigarette smoke–induced asbestos fiber penetration in rat tracheal explants. Churg A, et al. **Am J Pathol** 1989 Oct; 135(4):599–603

Effect of superoxide dismutase and catalase, given separately, on myocardial "stunning". Jeroudi MO, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H889–901

Effects of anti–free radical agents on Na+, Ca2+, and function in reperfused rat hearts. Tani M. **Am J Physiol** 1990 Jul;259(1 Pt 2):H137–43

Liposome–mediated augmentation of antioxidant defenses in fetal rat pneumocytes. Tanswell AK, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):L165–72

Inhibition of lung injury, inflammation, and interstitial pulmonary fibrosis by polyethylene glycol–conjugated catalase in a rapid inhalation model of asbestosis. Mossman BT, et al. **Am Rev Respir Dis** 1990 May;141(5 Pt 1):1266–71

Antioxidant enzymes and proliferative activity of cell lines of different origin. Liotti FS, et al. **Cell Mol Biol** 1989; 35(5):487–94

Thromboxane B2 in cardiac lymph. Effect of superoxide dismutase and catalase during myocardial ischemia and reperfusion. Michael LH, et al. **Circ Res** 1990 Apr; 66(4):1040–4

Mitigation of pulmonary oxygen toxicity in premature lambs with intravenous antioxidants. Walther FJ, et al. **Exp Lung Res** 1990 May–Jun;16(3):177–89

The role of oxygen free radicals in experimental acute pancreatitis in the rat. Koiwai T, et al. **Int J Pancreatol** 1989 Sep;5(2):135–43

Role of nerve growth factor in oxidant–antioxidant balance and neuronal injury. I. Stimulation of hydrogen peroxide resistance. Jackson GR, et al. **J Neurosci Res** 1990 Mar; 25(3):360–8

Effects of calcium antagonists and free radical scavengers on myocardial ischemia and reperfusion injury: evaluation by 31P–NMR spectroscopy. Ohsuzu F, et al. **Jpn Circ J** 1989 Sep;53(9):1138–43

The protective effects of calcium antagonist and free radical scavenger against myocardial ischemic/reperfusion injury in the isolated rat heart. Ataka K, et al. **Kobe J Med Sci** 1989 Dec;35(5–6):261–76

Superiority of substrate enhancement over oxygen free–radical scavengers during extended periods of cold storage for cardiac transplantation. Lazar HL, et al. **Surgery** 1990 Aug;108(2):423–9; discussion 429–30

Protective effect of allopurinol, catalase, or superoxide dismutase in the ischemic rat liver. Castillo M, et al. **Transplant Proc** 1990 Apr;22(2):490–1

Effect of catalase and/or allopurinol, or N–t–butyl–alpha–phenylnitrone on hepatic ischemia. Chiu C, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1077–9

Twenty–four hour heart–lung preservation and oxygen free radical scavengers. Hajjar GB, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1342–4

[Role of active oxygen species and lipid peroxidation in liver injury induced by ischemia–reperfusion] Yoshikawa T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Feb; 87(2):199–205 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Catalase is needed to avoid tissue peroxidation in Rana perezi in normoxia. Barja de Quiroga G, et al. **Comp Biochem Physiol [C]** 1989;94(2):391–8

The relative roles of the glutathione redox cycle and catalase in the detoxification of H2O2 by cultured rabbit lens epithelial cells. Giblin FJ, et al. **Exp Eye Res** 1990 Jun; 50(6):795–804

Contribution of superoxide dismutase and catalase activities to Shigella flexneri pathogenesis. Franzon VL, et al. **Infect Immun** 1990 Feb;58(2):529–35

RADIATION EFFECTS

Effects of single–dose ultraviolet radiation on skin superoxide dismutase, catalase, and xanthine oxidase in hairless mice. Pence BC, et al. **J Invest Dermatol** 1990 Aug;95(2):213–6

Acute effects of near ultraviolet and visible light on the cutaneous antioxidant defense system. Fuchs J, et al. **Photochem Photobiol** 1989 Dec;50(6):739–44

THERAPEUTIC USE

Prevention of myocardial reperfusion injury with free radical scavengers. An experimental study. Hou D, et al. **Chin Med J [Engl]** 1989 Oct;102(10):768–73

Free radicals and cardioplegia. Free radical scavengers improve postischemic function of rat myocardium. Chambers DJ, et al. **Eur J Cardiothorac Surg** 1987; 1(1):37–45

Superoxide dismutase and catalase as therapeutic agents for human diseases. A critical review. Greenwald RA. **Free Radic Biol Med** 1990;8(2):201–9 (64 ref.)

Oxygen–derived free radicals in hepatic ischemia and reperfusion injury in the rat. Nauta RJ, et al. **Surg Gynecol Obstet** 1990 Aug;171(2):120–5

Effect of allopurinol and/or catalase on hemorrhagic shock and their potential application to multiple organ harvesting. Cederna J, et al. **Transplant Proc** 1990 Apr;22(2):444–5

[Rheumajecta and Vasolastine treatment of primary fibromyalgia; results of a randomized placebo–controlled double–blind study (published erratum appears in Ned Tijdschr Geneeskd 1990 May 5;134(18):936)] Jacobs JW, et al. **Ned Tijdschr Geneeskd** 1990 Apr 7;134(14):693–7 (Eng. Abstr.) **(Dut)**

[Treatment of primary fibromyalgia with Rheumajecta and Vasolastine; results of a randomized, placebo–controlled, double–blind study (letter)] Nollen AJ. **Ned Tijdschr Geneeskd** 1990 May 26;134(21):1062–3 **(Dut)**

[Treatment of primary fibromyalgia with Rheumajecta and Vasolastine (letter)] van Leemput–Dankaart E. **Ned Tijdschr Geneeskd** 1990 Aug 4;134(31):1515–6 **(Dut)**

CATALEPSY

CHEMICALLY INDUCED

The ontogeny of SCH 23390–induced catalepsy in male and female rats exposed to ethanol in utero. Hannigan JH. **Alcohol** 1990 Jan–Feb;7(1):11–6

Melatonin potentiates the effects of naloxone on reserpine–induced catalepsy in the rat. Sandyk R, et al. **Int J Neurosci** 1989 Sep;48(1–2):125–7

Attenuation of reserpine–induced catalepsy by melatonin and the role of the opioid system. Sandyk R, et al. **Int J Neurosci** 1989 Oct;48(3–4):297–301

Synthetic opioids compared with morphine and ketamine: catalepsy, cross–tolerance and interactions in the rat. Benthuysen JL, et al. **Neuropharmacology** 1989 Oct; 28(10):1011–5

Comparison of isomers of ketamine on catalepsy in the rat and electrical activity of the brain and behavior in the cat. Benthuysen JL, et al. **Neuropharmacology** 1989 Oct; 28(10):1003–9

Inhibitory effect of ceruletide on haloperidol–induced catalepsy in rats. Ibii N, et al. **Peptides** 1989 Jul–Aug; 10(4):779–83

Actions of ORG 5222 as a novel psychotropic agent. Costall B, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):607–15

Is experimental catalepsy properly measured? Ferré S, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):753–7

Spinal paralysis and catalepsy induced by intrathecal injection of opioid agonists. Frenk H, et al. **Pharmacol Biochem Behav** 1990 Jun;36(2):243–7

Effects of repeated testing on the incidence of haloperidol–induced catalepsy in mice. Iwata S, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):705–7

LY 171555–induced catalepsy and defensive behavior in four strains of mice suggest the involvement of different D2 dopamine receptor systems. Puglisi–Allegra S, et al. **Pharmacol Biochem Behav** 1990 Jun;36(2):327–31

ENZYMOLOGY

[The relation of tryptophan hydroxylase activity in the brain and the manifestation of catalepsy in mice] Kulikov AV, et al. **Biull Eksp Biol Med** 1989 Sep;108(9):269–71 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Dorsal pressure potentiates the duration of tonic immobility and catalepsy in rats. Meyer ME. **Physiol Behav** 1990 Mar; 47(3):531–3

GENETICS

[Genetic control of catalepsy in mice] Kulikov AV, et al. **Genetika** 1989 Aug;25(8):1402–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Correlation between the duration of perphenazine catalepsy and pressure maintained tonic immobility under the influence of beta–sympathotropic agents. Tikal K. **Act Nerv Super (Praha)** 1989 Oct;31(3):175–82

Striatal and nucleus accumbens D1/D2 dopamine receptors in neuroleptic catalepsy. Ossowska K, et al. **Eur J Pharmacol** 1990 Jul 3;182(2):327–34

Role of N–methyl–D–aspartate (NMDA) receptors in experimental catalepsy in rats. Mehta AK, et al. **Life Sci** 1990;46(1):37–42

PHYSIOPATHOLOGY

Seemingly paradoxical jumping in cataleptic haloperidol–treated rats is triggered by postural instability. Morrissey TK, et al. **Behav Brain Res** 1989 Dec 1; 35(3):195–207

Lateral hypothalamus–zona incerta region as an output station for the catalepsy induced by the blockade of striatal D1 and D2 dopamine receptors. Ossowska K, et al. **Brain Res** 1990 Jan 8;506(2):311–5

[The characteristics of a change in the congenital and acquired forms of behavior in rats with genetic catalepsy] Petrova EV. **Zh Vyssh Nerv Deiat** 1990 May–Jun; 40(3):475–80 (Eng. Abstr.) **(Rus)**

[Thermal asymmetry of the rat brain in catalepsy] Petrova EV, et al. **Zh Vyssh Nerv Deiat** 1989 Nov–Dec;39(6):1160–2 **(Rus)**

PREVENTION & CONTROL

Possible involvement of the antiserotoninergic and antihistaminergic activity in the anticataleptogenic effect of EGYT–2509. István G, et al. **Acta Physiol Hung** 1990; 75 Suppl:119–20

CATALOGING

Government documents and the online catalog. Lynch FH, et al. **Bull Med Libr Assoc** 1990 Jan;78(1):23–8

Addressing the issue of cataloging and making chiropractic literature accessible: Part I: Defining the problem. Curl DD, et al. **J Manipulative Physiol Ther** 1990 Jun; 13(5):262–6

CATALOGS

Historical perspectives: the understanding and management of genetic disorders. McKusick VA. **Md Med J** 1989 Nov; 38(11):901–8

[Differential diagnosis of endogenous psychoses in relation to a symptom catalog] Leonhard K. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Mar; 42(3):136–45 (Eng. Abstr.) **(Ger)**

[A problem of creating a catalog of human erythrocyte membrane proteins] Shishkin SS. **Vopr Med Khim** 1989

Nov-Dec;35(6):2-13 (77 ref.) (Eng. Abstr.) (Rus)

CATALOGS, COMMERCIAL

1990-1991 Lab Guide. **Anal Chem** 1990 Aug 15; 62(16):1G-266G

The sixth annual medical hardware and software buyers' guide. Hoffman T. **MD Comput** 1989 Nov-Dec; 6(6):334-477

1990 guide to biotechnology products and instruments. **Science** 1990 Mar 23;247 Suppl:G1-217

CATALOGS, LIBRARY

Government documents and the online catalog. Lynch FH, et al. **Bull Med Libr Assoc** 1990 Jan;78(1):23-8

CATALYSIS

A microcalorimetric procedure for evaluating the kinetic parameters of enzyme-catalyzed reactions: kinetic measurements of the nitrogenase system. Watt GD. **Anal Biochem** 1990 May 15;187(1):141-6

Characteristics of methods for the simultaneous determination of catalysts by first-order inhibition kinetics. Fitzpatrick CP, et al. **Anal Chem** 1989 Nov 15; 61(22):2551-6

Catalytic antibodies. Shokat KM, et al. **Annu Rev Immunol** 1990;8:335-63 (89 ref.)

Progress-curve equations for reversible enzyme-catalysed reactions inhibited by tight-binding inhibitors. Szedlacsek SE, et al. **Biochem J** 1990 Feb 1;265(3):647-53

Dynamics of small autocatalytic reaction networks--I. Bifurcations, permanence and exclusion. Stadler PF, et al. **Bull Math Biol** 1990;52(4):485-508

A theoretical treatment of damped oscillations in the transient state kinetics of single-enzyme reactions. Ryde-Pettersson U. **Eur J Biochem** 1989 Dec 8;186(1-2):145-8

General acid-base catalysis in nucleobase amino proton exchange: cytidine. McConnell B. **J Biomol Struct Dyn** 1986 Dec;4(3):419-36

A comparison of enzymatic and heterogeneous catalysis. Erkelens J. **Naturwissenschaften** 1990 Feb;77(2):86-7

[Effect of selected physico-chemical parameters on changes in ascorbate oxidase and ceruloplasmin activities] Wieczorek P. **Ann Acad Med Stetin** 1989;35:57-71 (Eng. Abstr.) (Pol)

CATAPLEXY

see related
NARCOLEPSY

CHEMICALLY INDUCED

Triad of hyperthermia, increased REM sleep, and cataplexy during clozapine treatment? [letter] Blum A. **J Clin Psychiatry** 1990 Jun;51(6):259-60

DIAGNOSIS

Signs and symptoms associated with cataplexy in narcolepsy patients. Rosenthal LD, et al. **Biol Psychiatry** 1990 May 1;27(9):1057-60

DRUG THERAPY

Effects of central alpha-2 adrenergic compounds on canine narcolepsy, a disorder of rapid eye movement sleep. Nishino S, et al. **J Pharmacol Exp Ther** 1990 Jun; 253(3):1145-52

METABOLISM

ACTH and its relationship to the cataplectic syndrome. Sandyk R. **Int J Neurosci** 1989 Aug;47(3-4):317-9 (17 ref.)

PHYSIOPATHOLOGY

The influence of two behavioral regimens on the distribution of sleep and wakefulness in narcoleptic patients. Volk S, et al. **Sleep** 1990 Apr;13(2):136-42

[Too weak with laughing] Egeler-Peerdeman SM, et al. **Ned Tijdschr Geneeskd** 1990 Mar 10;134(10):465-8 (Dut)

CATARACT

Classification, monitoring and evaluation of cataracts. 4th Scheimpflug Club Meeting 1989. April 5-7, 1989. Gamagori, Japan. Proceedings. **Ophthalmic Res** 1990;22 Suppl 1:1-100

[Breeding of cataract rat strain (ICRF/Kmu//Yg)] Kato S, et al. **Jikken Dobutsu** 1990 Apr;39(2):295-8 (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Posterior subcapsular cataracts associated with nasal or inhalation corticosteroids. Fraunfelder FT, et al. **Am J Ophthalmol** 1990 Apr 15;109(4):489-90

Total dosage of chlorpromazine and ocular opacities. Buffaloe WJ, et al. **Am J Psychiatry** 1967 Aug;124(2):250-1

Steroid aerosols and cataract formation [see comments] Allen MB, et al. **BMJ** 1989 Aug 12;299(6696):432-3 Comment in: BMJ 1989 Oct 7;299(6704):918.

Steroid aerosols and cataract formation [letter; comment] Karim AK, et al. **BMJ** 1989 Oct 7;299(6704):918 Comment on: BMJ 1989 Aug 12;299(6696):432-3.

Toxicity of ethylene oxide on the lens and on leukocytes: an epidemiological study in hospital sterilisation installations. Deschamps D, et al. **Br J Ind Med** 1990 May; 47(5):308-13

Cataracts induced by topical ocular medications. Bonomi L. **Dev Ophthalmol** 1989;17:196-8

Toxic lenses--how they compare with senile cataracts. Rossa V, et al. **Dev Ophthalmol** 1989;17:165-8

A controlled study of the ocular effects of tamoxifen in conventional dosage in the treatment of breast carcinoma. Longstaff S, et al. **Eur J Cancer Clin Oncol** 1989 Dec; 25(12):1805-8

On the etiology of subcapsular lenticular opacities produced in dogs receiving HMG-CoA reductase inhibitors. Gerson RJ, et al. **Exp Eye Res** 1990 Jan;50(1):65-78

Induction of cataract in methylnitrosourea treated Fischer (F344) rats. Roy B, et al. **Hiroshima J Med Sci** 1989 Sep; 38(3):95-8

Steroid induced glaucoma and cataract. Mohan R, et al. **Indian J Ophthalmol** 1989 Jan-Mar;37(1):13-6

[Cataract caused by ethylene oxide poisoning] François P, et al. **Bull Soc Ophtalmol Fr** 1989 Dec;89(12):1397-8, 1400 (Eng. Abstr.) (Fre)

[Morphological studies on cataract and small lens formation in neonatal rats treated with monosodium-L-glutamate] Kawamura M, et al. **Nippon Ganka Gakkai Zasshi** 1989 May;93(5):562-8 (Eng. Abstr.) (Jpn)

CLASSIFICATION

Methods of clinical cataract grading: two systems compared [letter] Sparrow JM. **Arch Ophthalmol** 1990 Sep; 108(9):1209-10

A new method for an objective classification of lens opacities. Investigations about cataract morphology and cataract progression. Laser H, et al. **Dev Ophthalmol** 1989;17:145-51

Classification and prevalence of early senile lens opacities in human donor eyes. Vrensen G, et al. **Dev Ophthalmol** 1989;17:181-7

A simple accurate method of cataract classification. Cataract-I. Sharma YR, et al. **Indian J Ophthalmol** 1989 Jul-Sep;37(3):112-7

Classification system for cataracts. Application by the Japanese Cooperative Cataract Epidemiology Study Group. Sasaki K, et al. **Ophthalmic Res** 1990;22 Suppl 1:46-50

[A cataract classification and grading system] Sasaki K, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jul;93(7):796-800 (Eng. Abstr.) (Jpn)

COMPLICATIONS

Cataract extraction in patients with chronic posterior uveitis. Brinkman CJ, et al. **Acta Ophthalmol (Copenh)** 1990 Apr; 68(2):151-4

Topical flurbiprofen in intraocular surgery on diabetic and nondiabetic patients. Tsuchisaka H, et al. **Ann Ophthalmol** 1990 Jan;22(1):15-9, 23

Ophthalmological aspects in patients with Werner's syndrome. Ruprecht KW. **Arch Gerontol Geriatr** 1989 Nov-Dec;9(3):263-70

Cataract surgery in nanophthalmic eyes. Brockhurst RJ. **Arch Ophthalmol** 1990 Jul;108(7):965-7

Posterior chamber intraocular lens implantation in patients with retinitis pigmentosa. Reccia R, et al. **Doc Ophthalmol** 1989 Jun;72(2):115-8

Extracapsular cataract extraction and posterior chamber lens implantation in patients with primary chronic angle-closure glaucoma: effect on intraocular pressure control. Wishart PK, et al. **Eye** 1989;3 (Pt 6):706-12

The transparency of the lens: a comparison between diabetic and non-diabetic patients. Franklin SL, et al. **Int Ophthalmol** 1990 Mar;14(2):73-6

Cataract blindness in developing nations. Schwab L. **Int Ophthalmol Clin** 1990 Winter;30(1):16-8 (11 ref.)

Extracapsular cataract surgery and intraocular lens implantation in glaucomatous eyes that had a filtering bleb operation. Burratto L, et al. **J Cataract Refract Surg** 1990 May;16(3):315-9

Astigmatic keratotomy to correct preexisting astigmatism in cataract patients. Maloney WF, et al. **J Cataract Refract Surg** 1990 May;16(3):297-304

Modified triple procedure using a temporary keratoprosthesis for closed-system, small-incision cataract surgery. Menapace R, et al. **J Cataract Refract Surg** 1990 Mar; 16(2):230-4

Seasonal affective disorder and visual impairment: two case studies. Rosenthal NE, et al. **J Clin Psychiatry** 1989 Dec; 50(12):469-72

An index for estimating probabilities of surgical success for cataract patients with retinal disease. Graney MJ, et al. **J Gerontol** 1990 Mar;45(2):M40-4

Lens hexitols and cataract formation during lactation in a woman heterozygote for galactosaemia. Brivet M, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:343-5

Intraocular lens implantation following extracapsular cataract extraction in uveitis. Chung YM, et al. **Ophthalmic Surg** 1990 Apr;21(4):272-6

The long-term effect on intraocular pressure of a procedure combining trabeculectomy and cataract surgery, as compared with trabeculectomy alone. Naveh N, et al. **Ophthalmic Surg** 1990 May;21(5):339-45

Managing cataracts in patients with uveitis [letter; comment] Girard LJ. **Ophthalmology** 1989 Oct;96(10):1574 Comment on: Ophthalmology 1989 Mar;96(3):281-8.

A unilateral cataract produces a relative afferent pupillary defect in the contralateral eye. Lam BL, et al. **Ophthalmology** 1990 Mar;97(3):334-8

Lens implant surgery in pars planitis. Michelson JB, et al. **Ophthalmology** 1990 Aug;97(8):1023-6

[An uncommon clinical form of phakolytic glaucoma] Bremond D, et al. **Bull Soc Ophtalmol Fr** 1989 Jun-Jul; 89(6-7):853-6 (Eng. Abstr.) (Fre)

[Rothmund's syndrome] Cohen SY, et al. **J Fr Ophtalmol** 1989;12(8-9):583-5 (Eng. Abstr.) (Fre)

[Spontaneous bilateral lens luxation] Redor JY, et al. **Ophtalmologie** 1989 Jan-Mar;3(1):89-90 (Eng. Abstr.) (Fre)

[The exfoliation syndrome in Tunisia] Ayed S, et al. **Tunis Med** 1990 Jan;68(1):19-22 (Eng. Abstr.) (Fre)

[Charles Bonnet syndrome in a Parkinson patient with bilateral visual loss] Podoll K, et al. **Nervenarzt** 1990 Jan; 61(1):52-6 (Ger)

[Phacolytic glaucoma as a complication of highly developed cataract] Bogorodzki B, et al. **Klin Oczna** 1988 Dec; 90(12):422-3 (Eng. Abstr.) (Pol)

[Intraocular lenses in patients with diabetes mellitus] Kałużný J, et al. **Klin Oczna** 1989 Jul-Sep;91(7-9):201-2 (Eng. Abstr.) (Pol)

[The most frequent causes of loss and impairment of vision] Lenkiewicz E, et al. **Klin Oczna** 1989 Jul-Sep;91(7-9):186-7 (Eng. Abstr.) (Pol)

[Effects of early monocular deprivation because of leukoma or cataract on the development of the retina] Taktarov VG, et al. **Biull Eksp Biol Med** 1990 May;109(5):501-3 (Eng. Abstr.) (Rus)

CONGENITAL

Morphogenesis of diabetes-induced congenital cataract in the rat. Giavini E, et al. **Acta Anat (Basel)** 1990;137(2):132-6

A combined iris retractor and irrigation cannula for congenital-cataract surgery. Ruben JB, et al. **Am J Ophthalmol** 1989 Dec 15;108(6):741-2

A disorder of axonal development, necrotizing myopathy, cardiomyopathy, and cataracts: a new familial disease. Lyon G, et al. **Ann Neurol** 1990 Feb;27(2):193-9

Liver glycogenosis and cataracts in a mentally deficient child. de Loore I, et al. **Arch Dis Child** 1967 Aug;42(224):435-40

Spontaneous reabsorption of a rubella cataract. Smith GT, et al. **Br J Ophthalmol** 1990 Sep;74(9):564-5

Posterior polar cataracts: a predisposition to intraoperative posterior capsular rupture. Osher RH, et al. **J Cataract Refract Surg** 1990 Mar;16(2):157-62

Simultaneous surgery for bilateral congenital cataracts. Guo S, et al. **J Pediatr Ophthalmol Strabismus** 1990 Jan-Feb; 27(1):23-5; discussion 26-7

Changes in the aphakic refraction of children with unilateral congenital cataracts. Moore BD. **J Pediatr Ophthalmol Strabismus** 1989 Nov-Dec; 26(6):290-5

Congenital cataracts [letter] Borman B. **N Z Med J** 1990 Jul 11;103(893):326

Congenital cataracts [letter] Holborow P. **N Z Med J** 1990 Apr 11;103(887):163

Congenital cataracts [letter] Holborow P. **N Z Med J** 1990 Jul 25;103(894):357

Congenital and developmental cataracts and multimalformation syndromes. Bardelli AM, et al. **Ophthalmic Paediatr Genet** 1989 Dec;10(4):293-8 (14 ref.)

[The blood galactokinase activity in Chinese with reference to congenital cataract] Xu GT. **Chung Hua Yen Ko Tsa Chih** 1989 Mar;25(2):100-3 (Eng. Abstr.) (Chi)

[Hallermann-Streiff syndrome. A case report] Ihmaid J, et al. **Ann Dermatol Venereol** 1990;117(3):203-6 (12 ref.) (Fre)

[Congenital coralliform cataract] Drincic V. **Ophtalmologie** 1989 Jan-Mar;3(1):91-2 (Eng. Abstr.) (Fre)

[Artificial intraocular lenses in children and youth] Kałużny J, et al. **Klin Oczna** 1988;90 Suppl:520-1 (Eng. Abstr.) (Pol)

[Unilateral congenital cataract, iridic hypoplasia and macular degenerative lesions] Nicu C. **Rev Chir [Oftalmol]** 1989 Jul-Sep;33(3):235-9 (Eng. Abstr.) (Rum)

[An improvement in the technic and results of phacoemulsification of congenital cataracts in children] Bobrova NF, et al. **Oftalmol Zh** 1989;(3):137-42 (Eng. Abstr.) (Rus)

[The prognosis for the visual outcomes in the surgical treatment of children with congenital partial cataracts] Shpak AA, et al. **Vestn Oftalmol** 1990 Jan-Feb;106(1):24-7 (Eng. Abstr.) (Rus)

DIAGNOSIS

Oculocerebral hypopigmentation syndrome (Cross syndrome) in a Gipsy child. Courtens W, et al. **Acta Paediatr Scand** 1989 Sep;78(5):806-10

Influence of pupil size on measurements made with the Lens Opacity Meter 701. Clarke MP, et al. **Br J Ophthalmol** 1990 Sep;74(9):526-7

Computerized cataract detection and classification. Edwards

PA, et al. **Curr Eye Res** 1990 Jun;9(6):517–24
Opacity of the lens in a normal population. A study with the help of the lens opacity meter. De Natale R, et al. **Dev Ophthalmol** 1989;17:52–4
In vivo lens fluorescence as a cataract marker. Lerman S. **Dev Ophthalmol** 1989;17:60–4
Table for the differential diagnosis of age-related cataract types with a view to their clinical appearance, prognosis, biochemistry and etiology. Pau H. **Dev Ophthalmol** 1989; 17:55–9
Rapid epidemiologic assessment of cataract blindness. The Aravind Rapid Epidemiologic Assessment Staff. Venkataswamy G, et al. **Int J Epidemiol** 1989;18(4 Suppl 2):S60–7
Evaluation of photographic methods for documentation of lens opacities. Lee JA, et al. **Invest Ophthalmol Vis Sci** 1990 Jun;31(6):1191–3
Quantitative photoacoustic spectroscopy of cataractous human lenses. Bernini U, et al. **J Photochem Photobiol B** 1990 Mar;4(4):407–17
In vivo measurement of human lens aging using the lens opacity meter. Costagliola C, et al. **Ophthalmologica** 1989; 199(4):158–61
[Presentation of an instrument to measure lens opacity: the opacity lensmeter 701] Bosc JM, et al. **Bull Soc Ophtalmol Fr** 1988 Dec;88(12):1385–6, 1389–92 (Eng. Abstr.) (Fre)
[Scheimpflug photography of the lens] Hockwin O. **Fortschr Ophthalmol** 1989;86(4):304–11 (69 ref.) (Eng. Abstr.) (Ger)
[Ocutrast--a new procedure for measuring mesopic visual acuity and glare sensitivity] Nowak MR. **Fortschr Ophthalmol** 1990;87(2):192–5 (Eng. Abstr.) (Ger)
[Measuring lens opacity with the Opacity Lensmeter 701] Stoltenberg I, et al. **Fortschr Ophthalmol** 1989;86(4):301–3 (Eng. Abstr.) (Ger)
[Automatic evaluation of visual functions using a computer] Strobel J, et al. **Fortschr Ophthalmol** 1989;86(4):370–3 (Eng. Abstr.) (Ger)
[The value of the red-green test] Körner H. **Klin Monatsbl Augenheilkd** 1990 Jul;197(1):68–71 (Eng. Abstr.) (Ger)
[The Opacity Lens Meter 701: clinical experiences] Messmer C, et al. **Klin Monatsbl Augenheilkd** 1990 May;196(5):310–1 (Eng. Abstr.) (Ger)
[Present possibilities of utilizing nuclear magnetic resonance tomography in the examination of the human lens] Gutsze A, et al. **Klin Oczna** 1988;90 Suppl:489–90 (Eng. Abstr.) (Pol)
[The importance of ultrasonic study in optimizing the surgical treatment of congenital cataract in children] Sorochinskaia TA. **Oftalmol Zh** 1989;(3):132–6 (Eng. Abstr.) (Rus)
[Prognostic significance of visual evoked potentials in opacities of the optic media of the eye] Gamm EG. **Vestn Oftalmol** 1989 Jul–Aug;105(4):59–61 (Eng. Abstr.) (Rus)
[Scheimpflug photography of the crystalline lens] Khokvin O, et al. **Vestn Oftalmol** 1989 Nov–Dec;105(6):61–8 (67 ref.) (Rus)
[Importance of biomicroscopy in the determination of density of cataract before phacoemulsification] Korosteleva NF, et al. **Vestn Oftalmol** 1989 Nov–Dec;105(6):43–5 (Eng. Abstr.) (Rus)

DRUG THERAPY

Impact of certain proteolytic agents on the development of different types of cataract. Krasnov MM, et al. **Dev Ophthalmol** 1989;17:199–205
Bendazac lysine. A review of its pharmacological properties and therapeutic potential in the management of cataracts. Balfour JA, et al. **Drugs** 1990 Apr;39(4):575–96 (60 ref.)
Medical treatment of senile cataract: clinical investigation of bendazac-lysine using objective and subjective methods. Baraldi P, et al. **Graefes Arch Clin Exp Ophthalmol** 1990; 228(2):105–11
Medical therapy of cataracts, yet again? [editorial] Azad R. **Indian J Ophthalmol** 1989 Jul–Sep;37(3):109
Methodology for studies on medical therapy of cataracts: cataract–II. Sharma YR, et al. **Indian J Ophthalmol** 1989 Jul–Sep;37(3):118–20
Topical glutathione therapy in senile cataracts. Cataract–III. Sharma YR, et al. **Indian J Ophthalmol** 1989 Jul–Sep; 37(3):121–6
Topical sulindac therapy in diabetic senile cataracts: cataract–IV. Sharma YR, et al. **Indian J Ophthalmol** 1989 Jul–Sep;37(3):127–33
Systemic aspirin and systemic vitamin E in senile cataracts: cataract V. Sharma YR, et al. **Indian J Ophthalmol** 1989 Jul–Sep;37(3):134–41
Influence of certain drugs on the densitometry results of optic lens sections in posterior subcapsular cataracts. Polunin GS. **Ophthalmic Res** 1990;22 Suppl 1:85–9
[Preventional and therapeutic effects of aldose reductase inhibitor FR74366 on rat galactose cataract] Tsuji T, et al. **Nippon Ganka Gakkai Zasshi** 1990 Feb;94(2):120–7 (Eng. Abstr.) (Jpn)
[The antioxidant action of anticataract drug preparations] Chasovnikova LV, et al. **Biull Eksp Biol Med** 1989 Dec; 108(12):668–70 (Eng. Abstr.) (Rus)
[Effects of a proteolytic enzyme lekozim on the course of some types of cataract] Polunin GS. **Vestn Oftalmol** 1989 Jul–Aug;105(4):44–8 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Lactate dehydrogenase of concentric zones of human senile cataracts and calf lenses produced by ultrasound. Gershbein LL, et al. **Biotechnol Appl Biochem** 1989 Dec;11(6):602–9
Relative abundance of aldose reductase mRNA in rat lens undergoing development of osmotic cataracts. Bekhor I, et al. **Curr Eye Res** 1989 Dec;8(12):1299–308
[Studies on blood galactokinase of patients with presenile and senile cataracts] Xu G. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1990 Apr; 12(2):101–4 (Eng. Abstr.) (Chi)

EPIDEMIOLOGY

Cataract-free zone in Latin America [editorial] Contreras F. **Am J Ophthalmol** 1990 Aug 15;110(2):203–4
Prevalence of undiagnosed eye disease in high-risk diabetic individuals. Sprafka JM, et al. **Arch Intern Med** 1990 Apr; 150(4):857–61
India–US case-control study of age-related cataracts [letter; comment] Harding JJ. **Arch Ophthalmol** 1990 Jan; 108(1):13–4 Comment on: Arch Ophthalmol 1989 May;107(5):670–6.
3.8 million blinded by cataract each year: projections from the first epidemiological study of incidence of cataract blindness in India [see comments] Minassian DC, et al. **Br J Ophthalmol** 1990 Jun;74(6):341–3 Comment in: Br J Ophthalmol 1990 Jun;74(6):324.
Cataract and health status. A case-control study revisited. Chen TT, et al. **Dev Ophthalmol** 1989;17:6–12
Results of an epidemiological study of lens opacifications. Goder G, et al. **Dev Ophthalmol** 1989;17:21–5
Beer, cigarettes and military work as risk factors for cataract. Harding JJ, et al. **Dev Ophthalmol** 1989;17:13–6
Distribution of acquired senile cataracts within outpatients in Central Africa and Düsseldorf. Kluxen G, et al. **Dev Ophthalmol** 1989;17:33–7
Senile cataract: survey on cataract patients undergoing cataract surgery, Japan. Kogure F, et al. **Dev Ophthalmol** 1989;17:38–40
Epidemiologic investigations into the determination of cataractogenic risk factors. Laser H, et al. **Dev Ophthalmol** 1989;17:152–7
Epidemiological study of cataracts in Burma and central Europe. Marré E, et al. **Dev Ophthalmol** 1989;17:206–8
Metabolic and social risk factors in a cataractous population. A case-control study. Miglior S, et al. **Dev Ophthalmol** 1989;17:158–64
Prevalence of cataract in patients with anterior uveitis among Arabs in Kuwait. Noor Sunba MS, et al. **Dev Ophthalmol** 1989;17:106–9
Epidemiology of 'senile cataract'. Ohrloff C. **Dev Ophthalmol** 1989;17:1–5 (32 ref.)
Cataract prevalence study in Bulgaria. Parvova-Djurova T, et al. **Dev Ophthalmol** 1989;17:47–51
Prevalence of cataracts in a population-based study of patients with diabetes mellitus. Peduzzi M, et al. **Dev Ophthalmol** 1989;17:75–8
Study of the prevalence of cataract and of the influence of solar radiation on its development in Italy. Motivation and operational protocol. Ponte F, et al. **Dev Ophthalmol** 1989; 17:110–3
Cataract epidemiology survey in west Sumatra. Sasaki K, et al. **Dev Ophthalmol** 1989;17:26–32
Prevalence of lens opacities in ophthalmic screening examination of aged persons. Sekiryu T, et al. **Dev Ophthalmol** 1989;17:41–6
Clinical study on cataractogenic risk factors. Vassileva P, et al. **Dev Ophthalmol** 1989;17:101–5
Cataract risk factors in a Stuttgart cataract population. Voigt HU, et al. **Dev Ophthalmol** 1989;17:118–22
Epidemiology of cataract: still-video recording and image analysis. Yata K, et al. **Dev Ophthalmol** 1989;17:65–8
Does milk have a cataractogenic effect? Weighing of clinical evidence. Bhatnagar R, et al. **Dig Dis Sci** 1989 Nov; 34(11):1745–50
Cataracts and cigarette smoking. The City Eye Study. Flaye DE, et al. **Eye** 1989;3 (Pt 4):379–84
Screening and surgical intervention results from cataract-free-zone projects in Campinas, Brazil and Chimbote, Peru. Jose NK, et al. **Int Ophthalmol** 1990 May; 14(3):155–64
Pathogenesis of posterior capsular opacification. Part I. Epidemiological and clinico-statistical data. Frezzotti R, et al. **J Cataract Refract Surg** 1990 May;16(3):347–52
Clusters, cataracts, and concerned citizens [letter] Elwood JM. **N Z Med J** 1990 Jun 13;103(891):275
Diabetes as risk factor of cataract: differentiation by retroillumination photography and image analysis. Yata K, et al. **Ophthalmic Res** 1990;22 Suppl 1:78–80
Distribution of lens opacities in the Italian–American Case–Control Study of Age-Related Cataract. The Italian–American Study Group. Maraini G, et al. **Ophthalmology** 1990 Jun;97(6):752–6
Ultraviolet radiation and the eye: an epidemiologic study. Taylor HR. **Trans Am Ophthalmol Soc** 1990;87:802–53
Profile of cataract patients in the Eye, Ear, Nose and Throat Hospital, Rangoon. Le-Le-Win, et al. **Trop Doct** 1989 Oct; 19(4):189–90
[An epidemiologic survey of cataract in Shunyi County, Beijing] Hu C. **Chung Hua Yen Ko Tsa Chih** 1989 Nov; 25(6):360–4 (Eng. Abstr.) (Chi)
[Cataract epidemiological study in west Sumatra] Sasaki K, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jun;93(6):733–40 (Eng. Abstr.) (Jpn)
[Patterns of the development and progression of age-related cataracts in Voroshilovgrad Province (based on office visit data)] Skripka VK, et al. **Oftalmol Zh** 1989;(3):178–80 (Eng. Abstr.) (Rus)

ETHNOLOGY

The demand incidence of cataract in Asian immigrants to Britain and their descendants. Thompson JR. **Br J Ophthalmol** 1989 Dec;73(12):950–4

ETIOLOGY

Risk factors for cataract in Oxfordshire: diabetes, peripheral neuropathy, myopia, glaucoma and diarrhoea. Harding JJ, et al. **Acta Ophthalmol (Copenh)** 1989 Oct;67(5):510–7
Experimental cataract induced by ultraviolet radiation. Söderberg PG. **Acta Ophthalmol Suppl (Copenh)** 1990; (196):1–75 (171 ref.)
Re: "Sunlight, skin sensitivity, and senile cataract" [letter; comment] Badrinath P. **Am J Epidemiol** 1990 Jun; 131(6):1101 Comment on: Am J Epidemiol 1989 Mar;129(3):559–68.
Exposure to ultraviolet B radiation during phototherapy [letter] Oren DA, et al. **Am J Psychiatry** 1990 May; 147(5):675–6
Nutritional factors in cataract. Bunce GE, et al. **Annu Rev Nutr** 1990;10:233–54 (133 ref.)
Relationship of cataract to radiation sensitivity. Brown NA, et al. **Br J Ophthalmol** 1989 Dec;73(12):955–9
The lens after renal transplantation. Shun-Shin GA, et al. **Br J Ophthalmol** 1990 May;74(5):267–71
Prefeeding of aldose reductase inhibitor and galactose cataractogenesis. Unakar NJ, et al. **Curr Eye Res** 1989 Oct; 8(10):997–1010
Risk factors for cataract development. 2nd International Symposium on Cataract Epidemiology. Bonn, March 15–18, 1988. Proceedings. **Dev Ophthalmol** 1989;17:1–217
Does milk have a cataractogenic effect. A weighing of clinical evidence. Bhatnagar R, et al. **Dev Ophthalmol** 1989; 17:93–6
Prospective study of the lens changes after trabeculectomy. Bonomi L, et al. **Dev Ophthalmol** 1989;17:97–100
Systemic cataractogenic risk factors: experimental and clinical semeiology. Bucci MG, et al. **Dev Ophthalmol** 1989; 17:192–5
Role of metabolic risk factors in the pathogenesis of different morphologies of senile cataract. The special position of the posterior subcapsular cataract. Janke M, et al. **Dev Ophthalmol** 1989;17:87–92
Clinical evidence for light-induced thermal damage in cortical cataracts. Mohan M, et al. **Dev Ophthalmol** 1989; 17:114–7
The incidence of unknown diabetes mellitus and impaired glucose tolerance in idiopathic presenile cataract. al Samarrai AR, et al. **Dev Ophthalmol** 1989;17:79–81
Ultraviolet radiation as a risk factor in cataractogenesis. Schmitt C, et al. **Dev Ophthalmol** 1989;17:169–72 (27 ref.)
Cataract formation in patients with lactose and galactose disorders. Simonelli F, et al. **Dev Ophthalmol** 1989;17:82–6
Modelling cortical cataractogenesis. XI. Vitamin C reduces gamma-crystallin leakage from lenses in diabetic rats. Linklater HA, et al. **Exp Eye Res** 1990 Sep;51(3):241–7
The role of protein-thiol mixed disulfides in cataractogenesis. Lou MF, et al. **Exp Eye Res** 1990 Jun;50(6):819–26
The role of lens epithelium in sugar cataract formation. Robison WG Jr, et al. **Exp Eye Res** 1990 Jun;50(6):641–6
The reaction of proteins with 3-hydroxyanthranilic acid as a possible model for senile nuclear cataract in man. Truscott RJ, et al. **Exp Eye Res** 1989 Dec;49(6):927–40
Seven-year-old sustained a blunt injury to one eye. Campbell SJ, et al. **Eye** 1989;3 (Pt 6):864–5
Irradiation cataract in children after bone marrow transplantation. Lappi M, et al. **Graefes Arch Clin Exp Ophthalmol** 1990;228(3):218–21
Microwave cataract and litigation: a case study. Joyner KH. **Health Phys** 1989 Oct;57(4):545–9
Endocrine regulation of calcium and phosphate in rat eye lens and its significance in cataract formation. Srivastava VK, et al. **Indian J Exp Biol** 1990 Apr;28(4):365–8
Intraocular lens (I.O.L.) implant in traumatic cataract. Das R, et al. **Indian J Ophthalmol** 1989 Apr–Jun;37(2):89–90
Hypocalcemic cataract secondary to idiopathic hypoparathyroidism. Arora R, et al. **Indian Pediatr** 1989 Nov;26(11):1157–9
Intraocular lens implantation in children with unilateral traumatic cataract. Bienfait MF, et al. **Int Ophthalmol** 1990 Jul;14(4):271–6
Pathogenesis of posterior capsular opacification. Part II: Histopathological and in vitro culture findings. Frezzotti R, et al. **J Cataract Refract Surg** 1990 May;16(3):353–60
Long-term study of the prevalence of capsular opacification following extracapsular cataract extraction. Moisseiev J, et al. **J Cataract Refract Surg** 1989 Sep;15(5):531–3
Intraocular lens implantation in phakic rabbit eyes. Tchah H, et al. **J Cataract Refract Surg** 1989 Sep;15(5):554–8
The correction of unilateral aphakia in children treated for orbital rhabdomyosarcoma. Morgan KS, et al.

J Pediatr Ophthalmol Strabismus 1990 Mar–Apr;27(2):70–2; discussion 73

Sunlight exposure and cataract—an epidemiological enigma [letter] Badrinath P. J R Soc Med 1989 Dec;82(12):775

Characterization of peptide inducing cataractogenesis in lens of hereditary cataractous rat (ICR/f RAT). Kamei A, et al. Jpn J Ophthalmol 1989;33(3):348–57

Senile cataract and vitamin nutrition. Nutr Rev 1989 Oct; 47(10):326–8

Archives of ophthalmology, Volume 8, 1932: Experimental cataract in vitamin G deficiency [classical article] O'Brien CS. Nutr Rev 1989 Aug;47(8):235–7

Oxidative stress in trisomy 21. A possible role in cataractogenesis. Brás A, et al. Ophthalmic Paediatr Genet 1989 Dec;10(4):271–7

Transient cataracts in a young child with meningococcal meningitis. Hanna LS, et al. Pediatr Infect Dis J 1989 Nov; 8(11):802–3

Nonosmotic diabetic cataracts. Malone JI, et al. Pediatr Res 1990 Mar;27(3):293–6

Radiation-related posterior lenticular opacities in Hiroshima and Nagasaki atomic bomb survivors based on the DS86 dosimetry system. Otake M, et al. Radiat Res 1990 Jan; 121(1):3–13

Accelerated heavy ions and the lens. IV. Biomicroscopic and cytopathological analyses of the lenses of mice irradiated with 600 MeV/amu 56Fe ions. Worgul BV, et al. Radiat Res 1989 Nov;120(2):280–93

Infantile endogenous Candida endophthalmitis presenting as a cataract. Clinch TE, et al. Surv Ophthalmol 1989 Sep–Oct;34(2):107–12 (31 ref.)

[Various occupational diseases of the eyes caused by ultraviolet radiation] Zlateva V, et al. Probl Khig 1989; 14:167–73 (Eng. Abstr.) (Bul)

[Implantation of posterior chamber IOL after traumatic cataract extraction] Chen GL. Chung Hua Yen Ko Tsa Chih 1989 Sep;25(5):265–7 (Eng. Abstr.) (Chi)

[Changes in the lens and cataract surgery in dialyzed patients] Stibor V, et al. Cesk Oftalmol 1989 Jul;45(4):253–60 (Eng. Abstr.) (Cze)

[A privileged observation of bilateral retinoblastoma ... 35 years after] Flament J, et al. Bull Soc Ophtalmol Fr 1988 Dec;88(12):1411–5 (Eng. Abstr.) (Fre)

[Intra-ocular implantation and traumatic cataract] Flament J, et al. Bull Soc Ophtalmol Fr 1989 Apr;89(4):633–6 (Eng. Abstr.) (Fre)

[Treatment of opacification of the posterior crystalline capsule after extracapsular extraction: surgery or laser?] François JH, et al. Bull Soc Ophtalmol Fr 1989 Nov; 89(11):1297–300 (12 ref.) (Eng. Abstr.) (Fre)

[Secondary cataract after mechanized extracapsular technic or phacoemulsification] Arneodo J. J Fr Ophtalmol 1989; 12(4):287–90 (Eng. Abstr.) (Fre)

[Implantation in severe myopia cataract] Metge P, et al. Ophtalmologie 1989 Jan–Mar;3(1):82–5 (Eng. Abstr.) (Fre)

[Lens opacities following pars plana vitrectomy] Mester U, et al. Fortschr Ophthalmol 1989;86(5):429–32 (Eng. Abstr.) (Ger)

[Cataract in welders. Contribution of occupational exposure, references for recognition as an occupational disease and presentation of preventive measures] Hanke C, et al. Z Gesamte Hyg 1990 Feb;36(2):110–3 (Eng. Abstr.) (Ger)

[Lipid peroxidation and cataract formation in experimental diabetes] Simonelli F, et al. Boll Soc Ital Biol Sper 1989 Aug;65(8):759–65 (Eng. Abstr.) (Ita)

[Traumatic cataracts and intraocular implants in 10 years of material] Kamińska-Olechnowiczowa B, et al. Klin Oczna 1988;90 Suppl:514–5 (Eng. Abstr.) (Pol)

[Artificial intraocular lenses in traumatic cataract] Szweda E, et al. Klin Oczna 1988;90 Suppl:516–7 (Eng. Abstr.) (Pol)

[Visual function and professional preparation of persons with congenital glaucoma. IV. Complications of congenital glaucoma] Urban R. Klin Oczna 1989 Apr;91(4):87–8 (Eng. Abstr.) (Pol)

[Etiology, therapeutic management and functional results in traumatic cataract in children. A 5-year study] Bănacu I, et al. Rev Chir [Oftalmol] 1989 Apr–Jun;33(2):149–54 (Eng. Abstr.) (Rum)

[Pathologic cataract due to ovarian failure] Cernea P, et al. Rev Chir [Oftalmol] 1989 Jul–Sep;33(3):187–92 (Eng. Abstr.) (Rum)

[Secondary cataract in the intraocular correction of aphakia] Pavliuchenko KP, et al. Oftalmol Zh 1989;(5):307–9 (Eng. Abstr.) (Rus)

[Experimental secondary cataract induced by immune complexes] Larionov EV, et al. Vestn Oftalmol 1989 Nov–Dec;105(6):53–6 (Eng. Abstr.) (Rus)

[Changes in the eye in diabetes] Nikolić Lj, et al. Srp Arh Celok Lek 1987 May–Jun;115(5–6):639–47 (Scc)

GENETICS

Nance-Horan syndrome: localization within the region Xp21.1-Xp22.3 by linkage analysis. Stambolian D, et al. Am J Hum Genet 1990 Jul;47(1):13–9

X-linked cataract and X-linked microphthalmos: how many deletion families? [letter] Warburg M. Am J Med Genet 1989 Nov;34(3):451–3

A study about developmental characteristics of hereditary cataracts in the Fraser mouse. Formaziuk VE, et al. Dev Ophthalmol 1989;17:176–80

The transcripts of zeta-crystallin, a lens protein related to the alcohol dehydrogenase family, are altered in a guinea-pig hereditary cataract. Borrás T, et al. Exp Eye Res 1990 Jun;50(6):729–35

Characterization of Scat (suture cataract), a dominant cataract mutation in mice. Graw J, et al. Exp Eye Res 1989 Sep;49(3):469–77

Histological and biochemical characterization of the murine cataract mutant Nop. Graw J, et al. Exp Eye Res 1990 May;50(5):449–56

Association of hereditary cataracts in strain 13/N guinea-pigs with mutation of the gene for zeta-crystallin. Huang QL, et al. Exp Eye Res 1990 Mar;50(3):317–25

Late onset hereditary cataract of the emory mouse. A model for human senile cataract. Kuck JF. Exp Eye Res 1990 Jun;50(6):659–64 (22 ref.)

Hereditary cataract of the Nakano mouse. Takehana M. Exp Eye Res 1990 Jun;50(6):671–6 (23 ref.)

Morphological study of a hereditary rat cataract. Uga S, et al. Exp Eye Res 1990 Jun;50(6):665–70

Animal models for the study of maturity-onset and hereditary cataract. Zigler JS Jr. Exp Eye Res 1990 Jun;50(6):651–7 (53 ref.)

A note on the genetics of a unilateral senile cataract in mice. Cohen-Salmon C, et al. Growth Dev Aging 1989 Spring–Summer;53(1–2):43–5

Lenticular rubidium uptake and plasma renin activity in weanling cataract-prone salt-sensitive rats. Rodríguez-Sargent C, et al. Hypertension 1990 Feb;15(2 Suppl):I144–8

Characterization of Cat-2t, a radiation-induced dominant cataract mutation in mice. Graw J, et al. Invest Ophthalmol Vis Sci 1990 Jul;31(7):1353–61

Overexpression of the vimentin gene in transgenic mice inhibits normal lens cell differentiation. Capetanaki Y, et al. J Cell Biol 1989 Oct;109(4 Pt 1):1653–64

Genetic ablation in transgenic mice with an attenuated diphtheria toxin A gene. Breitman ML, et al. Mol Cell Biol 1990 Feb;10(2):474–9

The frequency of dominant cataract and recessive specific-locus mutations and mutation mosaics in F1 mice derived from post-spermatogonial treatment with ethylnitrosourea. Favor J, et al. Mutat Res 1990 Apr; 229(2):105–14

Oxidative stress and inherited cataracts in mice. Graw J, et al. Ophthalmic Res 1989;21(6):414–9

Mapping X-linked ophthalmic diseases. IV. Provisional assignment of the locus for X-linked congenital cataracts and microcornea (the Nance-Horan syndrome) to Xp22.2–p22.3. Lewis RA, et al. Ophthalmology 1990 Jan; 97(1):110–20; discussion 120–1

Mapping the gene for X-linked cataracts and microcornea with facial, dental, and skeletal features to Xp22: an appraisal of the Nance-Horan syndrome. Lewis RA. Trans Am Ophthalmol Soc 1990;87:658–728

[Zonular juvenile cataract and cerebrotendinous xanthomatosis] Farpour H. Klin Monatsbl Augenheilkd 1990 May;196(5):407–10 (Eng. Abstr.) (Fre)

HISTORY

Intermediary metabolism of the lens: a historical perspective 1928–1989. Chylack LT Jr, et al. Exp Eye Res 1990 Jun; 50(6):575–82

IMMUNOLOGY

Measurement of intraocular IgA and IgM synthesis and filtration through the blood-aqueous barrier in cataract patients. Stambuk N, et al. Curr Eye Res 1990;9 Suppl:45–51

Immune deficiency of the CTS mouse. I. Deficiency of in vitro T cell-mediated immune response. Yagi H, et al. Immunol Invest 1990 Jun;19(3):279–95

Antilens antibodies in cataract and inflammatory eye disease: an evaluation of a new technique. Patel M, et al. Int Ophthalmol 1990 Mar;14(2):97–100

[Antibodies against alpha, beta, and gamma crystallins in human serum] Xie CF. Chung Hua Yen Ko Tsa Chih 1990 May;26(3):165–7 (Eng. Abstr.) (Chi)

[Hyperimmunoglobulinemia E syndrome with deformity of bilateral fingers, juvenile cataracta and impairment of neutrophil phagocytosis] Takeichi T, et al. Nippon Naika Gakkai Zasshi 1989 Nov;78(11):1586–91 (20 ref.) (Jpn)

[Circulating immune complexes in the blood and anterior chamber fluid in patients with glaucoma and diabetic angioretinopathy complicated by myopia and senile cataract] Semenova GS, et al. Vestn Oftalmol 1989 Jul–Aug;105(4):70–1 (Eng. Abstr.) (Rus)

METABOLISM

Reversal of the limited proteolysis of MP26 during the reversal and prevention of the galactose cataract in rat lenses. Alcala J, et al. Curr Eye Res 1990 Mar;9(3):225–32

Effect of opacification and pigmentation on human lens protein thiol/disulfide and solubility. Lou MF, et al. Curr Eye Res 1989 Sep;8(9):883–90

Glutathione synthesis and glutathione redox pathways in naphthalene cataract of the rat. Rathbun WB, et al. Curr Eye Res 1990 Jan;9(1):45–53

The fate of gamma L crystallins in rat lens during diabetic cataractogenesis as determined by a monoclonal antibody. Swamy MS, et al. Curr Eye Res 1989 Oct;8(10):989–96

Lens protein glycation and the subsequent degree of opacity in streptozotocin-diabetic rats. Yano M, et al. Diabetes Res Clin Pract 1989 Nov 6;7(4):259–62

Activities of ascorbate free radical reductase and H2O2-dependent NADH oxidation in senile cataractous human lenses. Bando M, et al. Exp Eye Res 1990 Jun; 50(6):779–86

Galactose-induced cataract in rat: Raman detection of sulfhydryl decrease and water increase along an equatorial diameter. Cai MZ, et al. Exp Eye Res 1989 Oct;49(4):531–41

Role of site-specific, metal-catalyzed oxidation in lens aging and cataract: a hypothesis. Garland D. Exp Eye Res 1990 Jun;50(6):677–82 (64 ref.)

Differential effects of galactose-induced cataractogenesis on the soluble crystallins of rat lens. Huang WQ, et al. Exp Eye Res 1990 Jul;51(1):79–85

Alpha crystallin from human cataractous vs. normal lenses: change in binding to lens membrane. Ifeanyi F, et al. Exp Eye Res 1990 Jan;50(1):113–6

Changes in lens proteins induced at the early stage of cataractogenesis in cac (Nakano) mice. Kobayashi S, et al. Exp Eye Res 1989 Oct;49(4):553–9

Structural conversions of crystallins under senile cataract, dehydration and UV-irradiation studied by X-ray diffraction. Krivandin AV, et al. Exp Eye Res 1989 Nov; 49(5):853–9

Distribution pattern of native fluorophores in cataractous lenses. Lohmann W, et al. Exp Eye Res 1990 Feb; 50(2):227–30

Elevation of glucose in ocular compartments of developing chick embryos with glucocorticoid-induced cataract. Nishigori H, et al. Exp Eye Res 1989 Oct;49(4):515–22

Glutathione levels in human lens: regional distribution in different forms of cataract. Pau H, et al. Exp Eye Res 1990 Jan;50(1):17–20

Analysis of tryptic peptides from the C-terminal region of alpha-crystallin from cataractous and normal human lenses. Takemoto LJ, et al. Exp Eye Res 1990 Jun;50(6):695–702

Osmotic state of lenses in three dominant murine cataract mutants. Graw J, et al. Graefes Arch Clin Exp Ophthalmol 1990;228(3):252–4

Antisera to alpha crystallin as probes to study changes in lens proteins during human cataractogenesis. Takemoto L, et al. Invest Ophthalmol Vis Sci 1990 Jul;31(7):1348–52

Lens crystallin reactive protein in the aqueous humor of cataract patients. Fujiwara H. Jpn J Ophthalmol 1989; 33(4):418–24

Covalent change in alpha crystallin in opaque and transparent sections from the same human cataractous lens. Kodama T, et al. Jpn J Ophthalmol 1990;34(1):44–52

Management of aldose reductase mRNA abundance in rat lens undergoing reversal of galactose induced cataracts. A model for gene response to changes in the environment. Bekhor I, et al. Mol Cell Biochem 1990 Jun 1;95(1):55–60

Regional water content of clear and cataractous human lenses. Deussen A, et al. Ophthalmic Res 1989;21(5):374–80

Changes of lens protein particles during development and reversal of galactose cataracts. Study by laser scattering spectroscopy. Kaneda M, et al. Ophthalmic Res 1990;22 Suppl 1:95–100

Alterations of urea-insoluble membrane fraction, MP26, of Emory mouse lenses in aging and cataractogenesis. Lo WK, et al. Ophthalmic Res 1990;22(2):82–8

The decrease of free epsilon-amino groups in senile and diabetic cataracts. Simonelli F, et al. Ophthalmic Res 1990; 22(3):160–5

[Clinical observations and calcium determinations in hypocalcemic cataract] Huang QL. Chung Hua Yen Ko Tsa Chih 1989 Sep;25(5):268–70 (Eng. Abstr.) (Chi)

[Analysis of trace elements in cataractous lenses and environmental samples in Tibet] Qu Z. Chung Hua Yen Ko Tsa Chih 1990 May;26(3):147–50 (Eng. Abstr.) (Chi)

[Trace element contents in the transparent lens and the senile cataract lens] Song WL, et al. Chung Hua Yen Ko Tsa Chih 1989 Jul;25(4):220–1 (Eng. Abstr.) (Chi)

[Electron spin resonance (ESR) study on hair of rats with diabetic cataract] Hu X, et al. Hua Hsi I Ko Ta Hsueh Hsueh Pao 1990 Jun;21(2):131–3 (Eng. Abstr.) (Chi)

[Study on change in zinc concentration for diabetic cataractous lenses in rats by means of XIXA] Liu X, et al. Hua Hsi I Ko Ta Hsueh Hsueh Pao 1990 Jun;21(2):134–6 (Eng. Abstr.) (Chi)

[Detection of sorbitol content in crystalline lens of normal rats and rats with diabetic cataract by 1H-NMR] Zhang S, et al. Hua Hsi I Ko Ta Hsueh Hsueh Pao 1990 Jun; 21(2):125–7 (Eng. Abstr.) (Chi)

[Study on the variation of relaxation time in diabetic cataractous lenses of rats by using NMRA] Zhang Y, et al. Hua Hsi I Ko Ta Hsueh Hsueh Pao 1990 Jun; 21(2):128–30 (Eng. Abstr.) (Chi)

[Phospholipids in lenses of the cac mouse] Sugimori H. Nippon Ganka Gakkai Zasshi 1990 Jun;94(6):566–71 (Eng. Abstr.) (Jpn)

[A study on the metabolism of galactose cataract using a 31P-NMR spectroscopy] Yoshida A, et al. Nippon Ganka Gakkai Zasshi 1989 Jun;93(6):722–6 (Eng.

Abstr.) (Jpn)
[Measurements of fluorescence spectra in transparent and cataractous lenses] Balter A, et al. **Klin Oczna** 1988;90 Suppl:474–5 (Eng. Abstr.) (Pol)
[Fluorescence excitation spectra of opacified lenses] Balter A. **Klin Oczna** 1988;90 Suppl:476–7 (Eng. Abstr.) (Pol)
[Photoluminescence of ocular lenses] Balter A, et al. **Klin Oczna** 1988;90 Suppl:471–3 (23 ref.) (Eng. Abstr.) (Pol)
[Spectrum of the ocular lens in infrared light. II. Characteristics of selected lenses on the basis of their spectra in infrared light] Gutsze A, et al. **Klin Oczna** 1988; 90 Suppl:469–70 (Eng. Abstr.) (Pol)
[The content of zinc in opaque human lenses] Starzycka M, et al. **Klin Oczna** 1988;90 Suppl:484–5 (Eng. Abstr.) (Pol)
[A structural study of crystallins in the normal and cataractous crystalline lens by x-ray diffraction] Krivandin AV, et al. **Oftalmol Zh** 1989;(6):365–6 (Eng. Abstr.) (Rus)

PATHOLOGY

Distinctive cataract in the Stickler syndrome. Seery CM, et al. **Am J Ophthalmol** 1990 Aug 15;110(2):143–8
Analysis of Scheimpflug photographs using the MSP-4 technique. Meinel UR, et al. **Dev Ophthalmol** 1989;17:69–71
Appearance of alpha-smooth muscle actin in human eye lens cells of anterior capsular cataract and in cultured bovine lens-forming cells. Schmitt-Gräff A, et al. **Differentiation** 1990 Apr;43(2):115–22
Lens-capsule material of human and animal origin, studied by SEM. Los LI, et al. **Doc Ophthalmol** 1989 Aug; 72(3–4):357–65
Biomicroscopy and scanning electron microscopy of early opacities in the aging human lens. Vrensen G, et al. **Invest Ophthalmol Vis Sci** 1990 Aug;31(8):1582–91
In vivo lens density measurements using the IntraOptics opacity lensmeter. Jones RL, et al. **J Cataract Refract Surg** 1990 Jan;16(1):115–9
Opalescent nuclear cataract. Levin ML. **J Cataract Refract Surg** 1989 Sep;15(5):576–9
New method of measuring nuclear cataract in color Scheimpflug photographs. Kashiwagi T, et al. **Ophthalmic Res** 1990;22 Suppl 1:24–8
Subjective (LOCS II) versus objective (BGS) measures of cortical and subcapsular cataracts in retroillumination photographs. Khu PM, et al. **Ophthalmic Res** 1990;22 Suppl 1:68–70
A new analysis method for cataractous images taken by retroillumination photography. Miyauchi A, et al. **Ophthalmic Res** 1990;22 Suppl 1:74–7
Evaluation of nuclear opacification using a lens opacity meter. Mizuno T, et al. **Ophthalmic Res** 1990;22 Suppl 1:36–40
Comparison of retroillumination images of crystalline lenses taken with different camera types. Sakamoto Y, et al. **Ophthalmic Res** 1990;22 Suppl 1:41–5
Proliferation of abnormal cells in fetal organ-cultured and human cataractous eye lenses. Veromann S. **Ophthalmic Res** 1989;21(6):443–5
Reproducibility studies with the Zeiss SLC system and animal cataract models. Wegener A, et al. **Ophthalmic Res** 1990;22 Suppl 1:18–23
Ultraviolet filter photography to demonstrate the fluorescence of animal lenses with different cataract models. Wegener A, et al. **Ophthalmic Res** 1990;22 Suppl 1:56–61
Objective measurement of cortical and subcapsular opacification in retroillumination photographs. Wolfe JK, et al. **Ophthalmic Res** 1990;22 Suppl 1:62–7
Visualization of crystallin droplets associated with cold cataract formation in young intact rat lens. Lo WK. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9926–30
[Ultrastructures of the capsule and subcapsular epithelium of the senile cataractous lens] Wu H, et al. **Chung Hua Yen Ko Tsa Chih** 1990 May;26(3):168–70 (Eng. Abstr.) (Chi)
[Light and electron microscopy of the human, anterior cataract capsule] Bleckmann H, et al. **Fortschr Ophthalmol** 1989;86(6):556–60 (Eng. Abstr.) (Ger)
[The reliability of ultrasound biometry] Giers U, et al. **Klin Monatsbl Augenheilkd** 1990 Mar;196(3):171–8 (Eng. Abstr.) (Ger)
[Histopathologic study of after-cataract in the pseudophakic rabbit eye using out-of-the-bag fixation. (I)] Ayaki M, et al. **Nippon Ganka Gakkai Zasshi** 1990 Jun;94(6):553–8 (Eng. Abstr.) (Jpn)
[Histopathologic study of after-cataract in the pseudophakic rabbit eye using in-the-bag fixation. (II)] Ayaki M, et al. **Nippon Ganka Gakkai Zasshi** 1990 Jun;94(6):559–65 (Eng. Abstr.) (Jpn)
[Cell density and hexagonality of lens epithelium in human cataracts] Saitoh J, et al. **Nippon Ganka Gakkai Zasshi** 1990 Feb;94(2):176–80 (Eng. Abstr.) (Jpn)
[Movement of regenerated lens epithelial cells in 50% galactose cataract and an aldose reductase inhibitor] Terubayashi H, et al. **Nippon Ganka Gakkai Zasshi** 1989 Nov;93(11):1044–53 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

A new glare test based on low contrast letters--evaluation in cataract patients. Hård AL, et al. **Acta Ophthalmol (Copenh)** 1990 Apr;68(2):145–50
Quantification of lens opacification with a commercially available lensometer. Tuft SJ, et al. **Br J Ophthalmol** 1990 Feb;74(2):78–81
Jin H. Kinoshita International Symposium. 7 - 10 September, 1989. Proceedings. **Exp Eye Res** 1990 Jun;50(6):563–826
Degradation of crystallins from a psoriatic patient undergoing PUVA therapy. Sa e Melo T, et al. **FEBS Lett** 1990 Jul 30;268(1):72–4
31P nuclear magnetic resonance and laser spectroscopic analyses of lens transparency during calcium-induced opacification. Beaulieu CF, et al. **Invest Ophthalmol Vis Sci** 1990 Jul;31(7):1339–47
Glare and mesopic vision before and after cataract surgery. Weiss JF. **J Cataract Refract Surg** 1990 Jan;16(1):88–91
Quantitative evaluation of electroretinogram before cataract surgery. Cruz RD, et al. **Jpn J Ophthalmol** 1989;33(4):451–7
Contrast sensitivity and glare sensitivity changes with three types of cataract morphology: are these techniques necessary in a clinical evaluation of cataract? Elliott DB, et al. **Ophthalmic Physiol Opt** 1989 Jan;9(1):25–30
The subjective assessment of cataract. Elliott DB, et al. **Ophthalmic Physiol Opt** 1989 Jan;9(1):16–9
Prediction of visual function behind cataract using displacement threshold hyperacuity [see comments] Whitaker D, et al. **Ophthalmic Physiol Opt** 1989 Jan; 9(1):20–4 Comment in: Ophthalmic Physiol Opt 1989 Oct;9(4):456.
Aqueous/vitreous tonicity in "sugar' cataracts. Xiong H, et al. **Ophthalmic Res** 1989;21(4):292–6
Quantification and measurement of human lens opacities using the lens opacity meter. Costagliola C, et al. **Ophthalmologica** 1990;201(1):45–8
[Retinal function test of eyes with opaque refractive media] Zhang L. **Chung Hua Yen Ko Tsa Chih** 1989 May; 25(3):135–7 (Eng. Abstr.) (Chi)
[Contrast sensitivity of the pseudophakic eye] Malbrel C. **Bull Soc Ophtalmol Fr** 1990 Jan;90(1):93 (Eng. Abstr.) (Fre)
[Effect of light on the eye on metabolism and hormones] Hollwich F, et al. **Klin Monatsbl Augenheilkd** 1989 Nov; 195(5):284–90 (Eng. Abstr.) (Ger)
[A simple method of measuring ocular lens transparency] Bielski A, et al. **Klin Oczna** 1988;90 Suppl:452–3 (Eng. Abstr.) (Pol)
[Examination of transmitting spectra in lenses with cataracts] Gerkowicz K, et al. **Klin Oczna** 1988;90 Suppl:457–9 (Eng. Abstr.) (Pol)
[Examination of the influence of certain factors on the transmission of light by the lens] Prost M, et al. **Klin Oczna** 1988;90 Suppl:460–2 (Eng. Abstr.) (Pol)
[Examination of changes in light transmission in normal lenses and lenses with cataract] Prost M, et al. **Klin Oczna** 1988; 90 Suppl:465–6 (Eng. Abstr.) (Pol)
[Examination of lens transparency in vitro depending on temperature] Różyczka M, et al. **Klin Oczna** 1988;90 Suppl:454–5 (Eng. Abstr.) (Pol)
[The prognosis of the visual results of treating children with congenital cataracts based on visual evoked potentials] Fil'chikova LI, et al. **Oftalmol Zh** 1989;(3):129–32 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Protection against cataract by aspirin, paracetamol and ibuprofen. Harding JJ, et al. **Acta Ophthalmol (Copenh)** 1989 Oct;67(5):518–24
Vitamin E intake and risk of cataracts in humans. Robertson JM, et al. **Ann N Y Acad Sci** 1989;570:372–82
Modeling cortical cataractogenesis: IX. Activity of vitamin E and esters in preventing cataracts and gamma-crystallin leakage from lenses in diabetic rats. Trevithick JR, et al. **Ann N Y Acad Sci** 1989;570:358–71
Allopurinol promotes and butylated hydroxy toluene prevents sugar-induced cataractogenesis. Ansari NH, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):939–43
Biochemical test reactions for the evaluation of the potential anticataractic function of iodide. Heinisch HH, et al. **Dev Ophthalmol** 1989;17:132–7
Model systems for testing anticataractic activities in rabbit eyes. Kröner RP, et al. **Dev Ophthalmol** 1989;17:138–44
In vivo effectiveness of sulindac in sugar cataracts--the implication. Sharma YR, et al. **Dev Ophthalmol** 1989; 17:173–5
Ibuprofen, a putative anti-cataract drug, protects the lens against cyanate and galactose. Roberts KA, et al. **Exp Eye Res** 1990 Feb;50(2):157–64
Photoinduction of cataracts in rat lens in vitro. Preventive effect of pyruvate. Varma SD, et al. **Exp Eye Res** 1990 Jun;50(6):805–12
Prevention and reversal of cataracts in genetically hypertensive rats through sodium restriction. Rodríguez-Sargent C, et al. **Invest Ophthalmol Vis Sci** 1989 Nov;30(11):2356–60
Spectacles, ultraviolet radiation, and formation of cataracts [letter] McDonagh AF, et al. **N Engl J Med** 1989 Nov 23;321(21):1478–9
Associations between nutrition and cataract. Taylor A. **Nutr Rev** 1989 Aug;47(8):225–34 (62 ref.)
Prevention of posterior capsular opacification by cryolysis and the use of heparinized irrigating solution during extracapsular lens extraction in rabbits. Zaturinsky B, et al. **Ophthalmic Surg** 1990 Jun;21(6):431–4
Dietary myo-inositol effect on sugar cataractogenesis. Beyer-Mears A, et al. **Pharmacology** 1989;39(1):59–68
Glutathione ester prevents buthionine sulfoximine-induced cataracts and lens epithelial cell damage. Mårtensson J, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8727–31
Minimizing and measuring lens dose when giving cranial irradiation. Woo SY, et al. **Radiother Oncol** 1989 Nov; 16(3):183–8
[Morphological classification of the prevention by aldose reductase inhibitor of rat galactosemic cataract] Akagi Y, et al. **Nippon Ganka Gakkai Zasshi** 1989 Apr;93(4):494–500 (Eng. Abstr.) (Jpn)

THERAPY

Monocular infantile cataract, intraocular lenses, and amblyopia [comment] Taylor D. **Br J Ophthalmol** 1989 Nov;73(11):857–8 (14 ref.) Comment on: Br J Ophthalmol 1989 Nov;73(11):860–4.
Long-term results of IOL implantation in traumatic cataracts. Özçetin H, et al. **Bull Soc Belge Ophtalmol** 1988;228:1–8
[A challenge to be taken up. Management of 16 million cases of cataract not surgically treated in developing countries] Thylefors B, et al. **J Fr Ophtalmol** 1989;12(2):75–8 (Fre)
[Aging of the eye--findings and management] Yasuzaka A. **Hokkaido Igaku Zasshi** 1990 Jan;65(1):16–20 (Jpn)

VETERINARY

Possible causes of cataract in Atlantic salmon (Salmo salar) [letter] Dobson DP, et al. **Exp Eye Res** 1990 Apr; 50(4):439–42
Nuvan and cataracts in Atlantic salmon (Salmo salar). Fraser PJ, et al. **Exp Eye Res** 1990 Apr;50(4):443–7
Blood glucose, calcium and urea in cows from a herd with congenital nuclear cataract. France MP, et al. **Vet Rec** 1990 May 12;126(19):484–5
Success rates of unilateral vs. bilateral cataract extraction in dogs. Davidson MG, et al. **Vet Surg** 1990 May-Jun; 19(3):232–6
[Lens extraction] Heijn A. **Tijdschr Diergeneeskd** 1990 Mar 1;115(5):224–6 (Dut)

CATARACT EXTRACTION

see related
APHAKIA, POSTCATARACT
LENSES, INTRAOCULAR

Midazolam and flumazenil in ophthalmology. Gobeaux D, et al. **Acta Anaesthesiol Scand Suppl** 1990;92:35–8
Cataract extraction in patients with chronic posterior uveitis. Brinkman CJ, et al. **Acta Ophthalmol (Copenh)** 1990 Apr; 68(2):151–4
Phacoemulsification and intraocular lens implantation in patients with cataract. Experiences of a beginning 'phacoemulsification surgeon'. Pedersen OO. **Acta Ophthalmol (Copenh)** 1990 Feb;68(1):59–64
The effect of standardized keratoplasty technique on IOL power calculation for the triple procedure. Mattax JB, et al. **Acta Ophthalmol Suppl (Copenh)** 1989;192:24–9
The use of eye pads after cataract surgery. Carpel EF. **Am J Ophthalmol** 1990 Sep 15;110(3):318–9
Propionibacterium acnes endophthalmitis two years after extracapsular cataract extraction. Friberg TR, et al. **Am J Ophthalmol** 1990 May 15;109(5):609–10
Postoperative endophthalmitis caused by Wangiella dermatitidis. Margo CE, et al. **Am J Ophthalmol** 1990 Sep 15;110(3):322–3
Carbachol dose response. Zimmerman TJ, et al. **Am J Ophthalmol** 1989 Oct 15;108(4):456–7
A comparison of the effects of alfentanil/droperidol or fentanyl/droperidol on intra-ocular pressure. Coley S, et al. **Anaesthesia** 1990 Jun;45(6):477–80
Visual acuity after retrobulbar anesthesia. Levin ML, et al. **Ann Ophthalmol** 1989 Sep;21(9):337–9
Topical flurbiprofen in intraocular surgery on diabetic and nondiabetic patients. Tsuchisaka H, et al. **Ann Ophthalmol** 1990 Jan;22(1):15–9, 23
Toxic endothelial cell destruction of the cornea after routine extracapsular cataract surgery. Breebaart AC, et al. **Arch Ophthalmol** 1990 Aug;108(8):1121–5
Cataract surgery in nanophthalmic eyes. Brockhurst RJ. **Arch Ophthalmol** 1990 Jul;108(7):965–7
Effect of sulcus vs capsular fixation on YAG-induced pressure rises following posterior capsulotomy. Gimbel HV, et al. **Arch Ophthalmol** 1990 Aug;108(8):1126–9
Cataract surgery. A global perspective [editorial] Taylor HR, et al. **Arch Ophthalmol** 1990 Jun;108(6):797–8
Topical antibiotic prophylaxis for cataract surgery: a controlled trial of fusidic acid and chloramphenicol. Dallison IW, et al. **Aust N Z J Ophthalmol** 1989 Aug; 17(3):289–93
Glaucoma and its relationship to intraocular lens implantation. Obstbaum SA, et al. **Aust N Z J Ophthalmol** 1989 Aug;17(3):303–8 (37 ref.)
Cataracts, intra-ocular lens implants, and a flying career. Liddy BS, et al. **Aviat Space Environ Med** 1990 Jul; 61(7):660–1
"Operation Cataract" [letter] Must CJ. **BMJ** 1989 Dec 9;

299(6713):1465
Local analgesia prevents the cortisol and glycaemic responses to cataract surgery. Barker JP, et al. **Br J Anaesth** 1990 Apr;64(4):442–5
Intraocular lens power calculations in the triple procedure. Abdel-Hakim AS, et al. **Br J Ophthalmol** 1989 Sep; 73(9):709–13
Stabilisation of refraction following extracapsular cataract extraction. Baranyovits P. **Br J Ophthalmol** 1990 Aug; 74(8):486–9
Monocular infantile cataract, intraocular lenses, and amblyopia [letter] Burke JP, et al. **Br J Ophthalmol** 1989 Dec;73(12):1019
Intraocular lens implants for uniocular cataracts in childhood [see comments] Burke JP, et al. **Br J Ophthalmol** 1989 Nov; 73(11):860–4 Comment in: Br J Ophthalmol 1989 Nov;73(11):857–8.
Total hyphema following streptokinase administration eight days after cataract extraction [letter] Cahane M, et al. **Br J Ophthalmol** 1990 Jul;74(7):447
Persistently raised intraocular pressure following extracapsular cataract extraction. David R, et al. **Br J Ophthalmol** 1990 May;74(5):272–4
Visual outcome and complications after cataract extraction in Saudi Arabia. al Faran MF. **Br J Ophthalmol** 1990 Mar; 74(3):141–3
Retinal detachment and its relation to cataract surgery [see comments] Gray RH, et al. **Br J Ophthalmol** 1989 Oct; 73(10):775–80 Comment in: Br J Ophthalmol 1989 Oct;73(10):773.
Day case cataract surgery [letter; comment] Haylen MJ, et al. **Br J Ophthalmol** 1989 Nov;73(11):932–3 Comment on: Br J Ophthalmol 1988 Dec;72(12):897–9.
Simultaneous pterygium and intraocular surgery. Ibechukwu BI. **Br J Ophthalmol** 1990 May;74(5):265–6
Is padding necessary after cataract extraction? Laws DE, et al. **Br J Ophthalmol** 1989 Sep;73(9):699–701
Extracapsular cataract extraction under local anaesthesia without retrobulbar injection [see comments] Redmond RM, et al. **Br J Ophthalmol** 1990 Apr;74(4):203–4 Comment in: Br J Ophthalmol 1990 Apr;74(4):195.
Warfarin and cataract extraction. Robinson GA, et al. **Br J Ophthalmol** 1989 Sep;73(9):702–3
Topical use of indomethacin on the day of cataract surgery. Searle AE, et al. **Br J Ophthalmol** 1990 Jan;74(1):19–21
Paediatric cataract surgery [editorial; comment] Smith R. **Br J Ophthalmol** 1990 Feb;74(2):66 Comment on: Br J Ophthalmol 1990 Feb;74(2):73–7.
Aphakic detachment: a thing of the past? [editorial; comment] Smith R. **Br J Ophthalmol** 1989 Oct;73(10):773 Comment on: Br J Ophthalmol 1989 Oct;73(10):775–80.
Not enough cataract surgeons [editorial; comment] Smith R. **Br J Ophthalmol** 1990 Jun;74(6):324 Comment on: Br J Ophthalmol 1990 Jun;74(6):333–40. Comment on: Br J Ophthalmol 1990 Jun;74(6):341–3.
Cataract extraction without retrobulbar anaesthetic injection [see comments] Smith R. **Br J Ophthalmol** 1990 Apr; 74(4):205–7 Comment in: Br J Ophthalmol 1990 Apr;74(4):195.
Cataract surgery [editorial] Steele A. **Br J Ophthalmol** 1990 Mar;74(3):130–1
Local anaesthesia for cataract surgery [editorial; comment] Steele A. **Br J Ophthalmol** 1990 Apr;74(4):195 Comment on: Br J Ophthalmol 1990 Apr;74(4):203–4. Comment on: Br J Ophthalmol 1990 Apr;74(4):205–7.
A randomized comparison of midazolam and diazepam injectable emulsion in cataract surgery. Chung F, et al. **Can J Anaesth** 1990 Jul;37(5):528–33
Oxygen desaturation in elderly patients during cataract surgery. Forrest JB, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S50
Recovery after neuroleptanalgesia for cataract surgery. Forrest JB, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S82
The effect of hyaluronidase on the speed of onset of retrobulbar anaesthesia. Wood G, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S62
Control of intraocular pressure after cataract extraction. Hollands RH, et al. **Can J Ophthalmol** 1990 Apr; 25(3):128–32
Bacteroides fragilis endophthalmitis: a case report. Kelly LD, et al. **Can J Ophthalmol** 1990 Jun;25(4):208–9 (6 ref.)
Postoperative open-angle glaucoma following topical application of steroids. Kwitko ML. **Can Med Assoc J** 1966 Apr 30;94(18):966–7
Posterior chamber intraocular lens implantation in patients with retinitis pigmentosa. Reccia R, et al. **Doc Ophthalmol** 1989 Jun;72(2):115–8
In vitro corneal endothelial permeability in rabbit and human: the effects of age, cataract surgery and diabetes. Watsky MA, et al. **Exp Eye Res** 1989 Nov;49(5):751–67
Hydroxypropyl methylcellulose in extracapsular cataract surgery with intraocular lens implantation: intraocular pressure and inflammatory response. Chumbley LC, et al. **Eye** 1990;4 (Pt 1):121–6
How clean is your capsule? Green WT, et al. **Eye** 1989;3 (Pt 6):678–84
The role of white light interferometry in predicting visual acuity following posterior capsulotomy. Hanna IT, et al. **Eye** 1989;3 (Pt 4):468–71
Extracapsular cataract surgery with and without intraocular lens implantation in Fuchs' Heterochromic Uveitis. Jones NP. **Eye** 1990;4 (Pt 1):145–50
Extracapsular cataract extraction and posterior chamber lens implantation in patients with primary chronic angle-closure glaucoma: effect on intraocular pressure control. Wishart PK, et al. **Eye** 1989;3 (Pt 6):706–12
High volume efficient cataract surgery in developing countries. Christy NE. **Int Ophthalmol** 1990 May; 14(3):141–6 (10 ref.)
Astigmatism shift after extracapsular surgery: Mersilene versus nylon. Drews RC. **Int Ophthalmol** 1989 May; 13(3):209–10
Screening and surgical intervention results from cataract-free-zone projects in Campinas, Brazil and Chimbote, Peru. Jose NK, et al. **Int Ophthalmol** 1990 May; 14(3):155–64
Consultation section. Elective cataract surgery and visual potential after cataract surgery. **J Cataract Refract Surg** 1989 Sep;15(5):589–94
Effect of incision length, location, and shape on local corneoscleral deformation during cataract surgery. Armeniades CD, et al. **J Cataract Refract Surg** 1990 Jan; 16(1):83–7
Proper retrospective study [letter; comment] Berdy GJ, et al. **J Cataract Refract Surg** 1989 Sep;15(5):595–6 Comment on: J Cataract Refract Surg 1989 Mar;15(2):185–90.
Vaulted posterior chamber lenses and the posterior capsule. Boberg-Ans LJ, et al. **J Cataract Refract Surg** 1990 May; 16(3):325–8
Extracapsular cataract surgery and intraocular lens implantation in glaucomatous eyes that had a filtering bleb operation. Burratto L, et al. **J Cataract Refract Surg** 1990 May;16(3):315–9
Capsular bag distension after endophacoemulsification and posterior chamber intraocular lens implantation. Davison JA. **J Cataract Refract Surg** 1990 Jan;16(1):99–108
Comparison of hydroxypropyl methylcellulose 2% (Adatocel) and hyaluronic acid 1% (Healon). Fechner PU, et al. **J Cataract Refract Surg** 1989 Nov;15(6):685–8
ECG abnormalities and systemic diseases in patients having cataract or glaucoma surgery [letter] Gallenga PE, et al. **J Cataract Refract Surg** 1990 Jul;16(4):528
Results of neodymium:YAG laser posterior capsulotomy following penetrating keratoplasty. Insler MS, et al. **J Cataract Refract Surg** 1990 May;16(3):369–71
Opalescent nuclear cataract. Levin ML. **J Cataract Refract Surg** 1989 Sep;15(5):576–9
Anesthetic agents used in cataract surgery [letter] Livingston MW, et al. **J Cataract Refract Surg** 1990 Mar;16(2):272
Astigmatic keratotomy to correct preexisting astigmatism in cataract patients. Maloney WF, et al. **J Cataract Refract Surg** 1990 May;16(3):297–304
Corneal-scleral melt in association with cataract surgery and intraocular lenses: a report of four cases. Mamalis N, et al. **J Cataract Refract Surg** 1990 Jan;16(1):108–15
Further development of experimental techniques for refilling the lens of animal eyes with a balloon. Nishi O, et al. **J Cataract Refract Surg** 1989 Sep;15(5):584–8
Precision in cataract and intraocular lens surgery [editorial] Obstbaum SA. **J Cataract Refract Surg** 1990 May;16(3):295
Glare and mesopic vision before and after cataract surgery. Weiss JF. **J Cataract Refract Surg** 1990 Jan;16(1):88–91
Simultaneous surgery for bilateral congenital cataracts. Guo S, et al. **J Pediatr Ophthalmol Strabismus** 1990 Jan–Feb; 27(1):23–5; discussion 26–7
Intraocular lens implantation following cataract extraction in Fuchs' heterochromic uveitis. Razzak A, et al. **Ophthalmic Res** 1990;22(2):134–6
Intraocular lens implantation following extracapsular cataract extraction in uveitis. Chung YM, et al. **Ophthalmic Surg** 1990 Apr;21(4):272–6
Combined cataract implant and filtering surgery with 5-fluorouracil. Cohen JS. **Ophthalmic Surg** 1990 Mar; 21(3):181–6
Limbal anesthesia for cataract surgery. Furuta M, et al. **Ophthalmic Surg** 1990 Jan;21(1):22–5; discussion 26
A hypertensive emergency following cataract extraction and cornea transplantation. Hemmady P, et al. **Ophthalmic Surg** 1989 Sep;20(9):647–9, Discussion, 650
The long-term effect on intraocular pressure of a procedure combining trabeculectomy and cataract surgery, as compared with trabeculectomy alone. Naveh N, et al. **Ophthalmic Surg** 1990 May;21(5):339–45
Effect of intraocular aspiration of sodium hyaluronate on postoperative intraocular pressure. Stamper RL, et al. **Ophthalmic Surg** 1990 Jul;21(7):486–91
Anterior eyewall perforation during subconjunctival cataract block. Yanoff M, et al. **Ophthalmic Surg** 1990 May; 21(5):362–3
Extracapsular cataract extraction, posterior chamber lens insertion, and pars plana vitrectomy in one operation. Benson WE, et al. **Ophthalmology** 1990 Jul;97(7):918–21
Complications of sulcus-supported intraocular lenses with iris sutures, implanted during penetrating keratoplasty after intracapsular cataract extraction. Busin M, et al. **Ophthalmology** 1990 Apr;97(4):401–5; discussion 405–6
Low myopia with low astigmatic correction gives cataract surgery patients good depth of focus. Datiles MB, et al. **Ophthalmology** 1990 Jul;97(7):922–6
Managing cataracts in patients with uveitis [letter; comment] Girard LJ. **Ophthalmology** 1989 Oct;96(10):1574 Comment on: Ophthalmology 1989 Mar;96(3):281–8.
Vitreous loss rates in extracapsular cataract surgery by residents. Pearson PA, et al. **Ophthalmology** 1989 Aug; 96(8):1225–7
The barrier function in extracapsular cataract surgery. Smith RT, et al. **Ophthalmology** 1990 Jan;97(1):90–5
Association of systemic hypertension and diabetes mellitus with cataract extraction. A case-control study. Szmyd L Jr, et al. **Ophthalmology** 1989 Aug;96(8):1248–52
Prospective 5-year postoperative study of cataract extraction and lens implantation. Liesegang TJ, et al. **Trans Am Ophthalmol Soc** 1990;87:57–75; discussion 76–8
[Implantation of posterior chamber IOL after traumatic cataract extraction] Chen GL. **Chung Hua Yen Ko Tsa Chih** 1989 Sep;25(5):265–7 (Eng. Abstr.) **(Chi)**
[Clinical observations on the combined operation of penetrating keratoplasty, extracapsular cataract extraction and IOL implantation] Zheng YR, et al. **Chung Hua Yen Ko Tsa Chih** 1990 May;26(3):135–7 (Eng. Abstr.) **(Chi)**
[Methods and results of intraocular lens implantation at the Eye Clinic in Brno] Janula J, et al. **Cesk Oftalmol** 1990 Mar;46(2):89–93 (Eng. Abstr.) **(Cze)**
[Experience with the extracapsular extraction of cataracts in a community facility] Mazal Z. **Cesk Oftalmol** 1989 Jul; 45(4):308–13 (Eng. Abstr.) **(Cze)**
[Changes in the lens and cataract surgery in dialyzed patients] Stibor V, et al. **Cesk Oftalmol** 1989 Jul;45(4):253–60 (Eng. Abstr.) **(Cze)**
[Peribulbar anesthesia in cataract surgery] Poupard P, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R171 **(Fre)**
[Irreversible areflexive mydriasis following extracapsular surgery for cataract] Pereleux A, et al. **Bull Soc Belge Ophtalmol** 1988;229:73–80 (Eng. Abstr.) **(Fre)**
[An uncommon clinical form of phakolytic glaucoma] Bremond D, et al. **Bull Soc Ophtalmol Fr** 1989 Jun–Jul; 89(6–7):853–6 (Eng. Abstr.) **(Fre)**
[Importance of modulated neuroleptanalgesia in anterior chamber implantation] Clergeau G, et al. **Bull Soc Ophtalmol Fr** 1989 Mar;89(3):429–31 (Eng. Abstr.) **(Fre)**
[15-year evolution of loco-regional anesthesia for cataracts at a general hospital center] Dhedin G, et al. **Bull Soc Ophtalmol Fr** 1989 Feb;89(2):237–41 (Eng. Abstr.) **(Fre)**
[Cataract surgery in the diabetic] Rouchy JP. **Diabete Metab** 1989 Nov–Dec;15(6):426–8 (3 ref.) **(Fre)**
[Preventive cryotherapy of the retina and cataract surgery] Herzeel R, et al. **J Fr Ophtalmol** 1989;12(6–7):433–7 (Eng. Abstr.) **(Fre)**
[Progression of diabetic retinopathy following cataract extraction] Vignanelli M. **Klin Monatsbl Augenheilkd** 1990 May;196(5):334–7 (Eng. Abstr.) **(Fre)**
[Plasma level of lidocaine and adrenaline in local anesthesia with addition of colloid in eye surgery] Adams HA, et al. **Fortschr Ophthalmol** 1990;87(2):209–13 (Eng. Abstr.) **(Ger)**
[A pilot study on the effect of atrial natriuretic peptide on intraocular pressure in the human] Goldmann DB, et al. **Fortschr Ophthalmol** 1989;86(5):494–6 (Eng. Abstr.) **(Ger)**
[Intraocular pressure and ocular hemodynamics following oculopression with and without added retrobulbar anesthesia] Hessemer V, et al. **Fortschr Ophthalmol** 1989; 86(6):767–72 (Eng. Abstr.) **(Ger)**
[Comparison of the effect of 0.75% bupivacaine with 0.75% bupivacaine/2% mepivacaine in retrobulbar anesthesia and the effect of adding hyaluronidase] Lange W, et al. **Fortschr Ophthalmol** 1989;86(4):312–5 (Eng. Abstr.) **(Ger)**
[Preoperative disinfection of the conjunctiva with PVP-iodine] Maeck CR, et al. **Fortschr Ophthalmol** 1990; 87(3):320–3 (Eng. Abstr.) **(Ger)**
[Pseudo-exfoliation syndrome as a risk factor for vitreous loss in extra-capsular cataract extraction. The Erlangen Eye Information Group] Naumann GO, et al. **Fortschr Ophthalmol** 1989;86(6):543–5 (Eng. Abstr.) **(Ger)**
[Local anesthetic level and cardiovascular changes following local anesthesia in cataract operations with 3% mepivacaine] Schäffer J, et al. **Fortschr Ophthalmol** 1989; 86(4):319–22 (Eng. Abstr.) **(Ger)**
[In vivo examination of aqueous humor for cells and protein in clinically silent anterior uveitis before surgical interventions] Strobel J, et al. **Fortschr Ophthalmol** 1990; 87(3):305–7 (Eng. Abstr.) **(Ger)**
[Automatic evaluation of visual functions using a computer] Strobel J, et al. **Fortschr Ophthalmol** 1989;86(4):370–3 (Eng. Abstr.) **(Ger)**
[Evaluation of inflammatory reactions following cataract surgery] Wenzel M, et al. **Fortschr Ophthalmol** 1989; 86(5):422–5 (Eng. Abstr.) **(Ger)**
[Monocular and binocular vision following lens implantation in traumatic cataract] Aust W, et al. **Klin Monatsbl Augenheilkd** 1989 Sep;195(3):166–8 (Eng. Abstr.) **(Ger)**
[Effect of light on the eye on metabolism and hormones] Hollwich F, et al. **Klin Monatsbl Augenheilkd** 1989 Nov; 195(5):284–90 (Eng. Abstr.) **(Ger)**
[Cell density of the corneal endothelium following cataract surgery] Reinhard T, et al. **Klin Monatsbl Augenheilkd** 1989 Oct;195(4):211–5 (Eng. Abstr.) **(Ger)**
[Practical questions concerning cataract surgery (editorial)]

Bucher PJ, et al. **Schweiz Rundsch Med Prax** 1990 Feb 13;79(7):153–4 **(Ger)**

[The importance of ultrasonic study in optimizing the surgical treatment of congenital cataract in children] Sorochinskaia TA. **Oftalmol Zh** 1989;(3):132–6 (Eng. Abstr.) **(Rus)**

[The prognosis for the visual outcomes in the surgical treatment of children with congenital partial cataracts] Shpak AA, et al. **Vestn Oftalmol** 1990 Jan–Feb;106(1):24–7 (Eng. Abstr.) **(Rus)**

[Modern surgery of cataracts] Izák M. **Cesk Oftalmol** 1990 Mar;46(2):81–8 (Eng. Abstr.) **(Slo)**

ADVERSE EFFECTS

Diabetic maculopathy and cataract extraction. Smečka Z, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;122:291–4

Refractive complications of cataract surgery after radial keratotomy. Koch DD, et al. **Am J Ophthalmol** 1989 Dec 15;108(6):676–82

Conjunctival lesion in a patient with a history of glaucoma. Filtering conjunctival blebs. Stough DB, et al. **Arch Dermatol** 1990 Sep;126(9):1225–6, 1228–9

Corneal toxic changes after cataract extraction. Zabel RW, et al. **Can J Ophthalmol** 1989 Dec;24(7):311–6

Corneal astigmatism after cataract surgery. Dekkers NW, et al. **Doc Ophthalmol** 1989 Aug;72(3–4):323–7

Anticoagulant therapy and cataract surgery. Moll AC, et al. **Doc Ophthalmol** 1989 Aug;72(3–4):367–73

Experimental bacterial endophthalmitis following extracapsular lens extraction. Records RE, et al. **Exp Eye Res** 1989 Nov;49(5):729–37

Retinal detachment following YAG laser capsulotomy. MacEwen CJ, et al. **Eye** 1989;3 (Pt 6):759–63

Bacterial contamination of intraocular and extraocular fluids during extracapsular cataract extraction. Sherwood DR, et al. **Eye** 1989;3 (Pt 3):308–12

Consultation section. conjunctional bleb at the temporal extreme of cataract incision site. **J Cataract Refract Surg** 1990 Jul;16(4):520–4

Secondary intraocular lens implantation in eyes that experienced suprachoroidal hemorrhage during primary cataract surgery. Bryant WR. **J Cataract Refract Surg** 1989 Nov;15(6):629–34

Pathogenesis of posterior capsular opacification. Part I. Epidemiological and clinico-statistical data. Frezzotti R, et al. **J Cataract Refract Surg** 1990 May;16(3):347–52

Fellow eyes in aphakic and pseudophakic bullous keratopathy. Insler MS, et al. **J Cataract Refract Surg** 1990 Jan;16(1):92–5

Postcataract extraction ptosis: effect of the bridle suture. Loeffler M, et al. **J Cataract Refract Surg** 1990 Jul; 16(4):501–4

Long-term study of the prevalence of capsular opacification following extracapsular cataract extraction. Moisseiev J, et al. **J Cataract Refract Surg** 1989 Sep;15(5):531–3

Prospective study of posterior capsule-zonular disruption during extracapsular cataract extraction: eliminating iatrogenic disruption. O'Donnell FE Jr, et al. **J Cataract Refract Surg** 1990 May;16(3):329–32

Posterior polar cataracts: a predisposition to intraoperative posterior capsular rupture. Osher RH, et al. **J Cataract Refract Surg** 1990 Mar;16(2):157–62

The torn posterior capsule: its intraoperative behavior, surgical management, and long-term consequences. Osher RH, et al. **J Cataract Refract Surg** 1990 Jul;16(4):490–4

Fibrinoid reaction after extracapsular cataract extraction and relationship to exfoliation syndrome. Wålinder PE, et al. **J Cataract Refract Surg** 1989 Sep;15(5):526–30

Thyroid eye disease presenting after cataract surgery. Hamed LM, et al. **J Pediatr Ophthalmol Strabismus** 1990 Jan–Feb; 27(1):10–5

Astigmatism after cataract surgery: nylon versus Mersilene. Drews RC. **Ophthalmic Surg** 1989 Oct;20(10):695–6

Pupillary block glaucoma following pediatric cataract extraction. Eustis HS Jr, et al. **Ophthalmic Surg** 1990 Jun; 21(6):413–5

Iris/anterior capsular adhesions in endocapsular extraction [letter; comment] Mackintosh GM, et al. **Ophthalmic Surg** 1989 Oct;20(10):752 Comment on: Ophthalmic Surg 1989 Apr;20(4):245–9.

The shouting surgeon as a possible source of endophthalmitis. Schiff FS. **Ophthalmic Surg** 1990 Jun;21(6):438–40

Silicone oil tamponade in the management of severe hemorrhagic detachment of the choroid and ciliary body after surgical trauma. Alexandridis E. **Ophthalmologica** 1990;200(4):189–93

Histoplasma capsulatum endophthalmitis after cataract extraction. Pulido JS, et al. **Ophthalmology** 1990 Feb; 97(2):217–20

Pseudophakic retinal detachments. The relationships between retinal tears and the time following cataract surgery at which they occur. Bradford JD, et al. **Retina** 1989; 9(3):181–6

An analysis of corneal endothelial and graft survival in pseudophakic bullous keratopathy. Sugar A. **Trans Am Ophthalmol Soc** 1990;87:762–801

[Vitreous loss and the incidence of cystoid macular edema] Lin ZD, et al. **Chung Hua Yen Ko Tsa Chih** 1990 May; 26(3):144–6 (Eng. Abstr.) **(Chi)**

[Follow-up for posterior capsular opacification after extracapsular cataract extraction in 263 eyes] Zhu ZR. **Chung Hua Yen Ko Tsa Chih** 1990 May;26(3):138–40 (Eng. Abstr.) **(Chi)**

[Analysis of 3 cases of phako-antigenic uveitis] Gauthier L, et al. **Bull Soc Ophtalmol Fr** 1989 Oct;89(10):1145–7 **(Fre)**

[Cystoid macular edema, retinal detachment and vitreous detachment] Haut J, et al. **Bull Soc Ophtalmol Fr** 1989 Aug–Sep;89(8–9):1035–8 **(Fre)**

[Postoperative uveitis following extra-capsular extraction and posterior chamber implantation] Saracco JB, et al. **Bull Soc Ophtalmol Fr** 1989 Mar;89(3):433–6 (Eng. Abstr.) **(Fre)**

[Secondary cataract after mechanized extracapsular technic or phacoemulsification] Arneodo J. **J Fr Ophtalmol** 1989; 12(4):287–90 (Eng. Abstr.) **(Fre)**

[Retinal detachment following posterior capsulotomy using a YAG laser] Pariente O, et al. **Ophtalmologie** 1989 Jan–Mar;3(1):26–8 (Eng. Abstr.) **(Fre)**

[Prophylaxis of cystoid macular edema after cataract surgery. Observation of an application of Chibro-Amuno] Dirscherl M, et al. **Ophthalmologica** 1990;200(3):142–9 (Eng. Abstr.) **(Ger)**

[Risk factors for complications in cataract surgery using cryoextraction methods] Zygulska-Machowa H, et al. **Klin Oczna** 1988;90 Suppl:497–8 (Eng. Abstr.) **(Pol)**

ECONOMICS

Cataract PPOs [editorial] Jensen AD. **Arch Ophthalmol** 1990 Apr;108(4):501–2

"Operation Cataract" [letter] **BMJ** 1989 Dec 2; 299(6712):1403

An essay on choices.... Noreika JC. **Ohio Med** 1989 Oct; 85(10):755–6

A modest proposal: cataract cool-off period (C-COP) [editorial] Swift J. **Ophthalmic Surg** 1989 Sep;20(9):617–8

How the golden egg of Medicare is cooking ophthalmology's goose [editorial] [see comments] Lichter PR. **Ophthalmology** 1990 Mar;97(3):279–80 Comment in: Ophthalmology 1990 Apr;97(4):399–400.

HISTORY

Johan Lorenz Odhelius and cataract extraction in Sweden. Dohlman C, et al. **Acta Ophthalmol Suppl (Copenh)** 1989; 192:11–6

Cataract and lens implant surgery. The way it was and the way it is. Jaffe NS. **J Fla Med Assoc** 1989 Nov; 76(11):939–44

[Cataract surgery 220 years ago] Leydhecker W. **Klin Monatsbl Augenheilkd** 1989 Nov;195(5):334–6 (Eng. Abstr.) **(Ger)**

[Iritis following cataract operations. Historical retrospective with critical comments on a so-called "toxic lens" syndrome] Wenzel M. **Klin Monatsbl Augenheilkd** 1990 Jun; 196(6):495–501 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

A combined iris retractor and irrigation cannula for congenital-cataract surgery. Ruben JB, et al. **Am J Ophthalmol** 1989 Dec 15;108(6):741–2

Micropunch for 'buttonhole' anterior capsulotomy in endointercapsular cataract surgery. Nishi O, et al. **Arch Ophthalmol** 1990 Jun;108(6):892–3

Small-incision cataract surgery using the Perrin intraocular cataract scissors and forceps. Perrin R. **Aust N Z J Ophthalmol** 1990 Feb;18(1):61–4

Scleral and corneal burns during phacoemulsification with viscoelastic materials. **Health Devices** 1988 Dec; 17(12):377–9

Phacoemulsification systems. **Health Devices** 1989 Nov; 18(11):377–404

Complications during cataract extraction by phacoemulsification. **Health Devices** 1988 Sep;17(9):272–3

Cataract extraction procedures. **Health Devices** 1989 Nov; 18(11):373–6

New disposable cystotome for capsulorhexis. Blumenthal M, et al. **J Cataract Refract Surg** 1989 Nov;15(6):707–9

Voice-controlled motor for the McIntyre eclipse filter. Huber C, et al. **J Cataract Refract Surg** 1990 Jul;16(4):517–8

New cystotome for intercapsular cataract procedures. Joyce PW, et al. **J Cataract Refract Surg** 1990 May;16(3):376–7

Effect of a pupillary light occluder on cystoid macular edema. Kraff MC, et al. **J Cataract Refract Surg** 1989 Nov; 15(6):658–60

New spatula to facilitate bimanual phacoemulsification. Pisacano AM, et al. **J Cataract Refract Surg** 1990 Mar; 16(2):259–61

Electric microtrephine for new anterior capsular openings (barbell-like tear-free slit openings). Hara T, et al. **Ophthalmic Surg** 1990 Mar;21(3):202–5

Irrigating capsule retractor for posterior nucleus hydrodissection. Nishi O, et al. **Ophthalmic Surg** 1990 Mar; 21(3):196–8

The van Andel transparent glass microsurgical cannula. van Andel P, et al. **Ophthalmic Surg** 1990 May;21(5):368–9

[Coaxial illumination in the Zeiss Jena 310 and 311 microscopes] Mazal Z. **Cesk Oftalmol** 1990 Feb;46(1):47–52 (Eng. Abstr.) **(Cze)**

[Endocapsular cataract surgery using the excimer laser at 308 nm] Müller-Stolzenburg N, et al. **Fortschr Ophthalmol** 1989;86(6):561–5 (Eng. Abstr.) **(Ger)**

[Ocular outflow resistance and rate of secretion of aqueous humor following iridotomy and posterior capsulotomy with the Nd:YAG laser] Wetzel W, et al. **Fortschr Ophthalmol** 1989;86(6):566–9 (Eng. Abstr.) **(Ger)**

[Introduction of an aspiration-irrigation-reflow system with a special handle for extracapsular cataract operation] Hillenbrand P. **Klin Monatsbl Augenheilkd** 1989 Jul; 195(1):37–8 (Eng. Abstr.) **(Ger)**

[From cataract eyeglasses to the artificial lens—changes in cataract surgery] Bischoff P. **Ther Umsch** 1990 Apr; 47(4):303–7 (0 ref.) (Eng. Abstr.) **(Ger)**

[A device for irrigation of the eye chamber during cataract extraction] Dolzhikov IuM. **Oftalmol Zh** 1989;(8):502–4 **(Rus)**

METHODS

Limbal-based vs fornix-based conjunctival flaps in combined extracapsular cataract surgery and glaucoma filtering procedure. Murchison JF Jr, et al. **Am J Ophthalmol** 1990 Jun 15;109(6):709–15

Phacoemulsification. An improved method of cataract removal. Seery J. **AORN J** 1989 Dec;50(6):1230–4

Ophthalmological aspects in patients with Werner's syndrome. Ruprecht KW. **Arch Gerontol Geriatr** 1989 Nov-Dec;9(3):263–70

Combined phacoemulsification and pars plana vitrectomy. Koenig SB, et al. **Arch Ophthalmol** 1990 Mar;108(3):362–4

Small-incision cataract surgery [editorial] Thomson GG. **Aust N Z J Ophthalmol** 1990 Feb;18(1):5

Cataract extraction—an improved technique. Lehmann GD. **Br J Ophthalmol** 1966 Feb;50(2):105

Endocapsular cataract extraction. Rosen PH, et al. **Eye** 1989; 3 (Pt 6):672–7

Combined extracapsular cataract extraction and trabeculectomy using a separated corneal section. Williamson TH, et al. **Eye** 1989;3 (Pt 5):547–52

Phakoemulsification cataract extraction with foldable IOLs–first 50 cases. Mehtha KR. **Indian J Ophthalmol** 1989 Apr-Jun;37(2):80–3

Extracapsular surgery. Singh D. **Indian J Ophthalmol** 1989 Apr-Jun;37(2):69–72

Phaco-emulsification aspiration procedure: an evaluation. Srivastava AK, et al. **Indian J Ophthalmol** 1989 Oct-Dec; 37(4):205–6

The choice of cataract surgical techniques in developing nations: operations research considerations. Pizzarello L, et al. **Int Ophthalmol** 1990 May;14(3):147–54 (14 ref.)

Extracapsular cataract extraction, intraocular lens implantation, and trabeculectomy: the combined procedure. Johnson D. **Int Ophthalmol Clin** 1990 Summer;30(3):209–14 (16 ref.)

Consultation section. Varied techniques for manual nucleus removal. **J Cataract Refract Surg** 1989 Nov;15(6):710–7

Study of the lens epithelial cell density in cataractous eyes operated on with extracapsular and intercapsular techniques. Argento C, et al. **J Cataract Refract Surg** 1990 Mar;16(2):207–10

Laserphaco: fiberoptics plus irrigation/aspiration [letter] Bath PE. **J Cataract Refract Surg** 1990 Jul;16(4):525–7

Laser photophacofragmentation [letter; comment] Chambless WS. **J Cataract Refract Surg** 1990 May;16(3):386–7 Comment on: J Cataract Refract Surg 1990 Jan;16(1):96–8.

Intraocular lens centration with continuous tear capsulotomy. Colvard DM, et al. **J Cataract Refract Surg** 1990 May; 16(3):312–4

Hybrid nuclear dissection technique for capsular bag phacoemulsification. Davison JA. **J Cataract Refract Surg** 1990 Jul;16(4):441–50

Development, advantages, and methods of the continuous circular capsulorhexis technique. Gimbel HV, et al. **J Cataract Refract Surg** 1990 Jan;16(1):31–7

Modified triple procedure using a temporary keratoprosthesis for closed-system, small-incision cataract surgery. Menapace R, et al. **J Cataract Refract Surg** 1990 Mar; 16(2):230–4

Nucleus removal following circular capsulorhexis: surface cortex aspiration. Nishi O. **J Cataract Refract Surg** 1990 May;16(3):372–6

Extracapsular cataract extraction with keyhole capsulorhexis and lens epithelial cell removal. Nishi O. **J Cataract Refract Surg** 1990 Mar;16(2):249–52

Advances in cataract and intraocular lens surgery [editorial] Obstbaum SA. **J Cataract Refract Surg** 1990 Mar; 16(2):155–6

In situ fracture. Shepherd JR. **J Cataract Refract Surg** 1990 Jul;16(4):436–40

Double-hook extraction technique. Shimizu K. **J Cataract Refract Surg** 1989 Nov;15(6):702–4

Accumulation of carbon dioxide during eye surgery. Zeitlin GL, et al. **J Clin Anesth** 1989;1(4):262–7

A modified extracapsular cataract extraction for pediatric cataracts. Caputo AR, et al. **Ophthalmic Surg** 1990 Jun; 21(6):396–400

Intercapsular versus extracapsular cataract extraction. Naylor G, et al. **Ophthalmic Surg** 1989 Nov;20(11):766–8

Resident extracapsular cataract surgery: results and a comparison of automated and manual techniques. Sappenfield DL, et al. **Ophthalmic Surg** 1989 Sep; 20(9):619–24

Extracapsular cataract and lens implant surgery in developing countries: keeping it simple. Spencer MF. **Ophthalmic Surg** 1990 Jun;21(6):447–52

Combined extracapsular cataract extraction, posterior

chamber lens implantation and pars plana vitrectomy. Benson WE, et al.
Trans Pa Acad Ophthalmol Otolaryngol 1989;41:814–7
[Modern methods of cataract extraction] Janula J, et al. **Cesk Oftalmol** 1990 Feb;46(1):63–8 (Eng. Abstr.) **(Cze)**
[The position on phacoemulsification] Flament J, et al. **Annee Ther Clin Ophtalmol** 1988;39:181–92; discussion 215–28 **(Fre)**
[Treatment of opacification of the posterior crystalline capsule after extracapsular extraction: surgery or laser?] François JH, et al. **Bull Soc Ophtalmol Fr** 1989 Nov; 89(11):1297–300 (12 ref.) (Eng. Abstr.) **(Fre)**
[Presentation of a surgical technic: phacoemulsification of the capsular bag after circular linear capsulotomy and implantation in the bag: rigid implant, soft implant] Hachet EP. **Bull Soc Ophtalmol Fr** 1988 Dec;88(12):1381–3 (Eng. Abstr.) **(Fre)**
[Cataract surgery in children. Immediate postoperative equipment. Technical note] Hermann M, et al. **Bull Soc Ophtalmol Fr** 1989 May;89(5):711–3 **(Fre)**
[Does peripheral iridectomy increase the risk of retinal detachment in patients with aphakia or pseudophakia?] Comhaire–Poutchinian Y, et al. **J Fr Ophtalmol** 1989; 12(3):175–9 (Eng. Abstr.) **(Fre)**
[Comparison of phacoemulsification and manual extracapsular extraction of the lens] Colin J, et al. **Ophtalmologie** 1989 Jun–Aug;3(3):233–4 (Eng. Abstr.) **(Fre)**
[Pars plana phacoemulsification. Technics, indications and results] Furia M, et al. **Ophtalmologie** 1989 Jan–Mar; 3(1):79–81 (Eng. Abstr.) **(Fre)**
[Implantation in severe myopia cataract] Metge P, et al. **Ophtalmologie** 1989 Jan–Mar;3(1):82–5 (Eng. Abstr.) **(Fre)**
[Lens position following planned capsular sac fixation: results of 200 consecutively surgically treated phacoemulsifications] Duncker G, et al. **Fortschr Ophthalmol** 1990;87(2):140–3 (Eng. Abstr.) **(Ger)**
[Risk factors for capsular rupture and vitreous loss in extracapsular cataract extraction. The Erlangen Ophthalmology Group] Küchle M, et al. **Fortschr Ophthalmol** 1989;86(5):417–21 (Eng. Abstr.) **(Ger)**
[Small incision cataract surgery: changes in postoperative astigmatism] Artaria LG. **Klin Monatsbl Augenheilkd** 1990 May;196(5):316–9 (Eng. Abstr.) **(Ger)**
[Recommendation for lens implantation following vitreoretinal silicone oil surgery] Biermeyer H, et al. **Klin Monatsbl Augenheilkd** 1990 Jul;197(1):6–8 (Eng. Abstr.) **(Ger)**
[Astigmatism following cataract surgery: comparison following wound closure with nylon suture and Mersilene] Bigar F. **Klin Monatsbl Augenheilkd** 1990 May;196(5):314–5 (Eng. Abstr.) **(Ger)**
[Changes in the circulation of the eye caused by Vörösmarthy preoperative ocular pressure] Hessemer V, et al. **Klin Monatsbl Augenheilkd** 1990 Jan;196(1):11–6 (Eng. Abstr.) **(Ger)**
[Cataract extraction with bifocal lens implantation] Drolsum LK, et al. **Tidsskr Nor Laegeforen** 1990 May 10; 110(12):1517–9 (Eng. Abstr.) **(Nor)**
[Contemporary surgery of the lens] Gierek–Łapińska A. **Klin Oczna** 1988;90 Suppl:491–6 (Eng. Abstr.) **(Pol)**
[Traumatic cataracts and intraocular implants in 10 years of material] Kamińska–Olechnowiczowa B, et al. **Klin Oczna** 1988;90 Suppl:514–5 (Eng. Abstr.) **(Pol)**
[Modified argon laser discission of secondary cataracts with the use of Abrakham's contact lens] Bakutkin VV, et al. **Oftalmol Zh** 1989;(6):378–9 **(Rus)**
[An improvement in the technic and results of phacoemulsification of congenital cataracts in children] Bobrova NF, et al. **Oftalmol Zh** 1989;(3):137–42 (Eng. Abstr.) **(Rus)**
[The kallikrein–kinin activity of the blood serum after intracapsular cataract extraction and the implantation of intraocular lenses] Butiukova VA, et al. **Oftalmol Zh** 1989; (7):416–9 (Eng. Abstr.) **(Rus)**
[The prognosis of extracapsular extraction methods in cataract] Narbut NP, et al. **Oftalmol Zh** 1989;(5):284–6 (Eng. Abstr.) **(Rus)**
[Anterior capsulectomy in extracapsular cataract extraction] Iashinskas VP. **Vestn Oftalmol** 1990 May–Jun;106(3):11–3 (Eng. Abstr.) **(Rus)**
[Importance of biomicroscopy in the determination of density of cataract before phacoemulsification] Korosteleva NF, et al. **Vestn Oftalmol** 1989 Nov–Dec;105(6):43–5 (Eng. Abstr.) **(Rus)**
[The effect of YAG laser capsulotomy on the hydro– and hemodynamics of the eye] Kryl' LA, et al. **Vestn Oftalmol** 1990 Jan–Feb;106(1):27–31 (Eng. Abstr.) **(Rus)**
[A method of treatment of secondary cataract in artiphakia] Sergienko NM, et al. **Vestn Oftalmol** 1989 Nov–Dec; 105(6):23–5 (Eng. Abstr.) **(Rus)**

REHABILITATION

[Intraocular lenses in patients with diabetes mellitus] Kałużný J, et al. **Klin Oczna** 1989 Jul–Sep;91(7–9):201–2 (Eng. Abstr.) **(Pol)**

STANDARDS

[Intraocular pressure ten weeks after cataract surgery] Noske W, et al. **Ophtalmologie** 1989 Jun–Aug;3(3):248–9 (Eng. Abstr.) **(Fre)**

STATISTICS & NUMERICAL DATA

It is 25,000 operations and counting for Dr. Howard Gimbel [letter] Kwitko ML. **Can Med Assoc J** 1990 Apr 1; 142(7):709
An index for estimating probabilities of surgical success for cataract patients with retinal disease. Graney MJ, et al. **J Gerontol** 1990 Mar;45(2):M40–4

TRENDS

The increasing frequency of surgery for cataract. Jay JL, et al. **Eye** 1990;4 (Pt 1):127–31
A decade in ophthalmology [editorial] Fernandez ST. **Indian J Ophthalmol** 1990 Jan–Mar;38(1):1–2
Continuing progress in cataract surgical technique [editorial] Obstbaum SA. **J Cataract Refract Surg** 1990 Jan;16(1):19

UTILIZATION

"Operation Cataract": a means of reducing waiting lists for cataract operations. Thomas HF, et al. **BMJ** 1989 Oct 14; 299(6705):961–3

VETERINARY

Cataract surgery. Current approaches. Dziezyc J. **Vet Clin North Am Small Anim Pract** 1990 May; 20(3):737–54 (38 ref.)
Success rates of unilateral vs. bilateral cataract extraction in dogs. Davidson MG, et al. **Vet Surg** 1990 May–Jun; 19(3):232–6
[Lens extraction] Heijn A. **Tijdschr Diergeneeskd** 1990 Mar 1;115(5):224–6 **(Dut)**

CATARRHINA see **CERCOPITHECIDAE**

CATASTOMUS see **CYPRINIFORMES**

CATASTROPHIC HEALTH INSURANCE see **INSURANCE, MAJOR MEDICAL**

CATASTROPHIC ILLNESS

see related
INSURANCE, MAJOR MEDICAL

[The changing family structure and the ability to cope with catastrophic illness] Lan CF. **Acta Paediatr Sin** 1988 Oct; 29 Suppl A:34A–37A **(Chi)**

ECONOMICS

State execs say repeal Medicare drug benefit. **Am Pharm** 1989 Nov;NS29(11):20–1
The downfall of Medicare catastrophic. Martin S. **Am Pharm** 1989 Nov;NS29(11):19
Castastrophic lawmaking [editorial] Butler RN. **Geriatrics** 1989 Nov;44(11):17
Catastrophic repeal may doom benefit expansions. Robinson ML. **Hospitals** 1989 Nov 20;63(22):20
A taxpayer's view of the elderly's lament on the Medicare Catastrophic Coverage Act [see comments] Caldwell JR. **J Fla Med Assoc** 1989 Apr;76(4):405–7 Comment in: J Fla Med Assoc 1989 Jun;76(6):511.
Financial ruin or financing catastrophic health coverage: who pays? Philipp TA, et al. **J Prof Nurs** 1990 Mar–Apr; 6(2):94–102
High–cost patients in a fee–for–service medical plan. The case for earlier intervention. Alexandre LM. **Med Care** 1990 Feb;28(2):112–23
[Medical expenses of children with catastrophic illness in the Republic of China] Lu HK. **Acta Paediatr Sin** 1988 Oct; 29 Suppl A:19A–24A **(Chi)**

NURSING

Guilt: a crisis within a crisis. Flannery J. **J Neurosci Nurs** 1990 Apr;22(2):92–9

THERAPY

... Being alive is a fatal disease ... [editorial] Johnson EW. **Am J Phys Med Rehabil** 1989 Dec;68(6):263

CATATONIA

COMPLICATIONS

The significance of stupor in the long–term outcome of chronic schizophrenia. Rigby JC, et al. **Br J Psychiatry** 1989 Sep;155:352–5
Catatonia and burns. Zarr ML, et al. **Burns** 1990 Apr; 16(2):133–4

DIAGNOSIS

The neuroleptic malignant syndrome and its differentiation from lethal catatonia. Fleischhacker WW, et al. **Acta Psychiatr Scand** 1990 Jan;81(1):3–5 (13 ref.)
Problems in diagnosing bipolar disorder in catatonic patients. Fein S, et al. **J Clin Psychiatry** 1990 May;51(5):203–5
Neuroleptic–induced catatonia: neuroleptic malignant syndrome? de Leon J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(1):129–36
[Comments on the contribution by K.–J. Neumärker et al. Borrelia encephalitis and catatonia in adolescents. Nervenarzt (1989) 60:115–119 (letter)] Ackermann R. **Nervenarzt** 1989 Dec;60(12):765 **(Ger)**

DRUG THERAPY

Catatonia: a new indication for benzodiazepines? [comment] Fricchione G. **Biol Psychiatry** 1989 Dec;26(8):761–5 (31 ref.) Comment on: Biol Psychiatry 1989 Dec;26(8):842–6.
Benzodiazepines and catatonia: an overview [see comments] Menza MA, et al. **Biol Psychiatry** 1989 Dec;26(8):842–6 (37 ref.) Comment in: Biol Psychiatry 1989 Dec;26(8):761–5.
Benzodiazepines and catatonia [letter] Panzer M, et al. **Biol Psychiatry** 1990 Jul 15;28(2):178–9
Benzodiazepines and catatonia: a case report. Harris D, et al. **Can J Psychiatry** 1989 Oct;34(7):725–7
Lorazepam as an adjunct in the treatment of catatonic states: an open clinical trial. Yassa R, et al. **J Clin Psychopharmacol** 1990 Feb;10(1):66–8
Inducing catatonic patients to eat with daily administration of amobarbital sodium. Lewis JL, et al. **South Med J** 1989 Oct;82(10):1315–6

ETIOLOGY

Electroconvulsive therapy and cyclophosphamide in combination for severe neuropsychiatric lupus with catatonia. Fricchione GL, et al. **Am J Med** 1990 Apr; 88(4):442–3
Catatonia following biparietal infarction with spontaneous recovery. Howard RJ, et al. **Postgrad Med J** 1989 May; 65(763):316–7

METABOLISM

Brain neurotransmitter changes in three patients who had a fatal hyperthermia syndrome. Kish SJ, et al. **Am J Psychiatry** 1990 Oct;147(10):1358–63

PSYCHOLOGY

Speech–prompt catatonia: a case report and review of the literature. Ungvari GS, et al. **Compr Psychiatry** 1990 Jan–Feb;31(1):56–61 (43 ref.)
Melville's "Bartleby the Scrivener" [letter] **N Y State J Med** 1990 Aug;90(8):422–4

THERAPY

Treatment of lethal catatonia with electroconvulsive therapy and dantrolene sodium: a case report. Nolen WA, et al. **Acta Psychiatr Scand** 1990 Jul;82(1):90–2

CATATONIC SCHIZOPHRENIA see **SCHIZOPHRENIA, CATATONIC**

CATCHMENT AREA (HEALTH)

Clinical and demographic characteristics of emergency department patients in The Netherlands: a review of the literature and a preliminary study. Kooiman CG, et al. **Am J Emerg Med** 1989 Nov;7(6):632–8 (47 ref.)
Jarman indices and 'new chronic' in–patients [letter; comment] Abbott PM. **Br J Psychiatry** 1990 Jan;156:133–4 Comment on: Br J Psychiatry 1989 Sep;155:348–51.
Changes in Connecticut hospital use rates: have small–area variations been affected? Legnini MW, et al. **Inquiry** 1990 Spring;27(1):51–60
Health and travel in nineteenth–century Rome. Hoolihan C. **J Hist Med Allied Sci** 1989 Oct;44(4):462–85
How will health needs be measured in districts? Implications of variations in hospital use. Kirkup B, et al. **J Public Health Med** 1990 Feb;12(1):45–50
Does inappropriate use explain small–area variations in the use of health care services? Leape LL, et al. **JAMA** 1990 Feb 2;263(5):669–72
Hospital use and mortality among Medicare beneficiaries in Boston and New Haven. Wennberg JE, et al. **N Engl J Med** 1989 Oct 26;321(17):1168–73
Mobility of schizophrenic patients, non–psychotic patients and the general population in a case register area. Lesage AD, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Sep; 24(5):271–4
Patient outcomes and regional planning of coronary care services: a location–allocation approach. McLafferty S, et al. **Soc Sci Med** 1990;30(3):297–304
[Survey carried out by land of the intervention time for territorial health care] Tulli G, et al. **Minerva Anestesiol** 1989 Sep;55(9):359–61 (Eng. Abstr.) **(Ita)**

ECONOMICS

What price, Medicare? Geographic variability in Medicare physician payment levels. McMenamin P. **Inquiry** 1990 Summer;27(2):138–50

STATISTICS & NUMERICAL DATA

What is too much variation? The null hypothesis in

small-area analysis. Diehr P, et al. **Health Serv Res** 1990 Feb;24(6):741-71
The extremal quotient in small-area variation analysis. Kazandjian VA, et al. **Health Serv Res** 1989 Dec; 24(5):665-84
Micro-area variation in hospital use. Tedeschi PJ, et al. **Health Serv Res** 1990 Feb;24(6):729-40

CATECHIN

ADMINISTRATION & DOSAGE

Anti-ulcer activity of procyanidins preparation of water-soluble procyanidin-cimetidine complexes. Vennat B, et al. **Pharm Acta Helv** 1989;64(11):316-20

ADVERSE EFFECTS

[Immune hemolytic anemia caused by catergen] Shinkov D, et al. **Vutr Boles** 1989;28(5):84-7 (Eng. Abstr.) **(Bul)**
[Several years observation of a Catergen (cyanidanol-3) induced immunohemolysis] Stühlinger W, et al. **Schweiz Med Wochenschr** 1990 Mar 10;120(10):345-8 (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES

Differential inhibitory effects of some catechin derivatives on the activities of human immunodeficiency virus reverse transcriptase and cellular deoxyribonucleic and ribonucleic acid polymerases. Nakane H, et al. **Biochemistry** 1990 Mar 20;29(11):2841-5
A study on tea-pigment in prevention of atherosclerosis. Lou FQ, et al. **Chin Med J [Engl]** 1989 Aug;102(8):579-83
Bile salt binding by maalox, sucralfate, and meciadanol: in vitro and clinical comparisons. Lipsett P, et al. **J Surg Res** 1989 Nov;47(5):403-6
Differential inhibition of HIV-reverse transcriptase and various DNA and RNA polymerases by some catechin derivatives. Nakane H, et al. **Nucleic Acids Symp Ser** 1989; (21):115-6
[Inhibitory effect of green tea extract on promotion and related action of TPA] Cheng SJ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Aug; 11(4):259-64 (Eng. Abstr.) **(Chi)**
[The effect of procyanidolic oligomers on mesenchymal cells in culture. II—Attachment of elastic fibers to the cells] Robert AM, et al. **Pathol Biol (Paris)** 1990 Jun;38(6):601-7 (Eng. Abstr.) **(Fre)**
[The effect of procyanidolic oligomers on vascular permeability. A study using quantitative morphology] Robert L, et al. **Pathol Biol (Paris)** 1990 Jun;38(6):608-16 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Insulin like activity in (-) epicatechin. Ahmad F, et al. **Acta Diabetol Lat** 1989 Oct-Dec;26(4):291-300
Differential inhibitory effects of some catechin derivatives on the activities of human immunodeficiency virus reverse transcriptase and cellular deoxyribonucleic and ribonucleic acid polymerases. Nakane H, et al. **Biochemistry** 1990 Mar 20;29(11):2841-5
Quantitative ultrastructural analysis of hepatoprotective effects of (+)-cyanidanol-3 on alcoholic liver damage. Varga M, et al. **Exp Mol Pathol** 1990 Apr;52(2):249-57
D(+)catechin enhances heparan sulphate content in rat liver. Unnikrishnan VS, et al. **Indian J Biochem Biophys** 1989 Dec;26(6):377-80
Catechin inhibition of mutagenesis and alteration of DNA binding of 2-acetyl-aminofluorene in rat hepatocytes. Monteith DK. **Mutat Res** 1990 Feb;240(2):151-8
Inhibition of platelet aggregation and arachidonate metabolism in platelets by procyanidins. Chang WC, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Dec; 38(3):181-8
[Antibacterial and anti-hemolysin activities of tea catechins and their structural relatives] Toda M, et al. **Nippon Saikingaku Zasshi** 1990 Mar;45(2):561-6 (Eng. Abstr.) **(Jpn)**
[Angio-protective effect of catergen in experimental liver injury] Gaskina TK, et al. **Biull Eksp Biol Med** 1989 Jul; 108(7):28-30 (Eng. Abstr.) **(Rus)**
[Changes in the rate of lecithin cholesterol acyltransferase reaction and lipid indicators of serum under the effect of cathergene in acute experimental liver damage] Gaskina TK, et al. **Vopr Med Khim** 1989 Jul-Aug;35(4):24-8 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Some morphometric evidence of hepatoprotective effects of (+)-cyanidanol-3. Varga M, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):523-6

CATECHINIC ACID see **CATECHIN**

CATECHOL ESTROGENS

Novel synthesis of 2-fluoroestradiol from 19-nortestosterone: biomimetic oxidative defluorination to 2-hydroxyestradiol. Le Quesne PW, et al. **Steroids** 1989 Jun;53(6):649-61

ANALYSIS

Application of inclusion chromatography to the determination of in vitro metabolites of estriol. Shimada K, et al. **J Chromatogr Sci** 1989 Sep;27(9):557-60
Estrogens, androgens, and progestins in follicular fluid from preovulatory follicles: identification and quantification by gas chromatography/mass spectrometry associated with stable isotope dilution. Dehennin L. **Steroids** 1990 Apr; 55(4):181-4 (26 ref.)

ANTAGONISTS & INHIBITORS

[The neuroendocrine effects of neonatal exposure to an inhibitor of catechol-o-methyltransferase and of sex steroids] Nosenko ND. **Probl Endokrinol (Mosk)** 1989 Sep-Oct;35(5):64-8 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Catecholoestrogen synthesis and metabolism in the rabbit uterus during the periimplantation period. Chakraborty C, et al. **J Steroid Biochem** 1990 Jan;35(1):39-46
Effect of chronic estrogen treatment of Syrian hamsters on microsomal enzymes mediating formation of catecholestrogens and their redox cycling: implications for carcinogenesis. Liehr JG, et al. **J Steroid Biochem** 1990 Apr;35(5):555-60
Catechol estrogen formation in MCF-7 cell culture and effects of bromoestrogen inhibitors. Brueggemeier RW, et al. **Mol Cell Endocrinol** 1989 Jul;64(2):161-7
Catechol estrogen formation in the mouse uterus and its role in implantation. Paria BC, et al. **Mol Cell Endocrinol** 1990 Feb 12;69(1):25-32

BLOOD

[Clinical significance of catechol estrogen analysis in endocrine tests of the gonadal and placental system] Takagi S, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:1263-6 **(Jpn)**

METABOLISM

Cloning and expression of human liver UDP-glucuronosyltransferase in COS-1 cells. 3,4-catechol estrogens and estriol as primary substrates. Ritter JK, et al. **J Biol Chem** 1990 May 15;265(14):7900-6
Estradiol-15 alpha-hydroxylation: a new avenue of estrogen metabolism in peri-implantation pig blastocysts. Chakraborty C, et al. **J Steroid Biochem** 1990 Feb; 35(2):209-18
In vitro metabolism of catechol estrogens by human fecal microflora. Järvenpää P. **J Steroid Biochem** 1990 Feb; 35(2):289-92
Peroxidase-catalyzed displacement of tritium from regiospecifically labeled estradiol and 2-hydroxyestradiol. Jellinck PH, et al. **J Steroid Biochem** 1990 May; 35(6):705-10

PHARMACOLOGY

Catecholestrogens inhibit basal and luteinizing hormone-stimulated androgen production by porcine thecal cells. Morley P, et al. **Biol Reprod** 1989 Sep; 41(3):446-53
Inhibition of the soluble form of testis adenylate cyclase by catechol estrogens and other catechols. Braun T. **Proc Soc Exp Biol Med** 1990 May;194(1):58-63
[Increase of noradrenaline contents in the hypothalamus of neonatal female rats under the effects of 4-hydroxyestradiol-17beta] Nosenko ND, et al. **Biull Eksp Biol Med** 1990 Jun;109(6):555-6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Are the catecholestrogens involved in estrogen-induced striatal dopamine receptor supersensitivity? Ferretti C, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):149-56
Regulation of ovarian function by catecholestrogens: current concepts. Spicer LJ, et al. **J Steroid Biochem** 1989 Oct; 33(4A):489-501 (109 ref.)

CATECHOL METHYLTRANSFERASE

ANALYSIS

A chemical model of catechol-O-methyltransferase. Methylation of 3,4-dihydroxybenzaldehyde in aqueous solution. Sugata S, et al. **Chem Pharm Bull (Tokyo)** 1989 May;37(5):1143-6

ANTAGONISTS & INHIBITORS

Inhibition of rat liver and duodenum soluble catechol-O-methyltransferase by a tight-binding inhibitor OR-462. Schultz E, et al. **Biochem Pharmacol** 1989 Nov 15;38(22):3953-6
Rationale for selective COMT inhibitors as adjuncts in the drug treatment of Parkinson's disease. Männistö PT, et al. **Pharmacol Toxicol** 1990 May;66(5):317-23 (57 ref.)
[The neuroendocrine effects of neonatal exposure to an inhibitor of catechol-o-methyltransferase and of sex steroids] Nosenko ND. **Probl Endokrinol (Mosk)** 1989 Sep-Oct;35(5):64-8 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Coordinated induction of estrogen hydroxylase and catechol-O-methyl transferase by xenobiotics in first trimester human placental explants. Barnea ER, et al. **J Steroid Biochem** 1990 Feb;35(2):327-31

ISOLATION & PURIFICATION

Purification and partial characterization of rat liver soluble catechol-O-methyltransferase. Tilgmann C, et al. **FEBS Lett** 1990 May 7;264(1):95-9

METABOLISM

Variation in hepatic membrane-bound catechol-O-methyltransferase activity in Fischer and Wistar-Furth strains of rat. Roth JA, et al. **Biochem Pharmacol** 1990 Sep 1;40(5):1151-3
Monomethyl ether derivatives of 7,8-dihydroxy- and 8,9-dihydroxy-4-n-propyl-1,2,3,4,4a,5,6,10b-octahydrobenzo[f]quinolines as possible products of metabolism by catechol-O-methyltransferase. Cannon JG, et al. **J Med Chem** 1990 Jul;33(7):2000-6
Effect of acute levodopa on brain catecholamines after selective MAO and COMT inhibition in male rats. Männistö PT, et al. **J Neural Transm Park Dis Dement Sect** 1990;2(1):31-43

CATECHOLAMINES

ADMINISTRATION & DOSAGE

Effects of vasopressin and catecholamines on the maintenance of circulatory stability in brain-dead patients. Iwai A, et al. **Transplantation** 1989 Oct;48(4):613-7

ADVERSE EFFECTS

Reversibility of catecholamine-induced cardiomyopathy in a woman with pheochromocytoma [see comments] Sadowski D, et al. **Can Med Assoc J** 1989 Nov 1; 141(9):823-4 Comment in: Can Med Assoc J 1990 Jan 15;142(2):99-100.

ANALYSIS

Unconjugated methoxylated catecholamine metabolites in human saliva. Quantitation methodology and comparison with plasma levels. Drebing CJ, et al. **Biomed Chromatogr** 1989 Sep;3(5):217-20
Influence of host age and tumor load on the growth and catecholamine content of C-1300 murine neuroblastoma in situ. Fink DW Jr, et al. **Cancer Lett** 1990 Apr 9; 50(1):11-8
Catecholaminergic innervation of GRF-containing neurons in the rat hypothalamus revealed by electron-microscopic cytochemistry. Sato A, et al. **Cell Tissue Res** 1989 Oct; 258(1):31-4
Target influences on transmitter choice by sympathetic neurons developing in the anterior chamber of the eye. Stevens LM, et al. **Dev Biol** 1990 Jan;137(1):109-24
Adrenal growth and ontogeny of adrenal substance P, enkephalins and catecholamines in the ovine fetus. Cheung CY. **J Dev Physiol** 1989 Aug;12(2):77-84
Monoamine synaptic structure and localization in the central nervous system. Maley BE, et al. **J Electron Microsc Tech** 1990 May;15(1):20-33 (131 ref.)
Fluorescence histochemical techniques for catecholamines as tools in neurobiology. Felten DL, et al. **J Microsc** 1990 Mar;157 (Pt 3):271-83 (59 ref.)
Localization of phospholipids in human catecholamine neurons with Baker's acid haematein. Panayotacopoulou MT, et al. **J Neurocytol** 1989 Oct;18(5):593-7
Tissue concentrations of MPTP and MPP+ in relation to catecholamine depletion after the oral or subcutaneous administration of MPTP to mice. Fuller RW, et al. **Life Sci** 1989;45(22):2077-83
Nonendocrine theories of the etiology of benign breast disease. Minton JP, et al. **Ohio Med** 1990 Mar;86(3):192
Histochemical evidence of the catecholamine-associated nervous system in certain schistosome cercariae. Orido Y. **Parasitol Res** 1989;76(2):146-9
Opiocortin and catecholamine input to CRF-immunoreactive neurons in rat forebrain. Hornby PJ, et al. **Peptides** 1989 Nov-Dec;10(6):1139-46
Opiocortin and catecholamine projections to raphe nuclei. Sim LJ, et al. **Peptides** 1989 Sep-Oct;10(5):1019-25
[A two-step dry-air method of histochemical detection of biogenic amines] Tsygankov VI, et al. **Arkh Anat Gistol Embriol** 1989 Aug;97(8):67-8 **(Rus)**
[Myocardial damage and the sympatho-adrenal system in ethanol abstinence syndrome in rats] Nuzhnyĭ VP, et al. **Vopr Med Khim** 1989 Jul-Aug;35(4):16-20 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Acid-base-electrolyte balance responses to catecholamine antagonists in Ambystoma tigrinum. Stiffler DF, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1363-70
Inhibition by catecholaminergic blockers of the neurotensin-induced enhancement of luteinizing hormone secretion in the ovariectomized estrogen-primed rat. Akema T, et al. **Neuroendocrinology** 1989 Dec;50(6):688-92
Serotonergic and catecholaminergic reuptake inhibitors have

opposite effects on the ultrasonic isolation calls of rat pups. Winslow JT, et al. **Neuropsychopharmacology** 1990 Feb; 3(1):51–9

[Protective effects of nicorandil against catecholamine induced myocardial damage under hypoxia] Hayashi J, et al. **Kokyu To Junkan** 1989 Nov;37(11):1231–5 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Tyrosine content, influx and accumulation rate, and catecholamine biosynthesis measured in vivo, in the central nervous system and in peripheral organs of the young rat. Influence of neonatal hypo- and hyperthyroidism. Diarra A, et al. **Arch Int Physiol Biochim** 1989 Oct;97(5):317–32

The influence of angiotensin II on catecholamine synthesis in neuronal cultures from rat brain. MacLean MR, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):492–7

Effect of hypoglycemic sulfonylurea, glibenclamide, on the rate of catecholamine synthesis in cultured adrenal chromaffin cells. Morita K, et al. **Biochem Pharmacol** 1990 Mar 1;39(5):976–8

Some parasympathetic neurons in the guinea-pig heart express aspects of the catecholaminergic phenotype in vivo. Baluk P, et al. **Cell Tissue Res** 1990 Aug;261(2):275–85

Differential increase in the cholinergic properties of cultured chick sympathetic neurons by forskolin. Zurn AD. **Dev Biol** 1990 Jul;140(1):53–6

Regionally specific effects of acute and chronic nicotine on rates of catecholamine and 5-hydroxytryptamine synthesis in rat brain. Mitchell SN, et al. **Eur J Pharmacol** 1989 Aug 29;167(3):311–22

Nicotine-induced catecholamine synthesis after lesions to the dorsal or ventral noradrenergic bundle. Mitchell SN, et al. **Eur J Pharmacol** 1990 Apr 25;179(3):383–91

Short and long term regulation of catecholamine biosynthetic enzymes by angiotensin in cultured adrenal medullary cells. Molecular mechanisms and nature of second messenger systems. Stachowiak MK, et al. **J Biol Chem** 1990 Mar 15;265(8):4694–702

Effect of precursors on the synthesis of catecholamines and on neurotransmission in the superior cervical ganglion of the rat. Zhang C, et al. **J Neurochem** 1990 Sep;55(3):890–8

Food intake of rats depleted of dopamine as neonates is impaired by inhibition of catecholamine biosynthesis. Potter BM, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):295–300

Catecholamine and 5-HT synthesis ex vivo as an index of in-vivo neuronal activity and regulation. Broadhurst AM, et al. **Trends Pharmacol Sci** 1988 Oct;9(10):349–51 (27 ref.)

[Regulation of catecholamine biosynthesis] Okuno S, et al. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(4 Suppl):630–7 **(Jpn)**

BLOOD

Personality traits and neurohumoral stress response in healthy young sportsmen. Honzák R, et al. **Act Nerv Super (Praha)** 1989 Jun;31(2):100–2

Autonomic and hormonal responses after the use of midazolam and flumazenil. Nilsson A. **Acta Anaesthesiol Scand Suppl** 1990;92:51–4; discussion 78 (20 ref.)

The relationship between some beta-adrenergic mediated responses and plasma concentrations of adrenaline and cyclic AMP in man. Philipsen EK, et al. **Acta Endocrinol (Copenh)** 1990 Jan;122(1):115–20

A malignant mixed mesodermal tumor of the uterine corpus with hypercatecholaminemia. Uede T, et al. **Acta Pathol Jpn** 1990 Apr;40(4):293–300

Hemodynamic and catecholamine changes during a standard cold pressor test. Cuddy RP, et al. **Am Heart J** 1966 Apr; 71(4):446–54

New insights into pacemaker syndrome gained from hemodynamic, humoral and vascular responses during ventriculo-atrial pacing. Ellenbogen KA, et al. **Am J Cardiol** 1990 Jan 1;65(1):53–9

Taurine lowers blood pressure in the spontaneously hypertensive rat by a catecholamine independent mechanism. Trachtman H, et al. **Am J Hypertens** 1989 Dec; 2(12 Pt 1):909–12

The nutritional status in advanced emphysema associated with chronic bronchitis. A study of amino acid and catecholamine levels. Hofford JM, et al. **Am Rev Respir Dis** 1990 Apr;141(4 Pt 1):902–8

Changes in haemodynamics and plasma catecholamine concentrations after field block for inguinal herniorrhaphy using lignocaine with adrenaline. Hayse-Gregson PB, et al. **Anaesthesia** 1990 Jan;45(1):7–10

Catecholamine release during isoflurane-induced hypotension [letter; comment] Lam AM, et al. **Anesth Analg** 1990 Apr;70(4):466–7 Comment on: Anesth Analg 1989 Oct;69(4):467–72.

Patterns of plasma levels of catechols in neurogenic orthostatic hypotension. Goldstein DS, et al. **Ann Neurol** 1989 Oct;26(4):558–63

Plasma catecholamine and cardiovascular responses to nifedipine in hypertensives WHO-stage II. Lehmann M, et al. **Arzneimittelforschung** 1989 Dec;39(12):1593–6

Ammonia and monoamine concentrations in two brain areas in rats after one hyperoxic seizure. Mialon P, et al. **Aviat Space Environ Med** 1990 Jan;61(1):28–32

Dietary calcium deprivation increased the levels of plasma catecholamines and catecholamine-synthesizing enzymes of adrenal glands in rats. Hagihara M, et al. **Biochem Pharmacol** 1990 Apr 1;39(7):1229–31

Sensory gating deficits in psychiatric inpatients: relation to catecholamine metabolites in different diagnostic groups. Baker NJ, et al. **Biol Psychiatry** 1990 Mar 1;27(5):519–28

Effect of capsaicin-sensitive sensory nerves on plasma glucose and catecholamine levels during 2-deoxyglucose-induced stress in conscious rats. Zhou XF, et al. **Br J Pharmacol** 1990 Jul;100(3):523–9

Autonomic and myocardial changes in middle cerebral artery occlusion: stroke models in the rat. Cechetto DF, et al. **Brain Res** 1989 Nov 20;502(2):296–305

Atrial natriuretic polypeptide attenuates central angiotensin II-induced catecholamine and ACTH secretion. Makino S, et al. **Brain Res** 1989 Oct 30;501(1):84–9

Brain benzodiazepine receptor-mediated effects on plasma catecholamine and corticosterone concentrations in rats. De Boer SF, et al. **Brain Res Bull** 1990 Jun;24(6):843–7

Correlation of forearm vascular and catecholamine responses of hypertensive patients to baroreceptor stimulation. Fernandez PG, et al. **Can J Cardiol** 1990 Jul–Aug; 6(6):229–35

Catecholamine acute abdomen. A case of adrenal medulla hyperplasia accompanied by acute abdomen. Chen SX, et al. **Chin Med J [Engl]** 1989 Oct;102(10):811–3

Circadian variations of catecholamines and blood pressure in patients with pseudohypoparathyroidism and hypertension. Brickman AS, et al. **Chronobiologia** 1990 Jan–Mar;17(1):37–44

Relationship between plasma catecholamines and the renin-aldosterone system during exercise in normal and essential hypertensive subjects. Jindra A Jr, et al. **Clin Exp Hypertens [A]** 1990;12(3):415–35

Gamma 2-MSH increases during graded exercise in healthy subjects: comparison with plasma catecholamines, neuropeptides, aldosterone and renin activity. Valdemarsson S, et al. **Clin Physiol** 1990 Jul;10(4):321–7

Catecholamine and thyroid hormones in traumatic injury. Ziegler MG, et al. **Crit Care Med** 1990 Mar;18(3):253–8

Plasma catecholamines: laboratory aspects. Nyyssönen K, et al. **Crit Rev Clin Lab Sci** 1989;27(3):211–36 (120 ref.)

Beta-adrenoceptors desensitization may modulate catecholamine induced insulin resistance in human pheochromocytoma. di Paolo S, et al. **Diabete Metab** 1989 Nov–Dec;15(6):409–15

Effects of chlordiazepoxide and buspirone on plasma catecholamine and corticosterone levels in rats under basal and stress conditions. de Boer SF, et al. **Endocrinol Exp** 1990 Mar;24(1–2):229–39

Effect of xamoterol on haemodynamics and plasma catecholamines in chronic heart failure. Ollivier JP, et al. **Eur Heart J** 1990 Apr;11 Suppl A:59–60

Plasma free and sulphated catecholamines after ultra-long exercise and recovery. Sagnol M, et al. **Eur J Appl Physiol** 1990;60(2):91–7

Comparative effects of enoximone and theophylline on plasma catecholamines and haemodynamics in cardiosurgical patients. Boldt J, et al. **Eur J Clin Pharmacol** 1990;38(5):431–6

Effects of low-dose atenolol on postural and postprandial changes in heart rate, blood pressure, venous plasma catecholamines, and plasma renin activity. de Mey C, et al. **Eur J Clin Pharmacol** 1989;37(2):121–5

Haemodynamics as a determinant of the pharmacokinetics of and the plasma catecholamine responses to isoprenaline. Ludwig J, et al. **Eur J Clin Pharmacol** 1989;37(5):493–500

Relationships between swimming speed, oxygen consumption, plasma catecholamines and heart performance in rainbow trout (S. gairdneri R.). Hughes GM, et al. **Exp Biol** 1988;48(1):45–9

Influence of chronic melatonin implantation on circulating levels of catecholamines, growth hormone, thyroid hormones, glucose, and free fatty acids in the pigeon. John TM, et al. **Gen Comp Endocrinol** 1990 Aug;79(2):226–32

Fasting plasma caffeine level in cirrhotic patients: relation to plasma levels of catecholamines and renin activity. Hasegawa M, et al. **Hepatology** 1989 Dec;10(6):973–7

Endogenous opioid peptides in the pathogenesis of ascites. Henriksen JH. **Hepatology** 1989 Nov;10(5):896–7

Central effects of atrial natriuretic peptide on plasma catecholamines, vasopressin, renin and beta-endorphin and on renal excretory functions in the dog. Szeczepańska-Sadowswka E, et al. **Horm Metab Res** 1990 Jun;22(6):323–8

Effect of aging on vasopressin, catecholamines, and alpha 2-adrenergic receptors. Bursztyn M, et al. **J Am Geriatr Soc** 1990 Jun;38(6):628–32

Influence of infused beta-adrenergic agonists on porcine blood metabolites and catecholamines. Mersmann HJ. **J Anim Sci** 1989 Oct;67(10):2633–45

Plasma free and sulfoconjugated catecholamines during sustained exercise. Sothmann MS, et al. **J Appl Physiol** 1990 Feb;68(2):452–6

Alpha 2-adrenoceptor modulation of catecholamine and neuropeptide Y responses during haemorrhagic hypotension in anaesthetized dogs. Briand R, et al. **J Auton Nerv Syst** 1990 Jun;30(2):111–22

Effects of vagal blockade on neurohumoral systems in conscious dogs with heart failure. Elsner D, et al. **J Cardiovasc Pharmacol** 1990 Apr;15(4):586–91

Influence of opioid antagonism on plasma catecholamines in pheochromocytoma patients. Staessen J, et al. **J Cardiovasc Pharmacol** 1990 Mar;15(3):386–91

Proposal for the standardization of the calibration method for the assay of plasma catecholamines. Candito M, et al. **J Chromatogr** 1990 Mar 16;526(1):194–202

Routine measurement of plasma catecholamines in clinical pharmacology by high-performance liquid chromatography with electrochemical detection. Meineke I, et al. **J Chromatogr** 1989 Sep 1;493(2):287–303

Quantitative monitoring of brain function, vital signs, and hormonal response during acute insulin-induced hypoglycemia. Chalew SA, et al. **J Clin Monit** 1989 Oct; 5(4):229–35

The effect of dilevalol on cardiac autonomic neural discharge, plasma catecholamines, and myocardial beta receptor density associated with coronary occlusion. Lathers CM, et al. **J Clin Pharmacol** 1990 Mar;30(3):241–53

Plasma catecholamine concentrations of newborn piglets in thermoneutral and cold environments. Mayfield SR, et al. **J Dev Physiol** 1989 Jun;11(6):331–4

Effect of physical exercise on atrial natriuretic factor and plasma catecholamine concentrations in patients with essential uncomplicated hypertension. Januszewicz A, et al. **J Hypertens Suppl** 1989 Dec;7(6):S234–5

Free and conjugated catecholamines in patients with cirrhosis. Gaudin C, et al. **J Lab Clin Med** 1990 May; 115(5):589–92

Lymphocytic beta-adrenergic receptors in X-linked muscular dystrophy. Mäki T, et al. **J Neurol Sci** 1989 Sep; 92(2–3):281–90

Plasma vasopressin, renin and catecholamines during nitroprusside-induced hypotension in the newborn lamb. Zubrow AB, et al. **J Perinat Med** 1989;17(4):271–7

Regional changes in sympathetic nerve activity and baroreceptor reflex function and arterial plasma levels of catecholamines, renin and vasopressin during naloxone-precipitated morphine withdrawal in rats. Delle M, et al. **J Pharmacol Exp Ther** 1990 May;253(2):646–54

Sympathoadrenal, cardiovascular and blood gas responses to highly selective mu and delta opioid peptides. Kiritsy-Roy JA, et al. **J Pharmacol Exp Ther** 1989 Dec; 251(3):1096–103

The plasma endorphin, prostaglandin and catecholamine profile of patients with fibrositis treated with cyclobenzaprine and placebo: a 5-month study. Hamaty D, et al. **J Rheumatol Suppl** 1989 Nov;19:164–8

Catecholamine excess: probable cause of postoperative tachycardia following retroperitoneal lymph node dissection (RPLND) for testicular carcinoma. Bahnson RR, et al. **J Surg Oncol** 1989 Oct;42(2):132–5

Effects of pulsatile perfusion on plasma catecholamine levels and hemodynamics during and after cardiac operations with cardiopulmonary bypass. Minami K, et al. **J Thorac Cardiovasc Surg** 1990 Jan;99(1):82–91

Experimental and clinical study of catecholamine-induced hypokalemia in acute myocardial infarction. Zhao HY, et al. **J Tongji Med Univ** 1989;9(3):160–4

Study of plasma neuropeptide Y and catecholamine levels during high dose fentanyl anesthesia. Chang CL, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Dec;27(4):329–34

Hormonal and metabolic changes during exercise in cirrhotic patients. Campillo B, et al. **Metabolism** 1990 Jan;39(1):18–24

Renal haemodynamic and hormonal responses to a mixed high-protein meal in normal men. Swainson CP, et al. **Nephrol Dial Transplant** 1989;4(8):683–90

Long-term cortisol treatment impairs behavioral and neuroendocrine responses to 5-HT1 agonists in the rat. Bagdy G, et al. **Neuroendocrinology** 1989 Sep;50(3):241–7

Neuroendocrine, sympathetic and metabolic responses induced by interleukin-1. Berkenbosch F, et al. **Neuroendocrinology** 1989 Nov;50(5):570–6

Aldosterone, catecholamines, and CK-BB as biochemical markers in hypertensive intracerebral hemorrhage. Takahashi H. **Neurol Med Chir (Tokyo)** 1989 Nov; 29(11):999–1003

The secretion of catecholamines, chromogranin A and neuropeptide Y from the adrenal medulla of the cat via the adrenolumbar vein and thoracic duct: different anatomic routes based on size. Carmichael SW, et al. **Neuroscience** 1990;34(2):433–40

Effect of intravenous infusion and oral self-administration of cocaine on plasma and adrenal catecholamine levels and cardiovascular parameters in the conscious rat. Dixon WR, et al. **NIDA Res Monogr** 1989;95:335–6

Interrelation among endogenous catecholamines, prostaglandin F2 alpha and prolactin in last trimester and during parturition. Yamamoto K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Sep; 41(9):1479–86

Neuroendocrine and beta-adrenoceptor response to chronic ethanol and aggression in rats. Peterson JT, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):247–53

Effects of buspirone on plasma catecholamines, heart rate, and blood pressure in stressed and nonstressed rats. Taylor J, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):349–53

Catecholamines during short- and long-term head-down bedrest. Cottet-Emard JM, et al. **Physiologist** 1990 Feb;33(1 Suppl):S69–72 (15 ref.)

Effects of high sustained hypergravity on plasma catecholamines. Liscia P, et al. **Physiologist** 1990 Feb;33(1 Suppl):S153–4

Interactions of nimodipine and cocaine on endogenous catecholamines in the squirrel monkey. Trouvé R, et al.

Proc Soc Exp Biol Med 1990 Mar;193(3):171–5

Differential brain and peripheral nicotinic regulation of sympathoadrenal secretion. Van Loon GR, et al. **Prog Brain Res** 1989;79:217–23

Effects of glucocorticoids on plasma catecholamines in depression. Rupprecht R, et al. **Psychiatry Res** 1989 Aug; 29(2):187–98

Initial hormonal and metabolic profile in critically ill patients with community-acquired lobar pneumonia. Feldman C, et al. **S Afr Med J** 1989 Dec 2;76(11):593–6

Biochemical indicators of myocardial ischaemia during coronary artery bypass grafting. Kaukinen S, et al. **Scand J Thorac Cardiovasc Surg** 1990;24(1):71–3

Platelet release reaction and plasma catecholamines during total hip replacement. No effects of high doses of corticosteroids. Høgevold HE, et al. **Thromb Res** 1990 Jan 1;57(1):21–9

The effects of acute exercise and increased atmospheric pressure on the hemostatic mechanism and plasma catecholamine levels. LaCroix KA, et al. **Thromb Res** 1990 Mar 1;57(5):717–28

Cardiac manifestation and blood catecholamine levels during succinylcholine-induced stress of malignant hyperthermia sensitive pigs. Jönsson L, et al. **Zentralbl Veterinarmed [A]** 1989 Dec;36(10):772–82

[Solvent extraction and high performance liquid chromatography with electrochemical detection for determination of plasma catecholamines] Zhang L, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Nov;10(6):572–5 (Eng. Abstr.) **(Chi)**

[Normal and pathologic endocrinology of the adrenal glands] Bürgi U. **Helv Chir Acta** 1989 Aug;56(3):307–14 (11 ref.) (Eng. Abstr.) **(Ger)**

[Comparison of several variables of metabolic, immunologic and endocrine function with personality factors in perioperative stress] Grabow L, et al. **Psychother Psychosom Med Psychol** 1990 Jun;40(6):207–15 (Eng. Abstr.) **(Ger)**

[Morphologic findings in dilated cardiomyopathy and their relation to hemodynamics and catecholamine concentrations in the plasma and myocardium] Schofer J, et al. **Z Kardiol** 1990 Apr;79(4):302–7 (Eng. Abstr.) **(Ger)**

[Effects of sevoflurane anesthesia and surgery on plasma catecholamine levels] Murakawa T, et al. **Masui** 1989 Nov; 38(11):1456–62 (Eng. Abstr.) **(Jpn)**

[Plasma catecholamine levels following continuous epidural infusion of morphine for postoperative analgesia in surgical patients] Murakawa T, et al. **Masui** 1990 Jun;39(6):728–33 (Eng. Abstr.) **(Jpn)**

[The role of catecholamine content in human platelets; clinical implications in patients with pheochromocytoma] Okutani R, et al. **Masui** 1989 Nov;38(11):1463–8 (Eng. Abstr.) **(Jpn)**

[Effect of nafamostat mesilate on serum activities of pancreatic enzymes and plasma hormone levels] Wakayama S, et al. **Masui** 1990 Jun;39(6):734–40 (Eng. Abstr.) **(Jpn)**

[Clinical significance of catecholamine analysis in endocrine tests of the adrenal medulla and sympathetic nervous system] Sasaki M, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:1155–60 **(Jpn)**

[Role of HPLC in separation analysis in laboratory medicine] Okabe H. **Rinsho Byori** 1990 Jan;38(1):51–6 (Eng. Abstr.) **(Jpn)**

[Relations of catecholamine and prostaglandin contents in the blood of rats exposed to acute stress and during adaptation to stress] Pshennikova MG, et al. **Biull Eksp Biol Med** 1990 Jun;109(6):534–5 (Eng. Abstr.) **(Rus)**

[Effects of sodium oxybutyrate on the level of catecholamines and serotonin and monoamine oxidase activity in patients with alcoholism] Treskov VG, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):62–4 (Eng. Abstr.) **(Rus)**

[Chronic altitude-induced pulmonary heart disease and the status of the adrenergic receptor system] Meĭmanaliev TS, et al. **Kardiologiia** 1990 Jan;30(1):42–5 (Eng. Abstr.) **(Rus)**

[Catecholamines in the erythrocytes of cancer patients] Kashulina AP, et al. **Patol Fiziol Eksp Ter** 1990 Jan–Feb; (1):39–40 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Synthesis and alpha 2-adrenoceptor effects of substituted catecholimidazoline and catecholimidazole analogues in human platelets. Miller DD, et al. **J Med Chem** 1990 Apr; 33(4):1138–44

METABOLISM

Uterine adrenergic and cholinesterase-positive nerves and myometrial catecholamine concentrations during pregnancy in sheep. Renegar RH, et al. **Acta Anat (Basel)** 1990;137(4):373–81

Beta-endorphin-induced behavioural effects: endorphin-catecholamines interactions. Samardžić R, et al. **Acta Physiol Hung** 1990;75 Suppl:253–4

Effects of single administration of scopolamine, physostigmine and their combination on biogenic amine levels in rat brain. Hrbek J, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;121:271–5

Changes in adrenal oxygen consumption during catecholamine secretion in anesthetized dogs. Breslow MJ, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H681–8

Li+ as a secretagogue agent [letter] Serrano-Castro A, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):C527–9

Neuropathology of immunohistochemically identified brainstem neurons in Parkinson's disease. Halliday GM, et al. **Ann Neurol** 1990 Apr;27(4):373–85

Benzodiazepines facilitate the stimulatory action of gamma-aminobutyric acid (GABA) on basal and veratridine-evoked catecholamine release from cultured bovine adrenal chromaffin cells. Kitayama S, et al. **Arch Int Pharmacodyn Ther** 1989 Jul–Aug;300:254–64

Effects of pantethine, cysteamine and pantothenic acid on open-field behavior and brain catecholamines in rats. Vécsei L, et al. **Arch Int Pharmacodyn Ther** 1989 Jul–Aug; 300:14–21

Central aromatic amines and behavior. III. Correlative analysis of conditioned approach behavior and brain levels of serotonin and catecholamines in monkeys. Wada JA, et al. **Arch Neurol** 1966 Feb;14(2):129–42

Catecholamine metabolism in patients with congestive heart failure under acute and chronic oral levodopa therapy. Lehmann M, et al. **Arzneimittelforschung** 1990 Mar; 40(3):233–6

Plasma catecholamine metabolites and polycystic ovary syndrome. Yoshino K, et al. **Asia Oceania J Obstet Gynaecol** 1990 Mar;16(1):57–62

Alamethicin-evoked catecholamine release from cat adrenal glands. Artalejo AR, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):1204–10

Na(+)-dependent Ca2+ efflux inhibits stimulus-induced secretion in bovine chromaffin cells. Goh Y, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1346–51

Arachidonic acid stimulates phosphoinositide metabolism and catecholamine release from bovine adrenal chromaffin cells. Negishi M, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):773–9

Modulation of insulin receptors and catecholamines in rat brain in hyperthyroidism and hypothyroidism. Azam M, et al. **Biochem Int** 1990;20(6):1141–8

Stimulation of Ca2(+)-independent catecholamine secretion from digitonin-permeabilized bovine adrenal chromaffin cells by guanine nucleotide analogues. Relationship to arachidonate release. Morgan A, et al. **Biochem J** 1990 Jul 15;269(2):521–6

Serotonin- and catecholamine-related substances in the brain of ornithine transcarbamylase-deficient Sparse-fur mice in the hyperammonemic state: comparison of two procedures for obtaining brain extract, decapitation and microwave irradiation. Inoue I, et al. **Biochem Med Metab Biol** 1989 Dec;42(3):232–9

The effect of prenylamine and organic nitrates on the bioenergetics of bovine catecholamine storage vesicles. Grønberg M, et al. **Biochem Pharmacol** 1990 Jul 15; 40(2):351–5

Inhibitory action of carvedilol, a novel alpha, beta-adrenoceptor antagonist, on catecholamine secretion and calcium influx in cultured bovine adrenal chromaffin cells. Morita K, et al. **Biochem Pharmacol** 1989 Dec 15; 38(24):4461–5

Catecholamine metabolism in recurrent hereditary polyserositis. Pathogenesis of acute inflammation: the retention-leakage hypothesis. Barakat MH, et al. **Biomed Pharmacother** 1989;43(10):763–9

Vasoactive neurochemicals identified in omentum: a preliminary report. Goldsmith HS, et al. **Br J Neurosurg** 1987;1(3):359–64

The key role of sodium in the ouabain-mediated potentiation of potassium-evoked catecholamine release in cat adrenal glands. Abajo FJ, et al. **Br J Pharmacol** 1989 Oct; 98(2):455–62

Effect of diadenosine polyphosphates on catecholamine secretion from isolated chromaffin cells. Castro E, et al. **Br J Pharmacol** 1990 Jun;100(2):360–4

Effects of pinacidil on the sympatho-adrenal system in dogs. Damase-Michel C, et al. **Br J Pharmacol** 1989 Aug; 97(4):1019–26

Effect of quinine on the release of catecholamines from bovine cultured chromaffin cells. Tang R, et al. **Br J Pharmacol** 1990 Mar;99(3):548–52

The mode of action of caffeine on catecholamine release from perfused adrenal glands of cat. Yamada Y, et al. **Br J Pharmacol** 1989 Oct;98(2):351–6

Innervation of the spleen in the rat: evidence for absence of afferent innervation. Nance DM, et al. **Brain Behav Immun** 1989 Dec;3(4):281–90

Asymmetry in diencephalic monoamine metabolism is related to side of ovulation in a reptile. Jones RE, et al. **Brain Res** 1990 Jan 8;506(2):187–91

Immunohistochemical demonstration of glutaminase in catecholaminergic and serotoninergic neurons of rat brain. Kaneko T, et al. **Brain Res** 1990 Jan 15;507(1):151–4

Changes in catecholamine metabolism in the rostral ventrolateral medulla following halothane and nitroprusside-induced hypotension: an in vivo electrochemical study. Milne B, et al. **Brain Res** 1990 Jun 4;518(1–2):143–8

Ultrastructural localization of choline acetyltransferase in the rat rostral ventrolateral medulla: evidence for major synaptic relations with non-catecholaminergic neurons. Milner TA, et al. **Brain Res** 1989 Oct 23;500(1–2):67–89

Systemic glutamate induces degeneration of a subpopulation of tyrosine hydroxylase-immunoreactive neurons in the rat area postrema. Phelix CF, et al. **Brain Res** 1990 May 21; 516(2):335–40

Behavioral sensitization to amphetamine is dependent on corticosteroid receptor activation. Rivet JM, et al. **Brain Res** 1989 Sep 25;498(1):149–53

Effects of insulin on hypothalamic monoamine metabolism. Shimizu H, et al. **Brain Res** 1990 Mar 5;510(2):251–8

Tetraethylammonium stimulates adrenomedullary secretion by causing fluctuations in a cytosolic free Ca concentration. Sorimachi M, et al. **Brain Res** 1990 Jan 22;507(2):347–50

Effect of monoamine oxidase inhibition on catecholamine levels: evidence for synthesis but not storage of epinephrine in rat spinal cord. Sved AF. **Brain Res** 1990 Apr 2; 512(2):253–8

Reduction of insulin binding in the arcuate nucleus of the rat hypothalamus after 6-hydroxydopamine treatment. Wilcox BJ, et al. **Brain Res** 1989 Oct 23;500(1–2):149–55

Catecholaminergic projections to tuberoinfundibular neurones of the paraventricular nucleus: I. Effects of stimulation of A1, A2, A6 and C2 cell groups. Saphier D. **Brain Res Bull** 1989 Dec;23(6):389–95

Effects of acute hypoxia on neonatal rat brain: regionally selective, long-term alterations in catecholamine levels and turnover. Seidler FJ, et al. **Brain Res Bull** 1990 Feb; 24(2):157–61

Ontogeny of mu-, delta- and kappa-opioid receptors mediating inhibition of neurotransmitter release and adenylate cyclase activity in rat brain. De Vries TJ, et al. **Brain Res Dev Brain Res** 1990 Jun 1;54(1):63–9

Growth hormone-releasing hormone influences neuronal expression in the developing chick brain. I. Catecholaminergic neurons. Kentroti S, et al. **Brain Res Dev Brain Res** 1989 Oct 1;49(2):275–80

Selective retardation of the development of the basal forebrain cholinergic and pontine catecholaminergic nuclei in the brain of trisomy 16 mouse, an animal model of Down's syndrome. Kiss J, et al. **Brain Res Dev Brain Res** 1989 Dec 1;50(2):251–64

Corelease of neuropeptide Y like immunoreactivity with catecholamines from the adrenal gland during splanchnic nerve stimulation in anesthetized dogs. Briand R, et al. **Can J Physiol Pharmacol** 1990 Mar;68(3):363–9

Studies on responsiveness of hepatoma cells to catecholamines. V. Loss of adrenergic response of glycogen phosphorylase in rat ascites hepatoma AH130 cells. Miyamoto K, et al. **Chem Pharm Bull (Tokyo)** 1990 Feb; 38(2):470–3

Myocardial catecholamines and the pathophysiology of heart failure. Daly PA, et al. **Circulation** 1990 Aug;82(2 Suppl):I35–43 (107 ref.)

Catecholamines in myocardial ischemia. Systemic and cardiac release. Schömig A. **Circulation** 1990 Sep;82(3 Suppl):II13–22 (95 ref.)

Is physiologic sympathoadrenal catecholamine release exocytotic in humans? Takiyyuddin MA, et al. **Circulation** 1990 Jan;81(1):185–95

Modulation of adrenal catecholamine release by DA2 dopamine receptors in the anaesthetized dog. Foucart S, et al. **Clin Exp Pharmacol Physiol** 1988 Aug;15(8):601–11

Effects of sodium restriction on cardiac 3,4-dihydroxyphenylethylene glycol and catecholamine levels in rats. Howes LG, et al. **Clin Exp Pharmacol Physiol** 1989 Aug;16(8):671–4

Changes in the catecholamine metabolism in the adrenal medulla of male hamsters with experimental hyperprolactinemia. Fernandez-Ruiz JJ, et al. **Comp Biochem Physiol [C]** 1989;93(2):303–6

Characterization of unique ADTN-catecholamine binding sites in the iris root-ciliary body of rabbits. Rohde BH, et al. **Curr Eye Res** 1989 Dec;8(12):1225–31

Correction of arterial blood pressure in adult rats with inherited stress-induced arterial hypertension by enhancement of catecholamine metabolism in early postnatal period. Naumenko EV, et al. **Endocrinol Exp** 1990 Mar;24(1–2):241–8

Histamine as a neuroendocrine regulator of the stress-induced release of peripheral catecholamines. Knigge U, et al. **Endocrinology** 1990 Mar;126(3):1430–4

Complete spinal cord transection at different postnatal ages: recovery of motor coordination correlated with spinal cord catecholamines. Commissiong JW, et al. **Exp Brain Res** 1989;78(3):597–603

Importance of catecholamine release for the functional action of intrastriatal implants of adrenal medullary cells: pharmacological analysis and in vivo electrochemistry. Decombe R, et al. **Exp Neurol** 1990 Feb;107(2):143–53

The caffeine-sensitive Ca2+ store in bovine adrenal chromaffin cells; an examination of its role in triggering secretion and Ca2+ homeostasis. Cheek TR, et al. **FEBS Lett** 1990 Jun 18;266(1–2):91–5

Effect of apomorphine on adrenal medullary catecholamine levels. Montastruc JL, et al. **Fundam Clin Pharmacol** 1989; 3(6):665–70

Catecholamines and virulence of Cryptococcus neoformans. Polacheck I, et al. **Infect Immun** 1990 Sep;58(9):2919–22

Interaction of iron-bleomycin with catecholamines. Løvstad RA. **Int J Biochem** 1990;22(6):641–4

Catecholaminergic cells and support cell precursors in neural crest cultures differentially express nerve growth factor receptors. Bernd P. **Int J Dev Neurosci** 1989;7(5):449–63

The development and maturation of adrenal medullary chromaffin cells of the rat in vivo: a descriptive and quantitative study. Coupland RE, et al. **Int J Dev Neurosci** 1989;7(5):419–38

Chromaffin cell proliferation in the adult rat adrenal medulla. Tischler AS, et al. **Int J Dev Neurosci** 1989;7(5):439–48

Influence of thyroid hormones and catecholamines on myosin of swim–exercised rats. Rupp H, et al. **J Appl Physiol** 1990 Mar;68(3):973–8

Partial transection of the ipsilateral cervical spinal cord evokes a sustained increase in the adrenal section of catecholamines in the cat. Bereiter DA. **J Auton Nerv Syst** 1989 Aug;27(3):181–92

Neuronal and adrenal enkephalins and catecholamines in response to acute CNS ischemia and reserpine in pig. Klein RL, et al. **J Auton Nerv Syst** 1990 Apr;30(1):37–62

Nicotinic receptor–mediated catecholamine secretion from individual chromaffin cells. Chemical evidence for exocytosis. Leszczyszyn DJ, et al. **J Biol Chem** 1990 Sep 5;265(25):14736–7

Involvement of protein kinase C in prostaglandin E2–induced catecholamine release from cultured bovine adrenal chromaffin cells. Negishi M, et al. **J Biol Chem** 1990 Apr 15;265(11):6182–8

Expression of tyrosine hydroxylase–like immunoreactivity in cell bodies in intraocular spinal cord grafts: a comparison with classical Falck–Hillarp histochemistry. Henschen A, et al. **J Chem Neuroanat** 1990 Jan–Feb;3(1):77–83

Laminin facilitates and guides fiber growth of transplanted neurons in adult brain. Zhou FC, et al. **J Chem Neuroanat** 1988 May–Jun;1(3):133–46

Subnuclear organization of the lateral tegmental field of the rat. II: Catecholamine neurons and ventral respiratory group. Ellenberger HH, et al. **J Comp Neurol** 1990 Apr 8;294(2):212–22

Cholinergic and monoaminergic innervation of the cat's thalamus: comparison of the lateral geniculate nucleus with other principal sensory nuclei. Fitzpatrick D, et al. **J Comp Neurol** 1989 Oct 22;288(4):647–75

Developmental changes in the distribution of retinal catecholaminergic neurones in hamsters and gerbils. Mitrofanis J, et al. **J Comp Neurol** 1990 Feb 15; 292(3):480–94

Ontogeny of catecholaminergic and cholinergic cell distributions in the cat's retina. Mitrofanis J, et al. **J Comp Neurol** 1989 Nov 8;289(2):228–46

Development of catecholaminergic projections to the spinal cord in the North American opossum, Didelphis virginiana. Pindzola RR, et al. **J Comp Neurol** 1990 Apr 15; 294(3):399–417

Localization of enkephalinergic neurons in the dorsolateral pontine tegmentum projecting to the spinal cord of the cat. Reddy VK, et al. **J Comp Neurol** 1990 Jan 8; 291(2):195–202

Neuropeptides and catecholamines in efferent projections of the nuclei of the solitary tract in the rat. Riche D, et al. **J Comp Neurol** 1990 Mar 15;293(3):399–424

Catecholaminergic systems in the brain of a gymnotiform teleost fish: an immunohistochemical study. Sas E, et al. **J Comp Neurol** 1990 Feb 1;292(1):127–62

Catecholamines and related o–diphenols in cockroach hemolymph and cuticle during sclerotization and melanization: comparative studies on the order Dictyoptera. Czapla TH, et al. **J Comp Physiol [B]** 1990; 160(2):175–81

Long–term anoxia in crucian carp: changes in the levels of amino acid and monoamine neurotransmitters in the brain, catecholamines in chromaffin tissue, and liver glycogen. Nilsson GE. **J Exp Biol** 1990 May;150:295–320

Alternative catecholamine pathways after tyrosine hydroxylase inhibition in malignant pheochromocytoma. Kuchel O, et al. **J Lab Clin Med** 1990 Apr;115(4):449–53

Influence of cysteamine and cysteine on open–field behaviour, and on brain concentrations of catecholamines, somatostatin, neuropeptide Y, and corticotropin releasing hormone in the rat. Vécsei L, et al. **J Neural Transm Gen Sect** 1989;78(3):209–20

Effect of acute levodopa on brain catecholamines after selective MAO and COMT inhibition in male rats. Männistö PT, et al. **J Neural Transm Park Dis Dement Sect** 1990;2(1):31–43

Peptide regulation of adrenal medullary function. Livett BG, et al. **J Neural Transm Suppl** 1990;29:77–89 (25 ref.)

Phenolsulfotransferase (PST) and PAPS in catecholamine metabolism in human tissues: an overview. Wong KP, et al. **J Neural Transm Suppl** 1990;29:163–71 (43 ref.)

Studies on the effect of insulin–like growth factor–I on catecholamine secretion from chromaffin cells. Dahmer MK, et al. **J Neurochem** 1990 Mar;54(3):931–6

In vivo monitoring of catecholaminergic metabolism in the C1 region of rat medulla oblongata: a comparative study by voltammetry and intracerebral microdialysis. Lambás–Señas L, et al. **J Neurochem** 1990 Jun;54(6):2042–9

Effects of hypoxia on the catecholamine release, Ca2+ uptake, and cytosolic free Ca2+ concentration in cultured bovine adrenal chromaffin cells. Lee K, et al. **J Neurochem** 1990 Oct;55(4):1131–7

Synergistic effect of prostaglandin E2 and ouabain on catecholamine release from cultured bovine adrenal chromaffin cells. Tanaka T, et al. **J Neurochem** 1990 Jan; 54(1):86–95

A mutation that causes muscle defects also affects catecholamine metabolism in Drosophila. Homyk T Jr, et al. **J Neurogenet** 1989 Nov;6(2):57–73

Effects of different opiates on hypothalamic monoamine turnover and on plasma LH levels in pro–oestrous rats. Gopalan C, et al. **J Neurol Sci** 1989 Dec;94(1–3):211–9

Cross–communication between acetylcholine and VIP in controlling catecholamine secretion by affecting cAMP, inositol triphosphate, protein kinase C, and calcium in rat adrenal medulla. Malhotra RK, et al. **J Neurosci** 1989 Dec; 9(12):4150–7

Stimulation of adrenergic development in neural crest cultures by a reconstituted basement membrane–like matrix is inhibited by agents that elevate cAMP. Maxwell GD, et al. **J Neurosci Res** 1990 Feb;25(2):172–9

Nerve growth factor and K–252a increase catecholamine release from PC12 cells. Nikodijevic B, et al. **J Neurosci Res** 1990 Jul;26(3):288–95

Effects of repeated fenfluramine administration on indices of monoamine function in rat brain: pharmacokinetic, dose response, regional specificity and time course data. Zaczek R, et al. **J Pharmacol Exp Ther** 1990 Apr;253(1):104–12

Determination of catecholamines and their metabolites in adrenals of stress–loaded and wild suncus (Suncus murinus). Yazawa K, et al. **Jpn J Pharmacol** 1989 Nov;51(3):443–5

Effect of cyclosporin A on rat kidney catecholamines. Duruibe VA, et al. **Life Sci** 1990;47(4):255–61

Neonatal 6–hydroxydopamine treatment: noradrenaline levels and in vitro 3H–catecholamine synthesis in discrete brain regions of adult rats. Versteeg DH, et al. **Life Sci** 1974 Dec 15;15(12):2127–34

Effects of high magnesium intake on central catecholamines in spontaneously hypertensive rat. Luthringer C, et al. **Magnes Res** 1988 Dec;1(3–4):163–7

Enhancement by GABA of the stimulation–evoked catecholamine release from cultured bovine adrenal chromaffin cells. Kitayama S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 May; 341(5):414–8

GABAergic modulation of catecholamine release from cultured bovine adrenal chromaffin cells. Evidence for the involvement of Cl(–)–dependent Ca2+ entry. Kitayama S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 May; 341(5):419–24

Inhibition by vecuronium of carbachol–induced influx of 22Na+, 45Ca2+ and secretion of catecholamines in cultured bovine adrenal medullary cells. Wada A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Dec; 340(6):605–9

Sex– and age–related changes in catecholamine metabolism and release of rat adrenal gland. Fernandez–Ruiz JJ, et al. **Neurobiol Aging** 1989 Jul–Aug;10(4):331–5

Age–associated alterations in catecholaminergic concentrations, neuronal activity, and alpha 1 receptor densities in female rats. Weiland NG, et al. **Neurobiol Aging** 1989 Jul–Aug;10(4):323–9 (39 ref.)

Neuronal–glial interactions: quantitation of astrocytic influences on development of catecholamine neurons. Lieth E, et al. **Neurochem Res** 1989 Oct;14(10):979–85

Analysis of the development of cellular subsets present in the neural crest using cell sorting and cell culture. Maxwell GD, et al. **Neuron** 1988 Sep;1(7):557–68

Depletion of catecholamines in the brain of rats differentially affects stimulation of locomotor activity by caffeine, D–amphetamine, and methylphenidate. Finn IB, et al. **Neuropharmacology** 1990 Jul;29(7):625–31

The acute effect on levels of catecholamines and metabolites in brain, of a single dose of MPTP in 8 strains of mice. Hoskins JA, et al. **Neuropharmacology** 1989 Dec; 28(12):1389–97

Aldehyde dehydrogenase activity in rat cerebral structures. Zimatkin SM. **Neurosci Behav Physiol** 1990 Mar–Apr; 20(2):98–102

Tyrosine hydroxylase immunoreactive interplexiform cells in the lamprey retina. de Miguel E, et al. **Neurosci Lett** 1990 May 31;113(2):151–5

Carotid body amine levels in goats exposed to hypoxia or hypercapnia. Engwall MJ, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):221–6

Suramin–induced changes in sympathetic neurons: correlation between catecholamine fluorescence, tyrosine hydroxylase immunoreactivity and accumulation of pigment bodies. Koistinaho J. **Neurosci Lett** 1990 Apr 20; 112(1):19–24

Antidepressants induce regeneration of catecholaminergic axon terminals in the rat cerebral cortex. Nakamura S. **Neurosci Lett** 1990 Mar 26;111(1–2):64–8

Evidence for projections from the rostral medullary raphe onto medullary catecholamine neurons in the rat. Nicholas AP, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):22–8

Sodium ions inhibit the stimulant action of caffeine on catecholamine secretion from adrenal chromaffin cells of the guinea pig. Teraoka H, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):179–82

Cografts of adrenal medulla with C6 glioma cells in rats with 6–hydroxydopamine–induced lesions. Bing G, et al. **Neuroscience** 1990;34(3):687–97

Secalonic acid D mycotoxin affects ontogeny of brain catecholamines and swimming in mice. St Omer VE, et al. **Neurotoxicol Teratol** 1990 Mar–Apr;12(2):85–90

Actions of cocaine on central monoamine neurons: intracellular recordings in vitro. Williams J, et al. **NIDA Res Monogr** 1988;90:234–42

Catecholamine sensitive right ventricular outflow tract tachycardia: intraoperative mapping and ablation of a free–wall focus. Wilber DJ, et al. **PACE** 1989 Dec; 12(12):1851–6

Differential accumulation of catecholamines, proenkephalin–and chromogranin A–derived peptides in the medium after chronic nicotine stimulation of cultured bovine adrenal chromaffin cells. Watkinson A, et al. **Peptides** 1990 May–Jun;11(3):435–41

In vivo changes in brain catecholamine release from rat hypothalamus following olfactory bulbectomy. Iwasaki K, et al. **Pharmacol Biochem Behav** 1989 Dec;34(4):879–85

Testosterone replacement fails to reverse the adverse effects of streptozotocin–induced diabetes on sexual behavior in the male rat. Steger RW. **Pharmacol Biochem Behav** 1990 Mar;35(3):577–82

Effect of noncompetitive nicotinic receptor blockers on catecholamine release from cultured adrenal chromaffin cells. McKay DB, et al. **Pharmacology** 1990;40(4):224–30

Effect of ethanol and diazepam given to pregnant rats on the behavior and catecholamine content in the brain of offspring. Felińska W, et al. **Pol J Pharmacol Pharm** 1989 May–Jun;41(3):223–5

Catecholamine levels in the brain and adrenals of rats poisoned with triphenyltin (Brestan 60). Zieliński W, et al. **Pol J Pharmacol Pharm** 1989 Jan–Feb;41(1):7–14

myc products induce the expression of catecholaminergic traits in quail neural crest–derived cells. Fauquet M, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1546–50

Multiple effects of honokiol on catecholamine secretion from adrenal chromaffin cells. Liu PS, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Oct;13(4):307–13

Influence of nicotine on the release of monoamines in the brain. Balfour DJ. **Prog Brain Res** 1989;79:165–72 (28 ref.)

Brain monoamines are involved in the sedative effects of opiates and neuroleptics. Furst S. **Prog Clin Biol Res** 1990; 328:311–4

Ultrastructural immunocytochemistry of the hypothalamic corticotropin releasing hormone synthesizing system. Anatomical basis of neuronal and humoral regulatory mechanisms. Liposits Z. **Prog Histochem Cytochem** 1990; 21(2):1–98

Inverse correlation between N–myc amplification and catecholamine metabolism in children with advanced neuroblastoma. Nakagawara A, et al. **Surgery** 1990 Jan; 107(1):43–9

Age–related alteration in the catecholamine–sensitive adenylate cyclase system of the rat cerebral cortex. Ozawa H, et al. **Yakubutsu Seishin Kodo** 1989 Dec;9(4):359–68

Is there an interaction between catecholamines and enkephalins in the inferior mesenteric ganglion of the cat? Polónyi J, et al. **Z Mikrosk Anat Forsch** 1989;103(4):675–9

[Effects of intraperitoneal injection of naloxone on the analgesic effect and the changes of brain catecholamine contents induced by electroacupuncture in rats] Wang YJ, et al. **Chen Tzu Yen Chiu** 1989;14(3):348–51 (Eng. Abstr.) **(Chi)**

[Effects of destruction of preoptic catecholaminergic nerve terminals on acupuncture analgesia] Zhu JM, et al. **Sheng Li Hsueh Pao** 1990 Apr;42(2):135–40 (Eng. Abstr.) **(Chi)**

[Modification of catecholamine metabolism in rats by magnesium aspartate hydrochloride] Kietzmann M, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Apr;97(4):177–80 (Eng. Abstr.) **(Ger)**

[Changes in catecholamine and immunoglobulin during anesthesia for cardiac surgery—a comparison of valve replacement and aorto–coronary bypass surgery] Isshiki A, et al. **Masui** 1989 Dec;38(12):1583–7 (Eng. Abstr.) **(Jpn)**

[Direct evidence of alpha–adrenoceptor binding in rat and human adrenal glands] Furuta H. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb;81(2):161–9 (Eng. Abstr.) **(Jpn)**

[The distribution of toluene in the brain and its effects on the brain catecholamines in acute toluene poisoning] Kiriu T, et al. **Nippon Hoigaku Zasshi** 1990 Feb;44(1):25–33 (Eng. Abstr.) **(Jpn)**

[Effect of TRH and histidyl–proline diketopiperazine (cyclo(His–Pro) on catecholamine secretion] Miyamori C, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Nov 20; 65(11):1226–38 (Eng. Abstr.) **(Jpn)**

[Role of fetal catecholamines before and during birth] Kudo T. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Aug; 41(8):1027–32 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Neurochemistry of kindling] Akiyama K, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1206–13 **(Jpn)**

[Role of Ca2+ in the secretion of catecholamines] Morita K, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(12):2228–36 **(Jpn)**

[Granular biogenic amine–containing cells of the rat endometrium as components of the system of mononuclear phagocytes] Gunin AG, et al. **Arkh Anat Gistol Embriol** 1990 Jan;98(1):68–70 (Eng. Abstr.) **(Rus)**

[Catecholamines in adrenergic nerve fibers of the lymph nodes after sympathectomy] Izranov VA. **Arkh Anat Gistol Embriol** 1990 Apr;98(4):32–5 (Eng. Abstr.) **(Rus)**

[Immobilization stress–induced changes in catecholamine levels in the individual cerebral nuclei in rats of different zoosocial ranks] Belova TI, et al. **Biull Eksp Biol Med** 1990

Apr;109(4):323–4 (Eng. Abstr.) **(Rus)**

[The effect of testosterone propionate on energy metabolism indices and the catecholamine content of the vascular wall] Nikulin AA, et al. **Farmakol Toksikol** 1989 Nov–Dec; 52(6):65–8 (Eng. Abstr.) **(Rus)**

[The role of lipid peroxidation in the mechanism of stress] Baraboĭ VA. **Fiziol Zh** 1989 Sep–Oct;35(5):85–97 (55 ref.) (Eng. Abstr.) **(Rus)**

[Identification of catecholamines in the rat brain and mollusk tissues using semithin slices and retrograde staining] Prudnikov IM, et al. **Fiziol Zh** 1989 Nov–Dec;35(6):98–100 (Eng. Abstr.) **(Rus)**

[Effect of noise of moderate intensity on the functional status of the sympathetic–adrenal system] Oleshkevich LA, et al. **Gig Sanit** 1989 Dec;(12):93–5 **(Rus)**

[Effect of the leucine enkephalin analog dalargin on the components of the sympathetico–adrenal system in experimental myocardial infarction] Afonskaia NI, et al. **Kardiologiia** 1990 Feb;30(2):78–81 (Eng. Abstr.) **(Rus)**

[Catecholamine levels in various regions of the heart in sudden cardiac death] Smirnova EP, et al. **Kardiologiia** 1990 Feb;30(2):98–100 **(Rus)**

[The content of catecholamines in the adrenergic plexuses of the spleen and intestines during cold and emotional stresses] Dib J, et al. **Neirofiziologiia** 1990;22(3):347–54 (Eng. Abstr.) **(Rus)**

[The catecholamine level in the brain of rats with hereditary stress–induced arterial hypertension] Gordienko NI. **Patol Fiziol Eksp Ter** 1990 May–Jun;(3):38–40 (Eng. Abstr.) **(Rus)**

[The blood flow and catecholamine content in different layers of the myocardium in acute left–ventricular failure] Makhmudov SIa, et al. **Patol Fiziol Eksp Ter** 1990 May–Jun;(3):24–7 (Eng. Abstr.) **(Rus)**

[The brain catecholamines during domestication of the silver fox Vulpes fulvus] Nikulina EM. **Zh Evol Biokhim Fiziol** 1990 Mar–Apr;26(2):156–60 (Eng. Abstr.) **(Rus)**

[Catecholamine metabolism in essential tremor] Barkhatova VP, et al. **Zh Nevropatol Psikhiatr** 1990;90(3):10–4 (Eng. Abstr.) **(Rus)**

[Regulatory mechanism of gonadotropins and prolactin: role of the pineal gland and of the central catecholamines] Fernández–Tresguerres Hernández JA. **An R Acad Nac Med (Madr)** 1989;106(3):413–24 (68 ref.) **(Spa)**

PHARMACOKINETICS

Covalent labeling of the cocaine–sensitive catecholamine transporter. Howard BD, et al. **J Neurosci Res** 1990 Jun; 26(2):149–58

PHARMACOLOGY

Chronotropic and inotropic responses to ASL–7022 on isolated rat atria. Gende OA, et al. **Acta Physiol Pharmacol Latinoam** 1989;39(2):119–26

Catecholamine–thyroid hormone interactions and the cardiovascular manifestations of hyperthyroidism. Levey GS, et al. **Am J Med** 1990 Jun;88(6):642–6 (54 ref.)

Mechanisms underlying early and delayed afterdepolarizations induced by catecholamines. Priori SG, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1796–805

Trypanocidal effects of catecholamines and indolealkylamines. Owolabi OA, et al. **Ann Trop Med Parasitol** 1990 Apr;84(2):127–31

Inhibition of human immunodeficiency virus type 1 replication and cytopathicity by synthetic soluble catecholamine melanins in vitro. Montefiori DC, et al. **Biochem Biophys Res Commun** 1990 Apr 16;168(1):200–5

Effects of catecholamines on protein synthesis in cardiac myocytes and perfused hearts isolated from adult rats. Stimulation of translation is mediated through the alpha 1–adrenoceptor. Fuller SJ, et al. **Biochem J** 1990 Mar 15; 266(3):727–36

Catecholamines inhibit leukotriene formation and decrease leukotriene/prostaglandin ratio. Parantainen J, et al. **Biochem Pharmacol** 1990 Sep 1;40(5):961–6

The influence of thyroid states upon responses of the rat aorta to catecholamines. Gunasekera RD, et al. **Br J Pharmacol** 1990 Mar;99(3):541–7

FPL 63012AR: a potent D1–receptor agonist. Smith GW, et al. **Br J Pharmacol** 1990 Jun;100(2):295–300

Effect of glucocorticoids on the response of airway smooth muscle to catecholamine and resorcinol beta–agonists. Kolbeck RC, et al. **Can J Physiol Pharmacol** 1989 Nov; 67(11):1442–7

Thermogenesis and the effect of injected catecholamines on the oxygen consumption of cafeteria–fed rats. Maxwell GM, et al. **Clin Exp Pharmacol Physiol** 1988 May; 15(5):391–400

Influence of catecholamines, prostaglandins and thyroid hormones on growth hormone secretion by chicken pituitary cells in vitro. Donoghue DJ, et al. **Domest Anim Endocrinol** 1990 Jan;7(1):35–42

Catecholamines do not induce fibrinolytic activity increase in cultured bovine endothelial cells. Peracchia F, et al. **Haemostasis** 1989;19(4):235–40

Role of adenosine in catecholamine–induced global coronary functional hyperemia in isolated guinea pig hearts. Kang YH, et al. **J Cardiovasc Pharmacol** 1990 Jun;15(6):939–45

Regulation of hepatic gluconeogenesis and glycogenolysis by catecholamines in rainbow trout during environmental hypoxia. Wright PA, et al. **J Exp Biol** 1989 Nov;147:169–88

Increased lipolytic sensitivity to catecholamines in diabetic patients with severe autonomic neuropathy. Wahrenberg H, et al. **J Intern Med** 1990 May;227(5):309–16

Inhibitory effects of catecholamines on cholinergically and non–cholinergically mediated contractions of guinea–pig isolated bronchial muscle. Kamikawa Y, et al. **J Pharm Pharmacol** 1990 Feb;42(2):131–4

In situ studies of catecholamine–induced lipolysis in human adipose tissue using microdialysis. Arner P, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):284–8

Effect of catecholamines on deformability of red cells from trout: relative roles of cyclic AMP and cell volume. Chiocchia G, et al. **J Physiol (Lond)** 1989 May;412:321–32

Catecholamine–mediated inactivation of poliovirus RNA. Dubes GR. **Microbios** 1989;59(240–241):175–89

Alpha 1–adrenergic stimulation and beta 2–adrenergic inhibition of DNA synthesis in vascular smooth muscle cells. Nakaki T, et al. **Mol Pharmacol** 1990 Jan;37(1):30–6

Activation of vasodepressor reflexes by inotropic catecholamines [letter] Karnad DR, et al. **N Engl J Med** 1990 May 24;322(21):1532–3

Stereostructure activity relationships of catecholamines on human platelet function. Ahn CH, et al. **Proc Soc Exp Biol Med** 1990 Jun;194(2):149–56

Effect of castration on eicosanoid and catecholamine–induced luteinizing hormone–releasing hormone release in vitro. Gerozissis K, et al. **Prostaglandins** 1990 Jan;39(1):23–31

[The characteristics of the effect of catecholamines on the relaxation of ventricular myocardium in warm–blooded and cold–blooded animals] Bliakhman FA, et al. **Fiziol Zh SSSR** 1989 Dec;75(12):1708–13 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The role of catecholamines in lethal immobilization stress. Tóth T. **Acta Physiol Hung** 1990;75(2):95–9

Catecholamines and cardiovascular disorders: pathophysiologic considerations. Ganguly PK. **Am Heart J** 1989 Oct;118(4):868–72 (40 ref.)

Sympathoadrenal activity, catecholamines, and the pathogenesis of vasculopathic hypertensive target–organ damage. Izzo JL Jr. **Am J Hypertens** 1989 Dec;2(12 Pt 2):305S–312S (52 ref.)

Effect of magnesium on cocaine–induced, catecholamine–mediated platelet and vascular response in term pregnant ewes. Weaver K, et al. **Am J Obstet Gynecol** 1989 Nov;161(5):1331–7

Evaluation of neurohumoral substances in local regulation of blood flow. Altura BM. **Am J Physiol** 1967 Jun; 212(6):1447–54

The interaction of the beta–haloethyl benzylamines, xylamine, and DSP–4 with catecholaminergic neurons. Dudley MW, et al. **Annu Rev Pharmacol Toxicol** 1990; 30:387–403 (64 ref.)

Central catecholaminergic dysfunction and behavioural disorders following hypoxia in adult rats. Speiser Z, et al. **Behav Brain Res** 1990 Feb 12;37(1):19–27

Support for a physiological role of endogenous catecholamines in the stimulation of bovine luteal progesterone production. Battista PJ, et al. **Biol Reprod** 1989 Nov;41(5):807–12

Hypercapnia depresses nociception: endogenous opioids implicated. Gamble GD, et al. **Brain Res** 1990 Apr 30; 514(2):198–205

Diurnal variation in the concentrations of catecholamines and indoleamines in the median eminence and in the intermediate and posterior lobes of the pituitary gland of the male rat. Koulu M, et al. **Brain Res** 1989 Dec 4; 503(2):246–52

Neurotransmitter involvement in naloxone–induced stimulation of pulsatile LH release on day 8 of pregnancy in the rat. Mallory DS, et al. **Brain Res Bull** 1989 Jun; 22(6):1015–21

Selective beta 1–adrenoceptor blockade enhances positive inotropic responses to endogenous catecholamines mediated through beta 2–adrenoceptors in human atrial myocardium. Hall JA, et al. **Circ Res** 1990 Jun; 66(6):1610–23

Catecholaminergic modulation of corticotropin–releasing factor and adrenocorticotropin secretion. Plotsky PM, et al. **Endocr Rev** 1989 Nov;10(4):437–58 (281 ref.)

Acute selective withdrawal of testosterone negative feedback increases luteinizing hormone secretion without altering hypothalamic catecholaminergic neuronal activity. Liebmann JE, et al. **Endocrinology** 1990 Jan;126(1):555–64

Catecholamines mediate nicotine–induced adrenocorticotropin secretion via alpha–adrenergic receptors. Matta SG, et al. **Endocrinology** 1990 Oct; 127(4):1646–55

Cardiovascular regulation in the mudpuppy Necturus maculosus at rest and during short term exercise. Axelsson M, et al. **Exp Biol** 1989;48(5):253–9

Catecholamine–containing axon terminals in the hypoglossal nucleus of the rat: an immuno–electronmicroscopic study. Aldes LD, et al. **Exp Brain Res** 1990;81(1):167–78

The role of internal spermatic vein plasma catecholamine determinations in subfertile men with varicoceles. Cohen MS, et al. **Fertil Steril** 1975 Dec;26(12):1243–9

Dynamics of background adaptation in Xenopus laevis: role of catecholamines and melanophore–stimulating hormone. van Zoest ID, et al. **Gen Comp Endocrinol** 1989 Oct; 76(1):19–28

Alpha–1, alpha–2, and beta adrenergic signal transduction in cultured uterine myocytes. Phillippe M, et al. **In Vitro Cell Dev Biol** 1990 Apr;26(4):369–78

Depletion of catecholamines with alpha–methyl–p–tyrosine suppresses splenic NK cell activity. Won SJ, et al. **Int J Immunopharmacol** 1989;11(5):451–7

Central origins of preganglionic fibers to the sphenopalatine ganglion in the rat. A fluorescent retrograde tracer study with special reference to its relation to central catecholaminergic systems. Suzuki N, et al. **J Auton Nerv Syst** 1990 Jun;30(2):101–9

Paracrine control of adrenocortical function: a new role for the medulla? Hinson JP. **J Endocrinol** 1990 Jan;124(1):7–9

The hypertension–coronary heart disease dilemma: the catecholamine–blood platelet connection. Kjeldsen SE, et al. **J Hypertens** 1989 Nov;7(11):851–60 (143 ref.)

Phenylethylamine in the CNS: effects of monoamine oxidase inhibiting drugs, deuterium substitution and lesions and its role in the neuromodulation of catecholaminergic neurotransmission. Boulton AA, et al. **J Neural Transm Suppl** 1990;29:119–29 (38 ref.)

A muscle–derived factor(s) induces expression of a catecholamine phenotype in neurons of cultured rat cerebral cortex. Iacovitti L, et al. **J Neurosci** 1989 Oct; 9(10):3529–37

GABAergic neurons in the rat hippocampal formation: ultrastructure and synaptic relationships with catecholaminergic terminals. Milner TA, et al. **J Neurosci** 1989 Oct;9(10):3410–27

Locomotor behaviour of selective dopamine agonists in mice: is endogenous dopamine the only catecholamine involved? Pichler L, et al. **J Pharm Pharmacol** 1989 Oct;41(10):690–3

Neuroendocrine responses to stimulation of the splanchnic nerves in bursts in conscious, adrenalectomized, weaned lambs. Bloom SR, et al. **J Physiol (Lond)** 1989 Oct; 417:79–89

Carteolol is a useful tool to prove the tonically functioning nature of presynaptic beta–adrenoceptors on peripheral noradrenergic neurons but not on central catecholaminergic neurons. Ohno K, et al. **Jpn J Pharmacol** 1990 Apr;52(4):643–6

Stress–induced renin and corticosterone secretion is mediated by catecholaminergic nerve terminals in the hypothalamic paraventricular nucleus. Richardson Morton KD, et al. **Neuroendocrinology** 1990 Mar;51(3):320–7

Age–associated memory impairment: a role for catecholamines. McEntee WJ, et al. **Neurology** 1990 Mar; 40(3 Pt 1):526–30 (78 ref.)

Stimulation of carotid body chemoreceptors does not influence the discharge of A1 neurons projecting to the forebrain. Jamieson SM, et al. **Neuroscience** 1989; 32(1):227–34

Opioid, catecholamine, and steroid interaction in prolactin and gonadotropin regulation. Plosker SM, et al. **Obstet Gynecol Surv** 1990 Jul;45(7):441–53 (133 ref.)

Sites of action of amphetamine intrinsic to catecholaminergic nuclei: catecholaminergic presynaptic dendrites and axons. Groves PM, et al. **Prog Neuropsychopharmacol** 1979; 3(4):315–35 (85 ref.)

Comparison of the effects of three indirect dopamine agonists, GK 13, GBR 12783 and dexamphetamine on behavioural tests involving central catecholaminergic transmissions. Duterte–Boucher D, et al. **Psychopharmacology (Berl)** 1990; 101(3):344–53

A network model of catecholamine effects: gain, signal–to–noise ratio, and behavior. Servan–Schreiber D, et al. **Science** 1990 Aug 24;249(4971):892–5

Statistical analysis of dose–response curves in extracellular electrophysiological studies of single neurons. Pitts DK, et al. **Synapse** 1990;5(4):281–93

Insulin, cortisol and catecholamines do not regulate circadian variations in fibrinolytic activity. Chandler WL, et al. **Thromb Res** 1990 Apr 1;58(1):1–12

[The role of substance P and catecholamine in the mechanism of pressor response elicited by application of kainic acid to the rostral ventral surface of the medulla oblongata in rat] Chen JA. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Jun; 11(3):215–9 (Eng. Abstr.) **(Chi)**

[Various factors related to carbohydrate metabolism. Biogenic amines] Kitakaze Y, et al. **Nippon Rinsho** 1989 Nov;47(11):2420–4 **(Jpn)**

[Neurohumoral compensatory mechanisms and their role in the pathophysiology of chronic congestive heart failure] Witkowska M, et al. **Kardiol Pol** 1989;32(3):171–8 (44 ref.) **(Pol)**

[Dopamine beta–hydroxylase in disorders of blood pressure regulation] Wocial B, et al. **Kardiol Pol** 1989;32 Suppl 1:79–86 **(Pol)**

[The role of adrenergic receptors in the regulation of blood flow in the reproductive organs of swine during the estrous cycle] Dynarowicz I, et al. **Pol Arch Weter** 1988; 28(3–4):115–27 (Eng. Abstr.) **(Pol)**

[Catecholamine–containing sympathetic spinal neurons innervating the feline heart] Kade AKh, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):645–7 (Eng. Abstr.) **(Rus)**

[The brain catecholamine system in narcotic–dependent rats under the action of oxytocin] Ibragimov RSh, et al.

Fiziol Zh SSSR 1989 Dec;75(12):1657–63 (Eng. Abstr.) (Rus)

[A microdialysis study of catecholamine secretion in the rat adrenal gland during hypovolemic hypotension] Kuz'min AI, et al. Fiziol Zh SSSR 1990 Feb;76(2):227–32 (Eng. Abstr.) (Rus)

[Adrenergic receptors in the cardiovascular system (their topography, function and regulation)] Korkushko OV, et al. Kardiologiia 1989 Jul;29(7):124–8 (74 ref.) (Rus)

[The effect of the experimentally induced failure of catecholaminergic transmission on the neuronal activity of the thalamic ventrolateral nucleus] Lukhanina EP. Neirofiziologiia 1990;22(3):359–68 (Eng. Abstr.) (Rus)

[The experimental reproduction of catecholamine-deficient states and the problem of parkinsonism (the theoretical and practical aspects)] Voloshin MIa. Neirofiziologiia 1990; 22(3):401–14 (74 ref.) (Eng. Abstr.) (Rus)

[Pharmacologic analysis of the role of catecholamines in the mechanism of alcoholic affection of the heart] Nuzhnyĭ VP, et al. Patol Fiziol Eksp Ter 1989 May–Jun;(3):36–8 (Eng. Abstr.) (Rus)

[Neurohumoral regulation in frostbite] Kotel'nikov VP, et al. Vestn Khir 1990 Feb;144(2):68–72 (Eng. Abstr.) (Rus)

[The brain catecholamine systems in the regulation of dominance] Serova LI, et al. Zh Vyssh Nerv Deiat 1990 May–Jun;40(3):490–6 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Hemodynamic responses to amiodarone in critically ill patients receiving catecholamine infusions. Holt AW. Crit Care Med 1989 Dec;17(12):1270–6

[Results of the differentiated use of catecholamines and vasodilators in the early post-bypass phase] Krüger AD, et al. Anaesthesiol Reanim 1989;14(4):195–206 (Eng. Abstr.) (Ger)

[Mechanisms and clinical profile of inotropic action of medicines for heart failure] Yazaki Y. Kokyu To Junkan 1989 Dec;37(12):1271–7 (26 ref.) (Jpn)

URINE

High cardiovascular reactivity to psychological challenge associated alternatively with high density of beta-adrenergic receptors or with high resting level of catecholamines. Pacák K, et al. Act Nerv Super (Praha) 1989 Jun;31(2):96–9

Neuroblastoma and catecholamines [letter; comment] Gupta RN. Ann Clin Biochem 1989 Sep;26 (Pt 5):456–7 Comment on: Ann Clin Biochem 1988 Nov;25 (Pt 6):620–6.

Mechanism of autonomic dysreflexia. Contributions of catecholamine and peptide neurotransmitters. Naftchi NE. Ann N Y Acad Sci 1990;579:133–48 (67 ref.)

Plasma glucose and insulin, urinary catecholamine and cortisol responses to test breakfasts with high or low fibre content: the importance of the previous diet. Sundell IB, et al. Ann Nutr Metab 1989;33(6):333–40

Twenty-four hour urinary cortisol and catecholamine excretion in combat-related posttraumatic stress disorder. Pitman RK, et al. Biol Psychiatry 1990 Jan 15;27(2):245–7

The night of intense REM sleep after anesthesia and surgery increases urinary catecholamines. Knill RL, et al. Can J Anaesth 1990 May;37(4 Pt 2):S12

Effect of diet on urinary excretion of unconjugated catecholamines and some of their metabolites in healthy control subjects and depressed patients. Moleman P. Clin Chim Acta 1990 Jul;189(1):19–24

A study of the cardiopressor effects of lisuride in the treatment of parkinsonism and pathological aging brain. Micieli G, et al. Clin Neuropharmacol 1989 Oct; 12(5):404–15

Unexpected changes in urinary catecholamines and vanillylmandelic acid following rape assault. Ende N, et al. Horm Behav 1990 Mar;24(1):62–70

Catecholamines and diagnoses in children. Rogeness GA, et al. J Am Acad Child Adolesc Psychiatry 1990 Mar; 29(2):234–41

Catecholamine measurements in urine by high-performance liquid chromatography with amperometric detection—comparison with an autoanalyser fluorescence method. Hjemdahl P, et al. J Chromatogr 1989 Sep 29; 494:53–66

Measurement of urinary free catecholamines using high-performance liquid chromatography with electrochemical detection. Lee BL, et al. J Chromatogr 1989 Sep 29;494:303–9

[Urinary excretion of catecholamines by the transplanted kidney] Stříbrná J, et al. Vnitr Lek 1989 Sep;35(9):846–51 (Eng. Abstr.) (Cze)

[Hypobaric hypoxia and catecholaminuria in normal humans] Lecomte J, et al. C R Soc Biol (Paris) 1989;183(6):537–42 (Eng. Abstr.) (Fre)

[Comparison of adrenergic activity in Graves-Basedow disease and in nodular goiter] Sodolski W, et al. Wiad Lek 1990 Feb 1–15;43(3–4):96–100 (Eng. Abstr.) (Pol)

[Determination of free catecholamines in the urine using high efficiency liquid chromatography with an electrochemical detector] Iudaev AD, et al. Lab Delo 1990;(3):34–8 (Eng. Abstr.) (Rus)

[Catecholamine excretion in children with viral hepatitis] Begaĭdarova RKh, et al. Pediatriia 1989;(8):109 (Rus)

[Excretion of catecholamines and DOPA in the urine of patients with pulmonary tuberculosis during chemotherapy] Prosvetov IuV. Probl Tuberk 1989; (10):46–9 (Eng. Abstr.) (Rus)

CATECHOLS

The effects of caffeic acid and its related catechols on hydroxyl radical formation by 3-hydroxyanthranilic acid, ferric chloride, and hydrogen peroxide. Iwahashi H, et al. Arch Biochem Biophys 1990 Jan;276(1):242–7

Oxidation of the substituted catechols dihydroxyphenylalanine methyl ester and trihydroxyphenylalanine by lactoperoxidase and its compounds. Metodiewa D, et al. Arch Biochem Biophys 1989 Nov 1;274(2):601–8

Fluorescence of plastic embedded tissue sections after curcumin staining. Stockert JC, et al. Stain Technol 1989 Jul;64(4):207–9

[Spectrophotometric determination of boric acid by the curcumin method] Yoshida M, et al. Nippon Hoigaku Zasshi 1989 Dec;43(6):490–6 (Eng. Abstr.) (Jpn)

[Determination of boric acid in biological materials by curcuma paper] Yoshida M, et al. Nippon Hoigaku Zasshi 1989 Dec;43(6):497–501 (Eng. Abstr.) (Jpn)

ADVERSE EFFECTS

Contact sensitivity to para-tertiary-butylcatechol in an artificial limb. Macfarlane AW, et al. Contact Dermatitis 1990 Jan;22(1):56–7

Occupational contact dermatitis from pyrocatechol. Morelli R, et al. Contact Dermatitis 1989 Sep;21(3):201–2

An unusual delayed patch test reaction to para-tertiary-butylcatechol. Yu RC, et al. Contact Dermatitis 1990 Feb;22(2):110–1

ANALYSIS

A chemical model of catechol-O-methyltransferase. Methylation of 3,4-dihydroxybenzaldehyde in aqueous solution. Sugata S, et al. Chem Pharm Bull (Tokyo) 1989 May;37(5):1143–6

BLOOD

Effects of a peripherally acting alpha 2-adrenoceptor antagonist (L-659,066) on hemodynamics and plasma levels of catechols in conscious rats. Szemeredi K, et al. Eur J Pharmacol 1989 Oct 24;170(1–2):53–9

CEREBROSPINAL FLUID

[Effects of thyrotropin-releasing hormone on neurologic recovery and biogenic amine metabolites of cerebrospinal fluid in spinal disorders] Hirofuji E, et al. Nippon Seikeigeka Gakkai Zasshi 1989 Nov;63(11):1306–15 (Eng. Abstr.) (Jpn)

CHEMICAL SYNTHESIS

Tyrphostins I: synthesis and biological activity of protein tyrosine kinase inhibitors. Gazit A, et al. J Med Chem 1989 Oct;32(10):2344–52

IMMUNOLOGY

The use of human T-lymphocyte clones to study T-cell function in allergic contact dermatitis to urushiol. Kalish RS. J Invest Dermatol 1990 Jun;94(6 Suppl):108S–111S (45 ref.)

Suppression of urushiol-induced delayed-type hypersensitivity responses in mice with serum IgG immunoglobulin from human hyposensitized donors. Stampf JL, et al. J Invest Dermatol 1990 Sep;95(3):363–5

METABOLISM

Are free radicals and not quinones the haptenic species derived from urushiols and other contact allergenic mono- and dihydric alkylbenzenes? The significance of NADH, glutathione, and redox cycling in the skin. Schmidt RJ, et al. Arch Dermatol Res 1990;282(1):56–64

Isolation and partial characterization of an extradiol non-haem iron dioxygenase which preferentially cleaves 3-methylcatechol. Wallis MG, et al. Biochem J 1990 Mar 1;266(2):605–9

Bromobenzene metabolism in vivo and in vitro. The mechanism of 4-bromocatechol formation. Miller NE, et al. Drug Metab Dispos 1990 May–Jun;18(3):304–8

Operon structure and nucleotide homology of the chlorocatechol oxidation genes of plasmids pJP4 and pAC27. Ghosal D, et al. Gene 1989 Nov 30;83(2):225–32

Physically associated enzymes produce and metabolize 2-hydroxy-2,4-dienoate, a chemically unstable intermediate formed in catechol metabolism via meta cleavage in Pseudomonas putida. Harayama S, et al. J Bacteriol 1989 Nov;171(11):6251–8

Cir and Fiu proteins in the outer membrane of Escherichia coli catalyze transport of monomeric catechols: study with beta-lactam antibiotics containing catechol and analogous groups. Nikaido H, et al. J Bacteriol 1990 Mar; 172(3):1361–7

Organization and sequence analysis of the 2,4-dichlorophenol hydroxylase and dichlorocatechol oxidative operons of plasmid pJP4. Perkins EJ, et al. J Bacteriol 1990 May; 172(5):2351–9

Molecular orbital study on the metabolic pathway through the diol epoxide form of carcinogenic benzene in comparison with benzo[a]pyrene. Imamura A, et al. J Theor Biol 1988 Nov 21;135(2):215–8

Abnormal neurulation induced by 7-hydroxy-2-acetylaminofluorene and acetaminophen: evidence for catechol metabolites as proximate dysmorphogens. Harris C, et al. Toxicol Appl Pharmacol 1989 Dec;101(3):432–46

[Mutants of the plasmid for biodegradation of naphthalene, determining catechol oxidation via the meta-pathway] Kulakova AN, et al. Mikrobiologiia 1989 Mar–Apr; 58(2):298–304 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Inhibition of neutrophil response by curcumin. Srivastava R. Agents Actions 1989 Nov;28(3–4):298–303

Effect of a lipoxygenase inhibitor on vasoconstriction in dog lung. el-Kashef HA, et al. Am J Physiol 1989 Dec;257(6 Pt 2):H1977–82

The effect of an increase in inhaled allergen dose after rimiterol hydrobromide on the occurrence and magnitude of the late asthmatic response and the associated change in nonspecific bronchial responsiveness. Lai CK, et al. Am Rev Respir Dis 1989 Oct;140(4):917–23

Inhibition of rat liver and duodenum soluble catechol-O-methyltransferase by a tight-binding inhibitor OR-462. Schultz E, et al. Biochem Pharmacol 1989 Nov 15;38(22):3953–6

Oxidation and DNA binding of (+)-7,8-dihydroxy-7,8-dihydrobenzo(a)pyrene in mouse epidermis in vivo and effects of coadministration of catechol. Melikian AA, et al. Cancer Res 1990 Mar 15; 50(6):1795–9

Catechol-induced alterations in metabolic activation and binding of enantiomeric and racemic 7,8-dihydroxy-7,8-dihydrobenzo[a]pyrenes to DNA in mouse skin. Melikian AA, et al. Carcinogenesis 1989 Oct; 10(10):1863–70

Effects of catechol on the induction of tumors in mouse skin by 7,8-dihydroxy-7,8-dihydrobenzo[a]pyrenes. Melikian AA, et al. Carcinogenesis 1989 Oct;10(10):1897–900

Interactive inhibition of erythroid 59Fe utilization by benzene metabolites in female mice. Guy RL, et al. Chem Biol Interact 1990;74(1–2):55–62

Increasing 5-lipoxygenase inhibitory activities by oxidative conversion of o-methoxyphenols to catechols using a Cu2(+)-ascorbic acid-O2 system. Aihara K, et al. Chem Pharm Bull (Tokyo) 1990 Mar;38(3):842–4

Ebselen inhibits contractile responses of guinea-pig parenchymal lung strips. Leurs R, et al. Eur J Pharmacol 1990 Apr 10;179(1–2):193–9

Tyrphostins inhibit the epidermal growth factor receptor-mediated breakdown of phosphoinositides. Posner I, et al. FEBS Lett 1989 Nov 6;257(2):287–91

Inhibition of chemical carcinogenesis by curcumin. Soudamini KK, et al. J Ethnopharmacol 1989 Nov; 27(1–2):227–33

Effect of nordihydroguaiaretic acid on cultured rat and human glioma cell proliferation. Wilson DE, et al. J Neurosurg 1989 Oct;71(4):551–7

Fuel smoke condensate induced DNA damage in human lymphocytes and protection by turmeric (Curcuma longa). Shalini VK, et al. Mol Cell Biochem 1990 Jun 1;95(1):21–30

Exogenous action of 5-lipoxygenase by its metabolites on luteinizing hormone release in rat pituitary cells. Przylipiak A, et al. Mol Cell Endocrinol 1990 Feb 12;69(1):33–9

An in vitro study of the effect of lipoxygenase and cyclo-oxygenase inhibitors of arachidonic acid on the induction and maintenance of long-term potentiation in the hippocampus. Williams JH, et al. Neurosci Lett 1989 Dec 15;107(1–3):301–6

Inhibition of the soluble form of testis adenylate cyclase by catechol estrogens and other catechols. Braun T. Proc Soc Exp Biol Med 1990 May;194(1):58–63

Inhibition of arachidonic acid release by nordihydroguaiaretic acid and its antioxidant action in rat alveolar macrophages and Chinese hamster lung fibroblasts. Robison TW, et al. Toxicol Appl Pharmacol 1990 Aug; 105(1):113–22

The role of the lipoxygenase pathway in T lymphocyte clone function. Jordan ML, et al. Transplant Proc 1987 Feb;19(1 Pt 1):333–4

POISONING

Herbal hepatitis: subacute hepatic necrosis secondary to chaparral leaf. Katz M, et al. J Clin Gastroenterol 1990 Apr;12(2):203–6

THERAPEUTIC USE

Cytotoxic and cytoprotective activities of curcumin. Effects on paracetamol-induced cytotoxicity, lipid peroxidation and glutathione depletion in rat hepatocytes. Donatus IA, et al. Biochem Pharmacol 1990 Jun 15;39(12):1869–75

Inhibition of benzoyl peroxide-mediated tumor promotion in 7,12-dimethylbenz(a)anthracene-initiated skin of Sencar mice by antioxidants nordihydroguaiaretic acid and diallyl

sulfide. Athar M, et al. **J Invest Dermatol** 1990 Feb; 94(2):162–5
Prevention of experimental allograft rejection by nordihydroguaiaretic acid. Jordan ML, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1307

TOXICITY

Modification by catechol and resorcinol of upper digestive tract carcinogenesis in rats treated with methyl-N-amylnitrosamine. Yamaguchi S, et al. **Cancer Res** 1989 Nov 1;49(21):6015–8
Early proliferative responses of forestomach and glandular stomach of rats treated with five different phenolic antioxidants. Shibata MA, et al. **Carcinogenesis** 1990 Mar; 11(3):425–9
Epithelial cell proliferation in rat forestomach and glandular stomach mucosa induced by catechol and analogous dihydroxybenzenes. Shibata MA, et al. **Carcinogenesis** 1990 Jun;11(6):997–1000
Cigarette smoke-induced DNA-damage: role of hydroquinone and catechol in the formation of the oxidative DNA-adduct, 8-hydroxydeoxyguanosine. Leanderson P, et al. **Chem Biol Interact** 1990;75(1):71–81
Inductions of ornithine decarboxylase and replicative DNA synthesis but not DNA single strand scission or unscheduled DNA synthesis in the pyloric mucosa of rat stomach by catechol. Furihata C, et al. **Jpn J Cancer Res** 1989 Nov;80(11):1052–7
Stomach carcinogenicity of caffeic acid, sesamol and catechol in rats and mice. Hirose M, et al. **Jpn J Cancer Res** 1990 Mar;81(3):207–12
Structure-activity relations in promotion of rat urinary bladder carcinogenesis by phenolic antioxidants. Kurata Y, et al. **Jpn J Cancer Res** 1990 Aug;81(8):754–9

URINE

Biological monitoring of exposure to monochlorobenzene. Kusters E, et al. **Int Arch Occup Environ Health** 1990; 62(4):329–31

CATECHU see **CATECHIN**

CATECHUIC ACID see **CATECHIN**

CATENULIN see **PAROMOMYCIN**

CATFISH

Plasmid homologies in Edwardsiella ictaluri. Reid WS, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3253–5
Histopathological lesions in the body organs of cat-fish (Heteropneustes fossilis) following mercury intoxication. Bano Y, et al. **J Environ Sci Health [B]** 1990 Feb; 25(1):67–85
Serological investigation of the fish pathogen Edwardsiella ictaluri, cause of enteric septicemia of catfish. Bertolini JM, et al. **J Wildl Dis** 1990 Apr;26(2):246–52
A medium for the selective isolation of Edwardsiella ictaluri. Shotts EB, et al. **J Wildl Dis** 1990 Apr;26(2):214–8
Fish viruses: transmission and pathogenicity of an icosahedral cytoplasmic deoxyribovirus isolated from sheatfish (Silurus glanis). Ahne W, et al. **Zentralbl Veterinarmed [B]** 1990 May;37(3):187–90

ANATOMY & HISTOLOGY

Collagen turnover in regenerating barbels of a catfish. Whitear M. **Arch Histol Cytol** 1990 Jul;53(3):283–6
A SEM study of the olfactory lamellae of the catfish Heteropneustes fossilis (Bl.). Singh SP, et al. **Folia Morphol (Praha)** 1989;37(4):407–9
The intrinsic organization of the nucleus preopticus in the catfish, Clarias batrachus (Linn.). Subhedar N, et al. **J Hirnforsch** 1990;31(1):25–40
A discrete projection of the sacculus and lagena to a distinct brainstem nucleus in a catfish. Fritzsch B, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):7–11
Hypothalamic innervation of the pituitary in the catfish, Clarias batrachus (L.): a retrograde horseradish peroxidase study. Rama Krishna NS, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):39–44
Scanning electron microscopic studies on lenticular aberrations due to prolonged starvation in a cat fish (Heteropneustes fossilis, Bloch). Deb MK, et al. **Vision Res** 1990;30(7):1017–9

BLOOD

Anemia in the freshwater teleost, Heteropneustes fossilis, under the stress of environmental pollution. Narain AS, et al. **Bull Environ Contam Toxicol** 1989 Oct;43(4):627–34

EMBRYOLOGY

Hormonal sex manipulation and evidence for female homogamety in channel catfish. Davis KB, et al. **Gen Comp Endocrinol** 1990 May;78(2):218–23

GENETICS

Nucleotide sequence of channel catfish heavy chain cDNA and genomic blot analyses. Implications for the phylogeny of Ig heavy chains. Ghaffari SH, et al. **J Immunol** 1989 Oct 15;143(8):2730–9
The immunoglobulin M heavy chain constant region gene of the channel catfish, Ictalurus punctatus: an unusual mRNA splice pattern produces the membrane form of the molecule. Wilson MR, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5227–33

IMMUNOLOGY

Differences in the phagocytosis of four bacteria by channel catfish neutrophils. Ainsworth AJ, et al. **Dev Comp Immunol** 1990 Spring;14(2):201–9
A monoclonal antibody specific for neutrophils in normal and stressed channel catfish. Bly JE, et al. **Dev Comp Immunol** 1990 Spring;14(2):211–21
Effects of phorbol esters and calcium ionophore on nonspecific cytotoxic cells. Evans DL, et al. **Dev Comp Immunol** 1990 Spring;14(2):223–30
Channel catfish as an unconventional model for immunological studies. Clem LW, et al. **J Exp Zool Suppl** 1990;4:123–5 (18 ref.)
Effect of size and temperature on the quantity of immunoglobulin in channel catfish, Ictalurus punctatus. Klesius PH. **Vet Immunol Immunopathol** 1990 Feb; 24(2):187–95

METABOLISM

Effect of quinalphos, organophosphorus insecticide, on testicular steroidogenesis in fish, Clarias batrachus. Bagchi P, et al. **Bull Environ Contam Toxicol** 1990 Jun;44(6):871–5
Changes in brain monoamine levels and monoamine oxidase activity in the catfish, Clarias batrachus, during chronic treatments with mercurials. Kirubagaran R, et al. **Bull Environ Contam Toxicol** 1990 Jul;45(1):88–93
Formation and persistence of DNA adducts in the liver of brown bullheads exposed to benzo[a]pyrene. Sikka HC, et al. **Cancer Lett** 1990 Jan;49(1):81–7
Comparative metabolism of benzo[f]quinoline by liver microsomes from brown bullheads and rats. Kandaswami C, et al. **Comp Biochem Physiol [C]** 1989;93(2):269–74
Fat intestinal absorption in the catfish—a histochemical study in glycol methacrylate embedded tissue. Hernández-Blazquez FJ, et al. **Gegenbaurs Morphol Jahrb** 1989;135(6):941–6
Pituitary steroids in two teleost species: immunohistological and biochemical studies. Peute J, et al. **Gen Comp Endocrinol** 1989 Oct;76(1):63–72
A new member of the gonadotropin-releasing hormone family in teleosts: catfish gonadotropin-releasing hormone. Sherwood NM, et al. **Gen Comp Endocrinol** 1989 Sep; 75(3):427–36
Change of steroidogenic pathways in the ovary of a tropical catfish, Clarias macrocephalus, Gunther, after hCG treatment. Suzuki K, et al. **Gen Comp Endocrinol** 1989 Nov; 76(2):223–9
Role of calcium ions in action of gonadotropin-releasing hormone on gonadotropin secretion in the African catfish, Clarias gariepinus. van Asselt LA, et al. **Gen Comp Endocrinol** 1989 Oct;76(1):46–52
Bioaccumulation of nickel and vanadium in tissues of the catfish Clarias batrachus. Ray D, et al. **J Inorg Biochem** 1990 Mar;38(3):169–73
Lipid metabolic interrelationships and phospholipase activity in gustatory epithelium of Ictalurus punctatus in vitro. Rabinowitz JL, et al. **Lipids** 1990 Apr;25(4):181–6
Pharmacokinetics and metabolism of fenbendazole in channel catfish. Kitzman JV, et al. **Vet Res Commun** 1990; 14(3):217–26

MICROBIOLOGY

Outer membrane protein profiles of Edwardsiella ictaluri from fish. Newton JC, et al. **Am J Vet Res** 1990 Feb; 51(2):211–5

PARASITOLOGY

Trypanosomes of Brazilian fishes. II. Trypanosoma barrettoi sp. n. from Hypostomus paulinus (Siluriformes, Loricariidae). Lopes RA, et al. **Angew Parasitol** 1990 Feb; 31(1):11–4
First record of Raphidascaris (Sprentascaris) hypostomi (Petter et Cassone, 1984) comb. n. and R. (S.) mahnerti (Petter et Cassone, 1984) comb. n. (Nematoda: Anisakidae) from Brazil with remarks on the taxonomic status of the genus Sprentascaris Petter et Cassone, 1984. Moravec F, et al. **Folia Parasitol (Praha)** 1990;37(2):131–40
Sphaerospora ictaluri n. sp. (Myxosporea: Sphaerosphoridae) observed in the kidney of channel catfish, Ictalurus punctatus rafinesque. Hedrick RP, et al. **J Protozool** 1990 Mar-Apr;37(2):107–12

PHYSIOLOGY

Effect of 17 beta-estradiol on different parts of central nervous system of female Singi fish (Heteropneustes fossilis Bloch) in relation to reproductive stages. Ghosh M, et al. **Acta Physiol Hung** 1989;73(4):465–76
Effects of paraquat on mortality and cardiorespiratory function of catfish fry Plecostomus commersoni. Tortorelli MC, et al. **Arch Environ Contam Toxicol** 1990 Jul-Aug; 19(4):523–9
Somatotopical organization of the intermediate nucleus of the facial lobe in the channel catfish, Ictalurus punctatus. Hayama T, et al. **Brain Res** 1990 May 14;516(1):137–40
Junctions form between catfish horizontal cells in culture. Hidaka S, et al. **Brain Res** 1989 Sep 25;498(1):53–63
Sublethal effects of malathion on channel catfish, Ictalurus punctatus. Areechon N, et al. **Bull Environ Contam Toxicol** 1990 Mar;44(3):435–42
Differential effects of temperature and exogenous fatty acids on mitogen-induced proliferation in channel catfish T and B lymphocytes. Bly JE, et al. **Comp Biochem Physiol [A]** 1990;95(3):417–24
Air-breathing behaviour of the Colombian catfish Eremophilus mutisii (Trichomycteridae, Siluriformes). Cala P, et al. **Exp Biol** 1990;48(6):357–60
Changes in hypothalamic monoamine oxidase activity in relation to season, ovariectomy, and 17 beta-estradiol administration in intact and ovariectomized catfish, Clarias batrachus (L.). Manickam P, et al. **Gen Comp Endocrinol** 1989 Sep;75(3):437–45
Dissection of the neuron network in the catfish inner retina. IV. Bidirectional interactions between amacrine and ganglion cells. Sakai HM, et al. **J Neurophysiol** 1990 Jan; 63(1):105–19
Dissection of the neuron network in the catfish inner retina. V. Interactions between NA and NB amacrine cells. Sakai HM, et al. **J Neurophysiol** 1990 Jan;63(1):120–30
Expression of catfish amino acid taste receptors in Xenopus oocytes. Getchell TV, et al. **Neurochem Res** 1990 Apr; 15(4):449–56
Odor stimuli trigger influx of calcium into olfactory neurons of the channel catfish. Restrepo D, et al. **Science** 1990 Sep 7;249(4973):1166–8
[Utilization of CoCl2 for karyological studies in teleosts] Cucchi C, et al. **Boll Soc Ital Biol Sper** 1989 Dec; 65(12):1127–31 (Eng. Abstr.) **(Ita)**

CATFISH, FRESHWATER see **CATFISH**

CATGUT see under **SUTURES**

CATHARSIS see under **ABREACTION**

CATHARTICS

Taxol: same name for two drug products [letter] Zindel LR. **Am J Hosp Pharm** 1990 Aug;47(8):1752
The effect of laxatives and enemas on the sonographic visibility of the pancreas. Nilsson A, et al. **Eur J Radiol** 1990 Mar-Apr;10(2):124–5
Prevalence of surreptitious laxative abuse in patients with diarrhoea of uncertain origin: a cost benefit analysis of a screening procedure. Bytzer P, et al. **Gut** 1989 Oct; 30(10):1379–84
Correlates of laxative abuse in bulimia. Waller DA, et al. **Hosp Community Psychiatry** 1990 Jul;41(7):797–9
Laxative abuse as a cause for ammonium urate renal calculi. Dick WH, et al. **J Urol** 1990 Feb;143(2):244–7
Enema or Picolax as preparation for flexible sigmoidoscopy? Hickson DE, et al. **Postgrad Med J** 1990 Mar;66(773):210–1
Laxative abuse in eating disorders. Willard SG, et al. **Psychiatr Med** 1989;7(3):75–87
[Abuse of alcohol and drugs in homes for the aged] Luderer HJ, et al. **Fortschr Med** 1990 Mar 30;108(9):176–7 **(Ger)**
[Electromyography of the human colon] Müller-Lissner S. **Z Gastroenterol** 1990 Feb;28(2):121–2 **(Ger)**

ADMINISTRATION & DOSAGE

Safety of Picolax in inflammatory bowel disease [letter; comment] Evans M, et al. **BMJ** 1989 Oct 28; 299(6707):1101–2 Comment on: BMJ 1989 Sep 23;299(6702):776–7.
Whole gut irrigation and Prepacol laxative preparation for colonoscopy: a comparison. Köhler L, et al. **Br J Surg** 1990 May;77(5):527–9
Comparison of total costs of administering calcium polycarbophil and psyllium mucilloid in an institutional setting. Mamtani R, et al. **Clin Ther** 1990 Jan-Feb; 12(1):22–5
Blood-red residual after cherry-flavored magnesium citrate [letter] Slimak G, et al. **Gastrointest Endosc** 1990 Jan-Feb; 36(1):79–80
Laxatives prior to small bowel follow-through: are they necessary for a rapid and good-quality examination? Richards DG, et al. **Gastrointest Radiol** 1990 Winter; 15(1):66–8
[A comparative study of methods of preparing the colon for a double-contrast study: Prepacol versus ricinus capsules with a cleansing enema] Mundinger A, et al. **Radiologe** 1990 Jan;30(1):34–8 (Eng. Abstr.) **(Ger)**
[Bulk-forming agents as laxatives in geriatric patients] Meier P, et al. **Schweiz Med Wochenschr** 1990 Mar 3;120(9):314–7 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Serum magnesium concentrations after repetitive magnesium cathartic administration. Woodard JA, et al. **Am J Emerg Med** 1990 Jul;8(4):297–300 (23 ref.)
Safety of Picolax (sodium picosulphate-magnesium citrate) in inflammatory bowel disease [see comments] McDonagh AJ, et al. **BMJ** 1989 Sep 23;299(6702):776–7 Comment in: BMJ 1989 Oct 28;299(6707):1101–2.
Breast milk and drugs [letter; comment] Font LM. **MCN** 1989 Sep-Oct;14(5):308, 316 Comment on: MCN 1989

Jan-Feb;14(1):27-31.
Bulk laxative causing esophageal obstruction. Lee A, et al. **N C Med J** 1989 Sep;50(9):489-91
Anthraquinone laxatives and human cancer: an association in one case. Patel PM, et al. **Postgrad Med J** 1989 Apr; 65(762):216-7
[Irritable colon and colonic disease due to laxatives] Wienbeck M, et al. **Schweiz Rundsch Med Prax** 1990 Jul 17;79(29-30):885-8 (Eng. Abstr.) **(Ger)**
[Validity of ano-rectal manometry in the diagnosis of cathartic colon as a cause of chronic pseudo-obstruction of the colon. Considerations on a case] Uggeri G, et al. **Ann Ital Chir** 1989;60(2):115-21; discussion 121-2 (Eng. Abstr.) **(Ita)**
[Abuse of laxatives as the cause of obscure prolonged diarrhea] Blomquist L, et al. **Lakartidningen** 1989 Oct 11; 86(41):3467-70 (Eng. Abstr.) **(Swe)**

BLOOD

Determination of phosphonoformic acid in human plasma and urine by high-performance liquid chromatography with electrochemical detection. Hassanzadeh MK, et al. **J Chromatogr** 1990 Jan 26;525(1):133-40

PHARMACOKINETICS

[Senna-containing laxatives: excretion in the breast milk?] Faber P, et al. **Geburtshilfe Frauenheilkd** 1989 Nov; 49(11):958-62 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Laxatives and the production of kinins by rat colon. Autore G, et al. **Acta Physiol Hung** 1990;75 Suppl:17-8
Studies of aloe. III. Mechanism of cathartic effect. (2). Ishii Y, et al. **Chem Pharm Bull (Tokyo)** 1990 Jan;38(1):197-200
Quantitative appraisal of Picolax (sodium picosulfate/magnesium citrate) in the preparation of the large bowel for elective surgery. Takada H, et al. **Dis Colon Rectum** 1990 Aug;33(8):679-83

POISONING

Acute dichromate poisoning after use of traditional purgatives. A report of 7 cases. Wood R, et al. **S Afr Med J** 1990 Jun 16;77(12):640-2 (19 ref.)

THERAPEUTIC USE

Current preoperative bowel cleansing methods. Results of a survey. Beck DE, et al. **Dis Colon Rectum** 1990 Jan; 33(1):12-5
A calcium salt of an insoluble synthetic bulking laxative in elderly bedridden nursing home residents. Mamtani R, et al. **J Am Coll Nutr** 1989 Dec;8(6):554-6
Comparison of the effects of magnesium hydroxide and a bulk laxative on lipids, carbohydrates, vitamins A and E, and minerals in geriatric hospital patients in the treatment of constipation. Kinnunen O, et al. **J Int Med Res** 1989 Sep-Oct;17(5):442-54
[Study of the cleansing effect of senna on the intestinal tract] Han RX. **Chung Hua Hu Li Tsa Chih** 1989 May;24(5):273-5 **(Chi)**

CATHEPSIN B

ANALYSIS

Endotoxin and lysosomal protease activity in acute and chronic otitis media with effusion. Sakakura K, et al. **Ann Otol Rhinol Laryngol** 1990 May;99(5 Pt 1):379-85
Disulfide bridges of bovine spleen cathepsin B. Baudyš M, et al. **Biol Chem Hoppe Seyler** 1990 Jun;371(6):485-91
Cathepsin B to cysteine proteinase inhibitor balance in metastatic cell subpopulations isolated from murine tumors. Rozhin J, et al. **Cancer Res** 1990 Oct 1;50(19):6278-84
Effect of metabolic alterations on the density and the contents of cathepsins B, H and L of lysosomes in rat macrophages. Muno D, et al. **Eur J Biochem** 1990 Jul 20;191(1):91-8
Immunocytochemical localization of cathepsins B and H in human pancreatic endocrine cells and insulinoma cells. Im B, et al. **Histochemistry** 1989;93(2):111-8
Increased cathepsin B activity in human lung tumors. Křepela E, et al. **Neoplasma** 1990;37(1):61-70

ANTAGONISTS & INHIBITORS

Inhibition of cathepsin B and papain by peptidyl alpha-keto esters, alpha-keto amides, alpha-diketones, and alpha-keto acids. Hu LY, et al. **Arch Biochem Biophys** 1990 Sep; 281(2):271-4
Synthesis and activity of a novel, irreversible inhibitor of cathepsin B. Cullen BM, et al. **Biochem Soc Trans** 1990 Apr;18(2):315-6
Inhibition of bovine cathepsin B by amino acid-derived nitriles. Picken PP, et al. **Biochem Soc Trans** 1990 Apr; 18(2):316

BLOOD

Determination of cathepsins B and H in sera and synovial fluids of patients with different joint diseases. Gabrijelčič D, et al. **J Clin Chem Clin Biochem** 1990 Mar;28(3):149-53

GENETICS

Changes in the expression of elastase and cathepsin B with differentiation of U937 promonocytes by GMCSF. Ward CJ, et al. **Biochem Biophys Res Commun** 1990 Mar 16; 167(2):659-64
In vitro translation and processing of cathepsin B of Schistosoma mansoni. Felleisen R, et al. **EMBO J** 1990 Feb;9(2):371-7
A TaqI DNA polymorphism in the human cathepsin B gene (CTSB). Hsieh WT, et al. **Nucleic Acids Res** 1990 Jun 11; 18(11):3430

ISOLATION & PURIFICATION

Facile solubilization of tumour-associated cathepsin B by acid treatment. Cullen BM, et al. **Biochem Soc Trans** 1990 Apr;18(2):317
Crystallization of recombinant rat cathepsin B. Lee X, et al. **J Biol Chem** 1990 Apr 15;265(11):5950-1

METABOLISM

In vivo effect of a beta-adrenergic agonist on activity of calcium-dependent proteinases, their specific inhibitor, and cathepsins B and H in skeletal muscle. Kretchmar DH, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):228-35
The specificity of bovine spleen cathepsin S. A comparison with rat liver cathepsins L and B. Brömme D, et al. **Biochem J** 1989 Dec 1;264(2):475-81
Cartilage proteoglycan aggregate is degraded more extensively by cathepsin L than by cathepsin B. Nguyen Q, et al. **Biochem J** 1990 Mar 1;266(2):569-73
Cathepsin B-indicator for the release of lysosomal cysteine proteinases in severe trauma and inflammation. Assfalg-Machleidt I, et al. **Biol Chem Hoppe Seyler** 1990 May;371 Suppl:211-22
High affinity binding of rat brain cathepsin B to purified rat/bovine cerebral mannose 6-phosphate receptors. Chi LM, et al. **Biol Chem Hoppe Seyler** 1990 May;371 Suppl:259-64
Role for cathepsin B and cystatins in tumor growth and progression. Sloane BF, et al. **Biol Chem Hoppe Seyler** 1990 May;371 Suppl:193-8
N-terminal variants of recombinant stefin B: effect on affinity for papain and cathepsin B. Thiele U, et al. **Biol Chem Hoppe Seyler** 1990 May;371 Suppl:125-36
Lysosomal proteinase antigens are prominently localized within senile plaques of Alzheimer's disease: evidence for a neuronal origin. Cataldo AM, et al. **Brain Res** 1990 Apr 16;513(2):181-92
Antigenic expression of cathepsin B in aged human brain. Bernstein HG, et al. **Brain Res Bull** 1990 Apr;24(4):543-9
Susceptibility of the cartilage collagens types II, IX and XI to degradation by the cysteine proteinases, cathepsins B and L. Maciewicz RA, et al. **FEBS Lett** 1990 Aug 20; 269(1):189-93
Differences in cathepsin B + L and calcium-dependent protease activities among breed type and their relationship to beef tenderness. Johnson MH, et al. **J Anim Sci** 1990 Aug;68(8):2371-9
Differences in targeting and secretion of cathepsins B and L by BALB/3T3 fibroblasts and Moloney murine sarcoma virus-transformed BALB/3T3 fibroblasts. Achkar C, et al. **J Biol Chem** 1990 Aug 15;265(23):13650-4
Role of different proteolytic systems in the degradation of muscle proteins during denervation atrophy. Furuno K, et al. **J Biol Chem** 1990 May 25;265(15):8550-7
Kinetics of hydrolysis of endocytosed substrates by mammalian cultured cells: early introduction of lysosomal enzymes into the endocytic pathway. Bowser R, et al. **J Cell Physiol** 1990 Apr;143(1):110-7
Localization of cathepsin B in two human lung cancer cell lines. Erdel M, et al. **J Histochem Cytochem** 1990 Sep; 38(9):1313-21
Immunocytochemical localization of prorenin, renin, and cathepsins B, H, and L in juxtaglomerular cells of rat kidney. Matsuba H, et al. **J Histochem Cytochem** 1989 Nov; 37(11):1689-97
Immunocytochemical localization of cathepsins B and H in corticotrophs and melanotrophs of rat pituitary gland. Uchiyama Y, et al. **J Histochem Cytochem** 1990 May; 38(5):633-9
Immunocytochemical localization of angiotensinogen and cathepsins B, H, and L in rat hepatocytes, with special reference to degradation of angiotensinogen in lysosomes after colchicine. Watanabe T, et al. **J Histochem Cytochem** 1989 Dec;37(12):1899-911
Cigarette smoke stimulates cathepsin B activity in alveolar macrophages of rats. Gairola CG, et al. **J Lab Clin Med** 1989 Oct;114(4):419-25
Cathepsin B and cysteine protease inhibitors in human osteoarthritis. Martel-Pelletier J, et al. **J Orthop Res** 1990 May;8(3):336-44
Cathepsins B, H and L activities in gingival crevicular fluid from chronic adult periodontitis patients and experimental gingivitis subjects. Kunimatsu K, et al. **J Periodont Res** 1990 Mar;25(2):69-73
Mechanisms of human bladder tumor invasion: role of protease cathepsin B. Weiss RE, et al. **J Urol** 1990 Sep; 144(3):798-804
Effect of low molecular weight proteins and dextran on renal cathepsin B and L activity. Olbricht CJ, et al. **Kidney Int** 1990 Mar;37(3):918-26
Cathepsin B in cells of two rat sarcomas with different rates of spontaneous metastasis. Křepela E, et al. **Neoplasma** 1989;36(5):529-40
Is cathepsin B an enkephalin processing enzyme in the tooth pulp? Kudo T, et al. **Prog Clin Biol Res** 1990;328:271-4
Role of cathepsin B and L in anti-glomerular basement membrane nephritis in rats. Baricos WH, et al. **Renal Physiol Biochem** 1989 Sep-Dec;12(5-6):400-5
Alterations in proteolytic enzymes of the proximal tubule in a rat model of cyclosporine nephrotoxicity. Olbricht CJ, et al. **Transplantation** 1990 Sep;50(3):378-81
[Proteolytic activities in bronchoalveolar lavage fluid in pneumonia and chronic bronchitis] Schmidt M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:308-9 (Eng. Abstr.) **(Ger)**

SECRETION

Cathepsin B secretion by rabbit articular chondrocytes: modulation by cycloheximide and glycosaminoglycans. Baici A, et al. **Cell Tissue Res** 1990 Mar;259(3):567-73
Variant cathepsin B activity secreted from human pancreatic cancer cell lines into protein-free chemically defined medium. Chung SM, et al. **Gastroenterol Jpn** 1989 Dec; 24(6):699-706

CATHEPSIN D

The amino acid sequence of a novel inhibitor of cathepsin D from potato. Ritonja A, et al. **FEBS Lett** 1990 Jul 2; 267(1):13-5

ANALYSIS

Prognostic significance of the estrogen-regulated protein, cathepsin D, in breast cancer. An immunohistochemical study. Henry JA, et al. **Cancer** 1990 Jan 15;65(2):265-71
Association between high concentrations of Mr 52,000 cathepsin D and poor prognosis in primary human breast cancer. Thorpe SM, et al. **Cancer Res** 1989 Nov 1; 49(21):6008-14
Monocyte-derived macrophage and alveolar macrophage fibronectin production and cathepsin D activity. Rossman MD, et al. **Cell Immunol** 1990 Apr 1;126(2):268-77
Cathepsin D assay in primary breast cancer and lymph nodes: relationship with c-myc, c-erb-B-2 and int-2 oncogene amplification and node invasiveness. Brouillet JP, et al. **Eur J Cancer** 1990 Apr;26(4):437-41
Immunohistochemical localization of cathepsin D in ocular tissues. Yamada T, et al. **Invest Ophthalmol Vis Sci** 1990 Jul;31(7):1217-23
Cathepsin-D in human endometrium: induction by progesterone and potential value as a tumor marker. Maudelonde T, et al. **J Clin Endocrinol Metab** 1990 Jan; 70(1):115-21
Immunolocalization of endosomal cathepsin D in rabbit alveolar macrophages. Rodman JS, et al. **J Leukoc Biol** 1990 Aug;48(2):116-22
Cathepsin D: an independent prognostic factor for metastasis of breast cancer. Spyratos F, et al. **Lancet** 1989 Nov 11; 2(8672):1115-8
Immunolocalization of cathepsin D in dental tissues. Andujar MB, et al. **Matrix** 1989 Nov;9(5):397-404
Assessing the risk of recurrence in breast cancer [editorial: comment] Ingle JN. **N Engl J Med** 1990 Feb 1; 322(5):329-31 Comment on: N Engl J Med 1990 Feb 1;322(5):297-302.
Cathepsin D in breast cancer [letter; comment] Pietras RJ, et al. **N Engl J Med** 1990 Jun 7;322(23):1673-4 Comment on: N Engl J Med 1990 Feb 1;322(5):297-302.
Cathepsin D and prognosis in breast cancer [see comments] Tandon AK, et al. **N Engl J Med** 1990 Feb 1;322(5):297-302 Comment in: N Engl J Med 1990 Feb 1;322(5):329-31. Comment in: N Engl J Med 1990 Jun 7;322(23):1673-4.
Cathepsin D test helps identify breast cancers likely to recur [news] **Oncology (Williston Park)** 1990 Mar;4(3):109
[Cathepsin D: an independent prognostic factor in cancer of the breast] Romain S, et al. **Bull Cancer (Paris)** 1990; 77(5):439-47 (Eng. Abstr.) **(Fre)**
[Acid hydrolase activity and cyclic nucleotide contents in the rat heart during myocardial ischemia and postischemic reperfusion] Ivanova TN, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):30-2 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Prolongation of serum half-life of interleukin 2 and augmentation of lymphokine-activated killer cell activity by pepstatin in mice. Ohnishi H, et al. **Cancer Res** 1990 Feb 15;50(4):1107-12

BIOSYNTHESIS

Effects of cysteine protease inhibitors on rabbit cathepsin D maturation. Samarel AM, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 1):C1069-79
Stable transfection of the estrogen receptor cDNA into Hela cells induces estrogen responsiveness of endogenous cathepsin D gene but not of cell growth. Touitou I, et al. **Biochem Biophys Res Commun** 1990 May 31; 169(1):109-15
Calcitriol enhances transcriptional activity of lysozyme and cathepsin D genes in U937 promonocytes. Redecker B, et al. **Biochem J** 1989 Sep 15;262(3):843-7
Differential regulation of cathepsin D by sex steroids in

mammary cancer and uterine cells. Touitou I, et al. **Mol Cell Endocrinol** 1989 Oct;66(2):231–8

BLOOD

Calciferin and cathepsin D–like acid protease in serum in acute and chronic liver injuries in rats and humans. Terayama H, et al. **Clin Chem** 1989 Nov;35(11):2202–6

Cathepsin D–like activity in serum of patients with systemic lupus erythematosus. Phi NC, et al. **J Clin Lab Immunol** 1989 Aug;29(4):185–8

Cathepsin D in erythroid cells. Hultquist DE, et al. **Prog Clin Biol Res** 1989;319:93–101; discussion 102–6 (14 ref.)

[Determining cathepsin D activity in the blood serum using denatured hemoglobin as a substrate] Michalak S, et al. **Rocz Akad Med Bialymstoku** 1986–87;31–32:83–91 (Eng. Abstr.) **(Pol)**

[Lipid peroxidation and lysosomal enzyme activity in patients with acute gastrointestinal hemorrhage of peptic ulcer etiology] Kharaberiush VA, et al. **Klin Khir** 1990;(4):14–6 (Eng. Abstr.) **(Rus)**

GENETICS

Expression and refolding of recombinant human fibroblast procathepsin D. Conner GE, et al. **DNA Cell Biol** 1990 Jan–Feb;9(1):1–9

Overexpression and hormonal regulation of pro–cathepsin D in mammary and endometrial cancer. Rochefort H, et al. **J Steroid Biochem** 1989;34(1–6):177–82

Molecular cloning of mouse cathepsin D. Grusby MJ, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):4008

ISOLATION & PURIFICATION

Isolation of cathepsin D using three–phase partitioning in t–butanol/water/ammonium sulfate. Jacobs GR, et al. **Anal Biochem** 1989 Jul;180(1):169–71

METABOLISM

Cathepsin D activity is increased in alveolar macrophages and bronchoalveolar lavage fluid of smokers. Chang JC, et al. **Am Rev Respir Dis** 1989 Oct;140(4):958–60

Characterization of endothelin converting enzyme activities in soluble fraction of bovine cultured endothelial cells. Sawamura T, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):1138–44

Inhibitory effect of thiols on the degradation of albumin by human spleen cathepsin D. Ikeda K, et al. **Biochem Int** 1990;21(2):341–7

Isolation of procathepsin D from mature cathepsin D by pepstatin affinity chromatography. Autocatalytic proteolysis of the zymogen form of the enzyme. Conner GE. **Biochem J** 1989 Oct 15;263(2):601–4

Lysosomal proteinase antigens are prominently localized within senile plaques of Alzheimer's disease: evidence for a neuronal origin. Cataldo AM, et al. **Brain Res** 1990 Apr 16;513(2):181–92

Cathepsin D–like activity in the release of Gal beta 1–4GlcNAc alpha 2–6sialyltransferase from mouse and guinea pig liver Golgi membranes during the acute phase response. Lammers G, et al. **Comp Biochem Physiol [B]** 1990;95(2):327–34

Biochemical and histological validation of a model to study follicular atresia in rats. Dhanasekaran N, et al. **Endocrinol Exp** 1989 Sep;23(3):155–66

Suppression of the 'uncovering' of mannose–6–phosphate residues in lysosomal enzymes in the presence of NH4Cl. Isidoro C, et al. **Eur J Biochem** 1990 Aug 17;191(3):591–7

An aspartic proteinase in Drosophila: maternal origin and yolk localization. Medina M, et al. **Int J Dev Biol** 1989 Jun;33(2):313–5

Immunodetection of cathepsin D in neuritic plaques found in brains of patients with dementia of Alzheimer type. Bernstein HG, et al. **J Hirnforsch** 1989;30(5):613–8

Astrocytosis and cathepsin D activity in experimental measles encephalomyelitis. Bever CT Jr, et al. **Neurochem Res** 1990 Jul;15(7):667–71

Immunolocalization of cathepsin D in the human central nervous system and central nervous system neoplasms. Robson DK, et al. **Neuropathol Appl Neurobiol** 1990 Feb; 16(1):39–44

Characterization of castration–induced cell death in the rat prostate by immunohistochemical localization of cathepsin D. Sensibar JA, et al. **Prostate** 1990;16(3):263–76

Effect of excess iodine on rat thyroid lysosomal enzymes. Starling JR, et al. **Surg Forum** 1978;29:118–9

Activity of cathepsin D as affected by chemical and physical dry–curing parameters. Rico E, et al. **Z Lebensm Unters Forsch** 1990 Jul;191(1):20–3

[Intracellular and extracellular activity of cathepsin D in the liver in cirrhosis and its involution] Ryvniak VV, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):199–200 (Eng. Abstr.) **(Rus)**

[The protein content and cathepsin D activity of the mandibular bone in rats during fracture healing] Vakulenko VI, et al. **Stomatologiia (Mosk)** 1990 May–Jun;69(3):9–11 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Immunocytochemical evidence for the retrograde transport of intraaxonal cathepsin D: possible relevance to the dying–back process. Sahenk Z, et al. **Brain Res** 1990 Feb 26;510(1):1–6

PHYSIOLOGY

Cathepsin D in breast cancer cells can digest extracellular matrix in large acidic vesicles. Montcourrier P, et al. **Cancer Res** 1990 Sep 15;50(18):6045–54

Postnatal changes of cathepsin D activity in rat liver and brain. Dionyssiou–Asteriou A. **Cell Biochem Funct** 1990 Jul;8(3):141–5

Regulation, clinical and biological significance of cathepsin D in breast cancer. García M, et al. **Rev Esp Fisiol** 1990 Mar;46(1):39–41 (15 ref.)

CATHEPSINS

Structural evidence for two isozymic forms and the carbohydrate attachment site of human gastric cathepsin E. Athauda SB, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):878–85

Structural studies of rat cathepsin E: amino–terminal structure and carbohydrate units of mature enzyme. Yonezawa S, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):1032–8

ANALYSIS

Variations in immunoreactivity of angiotensinogen and cathepsins B and H in rat hepatocytes over 24 hours. Waguri S, et al. **Am J Anat** 1990 Feb;187(2):175–82

Effect of metabolic alterations on the density and the contents of cathepsins B, H and L of lysosomes in rat macrophages. Muno D, et al. **Eur J Biochem** 1990 Jul 20;191(1):91–8

Immunocytochemical localization of cathepsins B and H in human pancreatic endocrine cells and insulinoma cells. Im B, et al. **Histochemistry** 1989;93(2):111–8

The foveolar cell component of gastric cancer [corrected and republished article originally printed in Hum Pathol 1990 Jan;21(1):83–92] Fiocca R, et al. **Hum Pathol** 1990 Mar;21(3):260–70

Elastase and cathepsin G of human monocytes: heterogeneity and subcellular localization to peroxidase–positive granules. Kargi HA, et al. **J Histochem Cytochem** 1990 Aug; 38(8):1179–86

[The activities of cathepsin A in the placenta, fetal membranes and amniotic fluid in physiologic pregnancy and pregnancy complicated by EPH gestosis] Kurzatkowski W, et al. **Zentralbl Gynakol** 1989; 111(22):1486–9 (Eng. Abstr.) **(Ger)**

[Electron histochemical detection of intracellular and extracellular cathepsin D in the liver] Rybniak VV, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):200–3 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

The inhibition of human neutrophil elastase and cathepsin G by peptidyl 1,2–dicarbonyl derivatives. Mehdi S, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):595–600

The inactivation of the cysteinyl exopeptidases cathepsin H and C by affinity–labelling reagents. Angliker H, et al. **Biochem J** 1989 Aug 15;262(1):63–8

Design of an aprotinin variant with inhibitory activity against chymotrypsin and cathepsin G by recombinant DNA technology. Brinkmann T, et al. **Biol Chem Hoppe Seyler** 1990 May;371 Suppl:43–52

Cysteine proteinase–inhibitory activity of ras gene product is not affected by mutations at GTPase–activating protein–binding sites. Hiwasa T, et al. **Biol Chem Hoppe Seyler** 1989 Nov;370(11):1215–20

Synthesis of peptidyl fluoromethyl ketones and peptidyl alpha–keto esters as inhibitors of porcine pancreatic elastase, human neutrophil elastase, and rat and human neutrophil cathepsin G. Peet NP, et al. **J Med Chem** 1990 Jan;33(1):394–407

[The effect of anti–inflammatory agents on the granulocyte enzymes elastase and cathepsin G] Steinmeyer J, et al. **Arzneimittelforschung** 1989 Oct;39(10):1208–11 (Eng. Abstr.) **(Ger)**

BIOSYNTHESIS

Changes in amniotic fluid cathepsins with gestational age. al–Zaid NS, et al. **J Dev Physiol** 1989 Nov;12(5):273–5

The production of tumour necrosis factor, tissue thromboplastin, lactoferrin and cathepsin C during lipopolysaccharide stimulation in whole blood. Gutteberg TJ, et al. **Scand J Clin Lab Invest** 1990 Jun;50(4):421–7

BLOOD

Activation of human platelets by C5a–stimulated neutrophils: a role for cathepsin G. Ferrer–Lopez P, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1100–7

Cathepsin G binding to human platelets. Evidence for a specific receptor. Selak MA, et al. **Biochem J** 1990 Feb 15;266(1):55–62

Human alpha– to zeta–thrombin cleavage occurs with neutrophil cathepsin G or chymotrypsin while fibrinogen clotting activity is retained. Brezniak DV, et al. **Biochemistry** 1990 Apr 10;29(14):3536–42

An unusual specificity in the activation of neutrophil serine proteinase zymogens. Salvesen G, et al. **Biochemistry** 1990 Jun 5;29(22):5304–8

Human leukocyte cathepsin G and elastase specifically suppress thrombin–induced prostacyclin production in human endothelial cells. Weksler BB, et al. **Blood** 1989 Oct; 74(5):1627–34

Identification of the primary antimicrobial domains in human neutrophil cathepsin G. Bangalore N, et al. **J Biol Chem** 1990 Aug 15;265(23):13584–8

Interaction of heparin cofactor II with neutrophil elastase and cathepsin G. Pratt CW, et al. **J Biol Chem** 1990 Apr 15;265(11):6092–7

Determination of cathepsins B and H in sera and synovial fluids of patients with different joint diseases. Gabrijelčič D, et al. **J Clin Chem Clin Biochem** 1990 Mar;28(3):149–53

Elastase and cathepsin G of human monocytes. Quantification of cellular content, release in response to stimuli, and heterogeneity in elastase–mediated proteolytic activity. Campbell EJ, et al. **J Immunol** 1989 Nov 1;143(9):2961–8

[Serum cathepsin A activity in pregnant, parturient and puerperal patients] Kurzatkowski W, et al. **Zentralbl Gynakol** 1990;112(4):227–9 (Eng. Abstr.) **(Ger)**

[Clinical significance of kininogen–proteinase complex analysis in biochemical laboratory tests] Takeda A. **Nippon Rinsho** 1989 Dec;48 Suppl:257–60 **(Jpn)**

GENETICS

Assignment of cathepsin E (CTSE) to human chromosome region 1q31 by in situ hybridization and analysis of somatic cell hybrids. Couvreur JM, et al. **Cytogenet Cell Genet** 1990; 53(2–3):137–9

In vitro translation and processing of cathepsin B of Schistosoma mansoni. Felleisen R, et al. **EMBO J** 1990 Feb;9(2):371–7

Gene structure and 5'–upstream sequence of rat cathepsin L. Ishidoh K, et al. **FEBS Lett** 1989 Dec 18;259(1):71–4

Developmental regulation of the human cathepsin G gene in myelomonocytic cells. Hanson RD, et al. **J Biol Chem** 1990 Jan 25;265(3):1524–30

Activity and deletion analysis of recombinant human cathepsin L expressed in Escherichia coli. Smith SM, et al. **J Biol Chem** 1989 Dec 5;264(34):20487–95

Nucleotide sequence of human preprocathepsin H, a lysosomal cysteine proteinase. Fuchs R, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9471

RFLP for human cathepsin E (CTSE). Johnson MP, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10147

A cluster of hematopoietic serine protease genes is found on the same chromosomal band as the human alpha/delta T–cell receptor locus. Hanson RD, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):960–3

ISOLATION & PURIFICATION

Cathepsin S from bovine spleen. Purification, distribution, intracellular localization and action on proteins. Kirschke H, et al. **Biochem J** 1989 Dec 1;264(2):467–73

Purification and characterization of cathepsin L from the white muscle of chum salmon, Oncorhynchus keta. Yamashita M, et al. **Comp Biochem Physiol [B]** 1990; 96(2):247–52

Variant cathepsin L activity from gastric cancer tissue. Chung SM. **Jpn J Cancer Res** 1990 Aug;81(8):813–9

A high yield method for the isolation of sheep's liver cathepsin L. Pike R, et al. **Prep Biochem** 1989;19(3):231–45

METABOLISM

Cathepsin B and D activity in alveolar macrophages from rats with pulmonary granulomatous inflammation or acute lung injury. Lesser M, et al. **Agents Actions** 1989 Nov; 28(3–4):264–71

Angiotensin II–producing enzyme III from acidified serum of nephrectomized dogs. Activation of proenzyme III to enzyme III by cathepsin G. Haas E, et al. **Am J Hypertens** 1989 Sep;2(9):708–14

Lysosomal proteases and protease inhibitors in nasal allergy and non–atopic sinusitis. Hamaguchi Y, et al. **Am J Otolaryngol** 1990 Jan–Feb;11(1):37–43

Stretch–induced prostaglandins and protein turnover in cultured skeletal muscle. Vandenburgh HH, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):C232–40

Cathepsin L activity in alveolar macrophages of rats: response to cigarette smoke. Lesser M, et al. **Am J Respir Cell Mol Biol** 1989 Nov;1(5):371–6

Nonchromogenic hydrolysis of elastase and cathepsin G p–nitroanilide substrates by Pseudomonas aeruginosa elastase. Pelletier A, et al. **Am J Respir Cell Mol Biol** 1989 Jul;1(1):37–9

In vivo effect of a beta–adrenergic agonist on activity of calcium–dependent proteinases, their specific inhibitor, and cathepsins B and H in skeletal muscle. Kretchmar DH, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):228–35

Augmented excretion of procathepsin L of a fos–transferred highly metastatic rat cell line. Taniguchi S, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):520–6

The specificity of bovine spleen cathepsin S. A comparison with rat liver cathepsins L and B. Brömme D, et al. **Biochem J** 1989 Dec 1;264(2):475–81

Regulation of proteinase levels in the nematode Caenorhabditis elegans. Preferential depression by acute or chronic starvation. Hawdon JM, et al. **Biochem J** 1989 Nov 15;264(1):161–5

Cartilage proteoglycan aggregate is degraded more extensively by cathepsin L than by cathepsin B. Nguyen

Q, et al. **Biochem J** 1990 Mar 1;266(2):569–73
Glycosylation of procathepsin L does not account for species molecular-mass differences and is not required for proteolytic activity. Smith SM, et al. **Biochem J** 1989 Sep 15;262(3):931–8
Mode of activation of the precursor to cathepsin L: implication for matrix degradation in arthritis. Maciewicz RA, et al. **Biol Chem Hoppe Seyler** 1990 May;371 Suppl:223–8
Characterization of a cathepsin L-like enzyme secreted from human pancreatic cancer cell line HPC-YP. Yamaguchi N, et al. **Cancer Res** 1990 Feb 1;50(3):658–63
High activities of cathepsins B, D, H, and L in the white muscle of chum salmon in spawning migration. Yamashita M, et al. **Comp Biochem Physiol [B]** 1990;95(1):149–52
Susceptibility of the cartilage collagens types II, IX and XI to degradation by the cysteine proteinases, cathepsins B and L. Maciewicz RA, et al. **FEBS Lett** 1990 Aug 20; 269(1):189–93
Localization and activity of various lysosomal proteases in Leishmania amazonensis-infected macrophages. Prina E, et al. **Infect Immun** 1990 Jun;58(6):1730–7
Differences in cathepsin B + L and calcium-dependent protease activities among breed type and their relationship to beef tenderness. Johnson MH, et al. **J Anim Sci** 1990 Aug;68(8):2371–9
Differences in targeting and secretion of cathepsins B and L by BALB/3T3 fibroblasts and Moloney murine sarcoma virus-transformed BALB/3T3 fibroblasts. Achkar C, et al. **J Biol Chem** 1990 Aug 15;265(23):13650–4
Protein determinants impair recognition of procathepsin L phosphorylated oligosaccharides by the cation-independent mannose 6-phosphate receptor. Lazzarino D, et al. **J Biol Chem** 1990 Jul 15; 265(20):11864–71
Uptake of extracellular enzyme by a novel pathway is a major determinant of cathepsin L levels in human macrophages. Reilly JJ Jr, et al. **J Clin Invest** 1990 Jul;86(1):176–83
Immunocytochemical localization of prorenin, renin, and cathepsins B, H, and L in juxtaglomerular cells of rat kidney. Matsuba H, et al. **J Histochem Cytochem** 1989 Nov; 37(11):1689–97
Immunocytochemical localization of cathepsins B and H in corticotrophs and melanotrophs of rat pituitary gland. Uchiyama Y, et al. **J Histochem Cytochem** 1990 May; 38(5):633–9
Immunocytochemical localization of angiotensinogen and cathepsins B, H, and L in rat hepatocytes, with special reference to degradation of angiotensinogen in lysosomes after colchicine. Watanabe T, et al.
J Histochem Cytochem 1989 Dec;37(12):1899–911
Cathepsins B, H and L activities in gingival crevicular fluid from chronic adult periodontitis patients and experimental gingivitis subjects. Kunimatsu K, et al. **J Periodont Res** 1990 Mar;25(2):69–73
Effect of low molecular weight proteins and dextran on renal cathepsin B and L activity. Olbricht CJ, et al.
Kidney Int 1990 Mar;37(3):918–26
Characteristics of BANA-degrading enzyme in the tooth pulp activated by bradykinin. Kudo T, et al.
Prog Clin Biol Res 1990;328:275–8
Role of cathepsin B and L in anti-glomerular basement membrane nephritis in rats. Baricos WH, et al.
Renal Physiol Biochem 1989 Sep-Dec;12(5–6):400–5
Alterations in proteolytic enzymes of the proximal tubule in a rat model of cyclosporine nephrotoxicity. Olbricht CJ, et al. **Transplantation** 1990 Sep;50(3):378–81
[BANA hydrolase and DNP peptidase activities in the ovulatory process of PMS-hCG treated immature rat] Shibata S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Nov;41(11):1750–4 (Eng. Abstr.) **(Jpn)**
[Inborn errors of lysosome protease] Katunuma N, et al. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):715–7 **(Jpn)**
[Pathogenesis of varicose ulcers of the lower extremities] Gostishchev VK, et al. **Khirurgiia (Mosk)** 1990 May; (5):101–4 (Eng. Abstr.) **(Rus)**
[Cathepsin activity in the myocardium and skeletal muscles as a sign of the time of death] Zharov VV, et al.
Sud Med Ekspert 1989 Jul-Sep;32(3):38–40 (Eng. Abstr.) **(Rus)**
[Cathepsin H activity in the human brain and human brain neoplasms] Chernaia VI, et al. **Ukr Biokhim Zh** 1989 Sep-Oct;61(5):47–50 (Eng. Abstr.) **(Rus)**
[Lysosomes in cellular activity. Physiology and pathology] Tutel'ian VA, et al. **Vestn Akad Med Nauk SSSR** 1990; (2):14–21 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Modulation of the transport of a lysosomal enzyme by PDGF. Prence EM, et al. **J Cell Biol** 1990 Feb; 110(2):319–26

PHARMACOLOGY

Hypochlorous acid (HOCl) activation of neutrophil collagenase requires cathepsin G. Capodici C, et al.
Agents Actions 1989 Jun;27(3–4):481–4
Degradation of basement membrane laminin by human neutrophil elastase and cathepsin G. Heck LW, et al.
Am J Pathol 1990 Jun;136(6):1267–74
Activation by cathepsin G of latent gelatinase secreted from rat polymorphonuclear leukocytes. Sakata K, et al.
Chem Pharm Bull (Tokyo) 1989 May;37(5):1321–3
Dissection of laminin by cathepsin G into its long-arm and short-arm structures and localization of regions involved in calcium dependent stabilization and self-association. Bruch M, et al. **Eur J Biochem** 1989 Nov 6;185(2):271–9
Endocytosis of liposomes containing lysosomal proteins increases intracellular protein degradation in growing L-132 cells. Vargas JL, et al. **Eur J Biochem** 1990 Feb 22;188(1):99–109
Neutrophil elastase and cathepsin G stimulate secretion from cultured bovine airway gland serous cells. Sommerhoff CP, et al. **J Clin Invest** 1990 Mar;85(3):682–9
Listericidal activity of human neutrophil cathepsin G. Alford CE, et al. **J Gen Microbiol** 1990 Jun;136 (Pt 6):997–100
Mechanism of staphylococcal resistance to non-oxidative antimicrobial action of neutrophils: importance of pH and ionic strength in determining the bactericidal action of cathepsin G. Shafer WM, et al. **J Gen Microbiol** 1989 Apr; 135 (Pt 4):825–30

PHYSIOLOGY

Membrane-associated cathepsin L: a role in metastasis of melanomas [published erratum appears in Biochem Biophys Res Commun 1989 Dec 29;165(3):1444] Rozhin J, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):556–61
Mechanisms and regulation of lysosomal proteolysis. Katunuma N. **Revis Biol Celular** 1989;20:35–61 (43 ref.)

CATHETER ABLATION, ELECTRIC see **ELECTROCOAGULATION**

CATHETERIZATION

Transcatheter aspiration of intracoronary thrombus after myocardial infarction. Brown SE, et al. **Am Heart J** 1990 Sep;120(3):688–90
Regional myocardial blood flow with a reperfusion catheter and an autoperfusion balloon catheter during total coronary occlusion. Christensen CW, et al. **Am Heart J** 1990 Feb; 119(2 Pt 1):242–8
Assessment of normal and atherosclerotic arterial wall thickness with an intravascular ultrasound imaging catheter. Mallery JA, et al. **Am Heart J** 1990 Jun; 119(6):1392–400
Management of subretinal foreign bodies with a cannulated extrusion needle. Joondeph BC, et al. **Am J Ophthalmol** 1990 Sep 15;110(3):250–3
Estimation of catheter delay for appearance time of dye-dilution curves. Thilenius OG, et al. **Am J Physiol** 1967 Jun;212(6):1429–34
Advantages of the paramedian approach for lumbar epidural analgesia with catheter technique. A clinical comparison between midline and paramedian approaches. Blomberg RG, et al. **Anaesthesia** 1989 Sep;44(9):742–6
On passage of catheters through epidural needles [letter; comment] Rutter TW. **Anesth Analg** 1990 Mar;70(3):337–8 Comment on: Anesth Analg 1989 Aug;69(2):267–8.
Intraoperative diagnosis of acute subarachnoid hemorrhage using continuous pressure monitoring via a lumbar subarachnoid catheter. Kalustian AA, et al.
Anesthesiology 1990 Feb;72(2):386–8
Phrenic nerve block as a complication of local anesthetic. Infiltration for internal jugular vein catheterization. Schiessler R, et al. **Anesthesiology** 1989 Nov;71(5):812–3
Efficacy of dicloxacillin-coated polyurethane catheters in preventing subcutaneous Staphylococcus aureus infection in mice. Sherertz RJ, et al.
Antimicrob Agents Chemother 1989 Aug;33(8):1174–8
Abstracts from the International Symposium on Vascular Access for Blood Purification Methods and Catheter Technology. Homburg/Saar, F.R.G., November 10–12, 1988. **Artif Organs** 1989 Dec;13(6):561–70
Creatine kinase BB release into cerebrospinal fluid after lateral ventricle cannulation. Bach FW, et al.
Br J Neurosurg 1988;2(3):339–42
Adaptation of the quantitative 2-[14C]deoxyglucose method for use in freely moving rats. Crane AM, et al.
Brain Res 1989 Oct 9;499(1):87–92
Investigation of the performance of two types of the Doppler catheter in vitro. Hangiandreou NJ, et al.
Cathet Cardiovasc Diagn 1989 Oct;18(2):108–17
Discrepancies between Doppler and catheter gradients in aortic prosthetic valves in vitro. A manifestation of localized gradients and pressure recovery. Baumgartner H, et al. **Circulation** 1990 Oct;82(4):1467–75
An erroneous central venous pressure reading from a pulmonary artery catheter [letter] Hannallah M, et al.
Crit Care Med 1990 Sep;18(9):1050–1
Pulmonary artery versus pulmonary angiography catheters [letter; comment] Lopez A, et al. **Crit Care Med** 1990 Apr; 18(4):459–60 Comment on: Crit Care Med 1989 Mar;17(3):274–8.
Effect of plastic catheters on the phagocytic activity of human polymorphonuclear leukocytes. López-López G, et al. **Eur J Clin Microbiol Infect Dis** 1990 May;9(5):324–8
Selective fallopian tube cannulation: initial experience in an infertile population. Segars JH, et al. **Fertil Steril** 1990 Feb; 53(2):357–9
Cytoreductive surgery for advanced ovarian cancer: cardiovascular evaluation with pulmonary artery catheters. Eisner RF, et al. **Gynecol Oncol** 1990 Jun;37(3):311–4
Transluminal atherectomy for occlusive peripheral vascular disease. Graor RA, et al. **J Am Coll Cardiol** 1990 Jun; 15(7):1551–8
Early ambulation after 5 French diagnostic cardiac catheterization: results of a multicenter trial [see comments] Kern MJ, et al. **J Am Coll Cardiol** 1990 Jun;15(7):1475–83 Comment in: J Am Coll Cardiol 1990 Jun;15(7):1484–5.
The 5 French catheter and the future of coronary angiography [editorial; comment] Moses JW.
J Am Coll Cardiol 1990 Jun;15(7):1484–5 Comment on: J Am Coll Cardiol 1990 Jun;15(7):1475–83.
Percutaneous ablation of gallstones. Dempsey DT, et al.
J Surg Res 1990 Aug;49(2):116–20
A clinical evaluation of the Camino subdural screw and ventricular monitoring kits. Chambers IR, et al.
Neurosurgery 1990 Mar;26(3):421–3
The effect of paraldehyde on intravenous tubing sets. Schallinger LE, et al. **Pharmacotherapy** 1989;9(6):381–5
Direct catheterization of the mesenteric vein: combined surgical and radiologic approach to the treatment of variceal hemorrhage. Durham JD, et al. **Radiology** 1990 Oct;177(1):229–33
Palliation of malignant ascites with a Tenckhoff catheter. Lomas DA, et al. **Thorax** 1989 Oct;44(10):828
Transcatheter therapy for malignant neoplasms. Coldwell DM, et al. **West J Med** 1989 Sep;151(3):299–303 (25 ref.)
[Cannulation of the radial artery. Risks, effective examination methods and monitoring of the circulation in the hand during the procedure] Holm-Knudsen RJ, et al.
Ugeskr Laeger 1990 Apr 30;152(18):1278–81 (30 ref.) (Eng. Abstr.) **(Dan)**
[Use of axillary space as a placement site for venous implants] Joyon D, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R246 **(Fre)**
[Subdural location of a catheter. A complication of peridural anesthesia] Bredtmann R, et al. **Reg Anaesth** 1989 Sep; 12(5):102–5 (Eng. Abstr.) **(Ger)**
[Use of catheterization of the inferior petrosal sinus in the diagnosis of Cushing's disease] Rampazzo A, et al.
Medicina (Firenze) 1989 Apr-Jun;9(2):198–200 (Eng. Abstr.) **(Ita)**
[Accidental catheterization of the subdural space. Description of 2 cases] Visentin M, et al. **Minerva Anestesiol** 1989 May; 55(5):245–8 (Eng. Abstr.) **(Ita)**
[Use of Severini's coaxial catheters in gastrointestinal interventional radiology] Cozzi G, et al.
Radiol Med (Torino) 1990 Jun;79(6):607–9 (Eng. Abstr.) **(Ita)**
[Development of the intra-vascular dye dilution detector using optical fiber catheter] Oida A, et al.
Kokyu To Junkan 1990 Mar;38(3):229–35 **(Jpn)**
[Improvement in the catheterization of the epidural space] Nisimov EB, et al. **Klin Khir** 1989;(12):62 **(Rus)**
[Choice of the approach in catheterization and embolization of the hepatic artery in malignant tumors of the liver] Tarazov PG, et al. **Klin Khir** 1990;(5):24–6 (Eng. Abstr.) **(Rus)**
[Treatment of posterior epistaxis using a Foley catheter. Study of 235 cases] Arruti González, et al.
An Otorrinolaringol Ibero Am 1989;16(5):527–41 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Complications from 0.018-in. floppy platinum-tip guidewires. Quinn SF, et al. **AJR Am J Roentgenol** 1990 May;154(5):1103–4
Major leakage of pleural fluid out an epidural catheter tract in a post-thoracotomy patient. Diehl DK, et al.
Anesthesiology 1990 Jun;72(6):1086–7
Randomized prospective study comparing vancomycin with teicoplanin in the treatment of infections associated with Hickman catheters. Smith SR, et al.
Antimicrob Agents Chemother 1989 Aug;33(8):1193–7
A conservative procedure for the diagnosis of catheter-related infections. Cercenado E, et al.
Arch Intern Med 1990 Jul;150(7):1417–20
Arteriovenous fistula in the presence of subclavian vein thrombosis: a serious complication. Kahn D, et al.
Br J Surg 1990 Jun;77(6):682
A simple solution to blood clot obstruction of epidural catheter during labour [letter] Cohen S, et al.
Can J Anaesth 1990 Jan;37(1):143–4
Fluid through the epidural needle does not reduce complications of epidural catheter insertion. Rolbin SH, et al. **Can J Anaesth** 1990 Apr;37(3):337–40
Distal embolization during mechanical thrombolysis: rotational thrombectomy vs. balloon angioplasty. Titus BG, et al. **Cathet Cardiovasc Diagn** 1990 Apr;19(4):279–85
Pathogenesis and changes in the aetiology of arterio-venous fistulae. Schönbach B, et al. **Eur J Vasc Surg** 1990 Jun; 4(3):233–7
Symptomatic central venous thrombosis and long-term right atrial catheters. Oakley GJ, et al. **Gynecol Oncol** 1990 Mar; 36(3):405–8
The pathology of cholesterol embolism arising as a complication of intra-aortic catheterization. Kennedy A, et al. **Histopathology** 1989 Nov;15(5):515–21
Pacemaker malfunction due to subcutaneous emphysema. Giroud D, et al. **Int J Cardiol** 1990 Feb;26(2):234–6
Contact dermatitis from a subclavian catheter. Guin JD, et al. **Int J Dermatol** 1990 Jan-Feb;29(1):50–1
Quantitative blood cultures for catheter-associated infections [letter] **J Clin Microbiol** 1990 Jun;28(6):1487–8

Three-year experience with sonicated vascular catheter cultures in a clinical microbiology laboratory. Sherertz RJ, et al. **J Clin Microbiol** 1990 Jan;28(1):76–82

The femoral neuralgia syndrome after arterial catheter trauma. Hallett JW Jr, et al. **J Vasc Surg** 1990 May; 11(5):702–6

Sepsis during total parenteral nutrition. Freund HR, et al. **JPEN J Parenter Enteral Nutr** 1990 Jan–Feb;14(1):39–41

Delayed pneumothorax after subclavian vein catheterization. Plaus WJ. **JPEN J Parenter Enteral Nutr** 1990 Jul–Aug; 14(4):414–5

Usefulness of tip cultures to detect pulmonary artery catheter-related infections [letter] Rello J, et al. **Lancet** 1989 Nov 18;2(8673):1224

Catheter-related infections [letter] Kaufman JL. **Mayo Clin Proc** 1990 Sep;65(9):1277

Septicemia due to Xanthomonas species and non-aeruginosa Pseudomonas species: increasing incidence of catheter-related infections. Elting LS, et al. **Medicine (Baltimore)** 1990 Sep;69(5):296–306

Volar proximal skin necrosis after radial artery cannulation. Goldstein RD, et al. **N Y State J Med** 1990 Jul;90(7):375–6

Dangers of arterial catheters in critically ill neonates [letter; comment] Weinberg G, et al. **Pediatrics** 1990 Apr; 85(4):627–8 Comment on: Pediatrics 1989 Oct;84(4):735–8.

Tube tamponade: potential pitfall in angiography of arterial hemorrhage associated with percutaneous drainage catheters. Routh WD, et al. **Radiology** 1990 Mar;174(3 Pt 2):945–9

Bleeding complications of femoral catheterization: CT evaluation. Trerotola SO, et al. **Radiology** 1990 Jan; 174(1):37–40

False aneurysm secondary to aortic cannulation—rupture into lung with fatal hemoptysis during aortography. Ramakantan R, et al. **Thorac Cardiovasc Surg** 1989 Oct; 37(5):322–3

[Accidental catheterization of the subdural space: a complication of continuous spinal anesthesia and continuous peridural anesthesia] Mocan M, et al. **Can J Anaesth** 1989 Nov;36(6):708–12 (Eng. Abstr.) **(Fre)**

[Comments on the paper by R. Bredtmann and A. Scholz. Subdural catheter placement. A complication of peridural anesthesia] Seeling W. **Reg Anasesth** 1990 Jul;13(5):129–32 **(Ger)**

[Unilateral epidural anesthesia] Seeling W, et al. **Reg Anaesth** 1990 Mar;13(2):23–8 (Eng. Abstr.) **(Ger)**

[Repeated inadvertent subdural catheterization: a case report] Nonaka A, et al. **Masui** 1990 Jun;39(6):778–81 (Eng. Abstr.) **(Jpn)**

[Severe complication of epidural anesthesia] Koriachkin VA. **Vestn Khir** 1989 May;142(5):128 **(Rus)**

[Spinal microsurgical catheterization causes fibrosis (letter)] Torres LM, et al. **Rev Esp Anestesiol Reanim** 1990 Jan–Feb; 37(1):43–4 **(Spa)**

INSTRUMENTATION

Double-J catheter for transgastric cystogastrostomy [letter; comment] Das KM, et al. **AJR Am J Roentgenol** 1990 Feb; 154(2):421–2 Comment on: AJR Am J Roentgenol 1989 Mar;152(3):523–6.

Common bile duct biopsy with the Simpson atherectomy catheter. Kim D, et al. **AJR Am J Roentgenol** 1990 Jun; 154(6):1213–5

A one-piece unit for treatment of pneumothorax complicating needle biopsy: evaluation in 10 patients. Molina PL, et al. **AJR Am J Roentgenol** 1990 Jul; 155(1):31–3

Directable cannula for gastrojejunal catheterization [letter; comment] Pedersen MI, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):203 Comment on: AJR Am J Roentgenol 1989 Jun;152(6):1346.

Use of the Hawkins–Hunter rocket wire in the biliary system. Shaw DW, et al. **AJR Am J Roentgenol** 1990 May; 154(5):1101–2

Evaluation of cardiopulmonary devices on chest radiographs: digital vs analog radiographs. Thompson MJ, et al. **AJR Am J Roentgenol** 1989 Dec;153(6):1165–8

Fidelity of micromanometer pressure transduction in closed-end angiographic catheters. Lloyd TR, et al. **Am J Cardiol** 1989 Nov 15;64(18):1213–5

The effect of the Y-set on catheter infection rates in continuous ambulatory peritoneal dialysis patients. Piraino B, et al. **Am J Kidney Dis** 1990 Jul;16(1):46–50

The surgical management of giant retinal tears with the cannulated extrusion needle. Joondeph BC, et al. **Am J Ophthalmol** 1989 Nov 15;108(5):548–53

A new infusion cannula for advanced proliferative vitreoretinopathy. Landers MB 3d, et al. **Am J Ophthalmol** 1990 Aug 15;110(2):209–10

A combined iris retractor and irrigation cannula for congenital-cataract surgery. Ruben JB, et al. **Am J Ophthalmol** 1989 Dec 15;108(6):741–2

A potential complication associated with a tracheal tube with a Murphy eye [letter] Kubota Y, et al. **Anaesthesia** 1989 Oct;44(10):866–7

Breakage of a vessel dilator [letter] McCoy EP. **Anaesthesia** 1990 Aug;45(8):699

Equipment deadspace and drug administration. Macfie AG. **Anaesthesia** 1990 Feb;45(2):145–7

Problems with open-end catheters and epidural infusion [letter; comment] Saw KK, et al. **Anaesthesia** 1990 Feb; 45(2):170 Comment on: Anaesthesia 1989 Jul;44(7):578–80.

Microcatheters for continuous spinal anesthesia [letter] **Anesth Analg** 1990 Aug;71(2):200–3

Vanishing calibration marks on a spinal catheter [letter] Schmidt SI, et al. **Anesth Analg** 1990 Apr;70(4):462–3

A method of securing epidural catheters [letter] Schmitt LG, et al. **Anesth Analg** 1989 Dec;69(6):856–7

A new device for percutaneous central venous catheterization [letter] Arai T, et al. **Anesthesiology** 1989 Nov;71(5):807

Percutaneous venous cannula [letter] Laub GW. **Ann Thorac Surg** 1989 Oct;48(4):610

Access for peritoneal dialysis in neonates and infants. Lewis MA, et al. **Arch Dis Child** 1990 Jan;65(1 Spec No):44–7

Comparison of complications associated with single-holed and multi-holed extradural catheters. Morrison LM, et al. **Br J Anaesth** 1990 Feb;64(2):183–5

New silicone tipped cannulas for subretinal fluid drainage. Grizzard WS, et al. **Br J Ophthalmol** 1989 Oct;73(10):838–9

Use of the Rycroft anterior chamber irrigation cannula in microvascular surgery. Flemming AF. **Br J Plast Surg** 1990 May;43(3):383

Failure to cannulate the epidural space [letter] Vohra A, et al. **Can J Anaesth** 1989 Sep;36(5):598, 600

The efficacy of three different methods of transtracheal ventilation. Zornow MH, et al. **Can J Anaesth** 1989 Nov; 36(6):624–8

Quantitative digital subtraction arteriography with a calibration catheter. Barth KH, et al. **Cardiovasc Intervent Radiol** 1989 Sep–Oct;12(5):281–5

Foreign body retrieval using a simple snare device. Bogart DB, et al. **Cathet Cardiovasc Diagn** 1990 Apr;19(4):248–50

Probe exchange catheter used for angioplasty of total coronary artery occlusions. Kiemeneij F, et al. **Cathet Cardiovasc Diagn** 1990 Apr;19(4):289–93

Removal of an occlusive coronary dissection flap by using an atherectomy catheter. Lee TC, et al. **Cathet Cardiovasc Diagn** 1990 Jul;20(3):185–8

Use of femoral artery guiding catheters via the left brachial artery for transluminal coronary angioplasty. Spaccavento LJ, et al. **Cathet Cardiovasc Diagn** 1990 Jul;20(3):182–4

Use of a new device in cannulation of the great vessels: cannula introducer. Razi DM, et al. **Int Surg** 1990 Apr–Jun; 75(2):101–4

Functional properties of the Kensey arterial recanalization catheter. In vitro investigations. Schmitz-Rode T, et al. **Invest Radiol** 1990 Jun;25(6):631–7

Bedside modified latex tube colopexy for the treatment of colostomy prolapse in children. Mogilner JG, et al. **Isr J Med Sci** 1990 Jul;26(7):410–1

Sepsis of vascular catheters. II: In vitro disinfection of colonized tubing. Dennis MB Jr, et al. **J Biomed Mater Res** 1990 Jan;24(1):95–105

Evaluation of long sampling tubes for remote monitoring by mass spectrometry. Lerou JG, et al. **J Clin Monit** 1990 Jan;6(1):39–52

Barium sulphate radio-opacity agent and bacterial adhesion to silicone catheter material [letter] Barrett SP, et al. **J Clin Pathol** 1989 Nov;42(11):1226

Simple treatment for snoring also a means of prediction of uvulopalatopharyngoplasty success? Ramalingam KK, et al. **J Laryngol Otol** 1990 May;104(5):428–9

A single-ended perfusion method for large, cylindrical cells. Jaslove SW. **J Neurosci Methods** 1989 Oct;30(1):33–40

New triple microbore cannula system for push-pull perfusion of brain nuclei of the rat. Zhang X, et al. **J Neurosci Methods** 1990 May;32(2):93–104

A new "transducer-tipped" fiber optic catheter for measuring intramuscular pressures. Crenshaw AG, et al. **J Orthop Res** 1990 May;8(3):464–8

Single-cannula venovenous bypass for respiratory membrane lung support. Durandy Y, et al. **J Thorac Cardiovasc Surg** 1990 Mar;99(3):404–9

Five years' experience with Hickman catheters as temporary access for haemodialysis. Simoni G, et al. **Nephrol Dial Transplant** 1990;5(1):59–61

Use of Permcath (Quinton) catheter in uraemic patients in whom the creation of conventional vascular access for haemodialysis is difficult. Pourchez T, et al. **Nephron** 1989; 53(4):297–302

The Simcoe cannula as an aid to in-the-bag placement of intraocular lenses. Oyarzun M. **Ophthalmic Surg** 1990 Jun; 21(6):441–3

Transtracheal ventilation with crash cart equipment. Richtsmeier WJ, et al. **Otolaryngol Head Neck Surg** 1990 Feb;102(2):191–2

Development of multi-purpose catheter for visceral arteriography. Yashiro N, et al. **Radiat Med** 1989 Nov–Dec; 7(6):278–81

New guide wire for high-flow infusion. Barnhart W, et al. **Radiology** 1990 Mar;174(3 Pt 2):1058–9

Laser ring catheters in excimer laser angioplasty. Duda SH, et al. **Radiology** 1990 Apr;175(1):269–70

New high-flow "cloud" catheter for safer delivery of contrast material. Hansen EC, et al. **Radiology** 1989 Nov; 173(2):461–4

Experience with new retrieval forceps for foreign body removal in the vascular, urinary, and biliary systems. Selby JB, et al. **Radiology** 1990 Aug;176(2):535–8

Device for hysterosalpingography and fallopian tube catheterization. Thurmond AS, et al. **Radiology** 1990 Feb; 174(2):571–2

Fallopian tubes: improved technique for catheterization. Thurmond AS, et al. **Radiology** 1990 Feb;174(2):572–3

Successful management of faecal incontinence using the enema continence catheter. Walker J, et al. **Z Kinderchir** 1989 Dec;44 Suppl 1:44–5

[Comparative evaluation of two optic fiber catheters in patients in a state of shock and acute respiratory insufficiency] Poète P, et al. **Ann Fr Anesth Reanim** 1989; 8 Suppl:R226 **(Fre)**

[A comparison of 7 types of epidural catheters] Kobayashi N. **Masui** 1990 Mar;39(3):335–42 (Eng. Abstr.) **(Jpn)**

[The experience of a new double-catheter introducer for simultaneous bilateral internal iliac angiography] Kamano T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Jan 25;50(1):76–8 (Eng. Abstr.) **(Jpn)**

[Development of a J-shaped sheath and its usefulness for angiography] Ohmura M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Aug 25; 49(8):1064–6 (Eng. Abstr.) **(Jpn)**

[Application of the Tracker Infusion Catheter to hepatic tumors] Mitsuya K, et al. **Rinsho Hoshasen** 1990 Apr; 35(4):541–4 **(Jpn)**

[The analysis of superselective catheterization technique; transcatheter segmental arterial embolization using lipiodol for hepatocellular carcinoma] Satoh O, et al. **Rinsho Hoshasen** 1990 Jun;35(6):685–90 (Eng. Abstr.) **(Jpn)**

[Usefulness of a soft tip catheter in superselective hepatic angiography] Tarusawa K, et al. **Rinsho Hoshasen** 1990 Apr;35(4):537–9 **(Jpn)**

METHODS

A solution to the problem of high-flow jets from miniature angiographic catheters. Daniel TB, et al. **AJR Am J Roentgenol** 1990 May;154(5):1091–5

Selective osteal salpingography and transvaginal catheter dilatation in the diagnosis and treatment of fallopian tube obstruction. Lang EK, et al. **AJR Am J Roentgenol** 1990 Apr;154(4):735–40

Percutaneous endoscopic gastrostomy [letter; comment] Gaylord SF. **Am J Gastroenterol** 1990 Jan;85(1):107 Comment on: Am J Gastroenterol 1989 Jul;84(7):703–10.

Pulmonary artery catheterization in severe preeclampsia [letter; comment] Goodlin RC. **Am J Obstet Gynecol** 1990 Feb;162(2):601–3 Comment on: Am J Obstet Gynecol 1988 Mar;158(3 Pt 1):453–8.

Comparing two methods of umbilical artery catheter placement. Squire SJ, et al. **Am J Perinatol** 1990 Jan; 7(1):8–12

Successful atrial caval shunting in the management of retrohepatic venous injuries. Beal SL, et al. **Am J Surg** 1989 Nov;158(5):409–13

Intrapleural catheter placement [letter] Weston S, et al. **Anaesth Intensive Care** 1990 Feb;18(1):140

The falling column: a new technique for interpleural catheter placement [letter] Ben-David B, et al. **Anesth Analg** 1990 Aug;71(2):212

Psoas block for surgical repair of hip fracture: a case report and description of a catheter technique. Ben-David B, et al. **Anesth Analg** 1990 Sep;71(3):298–301

Rectal methohexital: concentration and length of the rectal catheters. Khalil SN, et al. **Anesth Analg** 1990 Jun; 70(6):645–9

Technique for visualization of the functioning mitral valve. Marshall WG Jr. **Ann Thorac Surg** 1990 Jun;49(6):1013

Pulmonary artery versus left ventricular venting: a radioisotope study of left ventricular function. Mitchell IM, et al. **Ann Thorac Surg** 1989 Nov;48(5):699–703

Access for peritoneal dialysis in neonates and infants [letter] Lambert H, et al. **Arch Dis Child** 1990 Aug;65(8):914–5

Management of hypovolaemic shock [letter] Touquet R. **BMJ** 1990 Jul 21;301(6744):179

Further advice on inserting a chest drain [letter; comment] **Br J Hosp Med** 1990 Jan;43(1):82 Comment on: Br J Hosp Med 1989 Sep;42(3):231–3.

How to cannulate the internal jugular vein. Apps MC. **Br J Hosp Med** 1980 Jul;24(1):74, 76

Balloon dilatation of the very small patent ductus arteriosus in preparation for transcatheter occlusion. Benson LN, et al. **Cathet Cardiovasc Diagn** 1989 Sep;18(1):48–9

Tracheal catheters in patients with acquired immunodeficiency syndrome for the diagnosis of Pneumocystis carinii pneumonia. Martin WR, et al. **Chest** 1990 Jul;98(1):29–32

Thermodilution cardiac output values obtained by using a centrally placed introducer sheath and right atrial port of a pulmonary artery catheter. Hunn D, et al. **Crit Care Med** 1990 Apr;18(4):438–9

Simple and safe method for operative cannulation of the portal vein. Umemoto S, et al. **Dis Colon Rectum** 1989 Jun; 32(6):536–7

Cannulation of the cystic duct and gallbladder. Miller GL, et al. **Endoscopy** 1989 Sep;21(5):223–4

Percutaneous catheterization of the peritoneal cavity guided by ultrasonography in the treatment of intraabdominal carcinoma of the ovary. Bennedbaek O, et al. **Eur J Gynaecol Oncol** 1989;10(5):300–1

A new pediatric duodenoscope: successful cannulation without a cannula elevator. Mauer K, et al. **Gastrointest Endosc** 1989 Sep–Oct;35(5):437–9

Enterostomy catheter exchange using new polymer-coated guide wire: technical note. Markowitz DM, et al.

Gastrointest Radiol 1990 Winter;15(1):64–5
With tubing, position is everything [letter] Deryke T. Geriatr Nurs (New York) 1990 Jul–Aug;11(4):170
A method for studying rat embryonic metabolism by microcannulation of the vitelline circulation. Mensah–Brown EP, et al. J Anat 1989 Apr;163:123–34
Hyperthermia catheter implantation and therapy in the brain. Technical note. Marchosky JA, et al. J Neurosurg 1990 Jun;72(6):975–9
A modified version of Herrera's method for creating a pancreatic fistula in dogs. Nishiwaki H, et al. Jpn J Surg 1990 Jul;20(4):418–23
A modification of the Brown–Roberts–Wells stereotactic frame for implantation of ventricular access reservoirs. Frank E, et al. Neurosurgery 1989 Nov;25(5):839–41; discussion 841–2
Seven years experience with vascular access for plasma exchange therapy. Guček A, et al. Prog Clin Biol Res 1990; 337:359–61
The cause of superior vena cava syndrome: diagnosis with percutaneous atherectomy. Dake MD, et al. Radiology 1990 Mar;174(3 Pt 2):957–9
Blue toe syndrome: treatment with percutaneous atherectomy. Dolmatch BL, et al. Radiology 1989 Dec; 173(3):799–804
Proximal fallopian tube occlusion: diagnosis and treatment with transcervical fallopian tube catheterization. Kumpe DA, et al. Radiology 1990 Oct;177(1):183–7
Fallopian tube catheterization: modified fluoroscopic technique. LaBerge JM, et al. Radiology 1990 Jul; 176(1):283–4
Guide-wire reinforcement and lengthening with coaxial locking guide wires: the crimping technique. Pry R, et al. Radiology 1990 Jan;174(1):268–9
Double-guide-wire access through a single 6-F vascular sheath. Teitelbaum GP, et al. Radiology 1989 Dec; 173(3):871–3
Paramedian versus midline incision for the insertion of permanent peritoneal dialysis catheters. A randomized clinical trial. Ejlersen E, et al. Scand J Urol Nephrol 1990; 24(2):151–4
Transhepatic portal vein catheterization for localization of sporadic and MEN gastrinomas: a ten-year experience. Vinik AI, et al. Surgery 1990 Mar;107(3):246–55
The management of T tube leaks in orthotopic liver transplant recipients with endoscopically placed nasobiliary catheters. Ostroff JW, et al. Transplantation 1990 May; 49(5):922–4
Limitations of percutaneous transhepatic cholangioscopy in the removal of complicated biliary calculi. Jeng KS, et al. World J Surg 1989 Sep–Oct;13(5):603–10 (43 ref.)
[Ultrasonically guided intraperitoneal catheterization for ascites drainage or intraperitoneal chemotherapy] Dons-Jensen H, et al. Ugeskr Laeger 1990 Jun 25; 152(26):1904–6 (Eng. Abstr.) (Dan)
[A new technic for interpleural blockade] Sydow FW, et al. Anaesthesist 1990 May;39(5):280–2 (Eng. Abstr.) (Ger)
[A newly devised continuous catheter flush system for arterial pressure monitoring] Hashimoto S, et al. Masui 1989 Oct;38(10):1378–82 (Eng. Abstr.) (Jpn)

VETERINARY

An improved rumen cannulation technique to minimize leakage. Grovum WL. Acta Vet Scand Suppl 1989;86:225–8
Cannulation of the rumen in cattle and buffaloes. McSweeney CS. Aust Vet J 1989 Aug;66(8):266–8
Silicone rumen cannula with a soft cylindrical part and a hard flange. Horigane A, et al. J Dairy Sci 1989 Dec; 72(12):3230–2
An improved method of bronchoalveolar lavage of lungs of small laboratory animals: short report. Van Soolingen D, et al. Lab Anim 1990 Jul;24(3):197–9
A method for long-term catheterization of various capacitance vessels in dogs. Béliveau L, et al. Lab Anim Sci 1990 Jan;40(1):97–100
A rapid non-surgical technique to obtain serial samples from the gastrointestinal tract using a steerable catheter and fluoroscopy in the rhesus monkey. Ford E, et al. Lab Anim Sci 1989 Nov;39(6):609–12
A two stage cannula for gastric fistulation of swine. Maragos CM, et al. Lab Anim Sci 1990 Mar;40(2):217–9
Intravenous catheterisation of conventional pigs without application of antimicrobial agents. Pijpers A, et al. Vet Q 1989 Oct;11(4):216–21
Effects of intramammary cannula design on dry cow therapy. Sol J, et al. Vet Rec 1990 Apr 28;126(17):438
Sampling of lymph from lymph vessels afferent to the supramammary lymph gland in the cow. Obel N, et al. Zentralbl Veterinarmed [A] 1989 Aug;36(7):490–3
[The attaching of bypass cannulas to the duodenum of dairy cows] Engelmann H, et al. Arch Exp Veterinarmed 1990; 44(1):59–63 (Eng. Abstr.) (Ger)
[Prececal crude protein digestion and amino acid absorption during the use of ileorectostomy and fistula technic in swine] Hennig U, et al. Arch Exp Veterinarmed 1990; 44(1):35–44 (Eng. Abstr.) (Ger)

CATHETERIZATION, BALLOON see **BALLOON DILATATION**

CATHETERIZATION, BRONCHIAL see

CATHETERIZATION, PERIPHERAL

CATHETERIZATION, CARDIAC see **HEART CATHETERIZATION**

CATHETERIZATION, CENTRAL VENOUS

see related
CATHETERS, INDWELLING

Pulmonary artery catheterization in severe eclampsia [letter; comment] Gibbs CP. Am J Obstet Gynecol 1989 Oct; 161(4):1089 Comment on: Am J Obstet Gynecol 1988 Mar;158(3 Pt 1):453–8.
Unexplained bleeding associated with central venous catheter care. Morgan SK, et al. Am J Pediatr Hematol Oncol 1989 Winter;11(4):447–9
The fate of 100 prolonged venous access devices. Hayward SR, et al. Am Surg 1990 Sep;56(9):515–9
A prospective study of femoral versus subclavian vein catheterization during cardiac arrest. Emerman CL, et al. Ann Emerg Med 1990 Jan;19(1):26–30
Factors influencing the R–R interval during central venous injection in newborn swine. Oyston JP, et al. Can J Anaesth 1989 Sep;36(5):554–9
Central venous hemoglobin saturation inaccurately estimates SvO2. Tatman DJ, et al. Can J Anaesth 1990 May;37(4 Pt 2):S154
Serendipitous discovery during jugular catheterization. Partial anomalous pulmonary venous connection. Wylam ME, et al. Chest 1990 Aug;98(2):493–5
Thermodilution cardiac output values obtained by using a centrally placed introducer sheath and right atrial port of a pulmonary artery catheter. Hunn D, et al. Crit Care Med 1990 Apr;18(4):438–9
Theophylline plasma concentrations and silicone central venous catheter: a potential source of error [letter] Triginer C, et al. DICP 1990 Mar;24(3):324
The use of dual lumen jugular venous catheters as definitive long term access for haemodialysis. Blake PG, et al. Int J Artif Organs 1990 Jan;13(1):26–31
Use of central venous catheters for prolonged venous access in cancer chemotherapy. Rajoor BG, et al. J Assoc Physicians India 1990 May;38(5):340–2
Surveillance skin cultures in central venous catheter sepsis [letter; comment] Golledge CL, et al. J Hosp Infect 1989 Nov;14(4):379–80 Comment on: J Hosp Infect 1988 Oct;12(3):191–8.
Clinically significant central venous catheter infections in a community hospital: association with type of dressing [letter; comment] Dickerson N, et al. J Infect Dis 1989 Oct;160(4):720–2 Comment on: J Infect Dis 1989 Feb;159(2):310–9.
Spontaneous retraction of catheters [letter] Wagman LD. JPEN J Parenter Enteral Nutr 1989 Sep–Oct;13(5):564
Candidemia in children with central venous catheters: role of catheter removal and amphotericin B therapy. Dato VM, et al. Pediatr Infect Dis J 1990 May;9(5):309–14
Long-term central venous access with a peripherally placed subcutaneous infusion port: initial results. Andrews JC, et al. Radiology 1990 Jul;176(1):45–7
Translumbar inferior vena cava catheters for long-term venous access. Lund GB, et al. Radiology 1990 Jan; 174(1):31–5
Repeated application of EMLA cream 5% for the alleviation of cannulation pain in haemodialysis. Wehle B, et al. Scand J Urol Nephrol 1989;23(4):299–302
Central venous pressure monitoring for the critically ill in Zambia. Deedat AM, et al. Trop Doct 1990 Apr;20(2):74–6
The practice of central venous pressure monitoring in the tropics. Watters DA, et al. Trop Doct 1990 Apr;20(2):56–60
[The central venous catheter in the treatment of patients with malignancies] van Klaveren RJ, et al. Ned Tijdschr Geneeskd 1989 Aug 19;133(33):1629–33 (28 ref.) (Eng. Abstr.) (Dut)
[Implantation technic and maintenance of a Hickman catheter for hemodialysis] De Pauw L, et al. Acta Chir Belg 1990 Jan–Feb;90(1):27–31 (Eng. Abstr.) (Fre)
[Indications for the insertion of a central venous catheter in emergency situations] Hrska F, et al. Anaesthesist 1990 Jan;39(1):60–1 (Eng. Abstr.) (Ger)
[Catheter break in an implantable central venous infusion system with embolization in the pulmonary artery] Krause U, et al. Dtsch Med Wochenschr 1989 Dec 1;114(48):1882–4 (Eng. Abstr.) (Ger)
[Use of central venous catheters implanted subcutaneously in children with neoplasms] Miniero R, et al. Minerva Pediatr 1989 May;41(5):277–9 (Eng. Abstr.) (Ita)
[Central venous catheters] Flaatten H. Tidsskr Nor Laegeforen 1990 Mar 10;110(7):854–5 (Nor)
[Analysis of the costs and complications of different procedures for the administration of intravenous liquids] Campos-Oltra JR, et al. Bol Med Hosp Infant Mex 1989 Aug;46(8):547–53 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Transvenous retrieval of intracardiac catheter fragments. Lybecker H, et al. Acta Anaesthesiol Scand 1989 Oct; 33(7):565–7
Prolonged bacteremia with catheter-related central venous thrombosis. Rupar DG, et al. Am J Dis Child 1990 Aug; 144(8):879–82
Coagulase-negative staphylococci: interplay of epidemiology and bench research. Goldmann DA. Am J Infect Control 1990 Jun;18(3):211–21
Colonization and bacteremia related to duration of triple-lumen intravascular catheter placement. Ullman RF, et al. Am J Infect Control 1990 Jun;18(3):201–7
Staphylococcus aureus bacteremia in patients with Hickman catheters. Dugdale DC, et al. Am J Med 1990 Aug; 89(2):137–41
Infection of hemodialysis catheters: incidence and mechanisms. Almirall J, et al. Am J Nephrol 1989; 9(6):454–9
Phrenic nerve damage in the tiny infant during vein cannulation for parenteral nutrition. Pleasure JR, et al. Am J Perinatol 1990 Apr;7(2):136–8
Inadvertent infusion of parenteral nutrition via the innominate artery [letter] Clarke C, et al. Anaesthesia 1989 Dec;44(12):1002
Internal jugular catheterisation. Case report of a potentially fatal hazard. Powell H, et al. Anaesthesia 1990 Jun; 45(6):458–9
Aneurysm formation after central venous cannulation [letter; comment] Winter A, et al. Anaesthesia 1990 Jan;45(1):67 Comment on: Anaesthesia 1989 Jul;44(7):588–9.
A pain in the neck—and shoulder [letter] Stock MC, et al. Anesthesiology 1990 Apr;72(4):771
Increased venous hemoglobin saturation during percutaneous right internal jugular vein cannulation in a patient with a mature right forearm arteriovenous hemodialysis fistula. Yee LL, et al. Anesthesiology 1990 Jul;73(1):184–6
Very low doses of warfarin can prevent thrombosis in central venous catheters. A randomized prospective trial. Bern MM, et al. Ann Intern Med 1990 Mar 15;112(6):423–8
Interleukin-2 therapy, central venous catheters, and nosocomial sepsis [letter; comment] Shiloni E, et al. Ann Intern Med 1990 Jun 1;112(11):882–3 Comment on: Ann Intern Med 1990 Jan 15;112(2):102–7.
Duplex scanning of central vascular access sites in burn patients. Wait M, et al. Ann Surg 1990 Apr;211(4):499–503
Current issues in central venous catheter infection. Toltzis P, et al. Annu Rev Med 1990;41:169–76 (41 ref.)
Complication of a central venous line in the newborn [letter] De Silva P, et al. Arch Dis Child 1990 Aug;65(8):915
Staphylococcus epidermidis and retention of neonatal percutaneous central venous catheters. Gladman G, et al. Arch Dis Child 1990 Feb;65(2):234–5
Vertebral artery pseudoaneurysm. A rare complication of subclavian artery catheterization. Amaral JF, et al. Arch Surg 1990 Apr;125(4):546–7
Respiratory distress during total parenteral nutrition. Rayner C, et al. Br J Clin Pract 1989 Aug;43(8):301–2
Hickman catheter-induced thoracic vein thrombosis. Frequency and long-term sequelae in patients receiving high-dose chemotherapy and marrow transplantation. Haire WD, et al. Cancer 1990 Sep 1;66(5):900–8
Complications from long-term indwelling central venous catheters in hematologic patients with special reference to infection. Kappers-Klunne MC, et al. Cancer 1989 Oct 15; 64(8):1747–52
Venobronchial fistula: a complication associated with central venous catheterization for chemotherapy. Beauregard JF, et al. Cathet Cardiovasc Diagn 1990 Jan;19(1):49–52
Infectious complications of indwelling long-term central venous catheters. Clarke DE, et al. Chest 1990 Apr; 97(4):966–72 (48 ref.)
Sepsis and pulmonary embolism due to catheter-related right heart thrombus [letter; comment] Dens J, et al. Chest 1990 Feb;97(2):509–10 Comment on: Chest 1988 Dec;94(6):1236–9.
Catheter complications [letter; comment] Kimmel RD, et al. Chest 1990 May;97(5):1271–2 Comment on: Chest 1988 Dec;94(6):1221–4.
A rare malposition of the central venous catheter. Zaman MH, et al. Chest 1990 Sep;98(3):768–70
Catheter-related thrombosis. Williams EC. Clin Cardiol 1990 Apr;13(4 Suppl 6):VI34–6
Fibrin sheath formation surrounding a pulmonary artery catheter sheath: eversion of the sleeve during catheter removal [letter] Benya RV. Crit Care Med 1990 Mar; 18(3):345
Transitory phrenic nerve palsy after subclavian vein puncture [letter] Floriot CP, et al. Crit Care Med 1989 Dec; 17(12):1366
Percutaneous central venous catheterization in a pediatric intensive care unit: a survival analysis of complications. Stenzel JP, et al. Crit Care Med 1989 Oct;17(10):984–8
An unusual outcome of a common complication of the subclavian vein catheterization [letter] Yerdel MA, et al. Crit Care Med 1990 Jul;18(7):796–7
Qualitative intravascular catheter tip cultures do not predict catheter-related bacteremia. Nahass RG, et al. Diagn Microbiol Infect Dis 1990 May–Jun;13(3):223–6
Venous access devices utilized in association with intensive cancer chemotherapy. Newman KA, et al. Eur J Cancer Clin Oncol 1989 Sep;25(9):1375–8 (5 ref.)
Laboratory diagnosis of intravascular catheter associated sepsis. Collignon PJ, et al. Eur J Clin Microbiol Infect Dis 1989 Sep;8(9):807–14 (36 ref.)
Iatrogenic superior vena caval syndrome [letter] Raghuveer

TS, et al. **Indian Pediatr** 1989 Sep;26(9):962–3
Clinical predictors of infection of central venous catheters used for total parenteral nutrition. Armstrong CW, et al. **Infect Control Hosp Epidemiol** 1990 Feb;11(2):71–8
Mediastinal haematoma caused by subclavian catheterisation for haemodialysis. Masud T, et al. **Int J Artif Organs** 1989 Nov;12(11):708–10
Broken piece in the lungs: a complication of haemodialysis via subclavian cannulation. Székely J, et al. **Int Urol Nephrol** 1989;21(5):533–40
Indwelling central venous catheter infections in patients with acquired immune deficiency syndrome. Skoutelis AT, et al. **J Acquir Immune Defic Syndr** 1990;3(4):335–42
Carotid artery pseudoaneurysm following internal jugular vein cannulation. Nayeem SA, et al. **J Cardiovasc Surg (Torino)** 1990 Mar–Apr;31(2):182–3
A prospective randomized trial evaluating prophylactic antibiotics to prevent triple-lumen catheter-related sepsis in patients treated with immunotherapy. Bock SN, et al. **J Clin Oncol** 1990 Jan;8(1):161–9
Prevention of bacteremia attributed to luminal colonization of tunneled central venous catheters with vancomycin-susceptible organisms. Schwartz C, et al. **J Clin Oncol** 1990 Sep;8(9):1591–7
CT diagnosis of catheter-induced septic thrombus of vena cava. Mori H, et al. **J Comput Assist Tomogr** 1990 Mar–Apr;14(2):236–8
Double-blind placebo controlled study of vancomycin prophylaxis for central venous catheter insertion in cancer patients. Ranson MR, et al. **J Hosp Infect** 1990 Jan; 15(1):95–102
Another complication of intravenous catheterization: a case report. Smith MB. **J Okla State Med Assoc** 1990 Jan; 83(1):18–20
Improvement in catheter sepsis rate in burned children. Askew AA, et al. **J Pediatr Surg** 1990 Jan;25(1):117–9
A comparison of placement techniques and complications of externalized catheters and implantable port use in children with cancer. Mirro J Jr, et al. **J Pediatr Surg** 1990 Jan;25(1):120–4
Central venous catheters in surgical neonates. Roberts JP, et al. **J Pediatr Surg** 1990 Jun;25(6):632–4
An unusual case presentation: pericardial tamponade complicating central venous catheter. Garg M, et al. **J Perinatol** 1989 Dec;9(4):456–7
Central venous catheter complications in sarcoma patients receiving adjuvant chemotherapy. Israel RJ, et al. **J Surg Oncol** 1990 Jun;44(2):100–2
Investigational use of tissue plasminogen activator (t-PA) for occluded central venous catheters. Atkinson JB, et al. **JPEN J Parenter Enteral Nutr** 1990 May–Jun;14(3):310–1
Thrombosis of the superior vena cava due to a central catheter for total parenteral nutrition. Belcastro S, et al. **JPEN J Parenter Enteral Nutr** 1990 Jan–Feb;14(1):31–3
Intracardiac thrombus complicating prolonged parenteral nutrition in an adult. McCulloch I, et al. **JPEN J Parenter Enteral Nutr** 1989 Sep–Oct;13(5):557–9
Antibiotic therapy of catheter infections in patients receiving home parenteral nutrition. Miller SJ, et al. **JPEN J Parenter Enteral Nutr** 1990 Mar–Apr;14(2):143–7
Efficacy of thrombolytic therapy for occlusion of long-term catheters. Monturo CA, et al. **JPEN J Parenter Enteral Nutr** 1990 May–Jun;14(3):312–4
Catheter-related complications in 35 children and adolescents with gastrointestinal disease on home parenteral nutrition. Schmidt-Sommerfeld E, et al. **JPEN J Parenter Enteral Nutr** 1990 Mar–Apr;14(2):148–51
Incidence of arrhythmia with central venous catheter insertion and exchange. Stuart RK, et al. **JPEN J Parenter Enteral Nutr** 1990 Mar–Apr;14(2):152–5
Subdural intravenous fat collection: an unusual complication of central intravenous feeding in the neonate. Young S, et al. **JPEN J Parenter Enteral Nutr** 1989 Nov–Dec; 13(6):661–2
Source and route of microbial colonisation of parenteral nutrition catheters. de Cicco M, et al. **Lancet** 1989 Nov 25;2(8674):1258–61
Infections related to central venous catheters. Corona ML, et al. **Mayo Clin Proc** 1990 Jul;65(7):979–86 (31 ref.)
Intrapleural central venous catheter malposition. Leang LT. **Med J Malaysia** 1989 Jun;44(2):147–50
Acute superior vena caval thrombosis after central venous catheter removal: successful treatment with thrombolytic therapy. Theriault RL, et al. **Med Pediatr Oncol** 1990; 18(1):77–80
Superiority of the internal jugular over the subclavian access for temporary dialysis. Cimochowski GE, et al. **Nephron** 1990;54(2):154–61
Tunneled catheter thrombosis: factors related to incidence. Brown-Smith JK, et al. **Oncol Nurs Forum** 1990 Jul–Aug; 17(4):543–9
Subclavian vein puncture is used by many physicians as the preferred mode of access to the central circulation [letter] Mullins PA, et al. **PACE** 1990 Jul;13(7):948–9
Port-A-Cath in children during long-term chemotherapy: complications and outcome. al-Hathal M, et al. **Pediatr Hematol Oncol** 1989;6(1):17–22
Munchausen syndrome by proxy: recurrent central catheter sepsis. Frederick V, et al. **Pediatr Infect Dis J** 1990 Jun; 9(6):440–2
Intrahepatic encystment of umbilical vein catheter infusate. Levkoff AH, et al. **Pediatr Radiol** 1990;20(5):360–1
Long term venous access using a totally implantable drug delivery system in patients with cystic fibrosis and bronchiectasis. Ball AB, et al. **Respir Med** 1989 Sep; 83(5):429–31
Catheter-related right-sided endocarditis in bone marrow transplant recipients. Martino P, et al. **Rev Infect Dis** 1990 Mar–Apr;12(2):250–7
The use of central venous catheters in paediatric oncology—a cautionary tale. Russell L, et al. **Scott Med J** 1990 Feb; 35(1):11–4
Increased infection rate in double-lumen versus single-lumen Hickman catheters in cancer patients. Early TF, et al. **South Med J** 1990 Jan;83(1):34–6
Title misleading [letter; comment] Cheng TO. **W V Med J** 1990 Jun;86(6):256 Comment on: W V Med J 1989 Sep;85(9):381–2.
[Fatal catheter septicemia with finding of Candida lusitaniae] Kjaeldgaard P, et al. **Ugeskr Laeger** 1990 Feb 26; 152(9):611–2 (Eng. Abstr.) **(Dan)**
[Infections caused by central venous catheterization at intensive care units] Schmit JL, et al. **Agressologie** 1989 May;30(5):269–72 (Eng. Abstr.) **(Fre)**
[Transient block of the brachial plexus after catheterization of the subclavian vein] García-Fages LC, et al. **Ann Fr Anesth Reanim** 1990;9(1):93–4 (Eng. Abstr.) **(Fre)**
[Bilateral glucolipidothorax: a rare complication of subclavian venous catheterization (letter)] Laborde Y, et al. **Ann Fr Anesth Reanim** 1990;9(3):315–6 **(Fre)**
[Early death after chemotherapy via central venous catheterization in tumors of the upper respiratory and digestive tracts] Ayadi A, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(6):271–4 (Eng. Abstr.) **(Fre)**
[Central venous stenoses after using a Hickman catheter in hemodialysis in children. Apropos of 4 cases] Cussenot O, et al. **Ann Urol (Paris)** 1989;23(5):395–7 (Eng. Abstr.) **(Fre)**
[Urokinase recanalization of extensive thrombosis of the superior vena cava secondary to an implantable perfusion device] Gueunoun M, et al. **Arch Mal Coeur** 1989 Nov; 82(11):1913–6 (Eng. Abstr.) **(Fre)**
[Surveillance of totally implanted catheters] Douard MC, et al. **Pathol Biol (Paris)** 1989 Nov;37(9):999–1001 **(Fre)**
[Unusual complication of central venous catheters: lymphomatous mass at the implantation site (letter)] Routy JP, et al. **Presse Med** 1990 Mar 31;19(12):571 **(Fre)**
[Complications of central venous catheterization from an anatomical point of view.] Stern W, et al. **Acta Anat (Basel)** 1990;138(2):137–43 (Eng. Abstr.) **(Ger)**
[Compression of the trachea by a hematoma caused by an internal jugular vein catheter] Janda A. **Anaesthesist** 1990 Jul;39(7):375–7 (Eng. Abstr.) **(Ger)**
[Catheter break of an implantable central venous infusion system (letter)] Wilms H. **Dtsch Med Wochenschr** 1990 Feb 9;115(6):237 **(Ger)**
[Catheter-induced atrial thrombi following central contrast medium injection in venous DSA] Kaltenborn HA, et al. **Rontgenpraxis** 1989 Dec;42(12):412–4 **(Ger)**
[Cannulation of the thoracic duct during central venous catheterization] Bosco M, et al. **Minerva Anestesiol** 1989 Jul–Aug;55(7–8):325–8 (Eng. Abstr.) **(Ita)**
[Prevention of vena cava thrombosis during catheterization. Comparison of calciheparin and defibrotide] Grosso P, et al. **Minerva Anestesiol** 1989 Jun;55(6):273–6 (Eng. Abstr.) **(Ita)**
[Bilateral hydrothorax with hydromediastinum after cannulation of the left internal jugular vein] Campagnutta E, et al. **Minerva Ginecol** 1989 Sep;41(9):479–83 (Eng. Abstr.) **(Ita)**
[Pulmonary edema. A rare complication of the percutaneous insertion of silastic central venous catheters] Carrera G, et al. **Minerva Pediatr** 1989 Oct;41(10):521–4 (Eng. Abstr.) **(Ita)**
[Vena cava superior syndrome in total parenteral nutrition. Vena cava superior thrombosis caused by a central venous catheter] Svane S. **Tidsskr Nor Laegeforen** 1990 Mar 10; 110(7):840–2 (Eng. Abstr.) **(Nor)**
[Removal of a non-radiopaque catheter fragment under echocardiographic imaging. A case report] Piccioni JL, et al. **Arq Bras Cardiol** 1989 Nov;53(5):281–2 (Eng. Abstr.) **(Por)**
[Prevention and treatment of complications of central venous catheterization] Kruglov AA, et al. **Sov Med** 1989;(6):76–8 **(Rus)**
[Cardiac tamponade in children as a complication of central venous catheterization. Report of four cases] Escribano Subías J, et al. **An Esp Pediatr** 1990 May;32(5):441–4 (Eng. Abstr.) **(Spa)**
[Horner's syndrome: an infrequent complication of cannulation of the internal jugular vein (letter)] Fita G, et al. **Rev Esp Anestesiol Reanim** 1990 Mar–Apr;37(2):111–2 **(Spa)**
[Earache: a symptom of the incorrect placement of a central venous catheter (letter)] Villalonga A, et al. **Rev Esp Anestesiol Reanim** 1989 Jul–Aug;36(4):241 **(Spa)**
[Dislocation of a central venous catheter as the cause of pulmonary embolism] Granström L, et al. **Lakartidningen** 1990 May 16;87(20):1771–2 **(Swe)**

INSTRUMENTATION

Introduction of percutaneous arteriovenous femoral shunt: a new access for continuous arteriovenous hemofiltration. Ahmed Z. **Am J Kidney Dis** 1990 Aug;16(2):115–7
An unusual complication of a central venous line [letter] Monro HM. **Anaesthesia** 1990 Apr;45(4):344
Prolonged venous access in cancer patients. Guenier C, et al. **Eur J Surg Oncol** 1989 Dec;15(6):553–5
Triple knotting of a central venous catheter. Ikeda S, et al. **J Clin Anesth** 1989;1(3):218–21
Continuous measurement of central venous pressure by manometry. Doyle DJ. **J Clin Monit** 1990 Jan;6(1):59–60
Evaluation of the endotoxin retention capabilities of inline intravenous filters. Horibe K, et al. **JPEN J Parenter Enteral Nutr** 1990 Jan–Feb;14(1):56–9
Evaluation of a percutaneously placed 27-gauge central venous catheter in neonates weighing less than 1200 grams. Nakamura KT, et al. **JPEN J Parenter Enteral Nutr** 1990 May–Jun;14(3):295–9
Internal fracture of a pediatric broviac catheter. Wagman LD, et al. **JPEN J Parenter Enteral Nutr** 1989 Sep–Oct; 13(5):560–1
Chylopericardium and chylothorax, resulting from a catheter to the left subclavian vein: an autopsy report. Smedts F, et al. **Klin Wochenschr** 1989 Dec 4;67(23):1214–7
Superior vena cava syndrome associated with a Hickman catheter. Kerr HD. **N Y State J Med** 1990 Apr;90(4):208–10
Central venous access for haemodialysis using the Hickman catheter. Cappello M, et al. **Nephrol Dial Transplant** 1989; 4(11):988–92
Subclavian catheters as temporary vascular access. Kong NC, et al. **Singapore Med J** 1989 Jun;30(3):261–2
Experience with the double lumen Silastic catheter for hemoaccess. Bour ES, et al. **Surg Gynecol Obstet** 1990 Jul; 171(1):33–9
[Intra-atrial ECG via a central venous catheter] Uhrbrand B, et al. **Ugeskr Laeger** 1990 Jan 29;152(5):320–2 (Eng. Abstr.) **(Dan)**
[Emergency vascular access in patients with renal failure. Apropos of 32 implantations of permcath] Chatelard P, et al. **J Chir (Paris)** 1990 Jan;127(1):13–6 (Eng. Abstr.) **(Fre)**
[Vena cava thrombosis: a rare complication in changing a central venous catheter] Kulka PJ, et al. **Anasth Intensivther Notfallmed** 1989 Aug;24(4):241–4 (Eng. Abstr.) **(Ger)**
[Central venous catheter (letter)] Haindl H, et al. **Dtsch Med Wochenschr** 1989 Oct 13;114(41):1591 **(Ger)**
[Venous long-term indwelling catheter and port systems in children. Progress in pediatric oncology] Haupt W, et al. **Fortschr Med** 1990 Jun 10;108(17):334–7 (Eng. Abstr.) **(Ger)**
[Fully implantable catheter systems. Long-term results—complications] Wenke K, et al. **Fortschr Med** 1990 May 10;108(14):276–9 (26 ref.) (Eng. Abstr.) **(Ger)**
[Clinical experiences with central venous multi-lumen catheters] Albert A, et al. **Infusionstherapie** 1990 Jun; 17(3):168–72 (Eng. Abstr.) **(Ger)**
[Particle load in intensive therapy. Possible solutions using a multi-lumen catheter and Intrapur filter] Schröder F. **Infusionstherapie** 1990 Jun;17(3):149–54 (Eng. Abstr.) **(Ger)**
[A totally implantable permanent central venous access, long-term experience with subcutaneous infusion chambers] Lorenz M, et al. **Langenbecks Arch Chir** 1988; 373(5):302–9 (Eng. Abstr.) **(Ger)**
[Long-term experiences with central venous catheters in pediatric oncology] Hadjilaskari P, et al. **Monatsschr Kinderheilkd** 1990 Jan;138(1):26–30 (Eng. Abstr.) **(Ger)**
[Methodologic procedure in the removal of a knotted intravascular pulmonary artery catheter] Kaltenborn HA, et al. **Rontgenblatter** 1990 Jan;43(1):27–9 (Eng. Abstr.) **(Ger)**
[Hematogenous osteomyelitis of the right clavicle and right femur head following subclavian vein puncture and insertion of an indwelling catheter] Albrecht G. **Unfallchirurgie** 1989 Dec;15(6):306–8 (Eng. Abstr.) **(Ger)**
[Invasive pulmonary monitoring in acute necrotizing pancreatitis. A decision aid for indications for surgery?] Sulkowski U, et al. **Zentralbl Chir** 1989;114(22):1459–65 (Eng. Abstr.) **(Ger)**
[A method of aseptic storage of puncture needles and venous catheters] Nisimov EB. **Vestn Khir** 1989 Apr;142(4):99–100 **(Rus)**

METHODS

"Half-way" venous catheters: developmental work on insertion. Hultman EA, et al. **Acta Anaesthesiol Scand** 1989 Jul;33(5):432–4
Simple technique for redirecting malpositioned central venous catheters. Recht MP, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):183–4
Ultrasonographic guidance for central venous access [letter] Greenspoon JS. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):252
Ultrasonographic guidance for central venous access during pregnancy. Lee W, et al. **Am J Obstet Gynecol** 1989 Oct; 161(4):1012–3
Avoidance of unintentional arterial cannulation [letter] Silverman S, et al. **Anaesthesia** 1989 Dec;44(12):1003

Central venous cannulation using the infraclavicular axillary vein. Taylor BL, et al. **Anesthesiology** 1990 Jan;72(1):55–8
Percutaneous infraclavicular insertion of long-term central venous Hickman catheters. Hughes CJ, et al. **Aust N Z J Surg** 1989 Nov;59(11):889–93
Stabilization and fixation of percutaneous central venous catheters [letter] Reynolds GJ. **Aust Paediatr J** 1989 Aug; 25(4):250–1
Management of hypovolaemic shock [letter] Longmore JM. **BMJ** 1990 Aug 11;301(6747):344–5
Misplacement of subclavian venous catheters: importance of head position and choice of puncture site. Sanchez R, et al. **Br J Anaesth** 1990 May;64(5):632–3
How to insert a central venous catheter [see comments] Edwards N, et al. **Br J Hosp Med** 1989 Oct;42(4):312, 314–5 Comment in: Br J Hosp Med 1990 Mar;43(3):184.
Successful cannulation of the subclavian vein [letter; comment] Thomas JM. **Br J Hosp Med** 1990 Mar;43(3):184 Comment on: Br J Hosp Med 1989 Oct;42(4):312, 314–5.
Electrocardiographic guided placement of central venous catheters [see comments] Hoffman MA, et al. **Br J Surg** 1989 Oct;76(10):1032–3 Comment in: Br J Surg 1990 Mar;77(3):354.
Electrocardiographic guided placement of central venous catheters [letter; comment] Mughal MM. **Br J Surg** 1990 Mar;77(3):354 Comment on: Br J Surg 1989 Oct;76(10):1032–3.
Internal jugular venous cannulation in children under 5 years of age. Smith MF. **Can J Anaesth** 1990 May;37(4 Pt 2):S102
The injection technique for repositioning central venous catheters: technical note. Olcott EW, et al. **Cardiovasc Intervent Radiol** 1989 Sep–Oct;12(5):292–3
Ultrasound guidance improves the success rate of internal jugular vein cannulation. A prospective, randomized trial. Mallory DL, et al. **Chest** 1990 Jul;98(1):157–60
Rapid identification of the external jugular vein. Jaroch M, et al. **Cleve Clin J Med** 1990 Jan–Feb;57(1):95–6
The insertion of chronic indwelling central venous catheters (Hickman lines) in interventional radiology suites. Page AC, et al. **Clin Radiol** 1990 Aug;42(2):105–9
Transcardiac method of jugular bulb catheter placement [letter; comment] Goetting MG, et al. **Crit Care Med** 1990 Apr;18(4):460 Comment on: Crit Care Med 1989 May;17(5):385–8.
Axillary or internal jugular central venous catheterization. Martin C, et al. **Crit Care Med** 1990 Apr;18(4):400–2
Avoiding unintentional arterial cannulation [letter] Silverman SM, et al. **Crit Care Med** 1990 Apr;18(4):460
Choosing an appropriate implantable device for long-term venous access. Reed WP, et al. **Eur J Cancer Clin Oncol** 1989 Sep;25(9):1383–91 (13 ref.)
Mupirocin for the reduction of colonization of internal jugular cannulae—a randomized controlled trial. Hill RL, et al. **J Hosp Infect** 1990 May;15(4):311–21
The venocutaneous fistula—a new approach to chronic venous access. Bagwell CE. **J Pediatr Surg** 1989 Oct; 24(10):1098–9
Vascular access in the neonate following extracorporeal membrane oxygenation. Ford EG, et al. **J Pediatr Surg** 1990 Jun;25(6):594–5
Percutaneous inferior vena cava placement of tunneled silastic catheters for prolonged vascular access in infants. Robertson LJ, et al. **J Pediatr Surg** 1990 Jun;25(6):596–8
Long-term parenteral nutrition: problems with venous access. McIntyre AS, et al. **J R Soc Med** 1990 Jun; 83(6):371–2
Repositioning the wayward central venous catheter [letter; comment] Jensen GL, et al. **JPEN J Parenter Enteral Nutr** 1990 Jan–Feb;14(1):107 Comment on: JPEN J Parenter Enteral Nutr 1989 Jul–Aug;13(4):438–9.
An alternative placement of implantable central venous access systems. Krog M, et al. **JPEN J Parenter Enteral Nutr** 1989 Nov–Dec;13(6):666–7
A technique for intravenous nutrition in the newborn rabbit. Rivera A Jr, et al. **JPEN J Parenter Enteral Nutr** 1990 Jan–Feb;14(1):101–3
Percutaneous catheterization of the axillary vein in infants and children. Metz RI, et al. **Pediatrics** 1990 Apr; 85(4):531–3
Percutaneous placement of femoral central venous catheter in patients undergoing transplantation of bone marrow. Lazarus HM, et al. **Surg Gynecol Obstet** 1990 May; 170(5):403–6
A technique for documenting central placement of long term catheters in neonates. Reyna TM, et al. **Surg Gynecol Obstet** 1989 Nov;169(5):461–2
Direct transcaval placement of both a Greenfield filter and a Hickman catheter. Voeller GR, et al. **Surgery** 1990 Jan; 107(1):110–2
Assessment of insertion techniques and complication rates of dual lumen central venous catheters in patients with hematological malignancies. Jansen RF, et al. **World J Surg** 1990 Jan–Feb;14(1):100–4; discussion 105–6
[Tolerance of femoral vein catheterization] Durbec O, et al. **Ann Fr Anesth Reanim** 1989;8(6):614–9 (Eng. Abstr.) **(Fre)**
[ECG-controlled placement of central venous catheters in patients with atrial fibrillation] Engelhardt W, et al. **Anaesthesist** 1989 Sep;38(9):476–9 (Eng. Abstr.) **(Ger)**
[Clinical use of a new cava catheter with an ECG lead over a steel mandrin] Hausser J. **Anaesthesist** 1990 Apr; 39(4):240–2 (Eng. Abstr.) **(Ger)**
[Control of the placement of a central venous catheter using Doppler ultrasound] Radke J, et al. **Anaesthesist** 1990 May; 39(5):283–7 (Eng. Abstr.) **(Ger)**
[Cannulation of the internal jugular vein using 2 ultrasonic technics. A comparative controlled study] Scherhag A, et al. **Anaesthesist** 1989 Nov;38(11):633–8 (Eng. Abstr.) **(Ger)**
[Comparison of 3 different approaches to central veins in total parenteral nutrition] Mancini S, et al. **G Chir** 1989 Jul–Aug;10(7–8):395–7 (Eng. Abstr.) **(Ita)**
[Approach methods to the central venous system] Viti M, et al. **Minerva Chir** 1990 Mar 31;45(6):405–8 (Eng. Abstr.) **(Ita)**
[Puncturing the central vein] Bondarenko ND, et al. **Klin Khir** 1990;(3):63–4 **(Rus)**
[Percutaneous venous catheterization with contraincision in low birth weight newborns] Campos-Oltra JR, et al. **Bol Med Hosp Infant Mex** 1989 Sep;46(9):611–4 (Eng. Abstr.) **(Spa)**
[Central venous catheterization using a percutaneous route] Paris E, et al. **Rev Chil Pediatr** 1988 Nov–Dec;59(6):377–9 (Eng. Abstr.) **(Spa)**

NURSING

More on vascular access devices [letter; comment] Babic C. **Am J Nurs** 1989 Nov;89(11):1438 Comment on: Am J Nurs 1989 Jun;89(6):826–33.

VETERINARY

Long-term jugular vein catheterization in horses. Spurlock SL, et al. **J Am Vet Med Assoc** 1990 Feb 1;196(3):425–30
Simultaneous sampling of portal, hepatic and systemic blood during intragastric loading and tracer infusion in conscious pigs. Olesen HP, et al. **Lab Anim Sci** 1989 Sep;39(5):429–32
[A new system for catheterization of the V. cava of rats for long-term infusions (Implantofix)] Lehnhardt FJ. **Z Versuchstierkd** 1989;32(4):171–8 (Eng. Abstr.) **(Ger)**

CATHETERIZATION, HEART see **HEART CATHETERIZATION**

CATHETERIZATION, PERIPHERAL

Disturbances of blood-flow velocity in the dorsal veins of the hand after vein cannulation and cannula fixation in the anaesthetised patient. Nitescu P, et al. **Acta Anaesthesiol Scand** 1990 Feb;34(2):120–5
Saphenous vein cutdown [letter] Melker RJ. **Am J Emerg Med** 1990 Mar;8(2):176–7
Administration of nitrous oxide to pediatric patients provides analgesia for venous cannulation. Henderson JM, et al. **Anesthesiology** 1990 Feb;72(2):269–71
A prospective study of femoral versus subclavian vein catheterization during cardiac arrest. Emerman CL, et al. **Ann Emerg Med** 1990 Jan;19(1):26–30
Home management of antibiotic therapy. Poretz DM. **Curr Clin Top Infect Dis** 1989;10:27–42 (41 ref.)
Peripheral venous nutrition in surgical patients: techniques, indications and results. Mattioli S, et al. **Ital J Surg Sci** 1989;19(3):225–31
Accurate measurement of intraarterial pressure through radial artery catheters in neonates. Hack WW, et al. **J Clin Monit** 1990 Jul;6(3):211–6
New technique for stabilizing umbilical artery catheters in very low birthweight infants. Stewart DL, et al. **J Perinatol** 1989 Dec;9(4):458–9
Catheter obstruction: analysis of filter content of total nutrient admixture. Rubin M, et al. **JPEN J Parenter Enteral Nutr** 1989 Nov–Dec;13(6):641–3
Pulmonary artery catheterization in critically ill neonates [letter; comment] Robin E. **Mayo Clin Proc** 1989 Sep; 64(9):1193–4 Comment on: Mayo Clin Proc 1989 Apr;64(4):387–91.
Umbilical venous catheter vs umbilical artery catheter [letter] Kitterman JA. **Pediatrics** 1990 Sep;86(3):495
Translumbar inferior vena cava catheters: safety and efficacy in peripheral blood stem cell transplantation. Haire WD, et al. **Transfusion** 1990 Jul–Aug;30(6):511–5
Adrenal venous sampling and adrenal biopsy. Mitty HA. **Urol Radiol** 1989;11(4):227–9 (14 ref.)
[A study of insertional length of umbilical artery catheters in newborns] Jeng JJ, et al. **Acta Paediatr Sin** 1989 Mar–Apr;30(2):100–4 (Eng. Abstr.) **(Chi)**
[Cytostatic treatment of patients at home] de Vries EG, et al. **Ned Tijdschr Geneeskd** 1990 Feb 24;134(8):377–9 **(Dut)**
[Prolonged catheterization of the pedis artery: prospective study of 125 cases] Ouerghemmi D, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R228 **(Fre)**
[Care of a peripheral indwelling catheter] Hingst V. **Dtsch Med Wochenschr** 1990 Apr 6;115(14):556 **(Ger)**
[Infusion pumps and subcutaneously implantable catheter systems as an aid in the ambulatory care of tumor patients] Ludwig CU, et al. **Ther Umsch** 1989 Oct;46(10):709–14 (Eng. Abstr.) **(Ger)**
[Peripheral artery catheterization—methods, indications, complications] Putterman C. **Harefuah** 1990 Apr 1; 118(7):405–7 (39 ref.) **(Heb)**
[A case of acute massive pulmonary embolism successfully treated with transvenous pulmonary embolectomy by catheter] Nakasaki Y, et al. **Kokyu To Junkan** 1989 Dec; 37(12):1363–6 (Eng. Abstr.) **(Jpn)**
[Usefulness of 5F superflexible catheter for hepatic arterial embolization] Nakagawa K, et al. **Rinsho Hoshasen** 1989 Aug;34(8):929–31 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Life-threatening hemorrhage due to percutaneous transthoracic intervention: importance of the internal mammary artery. Glassberg RM, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):47–9
Peroneal arteriovenous fistula. A complication of Fogarty catheter thromboembolectomy. Davidson JT. **Am Surg** 1989 Oct;55(10):616–20
Does the radial arterial line degrade the performance of a pulse oximeter? Morris RW, et al. **Anaesth Intensive Care** 1990 Feb;18(1):107–9
Acromegaly and radial artery cannulation [letter] Losasso T, et al. **Anesth Analg** 1990 Aug;71(2):204
Intraluminal colonization as a source of catheter-related infection [letter; comment] Yagupsky P, et al. **Antimicrob Agents Chemother** 1989 Nov;33(11):2023 Comment on: Antimicrob Agents Chemother 1989 May;33(5):597–601.
Fractures of long bones occurring in neonatal intensive therapy units. Phillips RR, et al. **BMJ** 1990 Jul 28; 301(6745):225–6
Iliopsoas abscess: an unusual complication of femoral artery catheterization. Loveday EJ, et al. **Br J Radiol** 1990 Mar; 63(747):224–6
Umbilical catheter masquerading at echocardiography as a left atrial mass. Crie JS, et al. **Clin Cardiol** 1989 Dec; 12(12):728–30
Catheter-induced aortic thrombus masquerading as coarctation of the aorta. Rodriguez M, et al. **Clin Pediatr (Phila)** 1989 Dec;28(12):581–4
Inability of inline pressure monitoring to predict or detect infiltration of peripheral intravenous catheters in infants. Phelps SJ, et al. **Clin Pharm** 1990 Apr;9(4):286–92
Silver sulphadiazene: an adjunct to central line maintenance protocol [letter] Bentivegna PE. **Crit Care Med** 1990 Jan; 18(1):120
Compartment syndrome in a five-year-old child following femoral cannulation for cardiopulmonary bypass. Williams PH, et al. **Eur J Cardiothorac Surg** 1989;3(5):474–5
Laboratory diagnosis of intravascular catheter associated sepsis. Collignon PJ, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):807–14 (36 ref.)
Incidence and duration of total occlusion of the radial artery in newborn infants after catheter removal. Hack WW, et al. **Eur J Pediatr** 1990 Jan;149(4):275–7
Fatality from blind intubation of suspected tension pneumothorax. Muckart DJ, et al. **Injury** 1989 May; 20(3):175–6
Incidence of forearm and hand ischaemia related to radial artery cannulation in newborn infants. Hack WW, et al. **Intensive Care Med** 1990;16(1):50–3
Risk factors of nosocomial bacteremia associated with pulmonary artery catheters in a critical care unit. Glowacki M, et al. **J Am Osteopath Assoc** 1990 Jun;90(6):509–14
Limb growth after late bypass graft for occlusion of the femoral artery. A case report. Rubinstein RA Jr, et al. **J Bone Joint Surg [Am]** 1990 Jul;72(6):935–7
Radial artery infections and aneurysms after catheterization. Swanson E, et al. **J Hand Surg [Am]** 1990 Jan;15(1):166–71
Hypoglycemia due to high positioning of umbilical artery catheters. Carey BE, et al. **J Perinatol** 1989 Dec;9(4):407–10
Umbilical artery catheter position and intraventricular hemorrhage. Schick JB, et al. **J Perinatol** 1989 Dec; 9(4):382–5
Early and late complications of totally implantable venous access devices. Grannan KJ, et al. **J Surg Oncol** 1990 May; 44(1):52–4
An evaluation of triple-lumen catheter infections using a guidewire exchange technique. Norwood S, et al. **J Trauma** 1990 Jun;30(6):706–12
Neonatal bladder rupture: a complication of umbilical artery catheterization. Diamond DA, et al. **J Urol** 1989 Dec; 142(6):1543–4
Late complications after femoral artery catheterization in children less than five years of age. Taylor LM Jr, et al. **J Vasc Surg** 1990 Feb;11(2):297–304; discussion 304–6
Effect of the continuous administration of fat emulsion on the infiltration of intravenous lines in infants receiving peripheral parenteral nutrition solutions. Phelps SJ, et al. **JPEN J Parenter Enteral Nutr** 1989 Nov–Dec;13(6):628–32
Aortic thrombosis in a neonate with undetectable protein C. Gremse DA, et al. **Pediatr Radiol** 1990;20(3):198–9
Thrombogenicity of hydrophilically coated guide wires and catheters. Leach KR, et al. **Radiology** 1990 Jun; 175(3):675–7
Subclavian artery-to-innominate vein fistula [letter] Peitzman AB, et al. **Surgery** 1990 Mar;107(3):356–7
[Cannula-related septicemia in severely burned patients] Jia XM. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1987 Mar;3(1):6–9 **(Chi)**
[Complications of subclavian and femoral cannulas] Herout V Jr, et al. **Cas Lek Cesk** 1989 Sep 1;128(36):1135–7 (Eng. Abstr.) **(Cze)**
[Iatrogenic femoral pseudo-aneurysm. Analysis of the causes,

diagnosis and treatment. Study of 12,248 arterial catheterizations] Wery D, et al. **J Radiol** 1989 Nov; 70(11):609–11 (Eng. Abstr.) **(Fre)**

[Thrombosis due to venous catheters—evaluation using CT] Sandring KH, et al. **Radiol Diagn (Berl)** 1989;30(6):639–42 (Eng. Abstr.) **(Ger)**

[Risk of umbilical vein catheterization in the newborn] Komraus–Gatniejewska M. **Pediatr Pol** 1989 Mar; 64(3):199–202 (31 ref.) **(Pol)**

[Intravenous catheters (venflons) in children as a possible cause of hospital infections] Rudkowski Z, et al. **Przegl Epidemiol** 1989;43(2):213–7 (Eng. Abstr.) **(Pol)**

[Complications of catheterization of the subclavian vein in oncological practice] Ryndin VD, et al. **Klin Med (Mosk)** 1989 Aug;67(8):92–5 **(Rus)**

[Clinical death caused by air embolism] Baimyshev ES, et al. **Vestn Khir** 1989 Sep;143(9):131–2 **(Rus)**

[Technical solution to a complication caused by intra–arterial catheterization] Oliu Torres O, et al. **Angiologia** 1990 May–Jun;42(3):85–6 (Eng. Abstr.) **(Spa)**

HISTORY

1977 Memorial Award Paper. Renal renin and hemodynamic responses to selective renal artery catheterization and angiography [classical article] Katzberg RW, et al. **Invest Radiol** 1990 Apr;25(4):453–60

INSTRUMENTATION

Cath–Finder Catheter Tracking System: a new device for positioning of central venous catheters. Early experience from implantation of brachial portal systems. Starkhammar H, et al. **Acta Anaesthesiol Scand** 1990 May;34(4):296–300

Intravascular microcatheter pressure monitoring: experimental results and early clinical evaluation. Duckwiler G, et al. **AJNR** 1990 Jan–Feb;11(1):169–75

A versatile, steerable, flow–guided catheter for delivery of detachable balloons. Nelson M. **AJNR** 1990 Jul–Aug; 11(4):657–8

A coaxial catheter and steerable guidewire used to embolize branches of the splanchnic arteries. Okazaki M, et al. **AJR Am J Roentgenol** 1990 Aug;155(2):405–6

Catheter for conversion of retrograde to antegrade femoral artery catheterization. Patel YD. **AJR Am J Roentgenol** 1990 Jan;154(1):179–80

Magnetic catheter for removal of magnetic foreign bodies. Towbin RB, et al. **AJR Am J Roentgenol** 1990 Jan; 154(1):149–50

Skin burns from a cold light source. Van Der Walt JH, et al. **Anaesth Intensive Care** 1990 Feb;18(1):113–5

In–vitro evaluation of a dual oxygen saturation/hematocrit intravascular fiberoptic catheter. Mendelson Y, et al. **Biomed Instrum Technol** 1990 May–Jun;24(3):199–206

A new catheter to simplify portal vein cannulation for adjuvant cytotoxic liver perfusion following resection of rectal cancer. Ashley S, et al. **Br J Cancer** 1990 May; 61(5):763–4

Embolization hazard of laser hot–tip catheters and coated guidewires. Delcour C, et al. **Br J Radiol** 1990 Jan; 63(745):76

Superselective embolization using a coaxial catheter technique. Olliff S, et al. **Br J Radiol** 1990 Mar; 63(747):197–201

Diagnostic fiberoptic bronchoscopy and protected brush culture in patients with community–acquired pneumonia. Ortqvist A, et al. **Chest** 1990 Mar;97(3):576–82

Peripheral teflon catheters. Potential source for bacterial contamination of orthopedic implants? Wilkins J, et al. **Clin Orthop** 1990 May;(254):251–4

Technical development: a modified pigtail catheter for transbrachial aortography. Patel YD. **Clin Radiol** 1990 Feb; 41(2):128–9

The feasibility of 12–gauge intravenous catheter use in the prehospital setting. Guisto JA, et al. **J Emerg Med** 1990 Mar–Apr;8(2):173–6

Five years of experience in patients receiving home nutrition support with the implanted reservoir: a comparison with the external catheter. Howard L, et al. **JPEN J Parenter Enteral Nutr** 1989 Sep–Oct;13(5):478–83

Endoluminal US: experiments with nonvascular uses in animals. Goldberg BB, et al. **Radiology** 1990 Apr; 175(1):39–43

Aspiration catheter for percutaneous thrombectomy: clinical results. Guenther RW, et al. **Radiology** 1990 Apr; 175(1):271–3

Percutaneous intravascular US as adjunct to catheter–based interventions: preliminary experience in patients with peripheral vascular disease. Isner JM, et al. **Radiology** 1990 Apr;175(1):61–70

[Peripheral venous catheterization: influence of catheter composition on the occurrence of thrombophlebitis] Jacquot C, et al. **Ann Fr Anesth Reanim** 1989;8(6):620–4 (Eng. Abstr.) **(Fre)**

[Fully implantable catheter systems. Long–term results—complications] Wenke K, et al. **Fortschr Med** 1990 May 10;108(14):276–9 (26 ref.) (Eng. Abstr.) **(Ger)**

[Complications of intravenous therapy with peripheral indwelling catheter] Knitsch W, et al. **Geburtshilfe Frauenheilkd** 1990 Jan;50(1):40–2 (Eng. Abstr.) **(Ger)**

[Pericardial tamponade as a complication of the use of peripheral percutaneous silastic catheters] Scharf J, et al. **Klin Padiatr** 1990 Jan–Feb;202(1):57–9 (Eng. Abstr.) **(Ger)**

[Experiences with the use of an intravascular 6 French endosonography catheter in vivo] Ludwig M, et al. **Klin Wochenschr** 1990 Jun 5;68(11):570–5 (Eng. Abstr.) **(Ger)**

[The value of the transbrachial approach for arterial visualization using a 4–F catheter] Lederer W, et al. **ROFO** 1989 Dec;151(6):674–7 (Eng. Abstr.) **(Ger)**

[Rotational angioplasty—recanalization of chronic arterial occlusion using a slowly rotating catheter. Clinical results with 100 patients] Vallbracht C, et al. **ROFO** 1989 Nov; 151(5):574–8 (Eng. Abstr.) **(Ger)**

[Methodologic procedure in the removal of a knotted intravascular pulmonary artery catheter] Kaltenborn HA, et al. **Rontgenblatter** 1990 Jan;43(1):27–9 (Eng. Abstr.) **(Ger)**

[Electron microscopy characterization of percutaneous biopsy of vascular plaque] Bauriedel G, et al. **Vasa Suppl** 1989;27:220–3 **(Ger)**

[Initial experiences with the Kensey catheter in acute and chronic femoro–popliteal arterial occlusion] Do D, et al. **Vasa Suppl** 1989;27:216, 218–9 **(Ger)**

[New mechanical catheter methods and after–care following angioplasty] Zeitler E. **Vasa Suppl** 1989;27:284–8 **(Ger)**

[Superselective arterial catheterization using a ball tip supple catheter] Matsushita M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jun 25; 49(6):728–34 (Eng. Abstr.) **(Jpn)**

[Transaxillary angiography of the abdominal blood vessels. Usefulness of an ultra–long sheath] Kubota G, et al. **Rinsho Hoshasen** 1989 Sep;34(9):1067–9 **(Jpn)**

[A device for endolymphatic administration of drugs] Ageev VA, et al. **Klin Khir** 1990;(1):73–4 **(Rus)**

[A device for inserting a catheter into the trachea and bronchi for conducting endobronchial therapy] Provotorov VM, et al. **Med Tekh** 1990 Mar–Apr;(2):34–6 (Eng. Abstr.) **(Rus)**

METHODS

Doppler flow monitoring of the dorsal artery of the foot facilitates puncture of the femoral artery in children. Becker CJ, et al. **AJR Am J Roentgenol** 1990 Jul; 155(1):131–2

Percutaneous transhepatic placement of a Hickman catheter [letter] Crummy AB, et al. **AJR Am J Roentgenol** 1989 Dec;153(6):1317–8

Nonsurgical intervention in the resolution of acquired neonatal bronchial stenosis. Lenoir P, et al. **Am J Perinatol** 1990 Jul;7(3):290–2

Effect of fluids on life span of peripheral arterial lines. Rais–Bahrami K, et al. **Am J Perinatol** 1990 Apr;7(2):122–4

Cannulation of the posterior tibial artery [letter] Rawle P. **Anaesthesia** 1990 Jul;45(7):589–90

Percutaneous pulmonary artery catheterization in pediatric cardiovascular anesthesia: insertion techniques and use. Introna RP, et al. **Anesth Analg** 1990 May;70(5):562–6

Blind selective bronchial catheterization [letter] [published erratum appears in Anesthesiology 1990 Aug;73(2):372] [comment] Kubota Y, et al. **Anesthesiology** 1990 May; 72(5):955–6 Comment on: Anesthesiology 1989 Nov;71(5):679–85.

Infant ECMO cannulation technique allowing preservation of carotid and jugular vessels. Karl TR, et al. **Ann Thorac Surg** 1990 Sep;50(3):488–9

Cannulas and junior doctors [letter; comment] Weller R. **BMJ** 1989 Dec 16;299(6714):1530 Comment on: BMJ 1989 Nov 18;299(6710):1279.

How to insert a peripheral venous cannula. Datta S, et al. **Br J Hosp Med** 1990 Jan;43(1):67–9

Percutaneous femoral artery puncture: practice and anatomy. Grier D, et al. **Br J Radiol** 1990 Aug;63(752):602–4

Continuous intra–arterial infusion therapy: an alternative approach to the femoral artery. Nagata Y, et al. **Br J Surg** 1990 May;77(5):584–5

Avoiding unintentional arterial cannulation [letter] Silverman SM, et al. **Can J Anaesth** 1989 Nov;36(6):734

"Retroantegrade" catheterization of the branches of the femoral artery: technical note. Giavroglou CE. **Cardiovasc Intervent Radiol** 1989 Nov–1990 Dec; 12(6):337–9

Percutaneous catheterization of the axillary artery in the pediatric patient. Cantwell GP, et al. **Crit Care Med** 1990 Aug;18(8):880–1

Use of Doppler ultrasound in performing percutaneous cannulation of the radial artery. Nagabhushan S, et al. **Crit Care Med** 1976 Nov–Dec;4(6):327

Simple method of umbilical artery catheterization [letter] Lauterbach R. **Eur J Pediatr** 1989 Nov;149(2):146

In vitro evaluation of left ventricular assistance by cannulation of both femoral arteries. De Paulis R, et al. **Int J Artif Organs** 1990 Apr;13(4):237–46

Preliminary results of percutaneous transluminal atherectomy. Wilms G, et al. **J Belge Radiol** 1990 Mar; 73(2):107–11

Chronic vascular catheters in growing piglets. Palmisano BW, et al. **J Dev Physiol** 1989 Dec;12(6):363–7

Radiological seminar CCXLV: Use of the Simpson atherectomy catheter in a lesion resistant to percutaneous transluminal angioplasty. Parker BC, et al. **J Miss State Med Assoc** 1990 Mar;31(3):71–4

Topical nitroglycerin as an aid to insertion of peripheral venous catheters in neonates [letter; comment] Guran P, et al. **J Pediatr** 1989 Dec;115(6):1025 Comment on: J Pediatr 1989 Mar;114(3):474–6.

Ultrasound–guided catheterization of the subclavian vein. Yonei A, et al. **JCU** 1988 Sep;16(7):499–501

Microvascular access to the uveal tract in the rabbit eye for ocular pharmacologic studies. Chiou FY, et al. **Ophthalmic Res** 1989;21(6):406–13

Peripheral vascular occlusions: mechanical recanalization with a metal laser probe after guide wire dissection. Belli AM, et al. **Radiology** 1990 Aug;176(2):539–41

Method to control spraying of high–velocity infected blood droplets during arterial catheterization. Cope C, et al. **Radiology** 1990 Mar;174(3 Pt 2):1055

Intraoperative intra–arterial urokinase infusion as an adjunct to Fogarty catheter embolectomy in acute arterial occlusion. Garcia R, et al. **Surg Gynecol Obstet** 1990 Sep; 171(3):201–5

[Selective catheter angiography using a translumbar technic] Rinast E, et al. **ROFO** 1990 May;152(5):556–8 (Eng. Abstr.) **(Ger)**

[New technique of intra–arterial catheterization via the branch of left axillary artery for continuous infusion chemotherapy] Fujii N, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 May 25; 49(5):684–7 (Eng. Abstr.) **(Jpn)**

[Computerized tomography in the evaluation of the outcome of of the treatment of lung abscess by long–term nasobronchial catheterization] Kabanov AN, et al. **Sov Med** 1989;(11):63–5 **(Rus)**

[Selection of a vascular approach in therapeutic plasmapheresis] Kliachkin ML, et al. **Sov Med** 1990;(3):83–6 **(Rus)**

[Topical nitroglycerin to facilitate peripheral venous cannulation (letter)] Cano Darder JM, et al. **Rev Esp Anestesiol Reanim** 1990 Jan–Feb;37(1):44–5 **(Spa)**

STANDARDS

Intravenous cannulae colour coding. A perennial source of confusion. Tordoff SG, et al. **Anaesthesia** 1990 May; 45(5):399–400

UTILIZATION

Arterial access in the pediatric emergency department. Saladino R, et al. **Ann Emerg Med** 1990 Apr;19(4):382–5

Survey of umbilical artery catheter practices [letter] Gilhooly J, et al. **Crit Care Med** 1990 Feb;18(2):247

VETERINARY

Aortic catheterization in cattle via the costoabdominal artery and validation for progesterone and estradiol–17 beta sample collection. Haibel GK, et al. **Am J Vet Res** 1989 Nov;50(11):1923–5

Plasma concentrations of arginine vasotocin and mesotocin following pentobarbital anaesthesia and carotid cannulation in domestic fowl. Bottje WG, et al. **Br Poult Sci** 1990 Mar; 31(1):189–95

The coccygeal artery as a route for the administration of drugs into the reproductive tract of cattle. Kotwica J, et al. **Vet Rec** 1990 Jul 14;127(2):38–40

[A practical vein catheter for small ruminants (short report)] Ganter M, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Jan;97(1):44–5 **(Ger)**

CATHETERIZATION, PERIPHERAL ARTERIAL see **CATHETERIZATION, PERIPHERAL**

CATHETERIZATION, PERIPHERAL VENOUS see **CATHETERIZATION, PERIPHERAL**

CATHETERIZATION, SWAN–GANZ

see related
PULMONARY WEDGE PRESSURE

Use of hepatic vein catheterization in the evaluation of patients with anasarca. Insel JM, et al. **Am J Med Sci** 1990 Apr;299(4):245–9

Use of pulmonary artery catheterization in parturients with Eisenmenger's syndrome [letter] Schwalbe SS, et al. **Anesth Analg** 1990 Oct;71(4):442–3

Pulmonary artery catheterization [letter; comment] Raybin DM. **Chest** 1989 Oct;96(4):957 Comment on: Chest 1989 Mar;95(3):489–90.

Pulmonary angiography via an indwelling four–channel Swan–Ganz catheter. Alsbrook EH, et al. **Crit Care Med** 1976 Nov–Dec;4(6):320–2

The use of a Swan–Ganz catheter and streptokinase in the management of massive hemoptysis [see comments] Brandstetter RD. **N Y State J Med** 1990 Jan;90(1):33–5 Comment in: N Y State J Med 1990 May;90(5):270–1.

The use of a Swan–Ganz catheter and streptokinase in the management of massive hemoptysis [letter; comment] Nakao MA. **N Y State J Med** 1990 May;90(5):270–1 Comment on: N Y State J Med 1990 Jan;90(1):33–5.

[Pulmonary artery catheter: essential technology or iatrogenic epidemic?] Putterman C. **Harefuah** 1990 Feb 15; 118(4):220–2 (36 ref.) **(Heb)**

[Septic shock in a case of purulent pericarditis. Usefulness of hemodynamic study with Swan–Ganz catheterization] Maione M, et al. **Minerva Anestesiol** 1989 Jul–Aug;

55(7–8):329–30 (Eng. Abstr.) (Ita)
[Hemodynamic study at the bedside of patients with acute myocardial infarction over 60 years of age] Pierri H, et al. **Arq Bras Cardiol** 1989 Nov;53(5):267–70 (Eng. Abstr.) (Por)
[Bedside cardiac catheterization. Advantages and disadvantages] Vitola D, et al. **Arq Bras Cardiol** 1989 Jun; 52(6):315–8 (Eng. Abstr.) (Por)
[Role of hemodynamic studies in evaluating left ventricular insufficiency in acute myocardial infarct] Soares–Costa JT. **Rev Port Cardiol** 1989 May;8(5):393–9 (30 ref.) (Eng. Abstr.) (Por)

ADVERSE EFFECTS

Right ventricular infarction as a risk factor for ventricular fibrillation during pulmonary artery catheterization using Swan–Ganz catheters. López–Sendón J, et al. **Am Heart J** 1990 Jan;119(1):207–9
Swan–Ganz catheter–induced rupture of the pulmonary artery: successful early management by transcatheter embolization. Jondeau G, et al. **Cathet Cardiovasc Diagn** 1990 Mar;19(3):202–4
Complications of flow–directed balloon–tipped catheters. Smart FW, et al. **Chest** 1990 Jan;97(1):227–8
Risk of right bundle–branch block and complete heart block during pulmonary artery catheterization [letter; comment] Patil AR. **Crit Care Med** 1990 Jan;18(1):122–3 Comment on: Crit Care Med 1989 Jan;17(1):1–3.
Severe maternal morbidity and fetal mortality caused by a diagnostic Swan–Ganz procedure: a case report. Crane–Elders AB, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Oct;37(1):95–8
Heart block after Swan–Ganz insertion. Weissman MS, et al. **Hosp Pract [Off]** 1989 Oct 15;24(10):36
[Immunoallergic thrombopenia caused by heparin coating of a catheter (letter)] Pelouze GA, et al. **Presse Med** 1989 Sep 30;18(30):1481 (Fre)
[Complications and practical problems in the measurements with the use of Swan–Ganz catheter] Nishikawa T, et al. **Kokyu To Junkan** 1989 Aug;37(8):835–43 (171 ref.) (Jpn)

INSTRUMENTATION

Pulmonary artery catheter failure [letter] Suderman V, et al. **Can J Anaesth** 1990 Apr;37(3):388–9
Evaluation of an inaccurate pulmonary artery catheter thermistor. Gotchall JI, et al. **Chest** 1989 Oct;96(4):941–3
[Comparative evaluation of 2 fiber optic catheters for the continuous measurement of Svo2] Rouby JJ, et al. **Ann Fr Anesth Reanim** 1989;8(6):672–6 (Eng. Abstr.) (Fre)

METHODS

Pulmonary artery catheterization in the anesthetized patient [letter; comment] Baraka A, et al. **Anesthesiology** 1990 Feb; 72(2):390 Comment on: Anesthesiology 1989 Apr;70(4):582–4.
How to insert a pulmonary arterial flotation catheter. Pierce T, et al. **Br J Hosp Med** 1989 Dec;42(6):484–7
Balloon floatation is more important than flow–direction in positioning "flow–directed" PA catheters. Parlow JL, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S86
Application of two–dimensional echocardiography in location of balloon of the Swan–Ganz catheter. Wang XF, et al. **Chin Med J [Engl]** 1990 Feb;103(2):117–24

CATHETERIZATION, URETERAL see **URINARY CATHETERIZATION**

CATHETERIZATION, URETHRAL see **URINARY CATHETERIZATION**

CATHETERIZATION, URINARY see **URINARY CATHETERIZATION**

CATHETERS, INDWELLING

see related
INFUSION PUMPS, IMPLANTABLE

High pressure percutaneous transtracheal ventilation: the use of large gauge intravenous–type catheters in the totally obstructed airway. Stothert JC Jr, et al. **Am J Emerg Med** 1990 May;8(3):184–9
Use of a silicone dual–lumen catheter with a Dacron cuff as a long–term vascular access for hemodialysis patients. Moss AH, et al. **Am J Kidney Dis** 1990 Sep;16(3):211–5
Kinetics of Staphylococcus epidermidis clearance from the peritoneal catheter site of renal failure mice following intracatheter inoculation. Gallimore B, et al. **Am J Nephrol** 1990;10(1):77–86
The fate of 100 prolonged venous access devices. Hayward SR, et al. **Am Surg** 1990 Sep;56(9):515–9
Long–term indwelling catheter for intermittent axillary plexus blocks with bupivacaine [letter; comment] Thomson S. **Anaesth Intensive Care** 1990 May;18(2):276–7 Comment on: Anaesth Intensive Care 1989 Aug;17(3):370–2.
Securing epidural catheters: a further modification [letter] Harrington BE, et al. **Anesth Analg** 1990 Oct;71(4):443–4
Increased fluid flow through the streamline intravenous catheter. McKiveen RE, et al. **Anesth Analg** 1990 Mar; 70(3):328–30
Vanishing calibration marks on a spinal catheter [letter] Schmidt SI, et al. **Anesth Analg** 1990 Apr;70(4):462–3
Air: an effective indicator of intravenously located epidural catheters. Leighton BL, et al. **Anesthesiology** 1989 Dec; 71(6):848–51
Attachment of staphylococci to silicone catheters in vitro. Espersen F, et al. **APMIS** 1990 May;98(5):471–8
Single–lumen vs double–lumen catheters for total parenteral nutrition. A randomized, prospective trial. Johnson BH, et al. **Arch Surg** 1990 Aug;125(8):990–2
Venovenous extracorporeal life support in neonates using a double lumen catheter. Anderson HL 3d, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):650–3
An original inflow cannula for paracorporeal assist devices. Deleuze P, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):442–4
Kinetics and quantitation of In–111 labeled platelet deposition on control and heparin–bonded polyurethane angio catheters in a dog model. Dewanjee MK, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):365–8
External catheter immobilization improves wound healing in micropigs. Gokoo CF, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):412–4
Use of the Hickman catheter as permanent vascular access for hemodialysis. Kinnaert P, et al. **ASAIO Trans** 1990 Apr–Jun;36(2):104–6
A new method of assessing left ventricular function under assisted circulation using a conductance catheter. Matsuwaka R, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):449–51
Laboratory evaluation of a double lumen catheter for venovenous neonatal ECMO. Otsu T, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):647–50
Left ventricular assist system with a simplified cannulation technique. Sasaki E, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):609–11
Resistance of conformable indwelling urinary catheters to encrustation. Cox AJ, et al. **Biomater Artif Cells Artif Organs** 1989;17(4):429–35
Early experience with an implantable intratracheal oxygen catheter. Jackson M, et al. **BMJ** 1990 Apr 7; 300(6729):909–10
Comparison of Teflon cannulas and metal needles for subcutaneous infusion in terminal care: a pilot study. Youssef MS, et al. **BMJ** 1990 Mar 31;300(6728):847
Effect of 1% mandelic acid as a bladder irrigation fluid in patients with in–dwelling catheters. Robertson MH, et al. **Br J Clin Pract** 1990 Apr;44(4):142–4 (11 ref.)
Simplified technique for insertion of ventricular access reservoirs [letter] Frank E. **Br J Neurosurg** 1989;3(3):415–7
Effects of saline dilution and i.v. catheter size on the infusion of packed red blood cells. Boisvenu G, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S85
Repeated dearterialization of hepatic tumors with an implantable occluder. Persson BG, et al. **Cancer** 1990 Sep 15;66(6):1139–46
Basket removal of intraatrial catheter after liver transplantation: technical note. Singer J, et al. **Cardiovasc Intervent Radiol** 1989 Jul–Aug;12(4):230–1
Implanted drug delivery system. Gordon JA. **Cent Afr J Med** 1989 Nov;35(11):540–1
Symptomatic loculated malignant pleural effusion treatment with indwelling Tenckhoff catheter [letter] Hussain SA, et al. **Chest** 1990 Mar;97(3):766–7
Peripheral teflon catheters. Potential source for bacterial contamination of orthopedic implants? Wilkins J, et al. **Clin Orthop** 1990 May;(254):251–4
Technical problem: impacted retained distal common duct stone. Malone DE, et al. **Clin Radiol** 1990 Feb;41(2):130–3
Sensitivity and specificity of blood cultures obtained through intravascular catheters. Wormser GP, et al. **Crit Care Med** 1990 Feb;18(2):152–6 (20 ref.)
Surgery for vascular access. Marx AB, et al. **Curr Probl Surg** 1990 Jan;27(1):1–48 (150 ref.)
Intra–arterial blood pressure monitoring in the evaluation of the hypertensive athlete. Palatini P, et al. **Eur Heart J** 1990 Apr;11(4):348–54
A newly designed venous cannula for use during total cardiac bypass in the closed chest by femoro–femoral perfusion. Scheld HH, et al. **Eur J Cardiothorac Surg** 1990;4(2):114
Microbial contamination of arterial infusions used for hemodynamic monitoring: a randomized trial of contamination with sampling through conventional stopcocks versus a novel closed system. Crow S, et al. **Infect Control Hosp Epidemiol** 1989 Dec;10(12):557–61
The use of dual lumen jugular venous catheters as definitive long term access for haemodialysis. Blake PG, et al. **Int J Artif Organs** 1990 Jan;13(1):26–31
Peritoneal catheters: a comparative study of column disc and Tenckhoff catheters. Shah GM, et al. **Int J Artif Organs** 1990 May;13(5):267–72
New concepts in the prevention of polymer–associated foreign body infections. Jansen B. **Int J Med Microbiol** 1990 Apr;272(4):401–10 (32 ref.)
Female urinary incontinence treated by transvaginal urethral closure and suprapubic catheter. Nielsen KT, et al. **Int Urol Nephrol** 1989;21(6):603–8
Porcine model for the development of interventional techniques in the gallbladder. Sullivan KL, et al. **Invest Radiol** 1989 Oct;24(10):754–7
Study of the effects of education on patients' knowledge and acceptance of their indwelling urethral catheters. Roe BH. **J Adv Nurs** 1990 Feb;15(2):223–31
Use of central venous catheters for prolonged venous access in cancer chemotherapy. Rajoor BG, et al. **J Assoc Physicians India** 1990 May;38(5):340–2
Haemodialysis using percutaneous internal jugular vein catheter as a haemoaccess [letter] Talwalkar NC, et al. **J Assoc Physicians India** 1989 Jul;37(7):480–1
Effect of slime production on the antibiotic susceptibility of isolates from prosthetic infections. Selan L, et al. **J Chemother** 1989 Dec;1(6):369–73
In vitro bacteriological study of a new hub model for intravascular catheters and infusion equipment. Segura M, et al. **J Clin Microbiol** 1989 Dec;27(12):2656–9
Effects of heparin and chlorbutol on bacterial colonisation of intravascular cannulae in an in vitro model. Elliott TS, et al. **J Hosp Infect** 1989 Oct;14(3):193–200
Evaluation of three methods for culturing long intravascular catheters. Kristinsson KG, et al. **J Hosp Infect** 1989 Oct; 14(3):183–91
The role of fibrinogen in staphylococcal adherence to catheters in vitro. Cheung AL, et al. **J Infect Dis** 1990 Jun;161(6):1177–86
Host factors selectively increase staphylococcal adherence on inserted catheters: a role for fibronectin and fibrinogen or fibrin. Vaudaux P, et al. **J Infect Dis** 1989 Nov; 160(5):865–75
Epidural morphine analgesia in Guillain Barré syndrome. Genis D, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug; 52(8):999–1001
Constant infusion of morphine for intractable cancer pain using an implanted pump. Hassenbusch SJ, et al. **J Neurosurg** 1990 Sep;73(3):405–9
Percutaneous axillary artery catheterization in critically ill infants and children. Greenwald BM, et al. **J Pediatr** 1990 Sep;117(3):442–4
Totally implantable vascular access devices in cystic fibrosis: a four–year experience with fifty–eight patients. Morris JB, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):82–5
Percutaneous inferior vena cava placement of tunneled silastic catheters for prolonged vascular access in infants. Robertson LJ, et al. **J Pediatr Surg** 1990 Jun;25(6):596–8
Neonatal radiology casebook. Broken umbilical artery catheter: a rare occurrence. Vohra K, et al. **J Perinatol** 1989 Sep;9(3):347–8
An improved method for bonding heparin to intravascular cannulae. Freeman AJ, et al. **J Pharmacol Methods** 1990 Mar;23(1):7–11
Motion marking in color Doppler ultrasound needle and catheter visualization. Kurohiji T, et al. **J Ultrasound Med** 1990 Apr;9(4):243–5
Pancreatic pseudoaneurysm. Monitoring the success of transcatheter embolization with duplex sonography. Lim GM, et al. **J Ultrasound Med** 1989 Nov;8(11):643–6
Reasons for replacement of long–term urethral catheters: implications for randomized trials. Muncie HL Jr, et al. **J Urol** 1990 Mar;143(3):507–9
Bacterial and crystal adherence to the surfaces of indwelling urethral catheters. Ohkawa M, et al. **J Urol** 1990 Apr; 143(4):717–21
The decoy catheter. Schomer NS, et al. **J Urol** 1990 Jul; 144(1):102
Five years of experience in patients receiving home nutrition support with the implanted reservoir: a comparison with the external catheter. Howard L, et al. **JPEN J Parenter Enteral Nutr** 1989 Sep–Oct;13(5):478–83
Tumor metastasis to an infusaport site [letter] Zelnick R, et al. **N Y State J Med** 1990 Apr;90(4):216
Intraventricular or epidural injection of morphine for severe pain. Choi CR, et al. **Neurochirurgia (Stuttg)** 1989 Nov; 32(6):180–3
Current status of intracavitary chemotherapy. Markman M. **Oncology (Williston Park)** 1987 Mar;1(1):25–30 (36 ref.)
Long–term central venous access with a peripherally placed subcutaneous infusion port: initial results. Andrews JC, et al. **Radiology** 1990 Jul;176(1):45–7
Translumbar inferior vena cava catheters for long–term venous access. Lund GB, et al. **Radiology** 1990 Jan; 174(1):31–5
Subclavian catheters as temporary vascular access. Kong NC, et al. **Singapore Med J** 1989 Jun;30(3):261–2
Malfunction of Tenckhoff catheter due to a rare kink. Sung JY, et al. **Singapore Med J** 1989 Feb;30(1):107–8
Subcutaneous port or what is in a name? [letter] Ikard RW. **South Med J** 1990 Apr;83(4):487–8
Intracranial thrombolysis via a catheter embedded in the clot. Jungreis CA, et al. **Stroke** 1989 Nov;20(11):1578–80
Experience with the double lumen Silastic catheter for hemoaccess. Bour ES, et al. **Surg Gynecol Obstet** 1990 Jul; 171(1):33–9
A prospective evaluation of the Port–A–Cath implantable venous access system in chronically ill adults and children. Harvey WH, et al. **Surg Gynecol Obstet** 1989 Dec; 169(6):495–500 (14 ref.)
Direct transcaval placement of both a Greenfield filter and a Hickman catheter. Voeller GR, et al. **Surgery** 1990 Jan; 107(1):110–2
Repetitive intercostal nerve block via catheter for postoperative pain relief after thoracotomy. Kolvenbach H, et al. **Thorac Cardiovasc Surg** 1989 Oct;37(5):273–6
How to make your patient comfortable and tolerate an indwelling urethral catheter indefinitely. Martin LS. **Urol Clin North Am** 1990 Feb;17(1):23–4
Experimental investigations on dissolution of incrustations

on the surface of catheters. Hesse A, et al. **Urol Int** 1989; 44(6):364–9

An experimental technique for renal intrapelvic access. Ryan PC, et al. **Urol Res** 1990;18(2):159–63

Use of open-end Malecot catheter after percutaneous renal surgery. Lycklama à Nijeholt GA. **Urology** 1990 Aug; 36(2):166

[The central venous catheter in the treatment of patients with malignancies] van Klaveren RJ, et al. **Ned Tijdschr Geneeskd** 1989 Aug 19;133(33):1629–33 (28 ref.) (Eng. Abstr.) **(Dut)**

[Implantation technic and maintenance of a Hickman catheter for hemodialysis] De Pauw L, et al. **Acta Chir Belg** 1990 Jan-Feb;90(1):27–31 (Eng. Abstr.) **(Fre)**

[Implanted venous access system in oncology. Review of 296 cases] Guenier C, et al. **Ann Chir** 1990;44(5):388–91 (Eng. Abstr.) **(Fre)**

[Early postoperative enteral feeding using the jejunostomy catheter] Hotton J, et al. **Cah Anesthesiol** 1989 Sep; 37(5):365–9 **(Fre)**

[Endotracheal prosthesis. A new method of insertion. A case report (letter)] Seitz B, et al. **Rev Pneumol Clin** 1989; 45(3):137–8 **(Fre)**

[Photoplethysmography evaluation of collateral blood flow before puncture of the dorsalis pedis artery] Bund M, et al. **Anasth Intensivther Notfallmed** 1989 Oct;24(5):309–11 (Eng. Abstr.) **(Ger)**

[Fully implantable catheter systems for arterial extremity infusion] Krawzak HW, et al. **Chirurg** 1989 Jul;60(7):475–8 (Eng. Abstr.) **(Ger)**

[Venous long-term indwelling catheter and port systems in children. Progress in pediatric oncology] Haupt W, et al. **Fortschr Med** 1990 Jun 10;108(17):334–7 (Eng. Abstr.) **(Ger)**

[Fully implantable catheter systems. Long-term results—complications] Wenke K, et al. **Fortschr Med** 1990 May 10;108(14):276–9 (26 ref.) (Eng. Abstr.) **(Ger)**

[Clinical experiences with central venous multi-lumen catheters] Albert A, et al. **Infusionstherapie** 1990 Jun; 17(3):168–72 (Eng. Abstr.) **(Ger)**

[Parenteral nutrition from the viewpoint of the hospital health officer] Daschner F, et al. **Infusionstherapie** 1989 Oct; 16(5):241–4 (16 ref.) (Eng. Abstr.) **(Ger)**

[A totally implantable permanent central venous access, long-term experience with subcutaneous infusion chambers] Lorenz M, et al. **Langenbecks Arch Chir** 1988; 373(5):302–9 (Eng. Abstr.) **(Ger)**

[Local treatment of encrusted eustachian catheter with N-acetylcysteine] Kraft E, et al. **Laryngorhinootologie** 1990 May;69(5):289 **(Ger)**

[The effect of the Tuohy cannula on the positioning of an epidural catheter. A radiologic analysis of the location of 175 peridural catheters] Beck H. **Reg Anaesth** 1990 Mar; 13(2):42–5 (Eng. Abstr.) **(Ger)**

[Occlusion of an implanted peridural catheter by a plug of epidermis] Horrichs-Haermeyer G, et al. **Reg Anaesth** 1990 Mar;13(2):39–41 (Eng. Abstr.) **(Ger)**

[Transtracheal oxygen therapy in obstructive sleep apnea syndrome] Breitenbücher A, et al. **Schweiz Med Wochenschr** 1989 Nov 18;119(46):1638–41 (Eng. Abstr.) **(Ger)**

[Experiences with long-term transtracheal oxygen therapy] Russi EW, et al. **Schweiz Rundsch Med Prax** 1990 Jul 3; 79(27–28):850–3 (Eng. Abstr.) **(Ger)**

[Percutaneous endoscopy-controlled gastrostomy] Keymling M. **Z Gastroenterol** 1989 Jun;27 Suppl 2:65–8 (28 ref.) **(Ger)**

[Transnasal catheter technics] Rabast U. **Z Gastroenterol** 1989 Jun;27 Suppl 2:61–4 (25 ref.) **(Ger)**

[Percutaneous puncture and drainage of pancreatic pseudocysts] Schwerk WB, et al. **Z Gastroenterol** 1989 Aug; 27(8):432–7 (Eng. Abstr.) **(Ger)**

[Fine-needle catheter jejunostomy] Vestweber KH, et al. **Z Gastroenterol** 1989 Jun;27 Suppl 2:69–72 **(Ger)**

[Optimizing technical administration forms] Vestweber KH. **Z Gastroenterol** 1989 Jun;27 Suppl 2:82–3 **(Ger)**

[A case report of implantation of the Greenfield vena cava filter for recurrent pulmonary embolism] Tamaki S, et al. **Kyobu Geka** 1990 Mar;43(3):193–6 (Eng. Abstr.) **(Jpn)**

[Double-J ureteral catheter: its application in patients with complex renal lithiasis as a support measure during extracorporeal lithotripsy. Analysis of 441 consecutive cases] Lancina Martín JA, et al. **Arch Esp Urol** 1989 Jul-Aug;42(6):557–63 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Spondylitis without epidural abscess formation following short-term use of an epidural catheter. Lynch J, et al. **Acta Anaesthesiol Scand** 1990 Feb;34(2):167–70

Colonization and bacteremia related to duration of triple-lumen intravascular catheter placement. Ullman RF, et al. **Am J Infect Control** 1990 Jun;18(3):201–7

Continuous cycling peritoneal dialysis is associated with lower rates of catheter infections than continuous ambulatory peritoneal dialysis. Holley JL, et al. **Am J Kidney Dis** 1990 Aug;16(2):133–6

Malpositioned peritoneal dialysis catheters: a critical reappraisal of correction by stiff-wire manipulation. Moss JS, et al. **Am J Kidney Dis** 1990 Apr;15(4):305–8

Staphylococcus aureus bacteremia in patients with Hickman catheters. Dugdale DC, et al. **Am J Med** 1990 Aug; 89(2):137–41

Infection of hemodialysis catheters: incidence and mechanisms. Almirall J, et al. **Am J Nephrol** 1989; 9(6):454–9

Bacterial meningitis in parturients after epidural anesthesia. Ready LB, et al. **Anesthesiology** 1989 Dec;71(6):988–90

Confirming position of venous port [letter] Sleijfer DT, et al. **Ann Intern Med** 1990 Jul 1;113(1):86

Current issues in central venous catheter infection. Toltzis P, et al. **Annu Rev Med** 1990;41:169–76 (41 ref.)

Thrombocytopenia associated with heparin-coated catheters in patients with heparin-associated antiplatelet antibodies. Laster JL, et al. **Arch Intern Med** 1989 Oct;149(10):2285–7

Complications associated with Ommaya reservoirs in patients with cancer. The Princess Margaret Hospital experience and a review of the literature. Lishner M, et al. **Arch Intern Med** 1990 Jan;150(1):173–6 (16 ref.)

Antidotes to vesicant chemotherapy extravasations. Dorr RT. **Blood Rev** 1990 Mar;4(1):41–60 (181 ref.)

Silver alloy coated catheters reduce catheter-associated bacteriuria. Liedberg H, et al. **Br J Urol** 1990 Apr; 65(4):379–81

Complications from long-term indwelling central venous catheters in hematologic patients with special reference to infection. Kappers-Klunne MC, et al. **Cancer** 1989 Oct 15; 64(8):1747–52

Foreign body retrieval using a simple snare device. Bogart DB, et al. **Cathet Cardiovasc Diagn** 1990 Apr;19(4):248–50

Infectious complications of indwelling long-term central venous catheters. Clarke DE, et al. **Chest** 1990 Apr; 97(4):966–72 (48 ref.)

Precautions necessary with central venous catheters. **Clin Pediatr (Phila)** 1990 Apr;29(4):222

Fibrin sheath formation surrounding a pulmonary artery catheter sheath: eversion of the sleeve during catheter removal [letter] Benya RV. **Crit Care Med** 1990 Mar; 18(3):345

Intravascular plastic catheters potentiate tumor necrosis factor release and cardiac dysfunction secondary to infection. Davis PK, et al. **Curr Surg** 1989 Nov-Dec; 46(6):486–9

Prophylactic ureteric catheters in colon surgery—how safe are they? Report of three cases. Sheikh FA, et al. **Dis Colon Rectum** 1990 Jun;33(6):508–10

Tumour metastasis from multiple myeloma in Hickman catheter tract. Davidson NG. **Eur J Surg Oncol** 1990 Apr; 16(2):170–1

Prolonged venous access in cancer patients. Guenier C, et al. **Eur J Surg Oncol** 1989 Dec;15(6):553–5

Refinements in the coating of urethral catheters reduces the incidence of catheter-associated bacteriuria. An experimental and clinical study. Liedberg H, et al. **Eur Urol** 1990;17(3):236–40

Erosion of portal vein catheter into the biliary system. Schuster JA, et al. **Gastrointest Radiol** 1990 Winter; 15(1):47–8

Bard biocath hydrophilic-coated Foley catheters. **Health Devices** 1988 Feb;17(2):69

Intravascular catheter colonization and related bloodstream infection in critically ill neonates. Cronin WA, et al. **Infect Control Hosp Epidemiol** 1990 Jun;11(6):301–8

Ventriculo-atrial shunt causing tricuspid endocarditis: its percutaneous removal. Bellamy CM, et al. **Int J Cardiol** 1990 Aug;28(2):260–2

Radiation dose perturbation in the presence of permanent vascular-access injection ports. Bagne FR, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb;18(2):463–7

Indwelling central venous catheter infections in patients with acquired immune deficiency syndrome. Skoutelis AT, et al. **J Acquir Immune Defic Syndr** 1990;3(4):335–42

Viggo phlebitis [letter] Saxena SK. **J Assoc Physicians India** 1989 May;37(5):347–8

The effect of right atrial catheters on infectious complications of chemotherapy in children. van Hoff J, et al. **J Clin Oncol** 1990 Jul;8(7):1255–62

Primary cutaneous infections with candida species associated with percutaneous intravenous catheters in patients with cancer. Spiers AS. **J Fla Med Assoc** 1989 Apr;76(4):386–7

A comparison of placement techniques and complications of externalized catheters and implantable port use in children with cancer. Mirro J Jr, et al. **J Pediatr Surg** 1990 Jan;25(1):120–4

Early and late complications of totally implantable venous access devices. Grannan KJ, et al. **J Surg Oncol** 1990 May; 44(1):52–4

An evaluation of triple-lumen catheter infections using a guidewire exchange technique. Norwood S, et al. **J Trauma** 1990 Jun;30(6):706–12

Early spontaneous retraction of indwelling catheters of totally implantable venous access devices [letter] Gimmon Z, et al. **JPEN J Parenter Enteral Nutr** 1990 Jan-Feb; 14(1):107–8

Culture of intravenous catheter tips [letter] Taylor RJ, et al. **Med Lab Sci** 1989 Jul;46(3):280

Superior vena cava syndrome associated with a Hickman catheter. Kerr HD. **N Y State J Med** 1990 Apr;90(4):208–10

Superior vena caval obstruction: a rare complication of Quinton double-lumen haemodialysis catheters. Madden B, et al. **Nephrol Dial Transplant** 1989;4(6):586–7

Long-term venous access with a Hickman catheter: complications and patient satisfaction. Claessen KA, et al. **Neth J Surg** 1990 Apr;42(2):47–9

Intrahepatic encystment of umbilical vein catheter infusate. Levkoff AH, et al. **Pediatr Radiol** 1990;20(5):360–1

Superior vena cava syndrome. Segall M, et al. **R I Med J** 1990 Mar;73(3):109–12

Long term venous access using a totally implantable drug delivery system in patients with cystic fibrosis and bronchiectasis. Ball AB, et al. **Respir Med** 1989 Sep; 83(5):429–31

Hickman catheter sepsis caused by Yersinia enterocolitica [letter] Cornfield DB, et al. **South Med J** 1990 Jun; 83(6):724–5

Increased infection rate in double-lumen versus single-lumen Hickman catheters in cancer patients. Early TF, et al. **South Med J** 1990 Jan;83(1):34–6

Small-bowel obstruction caused by a long-term indwelling urinary catheter. Sullivan LP, et al. **Surgery** 1990 Feb; 107(2):228–30

Assessment of insertion techniques and complication rates of dual lumen central venous catheters in patients with hematological malignancies. Jansen RF, et al. **World J Surg** 1990 Jan-Feb;14(1):100–4; discussion 105–6

[Emergency vascular access in patients with renal failure. Apropos of 32 implantations of permcath] Chatelard P, et al. **J Chir (Paris)** 1990 Jan;127(1):13–6 (Eng. Abstr.) **(Fre)**

[Catheter break of an implantable central venous infusion system (letter)] Wilms H. **Dtsch Med Wochenschr** 1990 Feb 9;115(6):237 **(Ger)**

[Complications of intravenous therapy with peripheral indwelling catheter] Knitsch W, et al. **Geburtshilfe Frauenheilkd** 1990 Jan;50(1):40–2 (Eng. Abstr.) **(Ger)**

[Pericardial tamponade as a complication of the use of peripheral percutaneous silastic catheters] Scharf J, et al. **Klin Padiatr** 1990 Jan-Feb;202(1):57–9 (Eng. Abstr.) **(Ger)**

[Long-term experiences with central venous catheters in pediatric oncology] Hadjilaskari P, et al. **Monatsschr Kinderheilkd** 1990 Jan;138(1):26–30 (Eng. Abstr.) **(Ger)**

[Thrombosis due to venous catheters—evaluation using CT] Sandring KH, et al. **Radiol Diagn (Berl)** 1989;30(6):639–42 (Eng. Abstr.) **(Ger)**

[Complications of the postoperative use of lumbar epidural catheters in place for surgery] Rockemann MG, et al. **Reg Anaesth** 1990 Mar;13(2):36–8 (Eng. Abstr.) **(Ger)**

[Hematogenous osteomyelitis of the right clavicle and right femur head following subclavian vein puncture and insertion of an indwelling catheter] Albrecht G. **Unfallchirurgie** 1989 Dec;15(6):306–8 (Eng. Abstr.) **(Ger)**

[Infectious complications caused by a hemodialysis catheter. Retrospective study of septicemia related to a dual lumen polyurethane hemodialysis catheter in the subclavian vein] Hole T. **Tidsskr Nor Laegeforen** 1989 Nov 20; 109(32):3332–3 (Eng. Abstr.) **(Nor)**

[Fracture and intracoronary retention of a guidewire catheter in percutaneous transluminal angioplasty. A case report] Dias AR, et al. **Arq Bras Cardiol** 1989 Sep;53(3):165–6 (Eng. Abstr.) **(Por)**

NURSING

Advances in venous access devices and nursing management strategies. Wickham RS. **Nurs Clin North Am** 1990 Jun; 25(2):345–64 (92 ref.)

[Ambulatory care of patients with indwelling catheters] Spichty ML. **Ther Umsch** 1989 Oct;46(10):722–6 (Eng. Abstr.) **(Ger)**

STANDARDS

Efficacy of large-bore intravenous fluid administration sets designed for rapid volume resuscitation. Landow L, et al. **Crit Care Med** 1990 May;18(5):540–3

STATISTICS & NUMERICAL DATA

[Use of indwelling catheters in long term care is still low] Frederici H, et al. **Lakartidningen** 1990 Jul 25; 87(30–31):2424–5 **(Swe)**

UTILIZATION

Cannulas and junior doctors [letter] [see comments] Zalin AM. **BMJ** 1989 Nov 18;299(6710):1279 Comment in: **BMJ** 1989 Dec 16;299(6714):1530.

VETERINARY

A method for long-term catheterization of various capacitance vessels in dogs. Béliveau L, et al. **Lab Anim Sci** 1990 Jan;40(1):97–100

A reusable adapter for collection of cerebrospinal fluid in chronically cannulated goats. Forte VA Jr, et al. **Lab Anim Sci** 1989 Sep;39(5):433–6

A minimally invasive surgical technique for implantation of a chronically indwelling thermodilution catheter in swine pulmonary artery. Holmes MA, et al. **Lab Anim Sci** 1990 Jan;40(1):93–4

The use of subcutaneous ports in the woodchuck (Marmota monax). Woolf A, et al. **Lab Anim Sci** 1989 Nov;39(6):620–2

CATHEXIS see under **DISPLACEMENT (PSYCHOLOGY)**

CATHODE see **ELECTRODES**

CATHODE RAY TUBE DISPLAY see COMPUTER SYSTEMS

CATHODE RAYS see BETA RAYS

CATHOLICISM

Education, survival, and independence in elderly Catholic sisters, 1936–1988. Snowdon DA, et al. **Am J Epidemiol** 1989 Nov;130(5):999–1012

Must a Catholic hospital inform a rape victim of the availability of the "morning-after pill"? Brushwood DB. **Am J Hosp Pharm** 1990 Feb;47(2):395–6

Papal policy, poverty, and AIDS [letter] **BMJ** 1990 Aug 4;301(6746):291–2

Papal policy, poverty, and AIDS. Morley D. **BMJ** 1990 Jun 30;300(6741):1705; discussion 1706–7

The changing influence of religion on U.S. fertility: evidence from Rhode Island. Williams LB, et al. **Demography** 1990 Aug;27(3):475–81

Principles in regard to withholding or withdrawing artificially assisted nutrition/hydration. McHugh JT. **Issues Law Med** 1990 Summer;6(1):89–93

Donum Vitae: civil law and moral values. Byk C. **J Med Philos** 1989 Oct;14(5):561–73

Donum Vitae on homologous interventions: is IVF-ET a less acceptable gift than "GIFT"? Carlson JW. **J Med Philos** 1989 Oct;14(5):523–40

Speculations regarding the history of Donum Vitae. Harvey JC. **J Med Philos** 1989 Oct;14(5):481–91

The cult of the saints and the reimagination of the space and time of sickness in twentieth-century American Catholicism. Orsi RA. **Lit Med** 1989;8:63–77

Natural methods and birth control: a choice in harmony with the conjugal anthropology of the couple. Honings B. **Suppl Int J Gynecol Obstet** 1989;1:161–6

[Dynamics of the dialogue on bioethics in a Spain in transition] Abel F. **Bol Of Sanit Panam** 1990 May-Jun; 108(5–6):542–9 (5 ref.) (Eng. Abstr.) **(Spa)**

HISTORY

Was Hitler a Christian? [letter] Samuel G. **Br J Psychiatry** 1990 Jul;157:151

Necessary fictions: healing encounters with a North American saint. Preston JJ. **Lit Med** 1989;8:42–62

PSYCHOLOGY

Eye injuries found in Catholic pilgrims [news] Carlson MJ. **Ohio Med** 1990 Jan;86(1):13

Religious influence on menstrual attitudes and symptoms. Rothbaum BO, et al. **Women Health** 1990;16(1):63–78

CATION EXCHANGE RESINS see under ION EXCHANGE RESINS

CATIONS

Occluded cations in active transport. Glynn IM, et al. **Annu Rev Biochem** 1990;59:171–205 (218 ref.)

Role of cationic residues in cytolytic activity: modification of lysine residues in the cardiotoxin from Naja nigricollis venom and correlation between cytolytic and antiplatelet activity. Kini RM, et al. **Biochemistry** 1989 Nov 14; 28(23):9209–15

Effect of changes in cation concentration near bilayer lipid membrane on the rate of carrier-mediated cation fluxes and on the carrier apparent selectivity. Antonenko YN, et al. **Biochim Biophys Acta** 1990 Jul 24;1026(2):236–40

The cationically selective state of the mitochondrial outer membrane pore: a study with intact mitochondria and reconstituted mitochondrial porin. Benz R, et al. **Biochim Biophys Acta** 1990 Mar;1022(3):311–8

Cationization of protein antigens. V. Effect of the degree of cationization on patterns of immune responsiveness. Muckerheide A, et al. **Cell Immunol** 1990 Apr 15; 127(1):67–77

Cationic polyelectrolytes: potent opsonic agents which activate the respiratory burst in leukocytes. Ginsburg I. **Free Radic Res Commun** 1989;8(1):11–26 (70 ref.)

Conformations, cation binding, and transmembrane ion transfer properties of a cyclooctapeptide built by an alternation of D and L residues. Heitz F, et al. **Int J Pept Protein Res** 1989 Nov;34(5):387–93

Changes in conformation, stability and condensation of DNA by univalent and divalent cations in methanol-water mixtures. Votavová H, et al. **J Biomol Struct Dyn** 1986 Dec;4(3):477–89

The effect of cationic electrolytes on the electrostatic behavior of cellular surfaces with ionizable groups. Chang YI. **J Theor Biol** 1989 Aug 22;139(4):561–71

The glomerular basement membrane defect in Alport-type hereditary nephritis: absence of cationic antigenic components. van den Heuvel LP, et al. **Nephrol Dial Transplant** 1989;4(9):770–5

ADVERSE EFFECTS

Cations and anions in drinking water as putative contributory factors to endemic goitre in Plateau State, Nigeria. Das SC, et al. **Trop Geogr Med** 1989 Oct;41(4):346–52

ANALYSIS

Cations and active androgens in breast cyst fluid. Secreto G, et al. **Ann N Y Acad Sci** 1990;586:88–92

A combined method for simultaneous proof of peroxidase and cation proteins in leukocytes. Tsvetkova T, et al. **Folia Med (Plovdiv)** 1988;30(2):15–7

Determination of cations in tear fluid samples by non-suppressed ion chromatography with indirect UV detection. Buchberger W, et al. **J Chromatogr** 1989 Dec 1;482(2):407–11

Parturient hypocalcemia in jersey cows fed alfalfa haylage-based diets with different cation to anion ratios. Gaynor PJ, et al. **J Dairy Sci** 1989 Oct;72(10):2525–31

[Ion chromatographic analysis of cations and anions in mineral water] Schwedt G, et al. **Z Lebensm Unters Forsch** 1990 Mar;190(3):205–11 (Eng. Abstr.) **(Ger)**

BLOOD

Cooperative binding of primycin and gramicidin on erythrocyte membranes. A cation transport study. Suga'r IP, et al. **Membr Biochem** 1989;8(1):1–10

DIAGNOSTIC USE

Further studies on the cationic staining of retinal photoreceptors. Sulzer D, et al. **J Histochem Cytochem** 1990 May;38(5):743–5

METABOLISM

Mechanism of organic cation transport in rabbit renal basolateral membrane vesicles. Sokol PP, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):F1599–607

Interactions of mammalian cells with lipid dispersions containing novel metabolizable cationic amphiphiles. Leventis R, et al. **Biochim Biophys Acta** 1990 Mar 30; 1023(1):124–32

Deoxygenation-induced cation fluxes in sickle cells: II. Inhibition by stilbene disulfonates. Joiner CH. **Blood** 1990 Jul 1;76(1):212–20

Extracellular ATP4- permeabilizes thymocytes not only to cations but also to low-molecular-weight solutes. el-Moatassim C, et al. **Eur J Pharmacol** 1990 May 31; 181(1–2):111–8

Cation metabolism in malaria-infected red cells. Krishna S, et al. **Exp Parasitol** 1989 Nov;69(4):402–6 (27 ref.)

Permeation of both cations and anions through a single class of ATP-activated ion channels in developing chick skeletal muscle. Thomas SA, et al. **J Gen Physiol** 1990 Apr; 95(4):569–90

Characterization of a 25-pS nonselective cation channel in a cultured secretory epithelial cell line. Cook DI, et al. **J Membr Biol** 1990 Mar;114(1):37–52

Nonselective cation channel activated by patch excision from lobster olfactory receptor neurons. McClintock TS, et al. **J Membr Biol** 1990 Feb;113(2):115–22

Mechanism of Na+/proline symport in Escherichia coli: reappraisal of the effect of cation binding to the Na+/proline symport carrier. Yamato I, et al. **J Membr Biol** 1990 Mar;114(2):143–51

Contraluminal organic anion and cation transport in the proximal renal tubule: V. Interaction with sulfamoyl- and phenoxy diuretics, and with beta-lactam antibiotics. Ullrich KJ, et al. **Kidney Int** 1989 Jul;36(1):78–88

Roles of proteins in cation/membrane interactions of isolated rat cardiac sarcolemmal vesicles. Leonards KS. **Mol Cell Biochem** 1990 Jun 1;95(1):31–42

Organic cations substituted for sodium are toxic to cultured rat glioma cells. Mokrasch LC. **Mol Cell Biochem** 1990 Jan 18;92(1):85–9

Zonal distribution of the cation lucigenin in rat liver: influence of taurocholate. Braakman I, et al. **Mol Pharmacol** 1989 Oct;36(4):532–6

Vesicular uptake system for the cation lucigenin in the rat hepatocyte. Braakman I, et al. **Mol Pharmacol** 1989 Oct; 36(4):537–42

Serotonin augments the cationic current Ih in central neurons. Bobker DH, et al. **Neuron** 1989 Jun;2(6):1535–40

Effects of glucagon on Na+, Cl-, K+, Mg2+ and Ca2+ transports in cortical and medullary thick ascending limbs of mouse kidney. Di Stefano A, et al. **Pflugers Arch** 1989 Sep;414(6):640–6

Identification of a voltage- and calcium-dependent non-selective cation channel in cultured adult and fetal human nasal epithelial cells. Jorissen M, et al. **Pflugers Arch** 1990 Feb;415(5):617–23

Cation channels in the apical membrane of collecting duct principal cell epithelium in culture. Laskowski FH, et al. **Renal Physiol Biochem** 1990 Jan-Apr;13(1-2):70–81

Volume of fluid and concentration of cations and energy substrates in the uteri of mice during early pseudopregnancy. Wales RG, et al. **Reprod Fertil Dev** 1989; 1(2):171–8

PHARMACOKINETICS

Fourier-transform infrared studies on cation binding to native and modified purple membranes. Duñach M, et al. **Biochemistry** 1989 Oct 31;28(22):8940–5

Investigations in intracellular drug storage: localization of disobutamide in lysosomal and nonlysosomal vesicles. Hjelle JT, et al. **Toxicol Appl Pharmacol** 1989 Oct; 101(1):70–82

[The effect of diphylic compounds on the transport of metabolites and cations in eukaryotic cells] Gulevskii AK, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jul-Aug;(4):507–13 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Cationic polypeptides modulate in vitro association of low density lipoprotein with arterial proteoglycans, fibroblasts, and arterial tissue. Wiklund O, et al. **Arteriosclerosis** 1990 Sep-Oct;10(5):695–702

Al3 binding studies and metallic cation effects on bioprosthetic heart valve calcification in the rat subdermal model. Webb CL, et al. **ASAIO Trans** 1990 Apr-Jun; 36(2):56–9

Stimulation and inhibition of 1,3-bis(2-chloroethyl)-1-nitrosourea-induced strand breaks and interstrand cross-linking in Col E1 plasmid deoxyribonucleic acid by polyamines and inorganic cations. Srivenugopal KS, et al. **Biochem Pharmacol** 1990 Aug 1; 40(3):473–9

Microencapsulation of human diploid fibroblasts in cationic polyacrylates. Mallabone CL, et al. **Biomaterials** 1989 Aug; 10(6):380–6

Cationic factors affecting phospholipase activities from human lung. Yeats DA, et al. **Br J Pharmacol** 1990 Jul; 100(3):447–52

A comparison of the effects of divalent and trivalent cations on parathyroid hormone release, 3',5'-cyclic-adenosine monophosphate accumulation, and the levels of inositol phosphates in bovine parathyroid cells. Brown EM, et al. **Endocrinology** 1990 Sep;127(3):1064–71

Characterization of melatonin receptors in the rat suprachiasmatic nuclei: modulation of affinity with cations and guanine nucleotides. Laitinen JT, et al. **Endocrinology** 1990 Apr;126(4):2110–5

Beta-endorphin binding to naloxone-insensitive sites on a human mononuclear cell line (U937): effects of cations and guanosine triphosphate. Shahabi NA, et al. **Endocrinology** 1990 Jun;126(6):3006–15

Comparative study of the condensation of chicken erythrocyte and calf thymus chromatins by di- and multivalent cations [published erratum appears in J Biomol Struct Dyn 1988 Jun;5(6):1295–6] Marquet R, et al. **J Biomol Struct Dyn** 1988 Feb;5(4):839–57

Polyamine-DNA interactions. Condensation of chromatin and naked DNA. Smirnov IV, et al. **J Biomol Struct Dyn** 1988 Apr;5(5):1149–61

Ionophores for monovalent cations inhibit angiotensin-stimulated aldosteronogenesis. Hadjokas NE, et al. **J Cardiovasc Pharmacol** 1990 Feb;15(2):291–301

Effects of synthetic polycations on leucine incorporation, lactate dehydrogenase release, and morphology of human umbilical vein endothelial cells. Morgan DM, et al. **J Cell Sci** 1988 Oct;91 (Pt 2):231–8

Effect of aluminum and other multivalent cations on neurofilaments in vitro: an electron microscopic study. Troncoso JC, et al. **J Struct Biol** 1990 Mar;103(1):2–12

Synthetic polycations, polyethylenimines and polyallylamines release histamine from rat mast cells. Suzuki-Nishimura T, et al. **Jpn J Pharmacol** 1989 Oct;51(2):279–90

Membrane potential measurements of transitional cells from the crista ampullaris of the gerbil. Effects of barium, quinidine, quinine, tetraethylammonium, cesium, ammonium, thallium and ouabain. Wangemann P, et al. **Pflugers Arch** 1989 Sep;414(6):656–62

Alteration of extracellular cation concentrations and ratios in culture medium does not affect first cleavage division of hamster zygotes in vitro nor overcome the 'two-cell block'. Bavister BD, et al. **Reprod Fertil Dev** 1989; 1(3):231–6

URINE

[Changes in urinary concentrations in healthy subjects and in subjects with parasitic disease] Kadir MA, et al. **Tunis Med** 1990 Apr;68(4):287–90 (Eng. Abstr.) **(Fre)**

CATIONS, DIVALENT

Divalent metal ion mediated interaction of proteins with negatively charged membranes. A model study employing molecular mechanics. Cain JD, et al. **Int J Pept Protein Res** 1990 Feb;35(2):111–6

Effect of divalent cations on structure-function relationships of the antitumor protein alpha-sarcin. Martínez del Pozo A, et al. **Int J Pept Protein Res** 1989 Nov;34(5):416–22

Divalent cation regulation of endothelial-dependent relaxation in coronary blood vessels. Ku DD. **Microcirc Endothelium Lymphatics** 1989 Feb-Apr; 5(1–2):99–120

ANALYSIS

The effects of age and sex on seven elements of Sprague-Dawley rat organs. Uchino E, et al. **Lab Anim** 1990 Jul;24(3):253–64

CEREBROSPINAL FLUID

Seizures induced by fluoroscetic acid and fluorocitric acid may involve chelation of divalent cations in the spinal cord. Hornfeldt CS, et al. **Eur J Pharmacol** 1990 Apr 25; 179(3):307–13

METABOLISM

Ion channel modulation by divalent cations. Latorre R. **Acta Physiol Scand Suppl** 1989;582:13

Photochemical manipulation of divalent cation levels. Kaplan JH. **Annu Rev Physiol** 1990;52:897–914 (40 ref.)

Binding of divalent and trivalent cations with crotoxin and with its phospholipase and its non–catalytic subunits: effects on enzymatic activity and on the interaction of phospholipase component with phospholipids. Radvanyi F, et al. **Biochim Biophys Acta** 1989 Nov 28;1006(2):183–92

Uptake and intracellular sequestration of divalent cations in resting and methacholine–stimulated mouse lacrimal acinar cells. Dissociation by Sr2+ and Ba2+ of agonist–stimulated divalent cation entry from the refilling of the agonist–sensitive intracellular pool. Kwan CY, et al. **J Biol Chem** 1990 Jan 15;265(2):678–84

Divalent cation activation and inhibition of single calcium release channels from sheep cardiac sarcoplasmic reticulum. Ashley RH, et al. **J Gen Physiol** 1990 May; 95(5):981–1005

[A study of the molecular mechanism of DNA interaction with divalent metal ions] Kas'ianenko NA, et al. **Mol Biol (Mosk)** 1989 Jul–Aug;23(4):975–82 (Eng. Abstr.) **(Rus)**

[Metal ions in the insulin–receptor interaction in human erythrocytes] Villar MT, et al. **Rev Esp Fisiol** 1989;45 Suppl:87–92 (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

General features in the stoichiometry and stability of ionophore A23187–cation complexes in homogeneous solution. Chapman CJ, et al. **Arch Biochem Biophys** 1990 Aug 15;281(1):44–57

The liver cell plasma membrane Ca2+ inflow systems exhibit a broad specificity for divalent metal ions. Crofts JN, et al. **Biochem J** 1990 Aug 1;269(3):579–87

PHARMACOLOGY

Effects of reduced cation supplement recommendations (National Committee for Clinical Laboratory Standards) on daptomycin antistaphylococcal activity. Jones RN. **Antimicrob Agents Chemother** 1989 Sep;33(9):1652–3

Effects of manganese and other divalent cations on progressive motility of human sperm. Magnus O, et al. **Arch Androl** 1990;24(2):159–66

Dehydroquinate synthase: the role of divalent metal cations and of nicotinamide adenine dinucleotide in catalysis. Bender SL, et al. **Biochemistry** 1989 Sep 19;28(19):7555–60

Binding of the fluorescent substrate analogue 2',3'-O-(2,4,6-trinitrophenylcyclohexadienylidene) adenosine 5'-triphosphate to the gastric H+,K(+)-ATPase: evidence for cofactor–induced conformational changes in the enzyme. Faller LD. **Biochemistry** 1990 Apr 3;29(13):3179–86

Division of divalent cations into two groups in relation to their effect on the coupling of the F0F1–ATPase of Rhodospirillum rubrum to the protonmotive force. Strid A, et al. **Biochemistry** 1989 Dec 12;28(25):9718–24

Maintenance of lipid asymmetry in red blood cells and ghosts: effect of divalent cations and serum albumin on the transbilayer distribution of phosphatidylserine. Connor J, et al. **Biochim Biophys Acta** 1990 Jun 11;1025(1):82–6

Inhibition of Na(+) –K+ pump activity by divalent cations in intact peritoneal mast cells of the rat. Knudsen T, et al. **Br J Pharmacol** 1990 Jul;100(3):453–6

Effects of divalent cations on the frequency of spontaneous action potentials from the lateral line organ of Xenopus laevis. Guth SL, et al. **Brain Res** 1990 Jan 29;508(1):76–84

Alterations in in situ prolactin secretory granule morphology and immunoactivity by thiols and divalent cations. Greenan J, et al. **Endocrinology** 1990 Jan;126(1):512–8

Histamine H3 receptor binding sites in rat brain membranes: modulations by guanine nucleotides and divalent cations. Arrang JM, et al. **Eur J Pharmacol** 1990 Apr 25; 188(4–5):219–27

Two distinct, divalent cation–sensitive, antagonist binding states of heart muscarinic receptors: differential modulation by guanine nucleotide. Sulakhe PV, et al. **Gen Pharmacol** 1990;21(2):211–8

Functioning of the colicin A lysis protein is affected by Triton X–100, divalent cations and EDTA. Cavard D, et al. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1715–26

Activation of three types of membrane currents by various divalent cations in identified molluscan pacemaker neurons. Müller TH, et al. **J Gen Physiol** 1989 Dec;94(6):997–1014

Competitive action of divalent cations and D600 in frog slow muscle fibers. Krippeit–Drews P, et al. **J Membr Biol** 1989 Dec;112(2):185–92

Selective alterations in presynaptic cytomatrix protein organization induced by calcium and other divalent cations that modulate exocytosis. Garner JA. **J Neurochem** 1990 May;54(5):1700–8

Modulation of excitatory amino acid receptors by group IIB metal cations in cultured mouse hippocampal neurones. Mayer ML, et al. **J Physiol (Lond)** 1989 Aug;415:329–50

Membrane currents elicited by divalent cations in Xenopus oocytes. Miledi R, et al. **J Physiol (Lond)** 1989 Oct; 417:173–95

Regional distribution of somatostatin receptor affinity states in rat brain: effects of divalent cations and GTP. Moyse E, et al. **Regul Pept** 1989 Dec;26(3):225–34

Effects of divalent cations on snake venom cardiotoxin–induced hemolysis and 3H–deoxyglucose–6–phosphate release from human red blood cells. Jiang MS, et al. **Toxicon** 1989;27(12):1297–305

[The role of divalent cations in DNA endonucleolysis catalyzed by restrictases] Sokolov NN, et al. **Vopr Med Khim** 1989 Nov–Dec;35(6):66–9 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Divalent ions in cardiopulmonary–cerebral resuscitation. Maekawa T. **Magnesium** 1989;8(3–4):154–62 (37 ref.)

CATIONS, MONOVALENT

Monovalent cation–induced fusion of acidic phospholipid vesicles. Eklund KK. **Chem Phys Lipids** 1990 Feb; 52(3–4):199–206

METABOLISM

In squid nerve fibers monovalent activating cations are not cotransported during Na+/Ca2+ exchange. Condrescu M, et al. **Biochim Biophys Acta** 1990 May 9;1024(1):198–202

Electrical tolerance (breakdown) of the Chara corallina plasmalemma: II. Inductive property of membrane and effects of pHo and impermeable monovalent cations on breakdown phenomenon. Ohkawa T, et al. **J Membr Biol** 1990 Mar;114(2):159–73

Currents carried by monovalent cations through cyclic GMP–activated channels in excised patches from salamander rods. Menini A. **J Physiol (Lond)** 1990 May; 424:167–85

PHARMACOKINETICS

A thermodynamic analysis of monovalent cation permeation through a K(+)–selective ion channel. Miller C, et al. **Neuron** 1988 Apr;1(2):159–64

PHARMACOLOGY

Monovalent cation–dependent reversible phosphorylation of a 40 S ribosomal subunit protein in growth–arrested Tetrahymena: correlation with changes in intracellular pH. Goumard G, et al. **FEBS Lett** 1990 Mar 26;262(2):335–8

[The effect of monovalent cations on the activity of site–specific endonuclease PaeII] Sokolov NN, et al. **Vopr Med Khim** 1990 Jan–Feb;36(1):65–7 (Eng. Abstr.) **(Rus)**

CATS

Animal exposures and antibodies to Toxoplasma gondii in a university population. DiGiacomo RF, et al. **Am J Epidemiol** 1990 Apr;131(4):729–33

Plasma, tissue, and urine carnitine concentrations in healthy adult cats and kittens. Jacobs G, et al. **Am J Vet Res** 1990 Sep;51(9):1345–8

Toxoplasma gondii. Zygmunt DJ. **Infect Control Hosp Epidemiol** 1990 Apr;11(4):207–11

Management of human and animal bite wounds. Goldstein EJ. **J Am Acad Dermatol** 1989 Dec;21(6):1275–9 (42 ref.)

Cat aggression redirected to people: 14 cases (1981–1987). Chapman BL, et al. **J Am Vet Med Assoc** 1990 Mar 15; 196(6):947–50

Concerned about euthanasia of healthy, homeless animals [letter] Olson PN. **J Am Vet Med Assoc** 1990 Jan 1; 196(1):10

Ultrasonic flea collars [letter; comment] Schwartz C. **J Am Vet Med Assoc** 1990 Mar 15;196(6):833–4 Comment on: J Am Vet Med Assoc 1989 Dec 15;195(12):1717–8.

Lycanthropy and self–identification. Kulick AR, et al. **J Nerv Ment Dis** 1990 Feb;178(2):134–7 (14 ref.)

A technique for continuous intravenous infusion in cats. Swenson CL, et al. **Lab Anim Sci** 1989 Nov;39(6):615–7

A craving for wax [letter] [see comments] Arny T. **Nature** 1990 Jan 18;343(6255):220 Comment in: Nature 1990 Mar 22;344(6264):300.

Epidemiological studies on the expectation of life for cats computed from animal cemetery records. Hayashidani H, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):905–8

Effects of cat exposure and cat odors on subsequent amphetamine–induced stereotypy. Williams JL, et al. **Pharmacol Biochem Behav** 1990 Jun;36(2):375–80

Reported cat bites in Dallas: characteristics of the cats, the victims, and the attack events. Wright JC. **Public Health Rep** 1990 Jul–Aug;105(4):420–4

Pasteurella multocida meningitis in an adult: case report and review. Kumar A, et al. **Rev Infect Dis** 1990 May–Jun; 12(3):440–8 (79 ref.)

Effects of non–psychotropic drugs on conditioned behavior of cats. Yen–Koo HC, et al. **Toxicol Ind Health** 1989 Dec; 5(6):949–52

'BSAVA manual of anaesthesia' [letter] Hilbery AD, et al. **Vet Rec** 1990 Jan 20;126(3):70

Induction of anaesthesia in dogs and cats with propofol. Weaver BM, et al. **Vet Rec** 1990 Jun 23;126(25):617–20

[The treatment of dog and cat bites (letter)] Houtman PM. **Ned Tijdschr Geneeskd** 1990 Jun 30;134(26):1273–4 **(Dut)**

[The treatment of dog and cat bites] Patka P, et al. **Ned Tijdschr Geneeskd** 1990 May 19;134(20):995–8 (20 ref.) **(Dut)**

[Respiratory allergy and domestic animals. Survey in a sample of the general population] Charpin D, et al. **Rev Mal Respir** 1989;6(4):325–8 (Eng. Abstr.) **(Fre)**

ABNORMALITIES

Surgical management of extrahepatic portosystemic shunts in the dog and cat. Butler LM, et al. **Semin Vet Med Surg (Small Anim)** 1990 May;5(2):127–33 (17 ref.)

Historical, physical examination, and clinicopathologic features of portosystemic vascular anomalies in the dog and cat. Center SA, et al. **Semin Vet Med Surg (Small Anim)** 1990 May;5(2):83–93 (34 ref.)

Liver function tests in the diagnosis of portosystemic vascular anomalies. Center SA. **Semin Vet Med Surg (Small Anim)** 1990 May;5(2):94–9 (24 ref.)

Diagnostic imaging of portosystemic shunts. Moon ML. **Semin Vet Med Surg (Small Anim)** 1990 May;5(2):120–6 (23 ref.)

The anatomy and embryology of portosystemic shunts in dogs and cats. Payne JT, et al. **Semin Vet Med Surg (Small Anim)** 1990 May;5(2):76–82 (36 ref.)

Medical management of animals with portosystemic shunts. Taboada J. **Semin Vet Med Surg (Small Anim)** 1990 May; 5(2):107–19 (104 ref.)

Diprosopia in a cat. Camón J, et al. **Zentralbl Veterinarmed [A]** 1990 May;37(4):278–84

ANATOMY & HISTOLOGY

Comparison of the size of the vascular compartment of the carotid body of the fetal, neonatal and adult cat. Clarke JA, et al. **Acta Anat (Basel)** 1990;138(2):166–74

Contribution to the morphology of mitochondria with prismatic cristae in astrocytes of the inferior olivary nucleus of the cat. Ogawa Y, et al. **Anat Anz** 1990;170(2):85–90

Fine structure of the retinal photoreceptors of the domestic cat (Felis catus). Braekevelt CR. **Anat Histol Embryol** 1990 Mar;19(1):67–76

Retinal epithelial fine structure in the domestic cat (Felis catus). Braekevelt CR. **Anat Histol Embryol** 1990 Mar; 19(1):58–66

Quantitative study of fungiform papillae and taste buds on the cat's tongue. Robinson PP, et al. **Anat Rec** 1990 Jan; 226(1):108–11

Distribution of small–diameter primary afferents containing oligosaccharide residues recognized by monoclonal antibody LA4 in the dorsal horn of the cat. Alvarez FJ, et al. **Brain Res** 1990 Jul 30;524(1):175–9

Somatosensory climbing fiber responses in the caudal posterior vermis of the cat cerebellum. Brons J, et al. **Brain Res** 1990 Jun 11;519(1–2):243–8

Physiological properties and patterns of projection in the cortico–cortical connections from the second somatosensory cortex to the motor cortex, area 4 gamma, in the cat. Mori A, et al. **Brain Res** 1989 Dec 18; 504(2):206–10

Physiological and morphological characteristics of periodontal mesencephalic trigeminal neurons in the cat—intra–axonal staining with HRP. Shigenaga Y, et al. **Brain Res** 1989 Dec 25;505(1):91–110

Central distributions of the efferent and afferent components of the pharyngeal branches of the vagus and glossopharyngeal nerves: an HRP study in the cat. Grélot L, et al. **Exp Brain Res** 1989;78(2):327–35

Interconnections of the auditory cortical fields of the cat with the cingulate and parahippocampal cortices. Rouiller EM, et al. **Exp Brain Res** 1990;80(3):501–11

The distribution of intrinsic cortical axons in area 3b of cat primary somatosensory cortex. Schwark HD, et al. **Exp Brain Res** 1989;78(3):501–13

Number of dorsal root ganglion neurons and axons in cats of different ages. Aldskogius H, et al. **Exp Neurol** 1989 Oct;106(1):70–3

Septal efferents in the cats. Powell EW. **Exp Neurol** 1966 Mar;14(3):328–37

Study of the carotid body in the cat with special reference to its innervation. I. Light microscopy. Bengoechea ME, et al. **Folia Morphol (Warsz)** 1988;47(1–4):59–70

Shape and orientation of arterial loops in cat sartorius muscle. Torres Filho IP, et al. **Int J Microcirc Clin Exp** 1990 Aug; 9(3):297–302

Ultrastructural three–dimensional reconstruction of group III and group IV sensory nerve endings ("free nerve endings") in the knee joint capsule of the cat: evidence for multiple receptive sites. Heppelmann B, et al. **J Comp Neurol** 1990 Feb 1;292(1):103–16

Axonal trajectories and terminations of on– and off–cells in the cat lower brainstem. Mason P, et al. **J Comp Neurol** 1989 Oct 8;288(2):185–207

Spinocerebellar projections from spinal border cells in the cat as studied by anterograde transport of wheat germ agglutinin–horseradish peroxidase. Matsushita M, et al. **J Comp Neurol** 1989 Oct 1;288(1):19–38

Spino–olivary termination on spines in cat medial accessory olive. Molinari HH, et al. **J Comp Neurol** 1989 Oct 8; 288(2):254–62

Axonal trajectory and terminal distribution of inspiratory neurons of the dorsal respiratory group in the cat's medulla. Otake K, et al. **J Comp Neurol** 1989 Aug 8;286(2):218–30

Thalamocortical connections of the rostral intralaminar nuclei: an autoradiographic analysis in the cat. Royce GJ, et al. **J Comp Neurol** 1989 Oct 22;288(4):555–82

Organization of afferent and efferent pathways in the pudendal nerve of the female cat. Thor KB, et al. **J Comp Neurol** 1989 Oct 8;288(2):263–79

Thalamic projections to the cortical gustatory area in the cat studied by retrograde axonal transport of horseradish peroxidase. Niimi K, et al. **J Hirnforsch** 1989;30(5):583–93

Brainstem afferents to the intralaminar nuclei of the cat thalamus studied by the horseradish peroxidase method. Niimi K, et al. **J Hirnforsch** 1990;31(1):107–22

Efferent connections of various parts of the orbitofrontal cortex with the thalamic structures of the cat. Malakhova OE, et al. **Neurosci Behav Physiol** 1989 Nov–Dec; 19(6):507–15

Neuronal organization of the pyramidal cortex of the cat brain. Mukhina YuK. **Neurosci Behav Physiol** 1989 Nov–Dec;19(6):515–25

Origin of sympathetic innervation of the knee joint in the cat: a retrograde tracing study with horseradish peroxidase. Heppelmann B, et al. **Neurosci Lett** 1990 Jan 1; 108(1–2):71–5

Arborization of corticothalamic axons in the auditory thalamus of the cat: a PHA–L tracing study. Rouiller EM, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):29–35

The cat cervical dorsal root ganglia: general cell–size characteristics and comparative study of neck muscle, neck cutaneous and phrenic afferents. Rose D, et al. **Neurosci Res** 1990 Feb;7(4):341–57

Fractal analysis of ganglion cell dendritic branching patterns of the rat and cat retinae. Morigiwa K, et al. **Neurosci Res Suppl** 1989;10:S131–9

Compartmental origins of striatal efferent projections in the cat. Jiménez–Castellanos J, et al. **Neuroscience** 1989; 32(2):297–321

Comparative characteristic of afferent inputs to the dorsal and ventral regions of the magnocellular part of the cat red nucleus. Pogossian VI, et al. **Neuroscience** 1990; 34(3):733–43

Microhardness of enamel and dentine of cat premolar teeth. Hayashi K, et al. **Nippon Juigaku Zasshi** 1989 Oct; 51(5):1033–5

A morphometric right–left comparison of the cat olfactory bulb. Hirano Y, et al. **Okajimas Folia Anat Jpn** 1989 Dec; 66(5):265–9

Ultrastructural investigation of the meningeal compartment of the blood–cerebrospinal fluid–barrier in rats and cats. A horseradish peroxidase study. Angelov DN. **Z Mikrosk Anat Forsch** 1990;104(1):1–16

A fine structural localization of the non–specific cholinesterase activity in glomerular nerve formations (endings). Dubový P. **Z Mikrosk Anat Forsch** 1990; 104(1):87–96

Axonal patterns of disc–shaped cells in the central nucleus of the cat inferior colliculus. Herrera M, et al. **Z Mikrosk Anat Forsch** 1989;103(3):515–25

[Ultrasonic diagnosis in dogs and cats. 1. Manner of function, instruments, biological effects] Flückiger M. **Schweiz Arch Tierheilkd** 1990;132(5):275–82 (Eng. Abstr.) **(Ger)**

[Amygdaloid innervation of the frontal cortex in cats] Llamas A, et al. **Rev Esp Fisiol** 1989;45 Suppl:139–49 (Eng. Abstr.) **(Spa)**

[Organization of the projections of the cortex of the sulcus cruciatus to the centromedian and parafascicular nuclei in cats] Velayos JL, et al. **Rev Esp Fisiol** 1989;45 Suppl:151–60 (Eng. Abstr.) **(Spa)**

BLOOD

Effect of diet on Heinz body formation in kittens. Hickman MA, et al. **Am J Vet Res** 1990 Mar;51(3):475–8

Donation and typing of blood [letter] Carlin S. **J Am Vet Med Assoc** 1990 Jan 1;196(1):13

Frequencies of feline blood groups in the United States. Giger U, et al. **J Am Vet Med Assoc** 1989 Nov 1;195(9):1230–2

Blood donor programs [letter] Henness AM. **J Am Vet Med Assoc** 1989 Nov 1;195(9):1190

Comparison of serum and plasma taurine values in Bengal tigers with values in taurine–sufficient and –deficient domestic cats. Pickett JP, et al. **J Am Vet Med Assoc** 1990 Jan 15;196(2):342–6

Evaluation of an automated tabletop blood biochemical analyzer for the veterinary clinical pathology laboratory. Sallee S, et al. **J Am Vet Med Assoc** 1990 Jan 15; 196(2):307–12

Isolation and observation of the phenotype of feline fourth component of complement. Furukawa T, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):843–6

Androgen concentration in the blood and spermatogenic function of tom cats during the breeding season. Tsutsui T, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):801–6

Comparative effects of proligestone and megestrol acetate on basal plasma glucose concentrations and cortisol responses to exogenous adrenocorticotrophic hormone in cats. Watson AD, et al. **Res Vet Sci** 1989 Nov;47(3):374–6

[Experiences with the QBC–V hematology system at the veterinary hospitals of Zurich and Bern] Meister D, et al. **Schweiz Arch Tierheilkd** 1990;132(5):261–6 (Eng. Abstr.) **(Ger)**

[The dry chemical system Kodak Ectachem DT 60. Working methods, performance and suitability for laboratory diagnosis in dogs and cats] Scholz U, et al. **Tierarztl Prax** 1989;17(3):327–37 (Eng. Abstr.) **(Ger)**

CEREBROSPINAL FLUID

Reference intervals for feline cerebrospinal fluid: cell counts and cytologic features. Rand JS, et al. **Am J Vet Res** 1990 Jul;51(7):1044–8

Reference intervals for feline cerebrospinal fluid: biochemical and serologic variables, IgG concentration, and electrophoretic fractionation. Rand JS, et al. **Am J Vet Res** 1990 Jul;51(7):1049–54

EMBRYOLOGY

Lectin histochemical aspects of vascular development in fetal mammalian skin. Meyer W, et al. **Anat Anz** 1989; 169(5):305–12

[The early development of the Jacobson's organ in the cat (Felis silvestris)] Wöhrmann–Repenning A. **Gegenbaurs Morphol Jahrb** 1989;135(5):765–73 (Eng. Abstr.) **(Ger)**

GENETICS

The primary structure of a feline class I gene: striking similarity to HLA–A. van Hoof M, et al. **Immunogenetics** 1989;30(5):330–4

DNA recombination and natural selection pressure sustain genetic sequence diversity of the feline MHC class I genes. Yuhki N, et al. **J Exp Med** 1990 Aug 1;172(2):621–30

The American curl cat. Robinson R. **J Hered** 1989 Nov–Dec; 80(6):474–5

Molecular cloning and characterization of a progesterone–dependent cat endometrial secretory protein complementary deoxyribonucleic acid. Jaffe RC, et al. **Mol Endocrinol** 1989 Nov;3(11):1807–14

GROWTH & DEVELOPMENT

[The effect of management and psychosocial stress on the fetal and postnatal development of the domestic cat] Bilkei G. **DTW Dtsch Tierarztl Wochenschr** 1990 May;97(5):202–3 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Clinical and lymphohematologic responses after bone marrow transplantation in sibling and unrelated donor–recipient pairs of cats. Cain JL, et al. **Am J Vet Res** 1990 May;51(5):839–44

Airborne concentrations and particle size distribution of allergen derived from domestic cats (Felis domesticus). Measurements using cascade impactor, liquid impinger, and a two–site monoclonal antibody assay for Fel d I. Luczynska CM, et al. **Am Rev Respir Dis** 1990 Feb; 141(2):361–7

Mapping of cat albumin using monoclonal antibodies: identification of determinants common to cat and dog. Boutin Y, et al. **Clin Exp Immunol** 1989 Sep;77(3):440–4

Direct immunofluorescence testing of normal feline nasal planum and footpad. Kalaher KM, et al. **Cornell Vet** 1990 Jan;80(1):105–9

Variability of cat–allergen shedding. Wentz PE, et al. **J Allergy Clin Immunol** 1990 Jan;85(1 Pt 1):94–8

A cytotoxic antibody produced by allo–skin transplantation in cats. Hara Y, et al. **Nippon Juigaku Zasshi** 1990 Jun; 52(3):543–9

Identification of a CD4 homologue in the cat. Ackley CD, et al. **Tissue Antigens** 1990 Feb;35(2):92–8

Effect of recombinant human interferon–alpha in vitro and in vivo on mitogen–induced lymphocyte blastogenesis in cats. Weiss RC, et al. **Vet Immunol Immunopathol** 1990 Feb;24(2):147–57

INJURIES

Fixation of cancellous bone and physeal fractures in dogs and cats. A comparison of the use of self–reinforced biodegradable devices to the use of metallic devices and external fixations. Axelson PB. **Acta Vet Scand** 1989; 30(3):259–65

Traumatic pancreatic injury in a cat—a case history. Westermarck E, et al. **Acta Vet Scand** 1989;30(3):359–62

Anaesthetic management of the traumatized small animal patient. Norman WM, et al. **Br Vet J** 1989 Sep–Oct; 145(5):410–25 (90 ref.)

Care of accidental wounds. Johnston DE. **Vet Clin North Am Small Anim Pract** 1990 Jan;20(1):27–46 (13 ref.)

Spinal trauma in dogs and cats: a review of 51 cases. McKee WM. **Vet Rec** 1990 Mar 24;126(12):285–9

[Enlargement of the transverse diameter of the pelvis in a cat] Huber E, et al. **Schweiz Arch Tierheilkd** 1990; 132(2):65–7 (Eng. Abstr.) **(Fre)**

METABOLISM

Metabolic characteristics of cat kidney: failure to adapt to metabolic acidosis. Lemieux G, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R277–81

Pharmacokinetics of etomidate in cats. Wertz EM, et al. **Am J Vet Res** 1990 Feb;51(2):281–5

Pharmacokinetics of phenobarbital in the cat following multiple oral administration. Cochrane SM, et al. **Can J Vet Res** 1990 Jun;54(3):309–12

Pharmacokinetics of phenobarbital in the cat following intravenous and oral administration. Cochrane SM, et al. **Can J Vet Res** 1990 Jan;54(1):132–8

Feline whey proteins: identification, isolation and initial characterization of alpha–lactalbumin, beta–lactoglobulin and lysozyme. Halliday JA, et al. **Comp Biochem Physiol [B]** 1990;95(4):773–9

Pharmacologic features of butorphanol in dogs and cats. Hosgood G. **J Am Vet Med Assoc** 1990 Jan 1;196(1):135–6 (18 ref.)

Substance P–like immunoreactivity in the lateral cervical nucleus of the owl monkey (Aotus trivirgatus): a comparison with the cat and rat. Broman J, et al. **J Comp Neurol** 1989 Nov 1;289(1):111–7

Monoamine–accumulating ganglion cell type of the cat's retina. Dacey DM. **J Comp Neurol** 1989 Oct 1;288(1):59–80

Polyglucosan bodies in the brain of the cat. Kamiya S, et al. **J Comp Pathol** 1989 Oct;101(3):263–7

Effect of processing on fate of dietary [14C]taurine in cats. Hickman MA, et al. **J Nutr** 1990 Sep;120(9):995–1000

Cytochemistry of glycoconjugates in the zona pellucida of the cat. Kimura J, et al. **Nippon Juigaku Zasshi** 1989 Oct; 51(5):1091–4

Is there an interaction between catecholamines and enkephalins in the inferior mesenteric ganglion of the cat? Polónyi J, et al. **Z Mikrosk Anat Forsch** 1989;103(4):675–9

[Nutrition of the cat] Halle I, et al. **Arch Tierernahr** 1990 Mar;40(3):179–90 (120 ref.) (Eng. Abstr.) **(Ger)**

MICROBIOLOGY

Preliminary comparisons of the biological properties of two strains of feline immunodeficiency virus (FIV) isolated in Japan with FIV Petaluma strain isolated in the United States. Miyazawa T, et al. **Arch Virol** 1989;108(1–2):59–68

Paget's disease of bone and previous pet ownership in the United States: dogs exonerated. Siris ES, et al. **Int J Epidemiol** 1990 Jun;19(2):455–8

Bacterial flora of the vagina and uterus of healthy cats. Clemetson LL, et al. **J Am Vet Med Assoc** 1990 Mar 15; 196(6):902–6

"Campylobacter upsaliensis" isolated from cats as identified by DNA relatedness and biochemical features. Fox JG, et al. **J Clin Microbiol** 1989 Oct;27(10):2376–8

Septic monarthritis due to Pasteurella multocida after a cat scratch in a patient with rheumatoid arthritis. Houtman PM. **Neth J Med** 1990 Apr;36(3–4):207–8

The obligate and facultatively anaerobic bacterial flora of the normal feline gingival margin. Love DN, et al. **Vet Microbiol** 1990 Apr;22(2–3):267–75

PHYSIOLOGY

Clinical evaluation of medetomidine, a novel sedative and analgesic drug for dogs and cats. Vähä–Vahe T. **Acta Vet Scand** 1989;30(3):267–73

Vagal interactions on brain stem neurons receiving input from the proximal stomach in cats. Barber WD, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):G321–7

Cardiopulmonary effects of halothane anesthesia in cats. Grandy JL, et al. **Am J Vet Res** 1989 Oct;50(10):1729–32

Electromyographic evaluation of the external urethral sphincter during cystometry in male cats. Sackman JE, et al. **Am J Vet Res** 1990 Aug;51(8):1237–41

Histochemical aspects of stratum corneum function in the feline foot pad. Meyer W, et al. **Arch Dermatol Res** 1990; 281(8):541–3

Tongue movement in the cat during the intake of solid food. Thexton AJ, et al. **Arch Oral Biol** 1989;34(4):239–48

Physiological differentiation within the auditory part of the thalamic reticular nucleus of the cat. Villa AE. **Brain Res Brain Res Rev** 1990 Jan–Apr;15(1):25–40

A critical epileptic area in the cat's cortex and its relation to the cortical columns. Reichenthal E, et al. **Electroencephalogr Clin Neurophysiol** 1979 Aug; 47(2):147–52

The propriobulbar respiratory neurons in the cat. Duffin J, et al. **Exp Brain Res** 1990;81(2):213–20 (58 ref.)

Optokinetic nystagmus in the ferret: including selected comparisons with the cat. Hein A, et al. **Exp Brain Res** 1990;79(3):623–32

Direction–dependent spectral properties of cat external ear: new data and cross–species comparisons. Musicant AD, et al. **J Acoust Soc Am** 1990 Feb;87(2):757–81

Trabecular bone remodeling and bone mineral density in the adult cat during chronic dietary acidification with ammonium chloride. Ching SV, et al. **J Bone Miner Res** 1990 Jun;5(6):547–56

Feline hybridoma growth factor/interleukin–6 activity. Ohashi T, et al. **J Leukoc Biol** 1989 Dec;46(6):501–7

The projection from medial geniculate to field AI in cat: organization in the isofrequency dimension. Brandner S, et al. **J Neurosci** 1990 Jan;10(1):50–61

Different fusimotor reflexes from the ipsi– and contralateral hind limbs of the cat assessed in the same primary muscle spindle afferents. Johansson H, et al. **J Physiol (Paris)** 1988–89;83(4):281–92

Dog and cat reproduction, contraception and artificial insemination. Proceedings of the First International Symposium on Canine and Feline Reproduction. Dublin, Ireland, July 1–2, 1988. **J Reprod Fertil Suppl** 1989;39:1–323

Reproductive biology of the domestic cat with special reference to endocrinology, sperm function and in–vitro

fertilization. Goodrowe KL, et al.
J Reprod Fertil Suppl 1989;39:73–90 (105 ref.)

Effects on pseudopregnancy, pregnancy and interoestrous intervals of pharmacological suppression of prolactin secretion in female dogs and cats. Jöchle W, et al.
J Reprod Fertil Suppl 1989;39:199–207

Effect of light manipulation on ovarian activity and melatonin and prolactin secretion in the domestic cat. Leyva H, et al. **J Reprod Fertil Suppl** 1989;39:125–33

Effect of melatonin on photoperiod responses, ovarian secretion of oestrogen, and coital responses in the domestic cat. Leyva H, et al. **J Reprod Fertil Suppl** 1989;39:135–42

Copper-bottomed earwax [letter; comment] O'Connor PM. **Nature** 1990 Mar 22;344(6264):300 Comment on: Nature 1990 Jan 18;343(6255):220.

Responses of motor cortical neurones in the cat to unexpected perturbations of locomotion. Amos A, et al.
Neurosci Lett 1989 Sep 25;104(1–2):147–51

Injection of a cholinergic agonist in the dorsolateral pontine tegmentum of cats affects the posturokinetic responses to cortical stimulation. Luccarini P, et al. **Neurosci Lett** 1990 Jun 22;114(1):75–81

Induced ovulation in cats using porcine pituitary gland preparation during the non-breeding season. Tsutsui T, et al. **Nippon Juigaku Zasshi** 1989 Aug;51(4):677–83

Embryo transfer in the cat during the non-breeding season. Tsutsui T, et al. **Nippon Juigaku Zasshi** 1989 Oct; 51(5):871–7

Effects of lesions of nucleus raphe magnus on behavior of the cat. Wada N. **Nippon Juigaku Zasshi** 1990 Jun; 52(3):643–4

Orientation discrimination in the cat: a distributed function. Orban GA, et al. **Proc Natl Acad Sci U S A** 1990 Feb; 87(3):1134–8

Effect of megestrol acetate on the endometrium of the prepubertally ovariectomised kitten. Bellenger CR, et al. **Res Vet Sci** 1990 Jan;48(1):112–8

[Regulation pathways of expectancy behavior in the cat: histologic study] Bouyer JJ, et al. **C R Acad Sci [III]** 1989; 309(16):637–46 (Eng. Abstr.) **(Fre)**

[Effect of the nutrition status on parturition in the cat] Bilkei G. **Berl Munch Tierarztl Wochenschr** 1990 Feb 1; 103(2):49–51 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Illusory contour orientation discrimination in the cat. De Weerd P, et al. **Behav Brain Res** 1990 Jun 18;39(1):1–17

SURGERY

Percutaneous endoscopic gastrostomy. A retrospective study of 54 clinical cases in dogs and cats. Armstrong PJ, et al. **J Vet Intern Med** 1990 Jul–Aug;4(4):202–6

Percutaneous endoscopic gastrostomy tube placement in cats. Keshavarzian A, et al. **Lab Anim Sci** 1989 Sep;39(5):459–61

Plastic and reconstructive surgery.
Vet Clin North Am Small Anim Pract 1990 Jan;20(1):1–234

Skin flaps in reconstructive surgery. Pavletic MM.
Vet Clin North Am Small Anim Pract 1990 Jan;20(1):81–103 (16 ref.)

Reconstructive surgery of the lips and cheek. Pavletic MM.
Vet Clin North Am Small Anim Pract 1990 Jan;20(1):201–26 (4 ref.)

Axial pattern flaps in small animal practice. Pavletic MM.
Vet Clin North Am Small Anim Pract 1990 Jan;20(1):105–25 (11 ref.)

Mesh skin grafting. Pope ER.
Vet Clin North Am Small Anim Pract 1990 Jan;20(1):177–87 (11 ref.)

Ventral rhinotomy in the dog and cat. Holmberg DL, et al. **Vet Surg** 1989 Nov–Dec;18(6):446–9

Bilateral ischiocavernosus myectomy for chronic urine spraying in castrated male cats. Komtebedde J, et al.
Vet Surg 1990 Jul–Aug;19(4):293–6

Thoracodorsal and caudal superficial epigastric axial pattern skin flaps in cats. Remedios AM, et al. **Vet Surg** 1989 Sep–Oct;18(5):380–5

[Experimental cesarean sections in the cat] Knospe C, et al. **Berl Munch Tierarztl Wochenschr** 1989 Nov 1; 102(11):386–7 (Eng. Abstr.) **(Ger)**

URINE

Twenty-four hour urinary protein loss in healthy cats and the urinary protein-creatinine ratio as an estimate. Monroe WE, et al. **Am J Vet Res** 1989 Nov;50(11):1906–9

Urinalysis and associated laboratory procedures. Brobst D. **Vet Clin North Am Small Anim Pract** 1989 Sep;19(5):929–49 (22 ref.)

CATTELL PERSONALITY FACTOR QUESTIONNAIRE
see under **PERSONALITY INVENTORY**

CATTLE

Cardiopulmonary effects of butorphanol tartrate intravenously administered for placement of duodenal cannulae in isoflurane-anesthetized yearling steers. Cornick JL, et al. **Am J Vet Res** 1990 Jul;51(7):1062–4

Effects of marketing stress on fecal excretion of Salmonella spp in feeder calves. Corrier DE, et al. **Am J Vet Res** 1990 Jun;51(6):866–9

Ocular and serum disposition kinetics of cloxacillin after topical administration of benzathine cloxacillin and intravenous administration of sodium cloxacillin to calves. Daigneault J, et al. **Am J Vet Res** 1990 Mar;51(3):381–5

Phagocytosis, bactericidal activity, and oxidative metabolism of milk neutrophils from dairy cows fed selenium-supplemented and selenium-deficient diets. Grasso PJ, et al. **Am J Vet Res** 1990 Feb;51(2):269–74

Effects of bovine mammary secretion during the early nonlactating period and antibiotics on polymorphonuclear neutrophil function and morphology. Lintner TJ, et al.
Am J Vet Res 1990 Apr;51(4):524–32

In vivo effects of chloramphenicol, tetracycline, and gentamicin on bovine neutrophil function and morphologic features. Paape MJ, et al. **Am J Vet Res** 1990 Jul; 51(7):1055–61

Caudal epidural analgesia induced by xylazine administration in cows. St. Jean G, et al. **Am J Vet Res** 1990 Aug; 51(8):1232–6

Influence of tolazoline on caudal epidural administration of xylazine in cattle. Skarda RT, et al. **Am J Vet Res** 1990 Apr;51(4):556–60

Use of mucosal grafts and temporary tube implants for treatment of teat sinus mucosal injuries. Trent AM, et al.
Am J Vet Res 1990 Apr;51(4):666–76

Oestrogen sulfotransferase: isolation of a high specific activity species from bovine placenta. Moore SS, et al.
Aust J Biol Sci 1988;41(3):333–41

An evaluation of calf castration by intra-testicular injection of a lactic acid solution. Fordyce G, et al. **Aust Vet J** 1989 Sep;66(9):272–6

Update on dairy cow housing with particular reference to flooring. Barnes MM. **Br Vet J** 1989 Sep–Oct;145(5):436–45 (1 ref.)

Attempts to detect evidence of scrapie-associated protein in bovine tissue-derived products. DiMartino A.
J Am Vet Med Assoc 1990 May 15;196(10):1685–6

Use of B-mode, linear array ultrasonography for evaluating the technique of bovine artificial insemination. Beal WE, et al. **J Dairy Sci** 1989 Aug;72(8):2198–202

Prediction of total intake of dry matter and net energy in a lactation. Moore TL, et al. **J Dairy Sci** 1990 May; 73(5):1255–62

Comparative distribution of immunoglobulin-containing cells in stomach, intestine and associated lymph nodes of cattle [published erratum appears in Nippon Juigasku Zasshi 1990 Jun;52(3):675] Sato S, et al. **Nippon Juigaku Zasshi** 1990 Feb;52(1):63–70

Increase in calf production by the transfer of bisected bovine embryos. Seike N, et al. **Nippon Juigaku Zasshi** 1989 Dec; 51(6):1193–9

Behavior and heart rate of heifers housed in tether stanchions without straw. Müller C, et al. **Physiol Behav** 1989 Oct; 46(4):751–4

Transfer of Chernobyl fall-out caesium radioisotopes in the cow food chain. Belli M, et al. **Sci Total Environ** 1989 Sep; 85:169–77

Delayed isolated mitral incompetence after being kicked in the chest by a bull. Van Roye S, et al.
Thorac Cardiovasc Surg 1989 Oct;37(5):329–31

Recombinant bovine interferon-gamma enhances expression of class I and class II bovine lymphocyte antigens. Walrand F, et al. **Vet Immunol Immunopathol** 1989 Nov 15; 22(4):379–83

Casualty cattle [letter] **Vet Rec** 1990 Mar 24;126(12):296

The coccygeal artery as a route for the administration of drugs into the reproductive tract of cattle. Kotwica J, et al. **Vet Rec** 1990 Jul 14;127(2):38–40

Casualty cattle [letter; comment] Woodger SJ, et al.
Vet Rec 1990 Mar 10;126(10):248–9 Comment on: Vet Rec 1990 Feb 24;126(8):189–90.

[Use of synchronized heifer-recipients in view of the effectiveness of embryo transfer in cattle] Holý L, et al. **Vet Med (Praha)** 1990 Jan;35(1):1–10 (Eng. Abstr.) **(Cze)**

[Hygienic evaluation of atmospheric air pollution in animal breeding complexes] Okladnikov NI. **Gig Sanit** 1989 Dec; (12):4–6 **(Rus)**

ABNORMALITIES

Repair of anomalous nasolacrimal duct in a bull by use of conjunctivorhinostomy. Wilkie DA, et al.
J Am Vet Med Assoc 1990 May 15;196(10):1647–50

Perocormus associated with segmental aplasia of the cervical spinal cord in a Japanese shorthorn calf. Madarame H, et al. **J Comp Pathol** 1989 Aug;101(2):225–30

Seven-legged calf—dipygus with an extra foreleg at the pelvic region. Hiraga T, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):1011–5

Anomalous caudal vena cava passing through the vertebral canal in a calf. Hiraga T, et al. **Teratology** 1990 Apr; 41(4):415–20

Piperidine alkaloid composition and relation to crooked calf disease-inducing potential of Lupinus formosus. Keeler RF, et al. **Teratology** 1989 Nov;40(5):423–32

Congenital portosystemic shunts in three pigs and one calf. van den Ingh TS, et al. **Vet Pathol** 1990 Jan;27(1):56–8

Dandy-Walker malformation in two calves. Jeffrey M, et al. **Vet Rec** 1990 May 19;126(20):499–501

[Case description of a congenital malformation in a calf, characterized by an ingrowth of the fetal membranes into the cranial cavity] Heer A, et al.
DTW Dtsch Tierarztl Wochenschr 1989 Oct;96(9):435–7 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

Histochemistry of glycoconjugates in the skin of the bovine muzzle, with special reference to glandular structures. Meyer W, et al. **Acta Anat (Basel)** 1989;136(3):226–34

Ultrastructural cytology of the cyclic corpus luteum of the cow. O'Shea JD, et al. **Acta Anat (Basel)** 1990; 138(2):154–65

An immunohistochemical approach to the intrafusal fibers of extraocular muscle spindles in sheep, cow, and pig. Scapolo PA, et al. **Anat Rec** 1990 Jul;227(3):314–20

Relationships of empty-body composition and fat distribution to live animal and carcass measurements in Bos indicus-Bos taurus crossbred cows. Holloway JW, et al. **J Anim Sci** 1990 Jul;68(7):1818–26

The influence of sex-class, USDA yield grade and USDA quality grade on seam fat trim from the primals of beef carcasses. Jones DK, et al. **J Anim Sci** 1990 Jul; 68(7):1987–91

Performance, carcass, cartilage calcium, sensory and collagen traits of longissimus muscles of open versus 30-month-old heifers that produced one calf. Waggoner AW, et al.
J Anim Sci 1990 Aug;68(8):2380–6

Simultaneous isolation and characterization of brush border and basolateral membrane vesicles from bovine small intestine. Wilson JW, et al. **J Anim Sci** 1990 Feb; 68(2):583–90

Neuropil vacuolation in brain: a reproducible histological processing artefact. Wells GA, et al. **J Comp Pathol** 1989 Nov;101(4):355–62

Methods of collection and lipid composition of teat canal keratin in dry and lactating cows. Bright SA, et al.
J Dairy Sci 1990 Jan;73(1):98–106

Correlations between udder conformation traits and somatic cell count in Canadian Holstein cows. Monardes HG, et al. **J Dairy Sci** 1990 May;73(5):1337–42

Effects of body measurements and weight on calf size and calving difficulty of Holsteins. Sieber M, et al.
J Dairy Sci 1989 Sep;72(9):2402–10

Histochemical demonstration of nerve cell bodies in the retractor penis muscle and the penile artery of the bull. Alaranta S, et al. **Neuroscience** 1989;32(3):823–7

Multivariate craniometrics of yak in Nepal. Hayashi Y, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):1037–9

Investigation of bovine gut associated lymphoid tissue (GALT) using monoclonal antibodies against bovine lymphocytes. Parsons KR, et al. **Vet Pathol** 1989 Sep; 26(5):396–408

Examination of the ovaries of the cow by ultrasound [letter] Logue DN. **Vet Rec** 1990 Mar 3;126(9):225–6

Outsize calf [letter] Mee JF, et al. **Vet Rec** 1989 Sep 23; 125(13):358

Estimation of the developmental age of the bovine fetus and newborn calf. Richardson C, et al. **Vet Rec** 1990 Mar 24; 126(12):279–84

Oversized bovine fetuses [letter] Stockman MJ. **Vet Rec** 1989 Dec 23–30;125(26–27):656

Pulmonary lesions induced by a Pasteurella haemolytica cytotoxin preparation in calves. van den Ingh TS, et al.
Zentralbl Veterinarmed [B] 1990 Jun;37(4):297–308

[Morphometry of bovine luteal tissue explants after the addition of various doses of 15-glycol cloprostenol (Glystrophan inj. Spofa)] Kolouch F, et al.
Vet Med (Praha) 1990 Feb;35(2):65–72 (Eng. Abstr.) **(Cze)**

[Histological study of the lymph nodes of cattle, before and after antigenic stimulation. 2. Immunocytochemistry and electron microscopy] Femenia F, et al.
Zentralbl Veterinarmed [A] 1990 Mar;37(2):81–94 (Eng. Abstr.) **(Fre)**

[Vascular morphology of the bovine testis. Light and scanning electron microscopic studies] Hees H, et al.
Anat Anz 1990;170(2):119–32 (Eng. Abstr.) **(Ger)**

[Is there a structural principle of the myocardium?] Heine H. **Gegenbaurs Morphol Jahrb** 1989;135(3):463–74 (Eng. Abstr.) **(Ger)**

[Corrosion anatomical and scanning electron microscopic studies of the blood vessels in the digital end organ of the hindlimb of cattle] Schweitzer W, et al. **Tierarztl Prax** 1990 Feb;18(1):13–6 (Eng. Abstr.) **(Ger)**

[The chambers of the bovine uterus during early pregnancy. A comparative morphologic, sonographic and nuclear spin tomographic findings] Kähn W, et al.
Zentralbl Veterinarmed [A] 1989 Nov;36(9):641–52 (Eng. Abstr.) **(Ger)**

[Arterial and venous vascularization of cow's ureter in the fetal and neonatal periods] Molenda O, et al.
Pol Arch Weter 1988;28(3–4):79–97 (Eng. Abstr.) **(Pol)**

[Intraorganic lymphatic bed of the cattle heart] Chumakov VIu. **Arkh Anat Gistol Embriol** 1990 Feb;98(2):65–8 (Eng. Abstr.) **(Rus)**

[Dynamics of the histological structure and function of the skin during adaptation of Angler cattle of various constitutional types] Shalimov NA, et al. **Tsitol Genet** 1989 Jul–Aug;23(4):10–4 (Eng. Abstr.) **(Rus)**

BLOOD

Diurnal and individual variations in bile acids in the plasma of normal dairy cows. Abdelkader SV, et al.
Acta Vet Scand 1989;30(2):221–8

Plasma glucose, ketone bodies, insulin, glucagon and enteroglucagon in cows: diurnal variations related to ketone levels before feeding and to the ketogenic effects of feeds. Borrebaek B, et al. **Acta Vet Scand** 1990;31(1):5–15

Safety and efficacy of two sustained-release intrareticular selenium supplements and the associated placental and colostral transfer of selenium in beef cattle. Campbell DT, et al. **Am J Vet Res** 1990 May;51(5):813–7

Phospholipid composition of bovine erythrocytes [letter] DeLoach JR, et al. **Am J Vet Res** 1990 Sep;51(9):1506–7

Aortic catheterization in cattle via the costoabdominal artery and validation for progesterone and estradiol-17 beta sample collection. Haibel GK, et al. **Am J Vet Res** 1989 Nov;50(11):1923–5

Effects of dichlorvos on blood cholinesterase activities of cattle [published erratum appears in Am J Vet Res 1990 Mar;51(3):495] Khan AA, et al. **Am J Vet Res** 1990 Jan; 51(1):79–82

In vitro migration responses of neutrophils from cows and calves. Olson DP. **Am J Vet Res** 1990 Jul;51(7):973–7

Interferon and 2',5'-oligo(A) synthetase activities in serum and blood mononuclear leukocytes of cattle after injection of bovine interferon-alpha 1. Perino LJ, et al. **Am J Vet Res** 1990 Jun;51(6):886–92

Upper-normal prediction limits of lymphocyte counts for cattle not infected with bovine leukemia virus. Thurmond MC, et al. **Am J Vet Res** 1990 Mar;51(3):466–70

Haemoglobin and packed cell volume of yaks at high altitude. Winter H, et al. **Aust Vet J** 1989 Sep;66(9):299–301

Some hormonal characteristics of high and low yielding Holstein cows and water buffaloes located in temperate and subtropical environments. el-Nouty FD, et al. **Beitr Trop Landwirtsch Veterinarmed** 1989;27(4):461–8

Sequential changes in plasma progesterone, total oestrogens and corticosteroids in the cow throughout pregnancy and around parturition. Eissa HM, et al. **Br Vet J** 1990 Jan–Feb; 146(1):24–9

Effects of dihydroheptaprenol on neutrophil functions in calves. Yoneyama O, et al. **Br Vet J** 1989 Nov–Dec; 145(6):531–7

Activation of bovine monocytes and neutrophils by the Bb fragment of complement factor B: demonstration by the uptake of 3H-deoxyglucose. Sethi MS, et al. **Can J Vet Res** 1990 Jan;54(1):106–12

Granulocyte plasma membrane damage by leukotoxic supernatant from Pasteurella haemolytica A1 and protection by immune serum. Styrt B, et al. **Can J Vet Res** 1990 Jan;54(1):146–50

Insulin-like growth factor-I, GH, insulin and glucagon concentrations in bovine colostrum and in plasma of dairy cows and neonatal calves around parturition. Oda S, et al. **Comp Biochem Physiol [A]** 1989;94(4):805–8

Haemoglobin, serum albumin and transferrin variants of Bali (Banteng) cattle, Bos (Bibos) javanicus. Bell K, et al. **Comp Biochem Physiol [B]** 1990;95(4):825–32

Quantitative determination of apolipoprotein B in bovine serum by radial immunodiffusion. Marcos E, et al. **Comp Biochem Physiol [B]** 1989;94(1):171–3

Comparison of the lipoprotein pattern of the horse, the pony and the lactating and non-lactating cow obtained by a combination of an ultracentrifugation and a precipitation technique. van Dijk S, et al. **Comp Biochem Physiol [B]** 1989;94(4):735–8

Hemolytic potential of guaifenesin in cattle. Wall R, et al. **Cornell Vet** 1990 Apr;80(2):209–16

Insulin-like growth factor-I concentration in Holstein female cattle: variations with age, stage of lactation and growth hormone-releasing factor administration. Abribat T, et al. **Domest Anim Endocrinol** 1990 Jan;7(1):93–102

Changes in hormonal profiles during the estrous cycle in old lactating beef cows. Bryner RW, et al. **Domest Anim Endocrinol** 1990 Apr;7(2):181–9

Effect of triglycerides on growth hormone (GH)-releasing factor-mediated GH secretion in newborn calves. Coxam V, et al. **Domest Anim Endocrinol** 1989 Oct;6(4):389–93

Behavior, episodic secretion of cortisol, and adrenocortical reactivity in bulls subjected to tethering. Ladewig J, et al. **Horm Behav** 1989 Sep;23(3):344–60

Plasma growth hormone and insulin concentrations in double-muscled and normal bull calves. Arthur PF, et al. **J Anim Sci** 1990 Jun;68(6):1609–15

Effect of human growth hormone-releasing factor and(or) thyrotropin-releasing factor on hormone concentrations in dairy calves. Lapierre H, et al. **J Anim Sci** 1990 Aug; 68(8):2436–49

Effect of pituitary somatotropin injections on plasma insulin-like growth factor I and somatotropin profiles in growing heifers. Lemal D, et al. **J Anim Sci** 1989 Oct; 67(10):2715–23

Effects of natural mating stimuli on serum luteinizing hormone, testosterone and estradiol-17 beta in yearling beef bulls. Lunstra DD, et al. **J Anim Sci** 1989 Dec; 67(12):3277–88

Growth hormone, insulin and glucose concentrations in bovine fetal and maternal plasmas at several stages of gestation. Reynolds LP, et al. **J Anim Sci** 1990 Mar; 68(3):725–33

Luteinizing hormone concentrations in serum of postpartum beef cows injected with microencapsulated luteinizing hormone-releasing hormone analog. Roberts AJ, et al. **J Anim Sci** 1989 Oct;67(10):2730–4

Serum concentrations of IGF-I in postpartum beef cows. Rutter LM, et al. **J Anim Sci** 1989 Aug;67(8):2060–6

Effect of uterine manipulation 35 days after parturition on plasma concentrations of 13, 14-dihydro-15-keto prostaglandin F2 alpha in multiparous and primiparous Brahman cows. Wann RA, et al. **J Anim Sci** 1990 May; 68(5):1389–94

Electrophoresis of bovine erythrocyte sialic acids: existence of additional band in trypanotolerant Ndama cattle. Esievo KA, et al. **J Comp Pathol** 1990 May;102(4):357–61

Rhythms in cholesterol, cholesteryl esters, free fatty acids, and triglycerides in blood of lactating dairy cows. Bitman J, et al. **J Dairy Sci** 1990 Apr;73(4):948–55

Effects of handling, administration of a local anesthetic, and electrical dehorning on plasma cortisol in Holstein calves. Boandl KE, et al. **J Dairy Sci** 1989 Aug;72(8):2193–7

Blood responses of calves fed milk substitutes containing hydrolyzed fish protein and lime-treated corn flour. Diaz-Castaneda M, et al. **J Dairy Sci** 1989 Aug; 72(8):2095–106

Serum folates in gestating and lactating dairy cows. Girard CL, et al. **J Dairy Sci** 1989 Dec;72(12):3240–6

Radioimmunoassay for bovine tumor necrosis factor: concentrations and circulating molecular forms in bovine plasma. Kenison DC, et al. **J Immunoassay** 1990; 11(2):177–98

Beta-endorphin and met-enkephalin in plasma of cattle during pregnancy, parturition and the neonatal period. Aurich JE, et al. **J Reprod Fertil** 1990 Jul;89(2):605–12

Effect of non-linear plasma protein binding on unbound and total plasma phenylbutazone concentrations in cows. Boudinot FD, et al. **J Vet Pharmacol Ther** 1990 Jun; 13(2):132–6

Plasma estradiol-17 beta concentrations in the cow during induced estrus and after injection of estradiol-17 beta benzoate and estradiol-17 beta cypionate--a preliminary study. Vynckier L, et al. **J Vet Pharmacol Ther** 1990 Mar; 13(1):36–42

The microheterogeneity of bovine serum alpha 1-acid glycoprotein. Iwata H, et al. **Nippon Juigaku Zasshi** 1989 Aug;51(4):717–21

Isolation and characterization of C-reactive protein and serum amyloid P component from bovine serum. Morimatsu M, et al. **Nippon Juigaku Zasshi** 1989 Aug; 51(4):723–32

Impairment of lymphocyte blastogenesis in road-transported calves observed with a whole blood culture technique. Murata H, et al. **Nippon Juigaku Zasshi** 1990 Feb; 52(1):183–5

Seasonal changes in the phospholipids and fatty acid composition of the bovine erythrocyte membrane. Sako T, et al. **Nippon Juigaku Zasshi** 1989 Dec;51(6):1243–5

Adrenocorticotropin and cortisol levels in the plasma of bovine fetuses and neonates. Takeishi M, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):975–80

Measurement of atrial natriuretic peptide in bovine plasma and urine by radioimmunoassay. Takemura N, et al. **Nippon Juigaku Zasshi** 1989 Aug;51(4):843–5

Isolation, characterization, and quantitative measurement of serum alpha 1-acid glycoprotein in cattle. Tamura K, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):987–94

Enhancement of neutrophil function by dihydroheptaprenol in adult cows. Yoneyama O, et al. **Nippon Juigaku Zasshi** 1989 Dec;51(6):1283–6

Associations among progesterone, estradiol-17 beta, oxytocin and prostaglandin in cattle treated with hCG during diestrus to extend corpus luteum function. Howard HJ, et al. **Prostaglandins** 1990 Jul;40(1):51–70

Relationship between mitogen receptors in peripheral blood lymphocytes and blastogenic responses to mitogen. Tajima M, et al. **Res Vet Sci** 1990 Jan;48(1):1–5

Proteolytic and immunologic comparison of human and bovine von Willebrand factor. Bakhshi MR, et al. **Thromb Haemost** 1990 Jun 28;63(3):517–23

Testing blood lead levels [letter] Rumford AK. **Vet Rec** 1990 Jan 27;126(4):93

An efficient procedure for manual platelet counting. Thibodeaux JK, et al. **Vet Rec** 1989 Oct 14;125(16):417–9

The effects of age on the erythrocyte sodium and potassium concentrations of dairy cows during late pregnancy and early lactation. Mulei CM, et al. **Vet Res Commun** 1990; 14(1):63–70

Coagulation profile of dairy cattle in the periparturient period. Heuwieser W, et al. **Zentralbl Veterinarmed [A]** 1990 Feb;37(1):8–15

Coagulation profile in different stages of pregnancy and under consideration of placental expulsion in dairy cattle. Heuwieser W, et al. **Zentralbl Veterinarmed [A]** 1990 May; 37(4):310–5

[The development of beta-carotenemia in dairy cows 1975–1987] Lebeda M, et al. **Vet Med (Praha)** 1989 Sep; 34(9):527–36 (Eng. Abstr.) **(Cze)**

[The effect of biotechnological treatment of milk-replacer feeding mixtures on hematologic and biochemical parameters and its utilization in calves] Skřivanová V, et al. **Vet Med (Praha)** 1989 Oct;34(10):577–84 (Eng. Abstr.) **(Cze)**

[The effect of postpartum blood collection on the health and liveweight development of calves and the use of neonatal calf serum (NCS) for the in vitro cultivation of mouse embryos] Methling W, et al. **Z Med Lab Diagn** 1989; 30(7):391–4 (Eng. Abstr.) **(Ger)**

[Effect of proserine on the levels of steroid hormones in cows] Saĭko AA. **Fiziol Zh** 1990 May–Jun;36(3):71–3 (Eng. Abstr.) **(Rus)**

[Pregnancy in dairy cows in various times of the year in relation to thyroxine and triiodothyronine levels] Bekeová E, et al. **Vet Med (Praha)** 1989 Aug;34(8):491–500 (Eng. Abstr.) **(Slo)**

EMBRYOLOGY

Morphology of day 7 bovine demi-embryos during in vitro reorganization. Albihn A, et al. **Acta Anat (Basel)** 1990; 138(1):42–9

Sex determination of bovine embryos based on embryonic cleavage rates. Avery B, et al. **Acta Vet Scand** 1989; 30(2):147–53

Sex determination of bovine embryos using H-Y antibodies. Avery B, et al. **Acta Vet Scand** 1989;30(2):155–64

The development of the sulci and gyri of the bovine cerebral hemispheres. Louw GJ. **Anat Histol Embryol** 1989 Sep; 18(3):246–64

Bovine 1-2-cell embryo development using a simple medium in three oviduct epithelial cell coculture systems. Ellington JE, et al. **Biol Reprod** 1990 Jul;43(1):97–104

Expression of trophoblastic interferon genes in sheep and cattle. Farin CE, et al. **Biol Reprod** 1990 Aug;43(2):210–8

Comparison of persistence of seven bovine viruses on bovine embryos following in vitro exposure. Gillespie JH, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Feb;97(2):65–8

Cloning of sheep and cow embryos. Willadsen SM. **Genome** 1989;31(2):956–62 (14 ref.)

Relationship between plasminogen activator production and bovine embryo development in vitro. Kaaekuahiwi MA, et al. **J Anim Sci** 1990 Jul;68(7):2009–14

Histological development and histochemical localization of enzymes in rumen and reticulum in bovine fetuses. Stallcup OT, et al. **J Anim Sci** 1990 Jun;68(6):1773–89

Production and development of calves from sexed-bisected bovine embryos. Seike N, et al. **Jpn J Vet Res** 1990 Jan; 38(1):1–9

High-resolution autoradiographic studies of comparative nucleologenesis and genome reactivation during early embryogenesis in pig, man and cattle. Kopečny V. **Reprod Nutr Dev** 1989;29(5):589–600 (30 ref.)

In vitro culture of bovine egg fertilized either in vivo or in vitro. Marquant-Le Guienne B, et al. **Reprod Nutr Dev** 1989;29(5):559–68

In vitro techniques of bovine oocyte maturation, fertilization and embryo culture resulting in the birth of a calf. Pavlok A, et al. **Reprod Nutr Dev** 1989;29(5):611–6

Estimation of the developmental age of the bovine fetus and newborn calf. Richardson C, et al. **Vet Rec** 1990 Mar 24; 126(12):279–84

Growth of the early bovine fetus. Hart-Elcock L, et al. **Zentralbl Veterinarmed [A]** 1990 May;37(4):294–9

[Endocrine cells in the epithelium of the fetal large intestine of cattle (Bos primigenius taurus) from the cytomorphological aspect] Wille KH. **Anat Anz** 1990; 171(1):17–22 (Eng. Abstr.) **(Ger)**

[On the occurrence of blood vessels in the superficial layers of articular cartilage in bovine fetuses] Loeffler K, et al. **Anat Histol Embryol** 1989 Dec;18(4):334–41 (Eng. Abstr.) **(Ger)**

[Morphology and development of the veins of the uterus in cattle during the fetal and neonatal periods] Wyrost P, et al. **Anat Histol Embryol** 1990 Mar;19(1):1–15 (Eng. Abstr.) **(Ger)**

[Cryopreservation of bovine embryos] Falge R, et al. **Arch Exp Veterinarmed** 1990;44(1):127–34 (Eng. Abstr.) **(Ger)**

[Physiologic studies of maturity diagnosis in the calf and its relationship to the postnatal condition] Schwark HJ, et al. **Arch Exp Veterinarmed** 1990;44(1):45–52 (Eng. Abstr.) **(Ger)**

[The embryonic development of the intestinal mucosa with special reference to its epithelium] Wille KH. **Z Mikrosk Anat Forsch** 1989;103(5):807–25 (Eng. Abstr.) **(Ger)**

GENETICS

Body weight, tick burden (Boophilus microplus), physiological parameters and reproductive efficiency of crossbred zebu cattle. Garcia M, et al. **Acta Vet Scand** 1989; 30(3):347–53

Detection of bovine kappa-casein genomic variants by the polymerase chain reaction method. Denicourt D, et al. **Anim Genet** 1990;21(2):215–6

Linkage relationships among 20 genetic markers in cattle. Evidence for linkage between two pairs of blood group systems: B-Z and S-F/V respectively. Georges M, et al. **Anim Genet** 1990;21(2):95–105

Analysis of genetic variation in the Belgian Blue cattle breed using DNA sequence polymorphism at the growth hormone, low density lipoprotein receptor, alpha-subunit of glycoprotein hormones and thyroglobulin loci. Hilbert P, et al. **Anim Genet** 1989;20(4):383–93

Isolation and characterization of two male-specific DNA fragments from the bovine gene. Miller JR, et al. **Anim Genet** 1990;21(1):77–82

Genetic polymorphism of complement factor H in cattle. Tabel H, et al. **Anim Genet** 1990;21(2):123–8

Linkage of complement factor B gene to the bovine major histocompatibility complex. Teutsch MR, et al.

Anim Genet 1989;20(4):427
Strategies for the development of a bovine gene map. Womack JE. **Anim Genet** 1989;20(3):330–1
Synaptonemal complexes analysis in a bull carrying a 4;8 Robertsonian translocation. Bouvet A, et al. **Ann Genet** 1989;32(4):193–9
Complete nucleotide sequence of the bovine beta-casein gene. Bonsing J, et al. **Aust J Biol Sci** 1988;41(4):527–37
Mitochondrial DNA polymorphism in native Philippine cattle based on restriction endonuclease cleavage patterns. Watanabe T, et al. **Biochem Genet** 1989 Aug;27(7–8):431–8
Comparative gene frequencies of nucleoside phosphorylase from cattle of Bos taurus and Bos indicus derivation in Brazil. Panepucci L, et al. **Comp Biochem Physiol [B]** 1990; 95(3):501–3
The thyroglobulin gene is syntenic with the MYC and MOS protooncogenes and carbonic anhydrase II and maps to chromosome 14 in cattle. Threadgill DW, et al. **Cytogenet Cell Genet** 1990;53(1):32–6
The inheritance of the piebald spotting pattern and its variation in Holstein–Friesian cattle and in Landseer–Newfoundland dogs. Pape H. **Genetica** 1990; 80(2):115–28
Synaptonemal complex analysis of hybrid cattle. I. Pachytene substaging and the normal full bloods. Dollin AE, et al. **Genome** 1989 Oct;32(5):856–64
Trypanotolerance and the value of conserving livestock genetic resources. Trail JC, et al. **Genome** 1989;31(2):805–12
On the use of DNA fingerprints for linkage studies in cattle. Georges M, et al. **Genomics** 1990 Mar;6(3):461–74
A polymorphic satellite sequence maps to the pericentric region of the bovine Y chromosome. Perret J, et al. **Genomics** 1990 Mar;6(3):482–90
Regional localization of the fibronectin and gamma-crystallin genes to bovine chromosome 8. Zneimer SM, et al. **Genomics** 1989 Aug;5(2):215–20
The nucleotide sequence of bovine MHC class II DQB and DRB genes. Groenen MA, et al. **Immunogenetics** 1990; 31(1):37–44
Sequence analysis of bovine T-cell receptor alpha chain. Ishiguro N, et al. **Immunogenetics** 1990;31(1):57–60
The nucleotide sequence of the bovine MHC class II alpha genes: DRA, DOA, and DYA. van der Poel JJ, et al. **Immunogenetics** 1990;31(1):29–36
Transfection into mouse L cells of genes encoding two serologically and functionally distinct bovine class I MHC molecules from a MHC-homozygous animal: evidence for a second class I locus in cattle. Toye PG, et al. **Immunology** 1990 May;70(1):20–6
Associations between genetic markers and growth and carcass traits in a paternal half-sib family of Angus cattle. Beever JE, et al. **J Anim Sci** 1990 Feb;68(2):337–44
Molecular analysis of cytoplasmic genetic variation in Holstein cows. Brown DR, et al. **J Anim Sci** 1989 Aug; 67(8):1926–32
Heritability estimates of calving date in Hereford cattle maintained on range under natural mating. Buddenberg BJ, et al. **J Anim Sci** 1990 Jan;68(1):70–4
Heritability estimates of pregnancy rate in beef cows under natural mating. Buddenberg BJ, et al. **J Anim Sci** 1989 Oct;67(10):2589–94
Direct and maternal genetic effects due to the introduction of Bos taurus alleles into Brahman cattle in Florida: II. Preweaning growth traits. Elzo MA, et al. **J Anim Sci** 1990 Feb;68(2):324–9
Variance heterogeneity in direct and maternal weight traits by sex and percent purebred for Simmental-sired calves. Garrick DJ, et al. **J Anim Sci** 1989 Oct;67(10):2515–28
The use of elite nucleus units in beef cattle breeding. Gearheart WW, et al. **J Anim Sci** 1990 May;68(5):1229–36
Multiple ovulation and embryo manipulation in the improvement of beef cattle: relative theoretical rates of genetic change. Gearheart WW, et al. **J Anim Sci** 1989 Nov;67(11):2863–71
Use of animal breeds and breeding to overcome the incidence of grass tetany: a review. Greene LW, et al. **J Anim Sci** 1989 Dec;67(12):3463–9 (35 ref.)
Twinning in cattle: I. Foundation animals and genetic and environmental effects on twinning rate. Gregory KE, et al. **J Anim Sci** 1990 Jul;68(7):1867–76
Crossbreeding among British and continental European dual-purpose breeds in the coastal Pacific Northwest. Hohenboken WD, et al. **J Anim Sci** 1989 Nov;67(11):2841–7
Effects of percentage Brahman and Angus breeding, age-season of feeding and slaughter end point on meat palatability and muscle characteristics. Johnson DD, et al. **J Anim Sci** 1990 Jul;68(7):1980–6
Performance of crosses among Hereford, Angus and Simmental cattle with different levels of Simmental breeding: IV. Maternal heterosis and calf production by two-year-old dams. Kress DD, et al. **J Anim Sci** 1990 Jan; 68(1):54–63
Performance of crosses among Hereford, Angus and Simmental cattle with different levels of Simmental breeding: V. Calf production, milk production and reproduction of three- to eight-year-old dams. Kress DD, et al. **J Anim Sci** 1990 Jul;68(7):1910–21
Genetic variation and covariation in beef cow and bull fertility. Mackinnon MJ, et al. **J Anim Sci** 1990 May; 68(5):1208–14
Growth of crossbred progeny of polled Hereford sires divergently selected for yearling weight and maternal ability. Mahrt GS, et al. **J Anim Sci** 1990 Jul;68(7):1889–98
Direct and maternal genetic effects due to the introduction of Bos taurus alleles into Brahman cattle in Florida: I. Reproduction and calf survival. Olson TA, et al. **J Anim Sci** 1990 Feb;68(2):317–23
Multiple trait prediction for a type of model with heterogeneous genetic and residual covariance structures. Quaas RL, et al. **J Anim Sci** 1989 Oct;67(10):2529–35
Effects of embryo transfer in beef cattle on genetic evaluation methodology. Schaeffer LR, et al. **J Anim Sci** 1989 Oct; 67(10):2536–43
Breed effects on crossbred cow-calf performance. Setshwaelo LL, et al. **J Anim Sci** 1990 Jun;68(6):1577–87
Estimation of genetic parameters among reproductive and growth traits in yearling heifers. Smith BA, et al. **J Anim Sci** 1989 Nov;67(11):2886–91
Estimation of genetic parameters among breeding soundness examination components and growth traits in yearling bulls. Smith BA, et al. **J Anim Sci** 1989 Nov;67(11):2892–6
Evaluation of cytoplasmic genetic effects in beef cattle using an animal model. Tess MW, et al. **J Anim Sci** 1990 Jul; 68(7):1899–909
Concerted evolution of ruminant stomach lysozymes. Characterization of lysozyme cDNA clones from sheep and deer. Irwin DM, et al. **J Biol Chem** 1990 Mar 25; 265(9):4944–52
Milk protein polymorphism in Danish dairy cattle and the influence of genetic variants on milk yield. Bech AM, et al. **J Dairy Res** 1990 Feb;57(1):53–62
Class I alleles of the bovine major histocompatibility system and their association with economic traits. Batra TR, et al. **J Dairy Sci** 1989 Aug;72(8):2115–24
Estimation of genetic parameters for milk and fat yields of dairy cattle in Spain and the United States. Carabaño MJ, et al. **J Dairy Sci** 1989 Nov;72(11):3013–22
Inheritance of calf mortality for Brown Swiss cattle. Erf DF, et al. **J Dairy Sci** 1990 Apr;73(4):1130–4
Relationship between dam's age at bull's birth and bull's genetic evaluation. Ferris TA, et al. **J Dairy Sci** 1990 May; 73(5):1327–36
Altering milk composition through genetic selection. Gibson JP. **J Dairy Sci** 1989 Oct;72(10):2815–25
Treatment of dairy cows with recombinant bovine somatotropin: genetic and phenotypic aspects. Leitch HW, et al. **J Dairy Sci** 1990 Jan;73(1):181–90
Cloning and sequencing of a complementary deoxyribonucleic acid coding for a bovine alpha s1-casein A from mammary tissue of a homozygous B variant cow. McKnight RA, et al. **J Dairy Sci** 1989 Oct;72(10):2464–73
Estimation of genetic parameters for production and reproduction in Finnish Ayrshire cattle. Mäntysaari E, et al. **J Dairy Sci** 1989 Sep;72(9):2375–86
Milk protein typing of bovine mammary gland tissue used to generate a complementary deoxyribonucleic acid library. Medrano JF, et al. **J Dairy Sci** 1989 Dec;72(12):3190–6
Preliminary report on BoLA polymorphism in Guernsey cattle. Nonnecke BJ, et al. **J Dairy Sci** 1989 Dec; 72(12):3255–8
Relationship of bull fertility with daughter fertility and production traits in Holstein dairy cattle. Raheja KL, et al. **J Dairy Sci** 1989 Oct;72(10):2679–82
Estimation of additive maternal and cytoplasmic genetic variances in animal models. Southwood OI, et al. **J Dairy Sci** 1989 Nov;72(11):3006–12
Prediction of transmitting abilities for Holstein type traits. Vanraden PM, et al. **J Dairy Sci** 1990 Jan;73(1):191–7
Genetic analysis of fertility traits in Israeli dairy cattle. Weller JI. **J Dairy Sci** 1989 Oct;72(10):2644–50
Relationships between characteristics of herd of bull-dams and predicting transmitting ability of young bull. Wilhelm AE, et al. **J Dairy Sci** 1989 Sep;72(9):2395–401
Somatic cell mapping of the bovine somatostatin gene. Dietz AB, et al. **J Hered** 1989 Sep–Oct;80(5):410–2
The gene for the beta subunit of the follicle-stimulating hormone maps to bovine chromosome 15. Fries R. **J Hered** 1989 Sep–Oct;80(5):401–3
Potential genetic improvement of cattle by fertilization of fetal oocytes in vitro. Betteridge KJ, et al. **J Reprod Fertil Suppl** 1989;38:87–98 (39 ref.)
Gene transfer experiments in cattle. Roschlau K, et al. **J Reprod Fertil Suppl** 1989;38:153–60
Rapid segregation of heteroplasmic bovine mitochondria. Ashley MV, et al. **Nucleic Acids Res** 1989 Sep 25; 17(18):7325–31
Down on the pharm. Animal developers seeking better beasts breed controversy. Erickson D. **Sci Am** 1990 Aug; 263(2):102–3
Cloning and expression of the cDNA for bovine granulocyte-macrophage colony-stimulating factor. Leong SR, et al. **Vet Immunol Immunopathol** 1989 Jul; 21(3–4):261–78
[Transgenesis; applications, welfare and ethics] de Boer HA. **Tijdschr Diergeneeskd** 1990 Jun 15;115(12):570–4 (Eng. Abstr.) **(Dut)**
[Genomic organization of the major histocompatibility complex in cattle] Bensaid A, et al. **Ann Rech Vet** 1989; 20(3):389–94 **(Fre)**
[Genetic characteristics of erythrocyte antigens and various polymorphic blood proteins in the Jersey cattle in Moldavia] Bukataru NN, et al. **Genetika** 1990 Feb; 26(2):319–24 (Eng. Abstr.) **(Rus)**
[Cytogenetic mapping of cattle (Bos taurus L.). Quantitative analysis of the RBA-map of prometaphase chromosomes] Chiriaeva OG, et al. **Genetika** 1989 Aug;25(8):1436–48 (Eng. Abstr.) **(Rus)**
[The effect of cow genotype for beta-casein on the quantitative level of milk proteins] Khaertdinov RA. **Genetika** 1989 Aug;25(8):1462–72 (Eng. Abstr.) **(Rus)**
[Genetic characteristics of the Yakut aboriginal cattle and its hybrids] Ukhanov SV, et al. **Genetika** 1990 Mar; 26(3):525–30 (Eng. Abstr.) **(Rus)**
[The structure of PstI-repeats adjacent to the growth hormone gene and transcription of the family of PstI-repeats in various bovine organs] Akopian KZh, et al. **Mol Biol (Mosk)** 1990 May–Jun;24(3):775–80 (Eng. Abstr.) **(Rus)**
[The integration and expression of the beta-casein gene of Bos taurus in transgenic rats and mice] Mukha DV, et al. **Ontogenez** 1990 Mar–Apr;21(2):215–8 (Eng. Abstr.) **(Rus)**
[A new chromosomal rearrangement in cattle] Sharshov AA, et al. **Tsitol Genet** 1990 Mar–Apr;24(2):30–3 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Variability of tooth eruption in cattle. Bartosiewicz L. **Acta Vet Hung** 1989;37(4):303–17
Morphometric and ultrastructural study of postnatal lung growth and development in calves. Castleman WL, et al. **Am J Vet Res** 1990 May;51(5):789–95
Effect of monensin on rumen fermentation and performance of young calves. Kalachnyuk GI, et al. **Arch Tierernahr** 1989 Aug–Sep;39(8–9):793–7
Growth of rearing calves in relation to lysine contents of milk replacer and calf starter and feeding frequency of milk replacer. Veen WA, et al. **Arch Tierernahr** 1989 Jun; 39(6):515–25
Nutrient supply and growth of cattle offered straw-based diets. Ortigues I, et al. **Br J Nutr** 1989 Nov;62(3):601–19
Feeding antibiotic-contaminated waste milk to calves—effects on physical performance and antibiotic sensitivity of gut flora. Wray C, et al. **Br Vet J** 1990 Jan–Feb;146(1):80–7
Effect of bovine somatotropin on the growth rate, hormone profiles and carcass composition of Holstein bull calves. Groenewegen PP, et al. **Domest Anim Endocrinol** 1990 Jan; 7(1):43–54
The politics of formula-fed veal calf production. Schwartz A. **J Am Vet Med Assoc** 1990 May 15;196(10):1578–86
Feed intake, weaning weight and net returns comparisons for four breeding systems. Armstrong SL, et al. **J Anim Sci** 1990 Jul;68(7):1848–56
Influence of variations in biological and economical parameters on beef production net returns. Armstrong SL, et al. **J Anim Sci** 1990 Jul;68(7):1857–66
Markov chains as a shortcut method to estimate age distributions in herds of beef cattle under different culling strategies. Azzam SM, et al. **J Anim Sci** 1990 Jan;68(1):5–14
Influence of breed and diet on growth, nutrient digestibility, body composition and plasma hormones of Brangus and Angus steers. Beaver EE, et al. **J Anim Sci** 1989 Sep; 67(9):2415–25
The relationship of insulin-like growth factor-I with postweaning performance in Angus beef cattle. Bishop MD, et al. **J Anim Sci** 1989 Nov;67(11):2872–80
Supplemental fat source affects feedlot performance and carcass traits of finishing yearling steers and estimated diet net energy value. Brandt RT Jr, et al. **J Anim Sci** 1990 Aug;68(8):2208–16
Breed means for average daily gain, feed conversion and intake of beef bulls during postweaning feedlot performance tests. Chewning JJ, et al. **J Anim Sci** 1990 Jun;68(6):1500–4
Effects of prenatal testosterone treatment and postnatal steroid implantation on growth performance and carcass traits of heifers and steers. DeHaan KC, et al. **J Anim Sci** 1990 Aug;68(8):2198–207
Genetic parameter estimates for postweaning traits of beef cattle in a stressful environment. DeNise SK, et al. **J Anim Sci** 1989 Oct;67(10):2619–26
Effects of long-term administration of pituitary-derived bovine growth hormone and estradiol on growth in steers. Enright WJ, et al. **J Anim Sci** 1990 Aug;68(8):2345–56
Effect of testosterone propionate on performance and carcass characteristics of heifers and cows. Faulkner DB, et al. **J Anim Sci** 1989 Aug;67(8):1907–15
The effect of zeranol on live weight gain, feed intake and carcass composition of steers during compensatory growth. Fumagalli A, et al. **J Anim Sci** 1989 Dec;67(12):3397–409
Efficacy of vaginal spaying and anabolic implants on growth and carcass characteristics in beef heifers. Garber MJ, et al. **J Anim Sci** 1990 May;68(5):1469–75
Dose-response relationship of tetronasin administered to grazing steers. Gates RN, et al. **J Anim Sci** 1989 Dec; 67(12):3419–24
Effect of location and season on body and testicular growth in Brahman and Hereford bulls. Godfrey RW, et al. **J Anim Sci** 1990 Jun;68(6):1520–9
Effects of breed and wintering diet on heifer postweaning growth and development. Granger AL, et al. **J Anim Sci** 1990 Feb;68(2):304–16
Effects of percentage Brahman and Angus breeding, age-season of feeding and slaughter end point on feedlot performance and carcass characteristics. Huffman RD, et

al. **J Anim Sci** 1990 Aug;68(8):2243–52

Effects of treating corn silage with alpha–amylase and(or) sorbic acid on beef cattle growth and carcass characteristics. Leahy KT, et al. **J Anim Sci** 1990 Feb; 68(2):490–7

Effects of rate of gain during winter on subsequent grazing and finishing performance. Lewis JM, et al. **J Anim Sci** 1990 Aug;68(8):2525–9

An economic evaluation of the differences between intensive and extensive beef production systems. Lewis JM, et al. **J Anim Sci** 1990 Aug;68(8):2506–16

Effects of recombinant DNA–derived somatotropin and dietary energy intake on development of beef heifers: II. Concentrations of hormones and metabolites in blood sera. McShane TM, et al. **J Anim Sci** 1989 Sep;67(9):2237–44

Effects of recombinant DNA–derived somatotropin and dietary energy intake on development of beef heifers: I. Growth and puberty. McShane TM, et al. **J Anim Sci** 1989 Sep;67(9):2230–6

Growth, feed efficiency and carcass composition of finishing Friesian steers fed the beta–adrenergic agonist L–644,969. Moloney AP, et al. **J Anim Sci** 1990 May;68(5):1269–77

Biological efficiency to weaning and to slaughter of crossbred beef cattle with different genetic potential for milk. Montaño–Bermudez M, et al. **J Anim Sci** 1990 Aug; 68(8):2297–309

Effects of calcium soaps of long–chain fatty acids on feedlot performance, carcass characteristics and ruminal metabolism of steers. Ngidi ME, et al. **J Anim Sci** 1990 Aug;68(8):2555–65

Influence of dietary energy intake on prepubertal development of Brahman bulls. Nolan CJ, et al. **J Anim Sci** 1990 Apr;68(4):1087–96

Predicting growth and performance of Holstein steers. Rayburn EB, et al. **J Anim Sci** 1990 Mar;68(3):788–98

Salinomycin and lasalocid effects on growth rate, mineral metabolism and ruminal fermentation in steers. Reffett–Stabel J, et al. **J Anim Sci** 1989 Oct;67(10):2735–42

Comparison of two– and three–way rotational crossing, beef x beef and beef x Brown Swiss composite breed production: postweaning growth and carcass traits. Urick JJ, et al. **J Anim Sci** 1989 Oct;67(10):2603–8

Genetic analysis of absolute growth measurements, relative growth rate and restricted selection indices in red Angus cattle. Winder JA, et al. **J Anim Sci** 1990 Feb;68(2):330–6

Effects of nutrition, sex of calf and breed type on response to zeranol: preweaning growth. Woods BL, et al. **J Anim Sci** 1990 Apr;68(4):919–22

Effect of human somatotropin–releasing factor and photoperiods on carcass parameters and mammary gland development of dairy heifers. Ringuet H, et al. **J Dairy Sci** 1989 Nov;72(11):2928–35

Growth of Mashona cattle on range in Zimbabwe. II. Estimates of genetic parameters and predicted response to selection. Tawonezvi HP. **Trop Anim Health Prod** 1989 Aug;21(3):170–4

The effect of stocking rate and parasite control on the performance of replacement beef heifers on pasture. Hansen JW, et al. **Vet Parasitol** 1989 Nov;34(1–2):103–15

[From the Veterinary Chief Inspection for Public Health—Action Program Salbutamol (A beta agonist)] **Tijdschr Diergeneeskd** 1990 Jan 1;115(1):36 **(Dut)**

[The vitamin A requirement and the vitamin A status of growing cattle. 1. Studies of calves] Flachowsky G, et al. **Arch Tierernahr** 1990 Jan–Feb;40(1–2):85–100 (Eng. Abstr.) **(Ger)**

[The effect of a monensin–containing bolus on the live weight increase and characteristics of rumen fermentation of growing cattle] Richter GH, et al. **Arch Tierernahr** 1990 Apr;40(4):355–61 (Eng. Abstr.) **(Ger)**

[Reduced feed absorption and performance and diarrhea in a dairy cow herd as the result of a defective feed composition] Kamphues J, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 May;97(5):214–6 **(Ger)**

IMMUNOLOGY

Research on listeriosis in milk cows with intramammary inoculation of Listeria monocytogenes. Bryner J, et al. **Acta Microbiol Hung** 1989;36(2–3):137–40

Immune function in dairy cows related to energy balance and metabolic status in early lactation. Ropstad E, et al. **Acta Vet Scand** 1989;30(2):209–19

Comparative analysis of bovine extracts by immunoblotting and ELISA inhibition. Rabbit and human responses against cow epithelial and urine antigens. Ylönen J, et al. **Allergy** 1990 Jan;45(1):30–9

Range of viral neutralizing activity and molecular specificity of antibodies induced in cattle by inactivated bovine viral diarrhea virus vaccines. Bolin SR, et al. **Am J Vet Res** 1990 May;51(5):703–7

Interleukin–2 production by mitogen–stimulated intestinal mucosal leukocytes from cattle. Nagi AM, et al. **Am J Vet Res** 1989 Sep;50(9):1591–7

Influence of recombinant human interleukin–2 administration on lymphocyte and neutrophil function in clinically normal and dexamethasone–treated cattle. Roth JA, et al. **Am J Vet Res** 1990 Apr;51(4):546–9

Bovine T–lymphocyte lines reactive with Brucella abortus. Smith R 3d, et al. **Am J Vet Res** 1990 Apr;51(4):512–7

Differential reactivity of bovine lymphocytes to species of Brucella. Smith R 3d, et al. **Am J Vet Res** 1990 Apr; 51(4):518–23

Influence of supplemental selenium on humoral immune responses in weaned beef calves. Swecker WS Jr, et al. **Am J Vet Res** 1989 Oct;50(10):1760–3

Biochemical characterization of activation–associated bovine class I major histocompatibility complex antigens. Bensaid A, et al. **Anim Genet** 1989;20(3):241–55

Monoclonal antibodies to the bovine immunoglobulin G2a allotypes A1 and A2. Estes DM, et al. **Anim Genet** 1990; 21(2):181–90

Variation in T cell responses to ovalbumin in cattle: evidence for Ir gene control. Glass EJ, et al. **Anim Genet** 1990; 21(1):15–28

Demonstration of two allelic forms of the bovine T cell antigen Bo5 (CD5) and studies of their inheritance. Howard CJ, et al. **Anim Genet** 1989;20(4):351–9

The definition of five B lymphocyte alloantigens closely linked to BoLA class I antigens. Mackie JT, et al. **Anim Genet** 1990;21(1):69–76

Partial nucleotide sequence of a bovine major histocompatibility class II DR beta–like gene. Muggli–Cockett NE, et al. **Anim Genet** 1989;20(4):361–9

Studies on the bovine major histocompatibility class I and class II antigens using homozygous typing cells and antigen–specific BoT4+ blast cells. Rothel JS, et al. **Anim Genet** 1990;21(2):141–8

Z/Z antigen as a result of interaction of two identical allelic genes of the Z blood group system in cattle. Węgrzyn J, et al. **Arch Immunol Ther Exp (Warsz)** 1971;19(5):717–20

Some observations on the effects of age of calves on the phagocytosis and killing of Staphylococcus aureus by polymorphonuclear leucocytes. Woldehiwet Z, et al. **Br Vet J** 1990 Mar–Apr;146(2):165–70

Breed differences in the frequency of bovine lymphocyte antigens. Stear MJ, et al. **Exp Clin Immmunogenet** 1987; 4(1):27–36

Antibodies to ovine lymphocytes exist in bovine alloantisera. Stear MJ, et al. **Exp Clin Immmunogenet** 1986;3(1):28–33

Molecular mimicry: a herpes virus glycoprotein antigenically related to a cell–surface glycoprotein expressed by macrophages, polymorphonuclear leucocytes, and platelets. Fitzpatrick DR, et al. **Immunology** 1990 Aug;70(4):504–12

Ability of mononuclear phagocytes from cattle naturally resistant or susceptible to brucellosis to control in vitro intracellular survival of Brucella abortus. Price RE, et al. **Infect Immun** 1990 Apr;58(4):879–86

Cryptosporidium parvum (Apicomplexa: Cryptosporidiidae) oocyst and sporozoite antigens recognized by bovine colostral antibodies. Tilley M, et al. **Infect Immun** 1990 Sep;58(9):2966–71

Clinical and immunologic response of cattle to administration of a vaccine containing modified–live bovine respiratory syncytial virus. Ellis JA, et al. **J Am Vet Med Assoc** 1990 Feb 15;196(4):583–9

Specificity of bovine serum antibody to capsular carbohydrate antigens from Pasteurella haemolytica. McVey DS, et al. **J Clin Microbiol** 1990 Jun;28(6):1151–8

Ability of bovine mammary macrophages to enhance proliferation of autologous blood and mammary secretion lymphocytes. Concha C, et al. **J Dairy Res** 1990 Feb; 57(1):7–16

Immunology and fertility in the bovine. Hunter AG. **J Dairy Sci** 1989 Dec;72(12):3353–62 (105 ref.)

Effect of dietary vitamin A and beta–carotene on polymorphonuclear leukocyte and lymphocyte function in dairy cows during the early dry period. Tjoelker LW, et al. **J Dairy Sci** 1990 Apr;73(4):1017–22

Analysis of foot–and–mouth disease virus–neutralizing idiotypes from immune bovine and swine with anti–murine idiotype antibody probes. Garmendia AE, et al. **J Immunol** 1989 Nov 1;143(9):3015–9

Molecular characterization of Babesia bovis merozoite surface proteins bearing epitopes immunodominant in protected cattle. Hines SA, et al. **Mol Biochem Parasitol** 1989 Nov;37(1):1–9

Characterization of agretopes and epitopes involved in the presentation of beef insulin to T cells. Fotedar A, et al. **Mol Immunol** 1990 Jul;27(7):603–11

Structure of bovine immunoglobulin constant region heavy chain gamma 1 and gamma 2 genes. Symons DB, et al. **Mol Immunol** 1989 Sep;26(9):841–50

Localization of bacterial antigens in calves inoculated orally with ruminal Bacteroides succinogenes and Selenomonas ruminantium. Sato S, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):711–7

Distribution of immunoglobulin–containing cells in calves inoculated orally with ruminal Bacteroides succinogenes and Selenomonas ruminantium. Sato S, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):719–25

Early immunization of calves with an inactivated vaccine against trichophytosis. Wawrzkiewicz K, et al. **Pol Arch Weter** 1988;28(3–4):5–16

Phenotypic and functional characterisation of bovine lymphocytes. Morrison WI, et al. **Prog Vet Microbiol Immunol** 1988;4:134–64 (87 ref.)

The MHC of cattle and sheep. Spooner RL, et al. **Prog Vet Microbiol Immunol** 1988;4:88–107 (75 ref.)

Sensitisation of preruminant calves and piglets to antigenic protein in early weaning diets: control of the systemic antibody responses. Heppell LM, et al. **Res Vet Sci** 1989 Sep;47(2):257–62

Specific antibody in milk whey and phagocytosis of Actinomyces pyogenes by neutrophils in vitro. Watson ED. **Res Vet Sci** 1989 Sep;47(2):253–6

Novel vaccination for control of the Babesia vector, Boophilus microplus. Willadsen P, et al. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:107

Bovine interleukin 2: biochemical and biological characterization. Arunachalam B, et al. **Vet Immunol Immunopathol** 1989 Dec;23(3–4):377–83

Isolation of the fifth component of the bovine complement system. Aston WP, et al. **Vet Immunol Immunopathol** 1990 Apr;24(4):301–12

In vitro interactions of cytokines and bovine viral diarrhea virus in phytohemagglutinin–stimulated bovine mononuclear cells. Atluru D, et al. **Vet Immunol Immunopathol** 1990 May;25(1):47–59

Sepracell–MN for mononuclear cell separation from cattle: effect on mitogen–and antigen–induced lymphocyte blastogenesis. Confer AW, et al. **Vet Immunol Immunopathol** 1989 Aug;22(1):79–89

Production and use of murine monoclonal antibodies reactive with bovine IgM isotype and IgG subisotypes (IgG1, IgG2a and IgG2b) in assessing immunoglobulin levels in serum of cattle. Estes DM, et al. **Vet Immunol Immunopathol** 1990 May;25(1):61–72

Identification of two independent MHC class II antigens in a bovine lymphoblastoid cell line. Janzer–Pfeil AM, et al. **Vet Immunol Immunopathol** 1989 Nov 15;22(4):307–19

Bovine natural cell mediated cytotoxicity (NCMC): activation by cytokines. Jensen J, et al. **Vet Immunol Immunopathol** 1990 Feb;24(2):113–24

Activation of complement by bovine respiratory syncytial virus–infected cells. Kimman TG, et al. **Vet Immunol Immunopathol** 1989 Jul;21(3–4):311–25

Serum IgG and IgM antibody response in cattle to antigens of Pasteurella haemolytica. Mosier DA, et al. **Vet Immunol Immunopathol** 1989 Aug;22(1):53–65

Peanut agglutinin (PNA): binding and stimulation of bovine intestinal and peripheral blood leukocytes. Nagi AM, et al. **Vet Immunol Immunopathol** 1989 Aug;22(1):67–78

Characterization of surface markers of bovine gut mucosal leukocytes using monoclonal antibodies. Nagi AM, et al. **Vet Immunol Immunopathol** 1989 Aug;22(1):1–14

The serological response of cattle immunized with Yersinia enterocolitica O:9 or O:16 to Yersinia and Brucella abortus antigens in enzyme immunoassays. Nielsen K. **Vet Immunol Immunopathol** 1990 Apr;24(4):373–82

Recombinant bovine interferon–gamma, but not interferon–alpha, potentiates bovine neutrophil oxidative responses in vitro. Sample AK, et al. **Vet Immunol Immunopathol** 1990 May;25(1):23–35

Immunogenicity of subcellular fractions of Brucella abortus: measurement by in vitro lymphocyte proliferative responses. Smith R 3d, et al. **Vet Immunol Immunopathol** 1990 May;25(1):83–97

A new hemolytic assay for bovine serum complement and its application during experimental bovine anaplasmosis. Soler–Rodríguez AM, et al. **Vet Immunol Immunopathol** 1990 Apr;24(4):347–60

Humoral response in neonatal calves following immunization with Escherichia coli (strain J5): the effects of adjuvant, age and colostral passive interference. Tyler JW, et al. **Vet Immunol Immunopathol** 1989 Dec;23(3–4):333–44

Quantitation of bovine immunoglobulin isotypes and allotypes using monoclonal antibodies. Williams DJ, et al. **Vet Immunol Immunopathol** 1990 Mar;24(3):267–83

Production and characterization of monoclonal antibodies specific for bovine gamma–interferon. Wood PR, et al. **Vet Immunol Immunopathol** 1990 May;25(1):37–46

The effect of interferon–gamma intramammary administration on mammary phagocyte function. Fox LK, et al. **Zentralbl Veterinarmed [B]** 1990 Feb;37(1):28–30

The influence of mononuclear leukocytes on the chemotactic responsiveness of polymorphonuclear leukocytes of bovines. Henricks PA, et al. **Zentralbl Veterinarmed [B]** 1990 Jul;37(5):332–6

A monoclonal antibody specific for bovine T cell surface antigen associated with the E–rosette receptor. Koyama H, et al. **Zentralbl Veterinarmed [B]** 1990 Feb;37(1):9–18

Characterization of some parameters of non–specific immunity in beef cattle (II). Ponti W, et al. **Zentralbl Veterinarmed [B]** 1989 Aug;36(6):402–8

[Research on antibodies against BHV–1, BHV–2, BHV–4, BVD–MD virus, bovine adenovirus A and B, rotavirus and coronavirus in cattle in western Zaire: complementary results] Eyanga E, et al. **Rev Elev Med Vet Pays Trop** 1989; 42(2):155–61 (Eng. Abstr.) **(Fre)**

[Evaluation of serological protection against cattle rinderpest of bovine livestock in Chad] Guillaud M, et al. **Rev Elev Med Vet Pays Trop** 1989;42(2):163–7 (Eng. Abstr.) **(Fre)**

[The major histocompatibility complex of West African cattle. Typing of lymphocyte antigens (BoLA) of Baoulé cattle (Bos taurus) and Sudanese zebus (Bos indicus) of Burkina Faso (West Africa)] Maillard JC, et al. **Rev Elev Med Vet Pays Trop** 1989;42(2):275–81 (Eng. Abstr.) **(Fre)**

[Bactericides against Pasteurella multocida in whole blood, plasma and lung lavage fluid of untreated and immunized young swine and calves] Müller G, et al. **Arch Exp Veterinarmed** 1990;44(1):65–73 (Eng. Abstr.) **(Ger)**

[Incidence of Coxiella burnetti and Chlamydia psittaci in

cattle in southern Bohemia] Lisák V, et al. **Vet Med (Praha)** 1989 Jul;34(7):403–10 (Eng. Abstr.) **(Slo)**

[Effect of blood derivatives with immunomodulators on the immunoprotein profile in calves under clinical conditions] Paulik S, et al. **Vet Med (Praha)** 1989 Dec;34(12):705–15 (Eng. Abstr.) **(Slo)**

[Immunization of calves with a rabies vaccine from suckling mouse brain] Díaz AM, et al. **Rev Argent Microbiol** 1981 May–Aug;13(2):45–8 (Eng. Abstr.) **(Spa)**

INJURIES

Treatment of lesions on the penis and prepuce of bulls. Copland RS, et al. **Aust Vet J** 1989 Nov;66(11):378–80

Prognostic factors for recovery from coxo–femoral dislocation in cattle. Jubb TF, et al. **Aust Vet J** 1989 Nov; 66(11):354–8

Dislocation of the coxo–femoral joint in dairy cows. Larcombe MT, et al. **Aust Vet J** 1989 Nov;66(11):351–4

Treatment of lacerated flexor tendons in a dairy cow, using specialized farriery. Jann HW, et al. **J Am Vet Med Assoc** 1989 Sep 15;195(6):772–4

Peripheral detachment of the medial meniscus with injury to the medial collateral ligament in 50 cattle. Nelson DR, et al. **Vet Rec** 1990 Jul 21;127(3):59–60

[Metacarpal and metatarsal fractures in cattle. Treatment and results] Köstlin RG, et al. **Tierarztl Prax** 1990 Apr; 18(2):131–44 (Eng. Abstr.) **(Ger)**

METABOLISM

Intracellular enzyme localization in the epithelium of the bovine glandular stomach. Schessner M, et al. **Acta Anat (Basel)** 1990;138(1):50–5

Pharmacokinetics and pharmacodynamics of terguride following intramuscular administration in cows and goats. Lapka R, et al. **Acta Physiol Pol** 1989 Jan–Feb;40(1):139–44

Levels of milk urea, plasma constituents and rumen liquid ammonia in relation to the feeding of dairy cows during early lactation. Ropstad E, et al. **Acta Vet Scand** 1989; 30(2):199–208

Acetate: a hydrogen sink in hindgut fermentation as opposed to rumen fermentation. Demeyer D, et al. **Acta Vet Scand Suppl** 1989;86:68–75

Comparison of the rumen protein synthesis in cows during the perinatal and lactation periods. Leontowicz H, et al. **Acta Vet Scand Suppl** 1989;86:100–2

Disappearance of long–chain fatty acids in the hindgut of dairy cows. Møller PD. **Acta Vet Scand Suppl** 1989; 86:222–4

Influence of fat and feed level on fiber digestibility in vitro and in sacco and on volatile fatty acid proportions in the rumen. Weisbjerg MR, et al. **Acta Vet Scand Suppl** 1989; 86:137–9

Pharmacokinetics of flunixin meglumine in lactating cattle after single and multiple intramuscular and intravenous administrations. Anderson KL, et al. **Am J Vet Res** 1990 Sep;51(9):1464–7

Influence of cortisol and different steroidogenic pathways on estrogen synthesis by the bovine placenta. Hoedemaker M, et al. **Am J Vet Res** 1990 Jul;51(7):1012–5

Comparison of pharmacokinetic variables for two injectable formulations of netobimin administered to calves. Lanusse CE, et al. **Am J Vet Res** 1990 Sep;51(9):1459–63

Serum distribution of iodine after oral administration of ethylenediamine dihydriodide in cattle. Maas J, et al. **Am J Vet Res** 1989 Oct;50(10):1758–9

Jejunal mucosal lactase activity from birth to 3 weeks in conventionally raised calves. St. Jean GD, et al. **Am J Vet Res** 1989 Sep;50(9):1496–8

Elimination of salicylic acid in goats and cattle. Short CR, et al. **Am J Vet Res** 1990 Aug;51(8):1267–70

Pharmacokinetics of ceftazidime given alone and combination with probenecid to unweaned calves. Soback S, et al. **Am J Vet Res** 1989 Sep;50(9):1566–9

Pharmacokinetics of phenylbutazone given intravenously or orally in mature Holstein bulls. Williams RJ, et al. **Am J Vet Res** 1990 Mar;51(3):367–70

Gas chromatographic/mass spectrometric analysis of 19–nortestosterone urinary metabolites in cattle. Benoît E, et al. **Ann Rech Vet** 1989;20(4):485–91

Disposition kinetics and dosage regimen of sulfadiadine in crossbred calves. Srivastava AK, et al. **Ann Rech Vet** 1990; 21(3):173–7

The effect of monensin on in vitro utilization of lactate in the rumen contents. Marounek M, et al. **Arch Tierernahr** 1989 Jun;39(6):527–33

Protein and energy relationships in dairy cattle. 1. Dry cows. Teller E, et al. **Arch Tierernahr** 1989 Jun;39(6):535–42

Protein and energy relationships in dairy cattle. 2. Lactating cows. Teller E, et al. **Arch Tierernahr** 1989 Jun;39(6):543–51

Studies on the evaluation of feed protein for ruminants. 1. Passage of nitrogen fractions to the duodenum of dairy cows fed different protein and carbohydrate sources. Voigt J, et al. **Arch Tierernahr** 1990 Mar;40(3):245–57

Factors affecting concentrations of progesterone in peripheral plasma of ovariectomised cows during intravaginal treatment with progesterone. Munro RK. **Aust Vet J** 1990 Jul;67(7):270–1

Changes in the proportion of type I and type III collagen in the developing and retained bovine placentome. Sharpe KL, et al. **Biol Reprod** 1990 Aug;43(2):229–35

Oxytocin–induced release of prostaglandin F2 alpha in postpartum beef cows: comparison of short versus normal luteal phases. Zollers WG Jr, et al. **Biol Reprod** 1989 Aug; 41(2):262–7

The effect of fishmeal on the digestion of grass silage by growing cattle. Beever DE, et al. **Br J Nutr** 1990 May; 63(3):489–502

The effect of the amount and type of dietary fat on milk fat secretion in the cow. Storry JE, et al. **Br J Nutr** 1967; 21(2):425–38

Pharmacokinetics of halofuginone in cattle. Kinabo LD, et al. **Br Vet J** 1989 Nov–Dec;145(6):546–51

A follow–up study of lead absorption in cows as an indicator of environmental lead pollution. Prpić–Majić D, et al. **Bull Environ Contam Toxicol** 1990 Jul;45(1):19–24

The significance of water absorption and fibre digestion in the omasum of sheep, goats and cattle. Holtenius K, et al. **Comp Biochem Physiol [A]** 1989;94(1):105–9

Mammary extraction of plasma triglycerides in the cow during lactogenesis. Thompson GE. **Comp Biochem Physiol [B]** 1989;94(2):411–3

A comparative study on acetyl–CoA synthesising enzymes in spinal cord from cows, horses and pigs. Björkman C. **Comp Biochem Physiol [C]** 1989;93(2):201–6

In vitro metabolism of the pro–carcinogen aflatoxin B1 by liver preparations of the calf, nurse shark and clearnose skate. Bodine AB, et al. **Comp Biochem Physiol [C]** 1989; 94(2):447–53

Studies on the properties of muscarinic cholinergic receptor sites in bovine pineal gland. Govitrapong P, et al. **Comp Biochem Physiol [C]** 1989;94(1):159–64

Comparison of the effects of an isosmolar and hyperosmolar oral rehydrating solution on the hydration status, glycemia and ileal content composition of healthy neonatal calves. Levy M, et al. **Cornell Vet** 1990 Apr;80(2):143–51

Circadian profile and production rate of melatonin in the cow. Berthelot X, et al. **Domest Anim Endocrinol** 1990 Jul; 7(3):315–22

Energy balance and pulsatile LH secretion in early postpartum dairy cattle. Canfield RW, et al. **Domest Anim Endocrinol** 1990 Jul;7(3):323–30

Effect of dietary energy, body condition and calf removal on pituitary gonadotropins, gonadotropin–releasing hormone (GnRH) and hypothalamic opioids in beef cows. Connor HC, et al. **Domest Anim Endocrinol** 1990 Jul; 7(3):403–11

Isolation of bovine ovarian inhibin, its immunoneutralization in vitro and immunolocalization in bovine ovary. Knight PG, et al. **Domest Anim Endocrinol** 1990 Jul;7(3):299–313

Arginine vasopressin stimulation of prostaglandin F2 alpha release in heifers during the estrous cycle. Lafrance M, et al. **Domest Anim Endocrinol** 1990 Apr;7(2):173–80

Evidence that bovine growth hormone treatment increases the rate of extrathyroidal 5'–monodeiodinase activity in cattle. Rumsey TS, et al. **Domest Anim Endocrinol** 1990 Apr;7(2):125–34

Disposition kinetics of gentamicin in normal and endometritic cows using a microbiological assay. el–Sayed MG, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Sep;96(8):412–5

Glutathione: an in vitro granulopoiesis inhibitor at nanomolar concentration, isolated from calf spleen. Fetsch J, et al. **Exp Hematol** 1990 May;18(4):322–5

Influence of vitamin D on calcium metabolism and the parathyroid glands of cattle. Capen CC, et al. **Fed Proc** 1968 Jan–Feb;27(1):142–52

Experimental determination of transfer coefficients of 137Cs and 131I from fodder into milk of cows and sheep after the Chernobyl accident. Voigt G, et al. **Health Phys** 1989 Dec;57(6):967–73

Characterization of the bovine receptor(s) for interleukin–2. Siess DC, et al. **Immunology** 1989 Oct;68(2):190–5

Effect of intraperitoneally injected tocopherol on vitamin E status of dairy cow. Hidiroglou M, et al. **Int J Vitam Nutr Res** 1989;59(3):280–7

Adverse effect of orally administered magnesium hydroxide on serum magnesium concentration and systemic acid–base balance in adult cattle. Kasari TR, et al. **J Am Vet Med Assoc** 1990 Mar 1;196(5):735–42

Insulin and insulin–like growth factor–I stimulate DNA synthesis in bovine mammary tissue in vitro. Baumrucker CR, et al. **J Anim Sci** 1989 Dec;67(12):3503–14

Ionophores alter hepatic concentrations of intermediary carbohydrate metabolites in steers. Benz DA, et al. **J Anim Sci** 1989 Sep;67(9):2393–9

Intestinal acid flow, dry matter, starch and protein digestibility and amino acid absorption in beef cattle fed a high–concentrate diet with defluorinated rock phosphate, limestone or magnesium oxide. Christiansen ML, et al. **J Anim Sci** 1990 Jul;68(7):2105–18

Stimulation of bovine luteal oxytocin secretion in vitro by a phorbol ester and calcium ionophore. Cosola–Smith CA, et al. **J Anim Sci** 1990 Aug;68(8):2465–70

Nitrogen metabolism and somatotropin secretion in beef heifers receiving abomasal arginine infusions. Davenport GM, et al. **J Anim Sci** 1990 Jun;68(6):1683–92

Effects of a monensin ruminal delivery device on daily gain, forage intake and ruminal fermentation of steers grazing irrigated winter wheat pasture. Davenport RW, et al. **J Anim Sci** 1989 Aug;67(8):2129–39

Supplementation of dormant tallgrass–prairie forage: I. Influence of varying supplemental protein and(or) energy levels on forage utilization characteristics of beef steers in confinement. DelCurto T, et al. **J Anim Sci** 1990 Feb; 68(2):515–31

Supplementation of dormant tallgrass–prairie forage: II. Performance and forage utilization characteristics in grazing beef cattle receiving supplements of different protein concentrations. DelCurto T, et al. **J Anim Sci** 1990 Feb;68(2):532–42

Within–herd variation in energy utilization for maintenance and gain in beef cows. DiCostanzo A, et al. **J Anim Sci** 1990 Jul;68(7):2156–65

Sulfur and nitrogen metabolism in the bovine fed different forms of supplemental sulfur. Fron MJ, et al. **J Anim Sci** 1990 Feb;68(2):543–52

Effects of buffer or DL–methionine with different amounts of supplemental corn on feed intake and nutrient digestion by Holstein steers consuming bermudagrass hay. Hall KL, et al. **J Anim Sci** 1990 Jun;68(6):1674–82

Effects of corn vs corn gluten feed on site, extent and ruminal rate of forage digestion and on rate and efficiency of gain. Hannah SM, et al. **J Anim Sci** 1990 Aug;68(8):2536–45

Nutritive characteristics of pearl millet grain in beef cattle diets. Hill GM, et al. **J Anim Sci** 1990 Jul;68(7):2061–6

Effects of body composition, pre– and postpartum energy intake and stage of production of energy utilization by beef cows. Houghton PL, et al. **J Anim Sci** 1990 May; 68(5):1447–56

Differences in cathepsin B + L and calcium–dependent protease activities among breed type and their relationship to beef tenderness. Johnson MH, et al. **J Anim Sci** 1990 Aug;68(8):2371–9

The effects of lysocellin and varying calcium levels on performance and ruminal and plasma characteristics of growing beef steers fed corn silage. Kegley EB, et al. **J Anim Sci** 1990 Feb;68(2):483–9

Effects of nutritional level and biological type on gonadotropin–releasing hormone–induced luteinizing hormone release and plasma progesterone, estrone and estradiol concentrations in pre– and post–partum beef heifers. Killen JH, et al. **J Anim Sci** 1989 Dec; 67(12):3379–87

Influence of supplemental protein source and protein concentration on ruminal and intestinal digestion in heifers. Kirkpatrick BK, et al. **J Anim Sci** 1989 Oct;67(10):2743–50

Quantification of Ca2(+)–dependent protease activities by hydrophobic and ion–exchange chromatography. Koohmaraie M. **J Anim Sci** 1990 Mar;68(3):659–65

Steam–rolled wheat diets for finishing cattle: effects of dietary roughage and feed intake on finishing steer performance and ruminal metabolism. Kreikemeier KK, et al. **J Anim Sci** 1990 Jul;68(7):2130–41

Influence of soybean meal and sorghum grain supplementation on intake, digesta kinetics, ruminal fermentation, site and extent of digestion and microbial protein synthesis in beef steers grazing blue grama rangeland. Krysl LJ, et al. **J Anim Sci** 1989 Nov; 67(11):3040–51

Relationship of anabolic status and phase and rate of growth to priorities for protein and fat deposition in steers. Lemieux PG, et al. **J Anim Sci** 1990 Jun;68(6):1702–10

Serum prolactin and growth hormone responses to naloxone and intracerebral ventricle morphine administration in heifers. Leshin LS, et al. **J Anim Sci** 1990 Jun;68(6):1656–65

Factors that determine rates of cyanogenesis in bovine ruminal fluid in vitro. Majak W, et al. **J Anim Sci** 1990 Jun;68(6):1648–55

Effects of whole cottonseed and live yeast culture on ruminal fermentation and fluid passage rate in steers. Malcolm KJ, et al. **J Anim Sci** 1990 Jul;68(7):1965–70

Adipose tissue lipogenesis in growing steers adapted to different levels of feed intake. Mills SE, et al. **J Anim Sci** 1989 Nov;67(11):3011–7

Effect of suppression of prolactin secretion on adipose lipogenesis in the postpartum beef cow. Mills SE, et al. **J Anim Sci** 1989 Nov;67(11):2904–12

The effects of ruminal escape protein or fat on nutritional status of pregnant winter–grazing beef cows. Miner JL, et al. **J Anim Sci** 1990 Jun;68(6):1743–50

The effects of ruminal escape protein or fat on ruminal characteristics of pregnant winter–grazing beef cows. Miner JL, et al. **J Anim Sci** 1989 Oct;67(10):2782–91

Energy requirements for maintenance of crossbred beef cattle with different genetic potential for milk. Montaño–Bermudez M, et al. **J Anim Sci** 1990 Aug; 68(8):2279–88

Effects of dietary aluminum and phosphorus on magnesium metabolism in dairy calves. Neathery MW, et al. **J Anim Sci** 1990 Apr;68(4):1133–8

Effects of the ionophore tetronasin on nitrogen metabolism by ruminal microorganisms in vitro. Newbold CJ, et al. **J Anim Sci** 1990 Apr;68(4):1103–9

The effects of diet on water flux and volatile fatty acid concentrations in the rumen of growing beef steers fed once daily. Peters JP, et al. **J Anim Sci** 1990 Jun;68(6):1711–8

Effects of monensin and pH on the production and utilization of pyro–glutamate, a novel product of ruminal glutamine deamination. Russell JB, et al. **J Anim Sci** 1989 Sep; 67(9):2370–6

Intake and digestion of low–quality meadow hay by steers and performance of cows on native range when fed protein supplements containing various levels of corn. Sanson DW, et al. **J Anim Sci** 1990 Mar;68(3):595–603

Intake and digestibility of low–quality meadow hay by cattle

receiving various levels of whole shelled corn. Sanson DW, et al. **J Anim Sci** 1989 Nov;67(11):2854–62

Relationship between uterine secretion of prostaglandin F2 alpha induced by oxytocin and endogenous concentrations of estradiol and progesterone at three stages of the bovine estrous cycle. Silvia WJ, et al. **J Anim Sci** 1989 Sep; 67(9):2347–53

Elevation of a specific mRNA in longissimus muscle of steers fed ractopamine [published erratum appears in J Anim Sci 1990 Mar;68(3):905] Smith SB, et al. **J Anim Sci** 1989 Dec; 67(12):3495–502

Effects of protein and energy supplementation of Guernsey cows on the kinetics of digestion and passage of orchardgrass versus alfalfa. Solaiman SG, et al. **J Anim Sci** 1990 Jul;68(7):2119–29

Anabolic implant and frame size effects on growth regulation, nutrient repartitioning and energetic efficiency of feedlot steers. Solís JC, et al. **J Anim Sci** 1989 Oct;67(10):2792–801

Ruminal fermentation pattern, bacterial population and ruminal degradation of feed ingredients as influenced by ruminal ammonia concentration. Song MK, et al. **J Anim Sci** 1990 Apr;68(4):1110–20

Influence of lysocellin and monensin on mineral metabolism of steers fed forage-based diets. Spears JW, et al. **J Anim Sci** 1989 Aug;67(8):2140–9

The effect of abomasal methionine supplementation on nitrogen retention of growing steers postruminally infused with casein or nonsulfur-containing amino acids. Titgemeyer EC, et al. **J Anim Sci** 1990 Mar;68(3):750–7

Sulfur-containing amino acid requirement of rapidly growing steers. Titgemeyer EC, et al. **J Anim Sci** 1990 Jul; 68(7):2075–83

Lysine and methionine transport by bovine jejunal and ileal brush border membrane vesicles. Wilson JW, et al. **J Anim Sci** 1990 Feb;68(2):504–14

Suckling inhibits release of luteinizing hormone-releasing hormone from the bovine median eminence following ovariectomy. Zalesky DD, et al. **J Anim Sci** 1990 Feb; 68(2):444–8

Influence of flake density on the comparative feeding value of steam-flaked corn for feedlot cattle. Zinn RA. **J Anim Sci** 1990 Mar;68(3):767–75

Feeding value of coconut alcohol bottoms-bottoms for feedlot cattle. Zinn RA. **J Anim Sci** 1990 Feb;68(2):478–82

Influence of steaming time on site of digestion of flaked corn in steers. Zinn RA. **J Anim Sci** 1990 Mar;68(3):776–81

Effect of dietary unsaturated fatty acids in various forms on the de novo synthesis of fatty acids in the bovine mammary gland. Banks W, et al. **J Dairy Res** 1990 May;57(2):179–85

Changes in milk plasminogen, plasmin and in vitro bacterial growth in whey during early lactation. Kaartinen L, et al. **J Dairy Res** 1989 Nov;56(5):719–25

The onset of mammary secretion of medium-chain-length triglyceride fatty acids in the cow milked pre-partum. Thompson G, et al. **J Dairy Res** 1990 Feb;57(1):1–5

Milk synthesis and secretion rates in cows with milk composition changed by oxytocin. Allen JC. **J Dairy Sci** 1990 Apr;73(4):975–84

Metabolism of propionate, glucose, and carbon dioxide as affected by exogenous glucose in dairy cows at energy equilibrium. Amaral DM, et al. **J Dairy Sci** 1990 May; 73(5):1244–54

Prediction of duodenal nitrogen supply from degradation or organic and nitrogenous matter in situ. Arieli A, et al. **J Dairy Sci** 1989 Oct;72(10):2532–9

Energy and nitrogen utilization of high versus low producing dairy cows. Belyea RL, et al. **J Dairy Sci** 1990 Apr; 73(4):1023–30

Purification and properties of an acid phosphatase from lactating bovine mammary gland. Bingham EW, et al. **J Dairy Sci** 1990 Apr;73(4):964–9

Metabolism of peptides and amino acids during in vitro protein degradation by mixed rumen organisms. Broderick G, et al. **J Dairy Sci** 1989 Oct;72(10):2540–8

Calcium salts of fatty acids in diets that differ in neutral detergent fiber: effect on lactation performance and nutrient digestibility. Canale CJ, et al. **J Dairy Sci** 1990 Apr;73(4):1031–8

Dietary fat and ruminally protected amino acids for high producing dairy cows. Canale CJ, et al. **J Dairy Sci** 1990 Jan;73(1):135–41

Response of early lactation dairy cows fed diets varying in source of nonstructural carbohydrate and crude protein. Casper DP, et al. **J Dairy Sci** 1990 Apr;73(4):1039–50

Effect of rumen-protected methionine and lysine on casein in milk when diets high in fat or concentrate are fed. Chow JM, et al. **J Dairy Sci** 1990 Apr;73(4):1051–61

Effect of dietary fat in isocaloric rations on the nitrogen content of milk from Holstein cows. DePeters EJ, et al. **J Dairy Sci** 1989 Nov;72(11):2949–57

Improved energy prediction equations for dairy cattle rations. Donker JD. **J Dairy Sci** 1989 Nov;72(11):2942–8

Effects of feeding frequency and exogenous somatotropin on lipolysis, hormone profiles, and milk production in dairy cows. French N, et al. **J Dairy Sci** 1990 Jun;73(6):1552–9

Effects of sodium bicarbonate and sodium sesquicarbonate on animal performance, ruminal metabolism, and systemic acid-base status. Ghorbani GR, et al. **J Dairy Sci** 1989 Aug;72(8):2039–45

Effects of dry matter concentration and ammonia treatment of alfalfa silage on digestion and metabolism by heifers. Glenn BP. **J Dairy Sci** 1990 Apr;73(4):1081–90

Influence of cultures of Aspergillus oryzae on rumen and total tract digestibility of dietary components. Gomez-Alarcon RA, et al. **J Dairy Sci** 1990 Mar; 73(3):703–10

Milk fatty acid composition and plasma energy metabolite concentrations in lactating cows fed medium-chain triglycerides. Grummer RR, et al. **J Dairy Sci** 1989 Aug; 72(8):1996–2001

Influence of synchronizing protein and starch degradation in the rumen on nutrient utilization and microbial protein synthesis. Herrera-Saldana R, et al. **J Dairy Sci** 1990 Jan; 73(1):142–8

Effect of copper loading of preruminant calves on intracellular distribution of hepatic copper, zinc, iron, and molybdenum. Jenkins KJ. **J Dairy Sci** 1989 Sep; 72(9):2346–50

Influence of excess dietary copper on lipid composition of calf tissues. Jenkins KJ, et al. **J Dairy Sci** 1989 Oct; 72(10):2582–91

Body temperature of dry cows on pasture: environmental and behavioral effects. Lefcourt AM, et al. **J Dairy Sci** 1989 Nov;72(11):3040–9

Efficiency of feed utilization in Holsteins selected for yield. Legates JE. **J Dairy Sci** 1990 Jun;73(6):1533–6

Effect of alfalfa maturity on fiber utilization by high producing dairy cows. Llamas-Lamas G, et al. **J Dairy Sci** 1990 Apr;73(4):1069–80

Effects of source of protein and carbohydrate on ruminal fermentation and passage of nutrients to the small intestine of lactating cows. McCarthy RD Jr, et al. **J Dairy Sci** 1989 Aug;72(8):2002–16

Milk intake before first colostrum in newborn dairy calves. Effect on intestinal transmission of macromolecules. Michanek P, et al. **J Dairy Sci** 1990 Feb;73(2):480–3

Effects of continuous administration of 1,25-dihydroxyvitamin D3 on plasma minerals and unoccupied colon mucosal 1,25-dihydroxyvitamin D3 receptor concentrations. Naito Y, et al. **J Dairy Sci** 1989 Nov;72(11):2936–41

Apparent digestibility of nitrogen in rumen and whole tract of Friesian cattle fed direct-cut and wilted grass silages. Narasimhalu P, et al. **J Dairy Sci** 1989 Aug;72(8):2055–61

Effects of high dietary lead on the metabolism of intravenously dosed selenium-75 in dairy calves. Neathery MW, et al. **J Dairy Sci** 1990 Apr;73(4):1107–12

Prediction of responses to required nutrients in dairy cows. Oldham JD, et al. **J Dairy Sci** 1989 Dec;72(12):3212–29 (100 ref.)

Effect of somatotropin on the plasminogen and plasmin system in the mammary gland: proposed mechanism of action for somatotropin on the mammary gland. Politis I, et al. **J Dairy Sci** 1990 Jun;73(6):1494–9

Responses of dairy cows in early lactation to bovine somatotropin and ruminally inert fat. Schneider PL, et al. **J Dairy Sci** 1990 May;73(5):1263–8

Seasonal effects of prepartum and postpartum fat and niacin feeding on lactation performance and lipid metabolism. Skaar TC, et al. **J Dairy Sci** 1989 Aug;72(8):2028–38

Regulation of bovine adipose tissue metabolism during lactation. 6. Cellularity and hormone-sensitive lipase activity as affected by genetic merit and energy intake. Smith TR, et al. **J Dairy Sci** 1990 Mar;73(3):772–83

Effect of ammoniated barley silage on ruminal fermentation, nitrogen supply to the small intestine, ruminal and whole tract digestion, and milk production of Holstein cows. Song MK, et al. **J Dairy Sci** 1989 Nov;72(11):2981–90

Insulin-like growth factor-I in dairy cows: relationships among energy balance, body condition, ovarian activity, and estrous behavior. Spicer LJ, et al. **J Dairy Sci** 1990 Apr;73(4):929–37

Relationship between ovarian activity and energy status during the early postpartum period of high producing dairy cows. Staples CR, et al. **J Dairy Sci** 1990 Apr;73(4):938–47

Iodine in milk and meat of dairy cows fed different amounts of potassium iodide or ethylenediamine dihydroiodide. Swanson EW, et al. **J Dairy Sci** 1990 Feb;73(2):398–405

Assessment of intestinal amino acid availability in cattle by use of the precision-fed cecectomized rooster assay. Titgemeyer E, et al. **J Dairy Sci** 1990 Mar;73(3):690–3

Comparison of lactoferrin content in colostrum between different cattle breeds. Tsuji S, et al. **J Dairy Sci** 1990 Jan; 73(1):125–8

Modeling net energy efficiencies as quantitative characteristics in lactating cows. Walter JP, et al. **J Dairy Sci** 1989 Sep;72(9):2362–74

Effect of lasalocid on performance of lactating dairy cows. Weiss WP, et al. **J Dairy Sci** 1990 Jan;73(1):153–62

Effect of source of neutral detergent fiber and starch on nutrient utilization by dairy cows. Weiss WP, et al. **J Dairy Sci** 1989 Sep;72(9):2308–15

Effects of infusions of various doses of bovine growth hormone-releasing factor on blood hormones and metabolites in lactating Holstein cows. Enright WJ, et al. **J Endocrinol** 1989 Sep;122(3):671–9

Minimal transmission of zearalenone to milk of dairy cows. Prelusky DB, et al. **J Environ Sci Health [B]** 1990 Feb; 25(1):87–103

Partitioning of amino acids in lactating cows: oxidation to carbon dioxide. Black AL, et al. **J Nutr** 1990 Jul; 120(7):700–10

Preliminary pharmacokinetics of sulfadimidine in healthy Sahelian sheep and cows. Abiola FA, et al. **J Vet Pharmacol Ther** 1990 Jun;13(2):220–2

A comparison of the various routes of administration of erythromycin in cattle. Burrows GE, et al. **J Vet Pharmacol Ther** 1989 Sep;12(3):289–95

Subcutaneously implanted tissue chambers—a pharmacokinetic study. Clarke CR, et al. **J Vet Pharmacol Ther** 1989 Sep;12(3):312–21

The pharmacokinetics of chloramphenicol in plasma and saliva of dairy cows. Dotter A, et al. **J Vet Pharmacol Ther** 1990 Mar;13(1):81–5

Pharmacokinetics, metabolism and renal clearance of flumequine in veal calves. Mevius DJ, et al. **J Vet Pharmacol Ther** 1990 Jun;13(2):159–69

Opioid modulation of tonic luteinizing hormone release in ovariectomized dairy cows. Nanda AS, et al. **J Vet Pharmacol Ther** 1989 Dec;12(4):397–403

Identification of a soluble UDP-Gal: Gal (beta 1-4)Glc (or GlcNAc) (alpha 1-3) galactosyltransferase of bovine colostrum. Hosomi O, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):961–8

Effect of short-chain fatty acids on pancreatic exocrine secretion in calves aged 2 weeks and 13 weeks. Kato S, et al. **Nippon Juigaku Zasshi** 1989 Dec;51(6):1123–7

Injection and sampling methods for drug residue study in calf muscle. Takahashi Y, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):995–1001

Udder health implications of premature bovine mammary regression. I. Clinical, subclinical and reducing-sugar changes in milk during 168 hours of suspended milking in mid-lactation. Giesecke WH, et al. **Onderstepoort J Vet Res** 1990 Mar;57(1):25–35

In vitro regulation of mammary glucose-6-phosphate dehydrogenase activity by palmitoyl coenzyme A, acetate, and polyamines. Young AJ, et al. **Proc Soc Exp Biol Med** 1990 Apr;193(4):274–9

Prolactin regulation of dopaminergic neurons in the infundibulum pituitary stalk of bull calves. Zinn SA, et al. **Proc Soc Exp Biol Med** 1990 Feb;193(2):98–103

Energy metabolism in the digestive tract and liver of cattle: influence of physiological state and nutrition. Huntington GB. **Reprod Nutr Dev** 1990;30(1):35–47 (70 ref.)

Comparative pharmacokinetics of amikacin sulphate in calves and sheep. Carli S, et al. **Res Vet Sci** 1990 Mar;48(2):231–4

Subcutaneously implanted tissue chambers: a pathophysiological study. Clarke CR, et al. **Res Vet Sci** 1989 Sep;47(2):195–202

Pharmacokinetics in sheep and cattle of albendazole administered by an intraruminal slow release capsule. Delatour P, et al. **Res Vet Sci** 1990 May;48(3):271–5

Stimulated pepsinogen secretion from dispersed abomasal glands exposed to Ostertagia species secretion. McKellar QA, et al. **Res Vet Sci** 1990 Jan;48(1):6–11

Comparison of pepsinogen forms in cattle, sheep and goats. Mostofa M, et al. **Res Vet Sci** 1990 Jan;48(1):33–7

Pharmacokinetics of single doses of cefoperazone given by the intravenous and intramuscular routes to unweaned calves. Soback S, et al. **Res Vet Sci** 1989 Sep;47(2):158–63

The propagation of the Chernobyl 131I impulse through the air- grass- animal- milk pathway in northwestern Greece. Assimakopoulos PA, et al. **Sci Total Environ** 1989 Sep; 85:295–305

Caesium and iodine metabolism in lactating cows under chronic administration. Daburon F, et al. **Sci Total Environ** 1989 Sep;85:253–61

Transfer of aged 239+240Pu, 238Pu, 241Am, and 137Cs to cattle grazing a contaminated arid environment. Gilbert RO, et al. **Sci Total Environ** 1989 Sep;85:53–62

Transfer of caesium from silage to cows milk: observations and models. Mitchell NG, et al. **Sci Total Environ** 1989 Sep;85:307–16

Studies of the transfer of dietary radiocaesium from silage to milk in dairy cows. Pearce J, et al. **Sci Total Environ** 1989 Sep;85:267–78

Non-conventional indigenous mineral supplements used for cattle feeding in the pastoral rangelands of Ethiopia. Kabaija E. **Trop Anim Health Prod** 1989 Nov;21(4):256–62

Trace element concentrations in perinatal beef calves from west central Nebraska. Johnson JL, et al. **Vet Hum Toxicol** 1989 Dec;31(6):521–4

Oral absorption and bioavailability of flumequine in veal calves. Mevius DJ, et al. **Vet Q** 1989 Oct;11(4):232–41

Postmortal degradation of furazolidone and furaltadone in edible tissues of calves. Nouws JF, et al. **Vet Q** 1990 Jan; 12(1):56–9

Age-dependent pharmacokinetics of phenylbutazone in calves. Volner Z, et al. **Vet Q** 1990 Apr;12(2):98–102

Use of a sustained release bolus for enhancing selenium status in cattle. Lawson DC, et al. **Vet Rec** 1990 Jul 21;127(3):67–8

The relationship between carcass characteristics, plasma hormones and metabolites in young fattening bulls. Istasse L, et al. **Vet Res Commun** 1990;14(1):19–26

A quantitative histochemical study of delta 5-3 beta-hydroxysteroid dehydrogenase and succinate dehydrogenase activities in the bovine corpus luteum of pregnancy. Boos A, et al. **Z Mikrosk Anat Forsch** 1989; 103(6):888–96

Regulation of prostaglandin biosynthesis with flunixin meglumine in the bovine species. Aiumlamai S, et al. **Zentralbl Veterinarmed [A]** 1990 Feb;37(1):16–22

Influence of exogenous estradiol on the concentration of antitrypsin, albumin, N-acetyl-beta-D-glucosaminidase and somatic cells in milk of cows at various lactation stages.

Saad AM, et al. **Zentralbl Veterinarmed** [A] 1990 Feb; 37(1):51–60

[Evaluation of a new mineral food supplement used in feeding young breeding cattle in the winter season] Hlásný J. **Vet Med (Praha)** 1989 Dec;34(12):717–25 (Eng. Abstr.) **(Cze)**

[Effect of BST administration on milk production and metabolism of dairy cows in 3 consecutive years of IVO trials(Institute for Animal Husbandry Research)] Oldenbroek JK, et al. **Tijdschr Diergeneeskd** 1990 Jul 1; 115(13):613–24 (Eng. Abstr.) **(Dut)**

[Synthetic anabolic androgens in the fecal material of cattle: radioimmunological determination after purification by high performance liquid chromatography] Delahaut P, et al. **Ann Rech Vet** 1990;21(1):13–22 (Eng. Abstr.) **(Fre)**

[Ethyl benzimidazole carbamate: teratogenic effect and presence in the milk of cows after administration of thiophanate] Delatour P, et al. **Ann Rech Vet** 1990; 21(1):87–92 (Eng. Abstr.) **(Fre)**

[Evolution of plasma concentrations of testosterone and insulin-like growth factor I during the peripubertal period of cattle catheterized at the hepatic level] Renaville R, et al. **Ann Rech Vet** 1990;21(3):187–94 (Eng. Abstr.) **(Fre)**

[The absorption behavior of chemotherapeutics after intrauterine administration in cattle] Golbs S, et al. **Arch Exp Veterinarmed** 1989;43(4):533–9 (Eng. Abstr.) **(Ger)**

[Relationship between metabolic status and results of embryo collection in high-producing cows] Schäfer M, et al. **Arch Exp Veterinarmed** 1990;44(1):157–62 (Eng. Abstr.) **(Ger)**

[Hyaluronidase release in bull sperm—influence of media and temperature] Schülke B, et al. **Arch Exp Veterinarmed** 1990; 44(1):135–42 (Eng. Abstr.) **(Ger)**

[Experimental studies of the evaluation of the energy balance of dairy cows. 1. Milk production and milk composition] Staufenbiel B, et al. **Arch Exp Veterinarmed** 1990; 44(1):143–55 (Eng. Abstr.) **(Ger)**

[Behavior of back fat thickness, the activity of NADP-dependent dehydrogenases from adipose tissue and adipose tissue constituents fat and protein and their evidence for energy metabolism in dairy cows] Staufenbiel R, et al. **Arch Exp Veterinarmed** 1989 Nov;43(6):885–95 (Eng. Abstr.) **(Ger)**

[The vitamin A requirement and the vitamin A status of growing cattle. 2. Studies of fattening cattle] Wilk H, et al. **Arch Tierernahr** 1990 Jan–Feb;40(1–2):101–15 (Eng. Abstr.) **(Ger)**

[The energy requirements of Holstein-Friesian heifers during rearing and pregnancy under the tropical conditions of Cuba. 1. Determination of dry matter and energy assimilation and of the live weight development and energy expenditure] Zarragoitia L, et al. **Arch Tierernahr** 1990 Apr; 40(4):363–73 (Eng. Abstr.) **(Ger)**

[The energy requirements of Holstein-Friesian heifers during rearing and pregnancy under the tropical conditions of Cuba. 2. Generalization of the results and derivation of the energy requirements] Zarragoitia L, et al. **Arch Tierernahr** 1990 Apr;40(4):375–84 (Eng. Abstr.) **(Ger)**

[Development of water space volumes in calves during the first month of life. I. Changes in the total amount of water] Janus K. **Pol Arch Weter** 1988;28(3–4):23–32 (Eng. Abstr.) **(Pol)**

[Development of water space volumes in calves during the first month of life. II. Changes in the extracellular and intracellular volumes] Janus K. **Pol Arch Weter** 1988; 28(3–4):33–42 (Eng. Abstr.) **(Pol)**

[Interrelation between profile test indicators in the decreased milk acidity syndrome in cows] Beseda I, et al. **Vet Med (Praha)** 1990 Mar;35(3):137–44 (Eng. Abstr.) **(Slo)**

[The health status and metabolic indicators in calves fed colostrum and first milk preserved with potassium sorbate and milk replacements] Brouček J, et al. **Vet Med (Praha)** 1989 Jul;34(7):395–402 (Eng. Abstr.) **(Slo)**

MICROBIOLOGY

Epidemiologic study of bluetongue viruses in Central America and the Caribbean: 1986–1988. Regional Bluetongue Team. Homan EJ, et al. **Am J Vet Res** 1990 Jul;51(7):1089–94

Isolation of Mycobacterium paratuberculosis from washed bovine ova after in vitro exposure. Rohde RF, et al. **Am J Vet Res** 1990 May;51(5):708–10

Bovine monoclonal antibodies specific for bovine herpesvirus-1 glycoprotein gIII. Srikumaran S, et al. **Am J Vet Res** 1990 Apr;51(4):543–5

Evaluation of DNA probes for detection of Shiga-like-toxin-producing Escherichia coli in food and calf fecal samples. Samadpour M, et al. **Appl Environ Microbiol** 1990 May;56(5):1212–5

Shiga-like-toxin-producing Escherichia coli in retail meats and cattle in Thailand. Suthienkul O, et al. **Appl Environ Microbiol** 1990 Apr;56(4):1135–9

A new subgroup 2 bovine adenovirus proposed as the prototype strain 10. Horner GW, et al. **Arch Virol** 1989; 109(1–2):121–4

The effects of age, environmental temperature and relative humidity on the bacterial flora of the upper respiratory tract in calves. Woldehiwet Z, et al. **Br Vet J** 1990 May–Jun;146(3):211–8

Effect of brucellosis vaccination and dehorning on transmission of bovine leukemia virus in heifers on a California dairy. Lassauzet ML, et al. **Can J Vet Res** 1990 Jan;54(1):184–9

Bacteriological investigations and resistance patterns in beef and goat's meat in Colombo's slaughter-house. Sixl W, et al. **Geogr Med Suppl** 1989;3:73–6

Fungi on the claws of buffalo and cow in Egypt. Abdel-Gawad KM. **J Basic Microbiol** 1989;29(6):323–8

Kinetics of hemolysin production in bovine group B streptococci. Griffiths BB. **J Basic Microbiol** 1990; 30(4):241–50

Isolation of a previously undescribed rickettsia from an aborted bovine fetus. Dilbeck PM, et al. **J Clin Microbiol** 1990 Apr;28(4):814–6

Comparison of Vitek Gram-Positive Identification system with API Staph-Trac system for species identification of staphylococci of bovine origin. Matthews KR, et al. **J Clin Microbiol** 1990 Jul;28(7):1649–51

Detection and characterization of fecal verotoxin-producing Escherichia coli from healthy cattle. Montenegro MA, et al. **J Clin Microbiol** 1990 Jun;28(6):1417–21

Brucella biovars isolated from nomadic cattle in the southern Darfur Province of western Sudan. Musa MT, et al. **J Comp Pathol** 1990 Jan;102(1):49–54

The effect of udder preparation before milking and contamination from the milking plant on bacterial numbers in bulk milk of eight dairy herds. McKinnon CH, et al. **J Dairy Res** 1990 Aug;57(3):307–18

Effects of amino acids and peptides on rumen microbial growth yields. Argyle JL, et al. **J Dairy Sci** 1989 Aug; 72(8):2017–27

Effect of the combination of monensin and isoacids on rumen fermentation in vitro. Kone P, et al. **J Dairy Sci** 1989 Oct; 72(10):2767–71

Comparison of nitrogen-15 and diaminopimelic acid for estimating bacterial protein synthesis of lactating cows fed diets of varying protein degradability. Sadik MS, et al. **J Dairy Sci** 1990 Mar;73(3):694–702

Isolation of Mycoplasma bovis from intact and microinjected preimplantation bovine embryos washed or treated with trypsin or antibiotics. Bielanski A, et al. **J In Vitro Fert Embryo Transf** 1989 Aug;6(4):236–41

Analysis of bovine parainfluenza-3 virus replication in bovine embryonic lung cells by indirect fluorescent antibody and hemadsorption assays. Toth TE, et al. **J Virol Methods** 1990 Jan;27(1):113–9

Isolation of Trichophyton verrucosum from soil in cattle breeding environments. Takatori K, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):823–5

Inter- and intraspecies spread of Escherichia coli in a farm environment in the absence of antibiotic usage. Marshall B, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6609–13

Purification and characterization of a 94-kDa Pasteurella haemolytica antigen. Nelson SL, et al. **Vet Microbiol** 1989 Nov;21(1):57–66

Characterization of porcine and some ruminant pestiviruses by cross-neutralization. Wensvoort G, et al. **Vet Microbiol** 1989 Aug;20(4):291–306

Identification of non-haemolytic pasteurellae cultured from the lungs of cattle. Abdullahi MZ, et al. **Vet Rec** 1989 Aug 12;125(7):154

Persistent excretion of rotavirus by pregnant cows. Kodituwakku SN, et al. **Vet Rec** 1990 Jun 2;126(22):547–9

Enterohaemolysin and Shiga-like toxin genes in E coli [letter] Pohl P, et al. **Vet Rec** 1990 Jun 9;126(23):585–6

[AIDS in cows?] Koolen MJ, et al. **Tijdschr Diergeneeskd** 1989 Dec 1;114(23):1198 **(Dut)**

[Study of hemolytic staphylococci in slaughtering animals] Narucka UJ. **Tijdschr Diergeneeskd** 1989 Oct 1; 114(19):996–8 (Eng. Abstr.) **(Dut)**

[Species category of Mycobacteria isolated from cattle and environmental objects] Ovdienko NP, et al. **Probl Tuberk** 1990;(2):46–8 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Omasal ciliated protozoa in cattle, bison, and sheep. Towne G, et al. **Appl Environ Microbiol** 1990 Feb;56(2):409–12

Mechanism whereby holotrich ciliates are retained in the reticulo-rumen of cattle. Abe M, et al. **Br J Nutr** 1989 Nov;62(3):579–87

Effects of cattle density on New Jersey light trap mosquito captures in the rice/cattle agroecosystem of southwestern Louisiana. McLaughlin RE, et al. **J Am Mosq Control Assoc** 1990 Jun;6(2):283–6

Ruminal ciliated protozoa in cattle fed finishing diets with or without supplemental fat. Towne G, et al. **J Anim Sci** 1990 Jul;68(7):2150–5

Influence of host diet on the fatty acid composition and content of rumen protozoa in cattle. O'Kelly JC, et al. **J Protozool** 1990 May–Jun;37(3):190–3

Resistance of Brahman and Simmentaler cattle to southern African ticks. Rechav Y, et al. **Onderstepoort J Vet Res** 1990 Mar;57(1):7–12

[Dictyocaulus species, lungworms in cattle and deer in The Netherlands] Jansen J, et al. **Tijdschr Diergeneeskd** 1990 Feb 15;115(4):155–8 (Eng. Abstr.) **(Dut)**

[Occurrence of tissue Filarioidea in ruminants in Poland] Demiaszkiewicz AW. **Wiad Parazytol** 1989;35(4):315–21 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Pregnancies from bovine oocytes matured and fertilized in vitro. Peura T, et al. **Acta Vet Scand** 1989;30(4):483–5

Influence of the physical form of diet on chewing activity and reticulo-rumen motility in cows. Nørgaard P. **Acta Vet Scand Suppl** 1989;86:46–52 (35 ref.)

Effect of dietary crude-protein type on fertilization and embryo quality in dairy cattle. Blanchard T, et al. **Am J Vet Res** 1990 Jun;51(6):905–8

Inhibition of pregnancy in heifers, using a repositol formulation of melengestrol acetate. Floyd JG Jr, et al. **Am J Vet Res** 1989 Sep;50(9):1493–5

Effects of antibiotics on phagocyte recruitment, function, and morphology in the bovine mammary gland during the early nonlactating period. Lintner TJ, et al. **Am J Vet Res** 1990 Apr;51(4):533–42

Cardiopulmonary effects of position in conscious cattle. Wagner AE, et al. **Am J Vet Res** 1990 Jan;51(1):7–10

Concern over publicity for ultrasound pregnancy testing of cows [news] **Aust Vet J** 1990 Apr;67(4):N111–2

Relationship between serving capacity of beef bulls as predicted by the yard test and their fertility during paddock mating. Blockey MA. **Aust Vet J** 1989 Nov;66(11):348–51

Evaluation of a regimen using a progesterone releasing intravaginal device (CIDR) and PMSG as a treatment for post partum anoestrus in dairy cattle. Jubb TF, et al. **Aust Vet J** 1989 Oct;66(10):334–6

Comparison of an electronic meter and the stethoscope for measuring heart rate in cattle. Magner T. **Aust Vet J** 1990 Apr;67(4):147–8

Relationships among bovine male and female reproductive traits. Perry V, et al. **Aust Vet J** 1990 Jan;67(1):4–5

Fertility indices for beef bulls. Perry V, et al. **Aust Vet J** 1990 Jan;67(1):13–6

Reproductive performance of Friesian cows in Saudi Arabia. II. Resting and service interval, conception rate, and number of services per conception. Salah MS, et al. **Beitr Trop Landwirtsch Veterinarmed** 1990;28(1):85–91

Characterization and amino-terminal sequence of apolipoprotein AI from plasma high density lipoproteins in the preruminant calf, Bos spp. Auboiron S, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):833–9

Concentrations of insulin-like growth factor-I in blood and ovarian follicular fluid of cattle selected for twins. Echternkamp SE, et al. **Biol Reprod** 1990 Jul;43(1):8–14

Seminal transferrin and spermatogenic capability in the bull. Gilmont RR, et al. **Biol Reprod** 1990 Jul;43(1):151–7

Ovarian follicular dynamics in heifers during early pregnancy. Ginther OJ, et al. **Biol Reprod** 1989 Aug; 41(2):247–54

Difference in luteinizing hormone response to an opioid antagonist in beef heifers and cows. Mahmoud AI, et al. **Biol Reprod** 1989 Sep;41(3):431–7

Luteinizing hormone secretion and corpus luteum function in cows receiving two levels of progesterone. Roberson MS, et al. **Biol Reprod** 1989 Dec;41(6):997–1003

High molecular weight basic and acidic immunosuppressive protein components in uterine secretions of pregnant cows. Segerson EC, et al. **Biol Reprod** 1989 Dec;41(6):1014–23

Maximum likelihood estimation of the parameters of the prior distributions of three variables that strongly influence reproductive performance in cows. McNally RJ. **Biometrics** 1990 Jun;46(2):501–14

Resistance of leaf and stem fractions of tropical forage to chewing and passage in cattle. McLeod MN, et al. **Br J Nutr** 1990 Jan;63(1):105–19

Effects of oestradiol cypionate on spontaneous and oxytocin-stimulated postpartum myometrial activity in the cow. Burton MJ, et al. **Br Vet J** 1990 Jul–Aug; 146(4):309–15

Post-partum, ovarian function in dairy cows as revealed by concentrations of oestradiol-17 beta and progesterone in defatted milk. Gyawu P, et al. **Br Vet J** 1990 May–Jun; 146(3):194–204

Adrenal response in the calf to repeated simulated transport. Locatelli A, et al. **Br Vet J** 1989 Nov–Dec;145(6):517–22

Caudal epidural analgesia in cattle using xylazine. Caron JP, et al. **Can J Vet Res** 1989 Oct;53(4):486–9

Effects of progesterone and human chorionic gonadotrophin administration five days postinsemination on plasma and milk concentrations of progesterone and pregnancy rates of normal and repeat breeder dairy cows. Walton JS, et al. **Can J Vet Res** 1990 Jun;54(3):305–8

Reticulo-ruminal motility in cattle (Bos indicus) and water buffaloes (Bubalus bubalis) fed a low quality roughage diet. McSweeney CS, et al. **Comp Biochem Physiol [A]** 1989; 94(4):635–8

Influence of estradiol on duration of anestrus and incidence of short estrous cycles in postpartum cows. Day ML, et al. **Domest Anim Endocrinol** 1990 Jan;7(1):19–25

Comparative study of mammary gland development and differentiation between beef and dairy heifers. Keys JE, et al. **Domest Anim Endocrinol** 1989 Oct;6(4):311–9

Response to selection for milk yield and metabolic challenges in primiparous dairy cows. Lukes AJ, et al. **Domest Anim Endocrinol** 1989 Oct;6(4):287–98

Response of the bovine corpus luteum to increased secretion of luteinizing hormone induced by exogenous gonadotropin releasing hormone. Martin TL, et al. **Domest Anim Endocrinol** 1990 Jan;7(1):27–34

Extension of short cycles in postpartum beef cows by intrauterine treatment with catecholestradiol. Nephew KP,

et al. **Domest Anim Endocrinol** 1989 Oct;6(4):363–70
Patterns of tonic luteinizing hormone release and ovulation frequency in suckled anestrous beef cows following varying intervals of temporary weaning. Shively TE, et al. **Domest Anim Endocrinol** 1989 Oct;6(4):379–87
Energy balance and body condition influence luteal function in Holstein heifers. Villa-Godoy A, et al. **Domest Anim Endocrinol** 1990 Apr;7(2):135–48
The sex ratio of offspring of estrus-synchronised heifers. James WH. **DTW Dtsch Tierarztl Wochenschr** 1989 Sep; 96(8):424–5
Oxytocin plasma levels in cows with normal parturition or dystocia and with placental retention. Kotwica G, et al. **Exp Clin Endocrinol** 1990 Apr;95(2):203–9
Exocrine pancreatic function during cold blockade of the vagus in chronic experiments on calves. Zabielski R, et al. **Exp Physiol** 1990 May;75(3):401–6
Role of the parathyroid glands in cows. Mayer GP. **Fed Proc** 1968 Jan-Feb;27(1):139–41
Morphology of immature bovine oocytes. de Loos F, et al. **Gamete Res** 1989 Oct;24(2):197–204
Induction of lactation in cattle with estradiol 17-beta and progesterone primed with progesterone. Dabas YP, et al. **Indian J Exp Biol** 1989 Sep;27(9):774–6
Comments on formula-fed veal calf production [letter] **J Am Vet Med Assoc** 1990 Aug 1;197(3):295–7
Bradycardia in cattle deprived of food. McGuirk SM, et al. **J Am Vet Med Assoc** 1990 Mar 15;196(6):894–6
Financial comparison of three testing strategies for detection of estrus in dairy cattle. Mohammed HO, et al. **J Am Vet Med Assoc** 1990 Mar 15;196(6):865–9
Viewpoints on dairy herd fertility [published erratum appears in J Am Vet Med Assoc 1990 Apr 15;196(8):1275] Olds D. **J Am Vet Med Assoc** 1990 Mar 1;196(5):726–7
Teaming up for animal agriculture. American Dairy Science Association and American Society of Animal Science, combined annual meeting. July 31–August 4, 1989, Louisville, Kentucky. ASAS section abstracts. **J Anim Sci** 1989;67 Suppl 2:1–246
Particle size reduction during initial mastication of forages by dairy cattle. Bailey AT, et al. **J Anim Sci** 1990 Jul; 68(7):2084–94
Life-cycle evaluation of Bos taurus and Bos indicus X Bos taurus breed types in a dry, temperate climate: performance of mature dams. Bailey CM, et al. **J Anim Sci** 1990 Apr; 68(4):960–8
Comparison of production characteristics from birth through slaughter of calves sired by Angus, Charolais or Piedmontese bulls. Baker JF, et al. **J Anim Sci** 1990 Jun; 68(6):1562–8
Techniques for estimation of milk yield in beef cows and relationships of milk yield to calf weight gain and postpartum reproduction. Beal WE, et al. **J Anim Sci** 1990 Apr;68(4):937–43
Replication requirements and number of ejaculates needed for assessing treatment effects on sperm output and seminal characteristics of electroejaculated Holstein bulls. Berndtson WE. **J Anim Sci** 1990 Mar;68(3):709–18
Two methods for parameter estimation using multiple-trait models and beef cattle field data. Bertrand JK, et al. **J Anim Sci** 1990 Aug;68(8):2310–8
Physiological responses of cattle consuming tall fescue to environmental temperature and supplemental phenothiazine. Boling JA, et al. **J Anim Sci** 1989 Sep; 67(9):2377–85
Feed intake, digestion and digesta characteristics of cattle fed Bermudagrass or orchardgrass alone or with ground barley or corn. Brake AC, et al. **J Anim Sci** 1989 Dec; 67(12):3425–36
Size and management effects on reproduction in first-, second- and third-parity beef cows. Buttram ST, et al. **J Anim Sci** 1989 Sep;67(9):2191–6
Synchronization of estrus with melengestrol acetate and prostaglandin F2 alpha in beef and dairy heifers. Chenault JR, et al. **J Anim Sci** 1990 Feb;68(2):296–303
Postpartum interval to estrus and patterns of LH and progesterone in first-calf suckled beef cows exposed to mature bulls. Custer EE, et al. **J Anim Sci** 1990 May; 68(5):1370–7
Quantitative analysis of nycterohemeral eating and ruminating patterns in heifers with different voluntary intakes and effects of monensin. Deswysen AG, et al. **J Anim Sci** 1989 Oct;67(10):2751–61
Twinning in cattle: II. Genetic and environmental effects on ovulation rate in puberal heifers and postpartum cows and the effects of ovulation rate on embryonic survival. Echternkamp SE, et al. **J Anim Sci** 1990 Jul;68(7):1877–88
Influence of single or multiple sires and serving capacity on mating behavior of beef bulls. Godfrey RW, et al. **J Anim Sci** 1989 Nov;67(11):2897–903
Evaluation of luteolysis and estrous synchronization by a prostaglandin analog (Luprostiol) in Brahman cows and heifers. Godfrey RW, et al. **J Anim Sci** 1989 Aug; 67(8):2067–74
Effect of season and location on semen quality and serum concentrations of luteinizing hormone and testosterone in Brahman and Hereford bulls. Godfrey RW, et al. **J Anim Sci** 1990 Mar;68(3):734–49
Effects of energy and lasalocid on productivity of first-calf heifers. Goehring TB, et al. **J Anim Sci** 1989 Aug; 67(8):1879–88
Voluntary consumption and digestion of diets high in endophyte-infected fescue by growing Holstein steers. Goetsch AL, et al. **J Anim Sci** 1989 Sep;67(9):2263–9
In vitro fertilization and development of in vitro matured bovine follicular oocytes. Goto K, et al. **J Anim Sci** 1989 Aug;67(8):2181–5
Forage intake by lactating beef cows differing in potential for milk production. Hatfield PG, et al. **J Anim Sci** 1989 Nov;67(11):3018–27
Acid and alkaline phosphatase in bovine antral follicles. Henderson KA, et al. **J Anim Sci** 1990 May;68(5):1363–9
Effects of body composition, pre- and postpartum energy level and early weaning on reproductive performance of beef cows and preweaning calf gain. Houghton PL, et al. **J Anim Sci** 1990 May;68(5):1438–46
Portal blood flow in beef steers: comparison of techniques and relation to hepatic blood flow, cardiac output and oxygen uptake. Huntington GB, et al. **J Anim Sci** 1990 Jun;68(6):1666–73
Evaluation of intensive vs extensive systems of beef production and the effect of level of beef cow milk production on postweaning performance. Lewis JM, et al. **J Anim Sci** 1990 Aug;68(8):2517–24
Age of cow and age of dam effects on milk production of Hereford cows. Lubritz DL, et al. **J Anim Sci** 1989 Oct; 67(10):2544–9
Eating and ruminating behavior of steers fed Coastal Bermudagrass hay at four levels. Luginbuhl JM, et al. **J Anim Sci** 1989 Dec;67(12):3410–8
Comparison of crossbred cows containing various proportions of Brahman in spring or fall calving systems. I. Productivity as two-year-olds. McCarter MN, et al. **J Anim Sci** 1990 Jun;68(6):1547–52
Relative calving date of first-calf heifers as related to production efficiency and subsequent reproductive performance. Marshall DM, et al. **J Anim Sci** 1990 Jul; 68(7):1812–7
Ovarian responses to intramuscular or intravenous administration of prostaglandin F2 alpha in control and FSH-treated beef heifers. Maurer RR, et al. **J Anim Sci** 1989 Aug;67(8):2075–80
Contributions of ovum cytoplasm, uterine environment and postnatal environment to maternal effects in beef cattle. Maurer RR, et al. **J Anim Sci** 1990 Aug;68(8):2319–32
Reproductive performance and variation in body weight during annual cycles for crossbred beef cows with different genetic potential for milk. Montaño-Bermudez M, et al. **J Anim Sci** 1990 Aug;68(8):2289–96
Breeding performance of beef bulls assigned to two-sire cow groups on pasture. Neville WE Jr, et al. **J Anim Sci** 1989 Nov;67(11):2848–53
Subsequent reproduction and calf performance of nonpregnant cows compared with pregnant cows and replacement females. Neville WE Jr, et al. **J Anim Sci** 1990 Aug;68(8):2188–97
A review of synchronization of estrus in postpartum cattle. Odde KG. **J Anim Sci** 1990 Mar;68(3):817–30 (98 ref.)
Effects of changes in frequency of reticular contractions on fluid and particulate passage rates in cattle. Okine EK, et al. **J Anim Sci** 1989 Dec;67(12):3388–96
Value of a molasses mixture containing natural protein as a supplement to brood cows offered low-quality forages. Pate FM, et al. **J Anim Sci** 1990 Mar;68(3):618–23
Control of the bovine estrous cycle with melengestrol acetate (MGA): a review. Patterson DJ, et al. **J Anim Sci** 1989 Aug;67(8):1895–906 (145 ref.)
Effects of preconditioning on pre- and post-shipment performance of feeder calves. Pritchard RH, et al. **J Anim Sci** 1990 Jan;68(1):28–34
Nutrition and postpartum rebreeding in cattle. Randel RD. **J Anim Sci** 1990 Mar;68(3):853–62 (85 ref.)
Biological type effects on gestation length, calving traits and calf growth rate. Reynolds WL, et al. **J Anim Sci** 1990 Mar;68(3):630–9
Nutritional anestrus in beef cows: concentrations of glucose and nonesterified fatty acids in plasma and insulin in serum. Richards MW, et al. **J Anim Sci** 1989 Sep;67(9):2354–62
Production characters of straightbred, F1 and F2 cows: birth and weaning characters of terminal-cross calves. Sacco RE, et al. **J Anim Sci** 1989 Aug;67(8):1972–9
Meiotic maturation of bovine oocytes in vitro: improvement of meiotic competence by dibutyryl cyclic adenosine 3',5'-monophosphate. Sato E, et al. **J Anim Sci** 1990 Apr; 68(4):1182–7
Changing adrenergic sensitivity of the caruncular arterial vasculature supplying the bovine placentome. Sauer JJ, et al. **J Anim Sci** 1989 Nov;67(11):3003–10
Physiological mechanisms controlling anestrus and infertility in postpartum beef cattle [published erratum appears in J Anim Sci 1990 May;68(5):1490] Short RE, et al. **J Anim Sci** 1990 Mar;68(3):799–816 (200 ref.)
Relationships of sire scrotal circumference to offspring reproduction and growth. Smith BA, et al. **J Anim Sci** 1989 Nov;67(11):2881–5
Intake of direct cut or wilted grass silage as related to chewing behavior, ruminal characteristics and site and extent of digestion by heifers. Teller E, et al. **J Anim Sci** 1989 Oct;67(10):2802–9
Influence of footing surface on mounting and other sexual behaviors of estrual Holstein cows. Vailes LD, et al. **J Anim Sci** 1990 Aug;68(8):2333–9
Use of ultrasonic Doppler waveforms to estimate changes in uterine artery blood flow and vessel compliance. Waite LR, et al. **J Anim Sci** 1990 Aug;68(8):2450–8
Two-, three- and four-breed rotational crossbreeding of beef cattle: reproductive traits. Williams AR, et al. **J Anim Sci** 1990 Jun;68(6):1536–46
Suckling as a regulator of postpartum rebreeding in cattle: a review. Williams GL. **J Anim Sci** 1990 Mar;68(3):831–52 (143 ref.)
Effect of selection for growth traits on age and weight at puberty in bovine females. Wolfe MW, et al. **J Anim Sci** 1990 Jun;68(6):1595–602
Oxygen transport during exercise in large mammals. II. Oxygen uptake by the pulmonary gas exchanger. Constantinopol M, et al. **J Appl Physiol** 1989 Aug; 67(2):871–8
Oxygen transport during exercise in large mammals. I. Adaptive variation in oxygen demand. Jones JH, et al. **J Appl Physiol** 1989 Aug;67(2):862–70
Compensatory milk production within the bovine udder: effects of short-term non-milking of single quarters. Hamann J, et al. **J Dairy Res** 1990 Feb;57(1):17–22
Milk yield and mammary function in dairy cows milked four times daily. Hillerton JE, et al. **J Dairy Res** 1990 Aug; 57(3):285–94
Rationale of feeding systems for lactating dairy cows. Johnson CL, et al. **J Dairy Res** 1990 May;57(2):151–64 (15 ref.)
Feeding calcium soaps of fatty acids to lactating cows: effect on production, body condition and blood lipids. Sklan D, et al. **J Dairy Res** 1989 Nov;56(5):675–81
Seventy-second annual meeting of the American Dairy Science Association. Ames, Iowa, June 26–29, 1977. Abstracts. **J Dairy Sci** 1977 Jun;60 Suppl 1:33–174
American Dairy Science Association, 85th annual meeting. June 24–27, 1990, North Carolina. Abstracts. **J Dairy Sci** 1990;73 Suppl 1:1–297
Influence of dexamethasone, progesterone, gonadotropin-releasing hormone, and testosterone on estrous behavior of estradiol-treated ovariectomized heifers. Allrich RD, et al. **J Dairy Sci** 1989 Oct; 72(10):2707–11
Effect of yeast culture on nutrient digestibility and milk yield response in early- to midlactation dairy cows. Arambel MJ, et al. **J Dairy Sci** 1990 Jun;73(6):1560–3
Effect of poultry waste feeding on intake, body weight and milk yield of Holstein cows. Arave CW, et al. **J Dairy Sci** 1990 Jan;73(1):129–34
Effects of dietary neutral detergent fiber concentration and supplementary long hay on chewing activities and milk production of dairy cows. Beauchemin KA, et al. **J Dairy Sci** 1989 Sep;72(9):2288–300
Effects of fiber source and method of feeding on chewing activities, digestive function, and productivity of dairy cows. Beauchemin KA, et al. **J Dairy Sci** 1990 Mar; 73(3):749–62
Effects of photoperiod and pair-feeding on lactation of cows fed corn or barley grain in total mixed rations. Bilodeau PP, et al. **J Dairy Sci** 1989 Nov;72(11):2999–3005
Changes in milk fat phospholipids during lactation. Bitman J, et al. **J Dairy Sci** 1990 May;73(5):1208–16
Model to describe and alleviate milk protein depression in early lactation dairy cows fed a high fat diet. Casper DP, et al. **J Dairy Sci** 1989 Dec;72(12):3327–35
Nutritional implications of somatotropin for lactating cows. Chalupa W, et al. **J Dairy Sci** 1989 Oct;72(10):2510–24
Effect of fertirelin acetate or buserelin on conception rate at first or second insemination in lactating dairy cows. Chenault JR. **J Dairy Sci** 1990 Mar;73(3):633–8
Influence of high dietary aluminum on performance and phosphorus bioavailability in dairy calves. Crowe NA, et al. **J Dairy Sci** 1990 Mar;73(3):808–18
Corn gluten meal and blood meal mixture for dairy cows in midlactation. De Gracia M, et al. **J Dairy Sci** 1989 Nov; 72(11):3064–9
Lactational evaluation of recombinant bovine somatotropin with corn and barley diets. Eisenbeisz WA, et al. **J Dairy Sci** 1990 May;73(5):1269–79
Effect of chronobiological manipulation of lactation in the dairy cow. Evans NM, et al. **J Dairy Sci** 1989 Nov; 72(11):2921–7
The effect of whole ejaculate filtration on the morphology and the fertility of bovine semen. Graham EF, et al. **J Dairy Sci** 1990 Jan;73(1):91–7
Conception rate, growth, and lactation of dairy heifers treated with recombinant somatotropin. Grings EE, et al. **J Dairy Sci** 1990 Jan;73(1):73–7
Influence of dietary protein concentration and degradability on performance of lactating cows during hot environmental temperatures. Higginbotham GE, et al. **J Dairy Sci** 1989 Oct;72(10):2554–64
Lysis of oocytes by bovine sperm and seminal plasma. Ijaz A, et al. **J Dairy Sci** 1989 Dec;72(12):3273–9
Induction of bovine sperm capacitation by TEST-yolk semen extender. Ijaz A, et al. **J Dairy Sci** 1989 Oct;72(10):2683–90
Evaluation of calcium-free Tyrode's sperm capacitation medium for use in bovine in vitro fertilization. Ijaz A, et al. **J Dairy Sci** 1989 Dec;72(12):3280–5
Effect of washing and capacitating media pH on bull sperm motility, acrosome integrity, and ability to penetrate zona-free hamster oocytes. Ijaz A, et al. **J Dairy Sci** 1989 Oct;72(10):2691–9
Identification of the capacitating agent for bovine sperm in egg yolk-TEST semen extender. Ijaz A, et al.

J Dairy Sci 1989 Oct;72(10):2700–6

Effects of elevated iodine in milk replacer on calf performance. Jenkins KJ, et al. J Dairy Sci 1990 Mar; 73(3):804–7

Effect of hydrogenated fat on feed intake, nutrient digestion, and lactation performance of dairy cows. Jenkins TC, et al. J Dairy Sci 1989 Sep;72(9):2316–24

Utilization of three maturities of alfalfa by dairy cows fed rations that contain similar concentrations of fiber. Kaiser RM, et al. J Dairy Sci 1989 Sep;72(9):2301–7

Effect of variability in response to superovulation on donor cow selection differentials in nucleus breeding schemes. Keller DS, et al. J Dairy Sci 1990 Feb;73(2):549–54

Microbial inoculation of alfalfa haylage: ensiling characteristics and milk production response when fed to early lactation dairy cows. Kent BA, et al. J Dairy Sci 1989 Sep;72(9):2325–30

Estimation of repeatability of calving ease in Canadian Holsteins. Klassen DJ, et al. J Dairy Sci 1990 Jan; 73(1):205–12

Ammonia-treated alfalfa silage for lactating dairy cows. Kung L Jr, et al. J Dairy Sci 1989 Oct;72(10):2565–72

Effects of gonadotropin-releasing hormone and human chorionic gonadotropin on pregnancy rate in dairy cattle. Lewis GS, et al. J Dairy Sci 1990 Jan;73(1):66–72

Relationships of milk protein types to lifetime performance. Lin CY, et al. J Dairy Sci 1989 Nov;72(11):3085–90

Lactational responses to and in vitro ruminal solubility of magnesium oxide or magnesium chelate. Lough DS, et al. J Dairy Sci 1990 Feb;73(2):413–24

Effects of feed intake and thermal stress on mammary blood flow and other physiological measurements in lactating dairy cows. Lough DS, et al. J Dairy Sci 1990 Feb; 73(2):325–32

Lactation response of dairy cows receiving bovine somatotropin via daily injections or in a sustained-release vehicle. McGuffey RK, et al. J Dairy Sci 1990 Mar; 73(3):763–71

Performance of cows in early lactation fed isonitrogenous diets containing soybean meal or animal by-product meals. Mäntysaari PE, et al. J Dairy Sci 1989 Nov;72(11):2958–67

Forage intake, ruminal dry matter disappearance, and ruminal blood volatile fatty acids for steers in 18 and 32 degrees C temperatures. Martz FA, et al. J Dairy Sci 1990 May; 73(5):1280–7

True absorption of calcium and phosphorus from alfalfa and corn silage when fed to lactating cows. Martz FA, et al. J Dairy Sci 1990 May;73(5):1288–95

Influence of gonadotropin-releasing hormone and timing of insemination relative to estrus on pregnancy rates of dairy cattle at first service. Mee MO, et al. J Dairy Sci 1990 Jun;73(6):1500–7

Recovery of fecal chromium used as a digestibility marker in cattle. Mir PS, et al. J Dairy Sci 1989 Oct;72(10):2549–53

Relationships between reproduction traits, age and body weight at calving, and days dry in first lactation Ayrshires and Holsteins. Moore RK, et al. J Dairy Sci 1990 Mar; 73(3):835–42

Effects of age, parity, season of calving, and sire on milk yield of Carora cows in Venezuela. Morales F, et al. J Dairy Sci 1989 Aug;72(8):2161–9

Dietary interaction of cane molasses with source of roughage: intake and lactation effects. Morales JL, et al. J Dairy Sci 1989 Sep;72(9):2331–8

Effect of bovine follicular fluid and follicle-stimulating hormone on follicular growth in unilaterally ovariectomized prepuberal heifers. Moser MT, et al. J Dairy Sci 1989 Aug;72(8):2170–8

Response to recombinant bovine somatotropin in dairy cows with different genetic merit for milk production. Nytes AJ, et al. J Dairy Sci 1990 Mar;73(3):784–91

Heifer fertility and its relationship with cow fertility and production traits in Holstein dairy cattle. Raheja KL, et al. J Dairy Sci 1989 Oct;72(10):2665–9

Relationships between fertility and production in Holstein dairy cattle in different lactations. Raheja KL, et al. J Dairy Sci 1989 Oct;72(10):2670–8

Relationship between numbers of alpha 2- and beta 2-adrenoceptors in teat tissue and blood cells and milkability of primiparous cows. Roets E, et al. J Dairy Sci 1989 Dec;72(12):3304–13

Effects of dietary protein degradability and casein or amino acid infusions on production and plasma amino acids in dairy cows. Seymour WM, et al. J Dairy Sci 1990 Mar; 73(3):735–48

Effects of stage of lactation and pregnancy and their interactions on milk yield and constituents. Sharma AK, et al. J Dairy Sci 1990 Jun;73(6):1586–92

Effect of dietary protein and exogenous gonadotropin-releasing hormone on circulating progesterone concentrations and performance of Holstein cows. Sonderman JP, et al. J Dairy Sci 1989 Aug; 72(8):2179–83

Association between neutral-to-earth and cow contact voltage on New York dairy farms. Southwick LH, et al. J Dairy Sci 1989 Sep;72(9):2417–20

Relationship among climatological variables and hourly distribution of calvings in Holsteins fed during the late afternoon. Stevenson JS. J Dairy Sci 1989 Oct; 72(10):2712–7

Milking and feeding-induced release of the gastrointestinal hormones gastrin and somatostatin in dairy cows. Svennersten K, et al. J Dairy Sci 1989 Sep;72(9):2276–82

Effect of local stimulation of one quarter on milk production and milk components. Svennersten K, et al. J Dairy Sci 1990 Apr;73(4):970–4

Effects of bovine somatotropin on milk yield and composition, body weight, and condition score of Holstein and Jersey cows. West JW, et al. J Dairy Sci 1990 Apr; 73(4):1062–8

Responses of lactating Holstein cows to chilled drinking water in high ambient temperatures. Wilks DL, et al. J Dairy Sci 1990 Apr;73(4):1091–9

Dietary phosphorus concentrations related to breaking load and chemical bone properties in heifers. Williams SN, et al. J Dairy Sci 1990 Apr;73(4):1100–6

Calcium requirement and increased association with bovine sperm during capacitation by heparin. Handrow RR, et al. J Exp Zool 1989 Nov;252(2):174–82

Bioactivity of milk from bST-treated cows. Groenewegen PP, et al. J Nutr 1990 May;120(5):514–20

Vertebral end-plate failure in porcine and bovine models of spinal fracture instrumentation. Allan DG, et al. J Orthop Res 1990 Jan;8(1):154–6

The cycle of the seminiferous epithelium in Bali cattle (Bos sondaicus). McCool CJ. J Reprod Fertil 1989 Sep; 87(1):327–30

Effect of oxygen concentration on in-vitro development of preimplantation sheep and cattle embryos. Thompson JG, et al. J Reprod Fertil 1990 Jul;89(2):573–8

Suppression of the secondary FSH surge with bovine follicular fluid is associated with delayed ovarian follicular development in heifers. Turzillo AM, et al. J Reprod Fertil 1990 Jul;89(2):643–53

Follicular correlates with in-vitro fertilization in cattle. Greve T, et al. J Reprod Fertil Suppl 1989;38:117–26 (73 ref.)

Ultrastructural aspects of oocyte maturation and fertilization in cattle. Hyttel P, et al. J Reprod Fertil Suppl 1989; 38:35–47 (52 ref.)

Practical aspects of in-vitro fertilization in cattle. Sirard MA. J Reprod Fertil Suppl 1989;38:127–34 (73 ref.)

The non-significant effect of feeding level, growth rate and age on libido of young Afrikaner bulls. Maree C, et al. J S Afr Vet Assoc 1989 Sep;60(3):143–4

Postnatal development of brainstem auditory-evoked potentials, electroretinograms, and visual-evoked potentials in the calf. Strain GM, et al. J Vet Intern Med 1989 Oct–Dec;3(4):231–7

Expression of tumor necrosis factor-alpha receptors on bovine macrophages, lymphocytes and polymorphonuclear leukocytes, internalization of receptor-bound ligand, and some functional effects. Ohmann HB, et al. Lymphokine Res 1990 Spring;9(1):43–58

Diadem/crater defects in spermatozoa from two related angus bulls. Larsen RE, et al. Mol Reprod Dev 1990 Jan; 25(1):87–96

Effects of osmolality on water, electrolytes and VFAs absorption from the isolated ruminoreticulum in the cow. Tabaru H, et al. Nippon Juigaku Zasshi 1990 Feb;52(1):91–6

Udder health implications of premature bovine mammary regression. II. Collateral intramammary reactions in quarters milked normally during 168-hour milk stasis in opposite quarters. Giesecke WH, et al. Onderstepoort J Vet Res 1990 Mar;57(1):49–56

Resistance of Nguni, Bonsmara and Hereford cattle to ticks in a Bushveld region of South Africa. Spickett AM, et al. Onderstepoort J Vet Res 1989 Dec;56(4):245–50

Production and regulation of progesterone in bovine corpus luteum and placenta in mid and late gestation: a personal review. Shemesh M. Reprod Fertil Dev 1990;2(2):129–35 (37 ref.)

Evaluation of bull semen fertility by homologous in vitro fertilization tests. Marquant-Le Guienne B, et al. Reprod Nutr Dev 1990;30(2):259–66

Quantitative inhibitory influence of porcine cumulus cells upon the maturation of pig and cattle oocytes in vitro. Petr J, et al. Reprod Nutr Dev 1989;29(5):541–9

Spermatogenesis in Bali cattle (Bos sondaicus) and hybrids with Bos indicus and Bos taurus. McCool CJ. Res Vet Sci 1990 May;48(3):288–94

Productivity of crossbred cattle on smallholder farms in southern Malawi. Agyemang K, et al. Trop Anim Health Prod 1990 Feb;22(1):9–16

Simulated livestock dynamics—effects of pastoral offtake practices and drift on cattle wealth. Baptist R. Trop Anim Health Prod 1990 May;22(2):67–76

Progress in the use of computerised recording systems in dairy cow monitoring and extension in Malaysia. Pharo HJ, et al. Trop Anim Health Prod 1990 May;22(2):77–88

Mpwapwa cattle: an Indo-Euro-African synthesis. Syrstad O. Trop Anim Health Prod 1990 Feb;22(1):17–22

Development of smallholder dairy units in Malaysia. Wan Hassan WE, et al. Trop Anim Health Prod 1989 Aug; 21(3):175–82

Influence of androgens on the genital tract of cyclic heifers. Groot MJ, et al. Vet Q 1989 Oct;11(4):198–209

The bovine pituitary-adrenocortical axis and milk yield. van der Kolk JH. Vet Q 1990 Apr;12(2):114–20 (39 ref.)

Effects of prostaglandin on the reproductive performance of dairy cows. Armstrong JD, et al. Vet Rec 1989 Dec 9;125(24):597–600

Behaviour of cows in cubicles and its possible relationship with laminitis in replacement dairy heifers. Colam-Ainsworth P, et al. Vet Rec 1989 Dec 2; 125(23):573–5

Behaviour of cows in cubicles [letter] David G. Vet Rec 1990 Jan 20;126(3):69

Stress reactions of cattle undergoing ritual slaughter using two methods of restraint. Dunn CS. Vet Rec 1990 May 26;126(21):522–5

Determination of milk withholding time in cattle following use of intramuscular lincomycin. Pearson A. Vet Rec 1989 Dec 9;125(24):601

Herd fertility and Corynebacterium haemolyticum in bovine semen [letter] Richardson A, et al. Vet Rec 1968 Aug 10; 83(6):156–7

Vaginal probes [letter] [see comments] Scott SJ. Vet Rec 1989 Dec 9;125(24):609 Comment in: Vet Rec 1990 Feb 10;126(6):149.

Respiratory-induced variability of pulmonary arterial pressure measurements in cattle. Amory H, et al. Vet Res Commun 1990;14(3):227–33

Recovery of bovine oocytes from small vesicular follicles for in vitro maturation and fertilization. Stubbings RB, et al. Vet Res Commun 1990;14(1):71–81

Influence of repeated prostaglandin F2 alpha injections on the ovarian function in the heifer. Aiumlamai S, et al. Zentralbl Veterinarmed [A] 1989 Aug;36(7):530–8

Ventilatory mechanics in healthy calves during helium-oxygen breathing. Rodriguez MN, et al. Zentralbl Veterinarmed [A] 1990 May;37(4):241–6

Low-energy He-Ne-laser irradiation of the bovine mammary gland. Stoffel M, et al. Zentralbl Veterinarmed [A] 1989 Oct;36(8):596–602

[Abstracts presented at the 14th Seminar on the Physiology of Farm Animals. Liblice, 1–3 June 1988] Cesk Fysiol 1989; 38(4):335–76 (Cze, Slo)

[Increasing the superovulatory effect in heifers by trans-zonal bisection of embryos in practice] Lopatářová M, et al. Vet Med (Praha) 1989 Nov;34(11):641–50 (Eng. Abstr.) (Cze)

[Cesarean section (letter)] Hagendijk J. Tijdschr Diergeneeskd 1989 Nov 15;114(22):1170 (Dut)

[Dairy cattle near the Dead Sea] Naimi H. Tijdschr Diergeneeskd 1989 Oct 15;114(20):1061–2 (Dut)

[Bovine somatotropin; a review] Terpstra PM, et al. Tijdschr Diergeneeskd 1990 Jan 15;115(2):78–84 (0 ref.) (Dut)

[Feeding, pathology and productivity of the dairy cow: interrelations during the course of lactation] Coulon JB, et al. Ann Rech Vet 1990;21(1):33–47 (Eng. Abstr.) (Fre)

[Folliculogenesis and embryo transfer in ruminants] Beckers JF. Bull Mem Acad R Med Belg 1989;144(12):607–16; discussion 617–20 (Eng. Abstr.) (Fre)

[Digestion of pea and soya proteins in the preruminant calf. I. Circulating levels of nutrients, antibody formation and intestinal permeability to macromolecules] Nunes do Prado I, et al. Reprod Nutr Dev 1989;29(4):413–24 (Eng. Abstr.) (Fre)

[Digestion of pea and soya proteins in the preruminant calf. II. Apparent digestibility at the end of the ileum and the digestive tube] Nunes do Prado I, et al. Reprod Nutr Dev 1989;29(4):425–39 (Eng. Abstr.) (Fre)

[Management of reproduction in large dairy herds under Moroccan conditions. III. Resumption of heat and anestrus after natural insemination] Lakhdissi H, et al. Rev Elev Med Vet Pays Trop 1989;42(2):261–6 (Eng. Abstr.) (Fre)

[The effect of granulosa cells on maturation, fertilization and cleavage in vitro] Alm H, et al. Arch Exp Veterinarmed 1990;44(1):83–91 (Eng. Abstr.) (Ger)

[The detection of in vitro capacitation of bull sperm by heparin treatment] Blottner S, et al. Arch Exp Veterinarmed 1989;43(4):623–35 (Eng. Abstr.) (Ger)

[The effect of cumulus oophorus on the fertilization in vitro of mature oocytes of cattle] Böttcher M, et al. Arch Exp Veterinarmed 1990;44(1):53–7 (Eng. Abstr.) (Ger)

[Comparative studies of superovulation in high-producing cows] Rommel P, et al. Arch Exp Veterinarmed 1990; 44(1):117–25 (Eng. Abstr.) (Ger)

[The reproductive function in experimentally-produced monozygotic twin bulls] Braun J, et al. Berl Munch Tierarztl Wochenschr 1990 Jun 1;103(6):213–7 (Eng. Abstr.) (Ger)

[Effects of natural and synthetic PGF2 alpha preparations on the uterine contractility of cattle] Stolla R, et al. Berl Munch Tierarztl Wochenschr 1990 Jun 1; 103(6):198–202 (Eng. Abstr.) (Ger)

[Embryo transfer in cattle—present status and outlook] Hahn J. DTW Dtsch Tierarztl Wochenschr 1990 Jun;97(6):258–63 (23 ref.) (Ger)

[Lying behavior and space requirements of German Schwarzbunt fattening calves in box stalls] Lotthammer KH, et al. DTW Dtsch Tierarztl Wochenschr 1989 Sep; 96(8):408–12 (Eng. Abstr.) (Ger)

[Ethological foundations in relation to animal husbandry technics] Zeeb K. DTW Dtsch Tierarztl Wochenschr 1990 Jun;97(6):220–5 (Eng. Abstr.) (Ger)

[The uterine motility of cattle during late pregnancy, labor and puerperium. I. Spontaneous motility] Kündig H, et al. Schweiz Arch Tierheilkd 1990;132(2):77–84 (Eng. Abstr.) (Ger)

[Development of water space volumes in calves during the first month of life. III. Changes in the plasma and circulating blood volumes] Janus K. **Pol Arch Weter** 1988; 28(3–4):43–55 (Eng. Abstr.) **(Pol)**

[The effect of nutrition and technology on fertility in cows and the health of calves] Vasil' J, et al. **Vet Med (Praha)** 1990 Jan;35(1):11–20 (Eng. Abstr.) **(Slo)**

[Measurement of the spontaneous motility in vitro of the floor of the reticular sulcus in cattle] Encinas T, et al. **Rev Esp Fisiol** 1989 Dec;45(4):367–72 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

Social aggregations in cattle. I. Segregation by breed in free-ranging herds. Murphey RM. **Behav Genet** 1990 May; 20(3):341–54

Social aggregations in cattle. II. Contributions of familiarity and genetic similarity. Murphey RM, et al. **Behav Genet** 1990 May;20(3):355–68

SURGERY

Colonic anastomosis in calves: an experimental study. Singh H, et al. **Acta Vet Hung** 1989;37(1–2):167–77

Effects of teat cistern mural biopsy and teatoscopy stab versus longitudinal incision with or without tube implant on incisional healing in lactating dairy cattle. Tulleners E, et al. **Am J Vet Res** 1990 Aug;51(8):1257–66

Experimental colonic anastomosis in bovines—and angiographic study. Singh H, et al. **Arch Exp Veterinarmed** 1989;43(4):559–66

Cannulation of the rumen in cattle and buffaloes. McSweeney CS. **Aust Vet J** 1989 Aug;66(8):266–8

Healing of dehorning wounds. Kihurani DO, et al. **Br Vet J** 1989 Nov–Dec;145(6):580–5

Effect of brucellosis vaccination and dehorning on transmission of bovine leukemia virus in heifers on a California dairy. Lassauzet ML, et al. **Can J Vet Res** 1990 Jan;54(1):184–9

Surgery of the neonatal bovine digestive tract. Bristol DG, et al. **Vet Clin North Am Food Anim Pract** 1990 Jul; 6(2):473–93 (70 ref.)

A surgical approach to the ramus of the mandible in cattle and horses. Case reports of a bull and a horse. Wilson DG, et al. **Vet Surg** 1990 May–Jun;19(3):191–5

Sampling of lymph from lymph vessels afferent to the supramammary lymph gland in the cow. Obel N, et al. **Zentralbl Veterinarmed [A]** 1989 Aug;36(7):490–3

Sampling of the bovine teat for studies of defence mechanisms and inflammatory reactions based on a surgical procedure separating the teat and udder cisterns. Persson K, et al. **Zentralbl Veterinarmed [B]** 1989 Sep;36(7):527–31

[The attaching of bypass cannulas to the duodenum of dairy cows] Engelmann H, et al. **Arch Exp Veterinarmed** 1990; 44(1):59–63 (Eng. Abstr.) **(Ger)**

URINE

Excretion of purine derivatives by ruminants: endogenous excretion, differences between cattle and sheep. Chen XB, et al. **Br J Nutr** 1990 Jan;63(1):121–9

[A safe system of urine collection in cows] Hesselink JW. **Tijdschr Diergeneeskd** 1990 Apr 1;115(7):305–6 (Eng. Abstr.) **(Dut)**

CATTLE DISEASES

Dilated (congestive) cardiomyopathy in a Friesian heifer. McLennan MW, et al. **Aust Vet J** 1990 Feb;67(2):75–6

Thymic lymphosarcoma with metastases causing spinal cord compression and pelvic limb paresis in a heifer. Holmes LA, et al. **Br Vet J** 1990 Jan–Feb;146(1):91–2

Disorder of the inhibitory glycine receptor: inherited myoclonus in Poll Hereford calves. Gundlach AL. **FASEB J** 1990 Jul;4(10):2761–6 (39 ref.)

Proceedings of an International Roundtable on Bovine Spongiform Encephalopathy. **J Am Vet Med Assoc** 1990 May 15;196(10):1673–90 (0 ref.)

Recommendations for initiation of research studies on bovine spongiform encephalopathy. Gibbs CJ. **J Am Vet Med Assoc** 1990 May 15;196(10):1687–8

Squamous cell carcinoma of the vulva in a cow. Meyers SA, et al. **J Am Vet Med Assoc** 1990 May 15;196(10):1644–6

Isolation of Mycoplasma bovirhinis from the kidneys of a bull with urinary obstruction and subacute nephritis. Panangala VS, et al. **J Am Vet Med Assoc** 1990 Aug 1; 197(3):381–2

Eperythrozoon wenyonii infection in dairy cattle. Smith JA, et al. **J Am Vet Med Assoc** 1990 Apr 15;196(8):1244–50

Clinical manifestations of brucellosis in cattle of the southern Darfur Province, western Sudan. Musa MT, et al. **J Comp Pathol** 1990 Jul;103(1):95–9

Studies on experimental Jembrana disease in Bali cattle. II. Clinical signs and haematological changes. Soesanto M, et al. **J Comp Pathol** 1990 Jul;103(1):61–71

Delusional bovine spongiform encephalopathy [letter] Lovestone S. **Lancet** 1990 Sep 1;336(8714):565

Lyme disease in large animals. Post JE. **N J Med** 1990 Jul; 87(7):575–7 (17 ref.)

Frankness needed [editorial] **Nature** 1990 Jun 21; 345(6277):648

BSE. No madness in UK policy [news] Aldhous P. **Nature** 1990 Jul 19;346(6281):211

Resistance of Brahman and Simmentaler cattle to southern African ticks. Rechav Y, et al. **Onderstepoort J Vet Res** 1990 Mar;57(1):7–12

Oravske kuru. A human dementia raises the stakes in mad cow disease [news] Beardsley T. **Sci Am** 1990 Aug; 263(2):24–6

Turkey problems herald Christmas [news] **Vet Rec** 1989 Dec 16;125(25):613–4

Bovine spongiform encephalopathy [letter] **Vet Rec** 1990 Jun 23;126(25):628–9

MPs to look at government handling of BSE [news] **Vet Rec** 1990 May 26;126(21):516

Trace element deficiencies abound in cattle [news] **Vet Rec** 1990 Jan 13;126(2):27–8

Is BSE a new disease? [letter] **Vet Rec** 1990 Jun 9;126(23):585

Clinical findings in cattle with dilatation and torsion of the caecum. Braun U, et al. **Vet Rec** 1989 Sep 2;125(10):265–7

Two cases of persistent patent ductus arteriosus in calves [see comments] Horton EW, et al. **Vet Rec** 1989 Sep 23; 125(13):354 Comment in: Vet Rec 1989 Oct 21;125(17):445.

[The most important parasitic intestinal infections in calves and their role in diarrheal diseases] Nikitin VF, et al. **Vet Med (Praha)** 1990 Apr;35(4):201–6 (Eng. Abstr.) **(Cze)**

[The Veterinary Service Board. BSE (bovine spongiform encephalopathy)] **Tijdschr Diergeneeskd** 1990 Jun 15; 115(12):603–4 **(Dut)**

[Corneal dermoids and double malformation of the nostrils in a bull] Neophytou C. **Berl Munch Tierarztl Wochenschr** 1989 Dec 1;102(12):421–2 (Eng. Abstr.) **(Ger)**

[Mycoplasma infections in sheep, goats and yaks] Damdinsurén Ch. **Arch Exp Veterinarmed** 1989;43(5):763–7 (Eng. Abstr.) **(Rus)**

BLOOD

Determination of glycohaemoglobin levels in ketonuric and non-ketonuric cows. Bárdos L, et al. **Acta Vet Hung** 1989; 37(3):299–301

Plasma lipids in normal cows around partus and in cows with metabolic disorders with and without fatty liver. Holtenius P. **Acta Vet Scand** 1989;30(4):441–5

Thyroxine in blood plasma related to plasma levels of acetoacetate and glucose in ketotic and healthy cows. Ropstad E, et al. **Acta Vet Scand** 1989;30(2):175–83

Variations in parameters of liver function and plasma progesterone related to underfeeding and ketosis in a dairy herd. Ropstad E, et al. **Acta Vet Scand** 1989;30(2):185–97

Comparison of bile porphyrin concentrations in cattle and human beings with protoporphyria. Bloomer JR, et al. **Am J Vet Res** 1990 Jul;51(7):1144–6

Serum amyloid A concentrations in cows given endotoxin as an acute-phase stimulant. Boosman R, et al. **Am J Vet Res** 1989 Oct;50(10):1690–4

Trypanosoma congolense: erythrocyte indices, plasma iron turnover and effects of treatment in infected cattle. Wellde BT, et al. **Ann Trop Med Parasitol** 1989 Aug;83 Suppl 1:201–6

The relationship between certain blood constituents in cows with milk fever and the response following treatment with calcium borogluconate solutions. Fenwick DC. **Aust Vet J** 1990 Mar;67(3):102–4

Serum cortisol and "stress" in cattle. Herd RM. **Aust Vet J** 1989 Oct;66(10):341–2

Changes in plasma composition in calves surviving or dying from diarrhoea. Groutides CP, et al. **Br Vet J** 1990 May–Jun;146(3):205–10

Preliminary studies of a platelet function disorder in Simmental cattle. Searcy GP, et al. **Can J Vet Res** 1990 Jun;54(3):394–6

Erythrocyte glutathione and its metabolizing enzymes in bovine urinary bladder cancer. Dawra RK, et al. **Cancer Lett** 1989 Nov 30;48(2):143–6

Thrombocytopenia and hemorrhages in veal calves infected with bovine viral diarrhea virus. Corapi WV, et al. **J Am Vet Med Assoc** 1990 Feb 15;196(4):590–6

Studies of experimental Jembrana disease in Bali cattle. I. Transmission and persistence of the infectious agent in ruminants and pigs, and resistance of recovered cattle to re-infection. Soeharsono S, et al. **J Comp Pathol** 1990 Jul; 103(1):49–59

Erythrocyte glutathione peroxidase activity as an indicator of selenium status in an intensively-managed beef herd. Ehret WJ, et al. **J S Afr Vet Assoc** 1989 Sep;60(3):130–3

Plasma lipoproteins in dairy cows with naturally occurring severe fatty liver: evidence of alteration in the distribution of apo A-I-containing lipoproteins. Mazur A, et al. **Lipids** 1989 Sep;24(9):805–11

Studies on serum tocopherol, selenium levels and blood glutathione peroxidase activities in calves with white muscle disease. Hoshino Y, et al. **Nippon Juigaku Zasshi** 1989 Aug;51(4):741–8

The microheterogeneity of bovine serum alpha 1-acid glycoprotein. Iwata H, et al. **Nippon Juigaku Zasshi** 1989 Aug;51(4):717–21

Isolation, characterization, and quantitative measurement of serum alpha 1-acid glycoprotein in cattle. Tamura K, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):987–94

Changes in clinical values of cattle infected with Clostridium chauvoei CH3 strain and a local Kad1 strain. Haematological values. el Sawi Mohamed O, et al. **Rev Elev Med Vet Pays Trop** 1989;42(2):169–72

Production and consumption of T cell growth factor by peripheral blood lymphocytes of cattle infected with Taenia saginata. Huwer M, et al. **Vet Parasitol** 1989 Oct; 33(3–4):241–50

Sympathico-adrenal effects of endotoxaemia in cattle. Boosman R, et al. **Vet Rec** 1990 Jul 7;127(1):11–4

Clinical, haematological and biochemical findings and the results of treatment in cattle with acute functional pyloric stenosis. Braun U, et al. **Vet Rec** 1990 Feb 3;126(5):107–10

Haematological and biochemical findings in cattle with dilatation and torsion of the caecum. Braun U, et al. **Vet Rec** 1989 Oct 7;125(15):396–8

Evaluation of acid-base disturbances in calf diarrhoea [see comments] Groutides C, et al. **Vet Rec** 1990 Jan 13; 126(2):29–31 Comment in: Vet Rec 1990 Feb 3;126(5):120. Comment in: Vet Rec 1990 Mar 3;126(9):225.

Changes in concentrations of certain plasma and erythrocyte minerals associated with hypomagnesaemia in young calves. Mulei CM, et al. **Zentralbl Veterinarmed [A]** 1989 Dec;36(10):783–8

[Levels of progesterone, 17 beta-estradiol and 11-hydroxycorticosteroid in the blood in cows in different types of puerperal conditions] Zralý Z, et al. **Vet Med (Praha)** 1989 Sep;34(9):515–25 (Eng. Abstr.) **(Cze)**

[Comparison of arterial and venous blood gas and acid-base values in prematurely born healthy calves or calves with a late asphyxia] Pickel M, et al. **Zentralbl Veterinarmed [A]** 1989 Nov;36(9):653–63 (Eng. Abstr.) **(Ger)**

CEREBROSPINAL FLUID

Cerebrospinal fluid studies in normal cows and cases of bovine spongiform encephalopathy. Scott PR, et al. **Br Vet J** 1990 Jan–Feb;146(1):88–90

CHEMICALLY INDUCED

A collapse syndrome associated with gram-negative infection in cows treated with dexamethasone to induce parturition [letter] Browning JW, et al. **Aust Vet J** 1990 Jan;67(1):28–9

The toxicity for cattle of bufadienolide cardiac glycosides from Bryophyllum tubiflorum flowers. McKenzie RA, et al. **Aust Vet J** 1989 Nov;66(11):374–6

Solanum malacoxylon: a toxic plant which affects animal calcium metabolism. Boland RL. **Biomed Environ Sci** 1988 Dec;1(4):414–23 (42 ref.)

Clinical, chemical, and hematological parameters in cattle kept in a cadmium-contaminated area. Kessels BG, et al. **Bull Environ Contam Toxicol** 1990 Feb;44(2):339–44

Atrial fibrillation associated with neostigmine administration in three cows. Constable PD, et al. **J Am Vet Med Assoc** 1990 Jan 15;196(2):329–32

Effects of tetracyclines on the kidney in cattle and dogs. Riond JL, et al. **J Am Vet Med Assoc** 1989 Oct 1; 195(7):995–7 (25 ref.)

Subclinical ammonia toxicity in steers: effects on hepatic and portal-drained visceral flux of metabolites and regulatory hormones. Fernandez JM, et al. **J Anim Sci** 1990 Jun; 68(6):1726–42

Thiamin supplementation and the ingestive behavior of beef cattle grazing endophyte-infected tall fescue. Lauriault LM, et al. **J Anim Sci** 1990 May;68(5):1245–53

Estrogen induction of fatty liver in dairy cattle. Grummer RR, et al. **J Dairy Sci** 1990 Jun;73(6):1537–43

Apparent zearalenone intoxication in a dairy herd from feeding spoiled acid-treated corn. Coppock RW, et al. **Vet Hum Toxicol** 1990 Jun;32(3):246–8

Investigation of "mysterious" disease in livestock: hydrocyanic acid poisoning. Krishna L, et al. **Vet Hum Toxicol** 1989 Dec;31(6):566–7

Apparent Corydalis aurea intoxication of cattle. Smith RA, et al. **Vet Hum Toxicol** 1990 Feb;32(1):63–4

Bovine fluorosis following volcanic activity in the southern Andes. Araya O, et al. **Vet Rec** 1990 Jun 30;126(26):641–2

Acute cardiomyopathy in heifers [letter; comment] Barlow RM, et al. **Vet Rec** 1990 Jan 20;126(3):67 Comment on: Vet Rec 1989 Dec 23–30;125(26–27):656–7.

Lead poisoning from contaminated feed [letter] Lund LJ, et al. **Vet Rec** 1989 Nov 18;125(21):536

Acute cardiomyopathy in heifers [letter] Mathieson AO, et al. **Vet Rec** 1990 Feb 10;126(6):147–8

[Veterinary Chief Inspection for Public Health. Lead poisoning in cattle caused by feed concentrates] **Tijdschr Diergeneeskd** 1989 Dec 1;114(23):1210 **(Dut)**

[Acute lead poisoning in a young cow (case report)] Dubowy M, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun; 97(6):257–8 (Eng. Abstr.) **(Ger)**

[Foot-and-mouth disease vaccine damage or thallium poisoning in cattle (expert opinion)] Frerking H, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 May;97(5):206–7 (Eng. Abstr.) **(Ger)**

CONGENITAL

Congenital biliary atresia and jaundice in lambs and calves [published erratum appears in Aust Vet J 1990 May;67(5):167] Harper P, et al. **Aust Vet J** 1990 Jan; 67(1):18–22

Congenital spinal stenosis in beef calves in western Canada. Doige CE, et al. **Vet Pathol** 1990 Jan;27(1):16–25

Blood glucose, calcium and urea in cows from a herd with

congenital nuclear cataract. France MP, et al. **Vet Rec** 1990 May 12;126(19):484–5

Pathological studies of cross-related congenital hypotrichosis in cattle. Ayers JR, et al. **Zentralbl Veterinarmed [A]** 1989 Jul;36(6):447–52

DIAGNOSIS

A comparison of the filtration, concentration, and thick smear techniques in the diagnosis of Schistosoma bovis infection in cattle and goats. Olaechea FV, et al. **Acta Trop (Basel)** 1990 May;47(4):217–21

Demonstration of bovine viral diarrhoea virus antigens in cell cultures and in paraffin-embedded tissue sections by the peroxidase-antiperoxidase (PAP) technique using monoclonal antibodies. Belák K, et al. **Acta Vet Scand** 1989; 30(2):231–3

Latex test for rapid rotavirus diagnosis in calves. Sukura A, et al. **Acta Vet Scand** 1990;31(1):1–4

Diagnosis of nitrate toxicosis in cattle, using biological fluids and a rapid ion chromatographic method. Boermans HJ. **Am J Vet Res** 1990 Mar;51(3):491–5

Comparison of the complement-fixation and agar gel immunodiffusion tests for diagnosis of subclinical bovine paratuberculosis. Sherman DM, et al. **Am J Vet Res** 1990 Mar;51(3):461–5

Application of microbiological cancer test to cattle infected with bovine leucosis virus. Wittmann W, et al. **Arch Exp Veterinarmed** 1990;44(2):205–12

Cor pulmonale in an Angus cow. Jubb TF, et al. **Aust Vet J** 1989 Aug;66(8):257–9

The application of a transport and enrichment medium to the diagnosis of Campylobacter fetus infections in bulls. Lander KP. **Br Vet J** 1990 Jul-Aug;146(4):334–40

Monoclonal antibodies to the p80/125 gp53 proteins of bovine viral diarrhea virus: their potential use as diagnostic reagents. Deregt D, et al. **Can J Vet Res** 1990 Jun; 54(3):343–8

Detection of bovine viral diarrhea virus genome in leukocytes from persistently infected cattle by RNA-cDNA hybridization. Jensen J, et al. **Can J Vet Res** 1990 Apr; 54(2):256–9

New diagnostic techniques: a review of the HAP group of bacteria. Nielsen R. **Can J Vet Res** 1990 Apr;54 Suppl:S68–72 (74 ref.)

Assessment of an enzyme-linked immunosorbent assay using a Taenia hydatigena fraction antigen in the diagnosis of cysticercosis in cattle. Smith HJ, et al. **Can J Vet Res** 1990 Apr;54(2):299–300

Comparison of dot immunobinding assay, enzyme-linked immunosorbent assay and immunodiffusion for serodiagnosis of paratuberculosis. Tsai SJ, et al. **Can J Vet Res** 1989 Oct;53(4):405–10

Surveillance for persistent bovine viral diarrhea virus infection in four artificial insemination centers. Howard TH, et al. **J Am Vet Med Assoc** 1990 Jun 15;196(12):1951–5

Detection of bovine spongiform encephalopathy in the United Kingdom. Kimberlin RH. **J Am Vet Med Assoc** 1990 May 15;196(10):1675–6

Caudal vena caval thrombosis in a cow. Mills LL, et al. **J Am Vet Med Assoc** 1990 Apr 15;196(8):1294–6

Quest continues for fast, reliable test for bovine paratuberculosis [news] Sanftleben P. **J Am Vet Med Assoc** 1990 Aug 1;197(3):299–305

Something old, something new: thoracic acoustic percussion in cattle. Tyler JW, et al. **J Am Vet Med Assoc** 1990 Jul 1;197(1):52–7

Detection of leptospires in urine by polymerase chain reaction. Van Eys GJ, et al. **J Clin Microbiol** 1989 Oct; 27(10):2258–62

Intestinal and pulmonary mycotic lymphadenitis in cattle. Jensen HE, et al. **J Comp Pathol** 1990 Apr;102(3):345–55

An enzyme-linked immunosorbent assay for detection of bovine leukaemia virus p24 antibody in cattle. Molloy JB, et al. **J Virol Methods** 1990 Apr;28(1):47–57

Detection of bovine leukaemia virus (BLV) infection by DNA probe technology. Gaudi S, et al. **Mol Cell Probes** 1990 Jun;4(3):163–74

Mucormycosis of the bovine udder. Prabhakar SK, et al. **Mycoses** 1989 Sep;32(9):469–71

Double-inlet univentricular heart of left ventricular type in a calf: detection by two-dimensional and Doppler echocardiography. Hagio M, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):1049–53

Diagnosis of Fasciola sp. infections in cattle by enzyme-linked immunosorbent assay. Itagaki T, et al. **Nippon Juigaku Zasshi** 1989 Aug;51(4):757–64

Lactate dehydrogenase isoenzyme patterns in bovine liver tissue. Yasuda J, et al. **Nippon Juigaku Zasshi** 1989 Aug; 51(4):733–9

Use of a DNA probe in the diagnosis of enzootic bovine leukemia. Peirone B, et al. **Schweiz Arch Tierheilkd** 1990; 132(3):139–45

ELISA test for the serodiagnosis of Akabane virus infection in cattle. Ungar-Waron H, et al. **Trop Anim Health Prod** 1989 Aug;21(3):205–10

Use of milk samples and monoclonal antibodies directed against BLV-p24 to identify cattle infected with bovine leukemia virus (BLV). De Boer GF, et al. **Vet Immunol Immunopathol** 1989 Oct;22(3):283–92

An international comparison of different laboratory tests for the diagnosis of bovine leukosis: suggestions for international standardization. Hoff-Jørgensen R. **Vet Immunol Immunopathol** 1989 Oct;22(3):293–7

Evaluation of an ELISA for the diagnosis of experimentally induced and naturally occurring Leptospira hardjo infections in cattle. Bercovich Z, et al. **Vet Microbiol** 1990 Jan;21(3):255–62

Characterization and purification of Parafilaria bovicola antigens by chromatofocusing to enhance specificity in serodiagnosis. Sundquist B, et al. **Vet Parasitol** 1989 Oct; 33(3–4):309–18

The indirect fluorescent antibody test for bovine anaplasmosis. de Kroon JF, et al. **Vet Q** 1990 Apr; 12(2):124–8

Comparative evaluation of the enzyme-linked immunosorbent assay (ELISA) in the diagnosis of natural Fasciola gigantica infection in cattle. Fagbemi BO, et al. **Vet Q** 1990 Jan;12(1):35–8

Comparison of sampling methods for the detection of Tritrichomonas foetus infection in bulls. Gregory MW, et al. **Vet Rec** 1990 Jul 7;127(1):16

Diagnostic value of pepsinogen for clinical ostertagiosis. Hilderson H, et al. **Vet Rec** 1989 Sep 30;125(14):376–7

Evaluation of acid-base disturbances [letter; comment] Naylor JM. **Vet Rec** 1990 Feb 3;126(5):120 Comment on: Vet Rec 1990 Jan 13;126(2):29–31.

Idiopathic megaoesophagus in a pregnant heifer [published erratum appears in Vet Rec 1990 May 5;126(18):462] Ndikuwera J, et al. **Vet Rec** 1990 Feb 17;126(7):165–6

BSE diagnosis [letter] Palmer AC. **Vet Rec** 1990 May 26; 126(21):537

A comparison of serum vitamin B12 and serum methylmalonic acid as diagnostic measures of cobalt status in cattle. Paterson JE, et al. **Vet Rec** 1990 Apr 7; 126(14):329–32

Bovine spongiform encephalopathy: diagnostic significance of vacuolar changes in selected nuclei of the medulla oblongata. Wells GA, et al. **Vet Rec** 1989 Nov 18; 125(21):521–4

Vaginal probes [letter] Wright CJ, et al. **Vet Rec** 1990 Mar 17;126(11):273

The use of the enzyme-linked immunosorbent assay (ELISA) in serological diagnosis of Mycoplasma bovis in dairy cattle. Uhaa IJ, et al. **Vet Res Commun** 1990;14(4):279–85

[Rupture of the diaphragm in an HF cow] Hesselink JW. **Tijdschr Diergeneeskd** 1989 Nov 1;114(21):1109–11 (Eng. Abstr.) **(Dut)**

[Rachitis in yearlings permanently housed inside] Roumen MP, et al. **Tijdschr Diergeneeskd** 1990 Apr 1;115(7):321–2 **(Dut)**

[The validation of an enzyme immunoassay for the detection of antibodies to bovine leukosis virus] Olechnowitz AF, et al. **Arch Exp Veterinarmed** 1990;44(2):279–88 (Eng. Abstr.) **(Ger)**

[Mycoplasma (M.) bovis antiserum "Dessau"—a diagnostic material for the identification of M. bovis] Pfützner H. **Arch Exp Veterinarmed** 1989;43(5):697–8 (Eng. Abstr.) **(Ger)**

[Use of a monoclonal antibody against envelope protein gp51 of bovine leukemia virus in a test for the diagnosis of enzootic bovine leukosis] Siakkou H, et al. **Arch Exp Veterinarmed** 1990;44(2):223–31 (Eng. Abstr.) **(Ger)**

[Pilot study of the practicability of a commercially-available Salmonella rapid test for the detection of the Salmonella content of cattle fecal samples] Weber A, et al. **Berl Munch Tierarztl Wochenschr** 1990 Apr 1;103(4):132–4 (Eng. Abstr.) **(Ger)**

[Control measures in officially acknowledged brucellosis-free and leukosis unsuspected dairy herds on the basis of bulk milk samples in combination with ELISA tests] Forschner E, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Nov-Dec; 96(10):475–86 (Eng. Abstr.) **(Ger)**

[Urachal disorders in calves: clinical and sonographic findings, therapy and prognosis] Steiner A, et al. **Schweiz Arch Tierheilkd** 1990;132(4):187–95 (Eng. Abstr.) **(Ger)**

[Vertebral osteomyelitis in a calf—the significance of neurologic studies in veterinary medicine for newborn and young animals] Evers P, et al. **Tierarztl Prax** 1989; 17(3):245–9 (Eng. Abstr.) **(Ger)**

[Clarification of teat stenoses in cattle by ultrasound] Stocker H, et al. **Tierarztl Prax** 1989;17(3):251–6 (Eng. Abstr.) **(Ger)**

[Radioimmunologic determination of progesterone and rectal ovarian palpation in embryonic death in cows] Choma J, et al. **Vet Med (Praha)** 1989 Aug;34(8):459–65 (Eng. Abstr.) **(Slo)**

[Use of urinary furazolidone determination in calves in laboratory diagnosis] Szabóová E, et al. **Vet Med (Praha)** 1989 Nov;34(11):651–8 (Eng. Abstr.) **(Slo)**

DIET THERAPY

The effects of feeding milk to diarrheic calves supplemented with oral electrolytes. Heath SE, et al. **Can J Vet Res** 1989 Oct;53(4):477–85

DRUG THERAPY

Retained placenta in cattle: the effect of treatment or nontreatment on puerperal diseases and subsequent fertility. Heinonen M, et al. **Acta Vet Scand** 1989;30(4):425–9

Controlled dosage titration of febantel paste in naturally parasitized cattle. Blagburn BL, et al. **Am J Vet Res** 1989 Sep;50(9):1574–7

Interaction between Pasteurella haemolytica, sulfadiazine/trimethoprim, and bovine viral diarrhea virus. Clarke CR, et al. **Am J Vet Res** 1989 Sep;50(9):1557–65

Topically applied benzathine cloxacillin for treatment of experimentally induced infectious bovine keratoconjunctivitis. Daigneault J, et al. **Am J Vet Res** 1990 Mar;51(3):376–80

Efficacy of concomitant early summer treatment with fenbendazole and clorsulon against Fasciola hepatica and gastrointestinal nematodes in calves in Louisiana. Malone JB, et al. **Am J Vet Res** 1990 Jan;51(1):133–6

Treatment of induced enterotoxigenic colibacillosis (scours) in calves by the lactoperoxidase system and lactoferrin. Still J, et al. **Ann Rech Vet** 1990;21(2):143–52

Effect of deferoxamine pretreatment on acute pneumonic pasteurellosis and neutrophil oxidative metabolism in calves. Slocombe RF, et al. **Can J Vet Res** 1990 Apr; 54(2):227–31

Antibiotic treatment of infectious bovine keratoconjunctivitis. George LW. **Cornell Vet** 1990 Jul; 80(3):229–35 (16 ref.)

Clinico-biochemical use of serum acetylcholine esterase following treatment with synthetic pyrethroids, cypermethrin and fenvalerate, in cattle and buffalo experimentally infested with Boophilus microplus. Ansari MZ, et al. **Indian J Exp Biol** 1990 Mar;28(3):241–4

Effect of magnesium administration route on plasma minerals in Holstein calves receiving either adequate or insufficient magnesium in their diets. Bacon JA, et al. **J Dairy Sci** 1990 Feb;73(2):470–3

The effect of praziquantel on Schistosoma nasale infections in cattle. De Bont J, et al. **J Vet Pharmacol Ther** 1989 Dec;12(4):455–8

Therapeutic effects of electrolyte solution with oil emulsion on serious diarrhea in Holstein calves. Koiwa M, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):639–41

Chemotherapy and immunotherapy of bovine leukosis. Onuma M, et al. **Vet Immunol Immunopathol** 1989 Oct; 22(3):245–54

Effect of anthelmintic treatment of second-year cattle on growth performance during winter housing and first lactation yield. Ploeger HW, et al. **Vet Parasitol** 1990 Jul; 36(3–4):311–23

Effect of anthelmintic treatment of dairy cattle on milk production related to some parameters estimating nematode infection. Ploeger HW, et al. **Vet Parasitol** 1989 Dec; 34(3):239–53

Milk yield increase after anthelmintic treatment of dairy cattle related to some parameters estimating helminth infection. Ploeger HW, et al. **Vet Parasitol** 1990 Feb; 35(1–2):103–16

Effect of ivermectin treatment on anti-hypodermin C titers of Asturiana cattle naturally infected with Hypoderma lineatum. Prieto M, et al. **Vet Parasitol** 1990 Mar; 35(3):211–8

The efficacy of triclabendazole (Fasinex) against immature and adult Fasciola hepatica in experimentally infected cattle. Shi FH, et al. **Vet Parasitol** 1989 Sep;33(2):117–24

Anthelmintic efficacy of febantel paste in naturally infected calves. Stuedemann JA, et al. **Vet Parasitol** 1990 Apr; 35(4):341–7

Preliminary trials using a macrocyclic lactone against psoroptic scabies of cattle. Wright FC. **Vet Parasitol** 1990 Jan;34(4):289–94

POM advertising [letter] Cook RR. **Vet Rec** 1989 Nov 18; 125(21):537

Weak calf syndrome and parenteral selenium supplementation. Logan EF, et al. **Vet Rec** 1990 Feb 17; 126(7):163–4

The infertile cow [letter] Muirhead FS. **Vet Rec** 1989 Sep 9;125(11):309

Bovine endometritis: comparative efficacy of alfaprostol and intrauterine therapies, and other factors influencing clinical success. Murray RD, et al. **Vet Rec** 1990 Jul 28;127(4):86–90

Patent ductus arteriosus [letter; comment] Renton CP. **Vet Rec** 1989 Oct 21;125(17):445 Comment on: Vet Rec 1989 Sep 23;125(13):354.

The efficacy of triclabendazole and other anthelmintics against Fasciola hepatica in controlled studies in cattle. Richards RJ, et al. **Vet Rec** 1990 Mar 3;126(9):213–6

Redwater fever [letter] Rutter JM. **Vet Rec** 1990 Jul 28; 127(4):94–5

Comparison of the efficacy of dermal formulations of ivermectin and levamisole for the treatment and prevention of Dictyocaulus viviparus infection in cattle. Taylor SM, et al. **Vet Rec** 1990 Apr 14;126(15):357–9

[Use of sodium acetate in feed rations in ketotic cows] Vojtíšek B, et al. **Vet Med (Praha)** 1989 Oct;34(10):585–92 (Eng. Abstr.) **(Cze)**

[Postpartum endometritis in cattle] de Kruif A. **Tijdschr Diergeneeskd** 1990 Jan 15;115(2):51–60 (41 ref.) (Eng. Abstr.) **(Dut)**

[The treatment of Actinomyces pyogenes endometritis by intrauterine Gentaseptin administration] Anetzhofer JV. **Schweiz Arch Tierheilkd** 1989;131(8):495–8 (Eng. Abstr.) **(Ger)**

[The therapy of hypovolemic shock in cows with right-sided abomasal displacement] Goetze L, et al. **Zentralbl Veterinarmed [A]** 1990 May;37(4):300–9 (Eng. Abstr.) **(Ger)**

ECONOMICS

Economic losses caused by paratuberculosis in a dairy herd: case report. Körmendy B, et al. **Acta Vet Hung** 1989; 37(1–2):45–53

The impact of pestivirus on an artificial breeding program for cattle. Kirkland PD, et al. **Aust Vet J** 1990 Jul; 67(7):261–3

Veterinary and nonveterinary costs of disease in 29 California dairies participating in the National Animal Health Monitoring System from 1988 to 1989. Weigler BJ, et al. **J Am Vet Med Assoc** 1990 Jun 15;196(12):1945–9

BSE compensation [news] Aldhous P. **Nature** 1990 Mar 1; 344(6261):5

Influence of gastro-intestinal nematodes on the productivity of dairy cattle in the wet highlands of Sri Lanka. de Rond JC, et al. **Trop Anim Health Prod** 1990 May;22(2):135–43

The cost of anaplasmosis in the Red River Plains and south-east areas of Louisiana. Morley RS, et al. **Vet Res Commun** 1989;13(5):349–58

[Cost-benefit analysis of the control and cure of enzootic bovine leukosis, described in the example of a selected territory] Müller M, et al. **Arch Exp Veterinarmed** 1990; 44(2):213–22 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

Decreased protein kinase C activity in fatty liver from cattle. Katoh N, et al. **Am J Vet Res** 1989 Sep;50(9):1489–92

Reproductive consequences of deficiency of uridine monophosphate synthase in Holstein cattle. Shanks RD. **Am J Vet Res** 1990 May;51(5):800–2

EPIDEMIOLOGY

An outbreak of mucosal disease in a dairy herd. Løken T, et al. **Acta Vet Scand** 1989;30(3):321–7

Pneumocystis carinii in large domestic animals in Denmark. A preliminary report. Settnes OP, et al. **Acta Vet Scand** 1989;30(4):437–40

Vesicular stomatitis virus in Panama. Human serologic patterns in a cattle raising area. Brody JA, et al. **Am J Epidemiol** 1967 Jul;86(1):158–61

The effect of a control program for enzootic bovine leukosis. Changes in herd prevalence in Denmark, 1969–1978. Gottschau A, et al. **Am J Epidemiol** 1990 Feb;131(2):356–64

Serological monitoring of vesicular stomatitis New Jersey virus in enzootic regions of Costa Rica. Rodriguez LL, et al. **Am J Trop Med Hyg** 1990 Mar;42(3):272–81

Prevalence of bovid herpesvirus-4 and its antibody in cattle in Minnesota. Naeem K, et al. **Am J Vet Res** 1989 Nov; 50(11):1931–5

Eleven-year analysis of changes in the incidence and recurrence of cystic ovarian disease in a herd of dairy cattle in California [published erratum appears in Am J Vet Res 1990 Mar;51(3):474] Scholl DT, et al. **Am J Vet Res** 1990 Feb;51(2):314–9

Epidemiology of echinococcosis/hydatidosis in Anambra State, Nigeria. Onah DN, et al. **Ann Trop Med Parasitol** 1989 Aug;83(4):387–93

On the possibility of bovine Onchocerca species infecting Simulium damnosum s.l. in the forest zone of Sierra Leone. I. Parasitological aspects. Trees AJ, et al. **Ann Trop Med Parasitol** 1989 Dec;83(6):595–601

Detection of antibodies to bovid herpesvirus 2 infection of cattle in Syria. Tabbaa D, et al. **Arch Exp Veterinarmed** 1989 Nov;43(6):929–31

Bovine ephemeral fever and rhabdoviruses endemic to Australia. Walker PJ, et al. **Aust Vet J** 1989 Dec; 66(12):398–400 (27 ref.)

Bovine spongiform encephalopathy and biological products for human use. Report of an informal meeting held at NIBSC on 16 May 1988. Minor P. **Biologicals** 1990 Jan; 18(1):77–80

Observations on bovine pyelonephritis. Markusfeld O, et al. **Br Vet J** 1989 Nov-Dec;145(6):573–9

Epidemiologic survey of bovine diseases in Suriname. Corbett WT, et al. **Bull Pan Am Health Organ** 1989; 23(4):424–30

A group level analysis of the associations between antibodies to seven putative pathogens and respiratory disease and weight gain in Ontario feedlot calves. Martin SW, et al. **Can J Vet Res** 1990 Jun;54(3):337–42

Are cattle significant reservoirs of Coxiella? [letter; comment] van Dreumel T, et al. **Can J Vet Res** 1989 Oct;53(4):500–2 Comment on: Can J Vet Res 1989 Jan;53(1):1–6.

Tumors of the liver in cattle, sheep and pigs. Anderson LJ, et al. **Cancer** 1968 Feb;21(2):289–301

A seroepidemiologic study of bovine respiratory syncytial virus (BRSV) in Turkey. Burgu I, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Feb;97(2):88–9

Preliminary studies on enzootic bovine leukosis in Saudi dairy farms. Hafez SM, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Feb;97(2):61–3

Persistence of S. typhimurium in a large dairy herd. Giles N, et al. **Epidemiol Infect** 1989 Oct;103(2):235–41

Study of C. burnetii human and animal seroprevalence in a rural population in Madrid community. Tellez A, et al. **Eur J Epidemiol** 1989 Dec;5(4):444–6

Prevalence of trichomoniasis among California beef herds. BonDurant RH, et al. **J Am Vet Med Assoc** 1990 May 15;196(10):1590–3

Use of an enzyme-linked immunosorbent assay to estimate prevalence of paratuberculosis in cattle of Florida. Braun RK, et al. **J Am Vet Med Assoc** 1990 Apr 15;196(8):1251–4

Potential for the spread of Fasciola hepatica in cattle in Oklahoma. Cheriuyot HK, et al. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1090–4

Status of toxoplasmosis in cattle in the United States. Dubey JP. **J Am Vet Med Assoc** 1990 Jan 15;196(2):257–9 (37 ref.)

Bovine spongiform encephalopathy in the United States. Marsh RF. **J Am Vet Med Assoc** 1990 May 15;196(10):1677

Epidemiology and current status of bovine spongiform encephalopathy in the United Kingdom. Wilesmith JW. **J Am Vet Med Assoc** 1990 May 15;196(10):1674–5

An ecological analysis of risk factors for postpartum disorders of Holstein-Friesian cows from thirty-two New York farms. Correa MT, et al. **J Dairy Sci** 1990 Jun;73(6):1515–24

A study on the prevalence and intensity of occurrence of Thelazia skrjabini (Nematoda: Thelazioidea) in cattle in central Alberta, Canada. Kennedy MJ, et al. **J Parasitol** 1990 Apr;76(2):196–200

The seasonal tick populations on traditional and commercial cattle grazed at four altitudes in Natal. Baker MK, et al. **J S Afr Vet Assoc** 1989 Jun;60(2):95–101

BSE. Britain not alone in its predicament? [news] Aldhous P. **Nature** 1990 Apr 26;344(6269):805

Epidemiology of abomasal nematodes of dairy cattle in Hokkaido, northern Japan. Fukumoto S, et al. **Nippon Juigaku Zasshi** 1990 Apr;52(2):379–85

Cryptosporidial infections in calves in Kanto District, Japan, and experimental infections in mice. Miyaji S, et al. **Nippon Juigaku Zasshi** 1990 Apr;52(2):435–7

Prevalence and distribution of bovine coccidia in Japan. Oda K, et al. **Nippon Juigaku Zasshi** 1990 Feb;52(1):71–7

Serological evidence of Q fever in cattle in Malawi. Staley GP, et al. **Onderstepoort J Vet Res** 1989 Sep;56(3):205–6

Bovine farcy in the Accra Plains of Ghana. Marchot P, et al. **Rev Elev Med Vet Pays Trop** 1989;42(2):173–5

Rift Valley fever in the Sudan. Davies FG. **Trans R Soc Trop Med Hyg** 1990 Jan-Feb;84(1):141

Foot-and-mouth disease in Cameroon. Ekue NF, et al. **Trop Anim Health Prod** 1990 Feb;22(1):34–6

Streptothricosis in cattle on the coastal plains of Ghana: a comparison of the disease in animals reared under two different management systems. Koney EB, et al. **Trop Anim Health Prod** 1990 May;22(2):89–94

Bovine Babesia bigemina seroreactors in Jamaica. McGinnis B, et al. **Trop Anim Health Prod** 1989 Nov;21(4):227–8

Outbreaks of babesiosis in domestic livestock in the eastern region of the Sudan. Mohamed AA, et al. **Trop Anim Health Prod** 1990 May;22(2):123–5

Antibodies to enzootic bovine viral leukosis in Botswana. Mushi EZ, et al. **Trop Anim Health Prod** 1990 May; 22(2):126

Tick-borne diseases of cattle in Paraguay. I. Seroepidemiological studies on anaplasmosis and babesiosis. Payne RC, et al. **Trop Anim Health Prod** 1990 Feb; 22(1):53–60

Infertility and disease surveillance using a milk recording scheme in the Sahiwal district of Pakistan [published erratum appears in Trop Anim Health Prod 1990 Feb;22(1):60] Pedersen CH. **Trop Anim Health Prod** 1989 Nov;21(4):263–72

Epidemiology of fasciolosis on a ranch in the central Rift Valley, Kenya. Wamae LW, et al. **Trop Anim Health Prod** 1990 May;22(2):132–4

A longitudinal study of bovine coronavirus enteric and respiratory infections in dairy calves in two herds in Ohio. Heckert RA, et al. **Vet Microbiol** 1990 Apr;22(2–3):187–201

The carrier status of sheep, cattle and African buffalo recovered from heartwater. Andrew HR, et al. **Vet Parasitol** 1989 Dec;34(3):261–6

Dynamics of elimination of the eggs of Fasciola hepatica (Trematoda, Digenea) in the faeces of cattle in the Porma Basin, Spain. Gonzalez-Lanza C, et al. **Vet Parasitol** 1989 Nov;34(1–2):35–43

Aortic onchocercosis and elaeophorosis in traditional TSZ-cattle in Tabora (Tanzania): prevalence and pathology. Mtei BJ, et al. **Vet Parasitol** 1990 May; 36(1–2):165–70

Prevalence of Eimeria species in cattle in Kenya. Munyua WK, et al. **Vet Parasitol** 1990 Feb;35(1–2):163–8

Prevalence of microfilariae in cattle at slaughter in Zaria, Nigeria. Ogbogu VC, et al. **Vet Parasitol** 1990 May; 36(1–2):171–5

Epidemiology, effects and control of nematode infections on Zebu crossbred, Hereford and Hereford X Brahman calves of Argentina's western pampas. Suarez VH, et al. **Vet Parasitol** 1990 Feb;35(1–2):79–91

Multidisciplinary team dismisses BSE 'threat' [news] **Vet Rec** 1990 Jun 23;126(25):612–3

Bovine spongiform encephalopathy [news] **Vet Rec** 1990 Feb 17;126(7):170–1

Subclinical laminitis in dairy heifers. Bradley HK, et al. **Vet Rec** 1989 Aug 19;125(8):177–9

BSE in Oman [letter] Carolan DJ, et al. **Vet Rec** 1990 Jan 27;126(4):92

Identification of Babesia bovis and Cowdria ruminantium on the island of Unguja, Zanzibar. Flach EJ, et al. **Vet Rec** 1990 Jan 20;126(3):57–9

Winter dysentery in adult dairy cattle. Fleetwood AJ, et al. **Vet Rec** 1989 Nov 25;125(22):553–4

Rinderpest in Nigeria [letter] Nawathe DR, et al. **Vet Rec** 1990 Jul 14;127(2):46

Disease conditions diagnosed in culled adult cattle sent to an abattoir either with or without a veterinary certificate [see comments] Parker DW, et al. **Vet Rec** 1990 Feb 24; 126(8):189–90 Comment in: Vet Rec 1990 Mar 10;126(10):248–9.

Disease in single suckled beef herds [letter] Pritchard G, et al. **Vet Rec** 1990 Jan 20;126(3):67–8

Observations on Cysticercus bovis in slaughter cattle in the Matabeleland province of Zimbabwe. Pugh KE, et al. **Vet Rec** 1989 Nov 4;125(19):480–4

First case of type A botulism in zebu (Bos indicus). Schocken-Iturrino RP, et al. **Vet Rec** 1990 Mar 3; 126(9):217–8

The serological incidence of Hypoderma bovis in cattle in England and Wales in spring 1989. Sinclair IJ, et al. **Vet Rec** 1990 Apr 7;126(14):327–9

Incidence of BSE [letter] Taylor KC. **Vet Rec** 1990 May 19;126(20):513

Toxoplasmosis in sheep, goats and cattle in central Ethiopia. Bekele T, et al. **Vet Res Commun** 1989;13(5):371–5

The effect of management and ecological factors on the epidemiology of anaplasmosis in the Red River Plains and south-east areas of Louisiana. Morley RS, et al. **Vet Res Commun** 1989;13(5):359–69

The epidemiology of bovine dermatophilosis in Zambia. Samui KL, et al. **Vet Res Commun** 1990;14(4):267–78

A seroepidemiological study on bluetongue virus in dairy cattle in the central valley of California. Uhaa IJ, et al. **Vet Res Commun** 1990;14(2):99–112

Comparison of vaccine strains and the virus causing the 1986 foot-and-mouth disease outbreak in Spain: epizootiological analysis. Carrillo C, et al. **Virus Res** 1990 Jan;15(1):45–55

Epidemiological studies on the occurrence of Listeria monocytogenes in the feces of diary cattle. Husu JR. **Zentralbl Veterinarmed [B]** 1990 Jun;37(4):276–82

[Status leptospirosis/milker's fever in The Netherlands unchanged] **Tijdschr Diergeneeskd** 1989 Dec 15; 114(24):1252, 1255 **(Dut)**

[Bovine spongiform encephalopathy (BSE), a renewed appeal] Schreuder BE. **Tijdschr Diergeneeskd** 1990 Feb 15; 115(4):175 **(Dut)**

[Severe course of a primary BVD infection in a BVD-seronegative dairy herd] Sol J, et al. **Tijdschr Diergeneeskd** 1989 Sep 1;114(17):886–90 (Eng. Abstr.) **(Dut)**

[Anthrax in Chad: a zoonosis that still exists today] Lamarque D, et al. **Med Trop (Mars)** 1989 Jul-Sep;49(3):245–51 (Eng. Abstr.) **(Fre)**

[Enzootic bovine leukosis—first systematic survey—practical experiences] Gachet-Piguet AF. **Schweiz Arch Tierheilkd** 1990;132(1):19–21 (Eng. Abstr.) **(Fre)**

[Seroepizootiologic studies of the distribution of bovine herpesvirus type 1 and 2 (BHV 1, BHV 2) in Namibia] Geiger R, et al. **Zentralbl Veterinarmed [B]** 1990 May; 37(3):197–202 (Eng. Abstr.) **(Ger)**

[Detection of the foci of familial toxoplasmosis in rural environment] Umiński J, et al. **Wiad Parazytol** 1989; 35(4):289–97 (Eng. Abstr.) **(Pol)**

[Epidemiology of bovine and porcine cysticercosis in Chile. Tendencies of the prevalence rates, in animals slaughtered in abattoirs of the country. 1977–1986] Schenone H, et al. **Bol Chil Parasitol** 1988 Jul-Dec;43(3–4):66–7 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Investigation of the possible role of endotoxin, TXA2, PGI2 and PGE2 in experimentally induced rumen acidosis in cattle. Haubro Andersen P, et al. **Acta Vet Scand** 1990; 31(1):27–38

The influence of flunixin on the response to Salmonella typhimurium endotoxin in calves. Luthman J, et al. **Acta Vet Scand** 1989;30(3):295–300

The in vivo lipolytic effect of Salmonella typhimurium endotoxin. Luthman J, et al. **Acta Vet Scand** 1989; 30(3):363–5

Necrotic oophoritis in heifers vaccinated intravenously with infectious bovine rhinotracheitis virus vaccine during estrus. Smith PC, et al. **Am J Vet Res** 1990 Jul;51(7):969–72

Trypanosoma vivax: disseminated intravascular coagulation in cattle. Wellde BT, et al. **Ann Trop Med Parasitol** 1989 Aug;83 Suppl 1:177–83

On the aetiopathogenesis of Mycoplasma pneumonia in calf. Buchvarova Y, et al. **Arch Exp Veterinarmed** 1989; 43(5):685–9

Neonatal viral diarrhoeas. Caple IW. **Aust Vet J** 1989 Dec; 66(12):407–8 (19 ref.)

Prickly paddy melon (Cucumis myriocarpus) poisoning of cattle. Carter GI. **Aust Vet J** 1990 Jul;67(7):276

Haemoglobinuria and hypophosphataemia in postparturient dairy cows without dietary deficiency of phosphorus. Jubb TF, et al. **Aust Vet J** 1990 Mar;67(3):86–9

Induction of heat stress in beef cattle by feeding the ergots of Claviceps purpurea. Ross AD, et al. **Aust Vet J** 1989 Aug;66(8):247–9

Bracken (Pteridium aquilinum): its distribution and animal health implications. Hopkins A. **Br Vet J** 1990 Jul-Aug; 146(4):316–26 (51 ref.)

Pathogenesis and serodiagnosis of experimental Trichinella spiralis spiralis and Trichinella spiralis nativa infections in cattle. Smith HJ, et al. **Can J Vet Res** 1990 Jun;54(3):355–9

Circumocular pigmentation and incidence of ocular squamous cell tumors in Bos taurus and Bos indicus X Bos

taurus cattle. Bailey CM, et al. **J Am Vet Med Assoc** 1990 May 15;196(10):1605–8

Thrombocytopenia and hemorrhages in veal calves infected with bovine viral diarrhea virus. Corapi WV, et al. **J Am Vet Med Assoc** 1990 Feb 15;196(4):590–6

Cause, occurrence, and clinical signs of mastitis and anorexia in cows in a Wisconsin study. Jones GF, et al. **J Am Vet Med Assoc** 1989 Oct 15;195(8):1108–13

Possible association of vitamin A deficiency with displacement of the abomasum in dairy heifers. Markusfeld O. **J Am Vet Med Assoc** 1989 Oct 15;195(8):1123–4

Full-length diaphyseal sequestrum as a consequence of segmental transverse fractures of the large metatarsal bone in a calf. Squire KR, et al. **J Am Vet Med Assoc** 1990 Jun 15;196(12):2006–8

Influence of grain and monensin supplementation on ruminal fermentation, intake, digesta kinetics and incidence and severity of frothy bloat in steers grazing winter wheat pastures. Branine ME, et al. **J Anim Sci** 1990 Apr; 68(4):1139–50

Factors influencing calving difficulty in beef heifers. Naazie A, et al. **J Anim Sci** 1989 Dec;67(12):3243–9

Physiological mechanisms controlling anestrus and infertility in postpartum beef cattle [published erratum appears in J Anim Sci 1990 May;68(5):1490] Short RE, et al. **J Anim Sci** 1990 Mar;68(3):799–816 (200 ref.)

Experimental infection of calves with an apparently specific goat-pathogenic strain of Mycobacterium paratuberculosis. Saxegaard F. **J Comp Pathol** 1990 Feb;102(2):149–56

Causes of adverse responses to soybean milk replacers in young calves. Gardner RW, et al. **J Dairy Sci** 1990 May; 73(5):1312–7

Suspected vetch (Vicia benghalensis L) poisoning in a Friesland cow in the Republic of South Africa. Green JR, et al. **J S Afr Vet Assoc** 1989 Jun;60(2):109–10

Hydranencephaly–cerebellar hypoplasia in a newborn calf after infection of its dam with Chuzan virus. Miura Y, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):689–94

Acute phase response in calves following infection with Pasteurella haemolytica, Ostertagia ostertagi and endotoxin administration. Conner JG, et al. **Res Vet Sci** 1989 Sep; 47(2):203–7

Nutritional factors in bovine gastrointestinal disease. Niederman CN, et al. **Vet Clin North Am Food Anim Pract** 1990 Jul;6(2):265–306 (111 ref.)

Primary photosensitization in cattle. Horn GA Jr, et al. **Vet Hum Toxicol** 1990 Aug;32(4):331–2

Sulfur (hydrogen sulfide) toxicosis in cattle. Short SB, et al. **Vet Hum Toxicol** 1989 Oct;31(5):451–3

Bovine leukemia virus—issue and model. A satellite meeting to the XIIIth symposium of the International Association for Comparative Research on Leukemia and Related Diseases. Eilat, Israel, November 1987. Proceedings. **Vet Immunol Immunopathol** 1989 Oct;22(3):197–306

Bovine leukemia virus—issue and model [editorial] Trainin Z. **Vet Immunol Immunopathol** 1989 Oct;22(3):199–200

Pathogenesis of mucosal disease and molecular aspects of bovine virus diarrhoea virus. Brownlie J. **Vet Microbiol** 1990 Jun;23(1–4):371–82 (62 ref.)

Effects of endotoxin infusion on circulating levels of eicosanoids, progesterone, cortisol, glucose and lactic acid, and abortion in pregnant cows. Giri SN, et al. **Vet Microbiol** 1990 Jan;21(3):211–31

Increased establishment of lungworms (Dictyocaulus viviparus) in calves after previous infections with gastrointestinal nematodes (Ostertagia ostertagi and Cooperia oncophora). Kloosterman A, et al. **Vet Parasitol** 1989 Sep;33(2):155–63

Effect of chronic administration of recombinant bovine tumor necrosis factor to cattle. Bielefeldt Ohmann H, et al. **Vet Pathol** 1989 Nov;26(6):462–72

Ultrastructural morphogenesis of 4-ipomeanol-induced bronchiolitis and interstitial pneumonia in calves. Li X, et al. **Vet Pathol** 1990 May;27(3):141–9

Bovine spongiform encephalopathy [letter] **Vet Rec** 1990 Jun 16;126(24):608

Bovine fetal encephalitis and myocarditis associated with protozoa [letter] Barr BC, et al. **Vet Rec** 1990 Feb 3; 126(5):120–1

Evaluation of acid–base disturbances [letter; comment] Beckett JA. **Vet Rec** 1990 Mar 3;126(9):225 Comment on: Vet Rec 1990 Jan 13;126(2):29–31.

A case of bovine valvular endocarditis caused by Corynebacterium pseudodiphtheriticum. Cabana EM, et al. **Vet Rec** 1990 Jan 13;126(2):41–2

Behaviour of cows in cubicles [letter] David G. **Vet Rec** 1990 Jan 20;126(3):69

Is BSE a new disease? [letter] Eddy RG. **Vet Rec** 1990 May 26;126(21):537

Dystocia in the heifer [letter] Ewing JM. **Vet Rec** 1968 Aug 10;83(6):157

Caesarean sections on BSE cows [letter] Forbes AB. **Vet Rec** 1990 Feb 10;126(6):150

Suspected botulism in cattle associated with poultry litter. Hogg RA, et al. **Vet Rec** 1990 May 12;126(19):476–9

Environmental stress [letter] Lewis DW. **Vet Rec** 1989 Sep 16;125(12):333

Acute cardiomyopathy in heifers [letter] [see comments] Mathieson AO, et al. **Vet Rec** 1989 Dec 23–30; 125(26–27):656–7 Comment in: Vet Rec 1990 Jan 20;126(3):67.

A clinical syndrome in imported cows subjected to environmental stress in Sudan. Suliman HB, et al. **Vet Rec** 1989 Aug 26;125(9):240

Mucosal disease in a cow and her suckled calf. Torgerson PR, et al. **Vet Rec** 1989 Nov 18;125(21):530–1

Poisoned cows [letter] Van Inzen C, et al. **Vet Rec** 1989 Aug 19;125(8):212

Vaginal probes [letter; comment] Windsor RS, et al. **Vet Rec** 1990 Feb 10;126(6):149 Comment on: Vet Rec 1989 Dec 9;125(24):609.

Experimental Brachiaria decumbens toxicity in cattle. Noordin MM, et al. **Vet Res Commun** 1989;13(6):491–4

Some diagnostic features of the pathogenesis of bovine paratuberculosis (Johne's disease) and serum biochemical changes after oral reinfection. Körmendy B, et al. **Zentralbl Veterinarmed [B]** 1990 May;37(3):229–35

[White heifer disease as a cause of herd subfertility] Mijten P, et al. **Tijdschr Diergeneeskd** 1990 Aug 15; 115(15–16):736–8 (Eng. Abstr.) **(Dut)**

[Bovine spongiform encephalopathy (BSE), a review] Schreuder BE, et al. **Tijdschr Diergeneeskd** 1990 Jun 1; 115(11):507–17 (36 ref.) (Eng. Abstr.) **(Dut)**

[Mycobacteriosis and inspection regulations] Venema Y. **Tijdschr Diergeneeskd** 1990 Feb 1;115(3):132–3 **(Dut)**

[Increasing incidence of Salmonella dublin infections on dairy farms] Visser IJ, et al. **Tijdschr Diergeneeskd** 1990 Aug 15;115(15–16):738–9 **(Dut)**

[Feeding, pathology and productivity of the dairy cow: interrelations during the course of lactation] Coulon JB, et al. **Ann Rech Vet** 1990;21(1):33–47 (Eng. Abstr.) **(Fre)**

[Hoflund syndrome due to anterior functional stenosis in 20 cows] Braun U, et al. **Berl Munch Tierarztl Wochenschr** 1990 Jun 1;103(6):192–7 (Eng. Abstr.) **(Ger)**

[Infection-limited disease factors in cattle] Dirksen G. **Berl Munch Tierarztl Wochenschr** 1989 Dec 1;102(12):414–7 (35 ref.) (Eng. Abstr.) **(Ger)**

[Cervical hygroma in the calf as an absolute cause of dystocia. An unusual malformation possibly of hereditary genesis in Braunvieh x Brown-Swiss breeds] Wanke R, et al. **Berl Munch Tierarztl Wochenschr** 1990 Jan 1;103(1):18–22 (Eng. Abstr.) **(Ger)**

[Reduced feed absorption and performance and diarrhea in a dairy cow herd as the result of a defective feed composition] Kamphues J, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 May;97(5):214–6 **(Ger)**

[A case of disseminated intravascular coagulation (DIC) in a cow with endometritis and fetal death] Braun U, et al. **Schweiz Arch Tierheilkd** 1990;132(5):239–45 (Eng. Abstr.) **(Ger)**

[Experimental infection of calves and sheep with bovine Giardia isolates] Taminelli V, et al. **Schweiz Arch Tierheilkd** 1989;131(9):551–64 (Eng. Abstr.) **(Ger)**

[Post-traumatic urethral obstruction with bladder rupture in a calf] Bettinelli L, et al. **Tierarztl Prax** 1990 Jun; 18(3):237–8 (Eng. Abstr.) **(Ger)**

[The effect of nutrition and technology on fertility in cows and the health of calves] Vasil' J, et al. **Vet Med (Praha)** 1990 Jan;35(1):11–20 (Eng. Abstr.) **(Slo)**

GENETICS

Body weight, tick burden (Boophilus microplus), physiological parameters and reproductive efficiency of crossbred zebu cattle. Garcia M, et al. **Acta Vet Scand** 1989; 30(3):347–53

Multifocal encephalopathy in Limousin calves. Harper PA, et al. **Aust Vet J** 1990 Mar;67(3):111–2

Bovine citrullinaemia: a clinical, pathological, biochemical and genetic study. Healy PJ, et al. **Aust Vet J** 1990 Jul; 67(7):255–8

Inherited epidermal dysplasia in Holstein–Friesian calves. Jubb TF, et al. **Aust Vet J** 1990 Jan;67(1):16–8

Black-hair follicular dysplasia in a Holstein cow. Miller WH Jr, et al. **Cornell Vet** 1990 Jul;80(3):273–7

Deficiency of uridine monophosphate synthase among Holstein cattle. Shanks RD, et al. **Cornell Vet** 1990 Apr; 80(2):119–22

Comparison of production characteristics from birth through slaughter of calves sired by Angus, Charolais or Piedmontese bulls. Baker JF, et al. **J Anim Sci** 1990 Jun; 68(6):1562–8

Biological type effects on gestation length, calving traits and calf growth rate. Reynolds WL, et al. **J Anim Sci** 1990 Mar;68(3):630–9

Premature translation termination of the pre-E1 alpha subunit of the branched chain alpha-ketoacid dehydrogenase as a cause of maple syrup urine disease in Polled Hereford calves. Zhang B, et al. **J Biol Chem** 1990 Feb 15; 265(5):2425–7

Threshold model analysis of dystocia in dairy cattle when progeny information is limited. Clutter AC, et al. **J Dairy Sci** 1989 Dec;72(12):3264–72

Embryonic mortality attributed to inherited deficiency of uridine monophosphate synthase. Shanks RD, et al. **J Dairy Sci** 1989 Nov;72(11):3035–9

Models for genetic analysis of dystocia and calf mortality. Weller JI, et al. **J Dairy Sci** 1989 Oct;72(10):2633–43

Heritability of liability to cystic ovary development in Holstein cattle. Ashmawy AA, et al. **J Hered** 1990 Mar–Apr;81(2):165–6

Transformed phenotype of enzootic bovine lymphoma reflects differentiation-linked leukemogenesis. Heeney JL, et al. **Lab Invest** 1990 Mar;62(3):339–46

BSE gene-linked? [letter] Sparrow OH. **Nature** 1990 Aug 23;346(6286):694

Cases of XY female, single-birth freemartin and trisomy (61, XX, +20) observed in cytogenetical studies on 18 sterile heifers. Murakami R, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):941–5

The Harvey ras 1 gene is activated in papillomavirus-associated carcinomas of the upper alimentary canal in cattle. Campo MS, et al. **Oncogene** 1990 Mar;5(3):303–8

Phenotypic variation in bovine alpha-mannosidosis. Healy PJ, et al. **Res Vet Sci** 1990 Jul;49(1):82–4

Zinc deficiency by any other name... [letter] Bassett H. **Vet Rec** 1989 Dec 16;125(25):628

Inheritance of BSE [letter; comment] Fraser H. **Vet Rec** 1990 Jan 27;126(4):92 Comment on: Vet Rec 1990 Jan 6;126(1):5–8.

Preliminary report of familial thymic lymphosarcoma in Holstein calves. Parodi AL, et al. **Vet Rec** 1989 Sep 23; 125(13):350–3

Zinc deficiency by any other name... [letter; comment] Phillippo M, et al. **Vet Rec** 1989 Nov 25;125(22):561 Comment on: Vet Rec 1987 Jul 4;121(1):8–11.

A study of the inheritance of susceptibility to bovine spongiform encephalopathy [see comments] Wijeratne WV, et al. **Vet Rec** 1990 Jan 6;126(1):5–8 Comment in: Vet Rec 1990 Jan 27;126(4):92.

Inheritance of BSE [letter] Wijeratne WV, et al. **Vet Rec** 1990 Feb 17;126(7):176

Identification of the 1/29 Robertsonian translocation chromosome in British Friesian cattle. Wilson TD. **Vet Rec** 1990 Jan 13;126(2):37–9

Growth of the early bovine fetus. Hart-Elcock L, et al. **Zentralbl Veterinarmed [A]** 1990 May;37(4):294–9

[The occurrence of hereditary congenital arthromyodysplasia (arthromyodysplasia congenita hereditaria) in calves of the Hessian cattle population] Klein H, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Mar;97(3):117–22 (Eng. Abstr.) **(Ger)**

HISTORY

The microbe of pleuropneumonia. 1896 [classical article] Nocard, et al. **Rev Infect Dis** 1990 Mar-Apr;12(2):354–8

IMMUNOLOGY

An evaluation of four serological tests for the detection of antibodies to bovine parainfluenza virus type 3. Trybala E, et al. **Acta Vet Hung** 1989;37(4):365–72

Inverse age resistance to experimental Babesia divergens infection in cattle. Christensson DA. **Acta Vet Scand** 1989; 30(4):453–64

Effect of vaccination with a pentavalent leptospiral vaccine containing Leptospira interrogans serovar hardjo type hardjo-bovis on type hardjo-bovis infection of cattle. Bolin CA, et al. **Am J Vet Res** 1989 Dec;50(12):2004–8

Immunodominant proteins of Sarcocystis cruzi bradyzoites isolated from cattle affected or nonaffected with eosinophilic myositis. Granstrom DE, et al. **Am J Vet Res** 1990 Jul;51(7):1151–5

Effects of colostral antibody on susceptibility of calves to Cryptosporidium parvum infection [published erratum appears in Am J Vet Res 1990 Jul;51(7):1155] Harp JA, et al. **Am J Vet Res** 1989 Dec;50(12):2117–9

Infectivity and antigenicity of Anaplasma marginale from tick cell culture. Hidalgo RJ, et al. **Am J Vet Res** 1989 Dec; 50(12):2033–6

Breda virus (Toroviridae) infection and systemic antibody response in sentinel calves. Koopmans M, et al. **Am J Vet Res** 1990 Sep;51(9):1443–8

Studies of the immunomodulatory effects of low-level infection with Ostertagia ostertagi in calves. Wiggin CJ, et al. **Am J Vet Res** 1989 Oct;50(10):1764–70

Adverse immune reactions and the pathogenesis of Ostertagia ostertagi infections in calves. Wiggin CJ, et al. **Am J Vet Res** 1990 May;51(5):825–32

Serological reactions in sheep and cattle experimentally infected with three Australian isolates of bluetongue virus. Squire KR. **Aust Vet J** 1989 Aug;66(8):243–6

Protection of colostral antibodies against bovine leukemia virus infection in calves on a California dairy. Lassauzet ML, et al. **Can J Vet Res** 1989 Oct;53(4):424–30

A study of some pathogenetic aspects of bovine viral diarrhea virus infection. Castrucci G, et al. **Comp Immunol Microbiol Infect Dis** 1990;13(1):41–9

Detergent solubilised bovine viral diarrhea virus elicits a similar immune response as the inactivated virus. Mohanty JG, et al. **Comp Immunol Microbiol Infect Dis** 1989; 12(4):129–37

Immune response to bluetongue virus infection. Stott JL, et al. **Curr Top Microbiol Immunol** 1990;162:163–78 (94 ref.)

Immunity of the ox to the brown ear tick Rhipicephalus appendiculatus. Fivaz BH, et al. **Exp Appl Acarol** 1990 Jan; 8(1–2):51–63

Resistance of calves to Cryptosporidium parvum: effects of age and previous exposure. Harp JA, et al. **Infect Immun** 1990 Jul;58(7):2237–40

Decreased colostral immunoglobulin absorption in calves

with postnatal respiratory acidosis. Besser TE, et al. **J Am Vet Med Assoc** 1990 Apr 15;196(8):1239–43

Specificity of bovine serum antibody to capsular carbohydrate antigens from Pasteurella haemolytica. McVey DS, et al. **J Clin Microbiol** 1990 Jun;28(6):1151–8

Dinitrochlorobenzene contact hypersensitivity as a marker trait for selection to improve disease resistance in calves. Burton JL, et al. **J Dairy Sci** 1989 Sep;72(9):2351–61

Immunology and fertility in the bovine. Hunter AG. **J Dairy Sci** 1989 Dec;72(12):3353–62 (105 ref.)

Detection of circulating immune complexes by the enzyme–linked immunosorbent assay in sera from cattle infected with Fasciola hepatica. Langley RJ, et al. **J Parasitol** 1989 Oct;75(5):690–5

Humoral immune response to the bovine immunodeficiency–like virus in experimentally and naturally infected cattle. Whetstone CA, et al. **J Virol** 1990 Jul;64(7):3557–61

Isolation of tumor–associated antigen from sera of bovine leukemia virus–infected cattle. Kitamura R, et al. **Microbiol Immunol** 1990;34(2):163–70

The effect of GD3 ganglioside obtained from bovine lymphosarcoma on bovine normal mononuclear cell. Yasutomi Y, et al. **Microbiol Immunol** 1989;33(10):853–61

Serotype–specific antibody responses of calves infected naturally with bovine rotavirus. Murakami Y, et al. **Nippon Juigaku Zasshi** 1990 Feb;52(1):171–4

Meteorological factors involved in Japanese encephalitis virus infection in cattle. Sakai T, et al. **Nippon Juigaku Zasshi** 1990 Feb;52(1):121–7

Antigenic diversity of bovine viral diarrhea–mucosal disease (BVD–MD) viruses recently isolated from persistently infected cattle and mucosal disease, and serologic survey on bovine sera using antigenically different BVD–MD viruses. Shimizu M, et al. **Nippon Juigaku Zasshi** 1989 Dec; 51(6):1115–22

Serological evidence of bovine leptospirosis in Malawi. Myburgh JG, et al. **Onderstepoort J Vet Res** 1989 Dec; 56(4):285–6

Immunological properties of selected strains of Trichophyton genus. Wawrzkiewicz K, et al. **Pol Arch Weter** 1988; 28(1–2):5–17

Immunobiology of bovine genital mycoplasmosis. Pathak RC, et al. **Prog Vet Microbiol Immunol** 1988;4:218–45 (147 ref.)

Infestation of cattle by the brown ear tick, Rhipicephalus appendiculatus, does not affect serological responses to foot–and–mouth disease vaccine. Fivaz BH, et al. **Res Vet Sci** 1990 Jul;49(1):113

Effect of vaccination on cell populations in lung washes from calves after infection with respiratory syncytial virus. Taylor G, et al. **Res Vet Sci** 1989 Sep;47(2):231–5

Antibody response in the bovine genital tract to intrauterine infusion of Actinomyces pyogenes. Watson ED, et al. **Res Vet Sci** 1990 Jan;48(1):70–5

Immunopathology of experimental Brucella abortus strain 19 infection of the genitalia of bulls. Campero CM, et al. **Vet Immunol Immunopathol** 1990 Mar;24(3):235–46

T lymphocyte subset alterations following bluetongue virus infection in sheep and cattle. Ellis JA, et al. **Vet Immunol Immunopathol** 1990 Jan;24(1):49–67

Changes in B cell and T cell subsets in bovine leukaemia virus–infected cattle. Gatei MH, et al. **Vet Immunol Immunopathol** 1989 Nov 30;23(1–2):139–47

Tumor–associated antigen on bovine leukemia virus–induced bovine lymphosarcoma. Onuma M. **Vet Immunol Immunopathol** 1989 Oct;22(3):213–21

Immune responses of infected and vaccinated Hereford cattle to antigens of the cattle tick, Boophilus microplus. Opdebeeck JP, et al. **Vet Immunol Immunopathol** 1990 May; 25(1):99–108

Lymphocyte alterations in zinc–deficient calves with lethal trait A46. Perryman LE, et al. **Vet Immunol Immunopathol** 1989 Jul;21(3–4):239–48

Immunohistological demonstration of virus and tumor associated antigens in tissues experimental and spontaneous bovine leukemia virus (BLV) infection. Reinacher M, et al. **Vet Immunol Immunopathol** 1989 Oct;22(3):223–31

Comparison of the agar gel immunodiffusion test and ELISA in the detection of bovine leukosis virus antibody in cattle persistently infected with bovine virus diarrhoea virus. Roberts DH, et al. **Vet Immunol Immunopathol** 1989 Oct; 22(3):275–81

A new hemolytic assay for bovine serum complement and its application during experimental bovine anaplasmosis. Soler–Rodríguez AM, et al. **Vet Immunol Immunopathol** 1990 Apr;24(4):347–60

The specificity of antibody response in experimental and natural bovine paratuberculosis studied by crossed immunoelectrophoresis with intermediate gel. Krishnappa G, et al. **Vet Microbiol** 1989 Nov;21(1):67–78

In vitro production of antibodies to bovine virus diarrhoea virus by peripheral blood mononuclear cells from cattle immunized by infection. Larsson B, et al. **Vet Microbiol** 1990 Apr;22(2–3):161–70

Induction of protective immunity in calves immunized with adult Oesophagostomum radiatum somatic antigens. Gasbarre LC, et al. **Vet Parasitol** 1989 Dec;34(3):223–38

Effects of separate and mixed grazing on trichostrongylosis in first– and second–season grazing calves. Nansen P, et al. **Vet Parasitol** 1990 Jul;36(3–4):265–76

The effects of bovine tick resistance on the susceptibility of Hyalomma anatolicum anatolicum to infection with Theileria annulata (Ankara). Rubaire–Akiiki CM. **Vet Parasitol** 1990 Jan;34(4):273–88

The immune response in cattle infected with Tritrichomonas foetus. Soto P, et al. **Vet Parasitol** 1989 Oct;33(3–4):343–8

The relationships among ecto– and endoparasite levels, class I antigens of the bovine major histocompatibility system, immunoglobulin E levels and weight gain. Stear MJ, et al. **Vet Parasitol** 1990 Jan;34(4):303–21

Bovid herpesvirus–4 antibody in cattle in Great Britain [letter] Fitton J, et al. **Vet Rec** 1990 Feb 17;126(7):173

Effect of location on severity and prognosis of limb cellulitis in six cows. Nguhiu–Mwangi JA, et al. **Vet Rec** 1989 Aug 12;125(7):151–2

A comparison of interactions between vaccination against Dictyocaulus viviparus and anthelmintic suppression in immunised and unimmunised yearling cattle. Taylor SM, et al. **Vet Rec** 1990 Feb 24;126(8):185–8

Development of a neutralising antibody response to an inoculated cytopathic strain of bovine virus diarrhoea virus [published erratum appears in Vet Rec 1989 Nov 11;125(20):499] Westenbrink F, et al. **Vet Rec** 1989 Sep 2;125(10):262–5

Immunological induction of endometritis–model investigations in cows. Kluciński W, et al. **Zentralbl Veterinarmed [A]** 1990 Mar;37(2):148–53

Bovine uterine defense mechanisms: a review. Hussain AM. **Zentralbl Veterinarmed [B]** 1989 Nov;36(9):641–51 (101 ref.)

Purification of an antigen from the Taenia crassiceps metacestode vesicular fluid highly sensitive in detecting IgG–antibodies (ELISA) in calves with experimental cysticercosis. Kalinna B, et al. **Zentralbl Veterinarmed [B]** 1990 May;37(3):213–21

[Bovine leukemia virus antibody levels in the blood and mammary gland secretion in cows in the perinatal period] Kuźmak J. **Pol Arch Weter** 1988;28(1–2):63–73 (Eng. Abstr.) **(Pol)**

[Immunologic status in cattle naturally infected with the microorganisms Chlamydia trachomatis and Chlamydia psittaci] Deptula W, et al. **Vet Med (Praha)** 1990 Feb; 35(2):73–80 (Eng. Abstr.) **(Slo)**

METABOLISM

Effect of Pasteurella haemolytica infection on the distribution of sulfadiazine and trimethoprim into tissue chambers implanted subcutaneously in cattle. Clarke CR, et al. **Am J Vet Res** 1989 Sep;50(9):1551–6

Effects of ammoniation of endophyte fungus–infested fescue hay on serum prolactin concentration and rectal temperature in beef cattle. Kerr LA, et al. **Am J Vet Res** 1990 Jan;51(1):76–8

Pharmacokinetics of phenylbutazone in mature Holstein bulls: steady–state kinetics after multiple oral dosing. Williams RJ, et al. **Am J Vet Res** 1990 Mar;51(3):371–5

In vitro studies into some parameters of protein and carbohydrate metabolism in lymphocytes infected with bovine leucosis virus. Madej JA, et al. **Arch Exp Veterinarmed** 1989 Nov;43(6):923–7

Disposition kinetics of gentamicin in normal and endometritic cows using a microbiological assay. el–Sayed MG, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Sep;96(8):412–5

Severity of liver abscesses and efficiency of feed utilization of feedlot cattle. Brink DR, et al. **J Anim Sci** 1990 May; 68(5):1201–7

Bovine spongiform encephalopathy: a scrapie–like disease of British cattle. Hope J, et al. **Prog Clin Biol Res** 1989; 317:659–67

Ostertagia ostertagi infection in the calf: effects of a trickle challenge on the hormonal control of digestive and metabolic function. Fox MT, et al. **Res Vet Sci** 1989 Nov; 47(3):299–304

Relationship between an increase in plasma cortisol during transport–induced stress and failure of oestradiol to induce a luteinising hormone surge in dairy cows. Nanda AS, et al. **Res Vet Sci** 1990 Jul;49(1):25–8

Appetite, digestive efficiency, feed utilization and carcass evaluation of housed calves naturally infected with gastrointestinal nematodes. Bell SL, et al. **Vet Parasitol** 1990 Jan;34(4):323–33

Immunohistochemical localization of Pasteurella haemolytica A1–derived endotoxin, leukotoxin, and capsular polysaccharide in experimental bovine Pasteurella pneumonia. Whiteley LO, et al. **Vet Pathol** 1990 May; 27(3):150–61

The fat content of milk from dairy cattle infected with bovine leukosis virus. Brenner J, et al. **Vet Res Commun** 1990; 14(2):167–71

Biochemical profiles in cows with abomasal displacement estimated by blood and liver parameters. Muylle E, et al. **Zentralbl Veterinarmed [A]** 1990 May;37(4):259–63

[Clinical and endocrinological studies of the ovarian function of cows with fertility disorders] Glatzel P, et al. **Berl Munch Tierarztl Wochenschr** 1990 Jun 1;103(6):202–6 (Eng. Abstr.) **(Ger)**

[Comparison between dialysis methods and centrifugation/filtration for collecting fecal fluid from calves] Doll K, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Jan;97(1):45–8 (Eng. Abstr.) **(Ger)**

MICROBIOLOGY

DNA restriction enzyme analysis of a bovine herpesvirus 1 strain isolated from encephalitis in Hungary. Magyar G, et al. **Acta Vet Hung** 1989;37(4):349–52

Clinical and microbiological studies of Dermatophilus congolensis infection in cattle. Pal M. **Acta Vet Hung** 1989; 37(3):197–9

Studies on microaerophilic cocci (Stuart–Schwan cocci) isolated from summer mastitis and other pyogenic infections of cattle. Madsen M. **Acta Vet Scand** 1989; 30(2):165–74

BLV–p24 expression in BLV infected cattle and detection of BLV–p24 receptors in cattle afflicted with tumorous leukosis in vivo. Burkhardt H, et al. **Acta Virol (Praha)** 1989 Sep;33(5):410–6

Breda virus (Toroviridae) infection and systemic antibody response in sentinel calves. Koopmans M, et al. **Am J Vet Res** 1990 Sep;51(9):1443–8

Infectious bovine keratoconjunctivitis epizootic associated with area–wide emergence of a new Moraxella bovis pilus type. Vandergaast N, et al. **Am J Vet Res** 1989 Sep; 50(9):1437–41

Effects of dexamethasone on shedding of Listeria monocytogenes in dairy cattle. Wesley IV, et al. **Am J Vet Res** 1989 Dec;50(12):2009–13

A new subgroup 2 bovine adenovirus proposed as the prototype strain 10. Horner GW, et al. **Arch Virol** 1989; 109(1–2):121–4

Leptospira interrogans serovar hardjo is not a major cause of bovine abortion in Victoria. Chappel RJ, et al. **Aust Vet J** 1989 Oct;66(10):330–3

A perspective on the pestiviruses. Littlejohns IR. **Aust Vet J** 1989 Dec;66(12):434–7 (29 ref.)

A brief review of studies of bovine and equine herpesviruses. Studdert MJ. **Aust Vet J** 1989 Dec;66(12):401–2 (25 ref.)

Bovine spongiform encephalopathy [letter] **BMJ** 1990 Apr 7;300(6729):943–4

The development of a transport and enrichment medium for Campylobacter fetus. Lander KP. **Br Vet J** 1990 Jul–Aug; 146(4):327–33

Molecular aspects of some virulence factors of Haemophilus somnus. Corbeil LB. **Can J Vet Res** 1990 Apr;54 Suppl:S57–62 (42 ref.)

A guinea pig model of bovine pneumonic pasteurellosis. Morck DW, et al. **Can J Vet Res** 1990 Jan;54(1):139–45

Further data to the aetiology, pathogenesis and therapy of infectious bovine keratoconjunctivitis. Nagy A, et al. **Comp Immunol Microbiol Infect Dis** 1989;12(4):115–27

Attempts to characterize bovine viral diarrhea virus isolated from cattle after immunization with a contaminated vaccine. Kreeft HA, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Feb;97(2):63–5

The biology of bovine herpesvirus–4 infection of cattle. Thiry E, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Feb; 97(2):72–7 (62 ref.)

Some observations on the faecal carriage of mesophilic Aeromonas species in cows and pigs. Gray SJ, et al. **Epidemiol Infect** 1989 Dec;103(3):523–37

Pasteurella multocida infections in mice with reference to haemorrhagic septicaemia in cattle and buffalo. Ramdani, et al. **Immunol Cell Biol** 1990 Feb;68 (Pt 1):57–61

Cyclic rickettsemia during persistent Anaplasma marginale infection of cattle. Kieser ST, et al. **Infect Immun** 1990 Apr;58(4):1117–9

A comparison of different enrichment media for the isolation of Salmonella dublin from livers, kidneys and muscles of Salmonella–positive veal calves. van Klink EG, et al. **Int J Food Microbiol** 1990 May;10(3–4):177–82

Mycoplasmal mastitis in a dairy herd. Brown MB, et al. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1097–101

Serratia marcescens mastitis in a dairy herd. Wilson DJ, et al. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1102–5

Serological characterization of bovine rotaviruses isolated from dairy and beef herds in Argentina. Bellinzoni RC, et al. **J Clin Microbiol** 1989 Nov;27(11):2619–23

Cell culture propagation of a coronavirus isolated from cows with winter dysentery. Benfield DA, et al. **J Clin Microbiol** 1990 Jun;28(6):1454–7

Isolation of a previously undescribed rickettsia from an aborted bovine fetus. Dilbeck PM, et al. **J Clin Microbiol** 1990 Apr;28(4):814–6

Rotavirus serotypes 6 and 10 predominate in cattle. Snodgrass DR, et al. **J Clin Microbiol** 1990 Mar;28(3):504–7

Fluorogenic assay for differentiating Staphylococcus warneri and Staphylococcus hominis strains of bovine origin. White DG, et al. **J Clin Microbiol** 1990 Mar;28(3):602

Yersinia pseudotuberculosis enteritis in four calves. Brown CC, et al. **J Comp Pathol** 1989 Nov;101(4):463–6

Influence of nonlactating and peripartum bovine mammary secretions on growth of Staphylococcus species. Oliver SP, et al. **J Dairy Sci** 1990 Apr;73(4):995–9

Minimum inhibitory concentrations and disk diffusion zone diameter for selected antibiotics against streptococci isolated from bovine intramammary infections. Owens WE, et al. **J Dairy Sci** 1990 May;73(5):1225–31

Plague upon plague [editorial] **Nature** 1990 Jan 18; 343(6255):193–4

Epidemiology: BSE causing public alarm [news] [see comments] Aldhous P. **Nature** 1990 Jan 18;343(6255):196 Comment in: Nature 1990 Mar 22;344(6264):297.

Isolation of salmonellae from clinically normal cattle and pigs in Indonesia in 1986 and detection of plasmids in the

isolates. Nakamura M, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):1059–61

Causative agents of bovine pyelonephritis: Corynebacterium renale, C. pilosum and C. cystitidis. Yanagawa R. **Prog Vet Microbiol Immunol** 1986;2:158–74 (57 ref.)

Experimental Pasteurella multocida pneumonia in calves. Gourlay RN, et al. **Res Vet Sci** 1989 Sep;47(2):185–9

Distribution of Pasteurella haemolytica in the respiratory tracts of carrier calves and those subsequently infected experimentally with Dictyocaulus viviparus. Shoo MK, et al. **Res Vet Sci** 1990 May;48(3):383–5

Virus–like agent blamed for mad cow disease [news] [published erratum appears in Science 1990 Mar 9;247(4947):1167] Cherfas J. **Science** 1990 Feb 2; 247(4942):523

Experimental infection of bulls with a genital isolate of bovine herpesvirus–4 and reactivation of latent virus with dexamethasone. Dubuisson J, et al. **Vet Microbiol** 1989 Dec; 21(2):97–114

Investigations of bluetongue and other arboviruses in the blood and semen of naturally infected bulls. Gard GP, et al. **Vet Microbiol** 1989 Aug;20(4):315–22

Immunohistological detection of bovine viral diarrhoea virus antigen in the central nervous system of persistently infected cattle using monoclonal antibodies. Hewicker M, et al. **Vet Microbiol** 1990 Jun;23(1–4):203–10

DNA probes for the detection of toxin genes in Escherichia coli isolated from diarrhoeal disease in cattle and pigs. Woodward MJ, et al. **Vet Microbiol** 1990 Apr; 22(2–3):277–90

The pathogenesis of experimental bluetongue virus infection of calves. MacLachlan NJ, et al. **Vet Pathol** 1990 Jul; 27(4):223–9

Use of bovine sheath washings for screening for mycoplasmas. Ball HJ. **Vet Rec** 1990 Jul 7;127(1):16–7

Is BSE simply scrapie in cattle? [letter] Barlow RM, et al. **Vet Rec** 1990 Mar 24;126(12):295

Survey for Breda virus in neonatal calf diarrhoea. Brown D, et al. **Vet Rec** 1990 Apr 7;126(14):337

Hydrallantois in cows [letter] Collyer JH. **Vet Rec** 1990 Jul 14;127(2):47

Atypical Pasteurella strains producing a toxin similar to the dermonecrotic toxin of Pasteurella multocida subspecies multocida. Kamp EM, et al. **Vet Rec** 1990 Apr 28; 126(17):434–7

ETEC–like strains from cattle [letter] Pohl P, et al. **Vet Rec** 1989 Sep 30;125(14):382

Aujeszky's disease in a cow [see comments] Power EP, et al. **Vet Rec** 1990 Jan 6;126(1):13–5 Comment in: Vet Rec 1990 Mar 3;126(9):226.

Bovine encephalitis herpesvirus [letter; comment] Studdert MJ. **Vet Rec** 1989 Dec 2;125(23):584 Comment on: Vet Rec 1989 Jun 24;124(25):666–7.

Bovine encephalitis herpesvirus [letter; comment] Studdert MJ. **Vet Rec** 1990 Jan 6;126(1):21–2 Comment on: Vet Rec 1989 Jun 24;124(25):666–7.

Birna–type virus in diarrhoeic calf faeces [letter] Vanopdenbosch E, et al. **Vet Rec** 1989 Dec 9;125(24):610

Study of virus excretion in feces of diarrheic and asymptomatic calves infected with rotavirus. Archambault D, et al. **Zentralbl Veterinarmed [B]** 1990 Feb;37(1):73–6

Bovine diarrhea associated with Campylobacter hyointestinalis. Diker KS, et al. **Zentralbl Veterinarmed [B]** 1990 Mar;37(2):158–60

Immunohistochemical methods for the visualization of Mycobacterium paratuberculosis in bovine tissues. Massone AR, et al. **Zentralbl Veterinarmed [B]** 1990 Jun;37(4):251–3

A bovine herpesvirus (BHV–4) as passenger virus in ethmoidal tumours in Indian cattle. Moreno–Lopez J, et al. **Zentralbl Veterinarmed [B]** 1989 Sep;36(7):481–6

[Experimental infections of bulls with Mycoplasma (M.) bovis and M. bovigenitalium] Kreusel S, et al. **Arch Exp Veterinarmed** 1989;43(5):705–12 (Eng. Abstr.) **(Ger)**

[Typing and virulence testing of Pasteurella haemolytica field strains] Schimmel D, et al. **Arch Exp Veterinarmed** 1990; 44(2):295–300 (Eng. Abstr.) **(Ger)**

[The dynamics of the microbial count in experimentally–induced salmonellosis of calves] Steinbach G, et al. **Arch Exp Veterinarmed** 1990;44(1):93–101 (Eng. Abstr.) **(Ger)**

[Comparative studies of the detection of rotavirus in fecal samples of calves with diarrhea with the latex test "Slidex Rota–Kit 2" and electron microscopy] Hamann HP, et al. **Berl Munch Tierarztl Wochenschr** 1989 Oct 1;102(10):346–7 (Eng. Abstr.) **(Ger)**

[The possible pathogenic factors of Actinomyces pyogenes. A review] Lämmler C. **Berl Munch Tierarztl Wochenschr** 1990 Apr 1;103(4):121–5 (51 ref.) (Eng. Abstr.) **(Ger)**

[Seroepidemiologic studies of the agent of respiratory diseases in cattle] Pernthaner A, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun;97(6):254–7 (Eng. Abstr.) **(Ger)**

[Examination of cattle with respiratory diseases for Mycoplasma and bacterial bronchopneumonia agents] Binder A, et al. **Zentralbl Veterinarmed [B]** 1990 Aug; 37(6):430–5 (Eng. Abstr.) **(Ger)**

[Isolation of coronaviruses in cell culture from nasal swab samples of calves with respiratory tract diseases in the Federal Republic of Germany] Jiménez C, et al. **Zentralbl Veterinarmed [B]** 1989 Oct;36(8):635–8 (Eng. Abstr.) **(Ger)**

[Detection of mycoplasmas in eye swab specimens of cattle] Schöttker–Wegner HH, et al. **Zentralbl Veterinarmed [B]** 1990 Aug;37(6):436–41 (Eng. Abstr.) **(Ger)**

[An immunoenzyme method of isolation of foot–and–mouth disease virus by using beta–lactamase conjugate with virus–specific antibodies] Mishchenko VA, et al. **Antibiot Khimioter** 1989 Oct;34(10):739–41 (Eng. Abstr.) **(Rus)**

[Type D and A Clostridium botulinum in necropsy samples from bovines with "mal de Aguapey"] Fernández RA, et al. **Rev Argent Microbiol** 1989 Apr–Jun;21(2):47–53 (Eng. Abstr.) **(Spa)**

[Can the mad cow disease hit Sweden? Can it be transmitted to humans by meat?] Karlsson Y. **Lakartidningen** 1990 Jul 11;87(28–29):2361–4 **(Swe)**

MORTALITY

An investigation of the causes of parturient calf mortality in shorthorn heifers. Gee CD, et al. **Aust Vet J** 1989 Sep; 66(9):293–5

Hairballs in feedlot–raised calves. Herd RM, et al. **Aust Vet J** 1989 Nov;66(11):372–3

Risk factors for mortality from diarrhea in beef calves in Alberta. Schumann FJ, et al. **Can J Vet Res** 1990 Jun; 54(3):366–72

[Perinatal mortality in calves with symptoms of weak calf syndrome] Benedictus G. **Tijdschr Diergeneeskd** 1989 Oct 15;114(20):1046–8 (Eng. Abstr.) **(Dut)**

PARASITOLOGY

Observations on natural and experimental interactions between Schistosoma bovis and S. curassoni from West Africa. Rollinson D, et al. **Acta Trop (Basel)** 1990 Feb; 47(2):101–14

On the possibility of bovine Onchocerca species infecting Simulium damnosum s.l. in the forest zone of Sierra Leone. II. Biting densities and filarial infections in Simulium spp. and Culicoides spp. Davies JB, et al. **Ann Trop Med Parasitol** 1989 Dec;83(6):603–14

Experimental studies of Korea Taenia (Cheju strain) infection in domestic animals. Fan PC, et al. **Ann Trop Med Parasitol** 1989 Aug;83(4):395–403

Inhibited development of trichostrongylid worms in grazing cattle. Fabiyi JP, et al. **Aust Vet J** 1989 Aug;66(8):240–2

Comparison of immunogenicity and virulence between Babesia bigemina parasites from continuous culture and from a splenectomised calf. Jorgensen WK, et al. **Aust Vet J** 1989 Nov;66(11):371–2

Helminth development stages isolated from cattle faeces and herbage in pastures of rural areas in Imo State, Nigeria. Okafor FC. **Beitr Trop Landwirtsch Veterinarmed** 1989; 27(4):469–74

Ecology and phenology of cattle ticks in Zambia: development and survival of free–living stages. Pegram RG, et al. **Exp Appl Acarol** 1990 Apr;8(4):291–301

Rhipicephalus appendiculatus feeding on rabbits and cattle: salivary–gland responses to varying host resistance. Walker AR, et al. **Exp Appl Acarol** 1990 Apr;8(4):285–90

Experimental infection of Indonesia Taenia (Samosir strain) in domestic animals. Fan PC, et al. **Int J Parasitol** 1989 Nov;19(7):809–12

Experimental infection of Thailand Taenia (Chiengmai strain) in domestic animals. Fan PC, et al. **Int J Parasitol** 1990 Feb;20(1):121–3

Condemnation of beef because of Sarcocystis hirsuta infection. Dubey JP, et al. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1095–6

Fate of developing larvae of Onchocerca lienalis and O. volvulus in micropore chambers implanted into laboratory hosts. Bianco AE, et al. **J Helminthol** 1989 Sep;63(3):218–26

Enzyme polymorphism in Schistosoma mattheei from cattle in the Eastern Transvaal Lowveld. Kruger FJ. **J Helminthol** 1989 Sep;63(3):191–6

Zoonotic potential of giardiasis in domestic ruminants. Buret A, et al. **J Infect Dis** 1990 Jul;162(1):231–7

Fecundity of partially engorged female Dermacentor albipictus (Acari: Ixodidae) removed by cattle grooming. Barker RW, et al. **J Med Entomol** 1990 Jan;27(1):51–6

Identification of Tritrichomonas foetus in sections of bovine placental tissue with monoclonal antibodies. Burgess DE, et al. **J Parasitol** 1989 Dec;75(6):977–80

Failure of white–tailed deer, Odocoileus virginianus L., to sustain a population of cattle ticks, Boophilus annulatus (Say), through successive generations. Davey RB. **J Parasitol** 1990 Jun;76(3):356–9

Resistance of Nguni, Bonsmara and Hereford cattle to ticks in a Bushveld region of South Africa. Spickett AM, et al. **Onderstepoort J Vet Res** 1989 Dec;56(4):245–50

Finding and recognition of the bovine host by the cercariae of Schistosoma spindale. Haas W, et al. **Parasitol Res** 1990; 76(4):343–50

Distribution of Taenia saginata cysts in carcases of experimentally infected calves and its significance for routine meat inspection. Kyvsgaard NC, et al. **Res Vet Sci** 1990 Jul;49(1):29–33

Parasitic phase of Anocentor nitens (Acarina: Ixodidae) in cattle. Rodríguez Diego J, et al. **Rev Elev Med Vet Pays Trop** 1989;42(2):231–2

Distribution of microfilariae of Onchocerca lienalis and Onchocerca gutturosa in the skin of cattle in Germany and their development in Simulium ornatum and Culicoides nubeculosus following artificial infestation. Dohnal J, et al. **Vet Parasitol** 1990 Jul;36(3–4):325–32

Ultrastructural differentiation between sarcocysts of Sarcocystis hirsuta and Sarcocystis hominis. Dubey JP, et al. **Vet Parasitol** 1989 Nov;34(1–2):153–7

Ecological aspects of four species of ticks found on cattle in Salta, northwest Argentina. Guglielmone AA, et al. **Vet Parasitol** 1990 Feb;35(1–2):93–101

Increased establishment of lungworms after exposure to a combined infection of Ostertagia ostertagi and Cooperia oncophora. Kloosterman A, et al. **Vet Parasitol** 1990 May; 36(1–2):117–22

Extraintestinal stages of Eimeria bovis in calves and attempts to induce relapse of clinical disease. Lindsay DS, et al. **Vet Parasitol** 1990 May;36(1–2):1–9

Toxocara vitulorum in beef calves kept on effluent–irrigated pastures in Zimbabwe. Pandey VS, et al. **Vet Parasitol** 1990 Apr;35(4):349–55

A Neospora–like protozoon found in an aborted bovine placenta. Shivaprasad HL, et al. **Vet Parasitol** 1989 Nov; 34(1–2):145–8

Congenital neosporosis in a calf. Dubey JP. **Vet Rec** 1989 Nov 4;125(19):486

The effect of some haemoparasites on the reproductive performance of zebu bulls. Kumi–Diaka J, et al. **Vet Res Commun** 1989;13(6):475–7

[The helminth fauna of the gastrointestinal tract of young cattle in northwest Germany] Klein M, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Nov–Dec; 96(10):488–90 (Eng. Abstr.) **(Ger)**

PATHOLOGY

The pathology of concurrent bovine viral diarrhoea and infectious bovine rhinotracheitis virus infection in newborn calves. Pálfi V, et al. **Acta Vet Hung** 1989;37(1–2):89–95

Occurrence of intracytoplasmic inclusion bodies in the digestive epithelium of fallow deer (Dama dama L). Diaz R, et al. **Acta Vet Scand** 1989;30(3):301–5

Mycosis in the stomach compartments of cattle. Jensen HE, et al. **Acta Vet Scand** 1989;30(4):409–23

Animal model of human disease. Citrullinemia (argininosuccinate synthetase deficiency). Harper PA, et al. **Am J Pathol** 1989 Dec;135(6):1213–5

Scanning electron microscopy of pathologic changes in the epithelial surfaces of the uterus and uterine tubes of cows. Bollo E, et al. **Am J Vet Res** 1990 Jan;51(1):137–42

Immunoperoxidase evaluation of pneumonic lesions induced by Pasteurella multocida in calves. Haritani M, et al. **Am J Vet Res** 1989 Dec;50(12):2162–7

Eurytrema coelomaticum infection in bovines in an abattoir in south Brazil. Bossaert K, et al. **Ann Soc Belg Med Trop** 1989 Sep;69(3):263–8

Suspected Lyme disease in a cow. Rothwell JT, et al. **Aust Vet J** 1989 Sep;66(9):296–8

Experimental Haemophilus somnus infection in pregnant cattle. Stuart FA, et al. **Br Vet J** 1990 Jan–Feb;146(1):57–67

Attaching and effacing Escherichia coli infection as a cause of diarrhea in young calves. Janke BH, et al. **J Am Vet Med Assoc** 1990 Mar 15;196(6):897–901

Ultrastructural neuropathologic features of bovine spongiform encephalopathy. Liberski PP. **J Am Vet Med Assoc** 1990 May 15;196(10):1682

Muscular hypertrophy in beef cattle: déjà vu. Ott RS. **J Am Vet Med Assoc** 1990 Feb 1;196(3):413–5 (21 ref.)

Congenital intraocular melanoma in a calf. Schuh JC. **J Comp Pathol** 1989 Jul;101(1):113–6

Extraskeletal mesenchymal chondrosarcoma in a cow. Uno K, et al. **J Comp Pathol** 1989 Jul;101(1):31–8

Immunoperoxidase evaluation of pneumonic lesions in calves naturally infected with Pasteurella haemolytica. Haritani M, et al. **Nippon Juigaku Zasshi** 1989 Dec;51(6):1137–41

A bovine ameloblastic odontoma in the mandibular incisor region. Masegi T, et al. **Nippon Juigaku Zasshi** 1990 Jun; 52(3):635–7

The cellular composition in the pancreatic islet of a cow with spontaneous diabetes mellitus. Ono K, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):1067–9

Cecal adenocarcinoma in a cow. Suzuki T, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):1041–3

Sarcocystis in Murray Grey stock cattle introduced from Australia. Yamada M, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):883–5

An outbreak of contagious bovine pleuropneumonia in the Owambo Mangetti area of South West Africa/Namibia: microbiological, immunofluorescent, pathological and serological findings. Trichard CJ, et al. **Onderstepoort J Vet Res** 1989 Dec;56(4):277–84

Bovine spongiform encephalopathy: detection and quantitation of fibrils, fibril protein (PrP) and vacuolation in brain. Scott AC, et al. **Vet Microbiol** 1990 Jun; 23(1–4):295–304

Haemorrhagic pancarditis in cattle infected with Trypanosoma vivax. Kimeto BA, et al. **Vet Parasitol** 1990 Jan;34(4):295–301

Dandy–Walker malformation in a Japanese black calf. Madarame H, et al. **Vet Pathol** 1990 Jul;27(4):296–8

Experimental primary postnatal bovine viral diarrhea viral infections in six–month–old calves. Wilhelmsen CL, et al. **Vet Pathol** 1990 Jul;27(4):235–43

Bovine digital dermatitis. Bassett HF, et al. **Vet Rec** 1990

Feb 17;126(7):164–5
Bovine mandibular lymphosarcoma. Hamir AN, et al. **Vet Rec** 1989 Aug 26;125(9):238
Dandy–Walker malformation in two calves. Jeffrey M, et al. **Vet Rec** 1990 May 19;126(20):499–501
Pyometra in a Friesian heifer: bacteriological and endometrial changes. Noakes DE, et al. **Vet Rec** 1990 May 19; 126(20):509
Dystocia in nine British breeds of cattle and its relationship to the dimensions of the dam and calf [see comments] Schwabe AE, et al. **Vet Rec** 1989 Dec 23–30; 125(26–27):636–9 Comment in: Vet Rec 1990 Feb 17;126(7):176.
Nephroblastoma in a calf [letter] Srivastava AK, et al. **Vet Rec** 1989 Aug 26;125(9):245–6
Occurrence of 'attaching and effacing' lesions in the small intestine of calves experimentally infected with bovine isolates of verocytotoxic E coli. Wray C, et al. **Vet Rec** 1989 Sep 30;125(14):365–8
Histopathology of the bovine pododerma in relation to age and chronic laminitis. Boosman R, et al. **Zentralbl Veterinarmed** [A] 1989 Jul;36(6):438–46
Spinal muscular atrophy in Brown Swiss calves. el–Hamidi M, et al. **Zentralbl Veterinarmed** [A] 1989 Dec;36(10):731–8
S–phase evaluation with bromodeoxyuridine in lymphocytes from cattle infected with bovine leukemia virus (BLV). Tazzari PL, et al. **Zentralbl Veterinarmed** [B] 1989 Nov; 36(9):691–8
[Histology of the endometrium in cows in normal and pathologic puerperium] Kummer V, et al. **Vet Med (Praha)** 1989 Oct;34(10):603–12 (Eng. Abstr.) (Cze)
[Activity of the ovarian follicle system in cows with various puerperal courses] Zralý Z, et al. **Vet Med (Praha)** 1989 Oct;34(10):593–602 (Eng. Abstr.) (Cze)
[Experimental Mycoplasma bovis infection of the respiratory tract of calves] Brys A, et al. **Arch Exp Veterinarmed** 1989; 43(5):667–76 (Eng. Abstr.) (Ger)
[Accidental thymus involution in calves] Durchfeld B, et al. **Berl Munch Tierarztl Wochenschr** 1989 Dec 1;102(12):400–5 (Eng. Abstr.) (Ger)
[Pathology of bovine cardiomyopathy] Tontis A, et al. **Schweiz Arch Tierheilkd** 1990;132(3):105–16 (Eng. Abstr.) (Ger)
[Laminitis with a high degree of osteitis rarefaciens of the distal phalanx in a Fleckvieh bull] Kofler J, et al. **Tierarztl Prax** 1990 Jun;18(3):239–42 (Eng. Abstr.) (Ger)
[Hip dysplasia in a young Charolais bull] Müller M, et al. **Tierarztl Prax** 1989;17(4):368–70 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Induction of lactation in infertile cattle using synthetic steroid compounds. Dabas YP, et al. **Indian J Exp Biol** 1990 Jun; 28(6):594–6
Investigators relate experience with bovine somatotropin [letter] Jenny BF, et al. **J Am Vet Med Assoc** 1990 May 15;196(10):1562–3
ECG of the month. Atrial fibrillation in a cow with meningitis. Pringle J, et al. **J Am Vet Med Assoc** 1990 Jan 1;196(1):56–7
Bovine spongiform encephalopathy in a cow in the United Kingdom. Scott PR, et al. **J Am Vet Med Assoc** 1989 Dec 15;195(12):1745–7
Effects of sequential infestations of Dermacentor albipictus and Amblyomma americanum (Acari: Ixodidae) on overwintering beef cows in west–central Texas. Teel PD, et al. **J Med Entomol** 1990 Jul;27(4):632–41
Electroencephalographic observation on sheep and cattle with experimental cerebrocortical necrosis. Itabisashi T, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):551–8
Effect of pregnancy on gravid sclerosis of bovine uterine arteries. Kamiya S, et al. **Nippon Juigaku Zasshi** 1989 Dec; 51(6):1179–84
Ostertagia ostertagi infection in the calf: effects of a trickle challenge on appetite, digestibility, rate of passage of digesta and liveweight gain. Fox MT, et al. **Res Vet Sci** 1989 Nov;47(3):294–8
Pathophysiological and parasitological studies on a concurrent infection of Ostertagia ostertagi and Cooperia oncophora in calves. Parkins JJ, et al. **Res Vet Sci** 1990 Mar;48(2):201–8
Effects of an inadequate dietary intake of magnesium on osteogenesis in dairy cows during the dry period. van Mosel M, et al. **Res Vet Sci** 1990 May;48(3):280–7
Effect on liver function of acetonaemia and the fat cow syndrome in cattle. West HJ. **Res Vet Sci** 1990 Mar; 48(2):221–7
The implication of BLV infection in the productivity, reproductive capacity and survival rate of a dairy cow. Brenner J, et al. **Vet Immunol Immunopathol** 1989 Oct; 22(3):299–305
The effect of the bont tick (Amblyomma hebraeum) on the weight gain of Africander steers. Norval RA, et al. **Vet Parasitol** 1989 Oct;33(3–4):329–41
Effect of naturally occurring nematode infections on growth performance of first–season grazing calves. Ploeger HW, et al. **Vet Parasitol** 1990 Apr;35(4):307–22
Effect of nematode infections on growth performance of calves after stabling on commercial dairy farms. Ploeger HW, et al. **Vet Parasitol** 1990 May;36(1–2):71–81
Effect of nematode infections and management practices on growth performance of calves on commercial dairy farms. Ploeger HW, et al. **Vet Parasitol** 1990 Apr;35(4):323–39
Effect of nematode infections on growth performance of calves during winter housing on dairy farms. Ploeger HW, et al. **Vet Parasitol** 1990 May;36(1–2):45–55
Effect of naturally occurring nematode infections in the first and second grazing season on the growth performance of second–year cattle. Ploeger HW, et al. **Vet Parasitol** 1990 May;36(1–2):57–70
Dystocia in British cattle [letter; comment] Falk M. **Vet Rec** 1990 Feb 17;126(7):176 Comment on: Vet Rec 1989 Dec 23–30;125(26–27):636–9.
[Pathology and productivity of the lactating cow: interrelations based on the level of lactation] Coulon JB, et al. **Ann Rech Vet** 1989;20(4):443–59 (Eng. Abstr.) (Fre)
[Characterization of the pathology of lactating cows based on the level of lactation. Principal factors in the variation and typing of pathologic profiles of lactation] Landais E, et al. **Ann Rech Vet** 1989;20(3):277–94 (Eng. Abstr.) (Fre)
[Results of liver function tests in abomasal displacement and ketosis of cattle] Gül Y, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Mar;97(3):126–30 (Eng. Abstr.) (Ger)
[Diseases and culling of Swiss dairy cows. 2. Culling and relation between diseases and milk production parameters] Danuser J, et al. **Schweiz Arch Tierheilkd** 1990; 132(6):301–10 (Eng. Abstr.) (Ger)
[Dysfunction of the esophageal groove ("ruminal drinking") as a complication of neonatal diarrhea in the calf] Dirr L, et al. **Tierarztl Prax** 1989;17(4):353–8 (Eng. Abstr.) (Ger)
[Cardiac and circulatory physiological studies in cattle with and without cardiomyopathy] Tschudi P, et al. **Zentralbl Veterinarmed** [A] 1989 Oct;36(8):612–20 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Immunization of calves with live and inactivated whole–cell vaccines against Salmonella typhimurium infection. Mikula I, et al. **Acta Vet Hung** 1989;37(3):219–26
The effect of periparturient treatment with fenbendazole on the milk production of cows. Tharaldsen J, et al. **Acta Vet Scand** 1989;30(3):247–52
Prevention of leucaena toxicosis of cattle in Florida by ruminal inoculation with 3–hydroxy–4–(1H)–pyridone–degrading bacteria. Hammond AC, et al. **Am J Vet Res** 1989 Dec; 50(12):2176–80
Protection of cattle and swine against foot–and–mouth disease, using biosynthetic peptide vaccines. Morgan DO, et al. **Am J Vet Res** 1990 Jan;51(1):40–5
Prophylactic effects of recombinant bovine interferon–alpha I1 on acute Salmonella typhimurium infection in calves. Peel JE, et al. **Am J Vet Res** 1990 Jul;51(7):1095–9
Effectiveness of two commercial infectious bovine keratoconjunctivitis vaccines. Smith PC, et al. **Am J Vet Res** 1990 Jul;51(7):1147–50
Effects of ivermectin on control of gastrointestinal nematodes and weight gain in weaner–yearling beef cattle. Williams JC, et al. **Am J Vet Res** 1989 Dec;50(12):2108–16
Future challenges of disease in the beef cattle industry. Campbell RS. **Aust Vet J** 1989 Aug;66(8):252–7 (46 ref.)
Measurement of antibody in serum and genital fluids of bulls by ELISA after vaccination and challenge with Tritrichomonas foetus. Campero CM, et al. **Aust Vet J** 1990 May;67(5):175–8
Control of Campylobacter fetus in artificially contaminated bovine semen by incubation with antibiotics before freezing. Chen SS, et al. **Br Vet J** 1990 Jan–Feb; 146(1):68–74
The protective effect of vaccination against experimental pneumonia in cattle with Haemophilus somnus outer membrane antigens and interference by lipopolysaccharide. Silva SV, et al. **Can J Vet Res** 1990 Jun;54(3):326–30
Further studies on passive immunization of newborn calves against rotaviral infection. Castrucci G, et al. **Comp Immunol Microbiol Infect Dis** 1989;12(3):71–6
Immunization against bovine rotaviral infection. Castrucci G, et al. **Eur J Epidemiol** 1989 Sep;5(3):279–84
Clinical aspects and prevention of Q fever in animals. Krauss H. **Eur J Epidemiol** 1989 Dec;5(4):454–5
Immunization of cattle with the MSP–1 surface protein complex induces protection against a structurally variant Anaplasma marginale isolate. Palmer GH, et al. **Infect Immun** 1989 Nov;57(11):3666–9
Preconditioning did not sell—perhaps quality assurance would. Herrick JB. **J Am Vet Med Assoc** 1989 Sep 15; 195(6):730–1
Use of animal breeds and breeding to overcome the incidence of grass tetany: a review. Greene LW, et al. **J Anim Sci** 1989 Dec;67(12):3463–9 (35 ref.)
Effects of preconditioning on pre– and post–shipment performance of feeder calves. Pritchard RH, et al. **J Anim Sci** 1990 Jan;68(1):28–34
Adverse influence of social facilitation and learning context in training cattle to avoid eating larkspur. Ralphs MH, et al. **J Anim Sci** 1990 Jul;68(7):1944–52
Effect of subcutaneously released 24F–1,25–dihydroxyvitamin D3 on incidence of parturient paresis in dairy cows. Goff JP, et al. **J Dairy Sci** 1990 Feb;73(2):406–12
Chronology of permethrin resistance in a southern Illinois population of the horn fly (Diptera: Muscidae) during and after selection by pyrethroid use. Weinzierl RA, et al. **J Econ Entomol** 1990 Jun;83(3):690–7
Chemoprophylaxis and immunity to parasitic bronchitis in cattle—a field experiment comparing topical ivermectin and an oxfendazole intraruminal device. Jacobs DE, et al. **J Vet Pharmacol Ther** 1989 Dec;12(4):444–50
Bovine spongiform encephalopathy [letter] Meldrum KC. **Lancet** 1990 Mar 31;335(8692):797
An attempt to eradicate bovine leukemia virus infection in a public pasture. Itoh H, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):661–3
Larval membrane antigens protect Hereford cattle against infestation with Boophilus microplus. Wong JY, et al. **Parasite Immunol** 1990 Jan;12(1):75–83
Early immunization of calves with an inactivated vaccine against trichophytosis. Wawrzkiewicz K, et al. **Pol Arch Weter** 1988;28(3–4):5–16
Immunity of calves treated with an oxfendazole pulse release bolus to challenge with Dictyocaulus viviparus. Eysker M, et al. **Res Vet Sci** 1990 May;48(3):301–5
Immunoprophylactic control of bovine babesiosis: role of exoantigens of Babesia. Montenegro–James S. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:85–94 (39 ref.)
Development of babesial vaccines. Timms P. **Trans R Soc Trop Med Hyg** 1989;83 Suppl:73–9 (25 ref.)
Australian frozen vaccines for the control of babesiosis and anaplasmosis in cattle—a review. Dalgliesh RJ, et al. **Trop Anim Health Prod** 1990 Feb;22(1):44–52 (19 ref.)
Tick–borne diseases of cattle in Paraguay. II. Immunisation against anaplasmosis and babesiosis. Payne RC, et al. **Trop Anim Health Prod** 1990 May;22(2):101–8
Identification of foot–and–mouth disease virus replication in vaccinated cattle by antibodies to non–structural virus proteins. Berger HG, et al. **Vaccine** 1990 Jun;8(3):213–6
Perioperative antimicrobial considerations for gastrointestinal surgery of cattle. Brumbaugh GW. **Vet Clin North Am Food Anim Pract** 1990 Jul;6(2):307–33 (95 ref.)
Bovine vaccines and herd vaccination programs. Hjerpe CA. **Vet Clin North Am Food Anim Pract** 1990 Mar;6(1):167–260 (351 ref.)
Prevention and treatment of complications of bovine gastrointestinal surgery. Tulleners EP. **Vet Clin North Am Food Anim Pract** 1990 Jul;6(2):495–514 (15 ref.)
Priming for local and systemic antibody memory responses to bovine respiratory syncytial virus: effect of amount of virus, virus replication, route of administration and maternal antibodies. Kimman TG, et al. **Vet Immunol Immunopathol** 1989 Sep;22(2):145–60
Efficacy of a live Pasteurella multocida vaccine for the prevention of experimentally induced bovine pneumonic pasteurellosis. Chengappa MM, et al. **Vet Microbiol** 1989 Dec;21(2):147–54
The effect of stocking rate and parasite control on the performance of replacement beef heifers on pasture. Hansen JW, et al. **Vet Parasitol** 1989 Nov;34(1–2):103–15
Comparative study of early–season prophylaxis using ivermectin with lungworm vaccination in the control of parasitic bronchitis and gastroenteritis in cattle. Jacobs DE, et al. **Vet Parasitol** 1989 Nov;34(1–2):45–56
Efficacy of the morantel sustained release trilaminate matrix against gastrointestinal nematodes in beef calves. Rickard LG, et al. **Vet Parasitol** 1989 Sep;33(2):125–33
Estimation of the potential demand for a bovine babesiosis and anaplasmosis vaccine in Argentina. Späth EJ, et al. **Vet Parasitol** 1990 May;36(1–2):131–40
Effect of a single strategically timed dose of fenbendazole on cow and calf performance. Stuedemann JA, et al. **Vet Parasitol** 1989 Nov;34(1–2):77–86
Three treatments with ivermectin in year–long control of gastrointestinal nematode parasites of weaner–yearling beef cattle. Williams JC, et al. **Vet Parasitol** 1989 Oct; 33(3–4):265–81
Comparison of a levamisole sustained–release bolus and ivermectin treatment to prevent bovine lungworm infection. Borgsteede FH, et al. **Vet Q** 1990 Apr;12(2):65–72
Delay in timing of the oxfendazole pulse release bolus in calves in The Netherlands. Eysker M, et al. **Vet Q** 1989 Oct;11(4):210–5
Commons committee 'satisfied' with MAFF's handling of the BSE issue [news] **Vet Rec** 1990 Jul 21;127(3):50–1
Guidance for veterinary surgeons handling BSE cases [letter] Cooke M. **Vet Rec** 1990 Mar 3;126(9):223
Efficacy of long–acting oxytetracycline for the prevention of tick–borne fever in calves. Cranwell MP. **Vet Rec** 1990 Apr 7;126(14):334–6
Supply of Rotavec K99 vaccine [letter] Fox RA. **Vet Rec** 1989 Aug 12;125(7):162
Vaccination against bovine babesiosis with drug–controlled live parasites [published erratum appears in Vet Rec 1989 Dec 23–30;125(26–27):646] Gray JS, et al. **Vet Rec** 1989 Sep 30;125(14):369–72
Bovine babesiosis on Nevis—implications for tick control. Hadrill DJ, et al. **Vet Rec** 1990 Apr 21;126(16):403–4
Studies on vaccination against papillomaviruses: a comparison of purified virus, tumour extract and transformed cells in prophylactic vaccination. Jarrett WF, et al. **Vet Rec** 1990 May 5;126(18):449–52
Studies on vaccination against papillomaviruses: the

immunity after infection and vaccination with bovine papillomaviruses of different types. Jarrett WF, et al. **Vet Rec** 1990 May 12;126(19):473–5

Navel ill [letter] Mee JF. **Vet Rec** 1990 Apr 7;126(14):341

Field use of live haemorrhagic septicaemia vaccine [letter] Myint A, et al. **Vet Rec** 1990 Jun 30;126(26):648

Lameness in dairy cows [letter] Whipp JI. **Vet Rec** 1989 Sep 16;125(12):334

Investigations on the influence of copper succinate on the production of superoxide anion radicals by bovine small intestinal mucosa cells. Harisch G, et al. **Zentralbl Veterinarmed [A]** 1989 Oct;36(8):576–84

[Immunization of young cattle with gp51 of the bovine leukosis virus and the subsequent experimental infection] Burkhardt H, et al. **Arch Exp Veterinarmed** 1989 Nov; 43(6):933–42 (Eng. Abstr.) **(Ger)**

[Seasonal variations in the formation of virus–neutralizing antibodies in cattle after vaccination against foot–and–mouth disease] Felfe P, et al. **Arch Exp Veterinarmed** 1990;44(2):199–204 (Eng. Abstr.) **(Ger)**

[Development of an inactivated vaccine for the protection of cattle against Aujeszky's disease] Straub OC. **Berl Munch Tierarztl Wochenschr** 1990 Jul 1;103(7):225–9 (Eng. Abstr.) **(Ger)**

[The effectiveness of foot–and–mouth disease vaccines in Switzerland. II. Stability problems] Ackermann M, et al. **Schweiz Arch Tierheilkd** 1989;131(7):389–95 (Eng. Abstr.) **(Ger)**

[The effectiveness of foot–and–mouth disease vaccines in Switzerland. I. Screening tests and herd immunity] Müller HK, et al. **Schweiz Arch Tierheilkd** 1989;131(7):379–86 (Eng. Abstr.) **(Ger)**

[The prevention and control of salmonellosis in cattle and swine] Meyer H, et al. **Z Gesamte Hyg** 1989 Nov; 35(11):650–3 (Eng. Abstr.) **(Ger)**

[Udder immunization for the protection of calves from salmonella infections. 2. Estimation of serological findings of colostrum with regard to its protective activity] Staak C, et al. **Zentralbl Veterinarmed [B]** 1990 Jun;37(4):283–9 (Eng. Abstr.) **(Ger)**

[Phagocytic activity of blood leukocytes and level of serum immunoglobulins and albumin after parenteral administration of zinc during vaccination against trichophytosis in calves] Paulík S, et al. **Vet Med (Praha)** 1990 Apr;35(4):207–15 (Eng. Abstr.) **(Slo)**

RADIOGRAPHY

What is your diagnosis? Subchondral bone cyst in a bull. Scott E, et al. **J Am Vet Med Assoc** 1990 Feb 15; 196(4):639–40

[What is your diagnosis? Which treatment do you suggest? Colonic obstruction in a calf] Steiner A, et al. **Schweiz Arch Tierheilkd** 1989;131(9):577–8 **(Ger)**

SURGERY

Third–degree perineal lacerations and rectovestibular fistulae in cattle: 20 cases (1981–1988). Dreyfuss DJ, et al. **J Am Vet Med Assoc** 1990 Mar 1;196(5):768–70

Duodenal perforation and abdominal abscess in a cow. Weaver AD. **J Am Vet Med Assoc** 1989 Dec 1; 195(11):1603–5

Surgery of the bovine digestive tract. **Vet Clin North Am Food Anim Pract** 1990 Jul;6(2):265–524

Neoplasms of the bovine gastrointestinal tract. Bertone AL. **Vet Clin North Am Food Anim Pract** 1990 Jul;6(2):515–24 (31 ref.)

Surgery of the neonatal bovine digestive tract. Bristol DG, et al. **Vet Clin North Am Food Anim Pract** 1990 Jul; 6(2):473–93 (70 ref.)

Surgery of the bovine forestomach compartments. Ducharme NG. **Vet Clin North Am Food Anim Pract** 1990 Jul; 6(2):371–97 (47 ref.)

Surgery of the bovine large intestine. Fubini SL. **Vet Clin North Am Food Anim Pract** 1990 Jul;6(2):461–71 (20 ref.)

Bovine esophageal surgery. Haven ML. **Vet Clin North Am Food Anim Pract** 1990 Jul;6(2):359–69 (21 ref.)

Decision making in bovine abdominal surgery. St Jean G. **Vet Clin North Am Food Anim Pract** 1990 Jul;6(2):335–58 (68 ref.)

Surgery of the bovine small intestine. Smith DF. **Vet Clin North Am Food Anim Pract** 1990 Jul;6(2):449–60 (30 ref.)

Surgery of the bovine abomasum. Trent AM. **Vet Clin North Am Food Anim Pract** 1990 Jul;6(2):399–48 (136 ref.)

Caesarean sections on BSE cows [letter] Eddy RG. **Vet Rec** 1990 Jan 27;126(4):92

Caecal dilatation [letter; comment] Harrington MG. **Vet Rec** 1989 Nov 4;125(19):490 Comment on: Vet Rec 1989 Oct 21;125(17):430–3.

THERAPY

Influence of recombinant bovine interferon gamma and dexamethasone on pneumonia attributable to Haemophilus somnus in calves. Chiang YW, et al. **Am J Vet Res** 1990 May;51(5):759–62

Effect of bovine fibroblast interferon on rhinovirus infection in calves [published erratum appears in Am J Vet Res 1990 Aug;51(8):1320] Rosenquist BD, et al. **Am J Vet Res** 1990 Jun;51(6):870–3

Survival and fertility after uterine prolapse in dairy cows. Jubb TF, et al. **Aust Vet J** 1990 Jan;67(1):22–4

Local interleukin–2 therapy in bovine ocular squamous cell carcinoma. A pilot study. Rutten VP, et al. **Cancer Immunol Immunother** 1989;30(3):165–9

Cautions against substitution of production medicine for "sick cow treatment" [letter] Gérloff BJ. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1458, 1460

Fluid and electrolyte therapy. **Vet Clin North Am Food Anim Pract** 1990 Mar;6(1):1–165

Metabolic acidosis in diarrheic calves: the importance of alkalinizing agents in therapy. Kasari TR. **Vet Clin North Am Food Anim Pract** 1990 Mar;6(1):29–43 (29 ref.)

Fluid therapy in mature cattle. Roussel AJ Jr. **Vet Clin North Am Food Anim Pract** 1990 Mar;6(1):111–23 (27 ref.)

The use of parenteral nutrition in calves. Sweeney RW, et al. **Vet Clin North Am Food Anim Pract** 1990 Mar; 6(1):125–31 (13 ref.)

Intravenous fluid therapy in calves. Tremblay RR. **Vet Clin North Am Food Anim Pract** 1990 Mar;6(1):77–101 (78 ref.)

A practitioner's views on fluid therapy in calves. Tromp AM. **Vet Clin North Am Food Anim Pract** 1990 Mar;6(1):103–10 (17 ref.)

Fluid therapy with specific mucopolysaccharides. A new approach to control diarrhea. Verschoor J, et al. **Vet Clin North Am Food Anim Pract** 1990 Mar;6(1):69–75 (17 ref.)

Digital dermatitis control [letter; comment] **Vet Rec** 1990 Feb 24;126(8):200–1 Comment on: Vet Rec 1990 Feb 3;126(5):120.

Digital dermatitis control [letter] [see comments] Blowey RW. **Vet Rec** 1990 Feb 3;126(5):120 Comment in: Vet Rec 1990 Feb 24;126(8):200–1.

Therapy and clinical progress of cattle with dilatation and torsion of the caecum [see comments] Braun U, et al. **Vet Rec** 1989 Oct 21;125(17):430–3 Comment in: Vet Rec 1989 Nov 4;125(19):490.

Studies of the effect of recombinant human–alpha 1 interferon on experimental parainfluenza type 3 virus infections of the respiratory tract of calves [see comments] Bryson DG, et al. **Vet Rec** 1989 Dec 16;125(25):615–8 Comment in: Vet Rec 1990 Feb 17;126(7):176–7.

A comparison of two oral rehydration solutions in experimental models of dehydration and diarrhoea in calves [published erratum appears in Vet Rec 1990 Feb 3;126(5):110] Dupe RJ, et al. **Vet Rec** 1989 Dec 16; 125(25):620–4

[Testing of a hyperimmune serum in calves infected intranasally with Mycoplasma bovis] Brys A, et al. **Arch Exp Veterinarmed** 1989;43(5):677–83 (Eng. Abstr.) **(Ger)**

[Intravenous congestion anesthesia/–antibiotic administration in cattle—indications,technics, complications] Steiner A, et al. **Schweiz Arch Tierheilkd** 1990;132(5):227–37 (38 ref.) (Eng. Abstr.) **(Ger)**

TRANSMISSION

Transmission of bovine leukemia virus by Tabanus fuscicostatus. Foil LD, et al. **Am J Vet Res** 1989 Oct; 50(10):1771–3

Bovine leukosis virus transmission with mouthparts from Tabanus abactor after interrupted feeding. Perino LJ, et al. **Am J Vet Res** 1990 Aug;51(8):1167–9

An investigation of transovarial transmission of Akabane virus in Culicoides brevitarsis. Allingham PG, et al. **Aust Vet J** 1990 Jul;67(7):273–4

Bovine spongiform encephalopathy [see comments] Matthews WB. **BMJ** 1990 Feb 17;300(6722):412–3 (23 ref.) Comment in: BMJ 1990 Mar 24;300(6727):817.

Insemination of susceptible and preimmunized cattle with bovine viral diarrhoea virus infected semen. Paton DJ, et al. **Br Vet J** 1990 Mar–Apr;146(2):171–4

Effect of brucellosis vaccination and dehorning on transmission of bovine leukemia virus in heifers on a California dairy. Lassauzet ML, et al. **Can J Vet Res** 1990 Jan;54(1):184–9

Experimental transmission of bovine viral diseases by insemination with contaminated semen or during embryo transfer. Schlafer DH, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Feb;97(2):68–72

Experimentally induced bovine spongiform encephalopathy in cattle in Mission, Tex, and the control of scrapie. Hourrigan JL. **J Am Vet Med Assoc** 1990 May 15; 196(10):1678–9

Lack of evidence of transmission of bovine leukemia virus by rectal palpation of dairy cows. Lassauzet ML, et al. **J Am Vet Med Assoc** 1989 Dec 15;195(12):1732–3

More on confinement rearing of calves [letter; comment] Martsching SL. **J Am Vet Med Assoc** 1989 Oct 15; 195(8):1055 Comment on: J Am Vet Med Assoc 1989 Aug 15;195(4):423.

Seasonality of natural transmission of bovine anaplasmosis under desert mountain range conditions. Zaugg JL. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1106–9

Bovine spongiform encephalopathy: the need for knowledge, balance, patience, and action. Bradley R. **J Pathol** 1990 Apr;160(4):283–5 (12 ref.)

BSE in perspective [editorial] **Lancet** 1990 May 26; 335(8700):1252–3

Experimental transmission of scrapie to cattle [letter] Gibbs CJ Jr, et al. **Lancet** 1990 May 26;335(8700):1275

Concern about bovine spongiform encephalopathy [letter] Howard R, et al. **Lancet** 1990 Aug 4;336(8710):316

Bovine spongiform encephalopathy. Taking stock of the issues [news] Kimberlin RH. **Nature** 1990 Jun 28; 345(6278):763–4

Link between scrapie and BSE? [letter] Westaway D, et al. **Nature** 1990 Jul 12;346(6280):113

Spongiform encephalopathy. Duchen L. **Practitioner** 1989 Oct 22;233(1477):1407, 1409–10

Natural mode of horizontal transmission of bovine leukemia virus (BLV): the potential role of tabanids (Tabanus spp.). Manet G, et al. **Vet Immunol Immunopathol** 1989 Oct; 22(3):255–63

Susceptibility of African buffalo and Boran cattle to Trypanosoma congolense transmitted by Glossina morsitans centralis. Grootenhuis JG, et al. **Vet Parasitol** 1990 Mar;35(3):219–31

Transmission of encephalopathies [letter] **Vet Rec** 1990 Mar 10;126(10):248

Tyrrell report spells out priorities for BSE research [news] **Vet Rec** 1990 Jan 20;126(3):48

Government rejects compensation demand [news] **Vet Rec** 1990 Jan 20;126(3):50

Dietary transmission of bovine spongiform encephalopathy to mice. Barlow RM, et al. **Vet Rec** 1990 Feb 3;126(5):111–2

Bovine spongiform encephalopathy/scrapie [letter] Barr M. **Vet Rec** 1990 Jul 7;127(1):23

BSE, scrapie and laboratory models [letter] Chandler RL. **Vet Rec** 1990 Mar 3;126(9):223–4

Preliminary evidence of the experimental transmissibility of bovine spongiform encephalopathy to cattle. Dawson M, et al. **Vet Rec** 1990 Feb 3;126(5):112–3

BSE risks [letter] Fussell MH. **Vet Rec** 1990 May 26; 126(21):537

Spread of heartwater along trek routes in Shaba (south east Zaire). Matton P, et al. **Vet Rec** 1989 Nov 18;125(21):531

Bovine spongiform encephalopathy and human health. Taylor DM. **Vet Rec** 1989 Oct 14;125(16):413–5 (61 ref.)

Experimental infection of sheep with bovine leukemia virus: infectivity of blood, nasal and saliva secretions. Gatei MH, et al. **Zentralbl Veterinarmed [B]** 1989 Nov;36(9):652–60

[Detection certainty of the contamination of bull sperm with mycoplasma] Richter A, et al. **Arch Exp Veterinarmed** 1989; 43(5):713–20 (Eng. Abstr.) **(Ger)**

URINE

Isolation and purification of a low molecular weight protein from bovine urine. Kawamura S, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):787–93

CATTLE PLAGUE see **RINDERPEST**

CAUCASOID RACE

Racial differences in pharmacodynamic response to nicotinates in vivo in human skin: black and white. Berardesca E, et al. **Acta Derm Venereol (Stockh)** 1990; 70(1):63–6

Anthropometry in blacks: applicability of generalized skinfold equations and differences in fat patterning between blacks and whites. Zillikens MC, et al. **Am J Clin Nutr** 1990 Jul;52(1):45–51

Lifelong black–white differences in bone size and cortical area [letter; comment] Garn SM. **Am J Dis Child** 1990 Jul; 144(7):750–1 Comment on: Am J Dis Child 1989 Nov;143(11):1346–9.

Bone mineral content in black and white children 1 to 6 years of age. Early appearance of race and sex differences [see comments] Li JY, et al. **Am J Dis Child** 1989 Nov; 143(11):1346–9 Comment in: Am J Dis Child 1990 Jul;144(7):750–1.

The epidemiology of idiopathic dilated cardiomyopathy in a biracial community. Coughlin SS, et al. **Am J Epidemiol** 1990 Jan;131(1):48–56

Relation of body fatness and its distribution to cardiovascular risk factors in young blacks and whites. The role of insulin. Folsom AR, et al. **Am J Epidemiol** 1989 Nov;130(5):911–24

Differences between black and white men in correlates of high density lipoprotein cholesterol. Freedman DS, et al. **Am J Epidemiol** 1990 Oct;132(4):656–69

Hemostatic variables in Japanese and Caucasian men. Tissue plasminogen activator, antithrombin III, and protein C and their relations to coronary risk factors. Iso H, et al. **Am J Epidemiol** 1990 Jul;132(1):41–6

Hemostatic variables in Japanese and Caucasian men. Plasma fibrinogen, factor VIIc, factor VIIIc, and von Willebrand factor and their relations to cardiovascular disease risk factors. Iso H, et al. **Am J Epidemiol** 1989 Nov; 130(5):925–34

The estimation of selection coefficients in Afrikaners: Huntington disease, porphyria variegata, and lipoid proteinosis. Stine OC, et al. **Am J Hum Genet** 1990 Mar; 46(3):452–8

Racial differences in the incidence of end–stage renal disease in types I and II diabetes mellitus. Stephens GW, et al. **Am J Kidney Dis** 1990 Jun;15(6):562–7

Diversity of palmar pattern ridge counts in Iranian

populations. Kamali MS, et al. **Am J Phys Anthropol** 1990 Mar;81(3):363–73
Race differences in pubic symphyseal aging patterns in the male. Katz D, et al. **Am J Phys Anthropol** 1989 Oct; 80(2):167–72
Polynesian face and dentition: functional perspective. Kean MR, et al. **Am J Phys Anthropol** 1990 Jul;82(3):361–9
Dental agenesis in the Dariusleut Hutterite Brethren: comparisons to selected Caucasoid population surveys. Mahaney MC, et al. **Am J Phys Anthropol** 1990 Jun; 82(2):165–77
Race/ethnic-specific AIDS risk in New York City, 1981–87 [letter; comment] Menendez BS, et al. **Am J Public Health** 1989 Dec;79(12):1679–80 Comment on: Am J Public Health 1989 Jul;79(7):836–9.
Is testicular cancer incidence in blacks increasing? Van Den Eeden SK, et al. **Am J Public Health** 1989 Nov; 79(11):1553–4
Patterns of skeletal histologic change through time: comparison of an archaic native American population with modern populations. Burr DB, et al. **Anat Rec** 1990 Mar; 226(3):307–13
The adaptive significance of Polynesian body form. Houghton P. **Ann Hum Biol** 1990 Jan–Feb;17(1):19–32
The head circumference growth curve for Japanese children between 0–4 years of age: comparison with Caucasian children and correlation with stature. Tsuzaki S, et al. **Ann Hum Biol** 1990 Jul–Aug;17(4):297–303
Lifetime risks of hip, Colles', or vertebral fracture and coronary heart disease among white postmenopausal women. Cummings SR, et al. **Arch Intern Med** 1989 Nov; 149(11):2445–8
Quantitative regional structure of the normal human lamina cribrosa. A racial comparison. Dandona L, et al. **Arch Ophthalmol** 1990 Mar;108(3):393–8
Ankylosing spondylitis in aborigines (guanches) of the Canary Islands [letter] González T, et al. **Arthritis Rheum** 1990 Aug;33(8):1294–5
Nasopharyngeal carcinoma in Auckland: a study of racial factors. Morton RP, et al. **Australas Radiol** 1990 Feb; 34(1):17–8
Premenopausal bone loss in the lumbar spine and neck of femur: a study of 225 Caucasian women. Rodin A, et al. **Bone** 1990;11(1):1–5
Morphometric study on the postnatal growth of the cerebellum of Australian aborigines and Caucasians. Riedel A, et al. **Brain Res** 1989 Oct 16;499(2):333–43
Racial and age differences in multiple primary cancers after breast cancer: a population-based analysis. Schwartz AG, et al. **Breast Cancer Res Treat** 1989 Nov;14(2):245–54
Racial differences in the early detection of breast cancer in metropolitan Detroit, 1978 to 1987. Swanson GM, et al. **Cancer** 1990 Sep 15;66(6):1297–301
Black–white differences in exercise blood pressure. The Lipid Research Clinics Program Prevalence Study. Ekelund LG, et al. **Circulation** 1990 May;81(5):1568–74
Autonomic function in hypertension. Are there racial differences? Parmer RJ, et al. **Circulation** 1990 Apr; 81(4):1305–11
Ethnic differences in cyclic AMP accumulation: effect on alpha 2, beta 2, and prostanoid receptor responses. Stein M, et al. **Clin Pharmacol Ther** 1990 Mar;47(3):360–5
Differences in plasma binding of drugs between Caucasians and Chinese subjects. Zhou HH, et al. **Clin Pharmacol Ther** 1990 Jul;48(1):10–7
Dual photon absorptiometry of lumbar spine in west European (Belgian) postmenopausal females: normal range and fracture threshold. Reginster JY, et al. **Clin Rheumatol** 1990 Jun;9(2):220–4
An assessment of dental caries prevalence among Gujurati, Pakistani and white Caucasian five-year-old children resident in Dewsbury, West Yorkshire. Prendergast MJ, et al. **Community Dent Health** 1989 Sep;6(3):223–32
High prevalence of NIDDM and impaired glucose tolerance in Indian, Creole, and Chinese Mauritians. Mauritius Noncommunicable Disease Study Group. Dowse GK, et al. **Diabetes** 1990 Mar;39(3):390–6
Prevalence and risk factors of diabetic retinopathy in non-Hispanic whites and Hispanics with NIDDM. San Luis Valley Diabetes Study. Hamman RF, et al. **Diabetes** 1989 Oct;38(10):1231–7
Noninsulin-dependent diabetes mellitus in black and white Americans. Harris MI. **Diabetes Metab Rev** 1990 Mar; 6(2):71–90 (17 ref.)
Comparison of urinary albumin excretion between Maoris, Pacific Island Polynesians and Europeans with non-insulin-dependent diabetes. Lunt H, et al. **Diabetes Res Clin Pract** 1990 Jan;8(1):45–9
Comparative morphometric evaluation of permanent mandibular molar dentition of plain and hilly (Momba/Mongoloid) populations of eastern Indian states. Ganguli A. **Forensic Sci Int** 1990 Jan;44(1):49–53
Ethnic differences in anthropometric characteristics of young children and their parents. Greaves KA, et al. **Hum Biol** 1989 Jun;61(3):459–77
X chromosome restriction fragment length polymorphisms in five racial groups: rare variant detected with the RC8 (DXS9) probe in the Marathi population, India. Wadhwa R, et al. **Hum Hered** 1989;39(6):309–12
Pressor hormones in elderly hypertensive persons. Racial differences. Bursztyn M, et al. **Hypertension** 1990 Feb;15(2 Suppl):I88–92
Effect of chronic sodium loading on cardiovascular response in young blacks and whites. Falkner B, et al. **Hypertension** 1990 Jan;15(1):36–43
Differences in blacks and whites with essential hypertension: biochemistry and endocrine. State of the art lecture. Falkner B. **Hypertension** 1990 Jun;15(6 Pt 2):681–6 (61 ref.)
Hemodynamic differences between black patients and white patients with essential hypertension. State of the art lecture. Frohlich ED. **Hypertension** 1990 Jun;15(6 Pt 2):675–80
Essential hypertension and histocompatibility antigens. A linkage study. Gerbase-DeLima M, et al. **Hypertension** 1989 Dec;14(6):604–9 (37 ref.)
Race and gender influence ambulatory blood pressure patterns of adolescents. Harshfield GA, et al. **Hypertension** 1989 Dec;14(6):598–603
A global comparison of predicting equations on spirometry in the male population. Mathur N, et al. **Int J Epidemiol** 1990 Jun;19(2):331–8
Anthropometric measurements of white and black southern adolescent girls. Korslund MK, et al. **J Am Diet Assoc** 1990 Mar;90(3):394–400
Anthropometric standards: different growth curves for different races? [letter] Roberson LM. **J Am Diet Assoc** 1990 Sep;90(9):1206, 1208
Racial differences in the presentation of chronic open-angle glaucoma. Marshall EC. **J Am Optom Assoc** 1989 Oct; 60(10):760–7 (49 ref.)
Influence of body habitus and race on bone mineral density of the midradius, hip, and spine in aging women. DeSimone DP, et al. **J Bone Miner Res** 1989 Dec;4(6):827–30
Influence of age and body weight on spine and femur bone mineral density in U.S. white men. Mazess RB, et al. **J Bone Miner Res** 1990 Jun;5(6):645–52
The utility of indirect measures of obesity in racial comparisons of blood pressure. CARDIA Study Group. Ballew C, et al. **J Clin Epidemiol** 1990;43(8):799–804
Sensitivity and specificity of standardized screens of cognitive impairment and dementia among elderly black and white community residents. Fillenbaum G, et al. **J Clin Epidemiol** 1990;43(7):651–60
Comparison of plaque microflora between Chinese and Caucasian population groups. Cao CF, et al. **J Clin Periodontol** 1990 Feb;17(2):115–8
Tooth mineralization standards for blacks and whites from the middle southern United States. Harris EF, et al. **J Forensic Sci** 1990 Jul;35(4):859–72
Race-related differences among elderly urban residents: a cohort study, 1975–1984. Ford AB, et al. **J Gerontol** 1990 Jul;45(4):S163–71
Serum creatinine and its relation to cardiovascular disease risk variables in children and young adults from a biracial community. The Bogalusa Heart Study. Agamah ES, et al. **J Lab Clin Med** 1990 Sep;116(3):327–34
Body fat distribution patterns and blood pressure in black and white women. Adams-Campbell LL, et al. **J Natl Med Assoc** 1990 Aug;82(8):573–6
Chronic obstructive pulmonary disease in blacks and whites: mortality and morbidity. Gillum RF. **J Natl Med Assoc** 1990 Jun;82(6):417–28
Effects of race on the validity of clinical estimates of gestational age. Stevens-Simon C, et al. **J Pediatr** 1989 Dec;115(6):1000–2
An assessment of the Arthritis Impact Measurement Scales in 3 ethnic groups. Coulton CJ, et al. **J Rheumatol** 1989 Aug;16(8):1110–5
Urothelial cancer in white and Japanese patients in Hawaii: pathology. Stemmermann GN, et al. **J Urol** 1990 Jul; 144(1):44–6
Second trimester maternal serum human chorionic gonadotropin and unconjugated oestriol levels in blacks and whites [letter] Simpson JL, et al. **Lancet** 1990 Jun 16; 335(8703):1459–60
Separate hemoglobin standards for blacks and whites: a critical review of the case for separate and unequal hemoglobin standards. Jackson RT. **Med Hypotheses** 1990 Jul;32(3):181–9
Aboriginal and white births in Western Australia, 1980–1986. Part I: Birthweight and gestational age [see comments] Kliewer EV, et al. **Med J Aust** 1989 Nov 6;151(9):493–502 Comment in: Med J Aust 1990 Mar 19;152(6):334.
The treaty of Waitangi [letter; comment] Broughton HR. **N Z Med J** 1990 Feb 14;103(883):52 Comment on: N Z Med J 1989 Oct 25;102(878):564.
Effects of age and sex on bone density at the hip and spine in a normal Caucasian New Zealand population. Elliott JR, et al. **N Z Med J** 1990 Feb 14;103(883):33–6
Contrasting quantitative alterations in CD4+ and CD8+ lymphocytes in HIV-infected African Americans compared with the Caucasian population. Cruse JM, et al. **Pathol Immunopathol Res** 1989;8(5–6):300–13
Duplex Doppler and spectral flow analysis of racial differences in cerebrovascular atherosclerosis. Gil-Peralta A, et al. **Stroke** 1990 May;21(5):740–4
Results of renal transplantation in Miami analyzed by race. Milgrom M, et al. **Transplant Proc** 1989 Dec;21(6):3934–6
[A multifactorial study of the linear parameters of the mandible in 3 human ethnic groups] Baillet R, et al. **Orthod Fr** 1988;59 Pt 2:521–9 (Eng. Abstr.) **(Fre)**
[Topographic and quantitative characteristics of adipose tissue in various aborigines of Siberia (women)] Zhvavyi NF, et al. **Arkh Anat Gistol Embriol** 1989 Jul;97(7):85–9 (Eng. Abstr.) **(Rus)**
[Ecology of the peoples of the Central Asia. the anthropological aspect] Alekseeva TI. **Vestn Akad Med Nauk SSSR** 1989;(8):38–42 (Eng. Abstr.) **(Rus)**

GENETICS

A comparison of the position of the mental foramen in Chinese and British mandibles. Santini A, et al. **Acta Anat (Basel)** 1990;137(3):208–12
Globin genes in Micronesia: origins and affinities of Pacific Island peoples. O'Shaughnessy DF, et al. **Am J Hum Genet** 1990 Jan;46(1):144–55
Codon 129 changes in the prion protein gene in Caucasians [letter; comment] Owen F, et al. **Am J Hum Genet** 1990 Jun;46(6):1215–6 Comment on: Am J Hum Genet 1989 Oct;45(4):1–59, A3–373.
Ethnic polymorphism of DXS52 (St 14) locus linked to coagulation factor VIII gene in Argentina. de la Salle C, et al. **Ann Genet** 1990;33(1):24–8
Hep-G2 glucose transporter gene polymorphism in Caucasian, black, Hispanic and Japanese patients with NIDDM. Murakami K, et al. **Diabetes Res Clin Pract** 1990 May–Jun;9(2):115–21
Restriction site polymorphisms at the human HepG2 glucose transporter gene locus in Caucasian and west Indian subjects with non-insulin-dependent diabetes mellitus. Li SR, et al. **Hum Hered** 1990;40(1):38–44
Comparative mapping of the human major histocompatibility complex in different racial groups by pulsed field gel electrophoresis. Tokunaga K, et al. **Hum Immunol** 1989 Oct;26(2):99–106
The effect of race on serum ferritin during parturition. Lazebnik N, et al. **J Am Coll Nutr** 1989 Dec;8(6):591–6
Highly polymorphic minisatellite sequences: allele frequencies and mutation rates for five locus-specific probes in a Caucasian population. Smith JC, et al. **J Forensic Sci Soc** 1990 Jan–Feb;30(1):19–32
C4 null genes in American whites and blacks with myositis. Moulds JM, et al. **J Rheumatol** 1990 Mar;17(3):331–4
Probe 87-10a identifies a codominantly inherited X chromosome allele polymorphic in three racial populations. Young SR, et al. **Nucleic Acids Res** 1990 May 25; 18(10):3113
Molecular genetics of X chromosome-linked color vision among populations of African and Japanese ancestry: high frequency of a shortened red pigment gene among Afro-Americans. Jørgensen AL, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6512–6
Blood group gene frequencies of four population groups in the western Cape. May RM, et al. **S Afr Med J** 1989 Dec 16;76(12):647–50
HLA-DR, DQ antigens in North American Caucasians. Lee TD, et al. **Tissue Antigens** 1990 Feb;35(2):64–70
Restriction fragment length polymorphism of a lymphocyte surface antigen, Blast-1, in Japanese and Caucasians, and in patients with rheumatoid arthritis. Matsui Y, et al. **Tissue Antigens** 1990 May;35(5):203–5
An estimate on the frequency of duplicated haplotypes and silent alleles of human C4 protein polymorphism. I. Investigations in healthy Caucasoid families. Steuer M, et al. **Tissue Antigens** 1989 May;33(5):501–10
[Genetic markers of erythrocytes among the subpopulations of Komi] Morokov VA. **Gematol Transfuziol** 1989 Oct; 34(10):24–7 (Eng. Abstr.) **(Rus)**

CAUDA EQUINA

Neuroradiology case of the day. Subarachnoid hemorrhage complicating an ependymoma of cauda equina. Mestayer RJ, et al. **AJR Am J Roentgenol** 1990 Jun;154(6):1342
An unusual case of proctalgia. Rappaport B, et al. **Ann Emerg Med** 1990 Feb;19(2):201–3
Subarachnoid haemorrhage due to cauda equina haemangiopericytoma. Leber GL, et al. **Aust N Z J Surg** 1990 Jan;60(1):69–70
Urinary dysfunction and the cauda equina syndrome. Graham GP, et al. **Br J Hosp Med** 1990 Jul;44(1):62–3
Metastatic epidural spinal cord compression. Results of treatment and survival. Sørensen S, et al. **Cancer** 1990 Apr 1;65(7):1502–8
Cauda equina syndrome after in situ arthrodesis for severe spondylolisthesis at the lumbosacral junction. Schoenecker PL, et al. **J Bone Joint Surg [Am]** 1990 Mar;72(3):369–77
Giant ganglionic paraganglioma of the filum terminale. Case report. Djindjian M, et al. **J Neurosurg** 1990 Sep; 73(3):459–61
Cauda equina syndrome of long-standing ankylosing spondylitis. Case report and review of the literature. Tullous MW, et al. **J Neurosurg** 1990 Sep;73(3):441–7 (38 ref.)
Magnetic resonance imaging of arachnoid diverticula associated with cauda equina syndrome in ankylosing spondylitis. Sparling MJ, et al. **J Rheumatol** 1989 Oct; 16(10):1335–7
Urologic changes after cauda equina compression in dogs. Bodner DR, et al. **J Urol** 1990 Jan;143(1):186–90
Cauda equina neurinoma associated with normal pressure hydrocephalus—case report. Nishida K, et al. **Neurol Med Chir (Tokyo)** 1990 Apr;30(4):258–62 (21 ref.)
Acute bleeding into a filum terminale ependymoma. Herb E, et al. **Neurosurg Rev** 1990;13(3):243–5
Cauda equina syndrome complicating ankylosing spondylitis.

Mitchell MJ, et al. **Radiology** 1990 May;175(2):521–5
Neuropathic bladder in ankylosing spondylitis with spinal diverticula. Haddad FS, et al. **Urology** 1990 Apr; 35(4):313–6
[Patients' condition 1 year following surgery for a lumbosacral radicular syndrome (letter)] Pal TM. **Ned Tijdschr Geneeskd** 1990 Feb 24;134(8):406–7 **(Dut)**
[Intraspinal paraganglioma. Apropos of 3 cases with a review of the literature] Fuentes JM, et al. **Neurochirurgie** 1990; 36(2):108–14 (29 ref.) (Eng. Abstr.) **(Fre)**
[Ependymoma of the intradural filum terminale in adults. 20 cases] Rivierez M, et al. **Neurochirurgie** 1990; 36(2):96–107 (Eng. Abstr.) **(Fre)**
[Intermittent claudication of the cauda equina. The clinical picture and treatment] Benini A. **Dtsch Med Wochenschr** 1989 Oct 6;114(40):1536–43 (9 ref.) **(Ger)**
[Possibilities of ultrasonic studies in the diagnosis of extra-organ tumors of the small pelvis] Orlova LP, et al. **Sov Med** 1989;(12):83–5 **(Rus)**
[Posterior hernia of the intervertebral disk combined with a tumor of the cauda equina] Dolzhenko DA, et al. **Zh Vopr Neirokhir** 1989 Jul–Aug;(4):56 **(Rus)**

ABNORMALITIES

[Tethered cord syndrome, conservative or surgical approach?] Nuttin C, et al. **Acta Urol Belg** 1990; 58(1):95–104 (Eng. Abstr.) **(Fre)**
[The clinical problem of the tethered cord syndrome--a report of 3 personal cases] Weissert M, et al. **Z Kinderchir** 1989 Oct;44(5):275–9 (Eng. Abstr.) **(Ger)**

ANALYSIS

Characterization of HNK-1 bearing glycoproteins in human peripheral nerve myelin. van den Berg LH, et al. **J Neurosci Res** 1990 Mar;25(3):295–9

BLOOD SUPPLY

Report of a cavernoma of the cauda equina and review of the literature. Pagni CA, et al. **Surg Neurol** 1990 Feb; 33(2):124–31 (45 ref.)
[Conus-cauda symptoms as the initial manifestation of panarteritis] Hochschorner G, et al. **Nervenarzt** 1990 Apr; 61(4):235–8 **(Ger)**

INJURIES

Spinal subarachnoid haematoma after stab injury of the cauda equina. Thakur RC, et al. **S Afr J Surg** 1990 Mar;28(1):21–3
Importance of compression onset rate for the degree of impairment of impulse propagation in experimental compression injury of the porcine cauda equina. Olmarker K, et al. **Spine** 1990 May;15(5):416–9
[Reconstructive surgery in complicated trauma of the thoracic and lumbar segments of the spine] Iumashev GS, et al. **Vestn Khir** 1989 Nov;143(11):61–4 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Intercellular septate-like junction of neoplastic cells in myxopapillary ependymoma of the filum terminale. Ho KL. **Acta Neuropathol (Berl)** 1990;79(4):432–7
Experimental lumbar spinal stenosis. Analysis of the cortical evoked potentials, microvasculature, and histopathology. Delamarter RB, et al. **J Bone Joint Surg [Am]** 1990 Jan; 72(1):110–20
Fatty filum terminale: assessment with MR imaging. Okumura R, et al. **J Comput Assist Tomogr** 1990 Jul–Aug; 14(4):571–3
Syringomyelia associated with a spinal schwannoma: a case report [letter] Jamjoom AB, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):438–9
Paraganglioma of the cauda equina. Report of three cases. Pigott TJ, et al. **J Neurosurg** 1990 Sep;73(3):455–8
Mobile schwannoma of the cauda equina diagnosed by magnetic resonance imaging. Isu T, et al. **Neurosurgery** 1989 Dec;25(6):968–71
Hydrocephalus and cavernoma of the cauda equina. Ramos F Jr, et al. **Neurosurgery** 1990 Jul;27(1):139–42
[A rare manifestation of Echinococcus cysticus in CT and magnetic resonance tomography] Wrazidlo W, et al. **Digitale Bilddiagn** 1989 Sep;9(3):102–4 (Eng. Abstr.) **(Ger)**
[Chronic fibroplastic leptomeningitis of the spinal cord and cauda equina] Benini A, et al. **Schweiz Arch Neurol Psychiatr** 1990;141(4):293–343 (Eng. Abstr.) **(Ger)**
[Paraganglioma of the cauda equina with gangliocyte differentiation] Chillón D, et al. **Arch Neurobiol (Madr)** 1989 Jul–Aug;52(4):193–7 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Urethral function after chronic cauda equina lesion in cats. II. The role of autonomically-innervated smooth and striated muscle in distal sphincter dysfunction. Flood HD, et al. **J Urol** 1990 Oct;144(4):1029–35
Urethral function after chronic cauda equina lesions in cats. I. The contribution of mechanical factors and sympathetic innervation to proximal sphincter dysfunction. Flood HD, et al. **J Urol** 1990 Oct;144(4):1022–8

PHYSIOPATHOLOGY

Nerve-roots of the cauda equina. The effect of hypotension and acute graded compression on function. Garfin SR, et al. **J Bone Joint Surg [Am]** 1990 Sep;72(8):1185–92
Glioblastoma multiforme with bone metastase and cauda equina syndrome. Lampl Y, et al. **J Neurooncol** 1990 Apr; 8(2):167–72
Effects of experimental graded compression on blood flow in spinal nerve roots. A vital microscopic study on the porcine cauda equina. Olmarker K, et al. **J Orthop Res** 1989;7(6):817–23
True myotonic discharge in caudi equina syndrome [letter] Haig AJ. **Muscle Nerve** 1990 Jun;13(6):559
[Clinical and experimental studies on ascending cauda equina action potential (A-CEAP) in lumbar lesion with reference to positivisation] Nakamura H. **Nippon Seikeigeka Gakkai Zasshi** 1990 Jan;64(1):27–42 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Spontaneous priapism produced by stenosis of the lumbar canal. Coraddu M, et al. **Acta Neurol (Napoli)** 1989 Dec; 11(6):428–33

SURGERY

Occult spinal dysraphism: clinical and urodynamic outcome after division of the filum terminale. Khoury AE, et al. **J Urol** 1990 Aug;144(2 Pt 2):426–8; discussion 428–9, 443–4

ULTRASTRUCTURE

Microtubular aggregates within rough endoplasmic reticulum in myxopapillary ependymoma of the filum terminale. Ho KL. **Arch Pathol Lab Med** 1990 Sep;114(9):956–60

CAUDATA see **URODELA**

CAUDATE NUCLEUS

A primate model of Huntington's disease: behavioral and anatomical studies of unilateral excitotoxic lesions of the caudate-putamen in the baboon. Hantraye P, et al. **Exp Neurol** 1990 May;108(2):91–104
Technique of left adrenalectomy for autotransplantation to the caudate nucleus in Parkinson's disease. Skinner EC, et al. **J Urol** 1990 Oct;144(4):838–40; discussion 840–1
Neurobehavioral changes with caudate lesions [letter; comment] Krishnan KR, et al. **Neurology** 1989 Oct; 39(10):1410–1 Comment on: Neurology 1989 Mar;39(3):349–54.
[Disorders of voluntary motor activity and lesions of caudate nuclei] Trillet M, et al. **Rev Neurol (Paris)** 1990; 146(5):338–44 (47 ref.) (Eng. Abstr.) **(Fre)**
[Clinical analysis of 24 cases of caudate hemorrhage] Asakura K, et al. **Neurol Med Chir (Tokyo)** 1989 Dec;29(12):1107–12 (Eng. Abstr.) **(Jpn)**
[Paralysis of the vertical gaze caused by a hematoma of the caudate nucleus. A false localizing sign] López de Munain A, et al. **Neurologia** 1988 May–Jun;3(3):116–9 (Eng. Abstr.) **(Spa)**
[Hemorrhage of the caudate nucleus] Roquer J, et al. **Neurologia** 1988 Jul–Aug;3(4):143–7 (14 ref.) (Eng. Abstr.) **(Spa)**

ANALYSIS

Immunohistochemical studies on cholecystokinin (CCK)-immunoreactive neurons in the rat using sequence specific antisera and with special reference to the caudate nucleus and primary sensory neurons. Hökfelt T, et al. **J Chem Neuroanat** 1988 Jan–Feb;1(1):11–51
Sigma receptor "antagonist" BMY 14802 increases neurotensin concentrations in the rat nucleus accumbens and caudate. Levant B, et al. **J Pharmacol Exp Ther** 1990 Jul;254(1):330–5
What excitotoxin kills striatal neurons in Huntington's disease? Clues from neurochemical studies. Perry TL, et al. **Neurology** 1990 Jan;40(1):20–4 (31 ref.)
[Assay of nuclear triiodothyronine receptors in the precentral gyrus in patients with amyotrophic lateral sclerosis] Yoshino Y, et al. **Rinsho Shinkeigaku** 1990 Jan;30(1):45–9 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

The interhemispheric projection from the substantia nigra to the caudate-putamen as depicted by the anterograde transport of [3H]leucine. Morgan S, et al. **Behav Brain Res** 1990 May 7;38(2):155–62

BLOOD SUPPLY

Caudate infarcts. Caplan LR, et al. **Arch Neurol** 1990 Feb; 47(2):133–43 (122 ref.)

CYTOLOGY

Structure-function relationships in rat brain stem subnucleus interpolaris. IX. Inputs from subnucleus caudalis. Hallas BH, et al. **J Neurophysiol** 1990 Jul;64(1):28–45
[Fronto-striatal correlations in normal and pathologic aging of the human brain] Orzhekhovskaia NS. **Arkh Anat Gistol Embriol** 1989 Sep;97(9):6–13 (Eng. Abstr.) **(Rus)**
[The distribution of neurons in the caudate nucleus of the cat that respond to sensory stimulation and the organization of the topical projections] Rodionova EI, et al. **Neirofiziologiia** 1990;22(2):156–62 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Enhancement in switching motor patterns following local application of the glutamate agonist AMPA into the cat caudate nucleus. Jaspers RM, et al. **Behav Brain Res** 1990 Mar 26;37(3):237–46
Effects of intrastriatal apomorphine on changes in switching behaviour induced by the glutamate agonist AMPA injected into the cat caudate nucleus. Jaspers RM, et al. **Behav Brain Res** 1990 Mar 26;37(3):247–54
Effects of dopamine depletion from the caudate-putamen and nucleus accumbens septi on the acquisition and performance of a conditional discrimination task. Robbins TW, et al. **Behav Brain Res** 1990 May 28;38(3):243–61
Neuropathological changes in the caudate nucleus elicited by MPTP and their prevention by monoamine oxidase inhibition. Hess A. **Brain Res** 1989 Oct 16;499(2):393–6
Neuronotoxic effects of monoclonal anti-Thy 1 antibody (OX7) coupled to the ribosome inactivating protein, saporin, as studied by suicide transport experiments in the rat. Wiley RG, et al. **Brain Res** 1989 Dec 25;505(1):44–54
Acute neuropathological changes in the caudate nucleus caused by MPTP and methamphetamine: immunohistochemical studies. Hess A, et al. **J Neurocytol** 1990 Jun;19(3):338–42
The effects of haloperidol and amphetamine on ascorbic acid and uric acid in caudate and nucleus accumbens of rats as measured by voltammetry in vivo. Mueller K. **Life Sci** 1990;47(8):735–42
Neurochemical changes in hippocampal and caudate dialysates associated with early trimethyltin neurotoxicity in rats. Brodie ME, et al. **Neurotoxicology** 1990 Spring; 11(1):35–46
Alcohol-preferring rats: genetic sensitivity to alcohol-induced stimulation of dopamine metabolism. Fadda F, et al. **Physiol Behav** 1990 Apr;47(4):727–9
Modulation of central muscarinic receptor binding in vitro by ultralow levels of the organophosphate paraoxon. Katz LS, et al. **Toxicol Appl Pharmacol** 1989 Oct;101(1):114–23
[Effect of the destruction and activation of the caudate nuclei on the convulsive action of corazol kindling] Makul'kin RF, et al. **Fiziol Zh** 1990 Jan–Feb;36(1):3–8 (Eng. Abstr.) **(Rus)**
[Effect of damage of the nigro-neostriatal dopaminergic system by MPTP on the transmission of corticofugal impulses to the neurons of the caudate nucleus] Oleshko NN. **Fiziol Zh** 1989 Nov–Dec;35(6):33–9 (Eng. Abstr.) **(Rus)**
[A comparison of the effects of single and chronic microinjections of GABA and picrotoxin into the caudate nucleus on the conditioned reflexes of dogs] Iakimovskii AF. **Zh Vyssh Nerv Deiat** 1990 May–Jun;40(3):435–42 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

gamma-Glutamyltransferase activity is unchanged in acutely quinolinate-lesioned rat neostriatum but is elevated in Huntington's disease caudate. Zhu SG, et al. **Exp Neurol** 1990 Jan;107(1):106–9
Decrease of glutamate decarboxylase activity in substantia nigra and caudoputamen following transient hyperglycemic ischemia in the rat. Folbergrová J, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):897–901

GROWTH & DEVELOPMENT

Postnatal ontogenesis of dopaminergic and serotoninergic systems in rat caudate nucleus. Restani P, et al. **Pharmacol Res** 1990 May–Jun;22(3):343–50

METABOLISM

Amphetamine stereotypy in cats and neurotransmitter interactions in the caudate nucleus. II. Effects of intracaudate injection of leu-enkephalin and naloxone. Moyanova SG, et al. **Acta Physiol Pharmacol Bulg** 1989; 15(2):47–52
Amphetamine stereotypy in cats and neurotransmitter interactions in the caudate nucleus. III. Effects of intracaudate injections of quipazine, cyproheptadine and electrical stimulation of the raphe dorsal nucleus. Moyanova SG, et al. **Acta Physiol Pharmacol Bulg** 1989; 15(3):43–9
The effects of cholecystokinin (CCK-8) on dopamine-containing nerve terminals in the caudate nucleus and nucleus accumbens of the anesthetized rat: an in vivo electrochemical study. Gerhardt GA, et al. **Brain Res** 1989 Oct 9;499(1):157–63
Dopaminergic involvement in the cocaine-induced up-regulation of benzodiazepine receptors in the rat caudate nucleus. Goeders N, et al. **Brain Res** 1990 May 7;515(1–2):1–8
Differential modulation of 5-hydroxytryptamine1D binding sites by GTP and GTPgammaS. Harrington MA, et al. **Brain Res** 1990 Jan 1;506(1):172–4
Electrically stimulated [3H]dopamine and [14C]acetylcholine release from nucleus caudatus slices: differences between spontaneously hypertensive rats and Wistar-Kyoto rats.

Linthorst AC, et al. **Brain Res** 1990 Feb 19;509(2):266–72
DARPP-32 development in the caudate nucleus is independent of afferent input from the substantia nigra. Ehrlich ME, et al. **Brain Res Dev Brain Res** 1990 Jul 1; 54(2):257–63
PET studies of dopamine receptor distribution using [18F]fluoroethylspiperone: findings in disorders related to the dopaminergic system. Wienhard K, et al. **J Neural Transm Gen Sect** 1990;81(3):195–213
Evidence for the importance of a carboxyl group in the binding of ligands to the D2 dopamine receptor. Williamson RA, et al. **J Neurochem** 1990 Oct;55(4):1357–65
Neuropeptide Y in the cerebral cortex and the caudate-putamen nuclei: ultrastructural basis for interactions with GABAergic and non-GABAergic neurons. Aoki C, et al. **J Neurosci** 1989 Dec;9(12):4333–54
ARPP-21, a cyclic AMP-regulated phosphoprotein enriched in dopamine-innervated brain regions. I. Amino acid sequence of ARPP-21B from bovine caudate nucleus. Williams KR, et al. **J Neurosci** 1989 Oct;9(10):3631–7
Effects of cocaine and related drugs in nonhuman primates. I. [3H]cocaine binding sites in caudate-putamen. Madras BK, et al. **J Pharmacol Exp Ther** 1989 Oct;251(1):131–41
Characterization of a [3H]-5-hydroxytryptamine binding site in rabbit caudate nucleus that differs from the 5-HT1A, 5-HT1B, 5-HT1C and 5-HT1D subtypes. Xiong WC, et al. **Life Sci** 1989;45(16):1433–42
Cocaine receptors labeled by [3H]2 beta-carbomethoxy-3 beta-(4-fluorophenyl)tropane. Madras BK, et al. **Mol Pharmacol** 1989 Oct;36(4):518–24
A second molecular form of D2 dopamine receptor in rat and bovine caudate nucleus. Chio CL, et al. **Nature** 1990 Jan 18;343(6255):266–9
Endogenous homovanillic acid levels differ between rat and rabbit caudate, hippocampus, and cortical regions. Reader TA, et al. **Neurochem Res** 1989 Nov;14(11):1137–41
Developmental regulation of nerve growth factor and its receptor in the rat caudate-putamen. Mobley WC, et al. **Neuron** 1989 Nov;3(5):655–64
Does amphetamine preferentially increase the extracellular concentration of dopamine in the mesolimbic system of freely moving rats? Robinson TE, et al. **Neuropsychopharmacology** 1990 Jun;3(3):163–73
Distribution, projection and dopaminergic regulation of the neurokinin B mRNA-containing neurons of the rat caudate-putamen. Burgunder JM, et al. **Neuroscience** 1989; 32(2):323–35
Studies of dioxole ring substituted 3,4-methylenedioxyamphetamine (MDA) analogues. Nichols DE, et al. **Pharmacol Biochem Behav** 1989 Nov; 34(3):571–6
Serotonergic innervation of the rat caudate following a neonatal 6-hydroxydopamine lesion: an anatomical, biochemical and pharmacological study. Towle AC, et al. **Pharmacol Biochem Behav** 1989 Oct;34(2):367–74

PATHOLOGY

Adrenal to caudate transplantation--postmortem study. Waters C, et al. **Mov Disord** 1990;5(3):248–50
Single photon emission computed tomography in Huntington's chorea. Leblhuber F, et al. **Psychiatry Res** 1989 Sep;29(3):337–9
L-cysteine, a bicarbonate-sensitive endogenous excitotoxin. Olney JW, et al. **Science** 1990 May 4;248(4955):596–9

PHYSIOLOGY

Magnetic brain stimulation and immune response in the rat with lesioned brain structures. Jovanova-Nesic K, et al. **Acupunct Electrother Res** 1990;15(1):27–35
The caudate nuclei and locomotion. Martin JP. **Ann R Coll Surg Engl** 1966 Mar;38(3):166–75
Yawning behavior in male rats is associated with decreases in in vivo DOPAC efflux from the caudate nucleus. Laping NJ, et al. **Behav Brain Res** 1990 Jan 1;36(1-2):65–72
Lesions of the caudate nucleus selectively impair "reference memory" acquisition in the radial maze. Packard MG, et al. **Behav Neural Biol** 1990 Jan;53(1):39–50
Allocentric spatial and tactile memory impairments in rats with dorsal caudate lesions are affected by preoperative behavioral training. Colombo PJ, et al. **Behav Neurosci** 1989 Dec;103(6):1242–50
Ketamine blockade of spreading depression: rapid development of tolerance. Amemori T, et al. **Brain Res** 1990 Jun 11;519(1-2):351–4
In vivo evidence for an inhibitory glutamatergic control of serotonin release in the cat caudate nucleus: involvement of GABA neurons. Becquet D, et al. **Brain Res** 1990 Jun 11;519(1-2):82–8
Caudate neurons respond to excitatory and inhibitory amino acids in early postnatal periods in the cat. Levine MS, et al. **Dev Neurosci** 1990;12(3):196–203
Pentylenetetrazol (PTZ)-kindling development in intact and subcortical structure lesioned rats. Bandyopadhyay A. **Indian J Exp Biol** 1989 Sep;27(9):829–30
Activity of cortical and caudatal neurons accompanying instrumental prolongation of the extension phase of reaching in rats. Zhuravin IV, et al. **Int J Neurosci** 1989 Dec;49(3-4):213–20
Lesions of the nigrostriatal dopamine projection increase the inhibitory effects of D1 and D2 dopamine agonists on caudate-putamen neurons and relieve D2 receptors from the necessity of D1 receptor stimulation. Hu XT, et al. **J Neurosci** 1990 Jul;10(7):2318–29
Effect of thalamic parafascicularis nucleus stimulation in regulation of serotoninergic transmission in the cat caudate nucleus: involvement of autoreceptors in the dorsalis raphe nucleus. Becquet D, et al. **Neuroscience** 1989;33(2):293–300
Lever pressing for food reward and in vivo voltammetry: evidence for increases in extracellular homovanillic acid, the dopamine metabolite, and uric acid in the rat caudate nucleus. Joseph MH, et al. **Neuroscience** 1989;32(1):195–201
Central and peripheral modulation of spontaneous neuronal activity in the caudate nucleus. O'Donnell P, et al. **Neuroscience** 1989;33(3):543–8
A full repetitive jaw movement response after 70% depletion of caudate D1 receptors. Rosengarten H, et al. **Pharmacol Biochem Behav** 1989 Dec;34(4):895–7
Distinct presynaptic control of dopamine release in striosomal and matrix areas of the cat caudate nucleus. Kemel ML, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):9006–10
Blockade of dopamine receptors reverses the behavioral effects of endogenous enkephalins in the Nucleus caudatus but not in the Nucleus accumbens: differential involvement of delta and mu opioid receptors. Daugé V, et al. **Psychopharmacology (Berlin)** 1989;99(2):168–75
[The effect of electrical stimulation of the head of caudate nociceptive neuronal activities in the mesencephalon reticular formation and its relation to the acupuncture effect] Gao ML, et al. **Chen Tzu Yen Chiu** 1989;14(4):414–9 (Eng. Abstr.) **(Chi)**
[Superslow physiological processes and the neuronal impulse activity in the subcortical structures of the human brain in visual perception tests] Etlinger SK. **Fiziol Cheloveka** 1990 Jan-Feb;16(1):40–4 **(Rus)**
[Spreading depression in the thalamus, hippocampus and caudate nucleus of the rat during electrical stimulation of the parietal area of the cortex] Koroleva VI, et al. **Neirofiziologiia** 1990;22(1):36–44 (Eng. Abstr.) **(Rus)**
[The effects of the electrical microstimulation of the areas of the location of different cell types in the caudate nucleus] Rodionova EI, et al. **Neirofiziologiia** 1990;22(2):162–71 (Eng. Abstr.) **(Rus)**
[The neuronal responses of the caudate nucleus in the cat to sensory stimulation] Rodionova EI, et al. **Neirofiziologiia** 1990;22(1):3–10 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Depth electrographic studies on the caudate nucleus in man. Rosner BS, et al. **Electroencephalogr Clin Neurophysiol** 1966 Apr;20(4):391–6
Characteristics of tremor in cats following injections of carbachol into the caudate nucleus. Connor JD, et al. **Exp Neurol** 1966 Mar;14(3):371–82
Modulation of experimentally induced epilepsy by intracerebral grafts of fetal GABAergic neurons. Fine A, et al. **Neuropsychologia** 1990;28(6):627–34
Dementia in Huntington's disease is associated with neurochemical deficits in the caudate nucleus, not the cerebral cortex. Reynolds GP, et al. **Neurosci Lett** 1990 May 18;113(1):95–100
Anatomically distinct output channels of the caudate nucleus and orofacial dyskinesia: critical role of the subcommissural part of the globus pallidus in oral dyskinesia. Cools AR, et al. **Neuroscience** 1989;33(3):535–42
[Significance of the hippocampus in the development of convulsive syndrome by kindling electrostimulation of the caudate nucleus] Timofeeva OA. **Biull Eksp Biol Med** 1989 Aug;108(8):145–7 (Eng. Abstr.) **(Rus)**
[Effect of electric stimulation of the caudate nucleus on the foci of epileptic activity in the cerebral cortex] Maku'lkin RF, et al. **Fiziol Zh** 1989 Nov-Dec;35(6):25–33 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Visualization of subcaudate tractotomy lesions by magnetic resonance imaging. Ebmeier KP, et al. **Psychiatry Res** 1989 Sep;29(3):291–2
Reduction of 3-methoxytyramine concentrations in the caudate nucleus of rats after exposure to high-energy iron particles: evidence for deficits in dopaminergic neurons. Hunt WA, et al. **Radiat Res** 1990 Feb;121(2):169–74

SECRETION

Neurotensin-induced dopamine release in vivo and in vitro from substantia nigra and nucleus caudate. Faggin BM, et al. **J Pharmacol Exp Ther** 1990 Feb;252(2):817–25
Methylxanthine effects on caudate dopamine release as measured by in vivo electrochemistry. Morgan ME, et al. **Life Sci** 1989;45(21):2025–39

SURGERY

Adrenal medullary transplants as a treatment for advanced Parkinson's disease. Lieberman A, et al. **Acta Neurol Scand Suppl** 1989;126:189–96
Nucleus caudalis DREZ for facial pain due to cancer [letter; comment] **Br J Neurosurg** 1990;4(1):81-2 Comment on: Br J Neurosurg 1989;3(1):45–9.
Outcome in unipolar affective disorder after stereotactic tractotomy. Lovett LM, et al. **Br J Psychiatry** 1989 Oct; 155:547–50
Changes in endocrine function after adrenal medullary transplantation to the central nervous system. Watts NB, et al. **J Clin Endocrinol Metab** 1990 Sep;71(3):773–6
Measurement of lumbar CSF levels of met-enkephalin, encrypted met-enkephalin, and neuropeptide Y in normal patients and in patients with Parkinson's disease before and after autologous transplantation of adrenal medulla into the caudate nucleus. Yaksh TL, et al. **J Lab Clin Med** 1990 Mar;115(3):346–51
Autologous cervical ganglion transplantation in parkinsonian monkeys [letter] Pallini R, et al. **J Neurosurg** 1990 Sep; 73(3):474–5
Adrenal medullary transplantation into the brain for treatment of Parkinson's disease: clinical outcome and neurochemical studies. Ahlskog JE, et al. **Mayo Clin Proc** 1990 Mar;65(3):305–28
Clinical neuromythology VII. Artificial intelligence: the brain transplant cure for parkinsonism. Landau WM. **Neurology** 1990 May;40(5):733–40 (91 ref.)
Autotransplantation of superior cervical ganglion to the caudate nucleus in three patients with Parkinson's disease (preliminary report). Horvath M, et al. **Neurosurg Rev** 1990; 13(2):119–22

ULTRASTRUCTURE

Evidence for synaptic proliferation, reorganization, and growth in the excitotoxic lesioned adult rat caudate nucleus. Roberts RC, et al. **Exp Neurol** 1990 Jan; 107(1):1–10

CAUSALGIA see under **NEURALGIA**

CAUSALITY

Matching evidence about clustered health events with tort law requirements. Black B. **Am J Epidemiol** 1990 Jul;132(1 Suppl):S79–86
Toxic tort litigation: medical and scientific principles in causation. Henderson TW. **Am J Epidemiol** 1990 Jul;132(1 Suppl):S69–78
Epigenesis theory: a mathematical model relating causal concepts of pathogenesis in individuals to disease patterns in populations. Koopman JS, et al. **Am J Epidemiol** 1990 Aug;132(2):366–90
The probability of causation under a stochastic model for individual risk. Robins J, et al. **Biometrics** 1989 Dec; 45(4):1125–38
Analytical implications of epidemiological concepts of interaction. Pearce N. **Int J Epidemiol** 1989 Dec; 18(4):976–80
Toxic oil syndrome [letter; comment] Raphals P. **Int J Epidemiol** 1989 Sep;18(3):723–4 Comment on: Int J Epidemiol 1987 Mar;16(1):3–6.
Causation and disease: biomedical science in toxic tort litigation. Muscat JE, et al. **J Occup Med** 1989 Dec; 31(12):997–1002
Causal modeling: a comparison of path analysis and LISREL. Mason-Hawkes J, et al. **Nurs Res** 1989 Sep-Oct;38(5):312–4
Spiritual and natural etiologies on a Polynesian outlier in Papua New Guinea. Feinberg R. **Soc Sci Med** 1990; 30(3):311–23
A causal analysis of employment and health in midlife women. Adelmann PK, et al. **Women Health** 1990; 16(1):5–20

CAUSATION see **CAUSALITY**

CAUSE OF DEATH

Relative risk of death from ejection by crash type and crash mode. Esterlitz JR. **Accid Anal Prev** 1989 Oct;21(5):459–68
Mortality in a cohort of radiation treated childhood skin hemangiomas. Fürst CJ, et al. **Acta Oncol** 1989;28(6):789–94
Mortality and aggressiveness in a 30-year follow-up study in child guidance clinics in Stockholm. de Château P. **Acta Psychiatr Scand** 1990 May;81(5):472–6
Changes in the methods used for suicide in 16 countries from 1960 to 1980. Lester D. **Acta Psychiatr Scand** 1990 Mar; 81(3):260–1
Mortality and causes of death in schizophrenic patients in Denmark. Mortensen PB, et al. **Acta Psychiatr Scand** 1990 Apr;81(4):372–7
Mortality pattern at a children's emergency ward, University College Hospital, Ibadan, Nigeria. Bamgboye EA, et al. **Afr J Med Med Sci** 1990 Jun;19(2):127–32
Anthropometric measurements as predictors of mortality in a community population aged 70 years and over. Campbell AJ, et al. **Age Ageing** 1990 Mar;19(2):131–5
Death in Anchorage in 1987. Wilson R. **Alaska Med** 1990 Apr-Jun;32(2):61–6
Validity of post-mortem alcohol reports. Karhunen PJ, et al. **Alcohol Alcohol** 1990;25(1):25–32
The role of alcohol in mortality and morbidity from interpersonal violence. Norton RN, et al. **Alcohol Alcohol** 1989;24(6):565–76
Improving information on the role of alcohol in interpersonal violence in Great Britain. Norton RN, et al. **Alcohol Alcohol** 1989;24(6):577–89
The spectrum of death after myocardial infarction: a necropsy study. Stevenson WG, et al. **Am Heart J** 1989 Dec;118(6):1182–8
Modes of death and types of cardiac diseases in opiate addicts: analysis of 168 necropsy cases. Dressler FA, et al.

Am J Cardiol 1989 Oct 15;64(14):909–20
Diagnostic yield from 231 autopsies in a community hospital. Rao MG, et al. **Am J Clin Pathol** 1990 Apr;93(4):486–90
Age–related patterns of violent death, Cook County, Illinois, 1977 through 1982. Christoffel KK, et al. **Am J Dis Child** 1989 Dec;143(12):1403–9
Cocaine abuse and violent death. Budd RD. **Am J Drug Alcohol Abuse** 1989;15(4):375–82
Factors in mortality by drug dependence among Puerto Ricans in New York City. Shai D, et al. **Am J Drug Alcohol Abuse** 1990;16(1–2):97–107
Symptoms, signs, and ill–defined conditions: a leading cause of death among minorities. Becker TM, et al. **Am J Epidemiol** 1990 Apr;131(4):664–8
Validity of death certificates for injury–related causes of death. Moyer LA, et al. **Am J Epidemiol** 1989 Nov; 130(5):1024–32
Religious objection to autopsy. An ethical dilemma for medical examiners. Boglioli LR, et al. **Am J Forensic Med Pathol** 1990 Mar;11(1):1–8
Deaths at the workplace. Accidents or homicides? Boglioli LR, et al. **Am J Forensic Med Pathol** 1990 Mar;11(1):66–70 (14 ref.)
Suicide by jumping from buildings. Copeland AR. **Am J Forensic Med Pathol** 1989 Dec;10(4):295–8
Drug–induced accidental deaths of the elderly [letter] Dickinson JG. **Am J Forensic Med Pathol** 1990 Jun; 11(2):180
Disinterments. Their value and associated problems. Eckert WG, et al. **Am J Forensic Med Pathol** 1990 Mar;11(1):9–16
Desquamative interstitial pneumonia in an infant. Mimicry of sudden infant death syndrome. Golden IL, et al. **Am J Forensic Med Pathol** 1989 Dec;10(4):344–8
Postmortem tricyclic antidepressant concentrations. Lethal versus nonlethal levels. Hanzlick R. **Am J Forensic Med Pathol** 1989 Dec;10(4):326–9
Fly larvae and their relevance in forensic toxicology. Kintz P, et al. **Am J Forensic Med Pathol** 1990 Mar;11(1):63–5
Heart valve measurement at autopsy can distinguish cardiac from non–cardiac causes of death. Kirkham N, et al. **Am J Forensic Med Pathol** 1989 Dec;10(4):299–302
Chronic extradural haemorrhage. A case report and brief literature review. Lawler W. **Am J Forensic Med Pathol** 1990 Mar;11(1):74–8
Suicide by gunshot while driving an automobile. Murphy GK. **Am J Forensic Med Pathol** 1989 Dec;10(4):285–8
Anterior thoracic wall trauma in elderly homicide victims. The "CPR defense". Sperry K. **Am J Forensic Med Pathol** 1990 Mar;11(1):50–5
Investigation of a lung cancer cluster in the melt shop of an Ontario steel producer. Finkelstein MM, et al. **Am J Ind Med** 1990;17(4):483–91
Cohort mortality study of Seattle fire fighters: 1945–1983. Heyer N, et al. **Am J Ind Med** 1990;17(4):493–504
Mortality patterns of American merchant seamen 1973–1978. Kelman HR, et al. **Am J Ind Med** 1990;17(4):423–33
Mortality surveillance in a large chemical company: the Union Carbide Corporation experience, 1974–1983. Teta MJ, et al. **Am J Ind Med** 1990;17(4):435–47
Morbidity and mortality in talc–exposed workers. Wergeland E, et al. **Am J Ind Med** 1990;17(4):505–13
Clinical deterioration in patients with idiopathic pulmonary fibrosis: causes and assessment. Panos RJ, et al. **Am J Med** 1990 Apr;88(4):396–404 (75 ref.)
Microcomputer method to extract subfiles from statewide multiple cause of death files. Crane GL, et al. **Am J Prev Med** 1990 Mar–Apr;6(2):117–21
Alcohol and fatal injuries: temporal patterns. Smith SM, et al. **Am J Prev Med** 1989 Sep–Oct;5(5):296–302
Sentinel Health Events (Occupational): analysis of death certificates among residents of Nassau County, NY between 1980–82 for occupationally related causes of death [published erratum appears in Am J Public Health 1990 Sep;80(9):1137] Feldman JP, et al. **Am J Public Health** 1990 Feb;80(2):158–61
Quality of death certificates: studying or burying? [letter; comment] Salmi LR, et al. **Am J Public Health** 1990 Jun; 80(6):751–2 Comment on: Am J Public Health 1989 Oct;79(10):1349–50.
Death resulting from motor vehicle immersions: the nature of the injuries, personal and environmental contributing factors, and potential interventions. Wintemute GJ, et al. **Am J Public Health** 1990 Sep;80(9):1068–70
Mortality in a rural area of Madang Province, Papua New Guinea. Moir JS, et al. **Ann Trop Med Parasitol** 1989 Jun; 83(3):305–19
Perinatal mortality in different ethnic groups. Chitty LS, et al. **Arch Dis Child** 1989 Jul;64(7):1036–41
Alcohol related deaths in Greenland. Bjerregaard P. **Arctic Med Res** 1988;47 Suppl 1:596–7
Geographic variation of mortality in Greenland. Economic and demographic correlations. Bjerregaard P. **Arctic Med Res** 1990 Jan;49(1):16–24
Child survival in Greenland and Kenya. Bjerregaard P. **Arctic Med Res** 1988;47 Suppl 1:510–2
A sociobiological model for child survival in Greenland. Bjerregaard P. **Arctic Med Res** 1988;47 Suppl 1:513–5
Lost years of life in Greenland in the period 1968 to 1983. Johansen LG, et al. **Arctic Med Res** 1988;47 Suppl 1:379–84
Preliminary results of an evaluation of Canada's Northern Health Services. A longitudinal review of selected mortality rates. Lehtiniemi L, et al. **Arctic Med Res** 1988; 47 Suppl 1:341–5
A computerized analysis of matched infant death and birth certificates. Pelto JM. **Arctic Med Res** 1988;47 Suppl 1:529–31
Comparison of nutrition as customary in the Western World, the Orient, and northern populations (Eskimos) in relation to specific disease risks. Weisburger JH. **Arctic Med Res** 1988;47 Suppl 1:110–20 (72 ref.)
Prognosis in systemic lupus erythematosus. Negative impact of increasing age at onset, black race, and thrombocytopenia, as well as causes of death. Reveille JD, et al. **Arthritis Rheum** 1990 Jan;33(1):37–48
Inequalities in health within the health sector. Balarajan R. **BMJ** 1989 Sep 30;299(6703):822–5
Liver cirrhosis with and without mention of alcohol as cause of death. Haberman PW, et al. **Br J Addict** 1990 Feb; 85(2):217–22
Statistical control in research on alcohol and tobacco: an example from research on alcohol and mortality. Kozlowski LT, et al. **Br J Addict** 1990 Feb;85(2):271–8 (37 ref.)
Alcohol and mortality: a review of prospective studies. Shaper AG. **Br J Addict** 1990 Jul;85(7):837–47; discussion 849–61 (41 ref.)
A retrospective study of breast carcinoma: causes of death and pattern of metastases. Parham DM, et al. **Br J Cancer** 1989 Sep;60(3):394–6
Mortality among pulp and paper workers in Berlin, New Hampshire. Henneberger PK, et al. **Br J Ind Med** 1989 Sep;46(9):658–64
Lipid–lowering drugs and violence [letter; comment] Horrobin DF. **Br J Psychiatry** 1989 Jun;154:882–3 Comment on: Br J Psychiatry 1989 Feb;154:275–6.
The natural history of mental disorder in old age. A long–term study. Robinson JR. **Br J Psychiatry** 1989 Jun; 154:783–9
Causes of death in the native sheep of North Ronaldsay, Orkney. II. Lambs. Baker JR, et al. **Br Vet J** 1990 Mar–Apr;146(2):143–6
Causes of death and illness in the native sheep of North Ronaldsay, Orkney. I. Adult sheep. Britt DP, et al. **Br Vet J** 1990 Mar–Apr;146(2):129–42
New approaches for epidemiologic studies of mortality statistics. Puffer RR. **Bull Pan Am Health Organ** 1989; 23(4):365–83
An historical prospective mortality study of the Sarnia Division of Dow Chemical Canada Inc., Sarnia, Ontario (1950–1984). Egedahl RD, et al. **Can J Public Health** 1989 Nov–Dec;80(6):441–6
Decline of acute myocardial infarction death rates not due to cause of death coding. Guibert RL, et al. **Can J Public Health** 1989 Nov–Dec;80(6):418–22
Medical certification of cause of death in the General Hospital, Colombo. Fernando R. **Ceylon Med J** 1990 Jun; 35(2):71–4
Ceftriaxone versus cefotaxime in the treatment of septicemia in adults. Ferencz A, et al. **Chemotherapy** 1989;35 Suppl 2:5–9
Clinicopathological analysis of causes of perinatal death. Tang MY, et al. **Chin Med J [Engl]** 1989 Sep;102(9):672–8
Infant mortality by cause of death: main and interaction effects. Eberstein IW, et al. **Demography** 1990 Aug; 27(3):413–30
The current differential in black and white life expectancy. Keith VM, et al. **Demography** 1988 Nov;25(4):625–32
Excess mortality by natural causes of Italian schizophrenic patients. Lesage AD, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(6):361–5
An unusual case of fatal accidental paraquat poisoning. Fernando R, et al. **Forensic Sci Int** 1990 Jan;44(1):23–6
Death caused by drug addiction: a review of the experiences in Hamburg and the situation in the Federal Republic of Germany in comparison with the literature. Janssen W, et al. **Forensic Sci Int** 1989 Dec;43(3):223–37 (32 ref.)
A fentanyl fatality involving midazolam. Levine B, et al. **Forensic Sci Int** 1990 Apr;45(3):247–51
The role of hydrogen cyanide and carbon monoxide in fire casualties: a prospective study. Lundquist P, et al. **Forensic Sci Int** 1989 Sep;43(1):9–14
Fatal thrombosis of the basilar artery due to a minor head injury. Sprogøe–Jakobsen S, et al. **Forensic Sci Int** 1990 Apr;45(3):239–45
Mortality statistics of major causes of death among atomic bomb survivors in Hiroshima Prefecture from 1968 to 1982. Hayakawa N, et al. **Hiroshima J Med Sci** 1989 Jun; 38(2):53–67
Toward a population–based assessment of death due to pulmonary embolism in New Mexico. Sperry KL, et al. **Hum Pathol** 1990 Feb;21(2):159–65
Study of systemic fungal infections in autopsy material. Jadhav MV, et al. **Indian J Med Sci** 1990 May;44(5):115–9
Pattern of preventable diseases in Afghanistan: suggestions to reduce the morbidity and mortality at IGICH. Choudhry VP, et al. **Indian Pediatr** 1989 Jul;26(7):654–9
Overweight: fat distribution and health risks. Epidemiological observations. A review. Seidell JC, et al. **Infusionstherapie** 1989 Dec;16(6):276–81 (10 ref.)
Thirty–four–year mortality follow–up of BASF employees exposed to 2,3,7,8–TCDD after the 1953 accident. Zober A, et al. **Int Arch Occup Environ Health** 1990;62(2):139–57
What lichen planus patients die of. A retrospective study. Anonide A, et al. **Int J Dermatol** 1989 Oct;28(8):524–6
Validation of postmortem interviews to ascertain selected causes of death in children. Kalter HD, et al. **Int J Epidemiol** 1990 Jun;19(2):380–6
Fall and rise in asthma mortality in Italy, 1968–84 [letter] La Vecchia C, et al. **Int J Epidemiol** 1989 Dec;18(4):998–9
The role of confidential enquiries in the reduction of maternal mortality and alternatives to this approach. Cook R. **Int J Gynaecol Obstet** 1989 Sep;30(1):41–5
Developing professional responsibility in maternity care in Hong Kong. Wong VC, et al. **Int J Gynaecol Obstet** 1989 Sep;30(1):37–40
Acute effects of the Chernobyl nuclear accident on Irish mortality? Allwright S, et al. **Ir Med J** 1989 Sep; 82(3):119–21
Kala–azar mortality in hospitalized cases in north Bihar, India. Singh NK, et al. **J Assoc Physicians India** 1989 Aug; 37(8):514–6
A study of infant mortality and causes of death in a rural north–east Brazilian community. Bailey P, et al. **J Biosoc Sci** 1990 Jul;22(3):349–63
The WHO principles for registering causes of death: suggestions for improvement. Lindahl BI, et al. **J Clin Epidemiol** 1990;43(5):467–74
Contrasts in the multiple causes of stillbirth, neonatal death and postneonatal death. Murphy M, et al. **J Epidemiol Community Health** 1989 Dec;43(4):343–5
Death as a result of asthma in Wayne County Medical Examiner cases, 1975–1987. Campbell S, et al. **J Forensic Sci** 1990 Mar;35(2):356–64
The identification of maternity in an unusual pregnancy–related homicide. Clark EG, et al. **J Forensic Sci** 1990 Jan;35(1):80–8
Thiamylal: review of the literature and report of a suicide. Costantino AG, et al. **J Forensic Sci** 1990 Jan;35(1):89–96
Analysis of carboxyhemoglobin and cyanide in blood from victims of the Dupont Plaza Hotel fire in Puerto Rico. Levin BC, et al. **J Forensic Sci** 1990 Jan;35(1):151–68
Accidental deaths involving derringer handguns: a report of three cases. McKinney CD, et al. **J Forensic Sci** 1990 May; 35(3):730–4
Nonfracture–associated fatal fat embolism in a case of child abuse. Nichols GR 2d, et al. **J Forensic Sci** 1990 Mar; 35(2):493–9
The role of ethanol abuse in the etiology of heroin–related death. Ruttenber AJ, et al. **J Forensic Sci** 1990 Jul; 35(4):891–900
Fatal recreational inhalation of enflurane. Walker FB, et al. **J Forensic Sci** 1990 Jan;35(1):197–8
The significance of postmortem radiographs in infants. Williamson SL, et al. **J Forensic Sci** 1990 Mar;35(2):365–7
Nonsuicidal mortality in late–life depression [see comments] Lindesay J. **J Geriatr Psychiatry** 1989;22(1):53–65 Comment in: J Geriatr Psychiatry 1989;22(1):67–75.
Childhood deaths in Down's syndrome. Survival curves and causes of death from a total population study in Queensland, Australia, 1976 to 1985. Bell JA, et al. **J Med Genet** 1989 Dec;26(12):764–8
Mortality causes of owl monkeys (Aotus nancymae and Aotus vociferans) in captivity. Gozalo A, et al. **J Med Primatol** 1990;19(1):69–72
Cause of death among patients with Parkinson's disease: a rare mortality due to cerebral haemorrhage. Iwasaki S, et al. **J Neurol** 1990 Apr;237(2):77–9
Health insurance claims as morbidity data source [letter; comment] Warshaw LJ. **J Occup Med** 1990 Jan;32(1):64 Comment on: J Occup Med 1989 Aug;31(8):677–8.
The causes of death in an elderly African population. Olubuyide IO, et al. **J Trop Med Hyg** 1990 Aug;93(4):270–4
Neo–natal mortality patterns in rural Bangladesh. Rahman S, et al. **J Trop Pediatr** 1989 Aug;35(4):199–202
From the Centers for Disease Control. Fatal injuries to children—United States, 1986. **JAMA** 1990 Aug 22–29; 264(8):952–3
From the Centers for Disease Control. Deaths associated with hurricane Hugo—Puerto Rico. **JAMA** 1989 Oct 27; 262(16):2206
From the centers for disease control. Medical examiner/coroner reports of deaths associated with Hurricane Hugo—South Carolina. **JAMA** 1989 Dec 8; 262(22):3111–2
From the Centers for Disease Control. Earthquake–associated deaths—California. **JAMA** 1989 Dec 8;262(22):3112, 3115
Physical fitness and all–cause mortality. A prospective study of healthy men and women [see comments] Blair SN, et al. **JAMA** 1989 Nov 3;262(17):2395–401 Comment in: JAMA 1990 Apr 18;263(15):2047–8.
Geographic distribution of heat–related deaths among elderly persons. Use of county–level dot maps for injury surveillance and epidemiologic research. Martinez BF, et al. **JAMA** 1989 Oct 27;262(16):2246–50
MRFIT after 10.5 years [letter] Rosborough TK, et al. **JAMA** 1990 Sep 26;264(12):1534–5
Mortality and cause of death in patients with epilepsy over 16 years of age. Hashimoto K, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):546–7
NCEPOD and perioperative deaths of children [editorial] **Lancet** 1990 Jun 23;335(8704):1498–500
Causes of excess mortality in The Netherlands and England and Wales 1989/90 [letter] Macnair A, et al. **Lancet** 1990 Sep 29;336(8718):817
Anesthetic death investigation. Ward RJ, et al. **Leg Med** 1989;

:39–58 (15 ref.)
Environmental findings and sudden infant death syndrome. Carpenter RG, et al. **Lung** 1990;168 Suppl:358–67
Problems in paradise: pattern of coroner's autopsies in western Samoa [letter] Paksoy N. **Med J Aust** 1990 Jun 4;152(11):612
Death and diabetes [letter] Phillips P, et al. **Med J Aust** 1990 Aug 6;153(3):173
Drug-positive homicides in Virginia 1987 through 1989. **Med Leg Bull** 1990 Jan–Feb;39(1):1–9
Medico-legal problems of ischaemic heart disease and myocardial infarction. al-Alousi LM. **Med Sci Law** 1990 Jan;30(1):67–87
The blood alcohol concentration at post-mortem in 175 fatal cases of alcohol intoxication. Heatley MK, et al. **Med Sci Law** 1990 Apr;30(2):101–5
Immediate causes of death in fires. Hill IR. **Med Sci Law** 1989 Oct;29(4):287–92
Smoking-related mortality decline among physicians—Rhode Island. **MMWR** 1990 Sep 28; 39(38):656–8
Medical examiner/coroner reports of deaths associated with Hurricane Hugo—South Carolina. **MMWR** 1989 Nov 10; 38(44):754, 759–62
Fatal injuries to children—United States, 1986. **MMWR** 1990 Jul 6;39(26):442–5, 451
Earthquake-associated deaths—California. **MMWR** 1989 Nov 17;38(45):767–70
Smoking-attributable mortality—Kentucky, 1988. **MMWR** 1990 Sep 28;39(38):680–3
Labelling 'unexpected' deaths on a neurology service. Shafer SQ, et al. **Neurology** 1990 Jul;40(7):1017–9
Leukemia mortality rates along the Ohio River compared with the rest of Ohio. Dzik AJ. **Ohio Med** 1990 Aug; 86(8):611–2
Suicide in cancer patients. Breitbart W. **Oncology (Williston Park)** 1987 Apr;1(2):49–55 (51 ref.)
Time-trends in necropsy prevalence and birth prevalence of lung hypoplasia. Moessinger AC, et al. **Paediatr Perinat Epidemiol** 1989 Oct;3(4):421–31
Postneonatal mortality in south New Zealand: necropsy data review. Nelson EA, et al. **Paediatr Perinat Epidemiol** 1989 Oct;3(4):375–85
Infant mortality: a practical approach to the analysis of the leading causes of death and risk factors. Dollfus C, et al. **Pediatrics** 1990 Aug;86(2):176–83
Hyperglycaemia as a cardiovascular risk factor. Fuller JH, et al. **Postgrad Med J** 1989;65 Suppl 1:S30–2
Mechanisms of excess cardiovascular mortality in diabetes. Keen H, et al. **Postgrad Med J** 1989;65 Suppl 1:S26–9 (25 ref.)
A prospective study of risk factors for traumatic deaths in a retirement community. Ross RK, et al. **Prev Med** 1990 May;19(3):323–34
The comorbidity and mortality of panic disorder. Noyes R Jr. **Psychiatr Med** 1990;8(2):41–66 (102 ref.)
The accuracy of liver cancer as the underlying cause of death on death certificates. Percy C, et al. **Public Health Rep** 1990 Jul–Aug;105(4):361–7
Monthly vital statistics report. Provisional occurrence data from the Division of Vital Records. Scott HD, et al. **R I Med J** 1989 Dec;72(12):465
Poisson regression analysis of the mortality among a cohort of World War II nuclear industry workers. Frome EL, et al. **Radiat Res** 1990 Aug;123(2):138–52
Causes of death at Tshepong, a rural hospital, 1986–1987. Steenekamp JH, et al. **S Afr Med J** 1989 Oct 21;76(8):422–6
Sudden infant death syndrome as a socially determined cause of death. Nam CB, et al. **Soc Biol** 1989 Spring-Summer; 36(1–2):1–8
The epidemiological transition in an overseas territory: disease mapping in French Polynesia. Vigneron E. **Soc Sci Med** 1989;29(8):913–22
The problem of sudden death in athletes as illustrated by case studies. Sadaniantz A, et al. **Sports Med** 1990 Apr; 9(4):199–204 (33 ref.)
Relative survival and the estimation of net survival: elements for further discussion. Estève J, et al. **Stat Med** 1990 May; 9(5):529–38
Certification change versus actual behavior change in teenage suicide rates, 1955–1979. Gist R, et al. **Suicide Life Threat Behav** 1989 Fall;19(3):277–88
A study of mortality in workers engaged in the mining, smelting, and refining of nickel. I: Methodology and mortality by major cause groups. Roberts RS, et al. **Toxicol Ind Health** 1989 Dec;5(6):957–74
Certification of death. Reay DT. **Trans Assoc Life Insur Med Dir Am** 1990;73:155–64
Natural causes of death in non-suckling grey seals (Halichoerus grypus). Baker JR. **Vet Rec** 1989 Nov 11; 125(20):500–3
Mortality of unknown cause in pheasant poults [letter] Swarbrick O. **Vet Rec** 1990 Jun 30;126(26):648
Pulmonary embolism as a cause of death. Daisley H. **West Indian Med J** 1990 Jun;39(2):86–90
Who dies of what? A comparative analysis of mortality conditions in developed countries around 1987. Lopez AD. **World Health Stat Q** 1990;43(2):105–14
Causes of death: an assessment of global patterns of mortality around 1985. Lopez AD. **World Health Stat Q** 1990; 43(2):91–104
Fatal intoxications in the age group 15–34 years in Denmark in 1984 and 1985. A forensic study with special reference to drug addicts. Steentoft A, et al. **Z Rechtsmed** 1989; 103(2):93–100
Risk factors and mortality among female Riga population. An autopsy study. Volkov VA, et al. **Zentralbl Allg Pathol** 1989;135(6):561–4
Intravascular coagulation in relation to pregnancy and delivery. Angelov A. **Zentralbl Gynakol** 1989; 111(17):1169–75
[Descriptive study of suicide in Galicia, 1987] Carballeira Roca C, et al. **Gac Sanit** 1989 Nov–Dec;3(15):551–9 (Eng. Abstr.) **(Cat, Spa)**
[Pediatric health care, mortality rate and causes of death in the Republic of China] Chen JL. **Acta Paediatr Sin** 1988 Oct;29 Suppl A:6A–12A **(Chi)**
[An analysis of death in older burn patients] Li BG. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Jun;5(2):108–10, 158 (Eng. Abstr.) **(Chi)**
[An APC composite analysis system for analyzing the cause of perinatal death] Zhao C. **Chung Hua I Hsueh Tsa Chih** 1990 Apr;70(4):208–10, 16 (Eng. Abstr.) **(Chi)**
[Quality of retrospective survey of deaths and its evaluation] Chen J, et al. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1990 Feb; 11(1):42–5 (Eng. Abstr.) **(Chi)**
[Study of the morbidity structure by analyses of data from 6668 autopsied cases] Li GD. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Dec;18(4):250–3 (Eng. Abstr.) **(Chi)**
[Frequency of causes of death related to sudden infant death syndrome in Denmark during the period 1972–1983] Knudsen LB, et al. **Ugeskr Laeger** 1990 Apr 16; 152(16):1164–7 (Eng. Abstr.) **(Dan)**
[The Central Bureau for Statistics, breeding ground for cause of death statistics] Bonte JT. **Ned Tijdschr Geneeskd** 1990 Jan 20;134(3):134–5 **(Dut)**
[The Central Bureau for Statistics: the burial place of our cases of death (letter)] Molleman G. **Ned Tijdschr Geneeskd** 1989 Dec 2;133(48):2409–10 **(Dut)**
[The Central Bureau for Statistics, breeding place for cause of death statistics (letter)] Vandenbroucke JP. **Ned Tijdschr Geneeskd** 1990 Jan 20;134(3):139 **(Dut)**
[The Central Bureau for Statistics: the burial place of our causes of death] Vandenbroucke JP. **Ned Tijdschr Geneeskd** 1989 Oct 28;133(43):2112–4 **(Dut)**
[Perinatal mortality at the Hospital Center of Libreville (Gabon)] Nlome-Nze AR, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(7):856–62 (Eng. Abstr.) **(Fre)**
[Mortality of unskilled workers in different countries of Europe] Leclerc A, et al. **Rev Epidemiol Sante Publique** 1989;37(3):233–44 (Eng. Abstr.) **(Fre)**
[Evolution of early manifested arteriopathy—mortality and cause of death] Barras JP, et al. **Vasa Suppl** 1989;27:262–4 **(Fre)**
[Autopsy finding of "an object in the hand of the cadaver"] Strauch H, et al. **Arch Kriminol** 1990 Mar–Apr; 185(3–4):99–105 (Eng. Abstr.) **(Ger)**
[Fatalities in Alpine skiing—autopsy results and forensic medicine conclusions] Ambach E, et al. **Beitr Gerichtl Med** 1989;47:591–5 (Eng. Abstr.) **(Ger)**
[Optimizing carbon monoxide detection in biological material] Iffland R, et al. **Beitr Gerichtl Med** 1989;47:87–94 (Eng. Abstr.) **(Ger)**
[Injuries and traumatic fatalities in sports with special reference to criminal responsibility] Klös G, et al. **Beitr Gerichtl Med** 1989;47:337–9 (Eng. Abstr.) **(Ger)**
[Development of a findings and results data system for forensic medicine autopsy cases] Mattern R, et al. **Beitr Gerichtl Med** 1989;47:310–5 (Eng. Abstr.) **(Ger)**
[Comparative studies of the degree of trauma and cause of death in male and female traffic accident victims] Mittmeyer HJ. **Beitr Gerichtl Med** 1989;47:229–33 (Eng. Abstr.) **(Ger)**
[Age-dependent injury tolerance exemplified by fatal pedestrian accidents] Mittmeyer HJ, et al. **Beitr Gerichtl Med** 1989;47:509–13 (Eng. Abstr.) **(Ger)**
[Histopathologic changes in several opportunistic infections in AIDS] Nadjem H, et al. **Beitr Gerichtl Med** 1989; 47:13–21 (Eng. Abstr.) **(Ger)**
[HIV infection in legal autopsies] Penning R, et al. **Beitr Gerichtl Med** 1989;47:23–9 (Eng. Abstr.) **(Ger)**
[Unexpected natural death in street traffic] Penttilä A, et al. **Beitr Gerichtl Med** 1989;47:579–87 (Eng. Abstr.) **(Ger)**
[Alcohol consumption in males with sudden unexpected death in Helsinki] Penttilä A, et al. **Beitr Gerichtl Med** 1989; 47:361–8 (Eng. Abstr.) **(Ger)**
[Injuries caused by frontal and side collisions] Ropohl D, et al. **Beitr Gerichtl Med** 1989;47:221–8 (Eng. Abstr.) **(Ger)**
[Sudden natural death on the toilet] Spira A, et al. **Beitr Gerichtl Med** 1989;47:631–4 (Eng. Abstr.) **(Ger)**
[Fatal accidents of motorcycle riders. Comparison of the craniocervical injury picture before and following introduction of the legally sanctioned protective helmet rule] Tributsch W, et al. **Beitr Gerichtl Med** 1989;47:625–30 (Eng. Abstr.) **(Ger)**
[Poisoning with a wood preservative] Wiese J, et al. **Beitr Gerichtl Med** 1989;47:103–6 (Eng. Abstr.) **(Ger)**
[Alcohol and street traffic (critical comments from the legal and traffic medicine viewpoint)] Heifer U. **Blutalkohol** 1990 Jan;27(1):50–63 (Eng. Abstr.) **(Ger)**
[How great is the risk in surgical treatment of choledocholithiasis?] Lennert KA, et al. **Chirurg** 1990 May; 61(5):376–9; discussion 379–81 (Eng. Abstr.) **(Ger)**
[Cause of death during an asthma attack by self-medication with dosing aerosols (letter)] Risse M, et al. **Dtsch Med Wochenschr** 1990 Jul 27;115(30):1165 **(Ger)**
[Negligent death caused by careless autopsy. Cause of death not recognized: 2d death] Bayer M, et al. **Fortschr Med** 1989 Nov 30;107(34):71 **(Ger)**
[Age structure and incidence of cancer. An epidemiologic observation in West Germany] Selbmann HK. **Fortschr Med** 1990 Jun 20;108(18):353–7 (Eng. Abstr.) **(Ger)**
[Maternal mortality, its definition and concept] Heidegger H, et al. **Gynakol Rundsch** 1989;29 Suppl 2:323–5 **(Ger)**
[Cause od death statistics and death certificate documentation. 1. Historical development of cause of death statistics of fetal death, infants and children and current regulations in the GDR] Zschoch H. **Kinderarztl Prax** 1989 Aug;57(8):387–91 (Eng. Abstr.) **(Ger)**
[Cause of death statistics and death certificate documentation of stillborn infants and infants. II: Preventable errors in filling out death certificates for stillborn infants and for infants dying before 1 year of age] Zschoch H. **Kinderarztl Prax** 1989 Sep;57(9):457–65 (Eng. Abstr.) **(Ger)**
[Limited esophageal surgery?] Siewert JR. **Langenbecks Arch Chir** 1990;375(1):3–4 **(Ger)**
[Peculiarities of autopsy findings in patients of a psychiatric department] Hackl H. **Nervenarzt** 1989 Aug;60(8):506–9 **(Ger)**
[Forensic and medical insurance aspects of medically unexpected sudden death] Janssen W. **Nippon Hoigaku Zasshi** 1989 Oct;43(5):377–83 **(Ger)**
[Epidemiology and minimal risks—possibilities and limits of a prevention relevant risk assessment] Uberla K. **Off Gesundheitswes** 1990 May;52 Suppl 1:23–8 **(Ger)**
[Supplementary comments on the health effects of the 1985 smog period] Wichmann HE, et al. **Off Gesundheitswes** 1990 Jun;52(6):260–6 (Eng. Abstr.) **(Ger)**
[Autopsy findings and pathologic-anatomic epicrisis] Hecht A. **Pathologe** 1990 Jul;11(4):197–200 (20 ref.) **(Ger)**
[Retroperitoneal hemorrhage in an autopsy sample: incidence and causes] Sautner D, et al. **Pathologe** 1990 Mar; 11(2):101–2 **(Ger)**
[Mortality analysis: when is single evaluation of the basic cause of death allowable, when should multi-causality be assessed?] Beer V, et al. **Soz Praventivmed** 1990;35(1):17–23 (Eng. Abstr.) **(Ger)**
[Nondisplaced (impacted) femoral neck fracture—conservative or surgical treatment?] Manninger J, et al. **Unfallchirurgie** 1990 Jun;16(3):116–21 (Eng. Abstr.) **(Ger)**
[Fatal injury in childhood. Analysis of 160 autopsies] Schmitz M, et al. **Unfallchirurgie** 1989 Aug;15(4):174–9 (Eng. Abstr.) **(Ger)**
[Cause of death following heart valve replacement] Mittermayer C, et al. **Verh Dtsch Ges Inn Med** 1989; 95:270–4 **(Ger)**
[Experiences of forensic medicine with death in foreign travel] Haarhoff K, et al. **Versicherungsmedizin** 1990 Aug 1;42(4):115–7 (Eng. Abstr.) **(Ger)**
[Morbidity and mortality in polyarthritic changes of the upper spine] Krukenberg P, et al. **Versicherungsmedizin** 1990 Aug 1;42(4):124–5 (Eng. Abstr.) **(Ger)**
[Death in an epileptic seizure] Wiese J, et al. **Versicherungsmedizin** 1990 Aug 1;42(4):113–5 (Eng. Abstr.) **(Ger)**
[Arteriosclerosis and cancer—fats or carbohydrates? (letter)] Schwandt P, et al. **Wien Klin Wochenschr** 1989 Nov 24; 101(22):787–9 **(Ger)**
[Non-traumatic fatalities in sports activity] Israel S. **Z Arztl Fortbild (Jena)** 1990;84(3):97–100 (32 ref.) **(Ger)**
[Pathomorphologic contribution to the epidemiology of emergency medical conditions in advanced age] Theuring F. **Z Arztl Fortbild (Jena)** 1989;83(14):703–6 **(Ger)**
[Results of international studies of the effect of smoking on life and health and the effectiveness of smoking cessation] Wilde J. **Z Arztl Fortbild (Jena)** 1989;83(21):1047–53 **(Ger)**
[Required recording of concomitant diseases on death certificates] Zahradka W. **Z Arztl Fortbild (Jena)** 1989; 83(14):735–6 **(Ger)**
[Diagnosis in the aged from the pathologic-anatomic viewpoint] Pfuhl JP, et al. **Z Gerontol** 1989 Nov–Dec; 22(6):271–8 (Eng. Abstr.) **(Ger)**
[Results of an analysis of age and cause of death in 1,000 silicosis autopsies in the Thüringen region] Tischendorf M, et al. **Z Gesamte Hyg** 1990 Jun;36(6):328–31 (Eng. Abstr.) **(Ger)**
[Documentation of the death certificate for stillborn infants/infants dying before 1 year of age] Zschoch H, et al. **Z Gesamte Hyg** 1989 Jul;35(7):393–5 (Eng. Abstr.) **(Ger)**
[Pathologic-anatomic findings in sudden heart death] Hort W, et al. **Z Kardiol** 1989 Oct;78(10):619–32 (109 ref.) (Eng. Abstr.) **(Ger)**
[Histologic studies of lymphatic tissue in sudden infant death] Entrup M, et al. **Z Rechtsmed** 1990;103(6):414–24 (Eng.

Abstr.) (Ger)
[Histologic findings in the lung in sudden infant death] Entrup M, et al. **Z Rechtsmed** 1990;103(6):425–33 (Eng. Abstr.) (Ger)
[Comments on: "Determination of calcium and magnesium in postmortem human vitreous humor as a test to ascertain the cause and time of death" by R. Nowak and S. Balabanova] Madea B. **Z Rechtsmed** 1990;103(3):231–3 (Ger)
[Thyroglobulin content of the blood in cases of hanging] Müller E, et al. **Z Rechtsmed** 1990;103(5):361–7 (Eng. Abstr.) (Ger)
[Sudden infant death—fatal poisoning with pheniramine] Ogbuihi S, et al. **Z Rechtsmed** 1990;103(3):221–5 (Eng. Abstr.) (Ger)
[A heat gelatinized subdural hematoma in a burned cadaver as an indication of a vital accident] Ritter C. **Z Rechtsmed** 1990;103(3):227–30 (Eng. Abstr.) (Ger)
[Roentgenologic heart volume determination for the diagnosis of fatal heart failure] Schmidt G, et al. **Z Rechtsmed** 1990;103(3):155–62 (Eng. Abstr.) (Ger)
[Homicide by asphyxia—yes or no? On the use of muscle histology] Sigrist T, et al. **Z Rechtsmed** 1989;102(8):549–57 (Eng. Abstr.) (Ger)
[Changes in skeletal muscles in death caused by hypothermia] Sigrist T, et al. **Z Rechtsmed** 1990;103(6):463–72 (Eng. Abstr.) (Ger)
[Quality control in medicine. Analysis of death certificate entries with a personal computer] Schneider E, et al. **Zentralbl Allg Pathol** 1989;135(7):695–7 (Eng. Abstr.) (Ger)
[Problems of agreement of clinical and autopsy diagnoses] Vollmar F. **Zentralbl Allg Pathol** 1989;135(7):699–704 (Eng. Abstr.) (Ger)
[Problems in the documentation of autopsy findings on death certificates for stillborn babies and deaths of babies under one year of age] Zschoch H, et al. **Zentralbl Allg Pathol** 1989;135(7):689–94 (Eng. Abstr.) (Ger)
[Status and development of peripartal mortality in East Germany] Fritsche U, et al. **Zentralbl Gynakol** 1989; 111(17):1160–8 (Eng. Abstr.) (Ger)
[Hypertension and heart failure in patients with cerebrovascular insufficiency] Thiele R, et al. **ZFA** 1989 Nov–Dec;44(6):321–4 (Eng. Abstr.) (Ger)
[Significance of the comparison between clinical and pathological diagnosis in health care quality control] Sebök J, et al. **Morphol Igazsagugyi Orv Sz** 1990 Apr;30(2):96–105 (Eng. Abstr.) (Hun)
[Cases of unusual deaths in the registry of Hont County in the years 1750–1759] Kiss L. **Orv Hetil** 1990 Apr 22; 131(16):869–70 (Hun)
[The anatomo-pathologist as a necroscopy physician in the field: a balance-sheet of 4 years' experience] Galli C, et al. **Epidemiol Prev** 1989 Jun;11(39):41–6 (Eng. Abstr.) (Ita)
[Sentinel events in occupational medicine: the example of Local Health Unit No. 1 of the Tuscany region] Neri S, et al. **Epidemiol Prev** 1989 Jun;11(39):29–34 (Eng. Abstr.) (Ita)
[3 years of heart transplantation in Padua (1985–1988): concerning the cause of death "per anatomen indagatis" (based on autopsy findings)] Thiene G, et al. **G Ital Cardiol** 1989 Dec;19(12):1150–5 (Ita)
[Estimation of the long-term risks of death from smoking—application to public health education] Nakamura M, et al. **Gan No Rinsho** 1990 Feb;Spec No:319–28 (Eng. Abstr.) (Jpn)
[A socio-medical study of adult diseases related to the life style of Chinese in Japan] Yan S. **Nippon Eiseigaku Zasshi** 1989 Oct;44(4):877–86 (Eng. Abstr.) (Jpn)
[Experimental study on the interruption of hepatic blood flow in obstructive jaundice, with special reference to the causes of death and prolonged jaundice after biliary decompression] Okada Y. **Nippon Geka Hokan** 1989 May 1;58(3):275–88 (Eng. Abstr.) (Jpn)
[Problems regarding the examination in forensic medicine] Naitow M. **Nippon Hoigaku Zasshi** 1989 Oct;43(5):364–76 (Eng. Abstr.) (Jpn)
[Alcohol and statistics of causes of death in middle-aged men in Oslo. A forensic study] Skullerud K, et al. **Tidsskr Nor Laegeforen** 1990 Apr 30;110(11):1366–71 (Eng. Abstr.) (Nor)
[Cigarette smoking: a main preventable cause of death. The main public health problem of our times] Ceremużyński L, et al. **Wiad Lek** 1990 Jan 1–15;43(1–2):72–9 (58 ref.) (Eng. Abstr.) (Pol)
[Basic causes of death in elderly patients with Chagas' disease] de Menezes M, et al. **Arq Bras Cardiol** 1989 Feb; 52(2):75–8 (Eng. Abstr.) (Por)
[Evaluation of the quality of information on the basic cause of death of infants in Rio Grande do Sul (Brazil)] Nobre LC, et al. **Rev Saude Publica** 1989 Jun;23(3):207–13 (Eng. Abstr.) (Por)
[The medico-legal significance of natural death in the geriatric population] Dunjić D, et al. **Srp Arh Celok Lek** 1987 May–Jun;115(5–6):595–603 (Eng. Abstr.) (Scc)
[Reliability of data on the major causes of death] Egnerová A, et al. **Cesk Zdrav** 1989 Dec;37(12):526–34 (Eng. Abstr.) (Slo)
[Mental health for all in Latin America and the Caribbean. Epidemiologic bases for action] Levav I, et al. **Bol Of Sanit Panam** 1989 Sep;107(3):196–219 (Eng. Abstr.) (Spa)
[The cause of death: errors in the death certificate] Villar J. **Med Clin (Barc)** 1989 Oct 21;93(12):463–6 (24 ref.) (Spa)
[Years of potential life lost: their usefulness in the analysis of mortality in Mexico] Cavazos-Ortega N, et al. **Salud Publica Mex** 1989 Sep–Oct;31(5):610–24 (Eng. Abstr.) (Spa)

CAUSTICS

Experimental studies on caustic burns of the stomach by aggressive chemicals. Wit J, et al. **Prog Pediatr Surg** 1990; 25:68–70

ADVERSE EFFECTS

Lye ingestion and carcinoma of the esophagus. Isolauri J, et al. **Acta Chir Scand** 1989 Apr–May;155(4–5):269–71
Mercury in the Swedish chloralkali industry—an evaluation of the exposure and preventive measures over 40 years. Sällsten G, et al. **Ann Occup Hyg** 1990 Apr;34(2):205–14
Lye in the eye [editorial; comment] Smith R. **Br J Ophthalmol** 1990 Sep;74(9):513 Comment on: Br J Ophthalmol 1990 Sep;74(9):514–8.
Oesophagectomy for severe corrosive injuries: is it always legitimate? Ribet M, et al. **Eur J Cardiothorac Surg** 1990; 4(7):347–9; discussion 350
Caustic ingestion. Freedman SF, et al. **J La State Med Soc** 1989 Nov;141(11):13–5
Comparison of titratable acid/alkaline reserve and pH in potentially caustic household products. Hoffman RS, et al. **J Toxicol Clin Toxicol** 1989;27(4–5):241–6
A controlled trial of corticosteroids in children with corrosive injury of the esophagus [see comments] Anderson KD, et al. **N Engl J Med** 1990 Sep 6;323(10):637–40 Comment in: N Engl J Med 1990 Sep 6;323(10):668–70.
Corrosive injury of the esophagus in children: failure of corticosteroid treatment reemphasizes prevention [editorial; comment] Lovejoy FH Jr. **N Engl J Med** 1990 Sep 6; 323(10):668–70 Comment on: N Engl J Med 1990 Sep 6;323(10):637–40.
[Esophageal mucoceles complicating double exclusion of the esophagus after ingestion of caustics] Chambon JP, et al. **Ann Chir** 1989;43(9):724–30 (Eng. Abstr.) (Fre)
[Apropos of accidental ingestion of products for dishwashers (letter)] Martinot A, et al. **Arch Fr Pediatr** 1989 Nov; 46(9):704 (Fre)
[Low-energy irradiation with helium-neon and semiconductor lasers in the combined treatment of chemical burns of the esophagus] Sinev IuV, et al. **Sov Med** 1990;(3):52–4 (Rus)
[Diagnosis and aggressive therapy in caustic esophagogastritis: evaluation of 10 years' experience at the hospital of Lidice] Mora M, et al. **GEN** 1988 Jul–Sep; 42(3):83–7 (Eng. Abstr.) (Spa)
[Caustic esophagitis in children. Management and treatment] Piña JM, et al. **GEN** 1988 Oct–Dec;42(4):157–61 (Eng. Abstr.) (Spa)

POISONING

Tracheoesophageal-aortic fistula complicating lye ingestion. Rabinovitz M, et al. **Am J Gastroenterol** 1990 Jul; 85(7):868–71 (14 ref.)
[Causticity of a non-foaming degreasor] David JM, et al. **J Toxicol Clin Exp** 1989 Sep–Oct;9(5):366–7 (Fre)

CAUTERY

Dieulafoy's lesion treated by heater probe [letter] Golding MI, et al. **Am J Gastroenterol** 1990 Sep;85(9):1201–2
Changes of bioactive luteinizing hormone after laparoscopic ovarian cautery in patients with polycystic ovarian syndrome. Sakata M, et al. **Fertil Steril** 1990 Apr; 53(4):610–3
Inhibition of implantation of murine bladder tumor by thiotepa in cauterized bladder. Pan JS, et al. **J Urol** 1989 Dec;142(6):1589–93

INSTRUMENTATION

A simple method to protect tissue from accidental cautery burns. Guiloff AK, et al. **Ann Plast Surg** 1986 Aug;17(2):169
Bleeding during dacryocystorhinostomy: the importance of the suction cautery [letter] Small RG, et al. **Arch Ophthalmol** 1990 May;108(5):638–9
An improved approach to evacuation of subungual hematoma. Palamarchuk HJ, et al. **J Am Podiatr Med Assoc** 1989 Nov;79(11):566–8

METHODS

The treatment of ingrowing toenails. A randomised comparison of wedge excision and phenol cauterisation. van der Ham AC, et al. **J Bone Joint Surg [Br]** 1990 May; 72(3):507–9

CAVERNITIS, FIBROUS see **PENILE INDURATION**

CAVERNOUS SINUS

Cavernous sinus involvement in recurrent Nelson's syndrome. Sett PK, et al. **Acta Neurochir (Wien)** 1990; 104(1–2):69–72
Unilateral double carotid cavernous fistula treated with detachable balloons. Wilms G. **AJNR** 1990 May;11(3):517
MR imaging of Tolosa-Hunt syndrome. Yousem DM, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):167–70
Preoperative lateralization of pituitary microadenomas by petrosal sinus sampling: utility in two patients with non-ACTH-secreting tumors. Frank SJ, et al. **Am J Med** 1989 Dec;87(6):679–82
Carotid-cavernous sinus thrombosis caused by Aspergillus fumigatus: magnetic resonance imaging with pathologic correlation—a case report. Dyken ME, et al. **Angiology** 1990 Aug;41(8):652–7
Spontaneous arteriovenous shunts of the cavernous sinus—ophthalmological considerations. Halmagyi GM, et al. **Aust N Z J Ophthalmol** 1989 Nov;17(4):439–43
Carotico-cavernous fistula presenting as a late complication of facial trauma. Jones GM, et al. **Br J Oral Maxillofac Surg** 1989 Dec;27(6):481–6
Papillary carcinoma of the sphenoid sinus associated with sphenoid sinus abscess presenting as cavernous sinus syndrome. A case report. Colak A, et al. **J Clin Neuro Ophthalmol** 1990 Mar;10(1):18–20
Mucormycosis associated with carotid cavernous fistula and cavernous carotid mycotic aneurysm. Saff G, et al. **J Fla Med Assoc** 1989 Oct;76(10):863–5
High flow carotid cavernous fistula on magnetic resonance imaging with excellent angiographic correlation. Nalls G, et al. **J Natl Med Assoc** 1990 May;82(5):373–6
An unusual complication of mourning [letter] Harrop-Griffiths AW, et al. **J Neurol Neurosurg Psychiatry** 1990 Apr;53(4):358
Surgical alternatives in the treatment of cavernous sinus aneurysms [see comments] Diaz FG, et al. **J Neurosurg** 1989 Dec;71(6):846–53 Comment in: J Neurosurg 1990 Jul;73(1):161.
A combined orbitozygomatic infratemporal epidural and subdural approach for lesions involving the entire cavernous sinus. Hakuba A, et al. **J Neurosurg** 1989 Nov; 71(5 Pt 1):699–704
Vascular pressures and cortical blood flow in cavernous angioma of the brain. Little JR, et al. **J Neurosurg** 1990 Oct;73(4):555–9
Cavernous sinus thrombosis and blindness as complications of an odontogenic infection: report of a case and review of literature. Ogundiya DA, et al. **J Oral Maxillofac Surg** 1989 Dec;47(12):1317–21 (16 ref.)
Treatment of carotid-cavernous fistulas associated with Ehlers-Danlos syndrome. Halbach VV, et al. **Neurosurgery** 1990 Jun;26(6):1021–7
Aneurysms of the intracavernous carotid artery: natural history and indications for treatment. Linskey ME, et al. **Neurosurgery** 1990 Jun;26(6):933–7; discussion 937–8
Extracerebral cavernous angiomas of the middle fossa. Rigamonti D, et al. **Neurosurgery** 1990 Aug;27(2):306–10
The dural shunt syndrome. I. Management of glaucoma. Fiore PM, et al. **Ophthalmology** 1990 Jan;97(1):56–62
Radiotherapy of dural arteriovenous malformation in the cavernous sinus. Hidaka H, et al. **Radiat Med** 1989 May–Jun;7(3):160–4
Bacterial cavernous sinus aneurysm treated by detachable balloon technique. Micheli F, et al. **Stroke** 1989 Dec; 20(12):1751–4
Indirect carotid-cavernous sinus fistula: transvenous embolization from the external jugular vein using a superior ophthalmic vein approach. A case report. Komiyama M, et al. **Surg Neurol** 1990 Jan;33(1):57–63
Dural carotid-cavernous sinus fistula and central retinal vein occlusion: a case report and a review of the literature. Komiyama M, et al. **Surg Neurol** 1990 Oct;34(4):255–9 (20 ref.)
Intraoperative angiography and temporary balloon occlusion facilitating surgical obliteration of a traumatic carotid cavernous fistula: a case report. LeRoux PD, et al. **Surg Neurol** 1990 Oct;34(4):260–5
[Oculomotor nerve paralysis secondary to dural carotido-cavernous sinus fistula] Bordat B, et al. **Ophtalmologie** 1989 Apr–May;3(2):129–32 (Eng. Abstr.) (Fre)
[Clinical aspects and treatment of spontaneous carotid artery-cavernous sinus fistula] Möbius E, et al. **Fortschr Neurol Psychiatr** 1989 Dec;57(12):518–26 (Eng. Abstr.) (Ger)
[Septic thrombosis of the cavernous sinus. Presentation of a clinical case] Milano F, et al. **Recenti Prog Med** 1989 Sep;80(9):463–5 (Eng. Abstr.) (Ita)
[A successful treatment of spontaneous carotid cavernous fistula causing hemorrhagic infarction treated by detachable balloon] Kasama A, et al. **No Shinkei Geka** 1990 Jul;18(7):631–6 (Eng. Abstr.) (Jpn)
[Adenoid cystic carcinoma presenting as cavernous sinus syndrome: a clinico-pathological study of two cases] Yamamoto T, et al. **No To Shinkei** 1989 May;41(5):519–25 (Eng. Abstr.) (Jpn)
[CD33-positive acute lymphoblastic leukemia with breast tumor and cavernous sinus tumor] Ishida T, et al. **Rinsho Ketsueki** 1989 Dec;30(12):2194–8 (Eng. Abstr.) (Jpn)

[Treatment of the carotid-cavernous fistula: a historical review] Amâncio EJ, et al. **Arq Neuropsiquiatr** 1990 Mar; 48(1):119-30 (Eng. Abstr.) **(Por)**

[Exacerbation of chronic suppurative otitis media associated with carotid-cavernous anastomosis] Klochikhin AL, et al. **Vestn Otorinolaringol** 1989 Jul-Aug;(4):80-1 **(Rus)**

[Metastatic infiltration of the cavernous sinus (letter)] Castillo J, et al. **Neurologia** 1988 Jan-Feb;3(1):39-40 **(Spa)**

[Painful ophthalmology secondary to metastatic infiltration of the cavernous sinus (letter)] Vendrell J, et al. **Neurologia** 1987 May-Jun;2(3):145-6 **(Spa)**

ABNORMALITIES

Painful oculomotor nerve palsy due to dural-cavernous sinus shunt. Hawke SH, et al. **Arch Neurol** 1989 Nov; 46(11):1252-5

Cerebral cavernous malformations [letter; comment] Lee KS, et al. **Arch Neurol** 1989 Dec;46(12):1273 Comment on: Arch Neurol 1989 Feb;46(2):184-7.

MR imaging of dural AV fistulas at the cavernous sinus. Komiyama M, et al. **J Comput Assist Tomogr** 1990 May-Jun;14(3):397-401

Thalamic cavernous malformation. Case report. Roda JM, et al. **J Neurosurg** 1990 Apr;72(4):647-9

ANATOMY & HISTOLOGY

Anatomical variations of the intracavernous branches of the internal carotid artery with reference to the relationship of the internal carotid artery and sixth cranial nerve. A microsurgical study. Nuza AB, et al. **Acta Anat (Basel)** 1990;138(3):238-45

[The cavernous sinus: development, anatomy, radio-anatomy and clinical implications] Vandamme C, et al. **Acta Otorhinolaryngol Belg** 1989;43(3):203-11 (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

[Phosphoethanolamine--a substrate of alkaline phosphatase isolated from rat calvaria.] Müller K, et al. **Biomed Biochim Acta** 1989;48(8):495-504 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Cluster headache: MRI studies of the cavernous sinus and the base of the brain. Sjaastad O, et al. **Headache** 1990 May;30(6):350-1

Clinicopathological correlation in a case of painful ophthalmoplegia: Tolosa-Hunt syndrome. Goadsby PJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1290-3

Abnormality in the cavernous sinus in three patients with Tolosa-Hunt syndrome: MRI and CT findings. Goto Y, et al. **J Neurol Neurosurg Psychiatry** 1990 Mar;53(3):231-4

Diagnosis of carotid-cavernous fistula by periorbital color Doppler imaging and pulsed Doppler volume flow analysis. Kotval PS, et al. **J Ultrasound Med** 1990 Feb;9(2):101-6

Magnetic resonance imaging of intracavernous pathology. Komiyama M, et al. **Neurol Med Chir (Tokyo)** 1989 Jul; 29(7):573-8

Aspergillosis of the sphenoid sinus with cavernous sinus syndrome. Fujiwara S, et al. **Neuroradiology** 1989;31(5):443

Bilateral intracavernous carotid aneurysms presenting as pseudo-ocular myasthenia gravis. Mindel JS, et al. **Trans Am Ophthalmol Soc** 1990;87:445-57; discussion 457-62

RADIOGRAPHY

External carotid artery embolization of dural arteriovenous malformations involving the cavernous sinus. Outcome and role of venous thrombosis. Hirabuki N, et al. **Acta Radiol** 1990 Mar;31(2):197-201

CT demonstration of cavernous sinus fat. Stricof DD, et al. **AJNR** 1989 Nov-Dec;10(6):1199-201

Rhinocerebral mucormycosis: computed tomographic imaging of cavernous sinus thrombosis. Estrem SA, et al. **Ann Otol Rhinol Laryngol** 1990 Feb;99(2 Pt 1):160-1

Carotico-cavernous fistula after trans-sphenoidal hypophysectomy. Pigott TJ, et al. **Br J Neurosurg** 1989; 3(5):613-6

A case of parasellar meningioma mimicking cluster headache. Hannerz J. **Cephalalgia** 1989 Dec;9(4):265-9

Septic thrombosis of the cavernous sinus: diagnosis with the aid of computed tomography. Ben-Uri R, et al. **Clin Radiol** 1989 Sep;40(5):520-2

Carotid cavernous fistula. Mishra GK, et al. **J Indian Med Assoc** 1989 Jul;87(7):163-4

RADIONUCLIDE IMAGING

The cerebral circulation in cases of carotid cavernous fistula. Findings of single photon emission computed tomography. Watanabe A, et al. **Neuroradiology** 1990;32(2):108-13

SURGERY

Surgery of vascular lesions of the cavernous sinus. Dolenc VV. **Clin Neurosurg** 1990;36:240-55 (61 ref.)

Surgical anatomy of the lateral sellar compartment (cavernous sinus). Parkinson D. **Clin Neurosurg** 1990; 36:219-39 (39 ref.)

Carotid-cavernous sinus fistula accompanying facial trauma. Report of a case with a review of the literature. Takenoshita Y, et al. **J Craniomaxillofac Surg** 1990 Jan; 18(1):41-5 (22 ref.)

Transsphenoidal approach to infrasellar tumors involving the cavernous sinus. Hashimoto N, et al. **J Neurosurg** 1990 Oct; 73(4):513-7

Extra-axial cavernous hemangiomas involving the dural sinuses. Meyer FB, et al. **J Neurosurg** 1990 Aug; 73(2):187-92

Treatment of cavernous sinus aneurysms [letter; comment] Parkinson D. **J Neurosurg** 1990 Jul;73(1):161 Comment on: J Neurosurg 1989 Dec;71(6):846-53.

Petrous carotid-to-intradural carotid saphenous vein graft for intracavernous giant aneurysm, tumor, and occlusive cerebrovascular disease. Spetzler RF, et al. **J Neurosurg** 1990 Oct;73(4):496-501

Sphenoidal and cavernous sinus resection for tumor. Donald PJ, et al. **J Otolaryngol** 1990 Apr;19(2):122-9

Surgical approaches to the cavernous sinus: a microsurgical study. Inoue T, et al. **Neurosurgery** 1990 Jun;26(6):903-32

Congenital fistula of the dural carotid-cavernous sinus: case report and review of the literature. Konishi Y, et al. **Neurosurgery** 1990 Jul;27(1):120-6 (36 ref.)

Cavernous hemangioma in the cavernous sinus: case report. Sawamura Y, et al. **Neurosurgery** 1990 Jan;26(1):126-8

CAVH see **HEMOFILTRATION**

CAVIA see **GUINEA PIGS**

CAVUS DEFORMITY see **FOOT DEFORMITIES**

CCK-8 see **SINCALIDE**

CCNU see **LOMUSTINE**

CD25 ANTIGEN see **RECEPTORS, INTERLEUKIN-2**

CD4 ANTIGENS see **ANTIGENS, CD4**

CD4 MOLECULE see **ANTIGENS, CD4**

CEBIDAE

Seasonal or ecological differences in diet and molar microwear in Cebus nigrivittatus. Teaford MF, et al. **Am J Phys Anthropol** 1989 Nov;80(3):391-401

Mortality causes of owl monkeys (Aotus nancymae and Aotus vociferans) in captivity. Gozalo A, et al. **J Med Primatol** 1990;19(1):69-72

Encephalitis induced by a canine distemper virus in squirrel monkeys. Nagata T, et al. **J Med Primatol** 1990; 19(2):137-49

A retrospective review of lesions associated with the use of Freund's adjuvant. Broderson JR. **Lab Anim Sci** 1989 Sep;39(5):400-5

Perches for primate squeeze cages [letter; comment] Contel NR. **Lab Anim Sci** 1989 Nov;39(6):537 Comment on: Lab Anim Sci 1989 Mar;39(2):166-7.

The woolly monkey (Lagothrix lagothricha): a possible model for human hypertension research. Müller M, et al. **Schweiz Arch Tierheilkd** 1989;131(9):569-76

Subcutaneous leiomyosarcoma in a Peruvian squirrel monkey (Saimiri sciureus). Brunnert SR, et al. **Vet Pathol** 1990 Mar; 27(2):126-8

[Epidemiology of Klebsiella pneumoniae infections in 2 colonies of squirrel monkeys and lemurs] Richard C. **Bull Soc Pathol Exot Filiales** 1989;82(4):458-64 (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

The olfactory and respiratory epithelium in rhesus and squirrel monkeys studied with freeze-fracture technique. Engström B, et al. **Acta Otolaryngol (Stockh)** 1989 Sep-Oct; 108(3-4):259-67

Comparison of muscle weight and force ratios in New and Old World monkeys. Bouvier M, et al. **Am J Phys Anthropol** 1990 Aug;82(4):509-15

The centre médian and parafascicular thalamic nuclei project respectively to the sensorimotor and associative-limbic striatal territories in the squirrel monkey. Sadikot AF, et al. **Brain Res** 1990 Feb 26;510(1):161-5

Afferents of the caudal fastigial nucleus in a New World monkey (Cebus apella). Gonzalo-Ruiz A, et al. **Exp Brain Res** 1990;80(3):600-8

Morphological basis of arm-swinging: multivariate analyses of the forelimbs of Hylobates and Ateles. Takahashi LK. **Folia Primatol (Basel)** 1990;54(1-2):70-85

Scanning electron microscope study of the esophagogastric junction in the tufted capuchin monkey, Cebus apella. Watanabe I, et al. **Gegenbaurs Morphol Jahrb** 1990; 136(2):219-23

Primate spinothalamic pathways: I. A quantitative study of the cells of origin of the spinothalamic pathway. Apkarian AV, et al. **J Comp Neurol** 1989 Oct 15;288(3):447-73

Primate spinothalamic pathways: II. The cells of origin of the dorsolateral and ventral spinothalamic pathways. Apkarian AV, et al. **J Comp Neurol** 1989 Oct 15; 288(3):474-92

Connections between area 3b of the somatosensory cortex and subdivisions of the ventroposterior nuclear complex and the anterior pulvinar nucleus in squirrel monkeys. Cusick CG, et al. **J Comp Neurol** 1990 Feb 1;292(1):83-102

Visual area MT in the Cebus monkey: location, visuotopic organization, and variability. Fiorani M Jr, et al. **J Comp Neurol** 1989 Sep 1;287(1):98-118

Extrinsic determinants of retinal ganglion cell development in primates. Leventhal AG, et al. **J Comp Neurol** 1989 Aug 8;286(2):170-89

Heterogeneity of chandelier neurons in monkey neocortex: corticotropin-releasing factor- and parvalbumin-immunoreactive populations. Lewis DA, et al. **J Comp Neurol** 1990 Mar 22;293(4):599-615

Efferent projections of the subthalamic nucleus in the squirrel monkey as studied by the PHA-L anterograde tracing method. Smith Y, et al. **J Comp Neurol** 1990 Apr 8; 294(2):306-23

Retinal vasculature of the fovea of the squirrel monkey, Saimiri sciureus: three-dimensional architecture, visual screening, and relationships to the neuronal layers. Snodderly DM, et al. **J Comp Neurol** 1990 Jul 1; 297(1):145-63

Location of respiratory motoneurons involved in phonation. An HRP study in the squirrel monkey. Schriever S, et al. **J Hirnforsch** 1989;30(5):521-7

Compartmental origins of the striatopallidal projection in the primate. Giménez-Amaya JM, et al. **Neuroscience** 1990; 34(1):111-26

BLOOD

Lack of platelet monoamine oxidase activity in Cebus monkeys (Cebus albifrons). Heintz R, et al. **Comp Biochem Physiol [C]** 1989;93(2):421-3

Hypoglycemia of squirrel monkey neonates: implications for infant survival. Brady AG, et al. **Lab Anim Sci** 1990 May; 40(3):262-5

Hematology of the wild caught karyotype 1 owl monkey (Aotus nancymai). Málaga CA, et al. **Lab Anim Sci** 1990 Mar;40(2):204-6

Behavioral and endocrine consequences of heterosexual pair formation in squirrel monkeys. Mendoza SP, et al. **Physiol Behav** 1989 Oct;46(4):597-603

GENETICS

Biochemical genetic markers of squirrel monkeys and their use for pedigree validation. VandeBerg JL, et al. **Biochem Genet** 1990 Feb;28(1-2):41-56

Distribution of chromosomal polymorphisms in three subspecies of squirrel monkeys (genus Saimiri). Moore CM, et al. **Cytogenet Cell Genet** 1990;53(2-3):118-22

Cytogenetic characterization of Alouatta belzebul with atypical pelage coloration. Lima MM, et al. **Folia Primatol (Basel)** 1989;52(1-2):97-101

Cytogenetic variability within and across populations of Cebus apella in Argentina. Mudry MD. **Folia Primatol (Basel)** 1990;54(3-4):206-16

Owl monkey gene map: evidence for a homologous human chromosome 7q region near the cystic fibrosis locus. Ma NS, et al. **Genomics** 1989 Oct;5(3):389-96

The involucrin gene of the owl monkey: origin of the early region. Tseng H, et al. **Mol Biol Evol** 1989 Sep;6(5):460-8

GROWTH & DEVELOPMENT

Changes in skull components of the squirrel monkey evoked by growth and nutrition: an experimental study. Pucciarelli HM, et al. **Am J Phys Anthropol** 1990 Apr;81(4):535-43

A comparative study of neonatal skeletal development in Cebus and other primates. Watts ES. **Folia Primatol (Basel)** 1990;54(3-4):217-24

[Management of individual body weight growth of infant squirrel monkey (Saimiri sciureus) in indoor breeding colony] Hamano M, et al. **Jikken Dobutsu** 1990 Jan; 39(1):43-8 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Peripheral blood mononuclear cells in the squirrel monkey Saimiri sciureus: characterization and functional aspects of T lymphocytes. Garraud O, et al. **Res Immunol** 1989 Nov-Dec;140(9):857-74

[Use of New World Saimiri and Aotus monkeys in the development of an anti-malaria vaccine] Gysin J. **Pathol Biol (Paris)** 1990 Mar;38(3):189-92 (33 ref.) (Eng. Abstr.) **(Fre)**

METABOLISM

The compartmentalization of the monkey and rat cerebellar cortex: zebrin I and cytochrome oxidase. Leclerc N, et al. **Brain Res** 1990 Jan 1;506(1):70-8

Reduced nicotinamide adenine dinucleotide phosphate-diaphorase (NADPH-d) histochemistry in the hippocampal formation of the New World monkey (Saimiri sciureus). Mufson EJ, et al. **Brain Res** 1990 May 21; 516(2):237-47

Substance P-like immunoreactivity in the lateral cervical nucleus of the owl monkey (Aotus trivirgatus): a comparison with the cat and rat. Broman J, et al. **J Comp Neurol** 1989 Nov 1;289(1):111-7

Galanin-like immunoreactivity within the primate basal forebrain: differential staining patterns between humans and monkeys. Kordower JH, et al. **J Comp Neurol** 1990 Apr 8;294(2):281-92

Dopaminergic innervation of the basal ganglia in the squirrel monkey as revealed by tyrosine hydroxylase

immunohistochemistry. Lavoie B, et al. **J Comp Neurol** 1989 Nov 1;289(1):36–52

Corticotropin–releasing factor immunoreactivity in monkey neocortex: an immunohistochemical analysis. Lewis DA, et al. **J Comp Neurol** 1989 Dec 22;290(4):599–613

Bilirubin excretion and bile flow in fed and fasted Brazilian squirrel monkeys (Saimiri sciureus). Cornelius CE, et al. **Vet Res Commun** 1989;13(5):395–401

PARASITOLOGY

Eosinophilic meningoencephalitis due to Angiostrongylus cantonensis as the cause of death in captive non–human primates. Gardiner CH, et al. **Am J Trop Med Hyg** 1990 Jan;42(1):70–4

Anatomical distribution of developing trophozoites and schizonts of Plasmodium vivax in Aotus lemurinus lemurinus and Saimiri sciureus. Fremount HN, et al. **J Parasitol** 1990 Jun;76(3):428–30

PHYSIOLOGY

Positional behavior in Saimiri boliviensis and Ateles geoffroyi. Fontaine R. **Am J Phys Anthropol** 1990 Aug; 82(4):485–508

Hardness as a basis of fruit choice in two sympatric primates. Kinzey WG, et al. **Am J Phys Anthropol** 1990 Jan; 81(1):5–15

Selective degeneration of the parvocellular–projecting retinal ganglion cells in a New World monkey, Saimiri sciureus. Lynch JJ 3d, et al. **Brain Res** 1989 Oct 16;499(2):325–32

Brain–stem auditory evoked potentials in squirrel monkey (Saimiri sciureus). Pineda JA, et al. **Electroencephalogr Clin Neurophysiol** 1989 Dec; 73(6):532–43

Processing of amplitude modulated sounds in the medial geniculate body of squirrel monkeys. Preuss A, et al. **Exp Brain Res** 1990;79(1):207–11

Dietary variability in Cebus apella in extreme habitats: evidence for adaptability. Brown AD, et al. **Folia Primatol (Basel)** 1990;54(3–4):187–95

Ecological constraints on group size in three species of neotropical primates. Chapman CA. **Folia Primatol (Basel)** 1990;55(1):1–9

Dietary differences between neighboring Cebus capucinus groups: local traditions, food availability or responses to food profitability? Chapman CA, et al. **Folia Primatol (Basel)** 1990;54(3–4):177–86

Early behavioral development in capuchins (Cebus). Fragaszy DM. **Folia Primatol (Basel)** 1990;54(3–4):119–28

Effects of patch size on feeding associations in muriquis (Brachyteles arachnoides). Strier KB. **Folia Primatol (Basel)** 1989;52(1–2):70–7

Slowly adapting type I mechanoreceptor discharge as a function of dynamic force versus dynamic displacement of glabrous skin of raccoon and squirrel monkey hand. Pubols BH Jr. **Neurosci Lett** 1990 Mar 2;110(1–2):86–90

CRH and alpha–helical–CRH modulate behavioral measures of arousal in monkeys. Winslow JT, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):919–26

Open–loop and closed–loop optokinetic nystagmus in squirrel monkeys (Saimiri sciureus) and in man. Behrens F, et al. **Prog Brain Res** 1989;80:183–96; discussion 171–2 (36 ref.)

Training as an aid to welfare [letter] Hollands C. **Vet Rec** 1989 Dec 2;125(23):585

PSYCHOLOGY

Adaptation and adaptability of capuchin monkeys. **Folia Primatol (Basel)** 1990;54(3–4):113–228

Conceptual learning in capuchin monkeys. Adams–Curtis LE. **Folia Primatol (Basel)** 1990;54(3–4):129–37 (37 ref.)

Use of objects as hammers to open nuts by capuchin monkeys (Cebus apella). Anderson JR. **Folia Primatol (Basel)** 1990; 54(3–4):138–45

Behavioral development and socialization of infants in a free–ranging group of howling monkeys (Alouatta palliata). Clarke MR. **Folia Primatol (Basel)** 1990;54(1–2):1–15

Vertebrate predation in Cebus capucinus: meat eating in a neotropical monkey. Fedigan LM. **Folia Primatol (Basel)** 1990;54(3–4):196–205

Social processes affecting the appearance of innovative behaviors in capuchin monkeys. Fragaszy DM, et al. **Folia Primatol (Basel)** 1990;54(3–4):155–65 (30 ref.)

Variability and adaptability in the genus Cebus. Fragaszy DM, et al. **Folia Primatol (Basel)** 1990;54(3–4):114–8 (29 ref.)

Infanticide in wedge–capped capuchin monkeys, Cebus olivaceus. Valderrama X, et al. **Folia Primatol (Basel)** 1990; 54(3–4):171–6

Tool use in Cebus. Visalberghi E. **Folia Primatol (Basel)** 1990; 54(3–4):146–54 (50 ref.)

Social relations in groups of the black–capped capuchin (Cebus apella) in captivity. Interactions of group–born infants during their second half–year of life. Welker C, et al. **Folia Primatol (Basel)** 1990;54(1–2):16–33

Significance of kin relations and individual preferences in the social behaviour of Cebus apella. Welker C, et al. **Folia Primatol (Basel)** 1990;54(3–4):166–70

CEBUELLA see **CALLITHRICIDAE**

CEBUS see under **CEBIDAE**

CECAL DISEASES

Primary tuberculosis of the appendix. Murali VP, et al. **J Indian Med Assoc** 1989 Jul;87(7):162–3

Transanal and intraperitoneal prolapse in intussusception. Yadav K, et al. **J Paediatr Child Health** 1990 Apr; 26(2):99–100

Benign cecal ulcer. Himal HS. **Surg Endosc** 1989;3(3):170–2

[A case of acute simple volvulus of the cecum] Balli C, et al. **Minerva Chir** 1990 Apr 15;45(7):513–6 (Eng. Abstr.) **(Ita)**

CHEMICALLY INDUCED

Ileocaecal perforation and bleeding—are non–steroidal anti–inflammatory drugs (NSAIDs) responsible? Saw KC, et al. **J R Soc Med** 1990 Feb;83(2):114–5

Paralytic ileus associated with ipratropium [letter; comment] Markus HS. **Lancet** 1990 May 19;335(8699):1224 Comment on: Lancet 1990 Mar 3;335(8688):552.

Amitriptyline overdose complicated by intestinal pseudo–obstruction and caecal perforation. McMahon AJ. **Postgrad Med J** 1989 Dec;65(770):948–9

COMPLICATIONS

Obstructed intestine as a reservoir for systemic infection. Deitch EA, et al. **Am J Surg** 1990 Apr;159(4):394–401

Caecovesical fistula secondary to diverticulitis. Stephenson BM, et al. **Br J Urol** 1990 Jul;66(1):102–3

Control of life–threatening hemorrhage in cecal tuberculosis by transcatheter embolisation. Ramakantan R, et al. **Indian J Gastroenterol** 1990 Apr;9(2):149–50

Benign caecal ulceration presenting with life threatening haemorrhage. Journeaux SF, et al. **J R Soc Med** 1989 Jul; 82(7):443

Herniation of cecum and terminal ileum through Winslow's foramen: a case report. Greve JW, et al. **Neth J Surg** 1990 Apr;42(2):56–7

[Bifocal digestive tuberculosis complicated by generalized peritonitis (apropos of a case)] Kchila M, et al. **Tunis Med** 1989 May;67(5):361–6 (Eng. Abstr.) **(Fre)**

[Distal ulcerative colitis with proximal segmental inflammation (letter)] Heidt H, et al. **Dtsch Med Wochenschr** 1989 Sep 29;114(39):1506 **(Ger)**

[Intestinal obstruction caused by a gallstone associated with mucocele of the appendix] Begezhanov BA, et al. **Klin Khir** 1990;(4):69–70 **(Rus)**

[Torsion of the appendix with partial thrombosis of the mesentery in a child] Salamov LA, et al. **Vestn Khir** 1989 Aug;144(8):100 **(Rus)**

[Isolated diverticulum of the cecum (letter)] Cabeza Lamban F, et al. **Rev Esp Enferm Dig** 1990 Feb;77(2):165–6 **(Spa)**

[Single diverticulum of perforated cecum. Report of 5 cases] Dorfman S, et al. **Rev Esp Enferm Dig** 1990 Feb;77(2):147–8 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Uncomplicated acute diverticulitis of the cecum and ascending colon: sonographic findings in 18 patients. Wada M, et al. **AJR Am J Roentgenol** 1990 Aug;155(2):283–7

The presentation of malrotation of the intestine in adults. Gilbert HW, et al. **Ann R Coll Surg Engl** 1990 Jul; 72(4):239–42

Behçet's syndrome with gastro–intestinal tract involvement mimicking carcinoma of the caecum—a case report. Abdullah AN, et al. **Clin Exp Dermatol** 1989 Nov; 14(6):459–61

Cecocolic intussusception in multiple lymphomatous polyposis of the gastrointestinal tract. Report of a case. Jalleh RP, et al. **Dis Colon Rectum** 1990 May;33(5):424–6

Differentiating tuberculosis from Crohn's disease of the small bowel [letter] Shah P, et al. **Dis Colon Rectum** 1989 Oct; 32(10):905

Neutropenic typhlitis simulating carcinoma of the cecum. Musher DR, et al. **Gastrointest Endosc** 1989 Sep–Oct; 35(5):449–51

Bacterial ileocaecitis and appendicitis [letter] Van Noyen R, et al. **Lancet** 1990 Aug 25;336(8713):518

Intussusception of the appendix [letter] Relan M, et al. **Postgrad Med J** 1990 Feb;66(772):157

Intestinal malrotation—a missed diagnosis. Banerjee A. **Practitioner** 1989 Apr 8;233(1466):468, 471

Intussusception of the appendix. Gilpin D. **Ulster Med J** 1989 Oct;58(2):193–5

[Typhlitis resembling an infiltrative tumor with the clinical picture of acute appendicitis] Stoianov V, et al. **Khirurgiia (Sofiia)** 1989;42(3):82–3 **(Bul)**

[Cecal diverticulum and appendicitis. A diagnostic pitfall (letter)] Godquin B. **J Chir (Paris)** 1989 Nov;126(11):625–6 **(Fre)**

[Appendico–cecal invagination (considerations on a case)] Tonello PG, et al. **Chir Ital** 1989 Feb;41(1):62–8 (Eng. Abstr.) **(Ita)**

[A rare form of intestinal invagination] Razumov AA, et al. **Klin Khir** 1990;(6):51 **(Rus)**

[Local necrotic typhlitis] Naĭmovich VV. **Vestn Khir** 1989 Dec;144(12):29–30 **(Rus)**

[Torsion of the appendix in a child] Rusak PS, et al. **Vestn Khir** 1989 Aug;144(8):99–100 **(Rus)**

DIET THERAPY

[A case of simple ulcer of the cecum successfully treated by elemental diet] Tsukioka S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Apr;87(4):1074–7 **(Jpn)**

EPIDEMIOLOGY

Solitary caecal diverticulitis. Recognition and management. al–Hilaly MA, et al. **Acta Chir Scand** 1989 Sep;155(9):475–8

Caecocolic intussusception in Ibadan. Cole GJ. **Br J Surg** 1966 May;53(5):415–9

ETIOLOGY

Quantitative study of antibiotic–induced susceptibility to Clostridium difficile enterococitis in hamsters. Larson HE, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1348–53

Ileocecocolic intussusception produced by lymphoblastic lymphoma of ileum [letter] Shah P, et al. **Indian J Gastroenterol** 1989 Oct;8(4):302

[Neoplastic occlusion of the right colon] Corbucci Vitolo G, et al. **Minerva Chir** 1990 Apr 15;45(7):461–2 (Eng. Abstr.) **(Ita)**

[Perforation by an ascarid of the stump of the vermiform process in the hernial sac] Boboev AB, et al. **Klin Khir** 1990;(2):53 **(Rus)**

[Is the development of adhesions after appendectomy related to the methods of stump treatment?] Dzhaubaev MO, et al. **Klin Khir** 1990;(4):47–8 **(Rus)**

[Perforation of the cecum by a chicken bone in strangulated inguino–scrotal hernia] Spasiuk NI, et al. **Klin Khir** 1990; (2):52–3 **(Rus)**

[Left–sided location of the appendix] Te LB. **Klin Khir** 1990; (4):70 **(Rus)**

[Acute ileocecal enterocolitis (typhlitis) in patients with neutropenia associated with drug therapy] Bravo M, et al. **Rev Chil Pediatr** 1988 Nov–Dec;59(6):369–73 (Eng. Abstr.) **(Spa)**

PARASITOLOGY

Appendiceal infection by Entamoeba histolytica and Strongyloides stercoralis presenting like acute appendicitis. Nadler S, et al. **Dig Dis Sci** 1990 May;35(5):603–8 (37 ref.)

PATHOLOGY

Typhlitis. An 18–year experience and postmortem review. Katz JA, et al. **Cancer** 1990 Feb 15;65(4):1041–7

Effect of hemorrhagic shock on bacterial translocation, intestinal morphology, and intestinal permeability in conventional and antibiotic–decontaminated rats. Deitch EA, et al. **Crit Care Med** 1990 May;18(5):529–36

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 18–1990. A 58–year–old man with hematochezia and a lesion of the cecum. **N Engl J Med** 1990 May 3;322(18):1298–305

[Cecal actinomycosis: apropos of a case] Rodríguez García JF, et al. **Rev Esp Enferm Apar Dig** 1989 Aug;76(2):169–72 (17 ref.) (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Immunotherapeutic modulation of intraperitoneal adhesions by Asparagus racemosus. Rege NN, et al. **J Postgrad Med** 1989 Oct;35(4):199–203

Intra–abdominal adhesions and their prevention by topical tissue plasminogen activator. Menzies D, et al. **J R Soc Med** 1989 Sep;82(9):534–5

RADIOGRAPHY

Paraprosthetic cecal fistula: CT demonstration—a case report. Arrington ER, et al. **Angiology** 1990 Jun;41(6):502–4

Crohn's disease mimicking primary bladder tumour. Evans RH. **Br J Urol** 1990 Mar;65(3):299–300

[Deformity and retraction of the ascending colon] de Diego Rey P, et al. **Rev Clin Esp** 1989 Oct;185(6):330–2 **(Spa)**

[Importance of the clinico–radiologic diagnosis of cecal diverticulitis (letter)] Gimeno Solsona F, et al. **Rev Esp Enferm Dig** 1990 Feb;77(2):166–7 **(Spa)**

SURGERY

Cecal volvulus. Rabinovici R, et al. **Dis Colon Rectum** 1990 Sep;33(9):765–9 (36 ref.)

Crohn's disease of the appendix. Ruiz V, et al. **Surgery** 1990 Jan;107(1):113–7 (29 ref.)

[Diagnosis and therapy of inflammatory cecal diverticula] Lehnert T, et al. **Zentralbl Chir** 1989;114(20):1337–40 (Eng. Abstr.) **(Ger)**

[Necrotizing amebic dysentery. A rare cause of massive colorectal hemorrhage] Scherf FG, et al. **Zentralbl Chir** 1990;115(2):103–6 **(Ger)**

[Pseudoaneurysm of the right iliac artery with fistula into the cecum. A clinical case] Anfossi A, et al. **Minerva Cardioangiol** 1990 Jan–Feb;38(1–2):65–8 (Eng. Abstr.) **(Ita)**

[Volvulus of the cecum. A case report] Chaib E, et al. **Arq Gastroenterol** 1989 Jan–Jun;26(1–2):25–7 (Eng. Abstr.) **(Por)**

[Surgical tactics in spontaneous external intestinal fistulas in children] Rakhimov SR, et al. **Vestn Khir** 1989 Jul; 143(7):75–6 **(Rus)**

THERAPY

Cecal pseudo-obstruction. Early therapy should be nonoperative. Hart MB, et al. **Am Surg** 1990 Jan;56(1):43-6

[Complications and outcome of conservative and surgical treatment of intestinal invagination in children] Antoshkina EP, et al. **Klin Khir** 1990;(6):8-9 (Eng. Abstr.) **(Rus)**

VETERINARY

Effects of the caecal nematode Trichostrongylus tenuis on egg-laying by captive red grouse. Shaw JL, et al. **Res Vet Sci** 1990 Jan;48(1):59-63

Surgery of the bovine large intestine. Fubini SL. **Vet Clin North Am Food Anim Pract** 1990 Jul;6(2):461-71 (20 ref.)

Enterocecocolitis associated with intraepithelial Campylobacter-like bacteria in rabbits (Oryctolagus cuniculus). Schoeb TR, et al. **Vet Pathol** 1990 Mar; 27(2):73-80

Therapy and clinical progress of cattle with dilatation and torsion of the caecum [see comments] Braun U, et al. **Vet Rec** 1989 Oct 21;125(17):430-3 Comment in: Vet Rec 1989 Nov 4;125(19):490.

Haematological and biochemical findings in cattle with dilatation and torsion of the caecum. Braun U, et al. **Vet Rec** 1989 Oct 7;125(15):396-8

Clinical findings in cattle with dilatation and torsion of the caecum. Braun U, et al. **Vet Rec** 1989 Sep 2;125(10):265-7

Caecal dilatation [letter; comment] Harrington MG. **Vet Rec** 1989 Nov 4;125(19):490 Comment on: Vet Rec 1989 Oct 21;125(17):430-3.

Caecal intussusception in two ponies. Milne EM, et al. **Vet Rec** 1989 Aug 12;125(7):148-50

Caecal cores and mortality in French partridges (Alectoris rufa). Swarbrick O. **Vet Rec** 1990 Jan 13;126(2):41

[What is your diagnosis? Which treatment do you suggest? Colonic obstruction in a calf] Steiner A, et al. **Schweiz Arch Tierheilkd** 1989;131(9):577-8 **(Ger)**

CECAL NEOPLASMS

Carcinoma of the caecum. Armstrong CP, et al. **J R Coll Surg Edinb** 1990 Apr;35(2):88-92

[An infrequent association: carcinoma of the colon and hypernephroma] López de Tejada Cabeza I, et al. **Rev Esp Enferm Apar Dig** 1989 Oct;76(4):405-7 (Eng. Abstr.) **(Spa)**

BLOOD

Serial determinations of serum CEA in monitoring management of patients with colorectal carcinoma. Behbehani AI, et al. **Oncology** 1990;47(4):303-7

COMPLICATIONS

A case of malignant lymphoma accompanied with arterial bleeding from the gastric lesion. Nishimura H, et al. **Jpn J Med** 1989 Sep-Oct;28(5):604-7

Perforation of an unsuspected cecal granulocytic sarcoma during therapy with granulocyte-macrophage colony-stimulating factor [letter] Evans C, et al. **N Engl J Med** 1990 Feb 1;322(5):337-8

[Acute peritonitis complicating intestinal endometriosis. A case report with comments] Salman H, et al. **J Chir (Paris)** 1989 Oct;126(10):552-5 (Eng. Abstr.) **(Fre)**

[Invagination as a complication of malignant lymphoma] Lucciarini P, et al. **Wien Klin Wochenschr** 1989 Nov 10; 101(21):744-6 (Eng. Abstr.) **(Ger)**

[Hematuria: an initial sign of cecal carcinoma] Arai E, et al. **Hinyokika Kiyo** 1990 Mar;36(3):347-9 (Eng. Abstr.) **(Jpn)**

[Tumor-induced colonic invagination in adults] Berge V. **Tidsskr Nor Laegeforen** 1989 Sep 20;109(26):2655-6 (Eng. Abstr.) **(Nor)**

[Intestinal intussusception caused by malignant neoplasms of the cecum in children] Slovtsov NA, et al. **Vestn Khir** 1989 Jun;142(6):81-2 **(Rus)**

[Duodenocolonic fistula caused by carcinoma of the cecum] García Rodríguez JF, et al. **Rev Esp Enferm Apar Dig** 1989 Jul;76(1):79-81 (11 ref.) (Eng. Abstr.) **(Spa)**

[Myxoglobulosis of the cecal appendix] Guionmet N, et al. **Rev Esp Enferm Dig** 1990 May;77(5):365-7 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Acute appendicitis and carcinoma [letter] Bleker RJ, et al. **Br J Surg** 1990 Apr;77(4):475

Primary ileocecal lymphoma. A study of 22 patients. Auger MJ, et al. **Cancer** 1990 Jan 15;65(2):358-61

Cecocolic intussusception in multiple lymphomatous polyposis of the gastrointestinal tract. Report of a case. Jalleh RP, et al. **Dis Colon Rectum** 1990 May;33(5):424-6

Occult gastrointestinal carcinoma [letter; comment] Lorente JA, et al. **Dis Colon Rectum** 1990 Jul;33(7):631-2 Comment on: Dis Colon Rectum 1988 Apr;31(4):306-10.

Neutropenic typhlitis simulating carcinoma of the cecum. Musher DR, et al. **Gastrointest Endosc** 1989 Sep-Oct; 35(5):449-51

Is evaluation of the right colon necessary prior to cecocystoplasty? Beshai AZ, et al. **J Urol** 1990 Aug;144(2 Pt 1):359-61

Synchronous adenocarcinomas of jejunum and cecum following transverse colon carcinoma. A case study. Reddy VB, et al. **Mt Sinai J Med** 1990 Jan;57(1):34-6

Cecal carcinoma presenting as acute appendicitis. Foss JF. **Postgrad Med** 1989 Dec;86(8):123, 126

[Typhlitis resembling an infiltrative tumor with the clinical picture of acute appendicitis] Stoianov V, et al. **Khirurgiia (Sofiia)** 1989;42(3):82-3 **(Bul)**

[Peri-appendiceal inflammatory granuloma. An abscessed pseudocancer of the cecum. Value of echography and partial right colectomy (letter)] Steiner E, et al. **J Chir (Paris)** 1990 Jan;127(1):45-6 **(Fre)**

ETIOLOGY

Appendicectomy and carcinoma of the caecum. Armstrong CP, et al. **Br J Surg** 1989 Oct;76(10):1049-53

PATHOLOGY

Large bowel cancer in the young adult. Yong CK, et al. **Ann Acad Med Singapore** 1990 May;19(3):385-8 (21 ref.)

Rare secondary carcinoma from colon to testis. Review of literature and report of a new case. Blefari F, et al. **Arch Ital Urol Nefrol Androl** 1989 Sep;61(3):275-8 (22 ref.)

Pleomorphic (giant cell) carcinoma of the intestine. An immunohistochemical and electron microscopic study. Bak M, et al. **Cancer** 1989 Dec 15;64(12):2557-64

Endometriosis of the cecum and appendix: two case reports. Ardies P, et al. **Gastrointest Radiol** 1990 Summer; 15(3):263-4

Carcinoid tumour of Meckel's diverticulum associated with caecal adenocarcinoma. Venizelos ID, et al. **Histopathology** 1990 Apr;16(4):395-6

Cecal carcinoma: a different colon malignancy? Leenen LP, et al. **J Surg Oncol** 1990 Jul;44(3):171-5

[Establishment of a cell line (HCe-8693) from human undifferentiated adenocarcinoma of the cecum and its characterization] Zhang ZX. **Chung Hua Chung Liu Tsa Chih** 1989 Nov;11(6):413-5 (Eng. Abstr.) **(Chi)**

[Liver transplantation in metastases of carcinoid tumor] Bizouarn P, et al. **Ann Fr Anesth Reanim** 1990;9(2):180-2 (Eng. Abstr.) **(Fre)**

[A carcinoma of the cecum arising from the orifice of the appendix: a case report] Hayasaka T, et al. **Gan No Rinsho** 1990 Aug;36(9):1053-8 (Eng. Abstr.) **(Jpn)**

[A case of adenosquamous cell carcinoma of the cecum] Takemura K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Mar;87(3):857-60 **(Jpn)**

PHYSIOPATHOLOGY

Resistance to acid of canine kidney (MDCK) and human colonic (T84) and ileo-caecal (HCT-8) adenocarcinoma epithelial cell monolayers in vitro. Chan AB, et al. **Q J Exp Physiol** 1989 Jul;74(4):553-6

SECONDARY

[Epithelioma of the maxillary sinus with inguinal metastases. Case report and literature review of multiple tumors in gastroenterology] Debois JM, et al. **Acta Gastroenterol Belg** 1990 Jan-Feb;53(1):22-33 (58 ref.) (Eng. Abstr.) **(Dut)**

[Metastasis of a stomach carcinoma in a solitary adenomatous cecal polyp] Tiszlavicz L. **Zentralbl Allg Pathol** 1990; 136(3):277-82 (Eng. Abstr.) **(Ger)**

SURGERY

Local resection of tumors of the ampulla of Vater. Sharp KW, et al. **Am Surg** 1990 Apr;56(4):214-7 (18 ref.)

Enteroliths in association with right hemicolectomy for cecal carcinoma. Gordin SJ, et al. **W V Med J** 1990 Jul; 86(7):292-3

Haemangiomas of the gastrointestinal tract in children. Basaklar AC. **Z Kinderchir** 1990 Apr;45(2):114-6

THERAPY

Involvement of the ileocaecal region by non-Hodgkin's lymphoma in adults: clinical features and results of treatment. Sweetenham JW, et al. **Br J Cancer** 1989 Sep; 60(3):366-9

VETERINARY

Cecal adenocarcinoma in a cow. Suzuki T, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):1041-3

CECOSTOMY see under **ENTEROSTOMY**

CECUM

Phytobezoar extending from stomach to cecum. Sharma V, et al. **Indian J Gastroenterol** 1990 Jul;9(3):237

ABNORMALITIES

Intestinal malrotation—a missed diagnosis. Banerjee A. **Practitioner** 1989 Apr 8;233(1466):468, 471

[Ileo-caeco-appendicular agenesis. 1 case] Valla JS, et al. **Chir Pediatr** 1989;30(6):288-9 (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

Silicone-foam molding of the canine ileocolonic junctional zone. Kelley ML Jr, et al. **Am J Dig Dis** 1967 Aug; 12(8):813-22

Influence of conventionalization on cecal wall structure of germ-free Wistar rats: quantitative light and qualitative electron microscopic observations. Ishikawa K, et al. **Anat Embryol (Berl)** 1989;180(2):191-8

Anatomy of the avian cecum. McLelland J. **J Exp Zool Suppl** 1989;3:2-9 (53 ref.)

Avian cecal microanatomy: a morphometric comparison of two species. Strong TR, et al. **J Exp Zool Suppl** 1989; 3:10-20

BLOOD SUPPLY

Effects of fenoldopam on cecal blood flow and mechanical activity in horses. Clark ES, et al. **Am J Vet Res** 1989 Nov;50(11):1926-30

Behçet's syndrome with gastro-intestinal tract involvement mimicking carcinoma of the caecum—a case report. Abdullah AN, et al. **Clin Exp Dermatol** 1989 Nov; 14(6):459-61

[Angiodysplasia of the colon: a presentation of 7 cases] Beguiristain Gómez A, et al. **Rev Esp Enferm Apar Dig** 1989 Sep;76(3):233-7 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

[Prediction of dysbiotic effect in toxico-hygienic assessment of antibiotics] Zel'tser IZ. **Antibiot Khimioter** 1989 Jun; 34(6):440-3 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Morphogenesis of the digestive tract in the fetuses of the southern minke whale, Balaenoptera acutorostrata. Amasaki H, et al. **Anat Anz** 1989;169(3):161-8

ENZYMOLOGY

Effect of lindane on nitroreductase and dechlorinase enzyme activity in the gastrointestinal tract. Chadwick RW, et al. **Toxicol Lett** 1990 Feb;50(2-3):299-308

IMMUNOLOGY

Effect of Treponema hyodysenteriae infection on mucosal mast cells and T cells in the murine cecum. Nibbelink SK, et al. **Infect Immun** 1990 Jan;58(1):88-92

INNERVATION

Potassium currents in submucous neurones of guinea-pig caecum and their synaptic modification. Akasu T, et al. **J Physiol (Lond)** 1989 Sep;416:571-88

METABOLISM

Acetate: a hydrogen sink in hindgut fermentation as opposed to rumen fermentation. Demeyer D, et al. **Acta Vet Scand Suppl** 1989;86:68-75

Glycylsarcosine transport by epithelial cells isolated from chicken proximal cecum and rectum. Calonge ML, et al. **Am J Physiol** 1990 May;258(5 Pt 1):G660-4

In vitro transport of L-alanine by equine cecal mucosa. Freeman DE, et al. **Am J Vet Res** 1989 Dec;50(12):2138-44

Comparative study of hydrogen and methane production in the human colon using caecal and faecal homogenates. Flourié B, et al. **Gut** 1990 Jun;31(6):684-5

Transport of water and food particles through the avian ceca and colon. Björnhag G. **J Exp Zool Suppl** 1989;3:32-7 (24 ref.)

Effect of cecectomy on water and nutrient absorption of birds. Chaplin SB. **J Exp Zool Suppl** 1989;3:81-6 (33 ref.)

Relationship of cecal and colonic motility to diet, habitat, and cecal anatomy in several avian species. Duke GE. **J Exp Zool Suppl** 1989;3:38-47

Absorption by the cecum of wild birds: is there interspecific variation. Goldstein DL. **J Exp Zool Suppl** 1989;3:103-10 (44 ref.)

Ammonia production from uric acid, urea, and amino acids and its absorption from the ceca of the cockerel. Karasawa Y. **J Exp Zool Suppl** 1989;3:75-80

Sugar and amino acid transport properties of the chicken ceca. Moretó M, et al. **J Exp Zool Suppl** 1989;3:111-6 (20 ref.)

Interspecific variation in sugar and amino acid transport by the avian cecum. Obst BS, et al. **J Exp Zool Suppl** 1989; 3:117-26

The avian ceca: obligate combustion chambers or facultative afterburners? The conditioning influence of diet. Redig PT. **J Exp Zool Suppl** 1989;3:66-9 (12 ref.)

Why do grouse have ceca? A test of the fiber digestion theory. Remington TE. **J Exp Zool Suppl** 1989;3:87-94

Water and electrolyte transport by the avian ceca. Thomas DH, et al. **J Exp Zool Suppl** 1989;3:95-102

Effects of feeding fermentable carbohydrates on the cecal concentrations of minerals and their fluxes between the cecum and blood plasma in the rat. Demigné C, et al. **J Nutr** 1989 Nov;119(11):1625-30

Effect of colostomy on nitrogen nutrition in the chicken fed a low protein diet plus urea. Karasawa Y. **J Nutr** 1989 Oct;119(10):1388-91

The anaerobic metabolism of verapamil in rat cecal contents forms nor-verapamil and thiocyanate. Koch RL, et al.

J Pharmacol Exp Ther 1990 Aug;254(2):612–5

MICROBIOLOGY

Experimental models for studying the microbial ecology in the intestinal tract. Raibaud P.
Acta Gastroenterol Latinoam 1989;19(4):219–26

Influence of diet and monensin on development of anaerobic fungi in the rumen, duodenum, cecum, and feces of cows. Grenet E, et al. Appl Environ Microbiol 1989 Sep; 55(9):2360–4

Metabolism of leukotriene E4 to 5–hydroxy–6–mercapto7,9–trans–11,14–cis–eicosatetraenoic acid by microfloral cysteine–conjugate beta–lyase and rat cecum contents. Bernström K, et al. Arch Biochem Biophys 1989 Dec;275(2):531–9

Protection of chicks against Salmonella infection with a mixture of pure cultures of intestinal bacteria. Gleeson TM, et al. Avian Dis 1989 Oct–Dec;33(4):636–42

Dietary modification of potential vitamin K supply from enteric bacterial menaquinones in rats. Mathers JC, et al. Br J Nutr 1990 May;63(3):639–52

Enzymatic reduction of an epoxysuccinic acid derivative by rat cecal microflora. Fukushima K, et al. Drug Metab Dispos 1990 Mar–Apr;18(2):264–6

Modified mutagen activation in hepatic fractions from rats fed dietary rutin—interaction between gut flora and host metabolism. Mallett AK, et al. Food Chem Toxicol 1989 Sep;27(9):607–11

Microbes of the avian cecum: types present and substrates utilized. Mead GC. J Exp Zool Suppl 1989;3:48–54 (52 ref.)

Age–related changes in the persistence and pathogenicity of Salmonella typhimurium in chicks. Gast RK, et al. Poult Sci 1989 Nov;68(11):1454–60

Inhibition of Campylobacter jejuni in vitro by broiler chicken caecal contents. Humphrey TJ, et al. Vet Rec 1989 Sep 2;125(10):272–3

PATHOLOGY

Effect of silica treatment on histopathology of intestinal & hepatic amoebiasis in murine model. Gill NJ, et al. Indian J Med Res 1989 Nov;89:426–34

Cecal adenocarcinoma in a cow. Suzuki T, et al. Nippon Juigaku Zasshi 1989 Oct;51(5):1041–3

Observations on avian intestinal spirochaetosis. Dwars RM, et al. Vet Q 1990 Jan;12(1):51–5

Caecal cores and mortality in French partridges (Alectoris rufa). Swarbrick O. Vet Rec 1990 Jan 13;126(2):41

[Local necrotic typhlitis] Naĭmovich VV. Vestn Khir 1989 Dec;144(12):29–30 (Rus)

PHYSIOLOGY

Functions of the flow of urine and digesta in the avian lower intestine. Thomas DH, et al. Acta Vet Scand Suppl 1989; 86:212–8 (30 ref.)

Dual effects of carbachol on cytosolic Ca2+ and contraction in intestinal smooth muscle. Mitsui M, et al. Am J Physiol 1990 May;258(5 Pt 1):C787–93

Ileocecal sphincter contraction to colonic distension: a tachykinin–mediated spinal reflex. Rothstein RD, et al. Am J Physiol 1990 Apr;258(4 Pt 1):G585–90

Myoelectric activity of the ileum, cecum, and right ventral colon in ponies during interdigestive, nonfeeding, and digestive periods. Ross MW, et al. Am J Vet Res 1990 Apr;51(4):561–6

Role of rat large intestine in reducing diarrhea after 50% or 80% distal small bowel resection. Vázquez CM, et al. Dig Dis Sci 1989 Nov;34(11):1713–9

Function of the avian cecum. Proceedings of the First International Avian Cecal Symposium. Grand Marais, Minnesota, August 21–26, 1988. J Exp Zool Suppl 1989; 3:1–128

Comparison of Mg, Mn, and Co ions affecting the beta–adrenoceptor–mediated membrane response in the guinea–pig taenia caeci. Maruta K, et al. Jpn J Physiol 1989;39(5):659–71

Inhibitory effects of neuropeptide Y (NPY) on CRF and stress–induced cecal motor response in rats. Jiménez M, et al. Life Sci 1990;47(3):205–11

Liquid flow and capacity of the caecum and colon of the horse. Simmons HA, et al. Res Vet Sci 1990 Mar; 48(2):265–6

PHYSIOPATHOLOGY

Delayed stomach to caecum transit time in the diabetic rat. Possible role of hyperglucagonaemia. Chesta J, et al. Gut 1990 Jun;31(6):660–2

[Functional state of the cecal–colonic regulatory system in idiopathic megacolon] Iaremchuk AIa, et al. Klin Khir 1990;(2):60 (Rus)

RADIOGRAPHY

The assessment of colonic water retention prior to double–contrast enema. Pietilä JA, et al. Gastrointest Radiol 1990 Spring;15(2):164–8

SURGERY

Growing small–intestinal neomucosa in serosa–lined pouches. Nguyen BL, et al. Curr Surg 1990 Jul–Aug;47(4):269–71

Mucosal ultrastructure of continent cecal reservoir for urine and its ileal nipple valve 2–9 years after construction [see comments] Carlén B, et al. J Urol 1990 Feb;143(2):372–6 Comment in: J Urol 1990 Feb;143(2):370–1.

Functional characteristics of the continent ileocecal urinary reservoir: mechanisms of urinary continence. Carroll PR, et al. J Urol 1989 Oct;142(4):1032–6

Total replacement of the bladder with an intestinal pouch for normal micturition after cystectomy. Kakizoe T, et al. Jpn J Clin Oncol 1989 Sep;19(3):276–82

Radiologic evaluation of continent urinary reservoirs. Kenney PJ, et al. Radiographics 1990 May;10(3):455–66 (15 ref.)

The construction and reconstruction of the vagina with the colocecum. Turner–Warwick R, et al. Surg Gynecol Obstet 1990 Feb;170(2):132–6

Therapy and clinical progress of cattle with dilatation and torsion of the caecum [see comments] Braun U, et al. Vet Rec 1989 Oct 21;125(17):430–3 Comment in: Vet Rec 1989 Nov 4;125(19):490.

[Review of a 14–year experience of augmentation enterocystoplasty. Observations on bowel dynamics] Esa A, et al. Nippon Hinyokika Gakkai Zasshi 1990 May; 81(5):713–8 (Eng. Abstr.) (Jpn)

[Appendectomy in extension of inflammatory tissue infiltration to the cupula of cecum] Saidkhanov AS, et al. Khirurgiia (Mosk) 1989 Oct;(10):117–20 (Rus)

[A method of treating the appendiceal stump] Oleĭnikov VA, et al. Klin Khir 1990;(4):77 (Rus)

ULTRASTRUCTURE

Ultrastructure of experimental intestinal invasive amebiasis. Martínez–Palomo A, et al. Am J Trop Med Hyg 1989 Sep; 41(3):273–9

Morphometry of the galliform cecum: a comparison between Gambel's quail and the domestic fowl. Strong TR, et al. Cell Tissue Res 1990 Mar;259(3):511–8

Diarrhea induced by Treponema hyodysenteriae: a young chick cecal model for swine dysentery. Sueyoshi M, et al. Infect Immun 1990 Oct;58(10):3348–62

Ultrastructural observations on the caecum of the rabbit. Ross JA, et al. J Anat 1989 Jun;164:165–73

Ultrastructural differences between the two major components of chicken ceca. Dantzer V. J Exp Zool Suppl 1989;3:21–31

CEFACLOR see under CEPHALEXIN

CEFADROXIL

PHARMACOKINETICS

The pharmacokinetics of cefadroxil in the foal. Duffee NE, et al. J Vet Pharmacol Ther 1989 Sep;12(3):322–6

PHARMACOLOGY

The in–vitro activity of ceftibuten against 475 clinical isolates of gram–negative bacilli, compared with cefuroxime and cefadroxil. Bragman SG, et al. J Antimicrob Chemother 1990 Feb;25(2):221–6

In–vitro enhancement of leukotriene B4 receptor expression on human neutrophils by cefadroxil. Knöller J, et al. J Antimicrob Chemother 1990 Apr;25(4):613–20

[Alteration of IgE production by cefadroxil] Clot J, et al. Pathol Biol (Paris) 1990 Apr;38(4):307–9 (Eng. Abstr.) (Fre)

THERAPEUTIC USE

A randomised, prospective, single–blind comparison of cefadroxil and amoxycillin in the treatment of acute exacerbations of chronic bronchitis. Bint AJ, et al. Br J Clin Pract 1989 Jan;43(1):19–23

Once–daily cefadroxil versus oral penicillin in the pediatric treatment of streptococcal pharyngitis. Goldfarb J, et al. Clin Ther 1988;10(2):178–82

Cefetamet pivoxil in acute pyelonephritis: an open study. Stathakis C, et al. Curr Med Res Opin 1990;12(1):43–50

Randomised double–blind study of norfloxacin and cefadroxil in the treatment of acute pyelonephritis. Sandberg T, et al. Eur J Clin Microbiol Infect Dis 1990 May;9(5):317–23

A comparison of erythromycin and cefadroxil in the prevention of flare–ups from asymptomatic teeth with pulpal necrosis and associated periapical pathosis. Morse DR, et al. Oral Surg Oral Med Oral Pathol 1990 May; 69(5):619–30

Once daily cefadroxil therapy for pyoderma. Hains CS, et al. Pediatr Infect Dis J 1989 Sep;8(9):648–9

Cefadroxil as an alternative to metronidazole in the treatment of bacterial vaginosis. Wathne B, et al. Scand J Infect Dis 1989;21(5):585–6

CEFALOTIN see CEPHALOTHIN

CEFAMANDOLE

ADMINISTRATION & DOSAGE

Systemic antibiotic regimens for acute cholecystitis treated by early cholecystectomy. Lau WY, et al. Aust N Z J Surg 1990 Jul;60(7):539–43

Topical and systemic antibiotics in the prevention of wound infection. Nichols RL. Curr Surg 1990 Jul–Aug;47(4):274–5

Topical and systemic antibiotics in the prevention of wound infection. Stringel G, et al. J Pediatr Surg 1989 Oct; 24(10):1003–6

Cesarean prophylaxis: a comparison of cefamandole and cefazolin by both intravenous and lavage routes, and risk factors associated with endometritis. Peterson CM, et al. Obstet Gynecol 1990 Feb;75(2):179–82

ANALOGS & DERIVATIVES

Simultaneous determination of cefamandole and cefamandole nafate in human plasma and urine by high–performance liquid chromatography with column switching. Lee HS, et al. J Chromatogr 1990 Jun 29;528(2):425–33

ANALYSIS

Simultaneous determination of cefamandole and cefamandole nafate in human plasma and urine by high–performance liquid chromatography with column switching. Lee HS, et al. J Chromatogr 1990 Jun 29;528(2):425–33

PHARMACOKINETICS

[Plasma and tissue concentrations of cefamandole during cardiac surgery] Clavey M, et al. Ann Fr Anesth Reanim 1989;8(4):316–20 (Eng. Abstr.) (Fre)

[A pharmacokinetic study of diffusion in adenomatous prostatic tissue of an intravenous bolus of cefamandole] Billebaud T, et al. Ann Urol (Paris) 1990;24(2):141–5 (Eng. Abstr.) (Fre)

[Penetration of antibiotics into the vitreous humor in man] Tamai M, et al. Nippon Ganka Gakkai Zasshi 1990 Feb; 94(2):219–23 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

Effects of subinhibitory concentrations of vancomycin or cefamandole on biofilm production by coagulase–negative staphylococci. Dunne WM Jr. Antimicrob Agents Chemother 1990 Mar;34(3):390–3

Inoculum effect on growth–delay time of oxacillin–resistant strains of Staphylococcus aureus and Staphylococcus epidermidis exposed to cefamandole, cefazolin, and cefuroxime. Yourassowsky E, et al. Antimicrob Agents Chemother 1990 Apr;34(4):505–9

Effect of biliary diversion on the ability of cefamandole to inhibit vitamin K metabolism. Tibbitts JS, et al. Drug Metabol Drug Interact 1989;7(2–3):149–60

Intracellular activity of cefamandole and aztreonam against phagocytosed Escherichia coli and Staphylococcus aureus. Adinolfi LE, et al. J Antimicrob Chemother 1989 Dec; 24(6):927–35

THERAPEUTIC USE

Cefamandole versus cefonicid prophylaxis in cardiovascular surgery: a prospective study. Gelfand MS, et al. Ann Thorac Surg 1990 Mar;49(3):435–9

Comparative evaluation of cefotaxime and cephamandole in the prevention of post–operative infective complications following emergency abdominal surgery. Ridley PD, et al. Br J Clin Pract 1990 Jan;44(1):17–21

Comment: cost effectiveness of cefazolin compared with cefamandole [letter] MacArthur RB, et al. DICP 1990 Jul–Aug;24(7–8):788

A comparative study of cefamandole and ceftriaxone as prophylaxis in cardiac surgery. Neidhart P, et al. Infection 1990 Mar–Apr;18(2):101–4

Alterations of coagulase–negative staphylococcal flora in cardiac surgery patients: comparative study between cefamandole and pefloxacin perioperative prophylaxis. Baiocchi P, et al. J Chemother 1989 Oct;1(5):305–9

Efficacy of prophylactic antibiotics in vascular surgery: an arterial wall microbiologic and pharmacokinetic perspective. Lalka SG, et al. J Vasc Surg 1989 Nov; 10(5):501–9; discussion 509–10

[Antibiotic prophylaxis with cefamandole: pharmacokinetic modifications in hemorrhagic surgery] Drouet JC, et al. Ann Fr Anesth Reanim 1989;8 Suppl:R159 (Fre)

[Antibiotic prophylaxis using cefamandole in endoscopic prostatic surgery: "flash" treatment versus short 24–hour treatment] Tauzin–Fin P, et al. Ann Fr Anesth Reanim 1989; 8 Suppl:R34 (Fre)

[Comparative study of 2 antibiotic prophylaxis regimens in endoscopic prostatic surgery] Tauzin–Fin P, et al. Pathol Biol (Paris) 1989 Jun;37(5 Pt 2):677–80 (Eng. Abstr.) (Fre)

TOXICITY

Effects of cefamandole on spermatogenic development of young CD rats. Hoover DM, et al. Fundam Appl Toxicol 1989 Nov;13(4):737–46

CEFATRIZINE see under CEPHALOSPORINS

CEFAZOLIN

ADMINISTRATION & DOSAGE

Effect of primary fluids and dilutional volumes on the delivery of cefazolin sodium by a membrane infusion device. Nahata MC, et al. Am J Hosp Pharm 1989 Nov; 46(11):2318–21

Antibiotic irrigation and the formation of intraabdominal

adhesions. Rappaport WD, et al. **Am J Surg** 1989 Nov; 158(5):435–7

Accidental epidural cephazolin injection: safeguards for patient-controlled analgesia. Kopacz DJ, et al. **Anesthesiology** 1990 May;72(5):944–7

Randomized, double-blind comparison of the efficacies, costs, and vaginal flora alterations with single-dose ceftriaxone and multidose cefazolin prophylaxis in vaginal hysterectomy. Stiver HG, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1194–7

Discitis after discography. The role of prophylactic antibiotics. Osti OL, et al. **J Bone Joint Surg [Br]** 1990 Mar;72(2):271–4

Appropriate prophylaxis for TMJ prostheses [letter; comment] Gradon JD. **J Oral Maxillofac Surg** 1990 Jun; 48(6):667–8 Comment on: J Oral Maxillofac Surg 1989 Nov;47(11):1210–4.

Cesarean prophylaxis: a comparison of cefamandole and cefazolin by both intravenous and lavage routes, and risk factors associated with endometritis. Peterson CM, et al. **Obstet Gynecol** 1990 Feb;75(2):179–82

Antibiotic prophylaxis for surgery in morbidly obese patients. Forse RA, et al. **Surgery** 1989 Oct;106(4):750–6; discussion 756–7

[Combined antibacterial therapy of infectious complications in oncological patients] Smolianskaia AZ. **Antibiot Khimioter** 1989 Sep;34(9):696–9 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Acute confusional state with postoperative intravenous cefazolin. Herd AM, et al. **BMJ** 1989 Aug 5; 299(6695):393–4

Photo recall-like phenomenon following the use of cefazolin and gentamicin sulfate. Flax SH, et al. **Cutis** 1990 Jul; 46(1):59–61

[A case of peripheral neuropathy due to the use of kefzol] Vlasiuk VN, et al. **Vrach Delo** 1990 May;(5):82–3 **(Rus)**

ANALOGS & DERIVATIVES

In vitro activities of cefcanel and some other cephalosporins against Pasteurella multocida. Holst E, et al. **Antimicrob Agents Chemother** 1989 Dec;33(12):2142–3

[Drug-protein binding in elderly subjects] Shin K, et al. **Nippon Ronen Igakkai Zasshi** 1989 Sep;26(5):481–8 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Cyclic and linear sweep voltammetry of cefazolin and cefmetazole: electroanalytical applications. Muñoz E, et al. **Analyst** 1989 Dec;114(12):1611–5

METABOLISM

Effect of protein binding on the disposition of cephalexin and cefazolin in a simultaneous perfusion system of rat liver and kidney. Okumura K, et al. **Chem Pharm Bull (Tokyo)** 1989 Nov;37(11):3150–2

PHARMACOKINETICS

Placental transfer of cefazolin and piperacillin in pregnancies remote from term complicated by Rh isoimmunization. Brown CE, et al. **Am J Obstet Gynecol** 1990 Sep; 163(3):938–43

Assessment of cefazolin and cefuroxime tissue penetration by using a continuous intravenous infusion. Connors JE, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1128–31

Vitreous cefazolin levels after intravenous injection. Effects of inflammation, repeated antibiotic doses, and surgery. Martin DF, et al. **Arch Ophthalmol** 1990 Mar;108(3):411–4

Cefazolin levels after intravitreal injection. Effects of inflammation and surgery. Ficker L, et al. **Invest Ophthalmol Vis Sci** 1990 Mar 1;31(3):502–5

Multiple dose pharmacokinetics of a new cefazolin derivative for sustained release. Vicente MT, et al. **J Antimicrob Chemother** 1989 Aug;24(2):269–71

PHARMACOLOGY

In vitro bactericidal activities of gentamicin, cefazolin, and imipenem in peritoneal dialysis fluids. Halstead DC, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1553–6

Inoculum effect on growth-delay time of oxacillin-resistant strains of Staphylococcus aureus and Staphylococcus epidermidis exposed to cefamandole, cefazolin, and cefuroxime. Yourassowsky E, et al. **Antimicrob Agents Chemother** 1990 Apr;34(4):505–9

Susceptibility of clinical isolates to cephalexin, cefazolin and cefotaxime. Gupta BL, et al. **Indian Pediatr** 1989 May; 26(5):466–71

[Hospital and district differences in susceptibilities to antibiotics of main clinical isolates] Igari J, et al. **Jpn J Antibiot** 1990 Feb;43(2):362–73 (Eng. Abstr.) **(Jpn)**

[The in vitro effect of a combination of sulbactam with cephalothin and cefazolin on strains of Escherichia coli and Proteus mirabilis which produce beta lactamase] Máčková M, et al. **Bratisl Lek Listy** 1990 Apr;91(4):303–8 (Eng. Abstr.) **(Slo)**

THERAPEUTIC USE

Antibiotic prophylaxis: is there a difference? Faro S, et al. **Am J Obstet Gynecol** 1990 Apr;162(4):900–7; discussion 907–9

Comparative evaluation of cefazolin and clindamycin in the treatment of experimental Staphylococcus aureus osteomyelitis in rabbits. Mader JT, et al. **Antimicrob Agents Chemother** 1989 Oct;33(10):1760–4

Comment: cost effectiveness of cefazolin compared with cefamandole [letter] MacArthur RB, et al. **DICP** 1990 Jul-Aug;24(7–8):788

Ceftriaxone versus aztreonam plus cefazolin for infections in cancer patients with adequate neutrophil counts. Menichetti F, et al. **Infection** 1990 May-Jun;18(3):166–9

Comparison of one dose cefazolin versus one dose cefotetan for cesarean section prophylaxis. Probst JR, et al. **J Fla Med Assoc** 1989 Dec;76(12):1027–9

Postoperative infection in cardiac surgery: the influence of a change in prophylactic antibiotic regimen. Mehta G, et al. **J Hosp Infect** 1990 May;15(4):353–62

Cardiovascular surgery prophylaxis. A randomized, controlled comparison of cefazolin and cefuroxime. Doebbeling BN, et al. **J Thorac Cardiovasc Surg** 1990 Jun; 99(6):981–9

Efficacy of prophylactic antibiotics in vascular surgery: an arterial wall microbiologic and pharmacokinetic perspective. Lalka SG, et al. **J Vasc Surg** 1989 Nov; 10(5):501–9; discussion 509–10

Antibiotic therapy of catheter infections in patients receiving home parenteral nutrition. Miller SJ, et al. **JPEN J Parenter Enteral Nutr** 1990 Mar-Apr;14(2):143–7

Role of antibiotic prophylaxis in retropubic surgery for stress urinary incontinence. Bhatia NN, et al. **Obstet Gynecol** 1989 Oct;74(4):637–9

Antibiotic prophylaxis for cesarean delivery: is an extended-spectrum agent necessary? Carlson C, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 1):343–6

A prospective, randomized double-blind study of the use of antibiotics at the time of mastectomy. Wagman LD, et al. **Surg Gynecol Obstet** 1990 Jan;170(1):12–6

Perioperative antibiotic prophylaxis in cardiovascular surgery: a prospective randomized comparative trial of cefazolin versus ceftriaxone [letter; comment] Geroulanos S. **World J Surg** 1990 Mar-Apr;14(2):277 Comment on: World J Surg 1989 Nov-Dec;13(6):798–801; discussion 801–2.

Perioperative antibiotic prophylaxis in cardiovascular surgery: a prospective randomized comparative trial of cefazolin versus ceftriaxone [see comments] Soteriou M, et al. **World J Surg** 1989 Nov-Dec;13(6):798–801; discussion 801–2 Comment in: World J Surg 1990 Mar-Apr;14(2):277.

[Comparative study of two protocols of antibiotic prophylaxis in endoscopic urologic surgery] Lepage JY, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):564–7 (Eng. Abstr.) **(Fre)**

[Prevention of infection in elective orthopedic interventions with special reference to alloplastic joint replacement] Aebi B, et al. **Helv Chir Acta** 1989 Aug;56(3):387–97 (Eng. Abstr.) **(Ger)**

[Ceftriaxone or combined cefazolin-gentamicin for complicated urinary tract infections] Landau Z, et al. **Harefuah** 1990 Feb 1;118(3):152–3 (Eng. Abstr.) **(Heb)**

[The cytoarchitectonics of hard chancre in rabbits with experimental syphilis exposed to soliusul'fon and cefamezine] Delektorskii VV, et al. **Vestn Dermatol Venerol** 1990;(4):32–6 (Eng. Abstr.) **(Rus)**

CEFMENOXIME

ANALOGS & DERIVATIVES

Rapid analysis of ceftetrame in human plasma using sorbent extraction and high-performance liquid chromatography. Hicks CM, et al. **J Chromatogr** 1989 Dec 29;497:349–54

[Clinical study on cefteram pivoxil in pediatric field] Fujita M, et al. **Jpn J Antibiot** 1989 Aug;42(8):1845–8 (Eng. Abstr.) **(Jpn)**

[A clinical study on cefteram pivoxil granule in the field of pediatrics] Haruta T, et al. **Jpn J Antibiot** 1989 Sep; 42(9):2016–22 (Eng. Abstr.) **(Jpn)**

[Laboratory and clinical studies on cefteram pivoxil in the field of pediatrics] Hayakawa F, et al. **Jpn J Antibiot** 1989 Aug;42(8):1849–59 (Eng. Abstr.) **(Jpn)**

[Clinical studies of cefteram pivoxil in pediatric infection] Hirosawa H, et al. **Jpn J Antibiot** 1989 Aug;42(8):1828–36 (Eng. Abstr.) **(Jpn)**

[Clinical studies of cefteram pivoxil in pediatrics] Iwai N, et al. **Jpn J Antibiot** 1989 Sep;42(9):1963–80 (Eng. Abstr.) **(Jpn)**

[The influence of cefteram pivoxil on the intestinal bacterial flora] Iwata S, et al. **Jpn J Antibiot** 1989 Aug;42(8):1761–79 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of cefteram pivoxil in the pediatric field] Meguro H, et al. **Jpn J Antibiot** 1989 Aug;42(8):1815–27 (Eng. Abstr.) **(Jpn)**

[A clinical study on cefteram pivoxil in the field of pediatrics] Minamitani M, et al. **Jpn J Antibiot** 1989 Sep;42(9):1938–47 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of cefteram pivoxil in respiratory tract infections] Miyazaki RM, et al. **Jpn J Antibiot** 1990 Feb; 43(2):326–36 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies of cefteram pivoxil granule in the pediatric field] Motohiro T, et al. **Jpn J Antibiot** 1989 Sep;42(9):2023–61 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic studies on oral antibiotics in pediatrics. II. A pharmacokinetic study on cefteram pivoxil in pediatrics] Nakamura H, et al. **Jpn J Antibiot** 1989 Sep; 42(9):1981–2003 (Eng. Abstr.) **(Jpn)**

[Clinical observations with cefteram pivoxil granules in field of pediatrics] Nakazato A, et al. **Jpn J Antibiot** 1989 Aug; 42(8):1791–8 (Eng. Abstr.) **(Jpn)**

[Laboratory and clinical studies of cefteram pivoxil in pediatric field] Nishimura T, et al. **Jpn J Antibiot** 1989 Sep;42(9):2004–15 (Eng. Abstr.) **(Jpn)**

[Clinical and pharmacokinetic evaluation of cefteram pivoxil in children] Sakata H, et al. **Jpn J Antibiot** 1989 Aug; 42(8):1727–34 (Eng. Abstr.) **(Jpn)**

[Clinical studies on cefteram pivoxil granules in pediatrics] Sato H, et al. **Jpn J Antibiot** 1989 Sep;42(9):1948–62 (Eng. Abstr.) **(Jpn)**

[A clinical study on cefteram pivoxil in pediatrics] Satoh Y, et al. **Jpn J Antibiot** 1989 Aug;42(8):1780–90 (Eng. Abstr.) **(Jpn)**

[Clinical studies on cefteram pivoxil in the field of pediatrics] Shinozaki T, et al. **Jpn J Antibiot** 1989 Aug;42(8):1837–44 (Eng. Abstr.) **(Jpn)**

[Laboratory and clinical studies on cefteram pivoxil in pediatric field] Suzuki G, et al. **Jpn J Antibiot** 1989 Aug; 42(8):1751–60 (Eng. Abstr.) **(Jpn)**

[Bacteriological, pharmacokinetic and clinical studies on cefteram pivoxil in the pediatric field] Toyonaga Y, et al. **Jpn J Antibiot** 1989 Aug;42(8):1799–814 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of cefteram pivoxil fine granules in pediatric infections] Wagatsuma Y, et al. **Jpn J Antibiot** 1989 Aug;42(8):1735–44 (Eng. Abstr.) **(Jpn)**

[Clinical studies on cefteram pivoxil in the treatment of respiratory infections] Yamaki K, et al. **Jpn J Antibiot** 1990 Jan;43(1):81–8 (Eng. Abstr.) **(Jpn)**

[Clinical studies on cefteram pivoxil in pediatrics] Yokoyama M, et al. **Jpn J Antibiot** 1989 Aug;42(8):1745–50 (Eng. Abstr.) **(Jpn)**

METABOLISM

[Fundamental and clinical studies on cefmenoxime in perinatal period] Cho N, et al. **Jpn J Antibiot** 1989 Dec; 42(12):2692–708 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of cefmenoxime in infections of neonates] Haruta T, et al. **Jpn J Antibiot** 1989 Dec;42(12):2661–71 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

[Bacteriological and clinical evaluations of cefmenoxime in neonates and premature infants] Sunakawa K, et al. **Jpn J Antibiot** 1989 Dec;42(12):2617–26 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

[Clinical and pharmacokinetic evaluation of cefmenoxime in neonates and young infants] Fujita K, et al. **Jpn J Antibiot** 1989 Dec;42(12):2574–81 (Eng. Abstr.) **(Jpn)**

[A preclinical and clinical study of cefmenoxime in newborns] Hashira S, et al. **Jpn J Antibiot** 1989 Dec; 42(12):2607–16 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on cefmenoxime in neonates and infants] Iwai N, et al. **Jpn J Antibiot** 1989 Dec;42(12):2641–60 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on cefmenoxime in neonates and premature infants] Motohiro T, et al. **Jpn J Antibiot** 1989 Dec;42(12):2672–91 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on cefmenoxime in newborn infants] Nakazawa S, et al. **Jpn J Antibiot** 1989 Dec;42(12):2627–40 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies on cefmenoxime in neonates and premature infants] Sato Y, et al. **Jpn J Antibiot** 1989 Dec;42(12):2582–92 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic and clinical studies of cefmenoxime in neonates and premature infants] Toyonaga Y, et al. **Jpn J Antibiot** 1989 Dec;42(12):2593–606 (Eng. Abstr.) **(Jpn)**

CEFMETAZOLE

ADMINISTRATION & DOSAGE

[A successful treatment of an infective endocarditis caused by methicillin-resistant Staphylococcus aureus with a combination of cefmetazole with fosfomycin] Fukuda K, et al. **Jpn J Antibiot** 1989 Sep;42(9):1913–8 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

[Antibiotics-induced agranulocytosis. Patient's IgG inhibits a GM colony formation] Sugimoto M, et al. **Rinsho Ketsueki** 1989 May;30(5):768–73 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Cyclic and linear sweep voltammetry of cefazolin and cefmetazole: electroanalytical applications. Muñoz E, et al. **Analyst** 1989 Dec;114(12):1611–5

METABOLISM

Biliary excretion and choleretic effect of cefmetazole in rats. Gonzalez J, et al. **Antimicrob Agents Chemother** 1989 Nov; 33(11):1970–4

PHARMACOKINETICS

Disposition of cefmetazole in healthy volunteers and patients with impaired renal function. Halstenson CE, et al. **Antimicrob Agents Chemother** 1990 Apr;34(4):519–23

[A study of tissue transfer of cefmetazole in the blood and uterus in pregnant rabbits] Morisaki J, et al. **Jpn J Antibiot** 1990 Feb;43(2):318–20 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Cefmetazole (CS–1170), a "new" cephamycin with a decade of clinical experience. Jones RN. **Diagn Microbiol Infect Dis** 1989 Sep–Oct;12(5):367–79 (74 ref.)

[Hospital and district differences in susceptibilities to antibiotics of main clinical isolates] Igari J, et al. **Jpn J Antibiot** 1990 Feb;43(2):362–73 (Eng. Abstr.) **(Jpn)**

[In vitro synergism of two–drug combinations among cefamandole, flomoxef and imipenem against MRSA] Inoue M, et al. **Jpn J Antibiot** 1990 Feb;43(2):233–8 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Efficacy of cefmetazole in the treatment of active syphilis in the rabbit model. Baker–Zander SA, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1465–9

Cefmetazole sodium (Zefazone). **Med Lett Drugs Ther** 1990 Jul 13;32(822):65–6

Controlled comparison of cefmetazole with cefoxitin for prophylaxis in elective cholecystectomy. Berne TV, et al. **Surg Gynecol Obstet** 1990 Feb;170(2):137–40

[Clinical experience with a new antibiotic: cefmetazole] De Lorenzi E, et al. **Clin Ter** 1990 Jan 31;132(2):105–8 (Eng. Abstr.) **(Ita)**

CEFONICID

ADMINISTRATION & DOSAGE

Treatment of experimental pyelonephritis in the monkey. Roberts JA, et al. **J Urol** 1990 Jan;143(1):150–4

Perioperative antibiotic prophylaxis for herniorrhaphy and breast surgery. Platt R, et al. **N Engl J Med** 1990 Jan 18; 322(3):153–60

PHARMACOKINETICS

Cortical and medullary kidney tissue levels of cefonicid in human beings. Scaglione F, et al. **Int J Clin Pharmacol Res** 1989;9(5):313–7

PHARMACOLOGY

In vitro activity of cefonicid compared to other antibiotics against clinical bacterial isolates. Verbist L, et al. **Acta Clin Belg** 1990;45(2):113–9

THERAPEUTIC USE

Cefamandole versus cefonicid prophylaxis in cardiovascular surgery: a prospective study. Gelfand MS, et al. **Ann Thorac Surg** 1990 Mar;49(3):435–9

Randomized, double–blind trial of cefonicid and nafcillin in the treatment of skin and skin structure infections. Daly JS, et al. **Antimicrob Agents Chemother** 1990 Apr; 34(4):654–6

A trial using early preoperative administration of cefonicid for antimicrobial prophylaxis with hysterectomies. Eron LJ, et al. **DICP** 1989 Sep;23(9):655–8

Single–dose antibiotic prophylaxis in patients at high risk for infection in biliary surgery: a prospective and randomized study comparing cefonicid with mezlocillin. Targarona EM, et al. **Surgery** 1990 Mar;107(3):327–34

CEFOPERAZONE

ADMINISTRATION & DOSAGE

Incompatibility of cefoperazone and promethazine [letter] Scott SM. **Am J Hosp Pharm** 1990 Mar;47(3):519

In vitro assessment of sulbactam plus cefoperazone in the treatment of bacteria isolated from cancer patients. Bodey GP, et al. **Diagn Microbiol Infect Dis** 1989 Jul–Aug;12(4 Suppl):209S–214S

Efficacy of sulbactam/cefoperazone for the treatment of infections in patients with hematologic diseases. Horiuchi A, et al. **Diagn Microbiol Infect Dis** 1989 Jul–Aug;12(4 Suppl):215S–219S

[Treatment with sulbactam/cefoperazone of severe infections in patients with hematological disorders] Ohno R, et al. **Jpn J Antibiot** 1989 Aug;42(8):1713–9 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

[Side effects of cefoperazone (third–generation cephalosporin) in a child with acute lymphoblastic leukemia] Koehler M, et al. **Pediatr Pol** 1989 Jul; 64(7):497–9 **(Pol)**

PHARMACOKINETICS

Pharmacokinetic study on adenomatous prostate tissue concentrations of cefoperazone. Clinical efficacy and patient tolerance of intramuscular cefoperazone treatment of chronic bacterial prostatitis. Melloni D, et al. **Chemotherapy** 1989;35(6):410–5

Penetration of cefoperazone into ascites. Van Gossum A, et al. **Eur J Clin Pharmacol** 1989;37(6):577–80

The effect of obstruction on the biliary excretion of cefoperazone and ceftazidime. Leung JW, et al. **J Antimicrob Chemother** 1990 Mar;25(3):399–406

Transfer of ceftizoxime surpasses that of cefoperazone by the isolated human placenta perfused in vitro. Fortunato SJ, et al. **Obstet Gynecol** 1990 May;75(5):830–3

Pharmacokinetics of single doses of cefoperazone given by the intravenous and intramuscular routes to unweaned calves. Soback S, et al. **Res Vet Sci** 1989 Sep;47(2):158–63

PHARMACOLOGY

Beta–lactamase production in members of the family Enterobacteriaceae and resistance to beta–lactam–enzyme inhibitor combinations. Thomson KS, et al. **Antimicrob Agents Chemother** 1990 Apr;34(4):622–7

Reversal by cefoperazone of resistance to etoposide, doxorubicin, and vinblastine in multidrug resistant human sarcoma cells. Gosland MP, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):6901–5

In vitro activity of cefoperazone/sulbactam and other antimicrobials against anaerobic bacteria. D'Amato RF, et al. **Diagn Microbiol Infect Dis** 1990 Jan–Feb;13(1):51–5

In vitro comparison of cefoperazone/sulbactam with selected antimicrobials against 300 bacteroides isolates. Inhibitory activity and time–kill kinetic studies. Gelfand MS, et al. **Diagn Microbiol Infect Dis** 1989 Sep–Oct;12(5):421–8

Comparative in vitro activity of cefoperazone and various combinations of cefoperazone/sulbactam. Knapp CC, et al. **Diagn Microbiol Infect Dis** 1990 Jan–Feb;13(1):45–9

Antimicrobial activity of cefoperazone with clavulanic acid or sulbactam against Enterobacteriaceae [letter] Nagy E, et al. **J Antimicrob Chemother** 1990 Apr;25(4):701–3

[Combined effect of sulbactam/cefoperazone and other antibiotics against clinical isolates of multi–resistant strains. I. Effect of sulbactam against beta–lactams resistant strains and in vitro combined effect of sulbactam/cefoperazone with each of piperacillin, latamoxef, ceftazidime, fosfomycin and doxycycline] Kouda M, et al. **Jpn J Antibiot** 1990 Apr;43(4):636–58 (Eng. Abstr.) **(Jpn)**

[Sensitivity to cefoperazone (CEFOBID) of microorganisms isolated from diagnostic specimens] Janowiec M, et al. **Pneumonol Pol** 1989 Jul–Sep;57(7–9):409–13 (Eng. Abstr.) **(Pol)**

THERAPEUTIC USE

Treatment of experimental brain abscess. 2. Effects of combinations of hyaluronidase with antibiotics and dexamethasone. Paşaoğlu A, et al. **Acta Neurochir (Wien)** 1989;100(1–2):79–83

Preventing major operative site infection after radical abdominal hysterectomy and pelvic lymphadenectomy. Hemsell DL, et al. **Gynecol Oncol** 1989 Oct;35(1):55–60

Cefoperazone therapy of bacterial meningitis: a clinical trial. Cristiano P, et al. **Infection** 1989 Nov–Dec;17(6):378–81

Prospective comparative trial of short course (four day) and continuous tobramycin in combination with cefoperazone or mezlocillin in febrile, granulocytopenic patients. Pegram PS, et al. **J Antimicrob Chemother** 1989 Oct;24(4):591–604

Antibiotics for cholangitis [letter] [published erratum appears in Lancet 1990 Jan 13;335(8681):122] [comment] French GL, et al. **Lancet** 1989 Nov 25;2(8674):1271–2 Comment on: Lancet 1989 Sep 30;2(8666):781–2.

Roerig extends antibiotic guarantee [news] **Oncology (Williston Park)** 1990 Feb;4(2):34

Current therapy of malignant external otitis. Strauss M. **Otolaryngol Head Neck Surg** 1990 Feb;102(2):174–6

[Experience with Cefobid in severe infections complicating immunodeficiency diseases] István L, et al. **Orv Hetil** 1989 Nov 5;130(45):2419–24 (49 ref.) (Eng. Abstr.) **(Hun)**

[Clinical evaluation of sulbactam/cefoperazone in lower respiratory tract infections] Ishibashi T, et al. **Jpn J Antibiot** 1990 Feb;43(2):239–56 (Eng. Abstr.) **(Jpn)**

[CEFOBID in the treatment of respiratory tract infection (preliminary report)] Filipecki S, et al. **Pneumonol Pol** 1989 Jul–Sep;57(7–9):403–8 (Eng. Abstr.) **(Pol)**

[Effect of prophylactic cefoperazone in the perioperative period for infections in patients following biliary tract and stomach surgery] Chmura A, et al. **Pol Tyg Lek** 1990 Jan 22–29;45(4–5):56–9 **(Pol)**

[Effect of cefoperazone on the activity of selected parameters of cellular immunity in mice with experimental viral–bacterial infection] Denys A, et al. **Pol Tyg Lek** 1989 Apr 24;44(17):387–9 (Eng. Abstr.) **(Pol)**

CEFOTAXIME

ADMINISTRATION & DOSAGE

Single–dose preoperative prophylaxis in transurethral surgery. Ciprofloxacin versus cefotaxime. Christensen MM, et al. **Am J Med** 1989 Nov 30;87(5A):258S–260S

Comparison of intravenous ciprofloxacin and intravenous cefotaxime for antimicrobial prophylaxis in transurethral surgery. Cox CE. **Am J Med** 1989 Nov 30; 87(5A):252S–254S

Intravenous ciprofloxacin versus cefotaxime prophylaxis during transurethral surgery. Gombert ME, et al. **Am J Med** 1989 Nov 30;87(5A):250S–251S

Oral ciprofloxacin vs parenteral cefotaxime in the treatment of difficult skin and skin structure infections. A multicenter trial. Gentry LO, et al. **Arch Intern Med** 1989 Nov; 149(11):2579–83

Cefotaxime for cesarean section prophylaxis in labor. Intravenous administration vs. lavage. Berkeley AS, et al. **J Reprod Med** 1990 Mar;35(3):214–8

[Single administration of 1 g ceftriaxon versus 3 x 1 g cefotaxim in the treatment of gynecologic infections—a randomized comparative study] Gerstner GJ. **Gynakol Rundsch** 1989;29(3):182–6 **(Ger)**

ADVERSE EFFECTS

Hypoprothrombinemia and cefotaxime [letter; comment] Danan G, et al. **Am J Gastroenterol** 1990 Jun;85(6):763–4 Comment on: Am J Gastroenterol 1989 Jun;84(6):686–8.

Cefotaxime–induced encephalopathy in an uremic patient [letter; comment] Pascual J, et al. **Nephron** 1990;54(1):92 Comment on: Nephron 1988;48(3):237.

Cefotaxime–induced immune hemolytic anemia due to antibodies reacting in vitro by more than one mechanism. Shulman IA, et al. **Transfusion** 1990 Mar–Apr;30(3):263–6

ANALOGS & DERIVATIVES

Treatment of sinus empyema in adults. A coordinated Nordic multicenter trial of cefixime vs. cefaclor. Carenfelt C, et al. **Acta Otolaryngol (Stockh)** 1990 Jul–Aug; 110(1–2):128–35

In vitro activity of Ro 23–9424, a dual–action cephalosporin, compared with activities of other antibiotics. Gu JW, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):189–95

Influence of an antacid containing aluminum and magnesium on the pharmacokinetics of cefixime. Healy DP, et al. **Antimicrob Agents Chemother** 1989 Nov;33(11):1994–7

Single–dose oral cefixime versus amoxicillin plus probenecid for the treatment of uncomplicated gonorrhea in men. Megran DW, et al. **Antimicrob Agents Chemother** 1990 Feb; 34(2):355–7

Comparative in vitro activity of cefixime against Haemophilus influenzae isolates, including ampicillin–resistant, non–beta–lactamase–producing isolates, from pediatric patients. Mortensen JE, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1456–8

Randomized comparative study of cefixime versus cephalexin in acute bacterial exacerbations of chronic bronchitis. Verghese A, et al. **Antimicrob Agents Chemother** 1990 Jun; 34(6):1041–4

Pharmacokinetic study of cefodizime in experimentally infected animals. Arai S, et al. **Arzneimittelforschung** 1989 Aug;39(8):877–82

Relative bioavailability of three cefixime formulations. Kees F, et al. **Arzneimittelforschung** 1990 Mar;40(3):293–7

A general practice comparative study of a new third–gereration oral cephalosporin, cefixime, with amoxycillin in the treatment of acute paediatric otitis media. Leigh AP, et al. **Br J Clin Pract** 1989 Apr;43(4):140–3

In vivo evaluation of a dual–action antibacterial, Ro 23–9424, compared to cefotaxime and fleroxacin. Beskid G, et al. **Chemotherapy** 1990;36(2):109–16

Pharmacokinetics of cefotaxime in preterm infants. Gouyon JB, et al. **Dev Pharmacol Ther** 1990;14(1):29–34

Antimicrobial activity of Ro 24–6778, a covalent bonding of desmethylfleroxacin and desacetylcefotaxime. Jones RN. **Diagn Microbiol Infect Dis** 1990 May–Jun;13(3):253–9

Cefixime. Leggett NJ, et al. **DICP** 1990 May;24(5):489–95 (36 ref.)

Cefixime. A review of its antibacterial activity. Pharmacokinetic properties and therapeutic potential. Brogden RN, et al. **Drugs** 1989 Oct;38(4):524–50 (114 ref.)

In vitro activity of Ro 24–6392, a novel ester–linked co–drug combining ciprofloxacin and desacetylcefotaxime. Jones RN. **Eur J Clin Microbiol Infect Dis** 1990 Jun;9(6):435–8

Cefodizime and cefotaxime in acute exacerbations of chronic bronchitis: a randomized double–blind prospective study in 180 patients. Maesen FP, et al. **J Antimicrob Chemother** 1990 Mar;25(3):413–22

Safety and efficacy of cefixime versus cefaclor in respiratory tract infections. Dorow P. **J Chemother** 1989 Aug; 1(4):257–60

In vitro comparison of the activity of cefotaxime and desacetylated cefotaxime and of their combination. Nanetti A, et al. **J Chemother** 1990 Jun;2(3):159–63

Lack of effect of cefixime on the metabolism of vitamin K1. Trenk D, et al. **J Clin Pharmacol** 1990 Aug;30(8):737–42

Concentration of cefixime in bile, gallbladder wall and serum after preoperative administration in patients undergoing cholecystectomy. Moorthi K, et al.

Methods Find Exp Clin Pharmacol 1990 May;12(4):287–90

Cefixime: in vitro sensitivity of respiratory and urinary tract infection organisms [letter] McCarthy M, et al. **N Z Med J** 1990 Mar 14;103(885):106

Cefixime: clinical trial against otitis media and tonsillitis [letter] Scott HV, et al. **N Z Med J** 1990 Jan 24; 103(882):25–6

Concentrations of cefixime in bronchial mucosa and sputum after three oral multiple dose regimens. Baldwin DR, et al. **Thorax** 1990 May;45(5):401–2

Cefixime versus trimethoprim/sulfamethoxazole in treatment of patients with acute, uncomplicated lower urinary tract infections. Cox CE. **Urology** 1989 Nov;34(5):322–6

[In vitro antibacterial effect of a new oral cephalosporin, cefixime. Results of a multicenter study] Soussy CJ, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):528–33 (Eng. Abstr.) (Fre)

[Pharmacokinetic properties of cefixime] Barré J. **Presse Med** 1989 Oct 11;18(32):1578–82 (Eng. Abstr.) (Fre)

[Tonsillar diffusion of cefixime in children] Bégué P, et al. **Presse Med** 1989 Oct 11;18(32):1593–5 (Eng. Abstr.) (Fre)

[Comparative study of 2 dosage regimens of cefixime in the treatment of otorhinolaryngeal or bronchial infections] Boudignat O, et al. **Presse Med** 1989 Oct 11;18(32):1622–5 (Eng. Abstr.) (Fre)

[In vitro comparative effect of cefixime and 7 other beta-lactamines against Streptococcus pneumoniae] Boussougant Y, et al. **Presse Med** 1989 Oct 11; 18(32):1553–5 (Eng. Abstr.) (Fre)

[Efficacy and tolerability of cefixime in international and French studies] Carbon C. **Presse Med** 1989 Oct 11; 18(32):1626–9 (Eng. Abstr.) (Fre)

[In vitro effect of cefixime against 200 strains of Branhamella catarrhalis. Comparison with cefotaxime] Chardon H, et al. **Presse Med** 1989 Oct 11;18(32):1556–9 (19 ref.) (Eng. Abstr.) (Fre)

[Critical concentrations of cefixime and disc potency] Cluzel R. **Presse Med** 1989 Oct 11;18(32):1567–8 (Fre)

[In vitro effect of cefixime against Haemophilus influenzae] Dabernat H, et al. **Presse Med** 1989 Oct 11;18(32):1551–2 (Eng. Abstr.) (Fre)

[Effect of sub-inhibitory concentrations of cefixime on the morphology, hemagglutination and adhesiveness of urinary strains of Escherichia coli] Desnottes JF, et al. **Presse Med** 1989 Oct 11;18(32):1572–5 (Eng. Abstr.) (Fre)

[Pulmonary diffusion of cefixime in man] Grellet J, et al. **Presse Med** 1989 Oct 11;18(32):1589–92 (12 ref.) (Eng. Abstr.) (Fre)

[Controlled multicentric study comparing cefixime and amoxicillin in the treatment of lower respiratory tract infections in adults] Hugues FC, et al. **Presse Med** 1989 Oct 11;18(32):1600–4 (Eng. Abstr.) (Fre)

[Efficacy and tolerability of cefixime in lower respiratory tract infections in adults. French multicentric study] Modai J. **Presse Med** 1989 Oct 11;18(32):1605–7 (Eng. Abstr.) (Fre)

[Efficacy and tolerability of cefixime in urinary tract infections in adults. A French multicentric study] Modai J. **Presse Med** 1989 Oct 11;18(32):1614–6 (Eng. Abstr.) (Fre)

[Pharmacokinetics of cefixime in healthy volunteers after a single oral administration of 200 mg] Montay G, et al. **Presse Med** 1989 Oct 11;18(32):1583–6 (Eng. Abstr.) (Fre)

[Pharmacokinetic interaction of cefixime and 2 antacids. Preliminary results] Petitjean O, et al. **Presse Med** 1989 Oct 11;18(32):1596–8 (Eng. Abstr.) (Fre)

[Efficacy and tolerability of cefixime in the treatment of otorhinolaryngeal infections in adults] Peynègre R, et al. **Presse Med** 1989 Oct 11;18(32):1608–13 (Eng. Abstr.) (Fre)

[Antibacterial effect of cefixime in the presence of the type of beta-lactamases produced by Enterobacteriaceae] Philippon A, et al. **Presse Med** 1989 Oct 11;18(32):1560–6 (Eng. Abstr.) (Fre)

[Comparative study of intravenous ceftriaxone followed by oral cefixime versus ceftriaxone alone in the treatment of severe upper urinary tract infections] Regnier B. **Presse Med** 1989 Oct 11;18(32):1617–21 (Eng. Abstr.) (Fre)

[Cefixime, the first oral third-generation cephalosporin] Roche G. **Presse Med** 1989 Oct 11;18(32):1541–4 (Eng. Abstr.) (Fre)

[In vitro comparative bactericidal effect of cefotaxime and cefixime in a kinetic model] Rolin O, et al. **Presse Med** 1989 Oct 11;18(32):1569–71 (Eng. Abstr.) (Fre)

[Effect of hepatic failure upon the pharmacokinetics of cefixime] Singlas E, et al. **Presse Med** 1989 Oct 11; 18(32):1587–8 (Eng. Abstr.) (Fre)

[Antibacterial effect of cefixime] Soussy CJ, et al. **Presse Med** 1989 Oct 11;18(32):1546–50 (Eng. Abstr.) (Fre)

[Treatment of urinary tract infection with cefixime] Fujisawa M, et al. **Hinyokika Kiyo** 1989 Nov;35(11):1989–92 (Eng. Abstr.) (Jpn)

[Clinical evaluation of cefixime (CFIX) in the treatment of urinary tract infection] Sonoda T, et al. **Hinyokika Kiyo** 1989 Jul;35(7):1267–75 (Eng. Abstr.) (Jpn)

[Clinical evaluation of cefixime in the treatment of acute uncomplicated cystitis] Togashi M, et al. **Hinyokika Kiyo** 1989 Jun;35(6):1083–7 (Eng. Abstr.) (Jpn)

[Clinical and pharmacokinetic study on cefodizime, a new cephalosporin antibiotic, in the pediatric infections] Arimasu O, et al. **Jpn J Antibiot** 1989 Jun;42(6):1293–305 (Eng. Abstr.) (Jpn)

[Clinical effects of cefodizime against infectious diseases in obstetrics and gynecology] Chimura T, et al. **Jpn J Antibiot** 1989 Oct;42(10):2065–8 (Eng. Abstr.) (Jpn)

[Pharmacokinetic and clinical studies on cefodizime in obstetrics and gynecology] Cho N, et al. **Jpn J Antibiot** 1989 Oct;42(10):2069–81 (Eng. Abstr.) (Jpn)

[Pharmacokinetic and clinical studies on cefodizime in gynecologic field] Hanada S, et al. **Jpn J Antibiot** 1989 Oct;42(10):2098–106 (Eng. Abstr.) (Jpn)

[Clinical experience with cefodizime on pediatric infections] Haruta T, et al. **Jpn J Antibiot** 1989 Jun;42(6):1381–4 (Eng. Abstr.) (Jpn)

[Transferability of cefodizime to cerebrospinal fluid of rabbits with meningitis caused by Staphylococcus aureus] Haruta T, et al. **Jpn J Antibiot** 1989 Jun;42(6):1279–85 (Eng. Abstr.) (Jpn)

[Clinical and pharmacokinetic evaluation of cefodizime in children] Hirabayashi Y, et al. **Jpn J Antibiot** 1989 Jun; 42(6):1366–80 (Eng. Abstr.) (Jpn)

[Fundamental and clinical evaluation of cefodizime in obstetrics and gynecology] Ito K, et al. **Jpn J Antibiot** 1989 Oct;42(10):2107–19 (Eng. Abstr.) (Jpn)

[Clinical experience with cefixime in urinary tract infections] Kameoka H, et al. **Jpn J Antibiot** 1989 Dec;42(12):2540–7 (Eng. Abstr.) (Jpn)

[Pharmacokinetic and clinical study on cefodizime in obstetrics and gynecological field] Kinoshita Y, et al. **Jpn J Antibiot** 1989 Oct;42(10):2090–7 (Eng. Abstr.) (Jpn)

[Laboratory and clinical investigations of cefodizime in infectious diseases in childhood] Komada Y, et al. **Jpn J Antibiot** 1989 Jun;42(6):1346–57 (Eng. Abstr.) (Jpn)

[Pharmacokinetic and clinical studies on cefodizime in the field of obstetrics and gynecology] Lin BL, et al. **Jpn J Antibiot** 1989 Oct;42(10):2082–9 (Eng. Abstr.) (Jpn)

[Clinical studies on cefixime in pediatrics] Mikawa H, et al. **Jpn J Antibiot** 1989 Dec;42(12):2527–39 (Eng. Abstr.) (Jpn)

[Clinical evaluation of cefodizime in children] Mochizuki Y, et al. **Jpn J Antibiot** 1989 Jun;42(6):1358–65 (Eng. Abstr.) (Jpn)

[Experimental and clinical studies on cefodizime in pediatrics] Motohiro T, et al. **Jpn J Antibiot** 1990 Apr;43(4):603–22 (Eng. Abstr.) (Jpn)

[Pharmacokinetic and clinical studies on cefodizime in the field of obstetrics and gynecology] Nakagiri Y, et al. **Jpn J Antibiot** 1989 Oct;42(10):2128–34 (Eng. Abstr.) (Jpn)

[Experimental and clinical studies on cefodizime in pediatrics] Nakamura H, et al. **Jpn J Antibiot** 1989 Jun;42(6):1322–35 (Eng. Abstr.) (Jpn)

[Laboratory and clinical studies of cefodizime in pediatric field] Nakao Y, et al. **Jpn J Antibiot** 1989 Jun;42(6):1336–45 (Eng. Abstr.) (Jpn)

[Clinical studies of cefodizime in the pediatric field] Niino M, et al. **Jpn J Antibiot** 1989 Jun;42(6):1400–13 (Eng. Abstr.) (Jpn)

[Experimental study on transferability to cerebrospinal fluid of cefodizime in combination with ampicillin] Okura K, et al. **Jpn J Antibiot** 1989 Jun;42(6):1286–92 (Eng. Abstr.) (Jpn)

[Study on cefodizime, a new cephem antibiotic, in the field of pediatrics] Sato H, et al. **Jpn J Antibiot** 1989 Jun; 42(6):1306–21 (Eng. Abstr.) (Jpn)

[Clinical experience with cefodizime in pediatric field] Sekiguchi T, et al. **Jpn J Antibiot** 1989 Jun;42(6):1391–8 (Eng. Abstr.) (Jpn)

[Therapeutic effects of cefodizime in the treatment of various infectious diseases in children] Wakiguchi H, et al. **Jpn J Antibiot** 1989 Jun;42(6):1414–23 (Eng. Abstr.) (Jpn)

[Clinical studies on cefodizime in the field of obstetrics and gynecology] Yamamoto T, et al. **Jpn J Antibiot** 1989 Oct; 42(10):2121–7 (Eng. Abstr.) (Jpn)

[Laboratory and clinical studies on cefodizime in the pediatric field] Yanagishima M, et al. **Jpn J Antibiot** 1989 Jun; 42(6):1424–35 (Eng. Abstr.) (Jpn)

[Clinical experience with cefodizime in bacterial infection of children] Yokota I, et al. **Jpn J Antibiot** 1989 Jun; 42(6):1385–90 (Eng. Abstr.) (Jpn)

[Dual cephalosporins—a return of fixed combinations of antibiotics?] Krčméry V Sr. **Cas Lek Cesk** 1990 Jul 20; 129(29):914–6 (Eng. Abstr.) (Slo)

ANALYSIS

Stability of cefotaxime in two peritoneal dialysis solutions. Paap CM, et al. **Am J Hosp Pharm** 1990 Jan;47(1):147–50

BLOOD

Probable cefotaxime interference in enzymatic ammonia assay [letter; comment] Dalton RN. **Ann Clin Biochem** 1989 Sep; 26 (Pt 5):461–2 Comment on: Ann Clin Biochem 1989 Mar;26 (Pt 2):195–6.

METABOLISM

Individual degradation rate constants for cefotaxime, deacetylation profile. Fabre H, et al. **Farmaco** 1989 Jul–Aug;44(7–8):695–702

Nucleotide sequences of the pbpX genes encoding the penicillin-binding proteins 2x from Streptococcus pneumoniae R6 and a cefotaxime-resistant mutant, C506. Laible G, et al. **Mol Microbiol** 1989 Oct;3(10):1337–48

PHARMACOKINETICS

Potencies of ceftriaxone and cefotaxime in a single chamber pharmacokinetic system simulating their in vivo half-lives. Unowsky J, et al. **Chemotherapy** 1989;35(5):338–44

Pharmacokinetics of cefotaxime in preterm infants. Gouyon JB, et al. **Dev Pharmacol Ther** 1990;14(1):29–34

Cefotaxime pharmacokinetics and treatment of meningitis in neonates. Jacobs RF, et al. **Infection** 1989 Sep–Oct; 17(5):338–42

Pharmacokinetic profile of cefotaxime in goats. Atef M, et al. **Res Vet Sci** 1990 Jul;49(1):34–8

Disposition of ceftriaxone in rat: application of a pharmacokinetic-protein binding model and comparison with cefotaxime. Hakim L, et al. **Xenobiotica** 1989 Aug; 19(8):815–22

[In vitro comparative bactericidal effect of cefotaxime and cefixime in a kinetic model] Rolin O, et al. **Presse Med** 1989 Oct 11;18(32):1569–71 (Eng. Abstr.) (Fre)

[Pharmacokinetics of cefotaxime during late pregnancy] Voigt R, et al. **Z Geburtshilfe Perinatol** 1989 Sep–Oct; 193(5):230–2 (22 ref.) (Eng. Abstr.) (Ger)

[Study on cefotaxime in respiratory surgery: transfer to lung tissue and kinetics in serum] Morita J, et al. **Jpn J Antibiot** 1989 Nov;42(11):2406–11 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

Molecular characterization of the gene encoding SHV-3 beta-lactamase responsible for transferable cefotaxime resistance in clinical isolates of Klebsiella pneumoniae. Nicolas MH, et al. **Antimicrob Agents Chemother** 1989 Dec; 33(12):2096–100

Inhibitory and bactericidal activity of cefpirome and cefotaxime against blood culture isolates. Ansorg R, et al. **Chemotherapy** 1990;36(1):24–8

In vivo evaluation of a dual-action antibacterial, Ro 23–9424, compared to cefotaxime and fleroxacin. Beskid G, et al. **Chemotherapy** 1990;36(2):109–16

Investigation of the immune status of mice during and following selective decontamination of the digestive tract. Speekenbrink AB, et al. **Epidemiol Infect** 1989 Oct; 103(2):323–32

Susceptibility of clinical isolates to cephalexin, cefazolin and cefotaxime. Gupta BL, et al. **Indian Pediatr** 1989 May; 26(5):466–71

Enhancement of the activity of cefotaxime by iron-binding proteins [letter] Ellison RT 3d, et al. **J Antimicrob Chemother** 1990 Mar;25(3):479–81

Enhanced resistance to cefotaxime and imipenem associated with outer membrane protein alterations in Enterobacter aerogenes. Hopkins JM, et al. **J Antimicrob Chemother** 1990 Jan;25(1):49–55

In vitro comparison of the activity of cefotaxime and desacetylated cefotaxime and of their combination. Nanetti A, et al. **J Chemother** 1990 Jun;2(3):159–63

Study of the influence of protein binding on serum bactericidal titres and killing rates in volunteers receiving ceftazidime, cefotaxime and ceftriaxone. Van der Auwera P, et al. **J Hosp Infect** 1990 Apr;15 Suppl A:23–34

An improved broth-microdilution procedure for testing metal ion resistance of Klebsiella pneumoniae. Podbielski A, et al. **Zentralbl Hyg Umweltmed** 1989 Nov;189(2):147–50

[Bactericidal effect of cefotaxime-sulbactam and imipenem combined with gentamicin and/or ciprofloxacin against CTX-1 producing Klebsiella pneumoniae] Archambaud M, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):534–9 (Eng. Abstr.) (Fre)

[Enzymatic resistance to cefotaxime in 56 strains of Klebsiella spp., Escherichia coli and Salmonella spp. at a Tunisian hospital (1984–1988)] Ben Hassen A, et al. **Pathol Biol (Paris)** 1990 May;38(5):464–9 (Eng. Abstr.) (Fre)

[In vitro effect of cefixime against 200 strains of Branhamella catarrhalis. Comparison with cefotaxime] Chardon H, et al. **Presse Med** 1989 Oct 11;18(32):1556–9 (19 ref.) (Eng. Abstr.) (Fre)

[Comparative activity of imipenem, ceftazidime and cefotaxime against Acinetobacter calcoaceticus] Vallée E, et al. **Presse Med** 1990 Apr 4;19(13):588–91 (Eng. Abstr.) (Fre)

THERAPEUTIC USE

A comparative evaluation of oral ofloxacin versus intravenous cefotaxime therapy for serious skin and skin structure infections. Gentry LO, et al. **Am J Med** 1989

Dec 29;87(6C):57S–60S
Cefotaxime and prophylaxis. New approaches with a proven agent. Gentry LO. **Am J Med** 1990 Apr 9;88(4A):32S–37S (53 ref.)
Antibiotic prophylaxis with cefotaxime in gastroduodenal and biliary surgery [published erratum appears in Am J Surg 1990 Feb;159(2):A12] Garcia-Rodriguez JA, et al. **Am J Surg** 1989 Nov;158(5):428–33; discussion 433–4
Hospital-acquired neonatal bacterial meningitis: the impacts of cefotaxime usage on mortality and of amikacin usage on incidence. Coovadia YM, et al. **Ann Trop Paediatr** 1989 Dec;9(4):233–9
Cefotaxime vs penicillin G for acute neurologic manifestations in Lyme borreliosis. A prospective randomized study. Pfister HW, et al. **Arch Neurol** 1989 Nov;46(11):1190–4
Single dose cefotaxime plus metronidazole versus three dose cefuroxime plus metronidazole as prophylaxis against wound infection in colorectal surgery: multicentre prospective randomised study [see comments] Rowe-Jones DC, et al. **BMJ** 1990 Jan 6;300(6716):18–22 Comment in: BMJ 1990 Feb 17;300(6722):464.
Comparative evaluation of cefotaxime and cephamandole in the prevention of post-operative infective complications following emergency abdominal surgery. Ridley PD, et al. **Br J Clin Pract** 1990 Jan;44(1):17–21
Use of cefotaxime in brain abscess [letter] Donald FE, et al. **Br J Neurosurg** 1988;2(4):539–40
Therapy of lower respiratory tract infections: a comparison of ceftriaxone and cefotaxime. Barradas P, et al. **Chemotherapy** 1989;35 Suppl 2:33–40
Ceftriaxone versus cefotaxime in the treatment of septicemia in adults. Ferencz A, et al. **Chemotherapy** 1989;35 Suppl 2:5–9
One-shot treatment of uncomplicated gonorrhoea with third-generation cephalosporins with differing serum half-life. Results of a controlled trial with ceftriaxone and cefotaxime. Korting HC, et al. **Chemotherapy** 1989;35(6):441–8
Comparison of ceftriaxone with cefotaxime in serious chest infections. Reeves JH, et al. **Chest** 1989 Dec;96(6):1292–7
Synergism between cefotaxime and fosfomycin in the therapy of methicillin and gentamicin resistant Staphylococcus aureus infection in rabbits. Chavanet P, et al. **Eur J Clin Microbiol Infect Dis** 1990 Apr;9(4):271–5
Comparison of ceftriaxone (1 x 1 g/day) versus cefotaxime (3 x 1 g/day) for gynecologic and obstetric infections. A randomized clinical trial. Gerstner GJ. **Gynecol Obstet Invest** 1990;29(4):273–7
Cefotaxime versus penicillin in the late stage of Lyme disease—prospective, randomized therapeutic study. Hassler D, et al. **Infection** 1990 Jan-Feb;18(1):16–20
Treatment of childhood bacterial meningitis. Lecour H, et al. **Infection** 1989 Sep-Oct;17(5):343–6
Cefotaxime in urinary tract infections. Naber KG. **Infection** 1989 Nov-Dec;17(6):425–8 (24 ref.)
Infections in gynaecology and obstetrics and cefotaxime. Petersen EE. **Infection** 1989 Nov-Dec;17(6):422–4
Urinary tract infections with tissue penetration in children: cefotaxime compared with amoxycillin/clavulanate. Fischbach M, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:177–83
Cefodizime and cefotaxime in acute exacerbations of chronic bronchitis: a randomized double-blind prospective study in 180 patients. Maesen FP, et al. **J Antimicrob Chemother** 1990 Mar;25(3):413–22
A comparison of aztreonam/metronidazole and cefotaxime/metronidazole in elective colorectal surgery: antimicrobial prophylaxis must include gram-positive cover. Morris DL, et al. **J Antimicrob Chemother** 1990 Apr;25(4):673–8
Omnatax in acute urinary tract infection. A clinical study [see comments] Choudhury A. **J Assoc Physicians India** 1989 Jul;37(7):437–9 Comment in: J Assoc Physicians India 1989 Nov;37(11):733.
Cefotaxime in acute urinary tract infection [letter] Shanmugam S. **J Assoc Physicians India** 1989 Dec;37(12):795
Prophylactic antibiotics and post laryngectomy pharyngocutaneous fistulae. Violaris N, et al. **J Laryngol Otol** 1990 Mar;104(3):225–8
Selective decontamination to reduce gram-negative colonisation and infections after oesophageal resection. Tetteroo GW, et al. **Lancet** 1990 Mar 24;335(8691):704–7
A comparative study of cefotaxime sodium versus a combination of cefapirin and gentamicin in the prophylactic treatment of patients undergoing cholecystectomy. Ker CG, et al. **Methods Find Exp Clin Pharmacol** 1989 Nov;11(11):711–5
Emergence of resistance to multiple beta-lactams in Enterobacter cloacae during treatment for neonatal meningitis with cefotaxime. Heusser MF, et al. **Pediatr Infect Dis J** 1990 Jul;9(7):509–12
Five years of cefotaxime use in a neonatal intensive care unit. Spritzer R, et al. **Pediatr Infect Dis J** 1990 Feb;9(2):92–6
Ceftriaxone vs cefotaxime for treatment of Haemophilus influenzae meningitis [letter; comment] Madson L, et al. **Pediatrics** 1990 Apr;85(4):622–4 Comment on: Pediatrics 1989 Jul;84(1):132–5.
[Quantitative study of the antibacterial effect of cefotaxime and ceftriaxone during experimental Escherichia coli K1 bacteremia in chickens] Labarthe JC, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):664–7 (Eng. Abstr.) (Fre)
[Prompt antibiotic prophylaxis in resection of the prostate and removal of the bladder catheter] Duclos JM, et al. **Presse Med** 1989 Sep 30;18(30):1466–8 (Eng. Abstr.) (Fre)
[Prospective, randomized, controlled study of imipenem-cilastatin versus cefotaxime-amikacin in the treatment of lower respiratory tract infection and septicemia at intensive care units] Mouton Y, et al. **Presse Med** 1990 Apr 4;19(13):607–12 (Eng. Abstr.) (Fre)
[Intra-arterial infusion therapy of progressive diabetic foot gangrene with prostaglandin E1 amd cefotaxime] Krawzak HW, et al. **Vasa** 1989;18(4):312–5 (Eng. Abstr.) (Ger)
[Antibiotic prophylaxis in non-elective cesarean section with single-dose imipenem versus multiple-dose cefotaxime] Mansueto GB, et al. **Riv Eur Sci Med Farmacol** 1989 Feb;11(1):65–8 (Eng. Abstr.) (Ita)
[Klebsiella pneumoniae meningitis associated with liver abscess: a case report] Yanagawa T, et al. **Jpn J Antibiot** 1989 Oct;42(10):2135–40 (Eng. Abstr.) (Jpn)

TOXICITY

[General toxic and organotropic properties of cefotaxime in acute and chronic experiments] Berezhinskaia VV, et al. **Antibiot Khimioter** 1990 May;35(5):25–7 (Eng. Abstr.) (Rus)

CEFOTETAN

ADVERSE EFFECTS

Acute interstitial nephritis associated with cefotetan therapy. Nguyen VD, et al. **Am J Kidney Dis** 1990 Sep;16(3):259–61
Anaphylaxis and cefotetan [letter] Faro S, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):296
Warnings in use of cefotetan [letter] Pocelinko RM. **Am J Obstet Gynecol** 1990 Jan;162(1):296–7
Hypoprothrombinemia in patients receiving cefotetan [letter] Foresti V, et al. **Haematologica** 1990 Mar-Apr;75(2):196

ANALYSIS

Chemical stability of cefotetan disodium in 5% dextrose and 0.9% sodium chloride injections. Das Gupta V, et al. **J Clin Pharm Ther** 1990 Apr;15(2):109–14

PHARMACOKINETICS

[Tissue penetration of single-dose cefotetan used for antibiotic prophylaxis in colorectal surgery] Martin C, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):500–3 (Eng. Abstr.) (Fre)

PHARMACOLOGY

[Determination of the MIC of cefotetan against freshly isolated gram-negative bacilli] Deguchi K, et al. **Jpn J Antibiot** 1989 Nov;42(11):2363–76 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Drug utilization evaluation of cefotetan versus cefoxitin in large teaching hospital [letter] Sesin GP, et al. **DICP** 1990 Feb;24(2):206–7
Formulary conversion of cefoxitin usage to cefotetan: experience at a large teaching hospital. Smith KS, et al. **DICP** 1989 Dec;23(12):1024–30
Efficacy and safety of cefotetan in the treatment of complicated urinary tract infections: clinical experience in a selective and single study. Gesualdo L, et al. **Drugs Exp Clin Res** 1989;15(6–7):309–13
Cefotetan versus piperacillin in the prophylaxis of abdominal and vaginal hysterectomy: a prospective randomized study. Regallo M, et al. **Drugs Exp Clin Res** 1989;15(6–7):315–20
Prophylaxis for caesarean section: where to turn [letter] [see comments] Dougherty SH, et al. **Infect Control Hosp Epidemiol** 1990 Jan;11(1):9 Comment in: Infect Control Hosp Epidemiol 1990 May;11(5):228.
Prophylaxis of cesarean sections [comment] Frank E. **Infect Control Hosp Epidemiol** 1990 May;11(5):228 Comment on: Infect Control Hosp Epidemiol 1990 Jan;11(1):9.
Comparison of one dose cefazolin versus one dose cefotetan for cesarean section prophylaxis. Probst JR, et al. **J Fla Med Assoc** 1989 Dec;76(12):1027–9
Prospective comparative study of cefotetan with piperacillin for prophylaxis against infection in elective colorectal surgery. Hershman MJ, et al. **J R Coll Surg Edinb** 1990 Feb;35(1):29–32
Antibiotic prophylaxis for cesarean delivery: is an extended-spectrum agent necessary? Carlson C, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 1):343–6
Cefotetan therapy for gonococcal urethritis and cervicitis. Youssef RZ, et al. **Sex Transm Dis** 1990 Apr-Jun;17(2):99–101
Sulbactam/ampicillin versus cefotetan in the treatment of obstetric and gynecologic infections. Scalambrino S, et al. **Suppl Int J Gynecol Obstet** 1989;2:21–7
[Cefotetan in the therapy of respiratory infections. Multicenter research] Bonsignore G, et al. **Clin Ter** 1989 Sep 15;130(5):259–66 (Eng. Abstr.) (Ita)
[Cefotetan in preoperative prophylaxis in gynecologic surgery] Napolitano C, et al. **Minerva Ginecol** 1989 Sep;41(9):461–7 (Eng. Abstr.) (Ita)

CEFOTIAM

ADMINISTRATION & DOSAGE

[Perioperative short-term preventive antibiotics in head-neck surgery] Mann W, et al. **Laryngorhinootologie** 1990 Mar;69(3):158–60 (Eng. Abstr.) (Ger)

BLOOD

High-performance liquid chromatographic assay for cefotiam and d3-cefotiam in human serum. Kees F, et al. **J Chromatogr** 1990 Feb 23;525(2):484–9

PHARMACOKINETICS

Cefotiam disposition in markedly obese athlete patients, Japanese sumo wrestlers. Chiba K, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1188–92
Clinical pharmacokinetics of cefotiam. Brogard JM, et al. **Clin Pharmacokinet** 1989 Sep;17(3):163–74 (60 ref.)
[Bone diffusion of cefotiam in men] Farinotti R, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):638–42 (Eng. Abstr.) (Fre)
[Pharmacokinetic studies of cefotiam in late pregnancy] Voigt R, et al. **Z Geburtshilfe Perinatol** 1989 Jul-Aug;193(4):185–7 (Eng. Abstr.) (Ger)
[Comparison of intraocular penetration level of cefuzonam sodium and cefotiam after intravenous and subconjunctival injection] Sugihara I, et al. **Nippon Ganka Gakkai Zasshi** 1990 Feb;94(2):211–8 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Activity of cefotiam in combination with beta-lactam antibiotics on enterobacterial hospital strains. Vanhoof R, et al. **Pharm Weekbl [Sci]** 1990 Jun 22;12(3):104–6
[Antibiotic prophylaxis with cefotiam in percutaneous nephrolithotomy] Baude C, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):673–6 (Eng. Abstr.) (Fre)
[Antibiotic prophylaxis with cefotiam in transurethral resection of the prostate] Baude C, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):561–3 (Eng. Abstr.) (Fre)
[Comparative study of two protocols of antibiotic prophylaxis in endoscopic urologic surgery] Lepage JY, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):564–7 (Eng. Abstr.) (Fre)

CEFOXITIN

ADMINISTRATION & DOSAGE

Antibiotics in elective colon surgery. A randomized trial of oral, systemic, and oral/systemic antibiotics for prophylaxis. Stellato TA, et al. **Am Surg** 1990 Apr;56(4):251–4
Addition of parenteral cefoxitin to regimen of oral antibiotics for elective colorectal operations. A randomized prospective study. Schoetz DJ Jr, et al. **Ann Surg** 1990 Aug;212(2):209–12
Enhanced effectiveness of intraperitoneal antibiotics administered via liposomal carrier. Price CI, et al. **Arch Surg** 1989 Dec;124(12):1411–4; discussion 1414–5
A randomized comparison of gentamicin-clindamycin and cefoxitin-doxycycline in the treatment of acute pelvic inflammatory disease. Walters MD, et al. **Obstet Gynecol** 1990 May;75(5):867–72
Ceftriaxone as prophylaxis for elective abdominal and colorectal surgery. Studies in the Departments of Surgery at the Universities of the Orange Free State, Natal and Pretoria. Nel CJ. **S Afr J Surg** 1989 Sep;Suppl:6

ADVERSE EFFECTS

Nonthrombocytopenic purpura induced by cefoxitin [letter] Burstein M, et al. **DICP** 1990 Feb;24(2):206

PHARMACOKINETICS

Penetration of clindamycin, cefoxitin, and metronidazole into pelvic peritoneal fluid of women undergoing diagnostic laparoscopy [published erratum appears in Antimicrob Agents Chemother 1990 Jun;34(6):1301] Berger SA, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):376–7
Rectal absorption enhancement of cefoxitin and desglycinamide arginine vasopressin by sodium tauro-24,25-dihydrofusidate in conscious rats. van Hoogdalem EJ, et al. **J Pharmacol Exp Ther** 1989 Nov;251(2):741–4

PHARMACOLOGY

A (-) deprenyl-derived new spectrum psychostimulant. Knoll B, et al. **Acta Physiol Hung** 1990;75 Suppl:173–4
Comparison of the effects of (-)deprenyl, 1-phenyl-2-propyl-aminopentane (MK-306) and amphetamine on the striatal and limbic dopaminergic system. Timár J, et al. **Acta Physiol Hung** 1990;75 Suppl:279–80

Comparison of the dependence capacity of amphetamine, MK-306 and (-)deprenyl. Yasar S, et al. **Acta Physiol Hung** 1990;75 Suppl:299-300

Enhanced antimicrobial activity of old and new beta-lactams against cefoxitin-resistant Bacteroides fragilis group isolates by beta-lactamase inhibitors [letter] Aldridge KE, et al. **J Antimicrob Chemother** 1990 May;25(5):873-5

A multicentre study to evaluate the effect of sulbactam/ampicillin combination on anaerobic micro-organisms. Leone F, et al. **J Int Med Res** 1990 May-Jun;18(3):191-200

A multicenter international study on the activity of sulbactam/ampicillin, ampicillin, and cefoxitin against anaerobic bacteria and introduction of a new model of susceptibility testing in mixed infections. Heizmann WR, et al. **Suppl Int J Gynecol Obstet** 1989;2:7-12; discussion 47-8

THERAPEUTIC USE

Reducing the incidence of infection after caesarean section: implications of prophylaxis with antibiotics for hospital resources [see comments] Mugford M, et al. **BMJ** 1989 Oct 21;299(6706):1003-6 Comment in: BMJ 1989 Nov 18;299(6710):1282-3. Comment in: BMJ 1989 Dec 9;299(6713):1466-7.

Antibiotic bonded nephrostomy catheters for percutaneous nephrostomies. Nosher JL, et al. **Cardiovasc Intervent Radiol** 1990 Apr-May;13(2):102-6

Gangrenous and perforated appendicitis with peritonitis: treatment and bacteriology. Bennion RS, et al. **Clin Ther** 1990;12 Suppl C:31-44

Comparison of single-dose ceftizoxime with multidose cefoxitin chemoprophylaxis for patients undergoing hysterectomy. McGregor JA, et al. **Clin Ther** 1990;12 Suppl C:45-52

Interchangeability of ceftizoxime and cefoxitin: a clinical perspective. Wikler MA. **Clin Ther** 1990;12 Suppl C:74-9

Drug utilization evaluation of cefotetan versus cefoxitin in large teaching hospital [letter] Sesin GP, et al. **DICP** 1990 Feb;24(2):206-7

Formulary conversion of cefoxitin usage to cefotetan: experience at a large teaching hospital. Smith KS, et al. **DICP** 1989 Dec;23(12):1024-30

Infectious complications after 809 biliary tract operations and results of a prospective randomized single-blind study comparing cefoxitin versus ampicillin plus an inhibitor of beta-lactamases. Wittmann DH, et al. **Infection** 1990 Jan-Feb;18(1):41-7

The prophylactic activity of amoxycillin/clavulanate and cefoxitin in vascular surgery--a randomized clinical study. Dieterich HJ, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:209-11

Etiology and treatment of post-cesarean-section endometritis after cephalosporin prophylaxis. Hillier S, et al. **J Reprod Med** 1990 Mar;35(3 Suppl):322-8

Selective effect of cefoxitin prophylaxis on post-cesarean-section microbial flora. Ismail MA, et al. **J Reprod Med** 1990 Feb;35(2):168-74

Antibiotic prophylaxis in penetrating abdominal injuries. Demetriades D. **S Afr J Surg** 1989 Sep;Suppl:5

Antibiotic prophylactic uterine lavage in cesarean section: a double-blind comparison of saline, ticarcillin, and cefoxitin irrigation in indigent patients. Lewis DF, et al. **South Med J** 1990 Mar;83(3):274-6

Controlled comparison of cefmetazole with cefoxitin for prophylaxis in elective cholecystectomy. Berne TV, et al. **Surg Gynecol Obstet** 1990 Feb;170(2):137-40

[Bacterial infections in cancer patients without neutropenia. Comparison between 2 antibiotic combinations (aztreonam and oxacillin versus cefoxitin and tobramycin)] Apice G, et al. **Clin Ter** 1989 Nov 15;131(3):177-82 (Eng. Abstr.) **(Ita)**

CEFSULODIN

PHARMACOKINETICS

Increased renal clearance of cefsulodin due to higher glomerular filtration rate in cystic fibrosis. Hedman A, et al. **Clin Pharmacokinet** 1990 Feb;18(2):168-75

[Pharmacokinetic studies on cefsulodin in perinatal period] Cho N, et al. **Jpn J Antibiot** 1989 Dec;42(12):2735-42 (Eng. Abstr.) **(Jpn)**

[Fundamental and clinical studies of cefsulodin in the neonates and premature infants] Motohiro T, et al. **Jpn J Antibiot** 1989 Dec;42(12):2720-34 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Resistance of Pseudomonas aeruginosa to cefsulodin: modification of penicillin-binding protein 3 and mapping of its chromosomal gene. Gotoh N, et al. **J Antimicrob Chemother** 1990 Apr;25(4):513-23

[Comparison of cefsulodin and cephalexin as selective agents in agar for Bordetella pertussis] Hoppe JE, et al. **Immun Infekt** 1990 Apr;18(2):40-1 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

[Clinical and pharmacokinetic evaluation of cefsulodin in neonates and young infants] Fujita K, et al. **Jpn J Antibiot** 1989 Dec;42(12):2709-13 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetics and clinical studies on cefsulodin in neonates] Iwata S, et al. **Jpn J Antibiot** 1989 Dec; 42(12):2714-9 (Eng. Abstr.) **(Jpn)**

CEFTAZIDIME

ADMINISTRATION & DOSAGE

Sequential intravenous and oral ciprofloxacin versus intravenous ceftazidime in the treatment of complicated urinary tract infections. Cox CE. **Am J Med** 1989 Nov 30;87(5A):157S-159S

Prospective, controlled, randomized, non-blind comparison of intravenous/oral ciprofloxacin with intravenous ceftazidime in the treatment of severe surgical infections. Del Rosal PL, et al. **Am J Med** 1989 Nov 30; 87(5A):183S-184S

Multicenter, randomized trial of ciprofloxacin plus azlocillin versus ceftazidime plus amikacin for empiric treatment of febrile neutropenic patients. Flaherty JP, et al. **Am J Med** 1989 Nov 30;87(5A):278S-282S

Intravenous/oral ciprofloxacin therapy versus intravenous ceftazidime therapy for selected bacterial infections. Gaut PL, et al. **Am J Med** 1989 Nov 30;87(5A):169S-175S

Prospective, randomized comparison of sequential intravenous followed by oral ciprofloxacin with intravenous ceftazidime in the treatment of serious infections. Peacock JE Jr, et al. **Am J Med** 1989 Nov 30; 87(5A):185S-190S

Comparative, double-blind study of intravenous ciprofloxacin and intravenous ceftazidime in serious infection. Ramirez-Ronda CH, et al. **Am J Med** 1989 Nov 30;87(5A):195S-197S

Intravenous ciprofloxacin and ceftazidime in serious infections. A prospective, controlled clinical trial with third-party blinding. Sifuentes-Osornio J, et al. **Am J Med** 1989 Nov 30;87(5A):202S-205S

Intravenous ciprofloxacin or ceftazidime in selected infections. A prospective, randomized, controlled study. Villavicencio J, et al. **Am J Med** 1989 Nov 30; 87(5A):191S-194S

Use of ceftazidime-impregnated polymethyl methacrylate beads in the treatment of Pseudomonas osteomyelitis. Tomczak RL, et al. **J Foot Surg** 1989 Nov-Dec;28(6):542-6

Antibiotic prophylaxis in ear, nose and throat surgery: a comparison of a single preoperative dose with three peri-operative doses of ceftazidime. Marcucci L, et al. **J Hosp Infect** 1990 Apr;15 Suppl A:81-5

[Prospective evaluation of modalities of ceftazidime prescription] Fourrier A, et al. **Pathol Biol (Paris)** 1990 Feb;38(2):126-9 (Eng. Abstr.) **(Fre)**

ANALYSIS

Ceftazidime concentrations in renal cysts. Basting RF, et al. **J Hosp Infect** 1990 Apr;15 Suppl A:77-9

METABOLISM

Structural features related to hydrolytic activity against ceftazidime of plasmid-mediated SHV-type CAZ-5 beta-lactamase. Péduzzi J, et al. **Antimicrob Agents Chemother** 1989 Dec;33(12):2160-3

The kinetics of CAZ-5, a novel SHV-related plasmid-mediated beta-lactamase with enhanced hydrolytic activity against ceftazidime. Labia R, et al. **Drugs Exp Clin Res** 1989;15(11-12):535-40

Characterisation of a unique ceftazidime-hydrolysing beta-lactamase, TEM-E2. Payne DJ, et al. **J Med Microbiol** 1990 Jun;32(2):131-4

PHARMACOKINETICS

Pharmacokinetics of ceftazidime given alone and combination with probenecid to unweaned calves. Soback S, et al. **Am J Vet Res** 1989 Sep;50(9):1566-9

Penetration of ceftazidime into intracranial abscess [letter; comment] Donald FE, et al. **J Antimicrob Chemother** 1990 Feb;25(2):297 Comment on: J Antimicrob Chemother 1989 Sep;24(3):431-6.

Penetration of ceftazidime into intracranial abscess [see comments] Green HT, et al. **J Antimicrob Chemother** 1989 Sep;24(3):431-6 Comment in: J Antimicrob Chemother 1990 Feb;25(2):297.

The effect of obstruction on the biliary excretion of cefoperazone and ceftazidime. Leung JW, et al. **J Antimicrob Chemother** 1990 Mar;25(3):399-406

[Serum and cerebrospinal fluid kinetics of ceftazidime] Nadstawek J, et al. **Immun Infekt** 1989 Dec;17(6):212-6 (Eng. Abstr.) **(Ger)**

[Study on CAZ levels in serum, urine and myocardial tissue during and after open-heart surgery with cardiopulmonary bypass] Murata S, et al. **Nippon Geka Hokan** 1989 Mar 1;58(2):236-44 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Interactions of ceftazidime and tobramycin in patients with normal and impaired renal function. Aronoff GR, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1139-42

In vitro antibacterial spectrum of E1040 compared with those of cefpirome and ceftazidime and disk diffusion interpretive criteria for E1040. Fuchs PC, et al. **Antimicrob Agents Chemother** 1990 May;34(5):914-7

Novel plasmid-mediated beta-lactamase (TEM-10) conferring selective resistance to ceftazidime and aztreonam in clinical isolates of Klebsiella pneumoniae. Quinn JP, et al. **Antimicrob Agents Chemother** 1989 Sep; 33(9):1451-6

Influence of beta-lactam antibiotics on serum resistance of K1-positive blood culture isolates of Escherichia coli. Suerbaum S, et al. **Antimicrob Agents Chemother** 1990 Apr; 34(4):628-31

Novel plasmid-mediated resistance to ceftazidime of a clinical isolate of Klebsiella pneumoniae. Walmsley SL, et al. **Can Med Assoc J** 1990 Mar 15;142(6):597-8

Beta-lactams act on DNA synthesis in K-562 cells. Cottagnoud P, et al. **Cell Biol Toxicol** 1986 Dec;2(4):523-9

Effects of beta-lactams on DNA replication. Hübscher U, et al. **Cell Biol Toxicol** 1986 Dec;2(4):541-8

In-vitro activity of meropenem imipenem, the penem HRE 664 and ceftazidime against clinical isolates from West Germany. Bauernfeind A, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:73-84

Mutants of the TEM-1 beta-lactamase conferring resistance to ceftazidime. Payne DJ, et al. **J Antimicrob Chemother** 1989 Aug;24(2):103-10

Comparative study of five plasmid-mediated ceftazidimases isolated in Klebsiella pneumoniae. Sirot D, et al. **J Antimicrob Chemother** 1989 Oct;24(4):509-21

The effect of rifampicin on the in-vitro activity of cefpirome or ceftazidime in combination with aminoglycosides against Pseudomonas aeruginosa. Valdes JM, et al. **J Antimicrob Chemother** 1990 Apr;25(4):575-84

Study of the influence of protein binding on serum bactericidal titres and killing rates in volunteers receiving ceftazidime, cefotaxime and ceftriaxone. Van der Auwera P, et al. **J Hosp Infect** 1990 Apr;15 Suppl A:23-34

A novel chromosomal TEM derivative and alterations in outer membrane proteins together mediate selective ceftazidime resistance in Escherichia coli. Weber DA, et al. **J Infect Dis** 1990 Aug;162(2):460-5

[Comparative activity of imipenem, ceftazidime and cefotaxime against Acinetobacter calcoaceticus] Vallée E, et al. **Presse Med** 1990 Apr 4;19(13):588-91 (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

A prospective, randomized comparison of ceftazidime and ciprofloxacin as initial empiric therapy in neutropenic patients with fever. Bayston KF, et al. **Am J Med** 1989 Nov 30;87(5A):269S-273S

Prospective, controlled, randomized non-blind comparison of intravenous/oral ciprofloxacin with intravenous ceftazidime in the treatment of skin or soft-tissue infections. Dominguez J, et al. **Am J Med** 1989 Nov 30; 87(5A):136S-137S

Comparison of the safety and efficacy of intravenous ciprofloxacin and intravenous ceftazidime in the treatment of selected infections. Gallis HA, et al. **Am J Med** 1989 Nov 30;87(5A):176S-180S

Intravenous/oral ciprofloxacin versus intravenous ceftazidime in the treatment of serious gram-negative infections of the skin and skin structure. Gentry LO, et al. **Am J Med** 1989 Nov 30;87(5A):132S-135S

Ciprofloxacin (intravenous/oral) versus ceftazidime in lower respiratory tract infections. Haddow A, et al. **Am J Med** 1989 Nov 30;87(5A):113S-115S

Randomized, double-blind comparative study of intravenous ciprofloxacin versus ceftazidime in the treatment of serious infections. Levine DP, et al. **Am J Med** 1989 Nov 30; 87(5A):160S-163S

Sequential intravenous/oral ciprofloxacin compared with intravenous ceftazidime in the treatment of serious lower respiratory tract infections. Menon L, et al. **Am J Med** 1989 Nov 30;87(5A):119S-120S

Efficacy and safety of intravenous ciprofloxacin in the treatment of serious infections. A comparison with ceftazidime. Quintero-Perez NP, et al. **Am J Med** 1989 Nov 30;87(5A):198S-201S

Ciprofloxacin versus ceftazidime in serious infections. Reinhardt JF, et al. **Am J Med** 1989 Nov 30; 87(5A):181S-182S

Randomized study of intravenous/oral ciprofloxacin versus ceftazidime in the treatment of hospital and nursing home patients with lower respiratory tract infections. Trenholme GM, et al. **Am J Med** 1989 Nov 30;87(5A):116S-118S

In vitro activities of combinations of aztreonam, ciprofloxacin, and ceftazidime against clinical isolates of Pseudomonas aeruginosa and Pseudomonas cepacia from patients with cystic fibrosis. Bosso JA, et al. **Antimicrob Agents Chemother** 1990 Mar;34(3):487-8

Pefloxacin versus ceftazidime in the treatment of a variety of gram-negative-bacterial infections. Giamarellou H, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1362-7

Ceftazidime versus imipenem-cilastatin as initial monotherapy for febrile neutropenic patients. Liang R, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1336-41

Failure of ceftazidime-amikacin therapy for bacteremia and meningitis due to Klebsiella pneumoniae producing an extended-spectrum beta-lactamase. Smith CE, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1290-3

Ceftazidime in the treatment of acute severe infections in children and adults. Păun L, et al. **Arch Roum Pathol Exp Microbiol** 1989 Apr-Jun; 48(2):177-84

A randomised trial of empirical antibiotic therapy in febrile

neutropenic patients with hematological disorders: ceftazidime versus azlocillin plus amikacin. Gibson J, et al. **Aust N Z J Med** 1989 Oct;19(5):417–25

A comparative study of ceftriaxone plus amikacin, ceftazidime plus amikacin and imipenem/cilastatin in the empiric therapy of febrile granulocytopenic cancer patients. Liu CY, et al. **Chemotherapy** 1989;35 Suppl 2:16–22

Ceftazidime/metronidazole versus netilmicin/metronidazole in the treatment of perforated appendicitis in children. Kooi GH, et al. **Clin Ther** 1990 Jan–Feb;12(1):54–60

Intravenous and oral ciprofloxacin versus intravenous ceftazidime for the treatment of severe urinary tract infections. Childs SJ. **Diagn Microbiol Infect Dis** 1990 Mar–Apr;13(2):161–3

Parenteral ciprofloxacin compared with ceftazidime in the treatment of serious upper and lower urinary tract infection. Palmer DL, et al. **Diagn Microbiol Infect Dis** 1990 Mar–Apr;13(2):157–60

Comparison of intravenous ciprofloxacin with ceftazidime in the treatment of serious soft tissue infections. Tice AD, et al. **Diagn Microbiol Infect Dis** 1990 Mar–Apr;13(2):165–7

Susceptibility of clinical isolates to cephalosporins [letter] Rattan A. **Indian Pediatr** 1989 Sep;26(9):965–6

Absence of ceftazidime activity against experimental syphilis [letter] Xerri L, et al. **J Antimicrob Chemother** 1989 Nov; 24(5):826

Ceftazidime in the management of hospital infection. **J Hosp Infect** 1990 Apr;15 Suppl A:1–89

Results of a clinical and pharmacokinetic study of ceftazidime in patients with postoperative pneumonia on assisted ventilation. Erttmann M, et al. **J Hosp Infect** 1990 Apr;15 Suppl A:55–9

Comparative clinical trial of ceftazidime and imipenem/cilastatin in patients with severe nosocomial pneumonias and septicaemias. Hartenauer U, et al. **J Hosp Infect** 1990 Apr;15 Suppl A:61–4

Ceftazidime monotherapy is as effective as ceftazidime combined with gentamicin in the treatment of febrile neutropenic patients. Kinsey SE, et al. **J Hosp Infect** 1990 Apr;15 Suppl A:49–53

Treatment of severe chronic bronchitis with ceftazidime. Micklefield GH, et al. **J Hosp Infect** 1990 Apr;15 Suppl A:65–7

Challenges in the design of trials to evaluate antibacterial agents in serious infections. Norrby SR. **J Hosp Infect** 1990 Apr;15 Suppl A:13–21

Ceftazidime vs. tobramycin for serious infections in urological patients. Tammela T, et al. **J Hosp Infect** 1990 Apr;15 Suppl A:69–76

The efficacy, safety and tolerance of ceftazidime for the treatment of bacterial infections in the elderly. Vozza A, et al. **J Hosp Infect** 1990 Apr;15 Suppl A:87–9

Delayed cerebrospinal fluid sterilization in infants with Hemophilus influenzae type b meningitis. Hatch DL, et al. **J Infect Dis** 1989 Oct;160(4):711–5

Efficacy of ceftazidime in chronic melioidosis with multiple liver abscesses [letter] Camus C, et al. **Lancet** 1990 Sep 8;336(8715):628

Antibiotics for cholangitis [letter] [published erratum appears in Lancet 1990 Jan 13;335(8681):122] [comment] French GL, et al. **Lancet** 1989 Nov 25;2(8674):1271–2 Comment on: Lancet 1989 Sep 30;2(8666):781–2.

Ceftazidime for melioidosis [letter; comment] Lam WK, et al. **Lancet** 1989 Oct 28;2(8670):1040 Comment on: Lancet 1989 Sep 23;2(8665):697–701.

Current therapy of malignant external otitis. Strauss M. **Otolaryngol Head Neck Surg** 1990 Feb;102(2):174–6

Treatment of Pseudomonas meningitis with ceftazidime with or without concurrent therapy. Rodriguez WJ, et al. **Pediatr Infect Dis J** 1990 Feb;9(2):83–7

Treatment of Pseudomonas lung infection in cystic fibrosis with piperacillin plus tobramycin versus ceftazidime monotherapy: preliminary communication. De Boeck K, et al. **Pediatr Pulmonol** 1989;7(3):171–3

Malignant external otitis: report on therapy with ceftazidime and review of therapy and prognosis. Johnson MP, et al. **Rev Infect Dis** 1990 Mar–Apr;12(2):173–80

A randomised comparison of ceftazidime and piperacillin, both in combination with flucloxacillin for treatment of febrile episodes in neutropenic children. Finnish Three–Centre Study. Perkkiö M, et al. **Scand J Infect Dis** 1990;22(2):209–18

Ceftazidime in treatment of urinary tract infection in patients with spinal cord injury: comparison with moxalactam. Montgomerie JZ, et al. **Urology** 1990 Jan;35(1):93–5

[Treatment of peritonitis under continuous ambulatory peritoneal dialysis using intraperitoneal ceftazidime] Ragnaud JM, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):681–4 (Eng. Abstr.) (Fre)

[Efficacy of the combination of ceftazidime/vancomycin in the first line treatment of infection in neutropenic children] Schaison G, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):557–60 (Eng. Abstr.) (Fre)

[Treatment of phalloid poisoning with silymarin and ceftazidime (letter)] Daoudal P, et al. **Presse Med** 1989 Sep 2–9;18(27):1341–2 (Fre)

[Piperacillin in the therapy of severe bacterial infections: comparison of its efficacy and tolerance vs. ceftazidime] D'Amato C, et al. **Clin Ter** 1989 Sep 15;130(5):271–6 (Eng. Abstr.) (Ita)

[Antibiotic prophylaxis in major surgery of the neck and head] Margarino G, et al. **Minerva Chir** 1989 Nov 30; 44(22):2341–5 (Eng. Abstr.) (Ita)

[Studies on uterine tissue penetration of ceftazidime and its prophylactic effect on postoperative infections] Mori T, et al. **Jpn J Antibiot** 1989 Sep;42(9):1919–25 (Eng. Abstr.) (Jpn)

[Usefulness of ceftazidime in intractable respiratory tract infections] Takenaka S, et al. **Jpn J Antibiot** 1989 Dec; 42(12):2555–65 (Eng. Abstr.) (Jpn)

[Clinical results of the treatment of bacterial infections in children with ceftazidime] Zoch–Zwierz W, et al. **Pol Tyg Lek** 1989 Apr 24;44(17):390–3 (Eng. Abstr.) (Pol)

[Evaluation of ceftazidime monotherapy in Pseudomonas aeruginosa bacteremias. Prospective study] Gómez J, et al. **Med Clin (Barc)** 1989 Sep 16;93(7):249–51 (Eng. Abstr.) (Spa)

CEFTIZOXIME

Ceftizoxime: a third–generation cephalosporin active against anaerobic bacteria. Committee on Antimicrobial Agents, Canadian Infectious Disease Society. **Can Med Assoc J** 1990 Jun 1;142(11):1209–12 (48 ref.)

ANALOGS & DERIVATIVES

Pharmacokinetics of cefpodoxime in plasma and skin blister fluid following oral dosing of cefpodoxime proxetil. Borin MT, et al. **Antimicrob Agents Chemother** 1990 Jun; 34(6):1094–9

Pharmacokinetics of intravenous cefetamet and oral cefetamet pivoxil in patients with hepatic cirrhosis. Hayton WL, et al. **Antimicrob Agents Chemother** 1990 Jul; 34(7):1318–22

Pharmacokinetics of intravenous cefetamet and oral cefetamet pivoxil in patients with renal insufficiency. Kneer J, et al. **Antimicrob Agents Chemother** 1989 Nov; 33(11):1952–7

Pharmacokinetics and inflammatory fluid penetration of cefpodoxime proxetil in volunteers. O'Neill P, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):232–4

In vitro activity of cefpodoxime proxetil (U–76,252; CS–807) against Neisseria gonorrhoeae. Schaadt RD, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):371–2

Different doses of cefetamet pivoxil (Ro 15–8075) in the treatment of acute uncomplicated gonococcal urethritis in men. Tio TT, et al. **Antimicrob Agents Chemother** 1990 Apr;34(4):674–5

The effects of gastric pH and food on the pharmacokinetics of a new oral cephalosporin, cefpodoxime proxetil. Hughes GS, et al. **Clin Pharmacol Ther** 1989 Dec;46(6):674–85

Cefetamet pivoxil in acute pyelonephritis: an open study. Stathakis C, et al. **Curr Med Res Opin** 1990;12(1):43–50

Cefpodoxime proxetil in patients with endstage renal failure on hemodialysis. Höffler D, et al. **Infection** 1990 May–Jun; 18(3):157–62

In–vitro activities of trospectomycin, cefpodoxime, and second–generation cephalosporins against Haemophilus influenzae type b. LiPuma JJ, et al. **J Antimicrob Chemother** 1990 Apr;25(4):535–9

In–vitro activity of cefetamet (Ro 15–8074) compared with other oral agents. Rozgonyi F, et al. **J Antimicrob Chemother** 1989 Oct;24(4):539–46

The in–vitro activity of cefpodoxime: a comparison with other oral cephalosporins. Wise R, et al. **J Antimicrob Chemother** 1990 Apr;25(4):541–50

Cefetamet in the treatment of acute sinusitis in adult patients. Gauger U, et al. **J Int Med Res** 1990 May–Jun;18(3):228–34

Gastric emptying and the pharmacokinetics of the cephalosporin antibiotic, cefpodoxime proxetil. Hughes GS Jr, et al. **Methods Find Exp Clin Pharmacol** 1990 Apr; 12(3):197–204

Cefetamet pivoxil in paediatric patients suffering from lower respiratory tract infections. Gatzola–Karaveli M, et al. **Pharmatherapeutica** 1989;5(6):423–8

[Comparative antibacterial activity of cefpodoxime, cefuroxime and cefaclor against strict anaerobic bacteria] Dubreuil L, et al. **Pathol Biol (Paris)** 1990 May;38(5):343–6 (Eng. Abstr.) (Fre)

[Comparative study of the antibacterial activity of cefpodoxime against enterobacteria producing beta lactamases] Siebor E, et al. **Pathol Biol (Paris)** 1990 May; 38(5):331–5 (Eng. Abstr.) (Fre)

[In vitro antibacterial activity of RU 51746 (sodium salt of cefpodoxime). Results of a multicenter study] Soussy CJ, et al. **Pathol Biol (Paris)** 1990 May;38(5):336–42 (Eng. Abstr.) (Fre)

[Pharmacokinetic, bacteriological and clinical studies on cefpodoxime proxetil in the field of pediatrics] Akita H, et al. **Jpn J Antibiot** 1989 Jul;42(7):1547–60 (Eng. Abstr.) (Jpn)

[Overall clinical evaluation of cefpodoxime proxetil against infections in pediatric fields] Fujii R, et al. **Jpn J Antibiot** 1989 Jul;42(7):1439–55 (Eng. Abstr.) (Jpn)

[Influence of Mueller–Hinton broth on the in vitro activities of cefuzoname, flomoxef, imipenem, and minocycline against Staphylococcus aureus] Fujita S, et al. **Jpn J Antibiot** 1990 May;43(5):757–60 (Eng. Abstr.) (Jpn)

[Clinical studies on cefpodoxime proxetil dry syrup in the field of pediatrics] Haruta T, et al. **Jpn J Antibiot** 1989 Jul;42(7):1621–8 (Eng. Abstr.) (Jpn)

[A clinical study on cefuzonam concentrations in myocardium in open heart surgery] Higami T, et al. **Jpn J Antibiot** 1989 Sep;42(9):1882–7 (Eng. Abstr.) (Jpn)

[Study of efficacy, safety and dosage on cefpodoxime proxetil in pediatric infections] Hirosawa H, et al. **Jpn J Antibiot** 1989 Jul;42(7):1498–504 (Eng. Abstr.) (Jpn)

[A clinical study of pulmonary tissue uptake of cefuzonam and its use in prophylaxis of postoperative infections] Imaizumi M, et al. **Jpn J Antibiot** 1989 Nov; 42(11):2393–405 (Eng. Abstr.) (Jpn)

[Pharmacokinetic, bacteriological and clinical evaluation of cefpodoxime proxetil in pediatrics] Iwai N, et al. **Jpn J Antibiot** 1989 Jul;42(7):1571–92 (Eng. Abstr.) (Jpn)

[The influence of cefpodoxime proxetil on the intestinal bacterial flora] Iwata S, et al. **Jpn J Antibiot** 1989 Jul; 42(7):1667–84 (Eng. Abstr.) (Jpn)

[Bacteriological, pharmacokinetic and clinical studies on cefpodoxime proxetil in the pediatric field] Kimura H, et al. **Jpn J Antibiot** 1989 Jul;42(7):1593–606 (Eng. Abstr.) (Jpn)

[Clinical studies of cefpodoxime proxetil in pediatric field] Kimura S, et al. **Jpn J Antibiot** 1989 Jul;42(7):1477–87 (Eng. Abstr.) (Jpn)

[Clinical evaluation of a new oral cephem, cefpodoxime proxetil in children] Meguro H, et al. **Jpn J Antibiot** 1989 Jul;42(7):1561–70 (Eng. Abstr.) (Jpn)

[A clinical evaluation of cefpodoxime proxetil in pediatrics] Minamitani M, et al. **Jpn J Antibiot** 1989 Jul;42(7):1488–97 (Eng. Abstr.) (Jpn)

[Pharmacokinetic and clinical studies on cefpodoxime proxetil dry syrup in the field of pediatrics] Motohiro T, et al. **Jpn J Antibiot** 1989 Jul;42(7):1629–66 (Eng. Abstr.) (Jpn)

[Clinical study of cefpodoxime proxetil dry syrup for skin and soft tissue infections in the field of pediatrics] Motohiro T, et al. **Jpn J Antibiot** 1989 Jul;42(7):1685–704 (Eng. Abstr.) (Jpn)

[Evaluation of cefpodoxime proxetil in the pediatric field] Niino K, et al. **Jpn J Antibiot** 1989 Jul;42(7):1505–18 (Eng. Abstr.) (Jpn)

[Laboratory and clinical studies of cefpodoxime proxetil in pediatric field] Nishimura T, et al. **Jpn J Antibiot** 1989 Jul;42(7):1607–20 (Eng. Abstr.) (Jpn)

[Clinical and pharmacokinetic evaluation of cefpodoxime proxetil in children] Sakata H, et al. **Jpn J Antibiot** 1989 Jul;42(7):1456–63 (Eng. Abstr.) (Jpn)

[Bacteriological, pharmacokinetic and clinical studies on cefpodoxime proxetil in the pediatric field] Toyonaga Y, et al. **Jpn J Antibiot** 1989 Jul;42(7):1519–46 (Eng. Abstr.) (Jpn)

[A clinical study on cefpodoxime proxetil dry syrup in pediatric infections] Wagatsuma Y, et al. **Jpn J Antibiot** 1989 Jul;42(7):1464–70 (Eng. Abstr.) (Jpn)

[Clinical studies on cefpodoxime proxetil in the pediatric fields] Watanabe A, et al. **Jpn J Antibiot** 1989 Jul; 42(7):1471–6 (Eng. Abstr.) (Jpn)

[Comparison of intraocular penetration level of cefuzonam sodium and cefotiam after intravenous and subconjunctival injection] Sugihara I, et al. **Nippon Ganka Gakkai Zasshi** 1990 Feb;94(2):211–8 (Eng. Abstr.) (Jpn)

PHARMACOKINETICS

Transfer of ceftizoxime surpasses that of cefoperazone by the isolated human placenta perfused in vitro. Fortunato SJ, et al. **Obstet Gynecol** 1990 May;75(5):830–3

PHARMACOLOGY

An update on the in vitro activity of ceftizoxime and other cephalosporin/cephamycin antimicrobial agents against clinically significant anaerobic bacteria. Aldridge KE. **Clin Ther** 1990;12 Suppl C:3–12 (16 ref.)

Comparison of in vivo and in vitro efficacy of ceftizoxime. Delaney ML, et al. **Clin Ther** 1990;12 Suppl C:25–30

Media– and method–dependent variation in MIC values of ceftizoxime for clinical isolates of the Bacteroides fragilis group. Wexler HM, et al. **Clin Ther** 1990;12 Suppl C:13–24

THERAPEUTIC USE

Gangrenous and perforated appendicitis with peritonitis: treatment and bacteriology. Bennion RS, et al. **Clin Ther** 1990;12 Suppl C:31–44

Comparison of single–dose ceftizoxime with multidose cefoxitin chemoprophylaxis for patients undergoing hysterectomy. McGregor JA, et al. **Clin Ther** 1990;12 Suppl C:45–52

A comparison of the efficacy and safety of ceftizoxime with doxycycline versus conventional CDC therapies in the treatment of upper genital tract infection with or without a mass. Roy S, et al. **Clin Ther** 1990;12 Suppl C:53–73

Interchangeability of ceftizoxime and cefoxitin: a clinical perspective. Wikler MA. **Clin Ther** 1990;12 Suppl C:74–9

Ceftizoxime drug utilization evaluation: empiric versus therapeutic regimens [letter] Sesin GP, et al. **DICP** 1990 Jan;24(1):97

Delayed cerebrospinal fluid sterilization in infants with Hemophilus influenzae type b meningitis. Hatch DL, et al. **J Infect Dis** 1989 Oct;160(4):711–5

CEFTRIAXONE

ADMINISTRATION & DOSAGE

Once-daily dosing regimen for aminoglycoside plus beta-lactam combination therapy of serious bacterial infections: comparative trial with netilmicin plus ceftriaxone. ter Braak EW, et al. **Am J Med** 1990 Jul; 89(1):58–66

Randomized, double-blind comparison of the efficacies, costs, and vaginal flora alterations with single-dose ceftriaxone and multidose cefazolin prophylaxis in vaginal hysterectomy. Stiver HG, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1194–7

Short course single daily ceftriaxone monotherapy for acute bacterial meningitis in children: results of a Swiss multicenter study. Part I: Clinical results. Martin E, et al. **Infection** 1990 Mar–Apr;18(2):70–7

Ceftriaxone plus amikacin in a single daily dose as empiric antibiotic therapy in granulocytopenic patients. Cudillo L, et al. **J Chemother** 1989 Dec;1(6):413–6

Reduced dosage of ceftriaxone for uncomplicated gonorrhea in women. Freedman LD. **J Fam Pract** 1990 Aug; 31(2):201–2, 205

Ceftriaxone as prophylaxis for elective abdominal and colorectal surgery. Studies in the Departments of Surgery at the Universities of the Orange Free State, Natal and Pretoria. Nel CJ. **S Afr J Surg** 1989 Sep;Suppl:6

Efficacy of various single-dose regimens of ceftriaxone in uncomplicated acute gonococcal urethritis in adult males. Hoosen AA, et al. **S Afr Med J** 1990 Aug 18;78(4):187–9

Short-chain fatty acid and organic acid concentrations in feces of healthy human volunteers and their correlations with anaerobe cultural counts during systemic ceftriaxone administration. Meijer-Severs GJ, et al. **Scand J Gastroenterol** 1990 Jul;25(7):698–704

[Single administration of 1 g ceftriaxon versus 3 x 1 g cefotaxim in the treatment of gynecologic infections—a randomized comparative study] Gerstner GJ. **Gynakol Rundsch** 1989;29(3):182–6 **(Ger)**

[Combination of oral bacterial vaccines and antibiotics in acute recurrent respiratory infections] Lauriello G, et al. **Clin Ter** 1990 Apr 30;133(2):87–90 (Eng. Abstr.) **(Ita)**

[Single-daily-dose treatment of ceftriaxone for biliary tract infections and bacterial counts in bile] Tanimura H, et al. **Nippon Geka Hokan** 1989 May 1;58(3):299–309 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Ceftriaxone-associated neutropenia [letter; comment] Billstein SA, et al. **Am J Med** 1990 Jun;88(6):701–2 Comment on: Am J Med 1989 Nov;87(5):591–2.

Ceftriaxone-induced granulopenia related to a peculiar mechanism of granulopoiesis inhibition [see comments] Rey D, et al. **Am J Med** 1989 Nov;87(5):591–2 Comment in: Am J Med 1990 Jun;88(6):701–2.

Apparent biliary pseudolithiasis during ceftriaxone therapy. Heim-Duthoy KL, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1146–9

Incidence of gallbladder lithiasis after ceftriaxone treatment. Cometta A, et al. **J Antimicrob Chemother** 1990 Apr; 25(4):689–95

Diarrhoea associated with ceftriaxone and its implications in paediatric patients. Nahata MC, et al. **J Clin Pharm Ther** 1989 Aug;14(4):305–7

Gallbladder sludge and antibiotics. Lee SP, et al. **Pediatr Infect Dis J** 1990 Jun;9(6):422–3 (18 ref.)

ANALYSIS

Determination of ceftriaxone in biological material by differential-pulse adsorptive stripping voltammetry. Altinoz S, et al. **Analyst** 1990 Jun;115(6):873–4

High-performance liquid chromatographic determination of the binding of ceftriaxone to human serum albumin solution and albumin from diluted human serum. Mohler J, et al. **J Chromatogr** 1990 Jun 29;528(2):415–23

Differential pulse adsorptive stripping voltammetric determination of ceftriaxone at a static mercury dropping electrode. Altinoz S, et al. **J Pharm Sci** 1990 Apr; 79(4):351–3

Ion-paired reversed-phase high-performance liquid chromatography assay for determination of ceftriaxone in human plasma and urine. Jungbluth GL, et al. **J Pharm Sci** 1989 Nov;78(11):968–70

Serum and tissue concentrations of intravenous ceftriaxone during aortic surgery. Robbs JV, et al. **S Afr J Surg** 1989 Sep;Suppl:11–2

BLOOD

Influence of temperature on degradation kinetics of ceftriaxone in diluted and undiluted human serum. Esteban MJ, et al. **Antimicrob Agents Chemother** 1990 Jun; 34(6):1268–70

Effect of serum albumin on in vitro displacement of valproic acid by ceftriaxone and nafcillin [letter] Dasgupta A, et al. **Clin Chem** 1990 May;36(5):825–6

Factors affecting ceftriaxone plasma protein binding during open heart surgery. Jungbluth GL, et al. **J Pharm Sci** 1989 Oct;78(10):807–11

METABOLISM

Ceftriaxone binding to human serum albumin. Indirect displacement by probenecid and diazepam. McNamara PJ, et al. **Biochem Pharmacol** 1990 Sep 15;40(6):1247–53

[Influence of surgical biliary pathology on the diffusion of ceftriaxone in the biliary tract] Guyot L, et al. **Therapie** 1989 Jul–Aug;44(4):285–9 (Eng. Abstr.) **(Fre)**

PHARMACOKINETICS

Influence of plasma exchange pheresis on plasma elimination of ceftriaxone. Bakken JS, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1276–7

Reduction in biliary excretion of ceftriaxone by diclofenac in rabbits. Merle-Melet M, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1506–10

Potencies of ceftriaxone and cefotaxime in a single chamber pharmacokinetic system simulating their in vivo half-lives. Unowsky J, et al. **Chemotherapy** 1989;35(5):338–44

Clinical pharmacokinetics of ceftriaxone. Yuk JH, et al. **Clin Pharmacokinet** 1989 Oct;17(4):223–35 (134 ref.)

Concentrative biliary secretion of ceftriaxone. Inhibition of lipid secretion and precipitation of calcium ceftriaxone in bile. Xia Y, et al. **Gastroenterology** 1990 Aug;99(2):454–65

The intravitreal penetration of ceftriaxone in man following systemic administration. Sharir M, et al. **Invest Ophthalmol Vis Sci** 1989 Oct;30(10):2179–83

Lack of probenecid effect on nonrenal excretion of ceftriaxone in anephric patients. Patel IH, et al. **J Clin Pharmacol** 1990 May;30(5):449–53

Disposition of ceftriaxone in rat: application of a pharmacokinetic-protein binding model and comparison with cefotaxime. Hakim L, et al. **Xenobiotica** 1989 Aug; 19(8):815–22

[Diffusion of ceftriaxone into the human brain] Dorche G, et al. **Pathol Biol (Paris)** 1990 Jun;38(6):638–42 (Eng. Abstr.) **(Fre)**

[Ceftriaxone concentrations in the subperitoneal space following hysterectomy] Gerstner GJ, et al. **Gynakol Rundsch** 1989;29 Suppl 2:381–3 **(Ger)**

PHARMACOLOGY

Susceptibilities to ceftriaxone of streptococcal strains associated with infective endocarditis. Etienne J, et al. **Chemotherapy** 1989;35(5):355–9

Short course single daily ceftriaxone monotherapy for acute bacterial meningitis in children: results of a Swiss multicenter study. Part II: Bacteriological results. Hohl P, et al. **Infection** 1990 Mar–Apr;18(2):78–82

Standardization of disk diffusion and agar dilution susceptibility tests for Neisseria gonorrhoeae: interpretive criteria and quality control guidelines for ceftriaxone, penicillin, spectinomycin, and tetracycline. Jones RN, et al. **J Clin Microbiol** 1989 Dec;27(12):2758–66

Study of the influence of protein binding on serum bactericidal titres and killing rates in volunteers receiving ceftazidime, cefotaxime and ceftriaxone. Van der Auwera P, et al. **J Hosp Infect** 1990 Apr;15 Suppl A:23–34

Ceftriaxone prophylaxis in surgery [letter] Villiger JW, et al. **N Z Med J** 1990 May 23;103(890):251

[In vitro effects of combinations of teicoplanin and ceftriaxone against Staphylococcus aureus and Enterococcus] Thabaut A, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):595–9 (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Antibiotic prophylaxis in biliary tract surgery. Ciprofloxacin versus ceftriaxone. Kujath P. **Am J Med** 1989 Nov 30; 87(5A):255S–257S

Oculo-facial-skeletal myorhythmia in Whipple disease: treatment with ceftriaxone. Adler CH, et al. **Ann Intern Med** 1990 Mar 15;112(6):467–9

Oral ciprofloxacin versus ceftriaxone for the treatment of urethritis from resistant Neisseria gonorrhoeae in Zambia. Bryan JP, et al. **Antimicrob Agents Chemother** 1990 May; 34(5):819–22

Comparison of ofloxacin and ceftriaxone in the treatment of uncomplicated gonorrhea caused by penicillinase-producing and non-penicillinase-producing strains. Covino JM, et al. **Antimicrob Agents Chemother** 1990 Jan;34(1):148–9

Activity of sulbactam in combination with ceftriaxone in vitro and in experimental endocarditis caused by Escherichia coli producing SHV-2-like beta-lactamase. Fantin B, et al. **Antimicrob Agents Chemother** 1990 Apr; 34(4):581–6

Ceftriaxone therapy of chronic inflammatory arthritis. A double-blind placebo controlled trial. Caperton EM, et al. **Arch Intern Med** 1990 Aug;150(8):1677–82

Ceftriaxone in the treatment of meningitis, gonococcal infections and other serious bacterial infections. Infectious Diseases and Immunization Committee, Canadian Paediatric Society. **Can Med Assoc J** 1990 Mar 1; 142(5):450–2

Therapy of lower respiratory tract infections: a comparison of ceftriaxone and cefotaxime. Barradas P, et al. **Chemotherapy** 1989;35 Suppl 2:33–40

Ceftriaxone versus imipenem/cilastatin as empirical monotherapy for infections in cancer patients. Bucaneve G, et al. **Chemotherapy** 1989;35 Suppl 2:10–5

Ceftriaxone versus cefotaxime in the treatment of septicemia in adults. Ferencz A, et al. **Chemotherapy** 1989;35 Suppl 2:5–9

Treatment of various infections in an outpatient practice by intramuscular ceftriaxone: home parenteral therapy. Karachalios GN, et al. **Chemotherapy** 1989;35(5):389–92

One-shot treatment of uncomplicated gonorrhoea with third-generation cephalosporins with differing serum half-life. Results of a controlled trial with ceftriaxone and cefotaxime. Korting HC, et al. **Chemotherapy** 1989; 35(6):441–8

A comparative study of ceftriaxone plus amikacin, ceftazidime plus amikacin and imipenem/cilastatin in the empiric therapy of febrile granulocytopenic cancer patients. Liu CY, et al. **Chemotherapy** 1989;35 Suppl 2:16–22

Use of ceftriaxone in the treatment of bacterial infections in cirrhotic patients. Mercader J, et al. **Chemotherapy** 1989; 35 Suppl 2:23–6

A single prophylactic antibiotic for emergency appendicectomy? el-Mufti M, et al. **Chemotherapy** 1989; 35(5):383–8

Ceftriaxone monotherapy for severe bacteremic infections. Spanish Ceftriaxone Study Group. Soriano E, et al. **Chemotherapy** 1989;35 Suppl 2:27–32

Comparison of ceftriaxone with cefotaxime in serious chest infections. Reeves JH, et al. **Chest** 1989 Dec;96(6):1292–7

Comparison of ceftriaxone (1 x 1 g/day) versus cefotaxime (3 x 1 g/day) for gynecologic and obstetric infections. A randomized clinical trial. Gerstner GJ. **Gynecol Obstet Invest** 1990;29(4):273–7

Ceftriaxone and amikacin as single daily dose in the empiric therapy for febrile episodes in neutropenic patients. Martino P, et al. **Haematologica** 1990 Jan–Feb;75(1):69–74

Eradication of Salmonella dublin in an immunodeficient child by combined use of ceftriaxone and ciprofloxacin after failure of either agent alone [letter] Hoppe JE, et al. **Infection** 1989 Nov–Dec;17(6):399–400

Ceftriaxone versus aztreonam plus cefazolin for infections in cancer patients with adequate neutrophil counts. Menichetti F, et al. **Infection** 1990 May–Jun;18(3):166–9

A comparative study of cefamandole and ceftriaxone as prophylaxis in cardiac surgery. Neidhart P, et al. **Infection** 1990 Mar–Apr;18(2):101–4

A randomized trial of ceftriaxone versus oral penicillin for the treatment of early European Lyme borreliosis. Weber K, et al. **Infection** 1990 Mar–Apr;18(2):91–6

Endocarditis due to Streptococcus agalactiae: a favorable outcome with conservative treatment. Guijarro-Morales A, et al. **Int J Cardiol** 1990 Aug;28(2):267–9

Ceftriaxone vs. azlocillin and netilmicin in the treatment of febrile neutropenic children. Smith L, et al. **J Infect** 1990 May;20(3):201–6

Cerebrospinal fluid endotoxin levels in children with H. influenzae meningitis before and after administration of intravenous ceftriaxone. Arditi M, et al. **J Infect Dis** 1989 Dec;160(6):1005–11

Cerebrospinal fluid levels with ceftriaxone therapy for Haemophilus influenzae meningitis [letter] Hurley JC. **J Infect Dis** 1990 Oct;162(4):991–3

Modulation of inflammation and cachectin activity in relation to treatment of experimental Hemophilus influenzae type b meningitis. Mustafa MM, et al. **J Infect Dis** 1989 Nov; 160(5):818–25

Ceftriaxone in the treatment of acute and subacute human brucellosis. al-Idrissi HY, et al. **J Int Med Res** 1989 Jul–Aug;17(4):363–8

Cefuroxime versus ceftriaxone for bacterial meningitis [letter; comment] Bass JW, et al. **J Pediatr** 1990 Mar;116(3):488–90 Comment on: J Pediatr 1989 Jun;114(6):1049–54.

Ceftriaxone versus cefuroxime for treatment of bacterial meningitis [letter; comment] Weiss D, et al. **J Pediatr** 1990 Mar;116(3):488–90, 492 Comment on: J Pediatr 1989 Jun;114(6):1049–54.

Abdominal aortic aneurysms infected with salmonella: problems of treatment. Trairatvorakul P, et al. **J Vasc Surg** 1990 Jul;12(1):16–9

A comparison of ceftriaxone and cefuroxime for the treatment of bacterial meningitis in children. Schaad UB, et al. **N Engl J Med** 1990 Jan 18;322(3):141–7

Ceftriaxone versus cefuroxime for meningitis in children [letter] Wrenn K. **N Engl J Med** 1990 Jun 21;322(25):1821

Ceftriaxone prophylaxis in surgery [letter; comment] Morris WT, et al. **N Z Med J** 1990 Jan 24;103(882):26 Comment on: N Z Med J 1989 Nov 22;102(880):619–20.

Auckland surgical prophylaxis trial [letter] [see comments] Smith JM. **N Z Med J** 1989 Nov 22;102(880):619–20 Comment in: N Z Med J 1990 Jan 24;103(882):26.

Auckland ceftriaxone prophylaxis trial [letter] Smith JM. **N Z Med J** 1990 Apr 11;103(887):164

Randomized comparative study of ampicillin/sulbactam vs. ceftriaxone for treatment of soft tissue and skeletal infections in children. Kulhanjian J, et al. **Pediatr Infect Dis J** 1989 Sep;8(9):605–10

Outpatient management of selected infants younger than two months of age evaluated for possible sepsis. McCarthy CA, et al. **Pediatr Infect Dis J** 1990 Jun;9(6):385–9

Once daily ceftriaxone vs. chloramphenicol for treatment of typhoid fever in children. Moosa A, et al. **Pediatr Infect Dis J** 1989 Oct;8(10):696–9

Ceftriaxone vs cefotaxime for treatment of Haemophilus influenzae meningitis [letter; comment] Madson L, et al. **Pediatrics** 1990 Apr;85(4):622–4 Comment on: Pediatrics 1989 Jul;84(1):132–5.

Ceftriaxone treatment of syphilis [letter] Zenker PN, et al. **Rev Infect Dis** 1990 May-Jun;12(3):565

Antibiotic prophylaxis in penetrating abdominal injuries. Demetriades D. **S Afr J Surg** 1989 Sep;Suppl:5

Multicenter, comparative study of enoxacin and ceftriaxone for treatment of uncomplicated gonorrhea. Pabst KM, et al. **Sex Transm Dis** 1989 Jul-Sep;16(3):148-51

Cefotetan therapy for gonococcal urethritis and cervicitis. Youssef RZ, et al. **Sex Transm Dis** 1990 Apr-Jun; 17(2):99-101

Short-course treatment of bacteremia with ceftriaxone monotherapy. Wang LS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Feb;89(2):115-20

Oral and intramuscular ceftriaxone for meningococcal infections [letter; comment] Billstein SA, et al. **West J Med** 1989 Nov;151(5):562 Comment on: West J Med 1989 Jan;150(1):68-73.

Perioperative antibiotic prophylaxis in cardiovascular surgery: a prospective randomized comparative trial of cefazolin versus ceftriaxone [letter; comment] Geroulanos S. **World J Surg** 1990 Mar-Apr;14(2):277 Comment on: World J Surg 1989 Nov-Dec;13(6):798-801; discussion 801-2.

Perioperative antibiotic prophylaxis in cardiovascular surgery: a prospective randomized comparative trial of cefazolin versus ceftriaxone [see comments] Soteriou M, et al. **World J Surg** 1989 Nov-Dec;13(6):798-801; discussion 801-2 Comment in: World J Surg 1990 Mar-Apr;14(2):277.

[Quantitative study of the antibacterial effect of cefotaxime and ceftriaxone during experimental Escherichia coli K1 bacteremia in chickens] Labarthe JC, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):664-7 (Eng. Abstr.) **(Fre)**

[Comparative study of intravenous ceftriaxone followed by oral cefixime versus ceftriaxone alone in the treatment of severe upper urinary tract infections] Regnier B. **Presse Med** 1989 Oct 11;18(32):1617-21 (Eng. Abstr.) **(Fre)**

[Prevention of infection in elective orthopedic interventions with special reference to alloplastic joint replacement] Aebi B, et al. **Helv Chir Acta** 1989 Aug;56(3):387-97 (Eng. Abstr.) **(Ger)**

[ERCP under ceftriaxone antibiotic cover in patients with obstructive jaundice] Werth B, et al. **Schweiz Rundsch Med Prax** 1990 Mar 27;79(13):387-8 (Eng. Abstr.) **(Ger)**

[Ceftriaxone or combined cefazolin-gentamicin for complicated urinary tract infections] Landau Z, et al. **Harefuah** 1990 Feb 1;118(3):152-3 (Eng. Abstr.) **(Heb)**

[Short-term antibiotic prophylaxis with ceftriaxone in general surgery] La Rosa M, et al. **Ann Ital Chir** 1989;60(3):183-6; discussion 187 (Eng. Abstr.) **(Ita)**

[Clinical use of ceftriaxone in short-term prophylaxis in general surgery. A case load contribution] Brigli G, et al. **Minerva Chir** 1990 Mar 15;45(5):307-8 (Eng. Abstr.) **(Ita)**

[Experience in the prophylactic use of ceftriaxone in pediatric surgery] Inserra A, et al. **Minerva Chir** 1990 May 31; 45(10):743-6 (Eng. Abstr.) **(Ita)**

[A clinical and experimental study of longatsef] Frolov AF, et al. **Vrach Delo** 1989 Oct;(10):111-3 (Eng. Abstr.) **(Rus)**

CEFUROXIME see under **CEPHALOSPORINS**

CELIAC ARTERY

Pancreaticoduodenectomy and the celiac artery compression syndrome. Kohler TR, et al. **Ann Vasc Surg** 1990 Jan; 4(1):77-80

Coeliac artery compression syndrome: the effect of decompression. Geelkerken RH, et al. **Br J Surg** 1990 Jul; 77(7):807-9

Acute intestinal failure secondary to simultaneous occlusion of the coeliac axis and the superior mesenteric artery. Gillett ER, et al. **J R Coll Surg Edinb** 1989 Jun;34(3):166-7

Total pancreatectomy with celiac artery occlusion. Karp N, et al. **N Y State J Med** 1990 Aug;90(8):416-8

[Aneurysm of the pancreaticoduodenal arteries and stenosis of the celiac trunk. Apropos of a case] Bersani D, et al. **J Radiol** 1989 Jun-Jul;70(6-7):427-30 (12 ref.) (Eng. Abstr.) **(Fre)**

[Exertion-induced lactic acidosis in celiac artery stenosis] Jungo O. **Schweiz Med Wochenschr** 1990 Mar 10; 120(10):349-53 (Eng. Abstr.) **(Ger)**

[Celiac-mesenteric insufficiency. Apropos of a case of aorto-hepatic bypass] Viglione G, et al. **Minerva Chir** 1990 Jan;45(1-2):117-9 (Eng. Abstr.) **(Ita)**

ABNORMALITIES

[Angiographic diagnosis of agenesis of the celiac trunk] Mersten A. **Cesk Radiol** 1990 Jan;44(1):32-6 (Eng. Abstr.) **(Slo)**

[Radiographic diagnosis and clinical significance of developmental anomalies of the celiac trunk] Mersten A. **Cesk Radiol** 1990 Mar;44(2):119-26 (Eng. Abstr.) **(Slo)**

SURGERY

[Digestive arterial bypass. Long-term clinical results] Courbier R, et al. **J Chir (Paris)** 1990 Mar;127(3):129-35 (Eng. Abstr.) **(Fre)**

CELIAC DISEASE

Diagnosis and treatment of gluten-sensitive enteropathy. Kelly CP, et al. **Adv Intern Med** 1990;35:341-63 (94 ref.)

Conformational studies of peptides corresponding to the coeliac-activating regions of wheat alpha-gliadin. Tatham AS, et al. **Biochem J** 1990 Sep 1;270(2):313-8

[Celiac disease where to? An update] Ashkenazi A. **Harefuah** 1990 Feb 1;118(3):167-72 (46 ref.) **(Heb)**

BLOOD

Lymphocyte subpopulations in the peripheral blood of children with coeliac disease. Arató A, et al. **Acta Paediatr Hung** 1988-89;29(3-4):281-7

Predictive value of D-xylose absorption test and erythrocyte folate in adult coeliac disease: a parallel approach. Labib M, et al. **Ann Clin Biochem** 1990 Jan;27 (Pt 1):75-7

Serum lipoprotein profile in children with celiac disease. Rosenthal E, et al. **J Pediatr Gastroenterol Nutr** 1990 Jul; 11(1):58-62

Coeliac disease--a new cause for a high carcinoembryonic antigen. Melville DM, et al. **J R Soc Med** 1990 Jun; 83(6):399

[Factor V-specific circulating anticoagulant and enteropathy. 2 cases] Taillan B, et al. **Presse Med** 1990 Feb 10; 19(5):211-2 (Eng. Abstr.) **(Fre)**

[Selenium in celiac disease] Cortigiani L, et al. **Minerva Pediatr** 1989 Nov;41(11):539-42 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Incidence of celiac disease in a cystic fibrosis population. Valleta EA, et al. **Acta Paediatr Scand** 1989 Sep;78(5):784-5

Small intestinal villous adenoma and celiac disease. Fishman MJ, et al. **Am J Gastroenterol** 1990 Jun;85(6):748-51

Celiac disease and organic dust toxic syndrome. Axmacher B, et al. **Am J Ind Med** 1990;17(1):94-5

Coexistence of celiac disease and Down syndrome. Similä S, et al. **Am J Ment Retard** 1990 Jul;95(1):120-2

Fundic gland polyposis occurring with adult celiac disease. Doris I, et al. **Can Assoc Radiol J** 1990 Jun;41(3):149-50

Partial lipodystrophy in coeliac disease. O'Mahony D, et al. **Gut** 1990 Jun;31(6):717-8

Association of primary sclerosing cholangitis and celiac disease: fact or fancy? Schrumpf E. **Hepatology** 1989 Dec; 10(6):1020-1

Neurological manifestations in celiac disease and vitamin E deficiency [letter] Ackerman Z, et al. **J Clin Gastroenterol** 1989 Oct;11(5):603-5

Obstetric and gynecological problems in women with untreated celiac sprue. Molteni N, et al. **J Clin Gastroenterol** 1990 Feb;12(1):37-9

Dental enamel defects in celiac disease. Aine L, et al. **J Oral Pathol Med** 1990 Jul;19(6):241-5

Down's syndrome and coeliac disease. Dias JA, et al. **J Pediatr Gastroenterol Nutr** 1990 Jan;10(1):41-3

Down's syndrome and celiac disease [letter] Granditsch G, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug;11(2):279

Coeliac disease and collagenous colitis. O'Mahony S, et al. **Postgrad Med J** 1990 Mar;66(773):238-41

Simultaneous occurrence of systemic lupus erythematosus and coeliac disease-like features. Varkel Y, et al. **Postgrad Med J** 1989 Aug;65(766):600-2

The association of autoimmune disorders with inflammatory bowel disease. Snook JA, et al. **Q J Med** 1989 Sep; 72(269):835-40

[Do you also consider celiac disease in iron-deficiency anemia?] Bosch FH, et al. **Ned Tijdschr Geneeskd** 1990 May 26;134(21):1033-4 **(Dut)**

[Celiac disease, autoimmune cirrhosis, chronic pancreatitis: apropos of a triple association] Faulques B, et al. **Gastroenterol Clin Biol** 1989 Dec;13(12):1082-5 (Eng. Abstr.) **(Fre)**

[Hemiplegia revealing Budd-Chiari syndrome associated with celiac disease in an infant (letter)] Hamdi A, et al. **Presse Med** 1990 May 26;19(21):1011-2 **(Fre)**

[Association of celiac disease with Hodgkin's disease of a digestive site (letter)] Routy JP, et al. **Rev Med Interne** 1990 Jan-Feb;11(1):94 **(Fre)**

[Budd-Chiari syndrome and total villous atrophy in children: apropos of 3 case reports] Boudhina T, et al. **Tunis Med** 1990 Jan;68(1):59-62 (Eng. Abstr.) **(Fre)**

[Incidence of iron deficiency anemia in celiac disease: apropos of 26 cases] Bouguerra L, et al. **Tunis Med** 1990 Feb; 68(2):131-3 (13 ref.) (Eng. Abstr.) **(Fre)**

[Adenocarcinoma of the small intestine in celiac disease. Case report and literature review] Marsch SC, et al. **Schweiz Med Wochenschr** 1990 Feb 3;120(5):135-41 (35 ref.) (Eng. Abstr.) **(Ger)**

[Risk of malignancies in celiac disease--a retrospective study] Marsch S, et al. **Schweiz Rundsch Med Prax** 1990 Apr 24; 79(17):533-6 (Eng. Abstr.) **(Ger)**

[Neoplasm prevention in endemic sprue: diet as a weapon] Lembcke B, et al. **Z Gastroenterol** 1990 Mar;28(3):177-8 **(Ger)**

[Osteomalacia and fatigue fractures in celiac disease] Jerosch J, et al. **Z Rheumatol** 1990 Mar-Apr;49(2):100-2 (Eng. Abstr.) **(Ger)**

[Treatment of enteropathy in AIDS with a gluten-free diet. Preliminary communication] Quiñones A, et al. **Rev Invest Clin** 1989 Jul-Sep;41(3):223-6 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Revised criteria for diagnosis of coeliac disease. Report of Working Group of European Society of Paediatric Gastroenterology and Nutrition. **Arch Dis Child** 1990 Aug; 65(8):909-11 (26 ref.)

Clinical monitoring of steatorrhoea in cystic fibrosis [letter] Brown GA, et al. **Arch Dis Child** 1990 Aug;65(8):913

When should the celiac patient have an intestinal biopsy [letter] Catassi C, et al. **Arch Dis Child** 1990 Jul;65(7):810-1

Diagnosis of coeliac disease: time for a change? Guandalini S, et al. **Arch Dis Child** 1989 Sep;64(9):1320-4; discussion 1324-5

Clinical monitoring of steatorrhoea in cystic fibrosis. Walters MP, et al. **Arch Dis Child** 1990 Jan;65(1):99-102

IgA isotyping of antigliadin antibodies. A possible clue for a less invasive diagnosis of coeliac disease. Elewaut A, et al. **Clin Chim Acta** 1989 Aug 31;183(3):285-94

Anemia: monosymptomatic celiac disease. A report of 3 cases. Depla AC, et al. **Hepatogastroenterology** 1990 Feb; 37(1):90-1

Celiac disease in Indian children [letter] Gupte S. **Indian Pediatr** 1990 Feb;27(2):211-2

Celiac disease in Indian children. Khoshoo V, et al. **Indian Pediatr** 1989 Jul;26(7):627-9

Celiac disease in Indian children [letter] Mehta S. **Indian Pediatr** 1990 Feb;27(2):212-3

Urinary oxalate recovery after oral oxalic load: an alternative method to the quantitative determination of stool fat for the diagnosis of lipid malabsorption. Sangaletti O, et al. **J Int Med Res** 1989 Nov-Dec;17(6):526-31

A new laboratory kit for anti-gliadin IgA at diagnosis and follow-up of childhood celiac disease. Ascher H, et al. **J Pediatr Gastroenterol Nutr** 1990 May;10(4):443-50

Serological markers and celiac disease: a new diagnostic approach? Calabuig M, et al. **J Pediatr Gastroenterol Nutr** 1990 May;10(4):435-42

Steatocrit test: normal range and physiological variations in infants. Iacono G, et al. **J Pediatr Gastroenterol Nutr** 1990 Jul;11(1):53-7

Endoscopic small intestinal biopsy in infants and children: its usefulness in the diagnosis of celiac disease and other enteropathies. Kirberg A, et al. **J Pediatr Gastroenterol Nutr** 1989 Aug;9(2):178-81

Anti-gliadin antibody panel and xylose absorption test in screening for celiac disease. Rich EJ, et al. **J Pediatr Gastroenterol Nutr** 1990 Feb;10(2):174-8

Serum antibodies to dietary antigens: a prospective study of the diagnostic usefulness in celiac disease of children. Scott H, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug; 11(2):215-20

IgA anti-gliadin antibodies in the monitoring of gluten challenge in celiac disease. Valletta EA, et al. **J Pediatr Gastroenterol Nutr** 1990 Feb;10(2):169-73

Dermatoglyphic (fingerprint) patterns in celiac disease. Weizman Z, et al. **J Pediatr Gastroenterol Nutr** 1990 May; 10(4):451-3

Rectal gluten challenge and diagnosis of coeliac disease [letter] deSousa JS. **Lancet** 1990 Aug 4;336(8710):323

Rectal gluten challenge and diagnosis of coeliac disease [letter] Loft DE, et al. **Lancet** 1990 Sep 1;336(8714):570

Rectal gluten challenge and diagnosis of coeliac disease [see comments] Loft DE, et al. **Lancet** 1990 Jun 2; 335(8701):1293-5 Comment in: Lancet 1990 Jun 30;335(8705):1592.

Celiac disease revealed by an acute folate deficiency. CESA. Committee of expert for specific investigations in complex anemias. Zittoun J. **Nouv Rev Fr Hematol** 1989;31(5):379-82

Hepatic abnormalities in coeliac disease: three cases of delayed diagnosis. Mitchison HC, et al. **Postgrad Med J** 1989 Dec;65(770):920-2

Atypical coeliac disease found with serologic screening. Collin P, et al. **Scand J Gastroenterol** 1990 Mar; 25(3):245-50

Measurements of serum IgA and IgG activities to dietary antigens. A prospective study of the diagnostic usefulness in adult coeliac disease. Scott H, et al. **Scand J Gastroenterol** 1990 Mar;25(3):287-92

[Determination of IgA anti-endomysium antibodies in different tissue substrates] Pavlovsky F, et al. **Dermatol Monatsschr** 1990;176(4):239-43 **(Ger)**

[Celiac disease (gluten sensitive enteropathy)] Granditsch G. **Padiatr Padol** 1990;25(2):67-84 (68 ref.) (Eng. Abstr.) **(Ger)**

[The value of the d-xylose loading test in the diagnosis of malabsorption syndromes] Horváth K, et al. **Orv Hetil** 1990 Aug 19;131(33):1803-6, 1809 (37 ref.) (Eng. Abstr.) **(Hun)**

[Sensitivity and specificity of antigliadine antibodies in the diagnosis of celiac disease in a population of children in Toscana] Rosselli P, et al. **Pediatr Med Chir** 1989 May-Jun; 11(3):301-5 (Eng. Abstr.) **(Ita)**

[Rapid diagnosis of celiac-sprue syndrome] Gaĭdar IuA, et al. **Arkh Patol** 1989;51(10):55-8 (Eng. Abstr.) **(Rus)**

[Anti-endomysium antibodies: new serological markers for the diagnosis and follow-up of patients with gluten-sensitive enteropathy. Preliminary study] Calabuig Sánchez M, et al. **An Esp Pediatr** 1989 Jun;30(6):432-4 (Eng. Abstr.) **(Spa)**

DIET THERAPY

Growth in children with partially treated coeliac disease [letter; comment] Paerregaard A, et al. **Acta Paediatr Scand** 1989 Nov;78(6):950–1 Comment on: Acta Paediatr Scand 1988 Jul;77(4):516–24.

The teenage coeliac [letter; comment] Colaco J, et al. **Arch Dis Child** 1989 Jul;64(7):1093–4 Comment on: Arch Dis Child 1988 Aug;63(8):916–20.

Dietary therapy of steatorrhea. Marotta RB, et al. **Gastroenterol Clin North Am** 1989 Sep;18(3):485–512 (140 ref.)

What is gluten-free—levels and tolerances in the gluten-free diet. Hekkens WT, et al. **Nahrung** 1990;34(5):483–7

Celiac disease: parental knowledge and attitudes of dietary compliance. Anson O, et al. **Pediatrics** 1990 Jan; 85(1):98–103

Scanning electron microscopy of the small intestine mucosa in children with celiac disease after long-term dietary treatment. Morroni M, et al. **Scanning Microsc** 1989 Dec; 3(4):1161–6; discussion 1166–7

[Should a gluten-free diet in celiac disease be followed for ever?] Cosnes J. **Ann Gastroenterol Hepatol (Paris)** 1990 Mar–Apr;26(2):77–80 (28 ref.) **(Fre)**

[Celiac disease and a gluten-free diet] Rampal P, et al. **Gastroenterol Clin Biol** 1990;14(2 (Pt 3)):T22–5 (20 ref.) **(Fre)**

[Selenium levels in erythrocytes of children with celiac disease] Boda M, et al. **Orv Hetil** 1989 Sep 24; 130(39):2087–90 (38 ref.) (Eng. Abstr.) **(Hun)**

[Celiac disease in adults and gluten free diet] Caprilli R, et al. **Ann Ital Med Int** 1986 Sep;1(3):241–6 (Eng. Abstr.) **(Ita)**

[Evaluation of the effect of gluten-free diet on nutritional status of children with florid celiac disease] Radzikowski A, et al. **Pediatr Pol** 1989 Mar;64(3):150–4 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Detection and estimation of the barley prolamin content of beer and malt to assess their suitability for patients with coeliac disease. Ellis HJ, et al. **Clin Chim Acta** 1990 Aug 15;189(2):123–30

[Requirements for successful pancreatic enzyme replacement therapy (comparative study of Kreon and Panpur)] Pap A, et al. **Orv Hetil** 1990 Feb 4;131(5):241–4 (Eng. Abstr.) **(Hun)**

[Efficacy of a new microencapsulated pancreatin versus a conventional preparation, in the treatment of steatorrhea of pancreatic origin] Aparisi L, et al. **Rev Esp Enferm Apar Dig** 1989 Jul;76(1):25–30 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Diamine oxidase plasma activities after treatment with heparin and jejunal morphometry in untreated coeliac disease. Corazza GR, et al. **J Clin Pathol** 1989 Nov; 42(11):1136–9

Brush border enzymes in coeliac disease: histochemical evaluation. Mercer J, et al. **J Clin Pathol** 1990 Apr; 43(4):307–12

[Activity and molecular form of intestinal gamma-glutamyltransferase (GGT) EC 2.3.2.2. in celiac disease] Tomaszewski L, et al. **Pediatr Pol** 1989 Jun; 64(6):369–78 (Eng. Abstr.) **(Pol)**

[Alkaline phosphatase in the intestinal mucosa of children with the malabsorption syndrome] Ferrer Calvete J, et al. **An Esp Pediatr** 1989 Jul;31(1):30–2 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Epidemiological survey of coeliac disease and inflammatory bowel disease in first-degree relatives of coeliac patients. Shah A, et al. **Q J Med** 1990 Mar;74(275):283–8

ETIOLOGY

Atopy and coeliac disease: bias or true relation? Greco L, et al. **Acta Paediatr Scand** 1990 Jun–Jul;79(6–7):670–4

Pica as a presenting symptom in childhood coeliac disease. Korman SH. **Am J Clin Nutr** 1990 Feb;51(2):139–41

An unusual case of ileocecal carcinoma presenting with steatorrhea [letter] Upadhyay R, et al. **Am J Gastroenterol** 1989 Nov;84(11):1467–8

Is a persistent adenovirus infection involved in coeliac disease? Carter MJ, et al. **Gut** 1989 Nov;30(11):1563–7

A physical approach to coeliac disease. Hills BA, et al. **Med Hypotheses** 1990 Jul;32(3):219–23 (30 ref.)

Nancy Slater's saga. Bile salt depletion from a scarred ileum causes steatorrhea. Tyor MP. **N C Med J** 1990 Jul; 51(7):331–3

[The association of diabetes and celiac disease: the value of assaying antireticulin antibodies] Keddari M, et al. **Pediatrie** 1989;44(4):319–21 (Eng. Abstr.) **(Fre)**

[Gluten intolerance as a disease of children and adults] Kaczmarski M, et al. **Pediatr Pol** 1989 Aug–Sep; 64(8–9):571–8 **(Pol)**

[Clinical aspects of cow milk protein and gluten intolerance in children] Kaczmarski M. **Pol Tyg Lek** 1989 Jan 23; 44(4):86–8 (Eng. Abstr.) **(Pol)**

[The fate of children with malabsorption syndrome and "flat mucosa"] Czerwionka-Szaflarska M, et al. **Wiad Lek** 1989 Feb 1;42(3):134–8 (Eng. Abstr.) **(Pol)**

GENETICS

HLA and celiac disease in Argentina: involvement of the DQ subregion. Palavecino EA, et al. **Dis Markers** 1990 Jan–Feb;8(1):5–10

HLA–DP and coeliac disease: family and population studies. Caffrey C, et al. **Gut** 1990 Jun;31(6):663–7

Understanding the molecular basis of coeliac disease. Kagnoff MF. **Gut** 1990 May;31(5):497–9 (32 ref.)

Studies of intestinal lymphoid tissue. XIV—HLA status, mucosal morphology, permeability and epithelial lymphocyte populations in first degree relatives of patients with coeliac disease. Marsh MN, et al. **Gut** 1990 Jan; 31(1):32–6

Restriction fragment length polymorphism in HLA class II genes of Latin-American Caucasian celiac disease patients. Herrera M, et al. **Hum Immunol** 1989 Dec;26(4):272–80

A locus telomeric to HLA-DPB encodes susceptibility to coeliac disease. Rosenberg WM, et al. **Immunogenetics** 1989;30(4):307–10

Celiac disease and schizophrenia: family occurrence [letter] Perisic VN, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug; 11(2):279

[HLA and disease in Argentina. Serologic and genomic polymorphism] Satz ML, et al. **Medicina (B Aires)** 1989; 49(2):119–24 (Eng. Abstr.) **(Spa)**

HISTORY

Forty years ago. Coeliac disease. Jackson AD. **Arch Dis Child** 1990 Jun;65(6):609

IMMUNOLOGY

Application of ELISA method to determine antigliadin antibodies in children with coeliac disease. Kolek A, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;122:183–92

Serum interleukin-2-receptor in coeliac disease: response to treatment and gluten challenge. Crabtree JE, et al. **Clin Exp Immunol** 1989 Sep;77(3):345–8

Influence of the G2m(n) allotype and age on IgG subclass distribution in antibodies to dietary proteins in children with coeliac disease. Rautonen N, et al. **Clin Exp Immunol** 1990 Aug;81(2):306–10

IgA subclass antibodies to gliadin in serum and intestinal juice of patients with coeliac disease. Volta U, et al. **Clin Exp Immunol** 1990 May;80(2):192–5

Celiac disease: adenovirus and alpha gliadin. Kagnoff MF. **Curr Top Microbiol Immunol** 1989;145:67–78 (50 ref.)

Antigliadin antibody levels in symptomless celiac disease [letter; comment] Frisoni M, et al. **Dig Dis Sci** 1989 Oct; 34(10):1639–40 Comment on: Dig Dis Sci 1988 Dec;33(12):1641.

Immunoglobulin allotypes and the immune response to wheat gliadin in a Finnish population with celiac disease. Fedrick JA, et al. **Exp Clin Immunogenet** 1985;2(4):185–90

Secretory immunity in celiac disease: cellular expression of immunoglobulin A subclass and joining chain. Kett K, et al. **Gastroenterology** 1990 Aug;99(2):386–92

Complement activation within the coeliac small intestine is localised to Brunner's glands [see comments] Gallagher RB, et al. **Gut** 1989 Nov;30(11):1568–73 Comment in: Gut 1990 May;31(5):583–4.

Comparison of IgA-class reticulin and endomysium antibodies in coeliac disease and dermatitis herpetiformis [see comments] Hällström O. **Gut** 1989 Sep;30(9):1225–32 Comment in: Gut 1990 May;31(5):585.

IgA class reticulin antibodies of human subtype in gluten sensitive enteropathy [letter; comment] Kárpáti S, et al. **Gut** 1990 May;31(5):585 Comment on: Gut 1989 Sep;30(9):1225–32.

Cellular hypersensitivity to a synthetic dodecapeptide derived from human adenovirus 12 which resembles a sequence of A-gliadin in patients with coeliac disease. Mantzaris GJ, et al. **Gut** 1990 Jun;31(6):668–73

Raised number of jejunal IgG2-producing cells in untreated adult coeliac disease compared with food allergy. Rognum TO, et al. **Gut** 1989 Nov;30(11):1574–80

Effect of diet and age on jejunal and circulating lymphocyte subsets in children with coeliac disease: persistence of CD4–8–intraepithelial T cells through treatment. Verkasalo MA, et al. **Gut** 1990 Apr;31(4):422–5

Celiac disease is associated with an extended HLA-DR3 haplotype which includes HLA-DPw1. Hall MA, et al. **Hum Immunol** 1990 Mar;27(3):220–8

Leucocyte common antigen expression on T cells in normal and inflamed human gut. Harvey J, et al. **Immunology** 1989 Sep;68(1):13–7

T lymphocyte recognition of a celiac disease-associated cis- or trans-encoded HLA-DQ alpha/beta-heterodimer. Lundin KE, et al. **J Immunol** 1990 Jul 1;145(1):136–9

Salivary and serum antibodies to gliadin in the diagnosis of celiac disease. al-Bayaty HF, et al. **J Oral Pathol Med** 1989 Dec;18(10):578–81

Expression of class II MHC antigens in the intestinal epithelium of pediatric celiac disease. Bonamico M, et al. **J Pediatr Gastroenterol Nutr** 1989 Oct;9(3):269–75

Intestinal mast cells and neutrophil chemotactic activity of serum following a single challenge with gluten in celiac children on a gluten-free diet. Horváth K, et al. **J Pediatr Gastroenterol Nutr** 1989 Oct;9(3):276–80

Celiac disease in Down's syndrome: considerations on the role of histocompatibility antigens [letter] Iacono G, et al. **J Pediatr Gastroenterol Nutr** 1990 Feb;10(2):273

Similarities in intestinal humoral immunity in dermatitis herpetiformis without enteropathy and in coeliac disease. O'Mahony S, et al. **Lancet** 1990 Jun 23;335(8704):1487–90

IgA mesangial nephritis, IgA antigliadin antibodies, and coeliac disease [letter] Rostoker G, et al. **Lancet** 1990 Sep 29;336(8718):824–5

Serum anti-gliadin antibody profile in childhood protracted diarrhoea due to coeliac disease and other causes in a developing country. Khoshoo V, et al. **Scand J Gastroenterol** 1989 Dec;24(10):1212–6

Intraepithelial T cells of the TcR gamma/delta+ CD8- and V delta 1/J delta 1+ phenotypes are increased in coeliac disease. Halstensen TS, et al. **Scand J Immunol** 1989 Dec; 30(6):665–72

The immunology of coeliac disease. Mantzaris GJ, et al. **Springer Semin Immunopathol** 1990;12(2–3):219–29 (72 ref.)

Molecular basis and functional importance of some disease-associated HLA polymorphisms. Thorsby E, et al. **Tissue Antigens** 1989 Jul;34(1):39–49 (34 ref.)

[T lymphocyte populations of the intestinal mucosa in celiac disease in children. Immunohistochemical study] Olives JP, et al. **Gastroenterol Clin Biol** 1990;14(1):33–40 (38 ref.) (Eng. Abstr.) **(Fre)**

[Gluten-sensitive enteropathy—immune phenomena and pathogenetic concepts] Granditsch G. **Z Gastroenterol [Verh]** 1990 Apr;25:55–7 (46 ref.) **(Ger)**

[The value of determining anti-gliadin antibodies as well as carotene and xylose blood levels in various phases of celiac disease] Caiulo VA, et al. **Minerva Pediatr** 1989 Sep; 41(9):473–5 (Eng. Abstr.) **(Ita)**

[Serologic markers active in celiac disease (letter)] Blanco Quiros A, et al. **An Esp Pediatr** 1990 Apr;32(4):375–7 **(Spa)**

[Antigliadin, antiendomysial and antireticulin antibodies in celiac disease] Torregrosa R, et al. **An Esp Pediatr** 1990 Apr;32(4):377 **(Spa)**

[The role of IgA and IgA antigliadin antibodies in the diagnosis and management of celiac disease] Torregrosa Sánchez R, et al. **An Esp Pediatr** 1989 Aug;31(2):100–4 (29 ref.) (Eng. Abstr.) **(Spa)**

METABOLISM

Absorption of erythromycin in children with gluten intolerance. Johansen K, et al. **Acta Paediatr Scand** 1989 Nov;78(6):959–60

Zinc metabolism in celiac disease. Crofton RW, et al. **Am J Clin Nutr** 1990 Aug;52(2):379–82

Challenge with gliadin induces eosinophil and mast cell activation in the jejunum of patients with celiac disease. Lavö B, et al. **Am J Med** 1989 Dec;87(6):655–60

Mucosal digestion studies of whole gliadin fractions in coeliac disease. Cornell HJ. **Ann Clin Biochem** 1990 Jan;27 (Pt 1):44–9

Mannan and oligomers of N-acetylglucosamine protect intestinal mucosa of celiac patients with active disease from in vitro toxicity of gliadin peptides. Auricchio S, et al. **Gastroenterology** 1990 Oct;99(4):973–8

Gliadin challenge-induced jejunal prostaglandin E2 secretion in celiac disease. Lavö B, et al. **Gastroenterology** 1990 Sep; 99(3):703–7

Lectin binding sites in the jejunal mucosa of patients with gluten sensitive enteropathy [letter; comment] Barresi G, et al. **Gut** 1990 Apr;31(4):482–3 Comment on: Gut 1989 Jun;30(6):804–10.

Glycoprotein synthesis and secretion by cultured small intestinal mucosa in coeliac disease. Crabtree JE, et al. **Gut** 1989 Oct;30(10):1339–43

Signs of increased leakage over the jejunal mucosa during gliadin challenge of patients with coeliac disease. Lavö B, et al. **Gut** 1990 Feb;31(2):153–7

Coeliac sprue: abnormalities of the hormone profile of gastroduodenal mucosa. Domschke S, et al. **Scand J Gastroenterol Suppl** 1989;167:86–9

PATHOLOGY

Postpubertal gluten challenge in coeliac disease. Mäki M, et al. **Arch Dis Child** 1989 Nov;64(11):1604–7

Massive plasma cell infiltration of the small bowel in celiac disease [letter] Carli P, et al. **Gastroenterology** 1990 Jan; 98(1):250–1

Lymphocytic gastritis in patients with celiac sprue or spruelike intestinal disease. Wolber R, et al. **Gastroenterology** 1990 Feb;98(2):310–5

Activated eosinophils in coeliac disease [letter; comment] Colombel JF, et al. **Gut** 1990 May;31(5):583–4 Comment on: Gut 1989 Nov;30(11):1568–73.

Grains of truth: evolutionary changes in small intestinal mucosa in response to environmental antigen challenge. Marsh MN. **Gut** 1990 Jan;31(1):111–4 (21 ref.)

Lymphocytic gastritis and coeliac disease [letter] Karttunen T, et al. **J Clin Pathol** 1990 May;43(5):436–7

Rectal gluten challenge and diagnosis of coeliac disease [letter; comment] **Lancet** 1990 Jun 30;335(8705):1592 Comment on: Lancet 1990 Jun 2;335(8701):1293–5.

Studies of intestinal lymphoid tissue. XIII. Immunopathology of the evolving celiac sprue lesion. Marsh MN. **Pathol Res Pract** 1989 Nov;185(5):774–7

Hepatic lesions in adult coeliac disease. Jacobsen MB, et al. **Scand J Gastroenterol** 1990 Jul;25(7):656–62

[Hemorrhagic necrosis of the mesenteric lymph nodes in adult celiac disease. Physiopathologic interpretation of 1

case] Le Quellec A, et al. **Ann Pathol** 1990;10(3):194–7 (Eng. Abstr.) **(Fre)**

[Diagnosis and treatment of celiac disease—what is the status in 1990?] Shmerling DH, et al. **Monatsschr Kinderheilkd** 1990 Jul;138(7):369–71 (9 ref.) (Eng. Abstr.) **(Ger)**

[Changes in the prostanoid content and the population of endocrine cells in jejunal biopsies from celiac children] Mariani P, et al. **Minerva Pediatr** 1990 Apr;42(4):131–4 (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

Growth in children with partially treated coeliac disease [letter] Paerregaard A, et al. **Acta Paediatr Scand** 1990 May; 79(5):563

Bone mineral density in adult celiac patients and the effect of gluten–free diet from childhood. Molteni N, et al. **Am J Gastroenterol** 1990 Jan;85(1):51–3

Extent of lactose absorption in children with active celiac disease. Roggero P, et al. **J Pediatr Gastroenterol Nutr** 1989 Oct;9(3):290–4

Intestinal permeability to inert sugars and different–sized polyethyleneglycols in children with celiac disease. Stenhammar L, et al. **J Pediatr Gastroenterol Nutr** 1989 Oct;9(3):281–9

[The effect of 6–month provocation with gluten on the height and weight of children with celiac disease] Radzikowski A, et al. **Pediatr Pol** 1989 Mar;64(3):145–9 (Eng. Abstr.) **(Pol)**

[The role of disorders of secretion of pancreatic enzymes and bile and bacterial contamination of the small intestine in the pathogenesis of diarrhea in patients with celiac disease] Loginov AS, et al. **Klin Med (Mosk)** 1989 Nov; 67(11):81–5 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

A comparison of enteric coated microspheres with enteric coated tablet pancreatic enzyme preparations in cystic fibrosis. A controlled study. Vyas H, et al. **Eur J Pediatr** 1990 Jan;149(4):241–3

Coeliac disease [letter] Logan RF. **Lancet** 1990 Sep 8; 336(8715):633

RADIOGRAPHY

Small bowel enema in non–responsive coeliac disease. Mike N, et al. **Gut** 1990 Aug;31(8):883–5

Adult celiac disease and its complications. Rubesin SE, et al. **Radiographics** 1989 Nov;9(6):1045–66 (31 ref.)

[Certain radiological aspects of celiac disease in Tunisia. Our experience (apropos of 40 cases)] Daghfous MH, et al. **Tunis Med** 1989 Jun–Jul;67(6–7):401–4 (Eng. Abstr.) **(Fre)**

THERAPY

Postoperative management of patients with total exocrine pancreatic insufficiency. Braga M, et al. **Br J Surg** 1990 Jun;77(6):669–72

CELIAC GANGLIA see **GANGLIA, SYMPATHETIC**

CELIAC PLEXUS

Precautions against injection into the spinal artery during coeliac plexus block [letter; comment] Bowen Wright RM. **Anaesthesia** 1990 Mar;45(3):247–8 Comment on: Anaesthesia 1989 Jun;44(6):487–9.

Retroperitoneal fibrosis after multiple coeliac plexus blocks. Pateman J, et al. **Anaesthesia** 1990 Apr;45(4):309–10

Percutaneous anterior approach to the coeliac plexus using ultrasound [letter; comment] Notcutt WG. **Br J Anaesth** 1990 Jan;64(1):126 Comment on: Br J Anaesth 1989 Jun;62(6):637–40.

Steroid celiac plexus block for chronic pancreatitis: results in 16 cases. Busch EH, et al. **J Clin Anesth** 1989;1(6):431–3

Has the analgesic efficacy of neurolytic celiac plexus block been demonstrated in pancreatic cancer pain? Sharfman WH, et al. **Pain** 1990 Jun;41(3):267–71 (24 ref.)

Celiac plexus neurolysis with the modified transaortic approach. Lieberman RP, et al. **Radiology** 1990 Apr; 175(1):274–6

[Effects of celiac plexus block on splanchnic circulation—II: Changes in the systemic hemodynamics and the blood flow of the liver and kidney in dogs] Sekiguchi Y. **Masui** 1989 Aug;38(8):1042–7 (Eng. Abstr.) **(Jpn)**

[The effect of celiac plexus block on splanchnic circulation; changes in systemic hemodynamics and tissue blood flow of the liver and kidney in rabbits] Sekiguchi Y, et al. **Masui** 1989 Jun;38(6):746–50 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

The human celiac ganglion and its splanchnic nerves. Paz Z, et al. **Acta Anat (Basel)** 1989;136(2):129–33

The roots of the splanchnic nerves of the rabbit. Langenfeld M. **Pol Arch Weter** 1988;28(1–2):19–24

Participation of the splanchnic nerves in the structure of the cranial mesenteric plexus of the rabbit. Langenfeld M. **Pol Arch Weter** 1988;28(3–4):109–13

[Projection of the celiac plexus to the afferent centers demonstrated by the horseradish peroxidase retrograde transport method] Beliaev LV. **Arkh Anat Gistol Embriol** 1989 Jul;97(7):27–32 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

[Alcoholization of the celiac plexus and splanchnic nerve: guided roentgenography] Karp P, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R182 **(Fre)**

PHYSIOLOGY

Monitoring of celiac plexus block in chronic pancreatitis. Myhre J, et al. **Pain** 1989 Sep;38(3):269–74

CELL ADHESION

Oral adhesion of yeasts. Olsen I. **Acta Odontol Scand** 1990 Feb;48(1):45–53 (60 ref.)

Intercellular contacts between germinal center cells. Mechanisms of adhesion between lymphoid cells and follicular dendritic cells. Louis E, et al. **Acta Otorhinolaryngol Belg** 1989;43(4):297–320

Molecular determinants of neutrophil adhesion. Smith CW. **Am J Respir Cell Mol Biol** 1990 Jun;2(6):487–9 (13 ref.)

Symposium on Cytoadherence and Cerebral Malaria. Honolulu, HI, 10 December 1989. Proceedings. **Am J Trop Med Hyg** 1990 Aug;43(2 Pt 2):1–41

Covalent surface immobilization of Arg–Gly–Asp– and Tyr–Ile–Gly–Ser–Arg–containing peptides to obtain well–defined cell–adhesive substrates. Massia SP, et al. **Anal Biochem** 1990 Jun;187(2):292–301

Inductive interactions in heart development. Role of cardiac adherons in cushion tissue formation. Markwald RR, et al. **Ann N Y Acad Sci** 1990;588:13–25 (27 ref.)

Covalently attached GRGD on polymer surfaces promotes biospecific adhesion of mammalian cells. Massia SP, et al. **Ann N Y Acad Sci** 1990;589:261–70

An ultrastructural and immunocytochemical analysis of human endothelial cell adhesion on coated vascular grafts. Curti T, et al. **Ann Vasc Surg** 1989 Oct;3(4):351–63

Growth kinetic studies of methionine dependence in co–culture of monolayer and anchorage independent mouse cell lines. Djurhuus R, et al. **Anticancer Res** 1989 Nov–Dec; 9(6):1611–5

Surface–active properties of Candida albicans. Klotz SA. **Appl Environ Microbiol** 1989 Sep;55(9):2119–22

Sialic acid dependent cell adhesion to collagen IV correlates with in vivo tumorigenicity of the human colon carcinoma sublines HCT116, HCT116a and HCT116b. Morgenthaler J, et al. **Biochem Biophys Res Commun** 1990 Sep 14; 171(2):860–6

Cell adhesion activity of non–specific cross–reacting antigen (NCA) and carcinoembryonic antigen (CEA) expressed on CHO cell surface: homophilic and heterophilic adhesion. Oikawa S, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):39–45

cDNA cloning of a novel cell adhesion protein expressed in human squamous carcinoma cells. Wong YC, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):984–92

Cell–adhesive immunoglobulin M in human plasma. Takahashi S, et al. **Biochemistry** 1989 Sep 19;28(19):7623–9

Complex carbohydrate–lectin interaction at the interface: a model for cellular adhesion. I. Effect of vesicle size on the kinetics of aggregation between a fatty acid conjugate of lectin and a liposomal asialoganglioside. Chakrabarti A, et al. **Biochim Biophys Acta** 1990 May 9;1024(1):103–10

MAC–1 mediates adherence of human monocytes to endothelium via a protein kinase C dependent mechanism. Gladwin AM, et al. **Biochim Biophys Acta** 1990 Apr 9; 1052(1):166–72

Receptor–mediated adhesion phenomena. Model studies with the Radical–Flow Detachment Assay. Cozens–Roberts C, et al. **Biophys J** 1990 Jul;58(1):107–25

Specific adhesion of glycophorin liposomes to a lectin surface in shear flow. Wattenbarger MR, et al. **Biophys J** 1990 Apr;57(4):765–77

Regulation of autoimmune anti–platelet antibody–mediated adhesion of monocytes to platelet GPIIb/GPIIIa: effect of armed monocytes and the Mac–1 receptor. Hymes KB, et al. **Blood** 1990 May 1;75(9):1813–9

Biochemical differentiation of nascent neurite junctions: unilateral localization of adheron components. Tsui HC, et al. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):205–16

Unimpaired ability to generate adherent lymphokine–activated killer (A–LAK) cells in patients with primary or metastatic liver tumors. Schwarz RE, et al. **Cancer Immunol Immunother** 1989;30(5):312–6

Role of fibronectin in adhesion, migration, and metastasis. Humphries MJ, et al. **Cancer Invest** 1989;7(4):373–93 (179 ref.)

Endothelial cells enhance spontaneous metastasis of human lung carcinoma cells in athymic mice. Varki NM, et al. **Cancer Lett** 1990 Jun 15;51(3):251–7

Detection of an altered form of cell–CAM 105 on rat transplantable and primary hepatocellular carcinomas. Hixson DC, et al. **Cancer Res** 1989 Dec 1;49(23):6788–94

Adhesion of Kirsten–ras+ tumor–progressing and Kirsten–ras– revertant 3T3 cells on fibronectin proteolytic fragments. Radinsky R, et al. **Cancer Res** 1990 Jul 15; 50(14):4388–400

Primary sequence of a motor neuron–selective adhesive site in the synaptic basal lamina protein S–laminin. Hunter DD, et al. **Cell** 1989 Dec 1;59(5):905–13

Cell–cell repulsion: clues from the growth cone? Keynes R, et al. **Cell** 1990 Aug 24;62(4):609–10 (21 ref.)

Expression of CD44 confers a new adhesive phenotype on transfected cells. St. John T, et al. **Cell** 1990 Jan 12; 60(1):45–52

Limitation of substratum size alters cytoskeletal organization and behaviour of Swiss 3T3 fibroblasts. Ireland GW, et al. **Cell Biol Int Rep** 1989 Sep;13(9):781–90

Functional involvement of the LFA–1/ICAM–1 adhesion system in the autologous mixed lymphocyte reaction. Bagnasco M, et al. **Cell Immunol** 1990 Jul;128(2):362–9

Attachment of tumor cells to endothelial monolayers: detection of surface molecules involved in cell–cell binding. Antonia SJ, et al. **Clin Immunol Immunopathol** 1989 Nov; 53(2 Pt 1):281–96

Bibliography of the current world literature. Cell–to–cell contact. **Curr Opin Cell Biol** 1989 Oct;1(5):1029–37

Calcium–dependent cell adhesion molecules. Kemler R, et al. **Curr Opin Cell Biol** 1989 Oct;1(5):892–7 (19 ref.)

Neural cell–to–cell adhesion and recognition. Rutishauser U. **Curr Opin Cell Biol** 1989 Oct;1(5):898–904 (24 ref.)

Cell adhesion to extracellular matrix in normal Rana pipiens gastrulae and in arrested hybrid gastrulae Rana pipiens female X Rana esculenta male. Johnson KE, et al. **Dev Biol** 1990 Jan;137(1):86–99

Intercellular recognition and adhesion in desmosomes. Gorbsky G. **Dev Biol (N Y 1985)** 1986;3:129–56 (175 ref.)

Cell traction in relationship to morphogenesis and malignancy. Harris AK. **Dev Biol (N Y 1985)** 1986;3:339–57 (15 ref.)

Cell surfaces in the control of growth and morphogenesis. Steinberg MS. **Dev Biol (N Y 1985)** 1986;3:1–13 (38 ref.)

Dual adhesive recognition systems in chick embryonic cells. Thomas WA. **Dev Biol (N Y 1985)** 1986;3:157–89 (137 ref.)

Endogenous lectins and cell adhesion in embryonic cells. Zalik SE, et al. **Dev Biol (N Y 1985)** 1986;2:145–94 (223 ref.)

Receptor–mediated active adhesion to the substratum is required for neurite outgrowth. Turner DC, et al. **Dev Neurosci** 1989;11(4–5):300–12 (23 ref.)

Direct adhesion to type I and homotrimer collagens by breast carcinoma and embryonic epithelial cells in culture: a comparative study. Ghersi G, et al. **Eur J Cell Biol** 1989 Dec;50(2):279–84

Colocalization of vinculin–containing adhesion plaques, microfilaments and cytokeratin filaments in cytochalasin–treated PtK1 cells. Roscioli NA, et al. **Eur J Cell Biol** 1989 Dec;50(2):522–4

The role of CD44, CD45, CD45RO, CD46 and CD55 as potential anti–adhesion molecules involved in the binding of human tonsillar T cells to phorbol 12–myristate 13–acetate–differentiated U–937 cells. King PD, et al. **Eur J Immunol** 1990 Feb;20(2):363–8

Only dull CD3+ thymocytes bind to thymic epithelial cells. The binding is elicited by both CD2/LFA–3 and LFA–1/ICAM–1 interactions. Nonoyama S, et al. **Eur J Immunol** 1989 Sep;19(9):1631–5

MALA–2, mouse homologue of human adhesion molecule ICAM–1 (CD54). Prieto J, et al. **Eur J Immunol** 1989 Sep; 19(9):1551–7

Mg2+ mediates the cell–substratum interaction of Arg–Gly–Asp–dependent HeLa cell collagen receptors. Beacham DA, et al. **Exp Cell Res** 1990 Jul;189(1):69–80

Observations on cell adhesion and separation following enzyme treatment. Weiss L, et al. **Exp Cell Res** 1966 Mar; 41(3):601–8

Heterogeneity of recombinant granulocyte–macrophage colony–stimulating factor–mediated enhancement of neutrophil adherence to endothelium. Gamble JR, et al. **Exp Hematol** 1990 Sep;18(8):897–902

Hemopoietic progenitor cell binding to the stromal microenvironment in vitro. Gordon MY, et al. **Exp Hematol** 1990 Aug;18(7):837–42

Virus induced adherence of monocytes to endothelial cells. Span AH, et al. **FEMS Microbiol Immunol** 1989 Mar; 1(4):237–44

Cellular adhesiveness on implanted lenses in monkeys. Ishibashi T, et al. **Graefes Arch Clin Exp Ophthalmol** 1990; 228(4):356–62

Lymphocyte homing receptors cloned—a role for anionic polysaccharides in lymphocyte adhesion. Coombe DR, et al. **Immunol Today** 1989 Sep;10(9):289–91

CD44—a molecule involved in leukocyte adherence and T–cell activation [published erratum appears in Immunol Today 1990 Mar;11(3):80] Haynes BF, et al. **Immunol Today** 1989 Dec;10(12):423–8 (69 ref.)

The CD2–LFA–3 and LFA–1–ICAM pathways: relevance to T–cell recognition. Makgoba MW, et al. **Immunol Today** 1989 Dec;10(12):417–22 (70 ref.)

New families of adhesion molecules play a vital role in platelet functions. Parmentier S, et al. **Immunol Today** 1990 Jul;11(7):225–7 (9 ref.)

Cell proliferation on hydrogels. Nagaoka S, et al. **In Vitro Cell Dev Biol** 1990 Jan;26(1):51–6

Modulation of human neutrophil adherence by periodontopathic bacteria: reversal by specific monoclonal antibodies. Seow WK, et al. **Int Arch Allergy Appl Immunol** 1989;90(1):24–30

Tenascin: a hexameric adhesive glycoprotein. Natali PG, et al. **Int J Cancer Suppl** 1989;4:66–8 (36 ref.)

Cell adhesion to collagen and decreased myogenic gene expression implicated in the control of myogenesis by transforming growth factor beta. Heino J, et al.

J Biol Chem 1990 Jun 25;265(18):10181–4
EndoCAM: a novel endothelial cell–cell adhesion molecule. Albelda SM, et al. J Cell Biol 1990 Apr;110(4):1227–37
Spatiotemporal segregation of endothelial cell integrin and nonintegrin extracellular matrix–binding proteins during adhesion events. Basson CT, et al. J Cell Biol 1990 Mar; 110(3):789–801
The role of integrins alpha 2 beta 1 and alpha 3 beta 1 in cell–cell and cell–substrate adhesion of human epidermal cells. Carter WG, et al. J Cell Biol 1990 Apr; 110(4):1387–404
Demonstration that a lectin–like receptor (gp90MEL) directly mediates adhesion of lymphocytes to high endothelial venules of lymph nodes. Geoffroy JS, et al. J Cell Biol 1989 Nov;109(5):2463–9
Functional cooperation between the neural adhesion molecules L1 and N–CAM is carbohydrate dependent. Kadmon G, et al. J Cell Biol 1990 Jan;110(1):209–18
The neural cell adhesion molecule N–CAM enhances L1–dependent cell–cell interactions. Kadmon G, et al. J Cell Biol 1990 Jan;110(1):193–208
Novel function for beta 1 integrins in keratinocyte cell–cell interactions. Larjava H, et al. J Cell Biol 1990 Mar; 110(3):803–15
Cell adhesion to fibronectin and tenascin: quantitative measurements of initial binding and subsequent strengthening response. Lotz MM, et al. J Cell Biol 1989 Oct;109(4 Pt 1):1795–805
RGD–independent cell adhesion to the carboxy–terminal heparin–binding fragment of fibronectin involves heparin–dependent and –independent activities. McCarthy JB, et al. J Cell Biol 1990 Mar;110(3):777–87
Clonal segregation of multiple and overlapping matrix adhesive responses in dorsal root neuronal derivative cells. Barletta E, et al. J Cell Physiol 1990 May;143(2):263–78
Modulation of Ca2(+)–dependent intercellular adhesion in bovine aortic and human umbilical vein endothelial cells by heparin–binding growth factors. Bavisotto LM, et al. J Cell Physiol 1990 Apr;143(1):39–51
Cell studies of total internal reflection fluorescence: effect of lipid membranes. Heavens OS. J Cell Sci 1990 Jan;95 (Pt 1):175–6
Evidence for a second class of membrane glycoprotein involved in cell adhesion. Norris WE. J Cell Sci 1989 Aug; 93 (Pt 4):631–40
Tandem scanning reflected–light microscopy of cell–substratum adhesions and stress fibres in Swiss 3T3 cells. Paddock SW. J Cell Sci 1989 May;93 (Pt 1):143–6
Scanning electron microscopy of focal contacts on the substratum attachment surface of fibroblasts adherent to fibronectin. Singer II, et al. J Cell Sci 1989 May;93 (Pt 1):147–54
A comparison of the biological activities of the cell–adhesive proteins vitronectin and fibronectin. Underwood PA, et al. J Cell Sci 1989 Aug;93 (Pt 4):641–9
Adhesion–promoting receptors on phagocytes. Wright SD, et al. J Cell Sci Suppl 1988;9:99–120 (86 ref.)
Identification of surface proteins mediating adherence of CD11/CD18–deficient lymphoblastoid cells to cultured human endothelium. Schwartz BR, et al. J Clin Invest 1990 Jun;85(6):2019–22
Specific binding of the human monocytic cell line U937 to the alternatively spliced connecting segment (IIICS) of fibronectin. Ferreira OC Jr, et al. J Exp Med 1990 Jan 1;171(1):351–6
Inducible cell adhesion molecule 110 (INCAM–110) is an endothelial receptor for lymphocytes. A CD11/CD18–independent adhesion mechanism. Rice GE, et al. J Exp Med 1990 Apr 1;171(4):1369–74
Production by K 562 cells of an inhibitor of adherence–related functions of human neutrophils. Amar M, et al. J Immunol 1990 Jun 15;144(12):4749–56
The complement SC5b–9 complex mediates cell adhesion through a vitronectin receptor. Biesecker G. J Immunol 1990 Jul 1;145(1):209–14
Constitutive and induced phosphorylation of the alpha– and beta–chains of the CD11/CD18 leukocyte integrin family. Relationship to adhesion–dependent functions. Buyon JP, et al. J Immunol 1990 Jan 1;144(1):191–7
Increased lymphocyte adherence to human arterial endothelial cell monolayers in the context of allorecognition. Colson YL, et al. J Immunol 1990 Apr 15;144(8):2975–84
Role of cell surface carbohydrate moieties in monocytic cell adhesion to endothelium in vitro. DiCorleto PE, et al. J Immunol 1989 Dec 1;143(11):3666–72
Human B lymphocytes define an alternative mechanism of adhesion to fibronectin. The interaction of the alpha 4 beta 1 integrin with the LHGPEILDVPST sequence of the type III connecting segment is sufficient to promote cell attachment. Garcia–Pardo A, et al. J Immunol 1990 May 1;144(9):3361–6
T cells bind to cytokine–activated endothelial cells via a novel, inducible sialoglycoprotein and endothelial leukocyte adhesion molecule–1. Graber N, et al. J Immunol 1990 Aug 1;145(3):819–30
Two leukocyte receptors (CD11a/CD18 and CD11b/CD18) mediate transient adhesion to endothelium by binding to different ligands. Lo SK, et al. J Immunol 1989 Nov 15; 143(10):3325–9
Monoclonal antibodies directed against the galactose–binding lectin of Entamoeba histolytica enhance adherence. Petri WA Jr, et al. J Immunol 1990 Jun 15;144(12):4803–9
Surgical stress impairment of murine natural killer cell cytotoxicity involves pre– and postbinding events. Pollock RE, et al. J Immunol 1989 Nov 15;143(10):3396–403
Dual role of the CD44 molecule in T cell adhesion and activation. Shimizu Y, et al. J Immunol 1989 Oct 15; 143(8):2457–63
Monocyte adherence results in selective induction of novel genes sharing homology with mediators of inflammation and tissue repair. Sporn SA, et al. J Immunol 1990 Jun 1;144(11):4434–41
Characterization of the enhanced adhesion of neutrophil leukocytes to thrombin–stimulated endothelial cells. Toothill VJ, et al. J Immunol 1990 Jul 1;145(1):283–91
The leukocyte adhesion glycoprotein CD18 participates in HIV–1–induced syncytia formation in monocytoid and T cells. Valentin A, et al. J Immunol 1990 Feb 1;144(3):934–7
Spectophotometric quantification of cell–cell adherence by an enzyme–linked immuno–cell adhesion assay. Bruynzeel I, et al. J Immunol Methods 1990 Aug 28;132(1):51–6
Solid–phase monoclonal antibodies. A novel method of directing the function of biologically active molecules by presenting a specific orientation. Underwood PA, et al. J Immunol Methods 1990 Feb 20;127(1):91–101
Epithelial cell adhesion mechanisms. Boyer B, et al. J Membr Biol 1989 Dec;112(2):97–108 (83 ref.)
Effect of adherence, cell morphology, and lipopolysaccharide on potassium conductance and passive membrane properties of murine macrophage J774.1 cells. McKinney LC, et al. J Membr Biol 1990 Jun;116(1):47–56
X–ray diffraction analysis of myelin lipid/proteolipid protein multilayers. Brown FR 3d, et al. J Neurosci Res 1989 Oct; 24(2):192–200
The strength of non–covalent biological bonds and adhesions by multiple independent bonds. Baltz JM, et al. J Theor Biol 1990 Jan 23;142(2):163–78
Adhesion induced by mobile cross–bridges: steady state peeling of conjugated cell pairs. Tozeren A. J Theor Biol 1989 Sep 11;140(1):1–17
The potential unreliability of indium 111 oxine labeling in studies of endothelial cell kinetics. Patterson RB, et al. J Vasc Surg 1989 Dec;10(6):650–5
Endothelial cell receptors on leukemic plasma cells. Kalász V, et al. Leuk Res 1989;13(9):863–8
Cell to cell contact enhances the proliferation of acute myeloid leukemia (AML) cells in vitro without an apparent role of adhesion glycoproteins LFA1, MAC1 and P150–95. Pulsoni A, et al. Leuk Res 1989;13(10):883–91
Analysis, selection, and sorting of anchorage–dependent cells under growth conditions. Schindler M, et al. Methods Cell Biol 1989;32:423–46 (65 ref.)
Adhesion of eukaryotic cells to immobilized carbohydrates. Schnaar RL, et al. Methods Enzymol 1989;179:542–58
A novel neutrophil adherence test effectively reflects the activated state of neutrophils. Yakuwa N, et al. Microbiol Immunol 1989;33(10):843–52
An intercellular adhesion protein of rat testis: isolation and preliminary characterization. D'Agostino A, et al. Mol Reprod Dev 1990 Feb;25(2):172–6
T–cell receptor cross–linking transiently stimulates adhesiveness through LFA–1. Dustin ML, et al. Nature 1989 Oct 19;341(6243):619–24
Adhesion receptors of the immune system. Springer TA. Nature 1990 Aug 2;346(6283):425–34 (165 ref.)
Enhancement of LFA–1–mediated cell adhesion by triggering through CD2 or CD3 on T lymphocytes. van Kooyk Y, et al. Nature 1989 Dec 14;342(6251):811–3
Cell–cell adhesion mediated by binding of membrane–anchored transforming growth factor alpha to epidermal growth factor receptors promotes cell proliferation. Anklesaria P, et al. Proc Natl Acad Sci U S A 1990 May;87(9):3289–93
An endogenous lectin and one of its neuronal glycoprotein ligands are involved in contact guidance of neuron migration. Lehmann S, et al. Proc Natl Acad Sci U S A 1990 Aug;87(16):6455–9
T–cell antigen CD28 mediates adhesion with B cells by interacting with activation antigen B7/BB–1. Linsley PS, et al. Proc Natl Acad Sci U S A 1990 Jul;87(13):5031–5
Carcinoembryonic antigen functions as an accessory adhesion molecule mediating colon epithelial cell–collagen interactions. Pignatelli M, et al. Proc Natl Acad Sci U S A 1990 Feb;87(4):1541–5
Hemonectin: a novel hematopoietic adhesion molecule. Campbell A, et al. Prog Clin Biol Res 1990;352:97–105
Molecular mechanism of hematopoietic stem cell binding to the supportive stroma. Tavassoli M, et al. Prog Clin Biol Res 1990;352:87–95 (31 ref.)
Adhesion and spreading of corneal endothelial cells on collagens type I and IV in vitro: a model to study mechanisms of endothelial repair. Rixen H, et al. Res Exp Med (Berl) 1990;190(3):203–11
Polyurethane support films: structure and cellular adhesion. Goodman SL, et al. Scanning Microsc Suppl 1989;3:285–94; discussion 294–5
Platelet and shear rate promote tumor cell adhesion to human endothelial extracellular matrix—absence of a role for platelet cyclooxygenase. Bastida E, et al. Thromb Haemost 1989 Jun 30;61(3):485–9
Inflammation–induced endothelial cell adhesion to lymphocytes, neutrophils, and monocytes. Role of homing receptors and other adhesion molecules. Jutila MA, et al. Transplantation 1989 Nov;48(5):727–31 (42 ref.)
Characterization of a new murine tumor variant with different in vivo behavior selected by its adhesive properties. Puricelli L, et al. Tumori 1990 Aug 31; 76(4):345–9
[Adherence of monocytes to the aortic endothelium. Effect of the intraluminal pressure] Tedgui A, et al. Arch Mal Coeur 1989 Jul;82(7):1191–4 (Eng. Abstr.) (Fre)
[Adhesion, migration and phagocytic behavior of blood granulocytic neutrophils from the rat and humans in essential hypertension] Blank I, et al. Biomed Biochim Acta 1990;49(4):235–41 (Eng. Abstr.) (Ger)
[Analysis of 33C4 monoclonal antibody associated with aggregation of human B lymphocytes] Ayabe T, et al. Hokkaido Igaku Zasshi 1989 Nov;64(6):715–25 (Eng. Abstr.) (Jpn)
[Roles of submembranous cytoskeleton and its regulatory mechanism] Sobue K, et al. Tanpakushitsu Kakusan Koso 1989 Sep;34(12 Suppl):1551–65 (Jpn)
[Adherens junction: its structure and function] Tsukita S, et al. Tanpakushitsu Kakusan Koso 1989 Sep;34(12 Suppl):1542–50 (Jpn)
[Stability threshold of a tissue system] Malenkov AG, et al. Biofizika 1990 Mar–Apr;35(2):356–60 (Eng. Abstr.) (Rus)
[Osteogenic properties of adhesive cells in Dexter culture of the mouse bone marrow] Kuznetsov SA, et al. Biull Eksp Biol Med 1989 Aug;108(8):236–8 (Eng. Abstr.) (Rus)
[Strength of intercellular adhesion in gastric cancer] Klimenkov AA, et al. Vopr Onkol 1990;36(4):451–4 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Mechanisms of tumor necrosis factor–alpha alteration of PMN adhesion and migration. Salyer JL, et al. Am J Pathol 1990 Apr;136(4):831–41
Interaction between chemoattractants and bacterial lipopolysaccharide in the induction and enhancement of neutrophil adhesion. Young SK, et al. Am J Respir Cell Mol Biol 1990 Jun;2(6):523–32
Beta–very low density lipoprotein pretreatment of endothelial monolayers increases monocyte adhesion. Territo MC, et al. Arteriosclerosis 1989 Nov–Dec; 9(6):824–8
Development of a novel artificial matrix with cell adhesion peptides for cell culture and artificial and hybrid organs. Matsuda T, et al. ASAIO Trans 1989 Jul–Sep;35(3):677–9
The adhesiveness of monocytic U937 cells is stimulated by pro–inflammatory agents and inhibited by adenosine 3',5'–cyclic monophosphate. Ventura MA, et al. Biochem Pharmacol 1990 Feb 15;39(4):677–83
Vascular cell adhesion molecule–1 mediates lymphocyte adherence to cytokine–activated cultured human endothelial cells. Carlos TM, et al. Blood 1990 Sep 1; 76(5):965–70
Correlation of inhibition of adhesion of large cell lymphoma and hepatic sinusoidal endothelial cells by RGD–containing peptide polymers with metastatic potential: role of integrin–dependent and –independent adhesion mechanisms. Tressler RJ, et al. Cancer Commun 1989; 1(1):55–63
Insulin induces cell adhesion and normal flattened morphology in Krebs II ascites tumour cells. Pryme IF, et al. Cell Biol Int Rep 1990 May;14(5):447–55
Modulation of survival and proliferation of BSC–1 cells through changes in spreading behavior caused by the tumor–promoting phorbol ester TPA. Shiba Y, et al. Cell Struct Funct 1989 Dec;14(6):685–96
Effect of leukotriene B4 and prostaglandin E2 on the adhesion of lymphocytes to endothelial cells. To SS, et al. Clin Exp Immunol 1990 Jul;81(1):160–5
Interleukin–1 increases tumor cell adhesion to endothelial cells through an RGD dependent mechanism: in vitro and in vivo studies. Lauri D, et al. Clin Exp Metastasis 1990 Jan–Feb;8(1):27–32
Interaction of amosite and surface–modified amosite with a V79–4 (Chinese hamster lung) cell line. Sara EA, et al. Environ Health Perspect 1990 Apr;85:101–5
Cell adhesion, spreading and neurite stimulation by laminin fragment E8 depends on maintenance of secondary and tertiary structure in its rod and globular domain. Deutzmann R, et al. Eur J Biochem 1990 Jul 31; 191(2):513–22
RGD peptides may only temporarily inhibit cell adhesion to fibronectin. Ylänne J. FEBS Lett 1990 Jul 2;267(1):43–5
An endogenous lectin found in rat astrocyte cultures has a role in cell adhesion but not in cell proliferation. Kuchler S, et al. GLIA 1989;2(6):437–45
Transforming growth factor–beta switches the pattern of integrins expressed in MG–63 human osteosarcoma cells and causes a selective loss of cell adhesion to laminin. Heino J, et al. J Biol Chem 1989 Dec 25;264(36):21806–11
Modulation of melanoma cell adhesion to basement membrane components by retinoic acid. Edward M, et al. J Cell Sci 1989 May;93 (Pt 1):155–61
Embryonic chicken fibroblast collagen binding proteins: distribution, role in substratum adhesion, and relationship to integrins. Ogle RC, et al. J Cell Sci 1989 Oct;94 (Pt

2):361–9
Coated fibronectin induces adhesion in the human monocytic cell line U937. Suzuki K, et al. **J Clin Lab Immunol** 1989 Dec;30(4):191–5
Mechanism of endotoxin inhibition of human gingival fibroblast attachment to type I collagen. Pitaru S, et al. **J Dent Res** 1990 Sep;69(9):1602–6
Interleukin 6 decreases cell–cell association and increases motility of ductal breast carcinoma cells. Tamm I, et al. **J Exp Med** 1989 Nov 1;170(5):1649–69
IL-3 augments adhesiveness for endothelium and CD11b expression in human basophils but not neutrophils. Bochner BS, et al. **J Immunol** 1990 Sep 15;145(6):1832–7
Lipopolysaccharide stimulates monocyte adherence by effects on both the monocyte and the endothelial cell. Doherty DE, et al. **J Immunol** 1989 Dec 1;143(11):3673–9
IL-3 and granulocyte–macrophage colony-stimulating factor stimulate two distinct phases of adhesion in human monocytes. Elliott MJ, et al. **J Immunol** 1990 Jul 1; 145(1):167–76
Effects of six different cytokines on lymphocyte adherence to microvascular endothelium and in vivo lymphocyte migration in the rat. Issekutz TB. **J Immunol** 1990 Mar 15;144(6):2140–6
Human endothelial cell adhesiveness for neutrophils, induced by Escherichia coli lipopolysaccharide in vitro, is inhibited by Bacteroides fragilis lipopolysaccharide. Magnuson DK, et al. **J Immunol** 1989 Nov 1;143(9):3025–30
IL-4 increases human endothelial cell adhesiveness for T cells but not for neutrophils. Thornhill MH, et al. **J Immunol** 1990 Apr 15;144(8):3060–5
Bacterial lipopolysaccharide acts on human endothelial cells to enhance the adherence of peripheral blood monocytes. Whisler RL, et al. **J Lab Clin Med** 1989 Dec;114(6):708–16
Oxidized low density lipoprotein induces differentiation and adhesion of human monocytes and the monocytic cell line U937. Frostegård J, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):904–8
Prevention of activated neutrophil adhesion to endothelium by soluble adhesion protein GMP140. Gamble JR, et al. **Science** 1990 Jul 27;249(4967):414–7
[Inhibition by nifurzide of the adhesion capacity of enteropathogenic colibacillus to HEP-2 cells] Darfeuille–Michaud A, et al. **Pathol Biol (Paris)** 1989 Dec; 37(10):1090–3 (Eng. Abstr.) **(Fre)**
[The platelet fibrinogen receptor: a model for the analysis of cellular adhesion mechanisms and their modification in pathology] Pidard D. **Pathol Biol (Paris)** 1989 Dec; 37(10):1107–13 (33 ref.) (Eng. Abstr.) **(Fre)**
[The effect of procyanidolic oligomers on mesenchymal cells in culture. II—Attachment of elastic fibers to the cells] Robert AM, et al. **Pathol Biol (Paris)** 1990 Jun;38(6):601–7 (Eng. Abstr.) **(Fre)**

GENETICS

Regulation of alpha 1 (I)–collagen gene expression in response to cell adhesion in Swiss 3T3 fibroblasts. Dhawan J, et al. **J Biol Chem** 1990 Jun 5;265(16):9015–21
Adhesive interactions between malignant cells and the extracellular matrix. Importance of proteoglycans and the ras oncogene. Kosir MA, et al. **Surg Annu** 1990;22:25–48 (133 ref.)

IMMUNOLOGY

Concepts in immunodermatology. van Lambalgen R, et al. **Acta Derm Venereol Suppl (Stockh)** 1989;151:56–60; discussion 106–10 (16 ref.)
Mechanisms of cell adhesion in the nervous system: role of the immunoglobulin gene superfamily. Salzer JL, et al. **Dev Neurosci** 1989;11(6):377–90 (75 ref.)
Functional studies of stable L cell transfectants expressing intercellular adhesion molecule 1 [ICAM-1] Wawryk SO, et al. **Immunol Cell Biol** 1989 Dec;67 (Pt 6):391–401
Relation between locomotion, chemotaxis and clustering of immune cells. Wilkinson PC. **Immunology** 1990 Jan; 69(1):127–33
T cell adhesion. Fischer A. **Nouv Rev Fr Hematol** 1990; 32(1):49–51 (27 ref.)

PHYSIOLOGY

Effect of adherent cells on the regulation of BFU-E in patients with myeloproliferative disease. Shabbad E, et al. **Am J Hematol** 1990 Apr;33(4):225–9
Cadherins: a molecular family important in selective cell–cell adhesion. Takeichi M. **Annu Rev Biochem** 1990;59:237–52 (110 ref.)
Molecular understanding of cellular adhesion on artificial surfaces. Takemoto Y, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):354–6
Uptake and incorporation of saturated and unsaturated fatty acids into macrophage lipids and their effect upon macrophage adhesion and phagocytosis. Calder PC, et al. **Biochem J** 1990 Aug 1;269(3):807–14
Intercellular adhesion mediated by neural cell adhesion molecules in transfected 3T3 fibroblasts. Rowett LH, et al. **Biochem Soc Trans** 1990 Jun;18(3):412–4
Analysis of the topological changes induced on cells exposed to adhesive or mechanical stimuli. Andre P, et al. **Cell Biophys** 1990 Jan–Apr;16(1–2):13–34
ICAM-1–dependent fibroblast–lymphocyte adhesion: discordance between surface expression and function of ICAM-1. Piela TH, et al. **Cell Immunol** 1990 Aug; 129(1):125–37
Cell adhesion mechanisms and their potential impact on wound healing and tumor control. Rudolph R, et al. **Clin Plast Surg** 1990 Jul;17(3):457–62 (31 ref.)
Cytoskeleton–associated cell contacts. Geiger B. **Curr Opin Cell Biol** 1989 Feb;1(1):103–9 (33 ref.)
Leukocyte adhesion. Hansen NL, et al. **Curr Probl Dermatol** 1990;19:17–28 (43 ref.)
Phorbol esters induce differentiation of U-937 human promonocytic cells in the absence of LFA-1/ICAM-1–mediated intercellular adhesion. Cabañas C, et al. **Eur J Biochem** 1990 Aug 17;191(3):599–604
Spreading of B16 F1 cells on laminin and its proteolytic fragments P1 and E8: involvement of laminin carbohydrate chains. Bouzon M, et al. **Exp Cell Res** 1990 Sep; 190(1):47–56
Alteration of cellular adhesion by heat shock. Cress AE, et al. **Exp Cell Res** 1990 Sep;190(1):40–6
Aging-related changes and topology of adhesion responses sensitive to cycloheximide on collagen substrata by human dermal fibroblasts. Flickinger KS, et al. **Exp Cell Res** 1990 Jan;186(1):158–68
Cytoadherence and sequestration in falciparum malaria. Barnwell JW. **Exp Parasitol** 1989 Nov;69(4):407–12 (36 ref.)
Versatile mechanisms of cell adhesion. Ruoslahti E. **Harvey Lect** 1988–89;84:1–17 (81 ref.)
The role of cell adhesion and migration in the in vitro invasiveness of mouse adrenal carcinoma cells. Fridman R, et al. **Invasion Metastasis** 1990;10(4):208–24
19th annual UCLA symposium: Molecular basis for cellular adhesion. Abstracts. **J Cell Biochem Suppl** 1990;14A:133–99
Identification of an Arg-Gly-Asp (RGD) cell adhesion site in human immunodeficiency virus type 1 transactivation protein, tat. Brake DA, et al. **J Cell Biol** 1990 Sep; 111(3):1275–81
The alpha 1/beta 1 and alpha 6/beta 1 integrin heterodimers mediate cell attachment to distinct sites on laminin. Hall DE, et al. **J Cell Biol** 1990 Jun;110(6):2175–84
Identification of a Ca2(+)–dependent cell–cell adhesion molecule in endothelial cells. Heimark RL, et al. **J Cell Biol** 1990 May;110(5):1745–56
Functional studies of the domains of talin. Nuckolls GH, et al. **J Cell Biol** 1990 May;110(5):1635–44
Intercellular adhesion mediated by human muscle neural cell adhesion molecule: effects of alternative exon use. Pizzey JA, et al. **J Cell Biol** 1989 Dec;109(6 Pt 2):3465–76
Paxillin: a new vinculin–binding protein present in focal adhesions. Turner CE, et al. **J Cell Biol** 1990 Sep; 111(3):1059–68
Narrow linear strips of adhesive substratum are powerful inducers of both growth and total focal contact area. O'Neill C, et al. **J Cell Sci** 1990 Apr;95 (Pt 4):577–86
Cells transmit spatial information by orienting collagen fibers. Klebe RJ, et al. **Matrix** 1990 Jan;9(6):451–8
Mammalian cell adhesion functions and cellular penetration of enteropathogenic Yersinia species. Isberg RR. **Mol Microbiol** 1989 Oct;3(10):1449–53 (27 ref.)
[Cell adhesion—during morphogenesis and in the immune system] Linnemann D, et al. **Ugeskr Laeger** 1990 Jul 16; 152(29):2089–90 **(Dan)**
[Vitronectin: mediator of cell adhesion in proliferative vitreoretinopathy?] Weller M, et al. **Fortschr Ophthalmol** 1990;87(2):221–5 (Eng. Abstr.) **(Ger)**
[Integrins—new receptor molecules: their significance for the differentiation, regeneration and immune response of the skin] Kaufmann R, et al. **Hautarzt** 1990 May;41(5):256–61 (52 ref.) (Eng. Abstr.) **(Ger)**
[The significance of laminin for the stability of endothelial–substrate adhesion in rheologic conditions] Franke RP, et al. **Z Kardiol** 1989;78 Suppl 6:5–8 (Eng. Abstr.) **(Ger)**

CELL ADHESION MOLECULES

Structure and function of the leukocyte adhesion molecules CD11/CD18. Arnaout MA. **Blood** 1990 Mar 1; 75(5):1037–50 (152 ref.)
Thrombospondin functions as a cytoadhesion molecule for human hematopoietic progenitor cells. Long MW, et al. **Blood** 1990 Jun 15;75(12):2311–8
Calcium–dependent cell adhesion molecules. Kemler R, et al. **Curr Opin Cell Biol** 1989 Oct;1(5):892–7 (19 ref.)
The cell adhesion molecule Cell–CAM 105 is an ecto–ATPase and a member of the immunoglobulin superfamily. Aurivillius M, et al. **FEBS Lett** 1990 May 21; 264(2):267–9
Adhesion molecules. **Immunol Rev** 1990 Apr;114:5–217
Hyaluronate can function as a cell adhesion molecule and CD44 participates in hyaluronate recognition. Miyake K, et al. **J Exp Med** 1990 Jul 1;172(1):69–75
Recognition in cell adhesion. A comparative study of the conformations of RGD–containing peptides by Monte Carlo and NMR methods. Cachau RE, et al. **J Mol Recognit** 1989 Dec;2(4):179–86
Role of myelin Po protein as a homophilic adhesion molecule. Filbin MT, et al. **Nature** 1990 Apr 26;344(6269):871–2
Modeling of the human intercellular adhesion molecule–1, the human rhinovirus major group receptor. Giranda VL, et al. **Proteins** 1990;7(3):227–33

ANALYSIS

Expression of leukocyte adhesion molecules in human endometrium. Tabibzadeh SS, et al. **Am J Clin Pathol** 1990 Feb;93(2):183–9
Fixed drug eruption. Expression of epidermal keratinocyte intercellular adhesion molecule-1 (ICAM-1). Shiohara T, et al. **Arch Dermatol** 1989 Oct;125(10):1371–6
Adhesion molecule mapping in normal human skin. Konter U, et al. **Arch Dermatol Res** 1989;281(7):454–62
Uvomorulin–catenin complex: cytoplasmic anchorage of a Ca2+–dependent cell adhesion molecule. Kemler R, et al. **Bioessays** 1989 Oct;11(4):88–91 (14 ref.)
Prognostic value of lymphocyte homing receptor and S phase fraction in non–Hodgkin's lymphoma. Jalkanen S, et al. **Blood** 1990 Apr 1;75(7):1549–56
Gamma interferon induces different keratinocyte cellular patterns of expression of HLA–DR and DQ and intercellular adhesion molecule–I (ICAM–I) antigens. Griffiths CE, et al. **Br J Dermatol** 1989 Jan;120(1):1–8
Modulation by cytokines of HLA antigens, intercellular adhesion molecule 1 and high molecular weight melanoma associated antigen expression and of immune lysis of clones derived from the melanoma cell line MeM 50–10. Maio M, et al. **Cancer Immunol Immunother** 1989;30(1):34–42
Expression of neural cell adhesion molecule–related sialoglycoprotein in small cell lung cancer and neuroblastoma cell lines H69 and CHP–212. Moolenaar CE, et al. **Cancer Res** 1990 Feb 15;50(4):1102–6
Differential expression of intercellular adhesion molecule 1 in primary and metastatic melanoma lesions. Natali P, et al. **Cancer Res** 1990 Feb 15;50(4):1271–8
The molecular constituents of intercellular junctions. Stevenson BR, et al. **Curr Opin Cell Biol** 1989 Oct; 1(5):884–91 (35 ref.)
Distribution and possible interactions of actin–associated proteins and cell adhesion molecules of nerve growth cones. Letourneau PC, et al. **Development** 1989 Mar; 105(3):505–19
Functional analysis of intercellular adhesion molecule–1–expressing human thyroid cells. Weetman AP, et al. **Eur J Immunol** 1990 Feb;20(2):271–5
Distribution and dynamics of cell surface–associated cellCAM 105 in cultured rat hepatocytes. Tingström A, et al. **Exp Cell Res** 1989 Nov;185(1):132–42
Hepatic expression of intercellular adhesion molecule–1 (ICAM–1) in viral hepatitis B. Volpes R, et al. **Hepatology** 1990 Jul;12(1):148–54
Immunohistochemical study of adhesion molecules in liver inflammation. Volpes R, et al. **Hepatology** 1990 Jul; 12(1):59–65
Localization of a putative cell adhesion molecule (gp110) in Wistar and Fischer rat tissues. Becker A, et al. **Histochemistry** 1989;93(1):55–61
Expression of adhesion molecules on lymphocytes/monocytes and hepatocytes in human liver grafts. Steinhoff G, et al. **Hum Immunol** 1990 Jun; 28(2):123–7
Distribution of LCA protein subspecies and the cellular adhesion molecules LFA–1, ICAM–1 and p150,95 within human foetal thymus. Harvey JE, et al. **Immunology** 1990 Jun;70(2):203–9
Phenotypic changes associated with activation of CD45RA+ and CD45RO+ T cells. Wallace DL, et al. **Immunology** 1990 Mar;69(3):460–7
Suramin inhibits proliferation of rat glioma cells and alters N–CAM cell surface expression. Fantini J, et al. **Int J Cancer** 1990 Mar 15;45(3):554–61
Lymphocyte homing receptors and adhesion molecules in intravascular malignant lymphomatosis. Jalkanen S, et al. **Int J Cancer** 1989 Nov 15;44(5):777–82
Cytokine–mediated modulation of HLA–class II, ICAM–1, LFA–3 and tumor–associated antigen profile of melanoma cells. Comparison with anti–proliferative activity by rIL1–beta, rTNF–alpha, rIFN–gamma, rIL4 and their combinations. Mortarini R, et al. **Int J Cancer** 1990 Feb 15;45(2):334–41
Identification of an adhesion–associated protein of the retinal pigment epithelium. Chu PG, et al. **Invest Ophthalmol Vis Sci** 1990 May;31(5):847–55
Drug–induced, photosensitive, erythema multiforme–like eruption: possible role for cell adhesion molecules in a flare induced by Rhus dermatitis. Shiohara T, et al. **J Am Acad Dermatol** 1990 Apr;22(4):647–50
Constitutive absence and interferon–gamma–induced expression of adhesion molecules in basal cell carcinoma. Taylor RS, et al. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):721–6
Leu–8/CD7 antigen expression by CD3+ T cells: comparative analysis of skin and blood in mycosis fungoides/Sézary syndrome relative to normal blood values. Wood GS, et al. **J Am Acad Dermatol** 1990 Apr; 22(4):602–7
Identification of a membrane–cytoskeletal complex containing the cell adhesion molecule uvomorulin (E–cadherin), ankyrin, and fodrin in Madin–Darby canine kidney epithelial cells. Nelson WJ, et al. **J Cell Biol** 1990 Feb;110(2):349–57
IgE receptor on human eosinophils (FcERII). Comparison with B cell CD23 and association with an adhesion molecule. Grangette C, et al. **J Immunol** 1989 Dec 1; 143(11):3580–8
Junctional epithelium expresses the intercellular adhesion

molecule ICAM-1. Crawford JM, et al. **J Periodont Res** 1990 Jul;25(4):254-6
Intercellular adhesion molecule 1 on liver allografts during rejection. Adams DH, et al. **Lancet** 1989 Nov 11; 2(8672):1122-5
Endothelial cell receptors on leukemic plasma cells. Kalász V, et al. **Leuk Res** 1989;13(9):863-8
Expression of Epstein-Barr virus transformation-associated genes in tissues of patients with EBV lymphoproliferative disease. Young L, et al. **N Engl J Med** 1989 Oct 19; 321(16):1080-5
Identification of a human peripheral lymph node homing receptor: a rapidly down-regulated adhesion molecule. Kishimoto TK, et al. **Proc Natl Acad Sci U S A** 1990 Mar; 87(6):2244-8
Comparison and functional characterization of C-CAM, glycoprotein IIb/IIIa and integrin beta 1 in rat platelets. Hansson M, et al. **Thromb Res** 1990 Apr 1;58(1):61-73

BIOSYNTHESIS

Tumor necrosis factor-alpha inhibits cell proliferation and induces class II antigens and cell adhesion molecules in cultured normal human keratinocytes in vitro. Detmar M, et al. **Arch Dermatol Res** 1990;282(4):238-45
Isolation of an aggregation-less mutant of Dictyostelium discoideum with the expression of contact site A glycoprotein. Yoshida M, et al. **Cell Struct Funct** 1989 Oct; 14(5):625-36
Induction of human thyroid cell ICAM-1 (CD54) antigen expression and ICAM-1-mediated lymphocyte binding. Martin A, et al. **Endocrinology** 1990 Aug;127(2):651-7
Human antigen-specific memory T cells express the homing receptor (LAM-1) necessary for lymphocyte recirculation. Tedder TF, et al. **Eur J Immunol** 1990 Jun;20(6):1351-5
Expression of adhesion molecules and the establishment of boundaries during embryonic and neural development. Crossin KL, et al. **Exp Neurol** 1990 Jul;109(1):6-18 (91 ref.)
Marked synergism between tumor necrosis factor-alpha and interferon-gamma in regulation of keratinocyte-derived adhesion molecules and chemotactic factors. Barker JN, et al. **J Clin Invest** 1990 Feb;85(2):605-8
Lymphocyte-mediated activation of cultured endothelial cells (EC). CD4+ T cells inhibit EC class II MHC expression despite secreting IFN-gamma and increasing EC class I MHC and intercellular adhesion molecule-1 expression. Doukas J, et al. **J Immunol** 1990 Aug 15; 145(4):1088-98
3-deazaadenosine inhibits leukocyte adhesion and ICAM-1 biosynthesis in tumor necrosis factor-stimulated human endothelial cells. Jurgensen CH, et al. **J Immunol** 1990 Jan 15;144(2):653-61
Characterization and functional analysis of interferon-gamma-induced intercellular adhesion molecule-1 expression in human keratinocytes and A-431 cells. Caughman SW, et al. **J Invest Dermatol** 1990 Jun; 94(6 Suppl):22S-26S
Tumor necrosis factor beta and ultraviolet radiation are potent regulators of human keratinocyte ICAM-1 expression. Krutmann J, et al. **J Invest Dermatol** 1990 Aug; 95(2):127-31
Ultraviolet radiation can either suppress or induce expression of intercellular adhesion molecule 1 (ICAM-1) on the surface of cultured human keratinocytes. Norris DA, et al. **J Invest Dermatol** 1990 Aug;95(2):132-8
Modulation of melanocyte intercellular adhesion molecule-1 by immune cytokines. Yohn JJ, et al. **J Invest Dermatol** 1990 Aug;95(2):233-7
Degranulation of human mast cells induces an endothelial antigen central to leukocyte adhesion. Klein LM, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8972-6

CLASSIFICATION

Heterogeneity of soluble neural cell adhesion molecule. Nybroe O, et al. **J Neurochem** 1989 Nov;53(5):1372-8

DEFICIENCY

Leukocyte adhesion deficiency: molecular basis and functional consequences. Fischer A, et al. **Immunodefic Rev** 1988;1(1):39-54 (83 ref.)

GENETICS

Cell adhesion activity of non-specific cross-reacting antigen (NCA) and carcinoembryonic antigen (CEA) expressed on CHO cell surface: homophilic and heterophilic adhesion. Oikawa S, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):39-45
cDNA cloning of a novel cell adhesion protein expressed in human squamous carcinoma cells. Wong YC, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):984-92
Differential expression of CD54/intercellular adhesion molecule-1 in myeloid leukemias and in lymphoproliferative disorders. Maio M, et al. **Blood** 1990 Aug 15;76(4):783-90
CD44 is the principal cell surface receptor for hyaluronate. Aruffo A, et al. **Cell** 1990 Jun 29;61(7):1303-13
Direct expression cloning of vascular cell adhesion molecule 1, a cytokine-induced endothelial protein that binds to lymphocytes. Osborn L, et al. **Cell** 1989 Dec 22; 59(6):1203-11
Expression of CD44 confers a new adhesive phenotype on transfected cells. St. John T, et al. **Cell** 1990 Jan 12; 60(1):45-52
The mouse lymph node homing receptor is identical with the lymphocyte cell surface marker Ly-22: role of the EGF domain in endothelial binding. Siegelman MH, et al. **Cell** 1990 May 18;61(4):611-22
The arrangement of the immunoglobulin-like domains of ICAM-1 and the binding sites for LFA-1 and rhinovirus [published erratum appears in Cell 1990 Jun 15;61(2):1157] Staunton DE, et al. **Cell** 1990 Apr 20;61(2):243-54
Structure and regulation of the leukocyte adhesion receptor LFA-1 and its counterreceptors, ICAM-1 and ICAM-2. Dustin ML, et al. **Cold Spring Harb Symp Quant Biol** 1989; 54 Pt 2:753-65
Endo16, a lineage-specific protein of the sea urchin embryo, is first expressed just prior to gastrulation. Nocente-McGrath C, et al. **Dev Biol** 1989 Nov; 136(1):264-72
Constitutive overexpression of the contact site A glycoprotein enables growth-phase cells of Dictyostelium discoideum to aggregate. Faix J, et al. **EMBO J** 1990 Sep; 9(9):2709-16
The E2 antigen, a 32 kd glycoprotein involved in T-cell adhesion processes, is the MIC2 gene product. Gelin C, et al. **EMBO J** 1989 Nov;8(11):3253-9
Molecular cloning of murine intercellular adhesion molecule (ICAM-1). Horley KJ, et al. **EMBO J** 1989 Oct; 8(10):2889-96
Identification and cloning of two species of cadherins in bovine endothelial cells. Liaw CW, et al. **EMBO J** 1990 Sep;9(9):2701-8
Distinct functional roles of the two intracellular phosphatase like domains of the receptor-linked protein tyrosine phosphatases LCA and LAR. Streuli M, et al. **EMBO J** 1990 Aug;9(8):2399-407
The ancestor of the adaptive immune system was the CAM system for organogenesis. Ohno S. **Exp Clin Immunogenet** 1987;4(4):181-92 (9 ref.)
Integrins and other cell adhesion molecules. Albelda SM, et al. **FASEB J** 1990 Aug;4(11):2868-80 (85 ref.)
Genetic mapping of mouse T3d and T3e between Apoa1 and Ncam. Miller RD, et al. **Immunogenetics** 1989; 30(6):511-4
Functional studies of stable L cell transfectants expressing intercellular adhesion molecule 1 [ICAM-1] Wawryk SO, et al. **Immunol Cell Biol** 1989 Dec;67 (Pt 6):391-401
Structure of the gene encoding the human leukocyte adhesion molecule-1 (TQ1, Leu-8) of lymphocytes and neutrophils. Ord DC, et al. **J Biol Chem** 1990 May 15;265(14):7760-7
cDNAs of cell adhesion molecules of different specificity induce changes in cell shape and border formation in cultured S180 cells. Matsuzaki F, et al. **J Cell Biol** 1990 Apr;110(4):1239-52
Molecular cloning of a human Ca2+-dependent cell-cell adhesion molecule homologous to mouse placental cadherin: its low expression in human placental tissues. Shimoyama Y, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1787-94
Molecular cloning of CD31, a putative intercellular adhesion molecule closely related to carcinoembryonic antigen. Simmons DL, et al. **J Exp Med** 1990 Jun 1;171(6):2147-52
Genomic organization of the selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. Watson ML, et al. **J Exp Med** 1990 Jul 1;172(1):263-72
Isolation of the murine intercellular adhesion molecule 1 (ICAM-1) gene. ICAM-1 enhances antigen-specific T cell activation. Siu G, et al. **J Immunol** 1989 Dec 1; 143(11):3813-20
Molecular cloning and expression of Pgp-1. The mouse homolog of the human H-CAM (Hermes) lymphocyte homing receptor. Zhou DF, et al. **J Immunol** 1989 Nov 15;143(10):3390-5
A pharmacologically distinct cyclic AMP receptor is responsible for the regulation of gp80 expression in Dictyostelium discoideum. Ma PC, et al. **Mol Cell Biol** 1990 Jul;10(7):3297-306
cDNA for endothelial leukocyte adhesion molecule 1 (ELAM1): sequence differences. Polte T, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1083
Overexpression of the pseudoautosomal gene MIC2 in Ewing's sarcoma and peripheral primitive neuroectodermal tumor. Kovar H, et al. **Oncogene** 1990 Jul;5(7):1067-70
Complexity of the immediate early response of myeloid cells to terminal differentiation and growth arrest includes ICAM-1, Jun-B and histone variants. Lord KA, et al. **Oncogene** 1990 Mar;5(3):387-96
Endothelial leukocyte adhesion molecule 1: direct expression cloning and functional interactions. Hession C, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1673-7
Localization of mRNA for neural cell adhesion molecule (N-CAM) polypeptides in neural and nonneural tissues by in situ hybridization. Prieto AL, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9579-83
PECAM-1 (CD31) cloning and relation to adhesion molecules of the immunoglobulin gene superfamily. Newman PJ, et al. **Science** 1990 Mar 9;247(4947):1219-22

IMMUNOLOGY

A blocking monoclonal antibody to endothelial-leukocyte adhesion molecule-1 (ELAM1). Benjamin C, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):348-53
Characterization of a monoclonal antibody recognizing a novel leucocyte adhesion molecule. Partridge LJ, et al. **Biochem Soc Trans** 1990 Apr;18(2):274-5
Hematopoietic progenitor cell expression of the H-CAM (CD44) homing-associated adhesion molecule. Lewinsohn DM, et al. **Blood** 1990 Feb 1;75(3):589-95
Monoclonal antibodies against LFA-1 or its ligand ICAM-1 accelerate CD2 (T11.1 + T11.2)-mediated T cell proliferation. Cerdan C, et al. **Cell Immunol** 1989 Oct 15; 123(2):344-53
Mechanisms of cell adhesion in the nervous system: role of the immunoglobulin gene superfamily. Salzer JL, et al. **Dev Neurosci** 1989;11(6):377-90 (75 ref.)
Binding of hyaluronic acid to lymphoid cell lines is inhibited by monoclonal antibodies against Pgp-1. Lesley J, et al. **Exp Cell Res** 1990 Apr;187(2):224-33
Membrane proteins involved in phagocyte adherence to endothelium. Carlos TM, et al. **Immunol Rev** 1990 Apr; 114:5-28 (122 ref.)
ICAM- melanoma cells are relatively resistant to CD3-mediated T-cell lysis. Braakman E, et al. **Int J Cancer** 1990 Sep 15;46(3):475-80
In vivo effects of monoclonal antibody to ICAM-1 (CD54) in nonhuman primates with renal allografts. Cosimi AB, et al. **J Immunol** 1990 Jun 15;144(12):4604-12
CD44 antibody against In(Lu)-related p80, lymphocyte-homing receptor molecule inhibits the binding of human erythrocytes to T cells. Hale LP, et al. **J Immunol** 1989 Dec 15;143(12):3944-8
Hodgkin's cell lectin, a lymphocyte adhesion molecule and mitogen. Paietta E, et al. **J Immunol** 1989 Nov 1; 143(9):2850-7
Participation of CD11a-c/CD18 and RGD-recognizing adhesion molecules in the binding of LGL to fibroblasts. Evidence for the role of CD11a in the fibroblast-mediated inactivation of NK cells. Heiskala MK, et al. **Scand J Immunol** 1990 Aug;32(2):137-47
Adhesion of human B cells to germinal centers in vitro involves VLA-4 and INCAM-110. Freedman AS, et al. **Science** 1990 Aug 31;249(4972):1030-3
Characterization of two monoclonal antibodies directed against an adhesion molecule on human endothelial cells. Leeuwenberg JF, et al. **Transplant Proc** 1990 Aug; 22(4):1991-3

ISOLATION & PURIFICATION

Oral adhesion of yeasts. Olsen I. **Acta Odontol Scand** 1990 Feb;48(1):45-53 (60 ref.)
Characterization of a glycosyl-phosphatidylinositol degrading activity in Dictyostelium discoideum membranes. da Silva AM, et al. **Exp Cell Res** 1989 Dec; 185(2):464-72
EndoCAM: a novel endothelial cell-cell adhesion molecule. Albelda SM, et al. **J Cell Biol** 1990 Apr;110(4):1227-37
Identification of a new cell surface glycoprotein with accessory function in murine T cell responses. Golde WT, et al. **J Immunol** 1990 Feb 1;144(3):804-10
Isolation of a fibroblast attachment protein from cementum. McAllister B, et al. **J Periodont Res** 1990 Mar;25(2):99-105
Purification of hexabrachion (tenascin) from cell culture conditioned medium, and separation from a cell adhesion factor. Aukhil I, et al. **Matrix** 1990 May;10(2):98-111
Identification of a cell surface-associated protein involved in mouse neural cell aggregation by means of antibodies against the sponge aggregation factor. Gramzow M, et al. **Membr Biochem** 1989;8(1):27-38
An intercellular adhesion protein of rat testis: isolation and preliminary characterization. D'Agostino A, et al. **Mol Reprod Dev** 1990 Feb;25(2):172-6
Association of intercellular adhesion molecule 1 with the multichain high-affinity interleukin 2 receptor. Burton J, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7329-33

METABOLISM

Keratinocyte intercellular adhesion molecule-1 (ICAM-1) expression precedes dermal T lymphocytic infiltration in allergic contact dermatitis (Rhus dermatitis). Griffiths CE, et al. **Am J Pathol** 1989 Dec;135(6):1045-53
Intercellular adhesion molecule-1 (ICAM-1) in cellular immune reactions in the human central nervous system. Sobel RA, et al. **Am J Pathol** 1990 Jun;136(6):1309-16
Intercellular adhesion molecule-1 (ICAM-1) expression is upregulated in autoimmune murine lupus nephritis. Wuthrich RP, et al. **Am J Pathol** 1990 Feb;136(2):441-50
Host receptors for malaria-infected erythrocytes. Chulay JD, et al. **Am J Trop Med Hyg** 1990 Aug;43(2 Pt 2):6-14 (37 ref.)
Covalent surface immobilization of Arg-Gly-Asp- and Tyr-Ile-Gly-Ser-Arg-containing peptides to obtain well-defined cell-adhesive substrates. Massia SP, et al. **Anal Biochem** 1990 Jun;187(2):292-301
Specific recognition of sulfate esters by bindin, a sperm adhesion protein from sea urchins. DeAngelis PL, et al. **Biochim Biophys Acta** 1990 Jan 19;1037(1):100-5
Unusual fucoidin-binding properties of chymotrypsinogen and trypsinogen. Jones R. **Biochim Biophys Acta** 1990 Feb 9;1037(2):227-32
Fetal expression of hemonectin: an extracellular matrix hematopoietic cytoadhesion molecule. Peters C, et al. **Blood** 1990 Jan 15;75(2):357-64
Differential modulation of keratinocyte intercellular adhesion molecule-I expression by gamma interferon and phorbol

ester: evidence for involvement of protein kinase C signal transduction. Griffiths CE, et al. **Br J Dermatol** 1990 Mar; 122(3):333–42

Biochemical differentiation of nascent neurite junctions: unilateral localization of adheron components. Tsui HC, et al. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):205–16

Detection of an altered form of cell–CAM 105 on rat transplantable and primary hepatocellular carcinomas. Hixson DC, et al. **Cancer Res** 1989 Dec 1;49(23):6788–94

Comparison of the structural characteristics of cell–CAM 105 from hepatocytes with those of an altered form expressed by rat transplantable hepatocellular carcinomas. McEntire KD, et al. **Cancer Res** 1989 Dec 1; 49(23):6795–802

VCAM–1 on activated endothelium interacts with the leukocyte integrin VLA–4 at a site distinct from the VLA–4/fibronectin binding site. Elices MJ, et al. **Cell** 1990 Feb 23;60(4):577–84

Identification of an octapeptide involved in homophilic interaction of the cell adhesion molecule gp80 of dictyostelium discoideum. Kamboj RK, et al. **Cell** 1989 Nov 17;59(4):615–25

Cytokine regulation of intercellular adhesion molecule–1 (ICAM–1) expression on human glioblastoma cells. Kuppner MC, et al. **Clin Exp Immunol** 1990 Jul;81(1):142–8

Attachment of tumor cells to endothelial monolayers: detection of surface molecules involved in cell–cell binding. Antonia SJ, et al. **Clin Immunol Immunopathol** 1989 Nov; 53(2 Pt 1):281–96

Cytotactin and its proteoglycan ligand mark structural and functional boundaries in somatosensory cortex of the early postnatal mouse. Crossin KL, et al. **Dev Biol** 1989 Dec; 136(2):381–92

Human memory T cells express intercellular adhesion molecule–1 which can be increased by interleukin 2 and interferon–gamma. Buckle AM, et al. **Eur J Immunol** 1990 Feb;20(2):337–41

Only dull CD3+ thymocytes bind to thymic epithelial cells. The binding is elicited by both CD2/LFA–3 and LFA–1/ICAM–1 interactions. Nonoyama S, et al. **Eur J Immunol** 1989 Sep;19(9):1631–5

Alteration of cellular adhesion by heat shock. Cress AE, et al. **Exp Cell Res** 1990 Sep;190(1):40–6

Selective elimination of the contact site A protein of Dictyostelium discoideum by gene disruption. Harloff C, et al. **Genes Dev** 1989 Dec;3(12A):2011–9

Binding of proteolytically–degraded human colonic mucin glycoproteins to the Gal/GalNAc adherence lectin of Entamoeba histolytica. Chadee K, et al. **Gut** 1990 Aug; 31(8):890–5

Roles of adhesion molecules in T–cell recognition: fundamental similarities between four integrins on resting human T cells (LFA–1, VLA–4, VLA–5, VLA–6) in expression, binding, and costimulation. Shimizu Y, et al. **Immunol Rev** 1990 Apr;114:109–43 (106 ref.)

Human melanoma cells with high susceptibility to cell–mediated lysis can be identified on the basis of ICAM–1 phenotype, VLA profile and invasive ability. Anichini A, et al. **Int J Cancer** 1990 Sep 15;46(3):508–15

Analysis of cell–surface sugar receptor expression by neoglycoenzyme binding and adhesion to plastic–immobilized neoglycoproteins for related weakly and strongly metastatic cell lines of murine tumor model systems. Gabius S, et al. **Int J Cancer** 1990 Sep 15; 46(3):500–7

C–CAM (cell–CAM 105) is an adhesive cell surface glycoprotein with homophilic binding properties. Tingström A, et al. **J Cell Sci** 1990 May;96 (Pt 1):17–25

Adhesion molecules of cultured hematopoietic malignancies. A calcium–dependent lectin is the principle mediator of binding to the high endothelial venule of lymph nodes. Stoolman LM, et al. **J Clin Invest** 1989 Oct;84(4):1196–205

Immunoelectron–microscopic localization of the 180 kD component of the neural cell adhesion molecule N–CAM in postsynaptic membranes. Persohn E, et al. **J Comp Neurol** 1989 Oct 1;288(1):92–100

Adhesive molecules in liver disease. Immunohistochemical distribution of thrombospondin receptors in chronic HBV infection. Volpes R, et al. **J Hepatol** 1990 May; 10(3):297–304

Organization of the cytoskeleton and the focal contacts of bovine aortic endothelial cells cultured on type I and III collagen. Semich R, et al. **J Histochem Cytochem** 1990 Jan; 38(1):59–67

Constitutive and induced phosphorylation of the alpha– and beta–chains of the CD11/CD18 leukocyte integrin family. Relationship to adhesion–dependent functions. Buyon JP, et al. **J Immunol** 1990 Jan 1;144(1):191–7

Granulocyte–macrophage colony–stimulating factor and other cytokines regulate surface expression of the leukocyte adhesion molecule–1 on human neutrophils, monocytes, and their precursors. Griffin JD, et al. **J Immunol** 1990 Jul 15;145(2):576–84

On the species specificity of the interaction of LFA–1 with intercellular adhesion molecules. Johnston SC, et al. **J Immunol** 1990 Aug 15;145(4):1181–7

IFN–gamma regulates the expression of the adhesion molecule ELAM–1 and IL–6 production by human endothelial cells in vitro. Leeuwenberg JF, et al. **J Immunol** 1990 Oct 1;145(7):2110–4

Two leukocyte receptors (CD11a/CD18 and CD11b/CD18) mediate transient adhesion to endothelium by binding to different ligands. Lo SK, et al. **J Immunol** 1989 Nov 15; 143(10):3325–9

Changes in homing receptor expression on murine lymphokine–activated killer cells during IL–2 exposure. Steen PD, et al. **J Immunol** 1989 Dec 15;143(12):4324–30

Expression of the human leukocyte adhesion molecule, LAM1. Identity with the TQ1 and Leu–8 differentiation antigens. Tedder TF, et al. **J Immunol** 1990 Jan 15; 144(2):532–40

Organ–specific and non–organ–specific lymphocyte receptors for vascular endothelium. Cavender DE. **J Invest Dermatol** 1990 Jun;94(6 Suppl):41S–48S (79 ref.)

Adhesion molecules on the plasma membrane of epidermal cells. II. The intercellular adhesion molecule–1 is constitutively present on the cell surface of human resting Langerhans cells. De Panfilis G, et al. **J Invest Dermatol** 1990 Mar;94(3):317–21

Intercellular adhesion molecule expression in the evolving human cutaneous delayed hypersensitivity reaction. Lewis RE, et al. **J Invest Dermatol** 1989 Nov;93(5):672–7

Binding properties of the neural cell adhesion molecule to different components of the extracellular matrix. Probstmeier R, et al. **J Neurochem** 1989 Dec;53(6):1794–801

A protein kinase activity is associated with and specifically phosphorylates the neural cell adhesion molecule L1. Sadoul R, et al. **J Neurochem** 1989 Nov;53(5):1471–8

Neural cell adhesion molecule is expressed by smooth muscle cells during the development of the rat vascular system. Gulbenkian S, et al. **J Neurocytol** 1989 Dec;18(6):809–17

Immunocytochemical localization of the neural cell adhesion molecules L1, N–CAM, and J1 in Pacinian corpuscles of the mouse during development, in the adult and during regeneration. Nolte C, et al. **J Neurocytol** 1989 Dec; 18(6):795–808

Expression of cellCAM–105 in the apical surface of rat uterine epithelium is controlled by ovarian steroid hormones. Svalander PC, et al. **J Reprod Fertil** 1990 Jan; 88(1):213–21

Adhesion molecules in the prognosis of diffuse large–cell lymphoma: expression of a lymphocyte homing receptor (CD44), LFA–1 (CD11a/18), and ICAM–1 (CD54). Horst E, et al. **Leukemia** 1990 Aug;4(8):595–9

Reduced membrane protein associated with resistance of human squamous carcinoma cells to methotrexate and cis–platinum. Bernal SD, et al. **Mol Cell Biochem** 1990 Jun 1;95(1):61–70

Uvomorulin–catenin complex formation is regulated by a specific domain in the cytoplasmic region of the cell adhesion molecule. Ozawa M, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4246–50

The role of leukocyte adhesion molecules in cellular interactions: implications for the pathogenesis of inflammatory synovitis. Haynes BF, et al. **Springer Semin Immunopathol** 1989;11(2):163–85 (79 ref.)

HIV–1–stimulated expression of CD11/CD18 integrins and ICAM–1: a possible mechanism for extravascular dissemination of HIV–1–infected cells. Rossen RD, et al. **Trans Assoc Am Physicians** 1989;102:117–30

[Adhesion molecules: their potential implication for dermatology] Staquet MJ, et al. **Allerg Immunol (Paris)** 1990 Jun;22(6):211–5 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Virology. Nosing ahead in the cold war [news; comment] Bangham CR, et al. **Nature** 1990 Mar 1;344(6261):16 Comment on: Nature 1990 Mar 1;344(6261):70–2.

A soluble form of intercellular adhesion molecule–1 inhibits rhinovirus infection [see comments] Marlin SD, et al. **Nature** 1990 Mar 1;344(6261):70–2 Comment in: Nature 1990 Mar 1;344(6261):16.

PHYSIOLOGY

Cell adhesion molecules. Garcia–Gonzalez E, et al. **Am J Dermatopathol** 1990 Apr;12(2):188–92 (32 ref.)

Expression and function of cell adhesion molecules during the early development of the heart. Hoffman S, et al. **Ann N Y Acad Sci** 1990;588:73–86

Carbohydrates and carbohydrate–binding proteins in the nervous system. Jessell TM, et al. **Annu Rev Neurosci** 1990; 13:227–55 (169 ref.)

Mechanisms of cutaneous inflammation. Interactions between epidermal cytokines, adhesion molecules, and leukocytes [published erratum appears in Arch Dermatol 1989 Dec;125(12):1643] Kupper TS. **Arch Dermatol** 1989 Oct; 125(10):1406–12 (40 ref.)

Molecular understanding of cellular adhesion on artificial surfaces. Takemoto Y, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):354–6

Vascular cell adhesion molecule–1 mediates lymphocyte adherence to cytokine–activated cultured human endothelial cells. Carlos TM, et al. **Blood** 1990 Sep 1; 76(5):965–70

GMP–140 mediates adhesion of stimulated platelets to neutrophils. Hamburger SA, et al. **Blood** 1990 Feb 1; 75(3):550–4

Effect of venous shear stress on CD18–mediated neutrophil adhesion to cultured endothelium. Lawrence MB, et al. **Blood** 1990 Jan 1;75(1):227–37

Expression of the adhesion molecule ICAM–1 and major histocompatibility complex class I antigens on human tumor cells is required for their interaction with autologous lymphocytes in vitro. Vánky F, et al. **Cancer Immunol Immunother** 1990;31(1):19–27

Novel function of the cell adhesion molecule uvomorulin as an inducer of cell surface polarity. McNeill H, et al. **Cell** 1990 Jul 27;62(2):309–16

Leukocyte adhesion to endothelium in inflammation. Osborn L. **Cell** 1990 Jul 13;62(1):3–6 (24 ref.)

Functional involvement of the LFA–1/ICAM–1 adhesion system in the autologous mixed lymphocyte reaction. Bagnasco M, et al. **Cell Immunol** 1990 Jul;128(2):362–9

ICAM–1–dependent fibroblast–lymphocyte adhesion: discordance between surface expression and function of ICAM–1. Piela TH, et al. **Cell Immunol** 1990 Aug; 129(1):125–37

Adhesion of polymorphonuclear cells to human endothelial cells. Adhesion–molecule–dependent, and Fc receptor–mediated adhesion–molecule–independent mechanisms. Leeuwenberg JF, et al. **Clin Exp Immunol** 1990 Sep;81(3):496–500

Adhesion–promoting receptors on leukocytes. Detmers PA, et al. **Curr Opin Immunol** 1988 Sep–Oct;1(1):10–5 (28 ref.)

Leukocyte adhesion. Hansen NL, et al. **Curr Probl Dermatol** 1990;19:17–28 (43 ref.)

Expression of cell adhesion molecules in lymphoid malignancies. Pals ST, et al. **Curr Probl Dermatol** 1990; 19:29–34 (14 ref.)

Integrins and cell adhesion molecules: neuronal receptors that regulate axon growth on extracellular matrices and cell surfaces. Reichardt LF, et al. **Dev Neurosci** 1989; 11(4–5):332–47 (93 ref.)

Spatial and temporal distribution of vinculin and talin in migrating avian neural crest cells and their derivatives. Duband JL, et al. **Development** 1990 Mar;108(3):421–33

Phorbol esters induce differentiation of U–937 human promonocytic cells in the absence of LFA–1/ICAM–1–mediated intercellular adhesion. Cabañas C, et al. **Eur J Biochem** 1990 Aug 17;191(3):599–604

MALA–2, mouse homologue of human adhesion molecule ICAM–1 (CD54). Prieto J, et al. **Eur J Immunol** 1989 Sep; 19(9):1551–7

Hemopoietic progenitor cell binding to the stromal microenvironment in vitro. Gordon MY, et al. **Exp Hematol** 1990 Aug;18(7):837–42

Adhesion molecules and animal development. Anderson H. **Experientia** 1990 Jan 15;46(1):2–13 (153 ref.)

CEA as a cell adhesion molecule. Lance MP. **Gastroenterology** 1990 Jul;99(1):277–8

Importance of ICAM–1 for accessory cell function of monocytic cells. Neumayer HP, et al. **Immunobiology** 1990 Jun;180(4–5):458–66

The CD2–LFA–3 and LFA–1–ICAM pathways: relevance to T–cell recognition. Makgoba MW, et al. **Immunol Today** 1989 Dec;10(12):417–22 (70 ref.)

New families of adhesion molecules play a vital role in platelet functions. Parmentier S, et al. **Immunol Today** 1990 Jul;11(7):225–7 (9 ref.)

Lymphocyte homing receptors and adhesion molecules in intravascular malignant lymphomatosis. Jalkanen S, et al. **Int J Cancer** 1989 Nov 15;44(5):777–82

An alternative leukocyte homotypic adhesion mechanism, LFA–1/ICAM–1–independent, triggered through the human VLA–4 integrin. Campanero MR, et al. **J Cell Biol** 1990 Jun;110(6):2157–65

Identification of a Ca2(+)–dependent cell–cell adhesion molecule in endothelial cells. Heimark RL, et al. **J Cell Biol** 1990 May;110(5):1745–56

Paxillin: a new vinculin–binding protein present in focal adhesions. Turner CE, et al. **J Cell Biol** 1990 Sep; 111(3):1059–68

Identification of surface proteins mediating adherence of CD11/CD18–deficient lymphoblastoid cells to cultured human endothelium. Schwartz BR, et al. **J Clin Invest** 1990 Jun;85(6):2019–22

Involvement of CD56 (NKH–1/Leu–19 antigen) as an adhesion molecule in natural killer–target cell interaction. Nitta T, et al. **J Exp Med** 1989 Nov 1;170(5):1757–61

Inducible cell adhesion molecule 110 (INCAM–110) is an endothelial receptor for lymphocytes. A CD11/CD18–independent adhesion mechanism. Rice GE, et al. **J Exp Med** 1990 Apr 1;171(4):1369–74

Homotypic cell aggregation induced by anti–CD44(Pgp–1) monoclonal antibodies and related to CD44(Pgp–1) expression. Belitsos PC, et al. **J Immunol** 1990 Mar 1; 144(5):1661–70

Role of ICAM–1 in antigen presentation demonstrated by ICAM–1 defective mutants. Dang LH, et al. **J Immunol** 1990 Jun 1;144(11):4082–91

T cells bind to cytokine–activated endothelial cells via a novel, inducible sialoglycoprotein and endothelial leukocyte adhesion molecule–1. Graber N, et al. **J Immunol** 1990 Aug 1;145(3):819–30

Engagement of the monocyte surface antigen CD14 induces lymphocyte function–associated antigen–1/intercellular adhesion molecule–1–dependent homotypic adhesion. Lauener RP, et al. **J Immunol** 1990 Sep 1;145(5):1390–4

Ligand binding to the LFA–3 cell adhesion molecule induces IL–1 production by human thymic epithelial cells. Le PT, et al. **J Immunol** 1990 Jun 15;144(12):4541–7

Anti–CD9 monoclonal antibodies induce homotypic adhesion of pre–B cell lines by a novel mechanism. Masellis–Smith A, et al. **J Immunol** 1990 Mar 1;144(5):1607–13

Human T lymphocyte adhesion to endothelial cells and

transendothelial migration. Alteration of receptor use relates to the activation status of both the T cell and the endothelial cell. Oppenheimer-Marks N, et al. **J Immunol** 1990 Jul 1;145(1):140–8

Thymocyte LFA-1 and thymic epithelial cell ICAM-1 molecules mediate binding of activated human thymocytes to thymic epithelial cells. Singer KH, et al. **J Immunol** 1990 Apr 15;144(8):2931–9

The LFA-1 ligand ICAM-1 provides an important costimulatory signal for T cell receptor-mediated activation of resting T cells. Van Seventer GA, et al. **J Immunol** 1990 Jun 15;144(12):4579–86

Substance P induces the expression of an endothelial-leukocyte adhesion molecule by microvascular endothelium. Matis WL, et al. **J Invest Dermatol** 1990 Apr; 94(4):492–5

The role of adhesion molecules, chemotactic factors, and cytokines in inflammatory and neoplastic skin disease—1990 update. Nickoloff BJ, et al. **J Invest Dermatol** 1990 Jun;94(6 Suppl):151S–157S (63 ref.)

The role of adhesion molecules in epithelial-T-cell interactions in thymus and skin. Singer KH, et al. **J Invest Dermatol** 1990 Jun;94(6 Suppl):85S–90S (69 ref.)

Interactions between epithelial cells and T lymphocytes: role of adhesion molecules. Singer KH. **J Leukoc Biol** 1990 Oct; 48(4):367–74 (86 ref.)

Increased intracellular cyclic AMP differentially modulates nerve growth factor induction of three neuronal recognition molecules involved in neurite outgrowth. Mann DA, et al. **J Neurochem** 1989 Nov;53(5):1581–8

Cellular functions of adhesion molecules. Fleming S. **J Pathol** 1990 Jul;161(3):189–90 (15 ref.)

Role of adhesion molecules in the genesis of the peripheral nervous system in avians. Duband JL. **J Physiol (Paris)** 1990;84(1):88–94 (85 ref.)

Antibodies that block rhinovirus attachment map to domain 1 of the major group receptor. Lineberger DW, et al. **J Virol** 1990 Jun;64(6):2582–7

Cell to cell contact enhances the proliferation of acute myeloid leukemia (AML) cells in vitro without an apparent role of adhesion glycoproteins LFA1, MAC1 and P150–95. Pulsoni A, et al. **Leuk Res** 1989;13(10):883–91

Expression of intercellular adhesion molecule-1 (ICAM-1) on human thyroid cells lines correlated with their binding of lymphoblasts. Fowler PD, et al. **Mol Cell Endocrinol** 1990 May 28;71(1):55–61

T-cell receptor cross-linking transiently stimulates adhesiveness through LFA-1. Dustin ML, et al. **Nature** 1989 Oct 19;341(6243):619–24

Enhancement of LFA-1-mediated cell adhesion by triggering through CD2 or CD3 on T lymphocytes. van Kooyk Y, et al. **Nature** 1989 Dec 14;342(6251):811–3

Differential effects of the cytoplasmic domains of cell adhesion molecules on cell aggregation and sorting-out. Jaffe SH, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(9):3589–93

Hemonectin: a novel hematopoietic adhesion molecule. Campbell A, et al. **Prog Clin Biol Res** 1990;352:97–105

An inducible endothelial cell surface glycoprotein mediates melanoma adhesion. Rice GE, et al. **Science** 1989 Dec 8; 246(4935):1303–6

Intercellular adhesion molecule-1 (ICAM-1) in the pathogenesis of asthma. Wegner CD, et al. **Science** 1990 Jan 26;247(4941):456–9

T lymphocyte adhesion molecules. Shimizu Y, et al. **Year Immunol** 1989–90;6:69–94 (161 ref.)

[Molecular mechanisms for cell adhesion mediated by fibronectin molecules] Obara M. **Seikagaku** 1989 Dec; 61(12):1462–6 **(Jpn)**

[Adherens junction: its structure and function] Tsukita S, et al. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(12 Suppl):1542–50 **(Jpn)**

CELL ADHESION MOLECULES, NEURONAL

Histogenesis of the semilunar valves: an immunohistochemical analysis of tenascin and type-I collagen distribution in developing chick heart valves. Garcia-Martinez V, et al. **Cell Tissue Res** 1990 Feb; 259(2):299–304

Families of neural adhesion molecules. Schachner M. **Ciba Found Symp** 1989;145:156–69, discussion 169–72 (54 ref.)

Drosophila fasciclin I is a novel homophilic adhesion molecule that along with fasciclin III can mediate cell sorting. Elkins T, et al. **J Cell Biol** 1990 May;110(5):1825–32

ANALYSIS

Immunofluorescent localization of tenascin during the morphogenesis of the outflow tract of the chick embryo heart. Hurle JM, et al. **Anat Embryol (Berl)** 1990; 181(2):149–55

Localization and quantitation of hexabrachion (tenascin) in skin, embryonic brain, tumors, and plasma. Lightner VA, et al. **Ann N Y Acad Sci** 1990;580:260–75

Presence of neural cell adhesion molecule on human embryonic and brain tumours. Patel K, et al. **Biochem Soc Trans** 1990 Jun;18(3):408–10

Differential spectrum of expression of neural cell adhesion molecule isoforms and L1 adhesion molecules on human neuroectodermal tumors. Figarella-Branger DF, et al. **Cancer Res** 1990 Oct 1;50(19):6364–70

Concentration of membrane antigens by forward transport and trapping in neuronal growth cones. Sheetz MP, et al. **Cell** 1990 Apr 20;61(2):231–41

Central nervous system antigen P84 can serve as a substrate for neurite outgrowth. Chuang W, et al. **Dev Biol** 1990 Feb;137(2):219–32

Characterization of epithelial domains in the nasal passages of chick embryos: spatial and temporal mapping of a range of extracellular matrix and cell surface molecules during development of the nasal placode. Croucher SJ, et al. **Development** 1989 Jul;106(3):493–509

Expression of J1/tenascin in the crypt-villus unit of adult mouse small intestine: implications for its role in epithelial cell shedding. Probstmeier R, et al. **Development** 1990 Jun; 109(2):313–21

Tenascin distribution in the normal human breast is altered during the menstrual cycle and in carcinoma. Ferguson JE, et al. **Differentiation** 1990 Feb;42(3):199–207

The relationship of polysialic acid and the neural cell adhesion molecule N-CAM in Wilms tumor and their subcellular distributions. Zuber C, et al. **Eur J Cell Biol** 1990 Apr;51(2):313–21

Neural cell adhesion molecule (NCAM) in adult vertebrate retinas: tissue localization and evidence against its role in retina-pigment epithelium adhesion. Fliesler SJ, et al. **Exp Eye Res** 1990 May;50(5):475–82

NCAM: a surface marker for human small cell lung cancer cells. Aletsee-Ufrecht MC, et al. **FEBS Lett** 1990 Jul 16; 267(2):295–300

Neural cell adhesion molecule (NCAM) is the antigen recognized by monoclonal antibodies of similar specificity in small-cell lung carcinoma and neuroblastoma. Patel K, et al. **Int J Cancer** 1989 Oct 15;44(4):573–8

Olfactory neurons express a unique glycosylated form of the neural cell adhesion molecule (N-CAM). Key B, et al. **J Cell Biol** 1990 May;110(5):1729–43

Immunocytological localization of the highly polysialylated form of the neural cell adhesion molecule during development of the murine cerebellar cortex. Hekmat A, et al. **J Comp Neurol** 1990 Jan 15;291(3):457–67

Immunohistochemical localization of polysialic acid in tissue sections: differential binding to polynucleotides and DNA of a murine IgG and a human IgM monoclonal antibody. Husmann M, et al. **J Histochem Cytochem** 1990 Feb; 38(2):209–15

Immunoelectron microscopic investigation of surface coat of Wilms tumor cells. Dense lamina is composed of highly sialylated neural cell adhesion molecule. Roth J, et al. **Lab Invest** 1990 Jan;62(1):55–60

Polypeptide variation in an N-CAM extracellular immunoglobulin-like fold is developmentally regulated through alternative splicing. Small SJ, et al. **Neuron** 1988 Dec;1(10):1007–17

Antibodies to the mammalian adhesion molecule J1/tenascin and its carbohydrate epitope L2/HNK-1 label the receptor lymph cavities of insect sensilla. Martini R. **Tissue Cell** 1989;21(5):639–45

[A highly sialylated, embryonic form of the neural cell adhesion molecule in Wilms tumor: identification of a cell adhesion molecule as a onco-developmental antigen] Roth J, et al. **Verh Dtsch Ges Pathol** 1989;73:372–87 (Eng. Abstr.) **(Ger)**

BIOSYNTHESIS

Thyroxine-dependent modulations of the expression of the neural cell adhesion molecule N-CAM during Xenopus laevis metamorphosis. Levi G, et al. **Development** 1990 Apr; 108(4):681–92

Expression of adhesion molecules and the establishment of boundaries during embryonic and neural development. Crossin KL, et al. **Exp Neurol** 1990 Jul;109(1):6–18 (91 ref.)

A developmental study of soluble L1. Nybroe O, et al. **Int J Dev Neurosci** 1990;8(3):273–81

GENETICS

Characterization of the human N-CAM promoter. Barton CH, et al. **Biochem J** 1990 May 15;268(1):161–8

Characterization of a regulatory region within the human neural cell adhesion molecule gene. Mann DA, et al. **Biochem Soc Trans** 1990 Jun;18(3):410–2

Generation of multiple neural cell adhesion molecule proteins from a single gene. Walsh FS. **Biochem Soc Trans** 1989 Dec;17(6):975–6 (9 ref.)

Generation of multiple N-CAM polypeptides from a single gene. Walsh FS, et al. **Bioessays** 1989 Oct;11(4):83–8 (26 ref.)

NCAM gene expression during the development of cerebellum and dentate gyrus in the mouse. Goldowitz D, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1–2):151–60

Evaluation of the effect of suramin on neural cell growth and N-CAM expression. Guo XJ, et al. **Cancer Res** 1990 Aug 15;50(16):5164–70

Drosophila neuroglian: a member of the immunoglobulin superfamily with extensive homology to the vertebrate neural adhesion molecule L1. Bieber AJ, et al. **Cell** 1989 Nov 3;59(3):447–60

Genetic analysis of a Drosophila neural cell adhesion molecule: interaction of fasciclin I and Abelson tyrosine kinase mutations. Elkins T, et al. **Cell** 1990 Feb 23; 60(4):565–75

Fasciclin III: a novel homophilic adhesion molecule in Drosophila. Snow PM, et al. **Cell** 1989 Oct 20;59(2):313–23

Up-regulation of embryonic NCAM in an EC cell line by retinoic acid. Husmann M, et al. **Dev Biol** 1989 Nov; 136(1):194–200

What distinguishes tenascin from fibronectin? Chiquet-Ehrismann R. **FASEB J** 1990 Jun;4(9):2598–604 (43 ref.)

Characterization of rat brain NCAM mRNA using DNA oligonucleotide probes. Andersson AM, et al. **FEBS Lett** 1990 Apr 24;263(2):385–8

Cloning of cDNA for a novel mouse membrane glycoprotein (gp42): shared identity to histocompatibility antigens, immunoglobulins and neural-cell adhesion molecules. Altruda F, et al. **Gene** 1989 Dec 28;85(2):445–51

The gene encoding L1, a neural adhesion molecule of the immunoglobulin family, is located on the X chromosome in mouse and man. Djabali M, et al. **Genomics** 1990 Aug; 7(4):587–93

Chromosomal localization of the human hexabrachion (tenascin) gene and evidence for recent reduplication within the gene. Gulcher JR, et al. **Genomics** 1990 Apr; 6(4):616–22

Genetic linkage of the human apolipoprotein AI–CIII–AIV gene cluster and the neural cell adhesion molecule (NCAM) gene. Mietus-Snyder M, et al. **Genomics** 1990 Aug;7(4):633–7

Drosophila fasciclin I, a neural cell adhesion molecule, has a phosphatidylinositol lipid membrane anchor that is developmentally regulated. Hortsch M, et al. **J Biol Chem** 1990 Sep 5;265(25):15104–9

The adhesion molecule on glia (AMOG) is a homologue of the beta subunit of the Na,K-ATPase. Gloor S, et al. **J Cell Biol** 1990 Jan;110(1):165–74

Localization during development of alternatively spliced forms of cytotactin mRNA by in situ hybridization. Prieto AL, et al. **J Cell Biol** 1990 Aug;111(2):685–98

Modulation of NCAM expression by transforming growth factor-beta, serum, and autocrine factors. Roubin R, et al. **J Cell Biol** 1990 Aug;111(2):673–84

N-myc down regulates neural cell adhesion molecule expression in rat neuroblastoma. Akeson R, et al. **Mol Cell Biol** 1990 May;10(5):2012–6

Transcription initiation sites and structural organization of the extreme 5' region of the rat neural cell adhesion molecule gene. Chen AS, et al. **Mol Cell Biol** 1990 Jul; 10(7):3314–24

Identification of positive and negative regulatory elements governing cell-type-specific expression of the neural cell adhesion molecule gene. Hirsch MR, et al. **Mol Cell Biol** 1990 May;10(5):1959–68

Differential splicing generates a nervous system-specific form of Drosophila neuroglian. Hortsch M, et al. **Neuron** 1990 May;4(5):697–709

Primary structure and developmental expression of a large cytoplasmic domain form of Xenopus laevis neural cell adhesion molecule (NCAM). Krieg PA, et al. **Nucleic Acids Res** 1989 Dec 25;17(24):10321–35

Identification and characterization of the promoter for the cytotactin gene. Jones FS, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6497–501

MUC18, a marker of tumor progression in human melanoma, shows sequence similarity to the neural cell adhesion molecules of the immunoglobulin superfamily. Lehmann JM, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9891–5

IMMUNOLOGY

Monoclonal antibody UJ127.11 recognizes the human homologue of mouse L1 cell adhesion molecule. Patel K, et al. **Biochem Soc Trans** 1990 Apr;18(2):274

Monoclonal antibody 3F8 recognises the neural cell adhesion molecule (NCAM) in addition to the ganglioside GD2. Patel K, et al. **Br J Cancer** 1989 Dec;60(6):861–6

An extracellular matrix molecule of newt and axolotl regenerating limb blastemas and embryonic limb buds: immunological relationship of MT1 antigen with tenascin. Onda H, et al. **Development** 1990 Apr;108(4):657–68

Monoclonal antibody UJ13A recognizes the neural cell adhesion molecule (NCAM). Patel K, et al. **Int J Cancer** 1989 Dec 15;44(6):1062–8

Human neuroectoderm-derived cell line secretes fibronectin that shares the HNK-1/10C5 carbohydrate epitope with neural cell adhesion molecules. Harper JR, et al. **J Neurochem** 1990 Feb;54(2):395–401

ISOLATION & PURIFICATION

Isolation and characterization of human fibroblast tenascin. An extracellular matrix glycoprotein of interest for developmental studies. Oike Y, et al. **Int J Dev Biol** 1990 Jun;34(2):309–17

Purification of hexabrachion (tenascin) from cell culture conditioned medium, and separation from a cell adhesion factor. Aukhil I, et al. **Matrix** 1990 May;10(2):98–111

METABOLISM

Close correlation between the distribution of tenascin and that of actin filaments in the mouse urethral mesenchyme during active morphogenesis. Murakami R, et al. **Acta Anat (Basel)** 1990;138(2):128–31

Connective-tissue macromolecules in Golgi chicken tendon

organs and at their interface with muscle fibers and adjoining tendinous structures. Maier A, et al. **Am J Anat** 1990 Jul;188(3):239–48

Cytotactin and cytotactin–binding proteoglycan. An interactive pair of extracellular matrix proteins. Hoffman S, et al. **Ann N Y Acad Sci** 1990;580:288–301 (30 ref.)

Expression of the neural cell adhesion molecule in human brain tumours. Patel K, et al. **Biochem Soc Trans** 1990 Apr; 18(2):264

Histogenesis of the semilunar valves: an immunohistochemical analysis of tenascin and type–I collagen distribution in developing chick heart valves. Garcia–Martinez V, et al. **Cell Tissue Res** 1990 Feb; 259(2):299–304

Cytotactin and its proteoglycan ligand mark structural and functional boundaries in somatosensory cortex of the early postnatal mouse. Crossin KL, et al. **Dev Biol** 1989 Dec; 136(2):381–92

Tissue specific O–linked glycosylation of the neural cell adhesion molecule (N–CAM). Walsh FS, et al. **Development** 1989 Apr;105(4):803–11

Embryonic neural cell adhesion molecules on human natural killer cells. Husmann M, et al. **Eur J Immunol** 1989 Sep; 19(9):1761–3

Neural cell adhesion molecule (N–CAM) in fetal and mature human heart. al–Mahdawi S, et al. **FEBS Lett** 1990 Jul 16;267(2):183–5

Binding properties of detergent–solubilized NCAM. Hall AK, et al. **J Cell Biol** 1990 Mar;110(3):817–24

Intercellular adhesion mediated by human muscle neural cell adhesion molecule: effects of alternative exon use. Pizzey JA, et al. **J Cell Biol** 1989 Dec;109(6 Pt 2):3465–76

A homologue of the axonally secreted protein axonin–1 is an integral membrane protein of nerve fiber tracts involved in neurite fasciculation. Ruegg MA, et al. **J Cell Biol** 1989 Nov;109(5):2363–78

Binding of hexabrachion (tenascin) to the extracellular matrix and substratum and its effect on cell adhesion. Lightner VA, et al. **J Cell Sci** 1990 Feb;95 (Pt 2):263–77

Expression of the novel extracellular matrix component tenascin in normal and diseased human liver. An immunohistochemical study. Van Eyken P, et al. **J Hepatol** 1990 Jul;11(1):43–52

Binding of the J1 adhesion molecules to extracellular matrix constituents. Faissner A, et al. **J Neurochem** 1990 Mar; 54(3):1004–15

Fibroblast–derived J1 adhesion glycoproteins show binding properties to extracellular matrix constituents different from those of central nervous system origin. Probstmeier R, et al. **J Neurochem** 1990 Mar;54(3):1016–9

Immunocytochemical localization of the neural cell adhesion molecules L1, N–CAM, and J1 in Pacinian corpuscles of the mouse during development, in the adult and during regeneration. Nolte C, et al. **J Neurocytol** 1989 Dec; 18(6):795–808

Ultrastructural localization of molecular subtypes of immunoreactive neural cell adhesion molecule (NCAM) in the adult rodent striatum. DiFiglia M, et al. **J Neurosci** 1989 Dec;9(12):4158–68

Tenascin distribution in basal cell carcinomas. Stamp GW. **J Pathol** 1989 Nov;159(3):225–9

Tenascin expression in the human endometrium and in endometrial adenocarcinomas. Vollmer G, et al. **Lab Invest** 1990 Jun;62(6):725–30

Expression of neural cell adhesion molecule immunoreactivity in hypertrophic myocardium. Gordon L, et al. **Life Sci** 1990;47(7):601–9

Identification of a heparin binding domain of the neural cell adhesion molecule N–CAM using synthetic peptides. Cole GJ, et al. **Neuron** 1989 Feb;2(2):1157–65

Neurite outgrowth in response to transfected N–CAM changes during development and is modulated by polysialic acid. Doherty P, et al. **Neuron** 1990 Aug;5(2):209–19

Effects of altered expression of the neural cell adhesion molecule, N–CAM, on early neural development in Xenopus embryos. Kintner C. **Neuron** 1988 Sep;1(7):545–55 (37 ref.)

Immunohistochemical demonstration of tenascin in the normal human limbus with special reference to trabeculectomy. Tervo T, et al. **Ophthalmic Res** 1990; 22(2):128–33

The distribution of immuno–reactive tenascin in the epithelial–mesenchymal junctional areas of benign and malignant squamous epithelia. Anbazhagan R, et al. **Virchows Arch [B]** 1990;59(1):59–63

PHARMACOKINETICS

Immunohistochemical study of the heterogeneity of tenascin distribution within the oral mucosa of the mouse. Sloan P, et al. **Arch Oral Biol** 1990;35(1):67–70

PHARMACOLOGY

Exogenous tenascin inhibits mesodermal cell migration during amphibian gastrulation. Riou JF, et al. **Dev Biol** 1990 Feb;137(2):305–17

J1/tenascin–related molecules are not responsible for the segmented pattern of neural crest cells or motor axons in the chick embryo. Stern CD, et al. **Development** 1989 Oct; 107(2):309–19

Neurite outgrowth promoting activity of G4 and its inhibition by monoclonal antibodies. Chang S, et al. **J Neurosci Res** 1990 Feb;25(2):180–6

A threshold effect of the major isoforms of NCAM on neurite outgrowth. Doherty P, et al. **Nature** 1990 Feb 1; 343(6257):464–6

The product of rab2, a small GTP binding protein, increases neuronal adhesion, and neurite growth in vitro. Ayala J, et al. **Neuron** 1990 May;4(5):797–805

L1–mediated axon outgrowth occurs via a homophilic binding mechanism. Lemmon V, et al. **Neuron** 1989 Jun; 2(6):1597–603

Tenascin, an extracellular matrix protein, exerts immunomodulatory activities. Rüegg CR, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7437–41

PHYSIOLOGY

Structure and function of the neural cell adhesion molecules NCAM and L1. Nybroe O, et al. **Adv Exp Med Biol** 1990; 265:185–96 (52 ref.)

Neural cell adhesion molecule as a regulator of cell–cell interactions. Rutishauser U. **Adv Exp Med Biol** 1990; 265:179–83 (22 ref.)

Tenascin: an extracellular matrix protein prominent in specialized embryonic tissues and tumors. Erickson HP, et al. **Annu Rev Cell Biol** 1989;5:71–92 (59 ref.)

Intercellular adhesion mediated by neural cell adhesion molecules in transfected 3T3 fibroblasts. Rowett LH, et al. **Biochem Soc Trans** 1990 Jun;18(3):412–4

Cell adhesion molecules and ion pumps—do ion fluxes regulate neuronal migration? Wilkin GP, et al. **Bioessays** 1990 Jun;12(6):287–8 (12 ref.)

Two contrary functions of tenascin: dissection of the active sites by recombinant tenascin fragments. Spring J, et al. **Cell** 1989 Oct 20;59(2):325–34

Neurite guidance molecules. Doherty P, et al. **Curr Opin Cell Biol** 1989 Dec;1(6):1102–6 (18 ref.)

Neural cell–to–cell adhesion and recognition. Rutishauser U. **Curr Opin Cell Biol** 1989 Oct;1(5):898–904 (24 ref.)

The role of cell adhesion molecules in neurite outgrowth on Müller cells. Drazba J, et al. **Dev Biol** 1990 Mar; 138(1):82–93

A role for the neural cell adhesion molecule, NCAM, in myoblast interaction during myogenesis. Knudsen KA, et al. **Dev Biol** 1990 Mar;138(1):159–68

Nerve growth cone migration onto Schwann cells involves the calcium–dependent adhesion molecule, N–cadherin. Letourneau PC, et al. **Dev Biol** 1990 Apr;138(2):430–42

Tenascin/J1/cytotactin: the potential function of hexabrachion proteins in neural development. Chiquet M. **Dev Neurosci** 1989;11(4–5):266–75 (39 ref.)

The spatiotemporal distribution of N–CAM in the retinotectal pathway of adult goldfish detected by the monoclonal antibody D3. Bastmeyer M, et al. **Development** 1990 Feb;108(2):299–311

Tenascin: a hexameric adhesive glycoprotein. Natali PG, et al. **Int J Cancer Suppl** 1989;4:66–8 (36 ref.)

Appearance of tenascin in healing skin of the mouse: possible involvement in seaming of wounded tissues. Murakami R, et al. **Int J Dev Biol** 1989 Dec;33(4):439–44

Drosophila fasciclin I is a novel homophilic adhesion molecule that along with fasciclin III can mediate cell sorting. Elkins T, et al. **J Cell Biol** 1990 May;110(5):1825–32

The neural cell adhesion molecule N–CAM enhances L1–dependent cell–cell interactions. Kadmon G, et al. **J Cell Biol** 1990 Jan;110(1):193–208

Functional cooperation between the neural adhesion molecules L1 and N–CAM is carbohydrate dependent. Kadmon G, et al. **J Cell Biol** 1990 Jan;110(1):209–18

Cell adhesion to fibronectin and tenascin: quantitative measurements of initial binding and subsequent strengthening response. Lotz MM, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1795–805

Antibodies to the L1 adhesion molecule inhibit Schwann cell ensheathment of neurons in vitro. Seilheimer B, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):3095–103

Enhanced myogenesis in NCAM–transfected mouse myoblasts. Dickson G, et al. **Nature** 1990 Mar 22; 344(6264):348–51

Adhesion molecules and the hierarchy of neural development. Jessell TM. **Neuron** 1988 Mar;1(1):3–13 (120 ref.)

Neural cell adhesion molecules influence second messenger systems. Schuch U, et al. **Neuron** 1989 Jul;3(1):13–20

An antibody to neural cell adhesion molecule impairs motor nerve terminal sprouting in a mouse muscle locally paralysed with botulinum toxin. Booth CM, et al. **Neuroscience** 1990;35(1):85–91

Newly isolated glycoprotein may control growth of tumor blood vessels [news] **Oncology (Williston Park)** 1988 Apr; 2(4):33

Differential effects of the cytoplasmic domains of cell adhesion molecules on cell aggregation and sorting–out. Jaffe SH, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(9):3589–93

[Cell adhesion molecules in the nervous system] Hatta M. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(4 Suppl):349–56 **(Jpn)**

SECRETION

J1–160 and J1–180 are oligodendrocyte–secreted nonpermissive substrates for cell adhesion. Pesheva P, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1765–78

ULTRASTRUCTURE

Biochemical and structural studies of tenascin/hexabrachion proteins. Taylor HC, et al. **J Cell Biochem** 1989 Oct; 41(2):71–90

CELL AGGREGATION

Aggregation of embryonic cells in a serum–free medium and its inhibition at suboptimal temperatures. Moscona AA, et al. **Exp Cell Res** 1966 Mar;41(3):697–702

Neuronal aggregation and neurotransmitter regulation: partial purification and characterization of a membrane–derived factor. Adler JE. **Int J Dev Neurosci** 1989;7(5):533–8

Functional cooperation between the neural adhesion molecules L1 and N–CAM is carbohydrate dependent. Kadmon G, et al. **J Cell Biol** 1990 Jan;110(1):209–18

The neural cell adhesion molecule N–CAM enhances L1–dependent cell–cell interactions. Kadmon G, et al. **J Cell Biol** 1990 Jan;110(1):193–208

Effector–target co–aggregation as a crucial step in the neutrophil–mediated tumour cell lysis. Dallegri F, et al. **J Clin Lab Immunol** 1989 Nov;30(3):131–4

Identification of a cell surface–associated protein involved in mouse neural cell aggregation by means of antibodies against the sponge aggregation factor. Gramzow M, et al. **Membr Biochem** 1989;8(1):27–38

Involvement of a carbohydrate group in the active site for surface guided reassociation of animal cells. Turner RS, et al. **Nature** 1973 Aug 24;244(5417):509–10

Two component system for surface guided reassociation of animal cells. Weinbaum G, et al. **Nature** 1973 Aug 24; 244(5417):510–2

Perturbation of homogeneous magnetic fields by isolated single and confocal spheroids. Implications for NMR spectroscopy of cells. Kuchel PW, et al. **NMR Biomed** 1989 Nov;2(4):151–60

Differential effects of the cytoplasmic domains of cell adhesion molecules on cell aggregation and sorting–out. Jaffe SH, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(9):3589–93

The increase in radioresistance of Chinese hamster cells cultured as spheroids is correlated to changes in nuclear morphology. Gordon DJ, et al. **Radiat Res** 1990 Feb; 121(2):175–9

DRUG EFFECTS

Effect of 12–O–tetradecanoylphorbol–13–acetate on colony formation and intercellular communication in a coculture system of JB6 clones. Yamadori I, et al. **Cancer Res** 1990 Sep 1;50(17):5567–73

Whole blood aggregation and plasma lyso–PAF related to smoking and atherosclerosis. Sturm MJ, et al. **Clin Exp Pharmacol Physiol** 1989 Jul;16(7):597–605

Inhibition of cell aggregation in vitro by puromycin. Moscona MH, et al. **Exp Cell Res** 1966 Mar;41(3):703–6

The effect of amiloride and its analog dichlorobenzamil on the cardiac chronotropic responses of myocardial cell aggregates in culture to alterations of extracellular potassium or calcium. Rabkin SW. **Gen Pharmacol** 1989; 20(5):595–600

Antiinflammatory peptides (antiflammins) inhibit synthesis of platelet–activating factor, neutrophil aggregation and chemotaxis, and intradermal inflammatory reactions. Camussi G, et al. **J Exp Med** 1990 Mar 1;171(3):913–27

Platelet–activating factor–induced aggregation of rat alveolar macrophages. Rabovsky J, et al. **Res Commun Chem Pathol Pharmacol** 1990 Aug; 69(2):163–72

Effects of proinflammatory mediators on canine neutrophil chemotaxis and aggregation. Strøm H, et al. **Vet Immunol Immunopathol** 1990 Jul;25(3):209–17

PHYSIOLOGY

Stepwise aggregation, compaction, and differentiation of uncompacted F9 cells. Littlefield JW. **Dev Genet** 1989; 10(5):402–10

A new test to measure homotypic aggregation of human tumour cells. Kemmner W, et al. **Invasion Metastasis** 1990; 10(2):86–100

CELL AGING see **CELL SURVIVAL**

CELL ANOXIA see **CELL HYPOXIA**

CELL COMMUNICATION

see related
INTERCELLULAR JUNCTIONS
SECOND MESSENGER SYSTEMS
SIGNAL TRANSDUCTION

Permanence of the cell–to–cell transmission of insulin induced hormonal imprinting. Csaba G, et al. **Acta Physiol Hung** 1990;75(2):111–6

Specificity of the cell–to–cell transmission of hormonal imprinting in cell cultures. Kovács P, et al. **Acta Physiol Hung** 1989;74(1):27–32

Endothelial and smooth muscle cells hyperpolarized by bradykinin are not dye coupled. Bény JL. **Am J Physiol** 1990 Mar;258(3 Pt 2):H836–41

Voltage–dependent gating of gap junction channels in

embryonic chick ventricular cell pairs. Veenstra RD. **Am J Physiol** 1990 Apr;258(4 Pt 1):C662–72
Dynamics of intercellular communication and differentiation in a rapidly developing mammalian airway epithelium. Carson JL, et al. **Am J Respir Cell Mol Biol** 1989 Nov; 1(5):385–90
The role of proteases in matrix breakdown during cellular invasion. Rifkin DB, et al. **Am Rev Respir Dis** 1989 Oct; 140(4):1112–3
Ultrastructural studies on interactions of choriocarcinoma cells with stromal cells in monolayers. Chew EC, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1819–24
Biological rhythms: fundamental aspects. Odeblad E. **Arctic Med Res** 1988;47 Suppl 1:199–200
The cell biology of T-dependent B cell activation. Owens T, et al. **Biochem Cell Biol** 1989 Sep;67(9):481–9 (83 ref.)
Gap junctions and intercellular communication: topology of the major junctional protein of rat liver. Evans WH, et al. **Biochem Soc Trans** 1989 Dec;17(6):983–5 (37 ref.)
Genetic control of cell communication in C. elegans development. Maine EM, et al. **Bioessays** 1990 Jun; 12(6):265–71 (31 ref.)
A mechanics model of the compression of cells with finite initial contact area. Qiong G, et al. **Biorheology** 1990; 27(2):225–40
Ultrastructural differences in junctional intercellular communication between highly and weakly metastatic clones derived from rat mammary carcinoma. Ren J, et al. **Cancer Res** 1990 Jan 15;50(2):358–62
Modification of gap junctional intercellular communication by changes in extracellular pH in Syrian hamster embryo cells. Ruch RJ, et al. **Carcinogenesis** 1990 Jun;11(6):909–13
Gap junctional intercellular communication and carcinogenesis. Yamasaki H. **Carcinogenesis** 1990 Jul; 11(7):1051–8 (85 ref.)
Cell–cell interactions prevent a potential inductive interaction between soma and germline in C. elegans. Seydoux G, et al. **Cell** 1990 Jun 15;61(6):939–51
The product of fem–1, a nematode sex-determining gene, contains a motif found in cell cycle control proteins and receptors for cell–cell interactions. Spence AM, et al. **Cell** 1990 Mar 23;60(6):981–90
Selective silencing of cell communication influences anteroposterior pattern formation in C. elegans. Waring DA, et al. **Cell** 1990 Jan 12;60(1):123–31
Clonal analysis in the ultrastructure of cell–to–cell interaction between a human glioma cell line and autologous tumor–specific cytotoxic T lymphocytes. Iwasaki K, et al. **Cell Immunol** 1990 Mar;126(1):164–75
Transfer of carbonic anhydrase–positive particles from the follicle–associated epithelium to lymphocytes of Peyer's patches in foetal sheep and lambs. Landsverk T, et al. **Cell Tissue Res** 1990 Aug;261(2):239–47
Hyaluronate–cell interactions and growth factor regulation of hyaluronate synthesis during limb development. Toole BP, et al. **Ciba Found Symp** 1989;143:138–45; discussion 145–9 281–5 (30 ref.)
Interactions between cells of the immune system and hyaluronate synthesis by human dermal fibroblasts. Whiteside TL, et al. **Ciba Found Symp** 1989;143:170–81; discussion 182–6, 281–5 (13 ref.)
Bibliography of the current world literature. Cell–to–cell contact. **Curr Opin Cell Biol** 1989 Oct;1(5):1029–37
Cell–to–cell interactions during synaptogenesis. Bloch RJ. **Curr Opin Cell Biol** 1989 Oct;1(5):940–6 (14 ref.)
Role of cell–to–cell interactions in T lymphocyte development and activation. Littman DR. **Curr Opin Cell Biol** 1989 Oct;1(5):920–8 (29 ref.)
Neural cell–to–cell adhesion and recognition. Rutishauser U. **Curr Opin Cell Biol** 1989 Oct;1(5):898–904 (24 ref.)
Glycoconjugates as mediators of cellular interactions during development. Shur BD. **Curr Opin Cell Biol** 1989 Oct; 1(5):905–12 (22 ref.)
The molecular constituents of intercellular junctions. Stevenson BR, et al. **Curr Opin Cell Biol** 1989 Oct; 1(5):884–91 (35 ref.)
Cell–cell interactions determine the dorsoventral axis in embryos of an equally cleaving opisthobranch mollusc. Boring L. **Dev Biol** 1989 Nov;136(1):239–53
Early tissue interactions leading to embryonic lens formation in Xenopus laevis. Henry JJ, et al. **Dev Biol** 1990 Sep; 141(1):149–63
Defective gap–junctional communication associated with imaginal disc overgrowth and degeneration caused by mutations of the dco gene in Drosophila. Jursnich VA, et al. **Dev Biol** 1990 Aug;140(2):413–29
Neuronal competition determines the spatial pattern of neuropeptide expression by identified neurons of the leech. Martindale MQ, et al. **Dev Biol** 1990 May;139(1):210–26
In vitro regulation of neuronal morphogenesis and polarity by astrocyte–derived factors. Rousselet A, et al. **Dev Biol** 1990 Jan;137(1):33–45
Modulation of neural commitment by changes in target cell contacts in Pleurodeles waltl. Saint–Jeannet JP, et al. **Dev Biol** 1990 Sep;141(1):93–103
Effect of cell contact on regionalization of mouse embryos. Sepúlveda S, et al. **Dev Biol** 1990 Jun;139(2):363–9
Changes in junctional communication associated with cell cycle arrest and differentiation of trochoblasts in embryos of Patella vulgata. Serras F, et al. **Dev Biol** 1990 Jan; 137(1):207–16
Cell–cell interactions in mammalian preimplantation development. Calarco–Gillam P. **Dev Biol (N Y 1985)** 1986; 2:329–71 (221 ref.)
The cellular basis of epithelial morphogenesis. Kolega J. **Dev Biol (N Y 1985)** 1986;2:103–43 (184 ref.)
Gap junctions in development. Revel JP. **Dev Biol (N Y 1985)** 1986;3:191–204 (110 ref.)
Migration of sea urchin primary mesenchyme cells. Solursh M. **Dev Biol (N Y 1985)** 1986;2:391–431 (110 ref.)
Cell–cell interactions during sea urchin morphogenesis. Spiegel E, et al. **Dev Biol (N Y 1985)** 1986;2:195–240 (100 ref.)
Molecular basis for teratocarcinoma cell–cell adhesion. Takeichi M. **Dev Biol (N Y 1985)** 1986;2:373–88 (56 ref.)
Topographical control of cell behaviour: II. Multiple grooved substrata. Clark P, et al. **Development** 1990 Apr; 108(4):635–44
Interaction between prostatic fibroblast and epithelial cells in culture: role of androgen. Chang SM, et al. **Endocrinology** 1989 Nov;125(5):2719–27
Human thymic dendritic cell–thymocyte association: ultrastructural cell phenotype analysis. Landry D, et al. **Eur J Immunol** 1989 Oct;19(10):1855–60
Immunoglobulin–specific T–B cell interaction. III. B cell activation by immunoglobulin–recognizing T cell clones. Mazel SM, et al. **Eur J Immunol** 1990 Apr;20(4):833–9
Nurse cells of the bursa of Fabricius: do they exist? Wuorela M, et al. **Eur J Immunol** 1990 Apr;20(4):913–7
"Contact inhibition" of alpha–fetoprotein synthesis and junctional communication in adult mouse hepatocyte culture. Gleiberman AS, et al. **Exp Cell Res** 1989 Sep; 184(1):228–34
Expression of markers of differentiation in a transformed human keratinocyte line induced by coculture with a fibroblast line. Kamalati T, et al. **Exp Cell Res** 1989 Dec; 185(2):453–63
Cell–cell contact promotes specific activity of pp60c–src protein kinase in human retinoblastoma cells. Kato G. **Exp Cell Res** 1990 Jul;189(1):51–4
Determination of apical membrane polarity in mammary epithelial cell cultures: the role of cell–cell, cell–substratum, and membrane–cytoskeleton interactions. Parry G, et al. **Exp Cell Res** 1990 Jun;188(2):302–11
Temporal retinal growth cones collapse on contact with nasal retinal axons. Raper JA, et al. **Exp Neurol** 1990 Jul; 109(1):70–4
Cell motility is required for the transmission of C–factor, an intercellular signal that coordinates fruiting body morphogenesis of Myxococcus xanthus. Kim SK, et al. **Genes Dev** 1990 Jun;4(6):896–904
Electrical coupling, without dye coupling, between mammalian astrocytes and oligodendrocytes in cell culture. Ransom BR, et al. **GLIA** 1990;3(4):258–66
Cytokines as communication signals between leukocytes and endothelial cells. Mantovani A, et al. **Immunol Today** 1989 Nov;10(11):370–5 (89 ref.)
Cell–cell interactions for CD23 expression and soluble CD23 release from peripheral lymphocytes of atopic donors. Kicza K, et al. **Immunology** 1989 Dec;68(4):532–9
Isolated trout liver cells: establishing short–term primary cultures exhibiting cell–to–cell interactions. Blair JB, et al. **In Vitro Cell Dev Biol** 1990 Mar;26(3 Pt 1):237–49
Cellular communication in leukotriene C4 production between eosinophils and neutrophils. Kloprogge E, et al. **Int Arch Allergy Appl Immunol** 1989;90(1):20–3
Cell interactions and regeneration control. Boilly B, et al. **Int J Dev Biol** 1990 Mar;34(1):219–31 (114 ref.)
Leydig cell cooperation in vitro: evidence for communication between adult rat Leydig cells. Hedger MP, et al. **J Androl** 1990 Jan–Feb;11(1):9–16
Involvement of a highly polyvalent glycan in the cell–binding of the aggregation factor from the marine sponge Microciona prolifera. Misevic GN, et al. **J Cell Biochem** 1990 Aug;43(4):307–14
Gap junctional communication in the extraembryonic tissues of the gastrulating mouse embryo. Kalimi GH, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):3015–26
Junctional communication is induced in migrating capillary endothelial cells. Pepper MS, et al. **J Cell Biol** 1989 Dec; 109(6 Pt 1):3027–38
Characterization of the activation of latent TGF–beta by co–cultures of endothelial cells and pericytes or smooth muscle cells: a self–regulating system. Sato Y, et al. **J Cell Biol** 1990 Aug;111(2):757–63
Intercellular communication is cell cycle modulated during early Xenopus laevis development. Su JW, et al. **J Cell Biol** 1990 Jan;110(1):115–21
Cellular distribution and biological activity of epidermal growth factor receptors in A431 cells are influenced by cell–cell contact. Lichtner RB, et al. **J Cell Physiol** 1990 Aug;144(2):303–12
Lipoxin formation during human neutrophil–platelet interactions. Evidence for the transformation of leukotriene A4 by platelet 12–lipoxygenase in vitro. Serhan CN, et al. **J Clin Invest** 1990 Mar;85(3):772–80
Islets of Langerhans: the puzzle of intraislet interactions and their relevance to diabetes. Weir GC, et al. **J Clin Invest** 1990 Apr;85(4):983–7 (41 ref.)
Autoantibodies in chronic graft versus host result from cognate T–B interactions. Morris SC, et al. **J Exp Med** 1990 Feb 1;171(2):503–17
Palmitate–derivatized antibodies can function as surrogate receptors for mediating specific cell–cell interactions. Colsky AS, et al. **J Immunol Methods** 1989 Nov 30; 124(2):179–87
The role of adhesion molecules in epithelial–T–cell interactions in thymus and skin. Singer KH, et al. **J Invest Dermatol** 1990 Jun;94(6 Suppl):85S–90S (69 ref.)
Cooperation between platelets and neutrophils for paf–acether (platelet–activating factor) formation. Coëffier E, et al. **J Leukoc Biol** 1990 Mar;47(3):234–43
Quantitation of conjugate formation between human polymorphonuclear leukocytes and antibody–coated target cells by flow cytometry: the role of Fc receptor and LFA–1 antigen. van Kessel KP, et al. **J Leukoc Biol** 1989 Nov; 46(5):467–75
Epithelial cell adhesion mechanisms. Boyer B, et al. **J Membr Biol** 1989 Dec;112(2):97–108 (83 ref.)
Altered slow axonal transport and regeneration in a myelin–deficient mutant mouse: the trembler as an in vivo model for Schwann cell–axon interactions. de Waegh S, et al. **J Neurosci** 1990 Jun;10(6):1855–65
Growth cones of chick sympathetic preganglionic neurons in vitro interact with other neurons in a cell–specific manner. Moorman SJ, et al. **J Neurosci** 1990 Sep; 10(9):3158–63
Cell–cell interaction during synaptogenesis. Chow I. **J Physiol (Paris)** 1990;84(1):121–7 (27 ref.)
Idiotypic networks incorporating T–B cell co–operation. The conditions for percolation. de Boer RJ, et al. **J Theor Biol** 1989 Jul 10;139(1):17–38
Interactions between neutrophils and platelets. Henson PM. **Lab Invest** 1990 Apr;62(4):391–3
Phenotypes and interactions of human melanocytes and keratinocytes in an epidermal reconstruction model. Valyi–Nagy IT, et al. **Lab Invest** 1990 Mar;62(3):314–24
Synthesis of alpha–fetoprotein in hepatocytes is co–ordinately regulated with cell–cell and cell–matrix interactions. Gleiberman AS, et al. **Mol Biol Med** 1989 Apr;6(2):95–107
Potential role of the human Ha–ras oncogene in the inhibition of gap junctional intercellular communication. el–Fouly MH, et al. **Mol Carcinog** 1989;2(3):131–5
At the cutting edge. Paracrine, cryptocrine, acrocrine. Funder JW. **Mol Cell Endocrinol** 1990 Mar 26;70(1):C21–4
Control of production of insulin–like growth factor I by pig Leydig and Sertoli cells cultured alone or together. Cell–cell interactions. Naville D, et al. **Mol Cell Endocrinol** 1990 May 7;70(3):217–24
Two component system for surface guided reassociation of animal cells. Weinbaum G, et al. **Nature** 1973 Aug 24; 244(5417):510–2
The role of cell–cell interaction in the development of the Drosophila visual system. Banerjee U, et al. **Neuron** 1990 Feb;4(2):177–87 (67 ref.)
Translational regulation of somatostatin in cultured sympathetic neurons. Spiegel K, et al. **Neuron** 1990 Feb; 4(2):303–11
Junctional intercellular communication is cooperatively inhibited by oncogenes in transformation. Azarnia R, et al. **Oncogene** 1989 Oct;4(10):1161–8
Expression of gap junction channels in communication–incompetent cells after stable transfection with cDNA encoding connexin 32. Eghbali B, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1328–31
Costimulatory signal provided by a B–lymphoblastoid cell line and its Ia–negative variant. Reiser H, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10069–73
Gap–junctional intercellular communication and murine hepatic carcinogenesis. Klaunig JE, et al. **Prog Clin Biol Res** 1990;331:277–91
Cell–to–cell communication: relationship of stem cells to the carcinogenic process. Trosko JE, et al. **Prog Clin Biol Res** 1990;331:259–76 (120 ref.)
Interactions between cell populations influence expression of the transformed phenotype in irradiated rat tracheal epithelial cells. Terzaghi–Howe M. **Radiat Res** 1990 Mar; 121(3):242–7
Germ cell–Sertoli cell interactions. de Kretser DM. **Reprod Fertil Dev** 1990;2(3):225–35 (70 ref.)
Cell–cell communication in corpora lutea. Rodgers RJ. **Reprod Fertil Dev** 1990;2(3):281–9 (74 ref.)
Mesenchymal (stromal)–epithelial cell interactions in the testis and ovary which regulate gonadal function. Skinner MK. **Reprod Fertil Dev** 1990;2(3):237–43 (16 ref.)
Mitogenic effect of alpha 1–microglobulin on mouse lymphocytes. Evidence of T– and B–cell cooperation, B–cell proliferation, and a low–affinity receptor on mononuclear cells. Babiker–Mohamed H, et al. **Scand J Immunol** 1990 Jul;32(1):37–44
Accessory signals in T–T cell interactions between antigen– and alloantigen–specific, human memory T cells generated in vitro. Odum N, et al. **Scand J Immunol** 1990 Jun; 31(6):717–28
Gap junctional intercellular communication (GJIC) in rat glioma cells—characterizations to detect inhibitors of metabolic cooperation. Lin ZX, et al. **Sci China [B]** 1990 Apr;33(4):435–43
Radioresistance of rat glioma cell lines cultured as multicellular spheroids. Correlation with electrical cell–to–cell–coupling. Knedlitschek G, et al. **Strahlenther Onkol** 1990 Feb;166(2):164–7
Tumor promotion: models and assay systems. Fitzgerald DJ, et al. **Teratogenesis Carcinog Mutagen** 1990;10(2):89–102 (105 ref.)
Cell–cell interactions in Dictyostelium development.

Devreotes P. **Trends Genet** 1989 Aug;5(8):242–5 (33 ref.)
The primacy of cell interactions in development. Gerhart J. **Trends Genet** 1989 Aug;5(8):233–6 (11 ref.)
Cell–cell interactions that specify certain cell fates in C. elegans development. Greenwald I. **Trends Genet** 1989 Aug;5(8):237–41 (36 ref.)
A cellular basis for pattern formation in the insect epidermis. Martinez Arias A. **Trends Genet** 1989 Aug;5(8):262–7 (51 ref.)
Intercellular communication within the liver has clinical implications. García–Sáinz JA. **Trends Pharmacol Sci** 1989 Jan;10(1):10–1
[Role of junctional intercellular communication in hepatic carcinogenesis in rats] Mesnil M, et al. **Bull Cancer (Paris)** 1990;77(5):485–8 (Eng. Abstr.) **(Fre)**
[Molecular pharmacologic approach to cell–communication transduction] Hidaka H. **Nippon Hifuka Gakkai Zasshi** 1989 Dec;99(13):1293–7 **(Jpn)**
[A study of intercellular communication of human transitional cell carcinoma cell lines] Kihara K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jul;80(7):988–94 (Eng. Abstr.) **(Jpn)**
[Neuropeptide receptor and intracellular signaling] Tanaka T, et al. **Nippon Rinsho** 1990 May;48(5):945–52 **(Jpn)**
[Turnover of inositol phospholipids and intracellular messenger systems] Tanaka T, et al. **Nippon Rinsho** 1989 Oct;47(10):2353–8 **(Jpn)**
[Electric coupling of frog embryo cells] Kvavilashvili ISh, et al. **Biofizika** 1990 Mar–Apr;35(2):363–6 (Eng. Abstr.) **(Rus)**
[Role of intracellular contact interactions in macrophage reaction to activators containing and not containing the Arg–Gly–Asp sequence] Zemskov VM, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):194–6 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Intercellular communication within the rat anterior pituitary gland. I. Postnatal development and changes after injection of luteinizing hormone–releasing hormone (LH–RH) or testosterone. Soji T, et al. **Anat Rec** 1990 Mar;226(3):337–41
Intercellular communication within the rat anterior pituitary gland. II. Castration effects and changes after injection of luteinizing hormone–releasing hormone (LH–RH) or testosterone. Soji T, et al. **Anat Rec** 1990 Mar;226(3):342–6
The non–phorbol ester tumor promoter okadaic acid does not promote morphological transformation or inhibit junctional communication in hamster embryo cells. Rivedal E, et al. **Biochem Biophys Res Commun** 1990 Mar 30; 167(3):1302–8
Proceedings: The cell membrane and cell signals as targets in cancer chemotherapy. September 14–16, 1989, Cambridge, UK. Abstracts. **Cancer Chemother Pharmacol** 1989;24 Suppl 2:S53–90
Morphological transformation of Syrian hamster embryo cells by aminobenzyl alcohols and nitrobenzyl alcohols is correlated with intercellular communication. Mikalsen SO. **Cancer Lett** 1990 Jul 31;52(3):203–8
Inhibitory effect of testosterone on gap junctional intercellular communication of human transitional cell carcinoma cell lines. Kihara K, et al. **Cancer Res** 1990 May 1;50(9):2848–52
Effect of 12–O–tetradecanoylphorbol–13–acetate on intercellular communication in various clones of mouse epidermal JB6 cells. Miki H, et al. **Cancer Res** 1990 Feb 15;50(4):1324–9
Effect of 12–O–tetradecanoylphorbol–13–acetate on colony formation and intercellular communication in a coculture system of JB6 clones. Yamadori I, et al. **Cancer Res** 1990 Sep 1;50(17):5567–73
Promotion of altered hepatic foci development in rat liver, cytochrome P450 enzyme induction and inhibition of cell–cell communication by DDT and some structurally related organohalogen pesticides. Flodström S, et al. **Carcinogenesis** 1990 Aug;11(8):1413–7
Differential effects of renal carcinogens and tumor promoters on growth promotion and inhibition of gap junctional communication in two rat renal epithelial cell lines. Konishi N, et al. **Carcinogenesis** 1990 Jun;11(6):903–8
Effects of heavy metal ions on intercellular communication in Syrian hamster embryo cells. Mikalsen SO. **Carcinogenesis** 1990 Sep;11(9):1621–6
Mutagenic effects of ferric nitrilotriacetate (Fe–NTA) on V79 Chinese hamster cells and its inhibitory effects on cell–cell communication. Nakatsuka S, et al. **Carcinogenesis** 1990 Feb;11(2):257–60
Inhibition of hepatocyte gap junctional intercellular communication by endosulfan, chlordane and heptachlor. Ruch RJ, et al. **Carcinogenesis** 1990 Jul;11(7):1097–101
Effects on intercellular communication in human keratinocytes and liver–derived cells of polychlorinated biphenyl congeners with differing in vivo promotion activities. Swierenga SH, et al. **Carcinogenesis** 1990 Jun; 11(6):921–6
Inhibition of metabolic cooperation in Chinese hamster V79 cells by various organic solvents and simple compounds. Chen TH, et al. **Cell Biol Toxicol** 1984 Oct;1(1):155–71
Effects of phorbol myristate acetate, phorbol dibutyrate, ethanol, dimethylsulfoxide, phenol, and seven metabolites of phenol on metabolic cooperation between Chinese hamster V79 lung fibroblasts. Malcolm AR, et al. **Cell Biol Toxicol** 1985 Oct;1(4):269–83
Effects of tumor promoters, genotoxic carcinogens and hepatocytotoxins on mouse hepatocyte intercellular communication. Ruch RJ, et al. **Cell Biol Toxicol** 1986 Dec; 2(4):469–83
Close relationship between modulation of serum–induced stimulation of DNA synthesis and changes in gap–junctional intercellular communication in quiescent 3T3–L1 cells caused by cyclic AMP and the tumor–promoting phorbol ester TPA. Shiba Y, et al. **Exp Cell Res** 1989 Dec;185(2):535–40
Comparison of assays for gap junctional communication using human embryocarcinoma cells exposed to dieldrin. Loch–Caruso R, et al. **Fundam Appl Toxicol** 1990 Jul; 15(1):63–74
The modulation of gap junctional communication by gossypol in various mammalian cell lines in vitro. Ye YX, et al. **Fundam Appl Toxicol** 1990 May;14(4):817–32
Effects of tunicamycin on the avoidance reaction of epidermis by sensory neurites in co–cultures. Fichard A, et al. **Int J Dev Neurosci** 1990;8(3):245–54
Minimally modified low density lipoprotein stimulates monocyte endothelial interactions. Berliner JA, et al. **J Clin Invest** 1990 Apr;85(4):1260–6
The staphylococcal toxic shock syndrome toxin 1 triggers B cell proliferation and differentiation via major histocompatibility complex–unrestricted cognate T/B cell interaction. Mourad W, et al. **J Exp Med** 1989 Dec 1; 170(6):2011–22
Okadaic acid and phorbol esters: comparative effects of these tumor promoters on cell transformation, intercellular communication and differentiation in vitro. Katoh F, et al. **Jpn J Cancer Res** 1990 Jun–Jul;81(6–7):590–7
Herbimycin A suppresses the reduction of gap–junctional intercellular communication induced by tumor–promoting phorbol ester in 3T3–L1 cells. Sasaki Y, et al. **Jpn J Cancer Res** 1989 Sep;80(9):855–60
Role of inhibition of intercellular communication in carcinogenesis. Klaunig JE, et al. **Lab Invest** 1990 Feb; 62(2):135–46 (181 ref.)
Organotin–induced thymus atrophy concerns the OX–44+ immature thymocytes. Relation to the interaction between early thymocytes and thymic epithelial cells? Pieters RH, et al. **Thymus** 1989;14(1–3):79–88
TPA–induced inhibition of gap junctional intercellular communication is not mediated through free radicals. Hasler CM, et al. **Toxicol Appl Pharmacol** 1990 May; 103(3):389–98
Comparative effects of phenobarbital, DDT, and lindane on mouse hepatocyte gap junctional intercellular communication. Klaunig JE, et al. **Toxicol Appl Pharmacol** 1990 Mar 1;102(3):553–63
[Studies on the gap junctional intercellular communication (GJIC) of human stomach carcinoma cells in comparison with normal cells and the effect of the tumor promoter, TPA] Lin ZX, et al. **Shih Yen Sheng Wu Hsueh Pao** 1989 Jun;22(2):157–67 (Eng. Abstr.) **(Chi)**
[The effect of phorbol esters on cell functions] Kawiak J. **Postepy Biochem** 1989;35(3):265–77 (70 ref.) **(Pol)**
[Effects of tumor promoters and related compounds on electric relations between giant cells of the salivary glands of Chironomus tentans larvae] Mizgirev IV. **Eksp Onkol** 1990;12(1):22–5 (Eng. Abstr.) **(Rus)**

GENETICS

The molecular genetics of early neurogenesis in Drosophila melanogaster. Knust E, et al. **Bioessays** 1989 Oct; 11(4):95–100 (36 ref.)
Are different events involved in the development of sporadic versus hereditary tumours? The possible importance of the microenvironment in hereditary cancer. Paraskeva C, et al. **Br J Cancer** 1990 Jun;61(6):828–30
Genetics of intercellular signalling in C. elegans. Austin J, et al. **Development** 1989;107 Suppl:53–7 (23 ref.)
Autonomous expression of tissue–specific genes in dissociated sea urchin embryos. Stephens L, et al. **Development** 1989 Oct;107(2):299–307
Albuminoid molecules: a novel, variability–generating cell–surface receptor system? Gersten DM, et al. **Med Hypotheses** 1989 Oct;30(2):135–40
Infection of rat liver epithelial cells with v–Ha–ras: correlation between oncogene expression, gap junctional communication, and tumorigenicity. De Feijter AW, et al. **Mol Carcinog** 1990;3(2):54–67

PHYSIOLOGY

The interaction of follicular cells and steroidogenic activity of the ovary. Stoklosowa S. **Acta Physiol Pol** 1989 Jan–Feb; 40(1):35–52 (98 ref.)
Neural cell adhesion molecule as a regulator of cell–cell interactions. Rutishauser U. **Adv Exp Med Biol** 1990; 265:179–83 (22 ref.)
Biochemistry of breast cyst fluid. An approach to understanding intercellular communication in the terminal duct lobular units. Dogliotti L, et al. **Ann N Y Acad Sci** 1990;586:17–28
Growth factors in early embryogenesis. Whitman M, et al. **Annu Rev Cell Biol** 1989;5:93–117 (134 ref.)
Ultrastructure of paracriny/steroidogenesis in principal cells of the marmoset epididymis. Humar RA, et al. **Arch Androl** 1990;24(2):167–75
The relationship of the internal security system to group level organization in Miller's living systems theory. Walker JF, et al. **Behav Sci** 1990 Apr;35(2):147–53 (24 ref.)
Modulation of osteogenesis by isolated calvaria cells: a model for tissue interactions. Villanueva JE, et al. **Biomaterials** 1990 Jul;11:19–21
Microvascular endothelial cell heterogeneity: interactions with leukocytes and tumor cells. Belloni PN, et al. **Cancer Metastasis Rev** 1990 Feb;8(4):353–89 (296 ref.)
Gap junctions between odontoblasts revealed by transjunctional flux of fluorescent tracers. Ushiyama J. **Cell Tissue Res** 1989 Dec;258(3):611–6
The calcium signal and neutrophil activation. Krause KH, et al. **Clin Biochem** 1990 Apr;23(2):159–66 (56 ref.)
The influence of cell interactions and tissue mass on differentiation of sea urchin mesomeres. Khaner O, et al. **Development** 1990 Jul;109(3):625–34
The hormone–induced regulation of contact–dependent cell–cell communication by phosphorylation. Stagg RB, et al. **Endocr Rev** 1990 May;11(2):302–25 (213 ref.)
Morphology of interactions of the haematopoietic microenvironment with the haematopoietic cells in erythroid spleen colonies. Hofer M, et al. **Folia Morphol (Praha)** 1989;37(4):443–8
Neuroscience and oncology. A unified view. Marolda R, et al. **Funct Neurol** 1990 Jan–Mar;5(1):73–7 (34 ref.)
Osteoblast–like cell line maintains in vitro rat peritoneal mast cell viability and functional activity. Levi–Schaffer F, et al. **Immunology** 1990 Jan;69(1):145–9
The extracellular matrix and cell surface, mediators of cell interactions in chicken gastrulation. Harrisson F. **Int J Dev Biol** 1989 Dec;33(4):417–38 (206 ref.)
Tumor cell invasion and gap junctional communication. I. Normal and malignant cells confronted in monolayer cultures. Bräuner T, et al. **Invasion Metastasis** 1990; 10(1):18–30
Tumor cell invasion and gap junctional communication. II. Normal and malignant cells confronted in multicell spheroids. Bräuner T, et al. **Invasion Metastasis** 1990; 10(1):31–48
Leydig cell and extracellular matrix effects on Sertoli cell function: biochemical and morphologic studies. Reventos J, et al. **J Androl** 1989 Sep–Oct;10(5):359–65
Promotion of calvarial cell osteogenesis by endothelial cells. Villanueva JE, et al. **J Bone Miner Res** 1990 Jul;5(7):733–9
Steps in the morphogenesis of a polarized epithelium. I. Uncoupling the roles of cell–cell and cell–substratum contact in establishing plasma membrane polarity in multicellular epithelial (MDCK) cysts. Wang AZ, et al. **J Cell Sci** 1990 Jan;95 (Pt 1):137–51
Lectins and antibodies as tools for studying cellular interactions. Peacock JS, et al. **J Immunol Methods** 1990 Feb 9;126(2):147–57 (48 ref.)
Synaptic transmission between rat inferior olivary neurons and cerebellar Purkinje cells in culture. Hirano T. **J Neurophysiol** 1990 Jan;63(1):181–9
Dissection of the neuron network in the catfish inner retina. V. Interactions between NA and NB amacrine cells. Sakai HM, et al. **J Neurophysiol** 1990 Jan;63(1):120–30
Dissection of the neuron network in the catfish inner retina. IV. Bidirectional interactions between amacrine and ganglion cells. Sakai HM, et al. **J Neurophysiol** 1990 Jan; 63(1):105–19
Stromal–epithelial cell communication, growth factors, and tissue regulation. Anderson TL, et al. **Lab Invest** 1990 May; 62(5):519–21 (29 ref.)
Anatomical variation in mast cell nerve associations in the rat small intestine, heart, lung, and skin. Similarities of distances between neural processes and mast cells, eosinophils, or plasma cells in the jejunal lamina propria. Arizono N, et al. **Lab Invest** 1990 May;62(5):626–34
Intrapituitary cell–cell communication regulates ACTH secretion. Schwartz J, et al. **Neuroendocrinology** 1989 Dec; 50(6):716–22
Intercellular signaling as visualized by endogenous calcium–dependent bioluminescence. Brehm P, et al. **Neuron** 1989 Aug;3(2):191–8
Lack of correlation between intercellular junctional communication, p21rasEJ expression, and spontaneous metastatic properties of rat mammary cells after transfection with c–H–rasEJ or neo genes. Nicolson GL, et al. **Oncogene** 1990 May;5(5):747–53
The unpredictability of cellular behavior: trivial or of fundamental importance to cell biology? Hallett MB. **Perspect Biol Med** 1989 Autumn;33(1):110–9 (20 ref.)
Haem–dependent activation of guanylate cyclase and cyclic GMP formation by endogenous nitric oxide: a unique transduction mechanism for transcellular signaling. Ignarro LJ. **Pharmacol Toxicol** 1990 Jul;67(1):1–7 (62 ref.)
Hydration forces involved in cellular interactions. Popescu AI, et al. **Physiologie** 1989 Oct–Dec;26(4):323–30 (29 ref.)
Autonomic control of intercellular communication in salivary glands. Kanno Y, et al. **Proc Finn Dent Soc** 1989; 85(4–5):301–5
Cellular interaction regulating the production of colony–stimulating factors. Griffin JD, et al. **Prog Clin Biol Res** 1990;338:129–41 (49 ref.)
The role of cytokines as communication signals between leukocytes and endothelial cells. Mantovani A, et al. **Prog Clin Biol Res** 1990;349:343–53 (41 ref.)
Kupffer cell–hepatocyte interactions and the changes in 1–14C–arachidonate incorporation in response to endotoxin in vitro. Lysz TW, et al. **Prostaglandins** 1990 May;

39(5):497–514
The dynamics of the organism: implications of recent biological thought for psychosomatic theory and research. Weiner H. **Psychosom Med** 1989 Nov–Dec;51(6):608–35 (101 ref.)
Cell interactions in the sea urchin embryo studied by fluorescence photoablation. Ettensohn CA. **Science** 1990 Jun 1;248(4959):1115–8
A cellular automation model of excitable media including curvature and dispersion. Gerhardt M, et al. **Science** 1990 Mar 30;247(4950):1563–6
Lectins as cell recognition molecules. Sharon N, et al. **Science** 1989 Oct 13;246(4927):227–34 (76 ref.)
Platelet activation in the presence of polymorphonuclear (PMN) leucocytes [letter] Zatta A, et al. **Thromb Haemost** 1990 Jun 28;63(3):524
Dye and electrical coupling of endothelial cells in situ. Bény JL, et al. **Tissue Cell** 1989;21(6):797–802
[The phosphoinositide–phospholipase C system. A branched path of transmembrane signal transduction] Höer A, et al. **Med Monatsschr Pharm** 1990 Aug;13(8):243–52 (78 ref.) (Ger)
[Protein kinase C and signal transmission in the cell (minireview)] Kwiatkowska J. **Postepy Biochem** 1989; 35(3):253–63 (67 ref.) (Pol)
[The role of inositol triphosphate and diacylglycerol as intracellular second messengers] Nalepa I. **Postepy Hig Med Dosw** 1989;43(1):13–28 (75 ref.) (Eng. Abstr.) (Pol)
[Spatial organization and interneuronal relations in various areas of the neocortex in Cetacea] Krasnoshchekova EI, et al. **Arkh Anat Gistol Embriol** 1989 Sep;97(9):19–25 (Eng. Abstr.) (Rus)
[A method of determining interleukin-1 in a culture of lymphocytes and human blood monocytes activated by a pulsed method] Adamenko GP. **Lab Delo** 1990;(5):42–5 (Eng. Abstr.) (Rus)
[The role of histocompatibility antigens in nonimmune intercellular interactions] Pankratova EV. **Mol Biol (Mosk)** 1990 Mar–Apr;24(2):293–8 (26 ref.) (Eng. Abstr.) (Rus)
[The interaction of neurons characterized by a tonic reaction to sound with other neurons in the cat auditory cortex] Volkov IO, et al. **Neirofiziologiia** 1989;21(5):613–20 (Eng. Abstr.) (Rus)
[Space–time organization of cellular systems in the normal and pathologic states] Romanov IuA, et al. **Vestn Akad Med Nauk SSSR** 1990;(2):27–34 (Eng. Abstr.) (Rus)
[Mechanisms of the conduction of cellular regulatory signals] Severin ES, et al. **Vestn Akad Med Nauk SSSR** 1989; (12):63–70 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Gap-junctional communication of bone marrow stromal cells is resistant to irradiation in vitro. Umezawa A, et al. **Exp Hematol** 1990 Oct;18(9):1002–7

CELL COMPARTMENTATION

Tissue-specific differences in the compartmentalization of rat nuclear triiodothyronine receptors. Barsano CP, et al. **Acta Endocrinol (Copenh)** 1990 Feb;122(2):181–90
Calcium compartmentation and exchange rates in primary hepatocyte culture. Gish RG, et al. **Anal Biochem** 1990 May 15;187(1):187–96
A multicompartmental model of fluid–phase endocytosis in rabbit liver parenchymal cells. Blomhoff R, et al. **Biochem J** 1989 Sep 1;262(2):605–10
In vivo 133Cs–NMR a probe for studying subcellular compartmentation and ion uptake in maize root tissue. Pfeffer PE, et al. **Biochim Biophys Acta** 1990 Sep 1; 1054(2):169–75
Novel function of the cell adhesion molecule uvomorulin as an inducer of cell surface polarity. McNeill H, et al. **Cell** 1990 Jul 27;62(2):309–16
Polarized sorting in epithelia. Simons K, et al. **Cell** 1990 Jul 27;62(2):207–10 (23 ref.)
Intracellular compartmentation of diadenosine tetraphosphate (Ap4A) and dTTP in rat liver. Andersson M, et al. **Int J Biochem** 1989;21(6):593–8
Adenosine triphosphate compartmentation in the rat heart: a 31P spin–lattice relaxation study. Suzuki E, et al. **J Biochem (Tokyo)** 1990 Apr;107(4):559–62
G-proteins of rat liver membranes. Subcellular compartmentation and disposition in the plasma membrane. Ali N, et al. **Mol Cell Biochem** 1989 Nov 23–Dec 19; 91(1–2):75–84
Subcellular localization of an intermediate filament protein and its mRNA in glial cells. Sarthy PV, et al. **Mol Cell Biol** 1989 Oct;9(10):4556–9
Identification by anti-idiotype antibodies of an intracellular membrane protein that recognizes a mammalian endoplasmic reticulum retention signal [see comments] Vaux D, et al. **Nature** 1990 Jun 7;345(6275):495–502 Comment in: Nature 1990 Jun 7;345(6275):480–1.
[Biochemical features and functional activity of the endocytic compartment in the liver cell] Enrich C, et al. **Rev Esp Fisiol** 1990 Mar;46(1):95–101 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Time course of the quantitative changes in the autophagic–lysosomal and secretory granule compartments of murine liver cells under the influence of vinblastine. Réz G, et al. **Virchows Arch [B]** 1990;58(3):189–97

GENETICS

Phenotypic variations dictate the intracellular compartmentalization of doxorubicin in normal human bone marrow cells. Aghaï E, et al. **Cancer Chemother Pharmacol** 1990;25(4):295–8
Cultured human keratinocytes: discrimination of different cell cycle compartments based upon measurement of nuclear RNA or total cellular RNA content. Staiano–Coico L, et al. **Cell Tissue Kinet** 1989 May;22(3):235–43

PHYSIOLOGY

The structure and function of a mannose 6-phosphate receptor-enriched, pre-lysosomal compartment in animal cells. Griffiths G. **J Cell Sci Suppl** 1989;11:139–47 (33 ref.)
Organization and postnatal development of zebrin II antigenic compartmentation in the cerebellar vermis of the grey opossum, Monodelphis domestica. Doré L, et al. **J Comp Neurol** 1990 Jan 15;291(3):431–49
Iron compartments associated with sickle RBC membranes: a mechanism for the targeting of oxidative damage. Kuross SA, et al. **Prog Clin Biol Res** 1989;319:601–10; discussion 611–3
The sickle erythrocyte in double jeopardy: autoxidation and iron decompartmentalization. Hebbel RP. **Semin Hematol** 1990 Jan;27(1):51–69 (216 ref.)
Compartmentation of 4,6-difluoro-5HT studied by nuclear magnetic resonance in normal and CHS bovine platelets. Meyers KM, et al. **Thromb Res** 1990 May 1;58(3):265–72
[Intracellular recognition mechanisms. Physiopathologic implications] Carmo-Fonseca M. **Acta Med Port** 1990 Jan–Feb;3(1):43–9 (16 ref.) (Eng. Abstr.) (Por)

CELL COUNT

see related
BLOOD CELL COUNT
SPERM COUNT

Three-dimensional morphometry of mammalian cells. I. Diameters. Ocqueteau C, et al. **Arch Biol Med Exp (Santiago)** 1989 Jul;22(2):89–95
Normal endothelial cell density range in childhood. Nucci P, et al. **Arch Ophthalmol** 1990 Feb;108(2):247–8
Continued fraction representation for expected cell counts of a 2 x 2 table: a rapid and exact method for conditional maximum likelihood estimation. Satten GA, et al. **Biometrics** 1990 Mar;46(1):217–23
Reduction of glutathione content by 12-O-tetradecanoylphorbol-13-acetate in confluent, but not in sparse cultures of human diploid fibroblasts. Schäfer A, et al. **Carcinogenesis** 1990 Apr;11(4):697–9
Pachytene pairing and oocyte numbers in mice with two single Robertsonian translocations and the male-sterile compound with monobrachial homology. Mittwoch U, et al. **Cytogenet Cell Genet** 1990;53(2–3):144–7
Caution about assay of alkaline phosphatase to quantitate cell numbers [letter; comment] Herz F. **In Vitro Cell Dev Biol** 1989 Oct;25(10):865 Comment on: In Vitro Cell Dev Biol 1989 Jan;25(1):105–8.
Density-induced down regulation of epidermal growth factor receptors. Rizzino A, et al. **In Vitro Cell Dev Biol** 1990 May;26(5):537–42
Counting cells with stereology: random versus serial sectioning. Bertram JF, et al. **J Electron Microsc Tech** 1990 Jan;14(1):32–8
[Cytologic and immunocytologic findings in bronchoalveolar lavage as a contribution to the differential diagnosis of chronic lung hemorrhage] Ziesche R, et al. **Pneumologie** 1990 Feb;44 Suppl 1:299–300 (Eng. Abstr.) (Ger)

INSTRUMENTATION

[In vivo examination of aqueous humor for cells and protein in clinically silent anterior uveitis before surgical interventions] Strobel J, et al. **Fortschr Ophthalmol** 1990; 87(3):305–7 (Eng. Abstr.) (Ger)
[Can electronic measurement of total cell number in bronchoalveolar lavage replace conventional chamber counting?] Braun S, et al. **Pneumologie** 1990 Feb;44 Suppl 1:295–6 (Eng. Abstr.) (Ger)
[Increasing cerebrospinal fluid cell count with the sedimentation chamber using polycationic coated slides] Lehmitz R, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Dec;41(12):751–4 (Eng. Abstr.) (Ger)

METHODS

Quantification of cells cultured on 96-well plates. Kueng W, et al. **Anal Biochem** 1989 Oct;182(1):16–9
Quantification of attached cells in tissue culture plates and on microcarriers. Margis R, et al. **Anal Biochem** 1989 Sep; 181(2):209–11
Microelisa reader quantitation of fixed, stained, solubilized cells in microtitre dishes. Brasaemle DL, et al. **Biotechniques** 1988 May;6(5):418–9
A simplified working formulation of non-Hodgkin's lymphomas based on quantifiable histologic criteria. Schultz HB, et al. **Cancer** 1989 Dec 15;64(12):2532–40
A method to quantitate cell numbers of muscle cells and non-muscle cells in homogenised heart cell cultures. van der Laarse A, et al. **Cardiovasc Res** 1989 Nov;23(11):928–33
Chief cell mass in normal gastric mucosa: relationship with serum pepsinogen I. Perasso A, et al. **Gastroenterol Clin Biol** 1990;14(2):158–62
A rapid and convenient assay for counting cells cultured in microwell plates: application for assessment of growth factors. Oliver MH, et al. **J Cell Sci** 1989 Mar;92 (Pt 3):513–8
Modification, optimization and simplification of the spot ELISA technique for the enumeration of cells secreting anti-hapten antibodies. Greene G, et al. **J Immunol Methods** 1990 May 25;129(2):187–97
The total number of neurons in the human neocortex unbiasedly estimated using optical disectors. Braendgaard H, et al. **J Microsc** 1990 Mar;157 (Pt 3):285–304
Efficient estimation of cell volume and number using the nucleator and the disector. Møller A, et al. **J Microsc** 1990 Jul;159 (Pt 1):61–71

VETERINARY

Population dynamics of bulk milk somatic cell counts. Schukken YH, et al. **J Dairy Sci** 1990 May;73(5):1343–50

CELL CYCLE

Phosphotyrosyl phosphatase activity of the polycation-stimulated protein phosphatases and involvement of dephosphorylation in cell cycle regulation. Cayla X, et al. **Adv Enzyme Regul** 1990;30:265–85 (76 ref.)
A rapid method to determine proliferation patterns of normal and malignant tissues by H3 mRNA in situ hybridization. Chou MY, et al. **Am J Pathol** 1990 Apr;136(4):729–33
Growth factors, growth inhibitors and cell cycle control (review). Sorrentino V. **Anticancer Res** 1989 Nov–Dec; 9(6):1925–35 (150 ref.)
Changes of Escherichia coli cell cycle parameters during fast growth and throughout growth with limiting amounts of thymine. Puyet A, et al. **Arch Microbiol** 1989;152(6):578–83
Variations in c-fos mRNA expression during serum induction and the synchronous cell cycle. Bird RC, et al. **Biochem Cell Biol** 1990 May;68(5):858–62
Rapid increase of cellular UDP-glucuronide after mitogen stimulation of quiescent 3T3 mouse fibroblasts. Zaharevitz DW, et al. **Biochem Int** 1990;20(6):1067–76
Co-ordinated changes in the cyclic AMP signalling system and the phosphorylation of two nuclear proteins of Mr 130,000 and 110,000 during proliferative stimulation of the rat parotid gland by isoprenaline. Possible identity of the two proteins with pp135 and nucleolin. Hoffmann J, et al. **Biochem J** 1989 Nov 1;263(3):785–93
Control of ribonucleotide reductase in heat- and cold-sensitive mammalian cell-cycle mutants. Schaer JC, et al. **Biochim Biophys Acta** 1989 Sep 21;1009(1):90–3
Growth-dependent modulation of casein kinase II and its substrate nucleolin in primary human cell cultures and HeLa cells. Schneider HR, et al. **Biochim Biophys Acta** 1989 Oct 30;1014(1):98–100
A possible role of actin in the mechanical control of the cell cycle. Tripathi SC. **Biol Cell** 1989;67(3):351–3
Quantized cell cycle times: interaction between a relaxation oscillator and ultradian clock pulses. Lloyd D, et al. **Biosystems** 1990;23(4):305–10
A deterministic model of the cell cycle. Grasman J. **Bull Math Biol** 1990;52(4):535–47
Cell cycle phases of two human lung tumor cell lines derived from squamous cell carcinoma and pulmonary metastasis of a rhabdomyosarcoma (HS 24 and HS 57) and N-acetylalanine aminopeptidase activity. Schoenberger OL, et al. **Cancer Biochem Biophys** 1989 Oct;10(4):337–43
Inhibition of p34cdc2 kinase activity by etoposide or irradiation as a mechanism of G2 arrest in Chinese hamster ovary cells. Lock RB, et al. **Cancer Res** 1990 Jun 15; 50(12):3761–6
Real-time visualization of cell cycle-dependent changes in microtubule dynamics in cytoplasmic extracts. Belmont LD, et al. **Cell** 1990 Aug 10;62(3):579–89
Chromosome replication does not trigger cell division in E. coli. Bernander R, et al. **Cell** 1990 Feb 9;60(3):365–74
The three postblastoderm cell cycles of Drosophila embryogenesis are regulated in G2 by string. Edgar BA, et al. **Cell** 1990 Aug 10;62(3):469–80
Mutation of fission yeast cell cycle control genes abolishes dependence of mitosis on DNA replication. Enoch T, et al. **Cell** 1990 Feb 23;60(4):665–73
A candidate protein kinase C gene, PKC1, is required for the S. cerevisiae cell cycle. Levin DE, et al. **Cell** 1990 Jul 27;62(2):213–24
The identification of a second cell cycle control on the HO promoter in yeast: cell cycle regulation of SW15 nuclear entry. Nasmyth K, et al. **Cell** 1990 Aug 24;62(4):631–47
The candidate proto-oncogene bcl-3 is related to genes implicated in cell lineage determination and cell cycle control. Ohno H, et al. **Cell** 1990 Mar 23;60(6):991–7
The product of fem-1, a nematode sex-determining gene, contains a motif found in cell cycle control proteins and receptors for cell-cell interactions. Spence AM, et al. **Cell** 1990 Mar 23;60(6):981–90
G1-specific cyclins of S. cerevisiae: cell cycle periodicity,

regulation by mating pheromone, and association with the p34CDC28 protein kinase. Wittenberg C, et al. **Cell** 1990 Jul 27;62(2):225–37

Induction of DNA replication in mammalian G1 nuclei by a heat–inactivible component from permeable S phase cells; an assay system. van der Velden HM, et al. **Cell Biol Int Rep** 1989 Nov;13(11):933–40

A calcium flux at the termination of replication triggers cell division in Escherichia coli. Hypothesis. Norris V. **Cell Calcium** 1989 Nov–Dec;10(8):511–7 (53 ref.)

Proceedings of the Cell Kinetics Society, thirteenth annual meeting. 29 March–1 April 1989, White Plains, New York, U.S.A. **Cell Tissue Kinet** 1989 Jan;22(1):63–92

Abstracts of the joint meeting of the Cell Kinetics Society and the International Cell Cycle Society. 28–31 March 1990, St Louis, Missouri, U.S.A. **Cell Tissue Kinet** 1990 Jul;23(4):341–74

The highest labelled cell in the intestinal crypt column. Appleton DR, et al. **Cell Tissue Kinet** 1989 Mar;22(2):93–6

Flow cytometric correlation of the c-myc oncoprotein and cell cycle kinetics of HL60 leukaemia during induced maturation with cytosine arabinoside and dimethylsulphoxide. Dent GA, et al. **Cell Tissue Kinet** 1989 Jan;22(1):1–11

A nucleolar auto–antigen is part of a major chromosomal surface component. Yasuda Y, et al. **Chromosoma** 1990 Apr; 99(2):152–60

Heteropycnosis of an underreplicating chromosome. Zacharias H. **Chromosoma** 1990 Apr;99(1):24–35

Morphologic and cell kinetic investigations of the cryolesion. Helpap B. **Clin Dermatol** 1990 Jan–Mar;8(1):5–29

Cell cycle simulation for flow cytometry. Ubezio P. **Comput Methods Programs Biomed** 1990 Mar–Apr; 31(3–4):255–66

Cell kinetics in mouse epidermis studied by bivariate DNA/bromodeoxyuridine and DNA/keratin flow cytometry. Kirkhus B, et al. **Cytometry** 1990;11(2):253–60

Improved method for computing potential doubling time from flow cytometric data. White RA, et al. **Cytometry** 1990;11(2):314–7

Parthenogenesis in Xenopus eggs injected with centrosomes from synchronized human lymphoid cells. Tournier F, et al. **Dev Biol** 1989 Dec;136(2):321–9

Calcium and cell cycle control. Whitaker M, et al. **Development** 1990 Apr;108(4):525–42 (187 ref.)

p34cdc2 is located in both nucleus and cytoplasm; part is centrosomally associated at G2/M and enters vesicles at anaphase. Bailly E, et al. **EMBO J** 1989 Dec 20; 8(13):3985–95

Cdc2 H1 kinase is negatively regulated by a type 2A phosphatase in the Xenopus early embryonic cell cycle: evidence from the effects of okadaic acid. Félix MA, et al. **EMBO J** 1990 Mar;9(3):675–83

Differential repair of UV damage in Saccharomyces cerevisiae is cell cycle dependent. Terleth C, et al. **EMBO J** 1990 Sep;9(9):2899–904

Cyclic AMP can enhance mouse B cell activation by regulating progression into the late G1/S phase. Li YS, et al. **Eur J Immunol** 1989 Sep;19(9):1721–5

The effects of bacterial lipopolysaccharide, anti–receptor antibodies and recombinant interferon on mouse B cell cycle progression using 5–bromo–2'–deoxyuridine/Hoechst 33258 dye flow cytometry. Seyschab H, et al. **Eur J Immunol** 1989 Sep;19(9):1605–12

A temperature–sensitive mutation in asparaginyl–tRNA synthetase causes cell–cycle arrest in early S phase. Diamond G, et al. **Exp Cell Res** 1989 Sep;184(1):53–60

Cell cycle kinetics of insect cell cultures compared to mammalian cell cultures. Fertig G, et al. **Exp Cell Res** 1990 Aug;189(2):208–12

Proportions of H1 histone subspecies in human fibroblasts shift during density–dependent growth arrest independent of replicative senescence. Houde M, et al. **Exp Cell Res** 1989 Sep;184(1):256–61

Expression of mRNAs encoding mammalian chromosomal proteins HMG–I and HMG–Y during cellular proliferation. Johnson KR, et al. **Exp Cell Res** 1990 Mar;187(1):69–76

Flow cytometric multiparameter analysis of proliferating cell nuclear antigen/cyclin and Ki–67 antigen: a new view of the cell cycle. Landberg G, et al. **Exp Cell Res** 1990 Mar; 187(1):111–8

S100 protein expression in human melanoma cells: comparison of levels of expression among different cell lines and individual cells in different phases of the cell cycle. Marks A, et al. **Exp Cell Res** 1990 Mar;187(1):59–64

An anti–HLA class I monoclonal antibody alters the progression in the cell cycle of phytohemagglutinin–activated human T lymphocytes. Rubini M, et al. **Exp Cell Res** 1990 Mar;187(1):11–5

Density–dependent tumor cell death and reversible cell cycle arrest: mutually exclusive modes of monocyte–mediated growth control. van der Bosch J, et al. **Exp Cell Res** 1990 Apr;187(2):185–92

The dynamic distribution and quantification of DNA cruciforms in eukaryotic nuclei. Ward GK, et al. **Exp Cell Res** 1990 Jun;188(2):235–46

S–phase inhibitors induce vimentin expression in human promonocytic U–937 cells. Mata F, et al. **FEBS Lett** 1989 Dec 18;259(1):171–4

Comparison of forward and backwards methods of cell cycle analysis. Cooper S. **FEMS Microbiol Lett** 1990 Jan 1; 54(1–3):1–4

Cloning and nucleotide sequence of the CDC23 gene of Saccharomyces cerevisiae. Doi A, et al. **Gene** 1990 Jul 2; 91(1):123–6

Isolation and sequence analysis of CDC43, a gene involved in the control of cell polarity in Saccharomyces cerevisiae. Johnson DI, et al. **Gene** 1990 May 31;90(1):93–8

Two genes differentially regulated in the cell cycle and by DNA–damaging agents encode alternative regulatory subunits of ribonucleotide reductase. Elledge SJ, et al. **Genes Dev** 1990 May;4(5):740–51

Cytotoxicity by tumor necrosis factor is linked with the cell cycle but does not require DNA synthesis. Coffman FD, et al. **Growth Factors** 1989;1(4):357–64

Improved bromodeoxyuridine/DNA analysis by anti–BudR monoclonal antibody versus right angle light scatter. Vitale M, et al. **Histochemistry** 1989;93(1):9–11

Normal and tumor–bearing host macrophage responses: variability in accessory function, surface markers, and cell–cycle kinetics. Askew D, et al. **Immunol Lett** 1990 Mar–Apr;24(1):21–9

Radiosensitivity throughout the cell cycle and repair of potentially lethal damage and DNA double–strand breaks in an X–ray–sensitive CHO mutant. Iliakis GE, et al. **Int J Radiat Biol** 1990 Jun;57(6):1195–211

Can cell kinetic parameters predict the response of tumours to radiotherapy? McNally NJ. **Int J Radiat Biol** 1989 Nov; 56(5):777–86

Poly(ADP–ribose) metabolism in proliferating versus quiescent cells and its relationship to their radiation responses. Sweigert SE, et al. **Int J Radiat Biol** 1990 Jul; 58(1):111–23

A comparison of the sensitivity to photodynamic treatment of endothelial and tumour cells in different proliferative states. West CM, et al. **Int J Radiat Biol** 1990 Jul; 58(1):145–56

Cell cycle responses of two X–ray sensitive mutants defective in DNA repair. Whitmore GF, et al. **Int J Radiat Biol** 1989 Nov;56(5):657–65

Studies on scaffold attachment sites and their relation to genome function. Gasser SM, et al. **Int Rev Cytol** 1989; 119:57–96 (177 ref.)

Different kinetic properties of the two mutants, RAS2Ile152 and RAS2Val19, that suppress the CDC25 requirement in RAS/adenylate cyclase pathway in Saccharomyces cerevisiae. Créchet JB, et al. **J Biol Chem** 1990 Jan 25; 265(3):1563–8

Alterations in the phosphorylation and activity of DNA polymerase alpha correlate with the change in replicative DNA synthesis as quiescent cells re–enter the cell cycle. Cripps–Wolfman J, et al. **J Biol Chem** 1989 Nov 25; 264(33):19478–86

Isolation of temperature–sensitive cell cycle mutants from mouse FM3A cells. Characterization of mutants with special reference to DNA replication. Eki T, et al. **J Biol Chem** 1990 Jan 5;265(1):26–33

The pattern of dihydrofolate reductase expression through the cell cycle in rodent and human cultured cells. Feder JN, et al. **J Biol Chem** 1989 Dec 5;264(34):20583–90

Cell cycle commitment of rat muscle satellite cells. Bischoff R. **J Cell Biol** 1990 Jul;111(1):201–7

A model for astral stimulation of cytokinesis in animal cells. Devore JJ, et al. **J Cell Biol** 1989 Nov;109(5):2225–32

The permeability of the nuclear envelope in dividing and nondividing cell cultures. Feldherr CM, et al. **J Cell Biol** 1990 Jul;111(1):1–8

Simulation testing of mechanisms for inducing the formation of the contractile ring in cytokinesis. Harris AK, et al. **J Cell Biol** 1989 Nov;109(5):2215–23

Cellular and adenovirus dl312 DNA metabolism in cycling or mitotic human cultures exposed to supralethal gamma radiation. Ross PM. **J Cell Biol** 1989 Nov;109(5):1993–2002

Intercellular communication is cell cycle modulated during early Xenopus laevis development. Su JW, et al. **J Cell Biol** 1990 Jan;110(1):115–21

Reduction of DNA primase activity in aging but still proliferating cells. Collins JM, et al. **J Cell Physiol** 1990 Apr;143(1):52–9

Human bone cell enzyme expression and cellular heterogeneity: correlation of alkaline phosphatase enzyme activity with cell cycle. Fedarko NS, et al. **J Cell Physiol** 1990 Jul;144(1):115–21

The transient division block in the D9ts mutant of Tetrahymena is inducible at every cell cycle stage. Cleffmann G. **J Cell Sci** 1989 Mar;92 (Pt 3):349–52

Expression of a cell surface antigen in Dictyostelium discoideum in relation to the cell cycle. Krefft M, et al. **J Cell Sci** 1989 May;93 (Pt 1):199–204

The cell cycle. Proceedings of the British Society for Cell Biology–Journal of Cell Science Symposium. St Andrews, April 1989. **J Cell Sci Suppl** 1989;12:1–300

Maturation–promoting factor and the regulation of the cell cycle. Maller JI, et al. **J Cell Sci Suppl** 1989;12:53–63 (41 ref.)

Cyclin synthesis and degradation and the embryonic cell cycle. Murray AW. **J Cell Sci Suppl** 1989;12:65–76

Calcium–induced chromatin condensation and cyclin phosphorylation during chromatin condensation cycles in ammonia–activated sea urchin eggs. Patel R, et al. **J Cell Sci Suppl** 1989;12:129–44

Parallel arrangement, growth inhibition and cell cycle phase analysis of human dermal fibroblasts cultured in collagen lattice. Kono T, et al. **J Dermatol** 1990 Jan;17(1):2–10

BrdUrd labeling of S–phase cells in testes and small intestine of mice, using microwave irradiation for immunogold–silver staining: an immunocytochemical study. Thoolen B. **J Histochem Cytochem** 1990 Feb; 38(2):267–73

Ion channel blockers inhibit B cell activation at a precise stage of the G1 phase of the cell cycle. Possible involvement of K+ channels. Amigorena S, et al. **J Immunol** 1990 Mar 15;144(6):2038–45

The use of E. coli exonuclease III to generate single stranded DNA in BrdUrd cell–cycle analysis permits simultaneous detection of cell surface antigens. Bayer JA, et al. **J Immunol Methods** 1990 Aug 28;132(1):13–24

Alkaline phosphatase–fast red, a new fluorescent label. Application in double labelling for cell cycle analysis. Murdoch A, et al. **J Immunol Methods** 1990 Aug 28; 132(1):45–9

Expression of proliferating cell nuclear antigen/cyclin in human keratinocytes. Miyagawa S, et al. **J Invest Dermatol** 1989 Nov;93(5):678–81

Changes of electron spin resonance membrane fluidity in hexadecane–induced hyperproliferative epidermis. Tanaka T, et al. **J Invest Dermatol** 1989 Nov;93(5):682–6

Phospholipid flip–out controls the cell cycle of Escherichia coli. Norris V. **J Theor Biol** 1989 Jul 10;139(1):117–28

5–bromodeoxyuridine (BUdR) quenching of acridine orange fluorescence distinguishes cycling and non–cycling normal and malignant bone marrow cells in vitro. Maddox AM, et al. **Leuk Res** 1989;13(9):781–90

Perturbation of DNA replication and cell cycle progression by commonly used [3H]thymidine labeling protocols. Hoy CA, et al. **Mol Cell Biol** 1990 Apr;10(4):1584–92

Periodic biosynthesis of the human M–phase promoting factor catalytic subunit p34 during the cell cycle. McGowan CH, et al. **Mol Cell Biol** 1990 Jul;10(7):3847–51

The Saccharomyces cerevisiae DNA repair gene RAD2 is regulated in meiosis but not during the mitotic cell cycle. Madura K, et al. **Mol Cell Biol** 1990 Jun;10(6):3256–7

Importance of introns in the growth regulation of mRNA levels of the proliferating cell nuclear antigen gene. Ottavio L, et al. **Mol Cell Biol** 1990 Jan;10(1):303–9

Antigen receptor–induced cell cycle arrest in WEHI–231 B lymphoma cells depends on the duration of signaling before the G1 phase restriction point. Page DM, et al. **Mol Cell Biol** 1990 Jun;10(6):3003–12

Premature chromosome condensation is induced by a point mutation in the hamster RCC1 gene. Uchida S, et al. **Mol Cell Biol** 1990 Feb;10(2):577–84

Overexpression of the STE4 gene leads to mating response in haploid Saccharomyces cerevisiae. Whiteway M, et al. **Mol Cell Biol** 1990 Jan;10(1):217–22

Coding and noncoding sequences at the 3' end of yeast histone H2B mRNA confer cell cycle regulation. Xu HX, et al. **Mol Cell Biol** 1990 Jun;10(6):2687–94

Scoring of SCE frequency per cell cycle in CHO chromosomes by means of a standardized 3–way–differential staining method. Escalza P, et al. **Mutat Res** 1989 Nov;215(1):139–45

Differential cell cycle modulation of human DNA glycosylases against oxidized pyrimidines. Ganguly T, et al. **Mutat Res** 1990 Mar;235(2):137–46

Cell–cycle defect of DNA repair in progeria skin fibroblasts. Lipman JM, et al. **Mutat Res** 1989 Sep–Nov; 219(5–6):273–81

Origin of aneuploidy in relation to disturbances of cell–cycle progression. I. Effects of vinblastine on mouse bone marrow cells. Manca A, et al. **Mutat Res** 1990 Mar; 229(1):29–36

Length of cell cycle in vitro and sister–chromatid exchange (SCE) frequency in bone marrow cells from severely malnourished rats. Ortiz R, et al. **Mutat Res** 1990 Sep; 232(1):71–5

The yeast SW14 protein contains a motif present in developmental regulators and is part of a complex involved in cell–cycle–dependent transcription. Andrews BJ, et al. **Nature** 1989 Dec 14;342(6251):830–3

Homologous activators of ras in fission and budding yeast. Hughes DA, et al. **Nature** 1990 Mar 22;344(6264):355–7

Embryology. Under arrest in the cell cycle [news; comment] Hunt T. **Nature** 1989 Nov 30;342(6249):483–4 Comment on: Nature 1989 Nov 30;342(6249):505–11. Comment on: Nature 1989 Nov 30;342(6249):512–8.

Cell biology: the cell cycle as a cdc2 cycle [news] Murray AW. **Nature** 1989 Nov 2;342(6245):14–5

Inhibition of endocytic vesicle fusion in vitro by the cell–cycle control protein kinase cdc2. Tuomikoski T, et al. **Nature** 1989 Dec 21–28;342(6252):942–5

Abrogation of IL–3 dependent growth requires a functional v–src gene product: evidence for an autocrine growth cycle. Anderson SM, et al. **Oncogene** 1990 Mar;5(3):317–25

Cell cycle synchronization: reversible induction of G2 synchrony in cultured rodent and human diploid fibroblasts. Tobey RA, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5104–8

Association between the division delay target and DNA late in the cell cycle. Schneiderman MH, et al. **Radiat Res** 1990 Jun;122(3):337–40

The relationship between radiosensitivity and cell kinetic effects after low– and high–dose–rate irradiation in five human tumors in nude mice. van Oostrum IE, et al. **Radiat Res** 1990 Jun;122(3):252–61

PEST regions, proteolysis and cell cycle progression.

Rechsteiner M. **Revis Biol Celular** 1989;20:235–53 (83 ref.)
Protein turnover in relation to growth status and the cell cycle in cultured mammalian cells. Wheatley DN. **Revis Biol Celular** 1989;21:377–400 (77 ref.)
A voltage-dependent chloride current linked to the cell cycle in ascidian embryos. Block ML, et al. **Science** 1990 Mar 2;247(4946):1090–2
Cell cycle dependence of chloride permeability in normal and cystic fibrosis lymphocytes. Bubien JK, et al. **Science** 1990 Jun 15;248(4961):1416–9
Checkpoints: controls that ensure the order of cell cycle events. Hartwell LH, et al. **Science** 1989 Nov 3; 246(4930):629–34 (68 ref.)
Differential phosphorylation of c-Abl in cell cycle determined by cdc2 kinase and phosphatase activity. Kipreos ET, et al. **Science** 1990 Apr 13;248(4952):217–20
The cell cycle [editorial] Koshland DE Jr. **Science** 1989 Nov 3;246(4930):545
Dominoes and clocks: the union of two views of the cell cycle. Murray AW, et al. **Science** 1989 Nov 3; 246(4930):614–21 (114 ref.)
Determination of plasma cell labelling index with bromodeoxyuridine using a double immunoenzymatic technique. Ffrench M, et al. **Stain Technol** 1990;65(1):31–6
Heat shock affects cell cycling in the neural plate of cultured rat embryos: a flow cytometric study. Walsh DA, et al. **Teratology** 1989 Dec;40(6):583–92
[Cell cycle specific expression of the HER-2/NEU oncogene in breast cancer cell lines] Ehrhart E, et al. **Arch Gynecol Obstet** 1989;245(1–4):656–8 **(Ger)**
[Metastasis and its relation to cell kinetics in human colorectal cancers] Ooyama S, et al. **Nippon Geka Gakkai Zasshi** 1990 Jun;91(6):677–82 (Eng. Abstr.) **(Jpn)**
[Studies on the cell cycle in synchronous cultures of higher plant cells] Kodama H, et al. **Seikagaku** 1989 May; 61(5):389–93 **(Jpn)**
[Regulation of cell-cycle dependent genes in mammalian cells] Ayusawa D. **Tanpakushitsu Kakusan Koso** 1989 Jul; 34(9):1125–34 **(Jpn)**
[DNA replication in mammalian cells] Hanaoka F. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(9):1149–62 **(Jpn)**
[Regulation of cell-cycle progression in mammalian cells] Ide T. **Tanpakushitsu Kakusan Koso** 1989 Jul; 34(9):1097–107 **(Jpn)**
[Protein phosphorylations during cell cycle] Inagaki M, et al. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(9):1215–26 **(Jpn)**
[Control of formation of transcription apparatus] Ishihama A. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(9):1108–12 **(Jpn)**
[Modes of action of protein kinase C and growth factors] Kaibuchi K, et al. **Tanpakushitsu Kakusan Koso** 1989 Jul; 34(9):1061–8 **(Jpn)**
[Cell cycle-dependent regulation of plant gene expression, particularly on histone gene transcription] Mikami K, et al. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(9):1113–24 **(Jpn)**
[BN2 mutation and G2 block] Nishimoto T, et al. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(9):1188–203 **(Jpn)**
[Studies on the regulation of cell cycle] Uno I. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(9):1025–7 **(Jpn)**
[Regulation of cell cycle by intracellular factors] Uno I. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(9):1028–39 **(Jpn)**
[Interaction of mitotic oscillators as a source of variability of cell cycle duration] Volkov EI. **Biofizika** 1989 Jul–Aug; 34(4):647–50 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Cell cycle analysis of human dermal fibroblasts cultured on or in hydrated type I collagen lattices. Kono T, et al. **Arch Dermatol Res** 1990;282(4):258–62
Endothelin stimulates DNA synthesis in Swiss 3T3 cells. Synergy with polypeptide growth factors. Brown KD, et al. **Biochem J** 1989 Nov 1;263(3):977–80
Differential cell cycle perturbation by transmethylation inhibitors. Prytz PS, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):203–6
A trypsin-like proteinase appearing at 17 h and 17 min in the cell cycle time of HeLa cells correlates with the onset of DNA synthesis. Muramatu M, et al. **Biochim Biophys Acta** 1990 Sep 10;1087(1):87–90
ViVACCy--a drug schedule based on G2 blockade and prolonged infusion of multiple tubulin-binding agents. A pilot study. Shackney SE, et al. **Cancer** 1990 Aug 1; 66(3):411–7
Neurite outgrowth and cell cycle kinetic changes induced by cis-diamminedichloroplatinum II and retinoic acid in a human neuroblastoma cell line. Di Martino D, et al. **Cancer Lett** 1990 Jul 16;52(2):101–6
Differential drug sensitivity conferred by growth status detected in a mixed population of cycling and noncycling cells. Barcellos-Hoff MH, et al. **Cancer Res** 1990 Jun 15; 50(12):3551–5
Butylated hydroxyanisole-induced alterations in cell kinetic parameters in rat forestomach in relation to its oxidative cytochrome P-450-mediated metabolism. Verhagen H, et al. **Carcinogenesis** 1989 Oct;10(10):1947–51
Flow cytometric evaluation of the cytotoxicity of novel antiviral compounds. Nassiri MR, et al. **Cytometry** 1990; 11(3):411–7
Synchronisation of cancer cell lines of human origin using methotrexate. Sen S, et al. **Cytometry** 1990;11(5):595–602
Cell density and cell cycle effects on retinoic acid-induced embryonal carcinoma cell differentiation. Berg RW, et al. **Dev Biol** 1990 Mar;138(1):123–35
Reversible G1 arrest in the cell cycle of human lymphoid cell lines by dimethyl sulfoxide. Sawai M, et al. **Exp Cell Res** 1990 Mar;187(1):4–10
Effects of leptomycin B on the cell cycle of fibroblasts and fission yeast cells. Yoshida M, et al. **Exp Cell Res** 1990 Mar;187(1):150–6
Further studies on the biological activities of the CFU-S inhibitory tetrapeptide AcSDKP. I. The precise point of the cell cycle sensitive to AcSDKP. Studies on the effect of AcSDKP on GM-CFC and on the possible involvement of T-lymphocytes in AcSDKP response. Monpezat JP, et al. **Exp Hematol** 1989 Dec;17(11):1077–80
The effect of quercetin on cell cycle progression and growth of human gastric cancer cells. Yoshida M, et al. **FEBS Lett** 1990 Jan 15;260(1):10–3
Effect of tulipin on cell cycle progression analyzed by BrdUrd incorporation. Vitale M, et al. **Histochemistry** 1990; 93(3):229–31
Cell kinetic disturbances induced by treatment of human diploid fibroblasts with 5-azacytidine indicate a major role for DNA methylation in the regulation of the chromosome cycle. Poot M, et al. **Hum Genet** 1990 Feb;84(3):258–62
Cell type expression mediated by cell cycle events, and signaled by mitogens and growth inhibitors. Yamada T. **Int Rev Cytol** 1989;117:215–55 (208 ref.)
Comparative flow cytometric analysis of bleomycin toxicity on normal and tumour sheep cell kinetics in vitro. Shrivastava R, et al. **J Appl Toxicol** 1990 Apr;10(2):99–103
Phorbol ester mimics ACTH action in corticoadrenal cells stimulating steroidogenesis, blocking cell cycle, changing cell shape, and inducing c-fos proto-oncogene expression. Kimura E, et al. **J Biol Chem** 1990 Feb 25;265(6):3518–21
Effects of combinations of interferon-beta ser and interferon-gamma on interferon-inducible proteins and on the cell cycle. Schiller JH, et al. **J Biol Response Mod** 1990 Aug;9(4):368–77
Heparin selectively inhibits a protein kinase C-dependent mechanism of cell cycle progression in calf aortic smooth muscle cells [published erratum appears in J Cell Biol 1990 Mar;110(3):863] Castellot JJ Jr, et al. **J Cell Biol** 1989 Dec; 109(6 Pt 1):3147–55
Effect of cyclic AMP on the cell cycle regulation of ribonucleotide reductase M2 subunit messenger RNA concentrations in wild-type and mutant S49 T lymphoma cells. Albert DA, et al. **J Cell Physiol** 1990 May; 143(2):251–6
Altered cell cycle responses to insulin-like growth factor I, but not platelet-derived growth factor and epidermal growth factor, in senescing human fibroblasts. Chen YY, et al. **J Cell Physiol** 1990 Jul;144(1):18–25
Effects of 13 cis-retinoic acid on growth and differentiation of human follicular carcinoma cells (UCLA R0 82 W-1) in vitro. Van Herle AJ, et al. **J Clin Endocrinol Metab** 1990 Sep;71(3):755–63
Regulatory effects of transforming growth factor-beta on IL-2- and IL-4-dependent T cell-cycle progression. Ruegemer JJ, et al. **J Immunol** 1990 Mar 1;144(5):1767–76
Retinoic acid affects the cell cycle and increases total protein content in epithelial cells. Argilés A, et al. **Kidney Int** 1989 Dec;36(6):954–9
Hemoglobin induction by Ara-C in human erythroleukemic cells (K562) is cell-cycle dependent. Wanda PE, et al. **Leuk Res** 1989;13(8):683–8
Role of insulin during cell cycle in a myeloid cell line. Gossla R, et al. **Leukemia** 1990 Feb;4(2):111–6
The effects of interleukin-3, GM-CSF, and G-CSF on the growth kinetics of colony-forming cells in myelodysplastic syndromes. Schipperus M, et al. **Leukemia** 1990 Apr; 4(4):267–72
Mammalian genes coordinately regulated by growth arrest signals and DNA-damaging agents. Fornace AJ Jr, et al. **Mol Cell Biol** 1989 Oct;9(10):4196–203
Flow-cytometric cell-cycle analysis of Chinese hamster cells following exposure to cytotoxicants. Fertig G, et al. **Mutat Res** 1989 Nov;215(1):61–8
Comparison of baseline sister-chromatid exchanges (SCE), cyclophosphamide-, ethylnitrosourea (ENU)-induced SCE, ENU-induced cell-cycle delay and chromosome aberrations between Peru and laboratory mice. Huang CC, et al. **Mutat Res** 1990 May;230(1):93–100
Induction of ouabain-resistance mutation and cycle-dependent transformation of C3H/10T1/2 cells by N-nitroso-2-acetylaminofluorene. Lin JK, et al. **Mutat Res** 1990 May;230(1):35–43
SCE induction and cell-cycle delay by toxaphene. Steinel HH, et al. **Mutat Res** 1990 May;230(1):29–33
The insulin receptor as a transmitter of a mitogenic signal in Chinese hamster ovary CHO-K1 cells. Mamounas M, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9294–8
Cell killing, chromosomal aberrations, and division delay as thermal sensitivity is modified during the cell cycle. Dewey WC, et al. **Radiat Res** 1990 Jun;122(3):268–74
Chemically induced growth inhibition and cell cycle perturbations in cultures of differentiating rodent embryonic cells. Ribeiro PL, et al. **Toxicol Appl Pharmacol** 1990 Jun 15;104(2):200–11
Cadmium cytotoxicity correlates with the changes in glutathione content that occur during the logarithmic growth phase of A549-T27 cells. Kang YJ, et al. **Toxicol Lett** 1990 Mar;51(1):23–8
Sensitivity of intracellular signals responsible for cell cycle progression to cyclosporine. Kimball PM, et al. **Transplantation** 1990 Jan;49(1):186–91
[Antitumor activity and cell cycle effects of delta 12-PGJ2 in vivo] Nishimura G. **Nippon Gan Chiryo Gakkai Shi** 1990 Mar 20;25(3):632–9 (Eng. Abstr.) **(Jpn)**
[Zinc resistance and cell cycle regulation in Saccharomyces yeasts] Troitskaia EN, et al. **Dokl Akad Nauk SSSR** 1989; 307(3):729–32 **(Rus)**

GENETICS

Modifications in molecular mechanisms associated with control of cell cycle regulated human histone gene expression during differentiation. Stein GS, et al. **Cell Biophys** 1989 Dec;15(3):201–23 (81 ref.)
The cell cycle dependence of c-sis gene expression: artifactual conclusions in cells prepared by chemical but not physical techniques. Press RD, et al. **Cell Tissue Kinet** 1990 Jul;23(4):299–312
Localization of the human A1S9 gene complementing the ts A1S9 mouse L-cell defect in DNA replication and cell cycle progression to Xp11.2——p11.4. Zacksenhaus E, et al. **Cytogenet Cell Genet** 1990;53(1):20–2
Nucleotide sequence of yeast SCD26, a dosage-dependent suppressor of the cell cycle mutation cdc26. Dascher C, et al. **Nucleic Acids Res** 1989 Dec 25;17(24):10491
Tumor cells exhibit deregulation of the cell cycle histone gene promoter factor HiNF-D. Holthuis J, et al. **Science** 1990 Mar 23;247(4949 Pt 1):1454–7
Cell cycle-dependent regulation of phosphorylation of the human retinoblastoma gene product. Mihara K, et al. **Science** 1989 Dec 8;246(4935):1300–3

PHYSIOLOGY

An elementary approach to cell cycle analysis. Wiedemann C, et al. **Acta Biotheor (Leiden)** 1988;37(3–4):205–36
Cell cycle regulation of ribonucleotide reductase M2 subunit specific RNA in wild type and mutant S49 cells. Albert DA, et al. **Adv Exp Med Biol** 1989;253B:93–7
A versatile microtiter assay for the universal cdc2 cell cycle regulator. Ducommun B, et al. **Anal Biochem** 1990 May 15;187(1):94–7
Simple and complex cell cycles. Cross F, et al. **Annu Rev Cell Biol** 1989;5:341–96 (358 ref.)
Fluctuation of trypsin-like proteinase activity in the cell cycle of synchronized and growing HeLa cells, and the effect of GMCHA-OPhBut. Kozaki Y, et al. **Biochim Biophys Acta** 1989 Nov 20;1014(2):120–4
Driving the cell cycle: M phase kinase, its partners, and substrates. Lewin B. **Cell** 1990 Jun 1;61(5):743–52 (22 ref.)
Identification of cell cycle-regulated phosphorylation sites on nuclear lamin C. Ward GE, et al. **Cell** 1990 May 18; 61(4):561–77
Double labelling of cells with tritiated thymidine and bromodeoxyuridine reveals a circadian rhythm-dependent variation in duration of DNA synthesis and S phase flux rates in rodent oral epithelium. Hume WJ, et al. **Cell Tissue Kinet** 1990 Jul;23(4):313–23
Tetraploid cycle in ageing solid tumours. Liautaud-Roger F, et al. **Cell Tissue Kinet** 1990 Jul;23(4):261–9
The cell kinetics of the epidermis and follicular epithelium of the rat: variations with age and body site. Morris GM, et al. **Cell Tissue Kinet** 1989 May;22(3):213–22
Epidermal cell kinetics of the pig: a review. Morris GM, et al. **Cell Tissue Kinet** 1990 Jul;23(4):271–82 (52 ref.)
Cell cycle phase dependent emergence of thymidylate synthase studied by monoclonal antibody (M-TS-4). Shibui S, et al. **Cell Tissue Kinet** 1989 May;22(3):259–68
Cultured human keratinocytes: discrimination of different cell cycle compartments based upon measurement of nuclear RNA or total cellular RNA content. Staiano-Coico L, et al. **Cell Tissue Kinet** 1989 May;22(3):235–43
Oncogenes, growth, and the cell cycle: an overview. Studzinski GP. **Cell Tissue Kinet** 1989 Nov;22(6):405–24 (212 ref.)
Kinetics of the development of accelerated cell-cycle transit resulting from inhibition of DNA replication in the previous cycle. Tolmach LJ, et al. **Cell Tissue Kinet** 1990 Mar;23(2):125–35
Circadian and infradian aspects of the cell cycle: from past to future. Laerum OD, et al. **Chronobiologia** 1989 Oct–Dec; 16(4):441–53 (105 ref.)
Cell multiplication. **Curr Opin Cell Biol** 1990 Apr; 2(2):367–427
Yeast cell cycle. Futcher AB. **Curr Opin Cell Biol** 1990 Apr; 2(2):246–51 (22 ref.)
Abbreviated and regulated cell cycles in Drosophila. Glover DM. **Curr Opin Cell Biol** 1990 Apr;2(2):258–61 (15 ref.)
Periodic events in the cell cycle. Johnston LH. **Curr Opin Cell Biol** 1990 Apr;2(2):274–9 (14 ref.)
The bacterial cell cycle. Lutkenhaus J. **Curr Opin Cell Biol** 1990 Apr;2(2):241–5 (30 ref.)
Lower eukaryotic cell cycle: perspectives on mitosis from the fungi. Morris NR. **Curr Opin Cell Biol** 1990 Apr; 2(2):252–7 (39 ref.)
Cell cycle position affects response of normal fibroblasts to phorbol esters. Böhmer RM. **Growth Factors** 1988;

1(1):85-90
Dynamics of cytoplasmic organelles in the cell cycle of the fission yeast Schizosaccharomyces pombe: three-dimensional reconstruction from serial sections. Kanbe T, et al. **J Cell Sci** 1989 Dec;94 (Pt 4):647-56
Control of first cleavage in single-cell reconstituted mouse embryos. Smith LC, et al. **J Reprod Fertil** 1990 Mar; 88(2):655-63
The effects of hyperthermia on the cell cycle of Ehrlich ascites cancer cells in vivo. Hirooka Y, et al. **Jpn J Surg** 1990 Jul;20(4):437-42
Cell cycle oscillation of phosphatase inhibitor-2 in rat fibroblasts coincident with p34cdc2 restriction. Brautigan DL, et al. **Nature** 1990 Mar 1;344(6261):74-8
Cell cycle-dependent regulation of histone precursor mRNA processing by modulation of U7 snRNA accessibility. Hoffmann I, et al. **Nature** 1990 Aug 16;346(6285):665-8
HPV-16 E7 functions at the G1 to S phase transition in the cell cycle. Banks L, et al. **Oncogene** 1990 Jun;5(6):833-7
An insulin-stimulated protein kinase similar to yeast kinases involved in cell cycle control. Boulton TG, et al. **Science** 1990 Jul 6;249(4964):64-7
Logic of the Escherichia coli cell cycle. D'Ari R, et al. **Trends Biochem Sci** 1990 May;15(5):191-4 (33 ref.)
The start gene CDC28 and the genetic stability of yeast. Devin AB, et al. **Yeast** 1990 May-Jun;6(3):231-43
Intracellular and extracellular levels of cyclic AMP during the cell cycle of Saccharomyces cerevisiae. Smith ME, et al. **Yeast** 1990 Jan-Feb;6(1):53-60
[Gene expression regulation of adipocyte differentiation: cell cycle and hormones] Grimaldi P. **Reprod Nutr Dev** 1990; 30(3):281-95 (35 ref.) (Eng. Abstr.) **(Fre)**

RADIATION EFFECTS

Action of caffeine on DNA replication after ultraviolet irradiation in Indian muntjac cells: no connection with action on cell cycle delay. Musk SR, et al. **Biochim Biophys Acta** 1990 Apr 9;1052(1):53-62
Effects of helio-neon laser radiation upon cellular cycle in a plant model. de Barioglio SR, et al. **Cell Mol Biol** 1989; 35(4):367-71
The physiological state as a modifier of radiation-induced cytotoxicity in heterogeneous murine tumor cells growing in vitro. Cheng WY, et al. **Int J Radiat Biol** 1989 Oct; 56(4):463-83
[Analysis of cell kinetics after gamma ray irradiation using anti-BrdU monoclonal antibody] Akagi K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Apr 25; 49(4):477-83 (Eng. Abstr.) **(Jpn)**
[Principles of the organization of intestinal epithelium and its recovery from damage revealed by modeling] Tiazhelova VG, et al. **Radiobiologiia** 1989 Sep-Oct; 29(5):632-7 (Eng. Abstr.) **(Rus)**

CELL DEATH see **CELL SURVIVAL**

CELL DEGRANULATION

see related
EXOCYTOSIS

Degradation of Hageman factor by chymotrypsin-like protease released from rat mast cells during degranulation. Majima M, et al. **Adv Exp Med Biol** 1989;247A:487-92
Neutrophil degranulation inhibits potential hydroxyl-radical formation. Relative impact of myeloperoxidase and lactoferrin release on hydroxyl-radical production by iron-supplemented neutrophils assessed by spin-trapping techniques. Britigan BE, et al. **Biochem J** 1989 Dec 1; 264(2):447-55
Human immunoglobulin G potentiates superoxide production induced by chemotactic peptides and causes degranulation in isolated human neutrophils. Aaku E, et al. **Biochim Biophys Acta** 1990 May 2;1052(2):243-7
Cleavage of a rat serosal mast cell membrane component during degranulation mediated by chymase, a secretory granule protease. Schick B. **Immunology** 1990 Mar; 69(3):423-8
Receptor-operated, but not voltage-operated, calcium channels are involved in basophil leucocyte activation and histamine release. Tedeschi A, et al. **Int Arch Allergy Appl Immunol** 1989;90(1):109-11
Inhibition of in vitro and in vivo mast cell degranulation by Taenia crassiceps metacestodes in vitro incubation products. Seifert B, et al. **Int J Med Microbiol** 1989 Oct; 271(4):521-31
Phosphatidylinositol-linked FcRIII mediates exocytosis of neutrophil granule proteins, but does not mediate initiation of the respiratory burst. Huizinga TW, et al. **J Immunol** 1990 Feb 15;144(4):1432-7
Studies of the mechanism of natural killer (NK) degranulation and cytotoxicity. Atkinson EA, et al. **J Leukoc Biol** 1990 Jan;47(1):39-48
Liberation of eosinophil granules in the inner capsule of chronic subdural hematomas. Yamashima T, et al. **Neurochirurgia (Stuttg)** 1989 Nov;32(6):168-71
Ultrastructural evidence for mast cell activation in a case of neurofibromatosis. Giorno R, et al. **Neurofibromatosis** 1989;2(1):35-41
Mast cell activity in normal human skin. Giorno R, et al. **Neurofibromatosis** 1989;2(1):42

DRUG EFFECTS

Effect of ketotifen on the distribution and degranulation of uterine eosinophils in estrogen-treated rats. Soto J, et al. **Agents Actions** 1989 Nov;28(3-4):198-203
Effect of disodium cromoglycate on deuterium oxide-induced degranulation of human eosinophils in allergic asthmatic patients in vitro. Palczyński C, et al. **Arch Immunol Ther Exp (Warsz)** 1989;37(1-2):157-60
Polymeric analogues of N-formyl peptides are potent activators of degranulation and superoxide production by human neutrophils. Ravel P, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):266-72
Recombinant human granulocyte-macrophage colony-stimulating factor induces granule exocytosis from human polymorphonuclear neutrophils. Smith RJ, et al. **Inflammation** 1990 Feb;14(1):83-92
Studies on inhibitors of rat mast cell degranulation produced by microorganisms. I. Screening of microorganisms, and isolation and physico-chemical properties of eurocidins C, D and E. Nakagomi K, et al. **J Antibiot (Tokyo)** 1990 May; 43(5):462-9
Studies on inhibitors of rat mast cell degranulation produced by microorganisms. II. Structure elucidation of eurocidins D and E. Nakagomi K, et al. **J Antibiot (Tokyo)** 1990 May; 43(5):470-6
Cyclosporin A inhibits degranulation of rat basophilic leukemia cells and human basophils. Inhibition of mediator release without affecting PI hydrolysis or Ca2+ fluxes. Hultsch T, et al. **J Immunol** 1990 Apr 1;144(7):2659-64
Short term exposure to cis unsaturated free fatty acids inhibits degranulation of cytotoxic T lymphocytes. Richieri GV, et al. **J Immunol** 1990 Jan 15;144(2):671-7
Stimulus-specific effects of pentoxifylline on neutrophil CR3 expression, degranulation, and superoxide production. Currie MS, et al. **J Leukoc Biol** 1990 Mar;47(3):244-50
Comparison of stimulation by chemotactic formyl peptide analogs between GTPase activity in neutrophil plasma membranes and granule enzyme release from intact neutrophils. Kanaho Y, et al. **J Leukoc Biol** 1990 May; 47(5):420-8
Human neutrophil degranulation stimulated by Aspergillus fumigatus. Levitz SM, et al. **J Leukoc Biol** 1990 Feb; 47(2):170-5
Activation of neutrophils by cachectin/tumor necrosis factor: priming of N-formyl-methionyl-leucyl-phenylalanine-induced oxidative responsiveness via receptor mobilization without degranulation. Tennenberg SD, et al. **J Leukoc Biol** 1990 Mar;47(3):217-23
Investigation of rat mast cell degranulation using flow cytometry. Perretti M, et al. **J Pharmacol Methods** 1990 May;23(3):187-94
Cytoplasmic microtubules in human neutrophil degranulation: reversible inhibition by the colchicine analogue 2-methoxy-5-(2',3',4'-trimethoxyphenyl)-2,4,6-cycloheptatrien-1- one. Mollinedo F, et al. **Mol Pharmacol** 1989 Oct;36(4):547-55
Mast cell secretagogues. White MV, et al. **Prog Clin Biol Res** 1989;297:83-100; discussion 100-1 (95 ref.)
Hypotension induced by vasopressin antagonists in rats: role of mast cell degranulation. Macia RA, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):117-27
[Persistent spontaneous erythema caused by topical use of fumaric acid monoethyl ester--an obligate mast cell degranulation?] Gehring W, et al. **Dermatol Monatsschr** 1990;176(2-3):123-8 (Eng. Abstr.) **(Ger)**
[Degranulation of human eosinophilic granulocytes by the platelet activating factor] Kroegel C, et al. **Pneumologie** 1990 Feb;44 Suppl 1:234-5 (Eng. Abstr.) **(Ger)**
[Studies on the degranulation and histamine release of purified rat peritoneal mast cells. The inhibitory effect of histamine and other chemicals] Hirano H. **Nippon Ika Daigaku Zasshi** 1989 Aug;56(4):392-9 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Depressed degranulation response of synovial fluid polymorphonuclear leucocytes from patients with rheumatoid arthritis to IgG aggregates. Dularay B, et al. **Clin Exp Immunol** 1990 Feb;79(2):195-201
Antibody to Mol abrogates the increase in neutrophil phagocytosis and degranulation induced by granulocyte-macrophage colony-stimulating factor. Kletter Y, et al. **Eur J Haematol** 1989 Nov;43(5):389-96

PHYSIOLOGY

Plasma levels of main granulocyte components during hemodialysis. Comparison of new and reused dialyzers. Hörl WH, et al. **Am J Nephrol** 1990;10(1):53-7
The liver and intracellular digestion: how liver cells eat! Yamazaki K, et al. **Hepatology** 1989 Nov;10(5):877-86 (112 ref.)
[Urticaria and mast cells in adolescence] Kolde G. **Z Hautkr** 1990 Apr;65(4):339-42, 345-7 (49 ref.) (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

A further characterization of acridine-photosensitized inhibition of mast cell degranulation. Gendimenico GJ, et al. **Photodermatol Photoimmunol Photomed** 1990 Apr; 7(2):51-5

CELL DIFFERENTIATION

Growth and differentiation signals as determinants of cancer cell proliferation. Bloch A. **Adv Enzyme Regul** 1989; 28:359-74 (144 ref.)
Protein kinase C in cell growth and differentiation. Kuo JF, et al. **Adv Exp Med Biol** 1989;255:8-20
Purine nucleotide synthesis during terminal differentiation. Tsutani H, et al. **Adv Exp Med Biol** 1989;253A:423-6
Paradoxically slow preadipocyte replication and differentiation in corpulent rats. Shillabeer G, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E368-76
Viral oncogenesis and cell differentiation. The contributions of Charlotte Friend. **Ann N Y Acad Sci** 1989;567:1-356
Proto-oncogenes and differentiation versus transformation of striated muscle cells. Harel J, et al. **Ann N Y Acad Sci** 1989;567:187-207 (62 ref.)
Inductive interactions in heart development. Role of cardiac adherons in cushion tissue formation. Markwald RR, et al. **Ann N Y Acad Sci** 1990;588:13-25 (27 ref.)
Alteration of the program of terminal differentiation caused by oncogenes in the hemopoietic progenitor cell line 32D C13 (G). Rovera G, et al. **Ann N Y Acad Sci** 1989; 567:154-64 (48 ref.)
Transforming growth factor-beta in intestinal epithelial differentiation and neoplasia (review). Lamprecht SA, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1877-81 (58 ref.)
Isolation of immediate-early differentiation mRNAs by enzymatic amplification of subtracted cDNA from human endothelial cells. Hla T, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):637-43
PAF-acether transfer activity in HL-60 cells is induced during differentiation. Lumb RH, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):548-54
Isolation of mutants showing temperature-sensitive cell growth from embryonal carcinoma cells: control of stem cell differentiation by incubation temperatures. Nishimune Y, et al. **Biochem Biophys Res Commun** 1989 Nov 30; 165(1):65-72
Cyclic AMP induces activity increase of kinase FA (a transmembrane signal of insulin) during NG108-15 hybrid cell differentiation. Yang SD, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):921-6
Proto-oncogenes in cell differentiation. Zelenka PS. **Bioessays** 1990 Jan;12(1):22-6 (30 ref.)
Intracellular pH and the increase in protein synthesis accompanying activation of Xenopus eggs. Grandin N, et al. **Biol Cell** 1989;67(3):321-30
Regulation of erythroid-specific gene expression. Harrison PR, et al. **Biomed Biochim Acta** 1990;49(2-3):S5-10 (30 ref.)
Regulation of beta-adrenergic responsiveness during erythroid differentiation of Friend erythroleukemia cells. Moudry R, et al. **Biomed Biochim Acta** 1990;49(2-3):S82-7
Expression of IMP dehydrogenase in differentiating HL-60 cells. Collart FR, et al. **Blood** 1990 Feb 1;75(3):570-6
Human colony-stimulating factor 1 (CSF-1) receptor confers CSF-1 responsiveness to interleukin-3-dependent 32DC13 mouse myeloid cells and abrogates differentiation in response to granulocyte CSF. Kato J, et al. **Blood** 1990 May 1;75(9):1780-7
Culture of isolated bovine megakaryocytes on reconstituted basement membrane matrix leads to proplatelet process formation. Topp KS, et al. **Blood** 1990 Sep 1;76(5):912-24
Embryonic, larval and adult development of the sonic neuromuscular system in the oyster toadfish. Fine ML. **Brain Behav Evol** 1989;34(1):13-24
Retinal morphogenesis in the rainbow trout, Salmo gairdneri. Schmitt E, et al. **Brain Behav Evol** 1989;34(1):48-64
Modulation of galactoside-binding lectins in tumor cells by differentiation-inducing agents. Lotan R, et al. **Cancer Lett** 1989 Nov 30;48(2):115-22
Differentiation therapy. Lotan R, et al. **Cancer Res** 1990 Jun 1;50(11):3453-64
Decreased expression of type II protein kinase C in HL-60 variant cells resistant to induction of cell differentiation by phorbol diester. Nishikawa M, et al. **Cancer Res** 1990 Feb 1;50(3):621-6
Cellular F-actin levels as a marker for cellular transformation: relationship to cell division and differentiation. Rao JY, et al. **Cancer Res** 1990 Apr 15; 50(8):2215-20
Reversal of enzymic phenotype of thymidine metabolism in induced differentiation of U-937 cells. Shiotani T, et al. **Cancer Res** 1989 Dec 1;49(23):6758-63
Cysteine proteinase inhibitors and ras gene products share the same biological activities including transforming activity toward NIH3T3 mouse fibroblasts and the differentiation-inducing activity toward PC12 rat pheochromocytoma cells. Hiwasa T, et al. **Carcinogenesis** 1990 Jan;11(1):75-80
The ski oncogene induces muscle differentiation in quail embryo cells. Colmenares C, et al. **Cell** 1989 Oct 20; 59(2):293-303
Induction across germ layers in Drosophila mediated by a genetic cascade. Immerglück K, et al. **Cell** 1990 Jul 27; 62(2):261-8
Possible role of H1 histone in the differentiation of mouse erythroleukemia cells. Flickinger RA, et al. **Cell Biol Int Rep** 1990 May;14(5):457-62

The role of increased calcium influx rate in receptor mediated function of differentiating HL-60 cells. Aviram A, et al. **Cell Calcium** 1990 Apr;11(4):269-74

Embryonic lens induction: more than meets the optic vesicle. Saha MS, et al. **Cell Differ Dev** 1989 Dec;28(3):153-71 (89 ref.)

Unlinked regulation of cell growth and differentiation in immature B cell lines. Oka Y, et al. **Cell Immunol** 1990 Oct 1;130(1):42-9

Purification of a serum factor which reverses dibutyryl cAMP induced differentiation. Grabham PW, et al. **Cell Signal** 1989;1(3):269-81

Flow cytometric correlation of the c-myc oncoprotein and cell cycle kinetics of HL60 leukaemia during induced maturation with cytosine arabinoside and dimethylsulphoxide. Dent GA, et al. **Cell Tissue Kinet** 1989 Jan;22(1):1-11

Proto-oncogenes in cell development. A symposium. London, 19-21 September 1989. Proceedings. **Ciba Found Symp** 1990;150:1-284

Leukosialin, a major sialoglycoprotein defining leucocyte differentiation. Fukuda M. **Ciba Found Symp** 1989; 145:257-68; discussion 268-76

Control of division and differentiation in oligodendrocyte-type-2 astrocyte progenitor cells. Noble M, et al. **Ciba Found Symp** 1990;150:227-43; discussion 244-9

Experimental analyses of the migration and cell lineage of avian neural crest cells. Bronner-Fraser M. **Cleft Palate J** 1990 Apr;27(2):110-20 (39 ref.)

Bibliography of the current world literature. Cell differentiation. **Curr Opin Cell Biol** 1989 Dec;1(6):1219-48

Determination genes. Chen J, et al. **Curr Opin Cell Biol** 1989 Dec;1(6):1075-80 (18 ref.)

Transcription control and differentiation: the HLH family, c-myc and C/EBP. Kingston RE. **Curr Opin Cell Biol** 1989 Dec;1(6):1081-7 (23 ref.)

Cell lineage and lineage markers. Price J. **Curr Opin Cell Biol** 1989 Dec;1(6):1071-4 (18 ref.)

Induction and early amphibian development. Smith JC. **Curr Opin Cell Biol** 1989 Dec;1(6):1061-70 (38 ref.)

Interaction of oncogenes with differentiation programs. Boettiger D. **Curr Top Microbiol Immunol** 1989;147:31-78 (326 ref.)

Differential control of tropomyosin mRNA levels during myogenesis suggests the existence of an isoform competition-autoregulatory compensation control mechanism. Gunning P, et al. **Dev Biol** 1990 Apr; 138(2):443-53

Differential keratin gene expression during the differentiation of the cement gland of Xenopus laevis. LaFlamme SE, et al. **Dev Biol** 1990 Feb;137(2):414-8

Differential development of cholinergic neurons from cranial and trunk neural crest cells in vitro. Leblanc GG, et al. **Dev Biol** 1990 Feb;137(2):318-30

Actin and myosin expression during development of cardiac muscle from cultured embryonal carcinoma cells. Rudnicki MA, et al. **Dev Biol** 1990 Apr;138(2):348-58

Early development and cell commitment. Etkin LD. **Dev Biol (N Y 1985)** 1989;6:1-12 (41 ref.)

Transdifferentiation in animals. A model for differentiation control. McDevitt DS. **Dev Biol (N Y 1985)** 1989;6:149-73 (128 ref.)

Mechanisms of segmentation. Papers presented at a meeting of the British Society for Developmental Biology. Bristol, April 1988. **Development** 1988;104 Suppl:1-254

Cortical rotation of the Xenopus egg: consequences for the anteroposterior pattern of embryonic dorsal development. Gerhart J, et al. **Development** 1989;107 Suppl:37-51 (65 ref.)

The localization of an inductive response. Gurdon JB. **Development** 1989 Jan;105(1):27-33

Differential gene expression in the anterior neural plate during gastrulation of Xenopus laevis. Jamrich M, et al. **Development** 1989 Apr;105(4):779-86

Development of segmentation in zebrafish. Kimmel CB, et al. **Development** 1988;104 Suppl:197-207 (42 ref.)

Fibronectin gene expression during limb cartilage differentiation. Kulyk WM, et al. **Development** 1989 Jul; 106(3):449-55

int-1--a proto-oncogene involved in cell signalling. McMahon AP, et al. **Development** 1989;107 Suppl:161-7 (39 ref.)

Models for positional signalling with application to the dorsoventral patterning of insects and segregation into different cell types. Meinhardt H. **Development** 1989;107 Suppl:169-80 (49 ref.)

Region-specific deposition of dermal proteins between dermis and epidermis during induction of chick feather and scale rudiments. Peterson CA, et al. **Development** 1989 Apr; 105(4):697-706

Modifying expression of the engrailed gene of Drosophila melanogaster. Poole SJ, et al. **Development** 1988;104 Suppl:85-93

The specification of heart mesoderm occurs during gastrulation in Xenopus laevis. Sater AK, et al. **Development** 1989 Apr;105(4):821-30

The role of fibroblast growth factor in early Xenopus development. Slack JM, et al. **Development** 1989;107 Suppl:141-8

Mesoderm induction and mesoderm-inducing factors in early amphibian development. Smith JC. **Development** 1989 Apr; 105(4):665-77 (105 ref.)

Inducing factors and the control of mesodermal pattern in Xenopus laevis. Smith JC, et al. **Development** 1989;107 Suppl:149-59

Autonomous expression of tissue-specific genes in dissociated sea urchin embryos. Stephens L, et al. **Development** 1989 Oct;107(2):299-307

A cell lineage analysis of segmentation in the chick embryo. Stern CD, et al. **Development** 1988;104 Suppl:231-44

Involvement of oocyte-coded message in cell differentiation control of early human embryos. Tesařik J. **Development** 1989 Feb;105(2):317-22

Segmentation in leech development. Weisblat DA, et al. **Development** 1988;104 Suppl:161-8

Formation and anatomy of the prestalk zone of Dictyostelium. Williams JG, et al. **Development** 1989;107 Suppl:91-7

Positional information revisited. Wolpert L. **Development** 1989;107 Suppl:3-12 (75 ref.)

XlHbox 8: a novel Xenopus homeo protein restricted to a narrow band of endoderm. Wright CV, et al. **Development** 1989 Apr;105(4):787-94

Complete adipose differentiation of 3T3 L1 cells in a chemically defined medium: comparison to serum-containing culture conditions. Hauner H. **Endocrinology** 1990 Aug;127(2):865-72

Type II pneumocytes in mixed cell culture of human lung: a light and electron microscopic study. Bingle L, et al. **Environ Health Perspect** 1990 Apr;85:71-80

Differentiation-linked expression of the plasminogen activator inhibitor type-2 gene in the human HL-60 promyelocytic cell line. Arndt AD, et al. **Exp Cell Res** 1989 Dec;185(2):473-81

Expression of markers of differentiation in a transformed human keratinocyte line induced by coculture with a fibroblast line. Kamalati T, et al. **Exp Cell Res** 1989 Dec; 185(2):453-63

Expression of mRNAs for collagens and other matrix components in dedifferentiating and redifferentiating human chondrocytes in culture. Elima K, et al. **FEBS Lett** 1989 Dec 4;258(2):195-8

Carboxyl methylation of 21-23 kDa membrane proteins in intact neuroblastoma cells is increased with differentiation. Haklai R, et al. **FEBS Lett** 1990 Jan 1;259(2):233-6

Protein kinase C during differentiation of human promyelocytic leukemia cell line, HL-60. Hashimoto K, et al. **FEBS Lett** 1990 Apr 9;263(1):31-4

Divergent changes of chromogranin A/secretogranin II levels in differentiating human neuroblastoma cells. Weiler R, et al. **FEBS Lett** 1990 Jun 4;265(1-2):27-9

Octaploid mouse embryos produced by electrofusion polarize and cavitate at the same time as normal embryos. Winkel GK, et al. **Gamete Res** 1989 Sep;24(1):93-107

A novel B-cell lineage-specific transcription factor present at early but not late stages of differentiation. Barberis A, et al. **Genes Dev** 1990 May;4(5):849-59

Differentiation-induced gene expression in 3T3-L1 preadipocytes: CCAAT/enhancer binding protein interacts with and activates the promoters of two adipocyte-specific genes. Christy RJ, et al. **Genes Dev** 1989 Sep;3(9):1323-35

Retinoic acid receptor expression vector inhibits differentiation of F9 embryonal carcinoma cells. Espeseth AS, et al. **Genes Dev** 1989 Nov;3(11):1647-56

Successive histochemical differentiation steps during postnatal development of the collecting duct in rabbit kidney. Minuth WW, et al. **Histochemistry** 1989;93(1):19-25

Hemopoietic stem cells and B-lymphocyte differentiation. Dorshkind K. **Immunol Today** 1989 Dec;10(12):399-401

Terminally differentiating epithelial tissues in primary explant culture: a model of growth and development. Merchant DJ. **In Vitro Cell Dev Biol** 1990 Jun;26(6):543-53 (49 ref.)

Two dimensional gel human protein databases offer a systematic approach to the study of cell proliferation and differentiation. Celis JE, et al. **Int J Dev Biol** 1989 Dec; 33(4):407-16 (33 ref.)

Development of the vertebrate small intestine and mechanisms of cell differentiation. Dauça M, et al. **Int J Dev Biol** 1990 Mar;34(1):205-18 (166 ref.)

Meiosis reinitiation as a model system for the study of cell division and cell differentiation. Guerrier P, et al. **Int J Dev Biol** 1990 Mar;34(1):93-109

Role of myogenin in myoblast differentiation and its regulation by fibroblast growth factor. Brunetti A, et al. **J Biol Chem** 1990 Apr 15;265(11):5960-3

Phospholipase A2 is a differentiation-dependent enzymatic activity for adipogenic cell line and adipocyte precursors in primary culture. Gao G, et al. **J Biol Chem** 1990 Feb 15;265(5):2431-4

Regulation of expression of the CD11b and CD18 subunits of the neutrophil adherence receptor during human myeloid differentiation. Hickstein DD, et al. **J Biol Chem** 1989 Dec 25;264(36):21812-7

Induction of tumor necrosis factor-alpha and its receptors during differentiation in myeloid leukemic cells along the monocytic pathway. A possible regulatory mechanism for TNF-alpha production. Michishita M, et al. **J Biol Chem** 1990 May 25;265(15):8751-9

Transcriptional repression of the mouse dihydrofolate reductase gene during muscle cell commitment. Schmidt EE, et al. **J Biol Chem** 1989 Dec 15;264(35):21247-56

Expression of keratin K14 in the epidermis and hair follicle: insights into complex programs of differentiation. Coulombe PA, et al. **J Cell Biol** 1989 Nov;109(5):2295-312

Terminal differentiation of ectodermal epithelial stem cells of Hydra can occur in G2 without requiring mitosis or S phase. Dübel S, et al. **J Cell Biol** 1990 Apr;110(4):939-45

Generation of a stable, posttranslationally modified microtubule array is an early event in myogenic differentiation. Gundersen GG, et al. **J Cell Biol** 1989 Nov; 109(5):2275-88

An immortalized osteogenic cell line derived from mouse teratocarcinoma is able to mineralize in vivo and in vitro. Kellermann O, et al. **J Cell Biol** 1990 Jan;110(1):123-32

States of developmental commitment of a mouse embryonal carcinoma cell line differentiating along a neural pathway. Lang E, et al. **J Cell Biol** 1989 Nov;109(5):2481-93

Loss of proliferative potential during terminal differentiation coincides with the decreased abundance of a subset of heterogeneous ribonuclear proteins. Minoo P, et al. **J Cell Biol** 1989 Nov;109(5):1937-46

In vitro development of hypertrophic chondrocytes starting from selected clones of dedifferentiated cells. Quarto R, et al. **J Cell Biol** 1990 Apr;110(4):1379-86

Synthesis of basic fibroblast growth factor upon differentiation of rat mammary epithelial to myoepithelial-like cells in culture. Barraclough R, et al. **J Cell Physiol** 1990 Aug;144(2):333-44

Three distinct effects of SV40 T-antigen gene transfection on cellular differentiation. Estervig DN, et al. **J Cell Physiol** 1990 Mar;142(3):552-8

Calcium regulation of growth and differentiation of normal human keratinocytes: modulation of differentiation competence by stages of growth and extracellular calcium. Pillai S, et al. **J Cell Physiol** 1990 May;143(2):294-302

Lectin binding of F9 embryonal carcinoma cells: evidence for population heterogeneity and developmentally regulated high-Mr cell surface proteins. Tienari J, et al. **J Cell Sci** 1989 Apr;92 (Pt 4):561-8

Regulatory factors of embryonic stem cells. Heath JK, et al. **J Cell Sci Suppl** 1988;10:257-66 (30 ref.)

Germ cell deficiency causes testis cord differentiation in reconstituted mouse fetal ovaries. Hashimoto N, et al. **J Exp Zool** 1990 Jan;253(1):61-70

IL-3 induces differentiation of bone marrow precursor cells to osteoclast-like cells. Barton BE, et al. **J Immunol** 1989 Nov 15;143(10):3211-6

Adenosine receptors are expressed during differentiation of monocytes to macrophages in vitro. Implications for regulation of phagocytosis. Eppell BA, et al. **J Immunol** 1989 Dec 15;143(12):4141-5

Unique pathway of IL-3-driven hemopoietic differentiation. Keller JR, et al. **J Immunol** 1989 Dec 15;143(12):4025-33

Wavelike isomorphic prepatterns in development. Nagorcka BN. **J Theor Biol** 1989 Mar 21;137(2):127-62 (81 ref.)

On the relationships between the rate of cytoskeletal stable assemblies turnover, stability of the differentiated state, development and aging. Wagner AP. **J Theor Biol** 1989 May 22;138(2):175-84

Growth and differentiating factors in hematology. Paris, 3-5 April 1989. **Leuk Res** 1990;14(8):673-733

Induced differentiation of K562 leukemia cells: a model for studies of gene expression in early megakaryoblasts. Alitalo R. **Leuk Res** 1990;14(6):501-14 (124 ref.)

Differentiation trajectories in normal and malignant cells. Matioli GT. **Med Hypotheses** 1990 Jan;31(1):71-80 (33 ref.)

Cultures as epithelial models: porous-bottom culture dishes for studying transport and differentiation. Handler JS, et al. **Methods Enzymol** 1989;171:736-44

Mechanisms underlying the organizer formation in Bufo arenarum embryos. Manes ME, et al. **Microsc Electron Biol Celular** 1989 Jun;13(1):73-83

Early activation of endogenous pp60src kinase activity during neuronal differentiation of cultured human neuroblastoma cells. Bjelfman C, et al. **Mol Cell Biol** 1990 Jan;10(1):361-70

Effect of myogenic and adipogenic differentiation on expression of colony-stimulating factor genes. Harrington MA, et al. **Mol Cell Biol** 1990 Sep;10(9):4948-52

Differentiation of mouse erythroleukemia cells is blocked by late up-regulation of a c-myb transgene. McClinton D, et al. **Mol Cell Biol** 1990 Feb;10(2):705-10

Induction of macrophage colony-stimulating factor-dependent growth and differentiation after introduction of the murine c-fms gene into FDC-P1 cells. Rohrschneider LR, et al. **Mol Cell Biol** 1989 Nov; 9(11):5081-92

Enhanced translation and increased turnover of c-myc proteins occur during differentiation of murine erythroleukemia cells. Spotts GD, et al. **Mol Cell Biol** 1990 Aug;10(8):3952-64

Hemin-induced transcriptional activation of the HSP70 gene during erythroid maturation in K562 cells is due to a heat shock factor-mediated stress response. Theodorakis NG, et al. **Mol Cell Biol** 1989 Aug;9(8):3166-73

Differential trans activation associated with the muscle regulatory factors MyoD1, myogenin, and MRF4. Yutzey KE, et al. **Mol Cell Biol** 1990 Aug;10(8):3934-44

Cell proliferation inhibited by MyoD1 independently of myogenic differentiation. Sorrentino V, et al. **Nature** 1990 Jun 28;345(6278):813-5

A Purkinje cell differentiation marker shows a partial DNA sequence homology to the cellular sis/PDGF2 gene [published erratum appears in Neuron 1989 Sep;3(3):following 385] Oberdick J, et al. **Neuron** 1988 Jul; 1(5):367-76

Elongation and maturation of c-myc RNA is inhibited by

differentiation inducing agents in HL60 cells. Eick D. **Nucleic Acids Res** 1990 Mar 11;18(5):1199–205

The embryonal carcinoma stem cell Ela–like activity involves a differentiation–regulated transcription factor. La Thangue NB, et al. **Nucleic Acids Res** 1990 May 25;18(10):2929–38

Introduction of v–abl oncogene induces monocytic differentiation of an IL–3–dependent myeloid progenitor cell line. Keller JR, et al. **Oncogene** 1990 Apr;5(4):549–55

Complexity of the immediate early response of myeloid cells to terminal differentiation and growth arrest includes ICAM–1, Jun–B and histone variants. Lord KA, et al. **Oncogene** 1990 Mar;5(3):387–96

Nucleotide sequence and expression of a cDNA encoding MyD88, a novel myeloid differentiation primary response gene induced by IL6. Lord KA, et al. **Oncogene** 1990 Jul; 5(7):1095–7

Isolation of human fos–related genes and their expression during monocyte–macrophage differentiation. Matsui M, et al. **Oncogene** 1990 Mar;5(3):249–55

Differentiation of F9 cells is independent of c–myc expression. Nishikura K, et al. **Oncogene** 1990 Jul;5(7):981–8

In vitro differentiation of epithelial cells from cervical neoplasias resembles in vivo lesions. Rader JS, et al. **Oncogene** 1990 Apr;5(4):571–6

Inositol lipids and phosphates in the regulation of the growth and differentiation of haemopoietic and other cells. Michell RH, et al. **Philos Trans R Soc Lond [Biol]** 1990 Mar 12; 327(1239):193–207 (89 ref.)

Transforming growth factor–beta: multifunctional regulator of differentiation and development. Roberts AB, et al. **Philos Trans R Soc Lond [Biol]** 1990 Mar 12; 327(1239):145–54 (40 ref.)

Interleukin 6 dependence of spontaneous in vitro differentiation of B cells from patients with IgM gammapathy. Levy Y, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3309–13

Retinoic acid, dibutyryl–cAMP, and differentiation affect the expression of retinoic acid receptors in F9 cells. Martin CA, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4804–8

Origin of osteoclasts: mature monocytes and macrophages are capable of differentiating into osteoclasts under a suitable microenvironment prepared by bone marrow–derived stromal cells. Udagawa N, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7260–4

Cytokines and lipocortins in inflammation and differentiation. Proceedings of the International Conference on Molecular and Cellular Biology of IL–1, TNF, and Lipocortins in Inflammation and Differentiation. Siena, Italy, October 22–25, 1989. Proceedings. **Prog Clin Biol Res** 1990; 349:1–444

Morphologic and biochemical alterations in rat prostatic tumors induced by fetal urogenital sinus mesenchyme. Chung LW, et al. **Prostate** 1990;17(2):165–74

How fixed is the differentiated state? Lessons from heterokaryons. Blau HM. **Trends Genet** 1989 Aug; 5(8):268–72 (56 ref.)

Polyamines and their derivatives as modulators in growth and differentiation. Canellakis ZN, et al. **Yale J Biol Med** 1989 Sep–Oct;62(5):481–91 (41 ref.)

[Cell multiplication, differentiation, and transformation. 15th meeting of the INRA Development Group. Paris 24–26 May 1989. Proceedings] **Reprod Nutr Dev** 1990; 30(3):281–458 **(Fre)**

[Early development of the thymus–dependent cells attributable to recipient micro–environment in bone marrow chimera mice] Iwabuchi C. **Hokkaido Igaku Zasshi** 1989 Nov;64(6):777–91 (Eng. Abstr.) **(Jpn)**

[Neural induction in amphibian embryos involves cross–talk of signal pathways of protein kinase C and adenylate cyclase] Shiokawa K. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(3):270–4 **(Jpn)**

[Roles of microfilaments and microtubules in morphogenesis of multicellular animals] Takeuchi S. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(12 Suppl):1749–56 **(Jpn)**

[Induction of differentiation of leukemic cells] Butenko ZA, et al. **Eksp Onkol** 1989;11(6):20–7 (44 ref.) (Eng. Abstr.) **(Rus)**

[Multiple drug resistance and differentiation in the population of transformed dog kidney cells MDCK] Stavrovskaia AA, et al. **Mol Gen Mikrobiol Virusol** 1990 May;(5):3–7 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

The in vivo and in vitro anti–inflammatory activity of CD271: a new retinoid–like modulator of cell differentiation. Hensby C, et al. **Agents Actions** 1990 Jan; 29(1–2):56–8

Effects of histamine, granulocyte colony–stimulating factor and db–cAMP on the differentiation of HL–60 cells. Tasaka K, et al. **Agents Actions** 1990 Apr;30(1–2):240–2

Interactions between hematopoietic growth factors in normal and leukemic stem cell differentiation. Moore MA. **Ann N Y Acad Sci** 1989;567:171–81

Interferons and the differentiation of Friend cells. Rossi GB, et al. **Ann N Y Acad Sci** 1989;567:253–8 (26 ref.)

Effects of TGF beta on normal and malignant mammary epithelium. Zugmaier G, et al. **Ann N Y Acad Sci** 1990; 593:272–5

The effects of cytosine arabinoside and GM–CSF in leukemic cells in vitro. Gao XZ, et al. **Anticancer Res** 1989 Jul–Aug; 9(4):1053–5

New synthetic retinoids: effects on proliferation and differentiation. Nastruzzi C, et al. **Anticancer Res** 1989 Sep–Oct;9(5):1377–83

Effectiveness of differentiation inducers in combination on human neuroblastoma cells in vitro. Rocchi P, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1605–9

Novel vitamin D3 derivatives, 26–homo–delta 22–dehydro–1 alpha,25(S)–dihydroxyvitamin D3 and 26–homo–delta 22–dehydro–1 alpha,25(R)–dihydroxyvitamin D3: preferential activity in c–myc mRNA production and in induction of phenotypic differentiation of HL–60 cells. Koizumi T, et al. **Arch Biochem Biophys** 1990 Feb 1; 276(2):310–6

Deletion of carboxy–terminal residues of murine granulocyte–macrophage colony–stimulating factor results in a loss of biologic activity and altered glycosylation. LaBranche CC, et al. **Arch Biochem Biophys** 1990 Jan; 276(1):153–9

Effects of 1,25–dihydroxyvitamin D3 and its analogs on butyrate–induced differentiation of HT–29 human colonic carcinoma cells and on the reversal of the differentiated phenotype. Tanaka Y, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):415–23

Increasing potentiality in N.G.F. treated PC12 cells. Peirone SM, et al. **Arch Ital Anat Embriol** 1989 Jul–Sep; 94(3):289–99

Effects of human recombinant interleukin 5 and 3 on the differentiation of cord blood–derived eosinophils and basophils. Ebisawa M, et al. **Arerugi** 1989 May;38(5):442–5

Autocrine regulation of terminal differentiation by interleukin–6 in the pluripotent KU812 cell line. Navarro S, et al. **Biochem Biophys Res Commun** 1990 May 31; 169(1):184–91

Retinoic acid–induced differentiation–specific, C–kinase–dependent phosphorylation of cytosolic 44 and 32 kDa proteins in HL–60 cells. Tanaka Y, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):1253–60

Induction of differentiation of HL–60 cells by protein kinase C inhibitor, K252a. Taoka T, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1151–6

A retinoic acid responsive gene, MK, produces a secreted protein with heparin binding activity. Tomomura M, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):603–9

Changes in the expression of elastase and cathepsin B with differentiation of U937 promonocytes by GMCSF. Ward CJ, et al. **Biochem Biophys Res Commun** 1990 Mar 16; 167(2):659–64

The bistratenes: new cytotoxic marine macrolides which induce some properties indicative of differentiation in HL–60 cells. Watters D, et al. **Biochem Pharmacol** 1990 May 15;39(10):1609–14

Rescue of the Li+–induced delay of embryonic myogenesis in vitro by added inositol. Hausman RE, et al. **Biochim Biophys Acta** 1989 Sep 4;1013(1):92–6

Phorbol esters and chemotactic factor induce distinct changes in cytoplasmic Ca2+ and pH in granulocytic like HL60 cells. Ladoux A, et al. **Biochim Biophys Acta** 1989 Sep 4;1013(1):55–9

Differential effects of liposome–entrapped desferrioxamine on proliferation and erythroid differentiation of murine erythroleukemic Friend cells. Nastruzzi C, et al. **Biochim Biophys Acta** 1989 Sep 4;1013(1):36–41

Stimulus–response coupling in FMLP–stimulated U937 monocytes: effect of differentiation on Gi2 expression. Pollock K, et al. **Biochim Biophys Acta** 1990 Jan 23; 1051(1):71–7

Bryostatin 1 induces differentiation of B–chronic lymphocytic leukemia cells. Drexler HG, et al. **Blood** 1989 Oct;74(5):1747–57

Induction of differentiation in blast cells and leukemia colony–forming cells from patients with acute myeloid leukemia. Howell AL, et al. **Blood** 1990 Feb 1;75(3):721–9

Monocytoid differentiation of freshly isolated human myeloid leukemia cells and HL–60 cells induced by the glutamine antagonist acivicin. Nichols KE, et al. **Blood** 1989 Oct; 74(5):1728–37

The role of calcium in differentiation of leukemic cell lines. Rephaeli A, et al. **Cancer Biochem Biophys** 1990 Apr; 11(2):119–25

Growth and differentiation control. Francis GE, et al. **Cancer Chemother Biol Response Modif** 1987;9:502–29 (202 ref.)

Growth and differentiation control. Francis GE, et al. **Cancer Chemother Biol Response Modif** 1988;10:507–44 (166 ref.)

WEHI–3B D+ Y1 leukemia cells as a model system to assess the induction of differentiation in vivo. Gamba–Vitalo C, et al. **Cancer Commun** 1989;1(3):157–65

Effects of the monoamine oxidase inhibitor, tranylcypromine, on induction of HL60 cell differentiation by hexamethylene bisacetamide and N–acetyl–1,6–diaminohexane. Snyder SW, et al. **Cancer Commun** 1990;2(7):231–6

Mechanism of the induction of the differentiation of HL–60 leukemia cells by antifolates. Sokoloski JA, et al. **Cancer Commun** 1989;1(3):199–207

Detection of 5–methylcytosine removal from DNA of Friend erythroleukemia cells following exposure to several differentiating agents. Kuykendall JR, et al. **Cancer Lett** 1989 Sep 15;47(1–2):149–52

Differentiation of U–937 histiocytic lymphoma cells towards mature neutrophilic granulocytes by dibutyryl cyclic adenosine–3',5'–monophosphate. Laskin DL, et al. **Cancer Res** 1990 Jan 1;50(1):20–5

In vitro differentiation of human neuroblastoma cells caused by vasoactive intestinal peptide. Pence JC, et al. **Cancer Res** 1990 Aug 15;50(16):5177–83

Synergistic action of activin A and hexamethylene bisacetamide in differentiation of murine erythroleukemia cells. Yamashita T, et al. **Cancer Res** 1990 Jun 1; 50(11):3182–5

c–myc down regulation and precommitment in HL–60 cells due to bromodeoxyuridine. Yen A, et al. **Cancer Res** 1990 Mar 1;50(5):1411–20

Effect of homoharringtonine on proliferation and differentiation of human leukemic cells in vitro. Zhou JY, et al. **Cancer Res** 1990 Apr 1;50(7):2031–5

Rabbit endometrium in organ culture: morphological evidence for progestational differentiation in vitro. Hohn HP, et al. **Cell Tissue Res** 1989 Sep;257(3):505–18

Cell density and cell cycle effects on retinoic acid–induced embryonal carcinoma cell differentiation. Berg RW, et al. **Dev Biol** 1990 Mar;138(1):123–35

The cholinergic neuronal differentiation factor from heart cell conditioned medium is different from the cholinergic factors in sciatic nerve and spinal cord. Rao MS, et al. **Dev Biol** 1990 May;139(1):65–74

Potentiation by the lithium ion of morphogenetic responses to a Xenopus inducing factor. Cooke J, et al. **Development** 1989 Mar;105(3):549–58

Modulation by sodium butyrate of the differentiated status of a clonal pancreatic B–cell line (RIN). Gardner SL, et al. **Diabetes Res** 1989 Oct;12(2):93–9

Growth hormone–dependent events in the adipose differentiation of 3T3–F442A fibroblasts: modulation of macromolecular synthesis. Guller S, et al. **Endocrinology** 1989 Nov;125(5):2360–7

Suramin–induced differentiation of the human colic adenocarcinoma cell clone HT29–D4 in serum–free medium. Fantini J, et al. **Exp Cell Res** 1990 Jul; 189(1):109–17

Cell differentiation and altered IMP dehydrogenase expression induced in human T–lymphoblastoid leukemia cells by mycophenolic acid and tiazofurin. Kiguchi K, et al. **Exp Cell Res** 1990 Mar;187(1):47–53

Ascorbic acid phosphate stimulates type IV collagen synthesis and accelerates adipose conversion of 3T3–L1 cells. Ono M, et al. **Exp Cell Res** 1990 Apr;187(2):309–14

Effects of gamma–interferon on the growth, morphology, and membrane and cytoskeletal proteins expression of Lan–1 cells. Parodi MT, et al. **Exp Cell Res** 1989 Dec; 185(2):327–41

Thyroid hormones induce hemopoietic pluripotent stem cell differentiation toward erythropoiesis through the production of pluripoietin–like factors. Sainteny F, et al. **Exp Cell Res** 1990 Mar;187(1):174–6

DMSO and retinoic acid induce HL–60 differentiation by different but converging pathways. Van Roozendaal KE, et al. **Exp Cell Res** 1990 Sep;190(1):137–40

Retinoic acid induced differentiated neuroblastoma cells show increased expression of the beta A4 amyloid gene of Alzheimer's disease and an altered splicing pattern. König G, et al. **FEBS Lett** 1990 Sep 3;269(2):305–10

The specific inhibitor of protein kinase C, 1–(5–isoquinolinylsulfonyl)–2–methylpiperazine (H7), induces morphological change and cell differentiation of human neural crest–derived cell lineages. Parodi MT, et al. **FEBS Lett** 1990 Aug 20;269(1):4–6

Differentiation of intestinal epithelial cell line (IEC–18) by an acid extract of rat small intestine. Shintani T, et al. **FEBS Lett** 1989 Sep 25;255(2):423–6

Inhibition of development of Na(+)–dependent hexose transport in renal epithelial LLC–PK1 cells by differentiation–stimulating factor for myeloid leukemic cells/leukemia inhibitory factor. Tomida M, et al. **FEBS Lett** 1990 Jul 30;268(1):261–4

Interactions of hemopoietic cytokines on differentiation of HL–60 cells. Nerve growth factor is a basophilic lineage–specific co–factor. Tsuda T, et al. **Int Arch Allergy Appl Immunol** 1990;91(1):15–21

Modulation of differentiation and proliferation in human colon carcinoma cells by transforming growth factor beta 1 and beta 2. Chakrabarty S, et al. **Int J Cancer** 1990 Sep 15;46(3):493–9

Effects of NGF and dibutyryl cAMP on neuronal differentiation of embryonal carcinoma cells. Sharma S, et al. **Int J Dev Neurosci** 1990;8(1):33–45

Cell type expression mediated by cell cycle events, and signaled by mitogens and growth inhibitors. Yamada T. **Int Rev Cytol** 1989;117:215–55 (208 ref.)

Effect of retinoic acid on proliferation and differentiation of cultured chondrocytes in terminal differentiation. Takishita Y, et al. **J Biochem (Tokyo)** 1990 Apr; 107(4):592–6

Characterization and NH2–terminal amino acid sequence of natural human interleukin for DA cells: leukemia inhibitory factor. Differentiation inhibitory activity secreted by a T lymphoma cell line. Gascan H, et al. **J Biol Chem** 1989 Dec 25;264(36):21509–15

Role of ceramide as a lipid mediator of 1 alpha,25–dihydroxyvitamin D3–induced HL–60 cell differentiation. Okazaki T, et al. **J Biol Chem** 1990 Sep 15;265(26):15823–31

Adipose conversion of 3T3–L1 cells in a serum–free culture

system depends on epidermal growth factor, insulin-like growth factor I, corticosterone, and cyclic AMP. Schmidt W, et al. **J Biol Chem** 1990 Sep 15;265(26):15489–95

24- and 26-homo-1,25-dihydroxyvitamin D3 analogs: potencies on in vitro bone resorption differ from those reported for cell differentiation. Paulson SK, et al. **J Bone Miner Res** 1990 Feb;5(2):201–6

Differential effects of fibroblast growth factor and tumor promoters on the initiation and maintenance of adipocyte differentiation. Navre M, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1857–63

Effect of butylated hydroxytoluene on bilineage differentiation of the human HL-60 myeloblastic leukemia cell. Burns CP, et al. **J Cell Physiol** 1990 Jul;144(1):36–41

Human keratinocyte growth factor activity on proliferation and differentiation of human keratinocytes: differentiation response distinguishes KGF from EGF family. Marchese C, et al. **J Cell Physiol** 1990 Aug;144(2):326–32

Macrophage-colony-stimulating factor (CSF-1) modulates a differentiation-specific inward-rectifying potassium current in human leukemic (HL-60) cells. Wieland SJ, et al. **J Cell Physiol** 1990 Mar;142(3):643–51

Effect of second-messenger modulators in K-562 cell differentiation: dual action of calcium/phospholipid-dependent protein kinase in the process of differentiation. Yumoto Y, et al. **J Cell Physiol** 1990 May;143(2):243–50

Effects of vitamin A on growth and differentiation of human tracheobronchial epithelial cell cultures in serum-free medium. Chopra DP, et al. **J Cell Sci** 1989 May;93 (Pt 1):133–42

Induction of differentiation of HL-60 cells along the monocytic pathway by 5-methyltetrahydrofolate. Bernabei PA, et al. **J Chemother** 1989 Dec;1(6):359–64

Cultured human ectocervical epithelial cell differentiation is regulated by the combined direct actions of sex steroids, glucocorticoids, and retinoids. Gorodeski GI, et al. **J Clin Endocrinol Metab** 1990 Jun;70(6):1624–30

Effects of 13 cis-retinoic acid on growth and differentiation of human follicular carcinoma cells (UCLA R0 82 W-1) in vitro. Van Herle AJ, et al. **J Clin Endocrinol Metab** 1990 Sep;71(3):755–63

Stepwise progression of B lineage differentiation supported by interleukin 7 and other stromal cell molecules. Hayashi S, et al. **J Exp Med** 1990 May 1;171(5):1683–95

Pigeon crop-sac as a model system for studying the direct and indirect effects of hormones and growth factors on cell growth and differentiation in vivo. Nicoll CS. **J Exp Zool Suppl** 1990;4:72–7 (25 ref.)

Effects of combinations of transforming growth factor-beta 1 and tumor necrosis factor on induction of differentiation of human myelogenous leukemic cell lines. Kamijo R, et al. **J Immunol** 1990 Feb 15;144(4):1311–6

Effect of cyclosporin A on lymphopoiesis. II. Developmental defects of immature and mature thymocytes in fetal thymus organ cultures treated with cyclosporin A. Kosugi A, et al. **J Immunol** 1989 Nov 15;143(10):3134–40

Initial characterization of a cytokine which induces differentiation and cytolytic activity in HL-60 promyelocytic leukemia cells: evidence that the cytokine is distinct from other known differentiation-active cytokines. Leftwich JA, et al. **J Leukoc Biol** 1990 Jan; 47(1):87–96

Retinobenzoic acids. 4. Conformation of aromatic amides with retinoidal activity. Importance of trans-amide structure for the activity. Kagechika H, et al. **J Med Chem** 1989 Oct;32(10):2292–6

Effects of inhibitors of protein synthesis and intracellular transport on the gamma-aminobutyric acid agonist-induced functional differentiation of cultured cerebellar granule cells. Belhage B, et al. **J Neurochem** 1990 Oct;55(4):1107–13

Increased N-myc mRNA expression associated with dibutyryl cyclic AMP induced neuroblastoma differentiation. Berman SA, et al. **J Neurogenet** 1989 Nov; 6(2):75–86

Induction of the terminal differentiation of a human squamous cell carcinoma by steroids with glucocorticoid activity. Violette SM, et al. **J Steroid Biochem** 1989 Nov; 33(5):1001–5

Okadaic acid and phorbol esters: comparative effects of these tumor promoters on cell transformation, intercellular communication and differentiation in vitro. Katoh F, et al. **Jpn J Cancer Res** 1990 Jun-Jul;81(6–7):590–7

Tumor necrosis factor changes sensitivity of differentiation of mouse leukemia M1 cells by lipopolysaccharide. Nakaya K, et al. **Jpn J Cancer Res** 1990 Apr;81(4):396–402

Proliferation and differentiation of erythroleukemia cell line (ELM-I-1) in response to erythropoietin and interleukin 3. Shiozaki M, et al. **Leuk Res** 1990;14(3):287–91

Studies on the relationship between protein kinase C and differentiation of human promyelocytic leukemia cells induced by retinoic acid. Wu XZ, et al. **Leuk Res** 1989; 13(10):869–74

Characterization of sublines of HL-60 human leukemia cells resistant to induction of differentiation by butyric acid. Fischkoff SA, et al. **Leukemia** 1990 Apr;4(4):302–6

Rapid and transient decrease of N-myc expression in retinoic acid-induced differentiation of OTF9 teratocarcinoma stem cells. Kato K, et al. **Mol Cell Biol** 1990 Feb;10(2):486–91

Induction of the granulocyte-macrophage colony-stimulating factor (CSF) receptor by granulocyte CSF increases the differentiative options of a murine hematopoietic progenitor cell. Kreider BL, et al. **Mol Cell Biol** 1990 Sep;10(9):4846–53

Induction of differentiation in v-Ha-ras-transformed MDCK cells by prostaglandin E2 and 8-bromo-cyclic AMP is associated with a decrease in steady-state level of inositol 1,4,5-trisphosphate. Wu YY, et al. **Mol Cell Biol** 1990 Jan; 10(1):57–67

Study of differentiation of fresh human leukemic cells by low dose cytosine arabinoside (LD Ara-C) and 12-O-tetradecanoylphorbol-13-acetate (TPA). Kuliczkowski K, et al. **Neoplasma** 1989;36(5):589–97

Influence of 5-azacytidine on differentiation and growth in rat nervous system tumor cell lines. Stark M, et al. **Neurotoxicol Teratol** 1989 Nov-Dec;11(6):557–61

Growth factors in differentiation and development. Proceedings of a symposium. 26 and 27 April 1989. **Philos Trans R Soc Lond [Biol]** 1990 Mar 12; 327(1239):65–221

Growth factors involved in lymphocyte differentiation. Kinashi T, et al. **Philos Trans R Soc Lond [Biol]** 1990 Mar 12;327(1239):117–25

The induction and inhibition of differentiation in normal and leukaemic cells. Metcalf D. **Philos Trans R Soc Lond [Biol]** 1990 Mar 12; 327(1239):99–109 (42 ref.)

Transmembrane domain of the envelope gene of a polycythemia-inducing retrovirus determines erythropoietin-independent growth. Chung SW, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7957–60

Oxidized low density lipoprotein induces differentiation and adhesion of human monocytes and the monocytic cell line U937. Frostegård J, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):904–8

Role of 1,25-dihydroxycholecalciferol in growth-plate cartilage: inhibition of terminal differentiation of chondrocytes in vitro and in vivo. Kato Y, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6522–6

Inhibition of protein kinase C induces differentiation in Neuro-2a cells. Miñana MD, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4335–9

Macrophage-colony-stimulating factor (CSF-1) induces proliferation, chemotaxis, and reversible monocytic differentiation in myeloid progenitor cells transfected with the human c-fms/CSF-1 receptor cDNA. Pierce JH, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5613–7

Approaches to more effective induction of cytodifferentiation of transformed cells and potential for cancer treatment. Marks PA, et al. **Rinsho Ketsueki** 1990 Apr;31(4):401–8 (63 ref.)

Chemically induced growth inhibition and cell cycle perturbations in cultures of differentiating rodent embryonic cells. Ribeiro PL, et al. **Toxicol Appl Pharmacol** 1990 Jun 15;104(2):200–11

Inhibition of pancreatic islet cell differentiation and proliferation by cyclosporine A. Healey M, et al. **Transplant Proc** 1990 Apr;22(2):861–2

[Characterization of cultivated rat bone marrow cells modified by CSF-1 with lectins. A soybean agglutinin binding 30-kDa glycoprotein as a marker of mature macrophages] Krugluger W. **Wien Klin Wochenschr** 1989 Oct 27;101(20):710–4 **(Ger)**

[Suppressive effect of crocidolite fibers on the differentiation of HL-60 cells induced with DMSO] Ueki A, et al. **Nippon Eiseigaku Zasshi** 1990 Feb;44(6):1107–11 (Eng. Abstr.) **(Jpn)**

[Experimental study on maturational therapy of osteosarcoma cell] Otsuka T, et al. **Nippon Seikeigeka Gakkai Zasshi** 1990 May;64(5):421–9 (Eng. Abstr.) **(Jpn)**

[Effects of monoclonal antibodies to bovine nerve growth factor on NGF-induced cell differentiation in culture] Kakpakova ES, et al. **Biull Eksp Biol Med** 1989 Nov; 108(11):618–20 (Eng. Abstr.) **(Rus)**

GENETICS

A role of ras oncogenes in carcinogenesis and differentiation. Spandidos DA, et al. **Adv Exp Med Biol** 1990;265:127–31 (24 ref.)

Direct transdifferentiation: can cells change their phenotype without dividing? Beresford WA. **Cell Differ Dev** 1990 Feb; 29(2):81–93 (98 ref.)

Genomic adaptability in somatic cell specialization. **Dev Biol (N Y 1985)** 1989;6:1–236

The molecular biology of cell determination and cell differentiation. **Dev Biol (N Y 1985)** 1988;5:3–425

Genomic activation in differentiated somatic cells. DiBerardino MA. **Dev Biol (N Y 1985)** 1989;6:175–98 (83 ref.)

Fibroblast growth factor during mesoderm induction in the early chick embryo. Mitrani E, et al. **Development** 1990 Jun;109(2):387–93

Ectopic expression of c-jun leads to differentiation of P19 embryonal carcinoma cells. de Groot RP, et al. **EMBO J** 1990 Jun;9(6):1831–7

MyoD expression in the forming somites is an early response to mesoderm induction in Xenopus embryos. Hopwood ND, et al. **EMBO J** 1989 Nov;8(11):3409–17

Polyploidy in differentiation and evolution. Nagl W. **Int J Cell Cloning** 1990 Jul;8(4):216–23 (24 ref.)

Structure of a retinoic acid-responsive gene, MK, which is transiently activated during the differentiation of embryonal carcinoma cells and the mid-gestation period of mouse embryogenesis. Matsubara S, et al. **J Biol Chem** 1990 Jun 5;265(16):9441–3

Stability of anticancer activity induced by cellular differentiation. Maercklein PB, et al. **Lab Invest** 1990 Feb; 62(2):196–201

Posttranscriptional control of human homeobox gene expression in induced NTERA-2 embryonal carcinoma cells. Simeone A, et al. **Mol Reprod Dev** 1989;1(2):107–15

MyoD binds cooperatively to two sites in a target enhancer sequence: occupancy of two sites is required for activation. Weintraub H, et al. **Proc Natl Acad Sci U S A** 1990 Aug; 87(15):5623–7

[A new star in the heavens of epidermal proteins: loricrin—what is it?] Hohl D. **Hautarzt** 1990 Jun; 41(6):299–301 (9 ref.) (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

The level of differentiation of megakaryocyte progenitors and the subsequent modulation of megakaryocyte antigens on developing colony cells. Jackson H, et al. **Leukemia** 1990 Jul;4(7):490–3

PHYSIOLOGY

Growth factors in early embryogenesis. Whitman M, et al. **Annu Rev Cell Biol** 1989;5:93–117 (134 ref.)

The relationship of the internal security system to group level organization in Miller's living systems theory. Walker JF, et al. **Behav Sci** 1990 Apr;35(2):147–53 (24 ref.)

Microtubules and specification of the dorsoventral axis in frog embryos. Elinson RP. **Bioessays** 1989 Nov;11(5):124–7 (29 ref.)

Development and innervation of the paratympanic organ (Vitali organ) in chick embryos. von Bartheld CS. **Brain Behav Evol** 1990;35(1):1–15

Cation channels in apical membrane of fetal alveolar epithelium. Orser B, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S3

Nuclear lipids in Friend cells. Shifted profile of diacylglycerol during erythroid differentiation induced by DMSO. Trubiani O, et al. **Cell Biol Int Rep** 1990 Jun; 14(6):559–66

Growth factors and their receptors in differentiation and early murine development. Mummery CL, et al. **Cell Differ Dev** 1990 Apr;30(1):1–18 (126 ref.)

The role of growth factors in embryonic induction in amphibians. Dawid IB, et al. **Curr Top Dev Biol** 1990; 24:261–88 (132 ref.)

Stepwise aggregation, compaction, and differentiation of uncompacted F9 cells. Littlefield JW. **Dev Genet** 1989; 10(5):402–10

Development of the human mesencephalic trigeminal nucleus: a morphometric study. Hamano S, et al. **Dev Med Child Neurol** 1990 Jul;32(7):621–8

Range and stability of cell fate determination in isolated sea urchin blastomeres. Livingston BT, et al. **Development** 1990 Mar;108(3):403–10

The role of the dorsal lip in the induction of heart mesoderm in Xenopus laevis. Sater AK, et al. **Development** 1990 Mar; 108(3):461–70

Mesoderm induction and the control of gastrulation in Xenopus laevis: the roles of fibronectin and integrins. Smith JC, et al. **Development** 1990 Feb;108(2):229–38

Distribution and functional role of laminin during induction of the embryonic axis in the chick embryo. Zagris N, et al. **Differentiation** 1990 Apr;43(2):81–6

Pathways of differentiation of airway epithelial cells. Nettesheim P, et al. **Environ Health Perspect** 1990 Apr; 85:317–29

Differentiation and retrodifferentiation of U937 cells: reversible induction and suppression of intermediate filament protein synthesis. Hass R, et al. **Eur J Cell Biol** 1990 Apr;51(2):265–71

Replicative senescence and differentiated gene expression in cultured adrenocortical cells. Hornsby PJ, et al. **Exp Gerontol** 1989;24(5–6):539–58

The molecular genetics of differentiation. Ely B, et al. **Genetics** 1989 Nov;123(3):427–9

19th annual UCLA symposium: Polyamines in cell proliferation and differentiation. Abstracts. **J Cell Biochem Suppl** 1990;14C:81–111

19th annual UCLA symposium: Growth and differentiation factors in development. Abstracts. **J Cell Biochem Suppl** 1990;14E:31–130

19th annual UCLA symposium: Signal transduction and gene activation in development. Abstracts. **J Cell Biochem Suppl** 1990;14E:131–90

Regulation of the expression of vimentin gene during the differentiation of mouse myeloid leukemia cells. Tsuru A, et al. **J Cell Biol** 1990 May;110(5):1655–64

Heart induction in wild-type and cardiac mutant axolotls (Ambystoma mexicanum). Smith SC, et al. **J Exp Zool** 1990 Apr;254(1):48–54

Adherence of Staphylococcus aureus to cultured epidermal cells during differentiation. Miyake Y, et al. **J Med Microbiol** 1990 May;32(1):9–14

Scanning electron microscopy of tympanic membrane epithelium during in vitro migration. Boxall JD, et al. **J Otolaryngol** 1990 Feb;19(1):57–61

Cytoplasmic projections of trophectoderm distinguish implanting from preimplanting and implantation-delayed mouse blastocytes. McRae AC, et al. **J Reprod Fertil** 1990

Jan;88(1):31–40
Hyperoxidant states cause microbial cell differentiation by cell isolation from dioxygen. Hansberg W, et al. **J Theor Biol** 1990 Jan 23;142(2):201–21
Morphometric study of human cerebral cortex development. Huttenlocher PR. **Neuropsychologia** 1990;28(6):517–27 (47 ref.)
[Acrosyringial keratinocytes—no abnormal differentiation in psoriasis vulgaris] Wollina U, et al. **Dermatol Monatsschr** 1990;176(2–3):151–5 (Eng. Abstr.) **(Ger)**
[Differentiation behavior of human vaginal epithelium exemplified by keratin expression] Schaller G, et al. **Geburtshilfe Frauenheilkd** 1990 May;50(5):397–402 (Eng. Abstr.) **(Ger)**
[Changes in the intracellular concentration of cyclic nucleotides in the differentiation of neuroblastoma cells] Busse E, et al. **Onkologie** 1990 Feb;13(1):12–6 (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

[Estimation of the critical level of an arrest in differentiation of human hematopoietic stem cells] Solov'ev VIu, et al. **Radiobiologiia** 1989 Nov–Dec;29(6):835–8 (Eng. Abstr.) **(Rus)**

CELL DIVISION

Growth and differentiation signals as determinants of cancer cell proliferation. Bloch A. **Adv Enzyme Regul** 1989; 28:359–74 (144 ref.)
Protein kinase C in cell growth and differentiation. Kuo JF, et al. **Adv Exp Med Biol** 1989;255:8–20
Paradoxically slow preadipocyte replication and differentiation in corpulent rats. Shillabeer G, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):E368–76
[3H]thymidine incorporation does not correlate with growth state in cultured alveolar type II cells. Clement A, et al. **Am J Respir Cell Mol Biol** 1990 Aug;3(2):159–64
Cytokines as modulators of cell proliferation in fibrotic diseases. Libby P, et al. **Am Rev Respir Dis** 1989 Oct; 140(4):1114–7 (31 ref.)
Computerized determination of growth kinetic curves and doubling times from cells in microculture. Reile H, et al. **Anal Biochem** 1990 Jun;187(2):262–7
Chemiluminescent assay for determination of viable cell density of yeast, mammalian, and plant cells. Yamashoji S, et al. **Anal Biochem** 1989 Aug 15;181(1):149–52
Pathways in which growth factors and oncogenes interact in epithelial cell mitogenic signal transduction. Aaronson SA, et al. **Ann N Y Acad Sci** 1989;567:122–9
Dynamics of mitosis and cleavage. Inoué S. **Ann N Y Acad Sci** 1990;582:1–14 (34 ref.)
Association of actin and myosin in the contractile ring. Otto JJ, et al. **Ann N Y Acad Sci** 1990;582:179–84 (8 ref.)
Growth kinetic studies of methionine dependence in co-culture of monolayer and anchorage independent mouse cell lines. Djurhuus R, et al. **Anticancer Res** 1989 Nov–Dec; 9(6):1611–5
Homogeneous growth of tumor cell colonies in agar containing glass capillaries. Lathan B, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1897–902
Relationships among dolichyl phosphate, glycoprotein synthesis, and cell culture growth. Kabakoff BD, et al. **Arch Biochem Biophys** 1990 Feb 1;276(2):382–9
Intracellular [3H]dopamine binding sites in normal and malignant cells: relationships to cell proliferation. Markaverich BM, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):391–400
Questions about the use of [3H]thymidine incorporation as a reliable method to estimate cell proliferation rate. Murat JC, et al. **Biochem J** 1990 Sep 1;270(2):563–4
Modulation of fibroblast proliferation by oxygen free radicals. Murrell GA, et al. **Biochem J** 1990 Feb 1;265(3):659–65
Xenopus oocytes and the biochemistry of cell division. Maller JL. **Biochemistry** 1990 Apr 3;29(13):3157–66 (108 ref.)
Positive and negative controls on cell growth. Weinberg RA. **Biochemistry** 1989 Oct 17;28(21):8263–9 (91 ref.)
Growth-related protein kinases. Ralph RK, et al. **Bioessays** 1990 Mar;12(3):121–4 (40 ref.)
Synergistic inhibition of lymphoid tumor growth in vitro by combined treatment with the iron chelator deferoxamine and an immunoglobulin G monoclonal antibody against the transferrin receptor. Kemp JD, et al. **Blood** 1990 Sep 1;76(5):991–5
The cell-proliferative index. Meyer JS. **Cancer Invest** 1990; 8(2):247–9
Identification of a novel 80 kDa antigen associated with cell proliferation. Chatterjee A, et al. **Cancer Lett** 1989 Oct; 47(3):199–204
Calorie restriction and cellular proliferation in various tissues of the female Swiss Webster mouse. Lok E, et al. **Cancer Lett** 1990 May 15;51(1):67–73
Molecular aspects of growth control. An extended report on the first joint meeting of the AACR and the Japanese Cancer Association. Anderson G, et al. **Cancer Res** 1989 Dec 1;49(23):6852–66 (49 ref.)
Protein kinase C-induced stimulation or inhibition of cellular proliferation in a murine macrophage tumor cell line. Goode NT, et al. **Cancer Res** 1990 Mar 15;50(6):1828–33
Cellular F-actin levels as a marker for cellular transformation: relationship to cell division and differentiation. Rao JY, et al. **Cancer Res** 1990 Apr 15; 50(8):2215–20
Symposium on the control of cell proliferation and cancer. Sonnenschein C, et al. **Cancer Res** 1989 Nov 1;49(21):6161 (0 ref.)
Use of intracellular H3 messenger RNA as a marker to determine the proliferation pattern of normal and 7,12-dimethylbenz[a]anthracene-transformed hamster oral epithelium. Wong DT, et al. **Cancer Res** 1990 Aug 15; 50(16):5107–11
Progressive state selection of cells in low serum promotes high density growth and neoplastic transformation in NIH 3T3 cells. Yao A, et al. **Cancer Res** 1990 Aug 15; 50(16):5171–6
Conditional inhibition of transformation and of cell proliferation by a temperature-sensitive mutant of p53. Michalovitz D, et al. **Cell** 1990 Aug 24;62(4):671–80
Limitation of substratum size alters cytoskeletal organization and behaviour of Swiss 3T3 fibroblasts. Ireland GW, et al. **Cell Biol Int Rep** 1989 Sep;13(9):781–90
Unlinked regulation of cell growth and differentiation in immature B cell lines. Oka Y, et al. **Cell Immunol** 1990 Oct 1;130(1):42–9
The role of signal-transducing events in the proliferative response of cells to a mitogenic viral K-ras protein. Durkin JP, et al. **Cell Signal** 1990;2(3):285–97
Abstracts of the 16th meeting of the European Study Group for Cell Proliferation. 3–6 May 1989, Milan. **Cell Tissue Kinet** 1989 Mar;22(2):123–201
Tracer dose and availability time of thymidine and bromodeoxyuridine: application of bromodeoxyuridine in cell kinetic studies. Böswald M, et al. **Cell Tissue Kinet** 1990 May;23(3):169–81
Cell kinetics of a rat thyroid transplantable tumour. Christov K, et al. **Cell Tissue Kinet** 1990 May;23(3):183–90
Cell proliferation in the bone marrow, thymus and spleen of mice studied by continuous, in vivo bromodeoxycytidine labelling and flow cytometric analysis. Crippen TL, et al. **Cell Tissue Kinet** 1989 May;22(3):203–12
Multicell spheroids as a model for cell kinetic studies. Durand RE. **Cell Tissue Kinet** 1990 May;23(3):141–59 (40 ref.)
A reproducible technique combining tritiated thymidine autoradiography with immunodetection of bromodeoxyuridine for double labelling studies of cell proliferation in paraffin sections of tissues. Hume WJ. **Cell Tissue Kinet** 1990 May;23(3):161–8
Proto-oncogenes in cell development. A symposium. London, 19–21 September 1989. Proceedings. **Ciba Found Symp** 1990;150:1–284
Control of division and differentiation in oligodendrocyte-type-2 astrocyte progenitor cells. Noble M, et al. **Ciba Found Symp** 1990;150:227–43; discussion 244–9
Controls of cell proliferation in yeast and animals. Norbury C, et al. **Ciba Found Symp** 1990;150:168–77; discussion 177–83 (45 ref.)
Influence of extracellular magnesium on capillary endothelial cell proliferation and migration. Banai S, et al. **Circ Res** 1990 Sep;67(3):645–50
Time course of smooth muscle cell proliferation in the intima and media of arteries following experimental angioplasty. Hanke H, et al. **Circ Res** 1990 Sep;67(3):651–9
Interaction of C1q with its receptor on cultured cell lines induces an anti-proliferative response. Ghebrehiwet B, et al. **Clin Immunol Immunopathol** 1990 Jan;54(1):148–60
Cytokinesis in animal cells. Salmon ED. **Curr Opin Cell Biol** 1989 Jun;1(3):541–7 (29 ref.)
Functional properties of kinetochores in animal cells. Sluder G. **Curr Opin Cell Biol** 1990 Feb;2(1):23–7 (10 ref.)
Growing small-intestinal neomucosa in serosa-lined pouches. Nguyen BL, et al. **Curr Surg** 1990 Jul–Aug;47(4):269–71
Cell surfaces in the control of growth and morphogenesis. Steinberg MS. **Dev Biol (N Y 1985)** 1986;3:1–13 (38 ref.)
Requirement of cell division for muscle actin expression in the primary muscle cell lineage of ascidian embryos. Jeffery WR. **Development** 1989 Jan;105(1):75–84
Identification of a common signal associated with cellular proliferation stimulated by four haemopoietic growth factors in a highly enriched population of granulocyte/macrophage colony-forming cells. Cook N, et al. **EMBO J** 1989 Oct;8(10):2967–74
A role for the adenovirus inducible E2F transcription factor in a proliferation dependent signal transduction pathway. Mudryj M, et al. **EMBO J** 1990 Jul;9(7):2179–84
Effects of changes in calmodulin levels on cell proliferation. Rasmusen CD, et al. **Environ Health Perspect** 1990 Mar; 84:31–4 (29 ref.)
Transforming growth factors and the regulation of cell proliferation. Lyons RM, et al. **Eur J Biochem** 1990 Feb 14;187(3):467–73 (100 ref.)
The polymorphic human chaperonin protein HuCha60 is a mitochondrial protein sensitive to heat shock and cell transformation. Waldinger D, et al. **Eur J Cell Biol** 1989 Dec;50(2):435–41
The bimodal growth response of Swiss 3T3 cells to the B subunit of cholera toxin is independent of the density of its receptor, ganglioside GM1. Buckley NE, et al. **Exp Cell Res** 1990 Jul;189(1):13–21
Expression of mRNAs encoding mammalian chromosomal proteins HMG-I and HMG-Y during cellular proliferation. Johnson KR, et al. **Exp Cell Res** 1990 Mar;187(1):69–76
Glutathione content and growth in A549 human lung carcinoma cells. Kang YJ, et al. **Exp Cell Res** 1990 Mar; 187(1):177–9
The inhibition of chick embryo cell growth by medium obtained from cultures of Rous sarcoma cells. Rubin H. **Exp Cell Res** 1966 Jan;41(1):149–61
Steady-state suspension culture and metabolism of strain L mouse cells in simple defined medium. Sinclair R. **Exp Cell Res** 1966 Jan;41(1):20–33
The silver-stained proteins of interphasic nucleolar organizer regions as a parameter of cell duplication rate. Trerè D, et al. **Exp Cell Res** 1989 Sep;184(1):131–7
Density-dependent tumor cell death and reversible cell cycle arrest: mutually exclusive modes of monocyte-mediated growth control. van der Bosch J, et al. **Exp Cell Res** 1990 Apr;187(2):185–92
Approach to the isolation of antiproliferative genes. Nuell MJ, et al. **Exp Gerontol** 1989;24(5–6):469–76
Free radicals and the regulation of mammalian cell proliferation. Burdon RH, et al. **Free Radic Res Commun** 1989;6(6):345–58 (67 ref.)
DNA methylation in eukaryotes: kinetics of demethylation and de novo methylation during the life cycle. Otto SP, et al. **Genetics** 1990 Feb;124(2):429–37
Pachytene arrest and other meiotic effects of the start mutations in Saccharomyces cerevisiae. Shuster EO, et al. **Genetics** 1989 Sep;123(1):29–43
An autocrine activity capable of substituting for serum in cell cultures. Böhmer RM, et al. **Growth Factors** 1989; 1(4):347–56
Absence of synapsis during pachynema of the normal sized sex chromosomes of Microtus arvalis. Ashley T, et al. **Hereditas** 1989;111(3):295–304
Cell proliferation on hydrogels. Nagaoka S, et al. **In Vitro Cell Dev Biol** 1990 Jan;26(1):51–6
5-nucleotidase activity in cultured cell lines. Effect of different assay conditions and correlation with cell proliferation. Turnay J, et al. **In Vitro Cell Dev Biol** 1989 Nov;25(11):1055–61
Resident macrophages specifically inhibit DNA synthesis in the nuclei of transformed cells in heterokaryons. Prudovsky IA, et al. **Int J Cancer** 1989 Dec 15;44(6):1005–7
Two dimensional gel human protein databases offer a systematic approach to the study of cell proliferation and differentiation. Celis JE, et al. **Int J Dev Biol** 1989 Dec; 33(4):407–16 (33 ref.)
Meiosis reinitiation as a model system for the study of cell division and cell differentiation. Guerrier P, et al. **Int J Dev Biol** 1990 Mar;34(1):93–109
Induction and repair of DNA strand breaks in X-irradiated proliferating and quiescent CHO cells. Dikomey E. **Int J Radiat Biol** 1990 Jun;57(6):1169–82
Labelling index of gynaecological tumours assessed by bromodeoxyuridine staining in vitro using flow cytometry and histochemistry. Gasinska A, et al. **Int J Radiat Biol** 1989 Nov;56(5):793–6
In vivo bromodeoxyuridine labelling in human tumour xenografts. Parkins CS, et al. **Int J Radiat Biol** 1989 Nov; 56(5):787–91
Ki67 in the assessment of tumour growth rate: a study on xenografts. Price P, et al. **Int J Radiat Biol** 1989 Nov; 56(5):797–800
Regulation of DNA synthesis investigated in heterokaryons of dividing and nondividing cells. Zelenin AV, et al. **Int Rev Cytol** 1989;117:179–214 (201 ref.)
Dissection of the growth versus metabolic effects of insulin and insulin-like growth factor-I in transfected cells expressing kinase-defective human insulin receptors. McClain DA, et al. **J Biol Chem** 1990 Jan 25;265(3):1678–82
Influence of extracellular calcium on cell permeabilization and growth regulation by the lymphokine leukoregulin. Barnett SC, et al. **J Cell Biochem** 1990 May;43(1):89–101
Coexpression of tumor-associated alpha 2-macroglobulin and growth factors in human melanoma cell lines. Lizonová A, et al. **J Cell Biochem** 1990 Aug;43(4):315–25
Mechanism of the formation of contractile ring in dividing cultured animal cells. I. Recruitment of preexisting actin filaments into the cleavage furrow. Cao LG, et al. **J Cell Biol** 1990 Apr;110(4):1089–95
Nucleus-associated microtubules help determine the division plane of plant epidermal cells: avoidance of four-way junctions and the role of cell geometry. Flanders DJ, et al. **J Cell Biol** 1990 Apr;110(4):1111–22
Cycling of intracellular pH during cell division of Xenopus embryos is a cytoplasmic activity depending on protein synthesis and phosphorylation. Grandin N, et al. **J Cell Biol** 1990 Aug;111(2):523–32
Loss of proliferative potential during terminal differentiation coincides with the decreased abundance of a subset of heterogeneous ribonuclear proteins. Minoo P, et al. **J Cell Biol** 1989 Nov;109(5):1937–46
Protein kinase C levels and protein phosphorylation associated with inhibition of proliferation in a murine macrophage tumor. Goode NT, et al. **J Cell Physiol** 1990 Mar;142(3):480–7
Calcium regulation of growth and differentiation of normal human keratinocytes: modulation of differentiation competence by stages of growth and extracellular calcium. Pillai S, et al. **J Cell Physiol** 1990 May;143(2):294–302
ras and neu oncogenes reverse serum inhibition and epidermal growth factor dependence of serum-free mouse embryo cells. Shirahata S, et al. **J Cell Physiol** 1990 Jul;144(1):69–76
Eurythermic and stenothermic growth of cultured fish cells

and their thermosensitivity. Mitani H, et al. **J Cell Sci** 1989 Aug;93 (Pt 4):731–7

Synthesis of granulocyte colony–stimulating factor and its requirement for terminal divisions in chronic myelogenous leukemia. Klein H, et al. **J Exp Med** 1990 May 1; 171(5):1785–90

Inhibition of rate of tumour growth in rodent species by inoculation of herpesviruses and encephalomyocarditis virus. Cowan M, et al. **J Med Virol** 1990 Mar;30(3):211–5

Escherichia coli cell division inhibitor DicF–RNA of the dicB operon. Evidence for its generation in vivo by transcription termination and by RNase III and RNase E–dependent processing. Faubladier M, et al. **J Mol Biol** 1990 Apr 5;212(3):461–71

Rapid estimation of the proliferating index of brain tumours. Detta A, et al. **J Neurooncol** 1990 Jun;8(3):245–53

Growth of melanocytes in human epidermal cell cultures. Staiano–Coico L, et al. **J Trauma** 1990 Aug;30(8):1037–42; discussion 1043

Insulin and insulin–like growth factor (IGF I) modulate the effects of bTSH on 3H–thymidine incorporation in human thyroid cells in primary culture. Hoermann R, et al. **Klin Wochenschr** 1989 Oct 2;67(19):976–9

Changes in leukemia cell membrane fluidity induced by growth–restrictive and permissive culture conditions [letter] Kiss C, et al. **Leuk Res** 1990;14(3):293–4

Cell to cell contact enhances the proliferation of acute myeloid leukemia (AML) cells in vitro without an apparent role of adhesion glycoproteins LFA1, MAC1 and P150–95. Pulsoni A, et al. **Leuk Res** 1989;13(10):883–91

In vitro inhibition of cellular division by triatomine's haemolymph. Alvarenga NJ, et al. **Mem Inst Oswaldo Cruz** 1988 Oct–Dec;83(4):531–2

Genetic analysis of bacterial cell division. Lutkenhaus J. **Microbiol Sci** 1988 Mar;5(3):88–91 (26 ref.)

Periseptal annuli: organelles involved in the bacterial cell division process. Rothfield LI, et al. **Microbiol Sci** 1988 Jun;5(6):182–5 (20 ref.)

Negative growth controls and carcinogenesis [editorial] Weinberg RA. **Mol Carcinog** 1990;3(1):3–4

The G protein alpha o subunit alters morphology, growth kinetics, and phospholipid metabolism of somatic cells [published erratum appears in Mol Cell Biol 1990 Aug;10(8):4438] Bloch DB, et al. **Mol Cell Biol** 1989 Dec; 9(12):5434–9

Regulation of expression of growth arrest–specific genes in mouse fibroblasts. Ciccarelli C, et al. **Mol Cell Biol** 1990 Apr;10(4):1525–9

Mutations in cell division cycle genes CDC36 and CDC39 activate the Saccharomyces cerevisiae mating pheromone response pathway. de Barros Lopes M, et al. **Mol Cell Biol** 1990 Jun;10(6):2966–72

A growth arrest–specific (gas) gene codes for a membrane protein. Manfioletti G, et al. **Mol Cell Biol** 1990 Jun; 10(6):2924–30

Induction of macrophage colony–stimulating factor–dependent growth and differentiation after introduction of the murine c–fms gene into FDC–P1 cells. Rohrschneider LR, et al. **Mol Cell Biol** 1989 Nov; 9(11):5081–92

Antibody–induced mitogenicity mediated by a chimeric CD2–c–fms receptor. Roussel MF, et al. **Mol Cell Biol** 1990 May;10(5):2407–12

Mapping an origin of DNA replication at a single–copy locus in exponentially proliferating mammalian cells. Vassilev LT, et al. **Mol Cell Biol** 1990 Sep;10(9):4685–9

Transcriptional regulation of cell division genes in Escherichia coli. Dewar SJ, et al. **Mol Microbiol** 1989 Oct; 3(10):1371–7

Cell proliferation inhibited by MyoD1 independently of myogenic differentiation. Sorrentino V, et al. **Nature** 1990 Jun 28;345(6278):813–5

In vitro and in vivo growth control of transformed lymphoid cells expressing plasma membrane galactosyltransferase. Ghanta VK, et al. **Oncogene** 1989 Nov;4(11):1337–44

Complexity of the immediate early response of myeloid cells to terminal differentiation and growth arrest includes ICAM–1, Jun–B and histone variants. Lord KA, et al. **Oncogene** 1990 Mar;5(3):387–96

Wild type human p53 is antiproliferative in SV40–transformed hamster cells. Mercer WE, et al. **Oncogene** 1990 Jul;5(7):973–80

Diet–induced reduction in serum lipoproteins stimulates cell proliferation in weanling rats. Kazanecki ME, et al. **Pharmacol Res** 1989 Sep–Oct;21(5):533–47

Inositol lipids and phosphates in the regulation of the growth and differentiation of haemopoietic and other cells. Michell RH, et al. **Philos Trans R Soc Lond [Biol]** 1990 Mar 12; 327(1239):193–207 (89 ref.)

Cell growth and gene rearrangement signals during the development of T lymphocytes within the thymus. Owen JJ, et al. **Philos Trans R Soc Lond [Biol]** 1990 Mar 12; 327(1239):111–6 (23 ref.)

Cell–cell adhesion mediated by binding of membrane–anchored transforming growth factor alpha to epidermal growth factor receptors promotes cell proliferation. Anklesaria P, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3289–93

Human papilloma virus DNAs immortalize normal human mammary epithelial cells and reduce their growth factor requirements. Band V, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):463–7

Cellular levels of thymosin immunoreactive peptides are linked to proliferative events: evidence for a nuclear site of action [published erratum appears in Proc Natl Acad Sci U S A 1990 Jul;87(14):5587] Conteas CN, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3269–73

Cell division in higher plants: a cdc2 gene, its 34–kDa product, and histone H1 kinase activity in pea. Feiler HS, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5397–401

Role of a tumor–suppressor gene in the negative control of anchorage–independent growth of Syrian hamster cells. Koi M, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(22):8773–7

A point mutation at tyrosine–809 in the human colony–stimulating factor 1 receptor impairs mitogenesis without abrogating tyrosine kinase activity, association with phosphatidylinositol 3–kinase, or induction of c–fos and junB genes. Roussel MF, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6738–42

Relation of spontaneous transformation in cell culture to adaptive growth and clonal heterogeneity. Rubin AL, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):482–6

The insulin receptor with phenylalanine replacing tyrosine–1146 provides evidence for separate signals regulating cellular metabolism and growth. Wilden PA, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3358–62

K+ channels and mitogenesis. Deutsch C. **Prog Clin Biol Res** 1990;334:251–71

Directing cell division during development. O'Farrell PH, et al. **Science** 1989 Nov 3;246(4930):635–40 (37 ref.)

G1 events and regulation of cell proliferation. Pardee AB. **Science** 1989 Nov 3;246(4930):603–8 (64 ref.)

Functional diversity of muscarinic receptor subtypes in cellular signal transduction and growth. Ashkenazi A, et al. **Trends Pharmacol Sci** 1989 Dec;Suppl:16–22 (35 ref.)

Cell kinetics of solid tumors with time and its clinical implication. Silvestrini R, et al. **Tumori** 1989 Aug 31; 75(4):367–72

Nerve fibre proliferation in interstitial cystitis. Christmas TJ, et al. **Virchows Arch [A]** 1990;416(5):447–51

Polyamines and their derivatives as modulators in growth and differentiation. Canellakis ZN, et al. **Yale J Biol Med** 1989 Sep–Oct;62(5):481–91 (41 ref.)

[Role of protein kinase C in cell regulation and tumor promotion] Castagna M, et al. **Bull Cancer (Paris)** 1990; 77(5):489–94 (Eng. Abstr.) **(Fre)**

[Cell multiplication, differentiation, and transformation. 15th meeting of the INRA Development Group. Paris 24–26 May 1989. Proceedings] **Reprod Nutr Dev** 1990; 30(3):281–458 **(Fre)**

[Anemia in malignant tumor diseases. I. Tumor–induced loss of transferrin and its relation to tumor size and degree of malignancy in the rat model] Aulbert E. **Nuklearmedizin** 1989 Oct;28(5):193–200 (Eng. Abstr.) **(Ger)**

[Recording protein metabolism and cell proliferation with the stable isotope 15N] Wagenknecht C, et al. **Z Med Lab Diagn** 1990;31(3):134–8 (Eng. Abstr.) **(Ger)**

[Proliferating cell nuclear antigen–A] Ben–Chetrit E. **Harefuah** 1990 Feb 15;118(4):212–3 (24 ref.) **(Heb)**

[Role of protein kinase C in cell proliferation] Kamata T. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2156–65 **(Jpn)**

[Role of calcium in the regulation of cell growth] Kojima I, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(12):2283–91 **(Jpn)**

[Mechanism of cytokinesis: isolation and properties of cleavage furrow] Mabuchi I, et al. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(12 Suppl):1672–9 **(Jpn)**

[Cell growth control by growth factors] Shimizu N, et al. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(9):1040–8 **(Jpn)**

[Temporal and spatial changes in intracellular Ca2+ upon fertilization and during cell division] Yoshimoto Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2292–9 **(Jpn)**

[Study of the proliferation block in nuclear erythrocytes by a cellular hybridization method] Kapnik EM, et al. **Dokl Akad Nauk SSSR** 1989;308(4):982–6 **(Rus)**

[Predictive significance of parameters of tumor cell proliferation] Kotel'nikov VM. **Eksp Onkol** 1989;11(5):3–9 (62 ref.) (Eng. Abstr.) **(Rus)**

[The effect of space flight conditions on the rate of multiplication, morphology of cells, DNA and protein content in the ciliate Tetrahymena pyriformis] Prilina IS, et al. **Tsitologiia** 1989 Jul;31(7):829–38 (Eng. Abstr.) **(Rus)**

[Dependence of alkaline phosphatase activity in human cultured fibroblasts on the proliferative status of the culture] Stepanova LG, et al. **Tsitologiia** 1989 Jul; 31(7):791–8 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effect of various factors and substrates on the growth of a human hepatoblastoma cell line, HuH–6 in a serum–free medium. Tokiwa T, et al. **Acta Med Okayama** 1989 Dec; 43(6):359–62

Early mitogenic stimulation of metabolic flux through phosphoribosyl pyrophosphate into nucleotides in Swiss 3T3 cells and requirement of external magnesium for the response. Tatibana M, et al. **Adv Enzyme Regul** 1989; 28:147–66

The effects of human kallikrein and aprotinin on nonmalignant and malignant cell growth. Korbelik M, et al. **Adv Exp Med Biol** 1989;247B:675–80

Decreased cell proliferation and PGE2 production by fibroblasts treated with a modified hexose sugar, amiprilose hydrochloride. Brinckerhoff CE. **Agents Actions** 1990 Jun; 30(3–4):322–8

Effects of cyclosporin and chloroquine on the mitogen–driven cell proliferation and Ig production of human mononuclear cells. van Loenen HJ, et al. **Agents Actions** 1990 Jan;29(1–2):103–4

Ethanol induced growth inhibition and growth adaptation in vitro. Cell cycle delay in late G1. Cook RT, et al. **Alcohol Alcohol** 1990;25(1):33–43

Mechanism of atrial natriuretic factor–induced inhibition of rat mesangial cell mitogenesis. Appel RG. **Am J Physiol** 1990 Sep;259(3 Pt 1):E312–8

Histamine receptors in human fibroblasts: inositol phosphates, Ca2+, and cell growth. Johnson CL, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):C533–43

Extracellular glutathione suppresses human lung fibroblast proliferation. Cantin AM, et al. **Am J Respir Cell Mol Biol** 1990 Jul;3(1):79–85

New synthetic retinoids: effects on proliferation and differentiation. Nastruzzi C, et al. **Anticancer Res** 1989 Sep–Oct;9(5):1377–83

Suppression of human synovial cell proliferation by dihomo–gamma–linolenic acid. Baker DG, et al. **Arthritis Rheum** 1989 Oct;32(10):1273–81

Protein factor obtained from rat adipose tissue specifically permits the proliferation of the 3T3–L1 and Ob1771 cell lines. Aoki N, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):905–12

Specific inhibition of endothelial cell proliferation by thrombospondin. Bagavandoss P, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):867–72

Nitric oxide–generating vasodilators inhibit mitogenesis and proliferation of BALB/C 3T3 fibroblasts by a cyclic GMP–independent mechanism. Garg UC, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):474–9

Growth inhibition of human fibroblasts by epidermal growth factor in the presence of arachidonic acid. Hori T, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):959–65

Phorbol esters inhibit apoptosis in IL–2–dependent T lymphocytes. Rodríguez–Tarduchy G, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1069–75

Growth inhibition caused by serum depletion induces differentiation, interleukin 1 receptor expression and interleukin 1 responsiveness in the HL–60 promyelocytic leukemia cell line. Silvennoinen O, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):959–65

Effects of phorbol ester on cell growth inhibition by transforming growth factor beta 1 in human hepatoma cell lines. Takaishi K, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):91–6

Inhibition of BC3H–1 cell growth by heparin is related to decreased mitogenic signalling. Vannucchi S, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):89–95

Comparison of the inhibitions of proliferation of normal and psoriatic fibroblasts by 1 alpha,25–dihydroxyvitamin D3 and synthetic analogues of vitamin D3 with an oxygen atom in their side chain. Morimoto S, et al. **Biochem Int** 1989 Nov;19(5):1143–9

Growth inhibition of BALB/c 3T3 cells by a high–molecular–weight mucin–like glycoprotein of human milk fat globule membrane. Shimizu M, et al. **Biochem Int** 1990;20(1):147–54

The effect of beta–D–xylosides on the proliferation and proteoglycan biosynthesis of monoblastic U–937 cells. Kolset SO, et al. **Biochem J** 1990 Feb 1;265(3):637–45

Application of metabolic–control logic to the requirements for cell division. Newsholme EA. **Biochem Soc Trans** 1990 Feb;18(1):78–80 (18 ref.)

Differential effects of liposome–entrapped desferrioxamine on proliferation and erythroid differentiation of murine erythroleukemic Friend cells. Nastruzzi C, et al. **Biochim Biophys Acta** 1989 Sep 4;1013(1):36–41

Effect of dimethyl sulfoxide on mouse embryo fibroblasts: inhibition of plasminogen activator inhibitor deposition and interference with early events of serum–stimulated growth. Nagashunmugam T, et al. **Biol Cell** 1989;66(3):307–15

Cellular selenoproteins and the effects of selenite on cell proliferation. Golczewski JA, et al. **Biol Trace Elem Res** 1989 Apr–May;20(1–2):115–26

NK1–receptors mediate the proliferative response of human fibroblasts to tachykinins. Ziche M, et al. **Br J Pharmacol** 1990 May;100(1):11–4

Cyclosporin A exerts a cytostatic effect in vivo on human and murine epithelial cells. Ramirez–Bosca A, et al. **Cancer** 1990 Sep 1;66(5):936–40

Growth and differentiation control. Francis GE, et al. **Cancer Chemother Biol Response Modif** 1987;9:502–29 (202 ref.)

Growth and differentiation control. Francis GE, et al. **Cancer Chemother Biol Response Modif** 1988;10:507–44 (166 ref.)

Clonal stimulation or inhibition of human colon carcinomas and human renal carcinomas mediated by transforming growth factor–beta 1. Fan D, et al. **Cancer Commun** 1989; 1(2):117–25

Stimulation of cell growth and DNA synthesis by peripheral benzodiazepine. Ikezaki K, et al. **Cancer Lett** 1990 Feb; 49(2):115–20

Growth inhibition and induction of phenotypic alterations by L-histidinol in B16 mouse melanoma cells. Nordenberg J, et al. **Cancer Lett** 1989 Oct;47(3):193-7

The effects of the Bowman-Birk protease inhibitor on c-myc expression and cell proliferation in the unirradiated and irradiated mouse colon. St. Clair WH, et al. **Cancer Lett** 1990 Jul 16;52(2):145-52

Inhibition of growth and modulation of gene expression in human lung carcinoma in athymic mice by site-selective 8-Cl-cyclic adenosine monophosphate. Ally S, et al. **Cancer Res** 1989 Oct 15;49(20):5650-5

Conjugation of 9-deoxy-delta 9,delta 12(E)-prostaglandin D2 with intracellular glutathione and enhancement of its antiproliferative activity by glutathione depletion. Atsmon J, et al. **Cancer Res** 1990 Mar 15;50(6):1879-85

Correlation between the effects of polyamine analogues on DNA conformation and cell growth. Basu HS, et al. **Cancer Res** 1989 Oct 15;49(20):5591-7

Antiestrogen inhibition of prolactin-induced growth of the Nb2 rat lymphoma cell line. Biswas R, et al. **Cancer Res** 1989 Nov 15;49(22):6295-9

Enhancement of anthracycline growth inhibition in parent and multidrug-resistant Chinese hamster ovary cells by cyclosporin A and its analogues. Chambers SK, et al. **Cancer Res** 1989 Nov 15;49(22):6275-9

In vitro determination of uptake, retention, distribution, biological efficacy, and toxicity of boronated compounds for neutron capture therapy: a comparison of porphyrins with sulfhydryl boron hydrides. Fairchild RG, et al. **Cancer Res** 1990 Aug 15;50(16):4860-5

Effect of dietary cellulose on cell proliferation and progression of 1,2-dimethylhydrazine-induced colon carcinogenesis in rats. Heitman DW, et al. **Cancer Res** 1989 Oct 15;49(20):5581-5

Abolition of mevinolin-induced growth inhibition in human fibroblasts following transformation by simian virus 40. Larsson O, et al. **Cancer Res** 1989 Oct 15;49(20):5605-10

Binding of opioids to human MCF-7 breast cancer cells and their effects on growth. Maneckjee R, et al. **Cancer Res** 1990 Apr 15;50(8):2234-8

Estradiol sensitivity test using contact-sensitive plates of confluent BALB/c 3T3 cell monolayers. Matsuoka H, et al. **Cancer Res** 1990 Apr 1;50(7):2113-8

Opposite effect of tumor necrosis factor alpha on granulocyte colony-stimulating factor and granulocyte-macrophage colony-stimulating factor-dependent growth of normal and leukemic hemopoietic progenitors. Piacibello W, et al. **Cancer Res** 1990 Aug 15;50(16):5065-71

Inhibition of human breast cancer cell proliferation in tissue culture by the neuroleptic agents pimozide and thioridazine. Strobl JS, et al. **Cancer Res** 1990 Sep 1;50(17):5399-405

Effect of homoharringtonine on proliferation and differentiation of human leukemic cells in vitro. Zhou JY, et al. **Cancer Res** 1990 Apr 1;50(7):2031-5

Effects of estrogens and antiestrogens on cell proliferation: implications for the treatment of breast cancer. Osborne CK. **Cancer Treat Res** 1988;39:111-29 (47 ref.)

Cell proliferation and promotion of rat liver carcinogenesis: different effect of hepatic regeneration and mitogen induced hyperplasia on the development of enzyme-altered foci. Columbano A, et al. **Carcinogenesis** 1990 May; 11(5):771-6

Differential effects of renal carcinogens and tumor promoters on growth promotion and inhibition of gap junctional communication in two rat renal epithelial cell lines. Konishi N, et al. **Carcinogenesis** 1990 Jun;11(6):903-8

Growth inhibition by TGF-beta linked to suppression of retinoblastoma protein phosphorylation. Laiho M, et al. **Cell** 1990 Jul 13;62(1):175-85

Inhibition of rat fibroblast cell proliferation at specific cell cycle stages by cocaine. Di Francesco P, et al. **Cell Biol Int Rep** 1990 Jun;14(6):549-58

Modulation of SCE induction and cell proliferation by 2-mercaptoethanol in phytohemagglutinin-stimulated rat lymphocytes. Aidoo A, et al. **Cell Biol Toxicol** 1989 Nov; 5(3):237-48

Beta-lactam antibiotics inhibit human in vitro granulopoiesis and proliferation of some other cell types. Neftel KA, et al. **Cell Biol Toxicol** 1986 Dec;2(4):513-21 (16 ref.)

Quantitative analysis of antiviral drug toxicity in proliferating cells. Stenberg K, et al. **Cell Biol Toxicol** 1986 Dec; 2(4):441-55

Inhibition of human skin fibroblast proliferation by histamine and phorbol esters is mediated by protein kinase C. Johnson CL, et al. **Cell Signal** 1990;2(2):105-13

A stimulatory effect of Artemisia leaf extract on the proliferation of cultured endothelial cells. Kaji T, et al. **Chem Pharm Bull (Tokyo)** 1990 Feb;38(2):538-40

Antiproliferative drugs and human ocular fibroblasts: colorimetric vs. cell counting assays. Givens KT, et al. **Curr Eye Res** 1990 Jun;9(6):599-606

Determination of the capacity for proliferation and differentiation of osteoprogenitor cells in the presence and absence of dexamethasone. Bellows CG, et al. **Dev Biol** 1990 Jul;140(1):132-8

Glia maturation factor beta regulates the growth of N18 neuroblastoma cells. Lim R, et al. **Dev Biol** 1990 Feb; 137(2):444-50

The relevance of peroxisome proliferation and cell proliferation in peroxisome proliferator-induced hepatocarcinogenesis. Rao MS, et al. **Drug Metab Rev** 1989; 21(1):103-10 (52 ref.)

Progestin regulation of cellular proliferation. Clarke CL, et al. **Endocr Rev** 1990 May;11(2):266-301 (310 ref.)

Responses of the lung to toxic injury. Witschi H. **Environ Health Perspect** 1990 Apr;85:5-13

Distribution of intracellular free calcium in quiescent BALB/c 3T3 cells stimulated by platelet-derived growth factor. Tucker RW, et al. **Eur J Cell Biol** 1990 Feb; 51(1):120-7

Restoration of the responsiveness to growth factors in senescent cells by an embryonic cell extract. Amtmann E, et al. **Exp Cell Res** 1990 Aug;189(2):202-7

Early modifications of nucleic acid metabolism and nuclear lipid biosynthesis associated with antiproliferative activity of interferon-alpha on Daudi lymphoma cells. Miscia S, et al. **Exp Cell Res** 1990 Apr;187(2):197-202

Effects of gamma-interferon on the growth, morphology, and membrane and cytoskeletal proteins expression of Lan-1 cells. Parodi MT, et al. **Exp Cell Res** 1989 Dec; 185(2):327-41

Mechanisms influencing cytokinesis in hamster ascites multinucleated cells. The effect of some citrate cycle inhibitors and nucleotides. Stevens DF. **Exp Cell Res** 1966 Mar;41(3):492-501

A diet high in fat stimulates adipocyte proliferation in older (22 month) rats. Ellis JR, et al. **Exp Gerontol** 1990; 25(2):141-8

Further studies on the biological activities of the CFU-S inhibitory tetrapeptide AcSDKP. II. Unresponsiveness of isolated adult rat hepatocytes, 3T3, FDC-P2, and K562 cell lines to AcSDKP. Possible involvement of intermediary cell(s) in the mechanism of AcSDKP action. Lauret E, et al. **Exp Hematol** 1989 Dec;17(11):1081-5

Hydrocortisone promotes survival and proliferation of granulocyte-macrophage progenitors via monocytes/macrophages. Pasquale D, et al. **Exp Hematol** 1989 Dec;17(11):1110-5

1H-pyrrolo[2,3-f]quinoline and isoquinoline derivatives: synthesis and antiproliferative activity. Ferlin MG, et al. **Farmaco** 1989 Dec;44(12):1141-55

Expression of protein kinase CI in NIH 3T3 cells increases its growth response to specific activators. Cuadrado A, et al. **FEBS Lett** 1990 Jan 29;260(2):281-4

Liposome-associated retinoic acid. Increased in vitro antiproliferative effects on neoplastic cells. Nastruzzi C, et al. **FEBS Lett** 1990 Jan 1;259(2):293-6

Effect of heparin on proliferation and signalling in BC3H-1 muscle cells. Evidence for specific binding sites. Vannucchi S, et al. **FEBS Lett** 1990 Apr 9;263(1):137-41

Cell proliferation and oxidative stress. Burdon RH, et al. **Free Radic Res Commun** 1989;7(3-6):149-59

Regulation of cell growth by recombinant oncostatin M. Horn D, et al. **Growth Factors** 1990;2(2-3):157-65

Transforming growth factor beta (TGF-beta) potentiates the inhibitory effect of retinoic acid on human breast carcinoma (MCF-7) cell proliferation. Valette A, et al. **Growth Factors** 1990;2(4):283-7

Spontaneously transformed NRK cells lose their mitogenic response to epidermal growth factor. Wegrzyn RJ, et al. **Growth Factors** 1989;1(3):227-36

Oral contraceptive use influences resting breast proliferation. Anderson TJ, et al. **Hum Pathol** 1989 Dec;20(12):1139-44

Modulation of differentiation and proliferation in human colon carcinoma cells by transforming growth factor beta 1 and beta 2. Chakrabarty S, et al. **Int J Cancer** 1990 Sep 15;46(3):493-9

Enhancement of anchorage-independent growth of a human adrenal carcinoma cell line by endogenously produced basic fibroblast growth factor. Corin SJ, et al. **Int J Cancer** 1990 Sep 15;46(3):516-21

The influence of glucocorticoids on the growth of a human leiomyosarcoma cell line SK-LMS-1. Madsen WE, et al. **Int J Cancer** 1989 Dec 15;44(6):1034-40

Control of human T cell proliferation by platelet-activating factor. Behrens TW, et al. **Int J Immunopharmacol** 1990; 12(2):175-84

Preparation of new 7-hydroxyguanine derivatives and their biological activities. Kitahara M, et al. **J Antibiot (Tokyo)** 1990 Apr;43(4):352-6

Lomefloxacin-induced modification of the kinetics of growth of gram-negative bacteria and susceptibility to phagocytic killing by human neutrophils. Pruul H, et al. **J Antimicrob Chemother** 1990 Jan;25(1):91-101

Prostaglandin E2 inhibition of growth in a colony-stimulating factor 1-dependent macrophage cell line. Jackowski S, et al. **J Biol Chem** 1990 Apr 25; 265(12):6611-6

Inhibition of normal rat kidney cell growth by transforming growth factor-beta is mediated by collagen. Nugent MA, et al. **J Biol Chem** 1989 Oct 25;264(30):18060-7

Mitogenic and cytotoxic actions of tumor necrosis factor in BALB/c 3T3 cells. Role of phospholipase activation. Palombella VJ, et al. **J Biol Chem** 1989 Oct 25; 264(30):18128-36

Characterization of phosphatidylinositol-specific phospholipase C defects associated with thrombin-induced mitogenesis. Rath HM, et al. **J Biol Chem** 1990 Feb 25; 265(6):3080-7

Growth and protein phosphorylation in the Nb2 lymphoma: effect of prolactin, cAMP, and agents that activate adenylate cyclase. Rayhel EJ, et al. **J Cell Biochem** 1990 Aug;43(4):327-37

Epidermal growth factor and bombesin differ strikingly in the induction of early responses in Swiss 3T3 cells. Bierman AJ, et al. **J Cell Physiol** 1990 Mar;142(3):441-8

Role of Na+/H+ exchange in the granulocyte-macrophage colony-stimulating factor-dependent growth of a leukemic cell line. Caracciolo D, et al. **J Cell Physiol** 1990 Apr; 143(1):133-9

Stimulating effects of insulin and low-density lipoprotein on cell growth and macromolecular syntheses of HeLa cells cultured in K(+)-depleted medium. Hosokawa K, et al. **J Cell Physiol** 1990 Aug;144(2):254-61

Effect of inflammatory cytokines on human endothelial cell proliferation. Saegusa Y, et al. **J Cell Physiol** 1990 Mar; 142(3):488-95

New role for histamine in interleukin-3-induced proliferation of hematopoietic stem cells. Schneider E, et al. **J Cell Physiol** 1990 May;143(2):337-43

Effects of vitamin A on growth and differentiation of human tracheobronchial epithelial cell cultures in serum-free medium. Chopra DP, et al. **J Cell Sci** 1989 May;93 (Pt 1):133-42

Growth of mammalian cells at high oxygen concentrations. Oller AR, et al. **J Cell Sci** 1989 Sep;94 (Pt 1):43-9

Effect of thyrotropin and cAMP on FRTL5 cell growth in a serum free medium. Damante G, et al. **J Endocrinol Invest** 1990 May;13(5):397-402

Interferon gamma inhibits both proliferation and expression of differentiation-specific alpha-smooth muscle actin in arterial smooth muscle cells. Hansson GK, et al. **J Exp Med** 1989 Nov 1;170(5):1595-608

Pigeon crop-sac as a model system for studying the direct and indirect effects of hormones and growth factors on cell growth and differentiation in vivo. Nicoll CS. **J Exp Zool Suppl** 1990;4:72-7 (25 ref.)

Alterations in the responsiveness of senescent cells to growth factors. Cristofalo VJ, et al. **J Gerontol** 1989 Nov; 44(6):55-62

Transforming growth factor beta 1 has differential effects on B cell proliferation and activation antigen expression. Cross D, et al. **J Immunol** 1990 Jan 15;144(2):432-9

Antiproliferative effect of IFN-gamma on proliferation of mouse connective tissue-type mast cells. Takagi M, et al. **J Immunol** 1990 Sep 15;145(6):1880-4

Diorganotin dihalide complexes of 2,2'-biimidazole. A preliminary study of their inhibitory effects on cell division. Sánchez González A, et al. **J Inorg Biochem** 1990 Jul; 39(3):227-35

Gamma interferon modulates epidermal cell proliferation and mixed epidermal cell-lymphocyte reaction. Kim SY, et al. **J Korean Med Sci** 1987 Sep;2(3):151-6

Increased proliferation of phytohaemagglutinin (PHA)-stimulated human leucocytes after 8-methoxypsoralen treatment. Gawron A, et al. **J Pharm Pharmacol** 1990 Mar;42(3):194-5

Biocompatibility of wound management products: standardization of and determination of cell growth rate in L929 fibroblast cultures. Turner TD, et al. **J Pharm Pharmacol** 1989 Nov;41(11):775-80

The antitumor mechanism of progesterone antagonists is a receptor mediated antiproliferative effect by induction of terminal cell death. Michna H, et al. **J Steroid Biochem** 1989;34(1-6):447-53

Effects of heptaminol AMP amidate (HAA) on cyclic AMP level and mitogen-induced proliferation of murine spleen cells. Ueno K, et al. **Jpn J Pharmacol** 1990 Mar;52(3):483-8

Proliferation and differentiation of erythroleukemia cell line (ELM-I-1) in response to erythropoietin and interleukin 3. Shiozaki M, et al. **Leuk Res** 1990;14(3):287-91

The effects of interleukin-3, GM-CSF, and G-CSF on the growth kinetics of colony-forming cells in myelodysplastic syndromes. Schipperus M, et al. **Leukemia** 1990 Apr; 4(4):267-72

Prolactin stimulates transcription of growth-related genes in Nb2 T lymphoma cells. Yu-Lee LY. **Mol Cell Endocrinol** 1990 Jan 2;68(1):21-8

The effect of pentachlorophenol and its metabolite tetrachlorohydroquinone on cell growth and the induction of DNA damage in Chinese hamster ovary cells. Ehrlich W. **Mutat Res** 1990 Aug;244(4):299-302

Chromosome aberration test and sister-chromatid exchange assay in murine bone marrow cells after in vivo exposure to D-penicillamine alone or combined with cyclophosphamide. Nair ND, et al. **Mutat Res** 1989 Dec; 227(4):237-40

Influence of 5-azacytidine on differentiation and growth in rat nervous system tumor cell lines. Stark M, et al. **Neurotoxicol Teratol** 1989 Nov-Dec;11(6):557-61

Enhancement of immune status by high levels of dietary vitamin B-6 without growth inhibition of human malignant melanoma in athymic nude mice. Gebhard KJ, et al. **Nutr Cancer** 1990;14(1):15-26

Selective isolation of human breast carcinoma cells resistant to the growth-inhibitory effects of retinol. Halter SA, et al. **Nutr Cancer** 1990;14(1):43-56

Growth-inhibitory effects of vitamin E succinate on retrovirus-transformed tumor cells in vitro. Kline K, et al. **Nutr Cancer** 1990;14(1):27-41

Abrogation of IL-3 dependent growth requires a functional v-src gene product: evidence for an autocrine growth cycle. Anderson SM, et al. **Oncogene** 1990 Mar;5(3):317-25

Stimulation by hydrogen peroxide of DNA synthesis, competence family gene expression and phosphorylation of a specific protein in quiescent Balb/3T3 cells. Shibanuma

M, et al. **Oncogene** 1990 Jul;5(7):1025–32

The beta–interferon–mediated antimitogenic state resembles the anti–viral state. Garcia–Blanco MA, et al. **Oncogene Res** 1990;5(4):323–8

Influence of ciclosporin on epidermal proliferation after mechanical skin irritation. Kietzmann M, et al. **Pharmacology** 1990;40(2):122–8

Bombesin stimulation of fibroblast mitogenesis: specific receptors, signal transduction and early events. Rozengurt E, et al. **Philos Trans R Soc Lond [Biol]** 1990 Mar 12; 327(1239):209–21 (78 ref.)

Transmembrane domain of the envelope gene of a polycythemia–inducing retrovirus determines erythropoietin–independent growth. Chung SW, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7957–60

Extracellular ATP is a mitogen for 3T3, 3T6, and A431 cells and acts synergistically with other growth factors. Huang N, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7904–8

Mouse NIH 3T3 cells expressing human colony–stimulating factor 1 (CSF–1) receptors overgrow in serum–free medium containing human CSF–1 as their only growth factor. Roussel MF, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7924–7

Studies on the possible role of protein kinase C in the prolactin regulation of cell replication in Nb2 node lymphoma cells. Rillema JA, et al. **Proc Soc Exp Biol Med** 1989 Nov;192(2):140–4

The cytokinesis–block micronucleus assay in nucleated cells. Fenech M. **Prog Clin Biol Res** 1990;340B:195–206 (38 ref.)

Cell killing, chromosomal aberrations, and division delay as thermal sensitivity is modified during the cell cycle. Dewey WC, et al. **Radiat Res** 1990 Jun;122(3):268–74

Stimulatory effect of short–chain fatty acids on epithelial cell proliferation of isolated and denervated jejunal segment of the rat. Sakata T. **Scand J Gastroenterol** 1989 Sep; 24(7):886–90

Cell proliferation in carcinogenesis. Cohen SM, et al. **Science** 1990 Aug 31;249(4972):1007–11 (37 ref.)

Effect of phospholipase C–gamma overexpression on PDGF–induced second messengers and mitogenesis. Margolis B, et al. **Science** 1990 May 4;248(4955):607–10

Topical corticosteroids delay the proliferative response to sellotape stripping. Bauer FW, et al. **Skin Pharmacol** 1989; 2(4):204–9

Studies of the oxysterol inhibition of tumor cell growth. Parish EJ, et al. **Steroids** 1989 Mar–May;53(3–5):579–96

Cytotoxicity, anchorage–independent growth, and DNA adduct formation in human neonatal fibroblasts by 1,2,3,4–tetrahydro–7,12–dimethylbenz(a)–anthracene (TH–DMBA), its six aryl fluoro regioisomers, and an exo methylene tautomer. Kumari HL, et al. **Teratogenesis Carcinog Mutagen** 1990;10(3):247–62

Micronuclei assay in cytokinesis–blocked binucleated and conventional mononucleated methods in human peripheral lymphocytes. Nath CJ, et al. **Teratogenesis Carcinog Mutagen** 1990;10(3):273–9

Proliferative changes in the prostate. Pour P, et al. **Toxicol Appl Pharmacol** 1989 Dec;101(3):499–509

Immunosuppressive activity and toxicity of cyclosporine metabolites characterized by mass spectroscopy and nuclear magnetic resonance. Copeland KR, et al. **Transplant Proc** 1990 Jun;22(3):1146–9

FK 506 as a growth control factor. Francavilla A, et al. **Transplant Proc** 1990 Feb;22(1):90–2

Inhibition of pancreatic islet cell differentiation and proliferation by cyclosporine A. Healey M, et al. **Transplant Proc** 1990 Apr;22(2):861–2

[Immunosuppressive and cytostatic effectiveness of the poplar mushroom Tricholoma populinum LANGE] Lindequist U, et al. **Allerg Immunol (Leipz)** 1989; 35(4):265–9 (Eng. Abstr.) (Ger)

[The effect of hydrocortisone aceponate on proliferation, total protein synthesis and collagen synthesis in human skin fibroblasts in vitro] Görmar FE, et al. **Arzneimittelforschung** 1990 Feb;40(2 Pt 1):192–6 (Eng. Abstr.) (Ger)

[The effect of urea on epidermal cell renewal measured with a noninvasive method] Baló–Banga JM. **Hautarzt** 1989;40 Suppl 9:63–6 (Eng. Abstr.) (Ger)

[Effects of mellitic acid on matrix–induced, ectopic osteogenesis in the rat] Rüther W, et al. **Z Orthop** 1989 Nov–Dec;127(6):706–10 (Eng. Abstr.) (Ger)

[Growth and proliferation stimulating effect of extremely small doses of nitrosomethylurea] Krutova TV. **Biofizika** 1989 Nov–Dec;34(6):1063–4 (Eng. Abstr.) (Rus)

[Benz(a)anthracene and 2,3,7,8–tetrachloro dibenzo(p)dioxin modulate mitogen–stimulated proliferation of lymphocytes] Lozovatskiĭ AL, et al. **Biull Eksp Biol Med** 1990 Jun; 109(6):569–71 (Eng. Abstr.) (Rus)

[Chronobiological analysis of thyroxine action on cell proliferation in the hypotetraploid strain of Ehrlich's ascitic tumor] Romanov IuA, et al. **Biull Eksp Biol Med** 1989 Nov;108(11):610–2 (Eng. Abstr.) (Rus)

[Circadian rhythm of reaction of epithelial cells of the tongue and esophagus to the effects of hydroxyurea] Rybakov VP, et al. **Biull Eksp Biol Med** 1989 Nov;108(11):612–3 (Eng. Abstr.) (Rus)

[The effect of low–molecular weight nuclear RNA on the cell cycle during asynchronous embryonic fission] Burakova TA, et al. **Dokl Akad Nauk SSSR** 1989 Sep–Oct; 308(1):197–200 (Rus)

[Stimulation of protein synthesis in hypoxia–dystrophied neurons of the rat cerebral cortex by the action of a proliferation protein activator isolated from nerve tissue of newborn animals] Vitvitskiĭ VN, et al. **Dokl Akad Nauk SSSR** 1989;308(3):737–40 (Rus)

[The effect of the beta–type transforming growth factor and its combination with epidermal growth factor and insulin on substrate–dependent proliferation of normal and tumor cells] Sushel'nitskiĭ SI, et al. **Tsitologiia** 1989 Jul; 31(7):767–74 (Eng. Abstr.) (Rus)

GENETICS

19th annual UCLA symposium: Transcriptional control of cell growth. Abstracts. **J Cell Biochem Suppl** 1990; 14B:113–243

"Suppressor genes; restraint of growth or of tumor progression"? Studzinsky GP, et al. **Lab Invest** 1990 Sep; 63(3):279–82

Mammalian genes coordinately regulated by growth arrest signals and DNA–damaging agents. Fornace AJ Jr, et al. **Mol Cell Biol** 1989 Oct;9(10):4196–203

The retinoblastoma gene and cell growth control. Weinberg RA. **Trends Biochem Sci** 1990 May;15(5):199–202 (28 ref.)

PHYSIOLOGY

Thyroid growth promoting serum–IgG in endemic goiter. Brezinschek HP, et al. **Acta Med Austriaca** 1990;17 Suppl 1:26–7

Evidence that thyroid growth autoregulation is mediated by an iodolactone. Gärtner R, et al. **Acta Med Austriaca** 1990; 17 Suppl 1:24–6

Cytokinesis: mechanisms of furrow formation during cell division. **Ann N Y Acad Sci** 1990;582:1–327

Attachment of one spindle pole to the cortex in unequal cleavage. Dan K, et al. **Ann N Y Acad Sci** 1990;582:108–19 (17 ref.)

Testing cleavage mechanisms by comparing computer simulations to actual experimental results. Harris AK. **Ann N Y Acad Sci** 1990;582:60–77 (19 ref.)

Mechanical properties of the cortex before and during cleavage. Hiramoto Y. **Ann N Y Acad Sci** 1990;582:22–30 (24 ref.)

Cleavage furrow formation and actin–modulating proteins. Mabuchi I. **Ann N Y Acad Sci** 1990;582:131–46 (53 ref.)

Actin and myosin biochemistry in relation to cytokinesis. Pollard TD, et al. **Ann N Y Acad Sci** 1990;582:120–30 (35 ref.)

Role of the mitotic apparatus in furrow initiation. Rappaport R. **Ann N Y Acad Sci** 1990;582:15–21 (19 ref.)

Role of microtubules in stimulating cytokinesis in animal cells. Salmon ED, et al. **Ann N Y Acad Sci** 1990;582:88–98 (36 ref.)

Use of fluorescently labeled probes to analyze cell division in living cells. Sanger JM, et al. **Ann N Y Acad Sci** 1990; 582:185–98 (44 ref.)

The contractile ring and furrowing in dividing cells. Schroeder TE. **Ann N Y Acad Sci** 1990;582:78–87 (54 ref.)

Calcium and cellular clocks orchestrate cell division. Silver RB. **Ann N Y Acad Sci** 1990;582:207–21 (60 ref.)

Potential roles of microtubule–associated motor molecules in cell division. Vallee RB, et al. **Ann N Y Acad Sci** 1990; 582:99–107 (33 ref.)

Cytokinesis in the early Drosophila embryo. Warn RM, et al. **Ann N Y Acad Sci** 1990;582:222–32 (32 ref.)

Analysis of furrow formation and furrowing during cell division in Tetrahymena using cell–division–arrest mutants. Watanabe Y, et al. **Ann N Y Acad Sci** 1990;582:166–78 (35 ref.)

Laterally mobile, cortical tension elements can self–assemble into a contractile ring. White JG. **Ann N Y Acad Sci** 1990; 582:50–9 (28 ref.)

Cytokinesis by furrowing in diatoms. Wordeman L, et al. **Ann N Y Acad Sci** 1990;582:252–9 (13 ref.)

Manipulations of cellular iron metabolism for modulating normal and malignant cell proliferation: achievements and prospects. Cazzola M, et al. **Blood** 1990 May 15; 75(10):1903–19 (168 ref.)

Enhanced synthesis of stress proteins caused by hypoxia and relation to altered cell growth and metabolism. Heacock CS, et al. **Br J Cancer** 1990 Aug;62(2):217–25

Changes in growth characteristics and macromolecular synthesis on recovery from severe hypoxia. Wilson RE, et al. **Br J Cancer** 1990 Jan;61(1):14–21

Levels of oncogene transcripts in hepatomas of different growth rates and in liver in response to diets which cause a nucleotide imbalance. Chellani M, et al. **Cancer Biochem Biophys** 1990 Apr;11(2):127–33

Growth control circuitry and the oncogene connection. Adams JM. **Cancer Cells** 1990 Jun;2(6):190–2 (0 ref.)

The effects of adverse growth conditions on the shedding of carcinoembryonic antigen from cultured LS180 colon cancer cells. Adams GL, et al. **Cancer Commun** 1990; 2(2):73–80

Antioxidant enzymes and proliferative activity of cell lines of different origin. Liotti FS, et al. **Cell Mol Biol** 1989; 35(5):487–94

Analysis of cell division using fluorescently labeled actin and myosin in living PtK2 cells. Sanger JM, et al. **Cell Motil Cytoskeleton** 1989;14(2):201–19

A temperature–sensitive cell–cycle mutant of mammalian cells, tsJT16, is defective in a function operating soon after growth stimulation. Takasuka T, et al. **Cell Struct Funct** 1990 Feb;15(1):39–45

tsJT16, a cell–cycle ts mutant defective in a function operating soon after growth stimulation, fails to induce a primarily activated labile nuclear protein. Takasuka T, et al. **Cell Struct Funct** 1990 Feb;15(1):47–52

Cell multiplication. **Curr Opin Cell Biol** 1990 Apr; 2(2):367–427

Centrosomes: composition and reproduction. Cande WZ. **Curr Opin Cell Biol** 1990 Apr;2(2):301–5 (22 ref.)

Protein kinase C and tumor promoters. Jaken S. **Curr Opin Cell Biol** 1990 Apr;2(2):192–7 (40 ref.)

GTP binding and growth control. McCormick F. **Curr Opin Cell Biol** 1990 Apr;2(2):181–4 (9 ref.)

Control of mammalian cell proliferation. Zetterberg A. **Curr Opin Cell Biol** 1990 Apr;2(2):296–300 (24 ref.)

Translocation of bFGF to the nucleus is G1 phase cell cycle specific in bovine aortic endothelial cells. Baldin V, et al. **EMBO J** 1990 May;9(5):1511–7

Pathways of differentiation of airway epithelial cells. Nettesheim P, et al. **Environ Health Perspect** 1990 Apr; 85:317–29

Differential regulation of DNA synthesis in heterokaryons between chicken erythrocytes and culture cells with various proliferative potentials. Prudovsky IA, et al. **Eur J Cell Biol** 1990 Apr;51(2):347–52

DNA synthesis in fore and glandular stomach and in skin after nonspecific stress in mice. Lahtiharju A, et al. **Exp Cell Res** 1967 Jun;46(3):593–6

Control of cell proliferation in senescent cells. **Exp Gerontol** 1989;24(5–6):351–585

Expression of carbohydrate binding protein 35 in human fibroblasts: comparisons between cells with different proliferative capacities. Cowles EA, et al. **Exp Gerontol** 1989;24(5–6):577–85

Neuroscience and oncology. A unified view. Marolda R, et al. **Funct Neurol** 1990 Jan–Mar;5(1):73–7 (34 ref.)

Glutaminolysis and glycolysis interactions in proliferant cells. Medina MA, et al. **Int J Biochem** 1990;22(7):681–3 (37 ref.)

Surface viscoelastic effects in cell cleavage. Zinemanas D, et al. **J Biomech** 1990;23(5):417–24

19th annual UCLA symposium: Negative controls on cell growth. Abstracts. **J Cell Biochem Suppl** 1990;14C:249–310

19th annual UCLA symposium: Polyamines in cell proliferation and differentiation. Abstracts. **J Cell Biochem Suppl** 1990;14C:81–111

Mode of centriole duplication and distribution. Kochanski RS, et al. **J Cell Biol** 1990 May;110(5):1599–605

Control of blast cell proliferation and differentiation in acute myelogenous leukemia by soluble polypeptide growth factors. Herrmann F, et al. **Klin Padiatr** 1990 Jul–Aug; 202(4):212–7 (56 ref.)

Compartmentalization of the periplasm at cell division sites in Escherichia coli as shown by fluorescence photobleaching experiments. Foley M, et al. **Mol Microbiol** 1989 Oct;3(10):1329–36

Reversibility of the antiproliferative effect of interferon. Salzberg S, et al. **Nat Immun Cell Growth Regul** 1990; 9(3):191–202

Cell proliferation kinetics of tumours in relation to cancer therapy. Denekamp J. **Nowotwory** 1989 Jul–Dec; 39(3–4):145–51 (16 ref.)

Estrogen regulation of proliferation and hormonal modulation of estrogen and progesterone receptor biosynthesis and degradation in target cells. Katzenellenbogen BS, et al. **Prog Clin Biol Res** 1990; 322:201–11 (29 ref.)

Correlation between DNA synthesis and glucosamine incorporation in human diploid fibroblasts stimulated by fibroblast growth factor and fetal calf serum. Hiu IJ. **Ric Clin Lab** 1989 Jul–Sep;19(3):267–71

In the beginning is the end: regulation of poly(A) addition and removal during early development. Wickens M. **Trends Biochem Sci** 1990 Aug;15(8):320–4 (47 ref.)

Calmodulin, cell growth and gene expression. Rasmussen CD, et al. **Trends Neurosci** 1989 Nov;12(11):433–8 (65 ref.)

Aging of trabecular meshwork cells of the human eye in vitro. Schachtschabel DO, et al. **Z Gerontol** 1990 May–Jun; 23(3):133–5

[Cell receptors and proliferation markers in breast cancer] Czerwenka KF, et al. **Gynakol Rundsch** 1989;29 Suppl 2:400–1 (Ger)

[Integrins—new receptor molecules: their significance for the differentiation, regeneration and immune response of the skin] Kaufmann R, et al. **Hautarzt** 1990 May;41(5):256–61 (52 ref.) (Eng. Abstr.) (Ger)

[Progesterone receptors in breast cancer. Comparison of immunohistochemical with biochemical receptor analysis. Relation between hormone receptor content and growth fraction (Ki–67)] Ronay G, et al. **Pathologe** 1990 Jan; 11(1):4–9 (Ger)

[Detection of epidermal growth factor–like factors in various skin tumors] Hagedorn M, et al. **Z Hautkr** 1990 Jun; 65(6):575–7 (Eng. Abstr.) (Ger)

[Increased expression of proliferation keratins K 6 and K 16 in unaffected skin in exacerbated psoriasis] Wevers A, et al. **Z Hautkr** 1990 May;65(5):471–2, 475 (Eng. Abstr.) (Ger)

[Cytokinetics and keratins of keratinocytes from skin of the elderly] Wevers A, et al. **Z Hautkr** 1989 Nov 15; 64(11):943–4, 949–51 (Eng. Abstr.) (Ger)

[The importance of growth factors in endocrinology and

oncology] Rudolf K. **Zentralbl Gynakol** 1989; 111(23):1529–37 (28 ref.) (Eng. Abstr.) **(Ger)**

[Possible role of malonic dialdehyde in the regulation of cell division] Dmitriev LF. **Mol Biol (Mosk)** 1990 Mar–Apr; 24(2):566–71 (27 ref.) (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Combined DC and ELF magnetic fields can alter cell proliferation. Ross SM. **Bioelectromagnetics** 1990; 11(1):27–36

Radiosensitivity of different human tumor cells lines grown as multicellular spheroids determined from growth curves and survival data. Schwachöfer JH, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):1015–20

Thymidine kinase deficient human cells have increased UV sensitivity in their capacity to support herpes simplex virus but normal UV sensitivity for colony formation. Rainbow AJ. **Mutat Res** 1989 Nov;218(3):189–96

Enhanced proliferation of cells from human tissue explants following irradiation in the presence of environmental carcinogens. Mothersill C, et al. **Radiat Environ Biophys** 1989;28(3):203–12

Association between the division delay target and DNA late in the cell cycle. Schneiderman MH, et al. **Radiat Res** 1990 Jun;122(3):337–40

Growth of cells superinoculated onto irradiated and nonirradiated confluent monolayers. Matsuoka H, et al. **Semin Surg Oncol** 1990;6(1):48–52

[In vitro study of the influence of donor age, nature of mitogen and exposure to X-rays on the proliferation rate of human lymphocytes] Deknudt G, et al. **C R Soc Biol (Paris)** 1989;183(6):507–14 (Eng. Abstr.) **(Fre)**

[The Ro/SSA antigen–antibody system. Studies of the effect of UVA–/PUVA irradiation and fibroblast activity on immune reaction with autoantibodies] Wollina U, et al. **Z Hautkr** 1989 Dec 15;64(12):1130–4 (Eng. Abstr.) **(Ger)**

[Micronuclei induced by ultraviolet radiations or X rays in mammal cells in vitro] Catena C, et al. **Boll Soc Ital Biol Sper** 1990 May;66(5):413–8 (Eng. Abstr.) **(Ita)**

CELL EXTRACTS see under **TISSUE EXTRACTS**

CELL FRACTIONATION

see related
SUBCELLULAR FRACTIONS

Isolation of the major subcellular organelles from mouse liver using Nycodenz gradients without the use of an ultracentrifuge. Graham JM, et al. **Anal Biochem** 1990 Jun; 187(2):318–23

Simultaneous preparation of basolateral and brush-border membrane vesicles from sea bass intestinal epithelium. Drai P, et al. **Biochim Biophys Acta** 1990 Mar;1022(3):251–9

Heterogeneity of granules of murine cytolytic T lymphocytes. Isolation of a homogeneous population of dense granules. Persechini PM, et al. **J Immunol Methods** 1989 Nov 13;124(1):7–15

Influence of isolation media on synaptosomal properties: intracellular pH, pCa, and Ca2+ uptake. Bandeira-Duarte C, et al. **Neurochem Res** 1990 Mar;15(3):313–20

METHODS

Large scale isolation of nuclei from oocytes of Xenopus laevis. Ruberti I, et al. **Anal Biochem** 1989 Jul;180(1):177–80

In situ separation of nucleolar components by hypotonic treatment of cells. Hozák P, et al. **Biol Cell** 1990; 68(2):167–70

Preparation of protoplasts of Ustilago violacea for transformation and pulse-field electrophoresis. Bej AK, et al. **Biotechniques** 1989 Sep;7(8):824, 826, 828

Isolation and characterization of cell membranes. McNamee MG. **Biotechniques** 1989 May;7(5):466–75 (18 ref.)

Preparation of mammalian plasma membranes by aqueous two-phase partition. Morré DJ, et al. **Biotechniques** 1989 Oct;7(9):946–8, 950–4, 956–8

A convenient procedure for rapid release of protoplasts from Ustilago maydis. Waterfield WF, et al. **Biotechniques** 1988 Oct;6(9):832–4

The isolation and partial characterization of bovine parathyroid secretory granules. Bajpai S, et al. **Bone Miner** 1990 Apr;9(1):9–22

Isolation of pancreatic autophagic vacuoles induced by vinblastine or neutral red. Separation of autophagosomes and autolysosomes by Percoll density gradient centrifugation. Fellinger E, et al. **Eur J Cell Biol** 1990 Apr; 51(2):220–8

Preparation and characterization of plasma membrane vesicles from human polymorphonuclear leukocytes. Del Buono BJ, et al. **J Cell Physiol** 1989 Dec;141(3):636–44

Preparation of nucleate and anucleate fragments of hamster and mouse eggs by centrifugation. Yanagimachi R, et al. **J Exp Zool** 1990 Feb;253(2):220–5

Rapid isolation of metabolically active mitochondria from rat brain and subregions using Percoll density gradient centrifugation. Sims NR. **J Neurochem** 1990 Aug; 55(2):698–707

Human platelet dense granules: improved isolation and preliminary characterization of [3H]-serotonin uptake and tetrabenazine-displaceable [3H]-ketanserin binding. Chatterjee D, et al. **Life Sci** 1990;46(24):1755–64

Separation of cells and cell organelles by partition in aqueous polymer two-phase systems. Albertsson PA. **Methods Enzymol** 1989;171:532–49

Elimination of the nucleolus from the nucleus of a living cell by centrifugation (a literature review). Moroz PE. **Tissue Cell** 1989;21(4):535–41 (58 ref.)

[A rapid method of isolation of platelet membranes for radioligand and enzymatic assays] Gurevich VS, et al. **Biokhimiia** 1990 May;55(5):808–13 (Eng. Abstr.) **(Rus)**

[Isolation of intact mitochondria from the rat liver using vibration] Petrenko AIu, et al. **Ukr Biokhim Zh** 1989 Nov–Dec;61(6):102–5 (Eng. Abstr.) **(Rus)**

[Rapid simultaneous isolation of microsomes and plasma membranes from neuroblastoma C 1300 N 18 cells] Volkov GL. **Ukr Biokhim Zh** 1989 Sep–Oct;61(5):71–7 (Eng. Abstr.) **(Rus)**

CELL-FREE SYSTEM see under **SUBCELLULAR FRACTIONS**

CELL FUSION

see related
HYBRID CELLS

Parameters involved in the cell fusion induced by HIV. Tang SB, et al. **AIDS** 1990 May;4(5):409–15

Modulation of electrically induced permeabilization and fusion of Chinese hamster ovary cells by osmotic pressure. Rols MP, et al. **Biochemistry** 1990 May 15;29(19):4561–7

Thermofusion of cells. Antonov PA. **Biochim Biophys Acta** 1990 Mar 9;1051(3):279–81

Transfer of human membrane surface components by incorporating human cells into intact animal tissue by cell–tissue electrofusion in vivo. Heller R, et al. **Biochim Biophys Acta** 1990 May 9;1024(1):185–8

Induction of a long-lived fusogenic state in viable plant protoplasts permeabilized by electric fields. Montané MH, et al. **Biochim Biophys Acta** 1990 May 9;1024(1):203–7

Cell poration and cell fusion using an oscillating electric field. Chang DC. **Biophys J** 1989 Oct;56(4):641–52

The OPTIMIZOR: a graphic pulse analyzer to monitor electro cell fusion and electroporation experiments. Hofmann GA. **Biotechniques** 1988 Nov–Dec; 6(10):996–1003

Cell–to–cell fusion. White JM, et al. **Curr Opin Cell Biol** 1989 Oct;1(5):934–9 (12 ref.)

Fusion of Madin–Darby canine kidney cells by HVJ (Sendai virus): absence of direct association of virus particles with the site of membrane fusion. Kim J, et al. **Eur J Cell Biol** 1990 Feb;51(1):128–34

Electric-field-induced permeabilization and fusion of embryonic amphibian cells. Maurel P, et al. **Exp Cell Res** 1989 Sep;184(1):207–18

Production of bovine tetraploid embryos by electrofusion and their developmental capability in vitro. Iwasaki S, et al. **Gamete Res** 1989 Nov;24(3):261–7

HLA-DR peptide inhibits HIV-induced syncytia. Lewis DE, et al. **Immunol Lett** 1990 May;24(2):127–31

Establishment of a chicken X chicken hybridoma secreting specific antibody. Nishinaka S, et al. **Int Arch Allergy Appl Immunol** 1989;89(4):416–9

Electroacoustic fusion of millilitre volumes of cells in physiological medium. Bardsley DW, et al. **J Biochem Biophys Methods** 1989 Oct;19(4):339–48

Acid pH-induced fusion of cells by herpes simplex virus glycoproteins gB an gD. Butcher M, et al. **J Biol Chem** 1990 Apr 5;265(10):5862–8

Rearrangement of the cytoskeleton and nuclear transfer in Tetrahymena thermophila cells fused by electric field. Gaertig J, et al. **J Cell Sci** 1989 Aug;93 (Pt 4):691–703

Expression of bovine herpesvirus type 1 glycoprotein gI in transfected bovine cells induces spontaneous cell fusion. Fitzpatrick DR, et al. **J Gen Virol** 1990 May;71 (Pt 5):1215–9

Low pH-induced cell fusion in flavivirus-infected Aedes albopictus cell cultures. Randolph VB, et al. **J Gen Virol** 1990 Aug;71 (Pt 8):1845–50

Chemically induced CD4 mutants of a human T cell line. Evidence for dissociation between binding of HIV I envelope and susceptibility to HIV I infection and syncytia formation. Hillman K, et al. **J Immunol** 1990 Mar 15; 144(6):2131–9

Conformational change of the coronavirus peplomer glycoprotein at pH 8.0 and 37 degrees C correlates with virus aggregation and virus-induced cell fusion. Sturman LS, et al. **J Virol** 1990 Jun;64(6):3042–50

Facilitated cell fusion for hybridoma production. Conrad MK, et al. **Methods Enzymol** 1990;184:641–53

Cell fusion induced by herpes simplex is inhibited by hen egg-white lysozyme. Cisani G, et al. **Microbios** 1989; 59(239):73–83

Restoration of normal function in genetically defective myotubes by spontaneous fusion with fibroblasts. Chaudhari N, et al. **Nature** 1989 Oct 5;341(6241):445–7

Appearance of pH-dependent cell fusions by transmissible gastroenteritis (TGE) virus. Honda E, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):839–41

Suppression of tumor-forming ability and related traits in MCF-7 human breast cancer cells by fusion with immortal mammary epithelial cells. Zajchowski DA, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2314–8

Fusion of mammalian oocytes: SEM observations of surface changes. Fulka J Jr, et al. **Reprod Nutr Dev** 1989; 29(5):551–7

Electrofusion of IBRS2 cells and the study of their fusion process. Zheng Q, et al. **Sci China [B]** 1989 Mar; 32(3):303–13

Construction of a bovine-murine heteromyeloma cell line; production of bovine monoclonal antibodies against rotavirus and pregnant mare serum gonadotrophin. Booman P, et al. **Vet Immunol Immunopathol** 1990 Mar; 24(3):211–26

Hemadsorption and fusion inhibition activities of hemagglutinin analyzed by vaccinia virus mutants. Seki M, et al. **Virology** 1990 Apr;175(2):372–84

[Cell fusion in Leishmania (Kinetoplastida, Trypanosomatidae)] Lanotte G, et al. **C R Acad Sci [III]** 1990;310(7):285–8 (Eng. Abstr.) **(Fre)**

[Assays for phagosome–lysosome fusion] Ishibashi Y, et al. **Nippon Saikingaku Zasshi** 1990 Mar;45(2):571–5 **(Jpn)**

[Spontaneous fusion of cells without centrioles, formed as a result of tripolar mitosis in cell culture] Khodiakov AL, et al. **Dokl Akad Nauk SSSR** 1989;307(5):1242–5 **(Rus)**

DRUG EFFECTS

Correlation between carbohydrate structures on the envelope glycoprotein gp120 of HIV-1 and HIV-2 and syncytium inhibition with lectins. Hansen JE, et al. **AIDS** 1989 Oct; 3(10):635–41

Surfactant enhancement of polyethyleneglycol-induced cell fusion. Prado A, et al. **FEBS Lett** 1989 Dec 18; 259(1):149–52

Fusion of mouse alveolar macrophages induced by 1 alpha,25-dihydroxyvitamin D3 involves extracellular, but not intracellular, calcium. Jin CH, et al. **J Cell Physiol** 1990 Feb;142(2):434–9

Studies on the effect of ketoconazole on the fusion of L6 myoblasts. Wayne S, et al. **Mol Cell Biochem** 1990 Feb 9;92(2):137–46

PHYSIOLOGY

Oocyte fusion. Gulyas BJ. **Dev Biol (N Y 1985)** 1986;4:57–80 (49 ref.)

Lateral mobility of both envelope proteins (F and HN) of Sendai virus in the cell membrane is essential for cell–cell fusion. Henis YI, et al. **J Biol Chem** 1989 Oct 15; 264(29):17119–25

Control of virus-induced cell fusion by host cell lipid composition. Roos DS, et al. **Virology** 1990 Apr; 175(2):345–57

[A new approach for explaining viral organotropism: fusion of HBV transfected cells with hepatocytes] Streeck RE, et al. **Z Gastroenterol [Verh]** 1990 Apr;25:89–90 **(Ger)**

RADIATION EFFECTS

Dose-dependent effects of ionizing radiation on in vitro myoblast fusion. Santini MT, et al. **Int J Radiat Biol** 1990 Sep;58(3):463–74

CELL GROWTH see **CELL DIVISION**

CELL GROWTH INHIBITORS see **GROWTH INHIBITORS**

CELL HYPOXIA

Enzymology of the reductive bioactivation of SR 4233. A novel benzotriazine di-N-oxide hypoxic cell cytotoxin. Walton MI, et al. **Biochem Pharmacol** 1990 Jun 1; 39(11):1735–42

Local and systemic effects of organ hypoxia detected by chemiluminescence and photochemiluminescence. Popov I, et al. **Biomed Biochim Acta** 1990;49(4):297–300

Chronic hypoxia in neuronal cell culture: metabolic consequences. Sher PK. **Brain Dev** 1990;12(3):293–300

Spreading depression-like hypoxic depolarization in CA1 and fascia dentata of hippocampal slices: relationship to selective vulnerability. Balestrino M, et al. **Brain Res** 1989 Sep 11;497(1):102–7

Adenosine antagonists alter the synaptic response to in vitro ischemia in the rat hippocampus. Fowler JC. **Brain Res** 1990 Feb 19;509(2):331–4

Dantrolene suppresses the hyperpolarization or outward current observed during anoxia in hippocampal neurons. Krnjević K, et al. **Can J Physiol Pharmacol** 1989 Dec; 67(12):1602–4

Effect of hypoxia on 1,3-bis(2-chloroethyl)-1-nitrosourea cytotoxicity in 9L cells. Sarkar A, et al. **Cancer Res** 1990 May 1;50(9):2719–23

Misonidazole binding in murine liver tissue: a marker for cellular hypoxia in vivo. Maxwell AP, et al. **Gastroenterology** 1989 Nov;97(5):1300–3

Sensitization of hypoxic tumour cells—clinical experience. Overgaard J. **Int J Radiat Biol** 1989 Nov;56(5):801–11 (49 ref.)

Radiolabelled fluoromisonidazole as an imaging agent for tumor hypoxia. Rasey JS, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):985–91

Reoxygenation, but neither hypoxia nor intermittent ischemia, increases [125I]endothelin-1 binding to rat

cardiac membranes. Liu JJ, et al.
J Cardiovasc Pharmacol 1990 Mar;15(3):436–43
Hypoxia modulates the barrier and coagulant function of cultured bovine endothelium. Increased monolayer permeability and induction of procoagulant properties. Ogawa S, et al. **J Clin Invest** 1990 Apr;85(4):1090–8
Enzyme release from chick myocytes during hypoxia and reoxygenation: dependence on pH. Bhatti S, et al.
J Mol Cell Cardiol 1989 Oct;21(10):995–1008
Hypoxia–reoxygenation induced increase in cellular Ca2+ in myocytes and perfused hearts: the role of mitochondria. Stone D, et al. **J Mol Cell Cardiol** 1989 Oct;21(10):963–73
Effect of transient hypoxia on sensitivity to doxorubicin in human and murine cell lines. Luk CK, et al.
J Natl Cancer Inst 1990 Apr 18;82(8):684–92
Competitive and noncompetitive N-methyl-D-aspartate antagonists modify hypoxia-induced membrane potential changes and protect rat hippocampal slices from functional failure: a quantitative comparison. Grigg JJ, et al.
J Pharmacol Exp Ther 1990 Apr;253(1):130–5
Identification of hypoxic and oxygenated tumor subpopulations with enzyme and fluorescent probes. Freitas I, et al. **J Photochem Photobiol B** 1990 Jan;4(3):340–2
Causes of cell damage in hypoxia/ischemia, aging and Alzheimer's disease. Gibson G. **Neurobiol Aging** 1989 Sep–Oct;10(5):608–9; discussion 618–20
Stability of orthogonal arrays of particles in murine skeletal muscle and astrocytes after circulatory arrest, and human gliomas. Neuhaus J, et al. **Neurosci Lett** 1990 Feb 5; 109(1–2):163–8
Induction of hypoxia in glass versus Permanox petri dishes. Zeman EM, et al. **Radiat Res** 1990 Apr;122(1):72–6
Influence of hypercapnia and hypoxia on rabbit platelet aggregation. oude Egbrink MG, et al. **Thromb Res** 1990 Mar 15;57(6):863–75
Protection by exogenous glutathione against hypoxic and cyanide-induced damage to isolated perfused rat livers. Younes M, et al. **Toxicol Lett** 1990 Feb;50(2–3):229–36
[Relation between resistance to hypoxia and the cross-sectional surface area of the papillary muscles in laboratory rats] Procházka J, et al. **Cesk Fysiol** 1989; 38(6):573–6 **(Cze)**
[Tissue hypoxia and hepatocellular insufficiency in patients with cirrhosis] Moreau R, et al. **Gastroenterol Clin Biol** 1989 Dec;13(12):978–83 (Eng. Abstr.) **(Fre)**
[Transition of oxic cells to hypoxic cells in a murine squamous cell carcinoma] Takai Y. **Gan No Rinsho** 1989 Oct; 35(13):1543–7 (Eng. Abstr.) **(Jpn)**
[The effect of oxygen deficiency on the stability of the yeast Saccharomyces cerevisiae to the polyenic antibiotic nystatin] Ekhvalova TV, et al. **Mikrobiologiia** 1989 Mar–Apr;58(2):199–201 (Eng. Abstr.) **(Rus)**
[Primary culture of hepatocytes of newborn rats as a system for modeling anoxia and metabolic ischemia] Goncharenko TM, et al. **Vopr Med Khim** 1989 Nov–Dec;35(6):51–5 (Eng. Abstr.) **(Rus)**
[Changes in the cAMP levels and acid phosphatase activity in a monolayer primary culture of hepatocytes from newborn rats during anoxia and substrate deprivation] Nikulina SE, et al. **Vopr Med Khim** 1989 Sep–Oct; 35(5):103–8 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

3-Nitro-1,2,4-triazoles as hypoxia-selective agents. Jenkins TC, et al. **Anticancer Drug Des** 1989 Aug;4(2):145–60
Toxicity of [PtCl2(NH3)L] in hypoxia; L = misonidazole or metronidazole. Skov KA, et al. **Anticancer Drug Des** 1990 Feb;5(1):121–8
Glyoxylic compounds as radiosensitizers of hypoxic cells. Cornago MP, et al. **Biochem Med Metab Biol** 1990 Jun; 43(3):253–62
Bioreductive drugs and the selective induction of tumour hypoxia. Bremner JC, et al. **Br J Cancer** 1990 May; 61(5):717–21
Fructose-1,6-bisphosphate reduces ATP loss from hypoxic astrocytes. Gregory GA, et al. **Brain Res** 1990 May 21; 516(2):310–2
Radiosensitizing hypoxic cells with new 3-nitro-1,2,4-triazole derivatives in vitro and in vivo. Nagao Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Jul; 37(7):1951–3
Effect of nicotinamide on the microregional heterogeneity of oxygen delivery within a murine tumor. Chaplin DJ, et al. **J Natl Cancer Inst** 1990 Apr 18;82(8):672–6
Modification of anoxic neuronal injury by human recombinant epidermal growth factor and its possible mechanism. Kinoshita A, et al. **J Neurosci Res** 1990 Mar; 25(3):324–30
Protection against hypoxic injury in isolated-perfused rat heart by ruthenium red. Park Y, et al.
J Pharmacol Exp Ther 1990 May;253(2):628–35
Cultured neurons for testing antihypoxic drug effects. Peruche B, et al. **J Pharmacol Methods** 1990 Mar; 23(1):63–77
Effects of in vitro hypoxia on depolarization-stimulated accumulation of inositol phosphates in synaptosomes. Huang HM, et al. **Life Sci** 1989;45(16):1443–9
Calcium-associated cytoprotective effect of taurine on the calcium and oxygen paradoxes in isolated rat hepatocytes. Nakashima T, et al. **Liver** 1990 Jun;10(3):167–72
Hypoxic injury to developing glial cells: protective effect of high glucose. Callahan DJ, et al. **Pediatr Res** 1990 Feb; 27(2):186–90
Effects of delayed administration of methohexital and ketamine on posthypoxic cell damage of primary neuronal cultures. Oberpichler H, et al. **Pharmacology** 1990; 40(3):165–73
Evidence for a factor protective against hypoxic liver parenchymal cell injury in a protein-free blood extract. de Groot H, et al.
Res Commun Chem Pathol Pharmacol 1990 Apr;68(1):125–8
Protective effect of adenosine against hypoxic damage. Synaptic depression and adenosine [letter; comment] Lloyd HG, et al. **Trends Pharmacol Sci** 1988 Oct;9(10):352 Comment on: Trends Pharmacol Sci 1988 Jun;9(6):193–4.
[Protective effects of nicorandil against catecholamine induced myocardial damage under hypoxia] Hayashi J, et al. **Kokyu To Junkan** 1989 Nov;37(11):1231–5 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Enhanced synthesis of stress proteins caused by hypoxia and relation to altered cell growth and metabolism. Heacock CS, et al. **Br J Cancer** 1990 Aug;62(2):217–25
Effects of hypoxia, elevated K+ and acidosis on the potency of verapamil, diltiazem and nifedipine in the guinea-pig isolated papillary muscle. Robertson MJ, et al.
Br J Pharmacol 1989 Nov;98(3):937–49
Acidosis reduces NMDA receptor activation, glutamate neurotoxicity, and oxygen-glucose deprivation neuronal injury in cortical cultures. Giffard RG, et al. **Brain Res** 1990 Jan 8;506(2):339–42
Preferential loss of GABAergic neurons in hypoxia-exposed neocortex slab cultures is attenuated by the NMDA receptor blocker D-2-amino-7-phosphonoheptanoate. Romijn HJ. **Brain Res** 1989 Oct 30;501(1):100–4
Mild acidosis protects hippocampal neurons from injury induced by oxygen and glucose deprivation. Tombaugh GC, et al. **Brain Res** 1990 Jan 8;506(2):343–5
Enhanced adhesion of polymorphonuclear leukocytes to anoxic cultured vascular endothelium. Budd JM, et al.
Cell Signal 1990;2(3):305–10
Histamine enhances hypoxia-induced ventricular arrhythmias in isolated rat hearts. Dai S.
Clin Exp Pharmacol Physiol 1989 Dec;16(12):925–31
Multiparameter digitized video microscopy of toxic and hypoxic injury in single cells. Lemasters JJ, et al.
Environ Health Perspect 1990 Mar;84:83–94 (26 ref.)
Manipulation of radiobiological hypoxia in a human melanoma xenograft to exploit the bioreductive cytotoxicity of RSU-1069. Cole S, et al.
Int J Radiat Biol 1989 Nov;56(5):587–91
Pharmacokinetics of 2-nitroimidazole hypoxic cell radiosensitizers in rodent peripheral nervous tissue. Sasai K, et al. **Int J Radiat Biol** 1990 May;57(5):971–80
Radiosensitization by oxygen and radioprotection by thiols: analysis of the combined action according to a modified competition model. Sölen G, et al. **Int J Radiat Biol** 1990 May;57(5):959–69
Correlations between in vivo 31P NMR spectroscopy measurements, tumor size, hypoxic fraction and cell survival after radiotherapy. Fu KK, et al.
Int J Radiat Oncol Biol Phys 1990 Jun;18(6):1341–50
Relationship of changes in pH and energy status to hypoxic cell fraction and hyperthermia sensitivity. Koutcher JA, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1429–35
Hypoxic fractions of human tumors xenografted into mice: a review. Rockwell S, et al.
Int J Radiat Oncol Biol Phys 1990 Jul;19(1):197–202
Tumor hypoxia, drug resistance, and metastases [comment] Brown JM. **J Natl Cancer Inst** 1990 Mar 7;82(5):338–9 (16 ref.) Comment on: J Natl Cancer Inst 1990 Mar 7;82(5):371–80.
Effects of reoxygenation on cells from hypoxic regions of solid tumors: anticancer drug sensitivity and metastatic potential [see comments] Young SD, et al.
J Natl Cancer Inst 1990 Mar 7;82(5):371–80 Comment in: J Natl Cancer Inst 1990 Mar 7;82(5):338–9.
Relationship between coronary flow and high energy phosphates in the isolated perfused rat heart, with special reference to the effects of anoxia, iodoacetic acid, and 2,4-dinitrophenol. Shibano T, et al.
Methods Find Exp Clin Pharmacol 1989 Sep;11(9):567–75
The effect of blocking sodium influx on anoxic damage in the rat hippocampal slice. Boening JA, et al.
Neuroscience 1989;33(2):263–8
Oxygen sensing and erythropoietin gene regulation in a human hepatoma cell line. Goldberg MA, et al.
Prog Clin Biol Res 1989;319:467–86; discussion 487–9
Signal transduction in hypoxic pulmonary vasoconstriction (HPV). Rhoades RA, et al. **Prog Clin Biol Res** 1990; 327:565–73
Effects of l-carnitine on membrane potential derangements induced by palmitoylcarnitine and anoxia in isolated superfused guinea-pig papillary muscle. Yokota S, et al.
Res Commun Chem Pathol Pharmacol 1989 Nov; 66(2):179–90
Correction of hemorrhagic shock-induced liver hypoxia with whole blood, Ringer's solution or with hetastarch. Mäkisalo HJ, et al. **Res Exp Med (Berl)** 1989;189(6):397–407
The significance of the endothelium for hypoxic vasodilatation. Siegel G, et al. **Z Kardiol** 1989;78 Suppl 6:124–31
[Effects of various oxygen concentrations on metabolic performance of in vitro perfused human placentas] Reiber W, et al. **Zentralbl Gynakol** 1990;112(4):207–14 (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

The influence of radiation dose on the magnitude and kinetics of reoxygenation in a C3H mammary carcinoma. Grau C, et al. **Radiat Res** 1990 Jun;122(3):309–15
The potentiation of radiation damage by nicotinamide in the SCCVII tumour in vivo. Horsman MR, et al.
Radiother Oncol 1990 May;18(1):49–57
[Advanced research in hypoxic cells] Ando K.
Gan No Rinsho 1989 Oct;35(13):1525–9 (9 ref.) (Eng. Abstr.) **(Jpn)**

CELL ISOLATION see **CELL SEPARATION**

CELL LINE

Structural changes in the ribosomal genes of immortalized and transformed mouse embryo C3H/10T1/2 cell lines. Oyan AM, et al. **APMIS** 1990 Mar;98(3):212–20
Evaluation of continuous cell lines in antiviral studies with murine cytomegalovirus. Smee DF, et al. **Arch Virol** 1989; 107(3–4):253–60
Characterization of subclones of Madin-Darby canine kidney renal epithelial cell line. Nakazato Y, et al.
Biochim Biophys Acta 1989 Oct 30;1014(1):57–65
Use of human diploid cells in vaccine production. Wood DJ, et al. **Biologicals** 1990 Apr;18(2):143–6
A rapid and versatile method for the detection and isolation of mammalian cell lines secreting recombinant proteins. Walls JD, et al. **Biotechniques** 1990 Feb;8(2):138–42
Animal cell culture collections and the supply of authenticated cultures and services for industry and research. Doyle A, et al. **Biotechnol Genet Eng Rev** 1989; 7:259–80 (22 ref.)
Establishment and characterisation of a new tumorigenic cell line with a normal karyotype derived from a human breast adenocarcinoma. Gioanni J, et al. **Br J Cancer** 1990 Jul; 62(1):8–13
Two human myeloma cell lines, amylase-producing KMS-12-PE and amylase-non-producing KMS-12-BM, were established from a patient, having the same chromosome marker, t(11;14)(q13;q32). Ohtsuki T, et al.
Br J Haematol 1989 Oct;73(2):199–204
Establishment of a human undifferentiated thyroid cancer cell line producing several growth factors and cytokines. Enomoto T, et al. **Cancer** 1990 May 1;65(9):1971–9
Isolation of thymidine-requiring variants from rat nerve-like cells. Ishii K. **Cell Struct Funct** 1990 Apr;15(2):93–7
Development of new cell lines for animal cell biotechnology. MacDonald C. **Crit Rev Biotechnol** 1990;10(2):155–78 (261 ref.)
Cell lines with developmental potential restricted to mesodermal lineages isolated from differentiating cultures of pluripotential P19 embryonal carcinoma cells. Rudnicki MA, et al. **Development** 1989 Oct;107(2):361–72
Avian bone-derived cell line infected with osteopetrosis virus pts-56. Sovová V, et al. **Folia Biol (Praha)** 1990;36(1):32–40
Establishment and characterization of a new human cell line derived from ovarian clear cell carcinoma. Wong WS, et al. **Gynecol Oncol** 1990 Jul;38(1):37–45
In the interest of clearer communication [letter] Hayflick L.
In Vitro Cell Dev Biol 1990 Jan;26(1):1–6
Fish cell lines: establishment and characterization of three new cell lines from grass carp (Ctenopharyngodon idella). Lu YA, et al. **In Vitro Cell Dev Biol** 1990 Mar;26(3 Pt 1):275–9
Generation and characterisation of bovine antigen-specific T cell lines. Glass EJ, et al. **J Immunol Methods** 1990 Apr 17;128(2):267–75
Establishment of a B-lymphoblastoid cell line infected with Epstein-Barr-related virus from a cynomolgus monkey (Macaca fascicularis). Fujimoto K, et al.
J Med Primatol 1990;19(1):21–30
New variants of the B16 melanoma: tumorigenicity and metastatic properties under different culture conditions. Aubert C, et al. **J Natl Cancer Inst** 1990 Jun 6;82(11):952–8
Spontaneous development in vitro of a myelin basic protein-specific suppressor T cell line. Huang SK, et al.
J Neuroimmunol 1989 Dec;25(2–3):177–83
Establishment of permanent astroglial cell lines, able to differentiate in vitro, from transgenic mice carrying the polyoma virus large T gene: an alternative approach to brain cell immortalization. Galiana E, et al.
J Neurosci Res 1990 Jul;26(3):269–77
Variant sublines with different metastatic potentials selected in nude mice from human oral squamous cell carcinomas. Momose F, et al. **J Oral Pathol Med** 1989 Aug;18(7):391–5
Establishment and characterization of a small round cell sarcoma cell line, SCCH-196, with t(11;22)(q24;q12). Homma C, et al. **Jpn J Cancer Res** 1989 Sep;80(9):861–5
Establishment and characterization of two nasopharyngeal carcinoma cell lines. Lin CT, et al. **Lab Invest** 1990 Jun; 62(6):713–24
General characteristics and viral susceptibility of a newborn pig kidney (NPK) continuous culture. Ferrari M, et al.
Microbiologica 1989 Oct;12(4):329–34
Continuous cell lines as substrates for biologicals: report of a joint meeting of WHO, IABS (cell Culture Committee Subsection), and ESACT. Spier RE. **Mol Biother** 1988;

1(2):114–5
Identification of rat cell lines that preferentially express insulin–like growth factor binding proteins rlGFBP–1, 2, or 3. Yang YW, et al. **Mol Endocrinol** 1990 Jan;4(1):29–38
Tissues not for sale [news] Elsner R. **Nature** 1990 Jul 19; 346(6281):208
The development of a panel of human cell lines expressing specific human cytochrome P450 cDNAs. Crespi CL, et al. **Prog Clin Biol Res** 1990;340B:97–106
The untold story of HUT78 [news] [published erratum appears in Science 1990 Aug 3;249(4968):466] Rubinstein E. **Science** 1990 Jun 22;248(4962):1499–507
Safe and efficient ecotropic and amphotropic packaging lines for use in gene transfer experiments. Markowitz DG, et al. **Trans Assoc Am Physicians** 1988;101:212–8
The use of cell lines in neurobiology. Lendahl U, et al. **Trends Neurosci** 1990 Apr;13(4):132–7 (59 ref.)
[Establishment of Wg3h–neo cell line with two genetic markers] Han D, et al.
Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1990 Feb; 12(1):74–8 (Eng. Abstr.) **(Chi)**
[Characteristics of Namalwa cells—a substrate for production of human interferon] Shukhmina NR, et al.
Vopr Virusol 1990 Jan–Feb;35(1):64–8 (Eng. Abstr.) **(Rus)**
[Cell lines in experimental endocrinology] Filipčík P, et al. **Bratisl Lek Listy** 1990 Apr;91(4):278–83 (Eng. Abstr.) **(Slo)**

ANALYSIS

A rapid method for confirming cell line identity: DNA "fingerprinting" with a minisatellite probe from M13 bacteriophage. Devor EJ, et al. **Biotechniques** 1988 Mar; 6(3):200, 202

DRUG EFFECTS

The antiretroviral and cytostatic activity, and metabolism of 3'–azido–2',3'–dideoxythymidine, 3'–fluoro–2',3'–dideoxythymidine and 2',3'–dideoxycytidine are highly cell type–dependent. Balzarini J, et al. **Adv Exp Med Biol** 1989;253B:407–13
1,8–Dinitropyrene: comparative mutagenicity in Chinese hamster V79 and CHO cells. O'Donovan MR.
Mutagenesis 1990 May;5(3):275–7
DNA repair and chromosomal stability in the alkylating agent–hypersensitive Chinese hamster cell line 27–1. Kaina B, et al. **Mutat Res** 1990 Mar;243(3):219–24

IMMUNOLOGY

A cell line (CLC) of adherent peripheral blood mononuclear leucocytes of normal common carp Cyprinus carpio. Faisal M, et al. **Dev Comp Immunol** 1990 Spring;14(2):255–60
Cell lines derived from human autorosette–forming cells with suppressive activity. Michlin H, et al.
Nat Immun Cell Growth Regul 1990;9(1):49–59

METABOLISM

N–glycosylation and in vitro enzymatic activity of human recombinant tissue plasminogen activator expressed in Chinese hamster ovary cells and a murine cell line. Parekh RB, et al. **Biochemistry** 1989 Sep 19;28(19):7670–9

MICROBIOLOGY

Susceptibility of mammalian, avian, fish, and mosquito cell lines to rabies virus infection. Seganti L, et al.
Acta Virol (Praha) 1990 Apr;34(2):155–63

PHYSIOLOGY

A new human plasma cell line, Karpas 620, with translocations involving chromosomes 1, 11 and 14. Nacheva E, et al. **Br J Haematol** 1990 Jan;74(1):70–6
The selective utilization of serum proteins by different cell lines growing in vitro. Tritsch GL. **Exp Cell Res** 1967 Jun; 46(3):628–31

RADIATION EFFECTS

Summary of complementation groups of UV–sensitive CHO cell mutants isolated by large–scale screening. Busch D, et al. **Mutagenesis** 1989 Sep;4(5):349–54

CELL LINE, TRANSFORMED

see related
CELL TRANSFORMATION, NEOPLASTIC
CELL TRANSFORMATION, VIRAL

Structural changes in the ribosomal genes of immortalized and transformed mouse embryo C3H/10T1/2 cell lines. Oyan AM, et al. **APMIS** 1990 Mar;98(3):212–20
Generation of macrophage cell line from fresh bone marrow cells with a myc/raf recombinant retrovirus. Blasi E, et al. **Cancer Biochem Biophys** 1989 Oct;10(4):303–17
A continuous line of chicken embryo cells derived from a chondrocyte culture infected with RSV. Gionti E, et al. **Cell Differ Dev** 1989 Sep;27(3):215–23
Spontaneous transformation and immortalization of human endothelial cells. Takahashi K, et al.
In Vitro Cell Dev Biol 1990 Mar;26(3 Pt 1):265–74
Retransformation of a revertant cell line with the adenovirus E1 oncogenes and vanadate. Dessureault J, et al.
J Cell Biochem 1990 Jul;43(3):293–6

CYTOLOGY

A cultured human renal epithelioid cell line responsive to vasoactive intestinal peptide. Simmons NL. **Exp Physiol** 1990 May;75(3):309–19

DRUG EFFECTS

Reversion of transformed NIH 3T3 cells to flat cells by inhibitors of poly(ADP–ribose) polymerase. Nagao M, et al. **Basic Life Sci** 1990;52:401–5
Permanent conversion of NIH3T3 cells transformed by activated c–Ha–ras, c–Ki–ras, N–ras, or c–raf, and of human pancreatic adenocarcinoma containing activated c–Ki–ras to apparently normal cells by treatment with the antibiotic azatyrosine. Shindo–Okada N, et al.
Basic Life Sci 1990;52:309–12
Spontaneously transformed NRK cells lose their mitogenic response to epidermal growth factor. Wegrzyn RJ, et al. **Growth Factors** 1989;1(3):227–36

METABOLISM

Cloning of malignantly transformed rat thyroid (FRTL) cells with thyrotropin receptors and their growth inhibition by 3',5'–cyclic adenosine monophosphate. Endo T, et al.
Endocrinology 1990 Mar;126(3):1492–7
Cytochemical and molecular properties of simian virus 40 transformed Kaposi's sarcoma–derived cells: evidence for the secretion of a member of the fibroblast growth factor family. Werner S, et al. **J Cell Physiol** 1989 Dec; 141(3):490–502

PHYSIOLOGY

Effect of IL–6 on proliferation and IG production of human EBV–transformed cell lines in serum free culture media. Jochems GJ, et al. **Dev Biol Stand** 1990;71:57–63

ULTRASTRUCTURE

Acetoxycycloheximide and cycloheximide convert transformed morphology of ras–transformed cells to normal morphology. Ogawara H, et al.
J Antibiot (Tokyo) 1989 Oct;42(10):1530–3

CELL–MEDIATED IMMUNITY see **IMMUNITY, CELLULAR**

CELL–MEDIATED LYMPHOLYTIC CELLS see **T–LYMPHOCYTES, CYTOTOXIC**

CELL MEMBRANE

see related
MEMBRANE FLUIDITY
MEMBRANE LIPIDS
MEMBRANE POTENTIALS
MEMBRANE PROTEINS
OSMOTIC FRAGILITY

The effect of transmembrane potential on the dynamic behavior of cell membranes. Lakos Z, et al.
Biochim Biophys Acta 1990 Mar 30;1023(1):41–6
Isolation and characterization of cell membranes. McNamee MG. **Biotechniques** 1989 May;7(5):466–75 (18 ref.)
The cell surface and cancer metastasis. Poste G, et al.
Dev Biol (N Y 1985) 1986;3:15–31 (31 ref.)
Divalent metal ion mediated interaction of proteins with negatively charged membranes. A model study employing molecular mechanics. Cain JD, et al.
Int J Pept Protein Res 1990 Feb;35(2):111–6
Postischemic cell membrane dysfunction [editorial] Perry MO. **J Vasc Surg** 1990 Jan;11(1):179–80
Biomembranes in health and disease. An international conference. Lucknow, November 1–4, 1988. Proceedings.
Mol Cell Biochem 1989 Nov 23–Dec 19;91(1–2):1–182
Horizons in membrane biotechnology. Proceedings of the Third International Meeting on Membrane Biotechnology. College Station, Texas, September 17–20, 1989.
Prog Clin Biol Res 1990;343:1–304
Estrogen enhances cytotoxicity of hyperthermia on cultured transformed cells. Ueo H, et al. **Semin Surg Oncol** 1990; 6(1):14–8
[Effects of hyperthermia on certain properties of membranes of HeLa cells] Timoshenko AV, et al. **Eksp Onkol** 1990; 12(3):63–5 (Eng. Abstr.) **(Rus)**
[Models for rotating spin labels and probes in proteins and membranes] Antsiferova LI, et al.
Izv Akad Nauk SSSR [Biol] 1989 Jul–Aug;(4):494–501 (Eng. Abstr.) **(Rus)**
[Effect of dehydration of heat–induced restructuring of the cytoplasm membrane of yeast cells] Timoshin AA, et al.
Mikrobiologiia 1989 Jul–Aug;58(4):679–80 (Eng. Abstr.) **(Rus)**

ANALYSIS

Localization of alpha–tocopherol in membranes. Gomez–Fernandez JC, et al. **Ann N Y Acad Sci** 1989; 570:109–20 (30 ref.)
Lipid composition and fluidity of liver mitochondria, microsomes and plasma membrane of rats with chronic dietary iron overload. Pietrangelo A, et al.
Biochem Pharmacol 1990 Jan 1;39(1):123–8
The plasma membrane calcium pump: structure, function and regulation. Carafoli E. **Biochem Soc Trans** 1989 Oct; 17(5):808–10
Asymmetric extraction of membrane lipids by CHAPS. Banerjee P, et al. **Biochim Biophys Acta** 1990 Jun 14; 1044(3):305–14
Thermotropic characterization of the 2–O–acyl,polyprenyl alpha–D–glucopyranoside isolated from palmitate–enriched Acholeplasma laidlawii B membranes. Lewis RN, et al.
Biochim Biophys Acta 1990 Jul 9;1026(1):21–8
Identification and localization of low–molecular–mass GTP–binding proteins associated with synaptic vesicles and other membranes. Matsuoka I, et al.
Biochim Biophys Acta 1990 Jul 9;1026(1):99–104
Distribution of tumor promoters in lipid membranes and changes in membrane structure. Nam KY, et al.
Biophys Chem 1989 Sep 15;34(1):43–53
Epidermal growth factor induces the accumulation of calpactin II on the cell surface during membrane ruffling. Campos–Gonzalez R, et al. **Cell Motil Cytoskeleton** 1990; 15(1):34–40
Induction of non–bilayer lipid structures by functional signal peptides. Killian JA, et al. **EMBO J** 1990 Mar;9(3):815–9
The p36 substrate of pp60src kinase is located at the cytoplasmic surface of the plasma membrane of fibroblasts; an immunoelectron microscopic analysis. Semich R, et al.
Eur J Cell Biol 1989 Dec;50(2):313–23
Insulin–responsive glucose transporters are concentrated in a cell surface–derived membrane fraction of 3T3–L1 adipocytes. Lange K, et al. **FEBS Lett** 1990 Feb 26; 261(2):459–63
Differential evaluation of human sperm hypoosmotic swelling test and its relationship with the outcome of in–vitro fertilization of human oocytes. Chan SY, et al.
Hum Reprod 1990 Jan;5(1):84–8
Outer membrane polysaccharide deficiency in two nongliding mutants of Cytophaga johnsonae. Godchaux W 3d, et al.
J Bacteriol 1990 Mar;172(3):1250–5
Isolation of a receptor for acidic and basic fibroblast growth factor from embryonic chick. Burrus LW, et al.
J Biol Chem 1989 Nov 5;264(31):18647–53
Identification and characterization of parathyroid hormone receptors in rat renal cortical plasma membranes using radioligand binding. Nickols GA, et al.
J Bone Miner Res 1989 Aug;4(4):615–23
Cross–linking studies show that herpes simplex virus type 1 glycoprotein C molecules are clustered in the membrane of infected cells. Kikuchi GE, et al. **J Gen Virol** 1990 Feb; 71 (Pt 2):455–8
Immunohistochemical study of a rat membrane protein which induces a selective potassium permeation: its localization in the apical membrane portion of epithelial cells. Sugimoto T, et al. **J Membr Biol** 1990 Jan;113(1):39–47
Rabbit distal colon epithelium: I. Isolation and characterization of basolateral plasma membrane vesicles from surface and crypt cells. Wiener H, et al.
J Membr Biol 1989 Sep;110(2):147–62
Neuronal subsets express multiple high–molecular–weight cell–surface glycoconjugates defined by monoclonal antibodies Cat–301 and VC1.1. Zaremba S, et al.
J Neurosci 1990 Sep;10(9):2985–95
Effect of dietary fat composition on rat colon plasma membranes and fecal lipids. Awad AB, et al. **J Nutr** 1989 Oct;119(10):1376–82 (36 ref.)
Relationship between dietary fat, adipocyte membrane composition and insulin binding in the rat. Field CJ, et al. **J Nutr** 1989 Oct;119(10):1483–9 (37 ref.)
Subcellular localization of proteins encoded by the phenotypically cryptic plasmid of Neisseria gonorrhoeae: biological evidence for outer membrane association of the cppB gene product. Aalen RB, et al. **Mol Microbiol** 1989 Oct;3(10):1433–9
Dystrophin is localized to the plasma membrane of human skeletal muscle fibers by electron–microscopic cytochemical study. Carpenter S, et al. **Muscle Nerve** 1990 May;13(5):376–80
Amino acids bracketing the predicted transmembrane domains of membrane proteins. Pidgeon C, et al.
Pharm Res 1989 Sep;6(9):779–86
Analyses of surface membrane carbohydrates in parasitic flagellates of the order kinetoplastida using lectins. Chao D, et al. **Proc Natl Sci Counc Repub China [B]** 1990 Jan; 14(1):54–8
The role of unsaturated lipids in membrane structure and stability. Quinn PJ, et al. **Prog Biophys Mol Biol** 1989; 53(2):71–103 (176 ref.)
[Identification of human porins. II. Characterization and primary structure of a 31–lDa porin from human B lymphocytes (Porin 31HL).] Kayser H, et al.
Biol Chem Hoppe Seyler 1989 Dec;370(12):1265–78 (Eng. Abstr.) **(Ger)**
[Identification of human porins. I. Purification of a porin from human B–lymphocytes (Porin 31HL) and the topochemical proof of its expression on the plasmalemma of the progenitor cell.] Thinnes FP, et al.
Biol Chem Hoppe Seyler 1989 Dec;370(12):1253–64 (Eng. Abstr.) **(Ger)**
[Determination of lectin receptors on the surface membranes of lymphoid cells] Skliarenko LM, et al. **Lab Delo** 1990; (2):18–20 (Eng. Abstr.) **(Rus)**
[Lipid composition and properties of plasma membranes in aging and certain types of experimental pathology]

Bogatskaia LN, et al. **Vestn Akad Med Nauk SSSR** 1990; (1):31–4 (Eng. Abstr.) **(Rus)**

[Isolation and partial characteristics of biopolymers in the outer membrane of Pseudomonas syringae] Mykhal's'kyĭ LO, et al. **Ukr Biokhim Zh** 1990 Mar–Apr;62(2):40–7 (Eng. Abstr.) **(Ukr)**

DRUG EFFECTS

Effect of malnutrition and hormone treatments on intestinal microvillus membrane glycosylation in suckling rats. Jaswal VM, et al. **Ann Nutr Metab** 1990;34(3):155–62

Interaction of calcium and cholesterol sulphate induces membrane destabilization and fusion: implications for the acrosome reaction. Cheetham JJ, et al. **Biochim Biophys Acta** 1990 May 24;1024(2):367–72

Calcium-dependent fusion of the plasma membrane fraction from human neutrophils with liposomes. Francis JW, et al. **Biochim Biophys Acta** 1990 Jun 11;1025(1):1–9

Prevention of thromboxane B2-induced hepatocyte plasma membrane bleb formation by certain prostaglandins and a proteinase inhibitor. Horton AA, et al. **Biochim Biophys Acta** 1990 Mar;1022(3):319–24

Rats withdrawn from ethanol rapidly re-acquire membrane tolerance after resumption of ethanol feeding. Taraschi TF, et al. **Biochim Biophys Acta** 1990 Jan 15;1021(1):51–5

Ambazone as a membrane active antitumor drug. Löber G, et al. **Biophys Chem** 1990 Apr;35(2–3):287–300 (56 ref.)

Physiochemical characterization of substituted chromeno[4,3-b][1,5]benzodiazepine stereoisomers designed as cell membrane active antitumor agents. Werner W, et al. **Biophys Chem** 1990 Apr;35(2–3):271–85

Proceedings: The cell membrane and cell signals as targets in cancer chemotherapy. September 14–16, 1989, Cambridge, UK. Abstracts. **Cancer Chemother Pharmacol** 1989;24 Suppl 2:S53–90

Interaction of amine oxides and quaternary ammonium salts with membrane and membrane-associated processes in E. coli cells: mode of action. Kopecká-Leitmanová A, et al. **Drug Metabol Drug Interact** 1989;7(1):29–51

Cholera toxin differentially decreases membrane levels of alpha and beta subunits of G proteins in NG108-15 cells. Klinz FJ, et al. **Eur J Biochem** 1990 Mar 30;188(3):567–76

Asymmetric distribution of the phosphatidylinositol-linked phospho-oligosaccharide that mimics insulin action in the plasma membrane. Varela I, et al. **Eur J Biochem** 1990 Mar 10;188(2):213–8

Decreased plasma membrane fluidity of peripheral blood lymphocytes after diethyldithiocarbamate (DTC) therapy in HIV-infected patients. Lehr HA, et al. **Eur J Clin Pharmacol** 1989;37(5):521–3

Interactions of vitamin E with free radicals and membranes. Bisby RH. **Free Radic Res Commun** 1990;8(4–6):299–306 (32 ref.)

Pentoxifylline modulation of plasma membrane functions in human polymorphonuclear leukocytes [published erratum appears in Infect Immun 1990 Mar;58(3):846] Hand WL, et al. **Infect Immun** 1989 Nov;57(11):3520–6

Specific alterations in different adipose tissues of pig adipocyte plasma membrane structure by dietary lipids. Nicolas C, et al. **Int J Obes** 1990;14(6):537–49

Alteration of the lipid composition of rat testicular plasma membranes by dietary (n-3) fatty acids changes the responsiveness of Leydig cells and testosterone synthesis. Sebokova E, et al. **J Nutr** 1990 Jun;120(6):610–8

Inhibition of bile acid transport by cyclosporine A in rat liver plasma membrane vesicles. Moseley RH, et al. **J Pharmacol Exp Ther** 1990 Jun;253(3):974–80

Membrane effects of the polyene antibiotic amphotericin B and of some of its derivatives on lymphocytes. Henry-Toulmé N, et al. **Mol Cell Biochem** 1989 Nov 23–Dec 19;91(1–2):39–44 (49 ref.)

The effects of alcohols in vitro on the nervous cell membrane measured by changes in the (Ca2+/Mg2+) ATPase activity and fluidity of the synaptosomal membrane. Edelfors S, et al. **Pharmacol Toxicol** 1990 Jul;67(1):56–60

Membrane solubilization by the non-ionic detergent triton X-100. A comparative study including model and cell membranes. Macarulla JM, et al. **Rev Esp Fisiol** 1989;45 Suppl:1–8

Selective cytolysis by a protein toxin as a consequence of direct interaction with the lymphocyte plasma membrane. Hinman CL, et al. **Toxicol Appl Pharmacol** 1990 Jun 15; 104(2):290–300

Stimulation of a human erythrocyte membrane ATPase by glutathione conjugates. Sharma R, et al. **Toxicol Appl Pharmacol** 1990 Jul;104(3):421–8

Interaction of Clostridium perfringens delta toxin with erythrocyte and liposome membranes and relation with the specific binding to the ganglioside GM2. Jolivet-Reynaud C, et al. **Toxicon** 1989;27(10):1113–26

[The specific effects of new phenoxyacetic acid derivatives at the cellular membrane level] Neacşu I, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Jan–Mar;93(1):161–5 (Eng. Abstr.) **(Rum)**

[The centrosome reaction in tissue-culture cells to depolarization of the cell membranes] Alieva IB, et al. **Biol Nauki** 1990;(4):45–52 (Eng. Abstr.) **(Rus)**

[Effects of remantadine on fusion of lipid membranes of influenza A virus with plasma and internal membranes of lymphoblastic cells] Leneva IA, et al. **Biull Eksp Biol Med** 1990 May;109(5):483–5 (Eng. Abstr.) **(Rus)**

[Membrane mechanisms of the effect of alkylating cytostatic agents] Mukhin VV, et al. **Biull Eksp Biol Med** 1990 Apr; 109(4):351–3 (Eng. Abstr.) **(Rus)**

[Transmembrane segments of the P-type cation-transporting ATPases. A comparative study. Nakamoto RK, et al. **Ann N Y Acad Sci** 1989;574:165–79

Purification of liver plasma membranes and localization of a protein galactosyltransferase. Fernandez-Briera A, et al. **Arch Int Physiol Biochim** 1989 Jun;97(3):221–30

Characterization of cytoplasmic and membrane-associated phosphatidylinositol 4,5-biphosphate phospholipase C activities in guinea pig ventricles. Edes I, et al. **Basic Res Cardiol** 1990 Jan–Feb;85(1):78–87

Lack of translocation of protein kinase C from the cytosol to the membranes in vasopressin-stimulated hepatocytes. Diaz-Guerra MJ, et al. **Biochem J** 1990 Jul 1;269(1):163–8

Further characterization of the plasma membrane- and intracellular membrane-associated platelet Ca2+ transport systems. Enouf J, et al. **Biochem J** 1989 Oct 15; 263(2):547–52

Polyamines and neomycin inhibit the purified plasma-membrane Ca2+ pump by interacting with associated polyphosphoinositides. Missiaen L, et al. **Biochem J** 1989 Aug 1;261(3):1055–8

Inhibitory effects of cytotoxic disulfides on membrane Na+, K(+)-ATPase. Kirkpatrick DL, et al. **Biochem Pharmacol** 1990 May 1;39(9):1484–7

Variation in hepatic membrane-bound catechol-O-methyltransferase activity in Fischer and Wistar-Furth strains of rat. Roth JA, et al. **Biochem Pharmacol** 1990 Sep 1;40(5):1151–3

Differential inactivation of Escherichia coli membrane dehydrogenases by a myeloperoxidase-mediated antimicrobial system. Rakita RM, et al. **Biochemistry** 1990 Jan 30;29(4):1075–80

Expression of UDP-glucuronosyltransferase cDNA in Saccharomyces cerevisiae as a membrane-bound and as a cytosolic form. Toghrol F, et al. **Biochemistry** 1990 Mar 6;29(9):2349–56

Purification and kinetic properties of a membrane-bound phosphatidylinositol kinase of the bovine adrenal medulla. Husebye ES, et al. **Biochim Biophys Acta** 1990 Feb 23; 1042(3):330–7

Phosphoinositide metabolism in cultured glioma and neuroblastoma cells: subcellular distribution of enzymes indicate incomplete turnover at the plasma membrane. Morris SJ, et al. **Biochim Biophys Acta** 1990 Mar; 1022(3):339–47

Freeze-thawing causes masking of membrane-bound outer carnitine palmitoyltransferase activity: implications for studies on carnitine palmitoyltransferases deficiency. Pande SV, et al. **Biochim Biophys Acta** 1990 May 22;1044(2):262–8

Immunoelectron microscopic localization of the F1F0 ATPase (ATP synthase) on the cytoplasmic membrane of alkalophilic Bacillus firmus RAB. Rohde M, et al. **Biochim Biophys Acta** 1989 Oct 16;985(2):233–5

Catalytic and regulatory sites of yeast plasma membrane H(+)-ATPase studied by directed mutagenesis. Serrano R, et al. **Biochim Biophys Acta** 1990 Jul 25;1018(2–3):195–9

Expression and function of cell surface galactosyltransferase. Shur BD. **Biochim Biophys Acta** 1989 Dec 6;988(3):389–409 (148 ref.)

Human sperm plasma membranes possess alpha-D-mannosidase activity but no galactosyltransferase activity. Tulsiani DR, et al. **Biol Reprod** 1990 May–Jun; 42(5–6):843–58

Purification of the membrane protein enzyme lipoamidase by affinity chromatography. Oizumi J, et al. **Biomed Chromatogr** 1989 Nov;3(6):274–5

Effect of H-ras proteins on the activity of polyphosphoinositide phospholipase C in HL60 membranes. Cockcroft S, et al. **Cell Signal** 1990;2(3):227–34

Thyroid hormone regulation of membrane Ca2(+)-ATPase activity. Davis PJ, et al. **Endocr Res** 1989;15(4):651–82 (42 ref.)

Insulin antagonistic effects of insulin receptor antibodies on plasma membrane (Ca2+ + Mg2+) ATPase activity: a possible etiology of type B insulin resistance. Nagy K, et al. **Endocrinology** 1990 Jan;126(1):45–52

Characterization of the nickel-iron periplasmic hydrogenase from Desulfovibrio fructosovorans. Hatchikian CE, et al. **Eur J Biochem** 1990 Feb 14;187(3):635–43

Chemiosmotic energy conversion and the membrane ATPase of Methanolobus tindarius. Scheel E, et al. **Eur J Biochem** 1990 Feb 14;187(3):727–35

The H(+)-ATPase of the plasma membrane from yeast. Kinetics of ATP hydrolysis in native membranes, isolated and reconstituted enzymes. Wach A, et al. **Eur J Biochem** 1990 May 20;189(3):675–82

The principal difference in regulation of the catalytic activity of water-soluble and membrane forms of enzymes in reversed micelles. Gamma-glutamyltransferase and aminopeptidase. Kabanov AV, et al. **FEBS Lett** 1990 Jul 16;267(2):236–8

Structural analogies between different redox enzymes inserted into biological membranes. Degli Esposti M, et al. **Int J Biochem** 1989;21(6):599–608 (28 ref.)

Immunological discrimination of intralysosomal, cytosolic, and two membrane sialidases present in rat tissues. Miyagi T, et al. **J Biochem (Tokyo)** 1990 May;107(5):794–8

Biosynthesis of the Na,K-ATPase in Madin-Darby canine kidney cells. Activation and cell surface delivery. Caplan MJ, et al. **J Biol Chem** 1990 Feb 25;265(6):3528–34

A calcium-dependent mechanism for associating a soluble arachidonoyl-hydrolyzing phospholipase A2 with membrane in the macrophage cell line RAW 264.7. Channon JY, et al. **J Biol Chem** 1990 Apr 5;265(10):5409–13

Calcium-dependent and phosphorylation-stimulated proteolysis of lipocortin I by an endogenous A431 cell membrane protease. Chuah SY, et al. **J Biol Chem** 1989 Dec 15;264(35):21160–6

Molecular cloning of a third isoform of the calmodulin-sensitive plasma membrane Ca2+-transporting ATPase that is expressed predominantly in brain and skeletal muscle. Greeb J, et al. **J Biol Chem** 1989 Nov 5; 264(31):18569–76

Direct evidence for the cytoplasmic location of the NH2- and COOH-terminal ends of the Neurospora crassa plasma membrane H+-ATPase. Hennessey JP Jr, et al. **J Biol Chem** 1990 Jan 5;265(1):532–7

The calcium-transporting ATPase and the calcium- or magnesium-dependent nucleotide phosphatase activities of human placental trophoblast basal plasma membrane are separate enzyme activities. Kelley LK, et al. **J Biol Chem** 1990 Apr 5;265(10):5453–9

Reconstitution of a solubilized membrane but not cytosolic phospholipase C with membrane-associated Gp from GH3 cells. Martin TF, et al. **J Biol Chem** 1989 Dec 15; 264(35):20917–22

Detection of a phosphatidylinositol-specific phospholipase C at the surface of Swiss 3T3 cells and its potential role in the regulation of cell growth. Ting AE, et al. **J Biol Chem** 1990 Apr 5;265(10):5337–40

G protein-dependent activation of a phosphoinositide-specific phospholipase C in UMR-106 osteosarcoma cell membranes. Babich M, et al. **J Bone Miner Res** 1989 Aug;4(4):549–56

The protective role of a natural inhibitor in the fluorescent location of cells possessing a latent form of cell surface protease. Steven FS, et al. **J Enzym Inhib** 1990;3(4):317–22

cAMP- and RAS-independent nutritional regulation of plasma-membrane H+-ATPase activity in Saccharomyces cerevisiae. Mazón MJ, et al. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1453–60

Comparison of stimulation by chemotactic formyl peptide analogs between GTPase activity in neutrophil plasma membranes and granule enzyme release from intact neutrophils. Kanaho Y, et al. **J Leukoc Biol** 1990 May; 47(5):420–8

Subunit assembly and functional maturation of Na,K-ATPase. Geering K. **J Membr Biol** 1990 May; 115(2):109–21 (153 ref.)

Biomembranes. Part N. Transport in bacteria, mitochondria, and chloroplasts: protonmotive force. **Methods Enzymol** 1986;126:1–832

Location of signal sequences for membrane insertion of the Na+,K+-ATPase alpha subunit. Homareda H, et al. **Mol Cell Biol** 1989 Dec;9(12):5742–5

Non-steady state kinetic analysis of the regulation of adenylate cyclase by GTP-binding proteins. Bell JD, et al. **Mol Pharmacol** 1990 Apr;37(4):535–45

Solubilization and functional reconstitution of the protein-translocation enzymes of Escherichia coli. Driessen AJ, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3107–11

[Effects of VIP (vasoactive intestinal peptide) on plasma membrane ATPases from rat enterocytes] Vega FV, et al. **C R Soc Biol (Paris)** 1989;183(6):515–21 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Killing of gram-negative bacteria by complement. Fractionation of cell membranes after complement C5b-9 deposition on to the surface of Salmonella minnesota Re595. Tomlinson S, et al. **Biochem J** 1989 Oct 15; 263(2):505–11

Molecular associations of major histocompatibility complex antigens: probing the complexity of cell surface receptors. Edidin M. **Biochem Soc Trans** 1990 Apr;18(2):152–4

Consecutive enzyme cascades: complement activation at the cell surface triggers increased tissue factor activity. Carson SD, et al. **Blood** 1990 Jul 15;76(2):361–7

Shark cytotoxic macrophages interact with target membrane amino groups. McKinney EC. **Cell Immunol** 1990 May; 127(2):506–13

The importance of antigen processing in determinant selection and of the cell membrane as a reservoir of processed antigen. Benacerraf B, et al. **Cold Spring Harb Symp Quant Biol** 1989;54 Pt 1:293–8 (25 ref.)

CD4 molecules are restricted to the basolateral membrane domain of in vitro differentiated human colon cancer cells (HT29-D4). Rabenandrasana C, et al. **FEBS Lett** 1990 Jun

4;265(1-2):75-9
Monoclonal antibodies against cell surface antigens expressed during porcine adipocyte differentiation. Wright JT, et al. **Int J Obes** 1990;14(5):395-409
Human major histocompatibility complex class II invariant chain is expressed on the cell surface. Wraight CJ, et al. **J Biol Chem** 1990 Apr 5;265(10):5787-92
Membrane alterations in health and disease with particular reference to immune function and cancer. Ray PK, et al. **Mol Cell Biochem** 1989 Nov 23-Dec 19;91(1-2):13-21 (51 ref.)
Attack on neoplastic cell membranes by therapeutic antibody. Stevenson GT. **Mol Cell Biochem** 1989 Nov 23-Dec 19; 91(1-2):33-8
Peptide ligand-induced conformation and surface expression of the Ld class I MHC molecule. Lie WR, et al. **Nature** 1990 Mar 29;344(6265):439-41
Cycling of cell-surface MHC glycoproteins through primaquine-sensitive intracellular compartments. Reid PA, et al. **Nature** 1990 Aug 16;346(6285):655-7
Capping and co-capping of membrane immunoglobulin and lipid-conjugated immunoglobulin inserted in the cell membrane of B lymphocytes. Faro-Rivas J, et al. **Scand J Immunol** 1989 Oct;30(4):435-40
Suppression of renal allograft rejection in the rat using purified plasma membrane and endoplasmic reticulum preparation expressing donor class I major histocompatibility complex antigen. Foster S, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):469

METABOLISM

Characterization of alpha 2-adrenoceptors in a plasma membrane enriched fraction from the insulin-secreting cell line RINm5F. Ullrich S, et al. **Acta Endocrinol (Copenh)** 1989 Oct;121(4):525-32
Visualization of membrane-associated folate transport proteins. Pope LE, et al. **Adv Enzyme Regul** 1989;28:3-11
The calcium pump of the plasma membrane: structure-function relationships. Carafoli E, et al. **Adv Exp Med Biol** 1989;255:61-70
Labelling of non-H1-receptor binding sites by [3H]-mepyramine on the rat liver plasma membrane. Leurs R, et al. **Agents Actions** 1990 Apr;30(1-2):157-60
Changes in dietary lipid saturation modify fatty acid composition and high-density-lipoprotein binding of adipocyte plasma membrane. Zsigmond E, et al. **Am J Clin Nutr** 1990 Jul;52(1):110-9
Activation of human prorenin by lipidic constituents of the cell membrane. Glorioso N, et al. **Am J Hypertens** 1989 Dec;2(12 Pt 1):920-3
Determinants of the transmembrane distribution of chloride in rat lymphocytes: role of Cl(-)-HCO3- exchange. Garcia-Soto JJ, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1108-16
Anionic amino acid transport systems in isolated basal plasma membrane of human placenta. Hoeltzli SD, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):C47-55
Effects of MeCh, thapsigargin, and La3+ on plasmalemmal and intracellular Ca2+ transport in lacrimal acinar cells. Kwan CY, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1006-15
Direct evidence for apical Na+:2Cl-:K+ cotransport in macula densa cells. Lapointe JY, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1466-9
Fluorescent stilbene (BADS) binding proteins in anion-transporting epithelia. Pearce SF, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):C439-49
Basolateral and apical binding, internalization, and degradation of insulin by cultured kidney epithelial cells. Rabkin R, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):E895-902
Calcium uptake by brush-border and basolateral membrane vesicles in chick duodenum. Takito J, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):G16-23
Physiological regulation of transmembrane signaling elements. Malbon CC. **Am J Respir Cell Mol Biol** 1989 Dec;1(6):449-50 (8 ref.)
Inhibition of oxidation of biomembranes by tocopherol. Niki E, et al. **Ann N Y Acad Sci** 1989;570:23-31 (18 ref.)
Membrane traffic in endocytosis: insights from cell-free assays. Gruenberg J, et al. **Annu Rev Cell Biol** 1989; 5:453-81 (145 ref.)
Characterization of tonoplast-enriched vesicles isolated by gradient density fractionation of suspension-cultured cells. Dupaix A, et al. **Arch Biochem Biophys** 1990 May 1; 278(2):392-7
Vanadate-stimulated oxidation of NAD(P)H in the presence of biological membranes and other sources of O2-. Liochev SI, et al. **Arch Biochem Biophys** 1990 May 15;279(1):1-7 (81 ref.)
Role of polyunsaturated fatty acids and lipid peroxidation in LM fibroblast plasma membrane transbilayer structure. Schroeder F, et al. **Arch Biochem Biophys** 1990 Jan; 276(1):55-64
D1-dopamine receptor abnormality in frontal cortex points to a functional alteration of cortical cell membranes in Alzheimer's disease. De Keyser J, et al. **Arch Neurol** 1990 Jul;47(7):761-3
Laminin surface binding sites and metastatic potential of 3LL tumor cells, increased by indomethacin. Aliño SF, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):731-8
Streptavidin contains an RYD sequence which mimics the RGD receptor domain of fibronectin. Alon R, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1236-41
Separate regulatory control of apical and basolateral Na+/H+ exchange in renal epithelial cells. Casavola V, et al. **Biochem Biophys Res Commun** 1989 Dec 15; 165(2):833-7
Apical plasma membrane vesicles formed from organ donor colon demonstrate Na+ and H+ conductances and Na+/H+ exchange. Harig JM, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):438-43
Transient expression of the angiotensin II receptor: a rapid and functional analysis of a calcium-mobilizing seven-transmembrane domain receptor in COS-7 cells. McGillis JP, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):935-41
Proteolytic processing in a non-lysosomal compartment is required for transcytosis of protein-polylysine conjugates in cultured Madin-Darby canine kidney cells. Shen WC, et al. **Biochem Biophys Res Commun** 1990 Jan 15; 166(1):316-23
Inhibition of enzymatic degradation of angiotensin II in membrane binding assays: utility of 1,10-phenanthroline. Koziarz P, et al. **Biochem Cell Biol** 1990 Jan;68(1):218-20
Differential release of proteins from bovine fat globule membrane. Malin EL, et al. **Biochem Cell Biol** 1990 May; 68(5):899-902
Selective uptake of cholesteryl ester from high density lipoproteins by plasma membranes of adipose tissue. Parkes JG, et al. **Biochem Cell Biol** 1990 May;68(5):870-9
Bombesin receptor in membranes from Swiss 3T3 cells. Binding characteristics, affinity labelling and modulation by guanine nucleotides. Sinnett-Smith J, et al. **Biochem J** 1990 Jan 15;265(2):485-93
Transport systems for polyamines in the established renal cell line LLC-PK. Polarized expression of an Na(+)-dependent transporter. Van Den Bosch L, et al. **Biochem J** 1990 Jan 15;265(2):609-12
Characterization of sodium-dependent and sodium-independent nucleoside transport systems in rabbit brush-border and basolateral plasma-membrane vesicles from the renal outer cortex. Williams TC, et al. **Biochem J** 1989 Nov 15;264(1):223-31
Interactions of signal and transit peptides with membrane proteins and phospholipids. Adcock I, et al. **Biochem Soc Trans** 1989 Oct;17(5):823-7
Activation of cellular p21ras by myristoylation. Buss JE, et al. **Biochem Soc Trans** 1989 Oct;17(5):867-9
Modulation of (Ca2+ +Mg2+)-ATPases and Ca2+ fluxes through the plasma membrane of synaptosomes and sarcoplasmic reticulum by local anaesthetics. Garcia-Martin E, et al. **Biochem Soc Trans** 1989 Dec; 17(6):960-2 (21 ref.)
Interaction of anthracyclines with plasma membranes from tumour cells: implications on drug resistance. González-Ros JM, et al. **Biochem Soc Trans** 1989 Dec; 17(6):964-5 (16 ref.)
Cholesterol interactions with tetracosenoic acid phospholipids in model cell membranes: role of the double-bond position. Ayanoglu E, et al. **Biochemistry** 1990 Apr 10;29(14):3466-71
Pyrene eximer mapping in cultured fibroblasts by ratio imaging and time-resolved microscopy. Dix JA, et al. **Biochemistry** 1990 Feb 20;29(7):1949-53
Fourier-transform infrared studies on cation binding to native and modified purple membranes. Duñach M, et al. **Biochemistry** 1989 Oct 31;28(22):8940-5
pH-dependent interaction of amphiphilic polypeptide poly(Lys-Aib-Leu-Aib) with lipid bilayer membrane. Kono K, et al. **Biochemistry** 1990 Apr 17;29(15):3631-7
Gangliosides interact directly with plasminogen and urokinase and may mediate binding of these fibrinolytic components to cells. Miles LA, et al. **Biochemistry** 1989 Nov 28;28(24):9337-43
Electron-transfer events leading to reconstitution of oxygen-evolution activity in manganese-depleted photosystem II membranes. Miller AF, et al. **Biochemistry** 1990 Feb 13;29(6):1385-92
Thermodynamic parameters of the binding of retinol to binding proteins and to membranes. Noy N, et al. **Biochemistry** 1990 Apr 24;29(16):3888-92
Surface-enhanced resonance raman scattering spectroscopy of bacterial photosynthetic membranes: orientation of the carotenoids of Rhodobacter sphaeroides 2.4.1. Picorel R, et al. **Biochemistry** 1990 Jan 23;29(3):707-12
High-affinity transport of L-glutamine by a plasma membrane preparation from rat brain. Roon RJ, et al. **Biochemistry** 1989 Oct 3;28(20):8083-7
Substitution of membrane-embedded aspartic acids in bacteriorhodopsin causes specific changes in different steps of the photochemical cycle. Stern LJ, et al. **Biochemistry** 1989 Dec 26;28(26):10035-42
Transfer of phospholipid and protein into the envelope of gram-negative bacteria by liposome fusion. Tomlinson S, et al. **Biochemistry** 1989 Oct 17;28(21):8303-11
Interaction of calmodulin with the calmodulin binding domain of the plasma membrane Ca2+ pump. Vorherr T, et al. **Biochemistry** 1990 Jan 16;29(2):355-65
Time course analysis of cotransport in membrane vesicles: solutes and tracers. Andrietti F, et al. **Biochim Biophys Acta** 1990 May 24;1024(2):373-9
Electron donation to the plasma membrane redox system of cultured carrot cells stimulates proton release. Barr R, et al. **Biochim Biophys Acta** 1990 May 15;1017(1):91-5
Na(+)-dependent transport of alanine and serine by liver plasma-membrane vesicles from rats fed a low-protein or a high-protein diet. Bourdel G, et al. **Biochim Biophys Acta** 1990 Jul 9;1026(1):1-12
Characterization of the binding of S-adenosyl-L-methionine to plasma membranes of HL-60 promyelocytic leukemia cells. Duerre JA, et al. **Biochim Biophys Acta** 1989 Oct 16;985(2):211-7
An electron paramagnetic resonance study of skeletal muscle membrane fluidity in malignant hyperthermia. Ervasti JM, et al. **Biochim Biophys Acta** 1989 Nov 17;986(1):70-4
Substrate-dependent adaptive regulation and trans-inhibition of System A-mediated amino acid transport. Studies using rat hepatoma plasma membrane vesicles. Fong AD, et al. **Biochim Biophys Acta** 1990 Mar;1022(3):325-32
Chloride channels of biological membranes. Franciolini F, et al. **Biochim Biophys Acta** 1990 May 7;1031(2):247-59 (84 ref.)
Stimulation of ATP-driven Ca2+ pump in the basal-lateral plasma membranes of kidney cortex during compensatory renal growth. Hadžić A, et al. **Biochim Biophys Acta** 1990 Mar;1022(3):265-72
Transfer of human membrane surface components by incorporating human cells into intact animal tissue by cell-tissue electrofusion in vivo. Heller R, et al. **Biochim Biophys Acta** 1990 May 9;1024(1):185-8
Inhibition of the liver cell receptor-activated Ca2+ inflow system by metal ion inhibitors of voltage-operated Ca2+ channels but not by other inhibitors of Ca2+ inflow. Hughes BP, et al. **Biochim Biophys Acta** 1989 Oct 9; 1013(3):197-205
Characterization of amino acid transport systems in human placental basal membrane vesicles. Kudo Y, et al. **Biochim Biophys Acta** 1990 Jan 29;1021(2):169-74
The binding of large calpastatin to biologic membranes is mediated in part by interaction of an amino terminal region with acidic phospholipids. Mellgren RL, et al. **Biochim Biophys Acta** 1989 Nov 9;999(1):71-7
Regulation of calcium influx across the plasma membrane of the human T-leukemic cell line, JURKAT: dependence on a rise in cytosolic free calcium can be dissociated from formation of inositol phosphates. Ng J, et al. **Biochim Biophys Acta** 1990 Jun 12;1053(1):97-105
Characterization of basolateral membrane Na/H antiport in rat jejunum. Orsenigo MN, et al. **Biochim Biophys Acta** 1990 Jul 9;1026(1):64-8
The lateral organization of components of the membrane skeleton and superoxide generation in the plasma membrane of stimulated human neutrophils. Quinn MT, et al. **Biochim Biophys Acta** 1989 Dec 11;987(1):83-94
O-alkyl-O-methylglycerophosphocholine, an antineoplastic lipid, undergoes spontaneous redistribution between biological membranes prepared from HL-60 cells. Vallari DS, et al. **Biochim Biophys Acta** 1989 Nov 28;1006(2):250-4
A novel method for the efficient entrapment of calcium in large unilamellar phospholipid vesicles. Veiro JA, et al. **Biochim Biophys Acta** 1990 Jun 11;1025(1):109-15
Binding of human apolipoprotein A-IV to human hepatocellular plasma membranes. Weinberg RB, et al. **Biochim Biophys Acta** 1990 May 22;1044(2):255-61
Translocation of proteins into and across membranes. **Biochimie** 1990 Feb-Mar;72(2-3):87-200
Uptake across the cell envelope and insertion into the inner membrane of ion channel-forming colicins in E coli. Baty D, et al. **Biochimie** 1990 Feb-Mar;72(2-3):123-30 (60 ref.)
Water transepithelial transport; mechanisms of action of antidiuretic hormone. Third Colloque Biomembranes. Paris, 15-17 May 1988. Proceedings. **Biol Cell** 1989; 66(1-2):1-206
A common mechanism may be involved in the selective loss of plasma membrane functions during reticulocyte maturation. Johnstone RM, et al. **Biomed Biochim Acta** 1990;49(2-3):S70-5
The diagram methods for the evaluation of exchange fluxes in membrane transport systems. Chen YD. **Biophys Chem** 1990 Jan;35(1):55-63
Membrane transport equations with a time delay. A model for overshoot and oscillatory permeation. Ohshima H, et al. **Biophys Chem** 1989 Jul;33(3):303-10
Irreversible thermodynamic model equations of the transport across a horizontally mounted membrane. Slęzak A. **Biophys Chem** 1989 Oct;34(2):91-102
Mechanism of cystine reaccumulation by cystinotic fibroblasts in vitro. Forster S, et al. **Biosci Rep** 1990 Apr; 10(2):225-9
Membrane expression of platelet calpain. Schmaier AH, et al. **Blood** 1990 Mar 15;75(6):1273-81
GABAA receptor-mediated increase in membrane chloride conductance in rat paratracheal neurones. Allen TG, et al. **Br J Pharmacol** 1990 Jun;100(2):261-8
Interaction of antiestrogens with binding sites for muscarinic cholinergic drugs and calcium channel blockers in cell membranes. Batra S. **Cancer Chemother Pharmacol** 1990; 26(4):310-2
Subcellular localization of recently-absorbed iron in mouse duodenal enterocytes: identification of a basolateral membrane iron-binding site. Snape S, et al. **Cell Biochem Funct** 1990 Apr;8(2):107-15
Phosphatidylserine monolayers as models for drug uptake into membranes and tissue. Scheufler E, et al. **Cell Biol Int Rep** 1990 Apr;14(4):381-8

Insulin and step-up conditions cause a redistribution of polysomes among free, cytoskeletal-bound and membrane-bound fractions in Krebs II ascites cells. Vedeler A, et al. **Cell Biol Int Rep** 1990 Mar;14(3):211–8

The activation of factor X by hepatocyte plasma membranes. Willingham AK, et al. **Cell Mol Biol** 1989;35(4):421–9

Biphasic regulation of adenylate cyclase by cholera toxin in neuroblastoma x glioma hybrid cells is due to the activation and subsequent loss of the alpha subunit of the stimulatory GTP binding protein (GS). Macleod KG, et al. **Cell Signal** 1990;2(2):139–51

Alteration of cell surface carbohydrates associated with ordered and disordered proliferation of oral epithelia: a lectin histochemical study in oral leukoplakias, papillomas and carcinomas. Vigneswaran N, et al. **Cell Tissue Kinet** 1990 Jan;23(1):41–55

Stereological analysis of plasma membranes. Distribution of ligands on the cell surface components and membrane flow in endocytosis. de Paz P, et al. **Comput Methods Programs Biomed** 1990 Mar-Apr; 31(3–4):267–8

Verapamil stimulates Ca(++)-uptake and Ca(++)-ATPase in plasma membrane vesicles of guinea pig spermatozoa. Juneja R, et al. **Contraception** 1990 Apr;41(4):419–29

The transmembrane and intracellular transport of drugs: interactions with the cytoskeletal network. Bilej M, et al. **Crit Rev Ther Drug Carrier Syst** 1989;6(2):613–91 (268 ref.)

Bibliography of the current world literature. Membranes. **Curr Opin Cell Biol** 1989 Aug;1(4):775–843

Permeability through pores and holes. Benga G. **Curr Opin Cell Biol** 1989 Aug;1(4):771–4 (6 ref.)

Spectrin: a structural mediator between diverse plasma membrane proteins and the cytoplasm. Bennett V. **Curr Opin Cell Biol** 1990 Feb;2(1):51–6 (27 ref.)

Sorting signals. Breitfeld PP, et al. **Curr Opin Cell Biol** 1989 Aug;1(4):617–23 (29 ref.)

Bacterial membranes. Higgins CF. **Curr Opin Cell Biol** 1989 Aug;1(4):701–5 (8 ref.)

Uniport carriers for metabolites. Jarvis SM. **Curr Opin Cell Biol** 1989 Aug;1(4):721–8 (32 ref.)

Topogenesis of plasma membrane domains in polarized epithelial cells. Nelson WJ. **Curr Opin Cell Biol** 1989 Aug; 1(4):660–8 (26 ref.)

Membrane structure and dynamics. Watts A. **Curr Opin Cell Biol** 1989 Aug;1(4):691–700 (39 ref.)

A restricted set of apical proteins recycle through the trans-Golgi network in MDCK cells. Brändli AW, et al. **EMBO J** 1989 Nov;8(11):3207–13

Membrane interactions of diphtheria toxin analyzed using in vitro synthesized mutants. McGill S, et al. **EMBO J** 1989 Oct;8(10):2843–8

Determinants of membrane-targeting and transmembrane translocation during bacterial protein export. Swidersky UE, et al. **EMBO J** 1990 Jun;9(6):1777–85

Action of the thyroid hormone at the level of the plasma membrane. Segal J. **Endocr Res** 1989;15(4):619–49 (64 ref.)

Effect of cholesterol transport inhibitors on steroidogenesis and plasma membrane cholesterol transport in cultured MA-10 Leydig tumor cells. Nagy L, et al. **Endocrinology** 1990 May;126(5):2267–76

The role of calmodulin in the responses to adrenocorticotropin of plasma membranes from adrenal cells. Papadopoulos V, et al. **Endocrinology** 1990 May; 126(5):2465–73

NADPH-dependent H2O2 generation catalyzed by thyroid plasma membranes. Studies with electron scavengers. Dupuy C, et al. **Eur J Biochem** 1989 Nov 20;185(3):597–603

pH-induced insertion of the amphiphilic alpha-helical anchor of Escherichia coli penicillin-binding protein 5. Phoenix DA, et al. **Eur J Biochem** 1990 Jun 20;190(2):365–9

Turnover of plasma membrane in thyroid epithelium and review of evidence for the role of micropinocytosis. Wollman SH. **Eur J Cell Biol** 1989 Dec;50(2):247–56 (77 ref.)

High-affinity strychnine binding to adrenal medulla chromaffin cell membranes. Yadid G, et al. **Eur J Pharmacol** 1990 Jan 17;175(3):365–6

The bimodal growth response of Swiss 3T3 cells to the B subunit of cholera toxin is independent of the density of its receptor, ganglioside GM1. Buckley NE, et al. **Exp Cell Res** 1990 Jul;189(1):13–21

Effect of the phorbol ester 12-O-tetradecanoylphorbol-13-acetate (TTPA) upon membrane ionic exchanges in sea urchin eggs. Ciapa B, et al. **Exp Cell Res** 1989 Dec;185(2):407–18

Separation of the fertilization membrane in Urechis and sea urchin eggs as a phenomenon caused by breakage of hydrogen bonds. IV. Denaturing action of proteolytic enzymes. Isaka S. **Exp Cell Res** 1966 Mar;41(3):467–72

The role of cytoplasmic membranes in the regulation of water concentration within frog oocytes. Merriam RW. **Exp Cell Res** 1966 Jan;41(1):34–48

Pore-forming proteins of biological membranes. **Experientia** 1990 Feb 15;46(2):131–201

The effect of endotoxin on membrane fatty acid composition in BCG-sensitized mice. Stark JM, et al. **Experientia** 1990 May 15;46(5):472–4

Transmembrane movements of lipids. Zachowski A, et al. **Experientia** 1990 Jun 15;46(6):644–56 (154 ref.)

Solubilization of soybean membrane binding sites for fungal beta-glucans that elicit phytoalexin accumulation [published erratum appears in FEBS Lett 1990 Jul 30;268(1):306] Cosio EG, et al. **FEBS Lett** 1990 May 21; 264(2):235–8

Evidence for leukotriene C4 transport mediated by an ATP-dependent glutathione S-conjugate carrier in rat heart and liver plasma membranes. Ishikawa T, et al. **FEBS Lett** 1989 Dec 18;259(1):95–8

Insertion and translocation of proteins into and through membranes. Lazdunski CJ, et al. **FEBS Lett** 1990 Aug 1; 268(2):408–14 (87 ref.)

Lipid-protein interactions in membranes. Marsh D. **FEBS Lett** 1990 Aug 1;268(2):371–5 (39 ref.)

Participation of acid phospholipids in protein translocation across the bacterial cytoplasmic membrane. Nesmeyanova MA, et al. **FEBS Lett** 1989 Nov 6;257(2):203–7 (46 ref.)

The fourth Datta lecture. The energy coupled exchange of Na+ for K+ across the cell membrane. The Na+, K(+)-pump. Skou JC. **FEBS Lett** 1990 Aug 1; 268(2):314–24 (99 ref.)

In vitro protein translocation into inverted membrane vesicles prepared from Vibrio alginolyticus is stimulated by the electrochemical potential of Na+ in the presence of Escherichia coli SecA. Tokuda H, et al. **FEBS Lett** 1990 May 7;264(1):10–2

Inactivation of cGMP-dependent conductance of rod outer segment plasma membrane induced by cGMP. Zhainazarov AB, et al. **FEBS Lett** 1990 Jan 15;260(1):149–51

Papers presented at the meeting "Group Translocation in Bacterial Membrane Transport." Paris, France, 7–9 September 1988. **FEMS Microbiol Rev** 1989 Jun; 5(1–2):1–200

Characterization of membrane receptor activity for 17 alpha, 20 beta, 21-trihydroxy-4-pregnen-3-one in ovaries of spotted seatrout (Cynoscion nebulosus). Patiño R, et al. **Gen Comp Endocrinol** 1990 May;78(2):204–17

Comparison of the binding of 59Fe- and 239Pu-transferrin to rat liver cell membranes. Planas-Bohne F, et al. **Hum Exp Toxicol** 1990 Jan;9(1):17–24

Cultivation of HeLa cells with fetal bovine serum or Ultroser G: effects on the plasma membrane constitution. Blixt Y, et al. **In Vitro Cell Dev Biol** 1990 Jul;26(7):691–700

Selective binding of Trypanosoma cruzi to host cell membrane polypeptides. Davis CD, et al. **Infect Immun** 1990 Jan;58(1):1–6

Effect of some polypeptide hormones on the lateral mobility in plasma membranes of rat testes, L-cells and liver. Influence of development and ageing. Zlatanov IV, et al. **Int J Biochem** 1989;21(11):1269–74

Role of cell cholesterol in modulating antineoplastic ether lipid uptake, membrane effects and cytotoxicity. Diomede L, et al. **Int J Cancer** 1990 Aug 15;46(2):341–6

Analysis of cell-surface sugar receptor expression by neoglycoenzyme binding and adhesion to plastic-immobilized neoglycoproteins for related weakly and strongly metastatic cell lines of murine tumor model systems. Gabius S, et al. **Int J Cancer** 1990 Sep 15; 46(3):500–7

Modulation of plasma membrane Ca2+ pump by membrane potential in cultured vascular smooth muscle cells. Furukawa K, et al. **J Biochem (Tokyo)** 1989 Dec; 106(6):1068–73

Neuropeptide Y (18–36) is a competitive antagonist of neuropeptide Y in rat cardiac ventricular membranes. Balasubramaniam A, et al. **J Biol Chem** 1990 Sep 5; 265(25):14724–7

Insulin stimulates the assembly of cytosolic clathrin onto adipocyte plasma membranes. Corvera S. **J Biol Chem** 1990 Feb 15;265(5):2413–6

Pertussis toxin produces differential inhibitory effects on basal, P2-purinergic, and chemotactic peptide-stimulated inositol phospholipid breakdown in HL-60 cells and HL-60 cell membranes. Cowen DS, et al. **J Biol Chem** 1990 Sep 25;265(27):16181–9

Zymosterol is located in the plasma membrane of cultured human fibroblasts. Echevarria F, et al. **J Biol Chem** 1990 May 25;265(15):8484–9

Insulin action on activity and cell surface disposition of human HepG2 glucose transporters expressed in Chinese hamster ovary cells. Harrison SA, et al. **J Biol Chem** 1990 Apr 5;265(10):5793–801

Identification of a novel fatty acylated protein that partitions between the plasma membrane and cytosol and is deacylated in response to serum and growth factor stimulation. James G, et al. **J Biol Chem** 1989 Dec 15; 264(35):20998–1006

Altered membrane structure in transfected mouse L-cell fibroblasts expressing rat liver fatty acid-binding protein. Jefferson JR, et al. **J Biol Chem** 1990 Jul 5;265(19):11062–8

The role of cytosolic and membrane factors in processing of the human beta-2 adrenergic receptor following translocation and glycosylation in a cell-free system. Kobilka BK. **J Biol Chem** 1990 May 5;265(13):7610–8

The effects of foreign transmembrane domains on the biosynthesis of the influenza virus hemagglutinin. Lazarovits J, et al. **J Biol Chem** 1990 Mar 15;265(8):4760–7

Organic anion transport in macrophage membrane vesicles. Lipman BJ, et al. **J Biol Chem** 1990 Feb 5;265(4):2142–7

A human membrane-associated folate binding protein is anchored by a glycosyl-phosphatidylinositol tail. Luhrs CA, et al. **J Biol Chem** 1989 Dec 25;264(36):21446–9

Parathyroid hormone-induced alterations of protein content and phosphorylation in enriched apical membranes of opossum kidney cells. Reshkin SJ, et al. **J Biol Chem** 1990 Sep 5;265(25):15261–6

Protein structural requirements and properties of membrane binding by gamma-carboxyglutamic acid-containing plasma proteins and peptides. Schwalbe RA, et al. **J Biol Chem** 1989 Dec 5;264(34):20288–96

The distribution of oleic acid between chylomicron-like emulsions, phospholipid bilayers, and serum albumin. A model for fatty acid distribution between lipoproteins, membranes, and albumin. Spooner PJ, et al. **J Biol Chem** 1990 Jul 25;265(21):12650–5

In vitro analysis of the process of translocation of OmpA across the Escherichia coli cytoplasmic membrane. A translocation intermediate accumulates transiently in the absence of the proton motive force. Tani K, et al. **J Biol Chem** 1989 Nov 5;264(31):18582–8

Generation of transforming growth factor-alpha from the cell surface by an O-glycosylation-independent multistep process. Teixido J, et al. **J Biol Chem** 1990 Apr 15; 265(11):6410–5

Molecular characterization of an anion pump. The ArsB protein is the membrane anchor for the ArsA protein. Tisa LS, et al. **J Biol Chem** 1990 Jan 5;265(1):190–4

Cholesterol and vesicular stomatitis virus G protein take separate routes from the endoplasmic reticulum to the plasma membrane. Urbani L, et al. **J Biol Chem** 1990 Feb 5;265(4):1919–23

A high concentration of SecA allows proton motive force-independent translocation of a model secretory protein into Escherichia coli membrane vesicles. Yamada H, et al. **J Biol Chem** 1989 Nov 5;264(31):18577–81

Two forms of plasma membrane-intercalated heparan sulfate proteoglycan in rat ovarian granulosa cells. Labeling of proteoglycans with a photoactivatable hydrophobic probe and effect of the membrane anchor-specific phospholipase C. Yanagishita M, et al. **J Biol Chem** 1989 Oct 15; 264(29):17551–8

Physical mechanism of ATP formation in biomembranes. Blumenfeld LA. **J Biomol Struct Dyn** 1988 Aug;6(1):23–33

Sorting during transport to the surface of PC12 cells: divergence of synaptic vesicle and secretory granule proteins. Cutler DF, et al. **J Cell Biol** 1990 Mar; 110(3):721–30

Transforming growth factor (type beta) promotes the addition of chondroitin sulfate chains to the cell surface proteoglycan (syndecan) of mouse mammary epithelia. Rapraeger A. **J Cell Biol** 1989 Nov;109(5):2509–18

Evidence for a direct, nucleotide-sensitive interaction between actin and liver cell membranes. Tranter MP, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):2833–40

Evidence that microtubules do not mediate opsin vesicle transport in photoreceptors. Vaughan DK, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):3053–62

Evidence for a Mr 88,000 glycoprotein with a transmembrane association to a unique flagellum attachment region in Trypanosoma brucei. Woods A, et al. **J Cell Sci** 1989 Jul; 93 (Pt 3):501–8

Characterization of single non-inactivating potassium channels in primary neuronal cultures of Drosophila. Yamamoto D, et al. **J Exp Biol** 1989 Sep;145:173–84

Interaction of the fluorescent dye 1-N-phenylnaphthylamine with Escherichia coli cells during heat stress and recovery from heat stress. Tsuchido T, et al. **J Gen Microbiol** 1989 Jul;135 (Pt 7):1941–7

Delivery of lectin-labeled membrane to the trans-Golgi network and secretory granules in cultured atrial myocytes. Iida H, et al. **J Histochem Cytochem** 1989 Dec; 37(12):1885–92

The antipsoriatic compound anthralin influences bioenergetic parameters and redox properties of energy transducing membranes. Fuchs J, et al. **J Invest Dermatol** 1990 Jan; 94(1):71–6

Rapid intracellular transport of LDL-derived cholesterol to the plasma membrane in cultured fibroblasts. Brasaemle DL, et al. **J Lipid Res** 1990 Jan;31(1):103–12

Mechanism for binding of fatty acids to hepatocyte plasma membranes. Cooper RB, et al. **J Lipid Res** 1989 Nov; 30(11):1719–26

Action of diphtheria toxin does not depend on the induction of large, stable pores across biological membranes. Alder GM, et al. **J Membr Biol** 1990 Jan;113(1):67–74

D2O-induced cell excitation. Andjus PR, et al. **J Membr Biol** 1990 May;115(2):123–7

Electrogenic properties of the Na,K pump. Apell HJ. **J Membr Biol** 1989 Sep;110(2):103–14 (90 ref.)

Effect of K+ channels in the apical plasma membrane on epithelial secretion based on secondary active Cl- transport. Cook DI, et al. **J Membr Biol** 1989 Sep; 110(2):139–46

Reassociation of cortical secretory vesicles with sea urchin egg plasma membrane: assessment of binding specificity. Jackson RC, et al. **J Membr Biol** 1990 Apr;115(1):83–93

Nature of the water channels in the internodal cells of Nitellopsis. Wayne R, et al. **J Membr Biol** 1990 Jun; 116(1):31–9

Rabbit distal colon epithelium: II. Characterization of (Na+,K+,Cl-)-cotransport and [3H]-bumetanide binding. Wiener H, et al. **J Membr Biol** 1989 Sep;110(2):163–74

Presteady-state kinetics and carrier-mediated transport: a theoretical analysis. Wierzbicki W, et al. **J Membr Biol** 1990 Jul;117(1):11–27

A monoclonal antibody raised against plasma membrane of cholinergic nerve terminals of the Torpedo inhibits choline

acetyltransferase activity and acetylcholine release. Eder-Colli L, et al. **J Neurochem** 1989 Nov;53(5):1419-27

Modulation of calcium fluxes across synaptosomal plasma membrane by local anesthetics. García-Martín E, et al. **J Neurochem** 1990 Aug;55(2):370-8

Effect of dietary restriction on receptor-mediated and independent catabolism of beta-very low density lipoproteins in cholesterol-fed rabbits. Lacombe C, et al. **J Nutr** 1989 Oct;119(10):1513-8

Taurocholate transport by brush-border membrane vesicles from the developing rabbit ileum: structure/function relationships. Schwarz SM, et al. **J Pediatr Gastroenterol Nutr** 1990 May;10(4):482-9

Proceedings of the 10th Symposium on the Interaction between Biological Membranes and Drugs. November 17, 18, 1988, Sendai. **J Pharmacobiodyn** 1989 May; 12(5):s118-30

Functional validation of platelet-activating factor receptor sites characterized biochemically by a specific and reproducible [3H]platelet-activating factor binding in human platelets. Tahraoui L, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1221-7

Properties of heparin binding to purified plasma membranes from bovine granulosa cells. Winer MA, et al. **J Reprod Fertil** 1989 Sep;87(1):337-48

Effect of dietary fat on phospholipid class distribution and fatty acid composition in rat fat cell plasma membrane. Khuu Thi-Dinh KL, et al. **Lipids** 1990 May;25(5):278-83

Biomembranes. Part R. Transport theory: cells and model membranes. **Methods Enzymol** 1989;171:1-926

Biomembranes--Part U. Cellular and subcellular transport: eukaryotic (nonepithelial) cells. **Methods Enzymol** 1989; 174:1 676

Survey of carrier methodology: strategy for identification, isolation, and characterization of transport systems. Klingenberg M. **Methods Enzymol** 1989;171:12-23 (29 ref.)

Carbohydrate receptor binding using colloidal gold. Kolb-Bachofen V. **Methods Enzymol** 1989;179:111-21

Implantation of isolated carriers and receptors into living cells by Sendai virus envelope-mediated fusion. Loyter A, et al. **Methods Enzymol** 1989;171:829-50

Transport machinery: an overview. Sachs G, et al. **Methods Enzymol** 1989;171:3-12 (29 ref.)

Design of simple devices to measure solute fluxes and binding in monolayer cell cultures. Vadgama JV. **Methods Enzymol** 1989;171:133-44

Extracellular and membranal bound calcium on the contraction of mesenteric arteries of the rat. Fasciolo JC, et al. **Microsc Electron Biol Celular** 1988 Dec;12(2):231-43

G-proteins of rat liver membranes. Subcellular compartmentation and disposition in the plasma membrane. Ali N, et al. **Mol Cell Biochem** 1989 Nov 23-Dec 19; 91(1-2):75-84

Membrane transport and disease. Pasternak CA. **Mol Cell Biochem** 1989 Nov 23-Dec 19;91(1-2):3-11 (72 ref.)

The effect of oxidants on biomembranes and cellular metabolism. Srivastava SK, et al. **Mol Cell Biochem** 1989 Nov 23-Dec 19;91(1-2):149-57 (43 ref.)

The src protein contains multiple domains for specific attachment to membranes. Kaplan JM, et al. **Mol Cell Biol** 1990 Mar;10(3):1000-9

Tyrosine phosphorylation of a c-Src-like protein is increased in membranes of CD4- CD8- T lymphocytes from lpr/lpr mice. Katagiri T, et al. **Mol Cell Biol** 1989 Nov; 9(11):4914-22

Sequence of the fhuE outer-membrane receptor gene of Escherichia coli K12 and properties of mutants. Sauer M, et al. **Mol Microbiol** 1990 Mar;4(3):427-37

Transactivation of c-fos and beta-actin genes by raf as a step in early response to transmembrane signals. Jamal S, et al. **Nature** 1990 Mar 29;344(6265):463-6

Similarity in membrane proteins [letter] Rodaway AR, et al. **Nature** 1989 Dec 7;342(6250):624

How do sulfonylureas approach their receptor in the B-cell plasma membrane? Zünkler BJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Sep; 340(3):328-32

The structure of ion channels in membranes of excitable cells. Unwin N. **Neuron** 1989 Dec;3(6):665-76 (120 ref.)

Na+ channel accumulation on axolemma of afferent endings in nerve end neuromas in Apteronotus. Devor M, et al. **Neurosci Lett** 1989 Jul 31;102(2-3):149-54

Characterization of epidermal growth factor receptors on plasma membranes isolated from rat gastric mucosa. Hori R, et al. **Pharm Res** 1990 Jun;7(6):665-9

Ion pair transport across membranes. Neubert R. **Pharm Res** 1989 Sep;6(9):743-7 (41 ref.)

Microbial membrane transport systems. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1236):339-513

Membrane localization of the pertussis toxin-sensitive G-protein subunits alpha i-2 and alpha i-3 and expression of a metallothionein-alpha i-2 fusion gene in LLC-PK1 cells. Ercolani L, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4635-9

Isoproterenol stimulates shift of G proteins from plasma membrane to pinocytotic vesicles in rat adipocytes: a possible means of signal dissemination. Haraguchi K, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1208-12

Myristoylation of an inhibitory GTP-binding protein alpha subunit is essential for its membrane attachment. Jones TL, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):568-72

Salvage of glucosylceramide by recycling after internalization along the pathway of receptor-mediated endocytosis. Kok JW, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9896-900

Vectorial targeting of apical and basolateral plasma membrane proteins in a human adenocarcinoma epithelial cell line. Le Bivic A, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9313-7

G-protein alpha-subunit expression, myristoylation, and membrane association in COS cells. Mumby SM, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):728-32

Membrane biology in yeast as probed with enveloped viruses. Sareneva H, et al. **Subcell Biochem** 1989;15:367-404 (210 ref.)

Prenyl proteins in eukaryotic cells: a new type of membrane anchor. Glomset JA, et al. **Trends Biochem Sci** 1990 Apr; 15(4):139-42 (30 ref.)

Protein translocation into reconstituted vesicles. Hurtley SM. **Trends Biochem Sci** 1990 Jun;15(6):211-2 (20 ref.)

Insights into membrane insertion based on studies of colicins. Parker MW, et al. **Trends Biochem Sci** 1990 Apr;15(4):126-9 (27 ref.)

[The significance of cell surface carbohydrates in the pathogenesis of bacterial infection] Finne J. **Duodecim** 1989; 105(21):1695-9 (23 ref.) **(Fin)**

[Possible activation of human prorenin by contact with the cell membrane] Troffa C, et al. **Boll Soc Ital Biol Sper** 1989 Nov;65(11):1017-23 (Eng. Abstr.) **(Ita)**

[The plasma membrane Ca pump] Shigekawa M, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):1938-48 **(Jpn)**

[Waves on the cell surface] Belintsev BN, et al. **Biofizika** 1990 Mar-Apr;35(2):307-11 (Eng. Abstr.) **(Rus)**

[Delta pH-induced transport of Ca 2+ into smooth muscle plasma membrane vesicle fraction] Kosterin SA, et al. **Biokhimiia** 1990 Jan;55(1):73-9 (Eng. Abstr.) **(Rus)**

[Discovery of new sites of CA2+ binding by vesiculated fraction of plasma membranes of the smooth muscle cells in the presence of alameticin] Kucherenko NE, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):111-3 (Eng. Abstr.) **(Rus)**

[Study of the carbohydrate components of the surface of S 1300 neuroblastoma cells with the use of cytochemical and lectin agglutination methods] Tsegel'skiĭ AA, et al. **Eksp Onkol** 1989;11(5):30-4 (Eng. Abstr.) **(Rus)**

[The mechanism of the interaction of the pH-dependent cytostatic cauloside C with the membranes of tumor cells and liposomes] Prokof'eva NG, et al. **Izv Akad Nauk SSSR [Biol]** 1990 May-Jun;(3):338-42 (Eng. Abstr.) **(Rus)**

[Diagnosis of membrane disorders in acute pancreatitis] Smirnov DA, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):49-52 (Eng. Abstr.) **(Rus)**

[Lipid composition of plasma membranes of jejunum enterocytes in cattle of different age] Usatiuk PV, et al. **Ukr Biokhim Zh** 1990 May-Jun;62(3):87-94 (Eng. Abstr.) **(Rus)**

[Estradiol binding and lipid metabolism in the plasma membrane of myometrial cells during tumor growth] Sergeev PV, et al. **Vopr Onkol** 1990;36(4):433-7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

The release of bluetongue virus from infected cells and their superinfection by progeny virus. Hyatt AD, et al. **Virology** 1989 Nov;173(1):21-34

Herpes simplex virus activates expression of a cellular gene by specific binding to the cell surface. Preston VG. **Virology** 1990 Jun;176(2):474-82

PARASITOLOGY

Roles of target cell membrane carbohydrate and lipid in Entamoeba histolytica interaction with mammalian cells. Bailey GB, et al. **Infect Immun** 1990 Jul;58(7):2389-91

PATHOLOGY

A study of cell membrane structure. Feinmesser R, et al. **J Surg Oncol** 1990 Mar;43(3):172-6

PHYSIOLOGY

Carbachol induces oscillations of membrane potassium conductance in a colonic cell line, T84. Devor DC, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C318-26

Effect of hyperosmotic challenge on basolateral membrane potential in rabbit urinary bladder. Donaldson PJ, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C248-57

Intracellular pH and membrane potassium conductance in rabbit distal colon. Duffey ME, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C336-43

Polarized insertion of an intracellular glycoprotein pool into the apical membrane of MDCK cells. Ojakian GK, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):C390-8

Mediated transport of long-chain fatty acids by rat renal basolateral membranes. Trimble ME. **Am J Physiol** 1989 Oct;257(4 Pt 2):F539-46

A nonenzymatic preparation of epithelial basolateral membrane for patch clamp. Wehner F, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1159-64

Regulation of cardiac pacemaker current If in excised membranes from sinoatrial node cells. Yatani A, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1947-51

The conductance of cultured epithelial cell monolayers: oxidants, adenosine triphosphate, and phorbol dibutyrate. Winter M, et al. **Am J Respir Cell Mol Biol** 1990 Apr; 2(4):355-63

Cigarette smoke alters plasma membrane fluidity of rat alveolar macrophages. Hannan SE, et al. **Am Rev Respir Dis** 1989 Dec;140(6):1668-73

Calcium, membranes, aging, and Alzheimer's disease. A symposium. Irvine, California, October 24-26, 1988. Proceedings. **Ann N Y Acad Sci** 1989;568:1-290

Mechanical properties of the cortex before and during cleavage. Hiramoto Y. **Ann N Y Acad Sci** 1990;582:22-30 (24 ref.)

Tocopherol stabilizes membrane against phospholipase A, free fatty acids, and lysophospholipids. Kagan VE. **Ann N Y Acad Sci** 1989;570:121-35 (23 ref.)

Regulation of membrane function through composition, structure, and dynamics. Yeagle PL. **Ann N Y Acad Sci** 1989;568:29-34 (28 ref.)

Membrane lipid composition, fluidity, and surface charge changes in response to growth of the fresh water cyanobacterium Synechococcus 6311 under high salinity. Khomutov G, et al. **Arch Biochem Biophys** 1990 Mar; 277(2):263-7

On the role of intracellular physicochemistry in quantitative gene expression during aging and the effect of centrophenoxine. A review. Zs.-Nagy I. **Arch Gerontol Geriatr** 1989 Nov-Dec;9(3):215-29 (96 ref.)

Effects of bupivacaine on the membrane properties of nerve cell soma. Tabatabai M, et al. **Arch Int Physiol Biochim** 1989 Oct;97(5):409-15

Relationship between fluidity and L-alanine transport in a fatty acid auxotroph of Saccharomyces cerevisiae. Mishra P, et al. **Biochem Int** 1989 Nov;19(5):1019-30

Membrane structure and dynamics. Bilbao, Spain, 6-9 July 1989. Proceedings. **Biochem Soc Trans** 1989 Dec; 17(6):951-1012

Membrane/cytoskeletal interactions in blood platelets and leucocytes: structural and functional implications. Crawford N, et al. **Biochem Soc Trans** 1989 Dec; 17(6):966-71 (12 ref.)

Control of electric field induced cell membrane permeabilization by membrane order. Rols MP, et al. **Biochemistry** 1990 Mar 27;29(12):2960-6

Role of calcium and calpain in complement-induced vesiculation of the platelet plasma membrane and in the exposure of the platelet factor Va receptor. Wiedmer T, et al. **Biochemistry** 1990 Jan 23;29(3):623-32

Prevention of chemically induced changes in synaptosomal membrane order by ganglioside GM1 and alpha-tocopherol. Bondy SC, et al. **Biochim Biophys Acta** 1990 Jul 24;1026(2):213-9

Dielectrophoretic characterisation of Friend murine erythroleukaemic cells as a measure of induced differentiation. Burt JP, et al. **Biochim Biophys Acta** 1990 Apr 23;1034(1):93-101

Alterations in the electrical properties of T and B lymphocyte membranes induced by mitogenic stimulation. Activation monitored by electro-rotation of single cells. Hu X, et al. **Biochim Biophys Acta** 1990 Jan 29;1021(2):191-200

Membrane properties of metastatic and non-metastatic cells cultured from C3H mice injected with LM fibroblasts. Kier AB. **Biochim Biophys Acta** 1990 Mar;1022(3):365-72

Temperature adaptation of biological membranes: differential homoeoviscous responses in brush-border and basolateral membranes of carp intestinal mucosa. Lee JA, et al. **Biochim Biophys Acta** 1990 Jul 24;1026(2):195-203

Fractal filtering of channel data. Lew RR, et al. **Biochim Biophys Acta** 1990 Apr 13;1023(2):305-11

Lipid and membrane interactions of neuropeptide Y. McLean LR, et al. **Biochim Biophys Acta** 1990 May 9;1024(1):1-4

A quantitative assessment of the use of 36Cl- distribution to measure plasma membrane potential in isolated hepatocytes. Nobes CD, et al. **Biochim Biophys Acta** 1989 Dec 11;987(1):115-23

NPPB inhibits the basolateral membrane K+ conductance in the isolated bullfrog cornea. Reinach PS, et al. **Biochim Biophys Acta** 1990 Jul 9;1026(1):13-20

The cesium-induced delay in myoblast membrane fusion is accompanied by changes in isolated membrane lipids. Santini MT, et al. **Biochim Biophys Acta** 1990 Apr 13; 1023(2):298-304

Platelet-activating factor is a general membrane perturbant. Sawyer DB, et al. **Biochim Biophys Acta** 1989 Dec 11; 987(1):129-32

Biphasic voltage relaxation pattern observed in cells of Eremosphaera viridis after injection of charge-pulses of short duration: detection of tip clogging of intracellular microelectrodes by charge-pulse technique. Wehner G, et al. **Biochim Biophys Acta** 1990 Aug 24;1027(2):105-15

Asymmetric distribution of a fluorescent sterol in synaptic plasma membranes: effects of chronic ethanol consumption. Wood WG, et al. **Biochim Biophys Acta** 1990 Jun 27; 1025(2):243-6

Membranes and microfilaments: interactions and role in cellular dynamics. Carraway KL. **Bioessays** 1990 Feb; 12(2):90-2 (24 ref.)

Exocytotic events unrelated to regulation of water permeability in amphibian tight epithelia: effects of oxytocin, PMA and insulin on membrane capacitance,

water and Na+ transport. Erlij D, et al. **Biol Cell** 1989; 66(1-2):53-8
Structural and biochemical observations on specialized membranes of the "filter chamber", a water-shunting complex in sap-sucking homopteran insects. Hubert JF, et al. **Biol Cell** 1989;66(1-2):155-63
Vasopressin-induced intramembrane particle aggregates. A dose-response relationship in the isolated cortical collecting duct of the rabbit kidney. Kubat B, et al. **Biol Cell** 1989;66(1-2):59-63
Maturation of pig oocytes: observations on membrane potential. Mattioli M, et al. **Biol Reprod** 1990 Aug; 43(2):318-22
Frequency domain analysis of membrane capacitance of cultured cells (HeLa and myeloma) using the micropipette technique. Asami K, et al. **Biophys J** 1990 Jul;58(1):143-8
Simultaneous imaging of cell and mitochondrial membrane potentials [published erratum appears in Biophys J 1990 Mar;57(3):following 684] Farkas DL, et al. **Biophys J** 1989 Dec;56(6):1053-69
Phase tracking: an improved phase detection technique for cell membrane capacitance measurements. Fidler N, et al. **Biophys J** 1989 Dec;56(6):1153-62
Mechanisms of intracellular ice formation. Muldrew K, et al. **Biophys J** 1990 Mar;57(3):525-32
Deviation from homeoviscous adaptation in Escherichia coli membranes. Parola AH, et al. **Biophys J** 1990 Mar; 57(3):621-6
Tissue electroporation. Observation of reversible electrical breakdown in viable frog skin. Powell KT, et al. **Biophys J** 1989 Dec;56(6):1163-71
A stimulus-activated conductance in isolated taste epithelial membranes. Teeter JH, et al. **Biophys J** 1990 Jul;58(1):253-9
Membrane-membrane contact: involvement of interfacial instability in the generation of discrete contacts. Coakley WT, et al. **Biosci Rep** 1989 Dec;9(6):675-91 (56 ref.)
Fodrin and band 4.1 in a plasma membrane-associated fraction of human neutrophils. Stevenson KB, et al. **Blood** 1989 Nov 1;74(6):2136-43
Membrane hyperpolarization, cyclic nucleotide levels and relaxation in the guinea-pig internal anal sphincter. Baird AA, et al. **Br J Pharmacol** 1990 Jun;100(2):329-35
Microtubules, membrane traffic, and cell organization. Kelly RB. **Cell** 1990 Apr 6;61(1):5-7 (11 ref.)
Fine-tuning the topology of a polytopic membrane protein: role of positively and negatively charged amino acids. Nilsson I, et al. **Cell** 1990 Sep 21;62(6):1135-41
Analysis of the topological changes induced on cells exposed to adhesive or mechanical stimuli. Andre P, et al. **Cell Biophys** 1990 Jan-Apr;16(1-2):13-34
Carbohydrate recognition in cellular function. **Ciba Found Symp** 1989;145:1-294
The lipid environment of the nicotinic acetylcholine receptor in native and reconstituted membranes. Barrantes FJ. **Crit Rev Biochem Mol Biol** 1989;24(5):437-78 (244 ref.)
Cytokinesis in animal cells. Salmon ED. **Curr Opin Cell Biol** 1989 Jun;1(3):541-7 (29 ref.)
Latex beads as probes of cell surface-extracellular matrix interactions during chondrogenesis: evidence for a role for amino-terminal heparin-binding domain of fibronectin. Frenz DA, et al. **Dev Biol** 1989 Nov;136(1):87-96
The mechanism of precartilage mesenchymal condensation: a major role for interaction of the cell surface with the amino-terminal heparin-binding domain of fibronectin. Frenz DA, et al. **Dev Biol** 1989 Nov;136(1):97-103
The secretory pathway is blocked between the trans-Golgi and the plasma membrane during meiotic maturation in Xenopus oocytes. Leaf DS, et al. **Dev Biol** 1990 Sep; 141(1):1-12
The induction of oocyte maturation: transmembrane signaling events and regulation of the cell cycle. Smith LD. **Development** 1989 Dec;107(4):685-99 (118 ref.)
Importance of the cellular energy level for enzyme release induced by direct membrane damage. Kristensen SR. **Enzyme** 1990;43(1):33-46
Determination of apical membrane polarity in mammary epithelial cell cultures: the role of cell-cell, cell-substratum, and membrane-cytoskeleton interactions. Parry G, et al. **Exp Cell Res** 1990 Jun;188(2):302-11
Assembly of lipids into membranes. **Experientia** 1990 Jun 15; 46(6):551-658
Assembly of lipids into membranes. Introduction. Daum G. **Experientia** 1990 Jun 15;46(6):551-2 (7 ref.)
Interaction of lipid transfer protein with plasma lipoproteins and cell membranes. Morton RE. **Experientia** 1990 Jun 15; 46(6):552-60 (81 ref.)
Characteristics of a cell-free assay for the delivery of proteins to the plasma membrane. Edwardson JM, et al. **FEBS Lett** 1990 Jun 4;265(1-2):107-9
Membrane elasticity of mouse dorsal root ganglion neurons decreases with aging. Horie H, et al. **FEBS Lett** 1990 Aug 20;269(1):23-5
A parametric modeling of membrane current fluctuations with its application to the estimation of the kinetic properties of single ionic channels. Mino H, et al. **IEEE Trans Biomed Eng** 1989 Oct;36(10):1028-37
The extracellular matrix and cell surface, mediators of cell interactions in chicken gastrulation. Harrisson F. **Int J Dev Biol** 1989 Dec;33(4):417-38 (206 ref.)
Neutrophil hyperpolarization in response to a chemotactic peptide. Lazzari KG, et al. **J Biol Chem** 1990 Jul 5; 265(19):10959-67
Correlation between plasma membrane potential and second messenger generation in the promyelocytic cell line HL-60. Pittet D, et al. **J Biol Chem** 1990 Aug 25;265(24):14256-63
Assembly of the platelet prothrombinase complex is linked to vesiculation of the platelet plasma membrane. Studies in Scott syndrome: an isolated defect in platelet procoagulant activity. Sims PJ, et al. **J Biol Chem** 1989 Oct 15;264(29):17049-57
From signal to pseudopod. How cells control cytoplasmic actin assembly. Stossel TP. **J Biol Chem** 1989 Nov 5; 264(31):18261-4 (55 ref.)
A glycophospholipid membrane anchor acts as an apical targeting signal in polarized epithelial cells. Lisanti MP, et al. **J Cell Biol** 1989 Nov;109(5):2145-56
Detection of an intermediate compartment involved in transport of alpha-factor from the plasma membrane to the vacuole in yeast. Singer B, et al. **J Cell Biol** 1990 Jun; 110(6):1911-22
The structure and dynamics of patch-clamped membranes: a study using differential interference contrast light microscopy. Sokabe M, et al. **J Cell Biol** 1990 Aug; 111(2):599-606
Generation of lipid polarity in intestinal epithelial (Caco-2) cells: sphingolipid synthesis in the Golgi complex and sorting before vesicular traffic to the plasma membrane. van 't Hof W, et al. **J Cell Biol** 1990 Sep;111(3):977-86
Preparation and characterization of plasma membrane vesicles from human polymorphonuclear leukocytes. Del Buono BJ, et al. **J Cell Physiol** 1989 Dec;141(3):636-44
Effects of hyperthermia on the membrane potential and Na+ transport of V79 fibroblasts. Mikkelsen RB, et al. **J Cell Physiol** 1990 Aug;144(2):216-21
Steps in the morphogenesis of a polarized epithelium. I. Uncoupling the roles of cell-cell and cell-substratum contact in establishing plasma membrane polarity in multicellular epithelial (MDCK) cysts. Wang AZ, et al. **J Cell Sci** 1990 Jan;95 (Pt 1):137-51
Steps in the morphogenesis of a polarized epithelium. II. Disassembly and assembly of plasma membrane domains during reversal of epithelial cell polarity in multicellular epithelial (MDCK) cysts. Wang AZ, et al. **J Cell Sci** 1990 Jan;95 (Pt 1):153-65
Bacterial cell surface hydrophobicity properties in the mediation of in vitro adhesion by the rabbit enteric pathogen Escherichia coli strain RDEC-1. Drumm B, et al. **J Clin Invest** 1989 Nov;84(5):1588-94
Power transmission along biological membranes. Skulachev VP. **J Membr Biol** 1990 Mar;114(2):97-112 (73 ref.)
Membrane current underlying muscarinic cholinergic excitation of motoneurons in lobster cardiac ganglion. Freschi JE, et al. **J Neurophysiol** 1989 Oct;62(4):984-95
Membrane ultrastructure preservation and membrane potentials after isolation of rabbit retinal glial (Müller) cells by papain. Reichenbach A, et al. **J Neurosci Methods** 1990 Jun;32(3):227-33
Characterization of neuropeptide-induced membrane chloride currents in Xenopus oocytes primed with exogenous mRNA. Meyerhof W, et al. **J Protein Chem** 1989 Jun;8(3):365-8
The effect of cationic electrolytes on the electrostatic behavior of cellular surfaces with ionizable groups. Chang YI. **J Theor Biol** 1989 Aug 22;139(4):561-71
Bioelectrorheological model of the cell. 2. Analysis of creep and its experimental verification. Fikus M, et al. **J Theor Biol** 1989 Apr 20;137(4):365-73
Kinetic model of the effects of electrogenic enzymes on the membrane potential. Hernandez J, et al. **J Theor Biol** 1989 Mar 7;137(1):113-25
Thermodynamics, mechanical and electrical properties of biomembranes. Malev VV, et al. **J Theor Biol** 1989 Feb 8;136(3):295-307
Parametric resonance and amplification in excitable membranes. The Hodgkin-Huxley model. Markevich NI, et al. **J Theor Biol** 1989 Sep 11;140(1):27-38
Conformation of surface bound polyelectrolytes: I. Implications for cell electrophoresis. Miklavic SJ, et al. **J Theor Biol** 1989 Mar 7;137(1):71-89
Liquid junction potentials calculated from numerical solutions of the Nernst-Planck and Poisson equations. Riveros OJ, et al. **J Theor Biol** 1989 Sep 22;140(2):221-30
A non-uniform equivalent cable model of membrane voltage changes in a passive dendritic tree. Schierwagen AK. **J Theor Biol** 1989 Nov 21;141(2):159-79
Biophysical interpretation of membrane fluidity by catastrophe theory. Viret J, et al. **J Theor Biol** 1989 Sep 11;140(1):51-82
Fusion of intra- and extracellular forms of vaccinia virus with the cell membrane. Doms RW, et al. **J Virol** 1990 Oct;64(10):4884-92
Identification of herpes simplex virus type 1 glycoproteins interacting with the cell surface. Kühn JE, et al. **J Virol** 1990 Jun;64(6):2491-7
Intracellular regulation of ion channels in cell membranes. Lewis DL, et al. **Mayo Clin Proc** 1990 Aug;65(8):1127-43 (107 ref.)
Experimental control of intracellular environment. Baker PF, et al. **Methods Enzymol** 1989;171:817-28
Ionic permeation mechanisms in epithelia: biionic potentials, dilution potentials, conductances, and streaming potentials. Barry PH. **Methods Enzymol** 1989;171:678-715
Impedance analysis in tight epithelia. Clausen C. **Methods Enzymol** 1989;171:628-42
Scanning electrode localization of transport pathways in epithelial tissues. Foskett JK, et al. **Methods Enzymol** 1989; 171:792-813
Electrical impedance analysis of leaky epithelia: theory, techniques, and leak artifact problems. Gordon LG, et al. **Methods Enzymol** 1989;171:642-63
Use of ionophores in epithelia: characterizing membrane properties. Lewis SA, et al. **Methods Enzymol** 1989; 171:715-36
Volume regulation in epithelia: experimental approaches. Macknight AD, et al. **Methods Enzymol** 1989;171:744-92
Patch-clamp experiments in epithelia: activation by hormones or neurotransmitters. Petersen OH. **Methods Enzymol** 1989;171:663-78
Permeabilizing mammalian cells to macromolecules. Weisman GA, et al. **Methods Enzymol** 1989;171:857-69
Ischemia-reperfusion and cell membrane dysfunction. Perry MO, et al. **Microcirc Endothelium Lymphatics** 1989 Jun-Oct;5(3-5):241-58
Changes induced by glucose in the plasma membrane properties of pancreatic islets. Cortizo AM, et al. **Mol Cell Endocrinol** 1990 May 28;71(1):49-54
A comparison of fertilization envelope development in three species of Strongylocentrotus (S. franciscanus, S. droebachiensis, and S. purpuratus). Carroll EJ Jr, et al. **Mol Reprod Dev** 1990 Jan;25(1):77-86
Patch clamp studies of single cell-fusion events mediated by a viral fusion protein. Spruce AE, et al. **Nature** 1989 Nov 30;342(6249):555-8
Changes in distribution of electric charges in the surface membrane of rat ascites hepatocarcinoma cells induced by con A. Yamada T, et al. **Nature** 1973 Aug 3;244(5414):297-9
Patch cramming: monitoring intracellular messengers in intact cells with membrane patches containing detector ion channels. Kramer RH. **Neuron** 1990 Mar;4(3):335-41
Time-dependent effects of aldosterone on sodium transport and cell membrane resistances in rabbit distal colon. Hoffmann B, et al. **Pflugers Arch** 1989 Nov;415(2):156-64
Depolarization of mouse myeloma cell membranes during photodynamic action. Specht KG, et al. **Photochem Photobiol** 1990 Mar;51(3):319-24
The significance of membrane changes in the safe and effective use of therapeutic and diagnostic ultrasound. Dinno MA, et al. **Phys Med Biol** 1989 Nov;34(11):1543-52 (26 ref.)
Fusion of neurotransmitter vesicles with target membrane is calcium independent in a cell-free system. Karli UO, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5912-5
Steady-state coupling of ion-channel conformations to a transmembrane ion gradient. Richard EA, et al. **Science** 1990 Mar 9;247(4947):1208-10
The role of membrane biophysical properties in the regulation of protein kinase C activity. Epand RM, et al. **Trends Pharmacol Sci** 1990 Aug;11(8):317-20 (28 ref.)
Lateral mobility measurement of cell surface components: applications for molecular pharmacology. Henis YI. **Trends Pharmacol Sci** 1989 Mar;10(3):95-8 (26 ref.)
[Biological membrane fluidity and methods of its detection] Amler E. **Cesk Fysiol** 1989;38(5):385-404 **(Cze)**
[Intracellular recognition mechanisms. Physiopathologic implications] Carmo-Fonseca M. **Acta Med Port** 1990 Jan-Feb;3(1):43-9 (16 ref.) (Eng. Abstr.) **(Por)**
[A new stage in the development of the membrane concept of the pathogenesis of primary hypertension: the role of cellular oncogenes in the genesis of membrane disorders] Postnov IuV. **Arkh Patol** 1989;51(11):5-12 (44 ref.) (Eng. Abstr.) **(Rus)**
[The dielectric breakdown of membranes during cryopreservation of biological objects] Grishchenko VI, et al. **Dokl Akad Nauk SSSR** 1989 Sep-Oct;308(1):215-7 **(Rus)**
[The formation of a conditioned response on the electroexcitable membrane of the isolated LPa2 neuron] Grechenko TN. **Zh Vyssh Nerv Deiat** 1989 Jul-Aug; 39(4):777-9 **(Rus)**
[Seminal parameters and fertilizing capacity of human spermatozoa] Moreno NG, et al. **Acta Cient Venez** 1988; 39(5-6):447-50 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Dimerization of the P-glycoprotein in membranes. Boscoboinik D, et al. **Biochim Biophys Acta** 1990 Sep 7; 1027(3):225-8
Cell membrane is a major locus for ultraviolet B-induced alterations in accessory cells. Krutmann J, et al. **J Clin Invest** 1990 May;85(5):1529-36
[Resonance effect of coherent millimeter-band electromagnetic waves on living organisms] Golant MB. **Biofizika** 1989 Nov-Dec;34(6):1004-14 (37 ref.) (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Orthogonal arrays are absent from the membranes of human glioblastomatous tissues. Hatton JD, et al. **Acta Anat (Basel)** 1990;137(4):363-6
Endothelial attachment and plasmalemmal apposition in the transcellular movement of intravascular leukemic cells entering the myeloid parenchyma. De Bruyn PP, et al. **Am J Anat** 1989 Oct;186(2):115-26
Sperm maturation: membrane domain boundaries. Friend DS. **Ann N Y Acad Sci** 1989;567:208-21 (35 ref.)

Ruffling membranes in cultured human and rat glial cells. Sawa H, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1673-9

Physicochemical interaction of Escherichia coli cell envelopes and Bacillus subtilis cell walls with two clays and ability of the composite to immobilize heavy metals from solution. Walker SG, et al. **Appl Environ Microbiol** 1989 Nov;55(11):2976-84

Effects of decreased pH on membrane structural organization of Escherichia coli grown in different fatty acid-supplemented media: a 31P NMR study. Ianzini F, et al. **Arch Biochem Biophys** 1990 Apr;278(1):1-10

Simultaneous preparation of basolateral and brush-border membrane vesicles from sea bass intestinal epithelium. Drai P, et al. **Biochim Biophys Acta** 1990 Mar;1022(3):251-9

Reversible large-scale deformations in the membranes of electrically-treated cells: electroinduced bleb formation. Gass GV, et al. **Biochim Biophys Acta** 1990 Mar 30; 1023(1):1-11

Infrared spectroscopic study of ethanol-induced changes in rat liver plasma membrane. Lewis EN, et al. **Biochim Biophys Acta** 1989 Nov 17;986(1):161-6

Periodically curved bilayer structures observed in hyphal cells or stable L-form cells of a Streptomyces strain, and in liposomes formed by the extracted lipids. Meyer HW, et al. **Biochim Biophys Acta** 1990 Jul 24;1026(2):171-8

Freeze-fracture study of the pavement cell in the lamprey gill epithelium. Analogy of membrane structure with the granular cell in the amphibian urinary bladder. Bartels H. **Biol Cell** 1989;66(1-2):165-71

A method of isolation of apical membranous sheets from frog urinary bladder epithelium by stripping with gelatin. Favard P, et al. **Biol Cell** 1989;66(1-2):99-106

Intramembrane particle structures in epithelial cells of the toad urinary bladder: a quantitative freeze-fracture study. Shinowara NL, et al. **Biol Cell** 1989;66(1-2):65-76

Neutral aminopeptidase: a potential marker enzyme of the amphibian urinary bladder epithelial cell apical membrane. Tacnet F, et al. **Biol Cell** 1989;66(1-2):121-9

Isolation of frog urinary bladder plasma membranes with polycation coated beads. Valenti G, et al. **Biol Cell** 1989; 66(1-2):85-9

Isolation of large sheets of apical material from frog urinary bladder epithelial cells by freeze-fracture. Verbavatz JM, et al. **Biol Cell** 1989;66(1-2):91-7

Preparation of mammalian plasma membranes by aqueous two-phase partition. Morré DJ, et al. **Biotechniques** 1989 Oct;7(9):946-8, 950-4, 956-8

Limitation of substratum size alters cytoskeletal organization and behaviour of Swiss 3T3 fibroblasts. Ireland GW, et al. **Cell Biol Int Rep** 1989 Sep;13(9):781-90

Cornified cell envelope. Hohl D. **Dermatologica** 1990; 180(4):201-11 (110 ref.)

Topographical rearrangement of a plasma membrane antigen during capacitation of rat spermatozoa in vitro. Jones R, et al. **Dev Biol** 1990 Jun;139(2):349-62

Study on membrane elevation (blebbing) in the rabbit zygote. Hadek R. **Exp Cell Res** 1966 Mar;41(3):622-9

A digital image processing system for quantitating dynamic morphology in cultured mammalian cells [published erratum appears in Exp Cell Res 1990 Apr;187(2):349] Tatsuka M, et al. **Exp Cell Res** 1989 Dec;185(2):342-52

Surface blebbing and cytoskeletal changes induced in vitro by toxin B from Clostridium difficile: an immunochemical and ultrastructural study. Malorni W, et al. **Exp Mol Pathol** 1990 Jun;52(3):340-56

Imaging of cell membraneous and cytoskeletal structures with a scanning tunneling microscope. Ruppersberg JP, et al. **FEBS Lett** 1989 Nov 6;257(2):460-4

New membrane assembly in IgE receptor-mediated exocytosis. Schmauder-Chock EA, et al. **Histochem J** 1990 Apr;22(4):215-26

Combined effects of hyperthermia (to 45 degrees C) and ultrasound irradiation on the surface ultrastructure of HeLa cells. Shammari MA, et al. **Int J Hyperthermia** 1990 May-Jun;6(3):571-80

Structural and chemical characterization of the S layer of a Pseudomonas-like bacterium. Austin JW, et al. **J Bacteriol** 1990 Feb;172(2):808-17

Patch-clamp measurements reveal multimodal distribution of granule sizes in rat mast cells. Alvarez de Toledo G, et al. **J Cell Biol** 1990 Apr;110(4):1033-9

Membrane domains of intestinal epithelial cells: distribution of Na+,K+-ATPase and the membrane skeleton in adult rat intestine during fetal development and after epithelial isolation. Amerongen HM, et al. **J Cell Biol** 1989 Nov; 109(5):2129-38

Role of the membrane skeleton in preventing the shedding of procoagulant-rich microvesicles from the platelet plasma membrane. Fox JE, et al. **J Cell Biol** 1990 Aug; 111(2):483-93

Anchorage of secretion-competent dense granules on the plasma membrane of bovine platelets in the absence of secretory stimulation. Morimoto T, et al. **J Cell Biol** 1990 Jul;111(1):79-86

Scanning electron microscopy of focal contacts on the substratum attachment surface of fibroblasts adherent to fibronectin. Singer II, et al. **J Cell Sci** 1989 May;93 (Pt 1):147-54

Composite replicas: methodologies for direct evaluation of the relationship between intramembrane and extramembrane structures. Coleman RA, et al. **J Electron Microsc Tech** 1989 Nov;13(3):216-27

Counting and measuring IMPs and pits: why accurate counts are exceedingly rare. Rash JE, et al. **J Electron Microsc Tech** 1989 Nov;13(3):204-15

Direct evidence for the cell surface location of a protease-inhibitor complex on intact leukaemia cells. Steven FS, et al. **J Enzym Inhib** 1990;3(4):311-6

An enhanced method for post-embedding immunocytochemical staining which preserves cell membranes. Berryman MA, et al. **J Histochem Cytochem** 1990 Feb;38(2):159-70

Recycled synaptic vesicles contain vesicle but not plasma membrane marker, newly synthesized acetylcholine, and a sample of extracellular medium. Bonzelius F, et al. **J Neurochem** 1990 Oct;55(4):1266-73

Astrocytic orthogonal arrays of intramembranous particle assemblies are modulated by brain endothelial cells in vitro. Tao-Cheng JH, et al. **J Neurocytol** 1990 Apr;19(2):143-53

Use of fluorescent probes to assess membrane integrity in mammalian spermatozoa. Harrison RA, et al. **J Reprod Fertil** 1990 Jan;88(1):343-52

Preassembled capsids of type D retroviruses contain a signal sufficient for targeting specifically to the plasma membrane. Rhee SS, et al. **J Virol** 1990 Aug;64(8):3844-52

Preparation of membrane fractions. Ozols J. **Methods Enzymol** 1990;182:225-35

Detection of cell surface components using fluorescent microspheres. Sytkowski AJ. **Methods Enzymol** 1990; 184:353-6

Isolation and partial characterization of a plasma membrane-enriched fraction of Blastomyces dermatitidis. Chaturvedi VP, et al. **Microbios** 1990;61(248-249):145-51

Isolation and characterization of a highly purified flagellar membrane fraction from trypanosomatids. da Cunha e Silva NL, et al. **Mol Biochem Parasitol** 1989 Nov;37(1):129-36

Isolation of a highly enriched plasma membrane fraction of Trypanosoma brucei by free-flow electrophoresis. Siddiqui AA, et al. **Mol Biochem Parasitol** 1990 Apr;40(1):95-103

Membrane remodelling during sperm maturation in the epididymis. Jones R. **Oxf Rev Reprod Biol** 1989;11:285-337 (240 ref.)

Detergent disruption of bacterial inner membranes and recovery of protein translocation activity. Cunningham K, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8673-7

Improved representation of cell surface structures by freeze substitution and backscattered electron imaging. Walther P, et al. **Scanning Microsc Suppl** 1989;3:201-10; discussion 211

Pore-forming toxins: experiments with S. aureus alpha-toxin, C. perfringens theta-toxin and E. coli haemolysin in lipid bilayers, liposomes and intact cells. Menestrina G, et al. **Toxicon** 1990;28(5):477-91

Possible explanation for the unexpected absence of gross biological damage to membranes of cells insonated in suspension and in surface culture in chambers exposed to standing and progressive wave fields. Watmough DJ, et al. **Ultrasonics** 1990 May;28(3):142-8

Cellular mechanisms in the superinfection exclusion of vesicular stomatitis virus. Simon KO, et al. **Virology** 1990 Jul;177(1):375-9

[Rapid simultaneous isolation of microsomes and plasma membranes from neuroblastoma C 1300 N 18 cells] Volkov GL. **Ukr Biokhim Zh** 1989 Sep-Oct;61(5):71-7 (Eng. Abstr.) **(Rus)**

CELL MEMBRANE LIPIDS see **MEMBRANE LIPIDS**

CELL MEMBRANE PERMEABILITY

see related
BIOLOGICAL TRANSPORT

Swelling-induced membrane transport changes in astrocytes. Kimelberg HK, et al. **Acta Physiol Scand Suppl** 1989;582:26

Elementary aspects of acid-base permeation and pH regulation. Andersen OS. **Ann N Y Acad Sci** 1989; 574:333-53 (61 ref.)

Ion permeability and pump regulation. Lorentzon P, et al. **Ann N Y Acad Sci** 1989;574:134-44

Modification of membrane permeability measured by Texas-Red during cell cycle progression and differentiation. Leonce S, et al. **Anticancer Res** 1990 Mar-Apr;10(2A):369-74

Coxsackie B1 virus infection enhances the bacterial invasiveness, the phagocytosis and the membrane permeability in HEp-2 cells. Modalsli K, et al. **APMIS** 1990 Jun;98(6):489-95

Modes of inhibitory action of 4 beta-phorbol 12-myristate 13-acetate in thrombin-stimulated arachidonic acid release in intact and permeabilized platelets. Murayama T, et al. **Arch Biochem Biophys** 1990 Jan;276(1):146-52

Purification of a glycoprotein excreted by Trypanosoma cruzi to increase the permeability of the host-cell membrane. Castanys S, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):736-42

Activation of electropermeabilized neutrophils by adenosine 5'-[gamma-thio]triphosphate (ATP[S]). Role of phosphatases in stimulus-response coupling. Grinstein S, et al. **Biochem J** 1989 Aug 1;261(3):755-9

Control of electric field induced cell membrane permeabilization by membrane order. Rols MP, et al. **Biochemistry** 1990 Mar 27;29(12):2960-6

Modulation of electrically induced permeabilization and fusion of Chinese hamster ovary cells by osmotic pressure. Rols MP, et al. **Biochemistry** 1990 May 15;29(19):4561-7

Enhancement of transmembrane proton conductivity of protonophores by membrane-permeant cations. Ahmed I, et al. **Biochim Biophys Acta** 1990 May 24;1024(2):298-306

Rat pancreatic acini permeabilised with streptolysin O secrete amylase at Ca2+ concentrations in the micromolar range, when provided with ATP and GTP gamma S. Edwardson JM, et al. **Biochim Biophys Acta** 1990 Jun 12;1053(1):32-6

Nonelectrolyte permeability of liposomes of hydroxyfatty acid-containing phosphatidylcholines. Isaacson Y, et al. **Biochim Biophys Acta** 1989 Nov 27;986(2):295-300

Water permeabilities and salt reflection coefficients of luminal, basolateral and intracellular membrane vesicles isolated from rabbit kidney proximal tubule. Van der Goot FG, et al. **Biochim Biophys Acta** 1989 Nov 27;986(2):332-40

Permeabilized cells as a way of gaining access to intracellular organelles: an approach to glycosylation reactions. Lepers A, et al. **Biochimie** 1990 Jan;72(1):1-5

The permeability of hydrophobic membranes to 22Na salts and 14CO2 in low dielectric media. Conroy CW, et al. **Biophys Chem** 1989 Oct;34(2):177-84

Cell poration and cell fusion using an oscillating electric field. Chang DC. **Biophys J** 1989 Oct;56(4):641-52

The basal permeability to water of human red blood cells evaluated by a nuclear magnetic resonance technique. Benga G, et al. **Biosci Rep** 1990 Feb;10(1):31-6

Electroporation of eukaryotes and prokaryotes: a general approach to the introduction of macromolecules into cells. Shigekawa K, et al. **Biotechniques** 1988 Sep;6(8):742-51

Exposure of human neutrophils to exogenous nucleotides causes elevation in intracellular calcium, transmembrane calcium fluxes, and an alteration of a cytosolic factor resulting in enhanced superoxide production in response to FMLP and arachidonic acid. Axtell RA, et al. **Blood** 1990 Mar 15;75(6):1324-32

Pulmonary absorption of instilled and inhaled DTPA in smokers. Groth S, et al. **Clin Physiol** 1990 May;10(3):231-43

A two-step method for permeabilization of Drosophila eggs. Lynch DV, et al. **Cryobiology** 1989 Oct;26(5):445-52

Bibliography of the current world literature. Membrane permeability. **Curr Opin Cell Biol** 1989 Aug;1(4):845-73

Permeability through pores and holes. Benga G. **Curr Opin Cell Biol** 1989 Aug;1(4):771-4 (6 ref.)

Localization of intracellular zinc under conditions of altered permeability control of the plasma membrane. Reddy AG, et al. **Cytobios** 1989;60(240):21-6

Multiparametric analysis of cell membrane permeability by two colour flow cytometry with complementary fluorescent probes. Dive C, et al. **Cytometry** 1990; 11(2):244-52

Prevention of nerve edema and increased blood-nerve barrier permeability-surface area product in galactosemic rats by aldose reductase or thromboxane synthetase inhibitors. Wadhwani KC, et al. **Diabetes** 1989 Nov;38(11):1469-77

Permeabilization of the plasma membrane by deletion mutants of diphtheria toxin. Stenmark H, et al. **EMBO J** 1989 Oct; 8(10):2849-53

Electric-field-induced permeabilization and fusion of embryonic amphibian cells. Maurel P, et al. **Exp Cell Res** 1989 Sep;184(1):207-18

The number of molecules taken up by electroporated cells: quantitative determination. Bartoletti DC, et al. **FEBS Lett** 1989 Oct 9;256(1-2):4-10

The barrier function of the outer membrane of Pseudomonas maltophilia in the diffusion of saccharides and beta-lactam antibiotics. Yamazaki E, et al. **FEMS Microbiol Lett** 1989 Jul 1;51(1):85-8

Thallium and rubidium permeability of human and rat erythrocyte membrane. Skulskii IA, et al. **Gen Physiol Biophys** 1990 Feb;9(1):39-44

Experimental studies on membrane permeability defects of drug-resistant bacteria. Mukherjee K, et al. **Indian J Med Res** 1989 Jul;89:238-42

Permeability alteration of the sarcolemmal membrane, particularly at the site of macrophage contact, in experimental chronic Trypanosoma cruzi myocarditis in mice. Rossi MA, et al. **Int J Exp Pathol** 1990 Aug; 71(4):545-55

Characterization of a new superfusion, two-compartment culture system for Sertoli cells: influence of extracellular matrix on the cell permeability and dynamics of transferrin secretion. Guillou F. **J Androl** 1990 Mar-Apr;11(2):182-94

Effect of outer membrane permeability on chemotaxis in Escherichia coli. Ingham C, et al. **J Bacteriol** 1990 Jul; 172(7):3577-83

Permeability barrier to hydrophilic solutes in Mycobacterium chelonei. Jarlier V, et al. **J Bacteriol** 1990 Mar; 172(3):1418-23

Fragment A of diphtheria toxin causes pH-dependent lesions in model membranes. Jiang GS, et al. **J Biol Chem** 1989 Oct 15;264(29):17170-3

Agonist-mediated Ca2+ release in permeabilized UMR-106-01 cells. Transport properties and generation of inositol 1,4,5-trisphosphate. Zhao H, et al. **J Biol Chem** 1990 Sep 5;265(25):14822-7

Influence of extracellular calcium on cell permeabilization and growth regulation by the lymphokine leukoregulin. Barnett SC, et al. **J Cell Biochem** 1990 May;43(1):89-101

The action of v-src on gap junctional permeability is modulated by pH. Hyrc K, et al. **J Cell Biol** 1990 Apr; 110(4):1217-26

Hypoxia modulates the barrier and coagulant function of

cultured bovine endothelium. Increased monolayer permeability and induction of procoagulant properties. Ogawa S, et al. **J Clin Invest** 1990 Apr;85(4):1090–8

Interactions of protons with single open L-type calcium channels. Location of protonation site and dependence of proton-induced current fluctuations on concentration and species of permeant ion. Prod'hom B, et al. **J Gen Physiol** 1989 Jul;94(1):23–42

A new membrane permeabilization method for the detection of intracellular antigens by flow cytometry. Halidén G, et al. **J Immunol Methods** 1989 Nov 13;124(1):103–9

Potential mechanisms of resistance to the modern fluorinated 4-quinolones. Lewin CS, et al. **J Med Microbiol** 1990 Mar; 31(3):153–62 (101 ref.)

Characterization of a 25-pS nonselective cation channel in a cultured secretory epithelial cell line. Cook DI, et al. **J Membr Biol** 1990 Mar;114(1):37–52

Immunohistochemical study of a rat membrane protein which induces a selective potassium permeation: its localization in the apical membrane portion of epithelial cells. Sugimoto T, et al. **J Membr Biol** 1990 Jan;113(1):39–47

Relationship between in vivo first-order intestinal absorption rate constant and the membrane permeability clearance. Yuasa H, et al. **J Pharm Sci** 1989 Nov;78(11):922–4

Permeabilizing mammalian cells to macromolecules. Weisman GA, et al. **Methods Enzymol** 1989;171:857–69

Cl- permeability of human sweat duct cells monitored with fluorescence-digital imaging microscopy: evidence for reduced plasma membrane Cl- permeability in cystic fibrosis. Ram SJ, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10166–70

Phosphatidylserine translocation to the mitochondrion is an ATP-dependent process in permeabilized animal cells. Voelker DR. **Proc Natl Acad Sci U S A** 1989 Dec; 86(24):9921–5

Predictions of diffusion models for one-ion membrane channels. Gates P, et al. **Prog Biophys Mol Biol** 1989; 53(3):153–96 (42 ref.)

Gene transfer by electroporation: a model for gene therapy. Keating A, et al. **Prog Clin Biol Res** 1990;333:491–8

Membrane electroporation: the dye method to determine the cell membrane conductivity. Neumann E, et al. **Prog Clin Biol Res** 1990;343:69–83 (24 ref.)

Cell cycle dependence of chloride permeability in normal and cystic fibrosis lymphocytes. Bubien JK, et al. **Science** 1990 Jun 15;248(4961):1416–9

Bacterial genetics by electric shock. Solioz M, et al. **Trends Biochem Sci** 1990 May;15(5):175–7 (20 ref.)

[Ultrastructure of myocardium and permeability of cell membrane in early severe burns of mice] Tang GY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1989 Mar;5(1):51–2, 79 (Eng. Abstr.) **(Chi)**

[Factors affecting gap junction formation and permeability] Sun JJ. **Sheng Li Ko Hsueh Chin Chan** 1989 Apr;20(2):123–7 (22 ref.) **(Chi)**

[The transmembrane diffusion of trinitrine and isosorbide dinitrate. Study of artificial membranes] Guyot-Hermann AM, et al. **Ann Pharm Fr** 1989;47(5):290–5 (Eng. Abstr.) **(Fre)**

[Intestinal permeability] Girard L. **Rev Med Suisse Romande** 1990 Jan;110(1):95–100 **(Fre)**

[Endothelial function in contact lens-induced deep corneal opacities] Göbbels M, et al. **Fortschr Ophthalmol** 1989; 86(5):448–50 (Eng. Abstr.) **(Ger)**

[Morphology and function of endothelial cells] Yoshida Y. **Kokyu To Junkan** 1989 Aug;37(8):819–33 (96 ref.) **(Jpn)**

[The SecY protein of E. coli, an integral membrane protein involved in protein translocation] Akiyama Y. **Seikagaku** 1989 Aug;61(8):681–92 (79 ref.) **(Jpn)**

[The effect of decreasing erythrocyte membrane permeability for oxygen during oxygenation] Fok MV, et al. **Biofizika** 1989 Sep–Oct;34(5):901–4 (Eng. Abstr.) **(Rus)**

[New data on characteristics of the chemism of erythrocytes in patients with metabolic-alimentary obesity] Kadyvkina ZM, et al. **Vopr Pitan** 1989 May–Jun;(3):16–9 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Sex-linked variation in creatine kinase release, and its dependence on oestradiol, can be demonstrated in an in-vitro rat skeletal muscle preparation. Amelink GJ, et al. **Acta Physiol Scand** 1990 Feb;138(2):115–24

Growth hormone-releasing factor induces a biphasic modulation of K+ permeability in perfused cultured rat somatotrophs. Ohlsson L, et al. **Acta Physiol Scand** 1989 Oct;137(2):237–41

Protection against membrane-mediated cytotoxicity by calcium and zinc. Mahadevan D, et al. **Am J Pathol** 1990 Mar;136(3):513–20

Apical membrane vesicles of ADH-stimulated toad bladder are highly water permeable. Harris HW Jr, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):F237–43

Modulation of ionic permeability in a nonpolarized cell: effect of cAMP. London RD, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):F985–93

A23187 increases permeability of MDCK monolayers independent of phospholipase activation. Peterson MW, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):C69–76

Effect of pinacidil on ion permeability in resting and contracted resistance vessels. Videback LM, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H14–22

Decreased outer membrane permeability in imipenem-resistant mutants of Pseudomonas aeruginosa. Trias J, et al. **Antimicrob Agents Chemother** 1989 Aug; 33(8):1202–6

Latency of the peroxisomal enzyme acyl-CoA:dihydroxyacetonephosphate acyltransferase in digitonin-permeabilized fibroblasts: the effect of ATP and ATPase inhibitors. Wolvetang EJ, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1135–43

Extracellular ATP induces a nonspecific permeability of thymocyte plasma membranes. el-Moatassim C, et al. **Biochem Cell Biol** 1989 Sep;67(9):495–502

Histamine and a guanine nucleotide increase calcium permeability in pig aortic microsomal fractions. Blayney LM, et al. **Biochem J** 1990 Apr 1;267(1):105–9

A heart mitochondrial Ca2(+)-dependent pore of possible relevance to re-perfusion-induced injury. Evidence that ADP facilitates pore interconversion between the closed and open states. Crompton M, et al. **Biochem J** 1990 Feb 15;266(1):33–9

Mechanisms of luteinizing-hormone exocytosis in Staphylococcus aureus-alpha-toxin-permeabilized sheep gonadotropes. van der Merwe PA, et al. **Biochem J** 1989 Dec 15;264(3):901–8

Interaction of cyclopiazonic acid with rat skeletal muscle sarcoplasmic reticulum vesicles. Effect on Ca2+ binding and Ca2+ permeability. Goeger DE, et al. **Biochem Pharmacol** 1989 Nov 15;38(22):3995–4003

Chlorpromazine makes the platelet plasma membrane permeable for low-molecular weight substances and reduces ATP production. Holmsen H, et al. **Biochem Pharmacol** 1990 Jul 15;40(2):373–6

Photodynamic action of sulphonated aluminium phthalocyanine (SALPC) on isolated rat pancreatic acini. Matthews EK, et al. **Biochem Pharmacol** 1990 May 1; 39(9):1445–57

Mechanism of penetration and of action of local anesthetics in Escherichia coli cells. Collura V, et al. **Biochim Biophys Acta** 1990 Sep 7;1027(3):238–44

pH dependence of protamine action on apical membrane permeability in Necturus gallbladder epithelium. Fromm M, et al. **Biochim Biophys Acta** 1990 Aug 24;1027(2):179–84

Interaction of wasp venom mastoparan with biomembranes. Katsu T, et al. **Biochim Biophys Acta** 1990 Aug 24; 1027(2):185–90

Inhibitory effects of newly synthesized sulfonamide derivatives on calmodulin-dependent phosphodiesterase activity and their modulation of the external ATP-dependent permeability change in mammalian cultured cells. Kitagawa T, et al. **Biochim Biophys Acta** 1989 Dec 28;987(2):235–8

Plant sterol inhibition of abscisic acid-induced perturbations in phospholipid bilayers. Stillwell W, et al. **Biochim Biophys Acta** 1990 May 24;1024(2):345–51

Transport parameters in the human red cell membrane: solute-membrane interactions of hydrophilic alcohols and their effect on permeation. Toon MR, et al. **Biochim Biophys Acta** 1990 Feb 16;1022(1):57–71

Chronic choline treatment improves the "in vivo" membrane permeability of old hepatocytes to Rb+. Pieri C. **Boll Soc Ital Biol Sper** 1989 Oct;65(10):909–15

Bleomycin-induced DNA damage and repair in human cells permeabilized with lysophosphatidylcholine. Sidik K, et al. **Cancer Res** 1990 Mar 1;50(5):1613–9

Effect of orally-administered epidermal growth factor on intestinal iron absorption and mucosal permeability. Raja KB, et al. **Cell Biochem Funct** 1989 Jul;7(3):157–63

A rapid cell membrane permeability test using fluorescent dyes and flow cytometry. Aeschbacher M, et al. **Cell Biol Toxicol** 1986 Jun;2(2):247–55

The effect of complete carcinogens on intercellular transfer of lucifer yellow in fibroblast culture. Budunova IV, et al. **Cell Biol Toxicol** 1990 Jan;6(1):47–61

Enzyme leakage due to change of membrane permeability of primary cultured rat hepatocytes treated with various hepatotoxins and its prevention by glycyrrhizin. Nakamura T, et al. **Cell Biol Toxicol** 1985 Oct;1(4):285–95

Effects of the lipophilic anticancer drug teniposide (VM-26) on membrane transport. Wright SE, et al. **Chem Biol Interact** 1990;75(1):31–48

Bile salt-induced increases in duodenal brush-border membrane proton permeability, fluidity, and fragility. Zhao DL, et al. **Dig Dis Sci** 1990 May;35(5):589–95

Permeabilization of hepatocytes by a saponin and the effects of dextran. Wassler M, et al. **Eur J Cell Biol** 1990 Apr; 51(2):252–8

Extracellular ATP4- permeabilizes thymocytes not only to cations but also to low-molecular-weight solutes. el-Moatassim C, et al. **Eur J Pharmacol** 1990 May 31; 181(1-2):111–8

Effect of centrophenoxine and BCE-001 treatment on lateral diffusion of proteins in the hepatocyte plasma membrane as revealed by fluorescence recovery after photobleaching in rat liver smears. Zs.-Nagy I, et al. **Exp Gerontol** 1989; 24(4):317–30

Morphological and physiological characteristics of pancreas-specific venular permeability induced by Monastral blue B. Desemone J, et al. **Exp Mol Pathol** 1990 Feb;52(1):141–53

Increased calcium permeability is not responsible for the rapid lethal effects of amphotericin B on Leishmania sp. Cohen BE, et al. **FEBS Lett** 1990 Jan 1;259(2):286–8

Do beta-lactam antibiotics permeabilize the outer membrane of gram-negative bacteria? An electrochemical investigation. Jouenne T, et al. **FEMS Microbiol Lett** 1990 Mar 15;56(3):313–7

Fast in vitro movement of outer hair cells in an external electric field: effect of digitonin, a membrane permeabilizing agent. Iwasa KH, et al. **Hear Res** 1989 Jul; 40(3):247–54

Defenestration of hepatic sinusoids in the pathogenesis of alcoholic hyperlipoproteinemia. Scheig R. **Hepatology** 1990 Jan;11(1):148–9

High zone-selectivity of cell permeabilization following digitonin-pulse perfusion of rat liver. A re-interpretation of the microcirculatory zones. Quistorff B, et al. **Histochemistry** 1989;92(6):487–98

Antibacterial activity of meropenem against gram-negative bacteria with a permeability defect and against staphylococci. Kitzis MD, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:125–32

Silica directly increases permeability of alveolar epithelial cells. Merchant RK, et al. **J Appl Physiol** 1990 Apr; 68(4):1354–9

Protamine increases the permeability of cultured epithelial monolayers. Peterson MW, et al. **J Appl Physiol** 1990 Jan; 68(1):220–7

Chelation of cytoplasmic Ca2+ increases plasma membrane permeability in murine macrophages. Picello E, et al. **J Biol Chem** 1990 Apr 5;265(10):5635–9

Insulin regulates the paracellular permeability of cultured intestinal epithelial cell monolayers. McRoberts JA, et al. **J Clin Invest** 1990 Apr;85(4):1127–34

Myocardial biochemical changes in furazolidone-induced cardiomyopathy of turkeys. Mirsalimi SM, et al. **J Comp Pathol** 1990 Feb;102(2):139–47

Lanthanum probing of cell membrane permeability in the rat heart: pathological versus artefactual alterations. Harper IS, et al. **J Electron Microsc Tech** 1990 Apr;14(4):357–66

Very high water permeability in vasopressin-induced endocytic vesicles from toad urinary bladder. Shi LB, et al. **J Gen Physiol** 1989 Dec;94(6):1101–15

Reconstituted voltage-sensitive sodium channels from eel electroplax: activation of permeability by quaternary lidocaine, N-bromoacetamide, and N-bromosuccinimide. Cooper EC, et al. **J Membr Biol** 1989 Nov;111(3):253–64

Pre-steady-state analysis of the turn-on and turn-off of water permeability in the kidney collecting tubule. Kuwahara M, et al. **J Membr Biol** 1989 Aug;110(1):57–65

Bicarbonate permeability of the outwardly rectifying anion channel. Tabcharani JA, et al. **J Membr Biol** 1989 Dec; 112(2):109–22

Chloride permeability regulation via a cyclic AMP pathway in cultured human sweat duct cells. Pedersen PS. **J Physiol (Lond)** 1990 Feb;421:379–97

On the sensitivity of intact cells to perturbation by ethanol. Hitzemann R, et al. **Life Sci** 1989;45(26):2611–9

Relationship between magnesium, carcinogenic metals and ionic permeability of the human amnion. Bara M, et al. **Magnes Res** 1988 Dec;1(3-4):231–7

Plasma membrane damage detected by nucleic acid leakage. Fortunati E, et al. **Mol Toxicol** 1989 Winter;2(1):27–38

Specific inhibitors of protein kinase C block transmitter-induced modulation of sensory neuron calcium current. Rane SG, et al. **Neuron** 1989 Aug;3(2):239–45

Calmodulin loss in vascular smooth muscle following Triton X-100 or saponin skinning. Gardner JP, et al. **Pflugers Arch** 1989 Aug;414(4):484–91

Effects of nitrogen dioxide on alveolar epithelial barrier properties. Crandall ED, et al. **Res Rep Health Eff Inst** 1987 Oct;(13):3–19

Effects of in vitro ozone exposure on peroxidative damage, membrane leakage, and taurine content of rat alveolar macrophages. Banks MA, et al. **Toxicol Appl Pharmacol** 1990 Aug;105(1):55–65

Effect of Diamphidia toxin, a Bushman arrow poison, on ionic permeability in nucleated cells. Jacobsen TF, et al. **Toxicon** 1990;28(4):435–44

Increase of the anion and proton permeability of Saccharomyces carlsbergensis plasmalemma by n-alcohols as a possible cause of its de-energization. Petrov VV, et al. **Yeast** 1990 Jul–Aug;6(4):311–8

[The effect of procyanidolic oligomers on vascular permeability. A study using quantitative morphology] Robert L, et al. **Pathol Biol (Paris)** 1990 Jun;38(6):608–16 (Eng. Abstr.) **(Fre)**

[Effects of cepharanthine on liposomal permeability and size] Shinoda K, et al. **Yakugaku Zasshi** 1990 Mar;110(3):186–90 (Eng. Abstr.) **(Jpn)**

[The molecular organization of the bacterial outer membrane and its penetration by antibiotics with beta-lactam and aminoglycoside structures] Griaznova NS, et al. **Antibiot Khimioter** 1989 Dec;34(12):925–32 (59 ref.) **(Rus)**

[Mechanisms of the action of hypertonic solutions on the ionic permeability of human skin] Tereshin SIu, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jul–Aug;(4):14–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Channels for water flow in epithelia: characteristics and regulation. Whittembury G, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(4):555–63

Electrophysiological characteristics of the Necturus proximal duodenal mucosa: effects of ion substitutions. Bridén S.

Acta Physiol Scand 1989 Dec;137(4):469–79

Permeability of neutral vs. anionic dextrans in cultured brain microvascular endothelium. Sahagun G, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H162–6

Sites of endometrial vascular leakage during implantation in the rabbit. Hoffman LH, et al. **Anat Rec** 1990 May; 227(1):47–61

Hypo-osmotic swelling test: analysis of prevasectomy ejaculates. de Castro M, et al. **Arch Androl** 1990;24(1):11–6

Splanchnic volume, not flow rate, determines peritoneal permeability. Pietrzak I, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):583–7

Intraerythrocytic water relaxation rates in amyotrophic lateral sclerosis. An NMR investigation. Monti JP, et al. **Clin Chim Acta** 1989 Oct 31;185(1):53–9

Alterations caused by the intraerythrocytic malaria parasite in the permeability of its host cell membrane. Ginsberg H. **Comp Biochem Physiol [A]** 1990;95(1):31–9 (47 ref.)

Polarity and membrane transport in osteoclasts. Baron R. **Connect Tissue Res** 1989;20(1–4):109–20 (27 ref.)

Osmometric behavior of Drosophila melanogaster embryos. Lin TT, et al. **Cryobiology** 1989 Oct;26(5):453–71

Permeability of human granulocytes to water: rectification of osmotic flow. Toupin CJ, et al. **Cryobiology** 1989 Oct; 26(5):431–44

Permeability of human granulocytes to dimethyl sulfoxide. Toupin CJ, et al. **Cryobiology** 1989 Oct;26(5):422–30

Haemophilia, AIDS and lung epithelial permeability. O'Doherty MJ, et al. **Eur J Haematol** 1990 Apr;44(4):252–6

Ionic permeabilities of the cell membranes of sheep tracheal epithelium. Acevedo M, et al. **J Physiol (Lond)** 1990 Mar; 422:67–81

Determination of ionic permeability coefficients of the plasma membrane of Xenopus laevis oocytes under voltage clamp. Costa PF, et al. **J Physiol (Lond)** 1989 Jun;413:199–211

Towards the biochemical defect in cystic fibrosis [editorial] **Lancet** 1989 Dec 16;2(8677):1433

Temporal variations in the erythrocyte permeability to bupivacaine, etidocaine and mepivacaine in mice. Bruguerolle B, et al. **Life Sci** 1989;45(26):2587–90

Cell membrane activities and regeneration mechanisms as therapy mediators in moxibustion and acupuncture treatments: theoretical considerations. Sternfeld M, et al. **Med Hypotheses** 1990 Mar;31(3):227–31 (89 ref.)

Cell surface hydrophobicity of 88 clinical strains of Acinetobacter baumannii. Boujaafar N, et al. **Res Microbiol** 1990 May;141(4):477–82

Terminal complement complex and endothelial cells. Suttorp N, et al. **Z Kardiol** 1989;78 Suppl 6:140–2

[The relationship between the intracellular content of 1-methyl-3-isobutylxanthine and the permeability for water of the bladder wall in the frog] Natochin IuV, et al. **Fiziol Zh SSSR** 1989 Dec;75(12):1766–71 (Eng. Abstr.) **(Rus)**

[Passive Ca2+ transport in a suspension of isolated smooth-muscle cells and the contribution of the basal calcium permeability of the plasma membrane to the activation of a tonic contraction] Shinlova OP, et al. **Izv Akad Nauk SSSR [Biol]** 1990 May–Jun;(3):383–90 (Eng. Abstr.) **(Rus)**

[Erythrocyte membrane permeability to monovalent ions of sodium and potassium in adolescents with essential arterial hypertension and renal hypertension] Kavtaradze VG, et al. **Kardiologiia** 1990 Mar;30(3):53–5 (Eng. Abstr.) **(Rus)**

[Changes in the membrane permeability of erythrocytes during blood coagulation in vitro] Bezrukova GA, et al. **Patol Fiziol Eksp Ter** 1989 Sep–Oct;(5):22–3 (Eng. Abstr.) **(Rus)**

[Disordered permeability of the hemato-encephalic barrier in the development of allergic processes of the nervous system] Zhitnukhin IuL, et al. **Patol Fiziol Eksp Ter** 1989 Sep–Oct;(5):44–7 (Eng. Abstr.) **(Rus)**

[Regulation of the blood-brain barrier permeability in suppurative-inflammatory diseases of the maxillofacial area] Chulkin SV, et al. **Stomatologiia (Mosk)** 1990 Mar–Apr;69(2):38–40 (Eng. Abstr.) **(Rus)**

[DNA degradation and changes in the permeability and form of Ehrlich ascites tumor cells when incubated in an anaerobic medium without glucose] Proskurikov SIa, et al. **Tsitologiia** 1989 Jun;31(6):690–5 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Influence of far-ultraviolet radiation on the permeability of the outer membrane of Escherichia coli. Mody R, et al. **Can J Microbiol** 1989 Nov;35(11):1022–30

CELL MEMBRANE PROTEINS see **MEMBRANE PROTEINS**

CELL MIGRATION INHIBITION

see related
MACROPHAGE MIGRATION INHIBITORY FACTORS

Optimization of the under-agarose assay of porcine neutrophil migration. Elliott GS, et al. **Am J Vet Res** 1990 Feb;51(2):245–8

In vitro migration responses of neutrophils from cows and calves. Olson DP. **Am J Vet Res** 1990 Jul;51(7):973–7

Macrophage migration inhibition factor (MIF) in drug eruption. Halevy S, et al. **Arch Dermatol** 1990 Jan; 126(1):48–51

Macrophages stimulated with lipopolysaccharide release a selective neutrophil recruitment inhibitory factor: an in vivo demonstration. Tavares BM, et al. **Braz J Med Biol Res** 1989;22(6):733–6

Leukocyte migration inhibition in propranolol-induced pneumonitis. Evidence for an immunologic cell-mediated mechanism. Gauthier-Rahman S, et al. **Chest** 1990 Jan; 97(1):238–41

Macrophage migration. David JR. **Fed Proc** 1968 Jan–Feb; 27(1):6–12

Studies of chemotactic, chemotactic movement-inhibiting and random movement-inhibiting effects of interleukin-1 alpha and beta, tumour necrosis factors alpha and beta and interferon gamma on human neutrophils in assays using 'sparse-pore' polycarbonate (Nuclepore) membranes in the Boyden chamber. Bignold LP, et al. **Int Arch Allergy Appl Immunol** 1990;91(1):1–7

Application of leucocyte migration tests to detection of allergenic drugs in patients with hypersensitivity to beta-lactam antibiotics. Uno K, et al. **J Antimicrob Chemother** 1989 Aug;24(2):241–50

Leukocyte migration inhibition response to breast cancer antigens and to mouse mammary tumor virus in women with primary breast cancer. Fukuda M, et al. **Surg Forum** 1978;29:167–9

[Hip joint endoprosthesis and metal sensitivity. Studies using the leukocyte migration test] Grasshoff H, et al. **Beitr Orthop Traumatol** 1990 Apr;37(4):211–5 (Eng. Abstr.) **(Ger)**

[Leukocyte migration inhibition after experimental trypanosome infection in cattle] Hauner G, et al. **Zentralbl Veterinarmed [B]** 1989 Dec;36(10):746–56 (Eng. Abstr.) **(Ger)**

[Clinical significance of the leukocyte migration inhibition test] Aoki T. **Nippon Rinsho** 1990 Feb;48 Suppl:730–3 **(Jpn)**

[Macrophage migration inhibitory test] Nomoto K. **Nippon Rinsho** 1990 Feb;48 Suppl:734–7 **(Jpn)**

[Possibilities for the use of the leukocyte migration inhibition test in clinical practice] Stanciu L, et al. **Rev Med Interna [Med Interna]** 1989 May–Jun;41(3):229–37 (41 ref.) **(Rum)**

[The leukocyte migration inhibition reaction in children with neurodermatitis] Gorlanov IA. **Vestn Dermatol Venerol** 1989;(8):35–8 (Eng. Abstr.) **(Rus)**

CELL MOVEMENT

Model structure of a fragment of biological knowledge (cell motility). Doroszewski J, et al. **Acta Biotheor (Leiden)** 1988; 37(3–4):237–66

The control of directed myogenic cell migration in the avian limb bud. Brand-Saberi B, et al. **Anat Embryol (Berl)** 1989; 180(6):555–66

A study on skeletal myogenic cell movement in the developing avian limb bud. Lee KK, et al. **Anat Embryol (Berl)** 1989;180(3):293–300

The instructive role of fibronectins in cell migrations during embryonic development. Duband JL, et al. **Ann N Y Acad Sci** 1990;588:273–80 (50 ref.)

Kinematics of helical motion of microorganisms capable of motion with four degrees of freedom [published erratum appears in Biophys J 1990 May;57(5):1107] Crenshaw HC. **Biophys J** 1989 Nov;56(5):1029–35

Role of fibronectin in adhesion, migration, and metastasis. Humphries MJ, et al. **Cancer Invest** 1989;7(4):373–93 (179 ref.)

One motor, many tails: an expanding repertoire of force-generating enzymes. Vale RD, et al. **Cell** 1990 Mar 23;60(6):883–5 (15 ref.)

In vitro migration of rat large granular lymphocytes. Punturieri A, et al. **Cell Immunol** 1989 Oct 15;123(2):257–63

Cell migration into neural tube lumen provides evidence for the "fixed cortex" theory of cell motility. Bilozur ME, et al. **Cell Motil Cytoskeleton** 1989;14(4):469–84

Correlated distribution of actin, myosin, and microtubules at the leading edge of migrating Swiss 3T3 fibroblasts. Conrad PA, et al. **Cell Motil Cytoskeleton** 1989; 14(4):527–43

Theory for epithelial-mesenchymal transformation based on the "fixed cortex" cell motility model. Hay ED. **Cell Motil Cytoskeleton** 1989;14(4):455–7 (13 ref.)

Influence of extracellular magnesium on capillary endothelial cell proliferation and migration. Banai S, et al. **Circ Res** 1990 Sep;67(3):645–50

Experimental analyses of the migration and cell lineage of avian neural crest cells. Bronner-Fraser M. **Cleft Palate J** 1990 Apr;27(2):110–20 (39 ref.)

Bibliography of the current world literature. Cytoplasm and cell motility. **Curr Opin Cell Biol** 1990 Feb;2(1):131–57

Cell migration in the embryo and adult organism. Erickson CA. **Curr Opin Cell Biol** 1990 Feb;2(1):67–74 (32 ref.)

Morphogenesis of the neural crest. Erickson CA. **Dev Biol (N Y 1985)** 1986;2:481–543 (176 ref.)

Mesoderm migration in the early chick embryo. Sanders EJ. **Dev Biol (N Y 1985)** 1986;2:449–80 (132 ref.)

Migration of sea urchin primary mesenchyme cells. Solursh M. **Dev Biol (N Y 1985)** 1986;2:391–431 (110 ref.)

Primordial germ cell migration. Wylie CC, et al. **Dev Biol (N Y 1985)** 1986;2:433–48 (38 ref.)

Topographical control of cell behaviour: II. Multiple grooved substrata. Clark P, et al. **Development** 1990 Apr; 108(4):635–44

A digital image processing system for quantitating dynamic morphology in cultured mammalian cells [published erratum appears in Exp Cell Res 1990 Apr;187(2):349] Tatsuka M, et al. **Exp Cell Res** 1989 Dec;185(2):342–52

A hyaluronan-binding protein shows a partial and temporally regulated codistribution with actin on locomoting chick heart fibroblasts. Turley EA, et al. **Exp Cell Res** 1990 Apr; 187(2):243–9

Quasi-dynamic test of in vitro cell migration developed to characterize dividing cells of spontaneously metastasizing rat sarcomas. Matoušková E, et al. **Folia Biol (Praha)** 1990; 36(2):117–29

Protein factors which regulate cell motility. Rosen EM, et al. **In Vitro Cell Dev Biol** 1989 Dec;25(12):1079–87 (97 ref.)

Neither motility nor chemotaxis plays a role in the ability of Escherichia coli F-18 to colonize the streptomycin-treated mouse large intestine. McCormick BA, et al. **Infect Immun** 1990 Sep;58(9):2957–61

Analysis of neural crest migration and differentiation using a microinjection technique. Bronner-Fraser M. **Int J Neurol** 1982–83;16–17:73–94 (31 ref.)

Migratory responses of eosinophil and neutrophil granulocytes from patients with asthma. Håkansson L, et al. **J Allergy Clin Immunol** 1990 Apr;85(4):743–50

Chemotaxis in Escherichia coli proceeds efficiently from different initial tumble frequencies. Weis RM, et al. **J Bacteriol** 1990 Feb;172(2):1099–105

An instructive role for the interstitial matrix in tissue patterning: tissue segregation and intercellular invasion. Armstrong PB, et al. **J Cell Biol** 1990 Apr;110(4):1439–55

Signal transduction for chemotaxis and haptotaxis by matrix molecules in tumor cells. Aznavoorian S, et al. **J Cell Biol** 1990 Apr;110(4):1427–38

Recognition of hepatitis B virus envelope proteins by liver-infiltrating T lymphocytes in chronic HBV infection. Barnaba V, et al. **J Immunol** 1989 Oct 15;143(8):2650–5

Migration of neutrophils across endothelial monolayers is stimulated by treatment of the monolayers with interleukin-1 or tumor necrosis factor-alpha. Furie MB, et al. **J Immunol** 1989 Nov 15;143(10):3309–17

Non-chemotactic translocation of phagocytic cells mediated by a fibronectin-related human lymphokine. Godfrey HP, et al. **J Immunol** 1989 Dec 1;143(11):3691–6

Endogenous receptor-bound urokinase mediates tissue invasion of human monocytes. Kirchheimer JC, et al. **J Immunol** 1989 Oct 15;143(8):2634–9

The antiinflammatory effects of essential fatty acid deficiency in experimental glomerulonephritis. The modulation of macrophage migration and eicosanoid metabolism. Schreiner GF, et al. **J Immunol** 1989 Nov 15;143(10):3192–9

Characterization of the CD4+ and CD8+ tumor infiltrating lymphocytes propagated with bispecific monoclonal antibodies. Wong JT, et al. **J Immunol** 1989 Nov 15; 143(10):3404–11

Macrophages and carcinoma cells migrate at the same pace to the lymph nodes. Verhoeven D, et al. **Lymphology** 1989 Sep;22(3):141–3

An in situ transgenic enzyme marker to monitor migration of cells in the mid-gestation mouse embryo. Somite contribution to the early forelimb bud. Beddington RS, et al. **Mol Biol Med** 1989 Aug;6(4):263–74

Cell motility: multiple microtubule motors [news] Scholey JM. **Nature** 1990 Jan 11;343(6254):118–20

Multiple-exposure photographic analysis of a motile spirochete. Goldstein SF, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):4895–9

A new method for the investigation of cellular dielectrophoresis. Zieliński JJ, et al. **Z Naturforsch [C]** 1989 Sep–Oct;44(9–10):845–8

[Adherence of monocytes to the aortic endothelium. Effect of the intraluminal pressure] Tedgui A, et al. **Arch Mal Coeur** 1989 Jul;82(7):1191–4 (Eng. Abstr.) **(Fre)**

[Control of cell movement by laminin, multifunctional glycoprotein of the basal membrane. Role in metastasis] Lissitzky JC, et al. **Pathol Biol (Paris)** 1989 Nov; 37(9):1028–9 **(Fre)**

[Actin binding proteins from physarum and the organization of the actin cytoskeleton] Furuhashi K, et al. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(12 Suppl):1524–32 **(Jpn)**

[Cell motility and Ca2+] Hatano S, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(12):2067–75 **(Jpn)**

[Ca2+-dependent phosphorylation of cytoskeleton proteins and its pharmacological control] Hidaka H, et al. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(12 Suppl):1584–9 **(Jpn)**

[Growth factor-induced changes in the actin architecture] Miyata Y, et al. **Tanpakushitsu Kakusan Koso** 1989 Sep; 34(12 Suppl):1575–83 **(Jpn)**

[Roles of microfilaments and microtubules in morphogenesis of multicellular animals] Takeuchi S. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(12 Suppl):1749–56 **(Jpn)**

[In vitro actin-myosin motility assay system] Toyoshima YY. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(12 Suppl):1480–6 **(Jpn)**

[Use of acridine orange in the estimation of lymphoid cell migration in an organism] Popugallo MV, et al. **Biull Eksp Biol Med** 1989 Jul;108(7):40–2 (Eng. Abstr.) **(Rus)**

[Method of automatic recording and analysis of leukocyte migration based on the image analysis system] Tumanov EA, et al. **Biull Eksp Biol Med** 1990 Jun;109(6):594–7 (Eng. Abstr.) **(Rus)**

[Effects of DL–difluoromethylornithine on the cell surface charge of Ehrlich ascitic cancer during different phases of the mitotic cycle] Kozak VV, et al. **Eksp Onkol** 1990; 12(1):50–3 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Non–steroidal anti–inflammatory drug–copper complex modulation of polymorphonuclear leukocyte migration. Roch–Arveiller M, et al. **Biochem Pharmacol** 1990 Feb 1; 39(3):569–74

The effect of tumor promoters and antagonists on in vitro directional migration of 10T1/2 mouse embryo cells. Verschueren H. **Cell Biol Toxicol** 1985 Jun;1(3):145–57

Tumor cell haptotaxis on immobilized N–acetylglucosamine gradients. Brandley BK, et al. **Dev Biol** 1990 Jul; 140(1):161–71

Exogenous tenascin inhibits mesodermal cell migration during amphibian gastrulation. Riou JF, et al. **Dev Biol** 1990 Feb;137(2):305–17

Physiologic and pharmacologic studies on the motility of isolated guinea pig cauda epididymidis. Da Silva e Souza MC, et al. **Fertil Steril** 1975 Dec;26(12):1250–6

Diacylglycerols and the protein kinase inhibitor H–7 suppress cell polarity and locomotion of Walker 256 carcinosarcoma cells. Keller HU, et al. **Int J Cancer** 1989 Nov 15; 44(5):934–9

The type I insulin–like growth factor receptor is a motility receptor in human melanoma cells. Stracke ML, et al. **J Biol Chem** 1989 Dec 25;264(36):21544–9

Phosphoproteins associated with cyclic nucleotide stimulation of ciliary motility in Paramecium. Bonini NM, et al. **J Cell Sci** 1990 Feb;95 (Pt 2):219–30

Effects of chlorhexidine solution on neutrophil locomotion in vitro. Watts TL, et al. **J Dent** 1989 Dec;17(6):287–9

Interleukin 6 decreases cell–cell association and increases motility of ductal breast carcinoma cells. Tamm I, et al. **J Exp Med** 1989 Nov 1;170(5):1649–69

Aminoglycoside antibiotics impair calcium entry but not viability and motility in isolated cochlear outer hair cells. Dulon D, et al. **J Neurosci Res** 1989 Oct;24(2):338–46

[Effects of dalargin on proliferative processes and vertical migration of cells of the corneal epithelium during stress] Timoshin SS, et al. **Biull Eksp Biol Med** 1990 Feb; 109(2):189–91 (Eng. Abstr.) **(Rus)**

GENETICS

Gene targeting and cell motility. De Lozanne A. **Cell Motil Cytoskeleton** 1989;14(1):62–8 (69 ref.)

Molecular genetic approaches to the study of motility in Caenorhabditis elegans. Waterston RH. **Cell Motil Cytoskeleton** 1989;14(1):136–45 (57 ref.)

IMMUNOLOGY

Adoptive transfer of fluorescence–labeled cells shows that resident peritoneal macrophages are able to migrate into specialized lymphoid organs and inflammatory sites in the mouse. Rosen H, et al. **Eur J Immunol** 1990 Jun; 20(6):1251–8

Relation between locomotion, chemotaxis and clustering of immune cells. Wilkinson PC. **Immunology** 1990 Jan; 69(1):127–33

PHYSIOLOGY

Random–walk chemotaxis: trial and error as a control process. Marken RS, et al. **Behav Neurosci** 1989 Dec; 103(6):1348–55

Stimulatory and inhibitory effects of serum and conditioned medium on cell spreading. Verger C, et al. **Cell Biol Int Rep** 1990 Jun;14(6):543–8

Membrane–bound myosin–I provides new mechanisms in cell motility. Adams RJ, et al. **Cell Motil Cytoskeleton** 1989; 14(2):178–82 (29 ref.)

Cytoplasm and cell motility. **Curr Opin Cell Biol** 1989 Feb; 1(1):123–52

Genetic approaches to cytoskeleton function and the control of cell motility. Segall JE, et al. **Curr Opin Cell Biol** 1989 Feb;1(1):44–50 (13 ref.)

Microfilament–based motility in non–muscle cells. Small JV. **Curr Opin Cell Biol** 1989 Feb;1(1):75–9 (19 ref.)

Cell locomotion and chemotaxis. Zigmond SH. **Curr Opin Cell Biol** 1989 Feb;1(1):80–6 (44 ref.)

Locomotion and chemotaxis of leukocytes: gradient perception and locomotor capacity. Haston WS, et al. **Curr Opin Immunol** 1988 Sep–Oct;1(1):5–9 (12 ref.)

Unidirectional displacement of cells in fibrillar matrices. Boocock CA. **Development** 1989 Dec;107(4):881–90

Spreading of B16 F1 cells on laminin and its proteolytic fragments P1 and E8: involvement of laminin carbohydrate chains. Bouzon M, et al. **Exp Cell Res** 1990 Sep; 190(1):47–56

The role of cell adhesion and migration in the in vitro invasiveness of mouse adrenal carcinoma cells. Fridman R, et al. **Invasion Metastasis** 1990;10(4):208–24

Quantification of corneal organ culture migration: central and peripheral epithelium. Cameron JD, et al. **Invest Ophthalmol Vis Sci** 1989 Nov;30(11):2407–13

Spreading of trypsinized cells: cytoskeletal dynamics and energy requirements. Bereiter–Hahn J, et al. **J Cell Sci** 1990 May;96 (Pt 1):171–88

Scanning electron microscopy of tympanic membrane epithelium during in vitro migration. Boxall JD, et al. **J Otolaryngol** 1990 Feb;19(1):57–61

Investigations on contractile properties of retinal pigment epithelial cells. Yamakawa R, et al. **Ophthalmologica** 1989; 199(4):165–72

Calibration of photodiode measurements of cell motion by a transmission optical lever method. Clark BA, et al. **Pflugers Arch** 1990 Jan;415(4):490–3

The direction of membrane lipid flow in locomoting polymorphonuclear leukocytes. Lee J, et al. **Science** 1990 Mar 9;247(4947):1229–33

[Migration of monocytes and granulocytes in co–culture with endothelial cells] Grünwald J, et al. **Z Kardiol** 1989;78 Suppl 6:113–6 (Eng. Abstr.) **(Ger)**

CELL NUCLEOLUS

Elimination of the nucleolus from the nucleus of a living cell by centrifugation (a literature review). Moroz PE. **Tissue Cell** 1989;21(4):535–41 (58 ref.)

ANALYSIS

Nucleolin from the multiple nucleoli of amphibian oocyte nuclei. DiMario PJ, et al. **Chromosoma** 1990 Apr; 99(2):87–94

Immunolocalization of DNA at nucleolar structural components in onion cells. Martin M, et al. **Chromosoma** 1989 Nov;98(5):368–77

U3, U8 and U13 comprise a new class of mammalian snRNPs localized in the cell nucleolus. Tyc K, et al. **EMBO J** 1989 Oct;8(10):3113–9

In situ hybridization at the electron microscope level: an improved method for precise localization of ribosomal DNA and RNA. Thiry M, et al. **Eur J Cell Biol** 1989 Oct; 50(1):235–43

Ultrastructural studies on RNA and DNA components of isolated nucleoli of Walker 256 carcinosarcoma. Narayan KS, et al. **Exp Cell Res** 1966 Jan;41(1):81–98

Three–dimensional localisation of DNA in the nucleolus of Spirogyra by correlated optical tomography and serial ultra–thin sectioning. Jordan EG, et al. **J Cell Sci** 1990 Mar;95 (Pt 3):343–52

Nucleolar transcription factor hUBF contains a DNA–binding motif with homology to HMG proteins. Jantzen HM, et al. **Nature** 1990 Apr 26;344(6269):830–6

ENZYMOLOGY

The specificity of interaction between S–adenosyl–L–methionine and a nucleolar 2'–O–methyltransferase. Segal DM, et al. **Arch Biochem Biophys** 1989 Dec;275(2):334–43

Presence of two protein kinases in highly purified rat liver nucleoli. Gamo S, et al. **Life Sci** 1974 Dec 15; 15(12):2179–87

In vitro processing at the 3'–terminal region of pre–18S rRNA by a nucleolar endoribonuclease. Shumard CM, et al. **Mol Cell Biol** 1990 Aug;10(8):3868–72

IMMUNOLOGY

Different nucleolar antigen expression in resting and proliferating human lymphocytes as studied by fluorescence microscopy and flow cytometry. Dubben HH. **Cell Tissue Kinet** 1990 Mar;23(2):89–97

A nucleolar auto–antigen is part of a major chromosomal surface component. Yasuda Y, et al. **Chromosoma** 1990 Apr; 99(2):152–60

Identification of protein components reactive with anti–PM/Scl autoantibodies. Gelpi C, et al. **Clin Exp Immunol** 1990 Jul;81(1):59–64

Ki–67 detects a nuclear matrix–associated proliferation–related antigen. II. Localization in mitotic cells and association with chromosomes. Verheijen R, et al. **J Cell Sci** 1989 Apr;92 (Pt 4):531–40

[The fibrillarin (Scl–34) autoantibody in systemic scleroderma] Kühn G, et al. **Dermatol Monatsschr** 1990; 176(1):19–26 (Eng. Abstr.) **(Ger)**

METABOLISM

Actinomycin D binding in vitro: active chromatin preferred. Yu FL, et al. **Biochem Int** 1990;20(4):807–15

The effect of adenosine analogue (DRB) on a major nucleolar phosphoprotein nucleolin. Noaillac–Depeyre J, et al. **Biol Cell** 1989;67(1):27–35

The U3 small nucleolar ribonucleoprotein functions in the first step of preribosomal RNA processing. Kass S, et al. **Cell** 1990 Mar 23;60(6):897–908

Identification of major nucleolar proteins as candidate mitotic substrates of cdc2 kinase. Peter M, et al. **Cell** 1990 Mar 9;60(5):791–801

The nucleolus and ribosome formation. Warner JR. **Curr Opin Cell Biol** 1990 Jun;2(3):521–7 (24 ref.)

A yeast nucleolar protein related to mammalian fibrillarin is associated with small nucleolar RNA and is essential for viability. Schimmang T, et al. **EMBO J** 1989 Dec 20; 8(13):4015–24

Nucleolar DNA synthesis in leukocytes cultured in vitro. Ribas–Mundó M. **Exp Cell Res** 1966 Jan;41(1):210–4

Nuclear and nucleolar targeting sequences of c–erb–A, c–myb, N–myc, p53, HSP70, and HIV tat proteins. Dang CV, et al. **J Biol Chem** 1989 Oct 25;264(30):18019–23

Isolation and sequencing of NOP1. A yeast gene encoding a nucleolar protein homologous to a human autoimmune antigen. Henríquez R, et al. **J Biol Chem** 1990 Feb 5; 265(4):2209–15

Mutational analysis of the human HSP70 protein: distinct domains for nucleolar localization and adenosine triphosphate binding. Milarski KL, et al. **J Cell Biol** 1989 Nov;109(5):1947–62

Effect of estrogen on the elongation rate and number of RNA chains being synthesized in uterine nucleoli. Brantley KM, et al. **J Steroid Biochem** 1990 Mar;35(3–4):367–75

Effects of a highly basic region of human immunodeficiency virus Tat protein on nucleolar localization. Siomi H, et al. **J Virol** 1990 Apr;64(4):1803–7

The role of small nucleolar ribonucleoproteins in ribosome synthesis. Tollervey D, et al. **Mol Biol Rep** 1990; 14(2–3):103–6 (17 ref.)

Nucleolar single stranded DNA [news] **Nature** 1973 May 4;243(5401):9

Nucleolar targeting signal of human T–cell leukemia virus type I rex–encoded protein is essential for cytoplasmic accumulation of unspliced viral mRNA. Nosaka T, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9798–802

PATHOLOGY

Morphometric analysis of hyperthermia–induced nuclear and nucleolar size modifications in a human melanoma cell line. Delpino A, et al. **Diagn Cytopathol** 1989;5(4):427–31

PHYSIOLOGY

Structure and developmental expression of chicken nucleolin and NO38: coordinate expression of two abundant non–ribosomal nucleolar proteins. Maridor G, et al. **Biochim Biophys Acta** 1990 Jun 21;1049(2):126–33

Discovery of the nucleolar targeting signal. Hatanaka M. **Bioessays** 1990 Mar;12(3):143–8 (25 ref.)

The nucleolus, in the spotlight. Meeting on the nucleolus, Toledo (Spain), December 15–18, 1988. Medina FJ. **Eur J Cell Biol** 1989 Oct;50(1):244–6

Nucleologenesis and the onset of transcription in the eight–cell bovine embryo: fine–structural autoradiographic study. Kopečný V, et al. **Mol Reprod Dev** 1989;1(2):79–90

High–resolution autoradiographic studies of comparative nucleologenesis and genome reactivation during early embryogenesis in pig, man and cattle. Kopečny V. **Reprod Nutr Dev** 1989;29(5):589–600 (30 ref.)

ULTRASTRUCTURE

Electron microscopy and morphometry of nucleoli in rat neurosecretory cells with stimulated and suppressed secretion. Andersen L. **Acta Anat (Basel)** 1990;138(3):220–3

Number, volume and size distribution of nucleoli in rat neurosecretory cells with suppressed and stimulated secretion. Andersen L. **Acta Anat (Basel)** 1990;137(4):311–5

Argyrophilic nucleolar organizer region proteins (Ag–NORs) in human brain tumors: relations with grade of malignancy and proliferation indices. Maier H, et al. **Acta Neuropathol (Berl)** 1990;80(2):156–62

Heat–shock proteins and nucleolar hypertrophy in the liver of rat infused with methionine–free total parenteral nutrition. Masumi A, et al. **Biochim Biophys Acta** 1990 Apr 9;1052(1):71–7

Functional and dynamic aspects of the mammalian nucleolus. Scheer U, et al. **Bioessays** 1990 Jan;12(1):14–21 (38 ref.)

In situ separation of nucleolar components by hypotonic treatment of cells. Hozák P, et al. **Biol Cell** 1990; 68(2):167–70

Formation of microspherules in nucleoli of tumor cells treated with high doses of actinomycin D. Unuma T, et al. **Cancer Res** 1967 Jul;27(7):1232–42

U3 snRNPs and nucleolar development during oocyte maturation, fertilization and early embryogenesis in the mouse: U3 snRNA and snRNPs are not regulated coordinate with other snRNAs and snRNPs. Prather R, et al. **Dev Biol** 1990 Apr;138(2):247–55

Fibrillar center distribution in nucleoli of PHA–stimulated human lymphocytes. Ochs RL, et al. **Exp Cell Res** 1989 Oct;184(2):552–7

Ribosomal DNA is located and transcribed in the dense fibrillar component of human Sertoli cell nucleoli. Wachtler F, et al. **Exp Cell Res** 1989 Sep;184(1):61–71

Electron microscopic in situ hybridization and autoradiography: localization and transcription of rDNA in human lymphocyte nucleoli. Wachtler F, et al. **Exp Cell Res** 1990 Apr;187(2):346–8

Studies on satellite nucleoli in human blastic cells of acute leukaemias. Smetana K, et al. **Folia Haematol (Leipz)** 1990; 117(1):59–64

Cellular distribution of the hamster liver specific nucleolar antigens. Wojtkowiak Z, et al. **Gen Physiol Biophys** 1990 Feb;9(1):29–38

Unusual prophase structures and multiple nucleoli in male meiosis of Drosophila species of the virilis group. Klasterska I, et al. **Genetica** 1990;80(3):181–7

Ultrastructural and cytochemical studies of nucleolus–like bodies in neurons of rat sympathetic ganglia. Zaręba–Kowalska A, et al. **Histochemistry** 1990; 93(3):305–10

Maturation at high frequency of germinal-vesicle-stage mouse oocytes after cryopreservation: alterations in cytoplasmic, nuclear, nucleolar and chromosomal structure and organization associated with vitrification. Van Blerkom J. **Hum Reprod** 1989 Nov;4(8):883–98

Observations on the morphology of pronuclei and nucleoli in human zygotes and implications for cryopreservation. Wright G, et al. **Hum Reprod** 1990 Jan;5(1):109–15

Ultrastructural cytochemistry of the mammalian cell nucleolus. Derenzini M, et al. **J Histochem Cytochem** 1990 Sep;38(9):1237–56 (106 ref.)

Towards light microscopic imaging of hydrated 'native' ribosomal RNA genes. A combined video microscopic and transmission electron microscopic analysis. Spring H, et al. **J Microsc** 1990 Jun;158 (Pt 3):323–33

Nucleolar structure and RNA synthesis in mammalian oocytes. Crozet N. **J Reprod Fertil Suppl** 1989;38:9–16 (24 ref.)

Nucleolus organizer regions and nucleoli in mammalian embryos. King WA, et al. **J Reprod Fertil Suppl** 1989; 38:63–71 (48 ref.)

Quantity of nucleolar silver-stained proteins is related to proliferating activity in cancer cells. Derenzini M, et al. **Lab Invest** 1990 Jul;63(1):137–40

Organization of nucleoskeleton and its relation to DNA topological organization. Bao SD, et al. **Sci China [B]** 1989 Mar;32(3):314–23

Sequential changes in the nucleoli of human spermatogonia with special reference to rDNA location and transcription. Hartung M, et al. **Tissue Cell** 1990;22(1):25–37

Nucleolar grading of breast cancer. Comparative studies on frequency and localization of nucleoli and histology, stage, hormonal receptor status and lectin histochemistry. Helpap B. **Virchows Arch [A]** 1989;415(6):501–8

[The PM-Scl (polymyositis-scleroderma) autoantibody and its nucleolar fluorescence pattern] Kühn G, et al. **Dermatol Monatsschr** 1989;175(8):479–83 (Eng. Abstr.) **(Ger)**

[Ultrastructural organization of nucleoli and ribosome level in lymphocytes at different stages of maturation in patients with chronic B-cell lymphocytic leukemia] Morozova EO, et al. **Eksp Onkol** 1990;12(4):35–40 (Eng. Abstr.) **(Rus)**

[Changes in the ultrastructure of rat hepatocyte nucleoli during bilateral adrenalectomy and after administration of cortisol] Mdivani TV, et al. **Tsitol Genet** 1989 Jul–Aug; 23(4):3–6 (Eng. Abstr.) **(Rus)**

[A comparative study of the main components of the nucleolus in different populations of rat trophoblast cells during differentiation. I. The nucleoli of the trophoblast cells in the labyrinth section of the placenta] Zybina EV, et al. **Tsitologiia** 1989 Dec;31(12):1423–7 (Eng. Abstr.) **(Rus)**

[A comparative study of the main components of the nucleolus in different populations of rat trophoblast cells during differentiation. II. The nucleoli of the trophospongium cells, the glycogen cells and the secondary giant cells] Zybina EV, et al. **Tsitologiia** 1989 Dec; 31(12):1428–34 (Eng. Abstr.) **(Rus)**

[A quantitative study of Ag-positive nucleolar segments revealed by silver staining in the interphase nuclei of trophoblast cells from the rat placental connective zone] Zybina TG, et al. **Tsitologiia** 1989 Nov;31(11):1292–305 (Eng. Abstr.) **(Rus)**

[Transcription of nucleoplasmatic and nucleolar sites of DNA sensitive to the protease inhibitor antipain] Iarygin VN, et al. **Vestn Akad Med Nauk SSSR** 1990;(2):46–8 (Eng. Abstr.) **(Rus)**

[Nucleolus-like bodies and neuronal differentiation in the anterior hypothalamus of rats] Kleshchinov VN. **Zh Nevropatol Psikhiatr** 1989;89(7):118–24 (Eng. Abstr.) **(Rus)**

CELL NUCLEUS

see related
CELL COMPARTMENTATION
KARYOMETRY

A comparison between stereological estimates of mean nuclear volume and DNA flow cytometry in bladder tumours. Nielsen K, et al. **APMIS** 1989 Oct;97(10):949–56

Bibliography of the current world literature. Nucleus and gene expression. **Curr Opin Cell Biol** 1989 Jun;1(3):549–609

Nucleus and gene expression. **Curr Opin Cell Biol** 1990 Jun; 2(3):539–97

Preparation of nucleate and anucleate fragments of hamster and mouse eggs by centrifugation. Yanagimachi R, et al. **J Exp Zool** 1990 Feb;253(2):220–5

Elimination of the nucleolus from the nucleus of a living cell by centrifugation (a literature review). Moroz PE. **Tissue Cell** 1989;21(4):535–41 (58 ref.)

[Quantitative characterization of nuclear polymorphism of the epithelial cells in fibroadenomatosis and cancer of the breast] Ganina KP, et al. **Vopr Onkol** 1989;35(12):1444–9 (Eng. Abstr.) **(Rus)**

ANALYSIS

Tissue-specific differences in the compartmentalization of rat nuclear triiodothyronine receptors. Barsano CP, et al. **Acta Endocrinol (Copenh)** 1990 Feb;122(2):181–90

Nuclear DNA measurements on thyroid carcinoma in young patients. Ekman ET, et al. **Acta Oncol** 1989;28(4):475–9

Cytofluorometric determination of nuclear DNA in heart muscles of patients with muscular dystrophy. Kuwamura Y, et al. **Acta Pathol Jpn** 1989 Sep;39(9):566–72

Karyometric marker features in fine needle aspirates of microinvasive follicular carcinoma of the thyroid. Bibbo M, et al. **Anal Quant Cytol Histol** 1990 Feb;12(1):42–7

Karyometric marker features in fine needle aspirates of invasive follicular carcinoma of the thyroid. Galera-Davidson H, et al. **Anal Quant Cytol Histol** 1990 Feb;12(1):35–41

Intranuclear androgen and cytosolic receptor concentrations in the axillary skin of osmidrosis. Kurata S, et al. **Arch Dermatol Res** 1990;282(1):33–7

Stage B prostate adenocarcinoma. Flow cytometric nuclear DNA ploidy analysis. Montgomery BT, et al. **Arch Surg** 1990 Mar;125(3):327–31

The prognostic significance of nuclear DNA content in malignant epithelial tumors of the ovary. Brescia RJ, et al. **Cancer** 1990 Jan 1;65(1):141–7

Prognostic and therapeutic significance of the flow cytometric nuclear DNA content in non-small cell lung cancer. Isobe H, et al. **Cancer** 1990 Mar 15;65(6):1391–5

A comparative analysis of nuclear DNA content and N-myc gene amplification in neuroblastoma. Taylor SR, et al. **Cancer** 1990 Mar 15;65(6):1360–6

Nuclear oncogenes. Lamph WW. **Cancer Cells** 1989 Oct; 1(2):65–6

Immunocytochemical localization of the glucocorticoid receptor in steroid-sensitive and -resistant human leukemic cells. Antakly T, et al. **Cancer Res** 1990 Feb 15; 50(4):1337–45

DNA in situ sensitivity to denaturation as a marker of human breast tumors. Kunicka JE, et al. **Cancer Res** 1989 Nov 15;49(22):6347–51

Chromatin organization in rat testis nuclei. Flow cytometric detection of the morphological compaction. Papa S, et al. **Cell Biochem Funct** 1989 Jul;7(3):205–12

Estimation of residual DNA in Feulgen reaction. A new correction of DNA determination per nucleus. Yamada M, et al. **Cell Mol Biol** 1990;36(2):155–61

Intracellular distribution of a 32-KDa calcium-dependent phospholipid-binding protein from human placenta. Giga-Hama Y, et al. **Cell Struct Funct** 1989 Oct; 14(5):587–95

Cultured human keratinocytes: discrimination of different cell cycle compartments based upon measurement of nuclear RNA or total cellular RNA content. Staiano-Coico L, et al. **Cell Tissue Kinet** 1989 May;22(3):235–43

Interpretation of microscopic image analysis of cell nuclei. Hause LL, et al. **Comput Med Imaging Graph** 1990 Jul–Aug; 14(4):225–30

Localization of a mouse centromeric DNA repeat in interphase nuclei. Disteche CM, et al. **Cytometry** 1990; 11(1):119–25

Cytofluorometric determination of protein-bound thiols and DNA in cell nuclei. Schabronath J, et al. **Cytometry** 1990; 11(3):333–40

Reference standards for flow cytometry and application in comparative studies of nuclear DNA content. Tiersch TR, et al. **Cytometry** 1989 Nov;10(6):706–10

Spatial topography of a pericentromeric region (1q12) in hemopoietic cells studied by in situ hybridization and confocal microscopy. van Dekken H, et al. **Cytometry** 1990; 11(5):570–8

Instrument for real-time pulse-shape analysis of slit-scan flow cytometry signals. van Oven C, et al. **Cytometry** 1990; 11(5):630–5

A procedure for the extraction and high resolution two-dimensional gel electrophoresis of total nuclear phosphoproteins from isotonically purified nuclei. Baciu PC, et al. **Electrophoresis** 1990 Feb;11(2):162–6

Immunohistochemical localization of nuclear 3,5,3'-triiodothyronine receptor proteins in rat tissues studied with antiserum against C-ERB A/T3 receptor. Tagami T, et al. **Endocrinology** 1990 Oct;127(4):1727–34

Cytochemical study of the localization and organization of parental herpes simplex virus type I DNA during initial infection of the cell. Puvion-Dutilleul F, et al. **Eur J Cell Biol** 1989 Oct;50(1):187–200

Nuclear localization of two steroid receptor-associated proteins, hsp90 and p59. Gasc JM, et al. **Exp Cell Res** 1990 Feb;186(2):362–7

The dynamic distribution and quantification of DNA cruciforms in eukaryotic nuclei. Ward GK, et al. **Exp Cell Res** 1990 Jun;188(2):235–46

An improved nuclear extract preparation method. Zerivitz K, et al. **Gene Anal Tech** 1989 Sep–Oct;6(5):101–9

Ultrastructural analysis of estrogen receptor immunoreactive neurons in the medial preoptic area of the female rat brain. Liposits Z, et al. **Histochemistry** 1990;93(3):233–9

In vitro demonstration of putative nuclear 3,5,3'-triiodothyronine receptors in isolated liver nuclei of Singi fish, Heteropneustes fossilis (Bloch). Dasmahapatra AK, et al. **Horm Metab Res** 1990 Apr;22(4):221–4

Nuclear localization of antigens detected by a monoclonal antibody against a synthetic peptide of rfp finger protein. Kikuchi T, et al. **Hybridoma** 1990 Apr;9(2):189–200

Enrichment of ubiquitinated histone H2A in a low salt extract of micrococcal nuclease-digested myotube nuclei. Parlow MH, et al. **J Biol Chem** 1990 May 5;265(13):7507–12

The in vitro DNA-binding properties of purified nuclear lamin proteins and vimentin. Shoeman RL, et al. **J Biol Chem** 1990 Jun 5;265(16):9055–61

Nuclear localization of 68 kDa calmodulin-binding protein is associated with the onset of DNA replication. Subramanyam C, et al. **J Cell Physiol** 1990 Sep;144(3):423–8

Observations on ultracentrifuging wild-type and mutant (cdc2.33) cells of Schizosaccharomyces pombe. Khar A, et al. **J Cell Sci** 1989 Mar;92 (Pt 3):345–8

Expression of nuclear lamins in mammalian somatic cells lacking cytoplasmic intermediate filament proteins. Paulin-Levasseur M, et al. **J Cell Sci** 1989 Mar;92 (Pt 3):361–70

Monoclonal antibody analysis of the proliferating cell nuclear antigen (PCNA). Structural conservation and the detection of a nucleolar form. Waseem NH, et al. **J Cell Sci** 1990 May;96 (Pt 1):121–9

Localization of ribosomal and telomeric DNA sequences in intact plant nuclei by in-situ hybridization and three-dimensional optical microscopy. Rawlins DJ, et al. **J Microsc** 1990 Jan;157 (Pt 1):83–9

Recognition of the retrograde reaction in motoneurons using an image analysing system. Rauch F, et al. **J Neurosci Methods** 1989 Dec;30(3):255–62

Nuclear localization of Semliki Forest virus-specific nonstructural protein nsP2. Peränen J, et al. **J Virol** 1990 May;64(5):1888–96

Flow cytometric analysis of the nuclear DNA content of hepatocellular carcinoma. Ishizu H. **Jpn J Surg** 1989 Nov; 19(6):662–73

Clonal growth of atypical adenomatous hyperplasia of the lung: cytofluorometric analysis of nuclear DNA content. Nakayama H, et al. **Mod Pathol** 1990 May;3(3):314–20

Antispectrin antibodies stain the oocyte nucleus and the site of fertilization channels in the egg of Discoglossus pictus (Anura). Campanella C, et al. **Mol Reprod Dev** 1990 Jun; 26(2):134–42

Sexing the human fetus and identification of polyploid nuclei by DNA-DNA in situ hybridisation in interphase nuclei. West JD, et al. **Mol Reprod Dev** 1989;1(2):129–37

Nuclear DNA content variability in Xenopus laevis: a redundancy regulation common to all gene families. Amaldi F, et al. **Nature** 1973 Apr 27;242(5400):615–7

Nucleotide sequence of a novel transcript confined in HeLa cell nucleus. Kim JH, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):669

Nuclear thiols: technical limitations on the determination of endogenous nuclear glutathione and the potential importance of sulfhydryl proteins. Loh SN, et al. **Radiat Res** 1990 Jan;121(1):98–106

Immunocytochemical localization of histones H2B, H3 and H4 in pronuclei and four-cell stages of porcine embryos. Preliminary results. Rozinek J, et al. **Reprod Nutr Dev** 1989; 29(5):577–87

Nuclear progestin receptors in rat thymic tissue. Fujii-Hanamoto H, et al. **Thymus** 1990 Feb;15(1):31–45

[Prognostic significance of nuclear DNA content in breast cancer] Nishi T, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Mar 20;25(3):569–77 (Eng. Abstr.) **(Jpn)**

[Flow cytometric DNA analysis in colorectal cancer] Ando Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep;90(9):1571–5 (Eng. Abstr.) **(Jpn)**

[Nuclear DNA analysis of hepatocellular carcinoma] Fujimoto J, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep; 90(9):1568–70 (Eng. Abstr.) **(Jpn)**

[Nuclear DNA content of gastric cancer with biologically high malignancy] Kimura O, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep;90(9):1564–7 (Eng. Abstr.) **(Jpn)**

[Clinical significance of measurement of nuclear DNA content in breast cancer] Nishi T, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep;90(9):1559–63 (Eng. Abstr.) **(Jpn)**

[Nuclear DNA cytofluorometry of normal human laryngeal epithelia and squamous cell carcinoma] Yasuda N, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Nov;92(11):1876–83 (Eng. Abstr.) **(Jpn)**

[Isolation of yeast nuclei and characteristics of their lipid composition] Belov AP, et al. **Mikrobiologiia** 1989 Jul–Aug; 58(4):562–5 (Eng. Abstr.) **(Rus)**

[Changes in the amount and synthesis of DNA in the nuclei of large decidual cells in rats during their differentiation] Mikhailov VM, et al. **Tsitologiia** 1989 Jun;31(6):677–84 (Eng. Abstr.) **(Rus)**

[The DNA content in the cell nuclei of trophoblastic tumors] Zueva EE, et al. **Tsitologiia** 1989 Aug;31(8):934–44 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Nuclear aberrations in hair follicle cells of patients receiving cyclophosphamide. A possible in vivo assay for human exposure to genotoxic agents. Goldberg MT, et al. **Arch Toxicol** 1990;64(2):116–21

Human chorionic gonadotropin increases chromatin solubility in isolated bovine and human luteal nuclei. Oechsli M, et al. **Biol Reprod** 1989 Oct;41(4):753–60

Effect of diallyl sulfide on MNNG-induced nuclear aberrations and ornithine decarboxylase activity in the glandular stomach mucosa of the Wistar rat. Hu PJ, et al. **Cancer Lett** 1989 Sep 15;47(1–2):153–8

Induction of endonucleolytic DNA cleavage in human acute myelogenous leukemia cells by etoposide, camptothecin, and other cytotoxic anticancer drugs: a cautionary note. Kaufmann SH. **Cancer Res** 1989 Nov 1;49(21):5870–8

Effects produced by the non-genotoxic hepatocarcinogen

methylclofenapate in dwarf mice: peroxisome induction uncoupled from DNA synthesis and nuclearity changes. Styles JA, et al. **Carcinogenesis** 1990 Mar;11(3):387–91

Effect of N–methyl–N–nitrosourea on avian erythrocyte nuclei reactivation. Guy SP, et al. **Chem Biol Interact** 1990; 74(1–2):207–20

Influence of inorganic and triethyl lead on nuclear migration and ultrastructure of Micrasterias. Meindl U, et al. **Ecotoxicol Environ Safety** 1990 Apr;19(2):192–203

Nucleolar inhibition in prolactin cells after combined thyroid hormone plus lisuride treatment in estrogenized rats. Duliková J, et al. **Endocrinol Exp** 1989 Sep;23(3):185–94

6DMAP inhibits chromatin decondensation but not sperm histone kinase in sea urchin male pronuclei. Poccia D, et al. **Exp Cell Res** 1990 Jun;188(2):226–34

Cytosol and nuclear estrogen receptor binding in the preoptic area and hypothalamus of female rats during pregnancy and ovariectomized, nulliparous rats after steroid priming: correlation with maternal behavior. Giordano AL, et al. **Horm Behav** 1990 Jun;24(2):232–55

Interaction of Clostridium difficile toxin A with cultured cells: cytoskeletal changes and nuclear polarization. Fiorentini C, et al. **Infect Immun** 1990 Jul;58(7):2329–36

The short–term effects of carcinogens and sulphur dioxide on the nuclear size of rat nasal epithelial cells. Fowlie AJ, et al. **J Appl Toxicol** 1990 Feb;10(1):29–38

Carcinogenic oil fractionation and nuclear enlargement in mouse skin. Ingram AJ. **J Appl Toxicol** 1990 Apr; 10(2):113–8

Effects of glutathione on the alpha–tocopherol–dependent inhibition of nuclear lipid peroxidation. Tirmenstein M, et al. **J Lipid Res** 1989 Jul;30(7):959–65

Micronuclei and nuclear anomalies induced in the gastro–intestinal epithelium of rats treated with formaldehyde. Migliore L, et al. **Mutagenesis** 1989 Sep; 4(5):327–34

Induction of micronucleated and binucleate cells in Chinese hamster ovary (CHO) cells by cis–diamminedichloroplatinum (II): a morphological and morphometric study. Rodilla V, et al. **Mutat Res** 1990 Jun; 241(2):115–24

Cisplatin–resistant cells express increased levels of a factor that recognizes damaged DNA. Chu G, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3324–8

[The effect of phorbol esters on cell functions] Kawiak J. **Postepy Biochem** 1989;35(3):265–77 (70 ref.) **(Pol)**

[The micronucleus test: characteristics of the micronuclei count and the method of statistical data processing] Zhurkov VS, et al. **Gig Sanit** 1990 Mar;(3):73–4 **(Rus)**

[Changes in histones and transcription in the nuclei of sympathetic neurons in rats of various ages under the action of testosterone] Chernykh GV, et al. **Ontogenez** 1989 Sep–Oct;20(5):500–6 (Eng. Abstr.) **(Rus)**

[DNA synthesis in the nuclei of stimulated NIH 3T3 cells in heterodikaryons obtained by the fusion of these cells with resting cells treated with cycloheximide] Setkov NA, et al. **Tsitologiia** 1989 Nov;31(11):1339–44 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

zeta–Related protein kinase C in nuclei of nerve cells. Hagiwara M, et al. **Biochem Biophys Res Commun** 1990 Apr 16;168(1):161–8

Tissue and species distribution of liver type and tumor type nuclear poly(A) polymerases. Hengst–Zhang JA, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):325–31

Calpain II–dependent solubilization of a nuclear protein kinase at micromolar calcium concentrations. Mellgren RL, et al. **Biochem Biophys Res Commun** 1990 Apr 30; 168(2):589–95

The HIV protein, GP120, activates nuclear protein kinase C in nuclei from lymphocytes and brain. Zorn NE, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1133–9

The major phosphorylation site of nucleophosmin (B23) is phosphorylated by a nuclear kinase II. Chan PK, et al. **Biochem J** 1990 Sep 1;270(2):549–52

Decreased nuclear matrix DNA topoisomerase II in human leukemia cells resistant to VM–26 and m–AMSA. Fernandes DJ, et al. **Biochemistry** 1990 May 1; 29(17):4235–41

Hepatic nuclear envelope cytochrome P–450 in rats fed 2–acetylaminofluorene. Effect of dietary fats and butylated hydroxytoluene. Carubelli R, et al. **Cancer Lett** 1989 Sep 15;47(1–2):83–9

Biochemical characterization of the DNA polymerase activity present in isolated nuclei from mussel tissues: a possible system for the evaluation of the rate of DNA repair. Accomando R, et al. **Comp Biochem Physiol [B]** 1989;93(4):747–51

p34cdc2 is located in both nucleus and cytoplasm; part is centrosomally associated at G2/M and enters vesicles at anaphase. Bailly E, et al. **EMBO J** 1989 Dec 20; 8(13):3985–95

Active RNA polymerase I is fixed within the nucleus of HeLa cells. Dickinson P, et al. **EMBO J** 1990 Jul; 9(7):2207–14

Prolactin and known modulators of rat splenocytes activate nuclear protein kinase C. Russell DH, et al. **Eur J Pharmacol** 1990 Mar 13;188(2–3):139–52

Regulation of nuclear scaffold protease activity by calcium. Madsen KR, et al. **Exp Cell Res** 1990 Apr;187(2):343–5

Gene transcription: a role for nuclear protein kinase C? Malviya AN, et al. **Int J Cancer** 1990 Mar 15;45(3):580–2

3'–5' cAMP phosphodiesterase in pig liver nuclei. Lupidi G, et al. **Ital J Biochem** 1990 Jan–Feb;39(1):30–7

Existence of Mg2+–dependent, neutral sphingomyelinase in nuclei of rat ascites hepatoma cells. Tamiya–Koizumi K, et al. **J Biochem (Tokyo)** 1989 Oct;106(4):593–8

Purification and characterization of two porcine liver nuclear histone acetyltransferases. Attisano L, et al. **J Biol Chem** 1990 Mar 5;265(7):3949–55

Rat liver nuclei protein kinase C is the isozyme type II. Rogue P, et al. **J Biol Chem** 1990 Mar 5;265(7):4161–5

N2,N2–dimethylguanosine–specific tRNA methyltransferase contains both nuclear and mitochondrial targeting signals in Saccharomyces cerevisiae. Li JM, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1411–9

The effects of tunicamycin, mevinolin and mevalonic acid on HMG–CoA reductase activity and nuclear division in the myxomycete Physarum polycephalum. Engström W, et al. **J Cell Sci** 1989 Mar;92 (Pt 3):341–4

Assembly of NADH: ubiquinone reductase (complex I) in Neurospora mitochondria. Independent pathways of nuclear–encoded and mitochondrially encoded subunits. Tuschen G, et al. **J Mol Biol** 1990 Jun 20;213(4):845–57

Enhanced ATPase activity in liver cell nuclei induced by administration of mitomycin C to rats. Wakizaka A, et al. **Jpn J Cancer Res** 1989 Dec;80(12):1206–11

RNA 3'–terminal phosphate cyclase from HeLa cells. Filipowicz W, et al. **Methods Enzymol** 1990;181:499–510

Phosphotyrosine–containing lactate dehydrogenase is restricted to the nuclei of PC12 pheochromocytoma cells. Zhong XH, et al. **Mol Cell Biol** 1990 Feb;10(2):770–6

Site–specific excision from RNA by RNase H and mixed–phosphate–backbone oligodeoxynucleotides. Agrawal S, et al. **Proc Natl Acad Sci U S A** 1990 Feb; 87(4):1401–5

Ca2+/calmodulin–dependent protein kinase II: localization in the interphase nucleus and the mitotic apparatus of mammalian cells. Ohta Y, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5341–5

Mismatch–specific thymine DNA glycosylase and DNA polymerase beta mediate the correction of G.T mispairs in nuclear extracts from human cells. Wiebauer K, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5842–5

A 37 kilodalton protein kinase associated with cauliflower mosaic virus. Geldreich A, et al. **Virus Genes** 1989 Aug; 2(4):313–22

[A comparative evaluation of the level of sphingomyelinase activity in liver cell nuclei and in the brain] Alesenko AV, et al. **Biull Eksp Biol Med** 1989 Sep;108(9):287–9 (Eng. Abstr.) **(Rus)**

[Changes in Ca, Mg–dependent endonuclease of DNA in isolated nuclei of human lymphocytes in lymphoproliferative diseases] Tkacheva TI, et al. **Biull Eksp Biol Med** 1990 Jun;109(6):543–6 (Eng. Abstr.) **(Rus)**

[Increase in the activity of nuclear DNA polymerases in the tissues of mice subjected to long–term gamma irradiation] Kozhanovskaia IaK, et al. **Radiobiologiia** 1990 May–Jun; 30(3):300–4 (Eng. Abstr.) **(Rus)**

[The proteinase activity in the cell nuclei of rats following exposure to gamma radiation and methylnitrosourea] Malakhova LV, et al. **Radiobiologiia** 1990 May–Jun; 30(3):312–6 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Ultrastructural localization of nuclear antigens during interphase in mouse 3T3 fibroblasts. Chaly N, et al. **Biochem Cell Biol** 1989 Sep;67(9):563–74

Spatial and temporal distribution of a Drosophila melanogaster embryonic variable nuclear antigen. Gay NJ. **Biochim Biophys Acta** 1990 Jul 30;1049(3):249–54

Intranuclear localization of the Ki–67 reactive antigen in HeLa cells. Flow cytometric analysis. Sasaki K, et al. **Biol Cell** 1990;68(2):129–32

A monoclonal antibody 5E5 recognizes an intranuclear antigen selectively present in a subpopulation of the neurons. Yoshimura K, et al. **Brain Res** 1990 Feb 12; 509(1):161–4

Nuclear and mitotically enhanced epitope. Hoffman JC, et al. **Cell Motil Cytoskeleton** 1990;16(1):68–79

Trichinella spiralis: secreted antigen of the infective L1 larva localizes to the cytoplasm and nucleoplasm of infected host cells. Despommier DD, et al. **Exp Parasitol** 1990 Jul; 71(1):27–38

Appearance and origin of snRNP antigens in chick erythrocyte nuclei reactivated in heterokaryons. Bergman M, et al. **J Cell Sci** 1990 Mar;95 (Pt 3):361–70

Virus–specific early antigen expressed in the nucleus of cowpox virus–infected cells. Kitamoto N, et al. **J Gen Virol** 1990 Jan;71 (Pt 1):235–40

[Monoclonal antibodies IGR to nuclear antigens of neutrophilic granulocytes of human blood] Ingerpuu SO, et al. **Eksp Onkol** 1990;12(3):24–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Mechanisms of signal transduction to the cell nucleus. Nigg EA. **Adv Cancer Res** 1990;55:271–310 (267 ref.)

Nuclear inositol lipids. Relationship between growth factor induced metabolic changes and protein kinase C activity. Cocco L, et al. **Adv Enzyme Regul** 1990;30:155–72

Nuclear polyphosphoinositides during cell growth and differentiation. Manzoli FA, et al. **Adv Enzyme Regul** 1989; 28:25–34

In vitro binding of retinoids to the nuclear retinoic acid receptor alpha. Cavey MT, et al. **Anal Biochem** 1990 Apr; 186(1):19–23

Large scale isolation of nuclei from oocytes of Xenopus laevis. Ruberti I, et al. **Anal Biochem** 1989 Jul;180(1):177–80

Nuclear polyphosphate as a possible source of energy during the sporulation of Physarum polycephalum. Pilatus U, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):215–23

Characterization of the 70KDA component of the human Ku autoantigen expressed in insect cell nuclei using a recombinant baculovirus vector. Allaway GP, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):747–55

Cytosolic–nuclear tumor promoter–specific binding protein (CN–TPBP) in human promyelocytic leukemia cells HL–60. Hashimoto Y, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1126–32

Intracellular [3H]dopamine binding sites in normal and malignant cells: relationships to cell proliferation. Markaverich BM, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):391–400

The acylation of 1–acyl–sn–glycero–3–phosphate by neuronal nuclei and microsomal fractions of immature rabbit cerebral cortex. Baker RR, et al. **Biochem Cell Biol** 1990 Mar;68(3):641–7

Differential transport and integration into the nuclear lamina for lamins A, B, and C. Dagenais A, et al. **Biochem Cell Biol** 1990 May;68(5):827–31

Thioredoxin and glutaredoxin enhance the binding of L–triiodothyronine to its hepatic nuclear receptors. Takagi S, et al. **Biochem Cell Biol** 1989 Aug;67(8):477–80

Effect of a partial trisomy in the mouse upon cellular and nuclear RNA. Rake AV, et al. **Biochem Genet** 1989 Aug; 27(7–8):403–16

Receptor–mediated endocytosis and nuclear transport of human interleukin 1 alpha. Grenfell S, et al. **Biochem J** 1989 Dec 15;264(3):813–22

The pool of histones in the nucleosol and cytosol of proliferating Friend cells is small, uneven and chasable. Tsvetkov S, et al. **Biochem J** 1989 Dec 15;264(3):785–91

Characterization of multiple forms of the Ah receptor: comparison of species and tissues. Henry EC, et al. **Biochemistry** 1989 Jul 25;28(15):6430–40

Primary structure and androgen regulation of a 20–kilodalton protein specific to rat ventral prostate. Ho KC, et al. **Biochemistry** 1989 Jul 25;28(15):6367–73

Differential effect of insulin and epidermal growth factor on the mRNA translocation system and transport of specific poly(A+) mRNA and poly(A–) mRNA in isolated nuclei. Schröder HC, et al. **Biochemistry** 1990 Mar 6; 29(9):2368–78

Uptake and phosphorylation of phosphatidylinositol by rat liver nuclei. Role of phosphatidylinositol transfer protein. Capitani S, et al. **Biochim Biophys Acta** 1990 May 22; 1044(2):193–200

Effects of epidermal growth factor on protein degradation the translocation of non–histone proteins to the nucleus and DNA synthesis. Polet H, et al. **Biochim Biophys Acta** 1989 Oct 9;1013(3):279–86

Hybridization analysis of RNA transported from rat liver nuclei in response to 35 kDa normal and 60 kDa messenger RNA transport factors. Schumm DE, et al. **Biochim Biophys Acta** 1989 Sep 21;1009(1):54–60

Cytochemical study of abnormal intranuclear structures rich in beryllium [published erratum appears in Biol Cell 1990;68(2):176] Berry JP, et al. **Biol Cell** 1989;67(2):147–57

SV40 large T–antigen nuclear signal analogues: successful nuclear targeting with bovine serum albumin but not low molecular weight fluorescent conjugates. Lobl TJ, et al. **Biopolymers** 1990 Jan;29(1):197–203

Some features of DNA fragments associated in vivo with the nuclear lamina. Christova R, et al. **Biosci Rep** 1989 Oct;9(5):587–92

A simplification of the nuclear run–off transcription assay. Celano P, et al. **Biotechniques** 1989 Oct;7(9):942, 944

Biotransformation of carbon tetrachloride and lipid peroxidation promotion by liver nuclear preparations from different animal species. Castro GD, et al. **Cancer Lett** 1990 Aug;53(1):9–15

Effects of 2,3,7,8–tetrachlorodibenzo–p–dioxin and related compounds on the occupied nuclear estrogen receptor in MCF–7 human breast cancer cells. Harris M, et al. **Cancer Res** 1990 Jun 15;50(12):3579–84

Methyl p–hydroxyphenyllactate and nuclear type II binding sites in malignant cells: metabolic fate and mammary tumor growth. Markaverich BM, et al. **Cancer Res** 1990 Mar 1; 50(5):1470–8

A nuclear translational block imposed by the HIV–1 U3 region is relieved by the Tat–TAR interaction. Braddock M, et al. **Cell** 1990 Sep 21;62(6):1123–33

Facilitated nuclear transport of histone H1 and other small nucleophilic proteins. Breeuwer M, et al. **Cell** 1990 Mar 23;60(6):999–1008

Protein–mediated nuclear export of RNA: 5S rRNA containing small RNPs in xenopus oocytes. Guddat U, et al. **Cell** 1990 Feb 23;60(4):619–28

Nuclear domains in muscle cells. Hall ZW, et al. **Cell** 1989 Dec 1;59(5):771–2 (13 ref.)

The trimethylguanosine cap structure of U1 snRNA is a component of a bipartite nuclear targeting signal. Hamm J, et al. **Cell** 1990 Aug 10;62(3):569–77

Cytoplasmic anchoring proteins and the control of nuclear localization. Hunt T. **Cell** 1989 Dec 22;59(6):949–51 (21 ref.)

Herpes simplex virus induces a processing factor that stimulates poly(A) site usage. McLauchlan J, et al. **Cell** 1989 Dec 22;59(6):1093–105

The identification of a second cell cycle control on the HO promoter in yeast: cell cycle regulation of SW15 nuclear entry. Nasmyth K, et al. **Cell** 1990 Aug 24;62(4):631–47

Relocalization of the dorsal protein from the cytoplasm to the nucleus correlates with its function. Steward R. **Cell** 1989 Dec 22;59(6):1179–88

Nuclear lipids in Friend cells. Shifted profile of diacylglycerol during erythroid differentiation induced by DMSO. Trubiani O, et al. **Cell Biol Int Rep** 1990 Jun; 14(6):559–66

Nucleoplasmic and cytoplasmic glycoproteins. Hart GW, et al. **Ciba Found Symp** 1989;145:102–12, discussion 112–8 (35 ref.)

Nuclear transport. Goldfarb DS. **Curr Opin Cell Biol** 1989 Jun;1(3):441–6 (19 ref.)

Pre-mRNA processing and mRNA nuclear export. Green MR. **Curr Opin Cell Biol** 1989 Jun;1(3):519–25 (43 ref.)

Regulation of gene expression by nuclear hormone receptors. Ham J, et al. **Curr Opin Cell Biol** 1989 Jun;1(3):503–11 (32 ref.)

Partial characterization of mechanism of insulin accumulation in H35 hepatoma cell nuclei. Smith RM, et al. **Diabetes** 1990 Jun;39(6):683–9

Translocation of bFGF to the nucleus is G1 phase cell cycle specific in bovine aortic endothelial cells. Baldin V, et al. **EMBO J** 1990 May;9(5):1511–7

Characterization of nuclear localizing sequences derived from yeast ribosomal protein L29. Underwood MR, et al. **EMBO J** 1990 Jan;9(1):91–9

Thyroid hormone receptors: release of receptor to the medium during in vitro incubation of isolated rat liver nuclei. Bernal J, et al. **Endocrinology** 1977 Mar; 100(3):648–55

Effect of cortisol on amino acid incorporation by nuclear and cytoplasmic fractions of rabbit thymus. Brunkhorst WK. **Endocrinology** 1968 Feb;82(2):277–81

The nuclear conversion of pregnenolone to progesterone and subsequent binding to the nuclear progesterone–binding protein in the guinea pig adrenal cortex: a possible regulatory role for the pregnenolone–binding protein. Demura T, et al. **Endocrinology** 1990 Sep;127(3):1114–20

Thyroidal regulation of rat pancreatic nuclear triiodothyronine receptor during postnatal development. Lee JT, et al. **Endocrinology** 1990 Jan;126(1):209–15

Estradiol–stimulated increases in uterine eosinophils and nuclear type II estrogen–binding sites are prevented by pertussis toxin. Lyttle CR, et al. **Endocrinology** 1989 Nov; 125(5):2773–9

Characterization of interaction between nuclear T3 receptors and antiserum against cellular–erb A peptide. Tagami T, et al. **Endocrinology** 1990 Feb;126(2):1105–11

Thyroid hormone and dexamethasone increase the levels of a messenger ribonucleic acid for a mitochondrially encoded subunit but not for a nuclear–encoded subunit of cytochrome c oxidase. Van Itallie CM. **Endocrinology** 1990 Jul;127(1):55–62

Tissue specificity of nucleo–cytoplasmic distribution of HMG1 and HMG2 proteins and their probable functions. Mosevitsky MI, et al. **Eur J Biochem** 1989 Nov 6; 185(2):303–10

Nucleocytoplasmic sorting of macromolecules following mitosis: fate of nuclear constituents after inhibition of pore complex function. Benavente R, et al. **Eur J Cell Biol** 1989 Oct;50(1):209–19

Three–dimensional distribution of DNase I–sensitive chromatin regions in interphase nuclei of embryonal carcinoma cells. de Graaf A, et al. **Eur J Cell Biol** 1990 Jun;52(1):135–41

Distribution of intracellular free calcium in quiescent BALB/c 3T3 cells stimulated by platelet–derived growth factor. Tucker RW, et al. **Eur J Cell Biol** 1990 Feb; 51(1):120–7

Pattern of DNA replication in binucleate cells occurring in mouse embryo cell cultures. Church K. **Exp Cell Res** 1967 Jun;46(3):639–41

DNA synthesis in isolated resting nuclei: evidence for protease–dependent nonreplicative nucleotide incorporation. Jensen TL, et al. **Exp Cell Res** 1990 Sep; 190(1):85–90

Comparison of diverse transport signals in synthetic peptide–induced nuclear transport. Lanford RE, et al. **Exp Cell Res** 1990 Jan;186(1):32–8

Early modifications of nucleic acid metabolism and nuclear lipid biosynthesis associated with antiproliferative activity of interferon–alpha on Daudi lymphoma cells. Miscia S, et al. **Exp Cell Res** 1990 Apr;187(2):197–202

Ultrastructural immunolocalization of cyclin/PCNA in synchronized 3T3 cells. Raška I, et al. **Exp Cell Res** 1989 Sep;184(1):81–9

Rapid actions of 1 alpha,25–dihydroxyvitamin D3 on Ca2+ and phospholipids in isolated rat liver nuclei. Baran DT, et al. **FEBS Lett** 1989 Dec 18;259(1):205–8

Transient shift of diacylglycerol and inositol lipids induced by interferon in Daudi cells. Evidence for a different pattern between nuclei and intact cells. Cataldi A, et al. **FEBS Lett** 1990 Sep 3;269(2):465–8

Glycosylated forms of nuclear lamins. Ferraro A, et al. **FEBS Lett** 1989 Nov 6;257(2):241–6

Benzo(a)pyrene induces nuclear–DNA adducts in plant cell suspension culture. Detection by [32P] postlabelling. Rether B, et al. **FEBS Lett** 1990 Apr 9;263(1):172–4

Replication–linked histone acetylation in rat liver tissue is sensitive to alkylating agents. Talasz H, et al. **FEBS Lett** 1990 May 7;264(1):141–4

Externally added DNA molecules support initiation of transcription in isolated nuclei from petunia. Zenvirth D, et al. **FEBS Lett** 1990 Apr 9;263(1):142–6

Saturable triiodothyronine–binding sites in the pituitary nuclei of salmonid teleost fish. Bres O, et al. **Gen Comp Endocrinol** 1990 Jan;77(1):23–8

Triiodothyronine binding to putative solubilized nuclear thyroid hormone receptor in liver and gill of the brown trout (Salmo trutta) and the European eel (Anguilla anguilla). Lebel JM, et al. **Gen Comp Endocrinol** 1989 Aug; 75(2):301–9

Poly(A) addition during maturation of frog oocytes: distinct nuclear and cytoplasmic activities and regulation by the sequence UUUUUAU. Fox CA, et al. **Genes Dev** 1989 Dec; 3(12B):2151–62

"Alternative self–diploidization" or "ASD" homothallism in Saccharomyces cerevisiae: isolation of a mutant, nuclear–cytoplasmic interaction and endomitotic diploidization. Ono B, et al. **Genetics** 1990 Aug; 125(4):729–38

Relative abundance of various rDNA repeat types in polytene nuclei of Drosophila melanogaster. Kalumuck KE, et al. **Genome** 1990 Apr;33(2):240–6

Localization of the heme–binding protein in the cytoplasm and of a heme–binding protein–like immunoreactive protein in the nucleus of rat liver parenchymal cells: immunocytochemical evidence of the subcellular distribution corroborated by radioimmunoassay and immunoblotting. Fahimi HD, et al. **Hepatology** 1990 May; 11(5):859–65

The correlation between uptake of methyl green and Feulgen staining intensity of cell nuclei. An image analysis study. Lyon H, et al. **Histochem J** 1989 Aug;21(8):508–13

Functional aspect of a phosphopeptide derived from calf thymus nuclei and DNA. Welsh RS, et al. **Indian J Exp Biol** 1990 Apr;28(4):301–7

Characteristics of chromatin release during digestion of nuclei with micrococcal nuclease: preferential solubilization of nascent RNA at low enzyme concentration. Telford DJ, et al. **Int J Biochem** 1989; 21(11):1235–40

Inhibition of nuclear T3 binding by fatty acids: dependence on chain length, unsaturated bonds, cis–trans configuration and esterification. Wiersinga WM, et al. **Int J Biochem** 1990; 22(3):269–73

The relationship between megakaryocyte nuclear DNA content and gene expression. Lelchuk R, et al. **Int J Cell Cloning** 1990 Jul;8(4):277–82

Indications on the formation of glucocorticoid–RNA adducts in nuclei of HeLa cells crosslinked in vivo. Rossini GP. **Ital J Biochem** 1989 Nov–Dec;38(6):382A–383A

Fatty acyl–CoAs are potent inhibitors of the nuclear thyroid hormone receptor in vitro. Li QL, et al. **J Biochem (Tokyo)** 1990 May;107(5):699–702

A protein that accumulates during starvation in Tetrahymena nuclei. Suda M, et al. **J Biochem (Tokyo)** 1989 Oct; 106(4):612–5

ATP 10, a yeast nuclear gene required for the assembly of the mitochondrial F1–F0 complex. Ackerman SH, et al. **J Biol Chem** 1990 Jun 15;265(17):9952–9

Yeast cytochrome c oxidase subunit VII is essential for assembly of an active enzyme. Cloning, sequencing, and characterization of the nuclear–encoded gene. Aggeler R, et al. **J Biol Chem** 1990 Sep 25;265(27):16389–93

A nuclear factor that enhances binding of thyroid hormone receptors to thyroid hormone response elements. Burnside J, et al. **J Biol Chem** 1990 Feb 15;265(5):2500–4

Nuclear and nucleolar targeting sequences of c–erb–A, c–myb, N–myc, p53, HSP70, and HIV tat proteins. Dang CV, et al. **J Biol Chem** 1989 Oct 25;264(30):18019–23

The zinc finger protein NGFI–A exists in both nuclear and cytoplasmic forms in nerve growth factor–stimulated PC12 cells. Day ML, et al. **J Biol Chem** 1990 Sep 5; 265(25):15253–60

Cloning and sequencing of the nuclear gene MIP1 encoding the catalytic subunit of the yeast mitochondrial DNA polymerase. Foury F. **J Biol Chem** 1989 Dec 5; 264(34):20552–60

Hormonally inducible phosphorylation of a nuclear pool of ribosomal protein S6. Franco R, et al. **J Biol Chem** 1990 Mar 15;265(8):4321–5

Separate nuclear genes encode sarcomere–specific and ubiquitous human mitochondrial creatine kinase isoenzymes. Haas RC, et al. **J Biol Chem** 1990 Apr 25; 265(12):6921–7

Interaction between fructose and glucose on the regulation of the nuclear precursor for mRNA–S14. Hamblin PS, et al. **J Biol Chem** 1989 Dec 25;264(36):21646–51

Two different negative and one positive regulatory factors interact with a short promoter segment of the alpha 1 (I) collagen gene. Karsenty G, et al. **J Biol Chem** 1990 Jun 15;265(17):9934–42

The tissue–specific expression and developmental regulation of two nuclear genes encoding rat mitochondrial proteins. Medium chain acyl–CoA dehydrogenase and mitochondrial malate dehydrogenase. Kelly DP, et al. **J Biol Chem** 1989 Nov 15;264(32):18921–5

Photoaffinity labeling of the nuclear Ah receptor from mouse Hepa 1c1c7 cells using 2,3,7,8–[3H]tetrachlorodibenzo–p–dioxin. Landers JP, et al. **J Biol Chem** 1989 Nov 5;264(31):18463–71

Hormone and DNA binding activity of a purified human thyroid hormone nuclear receptor expressed in Escherichia coli. Lin KH, et al. **J Biol Chem** 1990 Mar 25;265(9):5161–5

Assemblage of the prespliceosome complex with separated fractions isolated from HeLa cells. Pruzan R, et al. **J Biol Chem** 1990 Feb 15;265(5):2804–13

Purification and biochemical characterization of hepatocyte nuclear factor 2 involved in liver–specific transcription of the human alpha 1–antitrypsin gene. Rangan VS, et al. **J Biol Chem** 1990 May 25;265(15):8874–9

Shortened cytoplasmic domain affects intracellular transport but not nuclear localization of a viral glycoprotein. Raviprakash K, et al. **J Biol Chem** 1990 Jan 25; 265(3):1777–82

The nonactivated progesterone receptor is a nuclear heterooligomer. Renoir JM, et al. **J Biol Chem** 1990 Aug 25;265(24):14402–6

Mechanism of action of a steroidal antiglucocorticoid in lymphoid cells. Segnitz B, et al. **J Biol Chem** 1990 Feb 15;265(5):2789–96

A ribosomal protein is encoded in the chloroplast DNA in a lower plant but in the nucleus in angiosperms. Isolation of the spinach L21 protein and cDNA clone with transit and an unusual repeat sequence. Smooker PM, et al. **J Biol Chem** 1990 Sep 25;265(27):16699–703

Relationship of c–erbA mRNA content to tissue triiodothyronine nuclear binding capacity and function in developing and adult rats. Strait KA, et al. **J Biol Chem** 1990 Jun 25;265(18):10514–21

Secondary structure of the RNA component of a nuclear/mitochondrial ribonucleoprotein. Topper JN, et al. **J Biol Chem** 1990 Aug 5;265(22):13254–62

5–Fluorouracil inhibits dihydrofolate reductase precursor mRNA processing and/or nuclear mRNA stability in methotrexate–resistant KB cells. Will CL, et al. **J Biol Chem** 1989 Dec 15;264(35):21413–21

Nuclear exchange of the U1 and U2 snRNP–specific proteins. Feeney RJ, et al. **J Cell Biol** 1990 Apr;110(4):871–81

Nucleocytoplasmic transport is enhanced concomitant with nuclear accumulation of epidermal growth factor (EGF) binding activity in both 3T3–1 and EGF receptor reconstituted NR–6 fibroblasts. Jiang LW, et al. **J Cell Biol** 1990 Mar;110(3):559–68

Stable nuclear transformation of Chlamydomonas using the Chlamydomonas gene for nitrate reductase. Kindle KL, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):2589–601

Identification of a human protein that interacts with nuclear localization signals. Li RH, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):2623–32

Intracellular and surface distribution of a membrane protein (CD8) derived from a single nucleus in multinucleated myotubes. Ralston E, et al. **J Cell Biol** 1989 Nov; 109(5):2345–52

Nucleus–specific translation and assembly of acetylcholinesterase in multinucleated muscle cells. Rotundo RL. **J Cell Biol** 1990 Mar;110(3):715–9

A yeast gene important for protein assembly into the endoplasmic reticulum and the nucleus has homology to DnaJ, an Escherichia coli heat shock protein. Sadler I, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):2665–75

Replication occurs at discrete foci spaced throughout nuclei replicating in vitro. Mills AD, et al. **J Cell Sci** 1989 Nov; 94 (Pt 3):471–7

Changes in nuclear distribution of large tumor antigen correlate with the proliferative activity of simian virus 40–transformed cells. Ordenes GE, et al. **J Cell Sci** 1989 Jul;93 (Pt 3):525–32

Nuclear transport in vitro. Finlay DR, et al. **J Cell Sci Suppl** 1989;11:225–42

Growth factor–dependent initiation of DNA replication in nuclei isolated from an interleukin 3–dependent murine myeloid cell line. Munshi NC, et al. **J Clin Invest** 1990 Jan;85(1):300–4

Serum amyloid P component binds to cell nuclei in vitro and to in vivo deposits of extracellular chromatin in systemic lupus erythematosus. Breathnach SM, et al. **J Exp Med** 1989 Oct 1;170(4):1433–8

Preferential nuclear compartmentalization of endogenous mink cell focus–forming–related retroviral transcripts. Gourley MF, et al. **J Exp Med** 1990 May 1;171(5):1443–52

Stable expression of hepatitis delta virus antigen in a eukaryotic cell line. Macnaughton TB, et al. **J Gen Virol** 1990 Jun;71 (Pt 6):1339–45

Increase of 63 kDa protein kinase in the nuclear matrix of HL–60 cells during differentiation by retinoic acid. Sasaki I, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Feb;36(1):1–10

Analysis of glucocorticoid receptor subspecies binding to DNA–cellulose and isolated nuclei. Gruol DJ, et al. **J Steroid Biochem** 1989;34(1–6):319–23

Transport of hepatitis B virus precore protein into the nucleus after cleavage of its signal peptide. Ou JH, et al. **J Virol** 1989 Dec;63(12):5238–43

Interactions between nuclear factors and the hepatitis B virus enhancer. Patel NU, et al. **J Virol** 1989 Dec; 63(12):5293–301

Protein kinase A–dependent binding of a nuclear factor to the 21–base-pair repeat of the human T–cell leukemia virus type I long terminal repeat. Poteat HT, et al. **J Virol** 1990 Mar;64(3):1264–70

Regulated expression of nuclear genes by T3 RNA polymerase and lac repressor, using recombinant vaccinia virus vectors. Rodriguez D, et al. **J Virol** 1990 Oct; 64(10):4851–7

Preparation of precursors to mRNA from mammalian cell nuclei. Chen–Kiang S, et al. **Methods Enzymol** 1989; 180:69–82

Pulse labeling of heterogeneous nuclear RNA in isolated nuclei. Chen–Kiang S, et al. **Methods Enzymol** 1989; 180:82–96

Purification of small nuclear ribonucleoprotein particles active in RNA processing. Krämer A. **Methods Enzymol** 1990;181:215–32

Site-specific degradation of RNA of small nuclear ribonucleoprotein particles with complementary oligodeoxynucleotides and RNase H. Krämer A. **Methods Enzymol** 1990;181:284–92

Small-scale preparation of extracts from radiolabeled cells efficient in pre-mRNA splicing. Lee KA, et al. **Methods Enzymol** 1990;181:20–30

Preparation of mammalian extracts active in polyadenylation. Moore CL. **Methods Enzymol** 1990;181:49–74

Nuclear cap binding protein from HeLa cells. Ohno M, et al. **Methods Enzymol** 1990;181:209–15

Histone-specific RNA 3' processing in nuclear extracts from mammalian cells. Stauber C, et al. **Methods Enzymol** 1990; 181:74–89

Evolution of nuclear DNA and the occurrence of sequences related to new small chromosomal DNAs in the trypanosomatid genus Endotrypanum. Lopes AH, et al. **Mol Biochem Parasitol** 1990 May;40(2):151–61

Plasma membrane–mediated nuclear uptake and chromatin binding of insulin in tumor cell lines. Rakowicz–Szulczynska EM, et al. **Mol Carcinog** 1990; 3(3):150–6

Hierarchic and cooperative binding of the rat liver nuclear protein C/EBP at the hepatitis B virus enhancer. Dikstein R, et al. **Mol Cell Biol** 1990 Aug;10(8):4427–30

Translocation of a store of maternal cytoplasmic c-myc protein into nuclei during early development. Gusse M, et al. **Mol Cell Biol** 1989 Dec;9(12):5395–403

DNA binding of heat shock factor to the heat shock element is insufficient for transcriptional activation in murine erythroleukemia cells. Hensold JO, et al. **Mol Cell Biol** 1990 Apr;10(4):1600–8

Function of two discrete regions is required for nuclear localization of polymerase basic protein 1 of A/WSN/33 influenza virus (H1 N1). Nath ST, et al. **Mol Cell Biol** 1990 Aug;10(8):4139–45

Nucleocytoplasmic transport and processing of small nuclear RNA precursors. Neuman de Vegvar HE, et al. **Mol Cell Biol** 1990 Jul;10(7):3365–75

Nuclear transport of proteins translated in vitro from SP6 plasmid–generated mRNAs. Parnaik VK, et al. **Mol Cell Biol** 1990 Mar;10(3):1287–92

Differential distribution of factors involved in pre–mRNA processing in the yeast cell nucleus. Potashkin JA, et al. **Mol Cell Biol** 1990 Jul;10(7):3524–34

A regulatory element is characterized by purine–mediated and cell–type–specific gene transcription [published erratum appears in Mol Cell Biol 1990 Oct;10(10):5600] Walsh MJ, et al. **Mol Cell Biol** 1990 Aug;10(8):4356–64

Protamine–histone replacement and DNA replication in the male mouse pronucleus. Nonchev S, et al. **Mol Reprod Dev** 1990 Jan;25(1):72–6

RNA in the nucleus of a motile plant spermatozoid: characterization by enzyme–gold cytochemistry and in situ hybridization. Rejon E, et al. **Mol Reprod Dev** 1988; 1(1):49–56

Evolutionary transfer of the chloroplast tufA gene to the nucleus. Baldauf SL, et al. **Nature** 1990 Mar 15; 344(6263):262–5

Injection of the cAMP–responsive element into the nucleus of Aplysia sensory neurons blocks long–term facilitation. Dash PK, et al. **Nature** 1990 Jun 21;345(6277):718–21

Nuclear receptor that identifies a novel retinoic acid response pathway. Mangelsdorf DJ, et al. **Nature** 1990 May 17; 345(6272):224–9

Escape of DNA from mitochondria to the nucleus in Saccharomyces cerevisiae. Thorsness PE, et al. **Nature** 1990 Jul 26;346(6282):376–9

Comparisons of the nuclear uptake of [3H]–testosterone and its metabolites by the brains of male and female macaque fetuses at 122 days of gestation. Bonsall RW, et al. **Neuroendocrinology** 1990 Apr;51(4):474–80

Nuclear estrogen receptor binding in the preoptic area and hypothalamus of pregnancy–terminated rats: correlation with the onset of maternal behavior. Giordano AL, et al. **Neuroendocrinology** 1989 Sep;50(3):248–58

Estrogen and progesterone receptors in meningiomas: comparison of nuclear binding, dextran–coated charcoal, and immunoperoxidase staining assays. Halper J, et al. **Neurosurgery** 1989 Oct;25(4):546–52; discussion 552–3

The nuclear SUV3–1 mutation affects a variety of post–transcriptional processes in yeast mitochondria. Conrad–Webb H, et al. **Nucleic Acids Res** 1990 Mar 25; 18(6):1369–76

Detection of protein/RNA interactions in nuclear extracts is facilitated by poly r(G). Giordano T, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4627

Nuclear factors interacting with an interleukin–6 responsive element of rat alpha 2–macroglobulin gene. Ito T, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9425–35

Reverse triiodothyronine nuclear binding in rat brain. Kobayashi A, et al. **Osaka City Med J** 1990 May; 36(1):29–35

Nuclear binding sites for reverse triiodothyronine in human placenta. Kobayashi A, et al. **Osaka City Med J** 1989 Nov; 35(2):137–44

A nuclear protein that binds preferentially to methylated DNA in vitro may play a role in the inaccessibility of methylated CpGs in mammalian nuclei. Meehan R, et al. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1235):199–205

Identification of two nuclear genes (ATP11, ATP12) required for assembly of the yeast F1–ATPase. Ackerman SH, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):4986–90

Different fates of the chloroplast tufA gene following its transfer to the nucleus in green algae. Baldauf SL, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5317–21

Interaction of a nuclear location signal with isolated nuclear envelopes and identification of signal–binding proteins by photoaffinity labeling. Benditt JO, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9327–31

Similarities in transthyretin gene expression and differences in transcription factors: liver and yolk sac compared to choroid plexus. Costa RH, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6589–93

H–2RIIBP, a member of the nuclear hormone receptor superfamily that binds to both the regulatory element of major histocompatibility class I genes and the estrogen response element. Hamada K, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8289–93

Strand–specific mismatch correction in nuclear extracts of human and Drosophila melanogaster cell lines. Holmes J Jr, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5837–41

T–cell nuclei contain a protein that binds upstream of the murine granulocyte–macrophage colony–stimulating factor gene. James R, et al. **Proc Natl Acad Sci U S A** 1989 Oct; 86(19):7392–6

Identification and characterization of a nuclear localization sequence–binding protein in yeast. Lee WC, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8808–12

An inositol 1,4,5–trisphosphate–sensitive Ca2+ pool in liver nuclei. Nicotera P, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6858–62

Regulation of a bifunctional mRNA results in synthesis of secreted and nuclear probasin. Spence AM, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7843–7

Identification, purification, and biochemical characterization of U2 small nuclear ribonucleoprotein auxiliary factor. Zamore PD, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(23):9243–7

The nuclear–cytoplasmic [Ca2+] gradient in single mammalian vascular smooth muscle cells. Papageorgiou P, et al. **Proc Soc Exp Biol Med** 1990 Apr;193(4):331–4

Cytochalasin D inhibits nuclear translocation of nonhistone proteins induced by lectin and other agents in lymphocytes. Polet H. **Proc Soc Exp Biol Med** 1990 May;194(1):5–9

Evidence for a glucocorticoid receptor cycle and nuclear dephosphorylation of the steroid–binding protein. Mendel DB, et al. **Prog Clin Biol Res** 1990;322:97–117 (57 ref.)

Are receptor–associated nuclear proteins associated with the earliest effects of steroid hormones? Baulieu EE, et al. **Rev Esp Fisiol** 1990 Mar;46(1):17–29 (90 ref.)

Evidence of both decreased nuclear receptor–binding of T3 and inhibited thyroid hormone–stimulated glucose–uptake in cells from a euthyroid patient with hyperthyroxinaemia [letter] Kvetny J, et al. **Scand J Clin Lab Invest** 1990 Jun; 50(4):461–2

An essential signaling role for the m3G cap in the transport of U1 snRNP to the nucleus. Fischer U, et al. **Science** 1990 Aug 17;249(4970):786–90

Biological activity of retinoids correlates with affinity for nuclear receptors but not for cytosolic binding protein. Darmon M, et al. **Skin Pharmacol** 1988;1(3):161–75

Comparison of the physical properties of the nuclear progesterone receptor, bound to antiprogestin RU 486 or progestin ORG 2058, following limited proteolysis. Geier A, et al. **Steroids** 1990 Jun;55(6):283–8

Nuclear effects of cyclosporine. Citterio F, et al. **Transplant Proc** 1990 Aug;22(4):1742–3

Nuclear compartmentation of glycoprotein B of human cytomegalovirus. Radsak K, et al. **Virology** 1990 Aug; 177(2):515–22

Nuclear pre–mRNA splicing in yeast. Woolford JL Jr. **Yeast** 1989 Nov–Dec;5(6):439–57 (130 ref.)

[Metabolism of NAD+ in the nuclei of human placenta] Balducci E, et al. **Boll Soc Ital Biol Sper** 1989 Nov; 65(11):1059–66 (Eng. Abstr.) **(Ita)**

[Electrokinetic potential of cell nucleus during changes in the functional activity of rat hepatocytes] Panosian GA, et al. **Biofizika** 1989 Nov–Dec;34(6):989–92 (Eng. Abstr.) **(Rus)**

[Study of peripheral chromatin granules—anchorosomes] Prusov AN, et al. **Biokhimiia** 1989 Nov;54(11):1838–46 (Eng. Abstr.) **(Rus)**

[The spatio–temporal distribution of single–stranded breaks in nuclear DNA in sections of clawed toad embryos during gastrulation and neurulation] Zaraĭskiĭ AG, et al. **Ontogenez** 1989 Sep–Oct;20(5):471–7 (Eng. Abstr.) **(Rus)**

[Cholesterol and fatty acids of the nuclei and chromatin of the rat thymus at long intervals following gamma irradiation] Kulagina TP. **Radiobiologiia** 1990 May–Jun; 30(3):317–20 (Eng. Abstr.) **(Rus)**

[DNA synthesis and content in the macrophage nuclei of normal mice, during carcinogenesis and during the administration of retinoids to the animals] Karalova EM, et al. **Tsitologiia** 1990;32(1):47–53 (Eng. Abstr.) **(Rus)**

[Possibilities for the histochemical study of the nuclei of normal brain cells and in pathology] Krimer LS, et al. **Tsitologiia** 1989 Sep;31(9):995–1004 (124 ref.) (Eng. Abstr.) **(Rus)**

[Modulation of the binding characteristics of thyroid hormone receptors by the chemical modification of non–histone nuclear proteins] Brtko J, et al. **Bratisl Lek Listy** 1990 Mar;91(3):167–71 (Eng. Abstr.) **(Slo)**

MICROBIOLOGY

Computer–assisted imaging cytometry of nuclear chromatin reveals bone tumor virus infection and neoplastic transformation of adherent osteoblast–like cells. Schmidt J, et al. **Biochem Biophys Res Commun** 1989 Oct 31; 164(2):728–35

Imaging of viroids in nuclei from tomato leaf tissue by in situ hybridization and confocal laser scanning microscopy. Harders J, et al. **EMBO J** 1989 Dec 20;8(13):3941–9

Role of intranuclear sacs, intrasaccate tubes, and cytoplasmic dense bodies in the structural completion of cytomegalovirus. Tumilowicz JJ, et al. **Intervirology** 1990; 31(1):14–22

Identification of sequences important in the nucleolar localization of human immunodeficiency virus Rev: relevance of nucleolar localization to function. Cochrane AW, et al. **J Virol** 1990 Feb;64(2):881–5

Adenovirus and minute virus of mice DNAs are localized at the nuclear periphery. Moen PT Jr, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):513–20

Anchoring a vaccinia virus promoter in the nucleus prevents its trans–activation by viral infection. Miner JN, et al. **Virus Genes** 1990 Apr;3(4):355–9

PATHOLOGY

Morphometric analysis of the homogeneity of lymphoid cell populations in fine–needle aspiration cytology smears. Dawsey SM, et al. **Am J Clin Pathol** 1989 Oct;92(4):458–64

Nuclear morphometry as a prognostic indicator in colorectal carcinoma resected for cure. Ambros RA, et al. **Anal Quant Cytol Histol** 1990 Jun;12(3):172–6

Stereological estimation of nuclear volume and other quantitative histopathological parameters in the prognostic evaluation of supraglottic laryngeal squamous cell carcinoma. Sørensen FB, et al. **APMIS** 1989 Nov; 97(11):987–95

Centronuclear myopathy and type–1 hypotrophy without central nuclei. Distinct nosologic entities? Lo WD, et al. **Arch Neurol** 1990 Mar;47(3):273–6

Nuclear inclusions in oculopharyngeal muscular dystrophy in Quebec. Bouchard JP, et al. **Can J Neurol Sci** 1989 Nov; 16(4):446–50

Pathogenetic implications of internuclear bridging in myelodysplastic syndrome. An Eastern Cooperative Oncology Group/Southwest Oncology Group Cooperative Study. Head DR, et al. **Cancer** 1989 Dec 1; 64(11):2199–2202

Stereologic estimates of nuclear volume in noninvasive bladder tumors (Ta) correlated with the recurrence pattern. Nielsen K, et al. **Cancer** 1989 Dec 1;64(11):2269–74

Characterization of human colorectal mucosa, polyps, and cancers by means of computerized morphonuclear image analyses. Verhest A, et al. **Cancer** 1990 May 1;65(9):2047–54

'Clover leaf' nuclei in atypical lymphocytes during acute Toxoplasma gondii infection [letter] Win N, et al. **Clin Lab Haematol** 1990;12(1):111–2

Morphometric analysis of hyperthermia–induced nuclear and nucleolar size modifications in a human melanoma cell line. Delpino A, et al. **Diagn Cytopathol** 1989;5(4):427–31

Cytologic diagnosis of human papillomavirus infection: spindled nuclei. Shroyer KR, et al. **Diagn Cytopathol** 1990; 6(3):178–83

Hypertensive cardiomyopathy. Myocyte nuclei hyperplasia in the mammalian rat heart. Anversa P, et al. **J Clin Invest** 1990 Apr;85(4):994–7

Morphometric analysis of nuclear features, ploidy status, and staging in rectal carcinoma. Carter CD, et al. **J Pathol** 1989 Oct;159(2):113–20

Intralesional and metastatic heterogeneity in malignant melanomas demonstrated by stereologic estimates of nuclear volume. Sørensen FB, et al. **Lab Invest** 1990 May; 62(5):646–54

Heterogeneous subgroups among malignant diffuse small B cell lymphomas. A combined nucleometric and immunocytologic study. Tosi P, et al. **Lab Invest** 1990 Feb; 62(2):202–12

Which oral white lesions will become malignant? An image cytometric study. Abdel–Salam M, et al. **Oral Surg Oral Med Oral Pathol** 1990 Mar;69(3):345–50

Stereological estimates of nuclear volume in primary lung cancer. Aru A, et al. **Pathol Res Pract** 1989 Nov; 185(5):735–9

Minimum spanning tree, Voronoi's tesselation and Johnson–Mehl diagrams in human lung carcinoma. Kayser K, et al. **Pathol Res Pract** 1989 Nov;185(5):729–34

Grading and prognosis of invasive ductal mammary carcinoma by nuclear image analysis in tissue sections. Kunze KD, et al. **Pathol Res Pract** 1989 Nov;185(5):689–93

A new method of grading malignancy of prostate carcinoma using quantitative microscopic nuclear features. Robutti F, et al. **Pathol Res Pract** 1989 Nov;185(5):701–3

The nuclei in cutaneous malignant melanoma, stage I, are smaller in survivors than in non-survivors. Tosi P, et al. **Pathol Res Pract** 1989 Nov;185(5):625–30

Nuclear morphometric analysis of non-Hodgkin's lymphoma. Roy S, et al. **Pathology** 1989 Apr;21(2):100–4

Alterations in the nuclear volume of neurones from the hypothalamic magnocellular nuclei of fetuses born to rats subject to chronic alcoholism. Fresnillo M, et al. **Rev Esp Fisiol** 1989;45 Suppl:43–7

Morphometrically estimated variation in nuclear size. A useful tool in grading prostatic cancer. Blom JH, et al. **Urol Res** 1990;18(2):93–9

[Hypothesis: multinucleated giant cells in AIDS neuropathology] van Hemel K. **Rev Neurol (Paris)** 1989; 145(11):802–5 (21 ref.) (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

The absorption of ultraviolet light by cell nuclei. A technique for identifying neoplastic change. Baisden CR, et al. **Am J Clin Pathol** 1989 Nov;92(5):659–61

Communication between mitochondria and the nucleus in regulation of cytochrome genes in the yeast Saccharomyces cerevisiae. Forsburg SL, et al. **Annu Rev Cell Biol** 1989; 5:153–80 (155 ref.)

Characterization of DNA pattern in the site of permanent attachment to the nuclear matrix located in the vicinity of replication origin. Kalandadze AG, et al. **Biochem Biophys Res Commun** 1990 Apr 16;168(1):9–15

Epidermal growth factor: lysosomal degradation is not involved in the initial mitogenic signal to the nucleus. Inzani VA. **Biochem Soc Trans** 1990 Jun;18(3):446

The organization of replication centres in higher eukaryotes. Jackson DA. **Bioessays** 1990 Feb;12(2):87–9 (27 ref.)

A gradient of nuclear localization of the dorsal protein determines dorsoventral pattern in the Drosophila embryo. Roth S, et al. **Cell** 1989 Dec 22;59(6):1189–202

Nucleus–basal body connector in Chlamydomonas: evidence for a role in basal body segregation and against essential roles in mitosis or in determining cell polarity. Wright RL, et al. **Cell Motil Cytoskeleton** 1989;14(4):516–26

Chloroplast gene regulation: interaction of the nuclear and chloroplast genomes in the expression of photosynthetic proteins. Mayfield SP. **Curr Opin Cell Biol** 1990 Jun; 2(3):509–13 (12 ref.)

Involvement of microtubules and microfilaments in the control of the nuclear movement during maturation of mouse oocyte. Alexandre H, et al. **Dev Biol** 1989 Dec; 136(2):311–20

The role of the nucleocytoplasmic ratio in development regulation of the early mouse embryo. Evsikov SV, et al. **Development** 1990 Jun;109(2):323–8

5-Azacytidine affects the programming of expression of the somatic nucleus of Paramecium. Kwok FW, et al. **Development** 1989 Mar;105(3):559–68

Non-genic inheritance of cellular handedness. Nelsen EM, et al. **Development** 1989 Mar;105(3):447–56

Differential regulation of DNA synthesis in heterokaryons between chicken erythrocytes and culture cells with various proliferative potentials. Prudovsky IA, et al. **Eur J Cell Biol** 1990 Apr;51(2):347–52

Interactions between the nucleus and cytoplasmic organelles during the cell cycle of Euglena gracilis in synchronized cultures. IV. An aggregate form of chloroplasts in association with the nucleus appearing prior to chloroplast division. Ehara T, et al. **Exp Cell Res** 1990 Sep; 190(1):104–12

Nuclear envelope assembly around sperm chromatin in cell-free preparations from Drosophila embryos. Ulitzur N, et al. **FEBS Lett** 1989 Dec 18;259(1):113–6

Definition and properties of disequilibria within nuclear–mitochondrial–chloroplast and other nuclear–dicytoplasmic systems. Schnabel A, et al. **Genetics** 1989 Sep;123(1):199–215

Physicochemical properties of 57 kDa thyroid hormone binding protein from rat liver nuclei. Okabe N, et al. **J Biochem (Tokyo)** 1989 Dec;106(6):1064–7

The molecular cloning and identification of a gene product specifically required for nuclear movement in Aspergillus nidulans. Osmani AH, et al. **J Cell Biol** 1990 Aug; 111(2):543–51

In situ analyses reveal that the two nuclei of Giardia lamblia are equivalent. Kabnick KS, et al. **J Cell Sci** 1990 Mar;95 (Pt 3):353–60

In vitro immunohistochemical localization of S-phase cells by a monoclonal antibody to bromodeoxyuridine. Lee SS, et al. **J Korean Med Sci** 1989 Dec;4(4):193–201

Control of first cleavage in single-cell reconstituted mouse embryos. Smith LC, et al. **J Reprod Fertil** 1990 Mar; 88(2):655–63

Alpha/beta interferons fail to induce antiviral activity from within the nucleus. Riviere I, et al. **J Virol** 1990 May; 64(5):2430–2

Polyadenylation-specific complexes undergo a transition early in the polymerization of a poly(A) tail. Bardwell VJ, et al. **Mol Cell Biol** 1990 Jan;10(1):295–302

Microinjection of plasmid DNA encoding the A surface antigen of Paramecium tetraurelia restores the ability to regenerate a wild-type macronucleus. Koizumi S, et al. **Mol Cell Biol** 1989 Oct;9(10):4398–401

Splicing of a C. elegans myosin pre-mRNA in a human nuclear extract. Ogg SC, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):143–9

Copy number control and compatibility of nuclear plasmids in Dictyostelium discoideum. Hughes JE, et al. **Plasmid** 1989 Nov;22(3):215–23

[The role of the muscle cell nucleus in the mechanism of its transformation after infection by Trichinella spiralis larvae. II. Histochemical features of the functional transformation of the muscle cell nucleus in the course of infection] Gustowska L, et al. **Wiad Parazytol** 1989; 35(5):401–11 (Eng. Abstr.) **(Pol)**

[A new interpretation of the role of temperature in the formation of bioelectric potential and genetic functions of the cell nucleus] Shakhbazov VG. **Dokl Akad Nauk SSSR** 1989;308(4):994–7 **(Rus)**

RADIATION EFFECTS

The increase in radioresistance of Chinese hamster cells cultured as spheroids is correlated to changes in nuclear morphology. Gordon DJ, et al. **Radiat Res** 1990 Feb; 121(2):175–9

[An analysis of the lymphocytes with anomalous nuclei in the peripheral blood of rats subjected to gamma irradiation] Koliubaeva SN, et al. **Radiobiologiia** 1990 Jan–Feb; 30(1):124–7 (Eng. Abstr.) **(Rus)**

[The nuclear desoxyribonuclease (DNAse) spectrum of normal rat thymus cells and after whole-body x-ray irradiation] Selliev AA, et al. **Radiobiologiia** 1990 Jan–Feb; 30(1):20–7 (Eng. Abstr.) **(Rus)**

[The effect of the x-ray irradiation of rats on the NAD–pyrophosphorylase and poly(ADP-ribose)polymerase activities of brain nuclei and on the NAD content in nerve tissue] Zaalishvili TM, et al. **Radiobiologiia** 1990 Jan–Feb;30(1):36–9 (Eng. Abstr.) **(Rus)**

[Hormetic effects of exposure to low doses of ionizing radiation] Ružđić M. **Med Arh** 1989;43(2–3):117–23 (Eng. Abstr.) **(Scr)**

SECRETION

RNA synthesis by nuclei and chromatin isolated from adult and senescent Wistar rat liver. Park GH, et al. **Gerontology** 1990;36(2):61–75

TRANSPLANTATION

Nuclear transplantation in early pig embryos. Prather RS, et al. **Biol Reprod** 1989 Sep;41(3):414–8

Genomic activation in differentiated somatic cells. DiBerardino MA. **Dev Biol (N Y 1985)** 1989;6:175–98 (83 ref.)

Nuclear and cytoplasmic transfer in mammalian embryos. McGrath J, et al. **Dev Biol (N Y 1985)** 1986;4:37–55 (59 ref.)

Nuclear transfer from teratocarcinoma cells into mouse oocytes and eggs. Modlinski JA, et al. **Development** 1990 Feb;108(2):337–48

Nuclear transplantation of male primordial germ cells in the mouse. Tsunoda Y, et al. **Development** 1989 Oct; 107(2):407–11

Transplantation of nuclei from 2- to 16-cell embryos into enucleated blastomeres of 2-cell mouse embryos. Landa V. **Folia Biol (Praha)** 1989;35(5):299–305

Cytoplasts from two-cell embryos for nuclear transplantation in the mouse. Landa V. **Folia Biol (Praha)** 1989;35(6):353–9

Development of chimaeric two-cell mouse embryos produced by allogenic exchange of single nucleus from two- and eight-cell embryos. Kono T, et al. **Gamete Res** 1989 Dec;24(4):375–84

Developmental incompatibility between cell nucleus and cytoplasm as revealed by nuclear transplantation experiments in teleost of different families and orders. Yan SY, et al. **Int J Dev Biol** 1990 Jun;34(2):255–66

Nuclear transfer in mammalian embryos. Prather RS, et al. **Int Rev Cytol** 1990;120:169–90 (125 ref.)

Nuclear transplantation in the pig embryo: nuclear swelling. Prather RS, et al. **J Exp Zool** 1990 Sep;255(3):355–8

Effects of the number, stage and parental origin of nuclei in reconstructed mouse eggs. Howlett SK, et al. **J Reprod Fertil Suppl** 1989;38:99–105 (27 ref.)

Cloning of embryos. Prather RS, et al. **J Reprod Fertil Suppl** 1990;40:227–34 (49 ref.)

Developmental potential of nuclei from mouse teratocarcinoma cells. Illmensee K, et al. **Naturwissenschaften** 1989 Dec;76(12):582–4

Nuclear transplantation as a method for cloning embryos. Prather RS. **Proc Soc Exp Biol Med** 1990 Oct;195(1):7–12 (54 ref.)

ULTRASTRUCTURE

Evidence of repetitive patterns of chromatin distribution in cell nuclei of rat liver. Esquivel C, et al. **Acta Anat (Basel)** 1989;136(2):94–8

Incidence of centrally positioned nuclei in mouse masticatory muscle fibers. Vilmann A, et al. **Acta Anat (Basel)** 1989; 135(4):341–3

Diagnostic value of crush artifact in cytologic specimens. Occurrence in small cell carcinoma of the lung. Davenport RD. **Acta Cytol** 1990 Jul–Aug;34(4):502–4

Improvement of accuracy of scanning absorption measurement of nuclear DNA content in plants. Doležel J. **Acta Histochem (Jena)** 1989;86(2):123–7

Stereological estimation of nuclear volume in benign melanocytic lesions and cutaneous malignant melanomas. Sørensen FB. **Am J Dermatopathol** 1989 Dec;11(6):517–27

Atherosclerosis- and age-related multinucleated variant endothelial cells in primary culture from human aorta. Tokunaga O, et al. **Am J Pathol** 1989 Dec;135(6):967–76

Implications of nuclear diameter in small cell lung carcinoma. Lee TK, et al. **Anal Quant Cytol Histol** 1990 Apr; 12(2):78–84

An edge relocation segmentation algorithm. MacAulay C, et al. **Anal Quant Cytol Histol** 1990 Jun;12(3):165–71

A method for quantitating the nuclear area of gastric polyps using image analysis. Rubio CA, et al. **Anal Quant Cytol Histol** 1990 Apr;12(2):117–21

Nuclear DNA content and nuclear atypia. Relation to survival in patients with breast adenocarcinoma and serious ovarian tumors. Erhardt K, et al. **Anticancer Res** 1989 Sep–Oct;9(5):1325–30

Inhibition of 1,2-dimethylhydrazine-induced nuclear damage in rat colonic epithelium by chlorophyllin. Robins EW, et al. **Anticancer Res** 1989 Jul–Aug;9(4):981–5

DNA-index and stereological estimation of nuclear volume in primary and metastatic malignant melanomas: a comparative study with analysis of heterogeneity. Sørensen FB, et al. **APMIS** 1990 Jan;98(1):61–70

A comparative study of nuclear morphometric features of intraduct carcinoma and ductal epitheliosis of the breast. Delides GS, et al. **Arch Geschwulstforsch** 1990;60(3):231–3

The relationship between nuclear DNA content in salivary gland tumors and prognosis. Comparison of mucoepidermoid tumors and acinic cell tumors. Hamper K, et al. **Arch Otorhinolaryngol** 1989;246(5):328–32

Drug and metabolite-induced perturbations in nuclear structure and function: a review. Brasch K. **Biochem Cell Biol** 1990 Feb;68(2):408–26 (157 ref.)

Identification of a sperm nuclear annulus: a sperm DNA anchor. Ward WS, et al. **Biol Reprod** 1989 Aug; 41(2):361–70

Intranuclear inclusions in Bence Jones lambda plasma cell myeloma. Cohen HJ, et al. **Blood** 1975 Jan;45(1):131–9

Hairy cell leukemia with ringed-shaped nuclei [letter] Woessner S, et al. **Blut** 1989 Nov;59(5):464–5

The significance of ring eosinophils in humans [letter; comment] **Br J Haematol** 1989 Dec;73(4):579–81 Comment on: Br J Haematol 1989 Aug;72(4):597.

Multilobated nuclei in peripheral blood lymphocytes from HIV+ patients. Juncà J, et al. **Br J Haematol** 1989 Oct; 73(2):275–6

Nucleolar prominence as a diagnostic variable in prostatic carcinoma. Kelemen PR, et al. **Cancer** 1990 Feb 15; 65(4):1017–20

Prognostic value of histologic grade nuclear components of Scarff-Bloom-Richardson (SBR). An improved score modification based on a multivariate analysis of 1262 invasive ductal breast carcinomas. Le Doussal V, et al. **Cancer** 1989 Nov 1;64(9):1914–21

Karyometric marker features in normal-appearing glands adjacent to human colonic adenocarcinoma. Bibbo M, et al. **Cancer Res** 1990 Jan 1;50(1):147–51

Mutation of a gene that encodes a kinesin-like protein blocks nuclear division in A. nidulans. Enos AP, et al. **Cell** 1990 Mar 23;60(6):1019–27

KAR3, a kinesin-related gene required for yeast nuclear fusion [published erratum appears in Cell 1990 May 4;61(3):548] Meluh PB, et al. **Cell** 1990 Mar 23; 60(6):1029–41

Nuclear fraction enriched in interchromatin granules. Zborek A, et al. **Cell Biol Int Rep** 1990 Jan;14(1):79–88

Functional role of newly formed pore complexes in postmitotic nuclear reorganization. Benavente R, et al. **Chromosoma** 1989 Oct;98(4):233–41

Fine structural ribonucleoprotein components of the cell nucleus visualized after spreading and high resolution autoradiography. Fakan S, et al. **Chromosoma** 1989 Oct; 98(4):242–9

Intermediate structures in nuclear morphogenesis following metaphase from HeLaS3 cells can be isolated and temporally grouped. Hodge LD, et al. **Chromosoma** 1990 Jul;99(3):169–82

Neuronal intranuclear hyaline inclusion disease: report of a case and review of the literature. Funata N, et al. **Clin Neuropathol** 1990 Mar–Apr;9(2):89–96 (19 ref.)

Ultrastructural pathology of the nucleus. Kamel HM, et al. **Curr Top Pathol** 1990;82:17–89 (239 ref.)

Quantitation of the nucleus. Stephenson TJ. **Curr Top Pathol** 1990;82:151–213 (372 ref.)

Nuclear morphology and grading in tumours. Underwood JC. **Curr Top Pathol** 1990;82:1–15 (30 ref.)

Nuclear changes induced in NIH/3T3 cells by transfection and tumorigenesis. Mello ML, et al. **Cytobios** 1989; 60(242–243):135–49

BioGraf 3D: an algorithm for optimization and graphical representation of nuclear structure spatial distributions. Peeples WJ, et al. **Cytobios** 1989;58(233):109–23

Three-dimensional reconstruction of pericentromeric (1q12) DNA and ribosomal RNA sequences in HL60 cells after double-target in situ hybridization and confocal microscopy. van Dekken H, et al. **Cytometry** 1990; 11(5):579–85

Functional organization of the amphibian oocyte nucleus. Scheer U, et al. **Dev Biol (N Y 1985)** 1985;1:385–430 (97 ref.)

Architectural organization in the interphase nucleus of the protozoan Trypanosoma brucei: location of telomeres and mini-chromosomes. Chung HM, et al. **EMBO J** 1990 Aug; 9(8):2611–9

On the mechanism of cell internalization of chrysotile fibers: an immunocytochemical and ultrastructural study. Malorni W, et al. **Environ Res** 1990 Aug;52(2):164–77

Distribution of chromosome 18 and X centric heterochromatin in the interphase nucleus of cultured human cells. Popp S, et al. **Exp Cell Res** 1990 Jul; 189(1):1–12

Peri-nuclear structures in late anaphase in some amphibian mesenchyme cells. Waddington CH, et al. **Exp Cell Res** 1966 Mar;41(3):694–6

Polypronuclear embryos after in vitro fertilization. Dandekar PV, et al. **Fertil Steril** 1990 Mar;53(3):510–4

Development of human male pronucleus: ultrastructure and timing. Tesarik J, et al. **Gamete Res** 1989 Oct;24(2):135–49

Relationship between chromosome content and nuclear diameter in early spermatids of Drosophila melanogaster. González C, et al. **Genet Res** 1989 Dec;54(3):205–12

DNA ploidy, morphometry, and nuclear grade as prognostic factors in endometrial carcinoma. Sorbe B, et al. **Gynecol Oncol** 1990 Jul;38(1):22–7

Quantitative assessment of various fixatives on nuclear and cytoplasmic areas in oral cytology. Ogden GR, et al. **Histochem J** 1989 Dec;21(12):703–6

Immunofluorescent visualization of DNA replication sites within nuclei of Chinese hamster ovary cells. Banfalvi G, et al. **Histochemistry** 1989;93(1):81–6

Developmental control of the human male pronucleus by ooplasmic factors. Tesarik J, et al. **Hum Reprod** 1989 Nov; 4(8):962–8

Maturation at high frequency of germinal-vesicle-stage mouse oocytes after cryopreservation: alterations in cytoplasmic, nuclear, nucleolar and chromosomal structure and organization associated with vitrification. Van Blerkom J. **Hum Reprod** 1989 Nov;4(8):883–98

Observations on the morphology of pronuclei and nucleoli in human zygotes and implications for cryopreservation. Wright G, et al. **Hum Reprod** 1990 Jan;5(1):109–15

The oocyte lamin persists as a single major component of the nuclear lamina during embryonic development of the surf clam. Dessev G, et al. **Int J Dev Biol** 1990 Jun; 34(2):267–74

Failure of differentiation of the nuclear-perinuclear skeletal complex in the round-headed human spermatozoa. Escalier D. **Int J Dev Biol** 1990 Jun;34(2):287–97

Nucleus-associated microtubules help determine the division plane of plant epidermal cells: avoidance of four-way junctions and the role of cell geometry. Flanders DJ, et al. **J Cell Biol** 1990 Apr;110(4):1111–22

The yeast RNA1 gene product necessary for RNA processing is located in the cytosol and apparently excluded from the nucleus. Hopper AK, et al. **J Cell Biol** 1990 Aug; 111(2):309–21

The RCC1 protein, a regulator for the onset of chromosome condensation locates in the nucleus and binds to DNA. Ohtsubo M, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1389–97

Nucleus-specific and temporally restricted localization of proteins in Tetrahymena macronuclei and micronuclei. White EM, et al. **J Cell Biol** 1989 Nov;109(5):1983–92

Enucleation of the rat pheochromocytoma clonal cell line, PC12: effect on neurite outgrowth. Nichols RA, et al. **J Cell Physiol** 1989 Nov;141(2):301–9

Differentiation of human trophoblast cells in vitro as revealed by immunocytochemical staining of desmoplakin and nuclei. Douglas GC, et al. **J Cell Sci** 1990 May;96 (Pt 1):131–41

Rearrangement of the cytoskeleton and nuclear transfer in Tetrahymena thermophila cells fused by electric field. Gaertig J, et al. **J Cell Sci** 1989 Aug;93 (Pt 4):691–703

Prognostic value of nucleolar morphometric variables in cytological breast cancer specimens. van Diest PJ, et al. **J Clin Pathol** 1990 Feb;43(2):157–9

Ultrastructural study of nuclear inclusions in spindle and epithelioid cell nevus cells. Sakamoto F, et al. **J Cutan Pathol** 1990 Apr;17(2):82–6

Role of nuclear proto-oncogenes in the proliferation of aortic smooth muscle cells in spontaneously hypertensive rats. Baudouin-Legros M, et al. **J Hypertens Suppl** 1989 Dec; 7(6):S114–5

Recognition of paternal pronuclei in human zygotes. Wiker S, et al. **J In Vitro Fert Embryo Transf** 1990 Feb;7(1):33–7

X linked neonatal myotubular myopathy: one recombination detected with four polymorphic DNA markers from Xq28. Lehesjoki AE, et al. **J Med Genet** 1990 May;27(5):288–91

X linked neonatal centronuclear/myotubular myopathy: evidence for linkage to Xq28 DNA marker loci. Thomas NS, et al. **J Med Genet** 1990 May;27(5):284–7

Probing DNA structure and function with a multi-wavelength fluorescence confocal laser microscope. Arndt-Jovin DJ, et al. **J Microsc** 1990 Jan;157 (Pt 1):61–72

Estimating mean particle volume and number from random sections by sampling profile boundaries. Gittes F. **J Microsc** 1990 Apr;158 (Pt 1):1–18

Ultrastructural preservation of nuclei and chromatin: improvement with low-temperature methods. Horowitz RA, et al. **J Microsc** 1990 Feb;157 (Pt 2):205–24

The 'corpuscle' stereological problem--re-evaluation using slab fragment volumes and application to the correction of DNA histograms from sections of spherical nuclei. Rigaut JP, et al. **J Microsc** 1989 Dec;156 (Pt 3):371–82

Confocal microscopy as a tool for the study of the intranuclear topography of chromosomes. van Dekken H, et al. **J Microsc** 1990 May;158 (Pt 2):207–14

A polarized photobleaching study of chromatin reorientation in intact nuclei. Selvin PR, et al. **J Mol Biol** 1990 Aug 20;214(4):911–22

The distribution of intracellular acetylcholine receptors and nuclei in avian slow muscle fibres during establishment of distributed synapses. Kouts S, et al. **J Neurocytol** 1990 Jun; 19(3):421–31

Comparisons of sizes of pinealocyte nuclei and pinealocytes in young and adult Chinese hamsters (Cricetulus griseus) under different photoperiod conditions. Hira Y, et al. **J Pineal Res** 1989;7(4):411–8

Freeze fracture and scanning electron microscope studies on the nuclear envelope and perinuclear cytomembranes (parabasal apparatus) in the protozoan, Lophomonas blattarum. Kessel RG, et al. **J Submicrosc Cytol Pathol** 1990 Jul;22(3):367–78

Nuclear shape analysis for assessment of prognosis in renal cell carcinoma. Murphy GF, et al. **J Urol** 1990 Jun; 143(6):1103–7

Nuclear morphometry as a predictor of response to therapy in Wilms tumor: a preliminary report. Partin AW, et al. **J Urol** 1990 Oct;144(4):952–4

Computer assisted efficiency testing of different sampling methods for selective nuclear graphic tablet morphometry. Fleege JC, et al. **Lab Invest** 1990 Aug;63(2):270–5

Nonaqueous isolation of transcriptionally active nuclei from Xenopus oocytes. Lund E, et al. **Methods Enzymol** 1990; 181:36–43

Preparation of active nuclei. Marzluff WF. **Methods Enzymol** 1990;181:30–6

An ultrastructural morphometric study of follicular center lymphocytes: III. The control of lymphocyte nuclear size in reactive hyperplasia and non-Hodgkin's lymphoma. Dardick I, et al. **Mod Pathol** 1990 Mar;3(2):176–85

Changes in nuclear structure during eupyrene spermatogenesis in Murex brandaris. Amor MJ, et al. **Mol Reprod Dev** 1990 Apr;25(4):348–56

Chromatin arrangement in mouse sperm nuclei: an ultrastructural cytochemical study. Biggiogera M. **Mol Reprod Dev** 1989;1(2):91–7

Nucleus of the boar spermatozoon: structure and modifications in frozen, frozen-thawed, or sodium dodecyl sulfate-treated cells. Courtens JL, et al. **Mol Reprod Dev** 1989;1(4):264–77

Factor required for mammalian spliceosome assembly is localized to discrete regions in the nucleus. Fu XD, et al. **Nature** 1990 Feb 1;343(6257):437–41

Genetic apparatus of Stylonychia sp. Prescott DM, et al. **Nature** 1973 Apr 27;242(5400):576, 597–600

Malignant glial tumours: prognostic value of quantitative microscopy. Scarpelli M, et al. **Neurochirurgia (Stuttg)** 1989 Sep;32(5):135–40

Comparison of stains for image segmentation and measurement of nuclear parameters by computerised image analysis using IBAS 2000. Deverell MH, et al. **Pathol Res Pract** 1989 Nov;185(5):555–7

Cellular levels of thymosin immunoreactive peptides are linked to proliferative events: evidence for a nuclear site of action [published erratum appears in Proc Natl Acad Sci U S A 1990 Jul;87(14):5587] Conteas CN, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3269–73

The spatial distribution of exposed nuclear DNA in normal, cancer, and reverse-transformed cells. Krystosek A, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6560–4

Higher order nuclear organization: three-dimensional distribution of small nuclear ribonucleoprotein particles [published erratum appears in Proc Natl Acad Sci U S A 1990 Mar;87(6):2384] Spector DL. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):147–51

Specific disruption of intermediate filaments and the nuclear lamina by the 19-kDa product of the adenovirus E1B oncogene. White E, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9886–90

Influence of long-term continuous illumination on the nuclear volume of hypothalamic neurons in female rats. Lin YL, et al. **Proc Natl Sci Counc Repub China [B]** 1990 Jan;14(1):10–4

Characterization of the morphonuclear features and DNA ploidy of prostatic disease. Petein M, et al. **Prostate** 1990; 16(3):199–208

The organization and substructure of chromatin fibres in the interphase nucleus as studied by scanning electron microscopy. Allen TD. **Scanning Microsc Suppl** 1989; 3:77–85; discussion 85–6

A simple method for staining nuclei of mature and germinated maize pollen. Chang MT, et al. **Stain Technol** 1989 Jul; 64(4):181–4

Nuclear bodies (sphaeridia) in Sertoli cells of a man with acquired immunodeficiency syndrome (AIDS) and testicular infection by cytomegalovirus. Nistal M, et al. **Ultrastruct Pathol** 1990 Jan-Feb;14(1):21–6

Comparison of quantitative and classic prognosticators in urinary bladder carcinoma. A multivariate analysis of DNA flow cytometric, nuclear morphometric and clinicopathological features. Blomjous CE, et al. **Virchows Arch [A]** 1989;415(5):421–8

[Ultrastructural research on the sensorimotor cortex in adult rats. I. Intranuclear inclusions in the neurons and astrocytes] Bozhilova-Pastirova A, et al. **Eksp Med Morfol** 1990;29(1):1–8 (Eng. Abstr.) **(Bul)**

[Ultrastructural bases for the synthesis of ribosomal RNA in the nuclei of the parotid gland. The role of intranuclear bodies] Duquene L, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Dec; 32(3):121–6 (Eng. Abstr.) **(Fre)**

[Effect of culture duration and osmolarity of the medium on nuclear surface in vitro] Scholz C, et al. **Arch Gynecol Obstet** 1989;245(1–4):663–5 **(Ger)**

[Prognostic significance of nuclear DNA content in highly malignant thyroid tumors] Lukács G, et al. **Wien Klin Wochenschr** 1990 Apr 27;102(9):253–6 (Eng. Abstr.) **(Ger)**

[Splicing of nuclear messenger RNA precursors] Sieliwanowicz B. **Postepy Biochem** 1988;34(4):351–60 (54 ref.) **(Pol)**

[Karyometric characteristics of the accessory apparatus of the eye in embryonal histogenesis] Brusilovskii AI, et al. **Arkh Anat Gistol Embriol** 1989 Jul;97(7):32–9 (Eng. Abstr.) **(Rus)**

[Specificity of the location of human chromosomes in the nucleus of a moving cell] Gar'kavtsev IV, et al. **Biull Eksp Biol Med** 1989 Oct;108(10):479–81 (Eng. Abstr.) **(Rus)**

[The results of and prospects for the study of the interphase nucleus of eukaryotes] Ganina KP, et al. **Tsitol Genet** 1990 Jan-Feb;24(1):65–72 (63 ref.) (Eng. Abstr.) **(Rus)**

[A quantitative study of Ag-positive nucleolar segments revealed by silver staining in the interphase nuclei of trophoblast cells from the rat placental connective zone] Zybina TG, et al. **Tsitologiia** 1989 Nov;31(11):1292–305 (Eng. Abstr.) **(Rus)**

[Skeletal structures of the cell nucleus in the normal state and pathology] Zbarskiĭ IB. **Vestn Akad Med Nauk SSSR** 1990;(2):8–10 (Eng. Abstr.) **(Rus)**

[Prognosis factors in adenocarcinoma of the kidney. III. Nuclear area] Gutiérrez JL, et al. **Arch Esp Urol** 1990 Jun; 43(5):497–500 (Eng. Abstr.) **(Spa)**

CELL NUMBER see **CELL COUNT**

CELL RECEPTORS see **RECEPTORS, ENDOGENOUS SUBSTANCES**

CELL SEGREGATION see **CELL SEPARATION**

CELL SEPARATION

see related
PLASMAPHERESIS

Isolation procedures for blood lymphocytes produce artifacts. Detection by changes of electrophoretic mobilities of lymphocytes. Gomariz-Zilber E, et al. **Cell Biophys** 1990 Jan-Apr;16(1-2):55–69

Observations on cell adhesion and separation following enzyme treatment. Weiss L, et al. **Exp Cell Res** 1966 Mar; 41(3):601–8

Isolation and characterization of boar spermatozoa with and without a cytoplasmic droplet. de Vries AC, et al. **Int J Biochem** 1990;22(5):519–24

Settling-time dependence of rat bone marrow cell partition and counter-current distribution in charge-sensitive aqueous two-phase systems. Relationship with the cell partitioning mechanism. García-Pérez AI, et al. **J Chromatogr** 1990 Mar 30;504(1):79–88

Surface affinity chromatographic separation of blood cells. VII. Relationship between capacity factors of human peripheral blood cells and the rate of penetration of liquids into xerogel column packings. Matsumoto U, et al. **J Chromatogr** 1990 Mar 30;504(1):69–78

Counterflow centrifugation apheresis for the collection of autologous peripheral blood stem cells from patients with malignancies: a comparison with a standard centrifugation apheresis procedure. Schouten HC, et al. **J Clin Apheresis** 1990;5(3):140–4

Functions of purified mouse neutrophils isolated from gelatin sponges. Middleton MM, et al. **J Leukoc Biol** 1989 Nov; 46(5):461–6

The influence of extracorporeal circulation and hemoseparation on red cell deformability and membrane proteins in coronary artery disease [see comments] Lohrer RM, et al. **J Thorac Cardiovasc Surg** 1990 Apr;99(4):735–40
Comment in: J Thorac Cardiovasc Surg 1990 Apr;99(4):751–2.

Functional analysis of mononuclear cells infiltrating into tumors: establishment of a new system to obtain functionally active tumor-infiltrating cells. Shijubo N, et al. **Jpn J Cancer Res** 1990 Jan;81(1):28–34

Positive and negative liposome-based immunoselection techniques. Leserman L, et al. **Methods Cell Biol** 1989; 32:447–71 (26 ref.)

Separation of pluripotent haematopoietic stem cells from

spleen colony-forming cells [see comments] Jones RJ, et al. **Nature** 1990 Sep 13;347(6289):188-9 Comment in: Nature 1990 Sep 13;347(6289):126-7.
Neutrophil activation during cell separation procedures. Jackson MH, et al. **Nucl Med Commun** 1989 Dec; 10(12):901-4
Purging cancer from the bone marrow [news] Waldrop MM. **Science** 1990 May 18;248(4957):816-7
Can the efficacy of white cell depletion as a means to eliminate transfusion-transmitted AIDS ever be proved in man? [letter; comment] Strauss RG. **Transfusion** 1990 Feb; 30(2):191 Comment on: Transfusion 1989 Jun;29(5):460-2.
Preparation of white-cell poor platelet concentrates [letter; comment] Tedrow HE. **Transfusion** 1990 Mar-Apr; 30(3):288 Comment on: Transfusion 1989 Jul-Aug;29(6):562-3.
A new radioimmunoassay for the detection of small amounts of white cells and platelets in red cell concentrates: implications for blood transfusion. Webster MR, et al. **Transfusion** 1990 Feb;30(2):117-25
[Isolation of monocytes from peripheral blood by gradient centrifugation on Lymphoprep in a hypertonic medium] Májský A. **Cas Lek Cesk** 1989 Dec 8;128(50):1591-3 (Eng. Abstr.) **(Cze)**
[Isolation and characterization of human KB cell mutants resistant to epidermal growth factor-Pseudomonas exotoxin conjugates] Amano F. **Seikagaku** 1989 Dec; 61(12):1472-7 **(Jpn)**

INSTRUMENTATION

Anaphylatoxin and terminal complement complexes in red cell salvage. Bengtsson A, et al. **Acta Anaesthesiol Scand** 1990 Jul;34(5):339-41
Efficient continuous flow washing of red blood cells for exogenous agent loading using a hollow fiber plasma separator. el-Kalay MA, et al. **Artif Organs** 1989 Dec; 13(6):515-24
Plasma separator for encapsulating fluorescent probe in erythrocytes. el-Kalay MA, et al. **Artif Organs** 1990 Jun; 14(3):200-7
Preparation of leukocyte-poor platelet concentrates from buffy coats by a new type of quadruple bag. Misterek J, et al. **Blut** 1990 Jan;60(1):28-30
Transfusion using a cell saver apparatus during surgery for coronary artery disease: is it beneficial? Hall RI, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S155
Evaluation and calibration of a fluorescence-activated cell sorter for the interpretation of the granulocyte immunofluorescence test (GIFT). Minchinton RM, et al. **Clin Lab Haematol** 1989;11(4):349-59
Preparation of leukocyte-poor platelet concentrates for transfusion by filtration through a new cellulose acetate filter. Koerner K. **Haematologia (Budap)** 1989;22(3):181-8
Collection of peripheral blood stem cells by apheresis with continuous flow blood cell separator Dideco Vivacell. Del Monte C, et al. **Haematologica** 1990 Jan-Feb;75 Suppl 1:18-21
Collection of peripheral blood stem cells using an automated discontinuous flow blood cell separator. Pierelli L, et al. **Haematologica** 1990 Jan-Feb;75 Suppl 1:29-32
Use of a laser diffraction particle sizer for the measurement of mean diameter of multicellular tumor spheroids. Boothby CD, et al. **In Vitro Cell Dev Biol** 1989 Oct; 25(10):946-50
The safety of blood component preparation with blood cell separators. Borberg H, et al. **Infusionstherapie** 1989 Aug; 16 Suppl 2:21-9; discussion 28-9 **(Eng, Ger)**
Biocompatibility and safety of cytapheresis. Kretschmer V, et al. **Infusionstherapie** 1989 Aug;16 Suppl 2:10-20; discussion 28-9 **(Eng, Ger)**
Haemonetics V50 and Plasma Collection System: common concerns and troubleshooting. Gilcher RO, et al. **J Clin Apheresis** 1990;5(2):106-9
A simple device for the optimized isolation of fat cells. Meignen JM, et al. **Lipids** 1990 Jul;25(7):412-4
Analysis, selection, and sorting of anchorage-dependent cells under growth conditions. Schindler M, et al. **Methods Cell Biol** 1989;32:423-46 (65 ref.)
Dual tracer technique to measure salvaged red cell survival following autotransfusion in aortic surgery. Thorley PJ, et al. **Nucl Med Commun** 1990 May;11(5):369-74
Automated isolation of mononuclear cells using the Fenwal CS3000 blood cell separator. Areman EM, et al. **Prog Clin Biol Res** 1990;333:379-85
Microbial challenge of a blood cell separator outside-seal bowl system. Jacobson MS, et al. **Transfusion** 1990 Feb; 30(2):146-9
[Comparative study of the side effects and donor safety in preparatory cell collection using the cell separators CS 3,000 and V 50] Taborski U, et al. **Infusionstherapie** 1989 Aug;16(4):186-8 (Eng. Abstr.) **(Ger)**

METHODS

Immunomagnetic purging of bone marrow grafts for autologous transplantation in neuroblastoma. Van Riet I, et al. **Acta Clin Belg** 1990;45(2):97-106
Techniques of sperm selection, improvement and separation in an in vitro fertilization program. Van der Zwalmen P, et al. **Acta Eur Fertil** 1989 Sep-Oct;20(5):269-83 (57 ref.)
The effect of various cell separation procedures on assays of neutrophil function. A critical appraisal. Glasser L, et al. **Am J Clin Pathol** 1990 May;93(5):662-9
Isolation of mammalian cell autotrophs able to grow indefinitely in protein-free chemically defined medium. Hillova J, et al. **Anticancer Res** 1990 Jan-Feb;10(1):181-4
Immunomagnetic method to select human sperm without sperm surface-bound autoantibodies in male autoimmune infertility. Foresta C, et al. **Arch Androl** 1990;24(2):221-5
Ficoll gradient isolation of immature sperm of high purity and intactness from goat epididymis. Haldar S, et al. **Arch Androl** 1990;24(2):125-8
Bone marrow transplantation in Polish conditions. Method for removal of red cells from the transplant in the case of major blood group incompatibility. Wiktor-Jędrzejczak W, et al. **Arch Immunol Ther Exp (Warsz)** 1989; 37(3-4):261-7
Alternative methods of harvesting animal cell clones. Ramanujam P, et al. **Biotechniques** 1988 Jan;6(1):24, 27
Relative efficiency of leukemic cell depletion using anti-murine-IgG1(Fc) or anti-murine-IgG coated immunomagnetic microbeads. Janssen WE, et al. **Bone Marrow Transplant** 1990 Jan;5(1):19-22
Immunomagnetic removal of B-lymphoma cells using a novel mono-sized magnetizable polymer bead, M-280, in conjunction with primary IgM and IgG antibodies. Kvalheim G, et al. **Bone Marrow Transplant** 1989 Sep; 4(5):567-74
Elimination of malignant clonogenic T cells from human bone marrow using chemoimmunoseparation with 2'-deoxycoformycin, deoxyadenosine and an immunotoxin. Montgomery RB, et al. **Bone Marrow Transplant** 1990 Jun; 5(6):395-402
In vitro mineralization of osteoblastic cells derived from human bone. Gotoh Y, et al. **Bone Miner** 1990 Mar; 8(3):239-50
Isolation of human megakaryocytes by immunomagnetic beads. Tanaka H, et al. **Br J Haematol** 1989 Sep;73(1):18-22
A method for isolating and patch-clamping single mammalian taste receptor cells. Spielman AI, et al. **Brain Res** 1989 Dec 4;503(2):326-9
Isolation and short-term culture of mouse splenic erythroblastic islands. Sadahira Y, et al. **Cell Struct Funct** 1990 Feb;15(1):59-65
Isolation and antigenic profile of follicular dendritic cells. Sellheyer K, et al. **Clin Exp Immunol** 1989 Dec;78(3):431-6
Isolation, phenotyping, and functional analysis of lymphocytes from human liver. Hata K, et al. **Clin Immunol Immunopathol** 1990 Sep;56(3):401-19
A new principle of cell sorting by using selective electroporation in a modified flow cytometer. Bakker Schut TC, et al. **Cytometry** 1990;11(6):659-66
Selective cloning of hybridoma cells for enhanced immunoglobulin production using flow cytometric cell sorting and automated laser nephelometry. Marder P, et al. **Cytometry** 1990;11(4):498-505
High gradient magnetic cell separation with MACS. Miltenyi S, et al. **Cytometry** 1990;11(2):231-8
Increased light scattering resolution facilitates multidimensional flow cytometric analysis. Terstappen LW, et al. **Cytometry** 1990;11(4):506-12
Chemiluminescence by polymorphonuclear leucocyte subpopulations in chronic inflammatory bowel disease. Influence of the cell separation procedure. Kelleher D, et al. **Digestion** 1990;45(3):158-65
Antigen-specific electrophoretic cell separation for immunological investigations. Hansen E, et al. **Electrophoresis** 1989 Aug-Sep;10(8-9):645-52
Modified procedure for isolation of epithelial cells of rat epididymal caput. Dominiak B, et al. **Endocrinol Exp** 1989 Sep;23(3):235-47
Isolation of Clara cells from the mouse lung. Oreffo VI, et al. **Environ Health Perspect** 1990 Apr;85:51-64
Autologous bone marrow transplantation with immunotoxin-purged marrow for advanced multiple myeloma. Gobbi M, et al. **Eur J Haematol Suppl** 1989; 51:176-81
Ex vivo treatment of myeloma cells by 4-HC, VP-16, LAK cells and antibodies. Gulati SC, et al. **Eur J Haematol Suppl** 1989;51:164-72
Ex vivo bone marrow purging with immunotoxins. Stirpe F, et al. **Eur J Haematol Suppl** 1989;51:173-5
Functional properties of CD19+ B lymphocytes positively selected from buffy coats by immunomagnetic separation. Funderud S, et al. **Eur J Immunol** 1990 Jan;20(1):201-6
A method for removal of fibroblasts from human tissue culture systems. Linge C, et al. **Exp Cell Res** 1989 Dec; 185(2):519-28
Separation of blood cells using colloidal silica-polysaccharide gradients. Pertoft H. **Exp Cell Res** 1967 Jun;46(3):621-3
The growth and behaviour of rat retinal Müller cells in vitro. 1. An improved method for isolation and culture. Hicks D, et al. **Exp Eye Res** 1990 Aug;51(2):119-29
A method to establish pure fibroblast and endothelial cell colony cultures from murine bone marrow. Fei RG, et al. **Exp Hematol** 1990 Sep;18(8):953-7
Purification of peripheral blood hematopoietic cells using Campath-1M monoclonal antibody. Law P, et al. **Exp Hematol** 1990 May;18(4):289-93
A simplified method for enrichment of mouse hematopoietic stem cells. Spangrude GJ, et al. **Exp Hematol** 1990 Sep; 18(8):920-6
Purification of pluripotent hemopoietic stem cells: past and present. Visser JW, et al. **Exp Hematol** 1990 Mar; 18(3):248-56 (115 ref.)
Dissecting the hematopoietic microenvironment. VIII. Clonal isolation and identification of cell types in murine CFU-F colonies by limiting dilution. Wang QR, et al. **Exp Hematol** 1990 May;18(4):355-9
Purging of T-lymphocytes with magnetic affinity colloid. Yau JC, et al. **Exp Hematol** 1990 Mar;18(3):219-22
Transplantation of major ABO-incompatible bone marrow: removal of red cells by dextrane sedimentation. Müller A, et al. **Folia Haematol (Leipz)** 1989;116(3-4):475-9
Elimination of red blood cells from marrow suspension prior to transplantation using polysaccharide-ditrizoate gradient centrifugation. Experimental studies. Ratajczak MZ, et al. **Folia Haematol (Leipz)** 1989;116(3-4):469-73
Human bone marrow processing using Cobe 2991 and CS 3000 blood cell separators for further ex vivo manipulation. Angelini A, et al. **Haematologica** 1990 Jan-Feb;75 Suppl 1:43-7
Collection of peripheral blood stem cells in normal donors. Iacone A, et al. **Haematologica** 1990 Jan-Feb;75 Suppl 1:33-8
Collection of PBSC with Fenwal CS-3000 for autografting. Indovina A, et al. **Haematologica** 1990 Jan-Feb;75 Suppl 1:26-8
Lymphocyte contamination in leukocyte-depleted red cell and platelet concentrates obtained by filtration. Müller N, et al. **Hamatol Bluttransfus** 1990;33:563-5
Vestibular hair cells isolated from guinea pig labyrinth. Valat J, et al. **Hear Res** 1989 Jul;40(3):255-60
Failure to document fetal cells in maternal circulation using the Selypes-Lorencz "air-culture" cytogenetic technique [comment] Youssef M, et al. **Hum Genet** 1990 Jun; 85(1):133-4 Comment on: Hum Genet 1988 Aug;79(4):357-9.
Comparison between different pre-treatment techniques for sperm recovery prior to intrauterine insemination, GIFT or IVF. Punjabi U, et al. **Hum Reprod** 1990 Jan;5(1):75-83
Enrichment of murine haemopoietic stem cells: diverging roads. Spangrude GJ. **Immunol Today** 1989 Oct; 10(10):344-50 (58 ref.)
Biochemical and physiological alterations in canine neutrophils separated by lysis or Percoll gradient isolation technologies. Gruber DF, et al. **Immunopharmacol Immunotoxicol** 1990;12(1):93-104
Isolation of melanized cell lines with stable phenotypes from a goldfish erythrophoroma cell line and cryopreservation of these cells by the use of autologous serum. Chou SC, et al. **In Vitro Cell Dev Biol** 1989 Sep;25(9):813-20
A system employing a minimal defined medium for the selection of tumorigenic cells. Schaeffer WI, et al. **In Vitro Cell Dev Biol** 1990 Jul;26(7):737-40
Rat luteal cells in tissue culture: a technique for obtaining primary cell culture without enzymatic dissociation. Srivastava UK, et al. **Indian J Exp Biol** 1989 Jul;27(7):602-6
Isolation of vascular endothelial cells for investigations on hybrid prostheses. Gerlach J, et al. **Int J Artif Organs** 1989 Dec;12(12):805-10
Preparation and short-term culture of enriched populations of guinea pig spermatocytes and spermatids. Joshi MS, et al. **J Androl** 1990 Mar-Apr;11(2):120-30
An improved method for growing murine tumor-infiltrating lymphocytes with in vivo antitumor activity. Yang JC, et al. **J Biol Response Mod** 1990 Apr;9(2):149-59
Isolation and characterization of Chinese hamster ovary cell mutants defective in intracellular low density lipoprotein-cholesterol trafficking. Cadigan KM, et al. **J Cell Biol** 1990 Feb;110(2):295-308
Purification of human blood burst-forming units-erythroid and demonstration of the evolution of erythropoietin receptors. Sawada K, et al. **J Cell Physiol** 1990 Feb; 142(2):219-30
Isolation of functionally active pleural macrophages. Baughman RP, et al. **J Clin Lab Immunol** 1989 Nov; 30(3):147-51
Isolation of monocyte-depleted and monocyte-rich fractions from human mononuclear cells. Rubinstien E, et al. **J Clin Lab Immunol** 1989 Sep;30(1):35-9
A new method for isolation of salivary neutrophils and determination of their functional activity. Ashkenazi M, et al. **J Dent Res** 1989 Aug;68(8):1256-61
Immunomagnetic techniques. **J Immunogenet** 1989 Apr; 16(2):91-191
Immunomagnetic depletion of malignant cells from autologous bone marrow graft: from experimental models to clinical trials. Combaret V, et al. **J Immunogenet** 1989 Apr;16(2):125-36
Magnetic cell sorting using colloidal protein-magnetite. Owen CS. **J Immunogenet** 1989 Apr;16(2):117-23
Purification of transiently transfected cells by magnetic-affinity cell sorting. Padmanabhan R, et al. **J Immunogenet** 1989 Apr;16(2):91-102 (64 ref.)
Isolation of epidermal Langerhans cells. Schmitt DA, et al. **J Immunogenet** 1989 Apr;16(2):157-68 (32 ref.)
CD20 positive human B lymphocytes separated with the magnetic cell sorter (MACS) can be induced to proliferation and antibody secretion in vitro. Abts H, et al. **J Immunol Methods** 1989 Dec 20;125(1-2):19-28
Isolation of viable tumor cells following introduction of labelled antibody to an intracellular oncogene product using electroporation. Berglund DL, et al. **J Immunol Methods** 1989 Dec 20;125(1-2):79-87
One step separation of human fetal lymphocytes from

nucleated red blood cells. Bhat NM, et al. **J Immunol Methods** 1990 Jul 20;131(1):147–9
The use of targetted liposomes to isolate cells bearing immunoglobulin receptors. Golubev A, et al. **J Immunol Methods** 1989 Dec 20;125(1–2):29–34
Isolation of eosinophils from human blood. Hansel TT, et al. **J Immunol Methods** 1990 Mar 9;127(2):153–64 (76 ref.)
A new and rapid method for the selection and cloning of antigen-specific hybridomas with magnetic microspheres. Horton JK, et al. **J Immunol Methods** 1989 Nov 30; 124(2):225–30
Comparison of monocyte separation methods using flow cytometric analysis. Jones BM, et al. **J Immunol Methods** 1989 Dec 20;125(1–2):41–7
A rapid mechanical vibration procedure for purifying mature (Ia positive) columnar epithelial cells from the mouse small intestine. Kaiserlian D, et al. **J Immunol Methods** 1989 Sep 1;122(2):243–52
Flow sorting of hybrid hybridomas using the DNA stain Hoechst 33342. Karawajew L, et al. **J Immunol Methods** 1990 May 25;129(2):277–82
A one step cell sorting procedure for the enrichment of murine bone marrow CFU-S which is independent of their proliferative activity. Lepault F, et al. **J Immunol Methods** 1990 Apr 17;128(2):249–55
A method for isolating neutrophils from moderate volumes of human blood. McFaul SJ. **J Immunol Methods** 1990 Jun 12;130(1):15–8
Comparison of mitogen responses of lymphocyte subpopulations separated using coated metal beads and by traditional methods. Morgan A, et al. **J Immunol Methods** 1990 Jan 24;126(1):1–6
Preservation of cytotoxic function during multi-cycle immunomagnetic cell separations of human NK cells using a new type of magnetic bead. Pflueger E, et al. **J Immunol Methods** 1990 May 25;129(2):165–73
Purification and properties of peritoneal eosinophils from pediatric dialysis patients. Roberts RL, et al. **J Immunol Methods** 1990 Feb 9;126(2):205–11
A modified method for isolating viable alveolar type II cells from human lung tissue [letter] Van Overveld FJ, et al. **J Immunol Methods** 1990 Aug 28;132(1):145–6
Monosized, magnetic polymer particles: their use in separation of cells and subcellular components, and in the study of lymphocyte function in vitro. Lea T, et al. **J Mol Recognit** 1988 Feb;1(1):9–18 (49 ref.)
Studies in rat liver perfusion for optimal harvest of hepatocytes. Aiken J, et al. **J Pediatr Surg** 1990 Jan; 25(1):140–4; discussion 144–5
Comparison of two techniques to isolate microvascular endothelial cells from the omentum. Sterpetti AV, et al. **J Surg Res** 1990 Feb;48(2):101–6
Isolation of HIV using T-lymphocyte 'panning': methodological aspects. Nielsen C, et al. **J Virol Methods** 1989 Oct;26(1):105–14
Two populations of mouse lymphokine-activated killer cells separated by use of soybean agglutinin. Takano M, et al. **Jpn J Cancer Res** 1989 Dec;80(12):1228–37
Separation of human neutrophils in self-generated continuous density gradients of Percoll. Uyesaka N, et al. **Jpn J Physiol** 1989;39(4):629–34
An improved method for isolating cardiac myocytes useful for patch-clamp studies. Yazawa K, et al. **Jpn J Physiol** 1990;40(1):157–63
Sterile sorting of Leu-11a-positive cells (NK cells) using flow cytometry and the antineoplastic effects on brain tumors. Fujiwara H, et al. **Life Sci** 1989;45(22):2103–7
Tumour cell purging for autologous bone marrow transplantation. Trickett AE. **Med Lab Sci** 1990 Apr; 47(2):120–31 (66 ref.)
Separation of cells and cell organelles by partition in aqueous polymer two-phase systems. Albertsson PA. **Methods Enzymol** 1989;171:532–49
Separation of cell populations by free-flow electrophoresis. Heidrich HG, et al. **Methods Enzymol** 1989;171:513–31
Flow cytometry: rapid isolation and analysis of single cells. Jensen BD, et al. **Methods Enzymol** 1989;171:549–81
Cell isolation techniques: use of enzymes and chelators. Lewin MJ, et al. **Methods Enzymol** 1989;171:444–61
Cell separation by gradient centrifugation methods. Pretlow TG, et al. **Methods Enzymol** 1989;171:462–82
Cell separation by elutriation: major and minor cell types from complex tissues. Sanders MJ, et al. **Methods Enzymol** 1989;171:482–97
Cell separation using velocity sedimentation at unit gravity and buoyant density centrifugation. Wells J. **Methods Enzymol** 1989;171:497–512
Immunoselective cell separation. Wormmeester J, et al. **Methods Enzymol** 1990;184:314–9
Filterability of different human leukocyte subpopulations. Ciuffetti G, et al. **Microvasc Res** 1989 Nov;38(3):314–6
Development of a method to increase the proportion of polychromatic erythrocytes from mouse bone marrow for more rapid evaluation of the micronucleus assay. Comparison with the conventional method with respect to micronucleus frequency and time required for preparation and evaluation. Selig C, et al. **Mutat Res** 1990 Feb;234(1):23–30
Immunological, morphological, and electrophysiological variation among retinal ganglion cells purified by panning. Barres BA, et al. **Neuron** 1988 Nov;1(9):791–803
A dissociation procedure for mammalian taste cells. Herness MS. **Neurosci Lett** 1989 Nov 20;106(1–2):60–4
Utilization of magnetic affinity cell sorting for the isolation of stable transformants. Giordano T, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7540
Assay of cellular immune responses in rabbits sensitized to retinal antigens. Broekhuyse RM, et al. **Ophthalmic Res** 1989;21(6):436–9
Stem cell selection—clinical experience. Berenson RJ, et al. **Prog Clin Biol Res** 1990;333:403–10; discussion 411–3
Positive stem cell selection—basic science. Civin CI, et al. **Prog Clin Biol Res** 1990;333:387–401; discussion 402
The efficiency of a new cell separation technique in bone marrow purging without damaging the purged tumor cells. Handgretinger R, et al. **Prog Clin Biol Res** 1990;333:303–9
Using elutriation to engineer bone marrow allografts. Noga SJ, et al. **Prog Clin Biol Res** 1990;333:345–59; discussion 360–1
Culture of purified pluripotent haemopoietic stem cells. Visser JW, et al. **Prog Clin Biol Res** 1990;352:1–8
Separation of mature rat ventral prostate epithelial and fibroblast cells. Montpetit ML, et al. **Prostate** 1989; 15(4):315–25
Cellular analysis of functional mononuclear cells from chronically inflamed gingival tissue. McGhee ML, et al. **Reg Immunol** 1989 Mar–Apr;2(2):103–10
A new technique using an aggregating antibody against glycophorin-A for purging Ficoll-Paque-separated leucocytes of contaminating erythroid lineage cells. Heldrup J. **Scand J Immunol** 1990 Mar;31(3):289–96
Isolated proximal tubular cells from rat kidney as an in vitro model for studies on nephrotoxicity. I. An improved method for preparation of proximal tubular cells and their functional characterization by alpha-methylglucose uptake. Boogaard PJ, et al. **Toxicol Appl Pharmacol** 1989 Oct; 101(1):135–43
Preparation of white cell-depleted blood. Comparison of two bedside filter systems. Böck M, et al. **Transfusion** 1990 Jan; 30(1):26–9
Removal of white cells from red cells by transfusion through a new filter. Sirchia G, et al. **Transfusion** 1990 Jan; 30(1):30–3
Filtration. A method to prepare white cell-poor platelet concentrates with optimal preservation of platelet viability. van Marwijk Kooy M, et al. **Transfusion** 1990 Jan; 30(1):34–8
A simple method for bulk separation of highly purified human islets of Langerhans. Calafiore R, et al. **Transplant Proc** 1990 Apr;22(2):789–90
Intraductal injection of collagenase solution at the time of harvesting: a possible solution for preservation and collagenase digestion. Ohzato H, et al. **Transplant Proc** 1990 Apr;22(2):782–3
Isolation of pancreatic islets from dogs. Semiautomated purification on albumin gradients. Alejandro R, et al. **Transplantation** 1990 Aug;50(2):207–10
A simple method for the release of islets by controlled collagenase digestion of the human pancreas. London NJ, et al. **Transplantation** 1990 Jun;49(6):1109–13
Sepracell-MN for mononuclear cell separation from cattle: effect on mitogen-and antigen-induced lymphocyte blastogenesis. Confer AW, et al. **Vet Immunol Immunopathol** 1989 Aug;22(1):79–89
Negative enrichment of bovine T lymphocytes with monoclonal antibodies and magnetic microspheres. Griebel PJ, et al. **Vet Immunol Immunopathol** 1989 Sep;22(2):161–73
An evaluation of the mononuclear cells derived from bovine mammary gland dry secretions using leukocyte antigen specific monoclonal antibodies, light scattering properties and non-specific esterase staining. Hurley DJ, et al. **Vet Immunol Immunopathol** 1990 Jun;25(2):177–93
Leukocyte-poor platelet concentrates at the bedside by filtration through Sepacell-PL. Miyamoto M, et al. **Vox Sang** 1989;57(3):164–7
Storage of leukocyte-poor red cell concentrates: filtration in a closed system using a sterile connection device. Pietersz RN, et al. **Vox Sang** 1989;57(1):29–36
[Isolation of tubular proximal cells of the human kidney by affinity chromatography using Lotus tetragonolobus lectin] Merlet D, et al. **C R Acad Sci [III]** 1990;310(12):565–70 (Eng. Abstr.) **(Fre)**
[Free flow electrophoresis. Application to the separation of 2 populations of proximal tubule cells from the rabbit kidney] Toutain H, et al. **Pathol Biol (Paris)** 1989 Oct; 37(8):869–74 (Eng. Abstr.) **(Fre)**
[Leukocyte removal in a closed system of human red-cell concentrates: a technic coupled with the automated extraction of the buffy coat using a sterile connector from a filtration kit] Angué M, et al. **Rev Fr Transfus Hemobiol** 1989 Sep;32(4):265–75 (Eng. Abstr.) **(Fre)**
[Performance of Pall filters (RC 100 and PL 100) for the removal of leukocytes from red-cell concentrates and platelets] Hurel C, et al. **Rev Fr Transfus Hemobiol** 1989 Sep;32(4):307–22 (Eng. Abstr.) **(Fre)**
[Evaluation of a modified immunomagnetic procedure for the purging of neuroblastoma cells from bone marrow] Kremens B, et al. **Monatsschr Kinderheilkd** 1990 Jun; 138(6):331–6 (Eng. Abstr.) **(Ger)**
[Single cell preparation of the human heart. Technic of dissociation and isolation of myocytes] Donegani E, et al. **Minerva Cardioangiol** 1990 Apr;38(4):157–64 (Eng. Abstr.) **(Ita)**
[Advances in the biochemical and immunohistochemical study of kidney tubule transport] Miyanoshita A, et al. **Nippon Rinsho** 1989 Jul;47(7):1473–9 **(Jpn)**
[A method of separating mononuclears on a density gradient] Prilutskii AS, et al. **Lab Delo** 1990;(2):20–3 (Eng. Abstr.) **(Rus)**
[Preparation of a suspension of isolated hepatocytes using the Soviet drug collalitin] Toshchakov VIu, et al. **Vopr Med Khim** 1989 Jul–Aug;35(4):134–7 (Eng. Abstr.) **(Rus)**

VETERINARY

Separation by carrier-free electrophoresis of subpopulations of bovine alveolar macrophages. Seidel A, et al. **Vet Immunol Immunopathol** 1990 Mar;24(3):285–91

CELL SURFACE ANTIGENS see **ANTIGENS, SURFACE**

CELL SURFACE GLYCOPROTEINS see **MEMBRANE GLYCOPROTEINS**

CELL SURFACE PROTEINS see **MEMBRANE PROTEINS**

CELL SURVIVAL

Genetic and molecular studies of cellular immortalization. Smith JR, et al. **Adv Cancer Res** 1990;54:63–77 (43 ref.)
Developmental cell death: morphological diversity and multiple mechanisms. Clarke PG. **Anat Embryol (Berl)** 1990;181(3):195–213 (198 ref.)
Programmed cell death in the blastocyst. Pierce GB, et al. **Ann N Y Acad Sci** 1989;567:182–6 (29 ref.)
Growth factors for neuronal survival and process regeneration. Implications in the mammalian central nervous system [published erratum appears in Arch Neurol 1990 Jan;47(1):46] Lipton SA. **Arch Neurol** 1989 Nov; 46(11):1241–8 (109 ref.)
Addition of serum to electroporated cells enhances survival and transfection efficiency. Bahnson AB, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):752–7
Specific loss of microtubules in HL-60 cells leads to programmed cell death (apoptosis). Martin SJ, et al. **Biochem Soc Trans** 1990 Apr;18(2):299–301
Synergistic cytotoxic effects of recombinant human tumor necrosis factor, interferons, and heat-stress. Dubois MF, et al. **Cancer Res** 1989 Oct 15;49(20):5618–22
Failure of chronic glutathione elevation to reduce cytotoxicity produced by exposure to cis-diamminedichloroplatinum(II), ionizing radiation, or hyperthermia. Freeman ML, et al. **Cancer Res** 1990 Sep 1;50(17):5296–300
Cytotoxic interactions of heat and an ether lipid analogue in human ovarian carcinoma cells. Fujiwara K, et al. **Cancer Res** 1989 Nov 15;49(22):6285–9
Expression of endogenous tumor necrosis factor as a protective protein against the cytotoxicity of exogenous tumor necrosis factor. Himeno T, et al. **Cancer Res** 1990 Aug 15;50(16):4941–5
Programmed cell death during regression of PC-82 human prostate cancer following androgen ablation. Kyprianou N, et al. **Cancer Res** 1990 Jun 15;50(12):3748–53
Thermal response of oncogene-transfected rat cells. Li GC, et al. **Cancer Res** 1990 Aug 1;50(15):4515–21
Possible role for p34cdc2 kinase in etoposide-induced cell death of Chinese hamster ovary cells. Lock RB, et al. **Cancer Res** 1990 Jun 15;50(12):3767–71
Determination of the length of the histological stages of apoptosis in normal liver and in altered hepatic foci of rats. Bursch W, et al. **Carcinogenesis** 1990 May;11(5):847–53
Glutathione pool size affects cell survival after hyperthermic treatment. Freeman ML, et al. **Cell Biol Toxicol** 1985 Jun; 1(3):213–21
Cultured Chinese hamster cells undergo apoptosis after exposure to cold but nonfreezing temperatures. Nagle WA, et al. **Cryobiology** 1990 Aug;27(4):439–51
Factors influencing survival of mammalian cells exposed to hypothermia. IV. Effects of iron chelation. Zieger MA, et al. **Cryobiology** 1990 Aug;27(4):452–64
Vitality measurement using spectrum shift in Hoechst 33342 stained cells. Ellwart JW, et al. **Cytometry** 1990; 11(2):239–43
Cytochrome P-450, reductive metabolism, and cell injury. De Groot H, et al. **Drug Metab Rev** 1989;20(2–4):275–84 (47 ref.)
Ca2+-activated mechanisms in cell killing. Nicotera P, et al. **Drug Metab Rev** 1989;20(2–4):193–201 (22 ref.)
Programmed killing of human cells by means of an inducible clone of parvoviral genes encoding non-structural proteins. Caillet-Fauquet P, et al. **EMBO J** 1990 Sep;9(9):2989–95
The relationship between treatment duration and temperature for hyperthermia induced lethality of cultured murine cells. Influence of medium conditions. Haveman J, et al. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1629–35
Involvement of mitochondria in cell degeneration. Corbisier P, et al. **Eur J Cell Biol** 1990 Feb;51(1):173–82
Proportions of H1 histone subspecies in human fibroblasts shift during density-dependent growth arrest independent of replicative senescence. Houde M, et al. **Exp Cell Res** 1989 Sep;184(1):256–61
A quantitative measurement of cell damage by means of 51Cr-binding. Scaife JF, et al. **Exp Cell Res** 1967 Jun;

46(3):612–5
Density–dependent tumor cell death and reversible cell cycle arrest: mutually exclusive modes of monocyte–mediated growth control. van der Bosch J, et al. **Exp Cell Res** 1990 Apr;187(2):185–92
Replicative senescence of human skin fibroblasts correlates with a loss of regulation and overexpression of collagenase activity. West MD, et al. **Exp Cell Res** 1989 Sep; 184(1):138–47
Polyamine metabolism and cell–cycle–dependent gene expression in IMR–90 human diploid fibroblasts during senescence in culture. Chen KY, et al. **Exp Gerontol** 1989; 24(5–6):523–37
Antecedents of cell aging research. Hayflick L. **Exp Gerontol** 1989;24(5–6):355–65 (28 ref.)
Long–term growth of diploid human fibroblasts in low serum media. Wistrom C, et al. **Exp Gerontol** 1990;25(2):97–105
Reduced levels of ADP–ribosylatable elongation factor–2 in aged and SV40–transformed human cell cultures. Riis B, et al. **FEBS Lett** 1990 Jun 18;266(1–2):45–7
Genetic coregulation of longevity and antioxienzymes in Neurospora crassa. Munkres KD. **Free Radic Biol Med** 1990;8(4):355–61
The extended survival of tw5/tw5 mouse embryo cells in vitro. Garside W, et al. **Genet Res** 1990 Feb;55(1):21–5
Why dietary restriction may extend life: a hypothesis. Yu BP. **Geriatrics** 1989 Dec;44(12):87–90 (21 ref.)
Morphological, physiological and biochemical parameters associated with cell injury: a review. Liepins A. **Immunopharmacol Immunotoxicol** 1989;11(4):539–58 (71 ref.)
Cytotoxic activity of lactobacilli isolated from plant and dairy sources. Manjunath N, et al. **Indian J Exp Biol** 1989 Jan; 27(1):72–5
Thermal sensitivity of CHO cells with different shapes. Yasui LS, et al. **Int J Hyperthermia** 1990 Jan–Feb;6(1):57–65
Comparison between X–rays and SR 4233 for cytotoxicity and repair of potentially lethal damage in human cells. Biedermann KA, et al. **Int J Radiat Biol** 1989 Nov; 56(5):813–6
Prediction of cell survival curves from DNA double–strand break repair data for low– and high–LET radiation. Ostashevsky JY. **Int J Radiat Biol** 1990 Mar;57(3):523–36
Time–temperature analysis of cell killing of BHK cells heated at temperatures in the range of 43.5 degrees C to 57.0 degrees C. Borrelli MJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):389–99
Effects of pH on heat sensitization of mammalian cells with procaine hydrochloride. Li XL, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):933–5
Reduction of DNA primase activity in aging but still proliferating cells. Collins JM, et al. **J Cell Physiol** 1990 Apr;143(1):52–9
Increased thermostability of thermotolerant CHL V79 cells as determined by differential scanning calorimetry. Lepock JR, et al. **J Cell Physiol** 1990 Mar;142(3):628–34
Human macrophage–mediated cytotoxicity of Schistosoma mansoni. Functional and structural features of the effector cells. Cottrell BJ, et al. **J Cell Sci** 1989 Dec;94 (Pt 4):733–41
An experimental system for the molecular analysis of the aging process: the budding yeast Saccharomyces cerevisiae. Jazwinski SM. **J Gerontol** 1990 May;45(3):B68–74 (83 ref.)
Programmed cell death: new thoughts and relevance to aging. Lockshin RA, et al. **J Gerontol** 1990 Sep; 45(5):B135–40 (106 ref.)
Molecular analysis of clonal stability and longevity in B cell memory. Dell CL, et al. **J Immunol** 1989 Nov 15; 143(10):3364–70
Deregulated Bcl–2 gene expression selectively prolongs survival of growth factor–deprived hemopoietic cell lines. Nuñez G, et al. **J Immunol** 1990 May 1;144(9):3602–10
T cell receptor–mediated DNA fragmentation and cell death in T cell hybridomas. Odaka C, et al. **J Immunol** 1990 Mar 15;144(6):2096–101
Activation–induced cell death in T cell hybridomas is due to apoptosis. Morphologic aspects and DNA fragmentation. Shi YF, et al. **J Immunol** 1990 May 1; 144(9):3326–33
On the relationships between the rate of cytoskeletal stable assemblies turnover, stability of the differentiated state, development and aging. Wagner AP. **J Theor Biol** 1989 May 22;138(2):175–84
Characterization of the products of a gene expressed during androgen–programmed cell death and their potential use as a marker of urogenital injury. Bandyk MG, et al. **J Urol** 1990 Feb;143(2):407–13
Selective killing of transformed rat cells by minute virus of mice does not require infectious virus production. Guetta E, et al. **J Virol** 1990 Jan;64(1):458–62
Partial reversion of conditional transformation correlates with a decrease in the sensitivity of rat cells to killing by the parvovirus minute virus of mice but not in their capacity for virus production: effect of a temperature–sensitive v–src oncogene. Salome N, et al. **J Virol** 1989 Nov;63(11):4797–807
Mechanisms of cell injury by activated oxygen species. Farber JL, et al. **Lab Invest** 1990 Jun;62(6):670–9 (63 ref.)
A novel dye exclusion assay for measurement of cell response following in vitro exposure to radiation or drugs. Hanson JA, et al. **Leuk Res** 1989;13(10):943–7
Collagen synthesis and deposition in cultured fibroblasts from subcutaneous radiation–induced fibrosis. Modification as a function of cell aging. el Nabout R, et al. **Matrix** 1989 Nov;9(5):411–20
Induction of the TRPM–2 gene in cells undergoing programmed death. Buttyan R, et al. **Mol Cell Biol** 1989 Aug;9(8):3473–81
Expression of transforming growth factor–beta in the rat ventral prostate during castration–induced programmed cell death. Kyprianou N, et al. **Mol Endocrinol** 1989 Oct; 3(10):1515–22
Programmed death of autoreactive thymocytes. MacDonald HR, et al. **Nature** 1990 Feb 15;343(6259):642–4
Stress–resistance conferred by high level of bcl–2 alpha protein in human B lymphoblastoid cell. Tsujimoto Y. **Oncogene** 1989 Nov;4(11):1331–6
Life span of human corneal endothelial cells in long–term cultures. Engelmann K, et al. **Ophthalmic Res** 1989; 21(4):303–8
Amine oxidases, programmed cell death, and tissue renewal. Pierce GB, et al. **Philos Trans R Soc Lond [Biol]** 1990 Mar 12;327(1239):67–74 (44 ref.)
Gene activation is required for developmentally programmed cell death. Schwartz LM, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6594–8
Failla memorial lecture. The search for critical cellular targets damaged by heat. Dewey WC. **Radiat Res** 1989 Nov;120(2):191–204 (70 ref.)
Differences in thermotolerance induced by heat or sodium arsenite: cell killing and inhibition of protein synthesis. Lee YJ, et al. **Radiat Res** 1990 Mar;121(3):295–303
Thermal tolerance during S phase for cell killing and chromosomal aberrations. Li XL, et al. **Radiat Res** 1990 May;122(2):193–6
Time–temperature relationships for L1A2 cells step–down heated from 38 to 45 degrees C in vitro. Lindegaard JC, et al. **Radiat Res** 1990 Mar;121(3):282–7
Proteolysis and cell death. Amenta JS, et al. **Revis Biol Celular** 1989;21:401–22 (48 ref.)
Replicative senescence: the human fibroblast comes of age. Goldstein S. **Science** 1990 Sep 7;249(4973):1129–33 (53 ref.)
Estrogen enhances cytotoxicity of hyperthermia on cultured transformed cells. Ueo H, et al. **Semin Surg Oncol** 1990; 6(1):14–8
Assessment of different preservation and storage conditions on aortic valves: introduction of a quantitative measuring method of the integrity of endothelial cells. Kümper A, et al. **Thorac Cardiovasc Surg** 1989 Oct;37(5):294–8
Platelet storage lesions in second–generation containers: correlation with in vivo behavior with storage up to 14 days. Holme S, et al. **Vox Sang** 1990;59(1):12–8
[Physiopathology of neural death and of gliosis] Moonen G. **Bull Mem Acad R Med Belg** 1990;145(1–2):110–8 (Eng. Abstr.) **(Fre)**
[Possibilities and limitations of fibroblast cultures in the study of animal aging] Van Gansen P, et al. **Cellule** 1987; 74:317–73 (134 ref.) (Eng. Abstr.) **(Fre)**
[A new in vitro test of endothelial viability. Vital staining using Janus green with spectrophotometric analysis of the color extract] Hartmann C, et al. **Ophtalmologie** 1989 Jan–Mar;3(1):16–8 (Eng. Abstr.) **(Fre)**
[Morphology and vital reaction in heart injuries] Bratzke H, et al. **Beitr Gerichtl Med** 1989;47:55–61 (Eng. Abstr.) **(Ger)**
[Initial results of immunotherapy approaches to tumor treatment in the animal model] Kau RJ, et al. **Laryngorhinootologie** 1989 Aug;68(8):437–41 (Eng. Abstr.) **(Ger)**
[Survival rate of desmodontal cells in relation to their extraoral dehydration] Zimmermann M, et al. **Schweiz Monatsschr Zahnmed** 1989;99(9):1007–10 (Eng. Abstr.) **(Ger)**
[Morphometric proof of function–related aging] Rother P, et al. **ZFA** 1989 Jul–Aug;44(4):219–23 (11 ref.) (Eng. Abstr.) **(Ger)**
[Cellular thermosensitivity] Kano E, et al. **Gan No Rinsho** 1989 Oct;35(13):1507–11 (Eng. Abstr.) **(Jpn)**
[Survival of 4–cell mouse embryos derived from in vitro fertilization after ultrarapid freezing and thawing] Nakagata N. **Jikken Dobutsu** 1989 Jul;38(3):279–82 (Eng. Abstr.) **(Jpn)**
[Significance of tetrazolium salt based colorimetric assay (MTT assay) for isolated rabbit parietal cell] Yoshida Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 May; 87(5):1263 **(Jpn)**
[The effect of fast electrons and menadione on the structural–functional status of Ehrlich ascites carcinoma cells in the early periods following irradiation] Sellanov AS. **Radiobiologiia** 1989 Sep–Oct;29(5):595–600 (Eng. Abstr.) **(Rus)**

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Effect of calcium influx blocker verapamil on adriamycin–induced cytotoxicity in leukemia cells in vitro. Mircheva JJ, et al. **Acta Physiol Pharmacol Bulg** 1989; 15(4):3–8
Chemistry and biology of a novel lipid contaminant of some endotoxin preparations with selective cytotoxicity to transformed cells. Keler T, et al. **Adv Exp Med Biol** 1990; 256:163–84
The mechanism of 2–chlorodeoxyadenosine–induced cell death. Wataya Y, et al. **Adv Exp Med Biol** 1989; 253B:227–34
Neurotoxicity at the N–methyl–D–aspartate receptor in energy–compromised neurons. An hypothesis for cell death in aging and disease. Henneberry RC, et al. **Ann N Y Acad Sci** 1989;568:225–33
Covalent and noncovalent interactions in acute lethal cell injury caused by chemicals. Nelson SD, et al. **Annu Rev Pharmacol Toxicol** 1990;30:169–95 (263 ref.)
Daunorubicin coupled to monoclonal antibodies via a cis–aconitic anhydride linker: biochemical and cytotoxic properties revisited. Ahmad A, et al. **Anticancer Res** 1990 May–Jun;10(3):837–43
Comparison of two cytotoxicity assays—tetrazolium derivative reduction (MTT) and tritiated thymidine uptake—on three malignant mouse cell lines using chemotherapeutic agents and investigational drugs. Arnould R, et al. **Anticancer Res** 1990 Jan–Feb; 10(1):145–54
Differential sensitivity of tumorigenic and genetically related non–tumorigenic cells to cytotoxic polyunsaturated fatty acids. Bégin ME, et al. **Anticancer Res** 1989 Jul–Aug; 9(4):1049–52
Sequence dependent synergistic cytotoxicity between etoposide and fluoropyrimidines. Damon LE, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1761–7
In vitro cytotoxicity of hexamethylmelamine (HMM) and its derivatives. Dubois J, et al. **Anticancer Res** 1990 May–Jun;10(3):827–32
Cytotoxic activity of aryl and heteroaroxylazoxy derivatives. Fruttero R, et al. **Anticancer Res** 1989 Jul–Aug;9(4):971–2
Potentiation of 5–fluorouracil cytotoxicity by combining hyperthermia and dipyridamole in vitro. Maehara Y, et al. **Anticancer Res** 1989 Jul–Aug;9(4):967–9
An antimelanoma–barley ribosome inactivating protein conjugate is cytotoxic to melanoma cells in vitro. Ovadia M, et al. **Anticancer Res** 1990 May–Jun;10(3):671–5
Cytotoxicity and DNA damaging effects of a new nitrosourea, fotemustine, diethyl–1–(3–(2–chloroethyl)–3–nitrosoureido) ethylphosphonate–S10036. Tapiero H, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1617–22
Metronidazole enhances the cytotoxic synergism produced by the combination of 1–beta–arabinofuranosylcytosine and cis–diamminedichloroplatinum. Trujillo JM, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1751–6
Modulation of the in vitro cytotoxicity of seven anticancer drugs by protein synthesis inhibition using sparsomycin. Zylicz Z, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1835–40
Antagonism of the cytotoxic but not antiviral effects of ara–sangivamycin by adenosine. Birch GM, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1606–8
Cytotoxic ester derivatives of the mammary tumor inhibiting antiestrogen 2,3–bis(2–fluoro–4–hydroxyphenyl)–2,3–dimethylbutane. Schwarz W, et al. **Arch Pharm (Weinheim)** 1990 Feb; 323(2):121–4
Activation of natural killer cell cytotoxicity of human blood monocytes by a low molecular weight component from viscum album extract. Klett CY, et al. **Arzneimittelforschung** 1989 Dec;39(12):1580–5
Increased therapeutic efficacy of zidovudine in combination with vitamin E. Gogu SR, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):401–7
Phytohemagglutinin rapidly lyses S49 T–lymphoma cells and the cytotoxicity is not mediated by generation of cAMP or increase in cytosolic calcium. Gupta A, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1035–43
"Thymineless" death in androgen–independent prostatic cancer cells. Kyprianou N, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):73–81
Inhibition of HIV–replication by 3'–fluoro–modified nucleosides with low cytotoxicity. Matthes E, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):488–95
Protection by acidotic pH and fructose against lethal injury to rat hepatocytes from mitochondrial inhibitors, ionophores and oxidant chemicals. Nieminen AL, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):600–6
Phorbol esters inhibit apoptosis in IL–2–dependent T lymphocytes. Rodríguez–Tarduchy G, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1069–75
Hydrogen peroxide cytotoxicity. Low–temperature enhancement by ascorbate or reduced lipoate. Jonas SK, et al. **Biochem J** 1989 Dec 15;264(3):651–5
Prolonged high intracellular free calcium concentrations induced by ATP are not immediately cytotoxic in isolated rat hepatocytes. Changes in biochemical parameters implicated in cell toxicity. Nagelkerke JF, et al. **Biochem J** 1989 Oct 15;263(2):347–53
Cytotoxicity and metabolism of 4–hydroxy–2–nonenal and 2–nonenal in H2O2–resistant cell lines. Do aldehydic by–products of lipid peroxidation contribute to oxidative stress? Spitz DR, et al. **Biochem J** 1990 Apr 15;267(2):453–9
Cytotoxic effect of 1–methyl–4–phenylpyridinium ion on human melanoma cell lines, HMV–II and SK–MEL–44, is dependent on the melanin contents and caused by inhibition of mitochondrial electron transport. Umemura T, et al. **Biochem Med Metab Biol** 1990 Aug;44(1):51–8
Evidence for a direct role of intracellular calcium in paracetamol toxicity. Boobis AR, et al. **Biochem Pharmacol** 1990 Apr 15;39(8):1277–81
Requirement of a reactive aldehyde moiety for aldehyde–mediated protection against

cis-dichlorodiammineplatinum-induced cell inactivation. Dornish JM, et al. **Biochem Pharmacol** 1990 Jan 15; 39(2):309–18

Protein thiol depletion and the killing of cultured hepatocytes by hydrogen peroxide. Kyle ME, et al. **Biochem Pharmacol** 1989 Nov 1;38(21):3797–805

Cell photosensitization by 5-iminodaunomycin activated with red light. Andreoni A, et al. **Biochim Biophys Acta** 1989 Oct 30;1014(1):8–13

Cytotoxic effects of aflatoxin B1 and its association with cellular components in chicken embryo primary cultured cells. Iwaki M, et al. **Biochim Biophys Acta** 1990 Aug 17; 1035(2):146–53

Cytotoxicity and effect of glycyl-D-phenylalanine-2-naphthylamide on lysosomes. Jadot M, et al. **Biochim Biophys Acta** 1990 Aug 24; 1027(2):205–9

Tumor growth-inhibitory glycoprotein secreted from the mouse brain at terminal stage of the ontogeny: molecular homogeneity and requirement of the retained protein conformation for exhibition of the cytotoxic action. Miwa N, et al. **Biochim Biophys Acta** 1990 Jun 20;1034(3):309–17

Characteristics of the growth inhibition and cytotoxicity of long-chain (sphingoid) bases for Chinese hamster ovary cells: evidence for an involvement of protein kinase C. Stevens VL, et al. **Biochim Biophys Acta** 1990 Jan 23; 1051(1):37–45

Different effects of chlorpromazine on bleomycin- and epirubicin induced cytotoxicity. Grankvist K, et al. **Biosci Rep** 1990 Apr;10(2):173–7

Effector mechanism of human monocyte-mediated cytotoxicity: role of a new tumor cytotoxic factor distinct from interleukin 1 and tumor necrosis factor alpha. Sone S, et al. **Biotherapy** 1989;1(3):233–43

The effect of hyperthermia in combination with melphalan on drug-sensitive and drug-resistant CHO cells in vitro. Bates DA, et al. **Br J Cancer** 1990 Aug;62(2):183–8

Structural requirements for bioactivation of anticonvulsants to cytotoxic metabolites in vitro. Riley RJ, et al. **Br J Clin Pharmacol** 1989 Oct;28(4):482–7

The effect of ultrasound on the cytotoxicity of adriamycin. Loverock P, et al. **Br J Radiol** 1990 Jul;63(751):542–6

Growth inhibition of MXT mammary carcinoma by enhancing programmed cell death (apoptosis) with analogs of LH-RH and somatostatin. Szende B, et al. **Breast Cancer Res Treat** 1989 Dec;14(3):307–14

In vitro cytotoxicities of inorganic lead and di- and trialkyl lead compounds to fish cells. Babich H, et al. **Bull Environ Contam Toxicol** 1990 Mar;44(3):456–60

Cellular NAD+ and ATP levels in alkylation-induced cytotoxicity enhanced by an inhibitor of poly(ADP-ribose) synthesis. Wells RL, et al. **Cancer Biochem Biophys** 1990 Apr;11(2):97–105

A model for tumor cell killing by topoisomerase poisons. Zhang H, et al. **Cancer Cells** 1990 Jan;2(1):23–7 (32 ref.)

Involvement of the cellular vacuolar system with the cytotoxicity of bleomycin-like agents. Lazo JS, et al. **Cancer Commun** 1990;2(2):81–6

Cytotoxicity and antitumor activity of 2',2'-difluorodeoxycytidine (Gemcitabine). Grindey GB, et al. **Cancer Invest** 1990;8(2):313

Decreased DNA interstrand cross-linking and cytotoxicity induced in human brain tumor cells by 1,3-bis(2-chloroethyl)-1-nitrosourea after in vitro reaction with glutathione. Ali-Osman F, et al. **Cancer Res** 1989 Nov 1;49(21):5954–8

Tolerance to O6-methylguanine and 6-thioguanine cytotoxic effects: a cross-resistant phenotype in N-methylnitrosourea-resistant Chinese hamster ovary cells. Aquilina G, et al. **Cancer Res** 1990 Jul 15; 50(14):4248–53

Interactions of thymidine, hyperthermia, and cis-diammine-1,1-cyclobutane dicarboxylate platinum (II) in human T-cell leukemia. Cohen JD, et al. **Cancer Res** 1989 Nov 1;49(21):5805–9

In vitro determination of uptake, retention, distribution, biological efficacy, and toxicity of boronated compounds for neutron capture therapy: a comparison of porphyrins with sulfhydryl boron hydrides. Fairchild RG, et al. **Cancer Res** 1990 Aug 15;50(16):4860–5

Porphyrin photosensitivity in cell lines expressing a heat-resistant phenotype. Gomer CJ, et al. **Cancer Res** 1990 Sep 1;50(17):5365–8

Cytotoxicity of long and short crocidolite asbestos fibers in vitro and in vivo. Goodglick LA, et al. **Cancer Res** 1990 Aug 15;50(16):5153–63

Augmentation of cytotoxic effect of tumor necrosis factor on human immunodeficiency virus-infected cells by staurosporine, a potent protein kinase C inhibitor. Hamamoto Y, et al. **Cancer Res** 1990 Sep 1;50(17):5287–90

Differential requirement of DNA replication for the cytotoxicity of DNA topoisomerase I and II inhibitors in Chinese hamster DC3F cells. Holm C, et al. **Cancer Res** 1989 Nov 15;49(22):6365–8

Effects on growth and energy metabolism in untransformed and transformed BALB/c mouse fibroblasts by a novel cytotoxic compound. Keler T, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):7093–7

Action of hydroxyurea on the nucleic acid metabolism and viability of HeLa cells. Kim JH, et al. **Cancer Res** 1967 Jul;27(7):1301–5

Hyperthermic enhancement of rhodamine 123 cytotoxicity in B16 mouse melanoma cells in vitro. Krag DN, et al. **Cancer Res** 1990 Apr 15;50(8):2385–9

Expression of a resistance mechanism in ovarian and cervical carcinoma cells prevents their lysis by gamma-interferon. Massad LS, et al. **Cancer Res** 1990 Aug 15;50(16):4923–8

Reduction in cis-diamminedichloroplatinum(II)-induced cytotoxicity, sister chromatid exchange, and DNA interstrand cross-links in 9L cells treated with the polyamine biosynthesis inhibitor (2R,5R)-6-heptyne-2,5-diamine. Milam KM, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):6945–8

Hypersensitivity to cell killing and faulty repair of 1-beta-D-arabinofuranosylcytosine-detectable sites in human (ataxia-telangiectasia) fibroblasts treated with 4-nitroquinoline 1-oxide. Mirzayans R, et al. **Cancer Res** 1989 Oct 15;49(20):5523–9

Enhancement of trimetrexate cytotoxicity in vitro and in vivo by carboxypeptidase G2. Romanini A, et al. **Cancer Res** 1989 Nov 1;49(21):6019–23

Ultrasound enhanced drug toxicity on Chinese hamster ovary cells in vitro. Saad AH, et al. **Cancer Res** 1989 Nov 1; 49(21):5931–4

Influence of vitamin B2 on formation of chromium(V), alkali-labile sites, and lethality of sodium chromate(VI) in Chinese hamster V-79 cells. Sugiyama M, et al. **Cancer Res** 1989 Nov 15;49(22):6180–4

Cross-resistance and glutathione-S-transferase-pi levels among four human melanoma cell lines selected for alkylating agent resistance. Wang YY, et al. **Cancer Res** 1989 Nov 15;49(22):6185–92

Structure-activity studies of the nonphorbol tumor promoter palytoxin in Swiss 3T3 cells. Wattenberg EV, et al. **Cancer Res** 1989 Nov 1;49(21):5837–42

Effects of antibiotics on cellular viability in porcine heart valve tissue [published erratum appears in Cardiovasc Res 1990 Feb;24(2):168] Hu JF, et al. **Cardiovasc Res** 1989 Nov; 23(11):960–4

Paraquat-resistant cell lines derived from Chinese hamster ovary cells. Lee TC, et al. **Cell Biol Int Rep** 1990 Mar; 14(3):235–46

MEIC—a new international multicenter project to evaluate the relevance to human toxicity of in vitro cytotoxicity tests. Bondesson I, et al. **Cell Biol Toxicol** 1989 Nov; 5(3):331–47

Bovine spermatozoa as an in vitro model for studies on the cytotoxicity of chemicals: effects of chlorophenols. Seibert H, et al. **Cell Biol Toxicol** 1989 Nov;5(3):315–30

Differential effects of glutathione depletion and metallothionein induction on the induction of DNA single-strand breaks and cytotoxicity by tert-butyl hydroperoxide in cultured mammalian cells. Ochi T, et al. **Chem Biol Interact** 1989;72(3):335–45

Metallothionein accumulation in CHO Cdr cells in response to lead treatment. Rhee SJ, et al. **Chem Biol Interact** 1989; 72(3):347–61

Role of oxygen free radical formation in the mechanism of menogaril resistance in multidrug resistant tumor cells. Sinha BK, et al. **Chem Biol Interact** 1990;76(1):89–99

Studies on cytotoxic constituents in pericarps of Mallotus japonicus. IV. Arisawa M, et al. **Chem Pharm Bull (Tokyo)** 1990 Mar;38(3):698–700

A cytotoxic constituent of Lysimachia japonica THUNB. (Primulaceae) and the structure-activity relationships of related compounds. Arisawa M, et al. **Chem Pharm Bull (Tokyo)** 1989 Sep;37(9):2431–4

Diels-Alder reactions between dienamides and quinones: stereochemistry of the cycloadditions and cytotoxic activity of the adducts. Chigr M, et al. **Chem Pharm Bull (Tokyo)** 1990 Mar;38(3):688–91

Enhanced cytotoxicity in simultaneous and sequential drug-heat treatments of cultured Chinese hamster V79 cells. Suzuki T, et al. **Chem Pharm Bull (Tokyo)** 1989 Nov; 37(11):3058–60

Diethyldithiocarbamate (DEDC) enhances quinone mediated oxidative stress cytotoxicity in isolated hepatocytes by forming toxic quinone conjugates. Lauriault VV, et al. **Drug Metabol Drug Interact** 1989;7(1):1–15

Regulation of apoptosis in interleukin-3-dependent hemopoietic cells by interleukin-3 and calcium ionophores. Rodriguez-Tarduchy G, et al. **EMBO J** 1990 Sep; 9(9):2997–3002

GABA does not protect cerebro-cortical cultures against excitotoxic cell death. Erdö SL, et al. **Eur J Pharmacol** 1990 Jun 21;182(1):203–6

Hydrocortisone promotes survival and proliferation of granulocyte-macrophage progenitors via monocytes/macrophages. Pasquale D, et al. **Exp Hematol** 1989 Dec;17(11):1110–5

Contrasting cytotoxic mechanisms of similar antitumour diaziridinylbenzoquinones. Butler J, et al. **Free Radic Res Commun** 1990;8(4–6):231–9

Intracellular Ca2+ chelators prevent DNA damage and protect hepatoma 1C1C7 cells from quinone-induced cell killing. Dypbukt JM, et al. **Free Radic Res Commun** 1990; 8(4–6):347–54

Pharmacological interaction with quinoid antitumor drugs. Grankvist K, et al. **Free Radic Res Commun** 1990; 8(4–6):383–90

Cytotoxic effects of cyclophosphamide in the mouse seminiferous epithelium: DNA flow cytometric and morphometric analysis. Toppari J, et al. **Fundam Appl Toxicol** 1990 Jul;15(1):44–52

Chemical specificity of effector cell/tumor cell bridging by a Viscum album rhamnogalacturonan enhancing cytotoxicity of human NK cells. Mueller EA, et al. **Immunopharmacology** 1990 Jan-Feb;19(1):69–77

Influence of exogenous thymidine on killing and mutation of Chinese hamster V-79 cells by X-rays, ultraviolet light and N-methyl-N'-nitro-N-nitrosoguanidine. Ghosh R, et al. **Indian J Exp Biol** 1989 May;27(5):437–41

Glutathione depletion and cytotoxicity of buthionine sulphoximine and SR2508 in rodent and human cells. Ling CC, et al. **Int J Radiat Oncol Biol Phys** 1990 Feb; 18(2):325–30

Heterogeneous survival and cell kinetics responses of human astrocytoma clones to alpha-difluoromethylornithine in vitro. Barranco SC, et al. **Invest New Drugs** 1989 Jul; 7(2-3):155–61

The effects of the anti-tumor agent mezerein on the cytotoxic capacity and oxidative metabolism of human blood cells. Barton K, et al. **Invest New Drugs** 1989 Jul;7(2-3):179–88

Cytotoxicity of synthetic racemic ptilocaulin: a novel cyclic guanidine. Ruben RL, et al. **Invest New Drugs** 1989 Jul; 7(2-3):147–54

Involvement of protein kinase C in phorbol ester-induced sensitization of HeLa cells to cis-diamminedichloroplatinum(II). Basu A, et al. **J Biol Chem** 1990 May 25;265(15):8451–7

Tumor necrosis factor modulates epidermal growth factor receptor phosphorylation and kinase activity in human tumor cells. Correlation with cytotoxicity. Donato NJ, et al. **J Biol Chem** 1989 Dec 5;264(34):20474–81

Termination of DNA synthesis by 9-beta-D-arabinofuranosyl-2-fluoroadenine. A mechanism for cytotoxicity. Huang P, et al. **J Biol Chem** 1990 Sep 25;265(27):16617–25

Mitogenic and cytotoxic actions of tumor necrosis factor in BALB/c 3T3 cells. Role of phospholipase activation. Palombella VJ, et al. **J Biol Chem** 1989 Oct 25; 264(30):18128–36

Cytotoxicity of IL6-PE40 and derivatives on tumor cells expressing a range of interleukin 6 receptor levels. Siegall CB, et al. **J Biol Chem** 1990 Sep 25;265(27):16318–23

Deletion of lysine 84 to lysine 89 enhances the cytotoxicity and the receptor binding affinity of human lymphotoxin. Wakabayashi T, et al. **J Biol Chem** 1990 May 5; 265(13):7604–9

Drug-induced alterations of tumor necrosis factor-mediated cytotoxicity: discrimination of early versus late stage action. Kull FC Jr, et al. **J Cell Biochem** 1990 Jan;42(1):1–12

Dexamethasone-induced killing of neoplastic cells of lymphoid derivation: lack of early calcium involvement. Bansal N, et al. **J Cell Physiol** 1990 Apr;143(1):105–9

Altered cell cycle responses to insulin-like growth factor I, but not platelet-derived growth factor and epidermal growth factor, in senescing human fibroblasts. Chen YY, et al. **J Cell Physiol** 1990 Jul;144(1):18–25

Mechanism of human lymphotoxin and tumor necrosis factor induced destruction of cells in vitro: phospholipase activation and deacylation of specific-membrane phospholipids. Knauer MF, et al. **J Cell Physiol** 1990 Mar; 142(3):469–79

Comparative study of oxygen toxicity in human fibroblasts and endothelial cells. Michiels C, et al. **J Cell Physiol** 1990 Aug;144(2):295–302

Tumor promoters retard the loss of a transient subpopulation of cells in low passage Syrian hamster cell cultures. Ueo H, et al. **J Cell Physiol** 1990 Mar;142(3):505–13

In vitro cytotoxicity of polyindolenine alkaloids on rat hepatoma cell lines. Structure activity relationships. Adjibadé Y, et al. **J Ethnopharmacol** 1990 May;29(2):127–36

Reduction in tumor necrosis factor binding and cytotoxicity by hydrogen peroxide. Baud L, et al. **J Immunol** 1990 Jul 15;145(2):556–60

Effect of cyclosporin A on lymphopoiesis. II. Developmental defects of immature and mature thymocytes in fetal thymus organ cultures treated with cyclosporin A. Kosugi A, et al. **J Immunol** 1989 Nov 15;143(10):3134–40

The influence of calcium, sodium, and the Na+/Ca2+ antiport on susceptibility to cytolysin/perforin-mediated cytolysis. Kraut RP, et al. **J Immunol** 1990 May 1; 144(9):3498–505

Induction of apoptosis (programmed cell death) in human leukemic HL-60 cells by inhibition of RNA or protein synthesis. Martin SJ, et al. **J Immunol** 1990 Sep 15; 145(6):1859–67

IL-2 protects T lymphocytes from glucocorticoid-induced DNA fragmentation and cell death. Nieto MA, et al. **J Immunol** 1989 Dec 15;143(12):4166–70

Direct evidence for an intracellular role for tumor necrosis factor-alpha 1. Microinjection of tumor necrosis factor kills target cells. Smith MR, et al. **J Immunol** 1990 Jan 1; 144(1):162–9

The effects of pharmacologic agents on mitogen-induced cellular cytotoxicity in guinea pigs. Winkelstein A, et al. **J Immunopharmacol** 1978–79;1(1):87–103

Cytostatic trans-platinum(II) complexes. Farrell N, et al. **J Med Chem** 1989 Oct;32(10):2240–1

Structure-activity relationships of the lissoclinamides: cytotoxic cyclic peptides from the ascidian Lissoclinum patella. Hawkins CJ, et al. **J Med Chem** 1990 Jun; 33(6):1634–8

Synthesis and cytotoxicity of deoxyadenosine analogues: isomer distribution in the sodium salt glycosylation of

2,6-disubstituted purines. Kazimierczuk Z, et al. **J Med Chem** 1990 Jun;33(6):1683-7

Analysis of events associated with cell cycle arrest at G2 phase and cell death induced by cisplatin. Sorenson CM, et al. **J Natl Cancer Inst** 1990 May 2;82(9):749-55

Cytotoxic effects of food additives and pharmaceuticals on cells in culture as determined with the neutral red assay. Babich H, et al. **J Pharm Sci** 1990 Jul;79(7):592-4

The antitumor mechanism of progesterone antagonists is a receptor mediated antiproliferative effect by induction of terminal cell death. Michna H, et al. **J Steroid Biochem** 1989;34(1-6):447-53

Inhibitory effect of androgen on cell death of mouse uterine epithelium. Terada N, et al. **J Steroid Biochem** 1990 Jul 4;36(4):305-10

Effects of recombinant human basic fibroblast growth factor and its modified protein CS23 on survival of primary cultured neurons from various regions of fetal rat brain. Abe K, et al. **Jpn J Pharmacol** 1990 Jun;53(2):221-7

A simple in vito cytotoxicity test using the MTT (3-(4,5)-dimethylthiazol-2-yl)-2,5-diphenyl tetrazolium bromide) colorimetric assay: analysis of eugenol toxicity on dental pulp cells (RPC-C2A). Kasugai S, et al. **Jpn J Pharmacol** 1990 Jan;52(1):95-100

Cytotoxic effect of acyclovir on cultured mammalian cells to which herpesvirus thymidine kinase gene was introduced. Tanabe K, et al. **Jpn J Vet Res** 1989 Oct; 37(3-4):181-5

The adenosine analogue and cerebral protecting agent, AMG-1, has no effect on delayed neuronal death following ischemia. Araki H, et al. **Methods Find Exp Clin Pharmacol** 1989 Dec;11(12):731-6

Relationship between the effect of cyclophosphamide on adjuvant arthritis severity, skin allograft rejection and spleen cell cytotoxic activity in rats. Marinova-Mutafchieva L, et al. **Methods Find Exp Clin Pharmacol** 1990 Mar;12(2):103-8

Cell-specific toxicity of a chimeric protein composed of interleukin-6 and Pseudomonas exotoxin (IL6-PE40) on tumor cells [published erratum appears in Mol Cell Biol 1990 Aug;10(8):4438] Siegall CB, et al. **Mol Cell Biol** 1990 Jun;10(6):2443-7

Cytotoxicity of gelonin conjugated to targeting molecules: effects of weak amines, monensin, adenovirus, and adenoviral capsid proteins penton, hexon, and fiber. Goldmacher VS, et al. **Mol Pharmacol** 1989 Nov; 36(5):818-22

Temporal SCE and cytotoxicity responses of murine cells following in vivo treatment with MNU or L-PAM. Conner MK, et al. **Mutat Res** 1989 Oct;224(2):135-42

Killing and mutation induction in quiescent V79 cells as influenced by nalidixic acid. Ghosh R, et al. **Mutat Res** 1990 Jan;243(1):7-12

Sister-chromatid exchanges (SCEs), cell survival and mutation in HeLa s3 cells with different sensitivity to alkylating agents; evidence that SCE induction and cell survival or mutation induction are dissociable. Ishida R, et al. **Mutat Res** 1989 Nov;215(1):69-77

The light-dependent cytotoxicity of benzo[a]pyrene: effect on human erythrocytes, Escherichia coli cells, and Haemophilus influenzae transforming DNA. Kagan J, et al. **Mutat Res** 1989 Oct;216(5):231-42

Induction of cytotoxicity and mutagenesis is facilitated by fatty acid hydroperoxidase activity in Chinese hamster lung fibroblasts (V79 cells). Sevanian A, et al. **Mutat Res** 1989 Oct;224(2):185-96

Differences between survival, mutagenicity and DNA replication in MMS- and MNU-treated V79 hamster cells. Slameňová D, et al. **Mutat Res** 1990 Jan;228(1):97-103

Haemopoietic colony stimulating factors promote cell survival by suppressing apoptosis. Williams GT, et al. **Nature** 1990 Jan 4;343(6253):76-9

Comparison of delayed administration of competitive and uncompetitive antagonists in preventing NMDA receptor-mediated neuronal death. Levy DI, et al. **Neurology** 1990 May;40(5):852-5

Doxorubicin (adriamycin): a critical review of free radical-dependent mechanisms of cytotoxicity. Keizer HG, et al. **Pharmacol Ther** 1990;47(2):219-31 (130 ref.)

Effects of delayed administration of methohexital and ketamine on posthypoxic cell damage of primary neuronal cultures. Oberpichler H, et al. **Pharmacology** 1990; 40(3):165-73

Comparison of the effects of two gypsogenin saponins towards plant and animal cells in vitro. Henry M, et al. **Pharmazie** 1989 Nov;44(11):798-800

Biological activities of phthalocyanines--XI. Phototoxicity of sulfonated aluminum naphthalocyanines towards V-79 Chinese hamster cells. Paquette B, et al. **Photochem Photobiol** 1990 Mar;51(3):313-7

Synthesis of positively charged phthalocyanines and their activity in the photodynamic therapy of cancer cells. Wöhrle D, et al. **Photochem Photobiol** 1990 Mar; 51(3):351-6

Sensorimotor cortical lesion effects and treatment with nimodipine. Andersen AB, et al. **Physiol Behav** 1990 Jun; 47(6):1045-52

Lithium chloride potentiates tumor necrosis factor-mediated cytotoxicity in vitro and in vivo. Beyaert R, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9494-8

Down-regulation of protein kinase C protects cerebellar granule neurons in primary culture from glutamate-induced neuronal death. Favaron M, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1983-7

Overexpressed human metallothionein IIA gene protects Chinese hamster ovary cells from killing by alkylating agents. Kaina B, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2710-4

Expression of recombinant glutathione S-transferase pi, Ya, or Yb1 confers resistance to alkylating agents. Puchalski RB, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2443-7

Molecular basis of preferential resistance to colchicine in multidrug-resistant human cells conferred by Gly-185------Val-185 substitution in P-glycoprotein. Safa AR, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7225-9

Protection of 3'-azido-3'-deoxythymidine induced toxicity to murine hematopoietic progenitors (CFU-GM, BFU-E and CFU-MEG) with interleukin-1. Gallicchio VS, et al. **Proc Soc Exp Biol Med** 1989 Nov;192(2):201-4

Cell killing, chromosomal aberrations, and division delay as thermal sensitivity is modified during the cell cycle. Dewey WC, et al. **Radiat Res** 1990 Jun;122(3):268-74

Chrysotile asbestos-induced cytotoxicity and calcium-dependent exocytosis in polymorphonuclear leukocytes. Elferink JG. **Res Commun Chem Pathol Pharmacol** 1989 Sep; 65(3):361-72

Cytotoxicity, anchorage-independent growth, and DNA adduct formation in human neonatal fibroblasts by 1,2,3,4-tetrahydro-7,12-dimethylbenz(a)-anthracene (TH-DMBA), its six aryl fluoro regioisomers, and an exo methylene tautomer. Kumari HL, et al. **Teratogenesis Carcinog Mutagen** 1990;10(3):247-62

In vitro cyto- and genotoxicity of organomercurials to cells in culture. Babich H, et al. **Toxicol Lett** 1990 Feb; 50(2-3):143-9

Effects of sodium arsenite on the cytotoxicity of bleomycin. Jan KY, et al. **Toxicol Lett** 1990 Mar;51(1):81-90

Cadmium cytotoxicity correlates with the changes in glutathione content that occur during the logarithmic growth phase of A549-T27 cells. Kang YJ, et al. **Toxicol Lett** 1990 Mar;51(1):23-8

The protective effects of glutathione against methylmercury cytotoxicity. Kromidas L, et al. **Toxicol Lett** 1990 Mar; 51(1):67-80

Quantitation of blood plasma DNA as an index of in vivo cytotoxicity. Bret L, et al. **Toxicology** 1990 Apr 30; 61(3):283-92

Prostacyclin--protective effects on human islets of Langerhans in vitro. Löhde E, et al. **Transplant Proc** 1990 Aug;22(4):2048-9

[Adjustment of the dose-effect curve by means of an original algorithm. Application to the study of cytotoxicity in vitro] Dubois J, et al. **J Pharm Belg** 1989 May-Jun;44(3):181-91 (Eng. Abstr.) **(Fre)**

[The effect of selected irritants on suspended keratinocytes using double vital staining] Heise P, et al. **Dermatol Monatsschr** 1989;175(10):647-54 (Eng. Abstr.) **(Ger)**

[Increasing chemosensitivity to cisplatin by glutathione depletion with buthionine sulfoximine. In vitro and in vivo studies with a human squamous cell cancer line] Bier H. **Laryngorhinootologie** 1990 Jan;69(1):16-20 (Eng. Abstr.) **(Ger)**

[Initial results of the biocompatibility, cytotoxicity and genotoxicity of Aramid] Wening JV, et al. **Unfallchirurgie** 1989 Oct;15(5):215-20 (Eng. Abstr.) **(Ger)**

[Ultrastructure of the liver and endocrine system in aging rats: effect of piracetam] Schiller E. **Z Gerontol** 1990 May-Jun;23(3):168-70 (Eng. Abstr.) **(Ger)**

GENETICS

Altered gene expression during cellular aging. Smith JR, et al. **Genome** 1989;31(1):386-9 (31 ref.)

DNA fragmentation in cytolysis [letter; comment] Vaux D. **Immunol Today** 1989 Oct;10(10):325 Comment on: Immunol Today 1989 Mar;10(3):79-86.

DNAging. Genetic instability and aging. **Mutat Res** 1990 Mar;237(2):59-115

Glycosylases that excise modified DNA pyrimidines in young and senescent human WI-38 fibroblasts. Ganguly T, et al. **Mutat Res** 1990 Mar;237(2):107-15

A study of mitotic division fidelity and numerical chromosome changes in ageing Syrian hamster dermal cells. Parry EM, et al. **Mutat Res** 1990 Mar;237(2):83-93

dNTP imbalance and DNA double strand breaks in mouse FM3A cells and the mechanism of cell death. Wataya Y, et al. **Nucleic Acids Symp Ser** 1989;(21):11-2

Induction of cellular senescence in immortalized cells by human chromosome 1. Sugawara O, et al. **Science** 1990 Feb 9;247(4943):707-10

[Age-related changes in the activity and post-translational modification of DNA topoisomerase II in the quail oviduct] Schröder HC, et al. **Z Gerontol** 1990 May-Jun;23(3):117-22 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Novel monoclonal antibodies identify antigenic determinants unique to cellular senescence. Porter MB, et al. **J Cell Physiol** 1990 Feb;142(2):425-33

PHYSIOLOGY

Apoptosis. Weedon D. **Adv Dermatol** 1990;5:243-54; discussion 255 (50 ref.)

In vitro cultures of trabecular meshwork cells of the human eye as a model system for the study of cellular aging. Schachtschabel DO, et al. **Arch Gerontol Geriatr** 1989 Nov-Dec;9(3):251-62

Mechanisms of cell toxicity. Boobis AR, et al. **Curr Opin Cell Biol** 1990 Apr;2(2):231-7 (38 ref.)

The role of calcium ions in toxic cell injury. Farber JL. **Environ Health Perspect** 1990 Mar;84:107-11 (25 ref.)

Extracellular calcium effects on cell viability and thiol homeostasis. Reed DJ, et al. **Environ Health Perspect** 1990 Mar;84:113-20 (81 ref.)

Control of cell proliferation in senescent cells. **Exp Gerontol** 1989;24(5-6):351-585

Growth factors as probes of cell aging. Cristofalo VJ, et al. **Exp Gerontol** 1989;24(5-6):367-74

Replication control and cellular life span. Jazwinski SM, et al. **Exp Gerontol** 1989;24(5-6):423-36

Further studies on the genetic and biochemical basis of cellular senescence. Smith JR, et al. **Exp Gerontol** 1989; 24(5-6):377-81

Step-down heating of CHO cells at 37.5-39 degrees C. Jung H. **Int J Hyperthermia** 1989 Nov-Dec;5(6):665-73

Interaction of heat with X-rays and cis-platinum; cell lethality and oncogenic transformation [published erratum appears in Int J Hyperthermia 1990 Mar-Apr;6(2):474] Miller RC, et al. **Int J Hyperthermia** 1989 Nov-Dec; 5(6):697-705

Correlations between in vivo 31P NMR spectroscopy measurements, tumor size, hypoxic fraction and cell survival after radiotherapy. Fu KK, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1341-50

Alterations in the responsiveness of senescent cells to growth factors. Cristofalo VJ, et al. **J Gerontol** 1989 Nov; 44(6):55-62

Defective drug uptake contributing to multidrug resistance in hepatoma cells can be evaluated in vitro. Buscher HP. **Klin Wochenschr** 1990 May 4;68(9):443-6 (51 ref.)

Cytotoxic effects of expression of human superoxide dismutase in bovine adrenocortical cells. Norris KH, et al. **Mutat Res** 1990 Mar;237(2):95-106

The role of intracellular pH and its variance in low pH sensitization of killing by hyperthermia. Chu GL, et al. **Radiat Res** 1990 Jun;122(3):288-93

Relevance of in vitro studies for in vivo aging. Macieira-Coelho A. **Z Gerontol** 1990 May-Jun;23(3):130-2 (22 ref.)

Aging of trabecular meshwork cells of the human eye in vitro. Schachtschabel DO, et al. **Z Gerontol** 1990 May-Jun; 23(3):133-5

[Classification and mechanisms of cell death] Li YM. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Dec;18(4):309-11 (15 ref.) **(Chi)**

[The concept of cellular immortality, a myth or a reality. Example of "immortalized" articular chondrocytes] Adolphe M, et al. **Bull Acad Natl Med** 1990 Jan; 174(1):139-44; discussion 144-6 (Eng. Abstr.) **(Fre)**

[Kinematics of biological aging] Beier W. **Z Gerontol** 1990 May-Jun;23(3):171-4 (Eng. Abstr.) **(Ger)**

[Aging of cells and tissues] Sames K. **Z Gerontol** 1990 May-Jun;23(3):115-6 **(Ger)**

RADIATION EFFECTS

Relative biological effectiveness and oxygen enhancement ratio of 50 MV X-rays. Zackrisson B, et al. **Acta Oncol** 1989;28(4):529-35

Potentiation of radiation toxicity in C-6 glioma cells by prostaglandin D2. Tejedor M, et al. **Anticancer Res** 1989 Jul-Aug;9(4):1197-200

Biological dosimetry for iodine contrast medium and X-ray interactions by cell survival. Tokita N, et al. **Br J Radiol** 1990 Sep;63(753):735-7

Repair processes in the treatment and induction of cancer with radiation. Elkind MM. **Cancer** 1990 May 15; 65(10):2165-71 (36 ref.)

Hypersensitivity of skin fibroblasts from basal cell nevus syndrome patients to killing by ultraviolet B but not by ultraviolet C radiation. Applegate LA, et al. **Cancer Res** 1990 Feb 1;50(3):637-41

Apoptosis (cell death) induced in mouse bowel by 1,2-dimethylhydrazine, methylazoxymethanol acetate, and gamma-rays. Ijiri K. **Cancer Res** 1989 Nov 15; 49(22):6342-6

Modulation of IdUrd-DNA incorporation and radiosensitization in human bladder carcinoma cells. Kunugi KA, et al. **Cancer Res** 1990 Aug 15;50(16):4962-7

Synergistic effect of the v-myc oncogene with H-ras on radioresistance. McKenna WG, et al. **Cancer Res** 1990 Jan 1;50(1):97-102

Radiation-induced interphase death observed in human T-cell lymphoma cells established as a nude mouse tumor line. Igarashi T, et al. **Exp Hematol** 1990 Aug;18(7):824-31

The molecular basis of stochastic and nonstochastic effects. Leenhouts HP, et al. **Health Phys** 1989;57 Suppl 1:343-8

Mathematical models of cell survival after ionizing radiation: application to radiotherapy planning. Mauro F, et al. **Health Phys** 1989;57 Suppl 1:355-61

Analyzing the role of biochemical processes in determining response to ionizing radiations. Nelson JM, et al.

Health Phys 1989;57 Suppl 1:369–76

Mechanisms of cell reproductive death and shapes of radiation dose—survival curves of mammalian cells. Barendsen GW. **Int J Radiat Biol** 1990 Apr;57(4):885–96 (20 ref.)

Does variation in the in vitro cellular radiosensitivity explain the shallow clinical dose-control curve for malignant melanoma? Bentzen SM, et al. **Int J Radiat Biol** 1990 Jan; 57(1):117–26

Responses of two mammalian cell lines to low gamma-ray doses. Calkins J, et al. **Int J Radiat Biol** 1989 Dec; 56(6):869–75

The physiological state as a modifier of radiation-induced cytotoxicity in heterogeneous murine tumor cells growing in vitro. Cheng WY, et al. **Int J Radiat Biol** 1989 Oct; 56(4):463–83

Superoxide dismutase and media dependence of far-UV radiation resistance in thiol-treated cells. Claycamp HG, et al. **Int J Radiat Biol** 1990 Sep;58(3):449–61

Isolation of mammalian cell variants with enhanced endogenous thiol content at low survival levels following irradiation. Hodgkiss RJ. **Int J Radiat Biol** 1990 Jan; 57(1):83–95

Correlation between non-repairable DNA lesions and fixation of cell damage by hypertonic solutions in Chinese hamster cells. Kosaka T, et al. **Int J Radiat Biol** 1990 Sep; 58(3):417–25

Radiation response of cells from human tumor biopsies as assessed by a dye exclusion technique: a possible predictive assay. Kurohara W, et al. **Int J Radiat Biol** 1989 Nov; 56(5):767–70

The effect of post-irradiation anisotonic treatment on cell survival and repair of DNA damage. McNally NJ, et al. **Int J Radiat Biol** 1990 Mar;57(3):503–12

The relationship between potentially lethal damage repair and intrinsic radiosensitivity of human cells. Malaise EP, et al. **Int J Radiat Biol** 1989 Nov;56(5):597–604

A generalized formulation of the 'incomplete-repair' model for cell survival and tissue response to fractionated low dose-rate irradiation. Nilsson P, et al. **Int J Radiat Biol** 1990 Jan;57(1):127–42

DRFIT: a program for fitting radiation survival models. Roberts SA. **Int J Radiat Biol** 1990 Jun;57(6):1243–6

UV light and ionizing radiations cause programmed death of rat chloroleukaemia cells by inducing retropositions of a mobile DNA element (L1Rn). Servomaa K, et al. **Int J Radiat Biol** 1990 Feb;57(2):331–43

Lethal mutations, the survival curve shoulder and split-dose recovery. Seymour CB, et al. **Int J Radiat Biol** 1989 Dec; 56(6):999–1010

Clinical interest in determinations of cellular radiation sensitivity. Suit HD, et al. **Int J Radiat Biol** 1989 Nov; 56(5):725–37 (31 ref.)

Poly(ADP-ribose) metabolism in proliferating versus quiescent cells and its relationship to their radiation responses. Sweigert SE, et al. **Int J Radiat Biol** 1990 Jul; 58(1):111–23

Linear correlation between surviving fraction and the micronucleus frequency. Wandl EO, et al. **Int J Radiat Biol** 1989 Nov;56(5):771–5

Evaluation of surviving fraction at 2 Gy as a potential prognostic factor for the radiotherapy of carcinoma of the cervix. West CM, et al. **Int J Radiat Biol** 1989 Nov; 56(5):761–5

Mutation induction by 125iodoacetylproflavine, a DNA-intercalating agent, in human cells. Whaley JM, et al. **Int J Radiat Biol** 1990 Jun;57(6):1087–103

Response of cultured human airway epithelial cells to X-rays and energetic alpha-particles. Yang TC, et al. **Int J Radiat Biol** 1990 Sep;58(3):509–17

The effects of altered fractionation schedules on the survival of human cell lines differing in their proliferative activity and repair capacity. Konefal JB, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):1007–13

Radiosensitivity of different human tumor cells lines grown as multicellular spheroids determined from growth curves and survival data. Schwachöfer JH, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):1015–20

Radiobiological characterization of head and neck and sarcoma cells derived from patients prior to radiotherapy. Weichselbaum RR, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):313–9

Glass and plastic photoluminescence: interaction with aqueous media and cultured mammalian cells. Black HS, et al. **Photochem Photobiol** 1990 Mar;51(3):383–6

Parameter resolution in two models for cell survival after radiation. Di Cera E, et al. **Radiat Environ Biophys** 1989; 28(4):265–71

Dose-rate dependent stochastic effects in radiation cell-survival models. Sachs RK, et al. **Radiat Environ Biophys** 1990;29(3):169–84

Comparison of six different models describing survival of mammalian cells after irradiation. Sontag W. **Radiat Environ Biophys** 1990;29(3):185–201

Topological DNA target size model. Suciu D. **Radiat Environ Biophys** 1990;29(3):203–11

Radiation-induced cytotoxicity, DNA damage and DNA repair: implications for cell survival theory. Swarts SG, et al. **Radiat Environ Biophys** 1990;29(2):93–102

Additivity of cytotoxic damage due to dimethylbenz(a)anthracene and X rays. Chen CC, et al. **Radiat Res** 1990 Jul;123(1):44–8

Changes after irradiation in the number of mitotic cells and apoptotic fragments in growing mouse hair follicles and in the width of their hairs. Geng L, et al. **Radiat Res** 1990 Jul;123(1):75–81

Response of plateau-phase C3H 10T1/2 cells to radiation and concurrent administration of bleomycin. Jiang GL, et al. **Radiat Res** 1989 Nov;120(2):306–12

Dose-effect relations for stochastic rates of injury formation in cells. Kruglikov IL. **Radiat Res** 1990 May;122(2):120–5

Radioprotection of cultured mammalian cells by the aminothiols WR-1065 and WR-255591: correlation between protection against DNA double-strand breaks and cell killing after gamma radiation. Murray D, et al. **Radiat Res** 1989 Oct;120(1):154–63

Multiple components of split-dose repair in plateau-phase mammalian cells: a new challenge for phenomenological modelers. Nelson JM, et al. **Radiat Res** 1990 Feb; 121(2):154–60

Evidence that hydrogen peroxide generated by 365-nm UVA radiation is not important in mammalian cell killing. Peak MJ, et al. **Radiat Res** 1990 Aug;123(2):220–3

The saturated repair kinetics of Chinese hamster V79 cells suggests a damage accumulation—interaction model of cell killing. Reddy NM, et al. **Radiat Res** 1990 Mar; 121(3):304–11

The action of caffeine on X-irradiated HeLa cells. IX. Hypothermic effects. Tolmach LJ, et al. **Radiat Res** 1990 Jun;122(3):280–7

Failla memorial lecture. Time, cells, and X rays. Temporal aspects of some responses of cultured cells to X irradiation. Tolmach LJ. **Radiat Res** 1990 Aug;123(2):119–37 (69 ref.)

Reactivation of neutron killed mammalian cells by gamma irradiation: the observations, possible mechanism and implication. Calkins J, et al. **Strahlenther Onkol** 1990 Jan; 166(1):22–5

The occurrence of apoptosis, abnormal mitoses, cells dying in mitosis and micronuclei in a human melanoma xenograft exposed to single dose irradiation. Falkvoll KH. **Strahlenther Onkol** 1990 Jul;166(7):487–92

The correlation between cell survival curve and dose response curve of micronucleus (MN) frequency. Ono K, et al. **Strahlenther Onkol** 1989 Nov;165(11):824–7

[Therapy with the rare gas radon-222] Briem H. **Biomed Tech (Berlin)** 1989;34 Suppl:240–1 **(Ger)**

[Biological actions of radiation (1): effects on cells and their survival curves] Urano M. **Rinsho Hoshasen** 1990 Mar; 35(3):405–6 **(Jpn)**

[The interphase death of dividing cells. The relation of interphase death to cell energy requirements] Degtiareva OV, et al. **Radiobiologiia** 1990 May-Jun;30(3):407–10 (Eng. Abstr.) **(Rus)**

[The survival rate of irradiated cells as a solution of a stochastic differential equation. A general description] Kruglikov IL. **Radiobiologiia** 1990 Mar-Apr;30(2):207–10 (Eng. Abstr.) **(Rus)**

[A systemic model of the reproductive death of mammalian cells. The effect of radiation dose rate and fractionation] Obaturov GM, et al. **Radiobiologiia** 1989 Nov-Dec; 29(6):769–75 (Eng. Abstr.) **(Rus)**

[Molecular mechanisms of radiation-induced cell death] Khanson KP, et al. **Vestn Akad Med Nauk SSSR** 1990; (2):34–9 (Eng. Abstr.) **(Rus)**

CELL TRANSFORMATION, NEOPLASTIC

Transforming signals generated by the polyoma virus tumor antigens. Raptis L, et al. **Adv Enzyme Regul** 1990;30:133–42 (43 ref.)

Transformation of polycythemia vera to Ph-positive chronic myelogenous leukemia. Haq AU. **Am J Hematol** 1990 Oct; 35(2):110–3

Target cell of leukemic transformation in acute megakaryoblastic leukemia. Koike T, et al. **Am J Hematol** 1990 Aug;34(4):252–8

Oncogenes, malignant transformation, and modern medicine. Miller DM, et al. **Am J Med Sci** 1990 Jul;300(1):59–69 (143 ref.)

Proto-oncogenes and differentiation versus transformation of striated muscle cells. Harel J, et al. **Ann N Y Acad Sci** 1989;567:187–207 (62 ref.)

Host-mediated induction of tumor heterogeneity. Heppner GH, et al. **Ann N Y Acad Sci** 1989;567:234–42 (31 ref.)

Shope fibroma: a model system to study tumorigenesis by poxviruses. Pogo BG, et al. **Ann N Y Acad Sci** 1989; 567:222–33

Growth kinetic studies of methionine dependence in co-culture of monolayer and anchorage independent mouse cell lines. Djurhuus R, et al. **Anticancer Res** 1989 Nov-Dec; 9(6):1611–5

An experimental model for oncogene activation during tumor progression in vivo. Garte SJ, et al. **Anticancer Res** 1989 Sep-Oct;9(5):1439–46 (87 ref.)

Transformation of primate cells by chemicals and oncogenes: requirements for multiple factors. Khoobyarian N, et al. **Anticancer Res** 1989 Sep-Oct;9(5):1367–76 (92 ref.)

The cell biology of human papillomavirus transformed cells. Matlashewski G. **Anticancer Res** 1989 Sep-Oct; 9(5):1447–56 (70 ref.)

Invasiveness and chemotactic activity of oncogene transformed NIH/3T3 cells. Melchiori A, et al. **Anticancer Res** 1990 Jan-Feb;10(1):37–44

Oncogenes and tumor progression. Muschel RJ, et al. **Anticancer Res** 1989 Sep-Oct;9(5):1395–406

Multistage carcinogenesis in murine thymocytes: involvement of oncogenes, chromosomal imbalances and T cell growth factor receptor. Newcomb EW, et al. **Anticancer Res** 1989 Sep-Oct;9(5):1407–15 (104 ref.)

Neoplastic transformation of human epithelial cells in vitro. Rhim JS. **Anticancer Res** 1989 Sep-Oct;9(5):1345–65 (92 ref.)

Elevated expression of secreted phosphoprotein I (osteopontin, 2ar) as a consequence of neoplastic transformation. Senger DR, et al. **Anticancer Res** 1989 Sep-Oct;9(5):1291–9 (46 ref.)

Immortalization by truncated myc or ras genes and synergism between myc and ras genes in cell transformation. Spandidos DA, et al. **Anticancer Res** 1989 Jul-Aug; 9(4):1149–52

Gangliosides in human urothelial cell lines of different transformed phenotypes: the effect of v-raf-oncogene transfection. Ugorski M, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1583–6

Effect of oncogene transfection or passage in vivo on malignant phenotypes of rat2 cells. Van Roy FM, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1553–64

Transfection with fragments of the adenovirus 12 gene induces tumorigenicity-associated alteration of N-linked sugar chains in rat cells. Hiraizumi S, et al. **Arch Biochem Biophys** 1990 Jul;280(1):9–19

Molecular mechanisms of cell transformation. Altaner C. **Arch Geschwulstforsch** 1990;60(2):134–40 (22 ref.)

Synthesis of diacylglycerol de novo is responsible for permanent activation and down-regulation of protein kinase C in transformed cells. Chiarugi V, et al. **Biochem Biophys Res Commun** 1989 Oct 31;164(2):816–23

Increased tyrosine phosphorylation in ras transformed fibroblasts occurs prior to manifestation of the transformed phenotype. Cuadrado A. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):526–32

Basic fibroblast-like growth factor is present in the conditioned medium of simian sarcoma virus transformed NRK cells. Hicks K, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1323–30

Tumor promotion and depletion of protein kinase C in epidermal JB6 cells. Kischel T, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):981–7

Consistent oncogene methylation changes in epithelial cells chemically transformed in vitro. Mass MJ, et al. **Biochem Biophys Res Commun** 1989 Oct 31;164(2):693–9

Elevated gelsolin and alpha-actin expression in a flat revertant R1 of Ha-ras oncogene-transformed NIH/3T3 cells. Müllauer L, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):852–9

The non-phorbol ester tumor promoter okadaic acid does not promote morphological transformation or inhibit junctional communication in hamster embryo cells. Rivedal E, et al. **Biochem Biophys Res Commun** 1990 Mar 30; 167(3):1302–8

Computer-assisted imaging cytometry of nuclear chromatin reveals bone tumor virus infection and neoplastic transformation of adherent osteoblast-like cells. Schmidt J, et al. **Biochem Biophys Res Commun** 1989 Oct 31; 164(2):728–35

Increased mitogenic responsiveness of Swiss 3T3 cells expressing constitutively active Gs alpha. Zachary I, et al. **Biochem Biophys Res Commun** 1990 May 16; 168(3):1184–93

Desensitization of prostaglandin F2 alpha-stimulated inositol phosphate generation in NIH-3T3 fibroblasts transformed by overexpression of normal c-Ha-ras-1, c-Ki-ras-2 and c-N-ras genes. Black FM, et al. **Biochem J** 1990 May 1; 267(3):809–13

Activation of phosphatidylcholine-specific phospholipase C in cell growth and oncogene transformation. Moscat J, et al. **Biochem Soc Trans** 1989 Dec;17(6):988–91 (53 ref.)

Expression of the human gamma-globin gene after retroviral transfer to transformed erythroid cells. Rixon MW, et al. **Biochemistry** 1990 May 8;29(18):4393–400

Oncogenes, growth factors and hematopoietic cell transformation. Pierce JH. **Biochim Biophys Acta** 1989 Dec 17;989(2):179–208 (335 ref.)

Molecular changes in carbohydrate antigens associated with cancer. Singhal A, et al. **Bioessays** 1990 May;12(5):223–30 (48 ref.)

Malignant transformation of benign cerebellar astrocytoma. Schwartz AM, et al. **Cancer** 1990 Jan 15;65(2):333–6 (40 ref.)

Molecular mimicry of growth factors by products of tumor viruses. Aaronson SA, et al. **Cancer Cells** 1990 Jul; 2(7):212–4 (20 ref.)

Nonimmunological aspects of MHC function in the regulation of cell proliferation and the malignant phenotype. Haliotis T, et al. **Cancer Cells** 1990 Mar; 2(3):86–90

Effect of microinjected catalytic fragment of protein kinase C on morphological change in Swiss 3T3 cells. Nakakuma H, et al. **Cancer Commun** 1989;1(2):127–32

Bovine papillomavirus type 1 induces resistance to Ca+(+)-induced terminal differentiation in murine keratinocytes. Reiss M, et al. **Cancer Commun** 1989; 1(2):75–82

Morphological transformation of Syrian hamster embryo cells by aminobenzyl alcohols and nitrobenzyl alcohols is

correlated with intercellular communication. Mikalsen SO. **Cancer Lett** 1990 Jul 31;52(3):203–8

Detection of transforming ras proteins containing leucine at position 61 by a new mouse monoclonal antibody, ras(53–69)Leu61. Bizub D, et al. **Cancer Res** 1989 Nov 15; 49(22):6425–31

c–Ha–ras oncogene expression in immortalized human keratinocytes (HaCaT) alters growth potential in vivo but lacks correlation with malignancy. Boukamp P, et al. **Cancer Res** 1990 May 1;50(9):2840–7

EJ/ras neoplastic transformation of simian virus 40–immortalized human uroepithelial cells: a rare event. Christian BJ, et al. **Cancer Res** 1990 Aug 1;50(15):4779–86

Nonrandom chromosomal alterations in nickel–transformed Chinese hamster embryo cells. Conway K, et al. **Cancer Res** 1989 Nov 1;49(21):6032–8

Expression of hepatocyte and oval cell antigens in hepatocellular carcinomas produced by oncogene–transfected liver epithelial cells. Goyette M, et al. **Cancer Res** 1990 Aug 1;50(15):4809–17

Cytogenetic profile of in vitro spontaneously transformed and chemical tumor–derived cell lines related to the mouse lung alveologenic carcinoma. Markus I, et al. **Cancer Res** 1990 Jan 1;50(1):164–8

Selection for spontaneous metastasis after calcium phosphate–mediated transfer of DNA. Muschel RJ. **Cancer Res** 1990 Sep 1;50(17):5581–6

Multistage progression of Abelson virus–infected murine pre–B–cells to the tumorigenic state. Palumbo GJ, et al. **Cancer Res** 1990 Mar 15;50(6):1917–23

Adhesion of Kirsten–ras+ tumor–progressing and Kirsten–ras– revertant 3T3 cells on fibronectin proteolytic fragments. Radinsky R, et al. **Cancer Res** 1990 Jul 15; 50(14):4388–400

Cellular F–actin levels as a marker for cellular transformation: relationship to cell division and differentiation. Rao JY, et al. **Cancer Res** 1990 Apr 15; 50(8):2215–20

Evidence for the multistep nature of in vitro human epithelial cell carcinogenesis. Rhim JS, et al. **Cancer Res** 1990 Sep 1;50(17 Suppl):5653S–5657S

Phenotypic expression in spontaneously transformed cultured rat liver epithelial cells. Tsao MS, et al. **Cancer Res** 1990 Mar 15;50(6):1941–7

Production of and responsiveness to transforming growth factor–beta in normal and oncogene–transformed human mammary epithelial cells. Valverius EM, et al. **Cancer Res** 1989 Nov 15;49(22):6269–74

Stimulation of epithelial membrane antigen expression by transforming growth factor–beta in normal and oncogene–transformed human mammary epithelial cells. Walker–Jones D, et al. **Cancer Res** 1989 Nov 15; 49(22):6407–11

Non–p–glycoprotein–mediated multidrug resistance in detransformed rat cells selected for resistance to methylglyoxal bis(guanylhydrazone). Weber JM, et al. **Cancer Res** 1989 Nov 1;49(21):5779–83

Neoplastic transformation of a human colonic epithelial cell line: in vitro evidence for the adenoma to carcinoma sequence. Williams AC, et al. **Cancer Res** 1990 Aug 1; 50(15):4724–30

Malignant transformation of human fibroblasts by a transfected N–ras oncogene. Wilson DM, et al. **Cancer Res** 1990 Sep 1;50(17):5587–93

Use of intracellular H3 messenger RNA as a marker to determine the proliferation pattern of normal and 7,12–dimethylbenz[a]anthracene–transformed hamster oral epithelium. Wong DT, et al. **Cancer Res** 1990 Aug 15; 50(16):5107–11

Effect of 12–O–tetradecanoylphorbol–13–acetate on colony formation and intercellular communication in a coculture system of JB6 clones. Yamadori I, et al. **Cancer Res** 1990 Sep 1;50(17):5567–73

A human hepatocellular carcinoma 3.0–kilobase DNA sequence transforms both rat liver cells and NIH3T3 fibroblasts and encodes a 52–kilodalton protein. Yang SS, et al. **Cancer Res** 1990 Sep 1;50(17 Suppl):5658S–5667S

Progressive state selection of cells in low serum promotes high density growth and neoplastic transformation in NIH 3T3 cells. Yao A, et al. **Cancer Res** 1990 Aug 15; 50(16):5171–6

The platelet–derived growth factor system. Coughlin SR, et al. **Cancer Treat Res** 1989;47:169–76 (70 ref.)

Oncogenes and proto–oncogenes: general concepts. Dang CV. **Cancer Treat Res** 1989;47:1–24 (73 ref.)

Transforming growth factors–alpha and –beta and their potential roles in neoplastic transformation. Derynck R. **Cancer Treat Res** 1989;47:177–95 (112 ref.)

Malignant conversion of UV radiation and chemically induced mouse skin benign tumors by free–radical–generating compounds. Athar M, et al. **Carcinogenesis** 1989 Oct;10(10):1841–5

Enhancement of the invasive ability of a transformed human bronchial epithelial cell line by 12–O–tetradecanoyl–phorbol–13–acetate and diacylglycerol. Bonfil RD, et al. **Carcinogenesis** 1989 Dec; 10(12):2335–8

Variation in the loss of O6–methylguanine–DNA methyltransferase during immortalization of human fibroblasts. Green MH, et al. **Carcinogenesis** 1990 Jan; 11(1):185–7

Cysteine proteinase inhibitors and ras gene products share the same biological activities including transforming activity toward NIH3T3 mouse fibroblasts and the differentiation–inducing activity toward PC12 rat pheochromocytoma cells. Hiwasa T, et al. **Carcinogenesis** 1990 Jan;11(1):75–80

Detection of distinct transforming genes in X–ray induced tumors. Jaffe DR, et al. **Carcinogenesis** 1989 Dec; 10(12):2243–7

Increased uracil–DNA glycosylase, AP–DNA binding protein and deoxyribonuclease activities in tumor and SV40–transformed cell lines of human origin. Kuhnlein U, et al. **Carcinogenesis** 1990 Jan;11(1):117–21

Cytotoxic and transformation responses of rat tracheal epithelial cells exposed to nitrated polycyclic aromatic hydrocarbons in culture. Mitchell CE, et al. **Carcinogenesis** 1990 Jan;11(1):155–8

Neoplastic development in B–lymphocytes. Potter M. **Carcinogenesis** 1990 Jan;11(1):1–13 (147 ref.)

Gap junctional intercellular communication and carcinogenesis. Yamasaki H. **Carcinogenesis** 1990 Jul; 11(7):1051–8 (85 ref.)

The ski oncogene induces muscle differentiation in quail embryo cells. Colmenares C, et al. **Cell** 1989 Oct 20; 59(2):293–303

Elevated levels of the alpha 5 beta 1 fibronectin receptor suppress the transformed phenotype of Chinese hamster ovary cells. Giancotti FG, et al. **Cell** 1990 Mar 9; 60(5):849–59

Three–dimensional structures of H–ras p21 mutants: molecular basis for their inability to function as signal switch molecules. Krengel U, et al. **Cell** 1990 Aug 10; 62(3):539–48

jun–B inhibits and c–fos stimulates the transforming and trans–activating activities of c–jun. Schütte J, et al. **Cell** 1989 Dec 22;59(6):987–97

Intermolecular association of the p185neu protein and EGF receptor modulates EGF receptor function. Wada T, et al. **Cell** 1990 Jun 29;61(7):1339–47

The podosomes of Rous sarcoma virus transformed chondrocytes show a peculiar ultrastructural organization. Nitsch L, et al. **Cell Biol Int Rep** 1989 Nov;13(11):919–26

Cellular proteins that are targets for transformation by DNA tumour viruses. Buchkovich K, et al. **Ciba Found Symp** 1990;150:262–71; discussion 271–8 (40 ref.)

Controls of cell proliferation in yeast and animals. Norbury C, et al. **Ciba Found Symp** 1990;150:168–77; discussion 177–83 (45 ref.)

mos proto–oncogene function. Vande Woude GF, et al. **Ciba Found Symp** 1990;150:147–60; discussion 160–2

The in vivo clearance of Ha–ras transformants by natural killer cells. Johnson PW, et al. **Clin Exp Metastasis** 1990 Jan–Feb;8(1):13–25

Transfection of cultured fish cells RBCF–1 with exogenous oncogene and their resistance to malignant transformation. Hayasaka K, et al. **Comp Biochem Physiol [B]** 1990; 96(2):349–54

Stellate– and foci–formation of mouse fibroblast cells transfected with various cancer cell DNA. Ding JL, et al. **Cytobios** 1989;59(237):101–14

Nuclear changes induced in NIH/3T3 cells by transfection and tumorigenesis. Mello ML, et al. **Cytobios** 1989; 60(242–243):135–49

Isolation of simian virus 40–transformed human mammary epithelial stem cell lines that can differentiate to myoepithelial–like cells in culture and in vivo. Rudland PS, et al. **Dev Biol** 1989 Nov;136(1):167–80

The morphological oncogenic signature. Reorganization of epithelial cytoarchitecture and metabolic regulation by tumor promoters and by transformation. Fey EG, et al. **Dev Biol (N Y 1985)** 1986;3:81–100 (29 ref.)

Cell traction in relationship to morphogenesis and malignancy. Harris AK. **Dev Biol (N Y 1985)** 1986;3:339–57 (15 ref.)

Shedding of plasma membrane fragments. Neoplastic and developmental importance. Taylor DD, et al. **Dev Biol (N Y 1985)** 1986;3:33–57 (144 ref.)

Low incidence of tumourigenicity in agarose colonies from spontaneous murine mammary tumours. Price JE, et al. **Differentiation** 1989 Sep;41(3):202–7

The ras oncogene and tumour metastasis: observations on murine cells transfected with activated human c–Ha–ras. Wallace JS, et al. **Differentiation** 1989 Sep;41(3):208–15

Env–derived gp55 gene of Friend spleen focus–forming virus specifically induces neoplastic proliferation of erythroid progenitor cells. Aizawa S, et al. **EMBO J** 1990 Jul; 9(7):2107–16

Light chain gene conversion continues at high rate in an ALV–induced cell line. Buerstedde JM, et al. **EMBO J** 1990 Mar;9(3):921–7

In vivo transformation of factor–dependent hemopoietic cells: role of intracisternal A–particle transposition for growth factor gene activation. Dührsen U, et al. **EMBO J** 1990 Apr;9(4):1087–96

bcr–abl, the hallmark of chronic myeloid leukaemia in man, induces multiple haemopoietic neoplasms in mice. Elefanty AG, et al. **EMBO J** 1990 Apr;9(4):1069–78

Malignant transformation of immortalized transgenic hepatocytes after transfection with hepatitis B virus DNA. Höhne M, et al. **EMBO J** 1990 Apr;9(4):1137–45

Association between the cellular p53 and the adenovirus 5 E1B–55kd proteins reduces the oncogenicity of Ad–transformed cells. van den Heuvel SJ, et al. **EMBO J** 1990 Aug;9(8):2621–9

A transforming function of the BARF1 gene encoded by Epstein–Barr virus. Wei MX, et al. **EMBO J** 1989 Oct; 8(10):2897–903

Growth factors as transforming proteins. Heldin CH, et al. **Eur J Biochem** 1989 Oct 1;184(3):487–96 (205 ref.)

Expression of markers of differentiation in a transformed human keratinocyte line induced by coculture with a fibroblast line. Kamalati T, et al. **Exp Cell Res** 1989 Dec; 185(2):453–63

Increased susceptibility to SV40 transformation with development and in vitro aging. Kunisada T, et al. **Exp Cell Res** 1990 Aug;189(2):222–6

Characterization of a Mr 20,000 basic fibroblast growth factor–like protein secreted by normal and transformed fetal bovine aortic endothelial cells. Maier JA, et al. **Exp Cell Res** 1990 Feb;186(2):354–61

Complete transformation of embryonal rat fibroblasts by polyomavirus occurs during passage in vitro. Martens I, et al. **Exp Cell Res** 1990 Mar;187(1):143–9

Characterization of a serum–free culture system comparing growth factor requirements of transformed and untransformed cells. Mulder KM, et al. **Exp Cell Res** 1990 Jun;188(2):254–61

A RAS oncogene imparts growth factor independence to myeloid cells that abnormally regulate protein kinase C: a nonautocrine transformation pathway. Boswell HS, et al. **Exp Hematol** 1990 Jun;18(5):452–60

Modulation of the oncogenic potential of various anticancer modalities. Hall EJ, et al. **Front Radiat Ther Oncol** 1989; 23:131–9 discussion 160–1 (25 ref.)

The mutated, myeloid cell–specific growth factor receptor v–fms transforms avian erythroid but not myeloid cells. Fuhrmann U, et al. **Genes Dev** 1989 Dec;3(12B):2072–82

p53: oncogene or anti–oncogene? Lane DP, et al. **Genes Dev** 1990 Jan;4(1):1–8 (61 ref.)

Acutely transforming retroviruses as carcinogens in mouse embryos. Rossi L, et al. **IARC Sci Publ** 1989;(96):131–51

Autocrine growth factors and tumourigenic transformation. Lang RA, et al. **Immunol Today** 1990 Jul;11(7):244–9 (73 ref.)

Deficiency in catalase activity correlates with the appearance of tumor phenotype in human keratinocytes. Rabilloud T, et al. **Int J Cancer** 1990 May 15;45(5):952–6

Osteonectin transcript and metastatic behavior in v–Ki–ras transformed fibroblasts. Colombo MP, et al. **Int J Cancer Suppl** 1989;4:76–7

Interaction of heat with X–rays and cis–platinum; cell lethality and oncogenic transformation [published erratum appears in Int J Hyperthermia 1990 Mar–Apr;6(2):474] Miller RC, et al. **Int J Hyperthermia** 1989 Nov–Dec; 5(6):697–705

Requirements for T cell recognition and elimination of retrovirally–transformed cells. Greenberg P, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1988; 19:287–301

The role of the neu oncogene product in cell transformation and normal development. Kokai Y, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1988; 19:45–57 (36 ref.)

Differences in targeting and secretion of cathepsins B and L by BALB/3T3 fibroblasts and Moloney murine sarcoma virus–transformed BALB/3T3 fibroblasts. Achkar C, et al. **J Biol Chem** 1990 Aug 15;265(23):13650–4

Tyrosine phosphorylation of a 22–kDa protein is correlated with transformation by Rous sarcoma virus. Glenney JR Jr. **J Biol Chem** 1989 Dec 5;264(34):20163–6

Purification of 18– and 22–kDa forms of basic fibroblast growth factor from rat cells transformed by the ras oncogene. Iberg N, et al. **J Biol Chem** 1989 Nov 25; 264(33):19951–5

Alkalinization of the lysosomes is correlated with ras transformation of murine and human fibroblasts. Jiang LW, et al. **J Biol Chem** 1990 Mar 25;265(9):4775–7

Purification and properties of a novel insulin–like growth factor–II binding protein from transformed human fibroblasts. Martin JL, et al. **J Biol Chem** 1990 Mar 5; 265(7):4124–30

Regulation of N–acetylglucosaminyltransferase V activity. Kinetic comparisons of parental, Rous sarcoma virus–transformed BHK, and L–phytohemagglutinin–resistant BHK cells using synthetic substrates and an inhibitory substrate analog. Palcic MM, et al. **J Biol Chem** 1990 Apr 25;265(12):6759–69

Altered phosphatidylcholine metabolism in C3H10T1/2 cells transfected with the Harvey–ras oncogene. Teegarden D, et al. **J Biol Chem** 1990 Apr 15;265(11):6042–7

Characterization through cDNA cloning of galactoprotein b3 (Gap b3), a cell surface membrane glycoprotein showing enhanced expression on oncogenic transformation. Identification of Gap b3 as a member of the integrin superfamily. Tsuji T, et al. **J Biol Chem** 1990 Apr 25; 265(12):7016–21

Retransformation of a revertant cell line with the adenovirus E1 oncogenes and vanadate. Dessureault J, et al. **J Cell Biochem** 1990 Jul;43(3):293–6

Transformation of murine melanocytes by basic fibroblast growth factor cDNA and oncogenes and selective suppression of the transformed phenotype in a reconstituted cutaneous environment. Dotto GP, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):3115–28

c–Ha–rasVal 12 oncogene–transformed NIH–3T3 fibroblasts

display more decondensed nucleosomal organization than normal fibroblasts. Laitinen J, et al. **J Cell Biol** 1990 Jul; 111(1):9–17

Localization of 9E3/CEF–4 in avian tissues: expression is absent in Rous sarcoma virus–induced tumors but is stimulated by injury. Martins–Green M, et al. **J Cell Biol** 1990 Mar;110(3):581–95

Transformation of NIH 3T3 cells with basic fibroblast growth factor or the hst/K–fgf oncogene causes downregulation of the fibroblast growth factor receptor: reversal of morphological transformation and restoration of receptor number by suramin. Moscatelli D, et al. **J Cell Biol** 1989 Nov;109(5):2519–27

Comparative two–dimensional gel analysis and microsequencing identifies gelsolin as one of the most prominent downregulated markers of transformed human fibroblast and epithelial cells. Vandekerckhove J, et al. **J Cell Biol** 1990 Jul;111(1):95–102

Expression of oncomodulin does not lead to the transformation or immortalization of mammalian cells in vitro. Mes–Masson AM, et al. **J Cell Sci** 1989 Nov;94 (Pt 3):517–25

Chronobiology, growth hormone and healthy and malignant growth. Halberg F, et al. **J Endocrinol Invest** 1989;12(8 Suppl 3):41–7 (18 ref.)

Preferential nuclear compartmentalization of endogenous mink cell focus–forming–related retroviral transcripts. Gourley MF, et al. **J Exp Med** 1990 May 1;171(5):1443–52

Abrogation of the requirement for feeder cell interaction and T cell receptor stimulation of lymphocytes infected with retroviral vectors. Laker C, et al. **J Exp Med** 1990 Aug 1;172(2):447–56

Transformation of primary BRK cells by human papillomavirus type 16 and EJ–ras is increased by overexpression of the viral E2 protein. Lees E, et al. **J Gen Virol** 1990 Jan;71 (Pt 1):183–93

Adenovirus type 12 tumour antigen synthesis differs during infection of permissive and non–permissive cells. Lucher LA. **J Gen Virol** 1990 Mar;71 (Pt 3):579–83

BK virus early RNA transcripts in stably transformed cells: enhanced levels induced by dibutyryl cyclic AMP, forskolin and 12–O–tetradecanoylphorbol–13–acetate treatment. Moens U, et al. **J Gen Virol** 1990 Jul;71 (Pt 7):1461–71

Co–transformation by human papillomavirus types 6 and 11. Storey A, et al. **J Gen Virol** 1990 Jan;71 (Pt 1):165–71

Mutations of the human papillomavirus type 16 E7 gene that affect transformation, transactivation and phosphorylation by the E7 protein. Storey A, et al. **J Gen Virol** 1990 Apr; 71 (Pt 4):965–70

Lactate dehydrogenase–elevating virus induces antibodies reactive with a surface antigen of aetiologically unrelated murine cell transformants. Weiland E, et al. **J Gen Virol** 1990 May;71 (Pt 5):1233–6

Alterations in the cellular phenotype induced by herpes simplex viruses. Galloway DA, et al. **J Med Virol** 1990 May;31(1):36–42 (69 ref.)

1–Methyl–4–phenyl–1,2,3,6–tetrahydropyridine–resistant, flat–cell PC12 variants having a partial loss of transformed phenotype. Andersen JK, et al. **J Neurochem** 1990 Aug; 55(2):559–67

Histogenesis and cell lineage analysis of medulloblastomas. Cudkowicz M, et al. **J Neurol Sci** 1989 Dec;94(1–3):221–9

Intracranial C6 glioma model in adult Wistar–Furth rats [letter] Cohen JD, et al. **J Neurooncol** 1990 Feb;8(1):95–6

Enhanced bladder cancer detection with the Lewis X antigen as a marker of neoplastic transformation. Sheinfeld J, et al. **J Urol** 1990 Feb;143(2):285–8

Sequence–specific DNA binding by the v–erbA oncogene protein of avian erythroblastosis virus. Bonde BG, et al. **J Virol** 1990 Mar;64(3):1314–20

Suppression in vivo of human papillomavirus type 18 E6–E7 gene expression in nontumorigenic HeLa X fibroblast hybrid cells. Bosch FX, et al. **J Virol** 1990 Oct; 64(10):4743–54

FH3, a v–myc avian retrovirus with limited transforming ability. Chen C, et al. **J Virol** 1989 Dec;63(12):5092–100

The amino terminus of polyomavirus middle T antigen is required for transformation. Cook DN, et al. **J Virol** 1990 May;64(5):1879–87

A highly efficient retroviral vector allows detection of the transforming activity of the human c–fps/fes proto–oncogene. Feldman RA, et al. **J Virol** 1989 Dec; 63(12):5469–74

p53–plus–ras–transformed rat embryo fibroblasts express tumor–specific transplantation antigen activity which is shared by independently transformed cells. Frey AB, et al. **J Virol** 1989 Dec;63(12):5440–4

The malignant histiocytosis sarcoma virus, a recombinant of Harvey murine sarcoma virus and Friend mink cell focus–forming virus, has acquired myeloid transformation specificity by alterations in the long terminal repeat. Friel J, et al. **J Virol** 1990 Jan;64(1):369–78

Cooperation of v–jun and v–erbB oncogenes in embryo fibroblast transformation in vitro and in vivo. Garcia M, et al. **J Virol** 1990 Oct;64(10):4684–90

Transcriptional regulation of early–response genes during polyomavirus infection. Glenn GM, et al. **J Virol** 1990 May; 64(5):2193–201

Conservation of function of Drosophila melanogaster abl and murine v–abl proteins in transformation of mammalian cells. Holland GD, et al. **J Virol** 1990 May;64(5):2226–35

Transforming activity of a 16–amino–acid segment of the bovine papillomavirus E5 protein linked to random sequences of hydrophobic amino acids. Horwitz BH, et al. **J Virol** 1989 Nov;63(11):4515–9

Phenotypic analysis of bovine papillomavirus type 1 E2 repressor mutants. Lambert PF, et al. **J Virol** 1990 Feb; 64(2):950–6

Differential requirement for adenovirus type 12 E1A gene products in oncogenic transformation. Lamberti C, et al. **J Virol** 1990 Oct;64(10):4997–5007

The c–cbl proto–oncogene is preferentially expressed in thymus and testis tissue and encodes a nuclear protein. Langdon WY, et al. **J Virol** 1989 Dec;63(12):5420–4

Combined infection by Moloney murine leukemia virus and a mink cell focus–forming virus recombinant induces cytopathic effects in fibroblasts or in long–term bone marrow cultures from preleukemic mice. Li QX, et al. **J Virol** 1990 Aug;64(8):3701–11

Mutagenic analysis of the v–crk oncogene: requirement for SH2 and SH3 domains and correlation between increased cellular phosphotyrosine and transformation. Mayer BJ, et al. **J Virol** 1990 Aug;64(8):3581–9

Human papillomavirus type 6b DNA required for initiation but not maintenance of transformation of C127 mouse cells. Morgan D, et al. **J Virol** 1990 Mar;64(3):969–76

A DNA replication–positive mutant of simian virus 40 that is defective for transformation and the production of infectious virions. Peden KW, et al. **J Virol** 1990 Jun; 64(6):2912–21

Mutational analysis of bovine papillomavirus type 1 E5 peptide domains involved in induction of cellular DNA synthesis. Rawls JA, et al. **J Virol** 1989 Nov;63(11):4962–4

Bovine papillomavirus E2 repressor mutant displays a high–copy–number phenotype and enhanced transforming activity. Riese DJ 2d, et al. **J Virol** 1990 Feb;64(2):944–9

Human cells infected with retrovirus vectors acquire an endogenous murine provirus. Scadden DT, et al. **J Virol** 1990 Jan;64(1):424–7

The large tumor antigen of simian virus 40 encodes at least two distinct transforming functions. Srinivasan A, et al. **J Virol** 1989 Dec;63(12):5459–63

Integration of human immunodeficiency virus types 1 and 2 DNA in vitro by cytoplasmic extracts of Moloney murine leukemia virus–infected mouse NIH 3T3 cells. Vink C, et al. **J Virol** 1990 Oct;64(10):5219–22

Transforming growth factors beta 1 and 2 transcriptionally regulate human papillomavirus (HPV) type 16 early gene expression in HPV–immortalized human genital epithelial cells. Woodworth CD, et al. **J Virol** 1990 Oct; 64(10):4767–75

Stability of anticancer activity induced by cellular differentiation. Maercklein PB, et al. **Lab Invest** 1990 Feb; 62(2):196–201

Lipid characteristics of RSV–transformed Balb/c 3T3 cell lines with different spontaneous metastatic potentials. Calorini L, et al. **Lipids** 1989 Aug;24(8):685–90

Differentiation trajectories in normal and malignant cells. Matioli GT. **Med Hypotheses** 1990 Jan;31(1):71–80 (33 ref.)

Carcinogenic optical rotation. Schiff DT. **Med Hypotheses** 1990 Jan;31(1):19–20

NMR investigation of cell cultures: early detection of infection by Herpes simplex virus type 2 and transformation. Valensin PE, et al. **Microbiologica** 1990 Jan; 13(1):11–9

Spontaneous Ha–ras gene activation in cultured primary murine keratinocytes: consequences of Ha–ras gene activation in malignant conversion and malignant progression. Greenhalgh DA, et al. **Mol Carcinog** 1989; 2(4):199–207

Activation of ras oncogenes in chemically transformed BALB/MK–2 mouse keratinocytes. Weissman BE, et al. **Mol Carcinog** 1989;2(3):150–8

Development of an in vitro model of tumor progression using v–raf and v–raf/v–myc transformed rat liver epithelial cells: correlation of tumorigenicity with the downregulation of specific proteins. Worland PJ, et al. **Mol Carcinog** 1990;3(1):20–9

Cotransfection of plasmids with ras and myc oncogenes to diploid cells derived from rodent fetuses: alteration of neoplastic transformation frequency depending on the gestation period. Yagi T, et al. **Mol Carcinog** 1989; 1(4):222–8

Alterations of G–protein coupling function in phosphoinositide signaling pathways of cells transformed by ras and other membrane–associated and cytoplasmic oncogenes. Alonso T, et al. **Mol Cell Biol** 1990 Jun; 10(6):3117–24

Expression of 9E3 mRNA is associated with mitogenicity, phosphorylation, and morphological alteration in chicken embryo fibroblasts. Barker K, et al. **Mol Cell Biol** 1990 Jul;10(7):3813–7

Characterization of pp85, a target of oncogenes and growth factor receptors. Cohen B, et al. **Mol Cell Biol** 1990 Jun; 10(6):2909–15

Phosphorylation of connexin43 gap junction protein in uninfected and Rous sarcoma virus–transformed mammalian fibroblasts. Crow DS, et al. **Mol Cell Biol** 1990 Apr;10(4):1754–63

The carboxy–terminal domains of erbB–2 and epidermal growth factor receptor exert different regulatory effects on intrinsic receptor tyrosine kinase function and transforming activity. Di Fiore PP, et al. **Mol Cell Biol** 1990 Jun;10(6):2749–56

Transformation of NIH 3T3 cells by overexpression of the normal coding sequence of the rat neu gene. Di Marco E, et al. **Mol Cell Biol** 1990 Jun;10(6):3247–52

bcr/abl and src but not myc and ras replace v–abl in lymphoid transformation. Engelman A, et al. **Mol Cell Biol** 1990 Aug;10(8):4365–9

A gene that encodes a protein consisting solely of zinc finger domains is preferentially expressed in transformed mouse cells. Ernoult–Lange M, et al. **Mol Cell Biol** 1990 Jan; 10(1):418–21

Corrective recombination of mouse immunoglobulin kappa alleles in Abelson murine leukemia virus–transformed pre–B cells. Feddersen RM, et al. **Mol Cell Biol** 1990 Feb; 10(2):569–76

A glycoprotein in the plasma membrane matrix as a major potential substrate of p60v–src. Hamaguchi M, et al. **Mol Cell Biol** 1990 Feb;10(2):830–6

Mutational activation of c–raf–1 and definition of the minimal transforming sequence. Heidecker G, et al. **Mol Cell Biol** 1990 Jun;10(6):2503–12

Expression of the MyoD1 muscle determination gene defines differentiation capability but not tumorigenicity of human rhabdomyosarcomas. Hiti AL, et al. **Mol Cell Biol** 1989 Nov;9(11):4722–30

Overexpression of the human insulinlike growth factor I receptor promotes ligand–dependent neoplastic transformation. Kaleko M, et al. **Mol Cell Biol** 1990 Feb; 10(2):464–73

Oncogenic transformation by vrel requires an amino–terminal activation domain. Kamens J, et al. **Mol Cell Biol** 1990 Jun;10(6):2840–7

A cell mutant that exhibits temperature–dependent sensitivity to transformation by various oncogenes. Kizaka S, et al. **Mol Cell Biol** 1989 Dec;9(12):5669–75

Glycoprotein tyrosine phosphorylation in Rous sarcoma virus–transformed chicken embryo fibroblasts. Kozma LM, et al. **Mol Cell Biol** 1990 Feb;10(2):837–41

Constitutive phosphorylation of the receptor for insulinlike growth factor I in cells transformed by the src oncogene. Kozma LM, et al. **Mol Cell Biol** 1990 Jul;10(7):3626–34

Rates of mutation to growth factor autonomy and tumorigenicity differ in hematopoietic stem and precursor cells expressing the multilineage colony–stimulating factor gene. Laker C, et al. **Mol Cell Biol** 1989 Dec;9(12):5746–9

Transformation by v–myb correlates with trans–activation of gene expression. Lane T, et al. **Mol Cell Biol** 1990 Jun; 10(6):2591–8

Antisense–fos RNA causes partial reversion of the transformed phenotypes induced by the c–Ha–ras oncogene. Ledwith BJ, et al. **Mol Cell Biol** 1990 Apr; 10(4):1545–55

Epidermal growth factor receptor cytoplasmic domain mutations trigger ligand–independent transformation. Massoglia S, et al. **Mol Cell Biol** 1990 Jun;10(6):3048–55

Transforming c–Ki–ras mutation is a preneoplastic event in mouse mammary carcinogenesis induced in vitro by N–methyl–N–nitrosourea. Miyamoto S, et al. **Mol Cell Biol** 1990 Apr;10(4):1593–9

Inactivation of the cellular p53 gene is a common feature of Friend virus–induced erythroleukemia: relationship of inactivation to dominant transforming alleles. Munroe DG, et al. **Mol Cell Biol** 1990 Jul;10(7):3307–13

A Swiss 3T3 variant cell line resistant to the effects of tumor promoters cannot be transformed by src. Nori M, et al. **Mol Cell Biol** 1990 Aug;10(8):4155–62

Activation of the proto–oncogene p60c–src by point mutations in the SH2 domain. O'Brien MC, et al. **Mol Cell Biol** 1990 Jun;10(6):2855–62

Transformation and pH homeostasis of fibroblasts expressing yeast H(+)–ATPase containing site–directed mutations. Perona R, et al. **Mol Cell Biol** 1990 Aug;10(8):4110–5

Transformation of murine bone marrow cells with combined v–raf–v–myc oncogenes yields clonally related mature B cells and macrophages. Principato M, et al. **Mol Cell Biol** 1990 Jul;10(7):3562–8

Complementation by BCL2 and C–HA–RAS oncogenes in malignant transformation of rat embryo fibroblasts. Reed JC, et al. **Mol Cell Biol** 1990 Aug;10(8):4370–4

Transformation of chicken embryo fibroblast cells by avian retroviruses containing the human Fyn gene and its mutated genes. Semba K, et al. **Mol Cell Biol** 1990 Jun; 10(6):3095–104

Genetic evidence that acute morphologic transformation, induction of cellular DNA synthesis, and focus formation are mediated by a single activity of the bovine papillomavirus E5 protein. Settleman J, et al. **Mol Cell Biol** 1989 Dec;9(12):5563–72

Induction of transformation and DNA synthesis after microinjection of raf proteins. Smith MR, et al. **Mol Cell Biol** 1990 Jul;10(7):3828–33

Isolation of recessive (mediator–) revertants from NIH 3T3 cells transformed with a c–H–ras oncogene. Yamada H, et al. **Mol Cell Biol** 1990 Apr;10(4):1822–7

Structure, function and transforming potential of the epidermal growth factor receptor. Velu TJ. **Mol Cell Endocrinol** 1990 May 7;70(3):205–16 (176 ref.)

Improvement of carcinogen identification in BALB/3T3 cell transformation by application of a 2–stage method. Sakai A, et al. **Mutat Res** 1989 Oct;214(2):285–96

Phosphorylation of GAP and GAP–associated proteins by transforming and mitogenic tyrosine kinases. Ellis C, et

al. **Nature** 1990 Jan 25;343(6256):377–81
A mutant protein kinase C that can transform fibroblasts. Megidish T, et al. **Nature** 1989 Dec 14;342(6251):807–11
Suppression of c-ras transformation by GTPase-activating protein [see comments] Zhang K, et al. **Nature** 1990 Aug 23;346(6286):754–6 Comment in: Nature 1990 Aug 23;346(6286):696–7.
An immunohistochemical characterization of the primitive and maturing neuroepithelial components in the OTT-6050 transplantable mouse teratoma. Caccamo DV, et al. **Neuropathol Appl Neurobiol** 1989 Sep–Oct;15(5):389–405
Transcription of the transforming genes of the oncogenic human papillomavirus-16 is stimulated by tumor promotors through AP1 binding sites. Chan WK, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):763–9
Regulation of major histocompatibility class I gene expression at the level of transcription in highly oncogenic adenovirus transformed rat cells. Ackrill AM, et al. **Oncogene** 1988 Oct;3(4):483–7
In vivo and in vitro effects of v-fos and EJ-Ha-ras oncogene expression in murine epidermal keratinocytes. Appleby MW, et al. **Oncogene** 1989 Nov;4(11):1323–30
Junctional intercellular communication is cooperatively inhibited by oncogenes in transformation. Azarnia R, et al. **Oncogene** 1989 Oct;4(10):1161–8
The E6 and E7 genes of HPV-18 are sufficient for inducing two-stage in vitro transformation of human keratinocytes. Barbosa MS, et al. **Oncogene** 1989 Dec;4(12):1529–32
Correlation between H-ras p21TLeu61 protein content and tumorigenicity of NIH3T3 cells. Bizub D, et al. **Oncogene** 1988 Oct;3(4):443–8
Expression of the TGF alpha integral membrane precursor induces transformation of NRK cells. Blasband AJ, et al. **Oncogene** 1990 Aug;5(8):1213–21
Six amino acids from the retroviral gene gag greatly enhance the transforming potential of the oncogene v-erb-B. Bruskin A, et al. **Oncogene** 1990 Jan;5(1):15–24
Alterations in growth properties of human papilloma virus type 16 immortalised human cervical keratinocyte cell line correlate with amplification and overexpression of c-myc oncogene. Crook T, et al. **Oncogene** 1990 Apr;5(4):619–22
Polyoma middle T abrogates TPA requirement of murine melanocytes and induces malignant melanoma. Dooley TP, et al. **Oncogene** 1988 Nov;3(5):531–5
Establishment of human retinal pigment epithelial cell lines by oncogenes. Dutt K, et al. **Oncogene** 1990 Feb; 5(2):195–200
Requirement for the C-terminal domain of the v-erbA oncogene protein for biological function and transcriptional repression. Forrest D, et al. **Oncogene** 1990 Mar;5(3):309–16
The v-rel oncogene encodes a cell-specific transcriptional activator of certain promoters. Gélinas C, et al. **Oncogene** 1988 Oct;3(4):349–55
In vitro and in vivo growth control of transformed lymphoid cells expressing plasma membrane galactosyltransferase. Ghanta VK, et al. **Oncogene** 1989 Nov;4(11):1337–44
Early and late responses to induction of rasT24 expression in Rat-1 cells. Godwin AK, et al. **Oncogene** 1990 Aug; 5(8):1231–41
The expression of the retinoblastoma gene product Rb1 in primary and adenovirus-transformed human cells. Grand RJ, et al. **Oncogene** 1989 Nov;4(11):1291–8
Sensitivity to ionising radiation of transformed human cells containing mutant ras genes. Grant ML, et al. **Oncogene** 1990 Aug;5(8):1159–64
Co-amplification of integrated hepatitis B virus DNA and transforming gene hst-1 in a hepatocellular carcinoma. Hatada I, et al. **Oncogene** 1988 Nov;3(5):537–40
Transformation of NIH3T3 fibroblasts by an expression vector for the human epidermal growth factor precursor. Heidaran MA, et al. **Oncogene** 1990 Aug;5(8):1265–70
Introduction of v-abl oncogene induces monocytic differentiation of an IL-3-dependent myeloid progenitor cell line. Keller JR, et al. **Oncogene** 1990 Apr;5(4):549–55
v-myc and v-raf act synergistically to induce B-cell tumors in pristane-primed adult BALBC mice. Kurie JM, et al. **Oncogene** 1990 Apr;5(4):577–82
Analysis of the role of the extracellular domain of the v-erbB oncogene in cellular transformation. Lee EB, et al. **Oncogene** 1990 Aug;5(8):1165–72
Colony stimulating factor-1 induced growth stimulation of v-fms transformed fibroblasts. Lyman SD, et al. **Oncogene** 1988 Oct;3(4):391–5
Infection with a TGF-alpha retroviral vector transforms normal mouse mammary epithelial cells but not normal rat fibroblasts. McGeady ML, et al. **Oncogene** 1989 Nov; 4(11):1375–82
Tumorigenicity of SEWA murine cells correlates with degree of c-myc amplification. Martinsson T, et al. **Oncogene** 1988 Oct;3(4):437–41
Overexpression confers an oncogenic potential upon the eph gene. Maru Y, et al. **Oncogene** 1990 Mar;5(3):445–7
Induction of the neoplastic phenotype of EBV-established B lymphocytes by the human Ha-ras oncogene. Nasi S, et al. **Oncogene** 1990 Jan;5(1):117–22
Stage-specific transformation of murine B lineage cells by ras and myc. Overell RW, et al. **Oncogene** 1989 Dec; 4(12):1425–32
Effect of CpG-rich sequences in transformation and tumorigenesis by polyomavirus. Renzo A, et al. **Oncogene** 1989 Dec;4(12):1469–75
Neoplastic transformation of human keratinocytes by polybrene-induced DNA-mediated transfer of an activated oncogene. Rhim JS, et al. **Oncogene** 1989 Nov;4(11):1403–9
Transforming activities of human CSF-1 receptors with different point mutations at codon 301 in their extracellular domains. Roussel MF, et al. **Oncogene** 1990 Jan;5(1):25–30
Sensitization of transformed rat cells to parvovirus MVMp is restricted to specific oncogenes. Salomé N, et al. **Oncogene** 1990 Jan;5(1):123–30
Cytoplasmic pH and anchorage-independent growth induced by v-Ki-ras, v-src or polyoma middle T. Schwartz MA, et al. **Oncogene** 1990 Jan;5(1):55–8
Transformation of NIH3T3 cells by A-MuLV proviral DNA: effect of plasmid linearization and carrier DNA on transformation efficiency. Shore SK, et al. **Oncogene** 1989 Nov;4(11):1411–3
DNA binding properties of murine p53. Steinmeyer K, et al. **Oncogene** 1988 Nov;3(5):501–7
Immortalization and transformation of human fibroblasts by regulated expression of polyoma virus T antigens. Strauss M, et al. **Oncogene** 1990 Aug;5(8):1223–9
Anti-receptor antibodies reverse the phenotype of cells transformed by two interacting proto-oncogene encoded receptor proteins. Wada T, et al. **Oncogene** 1990 Apr; 5(4):489–95
ras induced lesions in a heterotopic mouse bladder. Wagner HE, et al. **Oncogene** 1990 Apr;5(4):557–63
Linkage of tyrosine kinase activity with transforming ability of the p185neu oncoprotein. Weiner DB, et al. **Oncogene** 1989 Oct;4(10):1175–83
Isolation of a new class of 'flat' revertants from ras-transformed NIH3T3 cells using cis-4-hydroxy-L-proline. Yanagihara K, et al. **Oncogene** 1990 Aug;5(8):1179–86
Selective potentiation of c-fps/fes transforming activity by a phosphatase inhibitor. Feldman RA, et al. **Oncogene Res** 1990;5(3):187–97
Analysis of mutant forms of the c-src gene product containing a phenylalanine substitution for tyrosine 416. Ferracini R, et al. **Oncogene Res** 1990;5(3):205–19
Isolation and characterization of flat revertant cell lines from A-MuLV-transformed fibroblasts. Glass DJ, et al. **Oncogene Res** 1990;5(3):175–85
A single amino-acid substitution in the DNA-binding domain of the myb oncogene confers a thermolabile phenotype to E26-transformed myeloid cells. Li RP, et al. **Oncogene Res** 1989;5(2):137–41
Expression level of the retinoblastoma susceptibility gene is elevated in simian virus 40-transformed cells. Moritsuka T, et al. **Oncogene Res** 1989;5(2):155–9
Transformation by basic fibroblast growth factor requires high levels of expression: comparison with transformation by hst/K-fgf. Quarto N, et al. **Oncogene Res** 1989; 5(2):101–10
Identification of a small region of the v-fos gene product that is sufficient for transforming potential and growth-stimulating activity. Yoshida T, et al. **Oncogene Res** 1989;5(2):79–89
Malignant melanoma associated with melanocytoma of the optic disc. Shields JA, et al. **Ophthalmology** 1990 Feb; 97(2):225–30
Isolation, culture, and transplantation of intrahepatic biliary epithelial cells and oval cells. Sirica AE, et al. **Pathobiology** 1990;58(1):44–64 (159 ref.)
Human papilloma virus DNAs immortalize normal human mammary epithelial cells and reduce their growth factor requirements. Band V, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):463–7
Tumor suppression involves down-regulation of interleukin 3 expression in hybrids between autocrine mastocytoma and interleukin 3-dependent parental mast cells. Diamantis ID, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(23):9299–303
Serum independence of transcription from the promoter of an avian retrovirus in v-src-transformed cells is a primary, intracellular effect of increased tyrosine phosphorylation. Dutta A, et al. **Proc Natl Acad Sci U S A** 1990 Jan; 87(2):608–12
Wild-type p53 can inhibit oncogene-mediated focus formation. Eliyahu D, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8763–7
Autocrine mechanism for v-sis transformation requires cell surface localization of internally activated growth factor receptors. Fleming TP, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):8063–7
Two oncogenes, v-fos and v-ras, cooperate to convert normal keratinocytes to squamous cell carcinoma. Greenhalgh DA, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):643–7
Persistent induction of cyclooxygenase in p60v-src-transformed 3T3 fibroblasts. Han JW, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3373–7
Hamster cell line suitable for transfection assay of transforming genes. Higashi T, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2409–13
Transformation stimulates glucose transporter gene expression in the absence of protein kinase C. Hiraki Y, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8252–6
Farnesol modification of Kirsten-ras exon 4B protein is essential for transformation. Jackson JH, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3042–6
De novo methylation of the MyoD1 CpG island during the establishment of immortal cell lines. Jones PA, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6117–21
Monoclonal antibodies to individual tyrosine-phosphorylated protein substrates of oncogene-encoded tyrosine kinases. Kanner SB, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(9):3328–32
Role of a tumor-suppressor gene in the negative control of anchorage-independent growth of Syrian hamster cells. Koi M, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(22):8773–7
The spatial distribution of exposed nuclear DNA in normal, cancer, and reverse-transformed cells. Krystosek A, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6560–4
Nontumorigenic squamous cell carcinoma line converted to tumorigenicity with methyl methanesulfonate without activation of HRAS or MYC. Milo GE, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1268–72
Cooperation of c-raf-1 and c-myc protooncogenes in the neoplastic transformation of simian virus 40 large tumor antigen-immortalized human bronchial epithelial cells. Pfeifer AM, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(24):10075–9
Neoplastic transformation and tumorigenesis by the human protooncogene MYC. Ramsay GM, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2102–6
Increased UV resistance in xeroderma pigmentosum group A cells after transformation with a human genomic DNA clone. Rinaldy A, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6818–22
Relation of spontaneous transformation in cell culture to adaptive growth and clonal heterogeneity. Rubin AL, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):482–6
c-ets-2 protooncogene has mitogenic and oncogenic activity. Seth A, et al. **Proc Natl Acad Sci U S A** 1989 Oct; 86(20):7833–7
Activation of murine c-abl protooncogene: effect of a point mutation on oncogenic activation. Shore SK, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6502–6
Differential expression of an 80-kDa protein kinase C substrate in preneoplastic and neoplastic mouse JB6 cells. Simek SL, et al. **Proc Natl Acad Sci U S A** 1989 Oct; 86(19):7410–4
Oncogenic transformation by the tax gene of human T-cell leukemia virus type I in vitro. Tanaka A, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1071–5
Neoplastic transformation of immortalized human epidermal keratinocytes by ionizing radiation. Thraves P, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1174–7
Production of platelet-derived endothelial cell growth factor by normal and transformed human cells in culture. Usuki K, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7427–31
Autocrine transformation by chimeric signal peptide-basic fibroblast growth factor: reversal by suramin. Yayon A, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5346–50
Avian proto-myc genes promoted by defective or nondefective retroviruses are single-hit transforming genes in primary cells [published erratum appears in Proc Natl Sci U S A 1989 Nov;86(22):8747] Zhou RP, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7721–5
The effect of radiation in combination with carcinogens on the growth of normal urothelium in explant culture. Mothersill C, et al. **Radiat Environ Biophys** 1990; 29(3):213–23
Radioresistance induced by oncogenic transformation. Ling CC, et al. **Radiat Res** 1989 Nov;120(2):267–79
Cellular and molecular characteristics of transformed T cells from an antigen-specific T-cell line. Wegener AM, et al. **Scand J Immunol** 1990 May;31(5):645–56
Molecular localization of the transforming and secretory properties of PDGF A and PDGF B. LaRochelle WJ, et al. **Science** 1990 Jun 22;248(4962):1541–4
Tyrosine kinase activity and transformation potency of bcr-abl oncogene products. Lugo TG, et al. **Science** 1990 Mar 2;247(4946):1079–82
Transcriptional activation by wild-type but not transforming mutants of the p53 anti-oncogene. Raycroft L, et al. **Science** 1990 Aug 31;249(4972):1049–51
Immunological properties of the murine macrophage cell line P388D1 and its oncogene transfectants in the induction of alloresponses. Wottge HU, et al. **Transplant Proc** 1990 Aug;22(4):1994
HSV-2-induced tumorigenicity in HPV16-immortalized human genital keratinocytes. DiPaolo JA, et al. **Virology** 1990 Aug;177(2):777–9
Glucocorticoid-enhanced neoplastic transformation of human keratinocytes by human papillomavirus type 16 and an activated ras oncogene. Dürst M, et al. **Virology** 1989 Dec;173(2):767–71
The N-terminal env-derived amino acids of v-rel are required for full transforming activity. Garson K, et al. **Virology** 1990 Jul;177(1):106–15
HPV-18 immortalization of human keratinocytes. Kaur P, et al. **Virology** 1989 Nov;173(1):302–10
Mutations in polyomavirus large T affecting immortalization of primary rat embryo fibroblasts. Larose A, et al. **Virology** 1990 May;176(1):98–105
The v-rel oncogene product is complexed with cellular proteins including its proto-oncogene product and heat shock protein 70. Lim MY, et al. **Virology** 1990 Mar; 175(1):149–60
Phenotypic properties of herpesvirus-transformed cells with high tumorigenic and metastatic ability. Marks G, et al. **Virus Res** 1990 Jan;15(1):27–44

[Histology of colonic polyps] Delos M, et al. **Acta Gastroenterol Belg** 1989 Jul–Oct;51(4–5):366–74 (32 ref.) (Eng. Abstr.) (Fre)

[Leukoplakia of the oral cavity] Petit JC. **Rev Belge Med Dent** 1989;44(4):59–77 (83 ref.) (Eng. Abstr.) (Fre)

[Hyperplasiogenic polyps and stomach carcinoma risk—experiences following 1074 polypectomies and follow–up studies] Bosseckert H, et al. **Schweiz Rundsch Med Prax** 1990 Apr 24;79(17):537–9 (Eng. Abstr.) (Ger)

[Establishment of rat myelomonocytic leukemia cell line (c–WRT–7)—induction of differentiation and transplantation into syngeneic and non–syngeneic rats] Fujii T. **Hokkaido Igaku Zasshi** 1989 Nov;64(6):769–76 (Eng. Abstr.) (Jpn)

[Abnormality in the cytoskeleton of cancer cells—with special reference to intermediate filaments] Nagata K, et al. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(12 Suppl):1590–8 (Jpn)

[Oncogenes and cancer] Santos Riquelme M. **Rev Med Chil** 1988 Dec;116(12):1306–13 (40 ref.) (Eng. Abstr.) (Spa)

ANALYSIS

The use of in vitro assays for neoplastic transformation and tumor promotion. Rosa S, et al. **Ann Ist Super Sanita** 1989; 25(4):545–8

Modulation of neoplastic development: concepts and examples. Roberfroid M, et al. **Bull Cancer (Paris)** 1990; 77(5):467–73

CHEMICALLY INDUCED

Establishment of a highly reproducible transformation assay of a ras–transfected BALB 3T3 clone by treatment with promoters. Sasaki K, et al. **Basic Life Sci** 1990;52:411–6

Effects of the tumor promoter 2–acetylaminofluorene and of 4–acetylaminofluorene on rat liver growth. Gerlyng P, et al. **Bull Cancer (Paris)** 1990;77(5):461–6

Malignant transformation of mouse BALB/c3T3 cells induced by NaNO2. Tsuda H, et al. **Carcinogenesis** 1990 Apr;11(4):595–7

Altered cytokeratin expression and differentiation induction during neoplastic transformation of cultured rat liver cells by nickel subsulfide. Swierenga SH, et al. **Cell Biol Toxicol** 1989 Nov;5(3):271–86

5–azacytidine–induced tumorous transformation and DNA hypomethylation in Nicotiana tissue cultures. Durante M, et al. **Dev Genet** 1989;10(4):298–303

Cell–specific brain tumour induction in neural transplants: evidence for multistep carcinogenesis in the nervous system. Kleihues P, et al. **IARC Sci Publ** 1989;(96):121–9

A host–mediated in vivo/in vitro assay with peritoneal murine macrophages for the detection of carcinogenic chemicals. Massa T, et al. **J Cancer Res Clin Oncol** 1990; 116(4):357–64

In vitro transformation of BALB/c 3T3 cells by 1,1,2,2–tetrachloroethane. Colacci A, et al. **Jpn J Cancer Res** 1990 Aug;81(8):786–92

Induction of ouabain–resistance mutation and cycle–dependent transformation of C3H/10T1/2 cells by N–nitroso–2–acetylaminofluorene. Lin JK, et al. **Mutat Res** 1990 May;230(1):35–43

Enhanced morphological and neoplastic transformation of Syrian hamster embryo cells cultured at pH 6.70. LeBoeuf RA, et al. **Prog Clin Biol Res** 1990;340D:219–28

Malignant transformation of human fibroblasts by oncogene transfection or carcinogen treatment. McCormick JJ, et al. **Prog Clin Biol Res** 1990;340D:195–205 (30 ref.)

Chemical–induced transformation in BALB/c–3T3 cells: relationship between in vitro transformation and cytotoxicity, carcinogenesis, and genotoxicity. Matthews EJ. **Prog Clin Biol Res** 1990;340D:229–38

Inhibition of 12–O–tetradecanoylphorbol–13–acetate–enhanced transformation in vitro by inhibitors of phospholipid metabolism. Semba M, et al. **Toxicol Lett** 1990 Mar; 51(1):1–6

Effects of activators and inhibitors of protein kinase C on two–stage transformation in BALB/3T3 cells. Semba M, et al. **Toxicol Lett** 1990 Mar;51(1):7–12

[Neoplastic transformation of human embryonic/nasopharyngeal epithelial cells induced by N N'–dinitrosopiperazine (DNP) in vitro] Chen ZC. **Chung–hua Ping Li Hsueh Tsa Chih** 1989 Dec;18(4):284–6 (Eng. Abstr.) (Chi)

[Modification of the cellular cytoskeleton and hepatic tumor promotion] Decloitre F, et al. **Bull Cancer (Paris)** 1990; 77(5):479–83 (Eng. Abstr.) (Fre)

[Concept of tumor promoters in hepatocarcinogenesis] Fraysinet C, et al. **Bull Cancer (Paris)** 1990;77(5):455–9 (Eng. Abstr.) (Fre)

[Acquisition of metastatic potential and chemoresistance. Markers connected to the development of malignancy] Poupon MF. **Pathol Biol (Paris)** 1989 Nov;37(9):1018–21 (Fre)

[Animal experiment and in vitro studies with inhaled environmental pollutants] Mohr U, et al. **Pneumologie** 1990 Feb;44 Suppl 1:390–6 (19 ref.) (Eng. Abstr.) (Ger)

DRUG EFFECTS

Designing a schedule of progestin administration in the control of endometrial carcinoma growth in the nude mouse model. Mortel R, et al. **Am J Obstet Gynecol** 1990 Apr;162(4):928–34; discussion 934–6

Oncogenic transformation by human papillomavirus type 16 deoxyribonucleic acid in the presence of progesterone or progestins from oral contraceptives. Pater A, et al. **Am J Obstet Gynecol** 1990 Apr;162(4):1099–103

Lack of effect of colony–stimulating factors, interleukins, interferons, and tumor necrosis factor on the growth and differentiation of cultured Reed–Sternberg cells. Comparison with effects of phorbol ester and retinoic acid. Hsu SM, et al. **Am J Pathol** 1990 Jan;136(1):181–9

Retinoidal benzoic acids (arotenoids) and other retinoids inhibit in vitro transformation of epithelial cells. Mass MJ. **Anticancer Res** 1990 Jan–Feb;10(1):241–5

Effect of 7 beta–hydroxycholesterol on astrocyte primary cultures and derived spontaneously transformed cell lines: cytotoxicity and metabolism. Kupferberg A, et al. **Biochim Biophys Acta** 1989 Oct 9;1013(3):231–8

Increased erythroid potentiating activity/tissue inhibitor of metalloproteinases and jun/fos transcription factor complex characterize tumor promoter–induced megakaryoblastic differentiation of K562 leukemia cells. Alitalo R, et al. **Blood** 1990 May 15;75(10):1974–82

Effects of low molecular weight B–cell growth factor on proliferation of leukemic cells from children with B–cell precursor–acute lymphoblastic leukemia. Findley HW Jr, et al. **Blood** 1990 Feb 15;75(4):951–7

Inhibition of phorbol ester–induced monocytic differentiation and c–fms gene expression by dexamethasone: potential involvement of arachidonic acid metabolites. Stone RM, et al. **Blood** 1990 Sep 15;76(6):1225–32

Effect of retinoic acid on human neuroblastoma: correlation between morphological differentiation and changes in plasminogen activator and inhibitor activity. Benjamin LA, et al. **Cancer Chemother Pharmacol** 1989;25(1):25–31

6–ethylmercaptopurine–mediated growth inhibition of HL–60 cells in vitro irrespective of purine salvage. Gibboney DS, et al. **Cancer Chemother Pharmacol** 1989; 25(3):189–94

Morphological change and cellular differentiation induced by cisplatin in human neuroblastoma cell lines. Parodi MT, et al. **Cancer Chemother Pharmacol** 1989;25(2):114–6

Okadaic acid: a reversible inhibitor of neoplastic transformation of mouse fibroblasts. Mordan LJ, et al. **Cancer Commun** 1990;2(7):237–41

Identification of a proteolytic activity which responds to anticarcinogenic protease inhibitors in C3H–10T1/2 cells. Carew JA, et al. **Cancer Lett** 1990 Feb;49(2):153–63

Inhibition of morphological transformation of C3H10T1/2CL8 mouse embryo cells by multiple carcinogen treatments. Nesnow S, et al. **Cancer Lett** 1989 Sep 15;47(1–2):91–7

Suppression of x–ray induced transformation by Valium and aspirin in mouse C3H10T1/2 cells. Radner BS, et al. **Cancer Lett** 1990 May 15;51(1):49–57

Altered queuine modification of transfer RNA involved in the in vitro transformation of Chinese hamster embryo cells. Muralidhar G, et al. **Cancer Res** 1989 Dec 15;49(24 Pt 1):7110–4

Suppression of transformation by and growth adaptation to low concentrations of glutamine in NIH–3T3 cells. Rubin AL. **Cancer Res** 1990 May 1;50(9):2832–9

Inhibition of transformation in cultured rat tracheal epithelial cells by potential chemopreventive agents. Steele VE, et al. **Cancer Res** 1990 Apr 1;50(7):2068–74

Inhibition of radiation–induced transformation of C3H/10T1/2 cells by specific protease substrates. Billings PC, et al. **Carcinogenesis** 1990 Feb;11(2):329–32

Cytotoxic and neoplastic transforming effects of industrial hexavalent chromium pigments in Syrian hamster embryo cells. Elias Z, et al. **Carcinogenesis** 1989 Nov;10(11):2043–52

Study of various transforming effects of the anabolic agents trenbolone and testosterone on Syrian hamster embryo cells. Lasne C, et al. **Carcinogenesis** 1990 Apr;11(4):541–7

Retinoic acid inhibits the fixation of initial transformational damage in X–irradiated Balb/3T3 mouse fibroblasts in vitro. Rutz HP, et al. **Carcinogenesis** 1989 Dec; 10(12):2183–6

Pentapeptide inhibitor of epidermal mitosis: production and responsiveness in cultures of normal, transformed and neoplastic human keratinocytes. Watt FM, et al. **Carcinogenesis** 1989 Dec;10(12):2249–53

Pyrene acts as a cocarcinogen with the carcinogens benzo[a]pyrene, beta–propiolactone and radiation in the induction of malignant transformation in cultured mouse fibroblasts; soybean extract containing the Bowman–Birk inhibitor acts as an anticarcinogen. Baturay N, et al. **Cell Biol Toxicol** 1986 Mar;2(1):21–32

Stimulation of cell growth and proliferation in NIH–3T3 cells by onion and garlic oils. Zelikoff JT, et al. **Cell Biol Toxicol** 1986 Sep;2(3):369–78

Use of biocarrier beads and flow cytometry for single–cell studies of fibronectin gene regulation in dibutyryl cyclic AMP reverse transformed CHO–K1 cells. Sterner JM, et al. **Cell Biophys** 1989 Dec;15(3):159–71

Variant human neuroblastoma cell lines resistant to the differentiation–inducing effect of interferon–gamma. Higuchi T, et al. **Cell Struct Funct** 1989 Aug;14(4):439–45

Growth regulation of multi–factor–dependent myeloid cell lines: IL–4, TGF–beta and pertussis toxin modulate IL–3– or GM–CSF–induced growth by controlling cell cycle length. Koyasu S, et al. **Cell Struct Funct** 1989 Aug; 14(4):459–71

Phosphoinositide metabolism and oncogenes. Takenawa T, et al. **Clin Chim Acta** 1989 Dec 15;185(3):309–16

Flow cytometric analysis of the kinetic effects of cisplatin on lung cancer cells. Fujikane T, et al. **Cytometry** 1989 Nov;10(6):788–95

The growth factor–platelet–transformation connection. Bowen–Pope DF. **Dev Biol (N Y 1985)** 1986;3:111–28 (132 ref.)

Inhibitory effects of transforming growth factor–beta on laminin production and growth exhibited by endoderm–like cells derived from embryonal carcinoma cells. Kelly D, et al. **Differentiation** 1989 Jul;41(1):34–41

Induction of mutagenesis and transformation in BALB/c–3T3 clone A31–1 cells by diverse chemical carcinogens. Lubet RA, et al. **Environ Mol Mutagen** 1990; 16(1):13–20

Differentiating effect of L–tyrosine on the human melanoma cell line IIB–MEL–J. Guerra L, et al. **Exp Cell Res** 1990 May;188(1):61–5

Evidence for autocrine growth stimulation of cultured colon tumor cells by a gastrin/cholecystokinin–like peptide. Hoosein NM, et al. **Exp Cell Res** 1990 Jan;186(1):15–21

Increased secretory activity and estradiol receptor expression are among other relevant aspects of MCF–7 human breast tumor cell growth which are expressed only in the absence of serum. Medrano EE, et al. **Exp Cell Res** 1990 May; 188(1):2–9

Basic fibroblast growth factor, albumin, and transferrin purified from rat rhodamine fibrosarcoma tissue are all essential for growth of primary tumor cells from the same tissue in serum–free medium. Nagao Y, et al. **In Vitro Cell Dev Biol** 1989 Oct;25(10):873–80

Effect of tea on 12–O tetradecanoyl–phorbol–13 acetate (TPA) induced promotion of transformation in JB6 mouse epidermal cells. Jain AK, et al. **Indian J Cancer** 1989 Jun; 26(2):92–8

Inhibition of growth and squamous–cell differentiation markers in cultured human head and neck squamous carcinoma cells by beta–all–trans retinoic acid. Jetten AM, et al. **Int J Cancer** 1990 Jan 15;45(1):195–202

Differentiation capacity of human non–small–cell lung cancer cell lines after exposure to phorbol ester. Salge U, et al. **Int J Cancer** 1990 Jun 15;45(6):1143–50

Calcium–independent growth of human ovarian carcinoma cells. Chan TC. **J Cell Physiol** 1989 Dec;141(3):461–6

Inhibition of epidermal growth factor/transforming growth factor–alpha–stimulated cell growth by a synthetic peptide. Eppstein DA, et al. **J Cell Physiol** 1989 Nov;141(2):420–30

Impaired carcinoembryonic antigen release during the process of suramin–induced differentiation of the human colonic adenocarcinoma cell clone HT29–D4. Fantini J, et al. **J Cell Physiol** 1990 Jun;143(3):468–74

Role of lipocortin I in the glucocorticoid induction of the terminal differentiation of a human squamous carcinoma. Violette SM, et al. **J Cell Physiol** 1990 Jan;142(1):70–7

Transforming growth factors type beta 1 and beta 2 are equipotent growth inhibitors of human breast cancer cell lines. Zugmaier G, et al. **J Cell Physiol** 1989 Nov; 141(2):353–61

The effect of antisense RNA to fibronectin on the malignancy of hybrids between melanoma cells and normal fibroblasts. Steel DM, et al. **J Cell Sci** 1989 Jul;93 (Pt 3):515–24

Ethanol treatment inhibits the development of diethylnitrosamine–induced tumors in rats. Mandl J, et al. **J Exp Pathol** 1989 Fall;4(4):227–35

Drug–induced revertants of adenovirus–transformed cells: retransformation by 5–azacytidine without reactivation of E1a. Weber JM, et al. **J Gen Virol** 1990 Mar;71 (Pt 3):585–91

Okadaic acid and phorbol esters: comparative effects of these tumor promoters on cell transformation, intercellular communication and differentiation in vitro. Katoh F, et al. **Jpn J Cancer Res** 1990 Jun–Jul;81(6–7):590–7

Synergistic action of tiazofurin and retinoic acid on differentiation and colony formation of HL–60 leukemia cells. Yamaji Y, et al. **Life Sci** 1990;46(6):435–42

Permanent conversion of mouse and human cells transformed by activated ras or raf genes to apparently normal cells by treatment with the antibiotic azatyrosine. Shindo–Okada N, et al. **Mol Carcinog** 1989;2(3):159–67

Action of retinoids during transformation of 10T1/2 cells. Przybyszewska M, et al. **Neoplasma** 1990;37(1):37–41

Effect of dimethylsulfoxide on human gliomas: correlations between the nuclear magnetic resonance spectra and the transformed phenotypes of the tumor cells. Geder L, et al. **Neurofibromatosis** 1989;2(1):23–34

Effects of specific fatty acids on cell transformation induced by an activated c–H–ras oncogene. Hsiao WL, et al. **Oncogene** 1990 Mar;5(3):417–21

Effect of glucocorticoids on oncogene transformed NIH3T3 cells. Matin A, et al. **Oncogene** 1990 Jan;5(1):111–6

The role of the c–fms oncogene in the regulation of HL–60 cell differentiation. Wu J, et al. **Oncogene** 1990 Jun; 5(6):873–7

Calcium current inactivation during nerve–growth–factor–induced differentiation of PC12 cells. Streit J, et al. **Pflugers Arch** 1990 Jun;416(4):368–74

Comparison of transforming, antimitotic and chromosomal

aberration-inducing properties of melphalan and cyclophosphamide. Chlopkiewicz B, et al. **Pol J Pharmacol Pharm** 1989 Jul-Aug;41(4):293-8

Development of in vitro systems for chemoprevention research. Bertram JS, et al. **Prev Med** 1989 Sep; 18(5):562-75

Flat reversion by okadaic acid of raf and ret-II transformants. Sakai R, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(24):9946-50

Inhibitors of repair of potentially lethal damage and DNA polymerases also influence the recovery of potentially neoplastic transforming damage in C3H10T-1/2 cells. Raaphorst GP, et al. **Radiat Res** 1990 Jul;123(1):49-54

Ciclosporin inhibits phorbol-ester-induced hyperplastic transformation and tumor promotion in mouse skin probably by suppression of Ca2+/calmodulin-dependent processes such as phosphorylation of elongation factor 2. Gschwendt M, et al. **Skin Pharmacol** 1988;1(2):84-92

Proliferative changes in the prostate. Pour P, et al. **Toxicol Appl Pharmacol** 1989 Dec;101(3):499-509

Effect of glycerol on cell kinetics and tumorigenesis in mouse lung following urethan administration. Nagahara N, et al. **Toxicol Pathol** 1990;18(2):289-96

[Malignant transformation of NIH 3T3 cells by urine NTCA in normal population of Lin-xian County] Cui XX. **Chung Hua Chung Liu Tsa Chih** 1989 Mar;11(2):101-3 (Eng. Abstr.) **(Chi)**

[Studies on mechanism of carcinogenesis in cell culture. III. Butyric acid-induced phenotypic reversion of malignant transformed Syrian hamster lung cells (BHLB4)] Xu K. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Jun; 11(3):195-9 (Eng. Abstr.) **(Chi)**

[In vitro transformation of Syrian hamster embryo cells by four chemicals] Zhang ZZ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Mar;20(1):96-8 (Eng. Abstr.) **(Chi)**

[Effect of expression of exogenous PDGF-A chain on growth and transformation of CHO cells] Yeh HJ, et al. **Shih Yen Sheng Wu Hsueh Pao** 1989 Dec;22(4):455-65 (Eng. Abstr.) **(Chi)**

[Effects of conditioned media of rat pleural mesothelial cells, transformed in vivo or in vitro by asbestos, on the proliferation of normal mesothelial cells. Comparison with epidermal growth factor, EGF] Van der Meeren A, et al. **C R Acad Sci [III]** 1989;309(15):617-22 (Eng. Abstr.) **(Fre)**

[Characteristics of revertant cells induced from transformed cells by the treatment with an antibiotic, azatyrosine] Okada N, et al. **Gan To Kagaku Ryoho** 1990 Mar;17(3 Pt 2):500-1 **(Jpn)**

[A study of the differentiation inducibility of cultured cells by environmental chemical substances] Kamakura M. **Nippon Eiseigaku Zasshi** 1989 Dec;44(5):1021-30 (Eng. Abstr.) **(Jpn)**

[Effects of gonadotropin on the growth of malignant ovarian neoplasms assessed by subrenal capsule assay] Ohtani K. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jun;42(6):579-85 (Eng. Abstr.) **(Jpn)**

[The induction of differentiation of myeloid antigen positive acute lymphoblastic leukemia by phorbol ester (TPA) or GM-CSF] Takeuchi H, et al. **Rinsho Ketsueki** 1990 May; 31(5):639-46 (Eng. Abstr.) **(Jpn)**

[Characteristics of action of precursors of carcinogenic nitroso-compounds on cell cultures] Osin'kovskaia ND, et al. **Tsitologiia** 1989 Jul;31(7):818-23 (Eng. Abstr.) **(Rus)**

GENETICS

Clonal evolution in Ph-negative, bcr-positive chronic myeloid leukaemia before and after bone marrow transplantation. Secker-Walker LM, et al. **Acta Haematol (Basel)** 1989;82(4):205-9

Perturbation of the calmodulin system in transformed cells. Van Eldik LJ, et al. **Adv Exp Med Biol** 1990;269:111-20

Structural changes in the ribosomal genes of immortalized and transformed mouse embryo C3H/10T1/2 cell lines. Oyan AM, et al. **APMIS** 1990 Mar;98(3):212-20

rho gene amplification and malignant transformation. Avraham H. **Biochem Biophys Res Commun** 1990 Apr 16; 168(1):114-24

Absence of mutations in codon 61 of the Ha-ras oncogene in epithelial cells transformed in vitro by 7,12-dimethylbenz(a)anthracene. Mass MJ, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1319-23

Translocation of chromosomes 16 and 18 in oxygen radical-transformed human lung fibroblasts. Weitberg AB, et al. **Biochem Biophys Res Commun** 1990 May 31; 169(1):70-4

NIH3T3 transforming gene not a general feature of atherosclerotic plaque DNA (atherosclerosis/oncogene/NIH3T3 transfection assay). Yew PR, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1067-71

MNU-induced point mutation and activation of c-Ha-ras oncogene in cell lines derived from human pancreas explants. Maheshwari KK, et al. **Biochem Int** 1990; 20(1):117-25

Tyrosine kinase activities and neoplastic transformation. Felice G, et al. **Biochem Soc Trans** 1990 Feb;18(1):69-72 (14 ref.)

Proton NMR studies of transforming and nontransforming H-ras p21 mutants. Schlichting I, et al. **Biochemistry** 1990 Jan 16;29(2):504-11

Growth factors and oncogenes. Berthois Y, et al. **Biomed Pharmacother** 1989;43(9):635-9 (47 ref.)

The regulation of gene expression and the molecular basis of cancer. Pauly M, et al. **Biomed Pharmacother** 1990; 44(4):195-8

Transforming growth factors in human breast cancer. Salomon DS, et al. **Biomed Pharmacother** 1989;43(9):661-7

Double minute chromosomes and a homogeneously staining chromosome region in C3H10T1/2 murine cells transformed "in vitro" by proton radiation. Privitera E, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):75-86

Relationships between heparanase activity and increasing metastatic potential of fibroblasts transfected with various oncogenes. Schwarz LC, et al. **Cancer Lett** 1990 Jun 15; 51(3):187-92

Cytogenetic abnormalities in cancer: with special emphasis on tumor heterogeneity. Pathak S. **Cancer Metastasis Rev** 1990 Feb;8(4):299-318 (141 ref.)

Detection of transforming growth factor-alpha messenger RNA in normal and chemically transformed hamster oral epithelium by in situ hybridization. Chang LC, et al. **Cancer Res** 1989 Dec 1;49(23):6700-7

Nonrandom chromosome alterations that correlate with progression to immortality in rat tracheal epithelial cells transformed with N-methyl-N'-nitro-N-nitrosoguanidine. Endo S, et al. **Cancer Res** 1990 Feb 1;50(3):740-7

Workshop report from the Division of Research Grants, National Institutes of Health. Molecular genetic approaches to the analysis of malignant transformation--a pathology B study section workshop. Furmanski P, et al. **Cancer Res** 1990 Jun 15;50(12):3805-6

Molecular cytogenetics: Rosetta stone for understanding cancer--twenty-ninth G. H. A. Clowes memorial award lecture. Rowley JD. **Cancer Res** 1990 Jul 1;50(13):3816-25 (69 ref.)

Karyotypic changes with neoplastic conversion in morphologically transformed golden hamster embryo cells induced by X-rays. Watanabe M, et al. **Cancer Res** 1990 Feb 1;50(3):760-5

Spontaneous induction of malignancy in mouse cells by a human small cell lung cancer implanted in nude mice. Gupta V, et al. **Carcinogenesis** 1990 May;11(5):713-22

Conditional inhibition of transformation and of cell proliferation by a temperature-sensitive mutant of p53. Michalovitz D, et al. **Cell** 1990 Aug 24;62(4):671-80

Tumorigenicity of EJ-ras oncogene transformed NIH 3T3 cells and expression of plasminogen activators. Sidhu MK, et al. **Cell Biol Int Rep** 1990 Jun;14(6):527-42

Oncogenes and anti-oncogenes. Cooper JA. **Curr Opin Cell Biol** 1990 Apr;2(2):285-95 (31 ref.)

Flow cytometry in the quantitation of DNA aneuploidy and cell proliferation in human disease. Quirke P. **Curr Top Pathol** 1990;82:215-56 (272 ref.)

Establishment of an interleukin-5-dependent subclone from an interleukin-3-dependent murine hemopoietic progenitor cell line, LyD9, and its malignant transformation by autocrine secretion of interleukin-5. Tohyama K, et al. **EMBO J** 1990 Jun;9(6):1823-30

Cooperation between bovine leukaemia virus transactivator protein and Ha-ras oncogene product in cellular transformation. Willems L, et al. **EMBO J** 1990 May; 9(5):1577-81

Proto-oncogene expression in differentiating and non-differentiating chronic myelogenous leukaemia cells. Wang ZQ, et al. **Eur J Cancer** 1990;26(6):694-8

A chemically transformed rat fibroblast cell line expresses high levels of oncomodulin. Sommer EW, et al. **FEBS Lett** 1989 Nov 6;257(2):307-10

Leukaemia is a genetic disorder of somatic cells. Luzzatto L. **Haematologica** 1990 Mar-Apr;75(2):105-8 (25 ref.)

Aberrant expression of the multi-CSF gene in hematopoietic precursor and stem cell lines initiates leukemogenic progression. Laker C, et al. **Hamatol Bluttransfus** 1989; 32:188-96

Even transcriptionally competent proviruses are silent in bovine leukemia virus induced tumor cells. van den Broeke A, et al. **Hamatol Bluttransfus** 1989;32:428-32

Transforming activity of nasopharyngeal carcinoma DNA detectable in mouse JB6 cells. Colburn NH, et al. **Int J Cancer** 1989 Dec 15;44(6):1012-6

Neoplastic transformation of a human kidney epithelial cell line transfected with v-Ha-ras oncogene. Haugen A, et al. **Int J Cancer** 1990 Mar 15;45(3):572-7

Deregulated c-myc expression in Epstein-Barr-virus-immortalized B-cells induces altered growth properties and surface phenotype but not tumorigenicity. Hotchin NA, et al. **Int J Cancer** 1990 Mar 15;45(3):566-71

Trisomy of chromosome 9q: specific chromosome change associated with tumorigenicity during the process of X-ray-induced neoplastic transformation in golden hamster embryo cells. Suzuki K, et al. **Int J Cancer** 1989 Dec 15; 44(6):1057-61

Phenotypes and mechanisms in the transformation of hematopoietic cells. Ihle JN, et al. **Int J Cell Cloning** 1990 Jan;8 Suppl 1:130-46 (56 ref.)

Oncogenes and metastatic progression. Greenberg AH, et al. **Invasion Metastasis** 1989;9(6):360-78 (79 ref.)

Kinetic evidence of a rapid activation of phosphatidylcholine hydrolysis by Ki-ras oncogene. Possible involvement in late steps of the mitogenic cascade. Lopez-Barahona M, et al. **J Biol Chem** 1990 Jun 5;265(16):9022-6

SV40 T antigen alone drives karyotype instability that precedes neoplastic transformation of human diploid fibroblasts. Ray FA, et al. **J Cell Biochem** 1990 Jan; 42(1):13-31

Expression of an exogenous interleukin 6 gene in human Epstein Barr virus B cells confers growth advantage and in vivo tumorigenicity. Scala G, et al. **J Exp Med** 1990 Jul 1;172(1):61-8

Post-transcriptional downregulation of MHC class I expression in oncogene-transformed cells is reverted by IFN-gamma and TNF-alpha. Seliger B, et al. **J Immunogenet** 1989 Aug-Oct;16(4-5):315-20

Oncogene expressions detected by in situ hybridization of squamous metaplasia, dysplasia and primary lung cancer in human. Lee JD, et al. **J Korean Med Sci** 1989 Sep; 4(3):121-7

Transformation of chicken embryo fibroblasts by direct DNA transfection of single oncogenes: comparative analyses of src, erbB, myc, and ras. Antczak M, et al. **J Virol** 1990 Apr;64(4):1451-8

Transcriptional enhancement of the human gene encoding for a melanoma-associated antigen (ME491) in association with malignant transformation. Hotta H, et al. **Jpn J Cancer Res** 1989 Dec;80(12):1186-91

Sequential loss of suppressor genes for three specific functions during in vivo carcinogenesis. Moroco JR, et al. **Lab Invest** 1990 Sep;63(3):298-306

Potential role of anti-oncogenes in aging. Ferluga J. **Mech Ageing Dev** 1990 Apr 30;53(3):267-75 (41 ref.)

A small nuclear RNA, U5, can transform cells in vitro. Hamada K, et al. **Mol Cell Biol** 1989 Oct;9(10):4345-56

Germ line c-myc is not down-regulated by loss or exclusion of activating factors in myc-induced macrophage tumors. Mango SE, et al. **Mol Cell Biol** 1989 Aug;9(8):3482-90

Transformation of mouse BALB 3T3 cells by enterobacterial plasmid misrepair gene mucAB. Tosu M, et al. **Mol Cell Biol** 1990 Oct;10(10):5359-64

Conditional immortalization of human thyroid epithelial cells: a tool for analysis of oncogene action. Wynford-Thomas D, et al. **Mol Cell Biol** 1990 Oct;10(10):5365-77

Oncogene alterations in in vitro transformed rat tracheal epithelial cells. Mass MJ, et al. **Mutat Res** 1990 Apr; 243(4):291-8

Mechanisms by which EGF receptor and TGF alpha contribute to malignant transformation. Di Marco E, et al. **Nat Immun Cell Growth Regul** 1990;9(3):209-21 (53 ref.)

Malignant transformation by a eukaryotic initiation factor subunit that binds to mRNA 5' cap. Lazaris-Karatzas A, et al. **Nature** 1990 Jun 7;345(6275):544-7

Independent regulation of mouse VL30 retrotransposon expression in response to serum and oncogenic cell transformation. Eaton L, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2069-77

An oncogenic chromosome 8-9 gene fusion isolated following transfection of human ovarian carcinoma cell line DNA. Halverson D, et al. **Oncogene** 1990 Jul; 5(7):1085-9

Genetic analysis of the Kirsten-ras-revertant 1 gene: potentiation of its tumor suppressor activity by specific point mutations. Kitayama H, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4284-8

Oncogene activation during multi-stage carcinogenesis. Bowden GT. **Prog Clin Biol Res** 1990;340D:1-12 (32 ref.)

A complementation analysis of suppression of tumorigenicity in human tumor cell hybrids. Chen P, et al. **Prog Clin Biol Res** 1990;340D:13-20 (33 ref.)

Tumor suppression studies of human lung cancer. Harris CC, et al. **Prog Clin Biol Res** 1990;340D:21-31 (39 ref.)

Malignant transformation of human fibroblasts by oncogene transfection or carcinogen treatment. McCormick JJ, et al. **Prog Clin Biol Res** 1990;340D:195-205 (30 ref.)

Excision repair differences in rat fibroblasts. Klaus H, et al. **Radiat Environ Biophys** 1989;28(4):273-6

Activation of ras oncogenes preceding the onset of neoplasia. Kumar R, et al. **Science** 1990 Jun 1;248(4959):1101-4

Identification of small clusters of divergent amino acids that mediate the opposing effects of ras and Krev-1. Zhang K, et al. **Science** 1990 Jul 13;249(4965):162-5

Susceptibility for N-ras-mediated transformation requires loss of tumor suppressor activity. Krizman DB, et al. **Somat Cell Mol Genet** 1990 Jan;16(1):15-27

Gene regulation in reverse transformation: cyclic AMP-induced actin homolog in CHO cells. Miranti C, et al. **Somat Cell Mol Genet** 1990 Jan;16(1):67-78

Sensitivity pattern of normal and Ha-ras transformed NIH3T3 fibroblasts to antineoplastic drugs. Toffoli G, et al. **Tumori** 1989 Oct 31;75(5):423-8

The divergence between two oncogenic Herpesvirus saimiri strains in a genomic region related to the transforming phenotype. Biesinger B, et al. **Virology** 1990 Jun; 176(2):505-14

[Studies on mechanism of carcinogenesis in vitro. IV. Studies on relationship between frequency of chromosome 15 monosomy and malignant expression of different clones from malignantly transformed baby hamster lung cells (BHL B4)] Li S. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1990 Apr; 12(2):126-30 (Eng. Abstr.) **(Chi)**

[Suppressor genes in the malignant transformation and genic deletions in human cancers] Frebourg T. **Presse Med** 1989 Oct 7;18(31):1519-22 (Eng. Abstr.) **(Fre)**

[oncogene cooperation in cellular transformation] Samarut

J. Reprod Nutr Dev 1990;30(3):361–78 (130 ref.) (Eng. Abstr.) (Fre)

[Cytologic molecular detection of oncogene expression: possibilities and prospects in hemato-oncology] Greil R, et al. Acta Med Austriaca 1990;17(1):6–10 (45 ref.) (Eng. Abstr.) (Ger)

[The role of papillomaviruses in the etiology of cervix cancer] von Knebel Doeberitz M. Geburtshilfe Frauenheilkd 1990 Jul;50(7):511–7 (46 ref.) (Eng. Abstr.) (Ger)

[Clinical applications of the study of immunoglobulin and T-cell receptor gene rearrangements in acute leukemia and non-Hodgkin's lymphoma in children] Schütt S, et al. Klin Padiatr 1990 Jul–Aug;202(4):218–23 (Eng. Abstr.) (Ger)

[Amplification of N-myc in neuroblastoma: paradigm for clinical use of an oncogene alteration] Schwab M. Klin Padiatr 1990 Jul–Aug;202(4):197–201 (25 ref.) (Eng. Abstr.) (Ger)

[The role of platelet-derived growth factor in the pathogenesis of various diseases. II. Platelet-derived growth factor and the development of neoplasms] Dmoszyńska-Giannopoulou A, et al. Pol Arch Med Wewn 1987 May;77(5):238–42 (39 ref.) (Pol)

[Transformation of human corneal endothelial cells by micro-injection of oncogenes] Zavizion BA, et al. Biull Eksp Biol Med 1990 Apr;109(4):395–8 (Eng. Abstr.) (Rus)

[The suppression of the tumorigenicity of the FC3H 3V7 mouse fibroblast line by transformation with a retroviral vector coding the antisense RNA to the c-fos gene] Vlasov VV, et al. Dokl Akad Nauk SSSR 1990;311(3):751–5 (Rus)

[Mechanism of integration of cellular and viral DNA. Possible role of integration in the carcinogenesis] Stoliarov ZE. Mol Biol (Mosk) 1990 Jan–Feb;24(1):17–22 (24 ref.) (Eng. Abstr.) (Rus)

[The effect of Ha-ras oncogene on cells immortalized by the gene for polyomavirus large T-antigen] Komissarova EV, et al. Mol Gen Mikrobiol Virusol 1990 Feb;(2):19–22 (Eng. Abstr.) (Rus)

[The karyotypic variability of mouse embryonic fibroblasts of 2 genotypes during spontaneous neoplastic transformation] Glazko TT, et al. Tsitologiia 1990; 32(2):171–80 (Eng. Abstr.) (Rus)

[The characteristics of the transformed phenotype and the expression of indicator plasmids in the cells of rat embryonic fibroblasts immortalized by oncogene E1Aad5 and transformed by oncogenes E1Aad5+c-Ha-ras] Pospelova TV, et al. Tsitologiia 1990;32(2):148–55 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Heterogeneity of hepatocyte antigen expression in rat liver carcinogenesis: concordance between neoplastic nodules and tumours. Embleton MJ, et al. Br J Exp Pathol 1989 Dec;70(6):647–57

Clonal cell surface structures related to differentiation, activation and homing in B-cell chronic lymphocytic leukemia and monoclonal lymphocytosis of undetermined significance. Kimby E, et al. Eur J Haematol 1989 Nov; 43(5):452–9

Western blotting analysis for malignant lymphoma and stomach cancer antigens from carcinogen-transformed Bloom syndrome cells. Shiraishi Y. Int J Cancer 1990 Apr 15;45(4):783–7

[T-lymphocyte induced normalization of transformed malignant fibroblasts: lymphokine with normalization factor activity] Stonans IIa, et al. Biull Eksp Biol Med 1989 Oct;108(10):473–5 (Eng. Abstr.) (Rus)

[Isolation from a murine tumor line of clones whose growth in vivo is totally blocked by macrophages] Lavrovskiĭ VA, et al. Dokl Akad Nauk SSSR 1990;310(4):990–2 (Rus)

METABOLISM

Oncomodulin in normal and transformed cells. MacManus JP, et al. Adv Exp Med Biol 1990;269:107–10 (27 ref.)

Distribution of cytokeratin polypeptides in human transitional cell carcinomas, with special emphasis on changing expression patterns during tumor progression. Schaafsma HE, et al. Am J Pathol 1990 Feb;136(2):329–43

Cellular ras protooncogene expression in human mammary explant cultures. A potential marker for chemical carcinogenesis. Telang NT, et al. Ann N Y Acad Sci 1990; 586:230–7

Increased intracellular glycerophosphoinositol is a biochemical marker for transformation by membrane-associated and cytoplasmic oncogenes. Alonso T, et al. Biochem Biophys Res Commun 1990 Aug 31; 171(1):14–9

Manipulations of cellular iron metabolism for modulating normal and malignant cell proliferation: achievements and prospects. Cazzola M, et al. Blood 1990 May 15; 75(10):1903–19 (168 ref.)

Synthesis and secretion of plasminogen activators and collagenases in human cells transformed by Kirsten murine sarcoma virus and N-methyl-N'-nitro-N-nitrosoguanidine. Sidhu MK, et al. Cancer Lett 1989 Sep 15;47(1–2):45–51

Differences in the biosynthesis and localization of the fibronectin receptor in normal and transformed cultured human cells. Akiyama SK, et al. Cancer Res 1990 Mar 1; 50(5):1601–7

Differences between normal and ras-transformed NIH-3T3 cells in expression of the 170kD and 180kD forms of topoisomerase II. Woessner RD, et al. Cancer Res 1990 May 15;50(10):2901–8

Tumour progression in experimental oral carcinogenesis is associated with changes in EGF and TGF-beta receptor expression and altered responses to these growth factors. Game SM, et al. Carcinogenesis 1990 Jun;11(6):965–73

In vitro transformation induces abnormal protein thiol levels in rat liver cells. Principe P, et al. Carcinogenesis 1990 Aug; 11(8):1429–32

Relationships between the cell cycle and the expression of c-myc and transferrin receptor genes during induced myeloid differentiation. Barker KA, et al. Exp Cell Res 1990 Jan;186(1):1–5

Changes in proteinase activities during the differentiation of murine erythroleukemia cells. Tsukahara T, et al. Exp Cell Res 1990 May;188(1):111–6

Biosynthesis of alkaline phosphatase during differentiation of the human colon cancer cell line Caco-2. Matsumoto H, et al. Gastroenterology 1990 May;98(5 Pt 1):1199–207

Role of the colony-stimulating factor-1 receptor (c-fms) and its ligand in oncogenesis. Rettenmier CW. Hematol Bluttransfus 1989;32:263–7 (21 ref.)

Autocrine growth factor and spontaneous transformation of rat liver epithelial cells. Narita T. In Vitro Cell Dev Biol 1990 Apr;26(4):330–4

Increased fucosylation of high-molecular-weight glycoproteins accompanies retinoic-acid-induced differentiation of F-9 embryonal carcinoma cells. Amos B, et al. Int J Cancer 1990 Jul 15;46(1):86–94

Antioxidant enzyme activities in normal and transformed mouse liver cells. Sun Y, et al. Int J Cancer 1989 Dec 15;44(6):1028–33

Metabolism of low-density lipoprotein in differentiated and undifferentiated HT29 colon cancer cells. Viallard V, et al. Int J Cancer 1990 Aug 15;46(2):320–5

Matrix metalloproteinases and tissue inhibitor of metalloproteinases: a review of their role in tumorigenesis and tissue invasion. Khokha R, et al. Invasion Metastasis 1989;9(6):391–405 (72 ref.)

8-Chloro-cAMP inhibits transforming growth factor alpha transformation of mammary epithelial cells by restoration of the normal mRNA patterns for cAMP-dependent protein kinase regulatory subunit isoforms which show disruption upon transformation. Ciardiello F, et al. J Biol Chem 1990 Jan 15;265(2):1016–20

Differential growth factor expression in transformed mouse NIH-3T3 cells. Ciardiello F, et al. J Cell Biochem 1990 Jan;42(1):45–57

Novel ATP-binding heat-inducible protein of Mr = 37,000 that is sensitive to transformation in BALB/3T3 cells. Nakai A, et al. J Cell Physiol 1990 Jun;143(3):577–89

Smooth muscle actin expression during P19 embryonal carcinoma differentiation in cell culture. Rudnicki MA, et al. J Cell Physiol 1990 Jan;142(1):89–98

Identification of a transformation-sensitive nuclear protein from normal human fibroblasts that specifically interacts with minute virus of mice DNA and correlates with cell resistance to the parvovirus. Avalosse BL, et al. Mol Carcinog 1989;2(5):245–51

Altered growth factor dependence and transforming growth factor gene expression in transformed rat tracheal epithelial cells. Ferriola PC, et al. Mol Carcinog 1989;2(6):336–44

Enhanced deoxyribonuclease activity in human transformed cells and in Bloom's syndrome cells. Mezzina M, et al. Mol Carcinog 1989;2(4):179–83

Phosphorylation of p53 in primary, immortalised and transformed Balb/c mouse cells. Patschinsky T, et al. Oncogene 1990 Jul;5(7):1071–6

Regulation of the level of the oncoprotein p53 in non-transformed and transformed cells. Reihsaus E, et al. Oncogene 1990 Jan;5(1):137–45

Sequential changes in epidermal growth factor receptor/ligand function in cultured rat liver epithelial cells transformed chemically in vitro. Grisham JW, et al. Pathobiology 1990;58(1):3–14 (24 ref.)

Cell differentiation in sacrococcygeal teratomas. An immunohistochemical and follow-up study. Lahdenne P, et al. Pathol Res Pract 1990 Jun;186(3):336–43

The role of protein kinase C in signal transduction and cellular transformation. Krauss RS, et al. Prog Clin Biol Res 1990;340D:175–82 (29 ref.)

Altered benzo[a]pyrene metabolism in C3H/10T1/2 cells transformed by aflatoxin B1 or 3-methylcholanthrene. Faletto MB, et al. Toxicol Appl Pharmacol 1990 Jun 15; 104(2):351–66

[Mechanisms of molecular resistance to cancer chemotherapy] Winqvist R, et al. Duodecim 1989; 105(21):1707–14 (52 ref.) (Fin)

[Expression of O-glycans during enterocytic differentiation of HT-29 cells] Ogier-Denis E, et al. C R Acad Sci [III] 1989;310(3):41–7 (Eng. Abstr.) (Fre)

[The study of biochemical properties of the membranes of a renal oncocytoma discloses a tubular proximal epithelial differentiation] Poustis-Delpont C, et al. J Urol (Paris) 1989;95(6):377–8 (Fre)

[The significance of the extracellular matrix for carcinogenesis in the intestinal tract] Stallmach A, et al. Dtsch Med Wochenschr 1990 Mar 23;115(12):467–72 (23 ref.) (Ger)

[The characteristics of lectin binding to the surface of differentiated neuroblastoma C 1300 cells] Khomutovskiĭ OA, et al. Eksp Onkol 1990;12(2):38–43 (Eng. Abstr.) (Rus)

[Possible role of malonic dialdehyde in the regulation of cell division] Dmitriev LF. Mol Biol (Mosk) 1990 Mar–Apr; 24(2):566–71 (27 ref.) (Eng. Abstr.) (Rus)

PATHOLOGY

Host-supplied connective tissue as a guide for proliferating tumor cells in human tumor xenografts. Köpf-Maier P, et al. Acta Anat (Basel) 1989;135(4):289–95

Studies in longstanding ulcerative colitis with special reference to malignant transformation of the colorectal mucosa. Löfberg R. Acta Chir Scand Suppl 1989;552:1–45

Neuroendocrine differentiation in a case of acinic cell carcinoma of the parotid gland. Ito K, et al. Acta Pathol Jpn 1990 Apr;40(4):279–87

Neuroectodermal differentiation in "extraskeletal Ewing's sarcoma". Kudo M. Acta Pathol Jpn 1989 Dec; 39(12):795–802

Epithelial differentiation in synovial sarcoma. Correlation with histology and immunophenotypic expression. Sumitomo M, et al. Acta Pathol Jpn 1989 Jun;39(6):381–7

Ciliated cells in the cardiac gland of the human stomach. Evidence of metaplastic change. Torikata C, et al. Acta Pathol Jpn 1989 Jun;39(6):388–92

Progressive transformation of germinal centers with and without association to Hodgkin's disease. Hansmann ML, et al. Am J Clin Pathol 1990 Feb;93(2):219–26

Differentiation of T-cell lymphoma from Hodgkin's disease. Mitotic rate and S-phase analysis. Osborne BM, et al. Am J Clin Pathol 1990 Feb;93(2):227–32

Lymphocytic lymphoma of intermediate differentiation. Morphologic and immunophenotypic spectrum and clinical correlations. Lardelli P, et al. Am J Surg Pathol 1990 Aug; 14(8):752–63

Malignant change in cysts of the skin. Linton PC, et al. Ann Plast Surg 1986 Mar;16(3):253–6

Recurrence and malignant transformation of endotracheal chondroma. Salminen US, et al. Ann Thorac Surg 1990 May;49(5):830–2

Effects of cytotoxic prostaglandin, delta 12-PGJ2 on protein synthesis and cytoskeleton in transformed epidermal cells in culture. Ikai K, et al. Arch Dermatol Res 1990; 282(2):131–4

Precocious appearance of markers of squamous differentiation in metaplastic cells of human endocervix. Serra V, et al. Arch Gynecol Obstet 1989;246(4):233–42

Morphological study of granular convoluted tubules in the submandibular gland of the mouse during the growth of a sarcoma-180 subcutaneous tumor. Chiou CY. Arch Histol Cytol 1990 Mar;53(1):23–30

Oncogenic transformation of murine C3H 10T1/2 cells resulting from DNA double-strand breaks induced by a restriction endonuclease. Bryant PE, et al. Br J Cancer 1989 Dec;60(6):852–4

Biochemical characterization of a virus-induced osteosarcoma-like osseous lesion in vitro. Schmidt J, et al. Calcif Tissue Int 1989 Oct;45(4):232–42

Multistage neoplastic transformation of Syrian hamster embryo cells cultured at pH 6.70. LeBoeuf RA, et al. Cancer Res 1990 Jun 15;50(12):3722–9

Mechanism of selective killing by dilinoleoylglycerol of cells transformed by the E1A gene of adenovirus type 12. Matsuzaki A, et al. Cancer Res 1989 Oct 15;49(20):5702–7

Cloned murine non-malignant, spontaneously transformed and chemical tumour-derived cell lines related to the type 2 pneumocyte. Bentel JM, et al. Cell Biol Int Rep 1989 Sep;13(9):729–38

Progression of spontaneous malignant transformation of epithelial rat liver cell lines. Morel-Chany E, et al. Cell Biol Toxicol 1985 Jan;1(2):11–22

Reversible dedifferentiation and redifferentiation of a melanized cell line from a goldfish tumor. Chou SC, et al. Cell Differ Dev 1989 Nov;28(2):105–17

Malignant transformation of oral lichen planus: case report and review of the literature. Massa MC, et al. Cutis 1990 Jan;45(1):45–7 (5 ref.)

Statistical evaluation of cell kinetic data from DNA flow cytometry (FCM) by the EM algorithm. Baldetorp B, et al. Cytometry 1989 Nov;10(6):695–705

Cytokinetic analysis of lung cancer by bromodeoxyuridine labeling of cytology specimens. ten Velde GP, et al. Cytometry 1989 Nov;10(6):807–10

Expression of various viral and cellular enhancer-promoters during differentiation of human embryonal carcinoma cells. Hasegawa T, et al. Differentiation 1990 Feb;42(3):191–8

The expression of the histone H1 (0) gene in the human hepatoma cell line HepG2 is independent of the state of cell proliferation. Hochhuth C, et al. Differentiation 1990 Jun;43(3):212–9

Neuroscience and oncology. A unified view. Marolda R, et al. Funct Neurol 1990 Jan–Mar;5(1):73–7 (34 ref.)

A case of Waldenström macroglobulinemia terminating in acute lymphoblastic leukemia. Angelopoulos N, et al. Haematologica (Pavia) 1989 May–Jun;74(3):309–12

Nodular paragranuloma can transform into high-grade malignant lymphoma of B type. Hansmann ML, et al. Hum Pathol 1989 Dec;20(12):1169–75

A system employing a minimal defined medium for the

selection of tumorigenic cells. Schaeffer WI, et al. **In Vitro Cell Dev Biol** 1990 Jul;26(7):737–40

Clustering of discrete cell properties essential for tumorigenicity and metastasis. I. Studies of Syrian hamster embryo fibroblasts spontaneously transformed in vitro. Deichman GI, et al. **Int J Cancer** 1989 Nov 15;44(5):904–7

Multidirectional differentiation in a newly established human epithelioid sarcoma cell line (GRU–1) with co–expression of vimentin, cytokeratins and neurofilament proteins. Gerharz CD, et al. **Int J Cancer** 1990 Jan 15;45(1):143–52

Differentiation and the tumorigenic and metastatic phenotype of murine melanoma cells. Kameyama K, et al. **Int J Cancer** 1990 Jun 15;45(6):1151–8

Resident macrophages specifically inhibit DNA synthesis in the nuclei of transformed cells in heterokaryons. Prudovsky IA, et al. **Int J Cancer** 1989 Dec 15;44(6):1005–7

Tumour–induced host stromal–cell transformation: induction of mouse spindle–cell fibrosarcoma not mediated by gene transfer. Russell PJ, et al. **Int J Cancer** 1990 Aug 15; 46(2):299–309

Tumorigenic conversion of xeroderma pigmentosum lymphoblastoid cells without karyotypic alteration. Tachibana A, et al. **Int J Cancer** 1989 Oct 15;44(4):629–33

Histogenesis of salivary gland neoplasms: a postulate with prognostic implications. Batsakis JG, et al. **J Laryngol Otol** 1989 Oct;103(10):939–44 (41 ref.)

Histologically documented transformation of benign oral melanosis into malignant melanoma: a case report. Taylor CO, et al. **J Oral Maxillofac Surg** 1990 Jul;48(7):732–4

Fluorescence microscopy of DES–induced morphologic transformation in unfixed, cultured cells. Petcharuttana Y, et al. **J Oral Pathol Med** 1989 Sep;18(8):451–6

Quantitative immunohistochemical analysis of mononuclear infiltrates in breast carcinomas—correlation with tumour differentiation. Naukkarinen A, et al. **J Pathol** 1990 Mar; 160(3):217–22

Microcolposcopy vs. cone histology in evaluation of the endocervix in women with inadequate colposcopy or positive endocervical curettage. Hunter V, et al. **J Reprod Med** 1989 Sep;34(9):625–8

The undifferentiated malignant tumor, a continuing challenge. Feiner H. **Mod Pathol** 1990 Jan;3(1):2

From koilocytosis to molecular biology: the impact of cytology on concepts of early human cancer. The 32nd Maude Abbott lecture. Koss LG. **Mod Pathol** 1989 Sep; 2(5):526–35 (58 ref.)

Assessment of proliferative rate of breast cancer by Ki–67 monoclonal antibody. Marchetti E, et al. **Mod Pathol** 1990 Jan;3(1):31–5

Role of adenovirus E1B proteins in transformation: altered organization of intermediate filaments in transformed cells that express the 19–kilodalton protein. White E, et al. **Mol Cell Biol** 1990 Jan;10(1):120–30

Induction of differentiation in v–Ha–ras–transformed MDCK cells by prostaglandin E2 and 8–bromo–cyclic AMP is associated with a decrease in steady–state level of inositol 1,4,5–trisphosphate. Wu YY, et al. **Mol Cell Biol** 1990 Jan; 10(1):57–67

Establishment and characterization of a new human cell–line (AMOC–2) derived from a serous adenocarcinoma of ovary. Yabushita H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jul;41(7):888–94

Downregulation of the early genomic growth factor response in neu oncogene–transformed cells. Sistonen L, et al. **Oncogene** 1990 Jun;5(6):815–21

Abnormalities in growth regulation of transformed rat tracheal epithelial cells. Ferriola PC, et al. **Pathobiology** 1990;58(1):28–36 (37 ref.)

Peripheral pigmented neuroectodermal tumor of infancy with rhabdomyoblastic differentiation. Roa I, et al. **Pathol Res Pract** 1990 Jun;186(3):403–7; discussion 407–9

Altered glycosylation of surface glycoproteins in tumor cells and its clinical application. Kobata A. **Pigment Cell Res** 1989 Jul–Aug;2(4):304–8 (13 ref.)

Speed of growth of melanoma: statistical analysis of the average ages of patient groups. Paul E, et al. **Pigment Cell Res** 1989 Nov–Dec;2(6):475–7

Promotion and progression in carcinogenesis. Burns FJ. **Prog Clin Biol Res** 1990;340D:65–80 (32 ref.)

Immortalization as an endpoint in studies on malignant transformation. Simons JW, et al. **Prog Clin Biol Res** 1990; 340D:207–17 (36 ref.)

Interactions between cell populations influence expression of the transformed phenotype in irradiated rat tracheal epithelial cells. Terzaghi–Howe M. **Radiat Res** 1990 Mar; 121(3):242–7

Correlation of computed tomographic and histopathologic features in malignant transformation of benign mixed tumor of lacrimal gland. Font RL, et al. **Surv Ophthalmol** 1990 May–Jun;34(6):449–52

Intercellular communication in bronchial epithelial cells: review of evidence for a possible role in lung carcinogenesis. Albright CD, et al. **Toxicol Pathol** 1990; 18(2):324–41; discussion 341–3 (213 ref.)

Ultrastructural and morphometric features of poorly differentiated and undifferentiated lung tumors. Mackay B, et al. **Ultrastruct Pathol** 1989 Sep–Dec;13(5–6):561–71

Colonic pericryptal fibroblasts. Differentiation pattern in embryogenesis and phenotypic modulation in epithelial proliferative lesions. Sappino AP, et al. **Virchows Arch [A]** 1989;415(6):551–7

[Relationship between malignant transformation of ovarian mucinous cystadenoma and intestinal epithelial metaplasia] Zhong CQ. **Chung–hua Ping Li Hsueh Tsa Chih** 1989 Jun; 18(2):134–6 (Eng. Abstr.) **(Chi)**

[Malignant transformation of an intracranial epidermoid cyst] Michenet P, et al. **Ann Pathol** 1989;9(5):360–2 (Eng. Abstr.) **(Fre)**

[The value of a study of the microvascularization and the cellular immunosurveillance of precancerous states and micro–cancers of the oral cavity] Chomette G, et al. **Rev Stomatol Chir Maxillofac** 1990;91(4):262–5 (Eng. Abstr.) **(Fre)**

[Malignant transformation of autonomous struma] Hermann M, et al. **Acta Med Austriaca** 1990;17 Suppl 1:76–7 **(Ger)**

[Adenoma–carcinoma sequence in the duodenum. A case report] Meier H, et al. **Chirurg** 1990 Apr;61(4):333–5 **(Ger)**

[Focal melanocytic atypia in dysplastic nevus cell nevi. Results of a serial section study] Sigg C, et al. **Hautarzt** 1989 Nov;40(11):701–7 (Eng. Abstr.) **(Ger)**

[Is there an endobrachy–esophagus cancer sequence?] Hameeteman W, et al. **Internist (Berl)** 1990 Feb; 31(2):119–23 (64 ref.) **(Ger)**

[Occurrence of non–metaplastic squamous epithelium within the larynx and its relation to the development of cancer] Arnhold–Schneider M, et al. **Laryngorhinootologie** 1990 Feb;69(2):91–7 (Eng. Abstr.) **(Ger)**

[Oncocytic hepatocytes] Altmann HW. **Pathologe** 1990 May; 11(3):137–42 (39 ref.) **(Ger)**

[Dust deposits in lung tumors—cause and significance] Fisseler–Eckhoff A, et al. **Pneumologie** 1990 Feb;44 Suppl 1:325–6 (Eng. Abstr.) **(Ger)**

[The tumorlet carcinoid in bronchiectasis–changed lungs. An example of a multifocal, endocrine tumor] Klinke F, et al. **Pneumologie** 1990 Feb;44 Suppl 1:607–9 (Eng. Abstr.) **(Ger)**

[Pathogenesis of HIV–associated Kaposi sarcoma—the Koebner phenomenon as a possible pathogenetic mechanism] Plettenberg A, et al. **Z Hautkr** 1990 Jul; 65(7):684–6, 689 (Eng. Abstr.) **(Ger)**

[Biochemical changes in cervix mucus in stepwise malignant transformation of cervix epithelium] Elling D, et al. **Zentralbl Gynakol** 1990;112(9):555–60 (Eng. Abstr.) **(Ger)**

[Malignant transformation of fibroadenoma of the breast] Rohde E. **Zentralbl Gynakol** 1989;111(24):1629–31 (Eng. Abstr.) **(Ger)**

[Mechanism of neoplasm metastasis: proliferation of metastatic cells in lymph nodes] Tachibana T. **Nippon Hifuka Gakkai Zasshi** 1989 Dec;99(13):1298–304 **(Jpn)**

[Pathogenesis and histologic diagnosis of carcinoid tumor of the stomach] Dubiel–Bigaj M, et al. **Patol Pol** 1989; 40(1):109–22 (Eng. Abstr.) **(Pol)**

[Neuropeptides and neoplasms] Pawlikowski M. **Pol Arch Med Wewn** 1988 Apr;79(4):177–80 **(Pol)**

[Studies of growth, differentiation and neoplastic transformation of human and animal cells—views and trends:1985–1988] Korohoda W. **Postepy Biochem** 1988; 34(4):269–71 (25 ref.) **(Pol)**

[Coexistence of Hodgkin's disease and myelodysplastic syndrome with late conversion to acute myeloblastic leukemia] Woźny T. **Wiad Lek** 1989 Feb 1;42(3):170–2 (Eng. Abstr.) **(Pol)**

[Early stages of hepatic carcinogenesis after vagotomy] Dubovaia TK, et al. **Arkh Anat Gistol Embriol** 1989 Jul; 97(7):65–70 (Eng. Abstr.) **(Rus)**

[Stability threshold of a tissue system] Malenkov AG, et al. **Biofizika** 1990 Mar–Apr;35(2):356–60 (Eng. Abstr.) **(Rus)**

[Possible role of somatic cell hybridization in the mechanism of malignant cell transformation] Gogichadze GK. **Gematol Transfuziol** 1989 Jun;34(6):54–7 **(Rus)**

[Development of metachronous tumors of the colon] Strekalovskiĭ VP, et al. **Klin Med (Mosk)** 1990 Jan; 68(1):95–100 (Eng. Abstr.) **(Rus)**

[New lines of spontaneously transformed cells obtained from "precrisis" cultures of embryonic rat cells] Artsybasheva IV, et al. **Tsitologiia** 1989 Dec;31(12):1466–77 (Eng. Abstr.) **(Rus)**

[The growth and morphological characteristics of undifferentiated and differentiated cells of the F9 mouse teratocarcinoma line] Kisliakova TV, et al. **Tsitologiia** 1990; 32(1):54–60 (Eng. Abstr.) **(Rus)**

[Complex assessment of the proliferation of epidermal and tumor cells in malignant skin lymphoma] Persina IS, et al. **Vestn Dermatol Venerol** 1989;(10):4–7 (Eng. Abstr.) **(Rus)**

[Characteristics of morphologic diagnosis of malignant transformation of chronic duodenal ulcer during its surgical treatment] Nechaĭ AI, et al. **Vestn Khir** 1989 Aug; 144(8):8–11 (Eng. Abstr.) **(Rus)**

[The probability of malignant degeneration of stomach polyps] Nechipaĭ AM, et al. **Vopr Onkol** 1989;35(9):1044–9 (Eng. Abstr.) **(Rus)**

[Paraganglioma of the cauda equina with gangliocyte differentiation] Chillón D, et al. **Arch Neurobiol (Madr)** 1989 Jul–Aug;52(4):193–7 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Repair processes in the treatment and induction of cancer with radiation. Elkind MM. **Cancer** 1990 May 15; 65(10):2165–71 (36 ref.)

Suppression of radiation–induced neoplastic transformation of human cell hybrids by long term incubation at low extracellular pH. Mendonca MS, et al. **Cancer Res** 1990 Apr 1;50(7):2123–7

Effect of excimer laser energy on the growth potential of corneal keratocytes. Gebhardt BM, et al. **Cornea** 1990 Jul; 9(3):205–10

Transformation of lung cells from inhalation of radon daughters in dwellings: a preliminary study. al–Affan IA, et al. **Int J Radiat Biol** 1989 Oct;56(4):413–22

Cell density dependence of transformation frequencies in C3H10T1/2 cells exposed to X–rays. Bettega D, et al. **Int J Radiat Biol** 1989 Dec;56(6):989–98

Confidence limits for low induced frequencies of oncogenic transformation in the presence of a background. Brenner DJ, et al. **Int J Radiat Biol** 1990 May;57(5):1031–45

A generalized state–vector model for radiation–induced cellular transformation. Crawford–Brown DJ, et al. **Int J Radiat Biol** 1990 Feb;57(2):407–23

Alpha–particles induce preneoplastic transformation of rat tracheal epithelial cells in culture. Thomassen DG, et al. **Int J Radiat Biol** 1990 Feb;57(2):395–405

Sensitivity of a human hybrid cell line (HeLa X skin fibroblast) to radiation–induced neoplastic transformation in G2, M, and mid–G1 phases of the cell cycle. Redpath JL, et al. **Radiat Res** 1990 Feb;121(2):206–11

Neoplastic cell transformation by heavy ions. Suzuki M, et al. **Radiat Res** 1989 Dec;120(3):468–76

Radiation–induced neoplastic transformation of C3H10T1/2 cells is suppressed by ascorbic acid. Yasukawa M, et al. **Radiat Res** 1989 Dec;120(3):456–67

ULTRASTRUCTURE

Ultrastructure and gold–immunolabelling of cell–substratum adhesions (podosomes) in RSV–transformed BHK cells. Gavazzi I, et al. **J Cell Sci** 1989 Sep;94 (Pt 1):85–99

Mitochondria as a feature of smooth muscle differentiation: a study of 70 smooth muscle tumors. Zukerberg LR, et al. **J Submicrosc Cytol Pathol** 1990 Jul;22(3):335–44

Surface heterogeneity of tumor cells and changes upon ionizing radiation. Somosy Z, et al. **Scanning Microsc** 1989 Sep;3(3):895–906 (93 ref.)

CELL TRANSFORMATION, VIRAL

see related

ANTIGENS, VIRAL, TUMOR

Transformation of rabbit vascular smooth muscle cells by transfection with the early region of SV40 DNA. Nachtigal M, et al. **Am J Pathol** 1990 Feb;136(2):297–306

The cell biology of human papillomavirus transformed cells. Matlashewski G. **Anticancer Res** 1989 Sep–Oct; 9(5):1447–56 (70 ref.)

Construction of human monoclonal antibodies against rabies NS–protein antigen by Epstein–Barr virus transformation. Gebauer W, et al. **Arzneimittelforschung** 1990 Jun; 40(6):718–22

Stimulatory effect of serum albumin on the proliferation of serum–free SV40–transformed Balb/c 3T3 cells. Bedotti R, et al. **Biochim Biophys Acta** 1990 Jun 12;1053(1):74–80

Abortive infection with Sindbis virus of a Chinese hamster ovary cell mutant defective in phosphatidylserine and phosphatidylethanolamine biosynthesis. Kuge O, et al. **Biochim Biophys Acta** 1989 Nov 17;986(1):61–9

Characterisation of the LDL receptor in Epstein–Barr virus transformed lymphocytes. Lombardi P, et al. **Biochim Biophys Acta** 1990 May 1;1044(1):127–32

Epstein–Barr virus transformed B lymphocytes produce interleukin–5. Paul CC, et al. **Blood** 1990 Apr 1; 75(7):1400–3

Establishment and characterization of a new Epstein–Barr virus transformed cell line from a human B cell lymphoma. Janssen O, et al. **Biut** 1990 Mar;60(3):206–12

Generation of macrophage cell line from fresh bone marrow cells with a myc/raf recombinant retrovirus. Blasi E, et al. **Cancer Biochem Biophys** 1989 Oct;10(4):303–17

Assessment of the potential malignancy of Epstein–Barr virus (EBV)–infected B cells in AIDS–related disorders. Roncella S, et al. **Cancer Detect Prev** 1990;14(3):325–9

Generation of cell–mediated cytotoxicity against bovine–papilloma–virus–transformed primary mouse cell lines. Laatikainen A, et al. **Cancer Immunol Immunother** 1990;30(6):351–6

Susceptibility of EBV–carrying B cell lines to infection by HIV–1: variability of production of progeny virus and expression of viral antigens. Tremblay M, et al. **Cancer Lett** 1989 Nov 30;48(2):95–103

Immortalization of human keratinocytes by simian virus 40 large T–antigen alters keratin gene response to retinoids. Agarwal C, et al. **Cancer Res** 1990 Sep 15;50(18):5947–53

Biochemical properties of media conditioned by simian virus 40–induced hamster tumor cells: correlation with distinct cell phenotypes but not with oncogenicity. Carbone M, et al. **Cancer Res** 1989 Dec 1;49(23):6809–12

Abolition of mevinolin–induced growth inhibition in human fibroblasts following transformation by simian virus 40. Larsson O, et al. **Cancer Res** 1989 Oct 15;49(20):5605–10

Metabolic effects of hydroxyurea on BHK–21 cells transformed with polyoma virus. Pollak RD, et al. **Cancer Res** 1967 Jul;27(7):1214–24

Human cervical and foreskin epithelial cells immortalized

by human papillomavirus DNAs exhibit dysplastic differentiation in vivo. Woodworth CD, et al. **Cancer Res** 1990 Jun 15;50(12):3709–15

Studies of phospholipase and cyclooxygenase activities in herpes simplex virus type 2–transformed rat cells. Heitman CR, et al. **Carcinogenesis** 1989 Nov;10(11):2059–65

Specific high frequency rearrangements induced by MNNG in SV40–infected human keratinocytes. Steinberg ML, et al. **Carcinogenesis** 1989 Oct;10(10):1801–7

A nuclear translational block imposed by the HIV–1 U3 region is relieved by the Tat–TAR interaction. Braddock M, et al. **Cell** 1990 Sep 21;62(6):1123–33

The IN protein of Moloney murine leukemia virus processes the viral DNA ends and accomplishes their integration in vitro. Craigie R, et al. **Cell** 1990 Aug 24;62(4):829–37

Unraveling retrovirus integration. Grandgenett DP, et al. **Cell** 1990 Jan 12;60(1):3–4 (14 ref.)

Spontaneous losses of control of cytokeratin gene expression in transformed, non–epithelial human cells occurring at different levels of regulation. Knapp AC, et al. **Cell** 1989 Oct 6;59(1):67–79

Different pathways mediate virus inducibility of the human IFN–alpha 1 and IFN–beta genes. MacDonald NJ, et al. **Cell** 1990 Mar 9;60(5):767–79

Herpes simplex virus induces a processing factor that stimulates poly(A) site usage. McLauchlan J, et al. **Cell** 1989 Dec 22;59(6):1093–105

The bovine papillomavirus E5 transforming protein can stimulate the transforming activity of EGF and CSF–1 receptors. Martin P, et al. **Cell** 1989 Oct 6;59(1):21–32

Cells nonproductively infected with HIV–1 exhibit an aberrant pattern of viral RNA expression: a molecular model for latency. Pomerantz RJ, et al. **Cell** 1990 Jun 29; 61(7):1271–6

Two independently transforming functions of human papillomavirus 8. Iftner T, et al. **Curr Top Microbiol Immunol** 1989;144:167–73

Human papillomavirus early gene products and maintenance of the transformed state of cervical cancer cells in vitro. Kleinheinz A, et al. **Curr Top Microbiol Immunol** 1989; 144:175–9

Interactions between SV40 and cellular oncogenes in the transformation of primary rat cells. Michalovitz D, et al. **Curr Top Microbiol Immunol** 1989;144:63–75

The mutagenic and immortalizing potential of polyoma virus large T antigen. Strauss M, et al. **Curr Top Microbiol Immunol** 1989;144:129–134

Suppression of cellular gene activity in adenovirus–transformed cells. van der Eb AJ, et al. **Curr Top Microbiol Immunol** 1989;144:197–207 (21 ref.)

Isolation of simian virus 40–transformed human mammary epithelial stem cell lines that can differentiate to myoepithelial–like cells in culture and in vivo. Rudland PS, et al. **Dev Biol** 1989 Nov;136(1):167–80

Cell surface alteration in Epstein–Barr virus–transformed cells from patients with extreme insulin resistance. Gorden DL, et al. **Diabetes** 1990 Aug;39(8):924–7

HPV16 E6 and E7 proteins cooperate to immortalize human foreskin keratinocytes. Hawley–Nelson P, et al. **EMBO J** 1989 Dec 1;8(12):3905–10

Post–transcriptional mechanisms of deregulation of MYC following conversion of a human B cell line by Epstein–Barr virus. Lacy J, et al. **EMBO J** 1989 Jul; 8(7):1973–80

A transforming function of the BARF1 gene encoded by Epstein–Barr virus. Wei MX, et al. **EMBO J** 1989 Oct; 8(10):2897–903

Malignant lymphoma of the thyroid and Epstein–Barr virus. Matsubayashi S, et al. **Endocrinol Jpn** 1989 Jun;36(3):343–8

Characterization of a temperature–sensitive beta–endorphin–secreting transformed endometrial cell line. Li WI, et al. **Endocrinology** 1989 Dec;125(6):2862–7

Characterization and purification of a secreted plasminogen activator inhibitor (PAI–1) induced by transforming growth factor–beta 1 in normal rat kidney (NRK) cells: decreased PAI–1 expression in transformed NRK cells. Newman MJ, et al. **Endocrinology** 1990 Jun;126(6):2936–46

pp60v–src association with the cytoskeleton induces actin reorganization without affecting polymerization status. Felice GR, et al. **Eur J Cell Biol** 1990 Jun;52(1):47–59

The polymorphic human chaperonin protein HuCha60 is a mitochondrial protein sensitive to heat shock and cell transformation. Waldinger D, et al. **Eur J Cell Biol** 1989 Dec;50(2):435–41

In vitro transformation by Epstein–Barr virus induces a switch in growth factor and anti–IgM responsiveness in a human leukemic B cell clone. Janssen O, et al. **Eur J Immunol** 1990 Jan;20(1):7–14

Disintegration of adhesion plaques in chicken embryo fibroblasts upon Rous sarcoma virus–induced transformation: different dissociation rates for talin and vinculin. Brands R, et al. **Exp Cell Res** 1990 Jan; 186(1):138–48

Transformed SV3T3 cells have a reduced lysosomal compartment and lower levels of enzyme activity than 3T3 cells. Kundra V, et al. **Exp Cell Res** 1990 Jul;189(1):93–9

Maintenance of DNA methylation level in SV40–infected human fibroblasts during their in vitro limited proliferative life span. Matsumura T, et al. **Exp Cell Res** 1989 Sep; 184(1):148–57

The inhibition of chick embryo cell growth by medium obtained from cultures of Rous sarcoma cells. Rubin H. **Exp Cell Res** 1966 Jan;41(1):149–61

Quantitation of the frequency of immortalization of normal human diploid fibroblasts by SV40 large T–antigen. Shay JW, et al. **Exp Cell Res** 1989 Sep;184(1):109–18

Levels of DNA methylation in diploid and SV40 transformed human fibroblasts. Matsumura T, et al. **Exp Gerontol** 1989; 24(5–6):477–81

HSV infection induces increased transcription of Alu repeated sequences by RNA polymerase III. Jang KL, et al. **FEBS Lett** 1989 Dec 4;258(2):255–8

Enhancement of colony forming ability in the lung by transfer of the v–fos oncogene into a ras–transformed rat 3Y1 cell line. Nakamatsu K, et al. **FEBS Lett** 1989 Nov 6;257(2):422–6

Reduced levels of ADP–ribosylatable elongation factor–2 in aged and SV40–transformed human cell cultures. Riis B, et al. **FEBS Lett** 1990 Jun 18;266(1–2):45–7

Major histocompatibility complex class II (Ia–like) antigens on chicken embryo fibroblasts: effect of transformation by Rous sarcoma virus. Gogusev J, et al. **Folia Biol (Praha)** 1989;35(6):383–97

An insertion vector for the analysis of gene expression during herpes simplex virus infection. Weir JP, et al. **Gene** 1990 May 14;89(2):271–4

The mutated, myeloid cell–specific growth factor receptor v–fms transforms avian erythroid but not myeloid cells. Fuhrmann U, et al. **Genes Dev** 1989 Dec;3(12B):2072–82

Infection of CV1 cells expressing the polyoma virus middle T antigen or the SV40 agnogene product with simian virus 40 host–range mutants. Spence SL, et al. **In Vitro Cell Dev Biol** 1990 Jun;26(6):604–11

Altered expression and distribution of the cytoskeletal–associated p35 protein in NIH 3T3 cells transformed with the Harvey sarcoma virus v–ras oncogene. Higgins PJ. **Int J Biochem** 1989;21(6):609–17

Clustering of discrete cell properties essential for tumorigenicity and metastasis. II. Studies of Syrian hamster embryo fibroblasts transformed by Rous sarcoma virus. Deichman GI, et al. **Int J Cancer** 1989 Nov 15;44(5):908–10

Superinfection by Epstein–Barr virus of a subset of Raji cells is independent of HLA class II–antigens [letter] Faggione A, et al. **Int J Cancer** 1990 May 15;45(5):989

Transformation of normal human melanocytes and non–malignant nevus cells by adenovirus 12–SV40 hybrid virus. Jambrosic J, et al. **Int J Cancer** 1989 Dec 15; 44(6):1117–23

Histocompatible miniature, boar model: selection of transformed cell lines of B and T lineages producing retrovirus. Kaeffer B, et al. **Int J Cancer** 1990 Sep 15; 46(3):481–8

Cytogenetic analysis of eight human papillomavirus immortalized human keratinocyte cell lines. Smith PP, et al. **Int J Cancer** 1989 Dec 15;44(6):1124–31

Suppression of focus formation by bovine papillomavirus–transformed cells by contact with non–transformed cells: involvement of sugar(s) and phosphorylation. Yoshikura H. **Int J Cancer** 1989 Nov 15; 44(5):885–91

Studies on the oncogenic potential of Epstein–Barr–virus (EBV)–infected B cells in AIDS–related disorders. Roncella S, et al. **Int J Cancer Suppl** 1989;4:78–82

Specific binding of 125I–rErythropoietin to Friend polycythemia virus–transformed erythroleukemia cells purified by centrifugal elutriation. Correa PN, et al. **Int J Cell Cloning** 1990 Jan;8(1):39–53

Variations in cap–binding complexes from uninfected and poliovirus–infected HeLa cells. Etchison D, et al. **J Biol Chem** 1990 May 5;265(13):7492–500

Modification of phospholipase C and phospholipase A2 activities during poliovirus infection. Guinea R, et al. **J Biol Chem** 1989 Dec 25;264(36):21923–7

Intracellular turnover, novel secretion, and mitogenically active intracellular forms of v–sis gene product in simian sarcoma virus–transformed cells. Implications for intracellular loop autocrine transformation. Lokeshwar VB, et al. **J Biol Chem** 1990 Jan 25;265(3):1665–75

Transformation of BALB/3T3 cells by simian virus 40 causes a decreased synthesis of a collagen–binding heat–shock protein (hsp47). Nakai A, et al. **J Biol Chem** 1990 Jan 15; 265(2):992–9

Differentiation of simian virus 40 transformed human mammary epithelial stem cell lines to myoepithelial–like cells is associated with increased expression of viral large T antigen. Rudland PS, et al. **J Cell Physiol** 1990 Mar; 142(3):657–65

Ultrastructure and gold–immunolabelling of cell–substratum adhesions (podosomes) in RSV–transformed BHK cells. Gavazzi I, et al. **J Cell Sci** 1989 Sep;94 (Pt 1):85–99

Growth hormone mediates the growth of T–lymphoblast cell lines via locally generated insulin–like growth factor–I. Geffner ME, et al. **J Clin Endocrinol Metab** 1990 Aug; 71(2):464–9

Expression of interleukin 2 receptors by monocytes from patients with acquired immunodeficiency syndrome and induction of monocyte interleukin 2 receptors by human immunodeficiency virus in vitro. Allen JB, et al. **J Clin Invest** 1990 Jan;85(1):192–9

Immortalization of Epstein–Barr virus–infected CD23–negative B lymphocytes by the addition of B cell growth factor. Azim T, et al. **J Gen Virol** 1990 Mar;71 (Pt 3):665–71

Uniformity of the splicing pattern of the E6/E7 transcripts in human papillomavirus type 16–transformed human fibroblasts, human cervical premalignant lesions and carcinomas. Cornelissen MT, et al. **J Gen Virol** 1990 May; 71 (Pt 5):1243–6

Intracellular proteins of feline immunodeficiency virus and their antigenic relationship with equine infectious anaemia virus proteins. Egberink HF, et al. **J Gen Virol** 1990 Mar; 71 (Pt 3):739–43

Transformation of primary BRK cells by human papillomavirus type 16 and EJ–ras is increased by overexpression of the viral E2 protein. Lees E, et al. **J Gen Virol** 1990 Jan;71 (Pt 1):183–93

Effect of herpes simplex virus type 1 infection on nucleoside transport in HeLa S3 cells. Palú G, et al. **J Gen Virol** 1990 Mar;71 (Pt 3):673–9

Cell surface expression of yellow fever virus non–structural glycoprotein NS1: consequences of interaction with antibody. Schlesinger JJ, et al. **J Gen Virol** 1990 Mar;71 (Pt 3):593–9

Co–transformation by human papillomavirus types 6 and 11. Storey A, et al. **J Gen Virol** 1990 Jan;71 (Pt 1):165–71

Mutations of the human papillomavirus type 16 E7 gene that affect transformation, transactivation and phosphorylation by the E7 protein. Storey A, et al. **J Gen Virol** 1990 Apr; 71 (Pt 4):965–70

Lactate dehydrogenase–elevating virus induces antibodies reactive with a surface antigen of aetiologically unrelated murine cell transformants. Weiland E, et al. **J Gen Virol** 1990 May;71 (Pt 5):1233–6

Properties and heterogeneity of human fetal pre–B cells transformed by EBV. Hui MF, et al. **J Immunol** 1989 Oct 15;143(8):2470–9

Monoclonal antibodies from Epstein–Barr virus–transformed lymphocytes of common marmosets (Callithrix jacchus) immune to malaria. Johnston DA, et al. **J Immunol Methods** 1990 Mar 9;127(2):187–95

Production of baboon (Papio hamadryas) monoclonal antibodies by herpesvirus papio immortalized baboon lymph node cells. Sharp RM, et al. **J Immunol Methods** 1990 Feb 9;126(2):287–94

Virus–transformed macrophage–like cell line as tool for eicosanoid research. Wessel K, et al. **J Leukoc Biol** 1989 Nov;46(5):476–83

Predilection of a nasopharyngeal carcinoma–derived isolate of Epstein–Barr virus for infection of specific subsets of B lymphocytes. Tarr KL, et al. **J Med Virol** 1989 Sep; 29(1):47–52

Establishment and characterization of multipotent neural cell lines using retrovirus vector–mediated oncogene transfer. Ryder EF, et al. **J Neurobiol** 1990 Mar;21(2):356–75

Immortalization of murine microglial cells by a v–raf/v–myc carrying retrovirus. Blasi E, et al. **J Neuroimmunol** 1990 May;27(2–3):229–37

Epstein–Barr virus nuclear antigen 2 induces expression of the virus–encoded latent membrane protein. Abbot SD, et al. **J Virol** 1990 May;64(5):2126–34

Effect of antiviral antibody on maintenance of long–term rubella virus persistent infection in Vero cells. Abernathy ES, et al. **J Virol** 1990 Oct;64(10):5183–7

The efficiency of adenovirus transformation of rodent cells is inversely related to the rate of viral E1A gene expression. Adami GR, et al. **J Virol** 1990 Jul;64(7):3427–36

Induction of sensitivity to the cytotoxic action of tumor necrosis factor alpha by adenovirus E1A is independent of transformation and transcriptional activation. Ames RS, et al. **J Virol** 1990 Sep;64(9):4115–22

In vitro infection of human hepatoma (HepG2) cells with hepatitis B virus. Bchini R, et al. **J Virol** 1990 Jun; 64(6):3025–32

Induction of immunoglobulin G Fc receptors by recombinant vaccinia viruses expressing glycoproteins E and I of herpes simplex virus type 1. Bell S, et al. **J Virol** 1990 May; 64(5):2181–6

Human cytomegalovirus induces expression of cellular topoisomerase II. Benson JD, et al. **J Virol** 1990 Jan; 64(1):9–15

An Epstein–Barr virus–specific cytotoxic T–cell epitope present on A– and B–type transformants. Burrows SR, et al. **J Virol** 1990 Aug;64(8):3974–6

The adenovirus DNA–binding protein stimulates the rate of transcription directed by adenovirus and adeno–associated virus promoters. Chang LS, et al. **J Virol** 1990 May; 64(5):2103–9

Bovine cells expressing bovine herpesvirus 1 (BHV–1) glycoprotein IV resist infection by BHV–1, herpes simplex virus, and pseudorabies virus. Chase CC, et al. **J Virol** 1990 Oct;64(10):4866–72

Identification of a region of simian virus 40 large T antigen required for cell transformation. Chen S, et al. **J Virol** 1990 Jul;64(7):3350–7

Transforming activity of E5a protein of human papillomavirus type 6 in NIH 3T3 and C127 cells. Chen SL, et al. **J Virol** 1990 Jul;64(7):3226–33

Avian reticuloendotheliosis virus–transformed lymphoid cells contain multiple pp59v–rel complexes. Davis N, et al. **J Virol** 1990 Feb;64(2):584–91

The alpha subunit of eucaryotic initiation factor 2 is phosphorylated in mengovirus–infected mouse L cells. DeStefano J, et al. **J Virol** 1990 Sep;64(9):4445–53

Human immunodeficiency virus integration in a cell–free system. Ellison V, et al. **J Virol** 1990 Jun;64(6):2711–5

Foot–and–mouth disease virus protease 3C induces specific

proteolytic cleavage of host cell histone H3. Falk MM, et al. **J Virol** 1990 Feb;64(2):748–56

Inositol trisphosphate levels in cells expressing wild-type and mutant polyomavirus middle T antigens: evidence for activation of phospholipase C via activation of pp60c–src. Gorga FR, et al. **J Virol** 1990 Jan;64(1):105–12

The internal methionine codons of human T-cell leukemia virus type II rex gene are not required for p24rex production or virus replication and transformation. Green PL, et al. **J Virol** 1990 Oct;64(10):4914–21

Kinetics of poliovirus uncoating in HeLa cells in a nonacidic environment. Gromeier M, et al. **J Virol** 1990 Aug; 64(8):3590–7

Selective killing of transformed rat cells by minute virus of mice does not require infectious virus production. Guetta E, et al. **J Virol** 1990 Jan;64(1):458–62

Anti-mRNAs in La Crosse bunyavirus-infected cells. Hacker D, et al. **J Virol** 1990 Oct;64(10):5051–7

The adeno-associated virus rep gene suppresses herpes simplex virus-induced DNA amplification. Heilbronn R, et al. **J Virol** 1990 Jun;64(6):3012–8

Immortalization and altered differentiation of human keratinocytes in vitro by the E6 and E7 open reading frames of human papillomavirus type 18. Hudson JB, et al. **J Virol** 1990 Feb;64(2):519–26

Infection of nonlymphoid cells by human immunodeficiency virus type 1 or type 2. Ikeuchi K, et al. **J Virol** 1990 Sep; 64(9):4226–31

Cationic liposomes (Lipofectin) mediate retroviral infection in the absence of specific receptors. Innes CL, et al. **J Virol** 1990 Feb;64(2):957–61

Delineation of functional determinants in the transforming protein of Fujinami sarcoma virus. Johnson KA, et al. **J Virol** 1990 Jul;64(7):3337–49

Loss of a phosphorylated form of transcription factor CREB/ATF in poliovirus-infected cells. Kliewer S, et al. **J Virol** 1990 Sep;64(9):4507–15

The level of c-fgr RNA is increased by EBNA-2, an Epstein-Barr virus gene required for B-cell immortalization. Knutson JC. **J Virol** 1990 Jun;64(6):2530–6

The herpes simplex virus virion host shutoff function. Kwong AD, et al. **J Virol** 1989 Nov;63(11):4834–9

Infection of the human monocytic cell line Mono Mac6 with human immunodeficiency virus types 1 and 2 results in long-term production of virus variants with increased cytopathogenicity for CD4+ T cells. L'age-Stehr J, et al. **J Virol** 1990 Aug;64(8):3982–7

Simian virus 40 large T-antigen-dependent DNA replication is activated by protein phosphatase 2A in vitro. Lawson R, et al. **J Virol** 1990 May;64(5):2380–3

Inducible expression of encephalomyocarditis virus 3C protease activity in stably transformed mouse cell lines. Lawson TG, et al. **J Virol** 1989 Dec;63(12):5013–22

Herpesvirus saimiri U RNAs are expressed and assembled into ribonucleoprotein particles in the absence of other viral genes. Lee SI, et al. **J Virol** 1990 Aug;64(8):3905–15

flvi-1, a common integration domain of feline leukemia virus in naturally occurring lymphomas of a particular type. Levesque KS, et al. **J Virol** 1990 Jul;64(7):3455–62

Mutation of lysine 405 to serine in the parvovirus H-1 NS1 abolishes its functions for viral DNA replication, late promoter trans activation, and cytotoxicity. Li X, et al. **J Virol** 1990 Oct;64(10):4654–60

CD4-independent, productive infection of a neuronal cell line by human immunodeficiency virus type 1. Li XL, et al. **J Virol** 1990 Mar;64(3):1383–7

The zta transactivator involved in induction of lytic cycle gene expression in Epstein-Barr virus-infected lymphocytes binds to both AP-1 and ZRE sites in target promoter and enhancer regions. Lieberman PM, et al. **J Virol** 1990 Mar;64(3):1143–55

Effect of human T-cell leukemia virus type I tax protein on activation of the human vimentin gene. Lilienbaum A, et al. **J Virol** 1990 Jan;64(1):256–63

Solubility of vesicular stomatitis virus M protein in the cytosol of infected cells or isolated from virions. McCreedy BJ Jr, et al. **J Virol** 1990 Feb;64(2):902–6

Role of heterologous and homologous glycoproteins in phenotypic mixing between Sendai virus and vesicular stomatitis virus. Metsikkö K, et al. **J Virol** 1989 Dec; 63(12):5111–8

Levels of Epstein-Barr virus DNA in lymphoblastoid cell lines are correlated with frequencies of spontaneous lytic growth but not with levels of expression of EBNA-1, EBNA-2, or latent membrane protein. Metzenberg S. **J Virol** 1990 Jan;64(1):437–44

Karyophilic properties of Semliki Forest virus nucleocapsid protein. Michel MR, et al. **J Virol** 1990 Oct;64(10):5123–31

Antibody-dependent enhancement of simian immunodeficiency virus (SIV) infection in vitro by plasma from SIV-infected rhesus macaques. Montefiori DC, et al. **J Virol** 1990 Jan;64(1):113–9

Processing of the Epstein-Barr virus-encoded latent membrane protein p63/LMP. Moorthy R, et al. **J Virol** 1990 Feb;64(2):829–37

Low probability of double integration in transformation of nonpermissive cells by polyomavirus. Oh SY, et al. **J Virol** 1990 Mar;64(3):1304–13

Inhibition of translation in cells infected with a poliovirus 2Apro mutant correlates with phosphorylation of the alpha subunit of eucaryotic initiation factor 2. O'Neill RE, et al. **J Virol** 1989 Dec;63(12):5069–75

Structure and expression of the vaccinia virus gene which prevents virus-induced breakdown of RNA. Pacha RF, et al. **J Virol** 1990 Aug;64(8):3853–63

Altered expression of fibronectin gene in cells infected with human cytomegalovirus. Pande H, et al. **J Virol** 1990 Mar; 64(3):1366–9

Replication and amplification of defective interfering particle RNAs of vesicular stomatitis virus in cells expressing viral proteins from vectors containing cloned cDNAs. Pattnaik AK, et al. **J Virol** 1990 Jun;64(6):2948–57

Nuclear localization of Semliki Forest virus-specific nonstructural protein nsP2. Peränen J, et al. **J Virol** 1990 May;64(5):1888–96

Differential increase in topoisomerase II in simian virus 40-infected cells. Rainwater R, et al. **J Virol** 1990 Feb; 64(2):918–21

Proviral DNA integration and transcriptional patterns of equine infectious anemia virus during persistent and cytopathic infections. Rasty S, et al. **J Virol** 1990 Jan; 64(1):86–95

Activation of the E2F transcription factor in adenovirus-infected cells involves E1A-dependent stimulation of DNA-binding activity and induction of cooperative binding mediated by an E4 gene product. Raychaudhuri P, et al. **J Virol** 1990 Jun;64(6):2702–10

Transmembrane envelope glycoproteins of human immunodeficiency virus type 2 and simian immunodeficiency virus SIV-mac exist as homodimers. Rey MA, et al. **J Virol** 1990 Feb;64(2):922–6

Steady-state infection by echovirus 6 associated with nonlytic viral RNA and an unprocessed capsid polypeptide. Righthand VF, et al. **J Virol** 1989 Dec;63(12):5268–75

Alpha/beta interferons fail to induce antiviral activity from within the nucleus. Riviere I, et al. **J Virol** 1990 May; 64(5):2430–2

Identification of the Epstein-Barr virus terminal protein gene products in latently infected lymphocytes. Rowe DT, et al. **J Virol** 1990 Jun;64(6):2866–75

Inhibition of rRNA synthesis by poliovirus: specific inactivation of transcription factors. Rubinstein SJ, et al. **J Virol** 1989 Nov;63(11):4689–96

Friend spleen focus-forming virus induces factor independence in an erythropoietin-dependent erythroleukemia cell line. Ruscetti SK, et al. **J Virol** 1990 Mar;64(3):1057–62

Partial reversion of conditional transformation correlates with a decrease in the sensitivity of rat cells to killing by the parvovirus minute virus of mice but not in their capacity for virus production: effect of a temperature-sensitive v-src oncogene. Salome N, et al. **J Virol** 1989 Nov;63(11):4797–807

Induction of cellular hsp70 expression by human cytomegalovirus. Santomenna LD, et al. **J Virol** 1990 May; 64(5):2033–40

Simian virus 40 large T antigen induces or activates a protein kinase which phosphorylates the transformation-associated protein p53. Scheidtmann KH, et al. **J Virol** 1990 Feb; 64(2):672–9

Chromosomal damage induced by human adenovirus type 12 requires expression of the E1B 55-kilodalton viral protein. Schramayr S, et al. **J Virol** 1990 May;64(5):2090–5

Murine coronavirus nonstructural protein ns2 is not essential for virus replication in transformed cells. Schwarz B, et al. **J Virol** 1990 Oct;64(10):4784–91

Expression of infectious woodchuck hepatitis virus in murine and avian fibroblasts. Seeger C, et al. **J Virol** 1989 Nov; 63(11):4665–9

Production of novel polyphosphoinositides in vivo is linked to cell transformation by polyomavirus middle T antigen. Serunian LA, et al. **J Virol** 1990 Oct;64(10):4718–25

Differential regulation of endogenous and transduced beta-globin genes during infection of erythroid cells with a herpes simplex virus type 1 recombinant. Smibert CA, et al. **J Virol** 1990 Aug;64(8):3882–94

The average number of molecules of Epstein-Barr nuclear antigen 1 per cell does not correlate with the average number of Epstein-Barr virus (EBV) DNA molecules per cell among different clones of EBV-immortalized cells. Sternås L, et al. **J Virol** 1990 May;64(5):2407–10

Recombination resulting in unusual features in the polyomavirus genome isolated from a murine tumor cell line. Streuli CH, et al. **J Virol** 1990 Aug;64(8):3570–80

Identification of interleukin-6 as an autocrine growth factor for Epstein-Barr virus-immortalized B cells. Tosato G, et al. **J Virol** 1990 Jun;64(6):3033–41

Release of RNA polymerase from vero cell mitochondria after herpes simplex virus type 1 infection. Tsurumi T, et al. **J Virol** 1990 Jan;64(1):450–2

Phosphatidylinositol metabolism in cells transformed by polyomavirus middle T antigen. Ulug ET, et al. **J Virol** 1990 Aug;64(8):3895–904

Degradation of cellular proteins during poliovirus infection: studies by two-dimensional gel electrophoresis. Urzainqui A, et al. **J Virol** 1989 Nov;63(11):4729–35

Integration of human immunodeficiency virus types 1 and 2 DNA in vitro by cytoplasmic extracts of Moloney murine leukemia virus-infected mouse NIH 3T3 cells. Vink C, et al. **J Virol** 1990 Oct;64(10):5219–22

Epstein-Barr virus latent membrane protein (LMP1) and nuclear proteins 2 and 3C are effectors of phenotypic changes in B lymphocytes: EBNA-2 and LMP1 cooperatively induce CD23. Wang F, et al. **J Virol** 1990 May;64(5):2309–18

Enhanced infectivity of herpes simplex virus type 1 viral DNA in a cell line expressing the trans-inducing factor Vmw65. Werstuck G, et al. **J Virol** 1990 Mar;64(3):984–91

Adenovirus transformed monkey cell lines permissive to enteric adenovirus type 40. Nascimento JP, et al. **J Virol Methods** 1990 Jun;28(3):321–5

A variant Schmidt-Ruppin strain of Rous sarcoma virus with increased affinity for mammalian cells. Kawai S, et al. **Jpn J Cancer Res** 1989 Dec;80(12):1179–85

Transformation of animal cells with human T-cell leukemia virus type II. Miyamoto K, et al. **Jpn J Cancer Res** 1990 Aug;81(8):720–2

The X gene of hepatitis B virus induced growth stimulation and tumorigenic transformation of mouse NIH3T3 cells. Shirakata Y, et al. **Jpn J Cancer Res** 1989 Jul;80(7):617–21

Tumor cells treated with vaccinia virus can activate the alternative pathway of mouse complement. Wakamiya N, et al. **Jpn J Cancer Res** 1989 Aug;80(8):765–70

Effects of a phorbol ester on activation and immortalization of leukaemic B cells by Epstein-Barr virus. Walls EV, et al. **Leuk Res** 1990;14(4):389–91

Enhancement of the proliferation of murine fetal liver erythroid progenitors by infection with Harvey sarcoma virus. Pharr PN, et al. **Leukemia** 1990 Mar;4(3):210–5

Lipid characteristics of RSV-transformed Balb/c 3T3 cell lines with different spontaneous metastatic potentials. Calorini L, et al. **Lipids** 1989 Aug;24(8):685–90

NMR investigation of cell cultures: early detection of infection by Herpes simplex virus type 2 and transformation. Valensin PE, et al. **Microbiologica** 1990 Jan; 13(1):11–9

Novel phenotype of C3H 10T1/2 fibroblasts cotransfected with the c-Ha-ras and adenovirus 5 E1A oncogenes. Davenport EA, et al. **Mol Carcinog** 1990;3(2):83–92

A common cellular pathway for v-mos and v-Ki-ras is not required for v-Ki-ras-induced tumorigenicity in a nonmalignant, v-mos-expressing revertant cell. Gerfaux J, et al. **Mol Carcinog** 1990;3(2):103–13

Efficient immortalization by SV40 T DNA of skin fibroblasts from patients with Wilms' tumor associated with chromosome 11p deletion. Kano Y, et al. **Mol Carcinog** 1989;2(6):314–21

Isolation and characterization of Kirsten murine sarcoma virus-transformed mouse keratinocytes resistant to transforming growth factor beta. Sipes NJ, et al. **Mol Carcinog** 1990;3(1):12–9

DNA damage stimulates human cell transformation by integrative but not episomal Epstein-Barr virus-derived plasmid. Vos JM, et al. **Mol Carcinog** 1989;2(5):237–44

Nucleosome assembly of simian virus 40 DNA in a mammalian cell extract. Banerjee S, et al. **Mol Cell Biol** 1990 Jun;10(6):2863–73

Suppression of the progression phenotype in somatic cell hybrids occurs in the absence of altered adenovirus type 5 gene expression. Duigou GJ, et al. **Mol Cell Biol** 1990 May;10(5):2027–34

Serum amyloid A protein-related mRNA expression in herpes simplex virus type 2-transformed hamster cells. Gervais C, et al. **Mol Cell Biol** 1990 Aug;10(8):4412–4

Position effects on the timing of replication of chromosomally integrated simian virus 40 molecules in Chinese hamster cells. Gilbert DM, et al. **Mol Cell Biol** 1990 Aug; 10(8):4345–55

The adenovirus E1B 19-kilodalton protein stimulates gene expression by increasing DNA levels. Herrmann CH, et al. **Mol Cell Biol** 1989 Dec;9(12):5412–23

Induction of a cellular enzyme for energy metabolism by transforming domains of adenovirus E1a. Kaddurah-Daouk R, et al. **Mol Cell Biol** 1990 Apr;10(4):1476–83

Identification, nuclear localization, and DNA-binding activity of the zinc finger protein encoded by the Evi-1 myeloid transforming gene. Matsugi T, et al. **Mol Cell Biol** 1990 Mar;10(3):1259–64

The human T-lymphotropic virus type 1 tax gene can cooperate with the ras oncogene to induce neoplastic transformation of cells. Pozzatti R, et al. **Mol Cell Biol** 1990 Jan;10(1):413–7

Role of adenovirus E1B proteins in transformation: altered organization of intermediate filaments in transformed cells that express the 19-kilodalton protein. White E, et al. **Mol Cell Biol** 1990 Jan;10(1):120–30

A cellular factor binds to the herpes simplex virus type 1 transactivator Vmw65 and is required for Vmw65-dependent protein-DNA complex assembly with Oct-1. Xiao P, et al. **Mol Cell Biol** 1990 Sep;10(9):4974–7

Structure, function and transforming potential of the epidermal growth factor receptor. Velu TJ. **Mol Cell Endocrinol** 1990 May 7;70(3):205–16 (176 ref.)

Differentiated mammalian cell lines immortalized by temperature-sensitive tumor viruses. Chou JY. **Mol Endocrinol** 1989 Oct;3(10):1511–4 (40 ref.)

Morphological transformation of human keratinocytes expressing the LMP gene of Epstein-Barr virus. Fåhraeus R, et al. **Nature** 1990 May 31;345(6274):447–9

HIV susceptibility conferred to human fibroblasts by cytomegalovirus-induced Fc receptor. McKeating JA, et al. **Nature** 1990 Feb 15;343(6259):659–61

Inhibitory effects of human interferons on the syncytium formation by bovine leukemia virus (BLV) and the proliferation of BLV. Ike H, et al. **Nippon Jaigaku Zasshi** 1989 Aug;51(4):801–3

Expression of the type I DNA topoisomerase gene in adenovirus-5 infected human cells. Romig H, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):801-8

Transformation of early erythroid precursor cells (BFU-E) by a recombinant murine retrovirus containing v-erb-B. Miller M, et al. **Oncogene** 1990 Aug;5(8):1125-31

Immortalization and transformation of human fibroblasts by regulated expression of polyoma virus T antigens. Strauss M, et al. **Oncogene** 1990 Aug;5(8):1223-9

Partial transformation of human tumor cell lines showing defective interaction between unusual p53 gene product and SV40 large-T antigen. Van Roy F, et al. **Oncogene** 1990 Feb;5(2):207-18

DNA octamer element can confer E1A trans-activation, and adenovirus infection results in a stimulation of the DNA-binding activity of OTF-1/NFIII factor. Chellappan SP, et al. **Proc Natl Acad Sci U S A** 1990 Aug; 87(15):5878-82

Herpes simplex virus-infected cells disarm killer lymphocytes. Confer DL, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3609-13

Molecular characterization and biological function of the movement protein of tobacco mosaic virus in transgenic plants. Deom CM, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3284-8

Infection of cultured central nervous system neurons with a defective herpes simplex virus 1 vector results in stable expression of Escherichia coli beta-galactosidase. Geller AI, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1149-53

Genetic consequences of packaging two RNA genomes in one retroviral particle: pseudodiploidy and high rate of genetic recombination. Hu WS, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1556-60

Vaccinia virus directs the synthesis of early mRNAs containing 5' poly(A) sequences. Ink BS, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1536-40

Infection of vascular endothelial cells with herpes simplex virus enhances tissue factor activity and reduces thrombomodulin expression. Key NS, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7095-9

Genomic RNA of an insect virus directs synthesis of infectious virions in plants. Selling BH, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):434-8

Coinfection of insect cells with recombinant baculovirus expressing pp60v-src results in the activation of a serine-specific protein kinase pp90rsk. Vik TA, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2685-9

Insertional mutagenesis and transformation of hematopoietic stem cells. Ihle JN, et al. **Prog Clin Biol Res** 1990; 352:329-37

Expression of a zinc finger gene in HTLV-I- and HTLV-II-transformed cells. Wright JJ, et al. **Science** 1990 May 4;248(4955):588-91

Expression of cellular genes in CD4 positive lymphoid cells infected by the human immunodeficiency virus, HIV-1: evidence for a host protein synthesis shut-off induced by cellular mRNA degradation. Agy MB, et al. **Virology** 1990 Jul;177(1):251-8

Transformation-defective mutants with 5' deletions of the src gene are frequently generated during replication of Rous sarcoma virus in established quail fibroblasts. Barnier JV, et al. **Virology** 1990 Aug;177(2):505-14

NS-1 and NS-2 proteins may act synergistically in the cytopathogenicity of parvovirus MVMp. Brandenburger A, et al. **Virology** 1990 Feb;174(2):576-84

Identification and stability of a 30-kDa nonstructural protein encoded by mRNA 2 of mouse hepatitis virus in infected cells. Bredenbeek PJ, et al. **Virology** 1990 Mar;175(1):303-6

Immortalization of primary rat embryo cells by human papillomavirus type 11 DNA is enhanced upon cotransfer of ras. Cerni C, et al. **Virology** 1990 Aug;177(2):427-36

Analysis of the hamster polyomavirus infection in vitro: host-restricted productive cycle. de la Roche Saint André C, et al. **Virology** 1990 Aug;177(2):532-40

The replication of viral and cellular DNA in human herpesvirus 6-infected cells. Di Luca D, et al. **Virology** 1990 Mar;175(1):199-210

Glucocorticoid-enhanced neoplastic transformation of human keratinocytes by human papillomavirus type 16 and an activated ras oncogene. Dürst M, et al. **Virology** 1989 Dec;173(2):767-71

Replication of minute virus of mice DNA in adenovirus-infected or adenovirus-transformed cells. Fox E, et al. **Virology** 1990 Jun;176(2):403-12

Differential viral gene expression and its effect on the biological properties of the cell clones of an HIV-1-infected cell line. Kalyanaraman VS, et al. **Virology** 1990 Jul;177(1):380-3

HPV-18 immortalization of human keratinocytes. Kaur P, et al. **Virology** 1989 Nov;173(1):302-10

The primary structure of major viral RNA in a rat cell line transfected with type 47 human papillomavirus DNA and the transforming activity of its cDNA and E6 gene. Kiyono T, et al. **Virology** 1989 Dec;173(2):551-65

The cellular chromatin is an important target for SV40 large T antigen in maintaining the transformed phenotype. Richter W, et al. **Virology** 1990 Feb;174(2):543-56

Restricted expression of measles virus in primary rat astroglial cells. Schneider-Schaulies S, et al. **Virology** 1990 Aug;177(2):802-6

Nucleotide sequence of E1 region of canine adenovirus type 2. Shibata R, et al. **Virology** 1989 Oct;172(2):460-7

Cellular mechanisms in the superinfection exclusion of vesicular stomatitis virus. Simon KO, et al. **Virology** 1990 Jul;177(1):375-9

Sequential disassembly of the cytoskeleton in BHK21 cells infected with vesicular stomatitis virus. Simon KO, et al. **Virology** 1990 Jul;177(1):289-97

The inhibition of mouse L-cell 45 S ribosomal RNA processing is a highly uv-resistant property of vesicular stomatitis virus. Zan M, et al. **Virology** 1990 Jul; 177(1):75-84

Human topoisomerase 1 messenger RNA is not destabilized by the herpes simplex virus type 2 virion-associated shut-off function. Bastow KF, et al. **Virus Genes** 1989 Aug; 2(4):357-65

Tumorigenic conversion of NIH 3T3 cells by transfection with Shope fibroma virus DNA. Obom KM, et al. **Virus Genes** 1989 Sep;3(1):5-10

Phenotypic properties of herpesvirus-transformed cells with high tumorigenic and metastatic ability. Marks G, et al. **Virus Res** 1990 Jan;15(1):27-44

[Molecular mechanisms of establishment and disruption of Epstein-Barr virus latency] Takada K. **Tanpakushitsu Kakusan Koso** 1989 Jun;34(7):823-34 (108 ref.) **(Jpn)**

DRUG EFFECTS

Suppression by protein kinase C inhibitors of tumor promoter enhancement of Epstein-Barr virus-induced growth transformation. Kinoshita T, et al. **Anticancer Res** 1990 Jul-Aug;10(4):1051-4

Augmentation of cytotoxic effect of tumor necrosis factor on human immunodeficiency virus-infected cells by staurosporine, a potent protein kinase C inhibitor. Hamamoto Y, et al. **Cancer Res** 1990 Sep 1;50(17):5287-90

5-Azacytidine-induced recovery of O6-alkylguanine--DNA alkyltransferase activity in mouse Ha821 cells. Mitani H, et al. **Carcinogenesis** 1989 Oct;10(10):1879-82

Proliferating, transformed keratinocytes cultured under low Ca2+ conditions exhibit high-affinity epidermal growth factor receptors. Boonstra J, et al. **Cell Biol Int Rep** 1989 Jul;13(7):609-17

Morphological aspects of inhibition of transformation of rat kidney cells infected with a temperature-sensitive mutant of the Rous sarcoma virus by rat fibroblast interferon. Chen YC, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1990 Feb;23(1):101-5

The effects of 3-deazaguanine on Rous sarcoma virus transformation. Chen YC, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1990 May;23(2):197-200

V-K-ras transformation induces reversion to an earlier developmental form in adult rat adrenal cells. Auersperg N, et al. **Differentiation** 1990 Mar;43(1):29-36

Amplification and overexpression of c-myc proto-oncogene correlate with the loss of glucocorticoid dependence in rodent cells transformed by human papillomavirus type 16. Crook T, et al. **Mol Carcinog** 1989;2(6):308-13

Early events in methyl methanesulfonate enhancement of adenovirus transformation of cloned rat embryo fibroblast cells. Su ZZ, et al. **Mol Carcinog** 1989;2(5):252-60

Establishment of rat endometrial cell lines by retroviral mediated transfer of immortalizing and transforming oncogenes. Wiehle RD, et al. **Oncogene** 1990 Jun; 5(6):787-94

Adenovirus inhibition of cellular protein synthesis is prevented by the drug 2-aminopurine. Huang JT, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7115-9

[Ultrastructural analysis of the action of centrophenoxine on retrovirus-transformed cells] Popov VI, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):761-5 (Eng. Abstr.) **(Rus)**

[The toxicity of sanguinarine compared to a number of other DNA-tropic compounds for ethidium bromide-sensitive and -resistant transformed murine fibroblasts in culture] Beliaeva TN, et al. **Tsitologiia** 1989 Nov;31(11):1363-8 (Eng. Abstr.) **(Rus)**

GENETICS

In vitro transformation by the SV40 'early region' of cells from a human benign salivary gland tumor with a 12q13——q15 rearrangement. Kazmierczak B, et al. **Cytogenet Cell Genet** 1990;53(1):37-9

Cooperation between bovine leukaemia virus transactivator protein and Ha-ras oncogene product in cellular transformation. Willems L, et al. **EMBO J** 1990 May; 9(5):1577-81

Human fibroblasts show expression of the leukotriene-A4-hydrolase gene, which is increased after simian-virus-40 transformation. Medina JF, et al. **Eur J Biochem** 1990 Jul 20;191(1):27-31

Microphotometric determination of DNA and RNA in single chick embryo fibroblasts during morphological transformation induced by Rous sarcoma virus. Sundelin P. **Exp Cell Res** 1967 Jun;46(3):581-92

Tissue specificity of oncogene action: endothelial cell tumours in polyoma middle T transgenic mice. Bautch VL, et al. **IARC Sci Publ** 1989;(96):255-66

Tumour induction in fetal brain transplants exposed to the viral oncogenes polyoma middle T and v-src. Wiestler OD, et al. **IARC Sci Publ** 1989;(96):267-74

Fusion of Rous-sarcoma-virus-transformed rat cells to morphologically normal human or rat cells results in transcriptional suppression of the provirus that depends on its chromosomal integration site. Green AR, et al. **Int J Cancer** 1990 Aug 15;46(2):220-7

Immortalization of rabbit vascular smooth muscle cells after transfection with a fragment of the BglII N region of herpes simplex virus type 2 DNA. Nachtigal M, et al. **Intervirology** 1990;31(2-4):166-74

Cis effect of the type 5 adenovirus E1A gene enhancer element on cellular transformation. Herbst RS, et al. **J Cell Biochem** 1990 Jan;42(1):33-44

SV40 T antigen alone drives karyotype instability that precedes neoplastic transformation of human diploid fibroblasts. Ray FA, et al. **J Cell Biochem** 1990 Jan; 42(1):13-31

Transcription of the Epstein-Barr virus genome during latency in growth-transformed lymphocytes. Sample J, et al. **J Virol** 1990 Apr;64(4):1667-74

A transformation-competent recombinant between v-src and Rous-associated virus RAV-1. Svoboda J, et al. **J Virol** 1990 Apr;64(4):1873-7

Novel non-tumorigenic cell variants showing potentially different susceptibility to v-src-induced metastasis. Enomoto T, et al. **Jpn J Cancer Res** 1990 May;81(5):501-5

Modes of transformation by the human T-cell leukemia viruses. Yip MT, et al. **Mol Biol Med** 1990 Feb;7(1):33-44 (101 ref.)

Rearrangement and diversification of immunoglobulin light-chain genes in lymphoid cells transformed by reticuloendotheliosis virus. Zhang JY, et al. **Mol Cell Biol** 1989 Nov;9(11):4970-6

The effect of retinoids, carotenoids and phenolics on chromosomal instability of bovine papillomavirus DNA-carrying cells. Stich HF, et al. **Mutat Res** 1990 Aug; 241(4):387-93

Rearrangement of the same chromosome regions in different SV40 transformed human skin keratinocyte lines is associated with tumourigenicity. Stacey M, et al. **Oncogene** 1990 May;5(5):727-39

Characterization of the human ABL promoter regions. Zhu QS, et al. **Oncogene** 1990 Jun;5(6):885-91

Characterization of avian retroviruses carrying activated transforming human c-src genes and of steps involved in expression of activated src-PKases in vitro. Tanaka A, et al. **Oncogene Res** 1990;5(4):305-22

SV40-mediated tumor selection and chromosome transfer to enrich for cystic fibrosis region. Porteous DJ, et al. **Somat Cell Mol Genet** 1990 Jan;16(1):29-38

The divergence between two oncogenic Herpesvirus saimiri strains in a genomic region related to the transforming phenotype. Biesinger B, et al. **Virology** 1990 Jun; 176(2):505-14

Transformation by simian virus 40 does not involve the mutational activation of p53 to an oncogenic form. Lin JY, et al. **Virology** 1990 May;176(1):302-5

Effects of 5' and 3' truncations of the myb gene on the transforming ability of avian myeloblastosis virus (AMV). Rosson D. **Virology** 1990 Apr;175(2):562-7

[A new approach for explaining viral organotropism: fusion of HBV transfected cells with hepatocytes] Streeck RE, et al. **Z Gastroenterol [Verh]** 1990 Apr;25:89-90 **(Ger)**

[Transforming genes of human papillomaviruses and cancer] Hakura A. **Gan To Kagaku Ryoho** 1990 Jul;17(7):1244-53 (47 ref.) (Eng. Abstr.) **(Jpn)**

[Transformation of human corneal endothelial cells by micro-injection of oncogenes] Zavizion BA, et al. **Biull Eksp Biol Med** 1990 Apr;109(4):395-8 (Eng. Abstr.) **(Rus)**

[The family of env genes of avian retroviruses: molecular analysis of Rous sarcoma virus adapted to duck cells] Ryndich AV, et al. **Mol Biol (Mosk)** 1989 Sep-Oct; 23(5):1355-63 (Eng. Abstr.) **(Rus)**

[Mechanism of integration of cellular and viral DNA. Possible role of integration in the carcinogenesis] Stoliarov ZE. **Mol Biol (Mosk)** 1990 Jan-Feb;24(1):17-22 (24 ref.) (Eng. Abstr.) **(Rus)**

[The characteristics of the transformed phenotype and the expression of indicator plasmids in the cells of rat embryonic fibroblasts immortalized by oncogene E1Aad5 and transformed by oncogenes E1Aad5+c-Ha-ras] Pospelova TV, et al. **Tsitologiia** 1990;32(2):148-55 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Tumorigenicity and H-2 expression of papillomavirus-transformed mouse cell lines. Laatikainen A, et al. **Cancer Immunol Immunother** 1990;31(3):164-8

Patterns of reactivity of Epstein-Barr virus-specific T cells in A-type donor cultures after reactivation with autologous A- or B-type transformants. Burrows SR, et al. **Cell Immunol** 1990 Apr 15;127(1):47-55

Epstein-Barr virus-immortalized B cells produce IL-6 as an autocrine growth factor. Yokoi T, et al. **Immunology** 1990 May;70(1):100-5

Changes in nuclear distribution of large tumor antigen correlate with the proliferative activity of simian virus 40-transformed cells. Ordenes GE, et al. **J Cell Sci** 1989 Jul;93 (Pt 3):525-32

Radiation leukemia virus and its effect on H-2 gene expression. Brown GD, et al. **J Immunogenet** 1989 Aug-Oct;16(4-5):351-61

Evidence that a target-derived soluble factor is necessary for the selective lysis of SV40-transformed fibroblasts by activated mouse macrophages. Laster SM, et al. **J Immunol** 1990 Feb 15;144(4):1438–43

Association of p62c-yes with polyomavirus middle T-antigen mutants correlates with transforming ability. Kornbluth S, et al. **J Virol** 1990 Apr;64(4):1584–9

Peripheral blood lymphocytes resistant to Epstein-Barr virus immortalization manifest high natural killer (NK) type activity against NK-resistant target cells [published erratum appears in Viral Immunol 1990 Summer;3(2):171] Gosselin J, et al. **Viral Immunol** 1990 Spring;3(1):55–65

PHYSIOLOGY

TGF-beta 1 inhibition of c-myc transcription and growth in keratinocytes is abrogated by viral transforming proteins with pRB binding domains. Pietenpol JA, et al. **Cell** 1990 Jun 1;61(5):777–85

Altered glycosylation in Madin-Darby canine kidney (MDCK) cells after transformation by murine sarcoma virus. Bruyneel EA, et al. **Clin Exp Metastasis** 1990 May-Jun;8(3):241–53

Secretion and intracellular degradation of collagen in cultures of normal and SV-40-transformed human fibroblasts. Berman AE, et al. **FEBS Lett** 1990 Apr 24;263(2):285–8

Acutely transforming retroviruses as carcinogens in mouse embryos. Rossi L, et al. **IARC Sci Publ** 1989;(96):131–51

Retransformation of a revertant cell line with the adenovirus E1 oncogenes and vanadate. Dessureault J, et al. **J Cell Biochem** 1990 Jul;43(3):293–6

Transformed sweat gland and nasal epithelial cell lines from control and cystic fibrosis individuals. Buchanan JA, et al. **J Cell Sci** 1990 Jan;95 (Pt 1):109–23

RADIATION EFFECTS

Enhancement of adenovirus transformation of cloned rat embryo fibroblast cells by gamma irradiation. Su ZZ, et al. **Mol Carcinog** 1990;3(3):141–9

CELL WALL

Preparation of Neurospora crassa chromosomes from a cell wall-less strain. Lai E. **Nucleic Acids Res** 1989 Dec 25; 17(24):10510

ANALYSIS

The poly-alpha- and -beta-1,4-glucuronic acid moiety of teichuronopeptide from the cell wall of the alkalophilic Bacillus strain C-125. Aono R. **Biochem J** 1990 Sep 1; 270(2):363–7

Use of lectins for a comparative study of cell wall composition of different anaerobic rumen fungal strains. Guillot J, et al. **FEMS Microbiol Lett** 1990 Jan 15; 55(1-2):151–6

Polymer length of teichuronic acid released from cell walls of Micrococcus luteus. Wolters PJ, et al. **J Bacteriol** 1990 Sep;172(9):5154–9

Characterization of a DL-dityrosine-containing macromolecule from yeast ascospore walls. Briza P, et al. **J Biol Chem** 1990 Sep 5;265(25):15118–23

Carbohydrate stability during ageing in Penicillium expansum cell wall. Gómez-Miranda B, et al. **Microbiologia** 1985 Sep; 1(1-2):67–75

[Poly(galactosylglycerophosphate) with mannosyl side residues from the cell wall of Actinoplanes phillipinensis VKM Ac-647] Ianushkene NA, et al. **Bioorg Khim** 1989 Dec;15(12):1634–40 (Eng. Abstr.) **(Rus)**

[The physicochemical and biochemical characteristics of the cell walls in M+ and M- variants of Streptococcus group A type 29] Bitko SA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Apr;(4):3–7 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Enhancement of drug susceptibility of Mycobacterium avium by inhibitors of cell envelope synthesis. Rastogi N, et al. **Antimicrob Agents Chemother** 1990 May;34(5):759–64

[The effect of small concentrations of antibiotics blocking the synthesis of bacterial cell wall on the permeability of Escherichia coli cell wall for plasmid DNA] Turkov MI, et al. **Genetika** 1990 Mar;26(3):443–7 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Molecular organization and clustering of cell-wall-bound enzymes as a source of kinetic apparent co-operativity. Dussert C, et al. **Eur J Biochem** 1989 Nov 6;185(2):281–90

IMMUNOLOGY

The effect of ethanol on cell wall antigens of Saccharomyces cerevisiae and specific isolation of high ethanol producing strains of this yeast, making use of a serological technique. Umesh-Kumar S, et al. **Antonie Van Leeuwenhoek** 1990 Jun;58(1):57–66

Production and characterization of monoclonal antibodies to cell wall antigens of Aspergillus fumigatus. Ste-Marie L, et al. **Infect Immun** 1990 Jul;58(7):2105–14

Characterization of T cell antigens associated with the cell wall protein-peptidoglycan complex of Mycobacterium tuberculosis. Barnes PF, et al. **J Immunol** 1989 Oct 15; 143(8):2656–62

Cell wall structures which may be important for successful immunization with Salmonella-Shigella hybrid vaccines. Schultz CL, et al. **Vaccine** 1990 Apr;8(2):115–20

[The persistence and biodegradation of the cell walls of Streptococcus group A in light of the immunopathogenesis of nonsuppurative poststreptococcal diseases] Shikhman AR, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Feb; (2):74–80 (54 ref.) **(Rus)**

METABOLISM

Different modes of vancomycin and D-alanyl-D-alanine peptidase binding to cell wall peptide and a possible role for the vancomycin resistance protein. Knox JR, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1342–7

Involvement of a cell wall receptor in the mode of action of an anti-Candida toxin of Pichia anomala. Sawant AD, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1331–5

Loss of alkalophily in cell-wall-component-defective mutants derived from alkalophilic Bacillus C-125. Isolation and partial characterization of the mutants. Aono R, et al. **Biochem J** 1990 Mar 15;266(3):933–6

Possible involvement of lymphocyte activating factor (LAF) as an endogenous pyrogen in fever induced by the cell wall skeleton of Nocardia rubra (N-CWS). Ohara K, et al. **Chem Pharm Bull (Tokyo)** 1990 Mar;38(3):804–6

The isolation of osmotic-remedial conditional lethal mutants of Candida albicans. Payton MA, et al. **Curr Genet** 1990 Apr;17(4):293–6

Dynamic changes of the cell wall surface of Candida albicans associated with germination and adherence. Tronchin G, et al. **Eur J Cell Biol** 1989 Dec;50(2):285–90

Autoradiographic analysis of regional cell wall growth of yeasts. III. Saccharomyces cerevisiae. Johnson BF, et al. **Exp Cell Res** 1966 Mar;41(3):580–91

Protein-bound choline is released from the pneumococcal autolytic enzyme during adsorption of the enzyme to cell wall particles. Markiewicz Z, et al. **J Bacteriol** 1990 May; 172(5):2241–4

Cell wall composition and surface properties in Bacillus subtilis: anomalous effect of incubation temperature on the phage-binding properties of bacteria containing varied amounts of teichoic acid. Archibald AR, et al. **J Gen Microbiol** 1989 Mar;135 (Pt 3):667–73

Fungal cell wall synthesis: the construction of a biological structure. Cabib E, et al. **Microbiol Sci** 1988 Dec; 5(12):370–5 (28 ref.)

PHYSIOLOGY

Induction of cytosine-rich poly(A)+ RNAs in Chlamydomonas reinhardtii by cell wall removal. Su X, et al. **Exp Cell Res** 1990 Mar;187(1):54–8

Specific expression of a novel cell wall hydroxyproline-rich glycoprotein gene in lateral root initiation. Keller B, et al. **Genes Dev** 1989 Oct;3(10):1639–46

Actin is associated with the formation of the cell wall in reverting protoplasts of the fission yeast Schizosaccharomyces pombe. Kobori H, et al. **J Cell Sci** 1989 Dec;94 (Pt 4):635–46

ULTRASTRUCTURE

Physicochemical interaction of Escherichia coli cell envelopes and Bacillus subtilis cell walls with two clays and ability of the composite to immobilize heavy metals from solution. Walker SG, et al. **Appl Environ Microbiol** 1989 Nov;55(11):2976–84

Barley aleurone protoplasts are structurally and functionally similar to the walled cells of aleurone layers. Hillmer S, et al. **Eur J Cell Biol** 1990 Jun;52(1):169–73

The cell walls of Chara aspera Willd. (Charophyta) vegetative cells. Nyberg H, et al. **Folia Histochem Cytobiol** 1989;27(3):175–81

Cell wall assembly in Bacillus subtilis: partial conservation of polar wall material and the effect of growth conditions on the pattern of incorporation of new material at the polar caps. Clarke-Sturman AJ, et al. **J Gen Microbiol** 1989 Mar; 135 (Pt 3):657–65

Cell wall assembly in Bacillus subtilis: visualization of old and new wall material by electron microscopic examination of samples stained selectively for teichoic acid and teichuronic acid [published erratum appears in J Gen Microbiol 1989 Jan;135(Pt 6):1777] Merad T, et al. **J Gen Microbiol** 1989 Mar;135 (Pt 3):645–55

Cell surface of a tetrads-forming mutant of Micrococcus luteus: chemical treatment of the cells and teichuronic acids on the surface. Monodane T, et al. **Microbiol Immunol** 1990; 34(1):65–72

Structure and metabolism of the murein sacculus. Höltje JV, et al. **Res Microbiol** 1990 Jan;141(1):75–89 (46 ref.)

CELLOBIOSE see under **DISACCHARIDES**

CELLOPHANE

A functional study of the skin barrier to evaporative water loss by means of repeated cellophane-tape stripping. van der Valk PG, et al. **Clin Exp Dermatol** 1990 May; 15(3):180–2

CELLS

Microbeads and anchorage-dependent eukaryotic cells: the beginning of a new era in biotechnology. Miller AO, et al. **Adv Biochem Eng Biotechnol** 1989;39:73–95 (151 ref.)

Issue dedicated to Gr. J. Gordin Kaplan in honour of his valuable contributions to cell biology and biochemisty in Canada. **Biochem Cell Biol** 1989 Sep;67(9):481–669

Papers presented at the forty-second annual meeting of the Japan Society for Cell Biology. Kyoto, 25-27 October 1989. Abstracts. **Cell Struct Funct** 1989 Dec;14(6):769–1005

Transposable elements and DNA transposition in eukaryotes. Finnegan DJ. **Curr Opin Cell Biol** 1990 Jun;2(3):471–7 (22 ref.)

Nomenclature of initiation, elongation and termination factors for translation in eukaryotes. Recommendations 1988. Nomenclature Committee of the International Union of Biochemistry (NC-IUB). **Eur J Biochem** 1989 Dec 8; 186(1-2):1–3

This is FASEB. The American Society for Cell Biology. Wilson DC. **FASEB J** 1989 Nov;3(13):2547–50

Replica plating of animal cells. Esko JD. **Methods Cell Biol** 1989;32:387–422 (89 ref.)

Perturbation of homogeneous magnetic fields by isolated single and confocal spheroids. Implications for NMR spectroscopy of cells. Kuchel PW, et al. **NMR Biomed** 1989 Nov;2(4):151–60

Towards a natural system of organisms: proposal for the domains Archaea, Bacteria, and Eucarya. Woese CR, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4576–9

Making light work of cell surgery [news] Pool R. **Science** 1990 Apr 6;248(4951):29–31

Microbial polysaccharides—a comparison with eukaryotic polymers. Sutherland IW. **Symp Soc Exp Biol** 1989; 43:389–402 (75 ref.)

Histone H1 and the regulation of transcription of eukaryotic genes. Zlatanova J. **Trends Biochem Sci** 1990 Jul; 15(7):273–6 (32 ref.)

ANALYSIS

Simultaneous purification of DNA and RNA from small numbers of eukaryotic cells. Karlinsey J, et al. **Anal Biochem** 1989 Aug 1;180(2):303–6

Preparation of extracts from higher eukaryotes. Dignam JD. **Methods Enzymol** 1990;182:194–203

Cell analysis in clinical chemistry. Jobst K. **Z Med Lab Diagn** 1989;30(8):411–5 (19 ref.)

CYTOLOGY

Ca2(+)-activated cell volume recovery mechanisms. Pierce SK, et al. **Annu Rev Physiol** 1990;52:27–42 (69 ref.)

Three-dimensional morphometry of mammalian cells. I. Diameters. Ocqueteau C, et al. **Arch Biol Med Exp (Santiago)** 1989 Jul;22(2):89–95

The cell cycle in lower eukaryotes. Berger JD. **Curr Opin Cell Biol** 1989 Apr;1(2):256–62 (21 ref.)

DNA replication and its control. Blow JJ. **Curr Opin Cell Biol** 1989 Apr;1(2):263–7 (22 ref.)

A model for astral stimulation of cytokinesis in animal cells. Devore JJ, et al. **J Cell Biol** 1989 Nov;109(5):2225–32

Simulation testing of mechanisms for inducing the formation of the contractile ring in cytokinesis. Harris AK, et al. **J Cell Biol** 1989 Nov;109(5):2215–23

On surface geometry coupled to morphogen. Cummings FW. **J Theor Biol** 1989 Mar 21;137(2):215–9

ColE1 plasmid replication: a simple kinetic description from a structured model. Keasling JD, et al. **J Theor Biol** 1989 Dec 19;141(4):447–61

Computing multiple cell kinetic properties from a single time point. White RA. **J Theor Biol** 1989 Dec 19;141(4):429–46

Flow cytometry: rapid isolation and analysis of single cells. Jensen BD, et al. **Methods Enzymol** 1989;171:549–81

[Morphogenetic reactions of cells and the reprogramming of their syntheses] Vasil'ev IuM. **Ontogenez** 1989 Nov-Dec; 20(6):616–25 (57 ref.) (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Augmentation of bleomycin-induced DNA damage in intact cells. Moseley PL. **Am J Physiol** 1989 Nov;257(5 Pt 1):C882–7

Environmental influences on living cells. Rounds DE. **Arch Environ Health** 1966 Jan;12(1):78–84

Mechanisms of toxic cell injury. Snyder JW. **Clin Lab Med** 1990 Jun;10(2):311–21 (40 ref.)

ENZYMOLOGY

A conserved 3'——5' exonuclease active site in prokaryotic and eukaryotic DNA polymerases. Bernad A, et al. **Cell** 1989 Oct 6;59(1):219–28

CpG frequency-dependence in the activity of eukaryotic DNA methyltransferase: in vitro methylation of CpG-rich islands. Carotti D, et al. **Ital J Biochem** 1989 Nov-Dec; 38(6):379A–382A

The function of protein carboxylmethyltransferase in eucaryotic cells. Barten DM, et al. **Life Sci** 1990; 47(3):181–94 (119 ref.)

Ubiquitin-conjugating enzymes: novel regulators of eukaryotic cells. Jentsch S, et al. **Trends Biochem Sci** 1990 May;15(5):195–8 (30 ref.)

IMMUNOLOGY

Rapid immunomagnetic phenotyping of cells. Gaudernack G, et al. **J Immunogenet** 1989 Apr;16(2):169–75

METABOLISM

Calcium and cell steady states. Williams RJ. **Adv Exp Med Biol** 1990;269:7–16 (0 ref.)
Calcium-dependent regulation of protein synthesis in intact mammalian cells. Brostrom CO, et al. **Annu Rev Physiol** 1990;52:577–90 (70 ref.)
Release of hyaluronate from eukaryotic cells. Prehm P. **Biochem J** 1990 Apr 1;267(1):185–9
How could a cell regulate its internal Pi concentration? Kemp GJ, et al. **Biochem Soc Trans** 1989 Dec;17(6):1092
Regulation of eukaryotic transcription factors by post-translational modification. Berk AJ. **Biochim Biophys Acta** 1989 Nov 2;1009(2):103–9 (77 ref.)
Continuous monitoring of transport by fluorescence on cells and vesicles. Eidelman O, et al. **Biochim Biophys Acta** 1989 Dec 6;988(3):319–34 (119 ref.)
Anaerobic metabolism in aerobic mammalian cells: information from the ratio of calorimetric heat flux and respirometric oxygen flux. Gnaiger E, et al. **Biochim Biophys Acta** 1990 Apr 26;1016(3):328–32 (47 ref.)
Negative regulation of transcriptional initiation in eukaryotes. Goodbourn S. **Biochim Biophys Acta** 1990 Jun 1; 1032(1):53–77 (288 ref.)
Structure and function of suppressor tRNAs in higher eukaryotes. Hatfield DL, et al. **Crit Rev Biochem Mol Biol** 1990;25(2):71–96 (262 ref.)
Sequence signals in eukaryotic upstream regions. Nussinov R. **Crit Rev Biochem Mol Biol** 1990;25(3):185–224 (322 ref.)
Eukaryotic RAS proteins and yeast proteins with which they interact. Broek D. **Curr Top Microbiol Immunol** 1989; 147:155–69 (67 ref.)
Translational dynamics. Interactions between the translational factors, tRNA and ribosomes during eukaryotic protein synthesis. Nygård O, et al. **Eur J Biochem** 1990 Jul 20;191(1):1–17 (303 ref.)
Colicins: prokaryotic killer–pores. Pattus F, et al. **Experientia** 1990 Feb 15;46(2):180–92 (98 ref.)
The evolutionary conservation of eukaryotic gene transcription. Schena M. **Experientia** 1989 Oct 15; 45(10):972–83 (117 ref.)
Biosynthesis of peptide precursors and protease inhibitors using new constitutive and inducible eukaryotic expression vectors. Johansen TE, et al. **FEBS Lett** 1990 Jul 16; 267(2):289–94
Application of spin traps to biological systems. Rosen GM, et al. **Free Radic Res Commun** 1990;9(3–6):187–95 (31 ref.)
Conserved tissue–restricted expression of HUC 1–1 actin phenotype among eumetazoan organisms. Sawtell NM, et al. **J Exp Zool** 1990 Oct;256(1):54–62
Phosphate transport processes in eukaryotic cells. Wehrle JP, et al. **J Membr Biol** 1989 Nov;111(3):199–213 (134 ref.)
Postreplication repair of DNA in mammalian cells. Lehmann AR. **Life Sci** 1974 Dec 15;15(12):2005–16 (68 ref.)
Biomembranes—Part U. Cellular and subcellular transport: eukaryotic (nonepithelial) cells. **Methods Enzymol** 1989; 174:1 676
Monitoring intracellular metabolism by nuclear magnetic resonance. Cohen JS, et al. **Methods Enzymol** 1989; 177:435–52
A selective review of RNA–protein interactions in eukaryotes. Mattaj IW. **Mol Biol Rep** 1990;14(2–3):151–5 (52 ref.)
Effect of accessory proteins on the fidelity of DNA synthesis by eukaryotic replicative polymerases. Roberts JD, et al. **Prog Clin Biol Res** 1990;340A:91–100
Control of prokaryotic translational initiation by mRNA secondary structure. de Smit MH, et al. **Prog Nucleic Acid Res Mol Biol** 1990;38:1–35 (102 ref.)
The Na+/H+ exchange system in cell pH and volume control. Rothstein A. **Rev Physiol Biochem Pharmacol** 1989; 112:235–57 (55 ref.)
Detection of cell–affecting agents with a silicon biosensor. Parce JW, et al. **Science** 1989 Oct 13;246(4927):243–7
Prenyl proteins in eukaryotic cells: a new type of membrane anchor. Glomset JA, et al. **Trends Biochem Sci** 1990 Apr; 15(4):139–42 (30 ref.)
Do the laws of chemistry apply to living cells? [see comments] Halling PJ. **Trends Biochem Sci** 1989 Aug; 14(8):317–8 Comment in: Trends Biochem Sci 1989 Nov;14(11):444. Comment in: Trends Biochem Sci 1990 Apr;15(4):137–8.
Molecular genetics of polyamine synthesis in eukaryotic cells. Heby O, et al. **Trends Biochem Sci** 1990 Apr;15(4):153–8 (30 ref.)
Thermodynamics and life [letter; comment] Orstan A. **Trends Biochem Sci** 1990 Apr;15(4):137–8 Comment on: Trends Biochem Sci 1989 Aug;14(8):317–8.
[Superoxide dismutase—its structure, function and phylogeny] Kwiatowski JM. **Postepy Biochem** 1988; 34(4):311–33 (172 ref.) **(Pol)**
[Characteristics of ubiquitin] Wiland E. **Postepy Biochem** 1988;34(4):361–74 (87 ref.) **(Pol)**
[Detection of serologically identical proteins in polysomal-bound mRNA from cells of various eukaryotes] Didenko LF, et al. **Mikrobiol Zh** 1986 Nov–Dec; 48(6):68–73 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Protein synthesis initiation factor modifications during viral infections: implications for translational control. Duncan RF. **Electrophoresis** 1990 Mar;11(3):219–27 (67 ref.)
Salmonella as an intracellular parasite. Finlay BB, et al. **Mol Microbiol** 1989 Dec;3(12):1833–41 (37 ref.)
Virally infected cells. **Subcell Biochem** 1989;15:1–450

PATHOLOGY

The pathological process. III(IV). Cellular population systems as substrates of pathological processes: structure, reactivity, dynamics and basic lesions. Eskenasy A. **Morphol Embryol (Bucur)** 1989 Jul–Sep;35(3):173–94 (63 ref.)

PHYSIOLOGY

On the nature of enduring modifications induced in cells and organisms. Rubin H. **Am J Physiol** 1990 Feb;258(2 Pt 1):L19–24 (28 ref.)
Development and biological applications of chloride–sensitive fluorescent indicators. Verkman AS. **Am J Physiol** 1990 Sep;259(3 Pt 1):C375–88 (58 ref.)
Complement membrane attack on nucleated cells: resistance, recovery and non–lethal effects. Morgan BP. **Biochem J** 1989 Nov 15;264(1):1–14 (163 ref.)
Initiation of mRNA translation in prokaryotes. Gualerzi CO, et al. **Biochemistry** 1990 Jun 26;29(25):5883–9 (82 ref.)
The cell biology of transforming growth factor beta. Barnard JA, et al. **Biochim Biophys Acta** 1990 Jun 1;1032(1):79–87 (132 ref.)
Enzyme activities in bondage? [letter; comment] Swezey RR, et al. **Bioessays** 1990 Feb;12(2):98–9 Comment on: Bioessays 1989 Apr;10(4):127–30.
Biophysical Journal: program and abstracts, thirty–fourth annual meeting. February 18–22, 1990, Baltimore, Maryland. **Biophys J** 1990 Feb;57(2 Pt 2):1a–577a
Mathematical analysis of cell–target encounter rates in three dimensions. Effect of chemotaxis. Charnick SB, et al. **Biophys J** 1990 May;57(5):1009–23
Kinematics of helical motion of microorganisms capable of motion with four degrees of freedom [published erratum appears in Biophys J 1990 May;57(5):1107] Crenshaw HC. **Biophys J** 1989 Nov;56(5):1029–35
Dielectrophoretic spectra of single cells determined by feedback–controlled levitation. Kaler KV, et al. **Biophys J** 1990 Feb;57(2):173–82
Immobilized biosystems in research and industry. Kennedy JF, et al. **Biotechnol Genet Eng Rev** 1989;7:297–313 (58 ref.)
Microtubules, membrane traffic, and cell organization. Kelly RB. **Cell** 1990 Apr 6;61(1):5–7 (11 ref.)
Third European Congress on Cell Biology. 2–7 September 1990, Firenze, Italy. Abstracts supplement. **Cell Biol Int Rep** 1990 Sep;14 Suppl:1–281
Papers presented at the 3rd Symposium on Cell Biology. Tokyo, May 12, 1989. Abstracts. **Cell Struct Funct** 1989 Oct;14(5):639–47
Three models of free radical–induced cell injury. Comporti M. **Chem Biol Interact** 1989;72(1–2):1–56 (356 ref.)
Cell regulation. **Curr Opin Cell Biol** 1990 Apr;2(2):307–65
The cell surface in development and cancer. **Dev Biol (N Y 1985)** 1986;3:1–357
Interactions between glutamine metabolism and cell–volume regulation in perfused rat liver. Häussinger D, et al. **Eur J Biochem** 1990 Mar 30;188(3):689–95
Annual meeting of the Dutch Society for Cell Biology, Amsterdam, January 19, 1989. Abstracts. **Eur J Cell Biol Suppl** 1989;29:1–19
Annual meeting of the Deutsche Gesellschaft für Zellbiologie. Bremen, 19–23 March 1990. Abstracts. **Eur J Cell Biol Suppl** 1990;30:1–44, 49–92
Na+/H+ exchange and Ca2+ influx. Siffert W, et al. **FEBS Lett** 1989 Dec 18;259(1):1–4 (28 ref.)
The "recall effect" in radiotherapy: is subeffective, reparable damage involved? Kitani H, et al. **Int J Radiat Oncol Biol Phys** 1990 Mar;18(3):689–95
In defense of "nonmolecular" cell biology. Albrecht–Buehler G. **Int Rev Cytol** 1990;120:191–241 (47 ref.)
Multiple second messenger pathways of alpha–adrenergic receptor subtypes expressed in eukaryotic cells. Cotecchia S, et al. **J Biol Chem** 1990 Jan 5;265(1):63–9
pH regulation in spread cells and round cells. Schwartz MA, et al. **J Biol Chem** 1990 Jan 25;265(3):1327–32
19th annual UCLA symposium: Cytoskeleton and cell regulation. Abstracts. **J Cell Biochem Suppl** 1990; 14A:201–47
19th annual UCLA symposium: Genetic and in vitro analysis of cell compartmentalization. Abstracts. **J Cell Biochem Suppl** 1990;14C:1–79
Spatial and spatio–temporal patterns in a cell–haptotaxis model. Maini PK. **J Math Biol** 1989;27(5):507–22
The physiological role of alpha–fetoprotein in cell growth and differentiation. Uriel J. **J Nucl Med Allied Sci** 1989 Jul–Sep;33(3 Suppl):12–7 (26 ref.)
Gompertzian mortality derived from competition between cell–types: congenital, toxicologic and biometric determinants of longevity. Bass L, et al. **J Theor Biol** 1989 Sep 22;140(2):263–78
A model of morphogenetic pattern formation. Cummings FW. **J Theor Biol** 1990 Jun 21;144(4):547–66
Diffusion effects in calcium–regulated strain fields. Hart TN, et al. **J Theor Biol** 1989 Feb 8;136(3):327–36
Experimental control of intracellular environment. Baker PF, et al. **Methods Enzymol** 1989;171:817–28
Adhesion of eukaryotic cells to immobilized carbohydrates. Schnaar RL, et al. **Methods Enzymol** 1989;179:542–58
Transcription elongation and eukaryotic gene regulation. Spencer CA, et al. **Oncogene** 1990 Jun;5(6):777–85 (108 ref.)
A superfusion bath for single–cell recording with high–precision optical depth control, temperature regulation, and rapid solution switching. Delbridge LM, et al. **Pflugers Arch** 1990 Apr;416(1–2):94–7
DNA methylation and late replication probably aid cell memory, and type I DNA reeling could aid chromosome folding and enhancer function. Riggs AD. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1235):285–97
Internal cell manipulation using infrared laser traps. Ashkin A, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7914–8
Distribution and function of non–lymphoid cells in liver and spleen of embryonic and adult chickens. Jeurissen SH, et al. **Prog Clin Biol Res** 1989;307:149–57
The state of potassium in skeletal muscle and in non–muscle cells. Hazlewood CF, et al. **Scanning Microsc** 1990 Jun; 4(2):457–64; discussion 464–6 (71 ref.)
The response of living cells to very weak electric fields: the thermal noise limit [published erratum appears in Science 1990 Mar 2;247(4946):1019] Weaver JC, et al. **Science** 1990 Jan 26;247(4941):459–62
[Cell polarity and cytoskeleton] Ishikawa H. **Tanpakushitsu Kakusan Koso** 1989 Sep;34(12 Suppl):1742–8 **(Jpn)**
[Mechanical stresses as factors in the autoregulation of morphogenesis] Belousov LV. **Ontogenez** 1989 Nov–Dec; 20(6):626–36 (37 ref.) (Eng. Abstr.) **(Rus)**
[Abstracts of the All–Union Symposium "Current questions in cell biology" (leningrad, 17–19 November 1989)] **Tsitologiia** 1989 Sep;31(9):1090–133 **(Rus)**

RADIATION EFFECTS

Cell–oriented alternatives to dose, quality factor, and dose equivalent for low–level radiation. Sondhaus CA, et al. **Health Phys** 1990 Jul;59(1):35–48
The radiobiology of human cells and tissues. Proceedings of the 15th L.H. Gray Conference. University of Kent, Canterbury, U.K., 11–15 April 1989. **Int J Radiat Biol** 1989 Nov;56(5):525–860
Isolation of mammalian cell variants with enhanced endogenous thiol content at low survival levels following irradiation. Hodgkiss RJ. **Int J Radiat Biol** 1990 Jan; 57(1):83–95
Effects of UV radiation of cells. Moan J, et al. **J Photochem Photobiol B** 1989 Oct;4(1):21–34 (79 ref.)
Role of glutathione in the radiation response of mammalian cells in vitro and in vivo. Bump EA, et al. **Pharmacol Ther** 1990;47(1):117–36 (178 ref.)
1989 Douglas Lea memorial lecture. The cell dose concept; potential application in radiation protection. Feinendegen LE. **Phys Med Biol** 1990 May;35(5):597–612 (32 ref.)
Dose–effect relations for stochastic rates of injury formation in cells. Kruglikov IL. **Radiat Res** 1990 May;122(2):120–5
Probabilistic approach to obtain hit–size effectiveness functions which relate microdosimetry and radiobiology. Morstin K, et al. **Radiat Res** 1989 Dec;120(3):383–402
[Cellular effects of the ultraviolet components of sunlight] Zölzer F, et al. **Naturwissenschaften** 1989 Nov; 76(11):489–95 (33 ref.) (Eng. Abstr.) **(Ger)**

SECRETION

Prokaryotic secretion. Model P, et al. **Cell** 1990 Jun 1; 61(5):739–41 (23 ref.)

ULTRASTRUCTURE

Localization of functional centers on the prokaryotic ribosome: immuno–electron microscopy approach. Spirin AS, et al. **Biol Cell** 1989;66(3):215–23 (38 ref.)
Centromeres and kinetochores: integrated domains on eukaryotic chromosomes. Brinkley BR. **Curr Opin Cell Biol** 1990 Jun;2(3):446–52 (14 ref.)
The origin and fate of Merkel cell granules—an ultrastructural study. Nindl M, et al. **J Dermatol** 1990 Apr; 17(4):218–25
Three–dimensional reconstruction of mammalian 40 S ribosomal subunit. Verschoor A, et al. **J Mol Biol** 1989 Sep 5;209(1):115–26
Bioelectrorheological model of the cell. 1. Analysis of stresses and deformations. Pawlowski P, et al. **J Theor Biol** 1989 Apr 6;137(3):321–37
Structure and function of eukaryotic RNP. Proceedings of the meeting. Delphi, Greece, April 1–5, 1990. **Mol Biol Rep** 1990;14(2–3):41–214
Comparison between light and scanning electron microscopic findings in cells stained by Riu's method. Yang SC. **Taiwan I Hsueh Hui Tsa Chih** 1989 Oct;88(10):1042–6
[Electron energy loss spectroscopy (EELS) as a method for the localization of antigens and other substances in cells and tissues] Wolf B, et al. **Naturwissenschaften** 1990 Mar; 77(3):110–5 (34 ref.) (Eng. Abstr.) **(Ger)**
[Splicing of nuclear messenger RNA precursors] Sieliwanowicz B. **Postepy Biochem** 1988;34(4):351–60 (54 ref.) **(Pol)**
[The results of and prospects for the study of the interphase

nucleus of eukaryotes] Ganina KP, et al. **Tsitol Genet** 1990 Jan-Feb;24(1):65-72 (63 ref.) (Eng. Abstr.) **(Rus)**

CELLS, CULTURED

see related
DIFFUSION CHAMBERS, CULTURE

Bioreactor for mammalian cell culture. Prokop A, et al. **Adv Biochem Eng Biotechnol** 1989;39:29-71 (177 ref.)

Growth kinetics of free and immobilized insect cell cultures. Agathos SN, et al. **Ann N Y Acad Sci** 1990;589:372-98 (101 ref.)

A membrane-based method for removal of toxic ammonia from mammalian-cell culture. Brose DJ, et al. **Appl Biochem Biotechnol** 1990 Spring-Summer; 24-25:457-68

Cytotoxicity due to a reaction between polystyrene and constituents of stool. Hussain AM, et al. **Bangladesh Med Res Counc Bull** 1989 Jun;15(1):42-5

The culture of human skin fibroblasts on microcarriers in the presence of serum substitute: Ultroser G. Miech G, et al. **Biol Cell** 1990;68(1):85-7

Report--from the European Collection of Animal Cell Cultures. **Biologicals** 1990 Jan;18(1):75-6

A compartmentalized device for the culture of animal cells. Vogler EA. **Biomater Artif Cells Artif Organs** 1989; 17(5):597-610

Evolution and development of membrane components in erythroid precursor cells in newly-developed two phase culture system. Yawata Y, et al. **Biomed Biochim Acta** 1990; 49(2-3):S76-81

Human liquid bone marrow culture in serum-free medium. Drouet X, et al. **Br J Haematol** 1989 Oct;73(2):143-7

The need for a Human Cell Organization [editorial] Moore GE. **Cancer** 1990 Aug 15;66(4):617-8

Microcarrier cell culture of neonatal human corneal endothelium. Insler MS, et al. **Curr Eye Res** 1990 Jan; 9(1):23-30

Phenotypic changes in cell culture. Harris M. **Dev Biol (N Y 1985)** 1989;6:79-95 (69 ref.)

Proposed usage of animal tissue culture terms. Fedoroff S. **Exp Cell Res** 1967 Jun;46(3):642-8

Cultivation of mammalian cells in heat-sealable pouches that are permeable to carbon dioxide. Klebe RJ, et al. **Exp Cell Res** 1990 Jun;188(2):316-9

A digital image processing system for quantitating dynamic morphology in cultured mammalian cells [published erratum appears in Exp Cell Res 1990 Apr;187(2):349] Tatsuka M, et al. **Exp Cell Res** 1989 Dec;185(2):342-52

Modified method of in vitro cultivation of human keratinocytes suitable for grafting. Matoušková E, et al. **Folia Biol (Praha)** 1989;35(4):267-71

Growth and development of rat oocytes in vitro. Daniel SA, et al. **Gamete Res** 1989 Sep;24(1):109-21

An autocrine activity capable of substituting for serum in cell cultures. Böhmer RM, et al. **Growth Factors** 1989; 1(4):347-56

Establishment of human ampullary cell cultures. Bongso A, et al. **Hum Reprod** 1989 Jul;4(5):486-94

Growing human B-cell precursors in vitro: the continuing challenge. LeBien TW. **Immunol Today** 1989 Sep; 10(9):296-8 (36 ref.)

Forty-first annual meeting of the Tissue Culture Association. June 10-13, 1990, Houston, TX. Abstracts. **In Vitro Cell Dev Biol** 1990 Mar;26(3 Pt 2):1A-80A

Preparation and use of lipid microemulsions as nutritional supplements for culturing mammalian cells. Darfler FJ. **In Vitro Cell Dev Biol** 1990 Aug;26(8):779-83

Isolation and characterization of endothelial cells from bovine cerebral arteries. Machi T, et al. **In Vitro Cell Dev Biol** 1990 Mar;26(3 Pt 1):291-300

Adult cardiac muscle cells in long-term serum-free culture: myofibrillar organization and expression of myosin heavy chain isoforms. Nag AC, et al. **In Vitro Cell Dev Biol** 1990 May;26(5):464-70

Isolation and characterization of rabbit ovarian surface epithelium, granulosa cells, and peritoneal mesothelium in primary culture. Piquette GN, et al. **In Vitro Cell Dev Biol** 1990 May;26(5):471-81

An improved method for in vitro cultivation of murine splenic macrophages [letter] Reddy MV, et al. **In Vitro Cell Dev Biol** 1990 Jul;26(7):657-8

Short-term cultivation of murine thymic epithelial cells in a serum-free medium. Ropke C, et al. **In Vitro Cell Dev Biol** 1990 Jul;26(7):671-81

Terminology associated with cell, tissue, and organ culture, molecular biology, and molecular genetics. Tissue Culture Association Terminology Committee. Schaeffer WI. **In Vitro Cell Dev Biol** 1990 Jan;26(1):97-101

Serum-free culture of enriched mouse anterior and ventral prostatic epithelial cells in collagen gel. Turner T, et al. **In Vitro Cell Dev Biol** 1990 Jul;26(7):722-30

Development of a new culture system for human lymphokine-activated killer cells. Murata M, et al. **J Immunol Methods** 1990 May 8;129(1):89-95

A simple culture method of fat cells from mature fat tissue fragments. Sugihara H, et al. **J Lipid Res** 1989 Dec; 30(12):1987-95

Key issues in the selection of an expression system for vaccine antigens. Ellis RW, et al. **J Med Virol** 1990 May;31(1):54-8

Improved methods for obtaining colonies of human peripheral blood lymphocytes in vitro for radiation dose-survival studies. Nakamura N, et al. **Mutat Res** 1990 Feb;234(1):15-22

31P NMR of mammalian cells encapsulated in alginate gels utilizing a new phosphate-free perfusion medium. Narayan KS, et al. **NMR Biomed** 1990 Feb;3(1):23-6

Glass and plastic photoluminescence: interaction with aqueous media and cultured mammalian cells. Black HS, et al. **Photochem Photobiol** 1990 Mar;51(3):383-6

Ultrasonic propagation in mammalian cell suspensions based on a shell model. Anson LW, et al. **Phys Med Biol** 1989 Sep;34(9):1153-67

Relation of spontaneous transformation in cell culture to adaptive growth and clonal heterogeneity. Rubin AL, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):482-6

Geneva on the beltway [news] Murphy E. **Science** 1990 May 25;248(4958):955

[Abstracts of reports presented at the 30th state-wide meeting of cell culture workers. Pardubice, March 29-31 1988] **Cesk Fysiol** 1989;38(5):421-38 **(Cze)**

[Cultures in vitro of embryonic cells of cockroaches (Dictyoptera insects)] Landureau JC. **Exp Cell Res** 1966 Mar;41(3):545-56 (Eng. Abstr.) **(Fre)**

[Method of total staining of monolayer cell cultures using vanadium hematoxylin] Viktorov IV. **Biull Eksp Biol Med** 1990 Jun;109(6):612-3 (Eng. Abstr.) **(Rus)**

[Abstracts of papers presented at the Conference of Cell Culture Researchers on the theme: "Present status and perspectives in the use of cell cultures in biotechnology". 25-28 May 1988, Zemplínská Šírava] **Cesk Fysiol** 1990; 39(1):63-78 **(Slo, Cze)**

ANALYSIS

Enzymatic quantification of sphingosine in the picomole range in cultured cells. Van Veldhoven PP, et al. **Anal Biochem** 1989 Nov 15;183(1):177-89

A reversible multi-well chamber for incubation of cultured cells with small volumes: application to screening of hybridoma fusions using immunofluorescence microscopy. Willingham MC, et al. **Biotechniques** 1990 Mar;8(3):320-4

CYTOLOGY

Growth and characterization of isolated bovine tracheal gland cells in culture. Influence of a reconstituted basement membrane matrix. Benali R, et al. **Biol Cell** 1989; 66(3):263-70

Cytological differences between normal and malignant human cell populations in culture. Gilvarry U, et al. **Cancer Res** 1990 Jun 1;50(11):3390-3

Differentiation of human monocytes into accessory cells at serum-free conditions. Najar HM, et al. **Eur J Cell Biol** 1990 Apr;51(2):339-46

Isolated trout liver cells: establishing short-term primary cultures exhibiting cell-to-cell interactions. Blair JB, et al. **In Vitro Cell Dev Biol** 1990 Mar;26(3 Pt 1):237-49

pH dependency of cell attachment and growth at both clonal and subculture densities of cultured lepidopteran cells. Koval TM, et al. **In Vitro Cell Dev Biol** 1990 Jul; 26(7):665-70

Postmitotic human dermal fibroblasts preserve intact feeder properties for epithelial cell growth after long-term cryopreservation. Limat A, et al. **In Vitro Cell Dev Biol** 1990 Jul;26(7):709-12

Cell proliferation on hydrogels. Nagaoka S, et al. **In Vitro Cell Dev Biol** 1990 Jan;26(1):51-6

Measurements of cells in culture by scanning acoustic microscopy. Litniewski J, et al. **J Microsc** 1990 Apr;158 (Pt 1):95-107

[The survivability of cells of continuous lines (in suspensions) during transport] Ikaeva MN, et al. **Vopr Virusol** 1990 Mar-Apr;35(2):169-70 **(Rus)**

DRUG EFFECTS

Primary culture of proximal tubular cells from normal rat kidney as an in vitro model to study mechanisms of nephrotoxicity. Toxicity of nephrotoxicants at low concentrations during prolonged exposure. Boogaard PJ, et al. **Biochem Pharmacol** 1990 Apr 15;39(8):1335-45

Use of cell culture to predict toxicity of solid materials in blood contact. Wieslander A, et al. **Biomater Artif Cells Artif Organs** 1990;18(3):367-74

Clara cell cultures from the mouse and their reaction to bronchiolar toxins. Richards RJ, et al. **Environ Health Perspect** 1990 Apr;85:119-27

Interaction between human peripheral blood monocytes and tumor promoters: effect on growth differentiation and function in vitro. Keisari Y, et al. **J Biol Response Mod** 1990 Aug;9(4):401-10

Growth responses of cell cultures in a galactose medium. Baugh CL, et al. **Life Sci** 1974 Dec 1;15(11):1955-60

[Studies using different human cell-culture systems for demonstrating interferon induction under in vitro conditions] Glück B. **Allerg Immunol (Leipz)** 1989; 35(3):181-6 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

Vertebrate cell culture II and enzyme technology. **Adv Biochem Eng Biotechnol** 1989;39:1-187

METABOLISM

Large-scale production of monoclonal antibodies in defined serum-free media in airlift bioreactors. Petrossian A, et al. **Biotechniques** 1990 Apr;8(4):414-22

Human and dog, but not rat, isolated hepatocytes have decreased foreign compound-metabolizing activity compared to liver slices. Powis G, et al. **Drug Metab Dispos** 1989 Sep-Oct;17(5):526-31

The composition and metabolism of cells cultured in a modified filter-well apparatus. Dickson JA, et al. **Exp Cell Res** 1966 Mar;41(3):502-8

Morpho-functional characterization of cultured pigment cells from Rana esculenta L. liver. Pintucci G, et al. **In Vitro Cell Dev Biol** 1990 Jul;26(7):659-64

Incorporation of contrast media in cultured cells. Nordby A, et al. **Invest Radiol** 1989 Sep;24(9):703-10

A cell culture system that enhances mononuclear cell IgE synthesis induced by recombinant human interleukin-4. Claassen JL, et al. **J Immunol Methods** 1990 Feb 9; 126(2):213-22

Design of simple devices to measure solute fluxes and binding in monolayer cell cultures. Vadgama JV. **Methods Enzymol** 1989;171:133-44

MICROBIOLOGY

Removal of yeast contamination from lymphoblast cultures. Overhauser J, et al. **Biotechniques** 1990 Feb;8(2):177

Some observations on contamination of animal cell cultures by the fungus Aspergillus fumigatus and suggested control measures. Clarke JH, et al. **Cell Biol Int Rep** 1989 Sep; 13(9):773-9

Herpesvirus simiae contamination of primary rhesus monkey kidney cell cultures. CDC recommendations to minimize risks to laboratory personnel. Wells DL, et al. **Diagn Microbiol Infect Dis** 1989 Jul-Aug;12(4):333-5

Microbiological cultivation of Mycoplasma hyorhinis from cell cultures. Kotani H, et al. **In Vitro Cell Dev Biol** 1990 Jan;26(1):91-6

Peroxidase-labeled primary antibody method for detection of pestivirus contamination in cell cultures. Potts BJ, et al. **J Virol Methods** 1989 Oct;26(1):119-24

The ability of Salmonella to enter mammalian cells is affected by bacterial growth state. Lee CA, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4304-8

[Mycoplasma as a contaminant of cell cultures maintained in laboratories of private and official institutions] Miyaki C, et al. **Rev Saude Publica** 1989 Feb;23(1):39-44 (Eng. Abstr.) **(Por)**

PATHOLOGY

[Trypan blue staining capacities of the culture cells (2)--The mechanism of staining] Suganuma M, et al. **Rinsho Byori** 1989 Dec;37(12):1361-6 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Human vascular smooth muscle cells in culture: growth characteristics and protein pattern by use of serum-free media supplements. Dartsch PC, et al. **Eur J Cell Biol** 1990 Apr;51(2):285-94

Long-term cultures of chicken bone marrow cells. Cormier F, et al. **Exp Cell Res** 1990 Sep;190(1):113-7

Frontiers in mammalian cell culture. McKeehan WL, et al. **In Vitro Cell Dev Biol** 1990 Jan;26(1):9-23 (272 ref.)

Comparative studies of the long-term growth of lymphocytes from tumor infiltrates, tumor-draining lymph nodes, and peripheral blood by repeated in vitro stimulation with autologous tumor. Skornick Y, et al. **J Biol Response Mod** 1990 Aug;9(4):431-8

Isolation, culture, and transplantation of intrahepatic biliary epithelial cells and oval cells. Sirica AE, et al. **Pathobiology** 1990;58(1):44-64 (159 ref.)

[The release of transforming growth factors by cells resistant to ethidium bromide and growing on a serum-free medium] Pashinin IuV, et al. **Tsitologiia** 1989 Nov;31(11):1369-76 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Thermoluminescent measurement of cellular radiation dose. Hendee WR, et al. **Am J Roentgenol Radium Ther Nucl Med** 1967 Aug; 100(4):886-9

Mechanism for 193-nm laser radiation-induced effects on mammalian cells. Kochevar IE, et al. **Radiat Res** 1990 May; 122(2):142-8

SECRETION

Use of primary cell culture to study regulation of airway surface epithelial mucus secretion. Kim KC, et al. **Symp Soc Exp Biol** 1989;43:231-9 (25 ref.)

TRANSPLANTATION

[Our experience with the use of epidermal cell cultures in reconstructive surgery] Abbes M, et al. **Ann Chir Plast Esthet** 1990;35(1):31-8 (19 ref.) (Eng. Abstr.) **(Fre)**

ULTRASTRUCTURE

Ultrastructural characterization of two new human

endometrial carcinoma cell lines and normal human endometrial epithelial cells cultured on extracellular matrix. Boyd JA, et al. **In Vitro Cell Dev Biol** 1990 Jul;26(7):701–8

CELLULAR INCLUSIONS

Microdissection: a novel method for the study of intracellular inclusion bodies. Martin JE, et al. **J Pathol** 1990 Jan; 160(1):77–9

ANALYSIS

The nature of hyaline (eosinophilic) globules and vascular slits of Kaposi's sarcoma. Kao GF, et al. **Am J Dermatopathol** 1990 Jun;12(3):256–67

Identification of basement membrane components in eosinophilic globules in a case of Spitz's nevus. Schmoeckel C, et al. **Am J Dermatopathol** 1990 Jun;12(3):272–4

Recovery of therapeutic proteins from inclusion bodies: problems and process strategies. Thatcher DR. **Biochem Soc Trans** 1990 Apr;18(2):234–5

Immunocytochemical and lectin–binding studies on Lafora bodies. Lewis PD, et al. **Clin Neuropathol** 1990 Jan–Feb; 9(1):7–9

Detection of the surface–exposed 18–kilodalton binding protein in Chlamydia trachomatis by immunogold staining. Gray GJ, et al. **J Bacteriol** 1990 Jun;172(6):3524–8

Sequence of a human MAP–2 region sharing epitopes with Alzheimer neurofibrillary tangles. Dammerman M, et al. **J Neurosci Res** 1989 Dec;24(4):487–95

Ultrastructural localization of Charcot–Leyden crystal protein (lysophospholipase) to intracytoplasmic crystals in tumor cells of primary solid and papillary epithelial neoplasm of the pancreas. Dvorak AM, et al. **Lab Invest** 1990 May;62(5):608–15

DRUG EFFECTS

Colchicine inhibits the effects of secretin on pancreatic duct cell tubulovesicles and HCO3– secretion in the pig. Veel T, et al. **Acta Physiol Scand** 1990 Apr;138(4):487–95

Lymphatic vessels and Kurloff cells in the thymus of estradiol–treated guinea pigs. Sandberg G, et al. **Cell Tissue Res** 1990 Feb;259(2):361–9

Axonal dystrophy in the posterior column nuclei of young adult epileptics with chronic phenytoin intoxication. Nakamura H, et al. **Jpn J Psychiatry Neurol** 1989 Dec; 43(4):685–93

ENZYMOLOGY

Investigations on beta–glucuronidase–positive erythrocytic inclusions. Budde R, et al. **Acta Haematol (Basel)** 1989; 82(3):126–30

Glycogen–enzymes containing bodies in type 2 fibres of tenotomized muscles in the rat. Józsa L, et al. **Gegenbaurs Morphol Jahrb** 1989;135(3):519–28

Ubiquitin carboxyl–terminal hydrolase (PGP 9.5) is selectively present in ubiquitinated inclusion bodies characteristic of human neurodegenerative diseases. Lowe J, et al. **J Pathol** 1990 Jun;161(2):153–60

IMMUNOLOGY

Immune effector mechanisms in inflammatory myopathies. Engel AG, et al. **Res Publ Assoc Res Nerv Ment Dis** 1990; 68:141–57 (37 ref.)

METABOLISM

Ubiquitin–immunoreactive filamentous inclusions in anterior horn cells of Guamanian and non–Guamanian amyotrophic lateral sclerosis. Matsumoto S, et al. **Acta Neuropathol (Berl)** 1990;80(3):233–8

Role for aluminum and silicon in the pathogenesis of senile plaques: studies in chronic renal dialysis. Edwardson JA, et al. **Adv Neurol** 1990;51:223–6

Asbestos body formation and iron accumulation in mouse peritoneal granulomas after the introduction of crocidolite asbestos fibers. Koerten HK, et al. **Am J Pathol** 1990 Jan; 136(1):141–57

Protease nexin I immunostaining in Alzheimer's disease. Rosenblatt DE, et al. **Ann Neurol** 1989 Nov;26(5):628–34

A progesterone–modulated, low–molecular–weight protein from the uterus of the sheep is associated with crystalline inclusion bodies in uterine epithelium and embryonic trophectoderm. Kazemi M, et al. **Biol Reprod** 1990 Jul; 43(1):80–96

Effects of Ca/Pi ratio, Ca2+ x Pi ion product, and pH of incubation fluid on accumulation of 45Ca2+ by matrix vesicles in vitro. Valhmu WB, et al. **Bone Miner** 1990 Mar; 8(3):195–209

Substance P immunoreactive astrocytes are present in multiple sclerosis plaques. Kostyk SK, et al. **Brain Res** 1989 Dec 18;504(2):284–8

Gomori–positive astrocytes in primary culture: effects of in vitro age and cysteamine exposure. Schipper HM, et al. **Brain Res Dev Brain Res** 1990 Jun 1;54(1):71–9

Evidence for non–lysosomal storage of N–acetylneuraminic acid (sialic acid) in sialuria fibroblasts. Thomas GH, et al. **Clin Genet** 1989 Oct;36(4):242–9 (25 ref.)

Lamellar body formation precedes pulmonary surfactant apoprotein expression during embryonic mouse lung development in vivo and in vitro. Slavkin HC, et al. **Differentiation** 1989 Sep;41(3):223–36

Marchi–positive myelinoid bodies at the transition between the central and the peripheral nervous system in some vertebrates. Corneliuson O, et al. **J Anat** 1989 Apr; 163:17–31

The effect of lead on the metabolism of a nuclear matrix protein which becomes prominent in lead–induced intranuclear inclusion bodies. Klann E, et al. **J Biol Chem** 1989 Oct 15;264(29):16969–72

Immunodetection of cathepsin D in neuritic plaques found in brains of patients with dementia of Alzheimer type. Bernstein HG, et al. **J Hirnforsch** 1989;30(5):613–8

Internalization of pulmonary surfactant into lamellar bodies of cultured rat pulmonary type II cells. Kalina M, et al. **J Histochem Cytochem** 1990 Apr;38(4):483–92

Keratins, transglutaminase, and Mallory bodies—the really insoluble stuff. Osborn M, et al. **Lab Invest** 1989 Dec; 61(6):585–7

Suramin–induced changes in sympathetic neurons: correlation between catecholamine fluorescence, tyrosine hydroxylase immunoreactivity and accumulation of pigment bodies. Koistinaho J. **Neurosci Lett** 1990 Apr 20; 112(1):19–24

Substance P and somatostatin coexist within neuritic plaques: implications for the pathogenesis of Alzheimer's disease. Armstrong DM, et al. **Neuroscience** 1989;31(3):663–71

PARASITOLOGY

Early events related with the behaviour of Trypanosoma cruzi within an endocytic vacuole in mouse peritoneal macrophages. de Carvalho TM, et al. **Cell Struct Funct** 1989 Aug;14(4):383–92

PATHOLOGY

Cytologic, ultrastructural and immunologic features of intracytoplasmic hyaline bodies in fine needle aspirates of hepatocellular carcinoma. MacDonald K, et al. **Acta Cytol** 1990 Mar–Apr;34(2):197–200

Involvement of the locus coeruleus in Pick's disease with or without Pick body formation. Arima K, et al. **Acta Neuropathol (Berl)** 1990;79(6):629–33

Pick bodies in the locus ceruleus. Forno LS, et al. **Acta Neuropathol (Berl)** 1989;79(1):10–7

Sporadic motor neuron disease with Lewy body–like hyaline inclusions. Sasaki S, et al. **Acta Neuropathol (Berl)** 1989; 78(5):555–60

Parkinson's disease: an immunohistochemical study of Lewy body–containing neurons in the enteric nervous system. Wakabayashi K, et al. **Acta Neuropathol (Berl)** 1990; 79(6):581–3

Distinctive, rapid, and easy labeling of diffuse plaques in the Alzheimer brains by a new methenamine silver stain. Yamaguchi H, et al. **Acta Neuropathol (Berl)** 1990; 79(5):569–72

Lewy bodies in Alzheimer disease—one or two diseases? Bergeron C, et al. **Alzheimer Dis Assoc Disord** 1989 Winter; 3(4):197–204

Mesothelial cell inclusions in mediastinal lymph nodes mimicking metastatic carcinoma. Brooks JS, et al. **Am J Clin Pathol** 1990 Jun;93(6):741–8

Prevalence of Lewy bodies in Alzheimer's disease [letter; comment] Gibb WR, et al. **Ann Neurol** 1989 Nov; 26(5):691–3 Comment on: Ann Neurol 1988 Jul;24(1):50–6.

Studies in ageing of the brain. I. Isolation and preliminary characterization of Alzheimer plaques and cores. Nikaido T, et al. **Arch Neurol** 1971 Sep;25(3):198–211

A primary epidemic of inclusion body hepatitis in broilers. Christensen NH, et al. **Avian Dis** 1989 Oct–Dec; 33(4):622–30

Nuclear inclusions in oculopharyngeal muscular dystrophy in Quebec. Bouchard JP, et al. **Can J Neurol Sci** 1989 Nov; 16(4):446–50

The relationship between Alzheimer's disease, Parkinson's disease and motor neuron disease. Calne DB, et al. **Can J Neurol Sci** 1989 Nov;16(4 Suppl):547–50

Inclusion body myositis associated with progressive dysphagia: treatment with cricopharyngeal myotomy. Danon MJ, et al. **Can J Neurol Sci** 1989 Nov;16(4):436–8

Co–existence of hepatocyte ground–glass inclusions from several causes. Alonso–Marti C, et al. **Histopathology** 1990 Mar;16(3):304–7

Endoplasmic storage disease of liver: characterization of intracytoplasmic hyaline inclusions. Ng IO, et al. **Histopathology** 1989 Nov;15(5):473–81

Fibrillary cytoplasmic inclusions in neoplastic Paneth cells. Watson PH. **Histopathology** 1990 Jan;16(1):69–74

Neonatal form of nemaline myopathy, muscle immaturity, and a microvascular injury. Fidzianska A, et al. **J Child Neurol** 1990 Apr;5(2):122–6

Glial cytoplasmic inclusions in the CNS of patients with multiple system atrophy (striatonigral degeneration, olivopontocerebellar atrophy and Shy–Drager syndrome). Papp MI, et al. **J Neurol Sci** 1989 Dec;94(1–3):79–100

Neurofibrillary tangles, Alzheimer's disease and Lewy bodies [letter] Bierer LM, et al. **Lancet** 1990 Jan 20;335(8682):163

Auer rods and myeloperoxidase: an approach for investigating changes at the molecular level in acute myeloid leukaemia (AML). Pearson EC. **Med Hypotheses** 1989 Nov;30(3):175–7 (16 ref.)

Lewy body variant [letter; comment] Dickson DW. **Neurology** 1990 Jul;40(7):1147–50 Comment on: Neurology 1990 Jan;40(1):1–8.

The Lewy body variant of Alzheimer's disease: a clinical and pathologic entity [see comments] Hansen L, et al. **Neurology** 1990 Jan;40(1):1–8 Comment in: Neurology 1990 Jul;40(7):1147–50.

Early senile plaques in Down's syndrome brains show a close relationship with cell bodies of neurons. Allsop D, et al. **Neuropathol Appl Neurobiol** 1989 Nov–Dec;15(6):531–42

A morphological analysis of senile plaques in the brains of non–demented persons of different ages using silver, immunocytochemical and lectin histochemical staining techniques. Mann DM, et al. **Neuropathol Appl Neurobiol** 1990 Feb;16(1):17–25

Lewy bodies in tyrosine hydroxylase–synthesizing neurons of the human cerebral cortex. Kuljis RO, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):49–54

Auer bodies in acute myeloid leukaemia patients. Hassan HT, et al. **Pathol Res Pract** 1990 Apr;186(2):293–5

Artefacts associated with a cryoglobulin. Hambley H, et al. **Postgrad Med J** 1989 Apr;65(762):241–3

[Familial myopathy with "cytoplasmic body" (or "spheroid") type inclusions, disclosed by respiratory insufficiency] Chapon F, et al. **Rev Neurol (Paris)** 1989;145(6–7):460–5 (22 ref.) (Eng. Abstr.) **(Fre)**

[Clinical forms of inclusion body myositis: 12 cases] Serratrice G, et al. **Rev Neurol (Paris)** 1989;145(11):781–8 (Eng. Abstr.) **(Fre)**

[Myositis with inclusion bodies] Carpenter S, et al. **Med Clin (Barc)** 1989 Jun 24;93(4):139–40 **(Spa)**

[Myositis with inclusion bodies: a little–known variety of idiopathic inflammatory myopathy] Casademont Pou J, et al. **Med Clin (Barc)** 1989 Jun 24;93(4):121–4 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Ubiquitin: new insights into chronic degenerative diseases. Lowe J, et al. **Br J Hosp Med** 1989 Dec;42(6):462–6

ULTRASTRUCTURE

Presence of vesicular bodies and thick basal laminae in the nephron of the desert gerbil Meriones crassus. Safer AM, et al. **Acta Anat (Basel)** 1990;137(3):261–71

Dense–cored vesicles and unusual lamellar bodies in type III gustatory cells in taste buds of rabbit foliate papillae. Toyoshima K, et al. **Acta Anat (Basel)** 1989;135(4):365–9

Bunina bodies in dendrites of patients with amyotrophic lateral sclerosis. Kuroda S, et al. **Acta Med Okayama** 1990 Feb;44(1):41–5

Cytomembranous inclusions in the peripheral nerves in AIDS. Fuller GN, et al. **Acta Neuropathol (Berl)** 1989; 79(3):336–9

Appearance of tubulovesicular structures in experimental Creutzfeldt–Jakob disease and scrapie precedes the onset of clinical disease. Liberski PP, et al. **Acta Neuropathol (Berl)** 1990;79(4):349–54

Bunina bodies in neurons of the medullary reticular formation in a case of amyotrophic lateral sclerosis. Nakano I, et al. **Acta Neuropathol (Berl)** 1990;79(6):689–91

Intracytoplasmic eosinophilic inclusions in the neurons of the central nervous system. Peña CE, et al. **Acta Neuropathol (Berl)** 1989;79(1):73–7

A case of testosterone–secreting adrenal cortical adenoma with spironolactone body–like inclusion. Deng Y, et al. **Acta Pathol Jpn** 1990 Jan;40(1):67–72

Occurrence of intracytoplasmic inclusion bodies in the digestive epithelium of fallow deer (Dama dama L). Diaz R, et al. **Acta Vet Scand** 1989;30(3):301–5

Eosinophilic globules in pigmented spindle cell nevus. Wistuba I, et al. **Am J Dermatopathol** 1990 Jun;12(3):268–71

Nemaline myopathy. A fatal case. Kolin IS. **Am J Dis Child** 1967 Jul;114(1):95–100

Lysosome lipid storage disorder in NCTR–BALB/c mice. III. Isolation and analysis of storage inclusions from liver. Bhuvaneswaran C, et al. **Am J Pathol** 1982 Aug; 108(2):160–70

Inclusion body myositis. An electrophysiologic study. Dumitru D, et al. **Am J Phys Med Rehabil** 1990 Feb; 69(1):2–5

Combined staining of acidophilic inclusion bodies and lipofuscin granules. Ulfig N. **Anat Anz** 1990;171(1):35–8

Ultrastructural characteristics of inclusion bodies of type II cells in late embryonic mouse lung. Ten Have–Opbroek AA, et al. **Anat Embryol (Berl)** 1990;181(4):317–23

Immunocytochemical and ultrastructural studies of lower motor neurons in amyotrophic lateral sclerosis. Murayama S, et al. **Ann Neurol** 1990 Feb;27(2):137–48

Fat–storing hamartoma of dermal dendrocytes. Clinical, histologic, and ultrastructural study. Bork K, et al. **Arch Dermatol** 1990 Jun;126(6):794–6

Intrahepatocellular erythrocyte inclusions with hepatic sinusoidal infiltrates and splenomegaly. Mitarnun W, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):148–54

Acute lymphoblastic leukaemia with cytoplasmic granules or inclusions [letter] Smith H, et al. **Br J Haematol** 1990 Jul;75(3):440–1

Intraepidermal morphologic manifestations in lysosomal diseases. Kaesgen U, et al. **Brain Dev** 1989;11(5):338–41

Ultrastructural studies of the cells forming amyloid fibers in classical plaques. Wisniewski HM, et al. **Can J Neurol Sci** 1989 Nov;16(4 Suppl):535–42

The formation of multivesicular structures in the adipose cells of chick embryos. Ohoue M, et al. **Cell Biol Int Rep** 1989

Nov;13(11):927–32
Crystalloid lysozyme inclusions in Paneth cells of vitamin A–deficient rats. Koch MJ, et al. **Cell Tissue Res** 1990 May; 260(3):625–8
Multitubular bodies in intestinal cells of Amphiuma means/tridactylum (Urodela): ultrastructural characterization. Yu QC, et al. **Cell Tissue Res** 1990 Jul; 261(1):163–71
Neuronal intranuclear hyaline inclusion disease: report of a case and review of the literature. Funata N, et al. **Clin Neuropathol** 1990 Mar–Apr;9(2):89–96 (19 ref.)
Neoplastic embryoid bodies of embryonal carcinoma C44 as a source of blastocele–like fluid. Parchment RE, et al. **Differentiation** 1990 Mar;43(1):51–8
The fate of intramitochondrial paracrystalline inclusion bodies in germ line cells of water frogs (Amphibia, Anura). Ogielska M. **Experientia** 1990 Jan 15;46(1):98–101
Tubuloreticular inclusions and viral particles in a case of hairy cell leukemia [letter] de Santi MM, et al. **Haematologica (Pavia)** 1989 Jul–Aug;74(4):413–4
Characterization of the parasporal inclusion of Bacillus thuringiensis subsp. kyushuensis. Held GA, et al. **J Bacteriol** 1990 Jan;172(1):481–3
Childhood onset inclusion body myositis mimicking limb–girdle muscular dystrophy. Riggs JE, et al. **J Child Neurol** 1989 Oct;4(4):283–5
The development of Chlamydia trachomatis inclusions within the host eukaryotic cell during interphase and mitosis. Campbell S, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1153–65
Influence of fixation procedures on the microanalysis of lead–induced intranuclear inclusions in rat kidney. Vandeputte DF, et al. **J Histochem Cytochem** 1990 Mar; 38(3):331–7
Extrusion of the residual body in spermatids of Ancylostoma caninum (Nematoda, Strongyloidea). Ugwunna SC. **J Morphol** 1990 Mar;203(3):283–92
Diffuse Lewy body disease: correlative neuropathology using anti–ubiquitin immunocytochemistry. Lennox G, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1236–47
Visual hallucinations and the cholinergic system in dementia [letter] Perry EK, et al. **J Neurol Neurosurg Psychiatry** 1990 Jan;53(1):88
Myopathy of internal anal sphincter with polyglucosan inclusions. Martin JE, et al. **J Pathol** 1990 Jul;161(3):221–6
Ultrastructural changes in rat Clara cells induced by bis(4–amino–3–methylcyclohexyl)methane. Ohshima S, et al. **J Toxicol Environ Health** 1989;28(2):249–55
Intramitochondrial helical filaments in medullary tubules of the rat kidney. Sasaki H, et al. **J Ultrastruct Mol Struct Res** 1989 Dec;102(3):229–39
Intracytoplasmic neuronal inclusions in woodchuck brain stem. Pierce V, et al. **J Wildl Dis** 1990 Jan;26(1):62–6
Histopathological study on a case of idiocy—morphological mechanism of idiocy appearance. Kuramoto R, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):221–6
Further postmortem examination of a case of familial ataxia with cerebrospinal fluid abnormality: an electron microscopic study of the intracytoplasmic eosinophilic inclusion bodies in the central nervous system. Nakamura I, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):227–39
High molecular weight component of Mallory bodies detected by a monoclonal antibody. Zatloukal K, et al. **Lab Invest** 1990 Apr;62(4):427–34
Staining of inclusion bodies and reticulocytes: a modified procedure. Ezzat HG, et al. **Med Lab Sci** 1990 Jan; 47(1):49–51
Ubiquitinated filamentous inclusions in spinal cord of patients with motor neuron disease. Migheli A, et al. **Neurosci Lett** 1990 Jun 22;114(1):5–10
Transient cytoplasmic bodies in muscle of three infants with Werdnig–Hoffmann disease. Buchino JJ, et al. **Pediatr Pathol** 1990;10(4):563–73
Electron microscopy of lipid deposits in human atherosclerosis. Pasquinelli G, et al. **Scanning Microsc** 1989 Dec;3(4):1151–9
Globular cytoplasmic inclusion bodies in a metastatic hepatocellular carcinoma of the iliac bone. Haratake J, et al. **Ultrastruct Pathol** 1990 May–Jun;14(3):283–8
Intracytoplasmic crystalline inclusions in the hepatocytes of humans and chimpanzees. Schaff Z, et al. **Ultrastruct Pathol** 1990 Jul–Aug;14(4):303–9
Case for the panel. Unusual intracytoplasmic inclusions in metastatic tumor cells in retroperitoneal lymph nodes of a man with unknown primary tumor. van Haelst UJ, et al. **Ultrastruct Pathol** 1990 Jan–Feb;14(1):101–6
[Ultrastructural research on the sensorimotor cortex in adult rats. I. Intranuclear inclusions in the neurons and astrocytes] Bozhilova–Pastirova A, et al. **Eksp Med Morfol** 1990;29(1):1–8 (Eng. Abstr.) **(Bul)**
[Ultrastructural and histochemical studies of late infantile metachromatic leukodystrophy] Wang DF. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Aug; 22(4):211–2, 253 (Eng. Abstr.) **(Chi)**
[Corpora amylacea of the brain and their significance for forensic medicine] Eisenmenger W, et al. **Beitr Gerichtl Med** 1989;47:465–71 (Eng. Abstr.) **(Ger)**
[Auer rods as tumor markers (letter)] Jehn U. **Internist (Berl)** 1990 Feb;31(2):163 **(Ger)**
[Parkinson's disease: the distribution of Lewy bodies in the peripheral autonomic nervous system] Wakabayashi K. **No To Shinkei** 1989 Oct;41(10):965–71 (Eng. Abstr.) **(Jpn)**
[Specific cytoplasmic crystalline inclusions in multiple myeloma with amyloidosis] Nomura N, et al. **Rinsho Ketsueki** 1989 Nov;30(11):2002–7 (Eng. Abstr.) **(Jpn)**

CELLULAR NEUROBIOLOGY see **NEUROBIOLOGY**

CELLULAR PROTO–ONCOGENE PROTEINS see **PROTO–ONCOGENE PROTEINS, CELLULAR**

CELLULASE

ANALYSIS

A method for detection of cellulases in polyacrylamide gels using 5–bromoindoxyl–beta–D–cellobioside: high sensitivity and resolution. Chernoglazov VM, et al. **Anal Biochem** 1989 Nov 1;182(2):250–2
Assessment of the endo–1,4–beta–glucanase components of Ruminococcus flavefaciens FD–1. Doerner KC, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1844–50
Cellulose digestion and cellulase regulation and distribution in Fibrobacter succinogenes subsp. succinogenes S85. Huang L, et al. **Appl Environ Microbiol** 1990 May; 56(5):1221–8
Regulation and distribution of Fibrobacter succinogenes subsp. succinogenes S85 endoglucanases. McGavin M, et al. **Appl Environ Microbiol** 1990 May;56(5):1235–44

BIOSYNTHESIS

Supernatant protein and cellulase activities of the anaerobic ruminal fungus Neocallimastix frontalis EB188. Barichievich EM, et al. **Appl Environ Microbiol** 1990 Jan; 56(1):43–8
Regulatory aspects of cellulase biosynthesis and secretion. Bisaria VS, et al. **Crit Rev Biotechnol** 1989;9(2):61–103 (329 ref.)
[Induction of cellulases and xylanases in Aureobasidium pullulans] Pou J, et al. **Microbiologia** 1988 Jun;4(2):87–96 (Eng. Abstr.) **(Spa)**
[Isolation of a cellulase hyperproducer Trichoderma pseudokoningii mutant] Zaldívar M, et al. **Microbiologia** 1987 Feb;3(1):33–44 (Eng. Abstr.) **(Spa)**

CLASSIFICATION

Cellulase families revealed by hydrophobic cluster analysis. Henrissat B, et al. **Gene** 1989 Sep 1;81(1):83–95

GENETICS

Purification and properties of an endo–1,4–beta–glucanase translated from a Clostridium josui gene in Escherichia coli. Fujino T, et al. **Appl Environ Microbiol** 1990 Apr; 56(4):1175–8
Purification and characterization of endoglucanase C of Cellulomonas fimi, cloning of the gene, and analysis of in vivo transcripts of the gene. Moser B, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2480–7
Cloning of an endo–1,4–beta–D–glucanase gene from Clostridium josui and its expression in Escherichia coli. Ohmiya K, et al. **Appl Environ Microbiol** 1989 Sep; 55(9):2399–402
Integration and expression of alpha–amylase and endoglucanase genes in the Lactobacillus plantarum chromosome. Scheirlinck T, et al. **Appl Environ Microbiol** 1989 Sep;55(9):2130–7
Expression of the Cellulomonas fimi cellulase genes cex and cenA from the divergent tet promoters of transposon Tn10. Din N, et al. **Arch Microbiol** 1990;153(2):129–33
Cloning of Clostridium thermocellum endoglucanase genes in Escherichia coli [published erratum appears in Biochem Biophys Res Commun 1990 May 16;168(3):1326–7] Bumazkin BK, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):1057–64
Cloning of Clostridium cellulovorans endo–1,4–beta–glucanase genes. Shoseyov O, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):667–72
Isozyme polymorphism of endo–beta–1,4–glucanase in Aspergillus nidulans. Sharma S, et al. **Biochem Genet** 1990 Feb;28(1–2):21–9
Cloning of the cellulase gene from Penicillium funiculosum and its expression in Escherichia coli. Sahasrabudhe NA, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1–3):291–3
Sequence analysis of the Clostridium cellulolyticum endoglucanase–A–encoding gene, celCCA. Faure E, et al. **Gene** 1989 Dec 7;84(1):39–46
Nucleotide sequence of the engXCA gene encoding the major endoglucanase of Xanthomonas campestris pv. campestris. Gough CL, et al. **Gene** 1990 Apr 30;89(1):53–9
CelS: a novel endoglucanase identified from Erwinia carotovora subsp. carotovora. Saarilahti HT, et al. **Gene** 1990 May 31;90(1):9–14
Nucleotide sequence and deletion analysis of the cellulase–encoding gene celH of Clostridium thermocellum. Yagüe E, et al. **Gene** 1990 Apr 30;89(1):61–7
Molecular cloning, expression, and characterization of endo–beta–1,4–glucanase genes from Bacillus polymyxa and Bacillus circulans. Baird SD, et al. **J Bacteriol** 1990 Mar;172(3):1576–86
Structure of the cel–3 gene from Fibrobacter succinogenes S85 and characteristics of the encoded gene product, endoglucanase 3. McGavin MJ, et al. **J Bacteriol** 1989 Oct; 171(10):5587–95
Structure of a Ruminococcus albus endo–1,4–beta–glucanase gene. Ohmiya K, et al. **J Bacteriol** 1989 Dec;171(12):6771–5
Evidence that extracellular export of the endoglucanase encoded by egl of Pseudomonas solanacearum occurs by a two–step process involving a lipoprotein intermediate. Huang JZ, et al. **J Biol Chem** 1990 Jul 15;265(20):11628–32
The isolation and comparison of cellulase genes from two strains of Ruminococcus albus. Ware CE, et al. **J Gen Microbiol** 1989 Apr;135 (Pt 4):921–30
Isolation of an endoglucanase gene from Bacteroides ruminicola subsp. brevis. Woods JR, et al. **J Gen Microbiol** 1989 Sep;135 (Pt 9):2543–9
Cloning and sequencing of an endoglucanase (end1) gene from Butyrivibrio fibrisolvens H17c. Berger E, et al. **Mol Gen Genet** 1989 Oct;219(1–2):193–8
The N–terminal region of an endoglucanase from Pseudomonas fluorescens subspecies cellulosa constitutes a cellulose–binding domain that is distinct from the catalytic centre. Gilbert HJ, et al. **Mol Microbiol** 1990 May; 4(5):759–67
Conserved serine–rich sequences in xylanase and cellulase from Pseudomonas fluorescens subspecies cellulosa: internal signal sequence and unusual protein processing. Hall J, et al. **Mol Microbiol** 1989 Sep;3(9):1211–9

IMMUNOLOGY

Antigenic nature of the chloride–stimulated cellobiosidase and other cellulases of Fibrobacter succinogenes subsp. succinogenes S85 and related fresh isolates. Huang L, et al. **Appl Environ Microbiol** 1990 May;56(5):1229–34
Cross–reactive and specific monoclonal antibodies against cellobiohydrolases I and II and endoglucanases I and II of Trichoderma reesei. Nieves RA, et al. **Appl Environ Microbiol** 1990 Apr;56(4):1103–8

ISOLATION & PURIFICATION

Purification and characterisation of two endoglucanases from Arthrobotrys oligospora. Kumble KD, et al. **Indian J Biochem Biophys** 1990 Jun;27(3):146–50
Purification and characterization of cellulolytic enzymes produced by Aspergillus nidulans. Bagga PS, et al. **J Appl Bacteriol** 1990 Jan;68(1):61–8

METABOLISM

Substrate–velocity relationships for the Trichoderma viride cellulase–catalyzed hydrolysis of cellulose. Liaw ET, et al. **Appl Environ Microbiol** 1990 Aug;56(8):2311–8
The Glu residue in the conserved Asn–Glu–Pro sequence of two highly divergent endo–beta–1,4–glucanases is essential for enzymatic activity. Baird SD, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):1035–9
Study of the mode of action and site–specificity of the endo–(1——4)–beta–D–glucanases of the fungus Penicillium pinophilum with normal, 1–3H–labelled, reduced and chromogenic cello–oligosaccharides. Bhat KM, et al. **Biochem J** 1990 Mar 1;266(2):371–3
Calcium–binding affinity and calcium–enhanced activity of Clostridium thermocellum endoglucanase D. Chauvaux S, et al. **Biochem J** 1990 Jan 1;265(1):261–5
Studies of the cellulolytic system of the filamentous fungus Trichoderma reesei QM 9414. Substrate specificity and transfer activity of endoglucanase I. Claeyssens M, et al. **Biochem J** 1990 Aug 15;270(1):251–6
Cellulase system of a free–living, mesophilic clostridium (strain C7). Cavedon K, et al. **J Bacteriol** 1990 Aug; 172(8):4222–30
Characterization of the extracellular cellulase from a mesophilic clostridium (strain C7). Cavedon K, et al. **J Bacteriol** 1990 Aug;172(8):4231–7
Structural and functional analysis of a bacterial cellulase by proteolysis. Gilkes NR, et al. **J Biol Chem** 1989 Oct 25; 264(30):17802–8
The effect of Trichoderma viride C–1 UV mutagenization on cellulases activity. Witkowska D, et al. **Microbiologia** 1989 Sep;5(2):113–9
Essential 170–kDa subunit for degradation of crystalline cellulose by Clostridium cellulovorans cellulase. Shoseyov O, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2192–5

CELLULITIS

[Peri–nephritic phlegmon in children. Apropos of 13 cases] Mhiri MN, et al. **Chir Pediatr** 1989;30(4):199–202 (Eng. Abstr.) **(Fre)**
[Gaseous phlegmon of the perineum] Massengo R. **Dakar Med** 1988;33(1–4):17–21 (Eng. Abstr.) **(Fre)**

CHEMICALLY INDUCED

[Iatrogenic phlegmon of the pelvis with extensive destruction of the urinary tract] Komiakov BK, et al. **Urol Nefrol (Mosk)** 1989 Sep–Oct;(5):63–5 **(Rus)**

COMPLICATIONS

Lingual cellulitis causing upper airways obstruction in neutropenic patients. Smith OP, et al. **BMJ** 1990 Jan 6; 300(6716):24
Cardiac arrest secondary to indomethacin–induced renal failure: a case report. Kharasch MS, et al. **J Emerg Med** 1990 Jan–Feb;8(1):51–4 (9 ref.)

Osteomyelitis caused by Vibrio vulnificus [letter] Vartian CV, et al. **J Infect Dis** 1990 Feb;161(2):363

Cavernous sinus thrombosis and blindness as complications of an odontogenic infection: report of a case and review of literature. Ogundiya DA, et al. **J Oral Maxillofac Surg** 1989 Dec;47(12):1317–21 (16 ref.)

Retropharyngeal cellulitis: an unusual cause of respiratory distress in infancy. Lichenstein R. **Pediatr Emerg Care** 1990 Jun;6(2):138–40

Septic scarlet fever due to Streptococcus pyogenes cellulitis. Shaunak S, et al. **Q J Med** 1988 Nov;69(259):921–5

Pasteurella multocida meningitis in an adult: case report and review. Kumar A, et al. **Rev Infect Dis** 1990 May–Jun; 12(3):440–8 (79 ref.)

[An unusual reaction to a spider bite] Wechsler J, et al. **Ann Pathol** 1990;10(2):139–40 **(Fre)**

[Cellulitis, Haemophilus meningitis and measles. Apropos of a case report] Bissagnene E, et al. **Med Trop (Mars)** 1989 Oct–Dec;49(4):427–8 (Eng. Abstr.) **(Fre)**

[Generalized morphea–like progressive systemic sclerosis with anticentromere antibodies and eosinophilic cellulitis] Sasaki T, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Apr; 99(4):469–76 (Eng. Abstr.) **(Jpn)**

[Mediastinitis and left pyopneumothorax complicating a laryngeal phlegmon] Shiota T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Nov; 27(11):1367–70 (Eng. Abstr.) **(Jpn)**

[Acute phlegmonous appendicitis associated with a complicated right–sided tubal pregnancy and cyst of the right ovary] Vil'chuk AV, et al. **Klin Khir** 1990;(4):74 **(Rus)**

[Phlegmonous appendicitis and torsion of the omental process in a child] Abdulzhavadov IM. **Vestn Khir** 1989 May; 142(5):83 **(Rus)**

[Orbital abscess as a complication of orbital cellulitis. Diagnostic value of C.A.T.] Rica I, et al. **Bol Med Hosp Infant Mex** 1990 Mar;47(3):178–80 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Leukemic infiltrate appearing as periorbital cellulitis. Grossniklaus HE, et al. **Arch Ophthalmol** 1990 Apr; 108(4):484

Crepitant cellulitis [letter; comment] Lawton JH. **J Am Podiatr Med Assoc** 1990 Jan;80(1):45–7 Comment on: J Am Podiatr Med Assoc 1989 Apr;79(4):197–201.

Vibrio vulnificus septicaemia presenting as spontaneous necrotising cellulitis in a woman with hepatic cirrhosis. Arnold M, et al. **Scand J Infect Dis** 1989;21(6):727–31

[Well's eosinophilic cellulitis] Read D, et al. **Rev Med Liege** 1989 Nov 1;44(21):654–7 **(Fre)**

[Ultrasonic examination of bile density and gallbladder walls in various forms of acute cholecystitis] Vasil'ev Ve, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):66–9 **(Rus)**

[A comparative evaluation of various methods for determining the degree of endogenous intoxication in patients with phlegmons of the maxillofacial area] Ganina SS, et al. **Stomatologiia (Mosk)** 1990 Mar–Apr;69(2):32–4 (Eng. Abstr.) **(Rus)**

[The diagnostic importance of the level of middle molecules in assessing the severity of endotoxemia in patients with phlegmons of the face and neck] Zakharov IuS. **Stomatologiia (Mosk)** 1990 May–Jun;69(3):43–4 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Low–dose alternate–day prednisone for persistent Wells' syndrome. Coldiron BM, et al. **Arch Dermatol** 1989 Dec; 125(12):1625–6

Treatment of bone and soft tissue infections with teicoplanin. Marone P, et al. **J Antimicrob Chemother** 1990 Mar; 25(3):435–9

Randomized comparative study of ampicillin/sulbactam vs. ceftriaxone for treatment of soft tissue and skeletal infections in children. Kulhanjian J, et al. **Pediatr Infect Dis J** 1989 Sep;8(9):605–10

[Clinical study of cefpodoxime proxetil dry syrup for skin and soft tissue infections in the field of pediatrics] Motohiro T, et al. **Jpn J Antibiot** 1989 Jul;42(7):1685–704 (Eng. Abstr.) **(Jpn)**

[Use of immobilized lysozyme in the treatment of suppurative wounds of the soft tissues] Timofeev AA, et al. **Klin Khir** 1990;(1):37–8 (Eng. Abstr.) **(Rus)**

[The use of the preparation baliz–2 in inflammatory processes of the maxillofacial area] Bernadskaia GP, et al. **Stomatologiia (Mosk)** 1989 Nov–Dec;68(6):10–1 (Eng. Abstr.) **(Rus)**

[The use of quercetin granules for treating suppurative soft–tissue wounds of the maxillofacial area and neck] Timofeev AA, et al. **Stomatologiia (Mosk)** 1989 Nov–Dec; 68(6):11–3 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

[Acute suppurative diseases of the hand in sailors] Voropanov IM. **Voen Med Zh** 1989 Oct;(10):45–7 **(Rus)**

ETIOLOGY

Vibrio cholerae non–O1 infection presenting as localized cellulitis. Clark R, et al. **Am J Med Sci** 1989 Nov; 298(5):328–30 (19 ref.)

Bacterial vaginosis and trichomoniasis vaginitis are risk factors for cuff cellulitis after abdominal hysterectomy. Soper DE, et al. **Am J Obstet Gynecol** 1990 Sep; 163(3):1016–21; discussion 1021–3

The optimum use of needle aspiration in the bacteriologic diagnosis of cellulitis in adults. Sachs MK. **Arch Intern Med** 1990 Sep;150(9):1907–12

Streptococcus zooepidemicus cellulitis and bacteraemia in a renal transplant recipient. McKeage MJ, et al. **Aust N Z J Med** 1990 Apr;20(2):177–8

Orbital cellulitis complicating isolated unilateral sphenoidal sinusitis: importance of the CT scan. Roberts C, et al. **Br J Ophthalmol** 1989 Sep;73(9):769–70

Wells' syndrome, insect bites, and eosinophils. Melski JW. **Dermatol Clin** 1990 Apr;8(2):287–93 (39 ref.)

Candida cellulitis: a complication of percutaneous endoscopic gastrostomy. Patel AS, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):571–2

Recurrent leukemia cutis in acute myeloblastic leukemia. Girgis RE, et al. **Henry Ford Hosp Med J** 1989;37(2):76–8

Cryptococcal cellulitis in congenital lymphedema. Krywonis N, et al. **Int J Dermatol** 1990 Jan–Feb;29(1):41–4

Eikenella corrodens cellulitis and arthritis of the knee. Flesher SA, et al. **J Clin Microbiol** 1989 Nov;27(11):2606–8

Severe cellulitis caused by group A streptococcus: Rx reading the Journal [letter] Fried M, et al. **J Infect Dis** 1990 Jan;161(1):155

An unusual case of cellulitis associated with a Molteno implant in a 1–year–old child. Karr DJ, et al. **J Pediatr Ophthalmol Strabismus** 1990 Mar–Apr; 27(2):107–10

Periorbital cellulitis in infancy. Molarte AB, et al. **J Pediatr Ophthalmol Strabismus** 1989 Sep–Oct; 26(5):232–4; discussion 235

Actinobacillus actinomycetemcomitans infection [letter; comment] Fischer P, et al. **Rev Infect Dis** 1989 Nov–Dec; 11(6):1032 Comment on: Rev Infect Dis 1989 Jan–Feb;11(1):46–63.

Recurrent cellulitis due to minor trauma [letter] Schweitzer G. **S Afr Med J** 1989 Nov 4;76(9):516–7

The etiology of bacterial cellulitis as determined by fine–needle aspiration. Sigurdsson AF, et al. **Scand J Infect Dis** 1989;21(5):537–42

Cellulitis caused by Rhizomucor pusillus in a diabetic patient receiving continuous insulin infusion pump therapy. Wickline CL, et al. **South Med J** 1989 Nov;82(11):1432–4

[Eosinophilic cellulitis (Wells' syndrome) and stings or bites by arthropods] Leclercq M. **Rev Med Liege** 1990 Feb 1; 45(2):75–7 **(Fre)**

[Gangrenous cervicofacial cellulitis of dental origin. Apropos of 11 cases] Romain P, et al. **Rev Stomatol Chir Maxillofac** 1989;90(6):428–37 (Eng. Abstr.) **(Fre)**

[Perinephretic phlegmon (apropos of 8 cases)] Jemni M, et al. **Tunis Med** 1989 Nov;67(11):689–92 (Eng. Abstr.) **(Fre)**

[Acute phlegmonous inflammation of the appendix incarcerated in a femoral hernia] Bodaniuk AA, et al. **Klin Khir** 1990;(4):71–2 **(Rus)**

[Complications of "diffuse" paraproctitis] Akhunbaeva NI, et al. **Vestn Khir** 1989 May;142(5):103 **(Rus)**

[Traumatic diaphragmatic hernia of many–year duration complicated by phlegmon of ruptured gastric fundus] Bisenkov LN, et al. **Vestn Khir** 1989 Sep;143(9):85–6 **(Rus)**

[Necrotic retroperitoneal phlegmon after injury of the colon] Opushnev VA, et al. **Vestn Khir** 1989 May;142(5):75 **(Rus)**

[Rare extensive otogenic phlegmon of the neck in a child] Gadzhimirzaev GA, et al. **Vestn Otorinolaringol** 1989 Jul–Aug;(4):83–5 **(Rus)**

[Orbital complications of sinusitis. Study of 40 cases] Bertrán JM, et al. **An Otorrinolaringol Ibero Am** 1990;17(3):235–49 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

[The interrelation of indices of the functional activity of phagocytosing cells with the status of their receptor apparatus in patients with acute inflammatory diseases of the maxillofacial area] Bazhanov NN, et al. **Stomatologiia (Mosk)** 1990 Mar–Apr;69(2):34–5 (Eng. Abstr.) **(Rus)**

[Neutrophil–macrophage correlations during the healing of suppurative wounds in patients with phlegmons of the maxillofacial area undergoing combined treatment with the use of low–frequency ultrasound] Mukhsinov ME, et al. **Stomatologiia (Mosk)** 1989 Sep–Oct;68(5):45–9 (Eng. Abstr.) **(Rus)**

METABOLISM

Oedema protein concentrations in cellulitis and deep vein thrombosis [letter; comment] **Lancet** 1989 Nov 11; 2(8672):1166 Comment on: Lancet 1989 Sep 23;2(8665):728–9.

MICROBIOLOGY

Bacteremic cellulitis caused by non–serogroup O1 Vibrio cholerae acquired in a freshwater inland lake. Pitrak DL, et al. **J Clin Microbiol** 1989 Dec;27(12):2874–6

Soft–tissue infection caused by Edwardsiella tarda and Aeromonas hydrophila [letter] Vartian CV, et al. **J Infect Dis** 1990 Apr;161(4):816

Acute painful cellulitis caused by a Pasteurella pneumotropica–like bacterium in northern Queensland [letter] Ashdown LR, et al. **Med J Aust** 1990 Mar 19; 152(6):333–4

[Etiology, diagnosis and therapy of soft tissue infections] Hau T, et al. **Zentralbl Chir** 1990;115(9):521–41 (90 ref.) (Eng. Abstr.) **(Ger)**

PATHOLOGY

Dissecting cellulitis of the scalp in 2 girls. Ramesh V. **Dermatologica** 1990;180(1):48–50

[Observation of a case of Wells syndrome: ultrastructural study] Di Gregorio C, et al. **Pathologica** 1990 Mar–Apr; 82(1078):193–8 (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

[Regulation of the blood–brain barrier permeability in suppurative–inflammatory diseases of the maxillofacial area] Chulkin SV, et al. **Stomatologiia (Mosk)** 1990 Mar–Apr;69(2):38–40 (Eng. Abstr.) **(Rus)**

[The functional basis for a new method of surgical intervention in phlegmons of the infratemporal space] Fediaev IM, et al. **Stomatologiia (Mosk)** 1990 May–Jun; 69(3):41–3 (Eng. Abstr.) **(Rus)**

[Changes of the functional indices of the liver in patients with phlegmons of the maxillofacial area based on gamma scintigraphic data] Perbokas F, et al. **Stomatologiia (Mosk)** 1990 Jan–Feb;69(1):36–8 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

An unusual case of orbital cellulitis. Jordan DR, et al. **Can J Ophthalmol** 1990 Jun;25(4):210–2 (7 ref.)

RADIOGRAPHY

Computed tomography of acute orbital infection: the importance of coronal sections. Langham–Brown JJ, et al. **Clin Radiol** 1989 Sep;40(5):471–4

Subperiosteal orbital masses in children with orbital cellulitis: time for a reevaluation? Catalano RA, et al. **J Pediatr Ophthalmol Strabismus** 1990 May–Jun; 27(3):141–2

[The image of a cervical phlegmon in computed tomography] Zwaan M, et al. **ROFO** 1990 May;152(5):605–6 **(Ger)**

[The role of x–ray diagnosis in preventing odontogenic mediastinitis] Slepchenko MA, et al. **Vestn Khir** 1989 Oct; 143(10):128–30 (Eng. Abstr.) **(Rus)**

[X–ray diagnosis of complications of purulent processes in the wrist] Vintergal'ter SF, et al. **Vestn Rentgenol Radiol** 1989 Nov–Dec;(6):60–3 (Eng. Abstr.) **(Rus)**

SURGERY

[Suppurative omentitis complicated by phlegmon of the anterior abdominal wall in a child] Dekhkanov ID. **Vestn Khir** 1989 Oct;143(10):57–8 **(Rus)**

[Principles of active surgical treatment of anaerobic non–clostridial infection of soft tissues] Kostiuchenok BM, et al. **Vestn Khir** 1989 Jul;143(7):102–7 **(Rus)**

[Treatment of acute gangrenous appendicitis complicated by extensive retroperitoneal phlegmon, suppurative paranephritis and local peritonitis] Meretin AI. **Vestn Khir** 1989 May;142(5):50–1 **(Rus)**

[Treatment of various forms of acute appendicitis] Parganenko VP. **Vestn Khir** 1989 Nov;143(11):57–8 **(Rus)**

THERAPY

Clinical management of orbital cellulitis in children. Noël LP, et al. **Can J Ophthalmol** 1990 Feb;25(1):11–6

[The mechanism of the action of UV–irradiated autotransfusions in treating patients with suppurative–inflammatory diseases of the face and neck] Karandashov VI, et al. **Vestn Khir** 1989 Oct;143(10):92–4 (Eng. Abstr.) **(Rus)**

[The combined treatment of patients with phlegmon of the hand] Palil' GK, et al. **Vrach Delo** 1989 Nov;(11):97–9 **(Rus)**

[Necrotizing perineal phlegmon (Fournier's gangrene)] Octavio Castillo C, et al. **Actas Urol Esp** 1989 Sep–Oct; 13(5):381–3 (Eng. Abstr.) **(Spa)**

VETERINARY

Juvenile cellulitis in dogs: 15 cases (1979–1988). White SD, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1609–11

Clinicopathologic characterization of canine juvenile cellulitis. Reimann KA, et al. **Vet Pathol** 1989 Nov; 26(6):499–504

Effect of location on severity and prognosis of limb cellulitis in six cows. Nguhiu–Mwangi JA, et al. **Vet Rec** 1989 Aug 12;125(7):151–2

CELLULOSE

see related
CELLOPHANE
PAPER

Paraplegia associated with the use of oxidized cellulose in

posterolateral thoracotomy incisions [see comments] Short HD. **Ann Thorac Surg** 1990 Aug;50(2):288–9; discussion 290 Comment in: Ann Thorac Surg 1990 Aug;50(2):178.

Paraplegia associated with thoracotomy [editorial; comment] Walker WE. **Ann Thorac Surg** 1990 Aug;50(2):178 Comment on: Ann Thorac Surg 1990 Aug;50(2):288–9; discussion 290.

Efficiency and biocompatibility of a polyethylene glycol grafted cellulosic membrane during hemodialysis. Akizawa T, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):333–5

Biodegradation of oxidized regenerated cellulose. Dimitrijevich SD, et al. **Carbohydr Res** 1990 Jan 15; 195(2):247–56

Comparison of three different activation methods for coupling antibodies to magnetisable cellulose particles. al-Abdulla IH, et al. **J Immunol Methods** 1989 Sep 1; 122(2):253–8

Compaction properties of microcrystalline cellulose and sodium sulfathiazole in combination with talc or magnesium stearate. Williams RO 3d, et al. **J Pharm Sci** 1989 Dec; 78(12):1025–34

The design of cellulosic based membranes that do not activate complement. Johnson RJ. **Med Prog Technol** 1989; 15(1–2):77–81

Mortality of cellulose fiber production workers. Lanes SF, et al. **Scand J Work Environ Health** 1990 Aug;16(4):247–51

[Cellulose, an interesting excipient for pharmaceutic use] Blaschek W. **Pharm Unserer Zeit** 1990 Mar;19(2):73–81 (0 ref.) **(Ger)**

[An evaluation in the Ames test of the mutagenicity of the sewage and industrial effluents from the Baikal Paper and Pulp Combine] Glazer VM, et al. **Biol Nauki** 1990;(1):101–9 (Eng. Abstr.) **(Rus)**

[Accumulation of chlorophenols in fishes in wood-pulp industry waste waters] Grachev MA, et al. **Dokl Akad Nauk SSSR** 1989;309(2):508–11 **(Rus)**

[Study of benzo(a)pyrene level in various by-products of the cellulose and paper industry] Dikun PP, et al. **Gig Sanit** 1989 Jul;(7):72–3 **(Rus)**

[Risks to health in the process of producing cellulose] Janković S, et al. **Plucne Bolesti** 1989 Jul–Dec; 41(3–4):162–4 (Eng. Abstr.) **(Scr)**

ADMINISTRATION & DOSAGE

Quantitative contribution of factors regulating rat colonic crypt epithelium: role of parenteral and enteral feeding, caloric intake, dietary cellulose level and the colon carcinogen DMH. Cameron IL, et al. **Cell Tissue Kinet** 1990 May;23(3):227–35

Establishment of cellulolytic bacteria in the digestive tract of conventionally reared young mice: effect of the dietary cellulose content in the adult. Boulahrouf A, et al. **FEMS Microbiol Lett** 1990 May;57(1–2):87–90

ADVERSE EFFECTS

[Complex sanitary and hygienic evaluation of water supply and community health in the area of the sulfite cellulose plants] Seliuzhitskiĭ GV, et al. **Gig Sanit** 1989 Aug;(8):10–3 (Eng. Abstr.) **(Rus)**

[The healing characteristics of the sockets following surgery in tooth extraction in workers in viscose manufacturing] Osipov AP. **Stomatologiia (Mosk)** 1989 Jul–Aug;68(4):28–9 (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

Granuloma caused by oxidized cellulose following craniotomy. Ito H, et al. **Acta Neurochir (Wien)** 1989; 100(1–2):70–3

Fluorometric assay for polyamines in urine and tissues using electrophoresis on Titan III cellulose acetate. Kanda S, et al. **Anal Biochem** 1989 Aug 1;180(2):307–10

A pilot study of piracetam in cuprophan hemodialysis. Grekas D, et al. **Artif Organs** 1989 Oct;13(5):422–6

Improved biocompatibility by modified cellulosic membranes: the case of hemophan. Lucchi L, et al. **Artif Organs** 1989 Oct;13(5):417–21

Chemical modification of cellulosic membranes and their blood compatibility. Paul D, et al. **Artif Organs** 1990 Apr; 14(2):122–5

Evaluation of dialyzers used in shortened dialysis. Petersen J, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):338–40

In vivo degradation of oxidized, regenerated cellulose. Dimitrijevich SD, et al. **Carbohydr Res** 1990 May 1; 198(2):331–41

Factors affecting the bioadhesive property of tablets consisting of hydroxypropyl cellulose and carboxyvinyl polymer. Satoh K, et al. **Chem Pharm Bull (Tokyo)** 1989 May;37(5):1366–8

Phenotyping of erythrocyte acid phosphatase and esterase D by high field strength isoelectric focusing on cellulose acetate membrane. Kane M, et al. **Electrophoresis** 1990 Apr; 11(4):318–21

Corneal toxicity studies in rabbits and dogs with hydroxyethyl cellulose and benzalkonium chloride. Durand-Cavagna G, et al. **Fundam Appl Toxicol** 1989 Oct; 13(3):500–8

Comparison of two hemodialysis membranes, polyacrylonitrile and cellulose acetate, on complement and coagulation systems. Moll S, et al. **Int J Artif Organs** 1990 May;13(5):273–9

Beta 2-microglobulin serum levels during dialysis: effect of cuprophan and serum osmolality changes. Sulková S, et al. **Int J Artif Organs** 1990 Jan;13(1):22–5

Detection of endotoxin antibody in long-term dialysis patients. Yamagami S, et al. **Int J Artif Organs** 1990 Apr; 13(4):205–10

In contrast to the glucocorticoid receptor, the thyroid hormone receptor is translated in the DNA binding state and is not associated with hsp90. Dalman FC, et al. **J Biol Chem** 1990 Mar 5;265(7):3615–8

Purification of phospholipase-C from Bacillus cereus by affinity chromatography on 2-(4-aminophenylsulphonyl)ethyl-cellulose. Kamberov E, et al. **J Chromatogr** 1990 Feb 23;525(2):307–18

Study on the analogy of gel permeation chromatography and cuprophan dialysis for the isolation of uremic 'middle molecules' using model compounds. Schoots AC, et al. **J Chromatogr** 1989 Dec 29;497:79–86

Controlled release captopril microcapsules: effect of ethyl cellulose viscosity grade on the in vitro dissolution from microcapsules and tableted microcapsules. Singh J, et al. **J Microencapsul** 1990 Jan–Mar;7(1):67–76

Assembly of terminal SC5b-9 complement complexes: a new index of blood-membrane interaction. Schaefer RM, et al. **Miner Electrolyte Metab** 1990;16(1):73–6

Design and in vitro evaluation of dapsone-loaded micropellets of ethyl cellulose. Roy S, et al. **Pharm Res** 1989 Nov;6(11):945–8

ACP and Surgicel in bone hemostasis. A comparative experimental and histologic study. Mattsson T, et al. **Swed Dent J** 1990;14(2):57–62

Histological and immunohistochemical studies on the preparation of leukocyte-poor red cell concentrates by filtration: the filtration process on cellulose acetate fibers. Steneker I, et al. **Vox Sang** 1990;58(3):192–8

[Treatment with a new preparation using peplomycin emulsion in hydroxypropylcellulosum. Analysis of immediate response in sixty-two patients with bladder cancer] Yasumoto R, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec;80(12):1728–32 (Eng. Abstr.) **(Jpn)**

[Automatic re-utilization of capillary dialysis] Szepietowski T, et al. **Polim Med** 1989;19(3–4):107–18 (Eng. Abstr.) **(Pol)**

[Interaction of hormone-receptor complexes of triiodothyronine with DNA and RNA] Adylova AT. **Biokhimiia** 1990 Apr;55(4):724–30 (Eng. Abstr.) **(Rus)**

ANALYSIS

Optimization of electrochemical detection in the high-performance liquid chromatography of lignin phenolics from lignocellulosic by-products. Galletti GC, et al. **J Chromatogr** 1990 May 16;507:439–50

Permeability of cellulose polymers: water vapour transmission rates. Sprockel OL, et al. **J Pharm Pharmacol** 1990 Mar;42(3):152–7

BIOSYNTHESIS

Patterns of cellulose synthesis in maize root-tips. A chemical and autoradiographic study. Roberts RM, et al. **Exp Cell Res** 1967 Jun;46(3):495–510

Cyclic diguanylic acid and cellulose synthesis in Agrobacterium tumefaciens. Amikam D, et al. **J Bacteriol** 1989 Dec;171(12):6649–55

DIAGNOSTIC USE

Colon transit scintigraphy in health and constipation using oral iodine-131-cellulose. McLean RG, et al. **J Nucl Med** 1990 Jun;31(6):985–9

METABOLISM

Factors affecting adhesion of Fibrobacter succinogenes subsp. succinogenes S85 and adherence-defective mutants to cellulose. Gong J, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3039–44

Cellulose digestion and cellulase regulation and distribution in Fibrobacter succinogenes subsp. succinogenes S85. Huang L, et al. **Appl Environ Microbiol** 1990 May; 56(5):1221–8

Effect of cellulose fine structure on kinetics of its digestion by mixed ruminal microorganisms in vitro. Weimer PJ, et al. **Appl Environ Microbiol** 1990 Aug;56(8):2421–9

Enzyme kinetics of cellulose hydrolysis [letter; comment] Bailey CJ. **Biochem J** 1989 Sep 15;262(3):1001 Comment on: Biochem J 1988 Nov 1;255(3):895–9.

Studies of the cellulolytic system of the filamentous fungus Trichoderma reesei QM 9414. Substrate specificity and transfer activity of endoglucanase I. Claeyssens M, et al. **Biochem J** 1990 Aug 15;270(1):251–6

Spatial separation of protein domains is not necessary for catalytic activity or substrate binding in a xylanase. Ferreira LM, et al. **Biochem J** 1990 Jul 1;269(1):261–4

Lignocellulose degradation and subsequent metabolism of lignin fermentation products by the desert black Bedouin goat fed on wheat straw as a single-component diet. Silanikove N, et al. **Br J Nutr** 1989 Sep;62(2):509–20

Preparation and characterization of a [14C]cellulose suitable for human metabolic studies. Walters MP, et al. **Br J Nutr** 1989 Jul;62(1):121–9

Enzymatic hydrolysis of plant polysaccharides: substrates for fermentation. Dekker RF. **Braz J Med Biol Res** 1989; 22(12):1441–56 (59 ref.)

Studies of the cellulolytic system of Trichoderma reesei QM 9414. Binding of small ligands to the 1,4-beta-glucan cellobiohydrolase II and influence of glucose on their affinity. Van Tilbeurgh H, et al. **Eur J Biochem** 1989 Oct 1;184(3):553–9

Regulation of the production of hemicellulolytic and cellulolytic enzymes by a Streptomyces sp. growing on lignocellulose. Godden B, et al. **J Gen Microbiol** 1989 Feb; 135 (Pt 2):285–92

The N-terminal region of an endoglucanase from Pseudomonas fluorescens subspecies cellulosa constitutes a cellulose-binding domain that is distinct from the catalytic centre. Gilbert HJ, et al. **Mol Microbiol** 1990 May; 4(5):759–67

Essential 170-kDa subunit for degradation of crystalline cellulose by Clostridium cellulovorans cellulase. Shoseyov O, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2192–5

PHARMACOLOGY

Lack of effect of purified cellulose and hemicellulose on the digestion and the intestinal absorption of dietary lipids in the rat. Borel P, et al. **Ann Nutr Metab** 1989;33(5):237–45

Modulation of postprandial glycaemia and insulinaemia by cellulose in mixed nutrient combinations. Siddhu A, et al. **Br J Nutr** 1989 Jul;62(1):131–7

The effects of increased dietary cellulose on the anatomy, physiology and behaviour of captive water voles, Arvicola terrestris (L.) (Rodentia: Microtinae). Woodall PF. **Comp Biochem Physiol [A]** 1989;94(4):615–21

Effect of dietary fat, starch and cellulose on fecal bile acids in mice. Bianchini F, et al. **J Nutr** 1989 Nov; 119(11):1617–24

A model system for studying the adsorption of a hydrophobic mutagen to dietary fibre. Roberton AM, et al. **Mutat Res** 1990 Jun;244(2):173–8

Colon cancer and dietary fiber: cellulose inhibits the DNA-damaging ability of bile acids. Cheah PY, et al. **Nutr Cancer** 1990;13(1–2):51–7

THERAPEUTIC USE

Acetobacter cellulose pellicle as a temporary skin substitute. Fontana JD, et al. **Appl Biochem Biotechnol** 1990 Spring-Summer;24–25:253–64

Comparison of psyllium hydrophilic mucilloid and cellulose as adjuncts to a prudent diet in the treatment of mild to moderate hypercholesterolemia. Levin EG, et al. **Arch Intern Med** 1990 Sep;150(9):1822–7

Reduction of colon cancer risk by dietary cellulose supplementation [letter; comment] Heitman DW, et al. **J Natl Cancer Inst** 1990 Jul 4;82(13):1154–5 Comment on: J Natl Cancer Inst 1989 Sep 6;81(17):1290–7.

TOXICITY

Toxicity of intratracheally instilled cotton dust, cellulose, and endotoxin. Milton DK, et al. **Am Rev Respir Dis** 1990 Jul; 142(1):184–92

[Evaluation of dyed substances in purified waste water in experiments on water organisms] Novikova LN, et al. **Gig Sanit** 1989 Aug;(8):78–80 **(Rus)**

CELLULOSE, OXIDIZED see under **CELLULOSE**

CEMENTATION

see related
DENTAL CEMENTS

Effect of a silicone fit-indicator on crown retention in vitro. Millstein PL, et al. **J Prosthet Dent** 1989 Nov;62(5):510–1

[Morphologic studies of asbestos-cement surfaces] Krause J, et al. **Z Gesamte Hyg** 1989 Jun;35(6):323–5 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Long-term results and complications of cement augmentation in the treatment of unstable trochanteric fractures. Cheng CL, et al. **Injury** 1989 May;20(3):134–8

CEMENTOMA see under **ODONTOGENIC TUMORS**

CEMENTUM see **DENTAL CEMENTUM**

CEMETERIES see **MORTUARY PRACTICE**

CENSUS see **DEMOGRAPHY**

CENTCHROMAN see under **BENZOPYRANS**

CENTENARIAN see **AGED, 80 AND OVER**

CENTERS FOR DISEASE CONTROL (U.S.)

Statistics from the World Health Organization and the Centers for Disease Control. AIDS 1990 Apr;4(4):375–9

Twenty-two years of cancer cluster investigations at the Centers for Disease Control. Caldwell GG. **Am J Epidemiol** 1990 Jul;132(1 Suppl):S43–7

National surveillance of occupational fatalities in agriculture. Myers JR. **Am J Ind Med** 1990;18(2):163–8

I. Recent advances in sexually transmitted diseases: reflections on the Center for Disease Control's new sexually transmitted diseases treatment guidelines from the viewpoint of a private practitioner. Felman YM. **Cutis** 1990 Mar;45(3):149–50

Recent advances in sexually transmitted diseases: reflections on the Center for Disease Control's new sexually transmitted diseases treatment guidelines from the viewpoint of a private practitioner: human immunodeficiency virus (HIV), genital ulcers, chancroid, and syphilis. Felman YM. **Cutis** 1990 Apr;45(4):221–4

Legal implications of OSHA and CDC regulations. Kaminski RA, et al. **J Prosthet Dent** 1990 Jun;63(6):707–12 (21 ref.)

Two-way street links ever-smaller world spanned by CDC's epidemiologic efforts [news] Cotton P. **JAMA** 1990 May 16;263(19):2569–70

News media have 'discovered' CDC [news] Cotton P. **JAMA** 1990 May 16;263(19):2585

'In the ballpark' not good enough [news] Cotton P. **JAMA** 1990 May 16;263(19):2597, 2599

On the job because that's where hazards are [news] Cowart VS. **JAMA** 1990 May 16;263(19):2599–600

CDC ponders new HIV guidelines [news] Goldsmith MF. **JAMA** 1990 Sep 5;264(9):1079

Focus on adolescent health enrolls school helpers [news] Goldsmith MF. **JAMA** 1990 May 16;263(19):2609, 2612

Preventing disease and promoting health [news] Goldsmith MF. **JAMA** 1990 May 16;263(19):2593, 2596

CDC planners: resourcefulness essential [news] Goldsmith MF. **JAMA** 1990 May 16;263(19):2616–7

AIDS activities: from day 1 to 'something big' [news] Goldsmith MF. **JAMA** 1990 May 16;263(19):2584, 2587

EIS officers: medical detectives [news] [published erratum appears in JAMA 1990 Sep 19;264(11):1411] Goldsmith MF. **JAMA** 1990 May 16;263(19):2566, 2569

Travel medicine to be discussed [news] Gunby P. **JAMA** 1990 May 16;263(19):2570

Morbidity and Mortality Weekly Report is unique [news] Gunby P. **JAMA** 1990 May 16;263(19):2583–4

How do they conduct 'N-HANES,' anyway? [news] Marwick C. **JAMA** 1990 May 16;263(19):2581

CDC plays cat-and-mouse with flu virus [news] Randall T. **JAMA** 1990 May 16;263(19):2574, 2579

CDC's hot line: 'America responds to AIDS' [news] Randall T. **JAMA** 1990 May 16;263(19):2587–8

Coping with violence epidemic [news] Randall T. **JAMA** 1990 May 16;263(19):2612, 2614

CDC has role in 40 worldwide health programs as World Health Organization collaborator [news] Randall T. **JAMA** 1990 May 16;263(19):2570, 2574

CDC expands dental disease prevention role [news] Skolnick A. **JAMA** 1990 May 16;263(19):2609

CDC health care courses offered [news] Skolnick A. **JAMA** 1990 May 16;263(19):2617

Office helps laboratories pass the test [news] Skolnick A. **JAMA** 1990 May 16;263(19):2617

Public health: William L. Roper named as CDC director [news] Gershon D. **Nature** 1990 Jan 11;343(6254):106

A state-by-state report from the CDC on deaths from breast cancer [news] **Oncology (Williston Park)** 1989 Nov; 3(11):132

A blueprint for injury control in the United States. Viano DC. **Public Health Rep** 1990 Jul–Aug;105(4):329–33

HISTORY

CDC nears close of first half-century [news] Cotton P. **JAMA** 1990 May 16;263(19):2579–80

ORGANIZATION & ADMINISTRATION

CDC moves on chronic diseases [news] Burklow J. **J Natl Cancer Inst** 1989 Dec 6;81(23):1776–7

Tons of work go into CDC's ounces of prevention [news] Goldsmith MF, et al. **JAMA** 1990 May 16;263(19):2596–7

CDC, statistics center weather 'marriage' [news] Marwick C. **JAMA** 1990 May 16;263(19):2580

Washington office provides eyes, ears, voice [news] Marwick C. **JAMA** 1990 May 16;263(19):2580

CDC minority health office: 'social epidemiology' [news] Randall T. **JAMA** 1990 May 16;263(19):2565–6

CENTERS FOR HEALTH PLANNING see HEALTH PLANNING ORGANIZATIONS

CENTRAL NERVOUS SYSTEM

Primitive neuroectodermal tumors of the central nervous system express neuroendocrine markers and may express all classes of intermediate filaments. Gould VE, et al. **Hum Pathol** 1990 Mar;21(3):245–52 (63 ref.)

Synaptophysin: a sensitive and specific marker for ganglion cells in central nervous system neoplasms. Miller DC, et al. **Hum Pathol** 1990 Mar;21(3):271–6

Acquired immunodeficiency syndrome and the nervous system [letter; comment] **JAMA** 1990 Jan 5;263(1):37–8 Comment on: JAMA 1989 Apr 28;261(16):2396–9.

ABNORMALITIES

Central nervous system malformations in relation to two polyvinyl chloride production facilities. Rosenman KD, et al. **Arch Environ Health** 1989 Sep–Oct;44(5):279–82

Malformational complex in an infant with intrauterine influenza viral infection. Conover PT, et al. **Arch Pathol Lab Med** 1990 May;114(5):535–8

The perinatal management of central nervous system anomalies. Silver RK, et al. **Clin Perinatol** 1989 Dec; 16(4):939–53 (85 ref.)

A cluster of central nervous system defects in Jamaica. Golding J, et al. **Hum Exp Toxicol** 1990 Jan;9(1):13–6

Clinical neurology and brain histopathology in NZB/NZW F1 lupus mice. Kier AB. **J Comp Pathol** 1990 Feb; 102(2):165–77

Holoprosencephaly and polydactyly: a possible expression of the hydrolethalus syndrome. Bachman H, et al. **J Med Genet** 1990 Jan;27(1):50–2

Congenital central nervous system anomalies. Poe LB, et al. **Radiographics** 1989 Sep;9(5):801–26 (78 ref.)

Fetal central nervous system abnormalities. Spirt BA, et al. **Radiol Clin North Am** 1990 Jan;28(1):59–73

[New clinical phase in intrauterine diagnosis and therapeutic modalities of CNS anomalies] Oi S, et al. **No Shinkei Geka** 1989 Nov;17(11):1029–35 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Identification of differentially expressed central nervous system transcripts. Clancy KP, et al. **Biochem Soc Trans** 1990 Jun;18(3):394–5

Chol-1: a cholinergic-specific ganglioside of possible significance in central nervous system neurochemistry and neuropathology. Borroni E, et al. **Experientia Suppl** 1989; 57:59–67

Laboratory markers for detection of scrapie. Diringer H. **J Am Vet Med Assoc** 1990 May 15;196(10):1683

Distribution of substance P, vasoactive intestinal polypeptide and serotonin immunoreactive structures in the central nervous system of the lizard, Lacerta agilis. Petkó M, et al. **J Hirnforsch** 1989;30(4):415–23

Localization of FGF receptor mRNA in the adult rat central nervous system by in situ hybridization. Wanaka A, et al. **Neuron** 1990 Sep;5(3):267–81

Alzheimer patients: preamyloid deposits are more widely distributed than senile plaques throughout the central nervous system. Bugiani O, et al. **Neurosci Lett** 1989 Sep 11;103(3):263–8

Identification of proctolin in the central nervous system of the horseshoe crab, Limulus polyphemus. Groome JR, et al. **Peptides** 1990 Mar–Apr;11(2):205–11

[Elemental microanalysis of the CNS using X rays] Elejalde MV, et al. **Neurologia** 1987 Jul–Aug;2(4):162–5 (Eng. Abstr.) **(Spa)**

ANATOMY & HISTOLOGY

Peroxidase backfills suggest the mammalian olfactory epithelium contains a second morphologically distinct class of bipolar sensory neuron: the microvillar cell. Rowley JC 3d, et al. **Brain Res** 1989 Nov 20;502(2):387–400

Cholinergic systems in the rat brain: IV. Descending projections of the pontomesencephalic tegmentum. Woolf NJ, et al. **Brain Res Bull** 1989 Dec;23(6):519–40

An immunocytochemical study of the olfactory projections in the three-spined stickleback, Gasterosteus aculeatus, L. Honkanen T, et al. **J Comp Neurol** 1990 Feb 1;292(1):65–72

Nontopographic projection of olfactory sensory neurons in the crayfish brain. Mellon D Jr, et al. **J Comp Neurol** 1990 Jun 8;296(2):253–62

Modality-specific axonal projections in the CNS of the flies Phormia and Drosophila. Murphey RK, et al. **J Comp Neurol** 1989 Dec 8;290(2):185–200

Intermingling of central and peripheral nervous tissues in rat dorsolateral vagal rootlet transitional zones. Rossiter JP, et al. **J Neurocytol** 1990 Jun;19(3):385–407

A Golgi study on the accessory olfactory bulb in the snake, Elaphe quadrivirgata. Iwahori N, et al. **Neurosci Res** 1989 Oct;7(1):55–70

Supraoptic nucleus afferents from the main olfactory bulb—I. Anatomical evidence from anterograde and retrograde tracers in rat. Smithson KG, et al. **Neuroscience** 1989; 31(2):277–87

Use of semithin sections embedded in a water-miscible methacrylate for light microscopy of central nerve tissues. Nagato Y, et al. **Okajimas Folia Anat Jpn** 1989 Aug; 66(2–3):145–51

Organization of central cholinergic systems. Semba K, et al. **Prog Brain Res** 1989;79:37–63 (172 ref.)

Diffusion-weighted MR imaging of anisotropic water diffusion in cat central nervous system. Moseley ME, et al. **Radiology** 1990 Aug;176(2):439–45

BLOOD SUPPLY

Neuronal and adrenal enkephalins and catecholamines in response to acute CNS ischemia and reserpine in pig. Klein RL, et al. **J Auton Nerv Syst** 1990 Apr;30(1):37–62

Isolated CNS angiitis [letter; comment] Sigal LH. **Neurology** 1989 Dec;39(12):1645 Comment on: Neurology 1989 Feb;39(2 Pt 1):167–73.

[Angiographic management of angiomatous malformations in the central nervous system] Hirsch M, et al. **Harefuah** 1989 Jun 15;116(12):624–7 (Eng. Abstr.) **(Heb)**

CYTOLOGY

The cerebrospinal fluid-contacting neuron: a peculiar cell type of the central nervous system. Immunocytochemical aspects. Vigh-Teichmann I, et al. **Arch Histol Cytol** 1989; 52 Suppl:195–207

Fluoro-Gold injected either subcutaneously or intravascularly results in extensive retrograde labelling of CNS neurones having axons terminating outside the blood–brain barrier. Ambalavanar R, et al. **Brain Res** 1989 Dec 25;505(1):171–5

Neurite-like outgrowth from CNS explants may not always be of neuronal origin. Toran-Allerand CD. **Brain Res** 1990 Apr 16;513(2):353–7

CNS stem cells express a new class of intermediate filament protein. Lendahl U, et al. **Cell** 1990 Feb 23;60(4):585–95

The organization of plurisegmental mechanosensitive interneurons in the central nervous system of the wandering spider Cupiennius salei. Gronenberg W. **Cell Tissue Res** 1990 Apr;260(1):49–61

Codistribution of neurite growth inhibitors and oligodendrocytes in rat CNS: appearance follows nerve fiber growth and precedes myelination. Caroni P, et al. **Dev Biol** 1989 Dec;136(2):287–95

GABA-immunohistochemistry as a label for identifying types of local interneurons and their synaptic contacts in the antennal lobes of the American cockroach. Distler P. **Histochemistry** 1990;93(6):617–26

Regional maturation of neurotransmitter-related and glial markers during postnatal development in the rat. Virgili M, et al. **Int J Dev Neurosci** 1990;8(2):159–66

Neurological mutations affecting myelination in the central nervous system. Baumann N, et al. **Int J Neurol** 1982–83; 16–17:95–101

Cholera toxin B-gold, a retrograde tracer that can be used in light and electron microscopic immunocytochemical studies. Llewellyn-Smith IJ, et al. **J Comp Neurol** 1990 Apr 8;294(2):179–91

Commentary on the replacement of neurons in the central nervous system. Carleton CC. **J Fla Med Assoc** 1990 Mar; 77(3):144–5

Insect olfactory neurons in vitro: morphological and physiological characterization of cells from the developing antennal lobes of Manduca sexta. Hayashi JH, et al. **J Neurosci** 1990 Mar;10(3):848–59

Insect olfactory neurons in vitro: morphological and immunocytochemical characterization of male-specific antennal receptor cells from developing antennae of male Manduca sexta. Stengl M, et al. **J Neurosci** 1990 Mar; 10(3):837–47

Detection of glia-derived nexin in the olfactory system of the rat. Reinhard E, et al. **Neuron** 1988 Jul;1(5):387–94

Characterization of an activity-dependent, neuronal surface proteoglycan identified with monoclonal antibody Cat-301. Zaremba S, et al. **Neuron** 1989 Mar;2(3):1207–19

Differential thionin block staining of nerve cells and fibers for paraffin-embedded material in mammalian central nervous system. Tolivia J, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):155–8

Astrocyte heterogeneity [news] Wilkin GP, et al. **Trends Neurosci** 1990 Feb;13(2):43–6 (47 ref.)

DRUG EFFECTS

Effect of 17 beta-estradiol on different parts of central nervous system of female Singi fish (Heteropneustes fossilis Bloch) in relation to reproductive stages. Ghosh M, et al. **Acta Physiol Hung** 1989;73(4):465–76

NBRB Workshop on the Neurochemical Bases of Alcohol-Related Behavior. Bethesda, Maryland, August 31–September 1, 1989. Proceedings. **Alcohol** 1990 May–Jun; 7(3):181–278

The effects of alpha-methyl-p-tyrosine pretreatment on ethanol-induced narcosis and hypothermia, as well as in the development of tolerance to these effects in UChA and UChB rats. Tampier L, et al. **Alcohol** 1990 Jul–Aug; 7(4):327–30

Side effects of beta-blocker treatments as related to the central nervous system. Dahlöf C, et al. **Am J Med Sci** 1990 Apr;299(4):236–44 (79 ref.)

Central nervous system cardiovascular actions of CRF in sinoaortic-denervated rats. Overton JM, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):R596–601

Neural tube defects in early rat embryos following maternal treatment with ethanol and caffeine. Ross CP, et al. **Anat Anz** 1989;169(4):247–52

Central nervous system effects of magnesium [letter] Szabo MD, et al. **Anesth Analg** 1989 Nov;69(5):691–2

Effect of epinephrine on central nervous system and cardiovascular system toxicity of bupivacaine in pigs. Bernards CM, et al. **Anesthesiology** 1989 Nov;71(5):711–7

Central nervous system effects of antihistamines on evoked potentials. Loring DW, et al. **Ann Allergy** 1989 Dec;63(6 Pt 2):604–8

Effect of inhaled trichloroethylene on the CNS. As measured by optokinetic nystagmus. Kylin B, et al. **Arch Environ Health** 1967 Jul;15(1):48–52

Comparison of the central nervous system activity of the aqueous and lipid extract of kava (Piper methysticum). Jamieson DD, et al. **Arch Int Pharmacodyn Ther** 1989 Sep–Oct;301:66–80

General pharmacology of recombinant human tumor necrosis factor. 2nd communication: effects on central nervous system functions. Kurumiya S, et al. **Arzneimittelforschung** 1990 Feb;40(2 Pt 1):225–31

General pharmacology of beraprost sodium. 1st

communication: effect on the central nervous system. Murata T, et al. **Arzneimittelforschung** 1989 Aug; 39(8):860–6

A study on CNS–side effects of mequitazine, an H1–specific antihistamine in healthy Thai volunteers. Dhorranintra B, et al. **Asian Pac J Allergy Immunol** 1990 Jun;8(1):39–44

CNS–related subjective symptoms during treatment with beta 1–adrenoceptor antagonists (atenolol, metoprolol): two double–blind placebo controlled studies. Dimenäs E, et al. **Br J Clin Pharmacol** 1989 Nov;28(5):527–34

A comparison of the CNS effects of enprofylline and theophylline in healthy subjects assessed by performance testing and subjective measures. Tiplady B, et al. **Br J Clin Pharmacol** 1990 Jul;30(1):55–61

Analgesic, central, cardiovascular and endocrine effects of the enkephalin analogue Tyr–D.Arg–Gly–Phe(4NO2)–Pro–NH2 (443C81) in healthy volunteers. Posner J, et al. **Eur J Clin Pharmacol** 1990;38(3):213–8

Pharmacodynamic studies on Polypodium vulgare (Linn.). Mannan A, et al. **Indian J Exp Biol** 1989 Jun;27(6):556–60

Pharmacology of Acorus calamus L. Panchal GM, et al. **Indian J Exp Biol** 1989 Jun;27(6):561–7

Synthesis and biological activities of 2,4–diethyl–3,5–diaryl imino–1,2,4–thiadiazolidines. III. Pandeya SN, et al. **Indian J Physiol Pharmacol** 1989 Oct–Dec;33(4):275–6

Effect of calcium ion on analgesia of opioid peptides. Wang JF, et al. **Int J Neurosci** 1989 Aug;47(3–4):279–85

Beta–adrenoceptor blockade and CNS–related subjective symptoms: a randomized, double–blind, placebo–controlled comparison of metoprolol CR/ZOK, atenolol and propranolol LA in healthy subjects. Dimenäs E, et al. **J Clin Pharmacol** 1990 Feb;30(2 Suppl):S103–7

Effects of Himanthalia elongata on the central nervous system of mice. Anca JM, et al. **J Ethnopharmacol** 1990 May;29(2):225–31

Effects of the gut–stimulating principle in Croton penduliflorus seed oil on the central nervous system. Asuzu IU, et al. **J Ethnopharmacol** 1989 Sep;26(2):111–9

Central nervous system studies on an ethanol extract of Acorus calamus rhizomes. Vohora SB, et al. **J Ethnopharmacol** 1990 Feb;28(1):53–62

Synthesis and central nervous system actions of thyrotropin–releasing hormone analogues containing a dihydroorotic acid moiety. Suzuki M, et al. **J Med Chem** 1990 Aug;33(8):2130–7

Simultaneous modeling of the pharmacokinetic and pharmacodynamic properties of benzodiazepines. I: Lorazepam. Gupta SK, et al. **J Pharmacokinet Biopharm** 1990 Apr;18(2):89–102

Structural, conformational, and stereochemical requirements of central excitatory amino acid receptors. Hansen JJ, et al. **Med Res Rev** 1990 Jan–Mar;10(1):55–94 (273 ref.)

Taste vs. CNS effects in voluntary oral opiate intake: studies with a novel device and technique. Carlson KR. **Pharmacol Biochem Behav** 1989 Oct;34(2):419–23

Mechanism of action of ethanol: initial central nervous system actions. Deitrich RA, et al. **Pharmacol Rev** 1989 Dec; 41(4):489–537 (486 ref.)

Effects of Phaeodactylum tricornutum and Dunaliella tertiolecta extracts on the central nervous system. Laguna MR, et al. **Planta Med** 1990 Apr;56(2):152–7

Pharmacological studies on the central action of novel benzylidene–imidazothiazolone derivatives. Kolasa K, et al. **Pol J Pharmacol Pharm** 1989 Jul–Aug;41(4):377–83

Pharmacological effects of oxaprotiline enantiomers on the central serotonin system. Maj J, et al. **Pol J Pharmacol Pharm** 1989 Jul–Aug;41(4):345–57

Single cell studies of the actions of agonists and antagonists on nicotinic receptors of the central nervous system. Egan TM. **Prog Brain Res** 1989;79:73–83 (67 ref.)

Influence of estrogen on aging of the central nervous system: its role in declining female reproductive function. Wise PM. **Prog Clin Biol Res** 1989;320:53–70 (70 ref.)

Carbon monoxide criteria. With reference to effects on the heart, central nervous system and fetus. Rylander R, et al. **Scand J Work Environ Health** 1981;7 Suppl 1:1–39

The role of descending inhibition in morphine–induced analgesia. Advokat C. **Trends Pharmacol Sci** 1988 Sep; 9(9):330–4 (39 ref.)

Magnesium sulfate suppresses electroencephalographic manifestations of CNS oxygen toxicity. Katz A, et al. **Undersea Biomed Res** 1990 Jan;17(1):45–9

Formate levels following a formalin ingestion. Burkhart KK, et al. **Vet Hum Toxicol** 1990 Apr;32(2):135–7

[Anesthetic properties of a new inhibitor of glutaminergic transmission in the central nervous system, riluzole] Mantz J, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R46 **(Fre)**

[Benzonitrile and derivatives. Synthesis and pharmacological study of alkyl para–cyanophenoxy alkanoates on the central nervous system] Kirkiacharian S, et al. **Ann Pharm Fr** 1989; 47(1):16–23 (Eng. Abstr.) **(Fre)**

[Effects of rilmenidine on the central nervous system and kidney] Fillastre JP. **Arch Mal Coeur** 1989 Dec;82 Spec No 5:19–23 (Eng. Abstr.) **(Fre)**

[Pharmacology of neurotransmitters. Current data on the central regulation of blood pressure] Bousquet P. **Therapie** 1990 Mar–Apr;45 Suppl 2:171–5 **(Fre)**

[Excitatory amino acids, central nervous system neurotransmitters] Nieoullon A. **Therapie** 1990 May–Jun; 45(3):281–5 (36 ref.) (Eng. Abstr.) **(Fre)**

[Gyrase inhibitors. Central nervous side effects and inhibition of methylxanthine elimination] Harder S, et al. **Dtsch Med Wochenschr** 1990 Feb 16;115(7):270–3 (32 ref.) **(Ger)**

[General pharmacological studies on 5,8,11,14,17–eicosapentaenoic acid ethyl ester (EPA–E)] Sato M, et al. **Nippon Yakurigaku Zasshi** 1989 Jul; 94(1):35–47 (Eng. Abstr.) **(Jpn)**

[Acute and chronic effects of organic solvents on the central nervous system. Use of psychobehavioral performance tests in the assessment of toxicity] Kishi R, et al. **Sangyo Igaku** 1990 Jan;32(1):3–17 (86 ref.) (Eng. Abstr.) **(Jpn)**

[The selective action of the tetrapeptide tuftsin on the central nervous system when administered intranasally] Kamenskiĭ AA, et al. **Zh Vyssh Nerv Deiat** 1989 Jul–Aug;39(4):767–9 **(Rus)**

[The action of atropine and d–tubocurarine on the monosynaptic connections between identified neurons in the central nervous system of the edible snail] Ter–Markarian AG, et al. **Zh Vyssh Nerv Deiat** 1990 Jan–Feb;40(1):183–4 **(Rus)**

[The central effects of a steroid alkaloid, Buxaminol–E, in conscious cats] Lukovič L, et al. **Bratisl Lek Listy** 1990 Apr;91(4):309–15 (Eng. Abstr.) **(Slo)**

EMBRYOLOGY

Scanning–electron–microscopic studies on the pathogenesis of exencephaly and cranioschisis induced in the rat after neural tube closure. Padmanabhan R. **Acta Anat (Basel)** 1990;138(2):97–110

Distribution of cell surface glycoconjugates during secondary neurulation in the chick embryo. Griffith CM, et al. **Anat Rec** 1990 Jan;226(1):81–90

Segmentation and segmental differentiation in the development of the central nervous systems of leeches and flies. Levine M, et al. **Annu Rev Neurosci** 1990;13:195–225 (140 ref.)

Do CNS anlagen have plasticity in differentiation? Analysis in quail–chick chimera. Nakamura H. **Brain Res** 1990 Mar 12;511(1):122–8

Intrinsic and extrinsic factors collaborate to generate driving forces for neural tube formation in the chick: a study using morphometry and computerized three–dimensional reconstruction. Nagele RG, et al. **Brain Res Dev Brain Res** 1989 Nov 1;50(1):101–11

HNK–1 marks earliest axonal outgrowth in Xenopus. Nordlander RH. **Brain Res Dev Brain Res** 1989 Nov 1; 50(1):147–53

Cell migration into neural tube lumen provides evidence for the "fixed cortex" theory of cell motility. Bilozur ME, et al. **Cell Motil Cytoskeleton** 1989;14(4):469–84

Growth cone guidance and cell recognition in insect embryos. Goodman CS, et al. **Dev Biol (N Y 1985)** 1986; 3:283–300 (22 ref.)

Octopod, a homeotic mutation of the moth Manduca sexta, influences the fate of identifiable pattern elements within the CNS. Booker R, et al. **Development** 1989 Mar; 105(3):621–8

Lateral inhibition and cell fate during neurogenesis in Drosophila: the interactions between scute, notch and delta. Cabrera CV. **Development** 1990 Jul;109(3):733–42

Sialoconjugates and development of the tail bud. Griffith CM, et al. **Development** 1990 Mar;108(3):479–89

Structure and expression of the mouse Oct2a and Oct2b, two differentially spliced products of the same gene. Hatzopoulos AK, et al. **Development** 1990 Jun; 109(2):349–62

Spatial aspects of neural induction in Xenopus laevis. Jones EA, et al. **Development** 1989 Dec;107(4):785–91

Expression of a homeobox gene product in normal and mutant zebrafish embryos: evolution of the tetrapod body plan. Molven A, et al. **Development** 1990 Jun;109(2):279–88

A Drosophila gene expressed in the embryonic CNS shares one conserved domain with the mammalian GAP–43. Ng SC, et al. **Development** 1989 Mar;105(3):629–38

Mechanisms of neurulation: traditional viewpoint and recent advances. Schoenwolf GC, et al. **Development** 1990 Jun; 109(2):243–70 (134 ref.)

Shaping and bending of the avian neural plate as analysed with a fluorescent–histochemical marker. Schoenwolf GC, et al. **Development** 1989 Jan;105(1):17–25

A cell lineage analysis of segmentation in the chick embryo. Stern CD, et al. **Development** 1988;104 Suppl:231–44

Effect of the notochord on proliferation and differentiation in the neural tube of the chick embryo. van Straaten HW, et al. **Development** 1989 Dec;107(4):793–803

Expression pattern of homeobox–containing genes during chick embryogenesis. Wedden SE, et al. **Development** 1989 Mar;105(3):639–50

Homeogenes in mammalian development and the evolution of the cranium and central nervous system. Lonai P, et al. **FASEB J** 1990 Mar;4(5):1436–43 (42 ref.)

Region–specific enhancers near two mammalian homeo box genes define adjacent rostrocaudal domains in the central nervous system. Tuggle CK, et al. **Genes Dev** 1990 Feb; 4(2):180–9

Immunofluorescent analysis of fibronectin and laminin distribution in the vl mutant mouse. Wilson DB, et al. **Histochem J** 1989 Jul;21(7):412–8

Primitive motor patterns and stereotyped movements. A comparison of findings in early childhood and in the apallic syndrome. Aichner F, et al. **Int J Neurol** 1982–83; 16–17:21–9

Intermediate filaments and neural cell differentiation. Fedoroff S, et al. **Int J Neurol** 1982–83;16–17:30–45 (109 ref.)

Neural induction. Saxen L. **Int J Neurol** 1982–83; 16–17:155–66 (61 ref.)

Initial development of capillaries in the neuroepithelium of the mouse. Herken R, et al. **J Anat** 1989 Jun;164:85–92

Primary neurulation in teleosts—evidence for epithelial genesis of central nervous tissue as in other vertebrates. Reichenbach A, et al. **J Hirnforsch** 1990;31(2):153–8

Polarizing activity and retinoid synthesis in the floor plate of the neural tube [see comments] Wagner M, et al. **Nature** 1990 Jun 28;345(6278):819–22 Comment in: Nature 1990 Jun 28;345(6278):766–8.

Lineage, migration, and morphogenesis of longitudinal glia in the Drosophila CNS as revealed by a molecular lineage marker. Jacobs JR, et al. **Neuron** 1989 Jun;2(6):1625–31

Segmentation and the origin of regional diversity in the vertebrate central nervous system. Keynes R, et al. **Neuron** 1990 Jan;4(1):1–9 (96 ref.)

Rat fetuses respond to chemical stimuli in gas phase. Smotherman WP, et al. **Physiol Behav** 1990 May; 47(5):863–8

Are spontaneous activity and supraspinal control co–responsible for functional development of the generator of embryonic motility? Sedláček J. **Physiol Bohemoslov** 1989;38(6):489–95

Embryonic spontaneous motility after acute and chronic administration of kainate. Sedláček J, et al. **Physiol Bohemoslov** 1989;38(5):433–40

Evidence that cells expressing luteinizing hormone–releasing hormone mRNA in the mouse are derived from progenitor cells in the olfactory placode. Wray S, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):8132–6

[Localization of lectin–binding sites on the neural tube of the rat] Bergmann M, et al. **Anat Anz** 1989;169(5):367–9 **(Ger)**

ENZYMOLOGY

Regulation of the activity of tyrosine hydroxylase in the central nervous system. Fujisawa H, et al. **Adv Enzyme Regul** 1989;28:93–110

Spatial and temporal expression of cellular retinoic acid binding protein (CRABP) along the anteroposterior axis in the central nervous system of mouse embryos. Momoi T, et al. **Biochem Biophys Res Commun** 1990 Jun 29; 169(3):991–6

Effects of prolactin on tyrosine hydroxylase activity of central dopaminergic neurons of male rats. Chen JC, et al. **Eur J Pharmacol** 1989 Aug 3;166(3):473–9

Regulation of choline acetyltransferase. Salvaterra PM, et al. **Int Rev Neurobiol** 1989;31:81–143 (271 ref.)

Inhibition of acetylcholinesterase in the central nervous system of Rana tigrina by an organophosphate. Balasundaram K, et al. **J Biochem Toxicol** 1990 Spring; 5(1):65–6

Ectonucleotidase activities associated with the olfactory organ of the spiny lobster. Trapido–Rosenthal HG, et al. **J Neurochem** 1990 Jul;55(1):88–96

Glutamine synthetase in the central nervous system is not confined to astrocytes. Cammer W. **J Neuroimmunol** 1990 Feb;26(2):173–8

A monoclonal antibody against the slow isoform of skeletal muscle Ca2+–ATPase selectively stains a subpopulation of neurons in the central nervous system. Shahin S, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):163–8

An insulin–stimulated protein kinase similar to yeast kinases involved in cell cycle control. Boulton TG, et al. **Science** 1990 Jul 6;249(4964):64–7

GROWTH & DEVELOPMENT

Influence of gestational age on early neuromotor development in the preterm infant. Piper MC, et al. **Am J Perinatol** 1989 Oct;6(4):405–11

Growth factors for neuronal survival and process regeneration. Implications in the mammalian central nervous system [published erratum appears in Arch Neurol 1990 Jan;47(1):46] Lipton SA. **Arch Neurol** 1989 Nov; 46(11):1241–8 (109 ref.)

Olfactory bulb and sensory epithelium in goldfish: morphological alterations accompanying growth. Stewart JS, et al. **Brain Res Dev Brain Res** 1990 Jul 1;54(2):187–93

Glial cells form boundaries for developing insect olfactory glomeruli. Tolbert LP, et al. **Exp Neurol** 1990 Jul; 109(1):19–28 (49 ref.)

Olfactory neurons express a unique glycosylated form of the neural cell adhesion molecule (N–CAM). Key B, et al. **J Cell Biol** 1990 May;110(5):1729–43

The infant at risk. Brazelton TB. **J Perinatol** 1989 Sep; 9(3):307–10

Somatosensory evoked potentials in term and preterm infants in relation to postconceptional age and birth weight. Bongers–Schokking JJ, et al. **Neuropediatrics** 1990 Feb; 21(1):32–6

Does very preterm birth impair myelination of the central nervous system? van de Bor M, et al. **Neuropediatrics** 1990 Feb;21(1):37–9

Frank Beach's research on the sexual differentiation of behavior and his struggle with the "organizational" hypothesis. Baum MJ. **Neurosci Biobehav Rev** 1990

Summer;14(2):201–6 (30 ref.)
Development and regeneration in the central nervous system. Noble M, et al. **Philos Trans R Soc Lond [Biol]** 1990 Mar 12;327(1239):127–43 (59 ref.)

IMMUNOLOGY

Spleen versus CNS immunoglobulin G in multiple sclerosis: an isoelectric focusing study. Mavra M, et al. **Acta Neurol Scand** 1990 Feb;81(2):125–7
Antineural autoantibodies in patients with paraneoplastic cerebellar degeneration. Tsukamoto T, et al. **Arch Neurol** 1989 Nov;46(11):1225–9
Immune responses against myelin basic protein and/or galactocerebroside cross-react with viruses: implications for demyelinating disease. Fujinami RS. **Curr Top Microbiol Immunol** 1989;145:93–100 (33 ref.)
Monoclonal antibody markers for amphibian oligodendrocytes and neurons. Steen P, et al. **J Comp Neurol** 1989 Nov 15;289(3):467–80
A study on demyelinating effect of galactocerebroside in experimental allergic encephalomyelitis. Khang SK, et al. **J Korean Med Sci** 1988 Sep;3(3):89–98
Treatment of spinal cord-induced experimental allergic encephalomyelitis in the Lewis rat with liposomes presenting central nervous system antigens. Stein CS, et al. **J Neuroimmunol** 1990 Jul;28(2):119–30
Autoantibody synthesis in the central nervous system of patients with paraneoplastic syndromes. Furneaux HF, et al. **Neurology** 1990 Jul;40(7):1085–91
Laminin-like antigen in rat CNS neurons: distribution and changes upon brain injury and nerve growth factor treatment. Hagg T, et al. **Neuron** 1989 Dec;3(6):721–32

INJURIES

Analysis of glial scarring in the mammalian CNS with a GFAP cDNA probe. Rataboul P, et al. **Adv Exp Med Biol** 1990;265:23–40
Heterotopic ossification in central nervous system-injured patients following closed nailing of femoral fractures. Keret D, et al. **Clin Orthop** 1990 Jul;(256):254–9
Epidemiology and pathology of traumatic deaths occurring at a Level I Trauma Center in a regionalized system: the importance of secondary brain injury. Shackford SR, et al. **J Trauma** 1989 Oct;29(10):1392–7
Seatbelt use and patterns of central nervous system injury in children. Stylianos S, et al. **Pediatr Emerg Care** 1990 Mar;6(1):4–5
Diabetes insipidus after traumata of two extremes in severity. Yoshida J, et al. **Yonsei Med J** 1990 Mar;31(1):71–3
[The interrelations of ophthalmologic and neurologic changes in newborns with birth injuries] Dubilei OV, et al. **Oftalmol Zh** 1989;(3):169–71 (Eng. Abstr.) **(Rus)**

METABOLISM

Glial hyaluronate-binding protein in dysmyelinating mice mutants: jimpy, quaking and shiverer. Bignami A, et al. **Acta Neuropathol (Berl)** 1989;79(3):326–9
Specific binding properties of 125I-apamin in various structures of the rat central nervous system. Janicki PK. **Acta Physiol Pol** 1989 Mar-Apr;40(2):235–9
Computer assisted quantitative densitometric analysis of 125I-apamin binding sites in the central nervous system. Janicki PK, et al. **Acta Physiol Pol** 1989 Mar-Apr; 40(2):240–9
Lipocortin-1 immunoreactivity in the normal human central nervous system and lesions with astrocytosis. Johnson MD, et al. **Am J Clin Pathol** 1989 Oct;92(4):424–9
Intercellular adhesion molecule-1 (ICAM-1) in cellular immune reactions in the human central nervous system. Sobel RA, et al. **Am J Pathol** 1990 Jun;136(6):1309–16
Depletion of high-energy phosphates in the central nervous system of patients with systemic lupus erythematosus, as determined by phosphorus-31 nuclear magnetic resonance spectroscopy. Griffey RH, et al. **Arthritis Rheum** 1990 Jun; 33(6):827–33
Lipopigment in the CNS [letter; comment] Medley I. **Br J Psychiatry** 1989 Nov;155:715 Comment on: Br J Psychiatry 1989 Jul;155:1–11.
Anti-goldfish glial fibrillary acidic protein (GFAP) recognises astrocytes from rat CNS. Shehab SS, et al. **Brain Res** 1989 Dec 18;504(2):343–6
Calcitonin gene-related peptide in the developing mouse olfactory system. Baker H. **Brain Res Dev Brain Res** 1990 Jul 1;54(2):295–8
Developmental expression of myelin proteins by oligodendrocytes in the CNS of trout. Jeserich G, et al. **Brain Res Dev Brain Res** 1990 Jan 1;51(1):27–34
Quantitative study of tyrosine hydroxylase mRNA in catecholaminergic neurons and adrenals during development and aging. Kedzierski W, et al. **Brain Res Mol Brain Res** 1990 Jan;7(1):45–51
Cross-talk between different receptor-effector systems in the mammalian CNS. Hill SJ, et al. **Cell Signal** 1989;1(2):135–41 (53 ref.)
Normal composition of the major lipids and the distribution of their fatty acids in central nervous system myelin further discriminate mld from shiverer mice. Fressinaud C, et al. **Dev Neurosci** 1990;12(1):61–72
Immunological, biochemical and physiological analyses of cardioacceleratory peptide 2 (CAP2) activity in the embryo of the tobacco hawkmoth Manduca sexta. Broadie KS, et al. **Development** 1990 Jan;108(1):59–71
Central GABAA excitatory and GABAB inhibitory receptors regulate gastric acid secretion in rats. Del Tacca M, et al. **Eur J Pharmacol** 1990 Feb 27;177(3):189–94
Age-related changes in lipid peroxidation and protective enzymes in the central nervous system. Ansari KA, et al. **Growth Dev Aging** 1989 Autumn;53(3):117–21
Current status of pharmacological receptors in mammalian central nervous system. Banerjee PK, et al. **Indian J Exp Biol** 1989 Apr;27(4):310–6 (57 ref.)
Analysis of the ontogeny of galanin in the rat central nervous system by immunohistochemistry and radioimmunoassay. Sizer AR, et al. **Int J Dev Neurosci** 1990;8(1):81–97
Marchi-positive myelinoid bodies at the transition between the central and the peripheral nervous system in some vertebrates. Corneliuson O, et al. **J Anat** 1989 Apr; 163:17–31
Appearance of laminin, heparan sulphate proteoglycan and collagen type IV during initial stages of vascularisation of the neuroepithelium of the mouse embryo. Herken R, et al. **J Anat** 1990 Apr;169:189–95
Autoradiographic quantitation and anatomical mapping of 125I-galanin binding sites in the rat central nervous system. Melander T, et al. **J Chem Neuroanat** 1988 Jul-Aug; 1(4):213–33
Distribution of tyrosine hydroxylase- and serotonin-immunoreactive cells in the central nervous system of the thornback guitarfish, Platyrhinoidis triseriata. Stuesse SL, et al. **J Chem Neuroanat** 1990 Jan-Feb; 3(1):45–58
Coexistence of TRH with other neuroactive substances in the rat central nervous system [published erratum appears in J Chem Neuroanat 1989 May-Jun;2(3):177] Tsuruo Y, et al. **J Chem Neuroanat** 1988 Sep-Oct;1(5):235–53
Novel peptide pancreastatin: its occurrence and codistribution with chromogranin A in the central nervous system of the pig. Kar S, et al. **J Comp Neurol** 1989 Oct 22;288(4):627–39
Autoradiographic distribution of thyrotropin-releasing hormone receptors in the African lungfish Protopterus annectens. Pack AM, et al. **J Comp Neurol** 1989 Sep 1; 287(1):19–27
Localization of immunoreactive alpha-bag-cell peptide in the central nervous system of Aplysia. Painter SD, et al. **J Comp Neurol** 1989 Sep 22;287(4):515–30
Immunohistochemical subpopulations of retinopetal neurons in the nucleus olfactoretinalis in a teleost, the whitespotted greenling (Hexagrammos stelleri). Uchiyama H. **J Comp Neurol** 1990 Mar 1;293(1):54–62
Gap junction protein in weakly electric fish (Gymnotide): immunohistochemical localization with emphasis on structures of the electrosensory system. Yamamoto T, et al. **J Comp Neurol** 1989 Nov 15;289(3):509–36
Synaptology of luteinizing hormone-releasing hormone (LHRH)-immunoreactive cells in the nervus terminalis of the gray short-tailed opossum (Monodelphis domestica). Zheng LM, et al. **J Comp Neurol** 1990 May 8;295(2):327–37
Phenylethylamine in the CNS: effects of monoamine oxidase inhibiting drugs, deuterium substitution and lesions and its role in the neuromodulation of catecholaminergic neurotransmission. Boulton AA, et al. **J Neural Transm Suppl** 1990;29:119–29 (38 ref.)
Autoradiographic identification of ecdysteroid-binding cells in the nervous system of the moth Manduca sexta. Fahrbach SE, et al. **J Neurobiol** 1989 Dec;20(8):681–702
Formation of [Leu5]enkephalin from dynorphin A(1–8) by rat central nervous tissue in vitro. Dixon DM, et al. **J Neurochem** 1990 Apr;54(4):1379–85
Time course of penetration of xenogeneic IgG into the central nervous system of the neonatal rat: an immunohistochemical and radionuclide tracer study. Fabian RH, et al. **J Neuroimmunol** 1989 Oct;24(3):183–9
Freund's complete adjuvant induces ornithine decarboxylase activity in the central nervous system of male rats and triggers the release of pituitary hormones. Neidhart M, et al. **J Neuroimmunol** 1990 Feb;26(2):97–105
Multiple forms of pancreatic polypeptide-related compounds in the lamprey CNS: partial characterization and immunohistochemical localization in the brain stem and spinal cord. Brodin L, et al. **J Neurosci** 1989 Oct; 9(10):3428–42
Distribution of a putative kainic acid receptor in the frog central nervous system determined with monoclonal and polyclonal antibodies: evidence for synaptic and extrasynaptic localization. Dechesne CJ, et al. **J Neurosci** 1990 Feb;10(2):479–90
Selective expression of an endogenous lactose-binding lectin gene in subsets of central and peripheral neurons. Hynes MA, et al. **J Neurosci** 1990 Mar;10(3):1004–13
The adult rat olfactory system expresses microtubule-associated proteins found in the developing brain. Viereck C, et al. **J Neurosci** 1989 Oct;9(10):3547–57
Immunolocalization of G protein alpha-subunits in the Drosophila CNS. Wolfgang WJ, et al. **J Neurosci** 1990 Mar; 10(3):1014–24
Tracing specific transmitter pathways in the rat CNS: combination of [3H]serotonin retrograde labelling with immunocytochemical detection of endogenous transmitters. Araneda S, et al. **J Neurosci Methods** 1989 Dec;30(3):211–8
Does transferrin have a special role in the nervous system? Espinosa de los Monteros A, et al. **J Neurosci Res** 1989 Oct;24(2):125–36 (138 ref.)
EGF-induced neuritogenesis and correlated synthesis of plasma membrane gangliosides in cultured embryonic chick CNS neurons. Rosenberg A, et al. **J Neurosci Res** 1989 Dec;24(4):531–6
Simultaneous up-regulation of neurofilament proteins during the postnatal development of the rat nervous system. Schlaepfer WW, et al. **J Neurosci Res** 1990 Jan;25(1):39–49
Low-abundance 32-kilodalton nuclear protein specifically enriched in the central nervous system. Shelton KR, et al. **J Neurosci Res** 1990 Mar;25(3):287–94
The unit impulse response procedure for the pharmacokinetic evaluation of drug entry into the central nervous system. van Bree JB, et al. **J Pharmacokinet Biopharm** 1989 Aug; 17(4):441–62
Axonal transport of neuronal antigens characteristic of subpopulations of central nervous system (CNS) neurons. Atkinson RD, et al. **Metab Brain Dis** 1989 Sep;4(3):157–67
Phencyclidine. Physiological actions, interactions with excitatory amino acids and endogenous ligands. Contreras PC, et al. **Mol Neurobiol** 1987 Fall;1(3):191–211 (174 ref.)
Maternal alcohol consumption and undernutrition in the rat: effects on gangliosides and their catabolizing enzymes in the CNS of the newborn. Prasad VV. **Neurochem Res** 1989 Nov;14(11):1081–8
Study of the influence of stress and adrenalectomy on central and peripheral neuropeptide Y levels. Comparison with catecholamines. Rivet JM, et al. **Neuroendocrinology** 1989 Oct;50(4):413–20
Differential subcellular localization of the RI and RII Na+ channel subtypes in central neurons. Westenbroek RE, et al. **Neuron** 1989 Dec;3(6):695–704
Spatial regulation of homeobox gene fusions in the embryonic central nervous system of transgenic mice. Zakany J, et al. **Neuron** 1988 Oct;1(8):679–91
Immunolocalization of cathepsin D in the human central nervous system and central nervous system neoplasms. Robson DK, et al. **Neuropathol Appl Neurobiol** 1990 Feb; 16(1):39–44
Gammahydroxybutyrate: an endogenous regulator of energy metabolism. Mamelak M. **Neurosci Biobehav Rev** 1989 Winter;13(4):187–98 (213 ref.)
Evidence for the expression of a glucuronic acid-containing epitope in the central nervous system of two insects (Calliphora vicina, Diptera; Tenebrio molitor, Coleoptera). Breidbach O, et al. **Neurosci Lett** 1990 Feb 16;109(3):265–70
Developmental changes of expression of non-muscle (beta and gamma) actin mRNAs in the central nervous system studied by in situ hybridization. Chiba T, et al. **Neurosci Lett** 1990 Apr 20;112(1):31–6
Effect of diazepam on electroacupuncture-induced changes in regional gamma-aminobutyric acid of the rat central nervous system. Chakrabarti S, et al. **Neurosci Res** 1989 Oct;7(1):24–32
The role of purines in nociception. Sawynok J, et al. **Neuroscience** 1989;32(3):557–69 (135 ref.)
Distribution of FMRFamide-like immunoreactivity in the central nervous system of the Formosan monkey (Macaca cyclopsis). Chen ST, et al. **Peptides** 1989 Jul-Aug; 10(4):825–34
Histamine receptors in the central nervous system. Timmerman H. **Pharm Weekbl [Sci]** 1989 Oct 20; 11(5):146–50 (32 ref.)
Excitatory amino acid receptors in the vertebrate central nervous system. Collingridge GL, et al. **Pharmacol Rev** 1989 Jun;41(2):143–210 (762 ref.)
Dose-related accumulation of organophosphate phosphamidon in discrete regions of the CNS: correlation with its neurotoxicity. Naqvi SM, et al. **Pharmacol Toxicol** 1990 Jul;67(1):47–8
Drug transport in the central nervous system: role of carriers. Spector R. **Pharmacology** 1990;40(1):1–7 (26 ref.)
Localization of mRNA for neural cell adhesion molecule (N-CAM) polypeptides in neural and nonneural tissues by in situ hybridization. Prieto AL, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9579–83
Calcitonin gene-related peptide in the nervous tissue. Ishida-Yamamoto A, et al. **Prog Neurobiol** 1989; 33(5–6):335–86 (281 ref.)
Prednisone effects on blood-brain barrier permeability and CNS IgG synthesis in healthy humans. Wolkowitz OM, et al. **Psychoneuroendocrinology** 1990;15(2):155–8
[Some aspects of GABAergic neurons in the central nervous system] Kosaka T. **Fukuoka Igaku Zasshi** 1989 Dec; 80(12):510–5 (18 ref.) **(Jpn)**
[Nerve tissue distribution and physiologic role of somatostatin and its receptor] Shimizu N, et al. **Nippon Rinsho** 1990 May;48(5):1037–41 **(Jpn)**
[Distribution of calcium and magnesium in soft tissues, especially in the central nervous system, and bone of rats fed with low calcium-magnesium with or without aluminum loading diets] Yasui M, et al. **No To Shinkei** 1990 Mar;42(3):283–9 (Eng. Abstr.) **(Jpn)**
[Contents of calcium, phosphorus and aluminum in central nervous system, liver and kidney of rabbits with experimental atherosclerosis—scavenger effects of vinpocetine on the deposition of elements] Yasui M, et al. **No To Shinkei** 1990 Apr;42(4):325–31 (Eng. Abstr.) **(Jpn)**
[Changes in free amino acids in the central nervous system of hypo- and hyperthyroid rats] Nozaki M. **Rinsho Shinkeigaku** 1989 Jun;29(6):713–9 (Eng. Abstr.) **(Jpn)**

[Alcohol and the central nervous system--fundamental neurochemical aspects of alcohol dependence] Filipović N, et al. **Med Arh** 1988;42(3):143-7 (Eng. Abstr.) **(Scr)**

MICROBIOLOGY

Passive immunization protects the mouse eye from damage after herpes simplex virus infection by limiting spread of virus in the nervous system. Shimeld C, et al. **J Gen Virol** 1990 Mar;71 (Pt 3):681-7

Neurotropic properties of pseudorabies virus: uptake and transneuronal passage in the rat central nervous system. Card JP, et al. **J Neurosci** 1990 Jun;10(6):1974-94

In ovo infection with the avian retrovirus RAV-1 leads to persistent infection of the central nervous system. Ewert DL, et al. **Lab Invest** 1990 Feb;62(2):156-62

Pathogenicity of Semliki Forest virus for the rat central nervous system and primary rat neural cell cultures: possible implications for the pathogenesis of multiple sclerosis. Atkins GJ, et al. **Neuropathol Appl Neurobiol** 1990 Feb;16(1):57-68

Incubation of poliomyelitis as calculated from the time of entry into the central nervous system via the peripheral nerve pathways. Wyatt HV. **Rev Infect Dis** 1990 May-Jun; 12(3):547-56 (40 ref.)

Immunohistological detection of bovine viral diarrhoea virus antigen in the central nervous system of persistently infected cattle using monoclonal antibodies. Hewicker M, et al. **Vet Microbiol** 1990 Jun;23(1-4):203-10

PARASITOLOGY

Light and electron microscopic studies on Myxobolus cotti el-Matbouli and Hoffmann, 1987 infecting the central nervous system of the bullhead (Cottus gobio). el-Matbouli M, et al. **Parasitol Res** 1990;76(3):219-27

PATHOLOGY

Distribution of ectopic neurite growth and other geometrical distortions of CNS neurons in feline GM2 gangliosidosis. Walkley SU, et al. **Brain Res** 1990 Feb 26;510(1):63-73

Prevention of central nervous system toxicity of the antitumor antibiotic acivicin by concomitant infusion of an amino acid mixture. Williams MG, et al. **Cancer Res** 1990 Sep 1;50(17):5475-80

Oxygen radicals in CNS damage. Kontos HA. **Chem Biol Interact** 1989;72(3):229-55 (196 ref.)

Clinical and neuropathologic findings in a case of severe myoclonic epilepsy of infancy. Renier WO, et al. **Epilepsia** 1990 May-Jun;31(3):287-91

Neuropathologic findings after bone marrow transplantation: an autopsy study. Mohrmann RL, et al. **Hum Pathol** 1990 Jun;21(6):630-9

Histological examination of the central nervous system in the diagnosis of botulism. France MP. **J Comp Pathol** 1989 Jul;101(1):101-8

Pathogenesis of meningitis caused by Streptococcus suis type 2. Williams AE, et al. **J Infect Dis** 1990 Aug;162(2):474-81

Experimental autoimmune encephalomyelitis: isolation and characterization of inflammatory cells from the central nervous system. Lyman WD, et al. **J Neuroimmunol** 1989 Dec;25(2-3):195-201

Histopathological findings in the central and peripheral nervous systems in neuroborreliosis. A report of three cases. Meurers B, et al. **J Neurol** 1990 Apr;237(2):113-6

Pressure wave injuries to the nervous system caused by high-energy missile extremity impact: Part II. Distant effects on the central nervous system--a light and electron microscopic study on pigs. Suneson A, et al. **J Trauma** 1990 Mar;30(3):295-306

Homing to central nervous system vasculature by antigen-specific lymphocytes. I. Localization of 14C-labeled cells during acute, chronic, and relapsing experimental allergic encephalomyelitis. Cross AH, et al. **Lab Invest** 1990 Aug;63(2):162-70

The role of gadolinium-diethylenetriaminepentaacetic acid in the evaluation of the central nervous system. Runge VM, et al. **Magn Reson Q** 1990 Apr;6(2):85-107 (58 ref.)

Neuropathology. **Monogr Pathol** 1990;(32):1-142

Biology of the central nervous system: special characteristics, common problems and common tools used today. Cancilla PA. **Monogr Pathol** 1990;(32):1-15 (39 ref.)

Involvement of the central nervous system and its coverings in different forms of amyloidosis. Bohl J, et al. **Prog Clin Biol Res** 1989;317:1007-19

Myelin basic protein and myelinogenesis: morphometric analysis of normal, mutant and transgenic central nervous system. Shine HD, et al. **Prog Clin Biol Res** 1990;336:81-92

Artifacts in routinely immersion fixed nervous tissue. Garman RH. **Toxicol Pathol** 1990;18(1 Pt 2):149-53

Neuropathology of excitatory neurotoxins: the domoic acid model. Tryphonas L, et al. **Toxicol Pathol** 1990;18(1 Pt 2):165-9 (34 ref.)

[CNS involvement in neurofibromatosis. A postmortem study] Schreiber D, et al. **Zentralbl Allg Pathol** 1990; 136(1-2):67-76 (Eng. Abstr.) **(Ger)**

[A clinical study and neuropathological findings of a familial disease with myoclonus and epilepsy--the nosological place of familial essential myoclonus and epilepsy (FEME)] Inazuki G, et al. **Seishin Shinkeigaku Zasshi** 1990;92(1):1-21 **(Jpn)**

PHYSIOLOGY

Studies on the mechanisms underlying CNS-induced natriuresis. Ulfendahl HR, et al. **Acta Physiol Scand Suppl** 1989;583:75-8

Axonal regeneration in the mammalian central nervous system. A critique of hypotheses. Oorschot DE, et al. **Adv Anat Embryol Cell Biol** 1990;119:1-118 (696 ref.)

Oral ethanol self-administration: a behavioral pharmacological approach to CNS control mechanisms. Samson HH, et al. **Alcohol** 1990 May-Jun;7(3):187-91 (18 ref.)

Influence of central and peripheral norepinephrine on the antibody response. Vidal J. **Allergol Immunopathol (Madr)** 1990 Jan-Feb;18(1):41-6

Function of vitamin B12 in the central nervous system as revealed by congenital defects. Hall CA. **Am J Hematol** 1990 Jun;34(2):121-7 (20 ref.)

Synaptic mechanisms regulating cardiovascular afferent inputs to solitary tract nucleus. Mifflin SW, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H653-61 (44 ref.)

Regulation of plasma atrial natriuretic peptide by the central nervous system. Rauch AL, et al. **Am J Physiol** 1990 Feb; 258(2 Pt 2):R531-5

Olfactory neurons exhibit heterogeneity in depolarization-induced calcium changes. Restrepo D, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1051-61

High spinal anesthesia does not depress central nervous system function as measured by central conduction time and somatosensory evoked potentials. Lang E, et al. **Anesth Analg** 1990 Aug;71(2):176-80

Central nervous system regulation of gastrointestinal motility. Burks TF. **Ann N Y Acad Sci** 1990;597:36-42 (39 ref.)

Taste responses from the entire gustatory apparatus. Norgren R, et al. **Ann N Y Acad Sci** 1989;575:246-63; discussion 263-4 (73 ref.)

Immunoglobulins promote remyelination in the central nervous system. Rodriguez M, et al. **Ann Neurol** 1990 Jan; 27(1):12-7

Hypercortisolism among socially subordinate wild baboons originates at the CNS level. Sapolsky RM. **Arch Gen Psychiatry** 1989 Nov;46(11):1047-51

Central control of body temperature. A review. Hissa R. **Arctic Med Res** 1990 Jan;49(1):3-15 (62 ref.)

Moderate cold exposure shortens evoked potential latencies in humans. Van Orden KF, et al. **Aviat Space Environ Med** 1990 Jul;61(7):636-9

A model of olfactory adaptation and sensitivity enhancement in the olfactory bulb. Li Z. **Biol Cybern** 1990;62(4):349-61

The central nervous system. Edelson RC. **Biomed Instrum Technol** 1989 Jul-Aug;23(4):321-3

Embryonic motoneurons grafted into the adult CNS can differentiate and migrate. Demierre B, et al. **Brain Res** 1990 Mar 5;510(2):355-9

Olfactory discrimination over a wide concentration range. Comparison of receptor cell and bulb neuron abilities. Duchamp-Viret P, et al. **Brain Res** 1990 May 28; 517(1-2):256-62

Peripheral mechanisms of olfactory discrimination of complex mixtures by the spiny lobster: no cell types for mixtures but different contributions of the cells to the across neuron patterns. Girardot MN, et al. **Brain Res** 1990 Apr 16;513(2):225-36

ATP-sensitive chemoreceptors: antagonism by other nucleotides and the potential implications of ectonucleotidase activity. Gleeson RA, et al. **Brain Res** 1989 Sep 11;497(1):12-20

Induction of tyrosine hydroxylase expression in rat forebrain neurons. Guthrie KM, et al. **Brain Res** 1989 Sep 11; 497(1):117-31

Activation of excitatory amino acid inputs to supraoptic neurons. I. Induced increases in dye-coupling in lactating, but not virgin or male rats. Hatton GI, et al. **Brain Res** 1990 Apr 16;513(2):264-9

Tumour necrosis factor-alpha and lymphotoxin have opposite effects on sympathetic efferent nerves to brown adipose tissue by direct action in the central nervous system. Holt SJ, et al. **Brain Res** 1989 Sep 11;497(1):183-6

Ca2(+)-dependent adaptive properties in the solitary olfactory receptor cell of the newt. Kurahashi T, et al. **Brain Res** 1990 May 7;515(1-2):261-8

Activation of excitatory amino acid inputs to supraoptic neurons. II. Increased dye-coupling in maternally behaving virgin rats. Modney BK, et al. **Brain Res** 1990 Apr 16; 513(2):270-3

Properties of K-currents in unmyelinated presynaptic axons of brain revealed revealed by extracellular polarisation. Scholfield CN. **Brain Res** 1990 Jan 15;507(1):121-8

Alterations in gonadotropin-releasing hormone immunoactivities in discrete brain areas of male goldfish during spawning behavior. Yu KL, et al. **Brain Res** 1990 Mar 26;512(1):89-94

Modular construction of nervous systems: a basic principle of design for invertebrates and vertebrates. Leise EM. **Brain Res Brain Res Rev** 1990 Jan-Apr;15(1):1-23 (252 ref.)

Physiological and pathophysiological roles of excitatory amino acids during central nervous system development. McDonald JW, et al. **Brain Res Brain Res Rev** 1990 Jan-Apr;15(1):41-70 (246 ref.)

Are glial cells targets of the central noradrenergic system? A review of the evidence. Stone EA, et al. **Brain Res Brain Res Rev** 1989 Oct-Dec;14(4):297-309 (116 ref.)

Olfactory associative conditioning in infant rats with brain stimulation as reward. I. Neurobehavioral consequences. Wilson DA, et al. **Brain Res Dev Brain Res** 1990 May 1; 53(2):215-21

Regulation of synaptic transmission in the central nervous system: long-term potentiation. Kennedy MB. **Cell** 1989 Dec 1;59(5):777-87 (110 ref.)

Differential exon expression in myelin basic protein transcripts during central nervous system (CNS) remyelination. Jordan CA, et al. **Cell Mol Neurobiol** 1990 Mar;10(1):3-18

Central nervous system mechanisms involved in inhibition of renal sympathetic nerve activity induced by arginine vasopressin. Suzuki S, et al. **Circ Res** 1989 Nov; 65(5):1390-9

Muscle and tendon: properties, models, scaling, and application to biomechanics and motor control. Zajac FE. **Crit Rev Biomed Eng** 1989;17(4):359-411 (177 ref.)

Bidirectional interaction between the central nervous system and the immune system. Rabin BS, et al. **Crit Rev Immunol** 1989;9(4):279-312 (163 ref.)

Contribution of central and reflex nervous activity to the rapid increase in pulmonary ventilation at the start of muscular exercise in man. Concu A. **Eur J Appl Physiol** 1989;59(1-2):10-5

Magneto-electrical stimulation of central motor pathways compared with percutaneous electrical stimulation. Ugawa Y, et al. **Eur Neurol** 1990;30(1):14-8

Physiological basis for neuroimmunomodulation. Neveu PJ, et al. **Fundam Clin Pharmacol** 1990;4(3):281-305 (232 ref.)

Synaptic membrane aging in the central nervous system. Ando S, et al. **Gerontology** 1990;36 Suppl 1:10-4

Central and peripheral actions of a nonpeptidic angiotensin II receptor antagonist. Koepke JP, et al. **Hypertension** 1990 Jun;15(6 Pt 2):841-7

Nerve growth factor activity and aging in CNS. Perez-Polo JR, et al. **Int J Clin Pharmacol Res** 1990;10(1-2):15-26 (103 ref.)

Biochemical characterization of three stimulatory GTP-binding proteins. The large and small forms of Gs and the olfactory-specific G-protein, Golf. Jones DT, et al. **J Biol Chem** 1990 Feb 15;265(5):2671-6

The peripheral nervous system--central nervous system regeneration dichotomy: a role for glial cell transplantation. Franklin RJ, et al. **J Cell Sci** 1990 Feb;95 (Pt 2):185-90 (76 ref.)

Expression of the potent vasoconstrictor endothelin in the human central nervous system. Lee ME, et al. **J Clin Invest** 1990 Jul;86(1):141-7

Sound-generating (sonic) motor system in a teleost fish (Porichthys notatus): sexual polymorphisms and general synaptology of sonic motor nucleus. Bass AH, et al. **J Comp Neurol** 1989 Aug 8;286(2):154-69

Morphometric modifications associated with early sensory experience in the rat olfactory bulb: I. Volumetric study of the bulbar layers. Royet JP, et al. **J Comp Neurol** 1989 Nov 22;289(4):586-93

Morphometric modifications associated with early sensory experience in the rat olfactory bulb: II. Stereological study of the population of olfactory glomeruli. Royet JP, et al. **J Comp Neurol** 1989 Nov 22;289(4):594-609

Effects of temperature on a central synapse between identified motor neurons in the locust. Burrows M. **J Comp Physiol [A]** 1989 Sep;165(5):687-95

A circadian rhythm in neural activity can be recorded from the central nervous system of the cockroach. Colwell CS, et al. **J Comp Physiol [A]** 1990 Mar;166(5):643-9

Central and peripheral opiate receptors appear to be activated during controlled haemorrhagic hypotension. van Giersbergen PL, et al. **J Hypertens Suppl** 1989 Dec; 7(6):S26-7

Neuron-specific modulation by serotonin of regenerative outgrowth and intracellular calcium within the CNS of Helisoma trivolvis. Murrain M, et al. **J Neurobiol** 1990 Jun; 21(4):611-8

Response similarity to odors in olfactory bulb output cells presumed to be connected to the same glomerulus: electrophysiological study using simultaneous single-unit recordings. Buonviso N, et al. **J Neurophysiol** 1990 Mar; 63(3):447-54

Paired individual and mean postsynaptic currents recorded in four-cell networks of Aplysia. Gardner D. **J Neurophysiol** 1990 May;63(5):1226-40

Afferent and association fiber differences in short-term potentiation in piriform (olfactory) cortex of the rat. Hasselmo ME, et al. **J Neurophysiol** 1990 Jul;64(1):179-90

Influence of central set on human postural responses. Horak FB, et al. **J Neurophysiol** 1989 Oct;62(4):841-53

Mechanism of potassium uptake in neuropile glial cells in the central nervous system of the leech. Wuttke WA. **J Neurophysiol** 1990 May;63(5):1089-97

Construction of a protoglomerular template by olfactory axons initiates the formation of olfactory glomeruli in the insect brain. Oland LA, et al. **J Neurosci** 1990 Jul; 10(7):2096-112

Neuroplasticity in the olfactory system: differential effects of central and peripheral lesions of the primary olfactory pathway on the expression of B-50/GAP43 and the olfactory marker protein. Verhaagen J, et al. **J Neurosci Res** 1990 May;26(1):31-44

Membrane potential dependence of intracellular pH regulation by identified glial cells in the leech central

nervous system. Deitmer JW, et al. **J Physiol (Lond)** 1990 Feb;421:617-31

The use of lacZ gene fusions in the studies of mammalian development: developmental regulation of mammalian homeobox genes in the CNS. Zakany J, et al. **J Physiol (Paris)** 1990;84(1):21-6 (45 ref.)

Growth factors, feeding regulation and the nervous system. Plata-Salaman CR. **Life Sci** 1989;45(14):1207-17 (144 ref.)

Electrophysiological effects of somatostatin-14 and somatostatin-28 on mammalian central nervous system neurons. Dichter MA, et al. **Metabolism** 1990 Sep;39(9 Suppl 2):86-90

Modulation by antidepressant drugs of CNS postsynaptic alpha 2-adrenoceptors mediating mydriasis in the rat. Menargues A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jan-Feb; 341(1-2):101-7

How well do we understand neurotrophic factors and the control of CNS neuronal growth? Walicke PA. **Neurobiol Aging** 1989 Sep-Oct;10(5):535-7; discussion 552-3

Model of classical conditioning on the isolated mollusk CNS. Babkina NV, et al. **Neurosci Behav Physiol** 1990 Jan-Feb; 20(1):1-4

A monosynaptic connection between identified snail neurons. Berezhnaya LA, et al. **Neurosci Behav Physiol** 1990 Mar-Apr;20(2):174-7

Comparative analysis of the action of a vasopressin analogue on functionally different neurons of the edible snail. Kudryashova IV. **Neurosci Behav Physiol** 1990 Jan-Feb; 20(1):26-31

Stimulus access to olfactory and vomeronasal receptors in utero. Coppola DM, et al. **Neurosci Lett** 1989 Dec 4; 106(3):241-8

Indications for a hormonal function of dopamine in the central nervous system of the snail Lymnaea stagnalis. Werkman TR, et al. **Neurosci Lett** 1990 Jan 1; 108(1-2):167-72

Supraoptic nucleus afferents from the main olfactory bulb--II. Intracellularly recorded responses to lateral olfactory tract stimulation in rat brain slices. Hatton GI, et al. **Neuroscience** 1989;31(2):289-97

Neural basis of olfactory memory in the context of pregnancy block. Kaba H, et al. **Neuroscience** 1989;32(3):657-62

Fluprazine hydrochloride: no influence on the odor detection performance of male rats. Doty RL, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):699-703

Selective olfactory pathway lesions differentially affect runway behavior of the rat. Cattarelli M. **Physiol Behav** 1989 Sep;46(3):393-6

Central versus peripheral effects on temperature preference and body temperature following alteration of 5-HT in maturing mice. Goodrich C, et al. **Physiol Behav** 1989 Aug; 46(2):203-9

Participation of the olfactory system in the control of approach behavior of the female rat to the male. Romero PK, et al. **Physiol Behav** 1990 Apr;47(4):685-90

Hippocampal lesions are without effect on olfactory memory formation in the context of pregnancy block. Selway R, et al. **Physiol Behav** 1990 Feb;47(2):249-52

Quantal analysis of synaptic potentials in neurons of the central nervous system. Redman S. **Physiol Rev** 1990 Jan; 70(1):165-98 (132 ref.)

Neuroendocrine involvements of the prostaglandin autacoids. Nechifor M. **Physiologie** 1989 Jul-Sep;26(3):217-21 (37 ref.)

An explanation for the purported excitation of piriform cortical neurons by N-acetyl-L-aspartyl-L-glutamic acid (NAAG). Whittemore ER, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9602-5

Central control of brown adipose tissue. Rothwell NJ. **Proc Nutr Soc** 1989 Jul;48(2):197-206 (79 ref.)

Nicotinic receptors in the CNS. Their role in synaptic transmission. Proceedings of an international symposium. Uppsala, Sweden, June 19-21, 1988. **Prog Brain Res** 1989; 79:1-366

Human EEG and odor response. Lorig TS. **Prog Neurobiol** 1989;33(5-6):387-98 (57 ref.)

Electrical charge properties of connective tissue in the insect central nervous system, with regard to ionic homeostasis of the nerve cell environment. Schofield PK. **Symp Soc Exp Biol** 1989;43:379-88 (38 ref.)

Ion conductances affected by 5-HT receptor subtypes in mammalian neurons. Bobker DH, et al. **Trends Neurosci** 1990 May;13(5):169-73 (57 ref.)

The role of perireceptor events in chemosensory processes. Carr WE, et al. **Trends Neurosci** 1990 Jun;13(6):212-5 (47 ref.)

The role of receptor subtype diversity in the CNS. Schofield PR, et al. **Trends Neurosci** 1990 Jan;13(1):8-11 (58 ref.)

[Heart rate control and determinant factors] Ninomiya I. **Nippon Rinsho** 1990 Feb;48(2):233-9 (Jpn)

[Role of the central nervous system and autonomic nervous system in the development of essential hypertension] Ueno Y, et al. **Nippon Rinsho** 1989 Sep;47(9):1917-22 (Jpn)

[The neural organization of the olfactory pathways] Motokizawa F, et al. **Nippon Seirigaku Zasshi** 1989; 51(11):345-62 (100 ref.) (Jpn)

[Neural and ethological relations in the evaluation of motor control changes. I. Neural substrates of motricity] Garcia-Cairasco N. **Arq Neuropsiquiatr** 1989 Jun; 47(2):165-71 (32 ref.) (Eng. Abstr.) (Por)

[Effect of olfactory stimuli on associative speech reactions] Aslanov AS, et al. **Fiziol Cheloveka** 1989 May-Jun; 15(3):170-3 (Rus)

[Individual characteristics in the functional regulation of the central nervous system] Gorev AS. **Fiziol Cheloveka** 1989 Sep-Oct;15(5):3-9 (Rus)

[The monosynaptic connection: identified synapses in the CNS of the edible snail] Arakelov GG, et al. **Zh Vyssh Nerv Deiat** 1989 Jul-Aug;39(4):737-45 (Eng. Abstr.) (Rus)

[Variability in the morphofunctional differentiation of the CNS in a heterogeneous population of laboratory mice] Astaurova NB, et al. **Zh Vyssh Nerv Deiat** 1989 Sep-Oct; 39(5):935-40 (Eng. Abstr.) (Rus)

[Language and reality: the origin of man] Maturana H. **Arch Biol Med Exp (Santiago)** 1989 Jul;22(2):77-81 (Eng. Abstr.) (Spa)

[The central nervous system and neuroendocrine system in the regulation of the immune response] Nahmod VE, et al. **Medicina (B Aires)** 1989;49(2):166-70 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Modification of central dopaminergic mechanisms by continuous levodopa therapy for advanced Parkinson's disease. Mouradian MM, et al. **Ann Neurol** 1990 Jan; 27(1):18-23

Schizotaxia revisited. Meehl PE. **Arch Gen Psychiatry** 1989 Oct;46(10):935-44 (81 ref.)

Neither adrenergic nor cholinergic antagonists in the central nervous system affect 2-deoxy-D-glucose(2-DG)-induced hyperglycemia. Iguchi A, et al. **Brain Res** 1990 Mar 5; 510(2):321-5

Functional deficits of central sensory and motor pathways in patients with cervical spinal stenosis: a study of SEPs and EMG responses to non-invasive brain stimulation. Masur H, et al. **Electroencephalogr Clin Neurophysiol** 1989 Nov-Dec;74(6):450-7

Central motor conduction studies in motor neurone disease using magnetic brain stimulation. Schriefer TN, et al. **Electroencephalogr Clin Neurophysiol** 1989 Nov-Dec; 74(6):431-7

F responses and central motor conduction in multiple sclerosis. Smith SJ, et al. **Electroencephalogr Clin Neurophysiol** 1989 Nov-Dec; 74(6):438-43

Intracisternal naloxone and cardiac nerve blockade prevent vasodilatation during simulated haemorrhage in awake rabbits. Evans RG, et al. **J Physiol (Lond)** 1989 Feb; 409:1-14

Tolerance to nicotine-induced sympathoadrenal stimulation and cross-tolerance to stress: differential central and peripheral mechanisms in rats. Kiritsy-Roy JA, et al. **Neuropharmacology** 1990 Jun;29(6):579-89

Some neurological aspects of reanimatology. Negovsky VA. **Resuscitation** 1990 Jun;19(3):189-97

Implications of olfactory agnosia for understanding sex differences in schizophrenia. Kopala L, et al. **Schizophr Bull** 1990;16(2):255-61 (45 ref.)

Statistical approach to the analysis of sensitivity to CNS oxygen toxicity in rats. Benjamini Y, et al. **Undersea Biomed Res** 1990 May;17(3):213-21

[Mechanisms of repair of the brain, spinal cord and peripheral nerves in relation to resolving problems of demyelination and toxic injury] Vymazal J. **Cesk Neurol Neurochir** 1989 Oct;52(6):356-9 (Cze)

[Neurological gait changes in old age: basic principles, senile gait] Waespe W, et al. **Schweiz Med Wochenschr** 1989 Oct 21;119(42):1445-53 (69 ref.) (Eng. Abstr.) (Ger)

[The central nervous system and inflammation: the role of opioid peptides] Mazzone A, et al. **Medicina (Firenze)** 1990 Jan-Mar;10(1):23-5 (Eng. Abstr.) (Ita)

[Sleep apnea in well-controlled myasthenia gravis] Shintani S, et al. **Rinsho Shinkeigaku** 1989 May;29(5):547-53 (Eng. Abstr.) (Jpn)

[Miller Fisher syndrome: a report of 4 cases and review of the nosologic position] Camargo SG, et al. **Arq Neuropsiquiatr** 1989 Sep;47(3):359-64 (Eng. Abstr.) (Por)

[Neural and ethological relations in the evaluation of motor control changes. II. Experimental models] Garcia-Cairasco N. **Arq Neuropsiquiatr** 1989 Jun;47(2):172-81 (56 ref.) (Eng. Abstr.) (Por)

SURGERY

Theories on the promotion of CNS transplant integration by selective activation of presynaptic enzyme cascades: prospects for future clinical applications. Moskowitz N. **Med Hypotheses** 1990 Jul;32(3):191-201 (44 ref.)

ULTRASTRUCTURE

Corpuscular bodies in the palate of the rat. 2. Innervation and central projection. Liem RS, et al. **Acta Anat (Basel)** 1990;138(1):65-74

Intracytoplasmic eosinophilic inclusions in the neurons of the central nervous system. Peña CE, et al. **Acta Neuropathol (Berl)** 1989;79(1):73-7

Cholinergic synapses in the central nervous system: studies of the immunocytochemical localization of choline acetyltransferase. Houser CR. **J Electron Microsc Tech** 1990 May;15(1):2-19 (99 ref.)

Monoamine synaptic structure and localization in the central nervous system. Maley BE, et al. **J Electron Microsc Tech** 1990 May;15(1):20-33 (131 ref.)

Radial component of CNS myelin: junctional subunit structure and supramolecular assembly. Kosaras B, et al. **J Neurocytol** 1990 Apr;19(2):187-99

Neuroaxonal dystrophy: an ultrastructural link between subacute spongiform virus encephalopathies and Alzheimer's disease. Liberski PP, et al. **Prog Clin Biol Res** 1989;317:549-57 (34 ref.)

[Electron microscopic changes in the central nervous system in experimental lymphogenous encephalopathy. III. The changes revealed by electron optics in the central nervous system in pantothenic acid/pyridoxine deficiency] Joó F, et al. **Angiologica** 1967;4(5):271-8 (Ger)

[The ultrastructural changes in the central and peripheral nervous system in burns] Isaev IM, et al. **Arkh Patol** 1990; 52(4):39-43 (Eng. Abstr.) (Rus)

CENTRAL NERVOUS SYSTEM AGENTS

CHEMICAL SYNTHESIS

Synthesis and CNS activity of some new substituted indeno [1,2-c] pyrazoles. Quraishi MA. **Farmaco** 1989 Jul-Aug; 44(7-8):753-8

[Potential CNS-active tricyclic compounds with a bridged middle ring. 9,10-Epoxy-9,10-dihydroanthracenes with dialkylamino side chain] Linde HF, et al. **Arch Pharm (Weinheim)** 1989 Sep;322(9):565-8 (Eng. Abstr.) (Ger)

[Potentially CNS-active tricyclic compounds with a bridged central ring. 3. Synthesis of partially hydrogenated 9,10-epithioanthracenes] Linde HF, et al. **Arch Pharm (Weinheim)** 1990 May;323(5):295-9 (Eng. Abstr.) (Ger)

[Synthesis of pyrazolo[3,4-e][1,4]diazepine-4,7-diones with central nervous system activity] Sprio V, et al. **Farmaco** 1989 Sep;44(9):809-18 (Eng. Abstr.) (Ita)

PHARMACOLOGY

Basic mechanisms of action of drugs used in the treatment of essential tremor. Guan XM, et al. **Clin Neuropharmacol** 1990 Jun;13(3):210-23 (139 ref.)

Effects of DM-9384 in a model of amnesia based on animals with GABAergic neuronal dysfunctions. Nabeshima T, et al. **Eur J Pharmacol** 1990 Mar 20;178(2):143-9

Effects of DM-9384, a pyrrolidone derivative, on alcohol- and chlordiazepoxide-induced amnesia in mice. Nabeshima T, et al. **Pharmacol Biochem Behav** 1990 Jun;36(2):233-6

[Changes in thymocyte DNA template activity under the effect of agents acting on the central nervous system] Golikov PP, et al. **Patol Fiziol Eksp Ter** 1989 May-Jun; (3):18-21 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

Methodological concerns: evaluating central nervous system (CNS) active compounds in Alzheimer's disease (AD). Cutler NR. **Prog Clin Biol Res** 1989;317:1311-7

URINE

A survey of drugs of abuse testing by clinical laboratories in the United Kingdom. Steering Committee for the UK-External Quality Assessment Scheme for Therapeutic Drug Assays. Burnett D, et al. **Ann Clin Biochem** 1990 May;27 (Pt 3):213-22

CENTRAL NERVOUS SYSTEM DEPRESSANTS

CHEMICAL SYNTHESIS

3,5-Diphenyl-1H-pyrazole derivatives. III--Esters from 1-(2-hydroxyethyl)-3,5-diphenyl-1H-pyrazole and its 4-bromo derivative with hypotensive, depressant, antiarrhythmic and analgesic activities. Bondavalli F, et al. **Farmaco** 1989 Jul-Aug;44(7-8):655-70

Amides of 1,3,3-trimethyl-n-[(2-pyridyl)methyl]-2-oxabicyclo [2.2.2]octan-6-amine with depressant and antiarrhythmic activities. Mariani E, et al. **Farmaco** 1989 May;44(5):503-10

Synthesis and preliminary pharmacological investigation of the central action of derivatives of 3-aminomethyl-5-(p-chlorophenyl)-tetrahydrofuran-2-one and 2-aminomethyl-4-(p-chlorophenyl)-4-hydroxybutyric acid. Zabska R, et al. **Pol J Pharmacol Pharm** 1989 Jan-Feb; 41(1):77-87

[Stereoselective differences of central nervous system-depressive action of a homologous series of 3-alkyl-thalidomide analysis] Büch HP, et al. **Arzneimittelforschung** 1990 Jan;40(1):32-6 (Eng. Abstr.) (Ger)

PHARMACOLOGY

Development of tolerance to the CNS effects of aminoglutethimide in mice. Ahmad B, et al. **Eur J Pharmacol** 1990 Jul 3;182(2):237-44

Pharmacodynamic studies on Polypodium vulgare (Linn.). Mannan A, et al. **Indian J Exp Biol** 1989 Jun;27(6):556-60

Pharmacological studies on drug dependence in rodents: dependence on opioids and CNS depressants. Suzuki T. **Jpn J Pharmacol** 1990 Jan;52(1):1–10 (50 ref.)

POISONING

Toxicology of selected pesticides, drugs, and chemicals. Illicit and abused drugs. Kisseberth WC, et al. **Vet Clin North Am Small Anim Pract** 1990 Mar; 20(2):405–18 (39 ref.)

CENTRAL NERVOUS SYSTEM DISEASES

Proceedings of the 28th Scandinavian Congress of Neurology. Reykjavík, Iceland June 6–9, 1990. Abstracts. **Acta Neurol Scand Suppl** 1990;128:1–88

Primary central nervous system lymphomas. Formenti SC, et al. **Cancer Treat Res** 1989;42:213–29 (107 ref.)

Turcot's syndrome: a diagnostic consideration in a child with primary adenocarcinoma of the colon. Tithecott GA, et al. **J Pediatr Surg** 1989 Nov;24(11):1189–91

Histoplasma capsulatum infections of the central nervous system. A clinical review. Wheat LJ, et al. **Medicine (Baltimore)** 1990 Jul;69(4):244–60 (86 ref.)

CNS Lyme disease [letter; comment] **Neurology** 1990 Jan; 40(1):189–91 Comment on: Neurology 1989 Jun;39(6):753–9.

[Neurobrucellosis. Report of 25 cases] García T, et al. **Neurologia** 1986 Mar–Apr;1(2):63–71 (45 ref.) (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

Central nervous system acute promyelocytic leukaemia: a report of three cases. Marra R, et al. **Haematologia (Budap)** 1989;22(3):195–9

Ureaplasma and mycoplasma infections of the central nervous system in preterm infants [letter; comment] [see comments] Shaw NJ, et al. **Lancet** 1989 Dec 23–30; 2(8678–8679):1530–1 Comment on: Lancet 1988 Jan 2–9;1(8575–6):17–21. Comment in: Lancet 1990 Mar 17;335(8690):658–9.

Central nervous system involvement in the erythrophagocytic disorders of infancy: the role of cerebrospinal fluid neopterins in their differential diagnosis and clinical management. Howells DW, et al. **Pediatr Res** 1990 Aug;28(2):116–9

[Evaluation of antigenic fractions of Cysticercus cellulosae for the immunodiagnosis of neurocysticercosis using antibody–lectin conjugates] Rossi CL. **Arq Neuropsiquiatr** 1989 Sep;47(3):287–90 (Eng. Abstr.) **(Por)**

[Pathogenesis of central nervous system infections and the cerebrospinal fluid. Critical analysis of the diagnostic contribution] Spina-França A. **Rev Paul Med** 1989 May–Jun;107(3):169–74 (20 ref.) (Eng. Abstr.) **(Por)**

CHEMICALLY INDUCED

Central anticholinergic syndrome (CAS) in anesthesia and intensive care. Schneck HJ, et al. **Acta Anaesthesiol Belg** 1989;40(3):219–28 (49 ref.)

Delayed onset of distal axonal neuropathy in primates after prolonged low-level administration of a neurotoxin. Schaumburg HH, et al. **Ann Neurol** 1989 Oct;26(4):576–9

Is the human nervous system most sensitive to environmental toxins? [editorial] Kilburn KH. **Arch Environ Health** 1989 Nov–Dec;44(6):343–4

Chronic neurobehavioural effects of toluene. Foo SC, et al. **Br J Ind Med** 1990 Jul;47(7):480–4

Effects of low exposure to inorganic mercury on psychological performance. Soleo L, et al. **Br J Ind Med** 1990 Feb;47(2):105–9

Methanol poisoning: factors associated with neurologic complications. Anderson TJ, et al. **Can J Neurol Sci** 1989 Nov;16(4):432–5

Pathogenesis of pulmonary edema associated with intracisternal endotoxin in dogs. Nahum A, et al. **J Appl Physiol** 1990 Apr;68(4):1688–95

Tolerability and well-being with metoprolol in a controlled release (CR/ZOK) formulation: a review article. Dimenäs E, et al. **J Clin Pharmacol** 1990 Feb;30(2 Suppl):S92–7 (54 ref.)

Central nervous system toxicity of tricyclic antidepressants: phenomenology, course, risk factors, and role of therapeutic drug monitoring. Preskorn SH, et al. **J Clin Psychopharmacol** 1990 Apr;10(2):88–95

Detecting subtle human CNS dysfunction: challenge for toxicologists in 1990's [editorial; comment] Becker CE, et al. **J Toxicol Clin Toxicol** 1990;28(1):vii–xi Comment on: J Toxicol Clin Toxicol 1990;28(1):1–20. Comment on: J Toxicol Clin Toxicol 1990;28(1):21–8.

Ifosfamide pharmacokinetics and neurotoxicity [letter] Lewis LD, et al. **Lancet** 1990 Jan 20;335(8682):175–6

Nervous reactions to terfenadine [letter; comment] Masheter HC. **Lancet** 1989 Oct 28;2(8670):1034 Comment on: Lancet 1989 Sep 9;2(8663):615–6.

Slow recovery of central axons in acrylamide neuropathy. Kaji R, et al. **Muscle Nerve** 1989 Oct;12(10):816–26

Prenatal exposure to drugs: behavioral distortions reflecting CNS impairment? Rodning C, et al. **Neurotoxicology** 1989 Fall;10(3):629–34

Beta-blockers and central nervous system side effects. McAinsh J, et al. **Pharmacol Ther** 1990;46(2):163–97 (220 ref.)

[Central anticholinergic syndrome during postoperative period] Rupreht J, et al. **Ann Fr Anesth Reanim** 1990; 9(3):295–304 (53 ref.) (Eng. Abstr.) **(Fre)**

[Neuromyeloencephalopathy caused by high-dose muzolimine medication in patients with renal failure] Pohlmann-Eden B, et al. **Fortschr Neurol Psychiatr** 1990 Mar;58(3):87–97 (Eng. Abstr.) **(Ger)**

[Acute and chronic effects of organic solvents on the central nervous system. Use of psychobehavioral performance tests in the assessment of toxicity] Kishi R, et al. **Sangyo Igaku** 1990 Jan;32(1):3–17 (86 ref.) (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

The probable mechanisms of brain damage and epilepsy in febrile convulsions, Singapore syndrome and Reye's syndrome. Aiyathurai EJ, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Jun;31(3):245–58 (55 ref.)

CNS toxoplasmosis as the initial presentation of the acquired immunodeficiency syndrome. Snyder HS. **Am J Emerg Med** 1989 Nov;7(6):588–92

Aspergillus infection of the central nervous system in patients with acquired immunodeficiency syndrome. Woods GL, et al. **Arch Neurol** 1990 Feb;47(2):181–4

Central pain [letter] Bowsher D. **BMJ** 1990 Jun 23; 300(6740):1652

Autoimmune myastenia gravis with thymoma following the spontaneous remission of stiff-man syndrome. Piccolo G, et al. **Ital J Neurol Sci** 1990 Apr;11(2):177–80

Progressive cranial polyneuropathy caused by primary central nervous system melanoma. Fish LA, et al. **J Clin Neuro Ophthalmol** 1990 Mar;10(1):41–4

Crohn disease in an infant with central nervous system thrombosis and protein-losing enteropathy. Mezoff AG, et al. **J Pediatr** 1990 Sep;117(3):436–9 (14 ref.)

Neurologic aspects of sleep apnea and related respiratory disturbances. Aldrich MS. **Otolaryngol Clin North Am** 1990 Aug;23(4):761–9 (41 ref.)

Congenital toxoplasmosis occurring in infants perinatally infected with human immunodeficiency virus I. Mitchell CD, et al. **Pediatr Infect Dis J** 1990 Jul;9(7):512–8

Spinal meningeal cyst concomitant with lumbar spondylolisthesis. A case report. Rojviroj S, et al. **Spine** 1990 May;15(5):432–3

[Poorer speech... then what?] van Harskamp F, et al. **Ned Tijdschr Geneeskd** 1990 Apr 28;134(17):841–3 **(Dut)**

[The incidence of nosocomial infections in preventive administration of H2 receptor antagonists in neurology] Berlit P, et al. **Nervenarzt** 1989 Nov;60(11):710–2 **(Ger)**

[A case of sarcoidosis presenting ataxic hemiparesis as an initial clinical manifestation] Orimo S, et al. **Rinsho Shinkeigaku** 1989 Jun;29(6):781–3 (Eng. Abstr.) **(Jpn)**

[Progressive hemifacial atrophy with sympathetic nerve dysfunction of central origin] Tsuchiya I, et al. **Rinsho Shinkeigaku** 1989 Sep;29(9):1189–91 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Influenza virus genetic sequences in the blood of children with congenital pathology of the CNS. Tentsov YuYu, et al. **Arch Virol** 1989;108(3–4):301–6

Congenital central nervous system anomalies. Poe LB, et al. **Radiographics** 1989 Sep;9(5):801–26 (78 ref.)

DIAGNOSIS

Magnetic resonance imaging of central nervous system vasculitis. A case report of Henoch–Schönlein purpura. Elinson P, et al. **Acta Paediatr Scand** 1990 Jun–Jul; 79(6–7):710–3

Toxoplasma gondii serology in HIV-infected patients: the development of central nervous system toxoplasmosis in AIDS. Grant IH, et al. **AIDS** 1990 Jun;4(6):519–21

Lyme disease of the CNS: MR imaging findings in 14 cases. Fernandez RE, et al. **AJNR** 1990 May;11(3):479–81

Biopsy-confirmed CNS Lyme disease: MR appearance at 1.5 T. Rafto SE, et al. **AJNR** 1990 May;11(3):482–4

Half-Fourier MR imaging of CNS disease. Runge VM, et al. **AJNR** 1990 Jan–Feb;11(1):77–82

Neuronal intranuclear inclusion disease in a child: diagnosis by rectal biopsy. Goutières F, et al. **Ann Neurol** 1990 Jan; 27(1):103–6 (13 ref.)

Signs of central nervous system dysfunction in obsessive-compulsive disorder. Hollander E, et al. **Arch Gen Psychiatry** 1990 Jan;47(1):27–32

Detection and recognition of visual field defects resulting from lesions involving the visual pathways [see comments] Wellings PC. **Aust N Z J Ophthalmol** 1989 Nov;17(4):331–5 Comment in: Aust N Z J Ophthalmol 1989 Nov;17(4):329–30.

Magnetic resonance imaging of the CNS. Bradshaw JR. **Br J Hosp Med** 1989 Dec;42(6):472–9 (4 ref.)

CNS cryptococcosis: unusual aspects. Cochius JI, et al. **Clin Exp Neurol** 1989;26:183–91

Electronystagmographic findings among 127 dizzy patients: correlation with the aetiology of dizziness. Ojala M, et al. **Clin Otolaryngol** 1989 Aug;14(4):343–8

Brucellosis of the central nervous system. A case report of an infected infant. Drutz JE. **Clin Pediatr (Phila)** 1989 Oct; 28(10):476–8

Computed tomography versus magnetic resonance imaging. Of the pediatric central nervous system. Techniques, indications, and examples. Gusnard DA, et al. **Clin Pediatr (Phila)** 1990 Mar;29(3):136–57 (23 ref.)

Diagnostic assessment of central and peripheral lesions by means of audiomotor reflex. Ljubin C. **Electromyogr Clin Neurophysiol** 1989 Sep–Oct;29(6):345–54

The role of MRI scanning in neuro-ophthalmology. Spalton DJ, et al. **Eye** 1989;3 (Pt 6):651–62 (11 ref.)

Central nervous system involvement in non-Hodgkin's lymphomas. Swencz-Szczepanik K, et al. **Hamatol Bluttransfus** 1989;32:78–81

Neurosonographic features of central nervous system infections in infancy and childhood. Frank LM, et al. **J Child Neurol** 1989;4 Suppl:S41–51 (31 ref.)

Serological diagnosis of neurobrucellosis. Sanchez-Sousa A, et al. **J Clin Pathol** 1990 Jan;43(1):79–81

Isolated central nervous system granulomatosis resembling sarcoidosis. Lee SC, et al. **J Neurol** 1989 Sep;236(6):356–8

PET, CT, and MRI in the evaluation of neuropsychiatric disorders: current applications. Jolles PR, et al. **J Nucl Med** 1989 Oct;30(10):1589–606 (160 ref.)

Echoencephalographic findings in neonates associated with maternal cocaine and methamphetamine use: incidence and clinical correlates. Dixon SD, et al. **J Pediatr** 1989 Nov; 115(5 Pt 1):770–8

Magnetic resonance imaging in the central nervous system: comparison with computed tomography. Bradley WG Jr. **Magn Reson Annu** 1986;:81–122 (88 ref.)

Magnetic resonance imaging for pediatric diagnosis. Brasch RC. **Magn Reson Annu** 1987;:179–201 (32 ref.)

The role of gadolinium-diethylenetriaminepentaacetic acid in the evaluation of the central nervous system. Runge VM, et al. **Magn Reson Q** 1990 Apr;6(2):85–107 (58 ref.)

Magnetic resonance imaging of the central nervous system. Miller DH. **N Z Med J** 1989 Oct 25;102(878):553–4 (28 ref.)

Dynamic posturography findings in central nervous system disorders. Voorhees RL. **Otolaryngol Head Neck Surg** 1990 Jul;103(1):96–101

Single central nervous system lesions can simulate multiple sclerosis. Grosset DG, et al. **Postgrad Med J** 1989 Sep; 65(767):656–9

Gd DTPA: a review of clinical indications in central nervous system magnetic resonance imaging. Runge VM, et al. **Radiographics** 1989 Sep;9(5):929–58 (54 ref.)

Fetal central nervous system abnormalities. Spirt BA, et al. **Radiol Clin North Am** 1990 Jan;28(1):59–73

Nervous system manifestations of Lyme disease. Halperin JJ. **Rheum Dis Clin North Am** 1989 Nov;15(4):635–47 (52 ref.)

Otoneurological findings in workers exposed to styrene. Möller C, et al. **Scand J Work Environ Health** 1990 Jun; 16(3):189–94

MR of central nervous system neoplasia of the phakomatoses. Braffman BH, et al. **Semin Roentgenol** 1990 Apr; 25(2):198–217 (139 ref.)

Analysis of neurologic symptoms in deep diving: implications for selection of divers. Todnem K, et al. **Undersea Biomed Res** 1990 Mar;17(2):95–107

[Nuclear resonance tomography of the central nervous system; a good use of the possibilities] van der Knaap MS, et al. **Ned Tijdschr Geneeskd** 1989 Dec 9;133(49):2433–8 **(Dut)**

[What is wrong with this child? Training program for the continuing education of pediatricians] Bartels H, et al. **Monatsschr Kinderheilkd** 1990 Jun;138(6):320, 358–9 **(Ger)**

[The significance of imaging procedures] Reither M. **Monatsschr Kinderheilkd** 1990 Jun;138(6):316–9 (Eng. Abstr.) **(Ger)**

[Increasing cerebrospinal fluid cell count with the sedimentation chamber using polycationic coated slides] Lehmitz R, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Dec;41(12):751–4 (Eng. Abstr.) **(Ger)**

[Magnetic resonance tomography and multiple sclerosis] Kesselring J. **Schweiz Rundsch Med Prax** 1989 Sep 5; 78(36):950–5 (Eng. Abstr.) **(Ger)**

[AIDS of the central nervous system] Wimberger D, et al. **Wien Klin Wochenschr** 1990 Jan 19;102(2):47–51 (16 ref.) (Eng. Abstr.) **(Ger)**

[Involvement of central nervous system in patients with diabetes mellitus detected by evoked potentials] Kondo J, et al. **Rinsho Byori** 1990 Apr;38(4):457–62 (Eng. Abstr.) **(Jpn)**

[Detection of latent spontaneous pathology of the central nervous system and visceral organs in rabbits by determining antibodies to tissue antigens and by a test for delayed hypersensitivity] Kulikova OS, et al. **Patol Fiziol Eksp Ter** 1989 Sep–Oct;(5):47–9 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

The treatment of Listeria monocytogenes infections in the central nervous system. Carvajal A, et al. **Acta Microbiol Hung** 1989;36(2–3):159–63

Central nervous system toxoplasmosis in AIDS patients: efficacy of an intermittent maintenance therapy. Pedrol E, et al. **AIDS** 1990 Jun;4(6):511–7

Treatment of patients with recurrent gliomas with

cyclophosphamide and vincristine. Longee DC, et al. **J Neurosurg** 1990 Apr;72(4):583–8

Drug delivery to the central nervous system: general principles and relevance to therapy for infections of the central nervous system. Scheld WM. **Rev Infect Dis** 1989 Nov–Dec;11 Suppl 7:S1669–90 (215 ref.)

[Excitatory amino acids and their antagonists in central nervous system disorders] Uziel Y, et al. **Harefuah** 1990 Mar 1;118(5):268–71 (45 ref.) **(Heb)**

EPIDEMIOLOGY

Monitoring the safety of childhood immunizations: methods of linking and augmenting computerized data bases for epidemiologic studies. Griffin MR, et al. **Am J Prev Med** 1988;4(2 Suppl):5–13

The inter-regional epidemiological study of childhood cancer (IRESCC): case-control study of children with central nervous system tumours. Birch JM, et al. **Br J Neurosurg** 1990;4(1):17–25

Neurological disorders in Nigerian children with homozygous sickle cell anaemia. Izuora GI, et al. **East Afr Med J** 1989 Oct;66(10):653–7

Human listeriosis in Britain, 1967–85, a summary of 722 cases. 2. Listeriosis in non-pregnant individuals, a changing pattern of infection and seasonal incidence. McLauchlin J. **Epidemiol Infect** 1990 Apr;104(2):191–201

Prevalence survey of major neurological disorders in Sicily. Results of a pilot study. Vita G, et al. **J Neurol** 1989 Sep; 236(6):315–8

Childhood central nervous system tumors. **N Y State J Med** 1989 Nov;89(11):638–9

Lyme borreliosis in Europe. Neurologic disorders. Kristoferitsch W. **Rheum Dis Clin North Am** 1989 Nov; 15(4):767–74 (97 ref.)

Risk of neuropsychiatric disability among painters in the United States. Brackbill RM, et al. **Scand J Work Environ Health** 1990 Jun;16(3):182–8

ETIOLOGY

CNS involvement in Japanese patients with chronic inflammatory demyelinating polyradiculoneuropathy. Ohtake T, et al. **Acta Neurol Scand** 1990 Feb;81(2):108–12

Central nervous system sequelae of immunization against measles, mumps, rubella and poliomyelitis. Ehrengut W. **Acta Paediatr Jpn Overseas Ed** 1990 Feb;32(1):8–11

Acute radiation sickness—morphology of CNS syndrome. Kamarád V. **Acta Univ Palacki Olomuc Fac Med** 1989; 121:7–144 (352 ref.)

Neurologic complications of cloacogenic carcinoma. Garofalo M Jr, et al. **Am J Gastroenterol** 1990 Sep; 85(9):1189–91

The spectrum of abdominal epilepsy in adults. Peppercorn MA, et al. **Am J Gastroenterol** 1989 Oct;84(10):1294–6

Neurologic manifestations of giant cell arteritis. Reich KA, et al. **Am J Med** 1990 Jul;89(1):67–72 (100 ref.)

How AIDS attacks the brain. Scherer P. **Am J Nurs** 1990 Jan;90(1):44–52 (15 ref.)

Cerebral vasculopathy associated with primary varicella infection. Caekebeke JF, et al. **Arch Neurol** 1990 Sep; 47(9):1033–5

Neuropathology of the acquired immunodeficiency syndrome. De Girolami U, et al. **Arch Pathol Lab Med** 1990 Jul;114(7):643–55 (191 ref.)

Elevated levels of interleukin-6 in cerebrospinal fluid from patients with systemic lupus erythematosus and central nervous system involvement. Hirohata S, et al. **Arthritis Rheum** 1990 May;33(5):644–9

Lyme disease. Bourke SJ. **Biomed Pharmacother** 1989; 43(6):397–400 (26 ref.)

Neurological manifestations of Lyme disease and treatments. Lecomte F, et al. **Biomed Pharmacother** 1989;43(6):409–13 (37 ref.)

Central nervous complications in subjects with artificial heart. Vaĺku J. **Bratisl Lek Listy** 1990 Jan;91(1):5–20 **(Eng, Cze)**

Myelopathy: an unusual presentation of toxoplasmosis. Nag S, et al. **Can J Neurol Sci** 1989 Nov;16(4):422–5

Human immunodeficiency virus infection of the CNS: characterization of "neurotropic" strains. Cheng-Mayer C, et al. **Curr Top Microbiol Immunol** 1990;160:145–56 (92 ref.)

Retroviral infections of the CNS of nonhuman primates. Lackner AA, et al. **Curr Top Microbiol Immunol** 1990; 160:77–96 (116 ref.)

Wild mouse retrovirus: pathogenesis. Portis JL. **Curr Top Microbiol Immunol** 1990;160:11–27 (52 ref.)

Late effects of central nervous system treatment of acute lymphoblastic leukemia in childhood are sex-dependent. Waber DP, et al. **Dev Med Child Neurol** 1990 Mar; 32(3):238–48

Impairment of cerebral function following cardiac and other major surgery. Treasure T, et al. **Eur J Cardiothorac Surg** 1989;3(3):216–21

Symmetrical necrosis of the basal ganglia in methylmalonic acidaemia. Roodhooft AM, et al. **Eur J Pediatr** 1990 May; 149(8):582–4 (12 ref.)

Tap-induced blink reflex and central nervous system dysfunction in diabetics with hyperosmolality. Tachibana Y, et al. **Eur Neurol** 1990;30(3):145–8

Neurobrucellosis—another cause of increased adenosine deaminase activity in cerebrospinal fluid [letter] da Cunha S, et al. **J Infect Dis** 1990 Jan;161(1):156–7

Ureaplasma and mycoplasma CNS infections in newborn babies [letter; comment] Waites KB, et al. **Lancet** 1990 Mar 17;335(8690):658–9 Comment on: Lancet 1989 Dec 23–30;2(8678–8679):1530–1.

Lyme borreliosis-associated encephalopathy. Halperin JJ, et al. **Neurology** 1990 Sep;40(9):1340–3

Genital mycoplasmas and the pediatrician. Wientzen RL. **Pediatr Infect Dis J** 1990 Apr;9(4):232–5 (26 ref.)

Transient neurologic symptoms. Narrowing the vast field of causes. Gnanamuthu C. **Postgrad Med** 1990 Apr; 87(5):99–102, 107–11, 114 passim

Subarachnoid cyst with hydrocephalus—a complication of mid-trimester amniocentesis. Chong SK, et al. **Prenat Diagn** 1989 Sep;9(9):677–9

Nervous system involvement in systemic lupus erythematosus: report of three cases. Marchiori PE, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Jul–Aug; 44(4):160–3

Central nervous system infection caused by Pseudallescheria boydii: case report and review. Berenguer J, et al. **Rev Infect Dis** 1989 Nov–Dec;11(6):890–6 (41 ref.)

The pathogenesis of Lyme disease. Garcia-Monco JC, et al. **Rheum Dis Clin North Am** 1989 Nov;15(4):711–26 (87 ref.)

Neurologic emergencies in the cancer patient. Willson JK, et al. **Semin Oncol** 1989 Dec;16(6):490–503 (128 ref.)

A review of neurological complications in AIDS. Ratnam KV, et al. **Singapore Med J** 1989 Apr;30(2):199–201 (10 ref.)

Relationship of pertussis immunization to the onset of epilepsy, febrile convulsions and central nervous system infections: a retrospective epidemiologic study. Jacobson V, et al. **Tokai J Exp Clin Med** 1988;13 Suppl:137–42

Pressure-induced tremor-associated activity in ventral roots in isolated spinal cord of newborn rats. Tarasiuk A, et al. **Undersea Biomed Res** 1990 Jul;17(4):287–96

Exposure to high pressure may produce the 5-HT behavioral syndrome in rats. Wardley-Smith B, et al. **Undersea Biomed Res** 1990 Jul;17(4):275–86

[Correlation of risk factors and disorders of neurophysiologic development in children at risk] Stojčević-Polovina M. **Acta Med Iugosl** 1990;44(1):55–8 **(Fre)**

[Neonatal miliary hemangioma] Heudes AM, et al. **Arch Fr Pediatr** 1990 Feb;47(2):135–8 (38 ref.) **(Fre)**

[Pathologic study of the eye and central nervous system in 25 cases of AIDS] De Girolami U, et al. **Rev Neurol (Paris)** 1989;145(12):819–28 (59 ref.) (Eng. Abstr.) **(Fre)**

[Cerebrospinal fluid in infection of the central nervous system by yeasts of the genus Candida: analysis of 11 cases] Livramento JA, et al. **Arq Neuropsiquiatr** 1989 Sep; 47(3):332–6 (Eng. Abstr.) **(Por)**

[Acquired immunodeficiency syndrome: analysis of neurologic complications in 44 cases] Puccioni M, et al. **Arq Neuropsiquiatr** 1989 Dec;47(4):385–91 (Eng. Abstr.) **(Por)**

[Stimulant amino acids, glutamate receptors and pathology of the central nervous system] Raevskiĭ KS. **Patol Fiziol Eksp Ter** 1990 Jan–Feb;(1):3–9 (53 ref.) **(Rus)**

[A case of gastrogenic senestopathy] Saliĭ ME, et al. **Vrach Delo** 1990 Jun;(6):91–2 **(Rus)**

[Infective complications of the central nervous system (CNS) in addicts to parenterally administered drugs] Garcés JM. **Arch Neurobiol (Madr)** 1989;52 Suppl 1:149–54 (30 ref.) (Eng. Abstr.) **(Spa)**

[Neurologic manifestations caused by Mycoplasma pneumoniae. Presentation of 4 cases] Montalbán J, et al. **Neurologia** 1987 Jul–Aug;2(4):187–9 (Eng. Abstr.) **(Spa)**

GENETICS

Myelin-deficient rat: a point mutation in exon III (A——C, Thr75——Pro) of the myelin proteolipid protein causes dysmyelination and oligodendrocyte death. Boison D, et al. **EMBO J** 1989 Nov;8(11):3295–302

Cytogenetics and molecular genetics: their status and role in understanding the behavior of central nervous system neoplasms. Bigner SH, et al. **Monogr Pathol** 1990;(32):30–40 (48 ref.)

Infantile mitochondrial disease [letter; comment] Byrne E. **Neurology** 1990 Jul;40(7):1152 Comment on: Neurology 1989 Sep;39(9):1203–9.

IMMUNOLOGY

Cellular immunoregulatory mechanisms in the central nervous system: characterization of noninflammatory and inflammatory cerebrospinal fluid lymphocytes. Matsui M, et al. **Ann Neurol** 1990 Jun;27(6):647–51

Neuropsychiatric lupus erythematosus, cerebral infarctions, and anticardiolipin antibodies. Fields RA, et al. **Ann Rheum Dis** 1990 Feb;49(2):114–7

Serum lymphocytotoxic antibodies and neurocognitive function in systemic lupus erythematosus. Long AA, et al. **Ann Rheum Dis** 1990 Apr;49(4):249–53

Taenia crassiceps metacestode vesicular fluid antigens shared with the Taenia solium larval stage and reactive with serum antibodies from patients with neurocysticercosis. Kunz J, et al. **Int J Med Microbiol** 1989 Oct;271(4):510–20

What is the significance of the presence of MHC molecules on the surface of parasites in human neurocysticercosis? Trejo V, et al. **J Immunogenet** 1989 Dec;16(6):427–36

Beta-endorphin alters the course of central nervous system disease induced by a temperature-sensitive vesicular stomatitis virus in reconstituted nude mice. Hummer HJ, et al. **J Neuroimmunol** 1990 Jun;28(1):73–82

Fine specificities of antibodies in sera and cerebrospinal fluid in herpes virus infections of the central nervous system as detected by the antigen variable immunoblot technique. Neumann B, et al. **J Neuroimmunol** 1990 Jul;28(2):111–8

Intrathecal synthesis of virus-specific oligoclonal antibodies in patients with enterovirus infection of the central nervous system. Kaiser R, et al. **J Neurol** 1989 Oct;236(7):395–9

Immunoglobulin M in the cerebrospinal fluid: an indicator of recent immunological stimulation. Sharief MK, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug;52(8):949–53

Detection of antigens of larval Taenia solium in the cerebrospinal fluid of patients with the use of HPLC and ELISA. Choromanski L, et al. **J Parasitol** 1990 Feb; 76(1):69–73

Class differentiation of immunoglobulin-containing cerebrospinal fluid cells in inflammatory diseases of the central nervous system. Rieckmann P, et al. **Klin Wochenschr** 1990 Jan 4;68(1):12–7

Neurological disorder in transgenic mice that express the large T antigen of polyoma virus in the nervous system. Jensen NA, et al. **Mol Biol Med** 1989 Dec;6(6):493–500

Autoantibodies to GABA-ergic neurons and pancreatic beta cells in stiff-man syndrome. Solimena M, et al. **N Engl J Med** 1990 May 31;322(22):1555–60

The spectrum of neurologic disease associated with anti-GM1 antibodies. Sadiq SA, et al. **Neurology** 1990 Jul; 40(7):1067–72

Long-term persistence of intrathecal viral antibody responses in postinfectious diseases of the central nervous system and in Rett syndrome. Riikonen R, et al. **Neuropediatrics** 1989 Nov;20(4):215–9

Immunologic mechanisms in chronic demyelinating diseases of the central and peripheral nervous system. Wucherpfennig KW, et al. **Res Publ Assoc Res Nerv Ment Dis** 1990;68:105–16 (51 ref.)

HLA antigens in Japanese patients with central nervous system lupus. Kawai T, et al. **Tissue Antigens** 1990 Jan; 35(1):45–6

[Immunoglobulin class and light chain type of oligoclonal bands in CSF in children with CNS infectious diseases] Sakuta R, et al. **No To Hattatsu** 1990 Mar;22(2):160–5 (Eng. Abstr.) **(Jpn)**

METABOLISM

Lipocortin-1 immunoreactivity in the normal human central nervous system and lesions with astrocytosis. Johnson MD, et al. **Am J Clin Pathol** 1989 Oct;92(4):424–9

Primitive neuroectodermal tumors of the central nervous system. Patterns of expression of neuroendocrine markers, and all classes of intermediate filament proteins. Gould VE, et al. **Lab Invest** 1990 Apr;62(4):498–509

Molecular markers of primitive neuroectodermal tumors and other pediatric central nervous system tumors. Monoclonal antibodies to neuronal and glial antigens distinguish subsets of primitive neuroectodermal tumors. Molenaar WM, et al. **Lab Invest** 1989 Dec;61(6):635–43

Somatostatin in neurodegenerative illnesses. Beal MF. **Metabolism** 1990 Sep;39(9 Suppl 2):116–9 (67 ref.)

Amyloid and the central nervous system: the neurobiology, genetics and immunocytochemistry of a process important in neurodegenerative diseases and stroke. Vinters HV. **Monogr Pathol** 1990;(32):55–85 (189 ref.)

The role of speciation in the effects of aluminum(III) on the stability of cell membranes and on the activity of selected enzymes. Zatta P, et al. **Prog Clin Biol Res** 1989; 317:1087–94 (23 ref.)

[The CNS syndrome. The characteristics of the intermediate filaments of the rat brain] Nedzvetskiĭ VS, et al. **Radiobiologiia** 1990 Mar–Apr;30(2):243–6 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Primary lateral sclerosis [letter; comment] Fredrikson S, et al. **Arch Neurol** 1989 Nov;46(11):1168 Comment on: Arch Neurol 1988 Dec;45(12):1304–7.

Serologic evidence of human immunodeficiency virus infection of the central nervous system in African patients with acquired immunodeficiency syndrome. Kaiser R, et al. **Eur Neurol** 1990;30(1):27–31

Demonstration of Epstein-Barr virus in primary central nervous system lymphomas by the polymerase chain reaction and in situ hybridization. Rouah E, et al. **Hum Pathol** 1990 May;21(5):545–50

Host genes conferring resistance to a central nervous system disease induced by a polytropic recombinant Friend murine retrovirus. Buller RS, et al. **J Virol** 1990 Feb;64(2):493–8

Neurodegenerative disease induced by the wild mouse ecotropic retrovirus is markedly accelerated by long terminal repeat and gag-pol sequences from nondefective Friend murine leukemia virus. Portis JL, et al. **J Virol** 1990 Apr;64(4):1648–56

Prion diseases of the central nervous system. Prusiner SB, et al. **Monogr Pathol** 1990;(32):86–122 (171 ref.)

Role of abortive retroviral infection of neurons in spongiform CNS degeneration. Sharpe AH, et al. **Nature** 1990 Jul 12; 346(6280):181–3

Vacuolar degeneration in mice infected with a coronavirus JHM-CC strain. Tsukamoto T, et al. **Neurology** 1990 Jun;

40(6):904–10
Pathogenicity of Semliki Forest virus for the rat central nervous system and primary rat neural cell cultures: possible implications for the pathogenesis of multiple sclerosis. Atkins GJ, et al. **Neuropathol Appl Neurobiol** 1990 Feb;16(1):57–68
Monocytes/macrophages isolated from the mouse central nervous system contain infectious Theiler's murine encephalomyelitis virus (TMEV). Clatch RJ, et al. **Virology** 1990 May;176(1):244–54
Immunohistochemical localization of neurotropic ecotropic murine leukemia virus in moribund mice. Morey MK, et al. **Virology** 1990 Sep;178(1):104–12
[Virus transmission to man from Phlebotomus flies: role of the Tuscany virus (Bunyaviridae, Phlebovirus) in the etiology of infections of the central nervous system] Balducci M. **Parassitologia** 1988 May–Dec;30(2–3):179–85 (Eng. Abstr.) **(Ita)**

MORTALITY

Labelling 'unexpected' deaths on a neurology service. Shafer SQ, et al. **Neurology** 1990 Jul;40(7):1017–9

NURSING

Home-based palliative care for children—Part 1: The institution of a program. Levy M, et al. **J Palliat Care** 1990 Spring;6(1):11–5

PARASITOLOGY

Neurocysticercosis as the main cause of late-onset epilepsy in Mexico. Medina MT, et al. **Arch Intern Med** 1990 Feb; 150(2):325–7

PATHOLOGY

Mitochondrial myopathy, encephalopathy, lactic acidosis, and stroke-like episodes. Report of an autopsy. Hamazaki S, et al. **Acta Pathol Jpn** 1989 Sep;39(9):599–606
Central nervous system involvement in adult T-cell leukemia/lymphoma. Teshima T, et al. **Cancer** 1990 Jan 15;65(2):327–32
Neuropathology of AIDS. Kanzer MD. **Crit Rev Neurobiol** 1990;5(4):313–62 (208 ref.)
26th annual meeting of the Italian Neuropathological Association. May 24–26, 1990, Sestri Levante. Abstracts. **Ital J Neurol Sci** 1990 Apr;11(2):187–213
Diffuse fulminant aspergillosis of the central nervous system. Sundaram C, et al. **J Assoc Physicians India** 1989 Feb; 37(2):186–7
Edematous changes in the central nervous system of zitter rats with genetic spongiform encephalopathy. Gomi H, et al. **J Neuropathol Exp Neurol** 1990 May;49(3):250–9
Calcifying pseudoneoplasms of the neural axis. Bertoni F, et al. **J Neurosurg** 1990 Jan;72(1):42–8
Neuropathology. **Monogr Pathol** 1990;(32):1–142
AIDS and the central nervous system. Petito CK, et al. **Monogr Pathol** 1990;(32):130–8 (34 ref.)
CNS chloromas in patients presenting with eosinophilia. Henson JW, et al. **Neurology** 1989 Oct;39(10):1386–8 (10 ref.)
Intrinsic factors in the selective vulnerability of hippocampal pyramidal neurons. Mattson MP, et al. **Prog Clin Biol Res** 1989;317:333–51 (65 ref.)
Histopathology of clinical phases of human Lyme disease. Duray PH. **Rheum Dis Clin North Am** 1989 Nov; 15(4):691–710 (39 ref.)
Granulomatous angiitis of the nervous system: a case report of long-term survival. Zimmerman RS, et al. **Surg Neurol** 1990 Mar;33(3):206–12
[Nervous system pathology in AIDS: results of a collaborative autopsy study from Switzerland] Lang W, et al. **Schweiz Rundsch Med Prax** 1990 May 2;79(18):562–8 (48 ref.) (Eng. Abstr.) **(Ger)**
[Multiple sclerosis: clinical and pathological study of a case] Lancellotti CL, et al. **Arq Neuropsiquiatr** 1989 Dec; 47(4):455–60 (Eng. Abstr.) **(Por)**

PHYSIOPATHOLOGY

Effect of NMDA and 2-amino-7-phosphonoheptanoate focal injection into the ventrolateral thalamic nucleus on the high pressure neurological syndrome in the rat. Millan MH, et al. **Brain Res** 1990 Jan 22;507(2):354–6
Platelet-activating factor—key mediator in neuroinjury? Frerichs KU, et al. **Cerebrovasc Brain Metab Rev** 1990 Summer;2(2):148–60 (54 ref.)
Visual information processing in infancy. Sontheimer D. **Dev Med Child Neurol** 1989 Dec;31(6):787–96
Beta-endorphin alters a viral induced central nervous system disease in normal mice but not in nude mice. Doll SC, et al. **J Neuroimmunol** 1989 Sep;24(1–2):47–53
[The value of auditory evoked potentials in otoneurology] Boniver R. **Rev Med Liege** 1990 May;45(5):228–37 **(Fre)**

PREVENTION & CONTROL

Scavenger effect of elastase on calcifications in liver, kidney and central nervous system tissues of rabbits with atherosclerosis induced by cholesterol-rich diet. Yasui M, et al. **J Int Med Res** 1989 Jul–Aug;17(4):350–7
Anoxic injury of CNS white matter: protective effect of ketamine. Ransom BR, et al. **Neurology** 1990 Sep; 40(9):1399–403
Radiotherapy vs intrathecal chemotherapy for CNS prophylaxis in childhood ALL. Steinherz PG. **Oncology (Williston Park)** 1989 Sep;3(9):47–53; discussion 58–60 (61 ref.)
[Neuropsychiatric disorders in very-low-birthweight newborn infants (VLBW-infants)—before and after the introduction of modern perinatal medicine. 3. Discussion of trends in quality of survival (CNS morbidity) and conclusions] Zielonka VS, et al. **Kinderarztl Prax** 1989 Aug; 57(8):371–9 (42 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

Neurosurgical emergencies. Rohatgi M, et al. **Indian Pediatr** 1988 Oct;25 Suppl:102–11
Proceedings of the meeting of the Society of British Neurological Surgeons. 115th meeting. Newcastle upon Tyne, 20–22 September 1989. Abstracts. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):443–9
[Results of stereotaxic operations in patients with neurosurgical pathology] Laponogov OA, et al. **Klin Khir** 1989;(12):19–21 (Eng. Abstr.) **(Rus)**

VETERINARY

Experimental infection of cattle with Trypanosoma brucei rhodesiense. Wellde BT, et al. **Ann Trop Med Parasitol** 1989 Aug;83 Suppl 1:133–50
Cerebral trypanosomiasis in naturally-infected cattle in the Lambwe Valley, south Nyanza, Kenya. Wellde BT, et al. **Ann Trop Med Parasitol** 1989 Aug;83 Suppl 1:151–60
Experimental infection of goats with Trypanosoma brucei ssp. and effects of treatment with suramin and Mel-B. Wellde BT, et al. **Ann Trop Med Parasitol** 1989 Aug;83 Suppl 1:161–9
Anaesthesia and central nervous system disease in small animals. Part II: Anaesthetic management for specific diseases and procedures. Court MH, et al. **Br Vet J** 1990 Jul–Aug;146(4):296–308 (47 ref.)
Feline immunodeficiency virus: a neurotropic lentivirus. Dow SW, et al. **J Acquir Immune Defic Syndr** 1990; 3(7):658–68
Cerebrospinal fluid creatine kinase activity in horses with central nervous system disease: 69 cases (1984–1989). Furr MO, et al. **J Am Vet Med Assoc** 1990 Jul 15;197(2):245–8
Analysis of cerebrospinal fluid from the cerebellomedullary and lumbar cisterns of dogs with focal neurologic disease: 145 cases (1985–1987). Thomson CE, et al. **J Am Vet Med Assoc** 1990 Jun 1;196(11):1841–4
Fatal perinatal sarcocystosis in a lamb. Dubey JP, et al. **J Parasitol** 1989 Dec;75(6):980–2
Spongy degeneration of white matter in the central nervous system of silver foxes (Vulpes vulpes). Hagen G, et al. **Vet Pathol** 1990 May;27(3):187–93
[An unusual infection of carnivorous animals] Martynov VF. **Vopr Virusol** 1989 May–Jun;34(3):354–8 **(Rus)**

CENTRAL NERVOUS SYSTEM STIMULANTS see **ANALEPTICS**

CENTRAL RETINAL ARTERY see **RETINAL ARTERY**

CENTRAL RETINAL ARTERY OCCLUSION see **RETINAL ARTERY OCCLUSION**

CENTRAL RETINAL EDEMA, CYSTOID see **MACULAR EDEMA, CYSTOID**

CENTRAL RETINAL VEIN see **RETINAL VEIN**

CENTRAL SUPPLY, HOSPITAL

STANDARDS

[Standard quality control of the central supply room] Zhao YH. **Chung Hua Hu Li Tsa Chih** 1990 Jan;25(1):7–9 **(Chi)**

CENTRAL VENOUS CATHETERIZATION see **CATHETERIZATION, CENTRAL VENOUS**

CENTRAL VENOUS PRESSURE

Post-Fontan care based on hemodynamic characteristics, with special reference to the central venous pressure. Nawa S, et al. **Acta Med Okayama** 1989 Aug;43(4):233–40
Inverse relation between central venous pressure and the plasma concentration of atrial natriuretic peptide during positive-pressure breathing. Schütten HJ, et al. **Acta Physiol Scand** 1990 Jun;139(2):389–90
Clinical assessment of central venous pressure in the critically ill. Cook DJ. **Am J Med Sci** 1990 Mar;299(3):175–8
Reliance on central venous pressure with regard to fluid management in preeclampsia deemed dangerous [letter; comment] Clark SL. **Am J Obstet Gynecol** 1990 Feb; 162(2):598 Comment on: Am J Obstet Gynecol 1987 Apr;156(4):1041–2.
Reductions in central venous pressure improve carotid baroreflex responses in conscious men. Pawelczyk JA, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1389–95
Effects of acute volemic changes on jejunal compliance in dogs. Rola FH, et al. **Braz J Med Biol Res** 1989; 22(4):523–31
Atrial natriuretic factor and central venous pressure during intermittent and continuous lower-body positive pressure in healthy humans. Keller N. **Clin Physiol** 1990 May; 10(3):245–55
Reliability of central venous pressure measured by water column [letter] Halck S, et al. **Crit Care Med** 1990 Apr; 18(4):461–2
An erroneous central venous pressure reading from a pulmonary artery catheter [letter] Hannallah M, et al. **Crit Care Med** 1990 Sep;18(9):1050–1
Continuous measurement of central venous pressure by manometry. Doyle DJ. **J Clin Monit** 1990 Jan;6(1):59–60
Prediction of successful primary closure of congenital abdominal wall defects using intraoperative measurements. Yaster M, et al. **J Pediatr Surg** 1989 Dec;24(12):1217–20
Central venous pressure monitoring for the critically ill in Zambia. Deedat AM, et al. **Trop Doct** 1990 Apr;20(2):74–6
The practice of central venous pressure monitoring in the tropics. Watters DA, et al. **Trop Doct** 1990 Apr;20(2):56–60
[The effect of IPPV, with or without PEEP, on central venous pressure] Sakai T, et al. **Masui** 1989 Jun;38(6):730–5 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

The effect of ethanol on arterial blood pressure, central venous pressure and ECG in rabbits treated with the single or multiple dose of amitriptyline or imipramine. Polakowski P, et al. **Pol J Pharmacol Pharm** 1989 May–Jun; 41(3):247–51

PHYSIOLOGY

Effect of backrest on central venous pressure in pediatric cardiac surgery. Callow LB, et al. **Nurs Res** 1989 Nov–Dec; 38(6):336–8
The influence of left ventricular pressure on the vascular responses to changes in carotid sinus pressure in anaesthetized dogs. Vukasovic JL, et al. **Q J Exp Physiol** 1989 Sep;74(5):735–46

CENTRALIZED HOSPITAL SERVICES see under **HOSPITAL ADMINISTRATION**

CENTRALLY ACTING MUSCLE RELAXANTS see **MUSCLE RELAXANTS, CENTRAL**

CENTRIC RELATION see **DENTAL OCCLUSION, CENTRIC**

CENTRIFUGATION

see related
ROTATION

Sample centrifugation onto membranes for sequencing. Sheer D. **Anal Biochem** 1990 May 15;187(1):76–83
Micro-centrifugation of human spermatozoa: its effect on fertilization of hamster oocytes after micro-insemination spermatozoal transfer. Ng SC, et al. **Hum Reprod** 1990 Feb; 5(2):209–11
The effect of centrifugation on the mechanical properties of cement. An in vitro total hip-arthroplasty model. Chin HC, et al. **J Bone Joint Surg [Am]** 1990 Mar;72(3):363–8
Increased sensitivity for rapid detection of cytomegalovirus by shell vial centrifugation assay using mink lung cell cultures. MacKenzie D, et al. **J Virol Methods** 1989 Nov; 26(2):183–8
Motion sickness—vestibular habituation with the centrifuge. Nel O, et al. **S Afr Med J** 1990 Apr 7;77(7):363–4

INSTRUMENTATION

An inexpensive storage box for 0.5 and 1.5 ml microcentrifuge/test tubes. Millar DB. **Biotechniques** 1989 Jan;7(1):32
Multilayer coil planet centrifuge for analytical high-speed counter-current chromatography. Oka H, et al. **J Chromatogr** 1989 Sep 22;479(1):53–60
[Determination of cerebrospinal fluid proteins using the Cobas Fara centrifugal analyser. Adaptation of the turbidimetric technic to benzethonium chloride] Guérin JL, et al. **Ann Biol Clin (Paris)** 1990;48(3):167–70 (Eng. Abstr.) **(Fre)**
[A device for centrifugation of Terasaki microchambers] Beisembaev EA, et al. **Lab Delo** 1989;(10):74–5 **(Rus)**

METHODS

Successful use of shell vial centrifugation and 16 to 18-hour immunofluorescent staining for the detection of influenza A and B in clinical specimens. Bartholoma NY, et al. **Am J Clin Pathol** 1989 Oct;92(4):487–90
Dihydropteridine reductase activity in eluates from dried blood spots: automation of an assay for a national screening service. Surplice IM, et al. **J Inherited Metab Dis** 1990; 13(2):169–77
[Use of a hematocrit centrifuge for measurement of the sedimentation constant of giant particles] Ochiai T. **Seikagaku** 1990 May;62(5):359–61 **(Jpn)**

CENTRIFUGATION, DENSITY GRADIENT

Wall effects in sucrose density gradient centrifugation of viruses. Boeyé A, et al. **Arch Virol** 1989;107(1–2):77–84

Elimination of red blood cells from marrow suspension prior to transplantation using polysaccharide-ditrizoate gradient centrifugation. Experimental studies. Ratajczak MZ, et al. **Folia Haematol (Leipz)** 1989;116(3-4):469-73

Preparation of nucleate and anucleate fragments of hamster and mouse eggs by centrifugation. Yanagimachi R, et al. **J Exp Zool** 1990 Feb;253(2):220-5

Separation of human neutrophils in self-generated continuous density gradients of Percoll. Uyesaka N, et al. **Jpn J Physiol** 1989;39(4):629-34

A survey of buoyant density of microorganisms in pure cultures and natural samples. Guerrero R, et al. **Microbiologia** 1985 Sep;1(1-2):53-65 (37 ref.)

INSTRUMENTATION

[Analysis of the distribution of low density lipoprotein flotation coefficients using an analytical centrifuge equipped with absorption optics] Morozkin AD, et al. **Biofizika** 1989 Nov-Dec;34(6):958-64 (Eng. Abstr.) **(Rus)**

METHODS

Detection of diepoxybutane-induced DNA-DNA crosslinks by cesium trifluoracetate (CsTFA) density-gradient centrifugation [letter] Ristau C, et al. **Arch Toxicol** 1990; 64(4):343-4

Rapid isolation of low density lipoprotein (LDL) subfractions from plasma by density gradient ultracentrifugation. Griffin BA, et al. **Atherosclerosis** 1990 Jul;83(1):59-67

Enhanced penetration of zona-free hamster ova by sperm prepared by Nycodenz and Percoll gradient centrifugation. Serafini P, et al. **Fertil Steril** 1990 Mar;53(3):551-5

Rapid isolation of vesicular and micellar carriers of biliary lipids by ultracentrifugation. Amigo L, et al. **J Lipid Res** 1990 Feb;31(2):341-7

Rapid isolation of metabolically active mitochondria from rat brain and subregions using Percoll density gradient centrifugation. Sims NR. **J Neurochem** 1990 Aug; 55(2):698-707

[A simple method for separating fresh and cryopreserved human sperm using dextran-visotrast density gradient centrifugation] Glander HJ, et al. **Zentralbl Gynakol** 1990; 112(2):91-7 (Eng. Abstr.) **(Ger)**

[A method of separating mononuclears on a density gradient] Prilutskii AS, et al. **Lab Delo** 1990;(2):20-3 (Eng. Abstr.) **(Rus)**

CENTRIFUGATION, ISOPYCNIC see under **CENTRIFUGATION, DENSITY GRADIENT**

CENTRIOLES

ANALYSIS

The basal bodies of Chlamydomonas reinhardtii do not contain immunologically detectable DNA. Johnson KA, et al. **Cell** 1990 Aug 24;62(4):615-9

Conservation of centriole protein composition among different species. Weide LG. **Cell Biol Int Rep** 1990 Jul; 14(7):659-60

Characterization of proteins immunologically related to brain microtubule-associated protein MAP-1B in non-neural cells. Diaz-Nido J, et al. **J Cell Sci** 1989 Apr;92 (Pt 4):607-20

DRUG EFFECTS

Diazepam induces abnormal mitosis in the early Drosophila embryo. Callaini G, et al. **Biol Cell** 1989;67(3):313-20

[Cellular behavior and centriole distribution during multipolar mitosis induced by nocodazole action] Alieva IB, et al. **Tsitologiia** 1989 Jun;31(6):633-41 (Eng. Abstr.) **(Rus)**

METABOLISM

Basal body/centriolar DNA: molecular genetic studies in Chlamydomonas. Hall JL, et al. **Cell** 1989 Oct 6; 59(1):121-32

PHYSIOLOGY

The acentriolar state of the Drosophila cell lines 1182. Debec A, et al. **Biol Cell** 1989;67(3):307-11

Centrosomes: composition and reproduction. Cande WZ. **Curr Opin Cell Biol** 1990 Apr;2(2):301-5 (22 ref.)

Centrosome duplication continues in cycloheximide-treated Xenopus blastulae in the absence of a detectable cell cycle. Gard DL, et al. **J Cell Biol** 1990 Jun;110(6):2033-42

Mode of centriole duplication and distribution. Kochanski RS, et al. **J Cell Biol** 1990 May;110(5):1599-605

[Spontaneous fusion of cells without centrioles, formed as a result of tripolar mitosis in cell culture] Khodiakov AL, et al. **Dokl Akad Nauk SSSR** 1989;307(5):1242-5 **(Rus)**

ULTRASTRUCTURE

Postnatal development of the photoreceptor inner segment of the retina in dogs. Miller WW, et al. **Am J Vet Res** 1989 Dec;50(12):2089-92

Abnormal centrosomes in cold-treated Drosophila embryos. Callaini G, et al. **Exp Cell Res** 1989 Oct;184(2):367-74

Centrosome competition: a possibility? Marin G, et al. **Exp Cell Res** 1990 Mar;187(1):1-3

Cytoskeletal control of centrioles movement during the establishment of polarity in Madin-Darby canine kidney cells. Buendia B, et al. **J Cell Biol** 1990 Apr;110(4):1123-35

Monoclonal antibody against the centrosome. Rao PN, et al. **J Cell Sci** 1989 May;93 (Pt 1):63-9

CENTROMERE see under **CHROMOSOMES**

CENTROPHENOXINE see under **GLYCOLATES**

CENURIASIS see **CESTODE INFECTIONS**

CEPHACETRILE see under **CEPHALOSPORINS**

CEPHAELIS see **IPECAC**

CEPHALEXIN

ADMINISTRATION & DOSAGE

Effective prophylaxis of recurrent urinary tract infections in premenopausal women by postcoital administration of cephalexin. Pfau A, et al. **J Urol** 1989 Nov;142(5):1276-8

ANALOGS & DERIVATIVES

Treatment of sinus empyema in adults. A coordinated Nordic multicenter trial of cefixime vs. cefaclor. Carenfelt C, et al. **Acta Otolaryngol (Stockh)** 1990 Jul-Aug; 110(1-2):128-35

Serum sickness in children after antibiotic exposure: estimates of occurrence and morbidity in a health maintenance organization population. Heckbert SR, et al. **Am J Epidemiol** 1990 Aug;132(2):336-42

Phase I study of multiple-dose cefprozil and comparison with cefaclor. Barbhaiya RH, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1198-203

Comparison of cefprozil and cefaclor pharmacokinetics and tissue penetration. Barbhaiya RH, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1204-9

Comparison of the effects of food on the pharmacokinetics of cefprozil and cefaclor. Barbhaiya RH, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1210-3

Single-dose cefuroxime axetil versus multiple-dose cefaclor in the treatment of acute urinary tract infections. Iravani A, et al. **Antimicrob Agents Chemother** 1989 Aug; 33(8):1212-6

Bilateral peripheral corneal edema after cefaclor therapy. Platt LW. **Arch Ophthalmol** 1990 Feb;108(2):175

The efficacy of cefaclor vs amoxicillin on recovery after tonsillectomy in children. Jones J, et al. **Arch Otolaryngol Head Neck Surg** 1990 May;116(5):590-3

Comparative evaluation of cefuroxime axetil and cefaclor for treatment of acute bacterial maxillary sinusitis. Sydnor A Jr, et al. **Arch Otolaryngol Head Neck Surg** 1989 Dec; 115(12):1430-3

Prospective randomized study comparing the efficacy and safety of ciprofloxacin with cefaclor in the treatment of patients with purulent bronchitis. Quenzer RW, et al. **Diagn Microbiol Infect Dis** 1990 Mar-Apr;13(2):143-8

Safety and efficacy of cefixime versus cefaclor in respiratory tract infections. Dorow P. **J Chemother** 1989 Aug; 1(4):257-60

The efficacy of pulse-dosed antibiotic therapy in the management of persistent otitis media with effusion. Donaldson JD, et al. **J Otolaryngol** 1990 Jun;19(3):175-8

Micellar modification of drug stability: analysis of the effect of hexadecyltrimethylammonium halides on the rate of degradation of cephaclor. Oliveira AG, et al. **J Pharm Sci** 1990 Jan;79(1):37-42

Cefaclor treatment of upper and lower respiratory tract infections caused by Moraxella catarrhalis. Oberlin JA, et al. **Pediatr Infect Dis J** 1990 Jan;9(1):41-4

Solid-state chemistry and crystal structure of cefaclor dihydrate. Martinez H, et al. **Pharm Res** 1990 Feb; 7(2):147-53

Cefaclor associated with intra-oral ulceration [letter] Blignaut E. **S Afr Med J** 1990 Apr 21;77(8):426-7

[Randomized study of cefatrizine versus cefaclor in conjunctivitis otitis syndrome] Cohen R, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):517-20 (Eng. Abstr.) **(Fre)**

[Comparative antibacterial activity of cefpodoxime, cefuroxime and cefaclor against strict anaerobic bacteria] Dubreuil L, et al. **Pathol Biol (Paris)** 1990 May;38(5):343-6 (Eng. Abstr.) **(Fre)**

[Cefaclor and trimethoprim-sulfamethoxazole for recurrent otitis media] Fliss DM, et al. **Harefuah** 1989 Dec 1; 117(11):361-3 (Eng. Abstr.) **(Heb)**

[Effect of cefaclor on guinea pig platelet aggregation in vitro] Kakushi H, et al. **Nippon Yakurigaku Zasshi** 1990 Jun; 95(6):335-46 (Eng. Abstr.) **(Jpn)**

METABOLISM

Effect of protein binding on the disposition of cephalexin and cefazolin in a simultaneous perfusion system of rat liver and kidney. Okumura K, et al. **Chem Pharm Bull (Tokyo)** 1989 Nov;37(11):3150-2

PHARMACOKINETICS

Uptake of the cephalosporin, cephalexin, by a dipeptide transport carrier in the human intestinal cell line, Caco-2. Dantzig AH, et al. **Biochim Biophys Acta** 1990 Sep 7; 1027(3):211-7

Cephalexin in ponies: a preliminary investigation. Lees P, et al. **Vet Rec** 1990 Jun 30;126(26):635-7

Pharmacokinetics and dosage regimen of cephalexin in buffalo calves (Bubalus bubalis) following single intravenous and intramuscular administration. Garg SK, et al. **Vet Res Commun** 1990;14(1):59-62

PHARMACOLOGY

Susceptibility of clinical isolates to cephalexin, cefazolin and cefotaxime. Gupta BL, et al. **Indian Pediatr** 1989 May; 26(5):466-71

[Comparison of cefsulodin and cephalexin as selective agents in agar for Bordetella pertussis] Hoppe JE, et al. **Immun Infekt** 1990 Apr;18(2):40-1 (Eng. Abstr.) **(Ger)**

[A clinical study of asymptomatic bacteriospermia] Chimura T, et al. **Jpn J Antibiot** 1990 Jan;43(1):139-46 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Randomized comparative study of cefixime versus cephalexin in acute bacterial exacerbations of chronic bronchitis. Verghese A, et al. **Antimicrob Agents Chemother** 1990 Jun; 34(6):1041-4

Outpatient management of uncomplicated lower-extremity infections in diabetic patients. Lipsky BA, et al. **Arch Intern Med** 1990 Apr;150(4):790-7

CEPHALINS see **PHOSPHATIDYLETHANOLAMINES**

CEPHALOMETRY

see related

CRANIOMETRY

A cephalometric comparison of bony profile changes in Class II, division 1 patients treated with extraoral force and functional jaw orthopedics. Meach CL. **Am J Orthod** 1966 May;52(5):353-70

Growth patterns in subjects with long and short faces. Nanda SK. **Am J Orthod Dentofacial Orthop** 1990 Sep; 98(3):247-58

Sonographic assessment of growth of the fetal head in diabetic pregnancies compared with normal gestations. Reece EA, et al. **Am J Perinatol** 1990 Jan;7(1):18-22

Cephalometric evaluation of pharyngeal obstructive factors in patients with sleep apneas syndrome. Bacon WH, et al. **Angle Orthod** 1990 Summer;60(2):115-22

Israeli cephalometric standards compared to Downs and Steiner analyses. Gleis R, et al. **Angle Orthod** 1990 Spring; 60(1):35-40; discussion 41

Head measurements. **Br J Neurosurg** 1988;2(1):123-4

Facial changes in children treated with the Activator appliance: a lateral cephalometric study. Mamandras AH, et al. **Can Dent Assoc J** 1989 Sep;55(9):727-30

A study of cephalometric features in cleft lip-cleft palate families. I: Phenotypic heterogeneity and genetic predisposition in parents of sporadic cases. Ward RE, et al. **Cleft Palate J** 1989 Oct;26(4):318-25; discussion 325-6

Standards of craniofacial dimension for an African population. Okanlawon AO, et al. **East Afr Med J** 1990 Apr;67(4):254-9

Profile changes in Class II, division 1 malocclusions: a comparison of the effects of Edgewise and Fränkel appliance therapy. Battagel JM. **Eur J Orthod** 1989 Aug; 11(3):243-53

Age and skeletal type-related changes of some cephalometric parameters in Finnish girls. Haavikko K, et al. **Eur J Orthod** 1989 Aug;11(3):283-9

A comparison of skeletal and dental changes produced by function regulators (FR-2 and FR-3). Kerr WJ, et al. **Eur J Orthod** 1989 Aug;11(3):235-42

Floating norms as a means to describe individual skeletal patterns. Segner D. **Eur J Orthod** 1989 Aug;11(3):214-20 (12 ref.)

Cranial thickness of modern and neolithic populations in Japan. Ishida H, et al. **Hum Biol** 1990 Jun;62(3):389-401

Effects of population structure on within-group variation in the Jirels of Nepal. Williams-Blangero S, et al. **Hum Biol** 1990 Feb;62(1):131-46

Ratio of mid arm circumference to head circumference as a predictor of small for gestational age babies. Sharma JN, et al. **Indian Pediatr** 1989 Apr;26(4):348-50

Cephalometric changes in Angle Class II treatment. Fischer-Brandies H. **Int J Orthod** 1989 Fall-Winter; 27(3-4):9-13

New methods for quantitative and qualitative facial studies: an overview. Thomas IT, et al. **J Craniofac Genet Dev Biol** 1989;9(1):107-11 (19 ref.)

Facial morphology as determined by anthropometry: keeping it simple. Ward RE. **J Craniofac Genet Dev Biol** 1989; 9(1):45-60 (25 ref.)

Frontal cephalometric study of dentofacial morphology in children with bilateral clefts of lip, alveolus and palate. Athanasiou AE, et al. **J Craniomaxillofac Surg** 1990 Feb; 18(2):49-54

On the development of an integrated computer system for cephalometric analyses. Bidanda B, et al. **J Med Syst** 1990 Apr;14(1-2):1-16

Orientation of the plane of occlusion. Ow RK, et al. **J Prosthet Dent** 1990 Jul;64(1):31-6

Cephalic index: a gestational age-dependent biometric parameter. Gray DL, et al. **Obstet Gynecol** 1989 Oct; 74(4):600–3

Condylar hyperplasia: cephalometric study, treatment planning, and surgical correction (our experience). Iannetti G, et al. **Oral Surg Oral Med Oral Pathol** 1989 Dec; 68(6):673–81

Head shape and abnormal appearance of tympanic membranes. Stolovitzky JP, et al. **Otolaryngol Head Neck Surg** 1990 Apr;102(4):322–5

Posterior repositioning of the entire maxilla without postoperative intermaxillary fixation. A clinical and cephalometric study. Krekmanov L, et al. **Scand J Plast Reconstr Surg Hand Surg** 1990;24(1):53–9

[Physiopathologic value of cephalometric teleradiography study and magnetic resonance imaging in sleep apnea syndromes. Therapeutic deductions] Chabolle F, et al. **Ann Otolaryngol Chir Cervicofac** 1990;107(3):159–66 (Eng. Abstr.) **(Fre)**

[The molar bite plane and the sagittal maxillo-mandibular skeletal shift] Crocquet M, et al. **Orthod Fr** 1988;59 Pt 2:441–8 (Eng. Abstr.) **(Fre)**

[A quantitative study of the transverse displacement of the premaxilla and the mandibular symphysis] Danguy M, et al. **Orthod Fr** 1988;59 Pt 2:415–9 (Eng. Abstr.) **(Fre)**

[Parietal-masticatory relations in 10 human populations] Pellerin Y, et al. **Orthod Fr** 1988;59 Pt 2:515–20 (Eng. Abstr.) **(Fre)**

[Morphologic and functional factors taken into consideration for the orientation of the occlusal plane in the preparation of the Ricketts VTO] Senior WB. **Orthod Fr** 1988;59 Pt 2:337–42 **(Fre)**

[The open bite—morphology and therapeutic consequences] Harzer W, et al. **Zahn Mund Kieferheilkd** 1989;77(5):421–6 (Eng. Abstr.) **(Ger)**

[Postero-anterior cephalometric features in Japanese children with malocclusion] Lin TZ. **Kokubyo Gakkai Zasshi** 1989 Jun;56(2):361–80 (Eng. Abstr.) **(Jpn)**

[Perinatal health in Ribeirão Preto, Brazil: distribution of the head circumference measurement of newborn infants] Gomes UA, et al. **Arq Neuropsiquiatr** 1989 Dec;47(4):392–6 (Eng. Abstr.) **(Por)**

[Skull growth in children] Rosado ML, et al. **Arq Neuropsiquiatr** 1989 Dec;47(4):397–402 (68 ref.) (Eng. Abstr.) **(Por)**

[Height, weight and head circumference according to gestational age in newborn infants born before 35 weeks] Beca JP, et al. **Rev Chil Pediatr** 1989 Jan-Feb;60(1):1–5 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

Cephalometric templates based on the Bolton standards. Samit A. **Oral Surg Oral Med Oral Pathol** 1989 Oct; 68(4):385–90

A filter for use in lateral cephalography. Tanimoto K, et al. **Oral Surg Oral Med Oral Pathol** 1989 Nov;68(5):666–9

[The orientation of the head in the cephalostat during the recording of cephalographs of the face (posterior-anterior axis)] Fischer-Brandies H, et al. **Orthod Fr** 1986;57 Pt 2:643–9 (Eng. Abstr.) **(Fre)**

["Aachen 3-D-finger". Development of a 3-D-digitizer for use in dental, oral and maxillary treatment] Schmitt W, et al. **Biomed Tech (Berlin)** 1990 Apr;35(4):69–71 (Eng. Abstr.) **(Ger)**

METHODS

Variability of measurements of cranial growth in the rabbit. Alberius P, et al. **Am J Anat** 1990 Aug;188(4):393–400

A method for structural mandibular superimpositioning. Dibbets JM. **Am J Orthod Dentofacial Orthop** 1990 Jan; 97(1):66–73

A biplanar cephalometric stereoradiography technique. Trocmé MC, et al. **Am J Orthod Dentofacial Orthop** 1990 Aug;98(2):168–75

A new cephalometric parameter to aid in dental base relationship analysis. Sarhan OA. **Angle Orthod** 1990 Spring;60(1):59–63

"Wits" appraisal in southern Chinese children. So LL, et al. **Angle Orthod** 1990 Spring;60(1):43–8

Evaluation of rare earth intensifying screens in cephalometric radiography. Stathopoulos V, et al. **Angle Orthod** 1990 Spring;60(1):9–16 (24 ref.)

The stability of anatomical and centroid reference points in cephalometric analysis. Trenouth MJ. **Angle Orthod** 1989 Winter;59(4):283–90

"Wits" appraisal in southern Chinese children a useful addition to literature [letter] Woodside DG. **Angle Orthod** 1990 Fall;60(3):164

A simple method for conversion of area ratio measurements of cerebral structures to volume estimates. Woods BT, et al. **Biol Psychiatry** 1989 Nov;26(7):748–52

Superimposition of cephalometric radiographs with different machine magnifications. Lew KK. **Br J Orthod** 1989 Nov; 16(4):281–3

A retrospective cephalometric study of Class I patients [letter; comment] Mills JR. **Br J Orthod** 1989 Nov; 16(4):291–2 Comment on: Br J Orthod 1989 Feb;16(1):17–23.

An evaluation of conventional cephalometric appraisals. Wong T, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Dec; 32(4):239–45

Cephalometric analysis for the surgeon. Grayson BH. **Clin Plast Surg** 1989 Oct;16(4):633–44

Landmarking of cephalograms using a microcomputer system. Tong W, et al. **Comput Biomed Res** 1990 Aug; 23(4):358–79

Clinical evaluation of maxillary and mandibular prognathism. Lundström F, et al. **Eur J Orthod** 1989 Nov;11(4):408–13 (18 ref.)

Determination of the shape of the head in man from the frontal view through a complex quantitative index. Ralev R, et al. **Folia Med (Plovdiv)** 1988;30(1):30–6

Potential of finite element analysis for cephalometric investigation. Lavelle CL, et al. **Hum Biol** 1990 Apr; 62(2):251–67

Three-dimensional analysis of facial morphology before and after orthognathic surgery. Kobayashi T, et al. **J Craniomaxillofac Surg** 1990 Feb;18(2):68–73

A study on the standard for forensic anthropologic identification of skull-image superimposition. Chai DS, et al. **J Forensic Sci** 1989 Nov;34(6):1343–56

A method for three-dimensional image reformation for quantitative cephalometric analysis. Matteson SR, et al. **J Oral Maxillofac Surg** 1989 Oct;47(10):1053–61

An assessment of the predictability of maxillary surgery. Polido WD, et al. **J Oral Maxillofac Surg** 1990 Jul; 48(7):697–701

The unreliability of facial measurements in the determination of the vertical dimension of occlusion in edentulous patients. Carossa S, et al. **J Oral Rehabil** 1990 May; 17(3):287–90

[Kinesiographic cephalometry] Attina A, et al. **Orthod Fr** 1988;59 Pt 2:487–501 **(Fre)**

[Proposals for the 3-dimensional architectural analysis of craniofacial structures] Danguy-Derot C, et al. **Orthod Fr** 1988;59 Pt 2:429–39 (Eng. Abstr.) **(Fre)**

[Rhinoplasty and computerized cephalometry. Subcutaneous tissue and bony landmarks] Thomas EH, et al. **Rev Stomatol Chir Maxillofac** 1989;90(6):391–8 (Eng. Abstr.) **(Fre)**

[Evaluation of the applicability of a mathematical model in the x-ray cephalometric diagnosis of sagittal bite anomalies. A clinical test] Järvinen S. **Fortschr Kieferorthop** 1989 Oct; 50(5):465–72 (Eng. Abstr.) **(Ger)**

[X-ray cephalometric characteristics of the facial skeleton in distal occlusion] Zhulev EN. **Stomatologiia (Mosk)** 1989 Sep-Oct;68(5):74–8 (Eng. Abstr.) **(Rus)**

CEPHALOPELVIC PROPORTION see **PELVIMETRY**

CEPHALOPELVIMETRY see **PELVIMETRY**

CEPHALORIDINE

PHARMACOLOGY

Influence of beta-lactam antibiotics on serum resistance of K1-positive blood culture isolates of Escherichia coli. Suerbaum S, et al. **Antimicrob Agents Chemother** 1990 Apr; 34(4):628–31

Lipid peroxidation and generations of oxygen radicals induced by cephaloridine in renal cortical microsomes of rats. Suzuki Y, et al. **Jpn J Pharmacol** 1990 Feb; 52(2):233–43

Changes in glutathione peroxidase system and pyridine nucleotide phosphate levels in kidneys of cephaloridine-administered rats. Suzuki Y, et al. **Jpn J Pharmacol** 1989 Oct;51(2):181–9

TOXICITY

In vitro correlation of ultrastructural morphology and creatine phosphokinase release in L6 skeletal muscle cells after exposure to parenteral antibiotics. Laska DA, et al. **In Vitro Cell Dev Biol** 1990 Apr;26(4):393–8

Effect of verapamil on cephaloridine nephrotoxicity in the rabbit. Browning MC. **Toxicol Appl Pharmacol** 1990 May; 103(3):383–8

CEPHALOSPORINASE see under **BETA-LACTAMASES**

CEPHALOSPORINS

Third-generation cephalosporins in the treatment of severe infections: introduction to a workshop. Scheld WM. **Chemotherapy** 1989;35 Suppl 2:1–4 (16 ref.)

3-Sulfonyl-1-carba-1-dethiacephems. Crowell TA, et al. **J Med Chem** 1989 Nov;32(11):2436–42

N5-acetyl-N5-hydroxy-L-ornithine-derived sideromycin-carbacephalosporin beta-lactam conjugates: iron transport mediated drug delivery. Dolence EK, et al. **J Med Chem** 1990 Feb;33(2):461–4

[Cephalosporins] Pauluzzi S. **Ann Ital Med Int** 1986 Sep; 1(3):247–54 (14 ref.) **(Ita)**

[Solid-state stability and preformulation study of a new parenteral cephalosporin antibiotics (E1040)] Ashizawa K, et al. **Yakugaku Zasshi** 1990 Mar;110(3):191–201 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Reduced rate of postoperative infections in emergency cesarean section after two doses of cefuroxim perioperatively. A placebo-controlled study. Hägglund L, et al. **Acta Obstet Gynecol Scand** 1989;68(3):201–4

Changes in recommendations for reconstituting Kefurox injection [letter] Bercovitz MC 4th. **Am J Hosp Pharm** 1990 Mar;47(3):519

Cefuroxime sodium for injection in the treatment of acute severe infections in children and adults. Păun L, et al. **Arch Roum Pathol Exp Microbiol** 1989 Apr-Jun; 48(2):171–5

Controlled multicenter clinical comparison between two cefatrizine administration schedules: a contribution to improvement of compliance in clinical nonhospital use of antibiotics. **Clin Ther** 1988;10(3):266–75

Synergy of new C-3 substituted cephalosporins and tobramycin against Pseudomonas aeruginosa and Pseudomonas cepacia. Chin NX, et al. **Diagn Microbiol Infect Dis** 1989 Jul-Aug;12(4):343–9

In vitro synergism of rifampin-cephalosporin combinations against Haemophilus influenzae type b. Gordon RC, et al. **Eur J Clin Microbiol Infect Dis** 1990 Mar;9(3):201–5

Increase in the activity of third-generation cephalosporins in combination with clavulanic acid and Sulbactam against Bacteroides fragilis. Martín MA, et al. **Med Lab Sci** 1990 Jul;47(3):163–7

Cost-saving single-shot prophylaxis in cardiovascular surgery. Geroulanos S, et al. **S Afr J Surg** 1989 Sep; Suppl:7–10

Half-life of antibiotics—an important factor in surgical single-dose prophylaxis. Hell K. **S Afr J Surg** 1989 Sep; Suppl:2–4

[Advice on intravenous treatment with beta-lactams] Schumacher H, et al. **Ugeskr Laeger** 1990 Feb 5; 152(6):375–9 (29 ref.) (Eng. Abstr.) **(Dan)**

[How I do it. Perioperative preventive use of antibiotics in tumor surgery of the head and neck] Luckhaupt H. **Laryngorhinootologie** 1989 Oct;68(10):582 **(Ger)**

[Prevention of postoperative complications following vaginal hysterectomy] Klug PW, et al. **Zentralbl Gynakol** 1989; 111(15):1042–8 (Eng. Abstr.) **(Ger)**

[Use of cephalosporins for the prevention of mixed infection during surgical treatment of rectal cancer] Spitsyna TA, et al. **Antibiot Khimioter** 1989 Sep;34(9):705–7 (Eng. Abstr.) **(Rus)**

[A case of successful antibiotic therapy of legionnaires' disease with lesions of the lungs and heart] Zamotaev IP, et al. **Antibiot Khimioter** 1990 Jun;35(6):43–5 (Eng. Abstr.) **(Rus)**

[Cefzol level in the blood and tissues after its intramuscular and intravenous administration in patients with post-traumatic osteomyelitis] Gritsil NP, et al. **Ortop Travmatol Protez** 1989 Nov;(11):62–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Safety of parenteral third-generation cephalosporins. Fekety FR. **Am J Med** 1990 Apr 9;88(4A):38S–44S (40 ref.)

Toxic pustuloderma: a self-limiting eruption. Rustin MH, et al. **Br J Dermatol** 1990 Jul;123(1):119–24

Cephapirin-induced neutropenia. Vidal Pan C, et al. **Chemotherapy** 1989;35(6):449–53

Cephalosporin-induced nephrotoxicity: does it exist? Zhanel GG. **DICP** 1990 Mar;24(3):262–5 (30 ref.)

Structural correlations with cross-reactivity of beta-lactam antibiotics in delayed type hypersensitivity.

Cross-allergenicity in hypersensitivity to cephems with a tetrazolyl group in the C-3 side chain. Uno K, et al. **J Antimicrob Chemother** 1989 Aug;24(2):251–64

Third generation cephalosporins: safety profiles after 10 years of clinical use. Neu HC. **J Clin Pharmacol** 1990 May; 30(5):396–403 (59 ref.)

Aztreonam in the management of gram-negative infections in penicillin-allergic patients: a review. Saxon A. **Pediatr Infect Dis J** 1989 Sep;8(9 Suppl):S124–7; discussion S128–32 (8 ref.)

[Hemostasis disturbance caused by cephalosporins with an N-methylthiotetrazole side chain. A randomized pilot study] Schäfer H, et al. **Arzneimittelforschung** 1989 Sep; 39(9):1156–62 (Eng. Abstr.) **(Ger)**

[Persistence of a positive lymphocyte stimulation test in cephalosporin-induced anaphylactic shock and the following neutropenia (letter)] Berg PA, et al. **Dtsch Med Wochenschr** 1989 Dec 8;114(49):1941–2 **(Ger)**

[Use of cephalosporins in pediatric practice with the study of the immunoleukolysis (leukocytolysis) reaction] Poshekhonov SA, et al. **Antibiot Khimioter** 1989 Sep; 34(9):699–701 (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

Single-dose cefuroxime axetil versus multiple-dose cefaclor in the treatment of acute urinary tract infections. Iravani A, et al. **Antimicrob Agents Chemother** 1989 Aug; 33(8):1212–6

Comparative evaluation of cefuroxime axetil and cefaclor for treatment of acute bacterial maxillary sinusitis. Sydnor A Jr, et al. **Arch Otolaryngol Head Neck Surg** 1989 Dec; 115(12):1430–3

Analytical studies on beta-lactam antibiotics. III. Automated high-performance liquid chromatographic method for the determination of the orally active antibiotic ceftibuten in human plasma and urine. Matsuura A, et al. **J Chromatogr** 1989 Sep 29;494:231–45

ANALYSIS

Continuous flow molecular emission cavity analysis of cephalosporins by alkaline degradation to sulphide. Grekas N, et al. **Analyst** 1990 May;115(5):613–6

Mass spectrometric approaches in structural characterization of cephalosporins. Scandola M, et al. **Biomed Environ Mass Spectrom** 1989 Oct;18(10):851–4

Cephradine (Velosef) penetration of mandibular bone. Middlehurst RJ, et al. **Int J Oral Maxillofac Surg** 1990 Apr;19(2):120–1

On-line high-performance liquid chromatography for the determination of cephalosporin C and by-products in complex fermentation broths. Holzhauer-Rieger K, et al. **J Chromatogr** 1990 Jan 19;499:609–15

Chemical stabilities of cefuroxime sodium and metronidazole in an admixture for intravenous infusion. Barnes AR. **J Clin Pharm Ther** 1990 Jun;15(3):187–96

Pseudopolymorphism and phase stability in four solid forms of (6R,7R)–7–[2–(5–amino–1,2,4–thiadiazol–3–yl)–(Z)–2–methoxy– iminoacetamid]–3–[(4–carbamoyl–1–quinuclidinio)methyl]–8–oxo–5–thia–1–azabicyclo – [4,2,0]oct–2–ene–2–carboxylate (E1040). Ashizawa K, et al. **J Pharm Sci** 1989 Nov;78(11):893–9

On the mechanism of isomerization of cephalosporin esters. Richter WF, et al. **J Pharm Sci** 1990 Feb;79(2):185–6

BIOSYNTHESIS

Molecular biology of penicillin and cephalosporin biosynthesis. Queener SW. **Antimicrob Agents Chemother** 1990 Jun;34(6):943–8 (46 ref.)

Purification from Cephalosporium acremonium of the initial enzyme unique to the biosynthesis of penicillins and cephalosporins. Zhang JY, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):1145–52

Solid state fermentation for cephalosporin production by Streptomyces clavuligerus and Cephalosporium acremonium. Jermini MF, et al. **Experientia** 1989 Dec 1; 45(11–12):1061–5

[Study of the optimal conditions of preservation of cephalosporin C–producing fungus Acremonium chrysogenum] Sidiakina TM, et al. **Antibiot Khimioter** 1990 Jan;35(1):11–4 (Eng. Abstr.) **(Rus)**

BLOOD

Liquid chromatographic determination of desfuroylceftiofur metabolite of ceftiofur as residue in cattle plasma. Jaglan PS, et al. **J Assoc Off Anal Chem** 1990 Jan–Feb;73(1):26–30

CHEMICAL SYNTHESIS

Synthesis and biological evaluation of 3–chloro–1–carbacephem compounds. Matsukuma I, et al. **Chem Pharm Bull (Tokyo)** 1989 May;37(5):1239–44

Synthesis of a new series of cephalosporins having 3–substituted–ammonio–1–propenyl group as the C–3 side chain. Kamachi H, et al. **J Antibiot (Tokyo)** 1990 May; 43(5):533–43

Direct introduction of a formamido group into the 7 alpha (6 alpha)–position of cephalosporins (penicillins). Kamachi H, et al. **J Antibiot (Tokyo)** 1990 Jul;43(7):820–9

New aminothiazolylglycylcephalosporins with a 1,5–dihydroxy–4–pyridone–2–carbonyl group. I. Synthesis and biological activity of cephalosporin derivatives leading to MT0703. Ogino H, et al. **J Antibiot (Tokyo)** 1990 Feb; 43(2):174–88

New aminothiazolylglycylcephalosporins with a 1,5–dihydroxy–4–pyridone–2–carbonyl group. II. Synthesis and antibacterial activity of MT0703 and its diastereomers. Ogino H, et al. **J Antibiot (Tokyo)** 1990 Feb;43(2):189–98

Synthesis and antibacterial activity of novel 2–methyl–1–oxacephalosporins. Okonogi T, et al. **J Antibiot (Tokyo)** 1990 Apr;43(4):357–71

C(3)–cyclopropyl cephems and carbacephems. Spry DO, et al. **J Antibiot (Tokyo)** 1989 Nov;42(11):1653–60

Inhibition of human leukocyte elastase. 1. Inhibition by C–7–substituted cephalosporin tert–butyl esters. Doherty JB, et al. **J Med Chem** 1990 Sep;33(9):2513–21

Inhibition of human leukocyte elastase. 2. Inhibition by substituted cephalosporin esters and amides. Finke PE, et al. **J Med Chem** 1990 Sep;33(9):2522–8

Inhibition of human leukocyte elastase. 3. Synthesis and activity of 3'–substituted cephalosporins. Shah SK, et al. **J Med Chem** 1990 Sep;33(9):2529–35

[Synthesis of 7 beta–(6–substituted–2–quinolone–3–acetamido) cephalosporins] Chen QP, et al. **Yao Hsueh Hsueh Pao** 1989;24(9):659–67 (Eng. Abstr.) **(Chi)**

[Synthesis of 7–(4,7–di–substituted coumarin–3–acetamido)cephalosporins] Fan HJ, et al. **Yao Hsueh Hsueh Pao** 1989;24(3):175–81 (Eng. Abstr.) **(Chi)**

[Synthesis of 7–(1,7–disubstituted–1,4–dihydro–4–oxo–1,8–naphthyridine–3–carboxamido) –cephalosporins] Zhou JC, et al. **Yao Hsueh Hsueh Pao** 1989;24(7):512–21 (Eng. Abstr.) **(Chi)**

[Studies on FK482. II. Synthesis and structure–activity relationships of 7 beta–[(Z)–2–(2–aminothiazol–4–yl)–2–substituted acetamido]–3–vinyl–3–cephem–4–carboxylic acid derivatives] Inamoto Y, et al. **Yakugaku Zasshi** 1990 Apr; 110(4):246–57 (Eng: Abstr.) **(Jpn)**

[Synthetic cephalosporins. III. Synthesis and antibacterial activity of 7–[2–(2–Aminothiazol–4–yl)–3–carboxy–2–propenoamido]cep hal osporins and related compounds] Sakagami K, et al. **Yakugaku Zasshi** 1989 Jun;109(6):377–87 (Eng. Abstr.) **(Jpn)**

[Synthetic cephalosporins. V. Synthesis and antibacterial activity of 3–alkylthio–7 beta–[(Z)–2–(2–aminothiazol–4–yl)–2–(O–substituted oxyimino)acetamido]cephalosporins and related compounds] Sakagami K, et al. **Yakugaku Zasshi** 1989 Dec; 109(12):913–25 (Eng. Abstr.) **(Jpn)**

[Synthetic cephalosporins. IV. Synthesis and antibacterial activity of 7 beta–[(Z)–2–(2–aminothiazol–4–yl)–2–(O–substituted oxyimino)acetamido]–3–(1,2,3–triazol–1–yl)methyl–3–cephem–4–carboxylic acid and related compounds] Sakagami K, et al. **Yakugaku Zasshi** 1989 Dec; 109(12):957–61 (Eng. Abstr.) **(Jpn)**

METABOLISM

Enzymes involved in penicillin, cephalosporin and cephamycin biosynthesis. Martin JF, et al. **Adv Biochem Eng Biotechnol** 1989;39:153–87 (138 ref.)

Interaction of E1040 with cephalosporinase from Citrobacter freundii GN7391. Inoue E, et al. **Antimicrob Agents Chemother** 1989 Dec;33(12):2157–9

Outer membrane permeability and beta–lactamase stability of dipolar ionic cephalosporins containing methoxyimino substituents. Nikaido H, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):337–42

TEM–4, a new plasmid–mediated beta–lactamase that hydrolyzes broad–spectrum cephalosporins in a clinical isolate of Escherichia coli. Paul GC, et al. **Antimicrob Agents Chemother** 1989 Nov;33(11):1958–63

Characterization of a D–amino acid oxidase with high activity against cephalosporin C from the yeast Trigonopsis variabilis. Szwajcer–Dey E, et al. **Biochem Int** 1990; 20(6):1169–78

Interactions of meropenem, with beta–lactamases, including enzymes with extended–spectrum activity against third–generation cephalosporins. Labia R, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:219–23

Permeability barrier to hydrophilic solutes in Mycobacterium chelonei. Jarlier V, et al. **J Bacteriol** 1990 Mar; 172(3):1418–23

Beta–lactam biosynthesis in a gram–negative eubacterium: purification and characterization of isopenicillin N synthase from Flavobacterium sp. strain SC 12.154. Palissa H, et al. **J Bacteriol** 1989 Oct;171(10):5720–8

Cephalosporin C acylase in the autolysis of filamentous fungi. Reyes F, et al. **J Pharm Pharmacol** 1990 Feb;42(2):128–31

Transport of cephalosporin antibiotics in rat renal basolateral membranes. Takano M, et al. **J Pharm Pharmacol** 1989 Nov;41(11):795–6

Effects of 2(3)–tert–butyl–4–hydroxyanisole pretreatment on cefpiramide binding to mouse glutathione S–transferases. Nishiya H, et al. **Pharmacology** 1989;39(4):213–23

PHARMACOKINETICS

Effect of probenecid administration on cephapirin pharmacokinetics and concentrations in mares. Juzwiak JS, et al. **Am J Vet Res** 1989 Oct;50(10):1742–7

Comparison of the effects of food on the pharmacokinetics of cefprozil and cefaclor. Barbhaiya RH, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1210–3

Phase I study of single–dose BMY–28100, a new oral cephalosporin. Barbhaiya RH, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):202–5

Comparison of cefprozil and cefaclor pharmacokinetics and tissue penetration. Barbhaiya RH, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1204–9

Phase I study of multiple–dose cefprozil and comparison with cefaclor. Barbhaiya RH, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1198–203

Assessment of cefazolin and cefuroxime tissue penetration by using a continuous intravenous infusion. Connors JE, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1128–31

Cephalosporin penetration into soft tissue of paralyzed limbs. Darouiche R, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1326–8

Crossover assessment of serum bactericidal activity and pharmacokinetics of five broad–spectrum cephalosporins in the elderly. Deeter RG, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1007–13

Pharmacokinetics of cephem antibiotics in exudate of pelvic retroperitoneal space after radical hysterectomy and pelvic lymphadenectomy. Ito K, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1160–4

Pharmacokinetics and tissue penetration of ceftibuten. Wise R, et al. **Antimicrob Agents Chemother** 1990 Jun; 34(6):1053–5

Uptake of the cephalosporin, cephalexin, by a dipeptide transport carrier in the human intestinal cell line, Caco–2. Dantzig AH, et al. **Biochim Biophys Acta** 1990 Sep 7; 1027(3):211–7

A new approach to pharmacokinetic parameters: estimation of cefuroxime during haemodialysis. Sánchez E, et al. **Biopharm Drug Dispos** 1990 Mar;11(2):107–20

Studies on orally active cephalosporin esters. II. Chemical stability of pivaloyloxymethyl esters in phosphate buffer solution. Miyauchi M, et al. **Chem Pharm Bull (Tokyo)** 1989 Sep;37(9):2369–74

Studies on orally active cephalosporin esters. IV. Effect of the C–3 substituent of cephalosporin on the gastrointestinal absorption in mice. Miyauchi M, et al. **Chem Pharm Bull (Tokyo)** 1989 Dec;37(12):3272–6

Studies on orally active cephalosporin esters. III. Effect of the 3–substituent on the chemical stability of pivaloyloxymethyl esters in phosphate buffer solution. Miyauchi M, et al. **Chem Pharm Bull (Tokyo)** 1989 Sep; 37(9):2375–8

Penetration of third–generation cephalosporins into human peritoneal tissue. Berger SA, et al. **Chemotherapy** 1989; 35(5):326–9

Pharmacokinetics of cefpiramide in healthy volunteers, patients with various degrees of renal dysfunction, and patients on hemodialysis. Ohkawa M, et al. **Chemotherapy** 1989;35(6):416–22

Pharmacokinetics of flomoxef in mucosal tissue of the middle ear and mastoid following intravenous administration in humans. Saito H, et al. **Chemotherapy** 1990;36(3):193–9

Pharmacokinetics of cefepime in subjects with renal insufficiency. Barbhaiya RH, et al. **Clin Pharmacol Ther** 1990 Sep;48(3):268–76

Cefepime concentrations in bronchial mucosa and serum following a single 2 gram intravenous dose. Chadha D, et al. **J Antimicrob Chemother** 1990 Jun;25(6):959–63

Elimination of cefuroxime and gentamicin during and after open heart surgery. Lippert S, et al. **J Antimicrob Chemother** 1989 Nov;24(5):775–80

Uptake of cephalosporins by human intestinal brush–border membrane vesicles [letter] Lowther J, et al. **J Antimicrob Chemother** 1990 Jan;25(1):183–4

Pharmacokinetics and tissue penetration of cefprozil. Nye K, et al. **J Antimicrob Chemother** 1990 May;25(5):831–5

Penetration of cefpirome into prostatic tissue [letter] Saxby MF, et al. **J Antimicrob Chemother** 1990 Mar;25(3):488–90

Pharmacokinetics of cefpiramide in rats acutely intoxicated with carbon tetrachloride. Li C, et al. **J Pharmacobiodyn** 1990 Mar;13(3):186–94

Effect of various chemical modifiers on H+ coupled transport of cephradine via dipeptide carriers in rabbit intestinal brush–border membranes: role of histidine residues. Kato M, et al. **J Pharmacol Exp Ther** 1989 Nov; 251(2):745–9

Membrane potential–dependent and carrier–mediated transport of cefpiramide, a cephalosporin antibiotic, in canalicular rat liver plasma membrane vesicles. Tamai I, et al. **J Pharmacol Exp Ther** 1990 May;253(2):537–44

The effect of peritonitis on the transperitoneal transport of cefuroxime in patients on CAPD treatment. Dahl K, et al. **Nephrol Dial Transplant** 1990;5(4):275–81

[The penetration of cephalosporins across the blood–brain barrier and its clinical significance] Zhang YY, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jun;28(6):340–2, 381 (Eng. Abstr.) **(Chi)**

[Distribution of an antimicrobial agent in oral tissues of rabbit. Cefuroxime axetil] Morihana T, et al. **Jpn J Antibiot** 1990 Apr;43(4):670–6 (Eng. Abstr.) **(Jpn)**

[Penetration of antibiotics into the vitreous humor in man] Tamai M, et al. **Nippon Ganka Gakkai Zasshi** 1990 Feb; 94(2):219–23 (Eng. Abstr.) **(Jpn)**

[Therapeutic drug monitoring of cephems] Nagatake T. **Nippon Rinsho** 1990 Feb;48 Suppl:1199–204 **(Jpn)**

[The pharmacokinetic interpretation of the nephrotoxic effect of aminoglycosides and the influence of cephalosporins on the aminoglycoside nephrotoxic effect] Gagaeeva EV, et al. **Antibiot Khimioter** 1989 Dec;34(12):920–5 (67 ref.) **(Rus)**

PHARMACOLOGY

In vitro activity of cefonicid compared to other antibiotics against clinical bacterial isolates. Verbist L, et al. **Acta Clin Belg** 1990;45(2):113–9

Antibiotic susceptibility of type b Haemophilus influenzae and Streptococcus pneumoniae, and antibiotic concentration in cerebrospinal fluid. Fujita K, et al. **Acta Paediatr Jpn Overseas Ed** 1990 Apr;32(2):132–8

Effects of bovine mammary secretion during the early nonlactating period and antibiotics on polymorphonuclear neutrophil function and morphology. Lintner TJ, et al. **Am J Vet Res** 1990 Apr;51(4):524–32

Effects of antibiotics on phagocyte recruitment, function, and morphology in the bovine mammary gland during the early nonlactating period. Lintner TJ, et al. **Am J Vet Res** 1990 Apr;51(4):533–42

Experimental studies on the influence of Cephradine on the duodenum mucous membrane. Ciszewska–Popiołek B, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:235–9

In vitro antibacterial spectrum of E1040 compared with those of cefpirome and ceftazidime and disk diffusion interpretive criteria for E1040. Fuchs PC, et al. **Antimicrob Agents Chemother** 1990 May;34(5):914–7

In vitro activities of cefcanel and some other cephalosporins against Pasteurella multocida. Holst E, et al. **Antimicrob Agents Chemother** 1989 Dec;33(12):2142–3

In vitro susceptibilities of Bordetella pertussis and Bordetella parapertussis to six new oral cephalosporins. Hoppe JE, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1442–3

Antimicrobial activity and stability to beta–lactamase of BMY–28271, a new oral cephalosporin ester. Matsui H, et al. **Antimicrob Agents Chemother** 1990 Apr;34(4):555–61

In vitro activities and targets of three cephem antibiotics

against Haemophilus influenzae. Mendelman PM, et al. **Antimicrob Agents Chemother** 1989 Nov;33(11):1878–82

In vitro and in vivo antibacterial activities of BO–1341, a new antipseudomonal cephalosporin. Nakagawa S, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1423–7

In vitro activity of ME1228, a new parenteral cephalosporin. Neu HC, et al. **Antimicrob Agents Chemother** 1989 Aug; 33(8):1260–7

Comparative in vitro activity and beta-lactamase stability of FK482, a new oral cephalosporin. Neu HC, et al. **Antimicrob Agents Chemother** 1989 Oct;33(10):1795–800

beta-Lactamase stability and in vitro activity of oral cephalosporins against strains possessing well-characterized mechanisms of resistance. Sanders CC. **Antimicrob Agents Chemother** 1989 Aug;33(8):1313–7

In vitro activity of E–1040, a 3-substituted cephalosporin, against pathogens from cystic fibrosis sputum. Stutman HR, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1366–70

In vitro investigation of BK–218, a new oral and parenteral cephalosporin. Szabó I, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):349–54

Emergence of cross-resistance to beta-lactam antibiotics in fecal Escherichia coli and Klebsiella strains from neonates treated with ampicillin or cefuroxime. Tullus K, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):361–2

In vitro activity of Bay v 3522, a new cephalosporin, compared with activities of other agents. Wise R, et al. **Antimicrob Agents Chemother** 1990 May;34(5):813–8

Inoculum effect on growth–delay time of oxacillin–resistant strains of Staphylococcus aureus and Staphylococcus epidermidis exposed to cefamandole, cefazolin, and cefuroxime. Yourassowsky E, et al. **Antimicrob Agents Chemother** 1990 Apr;34(4):505–9

Testing of microbial sensitivity to cephalosporin. Dorobăţ O, et al. **Arch Roum Pathol Exp Microbiol** 1989 Apr–Jun; 48(2):185–8

Cephalosporins increase the renal clearance of methotrexate and 7-hydroxymethotrexate in rabbits. Iven H, et al. **Cancer Chemother Pharmacol** 1990;26(2):139–43

Inhibitory and bactericidal activity of cefpirome and cefotaxime against blood culture isolates. Ansorg R, et al. **Chemotherapy** 1990;36(1):24–8

An update on the in vitro activity of ceftizoxime and other cephalosporin/cephamycin antimicrobial agents against clinically significant anaerobic bacteria. Aldridge KE. **Clin Ther** 1990;12 Suppl C:3–12 (16 ref.)

Penicillin–binding proteins and beta-lactamases: their effects on the use of cephalosporins and other new beta–lactams. Neu HC. **Curr Clin Top Infect Dis** 1987;8:37–61 (103 ref.)

In vitro comparison of cefpirome and four other beta–lactam antibiotics alone and in combination with tobramycin against clinical isolates of Pseudomonas aeruginosa. Cabezudo I, et al. **Diagn Microbiol Infect Dis** 1989 Jul–Aug; 12(4):337–41

Activity of cephalosporins against coagulase–negative staphylococci. Chin NX, et al. **Diagn Microbiol Infect Dis** 1990 Jan–Feb;13(1):67–9

Antibacterial activity and beta–lactamase stability of MDL 19,592, an oral cephalosporin. Yu KW, et al. **Diagn Microbiol Infect Dis** 1989 Sep–Oct;12(5):441–3

Beta–lactamase stability and antibacterial activity of cefpirome alone and in combination with other antibiotics. Bakhtiar M, et al. **Drugs Exp Clin Res** 1989;15(10):477–82

Comparative in vitro activity of cefepime (BMY 28142) against multiresistant nosocomial isolates of Pseudomonas aeruginosa. Voutsinas D, et al. **Eur J Clin Microbiol Infect Dis** 1989 Oct;8(10):917–9

In vitro activity of cefpirome (HR810) against Enterococcus species [letter] Wheat PF, et al. **Eur J Clin Microbiol Infect Dis** 1990 Mar;9(3):235–7

Perspectives of beta–lactamases inhibitors in therapy of infections caused by Escherichia coli or Klebsiella with plasmidic resistance to third generation cephalosporins. Bauernfeind A. **Infection** 1990 Jan–Feb;18(1):48–52

In vitro activity of cefpirome compared with other third generation cephalosporins against nosocomial isolates in Argentina. Casellas JM, et al. **Infection** 1990 May–Jun; 18(3):193–5

In vitro and in vivo antibacterial activity of KT3777, a new orally active carbacephem. Sato K, et al. **J Antibiot (Tokyo)** 1989 Dec;42(12):1844–53

A new aminothiazolylcephalosporin having 1–carboxyethoxyimino group, ME1228. Shibahara S, et al. **J Antibiot (Tokyo)** 1990 Jan;43(1):62–9

New orally active cephalosporin esters. Yamada H, et al. **J Antibiot (Tokyo)** 1990 May;43(5):578–83

The in–vitro activity of ceftibuten against 475 clinical isolates of gram–negative bacilli, compared with cefuroxime and cefadroxil. Bragman SG, et al. **J Antimicrob Chemother** 1990 Feb;25(2):221–6

In–vitro activity of FCE 22101 and other beta–lactam antibiotics against Enterobacteriaceae resistant to third generation cephalosporins. Jarlier V, et al. **J Antimicrob Chemother** 1989 Aug;24(2):165–72

Activity of cefepime, ceftazidime, and ceftizoxime against mutants of Enterobacteriaceae and Pseudomonas aeruginosa derepressed for class I beta–lactamase. Knapp CC, et al. **J Antimicrob Chemother** 1989 Dec;24(6):1011–2

In–vitro activities of trospectomycin, cefpodoxime, and second–generation cephalosporins against Haemophilus influenzae type b. LiPuma JJ, et al. **J Antimicrob Chemother** 1990 Apr;25(4):535–9

Comparison of TEM–E3 and TEM–5 beta–lactamases. Payne DJ, et al. **J Antimicrob Chemother** 1989 Oct;24(4):615–7

Antibiotic resistance in enterococci [letter; comment] Springbett RJ. **J Antimicrob Chemother** 1990 Apr; 25(4):697–8 Comment on: J Antimicrob Chemother 1989 Nov;24(5):631–5.

The effect of rifampicin on the in–vitro activity of cefpirome or ceftazidime in combination with aminoglycosides against Pseudomonas aeruginosa. Valdes JM, et al. **J Antimicrob Chemother** 1990 Apr;25(4):575–84

The in–vitro activity of cefpodoxime: a comparison with other oral cephalosporins. Wise R, et al. **J Antimicrob Chemother** 1990 Apr;25(4):541–50

In–vitro activity of flomoxef, a new oxacephem group antibiotic, against Nocardia in comparison with other cephalosporins. Yazawa K, et al. **J Antimicrob Chemother** 1989 Dec;24(6):921–5

The beta–lactamases of Citrobacter diversus and their hydrolysis kinetics for some structurally–related cephalosporins. Amicosante G, et al. **J Chemother** 1989 Dec;1(6):399–402

In–vitro evaluation of a new oral cephalosporin, cefroxadine (CGP 9000). Shibl AM, et al. **J Chemother** 1990 Feb; 2(1):8–10

Interpretive criteria and quality control limits for ceftibuten disk susceptibility tests. Collaborative Antimicrobial Susceptibility Testing Group. Barry AL, et al. **J Clin Microbiol** 1990 Mar;28(3):605–7

Failure of ceftibuten to alter single dose theophylline clearance. Bachmann K, et al. **J Clin Pharmacol** 1990 May; 30(5):444–8

Influence of subinhibitory concentrations of cephalosporins on the serum sensitivity of Pseudomonas aeruginosa. Darveau RP, et al. **J Infect Dis** 1990 Oct;162(4):914–21

Antibacterial activity of four cephalosporins in an experimental infection in relation to in vitro effect and pharmacokinetics. Mattie H, et al. **J Infect Dis** 1990 Sep; 162(3):717–22

Cephalosporin 3'-quinolone esters with a dual mode of action. Albrecht HA, et al. **J Med Chem** 1990 Jan; 33(1):77–86

Comparative reactivity of 1–carba–1–dethiacephalosporins with cephalosporins. Blaszczak LC, et al. **J Med Chem** 1990 Jun;33(6):1656–62

Synthesis and biological evaluation of a series of parenteral 3'-quaternary ammonium cephalosporins. Brown RF, et al. **J Med Chem** 1990 Aug;33(8):2114–21

3–Quaternary ammonium 1–carba–1–dethiacephems. Cook GK, et al. **J Med Chem** 1989 Nov;32(11):2442–50

Saturable rate of cefatrizine absorption after oral administration to humans. Reigner BG, et al. **J Pharmacokinet Biopharm** 1990 Feb;18(1):17–34

Transferable cephalosporin resistance not inhibited by clavulanate in Escherichia coli [letter] Woodford N, et al. **Lancet** 1990 Jul 28;336(8709):253

[Klebsiella pneumoniae resistant against 3d–generation cephalosporins] Wagenvoort JH, et al. **Ned Tijdschr Geneeskd** 1989 Sep 23;133(38):1895–6 **(Dut)**

[Comparative antibacterial activity of cefpodoxime, cefuroxime and cefaclor against strict anaerobic bacteria] Dubreuil L, et al. **Pathol Biol (Paris)** 1990 May;38(5):343–6 (Eng. Abstr.) **(Fre)**

[Comparative activity of new oral cephalosporins and quinolones against Escherichia coli resistant to ampicillin isolated from urinary specimens] Gharbaoui K, et al. **Pathol Biol (Paris)** 1990 May;38(5):358–61 (Eng. Abstr.) **(Fre)**

[Activity of cefapirin against bacterial strains isolated from acute otitis media in children] Simonet M, et al. **Pathol Biol (Paris)** 1990 May;38(5):352–4 (Eng. Abstr.) **(Fre)**

[Activity of cefuroxime against bacterial strains isolated from acute otitis media] Simonet M, et al. **Pathol Biol (Paris)** 1990 May;38(5):355–7 (Eng. Abstr.) **(Fre)**

[Comparative antibacterial activity of ceftibuten (SH 39 720) against 150 K. pneumoniae strains producing different beta–lactamases] Thabaut A, et al. **Pathol Biol (Paris)** 1990 May;38(5):347–51 (Eng. Abstr.) **(Fre)**

[Antibacterial activity of carumonam and cefpirome on hospital strains resistant to gentamicin and cephalothin: comparison with other beta–lactam antibiotics, new fluoroquinolones, aminoglycosides and other antibiotics] Vanhoof R, et al. **Pathol Biol (Paris)** 1990 Jun;38(6):634–7 (Eng. Abstr.) **(Fre)**

[Development of antibiotherapy and new trends] Bergogne–Berezin E. **Presse Med** 1990 Mar 3;19(8):373–7 (Eng. Abstr.) **(Fre)**

[Structure–activity relationship of oral cephalosporins] Bingen E, et al. **Presse Med** 1989 Nov 25;18(39):1923–7 (Eng. Abstr.) **(Fre)**

[Cefixime, the first oral third–generation cephalosporin] Roche G. **Presse Med** 1989 Oct 11;18(32):1541–4 (Eng. Abstr.) **(Fre)**

[Influence of Mueller–Hinton broth on the in vitro activities of cefuzoname, flomoxef, imipenem, and minocycline against Staphylococcus aureus] Fujita S, et al. **Jpn J Antibiot** 1990 May;43(5):757–60 (Eng. Abstr.) **(Jpn)**

[Concentrations of cefpiramide in the human bone marrow blood and bone tissues] Hasegawa S, et al. **Jpn J Antibiot** 1990 Jan;43(1):40–6 (Eng. Abstr.) **(Jpn)**

[In vitro susceptibility of Escherichia coli and Klebsiella sp. to antibiotics] Igari J, et al. **Jpn J Antibiot** 1990 Apr; 43(4):659–69 (Eng. Abstr.) **(Jpn)**

[In vitro synergism of two–drug combinations among cefamandole, flomoxef and imipenem against MRSA] Inoue M, et al. **Jpn J Antibiot** 1990 Feb;43(2):233–8 (Eng. Abstr.) **(Jpn)**

[Cefpiramide: antibacterial activity, pharmacokinetics, and clinical evaluation] Shindo K, et al. **Jpn J Antibiot** 1990 Jan;43(1):47–62 (Eng. Abstr.) **(Jpn)**

[Patterns of resistance of Staph aureus and gram–negative bacteria to aminoglycosides and cephalosporins] Ruczkowska J, et al. **Wiad Lek** 1989 May 1;42(9):579–83 (Eng. Abstr.) **(Pol)**

[Effect of beta–lactam antibiotics on lipid bilayer membranes. II. Cephalosporin antibiotics] Taisova AS, et al. **Antibiot Khimioter** 1989 Jul;34(7):504–10 (Eng. Abstr.) **(Rus)**

[Transmission of resistance to 1st and 2d generation cephalosporins] Antal M, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Dec;38(6):337–41 (Eng. Abstr.) **(Slo)**

THERAPEUTIC USE

Pharmacist intervention in prescribing of cefuroxime for pediatric patients. Strong DK, et al. **Am J Hosp Pharm** 1990 Jun;47(6):1350–3

Third–generation cephalosporins: a decade of progress in the treatment of severe infections. June 13, 1989. Proceedings. **Am J Med** 1990 Apr 9;88(4A):1S–45S

Third–generation cephalosporins in the treatment of rare infections. Finch RG. **Am J Med** 1990 Apr 9; 88(4A):25S–31S (40 ref.)

Serious pediatric infections. Kaplan SL. **Am J Med** 1990 Apr 9;88(4A):18S–24S (84 ref.)

Empiric therapy of severe infections in adults. Modai J. **Am J Med** 1990 Apr 9;88(4A):12S–17S (40 ref.)

Pathophysiologic basis for the use of third–generation cephalosporins. Neu HC. **Am J Med** 1990 Apr 9; 88(4A):3S–11S (60 ref.)

Efficacy of ceftiofur hydrochloride for treatment of experimentally induced colibacillosis in neonatal swine. Yancey RJ Jr, et al. **Am J Vet Res** 1990 Mar;51(3):349–53

Reducing the cost of surgical prophylaxis. Scher KS, et al. **Am Surg** 1990 Jan;56(1):32–5

Application of mathematical model to experimental chemotherapy of fatal murine pneumonia. Hishikawa T, et al. **Antimicrob Agents Chemother** 1990 Feb;34(2):326–31

Open trial of cefepime (BMY 28142) for infections in hospitalized patients. Oster S, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):954–7

Therapeutic studies of cefepime (BMY 28142) in murine meningitis and pharmacokinetics in neonatal rats. Tsai YH, et al. **Antimicrob Agents Chemother** 1990 May;34(5):733–8

Effectiveness of two therapeutic antibiotic regimens in the treatment of serious post–operative infections. Askew C, et al. **Br J Clin Pract** 1989 Dec;43(12):438–42

Use of cefotaxime in brain abscess [letter] Donald FE, et al. **Br J Neurosurg** 1988;2(4):539–40

Initial therapy for bacterial meningitis. Infectious Diseases and Immunization Committee, Canadian Paediatric Society. **Can Med Assoc J** 1990 Feb 15;142(4):305–6

Third generation cephalosporins in the treatment of severe infections. Workshop held during the 16th ICC. Jerusalem, June 11–16, 1989. Proceedings. **Chemotherapy** 1989;35 Suppl 2:1–42

Current concepts in prevention of prosthetic valve endocarditis. Bayer AS, et al. **Chest** 1990 May;97(5):1203–7 (38 ref.)

Choices of new penicillins and cephalosporins in the DRG era. Rahal JJ. **Curr Clin Top Infect Dis** 1988;9:173–84 (39 ref.)

The use of cefepime (BMY 28142) to treat respiratory infections. Clynes N, et al. **Diagn Microbiol Infect Dis** 1989 May–Jun;12(3):257–60

Nocardia infection in the acquired immunodeficiency syndrome. Telzak EE, et al. **Diagn Microbiol Infect Dis** 1989 Nov–Dec;12(6):517–9

Comment: oral cephalosporins [letter; comment] Mitchell D, et al. **DICP** 1990 Jun;24(6):642–4 Comment on: DICP 1990 Jan;24(1):45–51.

Oral cephalosporins in perspective [see comments] Smith GH. **DICP** 1990 Jan;24(1):45–51 (54 ref.) Comment in: DICP 1990 Jun;24(6):642–4.

Susceptibility of clinical isolates to cephalosporins [letter] Rattan A. **Indian Pediatr** 1989 Sep;26(9):965–6

Antimicrobial prophylaxis of cesarean section [editorial] Jones RN. **Infect Control Hosp Epidemiol** 1990 May; 11(5):233–4

Therapeutic effects of cefpirome (HR 810) on experimental mixed infections with Enterococcus faecalis and Escherichia coli in mice. Arai S, et al. **Infection** 1990 May–Jun;18(3):186–90

Randomized comparison of aztreonam and cefuroxime in gram–negative upper urinary tract infections. Friman G, et al. **Infection** 1989 Sep–Oct;17(5):284–9

Resistance to third generation cephalosporins: the current situation. Pechère JC. **Infection** 1989 Sep–Oct;17(5):333–7 (42 ref.)

Antibiotic prophylaxis in proximal femoral fracture. McQueen MM, et al. **Injury** 1990 Mar;21(2):104–6

Comparative chemotherapeutic activity of cefpirome and

imipenem in experimental infections. Klesel N, et al. **J Antibiot (Tokyo)** 1990 Jan;43(1):100–6

Prophylaxis in gynaecological surgery: a prospective randomized comparison between single dose prophylaxis with amoxycillin/clavulanate and the combination of cefuroxime and metronidazole. Friese S, et al. **J Antimicrob Chemother** 1989 Nov;24 Suppl B:213–6

Cephalosporin and aminoglycoside utilization in different parts of the world. Kumana CR, et al. **J Antimicrob Chemother** 1989 Dec;24(6):1001–10

Cefuroxime in total joint arthroplasty. Intravenous or in bone cement. McQueen MM, et al. **J Arthroplasty** 1990 Jun; 5(2):169–72

Systemic dry cow therapy—a preliminary report. Soback S, et al. **J Dairy Sci** 1990 Mar;73(3):661–6

Cefuroxime versus ceftriaxone for bacterial meningitis [letter; comment] Bass JW, et al. **J Pediatr** 1990 Mar;116(3):488–90 Comment on: J Pediatr 1989 Jun;114(6):1049–54.

Ceftriaxone versus cefuroxime for treatment of bacterial meningitis [letter; comment] Weiss D, et al. **J Pediatr** 1990 Mar;116(3):488–90, 492 Comment on: J Pediatr 1989 Jun;114(6):1049–54.

Cardiovascular surgery prophylaxis. A randomized, controlled comparison of cefazolin and cefuroxime. Doebbeling BN, et al. **J Thorac Cardiovasc Surg** 1990 Jun; 99(6):981–9

Failure of cephalosporins to prevent Staphylococcus aureus surgical wound infections. Kernodle DS, et al. **JAMA** 1990 Feb 16;263(7):961–6

Therapeutic effects of cefpirome, a new cephalosporin, on various models of infections in mice and rats. Arai S, et al. **Jpn J Antibiot** 1990 Jan;43(1):1–8

A comparative study of cefotaxime sodium versus a combination of cefapirin and gentamicin in the prophylactic treatment of patients undergoing cholecystectomy. Ker CG, et al. **Methods Find Exp Clin Pharmacol** 1989 Nov; 11(11):711–5

A comparison of ceftriaxone and cefuroxime for the treatment of bacterial meningitis in children. Schaad UB, et al. **N Engl J Med** 1990 Jan 18;322(3):141–7

Ceftriaxone versus cefuroxime for meningitis in children [letter] Wrenn K. **N Engl J Med** 1990 Jun 21;322(25):1821

[Randomized study of cefatrizine versus cefaclor in conjunctivitis otitis syndrome] Cohen R, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):517–20 (Eng. Abstr.) **(Fre)**

[Ambulatory treatment with cefuroxime-axetil of infectious bronchitis in patients sixty years of age or older: comparative study of the combination of amoxicillin and clavulanic acid] Hugonot R, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):533–7 (Eng. Abstr.) **(Fre)**

[Cefuroxime axetil. An antibiotic advances] **Fortschr Med** 1990;108 Suppl 92:4–13 **(Ger)**

[One year of Zinnat: effective antibiosis and good tolerance] Knothe H. **Fortschr Med** 1990;108 Suppl 92:13–5 **(Ger)**

[Mezlocillin in short-term obstetrico-gynecologic prophylaxis] Boemi P, et al. **Minerva Ginecol** 1989 Jul; 41(7):359–63 (Eng. Abstr.) **(Ita)**

[Clinical studies of ceftibuten in the field of obstetrics and gynecology] Doko F. **Jpn J Antibiot** 1990 Jan;43(1):111–5 (Eng. Abstr.) **(Jpn)**

[Clinical studies of ceftibuten in the field of urology] Hashimoto H, et al. **Jpn J Antibiot** 1990 Feb;43(2):355–61 (Eng. Abstr.) **(Jpn)**

[Clinical examination of ceftibuten in acute bronchitis] Hayashi I, et al. **Jpn J Antibiot** 1990 May;43(5):761–7 (Eng. Abstr.) **(Jpn)**

[Clinical experience with ceftibuten in complicated urinary tract infections] Mizutani S, et al. **Jpn J Antibiot** 1990 May; 43(5):779–89 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of cefpiramide for infections in leukemia and related disorders] Nakagawa H, et al. **Jpn J Antibiot** 1989 Aug;42(8):1720–6 (Eng. Abstr.) **(Jpn)**

[Therapeutic efficacy of ceftibuten in chronic respiratory tract infections] Watanabe A, et al. **Jpn J Antibiot** 1990 May;43(5):768–78 (Eng. Abstr.) **(Jpn)**

[Prophylactic use of cefpiramide (CPM) in open heart surgery] Koga M, et al. **Kyobu Geka** 1989 Nov;42(12):991–4 (Eng. Abstr.) **(Jpn)**

[Use of cephalosporins in pediatrics] Karwacki M, et al. **Pediatr Pol** 1989 Jan;64(1):68–78 (45 ref.) **(Pol)**

[Sensitivity of Salmonella strains to Augmentin and new generation cephalosporins and aminoglycosides] Dolna I, et al. **Przegl Epidemiol** 1989;43(2):218–22 (Eng. Abstr.) **(Pol)**

[Cephalosporins of the 1980s. New aminothiazolyloxyimino-cephalosporins and their sulfoxides] Nazarov AD, et al. **Antibiot Khimioter** 1990 Jan; 35(1):44–8 (33 ref.) **(Rus)**

[Cephalosporins of the 1980s. Aminothiazolylcephalosporins, non-glycine and phenylglycine cephalosporins, aminocephalosporins, cefamines, carbacephems and oxacephems] Nazarov AD, et al. **Antibiot Khimioter** 1990 Jan;35(1):48–52 (32 ref.) **(Rus)**

[A clinical and experimental study of longatsef] Frolov AF, et al. **Vrach Delo** 1989 Oct;(10):111–3 (Eng. Abstr.) **(Rus)**

[Antibiotic prophylaxis in endoscopic urologic surgery] Asuero Mantero M, et al. **Actas Urol Esp** 1989 Sep–Oct; 13(5):353–6 (Eng. Abstr.) **(Spa)**

[Antibiotics used for paratyphi B infections resistant to classical treatment and the results of their use] Taşdemir HA, et al. **Mikrobiyol Bul** 1989 Jan;23(1):35–9 (Eng. Abstr.) **(Tur)**

TOXICITY

Safety, tolerance, and pharmacokinetic evaluation of cefepime after administration of single intravenous doses. Barbhaiya RH, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1118–22

The renal mitochondrial toxicity of cephalosporins: specificity of the effect on anionic substrate uptake. Tune BM, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):65–9

CEPHALOSPORIUM see **ACREMONIUM**

CEPHALOTHIN

[Crystallization and subsequent freeze-drying of cephalothin sodium by seeding method] Takeda T, et al. **Yakugaku Zasshi** 1989 Jun;109(6):395–401 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

[Clinical laboratory approach for estimating effective administrative dose of cephalothin. Reevaluation of MIC break points in 4 category system of disc susceptibility test] Uete T, et al. **Jpn J Antibiot** 1989 Sep;42(9):1900–12 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

[Intraoperative anaphylactic shock—report of two cases] Chan YF, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Dec; 27(4):389–93 (23 ref.) (Eng. Abstr.) **(Chi)**

ANALYSIS

[Non-crystallinity determination by thermal analysis of freeze-dried cephalothin sodium] Suzuki Y, et al. **Yakugaku Zasshi** 1989 Jun;109(6):388–94 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

[Clinical significance of anti cephalothin antibody analysis] Kubo N, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:851–5 **(Jpn)**

PHARMACOKINETICS

Penetration of cephalothin into the spinal fluid. Vianna NJ, et al. **Am J Med Sci** 1967 Aug;254(2):216–20

[Oxacillin and cephalothin serum levels in patients undergoing surgery with extracorporeal circulation] Lonský V, et al. **Rozhl Chir** 1990 Apr;69(4):281–6 (Eng. Abstr.) **(Cze)**

PHARMACOLOGY

The effect of intravesically applied antibiotic solution in the prophylaxis of infectious complications of renal transplantation. Salmela K, et al. **Transpl Int** 1990 May; 3(1):12–4

[Antibacterial activity of carumonam and cefpirome on hospital strains resistant to gentamicin and cephalothin: comparison with other beta-lactam antibiotics, new fluoroquinolones, aminoglycosides and other antibiotics] Vanhoof R, et al. **Pathol Biol (Paris)** 1990 Jun;38(6):634–7 (Eng. Abstr.) **(Fre)**

[The in vitro effect of a combination of sulbactam with cephalothin and cefazolin on strains of Escherichia coli and Proteus mirabilis which produce beta lactamase] Múčková M, et al. **Bratisl Lek Listy** 1990 Apr;91(4):303–8 (Eng. Abstr.) **(Slo)**

THERAPEUTIC USE

Antibiotic prophylaxis in lower-extremity amputations due to ischemia. A prospective, randomized trial of cephalothin versus methicillin. Thomsen S, et al. **Arch Orthop Trauma Surg** 1990;109(2):72–4

CEPHAMYCINS

ADMINISTRATION & DOSAGE

[Treatment of female acute cystitis with a single dose of cefminox] Koguchi M, et al. **Hinyokika Kiyo** 1989 Dec; 35(12):2163–6 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of a combination treatment with cefbuperazone and amikacin in infections complicating with hematological disorders] Tanaka S, et al. **Jpn J Antibiot** 1989 Dec;42(12):2548–54 (Eng. Abstr.) **(Jpn)**

METABOLISM

Enzymes involved in penicillin, cephalosporin and cephamycin biosynthesis. Martín JF, et al. **Adv Biochem Eng Biotechnol** 1989;39:153–87 (138 ref.)

PHARMACOKINETICS

[Pharmacokinetics and antimicrobial effect of cefminox in serum and ascitic fluid for experimental purulent peritonitis in mice] Azuma Y, et al. **Nippon Geka Hokan** 1989 Sep 1;58(5):445–51 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

An update on the in vitro activity of ceftizoxime and other cephalosporin/cephamycin antimicrobial agents against clinically significant anaerobic bacteria. Aldridge KE. **Clin Ther** 1990;12 Suppl C:3–12 (16 ref.)

Bacteriolytic combination effect of cefminox and piperacillin evaluated by turbidimetry. Goi H, et al. **Drugs Exp Clin Res** 1989;15(9):397–407

Emergence of methicillin-resistant clones from cephamycin-resistant Staphylococcus aureus. Okonogi K, et al. **J Antimicrob Chemother** 1989 Nov;24(5):637–45

THERAPEUTIC USE

Experimental studies on the pharmacokinetics and therapeutic effect of cefbuperazone in biliary infection. Kameyama J, et al. **Curr Med Res Opin** 1989;11(9):577–84

Extended broad spectrum beta-lactamase in Klebsiella pneumoniae including resistance to cephamycins. Bauernfeind A, et al. **Infection** 1989 Sep–Oct;17(5):316–21

CEPHAPIRIN see under **CEPHALOSPORINS**

CEPHAZOLIN see **CEFAZOLIN**

CEPHRADINE see under **CEPHALOSPORINS**

CERAMICS

Comparisons of different debonding techniques for ceramic brackets: an in vitro study. Part II. Findings and clinical implications. Bishara SE, et al. **Am J Orthod Dentofacial Orthop** 1990 Sep;98(3):263–73

The shear bond strengths of stainless steel and ceramic brackets used with chemically and light-activated composite resins. Joseph VP, et al. **Am J Orthod Dentofacial Orthop** 1990 Feb;97(2):121–5

Legal aspects of orthodontic practice: risk management concepts. Ceramic bracket update. Machen DE. **Am J Orthod Dentofacial Orthop** 1990 Aug;98(2):185–6

Ceramic bracket bonding: a comparison of bond strength with polyacrylic acid and phosphoric acid enamel conditioning. Maskeroni AJ, et al. **Am J Orthod Dentofacial Orthop** 1990 Feb;97(2):168–75

Bond strength of ceramic brackets under shear stress: an in vitro report. Viazis AD, et al. **Am J Orthod Dentofacial Orthop** 1990 Sep;98(3):214–21

Pneumoconiosis in pottery workers and its trends in north Staffordshire from the point of view of the Medical Boarding Centre (Respiratory Diseases), Stoke-on-Trent. Chatterjee AK. **Ann Occup Hyg** 1989;33(3):369–74

Respiratory tuberculosis in the potteries. Cole RB. **Ann Occup Hyg** 1989;33(3):387–95

Orthopaedic problems in pottery workers. Report of a paper read by Mr C.H. Wynn Jones, Orthopaedic Department, North Staffordshire Hospital Centre, Stoke-on-Trent. Ellison JM. **Ann Occup Hyg** 1989;33(3):397–8

Respiratory symptoms and pulmonary impairment in male and female subjects with pottery workers' silicosis. Prowse K, et al. **Ann Occup Hyg** 1989;33(3):375–85

Skin disease in the pottery industry. Smith AG. **Ann Occup Hyg** 1989;33(3):365–8

Ceravital versus plastipore in tympanoplasty: a randomized prospective trial. Mangham CA, et al. **Ann Otol Rhinol Laryngol** 1990 Feb;99(2 Pt 1):112–6

Effect of ceramic-coated clothing on forearm blood flow during exercise in a cool environment. Katsuura T, et al. **Ann Physiol Anthropol** 1989 Jan;8(1):53–5

Radiographic and histological analysis of tooth eruption through calcium phosphate ceramics in the cat. Feinberg SE, et al. **Arch Oral Biol** 1989;34(12):975–84

Tricalcium phosphate ceramic as immediate root implants for the maintenance of alveolar bone in partially edentulous mandibular jaws. A clinical study. Mathai JK, et al. **Aust Dent J** 1989 Oct;34(5):421–6

Effect of glass-ceramic implants on primary calcification in rat tibial bone after injury. Amir D, et al. **Biomaterials** 1989 Nov;10(9):585–9

Preliminary studies on the phenomenological behaviour of osteoblasts cultured on hydroxyapatite ceramics. Bagambisa FB, et al. **Biomaterials** 1990 Jan;11(1):50–6

Stem cell delivery vehicle. Caplan AI. **Biomaterials** 1990 Jul; 11:44–6 (6 ref.)

Effect of the macroporosity for osseous substitution of calcium phosphate ceramics. Daculsi G, et al. **Biomaterials** 1990 Jul;11:86–7

Calcium phosphate ceramic coatings on porous titanium: effect of structure and composition on electrophoretic deposition, vacuum sintering and in vitro dissolution. Ducheyne P, et al. **Biomaterials** 1990 May;11(4):244–54

The interface of calcium-phosphate and glass-ceramic in bone, a structural analysis. Gross UM, et al. **Biomaterials** 1990 Jul;11:83–5

Oxidation of four palladium-rich ceramic fusing alloys. Hautaniemi JA, et al. **Biomaterials** 1990 Jan;11(1):62–72

Microstructure and mechanical properties of hydroxyapatite ceramics with zirconia dispersion prepared by post-sintering. Ioku K, et al. **Biomaterials** 1990 Jan; 11(1):57–61

Aluminas with dispersoids. Tribologic properties and in vivo aging. Mandrino A, et al. **Biomaterials** 1990 Jul;11:88–91

Quantitative study on osteoconduction of

apatite–wollastonite containing glass ceramic granules, hydroxyapatite granules, and alumina granules. Ono K, et al. **Biomaterials** 1990 May;11(4):265–71

Ceramic brackets. Birnie D. **Br J Orthod** 1990 Feb;17(1):71–4

Zirconia: the second generation of ceramics for total hip replacement. Christel PS. **Bull Hosp Jt Dis Orthop Inst** 1989 Fall;49(2):170–7

Formation of carbonate–apatite crystals after implantation of calcium phosphate ceramics. Daculsi G, et al. **Calcif Tissue Int** 1990 Jan;46(1):20–7

Macroporous calcium phosphate ceramic performance in human spine fusion. Passuti N, et al. **Clin Orthop** 1989 Nov; (248):169–76

Epidemiologic studies of inorganic dust–related lung diseases in The Netherlands. Meijers JM, et al. **Exp Lung Res** 1990 Jan;16(1):15–23

A case–referent study on lung cancer mortality among ceramic workers. Lagorio S, et al. **IARC Sci Publ** 1990; (97):21–8

Lung cancer mortality among pottery workers in the United States. Thomas TL. **IARC Sci Publ** 1990;(97):75–81

Lung cancer incidence among Swedish ceramic workers with silicosis. Tornling G, et al. **IARC Sci Publ** 1990;(97):113–9

A mortality follow–up study of pottery workers: preliminary findings on lung cancer. Winter PD, et al. **IARC Sci Publ** 1990;(97):83–94

Analysis of removed autophor ceramic–on–ceramic components. Kummer FJ, et al. **J Arthroplasty** 1990 Mar; 5(1):28–33

Macroporous calcium phosphate ceramic for long bone surgery in humans and dogs. Clinical and histological study. Daculsi G, et al. **J Biomed Mater Res** 1990 Mar; 24(3):379–96

Evaluation of metal implants coated with several types of ceramics as biomaterials. Hayashi K, et al. **J Biomed Mater Res** 1989 Nov;23(11):1247–59

Breakdown corrosion potential of ceramic coated metal implants. Hayashi K, et al. **J Biomed Mater Res** 1990 Aug; 24(8):1111–3

Surface reactions of calcium phosphate ceramics to various solutions. Hyakuna K, et al. **J Biomed Mater Res** 1990 Apr; 24(4):471–88

Thermodynamic study of phase transfer of precipitates on SiC whisker reinforced glass ceramics. Imai K, et al. **J Biomed Mater Res** 1990 Jan;24(1):1–10

Analysis of A.W glass–ceramic surface by micro–beam x–ray diffraction. Kitsugi T, et al. **J Biomed Mater Res** 1990 Feb; 24(2):259–73

Solutions able to reproduce in vivo surface–structure changes in bioactive glass–ceramic A–W. Kokubo T, et al. **J Biomed Mater Res** 1990 Jun;24(6):721–34

Ca,P–rich layer formed on high–strength bioactive glass–ceramic A–W. Kokubo T, et al. **J Biomed Mater Res** 1990 Mar;24(3):331–43

Tissues at the surface of the new composite material titanium/glass–ceramic for replacement of bone and teeth. Müller–Mai C, et al. **J Biomed Mater Res** 1989 Oct; 23(10):1149–68

Unsatisfactory results with a ceramic total hip prosthesis. Mahoney OM, et al. **J Bone Joint Surg [Am]** 1990 Jun; 72(5):663–71

Atomistic lattice simulation of high Tc oxides. Allan NL, et al. **J Comput Aided Mol Des** 1989 Dec;3(4):299–309 (34 ref.)

Preparation of cross–sectional specimens of ceramic thermal barrier coatings for transmission electron microscopy. Unal O, et al. **J Electron Microsc Tech** 1990 Apr;14(4):307–12

Application of compact aluminum oxide ceramic implants in maxillofacial surgery. Szabó G, et al. **J Oral Maxillofac Surg** 1990 Apr;48(4):354–61 (35 ref.)

Effect of various graft materials with tetracycline in localized juvenile periodontitis. Evans GH, et al. **J Periodontol** 1989 Sep;60(9):491–7

Bone formation in tricalcium phosphate–filled periodontal intrabony lesions. Histological observations in humans. Saffar JL, et al. **J Periodontol** 1990 Apr;61(4):209–16

Influence of ceramic thickness on the polymerization of light–cured resin cement. Blackman R, et al. **J Prosthet Dent** 1990 Mar;63(3):295–300

A comparative strength study of metal ceramic and all–ceramic esthetic materials: modulus of rupture. Campbell SD. **J Prosthet Dent** 1989 Oct;62(4):476–9

Marginal fit of porcelain–fused–to–metal and two types of ceramic crown. Hung SH, et al. **J Prosthet Dent** 1990 Jan; 63(1):26–31

Fracture–surface analysis of dental ceramics. Kelly JR, et al. **J Prosthet Dent** 1989 Nov;62(5):536–41

Veterans Administration Cooperative Studies Project No. 147: association of metallic taste with metal ceramic alloys. Morris HF. **J Prosthet Dent** 1990 Feb;63(2):124–9

Apparent fracture toughness of all–ceramic crown systems. Rosenstiel SF, et al. **J Prosthet Dent** 1989 Nov;62(5):529–32

Biocompatibility of zirconia dispersed hydroxyapatite ceramics. Suzuki O, et al. **Nippon Seikeigeka Gakkai Zasshi** 1990 Apr;64(4):249–59

Clinical application of dental implant with root of coated bioglass: short–term results. Kudo K, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jul;70(1):18–23

An investigation into the effect of a ceramic particle trap on the chemical mutagens in diesel exhaust. Bagley ST, et al. **Res Rep Health Eff Inst** 1987 Jan;(5):1–67

[Surface bioactive ceramics (preliminary report)] Urban K, et al. **Acta Chir Orthop Traumatol Cech** 1989 Oct; 56(5):391–7 (Eng. Abstr.) **(Cze)**

[Occupational lead poisoning in potters] Hassine L, et al. **J Toxicol Clin Exp** 1990 Jan–Feb;10(1):27–30 (Eng. Abstr.) **(Fre)**

[Bone integration within calcium phosphate ceramic by creation of posterior inter–articular lumbar spine fusions in dogs] Martin S, et al. **Neurochirurgie** 1989;35(4):209–15 (30 ref.) (Eng. Abstr.) **(Fre)**

[Contribution to the experimental study of endosseous sintered ceramic implants] Dubruille JH, et al. **Rev Stomatol Chir Maxillofac** 1990;91(1):70–2 (Eng. Abstr.) **(Fre)**

[Results of hip joint replacement with ceramics partial endoprostheses] Heisel J, et al. **Aktuel Traumatol** 1990 Jun; 20(3):129–35 (Eng. Abstr.) **(Ger)**

[Standardized bone model for incorporation of bone, bone ceramics or other materials into the implant bed] Roesgen M, et al. **Aktuel Traumatol** 1990 Feb;20(1):37–43 (Eng. Abstr.) **(Ger)**

[Aplasia and hypoplasia of the side of the nose in the Mocha Period and today] Pirsig W. **Auris Nasus Larynx** 1989;16 Suppl 1:S47–52 (Eng. Abstr.) **(Ger)**

[Two rare complications following implantation of total hip endoprostheses with a ceramic head] Israel C, et al. **Beitr Orthop Traumatol** 1989 Jul;36(7):310–2 (Eng. Abstr.) **(Ger)**

[Experimental studies of the obliteration of extensive radical ear cavities with a new kind of ceramic granulate] Schadel A, et al. **Laryngorhinootologie** 1989 Oct;68(10):571–5 (Eng. Abstr.) **(Ger)**

[Polyethylene wear and late loosening of a total prosthesis of the hip joint. New perspectives for metal/metal pairing of the capsule and head] Weber BG, et al. **Orthopade** 1989 Sep;18(5):370–6 (Eng. Abstr.) **(Ger)**

[Hazardous lead exposure in the cleaning of a kiln used in the ceramics industry] Kieser J, et al. **Z Gesamte Hyg** 1990 Mar;36(3):166–8 (Eng. Abstr.) **(Ger)**

[A SEM evaluation of the surface color of Dicor crowns] Fraccari F, et al. **Minerva Stomatol** 1990 Jun;39(6):431–4 (Eng. Abstr.) **(Ita)**

[Ceramic canal pins] Pizzirani C, et al. **Minerva Stomatol** 1989 Dec;38(12):1247–51 (Eng. Abstr.) **(Ita)**

[An experimental study on the osteoconductive properties of porous calcium phosphate glass ceramics] Wada M. **Nippon Seikeigeka Gakkai Zasshi** 1989 Nov;63(11):1368–78 (Eng. Abstr.) **(Jpn)**

[Use of porous ceramic implants in spinal surgery (preliminary report)] Kiwerski J, et al. **Chir Narzadow Ruchu Ortop Pol** 1989;54(3):181–7 (Eng. Abstr.) **(Pol)**

[Morphologic studies of the reaction of the subcutaneous connective tissue in rats to implantation of porous ceramics] Kotz J, et al. **Polim Med** 1989;19(3–4):119–25 (Eng. Abstr.) **(Pol)**

[Results of ceramoplasty of the supra–acetabular area in dysplasia of the hip joint] Bakhaa K, et al. **Ortop Travmatol Protez** 1990 May;(5):35–6 (Eng. Abstr.) **(Rus)**

[Ceramic implants in the surgical treatment of aseptic necrosis of the femur head] Korzh AA. **Ortop Travmatol Protez** 1989 Oct;(10):1–3 **(Rus)**

[Biomechanical substantiation of the form and position of endoprosthesis of the acetabular vault in dysplasia] Miteleva ZM. **Ortop Travmatol Protez** 1989 Oct;(10):19–23 (Eng. Abstr.) **(Rus)**

[The prevention of complications from the use of cast stump pin inserts for the fixation of metal–ceramic dentures] Arutiunov SD. **Stomatologiia (Mosk)** 1989 Jul–Aug; 68(4):48–50 (Eng. Abstr.) **(Rus)**

[Aspects under discussion in the design and use of metal–ceramic dentures] Kalamkarov KhA, et al. **Stomatologiia (Mosk)** 1989 Jul–Aug;68(4):44–8 (Eng. Abstr.) **(Rus)**

[Experience in preparing metal–ceramic and unit–cast fixed dentures using a new nickel–chromium alloy] Khokhlov AA, et al. **Stomatologiia (Mosk)** 1989 Jul–Aug;68(4):50–1 (Eng. Abstr.) **(Rus)**

[The properties of dental implants made of Al2O3–ceramic and the results of their clinical use] Piesold J, et al. **Stomatologiia (Mosk)** 1990 Jan–Feb;69(1):42–6 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Contact sensitization among ceramics workers. Seidenari S, et al. **Contact Dermatitis** 1990 Jan;22(1):45–9

Lead encephalopathy from an imported Toby mug. Zuckerman MA, et al. **Postgrad Med J** 1989 May; 65(763):307–9

ANALYSIS

Influence of automatic dishwashings and scrubbings on release of lead from glazed ceramicware. Gould JH, et al. **J Assoc Off Anal Chem** 1990 May–Jun;73(3):401–4

High–resolution electron microscopy of ceramic interfaces. Ishida Y, et al. **J Electron Microsc Tech** 1989 Jul; 12(3):244–51

METABOLISM

The bonding of glass ceramics to bone. Kitsugi T, et al. **Int Orthop** 1989;13(3):199–206

A bone–bonding bioactive material implant in the head and neck: bioglass. Karlan MS, et al. **Surg Forum** 1978;29:575–7

THERAPEUTIC USE

[New bone formation following implantation of various hydroxyapatite ceramics. Animal experiment with bore hole models of the sheep tibia] Mandelkow HK, et al. **Unfallchirurg** 1990 Aug;93(8):376–9 (Eng. Abstr.) **(Ger)**

TOXICITY

Silicon nitride ceramic (Si3N4) on rabbit skeletal cells and tissue [letter] Griss P. **Clin Orthop** 1990 Jul;(256):306–8

[Cytotolerance of bioceramics in cell culture studies] Novák L, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1989;32(4):365–9 (Eng. Abstr.) **(Cze)**

CERAMIDE TRIHEXOSIDASE see under **GALACTOSIDASES**

CERAMIDES

ANALYSIS

Analysis of derivatized ceramides and neutral glycosphingolipids by high–performance tandem mass spectrometry. Domon B, et al. **Anal Biochem** 1990 Jan; 184(1):151–64

Determination of the presence of ceramide aminoethylphosphonate and ceramide N–methylaminoethylphosphonate in marine animals by fast atom bombardment mass spectrometry. Matsubara T, et al. **Biochim Biophys Acta** 1990 Feb 23;1042(3):280–6

Glycosphingolipids in insects. Chemical structures of two variants of a glucuronic–acid–containing ceramide hexasaccharide from a pupae of Calliphora vicina (Insecta: Diptera), distinguished by a N–acetylglucosamine–bound phosphoethanolamine sidechain. Weske B, et al. **Eur J Biochem** 1990 Jul 31;191(2):379–88

Molecular trapping of a fluorescent ceramide analogue at the Golgi apparatus of fixed cells: interaction with endogenous lipids provides a trans–Golgi marker for both light and electron microscopy. Pagano RE, et al. **J Cell Biol** 1989 Nov;109(5):2067–79

Changes in the ceramide composition of rat forebrain gangliosides with age. Palestini P, et al. **J Neurochem** 1990 Jan;54(1):230–5

BIOSYNTHESIS

Metabolism of free sphingoid bases in murine tissues and in cultured human fibroblasts. Kobayashi T, et al. **Eur J Biochem** 1989 Dec 22;186(3):493–9

Ceramide 1–phosphate, a novel phospholipid in human leukemia (HL–60) cells. Synthesis via ceramide from sphingomyelin. Dressler KA, et al. **J Biol Chem** 1990 Sep 5;265(25):14917–21

IMMUNOLOGY

Monoclonal antibody to galactosylceramide: discrimination of structural difference in the ceramide moiety. Nakakuma H, et al. **FEBS Lett** 1989 Dec 4;258(2):230–2

ISOLATION & PURIFICATION

An acetylated derivative of a new N–acylsphingosine from red alga Halymenia porphyroides. Bano S, et al. **Planta Med** 1990 Apr;56(2):233–4

METABOLISM

Chemistry and biology of N–(7–nitrobenz–2–oxa–1,3–diazol–4–yl)–labeled lipids: fluorescent probes of biological and model membranes. Chattopadhyay A. **Chem Phys Lipids** 1990 Mar;53(1):1–15 (248 ref.)

Ceramide 1–phosphate, a novel phospholipid in human leukemia (HL–60) cells. Synthesis via ceramide from sphingomyelin. Dressler KA, et al. **J Biol Chem** 1990 Sep 5;265(25):14917–21

1,2–Diacylglycerol and ceramide levels in rat skeletal muscle and liver in vivo. Studies with insulin, exercise, muscle denervation, and vasopressin. Turinsky J, et al. **J Biol Chem** 1990 May 15;265(14):7933–8

PHARMACOLOGY

Role of ceramide as a lipid mediator of 1 alpha,25–dihydroxyvitamin D3–induced HL–60 cell differentiation. Okazaki T, et al. **J Biol Chem** 1990 Sep 15;265(26):15823–31

CERATOPOGONIDAE

Comparison of several different trapping methods for Culicoides variipennis (Diptera: Ceratopogonidae). Anderson JR, et al. **J Am Mosq Control Assoc** 1989 Sep; 5(3):325–34

Comparisons of light traps for monitoring adult Culicoides variipennis (Diptera: Ceratopogonidae). Holbrook FR, et al. **J Am Mosq Control Assoc** 1989 Dec;5(4):558–62

Habitat pH characteristics of tree hole Culicoides (Diptera: Ceratopogonidae). Pappas CD, et al.

J Am Mosq Control Assoc 1990 Mar;6(1):99–100
Seasonal abundance and parity of Culicoides biting midges associated with livestock at Roma, Lesotho (Diptera: Ceratopogonidae). Venter GJ, et al. **Onderstepoort J Vet Res** 1989 Sep;56(3):173–7
Potential of infra-red thermography for the detection of summer seasonal recurrent dermatitis (sweet itch) in horses [see comments] Braverman Y. **Vet Rec** 1989 Sep 30; 125(14):372–4 Comment in: Vet Rec 1989 Oct 28;125(18):466.

ANATOMY & HISTOLOGY

Afrotropical Culicoides: C. (Avaritia) spinifer Khamala & Kettle, 1971, a name based on an artefact (Diptera: Ceratopogonidae). Meiswinkel R. **Onderstepoort J Vet Res** 1989 Dec;56(4):287–8

CLASSIFICATION

Afrotropical Culicoides: Synhelea Kieffer, 1925, resurrected as subgenus to embrace 10 species (Diptera: Ceratopogonidae). Meiswinkel R, et al. **Onderstepoort J Vet Res** 1989 Sep;56(3):147–64
[Blood-sucking biting midges (Ceratopogonidae) in north central Siberia] Mezenev NP. **Parazitologiia** 1990 Jan–Feb; 24(1):28–36 (Eng. Abstr.) **(Rus)**

GENETICS

Genetic variation in laboratory and field populations of the vector of bluetongue virus, Culicoides variipennis (Diptera: Ceratopogonidae). Tabachnick WJ. **J Med Entomol** 1990 Jan;27(1):24–30

GROWTH & DEVELOPMENT

Environmental factors affecting mortality of adult Culicoides variipennis (Diptera: Ceratopogonidae) in the laboratory. Hunt GJ, et al. **J Am Mosq Control Assoc** 1989 Sep; 5(3):387–91
A quantitative survey of Culicoides variipennis (Diptera: Ceratopogonidae) in dairy wastewater ponds in southern California. Mullens BA. **J Med Entomol** 1989 Nov; 26(6):559–65
Response of Culicoides variipennis (Diptera: Ceratopogonidae) to water level fluctuations in experimental dairy wastewater ponds. Mullens BA, et al. **J Med Entomol** 1989 Nov;26(6):566–72

IMMUNOLOGY

Intradermal challenge of Icelandic horses with extracts of four species of the genus Culicoides. Halldorsdottir S, et al. **Res Vet Sci** 1989 Nov;47(3):283–7
Immunogenicity and allergenicity of Culicoides imicola (Diptera: Ceratopogonidae) extracts. Ungar-Waron H, et al. **Zentralbl Veterinarmed [B]** 1990 Feb;37(1):64–72

MICROBIOLOGY

An investigation of transovarial transmission of Akabane virus in Culicoides brevitarsis. Allingham PG, et al. **Aust Vet J** 1990 Jul;67(7):273–4
Absence of transovarial transmission of bluetongue virus in Culicoides variipennis: immunogold labelling of bluetongue virus antigen in developing oocytes from Culicoides variipennis (Coquillett). Nunamaker RA, et al. **Comp Biochem Physiol [A]** 1990;96(1):19–31
The replication of bluetongue virus in Culicoides vectors. Mellor PS. **Curr Top Microbiol Immunol** 1990;162:143–61 (101 ref.)
Asynchronous mixed infection of Culicoides variipennis with bluetongue virus serotypes 10 and 17. el Hussein A, et al. **J Gen Virol** 1989 Dec;70 (Pt 12):3355–62
Cell lines from Culicoides variipennis (Diptera: Ceratopogonidae) support replication of bluetongue virus. Wechsler SJ, et al. **J Invertebr Pathol** 1989 Nov; 54(3):385–93
Isolation of arboviruses from Culicoides midges (Diptera: Ceratopogonidae) in Colorado during an epizootic of vesicular stomatitis New Jersey. Kramer WL, et al. **J Med Entomol** 1990 Jul;27(4):487–93
Detection of bluetongue virus in Culicoides variipennis (Diptera: Ceratopogonidae) by an antigen capture enzyme-linked immunosorbent assay. Mecham JO, et al. **J Med Entomol** 1990 Jul;27(4):602–6
Effects of anesthetization and storage temperature on bluetongue virus recovery from Culicoides variipennis (Diptera: Ceratopogonidae) and sheep blood. Work TM, et al. **J Med Entomol** 1990 May;27(3):331–3
Culicoides: biological vectors of Akabane virus. Jennings M, et al. **Vet Microbiol** 1989 Dec;21(2):125–31
[Isolation of the Issyk-Kul virus from blood-sucking biting flies Culicoides schultzei Enderlein in southern Tadzhikistan] Nemova NV, et al. **Med Parazitol (Mosk)** 1989 Nov-Dec;(6):25–6 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

On the possibility of bovine Onchocerca species infecting Simulium damnosum s.l. in the forest zone of Sierra Leone. II. Biting densities and filarial infections in Simulium spp. and Culicoides spp. Davies JB, et al. **Ann Trop Med Parasitol** 1989 Dec;83(6):603–14
Fine structure and sporogonic development of a Vavraia sp. (Microsporida: Pleistophoridae) in the biting midge Culicoides edeni (Diptera: Ceratopogonidae). Atkinson CT. **J Invertebr Pathol** 1990 Jan;55(1):105–11

PHYSIOLOGY

Bluetongue in Australia—an entomologist's view. Standfast HA, et al. **Aust Vet J** 1989 Dec;66(12):396–7 (16 ref.)
Host-seeking behavior and seasonal abundance of Culicoides paraensis (Diptera: Ceratopogonidae) in Brazil. Hoch AL, et al. **J Am Mosq Control Assoc** 1990 Mar;6(1):110–4

CERCOPITHECIDAE

Persistent HIV-2 infection of rhesus macaque, baboon, and mangabeys. Nicol I, et al. **Intervirology** 1989;30(5):258–67
Spontaneous external endometriosis in a De Brazza's monkey. Binhazim AA, et al. **J Comp Pathol** 1989 Nov;101(4):471–4

ANATOMY & HISTOLOGY

Comparative anatomy of the arterial system of the foot in primates. 1. Macaque. Matsumoto S, et al. **Acta Anat (Basel)** 1990;137(4):367–72
Comparison of muscle weight and force ratios in New and Old World monkeys. Bouvier M, et al. **Am J Phys Anthropol** 1990 Aug;82(4):509–15
Functional assessment of subfamily variation in maxillomandibular morphology among Old World monkeys. Ravosa MJ. **Am J Phys Anthropol** 1990 Jun; 82(2):199–212

MICROBIOLOGY

Prevalence of natural infection with simian immunodeficiency virus and simian T-cell leukemia virus type I in a breeding colony of sooty mangabey monkeys. Fultz PN, et al. **AIDS** 1990 Jul;4(7):619–25
Import rules threaten research on primates [news] Palca J. **Science** 1990 Jun 1;248(4959):1071–3

PARASITOLOGY

Experimental infection of the leaf-monkeys, Presbytis cristata and Presbytis melalophos with subperiodic Brugia malayi. Mak JW, et al. **Acta Trop (Basel)** 1990 May;47(4):223–6
The immune response to nematode parasites: modulation of mast cell numbers and function during Strongyloides stercoralis infections in nonhuman primates. Barrett KE, et al. **Am J Trop Med Hyg** 1988 May;38(3):574–81

PHYSIOLOGY

Ecology of the capped langur (Presbytis pileatus) in Assam, India. Choudhury A. **Folia Primatol (Basel)** 1989; 52(1–2):88–92
Comparative study of vocal communication in two Asian leaf monkeys, Presbytis johnii and Presbytis entellus. Hohmann G. **Folia Primatol (Basel)** 1989;52(1–2):27–57

CERCOPITHECUS

Experimental infection of African green monkeys and cynomolgus monkeys with a SIVAGM strain isolated from a healthy African green monkey. Honjo S, et al. **J Med Primatol** 1990;19(1):9–20
[Therapy proposals for the quarantine of African green monkeys (Cercopithecus aethiops)] Abel C, et al. **Z Versuchstierkd** 1989;32(4):167–70 (Eng. Abstr.) **(Ger)**
[A method for collecting semen by fingers in the African green monkey (Cercopithecus aethiops) and properties of the semen collected] Hiyaoka A, et al. **Jikken Dobutsu** 1990 Jan;39(1):121–4 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Angiology of the brain of the baboon Papio ursinus, the vervet monkey Cercopithecus pygerithrus, and the bushbaby Galago senegalensis. Lake AR, et al. **Am J Anat** 1990 Mar;187(3):277–86

GROWTH & DEVELOPMENT

[Spheno-occipital synchondrosis—a fluorescence and polarization microscopy study in Cercopithecus aethiops monkeys] Heinkele M, et al. **Fortschr Kieferorthop** 1989 Dec;50(6):493–505 (Eng. Abstr.) **(Ger)**
[Growth curves of body weight and their relationship to sexual maturity in laboratory-bred male African green monkeys (Cercopithecus aethiops)] Hiyaoka A, et al. **Jikken Dobutsu** 1990 Jul;39(3):345–52 (Eng. Abstr.) **(Jpn)**
[Growth curves of body weight changes in laboratory-bred female African green monkeys (Cercopithecus aethiops)] Hiyaoka A, et al. **Jikken Dobutsu** 1989 Jul;38(3):239–44 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Persistent infection of rhesus macaques with a molecular clone of human immunodeficiency virus type 2: evidence of minimal genetic drift and low pathogenetic effects. Franchini G, et al. **J Virol** 1990 Sep;64(9):4462–7

METABOLISM

Hepatic apo B-100 lipoproteins and plasma LDL heterogeneity in African green monkeys. Murthy VN, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):E1041–57
Complete nucleotide sequence of a simian immunodeficiency virus from African green monkeys: a novel type of intragroup divergence. Baier M, et al. **Virology** 1990 May; 176(1):216–21

MICROBIOLOGY

Isolation and characterization of simian immunodeficiency viruses from two subspecies of African green monkeys. Allan JS, et al. **AIDS Res Hum Retroviruses** 1990 Mar; 6(3):275–85
Immunological and molecular comparison of simian cytomegaloviruses isolated from African green monkey (Cercopithecus aethiops) and Japanese macaque (Macaca fuscata). Eizuru Y, et al. **Arch Virol** 1989;107(1–2):65–75
Partial purification and characterization of the reverse transcriptase of the simian immunodeficiency virus TYO-7 isolated from an African green monkey. Lüke W, et al. **Biochemistry** 1990 Feb 20;29(7):1764–9
Increased peripheral lymphocytes, lymphoid hepatitis and anaemia in African vervet monkeys seropositive to retroviruses. Fincham JE, et al. **J Comp Pathol** 1989 Jul; 101(1):53–68
Simian immunodeficiency viruses from African green monkeys display unusual genetic diversity. Johnson PR, et al. **J Virol** 1990 Mar;64(3):1086–92
Construction and characterization of an infectious DNA clone and of mutants of simian immunodeficiency virus isolated from the African green monkey. Shibata R, et al. **J Virol** 1990 Jan;64(1):307–12
Efficiency of isolation of human rotavirus in primary African green monkey kidney cells. Aboudy Y, et al. **J Virol Methods** 1989 Sep;25(3):251–7

PARASITOLOGY

The structure of the shell and polar plugs of the egg of the whipworm, Trichuris trichiura (Nematoda: Trichuridae) from the Samango monkey (Cercopithecus albogularis). Appleton CC, et al. **Onderstepoort J Vet Res** 1989 Dec; 56(4):219–21
Experimental transmission of Leishmania major to vervet monkeys (Cercopithecus aethiops) by bites of Phlebotomus duboscqi (Diptera: Psychodidae). Lawyer PG, et al. **Trans R Soc Trop Med Hyg** 1990 Mar-Apr;84(2):229–32

PHYSIOLOGY

Effects of size on vervet (Cercopithecus aethiops) gait parameters: a longitudinal approach. Vilensky JA, et al. **Am J Phys Anthropol** 1990 Mar;81(3):429–39
Effects of growth and speed on hindlimb joint angular displacement patterns in vervet monkeys (Cercopithecus aethiops). Vilensky JA, et al. **Am J Phys Anthropol** 1990 Mar;81(3):441–9
MPTP-induced parkinsonism: relative changes in dopamine concentration in subregions of substantia nigra, ventral tegmental area and retrorubral field of symptomatic and asymptomatic vervet monkeys. Elsworth JD, et al. **Brain Res** 1990 Apr 16;513(2):320–4
Early experience and cross-generational continuity of mother-infant contact in vervet monkeys. Fairbanks LA. **Dev Psychobiol** 1989 Nov;22(7):669–81
Diet and feeding behaviour of samango monkeys (Cercopithecus mitis labiatus) in Ngoye Forest, South Africa. Lawes MJ, et al. **Folia Primatol (Basel)** 1990; 54(1–2):57–69
A field observation of Sclater's guenon (Cercopithecus sclateri Pocock, 1904). Oates JF, et al. **Folia Primatol (Basel)** 1989;52(1–2):93–6
Prostaglandins mediate the ocular hypotensive action of the angiotensin converting enzyme inhibitor MK-422 (enalaprilat) in African green monkeys. Lotti VJ, et al. **J Ocul Pharmacol** 1990 Spring;6(1):1–7

PSYCHOLOGY

Acoustic classification of alarm calls by vervet monkeys (Cercopithecus aethiops) and humans (Homo sapiens): I. Natural calls. Owren MJ. **J Comp Psychol** 1990 Mar; 104(1):20–8
Acoustic classification of alarm calls by vervet monkeys (Cercopithecus aethiops) and humans (Homo sapiens): II. Synthetic calls. Owren MJ. **J Comp Psychol** 1990 Mar; 104(1):29–40

CERCOPITHECUS AETHIOPS see under **CERCOPITHECUS**

CEREALS

Oat-bran cereal lowers serum total and LDL cholesterol in hypercholesterolemic men. Anderson JW, et al. **Am J Clin Nutr** 1990 Sep;52(3):495–9
All bran vs corn flakes: plasma glucose and insulin responses in young females [see comments] Behme MT, et al. **Am J Clin Nutr** 1989 Dec;50(6):1240–3 Comment in: Am J Clin Nutr 1990 Jun;51(6):1113–4.
Comparative effects of three cereal brans on plasma lipids, blood pressure, and glucose metabolism in mildly hypercholesterolemic men. Kestin M, et al. **Am J Clin Nutr** 1990 Oct;52(4):661–6
Effect of breakfast cereals on short-term food intake. Levine AS, et al. **Am J Clin Nutr** 1989 Dec;50(6):1303–7

Milk's effect on the bioavailability of iron from cereal-based diets in young women by use of in vitro and in vivo methods. Turnlund JR, et al. **Am J Clin Nutr** 1990 Aug; 52(2):373–8

Humoral immunological profiles of a group of mill workers. Carvalheiro MF, et al. **Am J Ind Med** 1990;17(1):99–100

Characterization of health effects of grain dust exposures. Hurst TS, et al. **Am J Ind Med** 1990;17(1):27–32 (26 ref.)

Lower respiratory tract inflammation in grain farmers. von Essen SG, et al. **Am J Ind Med** 1990;17(1):75–6

Cereal based oral rehydration solutions. Kenya PR, et al. **Arch Dis Child** 1989 Jul;64(7):1032–5

Decreased egg production in commercial laying hens fed zearalenone- and deoxynivalenol-contaminated grain sorghum. Branton SL, et al. **Avian Dis** 1989 Oct–Dec; 33(4):804–8

Effect of oat gum on the physical properties of the gastrointestinal contents and on the uptake of D-galactose and cholesterol by rat small intestine in vitro. Lund EK, et al. **Br J Nutr** 1989 Jul;62(1):91–101

Risks associated with source of fiber and fiber components in cancer of the colon and rectum. Freudenheim JL, et al. **Cancer Res** 1990 Jun 1;50(11):3295–300

Nutritional improvement of cereals by fermentation. Chavan JK, et al. **Crit Rev Food Sci Nutr** 1989;28(5):349–400 (224 ref.)

Nutritional improvement of cereals by sprouting. Chavan JK, et al. **Crit Rev Food Sci Nutr** 1989;28(5):401–37 (172 ref.)

Oat bran supplementation for elevated serum cholesterol. Kahn RF, et al. **Fam Pract Res J** 1990 Fall;10(1):37–46

Utilization of tropical foods: cereals. **FAO Food Nutr Pap** 1989;47(1):1–114

Volatile metabolites of some barley storage molds. Wilkins CK, et al. **Int J Food Microbiol** 1989 Feb;8(1):11–7

Nutritive characteristics of pearl millet grain in beef cattle diets. Hill GM, et al. **J Anim Sci** 1990 Jul;68(7):2061–6

Lactational evaluation of recombinant bovine somatotropin with corn and barley diets. Eisenbeisz WA, et al. **J Dairy Sci** 1990 May;73(5):1269–79

Deactivation of tannin in high tannin milo by treatment with urea. Russell RW, et al. **J Dairy Sci** 1989 Sep;72(9):2427–30

Cancer mortality in the U.S. flour industry. Alavanja MC, et al. **J Natl Cancer Inst** 1990 May 16;82(10):840–8

Pesticide exposure in grain industry raises cancer rates [news] Mahaney FX Jr. **J Natl Cancer Inst** 1990 May 16;82(10):817

Dose response to a dietary oat bran fraction in cholesterol-fed rats. Shinnick FL, et al. **J Nutr** 1990 Jun; 120(6):561–8

Modulation of the hypolipidemic effect of fish oils by dietary fiber in rats: studies with rice and wheat bran. Topping DL, et al. **J Nutr** 1990 Apr;120(4):325–30

The nutritional value of oat flour for very young children. Graham GG, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr; 10(3):344–50

Fermentation of cereals for reduction of bacterial contamination of weaning foods in Ghana. Mensah PP, et al. **Lancet** 1990 Jul 21;336(8708):140–3

Minicolumn chromatography for the detection of sterigmatocystin in agricultural commodities. Ramakrishna Y, et al. **Mycopathologia** 1990 Jun;110(3):153–5

Oat bran and serum cholesterol [letter; comment] **N Engl J Med** 1990 Jun 14;322(24):1746–9 Comment on: N Engl J Med 1990 Jan 18;322(3):147–52.

The nutritive value of new and traditional sorghum and millet foods from Sudan. Badi S, et al. **Plant Foods Hum Nutr** 1990 Jan;40(1):5–19

Lupins and energy-yielding nutrients in ewes. II. Responses in ovulation rate in ewes to increased availability of glucose, acetate and amino acids. Teleni E, et al. **Reprod Fertil Dev** 1989;1(2):117–25

Respiratory disease in grainworkers [editorial] Blainey AD. **Respir Med** 1990 Mar;84(2):93–5

Effects of variously processed starch on pH of human dental plaque. Lingström P, et al. **Scand J Dent Res** 1989 Oct; 97(5):392–400

Nutritional value of cereal products, beans and starches. **World Rev Nutr Diet** 1989;60:1–256

Nutritive value of cereal products with emphasis on the effect of milling. Pedersen B, et al. **World Rev Nutr Diet** 1989; 60:1–91 (288 ref.)

[A deliberation on the anticholesterol effect of oats] Wang Z. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Jun; 17(3):181–3 **(Chi)**

[Cereal grain preference of rats] Wang PY. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 Jul;6(7):402–7 (Eng. Abstr.) **(Chi)**

[The protective effect of preparations made from plant seedlings in experimental Pseudomonas aeruginosa infection] Khaitov RM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Aug;(8):12–4 (Eng. Abstr.) **(Rus)**

[Frequent problems and acutely affected lungs in dock workers unloading grain] Ahman M, et al. **Lakartidningen** 1990 Mar 14;87(11):835–6 **(Swe)**

[Oat has cholesterol-lowering qualities] Bergdahl L. **Lakartidningen** 1989 Nov 1;86(44):3760, 3763 **(Swe)**

ADVERSE EFFECTS

Grain dust asthma. Tse KS. **Allergy Proc** 1990 Mar–Apr; 11(2):61–2

Exposure to grain dust and changes in lung function. James AL, et al. **Br J Ind Med** 1990 Jul;47(7):466–72

Flour mill workers face cancer risk [news] **Occup Health Saf** 1990 Jul;59(7):15, 18

[Pneumopleurocutaneous fistula after inhalation of an ear of barley (Hordeum murinum)] Dutau G. **Ann Pediatr (Paris)** 1990 Jun;37(6):367–70 (Eng. Abstr.) **(Fre)**

ANALYSIS

Radioimmunoassay of nivalenol in barley. Teshima R, et al. **Appl Environ Microbiol** 1990 Mar;56(3):764–8

Sugar in breakfast cereals [letter] Slater MA, et al. **Aust Dent J** 1990 Apr;35(2):195–6

Viscometric characterization of pennisetin from pearl millet. Sainani MN, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):334–41

The prolamin storage proteins of cereal seeds: structure and evolution. Shewry PR, et al. **Biochem J** 1990 Apr 1; 267(1):1–12 (117 ref.)

Inflammatory potential of grain dust [published erratum appears in Biomed Environ Sci 1989 Jun;2(2):174] Ye TT, et al. **Biomed Environ Sci** 1988 Jun;1(1):115–24

Mycotoxins and toxigenic fungi on cereal grains in western Canada. Mills JT. **Can J Physiol Pharmacol** 1990 Jul; 68(7):982–6 (47 ref.)

The use of trichothecene-contaminated grains in feeds. Smith TK. **Can J Physiol Pharmacol** 1990 Jul;68(7):1000–3 (38 ref.)

Structural features of a water-soluble L-arabino-D-xylan from rye bran. Ebringerová A, et al. **Carbohydr Res** 1990 Apr 2;198(1):57–66

Detection and estimation of the barley prolamin content of beer and malt to assess their suitability for patients with coeliac disease. Ellis HJ, et al. **Clin Chim Acta** 1990 Aug 15;189(2):123–30

A survey of cereals, cereal products, feedstuffs and porcine kidneys for ochratoxin A by radioimmunoassay. Fukal L. **Food Addit Contam** 1990 Mar–Apr;7(2):253–8

A survey using normal-phase high-performance liquid chromatography of aflatoxins in domestic and imported foods in the USSR. Tutelyan VA, et al. **Food Addit Contam** 1989 Oct–Dec;6(4):459–65

Chemical test for mammalian feces in grain products: collaborative study. Gerber HR. **J Assoc Off Anal Chem** 1989 Sep–Oct;72(5):766–9

Monoclonal antibody-based enzyme linked immunosorbent assay of aflatoxin B1, T-2 toxin, and ochratoxin A in barley. Ramakrishna N, et al. **J Assoc Off Anal Chem** 1990 Jan–Feb;73(1):71–6

Additional toxic, bitter saponins from the seeds of Chenopodium quinoa. Ma WW, et al. **J Nat Prod** 1989 Sep–Oct;52(5):1132–5

Changes in carbohydrate and nitrogenous components and amylase activities during germination of grain amaranth. Balasubramanian T, et al. **Plant Foods Hum Nutr** 1989 Dec; 39(4):325–30

Limiting amino acids in raw and processed amaranth grain protein from biological tests. Bressani R, et al. **Plant Foods Hum Nutr** 1989 Sep;39(3):223–34

Compositional and digestibility changes in sprouted barley and canola seeds. Chung TY, et al. **Plant Foods Hum Nutr** 1989 Sep;39(3):267–78

Effect of heating and fortification with lysine on protein quality of minor millets. Geervani P, et al. **Plant Foods Hum Nutr** 1989 Dec;39(4):349–57

Evaluation of the selenium and chromium content of plant foods. Giri J, et al. **Plant Foods Hum Nutr** 1990 Jan; 40(1):49–59

Quantitative determinations of chemical compounds with nutritional value from Inca crops: Chenopodium quinoa ('quinoa'). González JA, et al. **Plant Foods Hum Nutr** 1989 Dec;39(4):331–7

Sequence of amino acid limitation in triticale. Heger J. **Plant Foods Hum Nutr** 1990 Apr;40(2):131–5

Dry heat popping of amaranth seed might damage some of its essential amino acids. Tovar LR, et al. **Plant Foods Hum Nutr** 1989 Dec;39(4):299–309

Sr-90 transfer factors for rye in podzolic soils: dependence on soil parameters. Claus B, et al. **Radiat Environ Biophys** 1990;29(3):241–5

Effects of different extraction protocols on endotoxin analyses of airborne grain dusts. Olenchock SA, et al. **Scand J Work Environ Health** 1989 Dec;15(6):430–5

The isolation and identification of steroidal sapogenins in Kleingrass. Patamalai B, et al. **Vet Hum Toxicol** 1990 Aug; 32(4):314–8

[A rapid and simple approach for radioimmunochemical determination of aflatoxin B1 in cereals and feed using a commercial analysis kit] Fukal L. **Vet Med (Praha)** 1990 Feb;35(2):113–7 (Eng. Abstr.) **(Cze)**

[Determination of residues of organochlorine insecticides and polychlorinated biphenyls in cereals, feeds and water] Riebel A, et al. **Nahrung** 1989;33(8):743–51 (Eng. Abstr.) **(Ger)**

[Determination of trichothecenes in cereals] Czerwiecki L, et al. **Rocz Panstw Zakl Hig** 1989;40(4–6):284–90 (Eng. Abstr.) **(Pol)**

[Analysis of uric acid in cereals and grain products by the method of liquid chromatography] Eller KI, et al. **Gig Sanit** 1990 May;(5):87–8 **(Rus)**

[A bioautographic method of analyzing trichothecene mycotoxins in grain and its products] Kotik AN, et al. **Gig Sanit** 1989 Sep;(9):53–4 **(Rus)**

[A microbiologic method of detecting mycotoxins in grain and its processing products] Bilai VI, et al. **Mikrobiol Zh** 1986 Sep–Oct;48(5):84–7 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Serotyping and strain identification of maize streak virus isolates. Pinner MS, et al. **J Gen Virol** 1990 Aug;71 (Pt 8):1635–40

DRUG EFFECTS

[The effect of trace-element fertilizers on the vitamin content in wheat grain grown in the forest-steppe area of Orenburg Province] Olifson LE, et al. **Vopr Pitan** 1990 Mar–Apr; (2):77–9 **(Rus)**

ENZYMOLOGY

The effect of phytochrome action on the activity of cytosolic cholinesterase in oat cells. Kim HY, et al. **Biochem Biophys Res Commun** 1990 May 31;169(1):159–64

Multiple forms of barley root acid phosphatase: purification and some characteristics of the major cytoplasmic isoenzyme. Panara F, et al. **Biochim Biophys Acta** 1990 Jan 19;1037(1):73–80

Purification and characterization of three (1——4)-beta-D-xylan endohydrolases from germinated barley. Slade AM, et al. **Eur J Biochem** 1989 Nov 20; 185(3):533–9

Multiple coordinate controls contribute to a balanced expression of ribulose-1,5-bisphosphate carboxylase/oxygenase subunits in rye leaves. Winter U, et al. **Eur J Biochem** 1990 Jan 26;187(2):445–53

Monoclonal antibodies to barley alpha-amylase I: production, characterization, and application to a specific immunoassay. Lecommandeur D, et al. **Hybridoma** 1990 Apr;9(2):177–87

Primary structure of a key enzyme in plant tetrapyrrole synthesis: glutamate 1-semialdehyde aminotransferase. Grimm B. **Proc Natl Acad Sci U S A** 1990 Jun; 87(11):4169–73

[Comparison of presence of ascorbic acid and the appearance of ascorbate peroxidase activity in embryos of Avena sativa L.] Tommasi F, et al. **Boll Soc Ital Biol Sper** 1990 Apr; 66(4):357–64 (Eng. Abstr.) **(Ita)**

[Specificity of action of metalloproteinases from buckwheat seeds. Hydrolysis of insulin beta-chain] Dunaevskiĭ IaE, et al. **Dokl Akad Nauk SSSR** 1989;309(3):733–6 **(Rus)**

GENETICS

Cloning and sequencing of protochlorophyllide reductase. Darrah PM, et al. **Biochem J** 1990 Feb 1;265(3):789–98

Sequence and transcriptional analysis of the barley ctDNA region upstream of psbD-psbC encoding trnK(UUU), rps16, trnQ(UUG), psbK, psbI, and trnS(GCU). Berends Sexton T, et al. **Curr Genet** 1990 May;17(5):445–54

Physical organization of the 18S and 5S ribosomal RNA genes in the mitochondrial genome of rye (Secale cereale L.). Coulthart MB, et al. **Curr Genet** 1990 Apr;17(4):339–46

Blue light regulates the accumulation of two psbD-psbC transcripts in barley chloroplasts. Gamble PE, et al. **EMBO J** 1989 Oct;8(10):2785–94

The molecular-cytogenetic analysis of grasses and its application to studying relationships among species of the Triticeae. Appels R, et al. **Genome** 1989;31(1):122–33

Genomic organization, evolution, and structural peculiarities of highly repetitive DNA of Hordeum vulgare. Vershinin AV, et al. **Genome** 1990 Jun;33(3):441–9

Light-induced transcription of chloroplast genes. psbA transcription is differentially enhanced in illuminated barley. Klein RR, et al. **J Biol Chem** 1990 Feb 5; 265(4):1895–902

Analysis of seed storage protein genes of oats. Shotwell MA, et al. **J Biol Chem** 1990 Jun 15;265(17):9652–8

The gene for trypsin inhibitor CMe is regulated in trans by the lys 3a locus in the endosperm of barley (Hordeum vulgare L.). Rodriguez-Palenzuela P, et al. **Mol Gen Genet** 1989 Nov;219(3):474–9

Genomic sequence of a 12S seed storage protein gene from oat (Avena sativa L. cv. 'Solidor'). Schubert R, et al. **Nucleic Acids Res** 1990 Jan 25;18(2):377

Rhythmic regulation of the light-harvesting chlorophyll a/b protein and the small subunit of ribulose-1,5-bisphosphate carboxylase mRNA in rye seedlings. Ernst D, et al. **Photochem Photobiol** 1990 Jul;52(1):29–33

Physical mapping of a low-copy DNA sequence in rye (Secale cereale L.). Gustafson JP, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1899–902

Hypoxically inducible barley lactate dehydrogenase: cDNA cloning and molecular analysis. Hondred D, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7300–4

[Photosystem II of rye. Nucleotide sequence of psbB and psbH genes, coding 47-kDa of chlorophyll(a)-binding and 10-kDa phosphorylated subunits] Bukharov AA, et al. **Bioorg Khim** 1989 Jul;15(7):927–39 (Eng. Abstr.) **(Rus)**

[Photosystem II of rye. Nucleotide sequence of genes psbE, psbF, psbL and OPC40 of chloroplast DNA] Kolosov VL, et al. **Bioorg Khim** 1989 Sep;15(9):1284–6 (Eng. Abstr.) **(Rus)**

[Nucleotide sequence of the B1-hordein gene of barley Hordeum vulgare L.] Chernyshev AI, et al. **Genetika** 1989 Aug;25(8):1349–55 (Eng. Abstr.) **(Rus)**

[Genome organization and primary structure of the BamHI fragment of highly repetitive DNA from Hordeum vulgare] Salina EA, et al. **Mol Biol (Mosk)** 1990 May–Jun; 24(3):729–35 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Allergenic fragments of ryegrass (Lolium perenne) pollen allergen Lol p IV. Jaggi KS, et al. **Int Arch Allergy Appl Immunol** 1989;89(4):342–8

Demonstration of human, rye grass pollen extract–specific, helper and suppressor stimulating activity of modified allergens by effects on in vitro hapten–specific antibody production. Wheeler AW, et al. **Int Arch Allergy Appl Immunol** 1989;90(4):320–5

METABOLISM

Intracellular protein phosphorylation in oat (Avena sativa L.) protoplasts by phytochrome action: involvement of protein kinase C. Park MH, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):1185–90

Chromophore topography and secondary structure of 124–kilodalton Avena phytochrome probed by Zn2(+)–induced chromophore modification. Sommer D, et al. **Biochemistry** 1990 Feb 20;29(7):1943–8

Mobility, distribution and persistence of metalaxyl residues in pearl millet (Pennisetum americanum (L.) Leeke.). Reddy MV, et al. **Bull Environ Contam Toxicol** 1990 Aug; 45(2):250–7

Post–prandial plasma aminograms in the assessment of protein quality for young children: maize and grain amaranth, alone and combined. Graham GG, et al. **Eur J Clin Nutr** 1990 Jan;44(1):35–43

In vitro synthesis of chlorophyll a in the dark triggers accumulation of chlorophyll a apoproteins in barley etioplasts. Eichacker LA, et al. **J Biol Chem** 1990 Aug 15;265(23):13566–71

The genetics of host–pathogen coevolution: implications for genetic resource conservation. Allard RW. **J Hered** 1990 Jan–Feb;81(1):1–6

Fermentative characteristics of cereal brans and vegetable fibers. McBurney MI, et al. **Nutr Cancer** 1990;13(4):271–80

Effect of addition of bovine milk and vegetable milks on the in vitro availability of iron from cereal meals. Christian P, et al. **Plant Foods Hum Nutr** 1989 Dec;39(4):317–24

Estimation of optimum amino acid supplements to triticale. Heger J. **Plant Foods Hum Nutr** 1990 Apr;40(2):137–42

The nutritive value of amaranth grain (Amaranthus caudatus). 3. Energy and fibre of raw and processed grain. Pedersen B, et al. **Plant Foods Hum Nutr** 1990 Jan; 40(1):61–71

Metabolism of metolachlor by a microsomal fraction isolated from grain sorghum (Sorghum bicolor) shoots. Moreland DE, et al. **Z Naturforsch [C]** 1990 May;45(5):558–64

MICROBIOLOGY

Production of fusarin C on cereal and soybean by Fusarium moniliforme. Bacon CW, et al. **Appl Environ Microbiol** 1989 Nov;55(11):2745–8

The relationship of insects to the deterioration of stored grain by fungi. Dunkel FV. **Int J Food Microbiol** 1988 Dec; 7(3):227–44

Ecological determinants of mould growth in stored grain. Magan N, et al. **Int J Food Microbiol** 1988 Dec;7(3):245–56

Spoilage relating to the storage and transport of cereals and oil seeds. Milton RF, et al. **Int J Food Microbiol** 1988 Dec; 7(3):211–7

Mould spoilage of cereals during transportation by sea from Latin America to Europe mechanisms, impact and management. Mossel DA. **Int J Food Microbiol** 1988 Dec; 7(3):205–9

Mould spoilage and mycotoxin formation in grains as controlled by physical means. Paster N, et al. **Int J Food Microbiol** 1988 Dec;7(3):257–65 (25 ref.)

Effects of fungal deterioration on grain: nutritional value, toxicity, germination. Sauer DB. **Int J Food Microbiol** 1988 Dec;7(3):267–75 (21 ref.)

Barley yellow mosaic virus (BaYMV) and BaYMV–M: two different viruses. Huth W, et al. **Intervirology** 1990; 31(1):38–42

Expression of resistance to barley stripe mosaic virus in barley and oat protoplasts. Zheng YZ, et al. **J Gen Virol** 1990 Aug;71 (Pt 8):1865–8

Influence of formic acid on fungal flora of barley and on aflatoxin production in Aspergillus flavus link. Clevström G, et al. **Mycopathologia** 1989 Sep;107(2–3):101–9

[Amino acid sequence analysis of barley stripe mosaic viral proteins: tentative identification of viral serine proteases] Gorbalenia AE, et al. **Mol Gen Mikrobiol Virusol** 1989 Jun; (6):12–6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Facilitated electrofusion of vacuolated x evacuolated oat mesophyll protoplasts in hypo–osmolar media after alignment with an alternating field of modulated strength. Klöck G, et al. **Biochim Biophys Acta** 1990 Jun 11; 1025(1):87–93

TOXICITY

Mannan and oligomers of N–acetylglucosamine protect intestinal mucosa of celiac patients with active disease from in vitro toxicity of gliadin peptides. Auricchio S, et al. **Gastroenterology** 1990 Oct;99(4):973–8

CEREBELLAR ATAXIA

BLOOD

Serum vitamin E in inherited ataxias. Eusebi MP, et al. **Acta Neurol (Napoli)** 1990 Apr;12(2):147–50

CHEMICALLY INDUCED

Phenytoin—isoniazid interaction [letter] Avasthi R, et al. **J Assoc Physicians India** 1989 Nov;37(11):728

CLASSIFICATION

[A nosological study of a patient showing ataxia & lower motor neuron involvement] Murakami N, et al. **Rinsho Shinkeigaku** 1989 Sep;29(9):1116–21 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Hearing loss associated with progressive ataxia (Lichtenstein–Knorr disease?). Report of a sporadic case with peculiar neuroradiological findings. Striano S, et al. **Acta Neurol (Napoli)** 1989 Oct;11(5):351–9

Benign hereditary cerebellar ataxia with extensive thermoanalgesia. Pollock M, et al. **Brain** 1990 Aug;113 (Pt 4):857–65

Secondary amenorrhea in two sisters with hypogonadotropic hypogonadism and progressive cerebellar ataxia. Arlazoroff A, et al. **Brain Dev** 1989;11(6):422–5

[Incomplete Bardet–Biedl syndrome associated with cerebellar ataxia] Kowal P, et al. **Neurol Neurochir Pol** 1989 Mar–Apr;23(2):145–8 (Eng. Abstr.) **(Pol)**

[Soft palate myoclonus and opsoclonus in disorders of cerebrovascular circulation in the vertebrobasilar system] Kalashnikova LA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(7):100–5 (Eng. Abstr.) **(Rus)**

CONGENITAL

[Congenital cerebellar ataxia: a comparative study of clinical data and morphometrical findings of CT and MRI] Yoshikawa H, et al. **No To Hattatsu** 1990 Jan;22(1):9–15 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

The Ramsay Hunt syndrome revisited: Mediterranean myoclonus versus mitochondrial encephalomyopathy with ragged–red fibers and Baltic myoclonus. Genton P, et al. **Acta Neurol Scand** 1990 Jan;81(1):8–15

Paroxysmal cerebellar ataxia [letter; comment] Goadsby PJ, et al. **Aust N Z J Med** 1990 Feb;20(1):103 Comment on: Aust N Z J Med 1989 Apr;19(2):113–7.

A case of acute cerebellar ataxia with an MRI abnormality. Hayashi T, et al. **Brain Dev** 1989;11(6):435–6

Ramsay Hunt syndrome: to bury or to praise [letter; comment] Berkovic SF, et al. **J Neurol Neurosurg Psychiatry** 1990 Jan;53(1):89–90 Comment on: J Neurol Neurosurg Psychiatry 1989 Feb;52(2):262–5.

Unilateral cerebellar damage in focal epilepsy [letter] Duncan R, et al. **J Neurol Neurosurg Psychiatry** 1990 May; 53(5):436–7

MR imaging of degenerative disorders of brainstem and cerebellum. Gallucci M, et al. **Magn Reson Imaging** 1990; 8(2):117–22

Dystonia and cerebellar ataxia [letter; comment] Lees A. **Mov Disord** 1990;5(2):178 Comment on: Mov Disord 1988;3(4):336–42.

Migraine associated with focal cerebral edema, cerebrospinal fluid pleocytosis, and progressive cerebellar ataxia: MRI documentation. Goldstein JM, et al. **Neurology** 1990 Aug; 40(8):1284–7

[Cerebellar ataxia of early onset: clinical symptoms and MRI findings] Yamashita S, et al. **No To Hattatsu** 1989 Jul; 21(4):327–33 (Eng. Abstr.) **(Jpn)**

[Paroxysmal cerebellar ataxia—an evaluation using the findings from magnetic resonance imaging, positron emission tomography, and acetazolamide treatment] Araki S, et al. **Rinsho Shinkeigaku** 1990 Apr;30(4):416–9 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

Cerebellar ataxia [letter; comment] Klein P. **Arch Neurol** 1989 Nov;46(11):1166 Comment on: Arch Neurol 1988 Nov;45(11):1217–22.

Cerebeller ataxia [letter] Trouillas P. **Arch Neurol** 1990 Jan; 47(1):12

TRH treatment in cerebellar ataxia following a lightning stroke [letter] Morocutti C, et al. **Ital J Neurol Sci** 1989 Oct;10(5):531

ETIOLOGY

Infantile opsoclonus–polymyoclonus syndrome associated with presacral ganglioneuroma: report of a case. Wang CS, et al. **Acta Paediatr Sin** 1988 May–Jun;29(3):196–201

Cerebellar ataxia with Mycoplasma pneumonia [letter] Wyler AR, et al. **Ann Intern Med** 1974 Apr;80(4):556–7

Cerebellar syndrome in malaria. Bhandari K, et al. **Indian Pediatr** 1989 Oct;26(10):1037–8

Acute cerebellar ataxia as a manifestation of typhoid fever [letter] Nanda S, et al. **Indian Pediatr** 1990 Jan;27(1):92–3

Cerebellar ataxia in malaria [letter] Shendurnikar N, et al. **Indian Pediatr** 1989 Oct;26(10):1060–1

Cerebellar syndrome due to multiple ischemic lesions in hypothyroidism [letter] Guidetti D, et al. **Ital J Neurol Sci** 1990 Apr;11(2):183–4

Ataxic hemiparesis syndrome [letter] Kaur K, et al. **J Assoc Physicians India** 1989 Sep;37(9):614–5

Crescentic glomerulonephritis and cerebellar ataxia in a patient with enteric fever [letter] Talwalkar NC, et al. **J Assoc Physicians India** 1989 Jul;37(7):474

Opsoclonus–ataxia due to childhood neural crest tumors: a chronic neurologic syndrome [published erratum appears in J Child Neurol 1990 Jul;5(3):266] Mitchell WG, et al. **J Child Neurol** 1990 Apr;5(2):153–8

[Homolateral ataxic hemiparesis] Ma ZZ. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Feb; 22(1):47–8, 63 (Eng. Abstr.) **(Chi)**

[Ataxic hemiparesis due to a cerebellar lacuna] De Smet Y, et al. **Acta Neurol Belg** 1989 Mar–Apr;89(2):61–6 (33 ref.) (Eng. Abstr.) **(Fre)**

[Ataxic hemiparesis: specificity of the vascular territory?] Danek A, et al. **Nervenarzt** 1989 Sep;60(9):585–6 **(Ger)**

[Acute cerebellar ataxia and facial palsy after DPT immunization] Katafuchi Y, et al. **No To Hattatsu** 1989 Sep;21(5):465–9 (Eng. Abstr.) **(Jpn)**

[A case of cerebral gigantism with cerebellar atrophy] Kitazawa K, et al. **Rinsho Shinkeigaku** 1990 May; 30(5):520–3 (Eng. Abstr.) **(Jpn)**

[Brainstem infarcts presented medial longitudinal fasciculus (MLF) syndrome and cerebellar ataxia—report of three cases] Sakakibara S, et al. **Rinsho Shinkeigaku** 1990 May; 30(5):533–9 (22 ref.) (Eng. Abstr.) **(Jpn)**

[Ataxic hemiparesis syndrome caused by capsular hemorrhage (letter)] Pujadas F, et al. **Med Clin (Barc)** 1989 Oct 28;93(13):517 **(Spa)**

[Cerebellar syndrome as the first manifestation of multiple myeloma] Prieto J, et al. **Neurologia** 1987 May–Jun; 2(3):123–7 (Eng. Abstr.) **(Spa)**

GENETICS

Hereditary cerebellar degeneration with downbeat nystagmus. A case and it's treatment. McConnell HW, et al. **Acta Neurol Scand** 1990 May;81(5):423–6

Syndrome of partial aniridia, cerebellar ataxia, and mental retardation—Gillespie syndrome. Nevin NC, et al. **Am J Med Genet** 1990 Apr;35(4):468–9

Exclusion mapping of the hereditary dentatorubropallidoluysian atrophy gene from the Huntington's disease locus. Kondo I, et al. **J Med Genet** 1990 Feb;27(2):105–8

Autosomal dominant cerebellar ataxia with deafness, myoclonus and amyotrophy [letter] Melo TP, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1448–9

Electroencephalographic findings of hereditary dentatorubral–pallidoluysian atrophy (DRPLA). Inazuki G, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):213–20

Autosomal dominant cerebellar ataxia: clinical analysis of 263 patients from a homogeneous population in Holguín, Cuba. Orozco Diaz G, et al. **Neurology** 1990 Sep;40(9):1369–75

[Zonular juvenile cataract and cerebrotendinous xanthomatosis] Farpour H. **Klin Monatsbl Augenheilkd** 1990 May;196(5):407–10 (Eng. Abstr.) **(Fre)**

[Biotinidase deficiency—a progressive metabolic disease in children with seizures and ataxia] Anger H, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Mar; 42(3):163–6 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Antineural autoantibodies in patients with paraneoplastic cerebellar degeneration. Tsukamoto T, et al. **Arch Neurol** 1989 Nov;46(11):1225–9

PATHOLOGY

Cerebellar ataxia and hypogonadism. A clinicopathological report. De Michele G, et al. **Clin Neurol Neurosurg** 1990; 92(1):67–70

Paroxysmal dysarthria and ataxia: associated MRI abnormality [letter] Gorard DA, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1444–5

MR imaging of degenerative disorders of brainstem and cerebellum. Gallucci M, et al. **Magn Reson Imaging** 1990; 8(2):117–22

Ataxic hemiparesis—localization by MRI. Kramer MD, et al. **Md Med J** 1990 Jun;39(6):593–5

PHYSIOPATHOLOGY

Early–onset cerebellar ataxia with retained tendon reflexes. Ozeren A, et al. **Acta Neurol Scand** 1989 Dec;80(6):593–7

Cone dysfunction in a subgroup of patients with autosomal dominant cerebellar ataxia. Hamilton SR, et al. **Arch Ophthalmol** 1990 Apr;108(4):551–6

Child ataxias: a developmental perspective. De Negri M, et al. **Brain Dev** 1990;12(2):195–201 (22 ref.)

The ataxic subgroup: a discrete outcome after traumatic brain injury. Mysiw WJ, et al. **Brain Inj** 1990 Jul–Sep;4(3):247–55

Depth electrographic studies on the caudate nucleus in man. Rosner BS, et al. **Electroencephalogr Clin Neurophysiol** 1966

Apr;20(4):391–6
Idiopathic cerebellar ataxia of late onset: natural history and MRI morphology. Klockgether T, et al. **J Neurol Neurosurg Psychiatry** 1990 Apr;53(4):297–305
[Cerebellar imitation synkineses] Trouillas P. **C R Acad Sci [III]** 1989;309(19):715–21 (Eng. Abstr.) **(Fre)**
[Hemodynamic vertebrobasilar insufficiency demonstrated by chronic oligemic cerebral flow and cerebellar ataxia: two new concepts] Trouillas P, et al. **C R Acad Sci [III]** 1989; 309(20):755–62 (Eng. Abstr.) **(Fre)**
[Significance of "on-off phonation test" to detect oral diadochokinesia in dysarthric patients] Kojima Y, et al. **No To Shinkei** 1989 Nov;41(11):1091–5 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Ataxic hemiparesis syndrome clinical and CT study of 20 new cases. Magrotti E, et al. **Funct Neurol** 1990 Jan–Mar; 5(1):65–71

CEREBELLAR CORTEX

ABNORMALITIES

3C syndrome: another case [letter; comment] Mims LC, et al. **Clin Genet** 1989 Dec;36(6):465 Comment on: Clin Genet 1989 Mar;35(3);205–8.

ANALYSIS

Immunocytological localization of the highly polysialylated form of the neural cell adhesion molecule during development of the murine cerebellar cortex. Hekmat A, et al. **J Comp Neurol** 1990 Jan 15;291(3):457–67

ANATOMY & HISTOLOGY

Observations on the projection from the perihypoglossal nuclei to the cerebellar cortex and nuclei in the cat. A retrograde WGA–HRP and fluorescent tracer study. Røste GK. **Anat Embryol (Berl)** 1989;180(6):521–33
An electrophysiological and anatomical study of afferents reaching the cerebellar uvula in the rabbit. Bradley DJ, et al. **Exp Physiol** 1990 Mar;75(2):163–77
Anatomy of the rat medial geniculate body: I. Cytoarchitecture, myeloarchitecture, and neocortical connectivity. Clerici WJ, et al. **J Comp Neurol** 1990 Jul 1;297(1):14–31
Sagittal organisation of the olivocerebellonuclear pathway in the rat. III. Connections with the nucleus dentatus. Buisseret–Delmas C, et al. **Neurosci Res** 1989 Nov; 7(2):131–43
[Olivocerebellar, corticonuclear and nucleocortical projections in the "four limbs area" of the paramedian lobule in the cat: a combined electrophysiological and HRP study] Inui N. **Kaibogaku Zasshi** 1990 Feb;65(1):1–10 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

A comparison of the distribution of the cerebellar and cortical connections of the nucleus of Darkschewitsch (ND) in the cat: a study using anterograde and retrograde HRP tracing techniques. Rutherford JG, et al. **Anat Embryol (Berl)** 1989; 180(5):485–96
Free calcium rise and mitogenesis in glial cells caused by endothelin. Supattapone S, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1115–22
Interactions between astroglia and ectopic granule cells in the cerebellar cortex of normal adult rats: a morphological and cytochemical study. Berciano MT, et al. **Exp Brain Res** 1990;80(2):397–408
Topographical organisation within the cerebellar nucleocortical projection to the paravermal cortex of lobule Vb/c in the cat. Trott JR, et al. **Exp Brain Res** 1990; 80(2):415–28
Parasagittal organization of the rat cerebellar cortex: direct comparison of Purkinje cell compartments and the organization of the spinocerebellar projection. Gravel C, et al. **J Comp Neurol** 1990 Jan 1;291(1):79–102
On the number of Purkinje cells in the human cerebellum: unbiased estimates obtained by using the "fractionator". Nairn JG, et al. **J Comp Neurol** 1989 Dec 22;290(4):527–32
Changes in neuron number in the cerebellar cortex of the ageing mouse. Sturrock RR. **J Hirnforsch** 1989; 30(4):499–503
Surface and membrane morphology of Bergmann glial cells and their topographic relationships in the cerebellar molecular layer. Castejón OJ. **J Submicrosc Cytol Pathol** 1990 Jan;22(1):123–34
Morphometric differences between basket cells and stellate cells of rat neocerebellum (Crus I and Crus II). Monteiro RA. **J Submicrosc Cytol Pathol** 1989 Oct;21(4):725–36

DRUG EFFECTS

Morphological changes of astroglia in the cerebellar cortex of developing mice after neonatal administration of cytosine arabinoside. Ono K, et al. **GLIA** 1990;3(4):311–4
Effect of retinoic acid on polyamine levels in developing rat nervous tissues. Macaione S, et al. **Ital J Biochem** 1989 Jul–Aug;38(4):307A–308A
Selective degeneration of cerebellar cortical neurons caused by cycad neurotoxin, L-beta-methylaminoalanine (L-BMAA), in rats. Seawright AA, et al. **Neuropathol Appl Neurobiol** 1990 Apr;16(2):153–69
Neurite outgrowth from mouse neuroblastoma and cerebellar cells induced by the protein kinase inhibitor H-7. Tsuda M, et al. **Neurosci Lett** 1989 Nov 6;105(3):241–5

EMBRYOLOGY

Ontogenetic development of chick cerebellar glomeruli. Volkova RI. **Neurosci Behav Physiol** 1989 Sep–Oct; 19(5):422–8

ENZYMOLOGY

Immunolocalization of cytosolic aspartate aminotransferase (cAAT) in axon terminals that form synapses in the rat cerebellar cortex. A study at the electron microscopic level. Arenas Díaz G, et al. **Brain Res** 1990 May 14;516(1):77–83

GROWTH & DEVELOPMENT

Deposition and role of thrombospondin in the histogenesis of the cerebellar cortex. O'Shea KS, et al. **J Cell Biol** 1990 Apr;110(4):1275–83
[Difference in the postnatal development of the layer structures in the phylogenetically different cat cerebellar cortices] Nagasaki S, et al. **Kaibogaku Zasshi** 1989 Dec; 64(6):539–49 (Eng. Abstr.) **(Jpn)**

METABOLISM

The prevalence of amyloid (A4) protein deposits within the cerebral and cerebellar cortex in Down's syndrome and Alzheimer's disease. Mann DM, et al. **Acta Neuropathol (Berl)** 1990;80(3):318–27
The compartmentalization of the monkey and rat cerebellar cortex: zebrin I and cytochrome oxidase. Leclerc N, et al. **Brain Res** 1990 Jan 1;506(1):70–8
A novel heat-stable 205 kDa microtubule-associated protein is involved in the neural development of the rat brain. Shiomura Y, et al. **Brain Res** 1989 Nov 20;502(2):356–64
Developmental expression of polypeptide PEP-19 in cerebellar cell suspensions transplanted into the cerebellum of pcd mutant mice. Chang AC, et al. **Exp Brain Res** 1989; 76(3):639–45
Hair trace elements in cerebellar degeneration: low copper levels in late cortical cerebellar atrophy. Oishi M, et al. **J Neurol** 1990 Jun;237(3):163–5
A comparative immunocytochemical study of human cerebellar cortex in X-chromosome-linked copper malabsorption (Menkes' kinky hair disease) and granule cell type cerebellar degeneration. Goto S, et al. **Neuropathol Appl Neurobiol** 1989 Sep–Oct;15(5):419–31
Subcellular localization of a putative kainate receptor in Bergmann glial cells using a monoclonal antibody in the chick and fish cerebellar cortex. Somogyi P, et al. **Neuroscience** 1990;35(1):9–30

PATHOLOGY

[The tardive cerebellar cortical atrophy of Pierre Marie, Foix and Alajouanine. A clinical case report] Trebini F, et al. **Minerva Med** 1990 Apr;81(4):315–7 (Eng. Abstr.) **(Ita)**
[Correlation of clinical course with MRI findings in olivo–pontocerebellar atrophy and late–cortical cerebellar atrophy] Konagaya M, et al. **Rinsho Shinkeigaku** 1989 Sep; 29(9):1122–9 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

A transient voltage-dependent outward current in cultured cerebellar granules. Robello M, et al. **Biosci Rep** 1989 Aug; 9(4):451–7
Autonomic and somatic responses evoked by stimulation of the cerebellar uvula in the conscious rabbit. Bradley DJ, et al. **Exp Physiol** 1990 Mar;75(2):179–86
Locomotion-related variations in excitability of spino–olivocerebellar paths to cat cerebellar cortical c2 zone. Apps R, et al. **J Physiol (Lond)** 1990 May;424:487–512
Learning causes synaptogenesis, whereas motor activity causes angiogenesis, in cerebellar cortex of adult rats. Black JE, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5568–72
[Effect of electro-acupuncture (EA) on response of cerebellar cortex to slow pain] Wu J, et al. **Chen Tzu Yen Chiu** 1989;14(3):328–33 (Eng. Abstr.) **(Chi)**
[Electric responses evoked by C-fiber input from saphenous nerve in cat cerebellar cortex] Wu J, et al. **Sheng Li Hsueh Pao** 1989 Dec;41(6):529–35 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

Two types of quisqualate receptors are decreased in human olivopontocerebellar atrophy cerebellar cortex. Makowiec RL, et al. **Brain Res** 1990 Jul 23;523(2):309–12
[The neuronal electrical activity of the cerebellar cortex in hypoxia] Kuz'mina TR, et al. **Patol Fiziol Eksp Ter** 1989 Sep–Oct;(5):53–6 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Three-dimensional reconstruction and synaptic architecture of cerebellar glomeruli in the rat. Jakab RL. **Acta Morphol Hung** 1989;37(1–2):11–20
Distribution of nuclear pores and chromatin organization in neurons and glial cells of the rat cerebellar cortex. Garcia-Segura LM, et al. **J Comp Neurol** 1989 Dec 15; 290(3):440–50
Freeze-fracture scanning electron microscopy and comparative freeze-etching study of parallel fiber–Purkinje spine synapses of vertebrate cerebellar cortex. Castejón OJ. **J Submicrosc Cytol Pathol** 1990 Apr;22(2):281–95
Blood-derived phagocytes in the cerebellar cortex of the rat after chronic alcohol consumption. Paula-Barbosa MM, et al. **J Submicrosc Cytol Pathol** 1989 Jul;21(3):585–92
The effect of space flight on the ultrastructure of the rat cerebellar and hemisphere cortex. Krasnov IB, et al. **Physiologist** 1990 Feb;33(1 Suppl):S29–30
[Ultrastructural characteristics of the cerebellar cortex in the postnatal development of animals with protein–calorie malnutrition and in subsequent rehabilitation] Medvedev DI, et al. **Arkh Anat Gistol Embriol** 1989 Oct;97(10):20–5 (Eng. Abstr.) **(Rus)**
[Possibility of using potassium dichromate for detecting phospholipid-containing ultrastructures of nerve tissue] Ulybina IN, et al. **Arkh Anat Gistol Embriol** 1989 Oct; 97(10):91–2 **(Rus)**

CEREBELLAR DISEASES

A case of early syphilis [letter] Redondo Mateo J, et al. **Int J Dermatol** 1990 Jul–Aug;29(6):457–8
Brucella melitensis cerebellar abscess [letter] Ayala-Gaytán JJ, et al. **J Infect Dis** 1989 Oct;160(4):730–2

CHEMICALLY INDUCED

[Encephalopathy and cerebellar calcifications from lead poisoning] Rémy P. **Presse Med** 1990 May 26; 19(21):997–1000 (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Spontaneous haemorrhage in a cerebellar abscess: a unique complication. Jamjoom AB, et al. **Br J Neurosurg** 1990; 4(3):231–5
Abnormal respiratory control and perinatal brainstem and cerebellar infarctions [letter; comment] Iannaccone ST, et al. **Pediatr Neurol** 1990 Mar–Apr;6(2):141 Comment on: Pediatr Neurol 1989 Jul–Aug;5(4):211–5.
[Ataxic hemiparesis due to a cerebellar lacuna] De Smet Y, et al. **Acta Neurol Belg** 1989 Mar–Apr;89(2):61–6 (33 ref.) (Eng. Abstr.) **(Fre)**

CONGENITAL

Congenital cholesteatomas of the cerebellopontine angle. de Souza CE, et al. **Am J Otol** 1989 Sep;10(5):358–63
Proboscis lateralis: a case report. Antoniades K, et al. **Teratology** 1989 Sep;40(3):193–7

DIAGNOSIS

Agenesis of the cerebellar vermis: otoneurological report in one patient. Palma V, et al. **Acta Neurol (Napoli)** 1989 Aug; 11(4):259–64
Prenatal diagnosis of intracerebellar hemorrhage: case report. Jennett RJ, et al. **Am J Obstet Gynecol** 1990 Jun; 162(6):1472–4; discussion 1474–5
Ultrasonographic measurement of the fetal transverse cerebellum in utero. Hata K, et al. **Gynecol Obstet Invest** 1989;28(2):111–2
CT and MR diagnosis of cerebellar hypoplasia. D'Archambeau O, et al. **J Belge Radiol** 1989 Dec; 72(6):506–7
Neonatal ultrasound casebook. Ultrasound detection of cerebellum in occipital encephalocele. Bracero LA, et al. **J Perinatol** 1990 Jun;10(2):211–3
Magnetic resonance imaging of the sella and temporal bone. Daniels DL, et al. **Magn Reson Annu** 1987;:1–47 (28 ref.)
[Large epidermoid cyst of the posterior cranial fossa] Schultze J, et al. **Rontgenblatter** 1990 Feb;43(2):50–3 (Eng. Abstr.) **(Ger)**
[Ultrasonic diagnosis of cerebellar hemorrhage in newborn infants. Apropos of 2 cases] Tomà P, et al. **Minerva Pediatr** 1990 Apr;42(4):161–4 (Eng. Abstr.) **(Ita)**
[Cerebellar infarction; the findings of CT, MRI and cerebral angiography] Bussaka H, et al. **Rinsho Hoshasen** 1990 Apr; 35(4):445–51 (Eng. Abstr.) **(Jpn)**
[A case of cerebellar hemispheric venous malformation presenting crossed cerebello–cerebral diaschisis] Yokoji H, et al. **Rinsho Shinkeigaku** 1989 Nov;29(11):1414–6 (Eng. Abstr.) **(Jpn)**
[Clinical, CT and electrophysiologic studies of alcoholics with special reference to the cerebellum] Domżał T, et al. **Neurol Neurochir Pol** 1989 Jan;23(1):17–20 (Eng. Abstr.) **(Pol)**
[Value of the Torok caloric test in the diagnosis of lesions of the cerebellar hemispheres] Nakiela J. **Otolaryngol Pol** 1989;43(4):273–7 (Eng. Abstr.) **(Pol)**
[2 cases of a combination of arterial and arteriovenous cerebellar aneurysms] Lebedev VV, et al. **Zh Vopr Neirokhir** 1990 May–Jun;(3):32–3 **(Rus)**
[Arteriovenous malformation in the vermis: apropos of a case] Bartróns Casas J, et al. **An Esp Pediatr** 1990 Jan;32(1):91–2 **(Spa)**

DRUG THERAPY

Posttraumatic cerebellar syndrome: response to l-tryptophan. Sandyk R, et al. **Int J Neurosci** 1989 Aug;47(3-4):301-2

CT-guided stereotactic fibrinolysis of spontaneous and hypertensive cerebellar hemorrhage: long-term results. Mohadjer M, et al. **J Neurosurg** 1990 Aug;73(2):217-22

[Isoniazid therapy in severe cerebellar, postural and kinetic tremor] Shu YD, et al. **Chung Hua I Hsueh Tsa Chih** 1989 May;43(5):292-8 (Eng. Abstr.) **(Chi)**

ETIOLOGY

Subacute cerebellar syndrome as the first manifestation of AIDS dementia complex. Graus F, et al. **Acta Neurol Scand** 1990 Feb;81(2):118-20

Crossed cerebellar diaschisis in intracarotid sodium amytal procedures: a SPECT study. Kurthen M, et al. **Acta Neurol Scand** 1990 May;81(5):416-22

Paraneoplastic subacute cerebellar degeneration in Hodgkin's disease. Report of three cases and review of the literature. Schlake HP, et al. **Clin Neurol Neurosurg** 1989;91(4):329-35 (44 ref.)

Basilar artery migraine stroke. Bernsen HJ, et al. **Headache** 1990 Feb;30(3):142-4

Infratentorial subdural empyema: clinical and computerized tomography findings. Report of three cases. Borovich B, et al. **J Neurosurg** 1990 Feb;72(2):299-301

Intracerebellar hematoma in a term newborn secondary to an angiomatous malformation--case report. Sakaki S, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):579-82

Test and teach. Number Sixty-one. Diagnosis: Cerebral and cerebellar infarctions due to mucormycosis with secondary hydrocephalus. McLean CA, et al. **Pathology** 1989 Oct; 21(4):279, 314-6

[Crossed cerebellar diaschisis in hydrocephalus--a case report] Abe M, et al. **No To Shinkei** 1989 Nov; 41(11):1085-90 (Eng. Abstr.) **(Jpn)**

[A case of progressive systemic sclerosis associated with a hemorrhagic infarction of the cerebellum] Kawano H, et al. **No To Shinkei** 1990 Feb;42(2):189-91 (Eng. Abstr.) **(Jpn)**

[Clinical and etiological study of crossed cerebellar diaschisis. Report of two cases] Tanaka M, et al. **Rinsho Shinkeigaku** 1989 Apr;29(4):469-74 (Eng. Abstr.) **(Jpn)**

[An animal model for underdevelopment of the CNS—bilirubin-induced cerebellar hypoplasia] Kashiwamata S, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1227-35 **(Jpn)**

[A case of favorable outcome of conservative treatment of acute otogenic cerebellar abscess] Buczek M, et al. **Neurol Neurochir Pol** 1989 Mar-Apr;23(2):153-6 (Eng. Abstr.) **(Pol)**

GENETICS

A family with late onset autosomal dominant cerebellar degeneration. Collins S, et al. **Clin Exp Neurol** 1988;25:61-5

Cerebellar degeneration-related antigen: a highly conserved neuroectodermal marker mapped to chromosomes X in human and mouse. Chen YT, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3077-81

[Cerebellar imitation synkineses] Trouillas P, et al. **Rev Neurol (Paris)** 1990;146(2):107-15 (38 ref.) (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Antipurkinje cell antibodies in cerebellar degeneration. Ahmed I. **Kans Med** 1989 Oct;90(10):279-81

Selective expression of Purkinje-cell antigens in tumor tissue from patients with paraneoplastic cerebellar degeneration. Furneaux HM, et al. **N Engl J Med** 1990 Jun 28; 322(26):1844-51

METABOLISM

Hair trace elements in cerebellar degeneration: low copper levels in late cortical cerebellar atrophy. Oishi M, et al. **J Neurol** 1990 Jun;237(3):163-5

A comparative immunocytochemical study of human cerebellar cortex in X-chromosome-linked copper malabsorption (Menkes' kinky hair disease) and granule cell type cerebellar degeneration. Goto S, et al. **Neuropathol Appl Neurobiol** 1989 Sep-Oct;15(5):419-31

MORTALITY

[Acute cerebellar vascular pathology. A clinical study of 38 cases] Peiró A, et al. **Neurologia** 1987 Jan-Feb;2(1):15-8 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Cerebellar infarction in the territory of the anterior and inferior cerebellar artery. A clinicopathological study of 20 cases. Amarenco P, et al. **Brain** 1990 Feb;113 (Pt 1):139-55

Acute haemorrhagic leucoencephalitis of brainstem and cerebellum. Sharma SC, et al. **Indian J Pathol Microbiol** 1990 Apr;33(2):185-7

Acute cerebellitis [letter] Jhamb DK, et al. **J Assoc Physicians India** 1990 May;38(5):379-80

Cerebellar infarction in the territory of the superior cerebellar artery: a clinicopathologic study of 33 cases. Amarenco P, et al. **Neurology** 1990 Sep;40(9):1383-90

Arterial pathology in cerebellar infarction. Amarenco P, et al. **Stroke** 1990 Sep;21(9):1299-305

[Topography and structure of secondary brain damage in edema associated with supratentorial foci of encephalomalacia] Szpakowa GM. **Neuropatol Pol** 1989; 27(2):177-98 (Eng. Abstr.) **(Pol)**

PHYSIOPATHOLOGY

Gait disturbances in patients with labyrinthine and cerebellar diseases. Miyata H, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;468:181-5

Analysis of body sway in patients with cerebellar lesions. Umemura K, et al. **Acta Otolaryngol Suppl (Stockh)** 1989; 468:253-61

Visual control of balance in cerebellar and parkinsonian syndromes. Bronstein AM, et al. **Brain** 1990 Jun;113 (Pt 3):767-79

Motor learning in patients with cerebellar dysfunction. Sanes JN, et al. **Brain** 1990 Feb;113 (Pt 1):103-20

Measurement of the handcoordination. Verkerk PH, et al. **Clin Neurol Neurosurg** 1990;92(2):105-9

Phoria adaptation in patients with cerebellar dysfunction. Hain TC, et al. **Invest Ophthalmol Vis Sci** 1990 Jul; 31(7):1394-7

Disturbances in human arm movement trajectory due to mild cerebellar dysfunction. Brown SH, et al. **J Neurol Neurosurg Psychiatry** 1990 Apr;53(4):306-13

Accuracy of ICP monitoring in posterior fossa lesions [letter; comment] Park CK. **J Neurosurg** 1990 May;72(5):832-3 Comment on: J Neurosurg 1989 Oct;71(4):503-5.

Relationship between abnormal respiratory control and perinatal brainstem and cerebellar infarctions [see comments] Takashima S, et al. **Pediatr Neurol** 1989 Jul-Aug;5(4):211-5 Comment in: Pediatr Neurol 1990 Mar-Apr;6(2):141.

Disturbances of motor preparation in basal ganglia and cerebellar disorders. Diener HC, et al. **Prog Brain Res** 1989; 80:481-8; discussion 479-80

Acetazolamide effect on cerebellar blood flow in crossed cerebral-cerebellar diaschisis. Bogsrud TV, et al. **Stroke** 1990 Jan;21(1):52-5

The functional nature of cerebellar diaschisis. Di Piero V, et al. **Stroke** 1990 Sep;21(9):1365-9

[Crossed "cerebral" diaschisis? Seven cases with unilateral cerebellar vascular lesion which showed decreased perfusion in the contralateral cerebral cortex] Kimura S, et al. **Kaku Igaku** 1989 Oct;26(10):1259-66 (Eng. Abstr.) **(Jpn)**

[Clinical study of two cases of traumatic cerebellar injury] Yokota H, et al. **No Shinkei Geka** 1990 Jan;18(1):67-70 (19 ref.) (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

CT signs of ascending transtentorial cerebellar herniation. Hahn FJ, et al. **J Comput Assist Tomogr** 1989 Nov-Dec; 13(6):1091-2

Anatomy-computerized tomography correlations in transtentorial brain herniation. Nguyen JP, et al. **J Neuroradiol** 1989;16(3):181-96 **(Eng, Fre)**

A quantitative evaluation of pontine volume by computed tomography in patients with cerebellar degeneration. Chida K, et al. **Neurology** 1990 Aug;40(8):1241-5

RADIONUCLIDE IMAGING

Brain perfusion SPECT in a cerebellar infarction. Moriarty JA, et al. **J Comput Assist Tomogr** 1990 Sep-Oct; 14(5):821-4

Cerebellar diseases: studies with positron emission tomography. Gilman S. **Semin Neurol** 1989 Dec;9(4):370-6 (50 ref.)

SURGERY

Posterior fossa abscesses. A review of 33 cases. Unnikrishnan M, et al. **J Assoc Physicians India** 1989 Jun;37(6):376-8

Cerebellopontine angle epidermoid cysts: a report on 30 cases. deSouza CE, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug;52(8):986-90

Neurosurgical management of cerebellar hemorrhage. Waidhauser E, et al. **Neurosurg Rev** 1990;13(3):211-7

Surgical exploration before computed tomography scanning in children with traumatic tentorial herniation. Andrews BT, et al. **Surg Neurol** 1989 Dec;32(6):434-8

[Clinical study of hypertensive cerebellar hemorrhage: surgical indication and measurement of volume of hematoma] Yoshimoto H, et al. **No Shinkei Geka** 1989 Dec; 17(12):1105-10 (Eng. Abstr.) **(Jpn)**

[Cerebellar hemorrhage: which treatment?] Feijóo de Freixo M. **Neurologia** 1989 Jul-Aug;4(6):191-3 (29 ref.) **(Spa)**

THERAPY

Conservative management of cerebellar hemorrhage in pregnancy. Kawasaki N, et al. **Int J Gynaecol Obstet** 1990 Apr;31(4):365-9 (8 ref.)

[Conservative treatment of post-traumatic intracerebellar hematoma] Buczek M, et al. **Wiad Lek** 1989 Apr 30; 42(8):550-5 (Eng. Abstr.) **(Pol)**

VETERINARY

Hereditary cerebellar abiotrophy in Australian kelpie dogs. Thomas JB, et al. **Aust Vet J** 1989 Sep;66(9):301-2

CEREBELLAR DYSSYNERGIA see under **CEREBELLAR ATAXIA**

CEREBELLAR NEOPLASMS

Voltage-gated sodium channels expressed in the human cerebellar medulloblastoma cell line TE671. Gambale F, et al. **Brain Res Mol Brain Res** 1990 Feb;7(2):123-9

The modulation of astrocytic differentiation in cells derived from a medulloblastoma surgical specimen. Maria BL, et al. **J Neurooncol** 1989 Nov;7(4):329-38

Mandibular metastasis from a cerebellar medulloblastoma. Amagasa M, et al. **J Oral Maxillofac Surg** 1990 Sep; 48(9):993-6

Cerebellopontine angle epidermoid tumor extending into the upper cervical spinal canal—case report. Hasegawa T, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):614-8

Primary intracranial epidermoid carcinoma—case report. Nishiura I, et al. **Neurol Med Chir (Tokyo)** 1989 Jul; 29(7):600-5 (32 ref.)

Metastases to bone in medulloblastoma. A report of five cases. Vieco PT, et al. **Skeletal Radiol** 1989;18(6):445-9

[Treatment of an extraneural metastasized medulloblastoma] Huber A, et al. **Klin Padiatr** 1990 May-Jun;202(3):186-7 (Eng. Abstr.) **(Ger)**

[Medulloblastoma in children. A 20-year case load] Hovind KH, et al. **Tidsskr Nor Laegeforen** 1989 Nov 30; 109(33):3412-5 (Eng. Abstr.) **(Nor)**

[Granulocytic sarcoma of the central nervous system] Bautista J, et al. **Neurologia** 1988 Nov-Dec;3(6):237-40 (Eng. Abstr.) **(Spa)**

ANALYSIS

Differentiation in medulloblastomas: correlation between the immunocytochemical demonstration of photoreceptor markers (S-antigen, rod-opsin) and the survival rate in 66 patients. Czerwionka M, et al. **Acta Neuropathol (Berl)** 1989;78(6):629-36

Dibutyryl cyclic AMP induces vimentin and GFAP expression in cultured medulloblastoma cells. Maria BL, et al. **Can J Neurol Sci** 1990 Feb;17(1):15-20

Differential spectrum of expression of neural cell adhesion molecule isoforms and L1 adhesion molecules on human neuroectodermal tumors. Figarella-Branger DF, et al. **Cancer Res** 1990 Oct 1;50(19):6364-70

Determination of gangliosides in six human primary medulloblastomas. Gottfries J, et al. **J Neurochem** 1990 Oct; 55(4):1322-6

BLOOD SUPPLY

Repetitive intratumoral hemorrhage in medulloblastoma. A case report. Tachibana O, et al. **Surg Neurol** 1990 Jun; 33(6):378-83

[Ultrastructure of capillary permeability in human brain tumor: disseminated and metastatic medulloblastoma] Shibata S, et al. **No Shinkei Geka** 1990 May;18(5):431-8 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Cerebello-pontine angle (CPA) tumor causing contralateral trigeminal neuralgia--a case report. Yang DY, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Aug;44(2):135-8

Pseudodrusen of the optic disc. Papilledema simulating buried drusen of the optic nerve head. Carter JE, et al. **J Clin Neuro Ophthalmol** 1989 Dec;9(4):273-6

Infratentorial intratumoral hemorrhage. Reichenthal E, et al. **Mt Sinai J Med** 1989 Sep;56(4):309-14 (29 ref.)

Superior oblique myokymia associated with a posterior fossa tumor: oculographic correlation with an idiopathic case. Morrow MJ, et al. **Neurology** 1990 Feb;40(2):367-70

Primary T-cell lymphoma with myelopathy associated with HTLV-1. Inoue M, et al. **Neurosurgery** 1990 Jul; 27(1):148-51

Cerebellar venous angioma associated with angiographically occult brain stem vascular malformation. Report of two cases. Abe M, et al. **Surg Neurol** 1990 Jun;33(6):400-3

[Cerebello-pontine angle epidermoid with cerebellar atrophy; report of a case] Fuse T, et al. **No Shinkei Geka** 1989 Jul; 17(7):673-7 (Eng. Abstr.) **(Jpn)**

[Association of asymptomatic syringomyelia with tentorial meningioma] Urasaki E, et al. **No Shinkei Geka** 1989 Oct; 17(10):985-9 (16 ref.) (Eng. Abstr.) **(Jpn)**

[Transient global amnesia as a manifestation of cerebellar metastasis (letter)] Olivé JM, et al. **Neurologia** 1989 Nov; 4(9):341-2 **(Spa)**

CONGENITAL

Congenital brain tumours: diagnostic and therapeutic approach. With a report of 3 cases. Albert FK, et al. **Zentralbl Neurochir** 1989;50(2):101-5

DIAGNOSIS

Recurrent medulloblastoma: frequency of tumor enhancement on Gd-DTPA MR imaging. Rollins N, et al. **AJR Am J Roentgenol** 1990 Jul;155(1):153-7

Gadolinium. The new gold standard for diagnosing cerebellopontine angle tumors. Sidman JD, et al. **Arch Otolaryngol Head Neck Surg** 1989 Oct;115(10):1244-7

Malignant melanoma of the cerebello-pontine angle region. Braga FM, et al. **Arq Neuropsiquiatr** 1989 Dec; 47(4):496–500

Pre-operative magnetic resonance imaging in Lhermitte-Duclos disease. Choudhury AR. **Br J Neurosurg** 1990;4(3):225–9

Solitary prostatic metastasis to the cerebellopontine angle: MR and CT findings. Flickinger FW, et al. **J Comput Assist Tomogr** 1989 Nov-Dec;13(6):1088–90

Diagnostic vetting of individuals with asymmetric sensorineural hearing impairments. Swan IR. **J Laryngol Otol** 1989 Sep;103(9):823–6

Upbeat nystagmus as an early sign of cerebellar astrocytoma. Traccis S, et al. **J Neurol** 1989 Sep;236(6):359–60

Cavernous angioma of the tentorium cerebelli. Case report. Quattrocchi KB, et al. **J Neurosurg** 1989 Dec;71(6):935–7

Contralateral acoustic-reflex growth function in a patient with a cerebellar tumor: a case study. Harrison T, et al. **J Speech Hear Disord** 1989 Nov;54(4):505–9

Gadolinium-DTPA-enhanced magnetic resonance scanning in cerebellopontine angle tumors. Wayman JW, et al. **Laryngoscope** 1989 Nov;99(11):1167–70

Cerebellopontine angle craniopharyngioma. Gökalp HZ, et al. **Neurochirurgia (Stuttg)** 1990 Jan;33(1):20–1 (16 ref.)

Primary choroid plexus papilloma of the cerebellopontine angle: MR imaging. Martin N, et al. **Neuroradiology** 1990; 31(6):541–3

MR imaging of a hemorrhagic medulloblastoma. Uchino A, et al. **Neuroradiology** 1989;31(4):371

Cerebral venous angiomas. MR imaging at 1.5 tesla. Wilms G, et al. **Neuroradiology** 1990;32(2):81–5

Brainstem auditory evoked response sensitivity: comparison with other neurologic tests in the detection of retrocochlear lesions. Benitez JT, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(6):332–8

Phase audiometry--a rapid method for detecting cerebello-pontine angle tumours? Almqvist U, et al. **Scand Audiol** 1989;18(3):155–9

Cerebellar neoplasms in children. Gusnard DA. **Semin Roentgenol** 1990 Jul;25(3):263–78

The cerebellopontine angle. Hasso AN, et al. **Semin Ultrasound CT MR** 1989 Jun;10(3):280–301 (60 ref.)

[Cerebellar teratoma in adults. Contribution of x-ray computed tomography and magnetic resonance imaging] Labauge R, et al. **Rev Neurol (Paris)** 1990;146(4):310–2 (16 ref.) (Eng. Abstr.) **(Fre)**

[Massive hemorrhage within an acoustic neurinoma. Case report] Fuse T, et al. **Neurol Med Chir (Tokyo)** 1989 Oct; 29(10):933–7 (Eng. Abstr.) **(Jpn)**

[Difficulties in the diagnosis of intracranial expansive processes coexisting with sinusitis and otitis] Kruk-Zagajewska A, et al. **Otolaryngol Pol** 1989; 43(5–6):376–80 (Eng. Abstr.) **(Pol)**

[Brain stem auditory evoked potentials in various tumors in the cerebellopontine angle] Haralampiev K. **Vojnosanit Pregl** 1990 Jan-Feb;47(1):3–7 (Eng. Abstr.) **(Scr)**

DRUG THERAPY

Results of treatment of children with recurrent medulloblastoma/primitive neuroectodermal tumors with lomustine, cisplatin, and vincristine. Lefkowitz IB, et al. **Cancer** 1990 Feb 1;65(3):412–7

Adjuvant chemotherapy for medulloblastoma: the first multi-centre control trial of the International Society of Paediatric Oncology (SIOP I). Tait DM, et al. **Eur J Cancer** 1990 Apr;26(4):464–9

Pre-irradiation chemotherapy for infants and children with medulloblastoma: a preliminary report. Kretschmar CS, et al. **J Neurosurg** 1989 Dec;71(6):820–5

Treatment of medulloblastoma [letter; comment] Huber A, et al. **J Pediatr** 1990 Jan;116(1):155 Comment on: J Pediatr 1989 Apr;114(4 Pt 1):511–9.

EPIDEMIOLOGY

Cerebellopontine angle tumours in black South Africans--how rare are acoustic schwannomas? Simpson RH, et al. **S Afr Med J** 1990 Jul 7;78(1):11–4 (16 ref.)

ETIOLOGY

Cerebellar malignant glioma after radiation therapy for suprasellar germinoma--case report. Tamura T, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):223–9 (55 ref.)

Transmission of medulloblastoma from cadaver donor to three organ transplant recipients. Lefrancois N, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2242

GENETICS

Amplification of the c-myc gene in human medulloblastoma cell lines and xenografts [published erratum appears in Cancer Res 1990 Jun 15;50(12):3809] Bigner SH, et al. **Cancer Res** 1990 Apr 15;50(8):2347–50

Statistical analysis of the two stage mutation model in von Hippel-Lindau disease, and in sporadic cerebellar haemangioblastoma and renal cell carcinoma. Maher ER, et al. **J Med Genet** 1990 May;27(5):311–4

Elevated c-myc expression in childhood medulloblastomas. MacGregor DN, et al. **Pediatr Res** 1990 Jul;28(1):63–8

METABOLISM

Histogenesis of intracranial haemangiopericytoma and haemangioblastoma. An immunohistochemical study. Theunissen PH, et al. **Acta Neuropathol (Berl)** 1990; 80(1):68–71

Expression of zeta (zeta), a growth-related opioid receptor, in metastatic adenocarcinoma of the human cerebellum. Zagon IS, et al. **J Natl Cancer Inst** 1990 Feb 21;82(4):325–7

Histogenesis and cell lineage analysis of medulloblastomas. Cudkowicz M, et al. **J Neurol Sci** 1989 Dec;94(1–3):221–9

A clinicopathologic and immunohistochemical analysis of 53 cases of medulloblastoma with emphasis on synaptophysin expression. Coffin CM, et al. **Mod Pathol** 1990 Mar; 3(2):164–70

A detailed immunohistochemical analysis of cerebellar hemangioblastoma: an undifferentiated mesenchymal tumor. Frank TS, et al. **Mod Pathol** 1989 Nov;2(6):638–51

Inactivation of human sodium channels and the effect of tocainide. Fakler B, et al. **Pflugers Arch** 1990 Mar; 415(6):693–700

MORTALITY

Astrocytomas of the cerebellum in children. Garcia DM, et al. **J Neurosurg** 1989 Nov;71(5 Pt 1):661–4

PATHOLOGY

Ganglioglial differentiation in medulloblastoma. Kudo M, et al. **Acta Pathol Jpn** 1990 Jan;40(1):50–6

Hemangioblastoma and renal clear cell carcinoma distinguished by means of the AgNOR method. Crocker J, et al. **Am J Clin Pathol** 1990 Apr;93(4):555–7

Phosphate-dependent and independent neurofilament protein epitopes are expressed throughout the cell cycle in human medulloblastoma (D283 MED) cells. Trojanowski JQ, et al. **Am J Pathol** 1989 Oct;135(4):747–58

Atypical inflammatory histiocytic tumor of the cerebellum. A histological, immunohistochemical, and ultrastructural study. Figarella-Branger D, et al. **Am J Surg Pathol** 1990 Aug;14(8):778–83

Primary T-cell lymphoma of the central nervous system. Grant JW, et al. **Arch Pathol Lab Med** 1990 Jan;114(1):24–7 (37 ref.)

Primary germinoma of the posterior fossa with CSF and extracranial metastases. Ng HK, et al. **Br J Neurosurg** 1990; 4(3):239–42

Poorly differentiated gliomas of the cerebellum. A study of 18 patients. Chamberlain MC, et al. **Cancer** 1990 Jan 15; 65(2):337–40

Medullomyoblastoma in an adult. Rao C, et al. **Cancer** 1990 Jan 1;65(1):157–63

Malignant transformation of benign cerebellar astrocytoma. Schwartz AM, et al. **Cancer** 1990 Jan 15;65(2):333–6 (40 ref.)

Medullomyoblastoma: a case report. Lai CR, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jul;44(1):65–70

Medullomyoblastoma. A case report. Lata M, et al. **Indian J Cancer** 1989 Dec;26(4):240–6

Glioblastoma multiforme of the cerebellum five decades after irradiation of a cerebellar tumor. Wisoff HS, et al. **J Neurooncol** 1989 Nov;7(4):339–44 (17 ref.)

Medulloblastoma cells constitutively produce granulocyte colony-stimulating factor. Pietsch T, et al. **Klin Padiatr** 1990 Jul-Aug;202(4):235–9

Cystic medulloblastoma. Mahapatra AK, et al. **Neuroradiology** 1989;31(4):369–70

Craniopharyngioma with extension into the cerebellopontine angle. Case report. Shimada M, et al. **Tokai J Exp Clin Med** 1989 Apr;14(2):113–6 (16 ref.)

[A case of facial nerve neurinoma originated from the cerebellopontine angle portion] Katayama S, et al. **No Shinkei Geka** 1989 Nov;17(11):1041–6 (64 ref.) (Eng. Abstr.) **(Jpn)**

[Melanotic medulloblastoma. Ultrastructural and histochemical study of a case] García-Bragado F, et al. **Arch Neurobiol (Madr)** 1990 Jan-Feb;53(1):8–12 (18 ref.) (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Hemangioblastomas: clinical and histopathological factors correlated with recurrence. de la Monte SM, et al. **Neurosurgery** 1989 Nov;25(5):695–8

Posterior fossa mass and hydrocephalus in a 7-month-old boy [clinical conference] Schut L, et al. **Pediatr Neurosci** 1988;14(4):212–5

RADIOGRAPHY

Dermoid tumour of the fourth ventricle with hyperdense aspect demonstrated on CT scan. Case report. Dănăilă L, et al. **Neurol Psychiatr (Bucur)** 1989 Jul-Sep;27(3):231–6

[Oligodendroglioma of the cerebellopontine angle: 16 years' course. Review of the literature and considerations on the pathology] Carvalho Filho A, et al. **Arq Neuropsiquiatr** 1989 Jun;47(2):241–7 (47 ref.) (Eng. Abstr.) **(Por)**

RADIOTHERAPY

Medulloblastoma in adults: a review of 47 patients treated between 1952 and 1981. Bloom HJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):763–72

Childhood cerebellar astrocytomas: is there a role for postoperative irradiation? [see comments] Garcia DM, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):815–8 Comment in: Int J Radiat Oncol Biol Phys 1990 Apr;18(4):971–3.

Aneurysm, arachnoiditis and intrathecal Au (gold). Pence DM, et al. **Int J Radiat Oncol Biol Phys** 1990 May; 18(5):1001–4

The treatment of medulloblastoma. Results of a prospective randomized trial of radiation therapy with and without CCNU, vincristine, and prednisone. Evans AE, et al. **J Neurosurg** 1990 Apr;72(4):572–82

Second place Alpha Cradle Award winner. Medulloblastoma immobilization and treatment considerations. Goldschmidt EJ Jr, et al. **Med Dosim** 1990 Mar;15(1):7–11

Impaired tooth root development after treatment of a cerebellar astrocytoma: a case report. Eckles TA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Oct;68(4):414–8

Supratentorial malignant glioma: an analysis of radiation therapy in 178 cases. Shibamoto Y, et al. **Radiother Oncol** 1990 May;18(1):9–17

[Results of radiation therapy for medulloblastoma] Shibamoto Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Dec 20; 24(11):2491–8 (Eng. Abstr.) **(Jpn)**

[Late growth of supratentorial meningioma after radiotherapy of cerebellar tumor] Mazurowski W, et al. **Neurol Neurochir Pol** 1989 Jul-Dec;23(4–6):373–7 (Eng. Abstr.) **(Pol)**

[The efficacy of gamma teletherapy in the combined treatment of medulloblastomas in the posterior cranial fossa of children] Raevskaia SA, et al. **Med Radiol (Mosk)** 1990 Jan;35(1):22–6 (Eng. Abstr.) **(Rus)**

SECONDARY

Extrarenal Wilms' tumor with cerebellar metastasis in a four-year-old girl with spina bifida. Mirkin LD, et al. **Am J Clin Pathol** 1990 Jun;93(6):805–9

Solitary prostatic metastasis to the cerebellopontine angle: MR and CT findings. Flickinger FW, et al. **J Comput Assist Tomogr** 1989 Nov-Dec;13(6):1088–90

Carcinoma metastatic to a cerebellar vascular malformation: case report. Greene GM, et al. **Neurosurgery** 1990 Jun; 26(6):1054–6; discussion 1056–7

Late recurrence of clear-cell adenocarcinoma of the cervix: case report. Burks RT, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):525–7

Carcinoma of the lower lip with perineural extension to the middle cranial fossa. Anderson C, et al. **Oral Surg Oral Med Oral Pathol** 1990 May;69(5):614–8

Brain metastasis of unknown origin. Chee CP. **Singapore Med J** 1990 Feb;31(1):48–50

[The question of medullomyoblastoma] Patt S, et al. **Zentralbl Allg Pathol** 1989;135(5):445–55 (Eng. Abstr.) **(Ger)**

[Solitary cerebellar metastases: a clinical neuro-radiological study] Montalbán J, et al. **Neurologia** 1988 Jan-Feb;3(1):3–8 (19 ref.) (Eng. Abstr.) **(Spa)**

SURGERY

Infratentorial ependymomas in childhood: prognostic factors and treatment. Nazar GB, et al. **J Neurosurg** 1990 Mar; 72(3):408–17

Cerebellar tumors in children and their management. Hekmatpanah J. **Semin Neurol** 1989 Sep;9(3):225–30 (11 ref.)

Anatomical basis of the extended subtemporal approach to the cerebellopontine angle: its value and limitations. Dautheribes M, et al. **Surg Radiol Anat** 1989;11(3):187–95

[Intracerebellar schwannoma. Apropos of a case. Review of the literature] Benazza A, et al. **Neurochirurgie** 1989; 35(4):246–51 (30 ref.) (Eng. Abstr.) **(Fre)**

[Ultrasound tomography following surgery of tumors of the cerebellopontile angle] Hagen A, et al. **Zentralbl Neurochir** 1989;50(1):27–9 (Eng. Abstr.) **(Ger)**

[A case of neonatal medulloblastoma] Shimizu H, et al. **No Shinkei Geka** 1989 Aug;17(8):771–6 (29 ref.) (Eng. Abstr.) **(Jpn)**

[Postoperative radiotherapy of glial tumors of the central nervous system] Kukolewska-Machnicka J, et al. **Neurol Neurochir Pol** 1989 Mar-Apr;23(2):128–31 (Eng. Abstr.) **(Pol)**

THERAPY

Non-surgical therapy for malignant brain tumours. Moseley RP, et al. **Br J Hosp Med** 1990 Jun;43(6):453–8

Medulloblastoma in adults--clinical observations and results of treatment. Sharma BS, et al. **Indian J Cancer** 1989 Sep; 26(3):156–63 (20 ref.)

Posterior fossa medulloblastoma in childhood: treatment results and a proposal for a new staging system. Jenkin D, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug; 19(2):265–74

Management of childhood cerebellar astrocytoma [editorial; comment] Larson DA, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):971–3 Comment on: Int J Radiat Oncol Biol Phys 1990 Apr;18(4):815–8.

Medulloblastoma--prognostic factors and outcome of treatment: review of the Mayo Clinic experience. Garton GR, et al. **Mayo Clin Proc** 1990 Aug;65(8):1077–86

Glioblastoma multiforme of the cerebellum in an elderly man. A case report. Rosenfeld J, et al. **Tumori** 1989 Dec 31; 75(6):626–9

ULTRASTRUCTURE

[Ultrastructural study of cerebellar medulloblastoma] Hang ZB, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Sep; 18(3):214–6 (Eng. Abstr.) **(Chi)**

[The astrocyte–endothelial interface in cerebellar astrocytoma] Uematsu Y, et al. **No Shinkei Geka** 1989 Nov; 17(11):999–1004 (Eng. Abstr.) **(Jpn)**

CEREBELLAR NUCLEI

ANATOMY & HISTOLOGY

Topographic organization of the cerebellar nucleocortical projection in the albino rat: an autoradiographic orthograde study. Umetani T. **Brain Res** 1990 Jan 22;507(2):216–24

Topographic organization of the cerebello–olivary projection in the albino rat: an autoradiographic orthograde tracing study. Umetani T. **Kobe J Med Sci** 1989 Apr;35(2):65–91

[Olivocerebellar, corticonuclear and nucleocortical projections in the "four limbs area" of the paramedian lobule in the cat: a combined electrophysiological and HRP study] Inui N. **Kaibogaku Zasshi** 1990 Feb;65(1):1–10 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

[Morphologic characteristics of the vascular network of the dentate nucleus during development] Gudović R, et al. **Med Pregl** 1989;42(3–4):109–10 (Eng. Abstr.) **(Scr)**

CYTOLOGY

Morphology of neurons and axon terminals associated with descending and ascending pathways of the lateral forebrain bundle in Rana esculenta. Lázár G, et al. **Cell Tissue Res** 1990 May;260(3):535–48

Secondary vestibulocerebellar projections to the flocculus and uvulo–nodular lobule of the rabbit: a study using HRP and double fluorescent tracer techniques. Epema AH, et al. **Exp Brain Res** 1990;80(1):72–82

Afferents of the caudal fastigial nucleus in a New World monkey (Cebus apella). Gonzalo-Ruiz A, et al. **Exp Brain Res** 1990;80(3):600–8

Topographical organisation within the cerebellar nucleocortical projection to the paravermal cortex of lobule Vb/c in the cat. Trott JR, et al. **Exp Brain Res** 1990; 80(2):415–28

Projections of the medial cerebellar nucleus to oculomotor-related midbrain areas in the rat: an anterograde and retrograde HRP study. Gonzalo-Ruiz A, et al. **J Comp Neurol** 1990 Jun 15;296(3):427–36

Anterograde tracing of the rat olivocerebellar system with Phaseolus vulgaris leucoagglutinin (PHA-L). Demonstration of climbing fiber collateral innervation of the cerebellar nuclei. Van der Want JJ, et al. **J Comp Neurol** 1989 Oct 1;288(1):1–18

Afferents to the cerebellar nuclei from the cervical enlargement in the rat, as demonstrated with the Phaseolus vulgaris leucoagglutinin method. Matsushita M, et al. **Neurosci Lett** 1990 Jun 8;113(3):253–9

DRUG EFFECTS

Dissociation by chloralose of the cardiovascular and cerebrovascular responses evoked from the cerebellar fastigial nucleus. Iadecola C, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):375–82

GROWTH & DEVELOPMENT

Development of human cerebellar nuclei. Morphometric study. Yamaguchi K, et al. **Acta Anat (Basel)** 1989; 136(1):61–8

[The fasciae of the pterygomandibular space] Madrid C, et al. **Acta Anat (Basel)** 1989;136(1):55–60 (Eng. Abstr.) **(Fre)**

METABOLISM

Quantitative autoradiography reveals selective changes in cerebellar GABA receptors of the rat mutant dystonic. Beales M, et al. **J Neurosci** 1990 Jun;10(6):1874–85

Developmentally regulated changes of glutamate binding sites in mouse deep cerebellar nuclei. Garcia-Ladona FJ, et al. **Neurosci Lett** 1990 Mar 14;110(3):256–60

GABA and glycine as putative transmitters in subcortical pathways to the pontine nuclei. A combined immunocytochemical and retrograde tracing study in the cat with some observations in the rat. Aas JE, et al. **Neuroscience** 1990;34(1):149–62

PATHOLOGY

Loss of neurons from the intracerebellar nuclei of the ageing mouse. Sturrock RR. **J Hirnforsch** 1989;30(5):517–9

[An autopsied case of manifesting chorea, serum antibody to brain proteins, neuronal degeneration in striatum and grumose degeneration in dentate nucleus] Ishikawa A, et al. **Rinsho Shinkeigaku** 1990 May;30(5):510–5 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Axons of passage may be responsible for fastigial nucleus pressor response. Henry RT, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):R1436–40

Cerebral blood flow during fastigial pressor response in cats. Williams JL, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H729–33

Depression of the vestibulo–ocular and optokinetic responses by intraflocular microinjection of GABA-A and GABA-B agonists in the rabbit. Van Neerven J, et al. **Arch Ital Biol** 1989 Oct;127(4):243–63

Pedunculopontine tegmental nucleus–induced inhibition of muscle activity in the rat. Kelland MD, et al. **Behav Brain Res** 1989 Sep 1;34(3):213–34

Taurine in deep cerebellar nuclei of the rat. In vivo comparison to GABA inhibitory effect. Billard JM. **Brain Res** 1990 Apr 23;514(1):155–8

Lesions of rostral ventrolateral medulla abolish some cardio– and cerebrovascular components of the cerebellar fastigial pressor and depressor responses. Chida K, et al. **Brain Res** 1990 Jan 29;508(1):93–104

Global reduction in cerebral blood flow and metabolism elicited from intrinsic neurons of fastigial nucleus. Chida K, et al. **Brain Res** 1989 Oct 23;500(1–2):177–92

Lesions of the cerebellar interpositus nucleus abolish both nictitating membrane and eyelid EMG conditioned responses. Lavond DG, et al. **Brain Res** 1990 Apr 30; 514(2):238–48

Cardiovascular responses of rats to electrical stimulation of the fastigial nucleus and local microinjection of amino acids. Huang TF, et al. **Chin J Physiol** 1989;32(1):31–9

Eye velocity is not the major factor that determines mossy fiber responses of rabbit floccular Purkinje cells to head and screen oscillation. Nagao S. **Exp Brain Res** 1990; 80(1):221–4

Antiepileptic effects of cerebellar nucleus dentatus electrical stimulation under different conditions of brain epileptisation. Shandra AA, et al. **Indian J Exp Biol** 1990 Feb;28(2):158–61

Continuous monitoring of cerebrocortical blood flow during stimulation of the cerebellar fastigial nucleus: a study by laser–Doppler flowmetry. Iadecola C, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):608–17

Fastigial inputs to paraventricular neurosecretory neurones studied by extra- and intracellular recordings in rats. Katafuchi T, et al. **J Physiol (Lond)** 1990 Feb;421:535–51

Electrical stimulation of the fastigial nucleus increases total cerebral blood flow in the monkey. Goadsby PJ, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):141–4

Vestibular and visual signals in the ventral parafloccular of the cerebellum in rabbits. Shojaku H, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):99–104

Representations of ocular rotations in the cerebellar flocculus of the rabbit. Simpson JI, et al. **Prog Brain Res** 1989; 80:213–23; discussion 211–2

Oculomotor functions of the flocculus and the vestibular nuclei after bilateral vestibular neurectomy. Waespe W, et al. **Prog Brain Res** 1989;80:225–36; discussion 211–2

[The effect of electrical stimulation of the cerebellar fastigial nuclei on local blood flow in the brain] Devdariani MI, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1602–7 (Eng. Abstr.) **(Rus)**

[The effect of stimulation of the raphe nucleus on the electrical activity of the cerebellar nuclei] Khanbabian MV, et al. **Fiziol Zh SSSR** 1989 Oct;75(10):1368–73 (Eng. Abstr.) **(Rus)**

CEREBELLOPONTILE ANGLE see **CEREBELLOPONTINE ANGLE**

CEREBELLOPONTINE ANGLE

Neuroradiology case of the day. Parasellar epidermoid. Ingram TL, et al. **AJR Am J Roentgenol** 1990 Jun; 154(6):1340–2

Congenital cholesteatomas of the cerebellopontine angle. de Souza CE, et al. **Am J Otol** 1989 Sep;10(5):358–63

Gadolinium. The new gold standard for diagnosing cerebellopontine angle tumors. Sidman JD, et al. **Arch Otolaryngol Head Neck Surg** 1989 Oct;115(10):1244–7

Malignant melanoma of the cerebello–pontine angle region. Braga FM, et al. **Arq Neuropsiquiatr** 1989 Dec; 47(4):496–500

Cerebello–pontine angle (CPA) tumor causing contralateral trigeminal neuralgia—a case report. Yang DY, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Aug;44(2):135–8

Solitary prostatic metastasis to the cerebellopontine angle: MR and CT findings. Flickinger FW, et al. **J Comput Assist Tomogr** 1989 Nov–Dec;13(6):1088–90

Radio–necrosis of the temporal bone presenting as cerebellopontine angle lesion. Small M, et al. **J Laryngol Otol** 1990 May;104(5):423–5

Diagnostic vetting of individuals with asymmetric sensorineural hearing impairments. Swan IR. **J Laryngol Otol** 1989 Sep;103(9):823–6

Cerebellopontine angle craniopharyngioma. Gökalp HZ, et al. **Neurochirurgia (Stuttg)** 1990 Jan;33(1):20–1 (16 ref.)

Cerebellopontine angle epidermoid tumor extending into the upper cervical spinal canal—case report. Hasegawa T, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):614–8

Primary intracranial epidermoid carcinoma—case report. Nishiura I, et al. **Neurol Med Chir (Tokyo)** 1989 Jul; 29(7):600–5 (32 ref.)

Choroidal epithelial cyst in the cerebellopontine angle associated with trigeminal neuralgia—case report. Urasaki E, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):424–8

Primary choroid plexus papilloma of the cerebellopontine angle: MR imaging. Martin N, et al. **Neuroradiology** 1990; 31(6):541–3

An unusual cause for trigeminal neuralgia: contralateral meningioma of the posterior fossa. Haddad FS, et al. **Neurosurgery** 1990 Jun;26(6):1033–8 (27 ref.)

Brainstem auditory evoked response sensitivity: comparison with other neurologic tests in the detection of retrocochlear lesions. Benitez JT, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(6):332–8

Phase audiometry—a rapid method for detecting cerebello–pontine angle tumours? Almqvist U, et al. **Scand Audiol** 1989;18(3):155–9

The cerebellopontine angle. Hasso AN, et al. **Semin Ultrasound CT MR** 1989 Jun;10(3):280–301 (60 ref.)

Craniopharyngioma with extension into the cerebellopontine angle. Case report. Shimada M, et al. **Tokai J Exp Clin Med** 1989 Apr;14(2):113–6 (16 ref.)

[Massive hemorrhage within an acoustic neurinoma. Case report] Fuse T, et al. **Neurol Med Chir (Tokyo)** 1989 Oct; 29(10):933–7 (Eng. Abstr.) **(Jpn)**

[A case of intracranial chondroma presenting with pontine hemorrhage] Furui T, et al. **No Shinkei Geka** 1990 Jun; 18(6):543–6 (33 ref.) (Eng. Abstr.) **(Jpn)**

[Cerebello–pontine angle epidermoid with cerebellar atrophy; report of a case] Fuse T, et al. **No Shinkei Geka** 1989 Jul; 17(7):673–7 (Eng. Abstr.) **(Jpn)**

[A case of facial nerve neurinoma originated from the cerebellopontine angle portion] Katayama S, et al. **No Shinkei Geka** 1989 Nov;17(11):1041–6 (64 ref.) (Eng. Abstr.) **(Jpn)**

[Stereotactic aspiration in hypertensive pontine hemorrhage: comparative study with conservative therapy] Takahama H, et al. **No Shinkei Geka** 1989 Aug;17(8):733–9 (Eng. Abstr.) **(Jpn)**

[Oligodendroglioma of the cerebellopontine angle: 16 years' course. Review of the literature and considerations on the pathology] Carvalho Filho A, et al. **Arq Neuropsiquiatr** 1989 Jun;47(2):241–7 (47 ref.) (Eng. Abstr.) **(Por)**

[Brain stem auditory evoked potentials in various tumors in the cerebellopontine angle] Haralampiev K. **Vojnosanit Pregl** 1990 Jan–Feb;47(1):3–7 (Eng. Abstr.) **(Scr)**

[Otoneurological examination in a case of epidermoid cyst of the cerebellopontine angle] Márquez Dorsch FJ, et al. **Acta Otorrinolaringol Esp** 1988 Jul–Aug;39(4):251–3 (10 ref.) (Eng. Abstr.) **(Spa)**

ANATOMY & HISTOLOGY

Anatomy of the cerebello–pontine angle visualized through the translabyrinthine approach. Tos M, et al. **Acta Otolaryngol (Stockh)** 1989 Sep–Oct;108(3–4):238–45

[Use of intracranial endoscopy in morphologic studies] Karakhan VB. **Arkh Anat Gistol Embriol** 1990 Jan; 98(1):75–82 **(Rus)**

BLOOD SUPPLY

Clinical diagnosis of anterior inferior cerebellar artery thrombosis: autopsy and temporal bone histopathologic study [letter] Benecke JE Jr. **Ann Otol Rhinol Laryngol** 1990 Aug;99(8):678

Variability of the surgical anatomy of the neurovascular complex of the cerebellopontine angle. Kim HN, et al. **Ann Otol Rhinol Laryngol** 1990 Apr;99(4 Pt 1):288–96

[Vascular compression at the cerebellopontine angle and the decompression technic] Fan Z. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1989;24(1):58–60 (21 ref.) **(Chi)**

[Diagnosis of vascular compression of the trigeminal and glossopharyngeal nerve roots] Auders AG, et al. **Zh Nevropatol Psikhiatr** 1990;90(4):8–11 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Gadolinium–DTPA–enhanced magnetic resonance scanning in cerebellopontine angle tumors. Wayman JW, et al. **Laryngoscope** 1989 Nov;99(11):1167–70

MR cisternography of the cerebello–pontine angle and internal auditory canal in diagnosis of intracanalicular acoustic neuroma. Bassi P, et al. **Neuroradiology** 1990; 31(6):486–91

Respiratory epithelial cyst in the cerebellopontine angle. Lee ST, et al. **Surg Neurol** 1989 Dec;32(6):418–20

PHYSIOLOGY

A comparison of magnetic and electrical stimulation of facial nerve at the cerebello–pontine angle in the dog. Estrem SA, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jun; 75(6):558–60

PHYSIOPATHOLOGY

Late onset cerebello–pontomesencephalic degeneration. al-Din AS, et al. **J Neurol Sci** 1989 Nov;93(2–3):323–31

SURGERY

Long–term results of surgical treatment of cerebello–pontine angle epidermoids. Lunardi P, et al. **Acta Neurochir (Wien)** 1990;103(3–4):105–8

[Selective injury of the vestibular and facial nerves following microvascular decompression procedures for hemifacial

spasm: A case report] Sekiya T, et al. **No Shinkei Geka** 1990 Jul;18(7):647–51 (Eng. Abstr.) **(Jpn)**

CEREBELLUM

Cerebellar heterotopia of the cervical cord (a case report). Davis SJ, et al. **Australas Radiol** 1989 Aug;33(3):282–4

Identification and mapping of a mouse gene influencing cerebellar folial pattern. Neumann PE, et al. **Brain Res** 1990 Jul 30;524(1):85–9

The effect of D–penicillamine in the developing rat cerebellum. Yurdakök M, et al. **Turk J Pediatr** 1989 Apr–Jun;31(2):137–43

[Progressive multifocal leukoencephalopathy associated with leukopenia of unknown (iatrogenic?) origin] Gómez Beldarrain M, et al. **Neurologia** 1990 Jan;5(1):29–32 (Eng. Abstr.) **(Spa)**

ABNORMALITIES

Oral–facial–digital syndrome type VI (Váradi syndrome): further clinical delineation. Münke M, et al. **Am J Med Genet** 1990 Mar;35(3):360–9

Evaluation of the lemon and banana signs in one hundred thirty fetuses with open spina bifida. Van den Hof MC, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):322–7

Anaesthesia in an infant with Joubert's syndrome. Matthews NC. **Anaesthesia** 1989 Nov;44(11):920–1

Abnormalities of the cerebellum in oro–facio–digital syndrome II (Mohr syndrome). Annerén G, et al. **Clin Genet** 1990 Jul;38(1):69–73

Pontoneocerebellar hypoplasia: report of a case in a newborn and review of the literature. Pittella JE, et al. **Clin Neuropathol** 1990 Jan–Feb;9(1):33–8 (27 ref.)

Dandy–Walker syndrome and agenesis of the cerebellar vermis: diagnostic problems and genetic counselling. Bordarier C, et al. **Dev Med Child Neurol** 1990 Apr; 32(4):285–94 (69 ref.)

Autoradiographic analysis of benzodiazepine receptors in mutant mice with cerebellar defects. Kahle G, et al. **J Chem Neuroanat** 1990 Jul–Aug;3(4):261–70

Moebius' syndrome with unilateral cerebellar hypoplasia. Harbord MG, et al. **J Med Genet** 1989 Sep;26(9):579–82

Inherited syndrome of microcephaly, dyskinesia and pontocerebellar hypoplasia: a systemic atrophy with early onset. Barth PG, et al. **J Neurol Sci** 1990 Jun;97(1):25–42

Targeted disruption of the murine int–1 proto–oncogene resulting in severe abnormalities in midbrain and cerebellar development. Thomas KR, et al. **Nature** 1990 Aug 30; 346(6287):847–50

Joubert syndrome: a clinico–radiological study. Kendall B, et al. **Neuroradiology** 1990;31(6):502–6

Hydranencephaly–cerebellar hypoplasia in a newborn calf after infection of its dam with Chuzan virus. Miura Y, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):689–94

Pontocerebellar hypoplasia associated with infantile motor neuron disease (Norman's disease). Kamoshita S, et al. **Pediatr Pathol** 1990;10(1–2):133–42

Unilateral duplication of the cerebellar hemisphere and internal, middle, and external ear: a clinical case study. Jackson JM, et al. **Plast Reconstr Surg** 1990 Sep;86(3):550–3

Dandy–Walker malformation in a Japanese black calf. Madarame H, et al. **Vet Pathol** 1990 Jul;27(4):296–8

[The association of nephronophthisis, tapeto–retinal degeneration, encephalopathy and vermian agenesis] Buissonnière R, et al. **Ann Pediatr (Paris)** 1989 Sep; 36(7):482 **(Fre)**

[An animal model for underdevelopment of the CNS—bilirubin–induced cerebellar hypoplasia] Kashiwamata S, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1227–35 **(Jpn)**

ANALYSIS

Comparative study of glial fibrillary acidic protein (GFAP)—immunoreactivity in the rat and monkey cerebellum. Kótai I, et al. **Acta Morphol Hung** 1989; 37(1–2):85–92

Glycoproteins of cultured cerebellar explants: effect of inhibitors of N–linked glycosylation. Carroll M, et al. **Biochem Soc Trans** 1990 Jun;18(3):488

A cerebellar Purkinje cell marker P400 protein is an inositol 1,4,5–trisphosphate (InsP3) receptor protein. Purification and characterization of InsP3 receptor complex. Maeda N, et al. **EMBO J** 1990 Jan;9(1):61–7

Bovine cerebellum endothelin receptor: solubilization and identification. Schvartz I, et al. **Endocrinology** 1990 Jun; 126(6):3218–22

Demonstration of the heterogeneity of the kappa–opioid receptors in guinea–pig cerebellum using selective and nonselective drugs. Tiberi M, et al. **Eur J Pharmacol** 1990 Jun 12;188(6):379–89

Immunoreactive corticotropin releasing factor in adult and developing rat cerebellum: its presence in climbing and mossy fibres. van den Dungen HM, et al. **J Chem Neuroanat** 1988 Nov–Dec;1(6):339–49

Effect of different fixatives on immunocytochemical localization of HNK–1–reactive antigens in cerebellum: a method for differentiating the localization of the same carbohydrate epitope on proteins vs lipids. Prasadarao N, et al. **J Histochem Cytochem** 1990 Aug;38(8):1193–200

Transiently expressed, neural–specific molecule associated with premigratory granule cells in postnatal mouse cerebellum. Pickford LB, et al. **J Neurocytol** 1989 Aug; 18(4):465–78

Identification and isolation of an axonal plasma membrane enriched fraction from cerebellar granule cell neurites. Mason PW, et al. **J Neurosci Res** 1990 Apr;25(4):511–23

Functional expression of the yes proto–oncogene protein in Xenopus oocytes injected with chicken cerebellar mRNA. Sudol M. **J Neurosci Res** 1989 Sep;24(1):1–8

Immunocytochemical confirmation of prion protein [letter] Clinton J, et al. **Lancet** 1990 Aug 25;336(8713):515

Molecular structure of the chick cerebellar kainate–binding subunit of a putative glutamate receptor. Gregor P, et al. **Nature** 1989 Dec 7;342(6250):689–92

Cerebellar GABAA receptor selective for a behavioural alcohol antagonist. Lüddens H, et al. **Nature** 1990 Aug 16; 346(6285):648–51

ANATOMY & HISTOLOGY

The cerebellum: 3. Anatomic–MR correlation in the coronal plane. Press GA, et al. **AJNR** 1990 Jan–Feb;11(1):41–50

Gd–DTPA–enhanced MR images: accentuation of vascular pulsation artifacts and correction by using gradient–moment nulling (MAST). Richardson DN, et al. **AJNR** 1990 Jan–Feb;11(1):209–10

The cerebellum: 3. Anatomic–MR correlation in the coronal plane. Press GA, et al. **AJR Am J Roentgenol** 1990 Mar; 154(3):593–602

Spinocerebellar tract neurons with axons passing through the inferior or superior cerebellar peduncles. A retrograde horseradish peroxidase study in rats. Kitamura T, et al. **Brain Behav Evol** 1989;34(3):133–42

Somatosensory climbing fiber responses in the caudal posterior vermis of the cat cerebellum. Brons J, et al. **Brain Res** 1990 Jun 11;519(1–2):243–8

Cerebellar phenotype of two alleles of the 'reeler' mutation on similar backgrounds. Goffinet AM. **Brain Res** 1990 Jun 11;519(1–2):355–7

Hot–foot murine mutation: behavioral effects and neuroanatomical alterations. Guastavino JM, et al. **Brain Res** 1990 Jul 23;523(2):199–210

Organization of the auditory area in the posterior cerebellar vermis of the cat. Huang C, et al. **Exp Brain Res** 1990; 81(2):377–83

Ultrasonographic measurement of the fetal transverse cerebellum in utero. Hata K, et al. **Gynecol Obstet Invest** 1989;28(2):111–2

Anatomical mapping of the cerebellar nucleocortical projections in the rat: a retrograde labeling study. Buisseret–Delmas C, et al. **J Comp Neurol** 1989 Oct 8; 288(2):297–310

Afferent connections of the valvula cerebelli in two teleosts, the common goldfish and the green sunfish. Wullimann MF, et al. **J Comp Neurol** 1989 Nov 22;289(4):554–67

Incertal projections from the brainstem and cerebellum: a horseradish peroxidase study in the cat. Aguirre JA, et al. **J Hirnforsch** 1989;30(4):449–55

Fetal cerebellar measurements in second trimester ultrasonography—clinical value. Montenegro NA, et al. **J Perinat Med** 1989;17(5):365–9

Topographical organization of the olivocerebellar projection upon the posterior vermis in the rat. Sugita S, et al. **Neurosci Res** 1989 Nov;7(2):87–102

Topographic and zonal pattern of olivocerebellar projection to the paramedian lobule in the rabbit: an experimental study with an HRP retrograde tracing method. Zimny R, et al. **Neurosci Res** 1989 Dec;7(3):173–98

[Afferent projections to the uvula in the cat. I. Climbing fiber projections] Kanda K. **Nippon Jibiinkoka Gakkai Kaiho** 1989 May;92(5):741–50 (Eng. Abstr.) **(Jpn)**

[Afferent projections to the uvula in the cat. II. Mossy fiber projections] Kanda K. **Nippon Jibiinkoka Gakkai Kaiho** 1989 May;92(5):751–63 (Eng. Abstr.) **(Jpn)**

[MR measurement of normal brainstem cerebellum and corpus callosum on midsagittal section] Kogame S, et al. **Rinsho Hoshasen** 1989 Oct;34(11):1383–7 (Eng. Abstr.) **(Jpn)**

[Vestibular projections of cervical sensory fibers in the frog] Suárez C, et al. **Acta Otorrinolaringol Esp** 1988 May–Jun; 39(3):151–7 (Eng. Abstr.) **(Spa)**

BLOOD SUPPLY

Anterior spinal arteries. Origin and distribution in man. Rodríguez–Baeza A, et al. **Acta Anat (Basel)** 1989; 136(3):217–21

Vascular relationships of the vestibulocochlear nerve on magnetic resonance imaging. Parnes LS, et al. **Am J Otol** 1990 Jul;11(4):278–81

Clinical diagnosis of anterior inferior cerebellar artery thrombosis. Autopsy and temporal bone histopathologic study. Hinojosa R, et al. **Ann Otol Rhinol Laryngol** 1990 Apr;99(4 Pt 1):261–72

Cerebellar infarction in the territory of the anterior and inferior cerebellar artery. A clinicopathological study of 20 cases. Amarenco P, et al. **Brain** 1990 Feb;113 (Pt 1):139–55

The association of arteriovenous malformation and aneurysm within the posterior cranial fossa—report of a case. Lin TK, et al. **Chang Keng I Hsueh** 1990 Mar 20;13(1):59–64

Cochlear blood flow following temporary occlusion of the cerebellar arteries. Randolf HB, et al. **Eur Arch Otorhinolaryngol** 1990;247(4):226–8

Cerebellar and thalamic infarctions in basilar artery migraine. Sabharwal RK, et al. **J Assoc Physicians India** 1990 Mar; 38(3):237–8

The difference in vascular volume between cerebrum and cerebellum is in the pia mater. Holash JA, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):432–4

Ischaemic supratentorial stroke: angiographic findings in patients examined in the very early phase. Bozzao L, et al. **J Neurol** 1989 Sep;236(6):340–2

Vermal infarct with pursuit eye movement disorders. Pierrot–Deseilligny C, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):519–21

Basilar artery migraine. Case report. McDonald JV. **J Neurosurg** 1990 Feb;72(2):289–91

Microsurgical anatomy of the tentorial sinuses. Matsushima T, et al. **J Neurosurg** 1989 Dec;71(6):923–8

Respiratory responses to occlusion or hypercapnic blood injection of the anterior inferior cerebellar artery in cats. Kuwana S, et al. **Jpn J Physiol** 1990;40(2):225–42

Fusiform superior cerebellar artery aneurysm presenting with contralateral abducens nerve paresis—case report. Hirose Y, et al. **Neurol Med Chir (Tokyo)** 1990 Feb;30(2):119–22 (17 ref.)

Distal posterior inferior cerebellar aneurysms—report of 12 cases. Ishikawa T, et al. **Neurol Med Chir (Tokyo)** 1990 Feb;30(2):100–8

Anterior inferior cerebellar artery aneurysm at the internal auditory meatus—case report. Kiya K, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):592–5

Cerebellar infarction in the territory of the superior cerebellar artery: a clinicopathologic study of 33 cases. Amarenco P, et al. **Neurology** 1990 Sep;40(9):1383–90

Cerebellar venous infarction: case report with clinicopathologic correlation. Eng LJ, et al. **Neurology** 1990 May;40(5):837–8

Incidental aneurysm of the superior cerebellar and non–visualized posterior inferior cerebellar artery: a diagnostic trap. Sadato N, et al. **Neuroradiology** 1989; 31(4):364–5

Carcinoma metastatic to a cerebellar vascular malformation: case report. Greene GM, et al. **Neurosurgery** 1990 Jun; 26(6):1054–6; discussion 1056–7

A false aneurysm coexisting with arteriovenous malformation in the cerebellum. Yokota A, et al. **Sangyo Ika Daigaku Zasshi** 1989 Sep 1;11(3):333–40

Acetazolamide effect on cerebellar blood flow in crossed cerebral–cerebellar diaschisis. Bogsrud TV, et al. **Stroke** 1990 Jan;21(1):52–5

Transcerebellar thrombectomy for the successful clipping of thrombosed giant vertebral artery–posterior inferior cerebellar artery aneurysm: case report. Kurokawa Y, et al. **Surg Neurol** 1990 Mar;33(3):217–20

Arteries in contact with the cisternal portion of the facial nerve in autopsy cases: microsurgical anatomy for neurovascular decompression surgery of hemifacial spasm. Matsushima T, et al. **Surg Neurol** 1990 Aug;34(2):87–93

[Extracranial aneurysm of the posterior inferior cerebellar artery. A case report] Alliez B, et al. **Neurochirurgie** 1990; 36(2):137–40 (12 ref.) (Eng. Abstr.) **(Fre)**

[Macroglossia after neck clipping of a VA–PICA (vertebral artery–posterior inferior cerebellar artery) aneurysm] Ishiyama T, et al. **Masui** 1990 Apr;39(4):503–7 (Eng. Abstr.) **(Jpn)**

[Peripheral superior cerebellar artery aneurysm. Case report] Hidaka M, et al. **Neurol Med Chir (Tokyo)** 1989 Jun; 29(6):533–7 (16 ref.) (Eng. Abstr.) **(Jpn)**

[Transoral transclival approach to vertebral–posterior inferior cerebellar artery aneurysm. Case report] Yamashita K, et al. **Neurol Med Chir (Tokyo)** 1989 Apr;29(4):342–6 (16 ref.) (Eng. Abstr.) **(Jpn)**

[Cochlear dysfunction induced by arterial obstruction in the cat anterior cerebellar artery] Ito H. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Nov;92(11):1863–8 (Eng. Abstr.) **(Jpn)**

[Basilar artery occlusion after STA–SCA anastomosis; case report] Yoshida S, et al. **No Shinkei Geka** 1990 Mar; 18(3):307–11 (Eng. Abstr.) **(Jpn)**

[A case of progressive systemic sclerosis associated with a hemorrhagic infarction of the cerebellum] Kawano H, et al. **No To Shinkei** 1990 Feb;42(2):189–91 (Eng. Abstr.) **(Jpn)**

[MR imaging of cerebellar infarct] Uchino A, et al. **Rinsho Hoshasen** 1989 Jun;34(6):691–5 (Eng. Abstr.) **(Jpn)**

[A case of cerebellar hemispheric venous malformation presenting crossed cerebello–cerebral diaschisis] Yokoji H, et al. **Rinsho Shinkeigaku** 1989 Nov;29(11):1414–6 (Eng. Abstr.) **(Jpn)**

[Millard–Gubler syndrome in a young man after hemorrhage from arteriovenous hemangioma to the brain stem] Gardela G, et al. **Neurol Neurochir Pol** 1989 Mar–Apr;23(2):149–52 (Eng. Abstr.) **(Pol)**

[Favorable outcome of decompression of the trigeminal nerve in a case of bilateral neuralgia] Mazurowski W, et al. **Pol Tyg Lek** 1989 Jan 30;44(5):131–2 (Eng. Abstr.) **(Pol)**

[Infarction of the superior cerebellar artery (Mills' syndrome). Clinico–morphological and functional correlation] Viguera J, et al. **Neurologia** 1988 Jul–Aug; 3(4):137–42 (Eng. Abstr.) **(Spa)**

CYTOLOGY

Quantitative analysis of synapses in the molecular layer of the cerebellum of the cat (a Golgi and electron microscopic study). Malínský J, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;123:55–78

Cerebellar granule cell migration involves proteolysis. Seeds NW, et al. **Adv Exp Med Biol** 1990;265:169–78

Separate populations of neurons in the oculomotor nucleus project to the cerebellum and the abducent nucleus. A retrograde fluorescent double-labelling study in the cat. Røste GK. **Arch Ital Biol** 1990 Jan;128(1):47–53

Excitatory amino acid neurotoxicity at the N-methyl-D-aspartate receptor in cultured neurons: role of the voltage-dependent magnesium block. Cox JA, et al. **Brain Res** 1989 Oct 16;499(2):267–72

Dibutyryl cyclic AMP-induced changes in neuron-astroglia interactions and fibronectin immunocytochemistry in dissociated rat cerebellar cultures. Gilad GM, et al. **Brain Res** 1990 Feb 5;508(2):215–24

Excitatory amino acid neurotoxicity at the N-methyl-D-aspartate receptor in cultured neurons: pharmacological characterization. Lysko PG, et al. **Brain Res** 1989 Oct 16;499(2):258–66

Neuritogenesis in cerebellar granule cells in vitro: a role for protein kinase C. Cambray-Deakin MA, et al. **Brain Res Dev Brain Res** 1990 Apr 1;53(1):40–6

Microtubule formation and neurite growth in cerebellar macroneurons which develop in vitro: evidence for the involvement of the microtubule-associated proteins, MAP-1a, HMW-MAP2 and Tau. Ferreira A, et al. **Brain Res Dev Brain Res** 1989 Oct 1;49(2):215–28

Marked neurotrophic effects of diffusible substances released from non-target cerebellar cells on thalamic neurons in culture. Hisanaga K, et al. **Brain Res Dev Brain Res** 1990 Jul 1;54(2):151–60

Granule cell behavior on laminin in cerebellar microexplant cultures. Nagata I, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1–2):63–73

Purkinje cell loss is due to a direct action of the weaver gene in Purkinje cells: evidence from chimeric mice. Smeyne RJ, et al. **Brain Res Dev Brain Res** 1990 Mar 1; 52(1–2):211–8

Ectopic Purkinje-like cells are GABAergic: immunohistochemistry with an immune serum against glutamic acid decarboxylase. Scherini E, et al. **Cell Tissue Res** 1989 Nov;258(2):437–9

Granule cell induction of 9-O-acetyl gangliosides on cerebellar glia in microcultures. Mendez-Otero R, et al. **Dev Biol** 1990 Apr;138(2):400–9

Response of cerebellar Purkinje cells to serotonin and the 5-HT1A agonists 8-OH-DPAT and ipsapirone in vitro. Darrow EJ, et al. **Eur J Pharmacol** 1990 Jan 10; 175(2):145–53

Glutamate receptor agonists cause efflux of endogenous neuroactive amino acids from cerebellar neurons in culture. Rogers KL, et al. **Eur J Pharmacol** 1990 Feb 27; 177(3):195–9

Secondary vestibulocerebellar projections to the flocculus and uvulo-nodular lobule of the rabbit: a study using HRP and double fluorescent tracer techniques. Epema AH, et al. **Exp Brain Res** 1990;80(1):72–82

Lumbar dorsal root projections to spinocerebellar cell groups in the rat spinal cord: a double labeling study. Rivero-Melián C, et al. **Exp Brain Res** 1990;81(1):85–94

Oligodendrocyte-derived J1-160/180 extracellular matrix glycoproteins are adhesive or repulsive depending on the partner cell type and time of interaction. Morganti MC, et al. **Exp Neurol** 1990 Jul;109(1):98–110

Activation of excitatory amino acid receptors increases intracellular free [3H]arachidonate levels in cultured cerebellar neurons. Aronica E, et al. **Funct Neurol** 1990 Jan-Mar;5(1):15–20

Myelination requirements of central nervous system glia in vitro: statistical validation of differences between glia from adult and immature mice. Stanhope GB, et al. **GLIA** 1990; 3(2):125–9

C17, a retrovirally immortalized neuronal cell line, inhibits the proliferation of astrocytes and astrocytoma cells by a contact-mediated mechanism. Weinstein DE, et al. **GLIA** 1990;3(2):130–9

Fractionator studies on Purkinje cells in the human cerebellum: numbers in right and left halves of male and female brains. Mayhew TM, et al. **J Anat** 1990 Apr; 169:63–70

Modulation of sphingolipid biosynthesis in primary cultured neurons by long chain bases. van Echten G, et al. **J Biol Chem** 1990 Jun 5;265(16):9333–9

Horseradish peroxidase labeling of the efferent and afferent pathways of the avian tangential vestibular nucleus. Cox RG, et al. **J Comp Neurol** 1990 Jun 8;296(2):324–41

Spinocerebellar projections from spinal border cells in the cat as studied by anterograde transport of wheat germ agglutinin-horseradish peroxidase. Matsushita M, et al. **J Comp Neurol** 1989 Oct 1;288(1):19–38

Cerebellar connections with the motor cortex and the arcuate premotor area: an analysis employing retrograde transneuronal transport of WGA-HRP. Orioli PJ, et al. **J Comp Neurol** 1989 Oct 22;288(4):612–26

Secondary vestibulocerebellar mossy fiber projection to the caudal vermis in the rabbit. Thunnissen IE, et al. **J Comp Neurol** 1989 Dec 8;290(2):262–77

Effects of inhibitors of protein synthesis and intracellular transport on the gamma-aminobutyric acid agonist-induced functional differentiation of cultured cerebellar granule cells. Belhage B, et al. **J Neurochem** 1990 Oct;55(4):1107–13

Methyl mercury stimulates protein 32P phospholabeling in cerebellar granule cell culture. Sarafian T, et al. **J Neurochem** 1990 Sep;55(3):913–21

Altered patterns of protein phosphorylation and synthesis caused by methyl mercury in cerebellar granule cell culture. Sarafian T, et al. **J Neurochem** 1990 Sep; 55(3):922–9

Location and morphology of dorsal spinocerebellar tract neurons that receive monosynaptic afferent input from ankle extensor muscles in cat hindlimb. Walmsley B, et al. **J Neurophysiol** 1990 Feb;63(2):286–93

Proton inhibition of N-methyl-D-aspartate receptors in cerebellar neurons. Traynelis SF, et al. **Nature** 1990 May 24;345(6273):347–50

Characterization of a co-culture system of neurons and hepatocytes. Westergaard N, et al. **Neurochem Res** 1989 Dec;14(12):1203–7

Immortalization of precursor cells from the mammalian CNS. Frederiksen K, et al. **Neuron** 1988 Aug;1(6):439–48

Small inhibitory cerebellar interneurons grow in a perpendicular orientation to granule cell neurites in culture. Hekmat A, et al. **Neuron** 1989 Feb;2(2):1113–22

Neuronal influences on glial progenitor cell development. Levine JM. **Neuron** 1989 Jul;3(1):103–13

Long-lasting inhibitory action of caerulein on climbing fiber system in the cerebellum of the rat. Kageyama H, et al. **Neuropharmacology** 1989 Sep;28(9):991–5

Cerebellar granule cell survival and maturation induced by K+ and NMDA correlate with c-fos proto-oncogene expression. Didier M, et al. **Neurosci Lett** 1989 Dec 15; 107(1-3):55–62

Serum and depolarizing agents cause acute neurotoxicity in cultured cerebellar granule cells: role of the glutamate receptor responsive to N-methyl-D-aspartate. Schramm M, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1193–7

[Cell-to-cell interactions between Purkinje and granule cells during cerebellar development. Some considerations on the hypoplastic cerebellum of Gunn rats] Keino H, et al. **Yakubutsu Seishin Kodo** 1989 Dec;9(4):381–8 (27 ref.) **(Jpn)**

[Immunocytochemical characteristics of organotypic cerebellar culture using the avidin-biotin complex method (ABC)] Weinrauder H. **Neuropatol Pol** 1989;27(3):311–21 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

Exposure of rats to ethanol from postnatal days 4 to 8: alterations of cholinergic neurochemistry in the hippocampus and cerebellum at day 20. Light KE, et al. **Alcoholism (N Y)** 1989 Oct;13(5):686–92

Neurotoxicity at the N-methyl-D-aspartate receptor in energy-compromised neurons. An hypothesis for cell death in aging and disease. Henneberry RC, et al. **Ann N Y Acad Sci** 1989;568:225–33

Effect of acute ethanol administration on the subcellular distribution of iron in rat liver and cerebellum. Rouach H, et al. **Biochem Pharmacol** 1990 Mar 15;39(6):1095–100

gamma-Aminobutyric acid (GABA) enhances glutamate cytotoxicity in a cerebellar cell line. Simantov R. **Brain Res Bull** 1990 Jun;24(6):711–5

Prenatal terbutaline exposure in the rat: selective effects on development of noradrenergic projections to cerebellum. Slotkin TA, et al. **Brain Res Bull** 1989 Oct-Nov; 23(4-5):263–5

Striatal homogenates from animals chronically treated with haloperidol stimulate dopamine and GABA uptake in cultures of rostral mesencephalic tegmentum. Carvey PM, et al. **Clin Neuropharmacol** 1989 Oct;12(5):425–34

Structural and neurochemical effects in mouse cerebellum following neonatal methylazoxymethanol and 6-hydroxydopamine treatment. Luthman J, et al. **Int J Dev Neurosci** 1990;8(1):107–18

The neurotoxicity of 1-methyl-4-phenylpyridinium in cultured cerebellar granule cells. Marini AM, et al. **J Neurosci** 1989 Oct;9(10):3665–72

Glutamate-induced neuronal death in primary cultures of cerebellar granule cells: protection by synthetic derivatives of endogenous sphingolipids. Manev H, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):419–27

Whole-cell current noise produced by excitatory and inhibitory amino acids in large cerebellar neurones of the rat. Cull-Candy SG, et al. **J Physiol (Lond)** 1989 Aug; 415:533–53

Cerebellar white matter after long-term ethanol consumption in mice. Phillips SC. **J Stud Alcohol** 1990 Jan;51(1):14–8

Effects of chlorpromazine in the nucleus reticularis lateralis on the cat cerebellar potentials. Hagiwara Y, et al. **Jpn J Pharmacol** 1989 Sep;51(1):1–9

Selection of a pure cerebellar granule cell culture by kainate treatment. Drejer J, et al. **Neurochem Res** 1989 Aug; 14(8):751–4

Protective effect of the calcium entry blocker, nimodipine on cerebellar organotypic cultures submitted to anoxia. Renkawek K, et al. **Neuropatol Pol** 1989;27(3):323–30

Nimodipine applied immediately after anoxia protects cerebellar cells in culture against injury. Renkawek K, et al. **Neuropatol Pol** 1989;27(3):331–8

In vivo antagonism of agonist actions at N-methyl-D-aspartate and N-methyl-D-aspartate-associated glycine receptors in mouse cerebellum: studies of 1-hydroxy-3-aminopyrrolidone-2. Wood PL, et al. **Neuropharmacology** 1990 Jul;29(7):675–9

The effect of low level lead exposure on the postnatal structuring of the rat cerebellum. Hasan F, et al. **Neurotoxicol Teratol** 1989 Sep-Oct;11(5):433–40

Neonatal ethanol exposure: functional alterations associated with cerebellar growth retardation. Meyer LS, et al. **Neurotoxicol Teratol** 1990 Jan-Feb;12(1):15–22

Interactions of nicotinamide with dopamine receptors in vivo. Dorris RL. **Pharmacol Biochem Behav** 1989 Aug; 33(4):915–7

[Cells of the external granular layer of the rat cerebellum as a test system for evaluating the clastogenic activity of chemical compounds] Zakhidov ST, et al. **Biol Nauki** 1990; (3):151–5 (Eng. Abstr.) **(Rus)**

[Pentobarbital interaction with the GABA-activated ion channels of the neurons in the rat cerebellum] Valeev AE, et al. **Neirofiziologiia** 1990;22(1):93–8 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Monoclonal antibody that binds to both the prenatal and postnatal astroglia in rodent cerebellum. Ono K, et al. **Brain Res Dev Brain Res** 1989 Nov 1;50(1):154–9

A new approach to the development of the cerebellum provided by the quail-chick marker system. Hallonet ME, et al. **Development** 1990 Jan;108(1):19–31

[Antenatal echographic measurement of the fetal cerebellum. Significance in the evaluation of fetal development] Duchatel F, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(7):879–83 (Eng. Abstr.) **(Fre)**

[Growth of the cerebellum in normal pregnancy] Miković Z, et al. **Jugosl Ginekol Perinatol** 1989 Sep-Dec; 29(5-6):157–60 (Eng. Abstr.) **(Scr)**

ENZYMOLOGY

Differential effects of hydrocortisone on alanine aminotransferase isoenzymes of the cerebral hemispheres and cerebellum of rats during growth, development, and senescence. Patnaik SK. **Biochem Int** 1990;21(1):175–84

Developmental expression of protein kinase C isozymes in rat cerebellum. Huang FL, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1-2):121–30

Histamine increases ornithine decarboxylase activity in primary cultures of cerebellar granule cells. Rodriguez J, et al. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):291–4

Generation of the Ca2(+)-independent form of Ca2+/calmodulin-dependent protein kinase II in cerebellar granule cells. Fukunaga K, et al. **J Biol Chem** 1989 Dec 25;264(36):21830–6

Characterization of glutamate dehydrogenase isoproteins purified from the cerebellum of normal subjects and patients with degenerative neurological disorders, and from human neoplastic cell lines. Hussain MM, et al. **J Biol Chem** 1989 Dec 5;264(34):20730–5

Glutamate dehydrogenase in cerebellar mutant mice: gene localization and enzyme activity in different tissues. Miret-Duvaux O, et al. **J Neurochem** 1990 Jan;54(1):23–9

Sialidase in cerebellar granule cells differentiating in culture. Pitto M, et al. **J Neurochem** 1989 Nov;53(5):1464–70

Chimeric analysis of the site of Lurcher gene action with respect to glial enzyme expression. Fisher M. **J Neurogenet** 1990 Apr;6(3):183–90

A study of 5'-nucleotidase activity in subcellular fractions of rat cerebellum after the administration of the convulsant 3-mercaptopropionic acid. Girardi E, et al. **Mol Chem Neuropathol** 1989 Oct;11(2):65–75

Development of monoamine oxidase activity and monoamine effects on glutamate release in cerebellar neurons and astrocytes. Hertz L, et al. **Neurochem Res** 1989 Oct; 14(10):1039–46

Neuronal influence on glial enzyme expression: evidence from chimeric mouse cerebellum. Fisher M, et al. **Neuron** 1988 Apr;1(2):151–7

Region selective increase in activities of CNS cholinergic marker enzymes during learning of memory tasks in aged rats. Nakamura S, et al. **Pharmacol Biochem Behav** 1989 Dec;34(4):805–10

Isolation of nitric oxide synthetase, a calmodulin-requiring enzyme. Bredt DS, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):682–5

Down-regulation of protein kinase C protects cerebellar granule neurons in primary culture from glutamate-induced neuronal death. Favaron M, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1983–7

[Experimental studies of the pathomechanism of portal encephalopathy. II. Monoamine oxidase (MAO) activity in the rat brain after porta- caval shunt using 2 different methods] Rokicki M, et al. **Neuropatol Pol** 1989; 27(2):209–16 (Eng. Abstr.) **(Pol)**

[Experimental studies of the pathomechanism of portal encephalopathy. I. Changes in monoamine oxidase (MAO) activity in the cerebral cortex and cerebellum of rats after portacaval shunt] Rokicki W, et al. **Neuropatol Pol** 1989; 27(2):199–207 (Eng. Abstr.) **(Pol)**

GROWTH & DEVELOPMENT

Sulfonylurea binding sites associated with ATP-regulated K+ channels in the central nervous system:

autoradiographic analysis of their distribution and ontogenesis, and of their localization in mutant mice cerebellum. Mourre C, et al. **Brain Res** 1990 Jun 11; 519(1-2):29-43

Morphometric study on the postnatal growth of the cerebellum of Australian aborigines and Caucasians. Riedel A, et al. **Brain Res** 1989 Oct 16;499(2):333-43

Regional differences in the timing of dendritic outgrowth of Purkinje cells in the vermal cerebellum demonstrated by MAP2 immunocytochemistry. Goodlett CR, et al. **Brain Res Dev Brain Res** 1990 Apr 1;53(1):131-4

Postnatal development of the wild-type and weaver cerebellum after embryonic administration of propylthiouracil (PTU). Smeyne RJ, et al. **Brain Res Dev Brain Res** 1990 Jul 1;54(2):282-6

Absence of impulse activity in cortical neurons with transient projections to the cerebellum. Tolbert DL. **Brain Res Dev Brain Res** 1989 Dec 1;50(2):241-9

Detection of binding sites for biotinylated neoglycoproteins and heparin (endogenous lectins) during cerebellar ontogenesis in the rat. Kuchler S, et al. **Eur J Cell Biol** 1990 Jun;52(1):87-97

Organization and postnatal development of zebrin II antigenic compartmentation in the cerebellar vermis of the grey opossum, Monodelphis domestica. Doré L, et al. **J Comp Neurol** 1990 Jan 15;291(3):431-49

Development of the electrosensory nervous system of Eigenmannia (gymnotiformes): II. The electrosensory lateral line lobe, midbrain, and cerebellum. Lannoo MJ, et al. **J Comp Neurol** 1990 Apr 1;294(1):37-58

Topological Link-Vertex Analysis of the growth of Purkinje cell dendritic trees in normal, reeler, and weaver mice. Sadler M, et al. **J Comp Neurol** 1989 Nov 8;289(2):260-83

Age related changes in Purkinje cell number in the cerebellar nodulus of the mouse. Sturrock RR. **J Hirnforsch** 1989; 30(6):757-60

Developmental regulation of tyrosine kinase substrate p36 (calpactin heavy chain) in rat cerebellum. Burgoyne RD, et al. **J Mol Neurosci** 1989;1(1):47-54

Expression of tropomyosin genes during the development of the rat cerebellum. Faivre-Sarrailh C, et al. **J Neurochem** 1990 Sep;55(3):899-906

Pharmacological characterization of somatostatin receptors in the rat cerebellum during development. Gonzalez BJ, et al. **J Neurochem** 1990 Sep;55(3):729-37

Location of a transiently expressed glycoprotein in developing cerebellum delineating its possible ontogenetic roles. Kuchler S, et al. **Neuroscience** 1989;33(1):111-24

Transient direct connection of vestibular mossy fibers to the vestibulocerebellar Purkinje cells in early postnatal development of kittens. Takeda T, et al. **Neuroscience** 1989; 32(1):99-111

Meander tail reveals a discrete developmental unit in the mouse cerebellum. Ross ME, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4189-92

Monoclonal antibodies to cerebellar pinceau terminals obtained after immunization with brain mRNA-injected Xenopus oocytes. Tigyi G, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):528-32

IMMUNOLOGY

Antibodies to cerebellar soluble lectin in multiple sclerosis [letter] Hughes RA. **Lancet** 1990 Aug 18;336(8712):438-9

Anticerebellar antibodies in neurologically normal patients with ovarian neoplasms. Brashear HR, et al. **Neurology** 1989 Dec;39(12):1605-9

INJURIES

Embolism of brain tissue to the lung in a neonate. Report of a case and review of the literature. Hauck AJ, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):217-8 (12 ref.)

[MR imaging of traumatic cerebellar dysfunction] Fumeya H, et al. **No Shinkei Geka** 1990 Mar;18(3):279-83 (Eng. Abstr.) **(Jpn)**

[Clinical study of two cases of traumatic cerebellar injury] Yokota H, et al. **No Shinkei Geka** 1990 Jan;18(1):67-70 (19 ref.) (Eng. Abstr.) **(Jpn)**

METABOLISM

Ubiquitin immunoelectron microscopy of dystrophic neurites in cerebellar senile plaques of Alzheimer's disease. Dickson DW, et al. **Acta Neuropathol (Berl)** 1990;79(5):486-93

Distribution of lead in the cerebellum of suckling rats following low and high dose lead exposure. A micro-PIXE analysis. Lindh U, et al. **Acta Neuropathol (Berl)** 1989; 79(2):149-53

Gene expression of a rat cerebellar Ca-binding protein, spot 35 protein. Takahashi Y, et al. **Adv Exp Med Biol** 1989; 255:257-62

Regulation of inositol 1,4,5-trisphosphate-induced Ca2+ release. I. Effect of Mg2+. Volpe P, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1077-85

Regulation of inositol 1,4,5-trisphosphate-induced Ca2+ release. II. Effect of cAMP-dependent protein kinase. Volpe P, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1086-91

Muscarinic receptor binding in forebrain and cerebellum during sleep-waking states in the rat. Pompeiano M, et al. **Arch Ital Biol** 1990 Jan;128(1):77-9

Identification of a novel inositol phosphate recognition site: specific [3H]inositol hexakisphosphate binding to brain regions and cerebellar membranes. Hawkins PT, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):819-27

Endothelin-1 stimulates the release of preloaded [3H]D-aspartate from cultured cerebellar granule cells. Lin WW, et al. **Biochem Biophys Res Commun** 1990 Mar 16; 167(2):593-9

Liver inositol, 1,4,5-trisphosphate-binding sites are the Ca2(+)-mobilizing receptors. Nunn DL, et al. **Biochem J** 1990 Aug 15;270(1):227-32

Molecular target sizes of inositol 1,4,5-trisphosphate receptors in liver and cerebellum. Nunn DL, et al. **Biochem J** 1990 Jan 15;265(2):393-8

Glycoproteins of cultured explants of fetal cerebellum. Carroll M, et al. **Biochem Soc Trans** 1989 Dec; 17(6):1029-30

Glutamate-receptor-mediated regulation of the cytoplasmic free calcium level in cultured cerebellar granule cells. Courtney MJ, et al. **Biochem Soc Trans** 1990 Jun; 18(3):420-1

Decreased blood flow and oxygen metabolism in the cerebellum, brain stem and thalamus in a case with Menkes kinky hair disease. Yoshikawa H, et al. **Brain Dev** 1989; 11(6):426-9

When does GABA-like immunoreactivity appear in the rat cerebellar GABAergic neurons? Aoki E, et al. **Brain Res** 1989 Nov 20;502(2):245-51

Localization of cGMP in the cerebellum of the adult rat: an immunohistochemical study. de Vente J, et al. **Brain Res** 1989 Dec 18;504(2):332-7

Low calcium-induced release of glutamate results in autotoxicity of cerebellar granule cells. McCaslin PP, et al. **Brain Res** 1990 Apr 16;513(2):280-5

CGRP expression in the rat olivocerebellar system during postnatal development. Morara S, et al. **Brain Res** 1989 Dec 18;504(2):315-9

Expression of neurofilament proteins in granule cells of the cerebellum. Vitadello M, et al. **Brain Res** 1990 Feb 12; 509(1):47-54

Interaction of ethanol and stress with the GABA/BZ receptor in LS and SS mice. Bowers BJ, et al. **Brain Res Bull** 1989 Jul-Aug;23(1-2):53-9

Developmental appearance of somatostatin in the rat cerebellum: in situ hybridization and immunohistochemistry. Naus CC. **Brain Res Bull** 1990 Apr; 24(4):583-92

The expression of excitatory amino acid binding sites during neuritogenesis in the developing rat cerebellum. Cambray-Deakin MA, et al. **Brain Res Dev Brain Res** 1990 Jul 1;54(2):265-71

The expression of acetylated microtubules during axonal and dendritic growth in cerebellar macroneurons which develop in vitro. Ferreira A, et al. **Brain Res Dev Brain Res** 1989 Oct 1;49(2):205-13

NCAM gene expression during the development of cerebellum and dentate gyrus in the mouse. Goldowitz D, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1-2):151-60

Trophic control of the ornithine decarboxylase/polyamine system in neonatal rat brain regions: lesions caused by 6-hydroxydopamine produce effects selective for cerebellum. Lau C, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1-2):167-73

Ontogenic changes in expression of neuron-specific enolase (NSE) and its mRNA in the Purkinje cells of the rat cerebellum: immunohistochemical and in situ hybridization study. Watanabe M, et al. **Brain Res Dev Brain Res** 1990 Apr 1;53(1):89-96

Neuropeptide-immunoreactive cells and fibers in the developing primate cerebellum. Yamashita A, et al. **Brain Res Dev Brain Res** 1990 Jan 1;51(1):19-25

The non-tyrosinated M alpha 4 alpha-tubulin gene product is post-translationally tyrosinated in adult rat cerebellum. Cambray-Deakin MA, et al. **Brain Res Mol Brain Res** 1990 Jun;8(1):77-81

In situ hybridization analysis of the somatostatin-containing neuron system in developing cerebellum of rats. Inagaki S, et al. **Brain Res Mol Brain Res** 1989 Dec;6(4):289-95

Glycoprotein expression in foetal and adult mouse cerebellum. Carroll M, et al. **Comp Biochem Physiol [B]** 1990;95(4):855-60

[3H]kainic acid binding sites in chick cerebellar membranes. Miralles A, et al. **Comp Biochem Physiol [C]** 1989; 93(2):321-5

Characterization of intermediate filament proteins in astroglia of hamster cerebellum. Diefenbach TJ, et al. **Cytobios** 1989; 59(238-239):193-206

Developmental profile of kappa, mu and delta opioid receptors in the rat and guinea pig cerebellum. Barg J, et al. **Dev Neurosci** 1989;11(6):428-34

Immunohistochemical localization of a beta-galactoside-binding lectin in rat central nervous system. II. Light- and electron-microscopical studies in developing cerebellum. Kuchler S, et al. **Dev Neurosci** 1989;11(6):414-27

Heterosis for brain cerebroside synthesis in mice. Sato C, et al. **Dev Neurosci** 1990;12(3):153-8

A neuropeptide precursor in cerebellum: proenkephalin exists in subpopulations of both neurons and astrocytes. Spruce BA, et al. **EMBO J** 1990 Jun;9(6):1787-95

Characterization of liver and cerebellar binding sites for avian pancreatic polypeptide. Adamo ML, et al. **Endocrinology** 1990 Jan;126(1):434-40

Effects of congenital hypothyroidism on microtubule-associated protein-2 expression in the cerebellum of the rat. Silva JE, et al. **Endocrinology** 1990 Feb;126(2):1276-82

Uncoupling of ganglioside biosynthesis by Brefeldin A. van Echten G, et al. **Eur J Cell Biol** 1990 Feb;51(1):135-9

Parasagittal zonation of GABA-B receptors in molecular layer of rat cerebellum. Albin RL, et al. **Eur J Pharmacol** 1989 Nov 28;173(1):113-4

Increased response of cerebellar cGMP to kainate but not NMDA or quisqualate following barbital withdrawal from dependent rats. McCaslin PP, et al. **Eur J Pharmacol** 1989 Dec 7;173(2-3):127-32

Diazepam-insensitive [3H]Ro 15-4513 binding in intact cultured cerebellar granule cells. Malminiemi O, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):53-60

Distribution of inositol 1,4,5-trisphosphate receptor mRNA in mouse tissues. Furuichi T, et al. **FEBS Lett** 1990 Jul 2;267(1):85-8

Quantitative analysis of gamma-aminobutyric acid (GABA) receptors of Purkinje cell layer from rat cerebellar slices. Hussain S, et al. **Gen Pharmacol** 1990;21(3):355-64

In situ demonstration of mature oligodendrocytes and their processes: an immunocytochemical study with a new monoclonal antibody, rip. Friedman B, et al. **GLIA** 1989; 2(5):380-90

An endogenous lectin found in rat astrocyte cultures has a role in cell adhesion but not in cell proliferation. Kuchler S, et al. **GLIA** 1989;2(6):437-45

Effect of thyroid deficiency on actin mRNA content in the developing rat cerebellum. Faivre-Sarrailh C, et al. **Int J Dev Neurosci** 1990;8(1):99-106

A chloride- and calcium-dependent glutamate-binding protein from rat brain. Identification as a ubiquitous constituent of the inner mitochondrial membrane. Brose N, et al. **J Biol Chem** 1990 Jun 25;265(18):10604-10

Zebrin II: a polypeptide antigen expressed selectively by Purkinje cells reveals compartments in rat and fish cerebellum. Brochu G, et al. **J Comp Neurol** 1990 Jan 22; 291(4):538-52

Distribution of corticotropin-releasing factor in the cerebellum and precerebellar nuclei of the cat. Cummings SL. **J Comp Neurol** 1989 Nov 22;289(4):657-75

Immunoelectron-microscopic localization of the 180 kD component of the neural cell adhesion molecule N-CAM in postsynaptic membranes. Persohn E, et al. **J Comp Neurol** 1989 Oct 1;288(1):92-100

Novel GABAA receptor alpha subunit is expressed only in cerebellar granule cells. Kato K. **J Mol Biol** 1990 Aug 5;214(3):619-24

[3H]N-methylscopolamine binding studies reveal M2 and M3 muscarinic receptor subtypes on cerebellar granule cells in primary culture. Alonso R, et al. **J Neurochem** 1990 Jul; 55(1):334-7

Identification of disialosyl paragloboside and O-acetyldisialosyl paragloboside in cerebellum and embryonic cerebrum. Chou DK, et al. **J Neurochem** 1990 May;54(5):1598-607

Modulation of non-N-methyl-D-aspartate receptors in cultured cerebellar granule cells. Gallo V, et al. **J Neurochem** 1990 May;54(5):1619-25

A kainate receptor linked to nitric oxide synthesis from arginine. Garthwaite J, et al. **J Neurochem** 1989 Dec; 53(6):1952-4

Metabolism of exogenous gangliosides in cerebellar granule cells, differentiated in culture. Ghidoni R, et al. **J Neurochem** 1989 Nov;53(5):1567-74

Presynaptic cholinergic mechanisms in the rat cerebellum: evidence for nicotinic, but not muscarinic autoreceptors. Lapchak PA, et al. **J Neurochem** 1989 Dec;53(6):1843-51

Molecular species of choline and ethanolamine phospholipids in rat cerebellum during development. Leray C, et al. **J Neurochem** 1990 May;54(5):1677-81

70-kilodalton heat shock protein induction in cerebellar astrocytes and cerebellar granule cells in vitro: comparison with immunocytochemical localization after hyperthermia in vivo. Marini AM, et al. **J Neurochem** 1990 May; 54(5):1509-16

mu-Opioid receptors and not kappa-opioid receptors are coupled to the adenylate cyclase in the cerebellum. Polastron J, et al. **J Neurochem** 1990 Feb;54(2):562-70

Direct effects of chronic ethanol exposure on beta-adrenergic and adenosine-sensitive adenylate cyclase activities and cyclic AMP content in primary cerebellar cultures. Rabin RA. **J Neurochem** 1990 Jul;55(1):122-8

Development of benzodiazepine and picrotoxin (t-butylbicyclophosphorothionate) binding sites in rat cerebellar granule cells in culture. Squires RF, et al. **J Neurochem** 1990 Feb;54(2):473-8

Diazepam sensitivity of the binding of an imidazobenzodiazepine, [3H]Ro 15-4513, in cerebellar membranes from two rat lines developed for high and low alcohol sensitivity. Uusi-Oukari M, et al. **J Neurochem** 1990 Jun;54(6):1980-7

Effect of climbing fiber deprivation on release of endogenous aspartate, glutamate, and homocysteate in slices of rat cerebellar hemispheres and vermis. Vollenweider FX, et al. **J Neurochem** 1990 May;54(5):1533-40

Inhibition of nitric oxide synthase blocks N-methyl-D-aspartate-, quisqualate-, kainate-, harmaline-, and pentylenetetrazole-dependent increases in cerebellar cyclic GMP in vivo. Wood PL, et al. **J Neurochem** 1990 Jul;55(1):346-8

Production of platelet-activating factor from rat cerebellar

granule cells in culture. Yue TL, et al. **J Neurochem** 1990 May;54(5):1809–11
Glycine–insensitive NMDA–sensitive receptor expressed in Xenopus oocytes by guinea pig cerebellar mRNA. Sekiguchi M, et al. **J Neurosci** 1990 Jul;10(7):2148–55
Double labeling of cytochrome oxidase and gamma–aminobutyric acid in central nervous system neurons of adult cats. Luo XG, et al. **J Neurosci Methods** 1989 Dec;30(3):189–95
Effect of low–dose lead acetate exposure on the metabolism of nucleic acids and lipids in cerebellum and hippocampus of rat during postnatal development. Agodi A, et al. **J Neurosci Res** 1990 Jan;25(1):131–8
Coexpression of lactosyl and gangliotetraosyl gangliosides in rat cerebellar radial glial cells in culture. Gravotta D, et al. **J Neurosci Res** 1990 Feb;25(2):214–22
Uptake and release of glycine in cerebellar granule cells and astrocytes in primary culture: potassium–stimulated release from granule cells is calcium–dependent. Holopainen I, et al. **J Neurosci Res** 1989 Nov;24(3):374–83
Coupling of glutamatergic receptors to changes in intracellular Ca2+ in rat cerebellar granule cells in primary culture. Holopainen I, et al. **J Neurosci Res** 1990 Feb; 25(2):187–93
Cerebellar ganglioside abnormalities in pcd mutant mice. Seyfried TN, et al. **J Neurosci Res** 1990 May;26(1):105–11
Structure and function of the alpha–subunit of the GTP–binding protein Go from bovine cerebellum. Slepak VZ, et al. **J Protein Chem** 1989 Jun;8(3):436–8
Photoaffinity labeling of [3H]flunitrazepam– and [3H]Ro15–4513–bound pellets in rat cerebral cortex and cerebellum. Chiu TH, et al. **Life Sci** 1989;45(11):1021–8
Comparison of [3H] phencyclidine ([3H] PCP) and [3H] N–[1–(2–thienyl) cyclohexyl] piperidine ([3H] TCP) binding properties to rat and human brain membranes. Vignon J, et al. **Life Sci** 1989;45(26):2547–55
Late ontogenetic development of adenosine A1 receptor coupling to associated G–proteins in guinea pig cerebellum but not forebrain. Morgan PF, et al. **Mol Cell Biochem** 1990 Feb 9;92(2):169–76
BMY–14802 antagonizes harmaline– and D–serine–induced increases in mouse cerebellar cyclic GMP: neurochemical evidence for a sigma receptor–mediated functional modulation of responses mediated by the N–methyl–D–aspartate receptor complex in vivo. Rao TS, et al. **Mol Pharmacol** 1990 Jun;37(6):978–82
Putative receptor for inositol 1,4,5–trisphosphate similar to ryanodine receptor. Mignery GA, et al. **Nature** 1989 Nov 9;342(6246):192–5
APP–695 transcript prevalence is selectively reduced during Alzheimer's disease in cortex and hippocampus but not in cerebellum [corrected and republished article originally printed in Neurobiol Aging 1989 May–Jun;10(3):267–72] Johnson SA, et al. **Neurobiol Aging** 1989 Nov–Dec; 10(6):755–60
Effects of taurine on cell morphology and expression of low–affinity GABA receptors in cultured cerebellar granule cells. Abraham JH, et al. **Neurochem Res** 1989 Oct; 14(10):1031–8
Release of [3H]L–glutamate and [3H]L–glutamine in rat cerebellum slices: a comparison of the effect of veratridine and electrical stimulation. de Barry J, et al. **Neurochem Res** 1989 Nov;14(11):1053–60
Time course of induction of a heat shock gene (hsp70) in the rabbit cerebellum after LSD in vivo: involvement of drug–induced hyperthermia. Manzerra P, et al. **Neurochem Res** 1990 Jan;15(1):53–9
Cellular localization of heat shock gene expression in rabbit cerebellum by in situ hybridization with plastic–embedded tissue. Masing TE, et al. **Neurochem Res** 1989 Aug; 14(8):725–31
Ontogeny of binding sites for [3H] kainic acid in chick and rat cerebellar membranes: a comparative study. Miralles A, et al. **Neurochem Res** 1990 Jan;15(1):47–52
Expressed cerebellar–type inositol 1,4,5–trisphosphate receptor, P400, has calcium release activity in a fibroblast L cell line. Miyawaki A, et al. **Neuron** 1990 Jul;5(1):11–8
Specific neuronal expression of human NGF receptors in the basal forebrain and cerebellum of transgenic mice. Patil N, et al. **Neuron** 1990 Mar;4(3):437–47
The mRNAs encoding GABAA/benzodiazepine receptor subunits are localized in different cell populations of the bovine cerebellum. Siegel RE. **Neuron** 1988 Sep; 1(7):579–84
The abnormal cerebellar organization of Weaver and reeler mice does not affect the cellular distribution of three neuronal mRNAs. Wuenschell CW, et al. **Neuron** 1988 Nov;1(9):805–15
Selective inhibition by ethanol of glutamate–stimulated cyclic GMP production in primary cultures of cerebellar granule cells. Hoffman PL, et al. **Neuropharmacology** 1989 Nov; 28(11):1239–43
Profile of phosphatidylinositol metabolism stimulated by carbachol and glutamate in primary cultures of rat cerebellar neurons. Hynie S, et al. **Neuropharmacology** 1989 Dec;28(12):1309–15
Gamma–aminobutyric acid and benzodiazepine receptors in cultured cerebellar granule cells: effects of taurine and its lipophilic derivatives. Malminen O, et al. **Neuropharmacology** 1989 Sep;28(9):907–12
Gangliosides attenuate NMDA receptor–mediated excitatory amino acid release in cultured cerebellar neurons. Nicoletti F, et al. **Neuropharmacology** 1989 Nov;28(11):1283–6
Thioether analogues of baclofen, phaclofen and saclofen. Allan RD, et al. **Neurosci Lett** 1990 May 4;112(2–3):223–8
Induction of the ganglioside marker A2B5 on cultured cerebellar neural cells by growth factors. Drago J, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):245–50
Inhibition of baclofen binding to rat cerebellar membranes by phaclofen, saclofen, 3–aminopropylphosphonic acid and related GABAB receptor antagonists. Drew CA, et al. **Neurosci Lett** 1990 May 18;113(1):107–10
Kappa–opioid agonist inhibits phospholipase C, possibly via an inhibition of G–protein activity. Misawa H, et al. **Neurosci Lett** 1990 May 4;112(2–3):324–7
Differential distribution of GABAA receptor mRNAs in bovine cerebellum—localization of alpha 2 mRNA in Bergmann glia layer. Wisden W, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):7–12
Glutaminase–like immunoreactivity in the lower brainstem and cerebellum of the adult rat. Kaneko T, et al. **Neuroscience** 1989;32(1):79–98
Distribution of nerve growth factor receptor–like immunoreactivity in the adult rat central nervous system. Effect of colchicine and correlation with the cholinergic system—II. Brainstem, cerebellum and spinal cord. Pioro EP, et al. **Neuroscience** 1990;34(1):89–110
Immunoreactivity for calretinin and other calcium–binding proteins in cerebellum. Rogers JH. **Neuroscience** 1989; 31(3):711–21
Ultrastructural localization of enkephalin–like immunoreactivity in developing rat cerebellum. Zagon IS, et al. **Neuroscience** 1990;34(2):479–89
Prenatal exposure to ethanol causes a delay in the developmental expression of neurofilament epitopes in cerebellum. Poltorak M, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):693–8
Age–related increase in CGRP binding site densities in rat cerebellum. Pagani F, et al. **Pharmacol Res** 1989 Nov–Dec; 21 Suppl 1:105–6
Nitric oxide mediates glutamate–linked enhancement of cGMP levels in the cerebellum. Bredt DS, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):9030–3
Amplified RNA synthesized from limited quantities of heterogeneous cDNA. Van Gelder RN, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1663–7
Effects of capsular or thalamic stroke on metabolism in the cortex and cerebellum: a positron tomography study. Pappata S, et al. **Stroke** 1990 Apr;21(4):519–24
Coexistence of corticotropin releasing factor and enkephalin in cerebellar afferent systems. Cummings S, et al. **Synapse** 1990;5(3):167–74
[Alcohol, iron and oxidative stress] Nordmann R, et al. **Bull Acad Natl Med** 1990 Jan;174(1):95–102; discussion 102–4 (Eng. Abstr.) **(Fre)**

MICROBIOLOGY

Ultrastructural and biochemical findings in brain cell cultures infected with canine distemper virus. Glaus T, et al. **Acta Neuropathol (Berl)** 1990;80(1):59–67
Pathogenesis and pathology of scrapie after stereotactic injection of strain 22L in intact and bisected cerebella. Kim YS, et al. **J Neuropathol Exp Neurol** 1990 Mar;49(2):114–21

PATHOLOGY

Cerebellar degeneration induced by acetyl–ethyl–tetramethyl–tetralin(AETT). Akasaki Y, et al. **Acta Neuropathol (Berl)** 1990;80(2):129–37
Axonal degeneration of ascending sensory neurons in gracile axonal dystrophy mutant mouse. Kikuchi T, et al. **Acta Neuropathol (Berl)** 1990;80(2):145–51
Selective axonal and terminal degeneration in the chicken brainstem and cerebellum following exposure to bis(1–methylethyl)phosphorofluoridate (DFP). Tanaka D Jr, et al. **Brain Res** 1990 Jun 11;519(1–2):200–8
CT and MR diagnosis of cerebellar hypoplasia. D'Archambeau O, et al. **J Belge Radiol** 1989 Dec; 72(6):506–7
Unilateral cerebellar damage in focal epilepsy [letter] Duncan R, et al. **J Neurol Neurosurg Psychiatry** 1990 May; 53(5):436–7
Alzheimer's disease: amyloid plaques in the cerebellum. Braak H, et al. **J Neurol Sci** 1989 Nov;93(2–3):277–87
Modified Bielschowsky and immunocytochemical studies on cerebellar plaques in Alzheimer's disease. Suenaga T, et al. **J Neuropathol Exp Neurol** 1990 Jan;49(1):31–40
MR imaging of degenerative disorders of brainstem and cerebellum. Gallucci M, et al. **Magn Reson Imaging** 1990; 8(2):117–22
The weaver granuloprival phenotype is due to intrinsic action of the mutant locus in granule cells: evidence from homozygous weaver chimeras. Goldowitz D. **Neuron** 1989 Jun;2(6):1565–75
Morphological study on striatum and cerebellum cultures exposed to kainic acid and kainic acid and tiapride treatment. Renkawek K, et al. **Neuropatol Pol** 1989; 27(2):217–27
The transverse cerebellar diameter cannot be used to assess gestational age in the small for gestational age fetus. Hill LM, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 1):329–33
The transverse cerebellar diameter in estimating gestational age in the large for gestational age fetus. Hill LM, et al. **Obstet Gynecol** 1990 Jun;75(6):981–5
Beta–endorphin in the brainstem and the cerebellum of the human infant: regional levels' profile assessed with immunoaffinity chromatography and solid phase radioimmunoassay. Pasi A, et al. **Physiol Behav** 1989 Jul; 46(1):13–6
Diphtheria toxin mutant selectively kills cerebellar Purkinje neurons. Riedel CJ, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5051–5
Membranocystic lesion in the brain in cerebrotendinous xanthomatosis. Histochemical and ultrastructural study with evidence of its ceroid nature. Elleder M, et al. **Virchows Arch [B]** 1989;57(6):367–74
[Cerebellar amyloid plaques in Alzheimer's disease] Brucher JM, et al. **Acta Neurol Belg** 1989 May–Oct;89(3–4):286–93 (Eng. Abstr.) **(Fre)**
[Cerebellar imitation synkineses] Trouillas P, et al. **Rev Neurol (Paris)** 1990;146(2):107–15 (38 ref.) (Eng. Abstr.) **(Fre)**
[Micromeasurement of autofluorescent granules of the human hippocampus and cerebellum in relation to age and grade of dementia] Ito Y, et al. **Nippon Ronen Igakkai Zasshi** 1989 Nov;26(6):602–7 (Eng. Abstr.) **(Jpn)**
[The vestibular system and cerebellum in organic mercury intoxication; an otolaryngological and neuropathological investigation on 14 autopsy cases in Niigata] Oyanagi K, et al. **No To Shinkei** 1989 Jul;41(7):711–7 (Eng. Abstr.) **(Jpn)**
[A case of cerebral gigantism with cerebellar atrophy] Kitazawa K, et al. **Rinsho Shinkeigaku** 1990 May; 30(5):520–3 (Eng. Abstr.) **(Jpn)**
[Degenerative changes in the cerebellum in adult non–lymphoblastic leukemia] Nowacki P, et al. **Neuropatol Pol** 1989;27(2):269–78 (Eng. Abstr.) **(Pol)**
[Disorders of the cerebellar development in alcoholic embryopathy] Kovetskii NS. **Zh Nevropatol Psikhiatr** 1989; 89(7):45–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effect of vestibulo–cerebellar lesions on asymmetry of vertical optokinetic functions in the squirrel monkey. Himi T, et al. **Acta Otolaryngol (Stockh)** 1990 Mar–Apr; 109(3–4):188–94
Pharmacologic studies of alkaline extracellular pH transients in the in vitro turtle cerebellum. Chesler M, et al. **Acta Physiol Scand Suppl** 1989;582:61
A comparison of the distribution of the cerebellar and cortical connections of the nucleus of Darkschewitsch (ND) in the cat: a study using anterograde and retrograde HRP tracing techniques. Rutherford JG, et al. **Anat Embryol (Berl)** 1989; 180(5):485–96
Classical conditioning of the eyeblink reflex in the decerebrate–decerebellate rabbit. Kelly TM, et al. **Behav Brain Res** 1990 Apr 16;38(1):7–18
Visual 'cortical–recipient' and 'tectal–recipient' pontine zones play distinct roles in cat visuomotor performance. Levesque F, et al. **Behav Brain Res** 1990 Jul 9;39(2):157–66
Classical nictitating membrane conditioning in rabbits with varying interstimulus intervals and direct activation of cerebellar mossy fibers as the CS. Steinmetz JE. **Behav Brain Res** 1990 May 7;38(2):97–108
Reappraising the cerebellum: what does the hindbrain contribute to the forebrain? Leiner HC, et al. **Behav Neurosci** 1989 Oct;103(5):998–1008 (105 ref.)
Changes of N–methyl–D–aspartate activated channels of cerebellar granule cells with days in culture. Sciancalepore M, et al. **Biochem Biophys Res Commun** 1989 Nov 30; 165(1):481–7
Adaptively timed conditioned responses and the cerebellum: a neural network approach. Moore JW, et al. **Biol Cybern** 1989;62(1):17–28
Distortion of magnetic evoked fields and surface potentials by conductivity differences at boundaries in brain tissue. Huang JC, et al. **Biophys J** 1990 Jun;57(6):1155–66
Role of the cerebellum in the ontogenesis of the equilibrium behavior in the young rat: a behavioral study. Auvray N, et al. **Brain Res** 1989 Dec 29;505(2):291–301
Modification of the visual response properties of cerebellar neurons by norepinephrine. Moises HC, et al. **Brain Res** 1990 Apr 30;514(2):259–75
Cortical field potential associated with hand movement on warning–imperative visual stimulus and cerebellum in the monkey. Sasaki K, et al. **Brain Res** 1990 Jun 11; 519(1–2):343–6
Myelination of axons within cytosine arabinoside treated mouse cerebellar explants by cultured rat oligodendrocytes. Seil FJ, et al. **Brain Res** 1989 Nov 27;503(1):111–7
Cerebellar vermis: essential for classically conditioned bradycardia in the rat. Supple WF Jr, et al. **Brain Res** 1990 Feb 12;509(1):17–23
Effects of cerebellectomy at day 15 on the ontogenesis of the equilibrium behavior in the rat. Zion C, et al. **Brain Res** 1990 May 7;515(1–2):104–10
Destabilization of ionized Ca2+ homeostasis in excitatory amino acid neurotoxicity: antagonism by glycosphingolipids. Manev H, et al. **Cell Biol Int Rep** 1990 Jan;14(1):3–14 (24 ref.)
Rapid refilling of neurosecretory terminals with secretory granules after an acute stimulus to the isolated neural lobe of the rat. Barnes PR, et al. **Cell Tissue Res** 1990 Apr; 260(1):211–3
Paradoxical perpendicular contact guidance displayed by mouse cerebellar granule cell neurons in vitro. Nakatsuji

N, et al. **Development** 1989 Jul;106(3):441–7
Antiepileptic properties of cerebrospinal fluid after activation of the antiepileptic system of the brain. Kryzhanovsky GN, et al. **Epilepsia** 1989 Sep–Oct;30(5):631–5
Nature of optokinetic response and zonal organization of climbing fiber afferents in the vestibulocerebellum of the pigmented rabbit. II. The nodulus. Kano M, et al. **Exp Brain Res** 1990;80(2):238–51
Formation of new synapses in the cat motor cortex following lesions of the deep cerebellar nuclei. Keller A, et al. **Exp Brain Res** 1990;80(1):23–33
Nature of optokinetic response and zonal organization of climbing fiber afferents in the vestibulocerebellum of the pigmented rabbit. I. The flocculus. Kusunoki M, et al. **Exp Brain Res** 1990;80(2):225–37
Injections of beta-noradrenergic substances in the flocculus of rabbits affect adaptation of the VOR gain. van Neerven J, et al. **Exp Brain Res** 1990;79(2):249–60
The effect of cerebellar stimulation on neuronal activity in the motor cortex. Li CL, et al. **Exp Neurol** 1966 Mar; 14(3):317–27
High-affinity inositol 1,3,4,5-tetrakisphosphate receptor from cerebellum: solubilization, partial purification and characterization. Donié F, et al. **FEBS Lett** 1990 Jul 30; 268(1):194–8
Influences of vestibulo-cerebellum on kindling in the cat. Guha D, et al. **Indian J Med Res** 1989 Aug;90:275–84
J1-160 and J1-180 are oligodendrocyte-secreted nonpermissive substrates for cell adhesion. Pesheva P, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1765–78
Early climbing fiber interactions with Purkinje cells in the postnatal mouse cerebellum. Mason CA, et al. **J Comp Neurol** 1990 Jul 1;297(1):77–90
Cholinergic innervation of the rat cerebellum: qualitative and quantitative analyses of elements immunoreactive to a monoclonal antibody against choline acetyltransferase. Ojima H, et al. **J Comp Neurol** 1989 Dec 1;290(1):41–52
The influence of the auditory cortex on acoustically evoked cerebellar responses in the CF-FM bat, Rhinolophus pearsonic chinesis. Sun DX, et al. **J Comp Physiol [A]** 1990 Feb;166(4):477–87
Slow excitatory amino acid receptor-mediated synaptic transmission in turtle cerebellar Purkinje cells. Larson-Prior LJ, et al. **J Neurophysiol** 1990 Mar; 63(3):637–50
Reversible neural inactivation by cooling in anesthetized and freely behaving rats. Campeau S, et al. **J Neurosci Methods** 1990 Apr;32(1):25–35
Excitatory synaptic responses in turtle cerebellar Purkinje cells. Chan CY, et al. **J Physiol (Lond)** 1989 Feb;409:143–56
Voltage-activated membrane currents in rat cerebellar granule neurones. Cull-Candy SG, et al. **J Physiol (Lond)** 1989 Jul;414:179–99
On the multiple-conductance single channels activated by excitatory amino acids in large cerebellar neurones of the rat. Cull-Candy SG, et al. **J Physiol (Lond)** 1989 Aug; 415:555–82
Synaptic control of excitability in turtle cerebellar Purkinje cells. Hounsgaard J, et al. **J Physiol (Lond)** 1989 Feb; 409:157–70
Synaptic potentials evoked in cat dorsal spinocerebellar tract neurones by impulses in single group I muscle afferents. Walmsley B. **J Physiol (Lond)** 1989 Aug;415:423–31
Dynorphin-selective inhibition of adenylyl cyclase in guinea pig cerebellum membranes. Konkoy CS, et al. **Mol Pharmacol** 1989 Oct;36(4):627–33
Dual-component NMDA receptor currents at a single central synapse. D'Angelo E, et al. **Nature** 1990 Aug 2; 346(6283):467–70
GABAergic mechanisms in the electrophysiological actions of ethanol on cerebellar neurons. Palmer MR, et al. **Neurochem Res** 1990 Feb;15(2):145–51 (54 ref.)
Differential expression of excitatory amino acid receptor subtypes in cultured cerebellar neurons. Cox JA, et al. **Neuron** 1990 Jun;4(6):941–7
Determination of GABA receptor-linked Cl- fluxes in rat cerebellar granule cells using a fluorescent probe SPQ. Engblom AC, et al. **Neurosci Lett** 1989 Oct 9;104(3):326–30
Excitatory amino acid receptors in the parallel fibre pathway in rat cerebellar slices. Garthwaite J, et al. **Neurosci Lett** 1989 Dec 15;107(1-3):151–6
Excitatory amino acid receptors mediate slow synaptic transmission in turtle cerebellum. Larson-Prior LJ, et al. **Neurosci Lett** 1989 Oct 9;104(3):286–91
Long-term synaptic changes in rat cerebellar slices reflected in extracellular K+ activity. Shibuki K, et al. **Neurosci Lett** 1990 May 18;113(1):34–9
Changes in the cerebello-cerebral response in the parietal cortex following ablation of the motor cortex in the cat: early occurrence and persistence. Okuda B, et al. **Neurosci Res** 1990 Apr;8(1):1–11
Effects of afferent signals from the extraocular muscles upon units in the cerebellum, vestibular nuclear complex and oculomotor nucleus of the trout. Ashton JA, et al. **Neuroscience** 1989;31(2):529–41
Imaging of cerebellar surface activation in vivo using voltage sensitive dyes. Kim JH, et al. **Neuroscience** 1989; 31(3):613–23
Long-term habituation of the acoustic startle response: role of the cerebellar vermis. Lopiano L, et al. **Neuroscience** 1990;35(1):79–84
Effects of cold acclimation on the energetic metabolism of the staggerer mutant mouse. Bertin R, et al. **Physiol Behav** 1990 Feb;47(2):377–80
Role of the cerebellum in an avoidance conditioning task in the rat. Dahhaoui M, et al. **Physiol Behav** 1990 Jun; 47(6):1175–80
Synaptic currents in cerebellar Purkinje cells. Konnerth A, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2662–5
An endogenous lectin and one of its neuronal glycoprotein ligands are involved in contact guidance of neuron migration. Lehmann S, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6455–9
Endothelin in brain: receptors, mitogenesis, and biosynthesis in glial cells. MacCumber MW, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2359–63
Basal ganglia and cerebellum receive different somatosensory information in rats. Mercier BE, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4388–92
Calcium is an intracellular mediator of the climbing fiber in induction of cerebellar long-term depression. Sakurai M. **Proc Natl Acad Sci U S A** 1990 May;87(9):3383–5
The role of the cerebellum in smooth pursuit eye movements and optokinetic nystagmus in primates. Büttner U. **Rev Neurol (Paris)** 1989;145(8–9):560–6 (72 ref.)
A new theory of cerebellar function: movement control through phase-independent recognition of identities between time-based neural informational symbols. Strehler BL. **Synapse** 1990;5(1):1–32
Messenger molecules in the cerebellum. Ross CA, et al. **Trends Neurosci** 1990 Jun;13(6):216–22 (95 ref.)
[Intracerebral graft of a line of chromaffin cells. Immunologic aspects and role of nerve growth factor in survival and differentiation of the graft] Menei P, et al. **Neurochirurgie** 1989;35(3):158–63 (Eng. Abstr.) **(Fre)**
[Regeneration of mammalian central nervous pathways] Kawaguchi S. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(4 Suppl):399–408 **(Jpn)**
[The muscular activity of the forelimbs in the guinea pig with cerebellum removed undergoing vestibular stimulation] Marlinskii VV, et al. **Fiziol Zh SSSR** 1989 Sep; 75(9):1230–7 (Eng. Abstr.) **(Rus)**
[A new concept of the role of the cerebellum in operative motor control and the shaping of motor automatism] Baev KV, et al. **Neirofiziologiia** 1990;22(3):415–21 (11 ref.) (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

The effect of halothane, isoflurane, or sufentanil on the hypertensive response to cerebellar retraction during posterior fossa surgery. Rupp SM, et al. **Anesthesiology** 1989 Nov;71(5):660–3
Child ataxias: a developmental perspective. De Negri M, et al. **Brain Dev** 1990;12(2):195–201 (22 ref.)
Macro square wave jerks in a rhesus monkey: physiological and anatomical findings in a case of selective impairment of attentive fixation. Weber H, et al. **J Hirnforsch** 1989; 30(5):603–11
Efficacy of carbamazepine on cerebellar tremors in patients with superior cerebellar artery syndrome. Sechi GP, et al. **J Neurol** 1989 Dec;236(8):461–3
Rehabilitative neurosurgery: posttraumatic syndromes. Richardson RR. **Stereotact Funct Neurosurg** 1989; 53(2):105–12
[Clinical, CT and electrophysiologic studies of alcoholics with special reference to the cerebellum] Domżał T, et al. **Neurol Neurochir Pol** 1989 Jan;23(1):17–20 (Eng. Abstr.) **(Pol)**
[Effect of low-frequency electric stimulation of the dentate nucleus of the cerebellum on foci of epileptic activity] Shandra AA, et al. **Patol Fiziol Eksp Ter** 1989 May-Jun; (3):24–8 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Organization of DNA in cerebellar neurons of ageing unirradiated and irradiated rats. Jaberaboansari A, et al. **Mech Ageing Dev** 1989 Dec;50(3):257–76
[Ultrastructural changes in the rat cerebellar cortex in the remote periods after exposure to accelerated carbon ions] Verbitskaia LB, et al. **Kosm Biol Aviakosm Med** 1989 Nov-Dec;23(6):71–7 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Non-familial degenerative disease and atrophy of brainstem and cerebellum. Clinical and CT data in 47 patients. Staal A, et al. **J Neurol Sci** 1990 Mar;95(3):259–69
A quantitative evaluation of pontine volume by computed tomography in patients with cerebellar degeneration. Chida K, et al. **Neurology** 1990 Aug;40(8):1241–5

SECRETION

Evidence for evoked release of adenosine and glutamate from cultured cerebellar granule cells. Schousboe A, et al. **Neurochem Res** 1989 Sep;14(9):871–5

SURGERY

Occurrence of vestibular and facial nerve injury following cerebellopontine angle operations. Sekiya T, et al. **Acta Neurochir (Wien)** 1990;102(3–4):108–13
[Transplantation of embryonal cerebral cortex to the adult rat cerebellum: the fiber connections made by cortical transplants and the cerebellum] Kitakami A. **No Shinkei Geka** 1990 Apr;18(4):347–53 (Eng. Abstr.) **(Jpn)**

TRANSPLANTATION

Neural transplantation using temperature-sensitive immortalized neural cells: a preliminary report. Bredesen DE, et al. **Ann Neurol** 1990 Feb;27(2):205–7
A neurotransmitter specific functional recovery mediated by fetal implants in the lesioned spinal cord of the rat. Moorman SJ, et al. **Brain Res** 1990 Feb 5;508(2):194–8
Retrovirus-mediated gene transfer into mouse cerebellar primary culture and its application to the neural transplantation. Tsuda M, et al. **Brain Res Bull** 1990 Jun; 24(6):787–92
Fate of grafted embryonic Purkinje cells in the cerebellum of the adult "Purkinje cell degeneration" mutant mouse. II. Development of synaptic responses: an in vitro study. Gardette R, et al. **J Comp Neurol** 1990 May 8;295(2):188–96
Fate of grafted embryonic Purkinje cells in the cerebellum of the adult "Purkinje cell degeneration" mutant mouse. I. Development of reciprocal graft-host interactions. Sotelo C, et al. **J Comp Neurol** 1990 May 8;295(2):165–87
Expression of compartmentation antigen zebrin I in cerebellar transplants. Wassef M, et al. **J Comp Neurol** 1990 Apr 8; 294(2):223–34
[Experimental study on embryo cerebellar tissue transplantation in repairing transection injury of spinal cord] Nan LZ. **Chung Hua Wai Ko Tsa Chih** 1989 Apr; 27(4):247–9, 255 (Eng. Abstr.) **(Chi)**

ULTRASTRUCTURE

Chronic phenytoin treatment decreases GABAA but not beta-adrenoceptors in the cerebellum of young rats. Ruiz G, et al. **Eur J Pharmacol** 1989 Sep 13;168(2):251–5
Somatic pairing of chromosome 1 centromeres in interphase nuclei of human cerebellum. Arnoldus EP, et al. **Hum Genet** 1989 Oct;83(3):231–4
Deposition and role of thrombospondin in the histogenesis of the cerebellar cortex. O Shea KS, et al. **J Cell Biol** 1990 Apr;110(4):1275–83
Substructure in the assemblies of intramembrane particles in astrocytic membranes. Landis DM, et al. **J Neurocytol** 1989 Dec;18(6):819–31
Inhibition of neurite polarity by tau antisense oligonucleotides in primary cerebellar neurons. Caceres A, et al. **Nature** 1990 Feb 1;343(6257):461–3
A threshold effect of the major isoforms of NCAM on neurite outgrowth. Doherty P, et al. **Nature** 1990 Feb 1; 343(6257):464–6
The organization of cytoplasm at the presynaptic active zone of a central nervous system synapse. Landis DM, et al. **Neuron** 1988 May;1(3):201–9
Morphological evidence for a monosynaptic connection between cerebellar Purkinje cells and vestibulospinal tract neurons in the larval clawed toad, Xenopus laevis. van der Linden JA, et al. **Neurosci Lett** 1990 May 4;112(2–3):121–6
Mesodiencephalic and cerebellar terminals terminate upon the same dendritic spines in the glomeruli of the cat and rat inferior olive: an ultrastructural study using a combination of [3H]leucine and wheat germ agglutinin coupled horseradish peroxidase anterograde tracing. de Zeeuw CI, et al. **Neuroscience** 1990;34(3):645–55
The effect of space flight on the ultrastructure of the rat cerebellar and hemisphere cortex. Krasnov IB, et al. **Physiologist** 1990 Feb;33(1 Suppl):S29–30
Fine structural characteristics and synaptic connections of trigeminocerebellar projection neurons in rat trigeminal nucleus oralis. Falls WM, et al. **Somatosens Mot Res** 1990; 7(1):1–18
Changes in the structure of synaptic junctions during climbing fiber synaptogenesis. Landis DM, et al. **Synapse** 1989;4(4):281–93

CEREBRAL ANEURYSM

Magnetic resonance imaging and aneurysm clips [letter; comment] Barstad P. **J Neurosurg** 1990 Jan;72(1):155 Comment on: J Neurosurg 1989 Mar;70(3):426–31.
Anterior inferior cerebellar artery aneurysm at the internal auditory meatus—case report. Kiya K, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):592–5

BLOOD

Succinylcholine does not increase serum potassium levels in patients with acutely ruptured cerebral aneurysms. Manninen PH, et al. **Anesth Analg** 1990 Feb;70(2):172–5
Raised plasma endothelin in aneurysmal subarachnoid haemorrhage [letter; comment] Levesque H, et al. **Lancet** 1990 Feb 3;335(8684):290 Comment on: Lancet 1989 Dec 9;2(8676):1402.

COMPLICATIONS

Ruptured intracranial aneurysm associated with spontaneous occlusion of internal carotid artery. Experience with 5 cases. Bidziński J, et al. **Acta Neurochir (Wien)** 1989; 100(1–2):43–5
Memory performances after anterior communicating artery aneurysm surgery. Fasanaro AM, et al. **Acta Neurol (Napoli)** 1989 Aug;11(4):272–8
Pituitary macroadenoma and anterior communicating artery aneurysm [letter] Fedder SL, et al.

AJR Am J Roentgenol 1990 Jul;155(1):200–1
In utero detection of cardiac failure from an aneurysm of the vein of Galen. Jeanty P, et al.
Am J Obstet Gynecol 1990 Jul;163(1 Pt 1):50–1
Pupil-sparing oculomotor palsy caused by fusiform arteriosclerotic aneurysm of the basilar artery—a case report. Soria E, et al. **Angiology** 1989 Oct;40(10):921–7
Hyponatremia is associated with cerebral ischemia in patients with aneurysmal subarachnoid hemorrhage. Hasan D, et al. **Ann Neurol** 1990 Jan;27(1):106–8
Aneurysms of the vein of Galen [see comments] O'Donnabhain D, et al. **Arch Dis Child** 1989 Nov; 64(11):1612–7 Comment in: Arch Dis Child 1990 Mar;65(3):337.
Treatment of aneurysmal subarachnoid hemorrhage. Aring CD. **Arch Neurol** 1990 Apr;47(4):450–1
Spontaneous dissection of the internal carotid artery in a patient with polyarteritis nodosa [letter] Lomeo RM, et al. **Arthritis Rheum** 1989 Dec;32(12):1625–6
Postoperative recovery of third nerve palsy due to posterior communicating aneurysms. Kyriakides T, et al.
Br J Neurosurg 1989;3(1):109–11
Verbal memory function after subarachnoid haemorrhage determined by the localisation of the ruptured aneurysm. Larsson C, et al. **Br J Neurosurg** 1989;3(5):549–60
Antifibrinolytic therapy in patients with aneurysmal subarachnoid haemorrhage. Rosenørn J, et al.
Br J Neurosurg 1988;2(4):447–53
Unruptured intracranial aneurysms: an assessment of the annual risk of rupture based on epidemiological and clinical data. Rosenørn J, et al. **Br J Neurosurg** 1988;2(3):369–77 (71 ref.)
A comparison of electrocardiographic and echocardiographic abnormalities in subarachnoid hemorrhage. Davies KR, et al. **Can J Anaesth** 1990 May; 37(4 Pt 2):S25
The association of arteriovenous malformation and aneurysm within the posterior cranial fossa—report of a case. Lin TK, et al. **Chang Keng I Hsueh** 1990 Mar 20;13(1):59–64
The effects of treating hypertension following aneurysmal subarachnoid hemorrhage. Wijdicks EF, et al.
Clin Neurol Neurosurg 1990;92(2):111–7
Cerebral aneurysms: mechanisms of injury and critical care interventions. Kirsch JR, et al. **Crit Care Clin** 1989 Oct; 5(4):755–72 (51 ref.)
Prognosis of ruptured intracranial mycotic aneurysms: a review of 12 cases. Monsuez JJ, et al. **Eur Heart J** 1989 Sep;10(9):821–5
Focal nodular hyperplasia of the liver associated with intracranial vascular malformations. Goldin RD, et al.
Gut 1990 May;31(5):554–5
Lipoma of the corpus callosum associated with distal anterior cerebral artery aneurysm. A case report. Yamamoto M, et al. **Hiroshima J Med Sci** 1989 Sep;38(3):157–60 (26 ref.)
Two cases of sudden death by rupture of traumatic and bacterial aneurysms. Feldges A, et al.
Intensive Care Med 1989;15(6):400–2
A pupil-sparing oculomotor palsy from a contralateral giant intracavernous carotid aneurysm. Terry JE, et al.
J Am Optom Assoc 1990 Aug;61(8):640–5
Ptosis as the sole manifestation of compression of the oculomotor nerve by an aneurysm of the posterior communicating artery. Good EF.
J Clin Neuro Ophthalmol 1990 Mar;10(1):59–61
Transient partial oculomotor nerve paresis with posterior communicating artery aneurysm. A case report. Greenspan BN, et al. **J Clin Neuro Ophthalmol** 1990 Mar;10(1):56–8
Cerebral vasospasm following intracranial aneurysm rupture: a protocol for detection. Flynn EP. **J Neurosci Nurs** 1989 Dec;21(6):348–52
Association of intracranial meningiomas and aneurysms. Report of three cases and review of the literature. Delfini R, et al. **J Neurosurg Sci** 1990 Jan–Mar;34(1):51–6 (19 ref.)
A case of thrombosed aneurysm of the vein of Galen associated with superior sagittal sinus thrombosis. Mancuso P, et al. **J Neurosurg Sci** 1989 Oct–Dec;33(4):305–9
Evaluation of vasospasm secondary to subarachnoid hemorrhage with technetium-99m-hexamethyl-propyleneamine oxime (HM-PAO) tomoscintigraphy. Soucy JP, et al.
J Nucl Med 1990 Jun;31(6):972–7
Epistaxis due to traumatic intracavernous aneurysm: case report. Lee JP, et al. **J Trauma** 1990 May;30(5):619–22
A case of central nervous system lupus associated with ruptured cerebral berry aneurysm. Nagayama Y, et al.
Jpn J Med 1989 Jul–Aug;28(4):530–3
Raised plasma endothelin in aneurysmal subarachnoid haemorrhage [letter] [see comments] Masaoka H, et al. **Lancet** 1989 Dec 9;2(8676):1402 Comment in: Lancet 1990 Feb 3;335(8684):290.
Intracerebral hemorrhage from a peripheral aneurysm associated with an astrocytoma—case report. Kadota Y, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):241–4
Anterior communicating artery aneurysm associated with bilateral occlusion of the middle cerebral artery—case report. Kusunose M, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):437–9
Medullary venous malformation with an arterial component associated with a ruptured aneurysm—case report. Tashiro Y, et al. **Neurol Med Chir (Tokyo)** 1989 Sep;29(9):857–60 (16 ref.)
Treatment of multiple intracranial aneurysms in the anterior circulation—case report. Yamaki T, et al.
Neurol Med Chir (Tokyo) 1990 Jan;30(1):47–50
A therapy against vasospasm after subarachnoidal haemorrhage: clinical experience of balloon angioplasty. Konishi Y, et al. **Neurol Res** 1990 Jun;12(2):103–5
Advances in the management of victims struck by ruptured intracranial aneurysms. Ljunggren B, et al. **Neurol Res** 1990 Mar;12(1):3–11
Ocular stroke and carotid artery dissection. Newman NJ, et al. **Neurology** 1989 Nov;39(11):1462–4
Multiple vertebro-basilar infarctions from fibromuscular dysplasia related dissecting aneurysm of the vertebral artery in a child. Vles JS, et al. **Neuropediatrics** 1990 May; 21(2):104–5
Social outcome related to cognitive performance and computed tomographic findings after surgery for a ruptured intracranial aneurysm. Vilkki J, et al.
Neurosurgery 1990 Apr;26(4):579–84; discussion 584–5
A false aneurysm coexisting with arteriovenous malformation in the cerebellum. Yokota A, et al.
Sangyo Ika Daigaku Zasshi 1989 Sep 1;11(3):333–40
Fusiform aneurysm of the vertebrobasilar arterial system. Echiverri HC, et al. **Stroke** 1989 Dec;20(12):1741–7
Multiple cranial neuropathy as a feature of internal carotid artery dissection. Panisset M, et al. **Stroke** 1990 Jan; 21(1):141–7
Rebleeding from ruptured intracranial aneurysms. Juvela S. **Surg Neurol** 1989 Nov;32(5):323–6
[Does nimodipine improve the outcome of perioperative complications of aneurysm rupture? Results of systematic treatment] Ades PE, et al. **Agressologie** 1989 Jun; 30(7):431–6 (Eng. Abstr.) **(Fre)**
[Takayasu's disease and cerebromeningeal hemorrhage] Dimitrijević J, et al. **Rev Neurol (Paris)** 1989;145(6–7):466–9 (Eng. Abstr.) **(Fre)**
[Unilateral nerve deafness due to rupture of a right vertebral artery aneurysm. Case report] Nishizawa S, et al.
Neurol Med Chir (Tokyo) 1989 Aug;29(8):772–6 (Eng. Abstr.) **(Jpn)**
[Isolated intraventricular hemorrhage due to a ruptured vertebral artery aneurysm] Irikura T, et al.
No Shinkei Geka 1990 May;18(5):469–73 (Eng. Abstr.) **(Jpn)**
[A case of systemic lupus erythematosus with subarachnoid hemorrhage due to ruptured aneurysm] Kodama S, et al. **No Shinkei Geka** 1990 Jun;18(6):571–5 (17 ref.) (Eng. Abstr.) **(Jpn)**
[Ruptured cerebral aneurysm followed by primary intracranial malignant lymphoma: case report] Nishigaya K, et al. **No Shinkei Geka** 1990 Apr;18(4):367–72 (Eng. Abstr.) **(Jpn)**
[A case of moyamoya disease with repeated intraventricular hemorrhage due to a ruptured pseudoaneurysm] Sadatoh A, et al. **No Shinkei Geka** 1989 Aug;17(8):755–8 (17 ref.) (Eng. Abstr.) **(Jpn)**
[A case of ruptured middle cerebral artery aneurysm with acute subdural hematoma after clipping of the aneurysm nine years previously] Shinmura F, et al.
No Shinkei Geka 1989 Dec;17(12):1175–9 (15 ref.) (Eng. Abstr.) **(Jpn)**
[Studies of two cases of ruptured intracranial aneurysm with disseminated intravascular coagulation] Toyoda O, et al.
No Shinkei Geka 1989 Nov;17(11):1083–7 (Eng. Abstr.) **(Jpn)**
[A case report: persistent primitive hypoglossal artery aneurysm] Tsugu A, et al. **No Shinkei Geka** 1990 Jan; 18(1):95–100 (18 ref.) (Eng. Abstr.) **(Jpn)**
[Coexistence of multiple metastatic brain tumors from thyroid carcinoma and cerebral aneurysms] Yamamoto F, et al.
No Shinkei Geka 1990 Apr;18(4):361–5 (Eng. Abstr.) **(Jpn)**
[High flow medullary venous malformation with aneurysm on the proximal artery—a case report] Ochi S, et al.
No To Shinkei 1990 Apr;42(4):361–6 (25 ref.) (Eng. Abstr.) **(Jpn)**
[Oculomotor nerve paralysis in intracranial aneurysm] Orłowska E, et al. **Neurol Neurochir Pol** 1988 Nov–Dec; 22(6):513–7 (Eng. Abstr.) **(Pol)**
[Pharmacology of spasm of intracranial arteries in aneurysm rupture. The latest views on the therapeutic possibilities] Ryba M, et al. **Neurol Neurochir Pol** 1989 Jan;23(1):58–63 (30 ref.) **(Pol)**
[Agrammatism in a patient with a lesion of the left temporal lobe. A case report] Ulatowska HK, et al.
Neurol Neurochir Pol 1989 May–Jun;23(3):243–6 (Eng. Abstr.) **(Pol)**
[A case of meningioma in the area of the lesser wing of the sphenoid bone coexistent with spindle-shaped aneurysm of the middle cerebral artery] Bażowski P, et al.
Wiad Lek 1989 Oct 1–Nov 1;42(19–21):1069–72 (Eng. Abstr.) **(Pol)**
[Causes and the clinical course of subarachnoid hemorrhage in pregnancy] Deev AS, et al. **Akush Ginekol (Mosk)** 1989 Aug;(8):65–7 **(Rus)**
[Bleeding of arteriovenous cerebral aneurysms] Bykovnikov LD. **Sov Med** 1990;(4):68–71 **(Rus)**
[Difficulties of differential diagnosis in traumatic and aneurysmal intracranial hemorrhages] Spiridonova VD.
Sov Med 1989;(12):114–7 **(Rus)**
[The information value of the EEG in the acute period of subarachnoid hemorrhage as a consequence of rupture of intracranial aneurysms] Lebedev VV, et al.
Zh Vopr Neirokhir 1989 Sep–Oct;(5):44–9 (Eng. Abstr.) **(Rus)**
[Memory disorders in lesions of the corpus callosum in man] Simernitskaia EG, et al. **Zh Vyssh Nerv Deiat** 1989 Nov–Dec;39(6):995–1002 (Eng. Abstr.) **(Rus)**
[Vascular abnormalities in a case of tuberous sclerosis] Martí Massó JF, et al. **Neurologia** 1986 Jan–Feb;1(1):36–8 (Eng. Abstr.) **(Spa)**

CONGENITAL

Neuroradiological and pathological studies on neonatal aneurysmal dilation of the vein of Galen. Yamashita Y, et al. **J Child Neurol** 1990 Jan;5(1):45–8
Congenital aneurysmal dilatation of the petrous-cavernous carotid artery and vertebral basilar junction in a child. Guha A, et al. **Neurosurgery** 1990 Feb;26(2):322–7

DIAGNOSIS

Detection of a ruptured aneurysmal sac by MRI in a case of negative angiogram. Successful clipping of an anterior communicating artery aneurysm. Case report. Pertuiset B, et al. **Acta Neurochir (Wien)** 1989;100(1–2):84–6
Three-dimensional phase-contrast MR angiography in the head and neck: preliminary report. Pernicone JR, et al. **AJNR** 1990 May;11(3):457–66
Intracranial aneurysms: evaluation by MR angiography. Ross JS, et al. **AJNR** 1990 May;11(3):449–55
Intracranial aneurysms: evaluation by MR angiography. Ross JS, et al. **AJR Am J Roentgenol** 1990 Jul;155(1):159–65
Aneurysm alert [letter] Cohen MA, et al.
Ann Emerg Med 1990 Jul;19(7):842–3
The diagnosis and treatment of cerebral mycotic aneurysms. Brust JC, et al. **Ann Neurol** 1990 Mar;27(3):238–46
Warning leak in subarachnoid haemorrhage. Ostergaard JR. **BMJ** 1990 Jul 28;301(6745):190–1 (26 ref.)
Transcranial Doppler studies in aneurysm patients. Hutchison K, et al. **Can J Neurol Sci** 1989 Nov;16(4):411–6
Intracranial haemodynamics in patients with spontaneous carotid dissection. Transcranial Doppler ultrasound follow-up studies. Kaps M, et al.
Eur Arch Psychiatry Neurol Sci 1990;239(4):246–56
Aneurysm mimicking intracranial growth of optic nerve sheath meningioma. Landau K, et al.
J Clin Neuro Ophthalmol 1990 Sep;10(3):185–7
Giant aneurysm causing frontal lobe syndrome. Bokemeyer C, et al. **J Neurol** 1990 Feb;237(1):47–50
Dissection of the cervical internal carotid artery. The role of Doppler/Duplex studies and conservative management. Eljamel MS, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):379–83
Pneumatized anterior clinoid mimicking an aneurysm [letter] Cole M. **J Neurosurg** 1989 Dec;71(6):955
MR imaging in carotid artery dissection [letter; comment] Herman JM, et al. **J Neurosurg** 1990 Jun;72(6):987–8 Comment on: J Neurosurg 1989 Dec;71(6):854–7.
Magnetic resonance demonstration of vertebral artery dissection. Report of two cases. Quint DJ, et al.
J Neurosurg 1990 Jun;72(6):964–7
Correlation of transcranial Doppler sonography findings with timing of aneurysm surgery. Romner B, et al.
J Neurosurg 1990 Jul;73(1):72–6
Management of intracranial aneurysms, or how to report decision analyses in clinical journals [letter] Habbema JD, et al. **Med Decis Making** 1990 Jul–Sep;10(3):223–4
Giant aneurysm of the petrous carotid artery presenting with facial numbness. Gibson RD, et al. **Neuroradiology** 1989; 31(5):440–1
Giant aneurysm of the pericallosal artery. Maiuri F, et al.
Neurosurgery 1990 Apr;26(4):703–6 (27 ref.)
Silent myocardial infarction [letter] Ellenberger L.
Postgrad Med 1990 Apr;87(5):32
Vein of Galen aneurysm presenting with recurrent aseptic meningitis and subsequent spontaneous thrombosis. Collins JJ, et al. **Surg Neurol** 1990 May;33(5):325–8
Aneurysms and vascular malformations [published erratum appears in Top Magn Reson Imaging 1990 Mar;2(2):V] Hyman RA, et al. **Top Magn Reson Imaging** 1989 Dec; 2(1):49–62 (35 ref.)
[Giant thrombosed aneurysm of the left vertebral artery developing in the fourth ventricle] Tommasi-Davenas C, et al. **Rev Neurol (Paris)** 1989;145(11):799–801 (Eng. Abstr.) **(Fre)**
[Dissecting carotid artery aneurysm—3 cases] Zagórski A, et al. **Med Klin** 1990 Mar;85 Suppl 1:125–8 **(Ger)**
[Traumatic dissection of the internal carotid artery] Kaech D, et al. **Unfallchirurg** 1990 Jan;93(1):6–10 (Eng. Abstr.) **(Ger)**
[Semiologic considerations and clinical significance of magnetic resonance in 11 intracranial aneurysms] Mauricio JC, et al. **Acta Med Port** 1989 Nov–Dec;2(6):288–96 (Eng. Abstr.) **(Por)**
[2 cases of a combination of arterial and arteriovenous cerebellar aneurysms] Lebedev VV, et al.
Zh Vopr Neirokhir 1990 May–Jun;(3):32–3 **(Rus)**

DRUG THERAPY

Analysis of reruptured cerebral aneurysms and the prophylactic effects of barbiturate therapy on the early stage. Ando T, et al. **Neurol Res** 1989 Dec;11(4):245–8
[Intravenous nicardipine in the treatment of cerebral vasospasm following subarachnoid hemorrhage caused by

aneurysm rupture: a comparative multicenter study] Desbordes JM, et al. **Agressologie** 1989 Jun;30(7):438–40 (Eng. Abstr.) **(Fre)**

[Value of transcranial Doppler in the monitoring of aneurysmal subarachnoid hemorrhage treated with calcium inhibitors] Ducrocq X, et al. **Agressologie** 1989 Jun; 30(7):425–30 (Eng. Abstr.) **(Fre)**

[Effects of an intravenous injection of nicardipine on cerebral blood flow in subarachnoid hemorrhage caused by intracranial aneurysm] Montarry M, et al. **Agressologie** 1989 Jun;30(7):411–5 (Eng. Abstr.) **(Fre)**

[Role of stopping calcium inhibitors in the worsening of postoperative vasospasm during the treatment of intracranial aneurysm] Picard-Claret M, et al. **Agressologie** 1989 Jun;30(7):441 **(Fre)**

EPIDEMIOLOGY

Prognostic factors in the untreated course of posterior communicating aneurysms. Richardson AE, et al. **Arch Neurol** 1966 Feb;14(2):172–6

ETIOLOGY

Radiation-induced cerebral aneurysms. Scodary DJ, et al. **Acta Neurochir (Wien)** 1990;102(3–4):141–4

Does spasm precede development of cerebroarterial aneurysms? [letter] Ecker A. **Arch Neurol** 1990 Sep; 47(9):951

Neurological complications of infective endocarditis. Roos KL. **Indiana Med** 1989 Nov;82(11):866–9

Aneurysm, arachnoiditis and intrathecal Au (gold). Pence DM, et al. **Int J Radiat Oncol Biol Phys** 1990 May; 18(5):1001–4

Carotid artery pseudoaneurysm following internal jugular vein cannulation. Nayeem SA, et al. **J Cardiovasc Surg (Torino)** 1990 Mar–Apr;31(2):182–3

Late onset of a large cavernous aneurysm after spontaneous disappearance of cerebral arteriovenous malformation. Case report. Salpietro FM, et al. **J Neurosurg Sci** 1989 Apr–Jun; 33(2):211–4

Multiple saccular cerebral aneurysms associated with systemic lupus erythematosus—case report. Asai A, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):245–7

The role of serial angiography in the management of bacterial and fungal intracranial aneurysms—report of two cases and review of the literature. Kojima Y, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):202–16 (97 ref.)

Type 2 proatlantal artery associated with a ruptured aneurysm—case report. Kurose K, et al. **Neurol Med Chir (Tokyo)** 1990 Mar;30(3):191–3

Postoperative subarachnoid hemorrhage from an intracranial aneurysm after craniotomy for astrocytoma—case report. Yamada H, et al. **Neurol Med Chir (Tokyo)** 1989 Sep; 29(9):846–9 (15 ref.)

Alkaptonuric ochronosis and multiple intracranial aneurysms. Kaufmann AM, et al. **Surg Neurol** 1990 Mar;33(3):213–6

[Rupture of neoplastic intracranial aneurysm caused by metastatic uterine choriocarcinoma] Steimle R, et al. **Chirurgie** 1989;115(6):393–6; discussion 396–7 (30 ref.) (Eng. Abstr.) **(Fre)**

[A case of anterior communicating artery aneurysm with occlusion of the bilateral middle cerebral arteries] Kurata H, et al. **No Shinkei Geka** 1989 Jun;17(6):585–7 (13 ref.) (Eng. Abstr.) **(Jpn)**

GENETICS

Familial intracranial aneurysms: report of five families. Elshunnar KS, et al. **Br J Neurosurg** 1990;4(3):181–6

Familial cerebral aneurysms and type III collagen deficiency [letter; comment] Pope FM, et al. **J Neurosurg** 1990 Jan; 72(1):156–8 Comment on: J Neurosurg 1989 Jun;70(6):837–40.

Type III collagen mutations and cerebral aneurysms [letter; comment] Pope FM. **Stroke** 1989 Oct;20(10):1432–3 Comment on: Stroke 1989 Apr;20(4):561.

HISTORY

Norman Dott's contribution to aneurysm surgery. Todd NV, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):455–8

IMMUNOLOGY

HLA-typing in a family with six intracranial aneurysms. Mellergård P, et al. **Br J Neurosurg** 1989;3(4):479–85

Immunohistochemical localization of an HIV epitope in cerebral aneurysmal arteriopathy in pediatric acquired immunodeficiency syndrome (AIDS). Kure K, et al. **Pediatr Pathol** 1989;9(6):655–67

[Sequential changes in serum complement after aneurysmal subarachnoid hemorrhage] Kawano T, et al. **No Shinkei Geka** 1990 Feb;18(2):145–52 (Eng. Abstr.) **(Jpn)**

METABOLISM

Hypermetabolism in the acute stage of hemorrhagic cerebrovascular disease. Touho H, et al. **J Neurosurg** 1990 May;72(5):710–4

MORTALITY

The influence of unruptured intracranial aneurysms on life expectancy in relation to their size at the time of detection and to age. Eskesen V, et al. **Br J Neurosurg** 1988; 2(3):379–84

Age as a prognostic factor after intracranial aneurysm rupture. Rosenørn J, et al. **Br J Neurosurg** 1987;1(3):335–41

NURSING

Aneurysmal subarachnoid hemorrhage. MacDonald E. **J Neurosci Nurs** 1989 Oct;21(5):313–21 (21 ref.)

PATHOLOGY

Deficiency of reticular fibers in cerebral arteries. On the etiology of saccular aneurysms in childhood. Ostergaard JR, et al. **Br J Neurosurg** 1989;3(1):113–5

Bilateral hypoplastic internal carotid arteries with multiple cerebral aneurysms. Kawai K, et al. **Clin Neuropathol** 1989 Nov–Dec;8(6):272–5

Aneurysm re-rupture: Doppler evidence of first phase vasospasm? [letter; comment] Grosset D. **J Neurol Neurosurg Psychiatry** 1990 Apr;53(4):361 Comment on: J Neurol Neurosurg Psychiatry 1988 Oct;51(10):1355–6.

Multiple middle cerebral artery aneurysms in an infant. Case report. Cedzich C, et al. **J Neurosurg** 1990 May;72(5):806–9

Cerebral transmural angiitis and ruptured cerebral aneurysms in patients with systemic lupus erythematosus. Sakaki T, et al. **Neurochirurgia (Stuttg)** 1990 Jul;33(4):132–5

Pathology and pathogenesis of intracranial berry aneurysms. Stehbens WE. **Neurol Res** 1990 Mar;12(1):29–34 (50 ref.)

Morphometric analysis of reticular and elastin fibers in the cerebral arteries of patients with intracranial aneurysms. Chyatte D, et al. **Neurosurgery** 1990 Jun;26(6):939–43

Two cases of giant serpentine aneurysm. Kumabe T, et al. **Neurosurgery** 1990 Jun;26(6):1027–32; discussion 1032–3

Ruptured intracranial aneurysms: an autopsy study of 133 patients. Inagawa T, et al. **Surg Neurol** 1990 Feb; 33(2):117–23

Magnetic resonance imaging with aneurysmal subarachnoid hemorrhage: comparison with computed tomography scan. Matsumura K, et al. **Surg Neurol** 1990 Aug;34(2):71–8

[The clinical course of fatal aneurysm rupture of the base of the skull] Ströhmann B. **Zentralbl Neurochir** 1989; 50(2):93–6 (Eng. Abstr.) **(Ger)**

[Clinical aspects of cerebral microaneurysms] Konjhodžić F. **Med Arh** 1983;37(2):71–5 (Eng. Abstr.) **(Scr)**

PHYSIOPATHOLOGY

Pathophysiology of development and rupture of cerebral aneurysms. Steiger HJ. **Acta Neurochir Suppl (Wien)** 1990; 48:1–57

Hyponatraemia and volume status in aneurysmal subarachnoid haemorrhage. Wijdicks EF, et al. **Acta Neurochir Suppl (Wien)** 1990;47:111–3

Growth of aneurysms can be understood as passive yield to blood pressure. An experimental study. Steiger HJ, et al. **Acta Neurochir (Wien)** 1989;100(1–2):74–8

Proximal clipping of dissecting intracranial vertebral aneurysm—effect of balloon Matas test with neurophysiological monitoring. Case report. Su CC, et al. **Acta Neurochir (Wien)** 1990;104(1–2):59–63

Risk factors in intracranial saccular aneurysms. Aspects on the formation and rupture of aneurysms, and development of cerebral vasospasm. Ostergaard JR. **Acta Neurol Scand** 1989 Aug;80(2):81–98 (176 ref.)

Serpentine aneurysm of the posterior circulation: report of two cases. Khan MT, et al. **Br J Neurosurg** 1990; 4(3):217–23

Strength, elasticity and viscoelastic properties of cerebral aneurysms. Steiger HJ, et al. **Heart Vessels** 1989;5(1):41–6

Effects of blood coagulation factor XIII on the development of experimental cerebral aneurysms in rats. Kang Y, et al. **J Neurosurg** 1990 Aug;73(2):242–7

Diagonistic dyspraxia: case report and movement-related potentials. Tanaka Y, et al. **Neurology** 1990 Apr; 40(4):657–61

Long-term follow-up of occlusive cervical carotid dissection. Pozzati E, et al. **Stroke** 1990 Apr;21(4):528–31

Acoustic recordings from experimental saccular aneurysms in dogs. Sekhar LN, et al. **Stroke** 1990 Aug;21(8):1215–21

Rupture of an intracranial aneurysm [letter; comment] Wiebers DO, et al. **Surg Neurol** 1990 Feb;33(2):157–8 Comment on: Surg Neurol 1988 Oct;30(4):321–3.

[Function of the cardiovascular system and treatment outcomes in arterial brain aneurysms in the hemorrhagic period] Lebedev VV, et al. **Zh Vopr Neirokhir** 1989 May–Jun;(3):3–8 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Impaired memory for new visual forms. Hanley JR, et al. **Brain** 1990 Aug;113 (Pt 4):1131–48

Neuropsychological outcome of patients operated upon for an intracranial aneurysm: analysis of general prognostic factors and of the effects of the location of the aneurysm. Desantis A, et al. **J Neurol Neurosurg Psychiatry** 1989 Oct; 52(10):1135–40

RADIOGRAPHY

On the problem of usefulness of angiography in the diagnosis of intracranial aneurysms. Woźnica J, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:191–6

Intracranial aneurysmal rupture and ventricular opacification during carotid angiography. Jayakumar PN, et al. **Australas Radiol** 1989 Aug;33(3):279–81

Hemispheric arteriovenous fistulae with giant venous dilation. Almeida GM, et al. **Childs Nerv Syst** 1990 Jun; 6(4):216–9

Sentinel symptoms and signs of intracranial aneurysms. Shapiro SA. **Indiana Med** 1990 Jan;83(1):20–2

Computer angiotomography of a bleeding intracranial aneurysm. Murphy JS, et al. **J Arkansas Med Soc** 1989 Oct;86(5):197–9

Non-invasive radiological investigation for oculomotor palsy. Teasdale E, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):549–53

Clinical-tomographic evolution of a giant intracranial aneurysm. Case report. Caneschi S, et al. **J Neurosurg Sci** 1990 Jan–Mar;34(1):29–34

Incidental aneurysm of the superior cerebellar and non-visualized posterior inferior cerebellar artery: a diagnostic trap. Sadato N, et al. **Neuroradiology** 1989; 31(4):364–5

Ruptured cerebral aneurysms missed by initial angiographic study. Iwanaga H, et al. **Neurosurgery** 1990 Jul;27(1):45–51

Intracranial mycotic aneurysm in an infant: report of a case. Lee KS, et al. **Neurosurgery** 1990 Jan;26(1):129–33

Calcification of an aneurysm of the vein of Galen. Chapman S, et al. **Pediatr Radiol** 1989;19(8):541–2

A hole in the head—a case study. Everitt C. **Radiogr Today** 1990 May;56(636):24–6

Imaging techniques in suspected internal carotid artery dissection [letter] Tomsick TA. **Stroke** 1990 Sep; 21(9):1378–80

Three cases of spontaneous extracranial vertebral artery dissection. Youl BD, et al. **Stroke** 1990 Apr;21(4):618–25

Double giant fusiform aneurysms of the posterior cerebral artery. Statham P, et al. **Surg Neurol** 1990 Jan;33(1):48–51

A clinical evaluation of computed tomography in patients with subarachnoid haemorrhage and multiple intracranial aneurysms. Jaskolski DJ, et al. **Zentralbl Neurochir** 1989; 50(3–4):138–41

[The foramen of Monro—blockage caused by a giant aneurysm of the basilar artery. A case report and review of the literature] Goetz C, et al. **Neurochirurgia (Stuttg)** 1990 Jul;33(4):122–6 (51 ref.) (Eng. Abstr.) **(Ger)**

[Subarachnoid hemorrhage and intracerebral hematoma in injury of the middle meningeal artery (aneurysma spurium)] Albert FK, et al. **Zentralbl Neurochir** 1989;50(3–4):153–6 (Eng. Abstr.) **(Ger)**

[Intracranial aneurysm in children. Peculiar clinico-radiologic aspects and the choice of surgical timing] Cagnoni G, et al. **Pediatr Med Chir** 1990 Jan–Feb; 12(1):45–8 (9 ref.) (Eng. Abstr.) **(Ita)**

[Location of cerebral aneurysms and arteriospasm after subarachnoid hemorrhage] Zaręba A, et al. **Neurol Neurochir Pol** 1989 Jul–Dec;23(4–6):332–6 (Eng. Abstr.) **(Pol)**

[Radiological image of aneurysm of the internal carotid artery as a complication of angiography] Gołąbek R, et al. **Wiad Lek** 1989 Feb 15;42(4):263–6 (Eng. Abstr.) **(Pol)**

SURGERY

Monitoring of direct cortical responses during temporary arterial occlusion at aneurysm surgery. Fujita S, et al. **Acta Neurochir (Wien)** 1989;101(1–2):23–8

Long-term results of wrapping of intracranial ruptured aneurysms. Fujiwara S, et al. **Acta Neurochir (Wien)** 1990; 103(1–2):27–9

Intracranial aneurysms in India—microsurgical approach. Saxena A, et al. **Acta Neurochir (Wien)** 1989;101(1–2):18–22

Assessment of risk of carotid occlusion with balloon Matas testing and dynamic computed tomography. Terada T, et al. **Acta Neurochir (Wien)** 1990;103(3–4):122–7

MR imaging after surgery for vertebrobasilar aneurysm. Brothers MF, et al. **AJNR** 1990 Jan–Feb;11(1):149–61

Anaesthesia for the treatment of a giant cerebral aneurysm under hypothermic circulatory arrest. Thomas AN, et al. **Anaesthesia** 1990 May;45(5):383–5

Induced hypertension for cerebral aneurysm surgery in a patient with carotid occlusive disease. Wasnick JD, et al. **Anesth Analg** 1990 Mar;70(3):331–3

Direct cortical EEG monitoring during temporary vascular occlusion for cerebral aneurysm surgery. Young WL, et al. **Anesthesiology** 1989 Nov;71(5):794–9

Aneurysms of the vein of Galen [letter; comment] Chapman S, et al. **Arch Dis Child** 1990 Mar;65(3):337 Comment on: Arch Dis Child 1989 Nov;64(11):1612–7.

Concentrations of atracurium and laudanosine in cerebrospinal fluid and plasma during intracranial surgery. Eddleston JM, et al. **Br J Anaesth** 1989 Nov;63(5):525–30

Anaesthesia for simultaneous caesarean section and clipping of intracerebral aneurysm. Whitburn RH, et al. **Br J Anaesth** 1990 May;64(5):642–5

Postoperative intracerebral haemorrhages remote from the site of the initial operation. Benvenuti D, et al. **Br J Neurosurg** 1987;1(3):377–84 (9 ref.)

Postoperative intracerebral haemorrhage [letter] Braunsdorf W. **Br J Neurosurg** 1988;2(1):125

A transcavernous-transsellar approach to the basilar tip aneurysms. Dolenc VV, et al. **Br J Neurosurg** 1987; 1(2):251–9

Clinical features and outcome in 48 patients with unruptured intracranial saccular aneurysms: a prospective consecutive study. Eskesen V, et al. **Br J Neurosurg** 1987;1(1):47–52

Management of ruptured intracranial aneurysm: a review. Ljunggren B, et al. **Br J Neurosurg** 1987;1(1):9–32 (189 ref.)

Unruptured aneurysms of the intracavernous internal carotid artery: outcome following carotid ligation or conservative treatment. Lye RH, et al. **Br J Neurosurg** 1989;3(2):181–8

The timing of aneurysm surgery [editorial] Maurice-Williams R. **Br J Neurosurg** 1987;1(1):4–6

Emergency surgery for haematoma-forming aneurysmal haemorrhage. Page RD, et al. **Br J Neurosurg** 1990; 4(3):199–204

Management of difficult intracranial aneurysms by deep hypothermia and elective cardiac arrest using cardiopulmonary bypass. Richards PG, et al. **Br J Neurosurg** 1987;1(2):261–9

Clinical features and outcome in 1076 patients with ruptured intracranial saccular aneurysms: a prospective consecutive study. Rosenørn J, et al. **Br J Neurosurg** 1987;1(1):33–45

Vertebro-PICA aneurysms: midline suboccipital approach and laminectomy of the atlas. Roux A, et al. **Br J Neurosurg** 1990;4(2):113–21

Changing practices in neuroanaesthesia. Drummond JC. **Can J Anaesth** 1990 May;37(4 Pt 2):Slxxxix–Scvii (119 ref.) **(Eng, Fre)**

Catecholamine level and plasma renin activity during induced hypotension—adenosine vs sodium nitroprusside. Lam AM, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S31

Monitoring of brain stem function during posterior fossa surgery. Manninen PH, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S23

Local cortical blood flow and oxygen consumption during isoflurane-induced hypotension. Results in patients undergoing intracranial aneurysm clipping. Roth S, et al. **Cleve Clin J Med** 1989 Nov-Dec;56(8):766–70

Management of intraoperative aneurysm rupture. Batjer H, et al. **Clin Neurosurg** 1990;36:275–88

Clinicoanatomic features of supraclinoid aneurysms. Day AL. **Clin Neurosurg** 1990;36:256–74 (36 ref.)

Surgery of vascular lesions of the cavernous sinus. Dolenc VV. **Clin Neurosurg** 1990;36:240–55 (61 ref.)

Management of giant intracranial aneurysms. Symon L. **Clin Neurosurg** 1990;36:21–47 (39 ref.)

Early surgical management of poor-grade patients with intracranial aneurysms. Winn HR, et al. **Clin Neurosurg** 1990;36:289–98 (13 ref.)

Early surgery for ruptured cerebral aneurysm. Vajda J, et al. **Int Surg** 1990 Apr-Jun;75(2):123–6

Two techniques for the assessment of line bisection in visuo-spatial neglect: a single case study. Halligan PW, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov; 52(11):1300–2

Role of angioplasty in the treatment of symptomatic vascular spasm occurring in the post-operative course of intracranial ruptured aneurysms. Bracard S, et al. **J Neuroradiol** 1990 Jan;17(1):6–19 **(Eng, Fre)**

Aneurysm wrapping: principles applicable to the neuroscience nurse. Rutledge B. **J Neurosci Nurs** 1989 Dec; 21(6):370–4

Posterior inferior to posterior inferior cerebellar artery anastomosis combined with trapping for vertebral artery aneurysm. Case report. Ausman JI, et al. **J Neurosurg** 1990 Sep;73(3):462–5

Management morbidity and mortality of poor-grade aneurysm patients. Bailes JE, et al. **J Neurosurg** 1990 Apr; 72(4):559–66

Retrograde suction decompression of giant paraclinoidal aneurysms. Technical note. Batjer HH, et al. **J Neurosurg** 1990 Aug;73(2):305–6

Gauze-induced granuloma ("gauzoma"): an uncommon complication of gauze reinforcement of berry aneurysms. Chambi I, et al. **J Neurosurg** 1990 Feb;72(2):163–70

Aneurysms of the ophthalmic segment. A clinical and anatomical analysis. Day AL. **J Neurosurg** 1990 May; 72(5):677–91

Surgical alternatives in the treatment of cavernous sinus aneurysms [see comments] Diaz FG, et al. **J Neurosurg** 1989 Dec;71(6):846–53 Comment in: J Neurosurg 1990 Jul;73(1):161.

Anosmia following operation for cerebral aneurysms in the anterior circulation. Eriksen KD, et al. **J Neurosurg** 1990 Jun;72(6):864–5

Foreign-body granuloma as a complication of wrapping and coating an intracranial aneurysm. Case report. Haisa T, et al. **J Neurosurg** 1990 Feb;72(2):292–4

The International Cooperative Study on the Timing of Aneurysm Surgery. Part 2: Surgical results. Kassell NF, et al. **J Neurosurg** 1990 Jul;73(1):37–47

The International Cooperative Study on the Timing of Aneurysm Surgery. Part 1: Overall management results. Kassell NF, et al. **J Neurosurg** 1990 Jul;73(1):18–36

Intraoperative digital subtraction angiography and the surgical treatment of intracranial aneurysms and vascular malformations. Martin NA, et al. **J Neurosurg** 1990 Oct; 73(4):526–33

Vascular anomalies associated with aneurysms of the anterior communicating artery: microsurgical observations. Ogawa A, et al. **J Neurosurg** 1990 May;72(5):706–9

Treatment of cavernous sinus aneurysms [letter; comment] Parkinson D. J Neurosurg 1990 Jul;73(1):161 Comment on: J Neurosurg 1989 Dec;71(6):846–53.

Surgical treatment of unruptured aneurysms of the posterior circulation. Rice BJ, et al. **J Neurosurg** 1990 Aug; 73(2):165–73

Correlation of transcranial Doppler sonography findings with timing of aneurysm surgery. Romner B, et al. **J Neurosurg** 1990 Jul;73(1):72–6

Management of giant intracranial ICA aneurysms with combined extracranial-intracranial anastomosis and endovascular occlusion. Serbinenko FA, et al. **J Neurosurg** 1990 Jul;73(1):57–63

Hypothermia and circulatory arrest in aneurysm surgery [letter] White RJ. **J Neurosurg** 1989 Dec;71(6):953–4

Aneurysms of azygous anterior cerebral artery. Report of two cases treated by surgery. Nardi PV, et al. **J Neurosurg Sci** 1990 Jan-Mar;34(1):17–20

Effect of calcitonin-gene-related peptide on postoperative neurological deficits after subarachnoid haemorrhage. Johnston FG, et al. **Lancet** 1990 Apr 14;335(8694):869–72

Anesthetic management of a patient with a giant intracranial aneurysm. Gulati C. **Middle East J Anesthesiol** 1989 Feb; 10(1):59–68

Therapy of giant intracranial aneurysms in the elderly. Doran S, et al. **Nebr Med J** 1990 Jul;75(7):165–70

Ruptured intracranial aneurysm in a 19-day-old infant—case report. Shimauchi M, et al. **Neurol Med Chir (Tokyo)** 1989 Nov;29(11):1047–50

Early surgery in elderly patients with ruptured intracranial aneurysms—preoperative clinical evaluation and prognosis. Suzuki A, et al. **Neurol Med Chir (Tokyo)** 1990 Feb; 30(2):95–9

Indications for cisternal drainage in conjunction with early surgery in ruptured aneurysms and timing of its discontinuation. Yamamoto I, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):407–13

Disturbed cerebrospinal fluid circulation after subarachnoid hemorrhage and acute aneurysm surgery. Auer LM, et al. **Neurosurgery** 1990 May;26(5):804–8; discussion 808–9

Enlarging thrombosed aneurysm of the distal basilar artery. Batjer HH, et al. **Neurosurgery** 1990 Apr;26(4):695–9; discussion 699–700

Causes of morbidity and mortality from surgery of aneurysms of the distal basilar artery. Batjer HH, et al. **Neurosurgery** 1989 Dec;25(6):904–15; discussion 915–6

Transcranial Doppler ultrasound as a guide to graded therapeutic occlusion of the carotid artery. Giller CA, et al. **Neurosurgery** 1990 Feb;26(2):307–11

Early aneurysm surgery and preventive therapy with intravenously administered nimodipine: a multicenter, double-blind, dose-comparison study. Gilsbach JM, et al. **Neurosurgery** 1990 Mar;26(3):458–64

Ruptured aneurysm at the origin of the accessory middle cerebral artery: case report. Kuwabara S, et al. **Neurosurgery** 1990 Feb;26(2):320–2 (12 ref.)

Treatment of a giant aneurysm of the cavernous internal carotid artery associated with a persistent primitive trigeminal artery: case report. Miyatake S, et al. **Neurosurgery** 1990 Feb;26(2):315–9

The use of electroencephalography and brain protection during operation for basilar aneurysms. Muizelaar JP. **Neurosurgery** 1989 Dec;25(6):899–903

Arterial graft reconstruction in an aneurysm of the middle cerebral artery. Ramina R, et al. **Neurosurgery** 1990 Feb; 26(2):327–9

Aneurysms of the posterior inferior cerebellar artery-vertebral artery complex: variations on a theme. Salcman M, et al. **Neurosurgery** 1990 Jul;27(1):12–20; discussion 20–1

Surgical and electrophysiological observations during clipping of 134 aneurysms with evoked potential monitoring. Schramm J, et al. **Neurosurgery** 1990 Jan; 26(1):61–70

Zygomatic temporopolar approach for basilar artery aneurysms. Shiokawa Y, et al. **Neurosurgery** 1989 Nov; 25(5):793–6;discussion 796–7

Temporary balloon occlusion of a proximal vessel as an aid to clipping aneurysms of the basilar and paraclinoid internal carotid arteries: technical note. Shucart WA, et al. **Neurosurgery** 1990 Jul;27(1):116–9

Evaluation of somatosensory evoked potentials in temporary occlusion of cerebral artery 2. Intraoperative monitoring during internal carotid and middle cerebral artery aneurysm surgery. Nakasu Y. **Nippon Geka Hokan** 1989 Mar 1; 58(2):206–16

Management of subarachnoid hemorrhage. Crowell RM. **Semin Neurol** 1989 Sep;9(3):210–7 (5 ref.)

A new microsurgical approach to cerebrovascular lesions of the sylvian point: report of two cases. Ausman JI, et al. **Surg Neurol** 1990 Jul;34(1):48–51

Giant intracranial aneurysm surgery: the role of microvascular reconstruction. Ausman JI, et al. **Surg Neurol** 1990 Jul;34(1):8–15

Direct angioplasty of the basilar artery in baboons. de los Reyes RA, et al. **Surg Neurol** 1990 Mar;33(3):185–91

Microsurgical procedures for management of giant middle cerebral aneurysm causing increased intracranial pressure. Fujii K, et al. **Surg Neurol** 1989 Nov;32(5):366–71

Transcerebellar thrombectomy for the successful clipping of thrombosed giant vertebral artery-posterior inferior cerebellar artery aneurysm: case report. Kurokawa Y, et al. **Surg Neurol** 1990 Mar;33(3):217–20

Direct surgery for carotid bifurcation artery aneurysms. Laranjeira M, et al. **Surg Neurol** 1990 Oct;34(4):250–4

Surgical approach to a large basilar artery bifurcation and upper basilar trunk aneurysm: case report. Lupret V, et al. **Surg Neurol** 1990 Jun;33(6):404–6

Prognosis of intraventricular hemorrhage due to rupture of intracranial aneurysm. Hayashi M, et al. **Zentralbl Neurochir** 1989;50(3–4):132–7

Parkinsonism after clipping of bilateral aneurysms of the middle cerebral arteries. Jaskólski D, et al. **Zentralbl Neurochir** 1989;50(3–4):193–5

Rupture of a giant aneurysm of the inferior wall of the internal carotid artery after saphenous vein interposition graft to the middle cerebral artery. Plangger CA, et al. **Zentralbl Neurochir** 1989;50(2):61–3

[Interaction of nimodipine and isoflurane in surgery of intracranial aneurysm] Adnet P, et al. **Agressologie** 1989 Jun;30(7):399–401 (Eng. Abstr.) **(Fre)**

[Controlled hypotension using nitroprusside in surgery of intracranial aneurysm. Effect of preoperative treatment with calcium inhibitor] Homs JB, et al. **Agressologie** 1989 Jun;30(7):403–6 (Eng. Abstr.) **(Fre)**

[Aneurysm of the internal carotid artery bifurcation. Technical reflections apropos of a series of 10 cases] Reynier Y, et al. **Neurochirurgie** 1989;35(4):242–5 (Eng. Abstr.) **(Fre)**

[Prognostic factors in ruptured intracranial aneurysm. Significance of the temperature curve] Sindou M, et al. **Presse Med** 1990 Mar 10;19(9):411–5 (Eng. Abstr.) **(Fre)**

[The postoperative treatment of hypertension with urapidil in patients with cerebrovascular aneurysms] Hussein S, et al. **Anasth Intensivther Notfallmed** 1989 Dec;24(6):373–6 (Eng. Abstr.) **(Ger)**

[Cerebral artery aneurysm of the para-ophthalmic artery segment of the internal carotid artery (C4 section)] Synowitz HJ. **Zentralbl Neurochir** 1989;50(1):39–41 (Eng. Abstr.) **(Ger)**

[A completely thrombosed giant aneurysm in an infant] Synowitz HJ, et al. **Zentralbl Neurochir** 1989;50(2):58–60 (Eng. Abstr.) **(Ger)**

[Peripheral superior cerebellar artery aneurysm. Case report] Hidaka M, et al. **Neurol Med Chir (Tokyo)** 1989 Jun; 29(6):533–7 (16 ref.) (Eng. Abstr.) **(Jpn)**

[Recurrent cerebral aneurysm suggestive of misplaced clipping. Case report] Maeda Y, et al. **Neurol Med Chir (Tokyo)** 1989 Apr;29(4):319–23 (Eng. Abstr.) **(Jpn)**

[Transoral transclival approach to vertebral-posterior inferior cerebellar artery aneurysm. Case report] Yamashita K, et al. **Neurol Med Chir (Tokyo)** 1989 Apr;29(4):342–6 (16 ref.) (Eng. Abstr.) **(Jpn)**

[A case report of early valve replacement surgery in infective endocarditis with mycotic cerebral aneurysm] Uchino T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep; 37(9):2025–8 (Eng. Abstr.) **(Jpn)**

[Minor leak in intracranial aneurysms] Fujita K, et al. **No Shinkei Geka** 1990 Feb;18(2):129–32 (Eng. Abstr.) **(Jpn)**

[Transoral transclival approach: anatomical and technical notes] Hayakawa T, et al. **No Shinkei Geka** 1989 Jul; 17(7):609–14 **(Jpn)**

[Peripheral branch (P4 segment) aneurysm of the posterior cerebral artery: a case report] Ishibashi Y, et al. **No Shinkei Geka** 1989 Jul;17(7):659–62 (Eng. Abstr.) **(Jpn)**

[Treatment of the association of arteriovenous malformation and cerebral aneurysms] Kagawa J, et al. **No Shinkei Geka** 1989 Jul;17(7):615–23 (Eng. Abstr.) **(Jpn)**

[An infected partially thrombosed giant aneurysm of the azygos anterior cerebral artery] Mishima K, et al. **No Shinkei Geka** 1990 May;18(5):475–81 (Eng. Abstr.) **(Jpn)**

[Bilateral pericallosal artery aneurysms in a mirror position] Niijima KH, et al. **No Shinkei Geka** 1989 Aug;17(8):779–81 (Eng. Abstr.) **(Jpn)**

[Supratentorial craniotomy of the cisternal clot removal in cases with ruptured aneurysms in the posterior fossa] Niwa J, et al. **No Shinkei Geka** 1990 Apr;18(4):385–9 (Eng. Abstr.) **(Jpn)**

[A case of a basilar bifurcation aneurysm associated with common carotid artery occlusion] Shirakawa N, et al. **No Shinkei Geka** 1990 Jun;18(6):581–5 (Eng. Abstr.) **(Jpn)**

[Evaluation of CT-guided stereotaxic aspiration for thalamic hemorrhage by single photon emission CT] Ueda M, et al. **No Shinkei Geka** 1990 Jan;18(1):25–31 (Eng. Abstr.) **(Jpn)**

[Aneurysm at the PCA posterior temporal artery junction: a case report] Yoshinaga S, et al. **No Shinkei Geka** 1989 Dec;17(12):1169–73 (12 ref.) (Eng. Abstr.) **(Jpn)**

[A case of epidural hematoma occurring on the opposite site of craniotomy after clipping surgery performed on internal carotid giant aneurysm] Yuki K, et al. **No Shinkei Geka** 1990 Jun;18(6):567–70 (Eng. Abstr.) **(Jpn)**

[Aneurysms of the pericallosal region] Bażowski P, et al. **Neurol Neurochir Pol** 1989 Mar-Apr;23(2):132–5 (Eng. Abstr.) **(Pol)**

[Surgical treatment of multiple arterial aneurysms of the brain] Filatov IuM, et al. **Zh Vopr Neirokhir** 1990 Jan-Feb; (1):36–40 (Eng. Abstr.) **(Rus)**

THERAPY

The relevance of the calcium channel blocker nimodipine in the therapy of cerebral aneurysms. Maier-Hauff K, et al. **Acta Physiol Hung** 1990;75 Suppl:197–8

Endovascular therapy of intracranial aneurysms [comment] Fox AJ, et al. **AJNR** 1990 Jul–Aug;11(4):641–2 (13 ref.) Comment on: AJNR 1990 Jul–Aug;11(4):633–40.

Treatment of carotid artery aneurysms with platinum coils: an experimental study in dogs. Graves VB, et al. **AJNR** 1990 Mar–Apr;11(2):249–52

Treatment of intracranial aneurysms with preservation of the parent vessel: results of percutaneous balloon embolization in 84 patients [see comments] Higashida RT, et al. **AJNR** 1990 Jul–Aug;11(4):633–40 Comment in: AJNR 1990 Jul–Aug;11(4):641–2.

Ferromagnetism and MR imaging: safety of carotid vascular clamps. Teitelbaum GP, et al. **AJNR** 1990 Mar–Apr; 11(2):267–72

Carotid traumatic aneurysm treated by detachable balloon. Crandon IW, et al. **Br J Neurosurg** 1988;2(4):507–11

Balloon embolization of posterior circulation aneurysms [letter; comment] Fisher WS 3d. **J Neurosurg** 1990 Jun; 72(6):984–5 Comment on: J Neurosurg 1989 Oct;71(4):512–9.

Detachable balloon embolization for intracranial aneurysms [letter; comment] Fox AJ, et al. **J Neurosurg** 1990 Jul; 73(1):157–9 Comment on: J Neurosurg 1989 Oct;71(4):512–9.

Hypothermia and circulatory arrest in aneurysm surgery [letter; comment] Gonski A. **J Neurosurg** 1989 Nov;71(5 Pt 1):793–4 Comment on: J Neurosurg 1989 Mar;70(3):489–91.

Detachable balloon embolization therapy of posterior circulation intracranial aneurysms [see comments] Higashida RT, et al. **J Neurosurg** 1989 Oct;71(4):512–9 Comment in: J Neurosurg 1990 Jun;72(6):984–5. Comment in: J Neurosurg 1990 Jul;73(1):157–9.

Endovascular detachable balloon embolization therapy of cavernous carotid artery aneurysms: results in 87 cases. Higashida RT, et al. **J Neurosurg** 1990 Jun;72(6):857–63

Rupture of aneurysms following balloon embolization. Hodes JE, et al. **J Neurosurg** 1990 Apr;72(4):567–71

Traumatic carotid artery dissection: diagnosis and treatment [see comments] Watridge CB, et al. **J Neurosurg** 1989 Dec; 71(6):854–7 Comment in: J Neurosurg 1990 Jun;72(6):987–8.

The role of ultrasound in the management of vein of Galen aneurysms in infancy. Abbitt PL, et al. **Neuroradiology** 1990;32(2):86–9

Aneurysms of the intracavernous carotid artery: natural history and indications for treatment. Linskey ME, et al. **Neurosurgery** 1990 Jun;26(6):933–7; discussion 937–8

Endovascular treatment of intracranial aneurysms with a new silicone microballoon device: technical considerations and indications for therapy. Higashida RT, et al. **Radiology** 1990 Mar;174(3 Pt 1):687–91

Bacterial cavernous sinus aneurysm treated by detachable balloon technique. Micheli F, et al. **Stroke** 1989 Dec; 20(12):1751–4

CEREBRAL ANGIOGRAPHY

Iopentol compared with iohexol in carotid angiography. A double blind crossover test of a new non-ionic contrast medium. Nakstad PH, et al. **Acta Radiol** 1990 Mar; 31(2):221–2

Correlation of angiographic and sequential CT findings in patients with evolving cerebral infarction. Bozzao L, et al. **AJNR** 1989 Nov–Dec;10(6):1215–22

The rhesus monkey as an animal model for training in interventional neuroradiology. terBrugge K, et al. **AJNR** 1989 Nov–Dec;10(6):1203–8

Routine MR imaging of the internal carotid artery siphon: angiographic correlation with cervical carotid lesions. Brant-Zawadzki M. **AJR Am J Roentgenol** 1990 Aug; 155(2):359–63

Angiographically demonstrated arterial spasm in a case of benign sexual headache and benign exertional headache. Silbert PL, et al. **Aust N Z J Med** 1989 Oct;19(5):466–8

The effect of intermittent positive pressure ventilation upon cerebral angiography with special reference to the quality of the films—a preliminary communication. Edmonds-Seal J, et al. **Br J Radiol** 1967 Dec;40(480):957–8

Cerebral arteriography. Halbach VV. **Curr Opin Radiol** 1990 Apr;2(2):250–1 (4 ref.)

A comparison of two sedation techniques for neuroradiology. Allan MW, et al. **Eur J Anaesthesiol** 1989 Sep;6(5):379–84

Synthesized image processing in clinical neurosurgery. Kikuchi K, et al. **Eur J Radiol** 1990 Jan–Feb;10(1):74–83

Ischaemic supratentorial stroke: angiographic findings in patients examined in the very early phase. Bozzao L, et al. **J Neurol** 1989 Sep;236(6):340–2

Persistent segmental cerebral artery constrictions in coital cephalgia [letter] Kapoor R, et al. **J Neurol Neurosurg Psychiatry** 1990 Mar;53(3):266–7

Non-invasive radiological investigation for oculomotor palsy. Teasdale E, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):549–53

Correlation of transcranial Doppler and noninvasive tests with angiography in the evaluation of extracranial carotid disease. Cantelmo NL, et al. **J Vasc Surg** 1990 Jun; 11(6):786–91; discussion 791–2

Determination of cerebral blood flow in an arteriovenous malformation using SPECT scanning. Rosenblum B, et al. **N Y State J Med** 1989 Nov;89(11):627–8

The role of serial angiography in the management of bacterial and fungal intracranial aneurysms—report of two cases and review of the literature. Kojima Y, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):202–16 (97 ref.)

Magnetic resonance angiography of the extracranial carotid arteries and intracranial vessels: a review. Ross JS, et al. **Neurology** 1989 Oct;39(10):1369–76 (22 ref.)

The "dense artery sign"—major cerebral artery thromboembolism demonstrated by computed tomography. Schuknecht B, et al. **Neuroradiology** 1990;32(2):98–103

Computed tomography and angiography do not reliably discriminate malignant meningiomas from benign ones. Servo A, et al. **Neuroradiology** 1990;32(2):94–7

Transient global amnesia associated with cerebral angiography performed with use of iopamidol [letter; comment] Minuk J, et al. **Radiology** 1990 Jan;174(1):285–6 Comment on: Radiology 1989 Jul;172(1):195–6.

Variable angiographic findings in patients with stroke and neurosyphilis. Landi G, et al. **Stroke** 1990 Feb;21(2):333–8

Carotid transient ischemic attacks and normal investigations: a follow-up study. Shuaib A, et al. **Stroke** 1990 Apr; 21(4):525–7

Imaging techniques in suspected internal carotid artery dissection [letter] Tomsick TA. **Stroke** 1990 Sep; 21(9):1378–80

Carotid endarterectomy without angiography. Gelabert HA, et al. **Surg Clin North Am** 1990 Feb;70(1):213–23 (28 ref.)

Intraoperative angiography and temporary balloon occlusion facilitating surgical obliteration of a traumatic carotid cavernous fistula: a case report. LeRoux PD, et al. **Surg Neurol** 1990 Oct;34(4):260–5

Neuroradiological findings in cavernous hemangioma. An analysis of 15 cases. Ferrante L, et al. **Zentralbl Neurochir** 1989;50(3–4):184–7

[Conventional cerebral arteriography. Study of a new non-ionic contrast medium: iopromide 300] Kasbarian M. **Ann Radiol (Paris)** 1989;32(4 Pt 2):342–3 (Eng. Abstr.) **(Fre)**

[Dense middle cerebral artery: etiologic significance and prognosis] Giroud M, et al. **Rev Neurol (Paris)** 1990; 146(3):224–7 (Eng. Abstr.) **(Fre)**

[Generalized brain edema and cerebral infarct in ergotamine abuse: imaging by computerized tomography, magnetic resonance tomography and angiography] Toedt C, et al. **Digitale Bilddiagn** 1989 Sep;9(3):107–9 (Eng. Abstr.) **(Ger)**

[Transarterial EEG in superselective cerebral angiography] Zeitlhofer J, et al. **EEG EMG** 1990 Mar;21(1):70–2 (Eng. Abstr.) **(Ger)**

[The basis for ultrasonic phenomena during the injection of x-ray contrast media] Staudacher T, et al. **Radiologe** 1990 Mar;30(3):124–9 (Eng. Abstr.) **(Ger)**

[Quantitative determination of cerebral perfusion using digital subtraction angiography (DSA)] Metzmann U, et al. **ROFO** 1990 Jul;153(1):41–7 (Eng. Abstr.) **(Ger)**

[Large epidermoid cyst of the posterior cranial fossa] Schultze J, et al. **Rontgenblatter** 1990 Feb;43(2):50–3 (Eng. Abstr.) **(Ger)**

[Subarachnoid hemorrhage and intracerebral hematoma in injury of the middle meningeal artery (aneurysma spurium)] Albert FK, et al. **Zentralbl Neurochir** 1989;50(3–4):153–6 (Eng. Abstr.) **(Ger)**

[Automated image processing by PACS as a simple tool for designing craniotomy; synthesis of sagittal reconstructed CT images and cerebral angiograms] Kikuchi K, et al. **No Shinkei Geka** 1990 Apr;18(4):355–60 (Eng. Abstr.) **(Jpn)**

[Analysis of angiographical findings in patients with severe brain disorders progressing to brain death] Kouji H, et al. **No To Shinkei** 1989 Jul;41(7):727–35 (Eng. Abstr.) **(Jpn)**

[Cerebellar infarction; the findings of CT, MRI and cerebral angiography] Bussaka H, et al. **Rinsho Hoshasen** 1990 Apr; 35(4):445–51 (Eng. Abstr.) **(Jpn)**

[The results of a dynamic angiographic examination following the microsurgical revascularization of the brain] Tissen TP, et al. **Zh Vopr Neirokhir** 1990 Mar–Apr;(2):20–4 (Eng. Abstr.) **(Rus)**

[Angiographic criteria for the morphologic and locational classification of angiomas] Slaković S. **Med Arh** 1986; 40(5):217–20 (Eng. Abstr.) **(Scr)**

[Venous angiomas of the brain. Retrospective study of angiograms and clinical material] Mihale J, et al. **Cesk Neurol Neurochir** 1990 Jan;53(1):39–42 (Eng. Abstr.) **(Slo)**

ADVERSE EFFECTS

Changes in visual reaction time following cerebral angiography. Preliminary communication. Dunkin LJ, et al. **Br J Anaesth** 1974 Nov;46(11):867–72

Relative safety of intravenous digital subtraction angiography over other methods of carotid angiography and impact on clinical management of cerebrovascular disease. Stevens JM, et al. **Br J Radiol** 1989 Sep;62(741):813–6

Transient cortical blindness following cerebral angiography. Shyn PB, et al. **J La State Med Soc** 1989 Nov;141(11):35–7

Complications of cerebral angiography for patients with mild carotid territory ischaemia being considered for carotid endarterectomy. Hankey GJ, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):542–8

Cerebral angiographic risk in mild cerebrovascular disease. Hankey GJ, et al. **Stroke** 1990 Feb;21(2):209–22 (40 ref.)

[Retrograde carotid angiography. Reassessment of safety measures against stenotic changes in the internal carotid artery] Kurimoto M, et al. **Rinsho Hoshasen** 1989 Sep; 34(9):1063–5 **(Jpn)**

[Radiological image of aneurysm of the internal carotid artery as a complication of angiography] Goląbek R, et al. **Wiad Lek** 1989 Feb 15;42(4):263–6 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

[Evaluation of 2 modalities of use of propofol in cerebral angiography] Rossi A, et al. **Minerva Anestesiol** 1989 Apr; 55(4):193–8 (Eng. Abstr.) **(Ita)**

ECONOMICS

Symptomatic carotid ischaemic events: safest and most cost effective way of selecting patients for angiography, before carotid endarterectomy. Hankey GJ, et al. **BMJ** 1990 Jun 9;300(6738):1485–91

METHODS

Three-dimensional phase-contrast MR angiography in the head and neck: preliminary report. Pernicone JR, et al. **AJNR** 1990 May;11(3):457–66

Intracranial aneurysms: evaluation by MR angiography. Ross JS, et al. **AJNR** 1990 May;11(3):449–55

Digital subtraction angiography (DSA): a neurosurgical perspective. Butler P. **Br J Neurosurg** 1987;1(3):323–33

Selective transfemoral cerebral angiography of the rabbit. Technique and applications. Klimek E, et al. **J Neuroradiol** 1990 Jan;17(1):20–5 **(Eng, Fre)**

Forensic application of angiography on injured brain. Fujikura T, et al. **Med Sci Law** 1990 Apr;30(2):127–32

Repeat cerebral pan-angiography in subarachnoid hemorrhage of unknown etiology. Gilbert JW, et al. **Surg Neurol** 1990 Jan;33(1):19–21

[Effect of the geometry of atherosclerotic carotid artery lesions on their angiography image—an arteriography study] Neufang KF, et al. **Rontgenblatter** 1990 Jan; 43(1):11–5 (Eng. Abstr.) **(Ger)**

[Magnetic resonance angiography of intracranial blood vessels] Felber S, et al. **Vasa Suppl** 1989;27:373–5 **(Ger)**

[Magnetic resonance angiography: the neck and head] Kaiser WA. **Vasa Suppl** 1989;27:389–92 **(Ger)**

[Transbrachial artery approach for selective cerebral angiography] Touho H, et al. **No Shinkei Geka** 1990 Feb; 18(2):161–6 (Eng. Abstr.) **(Jpn)**

[Preliminary evaluation of diagnostic usefulness of digital subtraction angiography (DSA) in the diagnosis of brain diseases] Selmaj K, et al. **Neurol Neurochir Pol** 1989 Mar–Apr;23(2):111–7 (Eng. Abstr.) **(Pol)**

STANDARDS

The value of angiography in cerebrovascular disease. Zeitler E, et al. **Thorac Cardiovasc Surg** 1989 Aug;37(4):259–63

UTILIZATION

The use and abuse of cerebral angiography in the diagnosis of strokes. Marshall J. **Am Heart J** 1967 Aug;74(2):145–8

CEREBRAL ANOXIA

[Postanoxia encephalopathies] Haberer JP, et al. **Ann Fr Anesth Reanim** 1990;9(3):212–9 (33 ref.) (Eng. Abstr.) **(Fre)**

[The effects of nicardipine on morphological changes and calcium accumulation during ischemic hypoxia in pyramidal nerve cells in the rat cerebral cortex] Yamazaki M, et al. **Masui** 1989 Oct;38(10):1264–70 (Eng. Abstr.) **(Jpn)**

CEREBROSPINAL FLUID

Adverse effects on the brain in connection with isoflurane-induced hypotensive anaesthesia. Enlund M, et al. **Acta Anaesthesiol Scand** 1989 Jul;33(5):413–5

CHEMICALLY INDUCED

Long-term behavioural consequences of sodium nitrite hypoxia: an animal model. Hliňák Z, et al. **Act Nerv Super (Praha)** 1990 Mar;32(1):48–9

COMPLICATIONS

Central diabetes insipidus: an ominous sign in severe hypoxic encephalopathy. Hojo M, et al. **Acta Paediatr Scand** 1990 Jun–Jul;79(6–7):701–3

The influence of growth retardation on perinatal hypoxic-ischemic brain damage. Trescher WH, et al. **Early Hum Dev** 1990 Mar;21(3):165–73

Hypoxic-ischemic damage of the basal ganglia. Case reports and a review of the literature. Hawker K, et al. **Mov Disord** 1990;5(3):219–24

Early prognosis in anoxic coma. Reliability and rationale. Shewmon DA, et al. **Neurol Clin** 1989 Nov;7(4):823–43

MK-801 ameliorates delayed amnesia, but potentiates acute amnesia induced by CO. Nabeshima T, et al. **Neurosci Lett** 1990 Jan 22;108(3):321–7

[Early somatosensory and auditory evoked potentials in anoxic coma. Role in evaluating and prognostic value] Sonnet ML, et al. **Presse Med** 1990 Feb 3;19(4):166–9 (Eng. Abstr.) **(Fre)**

[CT evidence of high density area in bilateral striatum secondary to anoxia] Iwasaki Y, et al.

Rinsho Shinkeigaku 1989 Aug;29(8):1045–7 (Eng. Abstr.) (Jpn)

DIAGNOSIS

Rat striatal cation shifts reflecting hypoxic–ischemic damage can be predicted by on–line impedance measurements. de Boer J, et al. Stroke 1989 Oct;20(10):1377–82

Heat flux from the head surface in healthy newborns and in newborns with cerebral pathology. Weninger M, et al. Wien Klin Wochenschr 1989 Sep 1;101(16):529–33

[Perinatal factors predicting hypoxic–ischemic encephalopathy in asphyxic newborn infants] Esque Ruiz MT, et al. An Esp Pediatr 1989 Dec;31(6):519–22 (Eng. Abstr.) (Spa)

DRUG THERAPY

Long–term behavioural consequences of sodium nitrite hypoxia: effect of alaptide, a cyclic dipeptide derived from MIF 1. Krejčí I, et al. Act Nerv Super (Praha) 1990 Mar; 32(1):50–1

MK–801 prevents hippocampal neurodegeneration in neonatal hypoxic–ischemic rats. Ford LM, et al. Arch Neurol 1989 Oct;46(10):1090–6

Amitriptyline treatment of agitation associated with anoxic encephalopathy. Szlabowicz JW, et al. Arch Phys Med Rehabil 1990 Jul;71(8):612–3

Brain injury following cardiorespiratory arrest in cats. Effects of alphaxalone–alphadolone. Cervantes M, et al. Bol Estud Med Biol 1989 Jan–Jun;37(1–2):17–27

The use of a calcium–channel blocker, nicardipine, for severely asphyxiated newborn infants. Levene MI, et al. Dev Med Child Neurol 1990 Jul;32(7):567–74

Pharmacology of calcium antagonists: clinical relevance in neurology. Cohan SL. Ear Neurol 1990;30 Suppl 2:28–30; discussion 39–41 (34 ref.)

Current and potentially new management strategies for perinatal hypoxic–ischemic encephalopathy. Vannucci RC. Pediatrics 1990 Jun;85(6):961–8 (104 ref.)

EEG brain mapping in gerontopsychopharmacology: on protective properties of pyritinol against hypoxic hypoxidosis. Saletu B, et al. Psychiatry Res 1989 Sep; 29(3):387–90

Immediate restoration of central nervous system autonomic cardiopulmonary control: survival of "lethal" cerebral hypoxia by treatment with prostaglandin Bx. Moss G, et al. Surg Forum 1978;29:513–6

[Feasibility of calcium inhibitors in the treatment of brain disease following cardiac arrest] Lamer C, et al. Agressologie 1989 Jun;30(7):451–4 (Eng. Abstr.) (Fre)

[Protective effect of eptazocine, a novel analgesic, against cerebral hypoxia–anoxia in mice] Tamura T, et al. Nippon Yakurigaku Zasshi 1990 Apr;95(4):167–75 (Eng. Abstr.) (Jpn)

[The antihypoxic activity of endogenous cyclic derivatives of gamma–aminobutyric acid] Mirzoian SA, et al. Farmakol Toksikol 1989 Sep–Oct;52(5):41–3 (Eng. Abstr.) (Rus)

ENZYMOLOGY

[Clinical value of the assessment of creatine kinase BB isoenzyme activity in newborn infants with hypoxic–ischemic lesions of the brain] Atakhanova MT, et al. Akush Ginekol (Mosk) 1990 Jan;(1):65–7 (Rus)

ETIOLOGY

Experimental biology of cerebral hypoxia–ischemia: relation to perinatal brain damage. Vannucci RC. Pediatr Res 1990 Apr;27(4 Pt 1):317–26 (100 ref.)

[A case of delayed post–anoxic encephalopathy after acute carbon monoxide poisoning] Ernotte D, et al. Acta Neurol Belg 1989 Mar–Apr;89(2):67–70 (Eng. Abstr.) (Fre)

[An autopsy case of anoxic encephalopathy caused by transient upper airway obstruction] Yoshida Y, et al. No To Shinkei 1989 Dec;41(12):1211–6 (Eng. Abstr.) (Jpn)

[Late effects of toxic methemoglobinemia] Byczkowska Z, et al. Med Pr 1989;40(5):277–80 (Eng. Abstr.) (Pol)

[Selected clinical and pathogenetic problems of Binswanger's subcortical arteriosclerotic encephalopathy—analysis of 19 cases] Bogucki A, et al. Neurol Neurochir Pol 1989 Mar–Apr;23(2):97–104 (Eng. Abstr.) (Pol)

[Risk factors of central nervous system damage in the perinatal period] Dobzhan'ska A, et al. Akush Ginekol (Mosk) 1990 Jan;(1):8–9 (Rus)

METABOLISM

Effect of a brief hypoxic/hypotensive episode on the in vivo release of cerebral cortical gamma–aminobutyric acid and glycine. Phillis JW, et al. Brain Res 1989 Dec 11; 504(1):121–3

Age–related modifications of potassium homeostasis and synaptic transmission during and after anoxia in rat hippocampal slices. Roberts EL Jr, et al. Brain Res 1990 Apr 23;514(1):111–8

Hypoxia–ischemia induces heat shock protein–like (HSP72) immunoreactivity in neonatal rat brain. Ferriero DM, et al. Brain Res Dev Brain Res 1990 Apr 1;53(1):145–50

Effects of hypoxia on release of amino acid neurotransmitters from fetal lamb brain in vitro. Penning DH, et al. Can J Anaesth 1990 May;37(4 Pt 2):S2

MRS of ischemic/hypoxic brain disease. Kucharczyk J, et al. Invest Radiol 1989 Dec;24(12):951–4 (10 ref.)

Oxidative phosphorylation system during steady–state hypoxia in the dog brain. Nioka S, et al. J Appl Physiol 1990 Jun;68(6):2527–35

Hypoxia and ion activities within the brain stem of newborn rabbits. Trippenbach T, et al. J Appl Physiol 1990 Jun; 68(6):2494–503

Carbohydrate and energy metabolism during the evolution of hypoxic–ischemic brain damage in the immature rat. Palmer C, et al. J Cereb Blood Flow Metab 1990 Mar; 10(2):227–35

Changes of cortical oxidative metabolism and cortical oxygen tension in hypoxia, anoxia and ischaemia. Kaminogo M. Neurol Res 1989 Sep;11(3):139–44

Simultaneous recording of tissue PCO2, interstitial pH and potassium activity in the rat cerebral cortex during anoxia and the subsequent recovery period. Ohno M, et al. Neurol Res 1989 Sep;11(3):153–9

Hypoxia/hypotension evoked release of glutamate and aspartate from the rat cerebral cortex. Phillis JW, et al. Neurosci Lett 1989 Nov 20;106(1–2):147–51

NMDA receptor activation accelerates ischemic energy depletion in the hippocampal slice and the demonstration of a threshold for ischemic damage to protein synthesis. Raley KM, et al. Neurosci Lett 1990 Mar 2;110(1–2):118–23

Cerebral energy metabolism and oxygen state during hypoxia in neonate and adult dogs. Nioka S, et al. Pediatr Res 1990 Jul;28(1):54–62

[Study of cerebral energy metabolism and development of postanoxia coma] Génestal M, et al. Ann Fr Anesth Reanim 1990;9(3):220–6 (Eng. Abstr.) (Fre)

[The short–term and long–lasting changes in DNA and RNA synthesis in the cerebral cortex cells of animals subjected to hypoxia and nerve tissue transplantation] Vitvitskiĭ VN, et al. Biol Nauki 1990;(3):26–36 (Eng. Abstr.) (Rus)

MORTALITY

Value of a revised EEG coma scale for prognosis after cerebral anoxia and diffuse head injury. Synek VM. Clin Electroencephalogr 1990 Jan;21(1):25–30

PATHOLOGY

Ultrastructural features of the neurohypophysis of reanimated rat in connection with experimentally induced clinical death lasting 15 min. A case report. Loesch A, et al. J Hirnforsch 1990;31(1):99–106

Stability of orthogonal arrays of particles in murine skeletal muscle and astrocytes after circulatory arrest, and human gliomas. Neuhaus J, et al. Neurosci Lett 1990 Feb 5; 109(1–2):163–8

A case of hypoxic brain damage consequent to ligature strangulation. Kubo S, et al. Nippon Hoigaku Zasshi 1989 Apr;43(2):186–90

[The development of the brain and perinatal hypoxia] Trojan S, et al. Cesk Neurol Neurochir 1989 Oct;52(6):364–71 (Eng. Abstr.) (Cze)

[Topography of hypoxia–induced cerebral extravasations] Kirschbaum M, et al. Arch Gynecol Obstet 1989; 245(1–4):348–50 (Ger)

[Reactions of cellular structures of the brain of laboratory animals in oxygen deficiency] Kvitnitskiĭ–Ryzhov IuN, et al. Arkh Anat Gistol Embriol 1990 Feb;98(2):12–8 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Brain ion transport and metabolism: studies of metabolic inhibition resolve separate roles for glycolytic and oxidative energy and suggest strategies for brain survival during anoxia. Rosenthal M, et al. Acta Physiol Scand Suppl 1989; 582:55

Features of the cerebral vascular pattern that predict vulnerability to perfusion or oxygenation deficiency: an anatomic study. Moody DM, et al. AJNR 1990 May; 11(3):431–9

Ion leakage is reduced during anoxia in turtle brain: a potential survival strategy. Chih CP, et al. Am J Physiol 1989 Dec;257(6 Pt 2):R1562–4

Upper facial muscle activity and survival after hypoxic insult in rats. Paloheimo MP. Behav Brain Res 1989 Oct 1; 35(1):81–3

Central catecholaminergic dysfunction and behavioural disorders following hypoxia in adult rats. Speiser Z, et al. Behav Brain Res 1990 Feb 12;37(1):19–27

Anoxia reveals a vulnerable period in the development of long–term potentiation. Arai A, et al. Brain Res 1990 Mar 19;511(2):353–7

The adenosine antagonist 8–cyclopentyltheophylline reduces the depression of hippocampal neuronal responses during hypoxia. Gribkoff VK, et al. Brain Res 1990 Apr 2; 512(2):353–7

Effects of acute hypoxia on neonatal rat brain: regionally selective, long–term alterations in catecholamine levels and turnover. Seidler FJ, et al. Brain Res Bull 1990 Feb; 24(2):157–61

Intracranial pressure monitoring following hypoxic–ischaemic cerebral insults [letter; comment] Tasker RC, et al. Childs Nerv Syst 1989 Oct;5(5):280 Comment on: Childs Nerv Syst 1988 Dec;4(6):370–2.

Transition from alpha to theta pattern coma in fatal cerebral anoxia. Synek VM, et al. Clin Exp Neurol 1988;25:109–13

Validity of a revised EEG coma scale for predicting survival in anoxic encephalopathy. Synek VM. Clin Exp Neurol 1989;26:119–27

Modulation of respiration during brain hypoxia. Neubauer JA, et al. J Appl Physiol 1990 Feb;68(2):441–51 (170 ref.)

Dynamics of the ventilatory response to central hypoxia in cats. Ward DS, et al. J Appl Physiol 1990 Mar; 68(3):1107–13

Cervical sympathetic and phrenic nerve responses to progressive brain hypoxia. Wasicko MJ, et al. J Appl Physiol 1990 Jan;68(1):53–8

Embryonic nervous tissue transplantation accelerates restoration of hypoxia–damaged blood–brain barrier in rats. Saburina IN. J Hirnforsch 1989;30(6):737–45

Different responses of CA1 and CA3 regions to hypoxia in rat hippocampal slice. Kawasaki K, et al. J Neurophysiol 1990 Mar;63(3):385–94

The cost to the central nervous system of climbing to extremely high altitude. Hornbein TF, et al. N Engl J Med 1989 Dec 21;321(25):1714–9

Effects of coenzymes Q2 and Q10 on the field potential of guinea pig olfactory cortex slices maintained in hypoxia. Fujii T, et al. Neurosci Lett 1990 Mar 2;110(1–2):40–5

Anoxic changes in dentate granule cells. Krnjević K, et al. Neurosci Lett 1989 Dec 15;107(1–3):89–93

Preservation of single–flash visual evoked potentials at very low cerebral oxygen delivery in preterm infants. Pryds O, et al. Pediatr Neurol 1990 May–Jun;6(3):151–8

New model of hemorrhagic hypoxic–ischemic encephalopathy in newborn mice. Yoshioka H, et al. Pediatr Neurol 1989 Jul–Aug;5(4):221–5

Physical and intellectual recovery following prolonged hypoxic coma. Falk RH. Postgrad Med J 1990 May; 66(775):384–6

Cerebral anoxic attacks in sleep apnea syndrome. Cirignotta F, et al. Sleep 1989 Oct;12(5):400–4

[Reactive hyperemia in the brain of rats after high altitude hypoxia] Trojan S, et al. Sb Lek 1990 Apr;92(4):97–102 (Eng. Abstr.) (Cze)

[The energy mechanism of phasic changes in the spontaneous electrical activity of the neurons during hypoxia] Luk'ianova LD, et al. Biull Eksp Biol Med 1989 Sep; 108(9):266–9 (Eng. Abstr.) (Rus)

[The effect of short–term hypoxia on the neuronal impulse activity of the visual cortex in monkeys in a chronic experiment] Dudkin KN, et al. Fiziol Zh SSSR 1989 Jul; 75(7):1009–12 (Rus)

[The neuronal electrical activity of the cerebellar cortex in hypoxia] Kuz'mina TR, et al. Patol Fiziol Eksp Ter 1989 Sep–Oct;(5):53–6 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Pharmacological actions of a new TRH analogue, YM–14673, in rats subjected to cerebral ischemia and anoxia. Yamamoto M, et al. Eur J Pharmacol 1990 Jun 8; 181(3):207–14

Nimodipine applied immediately after anoxia protects cerebellar cells in culture against injury. Renkawek K, et al. Neuropatol Pol 1989;27(3):331–8

Protective effect of the calcium entry blocker, nimodipine on cerebellar organotypic cultures submitted to anoxia. Renkawek K, et al. Neuropatol Pol 1989;27(3):323–30

Reduction of perinatal hypoxic–ischemic brain damage with allopurinol. Palmer C, et al. Pediatr Res 1990 Apr;27(4 Pt 1):332–6

PSYCHOLOGY

Visual simple reaction time in cyanotic heart disease. Rosenthal A. Am J Dis Child 1967 Aug;114(2):139–43

Effects of acute increases in altitude on mental status: prevention and treatment. Flynn CF, et al. Psychosomatics 1990 Spring;31(2):146–52

RADIOGRAPHY

Reversal sign on CT: effect of anoxic/ischemic cerebral injury in children. Han BK, et al. AJNR 1989 Nov–Dec; 10(6):1191–8

Reversal sign on CT: effect of anoxic/ischemic cerebral injury in children. Han BK, et al. AJR Am J Roentgenol 1990 Feb;154(2):361–8

[Near infrared spectrophotometry—a non–invasive, continuous method for monitoring of cerebral status in newborn infants] Skov L, et al. Ugeskr Laeger 1990 Jun 4;152(23):1646–50 (30 ref.) (Eng. Abstr.) (Dan)

[Computerized tomography and clinical findings in severe cerebral hypoxidoses. On the differential diagnosis of cerebral and extracerebral coma] Krüger GG. Nervenarzt 1989 Nov;60(11):693–9 (Ger)

THERAPY

New perspectives in the treatment of hypoxic and ischemic brain damage: effect of gangliosides. Rotondo G, et al. Aviat Space Environ Med 1990 Feb;61(2):162–4 (20 ref.)

Brain protection. Frost EA. Middle East J Anesthesiol 1990 Feb;10(4):339–62 (115 ref.)

CEREBRAL AQUEDUCT

ABNORMALITIES

Aqueduct stenosis and schizophrenia [letter] Smith KH. **Aust N Z J Psychiatry** 1990 Jun;24(2):158, 163–4

Aqueduct stenosis—presentation and prognosis. Robertson IJ, et al. **Br J Neurosurg** 1990;4(2):101–6

[Symptoms of dementia misdiagnosed as psychosocial development disorder in congenital aqueduct stenosis] Schulze D, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Feb;42(2):107–12 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Magnetic resonance imaging of the cerebral aqueduct. Signal intensity time curves demonstrated by fast acquisition with multiple excitation (FAME). van den Hout JH, et al. **Invest Radiol** 1989 Nov;24(11):855–60

Adult aqueductal stenosis representing with double incontinence [letter; comment] Andrew J. **Surg Neurol** 1990 Feb;33(2):158–9 Comment on: Surg Neurol 1989 May;31(5):387–9.

[Regional characteristics of ventricular surfaces of the brain in aging and in senile dementia (aqueduct of Sylvius)] Kiktenko AI. **Zh Nevropatol Psikhiatr** 1989;89(7):66–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Fast multiphase MR imaging of aqueductal CSF flow: 1. Study of healthy subjects. Ciraolo L, et al. **AJNR** 1990 May;11(3):589–96

Single injection into the cerebrospinal fluid of antibodies against the secretory material of the subcommissural organ reversibly blocks formation of Reissner's fiber: immunocytochemical investigations in the rat. Rodríguez S, et al. **Exp Brain Res** 1990;81(1):113–24

PHYSIOPATHOLOGY

Fast multiphase MR imaging of aqueductal CSF flow: 2. Study in patients with hydrocephalus. Mascalchi M, et al. **AJNR** 1990 May;11(3):597–603

RADIOGRAPHY

Aqueductal stenosis in neurofibromatosis. Riviello JJ Jr, et al. **Neurofibromatosis** 1988;1(5–6):312–7 (29 ref.)

ULTRASTRUCTURE

The ependyma of goat. II. Ependymal lining of the lateral ventricles, mesencephalic canal, and fourth ventricle: scanning electron microscopic study. Rajtová V. **Gegenbaurs Morphol Jahrb** 1990;136(2):233–40

CEREBRAL ARTERIES

Direct cortical EEG monitoring during temporary vascular occlusion for cerebral aneurysm surgery. Young WL, et al. **Anesthesiology** 1989 Nov;71(5):794–9

Hemispheric arteriovenous fistulae with giant venous dilation. Almeida GM, et al. **Childs Nerv Syst** 1990 Jun; 6(4):216–9

Differential effects of electrical stimulation of the dorsal raphe nucleus and of cervical sympathectomy on serotonin and noradrenaline concentrations in major cerebral arteries and pial vessels in the rat. Bonvento G, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):123–6

Cerebral-artery spasm in vitro [letter] [see comments] Gabrielian ES, et al. **Lancet** 1990 Jan 13;335(8681):115 Comment in: Lancet 1990 Feb 24;335(8687):480–1.

Cerebral artery spasm and migraine [letter; comment] Pearce JM. **Lancet** 1990 Feb 24;335(8687):480–1 Comment on: Lancet 1990 Jan 13;335(8681):115.

Neurovascular lesions and endovascular therapy: the role of MR. Jabour BA, et al. **Neuroradiology** 1989;31(4):341–5

Loss of the insular ribbon: another early CT sign of acute middle cerebral artery infarction. Truwit CL, et al. **Radiology** 1990 Sep;176(3):801–6

Effect of hyperglycemia on infarct size after cerebrovascular occlusion in cats [letter; comment] de Courten-Myers GM, et al. **Stroke** 1990 Feb;21(2):357–8 Comment on: Stroke 1989 Apr;20(4):519–23.

Phenylephrine-induced hypertension reduces ischemia following middle cerebral artery occlusion in rats [see comments] Drummond JC, et al. **Stroke** 1989 Nov; 20(11):1538–44 Comment in: Stroke 1990 May;21(5):827.

Anesthetic modulation of cerebral hemodynamic and evoked responses to transient middle cerebral artery occlusion in cats. Helfaer MA, et al. **Stroke** 1990 May;21(5):795–800

Selective cortical neuronal damage after middle cerebral artery occlusion in rats. Iizuka H, et al. **Stroke** 1989 Nov; 20(11):1516–23

Transcranial Doppler ultrasound findings in middle cerebral artery occlusion. Kaps M, et al. **Stroke** 1990 Apr; 21(4):532–7

Reversible experimental middle cerebral artery occlusion [letter; comment] Molnár L, et al. **Stroke** 1990 Apr; 21(4):679–80 Comment on: Stroke 1989 Oct;20(10):1368–76.

Somatosensory evoked potentials in rat cerebral cortex before and after middle cerebral artery occlusion. Sakatani K, et al. **Stroke** 1990 Jan;21(1):124–32

Hemorrhagic infarct induced by arterial hypertension in cat brain following middle cerebral artery occlusion. Saku Y, et al. **Stroke** 1990 Apr;21(4):589–95

Effects of middle cerebral artery occlusion on cerebral cortex choline and acetylcholine in rats. Scremin OU, et al. **Stroke** 1989 Nov;20(11):1524–30

Impairment of metabolic recovery with increasing periods of middle cerebral artery occlusion in rats. Selman WR, et al. **Stroke** 1990 Mar;21(3):467–71

Methionine sulfoximine reduces cortical infarct size in rats after middle cerebral artery occlusion. Swanson RA, et al. **Stroke** 1990 Feb;21(2):322–7

ABNORMALITIES

Chiasmal apoplexy: haemorrhage from a cavernous malformation in the optic chiasm. Regli L, et al. **J Neurol Neurosurg Psychiatry** 1989 Sep;52(9):1095–9

Vascular anomalies associated with aneurysms of the anterior communicating artery: microsurgical observations. Ogawa A, et al. **J Neurosurg** 1990 May;72(5):706–9

Type 2 proatlantal artery associated with a ruptured aneurysm—case report. Kurose K, et al. **Neurol Med Chir (Tokyo)** 1990 Mar;30(3):191–3

Arteriovenous malformation of the corpus callosum associated with persistent primitive trigeminal artery—case report. Uchino A, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):429–32

Ectasia of arteries beyond the circle of Willis. Dervin J, et al. **Neuroradiology** 1990;31(6):483–5

Persistent hypoglossal artery in combination with multifocal arteriovenous malformations of the brain: case report. Garza-Mercado R, et al. **Neurosurgery** 1990 May; 26(5):871–6

Treatment of a giant aneurysm of the cavernous internal carotid artery associated with a persistent primitive trigeminal artery: case report. Miyatake S, et al. **Neurosurgery** 1990 Feb;26(2):315–9

A case of medullary venous malformations with an arterial component coexisting with arteriovenous malformations. Tomura N, et al. **Surg Neurol** 1990 Jan;33(1):37–42

[Magnetic resonance tomographic detection of a primitive trigeminal artery] Schuierer G, et al. **ROFO** 1989 Oct; 151(4):510–2 **(Ger)**

[Moyamoya disease with persistent primitive hypoglossal artery. Case report] Kurose K, et al. **Neurol Med Chir (Tokyo)** 1989 Jun;29(6):528–32 (Eng. Abstr.) **(Jpn)**

[A case report: persistent primitive hypoglossal artery aneurysm] Tsugu A, et al. **No Shinkei Geka** 1990 Jan; 18(1):95–100 (18 ref.) (Eng. Abstr.) **(Jpn)**

ANALYSIS

Cholinergic and VIPergic innervation in cerebral arteries: a sequential double-labeling immunohistochemical study. Miao FJ, et al. **J Cereb Blood Flow Metab** 1990 Jan; 10(1):32–7

Mechanism of cerebral vasospasm—contractile proteins in smooth muscle of bovine cerebral artery. Takagi T, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):557–62

[Phencyclidine receptors in porcine cerebral arteries] Lu YF, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Nov;10(6):508–11 (Eng. Abstr.) **(Chi)**

ANATOMY & HISTOLOGY

Reproducibility of cerebral artery Doppler measurements. Moorthy B, et al. **Arch Dis Child** 1990 Jul;65(7 Spec No):700–1

Hydrodynamics of arterial branching—the effect of arterial branching on distal blood supply. Matsuo T, et al. **Biorheology** 1989;26(4):799–811

The cortical branches of the posterior cerebral artery in man. Kiś G, et al. **Folia Morphol (Warsz)** 1988;47(1–4):121–31

Types of cortical branches of the posterior cerebral artery in man. Kiś G, et al. **Folia Morphol (Warsz)** 1988; 47(1–4):133–44

Modalities of origin of the middle cerebral artery. Incidence on the arrangement of the perforating branches. Vincentelli F, et al. **J Neurosurg Sci** 1990 Jan-Mar;34(1):7–11

Morphological examination of the circulus arteriosus cerebri humani (circle of Willis). I. Anterior and posterior communicating arteries. Fujimoto K, et al. **Kaibogaku Zasshi** 1989 Oct;64(5):481–9

Microsurgical anatomy of the cisternal course of the perforating branches of the posterior communicating artery. Vincentelli F, et al. **Neurosurgery** 1990 May; 26(5):824–31

Volume MR angiography: methods to achieve very short echo times. Schmalbrock P, et al. **Radiology** 1990 Jun; 175(3):861–5

Spatial resolution of transcranial pulsed Doppler technique in vitro evaluation of the sensitivity distribution of the sample volume. Arnolds BJ, et al. **Ultrasound Med Biol** 1989;15(8):729–35

[Micro-anatomy of collateral perforating branches of the middle cerebral artery] Vincentelli F, et al. **Neurochirurgie** 1990;36(1):3–14; discussion 14–5 (Eng. Abstr.) **(Fre)**

[Trifurcations of the middle cerebral arteries] Anderhuber F, et al. **Acta Anat (Basel)** 1990;137(4):342–9 (Eng. Abstr.) **(Ger)**

[Study of human cerebral blood flow by corrosion casts of the carotid system] Anderhuber F, et al. **Acta Anat (Basel)** 1989;136(1):42–8 (Eng. Abstr.) **(Ger)**

[Doppler sonographic findings in the cerebral arteries] Ranke C, et al. **Internist (Berl)** 1989 Oct;30(10):W89–103 **(Ger)**

[Variability of the course of the posterior cerebral artery in humans] Michalczyk K. **Ann Acad Med Stetin** 1989; 35:23–36 (Eng. Abstr.) **(Pol)**

[Variability of the course of the anterior cerebral artery and its branches in humans] Mierzwa A. **Ann Acad Med Stetin** 1989;35:37–56 (Eng. Abstr.) **(Pol)**

[Age-related characteristics of cerebral blood vessels in the rat (morphometric study)] Levitman MKh, et al. **Arkh Anat Gistol Embriol** 1990 Jan;98(1):49–53 (Eng. Abstr.) **(Rus)**

[Age-related dynamics of blood supply and vascular-tissue interrelations in the human pineal body] Nikonorov SG, et al. **Arkh Anat Gistol Embriol** 1990 Feb;98(2):25–30 (Eng. Abstr.) **(Rus)**

[Age-related characteristics of intraorganic vascular structures of the cerebral cortex, heart, kidneys and spleen in rats in the normal state and in arterial hypertension] Sokolov VV, et al. **Arkh Anat Gistol Embriol** 1990 Apr; 98(4):47–57 (Eng. Abstr.) **(Rus)**

[Structural-functional organization of the cerebral circulatory system in birds] Krivchenko AI, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1616–23 (30 ref.) (Eng. Abstr.) **(Rus)**

CYTOLOGY

Isolation and characterization of endothelial cells from bovine cerebral arteries. Machi T, et al. **In Vitro Cell Dev Biol** 1990 Mar;26(3 Pt 1):291–300

Cytoarchitecture of the smooth muscles and pericytes of rat cerebral blood vessels. A scanning electron microscopic study. Ushiwata I, et al. **J Neurosurg** 1990 Jul;73(1):82–90

DRUG EFFECTS

Effects of HA1077, a novel calciumantagonistic spasmolytic agent on intracerebral arterioles of rats. Takayasu M, et al. **Acta Neurochir (Wien)** 1990;103(1–2):67–70

Enhanced vasoconstrictor effect of endothelin in cerebral arteries from rats with subarachnoid haemorrhage. Alafaci C, et al. **Acta Physiol Scand** 1990 Mar;138(3):317–9

Angiotensin II induces endothelium-dependent vasodilation of rat cerebral arterioles. Haberl RL, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1840–6

Potassium dilates rat cerebral arteries by two independent mechanisms. McCarron JG, et al. **Am J Physiol** 1990 Sep; 259(3 Pt 2):H902–8

Mechanisms of contracting action of oxyhemoglobin in isolated monkey and dog cerebral arteries. Toda N. **Am J Physiol** 1990 Jan;258(1 Pt 2):H57–63

Mechanism underlying responses to histamine of isolated monkey and human cerebral arteries. Toda N. **Am J Physiol** 1990 Feb;258(2 Pt 2):H311–7

Effects of thiopental, pentobarbital, and ketamine on endothelin-induced constriction of porcine cerebral arteries. Taga K, et al. **Anesthesiology** 1990 May; 72(5):939–41

Effect of thromboxane A2/endoperoxide antagonist SQ29548 on the contractile response to acetylcholine in newborn piglet cerebral arteries. Wagerle LC, et al. **Circ Res** 1990 Mar;66(3):824–31

Pharmacology of TA-3090 (8-chloro diltiazem) related to its cerebrovascular protective properties. Bevan JA, et al. **Circulation** 1989 Dec;80(6 Suppl):IV178–83

Pharmacological characterisation of postjunctional 5-HT receptors in cerebral arteries from the sheep. Gaw AJ, et al. **Eur J Pharmacol** 1990 Apr 10;179(1–2):35–44

Potentiation of stretch-induced myogenic tone of dog cerebral artery by hemolysate and the inhibitory action of calcium antagonists. Nakayama K, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):33–42

Effects of cilazapril on the cerebral circulation in spontaneously hypertensive rats. Clozel JP, et al. **Hypertension** 1989 Dec;14(6):645–51

Contractile responses to endothelin in feline cortical vessels in situ. Robinson MJ, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):285–9

Actions of platelet-activating factor on isolated feline and human cerebral arteries. Uski TK, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):428–31

Endothelium-dependent contractions induced by angiotensin I and angiotensin II in canine cerebral artery. Manabe K, et al. **J Pharmacol Exp Ther** 1989 Oct;251(1):317–20

Effects of calcitonin gene-related peptide on canine cerebral artery strips and the in-vivo vertebral blood flow in dogs. Ikegaki I, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Oct;340(4):431–6

Drug test value by transcranial Doppler in the diagnosis of neurologic vascular diseases. Pendefunda L. **Neurol Psychiatr (Bucur)** 1990 Apr-Jun;28(2):135–41

Effect of nimodipine on cerebrovascular response to CO2 in asymptomatic individuals and patients with subarachnoid hemorrhage: a transcranial Doppler ultrasound study. Seiler RW, et al. **Neurosurgery** 1990 Aug;27(2):247–51

Effects of mannitol on intracerebral arteriolar diameter in vitro: extraluminal and intraluminal application. Takayasu N, et al. **Neurosurgery** 1989 Nov;25(5):747–51; discussion 751–2

Cerebrovascular effects of prostanoids: in-vitro studies in feline middle cerebral and basilar artery. Whalley ET, et

al. **Prostaglandins** 1989 Dec;38(6):625–34
[Vasodilator actions of felodipine, a new Ca2+ entry blocker] Kawakami M, et al. **Nippon Yakurigaku Zasshi** 1989 Oct;94(4):251–6 (Eng. Abstr.) **(Jpn)**
[Angiographic studies on the effects of a novel calcium antagonist AE0047 on cerebral arteries in dogs, with special reference to the preventive effects of AE0047 on cerebral vasoconstriction induced by endothelin] Kido H, et al. **Nippon Yakurigaku Zasshi** 1990 Apr;95(4):177–84 (Eng. Abstr.) **(Jpn)**
[Effect of calcium antagonist nimodipine and induced hypertension on cerebral vessel reactivities, cerebral blood flow, cerebral edema and infarction in cats with one hour middle-cerebral-artery occlusion] Sakaki T, et al. **No Shinkei Geka** 1990 May;18(5):423–30 (Eng. Abstr.) **(Jpn)**
[Ca2+ antagonist on cerebral artery] Nishiye E, et al. **No To Shinkei** 1990 Jan;42(1):5–15 **(Jpn)**

GROWTH & DEVELOPMENT

Prenatal specification and target induction underlie the enrichment of calcitonin gene-related peptide in the trigeminal ganglion neurons projecting to the cerebral vasculature. Horgan K, et al. **J Neurosci** 1990 Jul; 10(7):2485–92

INJURIES

A new intracranial Silastic encircling clip for hemostasis. Technical note. Ishiwata Y, et al. **J Neurosurg** 1990 Oct; 73(4):638–9
Major cerebral vessels injury caused by a seatbelt shoulder strap: case report. Chedid MK, et al. **J Trauma** 1989 Nov; 29(11):1601–3
[Traumatic rupture of the anterior communicating artery] Bratzke H, et al. **Beitr Gerichtl Med** 1989;47:437–40 (Eng. Abstr.) **(Ger)**
[Injuries of the intracranial arteries in the angiogram] Jenewein K, et al. **ROFO** 1989 Dec;151(6):706–12 (Eng. Abstr.) **(Ger)**

INNERVATION

Sympathetic reactivity of cerebral arteries in developing fetal lamb and adult sheep. Wagerle LC, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1432–8
Monoamine oxidase-containing nerve fibers in the major cerebral arteries of rats. Shigematsu K, et al. **Brain Res** 1989 Sep 11;497(1):21–9
Increased sympathetic innervation in the cerebral and mesenteric arteries of hypertensive rats. Mangiarua EI, et al. **Can J Physiol Pharmacol** 1990 Apr;68(4):492–9
Involvement of perivascular sensory fibers in the pathophysiology of cerebral vasospasm following subarachnoid hemorrhage. Edvinsson L, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):602–7
Sympathetic innervation of the supratentorial dura mater of the rat. Keller JT, et al. **J Comp Neurol** 1989 Dec 8; 290(2):310–21
Origins and distribution of cerebrovascular nerve fibers showing calcitonin gene-related peptide-like immunoreactivity in the major cerebral artery of the dog. Nozaki K, et al. **J Comp Neurol** 1990 Jul 8;297(2):219–26
Effect of sympathetic nerves on composition and distensibility of cerebral arterioles in rats. Baumbach GL, et al. **J Physiol (Lond)** 1989 Sep;416:123–40
Inhibitory effects of L-NG-nitro-arginine on the synthesis of EDRF and the cerebroarterial response to vasodilator nerve stimulation. Toda N, et al. **Life Sci** 1990;47(4):345–51
Intracerebral NGF infusion induces hyperinnervation of cerebral blood vessels. Isaacson LG, et al. **Neurobiol Aging** 1990 Jan-Feb;11(1):51–5
Long-term chemical sympathectomy leads to an increase of neuropeptide Y immunoreactivity in cerebrovascular nerves and iris of the developing rat. Mione MC, et al. **Neuroscience** 1990;34(2):369–78
Origins and pathways of cerebrovascular nerves storing substance P and calcitonin gene-related peptide in rat. Suzuki N, et al. **Neuroscience** 1989;31(2):427–38
[Cholinergic innervation of vasopressin-containing cells of the blood vessels of the brain in man] Lomakin AV, et al. **Biull Eksp Biol Med** 1990 Jan;109(1):67–9 (Eng. Abstr.) **(Rus)**
[The neurogenic mechanism of the regulation of cerebral circulation and the linking of blood flow-metabolism function] Mitagvariia NP. **Fiziol Zh SSSR** 1989 Nov; 75(11):1473–8 (20 ref.) (Eng. Abstr.) **(Rus)**
[The role of a neurogenic mechanism in regulating cerebral circulation] Teplov SI, et al. **Fiziol Zh SSSR** 1989 Nov; 75(11):1501–8 (26 ref.) (Eng. Abstr.) **(Rus)**
[Mechanisms of the development of autonomic regulation disorders in neurogenic syncope in childhood] Kravtsov IuI, et al. **Zh Nevropatol Psikhiatr** 1989;89(11):37–43 (Eng. Abstr.) **(Rus)**

METABOLISM

Prostaglandin E1 modifies porcine cerebral arterial tone through cyclooxygenase related eicosanoid(s) release. Fukuda S, et al. **Brain Res** 1989 Sep 4;496(1–2):397–400
Cerebral arteries can generate 5- and 15-hydroxyeicosatetraenoic acid from arachidonic acid. Schulz R, et al. **Can J Physiol Pharmacol** 1990 Jul; 68(7):807–13
Kinetic studies on uptake of serotonin and noradrenaline into pial arteries of rats. Chang JY, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):22–31
Prevention of cerebral vasospasm in the rat by depletion or inhibition of substance P in conducting vessels. Delgado-Zygmunt TJ, et al. **J Neurosurg** 1990 Jun; 72(6):917–25
Etiology of the disruption in blood-arterial wall barrier following experimental subarachnoid hemorrhage. Nakagomi T, et al. **Surg Neurol** 1990 Jul;34(1):16–26
[Antioxidants in the prevention and treatment of cerebral arteriosclerosis] Bobyrev VN, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):60–3 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Doppler examination of the middle cerebral artery in anemic fetuses. Vyas S, et al. **Am J Obstet Gynecol** 1990 Apr; 162(4):1066–8
Deficiency of reticular fibers in cerebral arteries. On the etiology of saccular aneurysms in childhood. Ostergaard JR, et al. **Br J Neurosurg** 1989;3(1):113–5
Hereditary cerebral hemorrhage with amyloidosis—Dutch type. Research-Group Hereditary Cerebral Amyloid-Angiopathy. Haan J, et al. **Clin Neurol Neurosurg** 1989;91(4):285–90
Cerebral arteritis with unusual distribution. Husein AM, et al. **Clin Radiol** 1990 May;41(5):353–4
Corrugation of cerebral vessels following subarachnoid hemorrhage: comparison of two experimental models of chronic cerebral vasospasm. Rickels E, et al. **Exp Neurol** 1990 Feb;107(2):178–86
Multiple middle cerebral artery aneurysms in an infant. Case report. Cedzich C, et al. **J Neurosurg** 1990 May;72(5):806–9
Impact of vessel distortion on transcranial Doppler velocity measurements: correlation with magnetic resonance imaging. Finn JP, et al. **J Neurosurg** 1990 Oct;73(4):572–5
The significance of morphological changes in cerebral arteries after subarachnoid hemorrhage. Mayberg MR, et al. **J Neurosurg** 1990 Apr;72(4):626–33
Cerebral blood flow velocity waveforms in hydrocephalic fetuses. Kirkinen P, et al. **JCU** 1988 Sep;16(7):493–8
Biopsy-proven cerebral vasculitis associated with cocaine abuse. Krendel DA, et al. **Neurology** 1990 Jul;40(7):1092–4
The "dense artery sign"—major cerebral artery thromboembolism demonstrated by computed tomography. Schuknecht B, et al. **Neuroradiology** 1990;32(2):98–103
MR imaging of persistent primitive trigeminal artery. Shintani S, et al. **Neuroradiology** 1990;32(1):79
Morphometric analysis of reticular and elastin fibers in the cerebral arteries of patients with intracranial aneurysms. Chyatte D, et al. **Neurosurgery** 1990 Jun;26(6):939–43
Arterial wall changes in cerebral vasospasm. Findlay JM, et al. **Neurosurgery** 1989 Nov;25(5):736–45; discussion 745–6
MR angiography with two-dimensional acquisition and three-dimensional display. Work in progress. Keller PJ, et al. **Radiology** 1989 Nov;173(2):527–32
Extracorporeal membrane oxygenation in infants: angiographic and parenchymal evaluation of the brain with MR imaging. Lewin JS, et al. **Radiology** 1989 Nov; 173(2):361–5
Intracranial vascular lesions: optimization and clinical evaluation of three-dimensional time-of-flight MR angiography. Marchal G, et al. **Radiology** 1990 May; 175(2):443–8
Histopathologic and morphometric studies of leptomeningeal vessels in moyamoya disease. Kono S, et al. **Stroke** 1990 Jul;21(7):1044–50
Morphological changes in cerebral vascular smooth muscle cells in stroke-prone spontaneously hypertensive rats (SHRSP). A scanning and transmission electron microscopic study. Fujiwara T, et al. **Virchows Arch [B]** 1990;58(5):377–82
[Detection of the occluded artery in cerebral infarction by MRI] Sekihara Y, et al. **No Shinkei Geka** 1989 Dec; 17(12):1145–51 (Eng. Abstr.) **(Jpn)**
[The significance of sialic acids and changes in the noncellular structures of the vascular walls in the development of brain edema in meningoencephalitis] Barshtein IuA, et al. **Vrach Delo** 1989 Oct;(10):118–22 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Monitoring of direct cortical responses during temporary arterial occlusion at aneurysm surgery. Fujita S, et al. **Acta Neurochir (Wien)** 1989;101(1–2):23–8
Endothelin causes contraction of canine and bovine arterial smooth muscle in vitro and in vivo. Suzuki Y, et al. **Acta Neurochir (Wien)** 1990;104(1–2):42–7
Electrophysiological changes in the feline brain during 45 minutes occlusion and 3 hours recirculation of the middle cerebral artery. Bereczki D, et al. **Acta Physiol Hung** 1990; 75(2):155–63
Doppler assessment of the pulsatility index of the middle cerebral artery during constriction of the fetal ductus arteriosus after indomethacin therapy. Mari G, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1528–31
Studies of collateral perfusion to canine middle cerebral artery territory. Loftus CM, et al. **Am J Physiol** 1990 Aug; 259(2 Pt 2):H560–6
Arterial pH modulation of regional cerebral blood flow during hyperammonemia in dogs. Weigle CG, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H34–41
Blood flow velocity in the middle cerebral artery during carotid cross-clamping: loss of regulatory response to carbon dioxide partial pressure. A transcranial Doppler intraoperative study. Faccenda F, et al. **Artery** 1990; 17(3):159–69
Possible role of nitric oxide in transmitting information from vasodilator nerve to cerebroarterial muscle. Toda N, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):308–13
Endothelin is a potent constrictor of human intracranial arteries and veins. Hardebo JE, et al. **Blood Vessels** 1989; 26(5):249–53
Myogenic responses are independent of the endothelium in rat pressurized posterior cerebral arteries. McCarron JG, et al. **Blood Vessels** 1989;26(5):315–9
Regulation of large cerebral arteries and cerebral microvascular pressure. Faraci FM, et al. **Circ Res** 1990 Jan;66(1):8–17 (98 ref.)
Flow-induced constriction and dilation of cerebral resistance arteries. Garcia-Roldan JL, et al. **Circ Res** 1990 May; 66(5):1445–8
The influence of behavioural states on cerebral blood flow velocity patterns in stable preterm infants. Ramaekers VT, et al. **Early Hum Dev** 1989 Dec;20(3–4):229–46
Visualization of the fetal circle of Willis and intra-cerebral arteries by color-coded Doppler. Arbeille PH, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Sep;32(3):195–8
Contraction followed by relaxation in response to hypoxia in the sheep isolated middle cerebral artery. Klaas M, et al. **Eur J Pharmacol** 1989 Sep 13;168(2):187–92
H2O2 and endothelium-dependent cerebral arteriolar dilation. Implications for the identity of endothelium-derived relaxing factor generated by acetylcholine. Wei EP, et al. **Hypertension** 1990 Aug; 16(2):162–9
Neurotransmission in the sheep middle cerebral artery: modulation of responses by 5-HT and haemolysate. Gaw AJ, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):409–16
Mechanisms of action of endothelin on isolated feline cerebral arteries: in vitro pharmacology and electrophysiology. Jansen I, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):743–7
Sequential metabolic changes in rat brain following middle cerebral artery occlusion: a 2-deoxyglucose study. Shiraishi K, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):765–73
Muscarinic cholinergic receptors on the endothelium of human cerebral arteries. Tsukahara T, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):748–53
Middle cerebral artery flow velocity during coronary surgery; influence of clinical variables. van der Linden JA, et al. **J Clin Anesth** 1990 Jan-Feb;2(1):7–15
Transcranial Doppler studies of flow velocity in middle cerebral artery in weightlessness. Bondar RL, et al. **J Clin Pharmacol** 1990 May;30(5):390–5
Mechanisms of pressure-induced myogenic activation of cerebral and renal arteries: role of the endothelium. Harder DR, et al. **J Hypertens Suppl** 1989 Sep;7(4):S11–5; discussion S16
Pre-existing level of tone is an important determinant of cerebral artery autoregulatory responsiveness. Osol G, et al. **J Hypertens Suppl** 1989 Sep;7(4):S67–9
Endothelium-dependent modulation of endothelin-induced vasoconstriction and membrane depolarization in cat cerebral arteries. Kauser K, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):93–7
Reproducibility of measurement of pulsatility index by Doppler ultrasound of the anterior cerebral artery of preterm infants. Moorthy MB, et al. **J R Army Med Corps** 1989 Oct;135(3):131–4
Acceleration time in cerebral arteries of preterm and term infants. van de Bor M, et al. **JCU** 1990 Mar-Apr; 18(3):167–71
Effect of nimodipine on ischemia-induced brain edema and mortality in a novel transient middle cerebral artery occlusion model. Hara H, et al. **Jpn J Pharmacol** 1990 Jun; 53(2):247–53
Cerebral artery blood flow velocity waveforms in normal and small for dates fetuses. Ishimatsu J, et al. **Kurume Med J** 1989;36(4):181–4
Characterization of contractile responses to endothelin in human cerebral arteries: implications for cerebral vasospasm. Papadopoulos SM, et al. **Neurosurgery** 1990 May;26(5):810–5
Evaluation of somatosensory evoked potentials in temporary occlusion of cerebral artery 2. Intraoperative monitoring during internal carotid and middle cerebral artery aneurysm surgery. Nakasu Y. **Nippon Geka Hokan** 1989 Mar 1; 58(2):206–16
Evaluation of somatosensory evoked potential in temporary occlusion of cerebral artery. 1. Experimental study in cats. Nakasu Y. **Nippon Geka Hokan** 1989 Mar 1;58(2):193–205
Cerebral artery flow velocity acceleration and deceleration characteristics in newborn infants. Raju TN, et al. **Pediatr Res** 1989 Dec;26(6):588–92
Expression of melatonin receptors in arteries involved in thermoregulation. Viswanathan M, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6200–3
Characterization of dilatation induced by electrical field stimulation in mammalian cerebral and peripheral vessels.

Hardebo JE, et al. **Q J Exp Physiol** 1989 Jul;74(4):475–91

A validation study on the reproducibility of transcranial Doppler velocimetry. Maeda H, et al. **Ultrasound Med Biol** 1990;16(1):9–14

[Two types of relaxation responses mediated by cyclic GMP in cerebral arteries] Kanamaru K, et al. **No To Shinkei** 1989 Jun;41(6):559–65 (Eng. Abstr.) **(Jpn)**

[Responses of cerebral arteries to the changes in cerebral perfusion pressure] Yamaguchi S, et al. **No To Shinkei** 1989 Aug;41(8):807–11 (Eng. Abstr.) **(Jpn)**

[The reactivity and functional heterogeneity of the cerebral arteries] Azin AL, et al. **Fiziol Zh SSSR** 1989 Nov; 75(11):1479–85 (13 ref.) (Eng. Abstr.) **(Rus)**

[The role of the dopaminergic component in the autoregulatory reaction of the cerebral vessels] Gaevyl MD, et al. **Fiziol Zh SSSR** 1989 Jun;75(6):793–7 (Eng. Abstr.) **(Rus)**

[The reactivity of the major vessels of the human brain based on the data of transcranial dopplerography] Khil'ko VA, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1486–500 (Eng. Abstr.) **(Rus)**

[The antiaggregation activity of the normal cerebral vessels and in ischemia] Petrishchev NN, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1515–20 **(Rus)**

[The determination of the lower limit of autoregulation of cerebral blood flow by vascular compression in a local area of the brain] Semeniutin VB, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1635–8 **(Rus)**

PHYSIOPATHOLOGY

Continuous recording of middle cerebral artery blood velocity in clinical neurosurgery. Lundar T, et al. **Acta Neurochir (Wien)** 1990;102(3–4):85–90

Changes of glycogen and ATP contents of the major cerebral arteries after experimentally produced subarachnoid haemorrhage in the dog. Nozaki K, et al. **Acta Neurochir (Wien)** 1990;104(1–2):38–41

Morphological consequences of early reperfusion following thrombotic or mechanical occlusion of the rat middle cerebral artery. Dietrich WD, et al. **Acta Neuropathol (Berl)** 1989;78(6):605–14

Pulsatile flow changes in the anterior cerebral arteries in infants with patent ductus arteriosus: measured with Doppler technique. Wu CM, et al. **Acta Paediatr Sin** 1989 Jan–Feb;30(1):7–14

Transcranial Doppler ultrasonography of the middle cerebral artery in the hemodynamic assessment of internal carotid artery stenosis. Kelley RE, et al. **Arch Neurol** 1990 Sep; 47(9):960–4

Changes in contractile response and effect of a calcium antagonist, nimodipine, in isolated intracranial arteries of baboon following experimental subarachnoid hemorrhage. Sahlin C, et al. **Brain Res Bull** 1990 Mar;24(3):355–61

Cluster headache and "dynamite headache": blood flow velocities in the middle cerebral artery. Hannerz J, et al. **Cephalalgia** 1990 Feb;10(1):31–8

Hypertension and cerebral arteries: relationship to disruption of the blood–brain barrier. Werber AH, et al. **Clin Exp Hypertens [A]** 1990;12(2):243–65

Changes in vascular resistance in the umbilical and middle cerebral arteries in the human intrauterine growth–retarded fetus, measured with pulsed Doppler ultrasound. Satoh S, et al. **Early Hum Dev** 1989 Dec;20(3–4):213–20

Effects of partial plasma exchange transfusion on cerebral blood flow velocity in polycythaemic preterm, term and small for date newborn infants. Maertzdorf WJ, et al. **Eur J Pediatr** 1989 Aug;148(8):774–8

Cerebral vasoconstriction as a complication of carotid endarterectomy. Case report. Brick JF, et al. **J Neurosurg** 1990 Jul;73(1):151–3

The role of hemoglobin in arterial narrowing after subarachnoid hemorrhage. Mayberg MR, et al. **J Neurosurg** 1990 Apr;72(4):634–40

Relaxant effect of calcitonin gene–related peptide on cerebral arterial spasm induced by experimental subarachnoid hemorrhage in dogs. Nozaki K, et al. **J Neurosurg** 1989 Oct;71(4):558–64

Relevance of cerebral vasomotor reactivity to prospects for successful endarterectomy [letter] Fürst H, et al. **Lancet** 1990 Jan 20;335(8682):166–7

Assessment: transcranial Doppler. Report of the American Academy of Neurology, Therapeutics and Technology Assessment Subcommittee. **Neurology** 1990 Apr; 40(4):680–1

Transcranial Doppler ultrasound: present status. Caplan LR, et al. **Neurology** 1990 Apr;40(4):696–700 (69 ref.)

Heterogeneous arterial responses in postischemic state of cerebral cortex. Baramidze DG, et al. **Neuropatol Pol** 1989; 27(1):3–12

Conditions of blood flow in capillaries of cerebral cortex in control and ischemia. Varazashvili M, et al. **Neuropatol Pol** 1989;27(1):13–24

A study of the reactivity of feeding vessels to arteriovenous malformations: correlation with clinical outcome. Muraszko K, et al. **Neurosurgery** 1990 Feb;26(2):190–9; discussion 199–200

The influence of volume expansion with induced hypertension on vessel reactivities, the blood–brain barrier, and cerebral infarction in cats with one–hour occlusion of the middle cerebral artery. Sakaki T, et al. **Neurosurgery** 1990 Aug;27(2):268–73; discussion 273–4

Postoperative arteriovenous fistula between the middle meningeal artery and the sphenoparietal sinus. Tsutsumi K, et al. **Neurosurgery** 1990 May;26(5):869–71

Evaluation of posttraumatic cerebral blood flow velocities by transcranial Doppler ultrasonography. Weber M, et al. **Neurosurgery** 1990 Jul;27(1):106–12

Flow velocity waveforms of the umbilical and cerebral arteries before and after intravascular transfusion. Mari G, et al. **Obstet Gynecol** 1990 Apr;75(4):584–9

Anterior cerebral artery velocity changes in disease of the middle cerebral artery stem. Brass LM, et al. **Stroke** 1989 Dec;20(12):1737–40

Occlusion of major cerebral arteries: new concepts. Kassell NF, et al. **Surg Forum** 1978;29:527–9

Transcranial pulsed Doppler measurements of blood flow velocity in the middle cerebral artery: reference values at rest and during hyperventilation in healthy children and adolescents in relation to age and sex. Brouwers PJ, et al. **Ultrasound Med Biol** 1990;16(1):1–8

[Physiopathology of the cerebral arterial circulation. Application to cerebro arterial surgery] Testart J. **J Mal Vasc** 1990;15(2):194–201 (26 ref.) (Eng. Abstr.) **(Fre)**

[The contribution of umbilical and cerebral Doppler velocimetry in the diagnosis and monitoring of intrauterine growth retardation] Collet M, et al. **Rev Fr Gynecol Obstet** 1990 May;85(5):282–90 (Eng. Abstr.) **(Fre)**

[Occlusion of the middle cerebral artery after induction of ovulation with gonadotropins] Neau JP, et al. **Rev Neurol (Paris)** 1989;145(12):859–61 (Eng. Abstr.) **(Fre)**

[Changes in pulsatility index and blood flow velocity in the cerebral arteries in infantile hydrocephalus before and after ventriculo–peritoneal shunt] Horikawa M, et al. **No To Hattatsu** 1990 Jan;22(1):90–2 **(Jpn)**

[Transcranial Doppler ultrasonography—a new technic of examination of cerebral blood flow] Lass P, et al. **Wiad Lek** 1990 Apr 15;43(8):330–5 (Eng. Abstr.) **(Pol)**

[The variously directed reactions of the pial and cortical arterial branches in postischemic hyperemia in the cerebral cortex] Mchedlishvili GI, et al. **Fiziol Zh SSSR** 1989 Nov; 75(11):1534–40 (Eng. Abstr.) **(Rus)**

[Local neuroendocrine regulation of the cerebral vessels in acute disorders of cerebral blood circulation] Markina LD, et al. **Fiziol Zh SSSR** 1989 Oct;75(10):1397–404 (Eng. Abstr.) **(Rus)**

[Vascular reactivity in cerebral circulatory asthenia of various etiologies] Shtok VN, et al. **Sov Med** 1990;(1):92–4 **(Rus)**

[The use of vacuum ophthalmodynamometry for assessing pressure in the cortical arteries of the brain] Listopadova NA, et al. **Voen Med Zh** 1989 Sep;(9):52–3 **(Rus)**

[Syndromes of cerebral circulatory disorder in the anterior cerebral artery basin in the early postoperative period in tumors with a mediobasal localization] Dziubanova NA, et al. **Zh Vopr Neirokhir** 1990 Mar–Apr;(2):16–9 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[The effect of neodymium yttrium aluminum garment laser on the cerebral blood vessel and blood brain barrier] Sakaki T, et al. **No Shinkei Geka** 1989 Jul;17(7):641–6 (Eng. Abstr.) **(Jpn)**

[The early decrease in the endothelial cells of the cerebral vessels of rats after local irradiation] Eidus LKh, et al. **Radiobiologiia** 1990 Mar–Apr;30(2):266–9 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

[Radiocirculography in patients with cerebrovascular disorders] Ivanchev V, et al. **Zh Nevropatol Psikhiatr** 1990; 90(1):32–4 (Eng. Abstr.) **(Rus)**

SURGERY

Posterior inferior to posterior inferior cerebellar artery anastomosis combined with trapping for vertebral artery aneurysm. Case report. Ausman JI, et al. **J Neurosurg** 1990 Sep;73(3):462–5

Superficial temporal and occipital artery bypass pedicles to superior, anterior inferior, and posterior inferior cerebellar arteries for vertebrobasilar insufficiency. Ausman JI, et al. **J Neurosurg** 1990 Apr;72(4):554–8

Aneurysms of azygous anterior cerebral artery. Report of two cases treated by surgery. Nardi PV, et al. **J Neurosurg Sci** 1990 Jan–Mar;34(1):17–20

Dural arteriovenous fistulas supplied by ethmoidal arteries. Halbach VV, et al. **Neurosurgery** 1990 May;26(5):816–23 (29 ref.)

[Improvement in the mechanical properties of artificial blood vessel suitable for the extracranial cerebral artery] Miyamoto S, et al. **No Shinkei Geka** 1990 Mar;18(3):253–8 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of combined extra– and intracranial lesions of the carotid arteries] Grozovskiĭ IuL, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):12–9 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Ultrastructural changes induced by experimental subarachnoid haemorrhage and 6–hydroxydopamine in cat cerebral arteries. Rivilla F, et al. **Acta Neurochir (Wien)** 1989;100(3–4):158–63

Ultrastructure of capillaries and neuroglial cells in the hippocamus (sector CA1) during short–lasting ischemia and following blood recirculation. Tsitsishvili A, et al. **Neuropatol Pol** 1989;27(1):55–69

Evidence against the existence of GABA–B receptor sites in rat cerebrovascular tree. Napoleone P, et al. **Pharmacol Res** 1990 May–Jun;22(3):337–42

Study of the elastic skeleton of intracranial arteries in animal and human vessels by scanning electron microscopy. Yamazoe N, et al. **Stroke** 1990 May;21(5):765–70

Ultrastructural cerebrovascular changes in a model of subarachnoid hemorrhage in baboon based on triple cisternal blood injection. von Mecklenburg C, et al. **Surg Neurol** 1990 Mar;33(3):195–201

Alpha–adrenoceptors in human and animal cerebral arteries: alterations after sympathetic denervation and subarachnoid hemorrhage. Fujiwara M, et al. **Trends Pharmacol Sci** 1989 Aug;10(8):329–32 (32 ref.)

CEREBRAL ARTERIOSCLEROSIS

see related
DEMENTIA, VASCULAR

BLOOD

[Correlation between hemorheological and blood coagulation parameters in patients with arteriosclerosis of supraaortic vessels and/or recent cerebral ischemic attacks] Avellone G, et al. **Ric Clin Lab** 1989;19 Suppl 1:103–7 **(Ita)**

[Erythrocyte aggregation, erythrocyte filterability and membrane fluidity in single–area atherosclerotic vascular disease] Sarno A, et al. **Ric Clin Lab** 1989;19 Suppl 1:133–6 **(Ita)**

[Lipid peroxidation in patients with the initial stage of circulatory encephalopathy of atherosclerotic origin] Voloshin PV, et al. **Vrach Delo** 1989 Sep;(9):90–1 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Extracranial carotid atherosclerosis in patients with and without transient ischemic attacks and coronary artery disease. Howard G, et al. **Arterioscler Thromb** 1990 Sep–Oct; 10(5):714–9

Evaluation of the associations between carotid artery atherosclerosis and coronary artery stenosis. A case–control study. Craven TE, et al. **Circulation** 1990 Oct; 82(4):1230–42

Focal nodular hyperplasia of the liver associated with intracranial vascular malformations. Goldin RD, et al. **Gut** 1990 May;31(5):554–5

Acupuncture treatment of 60 cases of numbness due to cerebral arteriosclerosis. Cheng BG. **J Tradit Chin Med** 1989 Dec;9(4):245–6

Evaluation of extracranial carotid system with duplex scanner HR in hemiplegic patients. Pistarini C, et al. **Riv Neurol** 1989 Jul–Aug;59(4):150–7

[Selected clinical and pathogenetic problems of Binswanger's subcortical arteriosclerotic encephalopathy—analysis of 19 cases] Bogucki A, et al. **Neurol Neurochir Pol** 1989 Mar–Apr;23(2):97–104 (Eng. Abstr.) **(Pol)**

[The electroencephalographic image in Binswanger's subcortical arteriosclerotic encephalopathy] Działek E, et al. **Neurol Neurochir Pol** 1989 May–Jun;23(3):214–9 (Eng. Abstr.) **(Pol)**

[Atherosclerotic cerebro–ischemic hypertension (editorial)] Smolenskiĭ VS. **Kardiologiia** 1989 Nov;29(11):28–31 **(Rus)**

[Cerebral infarction in arteriosclerotic encephalopathy] Makarova LD. **Sov Med** 1989;(6):66–8 **(Rus)**

[Circulatory encephalopathy with organic dementia syndrome] Martynov IuS, et al. **Sov Med** 1990;(4):100–3 **(Rus)**

[Disorders of mental function in patients with circulatory encephalopathy due to hypertension and atherosclerosis] Voloshin PV, et al. **Vrach Delo** 1989 Jul;(7):77–80 (Eng. Abstr.) **(Rus)**

[The role of cerebral arteriosclerosis in the etiology of trigeminal neuralgia] Abdukhakimov FT, et al. **Zh Nevropatol Psikhiatr** 1990;90(4):11–3 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Carotid artery disease assessed by color Doppler flow imaging: correlation with standard Doppler sonography and angiography. Steinke W, et al. **AJNR** 1990 Mar–Apr; 11(2):259–66

Recent advances in carotid artery evaluation. Phillips DJ. **Clin Diagn Ultrasound** 1990;26:25–44 (21 ref.)

Ultrasonographic evaluation of the carotid arteries. Merritt CR. **Curr Opin Radiol** 1990 Apr;2(2):223–8 (12 ref.)

Carotid–CNS MR flow imaging. Masaryk TJ, et al. **Magn Reson Med** 1990 May;14(2):308–14

Drug test value by transcranial Doppler in the diagnosis of neurologic vascular diseases. Pendefunda L. **Neurol Psychiatr (Bucur)** 1990 Apr–Jun;28(2):135–41

Correlation of carotid bruits and carotid atherosclerosis detected by B–mode real–time ultrasonography [see comments] Howard VJ, et al. **Stroke** 1989 Oct; 20(10):1331–5 Comment in: Stroke 1990 Apr;21(4):678–9.

Accurate noninvasive method to diagnose minor atherosclerotic lesions in carotid artery bulb. van Merode T, et al. **Stroke** 1989 Oct;20(10):1336–40

Use of color-flow imaging technique in carotid artery disease. Sumner DS. **Surg Clin North Am** 1990 Feb; 70(1):201–11 (17 ref.)

Morphological characterization of carotid artery stenoses by ultrasound duplex scanning. Widder B, et al. **Ultrasound Med Biol** 1990;16(4):349–54

DRUG THERAPY

Suppression of cerebral, myocardial and renal arteriosclerosis by the calcium antagonist flunarizine in hypertensive rats (Skelton model) without reduction of the high blood pressure. Schwabedal PE, et al. **J Hypertens Suppl** 1989 Dec;7(6):S280–1

[Diagnosis and treatment of carotid artery stenoses] Knoll P, et al. **Acta Med Austriaca** 1989;16(5):104–9 (68 ref.) (Eng. Abstr.) **(Ger)**

[The effect of sermion on the main hemodynamic indices in patients with the initial manifestations of cerebral atherosclerosis] Tokar' AV, et al. **Vrach Delo** 1990 Feb; (2):27–30 (Eng. Abstr.) **(Rus)**

[Antioxidants in the prevention and treatment of cerebral arteriosclerosis] Bobyrev VN, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):60–3 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Binswanger's disease (Part II): Pathogenesis of subcortical arteriosclerotic encephalopathy and its relation to other dementing processes. Peterson B, et al. **J Geriatr Psychiatry Neurol** 1989 Oct–Dec;2(4):171–81 (57 ref.)

HISTORY

[The beginnings of the history of atherosclerosis in mental disorders] Doněk E, et al. **Cesk Psychiatr** 1989 Dec; 85(6):417–9 (Eng. Abstr.) **(Cze)**

METABOLISM

Cellular and immunologic features of carotid artery disease in man and experimental animal models. Holm J, et al. **Eur J Vasc Surg** 1990 Feb;4(1):49–55

PATHOLOGY

Hypertension, cerebral vascular changes and stroke in Ghana: cerebral atherosclerosis and stroke. Anim JI, et al. **East Afr Med J** 1989 Jul;66(7):468–75

Pathological findings correlated with magnetic resonance imaging in subcortical arteriosclerotic encephalopathy (Binswanger's disease). Révész T, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1337–44

[A case of Binswanger disease with numerous diffuse plaques in the neocortex] Inagaki T, et al. **No To Shinkei** 1990 Mar; 42(3):291–6 (Eng. Abstr.) **(Jpn)**

[Postmortem study of the cerebral vascular system by the method of vascular casts in patients with ischemic cerebral infarction] Stroińska-Kuś B. **Neurol Neurochir Pol** 1988 Nov–Dec;22(6):507–12 (Eng. Abstr.) **(Pol)**

PHYSIOPATHOLOGY

Circulatory effect of kallikrein; with special reference to cerebral circulation. Miyazaki M. **Adv Exp Med Biol** 1989; 247B:607–10

[Study of evoked potentials in patients with arteriosclerotic and senile dementia] Bogdanov AS, et al. **Zh Nevropatol Psikhiatr** 1990;90(3):110–3 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

[Effect of luliberin in the treatment of mental disorders in cerebral arteriosclerosis] Tikhomirov SM, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):121–3 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Intra-arterial digital subtraction angiography for suspected cerebrovascular disease—current status. Hoe J, et al. **Ann Acad Med Singapore** 1989 Nov;18(6):696–701

Anatomical variations of the carotid bifurcation: implications for digital subtraction angiography and ultrasonography. Trigaux JP, et al. **Br J Radiol** 1990 Mar;63(747):181–5

Mapping of rCBF and cerebrovascular reserve capacity by stable xenon CT in cerebrovascular disease: pathophysiological aspects and effects of operative therapy. Gaab MR, et al. **Psychiatry Res** 1989 Sep;29(3):309–12

[Ischemic optic neuropathy (apoplexia papillae) and ischemic micro-infarcts of the retinal nerve fiber layer in extreme internal carotid artery kinking] Schönherr U, et al. **Klin Monatsbl Augenheilkd** 1990 Jul;197(1):9–13 (Eng. Abstr.) **(Ger)**

[Effect of the geometry of atherosclerotic carotid artery lesions on their angiography image—an arteriography study] Neufang KF, et al. **Rontgenblatter** 1990 Jan; 43(1):11–5 (Eng. Abstr.) **(Ger)**

SURGERY

How to predict which patient with carotid atherosclerosis is "high risk". Schroeder T. **Acta Chir Scand Suppl** 1990; 555:209–22 (123 ref.)

Antiplatelet treatment prolongs survival after carotid bifurcation endarterectomy. Analysis of the clinical series followed by a controlled trial. Kretschmer G, et al. **Ann Surg** 1990 Mar;211(3):317–22

[Pneumonectomy with atrial resection in a patient with lung cancer with concomitant atherosclerotic encephalopathy] Gagua RO, et al. **Grudn Khir** 1989 Sep–Oct;(5):95–6 **(Rus)**

THERAPY

Surgical versus medical treatment for symptomatic carotid atherosclerosis. Warlow C. **Acta Chir Scand Suppl** 1990; 555:223–4

Antiplatelet therapy following carotid bifurcation endarterectomy. Evaluation of a controlled clinical trial. Prognostic significance of histologic plaque examination on behalf of survival. Pratschner T, et al. **Eur J Vasc Surg** 1990 Jun;4(3):285–9

Late results of surgical and nonoperative treatment of carotid stenosis. Eighty-four patients documented by angiography in 1974–1976. Salenius JP, et al. **J Cardiovasc Surg (Torino)** 1990 Mar–Apr;31(2):156–61

[Sanatorium treatment combined with acupuncture in patients with the initial manifestations of insufficient blood supply of the brain] Gubenko VP. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Sep–Oct;(5):30–2 **(Rus)**

CEREBRAL ARTERIOVENOUS MALFORMATIONS

Arteriovenous malformations involving the vein of Galen [see comments] Nicholson AA, et al. **Arch Dis Child** 1989 Dec;64(12):1653–5 (14 ref.) Comment in: Arch Dis Child 1990 May;65(5):559.

Intracranial arteriovenous malformations. Current imaging and treatment. Graves VB, et al. **Invest Radiol** 1990 Aug; 25(8):952–60 (38 ref.)

The natural history of symptomatic arteriovenous malformations of the brain: a 24-year follow-up assessment. Ondra SL, et al. **J Neurosurg** 1990 Sep;73(3):387–91

CLASSIFICATION

[Prognostic value of grading systems in cerebral arteriovenous malformations] Höllerhage HG, et al. **Neurochirurgia (Stuttg)** 1990 May;33(3):59–64 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Progressive visual field defects in patients with intracranial arteriovenous malformations. Kashii S, et al. **Am J Ophthalmol** 1990 May 15;109(5):556–62

Caesarean section and ablation of a cerebral arterio-venous malformation. Buckley TA, et al. **Anaesth Intensive Care** 1990 May;18(2):248–51

Painful oculomotor nerve palsy due to dural-cavernous sinus shunt. Hawke SH, et al. **Arch Neurol** 1989 Nov; 46(11):1252–5

Ruptured arteriovenous malformation complicating thrombolytic therapy with tissue plasminogen activator. Proner J, et al. **Arch Neurol** 1990 Jan;47(1):105–6

The association of arteriovenous malformation and aneurysm within the posterior cranial fossa—report of a case. Lin TK, et al. **Chang Keng I Hsueh** 1990 Mar 20;13(1):59–64

Arteriovenous malformation of the great vein of Galen associated with patent ductus arteriosus. Report of three cases and review of the literature. Crawford JM, et al. **Childs Nerv Syst** 1990 Jan;6(1):18–22 (35 ref.)

Pulsatile tinnitus: three cases of arteriovenous fistula treated by ligation of the occipital artery. Courteney-Harris RG, et al. **J Laryngol Otol** 1990 May;104(5):421–2

Pulsatile tinnitus and dural arteriovenous malformation. Morrison GA. **J Laryngol Otol** 1989 Nov;103(11):1073–5

Management of intraventricular haemorrhage secondary to ruptured arteriovenous malformation in a child with von Willebrand's disease [letter] Osenbach RK, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1452–4

Intracranial dural arteriovenous malformations: factors predisposing to an aggressive neurological course. Awad IA, et al. **J Neurosurg** 1990 Jun;72(6):839–50 (114 ref.)

Arteriovenous malformation and glioma: coexistent or sequential? Case report. Goodkin R, et al. **J Neurosurg** 1990 May;72(5):798–805 (21 ref.)

Recurrent intraparenchymal hemorrhages from angiographically occult vascular malformations. Tung H, et al. **J Neurosurg** 1990 Aug;73(2):174–80

Choroid plexus arteriovenous malformation in a full-term neonate. Case report. Wakai S, et al. **J Neurosurg** 1990 Jan;72(1):127–9 (14 ref.)

Late onset of a large cavernous aneurysm after spontaneous disappearance of cerebral arteriovenous malformation. Case report. Salpietro FM, et al. **J Neurosurg Sci** 1989 Apr–Jun; 33(2):211–4

Unilateral sudden hearing loss as a result of anomalous carotid anatomy. Snyder SO Jr. **J Vasc Surg** 1990 Sep; 12(3):341–4

The retrolabyrinthine approach and vascular loop. Wiet RJ, et al. **Laryngoscope** 1989 Oct;99(10 Pt 1):1035–9

Multiple cerebral and pulmonary arteriovenous malformations in association with brain and subcutaneous abscesses: a possible variant of hereditary hemorrhagic telangiectasia—case report. Kawaguchi T, et al. **Neurol Med Chir (Tokyo)** 1990 Apr;30(4):272–6

Intracerebellar hematoma in a term newborn secondary to an angiomatous malformation—case report. Sakaki S, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):579–82

Superior oblique palsy due to a midbrain vascular malformation. Gonyea EF. **Neurology** 1990 Mar;40(3 Pt 1):554–5

Persistent hypoglossal artery in combination with multifocal arteriovenous malformations of the brain: case report. Garza-Mercado R, et al. **Neurosurgery** 1990 May; 26(5):871–6

Bilateral arteriovenous malformations of the choroid plexus and retina. Iplikçioğlu AC, et al. **Neurosurgery** 1990 Aug; 27(2):302–5

Spinal cord cavernous malformation in a patient with familial intracranial cavernous malformations. Lee KS, et al. **Neurosurgery** 1990 May;26(5):877–80

Multiple peripheral aneurysms of the posterior inferior cerebellar artery associated with a cerebellar arteriovenous malformation: case report. Mintz A, et al. **Neurosurgery** 1990 Mar;26(3):533–6; discussion 536–7

Foix-Alajouanine syndrome [letter] Symon L. **Neurosurgery** 1990 Jul;27(1):168–9

Unilateral hydrocephalus caused by an intraventricular venous malformation obstructing the foramen of Monro. Tien R, et al. **Neurosurgery** 1990 Apr;26(4):664–6

Hemorrhage in intracerebral arteriovenous malformations: angiographic determinants. Marks MP, et al. **Radiology** 1990 Sep;176(3):807–13

A false aneurysm coexisting with arteriovenous malformation in the cerebellum. Yokota A, et al. **Sangyo Ika Daigaku Zasshi** 1989 Sep 1;11(3):333–40

Management of subarachnoid hemorrhage. Crowell RM. **Semin Neurol** 1989 Sep;9(3):210–7 (5 ref.)

Association of intracranial meningioma with arteriovenous malformation. Soria E, et al. **Surg Neurol** 1990 Aug; 34(2):111–7 (31 ref.)

Brain tumors associated with intracranial vascular anomalies. Brzeziński J, et al. **Zentralbl Neurochir** 1989;50(3–4):201–2

[Aneurysm of the vein of Galen as a possible cause of congestive heart failure: a report of 5 new cases] Breuer J, et al. **Monatsschr Kinderheilkd** 1989 Nov;137(11):726–32 (Eng. Abstr.) **(Ger)**

[Intracerebral hemorrhage in childhood] Grimm-Eckardt A, et al. **Radiologe** 1990 Jul;30(7):351–2 **(Ger)**

[Arteriovenous malformation associated with cyst. Case report] Takifuji K, et al. **Neurol Med Chir (Tokyo)** 1989 Apr;29(4):338–41 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Three cases of cryptic arteriovenous malformation in basal ganglia manifested by putaminal hemorrhage] Niwa J, et al. **No Shinkei Geka** 1990 Jul;18(7):665–8 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Multiple cerebral venous angiomas associated with mixed pial and dural arteriovenous malformation] Tanohata K, et al. **Rinsho Hoshasen** 1989 Jun;34(6):731–4 (Eng. Abstr.) **(Jpn)**

[Millard-Gubler syndrome in a young man after hemorrhage from arteriovenous hemangioma to the brain stem] Gardela G, et al. **Neurol Neurochir Pol** 1989 Mar–Apr;23(2):149–52 (Eng. Abstr.) **(Pol)**

[Coexistence of several arteriovenous fistulas in the pia mater. Case report] Majchrzak H, et al. **Neurol Neurochir Pol** 1988 Nov–Dec;22(6):563–6 (Eng. Abstr.) **(Pol)**

[Micromalformations of the cerebral vessels and their role in the development of stroke] Matsko DE. **Arkh Patol** 1989; 51(11):19–27 (Eng. Abstr.) **(Rus)**

[Proton stereotaxic therapy of epilepsy due to cerebral arteriovenous aneurysms] Konnov BA, et al. **Med Radiol (Mosk)** 1990 May;35(5):3–5 (Eng. Abstr.) **(Rus)**

[Diagnosis of vascular compression of the trigeminal and glossopharyngeal nerve roots] Auders AG, et al. **Zh Nevropatol Psikhiatr** 1990;90(4):8–11 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Three-dimensional phase-contrast MR angiography in the head and neck: preliminary report. Pernicone JR, et al. **AJNR** 1990 May;11(3):457–66

Comparison of MR imaging with clinical history in the identification of hemorrhage in patients with cerebral arteriovenous malformations. Yousem DM, et al. **AJNR** 1989 Nov–Dec;10(6):1151–4

Cranial arteriovenous malformations in neonates: color Doppler imaging with angiographic correlation. Tessler FN, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):1027–30

Two-dimensional echocardiography and Doppler findings in cerebral arteriovenous malformations [letter; comment] Kessler RM, et al. **Am J Cardiol** 1990 Apr 15;65(15):1050 Comment on: Am J Cardiol 1989 Jul 15;64(3):252–4.

Aneurysm of the vein of Galen: a new cause for Ballantyne syndrome. Ordorica SA, et al. **Am J Obstet Gynecol** 1990 May;162(5):1166–7

Hereditary cerebral arteriovenous malformations [letter; comment] Gomez CR. **Arch Neurol** 1989 Nov;46(11):1168 Comment on: Arch Neurol 1989 Feb;46(2):184–7.

Cerebral medullary venous malformations. Report of four cases and review of the literature. Dias PS, et al. **Br J Neurosurg** 1988;2(1):7–21

Positron emission tomography studies of changes in cerebral blood flow and oxygen metabolism in arteriovenous malformation of the brain. De Reuck J, et al. **Eur Neurol** 1989;29(5):294–7

MR imaging of dural AV fistulas at the cavernous sinus. Komiyama M, et al. **J Comput Assist Tomogr** 1990 May–Jun;14(3):397–401

A case of aneurysm of the vein of Galen. Sung KB, et al. **J Korean Med Sci** 1987 Jun;2(2):117–21

Epileptogenic cerebral vascular malformations and MRI. Trussart V, et al. **J Neuroradiol** 1989 Dec;16(4):273–84 **(Eng, Fre)**

Diagnosis and treatment of vascular brain–stem malformations. Kashiwagi S, et al. **J Neurosurg** 1990 Jan; 72(1):27–34

Cerebral venous malformations. Rigamonti D, et al. **J Neurosurg** 1990 Oct;73(4):560–4

Peripheral cerebral arteriovenous malformation in an infant: assessment by transcranial color flow mapping. Vaksmann G, et al. **JCU** 1990 Mar–Apr;18(3):215–7

Head and neck hemorrhage. Gomori JM, et al. **Magn Reson Annu** 1987;:71–112 (26 ref.)

Magnetic resonance imaging of an angiographically occult arteriovenous malformation—case report. Yamada H, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):433–6

Colour Doppler imaging of arteriovenous malformation of the vein of Galen in a newborn. Deeg KH, et al. **Neuroradiology** 1990;32(1):60–3

Cerebral vascular malformations: applications of magnetic resonance imaging to differential diagnosis. Imakita S, et al. **Neuroradiology** 1989;31(4):320–5

Wyburn–Mason syndrome. A case report and review of the literature. Patel U, et al. **Neuroradiology** 1990;31(6):544–6 (10 ref.)

Evidence of redistribution of cerebral blood flow during treatment for an intracranial arteriovenous malformation. Batjer HH, et al. **Neurosurgery** 1989 Oct;25(4):599–604; discussion 605

Intracerebral arteriovenous malformations: evaluation with selective MR angiography and venography. Edelman RR, et al. **Radiology** 1989 Dec;173(3):831–7

Intracranial vascular lesions: optimization and clinical evaluation of three–dimensional time–of–flight MR angiography. Marchal G, et al. **Radiology** 1990 May; 175(2):443–8

Occult cerebrovascular malformations: follow–up with MR imaging. Sigal R, et al. **Radiology** 1990 Sep;176(3):815–9

Transcranial Doppler ultrasonographic changes after treatment for arteriovenous malformations. Petty GW, et al. **Stroke** 1990 Feb;21(2):260–6

Aneurysms and vascular malformations [published erratum appears in Top Magn Reson Imaging 1990 Mar;2(2):V] Hyman RA, et al. **Top Magn Reson Imaging** 1989 Dec; 2(1):49–62 (35 ref.)

[Magnetic resonance imaging of occult intracranial malformations] Gao PY. **Chung Hua I Hsueh Tsa Chih** 1989 Jul;69(7):375–7, 28 (Eng. Abstr.) **(Chi)**

[Benign pulsatile cranial bruit in children. Apropos of 6 cases] Pruvost P, et al. **Arch Fr Pediatr** 1989 Oct;46(8):579–82 (Eng. Abstr.) **(Fre)**

[Angiographically occult vascular malformations in the posterior fossa] Kyoshima K, et al. **Nippon Geka Hokan** 1989 Mar 1;58(2):257–64 (Eng. Abstr.) **(Jpn)**

[Angiographically occult AVM: report on two cases] Yoshida S, et al. **Nippon Geka Hokan** 1988 Nov 1; 57(6):552–8 (Eng. Abstr.) **(Jpn)**

[Subdural hematoma from ruptured arteriovenous malformation; demonstration by MR imaging] Irie T, et al. **Rinsho Hoshasen** 1989 Oct;34(11):1377–81 (Eng. Abstr.) **(Jpn)**

[A case of an arteriosinusal anastomosis] Voronov VG, et al. **Zh Vopr Neirokhir** 1990 May–Jun;(3):33–4 **(Rus)**

[Cerebral magnetic resonance in the diagnosis of cryptic vascular malformations (telangiectases). Presentation of a case (letter)] Martín Algarra S, et al. **Med Clin (Barc)** 1989 Sep 30;93(9):356 **(Spa)**

ETIOLOGY

Dural arteriovenous malformation secondary to meningioma removal. Ugrinovski J, et al. **Br J Neurosurg** 1989; 3(5):603–7

[Rendu–Osler–Weber disease and cerebral arteriovenous malformation (letter)] Iriarte García–Baquero LM, et al. **Neurologia** 1988 Mar–Apr;3(2):83–4 **(Spa)**

GENETICS

Three cases of ruptured intracranial aneurysm in a family. Diersen G, et al. **Neurochirurgia (Stuttg)** 1990 May; 33(3):85–7

METABOLISM

Isolated growth hormone deficiency associated with a giant arteriovenous varix. Martin NA, et al. **Neurosurgery** 1990 Aug;27(2):295–9

MORTALITY

Decision analysis [letter; comment] Dippel DW, et al. **Neurosurgery** 1989 Oct;25(4):668–70 Comment on: Neurosurgery 1989 Jan;24(1):129–35.

[The death of a patient with latent syphilis from rupture of a cerebral aneurysm] Khalemin IaA, et al. **Vestn Dermatol Venerol** 1989;(11):73–4 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Cerebral arteriovenous malformations. A detailed morphological and immunohistochemical study using actin. Mandybur TI, et al. **Arch Pathol Lab Med** 1990 Sep; 114(9):970–3

Posterior fossa arteriovenous malformations. Angioarchitecture in relation to their hemorrhagic episodes. Garcia Monaco R, et al. **Neuroradiology** 1990; 31(6):471–5

Carcinoma metastatic to a cerebellar vascular malformation: case report. Greene GM, et al. **Neurosurgery** 1990 Jun; 26(6):1054–6; discussion 1056–7

PHYSIOPATHOLOGY

A study on the venous drainage of 150 cerebral arteriovenous malformations as related to haemorrhagic risks and size of the lesion. Albert P, et al. **Acta Neurochir (Wien)** 1990; 103(1–2):30–4

Intracranial hypertension associated with unruptured cerebral arteriovenous malformations. Chimowitz MI, et al. **Ann Neurol** 1990 May;27(5):474–9 (18 ref.)

Spontaneous angiographic disappearance of an intracranial arteriovenous malformation. Gibb PA, et al. **Br J Neurosurg** 1988;2(4):529–33 (21 ref.)

A model of the pathophysiology of cerebral arteriovenous malformations by a carotid–jugular fistula in the rat. Morgan MK, et al. **Brain Res** 1989 Sep 4;496(1–2):241–50

Hemodynamics of arteriovenous malformations. Leblanc R, et al. **Clin Neurosurg** 1990;36:299–317

Intracranial arteriovenous malformation: contralateral steal phenomena. Batjer HH, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):401–6

The effects of hyperventilation on cerebral blood flow in the rat with an open and closed carotid–jugular fistula. Morgan MK, et al. **Neurosurgery** 1989 Oct;25(4):606–11; discussion 611–2

A study of the reactivity of feeding vessels to arteriovenous malformations: correlation with clinical outcome. Muraszko K, et al. **Neurosurgery** 1990 Feb;26(2):190–9; discussion 199–200

[Evaluation of cerebral hemodynamics by 123I–IMP in cerebral AVMs before and after operation by using SPECT] Toyama H, et al. **Kaku Igaku** 1989 Dec; 26(12):1479–86 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Use of acetazolamide–challenge xenon CT in the assessment of cerebral blood flow dynamics in patients with arteriovenous malformations. Tarr RW, et al. **AJNR** 1990 May;11(3):441–8

Radiological cases of the month. Systemic air embolism within a vein of Galen malformation. Mehall CJ, et al. **Am J Dis Child** 1990 Jan;144(1):95–6

Spontaneous thrombosis of a cerebral arteriovenous malformation. Barker CS, et al. **Clin Radiol** 1990 Aug; 42(2):130–2

Multiple dural arteriovenous malformations. Report of two cases. Kuwayama N, et al. **J Neurosurg** 1989 Dec; 71(6):932–4

Determination of cerebral blood flow in an arteriovenous malformation using SPECT scanning. Rosenblum B, et al. **N Y State J Med** 1989 Nov;89(11):627–8

Arteriovenous malformation of the corpus callosum associated with persistent primitive trigeminal artery—case report. Uchino A, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):429–32

A hole in the head—a case study. Everitt C. **Radiogr Today** 1990 May;56(636):24–6

[Intracranial arterial aneurysm in children] Bröcheler J, et al. **Klin Padiatr** 1990 Jan–Feb;202(1):20–3 (Eng. Abstr.) **(Ger)**

[Demonstration of a vascular lesion by intraoperative portable DSA in a case of intracerebral hematoma with impending herniation] Meguro K, et al. **No Shinkei Geka** 1990 May;18(5):453–6 (Eng. Abstr.) **(Jpn)**

[A case of Wyburn–Mason syndrome] Fujita H, et al. **Rinsho Shinkeigaku** 1989 Aug;29(8):1039–44 (Eng. Abstr.) **(Jpn)**

[Angiographic criteria for the morphologic and locational classification of angiomas] Slaković S. **Med Arh** 1986; 40(5):217–20 (Eng. Abstr.) **(Scr)**

[Angiographically occult cerebrovascular malformation: an entity to consider] Yáñez Baña RM, et al. **Neurologia** 1988 Nov–Dec;3(6):244–7 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

Functional PET scanning in the assessment of cerebral arteriovenous malformations. Case report. Leblanc R, et al. **J Neurosurg** 1990 Oct;73(4):615–9

Intracranial arteriovenous malformation: relationships between clinical and radiographic factors and cerebral blood flow. Batjer HH, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):395–400

A case of medullary venous malformations with an arterial component coexisting with arteriovenous malformations. Tomura N, et al. **Surg Neurol** 1990 Jan;33(1):37–42

RADIOTHERAPY

Diagnosis of delayed cerebral radiation necrosis following proton beam therapy. Kaufman M, et al. **Arch Neurol** 1990 Apr;47(4):474–6

Stereotactic gamma knife radiosurgery. Initial North American experience in 207 patients. Lunsford LD, et al. **Arch Neurol** 1990 Feb;47(2):169–75

Comparison of different radiation types and irradiation geometries in stereotactic radiosurgery. Phillips MH, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan;18(1):211–20

Critique of "Stereotactic radiosurgery for intracranial arteriovenous malformations using a standard linear accelerator" [letter] Wollin M, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1535–6

Cerebral radiation necrosis complicating stereotactic radiosurgery for arteriovenous malformation. Statham P, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):476–9

Radiation treatment of cerebral arteriovenous malformations [editorial; comment] Heros RC, et al. **N Engl J Med** 1990 Jul 12;323(2):127–9 Comment on: N Engl J Med 1990 Jul 12;323(2):96–101.

Stereotactic heavy–charged–particle Bragg–peak radiation for intracranial arteriovenous malformations [see comments] Steinberg GK, et al. **N Engl J Med** 1990 Jul 12;323(2):96–101 Comment in: N Engl J Med 1990 Jul 12;323(2):127–9.

Radiosurgery [letter; comment] Kjellberg RN. **Neurosurgery** 1989 Oct;25(4):670–2 Comment on: Neurosurgery 1989 Feb;24(2):297–8.

Radiation therapy for arteriovenous malformations: a review. Ogilvy CS. **Neurosurgery** 1990 May;26(5):725–35 (65 ref.)

Gamma knife radiosurgery for intracranial arteriovenous malformations in childhood and adolescence. Altschuler EM, et al. **Pediatr Neurosci** 1989;15(2):53–61

Role of stereotactic radiosurgery with a linear accelerator in treatment of intracranial arteriovenous malformations and tumors in children. Loeffler JS, et al. **Pediatrics** 1990 May;85(5):774–82

Radiotherapy of dural arteriovenous malformation in the cavernous sinus. Hidaka H, et al. **Radiat Med** 1989 May–Jun;7(3):160–4

Stereotactic radiosurgery of the brain using a standard linear accelerator: a study of early and late effects. Loeffler JS, et al. **Radiother Oncol** 1990 Apr;17(4):311–21

Relief of epilepsy by radiosurgery of cerebral arteriovenous malformations. Heikkinen ER, et al. **Stereotact Funct Neurosurg** 1989;53(3):157–66

[Stereotactically targeted radiotherapy of cerebral arteriovenous malformations] Kimmig B, et al. **Strahlenther Onkol** 1989 Sep;165(9):652–6 (Eng. Abstr.) **(Ger)**

[Eight cases of intracranial arteriovenous malformations treated by conventional radiation therapy] Harada M, et al. **Rinsho Hoshasen** 1990 Mar;35(3):315–9 (Eng. Abstr.) **(Jpn)**

SURGERY

Left occipital lobectomy and the preangular anatomy of reading. Greenblatt SH. **Brain Lang** 1990 May;38(4):576–95

Grading and staged resection of cerebral arteriovenous malformations. Spetzler RF, et al. **Clin Neurosurg** 1990; 36:318–37

Stereotactic resection of occult vascular malformations. Davis DH, et al. **J Neurosurg** 1990 May;72(5):698–702

Intraoperative digital subtraction angiography and the surgical treatment of intracranial aneurysms and vascular malformations. Martin NA, et al. **J Neurosurg** 1990 Oct; 73(4):526–33

Management of dural arteriovenous malformations of the anterior cranial fossa. Martin NA, et al. **J Neurosurg** 1990 May;72(5):692–7

Retrograde thrombosis of feeding arteries after removal of arteriovenous malformations. Miyasaka Y, et al. **J Neurosurg** 1990 Apr;72(4):540–5

Feeding arteries to arteriovenous malformations [letter] Parkinson D. **J Neurosurg** 1990 Sep;73(3):477–8

Modulation of blood flow following excision of a high–flow cerebral arteriovenous malformation. Case report. Tamaki N, et al. **J Neurosurg** 1990 Mar;72(3):509–12

Direct approach to arteriovenous malformations in functional areas of the cerebral hemisphere. Yamada S, et al. **J Neurosurg** 1990 Mar;72(3):418–25

Surgical management of epilepsy associated with cerebral arteriovenous malformations. Yeh HS, et al. **J Neurosurg** 1990 Feb;72(2):216–23

Treatment of dolichoectasia of the middle cerebral artery with bypass and exclusion. de los Reyes RA, et al. **N Y State J Med** 1989 Nov;89(11):629–33 (95 ref.)

Frontal hypermetabolism and thalamic hypometabolism in a patient with abnormal orienting and retrosplenial amnesia. Heilman KM, et al. **Neuropsychologia** 1990;28(2):161–9

Application of decision analysis to unruptured arteriovenous malformations [letter; comment] Elstein AS, et al. **Neurosurgery** 1990 Mar;26(3):545–6 Comment on: Neurosurgery 1989 Jan;24(1):129–35.

Surgical excision of cerebral arteriovenous malformations:

late results. Heros RC, et al. **Neurosurgery** 1990 Apr; 26(4):570–7; discussion 577–8
Vein of Galen malformations [letter; comment] Lasjaunias P. **Neurosurgery** 1989 Oct;25(4):666–7 Comment on: Neurosurgery 1989 Mar;24(3):406–10.
The effect of arteriovenous malformation resection on cerebrovascular reactivity to carbon dioxide. Young WL, et al. **Neurosurgery** 1990 Aug;27(2):257–66; discussion 266–7
Microsurgical treatment of arteriovenous malformations of the brain in a defined population. Hernesniemi J, et al. **Surg Neurol** 1990 Jun;33(6):384–90
Vascular malformations and pregnancy. Sadasivan B, et al. **Surg Neurol** 1990 May;33(5):305–13
[Treatment of the association of arteriovenous malformation and cerebral aneurysms] Kagawa J, et al. **No Shinkei Geka** 1989 Jul;17(7):615–23 (Eng. Abstr.) **(Jpn)**
[Surgical indication to deep-seated arteriovenous malformation] Akachi K, et al. **No To Shinkei** 1989 Jul; 41(7):673–9 (Eng. Abstr.) **(Jpn)**
[Long-term results of cerebral arteriovenous malformations—surgical and conservative treatment] Andoh T, et al. **No To Shinkei** 1990 Apr;42(4):367–76 (Eng. Abstr.) **(Jpn)**
[Use of cortical somatosensory evoked potentials in surgical treatment of AVMs in and around the central sulcus] Takenobu A, et al. **No To Shinkei** 1990 Mar;42(3):253–60 (Eng. Abstr.) **(Jpn)**
[The microsurgical treatment of arteriovenous malformations in the hippocampus] Filatov IuM, et al. **Zh Vopr Neirokhir** 1990 Mar–Apr;(2):13–6 (Eng. Abstr.) **(Rus)**
[Arteriovenous malformations of the occipital lobe] Garza-Mercado R. **Gac Med Mex** 1989 Sep–Oct; 125(9–10):303–10; discussion 311–2 **(Spa)**
[Pseudomonas aeruginosa infection following ventriculo-peritoneal shunt (letter)] Saló J, et al. **Med Clin (Barc)** 1990 Jan 27;94(3):116 **(Spa)**

THERAPY

Embolization of cerebral arteriovenous malformations with bucrylate. Experience in a first series of 29 patients. Berthelsen B, et al. **Acta Radiol** 1990 Jan;31(1):13–21
Transfemoral venous embolization of vein of Galen malformations. Dowd CF, et al. **AJNR** 1990 Jul–Aug; 11(4):643–8
Aneurysms of the petrous portion of the internal carotid artery: results of treatment with endovascular or surgical occlusion. Halbach VV, et al. **AJNR** 1990 Mar–Apr; 11(2):253–7
Preoperative embolization of cerebral arteriovenous malformations with polyvinyl alcohol particles: experience in 51 adults. Purdy PD, et al. **AJNR** 1990 May;11(3):501–10
Arteriovenous malformations in the vein of Galen [letter; comment] Halliday HL, et al. **Arch Dis Child** 1990 May; 65(5):559 Comment on: Arch Dis Child 1989 Dec;64(12):1653–5.
Management of cerebrovascular malformations. Dias PS, et al. **Br J Hosp Med** 1989 Nov;42(5):372–84 (46 ref.)
Differential recovery of languages in a bilingual patient: a case study using selective amytal test. Berthier ML, et al. **Brain Lang** 1990 Apr;38(3):449–53
Management of vein of Galen aneurysms. Combined surgical and endovascular approach. King WA, et al. **Childs Nerv Syst** 1989 Aug;5(4):208–11
Intravascular treatment of aneurysms. Hieshima GB, et al. **Clin Neurosurg** 1990;36:338–43
Natural course of unoperated intracranial arteriovenous malformations: study of 50 cases. Itoyama Y, et al. **J Neurosurg** 1989 Dec;71(6):805–9
Interventional neuroradiological management of vein of Galen malformations in the neonate. Ciricillo SF, et al. **Neurosurgery** 1990 Jul;27(1):22–7; discussion 27–8
Arteriovenous malformations of the brain: recent results of endovascular therapy. Fox AJ, et al. **Radiology** 1990 Oct; 177(1):51–7
Focal headache during balloon inflation in the internal carotid and middle cerebral arteries. Nichols FT 3d, et al. **Stroke** 1990 Apr;21(4):555–9
[Liquid embolization for arteriovenous malformation with temporary balloon occlusion of another feeders] Abe H, et al. **Rinsho Hoshasen** 1989 Jun;34(6):739–42 (Eng. Abstr.) **(Jpn)**

CEREBRAL ARTERY DISEASES

COMPLICATIONS

Spontaneous bilateral anterior cerebral artery occlusion resulting in akinetic mutism. A case report. Gugliotta MA, et al. **Acta Neurol (Napoli)** 1989 Aug;11(4):252–8
Multiple neurological lesions due to vertebrobasilar dolichoectasia. Jamjoom AB, et al. **Br J Neurosurg** 1990; 4(2):147–54
Internal borderzone infarction following acute middle cerebral artery occlusion. Angeloni U, et al. **Neurology** 1990 Aug;40(8):1196–8
Akinetic mutism caused by bilateral anterior cerebral tuberculous obliterative arteritis. Fesenmeier JT, et al. **Neurology** 1990 Jun;40(6):1005–6
Multiple peripheral aneurysms of the posterior inferior cerebellar artery associated with a cerebellar arteriovenous malformation: case report. Mintz A, et al. **Neurosurgery** 1990 Mar;26(3):533–6; discussion 536–7
[Cerebral amyloid angiopathy] Gray F. **Presse Med** 1989 Nov 11;18(37):1818–20 **(Fre)**
[Preleukemia presenting optic agnosia caused by several attacks of cerebral hemorrhage due to amyloid angiopathy] Kurata H, et al. **Nippon Naika Gakkai Zasshi** 1989 Dec; 78(12):1742–6 **(Jpn)**
[Clinical study on the relationship between middle cerebral artery lesions and Binswanger type infarction] Iwamoto T, et al. **Nippon Ronen Igakkai Zasshi** 1989 Jul;26(4):340–6 (Eng. Abstr.) **(Jpn)**
[Two cases of subcortical hemorrhage with asymptomatic occlusion of the main trunk of cerebral artery] Ezura M, et al. **No Shinkei Geka** 1990 Apr;18(4):379–83 (Eng. Abstr.) **(Jpn)**
[A case of anterior communicating artery aneurysm with occlusion of the bilateral middle cerebral arteries] Kurata H, et al. **No Shinkei Geka** 1989 Jun;17(6):585–7 (13 ref.) (Eng. Abstr.) **(Jpn)**
[Lobar intracerebral hemorrhage secondary to cerebral amyloid angiopathy: a clinicopathologic study of three operated cases] Andoh Y, et al. **No To Shinkei** 1989 Dec; 41(12):1217–23 (23 ref.) (Eng. Abstr.) **(Jpn)**
[A case of cerebral arterial ectasia accompanied by intraventricular hemorrhage] Enomoto H, et al. **Rinsho Hoshasen** 1990 Jun;35(6):733–5 (Eng. Abstr.) **(Jpn)**
[Acquired aphasia syndrome with epilepsy (Landau-Kleffner syndrome) secondary to cerebral arteritis. 4 cases] Martínez Bermejo A, et al. **Neurologia** 1989 Oct;4(8):296–9 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Temporal arteritis presenting as an extrapyramidal disorder. Santambrogio L, et al. **Acta Neurol Scand** 1990 Apr; 81(4):361–2
Dolichoectasia and cranial nerve palsies. A case report. Durand JR, et al. **J Clin Neuro Ophthalmol** 1989 Dec; 9(4):249–53
Major pitfalls in Doppler investigations with particular reference to the cerebral vascular system. Part I. Sources of error, resulting pitfalls and measures to prevent errors. Winkler P, et al. **Pediatr Radiol** 1990;20(4):219–28
[Imaging diagnosis of central nervous system involvement in panarteritis nodosa] Wildhagen K, et al. **Z Rheumatol** 1989 Nov–Dec;48(6):323–5 (Eng. Abstr.) **(Ger)**
[MRI of middle cerebral artery occlusion] Uchino A, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Nov 25; 49(11):1355–60 (Eng. Abstr.) **(Jpn)**
[The application of vascular endoscope for the extracranial cerebrovascular occlusive disease: the development of the endoscopic system] Miyamoto S, et al. **No Shinkei Geka** 1989 Jul;17(7):625–8 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

Impaired homocysteine metabolism in early-onset cerebral and peripheral occlusive arterial disease. Effects of pyridoxine and folic acid treatment. Brattström L, et al. **Atherosclerosis** 1990 Feb;81(1):51–60 (42 ref.)
Thrombolytic therapy of cerebral arterial occlusion with recombinant tissue plasminogen activator. Overgaard K, et al. **Neurol Res** 1990 Jun;12(2):78–80
Fatal ischaemic brain oedema after unsuccessful thrombolysis. Overgaard K, et al. **Neurol Res** 1990 Jun; 12(2):81–2
[Pharmacology of spasm of intracranial arteries in aneurysm rupture. The latest views on the therapeutic possibilities] Ryba M, et al. **Neurol Neurochir Pol** 1989 Jan;23(1):58–63 (30 ref.) **(Pol)**

ETIOLOGY

Vertebral artery occlusion associated with closed head injury: report of three cases. Bishara SN, et al. **Br J Neurosurg** 1989;3(4):495–501
Neck trauma with embolization of the middle cerebral artery by a metal splinter. Langenbach M, et al. **Neurology** 1990 Mar;40(3 Pt 1):552–3 (7 ref.)
Reversible middle cerebral artery embolization in dogs without intracranial surgery [see comments] Purdy PD, et al. **Stroke** 1989 Oct;20(10):1368–76 Comment in: Stroke 1990 Apr;21(4):679–80.
[Boundary cerebral infarct in a case of essential thrombocythemia] Silvestrini M, et al. **Riv Neurol** 1989 Nov–Dec;59(6):220–2 (Eng. Abstr.) **(Ita)**
[Cerebral artery occlusion due to blunt cervical trauma] Onishi H, et al. **No Shinkei Geka** 1989 Jun;17(6):579–84 (Eng. Abstr.) **(Jpn)**
[Neurobrucellosis and cerebral vasculitis] Hernández MA, et al. **Neurologia** 1988 Nov–Dec;3(6):241–3 (Eng. Abstr.) **(Spa)**
[Anterior choroid artery syndrome. Study of 3 cases] Roquer J, et al. **Neurologia** 1989 Jul–Aug;4(6):206–9 (Eng. Abstr.) **(Spa)**

METABOLISM

Immunoreactive A4 and gamma-trace peptide colocalization in amyloidotic arteriolar lesions in brains of patients with Alzheimer's disease. Vinters HV, et al. **Am J Pathol** 1990 Aug;137(2):233–40

PATHOLOGY

A reversible component of cerebral injury as identified by the histochemical stain 2,3,5-triphenyltetrazolium chloride (TTC). Cole DJ, et al. **Acta Neuropathol (Berl)** 1990; 80(2):152–5
Cerebral infarcts and the lesions of intracranial and extracranial atherosclerosis. Moossy J. **Arch Neurol** 1966 Feb;14(2):124–8
Autonomic and myocardial changes in middle cerebral artery occlusion: stroke models in the rat. Cechetto DF, et al. **Brain Res** 1989 Nov 20;502(2):296–305
Corticofugal axonal degeneration in rats after middle cerebral artery occlusion. Iizuka H, et al. **Stroke** 1989 Oct; 20(10):1396–402

PHYSIOPATHOLOGY

The effect of hypervolemic hemodilution with and without hypertension on cerebral blood flow following middle cerebral artery occlusion in rats anesthetized with isoflurane. Cole DJ, et al. **Anesthesiology** 1989 Oct; 71(4):580–5
A model of proximal middle cerebral artery occlusion in rat. Shiraishi K, et al. **J Neurosci Methods** 1989 Nov; 30(2):169–74
An intravascular technique to occlude the middle cerebral artery in baboons. Brassel F, et al. **Neuroradiology** 1989; 31(5):418–24
Functional impairment due to white matter ischemia after middle cerebral artery occlusion in cats. Graf R, et al. **Stroke** 1990 Jun;21(6):923–8

RADIOGRAPHY

Hyperdense middle cerebral artery sign on CT: efficacy in detecting middle cerebral artery thrombosis. Tomsick TA, et al. **AJNR** 1990 May;11(3):473–7
Two pediatric cases with occlusions of the ipsilateral internal carotid and posterior cerebral arteries associated with moyamoya vessels: "unilateral" moyamoya disease. Matsushima T, et al. **Surg Neurol** 1990 Apr;33(4):276–80
[A case report of fibromuscular dysplasia presenting symptoms like moyamoya disease: "string of beads" appearance of the pericallosal artery] Shimauchi M, et al. **No Shinkei Geka** 1989 Oct;17(10):981–4 (Eng. Abstr.) **(Jpn)**

SURGERY

Iodine-123 IMP SPECT before and after bypass surgery in a patient with occlusion of left anterior and middle cerebral arteries with basal abnormal telangiectasis (unilateral Moyamoya disease). Honda N, et al. **Ann Nucl Med** 1987 Sep;1(1):43–6
Intracranial vertebral endarterectomy. Ausman JI, et al. **Neurosurgery** 1990 Mar;26(3):465–71

THERAPY

Morphological changes in normal canine basilar arteries after transluminal angioplasty. Chàvez L, et al. **Neurol Res** 1990 Mar;12(1):12–6
[Percutaneous transluminal angioplasty for experimental carotid artery stenosis. Mechanism and long-term results] Maemura E. **Neurol Med Chir (Tokyo)** 1989 Aug; 29(8):715–23 (Eng. Abstr.) **(Jpn)**

CEREBRAL CORTEX

see related
ELECTROENCEPHALOGRAPHY
SPREADING CORTICAL DEPRESSION

Cerebral toxoplasmosis and lymphoma in patients with acquired immunodeficiency syndrome. Laviopierre AM, et al. **Australas Radiol** 1989 Aug;33(3):270–5
Corticobasal degeneration. Gibb WR, et al. **Brain** 1989 Oct; 112 (Pt 5):1171–92
Corpus callosotomy for refractory seizures in a patient with cortical heterotopia: case report. Stearns M, et al. **Neurosurgery** 1989 Oct;25(4):633–5; discussion 635–6
[Systematized temporal delusion and hearing disorders of cortical origin] Assal G, et al. **Rev Neurol (Paris)** 1990; 146(4):249–55 (29 ref.) (Eng. Abstr.) **(Fre)**
[Nephroblastoma with prevalent rhabdomyosarcomatous component. Description of a case with early cerebral metastasis] Bolla G, et al. **Pediatr Med Chir** 1990 Jan–Feb; 12(1):87–90 (Eng. Abstr.) **(Ita)**
[Two cases of subcortical hemorrhage with asymptomatic occlusion of the main trunk of cerebral artery] Ezura M, et al. **No Shinkei Geka** 1990 Apr;18(4):379–83 (Eng. Abstr.) **(Jpn)**
[Dementia caused by miliary cerebral metastasis of a hepatocarcinoma] Fontán A, et al. **Med Clin (Barc)** 1989 Oct 14;93(11):421–3 (Eng. Abstr.) **(Spa)**
[Late recovery of macular vision in cortical blindness (letter)] Díaz M, et al. **Neurologia** 1989 Jul–Aug;4(6):219–20 **(Spa)**

ABNORMALITIES

Magnetic resonance imaging evidence for a defect of cerebral

cortical development in autism. Piven J, et al. **Am J Psychiatry** 1990 Jun;147(6):734–9

Cerebrocortical microdysgenesis with anomalous callosal connections: a case study in the rat. Rosen GD, et al. **Int J Neurosci** 1989 Aug;47(3–4):237–47

The neuroteratogenicity of procarbazine hydrochloride in the rat: histopathological and immunocytochemical aspects. Wright JA, et al. **J Comp Pathol** 1989 Nov;101(4):421–7

[Neocortical dysplasias] Barth PG. **Tijdschr Kindergeneeskd** 1989 Oct;57(5):197–202 (Eng. Abstr.) **(Dut)**

[Infantile spasms and lissencephaly. Apropos of 2 cases] Bouguerra L, et al. **Pediatrie** 1990;45(1):21–3 (18 ref.) (Eng. Abstr.) **(Fre)**

[Case report of ultrasound diagnosis of lissencephaly syndrome] Lemmer A, et al. **Padiatr Grenzgeb** 1990; 29(3):255–9 (Eng. Abstr.) **(Ger)**

ANALYSIS

Overexpression of the myelin basic protein RNA in the cortex of a patient with Alzheimer's disease. Macq AF, et al. **Acta Neurol Belg** 1989 May–Oct;89(3–4):316

Pathological proteins Tau 64 and 69 are specifically expressed in the somatodendritic domain of the degenerating cortical neurons during Alzheimer's disease. Demonstration with a panel of antibodies against Tau proteins. Delacourte A, et al. **Acta Neuropathol (Berl)** 1990;80(2):111–7

Postmortem stability of the GABAA receptor complex: a study using rat brain cerebrocortical membranes. Yau JL, et al. **Biochem Pharmacol** 1990 Aug 15;40(4):906–9

The organization of gangliosides and other lipid components in synaptosomal plasma membranes and modifying effects of calcium ion. Leskawa KC, et al. **Cell Mol Neurobiol** 1981 Dec;1(4):373–88

Improved method of analysis for aluminum in brain tissue. van Ginkel MF, et al. **Clin Chem** 1990 Apr;36(4):658–61

Isolation and properties of the alpha-latrotoxin receptor. Petrenko AG, et al. **EMBO J** 1990 Jun;9(6):2023–7

Separation of two beta gamma subunit complexes of brain GTP-binding proteins composed of distinct gamma subunits [published erratum appears in FEBS Lett 1990 Aug 20;269(1):277] Asano T, et al. **FEBS Lett** 1990 Jun 18;266(1–2):41–4

Complete purification of two identical Na(+)-pump inhibitors isolated from bovine hypothalamus and hypophysis. Illescas M, et al. **FEBS Lett** 1990 Feb 26; 261(2):436–40

Affinity chromatography of the bovine cerebral cortex A1 adenosine receptor. Olah ME, et al. **FEBS Lett** 1989 Nov 6;257(2):292–6

Separation and determination of sertraline and its metabolite, desmethylsertraline, in mouse cerebral cortex by reversed-phase high-performance liquid chromatography. Wiener HL, et al. **J Chromatogr** 1990 May 18;527(2):467–72

Organ distribution of proteinase-resistant prion protein in humans and mice with Creutzfeldt-Jakob disease. Kitamoto T, et al. **J Gen Virol** 1989 Dec;70 (Pt 12):3371–9

Simple immunoassays for semiquantitative determination of calmodulin (CaM) and anti-CaM. Applications to affinity column chromatography of anti-CaM antibodies and estimation of CaM in synaptosomal membranes from rat cerebral cortex. Natsukari N, et al. **J Immunol Methods** 1989 Dec 20;125(1–2):159–66

A fast atom bombardment-mass spectrometric method to quantitate lysophosphatidylserine in rat brain. Benfenati E, et al. **J Lipid Res** 1989 Dec;30(12):1983–6

Molecular mechanisms of homologous desensitization and internalization of muscarinic receptors in primary cultures of neonatal corticostriatal neurons. Eva C, et al. **J Pharmacol Exp Ther** 1990 Apr;253(1):257–65

Characterization of rat cerebral cortical beta adrenoceptor subtypes using (-)-[125I]-iodocyanopindolol. Tiong AH, et al. **J Recept Res** 1989–90;9(6):495–508

Biochemical assay of Alzheimer's disease--associated protein(s) in human brain tissue. A clinical study. Ghanbari HA, et al. **JAMA** 1990 Jun 6;263(21):2907–10

Alzheimer's disease: glycolytic pretreatment dramatically enhances immunolabeling of senile plaques and cerebrovascular amyloid substance. Behrouz N, et al. **Lab Invest** 1989 Nov;61(5):576–83

Immunocytochemical confirmation of prion protein [letter] Clinton J, et al. **Lancet** 1990 Aug 25;336(8713):515

Dementia with beta-amyloid deposition: involvement of alpha B-crystallin supports two main diseases [letter] Lowe J, et al. **Lancet** 1990 Aug 25;336(8713):515–6

Effect of typical and atypical antipsychotic drugs on 5-HT2 receptor density in rat cerebral cortex. Matsubara S, et al. **Life Sci** 1989;45(15):1397–406

Cell and fiber-type distribution of dystrophin. Hoffman EP, et al. **Neuron** 1988 Jul;1(5):411–20

Properties of putative nicotine receptors identified on cultured cortical neurons. Lippiello PM. **Prog Brain Res** 1989;79:129–35

The preliminary characterisation of a protein present in cerebrospinal fluid and serum using a monoclonal antibody which reacts immunohistochemically with amyloid deposits in Alzheimer brains. McDonald B, et al. **Prog Clin Biol Res** 1989;317:703–6

Beta-amyloid precursor detected in human cerebral cortex. Murphy GM Jr, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(3):309–17

[Effects of piracetam on pain sensitivity and levels of beta-endorphin in blood and cAMP in the cerebral cortex of rats] Vakulina OP, et al. **Biull Eksp Biol Med** 1990 Feb; 109(2):163–5 (Eng. Abstr.) **(Rus)**

[Analysis of the expression of the c-fos proto-oncogene in the rat cerebral cortex during learning] Maleeva NE, et al. **Genetika** 1989 Jun;25(6):1119–21 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

The organization of corticopontine fibres in man. Tredici G, et al. **Acta Anat (Basel)** 1990;137(4):320–3

Topography and identification of the inferior precentral sulcus in MR imaging. Ebeling U, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):1051–6

Nuclear terminations of corticoreticular fiber systems in rats. Newman DB, et al. **Brain Behav Evol** 1989;34(4):223–64

Regional brain morphometry and lissencephaly in the Sirenia. Reep RL, et al. **Brain Behav Evol** 1990;35(4):185–94

Manatee cerebral cortex: cytoarchitecture of the frontal region in Trichechus manatus latirostris. Reep RL, et al. **Brain Behav Evol** 1989;34(6):365–86

Relationships between cerebral indices for 'extra' cortical parts and ecological categories in anthropoids. Sawaguchi T. **Brain Behav Evol** 1989;34(5):281–93

Gyrification in the cerebral cortex of primates. Zilles K, et al. **Brain Behav Evol** 1989;34(3):143–50

A quantitative study of dendrite complexity in selected areas of the human cerebral cortex. Scheibel A, et al. **Brain Cogn** 1990 Jan;12(1):85–101

The topographical and laminar organization of a commissural-associational entorhino-entorhinal projection in the guinea pig. Christesen HB, et al. **Brain Res** 1989 Dec 25;505(1):75–82

Cortical asymmetries in frontal lobes of rhesus monkeys (Macaca mulatta). Falk D, et al. **Brain Res** 1990 Mar 26; 512(1):40–5

The ipsilateral cortico-cortical connections of area 7b, PF, in the parietal and temporal lobes of the monkey. Neal JW, et al. **Brain Res** 1990 Jul 30;524(1):119–32

Topographic organization of the cerebellar nucleocortical projection in the albino rat: an autoradiographic orthograde study. Umetani T. **Brain Res** 1990 Jan 22;507(2):216–24

Corticotrigeminal motor pathway in the rat—II. Anterio- and retrograde HRP labeling. Ohta M, et al. **Comp Biochem Physiol [A]** 1989;94(3):405–14

The topology of the thalamo-cortical projections in the marmoset monkey (Callithrix jacchus). Brysch W, et al. **Exp Brain Res** 1990;81(1):1–17

Projections from inferior temporal cortex to prefrontal cortex via the uncinate fascicle in rhesus monkeys. Ungerleider LG, et al. **Exp Brain Res** 1989;76(3):473–84

The midsagittal area of the corpus callosum and total neocortical volume differ in three inbred strains of mice. Rosen GD, et al. **Exp Neurol** 1990 Mar;107(3):271–6

Anatomical asymmetries of the human cerebral cortex. Habib M. **Int J Neurosci** 1989 Jul;47(1–2):67–80 (49 ref.)

The thalamic projection to the sensory neocortex of the porpoise, Phocoena phocoena. Revishchin AV, et al. **J Anat** 1990 Apr;169:85–102

Anatomical mapping of the cerebellar nucleocortical projections in the rat: a retrograde labeling study. Buisseret-Delmas C, et al. **J Comp Neurol** 1989 Oct 8; 288(2):297–310

Anatomy of the rat medial geniculate body: I. Cytoarchitecture, myeloarchitecture, and neocortical connectivity. Clerici WJ, et al. **J Comp Neurol** 1990 Jul 1;297(1):14–31

Distribution of cat-301 immunoreactivity in the frontal and parietal lobes of the macaque monkey. McGuire PK, et al. **J Comp Neurol** 1989 Oct 8;288(2):280–96

Intrinsic connections and architectonics of the superior temporal sulcus in the rhesus monkey. Seltzer B, et al. **J Comp Neurol** 1989 Dec 22;290(4):451–71

Quantitative light-microscopic study of the nucleus medialis dorsalis of the thalamus in the intact cat, and after prefrontal cortical ablations. Gonzalez C, et al. **J Hirnforsch** 1989;30(4):437–47

Central sulcus patterns at MRI. Missir O, et al. **J Neuroradiol** 1989;16(2):133–44 **(Eng, Fre)**

Nondopaminergic prefrontocortical efferent fibers modulate D1 receptor denervation supersensitivity in specific regions of the rat striatum. Herve D, et al. **J Neurosci** 1989 Nov; 9(11):3699–708

Individual variability in cortical organization: its relationship to brain laterality and implications to function. Galaburda AM, et al. **Neuropsychologia** 1990;28(6):529–46 (85 ref.)

Neuronal organization of the pyramidal cortex of the cat brain. Mukhina YuK. **Neurosci Behav Physiol** 1989 Nov-Dec;19(6):515–25

Organization of cerebral cortico-olivary projections in the rat. Swenson RS, et al. **Neurosci Res** 1989 Oct;7(1):43–54

The organization of chemically-identified neural systems in monkey prefrontal cortex: afferent systems. Lewis DA. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(3):371–7

Myelination of cortical-hippocampal relays during late adolescence. Benes FM. **Schizophr Bull** 1989;15(4):585–93

[Recent contributions concerning the development and distribution of dopaminergic innervation in the cerebral cortex of the rat] Berger B, et al. **Cellule** 1987;74:291–305 (Eng. Abstr.) **(Fre)**

[Structural organization of hippocampal cortex] Ishizuka N. **No To Shinkei** 1989 Aug;41(8):753–70 (108 ref.) **(Jpn)**

[Structure of the neocortex of the Baikal ringed seal (Pusa sibirica Gm.)] Galantsev VP, et al. **Arkh Anat Gistol Embriol** 1990 Jun;98(6):39–45 (Eng. Abstr.) **(Rus)**

[Sources of thalamic afferent neurons, projecting into the suprasylvian gyrus of the dolphin cerebral cortex] Revishchin AV, et al. **Neirofiziologiia** 1989;21(4):529–39 (Eng. Abstr.) **(Rus)**

[Organization of the projections of the cortex of the sulcus cruciatus to the centromedian and parafascicular nuclei in cats] Velayos JL, et al. **Rev Esp Fisiol** 1989;45 Suppl:151–60 (Eng. Abstr.) **(Spa)**

BLOOD SUPPLY

Changes in the distribution of anionic sites in brain micro-blood vessels with and without amyloid deposits in scrapie-infected mice. Vorbrodt AW, et al. **Acta Neuropathol (Berl)** 1990;79(4):355–63

Effect on cortical blood flow of electrical stimulation of trigeminal cerebrovascular nerve fibres in the rat. Suzuki N, et al. **Acta Physiol Scand** 1990 Mar;138(3):307–16

Cerebral blood flow responses to inhaled carbon dioxide in schizophrenia. Mathew RJ, et al. **Acta Psychiatr Scand** 1990 Jun;81(6):497–506

The effect of bradykinin and its fragments on the arachidonate cascade of brain microvessels. Gecse A, et al. **Adv Exp Med Biol** 1989;247A:249–54

Cortical microvascular changes in chronological aging, cortical insults and chronic alcohol intoxication in rats. Effects of antihypoxic drug on these phenomena. De Witte P, et al. **Alcohol** 1989 Nov-Dec;6(6):423–30

Atrial natriuretic peptide receptors in cerebral microvessels and choroid plexus of spontaneously hypertensive rats. Okazaki M, et al. **Brain Res** 1990 Jun 4;518(1–2):292–4

Involvement of protein kinase C in the mitogenic and chemotaxis effects of basic fibroblast growth factor on bovine cerebral cortex capillary endothelial cells. Daviet I, et al. **FEBS Lett** 1990 Jan 1;259(2):315–7

Types of cortical branches of the posterior cerebral artery in man. Kiś G, et al. **Folia Morphol (Warsz)** 1988; 47(1–4):133–44

The cortical branches of the posterior cerebral artery in man. Kiś G, et al. **Folia Morphol (Warsz)** 1988;47(1–4):121–31

Pericyte coverage of retinal and cerebral capillaries. Frank RN, et al. **Invest Ophthalmol Vis Sci** 1990 Jun; 31(6):999–1007

Effect of the calcium antagonists felodipine and nimodipine on cortical blood flow in the spontaneously hypertensive rat. Thorén P, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 4:S40

Continuous monitoring of cerebrocortical blood flow during stimulation of the cerebellar fastigial nucleus: a study by laser-Doppler flowmetry. Iadecola C, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):608–17

The effects of the GABA agonist muscimol upon blood flow in different vascular territories of the rat cortex. Kelly PA, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):754–8

Ischaemia of the insular cortex increases the vagal contribution to the baroreceptor reflex in the rat. Elghozi JL, et al. **J Hypertens Suppl** 1989 Dec;7(6):S36–7

Effect of the calcium antagonists felodipine and nimodipine on cortical blood flow in the spontaneously hypertensive rat. Thorén P, et al. **J Hypertens Suppl** 1989 Sep; 7(4):S153–8; discussion S159

Septic cortical thrombophlebitis. DiNubile MJ, et al. **J Infect Dis** 1990 Jun;161(6):1216–20

Alpha 1-adrenergic receptor binding sites in post-mortal human cerebral microvessel preparations: preservation in multi-infarct dementia and dementia of Alzheimer type. O'Neill C, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(4):303–10

Lateralisation of cortical function during cognitive tasks: regional cerebral blood flow studies of normal individuals and patients with schizophrenia. Berman KF, et al. **J Neurol Neurosurg Psychiatry** 1990 Feb;53(2):150–60

Acute effects of electromagnetic stimulation of the brain on cortical activity, cortical blood flow, blood pressure and heart rate in the cat: an evaluation of safety. Eyre JA, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):507–13

Reexamination of 123I-IMP-SPECT at interictal stages in adult partial epilepsy. Jibiki I, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):385–8

Regional cerebral blood flow in epileptic foci using [I-123] IMP-SPECT. Konishi T. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):355–60

Microvascular changes in aged rat forebrain. Effects of chronic nimodipine treatment. de Jong GI, et al. **Neurobiol Aging** 1990 Jul-Aug;11(4):381–9

Effects of aging and vincamine derivatives on pericapillary microenvironment: stereological characterization of the cerebral capillary network. Jucker M, et al. **Neurobiol Aging** 1990 Jan-Feb;11(1):39–46

Heterogeneous arterial responses in postischemic state of cerebral cortex. Baramidze DG, et al. **Neuropatol Pol** 1989; 27(1):3–12

Conditions of blood flow in capillaries of cerebral cortex in control and ischemia. Varazashvili M, et al. **Neuropatol Pol** 1989;27(1):13–24

Cerebral correlates of imagining colours, faces and a map—I. SPECT of regional cerebral blood flow. Goldenberg G, et al. **Neuropsychologia** 1989;27(11–12):1315–28

Fine structural features of the cerebral microvasculature in hydrocephalic human infants: correlated clinical observations. Glees P, et al. **Neurosurg Rev** 1989; 12(4):315–21

Positron emission tomographic studies on cerebral hemodynamics in patients with cerebral contusion. Tenjin H, et al. **Neurosurgery** 1990 Jun;26(6):971–9

Neuroimaging, cognitive, and pathological changes in dementia of the Alzheimer type (DAT). Besson JA, et al. **Psychiatry Res** 1989 Sep;29(3):447–8

Pathological cerebral blood blow and corpus callosum abnormalities in schizophrenia: relations to EEG mapping and PET data. Guenther W, et al. **Psychiatry Res** 1989 Sep;29(3):453–5

Electrical brain activity and cerebral blood flow in dementia of the Alzheimer type. Ihl R, et al. **Psychiatry Res** 1989 Sep;29(3):449–52

Normalization of rCBF pattern in senile dementia of the Alzheimer's type. Mubrin Z, et al. **Psychiatry Res** 1989 Sep;29(3):303–6

Cortical perfusion in Alzheimer's disease: beyond diagnosis. Prohovnik I. **Psychiatry Res** 1989 Sep;29(3):301–2

Regional cerebral blood flow in endogenous psychoses: a Tc-99m HMPAO-SPECT pilot study. Schroeder J, et al. **Psychiatry Res** 1989 Sep;29(3):331–3

Effects of nitrous oxide on global and regional cortical blood flow. Deutsch G, et al. **Stroke** 1990 Sep;21(9):1293–8

Effect of endothelin on cortical microvascular perfusion in rats. Willette RN, et al. **Stroke** 1990 Mar;21(3):451–8

Relation of regional cerebral blood flow to hemiparesis in chronic subdural hematoma. Ikeda K, et al. **Surg Neurol** 1990 Feb;33(2):87–95

[Trifurcations of the middle cerebral arteries] Anderhuber F, et al. **Acta Anat (Basel)** 1990;137(4):342–9 (Eng. Abstr.) **(Ger)**

[A comparison of the functional vulnerability of the cerebral cortex and thalamus to acute ischemia] Fukuda M, et al. **No To Shinkei** 1990 Apr;42(4):383–9 (Eng. Abstr.) **(Jpn)**

[Selected clinical and pathogenetic problems of Binswanger's subcortical arteriosclerotic encephalopathy—analysis of 19 cases] Bogucki A, et al. **Neurol Neurochir Pol** 1989 Mar–Apr;23(2):97–104 (Eng. Abstr.) **(Pol)**

[Age-related characteristics of intraorganic vascular structures of the cerebral cortex, heart, kidneys and spleen in rats in the normal state and in arterial hypertension] Sokolov VV, et al. **Arkh Anat Gistol Embriol** 1990 Apr; 98(4):47–57 (Eng. Abstr.) **(Rus)**

[The variously directed reactions of the pial and cortical arterial branches in postischemic hyperemia in the cerebral cortex] Mchedlishvili GI, et al. **Fiziol Zh SSSR** 1989 Nov; 75(11):1534–40 (Eng. Abstr.) **(Rus)**

[Methods of studying intracranial blood and cerebrospinal fluid circulation in chronic experimental decompression sickness] Korolev AB. **Kosm Biol Aviakosm Med** 1990 Jan–Feb;24(1):47–9 **(Rus)**

[Pathogenesis of the neurologic form of decompression sickness in rabbits] Korolev AB. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):92–3 **(Rus)**

[A new injection-free method of detecting cerebral cortex capillaries and the quantitative determination of the optical density of the capillary bed] Aleksandrov PN, et al. **Patol Fiziol Eksp Ter** 1990 Jan–Feb;(1):54–6 **(Rus)**

[Effect of the cerebrospinal fluid from patients with cerebral pathology on regional cerebral blood flow in experimental animals] Malorova NF, et al. **Zh Nevropatol Psikhiatr** 1989; 89(7):105–9 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Synapses, axonal and dendritic patterns of GABA-immunoreactive neurons in human cerebral cortex. Kisvárday ZF, et al. **Brain** 1990 Jun;113 (Pt 3):793–812 (143 ref.)

Quinolinate and kainate neurotoxicity in neostriatal cultures is potentiated by co-culturing with neocortical neurons. Galarraga E, et al. **Brain Res** 1990 Apr 2;512(2):269–76

The callosal connections of area 7b, PF in the monkey. Neal JW. **Brain Res** 1990 Apr 23;514(1):159–62

Further studies on the identification of microglia in mixed brain cell cultures. Glenn JA, et al. **Brain Res Bull** 1989 Jun;22(6):1049–52

Marked neurotrophic effects of diffusible substances released from non-target cerebellar cells on thalamic neurons in culture. Hisanaga K, et al. **Brain Res Dev Brain Res** 1990 Jul 1;54(2):151–60

Identification of injury-induced mitotic cells in adult rat cerebral cortex by neuron-specific markers. Huang LB, et al. **Brain Res Dev Brain Res** 1990 Jan 1;51(1):123–7

Maturation of astrocytes in vitro alters the extent and molecular basis of neurite outgrowth. Smith GM, et al. **Dev Biol** 1990 Apr;138(2):377–90

GABA does not protect cerebro-cortical cultures against excitotoxic cell death. Erdö SL, et al. **Eur J Pharmacol** 1990 Jun 21;182(1):203–6

Corticospinal projections from areas 4 and 6 in the raccoon. Saksi ST. **Exp Brain Res** 1990;79(2):240–8

Projections from the medial agranular cortex to brain stem visuomotor centers in rats. Stuesse SL, et al. **Exp Brain Res** 1990;80(3):532–44

Patterns of cell lineage in the cerebral cortex reveal evidence for developmental boundaries. Crandall JE, et al. **Exp Neurol** 1990 Jul;109(1):131–9

Retrograde transport of fluoro-gold in corticospinal and rubrospinal neurons 10 and 20 weeks after T-9 spinal cord transection. McBride RL, et al. **Exp Neurol** 1990 Apr; 108(1):83–5

Fibroblast growth factor inhibits epidermal growth factor-induced responses in rat astrocytes. Huff KR, et al. **GLIA** 1990;3(3):193–204

Neuronal-glial interactions: complexity of neurite outgrowth correlates with substrate adhesivity of serotonergic neurons. Lieth E, et al. **GLIA** 1990;3(3):169–79

Glial-conditioned medium and attachment to ConA are essential for long-term culture of cortical neurons. Bauer HC, et al. **Int J Dev Neurosci** 1990;8(2):151–8

Cell number, tissue thickness and protein content as measures for development and variability in cultured neocortex explants. De Jong BM, et al. **Int J Dev Neurosci** 1989; 7(6):575–9

Proliferation-related responses in rat astrocytes to epidermal growth factor. Huff KR, et al. **Int J Dev Neurosci** 1990; 8(3):255–66

In vitro screening for anticonvulsant-induced teratogenesis in neural primary cultures and cell lines. Regan CM, et al. **Int J Dev Neurosci** 1990;8(2):143–50

Histochemical study of the differentiation of microglial cells in the developing human cerebral hemispheres. Fujimoto E, et al. **J Anat** 1989 Oct;166:253–64

Neurons of the lateral entorhinal cortex of the rhesus monkey: a Golgi, histochemical, and immunocytochemical characterization. Carboni AA, et al. **J Comp Neurol** 1990 Jan 22;291(4):583–608

Morphological organization of thalamocortical relay cells in the dorsal lateral geniculate nucleus of the North American opossum. Condo GJ, et al. **J Comp Neurol** 1990 Feb 8; 292(2):303–19

Connections between area 3b of the somatosensory cortex and subdivisions of the ventroposterior nuclear complex and the anterior pulvinar nucleus in squirrel monkeys. Cusick CG, et al. **J Comp Neurol** 1990 Feb 1;292(1):83–102

Maturation of the corpus callosum of the rat: I. Influence of thyroid hormones on the topography of callosal projections. Gravel C, et al. **J Comp Neurol** 1990 Jan 1; 291(1):128–46

Branching patterns of corticospinal axon arbors in the rodent. Kuang RZ, et al. **J Comp Neurol** 1990 Feb 22;292(4):585–98

Intracellular recording and injection study of corticospinal neurons in the rat somatosensory cortex: effect of prenatal exposure to ethanol. Miller MW, et al. **J Comp Neurol** 1990 Jul 1;297(1):91–105

Descending pathways to the spinal cord, III: Sites of origin of the corticospinal tract. Nudo RJ, et al. **J Comp Neurol** 1990 Jun 22;296(4):559–83

Descending pathways to the spinal cord, IV: Some factors related to the amount of cortex devoted to the corticospinal tract. Nudo RJ, et al. **J Comp Neurol** 1990 Jun 22; 296(4):584–97

Topographic organization in the corticocortical connections of medial agranular cortex in rats. Reep RL, et al. **J Comp Neurol** 1990 Apr 8;294(2):262–80

Thalamocortical connections of the rostral intralaminar nuclei: an autoradiographic analysis in the cat. Royce GJ, et al. **J Comp Neurol** 1989 Oct 22;288(4):555–82

Disynaptic olfactory input to the hippocampus mediated by stellate cells in the entorhinal cortex. Schwerdtfeger WK, et al. **J Comp Neurol** 1990 Feb 8;292(2):163–77

Thalamic projections to the cortical gustatory area in the cat studied by retrograde axonal transport of horseradish peroxidase. Niimi K, et al. **J Hirnforsch** 1989;30(5):583–93

The total number of neurons in the human neocortex unbiasedly estimated using optical disectors. Braendgaard H, et al. **J Microsc** 1990 Mar;157 (Pt 3):285–304

Study of Golgi-impregnated material using the confocal tandem scanning reflected light microscope. Freire M, et al. **J Microsc** 1990 May;158 (Pt 2):285–90

Structure-function relationships in rat brain stem subnucleus interpolaris. VIII. Cortical inputs. Jacquin MF, et al. **J Neurophysiol** 1990 Jul;64(1):3–27

Cortical radial glia: identification in tissue culture and evidence for their transformation to astrocytes. Culican SM, et al. **J Neurosci** 1990 Feb;10(2):684–92

A chemically-defined medium for organotypic slice cultures. Annis CM, et al. **J Neurosci Methods** 1990 Apr;32(1):63–70

An efficient method for estimating the total number of neurons in rat brain cortex. Korbo L, et al. **J Neurosci Methods** 1990 Feb;31(2):93–100

Image analysis of CNS neurotrophic factor effects on neuronal survival and neurite outgrowth. Matsumoto T, et al. **J Neurosci Methods** 1990 Feb;31(2):153–62

Effect of ferric nitrilotriacetate on predominantly cortical glial cell cultures. Swaiman KF, et al. **Neurochem Res** 1990 May;15(5):501–5

Cortical neurons containing somatostatin- or parvalbumin-like immunoreactivity are atypically vulnerable to excitotoxic injury in vitro. Weiss JH, et al. **Neurology** 1990 Aug;40(8):1288–92

Interactions between entorhinal axons and target hippocampal neurons: a role for glutamate in the development of hippocampal circuitry. Mattson MP, et al. **Neuron** 1988 Nov;1(9):865–76

Morphometric study of human cerebral cortex development. Huttenlocher PR. **Neuropsychologia** 1990;28(6):517–27 (47 ref.)

Effect of cytosine arabinoside on rat cerebral explants: fibroblasts and reactive microglial cells as the primary cellular barrier to neurite growth. Oorschot DE, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):332–6

Distribution of corticotectal axons from the caudal part of the anterior ectosylvian sulcus in the cat. Segal RL, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):173–8

Noradrenaline axon terminals in adult rat neocortex: an immunocytochemical analysis in serial thin sections. Séguéla P, et al. **Neuroscience** 1990;35(2):249–64

Activation of subconductance states by gamma-aminobutyric acid and its analogs in chick cerebral neurons. Mistry DK, et al. **Pflugers Arch** 1990 Jun;416(4):454–61

Dopamine synaptic complex with pyramidal neurons in primate cerebral cortex. Goldman-Rakic PS, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):9015–9

The determination of neuronal fate in the cerebral cortex. McConnell SK. **Trends Neurosci** 1989 Sep;12(9):342–9 (37 ref.)

VIP neurons in the cerebral cortex. Magistretti PJ. **Trends Pharmacol Sci** 1990 Jun;11(6):250–4 (31 ref.)

[Characteristics of the ensemble organization of the human cerebral cortex from birth to 20 years of age] Semenova LK, et al. **Arkh Anat Gistol Embriol** 1989 Dec;97(12):15–24 (Eng. Abstr.) **(Rus)**

[Structural analysis of the reactivity of the cerebral cortex plexiform layer under the influence of extreme conditions] Kositsyn NS, et al. **Biull Eksp Biol Med** 1990 May; 109(5):486–9 (Eng. Abstr.) **(Rus)**

[Current state of the problem of cortical inhibition] Serkov FN. **Fiziol Zh** 1989 Nov–Dec;35(6):101–10 (40 ref.) (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effects of halothane on the efflux of [3H]D-aspartate from rat brain slices. Arai T, et al. **Acta Anaesthesiol Scand** 1990 May;34(4):267–70

Muscular and CNS effects of carotid artery administration of contrast media in rabbits. Whisson CC, et al. **AJNR** 1990 Jan–Feb;11(1):143–8

Cerebral cortical morphology and behavior in rats following acute prenatal ethanol exposure. Kotkoskie LA, et al. **Alcoholism (N Y)** 1989 Dec;13(6):776–81

Neglect following unilateral ablation of the caudal but not the rostral portion of medial agranular cortex of the rat and the therapeutic effect of apomorphine. King V, et al. **Behav Brain Res** 1990 Mar 5;37(2):169–84

Nucleus basalis magnocellularis and memory: differential effects of two neurotoxins. Markowska AL, et al. **Behav Neural Biol** 1990 Jul;54(1):13–26

Dual effect of fluoride on phosphoinositide metabolism in rat brain cortex. Stimulation of phospholipase C and inhibition of polyphosphoinositide synthesis. Claro E, et al. **Biochem J** 1990 Jun 15;268(3):733–7

Comparison of the effects of althesin and barbiturates on the neocortex and hippocampus in cats. Kayama Y. **Br J Anaesth** 1974 Dec;46(12):912–7

A phorbol diester-induced enhancement of synaptic transmission in olfactory cortex. Scholfield CN, et al. **Br J Pharmacol** 1989 Dec;98(4):1344–50

Neurotoxic effects of partially oxidized serotonin: tryptamine-4,5-dione. Crimo PB, et al. **Brain Res** 1989 Dec 18;504(2):247–57

Ca2(+)-dependence provides evidence for differing mechanisms of GABA-induced inositol phosphate formation and GABA potentiation of inositol phosphate formation induced by noradrenaline in rat cerebral cortex. Crawford ML, et al. **Brain Res Mol Brain Res** 1990 Jul; 8(2):181–3

Local cortical blood flow and oxygen consumption during isoflurane-induced hypotension. Results in patients undergoing intracranial aneurysm clipping. Roth S, et al. **Cleve Clin J Med** 1989 Nov–Dec;56(8):766–70

The use of a calcium-channel blocker, nicardipine, for severely asphyxiated newborn infants. Levene MI, et al. **Dev Med Child Neurol** 1990 Jul;32(7):567–74

Muscarinic suppression of the evoked N-wave by oxotremorine-M recorded in the guinea-pig olfactory cortex slice. Bagetta G, et al. **Eur J Pharmacol** 1990 Mar 13;178(1):91–6

Immature cortical neurons are uniquely sensitive to glutamate toxicity by inhibition of cystine uptake. Murphy TH, et al. **FASEB J** 1990 Apr 1;4(6):1624–33

Dendrotoxin and charybdotoxin increase the cytosolic concentration of free Ca2+ in cerebrocortical synaptosomes: an effect not shared by apamin. Tibbs GR, et al. **FEBS Lett** 1989 Sep 11;255(1):159–62

Development of excitatory amino acid induced cytotoxicity in cultured neurons. Frandsen A, et al. **Int J Dev Neurosci** 1990;8(2):209–16

Angiotensin II inhibits cortical cholinergic function: implications for cognition. Barnes JM, et al. **J Cardiovasc Pharmacol** 1990 Aug;16(2):234–8

Effect of dipyridamole on cerebral extracellular adenosine level in vivo. Park TS, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):424–7

Evidence for an intracerebral action of phenylalanine in stimulation of prolactin secretion: interaction of large neutral amino acids. Carlson HE, et al. **J Clin Endocrinol Metab** 1990 Mar;70(3):814–6

6,7-Dinitroquinoxaline-2,3-dione blocks the cytotoxicity of N-methyl-D-aspartate and kainate, but not quisqualate, in cortical cultures. Patel J, et al. **J Neurochem** 1990 Jul;

55(1):114–21
Non-NMDA receptor-mediated neurotoxicity in cortical culture. Koh JY, et al. **J Neurosci** 1990 Feb;10(2):693–705
Adenosine A1 receptor activation mediates suppression of (-) bicuculline methiodide-induced seizures in rat prepiriform cortex. Franklin PH, et al. **J Pharmacol Exp Ther** 1989 Dec;251(3):1229–36
Ethanol inhibits N-methyl-D-aspartate-stimulated [3H]norepinephrine release from rat cortical slices. Gonzales RA, et al. **J Pharmacol Exp Ther** 1990 Jun; 253(3):1138–44
Continuous physostigmine infusion in rats with excitotoxic lesions of the nucleus basalis magnocellularis: effects on performance in the water maze task and cortical cholinergic markers. Mandel RJ, et al. **J Pharmacol Exp Ther** 1989 Nov;251(2):612–9
Electrophysiological effects of selective D1 and D2 dopamine receptor agonists in the medial prefrontal cortex of young and aged Fischer 344 rats. Parfitt KD, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):539–45
Differential effects of phorbol ester on prefrontal cortex and striatal dopamine terminals: dependence on rate and duration of stimulation. Talmaciu RK, et al. **J Pharmacol Exp Ther** 1989 Dec;251(3):1160–5
Modulation of mesoprefrontal dopamine neurons by central benzodiazepine receptors. I. Pharmacological characterization. Tam SY, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):989–96
Acute alcohol intoxication and cognitive functioning. Peterson JB, et al. **J Stud Alcohol** 1990 Mar;51(2):114–22
Effects of bifemelane hydrochloride on various cholinergic markers in cortical and subcortical regions of aged rats. Egashira T, et al. **Jpn J Pharmacol** 1989 Oct;51(2):211–8
Down-regulation of 3H-imipramine binding sites in rat cerebral cortex after prenatal exposure to antidepressants. Montero D, et al. **Life Sci** 1990;46(22):1619–26
Apomorphine-induced alterations in cortical EEG activity of rats. Involvement of D-1 and D-2 dopamine receptors. Kropf W, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Dec;340(6 Pt 2):718–25
Behavioural and electrocortical effects after injection of two ornithine decarboxylase inhibitors into several areas of the brain in the rat. De Sarro GB, et al. **Neuropharmacology** 1989 Nov;28(11):1245–51
Cortical EEG changes during the self-administration of phencyclinoids. Marquis KL, et al. **Neuropharmacology** 1989 Nov;28(11):1193–8
Effects of 2-guanidinoethane sulfonate on glutamate uptake in primary astroglial cultures from the rat cerebral cortex. Nilsson M, et al. **Neuropharmacology** 1989 Dec; 28(12):1415–8
Selective activation of dopaminergic pathways in the mesocortex by compounds that act at the phencyclidine (PCP) binding site: tentative evidence for PCP recognition sites not coupled to N-methyl-D-aspartate (NMDA) receptors. Rao TS, et al. **Neuropharmacology** 1990 Mar; 29(3):225–30
Effect of drugs acting on monoaminergic and cholinergic systems on the quantified EEG of rats. Emilien G. **Neuropsychobiology** 1989;21(4):205–15
Phenobarbital protects cerebral cortex neurones against toxicity induced by kainate but not by other excitatory amino acids. Frandsen A, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):233–8
Intracortical AF64A: memory impairments and recovery from cholinergic hypofunction. Mouton PR, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):841–8
Infusion of NMDA into the nucleus basalis of Meynert, frontal cortex or lateral ventricle in rats: effect on memory and cholinergic brain neurochemistry. Santucci AC, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):485–8
Amphetamine affects the extinction of self-stimulation differently in prefrontal cortex and posterior hypothalamus of rats. West CH, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):479–84
The effects of morphine on norepinephrine-stimulated phosphatidylinositol response in rat cerebral cortex. Dixon W, et al. **Prog Clin Biol Res** 1990;328:279–82
Topographic mapping of pharmaco-EEG before and after application of phosphatidylserine. Rupprecht R, et al. **Psychiatry Res** 1989 Sep;29(3):417–8
Electrocortical and histopathologic effects of intrathecal antibiotics. Shields CB, et al. **Surg Forum** 1978;29:495–7
[Evaluation of the nervous system with reference to the bioelectric activity of the brain and neural conduction in workers exposed to organic solvents] Szyrocka-Szwed K. **Med Pr** 1989;40(6):342–9 (Eng. Abstr.) **(Pol)**
[The effect of cobalt on the dynamics of membrane-bound calcium in the cerebral cortex structures] Samollov MO, et al. **Biofizika** 1989 Nov-Dec;34(6):1024–7 (Eng. Abstr.) **(Rus)**
[Nicotinamide correction of the oxidative metabolism of cerebral cortex cells in the kindling phenomenon] Moiseev IN. **Biull Eksp Biol Med** 1989 Sep;108(9):297–9 (Eng. Abstr.) **(Rus)**
[Prolonged depolarizing potentials of the neurons in a strychninized isolated strip of the cat cerebral cortex] Lopantsev VE, et al. **Neirofiziologiia** 1990;22(1):19–23 (Eng. Abstr.) **(Rus)**
[The cellular reactions of a strychninized isolated strip of the cat cerebral cortex] Lopantsev VE, et al. **Neirofiziologiia** 1990;22(1):23–9 (Eng. Abstr.) **(Rus)**
[EEG factor analysis in the treatment with antidepressants] Bochkarev VK, et al. **Zh Nevropatol Psikhiatr** 1989; 89(10):120–5 (Eng. Abstr.) **(Rus)**
[Differences in the effect of diazepam on realized and non-realized conditioned emotional reactions] Kostandov EA, et al. **Zh Nevropatol Psikhiatr** 1990;90(4):103–8 (Eng. Abstr.) **(Rus)**
[Effect of the local administration of 5,7-DHT and 6-OHDA into the neocortex on the learning and exploratory behavior of rats in an open field] Ismailova KhIu, et al. **Zh Vyssh Nerv Deiat** 1989 May-Jun;39(3):548–55 (Eng. Abstr.) **(Rus)**
[The effect of acetylcholine on shifts in the spatial synchronization of the cortical potentials in the rabbit evoked by the reversible interruption of the mammillary body connections] Kurova NS, et al. **Zh Vyssh Nerv Deiat** 1989 Sep-Oct;39(5):906–13 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Expression of cholinergic markers in transplants of immature mouse neocortex into adult mouse parietal cortex. Hohmann CF. **Anat Embryol (Berl)** 1989;180(6):535–41
The development of the sulci and gyri of the bovine cerebral hemispheres. Louw GJ. **Anat Histol Embryol** 1989 Sep; 18(3):246–64
A comparative study of prenatal development in the olfactory bulb, neocortex and hippocampal region of the precocial mouse Acomys cahirinus and rat. Brunjes PC. **Brain Res Dev Brain Res** 1989 Sep 1;49(1):7–25
Neuron migration within the radial glial fiber system of the developing murine cerebrum: an electron microscopic autoradiographic analysis. Gadisseux JF, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1–2):39–56
Vertical compartmentation and cellular transformations in the germinal matrices of the embryonic rat cerebral cortex. Altman J, et al. **Exp Neurol** 1990 Jan;107(1):23–35
Horizontal compartmentation in the germinal matrices and intermediate zone of the embryonic rat cerebral cortex. Altman J, et al. **Exp Neurol** 1990 Jan;107(1):36–47
Development of layer I and the subplate in the rat neocortex. Bayer SA, et al. **Exp Neurol** 1990 Jan;107(1):48–62
Morphometric analysis of developing rat cerebral cortex following acute prenatal ethanol exposure. Kotkoskie LA, et al. **Exp Neurol** 1989 Dec;106(3):283–8
Early events of neocortical assembly: experimental studies and human pathology. Caviness VS Jr. **Int J Neurol** 1982–83;16–17:102–9 (30 ref.)
Synaptic development in human cerebral cortex. Huttenlocher PR, et al. **Int J Neurol** 1982–83;16–17:144–54
Methylazoxymethanol acetate (MAM ac) effects on the ontogenesis of the mouse neocortex. Ciaroni S, et al. **J Hirnforsch** 1989;30(6):699–705
Identification of proteins that are developmentally regulated during early cerebral corticogenesis in the rat. Geschwind DH, et al. **J Neurosci** 1989 Dec;9(12):4303–17
Effects of maternal restriction in vitamin B-6 on neocortex development in rats: neuron differentiation and synaptogenesis. Groziak SM, et al. **J Nutr** 1990 May; 120(5):485–92
Secretions of somatostatin and VIP in cultures of fetal rat neuroblasts increased by amino acids. Delgado JM, et al. **Life Sci** 1990;46(1):55–8
Cell lineage in the cerebral cortex of the mouse studied in vivo and in vitro with a recombinant retrovirus. Luskin MB, et al. **Neuron** 1988 Oct;1(8):635–47
Do cortical areas emerge from a protocortex? O'Leary DD. **Trends Neurosci** 1989 Oct;12(10):400–6 (86 ref.)

ENZYMOLOGY

Comparative distribution of acid phosphatase and simple esterase in the mouse neocortex and hippocampal formation. Sethi JS, et al. **Acta Anat (Basel)** 1989; 135(4):323–9
Shifting patterns of cortical cholinesterases in Alzheimer's disease: implications for treatment, diagnosis, and pathogenesis. Mesulam MM, et al. **Adv Neurol** 1990; 51:235–40 (17 ref.)
Calmodulin-dependent adenylate cyclase activity in rat cerebral cortex: effects of divalent cations, forskolin and isoprenaline. Mørk A, et al. **Arch Int Physiol Biochim** 1989 Jun;97(3):259–71
Phenytoin dephosphorylates the alpha(-) catalytic subunit of (Na+, K+)-ATPase. A study in mouse, cat and human brain. Guillaume D, et al. **Biochem Pharmacol** 1989 Nov 15;38(22):3933–9
Phosphatidylinositol synthetase activities in neuronal nuclei and microsomal fractions isolated from immature rabbit cerebral cortex. Baker RR, et al. **Biochim Biophys Acta** 1990 Jan 16;1042(1):55–61
Lysosomal proteinase antigens are prominently localized within senile plaques of Alzheimer's disease: evidence for a neuronal origin. Cataldo AM, et al. **Brain Res** 1990 Apr 16;513(2):181–92
Milacemide stimulates deficient glial Na+, K(+)-ATPase in freezing-induced epileptogenic cortex of cats. Laschet J, et al. **Brain Res** 1990 May 28;517(1–2):168–74
Effect of morphine on Na+,K(+)-ATPase from homogenate of synaptosomes and of synaptic membrane of rat cerebral cortex. Nishikawa T, et al. **Brain Res** 1990 Feb 26;510(1):92–6
Antibodies directed against tyrosine hydroxylase differentially recognize noradrenergic axons in monkey neocortex. Noack HJ, et al. **Brain Res** 1989 Oct 23; 500(1–2):313–24
Increases in the activity of tryptophan hydroxylase from rat cortex and midbrain in response to acute or repeated sound stress are blocked by adrenalectomy and restored by dexamethasone treatment. Singh VB, et al. **Brain Res** 1990 May 14;516(1):66–76
Activation of cerebrocortical type II 5'-deiodinase activity in Syrian hamsters kept under short photoperiod and reduced ambient temperature. Puig-Domingo M, et al. **Brain Res Bull** 1989 Jun;22(6):975–9
Tyrosine hydroxylase-immunoreactive neurons in the mouse cerebral cortex during the postnatal period. Satoh J, et al. **Brain Res Dev Brain Res** 1990 Apr 1;53(1):1–5
11 beta-hydroxysteroid dehydrogenase bioactivity and messenger RNA expression in rat forebrain: localization in hypothalamus, hippocampus, and cortex. Moisan MP, et al. **Endocrinology** 1990 Sep;127(3):1450–5
Effects of methimazole on the 5'-monodeiodinase activities of various tissues. Zenker N, et al. **Enzyme** 1989;42(2):73–9
5-Hydroxytryptamine receptor agonists influence calcium-stimulated adenylate cyclase activity in the cerebral cortex and hippocampus of the rat. Mørk A, et al. **Eur J Pharmacol** 1990 Jan 17;175(3):237–44
Patterns of transiently expressed acetylcholinesterase activity in cerebral cortex and dorsal thalamus of developing rats with cytotoxin-induced microencephaly. Robertson RT, et al. **Int J Dev Neurosci** 1990;8(2):223–32
Carbachol in the presence of guanosine 5'-O-(3-thiotriphosphate) stimulates the breakdown of exogenous phosphatidylinositol 4,5-bisphosphate, phosphatidylinositol 4-phosphate, and phosphatidylinositol by rat brain membranes. Claro E, et al. **J Biol Chem** 1989 Nov 5;264(31):18288–95
Cloning and expression of bovine brain inositol monophosphatase. Diehl RE, et al. **J Biol Chem** 1990 Apr 15;265(11):5946–9
Identification of a 27-kDa protein with the properties of type II iodothyronine 5'-deiodinase in dibutyryl cyclic AMP-stimulated glial cells. Farwell AP, et al. **J Biol Chem** 1989 Dec 5;264(34):20561–7
Beta subunit copurifies with GppNHp-activated adenylyl cyclase. Marbach I, et al. **J Biol Chem** 1990 Jun 15; 265(17):9999–10004
Muscarinic acetylcholine receptor regulates phosphatidylcholine phospholipase D in canine brain. Qian Z, et al. **J Biol Chem** 1989 Dec 25;264(36):21720–4
Distribution of phosphate-activated glutaminase in the human cerebral cortex. Akiyama H, et al. **J Comp Neurol** 1990 Jul 8;297(2):239–52
Formation of 12-lipoxygenase metabolites in rat cerebral cortical slices: stimulation by calcium ionophore, glutamate and N-methyl-D-aspartate. Wolfe LS, et al. **J Neural Transm Suppl** 1990;29:29–37 (25 ref.)
Protein kinase C activity in rat brain cortex. Crumrine RC, et al. **J Neurochem** 1990 Sep;55(3):826–31
Two isoenzymes of Na+,K+-ATPase have different kinetics of K+ dephosphorylation in normal cat and human brain cortex. Guillaume D, et al. **J Neurochem** 1990 Jan; 54(1):130–4
Guanine nucleotide-binding protein regulation of microsomal phospholipase D activity of canine cerebral cortex. Qian Z, et al. **J Neurochem** 1990 May;54(5):1632–8
Induction of ornithine decarboxylase in cerebral cortex by excitotoxin lesion of nucleus basalis: association with postsynaptic responsiveness and N-methyl-D-aspartate receptor activation. Reed LJ, et al. **J Neurochem** 1990 Sep; 55(3):780–7
Properties of a protein kinase C activity in synaptic plasma membrane and postsynaptic density fractions isolated from canine cerebral cortex. Suzuki T, et al. **J Neurochem** 1989 Dec;53(6):1751–62
Alterations in glutamine synthetase activity by FeCl2-induced focal and kindled amygdaloid seizures. Tiffany-Castiglioni EC, et al. **J Neurosci Res** 1990 Feb; 25(2):223–8
Kinetic properties of the 5 alpha-reductase of testosterone in the purified myelin, in the subcortical white matter and in the cerebral cortex of the male rat brain. Poletti A, et al. **J Steroid Biochem** 1990 Jan;35(1):97–101
The presence of ATP + ubiquitin-dependent proteinase and multicatalytic proteinase complex in bovine brain. Azaryan A, et al. **Neurochem Res** 1989 Oct;14(10):995–1001
Quantitation of the beta-bungarotoxin-induced release of lactate dehydrogenase from cerebrocortical synaptosomes. Martinez C, et al. **Neurochem Res** 1989 Sep;14(9):865–9
Effects of treatment with a lithium-imipramine combination on components of adenylate cyclase in the cerebral cortex of the rat. Mørk A, et al. **Neuropharmacology** 1990 Mar; 29(3):261–7
Subtype specificity of the muscarinic receptor-stimulated GTPase response in the rat cortex. Ghodsi-Hovsepian S, et al. **Neurosci Lett** 1990 Mar 2;110(1–2):148–54
Lewy bodies in tyrosine hydroxylase-synthesizing neurons of the human cerebral cortex. Kuljis RO, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):49–54
Effect of methionine sulfoximine on pyruvate dehydrogenase, citric acid cycle enzymes and aminotransferases in the subcellular fractions isolated from rat cerebral cortex. Ratnakumari L, et al. **Neurosci Lett** 1990 Jan 22;

108(3):328–34
Possible involvement of Na+,K(+)-ATPase inhibition in neurotransmitter release induced by collidine. Rodríguez de Lores Arnaiz G, et al. **Neurosci Lett** 1990 Jan 22; 108(3):309–13
Regional stimulation of cholinergic function by nerve growth factor in an animal model of Alzheimer's disease. Williams LR, et al. **Prog Clin Biol Res** 1989;317:1179–92
Correlation of cell-free brain cyclic nucleotide phosphodiesterase activities to cyclic AMP decay in intact brain slices. Whalin ME, et al.
Second Messengers Phosphoproteins 1988–89; 12(5–6):311–25
[Lactate dehydrogenase and malate dehydrogenase activity in the glial and neuronal fractions of the brain tissue in rats of various ages] Hrachovina V, et al. **Sb Lek** 1990 Mar;92(2–3):39–44 (Eng. Abstr.) **(Cze)**
[The effect of the pH environment and reduced ATP supply on ATPase activity in the brain of young and adult rats] Mourek J. **Sb Lek** 1990 Mar;92(2–3):71–7 (Eng. Abstr.) **(Cze)**
[Experimental studies of the pathomechanism of portal encephalopathy. II. Monoamine oxidase (MAO) activity in the rat brain after porta- caval shunt using 2 different methods] Rokicki M, et al. **Neuropatol Pol** 1989; 27(2):209–16 (Eng. Abstr.) **(Pol)**
[Experimental studies of the pathomechanism of portal encephalopathy. I. Changes in monoamine oxidase (MAO) activity in the cerebral cortex and cerebellum of rats after portacaval shunt] Rokicki W, et al. **Neuropatol Pol** 1989; 27(2):199–207 (Eng. Abstr.) **(Pol)**
[Adenylate cyclase system of synaptosomes from the rat cerebral cortex during acute stress] Skurygin VP, et al. **Vopr Med Khim** 1990 Mar–Apr;36(2):45–6 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Development of the various glial cell types in the cerebral cortex of postnatal rats. Kaur C, et al.
Acta Anat (Basel) 1989;136(3):204–10
[125I]alpha-bungarotoxin binding marks primary sensory area developing rat neocortex. Fuchs JL. **Brain Res** 1989 Nov 6;501(2):223–34
Absence of impulse activity in cortical neurons with transient projections to the cerebellum. Tolbert DL.
Brain Res Dev Brain Res 1989 Dec 1;50(2):241–9
Changes in messenger RNAs coding for neurotransmitter receptors and voltage-operated channels in the developing rat cerebral cortex. Carpenter MK, et al. **Dev Biol** 1990 Apr;138(2):313–23
Developmental changes in estrogen receptors in mouse cerebral cortex between birth and postweaning: studied by autoradiography with 11 beta-methoxy-16 alpha-[125I]iodoestradiol. Shughrue PJ, et al.
Endocrinology 1990 Feb;126(2):1112–24
Effect of environmental enrichment during nutritional rehabilitation on body growth, blood parameters and cerebral cortical development of rats. Carughi A, et al. **J Nutr** 1989 Dec;119(12):2005–16
Redistribution of synaptic vesicle antigens is correlated with the disappearance of a transient synaptic zone in the developing cerebral cortex. Chun JJ, et al. **Neuron** 1988 Jun;1(4):297–310
Developmental plasticity and recovery of function.
Neuropsychologia 1990;28(6):515–634
Transient increase in ligand binding to quisqualate and kainate sites in cerebral cortex of immature rats. Erdö SL, et al. **Neurosci Lett** 1989 Sep 25;104(1–2):161–6
Developmental aspects of the neocortex of the bat. Ferrer I. **Neurosci Res** 1989 Aug;6(6):573–80
Transient projection from the superior temporal sulcus to area 17 in the newborn macaque monkey. Kennedy H, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):8093–7
Glycosylation is required for maintenance of functional voltage-activated channels in growing neocortical neurons of the rat. Zona C, et al. **Proc R Soc Lond [Biol]** 1990 Mar 22;239(1295):119–27
Cross-modal plasticity in cortical development: differentiation and specification of sensory neocortex. Sur M, et al. **Trends Neurosci** 1990 Jun;13(6):227–33 (60 ref.)
[Dependency of Japanese encephalitis virus neurotropism on neuronal immaturity of rat cerebral cortex] Ogata A. **Hokkaido Igaku Zasshi** 1990 Mar;65(2):221–34 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

A monoclonal antibody 5E5 recognizes an intranuclear antigen selectively present in a subpopulation of the neurons. Yoshimura K, et al. **Brain Res** 1990 Feb 12; 509(1):161–4
Antibodies in serum of patients with Alzheimer's disease cause immunolysis of cholinergic nerve terminals from the rat cerebral cortex. Bradford HF, et al.
Can J Neurol Sci 1989 Nov;16(4 Suppl):528–34
An antiserum to the N-terminal subsequence of the Alzheimer amyloid beta protein does not react with neurofibrillary tangles. Behrouz N, et al. **J Gerontol** 1989 Nov;44(6):B156–9
Comparison and quantitation of Ia antigen expression on cultured macroglia and ameboid microglia from Lewis rat cerebral cortex: analyses and implications. Sasaki A, et al. **J Neuroimmunol** 1989 Nov;25(1):63–74
Autoantibodies to each protein fraction extracted from cerebral endothelial cell membrane in the sera of patients with multiple sclerosis. Tsukada N, et al.
J Neuroimmunol 1989 Sep;24(1–2):41–6
Swollen cortical neurons in Creutzfeldt-Jakob disease contain a phosphorylated neurofilament epitope. Nakazato Y, et al. **J Neuropathol Exp Neurol** 1990 May;49(3):197–205
Method for the identification of brain macrophages/phagocytic cells in vitro. Jordan FL, et al.
J Neurosci Res 1990 May;26(1):74–82

INJURIES

Cerebral birth injuries: their orthopaedic classification and subsequent treatment. 1932 [classical article] Phelps WM. **Clin Orthop** 1990 Apr;(253):4–11
Induction of a heat shock gene at the site of tissue injury in the rat brain. Brown IR, et al. **Neuron** 1989 Jun; 2(6):1559–64
Ectopic pupil associated with cerebral cortical injuries: a sentinel observation. Moress R. **Ophthalmic Physiol Opt** 1989 Jul;9(3):336–8
Systemic and cerebral hemodynamic response to mannitol after cerebral missile injury. Brown FD, et al.
Surg Forum 1978;29:525–7
[Depressed fracture of the calvaria] Langmayr JJ, et al. **Unfallchirurg** 1990 Jan;93(1):1–3 (Eng. Abstr.) **(Ger)**

METABOLISM

Glucose metabolism and rate constants in Alzheimer's disease examined with dynamic positron emission tomography scan. Fukuyama H, et al. **Acta Neurol Scand** 1989 Oct; 80(4):307–13
The prevalence of amyloid (A4) protein deposits within the cerebral and cerebellar cortex in Down's syndrome and Alzheimer's disease. Mann DM, et al.
Acta Neuropathol (Berl) 1990;80(3):318–27
Effect of D-penicillamine on rat brain cortex lipid peroxidation induced "in vitro" and "in vivo" by iron-compounds. Ciuffi M, et al. **Acta Physiol Hung** 1990; 75 Suppl:57–8
Parallel changes in brain tissue blood flow and mitochondrial function during and after 30 minutes of bilateral forebrain ischemia in the gerbil. Nádasy GL, et al.
Acta Physiol Hung 1989;74(3–4):267–76
Changes in the serotonin, dopamine and noradrenaline levels in the cerebral cortex of rats trained for active and passive avoidance. Petkov VV, et al.
Acta Physiol Pharmacol Bulg 1989;15(2):28–32
Local glucose utilization changes caused by subarachnoid contrast media in the rabbit. Ekholm SE, et al.
Acta Radiol 1990 Mar;31(2):209–12
Neuronal localization of the nerve growth factor precursor-like immunoreactivity in the cortex and hippocampus of the rat brain. Senut MC, et al.
Adv Exp Med Biol 1990;265:133–9
Influence of succinylpurines on the binding of adenosine to a particulate fraction of rat cerebral cortex. Vincent MF, et al. **Adv Exp Med Biol** 1989;253B:441–5
Autoinhibition of histamine release by H3 receptors in rat brain cortex depends on stimulation frequency. van der Vliet A, et al. **Agents Actions** 1990 Apr;30(1–2):206–9
Fura-2 measurement of cytosolic free calcium in rat brain cortical synaptosomes and the influence of ethanol. Rezazadeh SM, et al. **Alcohol** 1989 Sep–Oct;6(5):341–5
Substance P immunoreactivity in Alzheimer disease: a study in cases presenting symmetric or asymmetric cortical atrophy. Bouras C, et al. **Alzheimer Dis Assoc Disord** 1990; 4(1):24–34
Blood-induced superoxide anion generation on the cerebral cortex of newborn pigs. Mirro R, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1560–4
Greater left cerebral hemispheric metabolism in bulimia assessed by positron emission tomography. Wu JC, et al. **Am J Psychiatry** 1990 Mar;147(3):309–12
Local cerebral glucose utilization in the neocortical areas of the rat brain. Wree A, et al. **Anat Embryol (Berl)** 1990; 181(6):603–14
Molecular actions of pentobarbital isomers on sodium channels from human brain cortex. Frenkel C, et al.
Anesthesiology 1990 Apr;72(4):640–9
The action of stress and anxiolytic and anxiogenic benzodiazepine receptors ligands on [35S] T-butylbicyclophosphorothionate binding in the rat cerebral cortex. Concas A, et al. **Ann Ist Super Sanita** 1990; 26(1):19–24
Effect of aging on calcium cytosolic concentration in rat cortical synaptosomes. Pepeu G, et al.
Ann Ist Super Sanita 1990;26(1):49–53
Cortical dihydropyridine binding sites are unaltered in human alcoholic brain. Kril JJ, et al. **Ann Neurol** 1989 Sep; 26(3):395–7
Immunocytochemical and ultrastructural studies of Pick's disease. Murayama S, et al. **Ann Neurol** 1990 Apr; 27(4):394–405
Elimination of the delayed postischemic energy deficit in cerebral cortex and hippocampus of aged rats with a dried, deproteinized blood extract (Actovegin). Hoyer S, et al.
Arch Gerontol Geriatr 1989 Sep–Oct;9(2):181–92
Inhibition of 3H-nitrendipine binding in rat aortic and cerebral cortex membranes by the new dihydropyridine calcium antagonist benidipine hydrochloride. Ishii A.
Arzneimittelforschung 1989 Dec;39(12):1546–50
Brain glucose utilization under high sensory activation: hypoactivation of prefrontal cortex. Goffinet AM, et al.
Aviat Space Environ Med 1990 Apr;61(4):338–42
[35S]Lanthionine ketimine binding to bovine brain membranes. Fontana M, et al.
Biochem Biophys Res Commun 1990 Aug 31;171(1):480–6
The acylation of 1-acyl-sn-glycero-3-phosphate by neuronal nuclei and microsomal fractions of immature rabbit cerebral cortex. Baker RR, et al.
Biochem Cell Biol 1990 Mar;68(3):641–7
Conversion of ethanolamine, monomethylethanolamine and dimethylethanolamine to choline-containing compounds by neurons in culture and by the rat brain. Andriamampandry C, et al. **Biochem J** 1989 Dec 1; 264(2):555–62
Differences between muscarinic-receptor- and Ca2(+)-induced inositol polyphosphate isomer accumulation in rat cerebral-cortex slices. Baird JG, et al.
Biochem J 1990 May 1;267(3):835–8
Muscarinic cholinergic receptor of rat cerebral cortex. Location and characterization of ligand binding site-carrying peptides in synaptosomal membranes and isolated neuronal perikarya. Bouzat CB, et al.
Biochem J 1989 Nov 1;263(3):921–8
Reduced inositol polyphosphate accumulation and inositol supply induced by lithium in stimulated cerebral cortex slices. Kennedy ED, et al. **Biochem J** 1990 May 1; 267(3):781–6
Elegance persists in the purification of K+ channels [letter; comment] Parcej DN, et al. **Biochem J** 1989 Dec 1; 264(2):623–4 Comment on: Biochem J 1989 Dec 1;264(2):622–3.
Artificially imposed electrical potentials drive L-glutamate uptake into synaptic vesicles of bovine cerebral cortex. Shioi J, et al. **Biochem J** 1990 Apr 1;267(1):63–8
Botulinum type F neurotoxin. Large-scale purification and characterization of its binding to rat cerebrocortical synaptosomes. Wadsworth JD, et al. **Biochem J** 1990 May 15;268(1):123–8
Halothane disruption of alpha 2-adrenergic receptor-mediated inhibition of adenylate cyclase and receptor G-protein coupling in rat brain. Baumgartner MK, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):223–5
A common binding site for tricyclic and nontricyclic 5-hydroxytryptamine uptake inhibitors at the substrate recognition site of the neuronal sodium-dependent 5-hydroxytryptamine transporter. Graham D, et al.
Biochem Pharmacol 1989 Nov 1;38(21):3819–26
Inhibition of sodium-dependent L-leucine uptake in rat brain synaptosomes. Tan CH, et al. **Biochem Pharmacol** 1990 Mar 1;39(5):955–8
5HT2 receptor changes in rat cortex and platelets following chronic ritanserin and clorgyline administration. Twist EC, et al. **Biochem Pharmacol** 1990 Jan 1;39(1):161–6
Characterization of cysteine sulphinate transport by intact rat brain cerebrocortical synaptosome fractions. Grieve A, et al. **Biochem Soc Trans** 1990 Jun;18(3):426–7
Role of excitatory amino acids on somatostatin production in the central nervous system. Rickards C, et al.
Biochem Soc Trans 1990 Jun;18(3):405–7
Induction of ornithine decarboxylase mRNA in cerebral cortex in response to lesion of nucleus basalis. Wood H, et al. **Biochem Soc Trans** 1990 Jun;18(3):395–6
Modulation of glutamate-induced uncompetitive blocker binding to the NMDA receptor by temperature and by glycine. Lamdani-Itkin H, et al. **Biochemistry** 1990 Apr 24;29(16):3987–93
Local anesthetics: stimulation of incorporation of inositol into phosphoinositides in guinea pig cerebral cortical synaptoneurosomes. Nishizawa Y, et al.
Biochim Biophys Acta 1990 Sep 1;1054(2):213–8
Differences in the adenosine receptors modulating inositol phosphates and cyclic AMP accumulation in mammalian cerebral cortex. Alexander SP, et al. **Br J Pharmacol** 1989 Dec;98(4):1241–8
Heterogeneity of alpha 2-adrenoceptors in rat cortex but not human platelets can be defined by 8-OH-DPAT, RU 24969 and methysergide. Brown CM, et al. **Br J Pharmacol** 1990 Mar;99(3):481–6
Modulation of inositol (1,4,5)-trisphosphate concentration by cyclic AMP in rat cerebral cortex slices. Challiss RA, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:833P
Effects of selective phosphodiesterase inhibition on cyclic AMP hydrolysis in rat cerebral cortical slices. Challiss RA, et al. **Br J Pharmacol** 1990 Jan;99(1):47–52
Lower cortical beta-adrenoceptor binding sites in post-mortem samples from depressed suicide victims. De Paermentier F, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:818P
Temporal changes in the calcium-dependence of the histamine H1-receptor-stimulation of cyclic AMP accumulation in guinea-pig cerebral cortex. Donaldson J, et al. **Br J Pharmacol** 1989 Dec;98(4):1365–75
Characterisation of [3H]-senktide binding to NK3 tachykinin receptors in guinea-pig ileum and cerebral cortex. Guard S, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:798P
Cortical muscarinic receptors in demented patients with Alzheimer's disease or Parkinson's disease. Lange KW, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:817P
Baclofen and phaclofen modulate GABA release from slices

of rat cerebral cortex and spinal cord but not from retina. Neal MJ, et al. **Br J Pharmacol** 1989 Sep;98(1):105–12
Development of tolerance to the effects of vigabatrin (gamma–vinyl–GABA) on GABA release from rat cerebral cortex, spinal cord and retina. Neal MJ, et al. **Br J Pharmacol** 1990 Jun;100(2):324–8
Effect of acute and subchronic nicotine treatment on cortical acetylcholine release and on nicotinic receptors in rats and guinea–pigs. Nordberg A, et al. **Br J Pharmacol** 1989 Sep; 98(1):71–8
Quinoxalines interact with the glycine recognition site of NMDA receptors: studies in guinea–pig myenteric plexus and in rat cortical membranes. Pellegrini–Giampietro DE, et al. **Br J Pharmacol** 1989 Dec;98(4):1281–6
Effects of a selective 5–HT2 agonist, DOI, on 5–HT neuronal firing in the dorsal raphe nucleus and 5–HT release and metabolism in the frontal cortex. Wright IK, et al. **Br J Pharmacol** 1990 Feb;99(2):221–2
Glucose metabolic rate in normals and schizophrenics during the Continuous Performance Test assessed by positron emission tomography. Buchsbaum MS, et al. **Br J Psychiatry** 1990 Feb;156:216–27
Cerebral cortical concentrations of bioamines and their metabolites during arousal and after feeding in the little brown bat (Myotis lucifugus). Bauman WA, et al. **Brain Res** 1989 Oct 23;500(1–2):156–60
Enhanced production of superoxide anion by microglia from trisomy 16 mice. Colton CA, et al. **Brain Res** 1990 Jun 11;519(1–2):236–42
Visualization of neurokinin–3 receptor sites in rat brain using the highly selective ligand [3H]senktide. Dam TV, et al. **Brain Res** 1990 Jan 1;506(1):175–9
Synapses of double bouquet cells in monkey cerebral cortex visualized by calbindin immunoreactivity. DeFelipe J, et al. **Brain Res** 1989 Nov 27;503(1):49–54
Potentiation of [3H]inositol phosphate formation by receptor activation and membrane depolarization in brain cortical slices (I). Diamant S, et al. **Brain Res** 1989 Nov 27; 503(1):55–61
Acidosis reduces NMDA receptor activation, glutamate neurotoxicity, and oxygen–glucose deprivation neuronal injury in cortical cultures. Giffard RG, et al. **Brain Res** 1990 Jan 8;506(2):339–42
Expression of beta–nerve growth factor in cultured cells derived from the hypothalamus and cerebral cortex. Gonzalez D, et al. **Brain Res** 1990 Mar 19;511(2):249–58
Fructose–1,6–bisphosphate reduces ATP loss from hypoxic astrocytes. Gregory GA, et al. **Brain Res** 1990 May 21; 516(2):310–2
Chronic exposure of developing cortical neurons to GABA down–regulates GABA/benzodiazepine receptors and GABA–gated chloride currents. Hablitz JJ, et al. **Brain Res** 1989 Nov 6;501(2):332–8
Substance P and neurokinin A, two coexisting tachykinins stimulating the release of [3H]5–HT from rat cerebral cortical slices. Iverfeldt K, et al. **Brain Res** 1990 Jan 8; 506(2):335–8
Posthoc phosphorylation of proteins derived from ischemic rat hippocampus, striatum and neocortex. Kirschenbaum B, et al. **Brain Res** 1990 Mar 12;511(1):21–9
Vicia villosa lectin–positive neurones in human cerebral cortex. Loss in Alzheimer–type dementia. Kobayashi K, et al. **Brain Res** 1989 Sep 25;498(1):170–4
The effect of nicotine on catecholaminergic storage vesicles. Kramer HK, et al. **Brain Res** 1989 Dec 4;503(2):296–8
Chronic benzodiazepine antagonist treatment and its withdrawal upregulates components of GABA–benzodiazepine receptor ionophore complex in cerebral cortex of rat. Kulkarni SK, et al. **Brain Res** 1990 Jun 11;519(1–2):6–11
Guanidinoethanesulfonic acid—inhibitor of GABA uptake in rat cortical synaptosomes. Li YP, et al. **Brain Res** 1990 Feb 26;510(1):147–9
Remote lateralized changes in cortical [3H]spiperone binding following focal frontal cortex lesions in the rat. Mayberg HS, et al. **Brain Res** 1990 May 14;516(1):127–31
Inhibition of phosphoinositide hydrolysis by the novel neurotoxin beta–N–oxalyl–L–alpha, beta–diaminopropionic acid (L–BOAA). Ormandy GC, et al. **Brain Res** 1990 Feb 26;510(1):53–7
Effect of a brief hypoxic/hypotensive episode on the in vivo release of cerebral cortical gamma–aminobutyric acid and glycine. Phillis JW, et al. **Brain Res** 1989 Dec 11; 504(1):121–3
Preferential loss of GABAergic neurons in hypoxia–exposed neocortex slab cultures is attenuated by the NMDA receptor blocker D–2–amino–7–phosphonoheptanoate. Romijn HJ. **Brain Res** 1989 Oct 30;501(1):100–4
Differential effects of chronic treatment with mianserin and protryptiline on rat brain cortical alpha 1–adrenoceptors. Sallés J, et al. **Brain Res** 1989 Oct 2;498(2):366–70
Immunocytochemical visualization of muscarinic cholinoceptors in the human cerebral cortex. Schröder H, et al. **Brain Res** 1990 Apr 30;514(2):249–58
Immunohisto– and cytochemical localization of cortical nicotinic cholinoceptors in rat and man. Schröder H, et al. **Brain Res** 1989 Nov 20;502(2):287–95
Dog cerebral cortex contains mu–, delta– and kappa–opioid receptors at different densities: apparent lack of evidence for subtypes of the kappa–receptor using selective radioligands. Sharif NA, et al. **Brain Res** 1990 Feb 26; 510(1):108–14
Androgen receptors are differentially distributed between right and left cerebral hemispheres of the fetal male rhesus monkey. Sholl SA, et al. **Brain Res** 1990 May 14; 516(1):122–6
Is glutamate a co–transmitter in cortical cholinergic terminals? Effects of nucleus basalis lesion and of presynaptic muscarinic agents. Szerb JC, et al. **Brain Res** 1990 May 7;515(1–2):214–8
Analysis of wheat germ agglutinin (WGA), Phaseolus vulgaris leucoagglutinin (PHA–L), and lens culinaris agglutinin (LCA) binding to isolated rat neocortical membrane glycoproteins and to brain tissue sections. Trudrung P, et al. **Brain Res** 1989 Sep 18;497(2):399–401
Electroconvulsive shocks increase the concentration of neocortical and hippocampal neuropeptide Y (NPY)–like immunoreactivity in the rat. Wahlestedt C, et al. **Brain Res** 1990 Jan 15;507(1):65–8
Neurotoxicity of beta–N–methylamino–L–alanine (BMAA) and beta–N–oxalylamino–L–alanine (BOAA) on cultured cortical neurons. Weiss JH, et al. **Brain Res** 1989 Sep 11; 497(1):64–71
Interaction of ethanol and stress with the GABA/BZ receptor in LS and SS mice. Bowers BJ, et al. **Brain Res Bull** 1989 Jul–Aug;23(1–2):53–9
Dephosphorylation of B–50 in synaptic plasma membranes. Dokas LA, et al. **Brain Res Bull** 1990 Mar;24(3):321–9
MIF–1 and Tyr–MIF–1 augment muscimol–stimulated chloride uptake in cerebral cortex. Miller LG, et al. **Brain Res Bull** 1989 Dec;23(6):413–5
Ontogeny of high affinity uptake of GABA studied in 'minislices' (tissue prisms) of rat cerebral cortex. Balcar VJ, et al. **Brain Res Dev Brain Res** 1989 Oct 1;49(2):295–9
Direct visualisation of the soluble pool of tubulin in the neuronal growth cone: immunofluorescence studies following taxol polymerisation. Gordon–Weeks PR, et al. **Brain Res Dev Brain Res** 1989 Oct 1;49(2):305–10
Trophic control of the ornithine decarboxylase/polyamine system in neonatal rat brain regions: lesions caused by 6–hydroxydopamine produce effects selective for cerebellum. Lau C, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1–2):167–73
Procholecystokinin processing in rat cerebral cortex during development. Mogensen NW, et al. **Brain Res Dev Brain Res** 1990 Jun 1;54(1):81–6
Different ontogenetic profiles of cells expressing prepro–neurotensin/neuromedin N mRNA in the rat posterior cingulate cortex and the hippocampal formation. Sato M, et al. **Brain Res Dev Brain Res** 1990 Jul 1; 54(2):249–55
Relationship between the partial inhibition of muscarinic receptor–mediated phosphoinositide hydrolysis by phorbol esters and tetrodotoxin in rat cerebral cortex. Abdallah EA, et al. **Brain Res Mol Brain Res** 1990 Jun;8(1):1–7
Increased number of somatostatin–immunoreactive neurons in primary cultures of trisomy 16 mouse neocortex. Caserta MT, et al. **Brain Res Mol Brain Res** 1990 Apr;7(3):269–72
Changes of proenkephalin and prodynorphin mRNAs and related peptides in rat brain during the development of deep prepyriform cortex kindling. Lee PH, et al. **Brain Res Mol Brain Res** 1989 Dec;6(4):263–73
The influence of adrenalectomy on alpha–adrenoceptor responses in rat cerebral cortex slices. Robinson JP, et al. **Brain Res Mol Brain Res** 1990 Jan;7(1):69–74
Perforant path stimulation differentially alters prodynorphin mRNA and proenkephalin mRNA levels in the entorhinal cortex–hippocampal region. Xie CW, et al. **Brain Res Mol Brain Res** 1990 Apr;7(3):199–205
Effect of tityustoxin and ouabain on protein phosphorylation in a crude synaptosome fraction. Ribeiro AM, et al. **Braz J Med Biol Res** 1989;22(5):547–54 (23 ref.)
Potassium currents in rat cortical neurons in culture are enhanced by the antiepileptic drug carbamazepine. Zona C, et al. **Can J Physiol Pharmacol** 1990 Apr;68(4):545–7
Interaction of batrachotoxinin–A benzoate with voltage–sensitive sodium channels: the effects of pH. Brown GB, et al. **Cell Mol Neurobiol** 1981 Dec;1(4):361–71
Differential regulation by dexamethasone of glucocorticoid receptor messenger RNA concentrations in neuronal cultures derived from fetal rat hypothalamus and cerebral cortex. Pepin MC, et al. **Cell Mol Neurobiol** 1990 Jun; 10(2):227–35
Cholinergic–induced [3H] noradrenaline release in rat brain cortical slices is mediated via a pertussis toxin sensitive GTP binding protein and involves activation of protein kinase C. Ari IL, et al. **Cell Signal** 1989;1(5):461–70
Permeability of two nitrosoureas, carmustine and fotemustine in rat cortex. Meulemans A, et al. **Chemotherapy** 1989; 35(5):313–9
Evidence for the coupling of muscarinic M1 receptors to polyphosphoinositide turnover in rat cortical synaptosomes. Wei JW, et al. **Chin J Physiol** 1989; 32(2):103–14
Brain synaptosomal Ca2+ uptake: comparison of Sprague–Dawley, Wistar–Kyoto and spontaneously hypertensive rats. Honda H, et al. **Comp Biochem Physiol [B]** 1990;95(3):555–8
Immunohistochemical localization of a beta–galactoside–binding lectin in rat central nervous system. I. Light– and electron–microscopical studies on developing cerebral cortex and corpus callosum. Joubert R, et al. **Dev Neurosci** 1989;11(6):397–413
The regulation of proenkephalin expression in a distinct population of glial cells. Melner MH, et al. **EMBO J** 1990 Mar;9(3):791–6
Growth hormone–releasing factor production by fetal rat cerebrocortical and hypothalamic cells in primary culture. Fernandez G, et al. **Endocrinology** 1989 Oct;125(4):1991–8
Synthesis and secretion of vasoactive intestinal peptide by rat fetal cerebral cortical and hypothalamic cells in culture. Lorenzo MJ, et al. **Endocrinology** 1989 Oct;125(4):1983–90
Subcortical metabolic alterations in partial epilepsy. Sperling MR, et al. **Epilepsia** 1990 Mar–Apr;31(2):145–55
Cortical dihydropyridine binding sites and a behavioral syndrome in morphine–abstinent rats. Antkiewicz–Michaluk L, et al. **Eur J Pharmacol** 1990 May 3;180(1):129–35
Characterization of 5–hydroxytryptamine3 receptors in the medial prefrontal cortex: a microiontophoretic study. Ashby CR Jr, et al. **Eur J Pharmacol** 1989 Dec 7; 173(2–3):193–6
Hexahydrodifenidol does not distinguish among M1 receptors in rat cerebral cortex, hippocampus and superior cervical ganglion. Freedman SB, et al. **Eur J Pharmacol** 1989 Aug 29;167(3):411–4
Stereoselective binding of niguldipine enantiomers to alpha 1A–adrenoceptors labeled with [3H]5–methyl–urapidil. Graziadei I, et al. **Eur J Pharmacol** 1989 Oct 17; 172(4–5):329–37
Solubilization and characterisation of the cholecystokininB binding site from pig cerebral cortex. Gut SH, et al. **Eur J Pharmacol** 1989 Oct 17;172(4–5):339–46
Lithium modulation of cortical cyclic nucleotides: evidence for the Yin–Yang hypothesis. Harvey B, et al. **Eur J Pharmacol** 1990 Jan 10;175(2):129–36
Opioid receptor–mediated inhibition of dopamine and acetylcholine release from slices of rat nucleus accumbens, olfactory tubercle and frontal cortex. Heijna MH, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):267–78
Stress activation of limbic and cortical dopamine release is prevented by ICS 205–930 but not by diazepam. Imperato A, et al. **Eur J Pharmacol** 1990 Jan 10;175(2):211–4
Memantine displaces [3H]MK–801 at therapeutic concentrations in postmortem human frontal cortex. Kornhuber J, et al. **Eur J Pharmacol** 1989 Aug 3; 166(3):589–90
Further evidence for an anomalous regulation of cortical 5–HT2 receptors: studies with 5–HT precursors. Koshikawa N, et al. **Eur J Pharmacol** 1990 Mar 27; 178(3):365–9
Inhibition of cyclic AMP accumulation by alpha 2–adrenoceptors in the rat cerebral cortex. Kuno N, et al. **Eur J Pharmacol** 1990 Feb 13;176(3):281–7
Methoctramine, a cardioselective muscarinic antagonist, stimulates phosphoinositide hydrolysis in rat cerebral cortex. Lee NH, et al. **Eur J Pharmacol** 1989 Aug 22; 167(2):295–8
Beta down–regulation induced by repeated vasopressin treatment. Nalepa I, et al. **Eur J Pharmacol** 1990 Mar 27; 178(3):375–6
Repeated administration of lisuride down–regulates dopamine D–2 receptor function in mesostriatal and in mesolimbocortical rat brain regions. Nisoli E, et al. **Eur J Pharmacol** 1990 Jan 25;176(1):85–90
[14C]guanidinium ion influx into Na+ channel preparations from mouse cerebral cortex. Reith ME. **Eur J Pharmacol** 1990 Jan 23;188(1):33–41
Developmental aspects of muscarinic–induced inositol polyphosphate accumulation in rat cerebral cortex. Rooney TA, et al. **Eur J Pharmacol** 1989 Dec 5;172(6):425–34
Stress increases noradrenaline release in the rat frontal cortex: prevention by diazepam. Rossetti ZL, et al. **Eur J Pharmacol** 1990 Feb 6;176(2):229–31
Binding of [3H]ifenprodil, a novel NMDA antagonist, to a polyamine–sensitive site in the rat cerebral cortex. Schoemaker H, et al. **Eur J Pharmacol** 1990 Feb 6; 176(2):249–50
Reversal by apomorphine of the gabaculine–induced GABA accumulation in mouse cortex. Steulet AF, et al. **Eur J Pharmacol** 1989 Dec 19;174(2–3):161–70
Effect of monovalent ions upon G proteins coupling muscarinic receptors to phosphoinositide hydrolysis in the rat cerebral cortex. Tiger G, et al. **Eur J Pharmacol** 1990 Jan 23;188(1):51–62
Effects of cholinergic drugs on extracellular levels of acetylcholine and choline in rat cortex, hippocampus and striatum studied by brain dialysis. Toide K, et al. **Eur J Pharmacol** 1989 Dec 7;173(2–3):133–41
Chronic exposure to Ro 15–1788: differential effect on flunitrazepam binding to cortex and hippocampus. Urbancic M, et al. **Eur J Pharmacol** 1989 Nov 14;171(1):1–7
Specific [3H]LY278584 binding to 5–HT3 recognition sites in rat cerebral cortex. Wong DT, et al. **Eur J Pharmacol** 1989 Jul 4;166(1):107–10
Monoclonal antibody VC1.1 selectively stains a population of GABAergic neurons containing the calcium–binding protein parvalbumin in the rat cerebral cortex. Kosaka T, et al. **Exp Brain Res** 1989;78(1):43–50
Local variations in cerebrospinal fluid composition and its relationship to the composition of the extracellular fluid of the cortex. Bito LZ, et al. **Exp Neurol** 1966 Mar; 14(3):264–80
Distribution of cholinergic receptors in the rat and human neocortex. Zilles K, et al. **Experientia Suppl** 1989;57:212–28
Characteristics and displaceability of neurotensin binding

sites in the rat cerebral cortex and corpus striatum. Awad EW, et al. **Gen Pharmacol** 1989;20(6):725–9

Pentylenetetrazole–induced seizure activity produces an increased release of calcium from endoplasmic reticulum by mediating cyclic AMP–dependent protein phosphorylation in rat cerebral cortex. Onozuka M, et al. **Gen Pharmacol** 1989;20(5):627–34

Effects of the Ca2(+)–antagonists nifedipine, verapamil, flunarizine and of the calmodulin antagonist trifluoperazine on muscarinic cholinergic receptors in rat cerebral cortex. Popova J, et al. **Gen Pharmacol** 1990;21(3):317–9

Influence of long–term treatment with the Ca2(+)–antagonists nifedipine, verapamil, flunarizine and with the calmodulin antagonist trifluoperazine on beta–adrenoceptors in rat cerebral cortex. Staneva–Stoytcheva D, et al. **Gen Pharmacol** 1990; 21(1):149–52

Transection of the rat olfactory nerve increases glial fibrillary acidic protein immunoreactivity from the olfactory bulb to the piriform cortex. Anders JJ, et al. **GLIA** 1990; 3(1):17–25

Expression of beta–adrenergic receptors by astrocytes isolated from adult rat cortex. Salm AK, et al. **GLIA** 1989; 2(5):346–52

The effect of extrathyroidal conversion inhibitor from food–deprived animals on iodothyronines deiodination by pituitary and cerebral cortical homogenates in vitro. Nowak G. **Horm Metab Res** 1990 May;22(5):273–7

Guanine nucleotides have a direct inhibitory effect on polyphosphoinositide turnover in rat cortical synaptosomes. Wei JW, et al. **Int J Biochem** 1990; 22(5):507–11

Lipid peroxidation in rat cerebral cortex during post–ischemic reperfusion: effect of exogenous antioxidants and Ca(++)–antagonist drugs. Vanella A, et al. **Ital J Biochem** 1990 May–Jun;39(3):196A–198A

In vivo binding of carbon monoxide to cytochrome c oxidase in rat brain. Brown SD, et al. **J Appl Physiol** 1990 Feb; 68(2):604–10

Subcellular distribution of GTP–binding proteins, Go and Gi2, in rat cerebral cortex. Asano T, et al. **J Biochem (Tokyo)** 1990 May;107(5):694–8

A chloride– and calcium–dependent glutamate–binding protein from rat brain. Identification as a ubiquitous constituent of the inner mitochondrial membrane. Brose N, et al. **J Biol Chem** 1990 Jun 25;265(18):10604–10

A novel mechanism for acetylcholine to generate diacylglycerol in brain. Qian Z, et al. **J Biol Chem** 1990 Mar 5;265(7):3607–10

Regulation of immunoreactive GAP–43 expression in rat cortical macroglia is cell type specific. da Cunha A, et al. **J Cell Biol** 1990 Jul;111(1):209–15

Changes in cortical extracellular levels of energy–related metabolites and amino acids following concussive brain injury in rats. Nilsson P, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):631–7

Effects of unilateral lesion of the nucleus basalis of Meynert on brain glucose utilization in callosotomized baboons: a PET study. Yamaguchi T, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):618–23

Quantified regional and laminar distribution of the serotonin innervation in the anterior half of adult rat cerebral cortex. Audet MA, et al. **J Chem Neuroanat** 1989 Jan–Feb; 2(1):29–44

Expression of the growth cone specific epitope CDA 1 and the synaptic vesicle protein SVP38 in the developing mammalian cerebral cortex. Devoto SH, et al. **J Comp Neurol** 1989 Dec 1;290(1):154–68

Distribution of two morphologically distinct subsets of serotoninergic axons in the cerebral cortex of the marmoset. Hornung JP, et al. **J Comp Neurol** 1990 Jul 8;297(2):165–81

Corticotropin–releasing factor immunoreactivity in monkey neocortex: an immunohistochemical analysis. Lewis DA, et al. **J Comp Neurol** 1989 Dec 22;290(4):599–613

Heterogeneity of chandelier neurons in monkey neocortex: corticotropin–releasing factor– and parvalbumin–immunoreactive populations. Lewis DA, et al. **J Comp Neurol** 1990 Mar 22;293(4):599–615

Regional differences in the distribution of muscarinic cholinergic receptors in the macaque cerebral cortex. Lidow MS, et al. **J Comp Neurol** 1989 Nov 8;289(2):247–59

VIP– and PHI–immunoreactivity in olfactory centers of the adult cat. Sanides–Kohlrausch C, et al. **J Comp Neurol** 1990 Apr 15;294(3):325–39

Ultrastructural relationships of serotonin axon terminals in the cerebral cortex of the adult rat. Séguéla P, et al. **J Comp Neurol** 1989 Nov 1;289(1):129–42

Prenatal development of GABA–ergic neurons in the neocortex of the rat. Van Eden CG, et al. **J Comp Neurol** 1989 Nov 8;289(2):213–27

Calcitonin gene–related peptide immunoreactivity in the visceral sensory cortex, thalamus, and related pathways in the rat. Yasui Y, et al. **J Comp Neurol** 1989 Dec 22; 290(4):487–501

Normalization of protein synthesis in brain cortex of rats after hypoxia by transplantation of embryonic nervous tissue. Polezhaev LV, et al. **J Hirnforsch** 1989;30(4):457–9

Stimulation of RNA synthesis in brain cortex of rats after hypoxia by transplantation of embryonic nervous tissue. Polezhaev LV, et al. **J Hirnforsch** 1989;30(4):461–4

Dietary effects on brain fatty acid composition: the reversibility of n–3 fatty acid deficiency and turnover of docosahexaenoic acid in the brain, erythrocytes, and plasma of rhesus monkeys. Connor WE, et al. **J Lipid Res** 1990 Feb;31(2):237–47

Responses of gamma–aminobutyrate receptor from rat brain: similarity of different preparation methods; muscimol induced desensitization and chloride exchange. Cash DJ, et al. **J Membr Biol** 1989 Nov;111(3):229–40

Localization of VIP and PHI–27 messenger RNA in rat thalamic and cortical neurons. Baldino F Jr, et al. **J Mol Neurosci** 1989;1(4):199–207

Serotonergic effects of isatin: an endogenous MAO inhibitor related to tribulin. McIntyre IM, et al. **J Neural Transm Gen Sect** 1990;79(1–2):35–40

Excitatory amino acid–induced formation of inositol phosphates in guinea–pig cerebral cortical slices: involvement of ionotropic or metabotropic receptors? Alexander SP, et al. **J Neurochem** 1990 Oct;55(4):1439–41

Is the adenosine receptor modulation of histamine–induced accumulation of inositol phosphates in cerebral cortical slices mediated by effects on calcium ion fluxes? Alexander SP, et al. **J Neurochem** 1990 Oct;55(4):1138–41

Increased intracellular calcium stimulates 3H–inositol polyphosphate accumulation in rat cerebral cortical slices. Baird JG, et al. **J Neurochem** 1990 Feb;54(2):555–61

Heterotropic cooperativity between putative recognition sites for progesterone metabolites and the atypical benzodiazepine Ro 5–4864. Belelli D, et al. **J Neurochem** 1990 Jul;55(1):83–7

Effects of N–methyl–D–aspartate on [Ca2+]i and the energy state in the brain by 19F– and 31P–nuclear magnetic resonance spectroscopy. Ben–Yoseph O, et al. **J Neurochem** 1990 Oct;55(4):1446–9

Differential effects of forced locomotion, tail–pinch, immobilization, and methyl–beta–carboline carboxylate on extracellular 3,4–dihydroxyphenylacetic acid levels in the rat striatum, nucleus accumbens, and prefrontal cortex: an in vivo voltammetric study. Bertolucci–D'Angio M, et al. **J Neurochem** 1990 Oct;55(4):1208–15

A method for the in vivo investigation of the serotonergic 5–HT2 receptors in the human cerebral cortex using positron emission tomography and 18F–labeled setoperone. Blin J, et al. **J Neurochem** 1990 May;54(5):1744–54

Neurotransmitter and depolarization–stimulated accumulation of inositol 1,3,4,5–tetrakisphosphate mass in rat cerebral cortex slices. Challiss RA, et al. **J Neurochem** 1990 Jun;54(6):2138–41

Calcium– versus G protein–mediated phosphoinositide. Hydrolysis in rat cerebral cortical synaptoneurosomes. Chandler LJ, et al. **J Neurochem** 1990 Sep;55(3):1022–30

Decrease in the function of the gamma–aminobutyric acid–coupled chloride channel produced by the repeated administration of pentylenetetrazol to rats. Corda MG, et al. **J Neurochem** 1990 Oct;55(4):1216–21

Potentiation by gamma–aminobutyric acid of alpha 1–agonist–induced accumulation of inositol phosphates in slices of rat cerebral cortex. Crawford ML, et al. **J Neurochem** 1990 Jun;54(6):2100–9

Depolarization–induced phosphorylation of the protein kinase C substrate B–50 (GAP–43) in rat cortical synaptosomes. Dekker LV, et al. **J Neurochem** 1990 May; 54(5):1645–52

Discriminatory effects of forskolin and EGTA on the indirect cyclic AMP responses to histamine, noradrenaline, 5–hydroxytryptamine, and glutamate in guinea–pig cerebral cortical slices. Donaldson J, et al. **J Neurochem** 1990 May; 54(5):1484–91

Glutamate–induced 45Ca2+ uptake into immature cerebral cortex neurons shows a distinct pharmacological profile. Frandsen A, et al. **J Neurochem** 1989 Dec;53(6):1959–62

Modulation of gamma–aminobutyric acid release in cerebral cortex by fluoride, phorbol ester, and phosphodiesterase inhibitors: differential sensitivity of acetylcholine release to fluoride and K+ channel blockers. Gardiner IM, et al. **J Neurochem** 1990 Apr;54(4):1130–5

Modulation of 5–hydroxytryptamine1A receptor density by nonhydrolyzable GTP analogues. Harrington MA, et al. **J Neurochem** 1990 Jan;54(1):294–9

Regional difference in responsiveness of adenosine–sensitive cyclic AMP–generating systems in chronic epileptic cerebral cortex of the rat. Hattori Y. **J Neurochem** 1990 Oct;55(4):1294–303

Regional difference in responsiveness of norepinephrine–sensitive cyclic AMP–generating systems of rat cerebral cortex with iron–induced epileptic activity. Hattori Y, et al. **J Neurochem** 1990 Feb;54(2):518–25

Glutamate–evoked release of endogenous adenosine from rat cortical synaptosomes is mediated by glutamate uptake and not by receptors. Hoehn K, et al. **J Neurochem** 1990 May; 54(5):1716–24

Role of excitatory amino acid receptors in K+– and glutamate–evoked release of endogenous adenosine from rat cortical slices. Hoehn K, et al. **J Neurochem** 1990 Jan; 54(1):256–65

Adrenergic receptors in aging and Alzheimer's disease: increased beta 2–receptors in prefrontal cortex and hippocampus. Kalaria RN, et al. **J Neurochem** 1989 Dec; 53(6):1772–81

Selective increase in S–100 beta protein by aging in rat cerebral cortex. Kato K, et al. **J Neurochem** 1990 Apr; 54(4):1269–74

Lithium reduces the accumulation of inositol polyphosphate second messengers following cholinergic stimulation of cerebral cortex slices. Kennedy ED, et al. **J Neurochem** 1989 Nov;53(5):1652–5

Cholinergic regulation of vasoactive intestinal peptide content and release in rat frontal cortex and hippocampus. Lapchak PA, et al. **J Neurochem** 1990 Oct;55(4):1340–5

Neurotensin regulation of endogenous acetylcholine release from rat cerebral cortex: effect of quinolinic acid lesions of the basal forebrain. Lapchak PA, et al. **J Neurochem** 1990 Oct;55(4):1397–403

Guanosine 5'–O–thiotriphosphate and sodium fluoride activate polyphosphoinositide hydrolysis in rat cortical membranes by distinct mechanisms. Li PP, et al. **J Neurochem** 1990 Apr;54(4):1426–32

Increased gamma–aminobutyric acid receptor function in the cerebral cortex of myoclonic calves with an hereditary deficit in glycine/strychnine receptors. Lummis SC, et al. **J Neurochem** 1990 Aug;55(2):421–6

Solubilisation of the 5–hydroxytryptamine3 receptor from pooled rat cortical and hippocampal membranes. McKernan RM, et al. **J Neurochem** 1990 Mar;54(3):924–30

Characterisation of binding sites for delta–dendrotoxin in guinea–pig synaptosomes: relationship to acceptors for the K+–channel probe alpha–dendrotoxin. Muniz ZM, et al. **J Neurochem** 1990 Jan;54(1):343–6

Ischemia–induced alterations in lipid metabolism of the gerbil cerebral cortex: I. Changes in free fatty acid liberation. Nakano S, et al. **J Neurochem** 1990 Jun;54(6):1911–6

Functional coupling of the gamma–aminobutyric acidB receptor with calcium ion channel and GTP–binding protein and its alteration following solubilization of the gamma–aminobutyric acidB receptor. Ohmori Y, et al. **J Neurochem** 1990 Jan;54(1):80–5

Agonists and antagonists recognize different but overlapping populations of A1 adenosine receptors: modulation of receptor number by MgCl2, solubilization, and guanine nucleotides. Olah M, et al. **J Neurochem** 1990 Oct; 55(4):1432–8

Characterization of the quisqualate receptor linked to phosphoinositide hydrolysis in neurocortical cultures. Patel J, et al. **J Neurochem** 1990 May;54(5):1461–6

Distinct muscarinic receptor subtypes differentially modulate acetylcholine release from corticocerebral synaptosomes. Pittel Z, et al. **J Neurochem** 1990 Aug;55(2):665–72

Stereoselectivity for the (R)–enantiomer of HA–966 (1–hydroxy–3–aminopyrrolidone–2) at the glycine site of the N–methyl–D–aspartate receptor complex. Pullan LM, et al. **J Neurochem** 1990 Oct;55(4):1346–51

In vivo administration of ethanol enhances the function of the gamma–aminobutyric acid–dependent chloride channel in the rat cerebral cortex. Sanna E, et al. **J Neurochem** 1990 Feb;54(2):696–8

Accumulation of cyclic AMP elicited by vasoactive intestinal peptide is potentiated by noradrenaline, histamine, adenosine, baclofen, phorbol esters, and ouabain in mouse cerebral cortical slices: studies on the role of arachidonic acid metabolites and protein kinase C. Schaad NC, et al. **J Neurochem** 1989 Dec;53(6):1941–51

Prostaglandins and the alpha 1–adrenergic potentiation of neurotransmitter–stimulated cyclic AMP formation in mouse cerebral cortex [letter; comment] Schaad NC, et al. **J Neurochem** 1990 Mar;54(3):1082–4 Comment on: J Neurochem 1989 Aug;53(2):542–50.

Autopsy samples of Alzheimer's cortex show increased peroxidation in vitro. Subbarao KV, et al. **J Neurochem** 1990 Jul;55(1):342–5

Modulation of rat brain cortical alpha 2–adrenoceptors by treatment with hydrocortisone for 10 days. Szentendrei T, et al. **J Neurochem** 1990 Jun;54(6):1852–7

Further characterization of the guinea pig cerebral cortex idazoxan receptor: solubilization, distinction from the imidazole site, and demonstration of cirazoline as an idazoxan receptor–selective drug. Wikberg JE, et al. **J Neurochem** 1990 Jul;55(1):192–203

Regulation of the gamma–aminobutyric acidA receptor by gamma–aminobutyric acid levels within the postsynaptic cell. Wood JD, et al. **J Neurochem** 1989 Nov;53(5):1648–51

Cajal–Retzius neurons in developing monkey neocortex show immunoreactivity for calcium binding proteins. Huntley GW, et al. **J Neurocytol** 1990 Apr;19(2):200–12

Neuropeptide Y in the cerebral cortex and the caudate–putamen nuclei: ultrastructural basis for interactions with GABAergic and non–GABAergic neurons. Aoki C, et al. **J Neurosci** 1989 Dec;9(12):4333–54

Calcium current in cortical astrocytes: induction by cAMP and neurotransmitters and permissive effect of serum factors. Barres BA, et al. **J Neurosci** 1989 Sep;9(9):3169–75

Effect of zinc on NMDA receptor–mediated channel currents in cortical neurons. Christine CW, et al. **J Neurosci** 1990 Jan;10(1):108–16

Overlap of dopaminergic, adrenergic, and serotoninergic receptors and complementarity of their subtypes in primate prefrontal cortex. Goldman–Rakic PS, et al. **J Neurosci** 1990 Jul;10(7):2125–38

Fluorescence measurement of changes in intracellular calcium induced by excitatory amino acids in cultured cortical astrocytes. Jensen AM, et al. **J Neurosci** 1990 Apr; 10(4):1165–75

Light and electron microscopic localization of beta I–, beta II–, and gamma–subspecies of protein kinase C in rat cerebral neocortex. Tsujino T, et al. **J Neurosci** 1990 Mar; 10(3):870–84

Stereotaxic preparation of circumscribed cortical areas from

rat brain for biochemical studies. Hanisch UK, et al. **J Neurosci Methods** 1990 Jan;31(1):53–8

Automated determination of excitatory amino acid neurotoxicity in cortical culture. Klingman JG, et al. **J Neurosci Methods** 1990 Jan;31(1):47–51

The Alzheimer's amyloid precursor protein is produced by type I astrocytes in primary cultures of rat neuroglia. Berkenbosch F, et al. **J Neurosci Res** 1990 Mar;25(3):431–40

Glial fibrillary acidic protein messenger RNA and glutamine synthetase activity after nervous system injury. Condorelli DF, et al. **J Neurosci Res** 1990 Jun;26(2):251–7

Cerebral energy metabolism and intracellular pH during severe hypoxia and recovery: a study using 1H, 31P, and 1H [13C] nuclear magnetic resonance spectroscopy in the guinea pig cerebral cortex in vitro. Kauppinen RA, et al. **J Neurosci Res** 1990 Jul;26(3):356–69

Modification of anoxic neuronal injury by human recombinant epidermal growth factor and its possible mechanism. Kinoshita A, et al. **J Neurosci Res** 1990 Mar; 25(3):324–30

Adenosine metabolism in neurons and astrocytes in primary cultures. Matz H, et al. **J Neurosci Res** 1989 Oct;24(2):260–7

Expression of vimentin by cultured astroglia and oligodendroglia. Meyer SA, et al. **J Neurosci Res** 1989 Oct; 24(2):251–9

Cultured neurons release an inhibitor of astroglia proliferation (astrostatine). Rogister B, et al. **J Neurosci Res** 1990 Jan; 25(1):58–70

Expression of macrophage colony-stimulating factor gene in the mouse brain during development. Théry C, et al. **J Neurosci Res** 1990 May;26(1):129–33

Effect of monosialoganglioside (GM1) on transected monoaminergic pathways. Shigemori M, et al. **J Neurotrauma** 1990 Summer;7(2):89–97

Effects of undernutrition during suckling on phosphoryl serine levels in nuclear and synaptosomal proteins from cerebral cortex of rats. Gonçalves CA, et al. **J Nutr** 1990 Jun;120(6):594–7

Inhibition of noradrenaline release from cerebrocortical synaptosomes and stimulation of synaptosomal Na+,K(+)-ATPase activity by morphine in rats. Nishikawa T, et al. **J Pharm Pharmacol** 1990 Jan; 42(1):68–71

Noradrenaline release enhanced by cholera toxin and pertussis toxin in rat cerebral cortical slices. Qi SB, et al. **J Pharmacobiodyn** 1989 Apr;12(4):216–9

Cellular localization of serotonin 1A, 1B and uptake sites in cingulate cortex of the rat. Crino PB, et al. **J Pharmacol Exp Ther** 1990 Feb;252(2):651–6

Ontogeny of cortical muscarinic receptor subtypes and muscarinic receptor-mediated responses in rat. Lee W, et al. **J Pharmacol Exp Ther** 1990 Feb;252(2):482–90

Studies on histaminergic compounds, Part VII. Histamine H2-binding on guinea-pig cerebral cortex compared to histamine (ant)agonism. Sterk GJ, et al. **J Recept Res** 1989–90;9(6):417–27

Effects of progesterone, epipregnanolone and RU 38486 on potassium uptake in cultured cortical neurons. Bauer HC, et al. **J Steroid Biochem** 1990 Jul 4;36(4):269–72

Effect of membrane depolarization by high K+ on carbachol-stimulated phosphoinositides hydrolysis in guinea pig cerebral cortical slices. Zhou XM, et al. **Jpn J Pharmacol** 1990 Jun;53(2):229–34

Effects of lesions in the substantia innominata on active avoidance task and cerebral glucose metabolism. Mihara B. **Keio J Med** 1989 Dec;38(4):419–31

Photoaffinity labeling of [3H]flunitrazepam- and [3H]Ro15-4513-bound pellets in rat cerebral cortex and cerebellum. Chiu TH, et al. **Life Sci** 1989;45(11):1021–8

Inhibition of polyphosphoinositide turnover in rat cerebral cortex by clonidine. Dyck LE. **Life Sci** 1989;45(11):993–9

Amoxapine inhibition of GABA-stimulated chloride conductance: investigations of potential sites of activity. Ikeda M, et al. **Life Sci** 1989;45(20):1903–10

Cysteamine normalizes cerebral somatostatin level and binding in pentylenetetrazol-kindled rats. Perez-Oso E, et al. **Life Sci** 1989;45(25):2451–8

Higher density of serotonin-1A receptors in the hippocampus and cerebral cortex of alcohol-preferring P rats. Wong DT, et al. **Life Sci** 1990;46(3):231–5

Metabolism of phosphatidylinositol in plasma membranes and synaptosomes of rat cerebral cortex: a comparison between endogenous vs exogenous substrate pools. Navidi M, et al. **Lipids** 1990 May;25(5):273–7

Cortical spectroscopy: localized spectroscopy of the cerebral cortex in rats. Houkin K, et al. **Magn Reson Med** 1989 Dec;12(3):364–8

Cortical benzodiazepine receptor binding in a rabbit model of hepatic encephalopathy: the effect of Triton X-100 on receptor solubilization. Rössle M, et al. **Metab Brain Dis** 1989 Sep;4(3):203–12

Decreased efficacy of inositol 1,4,5-trisphosphate to elicit calcium mobilization from cerebrocortical microsomes of aged rats. Burnett DM, et al. **Mol Pharmacol** 1990 Apr; 37(4):566–71

On the involvement of multiple muscarinic receptor subtypes in the activation of phosphoinositide metabolism in rat cerebral cortex. Forray C, et al. **Mol Pharmacol** 1990 Jun; 37(6):893–902

Receptor reserve for 5-hydroxytryptamine1A-mediated inhibition of serotonin synthesis: possible relationship to anxiolytic properties of 5-hydroxytryptamine1A agonists. Meller E, et al. **Mol Pharmacol** 1990 Feb;37(2):231–7

Chronic clonazepam administration decreases gamma-aminobutyric acidA receptor function in cultured cortical neurons. Miller LG, et al. **Mol Pharmacol** 1989 Nov;36(5):796–802

Interaction of purified bovine brain A1-adenosine receptors with guanine nucleotide-binding proteins of human platelet membranes following reconstitution. Munshi R, et al. **Mol Pharmacol** 1990 Aug;38(2):170–6

Lack of cross-desensitization of somatostatin-14 and somatostatin-28 receptors coupled to potassium channels in rat neocortical neurons. Wang HL, et al. **Mol Pharmacol** 1990 Sep;38(3):357–61

Structure of a cannabinoid receptor and functional expression of the cloned cDNA [see comments] Matsuda LA, et al. **Nature** 1990 Aug 9;346(6284):561–4 Comment in: Nature 1990 Aug 9;36(6248):508].

Calcium/calmodulin-dependent protein kinase II increases glutamate and noradrenaline release from synaptosomes. Nichols RA, et al. **Nature** 1990 Feb 15;343(6259):647–51

Phentolamine blocks presynaptic serotonin autoreceptors in rabbit and rat brain cortex. Limberger N, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jul; 340(1):52–61

Estimation of pA2 values at presynaptic alpha 2-autoreceptors in rabbit and rat brain cortex in the absence of autoinhibition. Limberger N, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Dec; 340(6):639–47

Effect of nicotine and tacrine on acetylcholine release from rat cerebral cortical slices. Loiacono RE, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jul; 342(1):31–5

Dopamine D1 receptors labelled with [3H]SCH23390 in rabbit cerebral cortex and neostriatum. Equilibrium binding, kinetics and selectivity. Reader TA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Dec; 340(6):617–25

The pharmacological properties of the presynaptic serotonin autoreceptor in the pig brain cortex conform to the 5-HT1D receptor subtype. Schlicker E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jul; 340(1):45–51

Inhibition of noradrenaline release in the rat brain cortex via presynaptic H3 receptors. Schlicker E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Dec; 340(6):633–8

[125I]-omega conotoxin binding to human frontal cortex from normal, Alzheimer's and non-Alzheimer's dementia patients. Colvin RA, et al. **Neurobiol Aging** 1990 Mar-Apr; 11(2):151–3

Oral aluminum alters in vitro protein phosphorylation and kinase activities in rat brain. Johnson GV, et al. **Neurobiol Aging** 1990 May-Jun;11(3):209–16

APP-695 transcript prevalence is selectively reduced during Alzheimer's disease in cortex and hippocampus but not in cerebellum [corrected and republished article originally printed in Neurobiol Aging 1989 May-Jun;10(3):267–72] Johnson SA, et al. **Neurobiol Aging** 1989 Nov-Dec; 10(6):755–60

Increased levels of DNA breaks in cerebral cortex of Alzheimer's disease patients. Mullaart E, et al. **Neurobiol Aging** 1990 May-Jun;11(3):169–73

Somatostatin gene expression in hypothalamus and cortex of aging male rats. Sonntag WE, et al. **Neurobiol Aging** 1990 Jul-Aug;11(4):409–16

Different long-term effects of bilateral and unilateral nucleus basalis lesions on rat cerebral cortical neurotransmitter content. Arendash GW, et al. **Neurochem Res** 1989 Nov; 14(11):1113–8

Potassium ions potentiate the muscarinic receptor-stimulated phosphoinositide metabolism in cerebral cortex slices: a comparison of neonatal and adult rats. Balduini W, et al. **Neurochem Res** 1990 Jan;15(1):33–9

[3H]ketanserin binds to non-5-HT2 sites in rabbit cerebral cortex and neostriatum. Dewar KM, et al. **Neurochem Res** 1990 May;15(5):507–14

Effects of antidepressant drugs on inositol phospholipid hydrolysis in rat cerebral cortical slices. Dyck LE, et al. **Neurochem Res** 1989 Nov;14(11):1047–52

Calcium channel involvement in potassium depolarization-induced phosphoinositide hydrolysis in rat cortical slices. Gonzales RA, et al. **Neurochem Res** 1989 Nov;14(11):1067–74

Nicotinic binding sites in cerebral cortex and hippocampus in Alzheimer's dementia. London ED, et al. **Neurochem Res** 1989 Aug;14(8):745–50

Endogenous homovanillic acid levels differ between rat and rabbit caudate, hippocampus, and cortical regions. Reader TA, et al. **Neurochem Res** 1989 Nov;14(11):1137–41

Manganese(II) dynamics and distribution in glial cells cultured from chick cerebral cortex. Wedler FC, et al. **Neurochem Res** 1989 Nov;14(11):1129–35

Influence of the pituitary-adrenal axis on benzodiazepine receptor binding to rat cerebral cortex. Acuña D, et al. **Neuroendocrinology** 1990 Jan;51(1):97–103

Quantification of proteins in discrete brain regions of androgen-insensitive testicular feminized Tfm mice. Olsen KL, et al. **Neuroendocrinology** 1989 Oct;50(4):392–9

High-dose methylprednisolone and 'ex vivo' release of eicosanoids after experimental subarachnoid haemorrhage. Gaetani P, et al. **Neurol Res** 1990 Jun;12(2):111–6

Synaptic vesicles immunoisolated from rat cerebral cortex contain high levels of glutamate. Burger PM, et al. **Neuron** 1989 Dec;3(6):715–20

Does pH reduction contribute to postischemic brain edema development? Mchedlishvili G, et al. **Neuropatol Pol** 1989; 27(1):71–6

Cardiazol-induced seizures and the concentration of lipid peroxides in the brain of rats under the influence of valproic acid and vitamin E. Sobaniec W, et al. **Neuropatol Pol** 1989; 27(2):229–36

Influence of thyroid hormones on somatostatin processing in cultured cerebro-cortical cells. de los Frailes MT, et al. **Neuropeptides** 1990 Jan;15(1):25–30

Adenosine receptors in cortical-derived vesicles of the rat: studies on binding sites and accumulation of cyclic AMP. Florio C, et al. **Neuropharmacology** 1990 Apr;29(4):387–97

Glycine-related amino acids stereoselectively affect N-methyl-D-aspartate receptor-mediated contractions of guinea pig ileum: comparison with the inhibition of strychnine-insensitive [3H]glycine binding to rat cortical membranes. Galli A, et al. **Neuropharmacology** 1990 Feb; 29(2):145–50

The pharmacology of quisqualate and AMPA in the cerebral cortex of the rat in vitro. Horne AL, et al. **Neuropharmacology** 1989 Oct;28(10):1113–8

The kappa-opiate agonist U50488H decreases the entry of 45Ca into rat cortical synaptosomes by inhibiting N- but not L-type calcium channels. Xiang JZ, et al. **Neuropharmacology** 1990 May;29(5):439–44

Depolarization-dependent 45Ca uptake by synaptosomes of rat cerebral cortex is enhanced by L-triiodothyronine. Mason GA, et al. **Neuropsychopharmacology** 1990 Aug; 3(4):291–5

Diazepam enhances bicuculline-induced increase of t-[35S]butylbicyclophosphorothionate binding in unwashed membrane preparations from rat cerebral cortex. Concas A, et al. **Neurosci Lett** 1990 Apr 20;112(1):87–91

Evidence for a widespread dopaminergic innervation of the human cerebral neocortex. De Keyser J, et al. **Neurosci Lett** 1989 Oct 9;104(3):281–5

MK801 induces c-fos protein in thalamic and neocortical neurons of rat brain. Dragunow M, et al. **Neurosci Lett** 1990 May 31;113(2):144–50

MK-801 induces c-fos protein in thalamic and neocortical neurons of rat brain. Dragunow M, et al. **Neurosci Lett** 1990 Mar 26;111(1-2):39–45

High-frequency stimulation of the facial nerve results in local cortical release of vasoactive intestinal polypeptide in the anesthetised cat. Goadsby PJ, et al. **Neurosci Lett** 1990 May 4;112(2-3):282–9

Regional distribution of 3-O-methyl-DOPA in the cortex and subcortical structures in the rat: effect of aging. Godefroy F, et al. **Neurosci Lett** 1990 May 4; 112(2-3):307–12

Superoxide dismutase treatment reduces [3H]flunitrazepam affinity in cortex and hippocampus of the rat. Hariton C, et al. **Neurosci Lett** 1989 Jul 31;102(2-3):313–8

Effect of unilateral nucleus basalis lesion on cortical and striatal acetylcholine and dopamine release monitored in vivo with microdialysis. Herrera-Marschitz M, et al. **Neurosci Lett** 1990 Mar 2;110(1-2):172–9

Ethanol administration does not alter dopamine D1 and D2 receptor characteristics in rat brain. Hietala J, et al. **Neurosci Lett** 1990 Jan 22;108(3):289–94

Developmentally expressed O-acetyl ganglioside GT3 in fetal rat cerebral cortex. Hirabayashi Y, et al. **Neurosci Lett** 1989 Nov 20;106(1-2):193–8

Ibotenate stimulates glutamate release from guinea pig cerebrocortical synaptosomes: inhibition by L-2-amino-4-phosphonobutyrate (L-AP4). Jones PG, et al. **Neurosci Lett** 1990 Mar 26;111(1-2):228–32

Ligand-binding characteristics of [3H]QNB, [3H]prazosin, [3H]rauwolscine, [3H]TCP and [3H]nitrendipine to cerebral cortical and hippocampal membranes of senescence accelerated mouse. Kitamura Y, et al. **Neurosci Lett** 1989 Dec 4;106(3):334–8

Cerebral cortical calbindin D28K and parvalbumin neurones in Down's syndrome. Kobayashi K, et al. **Neurosci Lett** 1990 May 18;113(1):17–22

Differential activation of glutamate receptors by spontaneously released transmitter in slices of neocortex. LoTurco JJ, et al. **Neurosci Lett** 1990 Jul 13;114(3):265–71

Deposition of amyloid (A4) protein within the brains of persons with dementing disorders other than Alzheimer's disease and Down's syndrome. Mann DM, et al. **Neurosci Lett** 1990 Feb 5;109(1-2):68–75

Acetylcholine content and distribution in rat cortical synaptosomes after in vivo exposure to quinolinic acid. Metcalf RH, et al. **Neurosci Lett** 1990 Jan 1;108(1-2):219–24

Effects of nucleus basalis lesions on cerebral cortical concentrations of corticotropin-releasing hormone (CRH)-like immunoreactivity in the rat. Millard WJ, et al. **Neurosci Lett** 1990 May 31;113(2):233–9

Serotonin inhibits ATP-induced mobilization of arachidonic acid but not phosphoinositide turnover in astrocytes. Murphy S, et al. **Neurosci Lett** 1990 Feb 5;109(1-2):152–6

Increased responsiveness of the cerebral cortical phosphatidylinositol system to noradrenaline and carbachol in senescent rats. Nalepa I, et al. **Neurosci Lett** 1989 Dec 15;107(1-3):195–9

Inhibition of protein synthesis in the dentate gyrus, but not the entorhinal cortex, blocks maintenance of long-term

potentiation in rats. Otani S, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):175–80

Hypoxia/hypotension evoked release of glutamate and aspartate from the rat cerebral cortex. Phillis JW, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):147–51

The effect of 2–(4–phenylpiperidino)cyclohexanol (AH–5183), tityustoxin and ouabain on the release of acetylcholine and its mobilization from cytoplasmic and vesicular pools of rat brain cortical slices. Prado MA, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):195–200

[3H]acetylcholine release and the change in cytosolic free calcium level induced by high K+ and ouabain in rat brain synaptosomes. Satoh E, et al. **Neurosci Lett** 1989 Dec 15; 107(1–3):284–8

The GABAergic system of the dorsal cortex of lizards: a combined HRP–GABA immunohistochemistry study. Teruel V, et al. **Neurosci Lett** 1990 Feb 5;109(1–2):13–7

Co–localization of tyrosine hydroxylase and GABA immunoreactivities in human cortical neurons. Trottier S, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):76–82

Alzheimer patients and Down patients: cerebral preamyloid deposits differ ultrastructurally and histochemically from the amyloid of senile plaques. Verga L, et al. **Neurosci Lett** 1989 Nov 6;105(3):294–9

A novel role for dopamine: inhibition of muscarinic cholinergic–stimulated phosphoinositide hydrolysis in rat brain cortical membranes. Wallace MA, et al. **Neurosci Lett** 1990 Mar 2;110(1–2):155–61

Induction of ornithine decarboxylase mRNA in cerebral cortex in response to kainate lesion of nucleus basalis: involvement of NMDA receptors. Wood H, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):176–82

Aversive taste stimuli increase CGRP levels in the gustatory insular cortex of the rat. Yamamoto T, et al. **Neurosci Lett** 1990 May 4;112(2–3):167–72

Ammonia causes a drop in intracellular pH in metabolizing cortical brain slices. A [31P]– and [1H]nuclear magnetic resonance study. Brooks KJ, et al. **Neuroscience** 1989; 33(1):185–92

Serotonin release estimated by transcortical dialysis in freely–moving rats. Carboni E, et al. **Neuroscience** 1989; 32(3):637–45

N–methyl–D–aspartate receptors in the cortex and hippocampus of baboon (Papio anubis and Papio papio). Geddes JW, et al. **Neuroscience** 1989;32(1):39–47

Kappa opioid binding sites in the dog cerebral cortex and spinal cord. Hunter JC, et al. **Neuroscience** 1989; 31(3):735–43

Excitatory amino acid receptors in the human cerebral cortex: a quantitative autoradiographic study comparing the distributions of [3H]TCP, [3H]glycine, L–[3H]glutamate, [3H]AMPA and [3H]kainic acid binding sites. Jansen KL, et al. **Neuroscience** 1989;32(3):587–607

Regulation of endogenous acetylcholine release from mammalian brain slices by opiate receptors: hippocampus, striatum and cerebral cortex of guinea–pig and rat. Lapchak PA, et al. **Neuroscience** 1989;31(2):313–25

Quantitative immunogold analysis reveals high glutamate levels in retinal and cortical synaptic terminals in the lateral geniculate nucleus of the macaque. Montero VM, et al. **Neuroscience** 1989;31(3):639–47

Chromogranin A–like immunoreactivity in the human brain: distribution in bulbar medulla and cerebral cortex. Munoz DG, et al. **Neuroscience** 1990;34(3):533–43

A histamine–containing neuronal system in human brain. Panula P, et al. **Neuroscience** 1990;34(1):127–32

Cholinergic and noradrenergic denervations decrease labelled purine release from electrically stimulated rat cortical slices. Pedata F, et al. **Neuroscience** 1989; 32(3):629–36

In vivo 31P NMR spectroscopy of the rat cerebral cortex during acute hepatic encephalopathy. Deutz NE, et al. **NMR Biomed** 1988 Apr;1(2):101–6

Experience affects cortical but not subcortical polyamines. Ferchmin PA, et al. **Pharmacol Biochem Behav** 1990 Jan; 35(1):255–8

Activity–wheel stress and serotonergic hypersensitivity in rats. Mayeda AR, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):349–53

Effect of chronic variable stress on monoamine receptors: influence of imipramine administration. Molina VA, et al. **Pharmacol Biochem Behav** 1990 Feb;35(2):335–40

Loss of muscarinic M1 receptors with aging in the cerebral cortex of Fisher 344 rats. Schwarz RD, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):589–93

Cortical second messengers after NBM damage: no change in responses to cholinergic agonists. Shoham S, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):507–13

Galanthamine, an acetylcholinesterase inhibitor: a time course of the effects on performance and neurochemical parameters in mice. Sweeney JE, et al. **Pharmacol Biochem Behav** 1989 Sep;34(1):129–37

Release–regulating GABAB autoreceptors in rat cerebral cortex slices. Fedele E, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:97–8

Effect of (–)nicotine on GABA efflux from guinea pig cerebral cortex slices. Spalluto P, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:133–4

Biochemical and molecular changes in rat cerebral cortex after chronic antidepressant treatment: 'in vitro' and 'in vivo' studies. Brunello N, et al. **Pharmacol Toxicol** 1990; 66 Suppl 3:112–20

Guanfacine inhibits excitatory amino acid release from rat cerebral cortex through a non–adrenergic mechanism. Uhlén S, et al. **Pharmacol Toxicol** 1989 Nov;65(5):357–61

Lateralization of neocortical dopamine receptors and dopamine level in normal Wistar rats. Nowak G. **Pol J Pharmacol Pharm** 1989 Mar–Apr;41(2):133–7

Nerve growth factor receptor immunoreactivity is transiently associated with the subplate neurons of the mammalian cerebral cortex. Allendoerfer KL, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):187–90

Differential alterations of cortical glutamatergic binding sites in senile dementia of the Alzheimer type. Chalmers DT, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1352–6

Nonpsychotropic cannabinoid acts as a functional N–methyl–D–aspartate receptor blocker. Feigenbaum JJ, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9584–7

Oxidative damage to brain proteins, loss of glutamine synthetase activity, and production of free radicals during ischemia/reperfusion–induced injury to gerbil brain. Oliver CN, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5144–7

Effect of septal kindling on glutamate binding and calcium/calmodulin–dependent phosphorylation in a postsynaptic density fraction isolated from rat cerebral cortex. Wu K, et al. **Proc Natl Acad Sci U S A** 1990 Jul; 87(14):5298–302

Alterations in adrenergic receptors of frontal cortex and cerebral microvessels in Alzheimer's disease and aging. Kalaria RN, et al. **Prog Clin Biol Res** 1989;317:367–74

Deposition of Alzheimer's disease amyloid (A4) protein in the cerebral cortex in Parkinson's disease. Mastaglia FL, et al. **Prog Clin Biol Res** 1989;317:475–84

Immunogold electron microscopic study of cerebrovascular and senile plaque amyloid using anti–beta protein antibody. Okamoto K, et al. **Prog Clin Biol Res** 1989;317:953–63 (19 ref.)

Cerebral extracellular preamyloid deposits in Alzheimer's disease, Down syndrome and nondemented elderly individuals. Tagliavini F, et al. **Prog Clin Biol Res** 1989; 317:1001–5

Peptides in the neocortex in Alzheimer's disease and ageing. Ferrier IN, et al. **Psychoneuroendocrinology** 1990; 15(2):89–95 (51 ref.)

The effects of clozapine and fluperlapine on the in vivo release and metabolism of dopamine in the striatum and in the prefrontal cortex of freely moving rats. Imperato A, et al. **Psychopharmacol Bull** 1989;25(3):383–9

3H–spiroperidol binding in human temporal cortex (Brodmann areas 41–42) occurs at multiple high affinity states with serotonergic selectivity. Andorn AC, et al. **Psychopharmacology (Berl)** 1989;99(4):520–5

Effect of repetitive electroconvulsive treatment on sensitivity to pain and on [3H]nitrendipine binding sites in cortical and hippocampal membranes. Antkiewicz–Michaluk L, et al. **Psychopharmacology (Berl)** 1990;101(2):240–3

Prior stress attenuates the analgesic response but sensitizes the corticosterone and cortical dopamine responses to stress 10 days later. Caggiula AR, et al. **Psychopharmacology (Berlin)** 1989;99(2):233–7

Depolarizing influences regulate somatostatin synthesis and processing in cultured cerebral cortical cells. de los Frailes MT, et al. **Regul Pept** 1990 Jan;27(1):97–105

Influence of an uremia–associated serum factor on CNS alpha 2–adrenoceptors. Lübbecke F, et al. **Ren Fail** 1989; 11(2–3):111–5

Effects of capsular or thalamic stroke on metabolism in the cortex and cerebellum: a positron tomography study. Pappata S, et al. **Stroke** 1990 Apr;21(4):519–24

Effects of middle cerebral artery occlusion on cerebral cortex choline and acetylcholine in rats. Scremin OU, et al. **Stroke** 1989 Nov;20(11):1524–30

Distribution of dopamine D1 and D2 receptors in rabbit cortical areas, hippocampus, and neostriatum in relation to dopamine contents. Dewar KM, et al. **Synapse** 1989; 4(4):378–86

Pargyline–sensitive selective accumulation of a radiolabeled MPTP analog in the primate cerebral cortex and basal ganglia. Efange SM, et al. **Synapse** 1990;5(3):207–12

GABA and glutamate receptor development of cultured neurons from rat hippocampus, septal region, and neocortex. Köller H, et al. **Synapse** 1990;5(1):59–64

Polyamines regulate glycine interaction with the N–methyl–D–aspartate receptor. Ransom RW, et al. **Synapse** 1990;5(4):294–8

Human cortical neurons contain both nicotinic and muscarinic acetylcholine receptors: an immunocytochemical double–labeling study. Schröder H, et al. **Synapse** 1989;4(4):319–26

The design of full agonists for the cortical muscarinic receptor. Saunders J, et al. **Trends Pharmacol Sci** 1989 Dec; Suppl:70–5 (11 ref.)

Age–related alteration in the catecholamine–sensitive adenylate cyclase system of the rat cerebral cortex. Ozawa H, et al. **Yakubutsu Seishin Kodo** 1989 Dec;9(4):359–68

[Characterization of the binding of [3H]–MK 801 to glutamatergic NMDA receptors in normal cerebral cortex and in Alzheimer's disease] Holemans S, et al. **Acta Neurol Belg** 1989 May–Oct;89(3–4):314 **(Fre)**

[Coupling of inhibitory GTP binding protein to somatostatin receptors on rat cerebrocortical membranes] Nagao M, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Dec 20; 65(12):1357–66 (Eng. Abstr.) **(Jpn)**

[Study on Alzheimer's disease and the animal disease model—special reference to acetylcholinergic system] Ueki A, et al. **Seishin Shinkeigaku Zasshi** 1989;91(10):736–50 **(Jpn)**

[Changes in 5–HT2 receptor density induced by repeated treatment with 5–HT uptake inhibitor or 5–HT agonist] Kubota M, et al. **Yakubutsu Seishin Kodo** 1989 Sep; 9(3):289–92 (Eng. Abstr.) **(Jpn)**

[The short–term and long–lasting changes in DNA and RNA synthesis in the cerebral cortex cells of animals subjected to hypoxia and nerve tissue transplantation] Vitvitskiĭ VN, et al. **Biol Nauki** 1990;(3):26–36 (Eng. Abstr.) **(Rus)**

[The characteristics of [3H]muscimol binding to the synaptic membranes of the cerebral cortex in the progeny of rats subjected to deprivation of the paradoxical sleep phase during pregnancy] Zhulin VV, et al. **Biol Nauki** 1989; (6):54–6 (Eng. Abstr.) **(Rus)**

[Argiopinin–binding proteins from the membrane of the bull cerebral cortex] Volkova TM, et al. **Bioorg Khim** 1989 Aug; 15(8):1022–9 (Eng. Abstr.) **(Rus)**

[Effect of conditioned–reflex bilateral avoidance learning on lipid components of the rat brain] Bukbulatova LS, et al. **Biull Eksp Biol Med** 1990 Apr;109(4):315–6 (Eng. Abstr.) **(Rus)**

[Circular ID sequences in the synaptosomal fraction from the cerebral cortex of rats] Bukhman VL, et al. **Dokl Akad Nauk SSSR** 1990;310(4):1004–8 **(Rus)**

[Glutamate receptors in the human brain visualized using monoclonal antibodies] Orlova EA, et al. **Dokl Akad Nauk SSSR** 1989;307(2):495–6 **(Rus)**

[Stimulation of protein synthesis in hypoxia–dystrophied neurons of the rat cerebral cortex by the action of a proliferation protein activator isolated from nerve tissue of newborn animals] Vitvitskiĭ VN, et al. **Dokl Akad Nauk SSSR** 1989;308(3):737–40 **(Rus)**

[14C–adenine incorporation into neurons and glia of the cerebral cortex of rats after hypoxia and transplantation of embryonal nerve tissue] Vitvitskiĭ VN, et al. **Vopr Med Khim** 1990 Jan–Feb;36(1):63–5 (Eng. Abstr.) **(Rus)**

[Characteristics of passive transport of 45Ca2(+) into the synaptosomes of the cerebral cortex in rats] Orlický J, et al. **Bratisl Lek Listy** 1990 Mar;91(3):213–8 (Eng. Abstr.) **(Slo)**

MICROBIOLOGY

Detection of reactivating pseudorabies virus in tissue by immunoperoxidase technique. Narita M, et al. **J Comp Pathol** 1989 Aug;101(2):151–9

PATHOLOGY

Diffuse Lewy body disease: light and electron microscopic immunocytochemistry of senile plaques. Dickson DW, et al. **Acta Neuropathol (Berl)** 1989;78(6):572–84

Neuronal counts from four cortical regions of alcoholic brains. Kril JJ, et al. **Acta Neuropathol (Berl)** 1989; 79(2):200–4

Occurrence of 15–nm–wide straight tubules in neocortical neurons in progressive supranuclear palsy. Takahashi H, et al. **Acta Neuropathol (Berl)** 1989;79(3):233–9

Sudden cortical blindness following transient enhancement of steroids administered in congenital adrenal hyperplasia (case report). Decsi T, et al. **Acta Paediatr Hung** 1990; 30(1):107–10

Changes in synaptosomal membranes from cerebral cortex due to psychogenic stress in rats. Avdulov NA, et al. **Ann Ist Super Sanita** 1990;26(1):31–5

Degeneration of pyramidal projection neurons in Huntington's disease cortex. Cudkowicz M, et al. **Ann Neurol** 1990 Feb;27(2):200–4

Cerebral cortex and brainstem involvement in Marinesco–Sjögren syndrome [letter] Katafuchi Y, et al. **Ann Neurol** 1990 Apr;27(4):448–9

Histological and ultrastructural evidence that D–amphetamine causes degeneration in neostriatum and frontal cortex of rats. Ryan LJ, et al. **Brain Res** 1990 Jun 4;518(1–2):67–77

Initiation and growth of ectopic neurites and meganeurites during postnatal cortical development in ganglioside storage disease. Walkley SU, et al. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):167–78

Opercular syndrome without opercular lesions: Foix–Chavany–Marie syndrome in progressive supranuclear motor system degeneration. Weller M, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(6):370–2

Correction of PET data for partial volume effects in human cerebral cortex by MR imaging. Meltzer CC, et al. **J Comput Assist Tomogr** 1990 Jul–Aug;14(4):561–70

Cerebral amyloid angiopathy, recurrent intracerebral hemorrhage, and dementia in the elderly [clinical conference] Celestino FS, et al. **J Fam Pract** 1990 Jul; 31(1):21–2, 25–30

A monoclonal antibody raised against Alzheimer cortex that specifically recognizes a subpopulation of microglial cells. Cras P, et al. **J Histochem Cytochem** 1990 Aug;38(8):1201–7

Cognitive impairment in Parkinson's disease: amyloid plaques, neurofibrillary tangles, and neuropil threads in the cerebral cortex. Braak H, et al. **J Neural Transm Park Dis Dement Sect** 1990;2(1):45–57

A quantitative study of the neurofibrillary tangles and the choline acetyltransferase activity in the cerebral cortex and the amygdala in Alzheimer's disease. Esiri MM, et al.

J Neurol Neurosurg Psychiatry 1990 Feb;53(2):161–5
Unusual MRI appearance of diffuse subcortical heterotopia or "double cortex" in two children. Livingston JH, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):617–20
Visual hallucinations and the cholinergic system in dementia [letter] Perry EK, et al. **J Neurol Neurosurg Psychiatry** 1990 Jan;53(1):88
Mesolimbocortical dementia: clinico–pathological studies on two cases. Verity MA, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):492–5
Monoclonal antibody Tor 23 binds a subset of neural cells in the human cortex and displays an altered binding distribution in Alzheimer's disease. Kushner PD, et al. **J Neuropathol Exp Neurol** 1989 Nov;48(6):692–708
Fatty acid analysis of galactolipids and ganglioside in the brains of four cases of Nasu–Hakola disease. Yokoi S, et al. **Jpn J Psychiatry Neurol** 1989 Dec;43(4):695–701
Ammonia–induced swelling of rat cerebral cortical slices: implications for the pathogenesis of brain edema in acute hepatic failure. Ganz R, et al. **Metab Brain Dis** 1989 Sep; 4(3):213–23
Pyramidal neuron loss and "glycine–site therapy": a need for an animal model and study in late–life depression. Bowen DM, et al. **Neurobiol Aging** 1989 Sep–Oct; 10(5):616–8; discussion 618–20
Quantitative assessment of cortical synaptic density in Alzheimer's disease. Scheff SW, et al. **Neurobiol Aging** 1990 Jan–Feb;11(1):29–37
Cortical–basal ganglionic degeneration. Riley DE, et al. **Neurology** 1990 Aug;40(8):1203–12
Dynamics of changes in astrocytes and neurons of rabbit cerebral cortex induced by temporary blood supply deficiency. Mchedlishvili G, et al. **Neuropatol Pol** 1989; 27(1):25–37
Cytoarchitectonics of some areas of the human cerebral cortex in Alzheimer's disease and senile dementia. Bogolepova IN. **Neurosci Behav Physiol** 1989 Nov–Dec; 19(6):493–8
Changes in the sensorimotor cortex of offspring after chronic intoxication by tobacco smoke through the mother–fetus system. Kleshcheva RP. **Neurosci Behav Physiol** 1990 Mar–Apr;20(2):95–7
Angioarchitectonics of the cerebral cortex and the blood–brain barrier in Alzheimer's disease. Orlova ML. **Neurosci Behav Physiol** 1989 Nov–Dec;19(6):498–503
Neuronal alterations in patients with dementia: a Golgi study on biopsy samples. Ferrer I, et al. **Neurosci Lett** 1990 Jun 22;114(1):11–6
Tau–reactive neurofibrillary tangles in cerebellar cortex from patients with Alzheimer's disease. Tabaton M, et al. **Neurosci Lett** 1989 Sep 11;103(3):259–62
Cortical cholinergic fibers in aging and Alzheimer's disease: a morphometric study. Geula C, et al. **Neuroscience** 1989; 33(3):469–81
Selective neocortical and thalamic cell death in the gerbil after transient ischemia. Lin CS, et al. **Neuroscience** 1990; 35(2):289–99
Electroencephalographic observation on sheep and cattle with experimental cerebrocortical necrosis. Itabisashi T, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):551–8
A case of cerebrocortical necrosis in a sheep. Seimiya Y, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):1075–7
Walker–Warburg syndrome. Weinberg AG. **Pediatr Pathol** 1989;9(6):749–55
Circumscribed changes of the cerebral cortex in neuropsychiatric disorders of later life. Bowen DM, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9504–8
Altered expression of neuronal messenger RNA in Alzheimer cortex. Clark AW, et al. **Prog Clin Biol Res** 1989;317:511–5
Neuropsychological characteristics of subjects with and without neocortical Alz–50 immunoreactivity. Crystal H, et al. **Prog Clin Biol Res** 1989;317:165–73
Diffuse Lewy body disease: an important differential diagnosis in dementia with extrapyramidal features. Lennox G, et al. **Prog Clin Biol Res** 1989;317:121–30
Immunocytochemical and lectin histochemical studies of plaques and tangles in Down's syndrome patients at different ages. Mann DM, et al. **Prog Clin Biol Res** 1989; 317:849–56
Alteration of neuritic cytoarchitecture in Alzheimer disease. Onorato M, et al. **Prog Clin Biol Res** 1989;317:781–9 (29 ref.)
Brain morphology in schizophrenic disorder: prevalence and correlates of diffuse (cortical and subcortical) brain atrophy. Cazzullo CL, et al. **Psychiatry Res** 1989 Sep; 29(3):257–9
Use of CT and MRI in the neurobiological study of schizophrenia. Giordano PL, et al. **Psychiatry Res** 1989 Sep;29(3):265–6
Volumetric assessment of cerebral asymmetry from CT scans. Zipursky RB, et al. **Psychiatry Res** 1990 Apr;35(1):71–89
Human cortical neuronal cell line: establishment from a patient with unilateral megalencephaly. Ronnett GV, et al. **Science** 1990 May 4;248(4955):603–5
Magnetic resonance imaging of ataxic hemiparesis localized to the corona radiata. Gutmann DH, et al. **Stroke** 1989 Nov;20(11):1571–3
Selective cortical neuronal damage after middle cerebral artery occlusion in rats. Iizuka H, et al. **Stroke** 1989 Nov; 20(11):1516–23
[Alzheimer's disease: the beta amyloid protein A4 is also present in the cortical white matter] Behrouz N, et al. **C R Acad Sci [III]** 1990;310(11):539–44 (Eng. Abstr.) **(Fre)**
[Quantitative study of the dendritic spins of lamina V pyramidal neurons of the frontal lobe in children with severe mental retardation] von Bossányi P, et al. **J Hirnforsch** 1990;31(2):181–92 (Eng. Abstr.) **(Ger)**
[A case of Binswanger disease with numerous diffuse plaques in the neocortex] Inagaki T, et al. **No To Shinkei** 1990 Mar; 42(3):291–6 (Eng. Abstr.) **(Jpn)**
[An autopsy case of senile dementia with numerous neocortical senile plaques and preserved subcortical nuclei] Wakabayashi K, et al. **Rinsho Shinkeigaku** 1989 Sep; 29(9):1163–7 (Eng. Abstr.) **(Jpn)**
[Morphological analysis of the rat cerebral cortex and hippocampus in the early postresuscitation period following arrest of the systemic blood circulation] Esipova ZIa. **Anesteziol Reanimatol** 1989 Sep–Oct;(5):62–5 (Eng. Abstr.) **(Rus)**
[Effect of vascular factors and aging on the ultrastructure of neurons of the human cerebral cortex] Frumkina LE, et al. **Arkh Anat Gistol Embriol** 1989 Oct;97(10):5–12 (Eng. Abstr.) **(Rus)**
[Paramembraneous microfilamentous structures of the synapses of rat cerebral cortex during sensitization by brain antigens] Ereniev SI, et al. **Biull Eksp Biol Med** 1989 Nov; 108(11):624–6 (Eng. Abstr.) **(Rus)**
[Reparative processes in postischemic cerebral cortex in the early postresuscitation period (materials submitted to the International Symposium, "Central nervous system and postresuscitation pathology," Moscow, March 14–16, 1989)] Milokhin AA, et al. **Biull Eksp Biol Med** 1990 May; 109(5):506–8 (Eng. Abstr.) **(Rus)**
[Reorganization of the cortico–spinal tract after unilateral lesions of the neocortex] Obukhova GP, et al. **Biull Eksp Biol Med** 1989 Nov;108(11):626–8 (Eng. Abstr.) **(Rus)**
[Structural and cytochemical changes in cerebral cortical neurons of the offspring of neurosensitized female rats after prenatal administration of thymalin] Kazakova PB, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):114–7 (Eng. Abstr.) **(Rus)**
[Preliminary results of comparative studies of cerebral hemiatrophy in humans and animals] Pollak KG. **Zh Nevropatol Psikhiatr** 1989;89(10):127–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effect of carbamazepine on cortical interhemispheric responses in adult and young rats. Mareš P, et al. **Act Nerv Super (Praha)** 1989 Oct;31(3):238
The inhibitory components in the responses of the lateral suprasylvian area neurons to moving stimuli in cats. Harutiunian–Kozak BA, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(6):311–25
Monitoring of direct cortical responses during temporary arterial occlusion at aneurysm surgery. Fujita S, et al. **Acta Neurochir (Wien)** 1989;101(1–2):23–8
Conditioned taste aversion elicited by intracerebral administration of drugs. Bureš J, et al. **Acta Physiol Hung** 1989;74(1):77–93 (85 ref.)
The mesencephalic reticular formation as a link in the cortical control of exploratory and goal–directed behaviour. Klingberg F, et al. **Acta Physiol Hung** 1989;74(2):121–34
The influence of electrocoagulation of the septum and section of the entorhinal cortex on general behaviour and memory in cats. Oniani TN, et al. **Acta Physiol Hung** 1989;74(1):9–25
Field potential analysis of the cortical projection of the central lateral nucleus in the cat. Shyu BC, et al. **Acta Physiol Scand** 1989 Dec;137(4):503–12
Thalamocortical reverberation circuit simulation using the simula language. Faber J, et al. **Acta Univ Carol [Med] (Praha)** 1988;34(3–4):149–248
Anatomic localization of cerebral cortical function by magnetoencephalography combined with MR imaging and CT [see comments] Orrison WW, et al. **AJNR** 1990 Jul–Aug;11(4):713–6 Comment in: AJNR 1990 Jul–Aug;11(4):717–8.
Subcortical sites mediating sympathetic responses from insular cortex in rats. Cechetto DF, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R245–55
Cerebral oxidative metabolism in lambs during perinatal period: relationship to electrocortical state. Richardson BS, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1251–7
The influence of cortical lesions on penicillin induced convulsive activity in the awake rat. Horn E, et al. **Arch Ital Biol** 1990 Jan;128(1):1–18
Influence of stimulus intensity on AEP components in the 80- to 200–millisecond latency range. Adler G, et al. **Audiology** 1989;28(6):316–24
Behavioural effects of neocortical and cingulate lesions in the Mongolian gerbil. Ellard CG, et al. **Behav Brain Res** 1990 Jan 1;36(1–2):41–51
Sparing of visual field perception in neonatal but not adult cerebral hemispherectomized cats. Relationship with oxidative metabolism of the superior colliculus. Hovda DA, et al. **Behav Brain Res** 1990 Mar 5;37(2):119–32
Damage to ceruleo–cortical noradrenergic projections impairs locally cued but enhances spatially cued water maze acquisition. Selden NR, et al. **Behav Brain Res** 1990 Jun 18;39(1):29–51
The durations of hippocampal and cortical cholinergic activation induced by spatial discrimination testing of mice in an eight–arm radial maze decrease as a function of acquisition. Toumane A, et al. **Behav Neural Biol** 1989 Sep; 52(2):279–84
Function of the dorsal and medial cortex of turtles in learning. Grisham W, et al. **Behav Neurosci** 1989 Oct; 103(5):991–7
Reappraising the cerebellum: what does the hindbrain contribute to the forebrain? Leiner HC, et al. **Behav Neurosci** 1989 Oct;103(5):998–1008 (105 ref.)
Cortical, hippocampal, and striatal mediation of schedule–induced behaviors. Mittleman G, et al. **Behav Neurosci** 1990 Jun;104(3):399–409
Stimulus probability and motor response in young and old adults: an ERP study. Looren de Jong H, et al. **Biol Psychol** 1989 Oct;29(2):125–48
Event–related perturbations in an electrophysiological measure of auditory function: a measure of sensitivity during orienting? Rohrbaugh JW, et al. **Biol Psychol** 1989 Dec;29(3):247–71
Autoregressive spectral filter studies on the sensorimotor rhythm EEG state variable. Turbes CC, et al. **Biomed Sci Instrum** 1990;26:17–23
Forty hertz (40Hz) and sensorimotor rhythms (SMR) as EEG state variables and related evoked potentials. Turbes CC, et al. **Biomed Sci Instrum** 1990;26:25–31
Double cortical control acting upon activities of intralaminar thalamic cells. Condés–Lara M, et al. **Bol Estud Med Biol** 1989 Jan–Jun;37(1–2):63–8
Effects of pentobarbitone, ketamine and lignocaine on synaptic transmission in the rat olfactory cortex in vitro. Iwasaki M. **Br J Anaesth** 1989 Sep;63(3):306–14
Niguldipine discriminates between alpha 1–adrenoceptor–mediated second messenger responses in rat cerebral cortex slices. Robinson JP, et al. **Br J Pharmacol** 1990 May;100(1):3–4
Unimanual tapping during concurrent articulation: examining the role of cortical structures in the execution of programmed movement sequences. Inhoff AW, et al. **Brain Cogn** 1990 May;13(1):59–76
Reorganization of the corticospinal tract following neonatal unilateral cortical ablation in rats. Ono K, et al. **Brain Dev** 1990;12(2):226–36
The ontogeny of hemispheric specialization: some old hypotheses revisited. Satz P, et al. **Brain Lang** 1990 May; 38(4):596–614 (58 ref.)
Event–related potentials during word–reading and figure–matching in left–handed and right–handed males and females. Van Strien JW, et al. **Brain Lang** 1989 Nov; 37(4):525–47
Word–to–word variation in ERP component latencies: spoken words. Woodward SH, et al. **Brain Lang** 1990 May; 38(4):488–503
Stimulation of the nucleus basalis of Meynert and substantia innominata produces widespread increases in cerebral blood flow in the frontal, parietal and occipital cortices. Adachi T, et al. **Brain Res** 1990 Apr 23;514(1):163–6
Spontaneous neuronal unit activity in the primate basal ganglia and the effects of precentral cerebral cortical ablations. Aldridge JW, et al. **Brain Res** 1990 May 14; 516(1):46–56
Ketamine blockade of spreading depression: rapid development of tolerance. Amemori T, et al. **Brain Res** 1990 Jun 11;519(1–2):351–4
Mechanisms concerned in the direct effect of isoflurane on rat hippocampal and human neocortical neurons. Berg–Johnsen J, et al. **Brain Res** 1990 Jan 15;507(1):28–34
Monocular pattern discrimination learning after unilateral lesions of anteromedial cortex in rat. Christie D, et al. **Brain Res** 1989 Sep 18;497(2):378–81
Morris water task impairment and hypoactivity following cysteamine–induced reductions of somatostatin–like immunoreactivity. Fitzgerald LW, et al. **Brain Res** 1989 Dec 29;505(2):246–50
Correlation between adaptability to hypoxia and thickness of guinea pig olfactory cortical slice in vitro. Fujii T. **Brain Res** 1990 Jun 4;518(1–2):127–34
Estradiol induces rapid remodelling of plasma membranes in developing rat cerebrocortical neurons in culture. Garcia–Segura LM, et al. **Brain Res** 1989 Oct 2; 498(2):339–43
Effects of uniform and non–uniform synaptic 'activation–distributions' on the cable properties of modeled cortical pyramidal neurons. Holmes WR, et al. **Brain Res** 1989 Dec 25;505(1):12–22
Input–output relationships in the jaw and orofacial motor zones of the cat cerebral cortex. Iwata K, et al. **Brain Res** 1990 Jan 22;507(2):337–40
Effects of menthol on peripheral nerve and cortical unit responses to thermal stimulation of the oral cavity in the rat. Kosar E, et al. **Brain Res** 1990 Apr 16;513(2):202–11
Cortical unit responses to chemical stimulation of the oral cavity in the rat. Kosar E, et al. **Brain Res** 1990 Apr 16; 513(2):212–24
Laminar analysis of motion information processing in macaque V5. Lagae L, et al. **Brain Res** 1989 Sep 4; 496(1–2):361–7
Inhibition of spontaneous and evoked unit activity in the rat medial prefrontal cortex by mesencephalic raphe nuclei. Mantz J, et al. **Brain Res** 1990 Jul 30;524(1):22–30
Changes in EEG spindle activity induced by ibotenic acid lesions of medialis dorsalis thalamic nuclei in the cat. Marini G, et al. **Brain Res** 1989 Oct 23;500(1–2):395–9

Discharge patterns of pallidal neurons with input from various cortical areas during movement in the monkey. Nambu A, et al. **Brain Res** 1990 Jun 11;519(1–2):183–91
Ethosuximide alters intrathalamic and thalamocortical synchronizing mechanisms: a possible explanation of its antiabsence effect. Pellegrini A, et al. **Brain Res** 1989 Sep 18;497(2):344–60
The selective adenosine A2 receptor agonist, CGS 21680, is a potent depressant of cerebral cortical neuronal activity. Phillis JW. **Brain Res** 1990 Feb 19;509(2):328–30
Cortical field potential associated with hand movement on warning-imperative visual stimulus and cerebellum in the monkey. Sasaki K, et al. **Brain Res** 1990 Jun 11; 519(1–2):343–6
Properties of K-currents in unmyelinated presynaptic axons of brain revealed revealed by extracellular polarisation. Scholfield CN. **Brain Res** 1990 Jan 15;507(1):121–8
Serotonin (5-HT) induces IPSPs in pyramidal layer cells of rat piriform cortex: evidence for the involvement of a 5-HT2-activated interneuron. Sheldon PW, et al. **Brain Res** 1990 Jan 1;506(1):62–9
Pentylenetetrazole-induced changes of the single potassium channel in primary cultured cerebral cortical neurons. Sugaya E, et al. **Brain Res** 1989 Sep 18;497(2):239–44
Effects of protein kinase C inhibitor H-7 on membrane properties and synaptic responses of neocortical neurons of awake cats. Szente MB, et al. **Brain Res** 1990 Jan 8; 506(2):281–6
Synaptic aging as revealed by changes in membrane potential and decreased activity of Na+,K(+)-ATPase. Tanaka Y, et al. **Brain Res** 1990 Jan 1;506(1):46–52
Premotor negativity associated with saccadic eye movement and finger movement: a comparative study. Thickbroom GW, et al. **Brain Res** 1990 Jan 8;506(2):223–6
The role of serotonin in the control of cerebral activity: studies with intracerebral 5,7-dihydroxytryptamine. Vanderwolf CH, et al. **Brain Res** 1989 Dec 18; 504(2):181–91
Augmentation of N-methyl-D-aspartate induced depolarizations by GABA in neocortical and archicortical neurons. Walden J, et al. **Brain Res** 1990 Feb 26; 510(1):127–9
A search for the cortical gustatory area in the hamster. Yamamoto T, et al. **Brain Res** 1990 Mar 5;510(2):309–20
Hippocampal theta activity in the acute precollicular rat. Gotteamann C, et al. **Brain Res Bull** 1989 Jun;22(6):959–62
Cat-P300 present after association cortex ablation. Harrison JB, et al. **Brain Res Bull** 1990 Apr;24(4):551–60
The role of reticular activating system in altering medial preoptic neuronal activity in anesthetized rats. Kumar VM, et al. **Brain Res Bull** 1989 Jun;22(6):1031–7
Effects of quisqualic acid nucleus basalis lesioning on cortical EEG, passive avoidance and water maze performance. Riekkinen P Jr, et al. **Brain Res Bull** 1990 Jun;24(6):839–42
Projections of two separate cortical areas for rhythmical jaw movements in the rat. Zhang GX, et al. **Brain Res Bull** 1990 Feb;24(2):221–30
Pentobarbital suppresses human brain sodium channels. Frenkel C, et al. **Brain Res Mol Brain Res** 1989 Nov; 6(2–3):211–6
Facts and artifacts in brain electrical activity mapping. Coburn KL, et al. **Brain Topogr** 1988 Fall;1(1):37–45
Generation of human EEG by a combination of long and short range neocortical interactions. Nunez PL. **Brain Topogr** 1989 Spring;1(3):199–215
Magnetoencephalographic comparison of cortical sensorimotor extrema evoked by flexion of index finger and thumb. Sullivan GW, et al. **Brain Topogr** 1989 Summer; 1(4):257–62
Activity in cortical-like neural systems: short-range effects and attention phenomena. Ventriglia F. **Bull Math Biol** 1990;52(3):397–429
Development and plasticity of the primate cerebral cortex. Schwartz ML, et al. **Clin Perinatol** 1990 Mar;17(1):83–102
Corticotrigeminal motor pathway in the rat—I. Antidromic activation. Ohta M, et al. **Comp Biochem Physiol [A]** 1989; 94(1):99–104
Negative cortical potentials when classifying familiar and unfamiliar faces. Uhl F, et al. **Cortex** 1990 Mar;26(1):157–61
Maturation of the cortical evoked response to posterior-nerve stimulation in the preterm neonate. White CP, et al. **Dev Med Child Neurol** 1989 Oct;31(5):657–64
Electroencephalographic studies in "split brain" cats. Berlucchi G. **Electroencephalogr Clin Neurophysiol** 1966 Apr;20(4):348–56
Electrical transmission properties of the cranium of the dog to steady currents. Bradley WE, et al. **Electroencephalogr Clin Neurophysiol** 1966 May;20(5):520–3
Lateral coherence of the electrocorticogram: a new measure of brain synchrony. Bullock TH, et al. **Electroencephalogr Clin Neurophysiol** 1989 Dec; 73(6):479–98
A method for analyzing variations in evoked responses. Burns SK, et al. **Electroencephalogr Clin Neurophysiol** 1966 Apr; 20(4):407–9
Effect of brain lesions on conditioned cortical electropotentials. Chow KL, et al. **Electroencephalogr Clin Neurophysiol** 1966 Apr; 20(4):357–69
Examination of the descending pathway to the external anal sphincter and pelvic floor muscles by transcranial cortical stimulation. Ertekin C, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jun; 75(6):500–10
The evoked cortical somatosensory response in normal man and its modification by oral lithium carbonate. Gartside IB, et al. **Electroencephalogr Clin Neurophysiol** 1966 Apr; 20(4):382–90
Monitoring brain function during cardiothoracic surgery in children and adults at two levels of hypothermia. Glaría AP, et al. **Electroencephalogr Clin Neurophysiol** 1990 Sep; 76(3):268–70
Human somatosensory evoked potentials to mechanical pulses and vibration: contributions of SI and SII somatosensory cortices to P50 and P100 components. Hämäläinen H, et al. **Electroencephalogr Clin Neurophysiol** 1990 Feb;75(2):13–21
Cerebral evoked potentials after stimulation of the posterior urethra in man. Hansen MV, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jan–Feb; 77(1):52–8
Late muscular responses to transcranial cortical stimulation in man. Holmgren H, et al. **Electroencephalogr Clin Neurophysiol** 1990 Mar; 75(3):161–72
Kindling in the posterior cingulate cortex: electrographic and behavioral characteristics. Leung LS, et al. **Electroencephalogr Clin Neurophysiol** 1990 Aug; 76(2):177–86
Human DC scalp potentials during vestibular and optokinetic stimulation: non-specific responses? Mergner T, et al. **Electroencephalogr Clin Neurophysiol** 1989 Oct; 73(4):322–33
Electrocorticogram during whole body vibration. Nicholson AN, et al. **Electroencephalogr Clin Neurophysiol** 1966 May; 20(5):494–505
The magnetic field of cortical current sources: the application of a spatial filtering model to the forward and inverse problems. Tan S, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jul;76(1):73–85
Cortical topography of premotor and motor potentials preceding self-paced, voluntary movement of dominant and non-dominant hands. Tarkka IM, et al. **Electroencephalogr Clin Neurophysiol** 1990 Feb;75(2):36–43
Changes of somatosensory evoked potentials with increase of intracranial pressure in the rat's brain. Witzmann A. **Electroencephalogr Clin Neurophysiol** 1990 Jan–Feb; 77(1):59–67
Intracarotid amobarbital (Wada) test for language dominance: correlation with results of cortical stimulation. Wyllie E, et al. **Epilepsia** 1990 Mar–Apr;31(2):156–61
Supratentorial structures controlling oculomotor functions and their involvement in cases of stroke. Marx P. **Eur Arch Psychiatry Neurol Sci** 1989;239(1):3–8 (38 ref.)
Optical recording of epileptiform voltage changes in the neocortical slice. Albowitz B, et al. **Exp Brain Res** 1990; 81(2):241–56
Anaesthetic depression of excitatory synaptic transmission in neocortex. el-Beheiry H, et al. **Exp Brain Res** 1989; 77(1):87–93
Motor learning in monkeys (Macaca fascicularis) with lesions in motor thalamus. Canavan AG, et al. **Exp Brain Res** 1989; 77(1):113–26
Distribution of neurons with set- and movement-related activity before hand and foot movements in the premotor cortex of rhesus monkeys. Kurata K. **Exp Brain Res** 1989; 77(2):245–56
Properties of single neurons in the cat midsuprasylvian gyrus. Olausson B, et al. **Exp Brain Res** 1990;79(3):515–29
Development in the absence of spontaneous bioelectric activity results in increased stereotyped burst firing in cultures of dissociated cerebral cortex. Ramakers GJ, et al. **Exp Brain Res** 1990;79(1):157–66
Changes in glutamate-related enzyme activities in the striatum of the rat following lesion of corticostriatal fibres. Rothe F, et al. **Exp Brain Res** 1990;79(2):400–4
Met- and leu-enkephalins inhibit rat cortical neurons intracellularly recorded in vivo while morphine excites them: evidence for naloxone-sensitive and naloxone-insensitive effects. Stanzione P, et al. **Exp Brain Res** 1989;77(2):302–8
Intracortical grafts of embryonic basal forebrain tissue restore low voltage fast activity in rats with basal forebrain lesions. Vanderwolf CH, et al. **Exp Brain Res** 1990;81(2):426–32
Effects induced by the antiepileptic drug valproic acid upon the ionic currents recorded in rat neocortical neurons in cell culture. Zona C, et al. **Exp Brain Res** 1990;81(2):313–7
Effects of phenytoin, carbamazepine, and clonazepam on cortex- and amygdala-evoked potentials in partially kindled rats. Burnham WM, et al. **Exp Neurol** 1989 Nov; 106(2):150–5
Single-unit discharges in isolated cerebral cortex. Frost JD Jr, et al. **Exp Neurol** 1966 Mar;14(3):305–16
Electrical activity of the isolated cerebral hemisphere and isolated thalamus. Kellaway P, et al. **Exp Neurol** 1966 Mar; 14(3):281–304
The cholinergic nucleus basalis: a key structure in neocortical arousal. Buzsàki G, et al. **Experientia Suppl** 1989;57:159–71 (52 ref.)
Behavioral neuroanatomy of cholinergic innervation in the primate cerebral cortex. Mesulam MM. **Experientia Suppl** 1989;57:1–11 (53 ref.)
Cerebral electrical potentials evoked by balloon distention of the human esophagus. Castell DO, et al. **Gastroenterology** 1990 Mar;98(3):662–6
An improved method for localizing electric brain dipoles. Salu Y, et al. **IEEE Trans Biomed Eng** 1990 Jul; 37(7):699–705
Lymphocyte homing after left or right brain neocortex ablation. Barnéoud P, et al. **Immunol Lett** 1990 Mar–Apr; 24(1):31–5
Cortical neuron sensitivity to neurotransmitters following neonatal noradrenaline depletion. Mirmiran M, et al. **Int J Dev Neurosci** 1990;8(2):217–21
Cortical DC-potentials as electrophysiological correlates of hemispheric dominance of higher cognitive functions. Altenmüller E. **Int J Neurosci** 1989 Jul;47(1–2):1–14
The cerebral dominances: quantitative morphology of the human cerebral cortex. Weis S, et al. **Int J Neurosci** 1989 Jul;47(1–2):165–8
Event-related desynchronization, ERD-mapping and hemispheric differences for words and numbers. Klimesch W, et al. **Int J Psychophysiol** 1990 Apr;8(3):297–308
Ear dominance and laterality of cortical activation identified by event-related desynchronization mapping. Schulter G, et al. **Int J Psychophysiol** 1990 Apr;8(3):283–95
Stimulation in prefrontal cortex area inhibits cardiovascular and motor components of the defence reaction in rats. al Maskati HA, et al. **J Auton Nerv Syst** 1989 Nov; 28(2):117–25
Selective electrical stimulation of postganglionic cerebrovascular parasympathetic nerve fibers originating from the sphenopalatine ganglion enhances cortical blood flow in the rat. Suzuki N, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):383–91
Beta and mu rhythms. Kozelka JW, et al. **J Clin Neurophysiol** 1990 Apr;7(2):191–207 (125 ref.)
Alpha rhythms. Markand ON. **J Clin Neurophysiol** 1990 Apr; 7(2):163–89 (130 ref.)
Corticocortical connections of anatomically and physiologically defined subdivisions within the inferior parietal lobule. Andersen RA, et al. **J Comp Neurol** 1990 Jun 1;296(1):65–113
Cell death of corticospinal neurons is induced by axotomy before but not after innervation of spinal targets. Merline M, et al. **J Comp Neurol** 1990 Jun 15;296(3):506–16
Effect of transient hypoxia on oxygenation of the developing rat brain: relationships among haemoglobin saturation, autoregulation of blood flow and mitochondrial redox state. Sylvia AL, et al. **J Dev Physiol** 1989 Nov;12(5):287–92
The evolution of complex sensory systems in mammals. Kaas JH. **J Exp Biol** 1989 Sep;146:165–76 (55 ref.)
Mesocortical dopamine neurons: high basal firing frequency predicts tyrosine dependence of dopamine synthesis. Tam SY, et al. **J Neural Transm Gen Sect** 1990;81(2):97–110
Respective contributions of neuronal activity and presynaptic mechanisms in the control of the in vivo release of dopamine. Chéramy A, et al. **J Neural Transm Suppl** 1990; 29:183–93 (53 ref.)
Membrane viscosity correlates with alpha 1-adrenergic signal transduction of the aged rat cerebral cortex. Miyamoto A, et al. **J Neurochem** 1990 Jul;55(1):70–5
Repetitive action potentials in isolated nerve terminals in the presence of 4-aminopyridine: effects on cytosolic free Ca2+ and glutamate release. Tibbs GR, et al. **J Neurochem** 1989 Dec;53(6):1693–9
Chronic electroconvulsive seizures down-regulate expression of the immediate-early genes c-fos and c-jun in rat cerebral cortex. Winston SM, et al. **J Neurochem** 1990 Jun; 54(6):1920–5
Ionic basis of inhibitory presynaptic modulation in rat cortical synaptosomes. Zoltay G, et al. **J Neurochem** 1990 Sep; 55(3):1008–12
Synchronized excitation and inhibition driven by intrinsically bursting neurons in neocortex. Chagnac-Amitai Y, et al. **J Neurophysiol** 1989 Nov;62(5):1149–62
Visuospatial coding in primate prefrontal neurons revealed by oculomotor paradigms. Funahashi S, et al. **J Neurophysiol** 1990 Apr;63(4):814–31
Visual activity in area V2 during reversible inactivation of area 17 in the macaque monkey. Girard P, et al. **J Neurophysiol** 1989 Dec;62(6):1287–302
Afferent and association fiber differences in short-term potentiation in piriform (olfactory) cortex of the rat. Hasselmo ME, et al. **J Neurophysiol** 1990 Jul;64(1):179–90
Intracellular recording of identified neostriatal patch and matrix spiny cells in a slice preparation preserving cortical inputs. Kawaguchi Y, et al. **J Neurophysiol** 1989 Nov; 62(5):1052–68
GABA as an inhibitory neurotransmitter in human cerebral cortex. McCormick DA. **J Neurophysiol** 1989 Nov; 62(5):1018–27
Gustatory responses of single neurons in the insula of the macaque monkey. Yaxley S, et al. **J Neurophysiol** 1990 Apr;63(4):689–700
A muscle-derived factor(s) induces expression of a catecholamine phenotype in neurons of cultured rat cerebral cortex. Iacovitti L, et al. **J Neurosci** 1989 Oct; 9(10):3529–37
Visibility of synaptically induced conductance changes: theory and simulations of anatomically characterized cortical pyramidal cells. Koch C, et al. **J Neurosci** 1990 Jun;10(6):1728–44
Localization and development of nerve growth factor-sensitive rat basal forebrain neurons and their afferent projections to hippocampus and neocortex. Koh

S, et al. **J Neurosci** 1989 Sep;9(9):2999–0318

Functional organization of input from areas 17 and 18 to an extrastriate area in the cat. Sherk H. **J Neurosci** 1990 Aug;10(8):2780–90

Neuronal activities in brain–stem cholinergic nuclei related to tonic activation processes in thalamocortical systems. Steriade M, et al. **J Neurosci** 1990 Aug;10(8):2541–59

Kainate receptors in the rat hippocampus: a distribution and time course of changes in response to unilateral lesions of the entorhinal cortex. Ulas J, et al. **J Neurosci** 1990 Jul; 10(7):2352–62

Whole cell recording from neurons in slices of reptilian and mammalian cerebral cortex. Blanton MG, et al. **J Neurosci Methods** 1989 Dec;30(3):203–10

The Duchenne smile: emotional expression and brain physiology. II. Ekman P, et al. **J Pers Soc Psychol** 1990 Feb;58(2):342–53

Calcium currents in rat thalamocortical relay neurones: kinetic properties of the transient, low–threshold current. Coulter DA, et al. **J Physiol (Lond)** 1989 Jul;414:587–604

Frequency–dependent depression of inhibition in guinea–pig neocortex in vitro by GABAB receptor feed–back on GABA release. Deisz RA, et al. **J Physiol (Lond)** 1989 May;412:513–41

Corticofugal action on transmission of group I input from the hindlimb to the pericruciate cortex in the cat. McIntyre AK, et al. **J Physiol (Lond)** 1989 Sep;416:19–30

Putative cerebral cortical involvement in the ventilatory response to inhaled CO2 in conscious man. Murphy K, et al. **J Physiol (Lond)** 1990 Jan;420:1–18

Formation of new cortico–rubral synapses as a possible mechanism for classical conditioning mediated by the red nucleus in cat. Oda Y, et al. **J Physiol (Paris)** 1988–89; 83(3):207–16

Bilateral waveform dissimilarity of auditory evoked potentials may reveal a lateralized motor response process: a correlation method. Ninomiya H, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):183–90

Impaired driving fitness after electrical or magnetic cortical stimulation [letter] Saltuari L, et al. **Lancet** 1990 Sep 1; 336(8714):563

Subthreshold Na+–dependent theta–like rhythmicity in stellate cells of entorhinal cortex layer II. Alonso A, et al. **Nature** 1989 Nov 9;342(6246):175–7

Cortical maps [letter; comment] Kohonen T. **Nature** 1990 Jul 5;346(6279):24 Comment on: Nature 1990 Feb 15;343(6259):644–7.

Versive eye movements elicited by cortical stimulation of the human brain. Godoy J, et al. **Neurology** 1990 Feb; 40(2):296–9

Selective modulation of NMDA responses by reduction and oxidation. Aizenman E, et al. **Neuron** 1989 Mar; 2(3):1257–63

Antagonism of monosynaptic excitations in the mouse olfactory cortex slice by 6,7–dinitroquinoxaline–2,3–dione. Collins GG, et al. **Neuropharmacology** 1989 Oct; 28(10):1123–8

Benzodiazepine receptor autoradiography in corpus striatum of rat after large frontal cortex lesions and chronic treatment with diazepam. Moratalla R, et al. **Neuropharmacology** 1989 Sep;28(9):893–900

Neocortical representational dynamics in adult primates: implications for neuropsychology. Jenkins WM, et al. **Neuropsychologia** 1990;28(6):573–84 (36 ref.)

Functional recovery following transplants of embryonic brain tissue in rats with lesions of visual, frontal and motor cortex: problems and prospects for future research. Lescaudron L, et al. **Neuropsychologia** 1990;28(6):585–99 (64 ref.)

Cerebral correlates of imagining colours, faces and a map—II. Negative cortical DC potentials. Uhl F, et al. **Neuropsychologia** 1990;28(1):81–93

Psychophysiological correlates of human brain asymmetry: blood pressure changes during lateralized presentation of an emotionally laden film. Wittling W. **Neuropsychologia** 1990;28(5):457–70

Functional conjugation of cerebral cortex neurons and signal meaning of the stimulus (based on hypothesis of informational switching–over of conditioned activity). Komissarov VI. **Neurosci Behav Physiol** 1989 Nov–Dec; 19(6):475–80

Neurotransmitter diversity and its role in integrative brain functions. Kotlyar BI, et al. **Neurosci Behav Physiol** 1989 Jul–Aug;19(4):265–71

Temperature reactions of the rat cerebral cortex and distant effects of an experimentally induced excitatory focus. Rusinov VS, et al. **Neurosci Behav Physiol** 1990 Mar–Apr; 20(2):167–73

The influence of an enkephalin derivative, DAGO, on the behavior and activity of neurons of the neocortex and hippocampus of rabbits during the development of defensive and inhibitory conditioned reflexes. Shul'gina GI, et al. **Neurosci Behav Physiol** 1990 Mar–Apr;20(2):156–66

Long–term posttetanic changes in neuronal spike responses of the cat sensomotor cortex. Veber NV, et al. **Neurosci Behav Physiol** 1989 Nov–Dec;19(6):457–9

Multisensory regulation of maternal behavior and masculine sexual behavior: a revised view. Stern JM. **Neurosci Biobehav Rev** 1990 Summer;14(2):183–200 (157 ref.)

Potentiation of neurotransmitter release coincides with potentiation of phosphatidyl inositol turnover. A possible in vitro model for long term potentiation. Diamant S, et al. **Neurosci Lett** 1990 Feb 5;109(1–2):140–5

Two patterns of firing in human neocortical neurons. Foehring RC, et al. **Neurosci Lett** 1990 Mar 14; 110(3):279–85

Cortical field potentials associated with hand movements triggered by warning and imperative stimuli in the monkey. Gemba H, et al. **Neurosci Lett** 1990 Jun 8;113(3):275–80

Antagonism at GABAB receptors by saclofen and related sulphonic analogues of baclofen and GABA. Kerr DI, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):239–44

Long–term potentiation in the prefrontal cortex following stimulation of the hippocampal CA1/subicular region. Laroche S, et al. **Neurosci Lett** 1990 Jul 3;114(2):184–90

Pacemaker–like and other types of spontaneous membrane potential oscillations of thalamocortical cells. Leresche N, et al. **Neurosci Lett** 1990 May 18;113(1):72–7

D–CPP–ene (SDZ EAA 494), a potent and competitive N–methyl–D–aspartate (NMDA) antagonist: effect on spontaneous activity and NMDA–induced depolarizations in the rat neocortical slice preparation, compared with other CPP derivatives and MK–801. Lowe DA, et al. **Neurosci Lett** 1990 Jun 8;113(3):315–21

Antidepressants induce regeneration of catecholaminergic axon terminals in the rat cerebral cortex. Nakamura S. **Neurosci Lett** 1990 Mar 26;111(1–2):64–8

Differing actions of baclofen and 3–amino–propylphosphinic acid in rat neocortical slices. Ong J, et al. **Neurosci Lett** 1990 Feb 5;109(1–2):169–73

Effects of potassium channel blockers on baclofen–induced suppression of paroxysmal discharges in rat neo–cortical slices. Ong J, et al. **Neurosci Lett** 1990 May 4; 112(2–3):216–22

A comparison of preparation–related neuronal activity changes in the prefrontal, premotor, primary motor and posterior parietal areas of the monkey cortex: preliminary results. Requin J, et al. **Neurosci Lett** 1990 Mar 26; 111(1–2):151–6

Selective bilateral destruction of substantia nigra has no effect on kindled seizures induced from stimulation of amygdala or piriform cortex in rats. Wahnschaffe U, et al. **Neurosci Lett** 1990 May 31;113(2):205–10

Calcium–activated potassium channels recorded from rat neocortical neurons in cell culture. Zona C, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):223–8

Relationship between the cortical choline acetyltransferase content and EEG delta–power. Riekkinen P Jr, et al. **Neurosci Res** 1990 Apr;8(1):12–20

Eye movements following cortical stimulation in the ventral bank of the anterior ectosylvian sulcus of the cat. Tamai Y, et al. **Neurosci Res** 1989 Nov;7(2):159–63

Histochemical changes in enzymes of energy metabolism in the dentate gyrus accompany deafferentation and synaptic reorganization. Borowsky IW, et al. **Neuroscience** 1989; 33(2):253–62

Excitatory amino acids mediate responses elicited in vitro by stimulation of cortical afferents to reticularis thalami neurons of the rat. de Curtis M, et al. **Neuroscience** 1989; 33(2):275–83

Enhanced dopamine receptor activation in accumbens and frontal cortex has opposite effects on medial forebrain bundle self–stimulation. Olds ME. **Neuroscience** 1990; 35(2):313–25

In vivo release of endogenous glutamate and aspartate in the rat striatum during stimulation of the cortex. Perschak H, et al. **Neuroscience** 1990;35(2):283–7

Antidromic firing occurs spontaneously on thalamic relay neurons: triggering of ectopic action potentials by somatic intrinsic burst discharges. Pinault D. **Neuroscience** 1990; 34(2):281–92

Antidromic firing occurs spontaneously on thalamic relay neurons: triggering of somatic intrinsic burst discharges by ectopic action potentials. Pinault D, et al. **Neuroscience** 1989;31(3):625–37

Thalamic retrograde degeneration following cortical injury: an excitotoxic process? Ross DT, et al. **Neuroscience** 1990; 35(3):525–50

Plastic response of hippocampal excitatory amino acid receptors to deafferentation and reinnervation. Ulas J, et al. **Neuroscience** 1990;34(1):9–17

Automated identification and quantitation of four patterns of electrocortical activity in the near–term fetal lamb. McNerney ME, et al. **Pediatr Res** 1990 Aug;28(2):106–10

Spectral edge frequency as a simple quantitative measure of the maturation of electrocortical activity. Szeto HH. **Pediatr Res** 1990 Mar;27(3):289–92

Manual asymmetry in weight discrimination: hand or spatial–field advantage? Brodie EE. **Perception** 1989; 18(3):397–402

Corticostriatal and thalamic regulation of amphetamine–induced ascorbate release in the neostriatum. Basse–Tomusk A, et al. **Pharmacol Biochem Behav** 1990 Jan;35(1):55–60

Ibotenic acid lesions of the medial prefrontal cortex potentiate FG–7142–induced attenuation of exploratory activity in the rat. Jaskiw GE, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):695–7

Controllability of prestimulation of the medial prefrontal cortex determines the facilitation of self–stimulation and kindled seizures. Balleine BW, et al. **Physiol Behav** 1989 Aug;46(2):239–45

Effects of dorsal and medial cortex lesions on reversals in turtles. Grisham W, et al. **Physiol Behav** 1990 Jan;47(1):43–9

Slow potentials of the cerebral cortex and behavior. Birbaumer N, et al. **Physiol Rev** 1990 Jan;70(1):1–41 (402 ref.)

The effect of microinjections of clonidine into the locus coeruleus on cortical EEG in rats. Danysz W, et al. **Pol J Pharmacol Pharm** 1989 Jan–Feb;41(1):45–50

Cortically evoked responses of superior salivary nucleus neurons in the cat. Ishizuka K, et al. **Proc Finn Dent Soc** 1989;85(4–5):355–9

Cortical functional architecture and local coupling between neuronal activity and the microcirculation revealed by in vivo high–resolution optical imaging of intrinsic signals. Frostig RD, et al. **Proc Natl Acad Sci U S A** 1990 Aug; 87(16):6082–6

Convergence and divergence of neurotransmitter action in human cerebral cortex. McCormick DA, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):8098–102

Pigeons with ablated pyriform cortex home from familiar but not from unfamiliar sites. Papi F, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3783–7

The anterior cingulate cortex mediates processing selection in the Stroop attentional conflict paradigm. Pardo JV, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):256–9

A simple ordering of neocortical areas established by the compartmental organization of their striatal projections. Ragsdale CW Jr, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6196–9

Translocation of synapsin I in response to depolarization of isolated nerve terminals. Sihra TS, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):8108–12

Enantiomers of HA–966 (3–amino–1–hydroxypyrrolid–2–one) exhibit distinct central nervous system effects: (+)–HA–966 is a selective glycine/N–methyl–D–aspartate receptor antagonist, but (–)–HA–966 is a potent gamma–butyrolactone–like sedative. Singh L, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):347–51

Somatostatin–14 and somatostatin–28 induce opposite effects on potassium currents in rat neocortical neurons. Wang HL, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(23):9616–20

An explanation for the purported excitation of piriform cortical neurons by N–acetyl–L–aspartyl–L–glutamic acid (NAAG). Whittemore ER, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9602–5

A unitary hypothesis of mind–brain interaction in the cerebral cortex. Eccles J. **Proc R Soc Lond [Biol]** 1990 Jun 22; 240(1299):433–51

Interruption of motor programmes by electrical or magnetic brain stimulation in man. Rothwell JC, et al. **Prog Brain Res** 1989;80:467–72; discussion 465–6

The anatomy of mental unity and volition: an alternate view [comment] Stillman RC, et al. **Psychiatry** 1989 Nov; 52(4):410–3; discussion 414–5 Comment on: Psychiatry 1989 Nov;52(4):404–9.

Mean hemispheric blood perfusion during autogenic training and hypnosis. Diehl BJ, et al. **Psychiatry Res** 1989 Sep; 29(3):317–8

P300 evoked by an auditory and a visual paradigm and a semantic task. Dierks T, et al. **Psychiatry Res** 1989 Sep; 29(3):439–41

Methods of spatial interpolation applied to EEG mapping. Hinrichs H, et al. **Psychiatry Res** 1989 Sep;29(3):431–2

Computerized electroencephalographic topography (CET) during sleep: topographic hypnograms. Maurer K, et al. **Psychiatry Res** 1989 Sep;29(3):435–8

Brain electrical activity topographical maps produced in response to olfactory and chemosensory stimulation. Van Toller S, et al. **Psychiatry Res** 1989 Sep;29(3):429–30

VEP latency and some properties of simple motor reaction–time distribution. Jaśkowski P, et al. **Psychol Res** 1990;52(1):28–34

Indeterminacy of the isomorphism heuristic. van Leeuwen C. **Psychol Res** 1990;52(1):1–4

Contributions of hippocampus and neocortex to the expression of ethanol effects. Devenport LD, et al. **Psychopharmacology (Berl)** 1989;99(3):337–44

Modulation of event–related potentials by word repetition: the effects of inter–item lag. Nagy ME, et al. **Psychophysiology** 1989 Jul;26(4):431–6

Self–report during feedback regulation of slow cortical potentials. Roberts LE, et al. **Psychophysiology** 1989 Jul; 26(4):392–403

Brain potentials during selective attention, memory search, and mental rotation. Wijers AA, et al. **Psychophysiology** 1989 Jul;26(4):452–67

Cortical visual motion processing for oculomotor control. Wurtz RH, et al. **Res Publ Assoc Res Nerv Ment Dis** 1990; 67:211–31 (54 ref.)

The cortical control of ocular pursuit movements. Leigh RJ. **Rev Neurol (Paris)** 1989;145(8–9):605–12

Simulation of paleocortex performs hierarchical clustering. Ambros–Ingerson J, et al. **Science** 1990 Mar 16; 247(4948):1344–8

Interhemispheric transfer of plasticity in the cerebral cortex. Calford MB, et al. **Science** 1990 Aug 17;249(4970):805–7

A major direct GABAergic pathway from zona incerta to neocortex. Lin CS, et al. **Science** 1990 Jun 22; 248(4962):1553–6

Activation of extrastriate and frontal cortical areas by visual words and word–like stimuli. Petersen SE, et al.

Science 1990 Aug 31;249(4972):1041–4

2,3–Dihydroxy–6–nitro–7–sulfamoyl–benzo(F)quinoxaline: a neuroprotectant for cerebral ischemia. Sheardown MJ, et al. **Science** 1990 Feb 2;247(4942):571–4

Cortical influences on neurons of the lateral reticular nucleus responding to noxious stimuli. Sotgiu ML. **Somatosens Mot Res** 1989;6(5–6):589–99

The gamma wave: a cortical information carrier? [news] Bressler SL. **Trends Neurosci** 1990 May;13(5):161–2

Intrinsic firing patterns of diverse neocortical neurons. Connors BW, et al. **Trends Neurosci** 1990 Mar;13(3):99–104 (28 ref.)

The enigma of the cortical code [news] Mitchison G, et al. **Trends Neurosci** 1990 Feb;13(2):41–3 (15 ref.)

The monoaminergic innervation of the cerebral cortex is not diffuse and nonspecific. Parnavelas JG, et al. **Trends Neurosci** 1989 Sep;12(9):315–9 (27 ref.)

Immuno– and histochemical evidence for changed neurotransmission in basal forebrain, hippocampal formation and neocortex of aged rats. Lolova I, et al. **Z Mikrosk Anat Forsch** 1989;103(6):840–54

[Relationship between the precruciate cortex and the ventral lateral posterior nucleus of the thalamus in acupuncture analgesia] Chen Z, et al. **Chen Tzu Yen Chiu** 1990;15(1):61–5 (Eng. Abstr.) **(Chi)**

[Investigation of cortical slow potentials during the delayed discrimination learning in monkeys] Li BM, et al. **Sheng Li Hsueh Pao** 1990 Feb;42(1):9–17 (Eng. Abstr.) **(Chi)**

[Comparison between responses of monkey prefrontal neurons to signal and to indifferent stimuli] Mei ZT, et al. **Sheng Li Hsueh Pao** 1990 Feb;42(1):1–8 (Eng. Abstr.) **(Chi)**

[Does the plasticity of central nervous system synapses have a morphological basis?] Langmeier M. **Sb Lek** 1990 Mar; 92(2–3):50–8 (Eng. Abstr.) **(Cze)**

[Hemisphere differences in aging: an artifact] Nieland E, et al. **Tijdschr Gerontol Geriatr** 1990 Apr;21(2):67–70 (24 ref.) (Eng. Abstr.) **(Dut)**

[Modification of the cerebral electrical activity of the rabbit by micro–injections of monoamine precursors into bulbar and pontine sleep–producing structures] Ledebur IX, et al. **Electroencephalogr Clin Neurophysiol** 1966 Apr; 20(4):370–81 (Eng. Abstr.) **(Fre)**

[Cortical control of saccades] Pierrot–Deseilligny C. **Rev Neurol (Paris)** 1989;145(8–9):596–604 (82 ref.) (Eng. Abstr.) **(Fre)**

[Study of central motor pathways using cortical magnetic stimulation and spinal electrical stimulation: results in 20 normal subjects] Tabaraud F, et al. **Rev Neurol (Paris)** 1989; 145(10):690–5 (Eng. Abstr.) **(Fre)**

[The cervical somatosensory evoked potential in lesions of the cortical efferents] Strenge H. **EEG EMG** 1990 Mar; 21(1):59–63 (Eng. Abstr.) **(Ger)**

[Possibilities of objective assessment of the course of activation in ideomotor training] Weiss T, et al. **Z Psychol** 1989;197(3):295–313 (Eng. Abstr.) **(Ger)**

[Objective assessment of senile changes in visual function by visually evoked cortical potentials] Adachi–Usami E, et al. **Nippon Ganka Gakkai Zasshi** 1989 Dec; 93(12):1085–97 (Eng. Abstr.) **(Jpn)**

[Analysis of field potentials in the postcruciate dimple evoked by stimulation of the ampullary nerve of the posterior semicircular canal in cats] Sakuma A. **Nippon Jibiinkoka Gakkai Kaiho** 1990 May;93(5):779–85 (Eng. Abstr.) **(Jpn)**

[Evolutive neurologic evaluation and cortical functions in a sample of children from the 1st grade of an elementary school] Fernandez LL, et al. **Arq Neuropsiquiatr** 1989 Sep; 47(3):295–302 (Eng. Abstr.) **(Por)**

[An evaluation model of the cortical functions] Guardiola A, et al. **Arq Neuropsiquiatr** 1989 Jun;47(2):159–64 (Eng. Abstr.) **(Por)**

[Study of the electric activity of the brain in evaluating the effectiveness of obstetric analgesia using pulsed electric current during labor] Kastrubin EM, et al. **Akush Ginekol (Mosk)** 1990 Mar;(3):70–1 **(Rus)**

[Characteristics of cortical representation of the components of the gastroduodenal complex and role of the vagus nerve in the regulation of visceral afferentation] Bilibin DP, et al. **Biull Eksp Biol Med** 1990 Feb;109(2):107–9 (Eng. Abstr.) **(Rus)**

[Rhythms of slow–wave sleep and wakefulness in fluctuations of the potential of the oxidative–reductive states of the cerebral cortex] Svets–Ténéta–Gurïĭ TB, et al. **Biull Eksp Biol Med** 1989 Sep;108(9):259–61 (Eng. Abstr.) **(Rus)**

[Neuronal activity in the area of the central gyri of the human cerebral cortex during the recognition of semantic and grammatical signs of speech] Bekhtereva NP, et al. **Dokl Akad Nauk SSSR** 1989;309(5):1247–52 **(Rus)**

[Resonance phenomena in the EEG during photostimulation with a changing burst frequency. 2. Regional characteristics of the resonance effects] Fedochev AI, et al. **Fiziol Cheloveka** 1989 Jul–Aug;15(4):3–10 **(Rus)**

[Evoked cortical activity to the varying probability of significant stimuli in healthy subjects and alcoholics] Genkina OA, et al. **Fiziol Cheloveka** 1990 Jan–Feb; 16(1):33–9 **(Rus)**

[A multichannel cortical electrode for recording the neuronal impulse activity of the human cerebral cortex] Gurchin FA, et al. **Fiziol Cheloveka** 1989 Jul–Aug;15(4):174–6 **(Rus)**

[An analysis of the structure of the potential field of the cerebral cortex] Mel'nikov EV, et al. **Fiziol Cheloveka** 1990 Jan–Feb;16(1):5–12 **(Rus)**

[The characteristics of trace processes in different areas of the human cerebral cortex] Opolinskiĭ ES, et al. **Fiziol Cheloveka** 1990 Jan–Feb;16(1):72–80 **(Rus)**

[Classification evaluation of electroencephalograms for determining fitness for operator training] Gerasimov AV. **Fiziol Zh** 1990 Mar–Apr;36(2):71–7 (Eng. Abstr.) **(Rus)**

[Effect of electric stimulation of the caudate nucleus on the foci of epileptic activity in the cerebral cortex] Maku'lkin RF, et al. **Fiziol Zh** 1989 Nov–Dec;35(6):25–33 (Eng. Abstr.) **(Rus)**

[A method for the chronic implantation of electrodes into the cortex of the medial surface of the hemispheres in the dog] Aleksandrov VG. **Fiziol Zh SSSR** 1990 Jan; 76(1):133–4 **(Rus)**

[The participation of cholinergic mechanisms in the origin of the dendritic potential of the cerebral cortex] Gedevanishvili GI. **Fiziol Zh SSSR** 1990 Feb;76(2):145–51 (Eng. Abstr.) **(Rus)**

[The effect of vibration on the impulse activity of cortical neurons and their reaction to stimulation of the posterior hypothalamus and Deiters' vestibular nucleus] Minasian SM, et al. **Fiziol Zh SSSR** 1989 Oct;75(10):1346–54 (Eng. Abstr.) **(Rus)**

[The dynamics of the potential of the oxidative–reductive status of the cerebral cortex developing as a reaction to implanted platinum electrodes] Shvets–Ténéta–Gurïĭ TB, et al. **Fiziol Zh SSSR** 1990 Mar;76(3):315–23 (Eng. Abstr.) **(Rus)**

[Role of the vestibular nuclei and the mesencephalic reticular formation in changes of the electrical activity of the cerebral cortex during vibration] Minasian SM, et al. **Gig Sanit** 1990 Feb;(2):14–6 **(Rus)**

[Study of the effect of noise of varying intensity and duration on human body by using mathematical planning] Sidorenko ZhG, et al. **Gig Sanit** 1989 Oct;(10):18–21 (Eng. Abstr.) **(Rus)**

[An increase in the excitability of the cortical neurons during reinforcing stimulation of the lateral hypothalamus] Kozhedub RG. **Neirofiziologiia** 1989;21(6):805–11 (Eng. Abstr.) **(Rus)**

[Changes in the synaptic apparatus of the associative area (field 5b) of the cat cerebral cortex following destruction of the lateral posterior thalamic nucleus] Serkov FN, et al. **Neirofiziologiia** 1989;21(5):661–7 (Eng. Abstr.) **(Rus)**

[Rapid thermal waves propagated through the cerebral cortex during visual stimulation] Shevelev IA, et al. **Neirofiziologiia** 1989;21(4):467–75 (Eng. Abstr.) **(Rus)**

[The effect of a peptide–containing extract of the right hemispheric cortex on the recovery of conditioned reflex activity and on the level of neuromediators in the brain structures of rats after a unilateral frontal lobectomy] Romanova GA, et al. **Patol Fiziol Eksp Ter** 1990 May–Jun; (3):8–11 (Eng. Abstr.) **(Rus)**

[Human EEG reactions to discontinuous light exposures of different frequencies] Fedotchev AI, et al. **Usp Fiziol Nauk** 1990 Jan–Mar;21(1):97–109 (95 ref.) **(Rus)**

[Cyclic interactions in the processes of adaptation regulation] Vasilevskiĭ NN, et al. **Vestn Akad Med Nauk SSSR** 1989; (8):68–72 (Eng. Abstr.) **(Rus)**

[Interhemispheric asymmetry of the spatial–temporal organization of human cortical potentials during the performance of an intellectual task] Iakovenko IA. **Zh Vyssh Nerv Deiat** 1989 Jul–Aug;39(4):595–602 (Eng. Abstr.) **(Rus)**

[The dynamics of intracortical interaction during thinking activities] Ivanitskiĭ AM, et al. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr;40(2):230–7 (Eng. Abstr.) **(Rus)**

[Quantitative assessment of maps of the cortical background potentials during the adaptation of freely moving animals to environmental situations] Knipst IN. **Zh Vyssh Nerv Deiat** 1989 May–Jun;39(3):440–8 (Eng. Abstr.) **(Rus)**

[Evoked cortical activity to sounds of differing signal meaning in young and elderly subjects] Kostandov EA, et al. **Zh Vyssh Nerv Deiat** 1989 Sep–Oct;39(5):803–12 (Eng. Abstr.) **(Rus)**

[A spectral–correlational analysis of the EEG of the neocortex in the rabbit in a state of thirst] Malikova AK, et al. **Zh Vyssh Nerv Deiat** 1990 Jan–Feb;40(1):108–18 (Eng. Abstr.) **(Rus)**

[A method for mapping the characteristics of the connection of electrical processes in the human and animal cerebral cortex] Monakhov KK, et al. **Zh Vyssh Nerv Deiat** 1989 Nov–Dec;39(6):1173–6 **(Rus)**

[Systems organization of the electrical activity of the brain in recognizing a visual image based on data from the mapping of interconnection indices] Monakhov KK, et al. **Zh Vyssh Nerv Deiat** 1990 Jan–Feb;40(1):23–8 (Eng. Abstr.) **(Rus)**

[A comparison of the spike train activity of the cortical neurons and of the spatial synchronization of the EEG] Pavlova IV, et al. **Zh Vyssh Nerv Deiat** 1989 Nov–Dec; 39(6):1087–95 (Eng. Abstr.) **(Rus)**

[Psychogenesis, neurosis and the cortico–visceral concept] Zakharzhevskiĭ VB. **Zh Vyssh Nerv Deiat** 1989 Nov–Dec; 39(6):1003–9 (18 ref.) (Eng. Abstr.) **(Rus)**

[Long–loop muscle reflexes with a transcortical loop—mechanisms and practical applications] Podivinský F, et al. **Bratisl Lek Listy** 1990 Mar;91(3):225–32 (Eng. Abstr.) **(Slo)**

[Does a "transcortical" loop of the long–latency muscle reflex exist?] Podivinský F. **Cesk Neurol Neurochir** 1989 Oct;52(6):371–8 (Eng. Abstr.) **(Slo)**

PHYSIOPATHOLOGY

Spreading of epileptic afterdischarges between entorhinal cortex and hippocampus in acute experiments and the kindling model of epilepsy in the rat—comparing different methods of analysis. Trąbka W, et al. **Acta Physiol Pol** 1989 Mar–Apr;40(2):194–214

Delineation of single–word semantic comprehension deficits in aphasia, with anatomical correlation. Hart J Jr, et al. **Ann Neurol** 1990 Mar;27(3):226–31

How old is the lesion presenting as schizophrenia? Relevance to the laterality question [letter; comment] Bracha HS. **Arch Gen Psychiatry** 1990 Apr;47(4):393 Comment on: Arch Gen Psychiatry 1988 Sep;45(9):814–21.

Ictal tremor. Harrington RB, et al. **Arch Neurol** 1966 Feb; 14(2):184–9

The effects of calcium channel antagonists in an in vitro cortical slice model of epilepsy. Boulton CL, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:836P

Involvement of excitatory amino acid receptors in epileptiform activity in the rat entorhinal cortex and dentate gyrus in vitro. Jones RS, et al. **Br J Pharmacol** 1989 Dec; 98 Suppl:835P

Cerebral control of directed visual attention and orienting saccades. Nagel–Leiby S, et al. **Brain** 1990 Feb;113 (Pt 1):237–76

Unawareness of visual and sensorimotor defects: a hypothesis. Levine DN. **Brain Cogn** 1990 Jul;13(2):233–81

Semantic discrimination in nonspeaking youngsters with moderate or severe retardation: electrophysiological correlates. Molfese DL, et al. **Brain Lang** 1990 Jan; 38(1):61–74

Anatomical correlates of normal and impaired language in a set of dizygotic twins. Plante E, et al. **Brain Lang** 1989 Nov;37(4):643–55

Unilateral induction of c–fos protein in cortex following cortical devascularization. Herrera DG, et al. **Brain Res** 1989 Dec 4;503(2):205–13

Hyperactivity following posterior cortical injury is lateralized, sensitive to lesion size and independent of the nigrostriatal dopamine system. McMahon FJ, et al. **Brain Res** 1989 Dec 4;503(2):185–90

Relationship between tolerance to GABAA agonist and bursting properties in neocortical neurons during GABA–withdrawal syndrome. Silva–Barrat C, et al. **Brain Res** 1989 Oct 2;498(2):289–98

Alterations in cytosolic free calcium in the cat cortex during bicuculline–induced epilepsy. Uematsu D, et al. **Brain Res Bull** 1990 Feb;24(2):285–8

Extraction of "deep" components from scalp EEG. Hjorth B, et al. **Brain Topogr** 1988 Fall;1(1):65–9

Estimation of large scale neocortical source activity with EEG surface Laplacians. Nunez PL. **Brain Topogr** 1989 Fall–Winter;2(1–2):141–54

Cerebral hemodynamic and metabolic effects of chronic alcoholism. Lotfi J, et al. **Cerebrovasc Brain Metab Rev** 1989 Spring;1(1):2–25 (178 ref.)

Normal corticomotoneuronal latencies in idiopathic scoliosis [letter] Ludolph AC, et al. **Dev Med Child Neurol** 1990 Jun;32(6):555–6

The effect of procaine hydrochloride and diazepam, separately or in combination, on cortico–generalized kindled seizures. Racine R, et al. **Electroencephalogr Clin Neurophysiol** 1979 Aug; 47(2):204–12

A critical epileptic area in the cat's cortex and its relation to the cortical columns. Reichenthal E, et al. **Electroencephalogr Clin Neurophysiol** 1979 Aug; 47(2):147–52

Electroencephalographic study of the GABA–withdrawal syndrome in rats. Brailowsky S, et al. **Epilepsia** 1990 Jul–Aug;31(4):369–77

Methohexital (Brevital) effect on electrocorticogram may be misleading. Fiol ME, et al. **Epilepsia** 1990 Sep–Oct; 31(5):524–8

Reduced GABA–mediated chloride flux in entorhinal cortex–kindled rat brains. Sneddon WB, et al. **Epilepsy Res** 1990 May–Jun;6(1):18–22

Pathogenesis of aphasia in deep–seated lesions: likely role of cortical diaschisis. Demeurisse G, et al. **Eur Neurol** 1990; 30(2):67–74

The role of excitatory amino acid receptors in the propagation of epileptiform discharges from the entorhinal cortex to the dentate gyrus in vitro. Jones RS, et al. **Exp Brain Res** 1990;80(2):310–22

Grafts of fetal locus coeruleus neurons in rat amygdala–piriform cortex suppress seizure development in hippocampal kindling. Barry DI, et al. **Exp Neurol** 1989 Nov;106(2):125–32

Cholinergic responses in human neocortical neurones. Halliwell JV. **Experientia Suppl** 1989;57:138–49

In search of cerebral error detectors. Bechtereva NP, et al. **Int J Psychophysiol** 1990 Apr;8(3):261–73

Topographical EEG differences between schizophrenic patients and controls during neuropsychological functional activation. Gruzelier J, et al. **Int J Psychophysiol** 1990 Apr; 8(3):275–82

Regional brain electrical asymmetries discriminate between previously depressed and healthy control subjects. Henriques JB, et al. **J Abnorm Psychol** 1990 Feb; 99(1):22–31

Metabolic and hemodynamic activation of postischemic rat brain by cortical spreading depression. Kocher M. **J Cereb Blood Flow Metab** 1990 Jul;10(4):564–71

Crossed aphasia in a patient with complex partial seizures: evidence from intracarotid amobarbital testing, functional cortical mapping, and neuropsychological assessment. Loring DW, et al. **J Clin Exp Neuropsychol** 1990 Mar; 12(2):340–54

Cortical reorganization in deaf children. Wolff AB, et al. **J Clin Exp Neuropsychol** 1990 Mar;12(2):209–21

Clinical applications of the Matching Familiar Figures Test: impulsivity vs. unilateral neglect. Caplan B, et al. **J Clin Psychol** 1990 Jan;46(1):60–7

Component mechanisms underlying the processing of hierarchically organized patterns: inferences from patients with unilateral cortical lesions. Lamb MR, et al. **J Exp Psychol [Learn Mem Cogn]** 1990 May;16(3):471–83

Brain function in patients with cerebral fat embolism evaluated using somatosensory and brain-stem auditory evoked potentials. Morioka T, et al. **J Neurol** 1989 Oct; 236(7):415–7

Cerebral hemisphere function and migraine. Crisp AH, et al. **J Psychiatr Res** 1989;23(3–4):201–12

Simultaneous recording of tissue PCO2, interstitial pH and potassium activity in the rat cerebral cortex during anoxia and the subsequent recovery period. Ohno M, et al. **Neurol Res** 1989 Sep;11(3):153–9

Amplitudes of somatosensory evoked potentials reflect cortical hyperexcitability in antidepressant-induced myoclonus. Förstl H, et al. **Neurology** 1990 Jun;40(6):924–6

Cerebral hemispheric localization of smooth pursuit asymmetry. Morrow MJ, et al. **Neurology** 1990 Feb; 40(2):284–92

Unilateral cerebral inactivation produces differential left/right heart rate responses. Zamrini EY, et al. **Neurology** 1990 Sep;40(9):1408–11

Pathophysiological characteristics of clinical death in rats. Majkowska-Wierzbicka J. **Neuropatol Pol** 1989;27(1):85–96

Brain plasticity as a basis for recovery of function in humans. Bach-y-Rita P. **Neuropsychologia** 1990;28(6):547–54

Neurophysiological heterogeneity and the definition of dyslexia: preliminary evidence for plasticity. Duffy FH, et al. **Neuropsychologia** 1990;28(6):555–71

Cortical and subcortical hyperperfusion during migraine and cluster headache measured by Xe CT-CBF. Kobari M, et al. **Neuroradiology** 1990;32(1):4–11

Role of cholinergic mechanisms in alterations of rabbit brain functional activity during sea-sickness. Maksimuk VF, et al. **Neurosci Behav Physiol** 1990 Jan-Feb;20(1):36–45

Pyriform cortex involvement in kindling. McIntyre DC, et al. **Neurosci Biobehav Rev** 1989 Winter;13(4):277–80 (26 ref.)

Trauma-induced increase of extracellular ascorbate in rat cerebral cortex. Hillered L, et al. **Neurosci Lett** 1990 Jun 8;113(3):328–32

Endogenous adenosine can reduce epileptiform activity in the human epileptogenic cortex maintained in vitro. Kostopoulos G, et al. **Neurosci Lett** 1989 Nov 20; 106(1–2):119–24

Electrocorticographic characterization of chronic iron-induced epilepsy in rats. Moriwaki A, et al. **Neurosci Lett** 1990 Mar 2;110(1–2):72–6

Dementia in Huntington's disease is associated with neurochemical deficits in the caudate nucleus, not the cerebral cortex. Reynolds GP, et al. **Neurosci Lett** 1990 May 18;113(1):95–100

Lesions of the deep prepiriform cortex ('area tempestas') in rats do not affect the convulsant action of systemically administered bicuculline. Wahnschaffe U, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):161–6

Electrophysiological study of dyskinesia produced by microinjection of picrotoxin into the striatum of the rat. Muramatsu S, et al. **Neurosci Res** 1990 Feb;7(4):369–80

Synchronous discharges in the rat entorhinal cortex in vitro: site of initiation and the role of excitatory amino acid receptors. Jones RS, et al. **Neuroscience** 1990;34(3):657–70

Double-blind study with phosphatidylserine (PS) in parkinsonian patients with senile dementia of Alzheimer's type (SDAT). Fünfgeld EW, et al. **Prog Clin Biol Res** 1989; 317:1235–46

EEG mapping in a child with Rett syndrome. Faienza C, et al. **Psychiatry Res** 1989 Sep;29(3):425–6

Cerebral blood flow, glucose utilization, and electrocorticograms following common carotid artery occlusion in gerbils. Hasegawa Y, et al. **Stroke** 1990 Jan; 21(1):112–8

Cortical activity, ionic homeostasis, and acidosis during rat brain repetitive ischemia. Matsumoto T, et al. **Stroke** 1990 Aug;21(8):1192–8

Somatosensory evoked potentials in rat cerebral cortex before and after middle cerebral artery occlusion. Sakatani K, et al. **Stroke** 1990 Jan;21(1):124–32

[Cortical pain. Clinical, electrophysiologic and topographic study of 12 cases] Michel D, et al. **Rev Neurol (Paris)** 1990; 146(6–7):405–14 (38 ref.) (Eng. Abstr.) **(Fre)**

[Brain death, death of the cerebral cortex or personal death? On the current discussion of brain-oriented determination of death] Kurthen M, et al. **Med Klin** 1989 Oct 15; 84(10):483–7 (23 ref.) **(Ger)**

[Benign Rolandic epilepsy in children. Topographic EEG analysis] Graf M, et al. **Wien Klin Wochenschr** 1990 Mar 30;102(7):206–10 (Eng. Abstr.) **(Ger)**

[Relationship between central visual field and pattern VECP in optic neuritis] Fujimoto N, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jun;93(6):646–50 (Eng. Abstr.) **(Jpn)**

[Evaluation of color pattern VECP in deutan] Tsukamoto M, et al. **Nippon Ganka Gakkai Zasshi** 1989 Oct; 93(10):993–1001 (Eng. Abstr.) **(Jpn)**

[Use of cortical somatosensory evoked potentials in surgical treatment of AVMs in and around the central sulcus] Takenobu A, et al. **No To Shinkei** 1990 Mar;42(3):253–60 (Eng. Abstr.) **(Jpn)**

[Studies of the mechanisms of spreading of epileptic discharges in the central nervous system] Trąbka W. **Folia Med Cracov** 1989;30(3–4):135–46 (26 ref.) (Eng. Abstr.) **(Pol)**

[Value of electroencephalographic examination in the diagnosis of chronic carbon dioxide poisoning] Langauer-Lewowicka H, et al. **Med Pr** 1989;40(5):310–4 (Eng. Abstr.) **(Pol)**

[Clinical, CT and electrophysiologic studies of alcoholics with special reference to the cerebellum] Domżał T, et al. **Neurol Neurochir Pol** 1989 Jan;23(1):17–20 (Eng. Abstr.) **(Pol)**

[The electroencephalographic image in Binswanger's subcortical arteriosclerotic encephalopathy] Działek E, et al. **Neurol Neurochir Pol** 1989 May-Jun;23(3):214–9 (Eng. Abstr.) **(Pol)**

[Electroencephalographic changes in reversible ischemic cerebral infarction] Klimowicz-Młodzik I, et al. **Neurol Neurochir Pol** 1988 Nov-Dec;22(6):500–6 (Eng. Abstr.) **(Pol)**

[Value of electroencephalographic studies for the evaluation of the neurotoxic effect of metallic mercury] Langauer-Lewowicka H, et al. **Neurol Neurochir Pol** 1988 Nov-Dec;22(6):489–94 (Eng. Abstr.) **(Pol)**

[Bioelectric activity of the brain in insulin-induced hypoglycemia in children with growth deficiency] Szewczyk L, et al. **Pediatr Pol** 1989 Jul;64(7):474–8 (Eng. Abstr.) **(Pol)**

[Comprehensive evaluation of the immune state and functional activity of the central nervous system in patients with hyperemesis gravidarum] Shabadash VV, et al. **Akush Ginekol (Mosk)** 1990 Mar;(3):63–5 **(Rus)**

[The cortical reactivity of the cerebral hemispheres in craniocerebral trauma] Lyskov EB. **Fiziol Cheloveka** 1989 Sep-Oct;15(5):166–8 **(Rus)**

[Cerebro-autonomic correlations in patients with early stages of hypertension during reflexotherapy] Dmitriev VK, et al. **Kardiologiia** 1990 Jan;30(1):35–8 (Eng. Abstr.) **(Rus)**

[Clinico-encephalographic correlations in children with mild cranio-cerebral injuries] Malorova NF, et al. **Pediatriia** 1990;(3):42–7 **(Rus)**

[Functional state of the central nervous system in children with bronchial asthma in the post-paroxysmal period] Petrash VV, et al. **Pediatriia** 1990;(1):110–1 **(Rus)**

[Bioelectrical activity of the cerebral cortex in children with different forms of hypoacusis] Timen GE, et al. **Vestn Otorinolaringol** 1989 Sep-Oct;(5):8–12 (Eng. Abstr.) **(Rus)**

[Night sleep in facial hemispasm and paraspasm] Arzumanian AM. **Zh Nevropatol Psikhiatr** 1989;89(10):62–6 (Eng. Abstr.) **(Rus)**

[A method of studying the visual evoked potentials in the evaluation of the status of the central nervous system in newborn infants] Barashnev IuI, et al. **Zh Nevropatol Psikhiatr** 1989;89(8):6–9 (Eng. Abstr.) **(Rus)**

[Neurophysiologic changes during the treatment of endogenous depression by reflexotherapy] Dudaeva KI, et al. **Zh Nevropatol Psikhiatr** 1990;90(4):99–103 (Eng. Abstr.) **(Rus)**

[Lateralized forms of parkinsonism (clinical, electroencephalographic and psychomotor aspects)] Golubev VL, et al. **Zh Nevropatol Psikhiatr** 1989; 89(11):119–23 (Eng. Abstr.) **(Rus)**

[EEG characteristics of stammering in preschool children] Ivanova GA, et al. **Zh Nevropatol Psikhiatr** 1990; 90(3):78–81 (Eng. Abstr.) **(Rus)**

[Spectrum analysis of the EEG in children and adolescents with epilepsy: general characteristics and pathophysiological interpretation of the data] Karlov VA, et al. **Zh Nevropatol Psikhiatr** 1989;89(8):15–9 (Eng. Abstr.) **(Rus)**

[Clinico-psychophysiological characteristics of lateralized forms of migraine] Kolosova OA, et al. **Zh Nevropatol Psikhiatr** 1989;89(11):43–7 (Eng. Abstr.) **(Rus)**

[Clinico-electrophysiological examination of children with Martin-Bell syndrome] Lastochkina NA, et al. **Zh Nevropatol Psikhiatr** 1990;90(3):69–75 (Eng. Abstr.) **(Rus)**

[Relation between the changes in evoked and constant potentials of the brain and emotional disorders in Alzheimer's disease] Ponomareva NV, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):92–7 (Eng. Abstr.) **(Rus)**

[Neuropsychological study of memory in the complex clinical, psychological and neurophysiologic examination of children with schizophrenia] Simernitskaia EG, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):101–5 (Eng. Abstr.) **(Rus)**

[EEG analysis in patients in the acute stage of cerebral infarction by the methods of image recognition] Zhirmunskaia EA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(9):18–23 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

State of synapses of the cortex of cerebral hemispheres on gamma-irradiation. Gaidamakin NA, et al. **Neurosci Behav Physiol** 1989 Nov-Dec;19(6):483–8

[The 1.320 micron Nd-YAG laser. Experimental study of a new wavelength adapted to neurosurgery] Roux FX, et al. **Neurochirurgie** 1989;35(3):152–7 (Eng. Abstr.) **(Fre)**

[Physiological criteria of evaluation of the functional status of the central nervous system in hygienic standardization of the electric field of industrial frequency] Bezdol'naia IS. **Gig Sanit** 1989 Oct;(10):78–9 **(Rus)**

[Experimental analysis of biological effects of microwaves: their systemic, ultrastructural and neuronal mechanisms] Vasilevskiĭ NN, et al. **Gig Sanit** 1989 Oct;(10):41–5 (Eng. Abstr.) **(Rus)**

[The effect of ionizing radiation on the binding of muscimol by synaptic membranes in the rat brain] Kuznetsov VI, et al. **Radiobiologiia** 1989 Sep-Oct;29(5):705–6 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Ataxic hemiparesis syndrome clinical and CT study of 20 new cases. Magrotti E, et al. **Funct Neurol** 1990 Jan-Mar; 5(1):65–71

Cortical and diencephalic lesions in Korsakoff's syndrome: a clinical and CT scan study. Jacobson RR, et al. **Psychol Med** 1990 Feb;20(1):63–75

[Pathologic brain cavity after idiopathic intracerebral hematoma treated conservatively and surgically] Kojder I, et al. **Pol Przegl Radiol** 1988 Nov-Dec;52(6):253–5 (Eng. Abstr.) **(Pol)**

RADIONUCLIDE IMAGING

Single photon emission computed tomography in phencyclidine and related drug abuse [letter] Hertzmann M, et al. **Am J Psychiatry** 1990 Feb;147(2):255–6

Infantile spasms: I. PET identifies focal cortical dysgenesis in cryptogenic cases for surgical treatment. Chugani HT, et al. **Ann Neurol** 1990 Apr;27(4):406–13

Cortical pathophysiology and clinical neurologic abnormalities in acute cerebral ischemia. A serial study with single photon emission computed tomography. Rango M, et al. **Arch Neurol** 1989 Dec;46(12):1318–22

Concordance and discordance between PET images and foci of scalp EEG. Iinuma K, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):379–83

Anxiety and cerebral cortical metabolism in normal persons. Giordani B, et al. **Psychiatry Res** 1990 Apr;35(1):49–60

PET and neuropsychology in thalamic infarction: evidence for associated cortical dysfunction. Hennerici M, et al. **Psychiatry Res** 1989 Sep;29(3):363–5

SECRETION

Effects of apomorphine on in vivo release of dopamine and its metabolites in the prefrontal cortex and the striatum, studied by a microdialysis method. Ozaki N, et al. **J Neurochem** 1989 Dec;53(6):1861–4

Decrease of acetylcholine release from cortical slices in aged rats: investigations into its reversal by phosphatidylserine. Vannucchi MG, et al. **J Neurochem** 1990 Sep;55(3):819–25

Inhibition of norepinephrine and acetylcholine release from human neocortex by omega-conotoxin GVIA. Feuerstein TJ, et al. **J Pharmacol Exp Ther** 1990 Feb;252(2):778–85

A simple method to determine released acetylcholine in the presence of choline. Cooper JR. **Life Sci** 1989; 45(21):2041–2

SURGERY

Intracerebral implantation of synthetic polymer/biopolymer matrix: a new perspective for brain repair. Woerly S, et al. **Biomaterials** 1990 Mar;11(2):97–107

Expanding treatment modality of medically intractable epilepsy: classical excision and anterior callosal bisection. Wada JA. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):331–3

[EEG findings following cerebral surgery] Pittasch D, et al. **Zentralbl Neurochir** 1989;50(2):118–21 (Eng. Abstr.) **(Ger)**

[Experimental implantation of peripheral nerves in cerebral hemispheres of rabbits] Sulla I, et al. **Zentralbl Neurochir** 1989;50(3–4):157–8 (Eng. Abstr.) **(Ger)**

TRANSPLANTATION

Transplantation of serotonergic neurons into the 5,7-DHT-lesioned rat olfactory bulb restores the parameters of kindling. Camu W, et al. **Brain Res** 1990 Jun 4;518(1–2):23–30

Patterns of immune rejection of mouse neocortex transplanted into neonatal rat brain, and effects of host immunosuppression. Marion DW, et al. **Brain Res** 1990 Jun 11;519(1–2):133–43

Neural grafts attenuate behavioral deficits produced by early

radiation–induced hypoplasia of fascia dentata granule cells. Mickley GA, et al. **Brain Res** 1990 Feb 19; 509(2):280–92

Mosaic reconstruction of blood vessels in mouse neocortical tissue transplanted into the third ventricle of rat brain. Nakano Y, et al. **Brain Res** 1989 Sep 4;496(1–2):336–40

Emulation of seizure induced brain damage in neural tissue transplants to the anterior chamber of the eye. Ingvar M, et al. **Exp Brain Res** 1990;81(2):279–82

Cellular events associated with peripherally induced rejection of mature neural xenografts placed into neonatal rat brains. Backes MG, et al. **J Comp Neurol** 1990 May 15; 295(3):428–37

Timing and patterns of astrocyte migration from xenogeneic transplants of the cortex and corpus callosum. Zhou HF, et al. **J Comp Neurol** 1990 Feb 8;292(2):320–30

Embryonic nervous tissue transplantation accelerates restoration of hypoxia–damaged blood–brain barrier in rats. Saburina IN. **J Hirnforsch** 1989;30(6):737–45

Homotopic transplantation of embryonal neocortex tissue into damaged brains of adult rats. Obukhova GP, et al. **Neurosci Behav Physiol** 1989 Jul–Aug;19(4):324–9

Implantation of embryonal brain tissue into regenerating peripheral nerve. Petrova ES, et al. **Neurosci Behav Physiol** 1989 Jul–Aug;19(4):313–7

Development of Na, K–ATPase in neocortical grafts. Krivanek J, et al. **Neurosci Lett** 1989 Dec 4;106(3):310–4

[Transplantation of embryonal cerebral cortex to the adult rat cerebellum: the fiber connections made by cortical transplants and the cerebellum] Kitakami A. **No Shinkei Geka** 1990 Apr;18(4):347–53 (Eng. Abstr.) **(Jpn)**

[Neuroglial differentiation in rat embryonal neocortical transplants, located in the brain of adult animals. An immunohistochemical study] Kozlova EN. **Dokl Akad Nauk SSSR** 1989;307(6):1487–9 **(Rus)**

ULTRASTRUCTURE

Acute ultrastructural response of hypoxic hypoxia with relative ischemia in the isolated brain. Allen A, et al. **Acta Neuropathol (Berl)** 1989;78(6):637–48

Immunogold labeling of Alzheimer paired helical filaments with ganglioside MAB A2B5. Clements JR, et al. **Alzheimer Dis Assoc Disord** 1990;4(1):35–42

Reversibility of the ionomycin promoted synaptosomal hydrogen peroxide production. Zoccarato F, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):1104–9

A columnar arrangement of dendritic processes of entorhinal cortex neurons revealed by a monoclonal antibody. Ikeda J, et al. **Brain Res** 1989 Dec 25;505(1):176–9

Triads: a synaptic network component in the cerebral cortex. Keller A, et al. **Brain Res** 1989 Sep 4;496(1–2):105–12

Quantifying synaptic number and structure: effects of stain and post–mortem delay. Petit TL, et al. **Brain Res** 1990 May 28;517(1–2):269–75

Distinct platelet–activating factor binding sites in synaptic endings and in intracellular membranes of rat cerebral cortex. Marcheselli VL, et al. **J Biol Chem** 1990 Jun 5; 265(16):9140–5

Dendritic bundling in layer I of granular retrosplenial cortex: intracellular labeling and selectivity of innervation. Wyss JM, et al. **J Comp Neurol** 1990 May 1;295(1):33–42

Quantitative immunohistochemistry of synaptophysin in human neocortex: an alternative method to estimate density of presynaptic terminals in paraffin sections. Masliah E, et al. **J Histochem Cytochem** 1990 Jun;38(6):837–44

Decrease in nerve fibres in cerebral white matter in progressive subcortical vascular encephalopathy of Binswanger type. An electron microscopic study. Yamanouchi H, et al. **J Neurol** 1989 Oct;236(7):382–7

Dendritic varicosities [letter; comment] Troost D. **J Neurol Sci** 1989 Dec;94(1–3):325–6 Comment on: J Neurol Sci 1989 Jan;89(1):93–101.

Requirement for subplate neurons in the formation of thalamocortical connections. Ghosh A, et al. **Nature** 1990 Sep 13;347(6289):179–81

Influence of isolation media on synaptosomal properties: intracellular pH, pCa, and Ca2+ uptake. Bandeira–Duarte C, et al. **Neurochem Res** 1990 Mar;15(3):313–20

Experimental global cerebral ischemia in rats. I. Ultrastructural changes in cerebral cortex in the postischemic period. Majkowska–Wierzbicka J. **Neuropatol Pol** 1989;27(1):97–114

Ultrastructural organization of the surface of the cingulate cortex of rat cerebrum. Fedosikhina LA, et al. **Neurosci Behav Physiol** 1989 Sep–Oct;19(5):416–22

Ultrastructural reorganizations in the rat cerebral cortex after injection of ascorbic acid into the ventricular fluid. Grigor'ev IP. **Neurosci Behav Physiol** 1989 Nov–Dec; 19(6):529–34

Ultrastructural changes in synapses of rat cortical neurons on their functional isolation by means of EGTA ionophoresis. Kotlyar BI, et al. **Neurosci Behav Physiol** 1990 Jan–Feb;20(1):34–6

Ultrastructure of neurons of the sensorimotor cortex in progeny of rats receiving alcohol during pregnancy. Popova EN. **Neurosci Behav Physiol** 1989 Sep–Oct; 19(5):433–9

A preparation of Alzheimer paired helical filaments that displays distinct tau proteins by polyacrylamide gel electrophoresis. Greenberg SG, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5827–31

Phencyclidine, dizocilpine, and cerebrocortical neurons [comment] Allen HL, et al. **Science** 1990 Jan 12; 247(4939):221 Comment on: Science 1989 Jun 16;244(4910):1360–2.

Target control of collateral extension and directional axon growth in the mammalian brain. Heffner CD, et al. **Science** 1990 Jan 12;247(4939):217–20

Primary cilia in normal human neocortical neurons. Mandl L, et al. **Z Mikrosk Anat Forsch** 1989;103(3):425–30

[Morphological changes in the brain in schizophrenia] Soustek Z. **Cesk Psychiatr** 1990 Apr;86(2):113–9; discussion 138 (Eng. Abstr.) **(Cze)**

[Comparative characteristics of the methods of calculating numerical synaptic density in the cerebral cortex] Serkov FN. **Fiziol Zh** 1990 Mar–Apr;36(2):110–5 (16 ref.) (Eng. Abstr.) **(Rus)**

[An electron microscopic study of neuronal development in organotypic cultures of the anlage of the cerebral cortex from a human embryo] Bobryshev IuV, et al. **Tsitologiia** 1989 Dec;31(12):1453–8 (Eng. Abstr.) **(Rus)**

[Ultrastructural organization of the geniculo–cortical neurons demonstrated by retrograde axonal transport of horseradish peroxidase] Lazriev IL, et al. **Tsitologiia** 1989 Jul; 31(7):752–6 (Eng. Abstr.) **(Rus)**

CEREBRAL DECORTICATION

Increased susceptibility of detelencephalated rats to audiogenic seizures induced by microinjection of bicuculline into the inferior colliculus. Bagri A, et al. **Braz J Med Biol Res** 1989;22(11):1361–70

Ether and immobilization stress effects on pituitary adrenal function in hemidecorticate rats. López–Jiménez M, et al. **Braz J Med Biol Res** 1989;22(6):779–82

CEREBRAL DOMINANCE see **DOMINANCE, CEREBRAL**

CEREBRAL EMBOLISM AND THROMBOSIS

The lateral medullary syndrome. Luker J, et al. **Oral Surg Oral Med Oral Pathol** 1990 Mar;69(3):322–4

BLOOD

Hypercoagulability in acute ischemic stroke: analysis of the extrinsic coagulation reactions in plasma by a highly sensitive automated method. Takano K, et al. **Thromb Res** 1990 Jun 1;58(5):481–91

[Significance of decreasing high density lipoproteins in cerebrovascular diseases] Li J. **Chung Hua I Hsueh Tsa Chih** 1990 May;70(5):244–7, 18 (Eng. Abstr.) **(Chi)**

[Changes in peripheral leukocytic glucocorticoid receptor in patients with ischemic and hemorrhagic stroke] Zhao Y, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Aug; 28(8):479–81, 510 (Eng. Abstr.) **(Chi)**

CHEMICALLY INDUCED

Cerebral venous thrombosis in association with hormonal supplement therapy. Knox AM, et al. **Clin Radiol** 1990 May;41(5):355–7

Cerebral embolization and coma after hysterosalpingography with oil–soluble contrast medium. Dan U, et al. **Fertil Steril** 1990 May;53(5):939–40

[Cerebral thrombosis in a child with acute lymphocytic leukemia during L–asparaginase therapy] Horigome Y, et al. **Rinsho Ketsueki** 1989 Aug;30(8):1284–8 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Ischemic stroke in young adults. II. Analysis of risk factors in the etiological subgroups. Matias–Guiu J, et al. **Acta Neurol Scand** 1990 Apr;81(4):314–7

Computed tomographic patterns of proven embolic brain infarctions. Ringelstein EB, et al. **Ann Neurol** 1989 Dec; 26(6):759–65

Cerebral infarction and intracranial arterial thrombosis. Necropsy studies and clinical implications. Moossy J. **Arch Neurol** 1966 Feb;14(2):119–23

Directed embolization is an alternate cause of cerebral watershed infarction. Pollanen MS, et al. **Arch Pathol Lab Med** 1989 Oct;113(10):1139–41

Cerebral venous thrombosis associated with recurrent epilepsy–like attacks. Ichiyama T, et al. **Brain Dev** 1989; 11(5):326–8

Sensory–motor deficit and recovery from thrombotic infarction of the vibrissal barrel–field cortex. Hurwitz BE, et al. **Brain Res** 1990 Apr 2;512(2):210–20

Postpartum headache following regional analgesia; a symptom of cerebral venous thrombosis. Ravindran RS, et al. **Can J Anaesth** 1989 Nov;36(6):705–7

Simultaneous cerebral arterial and venous thrombosis. Nagaraja D, et al. **J Assoc Physicians India** 1990 May; 38(5):325–6

Reversible bilateral thalamic lesions caused by primary internal cerebral vein thrombosis: a case report. Forsting M, et al. **J Neurol** 1989 Dec;236(8):484–6

Epileptic seizures in thrombotic stroke. Sung CY, et al. **J Neurol** 1990 Jun;237(3):166–70

Pure agraphia of kanji due to thrombosis of the Labbé vein. Yokota T, et al. **J Neurol Neurosurg Psychiatry** 1990 Apr; 53(4):335–8

Ataxic hemiparesis secondary to paradoxic embolization. Sauer CM. **J Tenn Med Assoc** 1990 May;83(5):233–4

Therapeutic effect of point–through–point acupuncture in 70 cases of apoplectic hemipiegia. Zhang BN. **J Tradit Chin Med** 1989 Sep;9(3):167–8

Intracerebral hemorrhage due to venous thrombosis in venous angioma––case report. Yamamoto M, et al. **Neurol Med Chir (Tokyo)** 1989 Nov;29(11):1044–6

Neck trauma with embolization of the middle cerebral artery by a metal splinter. Langenbach M, et al. **Neurology** 1990 Mar;40(3 Pt 1):552–3 (7 ref.)

Cerebral thrombosis in beta–thalassemia/hemoglobin E disease. Wong V, et al. **Stroke** 1990 May;21(5):812–6

[Ischemic cerebral accidents and non–valvular atrial fibrillation. Secondary prevention with anticoagulants] Mas JL, et al. **Ann Med Interne (Paris)** 1989;140(7):625–30 (60 ref.) **(Fre)**

[Aortic and mitral endocarditis caused by Haemophilus paraphrophilus with abscess of the aortic ring and cerebral embolism] Cohen A, et al. **Arch Mal Coeur** 1989 Oct; 82(10):1761–5 (Eng. Abstr.) **(Fre)**

[Evolution of venous cerebral infarction and brain edema––an experimental study of sagittal sinus obstruction] Kannuki S, et al. **No To Shinkei** 1989 Dec;41(12):1225–31 (Eng. Abstr.) **(Jpn)**

[A case of cerebral thrombosis presenting global aphasia without hemiparesis] Hirano T, et al. **Rinsho Shinkeigaku** 1990 Jan;30(1):50–4 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Hyperintense thrombus on GRASS MR images: potential pitfall in flow evaluation. Yousem DM, et al. **AJNR** 1990 Jan–Feb;11(1):51–8

MR of deep cerebral venous thrombosis. Ashforth RA, et al. **Can J Neurol Sci** 1989 Nov;16(4):417–21

Magnetic resonance imaging of cerebral venous thrombosis secondary to "low–dose" birth control pills. Granato DB, et al. **Clin Imaging** 1989 Sep;13(3):220–4

Epileptic seizures following ischaemic cerebral infarction. Clinical picture, CT findings and prognosis. Hornig CR, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(6):379–83

Ultrasound detection of micro–emboli in the middle cerebral artery during cardiopulmonary bypass surgery. Deverall PB, et al. **Eur J Cardiothorac Surg** 1988;2(4):256–60

Magnetic resonance imaging in cerebral sinus thrombosis. Report of a case. Scarpa M, et al. **Ital J Neurol Sci** 1990 Jun;11(3):289–92

MRI of intracranial sinovenous thrombosis: the role of phase imaging. Nadel L, et al. **Magn Reson Imaging** 1990; 8(3):315–20

Magnetic resonance imaging of an angiographically occult arteriovenous malformation––case report. Yamada H, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):433–6

Drug test value by transcranial Doppler in the diagnosis of neurologic vascular diseases. Pendefunda L. **Neurol Psychiatr (Bucur)** 1990 Apr–Jun;28(2):135–41

Magnetic resonance imaging of a fat embolism of the brain: case report. Saito A, et al. **Neurosurgery** 1990 May; 26(5):882–4; discussion 884–5

Neonatal cerebral venous thrombosis. Hanigan WC, et al. **Pediatr Neurosci** 1988;14(4):177–83

Detection of middle cerebral artery emboli during carotid endarterectomy using transcranial Doppler ultrasonography. Spencer MP, et al. **Stroke** 1990 Mar; 21(3):415–23

Vein of Galen aneurysm presenting with recurrent aseptic meningitis and subsequent spontaneous thrombosis. Collins JJ, et al. **Surg Neurol** 1990 May;33(5):325–8

[Bilateral thalamic lesions in cerebral venous thrombosis] Erbguth F, et al. **Nervenarzt** 1990 Feb;61(2):123–6 **(Ger)**

[Prediction of embolism in patient with mitral stenosis studied by two–dimensional echocardiography and blood coagulation tests] Yasaka M, et al. **Nippon Naika Gakkai Zasshi** 1989 Dec;78(12):1736–41 **(Jpn)**

[Thromboses of the cerebral sinuses and veins in the gestational period] Deev AS. **Akush Ginekol (Mosk)** 1989 Dec;(12):51–3 (Eng. Abstr.) **(Rus)**

[Nuclear resonance in intracranial venous thrombosis] Vázquez Cruz J, et al. **Med Clin (Barc)** 1989 Nov 18; 93(16):613–5 (Eng. Abstr.) **(Spa)**

[Benign intracranial hypertension and thrombosis of the venous sinuses (letter)] Gelabert M, et al. **Neurologia** 1990 Jan;5(1):36–7 **(Spa)**

DRUG THERAPY

Ancrod causes rapid thrombolysis in patients with acute stroke. Pollak VE, et al. **Am J Med Sci** 1990 May; 299(5):319–25

Streptokinase in the treatment of an acute cerebral embolus––a case report. Frink RJ, et al. **Angiology** 1990 Jan;41(1):66–9

Cerebral haemorrhage and anticoagulants [editorial] Mattle HP. **Ir Med J** 1990 Jun;83(2):44–5

Low dose aspirin and its antithrombotic effect in ischaemic stroke patient. Poungvarin N, et al. **J Med Assoc Thai** 1989 Aug;72(8):421–6

The risk and efficacy of anticoagulant therapy in the

treatment of thromboembolic complications in patients with primary malignant brain tumors. Altschuler E, et al. **Neurosurgery** 1990 Jul;27(1):74–6; discussion 77

Anticoagulation: is there still a role in atherothrombotic stroke? Estol CJ, et al. **Stroke** 1990 May;21(5):820–4 (31 ref.)

Delayed treatment with a t-PA analogue and streptokinase in a rabbit embolic stroke model. Phillips DA, et al. **Stroke** 1990 Apr;21(4):602–5

Formation of left atrial ball thrombus during anticoagulation in a case of cerebral embolism [letter] Tsuda Y, et al. **Stroke** 1990 Sep;21(9):1375–6

ETIOLOGY

Recurrence of embolic stroke in non-valvular atrial fibrillation (NVAF). An autopsy study. Yamanouchi H, et al. **Acta Neurol Scand** 1989 Aug;80(2):123–9

Association of mitral anular calcium with new thromboembolic stroke and cardiac events at 39-month follow-up in elderly patients. Aronow WS, et al. **Am J Cardiol** 1990 Jun 15;65(22):1511–2

Cardiac embolism: the neurologist's perspective. Sherman DG. **Am J Cardiol** 1990 Feb 2;65(6):32C–37C (0 ref.)

A possible mechanism for neurologic ischemic events in patients with atrial septal aneurysm. Zabalgoitia-Reyes M, et al. **Am J Cardiol** 1990 Sep 15;66(7):761–4

Vertebral artery injuries following chiropractic cervical spine manipulation—case reports. Raskind R, et al. **Angiology** 1990 Jun;41(6):445–52

Atrial fibrillation. Thromboembolic risk and indications for anticoagulation. Wipf JE, et al. **Arch Intern Med** 1990 Aug; 150(8):1598–603 (64 ref.)

Nonvalvular atrial fibrillation associated with cardioembolic stroke: the role of hypertensive heart disease. Seneviratne BI, et al. **Aust N Z J Med** 1990 Apr;20(2):127–34

Septic pulmonary arteriovenous fistula. An unusual conduit for systemic embolization in right-sided valvular endocarditis. Stagaman DJ, et al. **Chest** 1990 Jun; 97(6):1484–6

Retinal microembolism and neuropsychological deficit following clinical cardiopulmonary bypass: comparison of a membrane and a bubble oxygenator. A preliminary communication. Blauth C, et al. **Eur J Cardiothorac Surg** 1989;3(2):135–8; discussion 139

Air embolism following intra-uterine hypertonic saline instillation: treatment in a high-pressure chamber; a case report. Weissman A, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Dec;33(3):271–4

Rate of cerebral embolic events in relation to antibiotic and anticoagulant therapy in patients with bacterial endocarditis. Paschalis C, et al. **Eur Neurol** 1990;30(2):87–9

Cerebral air embolism after transthoracic aspiration with a 0.6 mm (23 gauge) needle. Omenaas E, et al. **Eur Respir J** 1989 Oct;2(9):908–10

Protein C deficiency associated with massive cerebral thrombosis following open heart surgery. Ridley PD, et al. **J Cardiovasc Surg (Torino)** 1990 Mar-Apr;31(2):249–51

Vertebrobasilar occlusion complicating nonpenetrating craniocervical trauma in a child. Pitter JH, et al. **J Child Neurol** 1990 Jul;5(3):219–23 (28 ref.)

Septic cortical thrombophlebitis. DiNubile MJ, et al. **J Infect Dis** 1990 Jun;161(6):1216–20

Retrograde thrombosis of feeding arteries after removal of arteriovenous malformations. Miyasaka Y, et al. **J Neurosurg** 1990 Apr;72(4):540–5

Early thromboembolism after atrial septal defect repair [letter] Cheng TO. **J Thorac Cardiovasc Surg** 1990 Apr; 99(4):758

Cerebral infarction due to disseminated intravascular coagulation with thromboexclusion for dissecting aortic aneurysma. Urakami K, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):241–4

Cerebral venous thrombosis as the presenting feature of colonic adenocarcinoma [letter] Ryan J, et al. **Med J Aust** 1990 Aug 20;153(4):234

Wallenberg's syndrome following neck manipulation. Frumkin LR, et al. **Neurology** 1990 Apr;40(4):611–5 (29 ref.)

Antiphospholipid antibody syndrome presenting with complex partial seizures and transient ischaemic attacks due to widespread small cerebral arterial thrombosis. Leach IH, et al. **Neuropathol Appl Neurobiol** 1989 Nov-Dec; 15(6):579–84

Cerebral venous and sagittal sinus thrombosis after transcallosal removal of a colloid cyst of the third ventricle: case report. Garrido E, et al. **Neurosurgery** 1990 Mar; 26(3):540–2

Acute hepatotoxicity with resultant pulmonary and cerebral embolism in guinea pigs given tunicamycin. Finnie JW, et al. **Pathology** 1989 Jul;21(3):194–9

Cerebral embolization from an inferior vena cava thrombus in tetralogy of Fallot. Geva T, et al. **Pediatr Cardiol** 1990 Jan;11(1):44–6

Cardioembolic stroke in primary oxalosis with cardiac involvement. Di Pasquale G, et al. **Stroke** 1989 Oct; 20(10):1403–6

Ischemic stroke due to protein C deficiency. Kohler J, et al. **Stroke** 1990 Jul;21(7):1077–80

Brain damage after open heart surgery in patients with acute cardioembolic stroke. Maruyama M, et al. **Stroke** 1989 Oct; 20(10):1305–10

Paradoxical cerebral embolism secondary to pulmonary arteriovenous fistula [letter] Reguera JM, et al. **Stroke** 1990 Mar;21(3):504–5

Cerebral venous thrombosis in systemic lupus erythematosus. Vidailhet M, et al. **Stroke** 1990 Aug;21(8):1226–31

[Giant thrombosed aneurysm of the left vertebral artery developing in the fourth ventricle] Tommasi-Davenas C, et al. **Rev Neurol (Paris)** 1989;145(11):799–801 (Eng. Abstr.) **(Fre)**

[Pulmonary embolism and paradoxical embolism in a patient with chronic respiratory insufficiency treated with mechanical ventilation] Abroug F, et al. **Rev Pneumol Clin** 1990;46(1):39–42 (Eng. Abstr.) **(Fre)**

[A projectile embolism of the arteria cerebri media following a gunshot injury to the neck] Nagy E. **ROFO** 1990 Jun; 152(6):742 **(Ger)**

[Diagnosis of cardiac causes of cerebral embolism: a contribution to 2D echocardiography and long-term ECG] Richardt G, et al. **Z Kardiol** 1989 Sep;78(9):598–601 (Eng. Abstr.) **(Ger)**

[A case of posttraumatic cerebral air embolism] Muneda K, et al. **No Shinkei Geka** 1989 Aug;17(8):751–4 (Eng. Abstr.) **(Jpn)**

[Wallenberg's syndrome caused by a brain tumor—a case report and literature review] Hanyu H, et al. **Rinsho Shinkeigaku** 1990 Mar;30(3):324–6 (10 ref.) (Eng. Abstr.) **(Jpn)**

[Wallenberg's syndrome in a case of Vogt-Koyanagi-Harada disease] Nitta E, et al. **Rinsho Shinkeigaku** 1989 Apr; 29(4):505–8 (Eng. Abstr.) **(Jpn)**

[A case of fibromuscular dysplasia presenting lateral medullary syndrome] Ohnishi J, et al. **Rinsho Shinkeigaku** 1990 Apr;30(4):444–7 (Eng. Abstr.) **(Jpn)**

[Cardiogenic cause of cerebral embolism] Lundbom J, et al. **Tidsskr Nor Laegeforen** 1990 Feb 20;110(5):598–9 (Eng. Abstr.) **(Nor)**

[Clinico-morphologic characteristics of pneumococcal meningoencephalitis] Frolov AF, et al. **Klin Med (Mosk)** 1989 Dec;67(12):83–8 (Eng. Abstr.) **(Rus)**

[Pathogenesis of the neurologic form of decompression sickness in rabbits] Korolev AB. **Kosm Biol Aviakosm Med** 1989 Sep-Oct;23(5):92–3 **(Rus)**

[Transient disorders of cerebrovascular circulation in patients with heart defects operated on under extracorporeal circulation] Rudenko AE, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):31–5 (Eng. Abstr.) **(Rus)**

[Aortic arch: an unusual source of cerebral and systemic embolism. A clinicopathologic case (letter)] Elcano Luquín J, et al. **Med Clin (Barc)** 1989 Nov 4;93(14):556 **(Spa)**

[Deep venous thrombosis related to cranioencephalic injury] Yáñez Baña RM, et al. **Neurologia** 1989 Sep;4(7):256–9 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Cardiogenic brain embolism and lupus anticoagulant. Young SM, et al. **Ann Neurol** 1989 Sep;26(3):390–2

Platelet aggregating IgG antibody to platelet surface glycoproteins associated with thrombosis and thrombocytopenia. Pfueller SL, et al. **Br J Haematol** 1990 Mar;74(3):336–41

Cyclophosphamide use in a young woman with antiphospholipid antibodies and recurrent cerebrovascular accident. Perez MC, et al. **South Med J** 1989 Nov; 82(11):1421–4

METABOLISM

Possible therapeutic effect of naftidrofuryl oxalate on brain energy metabolism after microsphere-induced cerebral embolism. Miyake K, et al. **Br J Pharmacol** 1989 Oct; 98(2):389–96

[Circadian rhythm changes in leukocytic glucocorticoid receptors in patients with ischemic cerebral apoplexy] Zhao Y, et al. **Chung Hua I Hsueh Tsa Chih** 1990 May;70(5):283–5 **(Chi)**

[Cerebral venous thrombosis and protein S deficiency. Apropos of two cases] Stoiber HP, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R83 **(Fre)**

[Tissue pH and energy metabolism in cerebral embolization model of rat] Yamane K, et al. **No To Shinkei** 1990 Feb; 42(2):167–73 (Eng. Abstr.) **(Jpn)**

MORTALITY

[Clinical death caused by air embolism] Baĭmyshev ES, et al. **Vestn Khir** 1989 Sep;143(9):131–2 **(Rus)**

PATHOLOGY

Morphological consequences of early reperfusion following thrombotic or mechanical occlusion of the rat middle cerebral artery. Dietrich WD, et al. **Acta Neuropathol (Berl)** 1989;78(6):605–14

[Clinical and pathologic-anatomic findings in acute basilar thromboses. A study of 30 autopsy verified cases] Huber M, et al. **Nervenarzt** 1990 Feb;61(2):83–7 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Oculomotor disturbances during visual-vestibular interaction in Wallenberg's lateral medullary syndrome. Waespe W, et al. **Brain** 1990 Jun;113 (Pt 3):821–46

Wallenberg's syndrome: a first-person account. Werner DL, et al. **J Am Optom Assoc** 1989 Oct;60(10):745–7

Cerebral venous thrombosis [editorial] Yeolekar ME. **J Assoc Physicians India** 1990 May;38(5):321–2

Brain function in patients with cerebral fat embolism evaluated using somatosensory and brain-stem auditory evoked potentials. Morioka T, et al. **J Neurol** 1989 Oct; 236(7):415–7

Reversible experimental middle cerebral artery occlusion [letter; comment] Molnár L, et al. **Stroke** 1990 Apr; 21(4):679–80 Comment on: Stroke 1989 Oct;20(10):1368–76.

Predisposing factors of recurrent embolization in cardiogenic cerebral embolism. Yasaka M, et al. **Stroke** 1990 Jul; 21(7):1000–7

[Cerebral blood flow and oxygen metabolism in ischemic cerebrovascular disease; embolic occlusion and thrombotic occlusion] Higano S, et al. **Rinsho Hoshasen** 1989 Jun; 34(6):683–90 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Decision analysis concerning the application of echocardiography to the diagnosis and treatment of mural thrombi after anterior wall acute myocardial infarction. Weintraub WS, et al. **Am J Cardiol** 1989 Oct 1; 64(12):708–16

Cardiogenic brain embolism: role of anticoagulants. Kiers L, et al. **Aust N Z J Med** 1989 Oct;19(5):500–5 (47 ref.)

[Prevention of a brain infarct in patients with non-rheumatic atrial fibrillation] Koudstaal PJ. **Ned Tijdschr Geneeskd** 1989 Jul 29;133(30):1485–6 **(Dut)**

[The role of surgery and low molecular weight heparin in the treatment of cerebral venous thrombosis. Apropos of 2 cases] Nguyen JP, et al. **Agressologie** 1989 May; 30(6):351–2 (Eng. Abstr.) **(Fre)**

RADIOGRAPHY

Hyperdense middle cerebral artery sign on CT: efficacy in detecting middle cerebral artery thrombosis. Tomsick TA, et al. **AJNR** 1990 May;11(3):473–7

Postpartum thrombosis of the great vein of Galen. Krenz I, et al. **Anaesthesia** 1990 Aug;45(8):643–5

Spontaneous thrombosis of a cerebral arteriovenous malformation. Barker CS, et al. **Clin Radiol** 1990 Aug; 42(2):130–2

CT appearance of bilateral, acute thrombosis of the main cerebral arteries. Sąsiadek M, et al. **Comput Med Imaging Graph** 1990 Jan-Feb;14(1):89–90

Deep cerebral venous system thrombosis in adults. Milandre L, et al. **Eur Neurol** 1990;30(2):93–7 (23 ref.)

Differentiation between cerebral embolism and thrombosis on sequential CT scans. Tomura N, et al. **J Comput Assist Tomogr** 1990 Jan-Feb;14(1):26–31

The "dense artery sign"—major cerebral artery thromboembolism demonstrated by computed tomography. Schuknecht B, et al. **Neuroradiology** 1990;32(2):98–103

Hyperdense middle cerebral artery: incidence and quantitative significance. Tomsick TA, et al. **Neuroradiology** 1989;31(4):312–5

Analysis of patterns of hemispheric brain infarctions on CT: embolic stroke mechanism, territorial infarctions and lacunae. Ringelstein EB, et al. **Psychiatry Res** 1989 Sep; 29(3):273–6

[Differences in CT findings between embolic and thrombotic cerebral artery occlusion of the internal carotid arterial system] Takano K, et al. **Rinsho Shinkeigaku** 1989 Nov; 29(11):1370–6 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

[Different characteristics of 123I-IMP SPECT images of cerebral embolism and cerebral thrombosis] Uchiyama F, et al. **Kaku Igaku** 1989 Jul;26(7):901–5 (Eng. Abstr.) **(Jpn)**

SURGERY

Transcerebellar thrombectomy for the successful clipping of thrombosed giant vertebral artery-posterior inferior cerebellar artery aneurysm: case report. Kurokawa Y, et al. **Surg Neurol** 1990 Mar;33(3):217–20

[A completely thrombosed giant aneurysm in an infant] Synowitz HJ, et al. **Zentralbl Neurochir** 1989;50(2):58–60 (Eng. Abstr.) **(Ger)**

THERAPY

Carbon dioxide embolism treated with hyperbaric oxygen [see comments] McGrath BJ, et al. **Can J Anaesth** 1989 Sep;36(5):586–9 Comment in: Can J Anaesth 1990 Mar;37(2):270–1.

[Acupuncture at the cervical sympathetic nerve in the treatment of cerebrovascular obliterans disease. Report of 120 cases] Zhou YM. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jul;9(7):421–2 **(Chi)**

[Comparative study of cerebral infarction treated with acupuncture at 6 acupoints of yang meridian and calan] Zou X, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1990 Apr; 10(4):199–202, 195 (Eng. Abstr.) **(Chi)**

[Hemodilution in the treatment of acute cerebral thrombosis] Luo H. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1990 Apr;

23(2):84–6, 126 (Eng. Abstr.) (Chi)
[Use of hemosorption in the complex treatment of a patient with cerebral fat embolism] Isaev IuV, et al. **Ortop Travmatol Protez** 1990 Mar;(3):61–2 (Rus)

VETERINARY

Infarction of the pons and medulla oblongata caused by arteriolar thrombosis in a horse. Anderson WI, et al. **Cornell Vet** 1990 Jul;80(3):285–9

CEREBRAL HEMORRHAGE

Intracerebral hemorrhage in young adults. Bell MC, et al. **Ann Emerg Med** 1989 Nov;18(11):1230–2
Nontraumatic parenchymal brain hemorrhages. Weisberg LA, et al. **Medicine (Baltimore)** 1990 Sep;69(5):277–95 (108 ref.)
[Recurrent hemorrhage into the mesencephalon] Ambler Z. **Cesk Neurol Neurochir** 1989 May;52(3):218–21 (Eng. Abstr.) (Cze)
[Clinical study on the prognostic factors of thalamic hemorrhage] Ikakura K. **Nippon Ika Daigaku Zasshi** 1989 Dec;56(6):535–44 (Eng. Abstr.) (Jpn)
[Spontaneous subcortical (lobar) intracerebral hematoma] Ćustović K, et al. **Med Arh** 1988;42(3):109–11 (Scr)
[Hemorrhage of the caudate nucleus] Roquer J, et al. **Neurologia** 1988 Jul–Aug;3(4):143–7 (14 ref.) (Eng. Abstr.) (Spa)
[Spontaneous intracerebral hematoma] Espinosa Urrutia J. **Rev Med Panama** 1990 May;15(2):81–7 (Eng. Abstr.) (Spa)

BLOOD

Temporal changes in the oxidation state in in vitro blood. Taber KH, et al. **Invest Radiol** 1990 Mar;25(3):240–4
Umbilical cord blood coagulability, acidosis and intracranial hemorrhage. Sakuraba M, et al. **J Perinat Med** 1989; 17(2):99–106 (25 ref.)
[Changes in peripheral leukocytic glucocorticoid receptor in patients with ischemic and hemorrhagic stroke] Zhao Y, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Aug; 28(8):479–81, 510 (Eng. Abstr.) (Chi)
[Behavior of ketone bodies and some carbohydrate metabolism indicators in the blood of patients with various features of paralytic stroke] Nowicki J. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:257–65 (Eng. Abstr.) (Pol)
[Behavior of ketone bodies and some carbohydrate metabolism indicators in the blood of patient with various features of stroke after intravenous glucose loading] Nowicki J. **Ann Univ Mariae Curie Sklodowska [Med]** 1985; 40:275–83 (Eng. Abstr.) (Pol)

CEREBROSPINAL FLUID

[Behavior of ketone bodies and some carbohydrate metabolism indicators in the cerebrospinal fluid of patients with various features of stroke] Nowicki J. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:267–73 (Eng. Abstr.) (Pol)

CHEMICALLY INDUCED

Tissue plasminogen activator and intracranial hemorrhage [letter; comment] Becker RC, et al. **Ann Intern Med** 1990 Apr 15;112(8):630 Comment on: Ann Intern Med 1990 Jan 1;112(1):17–21.
Intracranial hemorrhage after use of tissue plasminogen activator for coronary thrombolysis [see comments] Kase CS, et al. **Ann Intern Med** 1990 Jan 1;112(1):17–21 Comment in: Ann Intern Med 1990 Apr 1;112(7):549. Comment in: Ann Intern Med 1990 Apr 15;112(8):630.
Tissue plasminogen activator and heparin dosage [letter; comment] Lomaestro BM. **Ann Intern Med** 1990 Apr 1; 112(7):549 Comment on: Ann Intern Med 1990 Jan 1;112(1):17–21.
Neonatal ultrasound casebook. Antenatal brain injury and maternal cocaine use. Sims ME, et al. **J Perinatol** 1989 Sep;9(3):349–50
Intracranial hemorrhage in a neonate following prenatal cocaine exposure. Spires MC, et al. **Pediatr Neurol** 1989 Sep–Oct;5(5):324–6
Intracerebral hemorrhage in stroke patients anticoagulated with heparin. Babikian VL, et al. **Stroke** 1989 Nov; 20(11):1500–3 (24 ref.)
Hemorrhagic transformation following tissue plasminogen activator in experimental cerebral infarction. del Zoppo GJ, et al. **Stroke** 1990 Apr;21(4):596–601
Intracerebral hematomas during anticoagulant treatment. Franke CL, et al. **Stroke** 1990 May;21(5):726–30
Multiple intracerebral hemorrhages after smoking "crack" cocaine. Green RM, et al. **Stroke** 1990 Jun;21(6):957–62 (34 ref.)
Collagenase-induced intracerebral hemorrhage in rats. Rosenberg GA, et al. **Stroke** 1990 May;21(5):801–7
[Neurologic complications of cocaine abuse] Van Viet H, et al. **Presse Med** 1990 Jun 2;19(22):1045–9 (51 ref.) (Eng. Abstr.) (Fre)
[A fatality caused by heparin overdose] Missliwetz J, et al. **Z Rechtsmed** 1989;103(2):147–53 (Eng. Abstr.) (Ger)
[Intracranial hemorrhage in patients undergoing anticoagulant treatment with acenocoumarol] Elcano J, et al. **Med Clin (Barc)** 1990 Feb 17;94(6):201–3 (Eng. Abstr.) (Spa)
[Anticoagulation in cerebral infarct of cardiac origin. A study of 58 patients in acute phase] Vázquez Cruz J, et al. **Neurologia** 1987 Mar–Apr;2(2):57–62 (Eng. Abstr.) (Spa)
[Cerebral hemorrhage caused by cocaine consumption (letter)] Vicens L, et al. **Rev Clin Esp** 1990 Jan;186(1):43–4 (Spa)

CLASSIFICATION

[Hypertensive putaminal hemorrhage with intraventricular hemorrhage—50 clinical cases and 6 pathoanatomy cases] Lu B. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Dec;22(6):328–30, 381 (Eng. Abstr.) (Chi)

COMPLICATIONS

Acquired pendular oscillation after brain-stem hemorrhage. Itoh Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1989; 468:205–8
Eicosanoid levels in CSF of premature infants with posthemorrhagic hydrocephalus. White RP, et al. **Am J Med Sci** 1990 Apr;299(4):230–5
Randomised trial of early tapping in neonatal posthaemorrhagic ventricular dilatation. Ventriculomegaly Trial Group. **Arch Dis Child** 1990 Jan;65(1 Spec No):3–10
Dementia in hereditary cerebral hemorrhage with amyloidosis–Dutch type. Haan J, et al. **Arch Neurol** 1990 Sep;47(9):965–7
Acute vertiginous presentation of primary thalamic hemorrhage. Nagaratnam N, et al. **Arch Otolaryngol Head Neck Surg** 1990 Sep;116(9):1077–8
Intraventricular haematoma: management of comatose patients with valve regulated external ventricular drainage. Chan KH, et al. **Br J Neurosurg** 1988;2(4):465–9
Kluver–Bucy syndrome following recovery from transtentorial herniation. Rossitch E Jr, et al. **Br J Neurosurg** 1989;3(4):503–6
Choreoathetosis and thalamic haemorrhage. Freilich RJ, et al. **Clin Exp Neurol** 1988;25:115–20
Sudden death from choroid plexus vascular malformation hemorrhage: case report and review of the literature. van Rybroek JJ, et al. **Clin Neuropathol** 1990 Jan–Feb; 9(1):39–45 (34 ref.)
Auditory sound agnosia without aphasia following a right temporal lobe lesion. Fujii T, et al. **Cortex** 1990 Jun; 26(2):263–8
Varicella associated intracerebral hemorrhage in the absence of thrombocytopenia. Fikrig E, et al. **Diagn Microbiol Infect Dis** 1989 Jul–Aug;12(4):357–9
Reversible nuclear oculomotor nerve paralysis. Caused by a primary mesencephalic hemorrhage. Gaymard B, et al. **Eur Neurol** 1990;30(3):128–31
Candida cellulitis: a complication of percutaneous endoscopic gastrostomy. Patel AS, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):571–2
Subcortical myoclonus from thalamic hemorrhage [letter] Baldrati A, et al. **Ital J Neurol Sci** 1990 Apr;11(2):185–6
Hematoma of the inferior colliculus: uncommon cause of trochlear nerve deficit and contralateral sensory hemisyndrome. Cocito D, et al. **Ital J Neurol Sci** 1990 Feb; 11(1):71–4
Spontaneous intracerebral hematoma in a adolescent with factor XIII deficiency. Case report. Giraldi C, et al. **Ital J Neurol Sci** 1989 Dec;10(6):579–82
Acquired aprosodia in children. Bell WL, et al. **J Child Neurol** 1990 Jan;5(1):19–26
Posthemorrhagic hydrocephalus. Holt PJ. **J Child Neurol** 1989;4 Suppl:S23–31 (38 ref.)
Oculographic analysis of acute esotropia secondary to a thalamic hemorrhage. Hertle RW, et al. **J Clin Neuro Ophthalmol** 1990 Mar;10(1):21–6
Compensatory head tilt in upbeating nystagmus. Kattah JC, et al. **J Clin Neuro Ophthalmol** 1990 Mar;10(1):27–31
Zieve's syndrome and intracranial haemorrhage: coincidence or related disorders. Hilz MJ, et al. **J Neurol** 1990 Apr; 237(2):120–1
Delayed-onset posthemiplegic dystonia and imitation synkinesia [letter] Chiang CY, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):623
Chiasmal apoplexy: haemorrhage from a cavernous malformation in the optic chiasm. Regli L, et al. **J Neurol Neurosurg Psychiatry** 1989 Sep;52(9):1095–9
Epileptic seizures in intracerebral haemorrhage. Sung CY, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov; 52(11):1273–6
Bruxism [letter; comment] Jacome DE. **Neurology** 1990 Apr; 40(4):727–8 Comment on: Neurology 1989 Sep;39(9):1262.
Pontine hemorrhage and trigeminal nerve impairment [letter; comment] Ambrosetto P. **Neurosurgery** 1990 Feb;26(2):360 Comment on: Neurosurgery 1989 Sep;25(3):451–3; discussion 453–4.
Pontine hemorrhage and trigeminal nerve impairment [letter; comment] Ambrosetto P. **Neurosurgery** 1990 Mar;26(3):549 Comment on: Neurosurgery 1989 Sep;25(3):451–3; discussion 453–4.
Chronic encapsulated intracerebral hematoma associated with cavernous angioma: a case report. Murakami S, et al. **Neurosurgery** 1990 Apr;26(4):700–2
Neurogenic pulmonary edema in the acute stage of hemorrhagic cerebrovascular disease. Touho H, et al. **Neurosurgery** 1989 Nov;25(5):762–8
Respiratory distress syndrome and intracranial hemorrhage: cause or association? Inferences from surfactant clinical trials. Leviton A, et al. **Pediatrics** 1989 Nov;84(5):915–22 (67 ref.)
Lacunar infarction in patients with hypertensive intracerebral hemorrhage. Weisberg LA, et al. **South Med J** 1990 Sep; 83(9):1050–2
Putaminal hemorrhage accompanied by hemichorea–hemiballism [letter] Altafullah I, et al. **Stroke** 1990 Jul;21(7):1093–4
Hemodilution and hypertension effects on cerebral hemorrhage in cerebral ischemia in rats. Cole DJ, et al. **Stroke** 1990 Sep;21(9):1333–9
Intracranial hemorrhage in patients with polycystic kidney disease. Ryu SJ. **Stroke** 1990 Feb;21(2):291–4
Hemorrhage into fibrous dysplasia following minor head injury—effective decompression for the ophthalmic artery and optic nerve. Kurokawa Y, et al. **Surg Neurol** 1989 Dec; 32(6):421–6 (15 ref.)
Cavernous angioma with encapsulated intracerebral hematoma: report of two cases. Monma S, et al. **Surg Neurol** 1990 Oct;34(4):245–9
[Double paralysis of the superior oblique muscles caused by ventricular inundation] Nguyen P, et al. **Bull Soc Ophtalmol Fr** 1989 Mar;89(3):455–7 (Fre)
[Prognostic significance of ventricular contamination in spontaneous intracerebral hemorrhage (letter)] Gras P, et al. **Presse Med** 1990 Apr 21;19(16):763 (Fre)
[Bilateral paresis of the superior oblique muscle caused by hematoma of the mesencephalic tegmentum] Dussaux P, et al. **Rev Neurol (Paris)** 1990;146(1):45–7 (Eng. Abstr.) (Fre)
[Pure agraphia. Apropos of 2 cases] Trillet M, et al. **Rev Neurol (Paris)** 1989;145(10):720–4 (Eng. Abstr.) (Fre)
[Post-hemorrhagic hydrocephalus and ventriculomegaly after peri-intraventricular hemorrhage in preterm infants] Levy Y, et al. **Harefuah** 1989 Nov 1;117(9):261–4 (38 ref.) (Heb)
[Successful surgical treatment of infective endocarditis complicated with DIC and intracerebral hemorrhage] Hamada Y, et al. **Kyobu Geka** 1989 Sep;42(10):869–72 (Eng. Abstr.) (Jpn)
[Hypoxemia in the acute stage of hypertensive intracerebral hemorrhage, with special reference to increased extravascular lung water] Touho H, et al. **Neurol Med Chir (Tokyo)** 1989 Aug;29(8):724–7 (Eng. Abstr.) (Jpn)
[MR imaging of acute hemorrhagic brain infarction] Uchino A, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Nov 25;49(11):1347–54 (Eng. Abstr.) (Jpn)
[Brain abscess following intracerebral hematoma] Kurihara H, et al. **No Shinkei Geka** 1989 Nov;17(11):1037–40 (Eng. Abstr.) (Jpn)
[CT appearances in a neonate presenting with seizures; a neoplastic lesion or hemorrhagic infarction? (letter)] Aoki N. **No To Hattatsu** 1990 Mar;22(2):191–2 (Jpn)
[A case of cerebral arterial ectasia accompanied by intraventricular hemorrhage] Enomoto H, et al. **Rinsho Hoshasen** 1990 Jun;35(6):733–5 (Eng. Abstr.) (Jpn)
[Left-sided extremity myorhythmia and rightward slow eye movement caused by a hemorrhage in the right pontine tegmentum] Hirono N, et al. **Rinsho Shinkeigaku** 1990 Jan; 30(1):73–7 (Eng. Abstr.) (Jpn)
[Motor amusia following a right temporal lobe hemorrhage—a case report] Takeda K, et al. **Rinsho Shinkeigaku** 1990 Jan;30(1):78–83 (29 ref.) (Eng. Abstr.) (Jpn)
[Primary hematoma of the brain stem: considerations apropos of a case] Salomão JF, et al. **Arq Neuropsiquiatr** 1989 Jun; 47(2):197–204 (Eng. Abstr.) (Por)
[Arteriovenous fistula of the inferior lobe of the right lung complicated by recurrent hemorrhage] Rakishev GB, et al. **Grud Serdechnososudistaia Khir** 1990;(4):68–9 (Rus)
[Tonic meningeal symptoms at early stages of acute neurologic pathology] Vilenskiĭ BS, et al. **Sov Med** 1990; (1):95–9 (Rus)
[Clinico-morphological characteristics of complex types of stroke] Akimov GA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(7):88–92 (Eng. Abstr.) (Rus)
[Ataxic hemiparesis syndrome caused by capsular hemorrhage (letter)] Pujadas F, et al. **Med Clin (Barc)** 1989 Oct 28;93(13):517 (Spa)
["Lacunar" syndromes caused by spontaneous cerebral hemorrhage] Delgado G, et al. **Neurologia** 1986 Nov–Dec; 1(6):233–40 (Spa)
[Paralysis of the vertical gaze caused by a hematoma of the caudate nucleus. A false localizing sign] López de Munain A, et al. **Neurologia** 1988 May–Jun;3(3):116–9 (Eng. Abstr.) (Spa)
[Sustained hemipiloerection as a manifestation of focal neurologic dysfunction] Maestre JF, et al. **Neurologia** 1987 May–Jun;2(3):128–30 (Eng. Abstr.) (Spa)
[Prognosis factors in conservatively treated patients with non-traumatic supratentorial intracerebral hematoma] Posada IJ, et al. **Neurologia** 1989 Jan–Feb;4(1):19–23 (Eng. Abstr.) (Spa)
[Lower maxillary nerve blockade as treatment of trismus secondary to pontomesencephalic hemorrhage (letter)] Roig C, et al. **Neurologia** 1986 Sep–Oct;1(5):226 (Spa)

DIAGNOSIS

Spontaneous resolution of posterior fossa hematoma in a term neonate. Liu HC, et al. **Acta Paediatr Sin** 1988 Sep–Oct; 29(5):341–6

Value of sonography in the diagnosis of intracranial hemorrhage and periventricular leukomalacia: a postmortem study of 35 cases. Carson SC, et al. **AJNR** 1990 Jul–Aug;11(4):677–83

The role of ferritin and hemosiderin in the MR appearance of cerebral hemorrhage: a histopathologic biochemical study in rats. Thulborn KR, et al. **AJNR** 1990 Mar–Apr; 11(2):291–7

Comparison of MR imaging with clinical history in the identification of hemorrhage in patients with cerebral arteriovenous malformations. Yousem DM, et al. **AJNR** 1989 Nov–Dec;10(6):1151–4

Value of sonography in the diagnosis of intracranial hemorrhage and periventricular leukomalacia: a postmortem study of 35 cases. Carson SC, et al. **AJR Am J Roentgenol** 1990 Sep;155(3):595–601

The role of ferritin and hemosiderin in the MR appearance of cerebral hemorrhage: a histopathologic biochemical study in rats. Thulborn KR, et al. **AJR Am J Roentgenol** 1990 May;154(5):1053–9

Prenatal diagnosis of intracerebellar hemorrhage: case report. Jennett RJ, et al. **Am J Obstet Gynecol** 1990 Jun; 162(6):1472–4; discussion 1474–5

Thrombocytopenia and cordocentesis clarifications requested [letter; comment] Weiner CP. **Am J Obstet Gynecol** 1989 Oct;161(4):1091–2 Comment on: Am J Obstet Gynecol 1988 Apr;158(4):939–46.

Primary intraventricular hemorrhage imaged by high–field magnetic resonance imaging––a case report. Ooboshi H, et al. **Angiology** 1990 Aug;41(8):647–51

Thalamic hemorrhage imitating hyperventilation. Scialdone AM. **Ann Emerg Med** 1990 Jul;19(7):817–9

Hereditary cerebral hemorrhage with amyloidosis–Dutch type. Clinical and computed tomographic analysis of 24 cases. Haan J, et al. **Arch Neurol** 1990 Jun;47(6):649–53

Cranial sonography: intracranial hemorrhage, periventricular leukomalacia, and asphyxia. Hay TC, et al. **Clin Diagn Ultrasound** 1989;24:25–42 (33 ref.)

Nonmetabolic causes of triphasic waves: a reappraisal. Aguglia U, et al. **Clin Electroencephalogr** 1990 Jul; 21(3):120–5

Central motor conduction in ischaemic and hemorrhagic cerebral lesions. Segura MJ, et al. **Electromyogr Clin Neurophysiol** 1990 Jan;30(1):41–5

Neurosonographic assessment of twin pairs in the perinatal period. Amato M, et al. **Eur Neurol** 1990;30(1):9–13

Management of spontaneous intracranial haemorrhage. O'Sullivan MG, et al. **Ir Med J** 1989 Dec;82(4):149–50

Intraventricular hemorrhage. Allan WC. **J Child Neurol** 1989; 4 Suppl:S12–22

Mottled MR appearance of a hyperacute intracerebral hemorrhage at 0.5 T. Mascalchi M, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):818–20

Mineralization of the falx cerebri simulating interhemispheric vascular anomalies on MR imaging. Report of three cases. Ruge JR, et al. **J Neurosurg** 1990 Jun;72(6):971–4

Echoencephalographic findings in neonates associated with maternal cocaine and methamphetamine use: incidence and clinical correlates. Dixon SD, et al. **J Pediatr** 1989 Nov; 115(5 Pt 1):770–8

Biochemical timing of peri–intraventricular hemorrhage assessed by perinatal CPK–BB isoenzyme measurements. Amato M, et al. **J Perinat Med** 1989;17(6):447–52

The use of in vitro magnetic resonance tissue studies to optimise pulse sequences in the imaging of intracranial haemorrhage. Jenkins A, et al. **Magn Reson Imaging** 1989 Jul–Aug;7(4):395–403

Iron in magnetic resonance imaging of cerebral hemorrhage. Thulborn KR, et al. **Magn Reson Q** 1989 Jan;5(1):23–38 (46 ref.)

MR imaging of a hemorrhagic medulloblastoma. Uchino A, et al. **Neuroradiology** 1989;31(4):371

Delayed diagnosis and treatment in traumatic intracranial hemorrhage. Lim DP. **Neurosurg Rev** 1989;12 Suppl 1:237–42

The echogenic ependymal wall in intraventricular hemorrhage: sonographic–pathologic correlation. Gaisie G, et al. **Pediatr Radiol** 1990;20(5):297–300

Periventricular–intraventricular hemorrhage, sonographic localization, phenobarbital, and motor abnormalities in low birth weight infants. Krishnamoorthy KS, et al. **Pediatrics** 1990 Jun;85(6):1027–33

Prediction of neurodevelopmental outcome in the preterm infant: MR–staged myelination compared with cranial US. Guit GL, et al. **Radiology** 1990 Apr;175(1):107–9

Cause of signal loss in MR images of old hemorrhagic lesions. Hardy PA, et al. **Radiology** 1990 Feb;174(2):549–55

Head trauma. Ahmadi J, et al. **Top Magn Reson Imaging** 1989 Dec;2(1):17–24 (15 ref.)

Congenital and perinatal lesions. Lee BC. **Top Magn Reson Imaging** 1989 Dec;2(1):1–16 (73 ref.)

Postoperative hematomas following 505 operations for intracranial meningiomas. Arnaudova V, et al. **Zentralbl Neurochir** 1989;50(2):99–100

[Image changes of hemoglobin in acute and hyperacute intracranial hematoma during hyperintensive magnetic resonance] Sui B. **Chung Hua I Hsueh Tsa Chih** 1990 Jan; 70(1):29–31, 4 (Eng. Abstr.) **(Chi)**

[Intracranial hemorrhage in mature infants without predisposing factors] Sørensen PJ, et al. **Ugeskr Laeger** 1990 Mar 19;152(12):809–11 (Eng. Abstr.) **(Dan)**

[Intraventricular hemorrhage in utero] Gautier A, et al. **Arch Fr Pediatr** 1990 Jun–Jul;47(6):429–31 (16 ref.) (Eng. Abstr.) **(Fre)**

[Supratentorial intracerebral hemorrhage] Trouillat R, et al. **Schweiz Med Wochenschr** 1990 Jul 21;120(29):1056–63 (33 ref.) (Eng. Abstr.) **(Fre)**

[Acute hemorrhage and ischemic necroses in hypophyseal tumors: hypophyseal apoplexy] Seyer H, et al. **Fortschr Neurol Psychiatr** 1989 Nov;57(11):474–88 (Eng. Abstr.) **(Ger)**

[How certain is the diagnosis of intracerebral tumor bleeding in magnetic resonance tomography?] Forsting M, et al. **ROFO** 1989 Sep;151(3):356–9 (Eng. Abstr.) **(Ger)**

[Intracranial hemorrhages in the magnetic resonance tomogram. Studies on sensitivity, on the development of hematomas and on the determination of the cause of the hemorrhage] Steinbrich W, et al. **ROFO** 1990 May; 152(5):534–43 (Eng. Abstr.) **(Ger)**

[Results of ultrasound brain studies in clinically normal newborn infants] Nagel H, et al. **Zentralbl Gynakol** 1989; 111(23):1580–3 (Eng. Abstr.) **(Ger)**

[The diagnosis of spontaneous intracerebral hemorrhage] Fried H, et al. **Zentralbl Neurochir** 1989;50(2):84–6 (10 ref.) (Eng. Abstr.) **(Ger)**

[Cerebral hemorrhage: initial experiences with magnetic resonance imaging] Foresti M, et al. **Radiol Med (Torino)** 1990 Jan–Feb;79(1–2):18–28 (Eng. Abstr.) **(Ita)**

[Ultrasonics in the study of periencephalic post–traumatic effusions in the newborn and suckling infants] Magnano GM, et al. **Radiol Med (Torino)** 1989 Nov;78(5):492–5 (Eng. Abstr.) **(Ita)**

[Massive hemorrhage within an acoustic neurinoma. Case report] Fuse T, et al. **Neurol Med Chir (Tokyo)** 1989 Oct; 29(10):933–7 (Eng. Abstr.) **(Jpn)**

[Acute hypertensive intracranial hemorrhage: MR imaging at 1.5T] Uchino A, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Oct 25; 49(10):1243–52 (Eng. Abstr.) **(Jpn)**

[Agenesis of the right internal carotid artery with intracerebral hemorrhage: case report] Uehara H, et al. **No Shinkei Geka** 1990 Jan;18(1):77–81 (19 ref.) (Eng. Abstr.) **(Jpn)**

[A case of intracranial hemorrhage in a young infant due to vitamin K deficiency: comparison of MRI and CT findings] Umemura A, et al. **No To Hattatsu** 1989 Jul; 21(4):385–9 (Eng. Abstr.) **(Jpn)**

[Chronic intracranial hematoma] Surmacz L, et al. **Neurol Neurochir Pol** 1989 Jan;23(1):72–4 (Eng. Abstr.) **(Pol)**

[Difficulties of differential diagnosis in traumatic and aneurysmal intracranial hemorrhages] Spiridonova VD. **Sov Med** 1989;(12):114–7 **(Rus)**

[Neurosonography of the brain in infectious toxicoses in infants] Berestov AI, et al. **Zh Nevropatol Psikhiatr** 1989; 89(8):9–11 (Eng. Abstr.) **(Rus)**

[Real–time sonography in the evaluation of peri– and intraventricular cerebral hemorrhage] Rodríguez RI. **Rev Med Panama** 1990 May;15(2):138–63 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Steroid treatment in primary intracerebral haemorrhage. De Reuck J, et al. **Acta Neurol Belg** 1989 Jan–Feb;89(1):7–11

Effects of glycerol infusion on cerebral blood flow in cases with hypertensive intracerebral hematoma. Yamada T, et al. **Adv Neurol** 1990;52:556

Impaired platelet function associated with parenteral nafcillin. Jeter EK, et al. **Ann Clin Lab Sci** 1990 Jan–Feb; 20(1):79–84

CT–guided stereotactic fibrinolysis of spontaneous and hypertensive cerebellar hemorrhage: long–term results. Mohadjer M, et al. **J Neurosurg** 1990 Aug;73(2):217–22

Effect of intramuscular vitamin E on mortality and intracranial hemorrhage in neonates of 1000 grams or less. Fish WH, et al. **Pediatrics** 1990 Apr;85(4):578–84

Blood coagulation findings and the efficacy of factor XIII concentrate in premature infants with intracranial hemorrhages. Shirahata A, et al. **Thromb Res** 1990 Mar 1;57(5):755–63

[Medical treatment of acute hemorrhagic stroke––observation of 44 cases with FCMCK therapy] Wang J. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1990 Feb; 12(1):61–7 (Eng. Abstr.) **(Chi)**

[Impaired cerebral circulation and the effect of glycerol infusion in the acute stage of hypertensive intracerebral hematoma] Yamada T, et al. **No To Shinkei** 1990 Mar; 42(3):303–9 (Eng. Abstr.) **(Jpn)**

[Effect of foridon on the blood supply of the cat brain in health and in intracerebral hemorrhage] Chernysheva GA, et al. **Farmakol Toksikol** 1989 Jul–Aug;52(4):20–4 (Eng. Abstr.) **(Rus)**

[Treatment of intracranial hemorrhage in chronic idiopathic thrombocytopenic purpura] Morales–Polanco MR, et al. **Gac Med Mex** 1990 Jan–Feb;126(1):45–9 (Eng. Abstr.) **(Spa)**

EMBRYOLOGY

Prenatal intracranial haemorrhage. Stirling HF, et al. **Dev Med Child Neurol** 1989 Dec;31(6):807–11

EPIDEMIOLOGY

Late onset and recurrent periventricular hemorrhage in prematurity. Shen EY, et al. **Acta Paediatr Sin** 1988 Mar–Apr;29(2):83–9

A statistical study of autopsied cases of neonatal intraventricular hemorrhage. Nakamura Y, et al. **Arch Pathol Lab Med** 1990 Sep;114(9):966–9

The risk of intracranial complications in pediatric head injury. Results of multivariate analysis. Chan KH, et al. **Childs Nerv Syst** 1990 Jan;6(1):27–9

A study on the recent trend and risk factors of cerebrovascular disease. Kim HT, et al. **J Korean Med Sci** 1989 Sep;4(3):129–34

Frequent handling in the neonatal intensive care unit and intraventricular hemorrhage. Bada HS, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):126–31

Intraventricular hemorrhage. Perlman JM. **Pediatrics** 1989 Nov;84(5):913–5

Intraventricular hemorrhage in preterm infants: declining incidence in the 1980s. Philip AG, et al. **Pediatrics** 1989 Nov;84(5):797–801

Serum cholesterol and hemorrhagic stroke in the Honolulu Heart Program. Yano K, et al. **Stroke** 1989 Nov; 20(11):1460–5

ETIOLOGY

A study on the venous drainage of 150 cerebral arteriovenous malformations as related to haemorrhagic risks and size of the lesion. Albert P, et al. **Acta Neurochir (Wien)** 1990; 103(1–2):30–4

Giant intracranial varix associated with venous angioma and intracerebral hemorrhage. Maiuri F, et al. **Acta Neurol (Napoli)** 1990 Jun;12(3):231–6

Intracranial hemorrhage in the hemophiliacs. Chen CM, et al. **Acta Paediatr Sin** 1989 Nov–Dec;30(6):389–93

Intracranial hemorrhage associated with quinidine induced thrombocytopenia. Glass JT, et al. **Ala Med** 1989 Oct; 59(4):21, 24–5

Serial abuse in children who are shaken. Alexander R, et al. **Am J Dis Child** 1990 Jan;144(1):58–60

Serum sodium concentration and intraventricular hemorrhage in premature infants. Lupton BA, et al. **Am J Dis Child** 1990 Sep;144(9):1019–21

Vertebral artery injuries following chiropractic cervical spine manipulation––case reports. Raskind R, et al. **Angiology** 1990 Jun;41(6):445–52

Complications associated with Ommaya reservoirs in patients with cancer. The Princess Margaret Hospital experience and a review of the literature. Lishner M, et al. **Arch Intern Med** 1990 Jan;150(1):173–6 (16 ref.)

Migraine with vasospasm and delayed intracerebral hemorrhage. Cole AJ, et al. **Arch Neurol** 1990 Jan; 47(1):53–6

Risks of acute traumatic intracranial haematoma in children and adults: implications for managing head injuries. Teasdale GM, et al. **BMJ** 1990 Feb 10;300(6721):363–7

Postoperative intracerebral haemorrhages remote from the site of the initial operation. Benvenuti D, et al. **Br J Neurosurg** 1987;1(3):377–84 (9 ref.)

Postoperative intracerebral haemorrhage [letter] Braunsdorf W. **Br J Neurosurg** 1988;2(1):125

Spontaneous massive haemorrhage into acoustic neuroma during anticoagulation therapy. Chee CP, et al. **Br J Neurosurg** 1987;1(4):489–93

Post–traumatic intraventricular haemorrhage: a reappraisal. Christie M, et al. **Br J Neurosurg** 1988;2(3):343–9

Diagnosis and management of delayed traumatic intracerebral haematomas. Gentleman D, et al. **Br J Neurosurg** 1989;3(3):367–72

Management of intraventricular haemorrhage in patients with haemorrhagic cerebrovascular diseases. Hayashi M, et al. **Br J Neurosurg** 1988;2(1):23–32

Spontaneous haemorrhage in a cerebellar abscess: a unique complication. Jamjoom AB, et al. **Br J Neurosurg** 1990; 4(3):231–5

Intracranial haemorrhage from meningiomas: a report of five cases. Jones NR, et al. **Br J Neurosurg** 1989;3(6):691–8 (46 ref.)

Traumatic isolated intracerebral hemorrhage in children. Kang JK, et al. **Childs Nerv Syst** 1989 Oct;5(5):303–6

Subacute traumatic extradural haematomas of the posterior fossa: a clinicopathological entity of the 5– to 10–year–old child. Peter JC, et al. **Childs Nerv Syst** 1990 May;6(3):135–8 (30 ref.)

The saga of cystatin C gene mutation causing amyloid angiopathy and brain hemorrhage––clinical genetics in Iceland. Jensson O, et al. **Clin Genet** 1989 Nov;36(5):368–77 (90 ref.)

Early and late germinal matrix hemorrhage may have different antecedents. Pagano M, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Oct;37(1):47–54

"Haemorrhagic" carotid plaque does not contain haemorrhage. Leen EJ, et al. **Eur J Vasc Surg** 1990 Apr; 4(2):123–8

Extradural haematoma associated with essential thrombocythaemia in a child after a relatively minor head injury. Eljamel MS, et al. **Injury** 1989 Jul;20(4):236–7

Cerebral haemorrhage and anticoagulants [editorial] Mattle HP. **Ir Med J** 1990 Jun;83(2):44–5

Neurosonographic findings in infants treated by extracorporeal membrane oxygenation (ECMO). Matamoros A, et al. **J Child Neurol** 1989;4 Suppl:S52–61 (30 ref.)

Recurrent intraparenchymal hemorrhages from angiographically occult vascular malformations. Tung H, et al. **J Neurosurg** 1990 Aug;73(2):174–80

Choroid plexus arteriovenous malformation in a full-term neonate. Case report. Wakai S, et al. **J Neurosurg** 1990 Jan;72(1):127–9 (14 ref.)

Acoustic neurinoma with intratumoral bleeding. Palaoğlu S, et al. **J Neurosurg Sci** 1990 Jan–Mar;34(1):65–7

Nursing interventions to decrease the risk of periventricular–intraventricular hemorrhage. Kling P. **J Obstet Gynecol Neonatal Nurs** 1989 Nov–Dec; 18(6):457–64 (39 ref.)

Umbilical artery catheter position and intraventricular hemorrhage. Schick JB, et al. **J Perinatol** 1989 Dec; 9(4):382–5

Intracranial haemorrhage caused by amphetamine abuse. Lessing MP, et al. **J R Soc Med** 1989 Dec;82(12):766–7

Very early intracranial haemorrhage in alloimmune fetal thrombocytopenia [letter] Giovangrandi Y, et al. **Lancet** 1990 Aug 4;336(8710):310

Bleeding in immune thrombocytopenic purpura after alpha–interferon [letter] Matthey F, et al. **Lancet** 1990 Feb 24;335(8687):471–2

Infratentorial intratumoral hemorrhage. Reichenthal E, et al. **Mt Sinai J Med** 1989 Sep;56(4):309–14 (29 ref.)

Intracerebral hemorrhage after break dancing [letter] Lee KC, et al. **N Engl J Med** 1990 Aug 30;323(9):615–6

Congophilic angiopathy [clinical conference] **N Y State J Med** 1990 Feb;90(2):64–8

Unexpected, unattended deliveries. Harper RG, et al. **N Y State J Med** 1990 Jun;90(6):330–1

Familial occurrence of moyamoya disease with intracranial hemorrhage—report of two cases. Ikeda A, et al. **Neurol Med Chir (Tokyo)** 1990 Jan;30(1):43–6

Intracerebral hemorrhage from a peripheral aneurysm associated with an astrocytoma—case report. Kadota Y, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):241–4

Intracerebral hemorrhage due to venous thrombosis in venous angioma—case report. Yamamoto M, et al. **Neurol Med Chir (Tokyo)** 1989 Nov;29(11):1044–6

Intraventricular hemorrhage following amphetamine abuse. Imanse J, et al. **Neurology** 1990 Aug;40(8):1318–9

Traumatic basal ganglia hemorrhage [letter; comment] Jellinger K. **Neurology** 1990 May;40(5):862–3 Comment on: Neurology 1989 Jul;39(7):897–904.

Posterior fossa arteriovenous malformations. Angioarchitecture in relation to their hemorrhagic episodes. Garcia Monaco R, et al. **Neuroradiology** 1990; 31(6):471–5

Patients with severe head trauma who talk and deteriorate. Isayama K, et al. **Neurosurg Rev** 1989;12 Suppl 1:446–50

Diffuse axonal injury in severe head trauma. Kobayashi S, et al. **Neurosurg Rev** 1989;12 Suppl 1:451–7

Delayed post–traumatic intracerebral bleeding. Delayed post–traumatic apoplexy: "Spätapoplexie". Nanassis K, et al. **Neurosurg Rev** 1989;12 Suppl 1:243–51 (9 ref.)

Chronological evaluation of the occurrence and growth of the traumatic intracerebral hematoma. Yamaki T, et al. **Neurosurg Rev** 1989;12 Suppl 1:149–52

Acute management of intracranial hemorrhage in patients receiving thrombolytic therapy: case reports. Eleff SM, et al. **Neurosurgery** 1990 May;26(5):867–9

Recurrent intracerebral hemorrhage due to hypertension. Lee KS, et al. **Neurosurgery** 1990 Apr;26(4):586–90

Thalamic hemorrhage in a 4–year–old child induced by nephro–vascular hypertension. Bianchi E, et al. **Pediatr Radiol** 1989;19(8):513–5

Cough as a risk factor for neonatal intraventricular hemorrhage [letter; comment] Argent AC, et al. **Pediatrics** 1990 Jan;85(1):138 Comment on: Pediatrics 1988 Mar;81(3):399–403.

Tentorial hemorrhage associated with vacuum extraction. Hanigan WC, et al. **Pediatrics** 1990 Apr;85(4):534–9

Fluctuating blood pressure and intraventricular hemorrhage [letter] Perlman JM, et al. **Pediatrics** 1990 Apr;85(4):620–2

Blood pressure increases, birth weight–dependent stability boundary, and intraventricular hemorrhage. Perry EH, et al. **Pediatrics** 1990 May;85(5):727–32

Mutation in the cystatin C gene causes hereditary brain hemorrhage. Palsdottir A, et al. **Prog Clin Biol Res** 1989; 317:241–6

Hemorrhagic infarct induced by arterial hypertension in cat brain following middle cerebral artery occlusion. Saku Y, et al. **Stroke** 1990 Apr;21(4):589–95

Avulsion of choroid plexus during revision of ventricular shunting: its high incidence and predictive value on computed tomography scan. Aoki N, et al. **Surg Neurol** 1990 Apr;33(4):256–60

Ruptured intracranial aneurysms: an autopsy study of 133 patients. Inagawa T, et al. **Surg Neurol** 1990 Feb; 33(2):117–23

Intracranial hemorrhage in hemophiliacs with AIDS [letter] Andes WA, et al. **Thromb Haemost** 1990 Apr 12;63(2):326

[Dystocia and intracranial hemorrhage in perinatal autopsy] Shi SZ. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Jul; 24(4):209–11, 252 (Eng. Abstr.) **(Chi)**

[Hypertension hemorrhage into the 3d ventricle] Drábek P, et al. **Cesk Neurol Neurochir** 1989 Jul;52(4):282–8 (Eng. Abstr.) **(Cze)**

[Intracranial hematoma in a patient with antithrombin III deficiency treated with anticoagulants. Early prevention of thromboembolic complications (letter)] Nighoghossian N, et al. **Presse Med** 1990 Jun 16;19(24):1155 **(Fre)**

[Takayasu's disease and cerebromeningeal hemorrhage] Dimitrijević J, et al. **Rev Neurol (Paris)** 1989;145(6–7):466–9 (Eng. Abstr.) **(Fre)**

[Basal ganglion bleeding after the surgical decompression of the craniovertebral junction] Jamjoom ZB. **Neurochirurgia (Stuttg)** 1990 Jan;33(1):22–5 (11 ref.) (Eng. Abstr.) **(Ger)**

[Intracerebral hemorrhage in childhood] Grimm–Eckardt A, et al. **Radiologe** 1990 Jul;30(7):351–2 **(Ger)**

[Parasagittal meningioma with unusual venous drainage manifesting through peritumoral hemorrhage. Case report] Niwa J, et al. **Neurol Med Chir (Tokyo)** 1989 Oct; 29(10):927–32 (Eng. Abstr.) **(Jpn)**

[Clinical aspects of traumatic intracerebral hematomas. Pathogenesis of delayed traumatic intracerebral hematomas] Okada T. **Nippon Ika Daigaku Zasshi** 1989 Dec;56(6):545–58 (Eng. Abstr.) **(Jpn)**

[Preleukemia presenting optic agnosia caused by several attacks of cerebral hemorrhage due to amyloid angiopathy] Kurata H, et al. **Nippon Naika Gakkai Zasshi** 1989 Dec; 78(12):1742–6 **(Jpn)**

[Intracranial hematoma accompanying bleeding tendency: therapeutic practice and analysis of literature] Fukuda T, et al. **No Shinkei Geka** 1990 Jun;18(6):511–20 (37 ref.) (Eng. Abstr.) **(Jpn)**

[A case of intracranial chondroma presenting with pontine hemorrhage] Furui T, et al. **No Shinkei Geka** 1990 Jun; 18(6):543–6 (33 ref.) (Eng. Abstr.) **(Jpn)**

[Isolated intraventricular hemorrhage due to a ruptured vertebral artery aneurysm] Irikura T, et al. **No Shinkei Geka** 1990 May;18(5):469–73 (Eng. Abstr.) **(Jpn)**

[A successful treatment of spontaneous carotid cavernous fistula causing hemorrhagic infarction treated by detachable balloon] Kasama A, et al. **No Shinkei Geka** 1990 Jul;18(7):631–6 (Eng. Abstr.) **(Jpn)**

[Glossopharyngeal neurinoma causing symptomatic hemorrhage: case report] Minokura K, et al. **No Shinkei Geka** 1990 Jul;18(7):659–63 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Three cases of cryptic arteriovenous malformation in basal ganglia manifested by putaminal hemorrhage] Niwa J, et al. **No Shinkei Geka** 1990 Jul;18(7):665–8 (12 ref.) (Eng. Abstr.) **(Jpn)**

[A case of moyamoya disease with repeated intraventricular hemorrhage due to a ruptured pseudoaneurysm] Sadatoh A, et al. **No Shinkei Geka** 1989 Aug;17(8):755–8 (17 ref.) (Eng. Abstr.) **(Jpn)**

[Intracerebral hemorrhage immediately following the operation of chronic subdural hematoma] Shiroyama Y, et al. **No Shinkei Geka** 1989 Aug;17(8):759–62 (9 ref.) (Eng. Abstr.) **(Jpn)**

[A case of acute myeloblastic leukemia associated with multiple intracerebral hematomas] Yabumoto M, et al. **No Shinkei Geka** 1989 Jun;17(6):567–71 (17 ref.) (Eng. Abstr.) **(Jpn)**

[Hemorrhagic infarction following cerebral vasospasm] Andoh T, et al. **No To Shinkei** 1989 Oct;41(10):979–85 (Eng. Abstr.) **(Jpn)**

[Lobar intracerebral hemorrhage secondary to cerebral amyloid angiopathy: a clinicopathologic study of three operated cases] Andoh Y, et al. **No To Shinkei** 1989 Dec; 41(12):1217–23 (23 ref.) (Eng. Abstr.) **(Jpn)**

[A case of progressive systemic sclerosis associated with a hemorrhagic infarction of the cerebellum] Kawano H, et al. **No To Shinkei** 1990 Feb;42(2):189–91 (Eng. Abstr.) **(Jpn)**

[Hypertensive recurrent intracerebral hemorrhage accompanied with orthostatic hypotension and labile hypertension] Ohta F, et al. **No To Shinkei** 1990 Mar; 42(3):277–81 (Eng. Abstr.) **(Jpn)**

[Successful treatment by a drainage of subdural hematoma in a case of intracranial hemorrhage due to DIC complicated with acute promyelocytic leukemia] Nakagawa T, et al. **Rinsho Ketsueki** 1989 Jun;30(6):874–7 (Eng. Abstr.) **(Jpn)**

[Rendu–Osler–Weber syndrome presented paramedian thalamic and midbrain infarcts and primary medullary hemorrhage: a case report] Hashimoto Y, et al. **Rinsho Shinkeigaku** 1989 Apr;29(4):475–82 (25 ref.) (Eng. Abstr.) **(Jpn)**

[An Alzheimer's disease case showing recurrent subcortical hemorrhage: an autopsy findings with immunohistochemical studies of cerebral amyloid deposits] Maruyama K, et al. **Rinsho Shinkeigaku** 1989 Jul; 29(7):936–9 (Eng. Abstr.) **(Jpn)**

[Diagnosis of cerebral amyloid angiopathy with cerebral hemorrhage by enzyme linked immunosorbent assay (ELISA) of cystatin C in the cerebrospinal fluid] Shimode K, et al. **Rinsho Shinkeigaku** 1990 Mar;30(3):288–93 (Eng. Abstr.) **(Jpn)**

[Millard–Gubler syndrome in a young man after hemorrhage from arteriovenous hemangioma to the brain stem] Gardela G, et al. **Neurol Neurochir Pol** 1989 Mar–Apr;23(2):149–52 (Eng. Abstr.) **(Pol)**

[Coexistence of several arteriovenous fistulas in the pia mater. Case report] Majchrzak H, et al. **Neurol Neurochir Pol** 1988 Nov–Dec;22(6):563–6 (Eng. Abstr.) **(Pol)**

[The role of inappropriate vasopressin secretion syndrome in the development of intraventricular hemorrhage in premature infants] Baĭbarina EN, et al. **Akush Ginekol (Mosk)** 1990 Jan;(1):36–8 **(Rus)**

[Method for modelling intracerebral hematomas in arterial hypertension] Romanova TP. **Patol Fiziol Eksp Ter** 1989 May–Jun;(3):80–1 **(Rus)**

[Intracranial hemorrhage in metastasis of hypernephroma] Gubskiĭ LV, et al. **Sov Med** 1990;(4):121–2 **(Rus)**

[Traumatic primary intraventricular hemorrhage] Antić B, et al. **Vojnosanit Pregl** 1990 Jan–Feb;47(1):43–5 **(Scr)**

[Intracerebral hematoma after surgery for chronic subdural hematoma] Antić B, et al. **Vojnosanit Pregl** 1989 Sep–Oct; 46(5):363–5 **(Scr)**

[Edema and secondary hemorrhage during the postoperative period in patients with surgery for intracranial meningioma] Bajtajić V, et al. **Vojnosanit Pregl** 1989 Jul–Aug; 46(4):277–81 **(Scr)**

[Intracerebral hemorrhage in hypertensives: diagnosis, therapy and prognosis] Gogolák I, et al. **Cesk Neurol Neurochir** 1990 May;53(3):164–73 (Eng. Abstr.) **(Slo)**

[Spontaneous non–hypertensive cerebral hematomas] Lluch V, et al. **Arch Neurobiol (Madr)** 1989 Sep–Oct;52(5):243–9 (Eng. Abstr.) **(Spa)**

[Specular bilateral lenticular hematomas] Fustinoni O, et al. **Medicina (B Aires)** 1989;49(1):59–61 (Eng. Abstr.) **(Spa)**

[Acute spontaneous subdural hematoma of arterial origin (letter)] Ricart C, et al. **Neurologia** 1986 Sep–Oct;1(5):227 **(Spa)**

[Life–threatening intracranial hemorrhage caused by boxing and assaults] Nordström CH, et al. **Lakartidningen** 1990 Jan 31;87(5):301, 303–4 **(Swe)**

GENETICS

Expression of a normal and variant Alzheimer's beta–protein gene in amyloid of hereditary cerebral hemorrhage, Dutch type: DNA and protein diagnostic assays. Prelli F, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):301–7

Cystatin C mutation causing amyloid angiopathy and brain hemorrhage. Jensson O, et al. **Biol Chem Hoppe Seyler** 1990 May;371 Suppl:229–32

Hereditary cerebral hemorrhage with amyloidosis—Dutch type. Research–Group Hereditary Cerebral Amyloid–Angiopathy. Haan J, et al. **Clin Neurol Neurosurg** 1989;91(4):285–90

Hereditary cerebral hemorrhage with amyloidosis—Dutch type. Tc–99m HM–PAO single photon emission computed tomography. Haan J, et al. **Neuroradiology** 1990;32(2):142–5

Mutation of the Alzheimer's disease amyloid gene in hereditary cerebral hemorrhage, Dutch type. Levy E, et al. **Science** 1990 Jun 1;248(4959):1124–6

Amyloid beta protein precursor gene and hereditary cerebral hemorrhage with amyloidosis (Dutch). Van Broeckhoven C, et al. **Science** 1990 Jun 1;248(4959):1120–2

[Hereditary cerebral hemorrhage. Dementia with cystatin C amyloidosis] Blöndal H, et al. **Nord Med** 1990;105(3):76–7, 81 (Eng. Abstr.) **(Swe)**

IMMUNOLOGY

Lymphocyte concanavalin A capping in hereditary cerebral haemorrhage with amyloidosis—Dutch type. Haan J, et al. **J Neurol** 1990 Apr;237(2):117–9

METABOLISM

Intraventricular haemorrhage and the renin–angiotensin–aldosterone system in very low birthweight infants. Leslie GI, et al. **Early Hum Dev** 1989 Nov;20(2):101–7

Hypermetabolism in the acute stage of hemorrhagic cerebrovascular disease. Touho H, et al. **J Neurosurg** 1990 May;72(5):710–4

Aldosterone, catecholamines, and CK–BB as biochemical markers in hypertensive intracerebral hemorrhage. Takahashi H. **Neurol Med Chir (Tokyo)** 1989 Nov; 29(11):999–1003

Cerebral amyloid angiopathy with the deposition of cystatin C (gamma–trace) and beta–protein. Fujihara S, et al. **Prog Clin Biol Res** 1989;317:939–44

MICROBIOLOGY

First isolation of Xanthomonas campestris from the blood of a Chinese woman. Li ZX, et al. **Chin Med J [Engl]** 1990 May;103(5):435–9

MORTALITY

Spontaneous supratentorial intracerebral haemorrhage: a prognostic study. Poungvarin N, et al. **J Med Assoc Thai** 1990 Apr;73(4):206–11

Cause of death among patients with Parkinson's disease: a rare mortality due to cerebral haemorrhage. Iwasaki S, et al. **J Neurol** 1990 Apr;237(2):77–9

A prospective study of acute cerebrovascular disease in the community: the Oxfordshire Community Stroke Project—1981–86. 2. Incidence, case fatality rates and overall outcome at one year of cerebral infarction, primary intracerebral and subarachnoid haemorrhage. Bamford J,

et al. **J Neurol Neurosurg Psychiatry** 1990 Jan;53(1):16–22

[A 3 to 6-year follow-up study of 414 cases of cerebral infarction and cerebral hemorrhage] Chen QT. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Aug; 22(4):202–4, 252 (Eng. Abstr.) **(Chi)**

[Premature rupture of the fetal membranes—do neonatal maturity and risk of infection require an alternative decision or a compromise] Heinrich J. **Gynakol Rundsch** 1989;29 Suppl 2:200–4 **(Ger)**

[Acute cerebellar vascular pathology. A clinical study of 38 cases] Peiró A, et al. **Neurologia** 1987 Jan–Feb;2(1):15–8 (Eng. Abstr.) **(Spa)**

NURSING

Cerebral injuries and intracranial hemorrhages as a result of trauma. Ammons AM. **Nurs Clin North Am** 1990 Mar; 25(1):23–33 (29 ref.)

[Nursing care in ultra-early surgery of acute hypertensive hemorrhage] Wang HP. **Chung Hua Hu Li Tsa Chih** 1989 Nov;24(11):651–2 **(Chi)**

PATHOLOGY

Chronic extradural haemorrhage. A case report and brief literature review. Lawler W. **Am J Forensic Med Pathol** 1990 Mar;11(1):74–8

Pathogenesis of ring-haemorrhage in cerebral malaria. Oo MM, et al. **Ann Trop Med Parasitol** 1989 Oct;83(5):555–7

Experience in 300 cases of CT-directed stereotactic surgery for lesion biopsy and aspiration of haematoma. Thomas DG, et al. **Br J Neurosurg** 1989;3(3):321–5

The effects of indomethacin on renal function and intracranial hemorrhage in infants with patent ductus arteriosus. Davis JM, et al. **Dev Pharmacol Ther** 1990;14(1):15–9

Acute haemorrhagic leucoencephalitis of brainstem and cerebellum. Sharma SC, et al. **Indian J Pathol Microbiol** 1990 Apr;33(2):185–7

Morphometric analysis of the human infant brain: effects of intraventricular hemorrhage and periventricular leukomalacia. de la Monte SM, et al. **J Child Neurol** 1990 Apr;5(2):101–10

Mesencephalic haematoma: case report with autopsy study. de Mendonça A, et al. **J Neurol** 1990 Feb;237(1):55–8 (17 ref.)

Intracranial haemorrhages occurring in the idiopathic hypereosinophilic syndrome [letter] Roche S, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):440–1

Synaptic reorganization within the human central nervous system following injury [see comments] Grady MS, et al. **J Neurosurg** 1989 Oct;71(4):534–7 Comment in: J Neurosurg 1990 May;72(5):835.

White matter necrosis in very low birth weight infants: neuropathologic and ultrasonographic findings in infants surviving six days or longer. Paneth N, et al. **J Pediatr** 1990 Jun;116(6):975–84 (32 ref.)

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 26–1990. A 68-year-old man with a right hemiparesis, abulia, and multiple intracerebral hemorrhages. **N Engl J Med** 1990 Jun 28; 322(26):1866–78

Experimental intracerebral haematoma in the rat: sequential light microscopical changes. Jenkins A, et al. **Neuropathol Appl Neurobiol** 1989 Sep–Oct;15(5):477–86

Dementia with non-hereditary cystatin C angiopathy. Benedikz E, et al. **Prog Clin Biol Res** 1989;317:517–22

Neuropathologic consequences of internal carotid artery occlusion and hemorrhagic hypotension in baboons. Graham DI, et al. **Stroke** 1990 Mar;21(3):428–34

[Pathologic studies of pituitary changes with hypertensive hemorrhage] Zhang Y. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Dec; 22(6):322–3, 381 (Eng. Abstr.) **(Chi)**

[The sites of pericerebral effusion in infants] Strootbandt G. **Neurochirurgie** 1989;35(6):407–9, 411 (Eng. Abstr.) **(Fre)**

[Topography of hypoxia-induced cerebral extravasations] Kirschbaum M, et al. **Arch Gynecol Obstet** 1989; 245(1–4):348–50 **(Ger)**

[An autopsy case of lethal midline granuloma that terminated in an intracranial hemorrhage] Kurose A, et al. **Gan No Rinsho** 1990 Aug;36(9):1007–13 (Eng. Abstr.) **(Jpn)**

[A case of cerebral venous angioma; effectiveness of MRI for confirmation of its hemorrhagic change] Nakanishi Y, et al. **Rinsho Hoshasen** 1990 Apr;35(4):505–8 (Eng. Abstr.) **(Jpn)**

[Cerebrovascular disease in the elderly—a clinicopathological study of 73 autopsied cases with intracerebral hemorrhage] Kawahata N. **Rinsho Shinkeigaku** 1990 Mar;30(3):276–81 (Eng. Abstr.) **(Jpn)**

[Aphasia and size of hematoma in patients with left putaminal hemorrhage] Sugimoto K, et al. **Rinsho Shinkeigaku** 1989 May;29(5):574–8 (Eng. Abstr.) **(Jpn)**

[Clinico-morphologic correlations in cerebral infarction after recurrent hemorrhage] Tarnowska-Dziduszko E, et al. **Neuropatol Pol** 1989;27(3):411–25 (Eng. Abstr.) **(Pol)**

PHYSIOPATHOLOGY

A clinical analysis of 32 brainstem haemorrhages; with special reference to surviving but severely disabled cases. Komiyama M, et al. **Acta Neurochir (Wien)** 1989; 101(1–2):46–51

Hemorrhagic infarction: risk factors, clinical and tomographic features, and outcome. A case-control study. Beghi E, et al. **Acta Neurol Scand** 1989 Sep;80(3):226–31

Neurologic status and intracranial hemorrhage in very-low-birth-weight preterm infants. Outcome at 1 year and 5 years. Ford LM, et al. **Am J Dis Child** 1989 Oct; 143(10):1186–90

Absent effect of plasma vasopressin on rat brain blood flow during hemorrhage. Nakai M, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1360–8

Brainstem auditory evoked potentials and somatosensory evoked potentials in pontine haemorrhage. Correlations with clinical and CT findings. Ferbert A, et al. **Brain** 1990 Feb;113 (Pt 1):49–63

Disruption of semantic influence on writing following a left prefrontal lesion. Rapcsak SZ, et al. **Brain Lang** 1990 Feb; 38(2):334–44

Patent ductus arteriosus and cerebral circulation in preterm infants. Shortland DB, et al. **Dev Med Child Neurol** 1990 May;32(5):386–93

Somatosensory evoked potentials predict neuromotor outcome after periventricular hemorrhage. Willis J, et al. **Dev Med Child Neurol** 1989 Aug;31(4):435–9 (16 ref.)

Continuous cerebral electrical impedance monitoring in sick preterm infants. Colditz PB, et al. **Eur J Pediatr** 1990 Mar; 149(6):428–31

Photo-evoked eyelid microvibration in neonates with hyperosmolality. Yasuhara A, et al. **J Child Neurol** 1990 Jul;5(3):191–4

Mesencephalic hemorrhage—a report of 3 cases. Han SH, et al. **J Korean Med Sci** 1989 Mar;4(1):1–5

Pure sensory stroke due to midbrain haemorrhage limited to the spinothalamic pathway. Azouvi P, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1427–8

Pure agraphia after deep left hemisphere haematoma. Croisile B, et al. **J Neurol Neurosurg Psychiatry** 1990 Mar; 53(3):263–5

Brain shift, level of consciousness, and restoration of consciousness in patients with acute intracranial hematoma. Ross DA, et al. **J Neurosurg** 1989 Oct;71(4):498–502

Injection-corrosion cast study of the microcirculation of the brain in haemorrhagic and ischaemic disorders. Preliminary investigation. Maccotta V, et al. **J Neurosurg Sci** 1989 Apr–Jun;33(2):157–60

Effect of medical and social risk factors on outcome of prematurity and very low birth weight. Leonard CH, et al. **J Pediatr** 1990 Apr;116(4):620–6

Heterogeneity of cerebral vasoreactivity in preterm infants supported by mechanical ventilation. Pryds O, et al. **J Pediatr** 1989 Oct;115(4):638–45

Neurodevelopmental follow-up of infants with birthweight less than 801 grams with intracranial hemorrhage. Kilbride HW, et al. **J Perinatol** 1989 Dec;9(4):376–81

Progression of hypertensive intracerebral hemorrhage [see comments] Chen ST, et al. **Neurology** 1989 Nov; 39(11):1509–14 Comment in: Neurology 1990 Jul;40(7):1152–3.

Progressive cerebral hemorrhage [letter; comment] Cranston R, et al. **Neurology** 1990 Jul;40(7):1152–3 Comment on: Neurology 1989 Nov;39(11):1509–14.

Bodily neglect and orientational biases in unilateral neglect syndrome and normal subjects. Mark VW, et al. **Neurology** 1990 Apr;40(4):640–3

Diagonistic dyspraxia: case report and movement-related potentials. Tanaka Y, et al. **Neurology** 1990 Apr; 40(4):657–61

Intracranial pressure: a reliable criterion of brain death? Richard KE, et al. **Neurosurg Rev** 1989;12 Suppl 1:287–97

New model of hemorrhagic hypoxic-ischemic encephalopathy in newborn mice. Yoshioka H, et al. **Pediatr Neurol** 1989 Jul–Aug;5(4):221–5

[A study of reaction time in 120 patients with brain tumor, traumatic intracranial hematoma, cerebrovascular disease and epilepsy] Wang X. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Dec; 22(6):331–4, 381 (Eng. Abstr.) **(Chi)**

[Correlation of thalamic aphasia and cerebral blood flow] Rousseaux M, et al. **Rev Neurol (Paris)** 1990;146(5):345–53 (Eng. Abstr.) **(Fre)**

[Postoperative intracranial pressure in severe cases with hypertensive intracerebral hematoma] Nakayama K, et al. **No To Shinkei** 1989 Nov;41(11):1149–54 (Eng. Abstr.) **(Jpn)**

[Dimethyl sulfoxide as a corrector of disorders of cerebral hemodynamics, oxygen and carbohydrate metabolism of the brain and lipid peroxidation in the early period after intracerebral hemorrhage] Plotnikov MB, et al. **Biull Eksp Biol Med** 1990 Apr;109(4):357–9 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Prophylaxis of periventricular hemorrhage in preterm babies by vitamin E supplementation. Chiswick M, et al. **Ann N Y Acad Sci** 1989;570:197–204; discussion 205–7

Incidence and causes of intracranial hemorrhage in infancy: a prospective surveillance study after vitamin K prophylaxis. Matsuzaka T, et al. **Brain Dev** 1989;11(6):384–8

Is routine vitamin E administration justified in very low-birthweight infants? Law MR, et al. **Dev Med Child Neurol** 1990 May;32(5):442–50

Antenatal phenobarbital in preventing intraventricular hemorrhage in premature newborns. De Carolis S, et al. **Fetal Ther** 1988;3(4):224–9

Indomethacin reduces the risks of severe intraventricular hemorrhage [see comments] Bada HS, et al. **J Pediatr** 1989 Oct;115(4):631–7 Comment in: J Pediatr 1990 May;116(5):839–40.

Oral phenobarbital given antenatally to reduce neonatal intraventricular hemorrhage. A comparison between maternal and umbilical cord serum levels at delivery. Rayburn W, et al. **J Perinatol** 1989 Sep;9(3):268–70

Prophylaxis of cerebral hemorrhage. Stoica E. **Neurol Psychiatr (Bucur)** 1989 Jul–Sep;27(3):187–96 (45 ref.)

Maternal administration of vitamin K does not improve the coagulation profile of preterm infants. Kazzi NJ, et al. **Pediatrics** 1989 Dec;84(6):1045–50

Vitamin E for prevention of perinatal intracranial hemorrhage. Poland RL. **Pediatrics** 1990 May;85(5):865–7 (15 ref.)

[Prevention of hemorrhagic cerebral injury in newborn and premature infants subjected to mechanical ventilation] Gianturco F, et al. **Minerva Anestesiol** 1989 Apr; 55(4):149–57 (9 ref.) (Eng. Abstr.) **(Ita)**

PSYCHOLOGY

Early language ability as a function of ventricular dilatation associated with intraventricular hemorrhage. Bendersky M, et al. **J Dev Behav Pediatr** 1990 Feb;11(1):17–21

The effects of intraventricular hemorrhage on functional communication skills in preterm toddlers. Landry SH, et al. **J Dev Behav Pediatr** 1989 Dec;10(6):299–306

Periventricular echodensities detected by cranial ultrasonography: usefulness in predicting neurodevelopmental outcome in low-birth-weight, preterm infants. Bennett FC, et al. **Pediatrics** 1990 Mar;85(3 Pt 2):400–4

RADIOGRAPHY

CT indications for surgery and evaluation of prognosis in patients with spontaneous intracerebral haematomas. Maiuri F, et al. **Br J Neurosurg** 1990;4(2):155–60

Primary medullary hemorrhage. Weisberg LA, et al. **Comput Med Imaging Graph** 1989 Nov–Dec;13(6):487–90

The chronic expanding intracerebral hematoma. Weisberg LA, et al. **Comput Med Imaging Graph** 1990 Jan–Feb; 14(1):61–5

Evaluation of intracerebral hematoma by computed tomography. Azar-Kia B, et al. **Comput Tomogr** 1977; 1(4):339–48

Unexpected brain hemorrhages and the value of computerized tomography. Greenberg JO, et al. **Comput Tomogr** 1977;1(4):349–57

Computer angiotomography of a bleeding intracranial aneurysm. Murphy JS, et al. **J Arkansas Med Soc** 1989 Oct;86(5):197–9

Postoperative contrast enhancement in brain tumors and intracerebral hematomas: CT study. Wakai S, et al. **J Comput Assist Tomogr** 1990 Mar–Apr;14(2):267–71

Chronic encapsulated intracerebral haematoma: pathogenetic and diagnostic considerations. Fiumara E, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1296–9

Development of multifocal haemorrhage in a cerebral infarct during computed tomography [letter] Franke CL, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):531–2

Ultra-early evaluation of intracerebral hemorrhage. Broderick JP, et al. **J Neurosurg** 1990 Feb;72(2):195–9

Head to head over Harrogate [editorial] **Lancet** 1990 Mar 24;335(8691):695–6

Neonatal brain abscess with intracystic hemorrhage—case report. Nakagawa Y, et al. **Neurol Med Chir (Tokyo)** 1989 Sep;29(9):861–3

Megadolichobasilar artery and acute cerebrovascular pathology. Maiuri F, et al. **Neurol Res** 1990 Mar;12(1):54–6

Prognostic significance of ventricular blood in supratentorial hemorrhage: a volumetric study. Young WB, et al. **Neurology** 1990 Apr;40(4):616–9

Nontraumatic temporal subcortical hemorrhage. Clinical-computed tomographic analysis. Weisberg LA, et al. **Neuroradiology** 1990;32(2):137–41

Traumatic intracerebral hematomas in infancy. McLaurin RL, et al. **Neurosurg Rev** 1989;12 Suppl 1:219–24

A peculiar intracerebral hemorrhage: the gliding contusion, its relationship to diffuse brain damage. Sganzerla EP, et al. **Neurosurg Rev** 1989;12 Suppl 1:215–8

Acute tissue tear hemorrhages of the brain: computed tomography and clinicopathological correlations. Wilberger JE Jr, et al. **Neurosurgery** 1990 Aug;27(2):208–13

Thalamic hemorrhage with intraventricular hemorrhage in the full-term newborn. Roland EH, et al. **Pediatrics** 1990 May;85(5):737–42

Hemorrhage in intracerebral arteriovenous malformations: angiographic determinants. Marks MP, et al. **Radiology** 1990 Sep;176(3):807–13

Spontaneous midbrain hemorrhage. Fingerote RJ, et al. **South Med J** 1990 Mar;83(3):280–2

Relation of leukoaraiosis to lesion type in stroke patients. Hijdra A, et al. **Stroke** 1990 Jun;21(6):890–4

Repetitive intratumoral hemorrhage in medulloblastoma. A case report. Tachibana O, et al. **Surg Neurol** 1990 Jun; 33(6):378–83

Intracerebral hematoma following removal of chronic subdural hematoma. Report of two cases. Turtas S, et al.

Zentralbl Neurochir 1989;50(2):115–7
[Diagnosis and treatment of delayed intracranial hematoma] Xia GD. **Chung Hua Wai Ko Tsa Chih** 1989 Nov; 27(11):674–5, 702 (Eng. Abstr.) **(Chi)**
[Subarachnoid hemorrhage and intracerebral hematoma in injury of the middle meningeal artery (aneurysma spurium)] Albert FK, et al. **Zentralbl Neurochir** 1989;50(3–4):153–6 (Eng. Abstr.) **(Ger)**
[Clinical analysis of 24 cases of caudate hemorrhage] Asakura K, et al. **Neurol Med Chir (Tokyo)** 1989 Dec;29(12):1107–12 (Eng. Abstr.) **(Jpn)**
[Clinical course of acute intracerebral hematoma which shows a fluid level presentation by X-ray CT] Kurokawa Y, et al. **No To Shinkei** 1989 Aug;41(8):771–6 (Eng. Abstr.) **(Jpn)**
[Massive intracerebral hemorrhage due to convexity meningioma] Kurokawa H, et al. **Rinsho Hoshasen** 1989 Jun;34(6):723–6 (Eng. Abstr.) **(Jpn)**
[Cerebral ischemia and hemorrhage; computed tomography and angiography] Okudera T, et al. **Rinsho Hoshasen** 1989 Jun;34(6):647–56 (Eng. Abstr.) **(Jpn)**
[Diagnosis of traumatic intracranial hematoma—analysis of methods and organizational problems] Samardžić M, et al. **Acta Chir Iugosl** 1989;36 Suppl 2:718–20 **(Scr)**
[Prognostic value of CAT scanning in spontaneous supratentorial cerebral hemorrhage. Multivariate study in 114 patients] Astarloa R, et al. **Arch Neurobiol (Madr)** 1989 Sep–Oct;52(5):234–8 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

[The early and delayed SPECT images of 123I-IMP and rCBF measurement] Odano I. **Rinsho Hoshasen** 1989 Jun; 34(6):667–73 (Eng. Abstr.) **(Jpn)**

REHABILITATION

Aphasia in left-handers. Comparison of aphasia profiles and language recovery in non-right-handed and matched right-handed patients. Basso A, et al. **Brain Lang** 1990 Feb; 38(2):233–52
[Predicting recovery of ambulatory function after hypertensive putaminal hemorrhage by multivariate analysis of acute-phase clinical data] Fukuishi Y, et al. **Neurol Med Chir (Tokyo)** 1989 Jun;29(6):503–9 (Eng. Abstr.) **(Jpn)**

SURGERY

Subtemporal decompression: radiological observations and current surgical experience. Alexander E, et al. **Br J Neurosurg** 1987;1(4):427–33
Emergency surgery for haematoma-forming aneurysmal haemorrhage. Page RD, et al. **Br J Neurosurg** 1990; 4(3):199–204
Reappearance of brain-stem auditory evoked potentials after surgical treatment of a brain-stem hemorrhage: contributions to the question of wave generation. Zanette G, et al. **Electroencephalogr Clin Neurophysiol** 1990 Mar–Apr;77(2):140–4
Early surgery for ruptured cerebral aneurysm. Vajda J, et al. **Int Surg** 1990 Apr–Jun;75(2):123–6
Surgery in spontaneous intra-cerebral haematoma. Nagaraja D, et al. **J Assoc Physicians India** 1989 Dec;37(12):745–7
Hypertensive intracerebral haemorrhage: is there a role for surgery? [editorial] Yeolekar ME, et al. **J Assoc Physicians India** 1989 Dec;37(12):741–2 (20 ref.)
Anesthetic care of a patient with an intracranial hemorrhage after thrombolytic therapy. Lubarsky DA, et al. **J Clin Anesth** 1990 Jul–Aug;2(4):276–9
Recurrent hematomas following craniotomy for traumatic intracranial mass. Bullock R, et al. **J Neurosurg** 1990 Jan; 72(1):9–14
Indications for surgical treatment of putaminal hemorrhage. Comparative study based on serial CT and time-course analysis. Fujitsu K, et al. **J Neurosurg** 1990 Oct; 73(4):518–25
Surgical management of hematomas of the brain stem. Konovalov AN, et al. **J Neurosurg** 1990 Aug;73(2):181–6
Considerations about the surgical indication of the spontaneous cerebral haematomas. Coraddu M, et al. **J Neurosurg Sci** 1990 Jan–Mar;34(1):35–9
Invagination of a shunt valve: an unusual complication—case report. Yoshida M, et al. **Neurol Med Chir (Tokyo)** 1990 Mar;30(3):198–200
Neurosurgical management of cerebellar hemorrhage. Waidhauser E, et al. **Neurosurg Rev** 1990;13(3):211–7
A new microsurgical approach to cerebrovascular lesions of the sylvian point: report of two cases. Ausman JI, et al. **Surg Neurol** 1990 Jul;34(1):48–51
Surgery and monitoring of traumatic intracerebral hematomas [letter; comment] Wilkinson HA. **Surg Neurol** 1990 Apr;33(4):296–7 Comment on: Surg Neurol 1989 Sep;32(3):181–7.
Ventricular shunting for hydrocephalus following intraventricular haemorrhage. Roberts JP, et al. **Z Kinderchir** 1989 Dec;44 Suppl 1:32–4
[Subacute brainstem hematoma. A surgically treated case] Cambon H, et al. **Rev Neurol (Paris)** 1990;146(4):312–4 (17 ref.) (Eng. Abstr.) **(Fre)**
[Depressed fracture of the calvaria] Langmayr JJ, et al. **Unfallchirurg** 1990 Jan;93(1):1–3 (Eng. Abstr.) **(Ger)**
[Indications and results of surgery of spontaneous intracerebral hematoma] Fried H, et al. **Zentralbl Neurochir** 1989;50(2):87–8 (Eng. Abstr.) **(Ger)**
[Two cases of subcortical hemorrhage with asymptomatic occlusion of the main trunk of cerebral artery] Ezura M, et al. **No Shinkei Geka** 1990 Apr;18(4):379–83 (Eng. Abstr.) **(Jpn)**
[Removal of hypertensive intracerebral hematoma with stereotactic aqua-stream and aspirator (SAS & A)] Ito H, et al. **No Shinkei Geka** 1989 Oct;17(10):939–43 (Eng. Abstr.) **(Jpn)**
[Demonstration of a vascular lesion by intraoperative portable DSA in a case of intracerebral hematoma with impending herniation] Meguro K, et al. **No Shinkei Geka** 1990 May;18(5):453–6 (Eng. Abstr.) **(Jpn)**
[Stereotactic aspiration in hypertensive pontine hemorrhage: comparative study with conservative therapy] Takahama H, et al. **No Shinkei Geka** 1989 Aug;17(8):733–9 (Eng. Abstr.) **(Jpn)**
[Evaluation of CT-guided stereotaxic aspiration for thalamic hemorrhage by single photon emission CT] Ueda M, et al. **No Shinkei Geka** 1990 Jan;18(1):25–31 (Eng. Abstr.) **(Jpn)**
[Massive traumatic hematoma localized in the basal ganglia: treatment by CT-guided stereotactic aspiration surgery] Yamamoto F, et al. **No Shinkei Geka** 1990 Jun;18(6):563–5 (Eng. Abstr.) **(Jpn)**
[Stereotactic aspiration using coordinate software for hypertensive intracerebral hematomas] Yanaka K, et al. **No Shinkei Geka** 1990 Jul;18(7):623–9 (16 ref.) (Eng. Abstr.) **(Jpn)**
[Clinical study of hypertensive cerebellar hemorrhage: surgical indication and measurement of volume of hematoma] Yoshimoto H, et al. **No Shinkei Geka** 1989 Dec; 17(12):1105–10 (Eng. Abstr.) **(Jpn)**
[Acute intracranial hematomas in full term neonates] Lundar T, et al. **Tidsskr Nor Laegeforen** 1990 Jun 20;110(16):2063–5 (Eng. Abstr.) **(Nor)**
[Diagnosis and surgical treatment of traumatic hematomas of the posterior cranial fossa] Pedachenko EG, et al. **Klin Khir** 1989;(12):17–9 (Eng. Abstr.) **(Rus)**

THERAPY

Cerebral electrophysiologic effects of resuscitation with hypertonic saline-dextran after hemorrhage. Ducey JP, et al. **Crit Care Med** 1990 Jul;18(7):744–9
Conservative management of cerebellar hemorrhage in pregnancy. Kawasaki N, et al. **Int J Gynaecol Obstet** 1990 Apr;31(4):365–9 (8 ref.)
Management of intraventricular haemorrhage secondary to ruptured arteriovenous malformation in a child with von Willebrand's disease [letter] Osenbach RK, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1452–4
Surgical vs. conservative treatment for spontaneous ICH [letter; comment] Sahuquillo J, et al. **J Neurosurg** 1990 Jan; 72(1):152–5 Comment on: J Neurosurg 1989 May;70(5):755–8.
Intracranial hemorrhage during pregnancy and puerperium. Maymon R, et al. **Obstet Gynecol Surv** 1990 Mar; 45(3):157–9 (13 ref.)
[Clinical research on 50 cases of stable stage apoplexy treated by acupuncture using brain activating and consciousness regaining principles] Li L, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Nov;9(11):653–5, 643–4 (Eng. Abstr.) **(Chi)**
[The role of surgery and low molecular weight heparin in the treatment of cerebral venous thrombosis. Apropos of 2 cases] Nguyen JP, et al. **Agressologie** 1989 May; 30(6):351–2 (Eng. Abstr.) **(Fre)**
[Emergency stereotaxic cerebral punctures] Cordoliani YS, et al. **J Radiol** 1989 Aug–Sep;70(8–9):465–70 (14 ref.) (Eng. Abstr.) **(Fre)**
[Treatment of spontaneous intracerebral hemorrhage—operative or conservative?] Dei-Anang K, et al. **Radiologe** 1989 Sep;29(9):423–6 (35 ref.) (Eng. Abstr.) **(Ger)**
[Conservative treatment of intracranial hematomas and the dynamics of their resorption] Bidziński J, et al. **Neurol Neurochir Pol** 1989 Jan;23(1):27–34 (Eng. Abstr.) **(Pol)**
[Pathologic brain cavity after idiopathic intracerebral hematoma treated conservatively and surgically] Kojder I, et al. **Pol Przegl Radiol** 1988 Nov–Dec;52(6):253–5 (Eng. Abstr.) **(Pol)**
[Conservative treatment of post-traumatic intracerebellar hematoma] Buczek M, et al. **Wiad Lek** 1989 Apr 30; 42(8):550–5 (Eng. Abstr.) **(Pol)**

VETERINARY

Amyloid angiopathy with cerebral hemorrhage and senile plaque in aged dogs. Uchida K, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):605–11

CEREBRAL INFARCTION

Prevention, treatment and prognosis of completed ischemic stroke (cerebral infarction). Murungi JH. **Cent Afr J Med** 1989 Jul;35(7):434–40 (58 ref.)
Symposium on Lacunar Infarcts: Clinical Aspects and Diagnostic Examinations. Ravenna, April 29, 1989. Proceedings. **Eur Neurol** 1989;29 Suppl 2:1–49

BLOOD

Platelet 5-HT uptake in post-stroke depression. Barry S, et al. **Acta Psychiatr Scand** 1990 Jul;82(1):88–9
A rapid electrophoretic method for the detection of serum Lp(a) lipoprotein. Kawakami K, et al. **Clin Chim Acta** 1989 Nov;185(2):147–55
Cutaneous thrombosis, cerebrovascular thrombosis, and lupus anticoagulant—the Sneddon syndrome. Report of 10 cases. Alegre VA, et al. **Int J Dermatol** 1990 Jan–Feb;29(1):45–9 (58 ref.)
Platelet count, mean platelet volume and their relation to prognosis in cerebral infarction. D'Erasmo E, et al. **J Intern Med** 1990 Jan;227(1):11–4
Do leukocytes have a role in the cerebral no-reflow phenomenon? [letter] Mercuri M, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):536
Antithrombin-III deficiency in ischemic stroke [letter] Ernerudh J, et al. **Stroke** 1990 Jun;21(6):967
Prognostic significance of fibrinopeptide A in survivors of cerebral infarction. Landi G, et al. **Stroke** 1990 Mar; 21(3):424–7
The serial hemostasis-related changes in patients with cerebral infarction: comparison between progressing and non-progressing stroke. Ho CH, et al. **Thromb Res** 1989 Dec 1;56(5):635–47
[Fluidity of erythrocyte membranes in patients with ischemic cerebral vascular disease] Li QS, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Oct;9(10):587–8, 579–80 (Eng. Abstr.) **(Chi)**
[A study of erythrocyte deformability using an ektacytometer in normal adults and in patients with acute cerebral infarction] Gao SJ. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Jun; 22(3):155–6, 191 (Eng. Abstr.) **(Chi)**
[Clinical analysis of blood lipids in 117 patients with acute cerebrovascular diseases in the Hui, Han and Weiwuer nationalities of Wulumuqi District] Tan Y. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1990 Feb; 23(1):41–3, 63–4 (Eng. Abstr.) **(Chi)**
[Relation of the changes in hemorheologic indices and the site and size of cerebral infarction] Zhou G, et al. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1990 Feb; 23(1):31–4, 63 (Eng. Abstr.) **(Chi)**
[Infection and tissue ischemia: what role does the rheologic behavior of blood cells play?] Ciufetti G, et al. **Z Gesamte Inn Med** 1989 Sep 15;44(18):555–7 (Eng. Abstr.) **(Ger)**
[Application of the box plot to evaluate serum lipid levels and apolipoprotein levels in patients with cerebral infarction and diabetes mellitus] Konemori G, et al. **Nippon Ronen Igakkai Zasshi** 1990 Jan;27(1):22–7 (Eng. Abstr.) **(Jpn)**
[A case of recurrent multiple cerebral infarctions with protein C abnormality] Sasaki M, et al. **Rinsho Shinkeigaku** 1989 Sep;29(9):1136–9 (Eng. Abstr.) **(Jpn)**
[Familial antithrombin III abnormality accompanied with progressing ischemic stroke] Sasaki Y, et al. **Rinsho Shinkeigaku** 1989 Apr;29(4):450–5 (20 ref.) (Eng. Abstr.) **(Jpn)**
[Behavior of ketone bodies and some carbohydrate metabolism indicators in the blood of patients with cerebral infarction in the earliest and later stages after intravenous glucose loading] Kawiak W, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:285–92 (Eng. Abstr.) **(Pol)**
[Behavior of ketone bodies and some carbohydrate metabolism indicators in the blood of patient with various features of stroke after intravenous glucose loading] Nowicki J. **Ann Univ Mariae Curie Sklodowska [Med]** 1985; 40:275–83 (Eng. Abstr.) **(Pol)**
[Behavior of ketone bodies and some carbohydrate metabolism indicators in the blood of patients with various features of paralytic stroke] Nowicki J. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:257–65 (Eng. Abstr.) **(Pol)**
[Serum lipids and lipoproteins in patients with cerebrovascular disorders] Lorenc J, et al. **Przegl Lek** 1989; 46(9):681–5 (Eng. Abstr.) **(Pol)**
[Subfractions of high-density cholesterol lipoproteins in patients with ischemic cerebrovascular disorders] Jovičić A, et al. **Vojnosanit Pregl** 1989 Jul–Aug;46(4):247–9 (Eng. Abstr.) **(Scr)**
[Blood glucose as a prognostic factor in cerebral infarction] Peinado E, et al. **Neurologia** 1988 Mar–Apr;3(2):50–3 (20 ref.) (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

[Behavior of ketone bodies and some carbohydrate metabolism indicators in the cerebrospinal fluid of patients with various features of stroke] Nowicki J. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:267–73 (Eng. Abstr.) **(Pol)**

CHEMICALLY INDUCED

Acute cocaine abuse associated with cerebral infarction. Seaman ME. **Ann Emerg Med** 1990 Jan;19(1):34–7
[Neurologic complications of cocaine abuse] Van Viet H, et al. **Presse Med** 1990 Jun 2;19(22):1045–9 (51 ref.) (Eng. Abstr.) **(Fre)**
[Generalized brain edema and cerebral infarct in ergotamine abuse: imaging by computerized tomography, magnetic

resonance tomography and angiography] Toedt C, et al. **Digitale Bilddiagn** 1989 Sep;9(3):107–9 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Do single right hemisphere infarcts or transient ischaemic attacks result in aprosody? Brådvik B, et al. **Acta Neurol Scand** 1990 Jan;81(1):61–70

Effect of glycerol on ischemic edema evaluated by somatosensory evoked potentials. Suga S, et al. **Adv Neurol** 1990;52:185–94

Nuclear third nerve palsy and somnolence due to stroke—a case report. Chee MW, et al. **Ann Acad Med Singapore** 1990 May;19(3):382–4

Persistent mutism and dysphagia of acute onset due to bilateral internal capsule infarction. Chee MW, et al. **Ann Acad Med Singapore** 1990 May;19(3):393–5

The dysarthria–clumsy hand syndrome: a distinct clinical entity related to pontine infarction. Glass JD, et al. **Ann Neurol** 1990 May;27(5):487–94

Peduncular hallucinosis associated with isolated infarction of the substantia nigra pars reticulata. McKee AC, et al. **Ann Neurol** 1990 May;27(5):500–4

Lacunar infarctions and dysarthria [letter] Arboix A, et al. **Arch Neurol** 1990 Feb;47(2):127

Anterior cerebral artery territory infarction in the Lausanne Stroke Registry. Clinical and etiologic patterns. Bogousslavsky J, et al. **Arch Neurol** 1990 Feb;47(2):144–50

Isolated inferior oblique paresis from brain–stem infarction. Perspective on oculomotor fascicular organization in the ventral midbrain tegmentum. Castro O, et al. **Arch Neurol** 1990 Feb;47(2):235–7 (17 ref.)

Vertical one-and-a-half syndrome. Supranuclear downgaze paralysis with monocular elevation palsy. Deleu D, et al. **Arch Neurol** 1989 Dec;46(12):1361–3

Cerebral infarction and intracranial arterial thrombosis. Necropsy studies and clinical implications. Moossy J. **Arch Neurol** 1966 Feb;14(2):119–23

Small deep cerebral infarcts associated with occlusive internal carotid artery disease. A hemodynamic phenomenon? Waterston JA, et al. **Arch Neurol** 1990 Sep; 47(9):953–7

Burning oral and mid–facial pain in ventral pontine infarction. Reutens DC. **Aust N Z J Med** 1990 Jun;20(3):249–50

Prior neurologic illness and the syndrome of irreversible lithium–effectuated neurotoxicity (SILENT). Adityanjee, et al. **Aust N Z J Psychiatry** 1989 Sep;23(3):422–4

Kleine–Levin syndrome 15 years later. Chiu HF, et al. **Aust N Z J Psychiatry** 1989 Sep;23(3):425–7

Central pain complicating infarction following subarachnoid haemorrhage. Bowsher DR, et al. **Br J Neurosurg** 1989; 3(4):435–41

Ischaemic stroke in the basal ganglia and internal capsule in childhood. Kappelle LJ, et al. **Brain Dev** 1989; 11(5):283–92

Lacunar infarction: a 12 month study. Reimers J, et al. **Clin Exp Neurol** 1987;24:28–32

Loss of motivation for speaking with bilateral lacunes in the anterior limb of the internal capsule. Croisile B, et al. **Clin Neurol Neurosurg** 1989;91(4):325–7

Loss of motivation for speaking with bilateral lacunes in the anterior limb of the internal capsule [letter] Laitinen LV. **Clin Neurol Neurosurg** 1990;92(2):177–8

Crossed aphasia in early childhood. Burd L, et al. **Dev Med Child Neurol** 1990 Jun;32(6):539–46

Ataxic hemiparesis associated with transcortical motor aphasia. Iragui VJ. **Eur Neurol** 1990;30(3):162–6

Anton syndrome and cortical blindness due to bilateral occipital infarction. Misra M, et al. **Indian J Ophthalmol** 1989 Oct–Dec;37(4):196

Spontaneous hemiballism and disappearance of parksinsonism following contralateral lenticular lacunar infarct. Scoditti U, et al. **Ital J Neurol Sci** 1989 Dec;10(6):575–7

Depression, episodic behavioral dyscontrol, and polydipsia following right temporal lobe damage. Rubenstein JL, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May; 29(3):472–4

Clinical features of occipital infarction. Simpson DE. **J Am Optom Assoc** 1990 Jun;61(6):465–70

Male sexual dysfunction after stroke. Agarwal A, et al. **J Assoc Physicians India** 1989 Aug;37(8):505–7

Vascular diseases and oral infections. Syrjänen J. **J Clin Periodontol** 1990 Aug;17(7 (Pt 2)):497–500 (51 ref.)

Acute hemichorea due to infarction in the corona radiata. Barinagarrementeria F, et al. **J Neurol** 1989 Sep; 236(6):371–2

Basilar artery migraine. Case report. McDonald JV. **J Neurosurg** 1990 Feb;72(2):289–91

Risk factors for the complication of cerebral infarction in Japanese patients with acute myocardial infarction. Nakaoka T, et al. **Jpn Heart J** 1989 Sep;30(5):635–43

Paroxysmal kinesigenic dystonic choreoathetosis associated with a thalamic infarct. Camac A, et al. **Mov Disord** 1990; 5(3):235–8

Complex hyperkinesia during recovery from left temporoparietal cortical infarction. Ferbert A, et al. **Mov Disord** 1990;5(1):78–82

Global aphasia without hemiparesis following prerolandic infarction. Deleval J, et al. **Neurology** 1989 Nov; 39(11):1532–5

'Peduncular hallucinosis' following paramedian thalamic infarction. Feinberg WM, et al. **Neurology** 1989 Nov; 39(11):1535–6

Bilateral infarction of the medullary pyramids. Milandre L, et al. **Neurology** 1990 Mar;40(3 Pt 1):556

Parkinsonism due to a basal ganglia lacunar state: clinicopathologic correlation. Murrow RW, et al. **Neurology** 1990 Jun;40(6):897–900

Facial neglect. Young AW, et al. **Neuropsychologia** 1990; 28(5):391–415

Abnormal respiratory control and perinatal brainstem and cerebellar infarctions [letter; comment] Iannaccone ST, et al. **Pediatr Neurol** 1990 Mar–Apr;6(2):141 Comment on: Pediatr Neurol 1989 Jul–Aug;5(4):211–5.

Catatonia following biparietal infarction with spontaneous recovery. Howard RJ, et al. **Postgrad Med J** 1989 May; 65(763):316–7

Alpha–2 adrenergic receptor function in post–stroke depression. Barry S, et al. **Psychol Med** 1990 May; 20(2):305–9

Clinical neurological, electrophysiological, and cerebral CT scan findings in systemic lupus erythematosus. Omdal R, et al. **Scand J Rheumatol** 1989;18(5):283–9

Ataxic hemiparesis following thalamic infarction. Boiten J, et al. **Stroke** 1990 Feb;21(2):339–40

Deep cerebral infarcts in the People's Republic of China [published erratum appears in Stroke 1990 Aug;21(8):1238] Davis LE, et al. **Stroke** 1990 Mar;21(3):394–6

Transient hemiballism and striatal infarct [letter] Defebvre L, et al. **Stroke** 1990 Jun;21(6):967–8

Treatment of right hemispheric cerebral infarction by hemicraniectomy. Delashaw JB, et al. **Stroke** 1990 Jun; 21(6):874–81

Lacunar pontine infarction with hemifacial spasm as the initial symptom [letter] Kawakami M, et al. **Stroke** 1990 Aug;21(8):1236

Cerebral infarction in hereditary spherocytosis [letter] van Hilten JJ, et al. **Stroke** 1989 Dec;20(12):1755–6

Relative scotoma and statokinetic dissociation (Riddoch's phenomenon) from occipital lobe dysfunction. Finkelstein JI, et al. **Trans Pa Acad Ophthalmol Otolaryngol** 1989; 41:789–92

[The Balint syndrome] Wang MY, et al. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Apr; 22(2):84–5, 126 (Eng. Abstr.) **(Chi)**

[Pharmacotherapy to control agitation in patients with cognitive deficits] Hottin P. **Can J Psychiatry** 1990 Apr; 35(3):270–2 (Eng. Abstr.) **(Fre)**

[Mood disorders and right hemisphere infarction] Danel T, et al. **Encephale** 1989 Nov–Dec;15(6):549–53 (32 ref.) (Eng. Abstr.) **(Fre)**

[Prevention of deep venous thrombosis of the leg by a very low molecular weight heparin fraction (CY 222) in patients with hemiplegia following cerebral infarction: a randomized pilot study (30 patients)] Elias A, et al. **Rev Med Interne** 1990 Jan–Feb;11(1):95–8 (Eng. Abstr.) **(Fre)**

[Systematized temporal delusion and hearing disorders of cortical origin] Assal G, et al. **Rev Neurol (Paris)** 1990; 146(4):249–55 (29 ref.) (Eng. Abstr.) **(Fre)**

[Isolated paralysis of the ocular motor nerve caused by infarction of fascicular fibers] Collard M, et al. **Rev Neurol (Paris)** 1990;146(2):128–32 (23 ref.) (Eng. Abstr.) **(Fre)**

[Bilateral, symmetrical and simultaneous putamino–capsulo–caudal infarction] De Smet Y, et al. **Rev Neurol (Paris)** 1990;146(6–7):415–9 (Eng. Abstr.) **(Fre)**

[Hemiballismus. Hemichorea. Striatal infarction] Destée A, et al. **Rev Neurol (Paris)** 1990;146(2):150–2 (17 ref.) (Eng. Abstr.) **(Fre)**

[Callosal disconnection syndrome caused by left hemisphere infarction] Habib M, et al. **Rev Neurol (Paris)** 1990; 146(1):19–24 (Eng. Abstr.) **(Fre)**

[Right hemiplegia and spatial neglect with apraxia and agraphia without aphasia in a right–handed patient] Lanoe Y, et al. **Rev Neurol (Paris)** 1990;146(5):368–71 (Eng. Abstr.) **(Fre)**

[Vascular dementia] Kuzuhara S. **Nippon Naika Gakkai Zasshi** 1990 Apr 10;79(4):496–501 **(Jpn)**

[Arrhythmia in patients with cerebral infarction evaluated by Holter ECG] Akashi N. **Nippon Ronen Igakkai Zasshi** 1989 Mar;26(2):153–9 (Eng. Abstr.) **(Jpn)**

[A case of progeria syndrome with cerebral infarction] Naganuma Y, et al. **No To Hattatsu** 1990 Jan;22(1):71–6 (Eng. Abstr.) **(Jpn)**

[Reading and writing deficit in cases of localized infarction of the left anterior thalamus] Araki S, et al. **No To Shinkei** 1990 Jan;42(1):65–72 (Eng. Abstr.) **(Jpn)**

[A case of medullary infarction presented lateral medullary syndrome and respiratory arrest after ataxic respiration] Hashimoto Y, et al. **Rinsho Shinkeigaku** 1989 Aug; 29(8):1017–22 (18 ref.) (Eng. Abstr.) **(Jpn)**

[Selective impairment of downward gaze; report of two cases of midbrain and bilateral paramedian thalamic infarction] Kitano K, et al. **Rinsho Shinkeigaku** 1989 May;29(5):593–8 (Eng. Abstr.) **(Jpn)**

[Multi–focal delayed neuronal damage after transient regional ischemia—mechanism of vascular dementia] Nagasawa H, et al. **Rinsho Shinkeigaku** 1990 Apr;30(4):396–401 (Eng. Abstr.) **(Jpn)**

[A case of ischemic oculopathy followed by border zone infarction] Oda Y, et al. **Rinsho Shinkeigaku** 1989 Jun; 29(6):747–53 (Eng. Abstr.) **(Jpn)**

[Right–left dissociation of voluntary eyelid closure following right middle cerebral artery infarction] Ohkawa S, et al. **Rinsho Shinkeigaku** 1990 Mar;30(3):294–8 (Eng. Abstr.) **(Jpn)**

[Brainstem infarcts presented medial longitudinal fasciculus (MLF) syndrome and cerebellar ataxia—report of three cases] Sakakibara S, et al. **Rinsho Shinkeigaku** 1990 May; 30(5):533–9 (22 ref.) (Eng. Abstr.) **(Jpn)**

[Capsular pseudobulbar mutism in a patient of lacunar state] Satomi K, et al. **Rinsho Shinkeigaku** 1990 Mar; 30(3):299–303 (Eng. Abstr.) **(Jpn)**

["Drop hand" resulting from cerebral infarction—case report] Takamiya K, et al. **Rinsho Shinkeigaku** 1989 Jun; 29(6):778–80 (Eng. Abstr.) **(Jpn)**

[Clinical and etiological study of crossed cerebellar diaschisis. Report of two cases] Tanaka M, et al. **Rinsho Shinkeigaku** 1989 Apr;29(4):469–74 (Eng. Abstr.) **(Jpn)**

[Korsakoff's syndrome as a prominent feature of bilateral paramedian thalamic infarction—a case report] Ujike H, et al. **Rinsho Shinkeigaku** 1989 Aug;29(8):1055–8 (Eng. Abstr.) **(Jpn)**

[Supranuclear vertical gaze palsy: bilateral thalamo–mesencephalic lesions demonstrated by MRI] Yamamoto T. **Rinsho Shinkeigaku** 1989 Apr;29(4):517–9 (Eng. Abstr.) **(Jpn)**

[A case of micrographia with the right hand due to left putaminal infarction] Yoshida T, et al. **Rinsho Shinkeigaku** 1989 Sep;29(9):1149–51 (Eng. Abstr.) **(Jpn)**

[Clinico–morphological characteristics of complex types of stroke] Akimov GA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(7):88–92 (Eng. Abstr.) **(Rus)**

[Pure sensory hemisyndromes caused by infarctions in the pons] Antigüedad AR, et al. **Neurologia** 1990 May; 5(5):164–6 (Eng. Abstr.) **(Spa)**

[Locked–in syndrome of reversible clinical course] Arboix A, et al. **Neurologia** 1990 Apr;5(4):137–9 (28 ref.) (Eng. Abstr.) **(Spa)**

[Pure hemifacial sensory ictus secondary to lacunar infarct in semioval center] Arias M, et al. **Neurologia** 1986 Jul–Aug;1(4):154–5 (Eng. Abstr.) **(Spa)**

[Transcortical motor aphasia and motor negligence] Bagunyà J, et al. **Neurologia** 1986 Jan–Feb;1(1):39–43 (Eng. Abstr.) **(Spa)**

[Locked–in syndrome of mesencephalic origin (letter)] Calatayud T, et al. **Neurologia** 1988 Sep–Oct;3(5):204–5 **(Spa)**

[Late recovery of macular vision in cortical blindness (letter)] Díaz M, et al. **Neurologia** 1989 Jul–Aug;4(6):219–20 **(Spa)**

[Crossed minor hemisphere syndrome in a right–handed man] Ferrero Arias J, et al. **Neurologia** 1988 Mar–Apr;3(2):71–6 (59 ref.) (Eng. Abstr.) **(Spa)**

[Cerebral infarction in full–term newborn infants with convulsions] Devilat M, et al. **Rev Chil Pediatr** 1988 Sep–Oct;59(5):334–8 (Eng. Abstr.) **(Spa)**

CONGENITAL

Congenital difficulties with swallowing and breathing associated with maternal polyhydramnios: neurocristopathy or medullary infarction? Alvord EC Jr, et al. **J Child Neurol** 1989 Oct;4(4):299–306 (50 ref.)

DIAGNOSIS

In vivo 1H spectroscopy of the human brain at 1.5 tesla. Preliminary experience at a clinical installation. Henriksen O, et al. **Acta Radiol** 1990 Mar;31(2):181–6

MR evaluation of brain iron in children with cerebral infarction. Cross PA, et al. **AJNR** 1990 Mar–Apr; 11(2):341–8

Cerebral angiography and ultrasonic quantitative flow measurement of common carotid artery in patients with cerebral infarction. Imamura S, et al. **Clin Ther** 1989 Nov–Dec;11(6):727–35

Epileptic seizures following ischaemic cerebral infarction. Clinical picture, CT findings and prognosis. Hornig CR, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(6):379–83

Somatosensory–evoked potentials in the diagnosis of lacunar syndromes: comparison with EEG findings. Abbruzzese G, et al. **Eur Neurol** 1989;29 Suppl 2:42–3

Lacunar cerebral infarct and nuclear magnetic resonance. A review of sixty cases. Arboix A, et al. **Eur Neurol** 1990; 30(1):47–51

Electrophysiological techniques in the assessment of aging brain: lacunar state and differential diagnosis. Onofrij M, et al. **Eur Neurol** 1989;29 Suppl 2:44–7 (10 ref.)

Magnetic resonance imaging. Trevisan C, et al. **Eur Neurol** 1989;29 Suppl 2:33–5 (13 ref.)

Role of MRI in the diagnosis of Mills syndrome. Dalla Volta G, et al. **Ital J Neurol Sci** 1989 Oct;10(5):519–21

High intensity areas on noncontrast T1–weighted MR images in cerebral infarction [published erratum appears in J Comput Assist Tomogr 1990 Sep–Oct;14(5):863] Nabatame H, et al. **J Comput Assist Tomogr** 1990 Jul–Aug;14(4):521–6

The hemimedullary syndrome: case report and review of the literature. Mossuto–Agatiello L, et al. **J Neurol** 1990 Jun; 237(3):208–12 (30 ref.)

Is the EEG really normal in lacunar stroke? Kappelle LJ,

et al. **J Neurol Neurosurg Psychiatry** 1990 Jan;53(1):63–6
Stroke risk and critical carotid stenosis. Norris JW, et al. **J Neurol Neurosurg Psychiatry** 1990 Mar;53(3):235–7
Magnetic resonance imaging of cerebral ischemia and infarction. Kucharczyk W, et al. **Magn Reson Annu** 1987; :49–69 (51 ref.)
Experimental cerebral infarction in the rat: utility of Gd-DOTA for MR imaging. Van de Vyver FL, et al. **Magn Reson Imaging** 1990;8(3):333–40
Assessment of hemodynamic disturbances in aphasic patients by transcranial Doppler ultrasonography. Pendefunda L. **Neurol Psychiatr (Bucur)** 1989 Jul–Sep;27(3):197–200
Language and verbal memory after right hemispheric stroke: a clinical–CT scan study. Cappa SF, et al. **Neuropsychologia** 1990;28(5):503–9
31P magnetic resonance spectroscopy of chronic cerebral infarction in rats. Houkin K, et al. **NMR Biomed** 1989 Jul; 2(2):83–6
MRI findings in two cases of acute facial paralysis. LaBagnara J Jr, et al. **Otolaryngol Head Neck Surg** 1989 Nov;101(5):562–5
Significance of HMPAO-SPECT in the early diagnosis and followup of acute cerebral ischemia—comparison to CCT. Feldmann M, et al. **Psychiatry Res** 1989 Sep;29(3):457–8
MR imaging of acute cerebral infarction: experimental study with Gd-DTPA. Hayakawa K, et al. **Radiat Med** 1989 Mar–Apr;7(2):58–65
Frontal white matter lesions and dementia in lacunar infarction. Fukuda H, et al. **Stroke** 1990 Aug;21(8):1143–9
Prospective study of lacunar infarction using magnetic resonance imaging. Hommel M, et al. **Stroke** 1990 Apr; 21(4):546–54
Wallerian degeneration of the pyramidal tract in capsular infarction studied by magnetic resonance imaging. Pujol J, et al. **Stroke** 1990 Mar;21(3):404–9
Magnetic resonance imaging of medial medullary infarction. Sawada H, et al. **Stroke** 1990 Jun;21(6):963–6
[Lateral inferior pontine infarction: 2 clinical aspects] Amarenco P, et al. **Rev Neurol (Paris)** 1990;146(6–7):433–7 (Eng. Abstr.) **(Fre)**
[Bilateral paramedian thalamic infarction: a case with MRI and gamma-emission tomography] Muller JP, et al. **Rev Neurol (Paris)** 1989;145(10):732–5 (Eng. Abstr.) **(Fre)**
[Improved diagnosis using biomagnetic fields. Electromagnetic fields of the brain—diagnosis of a neurologic focus] Schwing C. **Fortschr Med** 1989 Sep 20; 107(27):75–6 **(Ger)**
[Subacute cerebral infarct: native and contrast medium-enhanced MRT] Henkes H, et al. **ROFO** 1989 Sep; 151(3):348–55 (Eng. Abstr.) **(Ger)**
[Detection of the occluded artery in cerebral infarction by MRI] Sekihara Y, et al. **No Shinkei Geka** 1989 Dec; 17(12):1145–51 (Eng. Abstr.) **(Jpn)**
[t-PA activity, antigen and PAI-1 antigen levels in blood obtained from the patients with cerebral infarction] Yamada S, et al. **Rinsho Byori** 1990 Jul;38(7):819–24 (Eng. Abstr.) **(Jpn)**
[Cerebellar infarction; the findings of CT, MRI and cerebral angiography] Bussaka H, et al. **Rinsho Hoshasen** 1990 Apr; 35(4):445–51 (Eng. Abstr.) **(Jpn)**
[Magnetic resonance imaging of cerebrovascular disorders; cerebral infarction] Imakita S, et al. **Rinsho Hoshasen** 1989 Jun;34(6):657–66 (Eng. Abstr.) **(Jpn)**
[MR imaging of cerebellar infarct] Uchino A, et al. **Rinsho Hoshasen** 1989 Jun;34(6):691–5 (Eng. Abstr.) **(Jpn)**
[Left antero-medial thalamic infarction and symptoms of amnesia, aphasia, and dementia] Ino T, et al. **Rinsho Shinkeigaku** 1989 Jun;29(6):693–700 (Eng. Abstr.) **(Jpn)**
[Medial medullary infarction demonstrated by MRI] Sawada H, et al. **Rinsho Shinkeigaku** 1990 Jan;30(1):68–72 (19 ref.) (Eng. Abstr.) **(Jpn)**
[Infarction of the superior cerebellar artery (Mills' syndrome). Clinico-morphological and functional correlation] Viguera J, et al. **Neurologia** 1988 Jul–Aug; 3(4):137–42 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Cerebroprotective effects of flunarizine in an experimental rat model of cardiac arrest. Lu HR, et al. **Am J Emerg Med** 1990 Jan;8(1):1–6
Management of cerebral infarction or transient ischemic attacks [letter; comment] Lavin P. **Arch Intern Med** 1990 Mar;150(3):692, 694 Comment on: Arch Intern Med 1988 May;148(5):1023–38.
Glucocorticoids in acute stroke [letter] Gohel D. **J Assoc Physicians India** 1989 Dec;37(12):799–800
Hemorrhagic transformation following tissue plasminogen activator in experimental cerebral infarction. del Zoppo GJ, et al. **Stroke** 1990 Apr;21(4):596–601
Photochemical stroke model: flunarizine prevents sensorimotor deficits after neocortical infarcts in rats. De Ryck M, et al. **Stroke** 1989 Oct;20(10):1383–90
Placebo-controlled trial of nimodipine in the treatment of acute ischemic cerebral infarction. Martínez-Vila E, et al. **Stroke** 1990 Jul;21(7):1023–8
[Cerebral infarction in 141 cases treated by traditional Chinese medicine and Western medicine] Wu BQ. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Nov;9(11):656–7, 644 (Eng. Abstr.) **(Chi)**
[Pharmacotherapy of acute cerebral infarct] Eujen BR. **Med Monatsschr Pharm** 1990 Jan;13(1):14–5 **(Ger)**
[Drug prevention of ischemic cerebral infarct] Haass A. **Verh Dtsch Ges Inn Med** 1989;95:297–304 (26 ref.) **(Ger)**
[Mesoglycan in acute focal cerebral ischemia] Cazzato G, et al. **Riv Neurol** 1989 May–Jun;59(3):121–6 (Eng. Abstr.) **(Ita)**
[Clinical application of calcium antagonists in the treatment of cerebral infarction] Komatsumoto S, et al. **Nippon Rinsho** 1989 Aug;47(8):1837–41 **(Jpn)**
[Anticoagulation in cerebral infarct of cardiac origin. A study of 58 patients in acute phase] Vázquez Cruz J, et al. **Neurologia** 1987 Mar–Apr;2(2):57–62 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

A study on the recent trend and risk factors of cerebrovascular disease. Kim HT, et al. **J Korean Med Sci** 1989 Sep;4(3):129–34
Lacunar infarction in patients with hypertensive intracerebral hemorrhage. Weisberg LA, et al. **South Med J** 1990 Sep; 83(9):1050–2
[Lacunar-type cerebral infarct and ambulatory neurologic care (letter)] Arboix A. **Neurologia** 1989 Nov;4(9):343–4 **(Spa)**

ETIOLOGY

Neurosyphilis as a cause of cerebral infarction in AIDS [letter; comment] Matlow AG. **Am J Med** 1990 Jun; 88(6):700–1 Comment on: Am J Med 1989 May;86(5):528–32.
Cigarette smoking. A risk factor for cerebral infarction in young adults. Love BB, et al. **Arch Neurol** 1990 Jun; 47(6):693–8 (19 ref.)
Directed embolization is an alternate cause of cerebral watershed infarction. Pollanen MS, et al. **Arch Pathol Lab Med** 1989 Oct;113(10):1139–41
Plasma sulfhydryl-containing amino acids in patients with cerebral infarction and in hypertensive subjects. Araki A, et al. **Atherosclerosis** 1989 Oct;79(2–3):139–46
Cerebral infarction in cryptococcal meningitis. Yu YL, et al. **Clin Exp Neurol** 1989;26:193–7
The effects of treating hypertension following aneurysmal subarachnoid hemorrhage. Wijdicks EF, et al. **Clin Neurol Neurosurg** 1990;92(2):111–7
Intimal fibroelastic thickening—its etiological significance in juvenile cerebral infarction. Case report. Yamaki T, et al. **Clin Neurol Neurosurg** 1990;92(1):90–3
Ischemic infarct in childhood secondary to internal carotid artery dissection. Report of a case. Karoutas G, et al. **Funct Neurol** 1989 Jul–Sep;4(3):287–91
Cerebrovascular disease and secondary mania [clinical conference] Wilson D, et al. **Gen Hosp Psychiatry** 1990 Jul;12(4):271–5
Basilar artery migraine stroke. Bernsen HJ, et al. **Headache** 1990 Feb;30(3):142–4
Neurological complications of infective endocarditis. Roos KL. **Indiana Med** 1989 Nov;82(11):866–9
Herpes zoster ophthalmicus and delayed contralateral hemiparesis. Sung KB, et al. **J Korean Med Sci** 1988 Jun; 3(2):79–82
How often is non-valvular atrial fibrillation the cause of brain infarction? van Merwijk G, et al. **J Neurol** 1990 Jun; 237(3):205–7
Non ischaemic causes of lacunar syndromes: prevalence and clinical findings. Anzalone N, et al. **J Neurol Neurosurg Psychiatry** 1989 Oct;52(10):1188–90
A five-year-old girl with acute renal failure and multiple cerebral infractions [clinical conference] Mauro RD, et al. **J Pediatr** 1989 Nov;115(5 Pt 1):816–23
Cerebral infarction due to disseminated intravascular coagulation with thromboexclusion for dissecting aortic aneurysma. Urakami K, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):241–4
Lupus anticoagulant as a risk factor for cerebral infarction and habitual abortions. Mizoguchi K, et al. **Kurume Med J** 1989;36(3):113–6
Internal borderzone infarction following acute middle cerebral artery occlusion. Angeloni U, et al. **Neurology** 1990 Aug;40(8):1196–8
Cerebral infarction following herpes zoster: the enlarging clinical spectrum. Joy JL, et al. **Neurology** 1989 Dec; 39(12):1640
Infarcts with a cardiac source of embolism in the NINCDS Stroke Data Bank: historical features. Kittner SJ, et al. **Neurology** 1990 Feb;40(2):281–4
Multiple vertebro-basilar infarctions from fibromuscular dysplasia related dissecting aneurysm of the vertebral artery in a child. Vles JS, et al. **Neuropediatrics** 1990 May; 21(2):104–5
Patterns of failure of aspirin treatment in symptomatic atherosclerotic carotid artery disease. Chyatte D, et al. **Neurosurgery** 1990 Apr;26(4):565–9
Test and teach. Number Sixty-one. Diagnosis: Cerebral and cerebellar infarctions due to mucormycosis with secondary hydrocephalus. McLean CA, et al. **Pathology** 1989 Oct; 21(4):279, 314–6
Occipital infarction with hemianopsia from carotid occlusive disease [letter; comment] Cohen SN. **Stroke** 1989 Oct; 20(10):1433–4 Comment on: Stroke 1989 Mar;20(3):409–11.
Anterior choroidal artery territory infarction and small-vessel disease [letter; comment] Fisher M, et al. **Stroke** 1989 Nov;20(11):1591–2 Comment on: Stroke 1989 May;20(5):616–9.
Are hypertension or cardiac embolism likely causes of lacunar infarction? Lodder J, et al. **Stroke** 1990 Mar; 21(3):375–81
Brain damage after open heart surgery in patients with acute cardioembolic stroke. Maruyama M, et al. **Stroke** 1989 Oct; 20(10):1305–10
Snoring as a risk factor for sleep-related brain infarction. Palomäki H, et al. **Stroke** 1989 Oct;20(10):1311–5
Microfibrillar collagen model of canine cerebral infarction. Purdy PD, et al. **Stroke** 1989 Oct;20(10):1361–7
Hemorrhagic infarct induced by arterial hypertension in cat brain following middle cerebral artery occlusion. Saku Y, et al. **Stroke** 1990 Apr;21(4):589–95
Nonvalvular atrial fibrillation as a cause of fatal massive cerebral infarction in the elderly. Yamanouchi H, et al. **Stroke** 1989 Dec;20(12):1653–6
[Cerebral infarction in pernicious malaria. Diagnostic value of computed tomography] Pham-Hung G, et al. **Ann Fr Anesth Reanim** 1990;9(2):185–7 (Eng. Abstr.) **(Fre)**
[Dense middle cerebral artery: etiologic significance and prognosis] Giroud M, et al. **Rev Neurol (Paris)** 1990; 146(3):224–7 (Eng. Abstr.) **(Fre)**
[Patent foramen ovale and cerebral infarct in young patients] Jeanrenaud X, et al. **Schweiz Med Wochenschr** 1990 Jun 2;120(22):823–9 (Eng. Abstr.) **(Fre)**
[Temporal arteritis with scalp and tongue necrosis and brain stem infarct] Höring E, et al. **Med Klin** 1990 Mar;85 Suppl 1:159–60, 170 **(Ger)**
[Ataxic hemiparesis: specificity of the vascular territory?] Danek A, et al. **Nervenarzt** 1989 Sep;60(9):585–6 **(Ger)**
[Acute ischemic cerebral infarction: a possible role of hemorheologic changes caused by ischemia in the interpretation of pathological findings] Di Lollo F, et al. **Ann Ital Med Int** 1988 Oct–Dec;3(4):249–55 (Eng. Abstr.) **(Ita)**
[Heart disorders secondary to cerebral ischemic infarct. A clinical study of 20 patients and diagnostico-therapeutic considerations] Cosentino F, et al. **Minerva Cardioangiol** 1990 Jan–Feb;38(1–2):27–9 (Eng. Abstr.) **(Ita)**
[Lupus anticoagulant antibody (LAC) and juvenile cerebral ischemic attack: a clinical case] Menabue R, et al. **Riv Neurol** 1989 Nov–Dec;59(6):203–6 (29 ref.) (Eng. Abstr.) **(Ita)**
[Boundary cerebral infarct in a case of essential thrombocythemia] Silvestrini M, et al. **Riv Neurol** 1989 Nov–Dec;59(6):220–2 (Eng. Abstr.) **(Ita)**
[Fibromuscular dysplasia with cerebral infarction in children. Case report] Takenaka K, et al. **Neurol Med Chir (Tokyo)** 1989 Oct;29(10):912–6 (Eng. Abstr.) **(Jpn)**
[MR imaging of acute hemorrhagic brain infarction] Uchino A, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Nov 25;49(11):1347–54 (Eng. Abstr.) **(Jpn)**
[An autopsy case of adenocarcinoma of the lung with signet ring cells, manifesting with aphasia and hemiparesis due to nonbacterial thrombotic endocarditis] Hanazono Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Nov; 27(11):1349–54 (Eng. Abstr.) **(Jpn)**
[Clinical study on the relationship between middle cerebral artery lesions and Binswanger type infarction] Iwamoto T, et al. **Nippon Ronen Igakkai Zasshi** 1989 Jul;26(4):340–6 (Eng. Abstr.) **(Jpn)**
[Blunt injury of the vertebral artery: report of three cases] Iida H, et al. **No Shinkei Geka** 1989 Nov;17(11):1051–6 (Eng. Abstr.) **(Jpn)**
[A successful treatment of spontaneous carotid cavernous fistula causing hemorrhagic infarction treated by detachable balloon] Kasama A, et al. **No Shinkei Geka** 1990 Jul;18(7):631–6 (Eng. Abstr.) **(Jpn)**
[Two cases of brain infarction associated with hypertriglyceridemia] Yamanouchi H, et al. **No To Hattatsu** 1990 Jul;22(4):364–8 (7 ref.) (Eng. Abstr.) **(Jpn)**
[Hemorrhagic infarction following cerebral vasospasm] Andoh T, et al. **No To Shinkei** 1989 Oct;41(10):979–85 (Eng. Abstr.) **(Jpn)**
[A case of progressive systemic sclerosis associated with a hemorrhagic infarction of the cerebellum] Kawano H, et al. **No To Shinkei** 1990 Feb;42(2):189–91 (Eng. Abstr.) **(Jpn)**
[Rendu-Osler-Weber syndrome presented paramedian thalamic and midbrain infarcts and primary medullary hemorrhage: a case report] Hashimoto Y, et al. **Rinsho Shinkeigaku** 1989 Apr;29(4):475–82 (25 ref.) (Eng. Abstr.) **(Jpn)**
[PET study on cerebral hemodynamics in internal carotid artery occlusion—the pathogenesis of watershed infarction] Yamauchi H, et al. **Rinsho Shinkeigaku** 1990 May; 30(5):492–8 (Eng. Abstr.) **(Jpn)**
[Brain damage in the form of infarction of the parietal lobe in a newborn infant with Rh serologic conflict] Goląb M. **Pediatr Pol** 1989 Feb;64(2):104–6 **(Pol)**
[Ischemic infarction in a patient with echinococcosis of the heart and brain] Borisenko VV, et al. **Klin Med (Mosk)** 1990 Apr;68(4):122–4 **(Rus)**
[Stroke in patients with acute myocardial infarction] Feigin VL, et al. **Klin Med (Mosk)** 1989 Aug;67(8):86–9 (Eng. Abstr.) **(Rus)**

[Cerebral infarction in arteriosclerotic encephalopathy] Makarova LD. **Sov Med** 1989;(6):66–8 **(Rus)**

[Risk factors of acute and chronic cerebral ischemia] Burtsev EM, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):16–20 (Eng. Abstr.) **(Rus)**

[Vertebrobasilar stroke] Kravtsov IuI, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):26–9 (Eng. Abstr.) **(Rus)**

[Cerebral infarct in a young adult, as the presenting form of myeloencephalopathic syndrome with lactic acidosis and cerebral ischemia] Arboix A, et al. **Med Clin (Barc)** 1990 Mar 31;94(12):457–60 (Eng. Abstr.) **(Spa)**

[Beta-endorphin in acute focal cerebral infarct] Marín Gámez N, et al. **Med Clin (Barc)** 1989 Sep 16;93(7):252–5 (Eng. Abstr.) **(Spa)**

["Lacunar" syndromes caused by spontaneous cerebral hemorrhage] Delgado G, et al. **Neurologia** 1986 Nov–Dec; 1(6):233–40 **(Spa)**

[Risk factors and risk profile in atherothrombotic cerebral infarction. An OFRA study] Llabrés Olmo J, et al. **Neurologia** 1988 Jul–Aug;3(4):131–6 (Eng. Abstr.) **(Spa)**

[Bilateral frontal infarct with imitation and utilization syndrome in a case of giant cell arteritis] Rey Pérez de Pipaón M, et al. **Neurologia** 1990 Feb;5(2):65–8 (Eng. Abstr.) **(Spa)**

[Pure sensory stroke caused by thalamic hematoma (letter)] Rodríguez JR, et al. **Neurologia** 1990 Feb;5(2):70–1 **(Spa)**

[Lupus anticoagulant and cerebral infarction] Romero López J, et al. **Neurologia** 1988 Jul–Aug;3(4):161–3 (Eng. Abstr.) **(Spa)**

[Migrainous cerebral infarcts in young adults (letter)] Ara Callizo JR, et al. **Rev Clin Esp** 1989 Nov;185(8):427–8 **(Spa)**

[Cerebral infarct of arterial origin in meningitis caused by enterobacter. Apropos of a case (letter)] Martos JA, et al. **Rev Clin Esp** 1989 Dec;185(9):476–7 **(Spa)**

HISTORY

[An autopsy record dated 1808] Miler W. **Wiad Lek** 1989 Jul 1–15;42(13–15):924–7 **(Pol)**

IMMUNOLOGY

Anticardiolipin antibody associated ischaemic strokes in elderly patients without systemic lupus erythematosus. Chakravarty KK, et al. **Age Ageing** 1990 Mar;19(2):114–8

Cerebrovascular and neurologic disease associated with antiphospholipid antibodies: 48 cases. Levine SR, et al. **Neurology** 1990 Aug;40(8):1181–9

Cyclophosphamide use in a young woman with antiphospholipid antibodies and recurrent cerebrovascular accident. Perez MC, et al. **South Med J** 1989 Nov; 82(11):1421–4

[The antiphospholipid syndrome] Omdal R, et al. **Tidsskr Nor Laegeforen** 1989 Nov 10;109(31):3214–5 (Eng. Abstr.) **(Nor)**

METABOLISM

Selective, unilateral cortical infarction increases striatal muscarinic receptor binding: potential evidence for cortical modulation of intrastriatal cholinergic transmission. Filloux F, et al. **J Chem Neuroanat** 1990 Mar–Apr;3(2):125–32

Persistent high lactate level as a sensitive MR spectroscopy indicator of completed infarction. Houkin K, et al. **J Neurosurg** 1990 May;72(5):763–6

Cloning of human GAP–43: growth association and ischemic resurgence. Ng SC, et al. **Neuron** 1988 Apr;1(2):133–9

Early detection of cerebral infarction by 31P spectroscopic imaging. Sasahira M, et al. **Neuroradiology** 1990;32(1):43–6

[Ischemia-induced neurotrophic activity detected in the peri-infarcted brain tissue] Yamada K, et al. **No To Shinkei** 1989 Jun;41(6):611–6 (Eng. Abstr.) **(Jpn)**

[Concentrations of glucose, lactic and pyruvic acids in the cerebrospinal fluid of patients with cerebral infarction after intravenous glucose loading (further studies)] Kawiak W, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985; 40:293–8 (Eng. Abstr.) **(Pol)**

MORTALITY

A prospective study of acute cerebrovascular disease in the community: the Oxfordshire Community Stroke Project—1981–86. 2. Incidence, case fatality rates and overall outcome at one year of cerebral infarction, primary intracerebral and subarachnoid haemorrhage. Bamford J, et al. **J Neurol Neurosurg Psychiatry** 1990 Jan;53(1):16–22

[A 3 to 6-year follow-up study of 414 cases of cerebral infarction and cerebral hemorrhage] Chen QT. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Aug; 22(4):202–4, 252 (Eng. Abstr.) **(Chi)**

[Acute cerebellar vascular pathology. A clinical study of 38 cases] Peiró A, et al. **Neurologia** 1987 Jan–Feb;2(1):15–8 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Cerebral infarcts and the lesions of intracranial and extracranial atherosclerosis. Moossy J. **Arch Neurol** 1966 Feb;14(2):124–8

Cerebellar infarction in the territory of the anterior and inferior cerebellar artery. A clinicopathological study of 20 cases. Amarenco P, et al. **Brain** 1990 Feb;113 (Pt 1):139–55

Locked in state. A clinicopathological study. Sharma SC, et al. **J Assoc Physicians India** 1990 Mar;38(3):238–40

A semiautomated method for measuring brain infarct volume. Swanson RA, et al. **J Cereb Blood Flow Metab** 1990 Mar; 10(2):290–3

Cerebral infarcts and seizures in the neonate. Aso K, et al. **J Child Neurol** 1990 Jul;5(3):224–8

Vertical gaze palsy and selective unilateral infarction of the rostral interstitial nucleus of the medial longitudinal fasciculus (riMLF). Bogousslavsky J, et al. **J Neurol Neurosurg Psychiatry** 1990 Jan;53(1):67–71

White matter necrosis in very low birth weight infants: neuropathologic and ultrasonographic findings in infants surviving six days or longer. Paneth N, et al. **J Pediatr** 1990 Jun;116(6):975–84 (32 ref.)

Cerebellar infarction in the territory of the superior cerebellar artery: a clinicopathologic study of 33 cases. Amarenco P, et al. **Neurology** 1990 Sep;40(9):1383–90

Cerebellar venous infarction: case report with clinicopathologic correlation. Eng LJ, et al. **Neurology** 1990 May;40(5):837–8

Corticofugal projections to the motor nuclei of the brainstem and spinal cord in humans [published erratum appears in Neurology 1990 May;40(5):828] Iwatsubo T, et al. **Neurology** 1990 Feb;40(2):309–12

Arterial pathology in cerebellar infarction. Amarenco P, et al. **Stroke** 1990 Sep;21(9):1299–305

Effect of hyperglycemia on infarct size after cerebrovascular occlusion in cats [letter; comment] de Courten-Myers GM, et al. **Stroke** 1990 Feb;21(2):357–8 Comment on: Stroke 1989 Apr;20(4):519–23.

Neural damage in the rat thalamus after cortical infarcts. Iizuka H, et al. **Stroke** 1990 May;21(5):790–4

Liposome-entrapped superoxide dismutase reduces cerebral infarction in cerebral ischemia in rats. Imaizumi S, et al. **Stroke** 1990 Sep;21(9):1312–7

Methionine sulfoximine reduces cortical infarct size in rats after middle cerebral artery occlusion. Swanson RA, et al. **Stroke** 1990 Feb;21(2):322–7

[Evolution of venous cerebral infarction and brain edema—an experimental study of sagittal sinus obstruction] Kannuki S, et al. **No To Shinkei** 1989 Dec;41(12):1225–31 (Eng. Abstr.) **(Jpn)**

[Secondary degeneration of substantia nigra following massive basal ganglia infarction] Ohara S, et al. **Rinsho Shinkeigaku** 1989 Nov;29(11):1352–6 (Eng. Abstr.) **(Jpn)**

[Postmortem study of the cerebral vascular system by the method of vascular casts in patients with ischemic cerebral infarction] Stroińska-Kuś B. **Neurol Neurochir Pol** 1988 Nov–Dec;22(6):507–12 (Eng. Abstr.) **(Pol)**

[Clinico-morphologic correlations in cerebral infarction after recurrent hemorrhage] Tarnowska-Dziduszko E, et al. **Neuropatol Pol** 1989;27(3):411–25 (Eng. Abstr.) **(Pol)**

[Comparison between the clinical and magnetic resonance findings in infarctions of the brain stem] Castillo J, et al. **Neurologia** 1988 Nov–Dec;3(6):211–6 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Ischaemic cerebral infarction in young adults. Federico F, et al. **Acta Neurol (Napoli)** 1990 Apr;12(2):101–8

Hemorrhagic infarction: risk factors, clinical and tomographic features, and outcome. A case-control study. Beghi E, et al. **Acta Neurol Scand** 1989 Sep;80(3):226–31

Does kallikrein improve the brain function in dementia? Ishizuka Y, et al. **Adv Exp Med Biol** 1989;247B:601–6

Frontal systems impairment following multiple lacunar infarcts. Wolfe N, et al. **Arch Neurol** 1990 Feb;47(2):129–32

Subcortical auditory agnosia. Kazui S, et al. **Brain Lang** 1990 May;38(4):476–87

Kynurenate does not reduce infarct size after middle cerebral artery occlusion in spontaneously hypertensive rats. Roussel S, et al. **Brain Res** 1990 Jun 4;518(1–2):353–5

Recovery from occipital stroke: a self-report and an inquiry into visual processes. Kolb B. **Can J Psychol** 1990 Jun; 44(2):130–47

Ischemic stroke in young adults: the relevance of migrainous infarction. Sacquegna T, et al. **Cephalalgia** 1989 Dec; 9(4):255–8

Paramedian thalamic and midbrain infarction: the 'mesencephalothalamic syndrome'. Waterston JA, et al. **Clin Exp Neurol** 1987;24:45–53

Correlation of tibial nerve SEPs with the development of seizures in patients with supratentorial cerebral infarcts. Kovala T, et al. **Electroencephalogr Clin Neurophysiol** 1990 Sep–Oct;77(5):347–52

Lacunar infarcts: a personal series of 92 consecutive cases. Ciucci G, et al. **Eur Neurol** 1989;29 Suppl 2:10–2

Lacunar thalamic infarcts and amnesia. Ghidoni E, et al. **Eur Neurol** 1989;29 Suppl 2:13–5

Lacunar infarctions: preliminary data on clinical features and natural history. Landi G, et al. **Eur Neurol** 1989;29 Suppl 2:8–9

The lacunar syndromes. Loeb C. **Eur Neurol** 1989;29 Suppl 2:2–7 (41 ref.)

Effect of the serotonin antagonist ketanserin on the hemodynamic and morphological consequences of thrombotic infarction. Dietrich WD, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):812–20

Continuous nimodipine treatment attenuates cortical infarction in rats subjected to 24 hours of focal cerebral ischemia. Jacewicz M, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):89–96

Voice perception deficits: neuroanatomical correlates of phonagnosia. Van Lancker DR, et al. **J Clin Exp Neuropsychol** 1989 Oct;11(5):665–74

Changes in the somatosensory evoked potential during and immediately following temporary middle cerebral artery occlusion predict somatosensory cortex ischemic lesions in monkeys. Dowman R, et al. **J Clin Neurophysiol** 1990 Apr;7(2):269–81

Resolution of psychotic depression after right temporoparietal infarction. Chimowitz MI, et al. **J Nerv Ment Dis** 1990 Jul;178(7):458–9

Oral dyskinesias associated with bilateral thalamo-capsular infarction. Combarros O, et al. **J Neurol Neurosurg Psychiatry** 1990 Feb;53(2):168–9

Rejection behaviour: a human homologue of the abnormal behaviour of Denny-Brown and Chambers' monkey with bilateral parietal ablation. Mori E, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1260–6

Vermal infarct with pursuit eye movement disorders. Pierrot-Deseilligny C, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):519–21

Pathological stretch reflexes on the "good" side of hemiparetic patients. Thilmann AF, et al. **J Neurol Neurosurg Psychiatry** 1990 Mar;53(3):208–14

Recovery of elbow function in voluntary positioning of the hand following hemiplegia due to stroke. Wing AM, et al. **J Neurol Neurosurg Psychiatry** 1990 Feb;53(2):126–34

A model of proximal middle cerebral artery occlusion in rat. Shiraishi K, et al. **J Neurosci Methods** 1989 Nov; 30(2):169–74

Current concepts in brain ischemia. A review. Voiculescu V. **Neurol Psychiatr (Bucur)** 1989 Jul–Sep;27(3):175–86 (68 ref.)

Visual hemineglect and hemihallucinations in a patient with a subcortical infarction. Chamorro A, et al. **Neurology** 1990 Sep;40(9):1463–4

Laterality of motor response in visuo-spatial neglect: a case study. Halligan PW, et al. **Neuropsychologia** 1989; 27(10):1301–7

The influence of volume expansion with induced hypertension on vessel reactivities, the blood-brain barrier, and cerebral infarction in cats with one-hour occlusion of the middle cerebral artery. Sakaki T, et al. **Neurosurgery** 1990 Aug;27(2):268–73; discussion 273–4

Relationship between abnormal respiratory control and perinatal brainstem and cerebellar infarctions [see comments] Takashima S, et al. **Pediatr Neurol** 1989 Jul–Aug;5(4):211–5 Comment in: Pediatr Neurol 1990 Mar–Apr;6(2):141.

More on muscle strength measurement [letter; comment] Bourbonnais D, et al. **Phys Ther** 1989 Nov;69(11):990–4 Comment on: Phys Ther 1989 Mar;69(3):225–36.

A study of event-related potential P300 in cerebral infarction. Tang XF, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(4):205–9

Mixed transcortical aphasia without anatomic isolation of the speech area. Rapcsak SZ, et al. **Stroke** 1990 Jun;21(6):953–6

The effects of brain edema on intracranial pressure in focal cerebral ischemia. An experimental study in a rat using magnetic resonance imaging. Kotwica Z, et al. **Zentralbl Neurochir** 1989;50(2):68–71

[The influence of electric needling "Juci" on nail-bed microcirculation of apoplectic patients] Liu G, et al. **Chen Tzu Yen Chiu** 1990;15(1):40–3 (Eng. Abstr.) **(Chi)**

[In vivo inspection of Wallerian degeneration. MRI studies] Fang Y. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Dec; 22(6):349–51, 383 (Eng. Abstr.) **(Chi)**

[Constitutional peculiarities of the bioelectric activity of the brain] Kusnezowa SM, et al. **Z Gerontol** 1990 Jan–Feb; 23(1):56–8 (Eng. Abstr.) **(Ger)**

[Cerebral hemodynamics in multiple cerebral infarction with or without dementia] Kitamura S, et al. **Nippon Ronen Igakkai Zasshi** 1989 Nov;26(6):557–62 (Eng. Abstr.) **(Jpn)**

[P300 and Hasegawa Dementia Rating Scale in cerebral infarction] Yamashita K, et al. **Nippon Ronen Igakkai Zasshi** 1990 Jan;27(1):74–5 **(Jpn)**

[Electroencephalographic changes in reversible ischemic cerebral infarction] Klimowicz-Młodzik I, et al. **Neurol Neurochir Pol** 1988 Nov–Dec;22(6):500–6 (Eng. Abstr.) **(Pol)**

[EEG analysis in patients in the acute stage of cerebral infarction by the methods of image recognition] Zhirmunskaia EA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(9):18–23 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

A new method to predict safe resection of the internal carotid artery. de Vries EJ, et al. **Laryngoscope** 1990 Jan; 100(1):85–8

Prophylaxis of cerebral hemorrhage. Stoica E. **Neurol Psychiatr (Bucur)** 1989 Jul–Sep;27(3):187–96 (45 ref.)

[Carotid endarterectomy. A justifiable risk for the prevention of ischemic infarct?] Marx P. **Fortschr Med** 1989 Nov 30; 107(34):727–32 (0 ref.) (Eng. Abstr.) **(Ger)**

[What is the real value of antiaggregation therapy in the prevention of ischemic cerebral infarction? Reflections and

suggestions] Neri Serneri GG, et al. **Ann Ital Med Int** 1988 Oct-Dec;3(4):290-300 (58 ref.) (Eng. Abstr.) **(Ita)**

[Effect of calcium antagonist nimodipine and induced hypertension on cerebral vessel reactivities, cerebral blood flow, cerebral edema and infarction in cats with one hour middle-cerebral-artery occlusion] Sakaki T, et al. **No Shinkei Geka** 1990 May;18(5):423-30 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Depression among patients with stroke. Dam H, et al. **Acta Psychiatr Scand** 1989 Aug;80(2):118-24

The Rivermead Behavioural Memory Test: remembering a short route. Towle D, et al. **Br J Clin Psychol** 1989 Sep; 28 (Pt 3):287-8

Hemispatial neglect in a patient with callosal infarction. Kashiwagi A, et al. **Brain** 1990 Aug;113 (Pt 4):1005-23

Impaired shifting of attention in Balint's syndrome. Verfaellie M, et al. **Brain Cogn** 1990 Mar;12(2):195-204

Impaired activation of the phonological lexicon: effects upon oral reading. Friedman RB, et al. **Brain Lang** 1990 Feb; 38(2):278-97

Linguistic and nonlinguistic impairments in writing: a comparison of patients with focal and multifocal CNS disorders. Glosser G, et al. **Brain Lang** 1989 Oct; 37(3):357-80

Enhancement of naming in nonfluent aphasia through gesture. Hanlon RE, et al. **Brain Lang** 1990 Feb; 38(2):298-314

The effects of right hemisphere damage on the pragmatic interpretation of conversational remarks. Kaplan JA, et al. **Brain Lang** 1990 Feb;38(2):315-33

Effects of stimulus degradation on letter-matching performance of left and right hemispheric stroke patients. Wolcott CL, et al. **J Clin Exp Neuropsychol** 1990 Mar; 12(2):222-34

Cognitive changes in patients with multiple cerebral infarcts. Babikian VL, et al. **Stroke** 1990 Jul;21(7):1013-8

RADIOGRAPHY

Correlation of angiographic and sequential CT findings in patients with evolving cerebral infarction. Bozzao L, et al. **AJNR** 1989 Nov-Dec;10(6):1215-22

Posttraumatic cerebral infarction diagnosed by CT: prevalence, origin, and outcome. Mirvis SE, et al. **AJNR** 1990 Mar-Apr;11(2):355-60

Posttraumatic cerebral infarction diagnosed by CT: prevalence, origin, and outcome. Mirvis SE, et al. **AJR Am J Roentgenol** 1990 Jun;154(6):1293-8

Computed tomographic patterns of proven embolic brain infarctions. Ringelstein EB, et al. **Ann Neurol** 1989 Dec; 26(6):759-65

Caudate infarcts. Caplan LR, et al. **Arch Neurol** 1990 Feb; 47(2):133-43 (122 ref.)

Radiological and clinical features of basal ganglia infarction in tuberculous meningitis. Tang PS, et al. **Aust Paediatr J** 1989 Dec;25(6):361-2

CT diagnosis of lacunae. Xu GL, et al. **Chin Med J [Engl]** 1989 Jul;102(7):559-62

Computed tomography. Zappoli F, et al. **Eur Neurol** 1989; 29 Suppl 2:30-2 (10 ref.)

Ataxic hemiparesis syndrome clinical and CT study of 20 new cases. Magrotti E, et al. **Funct Neurol** 1990 Jan-Mar; 5(1):65-71

CT scanning in ischaemic stroke [letter; comment] Mehta JB, et al. **J Assoc Physicians India** 1989 Dec;37(12):797 Comment on: J Assoc Physicians India 1988 Apr;36(4):294.

Cerebellar and thalamic infarctions in basilar artery migraine. Sabharwal RK, et al. **J Assoc Physicians India** 1990 Mar; 38(3):237-8

Development of multifocal haemorrhage in a cerebral infarct during computed tomography [letter] Franke CL, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):531-2

The role of computed tomography in patients with lacunar stroke in the carotid territory. Kappelle LJ, et al. **Neuroradiology** 1989;31(4):316-9

The "dense artery sign"--major cerebral artery thromboembolism demonstrated by computed tomography. Schuknecht B, et al. **Neuroradiology** 1990;32(2):98-103

Tuberculous brain infection located in an old cerebral infarct: CT changes with successful conservative therapy. Shintani S, et al. **Neuroradiology** 1990;32(2):156-9

Cerebral infarct in patients with hemorrhagic shock and encephalopathy syndrome. Zureikat GY, et al. **Pediatr Radiol** 1990;20(5):301-3

Formed hallucination in the hemianopic field. Benson MT, et al. **Postgrad Med J** 1989 Oct;65(768):756-7

Confusional state and cerebral infarcts. García-Albea E. **Postgrad Med J** 1989 May;65(763):286-90

Mapping of rCBF and cerebrovascular reserve capacity by stable xenon CT in cerebrovascular disease: pathophysiological aspects and effects of operative therapy. Gaab MR, et al. **Psychiatry Res** 1989 Sep;29(3):309-12

Analysis of patterns of hemispheric brain infarctions on CT: embolic stroke mechanism, territorial infarctions and lacunae. Ringelstein EB, et al. **Psychiatry Res** 1989 Sep; 29(3):273-6

Loss of the insular ribbon: another early CT sign of acute middle cerebral artery infarction. Truwit CL, et al. **Radiology** 1990 Sep;176(3):801-6

Relation of leukoaraiosis to lesion type in stroke patients. Hijdra A, et al. **Stroke** 1990 Jun;21(6):890-4

Effect of capsular infarct size on clinical presentation of stroke. Sohn YH, et al. **Stroke** 1990 Sep;21(9):1258-61

Two cases of anterior choroidal artery territory infarction. Hwang SH, et al. **Yonsei Med J** 1989 Sep;30(3):310-4

[Analysis and classification of stages of supratentorial ischemic cerebral infarct on CT (414 cases)] Song ZW. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Oct; 22(5):310-2, 320 (Eng. Abstr.) **(Chi)**

[Leucoaraiosis: correlation of arterial hypertension and lacunar infarct (study of 80 patients)] Lazzarino LG, et al. **Schweiz Arch Neurol Psychiatr** 1990;141(4):345-9 (Eng. Abstr.) **(Fre)**

[Early sign of extensive cerebral infarct: arterial hyperdensity in non-contrast computerized tomography (letter)] Arias M, et al. **Neurologia** 1989 Jan-Feb;4(1):32-3 **(Spa)**

[Prosopagnosia. Bilateral occipital infarct observed in computerized tomography] Gómez Beldarrain MA. **Neurologia** 1986 Jul-Aug;1(4):156-60 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

I-123 HIPDM planar brain images demonstrating crossed cerebellar diaschisis. Shih WJ, et al. **Clin Nucl Med** 1990 Jan;15(1):34-7

Positron emission tomography: applications in the study of lacunar infarcts. Di Piero V, et al. **Eur Neurol** 1989;29 Suppl 2:39-41 (10 ref.)

Single photon emission tomography findings in lacunar lesions. Toso V. **Eur Neurol** 1989;29 Suppl 2:36-8

A determination of the regional brain/blood partition coefficient of water using dynamic positron emission tomography. Iida H, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):874-85

Brain perfusion SPECT in a cerebellar infarction. Moriarty JA, et al. **J Comput Assist Tomogr** 1990 Sep-Oct; 14(5):821-4

Brain perfusion defect size in SPECT predicts outcome in cerebral infarction [published erratum appears in Nucl Med Commun 1990 Apr;11(4):318] Launes J, et al. **Nucl Med Commun** 1989 Dec;10(12):891-900

PET and neuropsychology in thalamic infarction: evidence for associated cortical dysfunction. Hennerici M, et al. **Psychiatry Res** 1989 Sep;29(3):363-5

[The early and delayed SPECT images of 123I-IMP and rCBF measurement] Odano I. **Rinsho Hoshasen** 1989 Jun; 34(6):667-73 (Eng. Abstr.) **(Jpn)**

REHABILITATION

Aphasia in left-handers. Comparison of aphasia profiles and language recovery in non-right-handed and matched right-handed patients. Basso A, et al. **Brain Lang** 1990 Feb; 38(2):233-52

SURGERY

Long-term results of endarterectomy of the internal carotid artery for cerebral ischemia and infarction. Heyman A, et al. **Circulation** 1967 Aug;36(2):212-21

THERAPY

Enhancing "idling" neurons [letter] [see comments] Neubauer RA, et al. **Lancet** 1990 Mar 3;335(8688):542 Comment in: Lancet 1990 Apr 7;335(8693):860-1.

[Clinical research on 50 cases of stable stage apoplexy treated by acupuncture using brain activating and consciousness regaining principles] Li L, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Nov;9(11):653-5, 643-4 (Eng. Abstr.) **(Chi)**

[Conjunctival oxygen partial pressure, hemorheology and circulatory parameters in acute cerebral infarct before and following infusion of 6 percent low molecular hydroxyethyl starch] Kortsik CS, et al. **Infusionstherapie** 1990 Apr;17(2):79-82 (Eng. Abstr.) **(Ger)**

[Microcirculatory, hemorheologic and microcirculatory parameters before and following hypervolemic hemodilution in patients with acute cerebrovascular disorders] Staedt U, et al. **Vasa Suppl** 1989;27:33-4 **(Ger)**

[Acute therapy of ischemic cerebral infarct] Schulz J, et al. **ZFA** 1989 Jul-Aug;44(4):225-7 (Eng. Abstr.) **(Ger)**

[Physiopathological suppositions in the therapy of acute cerebral infarction by hemodilution] Agnoli A, et al. **Ric Clin Lab** 1989;19 Suppl 1:59-68 (33 ref.) **(Ita)**

[Therapy of cerebral infarction by infusion of plasma substitutes] Vasilenko FI. **Zh Nevropatol Psikhiatr** 1989; 89(9):44-7 (Eng. Abstr.) **(Rus)**

[Optimism or pessimism in the treatment of cerebral infarct] Bartko D, et al. **Cesk Neurol Neurochir** 1989 Jul; 52(4):261-70 (Eng. Abstr.) **(Slo)**

VETERINARY

Infarction of the pons and medulla oblongata caused by arteriolar thrombosis in a horse. Anderson WI, et al. **Cornell Vet** 1990 Jul;80(3):285-9

CEREBRAL ISCHEMIA

XIV International Symposium on Cerebral Blood Flow and Metabolism. Bologna, Italy, 28th May-1st June 1989. Abstracts. **J Cereb Blood Flow Metab** 1989;9 Suppl 1:S1-756

Rodent models of cerebral ischemia. Ginsberg MD, et al. **Stroke** 1989 Dec;20(12):1627-42 (169 ref.)

[A new model of complete global brain ischemia produced by clamping the ascending aorta with aorta to right-atrium and aorta to femoral vein bypass formation in dogs] Hashimoto H. **Masui** 1989 Jul;38(7):859-67 (Eng. Abstr.) **(Jpn)**

[The effects of nicardipine on morphological changes and calcium accumulation during ischemic hypoxia in pyramidal nerve cells in the rat cerebral cortex] Yamazaki M, et al. **Masui** 1989 Oct;38(10):1264-70 (Eng. Abstr.) **(Jpn)**

BLOOD

Effects of various doses of sodium dichloroacetate on hyperlactatemia in fed ischemic rats. Dimlich RV, et al. **Ann Emerg Med** 1989 Nov;18(11):1162-71 (52 ref.)

Effect of low dose acetylsalicylic acid upon plasma thromboxane B2 levels and platelet aggregation in ischemic stroke patients. Lee TK, et al. **Clin Chim Acta** 1989 Oct 16;184(3):323-8

Pituitary-thyroid axis, prolactin and growth hormone in patients with acute stroke. Olsson T, et al. **J Intern Med** 1990 Sep;228(3):287-90

Morning increase in blood viscoelasticity of patients with ischemic stroke [letter; comment] Koeltringer P, et al. **Stroke** 1990 May;21(5):826-7 Comment on: Stroke 1989 Apr;20(4):473-6.

Hypercortisolism revealed by the dexamethasone suppression test in patients [corrected] with acute ischemic stroke [published erratum appears in Stroke 1990 Apr;21(4):681] Olsson T, et al. **Stroke** 1989 Dec;20(12):1685-90

Platelet aggregability and in vivo platelet deposition in patients with ischemic cerebrovascular disease--evaluation by indium-111-platelet scintigraphy. Isaka Y, et al. **Thromb Res** 1989 Dec 15;56(6):739-49

[Significance of decreasing high density lipoproteins in cerebrovascular diseases] Li J. **Chung Hua I Hsueh Tsa Chih** 1990 May;70(5):244-7, 18 (Eng. Abstr.) **(Chi)**

[Concentrations of serum HDL subfractions and apolipoprotein B in ischemic cerebrovascular disease] Tu W. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1990 Feb;23(1):27-30, 62-3 (Eng. Abstr.) **(Chi)**

[Correlation between hemorheological and blood coagulation parameters in patients with arteriosclerosis of supraaortic vessels and/or recent cerebral ischemic attacks] Avellone G, et al. **Ric Clin Lab** 1989;19 Suppl 1:103-7 **(Ita)**

[Hemorheological alterations in patients with chronic cerebral ischemia] Carrieri PB, et al. **Ric Clin Lab** 1989; 19 Suppl 1:109-11 **(Ita)**

[Isovolemic hemodilution in cerebral ischemic attack: clinical and hemorheological evaluation] Porro F, et al. **Ric Clin Lab** 1989;19 Suppl 1:113-6 **(Ita)**

[The antiaggregation activity of the normal cerebral vessels and in ischemia] Petrishchev NN, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1515-20 **(Rus)**

[Sex and gonadotropic hormones in arteriopathy with lesions of the brain and skin (Sneddon's syndrome)] Kalashnikova LA, et al. **Sov Med** 1989;(6):8-13 (Eng. Abstr.) **(Rus)**

[Erythrocyte deformability in patients with acute ischemic cerebrovascular stroke] Eiben E, et al. **Cesk Neurol Neurochir** 1989 Oct;52(6):392-6 (Eng. Abstr.) **(Slo)**

CEREBROSPINAL FLUID

[Neurologic status and changes in the cerebrospinal fluid of patients with complete ischemic cerebrovascular insult before and after therapy with Redergin] Panić M, et al. **Med Arh** 1984;38(2):73-81 (Eng. Abstr.) **(Scr)**

CHEMICALLY INDUCED

Role of oxygen free radicals in carcinogenesis and brain ischemia. Floyd RA. **FASEB J** 1990 Jun;4(9):2587-97 (51 ref.)

Cortical blindness during chemotherapy: clinical, CT, and MR correlations. Heran F, et al. **J Comput Assist Tomogr** 1990 Mar-Apr;14(2):262-6

Indomethacin and ischemic brain injury in neonates [letter; comment] Haddad J, et al. **J Pediatr** 1990 May; 116(5):839-40 Comment on: J Pediatr 1989 Oct;115(4):631-7.

COMPLICATIONS

Pentoxifylline does not reduce cerebral ischemic edema in hypertensive rats. Johansson BB, et al. **Acta Neurol Scand** 1989 Sep;80(3):259-62

Blood-to-brain sodium transport in ischemic brain edema. Betz AL, et al. **Adv Neurol** 1990;52:73-80

Effect of halothane on ischemic brain edema. Cahn R, et al. **Adv Neurol** 1990;52:93-6

Pathogenesis of vasogenic edema in focal cerebral ischemia. Role of superoxide radicals. Chan PH, et al. **Adv Neurol** 1990;52:177-83

Role of blood-brain barrier permeability in focal ischemic brain edema. Hatashita S, et al. **Adv Neurol** 1990;52:327-33

An osmotic gradient in ischemic brain edema. Hatashita S, et al. **Adv Neurol** 1990;52:85-92

Chronological alterations of regional cerebral blood flow, glucose utilization, and edema formation after focal

ischemia in hypertensive and normotensive rats. Significance of hypertension. Hatashita T, et al. **Adv Neurol** 1990;52:29–37

Studies on relation of bradykinin to ischemic brain edema in stroke-resistant spontaneously hypertensive rat. Kamiya T, et al. **Adv Neurol** 1990;52:543

Effect of timing and dose of the hyperosmotic agent glycerol on experimental ischemic brain edema and metabolites. Kashiwagi F, et al. **Adv Neurol** 1990;52:541

Role of arachidonic acid metabolism on ischemic brain edema and metabolism. Katayama Y, et al. **Adv Neurol** 1990; 52:105–8

Role of adrenergic activity in ischemic brain edema. Kobayashi H, et al. **Adv Neurol** 1990;52:127–32

Ischemic cerebral edema. 5-Hydroxytryptamine receptors and the physical state of synaptosomal membranes. Kumami K, et al. **Adv Neurol** 1990;52:47–56 (58 ref.)

Vasogenic component of ischemic brain edema in experimental focal ischemia. Kuroiwa T, et al. **Adv Neurol** 1990;52:548

Effects of fluosol-DA on brain edema, energy metabolites, and tissue oxygen content in acute cerebral ischemia. Memezawa H, et al. **Adv Neurol** 1990;52:109–18

High-dose dexamethasone given long before cerebral ischemia does not ameliorate edema formation. Mima T, et al. **Adv Neurol** 1990;52:544

Cumulative effect of repeated ischemia on brain edema in the gerbil. Biochemical and physiological correlates of repeated ischemic insults. Nowak TS Jr, et al. **Adv Neurol** 1990;52:1–9

Cerebral protection during reperfusion with superoxide dismutase in focal cerebral ischemia. Pereira BM, et al. **Adv Neurol** 1990;52:97–103

Is postischemic hypoperfusion related to brain edema? Schürer L, et al. **Adv Neurol** 1990;52:155–64

Indomethacin attenuates early postischemic vasogenic edema and cerebral injury. Ting P. **Adv Neurol** 1990;52:119–26

Effects of calcium channel blockers on ischemic brain edema in rats. Wang JY, et al. **Adv Neurol** 1990;52:540

Brain injury after ischemia and trauma. The role of vitamin E. Yoshida S. **Ann N Y Acad Sci** 1989;570:219–36 (38 ref.)

Hyponatremia is associated with cerebral ischemia in patients with aneurysmal subarachnoid hemorrhage. Hasan D, et al. **Ann Neurol** 1990 Jan;27(1):106–8

Quantitative evaluation of myocardial injury induced by acute cerebral ischaemia and its prevention by beta 1-adrenergic blockade. An ultrastructural morphometry study. Kolin A, et al. **Br J Exp Pathol** 1989 Dec; 70(6):659–67

Cerebral acidosis in focal ischemia. Hakim AM, et al. **Cerebrovasc Brain Metab Rev** 1989 Summer;1(2):115–32 (117 ref.)

The influence of growth retardation on perinatal hypoxic-ischemic brain damage. Trescher WH, et al. **Early Hum Dev** 1990 Mar;21(3):165–73

The abilities of myelinated and non-myelinated aortic fibers on the brain ischemia-mediated reflex bradycardia in the rabbit. Matsumoto S. **Fukushima J Med Sci** 1988 Dec; 34(2):95–108

Continuous nimodipine treatment attenuates cortical infarction in rats subjected to 24 hours of focal cerebral ischemia. Jacewicz M, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):89–96

Astrocytic acidosis in hyperglycemic and complete ischemia. Kraig RP, et al. **J Cereb Blood Flow Metab** 1990 Jan; 10(1):104–14

Prevention of postischemic hyperthermia prevents ischemic injury of CA1 neurons in gerbils. Kuroiwa T, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):550–6

Monosymptomatic delusions of parasitosis associated with ischemic cerebrovascular disease. Flynn FG, et al. **J Geriatr Psychiatry Neurol** 1989 Jul–Sep;2(3):134–9

The angiotensin I converting enzyme inhibitors, captopril and Wy-44,655 attenuate the consequences of cerebral ischemia in renovascular hypertensive rats. Capdeville C, et al. **Life Sci** 1990;47(6):539–46

Anterior communicating artery aneurysm associated with bilateral occlusion of the middle cerebral artery—case report. Kusunose M, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):437–9

Does pH reduction contribute to postischemic brain edema development? Mchedlishvili G, et al. **Neuropatol Pol** 1989; 27(1):71–6

Brain calcification in hypoxic-ischemic lesions: an autopsy review. Ansari MQ, et al. **Pediatr Neurol** 1990 Mar–Apr; 6(2):94–101

Delayed seizures occurring with hypoxic-ischemic encephalopathy in the fetal sheep. Williams CE, et al. **Pediatr Res** 1990 Jun;27(6):561–5

Effect of steroids on edema and sodium uptake of the brain during focal ischemia in rats. Betz AL, et al. **Stroke** 1990 Aug;21(8):1199–204

Chronic cerebral intracellular alkalosis following forebrain ischemic insult in rats. Chopp M, et al. **Stroke** 1990 Mar; 21(3):463–6

Hemodilution and hypertension effects on cerebral hemorrhage in cerebral ischemia in rats. Cole DJ, et al. **Stroke** 1990 Sep;21(9):1333–9

Hematologic disorders and ischemic stroke. A selective review. Hart RG, et al. **Stroke** 1990 Aug;21(8):1111–21 (196 ref.)

Brain edema and cerebrovascular permeability during cerebral ischemia in rats. Hatashita S, et al. **Stroke** 1990 Apr;21(4):582–8

Liposome-entrapped superoxide dismutase reduces cerebral infarction in cerebral ischemia in rats. Imaizumi S, et al. **Stroke** 1990 Sep;21(9):1312–7

Learning impairment and microtubule-associated protein 2 decrease in gerbils under chronic cerebral hypoperfusion. Kudo T, et al. **Stroke** 1990 Aug;21(8):1205–9

Comparison of two-dimensional echocardiography and ultrafast cardiac computed tomography for evaluating intracardiac thrombi in cerebral ischemia. Love BB, et al. **Stroke** 1990 Jul;21(7):1033–8

[Ischemic cerebral accidents and non-valvular atrial fibrillation. Secondary prevention with anticoagulants] Mas JL, et al. **Ann Med Interne (Paris)** 1989;140(7):625–30 (60 ref.) **(Fre)**

[Acute ischemic cerebral infarction: a possible role of hemorheologic changes caused by ischemia in the interpretation of pathological findings] Di Lollo F, et al. **Ann Ital Med Int** 1988 Oct–Dec;3(4):249–55 (Eng. Abstr.) **(Ita)**

[Heart disorders secondary to cerebral ischemic infarct. A clinical study of 20 patients and diagnostico-therapeutic considerations] Cosentino F, et al. **Minerva Cardioangiol** 1990 Jan–Feb;38(1–2):27–9 (Eng. Abstr.) **(Ita)**

[Description of an unusual clinical picture of visual hallucinations (polyopsia, erythropsia) as expression of right temporo-occipital ischemia (visual association cortex, Brodman area 37] Coppo F, et al. **Minerva Med** 1990 Jan–Feb;81(1–2):111–4 (Eng. Abstr.) **(Ita)**

[Experimental studies on stress hormones at the time of sudden death (II)—Differences in adrenocortical hormone levels of cardiac arrest-preceding type and apnea preceding type sudden death under cerebral ischemia or aortic stenosis] Tsunoda K, et al. **Nippon Hoigaku Zasshi** 1989 Dec;43(6):453–9 (Eng. Abstr.) **(Jpn)**

[Preparation of cerebral ischemia-induced amnesic model in mice and ameliorative effect of several compounds on the model] Kojima M, et al. **Nippon Yakurigaku Zasshi** 1989 Oct;94(4):223–8 (Eng. Abstr.) **(Jpn)**

[Brain ischemia and brain edema] Kogure K, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1254–71 **(Jpn)**

[Bilateral partial ophthalmoplegia during ischemic stroke] Stępień A. **Wiad Lek** 1990 Feb 1–15;43(3–4):150–2 (Eng. Abstr.) **(Pol)**

[The mechanisms of speech recovery following revascularization surgery in patients having had an ischemic stroke] Vinnitskiĭ AR, et al. **Vrach Delo** 1989 Sep; (9):24–6 (Eng. Abstr.) **(Rus)**

[Clinico-morphological characteristics of complex types of stroke] Akimov GA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(7):88–92 (Eng. Abstr.) **(Rus)**

[Soft palate myoclonus and opsoclonus in disorders of cerebrovascular circulation in the vertebrobasilar system] Kalashnikova LA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(7):100–5 (Eng. Abstr.) **(Rus)**

[Prognosis factors in hypoxico-ischemic encephalopathy in full term infants] Jiménez González R, et al. **An Esp Pediatr** 1989 Sep;31(3):189–95 (Eng. Abstr.) **(Spa)**

[Affective disorders in subcortical ischemic cerebrovascular pathology. Prospective clinical study of 43 patients] Arboix A, et al. **Med Clin (Barc)** 1990 Mar 3;94(8):281–5 (Eng. Abstr.) **(Spa)**

[Cerebral infarct in a young adult, as the presenting form of myeloencephalopathic syndrome with lactic acidosis and cerebral ischemia] Arboix A, et al. **Med Clin (Barc)** 1990 Mar 31;94(12):457–60 (Eng. Abstr.) **(Spa)**

[One-and-a-half syndrome of ischemic vascular origin: apropos of 7 cases] Cases A, et al. **Neurologia** 1988 Jan–Feb; 3(1):26–30 (Eng. Abstr.) **(Spa)**

[Monocular elevation paresis. Ipsilateral mesencephalic ischemic lesion demonstrated by magnetic resonance] Roig C, et al. **Neurologia** 1986 Mar–Apr;1(2):80–3 (15 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Diffusion-weighted MR imaging of acute stroke: correlation with T2-weighted and magnetic susceptibility-enhanced MR imaging in cats. Moseley ME, et al. **AJNR** 1990 May; 11(3):423–9

A schizophrenic syndrome associated with a midbrain tegmental lesion. Minabe Y, et al. **Biol Psychiatry** 1990 Mar 15;27(6):661–3

Asymptomatic ischemic cerebral lesions—MRI study on a high risk group. Udaka F, et al. **Bull Osaka Med Coll** 1988 Nov;34(1–2):69–75

State of the art of magnetic resonance (MR) in neonatal hypoxic-ischemic encephalopathy. Nalin A, et al. **Childs Nerv Syst** 1989 Dec;5(6):350–5 (34 ref.)

Central motor conduction in ischaemic and hemorrhagic cerebral lesions. Segura MJ, et al. **Electromyogr Clin Neurophysiol** 1990 Jan;30(1):41–5

Magnetic resonance imaging of cerebral ischemia and infarction. Kucharczyk W, et al. **Magn Reson Annu** 1987; :49–69 (51 ref.)

Early detection of regional cerebral ischemia in cats: comparison of diffusion- and T2-weighted MRI and spectroscopy. Moseley ME, et al. **Magn Reson Med** 1990 May;14(2):330–46

Carotid dissection presenting as posterior ischemic optic neuropathy. Rivkin MJ, et al. **Neurology** 1990 Sep; 40(9):1469

Phosphorus-31 magnetic resonance spectroscopy of cerebral ischemia in cats. Kobayashi H, et al. **Neurosurgery** 1990 Aug;27(2):240–6

Significance of HMPAO-SPECT in the early diagnosis and followup of acute cerebral ischemia—comparison to CCT. Feldmann M, et al. **Psychiatry Res** 1989 Sep;29(3):457–8

Advantages of magnetoencephalography (AC and DC) in focal and generalized brain activity. Schüler P, et al. **Psychiatry Res** 1989 Sep;29(3):377

Magnetic resonance studies on the development of ischemic edema in an early period after occlusion of middle cerebral artery in a rat. Kotwica Z, et al. **Radiol Diagn (Berl)** 1989; 30(3):307–11

Rat striatal cation shifts reflecting hypoxic-ischemic damage can be predicted by on-line impedance measurements. de Boer J, et al. **Stroke** 1989 Oct;20(10):1377–82

Brain ischemia. Virapongse C, et al. **Top Magn Reson Imaging** 1989 Dec;2(1):63–75 (43 ref.)

[Ulrich oculo-oscillodynamography in carotid artery stenosis and temporal arteritis] Hofmann H, et al. **Klin Monatsbl Augenheilkd** 1989 Sep;195(3):172–3 (Eng. Abstr.) **(Ger)**

[The value and consequences of nocturnal pulse oximetry in severe heart failure, suspected myocardial infarct and acute cerebral ischemia] Stark R, et al. **Pneumologie** 1989 Nov;43 Suppl 1:596–9 (Eng. Abstr.) **(Ger)**

[Transcranial Doppler sonography in children. 2. Clinical uses] Bode H. **Ultraschall Med** 1989 Oct;10(5):237–44 (Eng. Abstr.) **(Ger)**

[Diagnosis and therapy of cerebrovascular insufficiency] Raithel D. **Versicherungsmedizin** 1989 Sep 1;41(5):165–8 (Eng. Abstr.) **(Ger)**

[Role of magnetic resonance spectroscopy in the diagnosis of ischemic cerebrovasculopathy] Cacciafesta M, et al. **Recenti Prog Med** 1990 May;81(5):344–50 (55 ref.) (Eng. Abstr.) **(Ita)**

[Perinatal factors predicting hypoxic-ischemic encephalopathy in asphyxic newborn infants] Esque Ruiz MT, et al. **An Esp Pediatr** 1989 Dec;31(6):519–22 (Eng. Abstr.) **(Spa)**

[The role of neonatal electroencephalography in the prognosis of the hypoxic-ischemic syndrome] Martínez Bermejo A, et al. **An Esp Pediatr** 1990 Jan;32(1):7–10 (29 ref.) (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Nimodipine in acute ischemic stroke: a double-blind controlled study. Paci A, et al. **Acta Neurol Scand** 1989 Oct;80(4):282–6

CBF decreases after calcium antagonist treatment in acute ischemic stroke. Vorstrup S, et al. **Agressologie** 1989 Jun; 30(7):447–9

Comparison of methohexital and isoflurane on neurologic outcome and histopathology following incomplete ischemia in rats. Baughman VL, et al. **Anesthesiology** 1990 Jan; 72(1):85–94

Effects of ciclopidine on the neurologic outcome and the hemorheologic pattern in the postacute phase of ischemic stroke: a pilot study. Ciuffetti G, et al. **Angiology** 1990 Jul; 41(7):505–11

50% dextrose: antidote or toxin? Browning RG, et al. **Ann Emerg Med** 1990 Jun;19(6):683–7 (45 ref.)

MK-801 prevents hippocampal neurodegeneration in neonatal hypoxic-ischemic rats. Ford LM, et al. **Arch Neurol** 1989 Oct;46(10):1090–6

Brain injury following cardiorespiratory arrest in cats. Effects of alphaxalone-alphadolone. Cervantes M, et al. **Bol Estud Med Biol** 1989 Jan–Jun;37(1–2):17–27

Nimodipine and cerebral ischaemia following subarachnoid haemorrhage. **Br J Neurosurg** 1989;3(5):529–31

The influence of barbiturates on cerebral metabolism in patients with borderline cerebrovascular reserve during intraoperative transient carotid occlusion. Wassman H, et al. **Br J Neurosurg** 1989;3(4):429–34

Actions of brain-protecting substances against both oxygen and glucose deprivation in the guinea pig hippocampal neurons studied in vitro. Amagasa M, et al. **Brain Res** 1989 Dec 11;504(1):87–93

Effects of an analogue of thyrotrophin-releasing hormone, RX77368, on infarct size and cerebral blood flow in focal cerebral ischaemia in the rat. O'Shaughnessy CT, et al. **Can J Physiol Pharmacol** 1989 Oct;67(10):1345–50

Potential therapeutic uses of N-methyl-D-aspartate antagonists in cerebral ischemia. Albers GW. **Clin Neuropharmacol** 1990 Jun;13(3):177–97 (109 ref.)

Ganglioside reduction of ischemic injury. Karpiak SE, et al. **Crit Rev Neurobiol** 1990;5(3):221–37 (140 ref.)

Pharmacology of calcium antagonists: clinical relevance in neurology. Cohan SL. **Eur Neurol** 1990;30 Suppl 2:28–30; discussion 39–41 (34 ref.)

Acute effects of acetyl-L-carnitine on regional cerebral blood flow in patients with brain ischaemia. Rosadini G, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):123–8

Dimethylthiourea reduces ischemic brain edema without affecting cerebral blood flow. Martz D, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):352–7

Low dose aspirin and its antithrombotic effect in ischaemic stroke patient. Poungvarin N, et al. **J Med Assoc Thai** 1989 Aug;72(8):421–6

Risk associated with heparin withdrawal in ischaemic

cerebrovascular disease. Slivka A, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1332–6

GM1 ganglioside treatment after global ischemia protects changes in membrane fatty acids and properties of Na+, K+–ATPase and Mg2+–ATPase. Mahadik SP, et al. **J Neurosci Res** 1989 Nov;24(3):402–12

Glucocorticoid treatment does not improve neurological recovery following cardiac arrest. Brain Resuscitation Clinical Trial I Study Group. Jastremski M, et al. **JAMA** 1989 Dec 22–29;262(24):3427–30

Carbon monoxide (CO)–induced hypoxia in mice: evaluation as an experimental model of cerebral ischemia for drug screening. Koida M, et al. **Jpn J Pharmacol** 1989 Oct; 51(2):273–8

Effect of calcitonin–gene–related peptide on postoperative neurological deficits after subarachnoid haemorrhage. Johnston FG, et al. **Lancet** 1990 Apr 14;335(8694):869–72

Use of antithrombotic drugs in the treatment of acute ischemic stroke: a survey of neurologists in practice in the United States. Marsh EE 3d, et al. **Neurology** 1989 Dec; 39(12):1631–4

Current and potentially new management strategies for perinatal hypoxic–ischemic encephalopathy. Vannucci RC. **Pediatrics** 1990 Jun;85(6):961–8 (104 ref.)

Anti–ischaemic effects of indomethacin and ketamine on hippocampus neurones in Mongolian gerbils. Petersen EN. **Pharmacol Toxicol** 1989 Oct;65(4):299–301

The effects of dihydroergocryptine on the neurological and enzyme disorders induced by cerebral ischaemia in rats. Cahn R, et al. **Resuscitation** 1989 Oct;18(1):37–48

2,3–Dihydroxy–6–nitro–7–sulfamoyl–benzo(F)quinoxaline: a neuroprotectant for cerebral ischemia. Sheardown MJ, et al. **Science** 1990 Feb 2;247(4942):571–4

Large–dose infusions of heparinoid ORG 10172 in ischemic stroke. Massey EW, et al. **Stroke** 1990 Sep;21(9):1289–92

Mannitol therapy in perinatal hypoxic–ischemic brain damage in rats. Mujsce DJ, et al. **Stroke** 1990 Aug;21(8):1210–4

High–dose intravenous naloxone for the treatment of acute ischemic stroke. Olinger CP, et al. **Stroke** 1990 May; 21(5):721–5

GM1 ganglioside therapy in acute ischemic stroke [letter; comment] Oppenheimer S. **Stroke** 1990 May;21(5):825 Comment on: Stroke 1989 Sep;20(9):1143–9.

Combination therapy with low–dose aspirin and ticlopidine in cerebral ischemia. Uchiyama S, et al. **Stroke** 1989 Dec; 20(12):1643–7

Examination of Cavinton effect in elderly diabetic patients. Boda J, et al. **Ther Hung** 1989;37(3):176–80

Nimodipine reduces morbidity, mortality after disruption of cerebral blood flow. Carmody J, et al. **W V Med J** 1990 Feb;86(2):49–51 (16 ref.)

[Effects of Ligusticum wallichii on the plasma and CSF levels of dynorphin A1–13 in rabbits under acute experimental cerebral ischemia] Liu Z, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1990 Mar;10(3):160–1, 163, 133 (Eng. Abstr.) **(Chi)**

[Diagnosis and treatment of carotid artery stenoses] Knoll P, et al. **Acta Med Austriaca** 1989;16(5):104–9 (68 ref.) (Eng. Abstr.) **(Ger)**

[Mesoglycan in acute focal cerebral ischemia] Cazzato G, et al. **Riv Neurol** 1989 May–Jun;59(3):121–6 (Eng. Abstr.) **(Ita)**

[Experimental studies on pharmacologic protection of the brain against focal ischemia. 2. Effects of KB–2796 and nicardipine on focal brain ischemia in rats] Shiino A. **Nippon Geka Hokan** 1989 Sep 1;58(5):438–44 (Eng. Abstr.) **(Jpn)**

[Effect of dilazep dihydrochloride on ischemia and reperfusion–induced cerebral injury in spontaneously hypertensive rats] Yamauchi Y, et al. **Nippon Yakurigaku Zasshi** 1990 May;95(5):239–46 (Eng. Abstr.) **(Jpn)**

[Effect of perfluorochemicals on experimental cerebral ischemia] Yamashita K, et al. **No To Shinkei** 1989 Dec; 41(12):1205–10 (Eng. Abstr.) **(Jpn)**

[Antiplatelet effects of combination therapy with low–dose aspirin and ticlopidine in cerebral ischemia] Uchiyama S, et al. **Rinsho Shinkeigaku** 1989 May;29(5):579–83 (Eng. Abstr.) **(Jpn)**

[The efficacy of using rheopolyglucin in the combined treatment of patients with ischemic stroke] Vinichuk SM, et al. **Vrach Delo** 1989 Nov;(11):54–7 (Eng. Abstr.) **(Rus)**

[Effect of calcium antagonists on cerebral and systemic hemodynamics in patients with ischemic disorders of cerebrovascular circulation] Ishchenko MM, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):52–6 (Eng. Abstr.) **(Rus)**

[Therapeutic effect of antiaggregants in patients with neurocirculatory asthenia with the initial signs of cerebral ischemia] Lebedev AA, et al. **Zh Nevropatol Psikhiatr** 1990; 90(1):48–52 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Prolonged ischemia differently affects phospholipase C acting against phosphatidylinositol and phosphatidylinositol 4,5–bisphosphate in brain subsynaptosomal fraction. Strosznajder J. **FEBS Lett** 1989 Oct 23;257(1):110–2

MRI quantitation of edema in focal cerebral ischemia in cats: correlation with cytochrome aa3 oxidation state. Kline RA, et al. **Magn Reson Med** 1990 Feb;13(2):319–23

Increase in choline acetyltransferase activity in septum of rats after transient forebrain ischemia: a possible role of factors released in the hippocampus. Hisanaga K, et al. **Neurosci Lett** 1989 Nov 6;105(3):321–5

[Xanthine oxidoreductase activity in rat brain tissue: the changes after decapitation] Oka H. **No To Shinkei** 1989 Jun;41(6):575–81 (Eng. Abstr.) **(Jpn)**

[Clinical value of the assessment of creatine kinase BB isoenzyme activity in newborn infants with hypoxic–ischemic lesions of the brain] Atakhanova MT, et al. **Akush Ginekol (Mosk)** 1990 Jan;(1):65–7 **(Rus)**

[Properties of monoamine oxidase in the brain of mongolian gerbils during cerebral ischemia] Goroshinskaia IA, et al. **Vopr Med Khim** 1989 Sep–Oct;35(5):112–5 (Eng. Abstr.) **(Rus)**

[Glucose–6–phosphate dehydrogenase and catalase in the erythrocytes of patients with cerebral ischemia attacks] Klímová E, et al. **Cesk Neurol Neurochir** 1990 Mar; 53(2):73–7 (Eng. Abstr.) **(Slo)**

EPIDEMIOLOGY

Circadian variation in the frequency of ischemic stroke. Argentino C, et al. **Stroke** 1990 Mar;21(3):387–9

A comparison of risk factors and prognosis for transient ischemic attacks and minor ischemic strokes. The Oxfordshire Community Stroke Project. Dennis MS, et al. **Stroke** 1989 Nov;20(11):1494–9

[Ischemic cerebral stroke and alcohol] Zawadzka–Tolloczko W, et al. **Pol Tyg Lek** 1989 Jun 12;44(24):579–80 (Eng. Abstr.) **(Pol)**

[Relation of risk factors for the development of ischemic stroke and indices of blood viscosity] Vinichuk IS. **Vrach Delo** 1990 Mar;(3):57–8 (Eng. Abstr.) **(Rus)**

[Methodology and case–control studies. Apropos of the OFRA study (letter)] Bermejo F. **Neurologia** 1989 May; 4(4):150–1 **(Spa)**

ETIOLOGY

Assessment of risk of carotid occlusion with balloon Matas testing and dynamic computed tomography. Terada T, et al. **Acta Neurochir (Wien)** 1990;103(3–4):122–7

A possible mechanism for neurologic ischemic events in patients with atrial septal aneurysm. Zabalgoitia–Reyes M, et al. **Am J Cardiol** 1990 Sep 15;66(7):761–4

Barotrauma and air embolism in hyperbaric oxygen therapy. Wolf HK, et al. **Am J Forensic Med Pathol** 1990 Jun; 11(2):149–53

Cardiogenic brain embolism and lupus anticoagulant. Young SM, et al. **Ann Neurol** 1989 Sep;26(3):390–2

Free radicals and brain damage. Siesjö BK, et al. **Cerebrovasc Brain Metab Rev** 1989 Fall;1(3):165–211 (205 ref.)

Focal cerebral ischaemia induced by postural change. Sedal L, et al. **Clin Exp Neurol** 1989;26:229–35

Therapy of acute stroke. Estol C, et al. **Clin Neuropharmacol** 1990 Apr;13(2):91–120 (202 ref.)

Intravenous digital subtraction angiography in patients with cerebral ischaemia. Evaluation of extracranial carotid lesions. Mantoni M, et al. **Eur J Radiol** 1989 Nov;9(4):221–3

Neurological complications of infective endocarditis. Roos KL. **Indiana Med** 1989 Nov;82(11):866–9

Silent cerebral ischemia in patients with chronic atrial fibrillation—a case–control study. Guidotti M, et al. **Ir J Med Sci** 1990 Apr;159(4):96–7

Cerebellar syndrome due to multiple ischemic lesions in hypothyroidism [letter] Guidetti D, et al. **Ital J Neurol Sci** 1990 Apr;11(2):183–4

Mitral valve prolapse and stroke: echocardiographic evidence for a missing causative link. Gross CM, et al. **J Am Soc Echocardiogr** 1989 Mar–Apr;2(2):94–7

Blood pressure and cerebral ischemia in very low birth weight infants. Kopelman AE. **J Pediatr** 1990 Jun; 116(6):1000–2 (12 ref.)

Neck trauma with embolization of the middle cerebral artery by a metal splinter. Langenbach M, et al. **Neurology** 1990 Mar;40(3 Pt 1):552–3 (7 ref.)

Brain death secondary to arteriovenous hemangioma of the forearm. Hamvas A, et al. **Pediatr Neurol** 1990 Jan–Feb; 6(1):63–4

Experimental biology of cerebral hypoxia–ischemia: relation to perinatal brain damage. Vannucci RC. **Pediatr Res** 1990 Apr;27(4 Pt 1):317–26 (100 ref.)

Ischemic brain edema as a complication of decompensated hypovolemic shock. Kozhura VL, et al. **Resuscitation** 1990 Apr;19(2):89–101

Ischemic stroke due to protein C deficiency. Kohler J, et al. **Stroke** 1990 Jul;21(7):1077–80

Reversible middle cerebral artery embolization in dogs without intracranial surgery [see comments] Purdy PD, et al. **Stroke** 1989 Oct;20(10):1368–76 Comment in: Stroke 1990 Apr;21(4):679–80.

Role of carotid stenosis in ischemic stroke. Zhu CZ, et al. **Stroke** 1990 Aug;21(8):1131–4

Risk factors of ischemic brain stroke in Korean diabetic patients—a retrospective study. Kim JS, et al. **Yonsei Med J** 1989 Sep;30(3):288–93

[Carotid artery occlusion disclosed by cerebral ischemia. Lesional, etiologic and developing aspects] Milandre L, et al. **Ann Med Interne (Paris)** 1990;141(2):115–22 (43 ref.) (Eng. Abstr.) **(Fre)**

[Cerebral ischemic accidents secondary to protein C deficiency (letter)] Madigand M, et al. **Presse Med** 1990 Mar 17;19(10):472 **(Fre)**

[Two–dimensional echocardiography in 100 cases of unexplained cerebral ischemic complications] Rosa A, et al. **Presse Med** 1990 Jan 20;19(2):73–5 (28 ref.) (Eng. Abstr.) **(Fre)**

[Cerebral arterial ischemic complications in young adults. Etiology and prognosis] Milandre L, et al. **Rev Med Interne** 1990 Jan–Feb;11(1):29–35 (Eng. Abstr.) **(Fre)**

[Multi–morbidity and pharmacotherapy in the aged. Considerations for the treatment of cerebral performance deficits] Platt D. **Fortschr Med** 1990 Mar 30;108(9):181–3 (4 ref.) **(Ger)**

[The patient with carotid reversible cerebral ischemic attack. Clinico–instrumental pathogenetic diagnosis] Landini GC, et al. **G Clin Med** 1989 Aug–Sep;70(8–9):503, 506–8 (Eng. Abstr.) **(Ita)**

[Infection and tissue ischemia: role of cellular rheology] Ciuffetti G, et al. **Medicina (Firenze)** 1989 Jul–Sep; 9(3):306–8 (Eng. Abstr.) **(Ita)**

[Effect of external decompression on the development of delayed ischemic neurological deficits after subarachnoid hemorrhage] Miyata I, et al. **Neurol Med Chir (Tokyo)** 1989 Aug;29(8):735–9 (Eng. Abstr.) **(Jpn)**

[Late effects of toxic methemoglobinemia] Byczkowska Z, et al. **Med Pr** 1989;40(5):277–80 (Eng. Abstr.) **(Pol)**

[Selected clinical and pathogenetic problems of Binswanger's subcortical arteriosclerotic encephalopathy—analysis of 19 cases] Bogucki A, et al. **Neurol Neurochir Pol** 1989 Mar–Apr;23(2):97–104 (Eng. Abstr.) **(Pol)**

[Mitral valve prolapse as a probable cause of cerebral ischemia. A case report] Marques PR, et al. **Arq Bras Cardiol** 1989 Jan;52(1):43–6 (Eng. Abstr.) **(Por)**

[Atherosclerotic cerebro–ischemic hypertension (editorial)] Smolenskiĭ VS. **Kardiologiia** 1989 Nov;29(11):28–31 **(Rus)**

[Risk factors of acute and chronic cerebral ischemia] Burtsev EM, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):16–20 (Eng. Abstr.) **(Rus)**

[Mitral valve prolapse and cerebral ischemia] Aguilera L, et al. **Neurologia** 1989 Apr;4(3):78–81 (Eng. Abstr.) **(Spa)**

[Mitral valve prolapse and cerebral ischemia. The point of view of the cardiologist (editorial)] Permanyer Miralda G, et al. **Neurologia** 1989 Apr;4(3):75–7 **(Spa)**

[Cerebral ischemia in young adults: experience with 55 cases] Brinck G, et al. **Rev Med Chil** 1988 Sep;116(9):901–5 (Eng. Abstr.) **(Spa)**

GENETICS

[Plasminogen deficiencies in 2 Spanish families. Response to the administration of DDAVP] Tabernero MD, et al. **Sangre (Barc)** 1990 Apr;35(2):137–41 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Anticardiolipin antibody associated ischaemic strokes in elderly patients without systemic lupus erythematosus. Chakravarty KK, et al. **Age Ageing** 1990 Mar;19(2):114–8

Clinical and laboratory findings in patients with antiphospholipid antibodies and cerebral ischemia. The Antiphospholipid Antibodies in Stroke Study Group. **Stroke** 1990 Sep;21(9):1268–73

METABOLISM

Parallel changes in brain tissue blood flow and mitochondrial function during and after 30 minutes of bilateral forebrain ischemia in the gerbil. Nádasy GL, et al. **Acta Physiol Hung** 1989;74(3–4):267–76

Protective effects of cyclohexyladenosine following cerebral ischemia in the gerbil hippocampus. Daval JL, et al. **Adv Exp Med Biol** 1989;253B:447–54

Effect of the calcium entry blocker nimodipine on the metabolism of nucleic acids in rat brain ischemia. Kostron H, et al. **Adv Neurol** 1990;52:133–9

Regional [14C]palmitate incorporation into the hippocampus after transient cerebral ischemia in awake gerbils. Tone O, et al. **Adv Neurol** 1990;52:141–8

Brain lactate and neurologic outcome following incomplete ischemia in fasted, nonfasted, and glucose–loaded rats. Hoffman WE, et al. **Anesthesiology** 1990 Jun;72(6):1045–50

Effects of sodium dichloroacetate dose. Brain metabolites associated with cerebral ischemia. Dimlich RV, et al. **Ann Emerg Med** 1989 Nov;18(11):1172–80

The role of glutamate neurotoxicity in hypoxic–ischemic neuronal death. Choi DW, et al. **Annu Rev Neurosci** 1990; 13:171–82 (96 ref.)

Elimination of the delayed postischemic energy deficit in cerebral cortex and hippocampus of aged rats with a dried, deproteinized blood extract (Actovegin). Hoyer S, et al. **Arch Gerontol Geriatr** 1989 Sep–Oct;9(2):181–92

Decapitation–induced changes in inositol phosphates in rat brain. Lin TN, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):1294–301

Enkephalin and neuropeptide Y in large cerebral arteries of the pig after ischemia and reserpine. Thureson–Klein A, et al. **Blood Vessels** 1989;26(3):177–84

Endogenous mediators of cerebral ischaemia–induced hypermetabolism in the rat. McCarthy HD, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:838P

Transient forebrain ischemia produces multiple deficits in

dopamine D1 transmission in the lateral neostriatum of the rat. Benfenati F, et al. **Brain Res** 1989 Oct 2;498(2):376–80

Unilateral induction of c-fos protein in cortex following cortical devascularization. Herrera DG, et al. **Brain Res** 1989 Dec 4;503(2):205–13

Allopurinol inhibits uric acid accumulation in the rat brain following focal cerebral ischemia. Kanemitsu H, et al. **Brain Res** 1989 Oct 16;499(2):367–70

Calcium, neuronal hyperexcitability and ischemic injury. Meyer FB. **Brain Res Brain Res Rev** 1989 Jul–Sep; 14(3):227–43 (171 ref.)

Hypoxia–ischemia induces heat shock protein–like (HSP72) immunoreactivity in neonatal rat brain. Ferriero DM, et al. **Brain Res Dev Brain Res** 1990 Apr 1;53(1):145–50

Experimental cerebral ischemia studied using nuclear magnetic resonance imaging and spectroscopy. Sutherland G, et al. **Can Assoc Radiol J** 1990 Feb;41(1):24–31

Cerebral ischaemia studied by nuclear magnetic resonance spectroscopy. Williams SR, et al. **Cerebrovasc Brain Metab Rev** 1989 Summer;1(2):91–114 (126 ref.)

Effect of thromboxane synthetase inhibitor on cerebral circulation and metabolism during experimental cerebral ischemia in spontaneously hypertensive rats. Sadoshima S, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):75–83

Putrescine content and structural defects in isolated fractions of rat brain after reversible cerebral ischemia. Röhn G, et al. **Exp Neurol** 1990 Mar;107(3):249–55

Cytochemical markers of ischaemia in the heart and brain. Borgers M, et al. **Histochem J** 1990 Mar;22(3):125–33 (64 ref.)

MRS of ischemic/hypoxic brain disease. Kucharczyk J, et al. **Invest Radiol** 1989 Dec;24(12):951–4 (10 ref.)

Lipid peroxidation in rat cerebral cortex during post-ischemic reperfusion: effect of exogenous antioxidants and Ca(++)-antagonist drugs. Vanella A, et al. **Ital J Biochem** 1990 May–Jun;39(3):196A–198A

Influence of cerebral ischemia and post-ischemic reperfusion on mitochondrial oxidative phosphorylation. Kurup CK, et al. **J Bioenerg Biomembr** 1990 Feb;22(1):61–80

Effect of nimodipine on regional cerebral glucose metabolism in patients with acute ischemic stroke as measured by positron emission tomography. Heiss WD, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):127–32

Delayed increases in regional brain quinolinic acid follow transient ischemia in the gerbil. Heyes MP, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):660–7

Metabolic and hemodynamic activation of postischemic rat brain by cortical spreading depression. Kocher M. **J Cereb Blood Flow Metab** 1990 Jul;10(4):564–71

Carbohydrate and energy metabolism during the evolution of hypoxic–ischemic brain damage in the immature rat. Palmer C, et al. **J Cereb Blood Flow Metab** 1990 Mar; 10(2):227–35

Protection by NMDA antagonists against selective cell loss following transient ischaemia. Swan JH, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):343–51

Eicosanoids in rat brain during ischemia and reperfusion—correlation to DC depolarization. Tegtmeier F, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):358–64

Mechanistic distinctions between excitotoxic and acidotic hippocampal damage in an in vitro model of ischemia. Tombaugh GC, et al. **J Cereb Blood Flow Metab** 1990 Jul; 10(4):527–35

Intracellular and extracellular changes of [Ca2+] in hypoxia and ischemia in rat brain in vivo. Silver IA, et al. **J Gen Physiol** 1990 May;95(5):837–66

Acid homeostasis following partial ischemia in neonatal brain measured in vivo by 31P and 1H nuclear magnetic resonance spectroscopy. Corbett RJ, et al. **J Neurochem** 1990 Apr;54(4):1208–17

Thromboxane and prostacyclin levels in fetal rabbit brain and placenta after intrauterine partial ischemic episodes. Goldin E, et al. **J Neurochem** 1990 Feb;54(2):587–91

Ischemia-induced alterations in lipid metabolism of the gerbil cerebral cortex: I. Changes in free fatty acid liberation. Nakano S, et al. **J Neurochem** 1990 Jun;54(6):1911–6

Fructose 2,6-bisphosphate changes in rat brain during ischemia. Yamamoto M, et al. **J Neurochem** 1990 Feb; 54(2):592–7

Effects of a new calcium channel blocker, KB-2796, on protein synthesis of the CA1 pyramidal cell and delayed neuronal death following transient forebrain ischemia. Yoshidomi M, et al. **J Neurochem** 1989 Nov;53(5):1589–94

Effect of bezafibrate on the sequelae of acute experimental focal cerebral ischaemia. Aspey BS, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1432–4

Alterations in Na(+)-K(+)-ATPase activity and beta-endorphin content in acute ischemic brain with and without naloxone treatment. Furui T, et al. **J Neurosurg** 1990 Mar;72(3):458–62

Neurological protection by dichloroacetate depending on the severity of injury in the paraplegic rat. LeMay DR, et al. **J Neurosurg** 1990 Jul;73(1):118–22

S-adenosyl-L-methionine ameliorates reduced local cerebral glucose utilization following brain ischemia in the rat. Kobayashi K, et al. **Jpn J Pharmacol** 1990 Jan;52(1):141–8

Cerebral metabolite dynamics during temporary complete ischemia in rats monitored by time-shared 1H and 31P NMR spectroscopy. Chang LH, et al. **Magn Reson Med** 1990 Jan;13(1):6–13

Immunohistochemical localization of prostaglandin F2 alpha in reperfused gerbil brain. Nakagomi T, et al. **Neurol Med Chir (Tokyo)** 1990 Apr;30(4):223–8

Cellular distribution of omega 3 (peripheral type benzodiazepine) binding sites in the normal and ischaemic rat brain: an autoradiographic study with the photoaffinity ligand [3H]PK 14105. Benavides J, et al. **Neurosci Lett** 1990 Jun 22;114(1):32–8

Synaptic vesicle-bound phospholipase(s) acting on phosphatidylinositol exhibit(s) high susceptibility to brain ischemia. Strosznajder J, et al. **Neurosci Lett** 1990 Jul 13; 114(3):329–32

Hippocampal damage induced by ischemia and intra-amygdaloid kainate injection: effect on N-methyl-D-aspartate, N-(1-[2-thienyl]cyclohexyl)piperidine and glycine binding sites. Crepel V, et al. **Neuroscience** 1989;31(3):605–12

Regional cerebral glucose utilization in the immature rat: effect of hypoxia–ischemia. Vannucci RC, et al. **Pediatr Res** 1989 Sep;26(3):208–14

Effect of stobadine and vitamin E on the ischemic reperfused brain tissue. Horáková L, et al. **Pharmazie** 1990 Mar; 45(3):223–4

Elevated brain lactate accumulation and increased neurologic deficit are associated with modest hyperglycemia in global brain ischemia. Natale JE, et al. **Resuscitation** 1990 Jun; 19(3):271–89

Reduction of hyperthermic ischemic acidosis by a conditioning event in cats. Chopp M, et al. **Stroke** 1989 Oct;20(10):1357–60

Increased cerebral lactate output to cerebral venous blood after forebrain ischemia in rats. Frerichs KU, et al. **Stroke** 1990 Apr;21(4):614–7

Changes in the concentrations of cerebral proteins following occlusion of the middle cerebral artery in rats. Inuzuka T, et al. **Stroke** 1990 Jun;21(6):917–22

Phenytoin affects metabolism of free fatty acids and nucleotides in rat cerebral ischemia. Kinouchi H, et al. **Stroke** 1990 Sep;21(9):1326–32

Effect of plasma glucose concentration on cerebral metabolism during partial ischemia in neonatal piglets. Laptook AR, et al. **Stroke** 1990 Mar;21(3):435–40

Effect of MCI-186 on ischemia-induced changes in monoamine metabolism in rat brain. Oishi R, et al. **Stroke** 1989 Nov;20(11):1557–64

Kappa-opioid receptor changes and neurophysiological alterations during cerebral ischemia in rabbits. Scavini C, et al. **Stroke** 1990 Jun;21(6):943–7

Free radicals in central nervous system ischemia. Schmidley JW. **Stroke** 1990 Jul;21(7):1086–90 (30 ref.)

Effects of middle cerebral artery occlusion on cerebral cortex choline and acetylcholine in rats. Scremin OU, et al. **Stroke** 1989 Nov;20(11):1524–30

Effects of hypoxia–ischemia and MK-801 treatment on the binding of a phencyclidine analogue in the developing rat brain. Silverstein FS, et al. **Stroke** 1990 Feb;21(2):310–5

[Brain energy metabolism of cerebral ischemic mice and the effects of some drugs] Feng YP, et al. **Yao Hsueh Hsueh Pao** 1989;24(2):89–94 (Eng. Abstr.) **(Chi)**

[Lipid peroxidation and changes in xanthine oxidase in cerebral ischemia] Kinuta Y. **Nippon Geka Hokan** 1989 Jan 1;58(1):59–70 (Eng. Abstr.) **(Jpn)**

[Alteration of regional calcium and energy metabolism in ischemic neuronal injury] Kobayashi S. **Nippon Geka Hokan** 1989 Jan 1;58(1):43–58 (Eng. Abstr.) **(Jpn)**

[Changes in muscarinic cholinergic receptor and choline acetyltransferase in experimental ischemic brain] Mizobuchi H. **Nippon Geka Hokan** 1989 Jan 1;58(1):93–106 (Eng. Abstr.) **(Jpn)**

[Degradation of cytoskeletal proteins in cerebral ischemia] Ogata N. **Nippon Geka Hokan** 1989 Jan 1;58(1):71–9 (Eng. Abstr.) **(Jpn)**

[Studies of metabolic changes during and following cerebral ischemia in gerbils by in vivo multi nuclear magnetic resonance spectroscopy] Igarashi H. **Nippon Ika Daigaku Zasshi** 1989 Aug;56(4):339–48 (Eng. Abstr.) **(Jpn)**

[The effect of vitamin A on leukotriene production in the ischemic rat brain] Katsura K. **Nippon Ika Daigaku Zasshi** 1989 Dec;56(6):592–601 (Eng. Abstr.) **(Jpn)**

[Role of arachidonic acids in cerebral circulatory disorders] Watanabe T, et al. **Nippon Rinsho** 1990 Jun;48(6):1216–23 **(Jpn)**

[Extracellular concentration of dopamine and dopamine metabolites in the rat striatum during cerebral ischemia and reperfusion] Matsumoto T, et al. **No To Shinkei** 1989 Oct; 41(10):1013–9 (Eng. Abstr.) **(Jpn)**

[Ischemia-induced neurotrophic activity detected in the peri-infarcted brain tissue] Yamada K, et al. **No To Shinkei** 1989 Jun;41(6):611–6 (Eng. Abstr.) **(Jpn)**

[Glycolytic activity and fructose 2, 6-bisphosphate changes in rat brain during ischemia] Yamamoto M. **No To Shinkei** 1990 Apr;42(4):405–11 (Eng. Abstr.) **(Jpn)**

[Can the brain be protected during ischemia?] Karlsson BR, et al. **Tidsskr Nor Laegeforen** 1989 Sep 20;109(26):2642 **(Nor)**

[Changes in energy metabolism in the brain in experimental cerebral ischemia of different degree of severity (nuclear magnetic resonance-spectroscopic study)] Gannushkina IV, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):3–6 (Eng. Abstr.) **(Rus)**

MORTALITY

Fatal ischaemic brain oedema after unsuccessful thrombolysis. Overgaard K, et al. **Neurol Res** 1990 Jun; 12(2):81–2

Pathophysiological characteristics of clinical death in rats. Majkowska-Wierzbicka J. **Neuropatol Pol** 1989;27(1):85–96

PATHOLOGY

Acute ultrastructural response of hypoxic hypoxia with relative ischemia in the isolated brain. Allen A, et al. **Acta Neuropathol (Berl)** 1989;78(6):637–48

Mechanisms of astroglial swelling in focal cerebral ischemia. Shigeno T, et al. **Adv Neurol** 1990;52:545

Atrophy of the ipsilateral substantia nigra following middle cerebral artery occlusion in the rat. Tamura A, et al. **Brain Res** 1990 Feb 26;510(1):154–7

Experimental cerebral ischemia studied using nuclear magnetic resonance imaging and spectroscopy. Sutherland G, et al. **Can Assoc Radiol J** 1990 Feb;41(1):24–31

Hippocampal cell death following ischemia: effects of brain temperature and anesthesia. Freund TF, et al. **Exp Neurol** 1990 Jun;108(3):251–60

Focal cerebral ischemia in the cat: pretreatment with a competitive NMDA receptor antagonist, D-CPP-ene. Bullock R, et al. **J Cereb Blood Flow Metab** 1990 Sep; 10(5):668–74

Staurosporine, a novel protein kinase C inhibitor, prevents postischemic neuronal damage in the gerbil and rat. Hara H, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):646–53

Protective effect of nimodipine against ischemic neuronal damage in rat hippocampus without changing postischemic cerebral blood flow. Nuglisch J, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):654–9

PAF antagonist ginkgolide B reduces postischemic neuronal damage in rat brain hippocampus. Oberpichler H, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):133–5

Excitatory amino acid release and free radical formation may cooperate in the genesis of ischemia-induced neuronal damage. Pellegrini-Giampietro DE, et al. **J Neurosci** 1990 Mar;10(3):1035–41

Changes of the cerebral microvascular structure and endothelium during the course of permanent ischemia. Naganuma Y. **Keio J Med** 1990 Mar;39(1):26–31

Calcium entry blockers in cerebral resuscitation. Sakabe T. **Magnesium** 1989;8(5–6):238–52 (41 ref.)

The adenosine analogue and cerebral protecting agent, AMG-1, has no effect on delayed neuronal death following ischemia. Araki H, et al. **Methods Find Exp Clin Pharmacol** 1989 Dec;11(12):731–6

Transient hyperthermia protects against subsequent forebrain ischemic cell damage in the rat. Chopp M, et al. **Neurology** 1989 Oct;39(10):1396–8

Experimental global cerebral ischemia in rats. I. Ultrastructural changes in cerebral cortex in the postischemic period. Majkowska-Wierzbicka J. **Neuropatol Pol** 1989;27(1):97–114

Experimental global cerebral ischemia in rats. II. Ultrastructural changes in the Ca1 sector of the hippocampus in the post-ischemic period. Majkowska-Wierzbicka J. **Neuropatol Pol** 1989; 27(1):115–26

Forebrain ischemia studied using magnetic resonance imaging and spectroscopy. Saunders JK, et al. **NMR Biomed** 1989 Dec;2(5–6):312–6

Histologic assessment of neurons in rat models of cerebral ischemia. Eke A, et al. **Stroke** 1990 Feb;21(2):299–304

Selective cortical neuronal damage after middle cerebral artery occlusion in rats. Iizuka H, et al. **Stroke** 1989 Nov; 20(11):1516–23

Platelet ultrastructure and secretion in acute ischemic stroke. Joseph R, et al. **Stroke** 1989 Oct;20(10):1316–9

Effect of hyperglycemia on neuronal changes in a rabbit model of focal cerebral ischemia. Kraft SA, et al. **Stroke** 1990 Mar;21(3):447–50

Selective occlusion of blood supply to the anterior perforated substance of the dog: a highly reproducible stroke model. Brenowitz G, et al. **Surg Neurol** 1990 Apr;33(4):247–52

[Ultrastructural observation of acute cerebral ischemia pathological changes after carotid ligation in rats] Guo Y. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1990 Apr; 12(2):150–2 (Eng. Abstr.) **(Chi)**

[Experimental studies on pharmacologic protection of the brain against focal ischemia. 1. Focal brain ischemia model in rats] Shiino A. **Nippon Geka Hokan** 1989 Sep 1; 58(5):431–7 (Eng. Abstr.) **(Jpn)**

[Postmortem study of the cerebral vascular system by the method of vascular casts in patients with ischemic cerebral infarction] Stroińska-Kuś B. **Neurol Neurochir Pol** 1988 Nov–Dec;22(6):507–12 (Eng. Abstr.) **(Pol)**

[Effect of short-term ischemia on the ultrastructure of the Ammon's horn of the hippocampus in Mongolian gerbils. II. The electron-microscopic image of the synapses in the early post-ischemic period] Gajkowska B, et al. **Neuropatol Pol** 1989;27(3):339–66 **(Pol)**

[Effect of ischemia on the ultrastructure of the hypothalamo-hypophyseal system in rats] Gajkowska B, et al. **Neuropatol Pol** 1989;27(3):367–81 (Eng. Abstr.) **(Pol)**

[Electron-microscopic changes in neurosecretory nuclei of the rat hypothalamus after total ischemia in short-term clinical death] Walski M, et al. **Neuropatol Pol** 1989; 27(3):383–96 (Eng. Abstr.) **(Pol)**

[Effect of ischemia on the gigantocellular nucleus in rats] Zaręba-Kowalska A, et al. **Neuropatol Pol** 1989; 27(3):397–409 (Eng. Abstr.) **(Pol)**

[Reactions of cellular structures of the brain of laboratory animals in oxygen deficiency] Kvitnitskiĭ-Ryzhov IuN, et al. **Arkh Anat Gistol Embriol** 1990 Feb;98(2):12–8 (Eng. Abstr.) **(Rus)**

[Reparative processes in postischemic cerebral cortex in the early postresuscitation period (materials submitted to the International Symposium, "Central nervous system and postresuscitation pathology," Moscow, March 14–16, 1989)] Milokhin AA, et al. **Biull Eksp Biol Med** 1990 May; 109(5):506–8 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Cerebral autoregulation following prophylactic and delayed experimental STA–MCA bypass. Loftus CM, et al. **Acta Neurochir (Wien)** 1989;101(1–2):75–9

Measurement of local haematocrit, energy metabolism and haemodynamics in cerebral ischaemia with positron tomography. Frackowiak RS. **Acta Neurol Scand Suppl** 1989;127:14–21 (26 ref.)

Cerebral blood flow during experimental hypoxaemia and ischaemia in the newborn piglet. Odden JP, et al. **Acta Paediatr Scand Suppl** 1989;360:13–9

Recovery of ion homeostasis and electrical activity in brain after ischemia does not require glucose. Bock AC, et al. **Acta Physiol Scand Suppl** 1989;582:54

Circulatory effect of kallikrein; with special reference to cerebral circulation. Miyazaki M. **Adv Exp Med Biol** 1989; 247B:607–10

Uncoupling of blood flow and glucose metabolism in the neighboring postischemic edematous brain area. Nagasawa H, et al. **Adv Neurol** 1990;52:63–71

Effect of glycerol on the hemodynamics of acutely induced ischemic area in the cerebral cortex of cats. Ohta K, et al. **Adv Neurol** 1990;52:275–84

Effects of neutrophil depletion and superoxide dismutase on postischemic hypoperfusion of rat brain. Schürer L, et al. **Adv Neurol** 1990;52:57–62

Hypertension and hemodilution during cerebral ischemia reduce brain injury and edema. Cole DJ, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):H211–7

The effects of intravenous succinylcholine on cerebral function and muscle afferent activity following complete ischemia in halothane-anesthetized dogs. Lanier WL, et al. **Anesthesiology** 1990 Sep;73(3):485–90

The effect of mild hyperthermia and hypothermia on brain damage following 5, 10, and 15 minutes of forebrain ischemia. Minamisawa H, et al. **Ann Neurol** 1990 Jul; 28(1):26–33

Evidence for transhemispheric diaschisis in unilateral stroke [see comments] Dobkin JA, et al. **Arch Neurol** 1989 Dec; 46(12):1333–6 Comment in: Arch Neurol 1990 Jun;47(6):621.

Influence of hypotension and hypotensive technique on the area of profound reduction in cerebral blood flow during focal cerebral ischaemia in the rat. Cole DJ, et al. **Br J Anaesth** 1990 Apr;64(4):498–502

Experimental intracerebral haematoma: the role of blood constituents in early ischaemia. Jenkins A, et al. **Br J Neurosurg** 1990;4(1):45–51

Topographic EEG in brain ischemia—correlation with blood flow and metabolism. Nagata K. **Brain Topogr** 1988 Winter; 1(2):97–106 (80 ref.)

Pathophysiology of ischemic brain injury. Milde LN. **Crit Care Clin** 1989 Oct;5(4):729–53 (123 ref.)

Patent ductus arteriosus and cerebral circulation in preterm infants. Shortland DB, et al. **Dev Med Child Neurol** 1990 May;32(5):386–93

The effects of experimental brain-stem ischaemia on brain-stem auditory evoked potentials in primates. Baik MW, et al. **Electroencephalogr Clin Neurophysiol** 1990 May; 75(5):433–43

An atypical paediatric case of malignant atrophic papulosis (Köhlmeier-Degos disease). Barabino A, et al. **Eur J Pediatr** 1990 Apr;149(7):457–8

Investigation of cerebrovascular reactivity using transcranial Doppler sonography. Evaluation and comparison of different methods. Provinciali L, et al. **Funct Neurol** 1990 Jan–Mar;5(1):33–41

Pathophysiological correlates of cerebral ischemia the significance of cellular acid base shifts. Welch KM, et al. **Funct Neurol** 1990 Jan–Mar;5(1):21–31

Cerebral ischemia in spontaneously hypertensive rats with type 2 (noninsulin-dependent) diabetes mellitus, cerebral blood flow and tissue metabolism. Fujii K, et al. **Gerontology** 1989;35(2–3):78–87

Autoregulation of cerebral blood flow in experimental focal brain ischemia. Dirnagl U, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):327–36

The novel dihydronaphthyridine Ca2+ channel blocker CI-951 improves CBF, brain pHi, and EEG recovery in focal cerebral ischemia. Meyer FB, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):97–103

Postischemic canine cerebral blood flow appears to be determined by cerebral metabolic needs. Michenfelder JD, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):71–6

Cerebral blood flow, glucose utilization, regional glucose, and ATP content during the maturation period of delayed ischemic injury in gerbil brain. Mies G, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):638–45

The influence of mild body and brain hypothermia on ischemic brain damage. Minamisawa H, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):365–74

Systematic studies on the effects of the NMDA receptor antagonist MK-801 on cerebral blood flow and responsivity, EEG, and blood-brain barrier following complete reversible cerebral ischemia. Stevens MK, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):77–88

Mild hypothermia prevents ischemic injury in gerbil hippocampus. Welsh FA, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):557–63

Changes in the somatosensory evoked potential during and immediately following temporary middle cerebral artery occlusion predict somatosensory cortex ischemic lesions in monkeys. Dowman R, et al. **J Clin Neurophysiol** 1990 Apr;7(2):269–81

Ischaemia of the insular cortex increases the vagal contribution to the baroreceptor reflex in the rat. Elghozi JL, et al. **J Hypertens Suppl** 1989 Dec;7(6):S36–7

High blood pressure in acute stroke—is it white coat hypertension? [letter] Carlberg B, et al. **J Intern Med** 1990 Sep;228(3):291–2

Regional cerebral blood flow by SPECT imaging in Sturge-Weber disease: an aid for diagnosis. Chiron C, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1402–9

Comparison of crystalloids and colloids for hemodilution in a model of focal cerebral ischemia. Korosue K, et al. **J Neurosurg** 1990 Oct;73(4):576–84

Injection-corrosion cast study of the microcirculation of the brain in haemorrhagic and ischaemic disorders. Preliminary investigation. Maccotta V, et al. **J Neurosurg Sci** 1989 Apr–Jun;33(2):157–60

Cerebral ischemia model with conscious mice. Involvement of NMDA receptor activation and derangement of learning and memory ability. Himori N, et al. **J Pharmacol Methods** 1990 Jul;23(4):311–27

Effect of nimodipine on ischemia-induced brain edema and mortality in a novel transient middle cerebral artery occlusion model. Hara H, et al. **Jpn J Pharmacol** 1990 Jun; 53(2):247–53

Deterioration of baroreflex by transient global cerebral ischemia: its correlation with the degree of ischemia or post-ischemic hypoperfusion in the medulla oblongata. Kurihara J, et al. **Jpn J Pharmacol** 1989 Dec;51(4):493–9

Divalent ions in cardiopulmonary-cerebral resuscitation. Maekawa T. **Magnesium** 1989;8(3–4):154–62 (37 ref.)

Current concepts in brain ischemia. A review. Voiculescu V. **Neurol Psychiatr (Bucur)** 1989 Jul–Sep;27(3):175–86 (68 ref.)

Heterogeneous arterial responses in postischemic state of cerebral cortex. Baramidze DG, et al. **Neuropatol Pol** 1989; 27(1):3–12

Conditions of blood flow in capillaries of cerebral cortex in control and ischemia. Varazashvili M, et al. **Neuropatol Pol** 1989;27(1):13–24

Calcium antagonists protect hippocampal neurons against ischemic damage. Krieglstein J, et al. **Prog Clin Biol Res** 1989;317:393–400

Monitoring of somatosensory evoked potentials in cerebral ischemia: an experimental model. Valle E, et al. **Riv Neurol** 1989 Nov–Dec;59(6):207–10

Periodicity of ischemic stroke [letter; comment] **Stroke** 1989 Nov;20(11):1590–1 Comment on: Stroke 1989 Apr;20(4):473–6.

Spontaneous improvement after acute ischemic stroke. A pilot study. Biller J, et al. **Stroke** 1990 Jul;21(7):1008–12

Effects of normothermic versus mild hyperthermic forebrain ischemia in rats. Dietrich WD, et al. **Stroke** 1990 Sep; 21(9):1318–25

Nimodipine posttreatment does not increase blood flow in rats with focal cortical ischemia. Dirnagl U, et al. **Stroke** 1990 Sep;21(9):1357–61

Prevention of ischemic-hypoxic brain injury and death in rabbits with fructose-1,6-diphosphate. Farias LA, et al. **Stroke** 1990 Apr;21(4):606–13

Assessment of median nerve somatosensory evoked potentials in cerebral ischemia. Gott PS, et al. **Stroke** 1990 Aug; 21(8):1167–71

Sequential cerebral blood flow changes in short-term cerebral ischemia in gerbils. Kato H, et al. **Stroke** 1990 Sep;21(9):1346–9

Cortical activity, ionic homeostasis, and acidosis during rat brain repetitive ischemia. Matsumoto T, et al. **Stroke** 1990 Aug;21(8):1192–8

Preservation of brain temperature during ischemia in rats. Minamisawa H, et al. **Stroke** 1990 May;21(5):758–64

Continuous lidocaine infusion and focal feline cerebral ischemia. Shokunbi MT, et al. **Stroke** 1990 Jan;21(1):107–11

Leukocyte involvement in cerebral ischemia and reperfusion injury. Vasthare US, et al. **Surg Neurol** 1990 Apr; 33(4):261–5

The effects of brain edema on intracranial pressure in focal cerebral ischemia. An experimental study in a rat using magnetic resonance imaging. Kotwica Z, et al. **Zentralbl Neurochir** 1989;50(2):68–71

[Monitoring of cerebral ischemia: current data and review of results based on the ischemic carotid model] Tempelhoff R, et al. **Agressologie** 1989 Nov–Dec;30(11–12):591–4 (Eng. Abstr.) **(Fre)**

[Physiopathology of the cerebral arterial circulation. Application to cerebro arterial surgery] Testart J. **J Mal Vasc** 1990;15(2):194–201 (26 ref.) (Eng. Abstr.) **(Fre)**

[Transcranial Doppler curve analysis. On the pathophysiology of unilateral carotid stenoses] Fürst H, et al. **Chirurg** 1990 Mar;61(3):178–82 (Eng. Abstr.) **(Ger)**

[Carotid and vertebral artery circulation in forearm choke holds in Doppler sonography] Denk W, et al. **Z Rechtsmed** 1990;103(5):369–77 (Eng. Abstr.) **(Ger)**

[SPECT measurement of cerebral hemodynamics in transient ischemic attack patients—evaluation of pathogenesis and detection of misery perfusion] Toyama H, et al. **Kaku Igaku** 1989 Dec;26(12):1487–92 (Eng. Abstr.) **(Jpn)**

[The effects of post-ischemic delayed hypoperfusion on the process of recovery of brain function] Dote K. **Masui** 1990 Apr;39(4):442–9 (Eng. Abstr.) **(Jpn)**

[The Chronological changes in the cerebral blood flow and cerebral metabolic rate for glucose in the ischemic rabbit brain] Tenjin H, et al. **Neurol Med Chir (Tokyo)** 1989 Dec; 29(12):1085–92 (Eng. Abstr.) **(Jpn)**

[Differential effects of isoflurane and nitrous oxide on cerebral blood flow, metabolism and electrocorticogram after incomplete cerebral ischemia in the rat] Ishikawa T, et al. **Nippon Yakurigaku Zasshi** 1989 Jul;94(1):73–80 (Eng. Abstr.) **(Jpn)**

[Diagnosis of hemodynamic compromise in patients with chronic cerebral ischemia; the detection of impaired vasodilatory capacity with 133Xe SPECT and acetazolamide (Diamox) test] Kuroda S, et al. **No Shinkei Geka** 1990 Feb;18(2):167–73 (Eng. Abstr.) **(Jpn)**

[Diagnosis of hemodynamic compromise in patients with chronic cerebral ischemia; measurement of cerebral blood volume (CBV) with 99mTc-RBC SPECT] Kuroda S, et al. **No Shinkei Geka** 1990 Mar;18(3):259–66 (Eng. Abstr.) **(Jpn)**

[A comparison of the functional vulnerability of the cerebral cortex and thalamus to acute ischemia] Fukuda M, et al. **No To Shinkei** 1990 Apr;42(4):383–9 (Eng. Abstr.) **(Jpn)**

[Cerebral blood flow and oxygen metabolism in ischemic cerebrovascular disease; embolic occlusion and thrombotic occlusion] Higano S, et al. **Rinsho Hoshasen** 1989 Jun; 34(6):683–90 (Eng. Abstr.) **(Jpn)**

[Relation between the EEG pattern and the site of ischemic focus in computerized tomography] Barańska-Gieruszczak M, et al. **Neurol Neurochir Pol** 1989 Mar–Apr;23(2):105–10 (Eng. Abstr.) **(Pol)**

[Characteristics of biochemical, electrophysiological and morphological changes in experimental cerebral ischemia] Barkhatova VP, et al. **Zh Nevropatol Psikhiatr** 1989; 89(7):95–100 (Eng. Abstr.) **(Rus)**

[Characteristics of intracerebral hemodynamics in occlusive diseases of major arteries of the brain] Pokrovskiĭ AV, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):7–11 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Anti-hypoxic potency of cerebroprotective drugs studied in a model of acute reversible respiratory failure. Tkáčová R, et al. **Biomed Biochim Acta** 1989;48(7):465–71

Oral nimodipine and cerebral ischaemia following subarachnoid haemorrhage. Pickard JD, et al. **Br J Clin Pract** 1990 Feb;44(2):66–7

Intraoperative cerebral ischaemia. O'Sullivan K, et al. **Br J Hosp Med** 1989 Oct;42(4):286–8, 290–6 (50 ref.)

The anaesthetic management of circulatory arrest. Tan PS. **Br J Hosp Med** 1990 Jan;43(1):36–41, 43–4 passim (67 ref.)

Protection against cerebral ischemia: the role of barbiturates. Spetzler RF, et al. **Cerebrovasc Brain Metab Rev** 1989 Fall; 1(3):212–29 (108 ref.)

Neurologic management following cardiac arrest. Bircher NG. **Crit Care Clin** 1989 Oct;5(4):773–84 (68 ref.)

Pharmacological actions of a new TRH analogue, YM-14673, in rats subjected to cerebral ischemia and anoxia. Yamamoto M, et al. **Eur J Pharmacol** 1990 Jun 8; 181(3):207–14

An external carotid artery shunt to prevent cerebral ischaemia during carotid surgery. Faraglia V, et al. **Eur J Vasc Surg** 1990 Aug;4(4):385–9

Aspects of brain metabolism during ischemia: intervention. Cottrell JE. **Minerva Anestesiol** 1989 Mar;55(3):59–61 (21 ref.)

Reduction of perinatal hypoxic–ischemic brain damage with allopurinol. Palmer C, et al. **Pediatr Res** 1990 Apr;27(4 Pt 1):332–6

Effect of fluid intake and antihypertensive treatment on cerebral ischemia after subarachnoid hemorrhage. Hasan D, et al. **Stroke** 1989 Nov;20(11):1511–5

Baclofen does not protect against cerebral ischemia in rats. Rosenbaum DM, et al. **Stroke** 1990 Jan;21(1):138–40

A prototype retractor system designed to minimize ischemic brain retractor injury: initial observations. Waring AJ, et al. **Surg Neurol** 1990 Sep;34(3):139–43

[The effectiveness of antiplatelet therapy in ischemic cerebrovascular attacks in the chronic stage] Chroboček J. **Cesk Neurol Neurochir** 1989 Sep;52(5):313–9 (Eng. Abstr.) **(Cze)**

[Surgical treatment of patients with combined lesions of the coronary and brachiocephalic arteries] Goriunov VS.

Kardiologiia 1990 Apr;30(4):119–21 (32 ref.) **(Rus)**

[Surgical prevention and treatment of cerebral ischemia] Grga A, et al. **Lijec Vjesn** 1989 Jun–Jul;111(6–7):217–23 (Eng. Abstr.) **(Scr)**

[Surgical treatment of extracranial lesions of the carotid arteries in the prevention of cerebral ischemia] Solaković E. **Med Arh** 1989;43(2–3):131–5 (Eng. Abstr.) **(Scr)**

[Usefulness of dyslipemia control for reducing the risk of cerebral vascular accidents (letter)] Villar Ortiz J. **Med Clin (Barc)** 1989 Oct 28;93(13):519 **(Spa)**

[Risk factors and ischemic stroke. Key to an adequate prevention] Díez-Tejedor E. **Neurologia** 1988 Jul–Aug; 3(4):127–9 (37 ref.) **(Spa)**

[Medico-surgical treatments in ischemic cerebrovascular diseases] Fields WS. **Neurologia** 1988 Sep–Oct;3(5):187–92 (15 ref.) **(Spa)**

PSYCHOLOGY

The relationship of structural ischemic brain damage to neurobehavioural deficit: the effect of postischemic MK-801. Rod MR, et al. **Can J Psychol** 1990 Jun; 44(2):196–209

Effect of S-adenosyl-L-methionine on impairment of working memory induced in rats by cerebral ischemia and scopolamine. Yatsugi S, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):231–9

Effect of minaprine and other reference drugs on passive avoidance impairment induced by cerebral ischemia in Mongolian gerbils. Karasawa Y, et al. **Jpn J Pharmacol** 1990 Jul;53(3):339–46

Models of hypoxia and cerebral ischemia. Weinachter SN, et al. **Pharmacopsychiatry** 1990 Feb;23 Suppl 2:94–7; discussion 98 (18 ref.)

Minaprine improves impairment of working memory induced by scopolamine and cerebral ischemia in rats. Yamamoto T, et al. **Psychopharmacology (Berl)** 1990;100(3):316–22

Preoperative training modifies radial maze performance in rats with ischemic hippocampal injury. Volpe BT, et al. **Stroke** 1989 Dec;20(12):1700–6

RADIOGRAPHY

Reversal sign on CT: effect of anoxic/ischemic cerebral injury in children. Han BK, et al. **AJNR** 1989 Nov–Dec; 10(6):1191–8

A comparison of normal intraarterial digital subtraction angiography with standard angiography in patients with symptomatic cerebrovascular ischemia. Lipchik EO, et al. **AJNR** 1990 Jul–Aug;11(4):837–8

Reversal sign on CT: effect of anoxic/ischemic cerebral injury in children. Han BK, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):361–8

Cerebral ischemia with CT. Constant P, et al. **Comput Tomogr** 1977;1(3):235–48

Histopathological correlates of leuko-araiosis in patients with ischemic stroke. Inzitari D, et al. **Eur Neurol** 1989;29 Suppl 2:23–6

CT scanning in ischaemic stroke [letter; comment] Mehta JB, et al. **J Assoc Physicians India** 1989 Dec;37(12):797 Comment on: J Assoc Physicians India 1988 Apr;36(4):294.

Complications of cerebral angiography for patients with mild carotid territory ischaemia being considered for carotid endarterectomy. Hankey GJ, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):542–8

Megadolichobasilar artery and acute cerebrovascular pathology. Maiuri F, et al. **Neurol Res** 1990 Mar;12(1):54–6

Functional image of dynamic computed tomography for the evaluation of cerebral hemodynamics. Nagata K, et al. **Stroke** 1990 Jun;21(6):882–9

[The most frequent localization of cerebral ischemia attacks. III. Status lacunaris cerebri] Kalvach P, et al. **Cas Lek Cesk** 1989 Sep 22;128(39):1224–9 (Eng. Abstr.) **(Cze)**

[Near infrared spectrophotometry—a non-invasive, continuous method for monitoring of cerebral status in newborn infants] Skov L, et al. **Ugeskr Laeger** 1990 Jun 4;152(23):1646–50 (30 ref.) (Eng. Abstr.) **(Dan)**

[Cerebral ischemia and hemorrhage; computed tomography and angiography] Okudera T, et al. **Rinsho Hoshasen** 1989 Jun;34(6):647–56 (Eng. Abstr.) **(Jpn)**

[An unusual CT image of an ischemic focus] Mihale J, et al. **Cesk Neurol Neurochir** 1990 May;53(3):188–90 (Eng. Abstr.) **(Slo)**

RADIONUCLIDE IMAGING

Cortical pathophysiology and clinical neurologic abnormalities in acute cerebral ischemia. A serial study with single photon emission computed tomography. Rango M, et al. **Arch Neurol** 1989 Dec;46(12):1318–22

Intravenous 99mTc HM-PAO radionuclide angiography as an adjunct to SPECT assessment of cerebral disease. Bartolini A, et al. **Comput Med Imaging Graph** 1990 Mar–Apr;14(2):91–5

Evaluation of the 11CO2 positron emission tomographic method for measuring brain pH. II. Quantitative pH mapping in patients with ischemic cerebrovascular diseases. Senda M, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):859–73

Autoradiographic analysis of iodoamphetamine redistribution in experimental brain ischemia. Matsuda H, et al. **J Nucl Med** 1990 May;31(5):660–7

SPECT quantification of cerebral ischemia before and after carotid endarterectomy. Maurer AH, et al. **J Nucl Med** 1990 Aug;31(8):1412–20

Predictive value of brain perfusion single-photon emission computed tomography in acute ischemic stroke. Giubilei F, et al. **Stroke** 1990 Jun;21(6):895–900

Single-photon emission computed tomography and early death in acute ischemic stroke. Limburg M, et al. **Stroke** 1990 Aug;21(8):1150–5

[Determination of regional cerebrovascular perfusion reserve (rCPR) using quantitative flow/volume (F/V)-SPECT. Results in patients with subcortical ischemic brain lesions with or without neuropsychological symptoms] Reiche W, et al. **ROFO** 1990 Jul;153(1):36–40 (Eng. Abstr.) **(Ger)**

[Single photon emission computed tomography (SPECT) using 99mTc-hexamethyl propyleneamine oxime in patients with ischemic cerebral diseases: comparative study of N-isopropyl-p-[123I]-iodoamphetamine and 99mTc-DTPA SPECT] Ono S, et al. **Kaku Igaku** 1989 Jul;26(7):811–20 (Eng. Abstr.) **(Jpn)**

[Analysis of relative cerebral perfusion in ischemic cerebral diseases by single photon emission computed tomography using N-isopropyl-p-[123I]iodoamphetamine] Suwa K, et al. **Kaku Igaku** 1989 Oct;26(10):1311–9 (Eng. Abstr.) **(Jpn)**

SURGERY

Status of extracranial-intracranial anastomoses for cerebral ischaemia 2 years after the international by-pass study. Bannister CM. **Br J Neurosurg** 1988;2(2):139–41

An assessment of the results of treatment of cerebral ischaemia by microsurgical anastomosis of STA-MCA on the basis of catamnestic examination. Mrówka R. **Zentralbl Neurochir** 1989;50(3–4):162–5

[Surgical treatment of cerebral ischemia in the acute stage] Yoshimoto T. **No Shinkei Geka** 1989 Jul;17(7):603–7 (31 ref.) **(Jpn)**

[Emergency surgery of carotid and vertebral arteries in acute cerebral ischemia] Portnoi IM, et al. **Khirurgiia (Mosk)** 1990 May;(5):92–5 (Eng. Abstr.) **(Rus)**

[Transposition and transplant of epiploon to the brain and spinal cord. Experimental investigation. Current knowledge and perspectives for clinical application] Aguilar-Rebolledo F, et al. **Gac Med Mex** 1989 Nov-Dec; 125(11–12):325–9 (39 ref.) **(Spa)**

THERAPY

Treatment for stroke [letter; comment] Gilson SB. **Ann Intern Med** 1989 Dec 15;111(12):1048–9 Comment on: Ann Intern Med 1989 Sep 15;111(6):449–51.

Effect of haemodilution on experimental cerebral ischaemia. Yamashita K, et al. **Clin Exp Neurol** 1989;26:23–31

Relationship between cardiac output and cerebral blood flow in patients with intact and with impaired autoregulation. Bouma GJ, et al. **J Neurosurg** 1990 Sep;73(3):368–74

Ischemic brain rescue by transvenous perfusion in baboons with venous sinus occlusion. Frazee JG, et al. **Stroke** 1990 Jan;21(1):87–93

Effect of vasoparalysis in acute cerebral revascularization. Diaz FG, et al. **Surg Forum** 1978;29:510–3

[Hemodilution in cerebral ischemia (letter)] **Dtsch Med Wochenschr** 1989 Oct 27;114(43):1681–3 **(Ger)**

[Hemorheologic therapy. Status and perspectives] Haass A. **Nervenarzt** 1989 Sep;60(9):528–39 (82 ref.) **(Ger)**

[Hemodilution in cerebral ischemia: a trial of treatment without a firm pathophysiologic concept] von Kummer R. **Nervenarzt** 1989 Sep;60(9):523–7 (33 ref.) **(Ger)**

[Current status in the therapy of ischemic cerebrovascular disorders] Regli F, et al. **Schweiz Rundsch Med Prax** 1989 Dec 12;78(50):1414–20 (74 ref.) (Eng. Abstr.) **(Ger)**

[Priority trends in scientific research on the problem of ischemic disorders of cerebrovascular circulation] Vereshchagin NV, et al. **Zh Nevropatol Psikhiatr** 1990; 90(1):3–8 (Eng. Abstr.) **(Rus)**

[Dilemmas in the treatment of ischemic cerebrovascular insult] Mulić H. **Med Arh** 1986;40(5):213–6 (Eng. Abstr.) **(Scr)**

URINE

Urinary free cortisol excretion shortly after ischaemic stroke. Olsson T. **J Intern Med** 1990 Aug;228(2):177–81

VETERINARY

Brain hypoperfusion post-resuscitation. Muir WW. **Vet Clin North Am Small Anim Pract** 1989 Nov; 19(6):1151–66 (56 ref.)

CEREBRAL ISCHEMIA, TRANSIENT

Transient ischemic attacks: clinical features, pathophysiology and management. Kane-Carlsen PA. **Nurse Pract** 1990 Jul; 15(7):9–14 (20 ref.)

Prognosis of transient ischemic attacks in the Oxfordshire Community Stroke Project. Dennis M, et al. **Stroke** 1990 Jun;21(6):848–53

Cerebral vasospasm in a double-injection model in rabbit. Spallone A, et al. **Surg Neurol** 1989 Dec;32(6):408–17

[Transient ischemic attack] Loeb C. **Ann Ital Med Int** 1986 Dec;1(4):307–16 (55 ref.) (Eng. Abstr.) **(Ita)**

BLOOD

Blood lipid peroxides in TIA: relation to platelet function and metabolic profile. Violi F, et al. **Acta Neurol Scand** 1989 Oct;80(4):273–6

Ischemia in normoglycemic and hyperglycemic rats: plasma energy substrates and hormones. Lundgren J, et al. **Am J Physiol** 1990 May;258(5 Pt 1):E767–74

[Fluidity of erythrocyte membranes in patients with ischemic cerebral vascular disease] Li QS, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Oct;9(10):587–8, 579–80 (Eng. Abstr.) **(Chi)**

[The role of subarachnoid periarterial acidosis and platelets aggregation in symptomatic cerebral vasospasm: an experimental study] Kimura M, et al. **No Shinkei Geka** 1989 Jun;17(6):525–31 (Eng. Abstr.) **(Jpn)**

[The antiaggregation activity of the normal cerebral vessels and in ischemia] Petrishchev NN, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1515–20 **(Rus)**

CEREBROSPINAL FLUID

S-100 protein and neuron-specific enolase in CSF after experimental traumatic or focal ischemic brain damage. Hårdemark HG, et al. **J Neurosurg** 1989 Nov;71(5 Pt 1):727–31

Cerebrospinal fluid lactate dehydrogenase levels in early stroke and transient ischemic attacks. Lampl Y, et al. **Stroke** 1990 Jun;21(6):854–7

[Levels of homovanillic acid and 5-hydroxyindoleacetic acid in the cerebrospinal fluid in patients with focal cerebral ischemia] Chavko M, et al. **Cesk Neurol Neurochir** 1989 Oct;52(6):403–8 (Eng. Abstr.) **(Slo)**

COMPLICATIONS

Spatial impairment following right hemisphere transient ischaemic attacks in patients without carotid artery stenosis. Brådvik B, et al. **Acta Neurol Scand** 1989 Nov;80(5):411–8

Do single right hemisphere infarcts or transient ischaemic attacks result in aprosody? Brådvik B, et al. **Acta Neurol Scand** 1990 Jan;81(1):61–70

Randomized clinical trials of hemodilution in acute ischemic stroke. Asplund K. **Acta Neurol Scand Suppl** 1989; 127:22–30

Migraine with vasospasm and delayed intracerebral hemorrhage. Cole AJ, et al. **Arch Neurol** 1990 Jan; 47(1):53–6

Does spasm precede development of cerebroarterial aneurysms? [letter] Ecker A. **Arch Neurol** 1990 Sep; 47(9):951

Extracranial carotid atherosclerosis in patients with and without transient ischemic attacks and coronary artery disease. Howard G, et al. **Arteriosclerosis** 1990 Sep–Oct; 10(5):714–9

Unreported symptomatic and asymptomatic ischaemic heart disease in patients presenting with TIA or minor stroke detected by the London School of Hygiene Cardiovascular Questionnaire and Minnesota coding of a routine ECG. Gates P, et al. **Clin Exp Neurol** 1987;24:21–5

Focal epilepsy as a possible sign of transient subclinical ischemia. Cocito L, et al. **Eur Neurol** 1989;29(6):339–44 (29 ref.)

Flunarizine in acute ischemic stroke: a pilot study. Limburg M, et al. **Eur Neurol** 1990;30(3):121–2

Migraine with and without aura: the same disease due to cerebral vasospasm of different intensity. A hypothesis based on CBF studies during migraine. Skyhøj Olsen T. **Headache** 1990 Apr;30(5):269–72 (43 ref.)

Arterial stenosis in migraine: spasm or arteriopathy? Solomon S, et al. **Headache** 1990 Jan;30(2):52–61 (114 ref.)

Advanced carotid stenosis in TIA and minor stroke as a predictor of coronary heart disease: a 3-year follow-up. Falke P, et al. **Int Angiol** 1989 Oct–Dec;8(4):175–8

Epileptic activity following 10 minute cerebral ischemia in Mongolian gerbils: an electrophysiological study. Grazia Marciani M, et al. **Neurosci Lett** 1990 Apr 20;112(1):48–53

Prolonged hypoperfusion and early stroke after transient ischemic attack. Bogousslavsky J, et al. **Stroke** 1990 Jan; 21(1):40–6

Time course of early brain edema following reversible forebrain ischemia in rats. Mellergård P, et al. **Stroke** 1989 Nov;20(11):1565–70

Dementia in stroke survivors in the Stroke Data Bank cohort. Prevalence, incidence, risk factors, and computed tomographic findings. Tatemichi TK, et al. **Stroke** 1990 Jun;21(6):858–66

[Focal motor crises: a transitory ischemic attack?] Demiati M, et al. **Rev Neurol (Paris)** 1989;145(10):728–31 (9 ref.) (Eng. Abstr.) **(Fre)**

[Cerebral ischemic accidents and kidney failure in a young man] Julien J, et al. **Rev Neurol (Paris)** 1989;145(11):813–8 (32 ref.) **(Fre)**

[Abnormal postural movements: transient ischemic episodes of the carotid?] Michel B, et al. **Rev Neurol (Paris)** 1989; 145(12):853–5 (17 ref.) (Eng. Abstr.) **(Fre)**

[Hemorrhagic infarction following cerebral vasospasm] Andoh T, et al. **No To Shinkei** 1989 Oct;41(10):979–85 (Eng. Abstr.) **(Jpn)**

[Electroencephalographic changes in reversible ischemic cerebral infarction] Klimowicz-Młodzik I, et al. **Neurol Neurochir Pol** 1988 Nov–Dec;22(6):500–6 (Eng. Abstr.) **(Pol)**

[Transient ischemic attacks and coronary disease] Jovičić A,

et al. **Vojnosanit Pregl** 1989 Sep-Oct;46(5):323-5 (Eng. Abstr.) **(Scr)**

DIAGNOSIS

Cerebral vasospasm diagnosis by means of angiography and blood velocity measurements. Lindegaard KF, et al. **Acta Neurochir (Wien)** 1989;100(1-2):12-24

Risk factors in lacunar strokes. A retrospective study of 52 patients. Lazzarino LG, et al. **Acta Neurol (Napoli)** 1989 Aug;11(4):265-71

Symptomatic carotid ischaemic events [letter] Cole SE, et al. **BMJ** 1990 Jul 28;301(6745):239

Symptomatic carotid ischaemic events: safest and most cost effective way of selecting patients for angiography, before carotid endarterectomy. Hankey GJ, et al. **BMJ** 1990 Jun 9;300(6738):1485-91

Cerebral arterial vasospasm following severe head injury: a transcranial Doppler study. Compton JS, et al. **Br J Neurosurg** 1987;1(4):435-9

Transient inhibitory seizures mimicking crescendo TIAs. Lee H, et al. **Neurology** 1990 Jan;40(1):165-6

Low yield in the diagnostic evaluation of transient ischemic attacks. Rolak LA, et al. **Neurology** 1990 May;40(5):747-8

Sensitivity and specificity of transcranial Doppler ultrasonography in the diagnosis of vasospasm following subarachnoid hemorrhage. Sloan MA, et al. **Neurology** 1989 Nov;39(11):1514-8

Transient ischaemic attacks. Wade J. **Practitioner** 1989 Aug 8;233(1473):1089-92

The value of diagnostic procedures in treating ischemic attacks and stroke. Marx P. **Thorac Cardiovasc Surg** 1989 Aug;37(4):253-8 (54 ref.)

[Late migrainous accompaniments (letter)] Astarloa R, et al. **Neurologia** 1988 Mar-Apr;3(2):81-2 **(Spa)**

DRUG THERAPY

A pilot study with monosialoganglioside GM1 on acute cerebral ischemia. Giraldi C, et al. **Acta Neurol (Napoli)** 1990 Jun;12(3):214-21

Prevention of ischemic neuronal damage by alpha 1-adrenoceptor agonist (methoxamine). Araki T, et al. **Acta Neurol Scand** 1989 Nov;80(5):451-4

Vinconate prevents ischemic neuronal damage in the rat hippocampus. Araki T, et al. **Acta Neurol Scand** 1990 Feb; 81(2):173-6

Comparative study of pentoxifylline vs antiaggregants in patients with transient ischaemic attacks. Herskovits E, et al. **Acta Neurol Scand Suppl** 1989;127:31-5

Influence of protective drugs on the EEG during short-term transient ischaemia. Lantos J, et al. **Acta Physiol Hung** 1990; 75(3):217-27

Antithrombotic therapy in stroke and transient ischemic attacks. Feinberg W. **Am Fam Physician** 1989 Nov;40(5 Suppl):53S-59S (34 ref.)

CGS-19755, a competitive NMDA receptor antagonist, reduces calcium-calmodulin binding and improves outcome after global cerebral ischemia. Grotta JC, et al. **Ann Neurol** 1990 Jun;27(6):612-9

Bimodal treatment with nimodipine and low-molecular-weight dextran for focal cerebral ischemia in the rat. Salgado AV, et al. **Ann Neurol** 1989 Nov; 26(5):621-7

N-methyl-D-aspartate antagonist reduces stroke size and regional glucose metabolism. Simon R, et al. **Ann Neurol** 1990 Jun;27(6):606-11

Surgery offers no more than medical treatment in the management of transient ischaemic attack. Thompson J, et al. **Ann R Coll Surg Engl** 1990 Mar;72(2):114-8 (47 ref.)

Management of cerebral infarction or transient ischemic attacks [letter; comment] Lavin P. **Arch Intern Med** 1990 Mar;150(3):692, 694 Comment on: Arch Intern Med 1988 May;148(5):1023-38.

A double blind placebo controlled trial of the calcium entry blocking drug, nicardipine, in the treatment of vasospasm following severe head injury. Compton JS, et al. **Br J Neurosurg** 1990;4(1):9-15

MK-801 reduced cerebral ischemic injury by inducing hypothermia. Corbett D, et al. **Brain Res** 1990 Apr 30; 514(2):300-4

Protective effect of adenosine and a novel xanthine derivative propentofylline on the cell damage after bilateral carotid occlusion in the gerbil hippocampus. Dux E, et al. **Brain Res** 1990 May 21;516(2):248-56

Protective effect of alpha-tocopherol on ischemic neuronal damage in the gerbil hippocampus. Hara H, et al. **Brain Res** 1990 Mar 5;510(2):335-8

Role of the excitotoxic mechanism in the development of neuronal damage following repeated brief cerebral ischemia in the gerbil: protective effects of MK-801 and pentobarbital. Kato H, et al. **Brain Res** 1990 May 14; 516(1):175-9

Oxypurinol attenuates ischemia-induced hippocampal damage in the gerbil. Phillis JW. **Brain Res Bull** 1989 Dec; 23(6):467-70

Role of platelets and antiplatelet agents in cerebrovascular disease. Clues from trials. Harrison MJ. **Circulation** 1990 Jan;81(1 Suppl):I20-1; discussion I22-3

Transient ischemic attacks and ischemic stroke: indications for anticoagulation. Miller VT. **Clin Cardiol** 1990 Apr;13(4 Suppl 6):V129-30 (41 ref.)

The effects of dizocilpine maleate (MK-801), an antagonist of the N-methyl-D-aspartate receptor, on neurologic recovery and histopathology following complete cerebral ischemia in primates. Lanier WL, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):252-61

The effect of radix Salviae miltiorrhizae on vasoactive intestinal peptide in cerebral ischemia: an animal experiment. Kuang PG, et al. **J Tradit Chin Med** 1989 Sep; 9(3):203-6

Effect of Fluosol-DA and hetastarch on local cerebral blood flow, cortical O2 availability and computerized EEG data during cerebral ischaemia. Tranmer BI, et al. **Neurol Res** 1990 Mar;12(1):17-22

Magnesium ions prevent phencyclidine-induced cerebrovasospasms and rupture of cerebral microvessels: direct in-vivo microcirculatory studies on the rat brain. Huang QF, et al. **Neurosci Lett** 1990 May 18;113(1):115-9

The specific NMDA receptor antagonist AP-7 attenuates focal ischemic brain injury. Roman R, et al. **Neurosci Lett** 1989 Sep 25;104(1-2):19-24

Dexamethasone treatment attenuates the development of ischaemic brain oedema in gerbils. Dux E, et al. **Neuroscience** 1990;34(1):203-7

The effect of timing of intrathecal fibrinolytic therapy on cerebral vasospasm in a primate model of subarachnoid hemorrhage. Findlay JM, et al. **Neurosurgery** 1990 Feb; 26(2):201-6

A dosage study of the effect of the 21-aminosteroid U74006F on chronic cerebral vasospasm in a primate model. Kanamaru K, et al. **Neurosurgery** 1990 Jul;27(1):29-38

The calmodulin antagonist trifluoperazine provides mild prophylactic protection against cerebral vasospasm after subarachnoid hemorrhage, but no therapeutic value. Peterson JW, et al. **Neurosurgery** 1989 Dec;25(6):917-22

Efficacy of single intracisternal bolus injection of recombinant tissue plasminogen activator to prevent delayed cerebral vasospasm after experimental subarachnoid hemorrhage [see comments] Seifert V, et al. **Neurosurgery** 1989 Oct;25(4):590-8 Comment in: Neurosurgery 1990 Mar;26(3):549-50.

Treatment of ischemic stroke. Lessons from clinical trials. Gorelick PB. **Postgrad Med** 1989 Dec;86(8):107-14, 117-8 (24 ref.)

Cerebral vasospasm: resolution by iloprost, nocloprost and UK 38 485. Türker RK, et al. **Prog Clin Biol Res** 1989; 301:205-9

Conditions for pharmacologic evaluation in the gerbil model of forebrain ischemia. Clifton GL, et al. **Stroke** 1989 Nov; 20(11):1545-52

Effect of insulin on acute experimental cerebral ischemia in gerbils [letter; comment] Vázquez-Cruz J, et al. **Stroke** 1989 Nov;20(11):1592-3 Comment on: Stroke 1989 Mar;20(3):396-9.

[Intravenous nicardipine in the treatment of cerebral vasospasm following subarachnoid hemorrhage caused by aneurysm rupture: a comparative multicenter study] Desbordes JM, et al. **Agressologie** 1989 Jun;30(7):438-40 (Eng. Abstr.) **(Fre)**

[Role of stopping calcium inhibitors in the worsening of postoperative vasospasm during the treatment of intracranial aneurysm] Picard-Claret M, et al. **Agressologie** 1989 Jun;30(7):441 **(Fre)**

[Clinical application of Ca2(+)-antagonist for prevention and treatment of cerebral vasospasm] Kyoi K, et al. **Nippon Rinsho** 1989 Aug;47(8):1831-6 **(Jpn)**

[Angiographic studies on the effects of a novel calcium antagonist AE0047 on cerebral arteries in dogs, with special reference to the preventive effects of AE0047 on cerebral vasoconstriction induced by endothelin] Kido H, et al. **Nippon Yakurigaku Zasshi** 1990 Apr;95(4):177-84 (Eng. Abstr.) **(Jpn)**

[Treatment of symptomatic vasospasm with GIK (glucose-insulin-potassium) infusion] Horimoto C, et al. **No Shinkei Geka** 1990 Jul;18(7):619-22 (Eng. Abstr.) **(Jpn)**

[Ca antagonists in neurosurgical practice] Handa J, et al. **No To Shinkei** 1990 Jan;42(1):43-52 (53 ref.) **(Jpn)**

ENZYMOLOGY

Densitometric analysis of cytochrome oxidase in ischemic rat brain. Dimlich RV, et al. **Brain Res** 1990 May 21; 516(2):181-91

Decrease of glutamate decarboxylase activity in substantia nigra and caudoputamen following transient hyperglycemic ischemia in the rat. Folbergrová J, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):897-901

Preischemic hyperglycemia and postischemic alteration of rat brain pyruvate dehydrogenase activity. Lundgren J, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):536-41

Altered protein kinase C activity in different subfields of hippocampus following cerebral ischemia. Oláh Z, et al. **Neurochem Res** 1990 May;15(5):515-8

Ca2+/calmodulin-dependent protein kinase II immunoreactivity in the rat hippocampus after forebrain ischemia. Onodera H, et al. **Neurosci Lett** 1990 May 31; 113(2):134-8

Transglutaminase activity in reversible cerebral ischemia in the rat. Paschen W, et al. **Neurosci Lett** 1990 Mar 2; 110(1-2):232-6

Anti-oxidant enzymes in the brain of newborn piglets during ischemia followed by reperfusion. Mishra OP, et al. **Neuroscience** 1990;35(1):211-5

[Dopamine beta-hydroxylase activity after subarachnoid hemorrhage] Markiewicz P. **Pol Tyg Lek** 1989 Jan 30; 44(5):109-11 (Eng. Abstr.) **(Pol)**

EPIDEMIOLOGY

The antiphospholipid syndrome: prevalence among patients with stroke and transient ischemic attacks. Trimble M, et al. **Am J Med** 1990 Jun;88(6):593-7

The Perth Community Stroke Study: attack rates for stroke and TIA in Western Australia. Stewart-Wynne E, et al. **Clin Exp Neurol** 1987;24:39-44

Comparison of case ascertainment by medical record linkage and cohort follow-up to determine incidence rates for transient ischemic attacks and stroke. Whisnant JP, et al. **J Clin Epidemiol** 1990;43(8):791-7

Transient ischemic attacks: their frequency in the Lehigh Valley. Lai SM, et al. **Neuroepidemiology** 1990;9(3):124-30

A comparison of risk factors and prognosis for transient ischemic attacks and minor ischemic strokes. The Oxfordshire Community Stroke Project. Dennis MS, et al. **Stroke** 1989 Nov;20(11):1494-9

Carotid artery blood flow velocity related to transient ischemic attack and stroke in a population study of 69-year-old men. Jungquist G, et al. **Stroke** 1989 Oct; 20(10):1327-30

ETIOLOGY

Risk factors in intracranial saccular aneurysms. Aspects on the formation and rupture of aneurysms, and development of cerebral vasospasm. Ostergaard JR. **Acta Neurol Scand** 1989 Aug;80(2):81-98 (176 ref.)

Rostral basilar reversible ischemic neurologic deficit in an HIV-infected patient with cryptococcal meningitis [letter] Rafal RD, et al. **Am J Med** 1990 Aug;89(2):248-9

Ischemia may be the primary cause of neurological deficits in classic migraine [letter; comment] Kronborg D, et al. **Arch Neurol** 1990 Feb;47(2):124-7 Comment on: Arch Neurol 1987 Feb;44(2):156-61.

Effect of stenosis on wall motion. A possible mechanism of stroke and transient ischemic attack. Binns RL, et al. **Arteriosclerosis** 1989 Nov-Dec;9(6):842-7

Angiographically demonstrated arterial spasm in a case of benign sexual headache and benign exertional headache. Silbert PL, et al. **Aust N Z J Med** 1989 Oct;19(5):466-8

Transient ischaemic attacks: controversies in treatment. A review. Gilligan BS. **Clin Exp Neurol** 1988;25:33-42 (23 ref.)

Perfusion pressure and electroencephalographic changes during cardiopulmonary bypass [letter] Jones BR, et al. **J Clin Monit** 1989 Oct;5(4):288

The role of inflammation in experimental cerebral vasospasm. Peterson JW, et al. **J Neurosurg** 1990 May;72(5):767-74

Evidence of the role of hemolysis in experimental cerebral vasospasm. Peterson JW, et al. **J Neurosurg** 1990 May; 72(5):775-81

Stroke syndrome in the young due to obliterative arteritis of extracranial carotid arteries. Clinical pathological profiles. Aghaji MA, et al. **J Neurosurg Sci** 1989 Oct-Dec; 33(4):333-7

Red blood cells are essential for late vasospasm following experimentally induced subarachnoid hemorrhage in dogs. Nozaki K, et al. **Neurol Med Chir (Tokyo)** 1990 Jan; 30(1):10-5

Common carotid occlusion [letter; comment] Gilbert GJ. **Neurology** 1989 Oct;39(10):1406-7 Comment on: Neurology 1989 Feb;39(2 Pt 1):178-86.

Antiphospholipid antibody syndrome presenting with complex partial seizures and transient ischaemic attacks due to widespread small cerebral arterial thrombosis. Leach IH, et al. **Neuropathol Appl Neurobiol** 1989 Nov-Dec; 15(6):579-84

Blood component induction of cerebral vasospasm. Harada T, et al. **Neurosurgery** 1990 Aug;27(2):252-5; discussion 255-6

Symptomatic arachnoid cyst at the clivus drained stereotactically through the vertex. Iacono RP, et al. **Neurosurgery** 1990 Jul;27(1):130-3

IgA myeloma complicated by fractures of the bones and hyperviscosity syndrome—report of an autopsied case. Tojo K, et al. **Osaka City Med J** 1990 May;36(1):61-70

Transesophageal echocardiography in the detection of intracardiac embolic sources in patients with transient ischemic attacks. Pop G, et al. **Stroke** 1990 Apr;21(4):560-5

Transient ischemic attacks resulting from carotid duplex imaging. Friedman SG. **Surgery** 1990 Feb;107(2):153-5

[Transient ischemic attacks in the carotid drainage area] Melcherová L, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1989;32(5):543-51 (Eng. Abstr.) **(Cze)**

[Migraine aura as the cause of apoplexy in young adults] Johansen AM, et al. **Ugeskr Laeger** 1990 May 21; 152(21):1509-13 (Eng. Abstr.) **(Dan)**

[Does nimodipine improve the outcome of perioperative complications of aneurysm rupture? Results of systematic treatment] Ades PE, et al. **Agressologie** 1989 Jun; 30(7):431-6 (Eng. Abstr.) **(Fre)**

[Reversible cerebral lesions in eclampsia. Clinical and x-ray computed tomographic study] Vandermarcq P, et al. **J Radiol** 1989 Aug-Sep;70(8-9):503-6 (25 ref.) (Eng. Abstr.) **(Fre)**

[Chronic subdural hematoma and transient neurologic deficits] Nicoli F, et al. **Rev Neurol (Paris)** 1990;

146(4):256–63 (60 ref.) (Eng. Abstr.) **(Fre)**

[Location of cerebral aneurysms and arteriospasm after subarachnoid hemorrhage] Zaręba A, et al. **Neurol Neurochir Pol** 1989 Jul–Dec;23(4–6):332–6 (Eng. Abstr.) **(Pol)**

[Transient disorders of cerebrovascular circulation in patients with heart defects operated on under extracorporeal circulation] Rudenko AE, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):31–5 (Eng. Abstr.) **(Rus)**

[Transient cerebellar syndrome secondary to heat stroke (letter)] Torre-Cisneros J, et al. **Med Clin (Barc)** 1989 Oct 28;93(13):519 **(Spa)**

[Lupus anticoagulant and recurrent transient ischemic attacks] Guerrero A, et al. **Neurologia** 1989 Jul–Aug; 4(6):216–8 (Eng. Abstr.) **(Spa)**

[Cerebrovascular disorders as a presentation form of hypertrophic myocardiopathy (letter)] Martínez R, et al. **Neurologia** 1987 May–Jun;2(3):144–5 **(Spa)**

IMMUNOLOGY

Immunological reaction against the aging human subarachnoid erythrocyte. A model for the onset of cerebral vasospasm after subarachnoid hemorrhage. Peterson JW, et al. **J Neurosurg** 1989 Nov;71(5 Pt 1):718–26

Antiphospholipid antibodies and cerebral ischemia in young people. Brey RL, et al. **Neurology** 1990 Aug;40(8):1190–6

Cerebrovascular and neurologic disease associated with antiphospholipid antibodies: 48 cases. Levine SR, et al. **Neurology** 1990 Aug;40(8):1181–9

METABOLISM

31 phosphorous nuclear magnetic resonance spectroscopy of rat brain with temporary global cerebral ischemia—methodology. Haraldseth O, et al. **Acta Neurochir (Wien)** 1990;103(3–4):158–62

Neurometabolic monitoring of the ischaemic human brain using microdialysis. Hillered L, et al. **Acta Neurochir (Wien)** 1990;102(3–4):91–7

Regional impairment of protein synthesis following brief cerebral ischemia in the gerbil. Araki T, et al. **Acta Neuropathol (Berl)** 1990;79(5):501–5

Selective sparing of NADPH-diaphorase–somatostatin–neuropeptide Y neurons in ischemic gerbil striatum. Uemura Y, et al. **Ann Neurol** 1990 Jun;27(6):620–5

Effects of propentofylline on energy metabolism of the ischemic brain studied by in vivo 31P nuclear magnetic resonance spectroscopy. Sasaki M, et al. **Arzneimittelforschung** 1989 Aug;39(8):886–9

Postischemic glucose utilization in rat hippocampal layers. Beck T, et al. **Brain Res** 1990 Feb 26;510(1):74–83

Posthoc phosphorylation of proteins derived from ischemic rat hippocampus, striatum and neocortex. Kirschenbaum B, et al. **Brain Res** 1990 Mar 12;511(1):21–9

Local as well as remote functional and metabolic changes after focal ischemia in cats. Jaspers RM, et al. **Brain Res Bull** 1990 Jan;24(1):23–32

Glucose utilization in rat hippocampus after long-term recovery from ischemia. Beck T, et al. **J Cereb Blood Flow Metab** 1990 Jul;10(4):542–9

Direct evidence for acute and massive norepinephrine release in the hippocampus during transient ischemia. Globus MY, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):892–6

Postischemic glucose metabolism is modified in the hippocampal CA1 region depleted of excitatory input or pyramidal cells. Jørgensen MB, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):243–51

Ornithine decarboxylase activity and putrescine levels in reversible cerebral ischemia of Mongolian gerbils: effect of barbiturate. Paschen W, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):236–42

Immunohistochemical determination of calcium–calmodulin binding predicts neuronal damage after global ischemia. Picone CM, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):805–11

Sequential metabolic changes in rat brain following middle cerebral artery occlusion: a 2-deoxyglucose study. Shiraishi K, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):765–73

Cytochemical calcium localization in hypothalamo-neurohypophysial system of rats after ischemia. Preliminary observations. Gajkowska B, et al. **J Hirnforsch** 1989;30(6):747–55

Ischemia in the dorsal hippocampus is associated with acute extracellular release of dopamine and norepinephrine. Bhardwaj A, et al. **J Neural Transm Gen Sect** 1990; 80(3):195–201

Effects of transient forebrain ischemia and pargyline on extracellular concentrations of dopamine, serotonin, and their metabolites in the rat striatum as determined by in vivo microdialysis. Damsma G, et al. **J Neurochem** 1990 Mar;54(3):801–8

Heat shock RNA levels in brain and other tissues after hyperthermia and transient ischemia. Nowak TS Jr, et al. **J Neurochem** 1990 Feb;54(2):451–8

Extracellular striatal dopamine and its metabolites during transient cerebral ischaemia. Obrenovitch TP, et al. **J Neurochem** 1990 May;54(5):1526–32

Effect of transient cerebral ischaemia and cardiac arrest on brain extracellular dopamine and serotonin as determined by in vivo dialysis in the rat. Sarna GS, et al. **J Neurochem** 1990 Sep;55(3):937–40

Stimulation of inositol phospholipid hydrolysis by excitatory amino acids is enhanced in brain slices from vulnerable regions after transient global ischemia. Seren MS, et al. **J Neurochem** 1989 Dec;53(6):1700–5

Effect of barbiturate treatment on post-ischemic protein biosynthesis in gerbil brain. Xie Y, et al. **J Neurol Sci** 1989 Sep;92(2–3):317–28

Effect of cerebral ischemia on synaptosomal uptake and release of 3H-5-hydroxytryptamine in adult and young Mongolian gerbils. Cvejic V, et al. **Metab Brain Dis** 1990 Mar;5(1):1–6

Glucose metabolism and acidosis in the metabolic penumbra of rat brain. Peek KE, et al. **Metab Brain Dis** 1989 Dec; 4(4):261–72

The evolution of focal ischemic damage: a metabolic analysis. Selman WR, et al. **Metab Brain Dis** 1990 Mar;5(1):33–44

Determination of RNA content in postischemic gerbil brain by in situ hybridization. Xie YX, et al. **Metab Brain Dis** 1989 Dec;4(4):239–51

The effects of sho-saiko-to-go-keishi-ka-shakuyaku-to (TJ-960) on ischemia-induced changes of brain acetylcholine and monoamine levels in gerbils. Haba K, et al. **Neurochem Res** 1990 May;15(5):487–93

Effect of partial ischemia on phospholipids and postischemic lipid peroxidation in rabbit spinal cord. Halát G, et al. **Neurochem Res** 1989 Nov;14(11):1089–97

In vivo 31phosphorus spectroscopy during transient cerebral ischaemia in the gerbil. Dempsey RJ, et al. **Neurol Res** 1990 Jun;12(2):106–10

Changes of cortical oxidative metabolism and cortical oxygen tension in hypoxia, anoxia and ischaemia. Kaminogo M. **Neurol Res** 1989 Sep;11(3):139–44

The effects of mild hyperoxia and/or hypertension on oxygen availability and oxidative metabolism in acute focal ischaemia. Kaminogo M. **Neurol Res** 1989 Sep;11(3):145–9

RNA synthesis and processing in the gerbil brain after transient hindbrain ischaemia. Matsumoto K, et al. **Neurol Res** 1990 Mar;12(1):45–8

Effect of pulsed electromagnetic fields on calcium tissue changes in focal ischaemia. Rappaport ZH, et al. **Neurol Res** 1990 Jun;12(2):95–8

Changes in extracellular amino acid neurotransmitters produced by focal cerebral ischemia. Graham SH, et al. **Neurosci Lett** 1990 Mar 2;110(1–2):124–30

Possible role of zinc in the selective degeneration of dentate hilar neurons after cerebral ischemia in the adult rat. Tønder N, et al. **Neurosci Lett** 1990 Feb 16;109(3):247–52

Microtubule-associated protein 2 as a sensitive marker for cerebral ischemic damage—immunohistochemical investigation of dendritic damage. Kitagawa K, et al. **Neuroscience** 1989;31(2):401–11

Cerebral uric acid, xanthine, and hypoxanthine after ischemia: the effect of allopurinol. Nihei H, et al. **Neurosurgery** 1989 Oct;25(4):613–7

Local cerebral glucose metabolism after global ischemia: treatment by ventriculocisternal perfusion with a fluorocarbon emulsion. Triolo AJ, et al. **Neurosurgery** 1990 Mar;26(3):480–7; discussion 487–8

Oxidative damage to brain proteins, loss of glutamine synthetase activity, and production of free radicals during ischemia/reperfusion-induced injury to gerbil brain. Oliver CN, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5144–7

Relationship between plasma glucose, brain lactate, and intracellular pH during cerebral ischemia in gerbils. Combs DJ, et al. **Stroke** 1990 Jun;21(6):936–42

Calcium-calmodulin binding in ischemic rat neurons after calcium channel blocker therapy. Grotta JC, et al. **Stroke** 1990 Jun;21(6):948–52

Calcium antagonist, adenosine A1, and muscarinic bindings in rat hippocampus after transient ischemia. Onodera H, et al. **Stroke** 1990 May;21(5):771–6

Nimodipine attenuates both increase in cytosolic free calcium and histologic damage following focal cerebral ischemia and reperfusion in cats. Uematsu D, et al. **Stroke** 1989 Nov; 20(11):1531–7

Arachidonic acid metabolite production following focal cerebral ischemia: time course and effect of meclofenamate. Bucci MN, et al. **Surg Neurol** 1990 Jan;33(1):12–4

[Role of arachidonic acids in cerebral circulatory disorders] Watanabe T, et al. **Nippon Rinsho** 1990 Jun;48(6):1216–23 **(Jpn)**

[Extracellular purine catabolites and tissue nucleotides and purine catabolites during progression and recovery of ischemia] Masana Y, et al. **No To Shinkei** 1989 Jul; 41(7):687–93 (Eng. Abstr.) **(Jpn)**

MORTALITY

Survival after stroke and transient ischemic attacks during the 1970s and 1980s. Terént A. **Stroke** 1989 Oct; 20(10):1320–6

NURSING

Cerebral vasospasm following intracranial aneurysm rupture: a protocol for detection. Flynn EP. **J Neurosci Nurs** 1989 Dec;21(6):348–52

PATHOLOGY

A reversible component of cerebral injury as identified by the histochemical stain 2,3,5-triphenyltetrazolium chloride (TTC). Cole DJ, et al. **Acta Neuropathol (Berl)** 1990; 80(2):152–5

Electron microscopic study of the gerbil dentate gyrus after transient forebrain ischemia. Crain BJ, et al. **Acta Neuropathol (Berl)** 1990;79(4):409–17

Neuronal damage following non-lethal but repeated cerebral ischemia in the gerbil. Kato H, et al. **Acta Neuropathol (Berl)** 1990;79(5):494–500

Prominent white matter lesions develop in Mongolian gerbils treated with 100% normobaric oxygen after global brain ischemia. Mickel HS, et al. **Acta Neuropathol (Berl)** 1990; 79(5):465–72

Pretreatment with the NMDA antagonist dextrorphan reduces cerebral injury following transient focal ischemia in rabbits. Steinberg GK, et al. **Brain Res** 1989 Sep 18; 497(2):382–6

Corrugation of cerebral vessels following subarachnoid hemorrhage: comparison of two experimental models of chronic cerebral vasospasm. Rickels E, et al. **Exp Neurol** 1990 Feb;107(2):178–86

Aneurysm re-rupture: Doppler evidence of first phase vasospasm? [letter; comment] Grosset D. **J Neurol Neurosurg Psychiatry** 1990 Apr;53(4):361 Comment on: J Neurol Neurosurg Psychiatry 1988 Oct;51(10):1355–6.

Hypothermia but not the N-methyl-D-aspartate antagonist, MK-801, attenuates neuronal damage in gerbils subjected to transient global ischemia. Buchan A, et al. **J Neurosci** 1990 Jan;10(1):311–6

Dynamics of changes in astrocytes and neurons of rabbit cerebral cortex induced by temporary blood supply deficiency. Mchedlishvili G, et al. **Neuropatol Pol** 1989; 27(1):25–37

Ultrastructure of neurons from the CA1 sector of Ammon's horn in short-term cerebral ischemia in Mongolian gerbils. Mossakowski MJ, et al. **Neuropatol Pol** 1989;27(1):39–53

Ultrastructure of capillaries and neuroglial cells in the hippocamus (sector CA1) during short-lasting ischemia and following blood recirculation. Tsitsishvili A, et al. **Neuropatol Pol** 1989;27(1):55–69

Free radical generation during brief period of cerebral ischemia may trigger delayed neuronal death. Kitagawa K, et al. **Neuroscience** 1990;35(3):551–8

Selective neocortical and thalamic cell death in the gerbil after transient ischemia. Lin CS, et al. **Neuroscience** 1990; 35(2):289–99

Arterial wall changes in cerebral vasospasm. Findlay JM, et al. **Neurosurgery** 1989 Nov;25(5):736–45; discussion 745–6

Comparative neuroprotective effects of pentobarbital, vinpocetine, flunarizine and ifenprodil on ischemic neuronal damage in the gerbil hippocampus. Araki T, et al. **Res Exp Med (Berl)** 1990;190(1):19–23

[An experimental study of acute brain ischemia followed by reperfusion in rhesus monkeys] Li L. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1990 Feb; 23(1):19–22, 62 (Eng. Abstr.) **(Chi)**

[Exo-focal neuronal death in the rat brain] Nagasawa H, et al. **No To Shinkei** 1990 Feb;42(2):137–43 (Eng. Abstr.) **(Jpn)**

[Ischemic axonal injury and its recovery after focal cerebral ischemia] Taguchi J, et al. **No To Shinkei** 1989 Aug; 41(8):813–8 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Superoxide dismutase does not prevent delayed hypoperfusion after incomplete cerebral ischaemia in the rat. Schürer L, et al. **Acta Neurochir (Wien)** 1990; 103(3–4):163–70

Selective neuronal vulnerability following transient cerebral ischemia in the gerbil: distribution and time course. Araki T, et al. **Acta Neurol Scand** 1989 Dec;80(6):548–53

Cerebral blood flow and cerebral hematocrit in patients with cerebral ischemia measured by single-photon emission computed tomography. Sakai F, et al. **Acta Neurol Scand Suppl** 1989;127:9–13

Selective vulnerability in the gerbil hippocampus: morphological changes after 5-min ischemia and long survival times. Bonnekoh P, et al. **Acta Neuropathol (Berl)** 1990;80(1):18–25

Pattern of neuronal vulnerability in the cat hippocampus after one hour of global cerebral ischemia. Schmidt-Kastner R, et al. **Acta Neuropathol (Berl)** 1990;79(4):444–55

Electrophysiological changes in the feline brain during 45 minutes occlusion and 3 hours recirculation of the middle cerebral artery. Bereczki D, et al. **Acta Physiol Hung** 1990; 75(2):155–63

Extracellular ions, hypoxic irreversible loss of function and delayed postischemic neuron degeneration studied in vitro. Somjen GG, et al. **Acta Physiol Scand Suppl** 1989;582:58

Transient neurological dysfunction and risk of stroke in an elderly English population: the different significance of vertigo and non-rotatory dizziness. Evans JG. **Age Ageing** 1990 Jan;19(1):43–9

Effects of ischemia on brain blood flow and oxygen consumption of newborn pigs. Leffler CW, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):H1917–26

Postischemic recovery rate of cerebral ATP, phosphocreatine, pH, and evoked potentials. Nishijima MK, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):H1860–70

Pregnancy-induced hypertension and renal failure: clinical importance of diuretics, plasma volume and vasospasm [see comments] Brown MA, et al.

Aust N Z J Obstet Gynaecol 1989 Aug;29(3 Pt 1):230–2 Comment in: Aust N Z J Obstet Gynaecol 1990 Feb;30(1):88–9.

The natural history of gravitational induced loss of consciousness [letter] Bagshaw RJ.
Aviat Space Environ Med 1990 May;61(5):442

Protective effect of beraprost sodium, a new chemically stable prostacyclin analogue, against the deterioration of baroreceptor reflex following transient global cerebral ischaemia in dogs [published erratum appears in Br J Pharmacol 1990 Jul;100(3):following 660] Kurihara J, et al. **Br J Pharmacol** 1990 Jan;99(1):91–6

Septo-hippocampal deafferentation protects CA1 neurons against ischemic injury. Buchan AM, et al. **Brain Res** 1990 Mar 26;512(1):7–14

Decreases in excitatory synaptic transmission and increases in recurrent inhibition in the rat dentate gyrus after transient cerebral ischemia. Chang HS, et al. **Brain Res** 1989 Dec 29;505(2):220–4

Degeneration of hippocampal CA1 neurons following transient ischemia due to raised intracranial pressure: evidence for a temperature-dependent excitotoxic process. Duhaime AC, et al. **Brain Res** 1990 Mar 26;512(1):169–74

Chronic maintenance of presynaptic terminals in gliotic hippocampus following ischemia. Kirino T, et al.
Brain Res 1990 Feb 26;510(1):17–25

Level of ischemia and brain functions in the Mongolian gerbil in vivo. Mayevsky A. **Brain Res** 1990 Jul 30;524(1):1–9

Effects of transient cerebral ischemia on the hippocampal dentate theta (theta) profile in the acute rat: a study 4–5 months following recirculation. Monmaur P, et al.
Brain Res 1990 Jan 29;508(1):124–34

The effect of the excitatory amino acid receptor antagonist dizocilipine maleate (MK-801) on hemispheric cerebral blood flow and metabolism in dogs: modification by prior complete cerebral ischemia. Perkins WJ, et al.
Brain Res 1989 Sep 25;498(1):34–44

Degeneration of neurons in the thalamic reticular nucleus following transient ischemia due to raised intracranial pressure: excitotoxic degeneration mediated via non-NMDA receptors? Ross DT, et al. **Brain Res** 1989 Oct 30;501(1):129–43

Kynurenate does not reduce infarct size after middle cerebral artery occlusion in spontaneously hypertensive rats. Roussel S, et al. **Brain Res** 1990 Jun 4;518(1–2):353–5

High frequency discharges of gerbil hippocampal CA1 neurons shortly after ischemia. Mitani A, et al.
Brain Res Bull 1989 Dec;23(6):569–72

Correlation of postural and pathological findings in a modified four-vessel occlusion model of rat forebrain ischemia. Coimbra CG, et al. **Braz J Med Biol Res** 1989; 22(10):1237–50

Intracranial pressure monitoring following hypoxic-ischaemic cerebral insults [letter; comment] Tasker RC, et al. **Childs Nerv Syst** 1989 Oct;5(5):280 Comment on: Childs Nerv Syst 1988 Dec;4(6):370–2.

Auditory evoked potentials in vertebrobasilar transient ischemic attacks. Drake ME Jr, et al.
Clin Electroencephalogr 1990 Apr;21(2):96–100

The lacunar syndromes. Loeb C. **Eur Neurol** 1989;29 Suppl 2:2–7 (41 ref.)

Ischemia-induced changes in the electrical activity of the hippocampus. Buzsàki G, et al. **Exp Brain Res** 1989; 78(2):268–78

Involvement of perivascular sensory fibers in the pathophysiology of cerebral vasospasm following subarachnoid hemorrhage. Edvinsson L, et al.
J Cereb Blood Flow Metab 1990 Sep;10(5):602–7

Decrease in perfusion of cerebral capillaries during incomplete ischemia and reperfusion. Ennis SR, et al.
J Cereb Blood Flow Metab 1990 Mar;10(2):213–20

Riluzole, a novel antiglutamate, prevents memory loss and hippocampal neuronal damage in ischemic gerbils. Malgouris C, et al. **J Neurosci** 1989 Nov;9(11):3720–7

Postischemic synaptic physiology in area CA1 of the gerbil hippocampus studied in vitro. Urban L, et al.
J Neurosci 1989 Nov;9(11):3966–75

Pharmacological studies on relaxation of spastic primate cerebral arteries in subarachnoid hemorrhage. Kanamaru K, et al. **J Neurosurg** 1989 Dec;71(6):909–15

Effects of ML-9 on experimental delayed cerebral vasospasm. Kokubu K, et al. **J Neurosurg** 1989 Dec; 71(6):916–22

Relaxant effect of calcitonin gene-related peptide on cerebral arterial spasm induced by experimental subarachnoid hemorrhage in dogs. Nozaki K, et al. **J Neurosurg** 1989 Oct;71(4):558–64

Nigrostriatal dopamine neurons, D1 transmission in basal and ischemic states and protective effects of gangliosides. Agnati LF, et al. **Lab Invest** 1990 Sep;63(3):283–97 (64 ref.)

Fasting prior to transient cerebral ischemia reduces delayed neuronal necrosis. Marie C, et al. **Metab Brain Dis** 1990 Jun;5(2):65–75

Ischemic flow threshold for striatal dopamine release in rats. Yao H, et al. **Neurochem Res** 1990 May;15(5):547–9

Mechanism of cerebral vasospasm—contractile proteins in smooth muscle of bovine cerebral artery. Takagi T, et al. **Neurol Med Chir (Tokyo)** 1989 Jul;29(7):557–62

Effect of flunarizine on cerebral blood flow in baboons with or without focal cerebral ischaemia. Hartmann A, et al. **Neurol Res** 1990 Mar;12(1):60–2

Comparison of methods eliciting cerebral ischaemic pressor response in the cat. Kocsis B, et al. **Neurol Res** 1990 Mar; 12(1):49–53

Observations on cerebral ischaemia in cats at injury threshold levels. Seida M, et al. **Neurol Res** 1989 Dec;11(4):205–12

Recovery of auditory evoked potentials after long-term complete brain ischemia. Hirsch H, et al.
Neurosurg Rev 1989;12 Suppl 1:313–6

Characterization of contractile responses to endothelin in human cerebral arteries: implications for cerebral vasospasm. Papadopoulos SM, et al. **Neurosurgery** 1990 May;26(5):810–5

Effects of repeated ischemia on cerebral blood flow and brain energy metabolism. Laptook AR, et al. **NMR Biomed** 1988 Apr;1(2):74–9

Electrocardiographic abnormalities after a transient ischemic attack. Crosby DL. **South Med J** 1990 Feb;83(2):256–7

Postoperative hemodynamic and metabolic changes in patients with subarachnoid hemorrhage. Hino A, et al.
Stroke 1989 Nov;20(11):1504–10

Consistency of cerebral blood flow and evoked potential alterations with reversible focal ischemia in cats. Matsumiya N, et al. **Stroke** 1990 Jun;21(6):908–16

Lidocaine accelerates neuroelectrical recovery after incomplete global ischemia in rabbits. Rasool N, et al.
Stroke 1990 Jun;21(6):929–35

Perfusion insufficiency in limb-shaking transient ischemic attacks. Tatemichi TK, et al. **Stroke** 1990 Feb;21(2):341–7

[Longitudinal monitoring of electroencephalographic findings in patients with transitory ischemic attacks] Melcherová L, et al.
Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1989;32(5):537–41 (Eng. Abstr.) **(Cze)**

[Cerebral hemodynamics of post-ischemic delayed hypoperfusion (PDH) and the effects of nicardipine on the PDH] Dote K. **Masui** 1990 Mar;39(3):357–66 (Eng. Abstr.) **(Jpn)**

[The changes in EEG, evoked potentials and neurological recovery after global brain ischemia in dogs] Ono K. **Masui** 1990 May;39(5):572–80 (Eng. Abstr.) **(Jpn)**

[Monoamine metabolism after transient global ischemia. Mechanism of delayed postischemic hypoperfusion] Maruki C. **Neurol Med Chir (Tokyo)** 1989 Dec;29(12):1093–100 (Eng. Abstr.) **(Jpn)**

[Delayed neuronal dysfunction after recirculation of cerebral ischemia] Yamagata S, et al. **No Shinkei Geka** 1989 Sep; 17(9):821–6 (Eng. Abstr.) **(Jpn)**

[Experimental focal cerebral ischemia produced by embolization with silicone cylinder in normotensive (NTR) and spontaneously hypertensive rats (SHR): comparison of neurological and pathological findings] Takeda T, et al. **No To Shinkei** 1989 Nov;41(11):1119–25 (Eng. Abstr.) **(Jpn)**

[The effects of disturbance of cerebral venous drainage on focal cerebral blood flow and ischemic cerebral edema] Yura S, et al. **No To Shinkei** 1990 Mar;42(3):269–75 (Eng. Abstr.) **(Jpn)**

[The variously directed reactions of the pial and cortical arterial branches in postischemic hyperemia in the cerebral cortex] Mchedlishvili GI, et al. **Fiziol Zh SSSR** 1989 Nov; 75(11):1534–40 (Eng. Abstr.) **(Rus)**

[Changes in carbohydrate metabolism before and after the development of focal cerebral ischemia. III. Function of the diencephalon] Bartko D, et al.
Cesk Neurol Neurochir 1989 May;52(3):193–200 (Eng. Abstr.) **(Slo)**

PREVENTION & CONTROL

Flunarizine treatment in poor-grade aneurysm patients. Fujita S, et al. **Acta Neurochir (Wien)** 1990;103(1–2):11–7

The neuroprotective actions of kynurenic acid and MK-801 in gerbils are synergistic and not related to hypothermia. Gill R, et al. **Eur J Pharmacol** 1990 Feb 6;176(2):143–9

Indobufen in secondary prevention of transient ischaemic attack. Multicentre Ischaemic Attack Study Group. Rogan J. **J Int Med Res** 1990 May-Jun;18(3):240–4

Ticlopidine, a new antithrombotic drug: but is it better than aspirin for longterm use? Warlow C.
J Neurol Neurosurg Psychiatry 1990 Mar;53(3):185–7 (5 ref.)

Prevention of cerebral vasospasm in the rat by depletion or inhibition of substance P in conducting vessels. Delgado-Zygmunt TJ, et al. **J Neurosurg** 1990 Jun; 72(6):917–25

Mg2+ protects against PCP-induced cerebrovasospasms and vascular damage in rat brain. Huang QF, et al.
Magnes Trace Elem 1990;9(1):44–6

Injection of tissue plasminogen activator to prevent delayed vasospasm [letter; comment] Aoki N. **Neurosurgery** 1990 Mar;26(3):549–50 Comment on: Neurosurgery 1989 Oct;25(4):590–8.

Phenylephrine-induced hypertension reduces ischemia following middle cerebral artery occlusion in rats [see comments] Drummond JC, et al. **Stroke** 1989 Nov; 20(11):1538–44 Comment in: Stroke 1990 May;21(5):827.

Cyclosporine A reduces cerebral vasospasm after subarachnoid hemorrhage in dogs. Peterson JW, et al.
Stroke 1990 Jan;21(1):133–7

[Use of calcium inhibitors in subarachnoid hemorrhage] Guggiari M. **Agressologie** 1989 Jun;30(7):407 **(Fre)**

[Prophylactic treatment of vasospasm with nimodipine in subarachnoid hemorrhage] Procházka M, et al.
Cas Lek Cesk 1990 Feb 23;129(8):237–9 (Eng. Abstr.) **(Slo)**

PSYCHOLOGY

The origins of utilization behaviour. Shallice T, et al.
Brain 1989 Dec;112 (Pt 6):1587–98

RADIOGRAPHY

Computed tomography in patients with transient ischaemic attacks: when is a transient ischaemic attack not a transient ischaemic attack but a stroke? Dennis M, et al.
J Neurol 1990 Jul;237(4):257–61

Complications of cerebral angiography for patients with mild carotid territory ischaemia being considered for carotid endarterectomy. Hankey GJ, et al.
J Neurol Neurosurg Psychiatry 1990 Jul;53(7):542–8

Persistent segmental cerebral artery constrictions in coital cephalgia [letter] Kapoor R, et al.
J Neurol Neurosurg Psychiatry 1990 Mar;53(3):266–7

Stable xenon-enhanced CT measurement of cerebral blood flow in reversible focal ischemia in baboons. Yonas H, et al. **J Neurosurg** 1990 Aug;73(2):266–73

Transient global amnesia and falcotentorial meningioma—a case report. Araga S, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):201–3

Carotid transient ischemic attacks and normal investigations: a follow-up study. Shuaib A, et al. **Stroke** 1990 Apr; 21(4):525–7

RADIONUCLIDE IMAGING

Evaluation of vasospasm secondary to subarachnoid hemorrhage with technetium-99m-hexamethyl-propyleneamine oxime (HM-PAO) tomoscintigraphy. Soucy JP, et al.
J Nucl Med 1990 Jun;31(6):972–7

SURGERY

Carotid endarterectomy [letter; comment] Lederle FA.
Ann Intern Med 1990 Mar 1;112(5):383–4 Comment on: Ann Intern Med 1989 Oct 15;111(8):675–7.

Surgery offers no more than medical treatment in the management of transient ischaemic attack. Thompson J, et al. **Ann R Coll Surg Engl** 1990 Mar;72(2):114–8 (47 ref.)

Long-term results of endarterectomy of the internal carotid artery for cerebral ischemia and infarction. Heyman A, et al. **Circulation** 1967 Aug;36(2):212–21

Dissection of the thoracic aorta following partial clamping. Banchini E, et al. **Int Angiol** 1989 Jul-Sep;8(3):157–60

Carotid surgery under cervical block anesthesia. A simple method of heart and brain protection in high risk patients. Bergeron P, et al. **Int Angiol** 1989 Apr-Jun;8(2):70–80

Effect of clot removal on cerebral vasospasm. Inagawa T, et al. **J Neurosurg** 1990 Feb;72(2):224–30

Angioplasty of persistent "stump" of internal carotid artery. Smith H, et al. **Mo Med** 1990 Jan;87(1):34–6

Comparison of the need for bypass shunt after stroke or transient ischemic attack in 97 patients. Khanna HL, et al. **South Med J** 1989 Dec;82(12):1512–4

Cerebral vasoreactivity and blood flow before and 3 months after carotid endarterectomy. Russell D, et al. **Stroke** 1990 Jul;21(7):1029–32

Carotid endarterectomy under local anesthesia supplemented with neuroleptic analgesia. Slutzki S, et al.
Surg Gynecol Obstet 1990 Feb;170(2):141–4

Effect of early operation on cerebral vasospasm. Inagawa T. **Surg Neurol** 1990 Apr;33(4):239–46

Alternative management of carotid kinking. Surgical technique. Beneš V Jr, et al. **Zentralbl Neurochir** 1989; 50(2):97–8

[Treatment of transient ischemic attack by carotid endarterectomy] Zhou DB.
Chung Hua Wai Ko Tsa Chih 1989 Dec;27(12):743–5, 781 (Eng. Abstr.) **(Chi)**

[Carotid endarterectomy. A justifiable risk for the prevention of ischemic infarct?] Marx P. **Fortschr Med** 1989 Nov 30; 107(34):727–32 (0 ref.) (Eng. Abstr.) **(Ger)**

[Peroperative morbidity and mortality in thromboendarterectomy of the carotid bifurcation in patients with a previous stabilized stroke. Our results and review of the literature] Floriani M, et al.
Ann Ital Chir 1989;60(2):101–8 (48 ref.) (Eng. Abstr.) **(Ita)**

[Extracranial-intracranial arterial bypass in the management of symptomatic vasospasm] Korosue K, et al.
Neurol Med Chir (Tokyo) 1989 Apr;29(4):285–91 (Eng. Abstr.) **(Jpn)**

THERAPY

Normovolaemic induced hypertension therapy for cerebral vasospasm after subarachnoid haemorrhage. Otsubo H, et al. **Acta Neurochir (Wien)** 1990;103(1–2):18–26

Effect of hemodilution on regional cerebral blood flow. Hartmann A, et al. **Acta Neurol Scand Suppl** 1989;127:36–48

Intracranial angioplasty for treatment of vasospasm after subarachnoid hemorrhage: technique and modifications to improve branch access. Brothers MF, et al. **AJNR** 1990 Mar-Apr;11(2):239–47

New microballoon device for transluminal angioplasty of intracranial arterial vasospasm. Higashida RT, et al.
AJNR 1990 Mar-Apr;11(2):233–8

Feasibility of percutaneous transluminal angioplasty for carotid artery stenosis. Brown MM, et al.
J Neurol Neurosurg Psychiatry 1990 Mar;53(3):238–43

Role of angioplasty in the treatment of symptomatic vascular spasm occurring in the post-operative course of intracranial ruptured aneurysms. Bracard S, et al. **J Neuroradiol** 1990 Jan;17(1):6–19 **(Eng, Fre)**

Transluminal angioplasty for treatment of intracranial arterial vasospasm. Higashida RT, et al. **J Neurosurg** 1989 Nov;71(5 Pt 1):648–53

Angioplasty for the treatment of symptomatic vasospasm following subarachnoid hemorrhage. Newell DW, et al. **J Neurosurg** 1989 Nov;71(5 Pt 1):654–60

A therapy against vasospasm after subarachnoidal haemorrhage: clinical experience of balloon angioplasty. Konishi Y, et al. **Neurol Res** 1990 Jun;12(2):103–5

Prevention of ischemic stroke after TIA: medical or surgical treatment? A review of the main trials. Annibali R, et al. **Panminerva Med** 1989 Apr–Jun;31(2):57–70 (86 ref.)

Current trends in treatment of transient ischemic attacks. Martí Massó JF. **Recenti Prog Med** 1989 Dec;80(12):701–5 (45 ref.)

Neurogenic hyperthermia in subarachnoid hemorrhage. Simpson RK Jr, et al. **South Med J** 1989 Dec;82(12):1577–8

Therapeutic effects of hyperbaric oxygenation on acute focal cerebral ischemia in rats. Kawamura S, et al. **Surg Neurol** 1990 Aug;34(2):101–6

CEREBRAL PALSY

Maternal reproductive histories in ataxic cerebral palsy. Miller G. **Am J Obstet Gynecol** 1990 Jan;162(1):242–3

Caries among children with cerebral palsy: relation to CP-diagnosis, mental and motor handicap. Nielsen LA. **ASDC J Dent Child** 1990 Jul–Aug;57(4):267–73

Symposium. Cerebral palsy. **Clin Orthop** 1990 Apr; (253):1–109

The cerebral palsy patient. DiMario FJ Jr, et al. **Clin Podiatr Med Surg** 1989 Oct;6(4):761–90 (108 ref.)

A regional register of early childhood impairments: a discussion paper. The Steering Committee of the Oxford Region Child Development Project. Johnson A, et al. **Community Med** 1989 Nov;11(4):352–63 (46 ref.)

Health literature for parents of children with cerebral palsy. Donovan TJ, et al. **Dev Med Child Neurol** 1989 Aug; 31(4):489–93

Annual meeting of the American Academy for Cerebral Palsy and Developmental Medicine, 1990. Abstracts. **Dev Med Child Neurol Suppl** 1990 Sep;62:1–49

Annual meeting of the American Academy for Cerebral Palsy and Developmental Medicine, 1989. Abstracts. **Dev Med Child Neurol Suppl** 1989 Oct;59:1–52

Establishing outpatient nutrition services for children with cerebral palsy. Johnson RK, et al. **J Am Diet Assoc** 1989 Oct;89(10):1504–6

[Functional sensorimotor therapy in functional orofacial disorders in children with cerebral palsy, using the Castillo–Morales technic] Fischer-Brandies H, et al. **Orthod Fr** 1988;59 Pt 2:449–58 (Eng. Abstr.) **(Fre)**

[Formation of the hip joint in patients with cerebral paralysis] Sadof'eva VI, et al. **Ortop Travmatol Protez** 1989 Aug; (8):29–31 **(Rus)**

COMPLICATIONS

Simultaneous Achilles and tibialis posterior tendon lengthening in cerebral palsy. Uyttendaele D, et al. **Acta Orthop Belg** 1989;55(1):62–6

Heterogeneity of X-linked recessive (spino)cerebellar ataxia with or without spastic diplegia. Apak S, et al. **Am J Med Genet** 1989 Oct;34(2):155–8

The effect of rhizotomy on movement in patients with cerebral palsy. Berman B, et al. **Am J Occup Ther** 1990 Jun;44(6):511–6

The effect of mouth closure on drooling and speech. Iammatteo PA, et al. **Am J Occup Ther** 1990 Aug; 44(8):686–91

Disorders of memory of motor sequences in cerebral palsied children. Lesný I, et al. **Brain Dev** 1990;12(3):339–41

Motoscopic analysis of gross motor patterns in athetotic cerebral palsied children. Yokochi K, et al. **Brain Dev** 1989; 11(5):317–21

Selective posterior rhizotomy for the treatment of spasticity: a review. Abbott R, et al. **Childs Nerv Syst** 1989 Dec; 5(6):337–46 (54 ref.)

Incidence of spinal deformity in children after multiple level laminectomy for selective posterior rhizotomy. Peter JC, et al. **Childs Nerv Syst** 1990 Jan;6(1):30–2

Established hip dislocations in children with cerebral palsy. Gamble JG, et al. **Clin Orthop** 1990 Apr;(253):90–9 (67 ref.)

Cerebral palsy and the bladder. Borzyskowski M. **Dev Med Child Neurol** 1989 Oct;31(5):687–9

The Grice extra-articular subtalar arthrodesis in the treatment of spastic hindfoot valgus deformity. Drvaric DM, et al. **Dev Med Child Neurol** 1989 Oct;31(5):665–9

Treated and untreated unstable hips in severe cerebral palsy. Pritchett JW. **Dev Med Child Neurol** 1990 Jan;32(1):3–6

Early prognosis for ambulation of neonatal intensive care survivors with cerebral palsy. Watt JM, et al. **Dev Med Child Neurol** 1989 Dec;31(6):766–73

Hyperprolinaemia type I and white matter disease: coincidence or causal relationship? Steinlin M, et al. **Eur J Pediatr** 1989 Oct;149(1):40–2

Biodynamics of the ankle in spastic children—effect of chronic stretching of the calf musculature. Walsh EG, et al. **Exp Physiol** 1990 May;75(3):423–5

Subtalar arthrodesis in children with cerebral palsy: results using iliac bone plug. Guttmann GG. **Foot Ankle** 1990 Feb; 10(4):206–10

Subtalar stabilization of the planovalgus foot by staple arthroereisis in young children who have neuromuscular problems. Crawford AH, et al. **J Bone Joint Surg [Am]** 1990 Jul;72(6):840–5

Pathologic fractures in severely handicapped children and young adults. Lee JJ, et al. **J Pediatr Orthop** 1990 Jul–Aug; 10(4):497–500

Treatment of the chronically dislocated hip in adolescents with cerebral palsy with femoral head resection and subtrochanteric valgus osteotomy. McHale KA, et al. **J Pediatr Orthop** 1990 Jul–Aug;10(4):504–9

Heel cord advancement for treatment of equinus deformity in cerebral palsy. Strecker WB, et al. **J Pediatr Orthop** 1990 Jan–Feb;10(1):105–8

The relationship between cerebral palsy and cryptorchidism. Smith JA, et al. **J Pediatr Surg** 1989 Dec;24(12):1303–5

The relationship between phoneme discrimination, speech production, and language comprehension in cerebral-palsied individuals. Bishop DV, et al. **J Speech Hear Res** 1990 Jun;33(2):210–9

Growth and nutrition in children with cerebral palsy. **Lancet** 1990 May 26;335(8700):1253–4

Does hip dislocation matter in cerebral palsy? [editorial] [see comments] **Lancet** 1990 Apr 7;335(8693):823–4 Comment in: Lancet 1990 May 26;335(8700):1285.

Blood tests before elective surgery on patients who cannot communicate [news] Brahams D. **Lancet** 1990 Jun 9; 335(8702):1394

Does hip dislocation matter in cerebral palsy? [letter; comment] Scrutton D. **Lancet** 1990 May 26;335(8700):1285 Comment on: Lancet 1990 Apr 7;335(8693):823–4.

Work and power in hemiplegic cerebral palsy gait. Olney SJ, et al. **Phys Ther** 1990 Jul;70(7):431–8

Unstable cervical spine in athetoid cerebral palsy [published erratum appears in Spine 1990 Jan;15(1):59] Ebara S, et al. **Spine** 1989 Nov;14(11):1154–9

[Surgical treatment of patients with juvenile cerebral palsy at the orthopedic clinic of the Charles University Medical School in Prague-Motol] Schejbalová A, et al. **Acta Chir Orthop Traumatol Cech** 1990 Feb;57(1):27–33 (Eng. Abstr.) **(Cze)**

[Surgical treatment of spinal deformity due to cerebral motor disorders using a Luque type appliance] Lascombes P, et al. **Chir Pediatr** 1989;30(6):271–6 (Eng. Abstr.) **(Fre)**

[Patella fragmentation in cerebral palsy] Feldkamp M. **Z Orthop** 1990 Mar–Apr;128(2):160–4 (Eng. Abstr.) **(Ger)**

[Sevoflurane anesthesia for a patient with cerebral palsy] Ogasawara H, et al. **Masui** 1990 Apr;39(4):500–2 (Eng. Abstr.) **(Jpn)**

[Orthopedic management of leg deformities in patients with cerebral palsy] Matsuo T. **Nippon Seikeigeka Gakkai Zasshi** 1989 Nov;63(11):1426–35 **(Jpn)**

[Disorders of vision and act in a child with spastic cerebral palsy] Yamamoto T, et al. **No To Hattatsu** 1990 May; 22(3):253–61 (Eng. Abstr.) **(Jpn)**

[Gastroesophageal reflux associated with severe cerebral paresis] Lindback T, et al. **Tidsskr Nor Laegeforen** 1989 Nov 30;109(33):3421–3 (Eng. Abstr.) **(Nor)**

[Complex stimulation of the locomotor and psycholingual develop- ment of children with perinatal lesions of the central nervous system] Skvortsov IA, et al. **Zh Nevropatol Psikhiatr** 1989;89(8):23–7 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Early diagnosis of spastic diplegia, spastic hemiplegia, and quadriplegia. Harris SR. **Am J Dis Child** 1989 Nov; 143(11):1356–60

Changing diagnosis of cerebral palsy in very low birthweight children. Ford GW, et al. **Am J Perinatol** 1990 Apr; 7(2):178–81

Early identification of cerebral palsy in high risk infants. Burns YR, et al. **Aust Paediatr J** 1989 Aug;25(4):215–9

Is popliteal angle measurement useful in early identification of cerebral palsy? [see comments] Johnson A, et al. **Dev Med Child Neurol** 1989 Aug;31(4):457–65 Comment in: Dev Med Child Neurol 1989 Dec;31(6):828.

Motor delay and cerebral palsy [letter] Scrutton D. **Dev Med Child Neurol** 1990 Jul;32(7):649

Electromyographic analysis of reach in individuals with cerebral palsy. Spaulding SJ, et al. **Electromyogr Clin Neurophysiol** 1990 Feb–Mar; 30(2):109–15

Colpocephaly: pitfalls in the diagnosis of a pathologic entity utilizing neuroimaging techniques. Bodensteiner J, et al. **J Child Neurol** 1990 Apr;5(2):166–8

A computerized kinematic diagnostic system. Eckhouse RH Jr, et al. **J Med Syst** 1989 Oct;13(5):261–74

Neurodevelopmental follow-up of infants with birthweight less than 801 grams with intracranial hemorrhage. Kilbride HW, et al. **J Perinatol** 1989 Dec;9(4):376–81

DRUG THERAPY

Intrathecal baclofen for cerebral spasticity [letter; comment] Dralle D, et al. **Lancet** 1989 Oct 14;2(8668):916 Comment on: Lancet 1989 Aug 26;2(8661):503–4.

[Microdensitometric study of maturation and fragility of the bone in male patients with cerebral palsy—the effect of long-term administration of 1 alpha-hydroxy vitamin D3 and the value of osteocalcin as a marker of bony growth] Hayashi Y, et al. **No To Hattatsu** 1990 May;22(3):209–15 (Eng. Abstr.) **(Jpn)**

[Results of using Dorsiflex in various neurologic diseases in children] Ignatowicz R, et al. **Wiad Lek** 1989 Feb 15; 42(4):239–44 (Eng. Abstr.) **(Pol)**

[Clinical results of using Nakom in diseases of the nervous system] Evtushenko SK, et al. **Zh Nevropatol Psikhiatr** 1989;89(8):35–7 (Eng. Abstr.) **(Rus)**

ECONOMICS

No-fault cerebral palsy insurance: an alternative to the obstetrical malpractice lottery. Freeman AD, et al. **J Health Polit Policy Law** 1989 Winter;14(4):707–18

EPIDEMIOLOGY

Decreasing perinatal mortality—increase in cerebral palsy morbidity. Hagberg B, et al. **Acta Paediatr Scand** 1989 Sep; 78(5):664–70 (37 ref.)

Prognosis for twins with birth weight less than 1500 gm: the impact of cesarean section in relation to fetal presentation. Rydhström H. **Am J Obstet Gynecol** 1990 Aug;163(2):528–33

Acquired cerebral palsy. Pharoah PO, et al. **Arch Dis Child** 1989 Jul;64(7):1013–6

Birthweight specific trends in cerebral palsy. Pharoah PO, et al. **Arch Dis Child** 1990 Jun;65(6):602–6

The changing panorama of infantile hydrocephalus and cerebral palsy over forty years—a Swedish survey. Hagberg B, et al. **Brain Dev** 1989;11(6):368–73 (33 ref.)

Cerebral palsy in Dar Es Salaam. Karumuna JM, et al. **Cent Afr J Med** 1990 Jan;36(1):8–10

Pregnancy and perinatal factors associated with persistently low Apgar scores: an analysis of the birth records of infants born in South Australia. Jonas O, et al. **Eur J Epidemiol** 1990 Jun;6(2):136–41

Cerebral palsy in multiple births. Stanley F. **Ir Med J** 1989 Sep;82(3):97

Declining incidence of low birth weight—impact on perinatal mortality and incidence of cerebral palsy. Meberg A. **J Perinat Med** 1990;18(3):195–200

Cerebral palsy in infants born during trial of intrapartum monitoring [letter] [see comments] **Lancet** 1990 Jan 27; 335(8683):238 Comment in: Lancet 1990 Mar 17;335(8690):660.

[The survey on the perinatal variables and the incidence of cerebral palsy for 12 years before and after the application of the fetal monitoring systems] Tsuzaki T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jan;42(1):99–105 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Perinatal asphyxia and cerebral palsy. Fact, fiction, or legal prediction? [editorial] [see comments] Bedrick AD. **Am J Dis Child** 1989 Oct;143(10):1139–40 Comment in: Am J Dis Child 1990 May;144(5):519.

Origins of cerebral palsy [letter; comment] Goodlin RC. **Am J Dis Child** 1990 May;144(5):518–9 Comment on: Am J Dis Child 1989 Oct;143(10):1154–61.

Asphyxia and cerebral palsy [letter] Grether JK. **Am J Dis Child** 1990 Aug;144(8):852–3

Origins of cerebral palsy [see comments] Naeye RL, et al. **Am J Dis Child** 1989 Oct;143(10):1154–61 Comment in: Am J Dis Child 1990 May;144(5):518–9.

Cerebral palsy and intrapartum fetal acidemia [letter] Goodlin RC. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):266–7

Cerebral palsy in very low birthweight infants. Cooke RW. **Arch Dis Child** 1990 Feb;65(2):201–6

Inching forward in cerebral palsy [editorial] Bax M. **Dev Med Child Neurol** 1989 Aug;31(4):425–6

Increased risk of cerebral palsy among very low-birthweight infants with chronic lung disease. Skidmore MD, et al. **Dev Med Child Neurol** 1990 Apr;32(4):325–32

Prenatal and perinatal factors in the etiology of cerebral palsy. Torfs CP, et al. **J Pediatr** 1990 Apr;116(4):615–9

Cerebral palsy, intrapartum care, and a shot in the foot [editorial] **Lancet** 1989 Nov 25;2(8674):1251–2

Cerebral palsy in infants born during trial of intrapartum monitoring [letter; comment] Grant A. **Lancet** 1990 Mar 17;335(8690):660 Comment on: Lancet 1990 Jan 27;335(8683):238.

The perinatal period: antecedents and sequelae. Rubin IL. **Pediatr Ann** 1989 Oct;18(10):653–61 (19 ref.)

[Bilirubin encephalopathy] Kalizhniuk ES. **Zh Nevropatol Psikhiatr** 1989;89(10):45–8 (Eng. Abstr.) **(Rus)**

NURSING

Words from Wanda [letter] Vanyo PA. **Am J Nurs** 1989 Oct; 89(10):1280

PATHOLOGY

Intrauterine growth and spastic cerebral palsy. I. Association with birth weight for gestational age. Blair E, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):229–37

Is popliteal angle measurement useful in early identification

of cerebral palsy [letter; comment] Katz K. **Dev Med Child Neurol** 1989 Dec;31(6):828 Comment on: Dev Med Child Neurol 1989 Aug;31(4):457–65.

Neurosonographic features of periventricular echodensities associated with cerebral palsy in preterm infants. Pidcock FS, et al. **J Pediatr** 1990 Mar;116(3):417–22

PHYSIOPATHOLOGY

Ankle–foot orthoses: effect on energy expenditure of gait in spastic diplegic children. Mossberg KA, et al. **Arch Phys Med Rehabil** 1990 Jun;71(7):490–4

Preoperative and postoperative gait evaluation in cerebral palsy. Shapiro A, et al. **Arch Phys Med Rehabil** 1990 Mar; 71(3):236–40

Motor delay and cerebral palsy [editorial] Bax M. **Dev Med Child Neurol** 1990 Apr;32(4):283–4

Reducing spasticity to control muscle contracture of children with cerebral palsy. Nash J, et al. **Dev Med Child Neurol** 1989 Aug;31(4):471–80

Mechanisms of muscle growth related to muscle contracture in cerebral palsy. O'Dwyer NJ, et al. **Dev Med Child Neurol** 1989 Aug;31(4):543–7 (41 ref.)

Energy expenditure index of walking for normal children and for children with cerebral palsy. Rose J, et al. **Dev Med Child Neurol** 1990 Apr;32(4):333–40

Correlation of ultrasound imaging of oral swallow with ventilatory alterations in cerebral palsied and normal children: preliminary observations. Kenny DJ, et al. **Dysphagia** 1989;4(2):112–7

Temporal feature extraction and clustering analysis of electromyographic linear envelopes in gait studies. Chen JJ, et al. **IEEE Trans Biomed Eng** 1990 Mar;37(3):295–302

A South Australian study of pregnancy and birth risk factors associated with cerebral palsy. Jonas O, et al. **Int J Rehabil Res** 1989;12(2):159–66

The technique of gait analysis using a Coda–3 motion analysis system. O'Brien T, et al. **Ir Med J** 1990 Jun;83(2):79–80

Electromyographic and force patterns of cerebral palsy patients with windblown hip deformity. Nwaobi OM, et al. **J Pediatr Orthop** 1990 May–Jun;10(3):382–8

Growth and nutrition in children with cerebral palsy [letter] Mutch L, et al. **Lancet** 1990 Sep 1;336(8714):569–70

Reciprocal inhibition in cerebral palsy. Berbrayer D, et al. **Neurology** 1990 Apr;40(4):653–6

Do injuries to the developing human brain alter corticospinal projections? Brouwer B, et al. **Neurosci Lett** 1990 Jan 1; 108(1–2):225–30

[Videofluoroscopic studies of the swallowing process in children with cerebral palsy] le Roux K, et al. **S Afr J Commun Disord** 1989;36:15–21 (Eng. Abstr.) **(Afr)**

[Is surgery of the tendons of the knee flexor muscles justified in cerebral palsy?] Lespargot A, et al. **Rev Chir Orthop** 1989;75(8):532–6 (Eng. Abstr.) **(Fre)**

[Electromyographic examination of patients with cerebral palsy] Umkhanov KhA. **Ortop Travmatol Protez** 1990 Mar; (3):32–7 (Eng. Abstr.) **(Rus)**

[Physiopathology of ocular movements in infantile cerebral paralysis] Escobar R, et al. **Rev Esp Fisiol** 1989;45 Suppl:289–92 (25 ref.) (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Is honesty the best policy? [editorial] Brown JK. **Dev Med Child Neurol** 1990 Jul;32(7):565–6

National seminar on reducing incidence of cerebral palsy in children. Paul D. **Indian Pediatr** 1989 Sep;26(9):929–31

Cerebral palsy among children born during the Dublin randomised trial of intrapartum monitoring. Grant A, et al. **Lancet** 1989 Nov 25;2(8674):1233–6

Electronic fetal heart rate monitoring during labour: does it prevent perinatal asphyxia and cerebral palsy? Colditz PB, et al. **Med J Aust** 1990 Jul 16;153(2):88–90 (51 ref.)

[Neuropsychiatric disorders in newborn infants with very low birth weight (VLBW infants)—before and following introduction of modern perinatal medicine. 2. Infantile cerebral palsy, epilepsy and mental handicap (oligophrenia)] Zielonka VS, et al. **Kinderarztl Prax** 1989 Jul;57(7):307–13 (0 ref.) (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Behavioral weight-loss for multiply-handicapped adults: assessing caretaker involvement and measures of behavior change. McCarran MS, et al. **Addict Behav** 1990; 15(1):13–20

The social environment and the adaptation of mothers of physically handicapped children. Wallander JL, et al. **J Pediatr Psychol** 1989 Sep;14(3):371–87

[Children with cerebral palsy and the need for speech therapy] Cazaux JP, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(4):349–53 (Eng. Abstr.) **(Fre)**

RADIOGRAPHY

Computed tomographic (CT) scans in cerebral palsy (CP). Kolawole TM, et al. **Pediatr Radiol** 1989;20(1–2):23–7

[Pathologic changes of the brain in children with various forms of infantile cerebral palsy (computerized-tomographic data)] Tomberg TA, et al. **Pediatriia** 1989;(9):50–4 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Cerebral palsy: initial experience with Tc-99m HMPAO SPECT of the brain. Denays R, et al. **Radiology** 1990 Apr; 175(1):111–6

REHABILITATION

Measuring the effects of neurodevelopmental treatment on the daily living skills of 2 children with cerebral palsy. Lilly LA, et al. **Am J Occup Ther** 1990 Feb;44(2):139–45 (20 ref.)

The effects of keyguard use and pelvic positioning on typing speed and accuracy in a boy with cerebral palsy. McCormack DJ. **Am J Occup Ther** 1990 Apr;44(4):312–5

Conductive education [letter; comment] **BMJ** 1989 Dec 9; 299(6713):1461–2 Comment on: BMJ 1989 Nov 4;299(6708):1145–9.

Cerebral palsy diplegia: improvements for walking. Patrick J. **BMJ** 1989 Nov 4;299(6708):1115–6 (8 ref.)

Conductive education at the Petö Institute, Budapest [see comments] Robinson RO, et al. **BMJ** 1989 Nov 4; 299(6708):1145–9 Comment in: BMJ 1989 Dec 9;299(6713):1461–2.

Follow-up studies in cerebral palsy. Martin JK. **Can Med Assoc J** 1966 May 7;94(19):996–8

Simplified home methods for the development of hand function in a cerebral palsied infant. Taiwade A, et al. **Indian Pediatr** 1989 May;26(5):473–5

Long-term follow-up study of cerebral palsy children and coping behaviour of parents. Hirose T, et al. **J Adv Nurs** 1990 Jul;15(7):762–70

Angle on disability [letter] O'Donovan DK. **Lancet** 1989 Oct 7;2(8667):866

Infant stimulation curriculum for infants with cerebral palsy: effects on infant temperament, parent–infant interaction, and home environment. Palmer FB, et al. **Pediatrics** 1990 Mar;85(3 Pt 2):411–5

Quantification of control: a preliminary study of effects of neurodevelopmental treatment on reaching in children with spastic cerebral palsy. Kluzik J, et al. **Phys Ther** 1990 Feb; 70(2):65–76; discussion 76–8

Use of serial casting in the management of knee joint contractures in an adolescent with cerebral palsy. Phillips WE, et al. **Phys Ther** 1990 Aug;70(8):521–3

Issues in measuring change in motor function in children with cerebral palsy: a special communication. Rosenbaum PL, et al. **Phys Ther** 1990 Feb;70(2):125–31 (45 ref.)

The use of behavior therapy and physical therapy to promote independent ambulation in a preschooler with mental retardation and cerebral palsy. Horton SV, et al. **Res Dev Disabil** 1989;10(4):363–75

Conductive education—magic or myth? Lonton AP, et al. **Z Kinderchir** 1989 Dec;44 Suppl 1:21–3

[Physiotherapy in cerebral palsy] Mundel G, et al. **Harefuah** 1989 Jun 1;116(11):590–2 (24 ref.) **(Heb)**

[Comparison of walking exercises in air and in water in children with cerebral palsy] Ishida C, et al. **No To Hattatsu** 1989 Sep;21(5):460–4 (Eng. Abstr.) **(Jpn)**

SURGERY

Surgical management of ankle and foot deformities in cerebral palsy. Fulford GE. **Clin Orthop** 1990 Apr; (253):55–61

Surgical treatment of knee dysfunction in cerebral palsy. Gage JR. **Clin Orthop** 1990 Apr;(253):45–54

Arthrodesis of the metacarpophalangeal joint of the thumb in children and adults. Adjunctive treatment of thumb-in-palm deformity in cerebral palsy. Goldner JL, et al. **Clin Orthop** 1990 Apr;(253):75–89

Combined flexor and extensor release for activation of voluntary movement of the fingers in patients with cerebral palsy. Matsuo T, et al. **Clin Orthop** 1990 Jan;(250):185–93

Physical therapeutic and surgical management in spastic diplegia. A Japanese experience. Okawa A, et al. **Clin Orthop** 1990 Apr;(253):38–44

Selective posterior rhizotomy for spastic cerebral palsy. A review. Oppenheim WL. **Clin Orthop** 1990 Apr;(253):20–9 (39 ref.)

Functional changes in the antagonists after lengthening the agonists in cerebral palsy. I. Triceps surae lengthening. Reimers J. **Clin Orthop** 1990 Apr;(253):30–4

Functional changes in the antagonists after lengthening the agonists in cerebral palsy. II. Quadriceps strength before and after distal hamstring lengthening. Reimers J. **Clin Orthop** 1990 Apr;(253):35–7

Surgery of spinal deformity in cerebral palsy. Twelve years in the evolution of scoliosis management. Rinsky LA. **Clin Orthop** 1990 Apr;(253):100–9

Split posterior tibial tendon transfer for spastic equinovarus foot deformity. Medina PA, et al. **Foot Ankle** 1989 Oct; 10(2):65–7

Intrapelvic obturator neurectomy in cerebral palsy. Sharma S, et al. **Indian J Pediatr** 1989 Mar–Apr;56(2):259–65

Dorsal rhizotomy, a treatment of unproven efficacy [comment] Landau WM, et al. **J Child Neurol** 1990 Jul; 5(3):174–8 Comment on: J Child Neurol 1990 Jul;5(3):179–85.

Spasticity in cerebral palsy and the selective posterior rhizotomy procedure [see comments] Peacock WJ, et al. **J Child Neurol** 1990 Jul;5(3):179–85 (37 ref.) Comment in: J Child Neurol 1990 Jul;5(3):174–8.

Selective posterior rhizotomy in the pediatric cerebral palsy population: implications for nursing practice. Shiminski-Maher T. **J Neurosci Nurs** 1989 Oct; 21(5):308–12

Distal hamstring elongation in the management of spastic cerebral palsy. Hsu LC, et al. **J Pediatr Orthop** 1990 May–Jun;10(3):378–81

Calcaneal gait in spastic diplegia after heel cord lengthening: a study with gait analysis. Segal LS, et al. **J Pediatr Orthop** 1989 Nov–Dec;9(6):697–701

Treatment of stiff-knee gait in cerebral palsy: a comparison by gait analysis of distal rectus femoris transfer versus proximal rectus release. Sutherland DH, et al. **J Pediatr Orthop** 1990 Jul–Aug;10(4):433–41

Gait analysis of cerebral palsy children before and after rhizotomy. Vaughan CL, et al. **Pediatr Neurosci** 1988; 14(6):297–300

[Orthopedic surgery of cerebral palsy] Han SB, et al. **Chung Hua Wai Ko Tsa Chih** 1990 Apr;28(4):246–9 (27 ref.) **(Chi)**

[Correction of autonomic hyperreactivity in surgery of children with spastic cerebral palsy] Korolenko OA, et al. **Anesteziol Reanimatol** 1990 May–Jun;(3):68–70 (Eng. Abstr.) **(Rus)**

[Reply to my opponents (concerning the letter by K.A. Semenova et al. in the journal "Ortopediia, travmatologiia i protezirovanie" No. 11, 1988, pp. 70–71)] (letter) Umkhanov KhA. **Ortop Travmatol Protez** 1990 Apr; (4):69–70 **(Rus)**

[Stereotaxic operations in the treatment of patients with infantile cerebral palsy] Laponogov OA, et al. **Vrach Delo** 1989 Aug;(8):98–9 (Eng. Abstr.) **(Rus)**

[Stereotaxic surgery in infantile cerebral palsy] Tsymbaliuk VI, et al. **Zh Vopr Neirokhir** 1989 Jul–Aug;(4):3–6 (Eng. Abstr.) **(Rus)**

THERAPY

Therapy—physical or otherwise—in cerebral palsy [letter; comment] Stine SB. **Am J Dis Child** 1990 May; 144(5):519–20 Comment on: Am J Dis Child 1989 May;143(5):552–5.

Cerebral palsy. Management of the upper extremity. Koman LA, et al. **Clin Orthop** 1990 Apr;(253):62–74 (33 ref.)

What have 30 years of medical progress done for cerebral palsy? Rang M, et al. **Clin Orthop** 1989 Oct;(247):55–60 (38 ref.)

Management of the lower extremities in children who have cerebral palsy. Bleck EE. **J Bone Joint Surg [Am]** 1990 Jan;72(1):140–4 (30 ref.)

Growth response to enteral feeding by children with cerebral palsy. Sanders KD, et al. **JPEN J Parenter Enteral Nutr** 1990 Jan–Feb;14(1):23–6

CEREBRAL PEDUNCLE see **MESENCEPHALON**

CEREBRAL REVASCULARIZATION

Cerebral autoregulation following prophylactic and delayed experimental STA–MCA bypass. Loftus CM, et al. **Acta Neurochir (Wien)** 1989;101(1–2):75–9

Effects of STA–MCA anastomosis for ischaemic oculopathy due to occlusion of the internal carotid artery. Shibuya M, et al. **Acta Neurochir (Wien)** 1990;103(1–2):71–5

Anaesthetic management in moyamoya disease. Chadha R, et al. **Anaesth Intensive Care** 1990 Feb;18(1):120–3

Iodine-123 IMP SPECT before and after bypass surgery in a patient with occlusion of left anterior and middle cerebral arteries with basal abnormal telangiectasis (unilateral Moyamoya disease). Honda N, et al. **Ann Nucl Med** 1987 Sep;1(1):43–6

Chronic low-perfusion state in children with moyamoya disease following revascularization. Sato H, et al. **Childs Nerv Syst** 1990 May;6(3):166–71

Cerebral revascularization: a review. Onesti ST, et al. **Neurosurgery** 1989 Oct;25(4):618–28; discussion 628–9 (229 ref.)

Comparison of the need for bypass shunt after stroke or transient ischemic attack in 97 patients. Khanna HL, et al. **South Med J** 1989 Dec;82(12):1512–4

Correlation of noninvasive Doppler and angiographic evaluation of extracranial–intracranial anastomoses. Ausman JI. **Surg Forum** 1978;29:534–5

Thrombolytic therapy and posterior circulation extracranial–intracranial bypass for acute basilar artery thrombosis. Case report. Morgan JK, et al. **Surg Neurol** 1990 Jan;33(1):43–7

Rupture of a giant aneurysm of the inferior wall of the internal carotid artery after saphenous vein interposition graft to the middle cerebral artery. Plangger CA, et al. **Zentralbl Neurochir** 1989;50(2):61–3

[Cerebral bypass surgery] Imhof HG. **Schweiz Rundsch Med Prax** 1990 Jan 9;79(1–2):9–19 (Eng. Abstr.) **(Ger)**

[Extracranial surgery of vertebrobasilar insufficiency. Reconstruction of the vertebral artery in the distal first portion] Fujimoto S, et al. **Neurol Med Chir (Tokyo)** 1989 Apr;29(4):292–6 (Eng. Abstr.) **(Jpn)**

[Extracranial–intracranial arterial bypass in the management of symptomatic vasospasm] Korosue K, et al. **Neurol Med Chir (Tokyo)** 1989 Apr;29(4):285–91 (Eng. Abstr.) **(Jpn)**

[Monitoring of somatosensory evoked potentials during

extracranial revascularization] Sasaki T, et al. **Neurol Med Chir (Tokyo)** 1989 Apr;29(4):280–4 (Eng. Abstr.) **(Jpn)**

[Adult moyamoya disease with a transcranial internal carotid–external carotid (EC–IC) anastomosis through burr holes] Yasukawa K, et al. **No Shinkei Geka** 1990 Apr; 18(4):373–8 (Eng. Abstr.) **(Jpn)**

[Cerebral blood flow imaging in patients with moyamoya disease] Ohnishi T, et al. **Radioisotopes** 1989 Jul; 38(7):305–10 (Eng. Abstr.) **(Jpn)**

[The mechanisms of speech recovery following revascularization surgery in patients having had an ischemic stroke] Vinnitskii AR, et al. **Vrach Delo** 1989 Sep; (9):24–6 (Eng. Abstr.) **(Rus)**

[The results of a dynamic angiographic examination following the microsurgical revascularization of the brain] Tissen TP, et al. **Zh Vopr Neirokhir** 1990 Mar–Apr;(2):20–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Effect of vasoparalysis in acute cerebral revascularization. Diaz FG, et al. **Surg Forum** 1978;29:510–3

[Basilar artery occlusion after STA–SCA anastomosis; case report] Yoshida S, et al. **No Shinkei Geka** 1990 Mar; 18(3):307–11 (Eng. Abstr.) **(Jpn)**

METHODS

Intolerable pulse-synchronous tinnitus caused by occlusion of the contralateral common carotid artery. A successful treatment by aorto–carotid bypass surgery. Nishikawa M, et al. **Acta Neurochir (Wien)** 1989;101(1–2):80–3

Superficial temporal and occipital artery bypass pedicles to superior, anterior inferior, and posterior inferior cerebellar arteries for vertebrobasilar insufficiency. Ausman JI, et al. **J Neurosurg** 1990 Apr;72(4):554–8

Management of giant intracranial ICA aneurysms with combined extracranial–intracranial anastomosis and endovascular occlusion. Serbinenko FA, et al. **J Neurosurg** 1990 Jul;73(1):57–63

Treatment of dolichoectasia of the middle cerebral artery with bypass and exclusion. de los Reyes RA, et al. **N Y State J Med** 1989 Nov;89(11):629–33 (95 ref.)

Arterial graft reconstruction in an aneurysm of the middle cerebral artery. Ramina R, et al. **Neurosurgery** 1990 Feb; 26(2):327–9

Giant intracranial aneurysm surgery: the role of microvascular reconstruction. Ausman JI, et al. **Surg Neurol** 1990 Jul;34(1):8–15

Subclavian artery revascularization: a comparison between carotid–subclavian artery bypass and subclavian–carotid transposition. Sterpetti AV, et al. **Surgery** 1989 Oct; 106(4):624–31; discussion 631–2

An assessment of the results of treatment of cerebral ischaemia by microsurgical anastomosis of STA–MCA on the basis of catamnestic examination. Mrówka R. **Zentralbl Neurochir** 1989;50(3–4):162–5

[Indirect cerebrovascular anastomosis] Matsushima Y. **No Shinkei Geka** 1990 Jan;18(1):15–23 (74 ref.) **(Jpn)**

[Ultrasonic Doppler assessment of hemodynamics in extra–intracranial arterial anastomosis in children with Moyamoya disease] Tagawa T, et al. **No To Hattatsu** 1989 Jul;21(4):354–60 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of combined extra- and intracranial lesions of the carotid arteries] Grozovskii IuL, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):12–9 (Eng. Abstr.) **(Rus)**

MORTALITY

Combined myocardial and cerebral revascularization. A ten year experience. Duchateau J, et al. **J Cardiovasc Surg (Torino)** 1989 Sep–Oct;30(5):715–22

STANDARDS

Status of extracranial–intracranial anastomoses for cerebral ischaemia 2 years after the international by-pass study. Bannister CM. **Br J Neurosurg** 1988;2(2):139–41

CEREBRAL SCLEROSIS, DIFFUSE

BLOOD

Very long-chain fatty acids in erythrocyte membrane phospholipids in adrenoleukodystrophy. Tanaka K, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Apr;31(2):136–43

Improved determination of very-long-chain fatty acids in plasma and cultured skin fibroblasts: applications to the diagnosis of peroxisomal disorders. Onkenhout W, et al. **J Chromatogr** 1989 Sep 29;494:31–41

CLASSIFICATION

The leukodystrophies [editorial; comment] Menkes JH. **N Engl J Med** 1990 Jan 4;322(1):54–5 Comment on: N Engl J Med 1990 Jan 4;322(1):13–6. Comment on: N Engl J Med 1990 Jan 4;322(1):28–32.

COMPLICATIONS

Adrenomyeloneuropathy presenting as Addison's disease in childhood [see comments] Sadeghi-Nejad A, et al. **N Engl J Med** 1990 Jan 4;322(1):13–6 Comment in: N Engl J Med 1990 Jan 4;322(1):54–5.

DIAGNOSIS

MR imaging of the brain in five members of a family with Pelizaeus–Merzbacher disease. Silverstein AM, et al. **AJNR** 1990 May;11(3):495–9

Prenatal diagnosis in Pelizaeus–Merzbacher disease using RFLP analysis. Mäenpää J, et al. **Clin Genet** 1990 Feb; 37(2):141–7

In situ genetic complementation analysis of cells with generalized peroxisomal dysfunction. Singh AK, et al. **Hum Hered** 1989;39(5):298–301

Magnetic resonance imaging in adrenoleukodystrophy presenting as spinocerebellar degeneration [letter] Miyai I, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):623–4

A comparison of erythrocytes, lymphocytes and blood plasma as samples in fatty acid analysis for the diagnosis of adrenoleukodystrophy. Antoku Y, et al. **J Neurol Sci** 1989 Dec;94(1–3):193–200

Complementation analysis of peroxisomal disorders and classical Refsum. Poll-The BT, et al. **Prog Clin Biol Res** 1990;321:537–43

Computed tomography, magnetic resonance imaging, positron emission tomography and evoked potentials at early stage of adrenoleukodystrophy. Iinuma K, et al. **Tohoku J Exp Med** 1989 Nov;159(3):195–203

[Adrenoleukodystrophy. Apropos of a case (letter)] Achour A, et al. **Ann Med Interne (Paris)** 1989;140(5):418–9 **(Fre)**

[Pelizaeus–Merzbacher disease: the diagnostic contribution of MRI] Jasek F, et al. **Arch Fr Pediatr** 1990 Apr; 47(4):265–9 (Eng. Abstr.) **(Fre)**

[Adrenoleukodystrophy: the significance of peroxisomal disease in adult neurology] Gold R, et al. **Nervenarzt** 1990 Feb;61(2):77–82 **(Ger)**

[Magnetic resonance tomography of adrenoleukodystrophy] Henkes H, et al. **Rontgenblatter** 1990 Jan;43(1):7–10 (Eng. Abstr.) **(Ger)**

[Adrenoleukodystrophy. Diagnosis of a typical case using magnetic resonance] de León-Silva TJ, et al. **Bol Med Hosp Infant Mex** 1989 Oct;46(10):681–3 (Eng. Abstr.) **(Spa)**

DIET THERAPY

A new therapeutic approach for X-linked adrenoleukodystrophy [letter] Cappa M, et al. **Eur J Pediatr** 1990 May;149(8):595–6

GENETICS

The red–green visual pigment gene region in adrenoleukodystrophy. Aubourg P, et al. **Am J Hum Genet** 1990 Mar;46(3):459–69

Autosomal recessive form of connatal Pelizaeus–Merzbacher disease. Begleiter ML, et al. **Am J Med Genet** 1989 Jul; 33(3):311–3 (15 ref.)

Linkage of DNA markers at Xq28 to adrenoleukodystrophy and adrenomyelcneuropathy present within the same family. Willems PJ, et al. **Arch Neurol** 1990 Jun;47(6):665–9

The otolaryngologic manifestations of Pelizaeus–Merzbacher disease. Feldman JI, et al. **Arch Otolaryngol Head Neck Surg** 1990 May;116(5):613–6

A family with adrenoleucodystrophy. Singh RP, et al. **Indian J Pediatr** 1989 Sep–Oct;56(5):666–70

Psychosocial reactions in the spouses of patients suffering polycystic lipomembranous osteodysplasia with sclerosing leukoencephalopathy. Hakola HP. **J Clin Psychiatry** 1990 Jan;51(1):21–4

Dietary erucic acid therapy for X-linked adrenoleukodystrophy. Rizzo WB, et al. **Neurology** 1989 Nov;39(11):1415–22

Mutation of the proteolipid protein gene PLP in a human X chromosome-linked myelin disorder. Hudson LD, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):8128–31

Pelizaeus–Merzbacher disease: tight linkage to proteolipid protein gene exon variant. Trofatter JA, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9427–30

[Adrenoleukodystrophy: significance for genetic counseling of the determination of very long-chain fatty acids and of molecular biology] Mathieu M, et al. **Ann Pediatr (Paris)** 1990 Mar;37(3):157–61 (Eng. Abstr.) **(Fre)**

[Adrenoleukodystrophy in the child and adrenomyeloneuropathy. Study of 2 families] Mabin D, et al. **Neurophysiol Clin** 1989 Aug;19(4):311–25 (Eng. Abstr.) **(Fre)**

[Adrenoleukodystrophy and adrenomyeloneuropathy—clinical spectrum, pathobiochemical aspects, diagnosis and therapy] Zierz S, et al. **Fortschr Neurol Psychiatr** 1989 Dec;57(12):527–34 (Eng. Abstr.) **(Ger)**

[Adrenoleukodystrophy and adrenomyeloneuropathy. Clinical spectrum, electrophysiologic and biochemical findings in 4 families] Klemm E, et al. **Nervenarzt** 1990 Apr;61(4):219–24 **(Ger)**

[A case of symptomatic adrenoleukodystrophy heterozygote manifested by spastic paraparesis of late onset] Nemoto H, et al. **Rinsho Shinkeigaku** 1989 Jul;29(7):914–8 (27 ref.) (Eng. Abstr.) **(Jpn)**

[Familial spastic paraparesis: phenotypic variant of adrenoleukodystrophy] de Andrés C, et al. **Neurologia** 1990 Jan;5(1):24–8 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Immunohistochemical analysis of brain macrophages in adrenoleukodystrophy. Boutin B, et al. **Neuropediatrics** 1989 Nov;20(4):202–6

METABOLISM

Metabolism of saturated and polyunsaturated very-long-chain fatty acids in fibroblasts from patients with defects in peroxisomal beta-oxidation. Street JM, et al. **Biochem J** 1990 Aug 1;269(3):671–7

Cellular oxidation of lignoceric acid is regulated by the subcellular localization of lignoceroyl-CoA ligases. Lazo O, et al. **J Lipid Res** 1990 Apr;31(4):583–95

In vivo assessment of N-acetylaspartate in brain in spongy degeneration (Canavan's disease) by proton spectroscopy [letter] Grodd W, et al. **Lancet** 1990 Aug 18; 336(8712):437–8

Adrenoleukodystrophy and Zellweger syndrome. Moser HW, et al. **Prog Clin Biol Res** 1990;321:511–35 (98 ref.)

[X-linked adrenoleukodystrophy and other peroxisomal diseases caused by a failing peroxisomal beta-oxidation system: clinical expression, diagnosis and treatment] Wanders RJ, et al. **Tijdschr Kindergeneeskd** 1989 Oct; 57(5):186–97 (25 ref.) (Eng. Abstr.) **(Dut)**

[Peroxisomal disorders; newer concept and recent studies] Kamoshita S. **Nippon Rinsho** 1990 Mar;48(3):629–38 (24 ref.) **(Jpn)**

[Adrenoleukodystrophy] Miyatake T. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):821–3 **(Jpn)**

PATHOLOGY

Adult pigment type (Peiffer) of sudanophilic leukodystrophy. Pathological and morphometrical studies on two autopsy cases of siblings. Okeda R, et al. **Acta Neuropathol (Berl)** 1989;78(5):533–42

Canavan disease: CT and MR imaging of the brain. Brismar J, et al. **AJNR** 1990 Jul–Aug;11(4):805–10

Cochlear nerve degeneration coincident with adrenocerebroleukodystrophy. Igarashi M, et al. **Arch Otolaryngol** 1976 Dec;102(12):722–6

MR imaging appearance of childhood adrenoleukodystrophy with auditory, visual, and motor pathway involvement. Jensen ME, et al. **Radiographics** 1990 Jan;10(1):53–66

Pathology of hepatic peroxisomes and mitochondria in patients with peroxisomal disorders. Hughes JL, et al. **Virchows Arch [A]** 1990;416(3):255–64

[A case of adrenomyeloneuropathy with localized cerebral white matter degeneration] Kanda F, et al. **Rinsho Shinkeigaku** 1989 Apr;29(4):483–7 (Eng. Abstr.) **(Jpn)**

[Adrenoleukodystrophy with high signal intensity areas in bilateral pyramidal tracts from internal capsule through medullary pyramids on MRI] Kitagawa Y, et al. **Rinsho Shinkeigaku** 1989 May;29(5):606–11 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Adrenoleukodystrophy. Report of a case with extremely slow progression of symptoms. Cavaletti G, et al. **Acta Neurol (Napoli)** 1990 Apr;12(2):109–14

Connatal Pelizaeus–Merzbacher disease. Haenggeli CA, et al. **Dev Med Child Neurol** 1989 Dec;31(6):803–7

Corticomotoneuronal latencies after non-invasive stimulation of the motor cortex in adrenomyeloneuropathy and adrenoleukodystrophy: results in patients and their relatives. Masur H, et al. **Funct Neurol** 1990 Jan–Mar; 5(1):55–9

RADIOGRAPHY

[Pathologic changes of the brain in children with various forms of infantile cerebral palsy (computerized–tomographic data)] Tomberg TA, et al. **Pediatriia** 1989;(9):50–4 (Eng. Abstr.) **(Rus)**

SURGERY

Reversal of early neurologic and neuroradiologic manifestations of X-linked adrenoleukodystrophy by bone marrow transplantation. Aubourg P, et al. **N Engl J Med** 1990 Jun 28;322(26):1860–6

CEREBRAL VASOSPASM see **CEREBRAL ISCHEMIA, TRANSIENT**

CEREBRAL VEINS

External carotid artery embolization of dural arteriovenous malformations involving the cavernous sinus. Outcome and role of venous thrombosis. Hirabuki N, et al. **Acta Radiol** 1990 Mar;31(2):197–201

In utero detection of cardiac failure from an aneurysm of the vein of Galen. Jeanty P, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):50–1

Aneurysm of the vein of Galen: a new cause for Ballantyne syndrome. Ordorica SA, et al. **Am J Obstet Gynecol** 1990 May;162(5):1166–7

Spontaneous arteriovenous shunts of the cavernous sinus—ophthalmological considerations. Halmagyi GM, et al. **Aust N Z J Ophthalmol** 1989 Nov;17(4):439–43

Postpartum headache following regional analgesia; a symptom of cerebral venous thrombosis. Ravindran RS,

et al. **Can J Anaesth** 1989 Nov;36(6):705–7

Hemispheric arteriovenous fistulae with giant venous dilation. Almeida GM, et al. **Childs Nerv Syst** 1990 Jun; 6(4):216–9

Long-term sampling of cerebral venous blood in conscious rats. Frerichs KU, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):902–5

A case of thrombosed aneurysm of the vein of Galen associated with superior sagittal sinus thrombosis. Mancuso P, et al. **J Neurosurg Sci** 1989 Oct–Dec;33(4):305–9

An experimental model of cerebral venous hypertension in the rat. Kurokawa Y, et al. **Neurol Med Chir (Tokyo)** 1989 Mar;29(3):175–80

Neurovascular lesions and endovascular therapy: the role of MR. Jabour BA, et al. **Neuroradiology** 1989;31(4):341–5

Aneurysm of the vein of Galen. Ultrasound, MRI and angiographic correlations. Leff SL, et al. **Pediatr Radiol** 1989;20(1–2):98–100

Intracranial vascular lesions: optimization and clinical evaluation of three-dimensional time-of-flight MR angiography. Marchal G, et al. **Radiology** 1990 May; 175(2):443–8

Cerebral venous thrombosis in a child with iron deficiency anemia and thrombocytosis. Belman AL, et al. **Stroke** 1990 Mar;21(3):488–93

Ischemic brain rescue by transvenous perfusion in baboons with venous sinus occlusion. Frazee JG, et al. **Stroke** 1990 Jan;21(1):87–93

Cerebral venous thrombosis in systemic lupus erythematosus. Vidailhet M, et al. **Stroke** 1990 Aug;21(8):1226–31

Lateral situated sinus pericranii. Case report. Nishio A, et al. **Surg Neurol** 1989 Nov;32(5):382–6

[Radiological and magnetic resonance aspects in cerebral venous angioma] Vandermarcq P, et al. **J Radiol** 1989 Nov; 70(11):601–8 (27 ref.) (Eng. Abstr.) **(Fre)**

[Hydrocephalus of venous origin] Sainte-Rose C, et al. **Neurochirurgie** 1989;35(6):383–9, 410 (Eng. Abstr.) **(Fre)**

[Evolution of venous cerebral infarction and brain edema—an experimental study of sagittal sinus obstruction] Kannuki S, et al. **No To Shinkei** 1989 Dec;41(12):1225–31 (Eng. Abstr.) **(Jpn)**

[Homocystinuria accompanied with cerebral deep venous thrombosis—a case report] Kita H, et al. **No To Shinkei** 1990 Mar;42(3):297–302 (Eng. Abstr.) **(Jpn)**

[Thromboses of the cerebral sinuses and veins in the gestational period] Deev AS. **Akush Ginekol (Mosk)** 1989 Dec;(12):51–3 (Eng. Abstr.) **(Rus)**

[Pathogenesis of the neurologic form of decompression sickness in rabbits] Korolev AB. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):92–3 **(Rus)**

[Venous angiomas of the brain. Retrospective study of angiograms and clinical material] Mihale J, et al. **Cesk Neurol Neurochir** 1990 Jan;53(1):39–42 (Eng. Abstr.) **(Slo)**

ABNORMALITIES

Basilar arterio-venous pseudoparallelism due to persistence of embryonal venous pattern. de Caro R, et al. **Acta Neurochir (Wien)** 1990;104(1–2):73–6

Radiological cases of the month. Systemic air embolism within a vein of Galen malformation. Mehall CJ, et al. **Am J Dis Child** 1990 Jan;144(1):95–6

Arteriovenous malformations in the vein of Galen [letter; comment] Halliday HL, et al. **Arch Dis Child** 1990 May; 65(5):559 Comment on: Arch Dis Child 1989 Dec;64(12):1653–5.

Arteriovenous malformations involving the vein of Galen [see comments] Nicholson AA, et al. **Arch Dis Child** 1989 Dec;64(12):1653–5 (14 ref.) Comment in: Arch Dis Child 1990 May;65(5):559.

Cerebral medullary venous malformations. Report of four cases and review of the literature. Dias PS, et al. **Br J Neurosurg** 1988;2(1):7–21

Arteriovenous malformation of the great vein of Galen associated with patent ductus arteriosus. Report of three cases and review of the literature. Crawford JM, et al. **Childs Nerv Syst** 1990 Jan;6(1):18–22 (35 ref.)

Management of vein of Galen aneurysms. Combined surgical and endovascular approach. King WA, et al. **Childs Nerv Syst** 1989 Aug;5(4):208–11

Neuroradiological and pathological studies on neonatal aneurysmal dilation of the vein of Galen. Yamashita Y, et al. **J Child Neurol** 1990 Jan;5(1):45–8

Venous anomalies and abnormalities of the posterior fossa. Goulao A, et al. **Neuroradiology** 1990;31(6):476–82

Venous angioma treated by radiation. Hashimoto M, et al. **Neuroradiology** 1990;31(6):537–40

Interventional neuroradiological management of vein of Galen malformations in the neonate. Ciricillo SF, et al. **Neurosurgery** 1990 Jul;27(1):22–7; discussion 27–8

Conservative management of thrombosed vein of Galen malformations. Report of two cases and a review of the literature. Zampella EJ, et al. **Pediatr Neurosci** 1988; 14(5):264–71 (14 ref.)

[Vein of Galen malformation in a newborn infant with clinical symptoms of a cardiologic emergency] Kabus M, et al. **Kinderarztl Prax** 1990 May;58(5):247–53 (Eng. Abstr.) **(Ger)**

[Aneurysm of the vein of Galen as a possible cause of congestive heart failure: a report of 5 new cases] Breuer J, et al. **Monatsschr Kinderheilkd** 1989 Nov;137(11):726–32 (Eng. Abstr.) **(Ger)**

[High flow medullary venous malformation with aneurysm on the proximal artery—a case report] Ochi S, et al. **No To Shinkei** 1990 Apr;42(4):361–6 (25 ref.) (Eng. Abstr.) **(Jpn)**

[Medullary venous malformation with marked early venous filling—a case report] Kurimoto M, et al. **Rinsho Hoshasen** 1989 Jun;34(6):735–8 (Eng. Abstr.) **(Jpn)**

[Sudden deafness associated with abnormal cerebral venous drainage. Apropos of a case] Bartual J, et al. **Acta Otorrinolaringol Esp** 1988 Jan–Feb;39(1):37–42 (Eng. Abstr.) **(Spa)**

ANATOMY & HISTOLOGY

A study of the junction between the straight sinus and the great cerebral vein. Ghali WM, et al. **J Anat** 1989 Jun; 164:49–54

[Age-related characteristics of cerebral blood vessels in the rat (morphometric study)] Levitman MKh, et al. **Arkh Anat Gistol Embriol** 1990 Jan;98(1):49–53 (Eng. Abstr.) **(Rus)**

[Age-related dynamics of blood supply and vascular-tissue interrelations in the human pineal body] Nikonorov SG, et al. **Arkh Anat Gistol Embriol** 1990 Feb;98(2):25–30 (Eng. Abstr.) **(Rus)**

[Structural-functional organization of the cerebral circulatory system in birds] Krivchenko AI, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1616–23 (30 ref.) (Eng. Abstr.) **(Rus)**

CYTOLOGY

Cytoarchitecture of the smooth muscles and pericytes of rat cerebral blood vessels. A scanning electron microscopic study. Ushiwata I, et al. **J Neurosurg** 1990 Jul;73(1):82–90

DRUG EFFECTS

Contractile responses to endothelin in feline cortical vessels in situ. Robinson MJ, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):285–9

INNERVATION

Small pial vessels, but not choroid plexus, exhibit specific biochemical correlates of functional cholinergic innervation. Hamel E, et al. **Brain Res** 1990 May 21; 516(2):301–9

[The neurogenic mechanism of the regulation of cerebral circulation and the linking of blood flow-metabolism function] Mitagvariia NP. **Fiziol Zh SSSR** 1989 Nov; 75(11):1473–8 (20 ref.) (Eng. Abstr.) **(Rus)**

METABOLISM

The identification of adrenergic receptors in human pial membranes. Alexander E 3d, et al. **Neurosurgery** 1990 Jul; 27(1):52–9

Increased cerebral lactate output to cerebral venous blood after forebrain ischemia in rats. Frerichs KU, et al. **Stroke** 1990 Apr;21(4):614–7

PATHOLOGY

Cerebellar venous infarction: case report with clinicopathologic correlation. Eng LJ, et al. **Neurology** 1990 May;40(5):837–8

The role of ultrasound in the management of vein of Galen aneurysms in infancy. Abbitt PL, et al. **Neuroradiology** 1990;32(2):86–9

Colour Doppler imaging of arteriovenous malformation of the vein of Galen in a newborn. Deeg KH, et al. **Neuroradiology** 1990;32(1):60–3

Intracranial venous thrombosis in relation to pregnancy and delivery. Angelov A. **Pathol Res Pract** 1989 Dec; 185(6):843–7

Vein of Galen aneurysm presenting with recurrent aseptic meningitis and subsequent spontaneous thrombosis. Collins JJ, et al. **Surg Neurol** 1990 May;33(5):325–8

[Bilateral thalamic lesions in cerebral venous thrombosis] Erbguth F, et al. **Nervenarzt** 1990 Feb;61(2):123–6 **(Ger)**

[The significance of sialic acids and changes in the noncellular structures of the vascular walls in the development of brain edema in meningoencephalitis] Barshtein IuA, et al. **Vrach Delo** 1989 Oct;(10):118–22 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Endothelin is a potent constrictor of human intracranial arteries and veins. Hardebo JE, et al. **Blood Vessels** 1989; 26(5):249–53

[The role of the dopaminergic component in the autoregulatory reaction of the cerebral vessels] Gaevyi MD, et al. **Fiziol Zh SSSR** 1989 Jun;75(6):793–7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Pial venous pressure and acute hypertensive disruption of the blood–brain barrier in spontaneous and renal hypertension. Werber AH, et al. **Brain Res** 1990 May 7; 515(1–2):235–40

Intracranial venous pressures, hydrocephalus and effects of cerebrospinal fluid shunts. Andeweg J. **Childs Nerv Syst** 1989 Oct;5(5):318–23

Postoperative arteriovenous fistula between the middle meningeal artery and the sphenoparietal sinus. Tsutsumi K, et al. **Neurosurgery** 1990 May;26(5):869–71

Major pitfalls in Doppler investigations with particular reference to the cerebral vascular system. Part I. Sources of error, resulting pitfalls and measures to prevent errors. Winkler P, et al. **Pediatr Radiol** 1990;20(4):219–28

[Hydrocephalus of venous origin] Sainte-Rose C, et al. **Neurochirurgie** 1989;35(6):383–9, 410 (Eng. Abstr.) **(Fre)**

[The effects of disturbance of cerebral venous drainage on focal cerebral blood flow and ischemic cerebral edema] Yura S, et al. **No To Shinkei** 1990 Mar;42(3):269–75 (Eng. Abstr.) **(Jpn)**

[Local neuroendocrine regulation of the cerebral vessels in acute disorders of cerebral blood circulation] Markina LD, et al. **Fiziol Zh SSSR** 1989 Oct;75(10):1397–404 (Eng. Abstr.) **(Rus)**

[Vascular reactivity in cerebral circulatory asthenia of various etiologies] Shtok VN, et al. **Sov Med** 1990;(1):92–4 **(Rus)**

RADIATION EFFECTS

[The early decrease in the endothelial cells of the cerebral vessels of rats after local irradiation] Eidus LKh, et al. **Radiobiologiia** 1990 Mar–Apr;30(2):266–9 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Calcification of an aneurysm of the vein of Galen. Chapman S, et al. **Pediatr Radiol** 1989;19(8):541–2

Intracerebral arteriovenous malformations: evaluation with selective MR angiography and venography. Edelman RR, et al. **Radiology** 1989 Dec;173(3):831–7

[Circulatory disturbance of deep cerebral veins in eclampsia] Nakakita K, et al. **No To Shinkei** 1990 Mar;42(3):239–43 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

[Radiocirculography in patients with cerebrovascular disorders] Ivanchev V, et al. **Zh Nevropatol Psikhiatr** 1990; 90(1):32–4 (Eng. Abstr.) **(Rus)**

SURGERY

Dural arteriovenous fistulas supplied by ethmoidal arteries. Halbach VV, et al. **Neurosurgery** 1990 May;26(5):816–23 (29 ref.)

Significance of preserving bridging veins in an interhemispheric approach [letter] Aoki N, et al. **Surg Neurol** 1990 Feb;33(2):159–60

CEREBRAL VENTRICLE NEOPLASMS

Hemangioblastoma of the lateral ventricle. Ho YS, et al. **Surg Neurol** 1990 Jun;33(6):407–12 (12 ref.)

ANALYSIS

A marker for primary choroid plexus neoplasms. Herbert J, et al. **Am J Pathol** 1990 Jun;136(6):1317–25

COMPLICATIONS

Bilateral intranuclear ophthalmoplegia associated with fourth ventricular dermoid tumor. Tekkok IH, et al. **J Clin Neuro Ophthalmol** 1989 Dec;9(4):254–7

[Duplicate origin of vertebral artery combined with brain tumor] Mashiyama S, et al. **Rinsho Hoshasen** 1989 Jun; 34(6):727–30 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Neurologic analysis of several forms of acromegaly] Erokhina LG, et al. **Sov Med** 1989;(7):81–4 **(Rus)**

CONGENITAL

Choroid plexus papilloma in early infants. Kawano H, et al. **Zentralbl Neurochir** 1989;50(3–4):171–5

DIAGNOSIS

Lateral ventricular neoplasms of the brain: differential diagnosis based on clinical, CT, and MR findings [published erratum appears in AJNR 1990 Jul–Aug;11(4):734] Jelinek J, et al. **AJNR** 1990 May;11(3):567–74

MR imaging of choroid plexus lipomas. Truwit CL, et al. **AJNR** 1990 Jan–Feb;11(1):202–4

Lateral ventricular neoplasms of the brain: differential diagnosis based on clinical, CT, and MR findings. Jelinek J, et al. **AJR Am J Roentgenol** 1990 Aug;155(2):365–72

Ependymoma of the fourth ventricle: an unusual presentation. Morris K, et al. **Br J Neurosurg** 1988; 2(4):513–6

Choroid plexus papillomas in infancy and childhood. Spallone A, et al. **Childs Nerv Syst** 1990 Mar;6(2):71–4

Magnetic resonance imaging and computed tomography of an intraventricular craniopharyngioma. Sacher M, et al. **Clin Imaging** 1990 May;14(2):116–9

Gadolinium-enhanced MR imaging in the management of a midline cerebral dysgerminoma. Hawes DR, et al. **Comput Med Imaging Graph** 1989 Nov–Dec;13(6):463–8

Ectopic pituitary adenoma of the third ventricle. Case report. Kleinschmidt-DeMasters BK, et al. **J Neurosurg** 1990 Jan; 72(1):139–42

Role of the intraoperative real-time sonography in the tumours of the pineal region and third ventricle. Guiducci G, et al. **J Neurosurg Sci** 1989 Jul-Sep;33(3):259-62

Lipoma and agenesis of the corpus callosum with associated choroid plexus lipomas. In utero diagnosis. Mulligan G, et al. **J Ultrasound Med** 1989 Oct;8(10):583-8 (20 ref.)

Prospective study on trisomy 18 and fetal choroid plexus cysts [letter] Camurri L, et al. **Prenat Diagn** 1989 Oct; 9(10):742

Intraventricular craniopharyngioma: its characteristics in magnetic resonance imaging and successful total removal. Fukushima T, et al. **Surg Neurol** 1990 Jan;33(1):22-7 (15 ref.)

[A pitfall of neuroradiological diagnosis: a double intracerebral tumor in CT and MR (intraventricular meningioma and corpus callosum glioma, a case report)] Flaschka G, et al. **ROFO** 1990 Jun;152(6):739-41 **(Ger)**

[A case of epidermoid in the fourth ventricle associated with bronchial asthma-like symptom] Sakamoto M, et al. **No Shinkei Geka** 1989 Jul;17(7):663-8 (Eng. Abstr.) **(Jpn)**

[A case of large malignant choroid plexus papilloma in the third ventricle--immunohistochemical and ultrastructural studies] Sato K, et al. **No To Shinkei** 1989 Oct;41(10):973-8 (Eng. Abstr.) **(Jpn)**

[A periventricular tumor associated with acute kidney failure and bilateral renal cortical necrosis] Marcovici H, et al. **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1989 Apr-Jun;34(2):149-53 (Eng. Abstr.) **(Rum)**

DRUG THERAPY

Adjunctive treatment for recurrent childhood ependymoma of the IV ventricle: chemotherapy with CDDP and MCNU. Tamura M, et al. **Childs Nerv Syst** 1990 Jun; 6(4):186-9

[Recurrent germinoma successfully treated with cisplatin. Case report] Hida K, et al. **Neurol Med Chir (Tokyo)** 1989 Jun;29(6):510-4 (22 ref.) (Eng. Abstr.) **(Jpn)**

GENETICS

Choroid plexus carcinoma in siblings [letter; comment] Munoz DG. **J Neuropathol Exp Neurol** 1990 Mar; 49(2):192-3 Comment on: J Neuropathol Exp Neurol 1989 Jul;48(4):483-93.

Impact of the genetic background of transgenic mice upon the formation and timing of choroid plexus papillomas. Cho HJ, et al. **J Neurosci Res** 1989 Sep;24(1):115-22

IMMUNOLOGY

Choroid plexus papillomas: immunohistochemical study [letter; comment] Lakhani S, et al. **Histopathology** 1990 Apr;16(4):419-20 Comment on: Histopathology 1989 Jul;15(1):61-9.

METABOLISM

Subepithelial basement membrane deposition and intermediate filament expression in choroid plexus neoplasms and ependymomas. Furness PN, et al. **Histopathology** 1990 Mar;16(3):251-5

Glial fibrillary acidic protein and cytokeratin in choroid plexus tumors. An immunohistochemical study. Lopes MB, et al. **Pathol Res Pract** 1989 Sep;185(3):339-41

PATHOLOGY

Pigmented choroid plexus papilloma. Reimund EL, et al. **Arch Pathol Lab Med** 1990 Aug;114(8):902-5 (8 ref.)

One-month-old infant with increasing head size [clinical conference] Harmon BH, et al. **Invest Radiol** 1990 Jul; 25(7):862-4

Double intracranial tumours of maldevelopmental origin--teratoma at the pineal region and an epidermoid cyst in the fourth ventricle. Yamaki T, et al. **Neurochirurgia (Stuttg)** 1990 May;33(3):88-90

Cystic optic glioma. Gower DJ, et al. **Neurosurgery** 1990 Jan;26(1):133-6

Intraventricular neurocytoma: a report of two cases. Patil AA, et al. **Neurosurgery** 1990 Jan;26(1):140-4

Chondromatosis of the choroid plexus: case report. Valdueza JM, et al. **Neurosurgery** 1990 Aug;27(2):291-4

Intraventricular neuroblastoma. A light and electron microscopic study and review of the literature. Honda M, et al. **Pathol Res Pract** 1989 Aug;185(2):267-72; discussion 273-5 (19 ref.)

[A clinicopathological study of central neurocytoma] Tsujita Y, et al. **No To Shinkei** 1989 Jun;41(6):547-58 (Eng. Abstr.) **(Jpn)**

[Chordoma of the 3d ventricle without extradural implantation (letter)] Antigüedad AR, et al. **Neurologia** 1989 Nov;4(9):340-1 **(Spa)**

RADIOGRAPHY

A case of Rendu-Osler-Weber disease with cerebral hemangioma, multiple pulmonary arteriovenous fistulas and hepatic arteriovenous fistula. Maruyama J, et al. **Jpn J Med** 1989 Sep-Oct;28(5):651-6

Dermoid tumour of the fourth ventricle with hyperdense aspect demonstrated on CT scan. Case report. Dănăilă L, et al. **Neurol Psychiatr (Bucur)** 1989 Jul-Sep;27(3):231-6

[Meningioma of the fourth ventricle] Jiang CC. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Aug; 22(4):220-1, 254 (9 ref.) (Eng. Abstr.) **(Chi)**

[The association of 2 histologically different neuroepithelial tumors] Friard T, et al. **Ann Radiol (Paris)** 1989; 32(7-8):586-9 (Eng. Abstr.) **(Fre)**

RADIOTHERAPY

The role of radiotherapy in the management of choroid plexus neoplasms. Palazzi M, et al. **Tumori** 1989 Oct 31; 75(5):463-9 (58 ref.)

SECONDARY

Alveolar soft part sarcoma of the pituitary gland with secondary involvement of the right cerebral ventricle. Bots GT, et al. **Br J Neurosurg** 1988;2(1):101-7

[Carcinomatous ventriculitis (letter)] Palomo F, et al. **Med Clin (Barc)** 1989 Nov 25;93(17):679 **(Spa)**

SECRETION

Mucous-secreting choroid plexus adenoma--case report and review of the literature. Eljamel MS, et al. **Neuropediatrics** 1990 Feb;21(1):55-6 (16 ref.)

SURGERY

Choroid plexus carcinoma--report of a case with metastases within the central nervous system. Bennedbaek O, et al. **Acta Oncol** 1990;29(2):241-3 (32 ref.)

Respiratory obstruction after posterior fossa surgery. Howard R, et al. **Anaesthesia** 1990 Mar;45(3):222-4

Intraventricular craniopharyngioma. Clinical and surgical considerations. Ferrara M, et al. **J Neurosurg Sci** 1989 Apr-Jun;33(2):161-4

Recovery of gonadal function after resection of an oligodendroglioma localized in the anterior horn of the lateral ventricle: relation to pulsatile secretion of luteinizing hormone. Saitoh Y, et al. **Neurosurgery** 1989 Nov; 25(5):820-3

[Central neurocytoma. Case report] Miyata M, et al. **Neurol Med Chir (Tokyo)** 1989 Dec;29(12):1148-52 (17 ref.) (Eng. Abstr.) **(Jpn)**

CEREBRAL VENTRICLES

see related
INJECTIONS, INTRAVENTRICULAR

Sonography of meningoencephalitis and ventriculitis in infancy. Váradi V, et al. **Acta Paediatr Hung** 1990; 30(1):53-62

Late onset and recurrent periventricular hemorrhage in prematurity. Shen EY, et al. **Acta Paediatr Sin** 1988 Mar-Apr;29(2):83-9

Primary intraventricular hemorrhage imaged by high-field magnetic resonance imaging--a case report. Ooboshi H, et al. **Angiology** 1990 Aug;41(8):647-51

Staphylococcus aureus ventriculitis treated with single-dose intraventricular vancomycin or daptomycin (LY146032): bacterial and antibiotic kinetics in hydrocephalic rabbits. Haworth CS, et al. **Antimicrob Agents Chemother** 1990 Feb; 34(2):245-51

Complications associated with Ommaya reservoirs in patients with cancer. The Princess Margaret Hospital experience and a review of the literature. Lishner M, et al. **Arch Intern Med** 1990 Jan;150(1):173-6 (16 ref.)

Creatine kinase BB release into cerebrospinal fluid after lateral ventricle cannulation. Bach FW, et al. **Br J Neurosurg** 1988;2(3):339-42

Intraventricular haematoma: management of comatose patients with valve regulated external ventricular drainage. Chan KH, et al. **Br J Neurosurg** 1988;2(4):465-9

Symptomatic neuroepithelial (colloid) cysts of the third ventricle. A unique case report in nontwin brothers. Bengtson BP, et al. **Cancer** 1990 Aug 15;66(4):779-85

Transplantation of the pineal gland in the mammalian third cerebral ventricle. Wu WT, et al. **Exp Neurol** 1990 Apr; 108(1):23-32

The effects of intraventricular hemorrhage on functional communication skills in preterm toddlers. Landry SH, et al. **J Dev Behav Pediatr** 1989 Dec;10(6):299-306

Increased endotoxin and interleukin-1 beta concentrations in cerebrospinal fluid of infants with coliform meningitis and ventriculitis associated with intraventricular gentamicin therapy. Mustafa MM, et al. **J Infect Dis** 1989 Nov;160(5):891-5

Intracerebroventricular bethanechol chloride infusion in Alzheimer's disease. Results of a collaborative double-blind study. Harbaugh RE, et al. **J Neurosurg** 1989 Oct; 71(4):481-6

Ontogenesis of colloid cysts [letter] Kondziolka D. **J Neurosurg** 1990 Aug;73(2):312

Nursing interventions to decrease the risk of periventricular-intraventricular hemorrhage. Kling P. **J Obstet Gynecol Neonatal Nurs** 1989 Nov-Dec; 18(6):457-64 (39 ref.)

Frequent handling in the neonatal intensive care unit and intraventricular hemorrhage. Bada HS, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):126-31

A modification of the Brown-Roberts-Wells stereotactic frame for implantation of ventricular access reservoirs. Frank E, et al. **Neurosurgery** 1989 Nov;25(5):839-41; discussion 841-2

Ventricular fluid concentrations of vancomycin in children after intravenous and intraventricular administration. McGee SM, et al. **Pediatr Infect Dis J** 1990 Feb;9(2):138-9

Unusual presentation of group B streptococcal ventriculitis. Sokol DM, et al. **Pediatr Infect Dis J** 1990 Jul;9(7):525-7

Blood pressure increases, birth weight-dependent stability boundary, and intraventricular hemorrhage. Perry EH, et al. **Pediatrics** 1990 May;85(5):727-32

Thalamic hemorrhage with intraventricular hemorrhage in the full-term newborn. Roland EH, et al. **Pediatrics** 1990 May;85(5):737-42

Fatal neonatal meningitis and ventriculitis caused by multiresistant Achromobacter xylosoxidans. A case report. Manjra AI, et al. **S Afr Med J** 1989 Nov 18;76(10):571-3

Primary oligodendroglioma of the lateral ventricle. Lee KS, et al. **South Med J** 1990 Feb;83(2):254-5 (20 ref.)

[Histogenesis of subependymal glioma in Bourneville's tuberous sclerosis] Bancel B, et al. **Ann Pathol** 1990; 10(2):109-16 (Eng. Abstr.) **(Fre)**

[Double paralysis of the superior oblique muscles caused by ventricular inundation] Nguyen P, et al. **Bull Soc Ophtalmol Fr** 1989 Mar;89(3):455-7 **(Fre)**

[Treatment of colloid cysts of the third ventricle by cerebrospinal fluid shunt] Hattab N, et al. **Neurochirurgie** 1990;36(2):129-31 (Eng. Abstr.) **(Fre)**

[Colloid cysts of the third cerebral ventricle. Computed x-ray tomography, MRI and stereotaxic puncture. Apropos of 9 cases] Peragut JC, et al. **Neurochirurgie** 1990;36(2):122-8 (Eng. Abstr.) **(Fre)**

["Bell clappers" with "ophthalmologic alarm". Apropos of 2 cases of colloid cysts of the 3d ventricle] Pon A, et al. **Ophtalmologie** 1989 Jun-Aug;3(3):244-7 (Eng. Abstr.) **(Fre)**

[Prognostic significance of ventricular contamination in spontaneous intracerebral hemorrhage (letter)] Gras P, et al. **Presse Med** 1990 Apr 21;19(16):763 **(Fre)**

[A case from practice (152). Intermittent cerebrospinal fluid flow obstruction caused by colloid cysts in the foramen of Monro area] Lahiguera S. **Schweiz Rundsch Med Prax** 1989 Nov 7;78(45):1267-8 **(Ger)**

[Isolated intraventricular hemorrhage due to a ruptured vertebral artery aneurysm] Irikura T, et al. **No Shinkei Geka** 1990 May;18(5):469-73 (Eng. Abstr.) **(Jpn)**

[A case of moyamoya disease with repeated intraventricular hemorrhage due to a ruptured pseudoaneurysm] Sadatoh A, et al. **No Shinkei Geka** 1989 Aug;17(8):755-8 (17 ref.) (Eng. Abstr.) **(Jpn)**

[A case of cerebral arterial ectasia accompanied by intraventricular hemorrhage] Enomoto H, et al. **Rinsho Hoshasen** 1990 Jun;35(6):733-5 (Eng. Abstr.) **(Jpn)**

[Intraventricular contrast medium (non-ionic water soluble dimer) residue a month after injection; a case report] Kawata Y, et al. **Rinsho Hoshasen** 1990 Jun;35(6):729-32 (Eng. Abstr.) **(Jpn)**

[Slit-ventricle syndrome in the treatment of hydrocephalus in children] Mandat K, et al. **Neurol Neurochir Pol** 1989 Jan;23(1):52-7 (21 ref.) **(Pol)**

ABNORMALITIES

Prenatal diagnosis of cystic kidney disease with ventriculomegaly: a report of six cases in two related sibships. Reuss A, et al. **Am J Med Genet** 1989 Jul; 33(3):385-9

Colpocephaly: pitfalls in the diagnosis of a pathologic entity utilizing neuroimaging techniques. Bodensteiner J, et al. **J Child Neurol** 1990 Apr;5(2):166-8

Disorders of ventricles and CSF spaces. Fitz CR. **Semin Ultrasound CT MR** 1988 Jun;9(3):216-30 (39 ref.)

Dandy-Walker malformation in a Japanese black calf. Madarame H, et al. **Vet Pathol** 1990 Jul;27(4):296-8

[Joubert's syndrome] Buissonnière RF, et al. **Ann Pediatr (Paris)** 1990 Mar;37(3):151-6 (41 ref.) (Eng. Abstr.) **(Fre)**

ANALYSIS

Immunohistochemical localisation of a gastrin-releasing peptide-like material in area postrema, nucleus of the solitary tract and vagal motor nucleus in the brainstem of rat. King BF, et al. **J Auton Nerv Syst** 1989 Nov; 28(2):97-104

ANATOMY & HISTOLOGY

Demonstration of the area postrema with contrast-enhanced MR. Williams KD, et al. **AJNR** 1990 Jul-Aug;11(4):733-4

Ventricular abnormalities in affective disorder: clinical and demographic correlates. Andreasen NC, et al. **Am J Psychiatry** 1990 Jul;147(7):893-900

The role of gender in studies of ventricle enlargement in schizophrenia: a predominantly male effect. Flaum M, et al. **Am J Psychiatry** 1990 Oct;147(10):1327-32

Left-handedness and ventricle size in schizophrenic patients [letter; comment] Randolph C, et al. **Am J Psychiatry** 1990 May;147(5):679-80 Comment on: Am J Psychiatry 1989 Aug;146(8):1056-8.

A simple method for conversion of area ratio measurements of cerebral structures to volume estimates. Woods BT, et al. **Biol Psychiatry** 1989 Nov;26(7):748-52

Sub/supraependymal axonal net in the brains of sharks and probable targets in parasynaptic relationship. MacDonnell MF. **Brain Behav Evol** 1989;34(4):201–11

Computerized volume measurement of brain structure. Ashtari M, et al. **Invest Radiol** 1990 Jul;25(7):798–805

Quantification of neonatal cerebral ventricular volume by real–time ultrasonography. Derivation and in vitro confirmation of a mathematical model. Brann BS 4th, et al. **J Ultrasound Med** 1990 Jan;9(1):1–8

Unbiased and efficient estimation of total ventricular volume of the brain obtained from CT–scans by a stereological method. Pakkenberg B, et al. **Neuroradiology** 1989; 31(5):413–7

Volume determinations of the encephalic ventricles with CT and MRI. Cramer GD, et al. **Surg Radiol Anat** 1990; 12(1):59–64

[The topography of the atrium ventriculi and its microsurgical importance] Hussein S, et al. **Neurochirurgia (Stuttg)** 1990 Jan;33(1):8–10 (Eng. Abstr.) **(Ger)**

BLOOD SUPPLY

Mosaic reconstruction of blood vessels in mouse neocortical tissue transplanted into the third ventricle of rat brain. Nakano Y, et al. **Brain Res** 1989 Sep 4;496(1–2):336–40

Vasculature of the paraphysis cerebri of the frog. Hinton DA, et al. **J Submicrosc Cytol Pathol** 1990 Jul;22(3):345–51

Superior oblique palsy due to a midbrain vascular malformation. Gonyea EF. **Neurology** 1990 Mar;40(3 Pt 1):554–5

[The role of inappropriate vasopressin secretion syndrome in the development of intraventricular hemorrhage in premature infants] Balbarina EN, et al. **Akush Ginekol (Mosk)** 1990 Jan;(1):36–8 **(Rus)**

[Ultramicroscopic organization of the vascular plexus in the rabbit cerebral lateral ventricles and its changes under the effect of pyrogens] Archakova LI, et al. **Arkh Anat Gistol Embriol** 1989 Jun;96(6):79–87 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Cells resembling intraventricular macrophages are present in the subretinal space of human foetal eyes. McMenamin PG, et al. **Anat Rec** 1990 Jun;227(2):245–53

Direct vagal input to neurons in the area postrema which project to the parabrachial nucleus: an electron microscopic–HRP study in the cat. Strain SM, et al. **Brain Res Bull** 1990 Mar;24(3):457–63

Collateral input to the paraventricular and supraoptic nuclei in rat. I. Afferents from the subfornical organ and the anteroventral third ventricle region. Weiss ML, et al. **Brain Res Bull** 1990 Feb;24(2):231–8

Supraependymal cells occurrence in ventricular system of small ruminants. Scanning electron microscopy study. Rajtová V. **Folia Morphol (Praha)** 1989;37(4):333–7

Proliferation "hot spots" in adult avian ventricular zone reveal radial cell division. Alvarez–Buylla A, et al. **Neuron** 1990 Jul;5(1):101–9

DRUG EFFECTS

Enlargement of cerebral third ventricle in psychotic patients with delayed response to neuroleptics. Kaplan MJ, et al. **Biol Psychiatry** 1990 Jan 15;27(2):205–14

Dependence on sedative–hypnotics [letter; comment] Templeton JS. **Br J Addict** 1990 Feb;85(2):301 Comment on: Br J Addict 1989 May;84(5):547–53.

Systemic glutamate induces degeneration of a subpopulation of tyrosine hydroxylase–immunoreactive neurons in the rat area postrema. Phelix CF, et al. **Brain Res** 1990 May 21; 516(2):335–40

Cardiorespiratory effects of D–Ala–2–Me–Phe–4–Met–(0)–ol enkephalin in the third ventricle, and in anterior hypothalamic and paraventricular areas of the rat brain. Rabkin SW. **Cardiovasc Res** 1989 Oct;23(10):904–12

Role of the fourth cerebroventricle in mediating rat plasma ACTH responses to intravenous nicotine. Matta SG, et al. **J Pharmacol Exp Ther** 1990 Feb;252(2):623–30

Central nervous system control of glycogenolysis and gluconeogenesis in fed and fasted rat liver. Iguchi A, et al. **Metabolism** 1989 Dec;38(12):1216–21

Infusion of NMDA into the nucleus basalis of Meynert, frontal cortex or lateral ventricle in rats: effect on memory and cholinergic brain neurochemistry. Santucci AC, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):485–8

Peptidergic control of male rat sexual behavior: the effects of intracerebral injections of substance P and cholecystokinin. Dornan WA, et al. **Physiol Behav** 1989 Sep;46(3):547–56

Neural factors in acute emetic, cardiovascular, and respiratory effects of T–2 toxin in cats. Borison HL, et al. **Toxicol Appl Pharmacol** 1989 Dec;101(3):399–413

EMBRYOLOGY

Sonographic evaluation of the normal developmental anatomy of fetal cerebral ventricles. IV.: The posterior horn. Goldstein I, et al. **Am J Perinatol** 1990 Jan;7(1):79–83

ENZYMOLOGY

Role of interaction of the tanycytes of the third ventricle of the brain with the vascular bed endothelium in enzymatic activation of the parkinsonism–inducing proneurotoxin MPTP in rat brain. Horský J, et al. **Folia Morphol (Praha)** 1990;38(1):24–7

IMMUNOLOGY

Response of intraventricular macrophages to crotoxin–coated microcarrier beads injected into the lateral ventricle of postnatal rats. Kaur C, et al. **J Anat** 1990 Feb;168:63–72

INJURIES

Lesions of the anteroventral third ventricle prevent salt–induced hypertension in the borderline hypertensive rat. Sanders BJ, et al. **Hypertension** 1989 Dec;14(6):619–22

METABOLISM

Evaluation for roles of periventricular cholinoceptors in vasopressin secretion in response to angiotensin II and an osmotic stimulus. Yamaguchi K, et al. **Brain Res** 1989 Sep 4;496(1–2):345–50

Glucose transporter immunoreactivity in the hypothalamus and area postrema. Young JK, et al. **Brain Res Bull** 1990 Mar;24(3):525–8

Differential sensitivity to cations of the melatonin receptors in the rat area postrema and suprachiasmatic nuclei. Laitinen JT, et al. **J Neurochem** 1990 Oct;55(4):1450–3

Characterization of melatonin receptors in the rat area postrema: modulation of affinity with cations and guanine nucleotides. Laitinen JT, et al. **Neuroendocrinology** 1990 Jun;51(6):619–24

Corticotropin–releasing factor acts via a third ventricle site to reduce exploratory behavior in rats. Spadaro F, et al. **Pharmacol Biochem Behav** 1990 Jun;36(2):305–9

Alterations of ventricular pH alter water intake and food consumption in rats. Badgaiyan RD, et al. **Physiol Behav** 1990 Mar;47(3):489–92

MICROBIOLOGY

Shunt–associated ventriculitis caused by Branhamella catarrhalis [letter] Cooke RP, et al. **J Hosp Infect** 1990 Feb;15(2):197–8

PARASITOLOGY

Albendazole therapy for subarachnoid and ventricular cysticercosis. Case report. del Brutto OH, et al. **J Neurosurg** 1990 May;72(5):816–7

PATHOLOGY

Computed tomography scans and negative symptoms in schizophrenia: chronic schizophrenics with negative symptoms and nonenlarged lateral ventricles. Serban G, et al. **Acta Psychiatr Scand** 1990 May;81(5):441–7

Colloid cysts of the third ventricle: correlation of MR and CT findings with histology and chemical analysis. Maeder PP, et al. **AJR Am J Roentgenol** 1990 Jul;155(1):135–41

Autosomal recessive hydrocephalus with third ventricle obstruction. Chow CW, et al. **Am J Med Genet** 1990 Mar; 35(3):310–3

Five–year outcome of infants of birthweight 500 to 1500 grams: relationship with neonatal ultrasound data. Kitchen WH, et al. **Am J Perinatol** 1990 Jan;7(1):60–5

A statistical study of autopsied cases of neonatal intraventricular hemorrhage. Nakamura Y, et al. **Arch Pathol Lab Med** 1990 Sep;114(9):966–9

EEG power spectrum profile and structural CNS characteristics in schizophrenia. Gambini O, et al. **Biol Psychiatry** 1990 Jun 15;27(12):1331–4

Ventricle–to–brain ratio in schizophrenia: a controlled follow–up study. Kemali D, et al. **Biol Psychiatry** 1989 Nov;26(7):756–9

Neuroanatomical changes and hypothalamo–pituitary–adrenal axis abnormalities. Rao VP, et al. **Biol Psychiatry** 1989 Nov;26(7):729–32

Epidermoid cyst of the fourth ventricle. Bret P, et al. **Br J Neurosurg** 1988;2(1):109–13

Xanthogranuloma of the choroid plexus of lateral ventricle, presenting with parosmia and parageusia. Rutherfoord GS, et al. **Br J Neurosurg** 1987;1(2):285–8

Third ventricular tuberculoma: a case report. Singh JP, et al. **Br J Neurosurg** 1988;2(1):93–6

Family history and cerebral ventricular enlargement in schizophrenia. A case control study. Owen MJ, et al. **Br J Psychiatry** 1989 May;154:629–34

Selective hippocampal lesion following omega–conotoxin administration in rats. Shapira S, et al. **Brain Res** 1990 Jul 23;523(2):291–4

Slit ventricle syndrome after cyst–peritoneal shunting for the treatment of intracranial arachnoid cyst. Aoki N, et al. **Childs Nerv Syst** 1990 Jan;6(1):41–3

Neurosonographic assessment of twin pairs in the perinatal period. Amato M, et al. **Eur Neurol** 1990;30(1):9–13

Morphological, morphometric and stereological study of submandibular glands in rats with lesion of the anteroventral region of the third ventricle (AV3V). Renzi A, et al. **Exp Pathol** 1990;38(3):177–87

Intraventricular hemorrhage. Allan WC. **J Child Neurol** 1989; 4 Suppl:S12–22

Morphometric analysis of the human infant brain: effects of intraventricular hemorrhage and periventricular leukomalacia. de la Monte SM, et al. **J Child Neurol** 1990 Apr;5(2):101–10

Cerebral ventriculitis: MR findings. Barloon TJ, et al. **J Comput Assist Tomogr** 1990 Mar–Apr;14(2):272–5

CT and MR imaging of fourth ventricular meningiomas. Perry RD, et al. **J Comput Assist Tomogr** 1990 Mar–Apr; 14(2):276–80

Colloid cysts of the third ventricle: MR findings. Wilms G, et al. **J Comput Assist Tomogr** 1990 Jul–Aug;14(4):527–31

An empirical model for analysing and interpreting ventricular measures. Clark C, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):411–5

Neurosonographic features of periventricular echodensities associated with cerebral palsy in preterm infants. Pidcock FS, et al. **J Pediatr** 1990 Mar;116(3):417–22

Quantification of neonatal cerebral ventricular volume by real–time ultrasonography. In vivo validation of the cylindrical coordinate method. Brann BS 4th, et al. **J Ultrasound Med** 1990 Jan;9(1):9–15

Lesions involving the fourth ventricle evaluated by CT and MR: a comparative study. Barloon TJ, et al. **Magn Reson Imaging** 1989 Nov–Dec;7(6):635–42

Double intracranial tumours of maldevelopmental origin—teratoma at the pineal region and an epidermoid cyst in the fourth ventricle. Yamaki T, et al. **Neurochirurgia (Stuttg)** 1990 May;33(3):88–90

Ventriculomegaly in neurofibromatosis–1. Association with Chiari type I malformation. Afifi AK, et al. **Neurofibromatosis** 1988;1(5–6):299–305

Computed tomography ventricular size has no predictive value in diagnosing pseudotumor cerebri. Jacobson DM, et al. **Neurology** 1990 Sep;40(9):1454–5

Clinicopathologic correlations of cranial magnetic resonance imaging of periventricular white matter. Leifer D, et al. **Neurology** 1990 Jun;40(6):911–8

Intraventricular neurocytoma: a clinical and pathological study of three cases and review of the literature. Barbosa MD, et al. **Neurosurgery** 1990 Jun;26(6):1045–54 (21 ref.)

Slit–like ventricles and intracranial pressure [letter; comment] Rapoport A, et al. **Neurosurgery** 1989 Oct;25(4):667 Comment on: Neurosurgery 1988 Mar;22(3):594–5.

The echogenic ependymal wall in intraventricular hemorrhage: sonographic–pathologic correlation. Gaisie G, et al. **Pediatr Radiol** 1990;20(5):297–300

Periventricular–intraventricular hemorrhage, sonographic localization, phenobarbital, and motor abnormalities in low birth weight infants. Krishnamoorthy KS, et al. **Pediatrics** 1990 Jun;85(6):1027–33

The role of limbic and paralimbic pathology in the etiology of schizophrenia. Bogerts B. **Psychiatry Res** 1989 Sep; 29(3):255–6

Brain morphology in schizophrenic disorder: prevalence and correlates of diffuse (cortical and subcortical) brain atrophy. Cazzullo CL, et al. **Psychiatry Res** 1989 Sep; 29(3):257–9

Ventricular size, cognitive and psychomotor performance, and laterality in schizophrenia. Classen W, et al. **Psychiatry Res** 1989 Sep;29(3):267–9

Use of CT and MRI in the neurobiological study of schizophrenia. Giordano PL, et al. **Psychiatry Res** 1989 Sep;29(3):265–6

The ventricle–brain ratio (VBR) in functional psychoses: an admixture analysis. Harvey I, et al. **Psychiatry Res** 1990 Apr;35(1):61–9

Computed tomography in depression: association between ventricular size and psychopathology. Schlegel S, et al. **Psychiatry Res** 1989 Aug;29(2):221–30

The ventricular–brain ratio (VBR) in functional psychoses: the relationship of lateral ventricular and total intracranial area. Harvey I, et al. **Psychol Med** 1990 Feb;20(1):55–62

Mild lateral cerebral ventricular dilatation in utero: clinical significance and prognosis. Goldstein RB, et al. **Radiology** 1990 Jul;176(1):237–42

Epidermoid cyst traversing the pons into the fourth ventricle. Case report. Iihara K, et al. **Surg Neurol** 1989 Nov; 32(5):377–81

[Pathologic changes in fetal brain ventricles and their prognostic significance. Case reports] Klug PW. **Z Geburtshilfe Perinatol** 1989 Sep–Oct;193(5):243–5 (Eng. Abstr.) **(Ger)**

[Pituitary hemorrhage extending into the third ventricle. Case report] Takasugi N, et al. **Neurol Med Chir (Tokyo)** 1989 Oct;29(10):908–11 (Eng. Abstr.) **(Jpn)**

[Comparison between PVHIS on the MRI and the permeability of brain blood vessels in elderly patients] Yamaguchi K, et al. **Nippon Ronen Igakkai Zasshi** 1989 Nov;26(6):624–9 (Eng. Abstr.) **(Jpn)**

[Status of cerebral ventricles and meninges in subarachnoid hemorrhage (clinico–pathomorphological studies)] Samosiuk IZ, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):12–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Inhibition of the cortisol response to systemic angiotensin II by forebrain lesions involving the anterior wall of the third ventricle. Junkergård J, et al. **Acta Physiol Scand** 1990 Mar;138(3):293–9

Location and functional properties of angiotensin targets in the third ventricular region. Simon E, et al. **Acta Physiol Scand Suppl** 1989;583:119–29

Osmotic and hormonal stimulation of the third ventricular region of ducks: antidiuretic, circulatory and local neuronal responses. Simon–Oppermann C, et al. **Acta Physiol Scand Suppl** 1989;583:131–40

Role of forebrain circumventricular organs in body fluid balance. Thrasher TN. **Acta Physiol Scand Suppl** 1989; 583:141–50 (34 ref.)
Central effect of aprotinin, a serine protease inhibitor, on blood pressure in spontaneously hypertensive and Wistar–Kyoto rats. Seto S, et al. **Adv Exp Med Biol** 1989; 247B:49–54
Effects on blood pressure of intracerebroventricular administration of a kinin antagonist. Yang XP, et al. **Adv Exp Med Biol** 1989;247A:439–45
Studies on the mechanism of the sedational state; "tranquilization" evoked by bradykinin or kallikrein in rats. Yazaki K. **Adv Exp Med Biol** 1989;247B:595–600
Variation of lateral ventricular volume during the cardiac cycle observed by MR imaging. Lee E, et al. **AJNR** 1989 Nov–Dec;10(6):1145–9
Central interleukin 1–elicited hyperinsulinemia is mediated by prostaglandins but not autonomics. Cornell RP. **Am J Physiol** 1989 Oct;257(4 Pt 2):R839–46
Effect of fourth ventricular neuropeptide Y and peptide YY on ingestive and other behaviors. Corp ES, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R317–23
CNS injection of CCK in rats: effects on real and sham feeding and gastric emptying. Della-Fera MA, et al. **Am J Physiol** 1990 May;258(5 Pt 2):R1165–9
Central nervous system injection of dynorphin–(1–13) overrides gastric satiety factors in sheep. Della-Fera MA, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):R946–50
Effects of 2–deoxy–D–glucose on sympathetic nerve activity to interscapular brown adipose tissue. Egawa M, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1377–85
Lateral hypothalamic injection of 2–deoxy–D–glucose suppresses sympathetic activity. Egawa M, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1386–92
ICV infusion of corticosterone antagonizes ICV–aldosterone hypertension. Gómez–Sánchez EP, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):E649–53
Intracerebroventricular infusion of RU28318 blocks aldosterone–salt hypertension. Gómez–Sánchez EP, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):E482–4
Role for central angiotensin II in control of blood pressure during pregnancy. Hines T, et al. **Am J Physiol** 1989 Dec; 257(6 Pt 2):R1457–61
Responses of vasopressin, atrial natriuretic peptide, and blood pressure to central osmotic stimulation. Iitake K, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):E611–6
Effect of cholecystokinin octapeptide analogues on food intake in the dog. Inui A, et al. **Am J Physiol** 1989 Oct; 257(4 Pt 2):R946–51
Differential osmoresponsiveness of periventricular neurons in duck hypothalamus. Kanosue K, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):R973–81
mu–Opioid peptide modulation of cardiovascular and sympathoadrenal responses to stress. Marson L, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R901–8
Rapid activation of gluconeogenesis after intracerebroventricular carbachol. Migliorini RH, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):E486–90
Area postrema and differential reflex effects of vasopressin and phenylephrine in rats. Peuler JD, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H1255–9
Effects of corticotropin-releasing factor on energy balance in rats are sex dependent. Rivest S, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1417–22
ADH, renal, and circulatory responses to adrenergic stimulation in anterior third ventricle. Simon–Oppermann C, et al. **Am J Physiol** 1990 Aug;259(2 Pt 2):R294–304
Effects of central and peripheral dopamine antagonism on aldosterone secretion: evidence for adrenal mechanism. Stern N, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):E588–94
Response to palatability after area postrema lesions: a result of learned aversions. Tomoyasu N, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1075–82
Effects of glucose, 2–deoxyglucose, phlorizin, and insulin on food intake of lean and fatty rats. Tsujii S, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):E476–81
Structure–function analyses of brain angiotensin control of pressor action in rats. Wright JW, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1551–7
Inhibition of gastric pepsin secretion by peripherally or centrally injected interleukin–1 in rats. Okumura T, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):956–61
Dependence and withdrawal following intracerebroventricular and systemic morphine administration: functional anatomy and behavior. Adams RE, et al. **Brain Res** 1990 Jun 4;518(1–2):6–10
Ablation of the region anterior and ventral to the third ventricle (AV3V region) in the rat does not abolish the release of oxytocin in response to systemic cholecystokinin. Blackburn RE, et al. **Brain Res** 1990 Jan 29;508(1):156–60
Cholinergic cell loss and cognitive impairments following intraventricular or intradentate injection of colchicine. Emerich DF, et al. **Brain Res** 1990 May 28;517(1–2):157–67
AF64A depletes hippocampal high–affinity choline uptake but does not alter the density of alpha–bungarotoxin binding sites or modify the effect of exogenous choline. Morley BJ, et al. **Brain Res** 1990 Jun 11;519(1–2):1–5
Cerebral sodium sensors in the sodium–deplete sheep. Tarjan E, et al. **Brain Res** 1989 Oct 23;500(1–2):352–8
Cholinergic and noradrenergic toxicity of intraventricular aluminum chloride in the rat hippocampus. Zubenko GS, et al. **Brain Res** 1989 Oct 2;498(2):381–4
Mediation of anorexia by human recombinant tumor necrosis factor through a peripheral action in the rat. Bodnar RJ, et al. **Cancer Res** 1989 Nov 15;49(22):6280–4
Effect of balloon aortic valvuloplasty on the dynamics of left ventricular ejection. Ferguson JJ 3d, et al. **Cathet Cardiovasc Diagn** 1989 Oct;18(2):73–8
Reflex effect of vasopressin after blockade of V1 receptors in the area postrema. Hasser EM, et al. **Circ Res** 1990 Aug; 67(2):265–71
Appearance of neurons with glucocorticoid receptors and neurovascular links in the embryonal rat hypothalamus grafted in the third ventricle. Daikoku S, et al. **Dev Biol** 1990 Jan;137(1):184–93
Circumventricular structures: CNS sensors of circulating peptides and autonomic control centres. Ferguson AV, et al. **Endocrinol Exp** 1990 Mar;24(1–2):19–27
Thyrotropin–releasing factor–induced adrenocorticotropin secretion is mediated by corticotropin–releasing factor. Brown MR, et al. **Endocrinology** 1989 Nov;125(5):2558–62
Cytokines act within the brain to inhibit luteinizing hormone secretion and ovulation in the rat. Rivier C, et al. **Endocrinology** 1990 Aug;127(2):849–56
Are neurons of the arcuate nucleus necessary for pathfinding by GnRH fibers arising from third ventricular grafts? Silverman RC, et al. **Exp Neurol** 1990 Aug;109(2):204–13
NGF primed spleen cells injected in brain of developing rats differentiate into mast cells. Aloe L, et al. **Int J Dev Neurosci** 1989;7(6):565–73
Cerebroventricular calcitonin gene–related peptide inhibits rat duodenal bicarbonate secretion by release of norepinephrine and vasopressin. Lenz HJ, et al. **J Clin Invest** 1990 Jan;85(1):25–32
Intracerebroventricular injection of interleukin 1 induces high circulating levels of interleukin 6. De Simoni MG, et al. **J Exp Med** 1990 May 1;171(5):1773–8
In vivo translocation and down–regulation of protein kinase C following intraventricular administration of tetanus toxin. Aguilera J, et al. **J Neurochem** 1990 Jan;54(1):339–42
Intracerebroventricular administration of L–buthionine sulfoximine: a method for depleting brain glutathione. Pileblad E, et al. **J Neurochem** 1989 Dec;53(6):1878–82
The role of interconnection between supraoptic nucleus and anterior third ventricular region in osmoregulation in the rat. Chaudhry MA, et al. **J Physiol (Lond)** 1989 Mar; 410:123–35
Effect of nerve growth factor (NGF) on survival of superior cervical ganglion (SCG) transplanted into the third ventricle in rats. Ohta H, et al. **Jpn J Pharmacol** 1990 May; 53(1):11–8
Central administration of neuropeptide Y induces hypothermia in mice. Possible interaction with central noradrenergic systems. Esteban J, et al. **Life Sci** 1989; 45(25):2395–400
Intracerebroventricular infusion but not bolus injection of vasopressin increases the cerebrospinal fluid pressure in awake rabbits. Sørensen PS, et al. **Neurol Res** 1990 Jun; 12(2):83–8
Regeneration of nerve fibres in the anterior medullary velum of neonatal and weanling rats. Hutchinson SP, et al. **Neuropathol Appl Neurobiol** 1990 Feb;16(1):69–83
Characterization of the inducible serotonin–sensitive dihydroalprenolol binding sites with low affinity for isoproterenol. Gillespie DD, et al. **Neuropsychopharmacology** 1989 Dec;2(4):265–71
Central corticotropin releasing factor reduces natural cytotoxicity. Time course of action. Irwin M, et al. **Neuropsychopharmacology** 1989 Dec;2(4):281–4
Potentiation of acoustic startle by corticotropin–releasing factor (CRF) and by fear are both reversed by alpha–helical CRF (9–41). Swerdlow NR, et al. **Neuropsychopharmacology** 1989 Dec;2(4):285–92
The anteroventral third ventricle (AV3V) region is essential for pressor, dipsogenic and natriuretic responses to central carbachol. Menani JV, et al. **Neurosci Lett** 1990 Jun 8; 113(3):339–44
The functional relevance of the area postrema in drug–induced aversion learning. Gallo M, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):543–51
Interaction of haloperidol and area postrema lesions in the disruption of amphetamine–induced conditioned taste aversion learning in rats. Rabin BM, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):847–51
Response to chronic insulin administration: effect of area postrema ablation. Kott JN, et al. **Physiol Behav** 1989 Dec; 46(6):971–6
Gamma radiation–induced conditioned taste aversions in rats: a comparison of the protective effects of area postrema lesions with differing doses of radiation. Ossenkopp KP, et al. **Physiol Behav** 1989 Oct;46(4):747–50
Role of the hypothalamus in the control of atrial natriuretic peptide release. Baldissera S, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9621–5
Expression of c–Fos immunoreactivity in transmitter–characterized neurons after stress. Ceccatelli S, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9569–73
Regulation of food intake and body weight by cobalt porphyrins in animals. Galbraith RA, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7653–7
Possible involvement of endogenous opioid peptides in prolactin secretion induced by alpha 2–adrenergic stimulation in rats. Koshiyama H, et al. **Proc Soc Exp Biol Med** 1989 Nov;192(2):105–8
Cardiovascular responses induced by endothelin microinjection into area postrema. Ferguson AV, et al. **Regul Pept** 1990 Jan;27(1):75–85
Passage of immunomodulators across the blood–brain barrier. Stitt JT. **Yale J Biol Med** 1990 Mar–Apr;63(2):121–31 (32 ref.)

PHYSIOPATHOLOGY

Early language ability as a function of ventricular dilatation associated with intraventricular hemorrhage. Bendersky M, et al. **J Dev Behav Pediatr** 1990 Feb;11(1):17–21
[Ventricular subarachnoidal hydrocephalus of arachnoid villi origin] Chazal J, et al. **Neurochirurgie** 1989;35(6):379–82, 410 (Eng. Abstr.) **(Fre)**

RADIONUCLIDE IMAGING

Isotope cisternography with indium–111 DTPA in a patient with nearly no intellectual deficits and extensive hydrocephalus. Grünwald F, et al. **Clin Nucl Med** 1990 May;15(5):352–3

SECRETION

The contribution from the choroid plexus and the periventricular CNS to amino acids and proteins in the human CSF. Hamberger A, et al. **Neurochem Res** 1990 Mar; 15(3):307–12

SURGERY

Surgical techniques in the management of colloid cysts of the third ventricle. Symon L, et al. **Adv Tech Stand Neurosurg** 1990;17:121–57 (34 ref.)
Application of CT–directed stereotaxy in the determination of functional neurosurgical targets in the diencephalon and cerebral hemisphere. Jeanmonod D, et al. **Br J Neurosurg** 1989;3(3):337–42
Microsurgical anatomy of the transcallosal approach to the ventricular system, pineal region and basal ganglia. Schijman E. **Childs Nerv Syst** 1989 Aug;5(4):212–9
A new neurosurgical ventriculoscope—technical note. Oka K, et al. **Neurol Med Chir (Tokyo)** 1990 Jan;30(1):77–9
Multiple meningiomas of the fourth ventricle in infancy: case report. Díaz P, et al. **Neurosurgery** 1990 Jun;26(6):1057–60
Intraventricular xenografts: chronic injection of antibodies into the CSF provokes granulomatosis reactions but Ia antibodies do not enhance graft survival. Poltorak M, et al. **Reg Immunol** 1989 Jul–Aug;2(4):197–202
Balloon needle for the atraumatic transcortical ventricular approach: technical note. Madrazo I, et al. **Surg Neurol** 1990 Mar;33(3):226–7

ULTRASTRUCTURE

Surface ultra–architecture of supraependymal elements in the vicinity of the area postrema of rhesus monkeys. Singh DR, et al. **Brain Res Bull** 1989 Sep;23(3):175–81
The ependyma of goat. II. Ependymal lining of the lateral ventricles, mesencephalic canal, and fourth ventricle: scanning electron microscopic study. Rajtová V. **Gegenbaurs Morphol Jahrb** 1990;136(2):233–40
The sulcus medianus organ in the fourth cerebral ventricle of the rabbit: a previously undescribed circumventricular organ. Collins P. **J Anat** 1989 Feb;162:185–93
Radial glial cells are present in the velum medullare of adult monkeys. Reichenbach A. **J Hirnforsch** 1990;31(2):269–71
Ultrastructural study of the cellular components of the organum vasculosum lamina terminalis of the rabbit (Oryctolagus cuniculus). Del Brio MA, et al. **J Submicrosc Cytol Pathol** 1990 Apr;22(2):303–9
Supraependymal cells and fibers in the third ventricle of the domestic chicken. A scanning electron microscopic study. Hirunagi K, et al. **Z Mikrosk Anat Forsch** 1989; 103(4):529–39
[A scanning electron microscopy study of the ependyma in the lateral cerebral ventricle in humans] Mitro A, et al. **Bratisl Lek Listy** 1989 Nov;90(11):814–9 (Eng. Abstr.) **(Slo)**

CEREBRAL VENTRICULOGRAPHY

Progressive ventricular enlargement in schizophrenia: comparison to bipolar affective disorder and correlation with clinical course. Woods BT, et al. **Biol Psychiatry** 1990 Feb 1;27(3):341–52
CT studies of schizophrenia [letter; comment] Mundt C. **Br J Psychiatry** 1989 Mar;154:413 Comment on: Br J Psychiatry 1988 Nov;153:667–74.
Periventricular enhancement: a non–pathognomonic sign of intracerebral tumours. Murray PA, et al. **Br J Radiol** 1989 Dec;62(744):1075–8
CT and MR imaging of fourth ventricular meningiomas. Perry RD, et al. **J Comput Assist Tomogr** 1990 Mar–Apr; 14(2):276–80
Intraventricular hemorrhage following amphetamine abuse. Imanse J, et al. **Neurology** 1990 Aug;40(8):1318–9
Prognostic significance of ventricular blood in supratentorial hemorrhage: a volumetric study. Young WB, et al. **Neurology** 1990 Apr;40(4):616–9
The relationship between enlargement of the temporal horns of the lateral ventricles and dementia in aging patients with Down syndrome. LeMay M, et al. **Neuroradiology** 1990; 32(2):104–7

Volume determinations of the encephalic ventricles with CT and MRI. Cramer GD, et al. **Surg Radiol Anat** 1990; 12(1):59–64

[The foramen of Monro--blockage caused by a giant aneurysm of the basilar artery. A case report and review of the literature] Goetz C, et al. **Neurochirurgia (Stuttg)** 1990 Jul;33(4):122–6 (51 ref.) (Eng. Abstr.) **(Ger)**

[Misinterpretation of the adhesio interthalamica and the commissura epithalamica (posterior) in occlusive hydrocephalus in the computed tomogram] Hussein S, et al. **Radiologe** 1990 Feb;30(2):75–8 (Eng. Abstr.) **(Ger)**

[Pathologic changes of the brain in children with various forms of infantile cerebral palsy (computerized-tomographic data)] Tomberg TA, et al. **Pediatriia** 1989;(9):50–4 (Eng. Abstr.) **(Rus)**

[Electronystagmographic evaluation of changes in vestibular reactions after administration of diverse substances into cerebral ventricles] Blagoveshchenskaia NS, et al. **Vestn Otorinolaringol** 1989 Sep-Oct;(5):25–30 (Eng. Abstr.) **(Rus)**

HISTORY

History of stereotactic surgery for Parkinson's disease. Redfern RM. **Br J Neurosurg** 1989;3(3):271–304

METHODS

Meglumine iocarmate (Dimer-X) ventriculography. Van Dellen JR, et al. **Clin Radiol** 1973 Oct;24(4):449–52

A comparative study on ventriculographic and computerized tomography-guided determinations of brain targets in functional stereotaxis. Hariz MI, et al. **J Neurosurg** 1990 Oct;73(4):565–71

Comparison of computerized tomography with magnetic resonance imaging (MRI) in the evaluation of encephalic ventricular volume. Cramer GD, et al. **Surg Radiol Anat** 1990;12(2):135–41

CEREBROHEPATORENAL SYNDROME see **ZELLWEGER SYNDROME**

CEREBROSIDE SULFATASE

ANALYSIS

Neuropathological and enzymatic studies in a case of adult form of metachromatic leukodystrophy with very late onset of clinical symptoms. Marmiroli P, et al. **Acta Neurol (Napoli)** 1990 Jun;12(3):184–92

BLOOD

Arylsulfatase A activity among psychotic patients [letter] Lejoyeux M, et al. **Psychiatry Res** 1989 Oct;30(1):107–8

[Arylsulfatase activity of asthmatic children] Suzuki I. **Arerugi** 1989 May;38(5):381–90 (Eng. Abstr.) **(Jpn)**

DEFICIENCY

Leucocyte arylsulphatase A activity and subtypes of chronic schizophrenia. Heavey AM, et al. **Acta Psychiatr Scand** 1990 Jul;82(1):55–9

Deficient glycosylation of arylsulfatase A in pseudo arylsulfatase-A deficiency. Ameen M, et al. **Mol Cell Biochem** 1990 Feb 9;92(2):117–27

[Arylsulfatase A deficiency-metachromatic leukodystrophy] Eto Y. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):749–52 **(Jpn)**

GENETICS

Structure of the arylsulfatase A gene. Kreysing J, et al. **Eur J Biochem** 1990 Aug 17;191(3):627–31

Human arylsulfatase B: MOPAC cloning, nucleotide sequence of a full-length cDNA, and regions of amino acid identity with arylsulfatases A and C. Schuchman EH, et al. **Genomics** 1990 Jan;6(1):149–58

Arylsulfatase A pseudodeficiency: loss of a polyadenylylation signal and N-glycosylation site. Gieselmann V, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9436–40

METABOLISM

On a rare atypical form of metachromatic leukodystrophy (MLD): "neurological non-mld patients with low levels of arylsulphatase A". Description of two cases. Grasso A, et al. **Acta Neurol (Napoli)** 1989 Aug;11(4):233–8

Regulation of sulfotransferase activity by vitamin K in mouse brain. Sundaram KS, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):109–13

The anomalous kinetics of sulphatase A. Roy AB, et al. **Biochem J** 1989 Aug 1;261(3):689–97 (56 ref.)

Galactosylceramide sulfotransferase, arylsulfatase A and cerebroside sulfatase activity in different regions of developing rat brain. van der Pal RH, et al. **Biochim Biophys Acta** 1990 Mar 12;1043(1):91–6

Insulin-like growth factors I and II stimulate endocytosis but do not affect sorting of lysosomal enzymes in human fibroblasts. Braulke T, et al. **J Biol Chem** 1990 Apr 25; 265(12):6650–5

CEREBROSIDES

Anisotropic 2H NMR spin-lattice relaxation in L alpha-phase cerebroside bilayers. Speyer JB, et al. **Biochemistry** 1989 Dec 12;28(25):9569–74

Membrane-damaging action of ricin on DPPC and DPPC-cerebrosides assemblies. A Raman and FTIR analysis. Picquart M, et al. **Eur Biophys J** 1989;17(3):143–9

ANALYSIS

Glucosylceramide having a novel tri-unsaturated long-chain base from the spermatozoa of the starfish, Asterias amurensis. Irie A, et al. **J Biochem (Tokyo)** 1990 Apr; 107(4):578–86

Analysis of the monohexosylceramide fraction of Echinococcus multilocularis metacestodes. Persat F, et al. **Mol Biochem Parasitol** 1990 Jun;41(1):1–6

BIOSYNTHESIS

Heterosis for brain cerebroside synthesis in mice. Sato C, et al. **Dev Neurosci** 1990;12(3):153–8

Progressive hypoxia inhibits the de novo synthesis of galactosylceramide in cultured oligodendrocytes. Kendler A, et al. **J Biol Chem** 1990 Jul 25;265(21):12259–66

Study of pathogenesis in twitcher mouse, an enzymatically authentic model of human Krabbe's disease. Inui K, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:383–5

Induction of cerebroside synthesis in oligodendroglia. Podusło SE, et al. **Neurochem Res** 1990 Jul;15(7):739–42

Ligand binding to the cell surface receptor for reovirus type 3 stimulates galactocerebroside expression by developing oligodendrocytes. Cohen JA, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):4922–6

BLOOD

Galactosylceramide: a reliable serum index of demyelination in multiple sclerosis. Lubetzki C, et al. **Ann Neurol** 1989 Sep;26(3):407–9

[Gaucher's disease (letter)] Harzer K. **Med Klin** 1990 May 15;85(5):350 **(Ger)**

IMMUNOLOGY

Elevated cerebroside antibody levels in human visceral and cutaneous leishmaniasis, Trypanosoma rangeli infection, and chronic Chagas' disease. Avila JL, et al. **Am J Trop Med Hyg** 1990 Jul;43(1):52–60

Dependence of the surface expression of the glycolipid cerebroside sulfate on its lipid environment: comparison of sphingomyelin and phosphatidylcholine. Stewart RJ, et al. **Biochemistry** 1990 Apr 17;29(15):3644–53

Spinal cord lesions induced by antigalactocerebroside serum. Mastaglia FL, et al. **Clin Exp Neurol** 1989;26:33–44

Monoclonal antibody to galactosylceramide: discrimination of structural difference in the ceramide moiety. Nakakuma H, et al. **FEBS Lett** 1989 Dec 4;258(2):230–2

A study on demyelinating effect of galactocerebroside in experimental allergic encephalomyelitis. Khang SK, et al. **J Korean Med Sci** 1988 Sep;3(3):89–98

[Antibodies to galactocerebrosides of the brain in the blood serum of children with neuroinfections] Taranova NP, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):27–31 (Eng. Abstr.) **(Rus)**

METABOLISM

Galactosylceramide and galactosylsphingosine loading studies in cultured skin fibroblasts in human and murine globoid cell leukodystrophy. Ida H, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):1053–60

Spontaneous interbilayer transfer of hexosylceramides between phospholipid bilayers. Jones JD, et al. **Biochemistry** 1990 Apr 24;29(16):3892–7

Correlation between the activity of glucosylceramidase and its binding to glucosylceramide-containing liposomes. Role of acidic phospholipids and fatty acids. Vaccaro AM, et al. **Biochim Biophys Acta** 1990 Jan 29;1033(1):73–9

The development of the transferrin-transferrin receptor system in relation to astrocytes, MBP and galactocerebroside in normal and myelin-deficient rat optic nerves. Lin HH, et al. **Brain Res Dev Brain Res** 1989 Oct 1;49(2):281–93

Glycolipid transfer protein and intracellular traffic of glucosylceramide. Sasaki T. **Experientia** 1990 Jun 15; 46(6):611–6 (59 ref.)

Investigation of dysmyelinogenesis in caprine beta-mannosidosis: in vitro characterization of oligodendrocytes. Boyer PJ, et al. **GLIA** 1990;3(3):222–7

Schwann cells depleted of galactocerebroside express myelin-associated glycoprotein and initiate but do not continue the process of myelination. Owens GC, et al. **GLIA** 1990;3(2):118–24

Evidence of neuropeptide bivalency in the interaction of substance P with cerebroside sulfate. Appu Rao AG, et al. **Int J Pept Protein Res** 1990 Mar;35(3):258–62

Immunoelectron microscopical labelling of a glycolipid in the envelopes of brain cell-derived budding viruses, Semliki Forest, influenza and measles, using a monoclonal antibody directed chiefly against galactocerebroside resulting from Semliki Forest virus infection. Pathak S, et al. **J Neurol Sci** 1990 May;96(2-3):293–302

Organization of oligodendroglial membrane sheets: II. Galactocerebroside:antibody interactions signal changes in cytoskeleton and myelin basic protein. Dyer CA, et al. **J Neurosci Res** 1989 Oct;24(2):212–21

Metabolism of peripheral nerve monogalactosylceramides. Yao JK. **Lipids** 1989 Oct;24(10):837–41

Intramyelinic conversion of cerebrosides into acylgalactosylceramides. Theret N, et al. **Neurochem Res** 1989 Dec;14(12):1235–40

Salvage of glucosylceramide by recycling after internalization along the pathway of receptor-mediated endocytosis. Kok JW, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9896–900

PHARMACOKINETICS

Extensive precursor-product relationship between gangliosides formed from exogenous glucosylceramide in rat liver. Trinchera M, et al. **FEBS Lett** 1990 Jan 15; 260(1):23–6

Metabolism of exogenous galactosylceramide in the twitcher mouse brain. Mitsuo K, et al. **Neurochem Res** 1989 Dec; 14(12):1191–4

PHYSIOLOGY

Glycolipids and transmembrane signaling: antibodies to galactocerebroside cause an influx of calcium in oligodendrocytes. Dyer CA, et al. **J Cell Biol** 1990 Aug; 111(2):625–33

CEREBROSPINAL FLUID

see related

BLOOD-BRAIN BARRIER

Epidural blood patch: a rapid coagulation response [letter] Cook MA, et al. **Anesth Analg** 1990 May;70(5):567–8

The treatment of childhood hydrocephalus by choroid plexus coagulation and artificial cerebrospinal fluid perfusion. Griffith HB, et al. **Br J Neurosurg** 1990;4(2):95–100

CSF-dynamics in syringomyelia: intracranial pressure and resistance to outflow. Kruse A, et al. **Br J Neurosurg** 1987; 1(4):477–84

A device for small-bore spinal needles for immediate detection of CSF [letter] Eldor J. **Can J Anaesth** 1990 Jan; 37(1):145–6

Foramen magnum meningioma: transoral resection with a bone baffle to prevent CSF leakage. Case report. Bonkowski JA, et al. **J Neurosurg** 1990 Mar;72(3):493–6

A reusable adapter for collection of cerebrospinal fluid in chronically cannulated goats. Forte VA Jr, et al. **Lab Anim Sci** 1989 Sep;39(5):433–6

The use of fibrin glue in intracranial procedures: preliminary results. Sierra DH, et al. **Laryngoscope** 1990 Apr; 100(4):360–3

Effects of pH of cerebrospinal fluid and local anesthetic on the success rate of spinal anesthesia. Chang CL, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Dec;27(4):335–40

Management of cerebrospinal fluid. Albright RE Jr, et al. **N C Med J** 1990 Feb;51(2):72–6

Causes of infections in penetrating head wounds in the Iran-Iraq War. Aarabi B. **Neurosurgery** 1989 Dec; 25(6):923–6

Relationship of suturing of the dura to cerebrospinal fluid fistulas [letter] Ameen AA. **Neurosurgery** 1990 Aug; 27(2):334

Disturbed cerebrospinal fluid circulation after subarachnoid hemorrhage and acute aneurysm surgery. Auer LM, et al. **Neurosurgery** 1990 May;26(5):804–8; discussion 808–9

Subarachnoid-pleural and subarachnoid-mediastinal fistulae. Pollack II, et al. **Neurosurgery** 1990 Mar;26(3):519–25 (38 ref.)

Radiologic case study. Lumbar pseudomeningocele. Barron JT. **Orthopedics** 1990 May;13(5):603, 608–9

Steady-state free precession imaging in the presence of motion: application for improved visualization of the cerebrospinal fluid. Haacke EM, et al. **Radiology** 1990 May; 175(2):545–52

[Pneumomyelography with regard to cerebrospinal fluid replacement] Samodurov AI. **Zh Nevropatol Psikhiatr** 1989; 89(12):23–5 (Eng. Abstr.) **(Rus)**

[Postoperative lumbar cerebrospinal fluid cysts] Blagodatskii MD, et al. **Zh Vopr Neirokhir** 1989 May-Jun;(3):55–6 **(Rus)**

ANALYSIS

Electrolytes, amino acids and proteins in lumbar CSF during the treatment of acute leukemia in childhood. Korinthenberg R, et al. **Acta Paediatr Scand** 1990 Mar; 79(3):335–42

Prognostic significance of cerebrospinal fluid adenosine deaminase in acute bacterial meningitis. da Cunha JG, et al. **Infection** 1990 Mar-Apr;18(2):125

Storage of cerebrospinal fluid on paper [letter] Garcia E, et al. **Lancet** 1989 Oct 28;2(8670):1046

[Determination of the elemental composition of cerebrospinal fluid using emission spectroscopy] Vasil'eva IG, et al. **Lab Delo** 1989;(11):76 **(Rus)**

CYTOLOGY

Quality assurance and cost containment clinical operational medical research [editorial; comment] Catrou PG, et al. **Am J Clin Pathol** 1990 Jul;94(1):111–2 Comment on: Am J Clin Pathol 1990 Jul;94(1):67–72.

Cost containment, quality assurance, and physician microscopy of cerebrospinal fluid with normal cell counts. Analysis of 1,677 consecutive specimens [see comments]

Fairbanks VF, et al. **Am J Clin Pathol** 1990 Jul;94(1):67–72 Comment in: Am J Clin Pathol 1990 Jul;94(1):111–2.

Cartilage cells in cerebrospinal fluid. Chen KT, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):212

Scanning electron microscopic observation on the surface ultrastructure of leucocytes in CSF. Zhang SM, et al. **Chin Med J [Engl]** 1989 Oct;102(10):795–9

Laboratory processing of cerebrospinal fluid specimens. Andrews JM, et al. **Diagn Cytopathol** 1990;6(2):139–43

Distinguishing cerebrospinal fluid abnormalities in children with bacterial meningitis and traumatic lumbar puncture. Bonadio WA, et al. **J Infect Dis** 1990 Jul;162(1):251–4

Immunoglobulin-secreting cells in the cerebrospinal fluid from patients with muscular tension headache. Link H, et al. **J Neuroimmunol** 1989 Nov;25(1):1–6

Class differentiation of immunoglobulin-containing cerebrospinal fluid cells in inflammatory diseases of the central nervous system. Rieckmann P, et al. **Klin Wochenschr** 1990 Jan 4;68(1):12–7

Cerebral glioblastoma with cerebrospinal fluid dissemination: a clinicopathological study of 14 cases examined by complete autopsy. Onda K, et al. **Neurosurgery** 1989 Oct; 25(4):533–40

RBC contamination and amino acid concentration in the CSF of children. McFarlin KE, et al. **Psychiatry Res** 1990 Apr; 32(1):99–101

[Cyto-dynamic observations on T lymphocytes and the CSF in Guillain-Barre syndrome] Diao KP. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Feb; 22(1):26–8, 62 (Eng. Abstr.) **(Chi)**

[Differential diagnosis of atypical plasma cells in the cerebrospinal fluid] Kraft R, et al. **Dtsch Med Wochenschr** 1989 Nov 10;114(45):1729–33 (Eng. Abstr.) **(Ger)**

[Diagnostic value of cerebrospinal fluid study in multiple sclerosis] Schädlich HJ. **Fortschr Neurol Psychiatr** 1990 Jul;58(7):247–51 (71 ref.) (Eng. Abstr.) **(Ger)**

[Significance of immunophenotyping of blood and cerebrospinal fluid lymphocytes for the diagnosis of leukemic meningosis in a patient with chronic lymphatic leukemia of the B-cell type] Ottinger H, et al. **Med Klin** 1990 Mar;85 Suppl 1:141–3 **(Ger)**

[The immune status as an indicator for parameter-dependent therapy of multiple sclerosis?] Kuppe G, et al. **Nervenarzt** 1989 Sep;60(9):549–52 **(Ger)**

[Increasing cerebrospinal fluid cell count with the sedimentation chamber using polycationic coated slides] Lehmitz R, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Dec;41(12):751–4 (Eng. Abstr.) **(Ger)**

[Acute meningitis with cerebrospinal fluid eosinophilia: neurocysticercosis] Matschke HJ, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Sep;41(9):545–9 (Eng. Abstr.) **(Ger)**

[Normal cerebrospinal fluid findings in spinal tumors—an analysis of 503 cases] Wieczorek V, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Oct; 41(10):609–13 (Eng. Abstr.) **(Ger)**

[Cerebrospinal fluid cell enrichment using the sediment chamber and the absorption chamber with the use of polycation-layered slides] Lehmitz R, et al. **Z Med Lab Diagn** 1989;30(7):403–5 **(Ger)**

[Recurrent episodic unilateral mydriasis with pleocytosis in the cerebrospinal fluid—a case report] Takeda K, et al. **Rinsho Shinkeigaku** 1989 Sep;29(9):1186–8 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

[The mechanisms of the decrease in prostatic mass in rats during the administration of estrogenic preparations into the cerebrospinal fluid] Bordiushkov IuN, et al. **Probl Endokrinol (Mosk)** 1990 Jan–Feb;36(1):69–72 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Immunoregulatory properties of T-cell lines derived from the systemic and intrathecal compartments: a phenotypic and functional study. Freedman MS, et al. **Ann Neurol** 1990 Mar;27(3):258–65

Cellular immunoregulatory mechanisms in the central nervous system: characterization of noninflammatory and inflammatory cerebrospinal fluid lymphocytes. Matsui M, et al. **Ann Neurol** 1990 Jun;27(6):647–51

Inflammatory cerebrospinal fluid T cells have activation requirements characteristic of CD4+CD45RA- T cells. Chofflon M, et al. **Eur J Immunol** 1989 Oct;19(10):1791–5

[Immunoglobulin class and light chain type of oligoclonal bands in CSF in children with CNS infectious diseases] Sakuta R, et al. **No To Hattatsu** 1990 Mar;22(2):160–5 (Eng. Abstr.) **(Jpn)**

METABOLISM

Cerebrospinal fluid absorption in the rabbit. Inner ear pathways. Manzo RP, et al. **Acta Otolaryngol (Stockh)** 1990 May–Jun;109(5–6):389–96

Morphological estimation of brain extracellular fluid dynamics in cold-induced edema from the aspect of cerebrospinal fluid–extracellular fluid communication. Hattori H, et al. **Acta Pathol Jpn** 1990 May;40(5):314–21

Rapid solute transport throughout the brain via paravascular fluid pathways. Rennels ML, et al. **Adv Neurol** 1990; 52:431–9

Effect of vasopressin on production of cerebrospinal fluid: possible role of vasopressin (V1)-receptors. Faraci FM, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):R94–8

The cerebrospinal fluid-contacting neuron: a peculiar cell type of the central nervous system. Immunocytochemical aspects. Vigh-Teichmann I, et al. **Arch Histol Cytol** 1989; 52 Suppl:195–207

Stilbenes inhibit exchange of chloride between blood, choroid plexus and cerebrospinal fluid. Deng QS, et al. **Brain Res** 1989 Oct 30;501(1):183–7

Corticosteroid action on choroid plexus: reduction in Na+-K+-ATPase activity, choline transport capacity, and rate of CSF formation. Lindvall-Axelsson M, et al. **Exp Brain Res** 1989;77(3):605–10

Local variations in cerebrospinal fluid composition and its relationship to the composition of the extracellular fluid of the cortex. Bito LZ, et al. **Exp Neurol** 1966 Mar; 14(3):264–80

Micronutrient homeostasis in mammalian brain and cerebrospinal fluid. Spector R. **J Neurochem** 1989 Dec; 53(6):1667–74 (58 ref.)

Benzodiazepine receptors and cerebrospinal fluid formation. Williams GL, et al. **J Neurosurg** 1990 May;72(5):759–62

Subcommissural organ and cerebrospinal fluid: a biochemical and experimental study. Rodríguez EM, et al. **Prog Clin Biol Res** 1990;342:282–92 (32 ref.)

Experimental subarachnoid hemorrhage in the rat: acute effects of blood components on mechanisms of cerebrospinal fluid absorption. Butler AB, et al. **Surg Forum** 1978;29:516–8

[Ventricular subarachnoidal hydrocephalus of arachnoid villi origin] Chazal J, et al. **Neurochirurgie** 1989;35(6):379–82, 410 (Eng. Abstr.) **(Fre)**

[The kinin and plasmin systems of the blood serum and cerebro- spinal fluid in patients with multiple sclerosis and schizophrenia] Vilkov GA, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):23–7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Association between intrathecal anti-HIV-1 immunoglobulin G synthesis and occurrence of HIV-1 in cerebrospinal fluid. Sönnerborg AB, et al. **AIDS** 1989 Nov;3(11):701–5

Clinical relevance of viridans and nonhemolytic streptococci isolated from blood and cerebrospinal fluid in a pediatric population. Hamoudi AC, et al. **Am J Clin Pathol** 1990 Feb;93(2):270–2

Evaluation of co-agglutination (COA), counter immunoelectrophoresis (CIE), culture and direct microscopic (Dm) examination of cere-brospinal fluid (CSF) for detection of meningitis caused by common bacterial pathogens. Chowdhury ZU, et al. **Bangladesh Med Res Counc Bull** 1990 Jun;16(1):34–41

Bacterial counts in cerebrospinal fluid of children with meningitis. Bingen E, et al. **Eur J Clin Microbiol Infect Dis** 1990 Apr;9(4):278–81

Use of the polymerase chain reaction to detect DNA sequences specific to pathogenic treponemes in cerebrospinal fluid. Hay PE, et al. **FEMS Microbiol Lett** 1990 Mar 15;56(3):233–8

Short course single daily ceftriaxone monotherapy for acute bacterial meningitis in children: results of a Swiss multicenter study. Part II: Bacteriological results. Hohl P, et al. **Infection** 1990 Mar-Apr;18(2):78–82

Feline immunodeficiency virus: a neurotropic lentivirus. Dow SW, et al. **J Acquir Immune Defic Syndr** 1990; 3(7):658–68

Cultivation and characterization of spirochetes from cerebrospinal fluid of patients with Lyme borreliosis. Karlsson M, et al. **J Clin Microbiol** 1990 Mar;28(3):473–9

Rapid detection of bacteria in cerebrospinal fluid by immunofluorescence staining on membrane filters. Lim LC, et al. **J Clin Microbiol** 1990 Apr;28(4):670–5

Poliovaccine virus in the cerebrospinal fluid after oral polio vaccination. Rantala H, et al. **J Infect** 1989 Sep;19(2):173–6

Borrelia burgdorferi in the central nervous system: experimental and clinical evidence for early invasion. Garcia-Monco JC, et al. **J Infect Dis** 1990 Jun; 161(6):1187–93

Amplification of HIV-1 provirus from cerebrospinal fluid and its correlation with neurologic disease. Shaunak S, et al. **J Infect Dis** 1990 Jun;161(6):1068–72

Isolation of Vibrio cholerae non-O1 from cerebrospinal fluid. Robson RA, et al. **Trans R Soc Trop Med Hyg** 1989 Jan–Feb;83(1):136

[Cerebrospinal fluid in infection of the central nervous system by yeasts of the genus Candida: analysis of 11 cases] Livramento JA, et al. **Arq Neuropsiquiatr** 1989 Sep; 47(3):332–6 (Eng. Abstr.) **(Por)**

PHYSIOLOGY

Diffusion from the cerebrospinal fluid as a nutritional pathway for spinal nerve roots. Rydevik B, et al. **Acta Physiol Scand** 1990 Feb;138(2):247–8

Fast multiphase MR imaging of aqueductal CSF flow: 1. Study of healthy subjects. Ciraolo L, et al. **AJNR** 1990 May;11(3):589–96

The rate of CSF formation, resistance to reabsorption of CSF, and aperiodic analysis of the EEG following administration of flumazenil to dogs. Artru AA. **Anesthesiology** 1990 Jan; 72(1):111–7

Net production of cerebrospinal fluid is decreased by SCH-23390. Boyson SJ, et al. **Ann Neurol** 1990 Jun; 27(6):631–5

Factors affecting cerebrospinal fluid flow in a shunt. Kadowaki C, et al. **Br J Neurosurg** 1987;1(4):467–75

Clinical studies of cranial and spinal compliance and the craniospinal flow of cerebrospinal fluid. Magnaes B. **Br J Neurosurg** 1989;3(6):659–68

Effect of varying the composition of CSF on urinary excretion in the conscious rat. Osborne PG, et al. **Brain Res** 1989 Oct 9;499(1):101–7

Cisternographic pattern of spontaneous liquoral hypotension. Molins A, et al. **Cephalalgia** 1990 Apr;10(2):59–65

Cerebrospinal fluid drainage does not counteract the negative effect of sodium nitroprusside on spinal cord perfusion pressure during aortic cross-clamping. Woloszyn TT, et al. **Curr Surg** 1989 Nov-Dec;46(6):489–92

Antiepileptic properties of cerebrospinal fluid after activation of the antiepileptic system of the brain. Kryzhanovsky GN, et al. **Epilepsia** 1989 Sep–Oct;30(5):631–5

Determination of cerebrospinal fluid production rate using a push-pull perfusion procedure in the conscious rat. Baudrie V, et al. **Fundam Clin Pharmacol** 1990;4(3):269–74

Accuracy and precision of radionuclide measurement of CSF oscillation in the spine. Palmer DW, et al. **Invest Radiol** 1990 Jan;25(1):72–8

Effects of inhibition of angiotensin converting enzyme and carbonic anhydrase on fluid production by ciliary process, choroid plexus, and pancreas. Vogh BP, et al. **J Ocul Pharmacol** 1989 Winter;5(4):303–11

Cerebrospinal fluid-contacting area of the deep pineal: effects of photoperiod. Welsh MG, et al. **J Pineal Res** 1989; 7(4):365–80

Appraisal of cerebrospinal fluid alterations during aortic surgery with intrathecal papaverine administration and cerebrospinal fluid drainage. Svensson LG, et al. **J Vasc Surg** 1990 Mar;11(3):423–9

Alternative pathways for drainage of cerebrospinal fluid in the canine brain. Leeds SE, et al. **Lymphology** 1989 Sep; 22(3):144–6

CSF flow effects during MRI of the central nervous system. Rubin JB, et al. **Magn Reson Annu** 1988;:147–87 (36 ref.)

CSF flow artifact reduction using cardiac cycle ordered phase-encoding method. Cho MH, et al. **Magn Reson Imaging** 1990;8(4):395–405

A method for MR quantification of flow velocities in blood and CSF using interleaved gradient-echo pulse sequences. Ståhlberg F, et al. **Magn Reson Imaging** 1989 Nov-Dec; 7(6):655–67

Cerebrospinal fluid physiology and the management of increased intracranial pressure. Lyons MK, et al. **Mayo Clin Proc** 1990 May;65(5):684–707 (126 ref.)

Brain tissue elasticity and CSF elastance. Walsh EK, et al. **Neurol Res** 1990 Jun;12(2):123–7

Cerebrospinal fluid production is reduced in healthy aging. May C, et al. **Neurology** 1990 Mar;40(3 Pt 1):500–3

Superior mediastinal widening from traumatic cerebrospinal fluid leak. Haddon MJ, et al. **Pediatr Radiol** 1990;20(3):190

Stresses in the brain mass and in the peripheral fluids under Gz acceleration. Study of a simple model. Liebaert P, et al. **Physiologist** 1990 Feb;33(1 Suppl):S145–6

MRI as the primary diagnostic instrument in normal pressure hydrocephalus? Kunz U, et al. **Psychiatry Res** 1989 Sep; 29(3):287–8

Intracranial CSF volumetry in alcoholics: studies with MRI and CT. Mann K, et al. **Psychiatry Res** 1989 Sep; 29(3):277–9

MRI of CSF flow in normal pressure hydrocephalus. Schroth G, et al. **Psychiatry Res** 1989 Sep;29(3):289–90

The drainage of cerebrospinal fluid in hydrocephalic rats. Jones HC, et al. **Z Kinderchir** 1989 Dec;44 Suppl 1:14–5

Suppression of cerebrospinal fluid (CSF) production by a Na+/K+ pump inhibitor extracted from human cerebrospinal fluid. Lorenzo AV, et al. **Z Kinderchir** 1989 Dec;44 Suppl 1:24–6

The use of intraventricular resorption tests (IVT) in the management of hydrocephalic children. Lundar T. **Z Kinderchir** 1989 Dec;44 Suppl 1:27–8

Comparison of intracranial pressure between spina bifida patients and normal subjects using a non-invasive pressure assessment technique. Moss SM, et al. **Z Kinderchir** 1989 Dec;44 Suppl 1:29–31

[Update on lymphatic resorption of cerebrospinal fluid after review of the literature] Chazal J, et al. **Bull Assoc Anat (Nancy)** 1989 Sep;73(222):43–6 (32 ref.) (Eng. Abstr.) **(Fre)**

[In search of the lymphatic system of the central nervous system] Picard JD, et al. **J Mal Vasc** 1990;15(1):5–13 (21 ref.) (Eng. Abstr.) **(Fre)**

[Cerebrospinal fluid dynamics in experimental subarachnoid hemorrhage] Brinker T, et al. **Neurochirurgia (Stuttg)** 1990 Mar;33(2):42–4 (Eng. Abstr.) **(Ger)**

[Do elevated blood and cerebrospinal fluid glucose levels and other factors modify the density of cerebrospinal fluid and the spread of isobaric spinal anesthesia?] Döbler K, et al. **Reg Anaesth** 1990 Jun;13(4):101–7 (Eng. Abstr.) **(Ger)**

[Persistent subarachnoid-pleural cerebrospinal fluid fistula following excision of a thoracic ganglioneuroma. Case report] Trammer A. **Z Kinderchir** 1990 Apr;45(2):109–10 (Eng. Abstr.) **(Ger)**

[A case of primary low spinal fluid pressure syndrome

complicated by bilateral subdural hematoma—study of the cerebrospinal fluid circulation] Hoshino M, et al. **Rinsho Shinkeigaku** 1990 Feb;30(2):174–8 (Eng. Abstr.) **(Jpn)**

[Mathematical model of intracranial blood–cerebrospinal fluid dynamics system applied to the study of extreme conditions] Grigorian SS, et al. **Kosm Biol Aviakosm Med** 1990 Mar–Apr;24(2):25–9 (Eng. Abstr.) **(Rus)**

[Methods of studying intracranial blood and cerebrospinal fluid circulation in chronic experimental decompression sickness] Korolev AB. **Kosm Biol Aviakosm Med** 1990 Jan–Feb;24(1):47–9 **(Rus)**

[Effect of the cerebrospinal fluid from patients with cerebral pathology on regional cerebral blood flow in experimental animals] Malorova NF, et al. **Zh Nevropatol Psikhiatr** 1989; 89(7):105–9 (Eng. Abstr.) **(Rus)**

[The effect of the cerebrospinal fluid from patients with manic and depressive syndromes on the social hierarchical relationships in a group of rats] Zhdanova IV, et al. **Zh Vyssh Nerv Deiat** 1990 May–Jun;40(3):558–64 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Lesser sac cerebrospinal fluid collection. An unusual complication of a ventriculoperitoneal shunt. Eschelman DJ, et al. **Clin Nucl Med** 1990 Jun;15(6):415–7

[Single-photon emission-computed tomography with the Testascan multidetector gamma tomograph in neurologic practice] Liass FM, et al. **Med Radiol (Mosk)** 1990 Jun; 35(6):3–8 (Eng. Abstr.) **(Rus)**

SECRETION

Release from live choroid plexus of apical fragments and electrophoretic characterization of their synthetic products. Gudeman DM, et al. **J Neurosci Res** 1989 Oct;24(2):184–91

CEREBROSPINAL FLUID PRESSURE

Cerebrospinal fluid outflow resistance measurements in the selection of patients for shunt surgery in the normal pressure hydrocephalus syndrome. A controlled trial. Kosteljanetz M, et al. **Acta Neurochir (Wien)** 1990; 104(1–2):48–53

Alteration of maternal posture and its immediate effect on epidural pressure [see comments] Johnston GM, et al. **Anaesthesia** 1989 Sep;44(9):750–2 Comment in: Anaesthesia 1990 Apr;45(4):336–7.

Hydromechanical testing in non-communicating hydrocephalus to select patients for microsurgical third ventriculostomy. Magnaes B. **Br J Neurosurg** 1989; 3(4):443–50

Spontaneous low cerebrospinal fluid pressure headache. Marcelis J, et al. **Headache** 1990 Mar;30(4):192–6

Mechanism of increased cerebrospinal fluid pressure with thoracic aortic occlusion. Piano G, et al. **J Vasc Surg** 1990 May;11(5):695–701

[The usefulness of lumbar epidural pressure as an index of intracranial pressure] Fujioka S, et al. **Neurol Med Chir (Tokyo)** 1989 Jun;29(6):484–9 (Eng. Abstr.) **(Jpn)**

[Prevention of spinal cord ischemia after cross-clamping of the thoracic aorta—monitoring of spinal cord perfusion pressure and somatosensory evoked potentials] Maeda S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep; 37(9):1923–31 (Eng. Abstr.) **(Jpn)**

[A case of primary low spinal fluid pressure syndrome complicated by bilateral subdural hematoma—study of the cerebrospinal fluid circulation] Hoshino M, et al. **Rinsho Shinkeigaku** 1990 Feb;30(2):174–8 (Eng. Abstr.) **(Jpn)**

[Queckenstedt test—pressure pattern analysis in spinal subarachnoidal block] Yamazaki M, et al. **Rinsho Shinkeigaku** 1990 Mar;30(3):247–53 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Cerebrospinal fluid pressure in patients with brain tumors: impact of fentanyl versus alfentanil during nitrous oxide–oxygen anesthesia. Jung R, et al. **Anesth Analg** 1990 Oct;71(4):419–22

Cerebral blood flow velocity and cerebrospinal fluid pressure after single bolus of propofol. Parma A, et al. **Neurol Res** 1989 Sep;11(3):150–2

Intracerebroventricular infusion but not bolus injection of vasopressin increases the cerebrospinal fluid pressure in awake rabbits. Sørensen PS, et al. **Neurol Res** 1990 Jun; 12(2):83–8

[Effect of intravenous infusion of nimodipine on intracranial pressure. Experimental study of ICP measurement conducted in a rat model] Kotwica Z, et al. **Neurol Neurochir Pol** 1989 May–Jun;23(3):227–30 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Intracerebral stimulation of the seventh cranial nerve in the rat. Effects on cerebrospinal fluid pressure. Vásquez JV, et al. **Acta Cient Venez** 1989;40(1):29–32

Interstitial fluid pressure in the facial nerve: relationship between facial nerve pressure and cerebrospinal fluid pressure. Takeda T, et al. **Am J Otolaryngol** 1989 Sep–Oct; 10(5):345–50

Effect of high PaCO2 and time on cerebrospinal fluid and intraocular pressure in halothane-anesthetized horses. Cullen LK, et al. **Am J Vet Res** 1990 Feb;51(2):300–4

Intraoperative diagnosis of acute subarachnoid hemorrhage using continuous pressure monitoring via a lumbar subarachnoid catheter. Kalustian AA, et al. **Anesthesiology** 1990 Feb;72(2):386–8

Cerebrospinal fluid drainage and steroids provide better spinal cord protection during aortic cross-clamping than does either treatment alone. Woloszyn TT, et al. **Ann Thorac Surg** 1990 Jan;49(1):78–82; discussion 83

Cochlear and cerebrospinal fluid pressure: their inter-relationship and control mechanisms. Marchbanks RJ, et al. **Br J Audiol** 1990 Jun;24(3):179–87 (49 ref.)

Effects of posture and age on tympanic membrane displacement measurements. Phillips AJ, et al. **Br J Audiol** 1989 Nov;23(4):279–84

Cerebrospinal fluid pressure and prolactin in empty sella syndrome. Maira G, et al. **Can J Neurol Sci** 1990 Feb; 17(1):92–4

Headaches associated with low spinal fluid pressure. Fernández E. **Headache** 1990 Feb;30(3):122–8 (69 ref.)

[Evaluation of the mechanisms regulating endolymph pressure in the internal ear. II.] Durko T. **Otolaryngol Pol** 1989;43(5–6):345–8 (Eng. Abstr.) **(Pol)**

CEREBROSPINAL FLUID PROTEINS

Reference intervals for feline cerebrospinal fluid: biochemical and serologic variables, IgG concentration, and electrophoretic fractionation. Rand JS, et al. **Am J Vet Res** 1990 Jul;51(7):1049–54

ANALYSIS

Application of high performance liquid chromatography combined with diode-array detection for analysis of proteins and peptides in human cerebrospinal fluid. Silberring J, et al. **Biomed Chromatogr** 1989 Sep;3(5):203–8

Cerebrospinal fluid proteins and free amino acids in patients with solvent induced chronic toxic encephalopathy and healthy controls. Moen BE, et al. **Br J Ind Med** 1990 Apr; 47(4):277–80

Oligoclonal bands in cerebrospinal fluid detected by PhastSystem isoelectric focusing. Wybo I, et al. **Clin Chem** 1990 Jan;36(1):123–5

Horizontal two-dimensional electrophoresis of cerebrospinal fluid proteins with immobilized pH gradients in the first dimension. Mattila K, et al. **Electrophoresis** 1990 Jan; 11(1):91–2

Further postmortem examination of a case of familial ataxia with cerebrospinal fluid abnormality: an electron microscopic study of the intracytoplasmic eosinophilic inclusion bodies in the central nervous system. Nakamura I, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):227–39

Motor neuron disease and amyotrophic lateral sclerosis: relation of high CSF protein content to paraproteinemia and clinical syndromes. Younger DS, et al. **Neurology** 1990 Apr;40(4):595–9

Capillary tube isotachophoresis of proteins in early postmortem serum, cerebrospinal fluid and pericardial fluid. Takahama K, et al. **Nippon Hoigaku Zasshi** 1989 Jun; 43(3):246–50

[Determination of cerebrospinal fluid proteins using the Cobas Fara centrifugal analyser. Adaptation of the turbidimetric technic to benzethonium chloride] Guérin JL, et al. **Ann Biol Clin (Paris)** 1990;48(3):167–70 (Eng. Abstr.) **(Fre)**

[Electrophoresis of unconcentrated CSF proteins in agarose gels. Rapid staining with silver salts] Saheb F, et al. **Arch Inst Pasteur Alger** 1988;56:217–23 (Eng. Abstr.) **(Fre)**

[Analysis of cerebro-spinal fluid proteins in neurologic and serologic syphilis] Gharbi N, et al. **Tunis Med** 1990 Mar; 68(3):205–8 (Eng. Abstr.) **(Fre)**

[Diagnostic value of cerebrospinal fluid study in multiple sclerosis] Schädlich HJ. **Fortschr Neurol Psychiatr** 1990 Jul;58(7):247–51 (71 ref.) (Eng. Abstr.) **(Ger)**

[Nerve tissue protein S 100 level in the cerebrospinal fluid as an indicator of the extent of brain damage in cerebral ischemic stroke. Experimental study of a rat model of stroke] Kotwica Z, et al. **Neurol Neurochir Pol** 1989 May–Jun;23(3):203–7 (Eng. Abstr.) **(Pol)**

[Levels of 10 proteins in normal cerebrospinal fluid determined using enzyme immunoassay] León VJ, et al. **Neurologia** 1987 May–Jun;2(3):101–4 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

[Normal cerebrospinal fluid findings in spinal tumors—an analysis of 503 cases] Wieczorek V, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Oct; 41(10):609–13 (Eng. Abstr.) **(Ger)**

GENETICS

The saga of cystatin C gene mutation causing amyloid angiopathy and brain hemorrhage—clinical genetics in Iceland. Jensson O, et al. **Clin Genet** 1989 Nov;36(5):368–77 (90 ref.)

The cDNA structure and expression analysis of the genes for the cysteine proteinase inhibitor cystatin C and for beta 2-microglobulin in rat brain. Cole T, et al. **Eur J Biochem** 1989 Dec 8;186(1–2):35–42

The fetal rat binding protein for insulin-like growth factors is expressed in the choroid plexus and cerebrospinal fluid of adult rats. Tseng LY, et al. **Mol Endocrinol** 1989 Oct; 3(10):1559–68

METABOLISM

Focal cerebral edema impedes convective fluid/tracer movement through paravascular pathways in cat brain. Blaumanis OR, et al. **Adv Neurol** 1990;52:385–9

Release from live choroid plexus of apical fragments and electrophoretic characterization of their synthetic products. Gudeman DM, et al. **J Neurosci Res** 1989 Oct;24(2):184–91

Binding of cystatin C to C4: the importance of sense-antisense peptides in their interaction. Ghiso J, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1288–91

Different gradients for neurotransmitter metabolites and protein in horse cerebrospinal fluid. Vaughn DM, et al. **Vet Res Commun** 1989;13(6):413–9

PHARMACOLOGY

Cystatin C, a human proteinase inhibitor, blocks replication of herpes simplex virus. Björck L, et al. **J Virol** 1990 Feb; 64(2):941–3

SECRETION

The contribution from the choroid plexus and the periventricular CNS to amino acids and proteins in the human CSF. Hamberger A, et al. **Neurochem Res** 1990 Mar; 15(3):307–12

CEREBROSPINAL FLUID SHUNTS

Scintigraphic study of cerebrospinal fluid shunts. Borbély K, et al. **Acta Neurochir (Wien)** 1989;100(3–4):115–9

Cerebrospinal fluid outflow resistance measurements in the selection of patients for shunt surgery in the normal pressure hydrocephalus syndrome. A controlled trial. Kosteljanetz M, et al. **Acta Neurochir (Wien)** 1990; 104(1–2):48–53

Predictive value of quantitative cisternography in normal pressure hydrocephalus. Larsson A, et al. **Acta Neurol Scand** 1990 Apr;81(4):327–32

Creatine kinase BB release into cerebrospinal fluid after lateral ventricle cannulation. Bach FW, et al. **Br J Neurosurg** 1988;2(3):339–42

Intraventricular haematoma: management of comatose patients with valve regulated external ventricular drainage. Chan KH, et al. **Br J Neurosurg** 1988;2(4):465–9

Factors affecting cerebrospinal fluid flow in a shunt. Kadowaki C, et al. **Br J Neurosurg** 1987;1(4):467–75

Ventriculo-pleural shunting for adult hydrocephalus. Megison DP, et al. **Br J Neurosurg** 1988;2(4):503–5

Surgical treatment of syringomyelia with syringopleural shunting. Williams B, et al. **Br J Neurosurg** 1987;1(1):63–80

Pharmacokinetics and cerebrospinal fluid (CSF) concentrations of vancomycin in pediatric patients undergoing CSF shunt placement. Fan-Havard P, et al. **Chemotherapy** 1990;36(2):103–8

Pharmacokinetics and cerebrospinal fluid concentration of nafcillin in pediatric patients undergoing cerebrospinal fluid shunt placement. Nahata MC, et al. **Chemotherapy** 1990; 36(2):98–102

Intracranial venous pressures, hydrocephalus and effects of cerebrospinal fluid shunts. Andeweg J. **Childs Nerv Syst** 1989 Oct;5(5):318–23

"Occult" hydrocephalus in children [letter; comment] Aoki N. **Childs Nerv Syst** 1990 Jan;6(1):1–2 Comment on: Childs Nerv Syst 1989 Apr;5(2):71–5.

Quantification of cerebrospinal fluid shunt flow rates. Assessment of the programmable pressure valve. Matsumae M, et al. **Childs Nerv Syst** 1989 Dec;5(6):356–60

Bobble-head doll syndrome associated with the III ventricular cyst. Three cases in children 7 years after CVP or CVA shunting. Pařízek J, et al. **Childs Nerv Syst** 1989 Aug;5(4):241–5 (25 ref.)

Pudenz antisiphon device tear as a cause of shunt malfunction [letter; comment] Pudenz RH. **Childs Nerv Syst** 1990 May; 6(3):117 Comment on: Childs Nerv Syst 1989 Oct;5(5):330–1.

Functions and complications of shunts in different etiologies of childhood hydrocephalus. Serlo W, et al. **Childs Nerv Syst** 1990 Mar;6(2):92–4

Infections of mechanical cerebrospinal fluid shunts. Gardner P, et al. **Curr Clin Top Infect Dis** 1988;9:185–214 (208 ref.)

Living with chronic illness: a retrospective study of patients shunted for hydrocephalus and their families. Query JM, et al. **Dev Med Child Neurol** 1990 Feb;32(2):119–28

Pharmacokinetics, cerebrospinal fluid concentration, and safety of intravenous rifampin in pediatric patients undergoing shunt placements. Nahata MC, et al. **Eur J Clin Pharmacol** 1990;38(5):515–7

Idiopathic hydrocephalic dementia in aging brain the neurosurgical approach. Spanu G, et al. **Funct Neurol** 1989 Jul–Sep;4(3):293–8

Ventriculo-atrial shunt causing tricuspid endocarditis: its percutaneous removal. Bellamy CM, et al. **Int J Cardiol** 1990 Aug;28(2):260–2

Audiological findings of shunt-treated hydrocephalus in children. Löppönen H, et al. **Int J Pediatr Otorhinolaryngol** 1989 Sep;18(1):21–30

Shunt-associated ventriculitis caused by Branhamella catarrhalis [letter] Cooke RP, et al. **J Hosp Infect** 1990 Feb;15(2):197–8

Isolation of Vibrio cholerae non-01 from a Somerset farmworker and his tropical fish tank. Booth LV, et al. **J Infect** 1990 Jan;20(1):55–7

LP shunting in cases of Chiari malformation [letter; comment] **J Neurosurg** 1989 Dec;71(6):950–3 Comment on: J Neurosurg 1989 May;70(5):721–7.

Fluid flow performance of a new siphon-control device for ventricular shunts. Horton D, et al. **J Neurosurg** 1990 Jun; 72(6):926–32

Fourth ventriculostomy for Chiari malformation. Lanford GB, et al. **J Tenn Med Assoc** 1989 Sep;82(9):477–9

Augmentation cystoplasty complicated by postoperative ventriculoperitoneal shunt infection. Kreder KJ, et al. **J Urol** 1990 Oct;144(4):955–6

Recurrent ventriculoperitoneal shunt pseudocyst in a nine-year-old girl. Baumgartner FJ, et al. **Klin Wochenschr** 1990 May 4;68(9):485–7

Elderly patients with head-and-neck cancer [letter; comment] Morton RP, et al. **Lancet** 1990 Jun 30; 335(8705):1597 Comment on: Lancet 1990 Apr 28;335(8696):1020–2.

Interatrial shunts and decompression sickness in divers [letter; comment] Smith DJ, et al. **Lancet** 1990 Jun 30; 335(8705):1593 Comment on: Lancet 1990 Apr 14;335(8694):914–5.

Auditory brainstem responses before and after shunting in patients with suspected normal pressure hydrocephalus. Hashimoto K, et al. **Neurol Med Chir (Tokyo)** 1990 Jan; 30(1):29–35

Communicating hydrocephalus in adults: prediction of outcome after ventricular shunting procedures. Benzel EC, et al. **Neurosurgery** 1990 Apr;26(4):655–60

The relationship between ventricular fluid pressure and body position in normal subjects and subjects with shunts: a telemetric study. Chapman PH, et al. **Neurosurgery** 1990 Feb;26(2):181–9

Endoscopic third ventriculostomy. Jones RF, et al. **Neurosurgery** 1990 Jan;26(1):86–91; discussion 91–2

Malfunction of cerebrospinal fluid shunt [letter] Schmidt JH 3d. **Neurosurgery** 1990 Jul;27(1):168

Dandy-Walker syndrome: experience at the Hospital for Sick Children, Toronto. Asai A, et al. **Pediatr Neurosci** 1989; 15(2):66–73

Planning ventriculoperitoneal shunts in infants and small children. Bridges N, et al. **Pediatr Neurosci** 1988; 14(4):191–5

A technique for removal of an adherent ventricular catheter. Chambi I, et al. **Pediatr Neurosci** 1988;14(4):216–7

Dandy-Walker cyst upward herniation: the role of magnetic resonance imaging and double shunts. Pillay P, et al. **Pediatr Neurosci** 1989;15(2):74–8; discussion 78–9

Cerebral blood flow in low pressure hydrocephalus. Meixensberger J, et al. **Psychiatry Res** 1989 Sep;29(3):307–8

Ventriculoperitoneal shunt in cryptococcal meningitis with hydrocephalus. Tang LM. **Surg Neurol** 1990 May; 33(5):314–9

Endocrinological disorders in shunted hydrocephalus. Kaiser G, et al. **Z Kinderchir** 1989 Dec;44 Suppl 1:16–7

Neurobehavioral development of in utero treated hydrocephalic monkeys. Michejda M. **Z Kinderchir** 1989 Dec;44 Suppl 1:52

Comparison of intracranial pressure between spina bifida patients and normal subjects using a non-invasive pressure assessment technique. Moss SM, et al. **Z Kinderchir** 1989 Dec;44 Suppl 1:29–31

Ventricular shunting for hydrocephalus following intraventricular haemorrhage. Roberts JP, et al. **Z Kinderchir** 1989 Dec;44 Suppl 1:32–4

Effects of ventricular shunt treatment of normal pressure hydrocephalus on psychological functions. Tromp CN, et al. **Z Kinderchir** 1989 Dec;44 Suppl 1:41–3

[A trial of preventing infection risk during treatment of hydrocephalus in children using cerebro-spinal fluid shunt] Derex MC, et al. **Minerva Anestesiol** 1989 Apr;55(4):169–71 **(Fre)**

[External ventricular drainage in surgery of the posterior fossa in children (30 cases)] Gutknecht JL, et al. **Minerva Anestesiol** 1989 Apr;55(4):189–91 **(Fre)**

[Acetazolamide: an alternative to shunting in normal pressure hydrocephalus? Preliminary results] Aimard G, et al. **Rev Neurol (Paris)** 1990;146(6-7):437–9 (Eng. Abstr.) **(Fre)**

[Lumboperitoneal shunt and normal pressure hydrocephalus in elderly subjects] Philippon J, et al. **Rev Neurol (Paris)** 1989;145(11):776–80 (39 ref.) (Eng. Abstr.) **(Fre)**

[The effect of acetazolamide-induced, endogenous volume stress of the cerebrospinal system on intracranial pressure. Diamox—effect on intracranial pressure] Holl K, et al. **Neurochirurgia (Stuttg)** 1990 Mar;33(2):29–36 (Eng. Abstr.) **(Ger)**

[Treatment of internal hydrocephalus] Rittmannsberger E. **Wien Med Wochenschr** 1989 Sep 30;139(18):442–3 **(Ger)**

[Normal pressure hydrocephalus in geriatric patients—a treatable form of dementia] Martin U, et al. **Z Gerontol** 1989 Sep-Oct;22(5):228–35 (Eng. Abstr.) **(Ger)**

[A conservative, surgery-delaying attitude in the treatment of concomitant hydrocephalus in patients with meningomyelocele] Jenny P, et al. **Z Kinderchir** 1989 Oct; 44(5):273–4 (Eng. Abstr.) **(Ger)**

[Gestation and spontaneous delivery in hydrocephalus with ventriculoperitoneal shunt] Yoffe N, et al. **Harefuah** 1990 Feb 15;118(4):209–10 (Eng. Abstr.) **(Heb)**

[Ventriculoperitoneal shunt for hydrocephalus secondary to tuberculous meningitis: a case report] Kawajiri K, et al. **No Shinkei Geka** 1989 Jun;17(6):589–92 (Eng. Abstr.) **(Jpn)**

[Ventriculoperitoneal shunts with the use of pressure-adjustable valve in the management of hydrocephalus] Kikuchi K, et al. **No Shinkei Geka** 1990 Mar;18(3):241–6 (Eng. Abstr.) **(Jpn)**

[The changes of intracranial pressure after shunt surgery: measurements of pre- and postshunt ventricular fluid pressure with an implanted telemetric ICP sensor] Yamaguchi Y, et al. **No Shinkei Geka** 1990 Feb; 18(2):175–82 (Eng. Abstr.) **(Jpn)**

[Changes in pulsatility index and blood flow velocity in the cerebral arteries in infantile hydrocephalus before and after ventriculo-peritoneal shunt] Horikawa M, et al. **No To Hattatsu** 1990 Jan;22(1):90–2 **(Jpn)**

[Infantile hydrocephalus: long-term results in 102 patients and the importance of neurosonography] Machado HR, et al. **Arq Neuropsiquiatr** 1990 Mar;48(1):82–90 (Eng. Abstr.) **(Por)**

[Criteria for the implantation of ventricular drainage in subarachnoid hemorrhage] Bartumeus Jené F. **Neurologia** 1990 Feb;5(2):39–40 **(Spa)**

[Syringomyelia associated with hydrocephalus: favorable course following ventriculo-peritoneal shunt. Proof using magnetic resonance] Mares Segura R, et al. **Neurologia** 1988 Jan-Feb;3(1):40–2 **(Spa)**

ADVERSE EFFECTS

Infected ventriculostomy: bacteriology and treatment. Ohrström JK, et al. **Acta Neurochir (Wien)** 1989; 100(1-2):67–9

Meningeal fibrosis appearing shortly after ventricular shunting [letter; comment] Martin DS, et al. **AJNR** 1990 May;11(3):617–8 Comment on: AJNR 1989 Sep-Oct;10(5):1021–6.

Intrahepatic abscess: a rare complication of ventriculoperitoneal shunt [letter] Peterfy CG, et al. **AJR Am J Roentgenol** 1990 Oct;155(4):894–5

Hydrocele following placement of a ventriculoperitoneal shunt: case report. Calvário JS, et al. **Arq Neuropsiquiatr** 1990 Mar;48(1):113–5

Case report: pregnant woman with a ventriculoperitoneal shunt to treat hydrocephalus. Okagaki A, et al. **Asia Oceania J Obstet Gynaecol** 1990 Jun;16(2):111–3

Tension pneumocephalus after CSF shunting procedures. Ferrante L, et al. **Br J Neurosurg** 1988;2(2):269–72 (21 ref.)

Misleading clinical syndromes of CSF shunt malfunction. Jamjoom AH, et al. **Br J Neurosurg** 1988;2(3):391–4

Pasteurella multocida: a rare case of shunt infection. Lee T, et al. **Br J Neurosurg** 1990;4(3):237–8

Persistent CSF leucocytosis associated with intrathecal gentamycin. Lee TK, et al. **Br J Neurosurg** 1989;3(4):517–9

Role of a separate subcutaneous cerebro-spinal fluid reservoir in the management of hydrocephalus. Leggate JR, et al. **Br J Neurosurg** 1988;2(3):327–37

Isotope transport studies and shunt pressure measurements as a guide to shunt function. Reilly PL, et al. **Br J Neurosurg** 1989;3(6):681–90

Acute abdomen in the patient with a ventriculoperitoneal shunt. Patrick D, et al. **Can J Surg** 1990 Feb;33(1):37–40

Ventriculoperitoneal shunt malfunction in a pregnant patient with meningomyelocele. Houston CS, et al. **Can Med Assoc J** 1989 Oct 1;141(7):701–2 (10 ref.)

Cerebrospinal fluid shunt infections by unencapsulated Haemophilus influenzae. Hellbusch LC, et al. **Childs Nerv Syst** 1989 Oct;5(5):315–7

Migraine headaches in hydrocephalic children: a diagnostic dilemma. Nowak TP, et al. **Childs Nerv Syst** 1989 Oct; 5(5):310–4

Lesser sac cerebrospinal fluid collection. An unusual complication of a ventriculoperitoneal shunt. Eschelman DJ, et al. **Clin Nucl Med** 1990 Jun;15(6):415–7

Acute bacterial meningitis. II: Treatment. Robinson RO, et al. **Dev Med Child Neurol** 1990 Feb;32(2):174–8

Migraine/epilepsy syndrome mimicking shunt malfunction in a child with shunted hydrocephalus [letter] Buchhalter JR, et al. **J Child Neurol** 1990 Jan;5(1):69–71

Seizures in relation to shunt dysfunction in children with meningomyelocele. Hack CH, et al. **J Pediatr** 1990 Jan; 116(1):57–60

Invagination of a shunt valve: an unusual complication—case report. Yoshida M, et al. **Neurol Med Chir (Tokyo)** 1990 Mar;30(3):198–200

Ballism: an association with ventriculoperitoneal shunting. Walker FO, et al. **Neurology** 1990 Jun;40(6):1004

Antibiotic single-dose prophylaxis of shunt infections. Blum J, et al. **Neurosurg Rev** 1989;12(3):239–44

Lumboperitoneal shunt: clinical applications, complications, and comparison with ventriculoperitoneal shunt. Aoki N. **Neurosurgery** 1990 Jun;26(6):998–1003; discussion 1003–4

Infection of the intervertebral disc space after placement of a percutaneous lumboperitoneal shunt for benign intracranial hypertension. Cabezudo JM, et al. **Neurosurgery** 1990 Jun;26(6):1005–8; discussion 1008–9

Small bowel obstruction secondary to incomplete removal of a ventriculoperitoneal shunt: case report. Hlavin ML, et al. **Neurosurgery** 1990 Mar;26(3):526–8

Patient data system for monitoring shunts. Frank E, et al. **Pediatr Neurosci** 1988;14(5):258–63

Systemic Torulopsis glabrata infection in a neonate. Walter EB Jr, et al. **South Med J** 1990 Jul;83(7):837–8 (11 ref.)

Avulsion of choroid plexus during revision of ventricular shunting: its high incidence and predictive value on computed tomography scan. Aoki N, et al. **Surg Neurol** 1990 Apr;33(4):256–60

Intestinal perforation by peritoneal shunt tubing: report of two cases. Hornig GW, et al. **Surg Neurol** 1990 Apr; 33(4):288–90 (17 ref.)

Haemophilus influenzae B meningitis in a patient with a ventriculoperitoneal shunt and meningomyelocele. Brandstetter Y, et al. **Wis Med J** 1990 Aug;89(8):461–3

[Ileus in an infant caused by a ventriculoperitoneal shunt] Koudelka J, et al. **Rozhl Chir** 1989 Sep;68(8-9):608–11 (Eng. Abstr.) **(Cze)**

[Nephritis due to a shunt: apropos of a case] Kooli C, et al. **Tunis Med** 1990 May;68(5):385–8 (Eng. Abstr.) **(Fre)**

[Primitive neuroectodermal tumor with peritoneal metastasis through a ventriculoperitoneal shunt. Case report] Yamamoto Y, et al. **Neurol Med Chir (Tokyo)** 1989 Dec; 29(12):1137–43 (16 ref.) (Eng. Abstr.) **(Jpn)**

[Slit-ventricle syndrome in the treatment of hydrocephalus in children] Mandat K, et al. **Neurol Neurochir Pol** 1989 Jan;23(1):52–7 (21 ref.) **(Pol)**

[Pseudomonas aeruginosa infection following ventriculo-peritoneal shunt (letter)] Saló J, et al. **Med Clin (Barc)** 1990 Jan 27;94(3):116 **(Spa)**

HISTORY

[Torkildsen's operation—50 years later] Lundar T, et al. **Tidsskr Nor Laegeforen** 1990 Feb 20;110(5):584–6 (Eng. Abstr.) **(Nor)**

INSTRUMENTATION

Ventriculoperitoneal shunt migration into the scrotum. Albala DM, et al. **Am Surg** 1989 Nov;55(11):685–8

A newly designed flow-regulating device in shunt therapy of hydrocephalus. Hashimoto S, et al. **Artif Organs** 1989 Oct;13(5):483–5

The use of magnetic resonance imaging to assess slow fluid flow in a model cerebrospinal fluid shunt system. Frank E, et al. **Br J Neurosurg** 1990;4(1):53–7

Pudenz antisiphon device tear as a cause of shunt malfunction [see comments] Borowitz B, et al. **Childs Nerv Syst** 1989 Oct;5(5):330–1 Comment in: Childs Nerv Syst 1990 May;6(3):117.

Cerebrospinal fluid shunt malfunction signaled by new or recurrent seizures. Faillace WJ, et al. **Childs Nerv Syst** 1990 Jan;6(1):37–40

Exposure of peritoneal catheter of ventriculoperitoneal shunt following minor trauma. Prasad VS, et al. **Indian Pediatr** 1989 Aug;26(8):836–8

A new, curved catheter for ventriculoperitoneal shunting—technical note. Ohta T, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):449–50

Optimum position of the antisiphon device [letter] Tokoro K, et al. **Neurosurgery** 1990 Aug;27(2):332–4

Cysto-atrial shunt treatment of intracranial arachnoid cysts. Radek A, et al. **Zentralbl Neurochir** 1989;50(3-4):176–9

[Shunt infection in hydrocephalus] Vara-Thorbeck R. **Zentralbl Chir** 1990;115(9):569–74 (Eng. Abstr.) **(Ger)**

[Penetration of the abdominal drainage catheter of a ventriculo-abdominal shunt into the descending colon] Rieger A, et al. **Zentralbl Neurochir** 1989;50(1):55–6 (Eng. Abstr.) **(Ger)**

[Experience with shunting operation using a pressure-adjustable valve] Fuse T, et al. **No Shinkei Geka** 1990 Feb;18(2):139–44 (Eng. Abstr.) **(Jpn)**

METHODS

Simplified technique for insertion of ventricular access reservoirs [letter] Frank E. **Br J Neurosurg** 1989;3(3):415–7

The treatment of infantile hydrocephalus by the Holter valve. Guthkelch AN. **Br J Surg** 1967 Aug;54(8):665–73

Ventriculoatrial shunting via the azygos vein. Balasubramaniam C, et al. **Childs Nerv Syst** 1990 Jun; 6(4):205–7

Normal pressure hydrocephalus: did publications alter management? Vanneste J, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):564–8

A technique for placing ventriculoperitoneal shunts in a neonatal model of hydrocephalus. Lovely TJ, et al. **J Neurosci Methods** 1989 Sep;29(3):201–6

[Treatment of colloid cysts of the third ventricle by cerebrospinal fluid shunt] Hattab N, et al. **Neurochirurgie** 1990;36(2):129–31 (Eng. Abstr.) **(Fre)**

[Renewed interest in Thorkildsen's operation] Magnaes B. **Tidsskr Nor Laegeforen** 1990 Feb 20;110(5):583 **(Nor)**

[Treatment of fetal hydrocephalus] Mandat K, et al. **Wiad Lek** 1990 Apr 15;43(8):348–51 (16 ref.) (Eng. Abstr.) **(Pol)**

[The treatment of hydrocephalus by ventriculosinustransverostomy] Bersnev VP, et al. **Zh Vopr Neirokhir** 1989 Jul-Aug;(4):17–9 (Eng. Abstr.) **(Rus)**

[The topographic anatomical basis for ventriculosinusal shunting in hydrocephalus in nursing and young infants]

Simernitskiĭ BP, et al. **Zh Vopr Neirokhir** 1990 May-Jun; (3):27-9 (Eng. Abstr.) **(Rus)**

[Ventriculoperitoneal shunt in the treatment of hydrocephalus in children. Results and complications] Fandiño Rivera J, et al. **An Esp Pediatr** 1990 Apr; 32(4):325-8 (Eng. Abstr.) **(Spa)**

UTILIZATION

Problems of hydrocephalus in Zimbabwe: a philosophical view. Levy LF. **Cent Afr J Med** 1989 Nov;35(11):538-40

CEREBROSPINAL OTORRHEA

DIAGNOSIS

Spontaneous atraumatic CSF otorrhea. Kossak B, et al. **Pediatr Emerg Care** 1989 Sep;5(3):166-8 (17 ref.)

DRUG THERAPY

A double-blind, randomized, prospective trial of a topical antiseptic versus a topical antibiotic in the treatment of otorrhoea. Clayton MI, et al. **Clin Otolaryngol** 1990 Feb; 15(1):7-10

ETIOLOGY

CSF fistula in a patient with Mondini deformity: demonstration by CT cisternography. Burton EM, et al. **AJNR** 1990 Jan-Feb;11(1):205-7

Cranial lymphangiomatosis causing CSF otorrhea and recurrent meningitis: CT features. Nazarian GK, et al. **J Comput Assist Tomogr** 1990 Jan-Feb;14(1):121-3

CSF otorrhoea secondary to a tegmen defect. Robson AK, et al. **J Laryngol Otol** 1989 Oct;103(10):980-2

CEREBROSPINAL RHINORRHEA

CHEMICALLY INDUCED

Cerebrospinal fluid rhinorrhea occurring in long-term bromocriptine treatment for macroprolactinomas. Bronstein MD, et al. **Surg Neurol** 1989 Nov;32(5):346-9

CSF rhinorrhea after dopamine agonist treatment for invasive macroprolactinoma [letter] Hildebrandt G. **Surg Neurol** 1990 Aug;34(2):133

COMPLICATIONS

Cerebrospinal fluid rhinorrhea and unilateral nasal polyposis: a case report. Gallina E, et al. **Auris Nasus Larynx** 1990; 17(1):39-44

ETIOLOGY

Management of cerebrospinal fluid otorhinorrhea complicating the retrosigmoid approach to the cerebellopontine angle. Smith PG, et al. **Am J Otol** 1990 May;11(3):178-80

Penetrating injuries involving the anterior cranial fossa. Roth M, et al. **Arch Otorhinolaryngol** 1989;246(6):411-6 (21 ref.)

Cerebrospinal fluid fistula secondary to ecchordosis physaliphora. Macdonald RL, et al. **Neurosurgery** 1990 Mar;26(3):515-8; discussion 518-9

Cerebrospinal fluid rhinorrhea in patients with untreated pituitary adenoma: report of two cases. Obana WG, et al. **Surg Neurol** 1990 May;33(5):336-40

[Spontaneous rhinorrhea of a rare etiology (apropos of empty sella turcica)] Virte M, et al. **Ann Otolaryngol Chir Cervicofac** 1990;107(1):43-6 (Eng. Abstr.) **(Fre)**

[Recurrent meningitis, hydrocephalus and tegmen tympani dehiscence] Muller JP, et al. **Rev Neurol (Paris)** 1989; 145(12):855-6 (11 ref.) (Eng. Abstr.) **(Fre)**

[Recurrent suppurative meningitis in a patient after 2 operations for cerebrospinal rhinorrhea] Garlicki A, et al. **Przegl Epidemiol** 1989;43(3):307-8 (Eng. Abstr.) **(Pol)**

RADIOGRAPHY

Caveat emptor: allergic rhinitis. Maccia CA, et al. **Ann Allergy** 1990 Mar;64(3):315-7

RADIONUCLIDE IMAGING

Identification of CSF fistulas by radionuclide counting. Yamamoto Y, et al. **AJNR** 1990 Jul-Aug;11(4):823-6

Overpressure radionuclide cisternography and metrizamide computed tomographic cisternography in the detection of intermittent rhinoliquorrheas in children. Wocjan J, et al. **Childs Nerv Syst** 1989 Aug;5(4):238-40

SURGERY

Transmastoid extracranial repair of CSF leaks following acoustic neuroma resection. Robson AK, et al. **J Laryngol Otol** 1989 Sep;103(9):842-4

Endoscopic management of cerebrospinal fluid leaks and cephaloceles. Mattox DE, et al. **Laryngoscope** 1990 Aug; 100(8):857-62

Rigid endoscopic repair of paranasal sinus cerebrospinal fluid fistulas. Papay FA, et al. **Laryngoscope** 1989 Nov; 99(11):1195-201

Lesions of Rathke's duct: another indication for the infratemporal fossa approach. Herzog J, et al. **Otolaryngol Head Neck Surg** 1989 Sep;101(3):302-8

Transnasal transseptal endoscopic repair of sphenoidal cerebral spinal fluid fistula. Papay FA, et al. **Otolaryngol Head Neck Surg** 1989 Nov;101(5):595-7

The osteo-mucoperiosteal flap in repair of cerebrospinal fluid rhinorrhea: a 20-year experience. Yessenow RS, et al. **Otolaryngol Head Neck Surg** 1989 Nov;101(5):555-8

[Disappearance of hemifacial spasm following spinal drainage: a case report] Niijima KH, et al. **No Shinkei Geka** 1990 Jun;18(6):577-80 (Eng. Abstr.) **(Jpn)**

THERAPY

Nursing management of lumbar drains. Clevenger V. **J Neurosci Nurs** 1990 Aug;22(4):227-31

A simple procedure for management of spontaneous cerebrospinal fluid rhinorrhea by injection of fibrin sealant. Technical note. Salpietro F, et al. **J Neurosurg Sci** 1989 Jul-Sep;33(3):297-9

[The use of fibrin glue for the repair of experimental nasal CSF leak in rats] Nishihira S, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Dec;92(12):2094-9 (Eng. Abstr.) **(Jpn)**

CEREBROVASCULAR CIRCULATION

Per- and postoperative changes in the arterio-venous oxygen content difference (AVDO2) in patients subjected to craniotomy for cerebral tumours. Asmussen J, et al. **Acta Neurochir (Wien)** 1989;101(1-2):9-17

Cerebral autoregulation following prophylactic and delayed experimental STA-MCA bypass. Loftus CM, et al. **Acta Neurochir (Wien)** 1989;101(1-2):75-9

The effects of an extradural expanding lesion on regional intracranial pressure, blood flow, somatosensory conduction and brain herniation: an experimental study in baboons. Nitta M, et al. **Acta Neurochir (Wien)** 1990; 104(1-2):30-7

Cerebral circulation and metabolism in adults' moyamoya disease--PET study. Taki W, et al. **Acta Neurochir (Wien)** 1989;100(3-4):150-4

Transcranial Doppler sonography. Verlooy J, et al. **Acta Neurol Belg** 1989 Mar-Apr;89(2):87-92 (9 ref.)

Tc99m HM-PAO single photon emission computed tomography in temporal lobe epilepsy. Duncan R, et al. **Acta Neurol Scand** 1990 Apr;81(4):287-93

Crossed cerebellar diaschisis in intracarotid sodium amytal procedures: a SPECT study. Kurthen M, et al. **Acta Neurol Scand** 1990 May;81(5):416-22

Delayed decrease in hemispheric cerebral blood flow during Wada test demonstrated by 99mTc-HMPAO single photon emission computer tomography. Ryding E, et al. **Acta Neurol Scand** 1989 Sep;80(3):248-54

Effect of hemodilution on regional cerebral blood flow. Hartmann A, et al. **Acta Neurol Scand Suppl** 1989;127:36-48

Cerebral blood flow and cerebral hematocrit in patients with cerebral ischemia measured by single-photon emission computed tomography. Sakai F, et al. **Acta Neurol Scand Suppl** 1989;127:9-13

The influence of haematocrit on the cerebral circulation. Thomas DJ. **Acta Neurol Scand Suppl** 1989;127:5-8 (16 ref.)

Morphological consequences of early reperfusion following thrombotic or mechanical occlusion of the rat middle cerebral artery. Dietrich WD, et al. **Acta Neuropathol (Berl)** 1989;78(6):605-14

Changes in the distribution of anionic sites in brain micro-blood vessels with and without amyloid deposits in scrapie-infected mice. Vorbrodt AW, et al. **Acta Neuropathol (Berl)** 1990;79(4):355-63

Intellectual impairment with regional cerebral dysfunction after low neonatal cerebral blood flow. Lou HC, et al. **Acta Paediatr Scand Suppl** 1989;360:72-82

Cerebral blood flow during experimental hypoxaemia and ischaemia in the newborn piglet. Odden JP, et al. **Acta Paediatr Scand Suppl** 1989;360:13-9

The effect of bradykinin and its fragments on the arachidonate cascade of brain microvessels. Gecse A, et al. **Adv Exp Med Biol** 1989;247A:249-54

Oxygen tension, oxygen metabolism, and microcirculation in vasogenic brain edema. Gaab MR, et al. **Adv Neurol** 1990;52:247-56

Chronological alterations of regional cerebral blood flow, glucose utilization, and edema formation after focal ischemia in hypertensive and normotensive rats. Significance of hypertension. Hatashita T, et al. **Adv Neurol** 1990;52:29-37

Vasogenic component of ischemic brain edema in experimental focal ischemia. Kuroiwa T, et al. **Adv Neurol** 1990;52:548

Uncoupling of blood flow and glucose metabolism in the neighboring postischemic edematous brain area. Nagasawa H, et al. **Adv Neurol** 1990;52:63-71

Is postischemic hypoperfusion related to brain edema? Schürer L, et al. **Adv Neurol** 1990;52:155-64

Effects of neutrophil depletion and superoxide dismutase on postischemic hypoperfusion of rat brain. Schürer L, et al. **Adv Neurol** 1990;52:57-62

Effect of experimental blunt head injury on acute regional cerebral blood flow and edema. Tornheim PA, et al. **Adv Neurol** 1990;52:377-84

Leukoaraiosis: correlation of MR and CT findings with blood flow, atrophy, and cognition. Kobari M, et al. **AJNR** 1990 Mar-Apr;11(2):273-81

Gd-DTPA-enhanced MR images: accentuation of vascular pulsation artifacts and correction by using gradient-moment nulling (MAST). Richardson DN, et al. **AJNR** 1990 Jan-Feb;11(1):209-10

Use of acetazolamide-challenge xenon CT in the assessment of cerebral blood flow dynamics in patients with arteriovenous malformations. Tarr RW, et al. **AJNR** 1990 May;11(3):441-8

Cranial arteriovenous malformations in neonates: color Doppler imaging with angiographic correlation. Tessler FN, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):1027-30

Assessing utility of single photon emission computed tomography (SPECT) scan in Alzheimer disease: correlation with cognitive severity. DeKosky ST, et al. **Alzheimer Dis Assoc Disord** 1990;4(1):14-23

Autoradiographic localization of vascular dopamine receptors. Amenta F, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 2):34S-36S

Local cerebral blood flow is increased in rapid-eye-movement sleep in fetal sheep. Abrams RM, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):278-81

Middle cerebral artery blood flow in normal and growth-retarded fetuses. Veille JC, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):391-6

Vasopressin and prostanoid mechanisms in control of cerebral blood flow in hypotensive newborn pigs. Armstead WM, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H408-13

Membrane hyperpolarization is a mechanism of endothelium-dependent cerebral vasodilation. Brayden JE. **Am J Physiol** 1990 Sep;259(3 Pt 2):H668-73

Cerebral blood flow and energy metabolism during stress. Bryan RM Jr. **Am J Physiol** 1990 Aug;259(2 Pt 2):H269-80 (97 ref.)

Cerebrovascular and metabolic responses to hypoxia during hypoglycemia in dogs. Derrer SA, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H400-7

Glucose is required to maintain ATP/ADP ratio of isolated bovine cerebral microvessels. Gaposchkin CG, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):E543-7

Effect of acute hypoxemia on brain blood flow and oxygen metabolism in immature fetal sheep. Gleason CA, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H1064-9

Cerebral blood flow and substrate utilization in insulin-treated diabetic subjects. Grill V, et al. **Am J Physiol** 1990 May;258(5 Pt 1):E813-20

Effects of ischemia on brain blood flow and oxygen consumption of newborn pigs. Leffler CW, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):H1917-26

Effects of aging on responses of cerebral arterioles. Mayhan WG, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H1138-43

Chemodenervation does not alter cerebrovascular response to hypoxic hypoxia. Miyabe M, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1413-8

Absent effect of plasma vasopressin on rat brain blood flow during hemorrhage. Nakai M, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1360-8

Postischemic recovery rate of cerebral ATP, phosphocreatine, pH, and evoked potentials. Nishijima MK, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):H1860-70

Role of prostanoids in cerebrovascular responses to asphyxia and reventilation in newborn pigs. Pourcyrous M, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H662-7

Cerebrovascular transport of [125I]quinuclidinyl benzilate, [3H]cyclofoxy, and [14C]iodoantipyrine. Sawada Y, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1585-98

Cerebrospinal fluid ionic regulation, cerebral blood flow, and glucose use during chronic metabolic alkalosis. Schröck H, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1220-7

Determination of capillary perfusion pattern in rat brain by timed plasma labeling. Vetterlein F, et al. **Am J Physiol** 1990 Jan;258(1 Pt 2):H80-4

Cerebral blood flow during fastigial pressor response in cats. Williams JL, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):H729-33

Anxiety and cerebral blood flow. Mathew RJ, et al. **Am J Psychiatry** 1990 Jul;147(7):838-49 (117 ref.)

Chronicity and a low anteroposterior gradient of cerebral blood flow in schizophrenia. Mathew RJ, et al. **Am J Psychiatry** 1990 Feb;147(2):211-3

99mTc-hexamethylpropyleneamine oxime single photon emission CT in poststroke depression. Schwartz JA, et al. **Am J Psychiatry** 1990 Feb;147(2):242-4

Intracranial and spinal cord hemodynamics in the sitting position in dogs in the presence and absence of increased intracranial pressure. Ernst PS, et al. **Anesth Analg** 1990 Feb;70(2):147-53

The effect of hypervolemic hemodilution with and without hypertension on cerebral blood flow following middle cerebral artery occlusion in rats anesthetized with isoflurane. Cole DJ, et al. **Anesthesiology** 1989 Oct; 71(4):580-5

Regional cerebral blood flow and glucose utilization during hypothermia in newborn dogs. Palmer C, et al. **Anesthesiology** 1989 Nov;71(5):730-7

Transcranial Doppler monitoring during percutaneous transluminal aortic valvuloplasty. Karnik R, et al. **Angiology** 1990 Feb;41(2):106-11

Regional cerebral blood flow during focal seizures of temporal and frontocentral onset. Stefan H, et al. **Ann Neurol** 1990 Feb;27(2):162-6

Quantitative assessment of cerebral blood flow using technetium-99m-hexamethyl-propyleneamine oxime: Part

I, Design of a mathematical model. Matsuda H, et al. **Ann Nucl Med** 1988 May;2(1):13–9

Carotid artery stump pressure: how reliable is it in predicting the need for a shunt? Gnanadev DA, et al. **Ann Vasc Surg** 1989 Oct;3(4):313–7

Significance of transcranial Doppler CO2. Reactivity measurements for the diagnosis of hemodynamically relevant carotid obstructions. Reith W, et al. **Ann Vasc Surg** 1990 Jul;4(4):359–64

On line cerebral blood flow velocity and blood pressure measurement in neonates: a new method. Fenton AC, et al. **Arch Dis Child** 1990 Jan;65(1 Spec No):11–4

Regional cerebral blood flow in mood disorders. I. Comparison of major depressives and normal controls at rest. Sackeim HA, et al. **Arch Gen Psychiatry** 1990 Jan; 47(1):60–70

Evidence for transhemispheric diaschisis in unilateral stroke [see comments] Dobkin JA, et al. **Arch Neurol** 1989 Dec; 46(12):1333–6 Comment in: Arch Neurol 1990 Jun;47(6):621.

Regional cerebral blood flow and cognitive function in Huntington's disease and schizophrenia. A comparison of patients matched for performance on a prefrontal-type task. Goldberg TE, et al. **Arch Neurol** 1990 Apr;47(4):418–22

Regional cerebral blood flow in patients with leuko-araiosis and atherosclerotic carotid artery disease. Herholz K, et al. **Arch Neurol** 1990 Apr;47(4):392–6

Leuko-araiosis, cerebral atrophy, and cerebral perfusion in normal aging. Kobari M, et al. **Arch Neurol** 1990 Feb; 47(2):161–5

Pediatric cerebrovascular disease. Alterations of regional cerebral blood flow detected by TC 99m-HMPAO SPECT. Shahar E, et al. **Arch Neurol** 1990 May; 47(5):578–84

No diaschisis after stroke [letter; comment] Stolzberg S. **Arch Neurol** 1990 Jun;47(6):621 Comment on: Arch Neurol 1989 Dec;46(12):1333–6.

Measurement of regional cerebral blood flow and accentuation of the primary auditory cortex with single photon emission computed tomography. Schadel A, et al. **Arch Otorhinolaryngol** 1989;246(4):205–9

Regional cerebral blood flow measurements in the diagnosis of dementia. Zurynski Y, et al. **Aust N Z J Med** 1989 Oct; 19(5):436–42

The brain-type glucose transporter mRNA is specifically expressed at the blood-brain barrier. Boado RJ, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):174–9

Substance P stimulates translocation of protein kinase C in brain microvessels. Catalán RE, et al. **Biochem Biophys Res Commun** 1989 Oct 31;164(2):595–600

Interactions of high-density lipoprotein 3 with brain capillary endothelial cells. Martin-Nizard F, et al. **Biochim Biophys Acta** 1989 Oct 17;1005(3):201–8

Sodium-dependent high-affinity uptake of taurine by isolated rat brain capillaries [published erratum appears in Biochem Biophys Acta 1989 Dec 11;987(1):137] Tayarani I, et al. **Biochim Biophys Acta** 1989 Oct 16;985(2):168–72

The hyperventilation syndrome [letter] Fried R. **Biofeedback Self Regul** 1989 Sep;14(3):259–61

Multiinfarct and Alzheimer-type dementia investigated by transcranial Doppler sonography. Foerstl H, et al. **Biol Psychiatry** 1989 Oct;26(6):590–4

Restricted cardiovascular and cerebral performance of intra-uterine growth retarded newborn piglets during severe hypoxia. Bauer R, et al. **Biomed Biochim Acta** 1989; 48(9):697–705

Calcitonin gene-related peptide-LI in subarachnoid haemorrhage in man. Signs of activation of the trigemino-cerebrovascular system? Juul R, et al. **Br J Neurosurg** 1990;4(3):171–9

Serpentine aneurysm of the posterior circulation: report of two cases. Khan MT, et al. **Br J Neurosurg** 1990; 4(3):217–23

Maternal abdominal pressure alters fetal cerebral blood flow. Vyas S, et al. **Br J Obstet Gynaecol** 1990 Aug;97(8):740–2

Abnormal vibration-induced cerebral blood flow responses in idiopathic dystonia. Tempel LW, et al. **Brain** 1990 Jun; 113 (Pt 3):691–707

Decreased blood flow and oxygen metabolism in the cerebellum, brain stem and thalamus in a case with Menkes kinky hair disease. Yoshikawa H, et al. **Brain Dev** 1989; 11(6):426–9

Stimulation of the nucleus basalis of Meynert and substantia innominata produces widespread increases in cerebral blood flow in the frontal, parietal and occipital cortices. Adachi T, et al. **Brain Res** 1990 Apr 23;514(1):163–6

Lesions of rostral ventrolateral medulla abolish some cardio- and cerebrovascular components of the cerebellar fastigial pressor and depressor responses. Chida K, et al. **Brain Res** 1990 Jan 29;508(1):93–104

Global reduction in cerebral blood flow and metabolism elicited from intrinsic neurons of fastigial nucleus. Chida K, et al. **Brain Res** 1989 Oct 23;500(1-2):177–92

Sphenopalatine ganglion stimulation increases regional cerebral blood flow independent of glucose utilization in the cat. Goadsby PJ. **Brain Res** 1990 Jan 1;506(1):145–8

A minimally invasive technique for multiple measurement of regional blood flow of the rat brain using radiolabeled microspheres. Nakai M, et al. **Brain Res** 1990 Jan 15; 507(1):168–71

Mosaic reconstruction of blood vessels in mouse neocortical tissue transplanted into the third ventricle of rat brain. Nakano Y, et al. **Brain Res** 1989 Sep 4;496(1-2):336–40

Confocal laser microscopy to study microcirculation on the rat brain surface in vivo. Villringer A, et al. **Brain Res** 1989 Dec 11;504(1):159–60

Cerebral microvessel endothelium is producing endothelin. Yoshimoto S, et al. **Brain Res** 1990 Feb 5;508(2):283–5

Topographic EEG in brain ischemia—correlation with blood flow and metabolism. Nagata K. **Brain Topogr** 1988 Winter; 1(2):97–106 (80 ref.)

No rarefaction of cerebral arterioles in hypertensive rats. Werber AH, et al. **Can J Physiol Pharmacol** 1990 Apr; 68(4):476–9

Cluster headache: transcranial Doppler ultrasound and rCBF studies. Dahl A, et al. **Cephalalgia** 1990 Apr;10(2):87–94

Cerebrovascular reactivity in migraineurs as measured by transcranial Doppler. Thomas TD, et al. **Cephalalgia** 1990 Apr;10(2):95–9

99mTc-D,L-hexamethylene-propyleneamine oxime (99mTc-HMPAO): basic kinetic studies of a tracer of cerebral blood flow. Andersen AR. **Cerebrovasc Brain Metab Rev** 1989 Winter;1(4):288–318 (74 ref.)

Local cerebral blood flow by xenon-enhanced CT: current status, potential improvements, and future directions. Gur D, et al. **Cerebrovasc Brain Metab Rev** 1989 Spring; 1(1):68–86 (67 ref.)

Influence of haematocrit in the cerebral circulation. Harrison MJ. **Cerebrovasc Brain Metab Rev** 1989 Spring;1(1):55–67 (45 ref.)

Cerebral autoregulation. Paulson OB, et al. **Cerebrovasc Brain Metab Rev** 1990 Summer;2(2):161–92 (204 ref.)

Adenosine in the control of the cerebral circulation. Phillis JW. **Cerebrovasc Brain Metab Rev** 1989 Spring;1(1):26–54 (189 ref.)

Autoradiographic assessment of pineal gland glucose utilization and capillary permeability in the unanesthetized rat. Cicciarello R, et al. **Childs Nerv Syst** 1990 Jun; 6(4):222–4

Chronic low-perfusion state in children with moyamoya disease following revascularization. Sato H, et al. **Childs Nerv Syst** 1990 May;6(3):166–71

Changes in cerebrovascular prostaglandins and thromboxane as a function of systemic blood pressure. Cerebral blood flow autoregulation of the newborn. Chemtob S, et al. **Circ Res** 1990 Sep;67(3):674–82

Regulation of large cerebral arteries and cerebral microvascular pressure. Faraci FM, et al. **Circ Res** 1990 Jan;66(1):8–17 (98 ref.)

Congruence of total and perfused capillary network in rat brains. Göbel U, et al. **Circ Res** 1990 Feb;66(2):271–81

Effects of aging on mechanics and composition of cerebral arterioles in rats. Hajdu MA, et al. **Circ Res** 1990 Jun; 66(6):1747–54

Cerebral perfusion pressure and CO2-reactivity in the evaluation of carotid obstructions. Strik F. **Clin Neurol Neurosurg** 1990;92(2):137–41

Tc-99m HMPAO brain perfusion tomography atlas using a high resolution SPECT system. Matsuda H, et al. **Clin Nucl Med** 1990 Jun;15(6):428–31

Cerebral perfusion imaging with technetium-99m HMPAO following cerebral trauma. Initial experience. Reid RH, et al. **Clin Nucl Med** 1990 Jun;15(6):383–8

Topographic mapping of cerebral blood flow and behavior. Trivedi SS, et al. **Comput Biol Med** 1989;19(4):219–29

Physiology and pharmacology of cerebral blood flow and metabolism. Prough DS, et al. **Crit Care Clin** 1989 Oct; 5(4):713–28 (89 ref.)

Effect of posture on intracranial pressure and cerebral perfusion pressure in patients with fulminant hepatic and renal failure after acetaminophen self-poisoning. Davenport A, et al. **Crit Care Med** 1990 Mar;18(3):286–9

Prediction of changing cerebral blood flow by use of the conjunctival oxygen tension/arterial oxygen tension index [published erratum appears in Crit Care Med 1990 Jun;18(6):688] Rutherford WF, et al. **Crit Care Med** 1989 Dec;17(12):1328–32

Cerebral blood flow is reduced in patients with sepsis syndrome [letter; comment] Sinclair JF, et al. **Crit Care Med** 1990 Jun;18(6):684 Comment on: Crit Care Med 1989 May;17(5):399–403.

Extracorporeal membrane oxygenation and cerebral blood flow velocity in newborn infants. van de Bor M, et al. **Crit Care Med** 1990 Jan;18(1):10–3

Severe birth asphyxia and abnormal cerebral blood-flow velocity. Levene MI, et al. **Dev Med Child Neurol** 1989 Aug;31(4):427–34

Defective regulation of cerebral oxygen transport after severe birth asphyxia. Ramaekers VT, et al. **Dev Med Child Neurol** 1990 Jan;32(1):56–62

Ontogeny of adenosine production and degradation and its implications in neonatal cerebral blood flow regulation. Aranda JV, et al. **Dev Pharmacol Ther** 1989;13(2-4):96–103 (22 ref.)

Regional brain glucose metabolism and blood flow in streptozocin-induced diabetic rats. Jakobsen J, et al. **Diabetes** 1990 Apr;39(4):437–40

Hyperventilation-induced reduction in cerebral blood flow: assessment by positron emission tomography. Bednarczyk EM, et al. **DICP** 1990 May;24(5):456–60

Cerebral blood flow during cardiopulmonary bypass. Venn GE, et al. **Eur J Cardiothorac Surg** 1988;2(5):360–3

Nuclear medicine to image applied pathophysiology: evaluation of reserves by emission computerized tomography. Buell U, et al. **Eur J Nucl Med** 1990; 16(3):129–35 (81 ref.)

Brain perfusion with intracarotid injection of 99mTc-HM-PAO in partial epilepsy during amobarbital testing. Hietala SO, et al. **Eur J Nucl Med** 1990; 16(8–10):683–7

"Luxury perfusion" with 99mTc-HMPAO and 123I-IMP SPECT imaging during the subacute phase of stroke. Moretti JL, et al. **Eur J Nucl Med** 1990;16(1):17–22

Pathogenesis of aphasia in deep-seated lesions: likely role of cortical diaschisis. Demeurisse G, et al. **Eur Neurol** 1990; 30(2):67–74

Positron emission tomography studies of changes in cerebral blood flow and oxygen metabolism in arteriovenous malformation of the brain. De Reuck J, et al. **Eur Neurol** 1989;29(5):294–7

Transcranial Doppler sonography as a diagnostic tool in vascular dementia. Provinciali L, et al. **Eur Neurol** 1990; 30(2):98–103

Stability of cerebral blood flow and oxygen metabolism during normal aging. Itoh M, et al. **Gerontology** 1990; 36(1):43–8

Migraine with and without aura: the same disease due to cerebral vasospasm of different intensity. A hypothesis based on CBF studies during migraine. Skyhøj Olsen T. **Headache** 1990 Apr;30(5):269–72 (43 ref.)

Blood flow changes in chicken brain stem auditory nuclei following cochlea removal. Richardson BE, et al. **Hear Res** 1990 Jun;46(1-2):53–61

Brain activity and blood flow velocity changes: a transcranial Doppler study. Harders AG, et al. **Int J Neurosci** 1989 Jul;47(1-2):91–102

Primary dysautonomia: cerebral blood flow and hemodynamic findings. Case report. Nobili F, et al. **Ital J Neurol Sci** 1990 Jun;11(3):283–8

Cerebral blood flow and plasma free tryptophan in cirrhotics with and without hepatic encephalopathy. Testa R, et al. **Ital J Neurol Sci** 1989 Aug;10(4):415–21

Regional cerebral blood flow in depression: associations with psychopathology. Schlegel S, et al. **J Affective Disord** 1989 Nov-Dec;17(3):211–8

After reaching retirement age physical activity sustains cerebral perfusion and cognition. Rogers RL, et al. **J Am Geriatr Soc** 1990 Feb;38(2):123–8

Influence of adenosine on cerebral blood flow during hypoxic hypoxia in the newborn piglet. Laudignon N, et al. **J Appl Physiol** 1990 Apr;68(4):1534–41

Cerebral blood flow during submaximal and maximal dynamic exercise in humans. Thomas SN, et al. **J Appl Physiol** 1989 Aug;67(2):744–8

Quantitation of cerebral blood volume in human infants by near-infrared spectroscopy. Wyatt JS, et al. **J Appl Physiol** 1990 Mar;68(3):1086–91

A quantitative study of changes in old age of 5-hydroxytryptamine-like immunoreactivity in perivascular nerves of the rabbit. Gale JD, et al. **J Auton Nerv Syst** 1989 Oct;28(1):51–60

Monitoring cerebral perfusion during carotid endarterectomy. Padayachee TS, et al. **J Cardiovasc Surg (Torino)** 1990 Jan-Feb;31(1):112–4

XIV International Symposium on Cerebral Blood Flow and Metabolism. Bologna, Italy, 28th May-1st June 1989. Abstracts. **J Cereb Blood Flow Metab** 1989;9 Suppl 1:S1–756

Use of PET methods for measurement of cerebral energy metabolism and hemodynamics in cerebrovascular disease. Baron JC, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):723–42 (134 ref.)

Use of 19F NMR spectroscopy for measurement of cerebral blood flow: a comparative study using microspheres. Barranco D, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):886–91

Autoregulation of cerebral blood flow in experimental focal brain ischemia. Dirnagl U, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):327–36

Comparison of [99mTc]HMPAO SPECT with [18F]fluoromethane PET in cerebrovascular disease. Heiss WD, et al. **J Cereb Blood Flow Metab** 1990 Sep; 10(5):687–97

Continuous monitoring of cerebrocortical blood flow during stimulation of the cerebellar fastigial nucleus: a study by laser-Doppler flowmetry. Iadecola C, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):608–17

A determination of the regional brain/blood partition coefficient of water using dynamic positron emission tomography. Iida H, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):874–85

Combination of dynamic and integral methods for generating reproducible functional CBF images. Lammertsma AA, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):675–86

Cerebral blood flow, glucose utilization, regional glucose, and ATP content during the maturation period of delayed ischemic injury in gerbil brain. Mies G, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):638–45

Evaluation of the 11CO2 positron emission tomographic method for measuring brain pH. II. Quantitative pH mapping in patients with ischemic cerebrovascular diseases. Senda M, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):859–73

Selective electrical stimulation of postganglionic

cerebrovascular parasympathetic nerve fibers originating from the sphenopalatine ganglion enhances cortical blood flow in the rat. Suzuki N, et al.
J Cereb Blood Flow Metab 1990 May;10(3):383–91

Neuropeptide Y and the cerebral circulation. Tuor UI, et al. **J Cereb Blood Flow Metab** 1990 Sep;10(5):591–601

Transcranial Doppler sonography in children. Bode H, et al. **J Child Neurol** 1989;4 Suppl:S68–76 (45 ref.)

Cerebral hemodynamic changes and electroencephalography during carotid endarterectomy. Algotsson L, et al.
J Clin Anesth 1990 May–Jun;2(3):143–51

Loss of cerebrovascular autoregulation in experimental meningitis in rabbits. Tureen JH, et al. **J Clin Invest** 1990 Feb;85(2):577–81

Acute effects of smoking on blood pressure and cerebral blood flow. Cruickshank JM, et al. **J Hum Hypertens** 1989 Dec;3(6):443–9

Structure–activity relationships for metal–labeled blood flow tracers: comparison of keto aldehyde bis(thiosemicarbazonato)copper(II) derivatives. John EK, et al. **J Med Chem** 1990 Jun;33(6):1764–70

Alpha 1–adrenergic receptor binding sites in post–mortal human cerebral microvessel preparations: preservation in multi–infarct dementia and dementia of Alzheimer type. O'Neill C, et al.
J Neural Transm Park Dis Dement Sect 1989;1(4):303–10

Transport of lead–203 at the blood–brain barrier during short cerebrovascular perfusion with saline in the rat. Deane R, et al. **J Neurochem** 1990 Mar;54(3):905–14

Choline uptake by cerebral capillary endothelial cells in culture. Estrada C, et al. **J Neurochem** 1990 May; 54(5):1467–73

Small rises in plasma choline reverse the negative arteriovenous difference of brain choline. Klein J, et al. **J Neurochem** 1990 Oct;55(4):1231–6

Synthesis of apolipoprotein A–1 in pig brain microvascular endothelial cells. Weiler–Güttler H, et al. **J Neurochem** 1990 Feb;54(2):444–50

Immunostaining of human brain capillaries by antibodies to very late antigens. McGeer PL, et al. **J Neuroimmunol** 1990 Mar;26(3):213–8

Transcranial Doppler sonographic studies of cerebral autoregulation in Shy–Drager syndrome. Briebach T, et al. **J Neurol** 1989 Sep;236(6):349–50

Sequential PET studies in neuro–Behçet's syndrome. Mineura K, et al. **J Neurol** 1989 Sep;236(6):367–70

Regional cerebral blood flow by SPECT imaging in Sturge–Weber disease: an aid for diagnosis. Chiron C, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1402–9

Regional cerebral blood flow (rCBF) and cerebral vasoreactivity in patients with retinal ischaemic symptoms. Kerty E, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec; 52(12):1345–50

Effect of the knee–chest position on cerebral blood flow in patients undergoing lumbar spinal surgery. Pittet JF, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1277–80

Cerebral diaschisis in patients with malignant glioma. Rozental JM, et al. **J Neurooncol** 1990 Apr;8(2):153–61

Human immunodeficiency virus (HIV) leukoencephalopathy and the microcirculation. Smith TW, et al.
J Neuropathol Exp Neurol 1990 Jul;49(4):357–70

Serial determinations of regional cerebral blood flow in the rat using simple chronically implanted platinum wire microelectrodes. Jackowski A, et al.
J Neurosci Methods 1989 Nov;30(2):133–9

Transcranial Doppler sonography—non–invasive monitoring of intracranial vasculature. March K. **J Neurosci Nurs** 1990 Apr;22(2):113–6

Relationship between cardiac output and cerebral blood flow in patients with intact and with impaired autoregulation. Bouma GJ, et al. **J Neurosurg** 1990 Sep;73(3):368–74

Estimation of CBF by cerebral venous oxygen difference [letter; comment] Gilbert J. **J Neurosurg** 1989 Nov;71(5 Pt 1):790–1 Comment on: J Neurosurg 1989 Feb;70(2):222–30.

Transcranial Doppler pulsatility in vasodilation and stenosis. Giller CA, et al. **J Neurosurg** 1990 Jun;72(6):901–6

Impaired capillary perfusion and brain edema following experimental subarachnoid hemorrhage: a morphometric study. Johshita H, et al. **J Neurosurg** 1990 Sep;73(3):410–7

Vascular pressures and cortical blood flow in cavernous angioma of the brain. Little JR, et al. **J Neurosurg** 1990 Oct;73(4):555–9

Transcranial Doppler ultrasound studies of cerebral autoregulation and subarachnoid hemorrhage in the rabbit. Nelson RJ, et al. **J Neurosurg** 1990 Oct;73(4):601–10

Cerebral blood flow and glucose metabolism in experimental brain edema. Sutton LN, et al. **J Neurosurg** 1989 Dec; 71(6):868–74

Modulation of blood flow following excision of a high–flow cerebral arteriovenous malformation. Case report. Tamaki N, et al. **J Neurosurg** 1990 Mar;72(3):509–12

Injection–corrosion cast study of the microcirculation of the brain in haemorrhagic and ischaemic disorders. Preliminary investigation. Maccotta V, et al. **J Neurosurg Sci** 1989 Apr–Jun;33(2):157–60

Quantitation of regional myocardial blood flow: oxygen–15–water versus nitrogen–13–ammonia [letter] Bianco JA. **J Nucl Med** 1990 Aug;31(8):1431–3

Validation studies of iodine–123–iodoamphetamine as a cerebral blood flow tracer using emission tomography. Greenberg JH, et al. **J Nucl Med** 1990 Aug;31(8):1364–9

Characterization of technetium–99m–L,L–ECD for brain perfusion imaging, Part 2: Biodistribution and brain imaging in humans. Léveillé J, et al. **J Nucl Med** 1989 Nov; 30(11):1902–10

SPECT quantification of cerebral ischemia before and after carotid endarterectomy. Maurer AH, et al. **J Nucl Med** 1990 Aug;31(8):1412–20

Measuring the ratio of rCBV to rCBF with SPECT [letter] Merrick MV. **J Nucl Med** 1990 Aug;31(8):1433–4

A neutral lipophilic technetium–99m complex for regional cerebral blood flow imaging. Narra RK, et al.
J Nucl Med 1990 Aug;31(8):1370–7

The utility of cerebral blood flow imaging in patients with the unique syndrome of progressive dementia with motor neuron disease. Ohnishi T, et al. **J Nucl Med** 1990 May; 31(5):688–91

Characterization of technetium–99m–L,L–ECD for brain perfusion imaging, Part 1: Pharmacology of technetium–99m ECD in nonhuman primates. Walovitch RC, et al. **J Nucl Med** 1989 Nov;30(11):1892–901

Regional cerebral blood flow velocity patterns in newborn infants. Lui K, et al. **J Paediatr Child Health** 1990 Feb; 26(1):55–7

Heterogeneity of cerebral vasoreactivity in preterm infants supported by mechanical ventilation. Pryds O, et al.
J Pediatr 1989 Oct;115(4):638–45

Transfemoral balloon aortic occlusion during open cardiopulmonary resuscitation improves myocardial and cerebral blood flow. Spence PA, et al. **J Surg Res** 1990 Sep;49(3):217–21

A comparison of the cerebral and cardiovascular effects of complete resuscitation with isotonic and hypertonic saline, hetastarch, and whole blood following hemorrhage. Ducey JP, et al. **J Trauma** 1989 Nov;29(11):1510–8

The effects of aortic crossclamping and resuscitation on intracranial pressure, cerebral blood flow, and cerebral water content in a model of focal brain injury and hemorrhagic shock. Shackford SR, et al. **J Trauma** 1990 Jul;30(7):768–74; discussion 774–5

Clinical observations on the effect of carotid artery occlusion on cerebral blood flow mapped by xenon computed tomography and its correlation with carotid artery back pressure. Steed DL, et al. **J Vasc Surg** 1990 Jan;11(1):38–43; discussion 43–4

Cerebral blood flow velocity waveforms in hydrocephalic fetuses. Kirkinen P, et al. **JCU** 1988 Sep;16(7):493–8

Vasodilatation and migraine. **Lancet** 1990 Apr 7; 335(8693):822–3 (26 ref.)

Focal cerebral dysfunction in developmental learning disabilities. Lou HC, et al. **Lancet** 1990 Jan 6;335(8680):8–11

A new method to predict safe resection of the internal carotid artery. de Vries EJ, et al. **Laryngoscope** 1990 Jan; 100(1):85–8

Functional cerebral imaging by susceptibility–contrast NMR. Belliveau JW, et al. **Magn Reson Med** 1990 Jun; 14(3):538–46

Measurement of cerebral blood flow in rat brain by 19F–NMR detection of trifluoromethane washout. Detre JA, et al. **Magn Reson Med** 1990 Jul;15(1):45–57

Measurement of regional cerebral blood flow in cat brain using intracarotid 2H2O and 2H NMR imaging. Detre JA, et al. **Magn Reson Med** 1990 May;14(2):389–95

Assessment of a superparamagnetic iron oxide (AMI–25) as a brain contrast agent. Kent TA, et al.
Magn Reson Med 1990 Mar;13(3):434–43

Validity of microsphere model in cerebral blood flow measurement using N–isopropyl–p–(I–123) iodoamphetamine. Murase K, et al. **Med Phys** 1990 Jan–Feb;17(1):79–83

Measurement of cerebral blood flow, cerebral blood volume, and cerebral capillary permeability in glioma–bearing rats. Aizawa S, et al. **Neurol Med Chir (Tokyo)** 1990 Feb; 30(2):113–8

Intracranial arteriovenous malformation: contralateral steal phenomena. Batjer HH, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):401–6

Intracranial arteriovenous malformation: relationships between clinical and radiographic factors and cerebral blood flow. Batjer HH, et al. **Neurol Med Chir (Tokyo)** 1989 May;29(5):395–400

Regional cerebral blood flow and oxygen metabolism in normal pressure hydrocephalus after subarachnoid hemorrhage. Ishikawa M, et al.
Neurol Med Chir (Tokyo) 1989 May;29(5):382–8

Postoperative luxury perfusion syndrome in patients with severe subarachnoid hemorrhage treated by early aneurysmal clipping. Ohta H. **Neurol Med Chir (Tokyo)** 1990 Jan;30(1):16–23

Regional cerebral blood flow in the persistent vegetative state. Sato M, et al. **Neurol Med Chir (Tokyo)** 1989 May; 29(5):389–94

Treatment of multiple intracranial aneurysms in the anterior circulation—case report. Yamaki T, et al.
Neurol Med Chir (Tokyo) 1990 Jan;30(1):47–50

Assessment of hemodynamic disturbances in aphasic patients by transcranial Doppler ultrasonography. Pendefunda L. **Neurol Psychiatr (Bucur)** 1989 Jul–Sep;27(3):197–200

Natural and surgically imposed anastomoses of the circle of Willis. Clark ME, et al. **Neurol Res** 1989 Dec;11(4):217–30

Cerebral blood flow and common carotid flow in neurologically asymptomatic carotid endarterectomy patients. Gratzl O, et al. **Neurol Res** 1990 Mar;12(1):26–8

Compensatory mechanisms in patients with asymptomatic carotid artery occlusion. Kuwert T, et al. **Neurol Res** 1990 Jun;12(2):89–93

Regional cerebral blood flow with age: changes in rCBF in childhood. Ogawa A, et al. **Neurol Res** 1989 Sep; 11(3):173–6

Carotid artery disease and low cerebral perfusion pressure: symptomatology, operative risk and outcome. Schroeder T, et al. **Neurol Res** 1990 Mar;12(1):35–40

Noninvasive study of critical thresholds of intracranial pressure and cerebral perfusion pressure for cerebral circulation and brain function. Shigemori M, et al.
Neurol Res 1989 Sep;11(3):165–8

Assessment: transcranial Doppler. Report of the American Academy of Neurology, Therapeutics and Technology Assessment Subcommittee. **Neurology** 1990 Apr; 40(4):680–1

Memory and regional cerebral blood flow in mildly symptomatic Alzheimer's disease. Reed BR, et al.
Neurology 1989 Nov;39(11):1537–9

Magnetic resonance angiography of the extracranial carotid arteries and intracranial vessels: a review. Ross JS, et al. **Neurology** 1989 Oct;39(10):1369–76 (22 ref.)

Cerebral blood flow velocity alterations during obstructive sleep apnea syndrome. Siebler M, et al. **Neurology** 1990 Sep;40(9):1461–2

Cortical and subcortical hyperperfusion during migraine and cluster headache measured by Xe CT–CBF. Kobari M, et al. **Neuroradiology** 1990;32(1):4–11

The cerebral circulation in cases of carotid cavernous fistula. Findings of single photon emission computed tomography. Watanabe A, et al. **Neuroradiology** 1990;32(2):108–13

Responses of regional cerebral blood flow following focal electrical stimulation of the nucleus basalis of Meynert and the medial septum using the [14C]iodoantipyrine method in rats. Adachi T, et al. **Neurosci Lett** 1990 May 4; 112(2–3):263–8

Stimulation of the septal complex increases local cerebral blood flow in the hippocampus in anesthetized rats. Cao WH, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):135–40

Electrical stimulation of the fastigial nucleus increases total cerebral blood flow in the monkey. Goadsby PJ, et al.
Neurosci Lett 1989 Dec 15;107(1–3):141–4

Increased alpha 2– and beta 2–adrenergic receptors in cerebral microvessels in Alzheimer disease. Kalaria RN, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):233–8

Erythrocytes suppress calcitonin gene–related peptide– and vasoactive intestinal polypeptide–like immunoreactivities in cerebrovascular nerve fibers after subarachnoid hemorrhage. Nozaki K, et al. **Neurosci Lett** 1990 Mar 2; 110(1–2):22–7

Stimulation of the rostral ventrolateral medullary neurons increases cortical cerebral blood flow via activation of the intracerebral neural pathway. Saeki Y, et al.
Neurosci Lett 1989 Dec 15;107(1–3):26–32

Maintenance of local cerebral blood flow after acute neuronal death: possible role of non–neuronal cells. Iadecola C, et al. **Neuroscience** 1990;35(3):559–75

Is TC–Doppler sonography a useful method for the determination of brain death? Gawlowski J, et al.
Neurosurg Rev 1989;12 Suppl 1:307–10

Significance of transcranial Doppler sonography in cerebral injury: influence of hemodynamic changes on therapeutic management. Gawlowski J, et al. **Neurosurg Rev** 1989;12 Suppl 1:386–8

Atraumatic estimation of blood flow arrest in the diagnosis of cerebral death with the transcranial Doppler investigation technique. Harders A. **Neurosurg Rev** 1989; 12 Suppl 1:298–301

Value of the transcranial Doppler ultrasound technique (ICD) for the determination of brain death. Ries F, et al.
Neurosurg Rev 1989;12 Suppl 1:302–6

Experimental study of continuous cerebral blood flow monitoring by the temperature–controlled thermoelectrical tissue blood flow meter. Sakamoto T, et al.
Neurosurg Rev 1989;12 Suppl 1:377–81

Evidence of redistribution of cerebral blood flow during treatment for an intracranial arteriovenous malformation. Batjer HH, et al. **Neurosurgery** 1989 Oct;25(4):599–604; discussion 605

Transcranial Doppler monitoring of cerebral blood velocity during craniotomy. Giller CA. **Neurosurgery** 1989 Nov; 25(5):769–76

Pericyte degeneration and thickening of basement membranes of cerebral microvessels in complex partial seizures: electron microscopic study of surgically removed tissue. Liwnicz BH, et al. **Neurosurgery** 1990 Mar;26(3):409–20

The effects of hyperventilation on cerebral blood flow in the rat with an open and closed carotid–jugular fistula. Morgan MK, et al. **Neurosurgery** 1989 Oct;25(4):606–11; discussion 611–2

Evaluation of posttraumatic cerebral blood flow velocities by transcranial Doppler ultrasonography. Weber M, et al.
Neurosurgery 1990 Jul;27(1):106–12

The effect of arteriovenous malformation resection on cerebrovascular reactivity to carbon dioxide. Young WL, et al. **Neurosurgery** 1990 Aug;27(2):257–66; discussion 266–7

Effects of repeated ischemia on cerebral blood flow and brain energy metabolism. Laptook AR, et al. **NMR Biomed** 1988 Apr;1(2):74–9

Non–invasive determination of cerebral blood flow changes

by 19F NMR spectroscopy. Rudin M, et al. **NMR Biomed** 1989 Sep;2(3):98–103

99Tcm–HMPAO SPET and cerebral blood flow: a study of CO2 reactivity. Choksey MS, et al. **Nucl Med Commun** 1989 Aug;10(8):609–18

Use of 18F–fluoromethane for cerebral blood flow measurement with PET. Herholz K, et al. **Nuklearmedizin** 1990 Mar;29(2):84

Cerebral blood flow and metabolism in experimental meningitis. Tureen J. **Pediatr Infect Dis J** 1989 Dec; 8(12):917–8

Cerebral blood flow in newborn infants with and without mechanical ventilation. Vergesslich KA, et al. **Pediatr Radiol** 1989;19(8):509–12

Cerebral blood flow and edema in perinatal hypoxic–ischemic brain damage. Mujsce DJ, et al. **Pediatr Res** 1990 May; 27(5):450–3

The effect of blood glucose concentration on postasphyxia cerebral hemodynamics in newborn lambs. Rosenberg AA, et al. **Pediatr Res** 1990 May;27(5):454–9

Impaired beta–adrenergic mediated cerebral blood flow response in streptozotocin diabetic rats. Lass P, et al. **Pharmacol Toxicol** 1989 Oct;65(4):318–20

The role of noise in the measurement of cerebral blood flow and partition coefficient using xenon–enhanced computed tomography. Bews J, et al. **Phys Med Biol** 1990 Jul; 35(7):937–45

Feasibility of simultaneous and sequentially administered dual tracer protocols for measurement of regional cerebral haematocrit using positron emission tomography. Kearfott KJ. **Phys Med Biol** 1990 Feb;35(2):249–58

Cortical functional architecture and local coupling between neuronal activity and the microcirculation revealed by in vivo high–resolution optical imaging of intrinsic signals. Frostig RD, et al. **Proc Natl Acad Sci U S A** 1990 Aug; 87(16):6082–6

Cerebral blood flow and metabolism of oxygen and glucose in young autistic adults. Herold S, et al. **Psychol Med** 1988 Nov;18(4):823–31

The pattern of function–related regional cerebral blood flow investigated by single photon emission tomography with 99mTc–HMPAO in patients with presenile Alzheimer's disease and Korsakoff's psychosis. Hunter R, et al. **Psychol Med** 1989 Nov;19(4):847–55

Effect of cervical spinal cord stimulation (cSCS) on cerebral glucose metabolism and blood flow in a vegetative patient assessed by positron emission tomography (PET) and single photon emission computed tomography (SPECT). Momose T, et al. **Radiat Med** 1989 Sep–Oct;7(5):243–6

Cerebral palsy: initial experience with Tc–99m HMPAO SPECT of the brain. Denays R, et al. **Radiology** 1990 Apr; 175(1):111–6

Cerebral blood flow: assessment with dynamic contrast–enhanced T2*–weighted MR imaging at 1.5 T. Edelman RR, et al. **Radiology** 1990 Jul;176(1):211–20

Right common carotid artery ligation for extracorporeal membrane oxygenation: cerebral blood flow velocity measurement with Doppler duplex US. Matsumoto JS, et al. **Radiology** 1990 Jun;175(3):757–60

Intracranial blood flow: quantification with duplex Doppler and color Doppler flow US. Taylor GA, et al. **Radiology** 1990 Jul;176(1):231–6

Headache: classification, mechanism and principles of therapy, with particular reference to migraine. Lance JW. **Recenti Prog Med** 1989 Dec;80(12):673–80 (56 ref.)

Cerebral perfusion and oxygen uptake studies in patients with intracranial tumors. Beaney RP. **Semin Neurol** 1989 Dec; 9(4):377–87 (20 ref.)

Evoked potentials and Doppler vascular studies in hydranencephaly. Gururaj AK, et al. **Singapore Med J** 1989 Feb;30(1):109–12

Abstracts. 15th International Joint Conference on Stroke and Cerebral Circulation. Orlando, Florida, February 15–17, 1990. **Stroke** 1990 Jan;21(1):156–99

Effect of induced hypertension on cerebral blood flow following middle cerebral occlusion in rats [letter; comment] Aspey BS, et al. **Stroke** 1990 May;21(5):827 Comment on: Stroke 1989 Nov;20(11):1538–44.

Prolonged hypoperfusion and early stroke after transient ischemic attack. Bogousslavsky J, et al. **Stroke** 1990 Jan; 21(1):40–6

Acute toxicity of a nuclear magnetic resonance cerebral blood flow indicator in cats. Branch CA, et al. **Stroke** 1990 Aug;21(8):1172–7

Reversed intracranial blood flow in patients with an intra–aortic balloon pump. Brass LM. **Stroke** 1990 Mar; 21(3):484–7

Prostanoids determine the range of cerebral blood flow autoregulation of newborn piglets. Chemtob S, et al. **Stroke** 1990 May;21(5):777–84

A single–photon emission computed tomography study of hypoperfusion after subarachnoid hemorrhage. Davis S, et al. **Stroke** 1990 Feb;21(2):252–9

Stable xenon versus radiolabeled microsphere cerebral blood flow measurements in baboons. DeWitt DS, et al. **Stroke** 1989 Dec;20(12):1716–23

Changes of cerebral blood flow velocity during cognitive activity [letter] Diehl RR, et al. **Stroke** 1990 Aug; 21(8):1236–7

Fluorocarbon–23 measure of cat cerebral blood flow by nuclear magnetic resonance. Ewing JR, et al. **Stroke** 1990 Jan;21(1):100–6

Cerebral blood flow and metabolism in normotensive and hypertensive patients with transient neurologic deficits. Fujii K, et al. **Stroke** 1990 Feb;21(2):283–90

Predictive value of brain perfusion single–photon emission computed tomography in acute ischemic stroke. Giubilei F, et al. **Stroke** 1990 Jun;21(6):895–900

Functional impairment due to white matter ischemia after middle cerebral artery occlusion in cats. Graf R, et al. **Stroke** 1990 Jun;21(6):923–8

Problems in cerebral blood flow calculation using xenon–133 in patients with pulmonary diseases. Hansen M, et al. **Stroke** 1990 May;21(5):745–50

Cerebral blood flow, glucose utilization, and electrocorticograms following common carotid artery occlusion in gerbils. Hasegawa Y, et al. **Stroke** 1990 Jan; 21(1):112–8

Brain edema and cerebrovascular permeability during cerebral ischemia in rats. Hatashita S, et al. **Stroke** 1990 Apr;21(4):582–8

The effect of gas emboli on rabbit cerebral blood flow. Helps SC, et al. **Stroke** 1990 Jan;21(1):94–9

Increasing doses of intracarotid air and cerebral blood flow in rabbits. Helps SC, et al. **Stroke** 1990 Sep;21(9):1340–5

Blood–brain barrier disturbance following subarachnoid hemorrhage in rabbits. Johshita H, et al. **Stroke** 1990 Jul; 21(7):1051–8

Carotid artery blood flow velocity related to transient ischemic attack and stroke in a population study of 69–year–old men. Jungquist G, et al. **Stroke** 1989 Oct; 20(10):1327–30

Chronic cerebral blood flow changes following experimental subarachnoid hemorrhage in rats. Kader A, et al. **Stroke** 1990 Apr;21(4):577–81

Sequential cerebral blood flow changes in short–term cerebral ischemia in gerbils. Kato H, et al. **Stroke** 1990 Sep;21(9):1346–9

Cerebral hemodynamic change in the child and the adult with moyamoya disease. Kuwabara Y, et al. **Stroke** 1990 Feb;21(2):272–7

Immunohistochemical characterization of cerebrovascular amyloid in 46 autopsied cases using antibodies to beta protein and cystatin C. Maruyama K, et al. **Stroke** 1990 Mar;21(3):397–403

Consistency of cerebral blood flow and evoked potential alterations with reversible focal ischemia in cats. Matsumiya N, et al. **Stroke** 1990 Jun;21(6):908–16

Local cerebral blood flow during and after bilateral carotid artery occlusion in unanesthetized gerbils. Nadasy GL, et al. **Stroke** 1990 Jun;21(6):901–7

Functional image of dynamic computed tomography for the evaluation of cerebral hemodynamics. Nagata K, et al. **Stroke** 1990 Jun;21(6):882–9

Regional cerebral blood flow and distribution of [99mTc]ethyl cysteinate dimer in nonhuman primates. Orlandi C, et al. **Stroke** 1990 Jul;21(7):1059–63

A simple test to assess cerebrovascular reserve capacity using transcranial Doppler sonography and acetazolamide. Piepgras A, et al. **Stroke** 1990 Sep;21(9):1306–11

Lidocaine accelerates neuroelectrical recovery after incomplete global ischemia in rabbits. Rasool N, et al. **Stroke** 1990 Jun;21(6):929–35

Cerebral vasoreactivity and blood flow before and 3 months after carotid endarterectomy. Russell D, et al. **Stroke** 1990 Jul;21(7):1029–32

Analysis of cerebrovascular sympathetic nerve density in relation to stroke development in spontaneously hypertensive rats. Smeda JS. **Stroke** 1990 May;21(5):785–9

Perfusion insufficiency in limb–shaking transient ischemic attacks. Tatemichi TK, et al. **Stroke** 1990 Feb;21(2):341–7

Xenon–enhanced computed tomography compared with [14C]iodoantipyrine for normal and low cerebral blood flow states in baboons. Wolfson SK Jr, et al. **Stroke** 1990 May;21(5):751–7

Three–minute blood flow index for assessment of cerebrovascular reserve. Young WL, et al. **Stroke** 1990 Feb; 21(2):278–82

Use of color–flow imaging technique in carotid artery disease. Sumner DS. **Surg Clin North Am** 1990 Feb; 70(1):201–11 (17 ref.)

Significance of preserving bridging veins in an interhemispheric approach [letter] Aoki N, et al. **Surg Neurol** 1990 Feb;33(2):159–60

Intracranial pressure response to stable xenon inhalation in patients with head injury. Darby JM, et al. **Surg Neurol** 1989 Nov;32(5):343–5

Vertebrobasilar insufficiency: stable xenon computed tomography–cerebral blood flow study in posterior circulation revascularization. Touho H, et al. **Surg Neurol** 1990 Sep;34(3):144–54

Cerebral blood flow velocity in newborn infants with asphyxia. Lin FK, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Mar;89(3):190–3

The value of cerebral blood flow measurement in carotid surgery. Grossmann W. **Thorac Cardiovasc Surg** 1989 Aug; 37(4):246–52 (28 ref.)

Repeatability of Doppler ultrasound measurement of blood flow velocity and its variability in the supraclinoid segment of the internal carotid artery in preterm newborns. Mullaart RA, et al. **Ultrasound Med Biol** 1989;15(6):545–53

[Experimental study of hemodynamic changes following obliteration of the vertebral artery and surgical treatment] Zheng ZG. **Chung Hua Wai Ko Tsa Chih** 1989 Dec; 27(12):732–4, 780 (Eng. Abstr.) **(Chi)**

[3–dimensional transcranial dopplerometry of the cerebral vessels. Methods and normal values] Modravý V, et al. **Cesk Neurol Neurochir** 1989 May;52(3):186–92 (Eng. Abstr.) **(Cze)**

[Reactive hyperemia in the brain of rats after high altitude hypoxia] Trojan S, et al. **Sb Lek** 1990 Apr;92(4):97–102 (Eng. Abstr.) **(Cze)**

[Transcranial Doppler measurement of hemodynamics in the major cerebral arteries] Nevrtal M, et al. **Vnitr Lek** 1990 Mar;36(3):226–37 (Eng. Abstr.) **(Cze)**

[Cerebrovascular Doppler studies in infants and neonates. Marginal observations on the method] Mullaart RA, et al. **Tijdschr Kindergeneeskd** 1989 Jun;57(3):112–7 (35 ref.) (Eng. Abstr.) **(Dut)**

[The use of radionuclides, specifically positron–emission tomography, in the determination of the blood circulation and metabolism of the brain. Application in experimental cerebral embolism] Weyne J, et al. **Verh K Acad Geneeskd Belg** 1989;51(4):315–76 (55 ref.) (Eng. Abstr.) **(Dut)**

[Postanoxia encephalopathies] Haberer JP, et al. **Ann Fr Anesth Reanim** 1990;9(3):212–9 (33 ref.) (Eng. Abstr.) **(Fre)**

[Correlation of thalamic aphasia and cerebral blood flow] Rousseaux M, et al. **Rev Neurol (Paris)** 1990;146(5):345–53 (Eng. Abstr.) **(Fre)**

[Study of human cerebral blood flow by corrosion casts of the carotid system] Anderhuber F, et al. **Acta Anat (Basel)** 1989;136(1):42–8 (Eng. Abstr.) **(Ger)**

[Transcranial Doppler sonography during pulsatile and non–pulsatile extracorporeal circulation] Thiel A, et al. **Anaesthesist** 1990 Apr;39(4):226–30 (Eng. Abstr.) **(Ger)**

[Hemorheologic therapy. Status and perspectives] Haass A. **Nervenarzt** 1989 Sep;60(9):528–39 (82 ref.) **(Ger)**

[Hemodilution in cerebral ischemia: a trial of treatment without a firm pathophysiologic concept] von Kummer R. **Nervenarzt** 1989 Sep;60(9):523–7 (33 ref.) **(Ger)**

[A method of adjusting and evaluating MRT and SPECT tomograms for comparing cerebral morphology with cerebrovascular regulation] Kaiser HJ, et al. **Nuklearmedizin** 1990 Feb;29(1):13–8 (Eng. Abstr.) **(Ger)**

[Determination of cerebral blood flow using an 81Rb/81mKr generator system] Schroth HJ, et al. **Nuklearmedizin** 1990 Feb;29(1):7–12 (Eng. Abstr.) **(Ger)**

[The relevance of duplex Doppler sonography in pediatrics] Vergesslich KA. **Padiatr Padol** 1989;24(3):195–213 (Eng. Abstr.) **(Ger)**

[Quantitative determination of cerebral perfusion using digital subtraction angiography (DSA)] Metzmann U, et al. **ROFO** 1990 Jul;153(1):41–7 (Eng. Abstr.) **(Ger)**

[Determination of regional cerebrovascular perfusion reserve (rCPR) using quantitative flow/volume (F/V)–SPECT. Results in patients with subcortical ischemic brain lesions with or without neuropsychological symptoms] Reiche W, et al. **ROFO** 1990 Jul;153(1):36–40 (Eng. Abstr.) **(Ger)**

[Transcranial Doppler sonography. Normal values and physiologic changes] Rosenkranz K, et al. **ROFO** 1990 Mar;152(3):321–6 (Eng. Abstr.) **(Ger)**

[The effect of physical stress on the blood flow velocity in the middle cerebral artery. A transcranial Doppler sonographic study] Briebach T, et al. **Ultraschall Med** 1989 Oct;10(5):250–3 (Eng. Abstr.) **(Ger)**

[Microcirculatory, hemorheologic and microcirculatory parameters before and following hypervolemic hemodilution in patients with acute cerebrovascular disorders] Staedt U, et al. **Vasa Suppl** 1989;27:33–4 **(Ger)**

[Cerebral autoregulation and the treatment of hypertensive patients with cerebrovascular accidents] Rosen B, et al. **Harefuah** 1990 Jan 1;118(1):24–5 (13 ref.) **(Heb)**

[Regional cerebral blood flow studied by single photon emission computed tomography (SPECT)] Pávics L, et al. **Orv Hetil** 1990 Jan 7;131(1):3–8 (36 ref.) (Eng. Abstr.) **(Hun)**

[Evaluation of cerebral circulation in the presence of carotid vessel changes] Fiermonte G, et al. **Riv Neurol** 1989 May–Jun;59(3):99–102 (Eng. Abstr.) **(Ita)**

[Effects of cerebral blood flow on hypoxic ventilatory response—a human study by jugular venous blood sampling] Suzuki A. **Hokkaido Igaku Zasshi** 1989 Sep; 64(5):558–66 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of Parkinson's disease using 123I–IMP SPECT] Hayashi H, et al. **Kaku Igaku** 1989 Nov; 26(11):1405–15 (Eng. Abstr.) **(Jpn)**

[Compartment analysis of 123I–IMP brain SPECT] Higano S, et al. **Kaku Igaku** 1990 Jan;27(1):51–4 (Eng. Abstr.) **(Jpn)**

[Crossed "cerebral" diaschisis? Seven cases with unilateral cerebellar vascular lesion which showed decreased perfusion in the contralateral cerebral cortex] Kimura S, et al. **Kaku Igaku** 1989 Oct;26(10):1259–66 (Eng. Abstr.) **(Jpn)**

[Development of the most suitable collimator system for Xe–133 inhalation rCBF SPECT and its performance] Komatani A, et al. **Kaku Igaku** 1990 Feb;27(2):173–7 **(Jpn)**

[Fluctuation of end–tidal CO2 concentration at rCBF measurement by Xe–133 inhalation and the necessity of its correction for CO2] Komatani A. **Kaku Igaku** 1990 Jan; 27(1):65–8 **(Jpn)**

[Brain perfusion SPECT imaging before and during the

acetazolamide test using 99mTc-HMPAO] Matsuda H, et al. **Kaku Igaku** 1990 May;27(5):485–92 (Eng. Abstr.) **(Jpn)**

[The quantitative analysis of regional cerebral blood flow by peripheral venous sampling in single photon emission computed tomography using N-isopropyl-p-[123I]iodoamphetamine: comparison with peripheral arterial sampling] Mimura H, et al. **Kaku Igaku** 1989 Oct;26(10):1327–34 **(Jpn)**

[Assessment of cerebral blood flow in intracerebral hematoma using IMP-SPECT] Okizuka H, et al. **Kaku Igaku** 1989 Dec;26(12):1531–6 (Eng. Abstr.) **(Jpn)**

[Analysis of relative cerebral perfusion in ischemic cerebral diseases by single photon emission computed tomography using N-isopropyl-p-[123I]iodoamphetamine] Suwa K, et al. **Kaku Igaku** 1989 Oct;26(10):1311–9 (Eng. Abstr.) **(Jpn)**

[SPECT measurement of cerebral hemodynamics in transient ischemic attack patients—evaluation of pathogenesis and detection of misery perfusion] Toyama H, et al. **Kaku Igaku** 1989 Dec;26(12):1487–92 (Eng. Abstr.) **(Jpn)**

[Evaluation of cerebral hemodynamics by 123I-IMP in cerebral AVMs before and after operation by using SPECT] Toyama H, et al. **Kaku Igaku** 1989 Dec; 26(12):1479–86 (Eng. Abstr.) **(Jpn)**

[A fast technique to estimate local cerebral blood flow and partition coefficient using dynamic PET of H(2)15O: a new approach to weighted integration method based on time integration of Kety-Schmidt equation] Yokoi T, et al. **Kaku Igaku** 1990 Mar;27(3):273–7 (Eng. Abstr.) **(Jpn)**

[A case of successful surgery in ruptured aneurysm of the aortic arch under profound hypothermic selective cerebral perfusion] Mizutani S, et al. **Kyobu Geka** 1990 Jul; 43(7):543–6 (Eng. Abstr.) **(Jpn)**

[A new thermal diffusion flow probe for continuous monitoring of cerebral blood flow in small animals] Kuwayama N, et al. **Neurol Med Chir (Tokyo)** 1989 Dec; 29(12):1078–84 (Eng. Abstr.) **(Jpn)**

[Monoamine metabolism after transient global ischemia. Mechanism of delayed postischemic hypoperfusion] Maruki C. **Neurol Med Chir (Tokyo)** 1989 Dec;29(12):1093–100 (Eng. Abstr.) **(Jpn)**

[Measurement of cerebral blood flow by single photon emission computed tomography in cases of internal carotid artery occlusion] Sunada I. **Neurol Med Chir (Tokyo)** 1989 Jun;29(6):496–502 (Eng. Abstr.) **(Jpn)**

[The Chronological changes in the cerebral blood flow and cerebral metabolic rate for glucose in the ischemic rabbit brain] Tenjin H, et al. **Neurol Med Chir (Tokyo)** 1989 Dec; 29(12):1085–92 (Eng. Abstr.) **(Jpn)**

[Diffuse bilateral periventricular hyperintensity of unknown origin on MRI spin-echo sequence. Cognitive function and regional cerebral blood flow] Lee S. **Nippon Ika Daigaku Zasshi** 1990 Jun;57(3):244–52 (Eng. Abstr.) **(Jpn)**

[Studies of cerebral blood flow and metabolism in patients with senile dementia of the Alzheimer's type and diagnostic evaluation of the dementing illnesses by positron emission tomography] Sakamoto S. **Nippon Ika Daigaku Zasshi** 1990 Jun;57(3):222–34 (Eng. Abstr.) **(Jpn)**

[A clinical study on brain perfusion during cardiopulmonary bypass] Kono M. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jun;38(6):970–81 (Eng. Abstr.) **(Jpn)**

[3-dimensional imaging of regional cerebral blood flow by means of emission computed tomography] Higano S, et al. **Nippon Rinsho** 1990 Jul;48(7):1591–8 (6 ref.) **(Jpn)**

[Cerebral hemodynamics in multiple cerebral infarction with or without dementia] Kitamura S, et al. **Nippon Ronen Igakkai Zasshi** 1989 Nov;26(6):557–62 (Eng. Abstr.) **(Jpn)**

[Cerebral blood flow of the non-affected brain in patients with malignant brain tumors as studied by SPECT; with special reference to adverse effects of radiochemotherapy] Araki Y, et al. **No Shinkei Geka** 1990 Jul;18(7):601–8 (Eng. Abstr.) **(Jpn)**

[Cerebral hemodynamics and functional prognosis in hydrocephalus] Hirai O, et al. **No Shinkei Geka** 1989 Nov; 17(11):1015–21 (Eng. Abstr.) **(Jpn)**

[Diagnosis of hemodynamic compromise in patients with chronic cerebral ischemia; the detection of impaired vasodilatory capacity with 133Xe SPECT and acetazolamide (Diamox) test] Kuroda S, et al. **No Shinkei Geka** 1990 Feb;18(2):167–73 (Eng. Abstr.) **(Jpn)**

[Diagnosis of hemodynamic compromise in patients with chronic cerebral ischemia; measurement of cerebral blood volume (CBV) with 99mTc-RBC SPECT] Kuroda S, et al. **No Shinkei Geka** 1990 Mar;18(3):259–66 (Eng. Abstr.) **(Jpn)**

[Analysis of regional blood flow, blood volume, oxygen and glucose metabolism in heterogeneous parts of untreated high grade gliomas using positron emission tomography (PET)] Sasajima T, et al. **No Shinkei Geka** 1989 Nov; 17(11):1005–13 (Eng. Abstr.) **(Jpn)**

[Luxury perfusion in herpes simplex encephalitis] Nara T, et al. **No To Hattatsu** 1989 Jul;21(4):390–1 **(Jpn)**

[Ultrasonic Doppler assessment of hemodynamics in extra-intracranial arterial anastomosis in children with Moyamoya disease] Tagawa T, et al. **No To Hattatsu** 1989 Jul;21(4):354–60 (Eng. Abstr.) **(Jpn)**

[Cerebral blood flow and oxygen metabolism in Rett syndrome] Yoshikawa H, et al. **No To Hattatsu** 1990 May; 22(3):216–22 (Eng. Abstr.) **(Jpn)**

[Cerebral microcirculation during increased intracranial pressure—assessment with reflectance photometry] Hashimoto K, et al. **No To Shinkei** 1990 Feb;42(2):153–8 (Eng. Abstr.) **(Jpn)**

[Assessment of reproducibility of transcranial Doppler velocimetry] Maeda H, et al. **No To Shinkei** 1989 Jul; 41(7):661–6 (Eng. Abstr.) **(Jpn)**

[Influence of superior cervical ganglion on cerebral hemodynamics—measurements of cerebral blood flow and metabolism during superior cervical ganglionectomy in patients with moyamoya disease] Sato H, et al. **No To Shinkei** 1990 Feb;42(2):203–8 (Eng. Abstr.) **(Jpn)**

[Regional cerebral blood flow and oxygen consumption during normal human sleep] Takahashi K. **No To Shinkei** 1989 Sep;41(9):919–25 (Eng. Abstr.) **(Jpn)**

[Vascular responses in cerebrovascular "Moyamoya" disease—evaluated by positron emission tomography] Tomura N, et al. **No To Shinkei** 1989 Sep;41(9):895–904 (Eng. Abstr.) **(Jpn)**

[Stable xenon CT-CBF study with measurement of end-tidal xenon concentration—correction by arterial concentration of xenon] Touho H, et al. **No To Shinkei** 1989 Jun; 41(6):603–9 (Eng. Abstr.) **(Jpn)**

[Responses of cerebral arteries to the changes in cerebral perfusion pressure] Yamaguchi S, et al. **No To Shinkei** 1989 Aug;41(8):807–11 (Eng. Abstr.) **(Jpn)**

[The effects of disturbance of cerebral venous drainage on focal cerebral blood flow and ischemic cerebral edema] Yura S, et al. **No To Shinkei** 1990 Mar;42(3):269–75 (Eng. Abstr.) **(Jpn)**

[Cerebral blood flow imaging in patients with moyamoya disease] Ohnishi T, et al. **Radioisotopes** 1989 Jul; 38(7):305–10 (Eng. Abstr.) **(Jpn)**

[Measurements of cerebral blood flow and metabolism in patients with Alzheimer's disease] Kitamura S, et al. **Rinsho Byori** 1990 May;38(5):494–8 (Eng. Abstr.) **(Jpn)**

[Cerebral blood flow and oxygen metabolism in ischemic cerebrovascular disease; embolic occlusion and thrombotic occlusion] Higano S, et al. **Rinsho Hoshasen** 1989 Jun; 34(6):683–90 (Eng. Abstr.) **(Jpn)**

[The early and delayed SPECT images of 123I-IMP and rCBF measurement] Odano I. **Rinsho Hoshasen** 1989 Jun; 34(6):667–73 (Eng. Abstr.) **(Jpn)**

[Cognitive function, cerebral blood flow and brain atrophy in olivo-ponto-cerebellar atrophy] Kobayashi S, et al. **Rinsho Shinkeigaku** 1990 Feb;30(2):157–63 (Eng. Abstr.) **(Jpn)**

[A case of "pure" progressive autonomic failure with impairment of cerebral blood flow autoregulation] Nishimura H, et al. **Rinsho Shinkeigaku** 1989 Nov; 29(11):1381–6 (28 ref.) (Eng. Abstr.) **(Jpn)**

[PET study on cerebral hemodynamics in internal carotid artery occlusion—the pathogenesis of watershed infarction] Yamauchi H, et al. **Rinsho Shinkeigaku** 1990 May; 30(5):492–8 (Eng. Abstr.) **(Jpn)**

[Imaging brain function with autoradiography and positron emission tomography] Kato M, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1182–91 **(Jpn)**

[Dynamic structure of blood flow in the smallest veins of the brain] Ivanov KP, et al. **Biull Eksp Biol Med** 1990 Jan;109(1):8–11 (Eng. Abstr.) **(Rus)**

[Age-related dynamics of energy metabolism enzymes of neurons and microvessels of the brain in spontaneously hypertensive rats] Sorokoumov VA, et al. **Biull Eksp Biol Med** 1990 May;109(5):512–4 (Eng. Abstr.) **(Rus)**

[The effect of an increased erythrocyte count on rapid blood flow fluctuations in the microvessels of the rat brain] Kisliakov Iula, et al. **Fiziol Zh SSSR** 1989 Jun;75(6):777–85 (Eng. Abstr.) **(Rus)**

[Methodologic characteristics of recording the cerebral blood flow and arterial pressure of rats in a chronic experiment] Sitdikov II, et al. **Fiziol Zh SSSR** 1989 Jun;75(6):876–7 **(Rus)**

[Characteristics of central and cerebral blood circulation in patients with borderline arterial hypertension in Arctic conditions] Iakovlev VA, et al. **Klin Med (Mosk)** 1990 Apr; 68(4):53–7 **(Rus)**

[Single-photon emission-computed tomography of the head using labelled amines in visualizing the cerebral microcirculation] Liass FM, et al. **Med Radiol (Mosk)** 1990 Jul;35(7):23–7 (Eng. Abstr.) **(Rus)**

[Radioanatomy of cerebral perfusion in single-photon emission-computed tomography using 99mTc-labelled amines] Liass FM, et al. **Med Radiol (Mosk)** 1989 Dec; 34(12):3–7 (Eng. Abstr.) **(Rus)**

[Correlations between changes in hearing and cerebral hemodynamics in patients with chronic alcoholism] Khlystov VIu, et al. **Vestn Otorinolaringol** 1989 Sep-Oct; (5):5–8 (Eng. Abstr.) **(Rus)**

[Equilibrium function in patients with chronic encephalopathy as an indicator of compensation level in cerebral circulation insufficiency] Luchikhin LA, et al. **Vestn Otorinolaringol** 1990 Jan-Feb;(1):14–7 (Eng. Abstr.) **(Rus)**

[The condition of cerebral hemodynamics of pilots during graded physical loads] Starikov LI. **Voen Med Zh** 1989 Jun;(6):45–9 **(Rus)**

[Changes in the cerebral hemodynamics of patients with vibration-induced disease undergoing sanatorium-health resort treatment] El'garov AA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 May-Jun; (3):44–7 **(Rus)**

[The significance of the fibrinogen level and hematocrit for the quantitative determination of cerebral blood flow] Vinichuk SM. **Vrach Delo** 1990 May;(5):40–2 (Eng. Abstr.) **(Rus)**

[Effect of the cerebrospinal fluid from patients with cerebral pathology on regional cerebral blood flow in experimental animals] Maiorova NF, et al. **Zh Nevropatol Psikhiatr** 1989; 89(7):105–9 (Eng. Abstr.) **(Rus)**

[Cerebral hemodynamics in occlusive diseases of major extracranial arteries] Pyshkina LI, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):86–8 (Eng. Abstr.) **(Rus)**

[Evaluation of pre- and postoperative cerebral hemodynamics in extracranial carotid surgery using transcranial Doppler. Preliminary note] Raso AM, et al. **Angiologia** 1989 Jul-Aug;41(4):161–5 (Eng. Abstr.) **(Spa)**

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The effects of propofol on intracranial pressure and cerebral perfusion pressure in patients with brain tumors. Van Hemelrijck J, et al. **Acta Anaesthesiol Belg** 1989; 40(2):95–100

The cerebral arterio-venous oxygen content differences (AVDO2) during halothane and neurolept anaesthesia in patients subjected to craniotomy. Engberg M, et al. **Acta Anaesthesiol Scand** 1989 Nov;33(8):642–6

Effect of adenosine-induced hypotension on the cerebral autoregulation in the anesthetized pig. Stänge K, et al. **Acta Anaesthesiol Scand** 1989 Aug;33(6):450–7

Midazolam and flumazenil in neuroanaesthesia. Schulte am Esch J, et al. **Acta Anaesthesiol Scand Suppl** 1990;92:96–102 (32 ref.)

Cerebrovascular and metabolic effects of midazolam and flumazenil. Wolff J. **Acta Anaesthesiol Scand Suppl** 1990; 92:75–7 (20 ref.)

The effect of nimodipine on ICP and CBF in patients with normal-pressure hydrocephalus. Schmidt JF, et al. **Acta Neurochir (Wien)** 1990;102(1–2):11–3

Superoxide dismutase does not prevent delayed hypoperfusion after incomplete cerebral ischaemia in the rat. Schürer L, et al. **Acta Neurochir (Wien)** 1990; 103(3–4):163–70

Regional cerebral blood flow in acute hypertension induced by adrenaline, noradrenaline and phenylephrine in the conscious rat. Sokrab TE, et al. **Acta Physiol Scand** 1989 Sep;137(1):101–6

Behavioral and cerebrovascular effects of caffeine in patients with anxiety disorders. Mathew RJ, et al. **Acta Psychiatr Scand** 1990 Jul;82(1):17–22

Circulatory effect of kallikrein; with special reference to cerebral circulation. Miyazaki M. **Adv Exp Med Biol** 1989; 247B:607–10

Glycerol elicits cerebral vasodilation. Chen JL, et al. **Adv Neurol** 1990;52:542

Brain edema, autoregulation, and calcium antagonism. An experimental study with nimodipine. Gaab MR, et al. **Adv Neurol** 1990;52:391–400

Effect of glycerol on the hemodynamics of acutely induced ischemic area in the cerebral cortex of cats. Ohta K, et al. **Adv Neurol** 1990;52:275–84

Effects of dexamethasone on blood flow and volume of perfused microvessels in traumatic brain edema. Tajima A, et al. **Adv Neurol** 1990;52:343–50

Effects of glycerol infusion on cerebral blood flow in cases with hypertensive intracerebral hematoma. Yamada T, et al. **Adv Neurol** 1990;52:556

CBF decreases after calcium antagonist treatment in acute ischemic stroke. Vorstrup S, et al. **Agressologie** 1989 Jun; 30(7):447–9

Effects of inhaled stable xenon on cerebral blood flow velocity. Giller CA, et al. **AJNR** 1990 Jan-Feb; 11(1):177–82

Cerebral blood flow during the acute therapy of severe hypertension with oral clonidine. Greene CS, et al. **Am J Emerg Med** 1990 Jul;8(4):293–6

The effect of fosinopril sodium on cerebral blood flow in moderate essential hypertension. Waldemar G, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 1):464–70

Effects of cephalic hypotension, hypertension, and barbiturates on fetal cerebral flood flow and metabolism. Hohimer AR, et al. **Am J Obstet Gynecol** 1989 Nov; 161(5):1344–51

Adenosine and cerebral capillary perfusion and blood flow during middle cerebral artery occlusion. Anwar M, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1656–62

Dilator effects of amino acid neurotransmitters on piglet pial arterioles. Busija DW, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):H1200–3

Effect of fish oil n-3 fatty acids on cerebral microcirculation. Ellis EF, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):H1780–5

Cerebral blood flow and end-tidal PCO2 during prolonged acetazolamide treatment in humans. Friberg L, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H954–9

Differences in endothelium-dependent cerebral dilation by bradykinin and acetylcholine. Kontos HA, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1261–6

Effect of atriopeptin on blood flow to cerebrum and choroid

plexus. Schalk KA, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1365–9

A comparison of the effects of suxamethonium, atracurium and vecuronium on intracranial haemodynamics in swine. Ducey JP, et al. **Anaesth Intensive Care** 1989 Nov; 17(4):448–55

Effect of dexmedetomidine, a selective and potent alpha 2-agonist, on cerebral blood flow and oxygen consumption during halothane anesthesia in dogs. Karlsson BR, et al. **Anesth Analg** 1990 Aug;71(2):125–9

Effects of sufentanil on cerebral circulation and metabolism in dogs. Milde LN, et al. **Anesth Analg** 1990 Feb; 70(2):138–46

Effect of propofol on cerebral circulation and autoregulation in the baboon. Van Hemelrijck J, et al. **Anesth Analg** 1990 Jul;71(1):49–54

Dexmedetomidine, an alpha 2-adrenergic agonist, decreases cerebral blood flow in the isoflurane-anesthetized dog. Zornow MH, et al. **Anesth Analg** 1990 Jun;70(6):624–30

Measurement of cerebral blood flow and volume with positron emission tomography during isoflurane administration in the hypocapnic baboon. Archer DP, et al. **Anesthesiology** 1990 Jun;72(6):1031–7

Intracranial volume-pressure relationship following thiopental or etomidate. Artru AA. **Anesthesiology** 1989 Nov;71(5):763–8

Cerebrovascular and cerebral metabolic effects of N2O in unrestrained rats. Baughman VL, et al. **Anesthesiology** 1990 Aug;73(2):269–72

The cerebral functional, metabolic, and hemodynamic effects of desflurane in dogs. Lutz LJ, et al. **Anesthesiology** 1990 Jul;73(1):125–31

Sufentanil does not increase cerebral blood flow in healthy human volunteers. Mayer N, et al. **Anesthesiology** 1990 Aug;73(2):240–3

Effects of propofol on cerebral hemodynamics and metabolism in patients with brain trauma. Pinaud M, et al. **Anesthesiology** 1990 Sep;73(3):404–9

A comparison of the cerebral hemodynamic effects of sufentanil and isoflurane in humans undergoing carotid endarterectomy. Young WL, et al. **Anesthesiology** 1989 Dec;71(6):863–9

Effects of epinephrine and norepinephrine on cerebral oxygen delivery and consumption during open-chest CPR. Lindner KH, et al. **Ann Emerg Med** 1990 Mar;19(3):249–54

Effects of nilvadipine on cerebral circulation and metabolism in cats. Isozumi K, et al. **Arzneimittelforschung** 1990 Apr; 40(4):421–4

Increased external carotid artery blood flow in headache patients induced by cilostazol. Preliminary communication. Yamashita K, et al. **Arzneimittelforschung** 1990 May; 40(5):587–8

Effect of caffeine on cerebral blood flow velocity in preterm infants. Saliba E, et al. **Biol Neonate** 1989;56(4):198–203

Cerebral blood flow and metabolism during hypotension induced with sodium nitroprusside. Griffiths DP, et al. **Br J Anaesth** 1974 Sep;46(9):671–9

Effects of nitrous oxide and volatile anaesthetics on cerebral blood flow. Hansen TD, et al. **Br J Anaesth** 1989 Sep; 63(3):290–5

Cerebral effects of fentanyl in dogs. Milde LN, et al. **Br J Anaesth** 1989 Dec;63(6):710–5

Effect of oxpentifylline on blood viscosity and cerebral blood flow in man. Brown MM. **Br J Clin Pharmacol** 1989 Oct; 28(4):488–92

Angiotensin converting enzyme inhibition and cerebral circulation--a review. Waldemar G, et al. **Br J Clin Pharmacol** 1989;28 Suppl 2:177S–182S (37 ref.)

Cerebrovascular responses to capsaicin in vitro and in situ. Edvinsson L, et al. **Br J Pharmacol** 1990 Jun;100(2):312–8

Nimodipine has no effect on the cerebral circulation in conscious pigs, despite an increase in cardiac output. van der Giessen WJ, et al. **Br J Pharmacol** 1990 Jun; 100(2):277–82

Anaesthesia and central nervous system disease in small animals. Part I: General considerations. Court MH, et al. **Br Vet J** 1990 Jul–Aug;146(4):285–95 (31 ref.)

The effect of carbon dioxide on the diameter of brain capillaries. Atkinson JL, et al. **Brain Res** 1990 May 28; 517(1–2):333–40

Effects of endothelin on blood vessels of the brain and choroid plexus. Kadel KA, et al. **Brain Res** 1990 Jun 4; 518(1–2):78–82

Plasma epinephrine modulates the cerebrovasodilation evoked by electrical stimulation of dorsal medulla. Lacombe PM, et al. **Brain Res** 1990 Jan 1;506(1):93–100

The effects of N-methyl-D-aspartate receptor blockade with MK-801 upon the relationship between cerebral blood flow and glucose utilisation. Nehls DG, et al. **Brain Res** 1990 Mar 19;511(2):271–9

The effect of the excitatory amino acid receptor antagonist dizocilipine maleate (MK-801) on hemispheric cerebral blood flow and metabolism in dogs: modification by prior complete cerebral ischemia. Perkins WJ, et al. **Brain Res** 1989 Sep 25;498(1):34–44

Theophylline reduces cerebral hyperaemia and enhances brain damage induced by seizures. Pinard E, et al. **Brain Res** 1990 Mar 19;511(2):303–9

Effects of drinking and central angiotensin II stimulation on organ blood flow in conscious rats. Rettig R, et al. **Brain Res** 1989 Dec 29;505(2):251–6

Changes in blood-brain barrier and cerebral blood flow following elevation of circulating serotonin level in anesthetized rats. Sharma HS, et al. **Brain Res** 1990 May 28;517(1–2):215–23

Cranial duplex sonography: does halothane affect the cerebrovascular response to carbon dioxide in anaesthetized children? Leon JE, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S24

A comparison of the cerebral pressure-flow relationship for halothane and isoflurane at haemodynamically equivalent end-tidal concentrations in the rabbit. Mutch WA, et al. **Can J Anaesth** 1990 Mar;37(2):223–30

Effects of an analogue of thyrotrophin-releasing hormone, RX77368, on infarct size and cerebral blood flow in focal cerebral ischaemia in the rat. O'Shaughnessy CT, et al. **Can J Physiol Pharmacol** 1989 Oct;67(10):1345–50

Brain uptake and anticancer activities of vincristine and vinblastine are restricted by their low cerebrovascular permeability and binding to plasma constituents in rat. Greig NH, et al. **Cancer Chemother Pharmacol** 1990; 26(4):263–8

Cerebral vasomotor responses after recombinant interleukin 2 infusion. Ellison MD, et al. **Cancer Res** 1990 Jul 15; 50(14):4377–81

Cerebral hemodynamic and metabolic effects of chronic alcoholism. Lotfi J, et al. **Cerebrovasc Brain Metab Rev** 1989 Spring;1(1):2–25 (178 ref.)

Pharmacology of TA-3090 (8-chloro diltiazem) related to its cerebrovascular protective properties. Bevan JA, et al. **Circulation** 1989 Dec;80(6 Suppl):IV178–83

Haemodynamic and cerebrovascular responses to glycerol infusion in dogs. Chen JL, et al. **Clin Sci** 1989 Nov; 77(5):535–9

The use of a calcium-channel blocker, nicardipine, for severely asphyxiated newborn infants. Levene MI, et al. **Dev Med Child Neurol** 1990 Jul;32(7):567–74

Effects of prostaglandins and indomethacin on cerebral blood flow and cerebral oxygen consumption of conscious newborn piglets. Chemtob S, et al. **Dev Pharmacol Ther** 1990;14(1):1–14

Influence of anesthetic induction with halothane and isoflurane on internal carotid blood flow velocity in early infancy. Jorch G, et al. **Dev Pharmacol Ther** 1989; 13(2–4):150–8

Cerebral blood flow velocity assessed by Doppler technique after intravenous application of diazepam in very low birth weight infants. Jorch G, et al. **Dev Pharmacol Ther** 1989; 14(2):102–7

Cerebral blood flow following indomethacin administration. Lundell BP, et al. **Dev Pharmacol Ther** 1989;13(2–4):139–44

Influence of anesthetics on cerebral blood flow velocity in infancy. Effects of halothane versus thiopental-fentanyl. Messer J, et al. **Dev Pharmacol Ther** 1989;13(2–4):145–9

Autoregulation of cerebral blood flow. Effect of phenobarbital and pancuronium in the newborn piglet. Monin P, et al. **Dev Pharmacol Ther** 1989;13(2–4):121–8

Caffeine and cerebral blood flow velocity in preterm infants. Saliba E, et al. **Dev Pharmacol Ther** 1989;13(2–4):134–8

Initiation of carbamazepine therapy in partial epilepsy: a regional cerebral blood flow study. Valmier J, et al. **Epilepsy Res** 1990 Apr;5(3):229–34

Effects of carvedilol on cerebral blood flow and its autoregulation in previous stroke patients with hypertension. Kuriyama Y, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S120–1

Effects of caffeine, L-phenylisopropyladenosine and their combination on local cerebral blood flow in the rat. Nehlig A, et al. **Eur J Pharmacol** 1990 Apr 25;179(3):271–80

Acute effects of antihypertensive agents on cerebral blood flow in hypertensive rats. Ooboshi H, et al. **Eur J Pharmacol** 1990 Apr 25;179(3):253–61

Effect of thromboxane synthetase inhibitor on cerebral circulation and metabolism during experimental cerebral ischemia in spontaneously hypertensive rats. Sadoshima S, et al. **Eur J Pharmacol** 1989 Oct 4;169(1):75–83

A novel dibenzoxazepine derivative (BY-1949) increases regional cerebral blood flow. Sugawa M, et al. **Eur J Pharmacol** 1990 Mar 20;178(2):225–8

Cerebrovascular effect of calcium antagonists. Morel N, et al. **Eur Neurol** 1990;30 Suppl 2:10–5; discussion 39–41

Effects of cilazapril on the cerebral circulation in spontaneously hypertensive rats. Clozel JP, et al. **Hypertension** 1989 Dec;14(6):645–51

Cerebral vasoconstrictor responses to serotonin during chronic hypertension. Mayhan WG, et al. **Hypertension** 1990 Jun;15(6 Pt 2):872–6

Pyritinol treatment of SDAT patients: evaluation by psychiatric and neurological examination, psychometric testing and rCBF measurements. Knezevic S, et al. **Int Clin Psychopharmacol** 1989 Jan;4(1):25–38

Cerebral blood flow in patients with chronic cerebrovascular disease: effect of acetyl L-carnitine. Postiglione A, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):129–32

Acute effects of acetyl-L-carnitine on regional cerebral blood flow in patients with brain ischaemia. Rosadini G, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):123–8

A controlled study of Dextran 40: effect on cerebral blood flow and metabolic rates in acute head trauma. Artru F, et al. **Intensive Care Med** 1989;15(8):499–504

The acute effect of dilevalol on cerebral blood flow and oxygen consumption in normotensive humans. Jakobsen J, et al. **J Cardiovasc Pharmacol** 1990 Apr;15(4):574–8

V2-like receptors mediate cerebral blood flow increase following vasopressin administration in rats. Koźniewska E, et al. **J Cardiovasc Pharmacol** 1990 Apr;15(4):579–85

Efficacy of nitrendipine in the treatment of elderly hypertensive subjects, and its effect on cerebral blood flow. Pandita-Gunawardena ND, et al. **J Cardiovasc Pharmacol** 1989;14 Suppl 10:S52–8

Computerized analysis of cerebral blood flow autoregulation in humans: validation of a method for pharmacologic studies. Schmidt JF, et al. **J Cardiovasc Pharmacol** 1990 Jun;15(6):983–8

Effect of the calcium antagonists felodipine and nimodipine on cortical blood flow in the spontaneously hypertensive rat. Thorén P, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 4:S40

Angiotensin-converting enzyme inhibition and regional cerebral blood flow in acute stroke. Waldemar G, et al. **J Cardiovasc Pharmacol** 1989 Nov;14(5):722–9

Effect of the serotonin antagonist ketanserin on the hemodynamic and morphological consequences of thrombotic infarction. Dietrich WD, et al. **J Cereb Blood Flow Metab** 1989 Dec;9(6):812–20

Effect of adenosine on total and regional cerebral blood flow of the newborn piglet. Laudignon N, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):392–8

Dimethylthiourea reduces ischemic brain edema without affecting cerebral blood flow. Martz D, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):352–7

The novel dihydronaphthyridine Ca2+ channel blocker CI-951 improves CBF, brain pHi, and EEG recovery in focal cerebral ischemia. Meyer FB, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):97–103

Systematic studies on the effects of the NMDA receptor antagonist MK-801 on cerebral blood flow and responsivity, EEG, and blood-brain barrier following complete reversible cerebral ischemia. Stevens MK, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):77–88

Capillary recruitment of the cerebral cortex during CO2 inhalation: fact or illusion? [letter; comment] Tomita M, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):294 Comment on: J Cereb Blood Flow Metab 1989 Aug;9(4):491–9.

Heterogeneity of P2-purinoceptors in brain circulation. Torregrosa G, et al. **J Cereb Blood Flow Metab** 1990 Jul; 10(4):572–9

Acute sympathetic denervation does not eliminate the effect of angiotensin converting enzyme inhibition on CBF autoregulation in spontaneously hypertensive rats. Waldemar G. **J Cereb Blood Flow Metab** 1990 Jan; 10(1):43–7

Intravenous lidocaine and cerebral blood flow: impaired microvascular reactivity in diabetic patients. Kastrup J, et al. **J Clin Pharmacol** 1990 Apr;30(4):318–23

Ovine fetal coronary and cerebral vascular responses to forskolin. Reid DL, et al. **J Dev Physiol** 1989 Aug; 12(2):63–7

First-dose effects of enalapril and atenolol upon blood pressure and cerebral blood flow in patients with mild hypertension on diuretic therapy. Kamlow F, et al. **J Hum Hypertens** 1990 Jun;4(3):281–5

The effect of orthostatic hypotension on cerebral blood flow and middle cerebral artery velocity in autonomic failure, with observations on the action of ephedrine. Brooks DJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug;52(8):962–6

Brain regional distribution of physostigmine and its relation to cerebral blood flow following intravenous administration in rats. Scremin OU, et al. **J Neurosci Res** 1990 Jun; 26(2):188–95

Anesthesia and cerebral coupling [letter] Tommasino C. **J Neurosurg** 1990 Oct;73(4):644–5

Permissive role of prostanoids in acetylcholine-induced cerebral vasoconstriction. Armstead WM, et al. **J Pharmacol Exp Ther** 1989 Dec;251(3):1012–9

Vascular effects of acetazolamide on the choroid plexus. Faraci FM, et al. **J Pharmacol Exp Ther** 1990 Jul; 254(1):23–7

Effects of methylene blue on hypoxic cerebral vasodilatation in the rabbit. Pearce WJ, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):616–25

Contribution of color Doppler flow imaging to the evaluation of the effect of indomethacin on neonatal cerebral hemodynamics. Van Bel F, et al. **J Ultrasound Med** 1990 Feb;9(2):107–9

Effects of calcium antagonists, felodipine and nicardipine, on cerebral circulation in dogs. Tanaka M, et al. **Jpn J Pharmacol** 1990 Feb;52(2):273–9

Uncoupling between local cerebral glucose utilization and local cerebral blood flow in kainic acid-induced limbic seizure status. Tanaka S, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):559–60

Regional cerebral blood flow in Alzheimer's disease [letter] **Lancet** 1990 Aug 18;336(8712):450

Comparison of carbon-dioxide-enriched, oxygen-enriched, and normal air in treatment of acute mountain sickness. Bärtsch P, et al. **Lancet** 1990 Sep 29;336(8718):772–5

Effects of indomethacin on cerebral haemodynamics in very preterm infants. Edwards AD, et al. **Lancet** 1990 Jun 23; 335(8704):1491–5

Effect of central cholinergic stimulation on regional cerebral blood flow in Alzheimer disease. Geaney DP, et al. **Lancet** 1990 Jun 23;335(8704):1484–7

Effect of carbon dioxide on the utilization of brain capillary reserve and flow. Frankel H, et al.

Microcirc Endothelium Lymphatics 1989 Dec;5(6):391–415

Cerebrovascular effects of prostanoids. In–situ studies in pial arteries of the cat. Wahl M, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Sep; 340(3):314–20

Cardiac function and cerebral blood flow in elderly hypertensive patients. Landahl S, et al. **Nephron** 1990;55 Suppl 1:98

Effect of flunarizine on cerebral blood flow in baboons with or without focal cerebral ischaemia. Hartmann A, et al. **Neurol Res** 1990 Mar;12(1):60–2

Cerebral blood flow velocity and cerebrospinal fluid pressure after single bolus of propofol. Parma A, et al.
Neurol Res 1989 Sep;11(3):150–2

Effect of Fluosol–DA and hetastarch on local cerebral blood flow, cortical O2 availability and computerized EEG data during cerebral ischaemia. Tranmer BI, et al.
Neurol Res 1990 Mar;12(1):17–22

Responses of cerebral circulation produced by adrenoceptor agonists and antagonists in rats. Tsai ML, et al.
Neuropharmacology 1989 Oct;28(10):1075–80

Changes in cerebral blood flow and mental state after amphetamine challenge in schizophrenic patients. Mathew RJ, et al. **Neuropsychobiology** 1989;21(3):117–23

Role of cholinergic mechanisms in alterations of rabbit brain functional activity during sea–sickness. Maksimuk VF, et al. **Neurosci Behav Physiol** 1990 Jan–Feb;20(1):36–45

Cocaine–induced cerebral vascular damage can be ameliorated by Mg2+ in rat brain. Huang QF, et al.
Neurosci Lett 1990 Feb 5;109(1–2):113–6

Effect of nimodipine on cerebrovascular response to CO2 in asymptomatic individuals and patients with subarachnoid hemorrhage: a transcranial Doppler ultrasound study. Seiler RW, et al. **Neurosurgery** 1990 Aug;27(2):247–51

Effects of phenylephrine and dopamine on cerebral blood flow, blood volume, and oxygenation in young rabbits. Koyama K, et al. **Pediatr Neurol** 1990 Mar–Apr;6(2):87–90

Effect of indomethacin on the regulation of cerebral blood flow during respiratory alkalosis in newborn piglets. DeGiulio PA, et al. **Pediatr Res** 1989 Dec;26(6):593–7

Carbon dioxide–related changes in cerebral blood volume and cerebral blood flow in mechanically ventilated preterm neonates: comparison of near infrared spectrophotometry and 133Xenon clearance. Pryds O, et al. **Pediatr Res** 1990 May;27(5):445–9

Cerebral blood flow velocity changes in preterm infants after a single dose of indomethacin: duration of its effect [see comments] Van Bel F, et al. **Pediatrics** 1989 Nov; 84(5):802–7 Comment in: Pediatrics 1990 Jul;86(1):146–7.

Increased cerebral blood flow velocity in infants of mothers who abuse cocaine. van de Bor M, et al. **Pediatrics** 1990 May;85(5):733–6

The effect of prostaglandins E2 and F2 alpha on carotid blood flow in rats with renovascular hypertension. Vacek L, et al. **Physiol Bohemoslov** 1989;38(6):481–7

Cerebrovascular effects of prostanoids: in–vitro studies in feline middle cerebral and basilar artery. Whalley ET, et al. **Prostaglandins** 1989 Dec;38(6):625–34

Local cerebral blood flow following the intrastriatal administration of vasoactive intestinal peptide or peptide histidine isoleucine in the rat. Tuor UI, et al.
Regul Pept 1990 May 21;28(3):255–64

Effect of high dose norepinephrine versus epinephrine on cerebral and myocardial blood flow during CPR. Hoekstra JW, et al. **Resuscitation** 1990 Jun;19(3):227–40

Pentoxifylline increases cerebral blood flow in patients with cerebrovascular disease. Bowton DL, et al. **Stroke** 1989 Dec;20(12):1662–6

Effect of nitroglycerin on cerebral circulation measured by transcranial Doppler and SPECT. Dahl A, et al. **Stroke** 1989 Dec;20(12):1733–6

Nimodipine posttreatment does not increase blood flow in rats with focal cortical ischemia. Dirnagl U, et al.
Stroke 1990 Sep;21(9):1357–61

Anesthetic modulation of cerebral hemodynamic and evoked responses to transient middle cerebral artery occlusion in cats. Helfaer MA, et al. **Stroke** 1990 May;21(5):795–800

Endogenous platelet activating factor does not modulate blood flow and metabolism in normal rat brain. Kochanek PM, et al. **Stroke** 1990 Mar;21(3):459–62

Influence of antihypertensive treatment with budralazine on autoregulation of cerebral blood flow in spontaneously hypertensive rats. Tanaka S, et al. **Stroke** 1989 Dec; 20(12):1724–9

Changes in hyperfrontality of cerebral blood flow and carbon dioxide reactivity with age. Tsuda Y, et al. **Stroke** 1989 Dec;20(12):1667–73

Nimodipine attenuates both increase in cytosolic free calcium and histologic damage following focal cerebral ischemia and reperfusion in cats. Uematsu D, et al. **Stroke** 1989 Nov; 20(11):1531–7

[Effect of dazoxiben on cerebrovascular resistance in rabbits] Rui YC, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Jul; 10(4):342–5 (Eng. Abstr.) **(Chi)**

[Effects of isoflurane on intracranial pressure and cerebral blood flow pressure in coma patients at neurologic intensive care units. Apropos of 12 cases] Montarry M, et al.
Agressologie 1989 Jun;30(7):443–6 (Eng. Abstr.) **(Fre)**

[Effects of an intravenous injection of nicardipine on cerebral blood flow in subarachnoid hemorrhage caused by intracranial aneurysm] Montarry M, et al. **Agressologie** 1989 Jun;30(7):411–5 (Eng. Abstr.) **(Fre)**

[Calcium inhibitors: effects on cerebral blood flow and intracranial pressure] Payen D, et al. **Agressologie** 1989 Jun; 30(7):408–10 (Eng. Abstr.) **(Fre)**

[Nimodipine and cerebrovascular circulation. Initial results apropos of 4 cases of subarachnoid hemorrhage] Texier JJ, et al. **Agressologie** 1989 Jun;30(7):416–24 (Eng. Abstr.) **(Fre)**

[The effects of propofol (Diprivan) on cerebral circulation, intracranial pressure and cerebral metabolism in cranial trauma] Lelausque JN, et al. **Ann Fr Anesth Reanim** 1989; 8 Suppl:R87 **(Fre)**

[Changes in the pulsatility index (Gosling) under drug action] Pendefunda L. **Rev Med Chir Soc Med Nat Iasi** 1989 Jan–Mar;93(1):77–83 (Eng. Abstr.) **(Fre)**

[Increase in blood flow velocity in the middle cerebral artery following low–dose ketamine] Werner C, et al.
Anasth Intensivther Notfallmed 1989 Aug;24(4):231–5 (Eng. Abstr.) **(Ger)**

[Effect of nifedipine and urapidil on autoregulation of cerebral circulation in the presence of an intracranial space occupying lesion] Wüsten R, et al.
Anasth Intensivther Notfallmed 1990 Apr;25(2):140–5 (Eng. Abstr.) **(Ger)**

[Conjunctival oxygen partial pressure, hemorheology and circulatory parameters in acute cerebral infarct before and following infusion of 6 percent low molecular hydroxyethyl starch] Kortsik CS, et al. **Infusionstherapie** 1990 Apr;17(2):79–82 (Eng. Abstr.) **(Ger)**

[Cerebral perfusion pressure in acute blood pressure decrease with hyperosmolar sorbitol in anesthesia conditions] Panning B, et al. **Neurochirurgia (Stuttg)** 1990 Mar; 33(2):37–41 (Eng. Abstr.) **(Ger)**

[Effects of alpha– and beta–adrenergic blockers on the lower limits of cerebral blood flow autoregulation in spontaneously hypertensive rats] Sadoshima S, et al.
Fukuoka Igaku Zasshi 1990 May;81(5):204–8 (Eng. Abstr.) **(Jpn)**

[Cerebral hemodynamics of post–ischemic delayed hypoperfusion (PDH) and the effects of nicardipine on the PDH] Dote K. **Masui** 1990 Mar;39(3):357–66 (Eng. Abstr.) **(Jpn)**

[Effects of controlled hypotension induced by prostaglandin E1 on the cerebral blood flow] Sha K, et al. **Masui** 1990 Feb;39(2):138–43 (Eng. Abstr.) **(Jpn)**

[Clinical application of calcium antagonists in the treatment of cerebral infarction] Komatsumoto S, et al.
Nippon Rinsho 1989 Aug;47(8):1837–41 **(Jpn)**

[Calcium channel blockers and cerebral circulation] Uematsu D, et al. **Nippon Rinsho** 1989 Aug;47(8):1770–5 **(Jpn)**

[Effect of medroxyprogesterone acetate on cerebral blood flow] Ikeda T, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1990 Mar;42(3):285–6 **(Jpn)**

[Differential effects of isoflurane and nitrous oxide on cerebral blood flow, metabolism and electrocorticogram after incomplete cerebral ischemia in the rat] Ishikawa T, et al. **Nippon Yakurigaku Zasshi** 1989 Jul;94(1):73–80 (Eng. Abstr.) **(Jpn)**

[The effect of glycerol on regional cerebral blood flow, blood volume and oxygen metabolism] Ishikawa M, et al.
No Shinkei Geka 1989 Jul;17(7):635–40 (Eng. Abstr.) **(Jpn)**

[Effect of calcium antagonist nimodipine and induced hypertension on cerebral vessel reactivities, cerebral blood flow, cerebral edema and infarction in cats with one hour middle–cerebral–artery occlusion] Sakaki T, et al.
No Shinkei Geka 1990 May;18(5):423–30 (Eng. Abstr.) **(Jpn)**

[Cerebral circulation and calcium antagonists] Uematsu D, et al. **No To Shinkei** 1990 Jan;42(1):17–31 (168 ref.) **(Jpn)**

[Impaired cerebral circulation and the effect of glycerol infusion in the acute stage of hypertensive intracerebral hematoma] Yamada T, et al. **No To Shinkei** 1990 Mar; 42(3):303–9 (Eng. Abstr.) **(Jpn)**

[Brain blood flow and cerebral metabolism during ataralgesia] Lubnin AIu, et al. **Anesteziol Reanimatol** 1990 Jan–Feb; (1):9–13 (Eng. Abstr.) **(Rus)**

[Dimethyl sulfoxide as a corrector of disorders of cerebral hemodynamics, oxygen and carbohydrate metabolism of the brain and lipid peroxidation in the early period after intracerebral hemorrhage] Plotnikov MB, et al.
Biull Eksp Biol Med 1990 Apr;109(4):357–9 (Eng. Abstr.) **(Rus)**

[Effect of foridon on the blood supply of the cat brain in health and in intracerebral hemorrhage] Chernysheva GA, et al. **Farmakol Toksikol** 1989 Jul–Aug;52(4):20–4 (Eng. Abstr.) **(Rus)**

[The action of fenigidin (nifedipine) on central hemodynamics and cerebral blood flow in hypertension] Ivleva AIa, et al. **Farmakol Toksikol** 1989 Sep–Oct;52(5):73–6 (Eng. Abstr.) **(Rus)**

[The effect of pyridoxine on the cerebral hemodynamics in vestibular disorders] Skoromnyi NA. **Farmakol Toksikol** 1989 Nov–Dec;52(6):43–6 (Eng. Abstr.) **(Rus)**

[Comparative effect of the action of calcium antagonists on cerebral blood flow] Karadzhaeva GB, et al.
Fiziol Zh SSSR 1989 Nov;75(11):1624–9 **(Rus)**

[The role of dopamine in regulating the cerebral circulation in extreme conditions] Pchelintseva TR, et al.
Fiziol Zh SSSR 1989 Nov;75(11):1596–601 (Eng. Abstr.) **(Rus)**

[Comparative evaluation of the effects of isoptin and obsidan on central and cerebral hemodynamics in patients with hypertension during physical exercise] Adibaev OA, et al.
Kardiologiia 1990 Mar;30(3):60–2 (Eng. Abstr.) **(Rus)**

[Cerebral hemodynamics in workers subjected to combined exposure to methanol and carbon monoxide vapors] Panchenko EN, et al. **Vrach Delo** 1989 Jul;(7):99–102 (Eng. Abstr.) **(Rus)**

[Effect of calcium antagonists on cerebral and systemic hemodynamics in patients with ischemic disorders of cerebrovascular circulation] Ishchenko MM, et al.
Zh Nevropatol Psikhiatr 1989;89(9):52–6 (Eng. Abstr.) **(Rus)**

[The new hemorheologic drug VULM 957 improves cerebral circulation] Turčáni P, et al. **Cesk Neurol Neurochir** 1989 Oct;52(6):384–92 (Eng. Abstr.) **(Slo)**

[Is the effect of naloxone on cerebral circulation mediated by blood platelets?] Turčáni P, et al.
Cesk Neurol Neurochir 1989 Jul;52(4):277–81 (Eng. Abstr.) **(Slo)**

GENETICS

Increased pulse pressure and carotid vascular resistance in normotensive black African subjects. Toto–Moukouo JA, et al. **J Hum Hypertens** 1990 Jun;4(3):247–51

PHYSIOLOGY

Hemodynamics of carotid occlusive disease. Nyberg–Hansen R, et al. **Acta Chir Scand Suppl** 1990;555:201–4

Cerebral blood flow during experimental epidural bleeding in swine. Ganz JC, et al. **Acta Neurochir (Wien)** 1990; 103(3–4):148–57

Regional cerebral blood flow in pigs estimated by microspheres. Madsen FF, et al. **Acta Neurochir (Wien)** 1990;103(3–4):139–47

Cerebral blood flow and metabolism in sleep. Sawaya R, et al. **Acta Neurol Scand** 1989 Dec;80(6):481–91 (49 ref.)

Cerebral blood flow reactivity in spontaneously breathing, preterm infants shortly after birth. Pryds O, et al.
Acta Paediatr Scand 1990 Apr;79(4):391–6

Oxygen affinity of haemoglobin modulates cerebral blood flow in premature infants. A study with the non–invasive xenon–133 method. Lipp–Zwahlen AE, et al.
Acta Paediatr Scand Suppl 1989;360:26–32

Effect of PaCO2 and haemoglobin concentration on day to day variation of CBF in preterm neonates. Pryds O, et al. **Acta Paediatr Scand Suppl** 1989;360:33–6

Features of the cerebral vascular pattern that predict vulnerability to perfusion or oxygenation deficiency: an anatomic study. Moody DM, et al. **AJNR** 1990 May; 11(3):431–9

Assessment of cerebral hemodynamics in pregnant women by internal carotid artery pulsed Doppler velocimetry. Ikeda T, et al. **Am J Obstet Gynecol** 1990 Aug;163(2):494–8

Double tracer autoradiographic method for sequential evaluation of regional cerebral perfusion. Matsuda H, et al. **Am J Physiol Imaging** 1989;4(4):131–5

Effect of limb tourniquet on cerebral perfusion pressure in a head–injured patient. Eldridge PR, et al. **Anaesthesia** 1989 Dec;44(12):973–4

The cerebral pressure–flow relationship during 1.0 MAC isoflurane anesthesia in the rabbit: the effect of different vasopressors. Patel PM, et al. **Anesthesiology** 1990 Jan; 72(1):118–24

Cerebral blood flow, oxygen and glucose metabolism with PET in progressive supranuclear palsy. Otsuka M, et al.
Ann Nucl Med 1989 Nov;3(3):111–8

Cerebral vasoreactivity to carbon dioxide during cardiopulmonary perfusion at normothermia and hypothermia [see comments] Johnsson P, et al.
Ann Thorac Surg 1989 Dec;48(6):769–75 Comment in: Ann Thorac Surg 1989 Dec;48(6):752–4.

Cerebral blood flow during cardiopulmonary bypass: some new answers to old questions [comment] Reves JG, et al.
Ann Thorac Surg 1989 Dec;48(6):752–4 Comment on: Ann Thorac Surg 1989 Dec;48(6):769–75.

Circulatory effects of fast ventilator rates in preterm infants. Fenton AC, et al. **Arch Dis Child** 1990 Jul;65(7 Spec No):662–6

Hydrodynamics of arterial branching—the effect of arterial branching on distal blood supply. Matsuo T, et al.
Biorheology 1989;26(4):799–811

Myogenic responses are independent of the endothelium in rat pressurized posterior cerebral arteries. McCarron JG, et al. **Blood Vessels** 1989;26(5):315–9

Pathophysiology of the vasomotor reactivity to hypo– and hypercapnia: role of aging and chronic cerebrovascular disorders. Ceravolo G, et al. **Boll Soc Ital Biol Sper** 1989 Oct;65(10):989–96

Influence of hypotension and hypotensive technique on the area of profound reduction in cerebral blood flow during focal cerebral ischaemia in the rat. Cole DJ, et al.
Br J Anaesth 1990 Apr;64(4):498–502

Cerebral vascular transit time in Alzheimer's disease and Korsakoff's psychosis and its relation to cognitive function. Hunter R, et al. **Br J Psychiatry** 1989 Jun;154:790–6

Cerebral blood flow velocity following tourniquet release in humans. Lam AM, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S29

Autoregulation and the CO2 responsiveness of cerebral blood flow after cardiopulmonary bypass. McNeill BR, et al.

Can J Anaesth 1990 Apr;37(3):313–7

Cerebral haemodynamics in infants during cardiopulmonary bypass. Taylor RH, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S153

Neuropeptides in the cerebral circulation. Uddman R, et al. **Cerebrovasc Brain Metab Rev** 1989 Fall;1(3):230–52 (141 ref.)

High frequency jet ventilation and intermittent positive pressure ventilation. Effect of cerebral blood flow in patients after open heart surgery. Pittet JF, et al. **Chest** 1990 Feb;97(2):420–4

Monitoring cerebral blood flow, oxygen, and glucose metabolism. Analysis of cerebral metabolic disorder in stroke and some therapeutic trials in human volunteers. Meyer JS, et al. **Circulation** 1967 Aug;36(2):197–211

The P300 event-related potential and regional cerebral blood flow in patients with Alzheimer's disease. Gordon E, et al. **Clin Exp Neurol** 1989;26:73–80

Cerebral perfusion changes in schizophrenic patients using Tc-99m hexamethylpropylene amineoxime (HMPAO). Abdel-Dayem HM, et al. **Clin Nucl Med** 1990 Jul; 15(7):468–72

Patent ductus arteriosus and cerebral circulation in preterm infants. Shortland DB, et al. **Dev Med Child Neurol** 1990 May;32(5):386–93

Normal range for blood flow velocity in cerebral arteries of newly born term infants. Fenton AC, et al. **Early Hum Dev** 1990 May;22(2):73–9

The influence of behavioural states on cerebral blood flow velocity patterns in stable preterm infants. Ramaekers VT, et al. **Early Hum Dev** 1989 Dec;20(3–4):229–46

Intracranial haemodynamics in patients with spontaneous carotid dissection. Transcranial Doppler ultrasound follow-up studies. Kaps M, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(4):246–56

Dynamics of regional cerebral blood flow for various visual stimuli. Conrad B, et al. **Exp Brain Res** 1989;77(2):437–41

Investigation of cerebrovascular reactivity using transcranial Doppler sonography. Evaluation and comparison of different methods. Provinciali L, et al. **Funct Neurol** 1990 Jan–Mar;5(1):33–41

Transcranial Doppler evaluation of common and classic migraine. Part II. Ultrasonic features during attacks. Thie A, et al. **Headache** 1990 Mar;30(4):209–15

Cerebral blood flow response to the tissue temperature in tumour and brain tissues. Satoh T, et al. **Int J Hyperthermia** 1989 Nov–Dec;5(6):683–96

Cerebral blood flow during static exercise in humans. Rogers HB, et al. **J Appl Physiol** 1990 Jun;68(6):2358–61

An online technique for estimating cerebral carbon dioxide reactivity. Patel MC, et al. **J Biomed Eng** 1990 Jul; 12(4):316–8

Changes in sensory-cognitive input: effects on cerebral blood flow. Cameron OG, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):38–42

Decrease in perfusion of cerebral capillaries during incomplete ischemia and reperfusion. Ennis SR, et al. **J Cereb Blood Flow Metab** 1990 Mar;10(2):213–20

Postischemic canine cerebral blood flow appears to be determined by cerebral metabolic needs. Michenfelder JD, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):71–6

Myogenic mechanisms in the cerebral circulation. Faraci FM, et al. **J Hypertens Suppl** 1989 Sep;7(4):S61–4; discussion S65 (22 ref.)

Haemodilution and oxygen transport capacity [letter; comment] Haass A, et al. **J Neurol** 1990 Apr;237(2):126 Comment on: J Neurol 1989 Mar;236(3):164–7.

Do leukocytes have a role in the cerebral no-reflow phenomenon? [letter] Mercuri M, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):536

Study of the cerebral blood flow in partial epilepsy of childhood using the SPECT method. Chiron C, et al. **J Neuroradiol** 1989 Dec;16(4):317–24 **(Eng, Fre)**

Computerized EEG: applications and interventions. Lundgren JP. **J Neurosci Nurs** 1990 Apr;22(2):108–12

Evaluation of a potential generator-produced PET tracer for cerebral perfusion imaging: single-pass cerebral extraction measurements and imaging with radiolabeled Cu-PTSM. Mathias CJ, et al. **J Nucl Med** 1990 Mar; 31(3):351–9

Cerebral hemodynamics in patients with chronic obstructive carotid disease by rCBF, rCBV, and rCBV/rCBF ratio using SPECT. Toyama H, et al. **J Nucl Med** 1990 Jan; 31(1):55–60

Vasoparalysis associated with brain damage in asphyxiated term infants. Pryds O, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):119–25

Measurement of filtration coefficient in single cerebral microvessels of the frog. Fraser PA, et al. **J Physiol (Lond)** 1990 Apr;423:343–61

Regional cerebrovascular reactivity to carbon dioxide during cardiopulmonary bypass in patients with cerebrovascular disease. Gravlee GP, et al. **J Thorac Cardiovasc Surg** 1990 Jun;99(6):1022–9

Side-to-side differences and day-to-day variations of transcranial Doppler parameters in normal subjects. Sorteberg W, et al. **J Ultrasound Med** 1990 Jul;9(7):403–9

The clinical role of the cerebral collateral circulation in carotid occlusion. Norris JW, et al. **J Vasc Surg** 1990 Aug; 12(2):113–8

Prediction of brain blood flow using pulsed Doppler ultrasonography in newborn lambs. Martin CG, et al. **JCU** 1990 Jul–Aug;18(6):487–95

Acceleration time in cerebral arteries of preterm and term infants. van de Bor M, et al. **JCU** 1990 Mar–Apr; 18(3):167–71

Effects of stimulation of cervical sympathetic trunks with various frequencies on the local cortical cerebral blood flow measured by laser Doppler flowmetry in the rat. Saeki Y, et al. **Jpn J Physiol** 1990;40(1):15–32

Enhanced vasomotion of cerebral arterioles in spontaneously hypertensive rats. Lefer DJ, et al. **Microvasc Res** 1990 Mar; 39(2):129–39

Ischemic flow threshold for striatal dopamine release in rats. Yao H, et al. **Neurochem Res** 1990 May;15(5):547–9

Heterogeneous arterial responses in postischemic state of cerebral cortex. Baramidze DG, et al. **Neuropatol Pol** 1989; 27(1):3–12

Ultrastructure of capillaries and neuroglial cells in the hippocamus (sector CA1) during short-lasting ischemia and following blood recirculation. Tsitsishvili A, et al. **Neuropatol Pol** 1989;27(1):55–69

Conditions of blood flow in capillaries of cerebral cortex in control and ischemia. Varazashvili M, et al. **Neuropatol Pol** 1989;27(1):13–24

Two transcranial Doppler studies on blood flow velocity in both middle cerebral arteries during rest and the performance of cognitive tasks. Droste DW, et al. **Neuropsychologia** 1989;27(10):1221–30

Effect of extracorporeal membrane oxygenation on cerebral blood flow and cerebral oxygen metabolism in newborn sheep. Short BL, et al. **Pediatr Res** 1990 Jul;28(1):50–3

Brain blood flow and ventilatory response to hypoxia in sedated newborn piglets. Suguihara C, et al. **Pediatr Res** 1990 Apr;27(4 Pt 1):327–31

Increased cerebral blood flow and plasma epinephrine in hypoglycemic, preterm neonates. Pryds O, et al. **Pediatrics** 1990 Feb;85(2):172–6

Cerebral and peripheral blood flow effects of TRH in the rat—a role of vagal nerves. Koskinen LO. **Peptides** 1989 Sep–Oct;10(5):933–8

A mathematical modeling of the cerebrovascular system. Gaffie D, et al. **Physiologist** 1990 Feb;33(1 Suppl):S157–8 (2 ref.)

Effect of metabolic rate on the occurrence of periodic breathing. Cherniack NS, et al. **Prog Clin Biol Res** 1990; 345:167–74; discussion 175–6

Regional cerebral blood flow in psychiatry as measured by single photon emission computed tomography. Friberg L. **Psychiatry Res** 1989 Sep;29(3):319–22 (14 ref.)

Stage-dependent reductions of regional cerebral blood flow measured by HMPAO-SPECT in dementia of Alzheimer type. Frlich L, et al. **Psychiatry Res** 1989 Sep;29(3):347–50

Mapping of rCBF and cerebrovascular reserve capacity by stable xenon CT in cerebrovascular disease: pathophysiological aspects and effects of operative therapy. Gaab MR, et al. **Psychiatry Res** 1989 Sep;29(3):309–12

Determination of brain death in children with 123I-IMP and Tc-99m HMPAO. Galaske RG, et al. **Psychiatry Res** 1989 Sep;29(3):343–5

Cerebral blood flow measured by SPECT as a diagnostic tool in the study of dementia. Gemmell HG, et al. **Psychiatry Res** 1989 Sep;29(3):327–9

Cerebral blood flow measurements with HMPAO- and HIPDM-SPECT in brain tumors: basic rCBF studies. Maier-Hauff K, et al. **Psychiatry Res** 1989 Sep;29(3):341–2

Cerebral blood flow in low pressure hydrocephalus. Meixensberger J, et al. **Psychiatry Res** 1989 Sep;29(3):307–8

Characteristics of regional cerebral blood flow in patients with concussion. Pogacnik T. **Psychiatry Res** 1989 Sep; 29(3):313–6

Clinical correlates of cerebral blood flow in depression. Reischies FM, et al. **Psychiatry Res** 1989 Sep;29(3):323–6

High resolution regional cerebral blood flow measurements in psychiatric disorders. Risberg J. **Psychiatry Res** 1989 Sep;29(3):297–300

Estimation of cerebral blood flow during cardiopulmonary resuscitation in humans. Christensen SF, et al. **Resuscitation** 1990 Apr;19(2):115–23

Cerebrovascular reactivity to CO2 in patients with hepatic or septic encephalopathy. Sari A, et al. **Resuscitation** 1990 Apr;19(2):125–34

Diabetes mellitus as a risk factor for stroke. Mortel KF, et al. **South Med J** 1990 Aug;83(8):904–11

Hemodynamic evaluation of vertebral arteries by duplex ultrasound. Bendick PJ, et al. **Surg Clin North Am** 1990 Feb;70(1):235–44

Mechanisms and implications of cerebral vasoconstriction in chronic hypertension. Mayhan WG, et al. **Trans Assoc Am Physicians** 1989;102:1–6 (28 ref.)

Spatial resolution of transcranial pulsed Doppler technique in vitro evaluation of the sensitivity distribution of the sample volume. Arnolds BJ, et al. **Ultrasound Med Biol** 1989;15(8):729–35

[Migraine with aura (classical migraine) in patients examined for cerebrovascular disease] Olsen TS, et al. **Ugeskr Laeger** 1990 May 21;152(21):1513–5 (Eng. Abstr.) **(Dan)**

[Hemodynamic assessment of cerebrovascular circulation using transcranial Doppler ultrasound in patients with carotid stenosis] Schroeder T, et al. **Ugeskr Laeger** 1990 Jul 16;152(29):2110–3 (Eng. Abstr.) **(Dan)**

[Hemodynamic vertebrobasilar insufficiency demonstrated by chronic oligemic cerebral flow and cerebellar ataxia: two new concepts] Trouillas P, et al. **C R Acad Sci [III]** 1989; 309(20):755–62 (Eng. Abstr.) **(Fre)**

[Physiopathology of the cerebral arterial circulation. Application to cerebro arterial surgery] Testart J. **J Mal Vasc** 1990;15(2):194–201 (26 ref.) (Eng. Abstr.) **(Fre)**

[The contribution of umbilical and cerebral Doppler velocimetry in the diagnosis and monitoring of intrauterine growth retardation] Collet M, et al. **Rev Fr Gynecol Obstet** 1990 May;85(5):282–90 (Eng. Abstr.) **(Fre)**

[Cerebral blood flow velocity. A prognostic factor following severe craniocerebral trauma?] Sanker P, et al. **Aktuel Traumatol** 1990 Jun;20(3):152–6 (Eng. Abstr.) **(Ger)**

[Transcranial Doppler curve analysis. On the pathophysiology of unilateral carotid stenoses] Fürst H, et al. **Chirurg** 1990 Mar;61(3):178–82 (Eng. Abstr.) **(Ger)**

[Non-invasive measurement of cerebrovascular circulation using xenon(s) computerized tomography. A review] Nabi Nemati M. **Neurochirurgia (Stuttg)** 1990 May;33(3):65–9 (Eng. Abstr.) **(Ger)**

[Intracranial MR flow signal changes in extracranial occlusions of the internal carotid artery] Forsting M, et al. **ROFO** 1990 Mar;152(3):333–5 (Eng. Abstr.) **(Ger)**

[Variability of the indices of vascular resistance in carotid Doppler sonography. Study of influencing factors in healthy vascular probands] Hänsgen K, et al. **Z Gesamte Inn Med** 1989 Oct 1;44(19):577–80 (Eng. Abstr.) **(Ger)**

[Evaluation of the central hemodynamics of the fetus using pulsed Doppler ultrasound] Hoffmann H, et al. **Zentralbl Gynakol** 1990;112(11):673–8 (Eng. Abstr.) **(Ger)**

[The effects of post-ischemic delayed hypoperfusion on the process of recovery of brain function] Dote K. **Masui** 1990 Apr;39(4):442–9 (Eng. Abstr.) **(Jpn)**

[Cerebral blood flow in infants: comparison of carotid blood flow and cerebral blood velocity] Tatsuno M, et al. **No To Hattatsu** 1990 Jul;22(4):336–40 (Eng. Abstr.) **(Jpn)**

[Maturational changes in cerebral blood flow and metabolism] Ogawa A, et al. **No To Shinkei** 1989 Sep; 41(9):843–50 (55 ref.) **(Jpn)**

[Vertebrobasilar ischemia—clinico-radiologic correlations] Domżał T, et al. **Neurol Neurochir Pol** 1989 May-Jun; 23(3):177–81 (Eng. Abstr.) **(Pol)**

[Transcranial Doppler ultrasonography--a new technic of examination of cerebral blood flow] Lass P, et al. **Wiad Lek** 1990 Apr 15;43(8):330–5 (Eng. Abstr.) **(Pol)**

[Intracerebral hemodynamic changes in lesions of the internal carotid arteries] Pendefunda L, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Apr–Jun;93(2):319–23 (Eng. Abstr.) **(Rum)**

[Age-related dynamics of blood supply and vascular-tissue interrelations in the human pineal body] Nikonorov SG, et al. **Arkh Anat Gistol Embriol** 1990 Feb;98(2):25–30 (Eng. Abstr.) **(Rus)**

[The blood circulation and oxygen tension in the brain of waking and narcotized rabbits during head-down tilt exposure] Beketov AI, et al. **Fiziol Zh SSSR** 1989 Nov; 75(11):1548–53 (Eng. Abstr.) **(Rus)**

[The effect of electrical stimulation of the cerebellar fastigial nuclei on local blood flow in the brain] Devdariani MI, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1602–7 (Eng. Abstr.) **(Rus)**

[Ways to optimize the cerebral circulation during extreme actions on the brain] Gaidar BV, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1568–75 (Eng. Abstr.) **(Rus)**

[Effect of unilateral occlusion of the carotid artery on cerebral blood flow of rats under hypoxia] Iripkhanov BB, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1585–8 (Eng. Abstr.) **(Rus)**

[Dynamics of blood flow in the brain in the lizard Phrynocephalus heliscopus under light and heat loading] Isabekova SB, et al. **Fiziol Zh SSSR** 1989 Oct;75(10):1405–8 (Eng. Abstr.) **(Rus)**

[The functional organization of autoregulation of local cerebral blood flow in spontaneously hypertensive rats in ontogeny] Khananashvili IaA. **Fiziol Zh SSSR** 1989 Nov; 75(11):1541–7 (Eng. Abstr.) **(Rus)**

[Macro- and microcirculatory shifts in the brain of cats during hypoxia and hypercapnia] Krasil'nikov VG, et al. **Fiziol Zh SSSR** 1989 Oct;75(10):1389–96 (Eng. Abstr.) **(Rus)**

[Structural-functional organization of the cerebral circulatory system in birds] Krivchenko AI, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1616–23 (30 ref.) (Eng. Abstr.) **(Rus)**

[The neurogenic mechanism of the regulation of cerebral circulation and the linking of blood flow-metabolism function] Mitagvariia NP. **Fiziol Zh SSSR** 1989 Nov; 75(11):1473–8 (20 ref.) (Eng. Abstr.) **(Rus)**

[The variability of physiological parameters as an index of the activity of the system of cerebral circulatory regulation] Morgalev IuN, et al. **Fiziol Zh SSSR** 1989 Nov; 75(11):1509–14 (Eng. Abstr.) **(Rus)**

[The cerebrovascular effects of motion sickness] Moskalenko IuE, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1560–7 (Eng. Abstr.) **(Rus)**

[Cerebral blood flow function during altered cholinergic mediation] Priputina LS, et al. **Fiziol Zh SSSR** 1989 Nov;

75(11):1589–95 (Eng. Abstr.) (Rus)
[The determination of the lower limit of autoregulation of cerebral blood flow by vascular compression in a local area of the brain] Semeniutin VB, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1635–8 (Rus)
[The interaction of humoral, metabolic and myogenic regulation of the cerebral circulation in unilateral occlusion of the internal carotid artery] Shakhnovich AR, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1521–6 (Eng. Abstr.) (Rus)
[The role of a neurogenic mechanism in regulating cerebral circulation] Teplov SI, et al. **Fiziol Zh SSSR** 1989 Nov; 75(11):1501–8 (26 ref.) (Eng. Abstr.) (Rus)
[Functioning of the cerebral circulatory system in rabbits during hyperthermia] Vainshtein GB, et al. **Fiziol Zh SSSR** 1989 Nov;75(11):1608–15 (Eng. Abstr.) (Rus)
[Cerebral hemodynamics in persons subjected to exposure to intensive industrial noise] Baranova VM, et al. **Gig Tr Prof Zabol** 1989;(10):22–5 (Eng. Abstr.) (Rus)
[Cerebrovascular circulation in patients with ischemic heart disease during stenocardia attack induced by transesophageal atrial stimulation] Dudko VA, et al. **Kardiologiia** 1990 Feb;30(2):94–5 (Rus)
[Mathematical model of intracranial blood–cerebrospinal fluid dynamics system applied to the study of extreme conditions] Grigorian SS, et al. **Kosm Biol Aviakosm Med** 1990 Mar–Apr;24(2):25–9 (Eng. Abstr.) (Rus)
[Methods of studying intracranial blood and cerebrospinal fluid circulation in chronic experimental decompression sickness] Korolev AB. **Kosm Biol Aviakosm Med** 1990 Jan–Feb;24(1):47–9 (Rus)
[Vascular reactivity in cerebral circulatory asthenia of various etiologies] Shtok VN, et al. **Sov Med** 1990;(1):92–4 (Rus)
[Characteristics of the effect of medical gymnastics on the cerebral hemodynamics in patients with cervical osteochondrosis] Levchenko KP, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Sep–Oct; (5):58–60 (Rus)
[Mechanisms of the therapeutic effect of hyperbaric oxygenation in minor differential pressure in stroke] Gusev EI, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):34–40 (Eng. Abstr.) (Rus)
[Radiocirculography in patients with cerebrovascular disorders] Ivanchev V, et al. **Zh Nevropatol Psikhiatr** 1990; 90(1):32–4 (Eng. Abstr.) (Rus)
[Characteristics of intracerebral hemodynamics in occlusive diseases of major arteries of the brain] Pokrovskiĭ AV, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):7–11 (Eng. Abstr.) (Rus)
[The dynamic changes in the regional volumetric cerebral blood flow and local vascular reactivity in acute craniocerebral trauma in animals with alloxan diabetes] Romodanov AP, et al. **Zh Vopr Neirokhir** 1990 May–Jun; (3):19–22 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Vascular response to irradiation in malignant gliomas. Schiffer D, et al. **J Neurooncol** 1990 Feb;8(1):73–84
[Delayed effects of radiation of patients with germ-cell tumor, with special to cerebral blood flow] Sakai N, et al. **No To Shinkei** 1990 Feb;42(2):161–6 (Eng. Abstr.) (Jpn)

CEREBROVASCULAR DISORDERS

A comparison of perceived and objective CVD risk in a general population. Niknian M, et al. **Am J Public Health** 1989 Dec;79(12):1653–4
The death of Nicholas Bolkonski. Neurology in Tolstoy's War and Peace. Albin RL. **Arch Neurol** 1990 Feb; 47(2):225–6
Recent advance in cardiovascular disease researches in China. Liu LS, et al. **Chin Med J [Engl]** 1989 May;102(5):319–26
Cerebrovascular accidents. Izzo KL, et al. **Clin Podiatr Med Surg** 1989 Oct;6(4):745–59 (15 ref.)
Calcium antagonists: hypertension, atherosclerosis, and stroke. An international symposium to the Fourth European Meeting on Hypertension. Milan, Italy, June 18, 1989. Proceedings. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S1–96
First European Stroke Conference. Düsseldorf, FRG, 10–12 May 1990. Abstracts. **J Neurol** 1990 Apr;237(2):129–61
Stroke. Nadeau SE. **Med Clin North Am** 1989 Nov; 73(6):1351–69 (50 ref.)
Rehabilitation cost effectiveness of stroke [letter] Blackbeard RR, et al. **N Z Med J** 1990 Mar 14;103(885):109
Stroke—1989. Recommendations on stroke prevention, diagnosis, and therapy. Report of the WHO Task Force on Stroke and other Cerebrovascular Disorders. **Stroke** 1989 Oct;20(10):1407–31
Abstracts. 15th International Joint Conference on Stroke and Cerebral Circulation. Orlando, Florida, February 15–17, 1990. **Stroke** 1990 Jan;21(1):156–99
Recent progress of stroke research. The 1st International Stroke Congress. Kyoto, Japan, October 15–19, 1989. Abstracts. **Stroke** 1990 Aug;21(8 Suppl):II–173
Family functioning assessment techniques in stroke. Bishop DS, et al. **Stroke** 1990 Sep;21(9 Suppl):II50–1 (19 ref.)
The decade of the brain: challenge and opportunities in stroke research [editorial] Goldstein M. **Stroke** 1990 Mar; 21(3):373–4
The fallacy of the lacune hypothesis. Millikan C, et al. **Stroke** 1990 Sep;21(9):1251–7 (93 ref.)
[Cerebrovascular diseases] Riegrová H. **Zdrav Aktual** 1983; 204:175–80 (Cze)
[Cerebral apoplexy, incidence and length of stay (letter)] Boysen G. **Ugeskr Laeger** 1990 Apr 30;152(18):1311–2 (Dan)
[Stroke in the young] Adunsky A, et al. **Harefuah** 1989 Aug; 117(3–4):79–81 (44 ref.) (Heb)
[Cerebral vasculitis in children] Calvani M. **Pediatr Med Chir** 1989 Mar–Apr;11 Suppl 1:57–61 (52 ref.) (Eng. Abstr.) (Ita)
[Stroke patients—a challenge to primary health care] Ruud M. **Tidsskr Nor Laegeforen** 1989 Nov 20;109(32):3317–20 (Eng. Abstr.) (Nor)
[Annual conference on neurology. Sinaia, 3–4 June 1988. Abstracts] **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1989 Apr–Jun;34(2):81–148 (Rum)
[Cerebral vascular pathology (editorial)] García JH. **Neurologia** 1987 Jul–Aug;2(4):151–2 (Spa)
[Stroke at a regional hospital—diagnosis, care requirements and epidemiology] Gunnarsson LG, et al. **Lakartidningen** 1990 Apr 25;87(17):1456–8 (Swe)

BLOOD

Serum lipoprotein pattern variations in dementia and ischemic stroke. Giubilei F, et al. **Acta Neurol Scand** 1990 Jan;81(1):84–6
Atherosclerosis and stroke [letter] Taylor WC, et al. **Ann Neurol** 1990 Jul;28(1):108–9
A plasmatic factor may cause platelet activation in acute ischemic stroke. Joseph R, et al. **Circ Res** 1989 Dec; 65(6):1679–87
Effect of low dose acetylsalicylic acid upon plasma thromboxane B2 levels and platelet aggregation in ischemic stroke patients. Lee TK, et al. **Clin Chim Acta** 1989 Oct 16;184(3):323–8
The haematocrit value in diabetic patients with ischaemic stroke. Emara MK, et al. **Diabetes Res** 1989 Dec; 12(4):189–92
Role of protein C in childhood cerebrovascular occlusive accidents. Uysal S, et al. **Eur J Pediatr** 1989 Dec; 149(3):216–8
Increase in red blood cell aggregability following experimental occlusion of the middle cerebral artery in cats. Ohta K. **Keio J Med** 1989 Sep;38(3):311–8
Smoking and cerebral ischaemia [letter; comment] Elwood PC. **Lancet** 1989 Oct 14;2(8668):923 Comment on: Lancet 1989 Sep 16;2(8664):643–7.
Increasing age, diabetes mellitus and recovery from stroke. Gray CS, et al. **Postgrad Med J** 1989 Oct;65(768):720–4
Morning increase in blood viscoelasticity of patients with ischemic stroke [letter; comment] Koeltringer P, et al. **Stroke** 1990 May;21(5):826–7 Comment on: Stroke 1989 Apr;20(4):473–6.
Plasma cortisol as a measure of stress response in acute stroke [letter] Mulley GP, et al. **Stroke** 1989 Nov;20(11):1593
Hypercortisolism revealed by the dexamethasone suppression test in patients [corrected] with acute ischemic stroke [published erratum appears in Stroke 1990 Apr;21(4):681] Olsson T, et al. **Stroke** 1989 Dec;20(12):1685–90
Plasma cortisol as a measure of stress response in acute stroke [letter] Oppenheimer SM. **Stroke** 1990 Sep;21(9):1376
Congenital changes of platelet functions in stroke-prone SHR: aggregability of gel-filtered platelets, PRP and whole blood, and effects of hypotensive treatment. Ikeda M, et al. **Thromb Res** 1989 Nov 1;56(3):441–52
[The effects of ligustrazine, aspirin and beta-histine on platelet aggregation in patients with acute ischemic stroke] Gao BT. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Jun; 22(3):148–51, 191 (Eng. Abstr.) (Chi)
[Changes in serum thyroid hormones in acute cerebrovascular apoplexy and their clinical significance] Hu R. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1990 Apr;23(2):87–9, 126 (Eng. Abstr.) (Chi)
[Observation of plasma levels of antithrombin–III and plasminogen in acute cerebrovascular disease] Lu J. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Aug; 22(4):205–7, 252–3 (Eng. Abstr.) (Chi)
[Serum lipids and apolipoproteins AI, B100, CI and CII in patients with apoplexy] Liu BW, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Mar;20(1):9–12 (Eng. Abstr.) (Chi)
[Rheologic risk factors of apoplexy] Resch KL, et al. **Versicherungsmedizin** 1990 Aug 1;42(4):103–6 (52 ref.) (Eng. Abstr.) (Ger)
[Plasma levels of prostaglandins and leukotrienes in vascular diseases] Dimich D, et al. **Ric Clin Lab** 1989;19 Suppl 1:75–8 (Ita)
[A comparative evaluation of the efficacy of methods of determining osmolality and middle molecules in the prognosis of the course of strokes] Piradov MA, et al. **Lab Delo** 1990;(5):10–2 (Eng. Abstr.) (Rus)
[Dynamics of blood serotonin contents in acute disorders of cerebral circulation and circulatory encephalopathy] Khrapova EV, et al. **Sov Med** 1989;(7):17–20 (Eng. Abstr.) (Rus)
[Various approaches to chemical characteristics of "atherogenic" and "antiatherogenic" classes of lipoproteins in patients with neurovascular diseases] Kolomiets NV, et al. **Vopr Med Khim** 1990 May–Jun;36(3):64–7 (Eng. Abstr.) (Rus)

CEREBROSPINAL FLUID

Cerebrospinal fluid lactate dehydrogenase levels in early stroke and transient ischemic attacks. Lampl Y, et al. **Stroke** 1990 Jun;21(6):854–7
[Usefulness of determining the level of neuron-specific enolase (NSE) in the cerebrospinal fluid as a biochemical indicator of the extent of cerebral ischemic stroke. Experimental study of the rat model of stroke] Kotwica Z, et al. **Neurol Neurochir Pol** 1989 May–Jun;23(3):198–202 (Eng. Abstr.) (Pol)
[Nerve tissue protein S 100 level in the cerebrospinal fluid as an indicator of the extent of brain damage in cerebral ischemic stroke. Experimental study of a rat model of stroke] Kotwica Z, et al. **Neurol Neurochir Pol** 1989 May–Jun;23(3):203–7 (Eng. Abstr.) (Pol)
[CSF monitoring in the emergency therapy of severe strokes] Barsukov SF. **Voen Med Zh** 1990 Mar;(3):44–6 (Rus)
[Prognostic value of primary cerebrospinal fluid acidosis in cerebrovascular insult] Džudža D. **Med Arh** 1983; 37(5–6):3–7 (Scr)

CHEMICALLY INDUCED

Severe non-occlusive ischemic stroke in young heroin addicts. Jensen R, et al. **Acta Neurol Scand** 1990 Apr; 81(4):354–7
Oral nifedipine in the treatment of hypertensive urgency: cerebrovascular accident following a single dose [letter; comment] Schwartz M, et al. **Arch Intern Med** 1990 Mar; 150(3):686–7 Comment on: Arch Intern Med 1989 Feb;149(2):260–5.
A stroke associated with cocaine use [letter; comment] Deringer PM, et al. **Arch Neurol** 1990 May;47(5):502 Comment on: Arch Neurol 1989 Sep;46(9):989–93.
Local low dose intra-arterial thrombolytic therapy: the risk of stroke or major haemorrhage. Berridge DC, et al. **Br J Surg** 1989 Dec;76(12):1230–3 (32 ref.)
Risk of cerebral hypoperfusion with antihypertensive therapy. Fagan SC, et al. **DICP** 1989 Dec;23(12):957–62 (45 ref.)
Possible cocaine predisposition to adverse cerebrovascular and cardiovascular sequelae of bromocriptine administered postpartum. Miller LG, et al. **J Clin Pharmacol** 1989 Sep; 29(9):781–5
Cerebrovascular complications of the use of the "crack" form of alkaloidal cocaine. Levine SR, et al. **N Engl J Med** 1990 Sep 13;323(11):699–704
Cocaine-induced cerebral vascular damage can be ameliorated by Mg2+ in rat brain. Huang QF, et al. **Neurosci Lett** 1990 Feb 5;109(1–2):113–6
Embolic stroke following cardioversion of atrial fibrillation to sinus rhythm with oral amiodarone therapy [letter] Yapa RS, et al. **Postgrad Med J** 1990 May;66(775):410
Cerebral abnormalities in cocaine abusers: demonstration by SPECT perfusion brain scintigraphy. Work in progress. Tumeh SS, et al. **Radiology** 1990 Sep;176(3):821–4
Gonadotrophins, livedo reticularis, and strokes [letter] Ellie E, et al. **Stroke** 1990 Sep;21(9):1377–8
[Neurologic complications caused by use of cocaine, amphetamines and sympathomimetics] Díez-Tejedor E, et al. **Arch Neurobiol (Madr)** 1989;52 Suppl 1:162–82 (46 ref.) (Eng. Abstr.) (Spa)

CLASSIFICATION

Special report from the National Institute of Neurological Disorders and Stroke. Classification of cerebrovascular diseases III. **Stroke** 1990 Apr;21(4):637–76
Classification of stroke for clinical trials. Hachinski V. **Stroke** 1990 Sep;21(9 Suppl):II27–9
A model stroke classification scheme and its use in outcome research. Reding MJ. **Stroke** 1990 Sep;21(9 Suppl):II35–7
[Nomenclature of cerebral vascular diseases] Martí-Vilalta JL, et al. **Neurologia** 1987 Jul–Aug;2(4):166–75 (38 ref.) (Spa)

COMPLICATIONS

Sneddon's syndrome: a rare cause of diffuse vasculopathy. A case report with review of the literature. Boland B, et al. **Acta Clin Belg** 1990;45(2):107–12 (20 ref.)
Sequential changes of auditory brain stem responses in relation to intracranial and cerebral perfusion pressure and initiation of secondary brain stem damage. Kawahara N, et al. **Acta Neurochir (Wien)** 1989;100(3–4):142–9
The natural history of late-onset epilepsy secondary to vascular disease. Fish DR, et al. **Acta Neurol Scand** 1989 Dec;80(6):524–6
108 cases of hemiplegia caused by stroke: the relationship between CT scan results, clinical findings and the effect of acupuncture treatment. Chen YM, et al. **Acupunct Electrother Res** 1990;15(1):9–17
Recovery of visual fields in acute stroke: homonymous hemianopia associated with adverse prognosis. Gray CS, et al. **Age Ageing** 1989 Nov;18(6):419–21
Cerebrovascular disease in AIDS: a case-control study. Berger JR, et al. **AIDS** 1990 Mar;4(3):239–44

Therapy of depressions in post-stroke patients. Balunov OA, et al. **Alaska Med** 1990 Jan-Mar;32(1):20-9 **(Eng, Rus)**

Dysphagia as the sole manifestation of bilateral strokes. Celifarco A, et al. **Am J Gastroenterol** 1990 May; 85(5):610-3

Shoulder subluxation and pain in stroke patients. Bohannon RW, et al. **Am J Occup Ther** 1990 Jun;44(6):507-9

Identification of visual scanning deficits in adults after cerebrovascular accident. Warren M. **Am J Occup Ther** 1990 May;44(5):391-9

Postocclusive cerebral hyperemia is markedly attenuated by chronic trigeminal ganglionectomy. Moskowitz MA, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1736-9

Dissociated neglect behavior following sequential strokes in the right hemisphere. Daffner KR, et al. **Ann Neurol** 1990 Jul;28(1):97-101

Relationship between anxiety disorders and depressive disorders in patients with cerebrovascular injury. Starkstein SE, et al. **Arch Gen Psychiatry** 1990 Mar;47(3):246-51

Downbeat nystagmus associated with dolichoectasia of the vertebrobasilar artery [letter] Gans MS, et al. **Arch Neurol** 1990 Aug;47(8):843

Epileptic seizures in acute stroke. Kilpatrick CJ, et al. **Arch Neurol** 1990 Feb;47(2):157-60

Hemiballism-hemichorea [letter; comment] Lang AE. **Arch Neurol** 1990 Jun;47(6):619-20 Comment on: Arch Neurol 1989 Aug;46(8):862-7.

The plantar response: caution in the elderly. Gray CS, et al. **Br J Hosp Med** 1989 Dec;42(6):495-6

Management of intraventricular haemorrhage in patients with haemorrhagic cerebrovascular diseases. Hayashi M, et al. **Br J Neurosurg** 1988;2(1):23-32

Fatal stroke in migraine: a case report with autopsy findings. Lindboe CF, et al. **Cephalalgia** 1989 Dec;9(4):277-80

Unreported symptomatic and asymptomatic ischaemic heart disease in patients presenting with TIA or minor stroke detected by the London School of Hygiene Cardiovascular Questionnaire and Minnesota coding of a routine ECG. Gates P, et al. **Clin Exp Neurol** 1987;24:21-5

The eye in stroke: amaurosis fugax, ischaemic optic neuropathy and chronic ocular ischaemia. King J. **Clin Exp Neurol** 1988;25:27-32 (24 ref.)

Cerebrovascular accidents. Urological effects and management. Motola JA, et al. **Clin Geriatr Med** 1990 Feb; 6(1):55-68 (35 ref.)

Therapy of acute stroke. Estol C, et al. **Clin Neuropharmacol** 1990 Apr;13(2):91-120 (202 ref.)

Isolated and sequenced oral motor posture production under different input modalities by left-hemisphere damaged adults. Square-Storer P, et al. **Cortex** 1989 Sep;25(3):371-86

Prognosis after stroke in diabetic patients. A controlled prospective study. Olsson T, et al. **Diabetologia** 1990 Apr; 33(4):244-9

Pathogenesis of aphasia in deep-seated lesions: likely role of cortical diaschisis. Demeurisse G, et al. **Eur Neurol** 1990; 30(2):67-74

Pseudobulbar palsy: a clinical computed tomography study. Loeb C, et al. **Eur Neurol** 1990;30(1):42-6

Advanced carotid stenosis in TIA and minor stroke as a predictor of coronary heart disease: a 3-year follow-up. Falke P, et al. **Int Angiol** 1989 Oct-Dec;8(4):175-8

Re: Wade DT et al. Selective Cognitive Losses After Stroke: Frequency Recovery and Prognostic Importance [letter; comment] Ebrahim S. **Int Disabil Stud** 1989 Jul-Sep; 11(3):141 Comment on: Int Disabil Stud 1989;11(1):34-9.

Incidence and evolution of the hemineglect disorder in chronic patients with unilateral right brain damage. Zoccolotti P, et al. **Int J Neurosci** 1989 Aug;47(3-4):209-16

Response to Alegre and Winkelmann: Sneddon's syndrome [letter; comment] Shamai-Lubovitz O, et al. **J Am Acad Dermatol** 1990 Feb;22(2 Pt 1):320-1 Comment on: J Am Acad Dermatol 1988 Jul;19(1 Pt 1):117-24.

The aging-disease dichotomy. Cerebral amyloid angiopathy—an independent entity associated with dementia. Blumenthal HT, et al. **J Am Geriatr Soc** 1990 Apr;38(4):475-82 (61 ref.)

Depression and cerebrovascular disease. Robinson RG, et al. **J Clin Psychiatry** 1990 Jul;51 Suppl:26-31; discussion 32-3 (18 ref.)

Impairment of language is related to left parieto-temporal glucose metabolism in aphasic stroke patients. Karbe H, et al. **J Neurol** 1990 Feb;237(1):19-23

Mitochondrial encephalomyopathy with pilovacuolar inclusion or phenocopy with mitochondrial artefact? Paulus W, et al. **J Neurol** 1989 Sep;236(6):361-3

Epileptic seizures in thrombotic stroke. Sung CY, et al. **J Neurol** 1990 Jun;237(3):166-70

Encephalopathy, deafness and blindness in young women: a distinct retinocochleocerebral arteriolopathy? [letter; comment] Asherson RA, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug;52(8):1020-1 Comment on: J Neurol Neurosurg Psychiatry 1989 Jan;52(1):43-6.

Do visual field deficits exacerbate visuo-spatial neglect? Halligan PW, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):487-91

Pleiotropic molecular defects in energy-transducing complexes in mitochondrial encephalomyopathy (MELAS). Yoneda M, et al. **J Neurol Sci** 1989 Sep; 92(2-3):143-58

Predictive risk factors associated with stroke patient falls in acute care settings. Byers V, et al. **J Neurosci Nurs** 1990 Jun;22(3):147-54

Thalamic pain syndrome. Wilton LM. **J Neurosci Nurs** 1989 Dec;21(6):362-5

Delayed recall deficits in aphasic stroke patients: evidence of Alzheimer's dementia? Bayles KA, et al. **J Speech Hear Disord** 1990 May;55(2):310-4

Knowledge and strategies for processing lexical metaphor after right or left hemisphere brain damage. Tompkins CA. **J Speech Hear Res** 1990 Jun;33(2):307-16

The effect of acupuncture on apoplectic aphasia. Zhang ZJ. **J Tradit Chin Med** 1989 Sep;9(3):169-70

Visuospatial neglect: underlying factors and test sensitivity. Halligan PW, et al. **Lancet** 1989 Oct 14;2(8668):908-11

A case of dysphagia caused by cricopharyngeal dysfunction that responded well to surgery [letter] Sandanam J, et al. **Med J Aust** 1990 Aug 6;153(3):176

Spatial representation of words in the brain implied by studies of a unilateral neglect patient [see comments] Caramazza A, et al. **Nature** 1990 Jul 19;346(6281):267-9 Comment in: Nature 1990 Jul 19;346(6281):217-8.

Stroke in an infant prior to the development of manifestations of neurofibromatosis. Hornstein L, et al. **Neurofibromatosis** 1989;2(2):116-20

Increased accumulation of N-isopropyl-p-(123I)-iodoamphetamine in two cases with mitochondrial encephalomyopathy with lactic acidosis and strokelike episodes (MELAS). Morita K, et al. **Neuroradiology** 1989;31(4):358-61

Mitochondrial encephalomyopathy (MELAS) with mental disorder. CT, MRI and SPECT findings. Suzuki T, et al. **Neuroradiology** 1990;32(1):74-6

Central post-stroke pain—somatosensory evoked potentials in relation to location of the lesion and sensory signs. Holmgren H, et al. **Pain** 1990 Jan;40(1):43-52

Megalencephaly secondary to occlusion and stenosis of sigmoid sinuses. Talwar D, et al. **Pediatr Neurol** 1990 Jan-Feb;6(1):51-3

Magnetic resonance studies on the development of ischemic edema in an early period after occlusion of middle cerebral artery in a rat. Kotwica Z, et al. **Radiol Diagn (Berl)** 1989; 30(3):307-11

Oropharynx in patients with cerebrovascular disease: evaluation with videofluoroscopy. Chen MY, et al. **Radiology** 1990 Sep;176(3):641-3

The cardiovascular status of the black stroke patient. Joubert J, et al. **S Afr Med J** 1989 Dec 16;76(12):657-64 (32 ref.)

Effect of strokes on musical ability and performance. Hachinski VC. **Semin Neurol** 1989 Jun;9(2):159-62 (37 ref.)

Re: Acromegaly and cerebrovascular accidents [letter; comment] Foo TK, et al. **Singapore Med J** 1989 Apr; 30(2):226 Comment on: Singapore Med J 1988 Oct;29(5):476-9.

Current management of amaurosis fugax. The Amaurosis Fugax Study Group. **Stroke** 1990 Feb;21(2):201-8 (85 ref.)

Prolonged hypoperfusion and early stroke after transient ischemic attack. Bogousslavsky J, et al. **Stroke** 1990 Jan; 21(1):40-6

Antiphospholipid antibodies, prethrombotic states, and stroke. Coull BM, et al. **Stroke** 1990 Sep;21(9):1370-4 (36 ref.)

Fatal strokes in hyperglycemic cats. de Courten-Myers GM, et al. **Stroke** 1989 Dec;20(12):1707-15

A prospective study of atrial fibrillation and stroke. D'Olhaberriague L, et al. **Stroke** 1989 Dec;20(12):1648-52

Prolonged pharyngeal impaction of dentures following stroke. Fort S, et al. **Stroke** 1989 Dec;20(12):1748-50

Ischemic brain rescue by transvenous perfusion in baboons with venous sinus occlusion. Frazee JG, et al. **Stroke** 1990 Jan;21(1):87-93

Staging motor impairment after stroke. Gowland CA. **Stroke** 1990 Sep;21(9 Suppl):II19-21

Hematologic disorders and ischemic stroke. A selective review. Hart RG, et al. **Stroke** 1990 Aug;21(8):1111-21 (196 ref.)

Dementia associated with stroke. Hershey LA. **Stroke** 1990 Sep;21(9 Suppl):II9-11 (24 ref.)

Variable angiographic findings in patients with stroke and neurosyphilis. Landi G, et al. **Stroke** 1990 Feb;21(2):333-8

Cerebral amyloid angiopathy as a cause of subarachnoid hemorrhage. Ohshima T, et al. **Stroke** 1990 Mar;21(3):480-3

Affective disorders after stroke. Price TR. **Stroke** 1990 Sep; 21(9 Suppl):II12-3

Cerebrovascular disease in Ehlers-Danlos syndrome type IV. Schievink WI, et al. **Stroke** 1990 Apr;21(4):626-32

Cardiac evaluation of the patient with stroke. Sirna S, et al. **Stroke** 1990 Jan;21(1):14-23

Effect of capsular infarct size on clinical presentation of stroke. Sohn YH, et al. **Stroke** 1990 Sep;21(9):1258-61

Communication deficits in stroke survivors. An overview of classification and treatment. Wertz RT. **Stroke** 1990 Sep; 21(9 Suppl):II16-8

Effect of thyrotropin-releasing hormone (TRH) on motor performance of hemiparetic stroke patients. Nakamura R, et al. **Tohoku J Exp Med** 1990 Feb;160(2):141-3

Analysis of voiding disorders in patients with cerebrovascular accidents. Khan Z, et al. **Urology** 1990 Mar;35(3):265-70

[Homolateral ataxic hemiparesis] Ma ZZ. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Feb; 22(1):47-8, 63 (Eng. Abstr.) **(Chi)**

[The relation between hypertension and cerebrovascular accidents] Fejfuša M, et al. **Cas Lek Cesk** 1989 Nov 17; 128(47):1487-90 (Eng. Abstr.) **(Cze)**

[Cortical pain. Clinical, electrophysiologic and topographic study of 12 cases] Michel D, et al. **Rev Neurol (Paris)** 1990; 146(6-7):405-14 (38 ref.) (Eng. Abstr.) **(Fre)**

[Association of a triple artery and acute cerebrovascular attack with hemolytic anemia in a 4-year-old child] Khaldi F, et al. **Tunis Med** 1989 Nov;67(11):723-6 (Eng. Abstr.) **(Fre)**

[Speech therapy for Aphasia following cerebrovascular accident] Schnider A. **Schweiz Med Wochenschr** 1990 Jun 9;120(23):859-65 (38 ref.) (Eng. Abstr.) **(Ger)**

[The Sneddon syndrome—diagnostic, etiological and therapeutic aspects] Aldenhövel HB. **Schweiz Rundsch Med Prax** 1990 Jun 5;79(23):726-9 (28 ref.) (Eng. Abstr.) **(Ger)**

[Cerebral autoregulation and the treatment of hypertensive patients with cerebrovascular accidents] Rosen B, et al. **Harefuah** 1990 Jan 1;118(1):24-5 (13 ref.) **(Heb)**

[Arterial hypertension during the rehabilitation phase of cerebral stroke. Study with nicardipine] Puccinelli F, et al. **Clin Ter** 1989 Jul 15;130(1):29-35 (Eng. Abstr.) **(Ita)**

[Clinical value of bedside ultrasonography in craniectomized patients] Kobayashi S, et al. **Neurol Med Chir (Tokyo)** 1989 Aug;29(8):740-5 (Eng. Abstr.) **(Jpn)**

[Treatment of hypertension complicated by cerebrovascular diseases] Fijishima M. **Nippon Naika Gakkai Zasshi** 1990 Jan 10;79(1):65-70 **(Jpn)**

[Consciousness disorders in cerebrovascular diseases] Terashi A. **Nippon Naika Gakkai Zasshi** 1990 Apr 10;79(4):446-51 **(Jpn)**

[Short-term therapeutic prognosis of cognitive impairment with cerebrovascular diseases in chronic stages] Fujita T, et al. **Nippon Ronen Igakkai Zasshi** 1989 Sep;26(5):499-506 (Eng. Abstr.) **(Jpn)**

[Disturbances of fluid and electrolyte balance in patients with acute stroke] Kusuda K, et al. **Nippon Ronen Igakkai Zasshi** 1989 May;26(3):223-7 (Eng. Abstr.) **(Jpn)**

[Mechanism and therapy of hyponatremia with central origin] Morinaga K, et al. **No Shinkei Geka** 1989 Jun;17(6):539-44 (Eng. Abstr.) **(Jpn)**

[A case of Fahr's disease showing West syndrome at the onset] Origuchi Y. **No To Hattatsu** 1989 Sep;21(5):499-501 **(Jpn)**

[Arteriovenous fistula of the inferior lobe of the right lung complicated by recurrent hemorrhage] Rakishev GB, et al. **Grud Serdechnososudistaia Khir** 1990;(4):68-9 **(Rus)**

[Onset of hypertensive disease and cerebral insult] Buletsa BA, et al. **Klin Med (Mosk)** 1989 Sep;67(9):54-5 **(Rus)**

[Vestibular syndrome in cerebral angiodystonia] Kukhtevich II, et al. **Sov Med** 1989;(7):84-7 **(Rus)**

[Vascular reactivity in cerebral circulatory asthenia of various etiologies] Shtok VN, et al. **Sov Med** 1990;(1):92-4 **(Rus)**

[Dynamics of intraocular pressure and pressure in the central retinal artery in cerebral disorders with vascular hypertension in children] Kadyrova TK, et al. **Vestn Oftalmol** 1990 May-Jun;106(3):30-2 (Eng. Abstr.) **(Rus)**

[Dynamics of cochleovestibular disorders in patients with early manifestations of cerebral circulation insufficiency] Kuklina EV. **Vestn Otorinolaringol** 1989 Jul-Aug;(4):13-6 (Eng. Abstr.) **(Rus)**

[Disorders of mental function in patients with circulatory encephalopathy due to hypertension and atherosclerosis] Voloshin PV, et al. **Vrach Delo** 1989 Jul;(7):77-80 (Eng. Abstr.) **(Rus)**

[Prediction of the degree of restoration of motor functions in patients after cerebral stroke at the ambulatory stage of rehabilitation treatment by using prognostic tables] Belova AN, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):48-52 (Eng. Abstr.) **(Rus)**

[Experience with amysil treatment of patients with vascular parkinsonism] Kamenetskii VK. **Zh Nevropatol Psikhiatr** 1989;89(9):56-9 (Eng. Abstr.) **(Rus)**

[Prevention of contractures in post-stroke arthropathies] Stoliarova LG, et al. **Zh Nevropatol Psikhiatr** 1989; 89(9):63-5 (Eng. Abstr.) **(Rus)**

[Sudden deafness associated with abnormal cerebral venous drainage. Apropos of a case] Bartual J, et al. **Acta Otorrinolaringol Esp** 1988 Jan-Feb;39(1):37-42 (Eng. Abstr.) **(Spa)**

[Sneddon's syndrome. 2 case reports] Lazarova A, et al. **Med Cutan Ibero Lat Am** 1989;17(6):354-6 (Eng. Abstr.) **(Spa)**

[Abnormal movements of vascular origin] López Arlandis JM, et al. **Neurologia** 1989 Nov;4(9):316-22 (Eng. Abstr.) **(Spa)**

[Depression in cerebrovascular disorders: a prospective study and the effect of maprotiline therapy] Fonck ML, et al. **Rev Med Chil** 1988 Sep;116(9):887-94 (Eng. Abstr.) **(Spa)**

[Central post-stroke pain is a confusing and forgotten condition] Leijon G, et al. **Lakartidningen** 1990 Jan 31; 87(5):294-300 **(Swe)**

DIAGNOSIS

Transcranial Doppler sonography. Verlooy J, et al. **Acta Neurol Belg** 1989 Mar-Apr;89(2):87-92 (9 ref.)

Neuroborreliosis simulating a progressive stroke. Olsson JE, et al. **Acta Neurol Scand** 1990 May;81(5):471-4

A re-validation of the Rivermead ADL scale for elderly patients with stroke. Lincoln NB, et al. **Age Ageing** 1990

Jan;19(1):19–24
Leukoencephalopathy in cerebral amyloid angiopathy: MR imaging in four cases. Loes DJ, et al. **AJNR** 1990 May; 11(3):485–8
Spontaneous arteriovenous shunts of the cavernous sinus—ophthalmological considerations. Halmagyi GM, et al. **Aust N Z J Ophthalmol** 1989 Nov;17(4):439–43
Detection and recognition of visual field defects resulting from lesions involving the visual pathways [see comments] Wellings PC. **Aust N Z J Ophthalmol** 1989 Nov;17(4):331–5 Comment in: Aust N Z J Ophthalmol 1989 Nov;17(4):329–30.
Transcranial Doppler sonography. Nelson RJ. **Br J Neurosurg** 1988;2(1):3–6
High resolution magnetic resonance imaging of vascular lesions at the skull base: a review. Kucharczyk W. **Can Assoc Radiol J** 1990 Feb;41(1):14–8 (11 ref.)
Cerebral vascular diseases. Atlas SW. **Curr Opin Radiol** 1990 Feb;2(1):18–25 (23 ref.)
Stroke-related EEG changes during carotid surgery. Krul JM, et al. **Eur J Vasc Surg** 1989 Oct;3(5):423–8
Comparative value of glutamic oxaloacetic transaminase and lactic dehydrogenase enzyme pattern in serum and cerebrospinal fluid in acute cerebrovascular accidents. Shukla RP, et al. **J Indian Med Assoc** 1989 Oct;87(10):231–3
Assessing motor impairment after stroke: a pilot reliability study. Collin C, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):576–9
Transcranial Doppler pulsatility in vasodilation and stenosis. Giller CA, et al. **J Neurosurg** 1990 Jun;72(6):901–6
Prognostication of recovery following stroke using the comparison of CT and technetium-99m HM-PAO SPECT. Mountz JM, et al. **J Nucl Med** 1990 Jan;31(1):61–6
Is the continued use of ocular pneumoplethysmography necessary for the diagnosis of cerebrovascular disease? Martin KD, et al. **J Vasc Surg** 1990 Feb;11(2):235–41; discussion 241–3
Magnetic resonance imaging of the posterior fossa. Bydder GM. **Magn Reson Annu** 1985;:1–26 (38 ref.)
Head and neck hemorrhage. Gomori JM, et al. **Magn Reson Annu** 1987;:71–112 (26 ref.)
Carotid-CNS MR flow imaging. Masaryk TJ, et al. **Magn Reson Med** 1990 May;14(2):308–14
Transcranial Doppler ultrasound: present status. Caplan LR, et al. **Neurology** 1990 Apr;40(4):696–700 (69 ref.)
Fluctuating MR images with mitochondrial encephalopathy, lactic acidosis, stroke-like syndrome (MELAS). Abe K, et al. **Neuroradiology** 1990;32(1):77
Magnetic resonance imaging in MELAS syndrome. Rosen L, et al. **Neuroradiology** 1990;32(2):168–71
Transcranial Doppler sonographic identification of a subgroup of patients with normal pressure hydrocephalus with coexistent vascular disease and treatment failure. Fritz W, et al. **Neurosurgery** 1989 Nov;25(5):777–80
Diagnosis of acute stroke. How to relate presentation to vascular anatomy. Alberts MJ. **Postgrad Med** 1989 Dec; 86(8):95–8, 101–2
Wallerian degeneration of the corticospinal tract in the brain stem: MR imaging. Uchino A, et al. **Radiat Med** 1989 Mar–Apr;7(2):74–8
Duplex examination of the carotid arteries. Zwiebel WJ, et al. **Semin Ultrasound CT MR** 1990 Apr;11(2):97–135 (60 ref.)
Clinical study of 227 patients with lacunar infarcts. Arboix A, et al. **Stroke** 1990 Jun;21(6):842–7
Community hospital-based stroke programs in North Carolina, Oregon, and New York. IV. Stroke diagnosis and its relation to demographics, risk factors, and clinical status after stroke. Coull BM, et al. **Stroke** 1990 Jun; 21(6):867–73
Classification of stroke by neuroimaging technique. Kinkel WR. **Stroke** 1990 Sep;21(9 Suppl):II7–8
The MICROSTROKE expert system for stroke type diagnosis. Spitzer K, et al. **Stroke** 1989 Oct;20(10):1353–6
The vascular laboratory. Standards and certification. Thiele BL. **Surg Clin North Am** 1990 Feb;70(1):1–11
The value of diagnostic procedures in treating ischemic attacks and stroke. Marx P. **Thorac Cardiovasc Surg** 1989 Aug;37(4):253–8 (54 ref.)
[Present possibilities of ultrasonic diagnosis of intracranial cerebral vasculature] Modravý V, et al. **Cas Lek Cesk** 1989 Jun 28;128(26):819–22 (Eng. Abstr.) **(Cze)**
[Migraine with aura (classical migraine) in patients examined for cerebrovascular disease] Olsen TS, et al. **Ugeskr Laeger** 1990 May 21;152(21):1513–5 (Eng. Abstr.) **(Dan)**
[Cerebrovascular Doppler studies in infants and neonates. Marginal observations on the method] Mullaart RA, et al. **Tijdschr Kindergeneeskd** 1989 Jun;57(3):112–7 (35 ref.) (Eng. Abstr.) **(Dut)**
[Transcranial Doppler exploration of the brain stem vascularization in neurological pathology] Pendefunda L, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Oct–Dec; 93(4):663–9 (Eng. Abstr.) **(Fre)**
[Doppler sonographic findings in the cerebral arteries] Ranke C, et al. **Internist (Berl)** 1989 Oct;30(10):W89–103 **(Ger)**
[Rare intrasellar and suprasellar processes. 3: Vascular processes. Vascular lesions of the sella turcica] Honegger J, et al. **Nervenarzt** 1989 Nov;60(11):685–92 **(Ger)**
[Modern imaging procedures in the diagnosis of an acute apoplectic insult and their therapeutic consequences] Köhler K, et al. **Radiol Diagn (Berl)** 1989;30(4):473–9 (Eng. Abstr.) **(Ger)**
[Rudimentary psychomotor seizures and their differential diagnosis] Karbowski K. **Schweiz Rundsch Med Prax** 1990 Jun 12;79(24):772–6 (Eng. Abstr.) **(Ger)**
[Diagnosis and therapy of cerebrovascular diseases] Yaşargil MG. **Schweiz Rundsch Med Prax** 1990 Jan 9;79(1–2):3–8 (14 ref.) (Eng. Abstr.) **(Ger)**
[Magnetic resonance angiography of intracranial blood vessels] Felber S, et al. **Vasa Suppl** 1989;27:373–5 **(Ger)**
[Magnetic resonance angiography: the neck and head] Kaiser WA. **Vasa Suppl** 1989;27:389–92 **(Ger)**
[Value of the Medicor CT 0100 equipment in a county hospital in the diagnosis of cerebrovascular diseases] Horváth G, et al. **Orv Hetil** 1990 Jan 14;131(2):59–60, 63–6 (38 ref.) (Eng. Abstr.) **(Hun)**
[Transcranial Doppler sonography] Lipcsey A, et al. **Orv Hetil** 1989 Nov 19;130(47):2507–11 (Eng. Abstr.) **(Hun)**
[Regional cerebral blood flow studied by single photon emission computed tomography (SPECT)] Pávics L, et al. **Orv Hetil** 1990 Jan 7;131(1):3–8 (36 ref.) (Eng. Abstr.) **(Hun)**
[Cardiac enzymes in acute cerebrovascular diseases: their behavior in relation to ECG] Lovreglio V, et al. **Minerva Med** 1989 Sep;80(9):1003–10 (Eng. Abstr.) **(Ita)**
[Silent stroke and advance in neuroimaging] Okada Y, et al. **Rinsho Hoshasen** 1989 Jun;34(6):641–6 (Eng. Abstr.) **(Jpn)**
[Recent progress of neuro-imaging for the diagnosis of cerebrovascular disease and dementia] Torizuka K. **Rinsho Hoshasen** 1989 Oct;34(11):1355–7 **(Jpn)**
[Isolated angitis of the central nervous system—case report and review] Saito T, et al. **Rinsho Shinkeigaku** 1989 Apr; 29(4):456–63 (Eng. Abstr.) **(Jpn)**
[Diagnosis of cerebral amyloid angiopathy with cerebral hemorrhage by enzyme linked immunosorbent assay (ELISA) of cystatin C in the cerebrospinal fluid] Shimode K, et al. **Rinsho Shinkeigaku** 1990 Mar;30(3):288–93 (Eng. Abstr.) **(Jpn)**
[The cerebral form of Sjögren's syndrome] Kowal-Gierczak B, et al. **Psychiatr Pol** 1989 Jan–Feb;23(1):64–7 **(Pol)**
[Transcranial Doppler ultrasonography—a new technic of examination of cerebral blood flow] Lass P, et al. **Wiad Lek** 1990 Apr 15;43(8):330–5 (Eng. Abstr.) **(Pol)**
[Clinico-laboratory criteria of cerebrovascular disorders in newborn infants] Barashnev IuI, et al. **Akush Ginekol (Mosk)** 1990 Jan;(1):29–31 **(Rus)**
[The initial manifestations of cerebral circulatory failure in coal mine workers of the Don Basin] Nazarenko VG, et al. **Vrach Delo** 1990 Feb;(2):95–7 (Eng. Abstr.) **(Rus)**
[Significance of subjective symptoms and diagnostic criteria in initial forms of cerebral circulation insufficiency] Eninia GI, et al. **Zh Nevropatol Psikhiatr** 1989;89(12):19–23 (Eng. Abstr.) **(Rus)**
[Encephaloradiothermometry in the diagnosis of early stages of cerebrovascular insufficiency] Gustov AV, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):27–31 (Eng. Abstr.) **(Rus)**
[Computer-assisted spectrum analysis of Doppler ultrasonograms in occlusive lesions of the carotid arteries] Pokrovskiĭ AV, et al. **Zh Nevropatol Psikhiatr** 1990; 90(1):9–12 (Eng. Abstr.) **(Rus)**
[The role of echopulsography in the detection of cerebrovascular pathology] Robule VKh. **Zh Nevropatol Psikhiatr** 1990;90(2):114–8 (Eng. Abstr.) **(Rus)**
[An automated system of diagnosis of cerebrovascular diseases for preventive mass screening of the population] Troshin VD, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):13–6 (Eng. Abstr.) **(Rus)**
[Syndromes of cerebral circulatory disorder in the anterior cerebral artery basin in the early postoperative period in tumors with a mediobasal localization] Dziubanova NA, et al. **Zh Vopr Neirokhir** 1990 Mar–Apr;(2):16–9 (Eng. Abstr.) **(Rus)**
[The man behind the method: Christian Doppler—the man behind a revised, old established method. Doppler measurement improved diagnosis of cerebrovascular disorders] Brandt L, et al. **Lakartidningen** 1990 Jul 11; 87(28–29):2351–5 **(Swe)**

DRUG THERAPY

Antithrombotic therapy in stroke and transient ischemic attacks. Feinberg W. **Am Fam Physician** 1989 Nov;40(5 Suppl):53S–59S (34 ref.)
Ancrod causes rapid thrombolysis in patients with acute stroke. Pollak VE, et al. **Am J Med Sci** 1990 May; 299(5):319–25
Results of hemorheologically active treatment with pentoxifylline in patients with cerebrovascular disease. Schneider R. **Angiology** 1989 Nov;40(11):987–93
Treatment of acute stroke [letter; comment] del Zoppo GJ, et al. **Ann Intern Med** 1990 May 1;112(9):713 Comment on: Ann Intern Med 1989 Sep 15;111(6):449–51.
Drugs in cerebral and peripheral arterial disease. Lowe GD. **BMJ** 1990 Feb 24;300(6723):524–8 (21 ref.)
Investigation of intravascular haemolysis during treatment of acute stroke with intravenous glycerol. Kumana CR, et al. **Br J Clin Pharmacol** 1990 Mar;29(3):347–53
Drug therapy in patients with recent stroke. Harper GD, et al. **Br Med Bull** 1990 Jan;46(1):181–201 (67 ref.)
Transient ischemic attacks and ischemic stroke: indications for anticoagulation. Miller VT. **Clin Cardiol** 1990 Apr;13(4 Suppl 6):VI29–30 (41 ref.)
Double-blind study of nimodipine in non-severe stroke. Bogousslavsky J, et al. **Eur Neurol** 1990;30(1):23–6
Treatment of acute stroke with calcium antagonists. Hülser PJ, et al. **Eur Neurol** 1990;30 Suppl 2:35–8; discussion 39–41 (27 ref.)
Flunarizine in acute ischemic stroke: a pilot study. Limburg M, et al. **Eur Neurol** 1990;30(3):121–2
Clinical neuropharmacology of calcium antagonists. Delumeau JC, et al. **Fundam Clin Pharmacol** 1989;3 Suppl:89s–102s (92 ref.)
Stroke therapy advances open new era in care. Moran EJ. **Hospitals** 1990 Sep 20;64(18):66, 68
Effects of acetyl-L-carnitine on reaction times in patients with cerebrovascular insufficiency. Arrigo A, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):133–7
Aspirin and stroke prevention: how much? Toffol GJ. **J Am Osteopath Assoc** 1990 May;90(5):435–7 (15 ref.)
Role of dexamethasone in the outcome from acute stroke. Kumar N, et al. **J Assoc Physicians India** 1989 May; 37(5):315–7 (18 ref.)
Calcium antagonists for reduction of brain damage in stroke. Sauter A, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S43–7
Adenosinergic approaches to stroke therapeutics. Marangos PJ. **Med Hypotheses** 1990 May;32(1):45–9 (32 ref.)
Fructose-added glycerol (Glyceol) for therapy of elevated intracranial pressure: analysis of the side effects of long-term administration in a multi-institutional trial. Tsubokawa T, et al. **Neurol Res** 1989 Dec;11(4):249–52
Use of antithrombotic drugs in the treatment of acute ischemic stroke: a survey of neurologists in practice in the United States. Marsh EE 3d, et al. **Neurology** 1989 Dec; 39(12):1631–4
Magnesium ions prevent phencyclidine-induced cerebrovasospasms and rupture of cerebral microvessels: direct in-vivo microcirculatory studies on the rat brain. Huang QF, et al. **Neurosci Lett** 1990 May 18;113(1):115–9
Stimulatory effect of some therapeutic drugs used for improving cerebral insufficiency on gastric acid secretion in rats. Yano S, et al. **Pharmacology** 1990;40(4):205–10
Treatment of ischemic stroke. Lessons from clinical trials. Gorelick PB. **Postgrad Med** 1989 Dec;86(8):107–14, 117–8 (24 ref.)
Intracerebral hemorrhage in stroke patients anticoagulated with heparin. Babikian VL, et al. **Stroke** 1989 Nov; 20(11):1500–3 (24 ref.)
Pentoxifylline increases cerebral blood flow in patients with cerebrovascular disease. Bowton DL, et al. **Stroke** 1989 Dec;20(12):1662–6
Anticoagulation: is there still a role in atherothrombotic stroke? Estol CJ, et al. **Stroke** 1990 May;21(5):820–4 (31 ref.)
Intracranial thrombolysis via a catheter embedded in the clot. Jungreis CA, et al. **Stroke** 1989 Nov;20(11):1578–80
Large-dose infusions of heparinoid ORG 10172 in ischemic stroke. Massey EW, et al. **Stroke** 1990 Sep;21(9):1289–92
High-dose intravenous naloxone for the treatment of acute ischemic stroke. Olinger CP, et al. **Stroke** 1990 May; 21(5):721–5
GM1 ganglioside therapy in acute ischemic stroke [letter; comment] Oppenheimer S. **Stroke** 1990 May;21(5):825 Comment on: Stroke 1989 Sep;20(9):1143–9.
Pentoxifylline alters the natural course of acute nonhemorrhagic stroke [letter; comment] Ott E, et al. **Stroke** 1990 Jan;21(1):152 Comment on: Stroke 1988 Jun;19(6):716–22.
Delayed treatment with a t-PA analogue and streptokinase in a rabbit embolic stroke model. Phillips DA, et al. **Stroke** 1990 Apr;21(4):602–5
Calcium antagonists: stroke therapy coming of age. Wong MC, et al. **Stroke** 1990 Mar;21(3):494–501 (68 ref.)
Warfarin and stroke [letter; comment] Bohr T. **West J Med** 1989 Dec;151(6):669 Comment on: West J Med 1989 Aug;151(2):197–8.
[Clinical, laboratory and animal experimental observations in treating 288 cases of ischemic cerebrovascular disease with polysaccharide sulfate] Han ZY. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Apr; 22(2):99–103, 127 (Eng. Abstr.) **(Chi)**
[Medical treatment of acute hemorrhagic stroke—observation of 44 cases with FCMCK therapy] Wang J. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1990 Feb; 12(1):61–7 (Eng. Abstr.) **(Chi)**
[Clinical aspects of treatment and preventive treatment with thrombocyte aggregation inhibitors in cerebrovascular diseases] Kollegger H, et al. **Acta Med Austriaca** 1989; 16(5):114–8 (40 ref.) (Eng. Abstr.) **(Ger)**
[Cerebrovascular disorders] Diener HC. **Med Monatsschr Pharm** 1990 Mar;13(3):69–73 (9 ref.) **(Ger)**
[Local intravasal fibrinolysis in acute cerebrovascular occlusions] Lehmann R, et al. **Radiol Diagn (Berl)** 1989; 30(4):481–8 (Eng. Abstr.) **(Ger)**
[Patients with stroke treated with TRH-T. Evaluation of electric brain activity using traditional and computerized methods] Bramanti P, et al. **Clin Ter** 1990 Apr 15; 133(1):19–23 (Eng. Abstr.) **(Ita)**
[Whole blood filterability in chronic cerebrovascular disorders: effects of the use of buflomedil hydrochloride] Ciuffetti G, et al. **Minerva Med** 1989 Nov;80(11):1237–40

(Eng. Abstr.) (Ita)
[Effects of buflomedil hydrochloride on the rheological properties of the blood in chronic cerebrovascular diseases] Lombardini R, et al. **Ric Clin Lab** 1989;19 Suppl 1:117–9 (Ita)
[Barbiturate therapy in traumatic cerebral vascular disease: report of two cases] Yanaka K, et al. **No Shinkei Geka** 1989 Dec;17(12):1153–7 (Eng. Abstr.) (Jpn)
[Nervous disease & Ca antagonist] Otomo E. **No To Shinkei** 1990 Jan;42(1):33–41 (Jpn)
[Use of naloxone in neurology] Mendel T, et al. **Neurol Neurochir Pol** 1988 Nov–Dec;22(6):553–7 (30 ref.) (Pol)
[The effect of carbacyclin on the ATPase activity in the heart of normotensive and spontaneously hypertensive rats with a hereditary susceptibility to stroke] Vasil'eva. **Biull Eksp Biol Med** 1990 Mar;109(3):229–31 (Eng. Abstr.) (Rus)
[Calcium antagonists (finoptin and senzit) in the treatment of cerebrovascular disorders] Burtsev EM, et al. **Klin Med (Mosk)** 1989 Sep;67(9):51–4 (Eng. Abstr.) (Rus)
[Comparison of the effectiveness of treatment with diverse doses of cinnarizine of patients with circulatory encephalopathy] Shtok VN, et al. **Klin Med (Mosk)** 1989 Sep;67(9):55–8 (Eng. Abstr.) (Rus)
[Use of sermion, Cavinton and trental in patients with cerebrovascular disorders] Lebedeva NV, et al. **Sov Med** 1990;(1):60–3 (Rus)
[The effect of combined drug treatment on rheologic properties of the blood in patients with disordered circulatory encephalopathy] Ishchenko MM, et al. **Vrach Delo** 1990 Mar;(3):58–60 (Eng. Abstr.) (Rus)
[Platelet antiaggregants in the treatment of vasculopathies] Honorato J, et al. **Angiologia** 1990 Jan–Feb;42(1):1–10 (31 ref.) (Eng. Abstr.) (Spa)
[Prevention and treatment of cerebral ictus] Martínez Castrillo JC, et al. **Neurologia** 1989 Mar;4(2):50–60 (103 ref.) (Spa)

ECONOMICS

The economics of hypertension and stroke. Smith GT. **Am Heart J** 1990 Mar;119(3 Pt 2):725–7; discussion 727–8 (10 ref.)
Direct costs of stroke for a Swedish population. Persson U, et al. **Int J Technol Assess Health Care** 1990;6(1):125–37
Principles involved in costing. Evans DB. **Med J Aust** 1990 Aug 6;153 Suppl:S10–2
[Stroke patients—quality of life and economics] Abildgaard U. **Tidsskr Nor Laegeforen** 1989 Nov 20;109(32):3313 (Eng. Abstr.) (Nor)

ENZYMOLOGY

Plasma benzylamine oxidase activity in cerebrovascular disease. Ishizaki F. **Eur Neurol** 1990;30(2):104–7
Antioxidant enzymatic systems in human erythrocytes from subjects with chronic cerebrovascular disease. Vanella A, et al. **Pharmacol Res** 1990 May–Jun;22(3):271–6
[Brain-type creatine kinase isoenzymes (CK BB) in cerebrovascular accidents] Mrabet A, et al. **Tunis Med** 1989 Jun–Jul;67(6–7):397–400 (Fre)
[A case of MELAS (mitochondrial myopathy, encephalopathy, lactic acidosis and stroke-like episodes) with progressive cytochrome c oxidase deficiency] Sumi K, et al. **Rinsho Shinkeigaku** 1989 Jul;29(7):901–8 (Eng. Abstr.) (Jpn)
[Creatine phosphokinase in the cerebrospinal fluid of patients with stroke in the acute period] Zinchenko VA, et al. **Zh Nevropatol Psikhiatr** 1989;89(7):92–5 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Ischemic stroke in young adults. II. Analysis of risk factors in the etiological subgroups. Matias-Guiu J, et al. **Acta Neurol Scand** 1990 Apr;81(4):314–7
Epidemiological chronorisk of stroke. Pasqualetti P, et al. **Acta Neurol Scand** 1990 Jan;81(1):71–4
Cerebral apoplexy: figures and features. Riishede J. **Am Heart J** 1968 Sep;76(3):301–3
Response bias in the Honolulu Heart Program. Benfante R, et al. **Am J Epidemiol** 1989 Dec;130(6):1088–100
Epidemiology of some peripheral arterial findings in diabetic men and women: experiences from the Framingham Study. Abbott RD, et al. **Am J Med** 1990 Apr;88(4):376–81
The antiphospholipid syndrome: prevalence among patients with stroke and transient ischemic attacks. Trimble M, et al. **Am J Med** 1990 Jun;88(6):593–7
The natural history of carotid bruits in elderly persons [published erratum appears in Ann Intern Med 1990 Jan 15;112(12):967] Van Ruiswyk J, et al. **Ann Intern Med** 1990 Mar 1;112(5):340–3
Perioperative stroke risk in 173 consecutive patients with a past history of stroke. Landercasper J, et al. **Arch Surg** 1990 Aug;125(8):986–9
Stroke in women. Barnett HJ. **Can J Cardiol** 1990 May;6 Suppl B:11B–17B (40 ref.)
Is atrial fibrillation an independent risk factor for stroke? Phillips SJ. **Can J Neurol Sci** 1990 May;17(2):163–8
Cerebrovascular disease and stroke in women. Wong MC, et al. **Cardiology** 1990;77 Suppl 2:80–90 (73 ref.)
Cardiovascular community control programs in Beijing. Wu YK, et al. **Chin Med J [Engl]** 1990 Feb;103(2):89–94 (5 ref.)
Trends for coronary heart disease in Japan [letter] Kesteloot H. **Circulation** 1990 Jan;81(1):392
The Perth Community Stroke Study: attack rates for stroke and TIA in Western Australia. Stewart-Wynne E, et al. **Clin Exp Neurol** 1987;24:39–44
Cerebrovascular accidents in Ethiopia. Abebe M, et al. **Ethiop Med J** 1990 Apr;28(2):53–61
Register for cerebrovascular events in the Area Latina, Italy. Clinical and epidemiological data during three years of surveillance. Giampaoli S, et al. **Ital J Neurol Sci** 1989 Oct;10(5):499–503
Stroke and acute myocardial infarction in the thrombolytic era: clinical correlates and long-term prognosis [see comments] O'Connor CM, et al. **J Am Coll Cardiol** 1990 Sep;16(3):533–40 Comment in: J Am Coll Cardiol 1990 Sep;16(3):541–4.
Early cerebral complications in carotid endarterectomy: risk factors. Salenius JP, et al. **J Cardiovasc Surg (Torino)** 1990 Mar–Apr;31(2):162–7
Comparison of case ascertainment by medical record linkage and cohort follow-up to determine incidence rates for transient ischemic attacks and stroke. Whisnant JP, et al. **J Clin Epidemiol** 1990;43(8):791–7
The use of hormonal replacement therapy and the risk of stroke and myocardial infarction in women. Thompson SG, et al. **J Epidemiol Community Health** 1989 Jun;43(2):173–8
Carotid endarterectomy contralateral to an occluded carotid artery: perioperative risk and late results. Mackey WC, et al. **J Vasc Surg** 1990 Jun;11(6):778–83; discussion 784–5
Carotid patch angioplasty: immediate and long-term results. Rosenthal D, et al. **J Vasc Surg** 1990 Sep;12(3):326–33
Cerebrovascular disease, ischaemic heart disease, and the stress of vehicle travel. Robinson AA. **Med Hypotheses** 1989 Oct;30(2):101–4
Measurement of cost-effectiveness of drug therapy: a review of the treatment of hypertension. Moulds RF. **Med J Aust** 1990 Aug 6;153 Suppl:S4–6
Seasonal variation in stroke frequency [letter] Berginer VM, et al. **Neuroepidemiology** 1990;9(3):162
Risk factors for stroke in rural areas of the People's Republic of China: results of a case-control study. Li SC, et al. **Neuroepidemiology** 1990;9(2):57–67
Risk factors predisposing to stroke in an elderly Chinese population—a longitudinal study. Woo J, et al. **Neuroepidemiology** 1990;9(3):131–4
Circadian variation in the frequency of ischemic stroke. Argentino C, et al. **Stroke** 1990 Mar;21(3):387–9
Moderate alcohol consumption and stroke. The epidemiologic evidence. Camargo CA Jr. **Stroke** 1989 Dec; 20(12):1611–26 (109 ref.)
Incidence of hypertension and stroke in relation to body fat distribution and other risk factors in older women. Folsom AR, et al. **Stroke** 1990 May;21(5):701–6
Cerebrovascular disease in Hong Kong Chinese. Huang CY, et al. **Stroke** 1990 Feb;21(2):230–5
Carotid artery blood flow velocity related to transient ischemic attack and stroke in a population study of 69-year-old men. Jungquist G, et al. **Stroke** 1989 Oct; 20(10):1327–30
Cerebrovascular disease in rural Kashmir, India. Razdan S, et al. **Stroke** 1989 Dec;20(12):1691–3
Stroke in the People's Republic of China. Shi FL, et al. **Stroke** 1989 Nov;20(11):1581–5 (55 ref.)
Seasonal variation in stroke incidence in Hisayama, Japan. Shinkawa A, et al. **Stroke** 1990 Sep;21(9):1262–7
Epidemiology of stroke in the Poznań district of Poland. Wender M, et al. **Stroke** 1990 Mar;21(3):390–3
An overview of the epidemiology of stroke. Wolf PA. **Stroke** 1990 Sep;21(9 Suppl):II4–6
Serum cholesterol and hemorrhagic stroke in the Honolulu Heart Program. Yano K, et al. **Stroke** 1989 Nov; 20(11):1460–5
[Incidence and distribution of cerebral amyloid angiopathy] Wang YS. **Chung Hua I Hsueh Tsa Chih** 1989 Jun; 69(6):338–40 (Chi)
[An investigation on the association between incidence of coronary heart disease and stroke and meteorological factors] Wu Y. **Chung Hua Lin Hsing Ping Hsueh Tsa Chih** 1990 Apr; 11(2):88–91 (Eng. Abstr.) (Chi)
[Cerebrovascular disease in rural areas of Sichuan] Hu CL. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Feb; 22(1):49–51, 63–4 (Eng. Abstr.) (Chi)
[Social impact of cerebrovascular disorders in a large engineering plant 1982–1986] Filipovský J, et al. **Cas Lek Cesk** 1989 Jun 28;128(26):805–8 (Eng. Abstr.) (Cze)
[Indicators of the incidence of cerebrovascular disorders in a selected part of the Brno agglomeration] Hrazdirová V, et al. **Cesk Neurol Neurochir** 1989 Jul;52(4):257–61 (Eng. Abstr.) (Cze)
[2 contributions to the question of care of patients with cerebrovascular disease] Pinta Z. **Cesk Neurol Neurochir** 1990 Jan;53(1):43–6 (Eng. Abstr.) (Cze)
[Cerebral apoplexy. Incidence and duration of hospitalization] Sivebaek AM, et al. **Ugeskr Laeger** 1990 Feb 12;152(7):459–61 (Eng. Abstr.) (Dan)
[Epidemiologic aspects of cerebrovascular accidents in Tunisia] Mrabet A, et al. **Rev Neurol (Paris)** 1990; 146(4):297–301 (Eng. Abstr.) (Fre)
[Surveillance of coronary and cerebrovascular events. Experience and teachings of the Latin Area of the Monitoring of Cardiovascular Diseases project] Giampaoli S, et al. **G Ital Cardiol** 1990 Mar;20(3):267–71 (Eng. Abstr.) (Ita)
[Cerebral ischemic disease in women. Notes on a CT-documented case series] Bottoni P, et al. **Minerva Med** 1989 Sep;80(9):999–1002 (Eng. Abstr.) (Ita)
[Some aspects of geriatric medicine in Kuchian, Hokkaido] Sakuma M. **Hokkaido Igaku Zasshi** 1990 Mar;65(2):122–7 (Jpn)
[Disease in the elderly in Hokkaido] Tanaka S. **Hokkaido Igaku Zasshi** 1990 Mar;65(2):115–21 (Jpn)
[Inequalities among hospitalized patients due to cardiac and cerebrovascular diseases in localities of the State of São Paulo (Brazil), 1986] Rocha JS, et al. **Rev Saude Publica** 1989 Oct;23(5):374–81 (Eng. Abstr.) (Por)
[Morbidity and mortality from stroke among the population of Moscow] Oganov RG, et al. **Ter Arkh** 1989;61(9):29–32 (Eng. Abstr.) (Rus)
[Relation of risk factors for the development of ischemic stroke and indices of blood viscosity] Vinichuk IS. **Vrach Delo** 1990 Mar;(3):57–8 (Eng. Abstr.) (Rus)
[Cerebrovascular diseases in outpatient neurological care (letter)] Arboix A. **Neurologia** 1988 Jul–Aug;3(4):164–6 (Spa)
[Cerebral vascular pathology in the area of Sabadell. 1 year's experience (april 1984–march 1985) at its district hospitals. A prospective study] Marco M, et al. **Neurologia** 1986 Sep–Oct;1(5):194–7 (Eng. Abstr.) (Spa)
[Ischemic cerebrovascular accidents in young patients] Pujadas F, et al. **Neurologia** 1986 Mar–Apr;1(2):51–4 (Eng. Abstr.) (Spa)

ETHNOLOGY

Black-white differences in stroke incidence in a national sample. The contribution of hypertension and diabetes mellitus. Kittner SJ, et al. **JAMA** 1990 Sep 12; 264(10):1267–70
Duplex Doppler and spectral flow analysis of racial differences in cerebrovascular atherosclerosis. Gil-Peralta A, et al. **Stroke** 1990 May;21(5):740–4

ETIOLOGY

Recurrence of embolic stroke in non-valvular atrial fibrillation (NVAF). An autopsy study. Yamanouchi H, et al. **Acta Neurol Scand** 1989 Aug;80(2):123–9
Oxidants and the central nervous system: some fundamental questions. Is oxidant damage relevant to Parkinson's disease, Alzheimer's disease, traumatic injury or stroke? Halliwell B. **Acta Neurol Scand Suppl** 1989;126:23–33 (81 ref.)
Cardiogenic stroke. Hart RG. **Am Fam Physician** 1989 Nov; 40(5 Suppl):35S–38S (16 ref.)
The carotid artery and stroke. Sherman DG. **Am Fam Physician** 1989 Nov;40(5 Suppl):41S–44S, 47S–49S (20 ref.)
The paradox of high risk of stroke in populations with low risk of coronary heart disease. Reed DM. **Am J Epidemiol** 1990 Apr;131(4):579–88
Intranephron PGE2 production in stroke-prone spontaneously hypertensive rats. Takemoto F, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):H987–93
Fibromuscular dysplasia of the basilar artery: a case with brain stem stroke. Saygi S, et al. **Angiology** 1990 Aug; 41(8):658–61 (12 ref.)
Intimal fibroplasia: an unusual etiology of stroke. Schwartz RA, et al. **Ann Vasc Surg** 1989 Oct;3(4):384–6
Adverse effects of fish oil [letter] Kenny D. **Arch Intern Med** 1990 Sep;150(9):1967, 1971
Noninvasive evaluation of the extracranial carotid arteries in patients with cerebrovascular events and atrial fibrillation [letter; comment] Lynfield J. **Arch Intern Med** 1990 Feb;150(2):458, 460 Comment on: Arch Intern Med 1988 Aug;148(8):1785–8.
Migraine-related stroke in the context of the International Headache Society classification of head pain. Welch KM, et al. **Arch Neurol** 1990 Apr;47(4):458–62 (20 ref.)
Effect of stenosis on wall motion. A possible mechanism of stroke and transient ischemic attack. Binns RL, et al. **Arteriosclerosis** 1989 Nov–Dec;9(6):842–7
Measuring plasma fibrinogen to predict stroke and myocardial infarction. Di Minno G, et al. **Arteriosclerosis** 1990 Jan–Feb;10(1):1–7 (144 ref.)
Not so rare complications of pulmonary AVMs letter; comment] Hartnell GG. **Br J Hosp Med** 1990 Mar;43(3):184 Comment on: Br J Hosp Med 1989 Oct;42(4):316–7.
Ischaemic stroke in the basal ganglia and internal capsule in childhood. Kappelle LJ, et al. **Brain Dev** 1989; 11(5):283–92
Level of fetal hemoglobin as an indicator of clinical complications in sickle cell anemia. Bordin JO, et al. **Braz J Med Biol Res** 1989;22(11):1347–53
Acute cerebrovascular disorder induced by allergic vasculitis. A case report. Dong CS, et al. **Chin Med J [Engl]** 1989 Apr;102(4):303–5
Reexploration for thrombosis in carotid endarterectomy. Koslow AR, et al. **Circulation** 1989 Nov;80(5 Pt 2):III73–8
A model for comparison of left ventricular mass and systolic

blood pressure as risk factors for stroke. McGee DL, et al. **Clin Cardiol** 1989 Dec;12(12 Suppl 4):IV30–3
A case–control study of cerebrovascular disease in Western Australia. Jamrozik K, et al. **Clin Exp Neurol** 1987;24:33–8
Lacunar infarction: a 12 month study. Reimers J, et al. **Clin Exp Neurol** 1987;24:28–32
A clinical study of stroke. al–Rajeh SM, et al. **East Afr Med J** 1989 Mar;66(3):183–91
Asymptomatic carotid bruit in patients who undergo coronary artery surgery. Skotnicki SH, et al. **Eur J Cardiothorac Surg** 1987;1(1):11–5
Giant–cell arteritis presenting with ipsilateral hemiplegia and lateral medullary syndrome. Collado A, et al. **Eur Neurol** 1989;29(5):266–8
Risk factors for geriatric stroke: identification and follow–up. Aronow WS. **Geriatrics** 1990 Sep;45(9):37–40, 43–4 (32 ref.)
Strokes and the carotid: myths and realities. Corman LC. **Geriatrics** 1990 Jul;45(7):28–32 (36 ref.)
Calcium sensitivity of Ca2(+)–activated K+ channels in spontaneously hypertensive stroke–prone rats. Furspan PB, et al. **Hypertension** 1990 Feb;15(2 Suppl):I97–101
Clinicopathological profile of vascular accidents with cyanotic congenital heart disease. Thapa BR, et al. **Indian J Pediatr** 1989 May–Jun;56(3):417–21
Alcohol use and retinal vessels: insights into the mechanism of alcohol–induced stroke [published erratum appears in Int J Epidemiol 1990 Mar;19(1):225] Klag MJ, et al. **Int J Epidemiol** 1989 Sep;18(3):619–25
Stroke due to paradoxical embolism. Frisoni GB, et al. **Ital J Neurol Sci** 1990 Feb;11(1):61–4
Cocaine use and cerebrovascular disease: two cases of ischemic stroke in young adults. Guidotti M, et al. **Ital J Neurol Sci** 1990 Apr;11(2):153–5
Vascular compression from goiter as an unusual cause of cerebrovascular accident. Silvestri R, et al. **Ital J Neurol Sci** 1990 Jun;11(3):307–8
Left ventricular thrombus and stroke after myocardial infarction: toward prevention or perplexity? [editorial] Halperin JL, et al. **J Am Coll Cardiol** 1989 Oct;14(4):912–4
Stroke complicating thrombolytic therapy of acute myocardial infarction [comment] Sloan MA, et al. **J Am Coll Cardiol** 1990 Sep;16(3):541–4 Comment on: J Am Coll Cardiol 1990 Sep;16(3):533–40.
Stroke as a clinical problem in hypertension. Doyle AE, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S34–7 (24 ref.)
Improvement of pituitary function after surgical decompression for pituitary tumor apoplexy. Arafah BM, et al. **J Clin Endocrinol Metab** 1990 Aug;71(2):323–8
The intrauterine and early postnatal origins of cardiovascular disease and chronic bronchitis. Barker DJ, et al. **J Epidemiol Community Health** 1989 Sep;43(3):237–40
Silent stroke associated with minor podiatric surgery. Slomovitz MA, et al. **J Foot Surg** 1990 Mar–Apr; 29(2):128–9
J–shaped curves. Wilhelmsen L. **J Hum Hypertens** 1990 Jun; 4 Suppl 2:21–5 (27 ref.)
Pure sensory stroke due to midbrain haemorrhage limited to the spinothalamic pathway. Azouvi P, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1427–8
Chiasmal apoplexy: haemorrhage from a cavernous malformation in the optic chiasm. Regli L, et al. **J Neurol Neurosurg Psychiatry** 1989 Sep;52(9):1095–9
Stroke syndrome in the young due to obliterative arteritis of extracranial carotid arteries. Clinical pathological profiles. Aghaji MA, et al. **J Neurosurg Sci** 1989 Oct–Dec; 33(4):333–7
Neurovascular and thromboembolic complications of inflammatory bowel disease in childhood. Lloyd–Still JD, et al. **J Pediatr Gastroenterol Nutr** 1989 Nov;9(4):461–6
Asymptomatic high–grade internal carotid artery stenosis: is stratification according to risk factors or duplex spectral analysis possible? Moneta GL, et al. **J Vasc Surg** 1989 Nov; 10(5):475–82; discussion 482–3
Neurologic sequelae of unilateral carotid artery occlusion: immediate and late. Nicholls SC, et al. **J Vasc Surg** 1989 Nov;10(5):542–7; discussion 547–8
Left ventricular thrombosis and stroke following myocardial infarction. **Lancet** 1990 Mar 31;335(8692):759–60 (29 ref.)
Burst lung, CAGE and scuba diving deaths [editorial; comment] Edmonds C. **Med J Aust** 1990 Jul 16;153(2):65 Comment on: Med J Aust 1990 Jul 16;153(2):97–100.
Pharmacologic therapy for ischemic cerebrovascular disease. Dutka AJ, et al. **Neurol Clin** 1990 Feb;8(1):161–76 (79 ref.)
Pathogenesis of anterior circulation stroke in patients with nonvalvular atrial fibrillation: the Lausanne Stroke Registry. Bogousslavsky J, et al. **Neurology** 1990 Jul; 40(7):1046–50
Cardiac embolism [letter] Lodder J. **Neurology** 1990 Aug; 40(8):1323
Risk of cardiac surgery in patients with prior stroke. Rorick MB, et al. **Neurology** 1990 May;40(5):835–7
Polish–Georgian cooperative studies on cerebral circulatory disorders [editorial] **Neuropatol Pol** 1989;27(1):1–2
Delayed post–traumatic intracerebral bleeding. Delayed post–traumatic apoplexy: "Spätapoplexie". Nanassis K, et al. **Neurosurg Rev** 1989;12 Suppl 1:243–51 (9 ref.)
Delayed post–traumatic apoplexy. Zülch KJ. **Neurosurg Rev** 1989;12 Suppl 1:252–5
A comment on "Fish and meat in men's diet" by G. Williams [letter; comment] Yellowlees WW. **Nutr Health** 1990; 6(4):211–2 Comment on: Nutr Health 1988;6(2):99–104.
Relationship of risk factors to subsequent development of stroke and ischemic heart disease in a rural community. Mui K. **Osaka City Med J** 1989 Nov;35(2):145–71
Stroke from alcohol and drug abuse. A current social peril. Gorelick PB. **Postgrad Med** 1990 Aug;88(2):171–4, 177–8 (21 ref.)
Hyperglycaemia and stroke. Stout RW. **Q J Med** 1989 Nov; 73(271):997–1004 (61 ref.)
A case of "young stroke" with ICA intracranial occlusion: pathogenetic implication for dissection in migraine. Casto L, et al. **Riv Neurol** 1989 Sep–Oct;59(5):172–5
Are clinical differences between black and white stroke patients caused by variations in the atherosclerotic involvement of the arterial tree? Joubert J, et al. **S Afr Med J** 1990 Mar 3;77(5):248–51
Diabetes mellitus as a risk factor for stroke. Mortel KF, et al. **South Med J** 1990 Aug;83(8):904–11
Stroke in young adults. Bevan H, et al. **Stroke** 1990 Mar; 21(3):382–6
Neurosarcoidosis and stroke [letter] Corse AM, et al. **Stroke** 1990 Jan;21(1):152–3
Elevated plasma homocyst(e)ine concentration as a possible independent risk factor for stroke. Coull BM, et al. **Stroke** 1990 Apr;21(4):572–6
Carotid plaque morphology and risk for stroke. Gomez CR. **Stroke** 1990 Jan;21(1):148–51 (33 ref.)
The status of alcohol as a risk factor for stroke. Gorelick PB. **Stroke** 1989 Dec;20(12):1607–10 (62 ref.)
Coagulation factors and the increased risk of stroke in nonvalvular atrial fibrillation. Gustafsson C, et al. **Stroke** 1990 Jan;21(1):47–51
Risk factors for stroke in middle–aged men in Göteborg, Sweden. Harmsen P, et al. **Stroke** 1990 Feb;21(2):223–9
Stroke in infective endocarditis. Hart RG, et al. **Stroke** 1990 May;21(5):695–700
Neurologic complications of late prosthetic valve endocarditis. Keyser DL, et al. **Stroke** 1990 Mar; 21(3):472–5
Etiology of stroke in patients with Wernicke's aphasia. Knepper LE, et al. **Stroke** 1989 Dec;20(12):1730–2
Suspected isolated angiitis causing stroke in a child [letter] LaMancusa J, et al. **Stroke** 1990 Sep;21(9):1380
Stroke in neuroborreliosis. May EF, et al. **Stroke** 1990 Aug; 21(8):1232–5 (14 ref.)
Analysis of cerebrovascular sympathetic nerve density in relation to stroke development in spontaneously hypertensive rats. Smeda JS. **Stroke** 1990 May;21(5):785–9
Prospective comparison of a cohort with asymptomatic carotid bruit and a population–based cohort without carotid bruit. Wiebers DO, et al. **Stroke** 1990 Jul;21(7):984–8
Role of carotid stenosis in ischemic stroke. Zhu CZ, et al. **Stroke** 1990 Aug;21(8):1131–4
Cerebral vasculitis associated with shingles. Edgar JD, et al. **Ulster Med J** 1990 Apr;59(1):77–81
[Cardiac disease and stroke] Yang S. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1990 Apr; 23(2):100–3, 127 (Eng. Abstr.) **(Chi)**
[The effects of smoking and alcohol drinking in cerebral vascular disease etiology. Cooperative Researching Group on Cerebrovascular Diseases, PLA of Lanzhou Region] **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Nov; 23(6):338–41 (Eng. Abstr.) **(Chi)**
[Lateralization of lesions in the carotid bed in patients with sudden cerebrovascular stroke] Spaček M, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1989;32(5):597–603 (Eng. Abstr.) **(Cze)**
[Migraine aura as the cause of apoplexy in young adults] Johansen AM, et al. **Ugeskr Laeger** 1990 May 21; 152(21):1509–13 (Eng. Abstr.) **(Dan)**
[Cerebral vascular accidents in young subjects. A study of 133 patients 9 to 45 years of age] Gautier JC, et al. **Rev Neurol (Paris)** 1989;145(6–7):437–42 (Eng. Abstr.) **(Fre)**
[Use of nicotine—a risk factor for stroke?] Dal Bianco P, et al. **Wien Klin Wochenschr** 1989 Oct 27;101(20):687–94 (50 ref.) (Eng. Abstr.) **(Ger)**
[Studies on stroke–prone spontaneously hypertensive rats (SHRSP) fed a high–fat and high–cholesterol diet—changes in serum concentrations and distributions of apolipoproteins A–I, A–IV and E] Ogawa H, et al. **Nippon Eiseigaku Zasshi** 1989 Jun;44(2):622–30 (Eng. Abstr.) **(Jpn)**
[Studies on stroke–prone spontaneously hypertensive rats (SHRSP) fed a high–fat and high–cholesterol diet—effect of taurine on serum lipoprotein metabolism in hypercholesterolemic rats] Ogawa H, et al. **Nippon Eiseigaku Zasshi** 1989 Jun;44(2):648–58 (Eng. Abstr.) **(Jpn)**
[Intraoperative intracranial hypotension syndrome] Kopliński A, et al. **Wiad Lek** 1989 Apr 1;42(7):470–2 (Eng. Abstr.) **(Pol)**
[Complete interruption of the aortic arch in adults] Fiuza M, et al. **Rev Port Cardiol** 1990 Apr;9(4):339–43 (Eng. Abstr.) **(Por)**
[Cerebral vascular disorders and arterial hypertension: cardiologic and neurologic aspects] Franco AS, et al. **Rev Port Cardiol** 1989 May;8(5):377–83 (Eng. Abstr.) **(Por)**
[Large trials in hypertension] Gouveia A. **Rev Port Cardiol** 1989 Apr;8(4):283–7 (Eng. Abstr.) **(Por)**
[Risk factors of central nervous system damage in the perinatal period] Dobzhan'ska A, et al. **Akush Ginekol (Mosk)** 1990 Jan;(1):8–9 **(Rus)**
[Micromalformations of the cerebral vessels and their role in the development of stroke] Matsko DE. **Arkh Patol** 1989; 51(11):19–27 (Eng. Abstr.) **(Rus)**
[Lesions of the central nervous system in systemic lupus erythematosus in the computerized–tomographic image] Ivanova MM, et al. **Klin Med (Mosk)** 1989 Dec;67(12):93–7 (Eng. Abstr.) **(Rus)**
[Neurologic and mental disorders in infectious endocarditis] Chekneva NS, et al. **Sov Med** 1989;(10):99–103 **(Rus)**
[Cerebral disorders in Cushing's syndrome] Kotov SV, et al. **Sov Med** 1990;(1):57–60 **(Rus)**
[Prognostic significance of arterial blood pressure levels and the effectiveness of the treatment of arterial hypertension in a non–organized male population 40–59 years of age in Moscow] Kalinina AM, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):50–5 (Eng. Abstr.) **(Rus)**
[Neurologic complications of myocardial infarction] Abdukhakimov FT, et al. **Zh Nevropatol Psikhiatr** 1989; 89(9):39–40 (Eng. Abstr.) **(Rus)**
[Clinico–morphological characteristics of complex types of stroke] Akimov GA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(7):88–92 (Eng. Abstr.) **(Rus)**
[Psycho–autonomic correlations in patients with neuroses and in persons with risk factors of cerebrovascular disorders] Shutov AA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(11):18–22 (Eng. Abstr.) **(Rus)**
[Alcohol and cerebrovascular and cardiac pathology (review of the literature)] Voloshin PV, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):122–6 (55 ref.) **(Rus)**
[Craniocerebral trauma and stroke] Pedachenko GA, et al. **Zh Vopr Neirokhir** 1989 Sep–Oct;(5):39–41 (Eng. Abstr.) **(Rus)**
[Neurologic and ophthalmologic complications of mitral valve prolapse] Puchala M. **Cesk Neurol Neurochir** 1990 Jan;53(1):27–35 (Eng. Abstr.) **(Slo)**
[Hyperlipidemia and ischemic ictus. The need for population studies (letter)] Bermejo F, et al. **Med Clin (Barc)** 1989 Sep 9;93(6):236–7 **(Spa)**
[Complicated migraine: a study of 7 cases] Arroyo S, et al. **Neurologia** 1990 Apr;5(4):125–9 (Eng. Abstr.) **(Spa)**
[Neuropathological findings in patients subjected to orthotopic liver transplantation] Galofré E, et al. **Neurologia** 1988 Mar–Apr;3(2):77–9 (Eng. Abstr.) **(Spa)**
[Tobacco and cerebrovascular disease (editorial)] García–Albea E. **Neurologia** 1989 Mar;4(2):37–8 **(Spa)**
[Neurobrucellosis and cerebral vasculitis] Hernández MA, et al. **Neurologia** 1988 Nov–Dec;3(6):241–3 (Eng. Abstr.) **(Spa)**
[Ictus (editorial)] Bermejo F, et al. **Rev Clin Esp** 1989 Nov; 185(8):385–7 **(Spa)**

GENETICS

Protein C deficiency and anticardiolipin antibodies in a family with premature stroke. Haire WD, et al. **Am J Hematol** 1990 Jan;33(1):61–3
Cystatin C mutation causing amyloid angiopathy and brain hemorrhage. Jensson O, et al. **Biol Chem Hoppe Seyler** 1990 May;371 Suppl:229–32
Familial cerebral amyloid angiopathy with nonneuritic amyloid plaque formation. Plant GT, et al. **Brain** 1990 Jun; 113 (Pt 3):721–47
The saga of cystatin C gene mutation causing amyloid angiopathy and brain hemorrhage—clinical genetics in Iceland. Jensson O, et al. **Clin Genet** 1989 Nov;36(5):368–77 (90 ref.)
Characteristics of stroke victims associated with early cardiovascular mortality in their children. Howard G, et al. **J Clin Epidemiol** 1990;43(1):49–54
Mutation of the Alzheimer's disease amyloid gene in hereditary cerebral hemorrhage, Dutch type. Levy E, et al. **Science** 1990 Jun 1;248(4959):1124–6
Amyloid beta protein precursor gene and hereditary cerebral hemorrhage with amyloidosis (Dutch). Van Broeckhoven C, et al. **Science** 1990 Jun 1;248(4959):1120–2
Premature stroke in a family with lupus anticoagulant and antiphospholipid antibodies. Ford PM, et al. **Stroke** 1990 Jan;21(1):66–71

HISTORY

Charles Foix—the first modern stroke neurologist. Caplan LR. **Stroke** 1990 Feb;21(2):348–56
[History of F.I. Tiutchev's illness] Evdokimov PP. **Klin Med (Mosk)** 1990 Jan;68(1):153 **(Rus)**

IMMUNOLOGY

Antiphospholipid antibodies and Sneddon's syndrome [comment] Vargas JA, et al. **Am J Med** 1989 Nov;87(5):597 Comment on: Am J Med 1989 Apr;86(4):391–9.
Antiphospholipid antibodies. Levine SR, et al. **Ann Neurol** 1989 Sep;26(3):386–9 (26 ref.)
Cerebrovascular accident and myocardial infarction associated with anticardiolipin antibodies in a young woman with systemic lupus erythematosus. Maaravi Y, et al. **Ann Rheum Dis** 1989 Oct;48(10):853–5
Antiphospholipid antibodies in stroke. Hess DC, et al. **J Med Assoc Ga** 1989 Dec;78(12):815–20
Antiphospholipid antibodies and cerebral ischemia in young people. Brey RL, et al. **Neurology** 1990 Aug;40(8):1190–6
Anticardiolipin antibodies in Sneddon's syndrome.

Kalashnikova LA, et al. **Neurology** 1990 Mar;40(3 Pt 1):464–7
Prospective study of anticardiolipin antibodies in stroke. Kushner MJ. **Stroke** 1990 Feb;21(2):295–8
[Sneddon syndrome and primary antiphospholipid syndrome: are they the same entity? (letter)] Vargas JA, et al. **Med Clin (Barc)** 1990 Apr 21;94(15):597 **(Spa)**

METABOLISM

Lipids in cerebrovascular disease: is there an association? Herzberg L, et al. **Clin Exp Neurol** 1987;24:63–5
Effect of nimodipine on regional cerebral glucose metabolism in patients with acute ischemic stroke as measured by positron emission tomography. Heiss WD, et al. **J Cereb Blood Flow Metab** 1990 Jan;10(1):127–32
Increased Na(+)–H+ exchange activity in cultured vascular smooth muscle cells from stroke-prone spontaneously hypertensive rats. Kobayashi A, et al. **J Hypertens** 1990 Feb;8(2):153–7
Depression of energy metabolism in distant brain structures: studies with positron emission tomography in stroke patients. Baron JC. **Semin Neurol** 1989 Dec;9(4):281–5 (44 ref.)
Effects of capsular or thalamic stroke on metabolism in the cortex and cerebellum: a positron tomography study. Pappata S, et al. **Stroke** 1990 Apr;21(4):519–24
Free protein S deficiency: a possible association with cerebrovascular occlusion. Sacco RL, et al. **Stroke** 1989 Dec;20(12):1657–61
[Oxygen radicals in cerebrovascular diseases] Ando Y, et al. **Nippon Ronen Igakkai Zasshi** 1990 Mar;27(2):166–70 (44 ref.) **(Jpn)**
[Pharmacokinetics of nifedipine after a single oral dose in patients with disorders of cerebral circulation] Sarkissian MA, et al. **Farmakol Toksikol** 1989 Jul–Aug;52(4):74–8 (Eng. Abstr.) **(Rus)**
[Characteristics of phosphorus metabolism in patients with acute disorders of cerebral circulation] ChepkiUi LP, et al. **Vrach Delo** 1989 Dec;(12):27–9 (Eng. Abstr.) **(Rus)**
[Fibronectin levels in the blood and cerebrospinal fluid in cerebrovascular diseases] Bakunts GO, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):35–8 (Eng. Abstr.) **(Rus)**

MORTALITY

Survival following stroke. A prospective population-based study of 438 hospitalized cases with prediction according to subtype, severity and age. Westling B, et al. **Acta Neurol Scand** 1990 May;81(5):457–63
High magnesium diets increase blood pressure and enhance stroke mortality in hypertensive SHRsp rats. Ganguli M, et al. **Am J Hypertens** 1989 Oct;2(10):780–3
Critical comments on the recent literature. Stroke and the treatment of hypertension. Kaplan NM. **Am J Hypertens** 1989 Oct;2(10):816–8
Mortality from cardiovascular diseases in Chinese, Malays and Indians in Singapore, in comparison with England and Wales, USA and Japan. Hughes K. **Ann Acad Med Singapore** 1989 Nov;18(6):642–5
Changes in CHD "risk factors" and cerebrovascular death rates in Iceland 1967–1984. Olafsson O, et al. **Arctic Med Res** 1988;47 Suppl 1:466–8
Regional and racial differences among stroke victims in the United States. Roccella EJ, et al. **Clin Cardiol** 1989 Dec; 12(12 Suppl 4):IV18–22
Similarities and differences between the epidemiology and possible dietary causes of coronary arterial disease and strokes. Seely S. **Int J Cardiol** 1989 Dec;25(3):333–8
Twenty-year stroke mortality and prediction in twelve cohorts of the Seven Countries Study. Menotti A, et al. **Int J Epidemiol** 1990 Jun;19(2):309–15
Risk of late stroke and survival following carotid endarterectomy procedures for symptomatic patients. Turner DA, et al. **J Neurosurg** 1990 Aug;73(2):193–200
Protocol for increasing organ donation after cerebrovascular deaths in a district general hospital [published erratum appears in Lancet 1990 Jun 9;335(8702):1412] Feest TG, et al. **Lancet** 1990 May 12;335(8698):1133–5
Serum cholesterol levels and stroke mortality [letter; comment] **N Engl J Med** 1989 Nov 9;321(19):1339–41 Comment on: N Engl J Med 1989 Apr 6;320(14):904–10.
Hyperglycaemia as a cardiovascular risk factor. Fuller JH, et al. **Postgrad Med J** 1989;65 Suppl 1:S30–2
Mortality from diabetes mellitus, ischemic heart disease, and cerebrovascular disease among blacks in a higher income area. Polednak AP. **Public Health Rep** 1990 Jul–Aug; 105(4):393–9
Stroke mortality in Miyagi, Japan. Sato T. **Soc Sci Med** 1989; 29(8):1035–42
Trends in the geographic inequality of cardiovascular disease mortality in the United States, 1962–1982. Wing S, et al. **Soc Sci Med** 1990;30(3):261–6
International trends in stroke mortality: 1970–1985. Bonita R, et al. **Stroke** 1990 Jul;21(7):989–92
Slowdown in the decline of stroke mortality in the United States, 1978–1986. Cooper R, et al. **Stroke** 1990 Sep; 21(9):1274–9
Time intervals, survival, and destination. Three crucial variables in stroke outcome research. Kelly-Hayes M. **Stroke** 1990 Sep;21(9 Suppl):II24–6 (20 ref.)
Survival after stroke and transient ischemic attacks during the 1970s and 1980s. Terént A. **Stroke** 1989 Oct; 20(10):1320–6
The principle of parsimony: Glasgow Coma Scale score predicts mortality as well as the APACHE II score for stroke patients. Weingarten S, et al. **Stroke** 1990 Sep; 21(9):1280–2
[Differential diagnosis and prognosis of apoplexy] Paa G. **Versicherungsmedizin** 1990 Aug 1;42(4):98–100, 102 (12 ref.) (Eng. Abstr.) **(Ger)**
[Hypertension and heart failure in patients with cerebrovascular insufficiency] Thiele R, et al. **ZFA** 1989 Nov–Dec;44(6):321–4 (Eng. Abstr.) **(Ger)**
[Mortality in vascular diseases of the central nervous in the Katowice province in comparison with other provinces and all Poland (evaluation based on hospital statistical charts)] Opala G, et al. **Neurol Neurochir Pol** 1989 Mar–Apr; 23(2):121–7 (Eng. Abstr.) **(Pol)**
[Risk factors in cerebrovascular disease and their prognostic importance] Muiño Míguez A, et al. **Rev Clin Esp** 1989 Sep;185(4):179–83 (Eng. Abstr.) **(Spa)**
[Cerebrovascular disorders in Chile between 1952 and 1984: the evolution in mortality] Baeza C, et al. **Rev Med Chil** 1988 Oct;116(10):1081–6 (Eng. Abstr.) **(Spa)**

NURSING

Strokes causing left vs. right hemiplegia: different effects and nursing implications. 1983 [classical article] Hart G. **Geriatr Nurs (New York)** 1990 Mar–Apr;11(2):67–70
Measuring the impact of an acute stroke program on patient outcomes. Pasquarello MA. **J Neurosci Nurs** 1990 Apr; 22(2):76–82
Group process effect on caregiver burden. Printz-Feddersen V. **J Neurosci Nurs** 1990 Jun;22(3):164–8
[Referral of elderly patients with cerebral apoplexy to nursing homes] Andersen G, et al. **Ugeskr Laeger** 1990 Jul 16; 152(29):2104–6 (Eng. Abstr.) **(Dan)**
[Care planning for the elderly at medical departments can be simplified by using the Katz ADL index] Asberg KH, et al. **Lakartidningen** 1990 Jan 17;87(3):121–4 **(Swe)**

PATHOLOGY

Mitochondrial myopathy, encephalopathy, lactic acidosis, and stroke-like episodes. Report of an autopsy. Hamazaki S, et al. **Acta Pathol Jpn** 1989 Sep;39(9):599–606
Autonomic and myocardial changes in middle cerebral artery occlusion: stroke models in the rat. Cechetto DF, et al. **Brain Res** 1989 Nov 20;502(2):296–305
Hypertension, cerebral vascular changes and stroke in Ghana: cerebral atherosclerosis and stroke. Anim JI, et al. **East Afr Med J** 1989 Jul;66(7):468–75
Cerebral amyloid angiopathy, recurrent intracerebral hemorrhage, and dementia in the elderly [clinical conference] Celestino FS, et al. **J Fam Pract** 1990 Jul; 31(1):21–2, 25–30
Facioscapulohumeral dystrophy, retinal vasculature, and Sneddon's syndrome [letter] Coleman RJ, et al. **Muscle Nerve** 1990 Aug;13(8):759
Carnitine treatment for stroke in rats. Slivka A, et al. **Stroke** 1990 May;21(5):808–11
Ultrastructural changes in cerebral pericytes and astrocytes of stroke-prone spontaneously hypertensive rats. Tagami M, et al. **Stroke** 1990 Jul;21(7):1064–71
Selective occlusion of blood supply to the anterior perforated substance of the dog: a highly reproducible stroke model. Brenowitz G, et al. **Surg Neurol** 1990 Apr;33(4):247–52
Vascular changes involved in pulmonary hemorrhage of stroke-prone spontaneously hypertensive rats. Yoshioka A, et al. **Tokushima J Exp Med** 1989 Jun;36(1–2):1–10
Morphological changes in cerebral vascular smooth muscle cells in stroke-prone spontaneously hypertensive rats (SHRSP). A scanning and transmission electron microscopic study. Fujiwara T, et al. **Virchows Arch [B]** 1990;58(5):377–82
[Transcranial Doppler: first results of exploration of the circle of Willis] Boespflug OJ. **J Mal Vasc** 1989;14(4):334–8 (Eng. Abstr.) **(Fre)**
[Effect of vascular factors and aging on the ultrastructure of neurons of the human cerebral cortex] Frumkina LE, et al. **Arkh Anat Gistol Embriol** 1989 Oct;97(10):5–12 (Eng. Abstr.) **(Rus)**
[Idiopathic calcification of the cerebral vessels (Fara's syndrome) in conjunction with pregnancy] Akimov OV. **Arkh Patol** 1989;51(9):76–9 (Eng. Abstr.) **(Rus)**
[Perioperative complications in carotid endarterectomy with respect to the stage of the cerebrovascular disease] De Syo D, et al. **Lijec Vjesn** 1989 Nov;111(11):371–4 (Eng. Abstr.) **(Scr)**

PHYSIOPATHOLOGY

Some aspects of adrenocortical stress response following stroke. Koršić M, et al. **Acta Med Iugosl** 1990;44(2):137–45
Cerebral autoregulation following prophylactic and delayed experimental STA–MCA bypass. Loftus CM, et al. **Acta Neurochir (Wien)** 1989;101(1–2):75–9
Cerebrovascular symptoms in thromboangiitis obliterans. Inzelberg R, et al. **Acta Neurol Scand** 1989 Oct;80(4):347–50
Circulatory effect of kallikrein; with special reference to cerebral circulation. Miyazaki M. **Adv Exp Med Biol** 1989; 247B:607–10
Transient neurological dysfunction and risk of stroke in an elderly English population: the different significance of vertigo and non-rotatory dizziness. Evans JG. **Age Ageing** 1990 Jan;19(1):43–9
Intravascular microcatheter pressure monitoring: experimental results and early clinical evaluation. Duckwiler G, et al. **AJNR** 1990 Jan–Feb;11(1):169–75
Effects of cephalic hypotension, hypertension, and barbiturates on fetal cerebral flood flow and metabolism. Hohimer AR, et al. **Am J Obstet Gynecol** 1989 Nov; 161(5):1344–51
Adenosine and cerebral capillary perfusion and blood flow during middle cerebral artery occlusion. Anwar M, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1656–62
Middle latency auditory evoked potentials in cortical lesions. Critical of interhemispheric asymmetry. Ibañez V, et al. **Arch Neurol** 1989 Dec;46(12):1325–32
Pediatric cerebrovascular disease. Alterations of regional cerebral blood flow detected by TC 99m-HMPAO SPECT. Shahar E, et al. **Arch Neurol** 1990 May; 47(5):578–84
Evaluation of carotid artery compression in cerebrovascular disease. An electroencephalographic-clinical correlation. Solomon S. **Arch Neurol** 1966 Feb;14(2):165–71
No diaschisis after stroke [letter; comment] Stolzberg S. **Arch Neurol** 1990 Jun;47(6):621 Comment on: Arch Neurol 1989 Dec;46(12):1333–6.
Correlation of knee extensor muscle torque and spasticity with gait speed in patients with stroke [published erratum appears in Arch Phys Med Rehabil 1990 Jun;71(7):464] Bohannon RW, et al. **Arch Phys Med Rehabil** 1990 Apr; 71(5):330–3
Laterality of performance in fingertapping rate and grip strength by hemisphere of stroke and gender. Robinson LM, et al. **Arch Phys Med Rehabil** 1990 Aug;71(9):695–8
Dissociation of elastin and elastase-like activity of aorta from stroke in stroke-prone SHR. Kwan CY, et al. **Blood Vessels** 1989;26(6):377–80
Caffeine-induced contraction in arteries from stroke-prone spontaneously hypertensive rats. Moriyama K, et al. **Blood Vessels** 1989;26(5):280–9
Pathophysiology of the vasomotor reactivity to hypo- and hypercapnia: role of aging and chronic cerebrovascular disorders. Ceravolo G, et al. **Boll Soc Ital Biol Sper** 1989 Oct;65(10):989–96
Peripersonal and vertical neglect. Shelton PA, et al. **Brain** 1990 Feb;113 (Pt 1):191–205
Lesion localization in acquired deficits of emotional expression and comprehension. Cancelliere AE, et al. **Brain Cogn** 1990 Jul;13(2):133–47
Kinematic properties of voluntary postural sway in patients with unilateral primary hemispheric lesions. Di Fabio RP, et al. **Brain Res** 1990 Apr 16;513(2):248–54
Clonidine impairs recovery of beam-walking after a sensorimotor cortex lesion in the rat. Goldstein LB, et al. **Brain Res** 1990 Feb 5;508(2):305–9
Topographic EEG mapping in cerebrovascular disease. Nagata K. **Brain Topogr** 1989 Fall–Winter;2(1–2):119–28
Ischemic stroke in young adults: the relevance of migrainous infarction. Sacquegna T, et al. **Cephalalgia** 1989 Dec; 9(4):255–8
Monitoring cerebral blood flow, oxygen, and glucose metabolism. Analysis of cerebral metabolic disorder in stroke and some therapeutic trials in human volunteers. Meyer JS, et al. **Circulation** 1967 Aug;36(2):197–211
Relaxation of mesenteric artery of stroke prone spontaneously hypertensive rats by calcium removal. Sunano S, et al. **Clin Exp Pharmacol Physiol** 1990 Jun; 17(6):413–25
Line bisection in visuo-spatial neglect: disproof of a conjecture. Halligan PW, et al. **Cortex** 1989 Sep; 25(3):517–21
Supratentorial structures controlling oculomotor functions and their involvement in cases of stroke. Marx P. **Eur Arch Psychiatry Neurol Sci** 1989;239(1):3–8 (38 ref.)
Effects of carvedilol on cerebral blood flow and its autoregulation in previous stroke patients with hypertension. Kuriyama Y, et al. **Eur J Clin Pharmacol** 1990;38 Suppl 2:S120–1
Functional changes in potassium channels in carotid arteries from stroke-prone spontaneously hypertensive rats. Miyata N, et al. **Eur J Pharmacol** 1990 Jun 21;182(1):209–10
Loss of brainstem acoustic evoked potentials with spontaneous breathing in a patient with supratentorial lesion. Biniek R, et al. **Eur Neurol** 1990;30(1):38–41
Animal models of cerebral stroke: pharmacological protection of function. De Ryck M. **Eur Neurol** 1990;30 Suppl 2:21–7; discussion 39–41 (32 ref.)
Structure and hypotensive activity relationships of tetrandrine derivatives in stroke-prone spontaneously hypertensive rats. Kawashima K, et al. **Gen Pharmacol** 1990;21(3):343–7
Relation of plasma renin to end organ damage and to protection of K+ feeding in stroke-prone hypertensive rats. Volpe M, et al. **Hypertension** 1990 Mar;15(3):318–26
Obesity and adipose tissue distribution as risk factors for the development of disease. A review. Björntorp P. **Infusionstherapie** 1990 Feb;17(1):24–7 (32 ref.)
Cerebral blood flow in patients with chronic cerebrovascular disease: effect of acetyl L-carnitine. Postiglione A, et al. **Int J Clin Pharmacol Res** 1990;10(1–2):129–32
Pathophysiology of stroke. Strandgaard S, et al. **J Cardiovasc Pharmacol** 1990;15 Suppl 1:S38–42 (44 ref.)

Angiotensin-converting enzyme inhibition and regional cerebral blood flow in acute stroke. Waldemar G, et al. **J Cardiovasc Pharmacol** 1989 Nov;14(5):722–9

Use of PET methods for measurement of cerebral energy metabolism and hemodynamics in cerebrovascular disease. Baron JC, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):723–42 (134 ref.)

Reduction of functional capillary density in human brain after stroke. Gjedde A, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):317–26

Relief of depression after stroke [comment] Odeh M, et al. **J Fam Pract** 1989 Nov;29(5):471–2 Comment on: J Fam Pract 1989 Feb;28(2):153–5.

Mood disorders following stroke: new findings and future directions. Robinson RG, et al. **J Geriatr Psychiatry** 1989; 22(1):1–15

Characteristics of syntactic comprehension deficits following closed head injury versus left cerebrovascular accident. Butler-Hinz S, et al. **J Speech Hear Res** 1990 Jun; 33(2):269–80

Regional cerebrovascular reactivity to carbon dioxide during cardiopulmonary bypass in patients with cerebrovascular disease. Gravlee GP, et al. **J Thorac Cardiovasc Surg** 1990 Jun;99(6):1022–9

Effects of CV-4093, a new dihydropyridine calcium channel blocker, on renal hemodynamics and function in stroke-prone spontaneously hypertensive rats (SHRSP). Morimoto S, et al. **Jpn J Pharmacol** 1989 Oct;51(2):257–65

Epileptic seizures in a patient with mitochondrial myopathy, encephalopathy, lactic acidosis and strokelike episodes (MELAS). Hori A, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):536–7

Hypergraphia in temporal lobe epilepsy—compared with stroke of the right cerebral hemisphere. Okamura T, et al. **Jpn J Psychiatry Neurol** 1989 Sep;43(3):524–5

Blood pressure, stroke, and coronary heart disease. Part 1, Prolonged differences in blood pressure: prospective observational studies corrected for the regression dilution bias [see comments] MacMahon S, et al. **Lancet** 1990 Mar 31;335(8692):765–74 Comment in: Lancet 1990 May 5;335(8697):1092–4. Comment in: Lancet 1990 May 19;335(8699):1230–1. Comment in: Lancet 1990 Jun 23;335(8704):1534.

Postural stability in stroke patients: vectorial expression of asymmetry, sway activity and relative sequence of reactive forces. Mizrahi J, et al. **Med Biol Eng Comput** 1989 Mar; 27(2):181–90

Topographic EEG brain mapping in cerebrovascular disease and dementia. Lechner H, et al. **Neurologija** 1989;38(1):3–10

Canadian Neurological Scale [letter] Brass LM, et al. **Neurology** 1989 Nov;39(11):1556–8

Effects of changes in stimulus contingency on visual extinction. Kaplan RF, et al. **Neurology** 1990 Aug; 40(8):1299–301

Relearning to swallow after stroke—application of maneuvers and indirect biofeedback: a case study. Logemann JA, et al. **Neurology** 1990 Jul;40(7):1136–8

Bodily neglect and orientational biases in unilateral neglect syndrome and normal subjects. Mark VW, et al. **Neurology** 1990 Apr;40(4):640–3

Olfactory lateralization and identification in right hemisphere lesion and control patients. Bellas DN, et al. **Neuropsychologia** 1989;27(9):1187–91

Dipole-tracing of abnormal slow brain potentials after cerebral stroke—EEG, PET, MRI correlations. Nakajima Y, et al. **Neurosci Lett** 1990 Apr 20;112(1):59–64

Postural control in standing following stroke: test-retest reliability of some quantitative clinical tests. Goldie PA, et al. **Phys Ther** 1990 Apr;70(4):234–43

Spatial neglect in acute stroke: the line bisection test. Friedman PJ. **Scand J Rehabil Med** 1990;22(2):101–6

Testing daily functions post-stroke with standardized practical equipment. Lindmark B, et al. **Scand J Rehabil Med** 1990;22(1):9–14

Hemodynamic and metabolic studies in stroke. Hakin AM. **Semin Neurol** 1989 Dec;9(4):286–92 (31 ref.)

The three phases of blood pressure in stroke. Loyke HF. **South Med J** 1990 Jun;83(6):660–3 (24 ref.)

Symposium recommendations for methodology in stroke outcome research. Task Force on Stroke Impairment, Task Force on Stroke Disability, and Task Force on Stroke Handicap. **Stroke** 1990 Sep;21(9 Suppl):II68–73

Acute stroke and circadian rhythm [letter] Arboix A, et al. **Stroke** 1990 May;21(5):826

Effect of induced hypertension on cerebral blood flow following middle cerebral occlusion in rats [letter; comment] Aspey BS, et al. **Stroke** 1990 May;21(5):827 Comment on: Stroke 1989 Nov;20(11):1538–44.

Anterior cerebral artery velocity changes in disease of the middle cerebral artery stem. Brass LM, et al. **Stroke** 1989 Dec;20(12):1737–40

Efficacy of Barthel index in evaluating activities of daily living in Japan, the United States, and United Kingdom. Chino N. **Stroke** 1990 Sep;21(9 Suppl):II64–5

International Classification of Impairments, Disabilities, and Handicaps (ICIDH) as a conceptual basis for stroke outcome research. A tribute to Philip H.N. Wood. Granger CV, et al. **Stroke** 1990 Sep;21(9 Suppl):II66–7

Prognosis and disability of stroke patients after 5 years in Akita, Japan. Kojima S, et al. **Stroke** 1990 Jan;21(1):72–7

Predictors of stroke outcome using objective measurement scales. Loewen SC, et al. **Stroke** 1990 Jan;21(1):78–81

The measure of balance in sitting in stroke rehabilitation prognosis. Sandin KJ, et al. **Stroke** 1990 Jan;21(1):82–6

Animal models in stroke [letter] Watson BD, et al. **Stroke** 1990 Sep;21(9):1376–7

Examining outcome measures in a clinical study of stroke. Wood-Dauphinee SL, et al. **Stroke** 1990 May;21(5):731–9

Short- and long-latency median nerve somatosensory evoked potentials in stroke patients. Chiang TR, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Aug;88(8):778–84

[Quantitative detection of microcirculation and multi-factorial analysis of patients with cardio-cerebrovascular diseases with blood-stasis syndrome] Han XM, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Oct;9(10):593–5, 580–1 (Eng. Abstr.) **(Chi)**

[Monitoring cerebro-vascular diseases using the Glasgow coma scale] Wang KQ, et al. **Chung Hua Hu Li Tsa Chih** 1989 Dec;24(12):707–9 **(Chi)**

[A case-control study on electrocardiographic abnormalities and hypertension in long-term survivors of cerebrovascular disease] Wang KJ. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Apr; 22(2):104–7, 127 (Eng. Abstr.) **(Chi)**

[A study of reaction time in 120 patients with brain tumor, traumatic intracranial hematoma, cerebrovascular disease and epilepsy] Wang X. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Dec; 22(6):331–4, 381 (Eng. Abstr.) **(Chi)**

[A further study and discussion on mirror writing and the development of the Chinese written language] Wang XD. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Apr; 22(2):108–10, 127 (Eng. Abstr.) **(Chi)**

[Hemodynamic profile in patients presenting with cerebral arterial spasm after meningeal hemorrhage in the presence of preventive administration of i.v. nimodipine] Adnet P, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R84 **(Fre)**

[Acute cerebrovascular disorders—clinical aspects and diagnosis] Sturzenegger M, et al. **Schweiz Rundsch Med Prax** 1989 Dec 12;78(50):1399–413 (107 ref.) (Eng. Abstr.) **(Ger)**

[Stroke: Holter monitoring in 15 hypertensive patients] Pothen P, et al. **Cardiologia** 1990 Jan;35(1):69–72 (Eng. Abstr.) **(Ita)**

[The sympathetic skin response: neurophysiological basis, normal values, clinical applications] Uncini A, et al. **Riv Neurol** 1989 May-Jun;59(3):113–20 (Eng. Abstr.) **(Ita)**

[Treatment of pathological laughing with amitriptyline] Ohkawa S, et al. **Rinsho Shinkeigaku** 1989 Sep;29(9):1183–5 (Eng. Abstr.) **(Jpn)**

[Imaging brain function with autoradiography and positron emission tomography] Kato M, et al. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1182–91 **(Jpn)**

[Evaluation of clinical and neurophysiological markers of depressive disorder with symptoms of peripheral and brain circulation disturbance] Strzyżewski W, et al. **Psychiatr Pol** 1989 Mar-Apr;23(2):89–96 (Eng. Abstr.) **(Pol)**

[The function of the microcirculatory bed of the bulbar conjunctiva in patients who have had a minor stroke against a background of the labile form of arterial hypertension] Bardin AI. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(2):58–60 **(Rus)**

[Local neuroendocrine regulation of the cerebral vessels in acute disorders of cerebral blood circulation] Markina LD, et al. **Fiziol Zh SSSR** 1989 Oct;75(10):1397–404 (Eng. Abstr.) **(Rus)**

[Homosynaptic depression of the monosynaptic spinal reflex in healthy people and patients, suffering from a cerebral stroke] Brazhnikov AN, et al. **Neirofiziologiia** 1989; 21(4):555–8 (Eng. Abstr.) **(Rus)**

[Age-related features of the functional state of the brain in patients with circulatory encephalopathy] Man'kovskiĭ NB, et al. **Vestn Akad Med Nauk SSSR** 1990;(1):46–8 (Eng. Abstr.) **(Rus)**

[A method of studying the visual evoked potentials in the evaluation of the status of the central nervous system in newborn infants] Barashnev IuI, et al. **Zh Nevropatol Psikhiatr** 1989;89(8):6–9 (Eng. Abstr.) **(Rus)**

[A study of left ventricle filling using pulsed Doppler in patients with a high prevalence of atherosclerosis] González Romero S, et al. **Arch Inst Cardiol Mex** 1989 Sep-Oct;59(5):493–7 (Eng. Abstr.) **(Spa)**

[Auditory extinction in cerebrovascular pathology. Prospective study of 105 cases] Arboix A, et al. **Neurologia** 1988 May-Jun;3(3):89–96 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Technical details in carotid endarterectomy. Welten RJ, et al. **Acta Chir Scand Suppl** 1990;555:205–8

The effect of cicletanine on cerebrovascular injury in stroke-prone spontaneously hypertensive rats. Ruchoux MM, et al. **Am J Hypertens** 1989 Sep;2(9):683–9

Perspectives on prevention and medical education for the 1990s. Nickens HW, et al. **Am J Prev Med** 1990;6(2 Suppl):1–5

Indications for carotid endarterectomy. American College of Physicians [see comments] **Ann Intern Med** 1989 Oct 15;111(8):675–7 Comment in: Ann Intern Med 1990 Mar 1;112(5):383–4.

Carotid endarterectomy. Cebul RD, et al. **Ann Intern Med** 1989 Oct 15;111(8):660–70 (108 ref.)

Safe extracranial vascular evaluation and surgery without preoperative arteriography. Hill JC, et al. **Ann Vasc Surg** 1990 Jan;4(1):34–8

The risk of carotid endarterectomy for the asymptomatic patient: an argument for prophylactic operation. Treiman RL, et al. **Ann Vasc Surg** 1990 Jan;4(1):29–33

The contribution of multicenter trials to stroke prevention and treatment. Barnett HJ. **Arch Neurol** 1990 Apr; 47(4):441–4 (32 ref.)

Multicenter trials in stroke. Hachinski V. **Arch Neurol** 1990 Apr;47(4):445

Effects of exercise on hypocholesterolemia of stroke-prone spontaneously hypertensive rats. Abe T, et al. **Atherosclerosis** 1989 Oct;79(2-3):113–9

Prolongation of life span of stroke-prone spontaneously hypertensive rats (SHRSP) ingesting persimmon tannin. Uchida S, et al. **Chem Pharm Bull (Tokyo)** 1990 Apr; 38(4):1049–52

The effects of antihypertensive drug treatment on the incidence of stroke and of coronary heart disease. MacMahon S. **Clin Exp Hypertens [A]** 1989;11(5–6):807–23 (29 ref.)

Analysis of antihypertensive treatment outcome and stroke. McNeil JJ. **Clin Exp Hypertens [A]** 1989;11(5–6):761–77 (38 ref.)

The "trials" of a long-term clinical trial: the Ticlopidine Aspirin Stroke Study and the Canadian-American Ticlopidine Study. Goyan JE. **Controlled Clin Trials** 1989 Dec;10(4 Suppl):236S–244S

Reduced total mortality and death from myocardial infarction and stroke in moderate/severe hypertensives treated with "Tenormin" (atenolol). Cruickshank JM. **Drugs Exp Clin Res** 1990;16(3):133–6

Prospective evaluation of combined carotid and coronary surgery. Lusiani L, et al. **Eur J Cardiothorac Surg** 1987; 1(1):16–9

Exercise training and incidence of cerebrovascular lesions in stroke-prone spontaneously hypertensive rats. Tipton CM, et al. **J Appl Physiol** 1990 Mar;68(3):1080–5

Prevention of myocardial infarction and stroke in patients with intermittent claudication; effects of ticlopidine. Results from STIMS, the Swedish Ticlopidine Multicentre Study. Janzon L, et al. **J Intern Med** 1990 May;227(5):301–8

Low dose acetylsalicylic acid and thromboxane release at the site of plug formation in vivo in elderly patients with cardiovascular disease. Thorngren M, et al. **J Intern Med** 1990 Mar;227(3):189–93

Ticlopidine, a new antithrombotic drug: but is it better than aspirin for longterm use? Warlow C. **J Neurol Neurosurg Psychiatry** 1990 Mar;53(3):185–7 (5 ref.)

Blood pressure, stroke, and coronary heart disease. Part 2, Short-term reductions in blood pressure: overview of randomised drug trials in their epidemiological context [see comments] Collins R, et al. **Lancet** 1990 Apr 7; 335(8693):827–38 (84 ref.) Comment in: Lancet 1990 Jun 23;335(8704):1534–5.

Stroke prevention and oestrogen replacement [letter; comment] Pike MC, et al. **Lancet** 1989 Oct 28; 2(8670):1034–5 Comment on: Lancet 1989 Aug 26;2(8661):508–9.

Effectiveness of carotid endarterectomy for asymptomatic carotid stenosis: design of a clinical trial. Mayo Asymptomatic Carotid Endarterectomy Study Group. **Mayo Clin Proc** 1989 Aug;64(8):897–904

Carotid endarterectomy clinical trials [editorial] Marler JR. **Mayo Clin Proc** 1989 Aug;64(8):1026–9

Decision making in the face of uncertainty: the case of carotid endarterectomy. Matchar DB. **Mayo Clin Proc** 1990 May; 65(5):756–60

Preliminary report of the Stroke Prevention in Atrial Fibrillation Study. **N Engl J Med** 1990 Mar 22; 322(12):863–8

Prevention of stroke in atrial fibrillation [letter] **N Engl J Med** 1990 Aug 16;323(7):481–4

Comparison of ticlopidine and aspirin for the prevention of stroke [letter; comment] **N Engl J Med** 1990 Feb 8; 322(6):404–5 Comment on: N Engl J Med 1989 Aug 24;321(8):501–7.

Treatment of hypertension [letter; comment] Kawachi I, et al. **N Z Med J** 1989 Oct 11;102(877):540–1 Comment on: N Z Med J 1989 Sep 13;102(875):478.

The benefits and risks of treating mild to moderate hypertension. Kawachi I, et al. **N Z Med J** 1989 Jul 26; 102(872):377–9

Anticoagulants and stroke prevention: the current evidence. Parkin PJ. **N Z Med J** 1990 Aug 8;103(895):368–9 (33 ref.)

Sociomedical factors affecting participation in screening program on cerebro- and cardio- vascular disease. Katsuda N, et al. **Nagoya J Med Sci** 1990 Mar;52(1–4):27–35

Prevention of ischemic stroke after TIA: medical or surgical treatment? A review of the main trials. Annibali R, et al. **Panminerva Med** 1989 Apr-Jun;31(2):57–70 (86 ref.)

Prevention of cardiovascular morbidity and mortality in hypertension: benefits of blood pressure reduction and cholesterol lowering. MacMahon S. **Postgrad Med J** 1989; 65 Suppl 1:S55–7 (26 ref.)

European Stroke Prevention Study. ESPS Group. **Stroke**

1990 Aug;21(8):1122–30

Design of a multicenter randomized trial for the Stroke Prevention in Atrial Fibrillation Study. The Stroke Prevention in Atrial Fibrillation Investigators. **Stroke** 1990 Apr;21(4):538–45

Prevention of stroke in patients with systemic lupus erythematosis [letter; comment] Achiron A, et al. **Stroke** 1990 Jan;21(1):154–5 Comment on: Stroke 1989 May;20(5):583–91.

[Are antihypertensive drugs different in their stroke prevention effectiveness?] Haberl RL. **Nervenarzt** 1989 Sep; 60(9):580–2 (33 ref.) **(Ger)**

[Current status in the therapy of ischemic cerebrovascular disorders] Regli F, et al. **Schweiz Rundsch Med Prax** 1989 Dec 12;78(50):1414–20 (74 ref.) (Eng. Abstr.) **(Ger)**

[Prevention and countermeasures in disorders of cerebral circulation complicated by hypertension] Yamamoto Y, et al. **Nippon Rinsho** 1989 Sep;47(9):2079–85 **(Jpn)**

[The effect of an antihypertensive drug budralazine on cerebrovascular lesions in salt–loaded SHR] Tanaka S, et al. **Nippon Yakurigaku Zasshi** 1989 Jul;94(1):49–60 (Eng. Abstr.) **(Jpn)**

[Value of studying lipids in the prevention of cerebrovascular disorders] Larski EG, et al. **Przegl Lek** 1989;46(7):578–82 **(Pol)**

[Results of the prevention of stroke in high risk groups] Misiuk NS, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):20–3 (Eng. Abstr.) **(Rus)**

[Thrombendarterectomy of the carotid artery in the prevention of cerebrovascular insult] Solaković E. **Acta Chir Iugosl** 1989;36 Suppl 2:684–6 **(Scr)**

[Prevention and treatment of cerebral ictus] Martínez Castrillo JC, et al. **Neurologia** 1989 Mar;4(2):50–60 (103 ref.) **(Spa)**

PSYCHOLOGY

Methods of identifying mood disorders in stroke patients: experience in the Oxfordshire Community Stroke Project. House A, et al. **Age Ageing** 1989 Nov;18(6):371–9

Neuropsychological impairments associated with lesions caused by tumor or stroke. Anderson SW, et al. **Arch Neurol** 1990 Apr;47(4):397–405

Types of affective response to stroke. Malec JF, et al. **Arch Phys Med Rehabil** 1990 Apr;71(5):279–84

Koro: the genital retraction symptom after stroke. Anderson DN. **Br J Psychiatry** 1990 Jul;157:142–4

Behavioural mapping of patients on a stroke unit. Lincoln NB, et al. **Int Disabil Stud** 1989 Oct–Dec;11(4):149–54

Is neglect (only) lateral? A quadrant analysis of line cancellation. Halligan PW, et al. **J Clin Exp Neuropsychol** 1989 Dec;11(6):793–8

Spouse adjustment to stroke: aphasic versus nonaphasic partners. Christensen JM, et al. **J Commun Disord** 1989 Aug;22(4):225–31

Verbal asomatognosia. Feinberg TE, et al. **Neurology** 1990 Sep;40(9):1391–4

Anosognosia and major depression in 2 patients with cerebrovascular lesions. Starkstein SE, et al. **Neurology** 1990 Sep;40(9):1380–2

A longitudinal study of the psychosocial impact of stroke on primary support persons. Schulz R, et al. **Psychol Aging** 1988 Jun;3(2):131–41

Stressful situations in caregiving: relations between caregiver coping and well–being. Stephens MA, et al. **Psychol Aging** 1988 Jun;3(2):208–9

Psychosocial outcomes in stroke survivors. Implications for research. Evans RL, et al. **Stroke** 1990 Sep;21(9 Suppl):II48–9

Neuropsychological assessment and treatment of stroke patients. An overview. Finlayson MA. **Stroke** 1990 Sep; 21(9 Suppl):II14–5

Outcome measures in stroke. A British view. Hewer RL. **Stroke** 1990 Sep;21(9 Suppl):II52–5

Social and family integration of hemiplegic elderly patients 1 year after stroke. Santus G, et al. **Stroke** 1990 Jul; 21(7):1019–22

[A study of personality type and its pathogenetic effect on patients with cerebrovascular disease] Han TR. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Aug; 22(4):198–201, 252 (Eng. Abstr.) **(Chi)**

[Being a stroke patient. Psychosocial aspects] Ruud M. **Tidsskr Nor Laegeforen** 1989 Nov 20;109(32):3314–7 (Eng. Abstr.) **(Nor)**

[Mechanisms of the development of autonomic regulation disorders in neurogenic syncope in childhood] Kravtsov IuI, et al. **Zh Nevropatol Psikhiatr** 1989;89(11):37–43 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Occlusion of the extracranial internal carotid artery in the acute stroke; angiographic findings within 6 hours. Bozzao L, et al. **Acta Neurochir (Wien)** 1989;100(1–2):39–42

The use and abuse of cerebral angiography in the diagnosis of strokes. Marshall J. **Am Heart J** 1967 Aug;74(2):145–8

Digital subtraction angiography (DSA): a neurosurgical perspective. Butler P. **Br J Neurosurg** 1987;1(3):323–33

Relative safety of intravenous digital subtraction angiography over other methods of carotid angiography and impact on clinical management of cerebrovascular disease. Stevens JM, et al. **Br J Radiol** 1989 Sep;62(741):813–6

Throwing out the baby with the bathwater [letter] Stevens JM, et al. **Br J Surg** 1990 Jul;77(7):835

Mood disorders after stroke and their relation to lesion location. A CT scan study. House A, et al. **Brain** 1990 Aug;113 (Pt 4):1113–29

Echocardiography and cerebral computed tomography in chronic atrial fibrillation. Petersen P, et al. **Eur Heart J** 1989 Dec;10(12):1101–4

A double–blind study comparing the safety, tolerability, and efficacy of ioversol 320 and iopamidol–300 in cerebral angiography. Ringel K, et al. **Invest Radiol** 1989 Jun;24 Suppl 1:S48–51

Ischaemic supratentorial stroke: angiographic findings in patients examined in the very early phase. Bozzao L, et al. **J Neurol** 1989 Sep;236(6):340–2

Computed tomography in patients with transient ischaemic attacks: when is a transient ischaemic attack not a transient ischaemic attack but a stroke? Dennis M, et al. **J Neurol** 1990 Jul;237(4):257–61

Acute blood pressure elevation can mimic arteriographic appearance of cerebral vasculitis—(a postpartum case with relative hypertension). Garner BF, et al. **J Rheumatol** 1990 Jan;17(1):93–7

Chronic cerebrovascular insufficiency on the xenon CT scan. Holl K, et al. **Neurosurg Rev** 1989;12(3):205–10

Cerebral angiographic risk in mild cerebrovascular disease. Hankey GJ, et al. **Stroke** 1990 Feb;21(2):209–22 (40 ref.)

Arterial disease risk factors and angiographic evidence of atheroma of the carotid artery [see comments] Schneidau A, et al. **Stroke** 1989 Nov;20(11):1466–71 Comment in: Stroke 1990 Jul;21(7):1092.

The value of angiography in cerebrovascular disease. Zeitler E, et al. **Thorac Cardiovasc Surg** 1989 Aug;37(4):259–63

[Non–invasive measurement of cerebrovascular circulation using xenon(s) computerized tomography. A review] Nabi Nemati M. **Neurochirurgia (Stuttg)** 1990 May;33(3):65–9 (Eng. Abstr.) **(Ger)**

[What does the neurologist expect from interventional neuroradiology?] Nickel B, et al. **Radiol Diagn (Berl)** 1989; 30(4):469–72 (Eng. Abstr.) **(Ger)**

[Angioradiology in geriatric patients] Zeitler E. **Radiologe** 1989 Dec;29(12):605–13 (Eng. Abstr.) **(Ger)**

[Quantitative determination of cerebral perfusion using digital subtraction angiography (DSA)] Metzmann U, et al. **ROFO** 1990 Jul;153(1):41–7 (Eng. Abstr.) **(Ger)**

[Distribution pattern of atheromatous lesions of the carotid circulation—significance for the angiographic strategy of cerebrovascular insufficiency] Neufang KF, et al. **Vasa** 1989;18(4):304–11 (Eng. Abstr.) **(Ger)**

[Preliminary evaluation of diagnostic usefulness of digital subtraction angiography (DSA) in the diagnosis of brain diseases] Selmaj K, et al. **Neurol Neurochir Pol** 1989 Mar–Apr;23(2):111–7 (Eng. Abstr.) **(Pol)**

[Diagnosis of senile dementia using the method of computerized tomography] Medvedev AV, et al. **Zh Nevropatol Psikhiatr** 1989;89(9):85–91 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

99mTc–hexamethylpropyleneamine oxime single photon emission CT in poststroke depression. Schwartz JA, et al. **Am J Psychiatry** 1990 Feb;147(2):242–4

Role of fast data acquisition method with Tc–99m HMPAO brain SPECT in patients with acute stroke. Oshima M, et al. **Clin Nucl Med** 1990 Mar;15(3):172–4

"Luxury perfusion" with 99mTc–HMPAO and 123I–IMP SPECT imaging during the subacute phase of stroke. Moretti JL, et al. **Eur J Nucl Med** 1990;16(1):17–22

Evaluation of the significance of "redistribution" in I–123 IMP SPECT in cerebrovascular disorders—a comparative study with PET. Tsukuda M, et al. **Eur J Nucl Med** 1989; 15(11):746–9

Comparison of [99mTc]HMPAO SPECT with [18F]fluoromethane PET in cerebrovascular disease. Heiss WD, et al. **J Cereb Blood Flow Metab** 1990 Sep; 10(5):687–97

Evaluation of the 11CO2 positron emission tomographic method for measuring brain pH. II. Quantitative pH mapping in patients with ischemic cerebrovascular diseases. Senda M, et al. **J Cereb Blood Flow Metab** 1989 Dec; 9(6):859–73

Pediatric brain imaging with technetium–99m–HM–PAO and SPECT [letter; comment] Costa DC, et al. **J Nucl Med** 1989 Nov;30(11):1917 Comment on: J Nucl Med 1989 Jan;30(1):15–24.

Clinical function following stroke [letter] Kushner MJ. **J Nucl Med** 1990 Sep;31(9):1574–5

SPECT in cerebral macro– and microangiopathy. Reiche W, et al. **Nuklearmedizin** 1990 Mar;29(2):83–4

Use of indium–111–labelled platelets in black stroke patients. A pilot study. Joubert J, et al. **S Afr Med J** 1990 Mar 3;77(5):246–8

Cerebrovascular disease: use of fluorodeoxyglucose. Herholz K, et al. **Semin Neurol** 1989 Dec;9(4):293–300 (48 ref.)

Single–photon emission computed tomography and early death in acute ischemic stroke. Limburg M, et al. **Stroke** 1990 Aug;21(8):1150–5

[SPECT in reversible symptoms of cerebrovascular diseases] Grünwald F, et al. **Nuklearmedizin** 1989 Dec;28(6):221–5 (Eng. Abstr.) **(Ger)**

[The validity of selected nuclear medicine imaging procedures (brain, skeletal, and hepatobiliary diagnosis)] Deckart H, et al. **Radiol Diagn (Berl)** 1990;31(2):153–61 (Eng. Abstr.) **(Ger)**

[SPECT of the brain using 99mTc–HMPAO in patients with cerebrovascular disease: a comparison with CT. A report of 100 cases] Just A, et al. **ROFO** 1989 Nov;151(5):611–5 (Eng. Abstr.) **(Ger)**

[Significance of computer analysis of dynamic brain scintigraphy in patients with cerebrovascular disorders] Valikovics A, et al. **Orv Hetil** 1990 Feb 11;131(6):297–301 (Eng. Abstr.) **(Hun)**

[The quantitative analysis of regional cerebral blood flow by peripheral venous sampling in single photon emission computed tomography using N–isopropyl–p–[123I]iodoamphetamine: comparison with peripheral arterial sampling] Mimura H, et al. **Kaku Igaku** 1989 Oct;26(10):1327–34 **(Jpn)**

[Evaluation of image quality and lesion detectability on I–123 IMP brain SPECT] Minoshima S, et al. **Kaku Igaku** 1990 Apr;27(4):323–32 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of SPECT in cerebrovascular disease] Oshibuchi M, et al. **Rinsho Hoshasen** 1989 Jun;34(6):675–82 (Eng. Abstr.) **(Jpn)**

[Single–photon emission–computed tomography with the Testascan multidetector gamma tomograph in neurologic practice] Liass FM, et al. **Med Radiol (Mosk)** 1990 Jun; 35(6):3–8 (Eng. Abstr.) **(Rus)**

[Radiocirculography in patients with cerebrovascular disorders] Ivanchev V, et al. **Zh Nevropatol Psikhiatr** 1990; 90(1):32–4 (Eng. Abstr.) **(Rus)**

RADIOTHERAPY

[Dosage of low–energy laser irradiation in acute disorders of cerebrovascular circulation] Kukes VG, et al. **Klin Med (Mosk)** 1990 Jan;68(1):57–60 **(Rus)**

REHABILITATION

Motor recovery following acute stroke. Gray CS, et al. **Age Ageing** 1990 May;19(3):179–84

An assessment of measures to predict the outcome of driving evaluations in patients with cerebral damage. Galski T, et al. **Am J Occup Ther** 1990 Aug;44(8):709–13

A tone–reducing wrist—hand orthosis. Scherling E, et al. **Am J Occup Ther** 1989 Sep;43(9):609–11

Change in response time of stroke patients and controls during rehabilitation. Korner–Bitensky N, et al. **Am J Phys Med Rehabil** 1990 Feb;69(1):32–8

Characteristics of cost outliers who did not benefit from stroke rehabilitation. Osberg JS, et al. **Am J Phys Med Rehabil** 1990 Jun;69(3):117–25

The impact of poststroke depression on recovery in activities of daily living over a 2–year follow–up. Parikh RM, et al. **Arch Neurol** 1990 Jul;47(7):785–9

Validity of outcome following stroke rehabilitation [letter] Vanclay F, et al. **Arch Neurol** 1989 Dec;46(12):1270–1

Return to work after stroke: development of a predictive model. Black–Schaffer RM, et al. **Arch Phys Med Rehabil** 1990 Apr;71(5):285–90

Predictors of long–term recovery in cerebrovascular disease. Bourestom NC. **Arch Phys Med Rehabil** 1967 Aug; 48(8):415–9

Evaluating sustained touch–pressure in severe sensory deficits: meeting an unanswered need. Dannenbaum RM, et al. **Arch Phys Med Rehabil** 1990 Jun;71(7):455–9

Electromyographic versus rhythmic positional biofeedback in computerized gait retraining with stroke patients. Mandel AR, et al. **Arch Phys Med Rehabil** 1990 Aug; 71(9):649–54

Rehabilitation for stroke survivors [letter; comment] Hankey GJ. **Aust N Z J Med** 1990 Feb;20(1):101–3 Comment on: Aust N Z J Med 1989 Aug;19(4):400–6.

Stroke rehabilitation: a case presentation and review. Greenspun B. **Del Med J** 1990 Apr;62(4):923–6, 929–30 (17 ref.)

The impact of family interactions on recovery from stroke: help or hindrance? Norris VK, et al. **Gerontologist** 1990 Aug;30(4):535–42

The natural history of a video programme 'stroke: caring for someone at home'. Wilson M. **Health Bull (Ediab)** 1989 Sep;47(5):234–7

Factors influencing utilization of postdischarge cognitive rehabilitation programs. Gummow LJ, et al. **Health Serv Res** 1990 Apr;25(1 Pt 2):197–211

The effectiveness of EMG biofeedback in the treatment of arm function after stroke. Crow JL, et al. **Int Disabil Stud** 1989 Oct–Dec;11(4):155–60

Day hospital and stroke patients. Forster A, et al. **Int Disabil Stud** 1989 Oct–Dec;11(4):181–3

Measuring arm impairment and disability after stroke. Wade DT. **Int Disabil Stud** 1989 Apr–Jun;11(2):89–92 (30 ref.)

Relative importance of after–effects, environment and socio–economic factors on the social integration of stroke victims. Bélanger L, et al. **Int J Rehabil Res** 1988; 11(3):251–60

Relationship between response time and falls among stroke patients undergoing physical rehabilitation. Mayo NE, et al. **Int J Rehabil Res** 1990;13(1):47–55

Stroke rehabilitation. Has it proven worthwhile? Harris JM. **J Fla Med Assoc** 1990 Jul;77(7):683–6 (15 ref.)

Prognosis in stroke [letter; comment] Foley J. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1312 Comment on: J Neurol Neurosurg Psychiatry 1989 Apr;52(4):493–6.

Arm function after stroke. An evaluation of grip strength as a measure of recovery and a prognostic indicator. Sunderland A, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1267–72

Use of the Nottingham ADL scale in stroke: relationship between functional recovery and length of stay in hospital. Barer DH. **J R Coll Physicians Lond** 1989 Oct;23(4):242–7

Shoulder shrug—a prognostic sign for recovery of hand movement after stroke. Katrak PH. **Med J Aust** 1990 Mar 19;152(6):297–301

It may be the slow lane ... but you can still get there from here. Collett RK. **N C Med J** 1989 Nov;50(11):617–21

Stroke rehabilitation in the elderly: a new patient management system. Friedman PJ. **N Z Med J** 1990 May 23;103(890):234–6

Social networks as assets and liabilities in recovery from stroke by geriatric patients. Stephens MA, et al. **Psychol Aging** 1987 Jun;2(2):125–9

The influence of visual and tactile inattention on predictions for recovery from acute stroke. Barer DH. **Q J Med** 1990 Jan;74(273):21–32

Predicting the outcome of acute stroke: do multivariate models help? Barer DH, et al. **Q J Med** 1989 Jan; 70(261):27–39

Stroke outcome in the absence of a structured rehabilitation programme. Dewar SR. **S Afr Med J** 1990 Aug 18; 78(4):200–2

The wider implications of stroke care [editorial] Meiring PD. **S Afr Med J** 1990 Aug 18;78(4):177–8

Rehabilitation of post-stroke hemiplegic patients. I. Gravity-center-swaying and walking ability. Morita H. **Sangyo Ika Daigaku Zasshi** 1989 Sep 1;11(3):261–73

Rehabilitation of post-stroke hemiplegic patients. II. Restudying functional assessment's methods. Morita H. **Sangyo Ika Daigaku Zasshi** 1989 Sep 1;11(3):275–85

Orthostatic tolerance training of stroke patients in general medical wards. An experimental study. Asberg KH. **Scand J Rehabil Med** 1989;21(4):179–85

The functional recovery of stroke: a comparison between neuro-developmental treatment and the Brunnstrom method. Wagenaar RC, et al. **Scand J Rehabil Med** 1990; 22(1):1–8

Methodologic issues in stoke outcome research. Proceedings of a national symposium. Buffalo, New York, July 10–12, 1989. **Stroke** 1990 Sep;21(9 Suppl):II1–73

Studies up to 1980 on stroke rehabilitation outcomes. Anderson TP. **Stroke** 1990 Sep;21(9 Suppl):II43–5

An overview of stroke rehabilitation. Brandstater ME. **Stroke** 1990 Sep;21(9 Suppl):II40–2

A review of stroke rehabilitation and physiotherapy. Ernst E. **Stroke** 1990 Jul;21(7):1081–5 (46 ref.)

Patterns of care for stroke survivors. Gibson CJ. **Stroke** 1990 Sep;21(9 Suppl):II38–9

Measurement of stroke rehabilitation outcome in the 1980s. Granger CV, et al. **Stroke** 1990 Sep;21(9 Suppl):II46–7 (11 ref.)

Past achievements and new directions in stroke outcome research. Gresham GE. **Stroke** 1990 Sep;21(9 Suppl):II1–2

Problems of methodological heterogeneity in studies predicting disability after stroke. Jongbloed L. **Stroke** 1990 Sep;21(9 Suppl):II32–4

Status of measurement in stroke rehabilitation outcomes. Keith RA. **Stroke** 1990 Sep;21(9 Suppl):II30–1

Arm and leg paresis as outcome predictors in stroke rehabilitation. Olsen TS. **Stroke** 1990 Feb;21(2):247–51

Stroke outcome research, a multidimensional problem in need of multidimensional answers. The Loewenstein Rehabilitation Center Stroke and Stroke Outcome Research at a crossroad. Ring H. **Stroke** 1990 Sep;21(9 Suppl):II61–3

Efficiency, effectiveness, and duration of stroke rehabilitation. Shah S, et al. **Stroke** 1990 Feb;21(2):241–6

Outcome studies in stroke rehabilitation. The South Australian Stroke Study. Smith DS. **Stroke** 1990 Sep;21(9 Suppl):II56–8

Outcome after stroke in patients discharged to independent living. Thorngren M, et al. **Stroke** 1990 Feb;21(2):236–40

[The relationship between early motor stage and hand function recovery six months after stroke] Chang JJ, et al. **Kso Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 Jan; 6(1):38–44 (Eng. Abstr.) **(Chi)**

[25 years of the Rehabilitation Institute for Cerebrovascular Diseases in Chotěboř] Zdichynec B, et al. **Cesk Neurol Neurochir** 1990 Jan;53(1):58–9 **(Cze)**

[Rehabilitation in stroke syndrome] von Albert VH. **Fortschr Med** 1990 Jul 20;108(21):417–9 **(Ger)**

[Stroke: aspects of rehabilitation and prevention] **Internist (Berl)** 1989 Apr;30(4 Suppl [SCHLAG Anniv No):1–12 **(Ger)**

[Rehabilitation for diseases of the nervous system] Ueda S. **Nippon Naika Gakkai Zasshi** 1989 Dec;78(12):1714–20 **(Jpn)**

[Use of oxygen baths in the early rehabilitation of patients with transient disorders of cerebrovascular circulation] Strelkova NI, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):40–8 (Eng. Abstr.) **(Rus)**

SURGERY

Results of microsurgical carotid endarterectomy. A prospective study with transcranial Doppler and EEG monitoring, and elective shunting. Steiger HJ, et al. **Acta Neurochir (Wien)** 1989;100(1–2):31–8

The influence of barbiturates on cerebral metabolism in patients with borderline cerebrovascular reserve during intraoperative transient carotid occlusion. Wassman H, et al. **Br J Neurosurg** 1989;3(4):429–34

Carotid surgery under cervical block anesthesia. A simple method of heart and brain protection in high risk patients. Bergeron P, et al. **Int Angiol** 1989 Apr–Jun;8(2):70–80

A combined orbitozygomatic infratemporal epidural and subdural approach for lesions involving the entire cavernous sinus. Hakuba A, et al. **J Neurosurg** 1989 Nov; 71(5 Pt 1):699–704

Early postoperative seizures after posterior fossa surgery. Lee ST, et al. **J Neurosurg** 1990 Oct;73(4):541–4

Petrous carotid-to-intradural carotid saphenous vein graft for intracavernous giant aneurysm, tumor, and occlusive cerebrovascular disease. Spetzler RF, et al. **J Neurosurg** 1990 Oct;73(4):496–501

Carotid endarterectomy in patients with intracranial vascular disease: short-term risk and long-term outcome. Mackey WC, et al. **J Vasc Surg** 1989 Oct;10(4):432–8

Timing of carotid endarterectomy after acute stroke. Piotrowski JJ, et al. **J Vasc Surg** 1990 Jan;11(1):45–51; discussion 51–2

Intracranial vertebral endarterectomy. Ausman JI, et al. **Neurosurgery** 1990 Mar;26(3):465–71

Comparison of the need for bypass shunt after stroke or transient ischemic attack in 97 patients. Khanna HL, et al. **South Med J** 1989 Dec;82(12):1512–4

[Cerebral bypass surgery] Imhof HG. **Schweiz Rundsch Med Prax** 1990 Jan 9;79(1–2):9–19 (Eng. Abstr.) **(Ger)**

[Use of the laser in neurosurgery] Synowitz HJ, et al. **Z Arztl Fortbild (Jena)** 1990;84(6):267–71 **(Ger)**

[Surgical management of concomitant diseases of coronary and cerebral arteries—indication and late results] Kito Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Aug; 37(8):1465–8 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of combined extra- and intracranial lesions of the carotid arteries] Grozovskiĭ IuL, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):12–9 (Eng. Abstr.) **(Rus)**

THERAPY

Randomized clinical trials of hemodilution in acute ischemic stroke. Asplund K. **Acta Neurol Scand Suppl** 1989; 127:22–30

A new liquid material for embolization of arteriovenous malformations. Taki W, et al. **AJNR** 1990 Jan–Feb; 11(1):163–8

Hyperintense thrombus on GRASS MR images: potential pitfall in flow evaluation. Yousem DM, et al. **AJNR** 1990 Jan–Feb;11(1):51–8

Controlled clinical trials in cerebrovascular disease. A misused tool. Marshall J. **Arch Neurol** 1990 Apr;47(4):444–5

Stroke intervention. Barnaby W. **Emerg Med Clin North Am** 1990 May;8(2):267–80 (59 ref.)

Outcome of stroke related admissions to a general hospital. Crowe M, et al. **Ir Med J** 1990 Jun;83(2):59–60

Stroke. Towards better management. Summary and recommendations of a report of the Royal College of Physicians. **J R Coll Physicians Lond** 1990 Jan;24(1):15–7

Treatment of acute cerebro-vascular diseases and sequelae with acupuncture. Zhao C. **J Tradit Chin Med** 1990 Mar; 10(1):70–3

An analysis of time of presentation after stroke. Alberts MJ, et al. **JAMA** 1990 Jan 5;263(1):65–8

Enhancing "idling" neurons [letter; comment] [see comments] Macleod MA, et al. **Lancet** 1990 Apr 7; 335(8693):860–1 Comment on: Lancet 1990 Mar 3;335(8688):542. Comment in: Lancet 1990 May 19;335(8699):1217.

Cost analysis of kinetic therapy in the prevention of complications of stroke. Kelley RE, et al. **South Med J** 1990 Apr;83(4):433–4

Relevance of animal models to stroke [letter; comment] **Stroke** 1990 Jul;21(7):1091–2 Comment on: Stroke 1990 Jan;21(1):1–3.

The call for action. Basmajian JV. **Stroke** 1990 Sep;21(9 Suppl):II3

Current use of functional assessment to measure stroke outcome in Canada. Clifford J. **Stroke** 1990 Sep;21(9 Suppl):II59–60

Hyperbaric oxygen increases survival following carotid ligation in gerbils. Reitan JA, et al. **Stroke** 1990 Jan; 21(1):119–23

Use of biofeedback in the treatment of stroke patients. Wolf SL. **Stroke** 1990 Sep;21(9 Suppl):II22–3 (19 ref.)

Animal stroke models. They are relevant to human disease. Zivin JA, et al. **Stroke** 1990 Jul;21(7):981–3 (22 ref.)

[Treatment of ischemic cerebral stroke with isovolemic hemodilution] Wang B. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1990 Apr; 23(2):81–3, 126 (Eng. Abstr.) **(Chi)**

[Suggestions for comprehensive rehabilitative care in cerebrovascular disorders within the framework of the cerebrovascular program (discussion)] Zdichynec B. **Cesk Neurol Neurochir** 1989 Sep;52(5):348–50 **(Cze)**

[Considerations in hemodilution therapy of stroke] Oder W, et al. **Acta Med Austriaca** 1989;16(5):109–14 (49 ref.) (Eng. Abstr.) **(Ger)**

[Microcirculatory, hemorheologic and microcirculatory parameters before and following hypervolemic hemodilution in patients with acute cerebrovascular disorders] Staedt U, et al. **Vasa Suppl** 1989;27:33–4 **(Ger)**

[Acute and chronic cerebrovascular diseases. A therapeutic approach] Bossi E, et al. **Minerva Med** 1989 Sep;80(9):991–8 (Eng. Abstr.) **(Ita)**

[Experience in the use of ultraviolet irradiation of autologous blood in multimodal treatment of circulatory encephalopathies] Berdichevskiĭ MIa, et al. **Sov Med** 1990; (4):97–100 **(Rus)**

[Mechanisms of the therapeutic effect of hyperbaric oxygenation in minor differential pressure in stroke] Gusev EI, et al. **Zh Nevropatol Psikhiatr** 1990;90(1):34–40 (Eng. Abstr.) **(Rus)**

[Effects of hyperbaric oxygenation in acute compression-dislocation syndrome in experimental animals] Isakov IuV, et al. **Zh Nevropatol Psikhiatr** 1989; 89(12):3–7 (Eng. Abstr.) **(Rus)**

[Care chains and care consumption after stroke—an analysis of effectiveness] Thorngren M, et al. **Lakartidningen** 1990 May 9;87(19):1675–8 **(Swe)**

VETERINARY

Cerebral preamyloid deposits and congophilic angiopathy in aged dogs. Giaccone G, et al. **Neurosci Lett** 1990 Jul 3; 114(2):178–83

Animal models of stroke: are they relevant to human disease? [editorial] [see comments] Wiebers DO, et al. **Stroke** 1990 Jan;21(1):1–3 Comment in: Stroke 1990 Jul;21(7):1091–2.

CEREBRUM see **BRAIN**

CEREMONIAL

see related

APPETITIVE BEHAVIOR

Behavioural perspectives on a Sri Lankan healing ritual. Bartlett A. **Int J Soc Psychiatry** 1989 Autumn;35(3):245–51 (36 ref.)

Symbolic expressions of dying patients: communications, not hallucinations. Dugan DO. **Nurs Forum** 1989;24(2):18–27

CERIUM

Lanthanide(III)-phosphatidic acid complexes: binding site heterogeneity and phase separation. Sun J, et al. **Biochim Biophys Acta** 1990 May 9;1024(1):159–66

Ultrastructural localization of phosphatase activity in the guinea pig pineal gland by the cerium technique. Luo ZR, et al. **J Histochem Cytochem** 1990 Jun;38(6):793–801

Localization of cerium-based reaction products by scanning laser reflectance confocal microscopy. Robinson JM, et al. **J Histochem Cytochem** 1990 Mar;38(3):315–8

Cerium-based demonstration of phosphatase activity in plastic-embedded sections: a comparison with conventional methods. van Goor H, et al. **Stain Technol** 1989 Nov; 64(6):289–96

Demonstration of secondary lysosomes in bovine megakaryocytes and platelets using acid phosphatase cytochemistry with cerium as a trapping agent. Ménard M, et al. **Thromb Haemost** 1990 Feb 19;63(1):127–32

ANALYSIS

A geochemical basis for endomyocardial fibrosis. Valiathan MS, et al. **Cardiovasc Res** 1989 Jul;23(7):647–8

Estimation of human gonadal Pu and Ce concentrations from animal data. Thomas RG, et al. **Health Phys** 1989;57 Suppl 1:97–107

BLOOD

Positive interferences with the Ektachem total CO2 assay from therapy with topical cerous nitrate. Daoud EW, et al. **Clin Chem** 1990 Aug;36(8 Pt 1):1521–2

METABOLISM

Interactions of thorium and cerium with adenine nucleotides. Shivakumar K, et al. **Biochem Int** 1989 Oct;19(4):845–53

Endomyocardial fibrosis—the possible connexion with myocardial levels of magnesium and cerium. Valiathan SM, et al. **Int J Cardiol** 1990 Jul;28(1):1–5 (30 ref.)

Cerium chloride as a histochemical marker of hydrogen peroxide in reperfused ischemic hearts. Shlafer M, et al. **J Mol Cell Cardiol** 1990 Jan;22(1):83–97

PHARMACOKINETICS

Intracellular localization of cerium. A microanalytical study using an electron microprobe and ionic microanalysis. Berry JP, et al. **Hum Toxicol** 1989 Nov;8(6):511–20

CERIUM RADIOISOTOPES

METABOLISM

Effect of mixed ligand complex therapy on the retention of 95Nb and 144Ce in mice. Gachályi A, et al. **Radiat Res** 1989 Oct;120(1):177–81

CEROID see under **PIGMENTS**

CEROID-LIPOFUSCINOSIS, NEURONAL see

NEURONAL CEROID-LIPOFUSCINOSIS

CERTIFICATE OF NEED see under REGIONAL HEALTH PLANNING

CERTIFICATION

Performances of U.S. osteopathic and Canadian medical school graduates on the American Board of Internal Medicine Certifying Examinations, 1984–1988. Shea JA, et al. **Acad Med** 1990 Aug;65(8):523–6

Recertification—by examination or by CEU? [letter] McFarland CR. **Am J Infect Control** 1990 Jun;18(3):222–3

NCCDN omission [letter] Bryson R. **Am J Nurs** 1990 Aug; 90(8):20

56 ways to get certified. Fickeissen JL. **Am J Nurs** 1990 Mar;90(3):50–7

Developing practice acts—a shared responsibility [letter] Anderson LJ. **Am Pharm** 1990 Jun;NS30(6):7

Critical care medicine certification and pulmonary disease trainees [editorial] Rogers RM, et al. **Am Rev Respir Dis** 1990 Sep;142(3):495–6

Training and practice activities of hematology and medical oncology diplomates. Shea JA, et al. **Arch Intern Med** 1990 Jan;150(1):145–8

Advanced cardiac life support certification in ophthalmology [letter] Korenfeld MS. **Arch Ophthalmol** 1990 Mar; 108(3):319

Ethical use of Yellow Pages listings by physicians [letter; comment] Miller JM. **Arch Otolaryngol Head Neck Surg** 1989 Dec;115(12):1480–1 Comment on: Arch Otolaryngol Head Neck Surg 1988 Dec;114(12):1392–4.

Yellow professionalism [letter] Reade JM, et al. **Arch Otolaryngol Head Neck Surg** 1989 Dec;115(12):1481

The surgical residency. The job description does not fit the job. Pories WJ, et al. **Arch Surg** 1990 Feb;125(2):147–9

Current issues in clinical engineering and biomedical technology certification [interview] Painter F, et al. **Biomed Instrum Technol** 1989 Nov–Dec;23(6):434–9

'MGDS examination' [letter] [see comments] **Br Dent J** 1990 Jan 20;168(2):52–4 Comment in: Br Dent J 1990 Feb 24;168(4):137–8.

MGDS examination' [letter; comment] **Br Dent J** 1989 Dec 9–23;167(11):368 Comment on: Br Dent J 1989 Nov 11;167(9):302–3.

The MGDS: a candidate's view—Part 2. Scola CM. **Br Dent J** 1990 Mar 10;168(5):210–2

MRCGP examination [letter] Tombleson P. **Br J Gen Pract** 1990 Apr;40(333):170

The MRCPsych examination. Holden NL. **Br J Hosp Med** 1989 Nov;42(5):415–6

MRCPsych Part One: multiple-choice questions. Ryley P. **Br J Hosp Med** 1989 Nov;42(5):417–8

Correlates of certification in family medicine in the billing patterns of Ontario general practitioners [letter] **Can Med Assoc J** 1990 Jan 15;142(2):98–9

Correlates of certification in family medicine in the billing patterns of Ontario general practitioners [published erratum appears in Can Med Assoc J 1989 Dec 15;141(12):1225] Woodward CA, et al. **Can Med Assoc J** 1989 Nov 1; 141(9):897–904

Is this physician really a specialist? [editorial] Nielsen EM, et al. **Chest** 1990 Jan;97(1):1

Symposium. Certification and accreditation in orthopedic surgery. **Clin Orthop** 1990 Aug;(257):1–66

Recertification. One orthopedic surgeon's view. Edmonson AS. **Clin Orthop** 1990 Aug;(257):35–7

Certification and recertification. A consumer's view. Glasser MA. **Clin Orthop** 1990 Aug;(257):38–42

Recertification in orthopedics. Kettelkamp DB, et al. **Clin Orthop** 1990 Aug;(257):29–34

Medical specialty credentialing in the United States. Langsley DG. **Clin Orthop** 1990 Aug;(257):22–8

Certificates of added qualifications in orthopedic surgery. Urbaniak JR. **Clin Orthop** 1990 Aug;(257):52–6

The American Society for Clinical Pharmacology and Therapeutics: its role in board certification in clinical pharmacology. Carr EA Jr. **Clin Pharmacol Ther** 1990 Feb; 47(2):291–7

Comment: pharmacotherapy and certification [letter] **DICP** 1990 Jun;24(6):644–6

Pharmacotherapy. Part II. Administering the certification process [editorial] [published erratum appears in DICP 1990 Mar;24(3):329] McLeod DC. **DICP** 1989 Dec;23(12):1031

Pharmacotherapy. Part IV. The future of specialization and certification in pharmacy [editorial] McLeod DC. **DICP** 1990 Feb;24(2):181–2

Pharmacotherapy. Part III. A process of certification. McLeod DC. **DICP** 1990 Jan;24(1):95–6

Boards in clinical pharmacology: portent for pharmacy and pharmacotherapy [editorial] McLeod DC. **DICP** 1990 Jul–Aug;24(7–8):779–80

The 'special competency' exam revisited—and rebuked. Anderson EG. **Geriatrics** 1990 Sep;45(9):75–6

CITECH—the new mark of excellence [editorial] **Health Devices** 1988 Sep;17(9):251–2

A technique for oral board preparation. Messmer JM. **Invest Radiol** 1989 Oct;24(10):813–4

Committee report of the training program director's committee of the American Academy of Allergy and Immunology: recommendations of five subcommittees at a retreat held in January 1989. **J Allergy Clin Immunol** 1990 Jan;85(1 Pt 1):132–6

Passing the boards [letter] Fox G. **J Am Acad Child Adolesc Psychiatry** 1990 May;29(3):484

American Board of Family Practice statistics [editorial] Pisacano NJ. **J Am Board Fam Pract** 1990 Apr–Jun; 3(2):137–9

Board certification in peripheral vascular disease [letter; comment] Griffen WO Jr. **J Am Coll Cardiol** 1989 Nov 1;14(5):1399–400 Comment on: J Am Coll Cardiol 1988 Sep;12(3):869–70.

Candidates for the Certificate of Added Qualifications in Geriatric Medicine. Who, why, and when? Reuben DB, et al. **J Am Geriatr Soc** 1990 Apr;38(4):483–8

The first certifying examination in geriatric medicine. Steel K, et al. **J Am Geriatr Soc** 1989 Dec;37(12):1188–91

The initial examination for a Certificate of Added Qualifications in Surgery of the Hand. Urbaniak JR, et al. **J Bone Joint Surg [Am]** 1990 Jun;72(5):639–42

The burn surgeon and the need for critical care certification [editorial] Demling R, et al. **J Burn Care Rehabil** 1990 Jan–Feb;11(1):91–2

The American Board of Psychiatry and Neurology and its examinations in child neurology. Bell WE. **J Child Neurol** 1990 Apr;5(2):80–3

Board certification and subcertification in cosmetic surgery: how to qualify and what to study. Bridenstine JB. **J Dermatol Surg Oncol** 1989 Dec;15(12):1257–60

Late night thoughts on listening to myself taking the oral boards in emergency medicine [see comments] Ratzan RM. **J Emerg Med** 1989 Sep–Oct;7(5):521–4 Comment in: J Emerg Med 1989 Sep–Oct;7(5):531–2.

Emergency medicine board examination [editorial; comment] Rosen P. **J Emerg Med** 1989 Sep–Oct;7(5):531–2 Comment on: J Emerg Med 1989 Sep–Oct;7(5):521–4.

Medical prospectors [letter] Brouillette JN. **J Fla Med Assoc** 1989 May;76(5):443

Recertification and the American Board of Family Practice [letter; comment] Gillette RD. **J Gen Intern Med** 1990 May–Jun;5(3):273 Comment on: J Gen Intern Med 1989 Nov–Dec;4(6):557–9.

Subspecialty boards in psychiatry [letter] Yesavage JA. **J Geriatr Psychintry Neurol** 1989 Jul–Sep;2(3):165

Expanding CCA options for CNMs [editorial] Shah MA. **J Nurse Midwifery** 1989 Nov–Dec;34(6):299–300

ILO "A" and "B" reader classification [letter] Hodous TK. **J Occup Med** 1990 Mar;32(3):267

Invited letter concerning: certification of perfusionists [letter] Fosburg RG, et al. **J Thorac Cardiovasc Surg** 1990 Sep; 100(3):455

Internal medicine certification: scores slip; spirochete survives [letter] Cary JF. **JAMA** 1990 Jun 13; 263(22):3022–3

A piece of my mind. Paper patients. Kardassakis DG. **JAMA** 1990 Sep 12;264(10):1340

Foreign medical graduates. The experience of the Australian Medical Examining Council and the Australian Medical Council, 1978–1989: implications for medical immigration and the medical workforce [see comments] Blacket RB. **Med J Aust** 1990 Aug 6;153(3):125–32 Comment in: Med J Aust 1990 Aug 6;153(3):124–5.

Physician recredentialing [letter] Reeves PE. **N Y State J Med** 1990 Feb;90(2):76

Position statement: Cornea and Contact Lens Section. Farkas B. **Optom Vis Sci** 1990 Jul;67(7):500

Certification revisited: Association of Schools and Colleges of Optometry. Hopping R. **Optom Vis Sci** 1990 Jul; 67(7):497–9

A public health optometrist looks at certification. Newcomb RD. **Optom Vis Sci** 1990 Jul;67(7):501–3

Certification revisited: a review of the issue related to the certification of optometric specialties. Peters H. **Optom Vis Sci** 1990 Jul;67(7):494–6

Certification revisited—American Optometric Association. Sullins WD Jr. **Optom Vis Sci** 1990 Jul;67(7):491–3

Who is properly certified? [letter; comment] Carey JS. **Plast Reconstr Surg** 1989 Dec;84(6):1004 Comment on: Plast Reconstr Surg 1987 Dec;80(6):870.

Certification: a shared responsibility [editorial] Miller SH. **Plast Reconstr Surg** 1990 Aug;86(2):335–6

Incidence of sickness certification. Proposal for use as a health status indicator. Tellnes G, et al. **Scand J Prim Health Care** 1989 Jun;7(2):111–7

Postgraduate medical training and certification at the National University of Singapore. Wong HB. **Singapore Med J** 1989 Apr;30(2):189–93

Self-certification in lay midwives' organizations: a vehicle for professional autonomy. Butter IH, et al. **Soc Sci Med** 1990;30(12):1329–39

Challenges in recertification. King RB. **Surg Neurol** 1989 Dec;32(6):403–7

Certificate examination in veterinary radiology [letter] Coulson A. **Vet Rec** 1990 Feb 3;126(5):122

Common board not needed [letter; comment] Ambrose JE. **W V Med J** 1990 Jun;86(6):255–6 Comment on: W V Med J 1990 Apr;86(4):167–8.

[The European diploma of anesthesiology and intensive care] Zorab JS. **Ma Tsui Hsueh Tsa Chi** 1989 Jun;27(2):177–83 **(Chi)**

[Medical residency and certification in neurology] Lana-Peixoto MA. **Arq Neuropsiquiatr** 1989 Dec; 47(4):503–5 (Eng. Abstr.) **(Por)**

[Certification and its role in the evaluation of the degree of professional qualifications of obstetricians and gynecologists] Mura'ev MV, et al. **Akush Ginekol (Mosk)** 1989 Jul;(7):65–6 **(Rus)**

HISTORY

The development of orthopedic certification in the United States. Omer GE Jr. **Clin Orthop** 1990 Aug;(257):11–7

Fifty years of the American Board of Orthopaedic Surgery. 1934 [classical article] Wickstrom JK. **Clin Orthop** 1990 Aug;(257):3–10

The American Board of Anesthesiology: thoughts on the occasion of its fiftieth anniversary. Epstein RM. **J Clin Anesth** 1990 Jan–Feb;2(1):3–6

LEGISLATION & JURISPRUDENCE

New federal law limits physical and chemical restraint usage in nursing homes. Yerian RD, et al. **Mich Med** 1990 Jun; 89(6):41

Recertification: update and future issues. Grenell B, et al. **Surv Ophthalmol** 1990 Jul–Aug;35(1):74–8

[Measuring the contribution of medical boards. Decision of the Bavarian Administrative Court on April 13, 1989] Rieger HJ. **Dtsch Med Wochenschr** 1989 Nov 17; 114(46):1807–9 **(Ger)**

[Impacts of certification system of psychiatrists] Hamagaki S. **Seishin Shinkeigaku Zasshi** 1989;91(10):820–4 **(Jpn)**

[Suggestion for abolition of mental health code] Itsushima Y. **Seishin Shinkeigaku Zasshi** 1989;91(10):825–8 **(Jpn)**

[Certification of physicians-therapists according to the qualifications category] Mura'ev MV, et al. **Klin Med (Mosk)** 1989 Nov;67(11):140–2 **(Rus)**

STANDARDS

On the fifth year, subspecialty certification, and delayed gratification. A partial solution. Neff JC. **Arch Pathol Lab Med** 1990 Jul;114(7):720–1

Credentialing for international fellowships. Burton RI. **Clin Orthop** 1990 Aug;(257):61–3

Ethics and training in digestive endoscopy [editorial] Gibinski K. **Endoscopy** 1989 Sep;21(5):232–3

Advanced achievement in internal medicine: the end of the line for voluntary recertification [editorial] [see comments] Langdon LO, et al. **J Gen Intern Med** 1989 Nov–Dec; 4(6):557–9 Comment in: J Gen Intern Med 1990 May–Jun;5(3):273.

On cranberry juice [editorial] McIntyre RV. **J Okla State Med Assoc** 1990 Feb;83(2):55

Board eligible? Unreal! [letter] Cleary MF. **JAMA** 1990 Oct 3;264(13):1661

The abyss: sinking scores in internal medicine [editorial] Dan BB. **JAMA** 1989 Nov 3;262(17):2438

Examining the Royal Colleges' examiners [letter; comment] Fleming PR, et al. **Lancet** 1990 Apr 28;335(8696):1040 Comment on: Lancet 1990 Feb 24;335(8687):443–5.

Examining the examiners [letter; comment] Hatch DJ. **Lancet** 1990 Apr 14;335(8694):916 Comment on: Lancet 1990 Feb 24;335(8687):443–5.

Examinations in surgery [letter] McIrvine AJ. **Lancet** 1990 Jan 6;335(8680):52

Case specificity of performance with simulated patients. Thomson AN. **N Z Med J** 1990 Aug 8;103(895):372–4

An assessment of a postgraduate examination of competence in general practice: Part 2: Validity. Thomson AN. **N Z Med J** 1990 May 9;103(889):217–9

Symposium on certification revisited. **Optom Vis Sci** 1990 Jul;67(7):489–503

Optometric certification. Corwin BC. **Optom Vis Sci** 1990 Jul;67(7):490

Certification in internal medicine [letter; comment] Gordon AL. **Pharos** 1990 Spring;53(2):42–3 Comment on: Pharos 1990 Winter;53(1):28–31.

The vascular laboratory. Standards and certification. Thiele BL. **Surg Clin North Am** 1990 Feb;70(1):1–11

A "Certificate of Added Qualifications" by the American Board of Preventive Medicine [editorial] Vorosmarti J Jr. **Undersea Biomed Res** 1990 Mar;17(2):93

Specialist qualifications [letter] Lucke JN. **Vet Rec** 1990 Jan 13;126(2):44

[Experience with competition-based certification of specialists in sanitary and epidemiological services] Shestopalov NV, et al. **Gig Sanit** 1990 Mar;(3):83–4 **(Rus)**

[Evaluation of the level of theoretical and practical skills of a surgeon during certification] Chernobrovyi NP, et al. **Klin Khir** 1990;(3):61–2 **(Rus)**

[Methods of the evaluation of clinical thinking of a physician-therapist] Golovskol BV, et al. **Klin Med (Mosk)** 1989 Nov;67(11):136–7 **(Rus)**

[Elaboration of qualification characteristics of a pediatrician for certification of the qualification categories] Murav'ev MV, et al. **Pediatriia** 1990;(1):85–9 **(Rus)**

[Practical activities of a pediatrician and the tasks of postgraduate training] Tarasova TV. **Pediatriia** 1990; (1):82–5 **(Rus)**

[The role of the institutes and schools of post-graduate training in the certification of physicians and pharmacists] Murav'ev MV. **Sov Zdravookhr** 1990;(1):62–4 **(Rus)**

[The certification examination and its role in assessing the level of professional qualification of the therapist] Murav'ev MV, et al. **Ter Arkh** 1989;61(9):134–5 **(Rus)**

TRENDS

Medical toxicology and emergency medicine [editorial] Vance MV. **Ann Emerg Med** 1990 Jun;19(6):623–4
Training of vascular surgeons in France: ten years of the French College of Vascular Surgery. Melliere D, et al. **Ann Vasc Surg** 1989 Oct;3(4):370–3
Societal trends toward accountability in the professions. Rineberg BA. **Clin Orthop** 1990 Aug;(257):43–6
Isn't it time for one family of generalists? The case for an American Board of Physicians. Benson JA Jr. **J Am Board Fam Pract** 1990 Apr–Jun;3 Suppl:29S–37S
Ex concilio [editorial] Pisacano NJ. **J Am Board Fam Pract** 1989 Oct–Dec;2(4):291
Licensure versus certification [editorial] Young PR. **J Am Board Fam Pract** 1989 Oct–Dec;2(4):287–8
Trends in medical knowledge as assessed by the certifying examination in internal medicine. Norcini JJ, et al. **JAMA** 1989 Nov 3;262(17):2402–4
Physician recredentialing [letter; comment] Atkinson DI. **N Y State J Med** 1989 Sep;89(9):536–7 Comment on: N Y State J Med 1989 Apr;89(4):209–13.

CERULEIN see CAERULEIN

CERULENIN see under ANTIBIOTICS, ANTIFUNGAL

CERULETIDE see CAERULEIN

CERULOPLASMIN

Detection of multiple forms of human ceruloplasmin. A novel Mr 200,000 form. Sato M, et al. **J Biol Chem** 1990 Feb 15;265(5):2533–7

ANALYSIS

Familial benign copper deficiency: an old case re-examined. Méhes K, et al. **Acta Paediatr Hung** 1988–89;29(3–4):313–5
Copper supplementation: failure to increase plasma copper and ceruloplasmin concentrations in healthy infants. Salmenperä L, et al. **Am J Clin Nutr** 1989 Oct;50(4):843–7
An enzyme-linked immunoadsorbent assay for rat ceruloplasmin. DiSilvestro RA, et al. **Biol Trace Elem Res** 1988 Sep–Dec;17:1–9
A kinetic method for determination of serum ceruloplasmin. Mukerjee H. **Clin Chem** 1990 Feb;36(2):391–2
The blue oxidases, ascorbate oxidase, laccase and ceruloplasmin. Modelling and structural relationships. Messerschmidt A, et al. **Eur J Biochem** 1990 Jan 26; 187(2):341–52 (42 ref.)
Comparison of some serum copper parameters in trained runners and control subjects. Resina A, et al. **Int J Sports Med** 1990 Feb;11(1):58–60
Serum and plasma ceruloplasmin in humans. Louro MO, et al. **J Clin Chem Clin Biochem** 1989 Aug;27(8):511–3
Serum copper and ceruloplasmin in early and in advanced hepatocellular carcinoma: diagnostic and prognostic relevance. Casaril M, et al. **Tumori** 1989 Oct 31; 75(5):498–502
[Retinol-binding protein, haptoglobin and ceruloplasmin—tumor markers in colorectal cancer?] Putzki H, et al. **Z Gesamte Inn Med** 1990 Jan 15;45(2):50–2 (Eng. Abstr.) (Ger)
[Serum cortisol and ceruloplasmin determination in neonates with intrauterine growth retardation] Szabó T, et al. **Orv Hetil** 1990 Jun 24;131(25):1351–5 (28 ref.) (Eng. Abstr.) (Hun)
[Behavior of blood copper, ceruloplasmin and procollagen III in acute myocardial infarction] Aresu G, et al. **Minerva Cardioangiol** 1990 Apr;38(4):141–50 (Eng. Abstr.) (Ita)
[Significance of ceruloplasmin analysis in clinical tests] Terao T. **Nippon Rinsho** 1989 Dec;48 Suppl:757–60 (Jpn)
[Use of a conductometric detector in capillary isotachophoresis of blood serum proteins] Kovalenko ON, et al. **Lab Delo** 1989;(10):47–50 (Eng. Abstr.) (Rus)
[The signal intensity of the electron paramagnetic resonance of ceruloplasmin and transferrin in the blood plasma of rats with altered function of the hypophyseal-adrenal cortex system] Kandul SV, et al. **Probl Endokrinol (Mosk)** 1990 Mar–Apr;36(2):80–3 (Eng. Abstr.) (Rus)
[HLA and ceruloplasmin phenotypes in lupus erythematosus and circumscribed scleroderma] Glavinskaia TA, et al. **Vestn Dermatol Venerol** 1989;(6):9–13 (Eng. Abstr.) (Rus)
[The ceruloplasmin and lipid peroxidation indices in patients with pulmonary tuberculosis] Kharakter ZhZ, et al. **Vrach Delo** 1989 Oct;(10):55–7 (Eng. Abstr.) (Rus)
[Experience in heterozygote detection in Wilson-Konovalov mutation based on the study of molecular forms of ceruloplasmin] Puchkova LV, et al. **Zh Nevropatol Psikhiatr** 1989;89(12):14–8 (Eng. Abstr.) (Rus)
[Clinical and neurohumoral indicators in women-alcoholics of reproductive and climacteric age] Semke VIa, et al. **Zh Nevropatol Psikhiatr** 1990;90(2):71–3 (Eng. Abstr.) (Rus)

DEFICIENCY

[The role of deficiency of carbohydrate containing proteins in the pathogenesis of sensorineural hearing loss] Atamanova NV. **Vestn Otorinolaringol** 1990 May–Jun; (3):79 (Rus)

GENETICS

Linkage between the loci for transferrin and ceruloplasmin in pigs. Juneja RK, et al. **Anim Genet** 1989;20(3):307–11
Expression of the caeruloplasmin gene in the adult and neonatal rat liver. Barrow L, et al. **Clin Sci** 1989 Sep; 77(3):259–63
Primary structure of rat ceruloplasmin and analysis of tissue-specific gene expression during development. Fleming RE, et al. **J Biol Chem** 1990 May 5;265(13):7701–7
Human ceruloplasmin. Tissue-specific expression of transcripts produced by alternative splicing. Yang FM, et al. **J Biol Chem** 1990 Jun 25;265(18):10780–5
[Expression of ceruloplasmin gene in various organs of the rat] Galtskhoki VS, et al. **Biokhimiia** 1990 May; 55(5):927–37 (Eng. Abstr.) (Rus)
[Expression of ceruloplasmin gene in mammalian organs from the data of hybridization analysis with complementary DNA probes] Shvartsman AL, et al. **Mol Biol (Mosk)** 1990 May–Jun;24(3):657–62 (Eng. Abstr.) (Rus)

IMMUNOLOGY

[Monoclonal antibodies to ceruloplasmin and their use for immunoenzyme assay of this protein] Megrabian TB, et al. **Biokhimiia** 1990 Feb;55(2):361–7 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Unusual stability properties of a reptilian ceruloplasmin. Musci G, et al. **Arch Biochem Biophys** 1990 May 15; 279(1):8–13

METABOLISM

Copper transport: insights into a ceruloplasmin-based delivery system. Harris ED, et al. **Adv Exp Med Biol** 1989; 258:95–102
Copper transport from ceruloplasmin: characterization of the cellular uptake mechanism. Percival SS, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):C140–6
Routine screen for Wilson's disease? [letter] Scheinberg IH. **Ann Neurol** 1990 Apr;27(4):450–1
Relationship of the glycan structure of glycoproteins to the desialylation process by rat liver endothelium. Irie S, et al. **Biochem Int** 1989 Aug;19(2):345–52
Study of ceruloplasmin oxidase activity. The effect of pH. Saenko EL, et al. **Biochem Int** 1990;20(6):1049–58
Studies on receptor interaction of ceruloplasmin with human red blood cells. Saenko EL, et al. **Biochem Int** 1990; 20(2):215–25
In vivo effects of nickel and cadmium in rats on lipid peroxidation and ceruloplasmin activity. Solé J, et al. **Bull Environ Contam Toxicol** 1990 May;44(5):686–91
Non-caeruloplasmin copper and ferroxidase activity in mammalian serum. Ferroxidase activity and phenanthroline-detectable copper in human serum in Wilson's disease. Evans PJ, et al. **Free Radic Res Commun** 1989;7(1):55–62
Presymptomatic Wilson's disease: further questions and comments. Epstein O. **Hepatology** 1989 Nov;10(5):892–3
Characterization of an interaction between protein C and ceruloplasmin. Walker FJ, et al. **J Biol Chem** 1990 Feb 5;265(4):1834–6
Binding of Cu(II) to non-prosthetic sites in ceruloplasmin and bovine serum albumin. Zgirski A, et al. **J Inorg Biochem** 1990 Jun;39(2):137–48
Purification and characterization of ceruloplasmin receptors. Omoto E, et al. **Trans Assoc Am Physicians** 1989;102:170–5
[Ceruloplasmin and the development of emphysema—facts or hypothesis?] Nowak D, et al. **Pneumonol Pol** 1990 Apr–May;58(4–5):258–62 (Pol)
[Protective effect rendered by human ceruloplasmin on erythrocytes in hepatocerebral dystrophy] Saenko EL, et al. **Biokhimiia** 1989 Oct;54(10):1617–22 (Eng. Abstr.) (Rus)
[Ceruloplasmin activity in the blood during progressive diseases of the central nervous system] Mzhel'skaia TI, et al. **Lab Delo** 1989;(11):12–6 (Eng. Abstr.) (Rus)
[Biochemical criteria of the activity of osteoarticular tuberculosis] Titarenko OT, et al. **Probl Tuberk** 1990; (5):56–60 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

[Effect of selected physico-chemical parameters on changes in ascorbate oxidase and ceruloplasmin activities] Wieczorek P. **Ann Acad Med Stetin** 1989;35:57–71 (Eng. Abstr.) (Pol)

PHARMACOLOGY

Ceruloplasmin reduces the adhesion and scavenges superoxide during the interaction of activated polymorphonuclear leukocytes with endothelial cells. Broadley C, et al. **Am J Pathol** 1989 Oct;135(4):647–55
Hemolysis of rabbit erythrocytes in the presence of copper ions. Inhibition by albumin and ceruloplasmin. Caffrey JM Jr, et al. **Biol Trace Elem Res** 1990 Apr;25(1):11–9
[The activating effect of ceruloplasmin on the development of delayed hypersensitivity in mice] Ismailova IM, et al. **Fiziol Zh** 1989 Jul–Aug;35(4):91–4 (Eng. Abstr.) (Rus)
[The effect of ceruloplasmin on metabolic processes in the liver of mice during neutron exposure] Antonenko SG, et al. **Radiobiologiia** 1990 Jan–Feb;30(1):80–3 (Eng. Abstr.) (Rus)

PHYSIOLOGY

The protective effect of normal and pathological (Wilson disease) ceruloplasmins on human erythrocytes. Saenko EL, et al. **Biochem Int** 1990;20(3):463–9
The valency state of absorbed iron appearing in the portal blood and ceruloplasmin substitution. Wollenberg P, et al. **Biol Met** 1990;3(1):1–7

THERAPEUTIC USE

[Lipid free-radical oxidation in rats with alimentary hypercholesterolemia and its correction with ceruloplasmin] Bobyrev VN, et al. **Farmakol Toksikol** 1989 Nov–Dec;52(6):73–4 (Eng. Abstr.) (Rus)

CERUMEN

Effect of cerumen removal on the hearing ability of geriatric patients. Lewis-Cullinan C, et al. **J Adv Nurs** 1990 May; 15(5):594–600
Impacted cerumen: a disorder of keratinocyte separation in the superficial external ear canal? Robinson AC, et al. **J Otolaryngol** 1990 Apr;19(2):86–90
A craving for wax [letter] [see comments] Arny T. **Nature** 1990 Jan 18;343(6255):220 Comment in: Nature 1990 Mar 22;344(6264):300.
[Artificial cerumen and its application following chronic otitis externa] Bongers V, et al. **Ned Tijdschr Geneeskd** 1990 Aug 11;134(32):1540–1 (Dut)

ANALYSIS

Identification of long-chain fatty acids and alcohols from human cerumen by the use of picolinyl and nicotinate esters. Harvey DJ. **Biomed Environ Mass Spectrom** 1989 Sep;18(9):719–23
Studies on hexachlorocyclohexane and DDT contents in human cerumen and their relationships to cancer mortality. Wang XQ, et al. **Biomed Environ Sci** 1988 Aug;1(2):138–51
Do patients with otitis externa produce biochemically different cerumen? Osborne JE, et al. **Clin Otolaryngol** 1990 Feb;15(1):59–61

DRUG EFFECTS

The efficacy of ceruminolytics [letter; comment] Freedman A. **J Otolaryngol** 1990 Apr;19(2):150–1 Comment on: J Otolaryngol 1989 Oct;18(6):263–7.
The mechanism of ceruminolysis. Robinson AC, et al. **J Otolaryngol** 1989 Oct;18(6):268–73
The efficacy of ceruminolytics: everything old is new again [see comments] Robinson AC, et al. **J Otolaryngol** 1989 Oct;18(6):263–7 Comment in: J Otolaryngol 1990 Apr;19(2):150–1.

METABOLISM

Production rate and composition of cerumen: influence of sex and season. Cipriani C, et al. **Laryngoscope** 1990 Mar; 100(3):275–6

PHYSIOLOGY

Copper-bottomed earwax [letter; comment] O'Connor PM. **Nature** 1990 Mar 22;344(6264):300 Comment on: Nature 1990 Jan 18;343(6255):220.

SECRETION

[Genetic geography of inherited dimorphism of ear wax by its consistency] Spitsyn VA, et al. **Genetika** 1989 Oct; 25(10):1854–60 (Eng. Abstr.) (Rus)

CERVICAL ESOPHAGOSTOMY see ESOPHAGOSTOMY

CERVICAL PLEXUS

Carotid endarterectomy under cervical plexus block—a prospective clinical audit. Davies MJ, et al. **Anaesth Intensive Care** 1990 May;18(2):219–23
Pathologic quiz case 2. Schwannoma of the cervical plexus. Nuss DW, et al. **Arch Otolaryngol Head Neck Surg** 1990 Feb;116(2):224–5, 227
[Block of the cervical plexus in surgery of the carotid artery. Our experience with 142 cases] Cantanna R, et al. **Minerva Anestesiol** 1989 Jul–Aug;55(7–8):301–5 (Eng. Abstr.) (Ita)

ANATOMY & HISTOLOGY

Nerves and nerve plexuses of the human vertebral column. Groen GJ, et al. **Am J Anat** 1990 Jul;188(3):282–96
Cutaneous branches from the dorsal rami of the cervical nerves, with emphasis on their positional relations to the semispinalis cervicis. Kasai T, et al. **Okajimas Folia Anat Jpn** 1989 Oct;66(4):153–9

DRUG EFFECTS

[Comments on the paper by G. Wald-Oboussier and B. Veill. Supraclavicular plexus blockade using prilocaine in patients with chronic anemia] Hahn J. **Reg Anaesth** 1990 Jun; 13(4):108–10 (Ger)

INJURIES

[Peripheral nerve injuries as a rare complication of cervical lymph node excision for diagnostic purposes] Ferencsik M, et al. **Orv Hetil** 1990 Jul 8;131(27):1465–7 (Eng. Abstr.) **(Hun)**

[Current problems of traumatic lesions of the peripheral nerves and the brachial and cervical plexuses] Ogleznev Kla. **Zh Vopr Neirokhir** 1989 Nov–Dec;(6):3–6 **(Rus)**

PATHOLOGY

An anatomic and dynamic study of the greater occipital nerve (n. of Arnold). Applications to the treatment of Arnold's neuralgia. Vital JM, et al. **Surg Radiol Anat** 1989; 11(3):205–10

PHYSIOLOGY

Differential ovulatory responses of the right and left ovaries of the adult rat to unilateral lesion and anaesthesia of the cervico–vaginal plexus. Domínguez R. **J Endocrinol** 1990 Jan;124(1):43–5

PHYSIOPATHOLOGY

Headache: classification, mechanism and principles of therapy, with particular reference to migraine. Lance JW. **Recenti Prog Med** 1989 Dec;80(12):673–80 (56 ref.)

SURGERY

Long–term survival after surgical excision of a schwannoma of the sixth cervical spinal nerve in a dog. Bailey CS. **J Am Vet Med Assoc** 1990 Mar 1;196(5):754–6

An anterior approach for decompression of the suprascapular nerve. Shupeck M, et al. **J Neurosurg** 1990 Jul;73(1):53–6

Autotransplantation of superior cervical ganglion to the caudate nucleus in three patients with Parkinson's disease (preliminary report). Horvath M, et al. **Neurosurg Rev** 1990; 13(2):119–22

CERVICAL RIB SYNDROME see under **THORACIC OUTLET SYNDROME**

CERVICAL VERTEBRAE

Hypertrophic cervical osteophytes presenting with pharyngeal symptoms. Van Wellen P, et al. **Acta Orthop Belg** 1989;55(4):599–603

Vertebral artery injuries following chiropractic cervical spine manipulation—case reports. Raskind R, et al. **Angiology** 1990 Jun;41(6):445–52

Destructive spine lesions in ankylosing spondylitis [letter] Kahan A, et al. **Ann Rheum Dis** 1990 Jun;49(6):422

Sensory impairment in the hands secondary to spondylotic compression of the cervical spinal cord [published erratum appears in Arch Neurol 1990 Jun;47(6):653] Voskuhl RR, et al. **Arch Neurol** 1990 Mar;47(3):309–11

Transcervical approaches to the prevertebral space. Carrau RL, et al. **Arch Otolaryngol Head Neck Surg** 1990 Sep; 116(9):1070–3 (18 ref.)

Acute pulmonary edema following removal of a spinal orthosis: an unusual complication of a halo vest. Kaplan SL, et al. **Arch Phys Med Rehabil** 1990 Mar;71(3):255–7

Hyperextension injuries to the cervical cord in the elderly [letter; comment] Enevoldson TP. **BMJ** 1989 Oct 7; 299(6704):920 Comment on: BMJ 1989 Sep 9;299(6700):669–70.

Pre– and postoperative motor conduction times, measured using magnetic stimulation, in patients with cervical spondylosis. Jaskolski DJ, et al. **Br J Neurosurg** 1990; 4(3):187–92

Are "cervicogenic" headaches due to myofascial pain and cervical spine dysfunction? Jaeger B. **Cephalalgia** 1989 Sep; 9(3):157–64

Radiology pathology conference. An 18–year–old man with a 4–month history of progressive neck and right shoulder pain. Nazarian LN, et al. **Clin Imaging** 1990 Mar; 14(1):67–71

Cervical spine and shoulder pain. Hawkins RJ, et al. **Clin Orthop** 1990 Sep;(258):142–6

Tortuous vertebral artery—onset of symptoms during pregnancy. Glover JR, et al. **Clin Radiol** 1990 Jan; 41(1):66–8

Cervical and thoracic pain including thoracic outlet syndrome and brachial neuritis. Bland JH. **Curr Opin Rheumatol** 1990 Apr;2(2):242–52 (24 ref.)

Osteosynthesis of the cervical spine with an anterior plate. Boccanera L, et al. **Ital J Orthop Traumatol** 1989 Sep; 15(3):287–94

Bifocal instability of the cervical spine. Case report. Carugno C, et al. **Ital J Orthop Traumatol** 1988 Dec;14(4):539–42

Osteoblastoma. Cause for wry neck. Babu ML, et al. **J Assoc Physicians India** 1989 Dec;37(12):790–1

Instability of the cervical spine and neurological involvement in Klippel–Feil syndrome. A case report. Hall JE, et al. **J Bone Joint Surg [Am]** 1990 Mar;72(3):460–2

Fibrous dysplasia of the second cervical vertebra. A case report. Hu SS, et al. **J Bone Joint Surg [Am]** 1990 Jun; 72(5):781–3

Pigmented villonodular synovitis in a vertebra. A case report. Karnezis TA, et al. **J Bone Joint Surg [Am]** 1990 Jul; 72(6):927–30

Fibrous dysplasia of the cervical spine: a fatal complication of treatment. A case report. Smith MD, et al. **J Bone Joint Surg [Am]** 1990 Sep;72(8):1254–8

Therapeutic legends of emergency medicine. Rosen P, et al. **J Emerg Med** 1989 Jul–Aug;7(4):387–9

Clinical and radiological evaluation of Vertebrace extrication collars. Solot JA, et al. **J Emerg Med** 1990 Jan–Feb; 8(1):79–83

Cervical spine immobilization with axial traction: a practice to be discouraged. Turner LM. **J Emerg Med** 1989 Jul–Aug;7(4):385–6

Large retropharyngeal cold abscess in an adult with respiratory distress. Bhargava SK, et al. **J Laryngol Otol** 1990 Feb;104(2):157–8

Brucellosis: a rare cause of the unstable spine. Aspegren DD. **J Manipulative Physiol Ther** 1990 Mar–Apr;13(3):165–8

Precise measurement of functional leg length inequality and changes due to cervical spine rotation in pain–free students. Falltrick DR, et al. **J Manipulative Physiol Ther** 1989 Oct; 12(5):364–8

The validation of the diagnosis "joint dysfunction" in the synovial joints of the cervical spine. Mennell JM. **J Manipulative Physiol Ther** 1990 Jan;13(1):7–12

Idiopathic dystonia and cervical spondylotic myelopathy. Waterston JA, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1424–6

Vascularized fibular grafts for vertebral body replacement [letter; comment] Cybulski GR. **J Neurosurg** 1990 Mar; 72(3):519–20 Comment on: J Neurosurg 1989 Aug;71(2):283–6.

Numb clumsy hands may indicate a surgically treatable cause of myelopathy in the elderly. Pitt MC, et al. **J R Soc Med** 1990 Feb;83(2):119–20

Rheumatoid subluxation of the cervical spine. Bland JH. **J Rheumatol** 1990 Feb;17(2):134–7 (22 ref.)

Destructive spondyloarthropathy in longterm CAPD and hemodialysis [letter; comment] Cruz A, et al. **J Rheumatol** 1989 Aug;16(8):1169–70 Comment on: J Rheumatol 1988 Apr;15(4):644–7.

Observations on efficacy of treatment of 279 cases of cervical spondylopathy with medicinal pillow. Li S. **J Tradit Chin Med** 1990 Jun;10(2):124–5

Manipulative treatment of 12 cases of cervical spondylosis with trigeminal neuralgia. Liu SJ, et al. **J Tradit Chin Med** 1982 Jun;2(2):115–8

Decompression of the brain stem and superior cervical spine for congenital/acquired craniovertebral invagination: an interdisciplinary approach. Wood DE, et al. **Laryngoscope** 1990 Sep;100(9):926–31

Osteoid osteoma of the cervical spine. Misleading MR features about a case involving the uncinate process. Houang B, et al. **Neuroradiology** 1990;31(6):549–51

Cervical spondylolysis. Faure BT, et al. **Orthopedics** 1990 Feb;13(2):250–2; discussion 252–4

Does pain always mean the presence of metastatic disease in an oncology patient? A case study. Hargest E. **Radiogr Today** 1990 May;56(636):11–3

CT appearances of an aneurysmal cyst of the spine in childhood. Hoeffel JC, et al. **Rontgenblatter** 1990 Apr; 43(4):169–70

Premature onset of degenerative disease of the cervical spine in rugby players. Scher AT. **S Afr Med J** 1990 Jun 2; 77(11):557–8

Case report 579: Progressive systemic sclerosis (PSS) with cervical cord compression syndrome, osteolysis and bilateral facet arthropathy. Pinstein ML, et al. **Skeletal Radiol** 1989;18(8):603–5

Metastatic lesions of the upper cervical spine. Phillips E, et al. **Spine** 1989 Oct;14(10):1071–7

Histology of the alar and transverse ligaments. Saldinger P, et al. **Spine** 1990 Apr;15(4):257–61

Dynamic response of human cervical spine ligaments. Yoganandan N, et al. **Spine** 1989 Oct;14(10):1102–10

[Ossification of the posterior longitudinal ligament of the cervical vertebrae and myelopathy] Fang DH. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Jun; 22(3):157–9, 191 (Eng. Abstr.) **(Chi)**

[Dynamic change in the ligmenta flava of the cervical spine in motion] Jia LS. **Chung Hua Wai Ko Tsa Chih** 1989 Sep; 27(9):561–5, 575 (Eng. Abstr.) **(Chi)**

[Pain in the arm with tingling index and middle fingers, or the too–little–known prolapsed disk in the neck (letter)] Blaauw AA. **Ned Tijdschr Geneeskd** 1989 Dec 23; 133(51):2579 **(Dut)**

[Pain in the arm with tingling index and middle fingers, or the little–known prolapsed disk in the neck (letter)] Bruggeman A, et al. **Ned Tijdschr Geneeskd** 1990 Jan 13; 134(2):88–9 **(Dut)**

[Cervical spondylodiscitis caused by Kingella kingae. Apropos of a case] Petrus M, et al. **Ann Pediatr (Paris)** 1990 Mar;37(3):170–2 (Eng. Abstr.) **(Fre)**

[Upper cervical intradural lipoma. Apropos of a case] Djavidi N, et al. **J Radiol** 1990 Feb;71(2):113–8 (Eng. Abstr.) **(Fre)**

[Bilateral anterolateral approach in primary tumors of the cervical vertebrae] Lesoin F. **Neurochirurgie** 1989; 35(5):330–1, 352 (Eng. Abstr.) **(Fre)**

[Neck pain and isolated torticollis revealing neurologic lesions] Croisile B, et al. **Presse Med** 1989 Oct 7; 18(31):1513–5 (Eng. Abstr.) **(Fre)**

[Tracheal pseudotumor as a result of compression by cervico–thoracic osteophytes (letter)] Mialon P, et al. **Rev Pneumol Clin** 1989;45(5):228–9 **(Fre)**

[MRI and intraspinal neurinoma. Apropos of 2 cases] Gillet P, et al. **Rev Rhum Mal Osteoartic** 1990 Feb;57(2):159–62 **(Fre)**

[Rapidly destructive spondylitis, a manifestation of SAPHO syndrome] Schreiber S, et al. **Rev Rhum Mal Osteoartic** 1990 Mar;57(3):217–9 (11 ref.) **(Fre)**

[Conservative and functional treatment of the cervical spine] Biesinger E. **HNO** 1990 Feb;38(2):77–9 (Eng. Abstr.) **(Ger)**

[Tumors of the craniospinal transition: a rare and often misdiagnosed disease] Anagnostopoulos–Schleep J, et al. **Med Klin** 1989 Sep 15;84(9):450–8 (64 ref.) **(Ger)**

[A unicameral aneurysmal bone cyst of the cervical spine. The differential diagnosis of a lateral cervical cyst] Dietlein M, et al. **ROFO** 1990 Jun;152(6):732–3 **(Ger)**

[Morbidity and mortality in polyarthritic changes of the upper spine] Krukenberg P, et al. **Versicherungsmedizin** 1990 Aug 1;42(4):124–5 (Eng. Abstr.) **(Ger)**

[Craniocervical amyloid tumor with destructive spondyloarthropathy and myelocompression as a rare complication of long–term dialysis] Ausserwinkler M, et al. **Wien Klin Wochenschr** 1990 Mar 2;102(5):152–5 (Eng. Abstr.) **(Ger)**

[Functional changes of the cervical spine and shoulder–neck region in workers employed in textile sewing] Czech C, et al. **Z Gesamte Hyg** 1990 Jan;36(1):61–4 (Eng. Abstr.) **(Ger)**

[Evaluation of the antalgic activity and tolerability of piroxicam in chronic pain in cervicoarthrosis and lumboarthrosis] Minisola G, et al. **Clin Ter** 1989 Oct 31; 131(2):73–82 (Eng. Abstr.) **(Ita)**

[Surgical treatment of cervical spondylotic radiculomyelopathy with abnormal involuntary neck movements. Report of three cases] Hanakita J, et al. **Neurol Med Chir (Tokyo)** 1989 Dec;29(12):1132–6 (Eng. Abstr.) **(Jpn)**

[Effect of activated macrophages on cultured fibroblasts of the spinal posterior longitudinal ligament of the rabbit] Miyata R. **Nippon Seikeigeka Gakkai Zasshi** 1989 Sep; 63(9):1117–23 (Eng. Abstr.) **(Jpn)**

[A case of juvenile–type distal and segmental muscular atrophy of upper extremities (Hirayama disease) with the isolated cervical fusion at the C3–C4 levels] Horikawa H, et al. **Rinsho Shinkeigaku** 1989 May;29(5):639–42 (Eng. Abstr.) **(Jpn)**

[Significance of flexed posture and neck instability as a cause of chronic muscle contraction headache] Sakuta M. **Rinsho Shinkeigaku** 1990 Mar;30(3):254–61 (Eng. Abstr.) **(Jpn)**

[Somatosensory evoked potentials in patients with cervical spondylotic myelopathy] Uozumi T, et al. **Rinsho Shinkeigaku** 1989 May;29(5):558–62 (Eng. Abstr.) **(Jpn)**

[Physiotherapy of cervical migraine in the light of personal experience] Ponikowska I. **Pol Tyg Lek** 1989 Jan 30; 44(5):128–30 (Eng. Abstr.) **(Pol)**

[Prerequisites for the manual therapy of diseases of the cervical spine] Khvisiuk NI, et al. **Ortop Travmatol Protez** 1989 Sep;(9):1–4 (Eng. Abstr.) **(Rus)**

[Clinico–thermographic characteristics of humeroscapular periarthritis in cervical osteochondrosis] Polienko EM, et al. **Ortop Travmatol Protez** 1989 Sep;(9):41–2 **(Rus)**

[IR thermography in the evaluation of the effectiveness of treating patients with cervical osteochondrosis by manual therapy] Sidorenko LV, et al. **Ortop Travmatol Protez** 1989 Dec;(12):28–31 **(Rus)**

[Acute nonspecific osteomyelitis of the cervical spine complicated by a wandering abscess] Smirnov NM, et al. **Vestn Otorinolaringol** 1990 May–Jun;(3):67–8 **(Rus)**

[Characteristics of the effect of medical gymnastics on the cerebral hemodynamics in patients with cervical osteochondrosis] Levchenko KP, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Sep–Oct; (5):58–60 **(Rus)**

[The diagnosis and treatment of patients with the vascular syndromes of cervical osteochondrosis] Sitel' AB, et al. **Zh Nevropatol Psikhiatr** 1990;90(5):39–42 (Eng. Abstr.) **(Rus)**

[Complicated echinococcosis in a rare location—case report] Custović K, et al. **Acta Chir Iugosl** 1989;36 Suppl 2:624–5 **(Scr)**

[Computerized tomography in the diagnosis of neurologic complications of cervical spondylosis] Arias M, et al. **Neurologia** 1987 Sep–Oct;2(5):211–5 (Eng. Abstr.) **(Spa)**

[Magnetic resonance in the evaluation of neurologic complications of cervical spondylosis] Castillo J, et al. **Neurologia** 1989 Mar;4(2):43–9 (Eng. Abstr.) **(Spa)**

[Cervical radiculopathy caused by Ewing's tumor] Castillo J, et al. **Neurologia** 1988 May–Jun;3(3):120–3 (Eng. Abstr.) **(Spa)**

[Epidural spinal cord compression in brucellar spondylitis (letter)] López–Arlandis JM, et al. **Rev Clin Esp** 1989 Jul–Aug;185(3):165–6 **(Spa)**

ABNORMALITIES

Os odontoideum detected on a lateral cephalogram of a 9–year–old orthodontic patient. Hickam HE, et al. **Am J Orthod Dentofacial Orthop** 1990 Aug;98(2):89–93

Variations of cervical vertebrae after expression of a Hox–1.1 transgene in mice. Kessel M, et al. **Cell** 1990 Apr 20; 61(2):301–8

Perocormus associated with segmental aplasia of the cervical spinal cord in a Japanese shorthorn calf. Madarame H, et al. **J Comp Pathol** 1989 Aug;101(2):225–30

Skeletal anomalies of the upper cervical spine in children with Down syndrome. Pueschel SM, et al. **J Pediatr Orthop** 1990 Sep–Oct;10(5):607–11

[Duplication of mouth and mandible. Apropos of a case] Chaouachi B, et al. **Ann Pediatr (Paris)** 1990 Mar; 37(3):193–4 (Eng. Abstr.) (Fre)

[The so-called Klippel–Feil syndrome and its orthopedic incidences] Chaumien JP, et al. **Rev Chir Orthop** 1990; 76(1):30–8 (Eng. Abstr.) (Fre)

[Iniencephaly: prenatal and postnatal findings] Hammer F, et al. **Geburtshilfe Frauenheilkd** 1990 Jun;50(6):491–4 (Eng. Abstr.) (Ger)

[Classification of cranioschisis. Morphologic studies with preparatory methods with reference to spinal findings] Walther L, et al. **Pathologe** 1989 Sep;10(5):283–8 (Ger)

ANATOMY & HISTOLOGY

Age-related changes in the cervical facet joints: studies with cryomicrotomy, MR, and CT. Fletcher G, et al. **AJNR** 1990 Jan–Feb;11(1):27–30

The adult cervical spine: implications for airway management. Crosby ET, et al. **Can J Anaesth** 1990 Jan; 37(1):77–93 (126 ref.)

Changes in the pharyngeal airway in relation to extension of the head. Hellsing E. **Eur J Orthod** 1989 Nov; 11(4):359–65

The effect of the gene undulated (un) on the shape of cervical and upper thoracic vertebrae in the house mouse (Mus musculus). Johnson DR, et al. **J Anat** 1989 Apr;163:49–55

[The measurements of the clivus, the foramina on the external base of the skull and the superior vertebrae] Lang J, et al. **Anat Anz** 1989;169(1):7–34 (Eng. Abstr.) (Ger)

[Further studies of the clinical anatomy of the craniocervical region] Issing PR, et al. **Gegenbaurs Morphol Jahrb** 1989; 135(3):455–61 (Eng. Abstr.) (Ger)

BLOOD SUPPLY

MRI diagnosis of vertebral arteriovenous malformations in neurofibromatosis. Westacott S, et al. **Br J Neurosurg** 1988; 2(3):385–9

Casts of the vessels of the head and vertebral column. Tompsett D. **Br J Surg** 1967 Aug;54(8):719–23

[Diaphanization and vascular study of the dog vertebra] Alberti A, et al. **Bull Assoc Anat (Nancy)** 1989 Jun; 73(221):5–7 (Eng. Abstr.) (Fre)

[Arterial vascularization of the vertebral column. Injection-corrosion-fluorescence technic] Alberti A, et al. **Bull Assoc Anat (Nancy)** 1989 Jun;73(221):9–11 (Eng. Abstr.) (Fre)

[The arterial supply of the cervical vertebral body in newborns.] Menck J, et al. **Acta Anat (Basel)** 1990; 137(2):165–9 (Eng. Abstr.) (Ger)

[Analysis of the effectiveness of reflexotherapy in patients with osteochondrosis of the cervical spine] Esina IIu, et al. **Zh Nevropatol Psikhiatr** 1990;90(4):23–6 (Eng. Abstr.) (Rus)

EMBRYOLOGY

[Morphogenesis of structural elements of the cervical spine in the white rat in prenatal ontogeny] Borisevich AI, et al. **Arkh Anat Gistol Embriol** 1989 Nov;97(11):38–44 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

The human growth process from infancy to maturity. Growth of the facial skeleton and neck. Anous MM, et al. **Clin Plast Surg** 1990 Jan;17(1):7–12

INJURIES

Ventral spondylodesis: basic method in the treatment of cervical spine injuries. Pentelényi T, et al. **Acta Chir Hung** 1989;30(4):299–310

Outcome after soft-tissue injury of the cervical spine. A prospective study of 93 car-accident victims. Hildingsson C, et al. **Acta Orthop Scand** 1990 Aug;61(4):357–9

Oculomotor problems after cervical spine injury. Hildingsson C, et al. **Acta Orthop Scand** 1989 Oct;60(5):513–6

Compatibility of cervical spine braces with MR imaging: a study of nine nonferrous devices. Clayman DA, et al. **AJNR** 1990 Mar–Apr;11(2):385–90

Halo vest for cervical spine fixation during MR imaging. Shellock FG, et al. **AJR Am J Roentgenol** 1990 Mar; 154(3):631–2

Cervicothoracic junction injury. Vanden Hoek T, et al. **Am J Emerg Med** 1990 Jan;8(1):30–3

The epidemiologic, pathologic, biomechanical, and cinematographic analysis of football-induced cervical spine trauma. Torg JS, et al. **Am J Sports Med** 1990 Jan–Feb; 18(1):50–7

Utility of the cervical spine radiograph in pediatric trauma. Lally KP, et al. **Am J Surg** 1989 Dec;158(6):540–1; discussion 541–2

Prevertebral hematoma secondary to whiplash injury necessitating emergency intubation. Biby L, et al. **Anesth Analg** 1990 Jan;70(1):112–4

Airway management in patients with unstable cervical spine fractures. Holley J, et al. **Ann Emerg Med** 1989 Nov; 18(11):1237–9

Cervical spine dislocation presenting as an isolated Horner's syndrome. Safran MJ, et al. **Arch Ophthalmol** 1990 Mar; 108(3):327–8

Primary survey in major trauma [letter] Calder I. **BMJ** 1990 Jun 23;300(6740):1652

Hyperextension injuries to the cervical cord in the elderly [see comments] Crawford PM, et al. **BMJ** 1989 Sep 9; 299(6700):669–70 Comment in: **BMJ** 1989 Oct 7;299(6704):920.

Trauma of the spine and spinal cord [letter] Miles KA. **BMJ** 1990 Aug 11;301(6747):340

The type III dens fracture and its associated soft-tissue injuries: a different form of Hangman's fracture. Renwick IG. **Br J Radiol** 1990 Jun;63(750):495–6

Elective intubation in the unstable cervical spine patient. Suderman VS, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S122

Fracture and dislocation of the fourth and fifth cervical vertebral bodies with transection of the spinal cord. Crenshaw AH Jr, et al. **Clin Orthop** 1989 Nov;(248):158–62

Evaluation and treatment of cervical spine injuries. Cibulka MT. **Clin Sports Med** 1989 Oct;8(4):691–701 (15 ref.)

Cervical spine fractures in athletes. Marks MR, et al. **Clin Sports Med** 1990 Jan;9(1):13–29 (28 ref.)

Scintigraphic findings in acute whiplash injury of the cervical spine. Hildingsson C, et al. **Injury** 1989 Sep;20(5):265–6

Transoral fusion for high cervical fractures. Ashraf J, et al. **J Bone Joint Surg [Br]** 1990 Jan;72(1):76–9

Post-traumatic lateral instability of the cervical spine. Grobler G, et al. **J Bone Joint Surg [Br]** 1990 May;72(3):522

Occlusion of the vertebral artery in cervical spine dislocations. Louw JA, et al. **J Bone Joint Surg [Br]** 1990 Jul;72(4):679–81

Unsuspected upper cervical spine fractures associated with significant head trauma: role of CT [see comments] Kirshenbaum KJ, et al. **J Emerg Med** 1990 Mar–Apr; 8(2):183–98 Comment in: J Emerg Med 1990 Mar–Apr;8(2):207–8.

Cervical spine injury and radiography in alert, high-risk patients. McNamara RM, et al. **J Emerg Med** 1990 Mar–Apr;8(2):177–82

Frederic Wood-Jones: the ideal lesion produced by hanging. 1913 [classical article] Sternbach G, et al. **J Emerg Med** 1989 Sep–Oct;7(5):517–20

The world in cervical spine precautions [editorial; comment] Sternbach G. **J Emerg Med** 1990 Mar–Apr;8(2):207–8 Comment on: J Emerg Med 1990 Mar–Apr;8(2):183–98.

Internal carotid artery thrombosis: a complication of closed craniocervical trauma. Mittal RS, et al. **J Indian Med Assoc** 1989 Aug;87(8):190–2

The chiropractic management and rehabilitation of cervical trauma [letter; comment] Barge FH. **J Manipulative Physiol Ther** 1990 May;13(4):236–7 Comment on: J Manipulative Physiol Ther 1990 Jan;13(1):17–25.

Management of cervical spine injuries in patients with ankylosing spondylitis. Detwiler KN, et al. **J Neurosurg** 1990 Feb;72(2):210–5

Management of cervical spine fractures [letter] Duff TA. **J Neurosurg** 1990 Sep;73(3):478–9

Cervical spine fracture caused by high jump. Olerud C, et al. **J Orthop Trauma** 1990;4(2):179–82

Cervical spine injuries in children. Evans DL, et al. **J Pediatr Orthop** 1989 Sep–Oct;9(5):563–8

Halo application in the infant. Mubarak SJ, et al. **J Pediatr Orthop** 1989 Sep–Oct;9(5):612–4

Cervical spine injuries in children. Bohn D, et al. **J Trauma** 1990 Apr;30(4):463–9

Reliability of indications for cervical spine films in trauma patients. Kreipke DL, et al. **J Trauma** 1989 Oct; 29(10):1438–9

Diagnosis of cervical spine injury in motor vehicle crash victims: how many X-rays are enough? MacDonald RL, et al. **J Trauma** 1990 Apr;30(4):392–7

Halo immobilization and surgical fusion: relative indications and effectiveness in the treatment of 140 cervical spine injuries. Rockswold GL, et al. **J Trauma** 1990 Jul; 30(7):893–8

Cervical fractures and spinal cord injury: outcome of surgical and nonsurgical management. Murphy KP, et al. **Mayo Clin Proc** 1990 Jul;65(7):949–59

Fixation of fractures of the lower cervical spine using methylmethacrylate and wire: technique and results in 99 patients. Branch CL Jr, et al. **Neurosurgery** 1989 Oct; 25(4):503–12; discussion 512–3

Anterior cervical fusion and Caspar plate stabilization for cervical trauma. Caspar W, et al. **Neurosurgery** 1989 Oct; 25(4):491–502

Cervical spine trauma. Kaye JJ, et al. **Orthop Clin North Am** 1990 Jul;21(3):449–62

Acute cervical spine trauma: correlation of MR imaging findings with degree of neurologic deficit [see comments] Flanders AE, et al. **Radiology** 1990 Oct;177(1):25–33 Comment in: Radiology 1990 Oct;177(1):18–20.

Cervical myelography: survey of modes of practice and major complications. Robertson HJ, et al. **Radiology** 1990 Jan;174(1):79–83

The medical and economic impact of closed cervical spine dislocations. Cotler HB, et al. **Spine** 1990 Jun;15(6):448–52

Fracture of the lamina of the sixth cervical vertebra with quadriplegia. A case report. De Barros Filho TE, et al. **Spine** 1990 Mar;15(3):220–2

Multidirectional instabilities of traumatic cervical spine injuries in a porcine model. Panjabi MM, et al. **Spine** 1989 Oct;14(10):1111–5

Magnetic resonance imaging of acute cervical spine trauma. Correlation with severity of neurologic injury. Schaefer DM, et al. **Spine** 1989 Oct;14(10):1090–5

Acute ascending myelopathy of the spine. Yablon IG, et al. **Spine** 1989 Oct;14(10):1084–9

Comparison of neck dislocation and percussion of the head on visual evoked responses in the chicken's brain. Gregory NG, et al. **Vet Rec** 1990 Jun 9;126(23):570–2

[Halo fixation for injuries of the cervical spine] Taller S, et al. **Acta Chir Orthop Traumatol Cech** 1990 Feb; 57(1):48–55 (Eng. Abstr.) (Cze)

[A dangerously stiff neck in Bechterew's disease] van der Heyden KW, et al. **Ned Tijdschr Geneeskd** 1990 Jul 28; 134(30):1433–5 (Dut)

[Fracture of the spine and growth in children] Bollini G. **Ann Chir** 1990;44(3):189–92 (8 ref.) (Fre)

[Pharyngo-esophageal risk of surgery of the cervical spine using an anterior approach] Crampette L, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(7):491–5 (Eng. Abstr.) (Fre)

[Diagnosis of severe neck sprain and its treatment] Pache T. **Rev Med Suisse Romande** 1989 Aug;109(8):607–11 (Fre)

[Injuries to the cervical spine in children and adolescents] Ludolph E, et al. **Aktuel Traumatol** 1990 Apr;20(2):57–61 (Eng. Abstr.) (Ger)

[Fatal accidents of motorcycle riders. Comparison of the craniocervical injury picture before and following introduction of the legally sanctioned protective helmet rule] Tributsch W, et al. **Beitr Gerichtl Med** 1989;47:625–30 (Eng. Abstr.) (Ger)

[Results of surgical treatment of 170 injuries of the middle and lower cervical spine] Klötzer R, et al. **Beitr Orthop Traumatol** 1990 Jan;37(1):15–21 (Eng. Abstr.) (Ger)

[The surgical treatment of injuries of the cervical spine] Illgner A, et al. **Unfallchirurg** 1989 Aug;92(8):363–72 (Eng. Abstr.) (Ger)

[Surgically stabilizing "complex therapy" of unstable injury of the lower cervical spine] Sándor L. **Unfallchirurgie** 1990 Feb;16(1):18–24 (Eng. Abstr.) (Ger)

[A case of fracture of the 5th cervical vertebra caused by electric shock] Putti E, et al. **Chir Organi Mov** 1989 Jul–Dec;74(3–4):153–4 (Eng. Abstr.) (Ita)

[5th Italian-French meeting on neuroanesthesia and resuscitation. Turin, 1–3 June 1988. 1. Cervical spinal cord injuries: anesthesia and resuscitation. Proceedings] **Minerva Anestesiol** 1989 Mar;55(3):57–133 (Ita, Fre)

[Traumatic cervical myelopathies. Effect of the operative timing and systemic complications on the functional outcome] Caldiroli D, et al. **Minerva Anestesiol** 1989 Mar; 55(3):107–10 (Eng. Abstr.) (Ita)

[Reduction and early surgical stabilization of fractures and fracture-luxations in cervical vertebral and spinal cord injuries] Caroli GC, et al. **Minerva Anestesiol** 1989 Mar; 55(3):99–102 (Eng. Abstr.) (Ita)

[Surgical treatment of fracture-luxations between C3 and C7 vertebrae] Cassinari V, et al. **Minerva Anestesiol** 1989 Mar; 55(3):103–5 (Eng. Abstr.) (Ita)

[Pre-, intra- and postoperative somatosensory evoked potentials in cervical vertebral and spinal cord injuries] D'Alpa F, et al. **Minerva Anestesiol** 1989 Mar;55(3):115–8 (Eng. Abstr.) (Ita)

[Transportation in a helicopter ambulance and resuscitation of patients with cervical spinal injuries. Our regional experience] De Trana L, et al. **Minerva Anestesiol** 1989 Mar;55(3):125–7 (Eng. Abstr.) (Ita)

[Surgical indications for the treatment of cervico-spinal cord injuries] Fasano VA. **Minerva Anestesiol** 1989 Mar; 55(3):73–9 (0 ref.) (Eng. Abstr.) (Ita)

[Early stabilization in severe cervical vertebral and spinal cord injuries] Gambardella G, et al. **Minerva Anestesiol** 1989 Mar;55(3):95–7 (Eng. Abstr.) (Ita)

[Tracheal cannulation technics in cervical vertebral and spinal cord injuries. A comparative study] Giron GP, et al. **Minerva Anestesiol** 1989 Mar;55(3):81–5 (Eng. Abstr.) (Ita)

[Cervical vertebral and spinal cord injury in intensive therapy] Massei R, et al. **Minerva Anestesiol** 1989 Mar; 55(3):129–33 (Eng. Abstr.) (Ita)

[Somatosensory evoked potentials in the evaluation and follow-up of patients with cervical vertebral and spinal cord injuries] Picozzi P, et al. **Minerva Anestesiol** 1989 Mar; 55(3):119–22 (Eng. Abstr.) (Ita)

[Traumatic rupture of the vertebral artery associated with fracture of the cervical spine: a case report] Okuyama T, et al. **No Shinkei Geka** 1989 Oct;17(10):973–7 (Eng. Abstr.) (Jpn)

[Pathomechanisms of spinal cord injuries caused by injuries of the cervical spine] Gusta A, et al. **Chir Narzadow Ruchu Ortop Pol** 1989;54(2):121–8 (Eng. Abstr.) (Pol)

[Cervical myelopathy caused by ossification of the posterior longitudinal ligament] Kurbanov NM, et al. **Ortop Travmatol Protez** 1989 Jul;(7):21–4 (Eng. Abstr.) (Rus)

[The surgical treatment of dislocations and fracture-dislocations of cervical vertebrae 3–7]

Voronovich IR, et al. **Ortop Travmatol Protez** 1989 Sep; (9):8–10 (Eng. Abstr.) **(Rus)**

[Surgical tactics in gunshot wounds of the spine and spinal cord] Verkhovskiĭ AI. **Vestn Khir** 1989 Nov;143(11):64–7 (Eng. Abstr.) **(Rus)**

INNERVATION

Cervical zygapophyseal joint pain patterns. II: A clinical evaluation. Aprill C, et al. **Spine** 1990 Jun;15(6):458–61

Cervical zygapophyseal joint pain patterns. I: A study in normal volunteers. Dwyer A, et al. **Spine** 1990 Jun; 15(6):453–7

An anatomic and dynamic study of the greater occipital nerve (n. of Arnold). Applications to the treatment of Arnold's neuralgia. Vital JM, et al. **Surg Radiol Anat** 1989; 11(3):205–10

[So-called cervicogenic headache] Bogucki A, et al. **Wiad Lek** 1989 Apr 30;42(8):547–9 (Eng. Abstr.) **(Pol)**

MICROBIOLOGY

[Spondylitis of the cervical spine caused by non–sporogenic anaerobes] Burdygin VN, et al. **Khirurgiia (Mosk)** 1989 Aug;(8):126–7 **(Rus)**

PATHOLOGY

Age–related changes in the cervical facet joints: studies with cryomicrotomy, MR, and CT. Fletcher G, et al. **AJR Am J Roentgenol** 1990 Apr;154(4):817–20

The importance of functional magnetic resonance imaging (MRI) in the planning of stabilizing operations on the cervical spine in rheumatoid patients. Krödel A, et al. **Arch Orthop Trauma Surg** 1990;109(1):30–3

Clinical evaluation of magnetic stimulation in cervical spondylosis. Jaskolski DJ, et al. **Br J Neurosurg** 1989; 3(5):541–8

Symptomatic calcification and ossification of the cervical ligamentum flavum: clinical, radiological and pathological features. Sato K, et al. **Br J Neurosurg** 1989;3(5):597–602

MR and CT evaluation of intraspinal chondrosarcoma. Judd J, et al. **Comput Med Imaging Graph** 1990 May–Jun; 14(3):213–6

Abnormal magnetic–resonance scans of the cervical spine in asymptomatic subjects. A prospective investigation. Boden SD, et al. **J Bone Joint Surg [Am]** 1990 Sep; 72(8):1178–84

Calcified synovial cyst of the cervical spine: CT and MR evaluation. Nijensohn E, et al. **J Comput Assist Tomogr** 1990 May–Jun;14(3):473–6

Cervical osteophytes: their significance in ENT practice (ankylosing vertebral hyperostosis—Forestier's disease). Jonathan D, et al. **J Laryngol Otol** 1990 Mar;104(3):236–8

Long term hemodialysis spondylarthropathy: an atlanto–occipital location. Grignon B, et al. **J Neuroradiol** 1990 Jan;17(1):60–5 **(Eng, Fre)**

Weaver syndrome and instability of the upper cervical spine. Muhonen MG, et al. **J Pediatr** 1990 Apr;116(4):596–9

Central spinal cord lesions in stenosis of the cervical canal. Faiss JH, et al. **Neuroradiology** 1990;32(2):117–23

Cranio–vertebral bony changes in a case of congenital lipomatosis. Wylie EJ, et al. **Neuroradiology** 1989; 31(4):352–3

Transoral stereotactic biopsy of the second cervical vertebral body: case report with technical note. Patil AA. **Neurosurgery** 1989 Dec;25(6):999–1001; discussion 1001–2

Magnetic resonance imaging of the craniocervical junction in rheumatoid arthritis: value, limitations, indications. Einig M, et al. **Skeletal Radiol** 1990;19(5):341–6

Magnetic resonance imaging of the postoperative spine. Ross JS. **Top Magn Reson Imaging** 1988 Dec;1(1):39–52 (17 ref.)

Tuberculous polyradiculopathy: the value of magnetic resonance imaging of the neck. Smith DF, et al. **Tubercle** 1989 Sep;70(3):213–6

Ataxia in Swedish warmblood and standardbred horses. A radiologic and pathology study. Ekman S. **Zentralbl Veterinarmed [A]** 1990 Jun;37(5):379–91

[Destructive spondylodiskopathy in beta 2 microglobulin–induced amyloidosis] Schober R, et al. **Pathologe** 1990 May;11(3):154–7 **(Ger)**

[Syrinx–like artifact on MR images of the spinal cord] Hashimoto M, et al. **Rinsho Hoshasen** 1989 Jun; 34(6):697–701 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

In vitro biomechanical study of female geriatric cervical vertebral bodies. Yoganandan N, et al. **J Biomed Eng** 1990 Mar;12(2):97–101

Interexaminer concordance in detecting joint–play asymmetries in the cervical spines of otherwise asymptomatic subjects [letter] Haas M, et al. **J Manipulative Physiol Ther** 1990 Jul–Aug;13(6):346–8

Addenda: effects of subject eye closure on goniometrically assessed cervical lateral–flexion passive end–range capability [letter] Nansel D, et al. **J Manipulative Physiol Ther** 1990 Jul–Aug;13(6):349–50

Effect of unilateral spinal adjustments on goniometrically–assessed cervical lateral–flexion end–range asymmetries in otherwise asymptomatic subjects [see comments] Nansel DD, et al. **J Manipulative Physiol Ther** 1989 Dec;12(6):419–27 Comment in: J Manipulative Physiol Ther 1990 May;13(4):237.

Effect of unilateral spinal adjustments on goniometrically assessed cervical lateral–flexion end–range asymmetries in otherwise asymptomatic subjects [letter; comment] Nilsson N. **J Manipulative Physiol Ther** 1990 May;13(4):237 Comment on: J Manipulative Physiol Ther 1989 Dec;12(6):419–27.

Effect of unilateral spinal adjustments on goniometrically–assessed cervical lateral–flexion end–range asymmetries in otherwise asymptomatic subjects [letter] Nilsson N. **J Manipulative Physiol Ther** 1990 Jul–Aug; 13(6):348–9

The effect of pin location on the rigidity of the halo pin–bone interface. Ballock RT, et al. **Neurosurgery** 1990 Feb; 26(2):238–41

Destructive and adaptive processes in human vertebral column under altered gravitational potential. Stupakov GP, et al. **Physiologist** 1990 Feb;33(1 Suppl):S4–7 (8 ref.)

Biomechanical evaluation of cervical spinal stabilization methods in a human cadaveric model. Coe JD, et al. **Spine** 1989 Oct;14(10):1122–31

Kinematics of the cervical spine following discectomy and stabilization. Schulte K, et al. **Spine** 1989 Oct; 14(10):1116–21

[Functional analysis of the cervical spine in healthy persons] Weh L, et al. **Radiologe** 1990 Feb;30(2):87–91 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Time course considerations for the effects of unilateral lower cervical adjustments with respect to the amelioration of cervical lateral–flexion passive end–range asymmetry. Nansel D, et al. **J Manipulative Physiol Ther** 1990 Jul–Aug; 13(6):297–304

Interexaminer concordance in detecting joint–play asymmetries in the cervical spines of otherwise asymptomatic subjects. Nansel DD, et al. **J Manipulative Physiol Ther** 1989 Dec;12(6):428–33

Spinal manipulation and headaches of cervical origin. Vernon HT. **J Manipulative Physiol Ther** 1989 Dec;12(6):455–68 (86 ref.)

Cervical angina [published erratum appears in N Y State J Med 1990 Feb;90(2):78] Jacobs B. **N Y State J Med** 1990 Jan;90(1):8–11

[Cervicalgia and vertebral artery loop. Value of magnetic resonance imaging. Apropos of a case (letter)] Franco M, et al. **Ann Med Interne (Paris)** 1990;141(1):92–4 **(Fre)**

[Functional disorders of the craniocervical transition and ENT symptoms—a status determination] Seifert K. **HNO** 1989 Nov;37(11):443–8 (43 ref.) (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Cervical osteomyelitis due to i.v. heroin use: radiologic findings in 14 patients. Endress C, et al. **AJR Am J Roentgenol** 1990 Aug;155(2):333–5

Cervical spondylolysis: imaging findings in 12 patients. Forsberg DA, et al. **AJR Am J Roentgenol** 1990 Apr; 154(4):751–5

Cervical prevertebral fat stripe: a normal variant simulating prevertebral hemorrhage. Lewis CA, et al. **AJR Am J Roentgenol** 1990 Sep;155(3):559–60

Radiology of the cervical spine in trauma patients: practice pitfalls and recommendations for improving efficiency and communication. Vandemark RM. **AJR Am J Roentgenol** 1990 Sep;155(3):465–72 (21 ref.)

The adequacy and cost effectiveness of routine resuscitation–area cervical–spine radiographs. Spain DA, et al. **Ann Emerg Med** 1990 Mar;19(3):276–8

Disposition of cervical vertebrae, atlanto–axial joint, hyoid and mandible during x–ray laryngoscopy. Horton WA, et al. **Br J Anaesth** 1989 Oct;63(4):435–8

Epidural abscess of the cervical spine: case report and literature review. Williams JW, et al. **Br J Radiol** 1990 Jul;63(751):576–8

Extensive spinal hyperostosis in a patient receiving isotretinoin—progression after 4 years of etretinate therapy. Archer CB, et al. **Clin Exp Dermatol** 1989 Jul;14(4):319–21

Cervical instability as an unusual manifestation of Hajdu–Cheney syndrome of acroosteolysis. Herscovici D Jr, et al. **Clin Orthop** 1990 Jun;(255):111–6

CT of the spine: are plain spine radiographs necessary? Tress BM, et al. **Clin Radiol** 1990 May;41(5):317–20

MR and CT evaluation of intraspinal chondrosarcoma. Judd J, et al. **Comput Med Imaging Graph** 1990 May–Jun; 14(3):213–6

Readability of cervical spine imaging: digital versus film/screen radiographs. Kreipke DL, et al. **Comput Med Imaging Graph** 1990 Mar–Apr;14(2):119–25

C1–C2 posterior soft–tissue injuries with neurologic impairment in children. Allington NJ, et al. **J Pediatr Orthop** 1990 Sep–Oct;10(5):596–601

Primary spondylolysis of the axis vertebra (C2) in three children, including one with pyknodysostosis. Currarino G. **Pediatr Radiol** 1989;19(8):535–8 (18 ref.)

A simple method of applying arm traction. Gaylor AL, et al. **Radiol Technol** 1982 Nov–Dec;54(2):125–6

Case report 595: Paget's disease with congenitally fused cervical vertebrae. Geil GE, et al. **Skeletal Radiol** 1990; 19(4):290–2

[Cervical pyogenic spondylitis] Tulla H, et al. **Duodecim** 1989;105(17):1498–502 **(Fin)**

[Iconographic rubric. Idiopathic disc calcifications] Silberman B, et al. **Arch Fr Pediatr** 1990 May;47(5):377–8 **(Fre)**

[How to visualize one additional vertebra on profile radiographs of the cervical spine?] Liebault B, et al. **J Radiol** 1989 Aug–Sep;70(8–9):507–9 (Eng. Abstr.) **(Fre)**

[Secondary wire migration following percutaneous bore wire fixation of acromioclavicular dislocation] Habernek H, et al. **Aktuel Traumatol** 1989 Oct;19(5):218–20 **(Ger)**

[The value of computerized tomography in the diagnosis of degenerative diseases of the cervical vertebrae] Berlit P, et al. **Nervenarzt** 1990 Apr;61(4):213–8 **(Ger)**

[Toward a better knowledge of the lateral x–ray picture of the cervical spinous process] Wackenheim A, et al. **Radiologe** 1989 Sep;29(9):437–40 (Eng. Abstr.) **(Ger)**

[Rotator syndrome of the shoulder and mobility of the cervical spine] Weh L, et al. **Z Rheumatol** 1989 Sep–Oct; 48(5):223–8 (Eng. Abstr.) **(Ger)**

[X–ray assessment of the functional status of the diaphragm in degenerative–dystrophic lesions of the spine] Dmitriev AE, et al. **Voen Med Zh** 1989 Nov;(11):38–41 **(Rus)**

RADIONUCLIDE IMAGING

Cervical osteomyelitis with prevertebral abscess formation. Bartels JW, et al. **Otolaryngol Head Neck Surg** 1990 Feb; 102(2):180–2

SURGERY

Percutaneous interbody osteosynthesis in the treatment of thoracolumbar traumatic or tumoural lesions. A review of 51 cases. Lozes G, et al. **Acta Neurochir (Wien)** 1990; 102(1–2):42–53 (165 ref.)

A case of occipitocervical fusion in myeloma. Löfvenberg R, et al. **Acta Orthop Scand** 1990 Feb;61(1):81–3 (22 ref.)

Operations for the unstable cervical spine in rheumatoid arthritis. Sixteen cases of subaxial subluxation. Santavirta S, et al. **Acta Orthop Scand** 1990 Apr;61(2):106–10

Reduction of rheumatoid periodontoid pannus following posterior occipito–cervical fusion visualised by magnetic resonance imaging. Zygmunt S, et al. **Br J Neurosurg** 1988; 2(3):315–20

Occipital pin for rigid occipitocervical fixation in upper cervical metastasis. Laohacharoensombat W, et al. **Bull Hosp Jt Dis Orthop Inst** 1990 Spring;50(1):20–6

Pseudarthrosis of the cervical spine after anterior arthrodesis. Treatment by posterior nerve–root decompression, stabilization, and arthrodesis. Farey ID, et al. **J Bone Joint Surg [Am]** 1990 Sep;72(8):1171–7

Occipitocervical fusion for reduction of traumatic periodontoid hypertrophic cicatrix. Case report. Lansen TA, et al. **J Neurosurg** 1990 Sep;73(3):466–70

Surgical treatment of myeloradiculopathy in cervical spondylosis. A report on 438 operations. Samii M, et al. **Neurosurg Rev** 1989;12(4):285–90

Vomited bone graft—a complication of anterior cervical spine fusion [letter] Louw JA. **S Afr Med J** 1990 Jul 7; 78(1):48

Complications of cervical spine surgery. A five–year report on a survey of the membership of the Cervical Spine Research Society by the Morbidity and Mortality Committee. Graham JJ. **Spine** 1989 Oct;14(10):1046–50

Motor evoked potential monitoring during upper cervical spine surgery. Kitagawa H, et al. **Spine** 1989 Oct; 14(10):1078–83

Dome–like expansive laminoplasty for the second cervical vertebra. Matsuzaki H, et al. **Spine** 1989 Nov; 14(11):1198–203

Esophageal perforation following anterior cervical spine surgery. Newhouse KE, et al. **Spine** 1989 Oct;14(10):1051–3

Clinical biomechanics of cervical spine implants. White AA 3d. **Spine** 1989 Oct;14(10):1040–5 (37 ref.)

[Surgical treatment of cervical spondylotic myelopathy. A follow–up study] Rasmussen G, et al. **Ugeskr Laeger** 1989 Oct 16;151(42):2730–3 (Eng. Abstr.) **(Dan)**

[Anterior discectomy as treatment for a cervical radicular syndrome (letter)] Zeilstra DJ. **Ned Tijdschr Geneeskd** 1989 Oct 14;133(41):2043 **(Dut)**

[Difficult intubation and surgery of the cervical spine: nuclear magnetic resonance] Bouguet D, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R25 **(Fre)**

[Lateral and lateral anterior approaches in tumors of the cervical vertebrae] George B. **Neurochirurgie** 1989; 35(5):332–3, 353 (Eng. Abstr.) **(Fre)**

[Basal ganglion bleeding after the surgical decompression of the craniovertebral junction] Jamjoom ZB. **Neurochirurgia (Stuttg)** 1990 Jan;33(1):22–5 (11 ref.) (Eng. Abstr.) **(Ger)**

[Anterior approach to the cervical vertebrae and the location of the recurrent laryngeal nerve] Menck J, et al. **Unfallchirurg** 1990 Aug;93(8):384–6 (Eng. Abstr.) **(Ger)**

[Moderated normovolemic hemodilution in surgery of the cervical rachis] Mangiameli S, et al. **Minerva Anestesiol** 1989 Mar;55(3):123–4 (Eng. Abstr.) **(Ita)**

[Use of porous ceramic implants in spinal surgery (preliminary report)] Kiwerski J, et al. **Chir Narzadow Ruchu Ortop Pol** 1989;54(3):181–7 (Eng. Abstr.) **(Pol)**

[Stabilization of the cervical spine with biocompatible polymer implants] Iumashev GS, et al.

Ortop Travmatol Protez 1989 Jul;(7):25–7 (Eng. Abstr.) **(Rus)**

[Spondylodesis of the cervical spine using a metal–polymer construction] Dzhindzhikhashvilisi Sl, et al. **Zh Vopr Neirokhir** 1989 May–Jun;(3):42–6 (Eng. Abstr.) **(Rus)**

CERVICITIS

The relation of chlamydial infection of the cervix to time elapsed from the onset of menses. Rosenthal GE, et al. **J Clin Epidemiol** 1990;43(1):15–20

COMPLICATIONS

[Mycoplasma infections and human reproduction] Akunts KB. **Akush Ginekol (Mosk)** 1989 Jul;(7):8–10 (46 ref.) **(Rus)**

DIAGNOSIS

Effective sampling device and mucopurulent cervicitis in women with chlamydial cervical infection. Svensson L, et al. **Acta Obstet Gynecol Scand** 1989;68(1):79–82

Detection, treatment, and follow up of women with Chlamydia trachomatis infection seeking abortion in inner city general practices [see comments] Southgate L, et al. **BMJ** 1989 Nov 4;299(6708):1136–7 Comment in: BMJ 1989 Dec 9;299(6713):1466. Comment in: BMJ 1989 Dec 16;299(6714):1527.

Towards developing a diagnostic algorithm for Chlamydia trachomatis and Neisseria gonorrhoeae cervicitis in pregnancy. Braddick MR, et al. **Genitourin Med** 1990 Apr; 66(2):62–5

TestPack Chlamydia, a new rapid assay for the direct detection of Chlamydia trachomatis. Coleman P, et al. **J Clin Microbiol** 1989 Dec;27(12):2811–4

Confirmatory assay increases specificity of the chlamydiazyme test for Chlamydia trachomatis infection of the cervix. Moncada J, et al. **J Clin Microbiol** 1990 Aug; 28(8):1770–3

Test of cure for genital Chlamydia trachomatis infection in women. Ferris DG, et al. **J Fam Pract** 1990 Jul;31(1):36–41

The diagnosis and management of chlamydial cervicitis: a test of cure. Southgate L. **J Fam Pract** 1990 Jul;31(1):33–5

Advances in diagnostic testing for vaginitis and cervicitis. Eschenbach DA, et al. **J Reprod Med** 1989 Aug;34(8 Suppl):555–64; discussion 564–5 (53 ref.)

Detection of cervical human papillomavirus by molecular probes [letter] Douyon S, et al. **JAMA** 1990 Jul 25; 264(4):453

Diagnosis of human papillomavirus infection in uterine cervix by immunoperoxidase technique. Shu LL. **Mater Med Pol** 1989 Jan–Mar;21(1):28–30

Endocervical chlamydial infection in female contacts of patients with nongonococcal urethritis. Lim KB, et al. **Singapore Med J** 1989 Apr;30(2):164–6

[Clinical aspects and simple laboratory parameters in Chlamydia infections] Spitzer D, et al. **Arch Gynecol Obstet** 1989;245(1–4):458–60 **(Ger)**

[Immunologic detection of infection caused by Neisseria gonorrhoeae] Kosian K, et al. **Gynakol Rundsch** 1989; 29(3):168–70 **(Ger)**

[Immunologic detection of genital Chlamydia infections in gynecology and obstetrics] Schieder K, et al. **Gynakol Rundsch** 1989;29(3):177–9 **(Ger)**

[Chlamydia trachomatis infection in pregnancy] Schön HJ, et al. **Gynakol Rundsch** 1989;29 Suppl 2:173–7 **(Ger)**

[Nucleic acid hybridization for direct detection of Chlamydia trachomatis. Comparison of a radioactive with a non-radioactive procedure] Näher H, et al. **Hautarzt** 1990 Mar;41(3):151–4 (Eng. Abstr.) **(Ger)**

[Diagnosis of gonorrhea using a microfluorimetric Neisseria gonorrheae-specific enzyme detection test] Grabert E, et al. **Z Gesamte Hyg** 1989 Oct;35(10):610–2 (Eng. Abstr.) **(Ger)**

[Response to the contribution, "Chlamydia infections", by U. B. Hoyme] Schieck H, et al. **Zentralbl Gynakol** 1990; 112(9):585–7 **(Ger)**

[The usefulness of Chlamydia testpack for the diagnosis of Chlamydia trachomatis infection in genito-urinary tract] Iwasa T, et al. **Hinyokika Kiyo** 1989 Oct;35(10):1721–4 (Eng. Abstr.) **(Jpn)**

[Diagnosis and follow-up study of human papillomavirus infection in benign epithelium and mild dysplasia of the uterine cervix] Suzuki M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jun;42(6):586–92 (Eng. Abstr.) **(Jpn)**

[Detection of papilloma virus in the cervix of the human uterus by in situ hybridization—Comparative study of detection rate by Southern blot method] Ishi K, et al. **Rinsho Byori** 1989 Oct;37(10):1161–6 (Eng. Abstr.) **(Jpn)**

[Chlamydia infection in obstetrics and gynecology] Liseeva ZA. **Akush Ginekol (Mosk)** 1989 Oct;(10):8–11 (51 ref.) **(Rus)**

[Clinical aspects, diagnosis and treatment of urogenital Chlamydia infection] Savicheva AM, et al. **Akush Ginekol (Mosk)** 1989 Jul;(7):74–8 **(Rus)**

[Clinical aspects and diagnosis of an atypical form of genital herpes] Smetnik VP, et al. **Akush Ginekol (Mosk)** 1989 Oct; (10):60–2 **(Rus)**

DRUG THERAPY

Efficacy and safety of ofloxacin in the treatment of nongonococcal sexually transmitted disease. Batteiger BE, et al. **Am J Med** 1989 Dec 29;87(6C):75S–77S

Randomized comparison of ofloxacin and doxycycline for chlamydia and ureaplasma urethritis and cervicitis. Mogabgab WJ, et al. **Chemotherapy** 1990;36(1):70–6

Effect of penicillin and spectinomycin given for urethritis and cervicitis with Neisseria gonorrhoeae: high prevalence of penicillin-resistant isolates. Kouri YH, et al. **Genitourin Med** 1989 Oct;65(5):342–6

Short-course erythromycin therapy for endocervical chlamydia during pregnancy. Thomason JL, et al. **J Fam Pract** 1990 Jun;30(6):711–2

Cefotetan therapy for gonococcal urethritis and cervicitis. Youssef RZ, et al. **Sex Transm Dis** 1990 Apr–Jun; 17(2):99–101

[Roxithromycin versus doxycycline in the treatment of cervicitis. Prospective randomized multicenter study under practice-related conditions] Hoyme UB, et al. **Fortschr Med** 1990 Apr 20;108(12):244–6 (Eng. Abstr.) **(Ger)**

[The importance of tetracycline treatment of cervical Chlamydia trachomatis infections: control with cervical smears] Demirezen S, et al. **Mikrobiyol Bul** 1988 Apr; 22(2):120–5 (Eng. Abstr.) **(Tur)**

EPIDEMIOLOGY

Yearly incidence of Chlamydia trachomatis infection of the cervix in a university student health service population over four years—British Columbia. Noble MA, et al. **Can Dis Wkly Rep** 1989 Sep 9;15(36):181–3; discussion 183–4 **(Eng, Fre)**

Endocervical chlamydial infection in women attending a sexually transmitted disease clinic in Singapore. Lim KB, et al. **Singapore Med J** 1989 Apr;30(2):167–9

[Chlamydia infection in gynecology] Carol W, et al. **Gynakol Rundsch** 1990;30(2):84–91 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Screening for chlamydial cervicitis in a sexually active university population. Malotte CK, et al. **Am J Public Health** 1990 Apr;80(4):469–71

The significance and scope of reproductive tract infections among Third World women. Wasserheit JN. **Suppl Int J Gynecol Obstet** 1989;3:145–68 (149 ref.)

[Cervical infection caused by Chlamydia trachomatis at a family planning center: prevalence, analysis of risk factors, prediction model] Chi Nguyen Duy, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(8):977–87 (Eng. Abstr.) **(Fre)**

METABOLISM

Epidermal growth factor receptor expression in the normal and inflamed cervix uteri: a comparison with estrogen receptor expression. Kupryjańczyk J. **Int J Gynecol Pathol** 1990;9(3):263–71

MICROBIOLOGY

Inflammatory epithelial changes and nonviral cervicovaginal pathogens. Frisch LE, et al. **Acta Cytol** 1990 Mar–Apr; 34(2):129–32

Clinical predictors of Chlamydia trachomatis endocervicitis in adolescent women. Looking for the right combination. Remafedi G, et al. **Am J Dis Child** 1989 Dec; 143(12):1437–42

Detection of Chlamydia trachomatis in cervical smears from pregnant population. Maguire NC, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):204–7

Comparison of chemiluminescent DNA probe to cell culture for the screening of Chlamydia trachomatis in a gynecology clinic population. Mercer LJ, et al. **Obstet Gynecol** 1990 Jul;76(1):114–7

[Cultural and serologic Chlamydia detection in diagnosis of sterility and increased risk of infection] Degen KW, et al. **Geburtshilfe Frauenheilkd** 1990 May;50(5):371–4 (Eng. Abstr.) **(Ger)**

[Microbiological study of vaginitis and cervicitis] Segovia S, et al. **Rev Chil Obstet Ginecol** 1987;52(3):165–77 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Colposcopy of patients with cytologic inflammatory epithelial changes. Frisch LE, et al. **Acta Cytol** 1990 Mar–Apr;34(2):133–5

Improving the sensitivity of cervical cytologic screening. A comparison of duplicate smears and colposcopic examination of patients with cytologic inflammatory epithelial changes. Frisch LE, et al. **Acta Cytol** 1990 Mar–Apr;34(2):136–9

The inflammatory cervical smear: a study in general practice. Kelly BA, et al. **Br J Gen Pract** 1990 Jun;40(335):238–40

Histopathology of endocervical infection caused by Chlamydia trachomatis, herpes simplex virus, Trichomonas vaginalis, and Neisseria gonorrhoeae. Kiviat NB, et al. **Hum Pathol** 1990 Aug;21(8):831–7

Herpetic cervicitis—a histo-morphologic study. Shariff S, et al. **Indian J Pathol Microbiol** 1989 Apr;32(2):81–91

Evaluation of inflammatory atypia. A literature review. Himmelstein LR. **J Reprod Med** 1989 Sep;34(9):634–7 (16 ref.)

[Viral and chlamydial diseases of the uterine cervix—histocytological correlates] Zavadilová H, et al. **Cesk Patol** 1989 Nov;25(4):217–25 (Eng. Abstr.) **(Cze)**

[Comparative cytologic and histologic studies of portio cervicitis in pemphigus] Anastasiadis P, et al. **Arch Gynecol Obstet** 1989;245(1–4):536–9 **(Ger)**

[Infectious genital diseases and their significance in the development of cervix cancer and its precancerous conditions] Barten G. **Zentralbl Gynakol** 1990;112(7):431–5 (Eng. Abstr.) **(Ger)**

[Possibilities of cytologic and histologic methods of diagnosing flat condyloma of the cervix uteri] Andreev AI. **Akush Ginekol (Mosk)** 1990 Feb;(2):35–8 (Eng. Abstr.) **(Rus)**

CERVICO-BRACHIAL NEURALGIA

Benign plexus neuropathy in children. Zeharia A, et al. **J Pediatr** 1990 Feb;116(2):276–8 (14 ref.)

COMPLICATIONS

[Bilateral diaphragmatic paralysis: sequelae of neuralgic amyotrophy] Leys D, et al. **Rev Neurol (Paris)** 1989; 145(11):811–2 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Neuralgic amyotrophy. Aymond JK, et al. **Orthop Rev** 1989 Dec;18(12):1275–9 (24 ref.)

ETIOLOGY

Recurrent brachial plexus neuropathy and giant cell arteritis. Dierckx RA, et al. **Clin Neurol Neurosurg** 1990;92(1):71–4

Neuralgic amyotrophy following recombinant DNA hepatitis B vaccination [letter] Reutens DC, et al. **Muscle Nerve** 1990 May;13(5):461

[Pain in the arm with tingling index and middle finger, or the little-known disk prolapse in the neck (letter)] **Ned Tijdschr Geneeskd** 1989 Sep 23;133(38):1898–9 **(Dut)**

[Pain in the arm with tingling index and middle fingers, or the too-little-known prolapsed disk in the neck (letter)] Blaauw AA. **Ned Tijdschr Geneeskd** 1989 Dec 23; 133(51):2579 **(Dut)**

[Pain in the arm with tingling index and middle fingers, or the little-known prolapsed disk in the neck (letter)] Bruggeman A, et al. **Ned Tijdschr Geneeskd** 1990 Jan 13; 134(2):88–9 **(Dut)**

[Parsonage-Turner syndrome after cytomegalovirus infection (letter)] Seror P, et al. **Presse Med** 1990 Mar 24; 19(11):527–8 **(Fre)**

[Atypical cervical syndromes: presentation of 2 cases] Robert JP, et al. **Rev Med Suisse Romande** 1990 Apr;110(4):369–73 **(Fre)**

[A case of cervicobrachial disorder caused by workload in sign language interpreter] Taoda K, et al. **Sangyo Igaku** 1989 Nov;31(6):442–3 **(Jpn)**

[Disorders of the cervical spine and the upper extremities and occupations] Krapac L. **Arh Hig Rada Toksikol** 1989 Dec;40(4):389–92 (Eng. Abstr.) **(Scr)**

IMMUNOLOGY

[A case of "neuralgic amyotrophy" with elevated serum antibody titer against Borrelia burgdorferi] Nangaku M, et al. **Rinsho Shinkeigaku** 1990 Jan;30(1):84–7 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Cervical and thoracic pain including thoracic outlet syndrome and brachial neuritis. Bland JH. **Curr Opin Rheumatol** 1990 Apr;2(2):242–52 (24 ref.)

Childhood onset inclusion body myositis mimicking limb-girdle muscular dystrophy. Riggs JE, et al. **J Child Neurol** 1989 Oct;4(4):283–5

PHYSIOPATHOLOGY

Cervical spine rotation and lateral flexion combined motion in the examination of the thoracic outlet [published erratum appears in Arch Phys Med Rehabil 1990 Jul;71(8):582] Lindgren KA, et al. **Arch Phys Med Rehabil** 1990 Apr; 71(5):343–4

Neuralgic amyotrophy with involvement of cranial nerves IX, X, XI and XII. Pierre PA, et al. **Muscle Nerve** 1990 Aug;13(8):704–7

SURGERY

An anterior approach for decompression of the suprascapular nerve. Shupeck M, et al. **J Neurosurg** 1990 Jul;73(1):53–6

[Destruction of the entry zone of the posterior roots combined with selective rhizotomy in pain syndromes due to a lesion of the brachial plexus] Dreval' ON, et al. **Zh Vopr Neirokhir** 1990 Jan–Feb;(1):19–22 (Eng. Abstr.) **(Rus)**

CERVIX DISEASES

CHEMICALLY INDUCED

Estrogens induce malpighian metaplasia of the endocervical

junction in female rats' immunohistochemistry study. Firmin-Gomes-Teixeira Z, et al. **Biol Struct Morphog** 1989; 2(2):45-53

COMPLICATIONS

Chlamydia trachomatis as a cause of abortion. Hossain A, et al. **J Hyg Epidemiol Microbiol Immunol** 1990;34(1):53-5

A case of haematocervix and hematometra [letter] Puzey MS, et al. **S Afr Med J** 1990 Jul 7;78(1):46

Human papilloma virus (HPV) and uterine cervix cancer [editorial] Persaud V. **West Indian Med J** 1989 Sep; 38(3):123-5

[Gynecologic infections and sterility] Nahmanovici C, et al. **Rev Fr Gynecol Obstet** 1989 Mar 25;84(3 Pt 2):269-71; discussion 282-6 (0 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Cervical signs of HPV infection in PAP-smear negative women with external genital warts. Petersen CS, et al. **Acta Derm Venereol (Stockh)** 1989;69(5):454-6

The 1988 Bethesda System for reporting cervical/vaginal cytologic diagnoses: developed and approved at the National Cancer Institute workshop in Bethesda, MD, December 12-13, 1988. **Diagn Cytopathol** 1989;5(3):331-4

Gynecologic cytology at the Catholic Hospital St. John of God, Lunsar Sierra Leone. Calvo A, et al. **Eur J Gynaecol Oncol** 1983;4(3):198-200

Endocervical curettage by Vabra aspiration as part of colposcopic evaluation. Helmerhorst TJ, et al. **Gynecol Oncol** 1990 Mar;36(3):312-6

Assessment of criteria used in the histologic diagnosis of human papillomavirus-related disease of the female lower genital tract. Spitzer M, et al. **Gynecol Oncol** 1990 Jul; 38(1):105-9

Role of endocervical curettage in the diagnostic workup of preinvasive cervical lesions. Sesti F, et al. **Int J Gynaecol Obstet** 1990 Feb;31(2):153-6

Should the Cytobrush be used in routine screening for cervical pathology? van Erp EJ, et al. **Int J Gynaecol Obstet** 1989 Oct;30(2):139-44

Deep nabothian cysts of the uterine cervix. A possible source of confusion with minimal-deviation adenocarcinoma (adenoma malignum). Clement PB, et al. **Int J Gynecol Pathol** 1989;8(4):340-8

Effect of patient characteristics on performance of an enzyme immunoassay for detecting cervical Chlamydia trachomatis infection. Magder LS, et al. **J Clin Microbiol** 1990 Apr; 28(4):781-4

A new diagnostic index for predicting cervical infection with either Chlamydia trachomatis or Neisseria gonorrhoeae. Rosenthal GE, et al. **J Gen Intern Med** 1990 Jul-Aug; 5(4):319-26

Assessment of endocervical curettage in colposcopy. Linasmita V, et al. **J Med Assoc Thai** 1990 Feb;73 Suppl 1:28-32

The 1988 Bethesda System for Reporting Cervical/Vaginal Cytologic Diagnoses. Developed and approved at a National Cancer Institute Workshop, Bethesda, Maryland, U.S.A., December 12-13, 1988. **J Reprod Med** 1989 Oct; 34(10):779-85

The place of colposcopy and related systems in gynecological practice and research [letter; comment] Jones HW 3d, et al. **J Reprod Med** 1989 Nov;34(11):75 Comment on: J Reprod Med 1988 Sep;33(9):737-8.

Redefinition and categorization of "Pap test" reporting [letter] McGregor JA. **J Reprod Med** 1990 May;35(5):541-2

Colposcopic biopsy in pregnant teenagers [letter] Bloch B. **S Afr Med J** 1990 Sep 1;78(5):285-6

Colposcopic biopsy in pregnant teenagers detects cervical lesions missed by cytology. de Villiers VP, et al. **S Afr Med J** 1990 Jun 2;77(11):555-6

[The diagnosis of human papillomaviruses in cervical smears by deoxyribonucleic acid hybridization] Mincheva A, et al. **Acta Microbiol Bulg** 1990;25:62-8 (Eng. Abstr.) **(Bul)**

[A system recommended for formulating cervico-vaginal cytological diagnoses] Kobilková J, et al. **Cesk Gynekol** 1990 Mar;55(2):152-6 **(Cze)**

[Experience with 1000 cases of conization of the uterine cervix] Kalocsai G, et al. **Orv Hetil** 1990 Apr 22; 131(16):841-4 (34 ref.) (Eng. Abstr.) **(Hun)**

DRUG THERAPY

Ligneous conjunctivitis involving the cervix. Case report [letter; comment] Buck DC, et al. **Br J Obstet Gynaecol** 1990 Feb;97(2):193 Comment on: Br J Obstet Gynaecol 1989 Oct;96(10):1228-30.

Improved pregnancy outcome following successful treatment of chlamydial infection [see comments] Cohen I, et al. **JAMA** 1990 Jun 20;263(23):3160-3 Comment in: JAMA 1990 Jun 20;263(23):3191-2.

Single application treatment of human papillomavirus infection of the cervix and vagina with trichloroacetic acid: a randomized trial. Boothby RA, et al. **Obstet Gynecol** 1990 Aug;76(2):278-80

Amoxicillin therapy for Chlamydia trachomatis in pregnancy. Crombleholme WR, et al. **Obstet Gynecol** 1990 May; 75(5):752-6

ENZYMOLOGY

Placental form of glutathione S-transferase in normal and diseased human uterine cervical mucosa. de Camargo JL, et al. **Carcinogenesis** 1989 Dec;10(12):2317-20

EPIDEMIOLOGY

Cytomegalovirus infection among women attending a sexually transmitted disease clinic: association with clinical symptoms and other sexually transmitted diseases. Pereira LH, et al. **Am J Epidemiol** 1990 Apr;131(4):683-92

Screening pregnant women for Chlamydia--Quebec. Auger P, et al. **Can Dis Wkly Rep** 1990 Mar 10;16(10):45-6 **(Eng, Fre)**

Genital human papillomavirus infection in Panama City prostitutes. Reeves WC, et al. **J Infect Dis** 1989 Oct; 160(4):599-603

ETIOLOGY

Risk factors for cervical human papillomavirus and herpes simplex virus infections in Greenland and Denmark: a population-based study. Kjaer SK, et al. **Am J Epidemiol** 1990 Apr;131(4):669-82

Haematocervix after conization diagnosed by ultrasonography. Pschera H, et al. **Gynecol Obstet Invest** 1990;29(4):309-10

Chlamydia trachomatis cervical infection and oral contraceptive use among adolescent girls. Oh MK, et al. **J Adolesc Health Care** 1989 Sep;10(5):376-81

[Vulvo-cervico-vaginal infections caused by common (non-herpetic) germs] Body G. **Rev Fr Gynecol Obstet** 1989 Mar 25;84(3 Pt 2):257-9; discussion 265-7 (Eng. Abstr.) **(Fre)**

METABOLISM

Distribution of involucrin in normal and pathological human uterine cervix. Serra V, et al. **Gynecol Oncol** 1990 Jan; 36(1):34-42

MICROBIOLOGY

Cervical tuberculosis--case report. Carter J, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 Pt 1):270-2

Practical approach to cervical human papillomavirus-related intraepithelial lesions. Crum C, et al. **Int J Gynecol Pathol** 1989;8(4):388-99

Human papillomavirus infection of the uterine cervix analyzed by nonisotopic in situ hybridization. Hara Y, et al. **J Med Virol** 1990 Jun;31(2):120-8

Subtypes of human papillomavirus 16 in cervical tissue [letter; comment] **Lancet** 1989 Dec 2;2(8675):1342-3 Comment on: Lancet 1989 Jun 3;1(8649):1225-7.

[Detection of HPV-DNA in the various uterocervical lesions by in situ hybridization] Ishi K, et al. **Rinsho Byori** 1989 Nov;37(11):1284-8 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Multinucleation and abortive cellular division in human papillomavirus infection [letter] Luzzatto R, et al. **Acta Cytol** 1990 Mar-Apr;34(2):286-7

Prediction of 'high-risk' cervical papillomavirus infection by biopsy morphology [see comments] Franquemont DW, et al. **Am J Clin Pathol** 1989 Nov;92(5):577-82 Comment in: Am J Clin Pathol 1990 May;93(5):722.

Development of melanosis of uterine cervix after cryotherapy for epithelial dysplasia. A case report and brief review of the literature on pigmented lesions of the cervix. Hytiroglou P, et al. **Am J Clin Pathol** 1990 Jun;93(6):802-5 (22 ref.)

Cystic endocervical tunnel clusters. A clinicopathologic study of 29 cases of so-called adenomatous hyperplasia. Segal GH, et al. **Am J Surg Pathol** 1990 Oct;14(10):895-903

Cytological terminology. Hudson EA. **Br J Obstet Gynaecol** 1990 Mar;97(3):202-4

Ligneous conjunctivitis involving the cervix. Case report [see comments] Rubin A, et al. **Br J Obstet Gynaecol** 1989 Oct; 96(10):1228-30 Comment in: Br J Obstet Gynaecol 1990 Feb;97(2):193.

Study of the abnormal cervical-vaginal cytology of sexually active young women living within the Waterloo region. Redmond M, et al. **Can J Public Health** 1990 May-Jun; 81(3):235-6

The 1988 Bethesda System for reporting cervical/vaginal cytologic diagnoses: developed and approved at the National Cancer Institute Workshop in Bethesda, Maryland, December 12-13, 1988. **Hum Pathol** 1990 Jul; 21(7):704-8 (0 ref.)

Malakoplakia of the female genital tract. Bose S, et al. **Indian J Pathol Microbiol** 1990 Apr;33(2):193-4

Selected papers from the 13th biennial meeting of the American Society of Colposcopy and Cervical Pathology. San Francisco, April 1988. **J Reprod Med** 1989 Sep; 34(9):611-72

[Isolated necrotizing angiitis of the cervix uteri. Apropos of a case] de Mascarel A, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(6):721-3 (Eng. Abstr.) **(Fre)**

[Subclinical vulvar lesions. Vulvoscopic and histologic aspects. Apropos fo 74 cases] Foulques H, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(1):43-7 (Eng. Abstr.) **(Fre)**

[A term delivery through a cervix laceration] Marrakchi O, et al. **Tunis Med** 1989 Oct;67(10):645-7 (Eng. Abstr.) **(Fre)**

[Cystic microglandular hyperplasia of the cervix uteri. Presentation of 2 clinical cases] Padovani G, et al. **Minerva Ginecol** 1989 Sep;41(9):475-8 (Eng. Abstr.) **(Ita)**

PREVENTION & CONTROL

Prevention of post-cone biopsy cervical stenosis using a temporary cervical stent. Luesley DM, et al. **Br J Obstet Gynaecol** 1990 Apr;97(4):334-7

Cervical screening in practice [letter; comment] Fenwicke R. N Z Med J 1989 Jul 26;102(872):386 Comment on: N Z Med J 1989 Jun 28;102(870):316-7.

[Use of Polygynax in pregnant women for preventing cervico-vaginal infections] Audebert AJ. **Rev Fr Gynecol Obstet** 1989 Mar 25;84(3 Pt 2):287-90 (Eng. Abstr.) **(Fre)**

SURGERY

Evidence against diathermy as a beneficial treatment for human papillomavirus infection of the cervix. Mitchell H, et al. **Aust N Z J Obstet Gynaecol** 1989 Nov;29(4):439-42

[A case of foreign body in the parametrium] Szlachta A, et al. **Wiad Lek** 1989 Oct 1-Nov 1;42(19-21):1064-5 (Eng. Abstr.) **(Pol)**

THERAPY

The management and treatment of an abnormal Pap smear. Hansell RS, et al. **Indiana Med** 1990 Jul;83(7):468-73 (0 ref.)

Management of cervical papillomavirus infections: a response. Task Force on Human Papillomavirus (HPV) Infection [comment] Buck HW. **J Am Coll Health** 1990 May;38(6):298-9 Comment on: J Am Coll Health 1990 Mar;38(5):241-3.

VETERINARY

Induced Tritrichomonas foetus infection in beef heifers. Skirrow SZ, et al. **J Am Vet Med Assoc** 1990 Mar 15; 196(6):885-9

CERVIX DYSPLASIA

Drop CIN? [letter; comment] Holmquist ND. **Am J Clin Pathol** 1990 May;93(5):722 Comment on: Am J Clin Pathol 1989 Nov;92(5):577-82.

ANALYSIS

In situ hybridization analysis of HPV DNA in cervical precancer and cervical cancers from China. Ji HX, et al. **Arch Gynecol Obstet** 1990;247(1):21-9

CLASSIFICATION

[Is the end of the Pap classification in sight? (letter)] Boon ME, et al. **Ned Tijdschr Geneeskd** 1990 May 19; 134(20):1016-8 **(Dut)**

COMPLICATIONS

[Cancer of the uterine cervix in 1990. Cervicovaginal smear is the only detection test] Bergeron C. **Presse Med** 1990 Jun 2;19(22):1032-4 **(Fre)**

[No cervix carcinoma without HPV infection? Intraepithelial neoplasia--prevention of invasive carcinoma] Näthke he. **Fortschr Med** 1990 Apr 30;108(13):18 **(Ger)**

DIAGNOSIS

Diagnostic value of an abnormal smear in non-pregnant women. Evaluation of positive smear from the surface of the portio obtained by the cottonswab method or by the dry wooden Ayre spatula and the relevance of positive smear from the endocervix and/or from the surface of the portio. Lundvall L, et al. **Acta Obstet Gynecol Scand** 1990; 69(2):147-51

Microphotometric DNA analysis in mild and moderate dysplasia of the uterine cervix: a retrospective study. Kashyap V, et al. **Indian J Pathol Microbiol** 1990 Jan; 33(1):30-4

Diagnosis of prospective malignancy in koilocytic dysplasias of the cervix with DNA cytometry. Chatelain R, et al. **J Reprod Med** 1989 Aug;34(8):505-10

Colposcopic diagnosis and treatment of cervical dysplasia at a single clinic visit. Experience of low-voltage diathermy loop in 1000 patients. Bigrigg MA, et al. **Lancet** 1990 Jul 28;336(8709):229-31

[Teenage pregnancy and routine colposcopy] de Villiers VP. **S Afr Med J** 1989 Dec 16;76(12):668-9 (23 ref.) (Eng. Abstr.) **(Afr)**

[The value of screening using cervicography in dysplasia and neoplasms of the uterine cervix] Coibion M, et al. **Rev Med Brux** 1990 Jan-Feb;11(1-2):16-20 (Eng. Abstr.) **(Fre)**

[Evaluation of severe dysplasia and carcinoma in situ detected by directed biopsy] Milojković M, et al. **Jugosl Ginekol Perinatol** 1989 Sep-Dec;29(5-6):198-200 (Eng. Abstr.) **(Ser)**

DRUG THERAPY

Test of immunopotentialization in colposcopy--a clinical evaluation. Balajewicz M, et al.

Eur J Obstet Gynecol Reprod Biol 1989 Dec;33(3):253–7

Development of a contingency recruitment plan for a phase III chemoprevention trial of cervical dysplasia. Loescher LJ, et al. **Prog Clin Biol Res** 1990;339:151–63

[Intra–lesional beta–interferon in combination with systemic thymopentin. Evaluation of results in 35 cases of CIN III and 2 cases of VAIN associated with HPV] Osnengo G, et al. **Minerva Ginecol** 1990 Apr;42(4):123–8 (37 ref.) (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

Placental form of glutathione S–transferase in normal and diseased human uterine cervical mucosa. de Camargo JL, et al. **Carcinogenesis** 1989 Dec;10(12):2317–20

[Fractions of human neoplasms and mice–LDH virus as markers of human cancer] Jandová A, et al. **Arch Gynecol Obstet** 1989;245(1–4):476–8 **(Ger)**

EPIDEMIOLOGY

Case–control study of risk factors for cervical intraepithelial neoplasia in young women. Cuzick J, et al. **Eur J Cancer** 1990;26(6):684–90

Prevalence of cervical dysplasia and HPV infection according to sexual behavior. Azocar J, et al. **Int J Cancer** 1990 Apr 15;45(4):622–5

The prevalence of abnormal cervical cytology in a group of New Zealand women using contraception: a preliminary report. The New Zealand Contraception and Health Study Group. **N Z Med J** 1989 Jul 26;102(872):369–71

ETIOLOGY

Abnormal papanicolaou smear. A population–based study of risk factors in Greenlandic and Danish women. Kjaer SK, et al. **Acta Obstet Gynecol Scand** 1990;69(1):79–86

Uterine cervical dysplasia with reference to the betel quid chewing habit. Chakrabarti RN, et al. **Eur J Gynaecol Oncol** 1990;11(1):57–9

[Viral etiology of cancer of the uterine cervix. II. Detection of human cytomegalovirus DNA sequence and antigen in cervical lesions] Meng XJ. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):263–5 (Eng. Abstr.) **(Chi)**

[Condylomata acuminata of the external genitalia and dysplasia of the uterine cervix] Galasso F, et al. **G Ital Dermatol Venereol** 1989 May;124(5):207–10 (Eng. Abstr.) **(Ita)**

[Role of viral infections in the genesis of dysplasias of the uterine cervix] Grio R, et al. **Minerva Ginecol** 1989 Apr; 41(4):183–5 (Eng. Abstr.) **(Ita)**

IMMUNOLOGY

[Human papilloma virus (HPV) antigens and DNA in dysplasia and carcinoma of the uterine cervix] Yamagata S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Sep; 41(9):1334–40 (Eng. Abstr.) **(Jpn)**

METABOLISM

Evaluation of the deoxyuridine suppression test by using whole blood samples from folic acid–supplemented subjects. Tamura T, et al. **Am J Clin Nutr** 1990 Jan; 51(1):80–6

MICROBIOLOGY

Occurrence of human papillomavirus DNA types 16 and 18 (HPV–16/18) in cervical smears as compared to cytological findings. Köchel HG, et al. **Int J Gynaecol Obstet** 1990 Feb;31(2):145–52

Detection of human papillomavirus type 52b in cervical dysplastic tissue. Yaegashi N, et al. **Tohoku J Exp Med** 1989 Nov;159(3):215–9

[Human papillomaviruses in uterine cervix pathology: clinical implications, detection and type] Laval C, et al. **Bull Cancer (Paris)** 1990;77(4):321–30 (Eng. Abstr.) **(Fre)**

[Clinical aspects of HPV–16/18 associated cervical lesions] Göppinger A, et al. **Geburtshilfe Frauenheilkd** 1990 Feb; 50(2):106–9 (Eng. Abstr.) **(Ger)**

[Microbiologic findings including Chlamydia serology in cervix dysplasia and human papillomavirus infection] Mayer HO, et al. **Gynakol Rundsch** 1989;29 Suppl 2:88–91 **(Ger)**

[The significance of multiple bacterial and viral infections in the origin of cervix dysplasia] Schön HJ, et al. **Gynakol Rundsch** 1989;29 Suppl 2:91–4 **(Ger)**

NURSING

Cervical dysplasia and condyloma as risks for carcinoma. Two case studies. Toole KA, et al. **MCN** 1990 May–Jun; 15(3):170–5 (8 ref.)

PATHOLOGY

Follow–up study of cervical epithelial atypia of pregnancy. Zilahi Z, et al. **Am J Obstet Gynecol** 1967 Aug 15; 98(8):1154

The efficiency of the cytobrush and cotton swab in obtaining endocervical cells in smears taken after conization of the cervix. Kristensen GB, et al. **Arch Gynecol Obstet** 1989; 246(4):207–10

The CIN saga—the biological and clinical significance of cervical intraepithelial neoplasia. Chanen W. **Aust N Z J Obstet Gynaecol** 1990 Feb;30(1):18–23

Risk factors related to biological behaviour of precancerous lesions of the uterine cervix. Murthy NS, et al. **Br J Cancer** 1990 May;61(5):732–6

Rates of condyloma and dysplasia in Papanicolaou smears with and without endocervical cells. Mauney M, et al. **Diagn Cytopathol** 1990;6(1):18–21

Postpartum pap smear [letter; comment] Lindes C. **J Am Board Fam Pract** 1990 Jan–Mar;3(1):70 Comment on: J Am Board Fam Pract 1989 Jan–Mar;2(1):4–9.

Cervical conization findings in women with dysplastic cervical cytology and normal colposcopy. Ramirez EJ, et al. **J Reprod Med** 1990 Apr;35(4):359–61

The intraepithelial lesion: more problems and few data [letter] Austin RM. **JAMA** 1990 Jun 27;263(24):3260

[Pathologic Papanicolaou—class IV smear without histologic correlate—what should be done? (letter)] Biedermann K. **Geburtshilfe Frauenheilkd** 1990 Jan;50(1):86–7 **(Ger)**

[Diagnosis of prospective malignancy of cervix dysplasia using DNA cytometry (published erratum appears in Geburtshilfe Frauenheilkd 1990 Jun;50(6):510)] Bollmann R. **Geburtshilfe Frauenheilkd** 1990 Feb;50(2):113–7 (Eng. Abstr.) **(Ger)**

[Microinvasive stage Ia cancer of the uterine cervix—results of a multicenter clinic based analysis] Ebeling K, et al. **Geburtshilfe Frauenheilkd** 1989 Sep;49(9):776–81 (Eng. Abstr.) **(Ger)**

[Clinical and histologic findings in persistent PAP III D] Holböck E, et al. **Gynakol Rundsch** 1989;29 Suppl 2:75–8 **(Ger)**

[Vaginal pathogens and cervix lesions] Hosmann J, et al. **Gynakol Rundsch** 1989;29(3):170–2 **(Ger)**

[Increased incidence and value of cytologic findings PAP III D] Müller–Holzner E, et al. **Gynakol Rundsch** 1989;29 Suppl 2:73–5 **(Ger)**

[Detection of papillomavirus types 6/11, 16/18 and 31/33/35 using DNA/RNA hybridization. Initial experiences] Wartusch B, et al. **Gynakol Rundsch** 1989;29 Suppl 2:402–4 **(Ger)**

[Cervical intra–epithelial neoplasia] Heinzl S. **Ther Umsch** 1989 Dec;46(12):839–46 (25 ref.) (Eng. Abstr.) **(Ger)**

[Incidence, causes and follow–up of doubtful smear findings (Papanicolaou group III)] Hofmann R, et al. **Zentralbl Gynakol** 1989;111(23):1549–54 (Eng. Abstr.) **(Ger)**

[Malignant and premalignant lesions of the uterine cervix. Cytologic contribution to the diagnosis] Garborg I, et al. **Tidsskr Nor Laegeforen** 1990 Mar 10;110(7):823–6 (Eng. Abstr.) **(Nor)**

[Comparative studies of 2 systems of early cyto–oncologic diagnosis of cervix erosion] Dudkiewicz J, et al. **Wiad Lek** 1989 May 1;42(9):584–9 (Eng. Abstr.) **(Pol)**

[Possibilities of cytologic and histologic methods of diagnosing flat condyloma of the cervix uteri] Andreev AI. **Akush Ginekol (Mosk)** 1990 Feb;(2):35–8 (Eng. Abstr.) **(Rus)**

[Ultrastructure of the cervical epithelium in dysplasia] Zheleznov BI, et al. **Arkh Patol** 1989;51(6):56–62 (Eng. Abstr.) **(Rus)**

SURGERY

Development of melanosis of uterine cervix after cryotherapy for epithelial dysplasia. A case report and brief review of the literature on pigmented lesions of the cervix. Hytiroglou P, et al. **Am J Clin Pathol** 1990 Jun;93(6):802–5 (22 ref.)

How frequently need vaginal smears be taken after hysterectomy for cervical intraepithelial neoplasia? Gemmell J, et al. **Br J Obstet Gynaecol** 1990 Jan; 97(1):58–61

The efficacy of paracervical injections of lignocaine before laser ablation of the cervical transformation zone. A randomized placebo–controlled double–blind clinical trial. Johnson N, et al. **Br J Obstet Gynaecol** 1989 Dec; 96(12):1410–2

[Does colposcopic and/or cytologic detection of HPV infection without signs of dysplasia require treatment, for example by cryotherapy, laser or trichloroacetic acid (Masviya et al.)?] Schneider A. **Zentralbl Gynakol** 1989; 111(14):1004–9 **(Ger)**

[Complications and late results of the treatment of precancerous conditions of the cervix uteri by diathermic conization] Bychkov VI, et al. **Akush Ginekol (Mosk)** 1990 Feb;(2):61–2 **(Rus)**

[Treatment of cervical and vulvar pathology using lasers of various intensities] Zaplavnova LD, et al. **Akush Ginekol (Mosk)** 1990 Feb;(2):63 **(Rus)**

THERAPY

Effects of interferon–alpha on macrophage activation in patients with ovarian carcinoma and cervical dysplasia. Fuith LC, et al. **J Clin Lab Immunol** 1989 Jun;29(2):65–9

Colposcopic diagnosis and treatment of cervical dysplasia at a single clinic visit. Experience of low–voltage diathermy loop in 1000 patients. Bigrigg MA, et al. **Lancet** 1990 Jul 28;336(8709):229–31

Patients' acceptance of diathermy loop treatment [letter] Jones M, et al. **Lancet** 1990 Sep 15;336(8716):698

[The treatment of virus–associated cervix dysplasia with recombinant interferon alpha–2c or gamma] Reichel R, et al. **Gynakol Rundsch** 1989;29 Suppl 2:94–6 **(Ger)**

CERVIX EROSION

COMPLICATIONS

Desquamative inflammatory vaginitis. A case report. Jacobson M, et al. **J Reprod Med** 1989 Sep;34(9):647–50

ETIOLOGY

[Complications and late results of the treatment of precancerous conditions of the cervix uteri by diathermic conization] Bychkov VI, et al. **Akush Ginekol (Mosk)** 1990 Feb;(2):61–2 **(Rus)**

PATHOLOGY

[Comparative studies of 2 systems of early cyto–oncologic diagnosis of cervix erosion] Dudkiewicz J, et al. **Wiad Lek** 1989 May 1;42(9):584–9 (Eng. Abstr.) **(Pol)**

CERVIX INCOMPETENT

[Cervix factors as a cause of infertility] Helm P, et al. **Ugeskr Laeger** 1990 Apr 23;152(17):1212–4 (30 ref.) (Eng. Abstr.) **(Dan)**

COMPLICATIONS

The effect of cervical cerclage on the course of labor. Weissman A, et al. **Obstet Gynecol** 1990 Aug;76(2):168–71

[Chorioamniotic dissociation and C–reactive protein as predictors of early premature amniotic rupture] Passloer HJ. **Z Geburtshilfe Perinatol** 1990 May–Jun;194(3):115–20 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Cervical incompetence: preliminary evaluation with MR imaging. Hricak H, et al. **Radiology** 1990 Mar;174(3 Pt 1):821–6

[Evaluating the cervix in pregnancy using vaginal sonography. Studies of cervix insufficiency] Stolz W, et al. **Geburtshilfe Frauenheilkd** 1989 Dec;49(12):1063–6 (Eng. Abstr.) **(Ger)**

[Experience with 1000 cases of conization of the uterine cervix] Kalocsai G, et al. **Orv Hetil** 1990 Apr 22; 131(16):841–4 (34 ref.) (Eng. Abstr.) **(Hun)**

ETIOLOGY

Cervical incompetence in a pregnancy following a cervical ectopic pregnancy. Hurley VA, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 (Pt 2)):358–60

PATHOLOGY

Ultrasonography in the detection of cervical incompetency. Podobnik M, et al. **JCU** 1988 Jul–Aug;16(6):383–91

PREVENTION & CONTROL

[Duration of pregnancy in higher degree multiple birth] Knitza R, et al. **Geburtshilfe Frauenheilkd** 1989 Dec; 49(12):1070–3 (Eng. Abstr.) **(Ger)**

SURGERY

The Shirodkar operation: a reappraisal. Frieden FJ, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):830–3

Shirodkar cerclage in a multifactorial approach to the patient with advanced cervical changes. Novy MJ, et al. **Am J Obstet Gynecol** 1990 Jun;162(6):1412–9; discussion 1419–20

Cervical cerclage—its role in the pregnant anomalous uterus. Golan A, et al. **Int J Fertil** 1990 May–Jun;35(3):164–70

Safety of outpatient cerclage. Wetchler BV, et al. **J Reprod Med** 1990 Mar;35(3):243–6

Guidance for cerclage using transrectal sonography. Fleischer AC, et al. **J Ultrasound Med** 1989 Oct; 8(10):589–90

Improving the outcome of cervical cerclage by sonographic follow–up. Rana J, et al. **J Ultrasound Med** 1990 May; 9(5):275–8

Uterine activity in patients with cervical cerclage. Robichaux AG 3d, et al. **Obstet Gynecol** 1990 Jul;76(1 Suppl):63S–66S

Retrospective analysis of cervical cerclage procedures at the Louisiana State University, Shreveport (1980 to 1987). Whitehead KD, et al. **South Med J** 1990 Feb;83(2):159–60

Emergent cerclage. Barth WH Jr, et al. **Surg Gynecol Obstet** 1990 Apr;170(4):323–6

The efficacy of cervical cerclage. Bassaw B, et al. **West Indian Med J** 1990 Mar;39(1):39–42

[Cerclage surgery—a possible treatment/prevention of cervical insufficiency] Grinsted L. **Ugeskr Laeger** 1989 Oct 30;151(44):2890–3 (Eng. Abstr.) **(Dan)**

[Late cerclage] Barau G, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(3):337–41 (Eng. Abstr.) **(Fre)**

[Control of postoperative vaginal sonographic findings following Shirodkar cerclage] Böhmer S, et al. **Z Geburtshilfe Perinatol** 1990 May–Jun;194(3):121–5 (Eng. Abstr.) **(Ger)**

[Indication for and benefit of 574 cerclages performed at the Medical University of Hannover (1987–1985)] Böhmer S, et al. **Z Geburtshilfe Perinatol** 1990 Jul–Aug;194(4):158–65

(Eng. Abstr.) (Ger)
[The course of pregnancy following cerclage. 1. Singleton pregnancies] Brockerhoff P, et al. **Zentralbl Gynakol** 1990; 112(10):601–7 (Eng. Abstr.) (Ger)
[Cerclage of the cervix uteri via a transabdominal route: report of 2 cases] Lippi UG, et al. **Rev Paul Med** 1989 May–Jun;107(3):189–90 (Eng. Abstr.) (Por)
[The surgical treatment of miscarriage in isthmus–cervix incompetence] El'tsov–Strelkov VI, et al. **Akush Ginekol (Mosk)** 1989 Dec;(12):46–7 (Eng. Abstr.) (Rus)
[The Espinosa Flores operation in isthmo–cervical insufficiency] Andrade Vargas A, et al. **Ginecol Obstet Mex** 1976 May;39(235):345–56 (Eng. Abstr.) (Spa)

THERAPY

[The Arabin cerclage pessary—an alternative to surgical cerclage] Quaas L, et al. **Geburtshilfe Frauenheilkd** 1990 Jun;50(6):429–33 (Eng. Abstr.) (Ger)

CERVIX MUCUS

Alpha–antitrypsin in cervical mucus. Schumacher GF, et al. **Fertil Steril** 1968 Jan–Feb;19(1):91–9

ANALYSIS

Enzymes of human cervical mucus: a comparative study on fertile and infertile mucus and on the endocervical epithelium. Iantomasi T, et al. **Acta Eur Fertil** 1989 May–Jun;20(3):151–5
The predictive value of the postcoital test for auto– and isoimmunity to spermatozoa. Pretorius E, et al. **Andrologia** 1989 Nov–Dec;21(6):584–8
Simple office methods to predict ovulation: the clinical usefulness of a new urine luteinizing hormone kit compared to basal body temperature, cervical mucus and ultrasound. Yong EL, et al. **Aust N Z J Obstet Gynaecol** 1989 May; 29(2):155–60
Changes in fatty acid composition of cervical mucus lecithin during pregnancy. Pschera H, et al. **Gynecol Obstet Invest** 1989;28(3):118–22

CYTOLOGY

[Cyto–microbiological and serological study for the screening of sexually transmissible diseases in Malagasy multiparous women] Mouden JC, et al. **Arch Inst Pasteur Madagascar** 1989;56(1):223–32 (Fre)

DRUG EFFECTS

Addition of exogenous estrogens to improve cervical mucus following clomiphene citrate medication. Patient selection. Kokia E, et al. **Acta Obstet Gynecol Scand** 1990; 69(2):139–42

ENZYMOLOGY

Cervical mucus enzymes as markers of the woman's fertile period. Tsibris JC, et al. **Suppl Int J Gynecol Obstet** 1989; 1:73–82
[Biochemical changes in cervix mucus in stepwise malignant transformation of cervix epithelium] Elling D, et al. **Zentralbl Gynakol** 1990;112(9):555–60 (Eng. Abstr.) (Ger)

IMMUNOLOGY

[Diagnosis and treatment of immunologic infertility] Grischenko VI, et al. **Akush Ginekol (Mosk)** 1989 Jul; (7):39–41 (Eng. Abstr.) (Rus)

METABOLISM

Study of the functional anatomy of bovine cervical mucosa with special reference to mucus secretion and sperm transport. Mullins KJ, et al. **Anat Rec** 1989 Oct; 225(2):106–17
Electron microscopy of cervical–mucus glycoproteins and fragments therefrom. The use of colloidal gold to make visible 'naked' protein regions. Sheehan JK, et al. **Biochem J** 1990 Jan 1;265(1):169–77
Cervical mucus and serum estradiol as predictors of response to progestin challenge. Rarick LD, et al. **Fertil Steril** 1990 Aug;54(2):353–5
Spiramycin concentrations in plasma and genital–tract secretions after intravenous administration in the ewe. Cester CC, et al. **J Vet Pharmacol Ther** 1990 Mar;13(1):7–14

MICROBIOLOGY

Ultrastructural analysis of the attachment sites of Escherichia coli to the human spermatozoon after in vitro migration through estrogenic cervical mucus. Sánchez R, et al. **Int J Fertil** 1989 Sep–Oct;34(5):363–7
Effect of endocervical specimen quality on detection of Chlamydia trachomatis and on the incidence of false–positive results with the Chlamydiazyme method. Kellogg JA, et al. **J Clin Microbiol** 1990 Jun;28(6):1108–13
[Aerobic bacteriological cultures taken from the vagina and cervix mucus of women free of complaints] Horváth A, et al. **Orv Hetil** 1989 Oct 29;130(44):2351–2352, 2355 (Eng. Abstr.) (Hun)
[Hemolytic group B streptococcus in cervico–vaginal secretions] Savarino A, et al. **Quad Sclavo Diagn** 1988 Jan–Dec;24(1–4):185–8 (Eng. Abstr.) (Ita)
[Chlamydia trachomatis: significance of endocervical sampling in diagnosis by the Papanicolaou method] Cavaliere MJ, et al. **Rev Paul Med** 1989 Jan–Feb; 107(1):25–8 (Eng. Abstr.) (Por)

PHYSIOLOGY

Mechanisms of filtration of morphologically abnormal human sperm by cervical mucus. Katz DF, et al. **Fertil Steril** 1990 Sep;54(3):513–6
Conductivity of cervical mucus during the menstrual cycle and pregnancy. Platt HA, et al. **Fertil Steril** 1968 Jan–Feb; 19(1):85–90
Movement of cynomolgus and rhesus monkey spermatozoa collected from the lower female reproductive tract. Behboodi E, et al. **Gamete Res** 1989 Nov;24(3):333–42
The use of hens' egg white as a substitute for human cervical mucus in assessing human infertility. Eggert–Kruse W, et al. **Int J Androl** 1990 Aug;13(4):258–66

CERVIX NEOPLASMS

Primary cervical melanoma [letter; comment] Divers MJ. **Am J Obstet Gynecol** 1990 Jan;162(1):293 Comment on: Am J Obstet Gynecol 1988 Oct;159(4):826–7.
Cervical cancer: aetiology, earlier diagnosis and treatment. Singh P. **Ann Acad Med Singapore** 1990 Mar;19(2):255–63 (50 ref.)
Advances in diagnosis, staging, and management of cervical and endometrial cancer, stages I and II. Boronow RC. **Cancer** 1990 Feb 1;65(3 Suppl):648–59 (118 ref.)
Cutaneous metastatic lymphangitis from squamous cell carcinoma of the cervix. Bachaud JM, et al. **Dermatologica** 1990;180(3):163–5
Cancer of distant primary site relapsing in the nasopharynx: a report of two cases and review of the literature. McKay MJ, et al. **Head Neck** 1989 Nov–Dec;11(6):534–7 (10 ref.)
Carcinoma of the uterine cervix metastatic to breast—report of a case. Singh K, et al. **Indian J Med Sci** 1990 Jan; 44(1):5–7
Pericardial metastases in squamous cell cancer of the cervix. A report of two cases. Malviya VK, et al. **J Reprod Med** 1990 Jan;35(1):49–52
Gynecologic cancer associated with pregnancy. Jolles CJ. **Semin Oncol** 1989 Oct;16(5):417–24 (39 ref.)
Selected papers from the seventh annual Ella T. Grasso Memorial Conference. New Haven, Connecticut, November 15, 1989. **Yale J Biol Med** 1989 Jul–Aug; 62(4):343–403
[Study of factors affecting prognosis of cervical cancer using a microcomputer] Yu SY. **Chung Hua I Hsueh Tsa Chih** 1989 Nov;69(11):614–6, 42 (Eng. Abstr.) (Chi)
[Malignant lymphoma of the uterine cervix] Mathiasen H, et al. **Ugeskr Laeger** 1990 Feb 5;152(6):401 (Eng. Abstr.) (Dan)
[Cervix uteri and human papillomavirus infections. Current approach] Broso P, et al. **Minerva Ginecol** 1990 Mar; 42(3):65–8 (Eng. Abstr.) (Ita)
[A clinicopathological study of pulmonary metastases in carcinoma of the uterine cervix] Takemura M, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Apr 20;25(4):776–80 (Eng. Abstr.) (Jpn)

ANALYSIS

The expression of EGF receptors, EGF–like factors and c–myc in ovarian and cervical carcinomas and their potential clinical significance. Kohler M, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1537–47
In situ hybridization analysis of HPV DNA in cervical precancer and cervical cancers from China. Ji HX, et al. **Arch Gynecol Obstet** 1990;247(1):21–9
Glutathione and cysteine levels in human tumour biopsies. Guichard M, et al. **Br J Radiol** 1990 Jul;63(751):557–61
Minimal deviation adenocarcinoma (adenoma malignum) of the endocervix: a histochemical and immunohistochemical study of two cases. Bulmer JN, et al. **Gynecol Oncol** 1990 Jan;36(1):139–46
Nuclear and "cytoplasmic" estrogen and progesterone receptors in squamous cell carcinoma of the cervix. Darne J, et al. **Gynecol Oncol** 1990 Aug;38(2):216–9
Distribution of involucrin in normal and pathological human uterine cervix. Serra V, et al. **Gynecol Oncol** 1990 Jan; 36(1):34–42
Studies of lectin binding to the human cervix uteri: II. Cervical intraepithelial neoplasia and invasive squamous carcinoma. Byrne P, et al. **Histochem J** 1989 Jun; 21(6):323–36
Mapping of linear epitopes of human papillomavirus type 16: the L1 and L2 open reading frames. Dillner J, et al. **Int J Cancer** 1990 Mar 15;45(3):529–35
MSN–1 antibody in the evaluation of female genital tract adenocarcinomas. Poropatich C, et al. **Int J Gynecol Pathol** 1990;9(1):73–9
Immunoreactive alpha interferon in cervical flat koilocytic lesions and intraepithelial neoplasia. Stewart CJ, et al. **J Clin Pathol** 1990 Mar;43(3):230–4
Mutagenic cervical mucus in women with cervical intraepithelial neoplasia [letter] Gupta MM, et al. **J Natl Cancer Inst** 1990 Feb 7;82(3):234
Detection of human papillomavirus DNA in cervical cancer tissue by the polymerase chain reaction. He YK, et al. **J Virol Methods** 1989 Oct;26(1):17–25
Association between poor prognosis in early–stage invasive cervical carcinomas and non–detection of HPV DNA. Riou G, et al. **Lancet** 1990 May 19;335(8699):1171–4
[Cellular DNA content of human cervical carcinoma] Zuo XL, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Sep; 24(5):288–90, 317 (Eng. Abstr.) (Chi)
[The relationship between DNA content in cervical carcinoma cell and the clinicopathological features] Zhang H. **Chung–hua Ping Li Hsueh Tsa Chih** 1989 Jun;18(2):137–9 (Eng. Abstr.) (Chi)
[Immunohistochemical studies on epidermal growth factor receptor in oncogenesis of uterine cervical cancer] Ueda M. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Sep; 41(9):1401–8 (Eng. Abstr.) (Jpn)

BLOOD

The clinical significance of the serum haptoglobin concentration in patients with invasive cervical carcinoma. Neale EJ, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug; 29(3 Pt 1):197–9
Decrease in interferon–gamma production by peripheral blood mononuclear cells in patients with uterine cervical cancer. Mori H, et al. **J Clin Immunol** 1990 Jan;10(1):45–51
[Determination of squamous cell carcinoma antigen in the blood of patients with cancer of the uterine cervix] Tolino A, et al. **Minerva Ginecol** 1989 Jul;41(7):349–52 (Eng. Abstr.) (Ita)
[A clinical study on multiple tumor markers following therapy in patients with uterine cervical carcinoma] Hiura M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 May; 42(5):471–8 (Eng. Abstr.) (Jpn)
[Dynamics of change in the status of peripheral blood during radical treatment with irradiation in patients with cervical cancer] Kożuch–Gdak W. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:61–6 (Eng. Abstr.) (Pol)
[Occurrence of circulating immune complexes in the blood serum of patients with cervical cancer prior to treatment] Sztaba–Kania M, et al. **Nowotwory** 1989 Jan–Mar;39(1):1–4 (Eng. Abstr.) (Pol)
[Hyperprolactinemia as a marker of the progression of cervical cancer] Strukov EL, et al. **Vopr Onkol** 1990; 36(7):831–5 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

Colposcopy in diethylstilbestrol–exposed offspring [letter] Gimbel GL. **Am J Obstet Gynecol** 1990 Aug;163(2):703
Colposcopic findings and intraepithelial neoplasia in diethylstilbestrol–exposed offspring. The Dutch experience. Helmerhorst TJ, et al. **Am J Obstet Gynecol** 1989 Nov; 161(5):1191–4
Epidemiological studies of the effects of diethylstilboestrol. Vessey MP. **IARC Sci Publ** 1989;(96):335–48 (62 ref.)
Oral contraceptive use and risk of invasive cervical cancer. Brinton LA, et al. **Int J Epidemiol** 1990 Mar;19(1):4–11
Oral contraceptive use and invasive cervical cancer. Parazzini F, et al. **Int J Epidemiol** 1990 Jun;19(2):259–63
Risk for malignant tumors after oral contraceptive use: is it related to organ size while taking the pill? Olsson H. **Med Oncol Tumor Pharmacother** 1990;7(1):61–4 (62 ref.)
[Oral contraceptives and cancer] Ludwig H. **Schweiz Rundsch Med Prax** 1989 Nov 14;78(46):1273–5 (Ger)

CLASSIFICATION

[Is the end of the Pap classification in sight? (letter)] Boon ME, et al. **Ned Tijdschr Geneeskd** 1990 May 19; 134(20):1016–8 (Dut)
[Cytological diagnosis of cervix uteri cancer; classification systems under discussion] de Vet HC. **Ned Tijdschr Geneeskd** 1990 Jul 28;134(30):1435–7 (Dut)
[Is the end of the Pap classification in sight?] Lammes FB, et al. **Ned Tijdschr Geneeskd** 1990 Jan 13;134(2):51–3 (Dut)

COMPLICATIONS

Extramedullary solitary plasmocytoma at the uterine cervix as a cause of postcoital bleeding. Johansen B, et al. **Acta Obstet Gynecol Scand** 1989;68(3):279–80
Prognostic importance of anemia related parameters in patients with carcinoma of the cervix uteri. Obralić N, et al. **Acta Oncol** 1990;29(2):199–201
Pretreatment urographic evaluation in invasive carcinoma of the cervix uteri. Komolafe F, et al. **Afr J Med Med Sci** 1989 Dec;18(4):311–4
Small cell carcinoma of the cervix with inappropriate antidiuretic hormone secretion. Case report. Kothe MJ, et al. **Br J Obstet Gynaecol** 1990 Jul;97(7):647–8
Peutz–Jeghers syndrome in association with adenoma malignum (minimal deviation adenocarcinoma) of the cervix. Case report. Soeters R, et al. **Br J Obstet Gynaecol** 1989 Sep;96(9):1101–4
Cervical intraepithelial neoplasia with conization: early complications and follow–up. Alberico S, et al. **Eur J Gynaecol Oncol** 1989;10(5):357–62
Lymphedema of legs and truncus as a complication of cancer colli uteri and treatment. Matthiesen L, et al.

Eur J Gynaecol Oncol 1990;11(1):23–5
Vulval lymphangiectasia. Handfield-Jones SE, et al. **Genitourin Med** 1989 Oct;65(5):335–7 (14 ref.)
Human immunodeficiency virus seroprevalence among cervical cancer patients. Rogo KO, et al. **Gynecol Oncol** 1990 Apr;37(1):87–92
Cervical cancers in uterus didelphys. Sugimori H, et al. **Gynecol Oncol** 1990 Mar;36(3):439–43
Carcinoma of the cervix and pregnancy. Baltzer J, et al. **Int J Gynaecol Obstet** 1990 Apr;31(4):317–23
Transcatheter arterial embolization in the management of gynaecological bleeding. Wilms G, et al. **J Belge Radiol** 1990 Jan;73(1):21–5
Clear cell adenocarcinoma of the cervix and vagina in a woman with mixed gonadal dysgenesis. A case report. Resnik E, et al. **J Reprod Med** 1989 Dec;34(12):981–4
Anal and cervical intraepithelial neoplasia [letter; comment] Dixon AR, et al. **Lancet** 1989 Nov 25;2(8674):1285 Comment on: Lancet 1989 Sep 30;2(8666):765–9.
Multifocal human papillomavirus infections of the genital tract in HIV seropositive women [letter] Caubel P, et al. **N Y State J Med** 1990 Mar;90(3):162–3
[No cervix carcinoma without HPV infection? Intraepithelial neoplasia—prevention of invasive carcinoma] Näthke he. **Fortschr Med** 1990 Apr 30;108(13):18 **(Ger)**
[HIV infections and cervical neoplasms] Friedmann W, et al. **Geburtshilfe Frauenheilkd** 1989 Nov;49(11):997–1000 (Eng. Abstr.) **(Ger)**
[Percutaneous catheter embolization of the of the internal iliac artery in life-threatening gynecological bleeding] Müller JH, et al. **Zentralbl Gynakol** 1989;111(22):1508–14 (Eng. Abstr.) **(Ger)**
[Infection of Chlamydia trachomatis and dysplasia lesions of the cervix uteri (CIN)] Alberico S, et al. **Minerva Ginecol** 1989 Jul;41(7):343–7 (Eng. Abstr.) **(Ita)**
[Advanced abdominal cancer. Treatment of complications] Grimsgaard S, et al. **Tidsskr Nor Laegeforen** 1990 Feb 20; 110(5):587–9 (Eng. Abstr.) **(Nor)**

DIAGNOSIS

Cytologic and hormonal findings in a carcinoid tumor of the uterine cervix. Hirahatake K, et al. **Acta Cytol** 1990 Mar-Apr;34(2):119–24
Cervical screening revisited. van der Graaf Y, et al. **Acta Cytol** 1990 May-Jun;34(3):366–72
Does the Bethesda System promote or endanger the quality of cervical cytology? [letter; comment] Vooijs GP. **Acta Cytol** 1990 May-Jun;34(3):455–9 Comment on: Acta Cytol 1989 Sep-Oct;33(5):567–74.
Diagnostic value of an abnormal smear in non-pregnant women. Evaluation of positive smear from the surface of the portio obtained by the cottonswab method or by the dry wooden Ayre spatula and the relevance of positive smear from the endocervix and/or from the surface of the portio. Lundvall L, et al. **Acta Obstet Gynecol Scand** 1990; 69(2):147–51
MR imaging of the cervix: off-axis scan to improve visualization of zonal anatomy. Baumgartner BR, et al. **AJR Am J Roentgenol** 1989 Nov;153(5):1001–2
Stage IA2 squamous carcinoma of the cervix: difficult diagnosis and therapeutic dilemma. Greer BE, et al. **Am J Obstet Gynecol** 1990 Jun;162(6):1406–9; discussion 1409–11
Analysis of false negative cytology by a chromosome study. Katayama KP, et al. **Asia Oceania J Obstet Gynaecol** 1990 Mar;16(1):85–7
Unusual gynaecological presentations of donovanosis as pseudo-elephantiasis and carcinoma of the cervix. Leung YC, et al. **Aust N Z J Obstet Gynaecol** 1990 May; 30(2):172–5
Alpha 1-antitrypsin: a possible tool for diagnosis of cervical cancer. Bhattacharyya J, et al. **Biochem Med Metab Biol** 1990 Jun;43(3):243–5
Cervical intraepithelial neoplasia in general practice [letter] [published erratum appears in BMJ 1989 Dec 16;299(6714):1531] [comment] Boomla K, et al. **BMJ** 1989 Nov 25;299(6711):1340 Comment on: BMJ 1989 Oct 28;299(6707):1083–6.
Cervical cancers diagnosed after negative results on cervical cytology [letter] Gray JA. **BMJ** 1990 Jul 21;301(6744):183
Diagnosis and treatment of cervical intraepithelial neoplasia in general practice [see comments] Johnson DB, et al. **BMJ** 1989 Oct 28;299(6707):1083–6 Comment in: BMJ 1989 Nov 25;299(6711):1340.
Cervical cancers diagnosed after negative results on cervical cytology: perspective in the 1980s. Mitchell H, et al. **BMJ** 1990 Jun 23;300(6740):1622–6
Routine pretreatment evaluation in cervical carcinoma. Chang CY, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Apr; 43(4):264–8
Colposcopic assessment in microinvasive carcinoma of the cervix. Liu WM, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Mar;43(3):171–6
Octadeca-9,11-dienoic acid in cervical intraepithelial neoplasia: a colposcopic study. Fairbank J, et al. **Clin Chim Acta** 1989 Dec 29;186(1):53–8
The 1988 Bethesda System for reporting cervical/vaginal cytologic diagnoses: developed and approved at the National Cancer Institute workshop in Bethesda, MD, December 12–13, 1988. **Diagn Cytopathol** 1989;5(3):331–4
Cervix uteri cancer and pregnancy. Bokhman JV, et al. **Eur J Gynaecol Oncol** 1989;10(6):406–11 (3 ref.)
Gynecologic cytology at the Catholic Hospital St. John of God, Lunsar Sierra Leone. Calvo A, et al. **Eur J Gynaecol Oncol** 1983;4(3):198–200
Ultrasonic assessment of efficacy of radiotherapy in cases of carcinoma of the cervix uteri by using rectosonography. Kochi T, et al. **Eur J Gynaecol Oncol** 1989;10(6):367–78
Evaluation of diagnostic usefulness of CEA, hCG and SCC antigens in cervical cancer patients. Kornafel J, et al. **Eur J Gynaecol Oncol** 1989;10(5):319–22
Colposcopy as a method of management strategy in CIN and microinvasive cancer. Madej J, et al. **Eur J Gynaecol Oncol** 1990;11(2):117–22
The microcolposcopy in the management of the cervical intraepithelial neoplasia. Mencaglia L, et al. **Eur J Gynaecol Oncol** 1983;4(3):216–9
Computed tomography in the evaluation of advanced cervical cancer. Ragni N, et al. **Eur J Gynaecol Oncol** 1983; 4(3):201–4
Colposcopy in teenagers [letter] Sivakumar K, et al. **Genitourin Med** 1990 Jun;66(3):228
A comparative study of computerized tomography, magnetic resonance imaging, and clinical staging for the detection of early cervix cancer. Brodman M, et al. **Gynecol Oncol** 1990 Mar;36(3):409–12
Urinary gonadotropin fragment, a new tumor marker. III. Use in cervical and vulvar cancers. Nam JH, et al. **Gynecol Oncol** 1990 Jul;38(1):66–70
Screening practices and invasive cervical cancer risk in different age strata. Parazzini F, et al. **Gynecol Oncol** 1990 Jul;38(1):76–80
Reporting cervical intra-epithelial neoplasia (CIN): intra- and interpathologist variation and factors associated with disagreement. Ismail SM, et al. **Histopathology** 1990 Apr; 16(4):371–6
Lysozyme and secretory component in endocervical and endometrial adenocarcinoma [letter] Patterson A, et al. **Histopathology** 1990 May;16(5):515–6
The silver colloid technique applied to endocervical tissue. Wood AJ, et al. **Histopathology** 1989 Sep;15(3):306–8
Population screening for cervical cancer in The Netherlands. A report by the Evaluation Committee. **Int J Epidemiol** 1989 Dec;18(4):775–81
The relative significance of colposcopic descriptive appearances in the diagnosis of cervical intraepithelial neoplasia. Edebiri AA. **Int J Gynaecol Obstet** 1990 Sep; 33(1):23–9
Role of endocervical curettage in the diagnostic workup of preinvasive cervical lesions. Sesti F, et al. **Int J Gynaecol Obstet** 1990 Feb;31(2):153–6
Actinomycosis mimicking pelvic malignancy. Snowman BA, et al. **Int J Gynaecol Obstet** 1989 Nov;30(3):283–6
A clinical review of cervicography. Turner MJ, et al. **Ir J Med Sci** 1990 Feb;159(2):50
Cancer screening in the elderly [letter] **J Am Geriatr Soc** 1990 Mar;38(3):387–8
Screening for cancer of the cervix [letter; comment] Waugh NR. **J Epidemiol Community Health** 1989 Dec;43(4):398 Comment on: J Epidemiol Community Health 1989 Jun;43(2):103–6.
The delayed diagnosis of invasive carcinoma of the uterine cervix. Holmquist ND. **J La State Med Soc** 1990 Feb; 142(2):37–9
A screening programme that worked: discussion paper. Hakama M. **J R Soc Med** 1990 May;83(5):322–4 (20 ref.)
Opportunistic smears. Husain OA. **J R Soc Med** 1990 May; 83(5):319–21 (8 ref.)
Diagnosis of prospective malignancy in koilocytic dysplasias of the cervix with DNA cytometry. Chatelain R, et al. **J Reprod Med** 1989 Aug;34(8):505–10
How good (or bad) is the Pap smear? [see comments] Creasman WT. **J S C Med Assoc** 1989 Oct;85(10):459–62 Comment in: J S C Med Assoc 1990 Feb;86(2):117–9.
From the Congressional Office of Technology Assessment. Power EJ. **JAMA** 1990 Jun 13;263(22):2996
A comparative study of the accuracy of ultrasound, X-ray CT and low field MRI in the demonstration of cervical and uterine malignancy. Smith FW, et al. **Magn Reson Imaging** 1989 Nov-Dec;7(6):677–9
Uterine cervical punch biopsy specimens can be analyzed by 1H MRS. Mountford CE, et al. **Magn Reson Med** 1990 Feb;13(2):324–31
Pap smear screening—Behavioral Risk Factor Surveillance System, 1988. **MMWR** 1989 Nov 17;38(45):777–9
Enhancing cervical cancer detection using nucleic acid hybridization and acetic acid tests. Ficsor G, et al. **Nurse Pract** 1990 Jul;15(7):26, 29–30
Screening for cervical cancer in emergency centers and sexually transmitted disease clinics. Marcus AC, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 1):453–5
A comparison of symptomatology, physical examination, and vaginal cytology in the detection of recurrent cervical carcinoma after radical hysterectomy. Soisson AP, et al. **Obstet Gynecol** 1990 Jul;76(1):106–9
Diagnosing cervical cancer by measuring DNA content [news] **Oncology (Williston Park)** 1988 Aug;2(8):29
Four cases found at screening in general practice. Ellis P. **Practitioner** 1989 May 22;233(1469):758–9
Uterine cervical carcinoma: comparison of CT and MR findings. Kim SH, et al. **Radiology** 1990 Apr;175(1):45–51
Cancer catcher. Neural net catches errors that slip through pap tests [news] Rennie J. **Sci Am** 1990 May;262(5):84
MRI of cervical carcinoma. Waggenspack GA, et al. **Semin Ultrasound CT MR** 1988 Apr;9(2):158–66 (22 ref.)
Practice of early diagnosis of breast and uterine cervix cancer in a northern Italian town. Segnan N, et al. **Tumori** 1990 Jun 30;76(3):227–33
MRI of carcinoma of the cervix. Thornbury JR. **Urol Radiol** 1989;11(4):230–2 (8 ref.)
[Problems in colposcopic diagnosis of human papillomavirus infection] Holub Z, et al. **Cesk Gynekol** 1990 Apr; 55(3):200–3 **(Cze)**
[Colposcopic and cytological diagnosis of subclinical papillomavirus infections from the aspect of biopsies and hybridization tests] Kaňka J, et al. **Cesk Gynekol** 1990 Mar; 55(2):109–13 **(Cze)**
[The value of screening using cervicography in dysplasia and neoplasms of the uterine cervix] Coibion M, et al. **Rev Med Brux** 1990 Jan-Feb;11(1-2):16–20 (Eng. Abstr.) **(Fre)**
[For an early diagnosis of cervical cancer by systematic vaginal smears—clinical and psychological approach] Sethom F, et al. **Tunis Med** 1989 Aug-Sep;67(8–9):505–11 (Eng. Abstr.) **(Fre)**
[The polymerase chain reaction as a sensitive genetic technics method of HIV and HPV diagnosis] Kirchesch H. **Z Hautkr** 1989 Aug 15;64(8):625–6 **(Ger)**
[Amplified DNA detection of HPV types 16 and 18 E7 gene in uterine cervical neoplasia by polymerase chain reaction] Nagai N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jun;42(6):635–6 **(Jpn)**
[Three cases of malignant lymphoma of the cervix uteri] Ohta M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 May; 42(5):495–8 (11 ref.) **(Jpn)**
[Usefulness of magnetic resonance imaging (MRI) in pre-treatment evaluation of the extension of uterine cervical carcinoma] Yamasaki M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Feb;42(2):167–73 (Eng. Abstr.) **(Jpn)**
[A case of coexistence of Bowen's disease of the vulva with pre-invasive cancer of the cervix uteri] Popiela A, et al. **Ginekol Pol** 1989 Feb;60(2):123–7 (Eng. Abstr.) **(Pol)**
[Biometric research in the diagnosis of precancerous states and endocervical cancer] Novik VI, et al. **Arkh Patol** 1989; 51(12):45–50 (Eng. Abstr.) **(Rus)**
[Immunocytochemical detection of antigen associated with squamous cell cancer of the cervix uteri in women] Ievleva ES, et al. **Eksp Onkol** 1990;12(4):65–7 (Eng. Abstr.) **(Rus)**
[Cervicography—a useful method for the early detection of changes in the uterine cervix] Kesić V, et al. **Jugosl Ginekol Perinatol** 1989 May-Aug;29(3–4):107–11 (Eng. Abstr.) **(Scr)**
[Evaluation of severe dysplasia and carcinoma in situ detected by directed biopsy] Milojković M, et al. **Jugosl Ginekol Perinatol** 1989 Sep-Dec;29(5–6):198–200 (Eng. Abstr.) **(Scr)**
[Simultaneous occurrence of an iodine-negative zone in the portio and papillomavirus disease of the skin] Häring M, et al. **Cesk Gynekol** 1989 Aug;54(7):510–3 **(Slo)**

DRUG THERAPY

A phase II study of 5-fluorouracil/cisplatinum in recurrent cervical cancer. Kaern J, et al. **Acta Oncol** 1990;29(1):25–8
Aminothiadiazole (NSC 4728) in patients with advanced nonsquamous carcinoma of the cervix. A phase II study of the Gynecologic Oncology Group. Asbury RF, et al. **Am J Clin Oncol** 1989 Oct;12(5):375–7
Treatment of recurrent cervical cancer with cis-platinum and mitomycin C: a phase II study. Malviya VK, et al. **Am J Clin Oncol** 1989 Oct;12(5):438–41
Echinomycin (NSC 526417) in squamous-cell carcinoma of the cervix. A phase II trial of the Gynecologic Oncology Group. Muss HB, et al. **Am J Clin Oncol** 1990 Jun; 13(3):191–3
Teniposide (VM-26) in patients with non-squamous-cell carcinoma of the cervix. A phase II trial of the Gynecologic Oncology Group. Muss HB, et al. **Am J Clin Oncol** 1990 Apr;13(2):117–8
Standard administration of hydroxyurea recommended [letter; comment] Piver MS. **Am J Obstet Gynecol** 1989 Nov;161(5):1425–6 Comment on: Am J Obstet Gynecol 1988 Jul;159(1):87–94.
In vitro and in vivo induction of squamous cell carcinoma antigen (SCC) in a uterine cervical cancer cell line (SKG-IIIa) with peplomycin and sodium butyrate. Nozawa S, et al. **Asia Oceania J Obstet Gynaecol** 1990 Jun;16(2):153–60
Clinical evaluation of sizofiran combined with irradiation in patients with cervical cancer. A randomized controlled study; a five-year survival rate. Okamura K, et al. **Biotherapy** 1989;1(2):103–7
Complete response to pre-operative chemotherapy in stage III B cervical carcinoma. Case report [letter; comment] Divers MJ. **Br J Obstet Gynaecol** 1989 Jun;96(6):753–4 Comment on: Br J Obstet Gynaecol 1988 Sep;95(9):946–8.
No effect of intralesional injection of interferon on moderate cervical intraepithelial neoplasia. Frost L, et al. **Br J Obstet Gynaecol** 1990 Jul;97(7):626–30
Sustained complete remission of stage IVb carcinoma of the cervix with cis-platinum, methotrexate and bleomycin chemotherapy. Burnet NG, et al. **Br J Radiol** 1989 Sep; 62(741):856–9
Phase II studies of ifosfamide alone and in combination in cancer of the cervix. Blackledge G, et al.

Cancer Chemother Pharmacol 1990;26 Suppl:S12–6
The potential for adjuvant therapy in early-stage cervical cancer. Buxton EJ, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S17–21
Ifosfamide and mesna at high doses for the treatment of cancer of the cervix: a GETLAC study. Cervellino JC, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S1–3
Phase II study of carboplatin/ifosfamide in untreated advanced cervical cancer. Kühnle H, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S33–5
Cisplatin–ifosfamide as neoadjuvant chemotherapy in stage IIIB cervical uterine squamous-cell carcinoma. Lara PC, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S36–8
Early phase II Gynecologic Oncology Group experience with ifosfamide/mesna in gynecologic malignancies. Sutton GP, et al. **Cancer Chemother Pharmacol** 1990;26 Suppl:S55–8
Neoadjuvant bleomycin, ifosfamide and cisplatin in cervical cancer. Tobias J, et al. **Cancer Chemother Pharmacol** 1990; 26 Suppl:S59–62
Treatment of small-cell carcinoma of the cervix with weekly combination chemotherapy. Tabbara IA, et al. **Eur J Cancer** 1990;26(6):748–9
Interferon gamma treatment for cervical intraepithelial neoplasia. Iwasaka T, et al. **Gynecol Oncol** 1990 Apr; 37(1):96–102
Conservative management of primary cervical lymphoma using combination chemotherapy: a case report. Johnston C, et al. **Gynecol Oncol** 1989 Dec;35(3):391–4
Adjuvant chemotherapy after radical hysterectomy for cervical carcinoma. Lai CH, et al. **Gynecol Oncol** 1989 Nov;35(2):193–8
Teniposide in recurrent or advanced cervical carcinoma: a phase II trial in patients not previously treated with cytotoxic therapy. Pfeiffer P, et al. **Gynecol Oncol** 1990 May;37(2):230–3
Successful pregnancy following treatment of primary malignant lymphoma of the uterine cervix. Sandvei R, et al. **Gynecol Oncol** 1990 Jul;38(1):128–31
A phase II trial of cisplatin and 5-fluorouracil with allopurinol for recurrent or metastatic carcinoma of the uterine cervix: a Southwest Oncology Group trial. Weiss GR, et al. **Gynecol Oncol** 1990 Jun;37(3):354–8
Bleomycin, vincristine, and mitomycin C (BOM) as second-line treatment after failure of cis-platinum-based combination chemotherapy for recurrent cervical cancer. Wheelock JB, et al. **Gynecol Oncol** 1990 Apr;37(1):21–3
Phase II study of esorubicin (4'-deoxydoxorubicin) in advanced or metastatic squamous carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. McGuire WP, et al. **Invest New Drugs** 1989 Jul;7(2–3):235–8
Phase II study of N-methylformamide (N-MF) (NSC 3051) in patients with advanced squamous cancer of the cervix. A Gynecologic Oncology Group study. McGuire WP 3d, et al. **Invest New Drugs** 1990 May;8(2):195–7
A phase II clinical trial of diaziquone (AZQ) in the treatment of patients with recurrent adenocarcinoma and adenosquamous carcinoma of the cervix. A Gynecologic Oncology Group study. Slayton RE, et al. **Invest New Drugs** 1989 Nov;7(4):337–40
Phase II study of ifosfamide and mesna in patients with previously-treated carcinoma of the cervix. A Gynecologic Oncology Group study. Sutton GP, et al. **Invest New Drugs** 1989 Nov;7(4):341–3
Cervix cancer: too many patients [letter; comment] Cohen MH. **J Clin Oncol** 1990 Apr;8(4):755–6 Comment on: J Clin Oncol 1989 Oct;7(10):1462–8.
A phase II evaluation of mitolactol in patients with advanced squamous cell carcinoma of the cervix: a Gynecologic Oncology Group Study. Stehman FB, et al. **J Clin Oncol** 1989 Dec;7(12):1892–5
Cis-platinum and mitomycin-C in treatment of recurrent, metastatic, or residual uterine cervical cancer post radiation. Senapad S, et al. **J Med Assoc Thai** 1989 Jul; 72(7):382–6
[The course of squamous cell carcinoma antigen and CEA as prognostic criteria for response to chemotherapy in cervix cancer] Meier W, et al. **Geburtshilfe Frauenheilkd** 1989 Dec;49(12):1050–5 (Eng. Abstr.) **(Ger)**
[Adjuvant chemotherapy in radical surgery of cervix cancer] Lahousen M, et al. **Gynakol Rundsch** 1989;29 Suppl 2:372–4 **(Ger)**
[The course of squamous cell cancer antigen in chemotherapy as a prognostic criterion in cervix cancer] Meier W, et al. **Gynakol Rundsch** 1989;29 Suppl 2:411–2 **(Ger)**
[Adjuvant chemotherapy in radical surgery of cervix cancer] Lahousen M, et al. **Zentralbl Gynakol** 1990;112(11):707–13 (Eng. Abstr.) **(Ger)**
[Chemotherapy of carcinoma of the cervix uteri. Current approaches] Sesti F, et al. **G Ital Oncol** 1989 Oct–Dec; 9(4):125–8 (32 ref.) (Eng. Abstr.) **(Ita)**
[Transcatheter intra-arterial injection of combination drugs in case of advanced uterine cervical cancer] Kinashi Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 May 20; 25(5):946–51 (Eng. Abstr.) **(Jpn)**
[Intravaginal administration of CDDP in cervical cancer] Nakayama K, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Apr 20;25(4):826–9 (Eng. Abstr.) **(Jpn)**
[Studies on renal dysfunction after intra-arterial hypertensive chemotherapy (CDDP, PEP) for advanced cancer of the uterine cervix—serum.urinary alpha 1-microglobulin, beta 2-microglobulin and urinary lysozyme, albumin] Iwanari O, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Feb; 42(2):115–20 (Eng. Abstr.) **(Jpn)**

ECONOMICS

Economic aspects of cervical cancer screening.
Koopmanschap MA, et al. **Soc Sci Med** 1990;30(10):1081–7

ENZYMOLOGY

Placental form of glutathione S-transferase in normal and diseased human uterine cervical mucosa. de Camargo JL, et al. **Carcinogenesis** 1989 Dec;10(12):2317–20
Modulation of the antigenicity of amylase in cervical glandular atypia, adenocarcinoma in situ and invasive adenocarcinoma. Griffin NR, et al. **Histopathology** 1989 Sep;15(3):267–79
[Fractions of human neoplasms and mice-LDH virus as markers of human cancer] Jandová A, et al. **Arch Gynecol Obstet** 1989;245(1–4):476–8 **(Ger)**

EPIDEMIOLOGY

Screening for cervical cancer. Eddy DM. **Ann Intern Med** 1990 Aug 1;113(3):214–26 (69 ref.)
Cervical cancer in South Australia: trends in incidence, mortality and case survival. Bonett A, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 Pt 1):193–6
Hormonal contraceptives, human papillomaviruses and cervical cancer; some observations from a colposcopy clinic. Chang AR. **Aust N Z J Obstet Gynaecol** 1989 Aug; 29(3 (Pt 2)):329–31
The socioeconomic status of women attending a New Zealand colposcopy clinic. Chang AR. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 Pt 1):200–3
Carcinoma of the cervix in women under the age of 35 in Queensland [letter; comment] Free K. **Aust N Z J Obstet Gynaecol** 1989 Nov;29(4):452 Comment on: Aust N Z J Obstet Gynaecol 1989 Feb;29(1):47–51.
Trends in invasive cancer of the cervix uteri in New South Wales, 1973–1982. McCredie M, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 (Pt 2)):335–9
Epidemiology of cancer of the uterine cervix in Costa Rica, 1980–1983. Sierra R, et al. **Bull Pan Am Health Organ** 1989; 23(4):431–7
Recent trends in cervix uteri cancer. Devesa SS, et al. **Cancer** 1989 Nov 15;64(10):2184–90
Regional distribution of human papillomavirus DNA and other risk factors for invasive cervical cancer in Panama. Acs J, et al. **Cancer Res** 1989 Oct 15;49(20):5725–9
An analysis of epidemic factors in cervical cancer by conditional logistic regression model. Chen YX, et al. **Chin Med J [Engl]** 1990 Jan;103(1):55–60
Epidemiology of cervical cancer in the screened population in Taiwan, 1979–1984. Chou P, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Apr;45(4):209–21
Risk factors of female cancers in Ragusa population (Sicily)—1. Endometrium and cervix uteri cancers. Cusimano R, et al. **Eur J Epidemiol** 1989 Sep;5(3):363–71
Risk factors of female cancers in Ragusa population (Sicily). 2. Breast cancer. Cusimano R, et al. **Eur J Epidemiol** 1989 Dec;5(4):497–506
Treatment failure in cervical cancer: high risk factors of relapse. Lanza A, et al. **Eur J Gynaecol Oncol** 1989; 10(5):326–36
Cervical cancer as a natural phenomenon. Klimek R. **Eur J Obstet Gynecol Reprod Biol** 1990 Sep;36(3):229–38 (24 ref.)
A prospective surgical pathological study of stage I squamous carcinoma of the cervix: a Gynecologic Oncology Group Study. Delgado G, et al. **Gynecol Oncol** 1989 Dec; 35(3):314–20
Relapse patterns in FIGO stage IB carcinoma of the cervix. Look KY, et al. **Gynecol Oncol** 1990 Jul;38(1):114–20
Injectable contraceptives and risk of invasive cervical cancer: evidence of an association. Herrero R, et al. **Int J Cancer** 1990 Jul 15;46(1):5–7
An alternate view of the management of cervical human papillomavirus infections [see comments] Grace TW, et al. **J Am Coll Health** 1990 Mar;38(5):241–3 Comment in: J Am Coll Health 1990 May;38(6):298–9.
Variation in the duration of protection given by screening using the Pap test for cervical cancer. Klassen AC, et al. **J Clin Epidemiol** 1989;42(10):1003–11
Incidence of invasive cervical cancer in the Swiss canton of Vaud, and a note on screening. Levi F, et al. **J Epidemiol Community Health** 1989 Jun;43(2):121–4
Declining trend in cervical cancer incidence in Bombay, India (1964–1985). Yeole BB, et al. **J Surg Oncol** 1989 Dec; 42(4):267–71
First coitus before menarche and risk of sexually transmitted disease. Duncan ME, et al. **Lancet** 1990 Feb 10; 335(8685):338–40
The New Zealand Report of the cervical cancer inquiry: significance for medical education. Jones DG. **Med J Aust** 1989 Oct 16;151(8):450, 452, 454, 456
The prevalence of abnormal cervical cytology in a group of New Zealand women using contraception: a preliminary report. The New Zealand Contraception and Health Study Group. **N Z Med J** 1989 Jul 26;102(872):369–71
A simulation approach for estimating the loss of womanyears due to cervical cancer and probability of developing cervical cancer. Sreenivas V, et al. **Neoplasma** 1989; 36(5):623–7
Cervical cancer study using the Cancer Registry. Norman SA, et al. **Pa Med** 1989 Dec;92(12):42–6
Interobserver variability in the cytological diagnosis of 1500 Papanicolaou stained cervical monolayer specimens. Naujoks H, et al. **Pathol Res Pract** 1990 Feb;186(1):150–3
Invasive carcinoma of the uterine cervix following diagnosis and treatment of in situ carcinoma. Record linkage study within a National Cancer Registry. Pettersson F, et al. **Radiother Oncol** 1989 Oct;16(2):115–20
Age differentials in trends of uterine cervical cancer incidence from 1970 to 1987 in Geneva [letter] Bouchardy C, et al. **Rev Epidemiol Sante Publique** 1990;38(3):261–2
Cervical cancer—have we lost the battle? [letter] Craighead PS. **S Afr Med J** 1990 Jun 2;77(11):591–2
The changing incidence of cervical intra-epithelial neoplasia. Learmonth GM, et al. **S Afr Med J** 1990 Jun 16; 77(12):637–9
Prevalence, incidence, and estimated life-time risk of cervical human papillomavirus infections in a nonselected Finnish female population. Syrjänen K, et al. **Sex Transm Dis** 1990 Jan-Mar;17(1):15–9
[Results of the Leiden mass screening for cervix uteri carcinoma; the 'young' (24–34 years) versus the 'old' (35–54 years) group of women] Boon ME, et al. **Ned Tijdschr Geneeskd** 1990 Aug 11;134(32):1545–9 (Eng. Abstr.) **(Dut)**
[Carcinoma of the cervical stump. Retrospective analysis of 43 cases] Calais G, et al. **Bull Cancer (Paris)** 1989; 76(10):1103–10 (Eng. Abstr.) **(Fre)**
[Cancer of the uterine cervix in 1990. Cervicovaginal smear is the only detection test] Bergeron C. **Presse Med** 1990 Jun 2;19(22):1032–4 **(Fre)**
[Epidemiology of human papillomavirus genital infections in women] Brémond A. **Rev Fr Gynecol Obstet** 1989 Mar 25;84(3 Pt 2):229–30; discussion 240–4 (Eng. Abstr.) **(Fre)**
[Cervix cancer: incidence, diagnosis, therapeutic principle] Ludwig H. **Ther Umsch** 1989 Dec;46(12):855–63 (Eng. Abstr.) **(Ger)**
[The incidence of borderline and pathologic findings in young females within the scope of gynecologic-cytologic screening studies] Neumann HG, et al. **Zentralbl Gynakol** 1989;111(14):947–51 (Eng. Abstr.) **(Ger)**
[Epidemiologic evaluation of precursors of cervix cancer, early diagnosis and treatment] Garozzo G, et al. **Minerva Ginecol** 1990 May;42(5):211–26 (177 ref.) (Eng. Abstr.) **(Ita)**
[Hospital epidemiology—a comparative case control study of breast and cervical cancers] Tajima K, et al. **Gan No Rinsho** 1990 Feb;Spec No:351–64 (Eng. Abstr.) **(Jpn)**
[Incidence and mortality of uterine cervix cancer in Norway. When do we get organized nation-wide cytologic screening in Norway?] Magnus K, et al. **Tidsskr Nor Laegeforen** 1990 May 10;110(12):1557–9 (Eng. Abstr.) **(Nor)**
[The characteristics of the recurrence and metastasis of vulvar cancer] Chkuaseli GT. **Vopr Onkol** 1990;36(7):835–8 **(Rus)**

ETHNOLOGY

Trend of cervical cancer in Jewish women [letter] Ben Baruch G, et al. **Am J Obstet Gynecol** 1990 Aug; 163(2):703–4
Cervical cancer in Jewish women. Glezerman M, et al. **Am J Obstet Gynecol** 1989 Nov;161(5):1186–90
Cervix and breast cancer incidence in immigrant Caribbean women. Fruchter RG, et al. **Am J Public Health** 1990 Jun; 80(6):722–4
Log-linear models for cancer risk among migrants. Kaldor J, et al. **Int J Epidemiol** 1990 Jun;19(2):233–9

ETIOLOGY

Detection of human papilloma virus in women referred for colposcopy. A comparison between different diagnostic methods. Bodén E, et al. **Acta Obstet Gynecol Scand** 1990; 69(2):153–9
Abnormal papanicolaou smear. A population-based study of risk factors in Greenlandic and Danish women. Kjaer SK, et al. **Acta Obstet Gynecol Scand** 1990;69(1):79–86
Smoking and cervical cancer—current status: a review. Winkelstein W Jr. **Am J Epidemiol** 1990 Jun;131(6):945–57; discussion 958–60 (73 ref.)
Diet and the risk of invasive cervical cancer among white women in the United States. Ziegler RG, et al. **Am J Epidemiol** 1990 Sep;132(3):432–45
Cervical cancer: role for progesterone during pregnancy and contraception? [letter] Stendahl U, et al. **Am J Obstet Gynecol** 1990 Aug;163(2):685–6
Viruses and cancer, with particular focus on human papillomaviruses in neoplastic lesions of the cervix uteri. Chow VT, et al. **Ann Acad Med Singapore** 1990 Mar; 19(2):208–18 (129 ref.)
Reproductive activity is a magic spell to connect the genesis of cancers of the uterine cervix and endometrium. Kodama M, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1909–14
Epidemiology of human papillomavirus (HPV) infections and their associations with genital squamous cell cancer. Review article. Syrjänen KJ. **APMIS** 1989 Nov; 97(11):957–70 (72 ref.)

Papillomavirus infection of the female genital tract before and after treatment: a cytological, colposcopic and histological study. Merkur H, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 Pt 1):185–8

Genital warts [letter] Stack WC. **BMJ** 1990 May 19; 300(6735):1339–40

Sexual behavior, venereal diseases, hygiene practices, and invasive cervical cancer in a high-risk population. Herrero R, et al. **Cancer** 1990 Jan 15;65(2):380–6

Human papillomaviruses and cervical carcinoma. Vousden KH. **Cancer Cells** 1989 Oct;1(2):43–50 (89 ref.)

Risk factors for in situ cervical cancer: results from a case–control study. Jones CJ, et al. **Cancer Res** 1990 Jun 15;50(12):3657–62

Oral contraceptive use, human papillomavirus infection, and risk of early cytological abnormalities of the cervix. Negrini BP, et al. **Cancer Res** 1990 Aug 1;50(15):4670–5

Genital human papillomavirus infections. Douglas JM Jr, et al. **Clin Lab Med** 1989 Sep;9(3):421–44 (172 ref.)

Barrier methods of contraception and the risk of cervical neoplasia. Parazzini F, et al. **Contraception** 1989 Nov; 40(5):519–30 (17 ref.)

Carcinoma of the cervix uteri and risk factors. Stanimirović B, et al. **Eur J Gynaecol Oncol** 1990;11(1):51–6

Association of oral contraceptive use and human papillomaviruses in invasive cervical cancers. Hildesheim A, et al. **Int J Cancer** 1990 May 15;45(5):860–4

Cigarette smoking and alcohol consumption in the aetiology of uterine cervical cancer. Licciardone JC, et al. **Int J Epidemiol** 1989 Sep;18(3):533–7

The genesis of cervical cancer. Turner MJ. **Ir J Med Sci** 1990 Apr;159(4):92–5

Possible cofactors in the etiology of cervical intraepithelial neoplasia. An immunopathologic study. Barton SE, et al. **J Reprod Med** 1989 Sep;34(9):613–6

Cervical intraepithelial neoplasia. The role of age at first coitus in its etiology. Edebiri AA. **J Reprod Med** 1990 Mar; 35(3):256–9

Histogenesis of cervical adenocarcinoma with reference to human papillomavirus–18 as a carcinogen. Okagaki T, et al. **J Reprod Med** 1989 Sep;34(9):639–44

Human papillomavirus and cervical cancer in Indian women [letter] Das BC, et al. **Lancet** 1989 Nov 25;2(8674):1271

Pork intake and human papillomavirus–related disease. Schneider A, et al. **Nutr Cancer** 1990;13(4):209–11

Genital papillomavirus infections: current knowledge and future prospects. Koutsky LA, et al. **Obstet Gynecol Clin North Am** 1989 Sep;16(3):541–64 (162 ref.)

Human papilloma virus clinic treats couples [news] **Oncology (Williston Park)** 1989 Apr;3(4):116

Human papilloma virus (HPV) and uterine cervix cancer [editorial] Persaud V. **West Indian Med J** 1989 Sep; 38(3):123–5

[Viral etiology of cancer of the uterine cervix. II. Detection of human cytomegalovirus DNA sequence and antigen in cervical lesions] Meng XJ. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):263–5 (Eng. Abstr.) **(Chi)**

[Correlation of human papilloma virus (HPV) and herpes simplex virus–2 (HSV–2)in the viral etiology of carcinoma of uterine cervix] Meng XJ. **Chung Hua Chung Liu Tsa Chih** 1989 Mar;11(2):108–10 (Eng. Abstr.) **(Chi)**

[A study on the relationship between human papilloma virus (HPV) and cervical cancer] Zhang G. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1990 Feb; 11(1):31–3 (Eng. Abstr.) **(Chi)**

[Human papillomavirus infection and cervical cancer (editorial)] Bremond A. **Bull Cancer (Paris)** 1990; 77(4):317–8 **(Fre)**

[Papillomavirus and cancer of the uterine cervix. The clinician's point of view] Dargent D. **Pathol Biol (Paris)** 1989 Nov;37(9):959–60 **(Fre)**

[Papillomavirus and cancer of the uterine cervix. The virologist's point of view] Orth G. **Pathol Biol (Paris)** 1989 Nov;37(9):957–8 **(Fre)**

[Preventive medicine. Smoking—a risk factor of cervix cancer (news)] Steinberg H. **Fortschr Med** 1989 Jul 30; 107(22):9 **(Ger)**

[The Szontágh IUD and cervix carcinoma (results of a 10–year follow up study)] Batár I. **Orv Hetil** 1990 Aug 26;131(34):1871–4 (30 ref.) (Eng. Abstr.) **(Hun)**

[Transforming genes of human papillomaviruses and cancer] Hakura A. **Gan To Kagaku Ryoho** 1990 Jul;17(7):1244–53 (47 ref.) (Eng. Abstr.) **(Jpn)**

[Human papilloma virus and cervical cancer] Kawana T. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 1):615–9 (Eng. Abstr.) **(Jpn)**

[Variability of the clinical picture and the course of infection of the genital organs an anus by human papillomaviruses] Mazurkiewicz W. **Przegl Dermatol** 1989 May–Jun; 76(3):234–40 **(Pol)**

[Analysis of selected risk factors in invasive cervical cancer among autochthonous women (born in Upper Silesia) and migrants] Zemła B. **Wiad Lek** 1989 Feb 1;42(3):143–8 (Eng. Abstr.) **(Pol)**

[Papilloma viruses in neoplasms of the female sex organs] Spitkovskiĭ DD, et al. **Dokl Akad Nauk SSSR** 1989; 306(6):1476–8 **(Rus)**

[A new methodology to evaluate the male factor in the etiology of cervico–uterine cancer] Salas O, et al. **Rev Chil Obstet Ginecol** 1987;52(6):333–6 (Eng. Abstr.) **(Spa)**

GENETICS

Deoxyribonucleic acid flow cytometric analysis of cervical adenocarcinoma: prognostic significance of deoxyribonucleic acid ploidy and S–phase fraction. Leminen A, et al. **Am J Obstet Gynecol** 1990 Mar; 162(3):848–53

Ras oncogene expression and progression in intraepithelial neoplasia of the uterine cervix. Sagae S, et al. **Cancer** 1990 Jul 15;66(2):295–301

Chromosome changes in 43 carcinomas of the cervix uteri. Atkin NB, et al. **Cancer Genet Cytogenet** 1990 Feb; 44(2):229–41

Increased spontaneous and mitomycin C–induced sister chromatid exchanges in patients with cancer of the cervix uteri, with special reference to stage of cancer. Yokota K, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):79–87

Growth–regulating functions of human papillomavirus early gene products in cervical cancer cells acting dominant over enhanced epidermal growth factor receptor expression. von Knebel Doeberitz M, et al. **Cancer Res** 1990 Jun 15; 50(12):3730–6

Human papillomavirus early gene products and maintenance of the transformed state of cervical cancer cells in vitro. Kleinheinz A, et al. **Curr Top Microbiol Immunol** 1989; 144:175–9

A comparison of the number of X–chromatin bodies and of X chromosomes in carcinomas of the cervix uteri. Atkin NB, et al. **Cytobios** 1989;60(241):111–4

DNA ploidy and cytophotometric analysis of cervical intraepithelial neoplasia grade III and invasive squamous cell carcinoma. Hanselaar AG, et al. **Cytometry** 1990; 11(5):624–9

DNA ploidy in adenocarcinoma in situ of the uterine cervix [letter] Jaworski RC, et al. **J Clin Pathol** 1990 May; 43(5):435–6

Expression of multidrug–resistance (MDR1) gene in normal epithelia and in invasive carcinomas of the uterine cervix. Riou GF, et al. **J Natl Cancer Inst** 1990 Sep 19; 82(18):1493–6

Flow cytometric analysis of DNA content in cervical lesions. Perticarari S, et al. **Pathol Res Pract** 1989 Nov;185(5):686–8

Detection of human papillomavirus DNA in genital condylomata in women and their male partners by using in situ hybridization with digoxygenin labeled probes. Konno R, et al. **Tohoku J Exp Med** 1990 Apr;160(4):383–90

[Study on molecular hybridization with biotin–labelled HPV 16 DNA probe in human cervical carcinoma] Li Y, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Sep;20(3):246–8 (Eng. Abstr.) **(Chi)**

[c–myc and c–Ha–ras proto–oncogenes in cervical cancer: prognostic value] Riou G, et al. **Bull Cancer (Paris)** 1990; 77(4):341–7 (Eng. Abstr.) **(Fre)**

HISTORY

[Schauta–Amreich expanded total vaginal excision in cervix cancer in relation to historical development] Gitsch E, et al. **Gynakol Rundsch** 1989;29 Suppl 3:2–12 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Serum squamous cell carcinoma antigen levels in women with neoplasms of the lower genital tract and in healthy controls. Neunteufel W, et al. **Arch Gynecol Obstet** 1989; 246(4):243–50

Investigation of expression of 5T4 antigen in cervical cancer. Jones H, et al. **Br J Cancer** 1990 Jan;61(1):96–100

Clinical and prognostic significance of concanavalin–A–induced suppressor cell activity in malignant cervical neoplasia. Radhakrishna Pillai M, et al. **Br J Obstet Gynaecol** 1990 Apr;97(4):357–61

Elevated levels of squamous cell carcinoma antigen in patients with a benign disease of the skin. Duk JM, et al. **Cancer** 1989 Oct 15;64(8):1652–6

Recombinant alpha–2b–interferon enhances the circulating levels of a 90–kilodalton (K) tumor–associated antigen in patients with gynecologic and breast malignancies. Scambia G, et al. **Cancer** 1990 Mar 15;65(6):1325–8

Interleukin 2 production in lymphocyte cultures: a rapid test for cancer–associated immunodeficiency in malignant cervical neoplasia. Radhakrishna Pillai M, et al. **Cancer Lett** 1989 Oct;47(3):205–10

Lymphoproliferative response to fusion proteins of human papillomaviruses in patients with cervical intraepithelial neoplasia. Cubie HA, et al. **Epidemiol Infect** 1989 Dec; 103(3):625–32

Experiences with SCC antigen, a new tumor marker for cervical carcinoma. Meier W, et al. **Eur J Cancer Clin Oncol** 1989 Nov;25(11):1555–9

Improvement of decreased natural killer cell activity in cervical cancer patients by active lipids (AL 721). Garzetti GG, et al. **Eur J Gynaecol Oncol** 1990;11(2):123–5

Squamous cell carcinoma (SCC) antigen in patients with invasive cervical carcinoma during primary irradiation. Neunteufel W, et al. **Gynecol Obstet Invest** 1990;29(2):154–7

Lymphocyte subpopulations in patients with cervical intraepithelial neoplasia. Andersen ES, et al. **Gynecol Oncol** 1990 Jul;38(1):125–7

Comparison between squamous cell carcinoma–associated antigen and CA–125 in patients with carcinoma of the cervix. Lehtovirta P, et al. **Gynecol Oncol** 1990 May; 37(2):276–8

Squamous cell carcinoma antigen and carcinoembryonic antigen levels as prognostic factors for the response of cervical carcinoma to chemotherapy. Meier W, et al. **Gynecol Oncol** 1990 Jul;38(1):6–11

Use of serum squamous cell carcinoma antigen assays in chemotherapy treatment of cervical cancer. Ngan HY, et al. **Gynecol Oncol** 1989 Nov;35(2):259–62

Distribution of basement membrane antigens in the uterine cervical adenocarcinomas: an immunohistochemical study. Toki N, et al. **Gynecol Oncol** 1990 Jul;38(1):17–21

Clinical implications of natural killer (NK) cytotoxicity in patients with squamous cell carcinoma of the uterine cervix. Vaquer S, et al. **Gynecol Oncol** 1990 Jan;36(1):90–2

Serological responses to papillomavirus group–specific antigens in women with neoplasia of the cervix uteri. Dillner L, et al. **J Clin Microbiol** 1990 Mar;28(3):624–7

Evaluation of 3–fucosyl N–acetyllactosamine antibody staining in histological assessment of CIN [letter] Robertson AJ, et al. **J Clin Pathol** 1990 Mar;43(3):261–2

Antibodies against the human papillomavirus type 16 early proteins in human sera: correlation of anti–E7 reactivity with cervical cancer. Jochmus–Kudielka I, et al. **J Natl Cancer Inst** 1989 Nov 15;81(22):1698–704

A novel monoclonal antibody against squamous cell carcinoma. Inoue M, et al. **Jpn J Cancer Res** 1990 Feb; 81(2):176–82

Antibodies to human papillomavirus type 16 in patients with cervical neoplasia [letter] Reeves WC, et al. **Lancet** 1990 Mar 3;335(8688):551–2

Augmentation of immune responses of pelvic lymph node lymphocytes in patients with cervical cancer by sizofiran. Shimizu Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Dec;41(12):2013–4

Monitoring the course of cervical carcinoma with the squamous cell carcinoma serum radioimmunoassay [letter; comment] Fuith LC. **Obstet Gynecol** 1990 Jul;76(1):156–7 Comment on: Obstet Gynecol 1989 Dec;74(6):944–9.

Monitoring the course of cervical carcinoma with the squamous cell carcinoma serum radioimmunoassay [see comments] Holloway RW, et al. **Obstet Gynecol** 1989 Dec; 74(6):944–9 Comment in: Obstet Gynecol 1990 Jul;76(1):156–7.

Does preoperative serum squamous cell carcinoma antigen level predict occult extracervical disease in patients with stage Ib invasive squamous cell carcinoma of the cervix? Patsner B, et al. **Obstet Gynecol** 1989 Nov;74(5):786–8

Serum squamous cell carcinoma antigen in gynecologic malignancies with special reference to cervical cancer. Hsieh CY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Aug; 88(8):797–800

Cell–mediated immunity in patients with invasive carcinoma of the cervix. Park TK, et al. **Yonsei Med J** 1989; 30(2):164–72

[Immunohistochemical study on the MHC class I antigen expression on squamous cell carcinoma of the uterine cervix] Honma S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jul;41(7):813–8 (Eng. Abstr.) **(Jpn)**

[Anti–embryoglycan antibodies detected in sera of patients with uterine cervical cancer] Kato Y. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Feb;42(2):129–35 (Eng. Abstr.) **(Jpn)**

[An immunohistochemical study on regional immunological response of uterine cervical cancer] Okamoto Y. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 May; 42(5):456–62 (Eng. Abstr.) **(Jpn)**

[Antigenic phenotype of the lymphocytic component of regional lymph nodes in patients with cervical cancer and its modulation by lentinan] Shimizu Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jan;42(1):37–44 (Eng. Abstr.) **(Jpn)**

[Human papilloma virus (HPV) antigens and DNA in dysplasia and carcinoma of the uterine cervix] Yamagata S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Sep; 41(9):1334–40 (Eng. Abstr.) **(Jpn)**

[Circulating immune complexes in the blood serum of patients with untreated cervical cancer—their occurrence and quantitative analysis] Dziewulska–Bokiniec A, et al. **Ginekol Pol** 1989 Feb;60(2):90–4 (Eng. Abstr.) **(Pol)**

[Functional indices of the peripheral blood lymphocytes in gynecologic patients] Stepankovskaia GK, et al. **Vrach Delo** 1989 Oct;(10):81–3 (Eng. Abstr.) **(Rus)**

METABOLISM

Studies on cervical intraepithelial neoplasia: the level of octadeca–9,11–dienoic acid and measurement of free radical content by electron spin resonance spectroscopy. Wickens DG, et al. **Am J Obstet Gynecol** 1990 Mar; 162(3):854–8

Changing patterns of keratin expression during progression of cervical intraepithelial neoplasia. Smedts F, et al. **Am J Pathol** 1990 Mar;136(3):657–68

Modulation of epidermal growth factor receptors by retinoic acid in ME180 cells. Zheng ZS, et al. **Cancer Res** 1990 Feb 15;50(4):1201–5

Patterns of mRNA for epidermal growth factor receptor and keratin B–2 in normal cervical epithelium and in cervical intraepithelial neoplasia. Mittal K, et al. **Gynecol Oncol** 1990 Aug;38(2):224–9

Opioid-like immunoreactants in human cervical cancer. Ottesen B, et al. **Gynecol Oncol** 1990 Feb;36(2):250–5

Steroid hormone receptors in carcinoma of the cervix: lack of response to an antiestrogen. Scambia G, et al. **Gynecol Oncol** 1990 Jun;37(3):323–6

The expression of cytokeratin 19 in cervical neoplasia. Raju GC. **Histopathology** 1990 Mar;16(3):297–300

Human papillomavirus messenger RNA expression in adenocarcinoma in situ of the uterine cervix. Farnsworth A, et al. **Int J Gynecol Pathol** 1989;8(4):321–30

A comparative autoradiographic study demonstrating differential intratumor localization of monoclonal antibodies to cell surface (Lym-1) and intracellular (TNT-1) antigens [see comments] Chen FM, et al. **J Nucl Med** 1990 Jun;31(6):1059–66 Comment in: J Nucl Med 1990 Jun;31(6):1066–8.

Filaggrin expression in cutaneous and mucosal human papillomavirus induced lesions. Viac J, et al. **Pathol Res Pract** 1989 Sep;185(3):342–6

MICROBIOLOGY

Human papillomavirus detection in paraffin-embedded cervical carcinomas and metastases of the carcinomas by the polymerase chain reaction. Claas EC, et al. **Am J Pathol** 1989 Oct;135(4):703–9

Integration of HPV-16 DNA in cervical carcinoma cell line CC3/CUHK3 and its xenografts. Yiu KC, et al. **Anticancer Res** 1990 Jul-Aug;10(4):917–22

Human papillomavirus and cervical intraepithelial neoplasia in women who subsequently had invasive cancer. Caussy D, et al. **Can Med Assoc J** 1990 Feb 15;142(4):311–7

Human papillomavirus type 16/18 in uterine cervical adenocarcinoma in situ and adenocarcinoma. A study by in situ hybridization with biotinylated DNA probes. Nielsen AL. **Cancer** 1990 Jun 1;65(11):2588–93

Preferential sites for viral integration on mammalian genome. Popescu NC, et al. **Cancer Genet Cytogenet** 1989 Oct 15; 42(2):157–71 (82 ref.)

Human papillomavirus associated with adenocarcinoma and adenosquamous carcinoma of the cervix: analysis by in situ hybridization. Gordon AN, et al. **Gynecol Oncol** 1989 Dec; 35(3):345–8

Detection of five different human papillomavirus types in cervical lesions by in situ hybridization. A study of 110 cases using sulfonated probes. Jacquemier J, et al. **Hum Pathol** 1990 Sep;21(9):911–7

Serological studies against herpes simplex virus types I & II in cervical carcinoma patients. Rajeswari N, et al. **Indian J Pathol Microbiol** 1987 Apr;30(2):157–62

Amplification and typing of multiple cervical cancer-associated human papillomavirus DNAs using a single pair of primers [letter] Yoshikawa H, et al. **Int J Cancer** 1990 May 15;45(5):990–2

Occurrence of human papillomavirus DNA types 16 and 18 (HPV-16/18) in cervical smears as compared to cytological findings. Köchel HG, et al. **Int J Gynaecol Obstet** 1990 Feb;31(2):145–52

Demonstration of multiple HPV types in normal cervix and in cervical squamous cell carcinoma using the polymerase chain reaction on paraffin wax embedded material. Griffin NR, et al. **J Clin Pathol** 1990 Jan;43(1):52–6

Uniformity of the splicing pattern of the E6/E7 transcripts in human papillomavirus type 16-transformed human fibroblasts, human cervical premalignant lesions and carcinomas. Cornelissen MT, et al. **J Gen Virol** 1990 May; 71 (Pt 5):1243–6

Localization of human papillomavirus type 16 DNA using the polymerase chain reaction in the cervix uteri of women with cervical intraepithelial neoplasia. Cornelissen MT, et al. **J Gen Virol** 1989 Oct;70 (Pt 10):2555–62

Analysis of human papillomavirus type 16 E6-E7 transcription in cervical carcinomas and normal cervical epithelium using the polymerase chain reaction. Johnson MA, et al. **J Gen Virol** 1990 Jul;71 (Pt 7):1473–9

Human papillomavirus type 56: a new virus detected in cervical cancers. Lörincz AT, et al. **J Gen Virol** 1989 Nov; 70 (Pt 11):3099–104

Detection of human papillomaviruses in cervicovaginal cells using polymerase chain reaction. Pao CC, et al. **J Infect Dis** 1990 Jan;161(1):113–5

Use of anticontamination primers in the polymerase chain reaction for the detection of human papilloma virus genotypes in cervical scrapes and biopsies. van den Brule AJ, et al. **J Med Virol** 1989 Sep;29(1):20–7

Scientists study cofactors of HPV-associated cervical cancer [news] Glover J. **J Natl Cancer Inst** 1990 Jul 4; 82(13):1096–7

Detection and typing of human papillomavirus in archival cervical cancer specimens by DNA amplification with consensus primers. Resnick RM, et al. **J Natl Cancer Inst** 1990 Sep 19;82(18):1477–84

Human papillomaviruses and cervical cancer. Pirisi LA. **J S C Med Assoc** 1990 May;86(5):275–8

Analysis of integrated human papillomavirus type 16 DNA in cervical cancers: amplification of viral sequences together with cellular flanking sequences. Wagatsuma M, et al. **J Virol** 1990 Feb;64(2):813–21

Human papillomavirus types and recurrent cervical warts. Nuovo GJ, et al. **JAMA** 1990 Mar 2;263(9):1223–6

Amplification and specific detection of transforming gene region of human papillomavirus 16, 18 and 33 in cervical carcinoma by means of the polymerase chain reaction. Shimada M, et al. **Jpn J Cancer Res** 1990 Jan;81(1):1–5

Human papillomavirus detection in cervical lesions nondiagnostic for cervical intraepithelial neoplasia: correlation with Papanicolaou smear, colposcopy, and occurrence of cervical intraepithelial neoplasia. Nuovo GJ, et al. **Obstet Gynecol** 1990 Jun;75(6):1006–11

Human papillomavirus genotype as a prognostic indicator in carcinoma of the uterine cervix. Walker J, et al. **Obstet Gynecol** 1989 Nov;74(5):781–5

HSV-2-induced tumorigenicity in HPV16-immortalized human genital keratinocytes. DiPaolo JA, et al. **Virology** 1990 Aug;177(2):777–9

Molecular cloning of a novel human papillomarvirus (type 58) from an invasive cervical carcinoma. Matsukura T, et al. **Virology** 1990 Aug;177(2):833–6

Molecular cloning of DNA sequences from cervical intraepithelial neoplasia that hybridize to human cytomegalovirus DNA. Fletcher K, et al. **Virus Genes** 1989 Aug;2(4):323–33

Episomal HPV 16 DNA isolated from a cervical carcinoma presents a partial duplication of the early region. Di Luca D, et al. **Virus Res** 1989 Sep;14(1):49–55

[Studies on the physical state of human papillomavirus 16 DNA in biopsies of patients with cervical carcinoma] Han RC. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Jun;11(3):234–6 (Eng. Abstr.) **(Chi)**

[Human papillomaviruses in uterine cervix pathology: clinical implications, detection and type] Laval C, et al. **Bull Cancer (Paris)** 1990;77(4):321–30 (Eng. Abstr.) **(Fre)**

[Clinical aspects of HPV-16/18 associated cervical lesions] Göppinger A, et al. **Geburtshilfe Frauenheilkd** 1990 Feb; 50(2):106–9 (Eng. Abstr.) **(Ger)**

[Incidence of human papillomavirus types 31, 33 and 35 in cervix intra-epithelial neoplasms] Wendler D. **Geburtshilfe Frauenheilkd** 1990 Feb;50(2):110–2 (Eng. Abstr.) **(Ger)**

[Microbiologic findings including Chlamydia serology in cervix dysplasia and human papillomavirus infection] Mayer HO, et al. **Gynakol Rundsch** 1989;29 Suppl 2:88–91 **(Ger)**

[Human papillomavirus types and cervical neoplasia] Stanimirović B, et al. **Jugosl Ginekol Perinatol** 1989 May-Aug;29(3–4):79–81 (Eng. Abstr.) **(Ser)**

MORTALITY

Adenocarcinoma of the uterine cervix. Prognosis and patterns of failure in 367 cases. Eifel PJ, et al. **Cancer** 1990 Jun 1;65(11):2507–14

Pattern of treatment failure among patients who died of invasive carcinoma of the uterine cervix. Kraiphibul P, et al. **J Med Assoc Thai** 1990 Feb;73 Suppl 1:20–2

Risk factors for survival in patients performed radical hysterectomy for cervical carcinoma. Pengsaa P, et al. **J Med Assoc Thai** 1989 Aug;72(8):427–32

Cervical cancer survival at Ramathibodi Hospital 1979–1983. Srisupundit S, et al. **J Med Assoc Thai** 1990 Feb;73 Suppl 1:15–9

From the Centers for Disease Control. Chronic disease reports: deaths from cervical cancer--United States, 1984–1986. **JAMA** 1989 Oct 20;262(15):2067, 2071

From the Centers for Disease Control. Black-white differences in cervical cancer mortality--United States, 1980–1987. **JAMA** 1990 Jun 13;263(22):3001–2

Black-white differences in cervical cancer mortality--United States, 1980–1987. **MMWR** 1990 Apr 20;39(15):245–8

Cervical cancer deaths among older women: implications for prevention. Remington P, et al. **Wis Med J** 1990 Jan; 89(1):30, 32–4

[Invasive cancer of the uterine cervix in young women: retrospective study of 236 cases] Fenton J, et al. **Bull Cancer (Paris)** 1990;77(2):109–16 (Eng. Abstr.) **(Fre)**

[Progress in the early detection of cervix cancer from the viewpoint of the Saarland cancer register] Brenner H, et al. **Geburtshilfe Frauenheilkd** 1990 Apr;50(4):304–9 (Eng. Abstr.) **(Ger)**

[Malignant neoplasms of the breast and female genital organs and carcinoma in situ of the uterine cervix in East Germany 1986. Statistical data of the national cancer register] Mehnert WH, et al. **Zentralbl Gynakol** 1990;112(7):395–401 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Adenoid cystic carcinoma of the uterine cervix. Cytologic features. Dayton V, et al. **Acta Cytol** 1990 Mar-Apr; 34(2):125–8 (13 ref.)

Changing cytologic detection rates for cervical intraepithelial neoplasia and invasive cancer in a population lacking a mass screening program. Frangopoulou E, et al. **Acta Cytol** 1989 Nov-Dec;33(6):839–42

Improving the sensitivity of cervical cytologic screening. A comparison of duplicate smears and colposcopic examination of patients with cytologic inflammatory epithelial changes. Frisch LE, et al. **Acta Cytol** 1990 Mar-Apr;34(2):136–9

Endocrine cell hyperplasia of the uterine cervix. A precursor of neuroendocrine carcinoma of the cervix? Chan JK, et al. **Am J Clin Pathol** 1989 Dec;92(6):825–30

Stromal endometriosis of the uterine cervix. A variant of endometriosis that may simulate a sarcoma. Clement PB, et al. **Am J Surg Pathol** 1990 May;14(5):449–55

Immunocytochemical detection of S-phase cells in normal and neoplastic cervical epithelium by anti-BrdU monoclonal antibody. Fukuda K, et al. **Anal Quant Cytol Histol** 1990 Apr;12(2):135–8

Characteristics of a cell line established from a Chinese patient with a squamous carcinoma of the uterine cervix. Chew EC, et al. **Anticancer Res** 1990 Jan-Feb;10(1):213–8

Precocious appearance of markers of squamous differentiation in metaplastic cells of human endocervix. Serra V, et al. **Arch Gynecol Obstet** 1989;246(4):233–42

Verrucous carcinoma of the cervix. Wong WS, et al. **Arch Gynecol Obstet** 1990;247(1):47–51

Alveolar soft-part sarcoma in the uterine cervix. Abeler V, et al. **Arch Pathol Lab Med** 1989 Oct;113(10):1179–83

Adenocarcinoma of the uterine cervix of small intestinal type containing numerous Paneth cells. Lee KR, et al. **Arch Pathol Lab Med** 1990 Jul;114(7):731–3

The cervical smear. The cytopathologist's point of view. Drake M. **Aust Fam Physician** 1990 May;19(5):695–7

Stage I adenocarcinoma of the uterine cervix: tumour size, grade, lymph node metastases and 5-year survival. Ayhan A, et al. **Aust N Z J Obstet Gynaecol** 1989 Nov;29(4):443–4

The CIN saga--the biological and clinical significance of cervical intraepithelial neoplasia. Chanen W. **Aust N Z J Obstet Gynaecol** 1990 Feb;30(1):18–23

Sarcomas of the uterine cervix. Weng ZY, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 Pt 1):241–4

Cervical cytology. Hudson E. **BMJ** 1990 May 26; 300(6736):1353–4 (6 ref.)

Fatty acid control of growth of human cervical and endometrial cancer cells. Gleeson RP, et al. **Br J Cancer** 1990 Apr;61(4):500–3

Natural history of cervical neoplasia: consistent results obtained by an identification technique. Gustafsson L, et al. **Br J Cancer** 1989 Jul;60(1):132–41

No endocervical cells: an update [letter] McGhee MF. **Br J Gen Pract** 1990 Apr;40(333):168

Cytological status and lesion size: a further dimension in cervical intraepithelial neoplasia. Jarmulowicz MR, et al. **Br J Obstet Gynaecol** 1989 Sep;96(9):1061–6

Is routine colposcopic assessment necessary following laser ablation of cervical intraepithelial neoplasia? Lopes A, et al. **Br J Obstet Gynaecol** 1990 Feb;97(2):175–7

Is it time for a reconsideration of the criteria for cone biopsy? Lopes A, et al. **Br J Obstet Gynaecol** 1989 Nov; 96(11):1345–7

A histological and immunohistological study of cervical intraepithelial neoplasia in relation to recurrence after local treatment. Rasbridge SA, et al. **Br J Obstet Gynaecol** 1990 Mar;97(3):245–50

Magnetic resonance imaging, computed tomography and endosonography in the local staging of carcinoma of the cervix. Cobby M, et al. **Br J Radiol** 1990 Sep;63(753):673–9

Secondary carcinoma from the cervix involving the large bowel. Fraser AM, et al. **Br J Surg** 1969 Apr;56(4):317–8

Human papillomaviruses and the pathogenesis of cervical neoplasia. A study by in situ hybridization. Gupta JW, et al. **Cancer** 1989 Nov 15;64(10):2104–10

The prognostic significance of number of positive nodes in cervical carcinoma stages IB, IIA, and IIB. Inoue T, et al. **Cancer** 1990 May 1;65(9):1923–7

Accuracy of cytology diagnosis [letter; comment] Rohr LR. **Cancer** 1990 Mar 15;65(6):1460–1 Comment on: Cancer 1989 Jul 1;64(1 Suppl):249–52; discussion 253–7.

Endoscopic localization of the squamocolumnar junction before cervical cone biopsy in 284 patients. Saunders N, et al. **Cancer** 1990 Mar 15;65(6):1312–7

Acute lymphoblastic leukemia. An unusual case of primary relapse in the uterine cervix. Zutter MM, et al. **Cancer** 1990 Sep 1;66(5):1002–4

Keratin subtypes in carcinomas of the uterine cervix: implications for histogenesis and differential diagnosis. Ivanyi D, et al. **Cancer Res** 1990 Aug 15;50(16):5143–52

Adenosquamous cell carcinoma of the cervix--a clinical analysis of 23 cases. Liu FS, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Apr;45(4):261–5

Steriological analysis of peritumoral lymph nodes in patients operated for cervical and endometrial cancer after being treated with thymostimulin. Cappello F, et al. **Clin Exp Obstet Gynecol** 1989;16(4):134–5

Thymostimuline and uterine cancer satellite lymph nodes. Morphometric comparison between an 8-day-before-surgery and a 14-day-before-surgery single treatment. Cappello F, et al. **Clin Exp Obstet Gynecol** 1990; 17(1):51–2

Immature teratoma primary of the uterine cervix. First case report. Cortés J, et al. **Eur J Gynaecol Oncol** 1990; 11(1):37–42

Minimal-deviation adenocarcinoma (adenoma malignum) of the uterine cervix; four case reports. Kudo R, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jan-Feb; 34(1-2):179–88

Transformation of histological tumor type of the cervix expressed in different tumor markers in the serum. Aalders JG, et al. **Gynecol Oncol** 1990 Jan;36(1):110–2

Adenocarcinoma in situ of the uterine cervix: a clinico-pathologic study of 36 cases. Andersen ES, et al. **Gynecol Oncol** 1989 Oct;35(1):1–7

Parametrial invasion of uterine cervical cancer assessed by transrectal ultrasonography: preliminary report. Aoki S, et al. **Gynecol Oncol** 1990 Jan;36(1):82–9

The topography and invasive potential of cervical adenocarcinoma in situ, with and without associated squamous dysplasia. Colgan TJ, et al. **Gynecol Oncol** 1990 Feb;36(2):246–9

Carcinoma of the cervix with extensive endometrial and myometrial involvement. de Jesus M, et al. **Gynecol Oncol** 1990 Feb;36(2):263–70 (29 ref.)

A new way to expose endocervical lesions at colposcopy. Johnson N, et al. **Gynecol Oncol** 1990 Feb;36(2):217–8

An adenocarcinoma in situ of the uterine cervix that developed into invasive adenocarcinoma after 5 years. Kashimura M, et al. **Gynecol Oncol** 1990 Jan;36(1):128–33

Prognosis of the adenocarcinoma of the cervix uteri: a comparative study. Kleine W, et al. **Gynecol Oncol** 1989 Nov;35(2):145–9

Early adenocarcinoma of the uterine cervix—its histologic and immunohistologic study. Matsukuma K, et al. **Gynecol Oncol** 1989 Oct;35(1):38–43

Development of an immunological staging system to prognosticate disease course in malignant cervical neoplasia. Radhakrishna Pillai M, et al. **Gynecol Oncol** 1990 May;37(2):200–5

Rapidly progressing cervical cancer in a patient with human immunodeficiency virus infection. Rellihan MA, et al. **Gynecol Oncol** 1990 Mar;36(3):435–8

Age as a prognostic factor in carcinoma of the cervix. Spanos WJ Jr, et al. **Gynecol Oncol** 1989 Oct;35(1):66–8

Scalene lymph node sampling in cervical carcinoma: a reappraisal. Vasilev SA, et al. **Gynecol Oncol** 1990 Apr; 37(1):120–4

Metastatic adenocarcinoma of the cervix presenting as an inflammatory breast lesion. Ward R, et al. **Gynecol Oncol** 1989 Dec;35(3):399–405

Squamous cell carcinoma with prominent myxoid stroma. Foschini MP, et al. **Hum Pathol** 1990 Aug;21(8):859–65

Langerhans cells and epithelial cell modifications in cervical intraepithelial neoplasia: correlation with human papillomavirus infection. Viac J, et al. **Immunobiology** 1990 Jun;180(4–5):328–38

Use of a laser diffraction particle sizer for the measurement of mean diameter of multicellular tumor spheroids. Boothby CD, et al. **In Vitro Cell Dev Biol** 1989 Oct; 25(10):946–50

The histogenetic origin of cervical mesonephric hyperplasia and mesonephric adenocarcinoma of the uterine cervix studied with immunohistochemical methods. Lang G, et al. **Int J Gynecol Pathol** 1990;9(2):145–57

Evaluation of surviving fraction at 2 Gy as a potential prognostic factor for the radiotherapy of carcinoma of the cervix. West CM, et al. **Int J Radiat Biol** 1989 Nov; 56(5):761–5

Immune reactive proteins as prognostic and clinical markers in malignant cervical neoplasia. Radhakrishna Pillai M, et al. **J Cancer Res Clin Oncol** 1989;115(6):583–91

Nucleolar organiser regions in adenocarcinoma in situ of the endocervix. Cullimore JE, et al. **J Clin Pathol** 1989 Dec; 42(12):1276–80

Histopathological grading of cervical intraepithelial neoplasia (CIN)—is there a need for change? Robertson AJ. **J Pathol** 1989 Dec;159(4):273–5 (19 ref.)

Selected papers from the 13th biennial meeting of the American Society of Colposcopy and Cervical Pathology. San Francisco, April 1988. **J Reprod Med** 1989 Sep; 34(9):611–72

Necessity for endocervical curettage in elderly women undergoing colposcopy. Dinh TA, et al. **J Reprod Med** 1989 Sep;34(9):621–4

Spatula/cytobrush vs. spatula/cotton swab detection of cervical condylomatous lesions. Selvaggi SM. **J Reprod Med** 1989 Sep;34(9):629–33

Primary lymphoma of the cervix: a case report. Kurup A, et al. **Mater Med Pol** 1989 Jan–Mar;21(1):31–3

Rhabdomyosarcoma with heterologous cartilage of the uterine cervix: a clinicopathologic and immunohistochemical study of an aggressive neoplasm in a young female. Perrone T, et al. **Med Pediatr Oncol** 1990; 18(1):72–6

Alveolar soft part sarcoma of the uterine cervix. Sahin AA, et al. **Mod Pathol** 1989 Nov;2(6):676–80 (24 ref.)

Tumor metastasis to an infusaport site [letter] Zelnick R, et al. **N Y State J Med** 1990 Apr;90(4):216

Paired Papanicolaou smears in the evaluation of atypical squamous cells [letter] **Obstet Gynecol** 1989 Oct;74(4):682–3

Minimum extension and appropriate topographic position of tissue destruction for treatment of cervical intraepithelial neoplasia. Boonstra H, et al. **Obstet Gynecol** 1990 Feb; 75(2):227–31

Late recurrence of clear-cell adenocarcinoma of the cervix: case report. Burks RT, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):525–7

A modified terminology for cervical intraepithelial neoplasia. Richart RM. **Obstet Gynecol** 1990 Jan;75(1):131–3

The influence of endometriosis on the staging of cervical cancer. Walker JL, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 2):543–5

Adenosquamous carcinoma of the cervix: prognosis in stage IB. Yazigi R, et al. **Obstet Gynecol** 1990 Jun;75(6):1012–5

In vitro differentiation of epithelial cells from cervical neoplasias resembles in vivo lesions. Rader JS, et al. **Oncogene** 1990 Apr;5(4):571–6

Multiparametric quantitation of the progression of uterine cervix preneoplasia towards neoplasia. Mariuzzi GM, et al. **Pathol Res Pract** 1989 Nov;185(5):606–11

Observation of growth and invasiveness of human uterine cervix carcinoma cell line (CC801) in the testes of nude mice. Huang JW, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(3):162–6

Primary malignant lymphoma of the cervix uteri: a case report. Khong CC, et al. **Singapore Med J** 1989 Apr; 30(2):217–20

Cutaneous metastases from carcinoma of the cervix. Franciolini G, et al. **Tumori** 1990 Aug 31;76(4):410–2

Histologic and clinical characteristics associated with rapidly progressive invasive cervical cancer: a preliminary report from the Yale Cancer Control Research Unit. Hadjimichael O, et al. **Yale J Biol Med** 1989 Jul–Aug;62(4):345–50

[A quantitative study on invasive process of mouse uterine cervix carcinoma (U14) cells implanted subcapsularly in testis] Huang JW. **Chung Hua Chung Liu Tsa Chih** 1990 Jan;12(1):24–6 (Eng. Abstr.) **(Chi)**

[Minimal deviation endocervical adenocarcinoma—clinical, histologic and immunohistochemical study] Zhang JM. **Chung Hua Chung Liu Tsa Chih** 1989 Jul;11(4):275–7 (Eng. Abstr.) **(Chi)**

[Study on the invasiveness of mouse uterine cervix carcinoma cell (U14) implanted in mouse testis] Huang JW, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Dec;18(4):265–7 (Eng. Abstr.) **(Chi)**

[Clinicopathologic and immunohistochemical study on 8 cases of malignant mixed müllerian tumor] Mi C. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Jun;18(2):141–2 (Eng. Abstr.) **(Chi)**

[Study on the metastatic mechanism and invasive degree of tumor cells after subcutaneous transplantation of uterine cervix carcinoma cells into footpad of mouse] Xue KX. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Dec; 11(6):407–11 (Eng. Abstr.) **(Chi)**

[Cervix cytology—follow-up of positive or unsuitable cervix cytology smears (letter)] Ganes S. **Ugeskr Laeger** 1990 Jul 30;152(31):2255–6 **(Dan)**

[Cervix cytology—frequency and quality of earlier examinations in women with cervix carcinoma] Rossen K, et al. **Ugeskr Laeger** 1990 Apr 30;152(18):1304–6 (Eng. Abstr.) **(Dan)**

[Cervical dysplasia and condylomatous lesions. Experience of Cameroon] Mbakop A, et al. **Ann Pathol** 1990;10(3):206 **(Fre)**

[Cervical screening and cervicography] Doyen J. **Rev Med Liege** 1990 Mar;45(3):135–8 **(Fre)**

[Pathologic Papanicolaou—class IV smear without histologic correlate—what should be done? (letter)] Biedermann K. **Geburtshilfe Frauenheilkd** 1990 Jan;50(1):86–7 **(Ger)**

[Diagnosis of prospective malignancy of cervix dysplasia using DNA cytometry (published erratum appears in Geburtshilfe Frauenheilkd 1990 Jun;50(6):510)] Bollmann R. **Geburtshilfe Frauenheilkd** 1990 Feb;50(2):113–7 (Eng. Abstr.) **(Ger)**

[Value of scalene lymph node biopsy in the treatment plan of advanced cervix cancer] Di Paolo M, et al. **Geburtshilfe Frauenheilkd** 1990 Apr;50(4):310–3 (Eng. Abstr.) **(Ger)**

[Microinvasive stage Ia cancer of the uterine cervix—results of a multicenter clinic based analysis] Ebeling K, et al. **Geburtshilfe Frauenheilkd** 1989 Sep;49(9):776–81 (Eng. Abstr.) **(Ger)**

[Is consecutive curettage of the corpus uteri indicated in every conization case?] Kubista E, et al. **Geburtshilfe Frauenheilkd** 1990 Feb;50(2):118–21 (Eng. Abstr.) **(Ger)**

[Multifocal carcinoma of the upper female genital tract: diffuse Müllerian neoplasia] Scharl A, et al. **Geburtshilfe Frauenheilkd** 1990 Feb;50(2):158–60 (Eng. Abstr.) **(Ger)**

[The role of papillomaviruses in the etiology of cervix cancer] von Knebel Doeberitz M. **Geburtshilfe Frauenheilkd** 1990 Jul;50(7):511–7 (46 ref.) (Eng. Abstr.) **(Ger)**

[Human papillomavirus infection as an oncogenic factor in the pathogenesis of cervix cancer] Czerwenka KF, et al. **Gynakol Rundsch** 1989;29 Suppl 2:81–5 **(Ger)**

[The significance of human papillomavirus infection in cervix cancer and its preliminary stages (including other HPV-induced genital lesions)] Czerwenka KF, et al. **Gynakol Rundsch** 1989;29 Suppl 3:44–53 (Eng. Abstr.) **(Ger)**

[Cytologic signs of human papillomavirus infection in HIV-positive patients] Friedmann W, et al. **Gynakol Rundsch** 1989;29 Suppl 2:100–3 **(Ger)**

[Clinical significance of human papillomavirus infection] Girardi F, et al. **Gynakol Rundsch** 1989;29 Suppl 2:61–6 **(Ger)**

[Cervical intraepithelial glandular neoplasia (adenocarcinoma in situ) of the cervix] Heim K, et al. **Gynakol Rundsch** 1989; 29 Suppl 2:407–9 **(Ger)**

[Clinical and histologic findings in persistent PAP III D] Holböck E, et al. **Gynakol Rundsch** 1989;29 Suppl 2:75–8 **(Ger)**

[Increased incidence and value of cytologic findings PAP III D] Müller-Holzner E, et al. **Gynakol Rundsch** 1989;29 Suppl 2:73–5 **(Ger)**

[Analysis of PAP III D findings as a discussion principle for clinical consequences] Ortner A. **Gynakol Rundsch** 1989;29 Suppl 2:103–5 **(Ger)**

[Follow-up of papillomavirus-induced changes of the cervix in pregnancy] Rudolf K, et al. **Gynakol Rundsch** 1989;29 Suppl 2:85–8 **(Ger)**

[Transvaginal sonographic staging of cervix cancer] Sautter T, et al. **Gynakol Rundsch** 1989;29 Suppl 2:365–7 **(Ger)**

[The incidence of papillomavirus types 6/11 and 16/18 in cervix smears] Wartusch B, et al. **Gynakol Rundsch** 1989; 29 Suppl 2:79–81 **(Ger)**

[Detection of papillomavirus types 6/11, 16/18 and 31/33/35 using DNA/RNA hybridization. Initial experiences] Wartusch B, et al. **Gynakol Rundsch** 1989;29 Suppl 2:402–4 **(Ger)**

[Staging of cervix cancer using MRT] Einspieler R, et al. **ROFO** 1990 Jan;152(1):67–70 (Eng. Abstr.) **(Ger)**

[Clinical significance of HPV infection for cervix cancer] Girardi F. **Ther Umsch** 1989 Dec;46(12):847–54 (Eng. Abstr.) **(Ger)**

[Cervical intra-epithelial neoplasia] Heinzl S. **Ther Umsch** 1989 Dec;46(12):839–46 (25 ref.) (Eng. Abstr.) **(Ger)**

[Histomorphologic and catamnestic studies of 226 patients with cervical carcinoma in stage Ia in the years 1966 to 1986] Schumacher A, et al. **Zentralbl Allg Pathol** 1989; 135(7):639–48 (Eng. Abstr.) **(Ger)**

[Follow-up in cervix intra-epithelial neoplasia and condylomatous lesions of the uterine cervix] Barten G. **Zentralbl Gynakol** 1990;112(2):99–108 (Eng. Abstr.) **(Ger)**

[Infectious genital diseases and their significance in the development of cervix cancer and its precancerous conditions] Barten G. **Zentralbl Gynakol** 1990;112(7):431–5 (Eng. Abstr.) **(Ger)**

[Colposcopic, cyto- and histologic signs of papilloma virus infection in precancerous and early stages of cervix cancer] Barten G, et al. **Zentralbl Gynakol** 1990;112(1):23–31 (Eng. Abstr.) **(Ger)**

[The role of sexual activity in the development of precancerous and early stages of cervix cancer] Barten G. **Zentralbl Gynakol** 1990;112(3):143–50 (Eng. Abstr.) **(Ger)**

[Ultrastructural papilloma virus detection in precancerous and early stages of cervix cancer] Barten G. **Zentralbl Gynakol** 1990;112(1):33–8 (Eng. Abstr.) **(Ger)**

[What is the role of cigarette smoking and various methods of contraception in the development of cervix cancer and its precancerous conditions?] Barten G. **Zentralbl Gynakol** 1990;112(7):437–43 (Eng. Abstr.) **(Ger)**

[Biochemical changes in cervix mucus in stepwise malignant transformation of cervix epithelium] Elling D, et al. **Zentralbl Gynakol** 1990;112(9):555–60 (Eng. Abstr.) **(Ger)**

[Incidence, causes and follow-up of doubtful smear findings (Papanicolaou group III)] Hofmann R, et al. **Zentralbl Gynakol** 1989;111(23):1549–54 (Eng. Abstr.) **(Ger)**

[CIN (cervical intraepithelial neoplasia)—a challenge?] Link M. **Zentralbl Gynakol** 1990;112(3):121–2 **(Ger)**

[Malignant non-Hodgkin's lymphoma of the vaginal portion of the uterus] Gábor Z, et al. **Orv Hetil** 1989 Sep 24; 130(39):2097–8 (Eng. Abstr.) **(Hun)**

[Colposcopic evaluation of cervical epithelium during oral contraception. A controlled clinical study] Stillo A, et al. **Ann Ostet Ginecol Med Perinat** 1989 Nov–Dec; 110(6):296–304 (Eng. Abstr.) **(Ita)**

[Adenocarcinoma of the uterine cervix] Inoue Y, et al. **Gan No Rinsho** 1989 Oct;35(13):1610–4 (Eng. Abstr.) **(Jpn)**

[A case of malignant lymphoma of the uterine cervix] Murotsuki J, et al. **Gan No Rinsho** 1989 Nov;35(14):1716–20 (26 ref.) (Eng. Abstr.) **(Jpn)**

[In vitro combined effects of pirarubicin (THP) and various antitumor drugs on human tumor cell lines] Nagasawa M, et al. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 1):633–8 (Eng. Abstr.) **(Jpn)**

[Solitary ureteral metastasis from cervical cancer: a case report] Miura H, et al. **Hinyokika Kiyo** 1989 Sep; 35(9):1577–80 (17 ref.) (Eng. Abstr.) **(Jpn)**

[Immunohistochemical approach to reveal the growth potential of uterine cancers using anti-BrdU antibody and Ki-67] Yoshinouchi M. **Nippon Gan Chiryo Gakkai Shi** 1989 Dec 20;24(11):2513–21 (Eng. Abstr.) **(Jpn)**

[Study on chemosensitivity of colony forming cells] Morimitus H. **Nippon Hinyokika Gakkai Zasshi** 1990 Feb; 81(2):215–20 (Eng. Abstr.) **(Jpn)**

[Surgical management of pulmonary metastasis from carcinoma of the uterine cervix] Matsukuma K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Dec; 41(12):1911–5 (Eng. Abstr.) **(Jpn)**

[The incidence and clinical significance of paraaortic lymph node metastases in patients with uterine cervical cancer] Sakuragi N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jan;42(1):60–6 (Eng. Abstr.) **(Jpn)**

[In vitro studies of 5-FU sensitivity on uterine cervical cancer cell lines—comparison between squamous cell carcinoma and adenocarcinoma] Ueda M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Sep; 41(9):1423–30 (Eng. Abstr.) **(Jpn)**

[Malignant and premalignant lesions of the uterine cervix. Cytologic contribution to the diagnosis] Garborg I, et al. **Tidsskr Nor Laegeforen** 1990 Mar 10;110(7):823–6 (Eng. Abstr.) **(Nor)**

[Coexistence of multifocal bowen disease of the vulva and cervix carcinoma] Czekanowski R, et al. **Ginekol Pol** 1989

Apr;60(4):229–34 (Eng. Abstr.) **(Pol)**

[Comparative studies of 2 systems of early cyto-oncologic diagnosis of cervix erosion] Dudkiewicz J, et al. **Wiad Lek** 1989 May 1;42(9):584–9 (Eng. Abstr.) **(Pol)**

[Possibilities of cytologic and histologic methods of diagnosing flat condyloma of the cervix uteri] Andreev AI. **Akush Ginekol (Mosk)** 1990 Feb;(2):35–8 (Eng. Abstr.) **(Rus)**

[Immunohistochemical study of cells of invasive cancer of the vaginal part of the cervix uteri] Raĭchlin NT, et al. **Vopr Onkol** 1990;36(3):314–8 (Eng. Abstr.) **(Rus)**

[Clinical management of Class III Papanicolaou] Orozco Magaña I, et al. **Ginecol Obstet Mex** 1976 May; 39(235):375–81 (Eng. Abstr.) **(Spa)**

[Microinvasive carcinoma of the cervix and pregnancy. Diagnosis and treatment in 13 cases] Puente González H, et al. **Ginecol Obstet Mex** 1977 Jul;42(249):61–71 (16 ref.) (Eng. Abstr.) **(Spa)**

[Parametrial evaluation by puncture biopsy in recurrent uterine cervix cancer] Cabezón C, et al. **Rev Chil Obstet Ginecol** 1988;53(1):9–14 (Eng. Abstr.) **(Spa)**

[Co-existence of intraepithelial neoplasms of the uterine cervix and condyloma latum. Analysis of diagnostic distortions induced by condylomas] Norambuena L, et al. **Rev Chil Obstet Ginecol** 1988;53(1):57–63 (Eng. Abstr.) **(Spa)**

[Cervicovaginal cytologic results in nulliparous and multiparous patients. Incidence of infections and cervical intraepithelial neoplasms] Audisio T, et al. **Rev Fac Cien Med Univ Nac Cordoba** 1988;46(1):19–20 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Labelling index of gynaecological tumours assessed by bromodeoxyuridine staining in vitro using flow cytometry and histochemistry. Gasinska A, et al. **Int J Radiat Biol** 1989 Nov;56(5):793–6

PREVENTION & CONTROL

An approach to the problem of false negatives in gynecologic cytologic screening. Hindman WM. **Acta Cytol** 1989 Nov–Dec;33(6):814–8

Screening for cervical cancer. The U.S. Preventive Services Task Force. **Am Fam Physician** 1990 Mar;41(3):853–7 (37 ref.)

Improving pap smears [letter; comment] Loeb RA. **Am Fam Physician** 1989 Dec;40(6):48, 50 Comment on: Am Fam Physician 1989 Jun;39(6):109–14.

Cervical screening in general practice [letter] **BMJ** 1990 Jul 28;301(6745):236–8

Making cervical screening work [letter; comment] **BMJ** 1989 Aug 19;299(6697):517 Comment on: BMJ 1989 Jun 24;298(6689):1662–4.

Cervical screening and family practitioner committee registers [letter] Beardow R, et al. **BMJ** 1989 Sep 23; 299(6702):792–3

Cervical screening and government policy [letter] Codling BW, et al. **BMJ** 1989 Sep 30;299(6703):855

Colposcopy services in West Midlands region [letter; comment] Davies LA. **BMJ** 1989 Nov 11;299(6709):1221 Comment on: BMJ 1989 Oct 7;299(6704):899–901.

Call and recall for cervical cytology screening [letter; comment] Masters N, et al. **BMJ** 1989 Aug 26; 299(6698):567 Comment on: BMJ 1989 Jul 15;299(6692):160–2.

Evaluation of a call programme for cervical cytology screening [letter] [published erratum appears in BMJ 1989 Sep 23;299(6702):796] [see comments] Shroff KJ. **BMJ** 1989 Aug 26;299(6698):567 Comment in: BMJ 1989 Sep 30;299(6703):855.

Cervical screening and government policy [letter; comment] Tankel JW. **BMJ** 1989 Aug 12;299(6696):458 Comment on: BMJ 1989 Jul 8;299(6691):101–4.

Evaluation of a call programme for cervical cytology screening [letter; comment] Waugh NR, et al. **BMJ** 1989 Sep 30;299(6703):855 Comment on: BMJ 1989 Aug 26;299(6698):567.

Cervical cytology in the Vale of Trent faculty of the Royal College of General Practitioners, 1985–8. Wilson A. **BMJ** 1990 Feb 10;300(6721):376–8

Cytologic screening for cancer of the uterine cervix in Sweden evaluated by identification and simulation. Gustafsson L, et al. **Br J Cancer** 1990 Jun;61(6):903–8

Cervical cancer screening [letter] van Oortmarrsen GJ, et al. **Br J Cancer** 1990 Aug;62(2):333–5

The accuracy of repeat cytology in women with mildly dyskaryotic smears. Giles JA, et al. **Br J Obstet Gynaecol** 1989 Sep;96(9):1067–70

Chemopreventive action of garlic on methylcholanthrene-induced carcinogenesis in the uterine cervix of mice. Hussain SP, et al. **Cancer Lett** 1990 Feb; 49(2):175–80

Cytologic screening for the detection of cancer in the uterine cervix—a survey in Patna (India). Mishra NK, et al. **Cancer Lett** 1990 Jun 30;52(1):21–7

Accuracy of screening for cervical cancer in Taiwan, 1974–1984. Chou P, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Mar;45(3):147–56

Women's knowledge and experience of cervical screening: a failure of health education and medical organization. Schwartz M, et al. **Community Med** 1989 Nov;11(4):279–89

Cervical screening in the workplace. Thornton J, et al. **Community Med** 1989 Nov;11(4):290–8

Implications of preventive health behaviour for cervical and breast cancer screening programmes: a review. Bowling A. **Fam Pract** 1989 Sep;6(3):224–31 (97 ref.)

Cervical-cancer screening: attendance and cost-effectiveness. Koopmanschap MA, et al. **Int J Cancer** 1990 Mar 15;45(3):410–5

Cytological screening history of patients with early invasive cervical cancer. Turner MJ, et al. **Ir Med J** 1990 Jun; 83(2):61–2

Factors associated with inadequate cervical cancer screening among lower income primary care patients. Lerman C, et al. **J Am Board Fam Pract** 1990 Jul–Sep;3(3):151–6

In situ/invasive cervical cancer ratios: impact of cancer education and screening. Foster JD, et al. **J Cancer Educ** 1988;3(2):121–5

Readability of the public education literature on cancer prevention and detection. Michielutte R, et al. **J Cancer Educ** 1990;5(1):55–61

Identification of community leadership in the development of public health education programs. Michielutte R, et al. **J Community Health** 1990 Feb;15(1):59–68

Cervical cancer screening and registration—are they working? Choyce A, et al. **J Epidemiol Community Health** 1990 Mar;44(1):52–4

Screening for cancer of the cervix [see comments] Day NE. **J Epidemiol Community Health** 1989 Jun;43(2):103–6 (8 ref.) Comment in: J Epidemiol Community Health 1989 Dec;43(4):398.

A centralised cytology screening programme for cervical cancer in Florence. Palli D, et al. **J Epidemiol Community Health** 1990 Mar;44(1):47–51

Pap tests of rural black women. Sawyer JA, et al. **J Gen Intern Med** 1990 Mar–Apr;5(2):115–9

Medicare to help pay for cervical cancer screening every 3 years [news] **J Natl Cancer Inst** 1990 Aug 1;82(15):1242–3

Subcommittee hears testimony on breast and cervical cancer screening bill [news] Steele JA. **J Natl Cancer Inst** 1990 Jun 6;82(11):906

Trends in the organization of cervical cancer screening. Haran D, et al. **J R Soc Health** 1990 Feb;110(1):17–9

Problems of follow-up for abnormal cervical smears: discussion paper. Ellman R. **J R Soc Med** 1990 Feb; 83(2):94–5

Value of repeat cytology at the time of colposcopy for the evaluation of cervical intraepithelial neoplasia on Papanicolaou smears. Wheelock JB, et al. **J Reprod Med** 1989 Oct;34(10):815–7

How good is the pap smear? [letter; comment] **J S C Med Assoc** 1990 Feb;86(2):117–9 Comment on: J S C Med Assoc 1989 Oct;85(10):459–62.

From the Centers for Disease Control. Cervical cancer control—Rhode Island. **JAMA** 1989 Oct 20;262(15):2075–6

Long-term mass screening in uterine cervical carcinoma eradication strategy. Shiromizu K, et al. **Jpn J Clin Oncol** 1990 Jun;20(2):134–8

Cervical screening in the elderly [letter] **Lancet** 1990 Mar 31;335(8692):796

Screening for cancer of the cervix in elderly women [see comments] Fletcher A. **Lancet** 1990 Jan 13;335(8681):97–9 (34 ref.) Comment in: Lancet 1990 Feb 10;335(8685):357. Comment in: Lancet 1990 Mar 3;335(8688):554.

Effects of halting a cervical screening programme [letter] Jensen PB, et al. **Lancet** 1990 Jun 23;335(8704):1523

Screening for cancer of the cervix in elderly women [letter; comment] Johnson DB, et al. **Lancet** 1990 Mar 3; 335(8688):554 Comment on: Lancet 1990 Jan 13;335(8681):97–9.

Screening for cervical cancer in elderly women [letter; comment] Lewis LS. **Lancet** 1990 Feb 10;335(8685):357 Comment on: Lancet 1990 Jan 13;335(8681):97–9.

Compliance behavior in women with abnormal pap smears. Developing and testing a decision model. Paskett ED, et al. **Med Care** 1990 Jul;28(7):643–56

General practitioners and the provision of Papanicolaou smear-tests: current practice, knowledge and attitudes. Bowman JA, et al. **Med J Aust** 1990 Feb 19;152(4):178–83

Increasing cervical screening in women of more than 40 years of age: an intervention in general practice. Cockburn J, et al. **Med J Aust** 1990 Feb 19;152(4):190–4

Adequacy of the cell sample in cervical cytology [letter] Medley G, et al. **Med J Aust** 1990 Jan 15;152(2):109–10

Screening for cervical carcinoma. Warner CA, et al. **Med Lab Sci** 1989 Jul;46(3):215–22 (28 ref.)

Sandra Coney and the National Women's Hospital affair [letter] **N Z Med J** 1990 Aug 8;103(895):378

Treatment protocols [letter; comment] Durham G. **N Z Med J** 1990 Jun 13;103(891):279 Comment on: N Z Med J 1990 Mar 28;103(886):138.

An audit of a cervical smear screening programme. Moodie PJ, et al. **N Z Med J** 1989 Jul 26;102(872):374–6

How not to organise a cervical screening programme. Skegg DC. **N Z Med J** 1989 Oct 11;102(877):527–8

Single application treatment of human papillomavirus infection of the cervix and vagina with trichloroacetic acid: a randomized trial. Boothby RA, et al. **Obstet Gynecol** 1990 Aug;76(2):278–80

Papanicolaou smear screening interval and risk of cervical cancer. Shy K, et al. **Obstet Gynecol** 1989 Dec;74(6):838–43

Duration of relative protection of screening for cervical cancer. Celentano DD, et al. **Prev Med** 1989 Jul; 18(4):411–22 (43 ref.)

Inner-city women at risk for cervical cancer: behavioral and utilization factors related to inadequate screening. Mamon JA, et al. **Prev Med** 1990 Jul;19(4):363–76

Development of a contingency recruitment plan for a phase III chemoprevention trial of cervical dysplasia. Loescher LJ, et al. **Prog Clin Biol Res** 1990;339:151–63

An urban community-based cancer prevention screening and health education intervention in Chicago. Lacey LP, et al. **Public Health Rep** 1989 Nov–Dec;104(6):536–41

Development of a community cancer education program: the Forsyth County, NC cervical cancer prevention project. Michielutte R, et al. **Public Health Rep** 1989 Nov–Dec; 104(6):542–51

The 'Pap' or cervical smear and the role of colposcopy in screening for carcinoma of the cervix. Singh P, et al. **Singapore Med J** 1989 Jun;30(3):302–5 (9 ref.)

Knowledge and attitudes about cervical cancer and the Pap smear among 10th-grade girls. Sharp PC, et al. **South Med J** 1990 Sep;83(9):1016–8

An attempt to increase compliance to cervical cancer screening through general practitioners. Cecchini S, et al. **Tumori** 1989 Dec 31;75(6):615–8

Pattern of cervical screening utilization in Italy. Ferraroni M, et al. **Tumori** 1989 Oct 31;75(5):420–2

Rome women's screening study: knowledge, attitudes and practices of women regarding screening for breast and cervical cancer. Perucci CA, et al. **Tumori** 1990 Aug 31; 76(4):365–9

[The use of the cervix brush for early diagnosis of cervix uteri cancer: quality of the smear] Weyler J, et al. **Arch Belg** 1989;47(1–4):81–4 (Eng. Abstr.) **(Dut)**

[Analysis of the routine control colposcopic findings, of the preventive gynecological oncology service] Beolchi S, et al. **Minerva Ginecol** 1989 Oct;41(10):509–13 (Eng. Abstr.) **(Ita)**

PSYCHOLOGY

Anxiety caused by abnormal result of cervical smear test: a controlled trial. Wilkinson C, et al. **BMJ** 1990 Feb 17; 300(6722):440

Medical psychiatric rounds on a gynecologic oncology service: end-stage cervical carcinoma in a Jehovah's Witness refusing treatment [clinical conference] Gise LH, et al. **Gen Hosp Psychiatry** 1989 Sep;11(5):372–6

Host moderator variables in the promotion of cervical neoplasia—II. Dimensions of life stress. Antoni MH, et al. **J Psychosom Res** 1989;33(4):457–67

Message framing, dispositional optimism, and follow-up for abnormal Papanicolaou tests. Lauver D, et al. **Res Nurs Health** 1990 Jun;13(3):199–207

RADIOGRAPHY

Diagnostic value of lymphography in cervical cancer stage Ib. Boie H, et al. **Eur J Gynaecol Oncol** 1989;10(6):393–5

Direct lymphadenography of the cervix: personal data. Garriba AP, et al. **Eur J Gynaecol Oncol** 1983;4(3):234–6

Computed tomography in the evaluation of clinical stage IB carcinoma of the cervix. Parker LA, et al. **Gynecol Oncol** 1990 Jun;37(3):332–4

Cystic pelvic mass in a patient having recurrent carcinoma of the cervix. Eising EG, et al. **Invest Radiol** 1990 Feb; 25(2):205–8

[Computed tomography for the assessment of pelvic lymph node metastasis in cases of uterine cervical carcinoma] Yokoyama T, et al. **Gan No Rinsho** 1990 Mar;36(4):495–8 (Eng. Abstr.) **(Jpn)**

RADIOTHERAPY

Three new primary pelvic carcinomas in a patient following radiotherapy for carcinoma of the cervix. Case report. Gatzen C, et al. **Acta Chir Scand** 1990 Feb;156(2):183–6

Second primary cancer after treatment of invasive carcinoma of the uterine cervix, compared with those arising after treatment for in situ carcinomas. An effect of irradiation? A cancer registry study. Pettersson F, et al. **Acta Obstet Gynecol Scand** 1990;69(2):161–74

Relationship between kerma and treatment volume in intracavitary radiation therapy. Ragnhult I, et al. **Acta Oncol** 1990;29(3):307–12

Experimental radioimmunotherapy of HeLa tumours in nude mice with 131I-labeled monoclonal antibodies. Riklund KE, et al. **Anticancer Res** 1990 Mar–Apr;10(2A):379–84

Early post-irradiation bowel obstruction managed by longitudinal serotomy. Wilkinson S. **Aust N Z J Surg** 1990 Feb;60(2):136–8

Topical infusion of metronidazole in the radiotherapy of tumours of the uterine cervix: interim report on the 2 year survival. Balmukhanov SB, et al. **Br J Radiol** 1990 Jun; 63(750):499–500

Clinical study of relative biological effectiveness for cervical carcinoma treated by 252Cf neutrons and assessed by histological tumour eradication. Maruyama Y, et al. **Br J Radiol** 1990 Apr;63(748):270–7

Phase II randomized clinical trial of LC9018 concurrently used with radiation in the treatment of carcinoma of the uterine cervix. Its effect on tumor reduction and histology. Okawa T, et al. **Cancer** 1989 Nov 1;64(9):1769–76

Extended-field radiation therapy for carcinoma of the cervix. Podczaski E, et al. **Cancer** 1990 Jul 15;66(2):251–8

Clear cell adenocarcinoma of the cervix and vaginal vault of mesonephric origin. Truskett ID, et al. **Cancer** 1968 Feb; 21(2):249–54

Rhabdomyosarcoma following radiation therapy for cervical carcinoma—a case report. Lee CL, et al. **Chang Keng I Hsueh** 1990 Mar 20;13(1):65–71

Radiological changes in the gastrointestinal and genitourinary tract following radiotherapy for carcinoma of the cervix. Taylor PM, et al. **Clin Radiol** 1990 Mar;41(3):165–9

Radiation therapy of the para-aortic lymph nodes in carcinoma of the uterine cervix: the concurrent use of cimetidine to reduce acute and subacute side effects from radiation. Teshima T, et al. **Clin Ther** 1990 Jan–Feb; 12(1):71–7

Chlamydia trachomatis in cervical uterine irradiated cancer patients. Maeda MY, et al. **Diagn Cytopathol** 1990;6(2):86–8

Fever, haemoglobin and smoking as prognostic factors during the treatment of cervical carcinoma by radiotherapy. Solberger O, et al. **Eur J Gynaecol Oncol** 1990;11(2):97–102

Results of radiotherapy of cervix cancer stage IB depending on the techniques of intracavitary gamma-therapy. Vishnevskaya EE. **Eur J Gynaecol Oncol** 1989;10(5):302–7

Fluid detection in the uterus during and after irradiation for carcinoma of the cervix—clinical implications. Aartsen EJ. **Eur J Surg Oncol** 1990 Feb;16(1):42–6

On a combined radiological treatment—percutaneously with 60Co and intracavitary with 137Cs, in patients with carcinoma of the cervix. Yaneva M, et al. **Folia Med (Plovdiv)** 1988;30(3):36–8

Endometrial response to endogenous hormones after pelvic irradiation for genital malignancies. Larson JE, et al. **Gynecol Oncol** 1990 Jan;36(1):106–9

Effect of intracavitary radiotherapy on tumor-associated trypsin inhibitor (TATI) in patients with cervical and endometrial cancer. Lehtovirta P, et al. **Gynecol Oncol** 1990 Jul;38(1):110–3

Serum squamous cell carcinoma antigen in the monitoring of radiotherapy treatment response in carcinoma of the cervix. Ngan HY, et al. **Gynecol Oncol** 1990 May; 37(2):260–3

Vaginal radiation brachytherapy to reduce central recurrence after radical hysterectomy for cervical carcinoma. Photopulos GJ, et al. **Gynecol Oncol** 1990 Aug;38(2):187–90

Adjuvant radiotherapy following radical hysterectomy for patients with stage IB and IIA cervical cancer. Soisson AP, et al. **Gynecol Oncol** 1990 Jun;37(3):390–5

Outcome of recurrent cervical carcinoma following definitive irradiation. Sommers GM, et al. **Gynecol Oncol** 1989 Nov; 35(2):150–5

Long-term follow-up of potentiation of radiotherapy by cis-platinum in advanced cervical cancer. Wong LC, et al. **Gynecol Oncol** 1989 Nov;35(2):159–63

Carcinoma of the uterine cervix stage IB and early stage II. Prognostic value of the histological tumor regression after initial brachytherapy. Calais G, et al. **Int J Radiat Oncol Biol Phys** 1989 Dec;17(6):1231–5

Radiation alone in the treatment of cancer of the uterine cervix: analysis of pelvic failure and dose response relationship. Kim RY, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):973–8

Dosimetric analysis in brachytherapy of carcinoma of the cervix. Krishnan L, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):965–70

Applicator for use of cesium-137 miniaturized tube sources in the treatment of uterine cervix cancer. Kumar PP, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1509–11

Persisting cyclical uterine bleeding in patients treated with radical radiation therapy and hormonal replacement for carcinoma of the cervix. McKay MJ, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr;18(4):921–5

Regeneration in cervix cancer after 252Cf neutron brachytherapy. Maruyama Y, et al. **Int J Radiat Oncol Biol Phys** 1990 Jul;19(1):61–7

The effect of applicator geometry on dose specification in cervical cancer. Potish RA. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1513–20

A CT-compatible version of the Fletcher system intracavitary applicator: clinical application and 3-dimensional treatment planning. Schoeppel SL, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov;17(5):1103–9

Dose calculation and measurements for a CT compatible version of the Fletcher applicator. Weeks KJ, et al. **Int J Radiat Oncol Biol Phys** 1990 May;18(5):1191–8

The usefulness of ultrasonography in intracavitary radiotherapy using selectron applicators. Wong F, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):477–82

Combined radiotherapy and hysterectomy in the treatment of high risk stage II invasive carcinoma of the uterine cervix: a preliminary report. Kraiphibul P, et al. **J Med Assoc Thai** 1990 Feb;73 Suppl 1:23–7

Epithelial ovarian cancer following cure of cervical carcinoma (a case report). Charak BS, et al. **J Postgrad Med** 1989 Jul;35(3):178–9

Radiation therapy in the treatment of cervical cancer: the University of Chicago/Michael Reese Hospital experience. Rader JS, et al. **J Surg Oncol** 1990 Jul;44(3):157–65

Clinical patterns and treatment complications of 1000 cases of carcinoma of the uterine cervix. Azhar T, et al. **Med J Malaysia** 1989 Jun;44(2):104–10

Tissue doses from radiotherapy of cancer of the uterine cervix. Stovall M, et al. **Med Phys** 1989 Sep–Oct; 16(5):726–33

Radiation associated eosinophilia and monocytosis in carcinoma of the uterine cervix: a simple reliable clinical and prognostic indicator. Radhakrishna Pillai M, et al. **Neoplasma** 1990;37(1):91–6

Calculation of radiation doses in critical organs compared with in vivo dosimetry during brachytherapy of carcinoma of the uterine cervix. Rašovská O, et al. **Neoplasma** 1990; 37(2):205–11

A case of carcinoma of the rectum after radiotherapy for carcinoma of the cervix. Hareyama M, et al. **Radiat Med** 1989 Jul–Aug;7(4):197–200

Complications of radiotherapy of uterine cervix carcinoma. Rašovská O, et al. **Radiobiol Radiother (Berl)** 1990; 31(1):85–91

The effect of 3-aminobenzamide in the radiation response of three human cervix carcinoma xenografts. Kelland LR, et al. **Radiother Oncol** 1989 Aug;15(4):363–9

A comparison of the in vivo and in vitro radiation response of three human cervix carcinomas [published erratum appears in Radiother Oncol 1989 Oct;16(2):157] Tonkin KS, et al. **Radiother Oncol** 1989 Sep;16(1):55–63

Cure of cervical cancer using 252Cf neutron brachytherapy. Maruyama Y, et al. **Strahlenther Onkol** 1990 May; 166(5):317–21

Analysis of the dose-volume histogram in uterine cervical cancer by diagnostic CT. Mizoe J. **Strahlenther Onkol** 1990 Apr;166(4):279–84

Neutron therapy of locally advanced uterine cervix carcinoma at Louvain-la-Neuve. Richard F, et al. **Strahlenther Onkol** 1990 Jan;166(1):69–71

Effect of small doses of 252Cf on the tumour regression in cervix uteri during combined radiotherapy. Tačev T, et al. **Strahlenther Onkol** 1989 Dec;165(12):837–43

Bartholin's gland mixed carcinoma predominantly of the transitional cell type following radiotherapy for a cervical carcinoma. Sieński W, et al. **Zentralbl Allg Pathol** 1990; 136(3):265–8

[Relationship between central recurrence and time-dose factors in patients with carcinoma of uterine cervix after radiotherapy] Gao JZ. **Chung Hua Chung Liu Tsa Chih** 1989 Sep;11(5):394–7 (Eng. Abstr.) **(Chi)**

[Afterloading technique for carcinoma of the uterine cervix] Sun JH. **Chung Hua Chung Liu Tsa Chih** 1989 May; 11(3):211–2 (Eng. Abstr.) **(Chi)**

[Regression of cervix uteri neoplasms in combined radiotherapy using low dose gamma-neutron irradiation] Tačev T, et al. **Cesk Radiol** 1989 Aug;43(4):258–66 (Eng. Abstr.) **(Cze)**

[Inflammatory carcinoma of the uterine cervix. Review of 9 cases] Bolla M, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(2):187–91 (Eng. Abstr.) **(Fre)**

[Primary irradiated adenocarcinoma of the uterine cervix] Vavra N, et al. **Gynakol Rundsch** 1989;29 Suppl 2:409–11 **(Ger)**

[Functional changes in the lower urinary tract after irradiation of cervix carcinoma] Behr J, et al. **Strahlenther Onkol** 1990 Feb;166(2):135–9 (Eng. Abstr.) **(Ger)**

[The monitoring of gynecological radiotherapy using serial tumor marker determinations] Wagner RK, et al. **Strahlenther Onkol** 1990 Jul;166(7):446–52 (Eng. Abstr.) **(Ger)**

[A risk score for surgically treated stage Ib cervix carcinoma and its significance for postoperative irradiation] Kucera H, et al. **Wien Klin Wochenschr** 1990 Aug 3;102(15):432–7 (Eng. Abstr.) **(Ger)**

[Study of prognostic factors in patients with cervix carcinoma treated by radiotherapy] Fukuhisa K. **Gan No Rinsho** 1989 Oct;35(13):1603–9 (Eng. Abstr.) **(Jpn)**

[Prediction of radiosensitivity by DNA analysis] Kubota S, et al. **Gan No Rinsho** 1989 Oct;35(13):1572–5 (Eng. Abstr.) **(Jpn)**

[High-dose intracavitary brachytherapy of a recurrent cervical cancer following surgery] Kumagaya H, et al. **Gan No Rinsho** 1990 Jan;36(1):51–6 (Eng. Abstr.) **(Jpn)**

[Development of a cancer of the large bowel following radiotherapy for cancer of the uterine cervix] Tomoda H, et al. **Gan No Rinsho** 1989 Dec;35(15):1749–52 (Eng. Abstr.) **(Jpn)**

[Radiotherapy of uterine cervix carcinoma] Okuhata Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Oct 20; 24(10):2381–5 (Eng. Abstr.) **(Jpn)**

[Radiotherapy of carcinoma of the uterine cervix—high dose rate intracavitary irradiation using a linear source arrangement] Matsuoka Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Mar 25; 50(3):271–7 (Eng. Abstr.) **(Jpn)**

[Injuries of the sigmoid colon following radiation therapy of carcinoma of the uterine cervix—a method of estimating the radiation dose to the sigmoid colon] Okuhata Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Mar 25; 50(3):262–70 (Eng. Abstr.) **(Jpn)**

[Carcinoma of the uterine cervix treated with TAO low-dose rate intracavitary radiation] Horiuchi J, et al. **Rinsho Hoshasen** 1989 Nov;34(12):1483–6 (Eng. Abstr.) **(Jpn)**

[Radiation load of patients under maximum dose radiotherapy (Ra226 and Co60) of cervical cancer. Comparison of three techniques of external field irradiation] Kożuch-Gdak W. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:67–71 (Eng. Abstr.) **(Pol)**

[Influence of brachytherapy on the behavior of immunologic circulating complexes in the blood serum of patients with cervix cancer] Dziewulska-Bokiniec A, et al. **Nowotwory** 1989 Jul–Dec;39(3–4):171–5 (Eng. Abstr.) **(Pol)**

[Lymphangiosarcoma of the leg following radiotherapy for cervical carcinoma] Kopacz A, et al. **Wiad Lek** 1989 May 15;42(10):682–4 (Eng. Abstr.) **(Pol)**

[The effect of metronidazole on the radiosensitivity of cancer of the uterine cervix] Balmukhanov SB, et al. **Med Radiol (Mosk)** 1989 Oct;34(10):44–8 (Eng. Abstr.) **(Rus)**

[Radiation pathomorphosis of experimental squamous cell cancer during mono- and polyradiomodifications] Krashevskiĭ SV, et al. **Med Radiol (Mosk)** 1990 Feb; 35(2):35–8 (Eng. Abstr.) **(Rus)**

[Early results of hypoxyradiotherapy of cancer of the uterine cervix] Tachev T, et al. **Med Radiol (Mosk)** 1990 Mar; 35(3):9–11 **(Rus)**

[Multiple primary vaginal tumors following the radiation treatment of cervical cancer] Filatova EI. **Vopr Onkol** 1990; 36(6):726–9 (Eng. Abstr.) **(Rus)**

[The results of the radiation treatment of cervical cancer using low, sensitizing doses of radiation] Iakimova TP, et al. **Vopr Onkol** 1990;36(6):678–82 (Eng. Abstr.) **(Rus)**

[Effectiveness of radiotherapy of patients with cancer of the cervix uteri at the Central Research Roentgeno-Radiological Institute of the USSR Ministry of Health] Kholin VV, et al. **Vopr Onkol** 1989; 35(12):1476–9 (Eng. Abstr.) **(Rus)**

[Use of optimizing programs of dosimetric planning in radiotherapy of gynecologic cancer] Ushakova GA. **Vopr Onkol** 1990;36(3):355–9 (Eng. Abstr.) **(Rus)**

SECONDARY

Metastatic breast carcinoma in the pelvis. Taylor WG, et al. **Br J Clin Pract** 1990 May;44(5):205–6

Abnormal cervical cytology leading to the diagnosis of gastric cancer. McGill F, et al. **Gynecol Oncol** 1990 Jan; 36(1):101–5 (15 ref.)

Management of endometrial cancer with suspected cervical involvement. Mannel RS, et al. **Obstet Gynecol** 1990 Jun; 75(6):1016–22

[Malignant melanoma of the uterine cervix (letter)] Rodier JF, et al. **J Chir (Paris)** 1990 Mar;127(3):174–5 (15 ref.) **(Fre)**

SECRETION

Mucin leakage into the cervical stroma may increase lymph node metastasis in mucin-producing cervical adenocarcinomas. Konishi I, et al. **Cancer** 1990 Jan 15; 65(2):229–37

SURGERY

Cryotherapy during pregnancy. Matányi S. **Acta Chir Hung** 1989;30(4):325–31

Change of tissue temperature of the uterine cervix during double freezing. Matányi S. **Acta Chir Hung** 1989; 30(4):319–24

Cryotherapy and CO2-laser vaporization in the treatment of cervical and vaginal human papillomavirus (HPV) infections. Yliskoski M, et al. **Acta Obstet Gynecol Scand** 1989;68(7):619–25

Pelvic and paraaortic lymphocysts after radical surgery because of cervical and ovarian cancer. Petru E, et al. **Am J Obstet Gynecol** 1989 Oct;161(4):937–41

Treatment of cervical intraepithelial neoplasia: experience with the low-voltage diathermy loop. Whiteley PF, et al. **Am J Obstet Gynecol** 1990 May;162(5):1272–7

Selective salvage surgery in gastrointestinal and gynaecological cancer. Allum WH, et al. **Ann R Coll Surg Engl** 1990 Jan;72(1):2–5

The efficacy of electrocoagulation diathermy performed under local anaesthesia for the eradication of precancerous lesions of the cervix. Chanen W. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 Pt 1):189–92

Surgery for gynaecological cancer: results since the introduction of radical operations. Hacker NF. **Aust N Z J Obstet Gynaecol** 1990 Feb;30(1):24–8

Loop diathermy excision [letter] **BMJ** 1990 Aug 11; 301(6747):343

Loop diathermy excision of the cervical transformation zone in patients with abnormal cervical smears. Luesley DM, et al. **BMJ** 1990 Jun 30;300(6741):1690–3

How frequently need vaginal smears be taken after hysterectomy for cervical intraepithelial neoplasia? Gemmell J, et al. **Br J Obstet Gynaecol** 1990 Jan; 97(1):58–61

Large loop excision of the transformation zone (LLETZ). A new method of management for women with cervical intraepithelial neoplasia. Prendiville W, et al. **Br J Obstet Gynaecol** 1989 Sep;96(9):1054–60

Retrospective evaluation of recurrence after radical abdominal hysterectomy in patients with cervical carcinoma. Dave K, et al. **Eur J Gynaecol Oncol** 1990; 11(1):67–73

Radical hysterectomy in cervical carcinoma stage Ib. Høyer M, et al. **Eur J Gynaecol Oncol** 1990;11(1):13–7

Feasibility of transposition of the ovaries in the surgical and radiotherapeutical treatment of cervical cancer. van Beurden M, et al. **Eur J Surg Oncol** 1990 Apr;16(2):141–6

Preliminary evaluation of cold coagulation as a treatment for cervical intraepithelial neoplasia in a department of genitourinary medicine [letter] Coker DM, et al. **Genitourin Med** 1990 Feb;66(1):44

Identification of prognostic factors and risk groups in patients found to have nodal metastasis at the time of radical hysterectomy for early-stage squamous carcinoma of the cervix. Alvarez RD, et al. **Gynecol Oncol** 1989 Nov; 35(2):130–5

The efficacy of laser therapy in the treatment of cervical intraepithelial neoplasia. Higgins RV, et al. **Gynecol Oncol** 1990 Jan;36(1):79–81

Invasive cervical cancer treated initially by standard hysterectomy. Hopkins MP, et al. **Gynecol Oncol** 1990 Jan; 36(1):7–12

Significance of positive endocervical curettage in predicting endocervical canal involvement in patients with cervical intraepithelial neoplasia. Husseinzadeh N, et al. **Gynecol Oncol** 1989 Dec;35(3):358–61

The correlation between dysmenorrhea and the pain experienced during laser ablation of a cervical lesion. Johnson N, et al. **Gynecol Oncol** 1990 Feb;36(2):215–6

Role of centralization of surgery in Stage IB carcinoma of the cervix: a review of 498 cases. Monaghan JM, et al. **Gynecol Oncol** 1990 May;37(2):206–9

Ovarian management at the time of radical hysterectomy for cancer of the cervix. Owens S, et al. **Gynecol Oncol** 1989 Dec;35(3):349–51

Renal agenesis with crossed ectopia diagnosed during radical hysterectomy. Patsner B, et al. **Gynecol Oncol** 1990 Jun; 37(3):443–4

Surgical intervention following multimodality therapy for advanced cervical cancer. Potish RA, et al. **Gynecol Oncol** 1990 Aug;38(2):175–80

Optimal therapy for pelvic recurrence after radical hysterectomy for early-stage cervical cancer. Potter ME, et al. **Gynecol Oncol** 1990 Apr;37(1):74–7

Early invasive cervical cancer with pelvic lymph node involvement: to complete or not to complete radical hysterectomy? Potter ME, et al. **Gynecol Oncol** 1990 Apr; 37(1):78–81

The role of surgical debulking in cancer of the uterine cervix. Potish RA, et al. **Int J Radiat Oncol Biol Phys** 1989 Nov; 17(5):979–84

Distant metastases following surgical treatment of cervical carcinoma. Foley M, et al. **Ir Med J** 1990 Jun;83(2):62–4

Radical hysterectomy: Srinagarind Hospital. Pothinam S, et al. **J Med Assoc Thai** 1989 Aug;72(8):441–7

Diathermy loop excision and the cervix [letter; comment] Hallam N, et al. **Lancet** 1989 Nov 11;2(8672):1160 Comment on: Lancet 1989 Aug 19;2(8660):453–4.

Analysis of cryolesions in the uterine cervix: application techniques, extension, and failures. Boonstra H, et al. **Obstet Gynecol** 1990 Feb;75(2):232–9

Pelvic lymphocele following radical para-aortic and pelvic lymphadenectomy for cervical carcinoma: incidence rate and percutaneous management. Conte M, et al. **Obstet Gynecol** 1990 Aug;76(2):268–71

The clinical significance of blood transfusion at the time of radical hysterectomy. Eisenkop SM, et al. **Obstet Gynecol** 1990 Jul;76(1):110–3

Laser vaporization versus laser excision conization in the treatment of cervical intraepithelial neoplasia [letter; comment] Schink JC. **Obstet Gynecol** 1989 Oct;74(4):681–2 Comment on: Obstet Gynecol 1989 May;73(5 Pt 1):775–9.

Cervical os obliteration after laser surgery in patients with amenorrhea. Spitzer M, et al. **Obstet Gynecol** 1990 Jul; 76(1):97–100

Wertheim's operation—a study of 130 cases. Cheng MC. **Singapore Med J** 1989 Feb;30(1):55–9

Role of surgery in the treatment of cancer of the cervix. Cheng MC. **Singapore Med J** 1990 Jun;31(3):253–4

Cervical polyp presenting as inevitable abortion. Adinma JI. **Trop Doct** 1989 Oct;19(4):181

[A method for preventing the urologic complications connected with the surgical treatment of cancer of the cervix uteri] Kŭrlov T, et al. **Akush Ginekol (Sofiia)** 1990; 29(1):55–7 (Eng. Abstr.) **(Bul)**

[The current principles of the surgical and combined treatments of cancer of the cervix uteri at the 1st clinical stage] Kŭrlov T, et al. **Akush Ginekol (Sofiia)** 1990; 29(1):71–4 (15 ref.) **(Bul)**

[Value of non-reperitonization for preventing lymphocele after extended lymphadeno-colpo-hysterectomy. Our experience in a comparative retrospective series of 124 cases] Caubel P, et al. **Ann Chir** 1989;43(7):525–9 (26 ref.) (Eng. Abstr.) **(Fre)**

[Electro-conization of the cervix uteri] Boulanger JC, et al. **Rev Fr Gynecol Obstet** 1989 Oct;84(10):663–72 (Eng. Abstr.) **(Fre)**

[Significance of the non-peritonization technic in extended lymphadenocolpohysterectomies in uterine cancer. Analysis and results in a series cases] Rodier JF, et al. **Rev Fr Gynecol Obstet** 1990 Apr;85(4):232–7 (Eng. Abstr.) **(Fre)**

[Results of surgical treatment of stage IIb cervix cancer] Friedberg V, et al. **Geburtshilfe Frauenheilkd** 1989 Sep; 49(9):782–6 (Eng. Abstr.) **(Ger)**

[Development of radical surgical technics in gynecology exemplified by ovarian and cervix cancer] Käser O. **Geburtshilfe Frauenheilkd** 1989 Dec;49(12):1025–30 (37 ref.) (Eng. Abstr.) **(Ger)**

[The value of cervix curettage in dysplasia of the cervix] Breuel C, et al. **Gynakol Rundsch** 1989;29 Suppl 2:67–72 **(Ger)**

[Prevention of hematomas and lymphoceles in radical surgery] Grünberger W, et al. **Gynakol Rundsch** 1989;29 Suppl 2:370–1 **(Ger)**

[Peritonealization following radical surgery of cervix cancer] Spernol R, et al. **Gynakol Rundsch** 1989;29 Suppl 2:367–70 **(Ger)**

[Interdisciplinary treatment measures in pulmonary metastasis of uterine cancer: initial results in 61 patients] Zink M, et al. **Pneumologie** 1990 Feb;44 Suppl 1:271–2 (Eng. Abstr.) **(Ger)**

[Diagnosis of angiologic function in unilateral leg edema following combined treatment of cervix cancer] Podhaisky H, et al. **Z Gesamte Inn Med** 1990 Jan 15;45(2):55–8 (Eng. Abstr.) **(Ger)**

[Does colposcopic and/or cytologic detection of HPV infection without signs of dysplasia require treatment, for example by cryotherapy, laser or trichloroacetic acid (Masviya et al.)?] Schneider A. **Zentralbl Gynakol** 1989; 111(14):1004–9 **(Ger)**

[Stage IB (FIGO) cervical carcinoma. Treatment and prognosis] Beretta P, et al. **Minerva Ginecol** 1989 Aug; 41(8):405–8 (Eng. Abstr.) **(Ita)**

[Lasers and genital (cervico-vulvo-vaginal) pathology] Giannone E, et al. **Minerva Ginecol** 1989 Oct;41(10):489–91 (Eng. Abstr.) **(Ita)**

[The diathermy loop and diathermic coagulation in the ambulatory treatment of intraepithelial cervical neoplasia] Zannoni E, et al. **Minerva Ginecol** 1990 Jan–Feb; 42(1–2):7–9 (Eng. Abstr.) **(Ita)**

[Cervical cancer] Izumi R, et al. **Gan To Kagaku Ryoho** 1990 Apr;17(4 Pt 2):749–55 (4 ref.) (Eng. Abstr.) **(Jpn)**

[Studies on pregnancy after CO2 laser conization for cervical intraepithelial neoplasia] Iwanari O, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Oct 20;24(10):2375–80 (Eng. Abstr.) **(Jpn)**

[A comparison between CO2 laser conization and cold knife conization in clinical diagnosis of cervical intraepithelial neoplasia] Iwanari O, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Nov; 41(11):1755–60 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of the treatment of early cervical neoplasia by carbon dioxide laser conization] Matsuo N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jan; 42(1):93–8 (Eng. Abstr.) **(Jpn)**

[Stump recurrence after radical hysterectomy for patients with uterine cervical cancer] Nakayama K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Mar;42(3):241–5 (Eng. Abstr.) **(Jpn)**

[Cervical cancer in pregnancy] Burda H, et al. **Ginekol Pol** 1989 Feb;60(2):113–8 (Eng. Abstr.) **(Pol)**

[Effects of low-temperature treatment of pathologic changes of the cervix uteri] Wojtyś A, et al. **Ginekol Pol** 1989 May; 60(5):276–9 (Eng. Abstr.) **(Pol)**

[Treatment of cervical and vulvar pathology using lasers of various intensities] Zaplavnova LD, et al. **Akush Ginekol (Mosk)** 1990 Feb;(2):63 **(Rus)**

[Combined surgery in cancer of the rectum] Gorshkov IuI, et al. **Sov Med** 1989;(7):100–2 **(Rus)**

THERAPY

Concurrent radiation therapy, cis-platinum, and mitomycin C in patients with poor prognosis cancer of the cervix: a pilot study. Malviya VK, et al. **Am J Clin Oncol** 1989 Oct;12(5):434–7

An analysis of adjuvant treatment strategies for carcinoma of the cervix. Potish RA, et al. **Am J Clin Oncol** 1989 Oct;12(5):430–3

Advanced cervical cancer therapy: concurrent radiation therapy and cisplatin chemotherapy for advanced cervical cancer—a toxicity report. Suggs CL 3d, et al. **Am J Clin Oncol** 1989 Dec;12(6):461–6

Adenocarcinoma of the uterine cervix. Leminen A, et al. **Cancer** 1990 Jan 1;65(1):53–9

The selective killing effect of special wavelength light in the treatment of human superficial cancer. Xu YL, et al. **Cancer** 1990 Jun 1;65(11):2482–7

Cutaneous lymphangiectases after therapy for carcinoma of the cervix—a case with unusual clinical and histological features. Ambrojo P, et al. **Clin Exp Dermatol** 1990 Jan; 15(1):57–9

Cervix uteri cancer and pregnancy. Bokhman JV, et al. **Eur J Gynaecol Oncol** 1989;10(6):406–11 (3 ref.)

Management of endometriosis in the infertile patient. Kistner RW. **Fertil Steril** 1975 Dec;26(12):1151–66 (42 ref.)

Cervical cancer: reflections of the professor. Averette HE. **Gynecol Oncol** 1990 Feb;36(2):157–60

Morbidity and survival patterns in patients after radical hysterectomy and postoperative adjuvant pelvic radiotherapy. Fiorica JV, et al. **Gynecol Oncol** 1990 Mar; 36(3):343–7

Adenocarcinoma of the cervical stump. Goodman HM, et al. **Gynecol Oncol** 1989 Nov;35(2):188–92

Sarcoma botryoides of the cervix: excision followed by adjuvant chemotherapy for preservation of reproductive function. Gordon AN, et al. **Gynecol Oncol** 1990 Jan; 36(1):119–24 (17 ref.)

20-year experience of follow-up of the abnormal smear with colposcopy and histology and treatment by conization or cryosurgery. Hellberg D, et al. **Gynecol Oncol** 1990 Aug; 38(2):166–9

Preliminary results of concurrent radiotherapy and chemotherapy in advanced cervical carcinoma: a phase I–II prospective intergroup NCOG–RTOG Study. John M, et al. **Gynecol Oncol** 1990 Apr;37(1):1–5

Immunotherapy using the streptococcal preparation OK–432 for the treatment of uterine cervical cancer. Cervical Cancer Immunotherapy Study Group. Noda K, et al. **Gynecol Oncol** 1989 Dec;35(3):367–72

Adjunctive radiation after radical hysterectomy in stage IB squamous cell carcinoma of the cervix. Remy JC, et al. **Gynecol Oncol** 1990 Aug;38(2):161–5

Topical treatment with human leukocyte interferon of HPV 16 infections associated with cervical and vaginal intraepithelial neoplasias. Yliskoski M, et al. **Gynecol Oncol** 1990 Mar;36(3):353–7

The management and treatment of an abnormal Pap smear. Hansell RS, et al. **Indiana Med** 1990 Jul;83(7):468–73 (0 ref.)

Carcinoma of the cervix and pregnancy. Baltzer J, et al. **Int J Gynaecol Obstet** 1990 Apr;31(4):317–23

Side-effects of local hyperthermia: results of a prospectively randomized clinical study. Sharma S, et al. **Int J Hyperthermia** 1990 Mar–Apr;6(2):279–85

Hydroxyurea plus pelvic irradiation versus placebo plus pelvic irradiation in nonsurgically staged stage IIIB cervical cancer. Piver M, et al. **J Surg Oncol** 1989 Oct; 42(2):120–5

Two microwave applicators for intracavitary hyperthermia treatment of cancer colli uteri. Roos D, et al. **Phys Med Biol** 1989 Dec;34(12):1917–21

Intraepithelial neoplasia of the lower genital tract. Nolte S, et al. **Semin Oncol Nurs** 1990 Aug;6(3):181–9 (57 ref.)

Cancer of the cervix. Thompson LJ. **Semin Oncol Nurs** 1990 Aug;6(3):190–7 (36 ref.)

[The importance of paraclinical indices, therapeutic and other factors for the late treatment results and prognosis in stage-Ib cervical cancer] Kŭrlov T, et al. **Akush Ginekol (Sofiia)** 1990;29(2):41–6 (Eng. Abstr.) **(Bul)**

[Long-term results of radio-surgical treatment of operable carcinoma of the cervix uteri] Lasry S, et al. **Bull Cancer (Paris)** 1990;77(4):355–62 (Eng. Abstr.) **(Fre)**

[Invasive cervix cancer stage I and II in women less than 35 years old] Moniez V, et al. **Rev Fr Gynecol Obstet** 1990 May;85(5):321–7 (107 ref.) (Eng. Abstr.) **(Fre)**

[Initial experiences with high-dosage afterloading short-term therapy combined with hyperthermia in non-operated cervix cancer] Schorcht J, et al. **Radiobiol Radiother (Berl)** 1989;30(4):386–90 (Eng. Abstr.) **(Ger)**

[Use of orgotein in the treatment of reactive damage to the use of high-energy radiation] Grio R, et al. **Minerva Ginecol** 1989 Aug;41(8):413–5 (Eng. Abstr.) **(Ita)**

[Preoperative intraarterial infusion chemotherapy in combination with angiotensin II pressor by BOAI method in cervical cancer] Kondoh T, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1788–92 (Eng. Abstr.) **(Jpn)**

[Therapy of recurrent cervical cancer] Sekiba K, et al. **Gan To Kagaku Ryoho** 1990 Sep;17(9):1839–42 (Eng. Abstr.) **(Jpn)**

[Antitumor effects of cisplatin, cyclophosphamide and interferon-gamma (gamma-IFN) against argyrophil small cell carcinoma of the uterine cervix heterotransplanted into nude mice] Shimizu H, et al. **Gan To Kagaku Ryoho** 1989 Dec;16(12):3777–80 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of high dose rate intra-cavitary irradiation in the treatment of uterine cervical cancer, combined with pepleomycin suppository in uterine cavity] Yamanashi S, et al. **Gan To Kagaku Ryoho** 1990 Feb; 17(2):245–51 (Eng. Abstr.) **(Jpn)**

[Cytological and histological effects of regional hyperthermia and radiation in cancer of the uterine cervix] Hasegawa K, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Aug 20; 24(8):1526–38 (Eng. Abstr.) **(Jpn)**

[The review of the treatment of the carcinoma of the uterine cervix in Gifu University Hospital. Primary treated cases from 1972 to 1982] Kondo H, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Aug 20;24(8):1600–6 (Eng. Abstr.) **(Jpn)**

[Effect of cryotherapy on pathological changes of the uterine cervix] Wojtyś A, et al. **Ginekol Pol** 1989 Mar;60(3):156–9 (Eng. Abstr.) **(Pol)**

[Treatment of patients with 1B-stage cervical cancer] Vekhova LI, et al. **Vopr Onkol** 1989;35(8):985–9 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Cytologic diagnosis of human papillomavirus infection: spindled nuclei. Shroyer KR, et al. **Diagn Cytopathol** 1990; 6(3):178–83

Relationship between intraepithelial neoplasia of the cervix and the size and number of nucleolar organizer regions. Egan M, et al. **Gynecol Oncol** 1990 Jan;36(1):30–3

Ultrastructural and immunohistochemical study of infiltration in microinvasive carcinoma of the uterine cervix. Kudo R, et al. **Gynecol Oncol** 1990 Jan;36(1):23–9

Immunohistochemical investigations of steroid receptors in normal and neoplastic squamous epithelium of the uterine

cervix. Mosny DS, et al. **Gynecol Oncol** 1989 Dec; 35(3):373–7

A study of nucleolar organizer regions in cervical intraepithelial neoplasia and human papillomavirus infection. Thickett KM, et al. **Int J Gynecol Pathol** 1989; 8(4):331–9

Nucleolar organiser regions in adenocarcinoma in situ and invasive adenocarcinoma of the cervix. Darne JF, et al. **J Clin Pathol** 1990 Aug;43(8):657–60

Pigmented melanocytic schwannoma of the uterine cervix. Terzakis JA, et al. **Ultrastruct Pathol** 1990 Jul–Aug; 14(4):357–66

URINE

Detection of a small molecular species of human chorionic gonadotropin in the urine of patients with carcinoma of the cervix and cervical intraepithelial neoplasia: comparison with other assays for human chorionic gonadotropin and its fragments. Norman RJ, et al. **Gynecol Oncol** 1990 May;37(2):254–9

CERVIX UTERI

Successful treatment of a viable cervical pregnancy with methotrexate. Palti Z, et al. **Am J Obstet Gynecol** 1989 Nov;161(5):1147–8

Cervical dilation: a comparison of Lamicel and Dilapan. Wells EC, et al. **Am J Obstet Gynecol** 1989 Nov; 161(5):1124–6

Cervical pregnancy after in vitro fertilization and embryo transfer. Weyerman PC, et al. **Am J Obstet Gynecol** 1989 Nov;161(5):1145–6

Chorion villus sampling—transcervical or transabdominal? Finikiotis G, et al. **Aust N Z J Obstet Gynaecol** 1990 Feb; 30(1):63–5

Vaginal rhabdomyoma and adenosis. Suarez Vilela D, et al. **Histopathology** 1990 Apr;16(4):393–4

Cervical prostaglandin injection: a novel method of administration for ripening the cervix and induction of labor. Shaala S, et al. **Int J Gynaecol Obstet** 1989 Nov; 30(3):221–3

Seaweed and its synthetic analogues in obstetrics and gynaecology 450BC–1990AD. Johnson N. **J R Soc Med** 1990 Jun;83(6):387–9

Successful treatment of a live cervical pregnancy with methotrexate and folinic acid. A case report. Kaplan BR, et al. **J Reprod Med** 1989 Oct;34(10):853–6

Packing of lower uterine segment for control of postcesarean bleeding in instances of placenta previa. Druzin ML. **Surg Gynecol Obstet** 1989 Dec;169(6):543–5

Structure and macromolecular properties of cervical mucus glycoproteins. Carlstedt I, et al. **Symp Soc Exp Biol** 1989; 43:289–316 (78 ref.)

ABNORMALITIES

Asymmetrical bilateral genital ureteric ectopy. Allen FJ, et al. **Br J Urol** 1990 Mar;65(3):300–1

Cervical and vaginal agenesis: a case report. Vutyavanich T, et al. **J Med Assoc Thai** 1989 Sep;72(9):527–30

ANALYSIS

Human papillomavirus DNA in genital tract lesions histologically negative for condylomata. Analysis by in situ, Southern blot hybridization and the polymerase chain reaction. Nuovo GJ. **Am J Surg Pathol** 1990 Jul; 14(7):643–51

Relationship between dilatation of the rat uterine cervix and a small dermatan sulfate proteoglycan. Kokenyesi R, et al. **Biol Reprod** 1990 Jan;42(1):87–97

Changes in the connective tissue of corpus and cervix uteri during ripening and labour in term pregnancy. Granström L, et al. **Br J Obstet Gynaecol** 1989 Oct;96(10):1198–202

Distribution of involucrin in normal and pathological human uterine cervix. Serra V, et al. **Gynecol Oncol** 1990 Jan; 36(1):34–42

Studies of lectin binding to the human cervix uteri: II. Cervical intraepithelial neoplasia and invasive squamous carcinoma. Byrne P, et al. **Histochem J** 1989 Jun; 21(6):323–36

Studies of lectin binding to the human cervix uteri: I. Normal cervix. Byrne P, et al. **Histochem J** 1989 Jun;21(6):311–22

S-100 protein in glands within decidua and cervical glands during early pregnancy. Nakamura Y, et al. **Hum Pathol** 1989 Dec;20(12):1204–9

HPV DNA detection in cervical swabs [letter] Nuovo GJ. **Hum Pathol** 1989 Oct;20(10):1030

Immunoreactive alpha interferon in cervical flat koilocytic lesions and intraepithelial neoplasia. Stewart CJ, et al. **J Clin Pathol** 1990 Mar;43(3):230–4

Smoking and DNA damage in cervical cells [letter] Phillips DH, et al. **Lancet** 1990 Feb 17;335(8686):417

Expression of epidermal growth factor receptor and HER-2/neu in normal and neoplastic cervix, vulva, and vagina. Berchuck A, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 1):381–7

Placental protein 14 (PP14) content and immunosuppressive activity of human cervical mucus. Pockley AG, et al. **Symp Soc Exp Biol** 1989;43:317–23

ANATOMY & HISTOLOGY

Prediction of risk for preterm delivery by ultrasonographic measurement of cervical length. Andersen HF, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):859–67

Vaginal ultrasonographic assessment of cervical length changes during normal pregnancy. Kushnir O, et al. **Am J Obstet Gynecol** 1990 Apr;162(4):991–3

Cervical length may change during ultrasonographic examination [letter] Sonek J, et al. **Am J Obstet Gynecol** 1990 May;162(5):1355–7

Results of ultrasonography not in agreement [letter; comment] Weinraub Z, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):596–7 Comment on: Am J Obstet Gynecol 1986 Oct;155(4):721–6.

Different characteristics of amniotic and cervical collagenous tissue during pregnancy and delivery: a morphologic study. Yoshida Y, et al. **Am J Obstet Gynecol** 1990 Jan; 162(1):190–3

In situ morphologic dynamics of ovaries, uterus, and cervix in llamas. Adams GP, et al. **Biol Reprod** 1989 Sep; 41(3):551–8

Alterations in bladder volume and the ultrasound appearance of the cervix. Mason GC, et al. **Br J Obstet Gynaecol** 1990 May;97(5):457–8

CYTOLOGY

Enzymes of human cervical mucus: a comparative study on fertile and infertile mucus and on the endocervical epithelium. Iantomasi T, et al. **Acta Eur Fertil** 1989 May–Jun;20(3):151–5

Cervical connective tissue in relation to pregnancy, labour, and treatment with prostaglandin E2. Uldbjerg N. **Acta Obstet Gynecol Scand Suppl** 1989;148:1–40

Genetic screening with exfoliated cervicovaginal cells collected by a noninvasive lavage technique performed during routine gynecologic cancer screening. Burk RD, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):652–4

Morphologic study of changes of collagenous tissue in the amnion and cervix during prostaglandin-induced abortion and delivery. Manabe Y, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):52–6

Immunocytochemical detection of S-phase cells in normal and neoplastic cervical epithelium by anti-BrdU monoclonal antibody. Fukuda K, et al. **Anal Quant Cytol Histol** 1990 Apr;12(2):135–8

Analysis of false negative cytology by a chromosome study. Katayama KP, et al. **Asia Oceania J Obstet Gynaecol** 1990 Mar;16(1):85–7

Keratin subtypes in carcinomas of the uterine cervix: implications for histogenesis and differential diagnosis. Ivanyi D, et al. **Cancer Res** 1990 Aug 15;50(16):5143–52

Retinoids, sex steroids and glucocorticoids regulate ectocervical cell envelope formation but not the level of the envelope precursor, involucrin. Gorodeski GI, et al. **Differentiation** 1989 Dec;42(2):75–80

Cultured human ectocervical epithelial cell differentiation is regulated by the combined direct actions of sex steroids, glucocorticoids, and retinoids. Gorodeski GI, et al. **J Clin Endocrinol Metab** 1990 Jun;70(6):1624–30

Transforming growth factors beta 1 and 2 transcriptionally regulate human papillomavirus (HPV) type 16 early gene expression in HPV-immortalized human genital epithelial cells. Woodworth CD, et al. **J Virol** 1990 Oct; 64(10):4767–75

Langerhans cells and T-lymphocytes in the normal human ectocervix defined by monoclonal antibodies and electron microscopy. Roig de Vargas-Linares C. **Microsc Electron Biol Celular** 1989 Jun;13(1):53–63

Alterations in growth properties of human papilloma virus type 16 immortalised human cervical keratinocyte cell line correlate with amplification and overexpression of c-myc oncogene. Crook T, et al. **Oncogene** 1990 Apr;5(4):619–22

[Immunohistochemical identification of reserve cells of the endocervical canal by monoclonal antibodies EE21-06d] Raikhlin NT, et al. **Biull Eksp Biol Med** 1989 Nov; 108(11):603–6 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Oral administration of the prostaglandin enisoprost induces uterine activity and softens the cervix during first trimester pregnancy. Pulkkinen MO, et al. **Acta Obstet Gynecol Scand** 1989;68(2):149–52

Further evidence for a prejunctional action of neuropeptide Y on cholinergic motor neurons in the rat uterine cervix. Stjernquist M, et al. **Acta Physiol Scand** 1990 Jan; 138(1):95–6

Dilatation of the cervix with dinoprostone ('Prepidil gel') prior to insertion of an intrauterine device: report of two cases. van der Griendt MC, et al. **Adv Contracept** 1990 Mar;6(1):53–6

Could antiprogesterones be used as alternative cervical ripening agents? Johnson N, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):688–90

The effects of RU-38486 on cervical ripening. Clinical studies. Lefebvre Y, et al. **Am J Obstet Gynecol** 1990 Jan; 162(1):61–5

Effect of intravaginal application of prostaglandin E2 gel on the mechanical properties of the ovine cervix uteri at term. Owiny JR, et al. **Am J Obstet Gynecol** 1990 Aug; 163(2):657–60

A randomized controlled trial of extra-amniotic ethinyloestradiol for cervical ripening in multiparas. Peedicayil A, et al. **Aust N Z J Obstet Gynaecol** 1990 May; 30(2):127–30

The use of mifepristone (RU 486) for cervical preparation in first trimester pregnancy termination by vacuum aspiration. World Health Organization. Task Force on Post-ovulatory Methods for Fertility Regulation. **Br J Obstet Gynaecol** 1990 Mar;97(3):260–6

Comparison of the Foley catheter and dinoprostone pessary for cervical preparation before second trimester abortion. Hackett GA, et al. **Br J Obstet Gynaecol** 1989 Dec; 96(12):1432–4

Cervagem/Dilapan for preoperative cervical dilatation prior to vacuum aspiration for termination of first trimester pregnancy. A prospective randomized study. Jürgensen U, et al. **Contraception** 1989 Dec;40(6):741–9

Induced cervical ripening with mifepristone (RU 486) and bioconversion of arachidonic acid in human pregnant uterine cervix in the first trimester. A double-blind, randomized, biomechanical and biochemical study. Rådestad A, et al. **Contraception** 1990 Mar;41(3):283–92

Randomized trial of the effect of drugs on cervical dilatation for termination of first trimester pregnancy. Xu DZ, et al. **Contraception** 1990 Jun;41(6):663–70

Umbilical artery Doppler flow velocity waveforms and maternal prostaglandin E2 and F2 alpha metabolite concentrations during cervical ripening with prostaglandin E2. Fairlie FM, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Oct;37(1):7–13

Enzymatic collagen degradation in the pregnant guinea pig cervix during physiological maturation of the cervix and after local application of prostaglandins. Rath W, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Sep;32(3):199–204

Histochemical localization of vasoactive intestinal polypeptide and its influence on contractile activity in the non-pregnant and pregnant human cervix. Bryman I, et al. **Gynecol Obstet Invest** 1989;28(2):57–61

Outpatient use of prostaglandin gel for ripening of the cervix and induction of labor. Smith MA, et al. **J Fam Pract** 1990 Jun;30(6):656–62; discussion 662–4

Intracervical prostaglandin in postdate pregnancy. A randomized trial. Buttino LT Jr, et al. **J Reprod Med** 1990 Feb;35(2):155–8

Cervical ripening. A retrospective experience with prostaglandin E2 "chips". Smith CV, et al. **J Reprod Med** 1990 Apr;35(4):388–90

Controlled-release prostaglandin E2 pessary and cervical ripening [letter] **Lancet** 1990 Sep 1;336(8714):562

Effect of mifepristone on dilatation of the pregnant and non-pregnant cervix. Gupta JK, et al. **Lancet** 1990 May 26;335(8700):1238–40

The Journal of the American Medical Association, Volume 226, 1973: Megaloblastic changes in cervical epithelium. Association with oral contraceptive therapy and reversal with folic acid [classical article] Whitehead N, et al. **Nutr Rev** 1989 Oct;47(10):318–21

Influence of neurohypophyseal hormones on human cervical smooth muscle contractility in vitro. Bryman I, et al. **Obstet Gynecol** 1990 Feb;75(2):240–3

Clinical effects and cervical tissue changes after treatment with 16,16 dimethyl-trans delta 2 PGE1 methylester in the first trimester. Ding JQ, et al. **Prostaglandins** 1990 Mar; 39(3):281–5

The concurrent in vitro and in vivo release of PGE2 from a controlled-release hydrogel polymer pessary for cervical ripening. Taylor AV, et al. **Prostaglandins** 1990 Jul; 40(1):89–98

Comparative study of a two dose schedule of PGE2 3 mg pessary and 1700 micrograms film for induction of labour in nulliparae with poor cervical score. Arulkumaran S, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Oct; 38(1):37–41

Changes in cervical mucus that prevent penetration by spermatozoa. Chantler E, et al. **Symp Soc Exp Biol** 1989; 43:325–36 (35 ref.)

Is preoperative cervical softening necessary in termination of pregnancy in nulliparous women? [editorial] Kajanoja P. **Zentralbl Gynakol** 1990;112(10):589–91

A randomized double blind study of a new ready-for use prostaglandin gel (Org 2436) for cervical ripening prior to first trimester pregnancy termination. Osmers R, et al. **Zentralbl Gynakol** 1990;112(9):545–54

[The value of magnesium pyrrolidone carboxylate in true cervix dystocia. A double blind versus placebo study] Demory JE, et al. **Rev Fr Gynecol Obstet** 1990 Jun; 85(6):413–6 (Eng. Abstr.) **(Fre)**

[Morphologic aspects of cervix ripening produced by progestin antagonists] Hegele-Hartung C, et al. **Arch Gynecol Obstet** 1989;245(1–4):341–3 **(Ger)**

[Cervical ripening and induction of labor in term pregnancy using prostaglandin E2. Controlled clinical study comparing the intracervical and intravaginal routes] Zanini A, et al. **Ann Ostet Ginecol Med Perinat** 1989 Sep–Oct; 110(5):209–16 (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

Placental form of glutathione S-transferase in normal and diseased human uterine cervical mucosa. de Camargo JL, et al. **Carcinogenesis** 1989 Dec;10(12):2317–20

[Studies of 17 beta-hydroxysteroid-dehydrogenase activity in human uterine cervix] Takahashi S. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Jun;42(6):567–72 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Distribution of epithelial antigens in the human uterine cervix: a review. Serra V, et al. **Arch Gynecol Obstet** 1989; 246(2):61–84 (127 ref.)

Generation and characterization of a murine monoclonal antibody to cervical glandular epithelium using mice rendered tolerant to cervical squamous epithelium. Imam A, et al. **Hybridoma** 1990 Apr;9(2):157–66

[Study of antispermatozoidal activity in the uterine cervix at the Women's Clinic in Plzeň] Ulčová-Gallová Z. **Cesk Gynekol** 1989 Jul;54(6):474–7 **(Cze)**

[Initial results with intra-tubal embryo transfer (IVF-IT-ET) in patients with cervix antibodies to spermatozoa antigens] Krüsmann G, et al. **Gynakol Rundsch** 1989;29 Suppl 2:436–9 **(Ger)**

INNERVATION

Studies of the innervation of rabbit myometrium and cervix. Bulat R, et al. **Can J Physiol Pharmacol** 1989 Aug; 67(8):837–44

Sources of autonomic and afferent fibers to the uterine cervix in pig. Boratyński Z, et al. **Folia Morphol (Warsz)** 1988; 47(1–4):71–6

Detection of sialic acid residues in the axonal reticulum of rat superior cervical ganglion cells by lectin–gold cytochemistry. Quatacker JR, et al. **J Histochem Cytochem** 1990 Oct;38(10):1445–9

Adrenergic and cholinergic nerve supply in the porcine myometrium and cervix. A histochemical investigation during pregnancy and parturition. Thilander G. **Zentralbl Veterinarmed [A]** 1989 Oct;36(8):585–95

METABOLISM

Maintenance of in vivo–like keratin expression, sex steroid responsiveness, and estrogen receptor expression in cultured human ectocervical epithelial cells. Gorodeski GI, et al. **Endocrinology** 1990 Jan;126(1):399–406

Patterns of mRNA for epidermal growth factor receptor and keratin B–2 in normal cervical epithelium and in cervical intraepithelial neoplasia. Mittal K, et al. **Gynecol Oncol** 1990 Aug;38(2):224–9

Improvement of cervical mucus viscoelasticity and sperm penetration with sodium bicarbonate douching. Everhardt E, et al. **Hum Reprod** 1990 Feb;5(2):133–7

Epidermal growth factor receptor expression in the normal and inflamed cervix uteri: a comparison with estrogen receptor expression. Kupryjańczyk J. **Int J Gynecol Pathol** 1990;9(3):263–71

Preparation of biologically active 32P–labeled human relaxin. Displaceable binding to rat uterus, cervix, and brain. Osheroff PL, et al. **J Biol Chem** 1990 Jun 5; 265(16):9396–401

Metabolic activation of carbon tetrachloride by the cervico–vaginal epithelium in rodents. Brittebo EB, et al. **Pharmacol Toxicol** 1989 Nov;65(5):336–42

Cyclooxygenase and lipoxygenase inhibitors—induced changes in the distribution of glycosaminoglycans in the pregnant rat uterine cervix. Cabrol D, et al. **Prostaglandins** 1990 May;39(5):515–23

The distribution of beta–adrenoceptors in human cervix. Whitaker EM, et al. **Q J Exp Physiol** 1989 Jul;74(4):573–6

[Cytokeratin expression in squamous–cell metaplasia of the cervix uteri: an immunohistochemical study using monoclonal antibodies Raĭkhlin NT, et al. **Arkh Patol** 1990; 52(3):29–32 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Inflammatory epithelial changes and nonviral cervicovaginal pathogens. Frisch LE, et al. **Acta Cytol** 1990 Mar–Apr; 34(2):129–32

Comparison of the detection of cervical human papillomavirus infection by filter DNA hybridization of cytologic specimens and by in situ DNA hybridization of tissues. Neumann R, et al. **Acta Cytol** 1990 Mar–Apr; 34(2):115–8

The clinical significance of the genital microbiologic flora at vacuum aspiration following miscarriage. Knudsen A, et al. **Acta Obstet Gynecol Scand** 1989;68(2):153–5

Concept of the existence of human papillomavirus (HPV) DNA in histologically normal squamous epithelium of the genital tract should be re-evaluated. Syrjänen K, et al. **Acta Obstet Gynecol Scand** 1989;68(7):613–7

Effect of the menstrual cycle on detection and typing of human papillomavirus in uterine cervical cells. McNicol PJ, et al. **Am J Obstet Gynecol** 1990 Apr;162(4):1037–41

Microbiology of the lower genital tract and amniotic fluid in asymptomatic preterm patients with intact membranes and moderate to advanced degrees of cervical effacement and dilation. Dunlow SG, et al. **Am J Perinatol** 1990 Jul; 7(3):235–8

Rapid viral diagnosis [letter] Best JM, et al. **BMJ** 1990 Jul 28;301(6745):238

Nonisotopic human papillomavirus DNA typing of cervical smears obtained at the initial colposcopic examination. Duggan MA, et al. **Cancer** 1990 Aug 15;66(4):745–51

Use of the Gen–Probe PACE system for the detection of Neisseria gonorrhoeae in urogenital samples. Granato PA, et al. **Diagn Microbiol Infect Dis** 1990 May–Jun; 13(3):217–21

Prevalence of human papillomavirus types 11, 16 and 18 in cervical swabs. A study of 1362 pregnant women. Hørding U, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 May–Jun; 35(2–3):191–8

Evaluation of abnormal cervical cytology results in a genitourinary clinic [letter; comment] Hicks D, et al. **Genitourin Med** 1989 Oct;65(5):348 Comment on: Genitourin Med 1988 Aug;64(4):281–2.

Chlamydia trachomatis among sexually active teenage girls: influence of sampling location and clinical signs on the detection rate. Rahm VA, et al. **Genitourin Med** 1990 Apr; 66(2):66–9

Response of lower genital tract flora to external pelvic irradiation. Gordon AN, et al. **Gynecol Oncol** 1989 Nov; 35(2):233–5

Cervical cytologic abnormalities and papillomavirus in women infected with human immunodeficiency virus. Feingold AR, et al. **J Acquir Immune Defic Syndr** 1990; 3(9):896–903

Quantitative culture of endocervical Chlamydia trachomatis. Barnes RC, et al. **J Clin Microbiol** 1990 Apr;28(4):774–80

TestPack Chlamydia, a new rapid assay for the direct detection of Chlamydia trachomatis. Coleman P, et al. **J Clin Microbiol** 1989 Dec;27(12):2811–4

Comparison of IDEIA III and cell culture for the detection of Chlamydia trachomatis in endocervical specimens. Lebar WD, et al. **J Clin Microbiol** 1990 Jun;28(6):1447–8

Evaluation of a nonisotopic probe for detection of Chlamydia trachomatis in endocervical specimens. Woods GL, et al. **J Clin Microbiol** 1990 Feb;28(2):370–2

Localization of human papillomavirus type 16 DNA using the polymerase chain reaction in the cervix uteri of women with cervical intraepithelial neoplasia. Cornelissen MT, et al. **J Gen Virol** 1989 Oct;70 (Pt 10):2555–62

Analysis of human papillomavirus type 16 E6–E7 transcription in cervical carcinomas and normal cervical epithelium using the polymerase chain reaction. Johnson MA, et al. **J Gen Virol** 1990 Jul;71 (Pt 7):1473–9

Detection of human papillomaviruses in cervicovaginal cells using polymerase chain reaction. Pao CC, et al. **J Infect Dis** 1990 Jan;161(1):113–5

Human papillomavirus infection of the uterine cervix analyzed by nonisotopic in situ hybridization. Hara Y, et al. **J Med Virol** 1990 Jun;31(2):120–8

Use of anticontamination primers in the polymerase chain reaction for the detection of human papilloma virus genotypes in cervical scrapes and biopsies. van den Brule AJ, et al. **J Med Virol** 1989 Sep;29(1):20–7

Endometrial bacteria in asymptomatic, nonpregnant women. Hemsell DL, et al. **J Reprod Med** 1989 Nov;34(11):872–4

Comparison of direct immunofluorescent staining and an enzyme–linked immunoabsorbent assay for identifying Chlamydia trachomatis in cervical and urethral specimens. Wiesmeier E, et al. **J Reprod Med** 1989 Aug;34(8):517–9

Subtypes of human papillomavirus 16 in cervical tissue [letter; comment] **Lancet** 1989 Dec 2;2(8675):1342–3 Comment on: Lancet 1989 Jun 3;1(8649):1225–7.

Looking for human papillomavirus type 16 by PCR [letter] Manos M, et al. **Lancet** 1990 Mar 24;335(8691):734

Detection of human papillomaviruses 16–18 in cervical cells by molecular hybridization: relationship with morphonuclear cell image analyses. d'Olne D, et al. **Mod Pathol** 1989 Nov;2(6):658–65

Detection of human papillomavirus in cervical exfoliated cells by polymerase chain reaction (PCR) method. Saito J, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Mar; 42(3):289–90

The value of routine cervical cultures before transcervical chorionic villus sampling. Kagie MJ, et al. **Prenat Diagn** 1989 Aug;9(8):569–73

[Carrier status of herpes viridae in pregnant women] Qi YH. **Chung Hua Fu Chan Ko Tsa Chih** 1989 May;24(3):133–5, 188 (Eng. Abstr.) **(Chi)**

[Human papillomavirus infection of the cervix uteri in married women] Sun XW, et al. **Chung Hua I Hsueh Tsa Chih** 1989 May;69(5):294–6 **(Chi)**

[Serotype distribution of urogenitally located Chlamydia trachomatis in Rotterdam] Wagenvoort JH, et al. **Ned Tijdschr Geneeskd** 1989 Sep 30;133(39):1936–9 (Eng. Abstr.) **(Dut)**

[Clinical relevance and pathognomonic significance of Actinomycetes colonization of intra–uterine devices] Eibach HW, et al. **Geburtshilfe Frauenheilkd** 1989 Nov; 49(11):972–6 (Eng. Abstr.) **(Ger)**

[Comparative study of the bacterial flora in both uterocervical and uterine regions] Chimura T, et al. **Jpn J Antibiot** 1990 Feb;43(2):321–5 (Eng. Abstr.) **(Jpn)**

[Detection of papilloma virus in the cervix of the human uterus by in situ hybridization—Comparative study of detection rate by Southern blot method] Ishi K, et al. **Rinsho Byori** 1989 Oct;37(10):1161–6 (Eng. Abstr.) **(Jpn)**

[The incidence of Mycoplasma in women with inflammatory changes in the genital organs] Zurovac–Jovanović G, et al. **Med Arh** 1987;41(6):319–21 (Eng. Abstr.) **(Scr)**

[Detection of Chlamydia trachomatis in clinical material 1985–1988] Cisláková L, et al. **Cesk Gynekol** 1990 Apr; 55(3):168–72 (Eng. Abstr.) **(Slo)**

PARASITOLOGY

Cytologic detection of parasites in cervical smears [letter] Pandit AA, et al. **Acta Cytol** 1989 Nov–Dec;33(6):944–5

PATHOLOGY

Improving the sensitivity of cervical cytologic screening. A comparison of duplicate smears and colposcopic examination of patients with cytologic inflammatory epithelial changes. Frisch LE, et al. **Acta Cytol** 1990 Mar–Apr;34(2):136–9

Statistical measurements of accuracy in cervical cytology. Mitchell H. **Acta Cytol** 1989 Nov–Dec;33(6):819–24

Significance of mild cervical cytologic atypia in a sexually transmitted disease clinic population. Paavonen J, et al. **Acta Cytol** 1989 Nov–Dec;33(6):831–8

National registry of cervical cytologic diagnoses in The Netherlands. Vooijs GP, et al. **Acta Cytol** 1989 Nov–Dec; 33(6):825–30

Colposcopic findings and intraepithelial neoplasia in diethylstilbestrol–exposed offspring. The Dutch experience. Helmerhorst TJ, et al. **Am J Obstet Gynecol** 1989 Nov; 161(5):1191–4

Experience with the EndoPap device for the cytologic detection of uterine cancer and its precursors: a comparison of the EndoPap with fractional curettage or hysterectomy. LaPolla JP, et al. **Am J Obstet Gynecol** 1990 Sep; 163(3):1055–9; discussion 1059–60

Temporal associations of human papillomavirus infection with cervical cytologic abnormalities. Lorincz AT, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):645–51

Preventing cervical conization by achieving satisfactory colposcopy with hygroscopic cervical dilators. Stern JL, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):176–7

Cystic endocervical tunnel clusters. A clinicopathologic study of 29 cases of so–called adenomatous hyperplasia. Segal GH, et al. **Am J Surg Pathol** 1990 Oct;14(10):895–903

The efficiency of the cytobrush and cotton swab in obtaining endocervical cells in smears taken after conization of the cervix. Kristensen GB, et al. **Arch Gynecol Obstet** 1989; 246(4):207–10

Precocious appearance of markers of squamous differentiation in metaplastic cells of human endocervix. Serra V, et al. **Arch Gynecol Obstet** 1989;246(4):233–42

Implications of inflammatory changes on cervical cytology [letter; comment] **BMJ** 1990 Apr 21;300(6731):1076–7 Comment on: BMJ 1990 Mar 10;300(6725):638–40.

Implications of inflammatory changes on cervical cytology [letter; comment] Oakeley P, et al. **BMJ** 1990 Apr 14; 300(6730):1014 Comment on: BMJ 1990 Mar 10;300(6725):638–40.

Implications of inflammatory changes on cervical cytology [see comments] Wilson JD, et al. **BMJ** 1990 Mar 10; 300(6725):638–40 Comment in: BMJ 1990 Apr 14;300(6730):1014. Comment in: BMJ 1990 Apr 21;300(6731):1076–7.

No endocervical cells: an update [letter] McGhee MF. **Br J Gen Pract** 1990 Apr;40(333):168

Cytological terminology. Hudson EA. **Br J Obstet Gynaecol** 1990 Mar;97(3):202–4

Cytological status and lesion size: a further dimension in cervical intraepithelial neoplasia. Jarmulowicz MR, et al. **Br J Obstet Gynaecol** 1989 Sep;96(9):1061–6

Using Lamicel to expose high cervical lesions during colposcopic examinations. Johnson N, et al. **Br J Obstet Gynaecol** 1990 Jan;97(1):46–52

A histological and immunohistological study of cervical intraepithelial neoplasia in relation to recurrence after local treatment. Rasbridge SA, et al. **Br J Obstet Gynaecol** 1990 Mar;97(3):245–50

Unsatisfactory colposcopy and the response to orally administered oestrogen: a randomized double blind placebo controlled trial. Saunders N, et al. **Br J Obstet Gynaecol** 1990 Aug;97(8):731–3

Endoscopic localization of the squamocolumnar junction before cervical cone biopsy in 284 patients. Saunders N, et al. **Cancer** 1990 Mar 15;65(6):1312–7

Oral contraceptive use, human papillomavirus infection, and risk of early cytological abnormalities of the cervix. Negrini BP, et al. **Cancer Res** 1990 Aug 1;50(15):4670–5

Human cervical and foreskin epithelial cells immortalized by human papillomavirus DNAs exhibit dysplastic differentiation in vivo. Woodworth CD, et al. **Cancer Res** 1990 Jun 15;50(12):3709–15

Cervical pathology with intrauterine contraceptive devices—a cyto–colpo–pathological study. Fahmy K, et al. **Contraception** 1990 Mar;41(3):317–22

The 1988 Bethesda System for reporting cervical/vaginal cytologic diagnoses: developed and approved at the National Cancer Institute workshop in Bethesda, MD, December 12–13, 1988. **Diagn Cytopathol** 1989;5(3):331–4

Cytopathological changes in human cervix and endometrium following prolonged retention of copper–bearing intrauterine contraceptive devices. Misra JS, et al. **Diagn Cytopathol** 1989;5(3):237–42

Ciliary orientation in the "immotile cilia" syndrome. Rautiainen M, et al. **Eur Arch Otorhinolaryngol** 1990; 247(2):100–3

Prospective follow–up of genital HPV infections: survival analysis of the HPV typing data. Kataja V, et al. **Eur J Epidemiol** 1990 Mar;6(1):9–14

Gynecologic cytology at the Catholic Hospital St. John of God, Lunsar Sierra Leone. Calvo A, et al. **Eur J Gynaecol Oncol** 1983;4(3):198–200

Uterine cervical dysplasia with reference to the betel quid chewing habit. Chakrabarti RN, et al. **Eur J Gynaecol Oncol** 1990;11(1):57–9

Asymptomatic cervicovaginal leukocytosis in infertile women. Wah RM, et al. **Fertil Steril** 1990 Sep;54(3):445–50
Haematocervix after conization diagnosed by ultrasonography. Pschera H, et al. **Gynecol Obstet Invest** 1990;29(4):309–10
A new way to expose endocervical lesions at colposcopy. Johnson N, et al. **Gynecol Oncol** 1990 Feb;36(2):217–8
Abnormal cervical cytology leading to the diagnosis of gastric cancer. McGill F, et al. **Gynecol Oncol** 1990 Jan; 36(1):101–5 (15 ref.)
Comparison of repeat smear, colposcopy, and colposcopically directed biopsy in the evaluation of the mildly abnormal smear. Maggi R, et al. **Gynecol Oncol** 1989 Dec;35(3):294–6
Langerhans cells and epithelial cell modifications in cervical intraepithelial neoplasia: correlation with human papillomavirus infection. Viac J, et al. **Immunobiology** 1990 Jun;180(4–5):328–38
Herpetic cervicitis—a histo-morphologic study. Shariff S, et al. **Indian J Pathol Microbiol** 1989 Apr;32(2):81–91
The relative significance of colposcopic descriptive appearances in the diagnosis of cervical intraepithelial neoplasia. Edebiri AA. **Int J Gynaecol Obstet** 1990 Sep; 33(1):23–9
Role of endocervical curettage in the diagnostic workup of preinvasive cervical lesions. Sesti F, et al. **Int J Gynaecol Obstet** 1990 Feb;31(2):153–6
Deep nabothian cysts of the uterine cervix. A possible source of confusion with minimal-deviation adenocarcinoma (adenoma malignum). Clement PB, et al. **Int J Gynecol Pathol** 1989;8(4):340–8
Tubal metaplasia of the uterine cervix. Suh KS, et al. **Int J Gynecol Pathol** 1990;9(2):122–8
A clinical review of cervicography. Turner MJ, et al. **Ir J Med Sci** 1990 Feb;159(2):50
Cervical cytologic abnormalities and papillomavirus in women infected with human immunodeficiency virus. Feingold AR, et al. **J Acquir Immune Defic Syndr** 1990; 3(9):896–903
Cervical and vaginal squamous cell abnormalities in women infected with human immunodeficiency virus. Schrager LK, et al. **J Acquir Immune Defic Syndr** 1989;2(6):570–5
Ultrasonographic diagnosis of obstructive uropathy in a caprine doe. Morin DE, et al. **J Am Vet Med Assoc** 1990 Aug 1;197(3):378–80
Cervical hyperplasia with prolapse in a mare. Riera FL, et al. **J Am Vet Med Assoc** 1989 Nov 15;195(10):1393–4
Contribution of the cytobrush to determining cellular composition of cervical smears. Doornewaard H, et al. **J Clin Pathol** 1990 May;43(5):393–6
Evaluation of inflammatory atypia. A literature review. Himmelstein LR. **J Reprod Med** 1989 Sep;34(9):634–7 (16 ref.)
Microcolposcopy vs. cone histology in evaluation of the endocervix in women with inadequate colposcopy or positive endocervical curettage. Hunter V, et al. **J Reprod Med** 1989 Sep;34(9):625–8
Squamous atypia on cytology. The influence of age. Kaminski PF, et al. **J Reprod Med** 1989 Sep;34(9):617–20
Sonographic guidance for uterine dilation and curettage complicated by postmenopausal cervical stenosis. A case report. King CR, et al. **J Reprod Med** 1990 Mar;35(3):281–2
Cervical conization findings in women with dysplastic cervical cytology and normal colposcopy. Ramirez EJ, et al. **J Reprod Med** 1990 Apr;35(4):359–61
The intraepithelial lesion: more problems and few data [letter] Austin RM. **JAMA** 1990 Jun 27;263(24):3260
Ultrasonography in the detection of cervical incompetency. Podobnik M, et al. **JCU** 1988 Jul–Aug;16(6):383–91
Uterine cervical punch biopsy specimens can be analyzed by 1H MRS. Mountford CE, et al. **Magn Reson Med** 1990 Feb;13(2):324–31
Detection and typing of human papillomavirus DNA from cervical biopsies by the slot-blot hybridization method. David F, et al. **Mol Cell Probes** 1990 Feb;4(1):53–61
Hemostasis and cold knife cone biopsy: a prospective randomized trial comparing a suture versus non-suture technique. Gilbert L, et al. **Obstet Gynecol** 1989 Oct; 74(4):640–3
Loop diathermy cone biopsy. Mor-Yosef S, et al. **Obstet Gynecol** 1990 May;75(5):884–6
Measurement of cervical length in pregnancy: comparison between vaginal ultrasonography and digital examination. Sonek JD, et al. **Obstet Gynecol** 1990 Aug;76(2):172–5
Cervical os obliteration after laser surgery in patients with amenorrhea. Spitzer M, et al. **Obstet Gynecol** 1990 Jul; 76(1):97–100
[Cervical dysplasia and condylomatous lesions. Experience of Cameroon] Mbakop A, et al. **Ann Pathol** 1990;10(3):206 **(Fre)**
[Correlation of cervicovaginal cytology and histology in endometrial cancer] Nagy P, et al. **Zentralbl Gynakol** 1989; 111(18):1241–5 (Eng. Abstr.) **(Ger)**
[Colposcopic evaluation of cervical epithelium during oral contraception. A controlled clinical study] Stillo A, et al. **Ann Ostet Ginecol Med Perinat** 1989 Nov–Dec; 110(6):296–304 (Eng. Abstr.) **(Ita)**
[Ultrastructure of the cervical epithelium in dysplasia] Zheleznov BI, et al. **Arkh Patol** 1989;51(6):56–62 (Eng. Abstr.) **(Rus)**
[Cytologic and morphometric features of mucosal cells of the cervical canal in the normal state and in pathology] Isakova LM, et al. **Lab Delo** 1989;(9):44–9 (Eng. Abstr.) **(Rus)**
[Cervicovaginal cytologic results in nulliparous and multiparous patients. Incidence of infections and cervical intraepithelial neoplasms] Audisio T, et al. **Rev Fac Cien Med Univ Nac Cordoba** 1988;46(1):19–20 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Myometrial activity after local application of prostaglandin E2 for cervical ripening and term labor induction. Granström L, et al. **Am J Obstet Gynecol** 1990 Mar; 162(3):691–4
Role of hormones in cervical ripening [letter] Sert MB. **Am J Obstet Gynecol** 1990 Aug;163(2):705–7
Study of the functional anatomy of bovine cervical mucosa with special reference to mucus secretion and sperm transport. Mullins KJ, et al. **Anat Rec** 1989 Oct; 225(2):106–17
The physiology of sperm recovered from the human cervix: acrosomal status and response to inducers of the acrosome reaction. Zinaman M, et al. **Biol Reprod** 1989 Nov; 41(5):790–7
Hormonal control of the cervix in pregnant gilts. I. Changes in the physical properties of the cervix correlate temporally with elevated serum levels of estrogen and relaxin. Eldridge-White R, et al. **Endocrinology** 1989 Dec; 125(6):2996–3003
Hormonal control of the cervix in pregnant gilts. II. Relaxin promotes changes in the physical properties of the cervix in ovariectomized hormone-treated pregnant gilts. O'Day MB, et al. **Endocrinology** 1989 Dec;125(6):3004–10
Enzymatic collagen degradation in the pregnant guinea pig cervix during physiological maturation of the cervix and after local application of prostaglandins. Rath W, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Sep;32(3):199–204
Clinical significance of crossed in vitro sperm-cervical mucus penetration test in infertility investigation. Eggert-Kruse W, et al. **Fertil Steril** 1989 Dec;52(6):1032–40
Mechanical properties of the pregnant human uterine cervix use of an instrument to measure the index of cervical distensibility. Cabrol D, et al. **Gynecol Obstet Invest** 1990; 29(1):32–6
Genital stimulation facilitates maternal behavior in estrous ewes. Poindron P, et al. **Horm Behav** 1989 Sep;23(3):305–16
Vaginal and cervical pH in normal pregnancy and pregnancy complicated by preterm labor. Riedewald S, et al. **J Perinat Med** 1990;18(3):181–6
The elastic modular changes of the rat uterine cervix under different physiological conditions. Wu JH, et al. **J Tongji Med Univ** 1990;10(1):57–9
Ovarian relaxin is not essential for dilatation of cervix [letter] Eddie LW, et al. **Lancet** 1990 Jul 28;336(8709):243
Simulation of cervical changes in labour: reproducibility of expert assessment. Tuffnell DJ, et al. **Lancet** 1989 Nov 4; 2(8671):1089–90
Randomized trial of Dilapan and Laminaria as cervical ripening agents before induction of labor. Blumenthal PD, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 1):365–8
Head-to-cervix forces and their relationship to the outcome of labor. Gough GW, et al. **Obstet Gynecol** 1990 Apr; 75(4):613–8
Entry of spermatozoa into the cervical mucosa and transmission of the AIDS virus [letter] Sievers-Altermann R, et al. **S Afr Med J** 1990 Mar 17;77(6):319
[Laminaria in obstetrical and gynecological practice] Abramchenko VV, et al. **Akush Ginekol (Mosk)** 1989 Oct; (10):12–4 (25 ref.) **(Rus)**
[The breech partogram] Poljak B, et al. **Jugosl Ginekol Perinatol** 1989 May–Aug;29(3–4):103–6 (Eng. Abstr.) **(Scr)**

PHYSIOPATHOLOGY

Warning symptoms, uterine contractions, and cervical examination findings in women at risk of preterm delivery. Copper RL, et al. **Am J Obstet Gynecol** 1990 Mar; 162(3):748–54

RADIOGRAPHY

Radiologic appearance of the upper cervical canal in women with a history of premature delivery. II. Relationship to clinical presentation and to tests of cervical compliance. Zlatnik FJ, et al. **J Reprod Med** 1989 Aug;34(8):525–30
Analysis of the dose-volume histogram in uterine cervical cancer by diagnostic CT. Mizoe J. **Strahlenther Onkol** 1990 Apr;166(4):279–84

SURGERY

The use of nonspecific esterase in assessing the effectivity of cryotherapy on the uterine cervix. Matányi S, et al. **Acta Chir Hung** 1989;30(3):205–9
Change of tissue temperature of the uterine cervix during double freezing. Matányi S. **Acta Chir Hung** 1989; 30(4):319–24
Vaginosonographic surveillance of cervix after conization. Eppel W, et al. **Acta Obstet Gynecol Scand** 1989;68(1):89–91
The Shirodkar operation: a reappraisal. Frieden FJ, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):830–3
Modified laparoscopy for monitoring transcervical surgery [letter] Lin BL, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):243–4
Prevention of post-cone biopsy cervical stenosis using a temporary cervical stent. Luesley DM, et al. **Br J Obstet Gynaecol** 1990 Apr;97(4):334–7
Large loop excision of the transformation zone (LLETZ). A new method of management for women with cervical intraepithelial neoplasia. Prendiville W, et al. **Br J Obstet Gynaecol** 1989 Sep;96(9):1054–60
Significance of positive endocervical curettage in predicting endocervical canal involvement in patients with cervical intraepithelial neoplasia. Husseinzadeh N, et al. **Gynecol Oncol** 1989 Dec;35(3):358–61
Cervical cerclage—its role in the pregnant anomalous uterus. Golan A, et al. **Int J Fertil** 1990 May–Jun;35(3):164–70
Safety of outpatient cerclage. Wetchler BV, et al. **J Reprod Med** 1990 Mar;35(3):243–6
Microcolpohysteroscopic tailoring of cervical conization. Gilbert L, et al. **Obstet Gynecol** 1990 Jul;76(1):101–5
A new technique for reduction of prolapsed fetal membranes for emergency cervical cerclage [letter; comment] Pelosi MA. **Obstet Gynecol** 1990 Jan;75(1):143–4 Comment on: Obstet Gynecol 1989 Sep;74(3 Pt 1):408–10.
Emergent cerclage. Barth WH Jr, et al. **Surg Gynecol Obstet** 1990 Apr;170(4):323–6
[Treatment with rectal diazepam or acetylsalicylic acid in effervescing tablets in ambulatory cervical curettage and biopsy. A double-blind randomized study] Andersen HJ, et al. **Ugeskr Laeger** 1990 May 14;152(20):1437–9 (Eng. Abstr.) **(Dan)**
[Cerclage surgery—a possible treatment/prevention of cervical insufficiency] Grinsted L. **Ugeskr Laeger** 1989 Oct 30;151(44):2890–3 (Eng. Abstr.) **(Dan)**
[Loop instrumentation for hemostasis during surgery of the cervical portio] Saling E. **Z Geburtshilfe Perinatol** 1989 Sep-Oct;193(5):241–2 (Eng. Abstr.) **(Ger)**
[The course of pregnancy following cerclage. 1. Singleton pregnancies] Brockerhoff P, et al. **Zentralbl Gynakol** 1990; 112(10):601–7 (Eng. Abstr.) **(Ger)**
[Cerclage of the cervix uteri via a transabdominal route: report of 2 cases] Lippi UG, et al. **Rev Paul Med** 1989 May-Jun;107(3):189–90 (Eng. Abstr.) **(Por)**

ULTRASTRUCTURE

Ultrastructural alterations in the ectocervical epithelium after cryotherapy. Matányi S, et al. **Acta Chir Hung** 1989; 30(3):211–7
An edge relocation segmentation algorithm. MacAulay C, et al. **Anal Quant Cytol Histol** 1990 Jun;12(3):165–71
Immunohistochemical investigations of steroid receptors in normal and neoplastic squamous epithelium of the uterine cervix. Mosny DS, et al. **Gynecol Oncol** 1989 Dec; 35(3):373–7

CESAREAN SECTION

Blood transfusion during cesarean section. A 12 years' retrospective analysis. Imberti R, et al. **Acta Anaesthesiol Belg** 1990;41(2):139–44
A fatal accident after epidural anesthesia for cesarean section. Van Zundert AA, et al. **Acta Anaesthesiol Belg** 1989; 40(3):195–9
Isoflurane or halothane for cesarean section: comparative maternal and neonatal effects. Abboud TK, et al. **Acta Anaesthesiol Scand** 1989 Oct;33(7):578–81
Visceral pain during caesarean section under spinal and epidural anaesthesia with bupivacaine. Alahuhta S, et al. **Acta Anaesthesiol Scand** 1990 Feb;34(2):95–8
Epidural anesthesia for cesarean section in a patient with severe pulmonary hypertension. Atanassoff P, et al. **Acta Anaesthesiol Scand** 1990 Jan;34(1):75–7
Does ephedrine influence newborn neurobehavioural responses and spectral EEG when used to prevent maternal hypotension during caesarean section? Kangas-Saarela T, et al. **Acta Anaesthesiol Scand** 1990 Jan;34(1):8–16
Pharmacokinetics of scopolamine during caesarean section: relationship between serum concentration and effect. Kanto J, et al. **Acta Anaesthesiol Scand** 1989 Aug;33(6):482–6
The effect on uteroplacental blood flow of epidural anaesthesia containing adrenaline for caesarean section. Skjöldebrand A, et al. **Acta Anaesthesiol Scand** 1990 Feb; 34(2):85–9
Uteroplacental blood flow measured by placental scintigraphy during epidural anaesthesia for caesarean section. Skjöldebrand A, et al. **Acta Anaesthesiol Scand** 1990 Feb;34(2):79–84
Occurrence of Enterobacteriaceae and E. coli in the intestine of the newborn by caesarean section. Bezirtzoglou E, et al. **Acta Microbiol Bulg** 1990;25:76–81
The influence of delivery mode on biological inactive renin level in umbilical cord blood. Fujimura A, et al. **Am J Hypertens** 1990 Jan;3(1):23–6
Epidural analgesia and cesarean section for dystocia [letter] Chestnut DH. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):247–9
Labor epidural analgesia and dystocia-related cesarean section [letter] Downing JW, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):1096–7
Fetal heart rate monitoring during cesarean section [letter] Dunn LK. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):253
The incidence of significant fetomaternal hemorrhage in patients undergoing cesarean section. Feldman N, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):855–8

Vaginal birth after cesarean section: an appraisal of the reappraisal [letter] Flamm BL. **Am J Obstet Gynecol** 1990 Aug;163(2):691–2

Vaginal birth after cesarean or repeat cesarean section: medical risks or social realities? Kirk EP, et al. **Am J Obstet Gynecol** 1990 Jun;162(6):1398–403; discussion 403–5

Fetal gastroschisis and omphalocele: is cesarean section the best mode of delivery? Lewis DF, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):773–5

Cesarean salpingectomy rare but not first [letter; comment] Pelosi MA. **Am J Obstet Gynecol** 1990 Feb;162(2):605–6 Comment on: Am J Obstet Gynecol 1987 May;156(5):1152.

Prognosis for twins with birth weight less than 1500 gm: the impact of cesarean section in relation to fetal presentation. Rydhström H. **Am J Obstet Gynecol** 1990 Aug;163(2):528–33

Postpartum pulmonary embolus as an unusual cause of cortical blindness. Stiller RJ, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):696–7

Vaginal birth after abdominal delivery [letter] Thorp JM Jr, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):1101–2

Safe motherhood: cesarean section or symphysiotomy? van Roosmalen J. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):1–4

Vaginal birth after cesarean section: a reappraisal of risk. Yetman TJ, et al. **Am J Obstet Gynecol** 1989 Nov; 161(5):1119–23

Autotransfusion during cesarean section [letter] Zichella L, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):295

Prophylactic intramyometrial carboprost tromethamine does not substantially reduce blood loss relative to intramyometrial oxytocin at routine cesarean section. Catanzarite VA. **Am J Perinatol** 1990 Jan;7(1):39–42

Vaginal birth after cesarean: a comparison of maternal and neonatal morbidity to elective repeat cesarean section. Eriksen NL, et al. **Am J Perinatol** 1989 Oct;6(4):375–9

Caesarean section and ablation of a cerebral arterio-venous malformation. Buckley TA, et al. **Anaesth Intensive Care** 1990 May;18(2):248–51

Acid aspiration prophylaxis in Australian obstetric hospitals—a survey. Burgess RW, et al. **Anaesth Intensive Care** 1989 Nov;17(4):492–5

The haemodynamic effects of propofol and thiopentone for induction of caesarean section. Gin T, et al. **Anaesth Intensive Care** 1990 May;18(2):175–9

Maternal and fetal levels of propofol at caesarean section. Gin T, et al. **Anaesth Intensive Care** 1990 May;18(2):180–4

A double-blind comparison of epidural bupivacaine and bupivacaine-fentanyl for caesarean section. Paech MJ, et al. **Anaesth Intensive Care** 1990 Feb;18(1):22–30

Pharmacokinetics of glycopyrronium in parturients. Ali-Melkkilä T, et al. **Anaesthesia** 1990 Aug;45(8):634–7

Unilateral subarachnoid anaesthesia [see comments] Armstrong PJ. **Anaesthesia** 1989 Nov;44(11):918–9 Comment in: Anaesthesia 1990 May;45(5):414.

Obstetric anaesthesia in dystrophia myotonica. Blumgart CH, et al. **Anaesthesia** 1990 Jan;45(1):26–9

Detecting awareness during general anaesthetic caesarean section. An evaluation of two methods. Bogod DG, et al. **Anaesthesia** 1990 Apr;45(4):279–84

Caesarean section: pain and awareness without negligence. Brahams D. **Anaesthesia** 1990 Feb;45(2):161–2

Anaesthesia in a gravid achondroplastic dwarf. Brimacombe JR, et al. **Anaesthesia** 1990 Feb;45(2):132–4

Sprotte needle for intrathecal anaesthesia for caesarean section: incidence of postdural puncture headache. Cesarini M, et al. **Anaesthesia** 1990 Aug;45(8):656–8

Hypotension and epidural for caesarean section [letter; comment] Crochetiere CT. **Anaesthesia** 1990 Jan;45(1):69 Comment on: Anaesthesia 1989 Jun;44(6):463–6.

Recurrent anaphylactoid reaction during caesarean section [letter; comment] Emmott RS. **Anaesthesia** 1990 Jan; 45(1):62 Comment on: Anaesthesia 1989 Jul;44(7):585–7.

Epidural versus general anaesthesia for elective caesarean section. Effect on Apgar score and acid–base status of the newborn [see comments] Evans CM, et al. **Anaesthesia** 1989 Sep;44(9):778–82 Comment in: Anaesthesia 1990 May;45(5):411–2.

A comparison of the effects of omeprazole and ranitidine on gastric secretion in women undergoing elective caesarean section. Ewart MC, et al. **Anaesthesia** 1990 Jul; 45(7):527–30

Effect of intravenous cimetidine on lignocaine disposition during extradural caesarean section. Flynn RJ, et al. **Anaesthesia** 1989 Sep;44(9):739–41

Propofol for caesarean section [letter] Gin T, et al. **Anaesthesia** 1990 Feb;45(2):165

Intravenous induction agents for caesarean section. Holdcroft A, et al. **Anaesthesia** 1989 Sep;44(9):719–20 (20 ref.)

Epidural fentanyl and 0.5% bupivacaine for elective caesarean section. King MJ, et al. **Anaesthesia** 1990 Apr; 45(4):285–8

Epidural or general anaesthesia for caesarean section? [letter; comment] Lawes EG, et al. **Anaesthesia** 1990 May; 45(5):411–2 Comment on: Anaesthesia 1989 Sep;44(9):778–82.

Laryngeal mask airway for caesarean section. McClune S, et al. **Anaesthesia** 1990 Mar;45(3):227–8

A comparison between propofol and thiopentone as induction agents in obstetric anaesthesia. Moore J, et al. **Anaesthesia** 1989 Sep;44(9):753–7

Awareness, caesarean section and the isolated forearm technique [letter] Tunstall ME. **Anaesthesia** 1990 Aug; 45(8):686

Comparison of propofol and thiopentone for induction of anaesthesia for elective caesarean section. Valtonen M, et al. **Anaesthesia** 1989 Sep;44(9):758–62

Prophylactic oral naltrexone with intrathecal morphine for cesarean section: effects on adverse reactions and analgesia. Abbound TK, et al. **Anesth Analg** 1990 Oct;71(4):367–70

Electrocardiographic changes during cesarean section under regional anesthesia [letter; comment] Elstein ID, et al. **Anesth Analg** 1990 Jul;71(1):103 Comment on: Anesth Analg 1990 Jan;70(1):36–43.

Vecuronium for rapid-sequence intubation for cesarean section. Hawkins JL, et al. **Anesth Analg** 1990 Aug; 71(2):185–90

Incidence of venous air embolism during cesarean section is unchanged by the use of a 5 to 10 degree head-up tilt [see comments] Karuparthy VR, et al. **Anesth Analg** 1989 Nov;69(5):620–3 Comment in: Anesth Analg 1990 Jun;70(6):668.

Perioperative blood transfusion may conceal atypical pseudocholinesterase. Lovely MJ, et al. **Anesth Analg** 1990 Mar;70(3):326–7

Venous embolism during cesarean section [letter; comment] Meyer RM. **Anesth Analg** 1990 Jun;70(6):668 Comment on: Anesth Analg 1989 Nov;69(5):620–3.

Incidence of electrocardiographic changes during cesarean delivery under regional anesthesia [see comments] Palmer CM, et al. **Anesth Analg** 1990 Jan;70(1):36–43 Comment in: Anesth Analg 1990 Jul;71(1):103.

Transient maternal hypotension following epidural anesthesia. Philipson EH, et al. **Anesth Analg** 1989 Nov; 69(5):604–7

Prophylactic oral naltrexone with epidural morphine: effect on adverse reactions and ventilatory responses to carbon dioxide. Abboud TK, et al. **Anesthesiology** 1990 Feb; 72(2):233–7

Cesarean delivery in a patient with a transplanted heart. Camann WR, et al. **Anesthesiology** 1989 Oct;71(4):618–20

Herpes labialis in parturients receiving epidural morphine following cesarean section. Crone LA, et al. **Anesthesiology** 1990 Aug;73(2):208–13

Intravenous propofol during cesarean section: placental transfer, concentrations in breast milk, and neonatal effects. A preliminary study. Dailland P, et al. **Anesthesiology** 1989 Dec;71(6):827–34

A comparison of epidural and intramuscular morphine in patients following cesarean section. Daley MD, et al. **Anesthesiology** 1990 Feb;72(2):289–94

A randomized double-blind comparison of epidural versus intravenous fentanyl infusion for analgesia after cesarean section. Ellis DJ, et al. **Anesthesiology** 1990 Jun;72(6):981–6

Cardiac arrest after succinylcholine administration in a pregnant patient recovered from Guillain-Barré syndrome. Feldman JM. **Anesthesiology** 1990 May;72(5):942–4

Perioperative analgesia with subarachnoid fentanyl-bupivacaine for cesarean delivery. Hunt CO, et al. **Anesthesiology** 1989 Oct;71(4):535–40

Transdermal scopolamine decreases nausea and vomiting following cesarean section in patients receiving epidural morphine. Kotelko DM, et al. **Anesthesiology** 1989 Nov; 71(5):675–8

Influence of local anesthetic solution on postdural puncture headache. Naulty JS, et al. **Anesthesiology** 1990 Mar; 72(3):450–4

Patient variables and the subarachnoid spread of hyperbaric bupivacaine in the term parturient. Norris MC. **Anesthesiology** 1990 Mar;72(3):478–82

An evaluation of morphine and oxymorphone administered via patient-controlled analgesia (PCA) or PCA plus basal infusion in postcesarean-delivery patients. Sinatra R, et al. **Anesthesiology** 1989 Oct;71(4):502–7

Anaphylactic reaction to epidural fentanyl. Zucker-Pinchoff B, et al. **Anesthesiology** 1989 Oct;71(4):599–601

C-reactive protein (CRP) levels after normal and complicated caesarean section. Stavén P, et al. **Ann Chir Gynaecol** 1989;78(2):142–5

Caesarean section and duration of breast feeding among Brazilians. Victora CG, et al. **Arch Dis Child** 1990 Jun; 65(6):632–4

The use of oxytocin after a previous caesarean section—a review and report on a series. Bider D, et al. **Arch Gynecol Obstet** 1990;247(1):15–9 (19 ref.)

Effect of cesarean section on outcome in high- and low-risk very preterm infants. Dietl J, et al. **Arch Gynecol Obstet** 1989;246(2):91–6

Vaginal delivery following one previous cesarean birth: nation wide survey. Mor-Yosef S, et al. **Asia Oceania J Obstet Gynaecol** 1990 Mar;16(1):33–7

The conservative management of a hydatidiform mole with coexistent living fetus. A case report. James C. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 (Pt 2)):356–8

Infection after caesarean section [letter; comment] **BMJ** 1989 Nov 18;299(6710):1282–3 Comment on: BMJ 1989 Oct 21;299(6706):1003–6.

Prophylactic antibiotics and caesarean section [published erratum appears in BMJ 1990 Feb 3;300(6720):284] Howie PW, et al. **BMJ** 1990 Jan 6;300(6716):2–3 (17 ref.)

Reducing the incidence of infection after caesarean section: implications of prophylaxis with antibiotics for hospital resources [see comments] Mugford M, et al. **BMJ** 1989 Oct 21;299(6706):1003–6 Comment in: BMJ 1989 Nov 18;299(6710):1282–3. Comment in: BMJ 1989 Dec 9;299(6713):1466–7.

Routine antibiotics for caesarean section [letter; comment] Murphy H, et al. **BMJ** 1989 Dec 9;299(6713):1466–7 Comment on: BMJ 1989 Oct 21;299(6706):1003–6.

Profound respiratory depression after extradural fentanyl. Brockway MS, et al. **Br J Anaesth** 1990 Feb;64(2):243–5

Pharmacokinetics of propofol in women undergoing elective caesarean section. Gin T, et al. **Br J Anaesth** 1990 Feb; 64(2):148–53

Hypertensive and catecholamine response to tracheal intubation in patients with pregnancy-induced hypertension. Lavies NG, et al. **Br J Anaesth** 1989 Oct; 63(4):429–34

Aspiration pneumonitis prophylaxis in obstetric anaesthesia: comparison of effervescent cimetidine-sodium citrate mixture and sodium citrate. Ormezzano X, et al. **Br J Anaesth** 1990 Apr;64(4):503–6

Analgesia following extradural and i.m. pethidine in post-caesarean section patients. Perriss BW, et al. **Br J Anaesth** 1990 Mar;64(3):355–7

Extradural anaesthesia for caesarean section in achondroplasia. Wardall GJ, et al. **Br J Anaesth** 1990 Mar; 64(3):367–70

Anaesthesia for simultaneous caesarean section and clipping of intracerebral aneurysm. Whitburn RH, et al. **Br J Anaesth** 1990 May;64(5):642–5

Complications of spinal anaesthesia following extradural block for caesarean section [letter; comment] Wildsmith JA. **Br J Anaesth** 1989 Sep;63(3):366–7 Comment on: Br J Anaesth 1989 Mar;62(3):335–7.

Respiratory difficulty following caesarean section. Tembo DC, et al. **Br J Hosp Med** 1990 Jul;44(1):52

Uterine activity during spontaneous labour after previous lower-segment caesarean section [letter; comment] Goodlin RC. **Br J Obstet Gynaecol** 1990 Mar;97(3):277–8 Comment on: Br J Obstet Gynaecol 1989 Aug;96(8):933–8.

Monitoring the fetus with a pulse oximeter during a caesarean section. Johnson N, et al. **Br J Obstet Gynaecol** 1990 Jul; 97(7):653–4

Anaesthesia for emergency caesarean section. Morgan BM, et al. **Br J Obstet Gynaecol** 1990 May;97(5):420–4

Haemodynamic changes associated with caesarean section under epidural anaesthesia. Robson SC, et al. **Br J Obstet Gynaecol** 1989 Jun;96(6):642–7

Caesarean section for the birth of the second twin. Samra JS, et al. **Br J Obstet Gynaecol** 1990 Mar;97(3):234–6

Epidural anaesthesia for caesarean section in patients with active recurrent genital herpes simplex infections: a retrospective review. Crosby ET, et al. **Can J Anaesth** 1989 Nov;36(6):701–4

Propofol infusion anaesthesia for caesarean section. Gregory MA, et al. **Can J Anaesth** 1990 Jul;37(5):514–20

Supplemental oxygen during caesarean section under epidural anaesthesia: nasal prongs vs face mask. Halpern SH, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S137

Comparison of lidocaine CO2, two per cent lidocaine hydrochloride and pH adjusted lidocaine hydrochloride for caesarean section anesthesia. Liepert DJ, et al. **Can J Anaesth** 1990 Apr;37(3):333–6

Another look at maternal inspired oxygen concentration during cesarian section. Perreault C, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S118

Anaesthetic management of emergency caesarean section followed by pulmonary embolectomy. Splinter WM, et al. **Can J Anaesth** 1989 Nov;36(6):689–92

Dystocia and cesarean section [letter; comment] **Can Med Assoc J** 1990 Jun 1;142(11):1187–8 Comment on: Can Med Assoc J 1990 Mar 1;142(5):459–63.

Neonatal asphyxia secondary to foaming syndrome after cesarean section [letter] Katzman GH. **Clin Pediatr (Phila)** 1990 Jun;29(6):355

Patient-controlled analgesia with meperidine after cesarean section [letter] Smythe MA, et al. **Clin Pharm** 1990 Feb; 9(2):92–3

Serum concentration of alpha 1-acid glycoprotein and albumin following cesarean section and vaginal delivery [letter] Larijani GE, et al. **DICP** 1990 Mar;24(3):328–9

Maternal and fetal digoxin-like immunoreactive factor in elective cesarean sections and spontaneous vaginal delivery. Zimmer EZ, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jul–Aug;36(1–2):53–8

Fibronectin and postpartum infection in rabbits: an animal model. Bawdon RE, et al. **Gynecol Obstet Invest** 1989; 28(4):185–90

Prevention of a side effect of epidural morphine by epidural steroid administration in cesarean section. Etchin A, et al. **Gynecol Obstet Invest** 1990;29(4):305–6

Successful outcome of pregnancy following complete removal of uterine septum during cesarean section. Lipitz S, et al. **Gynecol Obstet Invest** 1990;29(1):78–80

C-section for organ donation. Berkowitz ST, et al. **Hastings Cent Rep** 1990 Mar–Apr;20(2):22; discussion 22–4

Prophylaxis for caesarean section: where to turn [letter] [see comments] Dougherty SH, et al. **Infect Control Hosp Epidemiol** 1990 Jan;11(1):9 Comment in: Infect Control Hosp Epidemiol 1990 May;11(5):228.

Prophylaxis of cesarean sections [comment] Frank E. **Infect Control Hosp Epidemiol** 1990 May;11(5):228 Comment on: Infect Control Hosp Epidemiol 1990 Jan;11(1):9.

Anesthesia for cesarean delivery. Carp H.

Int Anesthesiol Clin 1990 Winter;28(1):25–9 (25 ref.)

Tubal ligation at cesarean delivery in five Asian centers: a comparison with tubal ligation soon after vaginal delivery. Chi IC, et al. **Int J Gynaecol Obstet** 1989 Nov;30(3):257–65

Post-cesarean analgesia using a subcutaneous pethidine infusion. Gleeson RP, et al. **Int J Gynaecol Obstet** 1990 Sep;33(1):13–7

Update on delivery following prior cesarean section: a 15-year review 1972–1987. Meehan FP, et al. **Int J Gynaecol Obstet** 1989 Nov;30(3):205–12

Fetal resuscitation in a patient with varicella pneumonia and preterm labor. Steyn DW, et al. **Int J Gynaecol Obstet** 1989 Oct;30(2):171–5

Vaginal delivery after cesarean section. Veridiano NP, et al. **Int J Gynaecol Obstet** 1989 Aug;29(4):307–11

Methylergometrine and puerperal infections after normal delivery and after cesarean section. Iatrakis GM, et al. **Isr J Med Sci** 1989 Dec;25(12):714–5

Onset of action between bupivacaine 0.5% and bupivacaine 0.5% plus fentanyl 75 mcg. Johnson C, et al. **J Clin Anesth** 1989;1(6):440–3

Difficult airway in obstetric anesthesia: a reply [letter; comment] Palmer CM, et al. **J Clin Anesth** 1989;1(5):403–5 Comment on: J Clin Anesth 1988;1(2):104–11.

The identification of maternity in an unusual pregnancy-related homicide. Clark EG, et al. **J Forensic Sci** 1990 Jan;35(1):80–8

Safety of copper T as contraceptive after caesarean section. Parikh V, et al. **J Indian Med Assoc** 1989 May;87(5):113–5

Role of nitroglycerin ointment in preventing the pressure response during caesarean section in pre-eclampsia. Rudra A, et al. **J Indian Med Assoc** 1989 Aug;87(8):195–6

Perinatal mortality and morbidity in caesarean section. Sood M, et al. **J Indian Med Assoc** 1990 Jan;88(1):6–8

Intrathecal meperidine as the sole agent for cesarean section. Cheun JK, et al. **J Korean Med Sci** 1989 Sep;4(3):135–8

Factors in intraoperative blood transfusion in cesarean section at Ramathibodi Hospital. Suchartwatnachai C, et al. **J Med Assoc Thai** 1990 Feb;73 Suppl 1:61–4

Incidental appendectomy at cesarean section: a prospective study. Tungphaisal S, et al. **J Med Assoc Thai** 1989 Nov; 72(11):633–7

Fetal outcome in term frank breech primipara delivered vaginally and by elective cesarean section. Wisestanakorn W, et al. **J Med Assoc Thai** 1990 Feb;73 Suppl 1:47–51

Prognosis for twins discordant in birth weight of 1.0 kg or more: the impact of cesarean section. Rydhström H. **J Perinat Med** 1990;18(1):31–7

Delivery of the low birthweight and the very low birthweight breech: cesarean section or vaginal delivery? Suidan JS, et al. **J Perinat Med** 1989;17(2):145–9

Routine predelivery coagulation screening in previous cesarean patients: impact on patient management. Sakala EP, et al. **J Perinatol** 1989 Dec;9(4):386–7

Cefotaxime for cesarean section prophylaxis in labor. Intravenous administration vs. lavage. Berkeley AS, et al. **J Reprod Med** 1990 Mar;35(3):214–8

Etiology and treatment of post-cesarean-section endometritis after cephalosporin prophylaxis. Hillier S, et al. **J Reprod Med** 1990 Mar;35(3 Suppl):322–8

Elective repeat cesarean section. Effect of anesthesia type on blood loss. Hood DD, et al. **J Reprod Med** 1990 Apr; 35(4):368–72

Selective effect of cefoxitin prophylaxis on post-cesarean-section microbial flora. Ismail MA, et al. **J Reprod Med** 1990 Feb;35(2):168–74

Myometrial norepinephrine in human pregnancy. Elevated levels in various disorders leading to cesarean section. Rydhström H, et al. **J Reprod Med** 1989 Nov;34(11):901–4

Routine postcesarean urine culture. A cost-effectiveness analysis. Sakala EP, et al. **J Reprod Med** 1990 Apr; 35(4):373–4

Vaginal birth after cesarean section. Experience in a community-based practice. van Amerongen D. **J Reprod Med** 1989 Aug;34(8):531–4

Birth of second twin [letter] **Lancet** 1990 Sep 15; 336(8716):690–1

Epidural block for Caesarean section and circulatory changes. **Lancet** 1989 Nov 4;2(8671):1076–8 (21 ref.)

Enforced caesarean section: a US appeal [news] Brahams D. **Lancet** 1990 May 26;335(8700):1270

Caesarean section for fetal distress [letter] Esmail A, et al. **Lancet** 1990 Sep 29;336(8718):819

The optimal dose of hyperbaric tetracaine spinal anesthesia for cesarean section. Pan PM, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Dec;27(4):349–52

Combined epidural lidocaine-fentanyl-epinephrine for cesarean section. Poon YY, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Jun;27(2):143–8

Court-ordered cesarean sections receive judicial defeat. Curran WJ. **N Engl J Med** 1990 Aug 16;323(7):489–92

Maternal and fetal catecholamines and uterine incision-to-delivery interval during elective cesarean. Bader AM, et al. **Obstet Gynecol** 1990 Apr;75(4):600–3

Cesarean birth for failed progress in labor [letter; comment] Cely WF. **Obstet Gynecol** 1989 Nov;74(5):829–30 Comment on: Obstet Gynecol 1989 Jun;73(6):915–20.

Labor patterns in women with previous cesareans. Chazotte C, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 1):350–5

The cesarean delivery rate can be safely reduced in a developing country. de Muylder X, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 1):360–4

The duration of labor in primiparas undergoing vaginal birth after cesarean delivery. Harlass FE, et al. **Obstet Gynecol** 1990 Jan;75(1):45–7

Ranking the risk factors for cesarean: logistic regression analysis of a nationwide study. Mor-Yosef S, et al. **Obstet Gynecol** 1990 Jun;75(6):944–7

Cesarean prophylaxis: a comparison of cefamandole and cefazolin by both intravenous and lavage routes, and risk factors associated with endometritis. Peterson CM, et al. **Obstet Gynecol** 1990 Feb;75(2):179–82

Vaginal birth after cesarean: is suspected fetal macrosomia a contraindication? [letter; comment] Ruiz-Moreno JA, et al. **Obstet Gynecol** 1990 Apr;75(4):734 Comment on: Obstet Gynecol 1989 Nov;74(5):694–7.

Oxytocin use after previous cesarean: why a higher rate of failed labor trial? Sakala EP, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 1):356–9

Rate responsive pacing with a minute ventilation sensing pacemaker during pregnancy and delivery. Lau CP, et al. **PACE** 1990 Feb;13(2):158–63

Rooming-in for babies born by caesarean section in Dr. Cipto Mangunkusumo General Hospital Jakarta. Suradi R. **Paediatr Indones** 1988 May-Jun;28(5–6):124–32

Case report. Diffuse cortical destruction in both femurs and the left humerus in puerperium. Kasperczyk A, et al. **Skeletal Radiol** 1989;18(7):533–6

The making of a medical tradition: vaginal birth after cesarean. McClain CS. **Soc Sci Med** 1990;31(2):203–10

Maternal paraparesis after epidural anesthesia and cesarean section. Ackerman WE, et al. **South Med J** 1990 Jun; 83(6):695–7 (26 ref.)

Metoclopramide versus droperidol for prevention of nausea and vomiting during epidural anesthesia for cesarean section. Chestnut DH, et al. **South Med J** 1989 Oct; 82(10):1224–7

Antibiotic prophylactic uterine lavage in cesarean section: a double-blind comparison of saline, ticarcillin, and cefoxitin irrigation in indigent patients. Lewis DF, et al. **South Med J** 1990 Mar;83(3):274–6

Epidural fentanyl for cesarean section in postpartal cardiomyopathy. Garla PG, et al. **W V Med J** 1990 Jan; 86(1):11–3

[Desquamation of the vascular endothelium after a normal birth and surgical delivery] Glavanakova V, et al. **Akush Ginekol (Sofiia)** 1989;28(5):1–6 (Eng. Abstr.) **(Bul)**

[Cesarean section with the second twin] Iankov D, et al. **Akush Ginekol (Sofiia)** 1989;28(6):70–1 **(Bul)**

[Labor after having had a cesarean section] Katsulov A, et al. **Akush Ginekol (Sofiia)** 1989;28(4):1–5 (Eng. Abstr.) **(Bul)**

[Labor induction and stimulation after a prior cesarean section] Lazarov L. **Akush Ginekol (Sofiia)** 1989; 28(5):18–22 (Eng. Abstr.) **(Bul)**

[Our experience with spinal anesthesia in cesarean section] Mincheva-Saeva M, et al. **Akush Ginekol (Sofiia)** 1990; 29(1):40–4 (Eng. Abstr.) **(Bul)**

[Outcome of the mother and baby delivered by cesarean section in pregnancy induced hypertension. Analysis of 487 cases] Bao SH, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1990 Jan;25(1):9–11, 61 (Eng. Abstr.) **(Chi)**

[Selection and evaluation of methods of anaesthesia in cesarean section] Shi LY. **Chung Hua Fu Chan Ko Tsa Chih** 1990 Jan;25(1):18–20, 61 (Eng. Abstr.) **(Chi)**

[Cesarean section in pregnancy complicated by severe hepatitis and heart disease] Zhang ZJ. **Chung Hua Fu Chan Ko Tsa Chih** 1990 Jan;25(1):12–4, 61 (Eng. Abstr.) **(Chi)**

[Measurement of topographic values during extraperitoneal cesarean section] Zhao CZ. **Chung Hua Fu Chan Ko Tsa Chih** 1990 Mar;25(2):105–7, 125 (Eng. Abstr.) **(Chi)**

[Cesarean section in placenta previa] Huang Y, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Jan;70(1):13–5, 2 (Eng. Abstr.) **(Chi)**

[Cesarean section: an analysis of 16,975 cases] Wang D. **Chung Hua I Hsueh Tsa Chih** 1990 Jan;70(1):10–2, 2 (Eng. Abstr.) **(Chi)**

[Indications of cesarean section for severe heart diseases in pregnancy--an analysis of 61 cases] Tian YB, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Jun;20(2):217–9 (Eng. Abstr.) **(Chi)**

[Dose-response of intrathecal morphine for post-cesarean analgesia] Lin CC, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Jun; 27(2):125–9 (Eng. Abstr.) **(Chi)**

[What are the present views on indications for cesarean section?] Lomíčková T, et al. **Cesk Gynekol** 1989 Sep; 54(8):604–9 **(Cze)**

[Indications for cesarean section in fetal immaturity] Lomíčková T, et al. **Cesk Gynekol** 1989 Nov;54(9):693–6 **(Cze)**

[Cesarean section under epidural anesthesia. A questionnaire study] Madsen PS, et al. **Ugeskr Laeger** 1989 Dec 4; 151(49):3312–4 (Eng. Abstr.) **(Dan)**

[Postoperative analgesia after cesarean section: sublingual buprenorphine versus subcutaneous morphine] Abid A, et al. **Ann Fr Anesth Reanim** 1990;9(3):275–9 (Eng. Abstr.) **(Fre)**

[Comparative study of propofol with thiopental for general anesthesia in cesarean section] Dailland P, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R65 **(Fre)**

[Autologous transfusion in cesarean section] Le Guillou JL, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R66 **(Fre)**

[Fetal distress after use of dextran for peridural anesthesia in a cesarean program] Rosay H, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R67 **(Fre)**

[Neonatal effects of propofol administered to the mother in anesthesia in cesarean section] Dailland P, et al. **Cah Anesthesiol** 1989 Oct;37(6):429–33 (Eng. Abstr.) **(Fre)**

[An anaphylactic-type accident caused by a dextran solution in a parturient] Rosay H, et al. **Cah Anesthesiol** 1989 Nov; 37(7):541–2 **(Fre)**

[A uterine cleft with a digestive intra-uterine adhesion detected during a cesarean section at term] Cristalli B, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(4):475–7 (8 ref.) (Eng. Abstr.) **(Fre)**

[The Zavanelli maneuver: use during breech retention of the head in the birth canal. Apropos of a case] Fernandez H, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(4):483–5 (Eng. Abstr.) **(Fre)**

[Comparative study of Pfannenstiel's incision and transverse abdominal incision in gynecologic and obstetric surgery] Berthet J, et al. **Presse Med** 1989 Sep 23;18(29):1431–3 (Eng. Abstr.) **(Fre)**

[Acute idiopathic dilatation of the right colon or Ogilvie's syndrome. Apropos of a case encountered after cesarean section] Cornier JL, et al. **Rev Fr Gynecol Obstet** 1990 Mar;85(3):194–8 (Eng. Abstr.) **(Fre)**

[Delivery in cases of twin pregnancy] Mellier G, et al. **Rev Fr Gynecol Obstet** 1990 Feb;85(2):121–5 (Eng. Abstr.) **(Fre)**

[Obstetrical treatment of retroplacental hematoma based on the clinical observation of 12 cases] Negură A. **Rev Fr Gynecol Obstet** 1990 Apr;85(4):227–31 (Eng. Abstr.) **(Fre)**

[The role of cesarean section after 32 weeks. Pediatric point of view] Putet G, et al. **Rev Fr Gynecol Obstet** 1990 Feb; 85(2):117–20 **(Fre)**

[Cesarean section in 1988. Obstetrical problems posed by the scarred uterus] Rudigoz RC, et al. **Rev Fr Gynecol Obstet** 1990 Feb;85(2):105–8 (18 ref.) **(Fre)**

[Use of fentanyl for anesthesia induction in cesarean section. Pharmacokinetics and pharmacodynamics in mother and child] Meyer-Breiting P, et al. **Anaesthesist** 1990 Mar; 39(3):144–50 (Eng. Abstr.) **(Ger)**

[Anesthesiologic and intensive care aspects of severe pre-eclampsia with HELLP syndrome] Rathgeber J, et al. **Anasth Intensivther Notfallmed** 1990 Jun;25(3):206–11 (Eng. Abstr.) **(Ger)**

[Puerperal infection in cesarean section patients with perioperative blood transfusion] Weissenbacher ER, et al. **Arch Gynecol Obstet** 1989;245(1–4):305–7 **(Ger)**

[Twin pregnancy after liver transplantation] Kreuzpaintner G, et al. **Dtsch Med Wochenschr** 1990 Jun 8;115(23):895–8 (Eng. Abstr.) **(Ger)**

[Doppler examination as an indication for surgical delivery. A case report] Schaffer H, et al. **Geburtshilfe Frauenheilkd** 1990 May;50(5):403–4 (Eng. Abstr.) **(Ger)**

[Effect of obstetric-perinatal measures on mortality and early morbidity of premature infants weighing 500 to 1,500 grams] Voigt HJ, et al. **Geburtshilfe Frauenheilkd** 1989 Aug; 49(8):720–7 (Eng. Abstr.) **(Ger)**

[Cesarean section versus vaginal delivery of breech presentation in primiparous patients] Stiglbauer M, et al. **Gynakol Rundsch** 1989;29 Suppl 2:319–20 **(Ger)**

[Cesarean section in breech presentation--for safety reasons or fear of complications?] Künzel W. **Gynakologe** 1989 Aug; 22(4):205–10 (20 ref.) **(Ger)**

[Mother and child stress parameters during cesarean section with general and peridural anesthesia] Adams HA, et al. **Reg Anaesth** 1989 Sep;12(5):87–94 (Eng. Abstr.) **(Ger)**

[Indications for cesarean section] Stoll W. **Schweiz Med Wochenschr** 1990 Feb 24;120(8):255–9 (30 ref.) (Eng. Abstr.) **(Ger)**

[Vaginal delivery following previous cesarean section] Flachowsky S, et al. **Z Arztl Fortbild (Jena)** 1990; 84(4):165–7 **(Ger)**

[A complicated course of appendicitis in the peripartal period] Reiher H, et al. **Z Arztl Fortbild (Jena)** 1990; 84(4):157–8 **(Ger)**

[Management of labor following cesarean section] Ralph G, et al. **Z Geburtshilfe Perinatol** 1989 Jul-Aug;193(4):188–92 (Eng. Abstr.) **(Ger)**

[Diagnosis and therapy of an in the cesarean section scar implanted early pregnancy] Rempen A, et al. **Z Geburtshilfe Perinatol** 1990 Jan-Feb;194(1):46–8 (Eng. Abstr.) **(Ger)**

[Toxic shock syndrome following cesarean section] Schwind S, et al. **Z Geburtshilfe Perinatol** 1990 May-Jun; 194(3):140–3 (Eng. Abstr.) **(Ger)**

[Deliveries in patients with more than 1 cesarean section] Wessel J, et al. **Z Geburtshilfe Perinatol** 1990 May-Jun; 194(3):126–30 (Eng. Abstr.) **(Ger)**

[Endometriosis on a cesarean cicatrix. Apropos of 3 cases] Sartori CA, et al. **Minerva Chir** 1989 Sep 30;44(18):2043–5 (Eng. Abstr.) **(Ita)**

[A case of pulmonary embolism after cesarean section] Bottino G, et al. **Minerva Ginecol** 1989 Nov;41(11):569–72 (Eng. Abstr.) **(Ita)**

[Ogilvie syndrome after cesarean section. A clinical

contribution] Vitale G, et al. **Minerva Ginecol** 1990 Mar; 42(3):69–72 (27 ref.) (Eng. Abstr.) **(Ita)**

[Antibiotic prophylaxis in non–elective cesarean section with single–dose imipenem versus multiple–dose cefotaxime] Mansueto GB, et al. **Riv Eur Sci Med Farmacol** 1989 Feb; 11(1):65–8 (Eng. Abstr.) **(Ita)**

[Respiratory effects of epidural anesthesia and anesthetic level obtained in patients for cesarean section] Kamitani H. **Masui** 1989 Oct;38(10):1301–11 (Eng. Abstr.) **(Jpn)**

[Anesthesia for a patient with HELLP syndrome] Shima T, et al. **Masui** 1989 Dec;38(12):1633–7 (Eng. Abstr.) **(Jpn)**

[Umbilical blood–gas status at cesarean section for breech presentation: a comparison with vertex presentation] Haruta M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Oct;41(10):1530–6 (Eng. Abstr.) **(Jpn)**

[Chlamydia trachomatis infection in a newborn infant delivered by cesarean section] Sato S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Mar;42(3):295–8 (9 ref.) **(Jpn)**

[Anaphylactic shock during elective cesarean section. Sensitizing mechanisms and follow–up] Guttormsen AB, et al. **Tidsskr Nor Laegeforen** 1989 Nov 20;109(32):3321–3 (Eng. Abstr.) **(Nor)**

[Severe hypotension in cesarean section. Aortocaval compression and regional anesthesia] Hetland S, et al. **Tidsskr Nor Laegeforen** 1989 Oct 30;109(30):3093–4 (Eng. Abstr.) **(Nor)**

[Subarachnoid anesthesia in cesarean section] Dmyterko W. **Ginekol Pol** 1989 May;60(5):283–90 (37 ref.) (Eng. Abstr.) **(Pol)**

[Choices in postoperative management of women after cesarean section and myomectomy] Abubakirova AM, et al. **Akush Ginekol (Mosk)** 1990 Mar;(3):44–8 (Eng. Abstr.) **(Rus)**

[Changes in the lactate dehydrogenase isoenzyme activity in parturients with chronic fetal hypoxia during different types of anesthesia in surgical delivery] Benediktova AB, et al. **Akush Ginekol (Mosk)** 1989 Nov;(11):49–52 (Eng. Abstr.) **(Rus)**

[The use of ketamine in cesarean section] D'iakonov VA, et al. **Akush Ginekol (Mosk)** 1989 Nov;(11):52–5 (Eng. Abstr.) **(Rus)**

[Transfusion of UV–irradiated autologous blood in the complex treatment of women with anemia after cesarean section] Kurapov EP, et al. **Akush Ginekol (Mosk)** 1990 May;(5):28–32 (Eng. Abstr.) **(Rus)**

[The support of adequate maternal and fetal gas exchange during abdominal delivery under endotracheal anesthesia] Pavlova SS, et al. **Akush Ginekol (Mosk)** 1989 Nov; (11):55–8 (Eng. Abstr.) **(Rus)**

[An assessment of the surgical and anesthesiological stress in cesarean section by studying the hypophyseal–adrenal system] Balich EIa, et al. **Anesteziol Reanimatol** 1990 Jan–Feb;(1):28–30 (Eng. Abstr.) **(Rus)**

[Neuropharmacologic analysis and clinical course of ketamine anesthesia during central alpha2–adrenostimulation with clopheline] Tarakanov AV. **Anesteziol Reanimatol** 1990 May–Jun;(3):23–6 (Eng. Abstr.) **(Rus)**

[Long term results of the development of children delivered by cesarean section] Abdullakhodzhaev MS, et al. **Pediatriia** 1989;(10):106 **(Rus)**

[Methods of diagnosis and correction of endogenous intoxication in obstetrical suppurative–inflammatory diseases] Stepaniants RI, et al. **Vopr Med Khim** 1990 Mar–Apr;36(2):37–9 (Eng. Abstr.) **(Rus)**

[Effect of metronidazole administration after cesarean section. A 1–year prospective study from November 1987 to October 1988] Elmahaishi MS, et al. **Cesk Gynekol** 1990 May;55(4):262–5 **(Slo)**

[Cesarean section in our milieu] Ruiz–Velasco V. **Ginecol Obstet Mex** 1977 Sep;42(251):177–94 (Eng. Abstr.) **(Spa)**

[Usefulness of isoflurane in anesthesia in elective cesarean section] Corralero Romaguera A, et al. **Rev Esp Anestesiol Reanim** 1990 Mar–Apr;37(2):101–2 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Reduced rate of postoperative infections in emergency cesarean section after two doses of cefuroxim perioperatively. A placebo–controlled study. Hägglund L, et al. **Acta Obstet Gynecol Scand** 1989;68(3):201–4

A comparison of the morbidity of midforceps and cesarean delivery. Bashore RA, et al. **Am J Obstet Gynecol** 1990 Jun;162(6):1428–34; discussion 1434–5

Catastrophic complications of previous cesarean section. Chazotte C, et al. **Am J Obstet Gynecol** 1990 Sep; 163(3):738–42

Antibiotics for postcesarean endometritis [letter; comment] Duff P. **Am J Obstet Gynecol** 1989 Oct;161(4):1087 Comment on: Am J Obstet Gynecol 1987 Oct;157(4 Pt 1):908–9.

Infections complicating low–risk cesarean sections in community hospitals: efficacy of antimicrobial prophylaxis. Ehrenkranz NJ, et al. **Am J Obstet Gynecol** 1990 Feb; 162(2):337–43

Fracture of the femur at cesarean section: case report and review of literature. Vasa R, et al. **Am J Perinatol** 1990 Jan;7(1):46–8 (9 ref.)

Are Doppler–detected venous emboli during cesarean section air emboli? Fong J, et al. **Anesth Analg** 1990 Sep;71(3):254–7

Ultrasonography of the lower uterine segment after multiple caesarean sections. Kirkinen P. **Ann Med** 1990 Apr; 22(2):137–9

How safe is caesarean section in current practice? A survey of mortality and serious morbidity. Broe S, et al. **Aust N Z J Obstet Gynaecol** 1989 May;29(2):93–8

Single dose prophylactic antibiotics in caesarean sections. Chan AC, et al. **Aust N Z J Obstet Gynaecol** 1989 May; 29(2):107–9

Blood transfusion and caesarean section. Maxwell CN. **Aust N Z J Obstet Gynaecol** 1989 May;29(2):121–3

Precordial Doppler diagnosis of haemodynamically compromising air embolism during caesarean section. Fong J, et al. **Can J Anaesth** 1990 Mar;37(2):262–4

Epidural sufentanil for post–caesarean section analgesia: lack of benefit of epinephrine. McMorland GH, et al. **Can J Anaesth** 1990 May;37(4 Pt 1):432–7

Infective–hemorrhagic complications of cesarean section. A case review of 2220 subjects [published erratum appears in Clin Exp Obstet Gynecol 1990;17(1):following 52] Borruto F, et al. **Clin Exp Obstet Gynecol** 1989;16(4):97–100

Sulbactam/ampicillin versus metronidazole/gentamicin in the treatment of post–cesarean section endometritis. Martens MG, et al. **Diagn Microbiol Infect Dis** 1989 Jul–Aug;12(4 Suppl):189S–194S

Management of antepartum spontaneous membrane rupture after one previous caesarean section. Carroll SG, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 May–Jun; 35(2–3):173–8

Chronic tuboovarian abscess due to Staphylococcus aureus: a case report and literature review. Meirow D, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Dec;33(3):275–9

Breast feeding in cesarean babies. Datta T. **Indian Pediatr** 1990 Jan;27(1):86–7

Antimicrobial prophylaxis of cesarean section [editorial] Jones RN. **Infect Control Hosp Epidemiol** 1990 May; 11(5):233–4

True rupture/scar dehiscence in delivery following prior section. Meehan FP, et al. **Int J Gynaecol Obstet** 1990 Mar; 31(3):249–55

Comparison of one dose cefazolin versus one dose cefotetan for cesarean section prophylaxis. Probst JR, et al. **J Fla Med Assoc** 1989 Dec;76(12):1027–9

Post–operative urinary tract infection and wound infection in women undergoing caesarean section: a comparison of two study periods in 1985 and 1987. Leigh DA, et al. **J Hosp Infect** 1990 Feb;15(2):107–16

Penicillin–tetracycline prophylaxis in cesarean delivery: prospective and randomized comparison of short and long term therapy. Neuman M, et al. **J Perinat Med** 1990; 18(2):145–8

Bacteriologic findings of post–cesarean endometritis in adolescents. Berenson AB, et al. **Obstet Gynecol** 1990 Apr; 75(4):627–9

Antibiotic prophylaxis for cesarean delivery: is an extended–spectrum agent necessary? Carlson C, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 1):343–6

Acute maternal morbidity following classical cesarean delivery of the preterm infant. Shah YG, et al. **Obstet Gynecol** 1990 Jul;76(1):16–9

Bacterial vaginosis as a risk factor for post–cesarean endometritis. Watts DH, et al. **Obstet Gynecol** 1990 Jan; 75(1):52–8

Shoulder pain in a trial of labor after cesarean delivery [letter] Shin YK. **South Med J** 1989 Oct;82(10):1320

Packing of lower uterine segment for control of postcesarean bleeding in instances of placenta previa. Druzin ML. **Surg Gynecol Obstet** 1989 Dec;169(6):543–5

Septic complications of 100 abdominal deliveries in the rural tropics. Moran BJ, et al. **Trop Doct** 1990 Jan;20(1):39–40

[Cesarean section and postoperative infectious–inflammatory complications. I. A new method for assessing the degree of risk of infectious–inflammatory complications] Dimitrov O, et al. **Akush Ginekol (Sofiia)** 1989;28(6):29–33 (Eng. Abstr.) **(Bul)**

[Cesarean section and postoperative infectious–inflammatory complications. II. A comparative evaluation of 2 methods for antibiotic prophylaxis in cesarean section] Dimitrov O, et al. **Akush Ginekol (Sofiia)** 1990;29(1):32–5 (Eng. Abstr.) **(Bul)**

[A single dose of doxycycline for preventing infections after cesarean section] Katsulov A, et al. **Akush Ginekol (Sofiia)** 1989;28(6):33–7 (Eng. Abstr.) **(Bul)**

[Sequelae in 4122 cases of cesarean section] Yao XY. **Chung Hua Fu Chan Ko Tsa Chih** 1990 Jan;25(1):15–7, 61 (Eng. Abstr.) **(Chi)**

[Torsion of the uterus due to uterine inversion during cesarean section] Cindr J, et al. **Cesk Gynekol** 1989 Nov; 54(9):690–2 **(Cze)**

[Hospital infection in the maternity department. 3 years of surveillance in 9,204 deliveries of which 1,333 were cesarean sections] Tissot–Guerraz F, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(1):19–24 (Eng. Abstr.) **(Fre)**

[Vesical endometriosis after cesarean section (letter)] Rossi D, et al. **Presse Med** 1990 Feb 24;19(7):334–5 **(Fre)**

[Infectious and hemorrhagic complications of cesarean section. Apropos of 2,220 procedures] Audra P. **Rev Fr Gynecol Obstet** 1990 Feb;85(2):111–3 **(Fre)**

[Prevention of thrombo–embolic complications after cesarean section. Results of a survey conducted during pregnancy in the Rhône–Alps region on 3,826 cesarean sections performed in 2 years (1986–1987)] Clément HJ, et al. **Rev Fr Gynecol Obstet** 1990 Feb;85(2):114–7 (7 ref.) **(Fre)**

[Clostridium infection in the puerperium following cesarean section] Baltzer J, et al. **Geburtshilfe Frauenheilkd** 1989 Nov;49(11):1010–3 (Eng. Abstr.) **(Ger)**

[Endometriosis of the lower abdominal wall. Report of two cases secondary to cesarean section] Bottino G, et al. **Minerva Ginecol** 1990 Jun;42(6):283–5 (Eng. Abstr.) **(Ita)**

[How hazardous is cesarean section?] Bergsjø P. **Tidsskr Nor Laegeforen** 1990 Jan 30;110(3):323–4 **(Nor)**

[Preventive antibiotics in emergency cesarean section. A prospective comparison of benzylpenicillin and ampicillin plus cloxacillin] Fredriksson A, et al. **Tidsskr Nor Laegeforen** 1990 Jan 30;110(3):348–50 (Eng. Abstr.) **(Nor)**

[How hazardous is cesarean section? (letter)] Huurnink A, et al. **Tidsskr Nor Laegeforen** 1990 May 10;110(12):1565–7 (Eng. Abstr.) **(Nor)**

[Complications following cesarean section] Rasmussen SA, et al. **Tidsskr Nor Laegeforen** 1990 Jan 30;110(3):351–3 (Eng. Abstr.) **(Nor)**

[Endometriosis of the bladder and vesico–uterine fistula as complications of cesarean section] Zięba Z, et al. **Ginekol Pol** 1989 May;60(5):297–9 (Eng. Abstr.) **(Pol)**

[Bladder–uterine fistulas] Romaszewski W, et al. **Pol Tyg Lek** 1989 Feb 27;44(9):229–31 (Eng. Abstr.) **(Pol)**

[Renal fistula as preparation for ureteral reconstruction] Gomuła A, et al. **Wiad Lek** 1989 Nov 15–Dec 15; 42(22–24):1156–9 (Eng. Abstr.) **(Pol)**

[Clinical aspects of peritonitis after cesarean section] Pańczyk T, et al. **Wiad Lek** 1989 Jun 1;42(11):720–4 (Eng. Abstr.) **(Pol)**

[Treatment of obstetrical infection] Chiladze AZ. **Akush Ginekol (Mosk)** 1989 Oct;(10):58–60 (Eng. Abstr.) **(Rus)**

[Laser exposure of the blood as a method of preventing inflammatory complications following cesarean section] Krasnopol'skiĭ VI, et al. **Akush Ginekol (Mosk)** 1989 Nov; (11):46–8 (Eng. Abstr.) **(Rus)**

[Hysterectomy following a cesarean section complicated by hypotonic hemorrhage] Sidorova IS, et al. **Akush Ginekol (Mosk)** 1989 Nov;(11):42–5 (Eng. Abstr.) **(Rus)**

[Pregnancy–associated alpha 2–glycoproteins in the diagnosis of postpartum suppurative and septic diseases] Gorin VS, et al. **Sov Med** 1990;(1):29–32 (Eng. Abstr.) **(Rus)**

[Non–surgical sanitation in patients with obstetrical and gynecological infections] Lytkin MI, et al. **Vestn Khir** 1989 Jul;143(7):28–31 (Eng. Abstr.) **(Rus)**

[Antibiotic therapy in post–cesarean endomyometritis. Comparison of ampicillin–gentamicin and ampicillin–metronidazole regimens] Walss–Rodríguez R, et al. **Gac Med Mex** 1990 Mar–Apr;126(2):102–7 (Eng. Abstr.) **(Spa)**

HISTORY

Caesarean birth. O'Sullivan JF. **Ulster Med J** 1990 Apr; 59(1):1–10

[The ancient history of cesarean section as reflected in literature and art] Szabó A. **Orv Hetil** 1990 Jun 3; 131(22):1199–201 **(Hun)**

[The first cesarean section in Polish obstetrics] Waszyński E. **Ginekol Pol** 1989 Jan;60(1):52–6 (Eng. Abstr.) **(Pol)**

INSTRUMENTATION

[Use of a stapler instrument for hysterotomy in cesarean section] von Rechenberg KN. **Z Geburtshilfe Perinatol** 1990 Mar–Apr;194(2):85–9 (Eng. Abstr.) **(Ger)**

METHODS

Low segment cesarean section: a supracervical hysterotomy [letter; comment] Reamy KJ. **Am J Obstet Gynecol** 1990 Mar;162(3):866 Comment on: Am J Obstet Gynecol 1988 Oct;159(4):807–10.

Anesthetic management of labor in a patient with dextrocardia, congenitally corrected transposition, Wolff–Parkinson–White syndrome, and congestive heart failure. Sellers JD, et al. **Am J Obstet Gynecol** 1989 Oct; 161(4):1001–3

Effect of epidural anesthesia for cesarean delivery on maternal femoral arterial and venous, uteroplacental, and umbilical blood flow velocities and waveforms. Baumann H, et al. **Obstet Gynecol** 1990 Feb;75(2):194–8

Cesarean hysterectomy: a procedure for modern obstetrics? Strickland JL, et al. **South Med J** 1989 Oct;82(10):1245–9

[Reconstruction of the uterine wall in cesarean section by a single–stage double–layer suture—our experience] Popov I, et al. **Akush Ginekol (Sofiia)** 1989;28(3):31–3 (Eng. Abstr.) **(Bul)**

[Transvesical cesarean section] Manenti A, et al. **Rev Fr Gynecol Obstet** 1989 Dec;84(12):955–6 (Eng. Abstr.) **(Fre)**

[Hysterectomy in cesarean section. Indications and complications] Bender HG. **Gynakologe** 1990 Apr; 23(2):75–8 (7 ref.) **(Ger)**

MORTALITY

Maternal deaths related to cesarean section in Sweden, 1951–1980. Högberg U. **Acta Obstet Gynecol Scand** 1989; 68(4):351–7

Commentary: confidential enquiry into maternal death [letter] Hall MH. **Br J Obstet Gynaecol** 1990 Aug;97(8):752–3

Caesarean section and maternal mortality in Dublin [letter] Onwude JL. **Ir Med J** 1989 Dec;82(4):179

PSYCHOLOGY

Psychosocial consequences of caesarean childbirth: a four-year follow-up study. Garel M, et al. **Early Hum Dev** 1990 Feb;21(2):105–14

Poor acceptance of caesarean section in Zimbabwe. de Muylder X, et al. **Trop Geogr Med** 1989 Jul;41(3):230–3

STATISTICS & NUMERICAL DATA

Changes in frequency and indications for cesarean section in Norway 1967–1984. Borthen I, et al. **Acta Obstet Gynecol Scand** 1989;68(7):589–93

Elective caesarean hysterectomy. Indications and outcome: a 17-year experience of 140 cases. Bukovsky I, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 (Pt 2)):287–90

Caesarean section in South Australia, 1986 [see comments] Jonas O, et al. **Aust N Z J Obstet Gynaecol** 1989 May; 29(2):99–106 Comment in: Aust N Z J Obstet Gynaecol 1990 Feb;30(1):91.

Recent trends in cesarean section rates in Ontario [letter; comment] **Can Med Assoc J** 1990 Jan 15;142(2):101 Comment on: Can Med Assoc J 1989 Nov 15;141(10):1049–53.

The course of delivery after previous cesarean section. Roumen FJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jan–Feb;34(1–2):15–20

Cesarean section odds ratios. Simini F, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jan–Feb; 34(1–2):1–13

Cesarean and postpartum hysterectomy in Enugu, 1973–1986. Osefo NJ. **Int J Gynaecol Obstet** 1989 Oct;30(2):93–7

The cesarean section rate [letter] **JAMA** 1990 Aug 22–29; 264(8):971

Inconsistencies in clinical decisions in obstetrics. Barrett JF, et al. **Lancet** 1990 Sep 1;336(8714):549–51

Too many cesarean sections? [editorial] Brame RG. **N C Med J** 1990 Feb;51(2):88–9

Cesarean section in North Carolina. The need for review [see comments] Gavin NI, et al. **N C Med J** 1990 Feb; 51(2):81–6 Comment in: N C Med J 1990 Apr;51(4):185–6.

Cesarean section in America: dramatic trends, 1970 to 1987. Taffel SM. **Stat Bull Metrop Insur Co** 1989 Oct–Dec; 70(4):2–11

[The effect of maternal age on the incidence of and indications for cesarean section in primiparae] Popov I, et al. **Akush Ginekol (Sofiia)** 1990;29(2):23–8 (Eng. Abstr.) **(Bul)**

[Maternal consequences of cesarean delivery. Results of a 4-year follow-up] Garel M, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(1):83–9 (Eng. Abstr.) **(Fre)**

[Active management of labor. Preliminary results] Hohlfeld P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(8):1068–75 (Eng. Abstr.) **(Fre)**

[Frequency and indications of cesarean section] Gaucherand P. **Rev Fr Gynecol Obstet** 1990 Feb;85(2):109–11 **(Fre)**

[Indications for cesarean section and their outcome at the Hospital Center in Libreville] Picaud A, et al. **Rev Fr Gynecol Obstet** 1990 Jun;85(6):393–8 (26 ref.) (Eng. Abstr.) **(Fre)**

[Evolution of the parietal incision in cesarean sections] Youssef N, et al. **Rev Fr Gynecol Obstet** 1989 Oct; 84(10):651–7 (Eng. Abstr.) **(Fre)**

[A clinical report of 11 years' experience of anesthesia for cesarean section (n = 721)—particularly spinal anesthesia (n = 648)—in a hospital outpatient clinic] Eckstein KL, et al. **Reg Anaesth** 1990 May;13(3):47–53 (Eng. Abstr.) **(Ger)**

[Retrospective analysis of 663 breech deliveries during the years 1976 to 1985] Lellé RJ, et al. **Z Geburtshilfe Perinatol** 1989 Nov–Dec;193(6):268–75 (Eng. Abstr.) **(Ger)**

[Destructive cesarean section: hysterectomy for obstetric reasons and post-abortive hysterectomy. Analysis of 35 cases] Morini A, et al. **Minerva Ginecol** 1989 Oct; 41(10):497–501 (Eng. Abstr.) **(Ita)**

[Hysterectomy in obstetrics. Analysis and comparison of a group of cases from the Italian and the international literature (536 cases)] Morini A, et al. **Minerva Ginecol** 1989 Sep;41(9):445–50 (10 ref.) (Eng. Abstr.) **(Ita)**

[The effect of cesarean section deliveries on female sterilization in Puerto Rico (published erratum appears in P R Health Sci J 1989 Dec;8(3):311)] Vázquez Calzada JL. **P R Health Sci J** 1989 Aug;8(2):215–23 (Eng. Abstr.) **(Spa)**

[Cesarean section rate is decreasing in Sweden] Ingemarsson I, et al. **Lakartidningen** 1990 Apr 4;87(14):1135–7 **(Swe)**

TRENDS

Caesarean section in South Australia 1986 [letter; comment] **Aust N Z J Obstet Gynaecol** 1990 Feb;30(1):91 Comment on: Aust N Z J Obstet Gynaecol 1989 May;29(2):99–106.

Recent trends in cesarean section rates in Ontario [see comments] Anderson GM, et al. **Can Med Assoc J** 1989 Nov 15;141(10):1049–53 Comment in: Can Med Assoc J 1990 Jan 15;142(2):101.

Predicting trends in operative delivery for cephalopelvic disproportion in Africa [letter] Harrison KA. **Lancet** 1990 Apr 7;335(8693):861–2

Blue Cross and Blue Shield and cesarean section [letter; comment] **N C Med J** 1990 Apr;51(4):185–6 Comment on: N C Med J 1990 Feb;51(2):81–6.

Trends in cesarean section rates. Halpin GJ, et al. **N J Med** 1989 Nov;86(11):867–73

[Retrospective study of cesarean section in the years 1974–87] Muziarelli A, et al. **Minerva Ginecol** 1989 Jul;41(7):353–8 (Eng. Abstr.) **(Ita)**

UTILIZATION

Physician characteristics and cesarean delivery [letter; comment] Barton DP. **Am J Obstet Gynecol** 1990 Jun; 162(6):1641–2 Comment on: Am J Obstet Gynecol 1989 Jul;161(1):146–9.

The Green Bay cesarean section study. I. The physician factor as a determinant of cesarean birth rates. DeMott RK, et al. **Am J Obstet Gynecol** 1990 Jun;162(6):1593–9; discussion 1599–602

The efficacy of external cephalic version and its impact on the breech experience. Hanss JW Jr. **Am J Obstet Gynecol** 1990 Jun;162(6):1459–63; discussion 1463–4

Active management of labor [letter] Lynch A. **Am J Obstet Gynecol** 1990 Jun;162(6):1637–8

Reducing cesarean sections at a teaching hospital. Sanchez-Ramos L, et al. **Am J Obstet Gynecol** 1990 Sep; 163(3):1081–7; discussion 1087–8

Cesarean section use and source of payment: an analysis of California hospital discharge abstracts. Stafford RS. **Am J Public Health** 1990 Mar;80(3):313–5

Philippino and Vietnamese women—a study of intrapartum differences. Howell R. **Aust N Z J Obstet Gynaecol** 1989 Nov;29(4):399–402

Lack of correlation between a high caesarean section rate and improved prognosis for low-birthweight twins (less than 2500 g). Rydhström H, et al. **Br J Obstet Gynaecol** 1990 Mar;97(3):229–33

Diagnosis of dystocia and management with cesarean section among primiparous women in Ottawa-Carleton [see comments] Stewart PJ, et al. **Can Med Assoc J** 1990 Mar 1;142(5):459–63 Comment in: Can Med Assoc J 1990 Jun 1;142(11):1187–8.

Cesarean section rate levels off in 1987. Taffel SM, et al. **Fam Plann Perspect** 1989 Sep–Oct;21(5):227–8

Vaginal birth after cesarean delivery. Trial of labor in women with breech presentation. Sarno APJr, et al. **J Reprod Med** 1989 Oct;34(10):831–3

Cesarean section guidelines: the Maryland experience [letter] Kazandjian VA, et al. **JAMA** 1990 Mar 16;263(11):1491

International differences in the use of obstetric interventions. Notzon FC. **JAMA** 1990 Jun 27;263(24):3286–91

Alternative strategies for controlling rising cesarean section rates. Stafford RS. **JAMA** 1990 Feb 2;263(5):683–7

Technology-free obstetrics at Semmelweis Clinic [letter] Savage W. **Lancet** 1990 Jul 21;336(8708):178–9

Obstetrics and technology [letter] Smith AM. **Lancet** 1990 Aug 25;336(8713):510–1

Socioeconomic differences in rates of cesarean section [letter; comment] **N Engl J Med** 1990 Jan 25;322(4):268–70 Comment on: N Engl J Med 1989 Jul 27;321(4):233–9.

Do practice guidelines guide practice? The effect of a consensus statement on the practice of physicians. Lomas J, et al. **N Engl J Med** 1989 Nov 9;321(19):1306–11 (28 ref.)

1988 U.S. cesarean-section rate: good news or bad? [letter] Myers SA, et al. **N Engl J Med** 1990 Jul 19;323(3):200

1988 U.S. cesarean-section rate at 24.7 per 100 births—a plateau? [letter] Taffel SM, et al. **N Engl J Med** 1990 Jul 19;323(3):199–200

Meeting the challenge of the rising cesarean birth rate. Porreco RP. **Obstet Gynecol** 1990 Jan;75(1):133–6

The demise of vaginal operative obstetrics: a suggested plan for its revival. Seiler JS. **Obstet Gynecol** 1990 Apr; 75(4):710–3

The impact of the fee-for-service reimbursement system on the utilisation of health services. Part III. A comparison of caesarean section rates in white nulliparous women in the private and public sectors. Price MR, et al. **S Afr Med J** 1990 Aug 4;78(3):136–8

[The current status of surgical obstetrics] Albrecht H. **Arch Gynecol Obstet** 1989;245(1–4):30–7 **(Ger)**

[Cesarean section and perinatal mortality] Schulze G, et al. **Zentralbl Gynakol** 1990;112(4):215–21 (Eng. Abstr.) **(Ger)**

[Cesarean section in present-day obstetrics] Rybalka AN, et al. **Sov Med** 1989;(11):114–6 **(Rus)**

VETERINARY

Ovine caesarean operations: a study of 137 field cases. Scott PR. **Br Vet J** 1989 Nov–Dec;145(6):558–64

Caesarean section in a chinchilla [letter; comment] **Vet Rec** 1990 May 12;126(19):490 Comment on: Vet Rec 1990 Apr 14;126(15):370.

Caesarean sections on BSE cows [letter] Eddy RG. **Vet Rec** 1990 Jan 27;126(4):92

Caesarean sections on BSE cows [letter] Forbes AB. **Vet Rec** 1990 Feb 10;126(6):150

Caesarean section in a chinchilla [letter; comment] Jones AK. **Vet Rec** 1990 Apr 28;126(17):441 Comment on: Vet Rec 1990 Apr 14;126(15):370.

Oversized bovine fetuses [letter] Kent MA. **Vet Rec** 1989 Nov 18;125(21):538

Caesarean section in a gerbil [letter] Mighell JS, et al. **Vet Rec** 1990 Apr 28;126(17):441

Caesarean section in a chinchilla [letter] [see comments] Stephenson RS. **Vet Rec** 1990 Apr 14;126(15):370 Comment in: Vet Rec 1990 Apr 28;126(17):441. Comment in: Vet Rec 1990 May 12;126(19):490.

Cesarean section in 19 mares. Results and postoperative fertility. Juzwiak JS, et al. **Vet Surg** 1990 Jan–Feb; 19(1):50–2

[Cesarean section (letter)] Hagendijk J. **Tijdschr Diergeneeskd** 1989 Nov 15;114(22):1170 **(Dut)**

[Rupture of the diaphragm in an HF cow] Hesselink JW. **Tijdschr Diergeneeskd** 1989 Nov 1;114(21):1109–11 (Eng. Abstr.) **(Dut)**

[Experimental cesarean sections in the cat] Knospe C, et al. **Berl Munch Tierarztl Wochenschr** 1989 Nov 1; 102(11):386–7 (Eng. Abstr.) **(Ger)**

CESIUM

The use of single-wavelength anomalous scattering to solve the crystal structure of a gramicidin A/caesium chloride complex. Wallace BA, et al. **Acta Crystallogr B** 1990 Jun 1;46 (Pt 3):440–6

Pharmacologic response of cesium-induced ventricular tachyarrhythmias in anesthetized dogs. Nayebpour M, et al. **J Cardiovasc Pharmacol** 1990 Apr;15(4):552–61

[Use of sorbents of cesium and strontium for internal decontamination of animals] Hrušovský J, et al. **Vet Med (Praha)** 1990 Jan;35(1):57–63 (47 ref.) **(Slo)**

ANALYSIS

[Cesium transfer in short food chains] Procházka H, et al. **Vet Med (Praha)** 1990 Feb;35(2):119–28 (Eng. Abstr.) **(Cze)**

METABOLISM

Differences in the relationships between coronary blood flow and myocardial clearance of isotopes of potassium, rubidium, and cesium. Love WD, et al. **Am Heart J** 1968 Sep;76(3):353–5

Energy profile of Cs+ in gramicidin A in the presence of water. Problem of the ion selectivity of the channel. Etchebest C, et al. **J Biomol Struct Dyn** 1988 Apr; 5(5):1111–25

Efficacy of different hexacyanoferrates(II) in inhibiting the intestinal absorption of radiocaesium in rats. Dresow B, et al. **Z Naturforsch [C]** 1990 Jun;45(6):676–80

PHARMACOLOGY

The cesium-induced delay in myoblast membrane fusion is accompanied by changes in isolated membrane lipids. Santini MT, et al. **Biochim Biophys Acta** 1990 Apr 13; 1023(2):298–304

Alpha-adrenoceptor stimulation and blockade modulates cesium-induced early afterdepolarizations and ventricular tachyarrhythmias in dogs. Ben-David J, et al. **Circulation** 1990 Jul;82(1):225–33

Effects of cesium on in vitro myoblast differentiation: an electron microscopic study. Malorni W, et al. **In Vitro Cell Dev Biol** 1990 Apr;26(4):399–410

Triple-barrel structure of inwardly rectifying K+ channels revealed by Cs+ and Rb+ block in guinea-pig heart cells [published erratum appears in J Physiol (Lond) 1989 Nov;418:441] Matsuda H, et al. **J Physiol (Lond)** 1989 Jun; 413:139–57

THERAPEUTIC USE

Cesium chloride [letter] Richmond CR. **Med Hypotheses** 1989 Sep;30(1):71–2

TOXICITY

Cardiovascular and metabolic effects of caesium chloride injection in dogs—limitations as a model for the long QT syndrome. Nayebpour M, et al. **Cardiovasc Res** 1989 Sep; 23(9):756–66

Clastogenic effects of cesium chloride on mouse bone marrow cells in vivo. Ghosh A, et al. **Mutat Res** 1990 Aug; 244(4):295–8

A toxicology evaluation of postnatal maternal exposure to cesium. Messiha FS. **Physiol Behav** 1989 Jul;46(1):85–8

Maternally-mediated neonatal lithium-cesium interaction in the mouse. Messiha FS. **Physiol Behav** 1989 Jul;46(1):89–95

CESIUM RADIOISOTOPES

Compartment model for long-term contamination prediction in deciduous fruit trees after a nuclear accident. Antonopoulos-Domis M, et al. **Health Phys** 1990 Jun; 58(6):737–41

Modeling transfer of 137Cs fallout in a large Finnish watercourse. Korhonen R. **Health Phys** 1990 Oct;

59(4):443–54
Dry deposition of 88Rb and 138Cs from a boiling water reactor plume. Nielsen SP, et al. **Health Phys** 1990 Mar; 58(3):283–9
Effect of redox potential on fixation of 137Cs in lake sediment. Pardue JH, et al. **Health Phys** 1989 Nov; 57(5):781–9
Some aspects of environmental contamination by 137Cs and the transfer to man during the 1986–1988 period. Chiosilă T, et al. **Sante Publique (Bucur)** 1989 Oct–Dec;32(4):375–83
A study of radiocesium contamination and decontamination of sheep's milk. Assimakopoulos PA, et al. **Sci Total Environ** 1989 Sep;85:279–85
Influence of husbandry on the transfer of radiocaesium from feed to milk during the winter that followed the Chernobyl reactor accident. Bradley EJ, et al. **Sci Total Environ** 1989 Sep;85:119–28
Transfer of radiocaesium from grass and silage to cows' milk. Fulker MJ, et al. **Sci Total Environ** 1989 Sep;85:129–38
Countermeasures for reducing the transfer of radiocesium to animal derived foods. Giese WW. **Sci Total Environ** 1989 Sep;85:317–27
Transfer of caesium from silage to cows milk: observations and models. Mitchell NG, et al. **Sci Total Environ** 1989 Sep;85:307–16
Investigations of the use of clay minerals and prussian blue in reducing the transfer of dietary radiocaesium to milk. Unsworth EF, et al. **Sci Total Environ** 1989 Sep;85:339–47
[Removal of cesium from deer meat] Jandl J, et al. **Vet Med (Praha)** 1989 Aug;34(8):485–90 (Eng. Abstr.) **(Cze)**
[Comparison of the biological effects of tritium oxide and gamma radiation based on changes in the mass of the rat thymus gland] Rusinova GG, et al. **Radiobiologiia** 1989 Nov–Dec;29(6):798–803 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Stage II endometrial carcinoma treated with external-beam radiotherapy, intracavitary application of cesium, and surgery. Podczaski ES, et al. **Gynecol Oncol** 1989 Nov; 35(2):251–4
[Changes in various indicators of cellular immunity in rats in chronic radio-chemical exposure] Shvedov VL, et al. **Gig Sanit** 1989 Jul;(7):16–9 (Eng. Abstr.) **(Rus)**
[Cesium–137 in the biosphere] Vasilenko IIa. **Gig Sanit** 1989 Jul;(7):55–8 (22 ref.) **(Rus)**

ADVERSE EFFECTS

Cesium chloride [letter] Richmond CR. **Med Hypotheses** 1989 Sep;30(1):71–2
[The reaction of a population of redbacked voles (Clethrionomys glareolus) to pollution of the biogeocenosis by 137Cs] Il'enko AI, et al. **Dokl Akad Nauk SSSR** 1989; 309(5):1266–9 **(Rus)**

ANALYSIS

Whole-body measurements of people in the northern region of Sweden. Olofsson L. **Arctic Med Res** 1988;47 Suppl 1:192–4
Measurements of radiocesium transfer to milk and calculation of resulting dose in Brescia, Italy, following the Chernobyl accident. Albini E, et al. **Health Phys** 1990 Oct;59(4):455–60
Cesium–137 in Montana soils. Arnalds O, et al. **Health Phys** 1989 Dec;57(6):955–8
Weighted concentration of 137Cs equivalent in foodstuffs in Kuwait from June 1986 to December 1988. Bakir YY, et al. **Health Phys** 1990 Jun;58(6):743–7
Seasonal variation of soil-to-plant transfer of K and fallout 134,137Cs in peatland vegetation. Bunzl K, et al. **Health Phys** 1989 Oct;57(4):593–600
Fungi: a major source of radiocesium contamination of grazing ruminants in Norway. Hove K, et al. **Health Phys** 1990 Aug;59(2):189–92
Transfer of radiocesium from different environmental sources to ewes and suckling lambs. Howard BJ, et al. **Health Phys** 1989 Oct;57(4):579–86
Measurements of whole-body radiocesium at the Harwell Laboratory, 1976–1988. Kang C. **Health Phys** 1989 Dec; 57(6):995–1001
Transfer of 137Cs to milk and meat in Hungary from Chernobyl fallout with comparisons of worldwide fallout in the 1960s. Ward GM, et al. **Health Phys** 1989 Oct; 57(4):587–92
Soil sampling and 137Cs analysis of the Chernobyl fallout in Greece. Simopoulos SE. **Int J Rad Appl Instrum [A]** 1989;40(7):607–13
Increased 137caesium whole body radioactivity in high-performance athletes. Havlik E, et al. **Int J Sports Med** 1990 Feb;11(1):37–40
Weathering of 134/137Cs following leaf contamination of grass cultures in an outdoor experiment. Ertel J, et al. **Radiat Environ Biophys** 1989;28(4):319–26
The environmental half-lives and mean residence times of contaminants in dust for an urban environment: Barrow-in-Furness. Allott RW, et al. **Sci Total Environ** 1990 Apr;93:403–10
Transfer of Chernobyl fall-out caesium radioisotopes in the cow food chain. Belli M, et al. **Sci Total Environ** 1989 Sep; 85:169–77
Caesium transfer and cycling in upland pastures. Coughtrey PJ, et al. **Sci Total Environ** 1989 Sep;85:149–58
The measurement of radiocaesium in sheep by an in vivo technique. Dodd NJ, et al. **Sci Total Environ** 1989 Sep; 85:225–33
The distribution of 137Cs, plutonium and Americium in sheep. Ham GJ, et al. **Sci Total Environ** 1989 Sep;85:235–44
Uptake and retention of strontium, iodine and caesium in lowland pasture following continuous or short-term deposition. Jackson D, et al. **Sci Total Environ** 1989 Sep; 85:63–72
The transfer of radiocesium from pasture to milk. Johanson KJ, et al. **Sci Total Environ** 1989 Sep;85:73–80
Measurements on retention and transfer characteristics of radiocaesium from poor quality upland soils to heather and from heather to sheep. McAulay IR, et al. **Sci Total Environ** 1989 Sep;85:159–67
A possible method for estimating the true absorption coefficient for radiocaesium in ruminants. Mayes RW, et al. **Sci Total Environ** 1989 Sep;85:263–6
Cs–137 concentration in reindeer and its fodder plants. Rissanen K, et al. **Sci Total Environ** 1989 Sep;85:199–206
Cesium–137 in moose diet; considerations on intake and accumulation. Von Bothmer S, et al. **Sci Total Environ** 1990 Feb;91:87–96
Transfer of Chernobyl 134Cs and 137Cs in cows from silage to milk. Voors PI, et al. **Sci Total Environ** 1989 Sep; 85:179–88
Transfer of Cs–137 from grass and wilted grass silage to milk of dairy cows. Vreman K, et al. **Sci Total Environ** 1989 Sep;85:139–47
[Aspects of long-term ingestion of contaminated food by cattle and game] Procházka H, et al. **Vet Med (Praha)** 1989 Aug;34(8):501–10 (Eng. Abstr.) **(Cze)**
[Cesium–137 content in children 1 and 3 years after Chernobyl (letter)] Koch HC, et al. **Dtsch Med Wochenschr** 1990 Mar 16;115(11):437 **(Ger)**
[The contamination of food trout and carp from Bavarian fish farms with radiocesium (Cs–137 + 134) 1986 to 1989 as the result of the nuclear power plant accident at Chernobyl] Gehra H. **DTW Dtsch Tierarztl Wochenschr** 1990 Jul;97(7):279–80 (Eng. Abstr.) **(Ger)**
[Radioactive cesium 137 and cesium 134 in follicle and seminal fluid] Krenn CG, et al. **Geburtshilfe Frauenheilkd** 1990 May;50(5):394–6 (Eng. Abstr.) **(Ger)**
[The strength of evidence of the food inspection after the Chernobyl accident proven by whole body measurements of Basel students] Herrmann A, et al. **Z Lebensm Unters Forsch** 1989 Nov;189(5):413–7 (Eng. Abstr.) **(Ger)**
[Radioactivity levels in mushrooms collected in the area of Karlsruhe during 1987 and 1988] Rückert G, et al. **Z Lebensm Unters Forsch** 1990 Jun;190(6):496–500 (Eng. Abstr.) **(Ger)**
[Results of a study of 134,137Cs elimination from the meat] Il'enko AI, et al. **Dokl Akad Nauk SSSR** 1990;311(1):246–8 **(Rus)**
[Effect of drug production technology on the transition of cesium–137 to liquid drug form] Antonova VA, et al. **Gig Sanit** 1989 Jul;(7):87–8 **(Rus)**
[Complex radiochemical analysis in the evaluation of the heat supply system of the atomic power plants] Saiapin NP, et al. **Gig Sanit** 1990 Mar;(3):45–6 **(Rus)**
[Radioactivity of atmospheric air and food products in Moscow 1984–1985] Zykova AS, et al. **Gig Sanit** 1989 Jul; (7):66–8 **(Rus)**
[Contamination of food with cesium radionuclides] Hrušovský J, et al. **Vet Med (Praha)** 1989 Aug;34(8):451–8 (Eng. Abstr.) **(Slo)**

METABOLISM

Bioconcentration of fallout 137Cs by fungi and red-backed voles (Clethrionomys gapperi). Mihok S, et al. **Health Phys** 1989 Dec;57(6):959–66
Experimental determination of transfer coefficients of 137Cs and 131I from fodder into milk of cows and sheep after the Chernobyl accident. Voigt G, et al. **Health Phys** 1989 Dec;57(6):967–73
Caesium and iodine metabolism in lactating cows under chronic administration. Daburon F, et al. **Sci Total Environ** 1989 Sep;85:253–61
Transfer of aged 239+240Pu, 238Pu, 241Am, and 137Cs to cattle grazing a contaminated arid environment. Gilbert RO, et al. **Sci Total Environ** 1989 Sep;85:53–62
A comparison of radiocaesium transfer coefficients for sheep milk and muscle derived from both field and laboratory studies. Howard BJ. **Sci Total Environ** 1989 Sep;85:189–98
Radiocesium uptake in reindeer on natural pasture. Jones BE, et al. **Sci Total Environ** 1989 Sep;85:207–12
Studies on the uptake, partition and retention of ionic and fallout radiocaesium by suckling and weaned lambs. Moss BW, et al. **Sci Total Environ** 1989 Sep;85:91–106
The effects of prussian blue provided by indwelling rumen boli on the tissue retention of dietary radiocaesium by sheep. Pearce J, et al. **Sci Total Environ** 1989 Sep;85:349–55
Studies of the transfer of dietary radiocaesium from silage to milk in dairy cows. Pearce J, et al. **Sci Total Environ** 1989 Sep;85:267–78
Radiocaesium metabolism in pregnant ewes and their progeny. Vandecasteele CM, et al. **Sci Total Environ** 1989 Sep;85:213–23

PHARMACOKINETICS

Measurements of Cs absorption and retention in man. Henrichs H, et al. **Health Phys** 1989 Oct;57(4):571–8
[A pharmacokinetic approach to studying the uptake of 137Cs by children following the reactor accident at Chernobyl] Wellner U. **Nuklearmedizin** 1989 Dec; 28(6):243–6 (Eng. Abstr.) **(Ger)**
[The effect of natural zeolite on the excretion and distribution of radiocesium in rats] Mižik P, et al. **Vet Med (Praha)** 1989 Aug;34(8):467–74 (Eng. Abstr.) **(Slo)**

THERAPEUTIC USE

A prospective trial of postoperative vaginal radium/cesium for grade 1–2 less than 50% myometrial invasion and pelvic radiation therapy for grade 3 or deep myometrial invasion in surgical stage I endometrial adenocarcinoma. Piver MS, et al. **Cancer** 1990 Sep 15;66(6):1133–8
Effect of bedside shielding on air-kerma rates around gynecologic intracavitary brachytherapy patients containing 226Ra or 137Cs. Papin PJ, et al. **Health Phys** 1990 Apr;58(4):405–10
Applicator for use of cesium–137 miniaturized tube sources in the treatment of uterine cervix cancer. Kumar PP, et al. **Int J Radiat Oncol Biol Phys** 1990 Jun;18(6):1509–11
An afterloading brachytherapy device utilizing thermoplastic material. Kim TH, et al. **Radiother Oncol** 1989 Aug; 15(4):341–4
[Curietherapy of epithelioma of the external ear. A series of 140 patients] Debois JM, et al. **Acta Otorhinolaryngol Belg** 1989;43(3):239–50 (Eng. Abstr.) **(Dut)**

URINE

Cesium–137 urinary excretion by northeastern Italian (Pordenone) people following the Chernobyl nuclear accident: a comment [letter; comment] Melandri C, et al. **Health Phys** 1990 Jul;59(1):146–7 Comment on: Health Phys 1989 Jul;57(1):99–106.

CESTODA

ANALYSIS

Selective distribution of sugars on the tegumental surface of adult Bothriocephalus gregarius (Cestoda: Pseudophyllidea). Berrada-Rkhami O, et al. **Int J Parasitol** 1990 May;20(3):285–97
Peptidergic nerve elements in three developmental stages of the tetraphyllidean tapeworm Trilocularia acanthiaevulgaris. An immunocytochemical study. Fairweather I, et al. **Parasitol Res** 1990;76(6):497–508

ANATOMY & HISTOLOGY

An ontogenetic study of the cholinergic and serotoninergic nervous systems in Trilocularia acanthiaevulgaris (Cestoda, Tetraphyllidea). Fairweather I, et al. **Parasitol Res** 1990; 76(6):487–96
[A population analysis of the variability of the hooklets in the cestode Triaenophorus crassus] Ieshko EP, et al. **Parazitologiia** 1989 Jul–Aug;23(4):296–301 (Eng. Abstr.) **(Rus)**
[The morphology and biology of the cestode Schistotaenia srivastavai (Cestoda, Amabiliidae)—a new representative of the fauna of the USSR] Kukashev DSh. **Parazitologiia** 1989 Sep–Oct;23(5):436–9 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

A new species of Calliobothrium (Tetraphyllidea: Onchobothriidae) from the whiskery shark, Furgaleus macki, in Australia. Caira JN, et al. **J Parasitol** 1990 Jun; 76(3):319–24
A new genus of Dilepididae (Cestoda) of the yellowbill Ceuthmochares aereus (Cuculidae) from the Ivory Coast. Mariaux J, et al. **J Parasitol** 1990 Feb;76(1):22–6

ENZYMOLOGY

Glutathione transferases in the tapeworm Moniezia expansa. Brophy PM, et al. **Biochem J** 1989 Sep 15;262(3):939–46
A novel NADPH/NADH-dependent aldehyde reduction enzyme isolated from the tapeworm Moniezia expansa. Brophy PM, et al. **FEBS Lett** 1990 Apr 24;263(2):305–7
Cu–Zn-superoxide dismutase activity in Moniezia expansa: inhibition by pyrimidine derivatives. Sanchez-Moreno M, et al. **Int J Parasitol** 1989 Nov;19(7):743–8
Tricarboxylic acid cycle enzymes of a pseudophyllid cestode Penetrocephalus ganapatii. Dhandayuthapani S, et al. **J Helminthol** 1990 Mar;64(1):51–3

GENETICS

Molecular characterization of the Spirometra mansonoides genome: renaturation kinetics, methylation, and hybridization to human cDNA probes. Cox GS, et al. **Biochim Biophys Acta** 1990 Jun 21;1049(2):134–44

GROWTH & DEVELOPMENT

A study on the life-cycle and epidemiology of Pseudanoplocephala crawfordi Baylis, 1927. Jiang TJ, et al. **J Helminthol** 1990 Mar;64(1):54–61

[The developmental cycle of Proteocephalus thymalli (Cestoda, Proteocephalidae)--a parasite of the Arctic grayling from Lake Baikal] Rusinek OT. **Parazitologiia** 1989 Nov-Dec;23(6):518-23 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

The immune response of the definitive hosts to diphyllobothriid antigens. Sergeeva EG, et al. **Angew Parasitol** 1990 Feb;31(1):43-6

Regulation of macrophage-mediated larvicidal activity in Echinococcus granulosus and Mesocestoides corti (Cestoda) infection in mice. Jenkins P, et al. **Parasitology** 1990 Apr;100 Pt 2:309-15

ISOLATION & PURIFICATION

Coenurus in the muscles of a gemsbok (Oryx gazella). Bohrmann R. **Vet Parasitol** 1990 Jul;36(3-4):353-6

[Epidemiology of alveolar echinococcosis in France. 1. Intestinal helminths in the red fox (Vulpes vulpes L.) from Haute-Savoie] Pétavy AF, et al. **Ann Parasitol Hum Comp** 1990;65(1):22-7 (Eng. Abstr.) **(Fre)**

METABOLISM

Acetylcholine-like immunoreactivity in the cestode Hymenolepis diminuta. Samii SI, et al. **Brain Res** 1990 Apr 9;513(1):161-5

PATHOGENICITY

Adaptation of an introduced host to an indigenous parasite. Sakanari JA, et al. **J Parasitol** 1990 Jun;76(3):420-3

PHYSIOLOGY

Mesocestoides corti: mouse type host, uncharacteristic or questionable? Beaver PC. **J Parasitol** 1989 Oct;75(5):815

The rarity of asexual reproduction among Mesocestoides tetrathyridia (Cestoda). Conn DB. **J Parasitol** 1990 Jun;76(3):453-5 (30 ref.)

Experimental reproduction of cysticercoids from Anoplocephala perfoliata Blanchard, 1848 in Scheloribates sp. Berlese, 1908 (Acarina-Oribatulidae). Romero J, et al. **Zentralbl Veterinarmed [B]** 1989 Aug;36(6):442-6

[The spatial structure and interrelation of plerocercoids of Digramma interrupta (Cestoda, Ligulidae) and the bream (Abramis brama) in the Kuibyshev reservoir] Evlanov IA. **Parazitologiia** 1989 Jul-Aug;23(4):281-7 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

The fine structure of the embryonic envelopes before and after hatching in bothriocephalids: physiological and ecological significance. Berrada-Rkhami O, et al. **Parasitol Res** 1990;76(3):251-62

Ultrastructural studies on the plerocercoid of Spirometra erinacei in experimental sparganosis. Osaki Y. **Parasitol Res** 1990;76(6):466-72

CESTODE INFECTIONS

DRUG THERAPY

The use of praziquantel in human infection with Dipylidium. Wijesundera MD. **Trans R Soc Trop Med Hyg** 1989 May-Jun;83(3):383

EPIDEMIOLOGY

Rat tapeworm (Hymenolepis diminuta) infection in a child. Hamrick HJ, et al. **Pediatr Infect Dis J** 1990 Mar;9(3):216-9 (16 ref.)

IMMUNOLOGY

The isotype potential of B cells present in BALB/c mice chronically infected with Mesocestoides corti. Desai BB, et al. **Cell Immunol** 1990 Oct 1;130(1):139-49

Regulation of macrophage-mediated larvicidal activity in Echinococcus granulosus and Mesocestoides corti (Cestoda) infection in mice. Jenkins P, et al. **Parasitology** 1990 Apr;100 Pt 2:309-15

PARASITOLOGY

A study on the life-cycle and epidemiology of Pseudanoplocephala crawfordi Baylis, 1927. Jiang TJ, et al. **J Helminthol** 1990 Mar;64(1):54-61

SURGERY

Long-term follow-up of the surgical treatment of intracranial coenurosis. Pau A, et al. **Br J Neurosurg** 1990;4(1):39-43

VETERINARY

Seasonal occurrence of helminths in freshwater fishes. Part IV. Adult Cestoda, Nematoda and Acanthocephala. Chubb JC. **Adv Parasitol** 1982;20:1-292 (586 ref.)

The immune response of the definitive hosts to diphyllobothriid antigens. Sergeeva EG, et al. **Angew Parasitol** 1990 Feb;31(1):43-6

Anticestodal action of oxfendazole on Raillietina tetragona in experimentally infected chickens. Nurelhuda IE, et al. **Br Vet J** 1989 Sep-Oct;145(5):458-61

A risk-assessed evaluation of postmortem meat inspection procedures for ovine thysanosomiasis. Hathaway SC, et al. **J Am Vet Med Assoc** 1990 Mar 15;196(6):860-4

Tricarboxylic acid cycle enzymes of a pseudophyllid cestode Penetrocephalus ganapatii. Dhandayuthapani S, et al. **J Helminthol** 1990 Mar;64(1):51-3

Mesocestoides corti: mouse type host, uncharacteristic or questionable? Beaver PC. **J Parasitol** 1989 Oct;75(5):815

Adaptation of an introduced host to an indigenous parasite. Sakanari JA, et al. **J Parasitol** 1990 Jun;76(3):420-3

Proteocephalus ambloplitis and Contracaecum sp. from largemouth bass (Micropterus salmoides) stocked into Boundary Reservoir, Saskatchewan. Szalai AJ, et al. **J Parasitol** 1990 Aug;76(4):598-601

Helminth parasites of unisexual and bisexual whiptail lizards (Teiidae) in North America. II. The New Mexico whiptail (Cnemidophorus neomexicanus). McAllister CT. **J Wildl Dis** 1990 Jul;26(3):403-6

Urinary bladders of freshwater turtles as a renal physiology model potentially biased by monogenean infections. Henke SE, et al. **Lab Anim Sci** 1990 Mar;40(2):172-7

The fine structure of the embryonic envelopes before and after hatching in bothriocephalids: physiological and ecological significance. Berrada-Rkhami O, et al. **Parasitol Res** 1990;76(3):251-62

An ontogenetic study of the cholinergic and serotoninergic nervous systems in Trilocularia acanthiaevulgaris (Cestoda, Tetraphyllidea). Fairweather I, et al. **Parasitol Res** 1990;76(6):487-96

Coenurus in the muscles of a gemsbok (Oryx gazella). Bohrmann R. **Vet Parasitol** 1990 Jul;36(3-4):353-6

New potential intermediate host of Moniezia expansa Rudolphi, 1810, in Argentina. Denegri GM. **Vet Parasitol** 1989 Sep;33(2):191-4

Outbreak of acute coenuriasis in adult sheep in Ireland. Doherty ML, et al. **Vet Rec** 1989 Aug 19;125(8):185

Equine tapeworms more prevalent [letter] Geering RR, et al. **Vet Rec** 1990 Jul 28;127(4):96

The effect of niclosamide on Raillietina tetragona. Elowni EE, et al. **Vet Res Commun** 1989;13(6):451-3

Experimental reproduction of cysticercoids from Anoplocephala perfoliata Blanchard, 1848 in Scheloribates sp. Berlese, 1908 (Acarina-Oribatulidae). Romero J, et al. **Zentralbl Veterinarmed [B]** 1989 Aug;36(6):442-6

[The spatial structure and interrelation of plerocercoids of Digramma interrupta (Cestoda, Ligulidae) and the bream (Abramis brama) in the Kuibyshev reservoir] Evlanov IA. **Parazitologiia** 1989 Jul-Aug;23(4):281-7 (Eng. Abstr.) **(Rus)**

CETACEA

Fractionation of whale cartilage chondroitin sulfate on Sepharose CL-4B in the presence of high concentration of ammonium sulfate. Relationship between molecular size and unit-disaccharide composition of the polysaccharide. Ogamo A, et al. **Carbohydr Res** 1990 Apr 2;198(1):157-162

Herpes-like viral dermatitis in a beluga whale (Delphinapterus leucas). Barr B, et al. **J Wildl Dis** 1989 Oct;25(4):608-11

[Three-dimensional structure of the lipotropic active fragment of sea whale somatotropin] Mzareulov KD. **Biokhimiia** 1990 Feb;55(2):247-55 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Microanatomy of the lung of the bowhead whale Balaena mysticetus. Henk WG, et al. **Anat Rec** 1990 Feb;226(2):187-97

Ultrastructure of synapses and golgi analysis of neurons in neocortex of the lateral gyrus (visual cortex) of the dolphin and pilot whale [published erratum appears in Brain Res Bull 1990 Apr;24(4):639-40] Glezer II, et al. **Brain Res Bull** 1990 Mar;24(3):401-27

[Histologic studies of cartilaginous structures in the anterior region of the head of the sperm whale Physeter macrocephalus] Klima M. **Gegenbaurs Morphol Jahrb** 1990;136(1):1-16 (Eng. Abstr.) **(Ger)**

BLOOD

Lactate does facilitate oxygen unloading from the hemoglobin of the whale, Balaenoptera acutorostrata, after diving. Brix O, et al. **Arctic Med Res** 1990 Jan;49(1):39-42

Arctic adaptation in whale hemoglobin: interplay of carbon dioxide and temperature in the oxygen unloading. Giardina B, et al. **Arctic Med Res** 1990 Apr;49(2):93-7

Arctic life adaptation--III. The function of whale (Balaenoptera acutorostrata) hemoglobin. Brix O, et al. **Comp Biochem Physiol [B]** 1989;94(1):139-42

EMBRYOLOGY

Morphogenesis of the digestive tract in the fetuses of the southern minke whale, Balaenoptera acutorostrata. Amasaki H, et al. **Anat Anz** 1989;169(3):161-8

Developmental changes of the fore- and hind-limbs in the fetuses of the southern minke whale, Balaenoptera acutorostrata. Amasaki H, et al. **Anat Anz** 1989;169(2):145-8

Early development of the olfactory and terminalis systems in baleen whales. Oelschläger HA. **Brain Behav Evol** 1989;34(3):171-83

GENETICS

Composition and chromosomal localization of cetacean highly repetitive DNA with special reference to the blue whale, Balaenoptera musculus. Arnason U, et al. **Chromosoma** 1989 Nov;98(5):323-9

Analysis of the C4 genes in baleen whales using a human cDNA probe. Spilliaert R, et al. **Immunogenetics** 1990;32(2):73-6

Influence of seasonal migration on geographic distribution of mitochondrial DNA haplotypes in humpback whales. Baker CS, et al. **Nature** 1990 Mar 15;344(6263):238-40

INJURIES

Fractured mandible and associated oral lesions in a subsistence-harvested bowhead whale (Balaena mysticetus). Philo LM, et al. **J Wildl Dis** 1990 Jan;26(1):125-8

METABOLISM

Characterization of ganglioside GM4 lactones isolated from the whale brain. Terabayashi T, et al. **J Biochem (Tokyo)** 1990 Jun;107(6):868-71

Contribution of chemical 6-O-sulfation of the aminodeoxyhexose residues in whale heparin with high affinity for antithrombin III to its anticoagulant properties. Uchiyama H, et al. **J Biochem (Tokyo)** 1990 Mar;107(3):377-80

MICROBIOLOGY

Microflora associated with the skin of the bowhead whale (Balaena mysticetus). Shotts EB Jr, et al. **J Wildl Dis** 1990 Jul;26(3):351-9

PHYSIOLOGY

An off beat whale hunt. Meijler FL. **BMJ** 1989 Dec 23-30;299(6715):1563-5

Energy absorption from ocean waves: a free ride for cetaceans. Bose N, et al. **Proc R Soc Lond [Biol]** 1990 Jun 22;240(1299):591-605

CETOMACROGOL see under **POLYETHYLENE GLYCOLS**

CETRIMONIUM COMPOUNDS see under **AMMONIUM COMPOUNDS**

CETYLPYRIDINIUM see under **PYRIDINIUM COMPOUNDS**

CEVANES

ISOLATION & PURIFICATION

[Studies on the chemical constituents of Fritillaria in Hubei. X. Isolation and identification of alkaloids from Fritillaria ebeiensis var.purpurea G.D.Yu et P.Li] Wu JZ, et al. **Yao Hsueh Hsueh Pao** 1989;24(8):600-5 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

Tetrodotoxin block of single germitrine-activated sodium channels in cultured rat cardiac cells. Dugas M, et al. **J Physiol (Lond)** 1989 Apr;411:611-26

CH50 ASSAY see **COMPLEMENT HEMOLYTIC ACTIVITY ASSAY**

CHAETOMIUM see under **ASCOMYCETES**

CHAGAS CARDIOMYOPATHY

[Chagas cardiomyopathy: a myth and a challenge] Pinto Dias JC. **Arch Inst Cardiol Mex** 1990 Mar-Apr;60(2):119-20 **(Spa)**

CLASSIFICATION

[Clinical forms of chronic Chagas' cardiopathy] Porto CC, et al. **Arq Bras Cardiol** 1989 May;52(5):235-7 **(Por)**

COMPLICATIONS

Angiographic and electrophysiologic substrates of ventricular tachycardia in chronic Chagasic myocarditis. de Paola AA, et al. **Am J Cardiol** 1990 Feb 1;65(5):360-3

[Cardiac thrombosis and embolism in patients having died of chronic Chagas cardiopathy] Arteaga-Fernández E, et al. **Arq Bras Cardiol** 1989 Apr;52(4):189-92 (Eng. Abstr.) **(Por)**

[Uncommon mechanisms of sudden death in chronic chagasic patients--report of 3 cases] Tostes Júnior S, et al. **Rev Soc Bras Med Trop** 1989 Apr-Jun;22(2):97-8 (Eng. Abstr.) **(Por)**

DIAGNOSIS

Ventricular arrhythmias and left ventricular myocardial function in chronic chagasic patients. Carrasco HA, et al. **Int J Cardiol** 1990 Jul;28(1):35-41

Echocardiographic recognition of Chagas' disease and endomyocardial fibrosis. Acquatella H, et al. **J Am Soc Echocardiogr** 1988 Jan-Feb;1(1):60-8 (13 ref.)

EPIDEMIOLOGY

A nine year prospective study of Chagas' disease in a defined rural population in northeast Brazil. Mota EA, et al. **Am J Trop Med Hyg** 1990 May;42(5):429–40

[Chronic Chagas cardiopathy in Chile. Frequency of abnormal electrocardiograms in 13,515 inhabitants of rural and periurban areas of endemic Chagas disease, with positive or negative serology] Schenone H, et al. **Bol Chil Parasitol** 1988 Jan–Jun;43(1–2):18–21 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Microvascular changes as a cause of chronic cardiomyopathy in Chagas' disease. Rossi MA. **Am Heart J** 1990 Jul; 120(1):233–6

Intensification of acute Trypanosoma cruzi myocarditis in BALB/c mice pretreated with low doses of cyclophosphamide or gamma irradiation. Silva JS, et al. **J Exp Pathol (Oxford)** 1990 Feb;71(1):33–9

HISTORY

Darwin's illness: a biopsychosocial perspective. Pasnau RO. **Psychosomatics** 1990 Spring;31(2):121–8

IMMUNOLOGY

Identification of major Trypanosoma cruzi antigenic determinants in chronic Chagas' heart disease. Levin MJ, et al. **Am J Trop Med Hyg** 1989 Nov;41(5):530–8

Association of elevated anti-sarcolemma, anti-idiotype antibody levels with the clinical and pathologic expression of chronic Chagas myocarditis. Sadigursky M, et al. **Circulation** 1989 Nov;80(5):1269–76

Major Trypanosoma cruzi antigenic determinant in Chagas' heart disease shares homology with the systemic lupus erythematosus ribosomal P protein epitope. Mesri EA, et al. **J Clin Microbiol** 1990 Jun;28(6):1219–24

MORTALITY

[Basic causes of death in elderly patients with Chagas' disease] de Menezes M, et al. **Arq Bras Cardiol** 1989 Feb; 52(2):75–8 (Eng. Abstr.) **(Por)**

PARASITOLOGY

Trypanosoma cruzi: quantification in tissues of experimentally infected mice by limiting dilution analysis. Nunes MP, et al. **Exp Parasitol** 1990 Feb;70(2):186–92

PATHOLOGY

Chagas' heart disease and myocardial infarct. Incidence and report of four necropsy cases. De Morais CF, et al. **Ann Trop Med Parasitol** 1989 Jun;83(3):207–14

Permeability alteration of the sarcolemmal membrane, particularly at the site of macrophage contact, in experimental chronic Trypanosoma cruzi myocarditis in mice. Rossi MA, et al. **Int J Exp Pathol** 1990 Aug; 71(4):545–55

Histopathological criteria of myocarditis—a study based on normal heart, chagasic heart and dilated cardiomyopathy. Higuchi M de L, et al. **Jpn Circ J** 1990 Apr;54(4):391–400

[Comparison of histologic changes in Chagas' cardiomyopathy and dilated cardiomyopathy] Barretto AC, et al. **Arq Bras Cardiol** 1989 Feb;52(2):79–83 (Eng. Abstr.) **(Por)**

[Parasitism of the vena cava and adrenal veins in chronic chagasic patients] Teixeira V de P, et al. **Arq Bras Cardiol** 1989 Jan;52(1):31–3 (Eng. Abstr.) **(Por)**

PHYSIOPATHOLOGY

[3H]-acetylcholine release from rat atria in chronic chagasic cardiopathy. Figuerêdo-Silva J, et al. **Braz J Med Biol Res** 1989;22(6):737–40 (12 ref.)

Electrocardiographic abnormalities and left ventricular systolic function in Chagas' heart disease. Casado J, et al. **Int J Cardiol** 1990 Apr;27(1):55–62

[Apical left ventricular involvement in chronic Chagas' cardiopathy: clinical and ventriculographic aspects] Albanesi Filho FM, et al. **Arq Bras Cardiol** 1989 Mar; 52(3):115–20 (Eng. Abstr.) **(Por)**

[Behavior of the ST segment, during isometric exercise, in chagasic patients with apical aneurysm of the left ventricle] Torres A, et al. **Arch Inst Cardiol Mex** 1989 Sep–Oct; 59(5):499–504 (Eng. Abstr.) **(Spa)**

[Left ventricular mechanics in Chagas' disease and dilated cardiomyopathy: echocardiographic study] Guerrero L, et al. **Arq Bras Cardiol** 1989 Jul;53(1):23–7 (Eng. Abstr.) **(Spa)**

[Clinical and paraclinical differences between chronic Chagas' cardiomyopathy and primary dilated cardiomyopathies] Parada H, et al. **Arq Bras Cardiol** 1989 Aug;53(2):99–104 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Effect of verapamil on the development of chronic experimental Chagas' disease. Tanowitz HB, et al. **Am J Trop Med Hyg** 1989 Dec;41(6):643–9

Chagas' disease: lymphoma growth in rabbits treated with Benznidazole. Teixeira AR, et al. **Am J Trop Med Hyg** 1990 Aug;43(2):146–58

Malignant, non-Hodgkin's lymphomas in Trypanosoma cruzi-infected rabbits treated with nitroarenes. Teixeira AR, et al. **J Comp Pathol** 1990 Jul;103(1):37–48

VETERINARY

Chronic dilatative myocarditis caused by Trypanosoma cruzi in two dogs. Barr SC, et al. **J Am Vet Med Assoc** 1989 Nov 1;195(9):1237–41

CHAGAS DISEASE see **TRYPANOSOMIASIS, SOUTH AMERICAN**

CHALCONE see under **PROPIOPHENONES**

CHALONES

ISOLATION & PURIFICATION

Isolation of a specific granulopoiesis inhibitor from calf spleen and identification as glutathione. Fetsch J, et al. **Eur J Biochem** 1990 Jul 31;191(2):445–8

METABOLISM

[G1 spermatogonial chalone] Bustos-Obregón E. **Arch Biol Med Exp (Santiago)** 1989 Apr;22(1):15–23 (30 ref.) (Eng. Abstr.) **(Spa)**

PHARMACOLOGY

Epidermal G1-chalone and transforming growth factor-beta are two different endogenous inhibitors of epidermal cell proliferation. Richter KH, et al. **J Cell Physiol** 1990 Mar; 142(3):496–504

[The biological activity of chalone-like proteoglycans isolated from the spleen and thymus at various periods of ontogeny] Ronichevskaia GM, et al. **Ontogenez** 1989 Jul–Aug;20(4):409–15 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Chalones revisited--a possible role for transforming growth factor beta in tumour promotion. Parkinson K, et al. **Carcinogenesis** 1990 Feb;11(2):195–8

SECRETION

[The excretion of intrasystemic regulators of granulocytopoiesis and the causes producing its alteration] Bala IuM, et al. **Fiziol Zh SSSR** 1989 Dec;75(12):1692–6 (Eng. Abstr.) **(Rus)**

CHAMBERS, ATMOSPHERE EXPOSURE see **ATMOSPHERE EXPOSURE CHAMBERS**

CHANCRE see under **SYPHILIS**

CHANCROID

COMPLICATIONS

Chancroid. A newly important sexually transmitted disease [editorial] Ronald AR, et al. **Arch Dermatol** 1989 Oct; 125(10):1413–4

DIAGNOSIS

Atypical presentation of chancroid in a patient infected with the human immunodeficiency virus. Quale J, et al. **Am J Med** 1990 May;88(5N):43N–44N

Rapid detection of Haemophilus ducreyi in clinical and experimental infections using monoclonal antibody: a preliminary evaluation. Karim QN, et al. **Genitourin Med** 1989 Dec;65(6):361–5

Use of the RapID-ANA system and sodium polyanetholesulfonate disk susceptibility testing in identifying Haemophilus ducreyi. Shawar R, et al. **J Clin Microbiol** 1990 Jan;28(1):108–11

Lymphogranuloma venereum, chancroid, and granuloma inguinale. Faro S. **Obstet Gynecol Clin North Am** 1989 Sep; 16(3):517–30 (68 ref.)

Chancroid. Willis SE. **Prim Care** 1990 Mar;17(1):145–52 (35 ref.)

DRUG THERAPY

Treatment of chancroid. Dangor Y, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1308–11 (43 ref.)

Clinical efficacy of antimicrobial therapy in Haemophilus ducreyi infections. Boyd AS. **Arch Dermatol** 1989 Oct; 125(10):1399–405 (70 ref.)

Treatment of chancroid with spectinomycin or co-trimoxazole. Traisupa A, et al. **Clin Ther** 1990 May–Jun; 12(3):200–5

Sulphaphenazole, streptomycin and sulphaphenazole combination, trimethoprim, and erythromycin in the treatment of chancroid. Kumar B, et al. **Genitourin Med** 1990 Apr;66(2):105–7

Treatment of chancroid, 1989. Schmid GP. **Rev Infect Dis** 1990 Jul–Aug;12 Suppl 6:S580–9 (50 ref.)

MICROBIOLOGY

Chancroid and granuloma inguinale. Ronald AR, et al. **Clin Lab Med** 1989 Sep;9(3):535–43 (36 ref.)

Detection of human immunodeficiency virus type 1 (HIV-1) in genital ulcer exudate of HIV-1-infected men by culture and gene amplification [letter] Plummer FA, et al. **J Infect Dis** 1990 Apr;161(4):810–1

PATHOLOGY

Characterization of skin lesions in mice following intradermal inoculation of Haemophilus ducreyi. Tuffrey M, et al. **J Exp Pathol (Oxford)** 1990 Apr;71(2):233–44

PREVENTION & CONTROL

Rapid control of a chancroid outbreak: implications for Canada. Jessamine PG, et al. **Can Med Assoc J** 1990 May 15;142(10):1081–5

CHANGUINOLA VIRUS see **REOVIRIDAE**

CHANNEL BLOCKERS, CALCIUM see **CALCIUM CHANNEL BLOCKERS**

CHAPLAINCY SERVICE, HOSPITAL see under **HOSPITAL DEPARTMENTS**

CHARACTER

Basic character inventory personality traits among patients with major depression, anxiety disorders and mixed conditions. Alnaes R, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(5):303–8

Character, character type, and character organization. Baudry F. **J Am Psychoanal Assoc** 1989;37(3):655–86

Character and virtue in medical practice. Coulehan JL. **Pa Med** 1989 Oct;92(10):58, 60–1

Character in fiction and fiction in character. Baudry F. **Psychoanal Q** 1990 Jul;59(3):370–97

Psychoanalysis and character development. Arlow JA. **Psychoanal Rev** 1990 Spring;77(1):1–10 (23 ref.)

Character structure and performance on the MMPI. Gibson DR, et al. **Psychol Rep** 1989 Dec;65(3 Pt 2):1139–49

Adapted character styles of Vietnam veterans with Posttraumatic Stress Disorder. Sherwood RJ, et al. **Psychol Rep** 1990 Apr;66(2):623–31

[Relationships between patterns of dyad relations and its change and mutual understanding of psychological traits] Kusumi S. **Shinrigaku Kenkyu** 1989 Apr;60(1):9–16 (Eng. Abstr.) **(Jpn)**

CHARCOAL

Ozone removal capability of a welding fume respirator containing activated charcoal. Johnston AR, et al. **Am Ind Hyg Assoc J** 1989 Sep;50(9):451–4

Effect of phenobarbital induction, charcoal treatment and storage on the spectral binding characteristics and NADPH-cytochrome P-450 reductase activity of hepatic microsomes. Crankshaw DL, et al. **Biochem Pharmacol** 1990 Jan 15;39(2):393–6

Comparative evaluation of the structure and properties of certain granulated and fibrous activated carboniferous sorbents. Sergeyev VP, et al. **Biomater Artif Cells Artif Organs** 1989;17(3):353–61

Performance of a diffusion barrier charcoal adsorption 222Rn monitor under conditions of varying humidity and temperature. Pojer PM, et al. **Health Phys** 1990 Jan; 58(1):13–9

Adsorption and desorption of noble gases on activated charcoal: I. 133Xe studies in a monolayer and packed bed. Scarpitta SC, et al. **Health Phys** 1990 Oct;59(4):383–92

Adsorption and desorption of noble gases on activated charcoal: II. 222Rn studies in a monolayer and packed bed. Scarpitta SC, et al. **Health Phys** 1990 Oct;59(4):393–404

A charcoal coil measurement system for environmental 222Rn. Solomon SB, et al. **Health Phys** 1989 Nov; 57(5):801–7

Activated charcoal as a adsorbent of oxidized 3,3'-diaminobenzidine in peroxidase cytochemistry. Ros Barceló A, et al. **Stain Technol** 1989 Mar;64(2):97–8

[Adsorbants (hemoperfusion excluded): activated charcoals. 26th French Congress of Anti-Poison Centers. Marseilles, 4–5 October 1988. Proceedings] **J Toxicol Clin Exp** 1989 Jul–Aug;9(4):235–98 **(Fre)**

[Activated charcoals: properties—experimental studies] Erb F, et al. **J Toxicol Clin Exp** 1989 Jul–Aug;9(4):235–48 (43 ref.) **(Fre)**

[Reducing chloramines in drinking water] Becker FF, et al. **Biomed Tech (Berlin)** 1989 Nov;34(11):280–8 (Eng. Abstr.) **(Ger)**

[Use of activated charcoal plasmafiltration in the treatment of hyperthyroidism] Candrina R, et al. **Recenti Prog Med** 1989 Nov;80(11):603–6 (Eng. Abstr.) **(Ita)**

[Alcohol dehydrogenase reaction on activated charcoal] Mishchenko IN, et al. **Ukr Biokhim Zh** 1989 Sep–Oct; 61(5):99–102 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Ability of charcoal to prevent absorption of paroxetine. Greb WH, et al. **Acta Psychiatr Scand Suppl** 1989;350:156–7

Does multiple-dose charcoal therapy enhance salicylate excretion? Kirshenbaum LA, et al. **Arch Intern Med** 1990

Jun;150(6):1281-3
The possibility of improving biocompatibility by removing anaphylatoxins from the circuit of blood-perfused artificial organs. Oka T. **ASAIO Trans** 1989 Oct-Dec;35(4):778-83
Repeated oral administration of activated charcoal for treating aspirin overdose in young children. Vertrees JE, et al. **Pediatrics** 1990 Apr;85(4):594-8
[Enterosorption as a method of detoxification (review of the literature)] Mamyrbaev AM, et al. **Gig Tr Prof Zabol** 1990; (3):40-3 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Enzyme induction by eating charcoal-grilled steak with no effect on blood lipids. Heller RF, et al.
Clin Exp Pharmacol Physiol 1989 Oct;16(10):783-8
Activated charcoal aspiration. Silberman H, et al.
N C Med J 1990 Feb;51(2):79-80

ANALYSIS

Drug adsorption to charcoals and anionic binding resins. al-Shareef AH, et al. **Hum Exp Toxicol** 1990 Mar;9(2):95-7
Interaction of microcystin-LR with SuperChar: water decontamination and therapy. Mereish KA, et al.
J Toxicol Clin Toxicol 1989;27(4-5):271-80

PHARMACOKINETICS

The mechanism of the hypocholesterolaemic effect of activated charcoal. Neuvonen PJ, et al.
Eur J Clin Invest 1989 Jun;19(3):251-4

PHARMACOLOGY

Gastrointestinal secretion of ciprofloxacin. Evaluation of the charcoal model for investigations in healthy volunteers. Sörgel F, et al. **Am J Med** 1989 Nov 30;87(5A):62S-65S
Prevention of T-2 toxin-induced morphologic effects in the rat by highly activated charcoal. Bratich PM, et al.
Arch Toxicol 1990;64(3):251-3
Effect of enterosorption on animal lifespan. Frolkis VV, et al. **Biomater Artif Cells Artif Organs** 1989;17(3):341-51
Influence of dietary charcoal on ochratoxin A toxicity in Leghorn chicks. Rotter RG, et al. **Can J Vet Res** 1989 Oct;53(4):449-53
Increased transport of theophylline into gastrointestinal lumen and gastrointestinal dialysis by activated charcoal in rats with hepatic cirrhosis. Arimori K, et al.
Chem Pharm Bull (Tokyo) 1989 Nov;37(11):3148-9
Evaluation of a superactivated charcoal paste and detergent and water in prevention of T-2 toxin-induced local cutaneous effects in topically exposed swine. Biehl ML, et al. **Fundam Appl Toxicol** 1989 Oct;13(3):523-32
The effects of charcoal and sorbitol (alone and in combination) on plasma theophylline concentrations after a sustained-release formulation. al-Shareef AH, et al.
Hum Exp Toxicol 1990 May;9(3):179-82
Pharmacokinetic modelling of the effect of activated charcoal on the intestinal secretion of theophylline, using the isolated vascularly perfused rat small intestine. de Vries MH, et al. **J Pharm Pharmacol** 1989 Aug;41(8):528-33
The effect of oral activated charcoal on the systemic clearance of gentamicin in rabbits with acute renal failure. Hasan MM, et al. **J Pharm Pharmacol** 1990 Feb;42(2):85-8
Kinetics of drug action in disease states. XXXIX. Effect of orally administered activated charcoal on the hypnotic activity of phenobarbital and the neurotoxicity of theophylline administered intravenously to rats with renal failure. Hoffman A, et al. **Pharm Res** 1990 Mar;7(3):242-6
Effect of oral activated charcoal on the pharmacokinetics of quinidine and quinine administered intravenously to rabbits. Hasan MM, et al. **Pharmacol Toxicol** 1990 Jul; 67(1):73-6

THERAPEUTIC USE

Contribution of sorbitol combined with activated charcoal in prevention of salicylate absorption. Keller RE, et al.
Ann Emerg Med 1990 Jun;19(6):654-6
Hypernatremia following treatment of theophylline toxicity with activated charcoal and sorbitol [letter] Gazda-Smith E, et al. **Arch Intern Med** 1990 Mar;150(3):689, 692
Activated charcoal should replace the resins in the treatment of digoxin intoxication! [letter; comment] Neuvonen PJ, et al. **Arch Intern Med** 1989 Nov;149(11):2603-6 Comment on: Arch Intern Med 1988 Mar;148(3):745-6.
Activated charcoal in the treatment of hypercholesterolaemia: dose-response relationships and comparison with cholestyramine. Neuvonen PJ, et al.
Eur J Clin Pharmacol 1989;37(3):225-30
Treatment of intoxications using single and repeated doses of oral activated charcoal. Olkkola KT, et al.
J Toxicol Clin Exp 1989 Jul-Aug;9(4):265-75 (73 ref.)
Multiple-dose activated charcoal in management of phenytoin overdose. Ros SP, et al. **Pediatr Emerg Care** 1989 Sep;5(3):169-70
Administration of activated charcoal or sodium polystyrene sulfonate (Kayexalate) as gastric decontamination for lithium intoxication: an animal model. Linakis JG, et al.
Pharmacol Toxicol 1989 Nov;65(5):387-9
[Value of charcoal by oral route in patients admitted to emergency department for voluntary absorption of benzodiazepines] Bouget J, et al. **J Toxicol Clin Exp** 1989 Jul-Aug;9(4):287-9 **(Fre)**
[Toxicokinetic study of 10 cases of acute maprotiline poisonings treated with activated charcoal] Bourdon H, et al. **J Toxicol Clin Exp** 1989 Jul-Aug;9(4):291-3 **(Fre)**
[Effectiveness of activated charcoals in the treatment of drug poisonings] Harou-Kouka M, et al. **J Toxicol Clin Exp** 1989 Jul-Aug;9(4):255-60 **(Fre)**
[Selective in vitro study of activated charcoals for their use in acute poisonings] M'Bisi R, et al.
J Toxicol Clin Exp 1989 Jul-Aug;9(4):249-53 **(Fre)**
[Efficacy of treatment with charcoal diluted in 70% sorbitol during acute poisonings] Passeron D, et al.
J Toxicol Clin Exp 1989 Jul-Aug;9(4):277-81 **(Fre)**
[Galenic formulation of an activated charcoal preparation. In vitro test of activity--1st clinical use]
Rambourg-Schepens MO, et al. **J Toxicol Clin Exp** 1989 Jul-Aug;9(4):261-3 **(Fre)**
[Toxicokinetic study in acute poisonings treated with activated charcoal] Tritsch L, et al. **J Toxicol Clin Exp** 1989 Jul-Aug;9(4):283-5 **(Fre)**
[Indications and contra-indications of activated charcoal in a poison control center. The viewpoint of the Poison Control Center of Finland] Vilska J.
J Toxicol Clin Exp 1989 Jul-Aug;9(4):295-8 **(Fre)**
[Theophylline poisoning in childhood: depurative therapy using a combination of activated charcoal and a saline cathartic] Chiossi M, et al. **Minerva Pediatr** 1989 Oct; 41(10):535-7 (Eng. Abstr.) **(Ita)**
[Bile sorption in hepatic insufficiency in patients with mechanical jaundice] Zhidovinov GI. **Khirurgiia (Mosk)** 1989 Jul;(7):88-92 (Eng. Abstr.) **(Rus)**
[Enterosorption as a method of total detoxication and nonspecific immune correction in acute surgical infection (a clinical-experimental study)] Novokreshchenov LB, et al. **Pediatriia** 1989;(12):62-6 **(Rus)**
[Enterosorption in the combined therapy of psoriasis patients] Mashkov OA, et al. **Vestn Dermatol Venerol** 1989; (12):27-31 (Eng. Abstr.) **(Rus)**

CHARCOT-MARIE DISEASE see under **MUSCULAR ATROPHY, SPINAL**

CHARCOT'S JOINT see **ARTHROPATHY, NEUROGENIC**

CHARGES see **FEES AND CHARGES**

CHARITIES

Charity and the NHS [letter] Nicholls MW. **Lancet** 1990 May 26;335(8700):1284
The Imperial Cancer Research Fund in the 1980s. Bodmer WF. **Postgrad Med J** 1990;66 Suppl 1:S18-22
The generous elderly: naturalistic studies of donations across the life span. Midlarsky E, et al. **Psychol Aging** 1989 Sep; 4(3):346-51

ECONOMICS

AIDS research. Sex survey gets Wellcome support [news] Webb B. **Nature** 1989 Oct 26;341(6244):675

LEGISLATION & JURISPRUDENCE

Report of the Special Task Force to Study Not-for-Profit Hospitals and Unsponsored Charity Care. Anderson RJ, et al. **Tex Med** 1990 Apr;86(4):68-71

CHEDIAK-HIGASHI SYNDROME

see related
ALEUTIAN MINK DISEASE
Chediak-Higashi syndrome. Rao CR, et al.
Indian J Pediatr 1989 Nov-Dec;56(6):778-80

BLOOD

Compartmentation of 4,6-difluoro-5HT studied by nuclear magnetic resonance in normal and CHS bovine platelets. Meyers KM, et al. **Thromb Res** 1990 May 1;58(3):265-72

COMPLICATIONS

Epstein-Barr virus infection in Chediak-Higashi syndrome mimicking acute lymphocytic leukemia. Kinugawa N.
Am J Pediatr Hematol Oncol 1990 Summer;12(2):182-6
A case report of Chediak-Higashi syndrome complicated with systemic amyloidosis and olivo-cerebellar degeneration. Maeda K, et al. **Pathol Res Pract** 1989 Aug; 185(2):231-7

DIAGNOSIS

Chediak-Higashi syndrome in the cat: prenatal diagnosis by evaluation of amniotic fluid cells. Kahraman MM, et al.
Am J Med Genet 1990 Jul;36(3):321-7
Chediak-Higashi syndrome. Pandita R, et al.
Indian Pediatr 1989 Aug;26(8):825-8

ETIOLOGY

[The accelerated phase of Chediak-Higashi syndrome] Bejaoui M, et al. **Arch Fr Pediatr** 1989 Dec;46(10):733-6 (35 ref.) (Eng. Abstr.) **(Fre)**

GENETICS

Platelet aggregation and ATP secretion in whole blood of normal cats and cats homozygous and heterozygous for Chediak-Higashi syndrome. Colgan SP, et al.
Blood Cells 1989;15(3):585-95; discussion 596-600

IMMUNOLOGY

Gamma-delta T cells in Chediak-Higashi syndrome. Holcombe RF, et al. **Acta Haematol (Basel)** 1990; 83(4):193-7

PATHOLOGY

Giant cytoplasmic granules in Langerhans cells of Chediak-Higashi syndrome. Carrillo-Farga J, et al.
Am J Dermatopathol 1990 Feb;12(1):81-7
Three-dimensional reconstruction of anomalous beige mouse macrophage lysosomes. Strausbauch P, et al.
J Leukoc Biol 1989 Nov;46(5):441-9
[The accelerated phase in Chediak-Higashi syndrome] Lazzam B, et al. **Tunis Med** 1990 May;68(5):389-93 (Eng. Abstr.) **(Fre)**

VETERINARY

Adenine nucleotides, serotonin, and aggregation properties of platelets of blue foxes (Alopex lagopus) with the Chediak-Higashi syndrome. Sjaastad OV, et al.
Am J Med Genet 1990 Mar;35(3):373-8

CHEEK

Light and electron microscopic study of hamster cheek pouch treated with 9,10 dimethyl 1,2 benzanthracene and retinoic acid. Potdar PD, et al.
Ann Acad Med Singapore 1989 Sep;18(5):523-7
'An unusual hazard of toothbrushing' [letter] MacLeod S.
Br Dent J 1990 Jul 7;169(1):6
Rhabdomyosarcoma, presenting as a facial swelling in a child. A case report and review of the literature. Brookes CN, et al. **Br J Oral Maxillofac Surg** 1990 Apr;28(2):117-21 (14 ref.)
Polymorphous low-grade adenocarcinoma of minor salivary glands--a report of three cases. Mitchell DA, et al.
Br J Oral Maxillofac Surg 1989 Dec;27(6):494-500 (9 ref.)
Use of an Ohmeda ear oximetry probe for "buccal" oximetry [letter] Sosis MB, et al. **Can J Anaesth** 1990 May;37(4 Pt 1):489-90
Simultaneous occurrence of junctional nevus and seborrheic keratosis. Requena L, et al. **Cutis** 1989 Dec;44(6):465-6
Cancer of the cheek. Whitaker DC, et al. **Dermatol Clin** 1989 Oct;7(4):751-62
Photodynamic therapy of choriocarcinoma transplanted to the hamster cheek pouch. I. Intraperitoneal photosensitization. Brand E, et al. **Gynecol Oncol** 1990 Feb; 36(2):200-6

ANATOMY & HISTOLOGY

Cheek dimples [letter] Wiedemann HR. **Am J Med Genet** 1990 Jul;36(3):376
A search for sonoluminescence in vivo in the human cheek. Leighton TG, et al. **Ultrasonics** 1990 May;28(3):181-4
[Bichat's fat pad: anatomy and imaging] Kahn JL, et al.
Arch Anat Histol Embryol 1988;71:57-83 (Eng. Abstr.) **(Fre)**

BLOOD SUPPLY

Effects of hypertonic NaCl solution on the hamster cheek pouch microcirculation in normo- and hypovolemia. Bouskela E, et al. **Braz J Med Biol Res** 1989;22(2):259-64
False aneurysm of the facial artery. Cooperband BR, et al.
J Oral Maxillofac Surg 1989 Dec;47(12):1327-9
[Report of a case: reaction to a local anesthetic] Blondeau DF. **Can Dent Assoc J** 1989 Nov;55(11):915-6 (Eng. Abstr.) **(Fre)**

INJURIES

Traumatic central retinal artery occlusion. Garzozi HJ, et al. **Ophthalmologica** 1990;200(3):113-6

INNERVATION

[A numb cheek (letter)] Graamans K.
Ned Tijdschr Geneeskd 1989 Aug 26;133(34):1707 **(Dut)**

PATHOLOGY

Metaplastic bone formation in an unusual neural tumour of the oral cavity. Farthing PM, et al.
Br J Oral Maxillofac Surg 1989 Dec;27(6):517-9 (7 ref.)
Necrotizing buccal and cervical fasciitis. Yamaoka M, et al.
J Craniomaxillofac Surg 1990 Jul;18(5):223-4

SURGERY

Reconstruction of the cheek using a "suspended" radial forearm free flap. Niranjan NS, et al. **Br J Plast Surg** 1990 May;43(3):365-6
Jaeger's jugal extended incision to approach the pterygomaxillary region. Brusati R, et al.
Int J Oral Maxillofac Surg 1989 Oct;18(5):298-301
The "double faced" pectoralis major island flap. A valuable alternative in full-thickness cheek reconstruction. Towpik

E, et al. **J Craniomaxillofac Surg** 1990 Feb;18(2):85–7
The principle of cosmetic junctions as applied to reconstruction of defects following Mohs surgery. Dzubow LM, et al. **J Dermatol Surg Oncol** 1990 Apr;16(4):353–5
Removal of buccal fat pad by liposuction [letter] Newman J. **Plast Reconstr Surg** 1990 Aug;86(2):385–6
The anatomy and clinical applications of the buccal fat pad. Stuzin JM, et al. **Plast Reconstr Surg** 1990 Jan;85(1):29–37
Reconstructive surgery of the lips and cheek. Pavletic MM. **Vet Clin North Am Small Anim Pract** 1990 Jan;20(1):201–26 (4 ref.)
[The application of a sternocleidomastoid musculocutaneous flap for the repair of a perforating defect in the buccal region (a report of 3 cases)] Luo JR.
Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih 1986 Mar;2(1):3 **(Chi)**
[The malar musculo-fatty flap] Le Louarn C.
Ann Chir Plast Esthet 1989;34(6):510–2 (Eng. Abstr.) **(Fre)**

CHEEK BONE see **ZYGOMA**

CHEESE

The use of the Listeria monocytogenes DTH gene for the detection of pathogenic biovars in food. Notermans S, et al. **Acta Microbiol Hung** 1989;36(2–3):215–8
Examination of Listeria monocytogenes in milk products. Rodler M, et al. **Acta Microbiol Hung** 1989;36(2–3):259–61
Serovars of Listeria monocytogenes and Listeria innocua from food. Schönberg A, et al. **Acta Microbiol Hung** 1989; 36(2–3):249–53
Pollution potential reduction of cheese whey through yeast fermentation. Ghaly AE, et al. **Appl Biochem Biotechnol** 1989 Nov;22(2):181–203
Characterization of a Lactobacillus strain producing white crystals on cheddar cheese. Rengpipat S, et al.
Appl Environ Microbiol 1989 Oct;55(10):2579–82
Staphylococcal food poisoning from sheep milk cheese. Bone FJ, et al. **Epidemiol Infect** 1989 Dec;103(3):449–58
Bacteriological quality of on-farm manufactured goat cheese. Tham WA, et al. **Epidemiol Infect** 1990 Feb;104(1):87–100
Microbiological quality of ayib, a traditional Ethiopian cottage cheese. Ashenafi M. **Int J Food Microbiol** 1990 May;10(3–4):263–8
The effect of pH on the initiation of growth of cottage cheese spoilage bacteria. Brocklehurst TF, et al.
Int J Food Microbiol 1988 Feb;6(1):43–9
Influence of lactic starter inoculation, curd heating and ripening temperature on Staphylococcus aureus behaviour in Manchego cheese. Gaya P, et al.
Int J Food Microbiol 1988 May;6(3):249–57
A survey on the microbiological quality of various cheeses in Turkey. Kivanç M. **Int J Food Microbiol** 1989 Aug; 9(1):73–7
The occurrence of Listeria monocytogenes in cheese from a manufacturer associated with a case of listeriosis. McLauchlin J, et al. **Int J Food Microbiol** 1990 May; 10(3–4):255–62
The occurrence in the U.K. of Listeria species in raw chickens and soft cheeses. Pini PN, et al.
Int J Food Microbiol 1988 Jun;6(4):317–26
A comparison of two procedures for the isolation of Listeria monocytogenes from raw chickens and soft cheese. Pini PN, et al. **Int J Food Microbiol** 1988 Dec 31;7(4):331–7
Survival and growth of food poisoning bacteria following inoculation into cottage cheese varieties. Sims GR, et al. **Int J Food Microbiol** 1989 Nov;9(3):173–95
Histamine formation by enterococci isolated from home-made goat cheeses. Tham W.
Int J Food Microbiol 1988 Oct;7(2):103–8
Microbiological and compositional status of Turkish white cheese. Turantaş F, et al. **Int J Food Microbiol** 1989 Feb; 8(1):19–24
Behavior of Listeria monocytogenes in the presence of gluconic acid and during preparation of cottage cheese curd using gluconic acid. el-Shenawy MA, et al.
J Dairy Sci 1990 Jun;73(6):1429–38
Bioavailability of iron–milk–protein complexes and fortified cheddar cheese. Zhang D, et al. **J Dairy Sci** 1989 Nov; 72(11):2845–55
Cheese turner's hypoglycaemia [letter] Diem P, et al.
Lancet 1990 Feb 17;335(8686):421
Selected characteristics of several strains of Lactobacillus plantarum. Mayo B, et al. **Microbiologia** 1989 Sep; 5(2):105–12
Mutagenic activity of various kinds of cheese on the Ames, rec and umu assays. Yamaguchi T. **Mutat Res** 1989 Dec; 224(4):493–502
Listeriosis traced to the consumption of alfalfa tablets and soft cheese [letter] Farber JM, et al. **N Engl J Med** 1990 Feb 1;322(5):338
Some properties of Streptococcus faecalis subsp. liquefaciens isolated from cheese with special reference to production of bitterness. Hegazi FZ. **Nahrung** 1989;33(10):989–97

ADVERSE EFFECTS

Tyramine and irreversible monoamine oxidase inhibitors in clinical practice. Cooper AJ. **Br J Psychiatry Suppl** 1989 Oct;(6):38–45 (37 ref.)
[Consumption of goat cheese and human brucellosis in Ghardaïa (Algeria)] Cherif A, et al.
Arch Inst Pasteur Alger 1986;55:9–14 (Eng. Abstr.) **(Fre)**

ANALYSIS

Investigation of trace element content of cheese. Gabrielli Favretto L. **Food Addit Contam** 1990 May–Jun;7(3):425–32
Liquid chromatographic determination of total niacin in beef, semolina, and cottage cheese. Tyler TA, et al.
J Assoc Off Anal Chem 1990 May–Jun;73(3):467–9
Detection of cows' milk in ewes' milk and cheese by an indirect enzyme-linked immunosorbent assay (ELISA). Rodríguez E, et al. **J Dairy Res** 1990 May;57(2):197–205
Relationships between physico-chemical parameters and microbial groups in Manchego and Burgos cheeses studied by principal component analysis. García MC, et al.
Microbiologia 1987 Jun;3(2):91–100

STANDARDS

The microbiological quality of Erzincan (Savak) Tulum cheese from Turkish retail markets. Kivanç M. **Nahrung** 1989;33(9):895–900
[Regulation of the mineral composition of processed cheese for the nutrition of school-age children] Zakharova NP, et al. **Vopr Pitan** 1989 May–Jun;(3):71–3 **(Rus)**

CHEETAHS see under **CARNIVORA**

CHEILITIS

CHEMICALLY INDUCED

Circumoral dermatitis and cheilitis caused by tartar control dentifrices. Beacham BE, et al. **J Am Acad Dermatol** 1990 Jun;22(6 Pt 1):1029–32

COMPLICATIONS

'Oral medicine in practice: angular cheilitis' [letter; comment] Fieldhouse J. **Br Dent J** 1989 Sep 23;167(6):186 Comment on: Br Dent J 1989 Jul 8;167(1):15–8.

DRUG THERAPY

[Local administration of vitamin A acid in chronic actinic cheilitis (letter)] Ehlert R, et al. **Hautarzt** 1989 Nov; 40(11):728 **(Ger)**
[Successful treatment of cheilitis granulomatosis with potent inhibitors of mediator release—possible involvement of mast cells in the pathogenesis] Chiba M, et al.
Nippon Hifuka Gakkai Zasshi 1989 Jul;99(8):883–9 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

[Minor symptoms in family practice; angular cheilitis] Feldmann CT. **Ned Tijdschr Geneeskd** 1989 Aug 19; 133(33):1638–40 (16 ref.) **(Dut)**
[Perioral dermatitis] Fritsch P, et al. **Hautarzt** 1989 Aug; 40(8):475–9 (Eng. Abstr.) **(Ger)**

GENETICS

Chronic granulomatous disease in an adult female with granulomatous cheilitis. Evidence for an X-linked pattern of inheritance with extreme lyonization. Dusi S, et al.
Acta Haematol (Basel) 1990;84(1):49–56

IMMUNOLOGY

Immunoglobulin-producing cells in plasma cell orificial mucositis. Aiba S, et al. **J Cutan Pathol** 1989 Aug; 16(4):207–10

PATHOLOGY

Angioedema, elephantiasis nostras, and cheilitis granulomatosa. Cranberg JA, et al. **Allergy Proc** 1990 Mar–Apr;11(2):79–82

RADIOTHERAPY

Actinic cheilitis. Treatment with the carbon dioxide laser. Zelickson BD, et al. **Cancer** 1990 Mar 15;65(6):1307–11

CHEIROGALEUS see **LEMURIDAE**

CHELATING AGENTS

see related
IRON CHELATES

Interference by haemoglobin with the cresolphthalein complexone method for serum calcium measurement. Corns CM. **Ann Clin Biochem** 1990 Mar;27 (Pt 2):152–5
meso-2,3-Dimercaptosuccinic acid: chemical, pharmacological and toxicological properties of an orally effective metal chelating agent. Aposhian HV, et al.
Annu Rev Pharmacol Toxicol 1990;30:279–306 (90 ref.)
General features in the stoichiometry and stability of ionophore A23187-cation complexes in homogeneous solution. Chapman CJ, et al. **Arch Biochem Biophys** 1990 Aug 15;281(1):44–57
The Cd-Chelex assay: a new sensitive method to determine metallothionein containing zinc and cadmium. Bartsch R, et al. **Arch Toxicol** 1990;64(3):177–80
Chelation of lead during co-exposure to ethanol. Dhawan M, et al. **Biochem Int** 1989 Nov;19(5):1067–75
Thromboresistant polymers: a new approach. Wilson JE, et al. **Biomater Artif Cells Artif Organs** 1989;17(4):437–45
N-acetylation in chitosan and the rate of its enzymic hydrolysis. Hirano S, et al. **Biomaterials** 1989 Oct; 10(8):574–6
Caged-Ca2+: a new agent allowing liberation of free Ca2+ in biological systems by photolysis. Grell E, et al.
Cell Mol Biol 1989;35(5):515–22
Selective removal of cadmium from aged hepatic and renal deposits: N-substituted talooctamine dithiocarbamates as cadmium mobilizing agents. Singh PK, et al.
Chem Biol Interact 1990;74(1–2):79–91
Seizures induced by fluoroacetic acid and fluorocitric acid may involve chelation of divalent cations in the spinal cord. Hornfeldt CS, et al. **Eur J Pharmacol** 1990 Apr 25; 179(3):307–13
Effect of different linkages between chelates and monoclonal antibodies on levels of radioactivity in the liver. Deshpande SV, et al. **Int J Rad Appl Instrum [B]** 1989;16(6):587–97
An optimized antibody-chelator conjugate for imaging of carcinoembryonic antigen with indium-111. Sumerdon GA, et al. **Int J Rad Appl Instrum [B]** 1990;17(2):247–54
Nuclear magnetic resonance studies of the solution chemistry of metal complexes. 26. Mixed ligand complexes of cadmium, nitrilotriacetic acid, glutathione, and related ligands. Kadima W, et al. **J Inorg Biochem** 1990 Apr; 38(4):277–88
Lead chelates of meso- and racemic-dimercaptosuccinic acid. Rivera M, et al. **J Inorg Biochem** 1989 Dec; 37(4):283–93
Yttrium-90-labeled monoclonal antibody for therapy: labeling by a new macrocyclic bifunctional chelating agent. Deshpande SV, et al. **J Nucl Med** 1990 Apr;31(4):473–9
Use of isothiocyanatobenzyl-DTPA derivatized monoclonal antimyosin fab for enhanced in vivo target localization. Khaw BA, et al. **J Nucl Med** 1990 Feb;31(2):211–7

ADVERSE EFFECTS

The colorimetric determination of iron in biological material with reference to its measurement during chelation therapy. Goodwin JF, et al. **Clin Chem** 1966 Feb;12(2):58–69

CHEMICAL SYNTHESIS

Preparation and evaluation of new bifunctional chelating agents: a preliminary report. Richard MD, et al.
Int J Rad Appl Instrum [B] 1990;17(2):181–8
Cytotoxicity and antitumor activity of some tetrahedral bis(diphosphino)gold(I) chelates. Berners-Price SJ, et al.
J Med Chem 1990 May;33(5):1386–92
The search for chelate antagonists for chronic cadmium intoxication. Jones MM, et al. **Toxicology** 1990 May 14; 62(1):1–25 (121 ref.)
[Synthesis of polyphenolic aminocarboxylic acid derivatives as radio-actinides mobilization agents] Du J, et al.
Yao Hsueh Hsueh Pao 1989;24(9):711–4 (Eng. Abstr.) **(Chi)**

DIAGNOSTIC USE

Multiple labelling of immunoglobulin G, albumin and testosterone with a fluorescent terbium chelate for fluorescence immunoassays. Canfi A, et al. **Analyst** 1989 Nov;114(11):1407–11
Macrocyclic chelates of radiometals for diagnosis and therapy. Meares CF, et al. **Br J Cancer Suppl** 1990 Jul; 10:21–6
Development of radiochemically pure antibodies. Eckelman WC. **Cancer Res** 1990 Feb 1;50(3 Suppl):780s–782s

METABOLISM

Ca2(+)-induced Ca2+ release as examined by photolysis of caged Ca2+ in single ventricular myocytes. Näbauer M, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):C189–93
Stable bifunctional chelates of metals used in radiotherapy. Moi MK, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):789s–793s
Determination and metabolism of dithiol chelating agents. VII. Biliary excretion of dithiols and their interactions with cadmium and metallothionein. Zheng W, et al.
Fundam Appl Toxicol 1990 Apr;14(3):598–607
Cell surface interactions with metal chelates. Botros HG, et al. **J Chromatogr** 1989 Oct 27;495:113–22
(An)aerobic breakdown of chelating agents used in household detergents. Egli T. **Microbiol Sci** 1988 Feb;5(2):36–41 (49 ref.)

PHARMACOKINETICS

13C NMR of methylated lysines of fd gene 5 protein: evidence for a conformational change involving lysine 24 upon binding of a negatively charged lanthanide chelate. Dick LR, et al. **Biochemistry** 1989 Sep 19;28(19):7896–904
The interactions of desferrioxamine and hydroxypyridone compounds with haemoglobin and erythrocytes. Rice-Evans C, et al. **FEBS Lett** 1989 Oct 9;256(1–2):17–20
Predicting the kinetics of chelating agents in man from animal data. Durbin PW, et al. **Health Phys** 1989;57 Suppl 1:165–73; discussion 174

PHARMACOLOGY

Effect of bathocuproine disulfonate, a copper chelator, on

cyst(e)ine metabolism by freshly isolated rat hepatocytes. Coloso RM, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):E443–50
Free radical production and DNA cleavage by copper chelating peptide–anthraquinones. Morier–Teissier E, et al. **Anticancer Drug Des** 1990 Aug;5(3):291–305
Evidence for a direct role of intracellular calcium in paracetamol toxicity. Boobis AR, et al. **Biochem Pharmacol** 1990 Apr 15;39(8):1277–81
Facilitated uptake of zinc into human erythrocytes. Relevance to the treatment of sickle-cell anaemia. Hider RC, et al. **Biochem Pharmacol** 1990 Mar 15;39(6):1005–12
Oxidant-induced haemoprotein degradation in rat tissue slices: effect of bromotrichloromethane, antioxidants and chelators. Hidalgo FJ, et al. **Biochim Biophys Acta** 1990 Mar 1;1037(3):313–20
Inhibition of dopamine beta-hydroxylase by bidentate chelating agents. Townes S, et al. **Biochim Biophys Acta** 1990 Feb 9;1037(2):240–7
Protective effects of certain natural and synthetic complexans on the toxicity of chromium and tin to a N2–fixing cyanobacterium, Anabaena doliolum. Rai LC, et al. **Biomed Environ Sci** 1989 Sep;2(3):271–81
Diethyldithiocarbamate and dithizone augment the toxicity of kainic acid. Mitchell CL, et al. **Brain Res** 1990 Jan 8; 506(2):327–30
99mTc labeling of proteins: initial evaluation of a novel diaminedithiol bifunctional chelating agent. Baidoo KE, et al. **Cancer Res** 1990 Feb 1;50(3 Suppl):799s–803s
Effect of N–benzyl–D–glucamine dithiocarbamate on renal toxicity of inorganic mercury in rats. Shimada H, et al. **Chem Pharm Bull (Tokyo)** 1990 May;38(5):1429–31
Effect of antioxidants in experimental Escherichia coli septicemia. Broner CW, et al. **Circ Shock** 1989 Oct; 29(2):77–92
Distribution of cadmium in body organs and hepatic metallothionein content following chelation therapy. Tewari PC, et al. **Clin Exp Pharmacol Physiol** 1988 Jan; 15(1):71–5
The efficacies of pure LICAM(C) and DTPA for enhancing the elimination of plutonium–238 and americium–241 from rats after their inhalation as nitrate. Stradling GN, et al. **Exp Pathol** 1989;37(1–4):83–8
Intracellular Ca2+ chelators prevent DNA damage and protect hepatoma 1C1C7 cells from quinone–induced cell killing. Dypbukt JM, et al. **Free Radic Res Commun** 1990; 8(4–6):347–54
An iron chelator is not required for reductive iron release from ferritin by radical generating systems. Monteiro HP, et al. **Free Radic Res Commun** 1989;7(1):33–5
Evaluation of the efficacy of dimercapto chelating agents for the treatment of systemic organic arsenic poisoning in rabbits. Inns RH, et al. **Hum Exp Toxicol** 1990 Jul; 9(4):215–20
Effect of metal chelators on thermoluminescence peaks of spinach chloroplasts and photosystem II particles: probing the water oxidation cycle with 8–hydroxyquinoline. Hegde U, et al. **Indian J Biochem Biophys** 1990 Feb;27(1):5–8
Catalytic properties of deoxyhypusine hydroxylase. Beninati S, et al. **Ital J Biochem** 1990 May–Jun;39(3):183A–185A
Calcium chelators induce bronchoconstriction in the canine lung periphery. Lindeman KS, et al. **J Appl Physiol** 1990 Mar;68(3):1114–20
Effects of pH, glucose, and chelating agents on lethality of paraquat to Escherichia coli. Minakami H, et al. **J Bacteriol** 1990 Feb;172(2):691–5
Chelation of cytoplasmic Ca2+ increases plasma membrane permeability in murine macrophages. Picello E, et al. **J Biol Chem** 1990 Apr 5;265(10):5635–9
Lactational responses to and in vitro ruminal solubility of magnesium oxide or magnesium chelate. Lough DS, et al. **J Dairy Sci** 1990 Feb;73(2):413–24
Effects of the copper chelators diethyldithiocarbamate and bathocuproine sulfonate on interferon and its antiviral state. Calvert JG, et al. **J Interferon Res** 1990 Feb;10(1):13–23
In vitro and in vivo effects of metal chelators on cartilage metabolism. Ehrlich MG, et al. **J Orthop Res** 1990 Jan; 8(1):72–7
Determination and metabolism of dithiol chelating agents: X. In humans, meso–2,3–dimercaptosuccinic acid is bound to plasma proteins via mixed disulfide formation. Maiorino RM, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):570–7
Effect of chelating agent structure on the mobilization of cadmium from intracellular deposits. Singh PK, et al. **J Toxicol Environ Health** 1989;28(4):501–18
The influence of CDTA and DPTA on ethanol production from sugar cane molasses using Saccharomyces cerevisiae. Oderinde RA, et al. **Nahrung** 1990;34(2):171–5
Long–term potentiation of hippocampal mossy fiber synapses is blocked by postsynaptic injection of calcium chelators. Williams S, et al. **Neuron** 1989 Nov;3(5):583–8
Efficacy of the chelating agent CaEDTA in reversing lead–induced changes in behavior. Cory–Slechta DA, et al. **Neurotoxicology** 1990 Winter;10(4):685–97
Effect of calcium ions and calcium chelators on 3H–CHA binding. Rossati A, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:137–8
Effects of chelators on copper therapy of macular mouse, a model animal of Menkes' kinky disease. Tanaka K, et al. **Res Commun Chem Pathol Pharmacol** 1990 Aug; 69(2):217–27
Comparison of effectiveness of 3 dithiocarbamates on excretion and distribution of cadmium in rats and mice. Kiyozumi M, et al. **Toxicology** 1990 Mar 16;60(3):275–85
Effect of chelating agents on biliary excretion of arsenic in perfused livers of guinea pigs pretreated with As2O3. Reichl FX, et al. **Vet Hum Toxicol** 1990 Jun;32(3):223–6
[Effect of alloxans on pancreatic B–cells with special regard to the alloxan–metal–complex theory. I. Effects of alloxan, alloxan–zinc chelates, dilauric acid and colchicine on blood sugar and rate of mitosis of B–cell Langerhans islets] Schmidt R, et al. **Acta Histochem (Jena)** 1990;88(1):29–46 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

Treatment of transfusional iron overload. Cohen A. **Am J Pediatr Hematol Oncol** 1990 Spring;12(1):4–8 (16 ref.)
Treatment of acute lead intoxication. A quantitative comparison of a number of chelating agents. Llobet JM, et al. **Arch Environ Contam Toxicol** 1990 Mar–Apr; 19(2):185–9
Late preventive effects against carbon tetrachloride–induced liver necrosis of the calcium chelating agent Calcion. de Ferreyra EC, et al. **Arch Toxicol** 1989;63(6):450–5
Effect of N–benzyl–D–glucamine dithiocarbamate on renal toxicity induced by cadmium–metallothionein in rats. Kojima S, et al. **Arch Toxicol** 1990;64(2):91–6
Antimalarial effect of HBED and other phenolic and catecholic iron chelators. Yinnon AM, et al. **Blood** 1989 Nov 1;74(6):2166–71
The antitumor activity of Cu(II)KTS, the copper (II) chelate of 3–ethoxy–2–oxobutyraldehyde bis(thiosemicarbazone). Crim JA, et al. **Cancer Res** 1967 Jul;27(7):1278–85
Therapeutic effectiveness of 2,3,2 tet, cyclam and EDTA in toads exposed to lethal doses of nickel and cobalt. Hilmy AM, et al. **Comp Biochem Physiol [C]** 1990;95(1):79–83
Oral cadmium exposure in mice: toxicokinetics and efficiency of chelating agents. Andersen O. **Crit Rev Toxicol** 1989; 20(2):83–112 (220 ref.)
Structural factors in the in vivo chelate mobilization of aged cadmium deposits. Singh PK, et al. **Environ Health Perspect** 1990 Apr;85:361–70
Effectiveness of chelation therapy with time after acute uranium intoxication. Domingo JL, et al. **Fundam Appl Toxicol** 1990 Jan;14(1):88–95
Selection of a DTPA chelate conjugate for monoclonal antibody targeting to a human colonic tumor in nude mice. Sharkey RM, et al. **Int J Cancer** 1990 Jul 15;46(1):79–85
The efficacies of pure LICAM(C) and DTPA on the retention of plutonium–238 and americium–241 in rats after their inhalation as nitrate and intravenous injection as citrate. Stradling GN, et al. **Int J Radiat Biol** 1989 Oct; 56(4):503–14
A therapeutic profile of metal chelators in the detoxication of methylmercury chloride inhibited acid and alkaline phosphatases in different areas of the central nervous system of rats. Vinay SD, et al. **J Environ Pathol Toxicol Oncol** 1989 Jul–Aug;9(4):351–9
The use of chelating agents in the treatment of aluminum overload. Domingo JL. **J Toxicol Clin Toxicol** 1989; 27(6):355–67 (81 ref.)
Reversal of cadmium–induced hypertension by D–myo–inositol–1,2,6–trisphosphate. Perry HM Jr, et al. **J Toxicol Environ Health** 1989;28(2):151–9
Effect of mixed ligand complex therapy on the retention of 95Nb and 144Ce in mice. Gachályi A, et al. **Radiat Res** 1989 Oct;120(1):177–81
Chelating agents in the treatment of acute vanadyl sulphate intoxication in mice. Domingo JL, et al. **Toxicology** 1990 May 31;62(2):203–11
Intracellular cadmium mobilization sequelae. Jones SG, et al. **Toxicology** 1990 Mar 30;61(1):73–83
[Use of calcium carbonate as an intestinal chelator of phosphorus] Bongiorno P, et al. **Minerva Urol Nefrol** 1990 Jan–Mar;42(1):55–7 (Eng. Abstr.) **(Ita)**
[Reduction in the level of 239Pu in pulmonary tissue using octacin] Kabirova NR, et al. **Med Radiol (Mosk)** 1989 Oct; 34(10):58–60 (Eng. Abstr.) **(Rus)**
[238Pu body distribution in dogs after intravenous administration and early complexon therapy] Sokhranich AL, et al. **Med Radiol (Mosk)** 1990 Jul;35(7):41–3 (Eng. Abstr.) **(Rus)**
[241Am body distribution in dogs after its intravenous administration and early complexon therapy] Sokhranich AL, et al. **Med Radiol (Mosk)** 1990 Jan;35(1):39–41 **(Rus)**

TOXICITY

[Modelling of diabetes mellitus using chelating agents] Gol'dberg ED, et al. **Patol Fiziol Eksp Ter** 1989 May–Jun; (3):81–3 **(Rus)**

CHELATION THERAPY

see related
IRON CHELATES

Chelation therapy and cardiac status in older patients with thalassemia major. Lerner N, et al. **Am J Pediatr Hematol Oncol** 1990 Spring;12(1):56–60
Iron chelation. Hershko C, et al. **Blood Rev** 1990 Mar;4(1):1–8 (75 ref.)
Studies of an oral iron chelator: 1,2–dimethyl–3–hydroxy–pyrid–4–one. I. Iron excretion in rats: development of a new rapid microwave method for iron analysis in faeces. Venkataram S, et al. **Br J Haematol** 1990 Jun;75(2):274–7
Sustained normalization of cardiac function by chelation therapy in thalassaemia major. Freeman AP, et al. **Clin Lab Haematol** 1989;11(4):299–307
Using unstimulated urinary lead excretion to assess the need for chelation in the treatment of lead poisoning. Berger OG, et al. **J Pediatr** 1990 Jan;116(1):46–51
Rapid removal of excessive iron in thalassemia by high–dose intravenous chelation therapy [letter; comment] Sabatino D. **J Pediatr** 1990 Jan;116(1):157–8 Comment on: J Pediatr 1989 Jul;115(1):151–5.
[Iron–chelating treatment] Vullo C, et al. **Haematologica (Pavia)** 1989 Oct;74(5 Suppl):241–51 (54 ref.) **(Ita)**
[Principles of treatment with iron chelates] Gershko Kh, et al. **Gematol Transfuziol** 1990 Mar;35(3):13–5 **(Rus)**

METHODS

Desferrioxamine: its use in iron chelation in thalassemia. Sharma BK, et al. **Indian Pediatr** 1990 Mar;27(3):314–9 (28 ref.)
Oral iron chelation with L1 [letter] Agarwal MB, et al. **Lancet** 1990 Mar 10;335(8689):601
Oral iron chelators. **Semin Hematol** 1990 Apr;27(2):83–120
Current status of iron chelation therapy with deferoxamine. Cohen A. **Semin Hematol** 1990 Apr;27(2):86–90 (26 ref.)
An evaluation of the potential of HBED as an orally effective iron–chelating drug. Grady RW, et al. **Semin Hematol** 1990 Apr;27(2):105–11 (24 ref.)
Principles of iron chelating therapy. Hershko C, et al. **Semin Hematol** 1990 Apr;27(2):91–4 (20 ref.)
Oral iron chelators. Nathan DG, et al. **Semin Hematol** 1990 Apr;27(2):83–5 (15 ref.)
Studies of the oral chelator 1,2–dimethyl–3–hydroxypyrid–4–one in thalassemia patients. Olivieri NF, et al. **Semin Hematol** 1990 Apr; 27(2):101–4
Update on the hydroxypyridinone oral iron–chelating agents. Porter JB, et al. **Semin Hematol** 1990 Apr;27(2):95–100 (20 ref.)

VETERINARY

A method for the treatment of lead poisoning in the mute swan (Cygnus olor) and its long–term success. Sears J, et al. **Br Vet J** 1989 Nov–Dec;145(6):586–95

CHELIDONIUM see **PLANTS, MEDICINAL**

CHEMEXFOLIATION

Dermal healing after local skin flaps and chemical peel. Hayes DK, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jul; 116(7):794–7
Viability of skin flaps subjected to simultaneous chemical peel with occlusive taping. Hayes DK, et al. **Laryngoscope** 1989 Oct;99(10 Pt 1):1016–9
[Chemical peeling of the face] Borenstein A, et al. **Harefuah** 1989 Jul;117(1–2):30–3 (22 ref.) **(Heb)**

ADVERSE EFFECTS

EKG changes in relationship to the chemical peel. Price NM. **J Dermatol Surg Oncol** 1990 Jan;16(1):37–42

METHODS

Baker's phenol chemical peel [letter; comment] Frankel EB. **J Dermatol Surg Oncol** 1990 Jun;16(6):581–2 Comment on: J Dermatol Surg Oncol 1989 Sep;15(9):980–93.
Test spots in dermabrasion and chemical peeling. Swinehart JM. **J Dermatol Surg Oncol** 1990 Jun;16(6):557–63

CHEMICAL ENGINEERING

Biochemical engineering VI. **Ann N Y Acad Sci** 1990; 589:1–715
19th annual UCLA symposium: Protein purification and biochemical engineering. Abstracts. **J Cell Biochem Suppl** 1990;14D:15–40

CHEMICAL FACE PEELING see **CHEMEXFOLIATION**

CHEMICAL INDUSTRY

Acute and chronic respiratory effects of occupational exposure to ammonia. Holness DL, et al. **Am Ind Hyg Assoc J** 1989 Dec;50(12):646–50
Biological monitoring for workers exposed to 4,4'–methylenebis(2–chloroaniline). Ichikawa Y, et al. **Am Ind Hyg Assoc J** 1990 Jan;51(1):5–7
Liver and biliary tract cancer among chemical workers. Bond GG, et al. **Am J Ind Med** 1990;18(1):19–24
Mortality and cancer morbidity in workers exposed to low levels of vinyl chloride monomer at a polyvinyl chloride processing plant. Hagmar L, et al. **Am J Ind Med** 1990; 17(5):553–65
Occupation and industry on death certificates of long–term chemical workers: concordance with work history records. Olsen GW, et al. **Am J Ind Med** 1990;17(4):465–81
Assessment of exposure to chemicals in a complex work environment. Ott MG, et al. **Am J Ind Med** 1989;

16(6):617-30
Lymphatic and hematopoietic tissue cancer in a chemical manufacturing environment. Ott MG, et al. **Am J Ind Med** 1989;16(6):631-43
Investigation of reports of sexual dysfunction among male chemical workers manufacturing stilbene derivatives. Quinn MM, et al. **Am J Ind Med** 1990;18(1):55-68
Oculotoxins: effects, implications, and importance in occupational health. Srivastava AK, et al. **Am J Ind Med** 1989;16(6):723-6
Mortality surveillance in a large chemical company: the Union Carbide Corporation experience, 1974-1983. Teta MJ, et al. **Am J Ind Med** 1990;17(4):435-47
Occupational risk of decreased plasma cholinesterase among pesticide production workers in Taiwan. Wu YQ, et al. **Am J Ind Med** 1989;16(6):659-66
Proceedings of the Eleventh Symposium on Biotechnology for Fuels and Chemicals. May 8-12, 1989, Colorado Springs, Colorado. **Appl Biochem Biotechnol** 1990 Spring-Summer;24-25:1-928
Elevated serum IgE, eosinophilia, and lung function in rubber workers. Bascom R, et al. **Arch Environ Health** 1990 Jan-Feb;45(1):15-9
Biotechnology—an overview of the opportunities for the chemical industry. Jeffcoat R. **Biochem Soc Trans** 1989 Dec;17(6):1137-8
Chemical industry: toward harmony with the environment. Knüsli E. **Biomed Environ Sci** 1988 Jun;1(1):34-41
Prediction of the environmental hazard of organic pollutants in an effluent from a pesticide-producing plant. Lindgaard-Jørgensen P. **Biomed Environ Sci** 1988 Aug; 1(2):210-21
Smoking and occupational allergy in workers in a platinum refinery. Venables KM, et al. **BMJ** 1989 Oct 14; 299(6705):939-42
Mortality and cancer incidence in chloralkali workers exposed to inorganic mercury. Barregård L, et al. **Br J Ind Med** 1990 Feb;47(2):99-104
Nasal mucosa in workers exposed to formaldehyde: a pilot study. Boysen M, et al. **Br J Ind Med** 1990 Feb;47(2):116-21
Fluoride in the urine, hair, and nails of phosphate fertiliser workers. Czarnowski W, et al. **Br J Ind Med** 1990 May; 47(5):349-51
Men assigned to ethylene oxide production or other ethylene oxide related chemical manufacturing: a mortality study. Greenberg HL, et al. **Br J Ind Med** 1990 Apr;47(4):221-30
Incidence of cancer in a cohort of magnesium production workers. Heldaas SS, et al. **Br J Ind Med** 1989 Sep; 46(9):617-23
Mortality of a cohort in a polyamide-polyester factory in Lyon: a further follow up. Hours M, et al. **Br J Ind Med** 1989 Sep;46(9):665-70
Multiple sclerosis and occupational exposure to chemicals: a co-twin control study of a nationwide series of twins. Juntunen J, et al. **Br J Ind Med** 1989 Jun;46(6):417-9
A multicentre mortality study of workers exposed to ethylene oxide. Kiesselbach N, et al. **Br J Ind Med** 1990 Mar; 47(3):182-8
EEG findings in chlor-alkali workers subjected to low long term exposure to mercury vapour. Piikivi L, et al. **Br J Ind Med** 1989 Jun;46(6):370-5
Lung cancer mortality among workers in a factory manufacturing chlorinated toluenes: 1961-84. Sorahan T, et al. **Br J Ind Med** 1989 Jun;46(6):425-7
Asthmagenic properties of a newly developed detergent ingredient: sodium iso-nonanoyl oxybenzene sulphonate. Stenton SC, et al. **Br J Ind Med** 1990 Jun;47(6):405-10
Natural killer cell activity in workers exposed to benzidine and beta-naphthylamine. Tanigawa T, et al. **Br J Ind Med** 1990 May;47(5):338-41
An historical prospective mortality study of the Sarnia Division of Dow Chemical Canada Inc., Sarnia, Ontario (1950-1984). Egedahl RD, et al. **Can J Public Health** 1989 Nov-Dec;80(6):441-6
Chronic exposure to sour gas emissions: meeting a community concern with epidemiologic evidence. Spitzer WO, et al. **Can Med Assoc J** 1989 Oct 1;141(7):685-91
Polyamine sensitization in offshore workers handling drilling muds. Ormerod AD, et al. **Contact Dermatitis** 1989 Nov; 21(5):326-9
Accumulation of metals and histopathology in Oreochromis niloticus exposed to treated NNPC Kaduna (Nigeria) petroleum refinery effluent. Onwumere BG, et al. **Ecotoxicol Environ Safety** 1990 Apr;19(2):123-34
Some organic solvents, resin monomers and related compounds, pigments and occupational exposures in paint manufacture and painting. **IARC Monogr Eval Carcinog Risks Hum** 1989;47:1-442
Occupational exposures in paint manufacture and painting. **IARC Monogr Eval Carcinog Risks Hum** 1989;47:329-442 (340 ref.)
Exclusion of fertile women from the workplace: bad medicine, worse law [editorial] Mattison DR. **J Arkansas Med Soc** 1990 May;86(12):491-2
Assessment of colorectal cancer incidence among polypropylene pilot plant employees. Acquavella JF, et al. **J Occup Med** 1990 Feb;32(2):127-30
Emergency medical response teams react swiftly to Phillips plant tragedy. Merriman M. **Occup Health Saf** 1990 Mar; 59(3):32-6
Bladder cancer screening study initiated by Fox Chase [news] **Oncology (Williston Park)** 1990 Jan;4(1):16
Databases in the perfumery industry. Cooke MA, et al. **Semin Dermatol** 1989 Jun;8(2):85-7
[Determining the occupational risk of skin diseases at the chemical plant "G. Genov" in Ruse] Madzhunov N, et al. **Probl Khig** 1989;14:173-8 (Eng. Abstr.) **(Bul)**
[Changes in the liver function of workers exposed to petroleum products] Nosko M, et al. **Probl Khig** 1989; 14:97-103 (Eng. Abstr.) **(Bul)**
[Local catastrophe and C.A.P.: apropos of 1 plant in Touraine] Majzoub S, et al. **J Toxicol Clin Exp** 1990 Jan-Feb;10(1):33-6 (Eng. Abstr.) **(Fre)**
[Disorders of color vision in employees of the Masovian Refining and Petrochemical Industries in Płock] Trzciński J, et al. **Klin Oczna** 1989 Feb-Mar;91(2-3):43-4 (Eng. Abstr.) **(Pol)**
[Late effects of toxic methemoglobinemia] Byczkowska Z, et al. **Med Pr** 1989;40(5):277-80 (Eng. Abstr.) **(Pol)**
[Usefulness of biological tumor markers for early detection of neoplastic changes in the bladder of persons exposed to aromatic amines] Hanke J, et al. **Med Pr** 1989; 40(6):376-80 (26 ref.) (Eng. Abstr.) **(Pol)**
[Synergistic effect of organic solvents and tobacco smoke on serum immunoglobulin levels in humans] Moszczyński P, et al. **Med Pr** 1989;40(6):337-41 (Eng. Abstr.) **(Pol)**
[Functional disorders of the nervous system in those occupationally exposed to mixtures of chloro-organic solvents and vinyl chloride] Polakowska B. **Med Pr** 1990; 41(1):39-43 (Eng. Abstr.) **(Pol)**
[Evaluation of the nervous system with reference to the bioelectric activity of the brain and neural conduction in workers exposed to organic solvents] Szyrocka-Szwed K. **Med Pr** 1989;40(6):342-9 (Eng. Abstr.) **(Pol)**
[Dynamics of the intellectual changes in workers exposed to long-term effect of carbon dioxide] Waszkowska M, et al. **Med Pr** 1989;40(6):350-4 (Eng. Abstr.) **(Pol)**
[Occupational exposure to butadiene and various parameters of cellular immunity in workers in petrochemical plants] Zeman K, et al. **Med Pr** 1989;40(2):99-104 (Eng. Abstr.) **(Pol)**
[Value of electroencephalographic studies for the evaluation of the neurotoxic effect of metallic mercury] Langauer-Lewowicka H, et al. **Neurol Neurochir Pol** 1988 Nov-Dec;22(6):489-94 (Eng. Abstr.) **(Pol)**
[Visual evoked potentials and the time of motor reaction to visual stimuli in chronic metallic mercury poisoning] Langauer-Lewowicka H, et al. **Neurol Neurochir Pol** 1988 Nov-Dec;22(6):495-9 (Eng. Abstr.) **(Pol)**
[Characteristics of chromosomal and mitotic disorders in patients with acute non-lymphoblastic leukemia exposed to chemical factors] Zedginidze AG, et al. **Gematol Transfuziol** 1990 Jan;35(1):25-7 (Eng. Abstr.) **(Rus)**
[Systematic study of health status of children living in industrial cities] Babadzhanov AS. **Gig Sanit** 1989 Nov; (11):32-3 **(Rus)**
[Characteristics of polycyclic aromatic hydrocarbons in waste water from petroleum-refining plants] Be'ziazykova AN, et al. **Gig Sanit** 1989 Nov;(11):68-71 **(Rus)**
[Chromatographic methods of analyzing esters in the air for hygienic research] Dmitriev MT, et al. **Gig Sanit** 1989 Aug; (8):55-9 (38 ref.) **(Rus)**
[Determining the levels of formaldehyde in the air in the presence of furfural] Golubeva TV, et al. **Gig Sanit** 1989 Aug;(8):41-2 **(Rus)**
[Health status of young children from industrial cities] Khamadullina AV, et al. **Gig Sanit** 1989 Nov;(11):9-11 (Eng. Abstr.) **(Rus)**
[Determining the levels of fluorine in various biological substrates for evaluating fluoride load] Liubchenko PN, et al. **Gig Sanit** 1989 Dec;(12):83-4 **(Rus)**
[Vitamin status of workers exposed to amine and nitro compounds of benzene and the possibilities of its correction] Perevalov AIa, et al. **Gig Sanit** 1990 Mar; (3):32-4 **(Rus)**
[Benzo(a)pyrene level in waste water from petroleum-processing plants used for irrigation of fields] Sarsebekov EK, et al. **Gig Sanit** 1989 Sep;(9):88-9 **(Rus)**
[Chronic effect of inorganic fluorides on the parathyroid and C-cells of the thyroid in industrial workers] Tokar' VI, et al. **Gig Sanit** 1989 Dec;(12):85-6 **(Rus)**
[Possible mechanisms of the development of osteopaties in patients with chronic lead poisoning] Abylaev ZhA, et al. **Gig Tr Prof Zabol** 1990;(2):31-5 (Eng. Abstr.) **(Rus)**
[Status of oxygen-detoxicating system of blood plasma in persons having contact with hydrogel in industrial establishments] Aloian GA, et al. **Gig Tr Prof Zabol** 1989; (9):59-60 **(Rus)**
[Disorders of the reproductive function of female workers in resin-producing industry (review of the literature)] Beliakova SV, et al. **Gig Tr Prof Zabol** 1989;(11):36-8 (16 ref.) (Eng. Abstr.) **(Rus)**
[The working conditions in the prototype industrial production of polysulfones] Gerusova GP, et al. **Gig Tr Prof Zabol** 1989;(12):39-42 (Eng. Abstr.) **(Rus)**
[Hygienic assessment of labor conditions in chemical industry sites during reconstruction] Mikhailuts AP, et al. **Gig Tr Prof Zabol** 1990;(4):15-8 (Eng. Abstr.) **(Rus)**
[Protection of the respiratory organs in production of dicyclopentadiene] Nikanorov AA, et al. **Gig Tr Prof Zabol** 1989;(9):58-9 **(Rus)**
[An electroencephalographic study of characteristics of the functional state of the central nervous system in workers of chlorophos producing industry] Povorinskiĭ AG, et al. **Gig Tr Prof Zabol** 1990;(3):28-31 **(Rus)**
[Pathogenetic characteristics of diseases of the peripheral nervous system in workers having contact with chromium compounds] Sliusar' TA, et al. **Gig Tr Prof Zabol** 1989; (9):25-8 (Eng. Abstr.) **(Rus)**
[Epidemiology of malignant neoplasms in rubber industry workers (review of the literature)] Solenova LG. **Gig Tr Prof Zabol** 1990;(1):33-6 (41 ref.) **(Rus)**
[Skin lesions caused by exposure to a pesticide norbormid] Tsyrkunov LP. **Gig Tr Prof Zabol** 1989;(8):46-7 (Eng. Abstr.) **(Rus)**
[Functional-diagnostic criteria of chronic bronchitis] Penknovich AA. **Klin Med (Mosk)** 1990 Feb;68(2):84-6 (Eng. Abstr.) **(Rus)**
[Clinico-immunologic characteristics of erysipelas in workers at large industrial plants and the therapeutic effect of reaferon] Peresadin NA, et al. **Sov Med** 1990;(1):81-3 **(Rus)**
[The health status and nature of the nutrition of workers in the coke chemical industry] Kovalenko AA, et al. **Vopr Pitan** 1990 May-Jun;(3):64-6 **(Rus)**
[The pathogenesis of toxic liver lesions in workers in phosphorus production] Beloskurskaia GI, et al. **Vrach Delo** 1989 Jul;(7):104-6 (Eng. Abstr.) **(Rus)**
[The health status of workers in the manufacture of monomethylaniline semifinished products] Kaminskaia LP, et al. **Vrach Delo** 1989 Aug;(8):112-3 (Eng. Abstr.) **(Rus)**
[Psycho-hygienic prevention and correction of functional disorders in workers at increased chemical hazard] Shafran LM, et al. **Vrach Delo** 1990 Mar;(3):106-8 (Eng. Abstr.) **(Rus)**

ECONOMICS

[Economic loss due to morbidity with temporary disability in industrial plants in Kazakhstan] Petrov PP, et al. **Sov Zdravookhr** 1989;(9):22-5 (Eng. Abstr.) **(Rus)**

STANDARDS

Sunset for dangerous chemicals [letter] [see comments] Wahlström B. **Nature** 1989 Sep 28;341(6240):276 Comment in: Nature 1989 Dec 21-28;342(6252):849.
[Evaluation of the stability of biological specimens used for monitoring of occupational exposure. Studies of the stability of phenol and trichloroacetic acid in urine] Antczak K. **Med Pr** 1989;40(6):362-8 (Eng. Abstr.) **(Pol)**
[Exposure to vinyl chloride in the Polish industry] Gromiec JP, et al. **Med Pr** 1989;40(6):369-75 (Eng. Abstr.) **(Pol)**
[Exposure of women to chemical solvents during work at chemical plants and its relation to various biochemical parameters] Lembas-Bogaczyk J, et al. **Med Pr** 1989; 40(2):111-8 (Eng. Abstr.) **(Pol)**
[Current hygienic aspects of allergy caused by pesticides and polymers] Borisenko NF, et al. **Gig Sanit** 1989 Jul;(7):51-4 (69 ref.) **(Rus)**
[Methods of determining formaldehyde levels in the air] Cheka'l VN, et al. **Gig Sanit** 1989 Sep;(9):42-4 **(Rus)**
[Separate gas-chromatographic analysis of combined levels of tetraethylene and pentaethylene glycols in the air of the work area] Gamaniuk EG, et al. **Gig Sanit** 1990 Mar; (3):70-1 **(Rus)**
[Complex study of various pathogenetic and physiologic parameters of the health status of watchmen in the oil industry] Il'inskikh NN, et al. **Gig Sanit** 1989 Dec; (12):18-21 (Eng. Abstr.) **(Rus)**
[Complex sanitary and hygienic evaluation of water supply and community health in the area of the sulfite cellulose plants] Seliuzhitskiĭ GV, et al. **Gig Sanit** 1989 Aug;(8):10-3 (Eng. Abstr.) **(Rus)**
[Characteristics of the biological effect of the products of the processing of natural gas and petroleum as sources of chemical environmental pollution] Setko NP. **Gig Sanit** 1989 Aug;(8):59-63 (59 ref.) **(Rus)**
[Hygienic aspects of the use of liquid wastes from oil-refining and chemical plants] Tikhomirov IuP, et al. **Gig Sanit** 1989 Aug;(8):13-5 (Eng. Abstr.) **(Rus)**
[Predicting the hygienic standard of the quality of water from small rivers of the Uzbek SSR] Usmanov IA. **Gig Sanit** 1989 Nov;(11):71-3 **(Rus)**
[Working conditions and various indicators of morbidity with temporary disability of workers at the petroleum-processing plant] Vorob'eva AI, et al. **Gig Sanit** 1990 Mar;(3):28-30 **(Rus)**
[Problems related to regulation of toxic substances] Kurliandskiĭ BA. **Gig Tr Prof Zabol** 1989;(9):9-12 (Eng. Abstr.) **(Rus)**
[Value of the sanitary control of technological processes in the normalization of the environment] Malevanyĭ VN. **Gig Tr Prof Zabol** 1989;(8):37-8 (Eng. Abstr.) **(Rus)**
[Substantiation of safe levels of methylheptenone in the air of the work area] Migukina NV, et al. **Gig Tr Prof Zabol** 1989;(8):52-3 **(Rus)**
[Effect of the main factors of the phosphorus industry on the level and prognosis of morbidity with temporary disability] Petrov PP, et al. **Sov Zdravookhr** 1990;(3):42-5 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

[Epidemiological data on precancerous conditions and

neoplasms among workers in the petroleum-refining industry] Saprykina AG. **Gig Tr Prof Zabol** 1990;(2):12–5 (Eng. Abstr.) **(Rus)**

TRENDS

The chemical industry: challenges and opportunities through the year 2000. Schmidt-Bleek F. **Biomed Environ Sci** 1988 Dec;1(4):339–49

CHEMICAL MODELS see MODELS, CHEMICAL

CHEMICAL WARFARE

see related
DECONTAMINATION
GAS POISONING

Heat-exercise performance of pyridostigmine-treated subjects wearing chemical protective clothing. Epstein Y, et al. **Aviat Space Environ Med** 1990 Apr;61(4):310–3

Nuclear, biological and chemical warfare. Part II: Medical aspects of biological warfare. Kasthuri AS, et al. **J Assoc Physicians India** 1990 May;38(5):356–7

Nuclear, biological and chemical warfare. Part III: Medical aspects of chemical warfare. Kasthuri AS, et al. **J Assoc Physicians India** 1990 Jun;38(6):413–4

Perversions of medical technology [letter] Trepman E, et al. **JAMA** 1990 Feb 23;263(8):1066–7

Behavioral and psychological responses to chemical and biological warfare. Fullerton CS, et al. **Milit Med** 1990 Feb;155(2):54–9

Chemical weapons: US to end modernization [news] Shulman S. **Nature** 1990 May 17;345(6272):192

Lewisite: its chemistry, toxicology, and biological effects. Goldman M, et al. **Rev Environ Contam Toxicol** 1989; 110:75–115 (158 ref.)

[Mycotoxins and "yellow rain"] Beritić T. **Arh Hig Rada Toksikol** 1989 Mar;40(1):57–63 (Eng. Abstr.) **(Scr)**

CHEMICAL WARFARE AGENTS

see related
TEAR GASES

The use of poison gas against the Iraqi Kurds: analysis of bomb fragments, soil, and wool samples [letter; comment] Hay A, et al. **JAMA** 1990 Feb 23;263(8):1065–6 Comment on: JAMA 1989 Aug 4;262(5):640–3.

ADVERSE EFFECTS

[The wound-healing properties of the essential oils of yarrow and Yakut wormwood and khamazulen in napalm burns] Taran DD, et al. **Voen Med Zh** 1989 Aug;(8):50–2 **(Rus)**

ANALYSIS

Chromatographic analysis of chemical warfare agents. Witkiewicz Z, et al. **J Chromatogr** 1990 Mar 23; 503(2):293–357 (413 ref.)

POISONING

[Treatment of insecticide and nerve gas poisoning] Fonnum F. **Nord Med** 1990;105(6–7):187–9 (Eng. Abstr.) **(Nor)**

CHEMICAL WATER POLLUTION see WATER POLLUTION, CHEMICAL

CHEMISTRY

see related
ALCHEMY
BRAIN CHEMISTRY
NEUROCHEMISTRY

Ethical guidelines to publication of chemical research. **Anal Chem** 1989 Oct 15;61(20):1142A–1143A

Chemical databases processing using parallel computer hardware. Lynch MF, et al. **Biochem Soc Trans** 1989 Oct; 17(5):856–8

PROLANG: an expandable software in protein chemistry. Petrilli P, et al. **Comput Appl Biosci** 1990 Apr;6(2):128–30

Synthesis and properties of new derivatives of ethyl 7-methyl-2,4-dioxo-1,2,3,4-tetrahydropyrido [2,3-d]pyrimidine-5-carboxylate. Sladowska H, et al. **Farmaco** 1990 Jan;45(1):101–10

Synthesis and properties of the derivatives of 2-alkylthio-4-oxo-3,4- (and -1,4)-dihydropyrido-[2,3-d]pyrimidine-5- and -6-carboxylic acids. Sladowska H, et al. **Farmaco** 1990 Jan; 45(1):111–21

Host-enhanced chemical indexing in technical databases. Badger EW, et al. **J Chem Inf Comput Sci** 1989 Nov; 29(4):279–83

CHEMLEARN: microcomputer-based training for CHEMLINE, an alternative to formal classroom training. Spann ML, et al. **J Chem Inf Comput Sci** 1990 Feb; 30(1):48–52

Chemistry--a scientific model for family medicine? Urberg M. **J Fam Pract** 1989 Dec;29(6):644–8; discussion 648–50

Recent advances in the use of enzyme-catalysed reactions in organic synthesis. Turner NJ. **Nat Prod Rep** 1989 Dec; 6(6):625–44 (158 ref.)

The pictographic molecular paradigm. Pictorial communication in the chemical and biological sciences. Luisi PL, et al. **Naturwissenschaften** 1990 Feb;77(2):67–74

Chemical evolution and the origin of life. Bibliography supplement 1986. Powers JV, et al. **Orig Life Evol Biosph** 1990;20(1):55–81

Do the laws of chemistry apply to living cells? [see comments] Halling PJ. **Trends Biochem Sci** 1989 Aug; 14(8):317–8 Comment in: Trends Biochem Sci 1989 Nov;14(11):444. Comment in: Trends Biochem Sci 1990 Apr;15(4):137–8.

[ChemBase--"databank of the superlative"?] Schweim HG, et al. **Pharm Unserer Zeit** 1989 Nov;18(6):174–6 **(Ger)**

[The winners of the Nobel Prize in chemistry this year: the discovery that shows RNA functioning as an enzyme helps us to understand the creation and development of life] Wieslander L. **Lakartidningen** 1989 Dec 6;86(49):4353–6 **(Swe)**

EDUCATION

[The way from medical to physiological chemistry at the University of Göttingen, 1840–1940] Maehle AH, et al. **Biol Chem Hoppe Seyler** 1990 Jun;371(6):447–54 (Eng. Abstr.) **(Ger)**

HISTORY

[Carl Wunibalt Otto—communist, pharmacist and chemist] Bach I. **Pharmazie** 1989 Nov;44(11):787–9 (Eng. Abstr.) **(Ger)**

[The participation of German pharmacists in the chemical revolution at the turn of the 18th to the 19th century] Friedrich C, et al. **Pharmazie** 1990 Feb;45(2):128–30 (Eng. Abstr.) **(Ger)**

[The contribution of German professors to pharmaceutical chemistry and phytochemistry in the 19th and 20th centuries. 40. The history of pharmaceutical science] Friedrich C. **Pharmazie** 1989 Oct;44(10):720–2 (Eng. Abstr.) **(Ger)**

CHEMISTRY, ANALYTICAL

see related
AUTOANALYSIS
CHEMISTRY, CLINICAL

1990–1991 Lab Guide. **Anal Chem** 1990 Aug 15; 62(16):1G–266G

International Symposium on Electroanalysis in Biochemical, Environmental and Industrial Sciences. Loughborough, UK, 11–14 April, 1989. Proceedings. **Analyst** 1989 Dec; 114(12):1517–705

Harnessing electrical forces for separation. Capillary zone electrophoresis, isoelectric focusing, field-flow fractionation, split-flow thin-cell continuous-separation and other techniques. Giddings JC. **J Chromatogr** 1989 Oct 20;480:21–33

[The importance of analytical chemistry in the study of biodistribution and pharmacokinetics of drugs] Gasparič J, et al. **Cesk Farm** 1989 Oct;38(8):340–2 **(Cze)**

[Annual scientific meeting of the German Pharmaceutical Society. Frankfurt, 30 September–4 October 1989. Abstracts of discussion and poster papers] **Arch Pharm (Weinheim)** 1989 Oct;322(10):641–782 **(Ger)**

INSTRUMENTATION

A dispenser for minimizing solvent evaporation during repeated pipetting. Goodman WG, et al. **Anal Biochem** 1990 Mar;185(2):297–8

Adaptation of an enzymatic cycling assay for NADP(H) measurement to the COBAS-FARA centrifugal analyzer. Lewis BL, et al. **Anal Biochem** 1990 Jan;184(1):104–10

A vertical submarine electrophoresis apparatus for polyacrylamide minigels. Spiker S. **Anal Biochem** 1990 Mar; 185(2):270–3

Determination of N-nitroso compounds by high-performance liquid chromatography with postcolumn reaction and a thermal energy analyzer. Havery DC. **J Anal Toxicol** 1990 May-Jun;14(3):181–5

Clinical assessment of the Hitachi 736-30 chemistry analyzer. Schotters SB, et al. **J Clin Lab Anal** 1990;4(2):157–60

METHODS

Optimization of northern analysis by vacuum-blotting, RNA-transfer visualization, and ultraviolet fixation. Kroczek RA, et al. **Anal Biochem** 1990 Jan;184(1):90–5

Complete mass spectrometry/mass spectrometry data field acquisition on the chromatographic time scale by time-resolved ion momentum spectrometry with time-array detection. Eckenrode BA, et al. **Anal Chem** 1990 Jul 15;62(14):1362–7

Two-dimensional field-flow fractionation. Giddings JC. **J Chromatogr** 1990 Apr 20;504(2):247–58

STANDARDS

Who defines the medical requirements of analytical tests? Guder WG, et al. **J Clin Chem Clin Biochem** 1990 Mar; 28(3):125–8

Guidelines for evaluation of analytical interference. **Scand J Clin Lab Invest Suppl** 1989;195:7–9

CHEMISTRY, CLINICAL

Guidelines for publications in molecular modelling related to medicinal chemistry [letter] Pullman B. **Anticancer Drug Des** 1989 Aug;4(2):172

Selected papers from the 4th Asian Pacific Congress of Clinical Biochemistry. Hong Kong, August 28–September 2, 1988. **Clin Biochem** 1990 Feb;23(1):1–84

XIV International Congress of Clinical Chemistry. July 22–26, 1990, San Francisco, California. Abstracts [published erratum appears in Clin Chem 1990 Aug;36(8 Pt 1):1530] **Clin Chem** 1990 Jun;36(6):917–1250

Changing patterns of demand for chemical pathology on-call services in four north Dublin Hospitals. Tormey WP, et al. **Ir J Med Sci** 1990 Apr;159(4):104–7

24th annual meeting of the Israeli Society for Clinical Biochemistry. Jerusalem, Israel, March 29–April 1, 1989. Abstracts. **J Clin Chem Clin Biochem** 1989 Nov; 27(11):879–93

Clinical chemistry in the European community. Development of international regulations on education, recognition and free exchange of professionals. European Communities Clinical Chemistry Committee. Brombacher PJ, et al. **J Clin Chem Clin Biochem** 1990 Apr;28(4):189–91

Abstracts of papers. Medicinal chemistry meeting. Weesp (The Netherlands), 15 December 1989. **Pharm Weekbl [Sci]** 1989 Dec 15;11(6 Suppl M):M1–11

The use of knowledge-based information systems for interpreting specialized clinical chemistry analyses--experience from erythrocyte enzymes and metabolites. Wiener F, et al. **Scand J Clin Lab Invest** 1990 May;50(3):247–59

IFCC Guidelines to the Evaluation of Drug Effects in Clinical Chemistry. Data banks. **Scand J Clin Lab Invest Suppl** 1989;195:22–4

Diagnosis and organ oriented clinical chemistry. Report from a project group initiated by the Nordic Clinical Chemistry Project (NORDKEM). **Scand J Clin Lab Invest Suppl** 1990; 200:5–66

IFCC Guidelines to the Evaluation of Drug Effects in Clinical Chemistry. **Scand J Clin Lab Invest Suppl** 1989; 195:1–29

Clinical chemistry. In-clinic analysis, quality control, reference values, and system selection. Lumsden JH, et al. **Vet Clin North Am Small Anim Pract** 1989 Sep;19(5):875–97 (27 ref.)

[Help with decisions on the assessment of clinical chemistry results] Keller H. **Z Med Lab Diagn** 1989;30(8):416–24 (8 ref.) **(Ger)**

[The rational utilization of the potentials of a department of clinical chemistry in a diagnostic center] Titov VN. **Ter Arkh** 1990;62(1):18–21 **(Rus)**

HISTORY

Clinical biochemistry in Singapore. Tan IK, et al. **Ann Acad Med Singapore** 1989 Jul;18(4):477–89

INSTRUMENTATION

A theoretical study of carryover in selective access analysers. Dixon K. **Ann Clin Biochem** 1990 Mar;27 (Pt 2):139–42

Laboratory instrument evaluation using a personal computer. Wootton AM, et al. **Ann Clin Biochem** 1990 Mar;27 (Pt 2):143–6

Safe, easy removal of Cobas Bio sample cups [letter] Klaus EM, et al. **Clin Chem** 1989 Oct;35(10):2156

A clinical chemistry analyzer evaluated by NCCLS guidelines for use in a military field laboratory unit. Sullinger J, et al. **Clin Chem** 1989 Nov;35(11):2223–6

Decision support alerts for clinical laboratory and blood gas data. Shabot MM, et al. **Int J Clin Monit Comput** 1990 Jan;7(1):27–31

Evaluation of the Beckman Synchron CX4 clinical chemistry analyzer in a hospital laboratory. Ambus T, et al. **J Clin Lab Anal** 1990;4(2):120–5

In vivo chemical sensors for intensive-care monitoring. Rolfe P. **Med Biol Eng Comput** 1990 May;28(3):B34–47 (104 ref.)

METHODS

Rapid purification of human DNA from whole blood for potential application in clinical chemistry laboratories. Adeli K, et al. **Clin Chem** 1990 Feb;36(2):261–4

Assessment of the reliability and validity of biochemical measures. DeKeyser FG, et al. **Nurs Res** 1990 Sep-Oct; 39(5):314–7

Applications of modern-high-field NMR spectroscopy in medicinal chemistry. Branch SK, et al. **Prog Med Chem** 1989;26:355–436 (180 ref.)

Reference system for cholesterol measurements. Cooper GR, et al. **Scand J Clin Lab Invest Suppl** 1990;198:27–31 (14 ref.)

General metrological requirements of clinical lipid measurements. Dybkaer R. **Scand J Clin Lab Invest Suppl** 1990;198:20–5 (26 ref.)

Laboratory measurement of lipid and lipoprotein risk factors. Warnick GR. **Scand J Clin Lab Invest Suppl** 1990;198:9–19 (17 ref.)

Cell analysis in clinical chemistry. Jobst K. **Z Med Lab Diagn** 1989;30(8):411–5 (19 ref.)

STANDARDS

Quality control of interpretation--possibility, necessity or

threat [letter; comment] Johnson JK. **Ann Clin Biochem** 1989 Sep;26 (Pt 5):459–60 Comment on: Ann Clin Biochem 1989 Mar;26 (Pt 2):111–2.

Analytical goals for imprecision [letter; comment] Ricós C. **Ann Clin Biochem** 1989 Sep;26 (Pt 5):458–9 Comment on: Ann Clin Biochem 1989 Jan;26 (Pt 1):1–12.

Determination of the lower limit of detection [letter; comment] Anderson DJ. **Clin Chem** 1989 Oct;35(10):2152–3 Comment on: Clin Chem 1989 Mar;35(3):509.

A comparison of results for cholesterol in human serum obtained by the Reference Method and by the Definitive Method of the National Reference System for cholesterol. Ellerbe P, et al. **Clin Chem** 1990 Feb;36(2):370–5

On dividing reference data into subgroups to produce separate reference ranges. Harris EK, et al. **Clin Chem** 1990 Feb;36(2):265–70

The significance of significant figures [letter] Hawkins RC, et al. **Clin Chem** 1990 May;36(5):824

Multi-center study of a new technique for measuring free thyroxin in serum. Izembart M, et al. **Clin Chem** 1989 Oct; 35(10):2137–9

Selection of medically useful quality-control procedures for individual tests done in a multitest analytical system. Koch DD, et al. **Clin Chem** 1990 Feb;36(2):230–3

Ethics and laboratory medicine. McQueen MJ. **Clin Chem** 1990 Aug;36(8 Pt 1):1404–7

Heteroantibody: phantom of the immunoassay [editorial; comment] Nahm MH, et al. **Clin Chem** 1990 Jun;36(6):829 Comment on: Clin Chem 1990 Jun;36(6):888–91. Comment on: Clin Chem 1990 Jun;36(6):892–4.

"G" test and evaluation of assay linearity [letter] Redondo FL. **Clin Chem** 1990 Jul;36(7):1384

Multivariate interpretation of laboratory tests used in monitoring patients. Slotnick HB, et al. **Clin Chem** 1990 May;36(5):748–51

Effects of analytical method and lyophilized sera on measurements of apolipoproteins A-I and B: an international survey. Smith SJ, et al. **Clin Chem** 1990 Feb; 36(2):290–6

Regional interlaboratory standardization of determinations of cholesterol, high-density lipoprotein cholesterol, and triglycerides. Tetrault GA, et al. **Clin Chem** 1990 Jan; 36(1):145–9

Steroid profile for urine: reference values. Weykamp CW, et al. **Clin Chem** 1989 Dec;35(12):2281–4

The necessity of achieving good laboratory performance. Fraser CG. **Diabetic Med** 1990 Jul;7(6):490–3

Bias to routine semen analysis by uncontrolled changes in laboratory environment--detection by long-term sampling of monthly means for quality control. Knuth UA, et al. **Int J Androl** 1989 Oct;12(5):375–83

Standardisation of cholesterol determination [letter; comment] Boerma GJ. **J Clin Chem Clin Biochem** 1990 Apr;28(4):259–60 Comment on: J Clin Chem Clin Biochem 1989 Dec;27(12):961–6.

Who defines the medical requirements of analytical tests? Guder WG, et al. **J Clin Chem Clin Biochem** 1990 Mar; 28(3):125–8

Performance profiles: new tools for characterization and comparison of clinical chemical results. Keller H, et al. **J Clin Chem Clin Biochem** 1989 Sep;27(9):613–29

General Scandinavian recommendations on quality control and quality assurance in clinical chemistry. **Scand J Clin Lab Invest** 1990 Apr;50(2):225; discussion 227–8

Analytical goals for the estimation of non-Gaussian reference intervals. Hyltoft Petersen P, et al. **Scand J Clin Lab Invest** 1989 Dec;49(8):727–37

Evaluation of biological effects of drugs. **Scand J Clin Lab Invest Suppl** 1989;195:10–2

Improvement of comparability and compatibility of laboratory assay results in life sciences. 2. Bergmeyer Conference on Laboratory Measurements in Lipid Disorders. Murnau, DE, 1989. Proceedings. **Scand J Clin Lab Invest Suppl** 1990;198:1–92

Clinical laboratory tests on laboratory animals during toxicity studies. **Scand J Clin Lab Invest Suppl** 1989;195:13–5

IFCC Guidelines to the Evaluation of Drug Effects in Clinical Chemistry. The basic concepts. **Scand J Clin Lab Invest Suppl** 1989;195:5–6

Laboratory tests during clinical trials. **Scand J Clin Lab Invest Suppl** 1989;195:16–8

Laboratory tests to monitor drug administration. **Scand J Clin Lab Invest Suppl** 1989;195:19–21

Guidelines for evaluation of analytical interference. **Scand J Clin Lab Invest Suppl** 1989;195:7–9

International quality assurance schemes for cholesterol. Grafnetter D. **Scand J Clin Lab Invest Suppl** 1990;198:32–42 (23 ref.)

Validation and standardization of cholesterol measurements. McQueen M, et al. **Scand J Clin Lab Invest Suppl** 1990; 198:49–50

Bergmeyer conference: laboratory measurements in lipid disorders. Magid E. **Scand J Clin Lab Invest Suppl** 1990; 198:1–2

Influence of analytical quality and preanalytical variations on measurements of cholesterol in screening programmes. Petersen H, et al. **Scand J Clin Lab Invest Suppl** 1990; 198:66–72 (16 ref.)

[Recommendations for clinical-chemical departments: lipid-lipoprotein analysis] Dyerberg J, et al. **Ugeskr Laeger** 1990 May 14;152(20):1434–7 (Eng. Abstr.) **(Dan)**

STATISTICS & NUMERICAL DATA

Generation and application of data on biological variation in clinical chemistry. Fraser CG, et al. **Crit Rev Clin Lab Sci** 1989;27(5):409–37 (92 ref.)

TRENDS

The future of clinical chemistry [letter; comment] Bock JL. **Clin Chem** 1990 May;36(5):821 Comment on: Clin Chem 1989 Nov;35(11):2165–8.

Molecular genetics and the transformation of clinical chemistry [see comments] Williamson R. **Clin Chem** 1989 Nov;35(11):2165–8 Comment in: Clin Chem 1990 May;36(5):821.

CHEMISTRY, INORGANIC

19th annual UCLA symposium: The inorganic chemistry/molecular biology interface. Abstracts. **J Cell Biochem Suppl** 1990;14C:185–212

CHEMISTRY, ORGANIC

The role of phosphorylation in the action of nerve growth factor. Mutoh T, et al. **Biofactors** 1989 Dec;2(2):71–6 (113 ref.)

A double-labeling method for measuring induction of protein phosphorylation. Capps GG, et al. **Biotechniques** 1990 Jan; 8(1):62–9

The hormone-induced regulation of contact-dependent cell-cell communication by phosphorylation. Stagg RB, et al. **Endocr Rev** 1990 May;11(2):302–25 (213 ref.)

Comparative free radical chemistry in the radiolytic deamination and dephosphorylation of bio-organic molecules. II. Oxygenated solutions. Garrison WM. **Free Radic Biol Med** 1989;7(2):171–5

Molecular recognition: model studies with convergent functional groups. Rebek J Jr. **J Mol Recognit** 1988 Feb; 1(1):1–8 (26 ref.)

[Acetylator phenotype in spondylarthritis ankylopoietica] Rojkovich B, et al. **Orv Hetil** 1989 Dec 3;130(49):2639–41 (31 ref.) (Eng. Abstr.) **(Hun)**

CHEMISTRY, PHARMACEUTICAL

see related
BIOPHARMACEUTICS

Aspirin-containing analgesics and cold preparations [letter] Davidson CL, et al. **Ann Allergy** 1989 Nov;63(5):471–2

Glassy state of pharmaceuticals. IV. Studies on glassy pharmaceuticals by thermomechanical analysis. Fukuoka E, et al. **Chem Pharm Bull (Tokyo)** 1989 Oct;37(10):2782–5

Towards better pediatric drug formulation [letter; comment] Karnawat BS. **Indian J Pediatr** 1989 May-Jun;56(3):443–5 Comment on: Indian J Pediatr 1987 Jan-Feb;54(1):126–7.

Spherical agglomerates of water-insoluble drugs. Bodmeier R, et al. **J Pharm Sci** 1989 Nov;78(11):964–7

Fifth annual meeting and exposition. American Association of Pharmaceutical Scientists. November 4–8, 1990, Las Vegas. Abstracts. **Pharm Res** 1990 Sep;7(9 Suppl):S1–305

Percolation theory and compactibility of binary powder systems. Blattner D, et al. **Pharm Res** 1990 Feb;7(2):113–7

[Use of a logical procedure in searching for a relationship between the chemical structure of substances and their biological activity] Waisser K. **Cesk Farm** 1990 Jun; 39(4):188–91 **(Cze)**

[Stereochemistry--an overlooked problem in medical treatment and research] Mikkelsen EO. **Ugeskr Laeger** 1990 Jul 9;152(28):2029–32 (30 ref.) (Eng. Abstr.) **(Dan)**

[Multivariate analysis as a means of access to optimal pharmacochemical specificity and to molecular archetypes] Doré JC, et al. **J Pharm Belg** 1990 Mar-Apr;45(2):101–10 (Eng. Abstr.) **(Fre)**

[Annual scientific meeting of the German Pharmaceutical Society. Frankfurt, 30 September-4 October 1989. Abstracts of discussion and poster papers] **Arch Pharm (Weinheim)** 1989 Oct;322(10):641–782 **(Ger)**

[A technique for preparing oral suspensions with sulfaguanidine] Nerlo H, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:29–35 (Eng. Abstr.) **(Pol)**

HISTORY

[The contribution of German professors to pharmaceutical chemistry and phytochemistry in the 19th and 20th centuries. 40. The history of pharmaceutical science] Friedrich C. **Pharmazie** 1989 Oct;44(10):720–2 (Eng. Abstr.) **(Ger)**

METHODS

Recent developments in the assay of ferritin containing drugs. La Torre F, et al. **Ann Ist Super Sanita** 1989;25(3):481–5

Stereoselectivity in clinical pharmacokinetics and drug development. Campbell DB. **Eur J Drug Metab Pharmacokinet** 1990 Apr-Jun; 15(2):109–25 (150 ref.)

Improvement of drug absorption through enhancers. de Boer AG, et al. **Eur J Drug Metab Pharmacokinet** 1990 Apr-Jun; 15(2):155–7 (23 ref.)

Human hepatocytes as a key in vitro model to improve preclinical drug development. Fabre G, et al. **Eur J Drug Metab Pharmacokinet** 1990 Apr-Jun; 15(2):165–71 (30 ref.)

Evaluation of drug-containing polymer films prepared from aqueous latexes. Bodmeier R, et al. **Pharm Res** 1989 Aug; 6(8):725–30

Preparation of asialofetuin-labeled liposomes with encapsulated human interferon-gamma and their uptake by isolated rat hepatocytes. Ishihara H, et al. **Pharm Res** 1990 May;7(5):542–6

STANDARDS

Comparative bioavailability of two brands of chlorpropamide in Kenyans. Ondari CO, et al. **East Afr Med J** 1989 Oct; 66(10):663–8

STATISTICS & NUMERICAL DATA

Corrigible error correction [letter; comment] Cardone MJ, et al. **J Pharm Sci** 1990 Jan;79(1):89–90 Comment on: J Pharm Sci 1988 Aug;77(8):711–4.

TRENDS

Recent antiarrhythmic drugs. Jaillon P, et al. **Am J Cardiol** 1989 Dec 5;64(20):65J–69J (71 ref.)

Renin inhibitors: discovery and development. An overview and perspective. Kleinert HD. **Am J Hypertens** 1989 Oct; 2(10):800–8 (99 ref.)

CHEMISTRY, PHYSICAL

Graph-set analysis of hydrogen-bond patterns in organic crystals. Etter MC, et al. **Acta Crystallogr B** 1990 Apr 1; 46 (Pt 2):256–62

A model for the hydrogen-bond-length probability distributions in the crystal structures of small-molecule components of the nucleic acids. Lesyng B, et al. **Acta Crystallogr B** 1988 Apr 1;44 (Pt 2):193–8

Topological analysis of hydrogen bonding in protein structure. Mao BY, et al. **Eur J Biochem** 1990 Mar 10; 188(2):361–5

Studies on hydrogen bonds. Part V--Hydrogen bonding in energy minimization studies of peptides. Paul PK, et al. **J Biomol Struct Dyn** 1985 Feb;2(5):879–98

A hydrogen bonded chain in bacteriorhodopsin by computer modelling approach. Sankara-Ramakrishnan R, et al. **J Biomol Struct Dyn** 1989 Aug;7(1):187–205

Thermodynamics of amide hydrogen bond formation in polar and apolar solvents. Sneddon SF, et al. **J Mol Biol** 1989 Oct 20;209(4):817–20

Identification of menaquinone-4 metabolites in the rat. Tadano K, et al. **J Pharmacobiodyn** 1989 Oct;12(10):640–5

Salt or ion bridges in biological systems: a study employing quantum and molecular mechanics. Deerfield DW 2d, et al. **Proteins** 1989;6(2):168–92

HISTORY

The development of concepts of chiral discrimination. Mason SF. **Chirality** 1989;1(3):183–91

INSTRUMENTATION

Deoxygenation of solutions for transient studies. Barboy N, et al. **Anal Biochem** 1989 Aug 1;180(2):384–6

METHODS

Exact conditional distribution of a three-phase invariant in the space group P1. I. Derivation and simplification of the Fourier series. Shmueli U, et al. **Acta Crystallogr A** 1989 Jun 1;45 (Pt 6):361–7

Exact conditional distribution of a three-phase invariant in the space group P1. II. Calculations and comparison with the Cochran approximation. Shmueli U, et al. **Acta Crystallogr A** 1989 Jun 1;45 (Pt 6):367–71

Inverted repeat sequences can influence the melting transitions of linear DNAs. McCampbell CR, et al. **Biopolymers** 1989 Oct;28(10):1745–58

CHEMODECTOMA see **PARAGANGLIOMA, NONCHROMAFFIN**

CHEMOLYSIS, INTERVERTEBRAL DISK see **INTERVERTEBRAL DISK CHEMOLYSIS**

CHEMONUCLEOLYSIS see **INTERVERTEBRAL DISK CHEMOLYSIS**

CHEMORECEPTORS

Synthetic chemoreceptive membranes. Sensing bitter or odorous substances on a synthetic lipid multibilayer film by using quartz-crystal microbalances and electric responses. Okahata Y, et al. **Anal Chem** 1990 Jul 15; 62(14):1431–8

ANATOMY & HISTOLOGY

[Coronary chemoreceptors in rabbits] Zhuchkova NI. **Arkh Anat Gistol Embriol** 1989 Sep;97(9):51–4 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Propranolol inhibits O2-sensitive chemoreceptor activity in trout gills. Burleson ML, et al. **Am J Physiol** 1990 Apr; 258(4 Pt 2):R1089–91

The effect of almitrine on the steady-state ventilatory response to carbon dioxide at rest and during exercise in man. Cummin AR, et al. **Eur Respir J** 1990 Jun;3(6):693–8

Cobalt stimulates carotid body chemoreceptors. Di Giulio C, et al. **J Appl Physiol** 1990 May;68(5):1844–9

A model-based evaluation of the single-breath CO2 ventilatory response test. Khoo MC. **J Appl Physiol** 1990 Jan;68(1):393–9

Ganglioglomerular nerves influence responsiveness of cat carotid body chemoreceptors to almitrine. McQueen DS, et al. **J Auton Nerv Syst** 1989 Jun;27(1):57–66

Intrapulmonary CO2 inhibits inspiration in garter snakes. Furilla RA, et al. **Respir Physiol** 1989 Nov;78(2):207–17

Effect of cisternal administration of acetazolamide on rapid excitation of central chemoreceptors. Arita H, et al. **Tohoku J Exp Med** 1988 Dec;156 Suppl:75–81

[Respiratory effects of almitrine on various levels of the fraction of inspired oxygen. A study in the anesthetized dog] Gaudy JH, et al. **Ann Fr Anesth Reanim** 1990; 9(1):26–30 (Eng. Abstr.) **(Fre)**

EMBRYOLOGY

Rat fetuses respond to chemical stimuli in gas phase. Smotherman WP, et al. **Physiol Behav** 1990 May; 47(5):863–8

METABOLISM

Peptidergic innervation of arterial chemoreceptors. Kummer W, et al. **Arch Histol Cytol** 1989;52 Suppl:361–4

G-proteins in neuronal and sensory tissue from invertebrates. Raming K, et al. **J Protein Chem** 1989 Jun;8(3):374–5

The rat distal ileum has a reduced absorptive and secretory capacity compared with proximal ileum—is it to facilitate its chemosensing function? Young A, et al. **Q J Exp Physiol** 1989 Jul;74(4):561–3

PHYSIOLOGY

Cellular basis of transduction in carotid chemoreceptors. Biscoe TJ, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):L271–8 (87 ref.)

Peripheral arterial chemoreceptors and reflex control of sodium and water homeostasis. Honig A. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1282–302 (304 ref.)

Chemoreceptor stimulation on sympathetic activity: dependence on respiratory phase. Katona PG, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1027–33

Chemodenervation does not alter cerebrovascular response to hypoxic hypoxia. Miyabe M, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):H1413–8

A cardiogenic hypertensive chemoreflex. James TN. **Anesth Analg** 1989 Nov;69(5):633–46 (98 ref.)

Estimation of peripheral chemoreflex gain from spontaneous sigh responses. Khoo MC, et al. **Ann Biomed Eng** 1989; 17(6):557–70

Chemosensory physiology in an age of transition. Dethier VG. **Annu Rev Neurosci** 1990;13:1–13 (67 ref.)

Arterial chemoreceptor involvement in salicylate-induced hyperventilation in rats. McQueen DS, et al. **Br J Pharmacol** 1989 Oct;98(2):413–24

Independent components of the neural population response for discrimination of quality and intensity of chemical stimuli. Girardot MN, et al. **Brain Behav Evol** 1990; 35(3):129–45

Taste as a highly discriminative system: a hamster intrapapillar single unit study with 18 compounds. Faurion A, et al. **Brain Res** 1990 Apr 2;512(2):317–32

Peripheral mechanisms of olfactory discrimination of complex mixtures by the spiny lobster: no cell types for mixtures but different contributions of the cells to the across neuron patterns. Girardot MN, et al. **Brain Res** 1990 Apr 16;513(2):225–36

ATP-sensitive chemoreceptors: antagonism by other nucleotides and the potential implications of ectonucleotidase activity. Gleeson RA, et al. **Brain Res** 1989 Sep 11;497(1):12–20

Cortical unit responses to chemical stimulation of the oral cavity in the rat. Kosar E, et al. **Brain Res** 1990 Apr 16; 513(2):212–24

Occurrence of neutral endopeptidase activity in the cat carotid body and its significance in chemoreception. Kumar GK, et al. **Brain Res** 1990 May 28;517(1-2):341–3

Peripheral chemoreceptor control of fetal renin responses to hypoxia and hypercapnia. Wood CE, et al. **Circ Res** 1990 Sep;67(3):722–32

Is central chemoreceptor sensitive to intracellular rather than extracellular pH? Lassen NA. **Clin Physiol** 1990 Jul; 10(4):311–9 (31 ref.)

Ventilatory and heart rate chemosensitivity in track-and-field athletes. Ohyabu Y, et al. **Eur J Appl Physiol** 1990;59(6):460–4

Ventilatory response kinetics and breathing pattern during exercise at different chemoreceptive drives. Breslav IS, et al. **Int J Sports Med** 1989 Aug;10(4):252–8

Respiratory muscle responses to changes in chemoreceptor drive in infants. Carlo WA, et al. **J Appl Physiol** 1990 Mar; 68(3):1041–7

Cardiac receptors evoke ventilatory response with increased venous PCO2 at constant arterial PCO2. Estavillo JA. **J Appl Physiol** 1990 Jan;68(1):369–73

Brain glutamate metabolism during hypoxia and peripheral chemodenervation. Hoop B, et al. **J Appl Physiol** 1990 Jul; 69(1):147–54

Responses of vagal efferent fibres to stimulation of gastric mechano- and chemoreceptors in the anaesthetized ferret. Blackshaw LA, et al. **J Auton Nerv Syst** 1989 Jun; 27(1):39–45

Sympathetic peripheral chemoreflex is independent of expiratory output neurons in the cat. Huang WX, et al. **J Auton Nerv Syst** 1989 Dec 30;29(1):29–39

Candidate cell populations for respiratory chemosensitive fields in the human infant medulla. Filiano JJ, et al. **J Comp Neurol** 1990 Mar 15;293(3):448–65

The incidence of breathing movements of fetal sheep in normoxia and hypoxia after peripheral chemodenervation and brain-stem transection. Moore PJ, et al. **J Dev Physiol** 1989 Mar;11(3):147–51

Ionic currents and ion channels of lobster olfactory receptor neurons. McClintock TS, et al. **J Gen Physiol** 1989 Dec; 94(6):1085–99

Chemosensitivity of fine afferents from rat skin in vitro. Lang E, et al. **J Neurophysiol** 1990 Apr;63(4):887–901

The effect of chronic hypoxia upon the development of respiratory chemoreflexes in the newborn kitten. Hanson MA, et al. **J Physiol (Lond)** 1989 Apr;411:563–74

Effects of peripheral and central chemoreflex activation on the isopnoeic rating of breathing in exercising humans [published erratum appears in J Physiol (Lond) 1990 Jan;420:489] Ward SA, et al. **J Physiol (Lond)** 1989 Apr; 411:27–43

Respiratory responses to occlusion or hypercapnic blood injection of the anterior inferior cerebellar artery in cats. Kuwana S, et al. **Jpn J Physiol** 1990;40(2):225–42

Differential sensitivity to hypoxic inhibition of respiratory processes in the anesthetized rat. Maruyama R, et al. **Jpn J Physiol** 1989;39(6):857–71

Stimulus access to olfactory and vomeronasal receptors in utero. Coppola DM, et al. **Neurosci Lett** 1989 Dec 4; 106(3):241–8

Effect of adenosine on isolated and superfused cat carotid body activity. Runold M, et al. **Neurosci Lett** 1990 May 18;113(1):111–4

Stimulation of carotid body chemoreceptors does not influence the discharge of A1 neurons projecting to the forebrain. Jamieson SM, et al. **Neuroscience** 1989; 32(1):227–34

A selective overview of the chemical senses. Kare MR, et al. **Nutr Rev** 1990 Feb;48(2):39–48; discussion 114–31 (63 ref.)

Effects of acetazolamide on medullary extracellular pH and PCO2 and on ventilation in peripherally chemodenervated cats. Teppema LJ, et al. **Pflugers Arch** 1990 Feb; 415(5):519–25

Differential effect of a chemical algogen on two nociceptive thresholds. Calvino B. **Physiol Behav** 1990 May; 47(5):907–10

Respiratory muscle activation by chemical stimuli in awake and sleeping dogs. Phillipson EA, et al. **Prog Clin Biol Res** 1990;345:201–11; discussion 211–3

Brain electrical activity topographical maps produced in response to olfactory and chemosensory stimulation. Van Toller S, et al. **Psychistry Res** 1989 Sep;29(3):429–30

Temperature effects on pulmonary receptor responses to airway pressure and CO2 in Alligator mississippiensis. Douse MA, et al. **Respir Physiol** 1989 Dec;78(3):331–43

Oxygen-sensitive chemoreceptors in the branchio-cardiac veins of the crayfish, Astacus leptodactylus. Ishii K, et al. **Respir Physiol** 1989 Oct;78(1):73–81

Odor stimuli trigger influx of calcium into olfactory neurons of the channel catfish. Restrepo D, et al. **Science** 1990 Sep 7;249(4973):1166–8

Localization of chemical stimulation: capsaicin on hairy skin. Green BG, et al. **Somatosens Mot Res** 1989;6(5–6):553–66

Arterial H+ as a determinant for interindividual variability of respiratory chemosensitivity to hypoxia in man. Kawakami Y, et al. **Tohoku J Exp Med** 1988 Dec;156 Suppl:93–102

The role of perireceptor events in chemosensory processes. Carr WE, et al. **Trends Neurosci** 1990 Jun;13(6):212–5 (47 ref.)

Developmental neurobiology of salt taste sensation. Hill DL, et al. **Trends Neurosci** 1990 May;13(5):188–95 (54 ref.)

[Chemical control of respiration in the newborn infant] Bureau MA. **Arch Int Physiol Biochim** 1990 Jun; 98(3):A117–8 **(Fre)**

[Taste] Langhans W. **Schweiz Arch Tierheilkd** 1989; 131(9):521–35 (120 ref.) (Eng. Abstr.) **(Ger)**

[The effect of plastic restructuring of the local chemoexcitable zone in the somatic membrane of the PPa4 neuron of Helix lucorum on the excitability of neighboring chemo- and electrically excited zones] Pivovarov AS, et al. **Biol Nauki** 1989;(8):41–6 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Effects of hypercapnia and hypoxia on the cardiovascular system: vascular capacitance and aortic chemoreceptors. Rothe CF, et al. **Am J Physiol** 1990 Sep;259(3 Pt 2):H932–9

Increased chemoreceptor output and ventilatory response to sustained hypoxia. Georgopoulos D, et al. **J Appl Physiol** 1989 Sep;67(3):1157–63

Re-setting of the hypoxic sensitivity of aortic chemoreceptors in the new-born lamb. Kumar P, et al. **J Dev Physiol** 1989 Apr;11(4):199–206

[The diurnal rhythm of chemosensitivity and its contribution to nocturnal disorders of respiratory control] Raschke F, et al. **Pneumologie** 1989 Nov;43 Suppl 1:568–71 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Three types of neurochemically defined autonomic fibres innervate the carotid baroreceptor and chemoreceptor regions in the guinea-pig. Kummer W. **Anat Embryol (Berl)** 1990;181(5):477–89

Chemoreceptive and mechanoreceptive paraneurons in the tongue. Toyoshima K. **Arch Histol Cytol** 1989;52 Suppl:383–8 (30 ref.)

The glomus tympanicum: a middle ear chemoreceptor? Rockley TJ, et al. **J Otolaryngol** 1989 Dec;18(7):370–3

[Light and electron microscopic studies of the vomeronasal organ (VNO) of newborn guinea pigs] Mendoza AS, et al. **Z Mikrosk Anat Forsch** 1989;103(5):801–6 (Eng. Abstr.) **(Ger)**

CHEMOSTERILANTS

Effect of apholate and metepa on Aedes aegypti infected with Venezuelan equine encephalomyelitis virus. Kappus KD, et al. **Am J Trop Med Hyg** 1967 Jul;16(4):539–43

PHARMACOLOGY

Effects of pyrimidine-2-thiol on the ovarian histology of Epilachna vigintioctopunctata (Fabr.) (Coleoptera: Coccinellidae). Sood V, et al. **Folia Morphol (Praha)** 1989; 37(4):402–6

CHEMOSYMPATHECTOMY see **SYMPATHECTOMY, CHEMICAL**

CHEMOTACTIC FACTORS

see related
PHEROMONES

Neutrophil attractant/activation protein-1 (NAP-1 [interleukin-8]). Leonard EJ, et al. **Am J Respir Cell Mol Biol** 1990 Jun;2(6):479–86 (57 ref.)

Neutrophil chemotactic activity of N-terminal peptides from the calpain small subunit. Kunimatsu M, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):1242–7

Role of lysine residue at 7th position of wasp chemotactic peptides. Nagashima K, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):844–9

A 1H-NMR study of the solution conformation of Icaria chemotactic peptide and its [Lys7] analog: effects on the physiological activity of a substitution of proline to lysine at position 7. Shimada I, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):596–603

Three-dimensional structure of interleukin 8 in solution. Clore GM, et al. **Biochemistry** 1990 Feb 20;29(7):1689–96

Macrophage inflammatory proteins 1 and 2: members of a novel superfamily of cytokines. Wolpe SD, et al. **FASEB J** 1989 Dec;3(14):2565–73 (77 ref.)

Crystallization and preliminary X-ray crystallographic study of interleukin-8. Auer M, et al. **FEBS Lett** 1990 Jun 4; 265(1-2):30–2

NAP-1 (IL-8) [letter] Leonard EJ. **Immunol Today** 1990 Jun; 11(6):223–4

Comparisons between the three-dimensional structures of the chemotactic protein CheY and the normal Gly 12-p21 protein. Chen JM, et al. **Int J Pept Protein Res** 1990 Jul; 36(1):1–6

Determination of the secondary structure of interleukin-8 by nuclear magnetic resonance spectroscopy. Clore GM, et al. **J Biol Chem** 1989 Nov 15;264(32):18907–11

Determination of the primary and secondary structure of NAP-1/IL-8 and a monocyte chemoattractant protein, MCP-1/MCAF. Appella E, et al. **Prog Clin Biol Res** 1990; 349:405–17 (39 ref.)

Chemotactic response of bovine neutrophils to Pasteurella haemolytica culture fluid. Brunner CJ, et al. **Vet Immunol Immunopathol** 1989 Jul;21(3-4):279–92

[Studies on the effect of mistletoe extract on the chemotactic activity and on chemiluminescence of polymorphonuclear leukocytes in vitro] Schmidt KH. **Planta Med** 1989 Oct; 55(5):455–7 (Eng. Abstr.) **(Ger)**

ANALYSIS

Determination of macrophage chemotaxis to atherosclerotic plaque extract in domestic turkeys with hypertension. Johnson PD, et al. **Am J Vet Res** 1990 Aug;51(8):1317–20

Identification by sequence analysis of chemotactic factors for monocytes produced by normal and transformed cells stimulated with virus, double-stranded RNA or cytokine. Van Damme J, et al. **Eur J Immunol** 1989 Dec; 19(12):2367–73

A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic and activating factor (MCP-1/MCAF). Bottazzi B, et al. **Int J Cancer** 1990 Apr 15;45(4):795–7

ANTAGONISTS & INHIBITORS

Functional loss of chemotactic factor inactivator in the adult respiratory distress syndrome [published erratum appears in Am Rev Respir Dis 1990 Sep;142(3):741] Robbins R, et al. **Am Rev Respir Dis** 1990 Jun;141(6):1463–8

Chemotactic factor inactivator interaction with Gc–globulin (vitamin D–binding protein). A mechanism of modulating the chemotactic activity of C5a. Robbins RA, et al. **J Immunol** 1990 Mar 15;144(6):2371–6

BIOSYNTHESIS

Inhibition of production of LTB4 and chemotactic agent from rat alveolar macrophages treated with t–butyl hydroperoxide is independent of ATP depletion. Robison TW, et al. **Biochim Biophys Acta** 1990 Jun 28;1045(1):9–16

Early production of a chemotactic factor to T lymphocytes by peritoneal macrophages. Gomez–Flores R, et al. **Cell Immunol** 1990 Mar;126(1):1–15

Estrogen regulation of an eosinophil chemotactic factor in the immature rat uterus. Lee YH, et al. **Endocrinology** 1989 Dec;125(6):3022–8

Generation of chemotactic activity for neutrophils by liver cells metabolizing ethanol. Roll FJ, et al. **Free Radic Biol Med** 1989;7(5):549–55

Production of interleukin–8 by human dermal fibroblasts and keratinocytes in response to interleukin–1 or tumour necrosis factor. Larsen CG, et al. **Immunology** 1989 Sep; 68(1):31–6

Synergism between interleukin–1 beta and tumor necrosis factor–alpha in production by 3T3 cells of a chemotactic factor for rat polymorphonuclear leukocytes. Nakagawa H, et al. **Inflammation** 1989 Oct;13(5):553–9

Production and characterization of recombinant human neutrophil chemotactic factor. Furuta R, et al. **J Biochem (Tokyo)** 1989 Sep;106(3):436–41

Marked synergism between tumor necrosis factor–alpha and interferon–gamma in regulation of keratinocyte–derived adhesion molecules and chemotactic factors. Barker JN, et al. **J Clin Invest** 1990 Feb;85(2):605–8

Lipopolysaccharide–stimulated human monocytes secrete, apart from neutrophil–activating peptide 1/interleukin 8, a second neutrophil–activating protein. NH2–terminal amino acid sequence identity with melanoma growth stimulatory activity. Schröder JM, et al. **J Exp Med** 1990 Apr 1;171(4):1091–100

Mechanisms underlying the anti–inflammatory effects of essential fatty acid deficiency in experimental glomerulonephritis. Inhibited release of a monocyte chemoattractant by glomeruli. Rovin BH, et al. **J Immunol** 1990 Aug 15;145(4):1238–45

Cytokines enhance the production of a chemotactic factor for polymorphonuclear leukocytes by rat renal glomerular epithelioid cells. Watanabe K, et al. **Nephron** 1990; 54(2):169–75

Lymphocyte inhibitory and chemotactic factors produced by bursal and thymic lymphocytes. Joshi P, et al. **Poult Sci** 1990 Feb;69(2):249–58

Minimally modified low density lipoprotein induces monocyte chemotactic protein 1 in human endothelial cells and smooth muscle cells. Cushing SD, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5134–8

BLOOD

Calcium dependent cysteine proteinase is a precursor of a chemotactic factor for neutrophils. Kunimatsu M, et al. **Biochem Biophys Res Commun** 1989 Oct 31;164(2):875–82

Intra–assay complement activation may falsely indicate the presence of chemotactic factors in a test plasma or serum [letter] Bergh K, et al. **J Immunol Methods** 1989 Sep 29; 123(1):147–8

GENETICS

Neutrophil chemotactic factor (IL–8) gene expression by cytokine–treated retinal pigment epithelial cells. Elner VM, et al. **Am J Pathol** 1990 Apr;136(4):745–50

Human alveolar macrophage gene expression of interleukin–8 by tumor necrosis factor–alpha, lipopolysaccharide, and interleukin–1 beta. Strieter RM, et al. **Am J Respir Cell Mol Biol** 1990 Apr;2(4):321–6

Structure of human monocyte chemotactic protein gene and its regulation by TPA. Shyy YJ, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):346–51

Disparate regulation of interleukin 8 gene expression from blood monocytes, endothelial cells, and fibroblasts by interleukin 4. Standiford TJ, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):531–6

Disparate gene expression of chemotactic cytokines by human mononuclear phagocytes. Strieter RM, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):886–91

Monocyte–derived neutrophil chemotactic factor (MDNCF/IL–8) resides in a gene cluster along with several other members of the platelet factor 4 gene superfamily. Modi WS, et al. **Hum Genet** 1990 Jan; 84(2):185–7

Coding region structure of interleukin–8 gene of human lung giant cell carcinoma LU65C cells that produce LUCT/interleukin–8: homogeneity in interleukin–8 genes. Hotta K, et al. **Immunol Lett** 1990 Jun;24(3):165–9

IL–1 transcriptionally activates the neutrophil chemotactic factor/IL–8 gene in endothelial cells. Sica A, et al. **Immunology** 1990 Apr;69(4):548–53

Multiple kinetic states for the flagellar motor switch. Kuo SC, et al. **J Bacteriol** 1989 Nov;171(11):6279–87

Role of the CheW protein in bacterial chemotaxis: overexpression is equivalent to absence. Sanders DA, et al. **J Bacteriol** 1989 Nov;171(11):6271–8

Tumor necrosis factor–alpha induction of novel gene products in human endothelial cells including a macrophage–specific chemotaxin. Dixit VM, et al. **J Biol Chem** 1990 Feb 15;265(5):2973–8

Identification of the site of phosphorylation of the chemotaxis response regulator protein, CheY. Sanders DA, et al. **J Biol Chem** 1989 Dec 25;264(36):21770–8

The neutrophil chemoattractant produced by the rat kidney epithelioid cell line NRK–52E is a protein related to the KC/gro protein. Watanabe K, et al. **J Biol Chem** 1989 Nov 25;264(33):19559–63

Cloning and characterization of cDNAs for murine macrophage inflammatory protein 2 and its human homologues. Tekamp–Olson P, et al. **J Exp Med** 1990 Sep 1;172(3):911–9

Monocyte chemotactic and activating factor gene expression induced in endothelial cells by IL–1 and tumor necrosis factor. Sica A, et al. **J Immunol** 1990 Apr 15;144(8):3034–8

IL–4 inhibits the expression of IL–8 from stimulated human monocytes. Standiford TJ, et al. **J Immunol** 1990 Sep 1; 145(5):1435–9

Cytokine–induced gene expression of a neutrophil chemotactic factor/IL–8 in human hepatocytes. Thornton AJ, et al. **J Immunol** 1990 Apr 1;144(7):2609–13

Two inflammatory mediator cytokine genes are closely linked and variably amplified on chromosome 17q. Irving SG, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3261–70

Conserved aspartate residues and phosphorylation in signal transduction by the chemotaxis protein CheY. Bourret RB, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):41–5

Salt taxis in Escherichia coli bacteria and its lack in mutants. Qi YL, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(21):8358–62

IMMUNOLOGY

Human monocyte chemoattractant protein–1 (MCP–1). Leonard EJ, et al. **Immunol Today** 1990 Mar;11(3):97–101 (45 ref.)

Differences in responses of rat– and guinea–pig–eosinophils to eosinophil chemotactic factors derived from Angiostrongylus cantonensis. Ishida K, et al. **Parasite Immunol** 1990 May;12(3):269–83

ISOLATION & PURIFICATION

Bronchial epithelial cells produce lung fibroblast chemotactic factor: fibronectin. Shoji S, et al. **Am J Respir Cell Mol Biol** 1989 Jul;1(1):13–20

Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N–terminally processed form. Decock B, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):904–9

Stimulation of lymphocyte migration by a novel low–molecular weight compound in normal human skin and plasma. Bacon KB, et al. **Eur J Immunol** 1990 Mar; 20(3):565–71

Crystallization of human interleukin–8. A protein chemotactic for neutrophils and T–lymphocytes. Baldwin ET, et al. **J Biol Chem** 1990 Apr 25;265(12):6851–3

CAP37, a human neutrophil–derived chemotactic factor with monocyte specific activity. Pereira HA, et al. **J Clin Invest** 1990 May;85(5):1468–76

Properties of monocyte chemotactic and activating factor (MCAF) purified from a human fibrosarcoma cell line. Zachariae CO, et al. **J Exp Med** 1990 Jun 1;171(6):2177–82

Identification of a novel and highly potent eosinophil chemotactic lipid in human eosinophils treated with arachidonic acid. Morita E, et al. **J Immunol** 1990 Mar 1;144(5):1893–900

Endothelial interleukin–8: a novel inhibitor of leukocyte–endothelial interactions. Gimbrone MA Jr, et al. **Science** 1989 Dec 22;246(4937):1601–3

METABOLISM

Characterization of three macrophage chemotactic factors from PPD–induced delayed hypersensitivity reaction sites in guinea pigs, with special reference to a chemotactic lymphokine. Honda M, et al. **Am J Pathol** 1982 Aug; 108(2):171–83

Cytokine–activated human endothelial cells synthesize and secrete a monocyte chemoattractant, MCP–1/JE. Rollins BJ, et al. **Am J Pathol** 1990 Jun;136(6):1229–33

Bronchial epithelial cells produce chemotactic activity for bronchial epithelial cells. Possible role for fibronectin in airway repair. Shoji S, et al. **Am Rev Respir Dis** 1990 Jan; 141(1):218–25

Demonstration of neutrophil chemotactic anaphylatoxins in human dandruff. Kikuchi T, et al. **Arch Dermatol Res** 1989; 281(7):482–6

Eosinophil chemotactic factor released from murine bone marrow derived cultured mast cells. Abe T, et al. **Arerugi** 1990 Feb;39(2 Pt 1):69–74

Production of low molecular weight chemoattractants for leukocytes by periovulatory ovine follicles. Murdoch WJ, et al. **Biol Reprod** 1989 Jul;41(1):86–90

Asbestos–induced release of a human alveolar macrophage–derived neutrophil chemotactic factor. Hayes AA, et al. **Exp Lung Res** 1990 Mar–Apr;16(2):121–30

Inactivation of chemotactic activity of C5a by the serratial 56–kilodalton protease. Oda T, et al. **Infect Immun** 1990 May;58(5):1269–72

Methyl transfer in chemotaxis toward sugars by Bacillus subtilis. Thoelke MS, et al. **J Bacteriol** 1990 Feb; 172(2):1148–50

Characterization of a receptor for human monocyte–derived neutrophil chemotactic factor/interleukin–8. Grob PM, et al. **J Biol Chem** 1990 May 15;265(14):8311–6

Interleukin 8 (monocyte–derived neutrophil chemotactic factor) dynamically regulates its own receptor expression on human neutrophils. Samanta AK, et al. **J Biol Chem** 1990 Jan 5;265(1):183–9

Localization of functional domains of the cAMP chemotactic receptor of Dictyostelium discoideum. Tao YP, et al. **J Biol Chem** 1990 Sep 15;265(26):15584–9

Methyl group turnover on methyl–accepting chemotaxis proteins during chemotaxis by Bacillus subtilis. Thoelke MS, et al. **J Biol Chem** 1990 Feb 5;265(4):1928–32

Neutrophil–activating peptide–1/interleukin 8, a novel cytokine that activates neutrophils. Baggiolini M, et al. **J Clin Invest** 1989 Oct;84(4):1045–9 (67 ref.)

Leukocyte specificity and binding of human neutrophil attractant/activation protein–1. Leonard EJ, et al. **J Immunol** 1990 Feb 15;144(4):1323–30

Detection of neutrophil–activating peptide NAP/IL–8 and NAP/IL–8 mRNA in human recombinant IL–1 alpha– and human recombinant tumor necrosis factor–alpha–stimulated human dermal fibroblasts. An immunocytochemical and fluorescent in situ hybridization study. Mielke V, et al. **J Immunol** 1990 Jan 1;144(1):153–61

Monocyte chemoattractants produced by malignant cells [editorial] Graves D, et al. **J Pathol** 1990 Jul;161(3):187–8 (7 ref.)

Renal cortical release of a specific macrophage chemoattractant in response to ureteral obstruction. Rovin BH, et al. **Lab Invest** 1990 Aug;63(2):213–20

Mechanism of polymorphonuclear leukocytes accumulation examined using inhibitors of complement and arachidonic acid cascade in rats treated with OK–432. Kato H, et al. **Nat Immun Cell Growth Regul** 1989;8(5):290–300

Role of CheW protein in coupling membrane receptors to the intracellular signaling system of bacterial chemotaxis. Liu JD, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(22):8703–7

[Neutrophil chemotactic factor in lung injury produced by immune complexes] Tanoue M. **Arerugi** 1989 Nov; 38(11):1209–16 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Potent and specific inhibition of IL–8–, IL–1 alpha– and IL–1 beta–induced in vitro human lymphocyte migration by calcium channel antagonists. Bacon KB, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):349–54

Interleukin (IL)–8–induced in vitro human lymphocyte migration is inhibited by cholera and pertussis toxins and inhibitors of protein kinase C. Bacon KB, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):1099–104

NAP–1/IL–8 induces up–regulation of CR1 receptors in human neutrophil leukocytes. Paccaud JP, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):187–92

Induction of haptotactic migration of melanoma cells by neutrophil activating protein/interleukin–8. Wang JM, et al. **Biochem Biophys Res Commun** 1990 May 31; 169(1):165–70

Enhancing and suppressing effects of recombinant murine macrophage inflammatory proteins on colony formation in vitro by bone marrow myeloid progenitor cells. Broxmeyer HE, et al. **Blood** 1990 Sep 15;76(6):1110–6

Relation of the CD11/CD18 family of leukocyte antigens to the transient neutropenia caused by chemoattractants. Lundberg C, et al. **Blood** 1990 Sep 15;76(6):1240–5

Human recombinant neutrophil–activating factor/interleukin–8 is a spasmogen of airway smooth muscle in vitro. Burrows LJ, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:789P

Macrophage inflammatory protein–1: unique action on the hypothalamus to evoke fever. Miñano FJ, et al. **Brain Res Bull** 1990 Jun;24(6):849–52

Chemotactic effect of PAF–acether on peritoneal eosinophils from normal rats. Martins MA, et al. **Braz J Med Biol Res** 1989;22(9):1151–4

Kinetic analysis of chemotactic peptide–induced actin polymerization in neutrophils. Wang DH, et al. **Cell Motil Cytoskeleton** 1990;16(1):80–7

Elastase released from human granulocytes stimulated with N–formyl–chemotactic peptide prevents activation of tumor cell prourokinase (pro–uPA). Schmitt M, et al. **FEBS Lett** 1989 Sep 11;255(1):83–8

Studies of chemotactic, chemotactic movement–inhibiting and random movement–inhibiting effects of interleukin–1 alpha and beta, tumour necrosis factors alpha and beta and interferon gamma on human neutrophils in assays using 'sparse–pore' polycarbonate (Nuclepore) membranes in the Boyden chamber. Bignold LP, et al. **Int Arch Allergy Appl Immunol** 1990;91(1):1–7

Histamine and sulfidoleukotriene release from human basophils: different effects of antigen, anti–IgE, C5a, f–Met–Leu–Phe and the novel neutrophil–activating peptide NAF. Dahinden CA, et al.

Int Arch Allergy Appl Immunol 1989;90(2):113–8

Chemokinetic effects of exogenous and endogenous tumor necrosis factor alpha on human blood monocytes. Mushtaha AA, et al. **Int Arch Allergy Appl Immunol** 1989; 90(1):11–5

Chemoattractants stimulate phosphatidylinositol-4-phosphate kinase in human polymorphonuclear leukocytes. Pike MC, et al. **J Biol Chem** 1990 Feb 5;265(4):1866–73

Interleukin 8 (monocyte-derived neutrophil chemotactic factor) dynamically regulates its own receptor expression on human neutrophils. Samanta AK, et al. **J Biol Chem** 1990 Jan 5;265(1):183–9

A novel succinyl dipeptide stimulates directed cell migration by modulating protein kinase C activity. Mascardo RN, et al. **J Cell Physiol** 1990 Feb;142(2):401–9

Myelopoietic enhancing effects of murine macrophage inflammatory proteins 1 and 2 on colony formation in vitro by murine and human bone marrow granulocyte/macrophage progenitor cells. Broxmeyer HE, et al. **J Exp Med** 1989 Nov 1;170(5):1583–94

Neutrophil-activating protein 1/interleukin 8 stimulates the binding activity of the leukocyte adhesion receptor CD11b/CD18 on human neutrophils. Detmers PA, et al. **J Exp Med** 1990 Apr 1;171(4):1155–62

Shedding of tumor necrosis factor receptors by activated human neutrophils. Porteu F, et al. **J Exp Med** 1990 Aug 1;172(2):599–607

Functional activation of human neutrophils by recombinant monocyte-derived neutrophil chemotactic factor/IL-8. Djeu JY, et al. **J Immunol** 1990 Mar 15;144(6):2205–10

Mast cells chemotax to laminin with enhancement after IgE-mediated activation. Thompson HL, et al. **J Immunol** 1989 Dec 15;143(12):4188–92

Neutrophil accumulation and plasma leakage induced in vivo by neutrophil-activating peptide-1. Colditz IG, et al. **J Leukoc Biol** 1990 Aug;48(2):129–37

In vivo and in vitro assessment of porcine neutrophil activation responses to chemoattractants: flow cytometric evidence for the selective absence of formyl peptide receptors. Fletcher MP, et al. **J Leukoc Biol** 1990 Apr; 47(4):355–65

Characteristics of the chemotactic activity of heparin cofactor II proteolysis products. Hoffman M, et al. **J Leukoc Biol** 1990 Aug;48(2):156–62

Comparison of stimulation by chemotactic formyl peptide analogs between GTPase activity in neutrophil plasma membranes and granule enzyme release from intact neutrophils. Kanaho Y, et al. **J Leukoc Biol** 1990 May; 47(5):420–8

Characterization of a class of nonformylated Enterococcus faecalis-derived neutrophil chemotactic peptides: the sex pheromones. Sannomiya P, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):66–70

Thymotaxin, a chemotactic protein, is identical to beta 2-microglobulin. Dargemont C, et al. **Science** 1989 Nov 10;246(4931):803–6

Effects of proinflammatory mediators on canine neutrophil chemotaxis and aggregation. Strøm H, et al. **Vet Immunol Immunopathol** 1990 Jul;25(3):209–17

[Naf/nap-1, a new peptide which activates neutrophil leukocytes] Baggiolini M, et al. **Schweiz Med Wochenschr** 1989 Sep 23;119(38):1285–9 (38 ref.) (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Chemotactic response of neutrophils. Zigmond SH. **Am J Respir Cell Mol Biol** 1989 Dec;1(6):451–3 (6 ref.)

The developmental fate of S. coelicolor hyphae depends upon a gene product homologous with the motility sigma factor of B. subtilis. Chater KF, et al. **Cell** 1989 Oct 6;59(1):133–43

Identification of high affinity receptors for human monocyte chemoattractant protein-1 on human monocytes. Yoshimura T, et al. **J Immunol** 1990 Jul 1;145(1):292–7

The role of adhesion molecules, chemotactic factors, and cytokines in inflammatory and neoplastic skin disease—1990 update. Nickoloff BJ, et al. **J Invest Dermatol** 1990 Jun;94(6 Suppl):151S–157S (63 ref.)

Tumor necrosis factor-alpha, interleukin-8 and chemotactic cytokines. Kunkel SL, et al. **Prog Clin Biol Res** 1990; 349:433–44 (16 ref.)

New approach to management of malignant ascites with streptococcal preparation OK-432. III. OK-432 attracts natural killer cells through a chemotactic factor released from activated neutrophils. Hayashi Y, et al. **Surgery** 1990 Jan;107(1):74–84

[Lung parenchyma as a milieu of immunological response] Konishi K. **Nippon Rinsho** 1990 Mar;48(3):455–60 **(Jpn)**

[Immunologic aspects of the macrophages in the milk of preterm mothers] Rodríguez Rodríguez MC, et al. **An Esp Pediatr** 1989 Jul;31(1):36–8 (Eng. Abstr.) **(Spa)**

SECRETION

Secretion of neutrophil attractant/activation protein by lipopolysaccharide-stimulated lung macrophages determined by both enzyme-linked immunosorbent assay and N-terminal sequence analysis. Sylvester I, et al. **Am Rev Respir Dis** 1990 Mar;141(3):683–8

Release of chemotactic factors by veins during preparation for arterial bypass. Ruby ST, et al. **Arch Surg** 1990 Apr; 125(4):481–4

Components of the angiotensin system cause release of a neutrophil chemoattractant from cultured bovine and human endothelial cells. Farber HW, et al. **Eur Heart J** 1990 Apr;11 Suppl B:100–7

Mycolyl glycolipids stimulate macrophages to release a chemotactic factor. Matsunaga I, et al. **FEMS Microbiol Lett** 1990 Jan 15;55(1–2):49–53

Purification and characterization of a chemoattractant from electric shock-induced earthworm secretion, its receptor binding, and signal transduction through the vomeronasal system of garter snakes. Jiang XC, et al. **J Biol Chem** 1990 May 25;265(15):8736–44

IL-1 alpha or tumor necrosis factor-alpha stimulate release of three NAP-1/IL-8-related neutrophil chemotactic proteins in human dermal fibroblasts. Schröder JM, et al. **J Immunol** 1990 Mar 15;144(6):2223–32

Secretion by human fibroblasts of monocyte chemoattractant protein-1, the product of gene JE. Yoshimura T, et al. **J Immunol** 1990 Mar 15;144(6):2377–83

THERAPEUTIC USE

Prevention of lethal peritonitis by intraperitoneal chemotactic agents. Hau T, et al. **Surg Forum** 1978;29:9–11

TOXICITY

Chemotactic peptide-induced acute colitis in rabbits. LeDuc LE, et al. **Gastroenterology** 1990 Apr;98(4):929–35

CHEMOTACTIC FACTORS, EOSINOPHIL see under **CHEMOTACTIC FACTORS**

CHEMOTACTIC FACTORS, MACROPHAGE see under **CHEMOTACTIC FACTORS**

CHEMOTACTIC PEPTIDE see **N-FORMYLMETHIONINE LEUCYL-PHENYLALANINE**

CHEMOTAXINS see **CHEMOTACTIC FACTORS**

CHEMOTAXIS

see related
CHEMORECEPTORS
CHEMOTACTIC FACTORS

Bronchial epithelial cells produce lung fibroblast chemotactic factor: fibronectin. Shoji S, et al. **Am J Respir Cell Mol Biol** 1989 Jul;1(1):13–20

Bronchial epithelial cells respond to insulin and insulin-like growth factor-I as a chemoattractant. Shoji S, et al. **Am J Respir Cell Mol Biol** 1990 Jun;2(6):553–7

Bronchial epithelial cells produce chemotactic activity for bronchial epithelial cells. Possible role for fibronectin in airway repair. Shoji S, et al. **Am Rev Respir Dis** 1990 Jan; 141(1):218–25

Is chemotaxis a factor in the migration of precardiac mesoderm in the chick? Easton HS, et al. **Anat Embryol (Berl)** 1990;181(5):461–8

Invasiveness and chemotactic activity of oncogene transformed NIH/3T3 cells. Melchiori A, et al. **Anticancer Res** 1990 Jan-Feb;10(1):37–44

Chemotaxis of Pseudomonas putida toward chlorinated benzoates. Harwood CS, et al. **Appl Environ Microbiol** 1990 May;56(5):1501–3

Mechanisms of microbial movement in subsurface materials. Reynolds PJ, et al. **Appl Environ Microbiol** 1989 Sep; 55(9):2280–6

Protein phosphorylation in the bacterial chemotaxis system. Simon MI, et al. **Biochimie** 1989 Sep-Oct;71(9–10):1013–9 (31 ref.)

Mathematical analysis of cell-target encounter rates in three dimensions. Effect of chemotaxis. Charnick SB, et al. **Biophys J** 1990 May;57(5):1009–23

Transduction of the chemotactic signal to the actin cytoskeleton of Dictyostelium discoideum. Hall AL, et al. **Dev Biol** 1989 Dec;136(2):517–25

Involvement of protein kinase C in signal transduction during fibroblast chemotaxis to platelet-derived growth factor and a fragment of fibronectin. Adelmann-Grill BC, et al. **Eur J Cell Biol** 1989 Oct;50(1):128–31

Chemotactic capabilities of HL-60 human myeloid leukemia cells differentiated to eosinophils. Howe RS, et al. **Exp Hematol** 1990 May;18(4):299–303

Chemotaxis of mononuclear cells in patients with community acquired pneumonia. Riyami BM, et al. **FEMS Microbiol Immunol** 1989 Apr;1(5):301

Molecular mechanisms of bacterial chemotaxis towards PTS-carbohydrates. Lengeler JW, et al. **FEMS Microbiol Rev** 1989 Jun;5(1–2):81–92 (32 ref.)

Protein factors which regulate cell motility. Rosen EM, et al. **In Vitro Cell Dev Biol** 1989 Dec;25(12):1079–87 (97 ref.)

Neither motility nor chemotaxis plays a role in the ability of Escherichia coli F-18 to colonize the streptomycin-treated mouse large intestine. McCormick BA, et al. **Infect Immun** 1990 Sep;58(9):2957–61

Repellents for Escherichia coli operate neither by changing membrane fluidity nor by being sensed by periplasmic receptors during chemotaxis. Eisenbach M, et al. **J Bacteriol** 1990 Sep;172(9):5218–24

Effect of outer membrane permeability on chemotaxis in Escherichia coli. Ingham C, et al. **J Bacteriol** 1990 Jul; 172(7):3577–83

Developmental sensory transduction in Myxococcus xanthus involves methylation and demethylation of FrzCD. McCleary WR, et al. **J Bacteriol** 1990 Sep;172(9):4877–87

Role of the CheW protein in bacterial chemotaxis: overexpression is equivalent to absence. Sanders DA, et al. **J Bacteriol** 1989 Nov;171(11):6271–8

Chemotactic control of the two flagellar systems of Vibrio parahaemolyticus. Sar N, et al. **J Bacteriol** 1990 Jan; 172(1):334–41

Mutations that affect control of the methylesterase activity of CheB, a component of the chemotaxis adaptation system in Escherichia coli. Stewart RC, et al. **J Bacteriol** 1990 Jun;172(6):3388–99

Methyl transfer in chemotaxis toward sugars by Bacillus subtilis. Thoelke MS, et al. **J Bacteriol** 1990 Feb; 172(2):1148–50

Chemotaxis in Escherichia coli proceeds efficiently from different initial tumble frequencies. Weis RM, et al. **J Bacteriol** 1990 Feb;172(2):1099–105

Repellent response functions of the Trg and Tap chemoreceptors of Escherichia coli. Yamamoto K, et al. **J Bacteriol** 1990 Jan;172(1):383–8

Transcriptional organization of a cloned chemotaxis locus of Bacillus subtilis. Zuberi AR, et al. **J Bacteriol** 1990 Apr; 172(4):1870–6

Methyl group turnover on methyl-accepting chemotaxis proteins during chemotaxis by Bacillus subtilis. Thoelke MS, et al. **J Biol Chem** 1990 Feb 5;265(4):1928–32

The role of methylation in chemotaxis. An explanation of outstanding anomalies. Weis RM, et al. **J Biol Chem** 1990 Apr 25;265(12):6817–26

Signal transduction for chemotaxis and haptotaxis by matrix molecules in tumor cells. Aznavoorian S, et al. **J Cell Biol** 1990 Apr;110(4):1427–38

Identification of actin nucleation activity and polymerization inhibitor in ameboid cells: their regulation by chemotactic stimulation. Hall AL, et al. **J Cell Biol** 1989 Nov; 109(5):2207–13

Histamine as a growth factor and chemoattractant for human carcinoma and melanoma cells: action through Ca2(+)-mobilizing H1 receptors. Tilly BC, et al. **J Cell Biol** 1990 Apr;110(4):1211–5

Signal perception of fibroblasts for directional migration to platelet-derived growth factor in Boyden-type chambers. Adelmann-Grill BC, et al. **J Cell Physiol** 1990 Apr; 143(1):172–7

A novel succinyl dipeptide stimulates directed cell migration by modulating protein kinase C activity. Mascardo RN, et al. **J Cell Physiol** 1990 Feb;142(2):401–9

Inositol tris- and polyphosphate formation during chemotaxis of Dictyostelium. Europe-Finner GN, et al. **J Cell Sci** 1989 Aug;93 (Pt 4):585–92

Chemosensitivity of Philophthalmus megalurus (Trematoda) miracidia. Nollen PM. **J Parasitol** 1990 Jun;76(3):439–40

Moving proteins [letter; comment] **Nature** 1989 Oct 19; 341(6243):575 Comment on: Nature 1989 Jul 27;340(6231):315–7.

Conserved aspartate residues and phosphorylation in signal transduction by the chemotaxis protein CheY. Bourret RB, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):41–5

Role of CheW protein in coupling membrane receptors to the intracellular signaling system of bacterial chemotaxis. Liu JD, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(22):8703–7

Independent expression of human alpha or beta platelet-derived growth factor receptor cDNAs in a naive hematopoietic cell leads to functional coupling with mitogenic and chemotactic signaling pathways. Matsui T, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8314–8

Salt taxis in Escherichia coli bacteria and its lack in mutants. Qi YL, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(21):8358–62

B-type receptor for platelet-derived growth factor mediates a chemotactic response by means of ligand-induced activation of the receptor protein-tyrosine kinase. Westermark B, et al. **Proc Natl Acad Sci U S A** 1990 Jan; 87(1):128–32

Thymotaxin, a chemotactic protein, is identical to beta 2-microglobulin. Dargemont C, et al. **Science** 1989 Nov 10;246(4931):803–6

[Lung parenchyma as a milieu of immunological response] Konishi K. **Nippon Rinsho** 1990 Mar;48(3):455–60 **(Jpn)**

[Chemotactic function of skin fibroblasts in patients with amyloidosis] Karryeva BCh, et al. **Biull Eksp Biol Med** 1990 Jun;109(6):578–80 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Production of recombinant human tropoelastin: characterization and demonstration of immunologic and chemotactic activity. Indik Z, et al. **Arch Biochem Biophys** 1990 Jul;280(1):80–6

Structure-activity relationships of peptide T-related pentapeptides. Marastoni M, et al. **Arzneimittelforschung** 1989 Aug;39(8):926–8

Induction of haptotactic migration of melanoma cells by neutrophil activating protein/interleukin-8. Wang JM, et al. **Biochem Biophys Res Commun** 1990 May 31; 169(1):165–70

Effect of vitamin A on chemotactic and chemoinvasive behaviour of an osteosarcoma cell line. Ferreri-Santi L, et al. **Boll Soc Ital Biol Sper** 1990 Apr;66(4):373–80

Chemotactic response of osteoblast-like cells to transforming growth factor beta. Lucas PA. **Bone** 1989;10(6):459–63

Impairment of human polymorphonuclear leukocyte chemotaxis by 2,5-hexanedione. Governa M, et al. **Cell Biol Toxicol** 1986 Mar;2(1):33–9

Quantitative relationships between single-cell and cell-population model parameters for chemosensory migration responses of alveolar macrophages to C5a. Farrell BE, et al. **Cell Motil Cytoskeleton** 1990;16(4):279–93

Involvement of protein kinase C in the mitogenic and chemotaxis effects of basic fibroblast growth factor on bovine cerebral cortex capillary endothelial cells. Daviet I, et al. **FEBS Lett** 1990 Jan 1;259(2):315–7

High chemotactic response to platelet-derived growth factor of a teratocarcinoma differentiated mesodermal cell line. Liapi C, et al. **In Vitro Cell Dev Biol** 1990 Apr;26(4):388–92

Chemotactic response of rat macrophages is enhanced by two diastereoisomers of LTB4. Zicari A, et al. **Int J Immunopharmacol** 1989;11(6):589–96

Differential effects of the various isoforms of platelet-derived growth factor on chemotaxis of fibroblasts, monocytes, and granulocytes. Siegbahn A, et al. **J Clin Invest** 1990 Mar; 85(3):916–20

Effects of tumor necrosis factor on PMN chemotaxis, chemiluminescence, and elastase activity. Yonemaru M, et al. **J Lab Clin Med** 1989 Dec;114(6):674–81

Inhibition of neutrophil and eosinophil chemotactic responses to PAF by the PAF-antagonists WEB-2086, L-652,731, and SRI-63441. Håkansson L, et al. **J Leukoc Biol** 1990 May;47(5):449–56

In vitro human polymorphonuclear leukocyte chemokinesis and human monocyte chemotaxis are different activities of aminoterminal and carboxyterminal substance P. Wiedermann CJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Aug; 340(2):185–90

Erythropoietin has a mitogenic and positive chemotactic effect on endothelial cells. Anagnostou A, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5978–82

Macrophage-colony-stimulating factor (CSF-1) induces proliferation, chemotaxis, and reversible monocytic differentiation in myeloid progenitor cells transfected with the human c-fms/CSF-1 receptor cDNA. Pierce JH, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5613–7

Phagocytosis of particulate antigens by corneal epithelial cells stimulates interleukin-1 secretion and migration of Langerhans cells into the central cornea. Niederkorn JY, et al. **Reg Immunol** 1989 Mar-Apr;2(2):83–90

The effect of zinc oxide on Staphylococcus aureus and polymorphonuclear cells in a tissue cage model. Sunzel B, et al. **Scand J Plast Reconstr Surg Hand Surg** 1990; 24(1):31–5

[Effect of pesticides on macrophage migration activity and various indicators of metabolism] Dolinskaia SI, et al. **Gig Sanit** 1989 Jul;(7):76–7 **(Rus)**

GENETICS

Genetic approaches to cytoskeleton function and the control of cell motility. Segall JE, et al. **Curr Opin Cell Biol** 1989 Feb;1(1):44–50 (13 ref.)

Biochemical differentiation in a mutant of Dictyostelium discoideum defective in cyclic AMP chemotaxis and in intercellular cohesion. Srinivas UK, et al. **Development** 1989 Sep;107(1):153–63

IMMUNOLOGY

[Chemotaxis and cellular migration in respiratory pathology] Martinet Y, et al. **Rev Mal Respir** 1990;7(4):301–6 (31 ref.) (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Chemotaxis and chemiluminescence responses of synovial fluid polymorphonuclear leucocytes during acute reactive arthritis. Leirisalo-Repo M, et al. **Ann Rheum Dis** 1990 Aug;49(8):615–9

Characterization of a chemotactic defect in patients with Kartagener syndrome. Walter RJ, et al. **Arch Otolaryngol Head Neck Surg** 1990 Apr;116(4):465–9

Random-walk chemotaxis: trial and error as a control process. Marken RS, et al. **Behav Neurosci** 1989 Dec; 103(6):1348–55

Comparative studies of microscopically determined aggregation, degranulation, and light transmission after chemotactic activation of adult and newborn neutrophils. Rochon YP, et al. **Blood** 1990 May 15;75(10):2053–60

Neurotropism to tissue specificity in nerve regeneration. Experimental study on sciatic nerves of rat. Zhao Q, et al. **Chin Med J [Engl]** 1989 Dec;102(12):926–30

Cell locomotion and chemotaxis. Zigmond SH. **Curr Opin Cell Biol** 1989 Feb;1(1):80–6 (44 ref.)

Chemotactic migration of normal dermal fibroblasts towards epidermal growth factor and its modulation by platelet-derived growth factor and transforming growth factor-beta. Adelmann-Grill BC, et al. **Eur J Cell Biol** 1990 Apr;51(2):322–6

In vitro assessment of chemotaxis by peripheral blood neutrophils from adult and senescent C57BL/6 mice: correlation with in vivo responses to pulmonary infection with type 3 Streptococcus pneumoniae. Esposito AL, et al. **Gerontology** 1990;36(1):2–11

Activation of lysosomal enzymes in chemotactically elicited rat peritoneal macrophages. Machaiah JP. **Indian J Biochem Biophys** 1989 Oct;26(5):343–7

Phosphorylation of an N-terminal regulatory domain activates the CheB methylesterase in bacterial chemotaxis. Lupas A, et al. **J Biol Chem** 1989 Oct 15;264(29):17337–42

Normal chemotaxis in Dictyostelium discoideum cells with a depolarized plasma membrane potential. Van Duijn B, et al. **J Cell Sci** 1990 Jan;95 (Pt 1):177–83

Effects of focal cooling in the ventrolateral medulla on chemoresponsiveness in dogs. Chonan T, et al. **Respir Physiol** 1990 Apr;80(1):45–54

[Experimental studies of specific neuro-chemotaxis in peripheral nerve regeneration in the rat] Zhao Q. **Chung Hua I Hsueh Tsa Chih** 1990 Apr;70(4):191–4, 14 (Eng. Abstr.) **(Chi)**

CHEMOTAXIS, LEUKOCYTE

Saethre-Chotzen syndrome associated with defective neutrophil chemotaxis. Etzioni A, et al. **Acta Paediatr Scand** 1990 Mar;79(3):375–9

Chemiluminescence and chemotaxis assay of canine granulocytes: a methodological study. Trowald-Wigh G, et al. **Acta Vet Scand** 1990;31(1):79–86

Pulmonary response to foreign body microemboli in dogs: release of neutrophil chemoattractant activity by vascular endothelial cells. Farber HW, et al. **Am J Respir Cell Mol Biol** 1989 Jul;1(1):27–35

Chemoattractant and leukotriene B4 production from rat alveolar macrophages exposed to nitrogen dioxide. Robison TW, et al. **Am J Respir Cell Mol Biol** 1990 Jul;3(1):21–6

Neutrophils show chemotaxis to type IV collagen and its 7S domain and contain a 67 kD type IV collagen binding protein with lectin properties. Senior RM, et al. **Am J Respir Cell Mol Biol** 1989 Dec;1(6):479–87

Interaction between chemoattractants and bacterial lipopolysaccharide in the induction and enhancement of neutrophil adhesion. Young SK, et al. **Am J Respir Cell Mol Biol** 1990 Jun;2(6):523–32

Chemotactic response of neutrophils. Zigmond SH. **Am J Respir Cell Mol Biol** 1989 Dec;1(6):451–3 (6 ref.)

Optimization of the under-agarose assay of porcine neutrophil migration. Elliott GS, et al. **Am J Vet Res** 1990 Feb;51(2):245–8

Determination of macrophage chemotaxis to atherosclerotic plaque extract in domestic turkeys with hypertension. Johnson PD, et al. **Am J Vet Res** 1990 Aug;51(8):1317–20

Demonstration of neutrophil chemotactic anaphylatoxins in human dandruff. Kikuchi T, et al. **Arch Dermatol Res** 1989; 281(7):482–6

Neutrophil chemotactic activity in human gastric secretions. Kozol RA, et al. **Arch Surg** 1990 Apr;125(4):454–6

Turkey heterophil chemotaxis to Pasteurella multocida (serotype 3,4)-generated chemotactic factors. Latimer KS, et al. **Avian Dis** 1990 Jan-Mar;34(1):137–40

Neutrophil chemotactic activity of N-terminal peptides from the calpain small subunit. Kunimatsu M, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):1242–7

Chemotactic activity for human PMN generated during ethanol metabolism by rat hepatocytes: role of glutathione and glutathione peroxidase. Neuschwander-Tetri BA, et al. **Biochem Biophys Res Commun** 1990 Mar 30; 167(3):1170–6

Degranulation in human neutrophils primes the cells for subsequent responsiveness to the chemoattractant N-formylmethionylleucylphenylalanine but does not increase the sensitivity of the NADPH-oxidase to an intracellular calcium rise. Dahlgren C, et al. **Biochim Biophys Acta** 1990 Apr 9;1052(1):42–6

Immunohistochemical analysis of inflammatory infiltrates around the injection site of a streptococcal preparation, OK-432, in rat tongue. Niimi A, et al. **Biotherapy** 1990; 2(1):13–20

Local and global changes in cytosolic free calcium in neutrophils during chemotaxis and phagocytosis. Marks PW, et al. **Cell Calcium** 1990 Feb-Mar;11(2-3):181–90

In vitro migration of rat large granular lymphocytes. Punturieri A, et al. **Cell Immunol** 1989 Oct 15;123(2):257–63

An increase in polymorphonuclear leucocyte chemotaxis accompanied by a change in the membrane fluidity with age during childhood. Yasui K, et al. **Clin Exp Immunol** 1990 Jul;81(1):156–9

Modulation of leucocyte locomotion by interleukin-1. Zielinski CC, et al. **Clin Exp Immunol** 1990 Jun;80(3):444–7

In vivo chemotaxis of oxidised lipids: 1. Chemotactic effects of oxidised arachidonic acid on rat leucocytes. Onyia KA. **Comp Immunol Microbiol Infect Dis** 1989;12(3):77–82

Additional evidence of autoxidation as a possible mechanism of neutrophil locomotory dysfunction in blunt trauma. Maderazo EG, et al. **Crit Care Med** 1990 Feb;18(2):141–7

Chemotaxis. Hugli TE. **Curr Opin Immunol** 1989 Oct; 2(1):19–27 (27 ref.)

Stimulation of lymphocyte migration by a novel low-molecular weight compound in normal human skin and plasma. Bacon KB, et al. **Eur J Immunol** 1990 Mar; 20(3):565–71

Chemotactic activity of pertussis toxin on murine lymphocytes. Its potential role on lymphocyte accumulation in the lung. Torre D, et al. **FEMS Microbiol Immunol** 1990 May;2(1):45–50

Chemoattractant-stimulated polymorphonuclear leukocytes contain two populations of actin filaments that differ in their spatial distributions and relative stabilities. Cassimeris L, et al. **J Cell Biol** 1990 Apr;110(4):1067–75

The receptor for urokinase type plasminogen activator polarizes expression of the protease to the leading edge of migrating monocytes and promotes degradation of enzyme inhibitor complexes. Estreicher A, et al. **J Cell Biol** 1990 Aug;111(2):783–92

Polymorphonuclear leukocyte adherence induces actin polymerization by a transduction pathway which differs from that used by chemoattractants. Southwick FS, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1561–9

The adenosine/neutrophil paradox resolved: human neutrophils possess both A1 and A2 receptors that promote chemotaxis and inhibit O2 generation, respectively. Cronstein BN, et al. **J Clin Invest** 1990 Apr;85(4):1150–7

CAP37, a human neutrophil-derived chemotactic factor with monocyte specific activity. Pereira HA, et al. **J Clin Invest** 1990 May;85(5):1468–76

IL-2-based immunotherapy alters circulating neutrophil Fc receptor expression and chemotaxis. Jablons D, et al. **J Immunol** 1990 May 1;144(9):3630–6

Leukocyte specificity and binding of human neutrophil attractant/activation protein-1. Leonard EJ, et al. **J Immunol** 1990 Feb 15;144(4):1323–30

Identification of a novel and highly potent eosinophil chemotactic lipid in human eosinophils treated with arachidonic acid. Morita E, et al. **J Immunol** 1990 Mar 1;144(5):1893–900

Suppression of human lymphocyte chemotaxis and transendothelial migration by anti-LFA-1 antibody. Van Epps DE, et al. **J Immunol** 1989 Nov 15;143(10):3207–10

Identification of high affinity receptors for human monocyte chemoattractant protein-1 on human monocytes. Yoshimura T, et al. **J Immunol** 1990 Jul 1;145(1):292–7

Measurement of leukocyte motility and chemotaxis parameters with the Millipore filter assay. Buettner HM, et al. **J Immunol Methods** 1989 Sep 29;123(1):25–37

Neutrophil chemotactic heterogeneity to N-formyl-methionyl-leucyl-phenylalanine detected by the under-agarose assay. Quitt M, et al. **J Lab Clin Med** 1990 Feb;115(2):159–64

Phlogistic and chemotactic activities of alveolar hydatid cyst antigen. Alkarmi T, et al. **J Parasitol** 1989 Oct;75(5):711–9

Impaired chemotactic responses of bronchoalveolar leukocytes in experimental pneumoconiosis. Donaldson K, et al. **J Pathol** 1990 Jan;160(1):63–9

Chemotaxis of gingival neutrophils: scanning electron microscopy. Farber PA. **J Periodontol** 1989 Oct; 60(10):540–3

Neutrophil surface protein markers as indicators of defective chemotaxis in LJP. Van Dyke TE, et al. **J Periodontol** 1990 Mar;61(3):180–4

Antiviral effect of lymphokine-activated killer cells: chemotaxis and homing to sites of virus infection. Natuk RJ, et al. **J Virol** 1989 Nov;63(11):4969–71

The discrepancy between chemotaxis and leukotriene B4 production in a patient with chronic neutrophilic leukemia. Oogushi K, et al. **Jpn J Med** 1989 Nov-Dec;28(6):717–21

PMN cells from chronic myeloid leukemia (CML) patients show defective chemotaxis in remission. Naik NR, et al. **Leuk Res** 1989;13(11):959–65

Resistance to the Sterne strain of B. anthracis: phagocytic cell responses of resistant and susceptible mice. Welkos SL, et al. **Microb Pathog** 1989 Jul;7(1):15–35

Recognition of protein structure in leukocyte chemotaxis. Wilkinson PC. **Nature** 1973 Aug 24;244(5417):512–3

Chemotactic responses of neutrophils in cats with spontaneous feline infectious peritonitis. Tsuji M, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):917–23

Physicochemical characterization of a polypeptide present in uremic serum that inhibits the biological activity of polymorphonuclear cells. Hörl WH, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6353–7

Chemotactic response of bovine neutrophils to Pasteurella haemolytica culture fluid. Brunner CJ, et al. **Vet Immunol Immunopathol** 1989 Jul;21(3–4):279–92

Chemiluminescence and chemotaxis assay of porcine polymorphonuclear cells. A methodological study. Thoren-Tolling K. **Zentralbl Veterinarmed [A]** 1990 Apr; 37(3):174–85

[Adhesion, migration and phagocytic behavior of blood granulocytic neutrophils from the rat and humans in essential hypertension] Blank I, et al. **Biomed Biochim Acta** 1990;49(4):235–41 (Eng. Abstr.) **(Ger)**

[Neutrophil chemotaxis. II. Clinical implications and therapeutic indications in children] Cazzola GA, et al. **Pediatr Med Chir** 1990 Jan-Feb;12(1):25–31 (97 ref.) (Eng. Abstr.) **(Ita)**

[Role of arachidonic acid cascade and related substances in blood and bone marrow cells] Okuma M. **Nippon Rinsho** 1990 Jun;48(6):1154–9 **(Jpn)**

[Immunological function of monocytes in pregnancy and the puerperium] Rodríguez Rodríguez MC, et al. **An Esp Pediatr** 1989 Jul;31(1):33–5 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Potassium iodide inhibits neutrophil chemotaxis. Honma K, et al. **Acta Derm Venereol (Stockh)** 1990;70(3):247–9

LTD4 increases cytosolic free calcium and inositol phosphates in human neutrophils: inhibition by the novel LTD4 receptor antagonist, SR2640, and possible relation

to modulation of chemotaxis. Bouchelouche PN, et al. **Agents Actions** 1990 Mar;29(3–4):299–307

Comparison of LTB4– and C5a–stimulated chemotaxis of isolated human neutrophils: difference revealed by cell migration in thick filters using the multiwell cap procedure. Psychoyos S, et al. **Agents Actions** 1989 Jun;27(3–4):380–4

Is interleukin–1 alpha a direct activator of neutrophil migration and phagocytosis in the dog? Thomsen MK. **Agents Actions** 1990 Jan;29(1–2):35–6

Mechanisms of tumor necrosis factor–alpha alteration of PMN adhesion and migration. Salyer JL, et al. **Am J Pathol** 1990 Apr;136(4):831–41

Comparison of leukotriene B4–induced neutrophil migration through different cellular barriers. Casale TB, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):C639–47

Role of oxidants in ischemia/reperfusion–induced granulocyte infiltration. Zimmerman BJ, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):G185–90

Effect of alpha–1–proteinase inhibitor on neutrophil chemotaxis. Stockley RA, et al. **Am J Respir Cell Mol Biol** 1990 Feb;2(2):163–70

Chemoattractant activity of Staphylococcus aureus serine proteinase modified human plasma alpha–1–proteinase inhibitor. Baran K, et al. **Antonie Van Leeuwenhoek** 1989 Nov;56(4):361–5

Potent and specific inhibition of IL–8–, IL–1 alpha– and IL–1 beta–induced in vitro human lymphocyte migration by calcium channel antagonists. Bacon KB, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):349–54

Non–steroidal anti–inflammatory drug–copper complex modulation of polymorphonuclear leukocyte migration. Roch–Arveiller M, et al. **Biochem Pharmacol** 1990 Feb 1; 39(3):569–74

Production of low molecular weight chemoattractants for leukocytes by periovulatory ovine follicles. Murdoch WJ, et al. **Biol Reprod** 1989 Jul;41(1):86–90

Inhibition of chemotaxis Ng–monomethyl–L–arginine: a role for cyclic GMP. Kaplan SS, et al. **Blood** 1989 Nov 1; 74(6):1885–7

Isoflurane but not halothane stimulates neutrophil chemotaxis. Erskine R, et al. **Br J Anaesth** 1990 Jun; 64(6):723–7

Inhibition of platelet–activating factor– and zymosan–activated serum–induced chemotaxis of human neutrophils by nedocromil sodium, BN 52021 and sodium cromoglycate. Bruijnzeel PL, et al. **Br J Pharmacol** 1989 Aug;97(4):1251–7

Inhibition of neutrophil and eosinophil induced chemotaxis by nedocromil sodium and sodium cromoglycate. Bruijnzeel PL, et al. **Br J Pharmacol** 1990 Apr; 99(4):798–802

Chemotactic effect of PAF–acether on peritoneal eosinophils from normal rats. Martins MA, et al. **Braz J Med Biol Res** 1989;22(9):1151–4

The effect of n–3 polyunsaturated fatty acids on lipids, platelet function, coagulation, fibrinolysis and monocyte chemotaxis in patients with hypertension. Schmidt EB, et al. **Clin Chim Acta** 1990 Jul;189(1):25–32

Alterations in arachidonic acid metabolism and chemotactic response in polymorphonuclear leukocytes from patients with rheumatoid arthritis. Smith DM, et al. **Clin Exp Rheumatol** 1989 Sep–Oct;7(5):471–7

Monoamines alter in vitro migration of chicken leukocytes. McCorkle FM, et al. **Dev Comp Immunol** 1990 Winter; 14(1):85–93

Depression of polymorphonuclear chemotaxis and T–lymphocyte proliferation following histamine inhalation in man. Bury TB, et al. **Eur Respir J** 1989 Oct;2(9):828–33

Endothelin and PDGF do not stimulate peripheral blood monocyte chemotaxis, adhesion to endothelium, and superoxide production. Bath PM, et al. **Exp Cell Res** 1990 Apr;187(2):339–42

Nicotine increases human polymorphonuclear leukocytes chemotactic response—a possible additional mechanism of lung injury in cigarette smokers. Nowak D, et al. **Exp Pathol** 1990;39(1):37–43

Granulocyte/macrophage colony–stimulating factor primes human neutrophils for increased diacylglycerol generation in response to chemoattractant. Tyagi SR, et al. **FEBS Lett** 1989 Oct 23;257(1):188–90

Inhibition of chemotactic migration of human neutrophilic granulocytes by recombinant human granulocyte–macrophage colony–stimulating factor. Kownatzki E, et al. **Immunopharmacology** 1990 Mar–Apr; 19(2):139–43

Influence of Ly146032 on chemotaxis, chemiluminescence of PMN and lymphocyte transformation in vitro. Schubert S, et al. **Infection** 1989 Nov–Dec;17(6):374–7

Effect of a leukotriene B4 receptor antagonist on leukotriene B4–induced neutrophil chemotaxis in cavine dermis. Fretland DJ, et al. **Inflammation** 1989 Oct;13(5):601–5

Neutrophil chemotactic activity is modulated by human cystatin C, an inhibitor of cysteine proteases. Leung–Tack J, et al. **Inflammation** 1990 Jun;14(3):247–58

Chemotactic response of human monocytes to pentapeptide analog derived from immunodeficiency virus protein gp 120. Spisani S, et al. **Inflammation** 1990 Feb;14(1):55–60

Chemotactic competence of neutrophils from neonatal ca 'ves. Functional comparison with neutrophils from adult cattle. Zwahlen RD, et al. **Inflammation** 1990 Feb;14(1):109–23

Chemokinetic effects of exogenous and endogenous tumor necrosis factor alpha on human blood monocytes. Mushtaha AA, et al. **Int Arch Allergy Appl Immunol** 1989; 90(1):11–5

Effect of rokitamycin on human polymorphonuclear leukocyte chemotaxis. Torre D, et al. **Int J Tissue React** 1989;11(1):27–9

Effect of zinc therapy on neutrophil chemotaxis in psoriasis. Leibovici V, et al. **Isr J Med Sci** 1990 Jun;26(6):306–9

Neutrophil chemotactic activity in toluene diisocyanate (TDI)–induced asthma. Sastre J, et al. **J Allergy Clin Immunol** 1990 Mar;85(3):567–72

Polyvalent cations inhibit human neutrophil chemotaxis by interfering with the polymerization of actin. Simchowitz L, et al. **J Biol Chem** 1990 Aug 15;265(23):13457–63

Human monocyte chemotactic activity of calcitonin and somatostatin related peptides: modulation by chronic peptide treatment. Sacerdote P, et al. **J Clin Endocrinol Metab** 1990 Jan;70(1):141–8

Monocyte–chemotactic activity of defensins from human neutrophils. Territo MC, et al. **J Clin Invest** 1989 Dec; 84(6):2017–20

Effects of chlorhexidine solution on neutrophil locomotion in vitro. Watts TL, et al. **J Dent** 1989 Dec;17(6):287–9

Antiinflammatory peptides (antiflammins) inhibit synthesis of platelet–activating factor, neutrophil aggregation and chemotaxis, and intradermal inflammatory reactions. Camussi G, et al. **J Exp Med** 1990 Mar 1;171(3):913–27

Stimulation of mast cell chemotaxis by interleukin 3. Matsuura N, et al. **J Exp Med** 1989 Oct 1;170(4):1421–6

Adenosine and related compounds counteract tumor necrosis factor–alpha inhibition of neutrophil migration: implication of a novel cyclic AMP–independent action on the cell surface. Sullivan GW, et al. **J Immunol** 1990 Sep 1; 145(5):1537–44

Influence of standard and novel LTB4 analogs on human neutrophil chemotaxis measured by the multiwell cap assay. Psychoyos S, et al. **J Immunol Methods** 1989 Nov 30; 124(2):189–96

Human C–reactive protein inhibits neutrophil chemotaxis in vitro: possible implications for the adult respiratory distress syndrome. Kew RR, et al. **J Lab Clin Med** 1990 Mar; 115(3):339–45

Leukotriene B4 modulates phospholipid methylation and chemotaxis in human polymorphonuclear leukocytes. Bomalaski JS, et al. **J Leukoc Biol** 1990 Jan;47(1):1–12

Inhibitory effect of SV–IV, a major protein secreted from the rat seminal vesicle epithelium, on phagocytosis and chemotaxis of human polymorphonuclear leukocytes. Metafora S, et al. **J Leukoc Biol** 1989 Nov;46(5):409–16

Failure of F–Met–Leu–Phe to induce chemotaxis in differentiated promyelocytic (HL–60) leukemia cells. Sirak AA, et al. **J Leukoc Biol** 1990 Oct;48(4):333–42

Intestinal mast cells and neutrophil chemotactic activity of serum following a single challenge with gluten in celiac children on a gluten–free diet. Horváth K, et al. **J Pediatr Gastroenterol Nutr** 1989 Oct;9(3):276–80

Improvement of neutrophil migration by systemic vitamin C in neonates. Vohra K, et al. **J Perinatol** 1990 Jun; 10(2):134–6

The effects of ibuprofen and diclofenac on the chemotaxis and adenosine triphosphate level of polymorphonuclear cells in vitro. Partsch G, et al. **J Rheumatol** 1990 May; 17(5):583–8

Effects of non–steroidal anti–inflammatory drugs on canine neutrophil chemotaxis. Strøm H, et al. **J Vet Pharmacol Ther** 1990 Jun;13(2):186–91

An acquired chemotactic defect in neutrophils from patients receiving interleukin–2 immunotherapy. Klempner MS, et al. **N Engl J Med** 1990 Apr 5;322(14):959–65

A defect in chemotaxis from interleukin–2 [letter] Schleiffenbaum B, et al. **N Engl J Med** 1990 Sep 6; 323(10):682–3

Cytokines enhance the production of a chemotactic factor for polymorphonuclear leukocytes by rat renal glomerular epithelioid cells. Watanabe K, et al. **Nephron** 1990; 54(2):169–75

Characterization of a class of nonformylated Enterococcus faecalis–derived neutrophil chemotactic peptides: the sex pheromones. Sannomiya P, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):66–70

Differential migration of lymphoblasts and small lymphocytes induced by mitogens in culture: characteristics of lymphoid cells. Tseng J, et al. **Reg Immunol** 1989 Jan–Feb;2(1):50–9

15–Hydroxyeicosatetraenoic acid (15–HETE) specifically inhibits LTB4–induced chemotaxis of human neutrophils. Ternowitz T, et al. **Skin Pharmacol** 1988;1(2):93–9

Effect of leukotriene B5 on the accumulation of polymorphonuclear leukocytes in unstimulated and leukotriene B4–stimulated human skin. Wozel G, et al. **Skin Pharmacol** 1990;3(1):45–8

Identification of the C5a des Arg cochemotaxin. Perez HD, et al. **Trans Assoc Am Physicians** 1988;101:242–9

Effects of proinflammatory mediators on canine neutrophil chemotaxis and aggregation. Strøm H, et al. **Vet Immunol Immunopathol** 1990 Jul;25(3):209–17

[The inhibitory effect of hydrocortisone on the chemotactic migration of human leukocytes] Liu ZM, et al. **Sheng Li Hsueh Pao** 1990 Apr;42(2):163–8 (Eng. Abstr.) **(Chi)**

[The effect of a single dose of dexamethasone on the production of superoxide anion and on the chemotaxis of blood polynuclear neutrophils in the horse] Guelfi JF, et al. **Comp Immunol Microbiol Infect Dis** 1989;12(4):105–13 (Eng. Abstr.) **(Fre)**

[Studies on the effect of mistletoe extract on the chemotactic activity and on chemiluminescence of polymorphonuclear leukocytes in vitro] Schmidt KH. **Planta Med** 1989 Oct; 55(5):455–7 (Eng. Abstr.) **(Ger)**

[Effect of isosorbide dinitrate on neutrophil migration in vivo] Wysocki H, et al. **Kardiol Pol** 1989;32(5):255–8 (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

Neutrophil chemotaxis, random migration, and adherence in patients with hyperthyroidism. Wolach B, et al. **Acta Endocrinol (Copenh)** 1989 Dec;121(6):817–20

In vivo neutrophil delivery in men with alcoholic cirrhosis is normal despite depressed in vitro chemotaxis. MacGregor RR. **Alcoholism** 1990 Apr;14(2):195–9

In vitro migration responses of neutrophils from cows and calves. Olson DP. **Am J Vet Res** 1990 Jul;51(7):973–7

Chemotactic properties of interleukin 1 [letter; comment] van der Raaij–Helmer LH, et al. **Immunol Today** 1990 May; 11(5):151–2 Comment on: Immunol Today 1990 Jan;11(1):13–20.

Inflammatory responses and the generation of chemoattractant activity in cowpox virus–infected tissues. Chua TP, et al. **Immunology** 1990 Feb;69(2):202–8

Identification of an IgA inhibitor of neutrophil chemotaxis and its membrane target for the metabolic burst. Moy JN, et al. **Immunology** 1990 Feb;69(2):257–63

Exercise–induced asthma and the generation of neutrophil chemotactic activity. Venge P, et al. **J Allergy Clin Immunol** 1990 Feb;85(2):498–504

Alteration of rat polymorphonuclear leukocyte function after thermal injury. Gruber DF, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):394–401

Inhibition of leukocyte function by serum from patients with trichinellosis. Bruschi F, et al. **J Parasitol** 1990 Aug; 76(4):577–8

Human neutrophils: evaluation of adherence, chemotaxis and phagocytosis, following interaction with radiolabeled antibodies. Thakur ML, et al. **Nucl Med Commun** 1990 Jan; 11(1):37–43

On septicemia in an adult with cystic fibrosis: neutrophil function and serum chemoattractant activity [letter] Colt HG, et al. **Pediatr Pulmonol** 1990;9(1):63–4

Influence of technical parameters on the in vitro motility of equine neutrophils in the presence of streptococcal culture supernatant. Blancquaert AB, et al. **Vet Immunol Immunopathol** 1989 Nov 30;23(1–2):85–101

Polymorphonuclear leucocyte function: relationship between induced migration into the bovine mammary gland and in vitro cell activity. Grommers FJ, et al. **Vet Immunol Immunopathol** 1989 Nov 30;23(1–2):75–83

The influence of mononuclear leukocytes on the chemotactic responsiveness of polymorphonuclear leukocytes of bovines. Henricks PA, et al. **Zentralbl Veterinarmed [B]** 1990 Jul;37(5):332–6

[Chemotactic activity of serum neutrophils during aspirin–induced bronchial spasm] Grzelewska–Rzymowska I, et al. **Pol Arch Med Wewn** 1987 Aug;78(2):65–72 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Inhibition of leukocyte chemotaxis by serum factor in diabetes mellitus: selective depression of cell responses mediated by complement–derived chemoattractants. Sannomiya P, et al. **Agents Actions** 1990 Jun;30(3–4):369–76

A simplified Boyden chamber assay for neutrophil chemotaxis based on quantitation of myeloperoxidase. Somersalo K, et al. **Anal Biochem** 1990 Mar;185(2):238–42

Induction of monocyte chemotaxis in devascularized rabbit bone. Sarkar MR, et al. **Arch Orthop Trauma Surg** 1990; 109(2):97–101

Characterization of a chemotactic defect in patients with Kartagener syndrome. Walter RJ, et al. **Arch Otolaryngol Head Neck Surg** 1990 Apr;116(4):465–9

Periodic elevation of complement activation products in peritoneal dialysis effluent. Holmes CJ, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):587–9

Locomotion and chemotaxis of leukocytes: gradient perception and locomotor capacity. Haston WS, et al. **Curr Opin Immunol** 1988 Sep–Oct;1(1):5–9 (12 ref.)

The chemotactic properties of cartilage glycosaminoglycans for polymorphonuclear neutrophils. Moore AR, et al. **Int J Tissue React** 1989;11(6):301–7

[Neutrophil chemotaxis. I. Physiology aspects and study methods] Valletta EA, et al. **Pediatr Med Chir** 1989 Nov–Dec;11(6):617–22 (62 ref.) (Eng. Abstr.) **(Ita)**

[Studies on defence effects of recombinant human granulocyte colony–stimulating factor (G–CSF) to infections. I. Induction of neutrophil polarization by G–CSF] Hirota M, et al. **Kansenshogaku Zasshi** 1990 Apr; 64(4):425–9 (Eng. Abstr.) **(Jpn)**

[Role of polymorphonuclear leukocytes in experimental lung injury—chemotaxis and active oxygen metabolite production] Horinouchi H. **Nippon Geka Gakkai Zasshi** 1990 Jun;91(6):741–8 (Eng. Abstr.) **(Jpn)**

[Plasma chemotactic activity stimulating the adhesiveness and inducing the aggregation of neutrophils in patients with acute pancreatitis] Wysocki H, et al. **Pol Arch Med Wewn** 1987 Oct;78(4):230–4 (Eng. Abstr.) **(Pol)**

CHEMOTHERAPY see **DRUG THERAPY**

CHENIC ACID see **CHENODEOXYCHOLIC ACID**

CHENODEOXYCHOLATE see **CHENODEOXYCHOLIC ACID**

CHENODEOXYCHOLIC ACID

ADMINISTRATION & DOSAGE

[Litholysis and lithotripsy of gallstones. State of the art and prospects] Waninger J, et al. **Fortschr Med** 1989 Nov 10; 107(32):679–82, 691 (29 ref.) (Eng. Abstr.) **(Ger)**

[Cholestatic liver diseases and modern bile acid therapy (Medica '89)] Stiefelhagen P. **Internist (Berl)** 1990 Jun; 31(6):434–5 **(Ger)**

ANALOGS & DERIVATIVES

Biological properties of the 2–fluoro–beta–alanine conjugates of cholic acid and chenodeoxycholic acid in the isolated perfused rat liver. Sweeny DJ, et al. **Biochim Biophys Acta** 1990 Aug 13;1054(1):21–5

Tauroursodeoxycholate prevents taurolithocholate–induced cholestasis and toxicity in rat liver. Schölmerich J, et al. **J Hepatol** 1990 May;10(3):280–3

Synthesis of new bile salt analogues, sodium 3 alpha, 7 alpha–dihydroxy–5 beta–cholane–24–sulfonate and sodium 3 alpha, 7 beta–dihydroxy–5 beta–cholane–24–sulfonate. Kihira K, et al. **J Lipid Res** 1990 Jul;31(7):1323–6

ANALYSIS

Ursodeoxycholic acid, chenodeoxycholic acid, and 7–ketolithocholic acid are primary bile acids of the guinea pig. Tint GS, et al. **J Lipid Res** 1990 Jul;31(7):1301–6

[Determination of bile acids in bear gall drainage by thin layer chromatographic scanning] Wang FS, et al. **Yao Hsueh Hsueh Pao** 1989;24(5):397–400 (Eng. Abstr.) **(Chi)**

ANTAGONISTS & INHIBITORS

Colon cancer and dietary fiber: cellulose inhibits the DNA–damaging ability of bile acids. Cheah PY, et al. **Nutr Cancer** 1990;13(1–2):51–7

METABOLISM

Intestinal absorption of unconjugated dihydroxy bile acids: non–mediation by the carrier system involved in long chain fatty acid absorption. Stremmel W, et al. **Lipids** 1990 Jan; 25(1):11–6

PHARMACOLOGY

Effect of 25–hydroxycholesterol and bile acids on the regulation of cholesterol metabolism in Hep G2 cells. Carlson TL, et al. **Biochem J** 1989 Nov 15;264(1):241–7

Bile acids reversible effects on small intestinal permeability. An in vitro study in the rabbit. Fasano A, et al. **Dig Dis Sci** 1990 Jul;35(7):801–8

Acute effects of ursodeoxycholic and chenodeoxycholic acid on the small intestinal absorption of bile acids. Stiehl A, et al. **Gastroenterology** 1990 Feb;98(2):424–8

Unusual trihydroxy bile acids in the urine of patients treated with chenodeoxycholate, ursodeoxycholate or rifampicin and those with cirrhosis. Nakashima T, et al. **Hepatology** 1990 Feb;11(2):255–60

Effects of bile acid depletion and of ursodeoxycholic and chenodeoxycholic acids on biliary protein secretion in the hamster. Malavolti M, et al. **Life Sci** 1990;46(23):1727–37

Role of bile and bile salts on cyclosporine absorption in dogs. Ericzon BG, et al. **Transplant Proc** 1987 Feb;19(1 Pt 2):1248–9

THERAPEUTIC USE

Postdissolution gallstone recurrence: a lifetime sentence to the rock pile or not? Auteri AG, et al. **Gastroenterology** 1990 Jan;98(1):241–2

In vivo kinetics of radiolucent gallstone dissolution by oral dihydroxy bile acids. Senior JR, et al. **Gastroenterology** 1990 Jul;99(1):243–51

Early involvement of hepatic parenchymal cells in erythrohepatic protoporphyria? An ultrastructural study of patients with and without overt liver disease and the effect of chenodeoxycholic acid treatment. Rademakers LH, et al. **Hepatology** 1990 Mar;11(3):449–57

Cerebrotendinous xanthomatosis: clinical, electrophysiological and nerve biopsy findings, and response to treatment with chenodeoxycholic acid. Donaghy M, et al. **J Neurol** 1990 Jun;237(3):216–9 (20 ref.)

Gallstone dissolution agents. Fink A, et al. **Ohio Med** 1990 Mar;86(3):210–3

[Oral dissolving treatment of gallbladder calculi: focus in 1989] Erlinger S. **Ann Chir** 1989;43(6):417–9 (Eng. Abstr.) **(Fre)**

[Chemolitholysis of gallstones as ambulatory treatment by the established physician] Kienzle HF, et al. **Leber Magen Darm** 1989 Sep;19(5):248–52, 254 (Eng. Abstr.) **(Ger)**

[Nucleation time and growth time in patients with cholesterol gallstone—factors affecting nucleation time and growth time and effect of UDCA and CDCA] Nomura Y. **Nippon Shokakibyo Gakkai Zasshi** 1989 May;86(5):1103–13 (Eng. Abstr.) **(Jpn)**

[Medical treatment of cholelithiasis. I. Bile acids] Moreno Sánchez D. **Rev Esp Enferm Dig** 1990 Feb;77(2):159–64 (96 ref.) (Eng. Abstr.) **(Spa)**

TOXICITY

Cimetidine reduces bile acid–mediated small intestinal mucosal injury in rats in vivo. Erickson RA. **Dig Dis Sci** 1990 Jul;35(7):809–14

CHENODIOL see **CHENODEOXYCHOLIC ACID**

CHENUDA VIRUS see **REOVIRIDAE**

CHERUBISM

[Cherubism. Description of a case] Barone R, et al. **Minerva Stomatol** 1989 Nov;38(11):1175–8 (Eng. Abstr.) **(Ita)**

[Cherubism: case report and literature review] Koželj V. **Chir Maxillofac Plast** 1988;18(1–3):49–53 (17 ref.) (Eng. Abstr.) **(Scr)**

GENETICS

Cherubism. Findings in three cases in the same family. Vaillant JM, et al. **J Craniomaxillofac Surg** 1989 Nov; 17(8):345–9

Fibrous dysplasia and cherubism as an hereditary familial disease. Follow–up of four generations. Zohar Y, et al. **J Craniomaxillofac Surg** 1989 Nov;17(8):340–4

RADIOGRAPHY

[Cherubism. Apropos of case reports of 3 families] Chossegros C, et al. **Rev Stomatol Chir Maxillofac** 1990; 91(1):23–32 (44 ref.) (Eng. Abstr.) **(Fre)**

CHEST see **THORAX**

CHEST PAIN

see related

ANGINA PECTORIS

Chest pain in children. Selbst SM. **Am Fam Physician** 1990 Jan;41(1):179–86 (24 ref.)

Early "step–down" transfer of low–risk patients with chest pain. A controlled interventional trial. Weingarten S, et al. **Ann Intern Med** 1990 Aug 15;113(4):283–9

The effect of gender on the probability of myocardial infarction among emergency department patients with acute chest pain: a report from the Multicenter Chest Pain Study Group. Cunningham MA, et al. **J Gen Intern Med** 1989 Sep–Oct;4(5):392–8

Non cardiac chest pain—current concepts. Ahmed W. **JPMA** 1990 Jan;40(1):1–3 (38 ref.)

Visceral pain: a review of experimental studies. Ness TJ, et al. **Pain** 1990 May;41(2):167–234 (503 ref.)

An audit of doctor's management of patients with chest pain in the accident and emergency department. Emerson PA, et al. **Q J Med** 1989 Mar;70(263):213–20

CHEMICALLY INDUCED

An angiographic and histologic study of cocaine–induced chest pain. Majid PA, et al. **Am J Cardiol** 1990 Mar 15; 65(11):812–4

Near syncope and chest tightness after administration of apraclonidine before argon laser iridotomy. King MH, et al. **Am J Ophthalmol** 1990 Sep 15;110(3):308–9

Dihydroergotamine interaction with propranolol [letter] Gandy W. **Ann Emerg Med** 1990 Feb;19(2):221

Chest pain—another adverse reaction to vancomycin [letter] Miralles R, et al. **Chest** 1990 Jun;97(6):1504

The effects of adenosine on chest pain and coronary dilation [letter] Sylvén C, et al. **Circulation** 1990 Aug;82(2):662–3

Chest pain and oesophageal pressure relationships in man following an intravenous bolus of adenosine. Melcher A, et al. **Clin Physiol** 1989 Oct;9(5):441–8

Intravenous adenosine but not its first metabolite inosine provokes chest pain in healthy volunteers. Lagerqvist B, et al. **J Cardiovasc Pharmacol** 1990 Jul;16(1):173–6

COMPLICATIONS

Chest pain in chronic sputum production: a neglected symptom. Munro NC, et al. **Respir Med** 1989 Jul; 83(4):339–41

DIAGNOSIS

Recurrent facial swelling and chest tightness [clinical conference] Sue MA, et al. **Ann Allergy** 1990 Jul; 65(1):18–21

The emerging role of echocardiography in the emergency department. Hauser AM. **Ann Emerg Med** 1989 Dec; 18(12):1298–303

Angina–like chest pain: head, heart or oesophagus? Schofield PM, et al. **Br J Hosp Med** 1990 Jun;43(6):443–7 (32 ref.)

Ambulatory 24 hour intraoesophageal pH and pressure recordings v provocation tests in the diagnosis of chest pain of oesophageal origin. Ghillebert G, et al. **Gut** 1990 Jul;31(7):738–44

An exploratory report of chest pain in primary care. A report from ASPN. **J Am Board Fam Pract** 1990 Jul–Sep; 3(3):143–50

Chest pain, cardiac disease, and panic disorder. Katon WJ. **J Clin Psychiatry** 1990 May;51 Suppl:27–30; discussion 50–3 (38 ref.)

Right arm involvement and pain extension can help to differentiate coronary diseases from chest pain of other origin: a prospective emergency ward study of 278 consecutive patients admitted for chest pain. Berger JP, et al. **J Intern Med** 1990 Mar;227(3):165–72

[The value of ambulatory 24–hour esophageal manometry in the diagnosis of retrosternal pain of non–cardiac origin] Breumelhof R, et al. **Ned Tijdschr Geneeskd** 1989 Oct 28; 133(43):2124–9 (Eng. Abstr.) **(Dut)**

[Questionable usefulness of the edrophonium test in the diagnosis of non–cardiac retrosternal pain] Apollonio G, et al. **Schweiz Med Wochenschr** 1990 Jun 2;120(22):830–2 (Eng. Abstr.) **(Fre)**

DRUG THERAPY

Resolution of atypical chest pain during treatment for idiopathic orthostatic edema [letter] Leskowitz SC, et al. **Am J Gastroenterol** 1990 May;85(5):621–2

Emergency room patients, chest pain, and thrombolysis [letter] [published erratum appears in Ann Intern Med 1989 Dec 1;111(11):954] [comment] **Ann Intern Med** 1989 Oct 15;111(8):685–6 Comment on: Ann Intern Med 1989 Jun 15;110(12):957–62.

Early use of aspirin [letter; comment] [see comments] Elwood PC. **Lancet** 1990 Feb 24;335(8687):486 Comment on: Lancet 1990 Jan 20;335(8682):163. Comment in: Lancet 1990 Apr 14;335(8694):923.

Photoallergic reaction induced by piroxicam. Sunohara A, et al. **Photodermatol** 1989 Aug;6(4):188–90

ENZYMOLOGY

ATP: creatine phosphotransferase in the diagnosis of acute chest pain. Griffiths PD. **Br Heart J** 1966 Mar; 28(2):199–203

EPIDEMIOLOGY

Risk of coronary heart disease in subjects with chest discomfort: the Framingham Heart Study. Murabito JM, et al. **Am J Med** 1990 Sep;89(3):297–302

ETHNOLOGY

Use of medical care for chest pain: differences between blacks and whites. Strogatz DS. **Am J Public Health** 1990 Mar; 80(3):290–4

ETIOLOGY

Clinical implications of exercise–induced chest pain: comparison of patients with and without pathologic Q waves in coronary artery disease. Ozawa T, et al. **Am Heart J** 1990 Sep;120(3):550–4

Xiphoidynia: an uncommon cause of exertional chest pain [letter] Howell J. **Am J Emerg Med** 1990 Mar;8(2):176

Intraesophageal balloon distention versus drug provocation in the evaluation of noncardiac chest pain. Deschner WK, et al. **Am J Gastroenterol** 1990 Aug;85(8):938–43

Sternal wire–induced persistent chest pain: a possible hypersensitivity reaction. Fine PG, et al. **Ann Thorac Surg** 1990 Jan;49(1):135–6

The prevalence of abnormal esophageal test results in patients with cardiovascular disease and unexplained chest pain. Hewson EG, et al. **Arch Intern Med** 1990 May;150(5):965–9

Atypical chest pain as an initial presentation of primary fibromyalgia. Pellegrino MJ. **Arch Phys Med Rehabil** 1990 Jun;71(7):526–8

Characteristics of children presenting with chest pain to a pediatric emergency department. Rowe BH, et al. **Can Med Assoc J** 1990 Sep 1;143(5):388–94

Acute pleuritic chest pain and lung mass in an elderly woman. Bensard DD, et al. **Chest** 1990 Jun;97(6):1473–4

Dramatic electrocardiographic T–wave changes associated with gastric dilatation. Frais MA, et al. **Chest** 1990 Aug; 98(2):489–90

Chest pain and increased CK–MB enzyme levels [clinical conference] Georgiou D, et al. **Chest** 1990 Aug;98(2):442–7

Chest pain in children. Follow–up of patients previously reported. Selbst SM, et al. **Clin Pediatr (Phila)** 1990 Jul; 29(7):374–7

Diagnosis of chest pain of esophageal origin. A guideline of the Patient Care Committee of the American Gastroenterological Association. Browning TH. **Dig Dis Sci** 1990 Mar;35(3):289–93

Noncardiac chest pain. The crumbling of the sphinx [editorial] [see comments] Cohen S. **Dig Dis Sci** 1989 Nov; 34(11):1649–50 Comment in: Dig Dis Sci 1990 Mar;35(3):411.

Prospective evaluation of high–dose bethanechol in investigation of esophageal chest pain. Deschner WK, et al. **Dig Dis Sci** 1989 Nov;34(11):1656–61

Comparison of esophageal manometry, provocative testing, and ambulatory monitoring in patients with unexplained chest pain. Hewson EG, et al. **Dig Dis Sci** 1990 Mar; 35(3):302–9

Noncardiac chest pain, the crumbling of the sphinx [letter; comment] Kahrilas PJ. **Dig Dis Sci** 1990 Mar;35(3):411 Comment on: Dig Dis Sci 1989 Nov;34(11):1649–50.

Spontaneous noncardiac chest pain: value of ambulatory esophageal pH and motility monitoring. Soffer EE, et al. **Dig Dis Sci** 1989 Nov;34(11):1651–5
The gastroenterologist and microvascular angina [letter] Castell DO. **Gastroenterology** 1990 Apr;98(4):1103–5
Acid perfusion in the assessment of non–cardiac chest pain [letter; comment] de Caestecker JS, et al. **Gut** 1989 Dec; 30(12):1795–8 Comment on: Gut 1989 Mar;30(3):305–10.
Chest wall pain after aortocoronary bypass surgery using internal mammary artery graft: a new pain syndrome? Mailis A, et al. **Heart Lung** 1989 Nov;18(6):553–8
The esophagus as a possible cause of chest pain in patients with and without angina pectoris. Bortolotti M, et al. **Hepatogastroenterology** 1990 Jun;37(3):316–8
Chest pain of esophageal origin. Ouyang A. **Hepatogastroenterology** 1989 Dec;36(6):533–7 (55 ref.)
Tortuous aorta—a new cause for esophageal chest pain? Shah P, et al. **Indian J Gastroenterol** 1990 Apr;9(2):153–4
Spontaneous pneumomediastinum in an adolescent patient. Lieberman A. **J Adolesc Health Care** 1990 Mar;11(2):170–2
Chest pain with normal coronary angiograms: is the heart innocent or guilty? [comment] Cannon RO 3d. **J Am Coll Cardiol** 1990 Sep;16(3):596–8 Comment on: J Am Coll Cardiol 1990 Sep;16(3):586–95.
Acute chest pain without obvious organic cause before the age of 40 years: response to forced hyperventilation. Roll M, et al. **J Intern Med** 1990 Sep;228(3):223–7
Use of the intraesophageal acid perfusion test in provoking nonspecific chest pain in children. Berezin S, et al. **J Pediatr** 1989 Nov;115(5 Pt 1):709–12
Chest pain and dysphagia in adolescents caused by diffuse esophageal spasm. Milov DE, et al. **J Pediatr Gastroenterol Nutr** 1989 Nov;9(4):450–3
Invited review: atypical chest pain. Mayou R. **J Psychosom Res** 1989;33(4):393–406 (90 ref.)
Acute chest syndrome in children with sickle cell anemia. Koren A, et al. **Pediatr Hematol Oncol** 1990;7(1):99–107
Mitral valve prolapse and esophageal motility disorders [letter] Cheng TO. **Postgrad Med** 1990 Sep 1;88(3):41–2
Diagnosis of esophageal motility disorders. Marshall JB. **Postgrad Med** 1990 May 15;87(7):81–4, 89–90, 92–4 (24 ref.)
Non–cardiac chest pain. Bass C. **Practitioner** 1989 Mar 8; 233(1464):352, 355–7
Panic anxiety and hyperventilation in patients with chest pain: a controlled study. Bass C, et al. **Q J Med** 1988 Dec; 69(260):949–59
Angina with normal coronary arteries: a review. Hutchison SJ, et al. **Q J Med** 1989 Aug;72(268):677–88 (60 ref.)
Noncardiac chest pain: is the esophagus really a frequent source? Limburg AJ, et al. **Scand J Gastroenterol** 1990 Aug; 25(8):793–8
Gastro–oesophageal reflux disease, an important cause of angina–like chest pain. Vantrappen G, et al. **Scand J Gastroenterol Suppl** 1989;168:73–9 (22 ref.)
Coexistent coronary artery disease and oesophageal spasm: the importance of establishing the source of chest pain. Hutchison SJ. **Scott Med J** 1990 Feb;35(1):23
Precordial catch syndrome in children. Reynolds JL. **South Med J** 1989 Oct;82(10):1228–30 (9 ref.)
Trigger point origin of musculoskeletal chest pain [letter; comment] Simons DG. **South Med J** 1990 Feb;83(2):262–3 Comment on: South Med J 1989 May;82(5):580–5, 591.
Chest pain and anxiety disorder. Kane FJ Jr, et al. **Tex Med** 1990 Jul;86(7):104–10
[Pseudo–angina pain of esophageal origin. Results of functional study and value of the balloon distention test] Humeau B, et al. **Gastroenterol Clin Biol** 1990;14(4):334–41 (Eng. Abstr.) **(Fre)**
[Angina–like chest pain of esophageal origin] Bory M, et al. **Presse Med** 1989 Dec 2;18(40):1970–3 (Eng. Abstr.) **(Fre)**
[A 50–year–old patient with precordial pressure sensation and increased dyspnea in a unilateral hyperlucent lung] Krawietz W, et al. **Internist (Berlin)** 1989 Aug;30(8):531–2 **(Ger)**
[Disorders of esophageal function as a cause of thoracic pain] Bielefeldt K, et al. **Leber Magen Darm** 1990 Mar;2(2):61–4, 67–70 (56 ref.) (Eng. Abstr.) **(Ger)**
[A case from practice (183). Left–sided overdistended lung bullae] Müller R. **Schweiz Rundsch Med Prax** 1990 Jul 3; 79(27–28):869–70 **(Ger)**
[Thoracic pain] Richter M, et al. **Schweiz Rundsch Med Prax** 1989 Aug 22;78(34):910–1 (Eng. Abstr.) **(Ger)**
[Coronary hemodynamics in a patient developing chest pain in the middle age in congenital coronary–pulmonary fistula] Mikuniya A, et al. **Kokyu To Junkan** 1989 Sep; 37(9):1015–20 (Eng. Abstr.) **(Jpn)**
[A case of DOC–producing adrenocortical cancer causing right chest pain] Sakurai Y, et al. **Nippon Naika Gakkai Zasshi** 1989 Jul;78(7):996–7 **(Jpn)**
[Minor complication with endoscopic injection sclerotherapy (chest pain, pleural effusion, pyrexia)] Maetani I, et al. **Nippon Rinsho** 1990 Apr;48(4):806–10 **(Jpn)**
[Thoracic pain of esophageal origin] Trujillo L, et al. **Rev Esp Enferm Apar Dig** 1989 Sep;76(3):249–52 (Eng. Abstr.) **(Spa)**
[Thoracic pain possibly of esophageal origin. Results of a prospective study] Ponce J, et al. **Rev Esp Enferm Dig** 1990 Apr;77(4):245–9 (Eng. Abstr.) **(Spa)**

NURSING

Impact of initial triage decisions on nursing intensity for patients with acute chest pain. Lee TH, et al. **Med Care** 1990 Aug;28(8):737–45

PATHOLOGY

[Chest pain, cough associated with pain, loss of consciousness (clinical conference)] **Harefuah** 1989 Nov 1;117(9):280–3 **(Heb)**

PHYSIOPATHOLOGY

Coronary flow reserve, esophageal motility, and chest pain in patients with angiographically normal coronary arteries. Cannon RO 3d, et al. **Am J Med** 1990 Mar;88(3):217–22
Oesophageal manometry during eating in the investigation of patients with chest pain or dysphagia. Howard PJ, et al. **Gut** 1989 Sep;30(9):1179–86
Pain associated with valve prolapse [letter; comment] Ackerman WE, et al. **Pain** 1989 Sep;38(3):353 Comment on: Pain 1989 Jan;36(1):89–92.
Chest pain in mitral valve prolapse [letter; comment] Cheng TO. **Pain** 1989 Sep;38(3):354 Comment on: Pain 1989 Jan;36(1):89–92.
Reply to Drs. Cheng and Ackerman regarding pain in mitral valve prolapse [letter] Maresca M, et al. **Pain** 1989 Sep; 38(3):355
[Thoracic pain of esophageal origin: the role of trapped air... (letter)] Gignoux C, et al. **Gastroenterol Clin Biol** 1989 Dec; 13(12):1092–3 **(Fre)**

PSYCHOLOGY

Panic disorder and depression in patients with chest pain not due to coronary artery disease [letter; comment] Carney RM, et al. **Am J Cardiol** 1990 Apr 15;65(15):1048 Comment on: Am J Cardiol 1989 Jun 1;63(18):1399–403.
[Problem of "organic neuroses" (data on functional disorders of cardiac activity)] Smulevich AB, et al. **Zh Nevropatol Psikhiatr** 1989;89(11):51–7 (Eng. Abstr.) **(Rus)**

THERAPY

Acute chest pain during dental treatment—a case report. Young ER, et al. **J Can Dent Assoc** 1990 May;56(5):437–40
[Continuous intercostal nerve block for chronic pain] Shir Y, et al. **Harefuah** 1989 May 1;116(9):461–3 (Eng. Abstr.) **(Heb)**

CHEST TUBES

Postoperative drainage and pericardial effusion [letter] Bryan AJ, et al. **Ann Thorac Surg** 1990 Aug;50(2):330
Further advice on inserting a chest drain [letter; comment] **Br J Hosp Med** 1990 Jan;43(1):82 Comment on: Br J Hosp Med 1989 Sep;42(3):231–3.
A simplified method of draining pleural effusions [letter; comment] Banerjee AK. **Br J Hosp Med** 1990 Jan;43(1):82 Comment on: Br J Hosp Med 1989 Sep;42(3):231–3.
What size chest tube for pleural effusions? [letter; comment] Thomas RF, et al. **Br J Hosp Med** 1990 Mar;43(3):184 Comment on: Br J Hosp Med 1989 Sep;42(3):231–3.
A new device that allows synchronous intermittent inspiratory chest tube occlusion with any mechanical ventilator. Blanch PB, et al. **Chest** 1990 Jun;97(6):1426–30
Intermittent inspiratory chest tube occlusion to limit bronchopleural cutaneous airleaks. Gallagher TJ, et al. **Crit Care Med** 1976 Nov–Dec;4(6):328–32
Flow characteristics of thoracotomy tubes used in infants. Ragosta KG, et al. **Crit Care Med** 1990 Jun;18(6):662–3
Simplified chest tube removal: a new technique. Prats I. **Curr Surg** 1990 Mar–Apr;47(2):110–1
Time of extubation in patients who underwent thoracotomy [letter] Hallfeldt KK, et al. **Heart Lung** 1990 Jul;19(4):432
Technique for high volume drainage beneath large tissue flaps. Kern KA. **Surg Gynecol Obstet** 1990 Jan;170(1):70
The tunnel tip thoracic catheter. Ring EM, et al. **Surg Gynecol Obstet** 1989 Dec;169(6):553–4
[Pneumothorax in chronic obstructive lung diseases (letter)] Engelmann C. **Z Gesamte Inn Med** 1990 Jun 15; 45(11):325–6; discussion 326–7 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Tension pneumothorax complicating small–caliber chest tube insertion. Mainini SE, et al. **Chest** 1990 Mar;97(3):759–60
Acute diaphragmatic paralysis after chest tube placement [letter] Palomeque A, et al. **Intensive Care Med** 1990; 16(2):138

CHEWING see **MASTICATION**

CHEWING GUM

Human plaque pH responses to meals and the effects of chewing gum' [letter; comment] **Br Dent J** 1990 Jan 6; 168(1):5 Comment on: Br Dent J 1989 Sep 23;167(6):204–8.
Chewing gum and dental health—a review. Edgar WM, et al. **Br Dent J** 1990 Feb 24;168(4):173–7
Human plaque pH responses to meals and the effects of chewing gum' [letter] Hamilton P. **Br Dent J** 1990 Feb 10;168(3):94
Human plaque pH responses to meals and the effects of chewing gum [see comments] Jensen ME, et al. **Br Dent J** 1989 Sep 23;167(6):204–8 Comment in: Br Dent J 1989 Nov 11;167(9):303. Comment in: Br Dent J 1990 Jan 6;168(1):5.
Xylitol in chewing gum: a discussion on developing CDA guidelines for the recognition of food products with dental therapeutic claims. Limeback H, et al. **Can Dent Assoc J** 1989 Sep;55(9):717–9 (30 ref.)
Oral biochemical status and depression of Streptococcus mutans in children during 24– to 36–month use of xylitol chewing gum. Mäkinen KK, et al. **Caries Res** 1989; 23(4):261–7
Smoking cessation through the use of nicotine chewing gum: a double–blind trial in Thailand. Areechon W, et al. **Clin Ther** 1988;10(2):183–6
Testing nicotine gum for ulcerative colitis patients. Experience with single–patient trials. Lashner BA, et al. **Dig Dis Sci** 1990 Jul;35(7):827–32
Psychopharmacologic treatment of cigarette smoking. Schneider NG. **J Am Dent Assoc** 1990 Jan;Suppl:7S–12S (25 ref.)
Evaluation of a treatment approach combining nicotine gum with self–guided behavioral treatments for smoking relapse prevention. Killen JD, et al. **J Consult Clin Psychol** 1990 Feb;58(1):85–92
Nicotine gum: does providing it free in a smoking cessation program alter success rates? Cox JL, et al. **J Fam Pract** 1990 Sep;31(3):278–80
Drinking coffee and carbonated beverages blocks absorption of nicotine from nicotine polacrilex gum. Henningfield JE, et al. **JAMA** 1990 Sep 26;264(12):1560–4
Nicotine gum in general practice [letter] Hughes JR. **JAMA** 1990 Sep 26;264(12):1531
Coming off long–term nicotine gum [letter] Bittoun R. **Lancet** 1989 Nov 11;2(8672):1164
Effect of dose on nicotine's withdrawal–suppressing, adverse and discriminative stimulus effects in humans. Huges JR, et al. **NIDA Res Monogr** 1989;95:428
Are smokers trying to stop and smokers not trying to stop the same experimental model? Sachs DP, et al. **NIDA Res Monogr** 1989;95:366–7
Effects of nicotine gum on psychomotor performance in smokers and non–smokers. Hindmarch I, et al. **Psychopharmacology (Berl)** 1990;100(4):535–41
[Smoking cessation using nicotine chewing gum in smokers with chronic diseases] Kozák J. **Cas Lek Cesk** 1990 Jan 5;129(1):26–9 (Eng. Abstr.) **(Cze)**
[Nicotine gum and lipid profile] Lagrue G, et al. **Pathol Biol (Paris)** 1989 Oct;37(8):937–9 (Eng. Abstr.) **(Fre)**
[A study of various smoking cessation programs based on close to 1000 volunteers recruited from the general population: 1–month results] Clavel F, et al. **Rev Epidemiol Sante Publique** 1990;38(2):133–8 (Eng. Abstr.) **(Fre)**
[Dependence on nicotine in chewing gum] Poser W. **Dtsch Med Wochenschr** 1989 Oct 20;114(42):1633 **(Ger)**
[Development of a psychologically founded program for smoking cessation with adjuvant use of nicotine–containing chewing gum] Meier–Lämmermann E, et al. **Pneumologie** 1990 Feb;44 Suppl 1:116–7 (Eng. Abstr.) **(Ger)**
[Smoking cessation using alternative nicotine administration in patients with peripheral arterial occlusive disease. Effects on peripheral circulation, hematologic parameters and lipoprotein status] Diehm C, et al. **Vasa Suppl** 1990;29:1–53 **(Ger)**
[A method for evaluation of compressive ability in mastication by chewing gum containing polycarbonate microcapsules] Numata O. **Kokubyo Gakkai Zasshi** 1989 Dec;56(4):513–27 (Eng. Abstr.) **(Jpn)**
[Smoking cessation using nicotine gum (see comments)] Schioldborg P. **Tidsskr Nor Laegeforen** 1990 Apr 10; 110(10):1199–201 (Eng. Abstr.) Comment in: Tidsskr Nor Laegeforen 1990 Apr 10;110(10):1193–4. **(Nor)**

ADVERSE EFFECTS

Perioral dermatitis in a child due to rosin in chewing gum. Satyawan I, et al. **Contact Dermatitis** 1990 Mar;22(3):182–3
[Side effects of nicotine chewing gum (letter)] López González ML, et al. **Med Clin (Barc)** 1990 Mar 3;94(8):319 **(Spa)**

CHEYNE–STOKES RESPIRATION see under **RESPIRATION DISORDERS**

CHI–SQUARE DISTRIBUTION

Chi 2 tests: how useful are they in the analysis of medical research data? Osborn JF. **Ann Ig** 1989 May–Aug; 1(3–4):417–32
The relationship between chi–square statistics from matched and unmatched analyses. Donner A, et al. **J Clin Epidemiol** 1990;43(8):827–31 (19 ref.)
Basic statistics in medical practice. Alam SE. **JPMA** 1990 May;40(5):119–20
Chi–square analysis [letter] Thomas DA. **Pain** 1990 Jan; 40(1):113

CHI–SQUARE TEST see **CHI–SQUARE DISTRIBUTION**

CHIARI'S SYNDROME see **HEPATIC VEIN**

THROMBOSIS

CHICANOS see HISPANIC AMERICANS

CHICK EMBRYO

Chick embryo survival under acute carbon monoxide challenges. Cirotto C, et al. **Comp Biochem Physiol [A]** 1989;94(1):117–23

Repair of cartilaginous fractures during chick limb development. McCullagh JJ, et al. **J Orthop Res** 1990 Jan; 8(1):127–31

O2 effect on composition of chick embryonic heart and brain. Asson-Batres MA, et al. **Respir Physiol** 1989 Ju[l]; 77(1):101–9

[Scale induction in the chick amnionic ectoderm attached to tarsometatarsal skin dermis] Mizuno T, et al. **C R Soc Biol (Paris)** 1989;183(6):551–4 (Eng. Abstr.) **(Fre)**

ANALYSIS

Histogenesis and histochemistry of the secretion plate: detection of glycans and neutral glycoproteins synthetized by the epithelial components of the gizzard mucosa of Gallus gallus. Pinheiro NL, et al. **Gegenbaurs Morphol Jahrb** 1989;135(3):385–95

The distribution of intracellular acetylcholine receptors and nuclei in avian slow muscle fibres during establishment of distributed synapses. Kouts S, et al. **J Neurocytol** 1990 Jun; 19(3):421–31

ANATOMY & HISTOLOGY

Development and innervation of the paratympanic organ (Vitali organ) in chick embryos. von Bartheld CS. **Brain Behav Evol** 1990;35(1):1–15

The developing heart in chick embryos [letter] Anderson RH. **Circulation** 1990 Oct;82(4):1542–3

Migration of neuroblasts by perikaryal translocation: role of cellular elongation and axonal outgrowth in the acoustic nuclei of the chick embryo medulla. Book KJ, et al. **J Comp Neurol** 1990 Jul 1;297(1):55–76

CYTOLOGY

Patterns of cell movement in early organ primordia of the chick embryo. Hilfer SR, et al. **Anat Rec** 1990 Aug; 227(4):508–17

Naturally occurring and induced neuronal death in the chick embryo in vivo requires protein and RNA synthesis: evidence for the role of cell death genes. Oppenheim RW, et al. **Dev Biol** 1990 Mar;138(1):104–13

Guidance of neural crest migration. Latex beads as probes of surface-substratum interactions. Bronner-Fraser M. **Dev Biol (N Y 1985)** 1986;3:301–37 (75 ref.)

Dual adhesive recognition systems in chick embryonic cells. Thomas WA. **Dev Biol (N Y 1985)** 1986;3:157–89 (137 ref.)

A cell lineage analysis of segmentation in the chick embryo. Stern CD, et al. **Development** 1988;104 Suppl:231–44

Distribution and functional role of laminin during induction of the embryonic axis in the chick embryo. Zagris N, et al. **Differentiation** 1990 Apr;43(2):81–6

A substance in conditioned medium which enhances the growth of small numbers of chick embryo cells. Rubin H. **Exp Cell Res** 1966 Jan;41(1):138–48

Cell generation times in normal and talpid3 mutant chick limb mesenchyme. Mohammed MB. **Folia Morphol (Praha)** 1989;37(4):435–42

Localization of molecules with restricted patterns of expression in morphogenesis: an immunohistochemical approach. Thibodeau A, et al. **Histochem J** 1989 Jun; 21(6):348–56

The extracellular matrix and cell surface, mediators of cell interactions in chicken gastrulation. Harrisson F. **Int J Dev Biol** 1989 Dec;33(4):417–38 (206 ref.)

Early haemopoietic stem cells in the avian embryo. Dieterlen-Lievre F, et al. **J Cell Sci Suppl** 1988;10:29–44 (29 ref.)

[The characteristics of the stimulation of the proliferation of cultured chick embryo cells during reseeding] Gasparian GG, et al. **Tsitol Genet** 1989 Sep-Oct;23(5):30–4 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Changes in blood plasma biochemistry of chicken embryos exposed to various pesticide formulations. Somlyay IM, et al. **Acta Vet Hung** 1989;37(1–2):179–83

Hatching eggs sanitized with chlorine dioxide foam: egg hatchability and bactericidal properties. Patterson PH, et al. **Avian Dis** 1990 Jan-Mar;34(1):1–6

Effects of acetylcholinesterase specific inhibitors on the development of chick embryos. Parodi M, et al. **Boll Soc Ital Biol Sper** 1989 Sep;65(9):839–45

Effect of embryonic and neonatal administration of tamoxifen on adiposity in the broiler chicken. Rozenboim I, et al. **Br Poult Sci** 1989 Sep;30(3):607–12

The effects of minoxidil on the development of the chick embryo. Gilani SH, et al. **Life Sci** 1989;45(22):2157–61

Evidence of single dose opioid dependence in 12- to 14-day-old chicken embryos. Bronson ME, et al. **Pharmacol Biochem Behav** 1989 Dec;34(4):705–9

Avian model for 13-cis-retinoic acid embryopathy: demonstration of neural crest related defects. Hart RC, et al. **Teratology** 1990 Apr;41(4):463–72

[Histological and histochemical changes in the crystalline lenses of lead-contaminated chickens] Gruszczyńska M. **Klin Oczna** 1989 Apr;91(4):79–81 (Eng. Abstr.) **(Pol)**

EMBRYOLOGY

Fate mapping the avian epiblast with focal injections of a fluorescent-histochemical marker: ectodermal derivatives. Schoenwolf GC, et al. **J Exp Zool** 1990 Sep;255(3):323–39

The development of the pecten oculi in the chick. Uehara M, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):503–12

[The development of the tongue in the chick embryo: observation under a scanning electron microscope] Sgambati E, et al. **Boll Soc Ital Biol Sper** 1990 Feb; 66(2):105–11 (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

Activity of aldrinepoxidase, 7-ethoxycoumarin-O-deethylase and 7-ethoxyresorufin-O-deethylase during the development of chick embryos in ovo. Heinrich-Hirsch B, et al. **Arch Toxicol** 1990;64(2):128–34

GROWTH & DEVELOPMENT

Origin of the proximal coronary artery stems and a review of ventricular vascularization in the chick embryo. Waldo KL, et al. **Am J Anat** 1990 Jun;188(2):109–20

Morphogenesis of precursor subpopulations of chicken limb mesenchyme in three dimensional collagen gel culture. Markwald RR, et al. **Anat Rec** 1990 Jan;226(1):91–107

Increased UDP-GlcNAc: alpha-mannoside beta(1——4) N-acetylglucosaminyltransferase activity during chick embryo development. Ogier-Denis E, et al. **Biochim Biophys Acta** 1990 Sep 1;1054(2):149–53

Histone variant patterns during vertebrate embryogenesis and limb development. Wunsch AM, et al. **Cell Differ Dev** 1990 Apr;30(1):19–25

Retinoic acid inhibits growth in agarose of early chick embryonic cells and may be involved in regulation of axis formation. Mitrani E, et al. **Development** 1989 Oct; 107(2):275–80

Complementary patterns of expression of c-ets 1, c-myb and c-myc in the blood-forming system of the chick embryo. Vandenbunder B, et al. **Development** 1989 Oct; 107(2):265–74

Accumulation of tropomyosin in developing chicken gizzard smooth muscle. Hosoya M, et al. **J Biochem (Tokyo)** 1989 Dec;106(6):998–1002

Development in culture of the chick embryo from fertilized ovum to hatching. Naito M, et al. **J Exp Zool** 1990 Jun; 254(3):322–6

Mapping of the microcirculation in the chick chorioallantoic membrane during normal angiogenesis. DeFouw DO, et al. **Microvasc Res** 1989 Sep;38(2):136–47

Histogenetic study of the vestibular ganglion in the developing chick embryo by lectin-horseradish peroxidase methods. Yamashita H, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(6):325–31

Regulation of avian skeletal muscle development and maturation. Klasing KC. **Proc Soc Exp Biol Med** 1990 Jun; 194(2):69–70

The myogenic lineage: evidence for multiple cellular precursors during avian limb development. Stockdale FE. **Proc Soc Exp Biol Med** 1990 Jun;194(2):71–5 (43 ref.)

On the development of the chick embryo colon: a computerized morphometric study. Bryk SG, et al. **Z Mikrosk Anat Forsch** 1990;104(1):97–118

[Mechanisms of development of the dome in the semicircular canals of birds. I. Cellular secretion] Gonzalez Sequeros O, et al. **Anat Histol Embryol** 1989 Sep;18(3):205–26 (Eng. Abstr.) **(Spa)**

[Mechanisms of development of the dome in the semicircular canals of birds. II. Cellular reorganization] Guijarro de Pablos JE, et al. **Anat Histol Embryol** 1989 Sep; 18(3):227–45 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Development of cytoplasmic CD3+/T cell receptor-negative cells in the peripheral lymphoid tissues of chickens. Bucy RP, et al. **Eur J Immunol** 1990 Jun; 20(6):1345–50

Recent advances in avian immunology research. Based on the Avian Immunology Research Group meeting. Lelystad, The Netherlands, September 29–30, 1988. **Prog Clin Biol Res** 1989;307:1–238

T cells in the spleen of chicken embryos undergoing a graft-versus-host reaction. Fedecka-Bruner B, et al. **Prog Clin Biol Res** 1989;307:19–29

Effect of early embryonic grafting of foreign tissues on the immune response of the host. Ohki H, et al. **Prog Clin Biol Res** 1989;307:3–17

METABOLISM

Distribution of cell surface glycoconjugates during secondary neurulation in the chick embryo. Griffith CM, et al. **Anat Rec** 1990 Jan;226(1):81–90

Control of glycolysis in cultured chick embryo hepatocytes. Fructose 2,6-bisphosphate content and phosphofructokinase-1 activity are stimulated by insulin and epidermal growth factor. Hamer MJ, et al. **Biochem J** 1990 Aug 1;269(3):685–90

Appearance during chick embryogenesis of vitamin D-dependent calcium-binding protein (calbindin-D28K). Opperman LA, et al. **Bone Miner** 1990 Apr;9(1):1–8

Strain differences in whole-body protein turnover in the chicken embryo. Muramatsu T, et al. **Br Poult Sci** 1990 Mar;31(1):91–9

Importance of albumen content in whole-body protein synthesis of the chicken embryo during incubation. Muramatsu T, et al. **Br Poult Sci** 1990 Mar;31(1):101–6

Chicken growth-associated protein (GAP)-43: primary structure and regulated expression of mRNA during embryogenesis. Baizer L, et al. **Brain Res Mol Brain Res** 1990 Jan;7(1):61–8

3,3',4,4'-tetrachlorobiphenyl: metabolism by the chick embryo in ovo and toxicity of hydroxylated metabolites. Wehler EK, et al. **Chem Biol Interact** 1990;73(1):121–32

The insulin-like growth factor I (IGF-I) gene is expressed in chick embryos during early organogenesis. Serrano J, et al. **Endocrinology** 1990 Sep;127(3):1547–9

Prenatal oxidative stress: I. Malondialdehyde in hypoxic and hyperoxic chick embryos. Stock MK, et al. **Free Radic Biol Med** 1990;8(4):313–8

Ontogeny of the effect of purified chicken growth hormone on the liver 5' monodeiodination activity in the chicken: reversal of the activity after hatching. Darras VM, et al. **Gen Comp Endocrinol** 1990 Feb;77(2):212–20

Thyrotropic activity of the ovine corticotropin-releasing factor in the chick embryo. Meeuwis R, et al. **Gen Comp Endocrinol** 1989 Dec;76(3):357–63

Measurement of pH in blood vessels and interstitium of 4 and 6 days-old chick embryos. Meuer HJ, et al. **J Dev Physiol** 1989 Jun;11(6):354–9

Glycoprotein synthesis in the subcommissural organ of the chick embryo. I. An ontogenetical study using specific antibodies. Karoumi A, et al. **J Neural Transm Gen Sect** 1990;79(3):141–53

Tissue and plasma levels of a teratogenic dose of dopamine in the chick embryo following pretreatment with metoprolol or phosphate buffered saline. Shields HE, et al. **Life Sci** 1990;46(16):1181–8

Insulin-like growth factor receptors in developing chicken tissue. Bassas L, et al. **Prog Clin Biol Res** 1990;342:99–104 (11 ref.)

The relationship between eggshell porosity and air space gas tensions measured before and during the parafoetal period and their effects on the hatching process in the domestic fowl. Burton FG, et al. **Respir Physiol** 1989 Jul;77(1):89–99

MICROBIOLOGY

Response of the chick embryo to live and heat-killed Campylobacter jejuni injected into the yolk sac. Clark AG, et al. **Epidemiol Infect** 1989 Dec;103(3):577–85

Investigations on the pathogenicity of Listeria spp. by experimental infection of the chick embryo. Terplan G, et al. **Int J Food Microbiol** 1989 Jun;8(3):277–80

Effects of chicken embryo age on time to death following infection by avian influenza viruses: implications for distinguishing highly pathogenic isolates. Perdue ML, et al. **Virus Res** 1990 Jun;16(2):137–52

PHYSIOLOGY

Ultrastructural aspects of the production of extracellular matrix components by the chick embryonic notochord in vitro. Camón J, et al. **Acta Anat (Basel)** 1990;137(2):114–23

The sites of intra-embryonic haemopoiesis prior to the hepatic haemopoiesis in the chick. Kudo M, et al. **Arch Histol Cytol** 1989 Oct;52(4):355–60

Importance of sub-embryonic fluid and albumen in the embryo's response to turning of the egg during incubation. Deeming DC. **Br Poult Sci** 1989 Sep;30(3):591–606

How do avian embryos breathe? Oxygen transport in the blood of early chick embryos. Cirotto C, et al. **Comp Biochem Physiol [A]** 1989;94(4):607–13

Endogenous electrical currents and the resultant voltage gradients in the chick embryo. Hotary KB, et al. **Dev Biol** 1990 Jul;140(1):149–60

Mesoderm migration in the early chick embryo. Sanders EJ. **Dev Biol (N Y 1985)** 1986;2:449–80 (132 ref.)

Avian embryo nutrition. Grau CR. **Fed Proc** 1968 Jan-Feb; 27(1):185–92 (78 ref.)

Oncogenes and avian development. Dieterlen-Lievre F, et al. **Int J Dev Biol** 1990 Mar;34(1):61–8

Embryogenesis of the avian iris sphincter muscle: in vivo and in vitro studies. Peirone SM, et al. **Int J Dev Neurosci** 1990;8(1):17–31

A kinematic analysis of hindlimb motility in 9- and 10-day-old chick embryos. Watson SJ, et al. **J Neurobiol** 1990 Jun;21(4):651–60

Euploid chicken embryos from eggs containing one, two or several yolks. Lee KH, et al. **J Reprod Fertil** 1990 May; 89(1):85–90

Differential expression of the neuronal acetylcholine receptor alpha 2 subunit gene during chick brain development. Daubas P, et al. **Neuron** 1990 Jul;5(1):49–60

Are spontaneous activity and supraspinal control co-responsible for functional development of the generator of embryonic motility? Sedláček J. **Physiol Bohemoslov** 1989;38(6):489–95

Using the amniotic cavity of the developing chick embryo for the in vivo culture of early-stage mammalian embryos.

Blakewood EG, et al. **Poult Sci** 1989 Dec;68(12):1695–702
Effect on hatchability of tilting instead of turning chicken eggs during incubation. Buhr RJ. **Poult Sci** 1989 Dec; 68(12):1603–11
Reduced hatchability associated with engine fumes [letter; comment] Fowler NG. **Vet Rec** 1989 Nov 25;125(22):560 Comment on: Vet Rec 1989 Oct 21;125(17):444–5.

RADIATION EFFECTS

Action of laser light on the ocular development of chick embryos. Sánchez del Campo F, et al. **Anat Anz** 1989; 169(4):253–9

ULTRASTRUCTURE

Organelle distribution in chick neuroepithelial cells: effects of colchicine and cytochalasin B. Fernández Alvarez JG, et al. **Int J Dev Biol** 1989 Jun;33(2):317–23
Electron microscopy of the pathology and chemotherapy of Legionella pneumophila infection in the chick embryo. Tzianabos AO, et al. **Int J Med Microbiol** 1989 Oct; 271(4):466–74

CHICKEN SARCOMA VIRUS B77 see under **AVIAN SARCOMA VIRUSES**

CHICKEN TUMOR 1 VIRUS see **AVIAN SARCOMA VIRUSES**

CHICKENPOX

Skin lesions as the sole manifestation of the fetal varicella syndrome [letter] Lloyd KM. **Arch Dermatol** 1990 Apr; 126(4):546–7
Public health policy on varicella infection [letter] Green ST, et al. **JAMA** 1990 Mar 16;263(11):1495
[Neonatal varicella. Report of a case] Sheu JN, et al. **Acta Paediatr Sin** 1988 Mar–Apr;29(2):122–5 (Eng. Abstr.) **(Chi)**

BLOOD

Production of circulation interferon in children with varicella. Takamiya H, et al. **Arch Virol** 1990; 112(3–4):229–33
Persistence of varicella-zoster virus DNA in blood mononuclear cells of patients with varicella or zoster. Gilden DH, et al. **Virus Genes** 1989 Aug;2(4):299–305

COMPLICATIONS

Early pregnancy varicella and associated congenital anomalies. Hammad E, et al. **Acta Paediatr Scand** 1989 Nov;78(6):963–4
Fatal varicella in a corticosteroid-dependent asthmatic receiving troleandomycin. Lantner R, et al. **Allergy Proc** 1990 Mar–Apr;11(2):83–7
Varicella hepatitis in the immunocompromised adult: a case report and review of the literature. Patti ME, et al. **Am J Med** 1990 Jan;88(1):77–80 (34 ref.)
Varicella-zoster virus disease in patients with human immunodeficiency virus infection [comment] Gulick RM, et al. **Arch Dermatol** 1990 Aug;126(8):1086–8 (14 ref.) Comment on: Arch Dermatol 1990 Aug;126(8):1033–6. Comment on: Arch Dermatol 1990 Aug;126(8):1048–50. Comment on: Arch Dermatol 1990 Aug;126(8):1105–6.
Varicella in patients infected with the human immunodeficiency virus [see comments] Perronne C, et al. **Arch Dermatol** 1990 Aug;126(8):1033–6 Comment in: Arch Dermatol 1990 Aug;126(8):1086–8.
Platelet antigens in varicella associated thrombocytopenia. Winiarski J. **Arch Dis Child** 1990 Jan;65(1):137–9
Cerebral vasculopathy associated with primary varicella infection. Caekebeke JF, et al. **Arch Neurol** 1990 Sep; 47(9):1033–5
Brachial plexus neuropathy in a gymnast associated with chicken pox. Kennedy M, et al. **Br J Sports Med** 1989 Dec;23(4):226
Viral reactivation as a cause of unexplained fever in patients with progressive metastatic breast cancer. Rasoul-Rockenschaub S, et al. **Cancer Immunol Immunother** 1990;31(3):191–5
Chickenpox and pneumothorax [letter] Barone JG, et al. **Chest** 1990 Aug;98(2):514
Varicella-associated arthritis occurring before the exanthem. Case report and literature review. Fierman AH. **Clin Pediatr (Phila)** 1990 Mar;29(3):188–90 (24 ref.)
Osteomyelitis of the skull after varicella infection. Gallagher PG. **Clin Pediatr (Phila)** 1990 Jan;29(1):29
Desmoplastic trichoepithelioma nosology. Reappraisal about a case developed on a varicella scar. Blanc D, et al. **Dermatologica** 1990;180(1):44–7
Varicella associated intracerebral hemorrhage in the absence of thrombocytopenia. Fikrig E, et al. **Diagn Microbiol Infect Dis** 1989 Jul–Aug;12(4):357–9
Fetal resuscitation in a patient with varicella pneumonia and preterm labor. Steyn DW, et al. **Int J Gynaecol Obstet** 1989 Oct;30(2):171–5
Bilateral facial palsy following chicken pox [letter] Ganjoo RK, et al. **J Assoc Physicians India** 1989 Dec;37(12):798
Extrapyramidal symptoms in varicella zoster infection [letter] Saha P, et al. **J Assoc Physicians India** 1990 Apr;38(4):312–3
Varicella and perforation of the stomach. Paret G, et al. **J Pediatr Gastroenterol Nutr** 1990 Jan;10(1):121–5 (26 ref.)
Iritis in children with varicella. Kachmer ML, et al. **J Pediatr Ophthalmol Strabismus** 1990 Jul–Aug;27(4):221–2
Case report: gamma-globulin treatment of severe varicella-associated thrombocytopenia. Steinfeld HJ. **Md Med J** 1990 May;39(5):469–70
Isolated staphylococcal pericarditis following varicella in an adolescent: an unusual age-associated complication. Kopec JS, et al. **Pediatr Emerg Care** 1990 Mar;6(1):38–9
Staphylococcus aureus osteomyelitis associated with varicella infection [letter; comment] Barson WJ, et al. **Pediatr Infect Dis J** 1990 Feb;9(2):146–7 Comment on: Pediatr Infect Dis J 1989 Jul;8(7):473–5.
Group A beta-hemolytic streptococcal toxic shock-like syndrome. Begovac J, et al. **Pediatr Infect Dis J** 1990 May; 9(5):369–70
Varicella-zoster virus infections in children infected with human immunodeficiency virus. Jura E, et al. **Pediatr Infect Dis J** 1989 Sep;8(9):586–90
Varicella myocarditis. Waagner DC, et al. **Pediatr Infect Dis J** 1990 May;9(5):360–3 (19 ref.)
Varicella-zoster virus infections: chronic disease in the immunocompromised host: evidence for persistent excretion of virus. Whitley RJ. **Pediatr Infect Dis J** 1989 Sep;8(9):584–5 (10 ref.)
Varicella with delayed contralateral hemiparesis detected by MRI. Liu GT, et al. **Pediatr Neurol** 1990 Mar–Apr; 6(2):131–4 (15 ref.)
Chickenpox pneumonia: an association with pregnancy [see comments] Esmonde TF, et al. **Thorax** 1989 Oct; 44(10):812–5 (42 ref.) Comment in: Thorax 1990 Mar;45(3):239.
Chickenpox pneumonia: an association with pregnancy [letter; comment] Rogerson SJ, et al. **Thorax** 1990 Mar; 45(3):239 Comment on: Thorax 1989 Oct;44(10):812–5.
Postnecrotic cirrhosis following varicella hepatitis in a liver transplant patient. Alonso EM, et al. **Transplantation** 1990 Mar;49(3):650–3
[A complicated varicella infection] Hofland J, et al. **Ned Tijdschr Geneeskd** 1990 May 19;134(20):1008–10 (Eng. Abstr.) **(Dut)**
[Post-varicella anetoderma. 3 cases] Tousignant J, et al. **Ann Dermatol Venereol** 1990;117(5):355–7 (33 ref.) (Eng. Abstr.) **(Fre)**
[Zona in a 6-month-old infant. Apropos of one case] Loras-Duclaux I, et al. **Pediatrie** 1989;44(8):645–7 (Eng. Abstr.) **(Fre)**
[A case of encephalitis and varicella pneumonia in a healthy adult (letter)] Boulet E, et al. **Presse Med** 1990 Jun 2; 19(22):1055 **(Fre)**
[Peripheral facial paralysis following varicella (letter)] Puntous M, et al. **Presse Med** 1989 Oct 21;18(34):1707 **(Fre)**
[Memory disorders in chickenpox encephalitis] Delerue O, et al. **Rev Neurol (Paris)** 1990;146(4):301–3 (11 ref.) (Eng. Abstr.) **(Fre)**
[Severe varicella pneumopathy in health adults. Apropos of a case] Urban T, et al. **Rev Pneumol Clin** 1989;45(6):267–70 (Eng. Abstr.) **(Fre)**
[Probable ADH inappropriate secretion syndrome in varicella] Gabriele G, et al. **Pediatr Med Chir** 1990 Jan–Feb;12(1):57–9 (Eng. Abstr.) **(Ita)**
[Transient atrioventricular conduction disorder: a potential cause of sudden death in myocarditis due to varicella. A case report] Amaral FT, et al. **Arq Bras Cardiol** 1989 Aug; 53(2):129–31 (Eng. Abstr.) **(Por)**
[Varicella pneumonia] Ašiku V. **Med Pregl** 1989; 42(3–4):133–6 (Eng. Abstr.) **(Scr)**
[Infantile exanthematous virosis in adults] de Luis Sánchez A, et al. **Med Clin (Barc)** 1990 Apr 14;94(14):533–4 (22 ref.) **(Spa)**
[Acute respiratory insufficiency caused by varicella in a pregnant woman (letter)] Prieto Palomino MA, et al. **Med Clin (Barc)** 1989 Nov 4;93(14):558 **(Spa)**

CONGENITAL

Connective tissue naevi in a child with intra-uterine varicella infection. White MI, et al. **Clin Exp Dermatol** 1990 Mar; 15(2):149–51
[Chicken pox infection in early pregnancy] Fiestas-Hummler A, et al. **Geburtshilfe Frauenheilkd** 1990 Jan;50(1):69–70 (Eng. Abstr.) **(Ger)**
[Prophylaxis in severe congenital neonatal varicella. Apropos of two cases] Rubio Quiñones F, et al. **An Esp Pediatr** 1989 Dec;31(6):580–2 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Chickenpox in the elderly. Demissie A, et al. **Br J Clin Pract** 1989 Nov;43(11):422–4
Rapid diagnosis in varicella and herpes zoster: re-evaluation of direct smear (Tzanck test) and electron microscopy including colloidal gold immuno-electron microscopy in comparison with virus isolation. Folkers E, et al. **Br J Dermatol** 1989 Sep;121(3):287–96
[Infections with herpes viruses in gynecology and obstetrics] Petersen EE. **Fortschr Med** 1989 Aug 30;107(25):526–8 (22 ref.) (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Comparison of acyclovir and vidarabine in immunocompromised children with varicella-zoster virus infection. Kunitomi T, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Dec;31(6):702–5
Acyclovir-resistant varicella zoster virus infection after chronic oral acyclovir therapy in patients with the acquired immunodeficiency syndrome (AIDS). Jacobson MA, et al. **Ann Intern Med** 1990 Feb 1;112(3):187–91
Acyclovir treatment of varicella in otherwise healthy children [see comments] Balfour HH Jr, et al. **J Pediatr** 1990 Apr;116(4):633–9 Comment in: J Pediatr 1990 Apr;116(4):587.
Chickenpox: where do we stand with treatment? [editorial; comment] Whitley RJ. **J Pediatr** 1990 Apr;116(4):587 Comment on: J Pediatr 1990 Apr;116(4):633–9.
[Acyclovir and specific anti-varicella-herpes zoster immunoglobulins in the treatment of varicella-zoster virus infection in 113 adults] Senneville E, et al. **Pathol Biol (Paris)** 1990 Jun;38(5 (Pt 2)):568–71 (Eng. Abstr.) **(Fre)**

ECONOMICS

[Socioeconomic repercussions of varicella in healthy children] Hernández Merino A, et al. **An Esp Pediatr** 1989 Nov;31(5):461–4 **(Spa)**

EPIDEMIOLOGY

Varicella outbreaks in Army recruits from Puerto Rico. Varicella susceptibility in a population from the tropics. Longfield JN, et al. **Arch Intern Med** 1990 May; 150(5):970–3
[Prevalence of varicella zoster virus in pregnant patients] Sauerbrei A, et al. **Zentralbl Gynakol** 1990;112(4):223–6 (Eng. Abstr.) **(Ger)**
[Vaccination against varicella in Spain] Valtueña Borqué O. **An R Acad Nac Med (Madr)** 1989;106(3):425–45 **(Spa)**

ETIOLOGY

Fatal varicella infection in a child associated with thymoma and immunodeficiency (Good's syndrome). Watts RG, et al. **Med Pediatr Oncol** 1990;18(3):246–51
[Mild varicella observed in children vaccinated with varicella vaccine between 1984 and 1987] Takayama N, et al. **Kansenshogaku Zasshi** 1990 Feb;64(2):188–94 (Eng. Abstr.) **(Jpn)**

HISTORY

["The Gout Galls the One, and the Pox Pinches the Other"] Ohry A. **Harefuah** 1989 Nov 1;117(9):274–7 **(Heb)**

IMMUNOLOGY

Natural killing of varicella-zoster virus (VZV)-infected fibroblasts in normal children, children with VZV infections, and children with Hodgkin's disease. Ihara T, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Oct;31(5):523–8
Determination and importance of varicella immune status of nursing staff in a children's hospital. Ferson MJ, et al. **J Hosp Infect** 1990 May;15(4):347–51
Subclass distribution of the serum and intrathecal IgG antibody response in varicella-zoster virus infections. Echevarría JM, et al. **J Infect Dis** 1990 Sep;162(3):621–6
A transient granulocyte killing defect secondary to a varicella infection. Blank CA, et al. **Md Med J** 1989 Sep;38(9):739–42
Congenital varicella-zoster virus infection and the failure to establish virus-specific cell-mediated immunity. Grose C. **Mol Biol Med** 1989 Oct;6(5):453–62 (32 ref.)
Difficulty in determining varicella-zoster immune status in pregnant women. Le CT, et al. **Pediatr Infect Dis J** 1989 Sep;8(9):650–1
Should children in renal failure be immunised against chickenpox before receiving a renal transplant. Heath RB. **Pediatr Nephrol** 1989 Apr;3(2):165

MICROBIOLOGY

Study of virus isolation from pharyngeal swabs in children with varicella. Ozaki T, et al. **Am J Dis Child** 1989 Dec; 143(12):1448–50
Severity of viremia and clinical findings in children with varicella. Asano Y, et al. **J Infect Dis** 1990 Jun; 161(6):1095–8

PATHOLOGY

Acute retinal necrosis as a novel complication of chickenpox in adults. Matsuo T, et al. **Br J Ophthalmol** 1990 Jul; 74(7):443–4
Multiple pulmonary nodules. Tulippe-Hecq C, et al. **Eur Respir J** 1990 Jan;3(1):119–20
[Varicella hepatitis] Reinecke P, et al. **Pathologe** 1990 Jul; 11(4):208–14 **(Ger)**
[Abdominal ultrasonography in eruptive diseases] Lara J, et al. **GEN** 1988 Apr–Jun;42(2):63–5 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Failure in phrenic pacing induced by varicella [letter] Doblas A, et al. **PACE** 1989 Dec;12(12):1961–2

PREVENTION & CONTROL

Clinical experience of Oka-strain live varicella vaccine. Kamiya H, et al. **Indian J Pediatr** 1989 Sep–Oct; 56(5):568–70
Prospects for use of a varicella vaccine in adults. Hardy IR,

et al. **Infect Dis Clin North Am** 1990 Mar;4(1):159–73 (57 ref.)

Immunoglobulin prophylaxis for infants exposed to varicella in a neonatal unit. Patou G, et al. **J Infect** 1990 May; 20(3):207–13

Live attenuated varicella vaccine: protection in healthy adults compared with leukemic children. National Institute of Allergy and Infectious Diseases Varicella Vaccine Collaborative Study Group. Gershon AA, et al. **J Infect Dis** 1990 Apr;161(4):661–6

Status of varicella vaccine for healthy children. Starr SE. **Pediatrics** 1989 Dec;84(6):1097–9

[Herpes virus infections in immunosuppressed patients. Herpes simplex and varicella zoster virus: prevention and therapy] Mertens T. **Fortschr Med** 1989 Aug 30; 107(25):537–40 (22 ref.) (Eng. Abstr.) **(Ger)**

[Varicella vaccination] Heidl M, et al. **Padiatr Grenzgeb** 1990; 29(1):31–6 (23 ref.) (Eng. Abstr.) **(Ger)**

[The protective value of varicella-zoster immunoglobulin in the hospital environment] Puvačić Z, et al. **Med Arh** 1983; 37(3):139–42 (Eng. Abstr.) **(Scr)**

THERAPY

Experimental studies on the prevention and treatment of chickenpox and herpes zoster with measles vaccine. Li WH, et al. **Chin Med J [Engl]** 1989 May;102(5):395–9

Varicella during pregnancy: the timing of effective treatment. Paulman PM, et al. **J Am Board Fam Pract** 1990 Apr–Jun; 3(2):121–3

[Neonatal varicella: indications for the use of varicella–zoster specific immunoglobulin] Espino Aguilar R, et al. **An Esp Pediatr** 1989 Sep;31(3):201–4 (Eng. Abstr.) **(Spa)**

TRANSMISSION

Transmission of chickenpox in a school setting prior to the observed exanthem. Brunell PA. **Am J Dis Child** 1989 Dec; 143(12):1451–2

Strategies for the management of varicella–susceptible healthcare workers after a known exposure. Josephson A, et al. **Infect Control Hosp Epidemiol** 1990 Jun;11(6):309–13

Live attenuated varicella vaccine: evidence that the virus is attenuated and the importance of skin lesions in transmission of varicella–zoster virus. National Institute of Allergy and Infectious Diseases Varicella Vaccine Collaborative Study Group. Tsolia M, et al. **J Pediatr** 1990 Feb;116(2):184–9

Varicella and zoster in hospitals [letter; comment] **Lancet** 1990 Jun 16;335(8703):1460–1 Comment on: Lancet 1990 May 5;335(8697):1100–1.

Varicella in maternity units [letter] [see comments] Meurisse V, et al. **Lancet** 1990 May 5;335(8697):1100–1 Comment in: Lancet 1990 Jun 16;335(8703):1460–1.

A pediatrician's personal reflections on varicella [letter] Gospe SM Jr. **Pediatrics** 1990 Sep;86(3):494

[A complicated varicella infection (letter)] Dekking F. **Ned Tijdschr Geneeskd** 1990 Jun 30;134(26):1273 **(Dut)**

CHICKENPOX VIRUS see **VARICELLA–ZOSTER VIRUS**

CHICKENS

Serovars of Listeria monocytogenes and Listeria innocua from food. Schönberg A, et al. **Acta Microbiol Hung** 1989; 36(2–3):249–53

Adaptation of 5'-deiodination to hypothyroid conditions following surgical and/or radiothyroidectomy in chickens. Rudas P, et al. **Acta Vet Hung** 1989;37(3):227–39

Public health aspects of bacterial drug resistance in modern battery and town/village poultry in the tropics. Ojeniyi AA. **Acta Vet Scand** 1989;30(2):127–32

Comparison of the effects of Sesbania drummondii on the hepatic microsomal monooxygenase systems of chickens and rats. Banton MI, et al. **Am J Vet Res** 1989 Oct; 50(10):1795–9

Effect of halothane, isoflurane, and pentobarbital anesthesia on myocardial irritability in chickens. Greenlees KJ, et al. **Am J Vet Res** 1990 May;51(5):757–8

Natural occurrence of the mycotoxin fusarochromanone, a metabolite of Fusarium equiseti, in cereal feed associated with tibial dyschondroplasia. Krogh P, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3184–8

In vivo interference by Newcastle disease virus in chickens, the natural host of the virus. Li X, et al. **Arch Virol** 1989; 108(3–4):229–45

An overview of Australia's poultry industry in 1989. Bagust TJ. **Aust Vet J** 1989 Dec;66(12):416–8 (5 ref.)

Avian infectious bronchitis: cross–protection studies using different Australian subtypes. Endo–Munoz LB, et al. **Aust Vet J** 1989 Nov;66(11):345–8

Epidemiology of an avian influenza outbreak in Victoria in 1985. Morgan IR, et al. **Aust Vet J** 1990 Apr;67(4):125–8

Safety of temperature sensitive mutant Mycoplasma gallisepticum vaccine. Whithear KG, et al. **Aust Vet J** 1990 May;67(5):159–65

Primary glossal squamous–cell carcinoma in a Spanish Cochin hen. Anderson WI, et al. **Avian Dis** 1989 Oct–Dec; 33(4):827–8

Epidemiologic studies on infectious coryza outbreaks in northern New South Wales, Australia, using serotyping, biotyping, and chromosomal DNA restriction endonuclease analysis. Blackall PJ, et al. **Avian Dis** 1990 Apr–Jun; 34(2):267–76

An outbreak of nephropathogenic H13 infectious bronchitis in commercial broilers. Butcher GD, et al. **Avian Dis** 1989 Oct–Dec;33(4):823–6

A primary epidemic of inclusion body hepatitis in broilers. Christensen NH, et al. **Avian Dis** 1989 Oct–Dec; 33(4):622–30

An avidin–biotin enhanced dot–immunobinding assay for the detection of Mycoplasma gallisepticum and M. synoviae serum antibodies in chickens. Cummins DR, et al. **Avian Dis** 1990 Jan–Mar;34(1):36–43

Investigation of problems associated with intramuscular breast injection of oil–adjuvanted killed vaccines in chickens. Droual R, et al. **Avian Dis** 1990 Apr–Jun; 34(2):473–8

Comparative toxicity of coniine, an alkaloid of Conium maculatum (poison hemlock), in chickens, quails, and turkeys. Frank AA, et al. **Avian Dis** 1990 Apr–Jun; 34(2):433–7

Efficacy of live vaccines against serologic subtypes of infectious bursal disease virus. Giambrone JJ, et al. **Avian Dis** 1990 Jan–Mar;34(1):7–11

Effect of breeder vaccination on immunization of progeny against Newcastle disease. Giambrone JJ, et al. **Avian Dis** 1990 Jan–Mar;34(1):114–9

Chronic myocarditis and circulatory syndrome in a White Leghorn strain induced by an avian leukosis virus: light and electron microscopic study. Gilka F, et al. **Avian Dis** 1990 Jan–Mar;34(1):174–84

The effect of oxytetracycline on the severity of airsacculitis in chickens infected with Mycoplasma gallisepticum. Glisson JR, et al. **Avian Dis** 1989 Oct–Dec;33(4):750–2

Intestinal cryptosporidiosis in chickens. Goodwin MA, et al. **Avian Dis** 1989 Oct–Dec;33(4):770–7

Virulence of infectious laryngotracheitis viruses: comparison of modified–live vaccine viruses and North Carolina field isolates. Guy JS, et al. **Avian Dis** 1990 Jan–Mar; 34(1):106–13

Specific antibody responses and generation of antigenic variants in chickens immunized against a virulent avian influenza virus. Hinshaw VS, et al. **Avian Dis** 1990 Jan–Mar;34(1):80–6

Infectious bursal disease virus variant from commercial Leghorn pullets. Ismail NM, et al. **Avian Dis** 1990 Jan–Mar; 34(1):141–5

An enzyme–linked immunosorbent assay for detection of antibodies against Escherichia coli: association between indirect hemagglutination test and survival. Leitner G, et al. **Avian Dis** 1990 Jan–Mar;34(1):58–62

Identification of the chicken anemia agent, reproduction of the disease, and serological survey in the United States. Lucio B, et al. **Avian Dis** 1990 Jan–Mar;34(1):146–53

Recent advances in filtered–air positive–pressure (FAPP) housing for the production of disease–free chickens. Mitchell BW, et al. **Avian Dis** 1989 Oct–Dec;33(4):792–800

Single and combined infections of specific–pathogen–free chickens with infectious bursal disease virus and an intestinal isolate of reovirus. Moradian A, et al. **Avian Dis** 1990 Jan–Mar;34(1):63–72

Salmonella typhimurium outbreak in broiler chicken flocks in Mexico. Padron M. **Avian Dis** 1990 Jan–Mar;34(1):221–3

The effects of age, route of exposure, and coinfection with infectious bursal disease virus on the pathogenicity and transmissibility of chicken anemia agent (CAA). Rosenberger JK, et al. **Avian Dis** 1989 Oct–Dec;33(4):753–9

Development of an enzyme–linked immunosorbent assay to detect and quantify adenovirus in chicken tissues. Saifuddin M, et al. **Avian Dis** 1990 Apr–Jun;34(2):239–45

Fowl cholera in broilers. Sander JE, et al. **Avian Dis** 1989 Oct–Dec;33(4):816–9

Experimental infection in specific–pathogen–free chicks with avian reovirus and avian nephritis virus isolated from broiler chicks showing runting syndrome. Shirai J, et al. **Avian Dis** 1990 Apr–Jun;34(2):295–303

Kidney lesions associated with mortality in chickens inoculated with waterfowl influenza viruses. Slemons RD, et al. **Avian Dis** 1990 Jan–Mar;34(1):120–8

Renal pathology in specific–pathogen–free chickens inoculated with a waterfowl–origin type A influenza virus. Swayne DE, et al. **Avian Dis** 1990 Apr–Jun;34(2):285–94

Detection of infectious bronchitis virus antigen from experimentally infected chickens by indirect immunofluorescent assay with monoclonal antibody. Yagyu K, et al. **Avian Dis** 1990 Apr–Jun;34(2):246–52

Pathogenicity of Escherichia coli in aerosols for young chickens. Yoder HW Jr, et al. **Avian Dis** 1989 Oct–Dec; 33(4):676–83

Effect of dietary palm kernel oil and biotin on the fatty liver and kidney syndrome in broiler chicken. Oloyo RA, et al. **Beitr Trop Landwirtsch Veterinarmed** 1989;27(3):347–55

Alleviation of hysteria in laying hens with dietary tryptophan. Laycock SR, et al. **Can J Vet Res** 1990 Apr; 54(2):291–5

Fibrosing cholehepatitis in broiler chickens induced by bile duct ligations or inoculation of Clostridium perfringens. Onderka DK, et al. **Can J Vet Res** 1990 Apr;54(2):285–90

Influence of dietary charcoal on ochratoxin A toxicity in Leghorn chicks. Rotter RG, et al. **Can J Vet Res** 1989 Oct;53(4):449–53

Spontaneous squamous carcinoma of the esophagus in chickens. Rubio CA, et al. **Cancer** 1989 Dec 15; 64(12):2511–4

Ocular responses of genetically blind chicks to the light environment and to lid suture. Lauber JK, et al. **Curr Eye Res** 1989 Aug;8(8):757–64

Antigenic characterization of IBDV field isolates by their reactivity with a panel of monoclonal antibodies. Van der Marel P, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Feb; 97(2):81–3

Serological response of chickens to Salmonella enteritidis infection. Chart H, et al. **Epidemiol Infect** 1990 Feb; 104(1):63–71

Horizontal transmission of Campylobacter jejuni amongst broiler chicks: experimental studies. Shanker S, et al. **Epidemiol Infect** 1990 Feb;104(1):101–10

Demonstration of enterotoxigenic Escherichia coli in diarrheic broiler chicks. Joya JE, et al. **Eur J Epidemiol** 1990 Mar;6(1):88–90

Prague inbred lines of chickens: a biological model for MHC research. Plachý J, et al. **Folia Biol (Praha)** 1989; 35(4):177–96 (76 ref.)

Bacteriological quality of broiler carcasses as affected by in–plant lactic acid decontamination. van der Marel GM, et al. **Int J Food Microbiol** 1988 Feb;6(1):31–42

Onset of spermatozoal degeneration in low–fertility Delaware roosters and test for autoimmune basis. Froman DP, et al. **J Androl** 1990 Mar–Apr;11(2):113–9

Disturbed endochondral ossification in the axial skeleton of young broiler fowls. Duff SR. **J Comp Pathol** 1989 Nov; 101(4):399–409

Marek's disease virus–induced transient paralysis in chickens: demonstration of vasogenic brain oedema by an immunohistochemical method. Swayne DE, et al. **J Comp Pathol** 1989 Nov;101(4):451–62

"Paradoxical" growth hormone secretion in acromegaly: an avian model? Harvey S. **J Exp Zool Suppl** 1990;4:195–9 (51 ref.)

Efficacy of several vitamin D compounds in the prevention of tibial dyschondroplasia in broiler chickens. Edwards HM Jr. **J Nutr** 1990 Sep;120(9):1054–61

The influence of breed and sex on the incidence of mortalities and skin tears in broiler carcasses. Casey NH, et al. **J S Afr Vet Assoc** 1989 Jun;60(2):102–3

Nerve conduction studies in chickens given phenyl saligenin phosphate and corticosterone. Lidsky TI, et al. **J Toxicol Environ Health** 1990;29(1):65–75

Objective clinical examination of poultry as illustrated by the comparison of chickens with different vitamin A status. Beynen AC, et al. **Lab Anim** 1989 Oct;23(4):307–12

Housing, breeding and selecting chickens of the Obese strain (OS) with spontaneous autoimmune thyroiditis. Dietrich HM. **Lab Anim** 1989 Oct;23(4):345–52

The respiratory health of Victorian broiler growers. Brown AM. **Med J Aust** 1990 May 21;152(10):521–4

Early nuclear events of in vitro fertilization in the domestic fowl (Gallus domesticus). Nakanishi A, et al. **Mol Reprod Dev** 1990 Jul;26(3):217–21

Aspergillus fumigatus as a cause of mycotic tracheitis in a chicken. Pal M, et al. **Mycoses** 1990 Feb;33(2):70–2

Chicken fat doesn't migrate [letter] Dieleman L, et al. **N Engl J Med** 1990 Sep 13;323(11):759

Evaluation of pathogenicity and protective efficacy of serotype 2 Marek's disease virus from birds belonging to genus Gallus in Japan. Lin JA, et al. **Nippon Juigaku Zasshi** 1990 Apr;52(2):329–37

Identification of Eimeria brunetti using glucose phosphate isomerase and lactate dehydrogenase. Nakamura T, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):859–60

Pathology of experimental chlamydiosis in chicks. Suwa T, et al. **Nippon Juigaku Zasshi** 1990 Apr;52(2):275–83

Eimeria tenella, E. acervulina and E. maxima: studies on the development of resistance to diclazuril and other anticoccidial drugs in the chicken. Chapman HD. **Parasitology** 1989 Oct;99 Pt 2:189–92

Effect of eumelanic phenotypes on the expression of amelanosis in the Smyth chicken. Boyle ML 3d, et al. **Poult Sci** 1989 Oct;68(10):1319–25

Hepatomegaly induced by the pulsatile, but not continuous, intravenous administration of purified chicken growth hormone in broiler pullets: liver composition and nucleic–acid content. Cravener TL, et al. **Poult Sci** 1990 May;69(5):845–8

Effect of vitamin C, environmental temperature, chlortetracycline, and vitamin D3 on the development of tibial dyschondroplasia in chickens. Edwards HM Jr. **Poult Sci** 1989 Nov;68(11):1527–34

Age–related changes in the persistence and pathogenicity of Salmonella typhimurium in chicks. Gast RK, et al. **Poult Sci** 1989 Nov;68(11):1454–60

Efficacy of simultaneous administration of Marek's disease and viral tenosynovitis vaccines to day–old broiler chickens. Giambrone JJ, et al. **Poult Sci** 1989 Sep; 68(9):1213–7

Order of exposure to high dietary calcium and gray strain infectious bronchitis virus alters renal function and the incidence of urolithiasis. Glahn RP, et al. **Poult Sci** 1989 Sep;68(9):1193–204

Effects of chronic ochratoxin A and citrinin toxicosis on kidney function of single comb White Leghorn pullets. Glahn RP, et al. **Poult Sci** 1989 Sep;68(9):1205–12

Diminution of aflatoxicosis in growing chickens by the dietary addition of a hydrated, sodium calcium aluminosilicate. Kubena LF, et al. **Poult Sci** 1990 May;

69(5):727–35
Relationships among mineral balance in the diet, early growth manipulation, and incidence of tibial dyschondroplasia in different strains of meat type chickens. Lilburn MS, et al. **Poult Sci** 1989 Sep;68(9):1263–73
Effect of cold acclimation on the broiler chicks' resistance to acute aflatoxicosis. Manning RO, et al. **Poult Sci** 1990 Mar;69(3):388–96
Effect of cold acclimation on the broiler chicks' resistance to dietary aflatoxin. Manning RO, et al. **Poult Sci** 1990 Jun;69(6):915–21
Effect of human adenovirus on the ellipsoid–associated cells of the chicken's spleen. Olah I, et al. **Poult Sci** 1990 Jun; 69(6):929–33
Prevention of Salmonella typhimurium colonization of broilers with D–mannose. Oyofo BA, et al. **Poult Sci** 1989 Oct;68(10):1357–60
Comparative toxicity of scirpentriol and its acetylated derivatives. Richardson KE, et al. **Poult Sci** 1990 Mar; 69(3):397–402
Effect of dietary lipid on lutein metabolism during aflatoxicosis in young broiler chickens. Schaeffer JL, et al. **Poult Sci** 1990 Jan;69(1):53–9
Effect of malabsorption syndrome on pancreatic function in broilers. Szabo J, et al. **Poult Sci** 1989 Nov;68(11):1553–60
Effect of dietary sodium zeolite A and excess calcium on growth and tibia calcium and phosphorus concentration in uninfected and Eimeria acervulina–infected chicks. Watkins KL, et al. **Poult Sci** 1989 Sep;68(9):1236–40
Ascites in growing broilers: a research model. Witzel DA, et al. **Poult Sci** 1990 May;69(5):741–5
Maturation of resistance to salmonellosis in newly hatched chicks: inhibition by cyclosporine. Ziprin RL, et al. **Poult Sci** 1989 Dec;68(12):1637–42
Developmental and maturational aspects of inherited avian myopathies. Wilson BW. **Proc Soc Exp Biol Med** 1990 Jun; 194(2):87–96 (58 ref.)
Advances in stunting and runting syndrome research. Martland MF. **Prog Vet Microbiol Immunol** 1989;5:109–33 (66 ref.)
Egg drop syndrome. Smyth JA, et al. **Prog Vet Microbiol Immunol** 1989;5:83–108 (74 ref.)
A decreased capacity of hepatic growth hormone (GH) receptors and failure of thyrotrophin–releasing hormone to stimulate the peripheral conversion of thyroxine into triiodothyronine in sex–linked dwarf broiler hens. Kühn ER, et al. **Reprod Nutr Dev** 1989;29(4):461–7
Localisation of avian reovirus in the hock joints of chicks after entry through broken skin. al Afaleq AI, et al. **Res Vet Sci** 1990 May;48(3):381–2
Sequential morphological changes in chicken erythrocytes after in vivo and in vitro exposure to phenylhydrazine–hydrochloride. Datta K, et al. **Res Vet Sci** 1990 Jan;48(1):12–7
Comparative efficacy of four vaccines against Salmonella virchow in chicks in India. Ghosh SS. **Res Vet Sci** 1989 Sep;47(2):280–2
Role of harderian glands in resistance against Mycoplasma gallisepticum challenge. Karaca K, et al. **Res Vet Sci** 1989 Nov;47(3):323–6
In vitro activity of chloropolysporin–C, a new glycopeptide–group antibiotic, on Clostridium perfringens isolates and its in vivo activity against C perfringens and other intestinal microflora of the caeca of broiler chickens. Kondo F, et al. **Res Vet Sci** 1990 Mar;48(2):175–9
Attenuation of Borrelia anserina by serial passage in liquid medium. Levine JF, et al. **Res Vet Sci** 1990 Jan;48(1):64–9
Dual infections of Eimeria tenella and Escherichia coli in chickens. Nakamura K, et al. **Res Vet Sci** 1990 Jul; 49(1):125–6
Evaluation of the efficacy of chlortetracycline for the control of chronic respiratory disease caused by Escherichia coli and Mycoplasma gallisepticum. Timms LM, et al. **Res Vet Sci** 1989 Nov;47(3):377–82
A fowlpox virus vaccine vector with insertion sites in the terminal repeats: demonstration of its efficacy using the fusion gene of Newcastle disease virus. Boursnell ME, et al. **Vet Microbiol** 1990 Jun;23(1–4):305–16
Characteristics and analysis of electropherotypes of avian reovirus field isolates. Rekik MR, et al. **Vet Microbiol** 1990 Jun;23(1–4):273–81
The use of an enzyme–linked immunosorbent assay for estimation of the immune status of chickens artificially immunized against coccidiosis. Onaga H, et al. **Vet Parasitol** 1989 Oct;33(3–4):199–205
Observations on avian intestinal spirochaetosis. Dwars RM, et al. **Vet Q** 1990 Jan;12(1):51–5
Serological tests for Salmonella enteritidis in chickens [letter; comment] **Vet Rec** 1990 Jan 6;126(1):20–1 Comment on: Vet Rec 1989 Dec 2;125(23):567–72.
Control of Salmonella enteritidis in poultry [letter; comment] **Vet Rec** 1989 Sep 30;125(14):380–1 Comment on: Vet Rec 1989 Sep 16;125(12):333–4.
Immunisation against infectious bursal disease [letter] Abrams L. **Vet Rec** 1990 Apr 28;126(17):441
Efficacy of an inactivated vaccine against hydropericardium syndrome in broilers. Afzal M, et al. **Vet Rec** 1990 Jan 20;126(3):59–60
Detection of Salmonella infection by ELISA [letter] [see comments] Barrow P, et al. **Vet Rec** 1989 Dec 2;125(23):586 Comment in: Vet Rec 1990 Feb 10;126(6):147.
Serological tests for Salmonella enteritidis in chickens [letter] Chart H, et al. **Vet Rec** 1990 Jan 27;126(4):92
Outbreak of virulent infectious bursal disease in East Anglia. Chettle N, et al. **Vet Rec** 1989 Sep 2;125(10):271–2
Serological and bacteriological investigations of chickens from flocks naturally infected with Salmonella enteritidis [see comments] Cooper GL, et al. **Vet Rec** 1989 Dec 2; 125(23):567–72 Comment in: Vet Rec 1990 Jan 6;126(1):20–1.
Egg yolk antibody detection in identification of salmonella infected poultry. Dadrast H, et al. **Vet Rec** 1990 Mar 3; 126(9):219
Avian rhinotracheitis diagnostic kit [letter] Gerrard C, et al. **Vet Rec** 1990 Apr 7;126(14):342
Infectious bronchitis in laying fowls [letter] Grattan DA. **Vet Rec** 1968 Aug 10;83(6):157
Comparison of neck dislocation and percussion of the head on visual evoked responses in the chicken's brain. Gregory NG, et al. **Vet Rec** 1990 Jun 9;126(23):570–2
Failure of Salkil to eliminate Salmonella from chicken feed [letter] [see comments] Hall P, et al. **Vet Rec** 1990 Mar 24;126(12):297 Comment in: Vet Rec 1990 Mar 31;126(13):317.
Antibody response to experimental Salmonella typhimurium infection in chickens measured by ELISA. Hassan JO, et al. **Vet Rec** 1990 May 26;126(21):519–22
Inhibition of Campylobacter jejuni in vitro by broiler chicken caecal contents. Humphrey TJ, et al. **Vet Rec** 1989 Sep 2;125(10):272–3
Infection of egg–laying hens with Salmonella enteritidis PT4 by oral inoculation. Humphrey TJ, et al. **Vet Rec** 1989 Nov 18;125(21):531–2
Factors responsible for the introduction and spread of Campylobacter jejuni infection in commercial poultry production. Kazwala RR, et al. **Vet Rec** 1990 Mar 31; 126(13):305–6
Control, prevention and eradication of Salmonella enteritidis infection in broiler and broiler breeder flocks. McIlroy SG, et al. **Vet Rec** 1989 Nov 25;125(22):545–8
Observations on swollen head syndrome in broiler and broiler breeder chickens. Pattison M, et al. **Vet Rec** 1989 Aug 26; 125(9):229–31
Droplet application for protecting chicks against Salmonella colonisation by competitive exclusion. Schneitz C, et al. **Vet Rec** 1990 May 19;126(20):510
Removal of an intra–abdominal egg from a chicken. Shield CF. **Vet Rec** 1990 Jun 23;126(25):624
A comparison of three different regimens of infectious bursal disease vaccination in chickens. Adene DF, et al. **Zentralbl Veterinarmed [B]** 1989 Aug;36(6):413–6
Dermatitis in broilers caused by Escherichia coli: isolation of Escherichia coli from field cases, reproduction of the disease with Escherichia coli O78:K80 and conclusions under consideration of predisposing factors. Glünder G. **Zentralbl Veterinarmed [B]** 1990 Jul;37(5):383–91
Screening for antibodies against infectious bronchitis virus: specificity of the haemagglutination inhibition test. Toro H, et al. **Zentralbl Veterinarmed [B]** 1990 Jun;37(4):254–6
[Experiments with the technology for manufacturing oral liquid of wuji jing] Zhao HS. **Chung Kuo Chung Yao Tsa Chih** 1989 Jul;14(7):413–5, 446 (Eng. Abstr.) **(Chi)**
[Karyometric differences in the tissue of lymphoid organs in Marek's disease and lymphoid leukosis in poultry] Neuhybel P, et al. **Vet Med (Praha)** 1989 Nov;34(11):675–80 (Eng. Abstr.) **(Cze)**
[A case of cryptosporidiosis in breeding laying hens with Marek's disease] Heijmans JF, et al. **Tijdschr Diergeneeskd** 1990 Jul 15;115(14):673–5 (Eng. Abstr.) **(Dut)**
[Tumor histogenesis and macrophage content in lymphomas in Marek's disease of chickens] Beyer J, et al. **Arch Exp Veterinarmed** 1990;44(2):233–49 (Eng. Abstr.) **(Ger)**
[A case of an undifferentiated rhabdomyosarcoma in a hen] Erer H, et al. **Berl Munch Tierarztl Wochenschr** 1989 Nov 1;102(11):382–5 (Eng. Abstr.) **(Ger)**
[The problems of the estimation of bacterial contamination in viral drinking water vaccines for poultry] Jungbäck C. **Berl Munch Tierarztl Wochenschr** 1990 Mar 1;103(3):81–3 (Eng. Abstr.) **(Ger)**
[Experiences with the testing of the microbial count in drinking water from two laying hen battery sheds] Adrian U, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Nov–Dec; 96(10):504–6 (Eng. Abstr.) **(Ger)**
[Hygienic evaluation of working conditions of poultry breeders] Vinogradov PB, et al. **Gig Sanit** 1989 Dec; (12):78–80 **(Rus)**
[The effect of cyadox and virginiamycin on Marek's disease in chickens] Tokošová M. **Vet Med (Praha)** 1990 Feb; 35(2):105–12 (Eng. Abstr.) **(Slo)**

ANATOMY & HISTOLOGY

Post natal development of the neck system in the chicken (Gallus domesticus). Heidweiller J. **Am J Anat** 1989 Nov; 186(3):258–70
Morphology of the lingual apparatus of the domestic chicken, Gallus gallus, with special attention to the structure of the fasciae. Homberger DG, et al. **Am J Anat** 1989 Nov; 186(3):217–57
Presence in chicken tibialis anterior and extensor digitorum longus muscle spindles of reactive and unreactive intrafusal fibers after incubation with monoclonal antibodies against myosin heavy chains. Maier A, et al. **Am J Anat** 1990 Apr; 187(4):338–46
Histochemical fiber types in the thigh muscles of 4 chicken inbred lines. Horák V, et al. **Anat Anz** 1989;169(5):313–20
On the presence of reciprocal synapses in the paratympanic organ of the chicken. Giannessi F. **Anat Embryol (Berl)** 1989;180(2):175–8
Distribution of serotonin–immunoreactive cells around arteries arising from the common carotid artery in the chicken. Kameda Y. **Anat Rec** 1990 May;227(1):87–96
Light microscopic and ultrastructural characterization of cells recovered by respiratory–tract lavage of 2– and 6–week–old chickens. Fulton RM, et al. **Avian Dis** 1990 Jan–Mar;34(1):87–98
Decreased spermatozoal survivability associated with aberrant morphology of the ductuli efferentes proximales of the chicken (Gallus domesticus). Kirby JD, et al. **Biol Reprod** 1990 Feb;42(2):383–9
Ultrastructure of the supporting cells of the paratympanic organ in the chicken: a preliminary study. Giannessi F. **Boll Soc Ital Biol Sper** 1990 Feb;66(2):99–104
Computerised tomography of chickens. Bentsen HB, et al. **Br Poult Sci** 1989 Sep;30(3):575–89
Bone strength of laying hens kept in an alternative system, compared with hens in cages and on deep–litter. Nørgaard–Nielsen G. **Br Poult Sci** 1990 Mar;31(1):81–9
Rete mirabile medullae: vascular specialization of the avian brain stem. Freedman SL, et al. **Brain Res Bull** 1990 Jun; 24(6):735–8
Ultrastructure of individual neurons isolated from avian retina: occurrence of microtubule loops in dendrites. Lankford KL, et al. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):217–24
Ultrastructural immuno–localization of tropoelastin in the chick eye. Daga Gordini D, et al. **Cell Tissue Res** 1990 Apr;260(1):137–46
Morphometry of the galliform cecum: a comparison between Gambel's quail and the domestic fowl. Strong TR, et al. **Cell Tissue Res** 1990 Mar;259(3):511–8
Light and electron microscopic localization of GABA–like immunoreactivity in myenteric plexus of chicken. Fekete E, et al. **Histochemistry** 1989;93(1):75–80
Arrangement of cytoskeletal filaments at the equator of chicken intrafusal muscle fibers. Maier A, et al. **Histochemistry** 1990;93(4):423–8
Horseradish peroxidase labeling of the central pathways in the medulla of the ampullary nerves in the chicken, Gallus gallus. Cox RG, et al. **J Comp Neurol** 1990 Jul 22; 297(4):564–81
Ultrastructural differences between the two major components of chicken ceca. Dantzer V. **J Exp Zool Suppl** 1989;3:21–31
Avian cecal microanatomy: a morphometric comparison of two species. Strong TR, et al. **J Exp Zool Suppl** 1989; 3:10–20
Further studies on the cyto–, fibro– and dendro–architectonic structures of chicken diencephalon and mesencephalon. Yamauchi K, et al. **J Hirnforsch** 1989;30(5):529–37
Organisation of the hyperstriatal projection to the ventral lateral geniculate nucleus in the chick (Gallus gallus). Ehrlich D, et al. **Neurosci Lett** 1989 Sep 25;104(1–2):1–6
Update on the anatomy of the pulley system in the chicken foot long digit. Telepun GM, et al. **Plast Reconstr Surg** 1990 Apr;85(4):597–9
Localization of chicken parathyroid glands through vital staining. Hess JB, et al. **Poult Sci** 1990 Jan;69(1):133–7
Glycosaminoglycans from the rooster comb and wattle. Nakano T, et al. **Poult Sci** 1989 Sep;68(9):1303–6
Architecture of chicken muscles: short–fibre patterns and their ontogeny. Gaunt AS, et al. **Proc R Soc Lond [Biol]** 1990 Jun 22;240(1298):351–62
Immunohistochemical study on the distribution of vasoactive intestinal polypeptide (VIP) containing nerve fibers in the chicken pancreas. Hiramatsu K, et al. **Z Mikrosk Anat Forsch** 1989;103(5):689–99
Supraependymal cells and fibers in the third ventricle of the domestic chicken. A scanning electron microscopic study. Hirunagi K, et al. **Z Mikrosk Anat Forsch** 1989; 103(4):529–39
An immunohistochemical study on the distribution of endocrine cells in the chicken gastrointestinal tract. Yamanaka Y, et al. **Z Mikrosk Anat Forsch** 1989; 103(3):437–46
[Organization of the bony nasal septum and its homologues I. Os alare et systema integratum fronto–alare in birds] Pędziwiatr ZF. **Otolaryngol Pol** 1989;43(4):289–97 (Eng. Abstr.) **(Pol)**
[The ultrastructural changes in the synapses of the hyperstriatum of chicks after visual imprinting] Petrova LP, et al. **Zh Evol Biokhim Fiziol** 1990 Mar–Apr; 26(2):230–5 (Eng. Abstr.) **(Rus)**

BLOOD

Active substance from the serum of laying hens and its effect on uterine smooth muscles. Nikolov A. **Acta Physiol Pharmacol Bulg** 1989;15(4):41–7
Ontogeny and expression of chicken A blood group antigens. Fulton JE, et al. **Anim Genet** 1990;21(1):47–57
Responsiveness to dietary cholesterol in the domestic fowl is not related to the degree of body fatness. Meijer GW, et al. **Artery** 1989;17(1):1–5
Thermal stress reduces serum luteinizing hormone and

bioassayable hypothalamic content of luteinizing hormone-releasing hormone in hens. Donoghue DJ, et al. **Biol Reprod** 1989 Sep;41(3):419-24

Plasma concentrations of arginine vasotocin and mesotocin following pentobarbital anaesthesia and carotid cannulation in domestic fowl. Bottje WG, et al. **Br Poult Sci** 1990 Mar; 31(1):189-95

Factors affecting chicken thrombocyte morphology and the relationship with heterophil:lymphocyte ratios. Gross WB. **Br Poult Sci** 1989 Dec;30(4):919-25

Comparison of haematological values in restricted- and ad libitum-fed domestic fowls: white blood cells and thrombocytes. Maxwell MH, et al. **Br Poult Sci** 1990 Jun; 31(2):399-405

Comparison of haematological values in restricted- and ad libitum-fed domestic fowls: red blood cell characteristics. Maxwell MH, et al. **Br Poult Sci** 1990 Jun;31(2):407-13

Effect of carbonated water on arterial pH, PCO2 and plasma lactate in heat-stressed broilers. Raup TJ, et al. **Br Poult Sci** 1990 Jun;31(2):377-84

A 12 kDa protein in chicken serum antigenically cross-reactive with, but unrelated to, beta 2-microglobulin. Warr GW. **Dev Comp Immunol** 1990 Spring;14(2):247-53

Long-term cultures of chicken bone marrow cells. Cormier F, et al. **Exp Cell Res** 1990 Sep;190(1):113-7

DNA single-strand breaks in adult and embryonic avian erythrocytes. Guy SP, et al. **Exp Cell Res** 1990 Sep; 190(1):141-4

Radiation induced blood pathology in chick-erythrocytes and related parameters. Malhotra N, et al. **Exp Pathol** 1990; 38(4):241-8

Influence of androgens on plasma concentrations of growth hormone in growing castrated and intact chickens. Fennell MJ, et al. **Gen Comp Endocrinol** 1990 Mar;77(3):466-75

Dynamics of avian inflammatory response to cross-linked dextran. Changes in avian blood leukocyte populations. Golemboski KA, et al. **Inflammation** 1990 Feb;14(1):31-40

Ontogeny and secretory patterns of plasma insulin-like growth factor-I concentrations in meat-type chickens. Johnson RJ, et al. **J Endocrinol** 1990 Jan;124(1):81-7

Absence of apolipoprotein B-48 in the chick, Gallus domesticus. Tarugi P, et al. **J Lipid Res** 1990 Mar; 31(3):417-27

Vacuum-assisted cardiac puncture in chickens. Foytik JE, et al. **Lab Anim Sci** 1989 Nov;39(6):626-8

Preliminary evidence of growth factor(s) from chicken thrombocytes--growth effects on chicken embryo fibroblasts culture. Horiuchi H, et al. **Nippon Juigaku Zasshi** 1990 Jun;52(3):559-65

Impact of L-phenylalanine supplementation on the performance of three-week-old broilers fed diets containing ochratoxin A. 2. Effects on hematology and clinical chemistry. Bailey CA, et al. **Poult Sci** 1990 Mar; 69(3):420-5

Ochratoxin A and dietary protein. 2. Effects on hematology and various clinical chemistry measurements. Bailey CA, et al. **Poult Sci** 1989 Dec;68(12):1664-71

Physiological effects of adrenocorticotropic hormone and hydrocortisone in laying hens. Gray HG, et al. **Poult Sci** 1989 Dec;68(12):1710-3

Monoclonal antibody specific for chicken blood group A antigens. Fulton JE, et al. **Prog Clin Biol Res** 1989; 307:213-9

Avian rhinotracheitis diagnostic kit [letter] [published erratum appears in Vet Rec 1990 Feb 17;126(7):178] Chettle N, et al. **Vet Rec** 1990 Feb 10;126(6):148-9

Haematological studies on naturally occurring hydropericardium syndrome in broiler chicks. Niazi AK, et al. **Vet Rec** 1989 Oct 7;125(15):400

Histochemical studies on chicken peripheral blood lymphocytes. Maiti NK, et al. **Vet Res Commun** 1990; 14(3):207-10

[The effect of polyclorinated biphenyls in chickens: the effect of short-term administration of high doses of Delor 103 on the levels of thyroxine, triiodothyronine, sodium, potassium and calcium in the blood] Piskač A, et al. **Vet Med (Praha)** 1990 Apr;35(4):237-46 (Eng. Abstr.) **(Cze)**

[The effect of polychlorinated biphenyls (PCB) on chickens: the effect of long-term administration of medium doses of Delor 103 on the levels of thyroxine, triiodothyronine and total calcium in the blood serum] Ruprich J, et al. **Vet Med (Praha)** 1990 Feb;35(2):97-103 (Eng. Abstr.) **(Cze)**

CEREBROSPINAL FLUID

CSF ion composition and manipulation during thermoregulation in an avian species, Gallus domesticus. Maki AA, et al. **Comp Biochem Physiol [A]** 1990; 96(1):135-40

GENETICS

Effect of orally administered furazolidone on volume and sperm concentration of dwarf and non-dwarf cock semen. Gehlaut BS, et al. **Arch Exp Veterinarmed** 1989; 43(4):609-12

Crossbreeding as a tool for genetic improvement of chickens in suboptimum environments. Katule AM. **Beitr Trop Landwirtsch Veterinarmed** 1990;28(3):325-35

Influence of the sex-linked dwarfing gene (dw) on the contribution of dietary lipid to yolk lipid synthesis. Burghelle-Mayeur C, et al. **Br Poult Sci** 1990 Mar; 31(1):197-206

Effect of the sex-linked dwarf gene on circulating levels of 17 beta-estradiol, progesterone and luteinising hormone in the laying hen. Tixier-Boichard M, et al. **Br Poult Sci** 1990 Jun;31(2):385-97

Presence of female-specific bent-repetitive DNA sequences in the genomes of turkey and pheasant and their interactions with W-protein of chicken. Saitoh H, et al. **Chromosoma** 1989 Oct;98(4):250-8

Chicken growth hormone: cDNA-synthesis and base sequence. Baum D, et al. **Comp Biochem Physiol [B]** 1990; 96(3):491-5

De novo lipogenesis and lipolysis activities in normal (Dw) and dwarf (dw) White Leghorn laying hens. Burghelle-Mayeur C, et al. **Comp Biochem Physiol [B]** 1989;93(4):773-9

Characterization of N-cadherin mRNA in chicken brain and heart by means of oligonucleotide probes. Dalseg AM, et al. **FEBS Lett** 1990 Mar 26;262(2):234-6

Chromosomal reallocation of the chicken c-myb locus and organization of 3'-proximal coding exons. Soret J, et al. **FEBS Lett** 1990 Apr 24;263(2):254-60

Inherited changes in concentrations of retinal and serum melatonin in the chicken. Pang SF, et al. **Gen Comp Endocrinol** 1989 Dec;76(3):427-36

Analysis of a CR1 (chicken repeat) sequence flanking the 5' end of the gene encoding alpha-skeletal actin. French BA, et al. **Gene** 1990 Apr 16;88(2):173-80

Assessment of inbreeding by DNA fingerprinting: development of a calibration curve using defined strains of chickens. Kuhnlein U, et al. **Genetics** 1990 May; 125(1):161-5

Genetic control of avian scleroderma. Abplanalp H, et al. **Immunogenetics** 1990;31(5-6):291-5

Cloning of a cDNA encoding adenylosuccinate lyase by functional complementation in Escherichia coli. Aimi J, et al. **J Biol Chem** 1990 Jun 5;265(16):9011-4

The chicken urokinase-type plasminogen activator gene. Leslie ND, et al. **J Biol Chem** 1990 Jan 25;265(3):1339-44

Alternative ribosomal initiation gives rise to chicken brain-type creatine kinase isoproteins with heterogeneous amino termini. Soldati T, et al. **J Biol Chem** 1990 Mar 15; 265(8):4498-506

Inheritance of the henny feathering trait in the golden Campine chicken: evidence for allelism with the gene that causes henny feathering in the Sebright bantam. George FW, et al. **J Hered** 1990 Mar-Apr;81(2):107-10

Chromosomal localization of chicken sequences homologous to the beta-actin gene by in situ hybridization. Shaw EM, et al. **J Hered** 1989 Nov-Dec;80(6):475-8

Hereditary congenital baldness: a sex-linked trait in the domestic fowl. Somes RG Jr. **J Hered** 1989 Nov-Dec; 80(6):493-6

Sequence and gene organization of the chicken mitochondrial genome. A novel gene order in higher vertebrates. Desjardins P, et al. **J Mol Biol** 1990 Apr 20;212(4):599-634

Cloning and sequencing of cDNA clones encoding chicken lamins A and B1 and comparison of the primary structures of vertebrate A- and B-type lamins. Peter M, et al. **J Mol Biol** 1989 Aug 5;208(3):393-404

A second higher vertebrate B-type lamin. cDNA sequence determination and in vitro processing of chicken lamin B2. Vorburger K, et al. **J Mol Biol** 1989 Aug 5;208(3):405-15

Influence of the sex-linked dwarfing gene (dw) on the lipid composition of plasma, egg yolk and abdominal fat pad in White Leghorn laying hens: effect of dietary fat. Burghelle-Mayeur C, et al. **J Nutr** 1989 Oct;119(10):1361-8 (42 ref.)

Evidence of enhanced storage capacity in adipose tissue of genetically fat chickens. Hermier D, et al. **J Nutr** 1989 Oct;119(10):1369-75 (35 ref.)

Tissue-specific regulation of the concentration of calbindin D28K mRNA in the developing chicken. Ferrari S, et al. **Life Sci** 1989;45(14):1247-53

Organization and expression of the chicken N-myc gene. Sawai S, et al. **Mol Cell Biol** 1990 May;10(5):2017-26

The major and minor chicken vitellogenin genes are each adjacent to partially deleted pseudogene copies of the other. Silva R, et al. **Mol Cell Biol** 1989 Aug;9(8):3557-62

Evidence that chicken CR1 elements represent a novel family of retroposons. Silva R, et al. **Mol Cell Biol** 1989 Aug; 9(8):3563-6

Episomal replication of cloned DNA injected into the fertilised ovum of the hen, Gallus domesticus. Sang H, et al. **Mol Reprod Dev** 1989;1(2):98-106

Organization of the 3'-boundary of the chicken alpha globin gene domain and characterization of a CR 1-specific protein binding site. Farache G, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):401-9

Basal expression of the histone H5 gene is controlled by positive and negative cis-acting sequences. Rousseau S, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7495-511

The nucleotide sequence of the cDNA encoding a chicken Deformed family homeobox gene, Chox-Z. Sasaki H, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):184

Specific DNA binding of the two chicken Deformed family homeodomain proteins, Chox-1.4 and Chox-a. Sasaki H, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1739-47

Isolation of the chicken middle-molecular weight neurofilament (NF-M) gene and characterization of its promoter. Zopf D, et al. **Nucleic Acids Res** 1990 Feb 11; 18(3):521-9

Influence of selection for egg production and Marek's disease resistance on the incidence of endogenous viral genes in White Leghorns. Kuhnlein U, et al. **Poult Sci** 1989 Sep; 68(9):1161-7

Genetic variation of peptidase and pyrophosphatase in the chicken. Lundin LG, et al. **Poult Sci** 1989 Oct; 68(10):1313-8

Effects of dietary aflatoxin in aflatoxin-resistant and control lines of chickens. Manning RO, et al. **Poult Sci** 1990 Jun; 69(6):922-8

Cryopreservation of semen from unique lines of chicken germ plasm. Tajima A, et al. **Poult Sci** 1990 Jun;69(6):999-1002

Characterization of chicken octamer-binding proteins demonstrates that POU domain-containing homeobox transcription factors have been highly conserved during vertebrate evolution. Petryniak B, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1099-103

Nuclear matrix attachment regions of the chicken beta-type globin gene cluster. Bennett JP, et al. **Prog Clin Biol Res** 1989;316B:47-55

Topoisomerase II activity is not involved in the maintenance of active beta-globin chromatin structure in avian reticulocytes. Brotherton TW, et al. **Prog Clin Biol Res** 1989;316B:57-67

Analysis of five B complex haplotypes with class I (B-F), class II (B-L) and class IV (B-G) probes. Chaussé AM, et al. **Prog Clin Biol Res** 1989;307:197-202

Pharmacologic induction of embryonic globin gene expression in adult avian erythroid cells. Ginder GD, et al. **Prog Clin Biol Res** 1989;316B:327-39

A molecular map of the chicken B complex. Guillemot F, et al. **Prog Clin Biol Res** 1989;307:169-76

Typing of MHC haplotypes in OS chicken by means of RFLP analysis. Hála K, et al. **Prog Clin Biol Res** 1989; 307:177-86

Evaluation of "major genes" affecting disease resistance in poultry in respect to their potential for commercial breeding. Hartmann W. **Prog Clin Biol Res** 1989;307:221-31

Biochemical polymorphism of B-G and B-F antigens of the chicken major histocompatibility complex. Hepkema BG, et al. **Prog Clin Biol Res** 1989;307:203-11

The chicken B-complex in commercial pure lines: comparison of polymorphisms defined by serotyping and DNA analysis. Tilanus MG, et al. **Prog Clin Biol Res** 1989; 307:187-96

Cloning and expression of the chicken ovary aromatase P-450: expression of mRNA in tissues of the Sebright and Leghorn chicken. McPhaul MJ, et al. **Trans Assoc Am Physicians** 1988;101:219-25

[The occurrence of Marek's disease in genetically different groups of chickens] Jurajda V, et al. **Vet Med (Praha)** 1989 Oct;34(10):629-36 (Eng. Abstr.) **(Cze)**

[Transgenic chickens] de Boer GF, et al. **Tijdschr Diergeneeskd** 1990 May 15;115(10):451-62 (41 ref.) (Eng. Abstr.) **(Dut)**

GROWTH & DEVELOPMENT

Effect of the pre-incubation storage period of hatching eggs on the hatchability and post-hatching growth of local chickens under tropical conditions. Abdou FH, et al. **Beitr Trop Landwirtsch Veterinarmed** 1990;28(3):337-43

The utilization of raw and autoclaved faba beans (Vicia faba L., var. minor) and faba bean fractions in diets for growing boiler chickens. Rubio LA, et al. **Br J Nutr** 1990 May; 63(3):419-30

Changes in body-weight, composition and hepatic enzyme activities in response to dietary methionine, betaine and choline levels in growing chicks. Saunderson CL, et al. **Br J Nutr** 1990 Mar;63(2):339-49

Note on the effects of protein concentration on responses to dietary lysine by chicks. Abebe S, et al. **Br Poult Sci** 1990 Jun;31(2):255-60

Effects of protein concentration on responses to dietary tryptophan by chicks. Abebe S, et al. **Br Poult Sci** 1990 Jun;31(2):267-72

Growth, food intake and energy balance of layer and broiler chickens offered glucose in the drinking water and the effect of dietary protein content. Engku Azahan EA, et al. **Br Poult Sci** 1989 Dec;30(4):907-17

Effects of oxidised dietary oil and antioxidant supplementation on broiler growth and meat stability. Lin CF, et al. **Br Poult Sci** 1989 Dec;30(4):855-64

Effects of arginine and protein on chicks' responses to dietary lysine. Morris TR, et al. **Br Poult Sci** 1990 Jun;31(2):261-6

Sodium bentonite as a component in layer diets. Olver MD. **Br Poult Sci** 1989 Dec;30(4):841-6

Effect of lincomycin as a growth promoter for broiler chicks. Proudfoot FG, et al. **Br Poult Sci** 1990 Mar;31(1):181-7

Effect of embryonic and neonatal administration of tamoxifen on adiposity in the broiler chicken. Rozenboim I, et al. **Br Poult Sci** 1989 Sep;30(3):607-12

Sexual and age variations of organ iron content in Shaver chickens. Saiz MP, et al. **Br Poult Sci** 1990 Jun;31(2):339-49

Responses of body composition, growth and food efficiency to dietary protein in genetically lean and fat broilers up to seven weeks of age. Whitehead CC. **Br Poult Sci** 1990 Mar;31(1):163-72

The effect of dark-rearing on dendritic development in two regions of the forebrain of the domestic chick. Galal KM, et al. **Brain Res Dev Brain Res** 1990 Apr 1;53(1):135-8

Different rates of functional development in the two visual

systems of the chicken revealed by [14C]2-deoxyglucose. Rogers LJ, et al. **Brain Res Dev Brain Res** 1989 Oct 1; 49(2):161–72

Postnatal development of mucosa-associated lymphoid tissues in chickens. Jeurissen SH, et al. **Cell Tissue Res** 1989 Oct;258(1):119–24

Effect of Escherichia coli infection on growth and protein metabolism in broiler chicks (Gallus domesticus). Tian S, et al. **Comp Biochem Physiol [A]** 1989;94(2):323–31

A quantitative analysis of the synaptic development of the lobus parolfactorius of the chick (Gallus domesticus). Hunter A, et al. **Exp Brain Res** 1989;78(2):425–34

Histogenesis and histochemistry of the secretion plate: detection of glycans and neutral glycoproteins synthetized by the epithelial components of the gizzard mucosa of Gallus gallus. Pinheiro NL, et al.
Gegenbaurs Morphol Jahrb 1989;135(3):385–95

Effect of estrogen on calcium homeostasis and pituitary hormones in the growing chick. Sommerville BA, et al. **Gen Comp Endocrinol** 1989 Nov;76(2):261–6

In ovo growth hormone alters growth and adipose tissue development of chickens. Hargis PS, et al.
Growth Dev Aging 1989 Autumn;53(3):93–9

Thyroid hormones and growth patterns of embryonic and posthatch chickens from lines selected for high and low juvenile body weight. McNabb FM, et al.
Growth Dev Aging 1989 Autumn;53(3):87–92

Effects of repeated eastward and westward synchronizer phase-shifts on growth, blood morphology and biochemical variables in male domestic fowls. Saini SK, et al. **Indian J Exp Biol** 1989 Oct;27(10):895–8

L-2-oxothiazolidine-4-carboxylate as a cysteine precursor: efficacy for growth and hepatic glutathione synthesis in chicks and rats. Chung TK, et al. **J Nutr** 1990 Feb; 120(2):158–65

Insulin-like growth factor (IGF)-I and IGF-binding activity in normal and fast-growing chickens. Lee PD, et al.
Life Sci 1989;45(25):2465–70

Docosahexaenoic acid is the preferred dietary n-3 fatty acid for the development of the brain and retina. Anderson GJ, et al. **Pediatr Res** 1990 Jan;27(1):89–97

Embryonic sex steroids affect mating behavior and plasma LH in adult chickens. Sayag N, et al. **Physiol Behav** 1989 Jun;45(6):1107–12

Lack of interactive effect of nicarbazin and dietary energy-to-protein ratio on performance and abdominal fat pad weight of broiler chicks. Bartov I. **Poult Sci** 1989 Nov; 68(11):1535–9

Body composition of the broiler-breeder pullet. Bennett CD, et al. **Poult Sci** 1990 May;69(5):715–20

Effects of the presence or absence of satellite chick-waterers in conjunction with nipple-drinkers on the mortality and productive performance of broiler chicks from young and old dams. Carpenter GH, et al. **Poult Sci** 1990 Jan; 69(1):45–7

An evaluation of a stepdown amino-acid feeding program for commercial pullets to 20 weeks of age. Douglas CR, et al. **Poult Sci** 1990 May;69(5):763–7

Male broiler performance during the starting and growing periods as affected by dietary protein, essential amino acids, and potassium levels. Fancher BI, et al. **Poult Sci** 1989 Oct;68(10):1385–95

Dietary requirements of leucine, isoleucine, and valine in male broilers during the starter period. Farran MT, et al. **Poult Sci** 1990 May;69(5):757–62

Tolerance to ground Sesbania macrocarpa seed by broiler chicks and White Leghorn hens. Flunker LK, et al.
Poult Sci 1990 Apr;69(4):669–72

Ochratoxin A and dietary protein. 1. Effects on body weight, feed conversion, relative organ weight, and mortality in three-week-old broilers. Gibson RM, et al. **Poult Sci** 1989 Dec;68(12):1658–63

Impact of L-phenylalanine supplementation on the performance of three-week-old broilers fed diets containing ochratoxin A. 1. Effects on body weight, feed conversion, relative organ weight, and mortality. Gibson RM, et al. **Poult Sci** 1990 Mar;69(3):414–9

Comparison of weights for left and right breast muscle of broilers. Hickling D, et al. **Poult Sci** 1990 Apr;69(4):711–3

Effects of a buffered propionic acid in diets on the performance of broiler chickens and on microflora of the intestine and carcass. Izat AL, et al. **Poult Sci** 1990 May; 69(5):818–26

Growth and development of broiler breeders. 2. Independent effects of dietary formulation versus body weight on skeletal and muscle growth. Lilburn MS, et al.
Poult Sci 1989 Sep;68(9):1274–81

Barley and full-fat canola seed in broiler diets. Nwokolo E, et al. **Poult Sci** 1989 Oct;68(10):1374–80

Response of four broiler strains to dietary phosphorus above and below the requirement when brooded at two temperatures. Orban JI, et al. **Poult Sci** 1990 Mar; 69(3):440–5

Single and combination effects of administering salinomycin and aflatoxin to broiler chicks. Pearson SA, et al.
Poult Sci 1990 May;69(5):849–51

The nutritional value of dehydrated, blue-green algae (Spirulina platensis) for poultry. Ross E, et al.
Poult Sci 1990 May;69(5):794–800

Niacin requirement of broiler chickens fed a corn-soybean meal diet from 1 to 21 days of age. Ruiz N, et al.
Poult Sci 1990 Mar;69(3):433–9

Factors influencing the response of broiler chickens to calcium supplementation of canola meal. Summers JD, et al. **Poult Sci** 1990 Apr;69(4):615–22

Effect of dietary thyroxine on growth and muscle protein metabolism in broiler chickens. Suthama N, et al.
Poult Sci 1989 Oct;68(10):1396–401

Response of White Leghorn chicks fed ascorbic acid and challenged with Escherichia coli or with corticosterone. van Niekerk T, et al. **Poult Sci** 1989 Dec;68(12):1631–6

The effect of zinc bacitracin and roxarsone on performance of broiler chickens when fed in combination with narasin. Waldroup PW, et al. **Poult Sci** 1990 Jun;69(6):898–901

Effect of daily restriction and age at initiation of a skip-a-day program for young broiler breeders. Wilson HR, et al.
Poult Sci 1989 Nov;68(11):1442–6

Dietary thyrotropin-releasing hormone stimulates growth rate and increases the insulin: glucagon molar ratio of broiler chickens. Cogburn LA, et al.
Proc Soc Exp Biol Med 1989 Nov;192(2):127–34

Patterns of cell proliferation and growth rate in limb bones of the domestic fowl (Gallus domesticus). Kirkwood JK, et al. **Res Vet Sci** 1989 Sep;47(2):139–47

Haematological and histopathological findings in young broilers reared in poorly and well ventilated environments. Maxwell MH. **Res Vet Sci** 1990 May;48(3):374–6

Changes in the collodiaphyseal angle with growth in the fowl (Gallus domesticus). Thorp BH. **Res Vet Sci** 1989 Nov; 47(3):402–3

Growth pattern of desi (indigenous) and crossbred chicks under rural scavenging conditions. Sazzad MH, et al.
Trop Anim Health Prod 1989 Nov;21(4):280

The effect of sodium selenite supplementation on monensin-induced growth inhibition and residue accumulation in broiler chicks. VanderKop PA, et al.
Vet Hum Toxicol 1990 Feb;32(1):1–5

[Functional morphology of the neural apparatus of the hen ovary in postnatal ontogeny] Leontiuk LA, et al.
Arkh Anat Gistol Embriol 1989 Dec;97(12):80–9 (Eng. Abstr.) **(Rus)**

[The effect of egg incubation temperature on the activity of cytochrome oxidase and anionic ATPase in chicken ontogenesis] Simonian AA, et al. **Ukr Biokhim Zh** 1989 Jul-Aug;61(4):69–73 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Somatic diversification of the chicken immunoglobulin light-chain gene. McCormack WT, et al. **Adv Immunol** 1990;48:41–67 (63 ref.)

The obese strain of chickens: an animal model with spontaneous autoimmune thyroiditis. Wick G, et al.
Adv Immunol 1989;47:433–500 (216 ref.)

Interdigital skin test for evaluation of delayed hypersensitivity and cutaneous basophil hypersensitivity in young chickens. Corrier DE, et al. **Am J Vet Res** 1990 Jun;51(6):950–4

Effects of standard and variant strains of infectious bursal disease virus on infections of chickens. Craft DW, et al.
Am J Vet Res 1990 Aug;51(8):1192–7

Monoclonal antibody differentiates chicken A system alloantigens. Fulton JE, et al. **Anim Genet** 1990;21(1):39–45

Marek's disease and major histocompatibility complex haplotypes in chickens selected for high or low antibody response. Martin A, et al. **Anim Genet** 1989;20(4):407–14

Development of the peripheral immune function in the chicken. A study on the bursa of Fabricius isolated from the rest of the gut-associated lymphoid tissue (GALT). Naukkarinen A, et al. **APMIS** 1989 Sep;97(9):787–92

Effects of antigen and antigen concentration on serum antibody titres in chickens primed per bursam. Naukkarinen A, et al. **APMIS** 1989 Sep;97(9):793–7

Immunogenicity of a temperature sensitive mutant Mycoplasma gallisepticum vaccine. Whithear KG, et al.
Aust Vet J 1990 May;67(5):168–74

The relationship of egg yolk and serum antibody. I. Infectious bursal disease virus. Brown J, et al. **Avian Dis** 1989 Oct-Dec;33(4):654–6

Comparison of phytohemagglutinin-induced cutaneous hypersensitivity reactions in the interdigital skin of broiler and layer chicks. Corrier DE. **Avian Dis** 1990 Apr-Jun; 34(2):369–73

Suppression of resistance to Salmonella typhimurium in young chickens inoculated with Corynebacterium parvum. Corrier DE, et al. **Avian Dis** 1989 Oct-Dec;33(4):787–91

Protection afforded infectious bronchitis virus-vaccinated sentinel chickens raised in a commercial environment. Gelb J Jr, et al. **Avian Dis** 1989 Oct-Dec;33(4):764–9

Protection of chicks against Salmonella infection with a mixture of pure cultures of intestinal bacteria. Gleeson TM, et al. **Avian Dis** 1989 Oct-Dec;33(4):636–42

Alternative injection sites for a Pasteurella multocida bacterin. Glisson JR, et al. **Avian Dis** 1990 Jan-Mar; 34(1):214–7

Stimulatory effect of avian influenza virus on chicken lymphocytes. Holt PS, et al. **Avian Dis** 1989 Oct-Dec; 33(4):743–9

Pathogenicity and immunosuppressive properties of infectious bursal disease "intermediate" strains. Mazariegos LA, et al. **Avian Dis** 1990 Jan-Mar;34(1):203–8

Cellular immunity in chicks expressing fibrosarcomatous liver tumor following embryo infection with subgroup A Rous sarcoma virus. Pani PK, et al. **Avian Dis** 1989 Oct-Dec; 33(4):615–21

Pathogenicity of recent isolates of infectious bursal disease virus in specific-pathogen-free chickens: protection conferred by an intermediate vaccine strain. Rosales AG, et al. **Avian Dis** 1989 Oct-Dec;33(4):729–34

Immunosuppressive potential and pathogenicity of a recent isolate of infectious bursal disease virus in commercial broiler chickens. Rosales AG, et al. **Avian Dis** 1989 Oct-Dec;33(4):724–8

Comparison of egg-yolk and serum antibody titers to four avian viruses by enzyme-linked immunosorbent assay using paired field samples. Silim A, et al. **Avian Dis** 1989 Oct-Dec;33(4):643–8

Development of an enzyme-linked immunosorbent assay to detect serum antibody to chicken anemia agent. Todd D, et al. **Avian Dis** 1990 Apr-Jun;34(2):359–63

Host immune response to northern fowl mite: immunoblot and lectin blot identification of mite antigens. Wikel SK, et al. **Avian Dis** 1989 Oct-Dec;33(4):668–75

Immune response to oil-emulsion vaccines with single or mixed antigens of Newcastle disease, avian influenza, and infectious bronchitis. Xie ZX, et al. **Avian Dis** 1990 Jan-Mar;34(1):154–62

Tissue distribution and appearance in ontogeny of alpha/beta T cell receptor (TCR2) in chicken. Vainio O, et al.
Cell Immunol 1990 Jan;125(1):254–60

Continuous administration of 5-hydroxytryptamine alters cellular immunity in chickens. McCorkle FM, et al.
Comp Biochem Physiol [C] 1989;94(2):511–4

Immune response of chicks to oral vaccination against Newcastle disease and fowl pox. Saini SS, et al.
Comp Immunol Microbiol Infect Dis 1990;13(1):1–6

Monoamines alter in vitro migration of chicken leukocytes. McCorkle FM, et al. **Dev Comp Immunol** 1990 Winter; 14(1):85–93

Comparison of roles of serine esterase in chicken and human natural cytotoxicity. Mándi Y, et al.
Dev Comp Immunol 1990 Winter;14(1):113–9

In vitro organ culture of embryonic bursa of Fabricius. Nowak JS, et al. **Dev Comp Immunol** 1990 Spring; 14(2):239–46

Autosomal albinism affects immunocompetence in the chicken. Pardue SL, et al. **Dev Comp Immunol** 1990 Winter; 14(1):105–12

Questioning the role of adenosine deaminase in the development of B lymphocytes in chicken bursa. Senesi S, et al. **Dev Comp Immunol** 1990 Winter;14(1):95–104

Efficient production of chicken egg yolk antibodies against a conserved mammalian protein. Gassmann M, et al.
FASEB J 1990 May;4(8):2528–32

Structure and expression of a chicken MHC class I gene. Kroemer G, et al. **Immunogenetics** 1990;31(5–6):405–9

Antigens similar to major histocompatibility complex B-G are expressed in the intestinal epithelium in the chicken. Miller MM, et al. **Immunogenetics** 1990;32(1):45–50

Organization of a functional chicken class II B gene. Zoorob R, et al. **Immunogenetics** 1990;31(3):179–87

Isolation of IgY from the yolks of eggs by a chloroform polyethylene glycol procedure. Polson A.
Immunol Invest 1990 Jun;19(3):253–8

Eliciting antibodies in chickens to human dimeric IgA. removal of factors from human colostrum depressing anti IgA antibody production. Polson A, et al.
Immunol Invest 1989 Aug;18(7):853–77

Genetic organization of the chicken MHC. Kroemer G, et al. **Immunol Res** 1990;9(1):8–19 (39 ref.)

Molecular genetics of the chicken MHC: current status and evolutionary aspects. Kroemer G, et al. **Immunol Rev** 1990 Feb;113:119–45 (112 ref.)

A comment on allelic exclusion, 'D-disaster' and germ-line gene specificities. Pink JR. **Immunol Rev** 1990 Jun; 115:239–41; discussion 242 (4 ref.)

Immunity to experimental fowl typhoid in chickens induced by a virulence plasmid-cured derivative of Salmonella gallinarum. Barrow PA. **Infect Immun** 1990 Jul; 58(7):2283–8

Proliferative response of T cells from tumor-immune chickens to carcinogen-induced fibrosarcoma cells. Quere P, et al. **Int J Cancer** 1990 Jun 15;45(6):1159–63

The significance of intestinal flow in the maturing of B lymphocytes and the chicken antibody response. Dolfi A, et al. **J Anat** 1989 Oct;166:233–42

Increased susceptibility of lead exposed chickens to experimental infection of Ascaridia galli. Malviya S, et al.
J Hyg Epidemiol Microbiol Immunol 1989;33(3):241–4

MHC-like molecules in some nonmammalian vertebrates can be detected by some cross-reactive xenoantisera. Kaufman J, et al. **J Immunol** 1990 Mar 15;144(6):2258–72

MHC-like molecules in some nonmammalian vertebrates can be detected by some cross-reactive monoclonal antibodies. Kaufman J, et al. **J Immunol** 1990 Mar 15;144(6):2273–80

Newcastle disease virus fusion protein expressed in a fowlpox virus recombinant confers protection in chickens. Taylor J, et al. **J Virol** 1990 Apr;64(4):1441–50

Characterization of two monoclonal antibodies which recognize different subpopulations of chicken T lymphocytes. Kondo T, et al. **Jpn J Vet Res** 1990 Jan; 38(1):11–7

Localization of immunoglobulins in the chicken oviduct. Kimijima T, et al. **Nippon Juigaku Zasshi** 1990 Apr; 52(2):299–305

Production and characterization of monoclonal antibodies against chicken lymphocyte surface antigens. Kondo T,

et al. **Nippon Juigaku Zasshi** 1990 Feb;52(1):97–103

Enhanced pathogenicity of chicken anemia agent by infectious bursal disease virus relative to the occurrence of Marek's disease vaccination breaks. Otaki Y, et al. **Nippon Juigaku Zasshi** 1989 Aug;51(4):849–52

Immunological properties of the cell-associated live infectious laryngotracheitis virus. Taneno A, et al. **Nippon Juigaku Zasshi** 1990 Aug;52(4):827–9

Evaluation of cell-mediated, cutaneous basophil hypersensitivity in young chickens by an interdigital skin test. Corrier DE, et al. **Poult Sci** 1990 Mar;69(3):403–8

Heat-stress influences on antibody production in chicken lines selected for high and low immune responsiveness. Donker RA, et al. **Poult Sci** 1990 Apr;69(4):599–607

Lymphocyte inhibitory and chemotactic factors produced by bursal and thymic lymphocytes. Joshi P, et al. **Poult Sci** 1990 Feb;69(2):249–58

Genetic control of interleukin-2-like activity is distinct from that of mitogen response in chickens. Knudtson KL, et al. **Poult Sci** 1990 Jan;69(1):65–71

Effect of different doses of sheep erythrocytes on the humoral immune response of chicken lines selected for high or low antibody production. Kreukniet MB, et al. **Poult Sci** 1990 Apr;69(4):608–14

Production traits and alloantigen systems in lines of chickens selected for high or low antibody responses to sheep erythrocytes. Martin A, et al. **Poult Sci** 1990 Jun; 69(6):871–8

Recent advances in avian immunology research. Based on the Avian Immunology Research Group meeting. Lelystad, The Netherlands, September 29–30, 1988. **Prog Clin Biol Res** 1989;307:1–238

Vaccination of chickens with recombinant E. tenella antigen alone or in combination with a subclinical exposure induces cross protective immunity against coccidiosis. Bhogal BS, et al. **Prog Clin Biol Res** 1989;307:131–46

Cellular immune responses to pathogens in the chicken. Bhogal BS. **Prog Clin Biol Res** 1989;307:81–104

Grafts of the bursal primordium in quail—chick chimeras are tolerated after implantation of thymic epithelium. Corbel C, et al. **Prog Clin Biol Res** 1989;307:31–43

Cell surface changes in chicken inflammatory macrophages. Golemboski KA, et al. **Prog Clin Biol Res** 1989;307:159–66

Specific titration of avian paramyxovirus (PMV1) antibodies using an anti-HN monoclonal antibody. Jestin V, et al. **Prog Clin Biol Res** 1989;307:111–5

Distribution and function of non-lymphoid cells in liver and spleen of embryonic and adult chickens. Jeurissen SH, et al. **Prog Clin Biol Res** 1989;307:149–57

Enzyme immunospot assay for the detection of immunoglobulin- and antibody-secreting cells in chickens. Koch G, et al. **Prog Clin Biol Res** 1989;307:67–77

B-cells in the chicken harderian gland. Mansikka A, et al. **Prog Clin Biol Res** 1989;307:59–65

Application of a novel recombinant Eimeria tenella antigen in a vaccine to protect broiler chickens from coccidiosis. Miller GA, et al. **Prog Clin Biol Res** 1989;307:117–30

Avian antibody forming cell responses to Newcastle disease virus. Russell PH. **Prog Clin Biol Res** 1989;307:105–9

Characterization of chicken CD4-expressing cells. Vainio O, et al. **Prog Clin Biol Res** 1989;307:45–56

Ontogeny and regulation of the immune response in the chicken. Tempelis CH. **Prog Vet Microbiol Immunol** 1988; 4:1–20 (106 ref.)

Role of the harderian gland in immunoglobulin A production in chicken lacrimal fluid. Baba T, et al. **Res Vet Sci** 1990 Jul;49(1):20–4

B cell-induced tolerance to class II MHC antigens in the chicken. Lehtonen L, et al. **Transplantation** 1989 Oct; 48(4):646–50

Comparison of Mycoplasma gallisepticum subunit and whole organism vaccines containing different adjuvants by western immunoblotting. Barbour EK, et al. **Vet Immunol Immunopathol** 1989 Sep;22(2):135–44

The use of monoclonal antibodies in an enzyme immunospot assay to detect isotype-specific antibody-secreting cells in pigs and chickens. Bianchi AT, et al. **Vet Immunol Immunopathol** 1990 Feb;24(2):125–34

Distribution and function of non-lymphoid cells positive for monoclonal antibody CVI-ChNL-68.2 in healthy chickens and those infected with Marek's disease virus. Jeurissen SH, et al. **Vet Immunol Immunopathol** 1989 Sep; 22(2):123–33

Associations of genetics and sampling time with levels of interleukin-2 activity. Knudtson KL, et al. **Vet Immunol Immunopathol** 1989 Nov 15;22(4):333–43

Sex-related differences in immune response and survival rate of broiler chickens. Leitner G, et al. **Vet Immunol Immunopathol** 1989 Jul;21(3–4):249–60

Suppression of chicken J chain production by in ovo bursectomy. Moriya O, et al. **Vet Immunol Immunopathol** 1990 May;25(1):109–15

Interference with the humoral immune response in diverse genetic lines of chickens. II. The effect of colloidal carbon. Van der Zijpp AJ, et al. **Vet Immunol Immunopathol** 1989 Nov 30;23(1–2):187–94

A recombinant fowlpox virus expressing the hemagglutinin-neuraminidase gene of Newcastle disease virus (NDV) protects chickens against challenge by NDV. Boursnell ME, et al. **Virology** 1990 Sep;178(1):297–300

[Molecular genetics of the chicken B complex] Auffray C. **Ann Rech Vet** 1989;20(3):355–7 **(Fre)**

[Polymorphism of the B locus and capacity for resistance to tumor development] Chausse AM, et al. **Ann Rech Vet** 1989;20(3):359–60 **(Fre)**

[In vitro parameters for the comprehension of the immunocompetence of chickens of different lines. 2. Testing an immunocompetent parameter as a selection criterion in the chicken] Kahl D, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Sep;96(8):416–9 (Eng. Abstr.) **(Ger)**

[The chicken egg as a supply of polyclonal antibodies] Gassmann M, et al. **Schweiz Arch Tierheilkd** 1990; 132(6):289–94 (29 ref.) (Eng. Abstr.) **(Ger)**

[A simple method for the isolation of immunoglobulin (Y) from the eggs of immunized hens] Wallmann J, et al. **Zentralbl Veterinarmed [B]** 1990 Jun;37(4):317–20 (Eng. Abstr.) **(Ger)**

[Blood group hemagglutinins in hens' eggs. 2. Comparison of immunohematological properties of serum and egg yolk hemagglutinins of hens immunized with OSe saliva] Saga K, et al. **Nippon Hoigaku Zasshi** 1990 Apr;44(2):168–73 (Eng. Abstr.) **(Jpn)**

[Blood group hemagglutinins in hens' eggs. 1. Quantity of hemagglutinins to human erythrocytes after immunization with OSe saliva] Yamashita M, et al. **Nippon Hoigaku Zasshi** 1990 Apr;44(2):163–7 (Eng. Abstr.) **(Jpn)**

[Prospect of avian encephalomyelitis antibodies in breeding farms in Chile] Cubillos A, et al. **Acta Cient Venez** 1989; 40(2):127–9 (Eng. Abstr.) **(Spa)**

INJURIES

Broken bones in domestic fowl: handling and processing damage in end-of-lay battery hens. Gregory NG, et al. **Br Poult Sci** 1989 Sep;30(3):555–62

METABOLISM

Immunohistochemistry and histochemistry of the inner ear gelatinous membranes and statoconia of the chick (Gallus domesticus). Fermin CD, et al. **Acta Anat (Basel)** 1990; 138(1):75–83

Restricted feed intake influences thyroid hormone production and peripheral deiodination in chickens. Bartha T, et al. **Acta Vet Hung** 1989;37(3):241–6

Effects of dietary NaCl intake on 3-oxy-methyl-D-glucose transport across chicken rectum. Amat C, et al. **Acta Vet Scand Suppl** 1989;86:183–5

Monosaccharide transport by the jejunum of chickens adapted to a low-Na+ diet. Caelles N, et al. **Acta Vet Scand Suppl** 1989;86:219–21

Gastric secretion in unanesthetized chickens. Long JF. **Am J Physiol** 1967 Jun;212(6):1303–7

Transport of radioiodide between blood and thyroid of chickens. Newcomer WS. **Am J Physiol** 1967 Jun; 212(6):1391–6

Renal medullary electrolyte and urea gradient in chickens and turkeys. Skadhauge E, et al. **Am J Physiol** 1967 Jun; 212(6):1313–8

Pharmacokinetics of single-dose intravenous or intramuscular administration of gentamicin in roosters. Pedersoli WM, et al. **Am J Vet Res** 1990 Feb;51(2):286–9

Use of lectins for detection of glycoconjugate changes in mucous epithelium of the chicken proventriculus. Suprasert A, et al. **Anat Anz** 1990;170(2):91–8

Immunohistochemical localization of type X collagen in the proximal tibiotarsi of broiler chickens and turkeys. Haynes JS. **Anat Rec** 1990 Jul;227(3):307–13

Effect of vitamin C administration on serum and egg-yolk cholesterol level of the chicken. al-Janabi AS, et al. **Aust J Biol Sci** 1988;41(4):403–7

Lipid changes in the residual yolk and liver of the chick immediately after hatching. Noble RC, et al. **Biol Neonate** 1989;56(4):228–36

Norepinephrine-stimulated in vitro release of luteinizing hormone-releasing hormone (LHRH) from median eminence tissue is facilitated by inhibition of LHRH-degrading activity in hens. Contijoch AM, et al. **Biol Reprod** 1990 Feb;42(2):222–30

Arachidonic acid inhibits luteinizing hormone-stimulated progesterone production in hen granulosa cells. Johnson AL, et al. **Biol Reprod** 1990 Mar;42(3):458–64

Regional pattern of cell maturation and progesterone biosynthesis in the avian granulosa cell layer. Marrone BL, et al. **Biol Reprod** 1990 Mar;42(3):405–12

Carbohydrate recognition systems in avian sinusoidal liver cells. Dini L, et al. **Biosci Rep** 1990 Feb;10(1):37–46

Intestinal distribution and absorption of biotin in the chicken. Bryden WL. **Br J Nutr** 1989 Sep;62(2):389–98

Oxidation of methionine and 2-hydroxy 4-methylthiobutanoic acid stereoisomers in chicken tissues. Dupuis L, et al. **Br J Nutr** 1989 Jul;62(1):63–75

The digestion of heat-damaged protein. Nesheim MC, et al. **Br J Nutr** 1967;21(2):399–411

Relation between some folate-dependent metabolic pathways and dietary folate content in chicks. Whitehead CC, et al. **Br J Nutr** 1989 Jul;62(1):203–9

Influence of oxidised dietary oil and antioxidant supplementation on membrane-bound lipid stability in broiler meat. Asghar A, et al. **Br Poult Sci** 1989 Dec; 30(4):815–23

Estimation of endogenous energy and nitrogen losses in the cockerel during fasting and postprandial. Askbrant S, et al. **Br Poult Sci** 1990 Mar;31(1):155–62

Effect of ammonium chloride on the bicarbonate buffer system in heat-stressed broilers. Bottje WG, et al. **Br Poult Sci** 1989 Dec;30(4):899–905

Developmental changes in the corticosterone response to corticotrophin and in the adrenal corticosterone content of rapid and slow growing strains of chickens (Gallus domesticus). Decuypere E, et al. **Br Poult Sci** 1989 Sep; 30(3):699–709

Incorporation of intraportally infused [15N]ammonia into urinary uric acid in cockerels pretreated with methionine sulfoximine. Karasawa Y, et al. **Br Poult Sci** 1989 Dec; 30(4):947–52

Histochemical identification of oestrogen target cells in the medullary bone of laying hens. Ohashi T, et al. **Br Poult Sci** 1990 Mar;31(1):221–4

Utilisation of free and protein dietary lysine in chicks estimated with isotopes. Otto M, et al. **Br Poult Sci** 1989 Sep;30(3):633–9

Effects of dietary cottonseed meal, with and without iron treatment, on laying hens. Panigrahi S, et al. **Br Poult Sci** 1989 Sep;30(3):641–51

Accumulation of zinc in egg yolk, ovarian follicles and organs after forced resting by high dietary zinc. Verheyen G, et al. **Br Poult Sci** 1990 Mar;31(1):147–54

Influence of age, chemical composition and rate of inclusion on the apparent metabolisable energy of fats fed to broiler chicks. Wiseman J, et al. **Br Poult Sci** 1989 Sep;30(3):653–62

Immunocytochemical study of the GABA system in chicken vestibular endorgans and the vestibular ganglion. Usami S, et al. **Brain Res** 1989 Dec 4;503(2):214–8

Distinct regional expression of nicotinic acetylcholine receptor genes in chick brain. Morris BJ, et al. **Brain Res Mol Brain Res** 1990 May;7(4):305–15

System-specific distribution of zinc in the chick brain. A light- and electron-microscopic study using the Timm method. Faber H, et al. **Cell Tissue Res** 1989 Nov; 258(2):247–57

Immunohistochemical colocalization of glucagon, serotonin, and aromatic L-amino acid decarboxylase in islet A cells of chicken pancreas. Watanabe T, et al. **Cell Tissue Res** 1990 Jan;259(1):67–72

In vitro studies of theophylline-induced changes in Na, K and Cl transport in hen (Gallus domesticus) colon suggesting bidirectional, basolateral NaK2Cl cotransport. Andersen V, et al. **Comp Biochem Physiol [A]** 1990; 96(1):187–93

The effects of macrophage-derived cytokines on lipid metabolism in chicken (Gallus domesticus) hepatocytes and adipocytes. Butterwith SC, et al. **Comp Biochem Physiol [A]** 1989;94(4):721–4

Serotonin-induced chloride secretion in hen colon. Possible second messengers. Hansen MB, et al. **Comp Biochem Physiol [A]** 1989;94(2):315–21

Intestinal transport of potassium. Effects of changing apical and basolateral influx of sodium in the isolated mucosa of the hen (Gallus domesticus) colon. Munck LK, et al. **Comp Biochem Physiol [A]** 1990;96(1):181–6

Characterization of shell gland lipids from chickens (Gallus domesticus) producing strong or weak egg shells. Castaldo DJ, et al. **Comp Biochem Physiol [B]** 1989;94(3):521–4

Purification and properties of glutamyl aminopeptidase from chicken egg-white. Petrović S, et al. **Comp Biochem Physiol [B]** 1990;95(3):589–95

Isolation and characterization of a fatty acid binding protein in adipose tissue of Gallus domesticus. Sams GH, et al. **Comp Biochem Physiol [B]** 1990;96(3):585–90

Chicken transferrin receptor expression during erythroid differentiation and by retrovirus transformed cells. Kline K, et al. **Dev Comp Immunol** 1989 Summer;13(3):231–52

Biological activity of insulin-like growth factor-I purified from chicken serum. Armstrong DG, et al. **Domest Anim Endocrinol** 1990 Jul;7(3):383–93

Two arylamine N-acetyltransferases from chicken pineal gland as identified by cDNA cloning. Ohtomi M, et al. **Eur J Biochem** 1989 Nov 6;185(2):253–61

Ontogeny of the effect of purified chicken growth hormone on the liver 5' monodeiodination activity in the chicken: reversal of the activity after hatching. Darras VM, et al. **Gen Comp Endocrinol** 1990 Feb;77(2):212–20

Arginine vasotocin and mesotocin levels in theca and granulosa layers of the ovary during the oviposition cycle in hens (Gallus domesticus). Saito N, et al. **Gen Comp Endocrinol** 1990 Jul;79(1):54–63

Plasma concentrations of insulin like growth factors (IGF-)I and IGF-II in dwarf and normal chickens of high and low weight selected lines. Scanes CG, et al. **Growth Dev Aging** 1989 Winter;53(4):151–7

Distribution of GABA-like immunoreactivity in myenteric plexus of carp, frog and chicken. Gábriel R, et al. **Histochemistry** 1990;94(3):323–8

Turnover of sarcoplasmic proteins in the breast muscle of rapidly growing chicks. Irvine JW, et al. **Int J Biochem** 1990;22(2):187–92

Studies on the measurement of whole-body protein degradation in vivo in the chicken. Muramatsu T, et al. **Int J Biochem** 1990;22(2):153–8

Plasma vitamin A composition and retinol-binding protein concentration during egg formation in laying hens. Bárdos L. **Int J Vitam Nutr Res** 1989;59(3):251–4

Phosphorus utilization in chicks fed hydrated sodium calcium aluminosilicate. Chung TK, et al. **J Anim Sci** 1990 Jul;

68(7):1992–8
Muscle protein turnover and tenderness in broiler chickens fed cimaterol. Morgan JB, et al. **J Anim Sci** 1989 Oct; 67(10):2646–54
Zinc bioavailability in feed-grade sources of zinc. Wedekind KJ, et al. **J Anim Sci** 1990 Mar;68(3):684–9
Detection and isolation of a 30 kDa abnormal protein in avian dystrophic muscle. Kobayashi R, et al. **J Biochem (Tokyo)** 1990 Jan;107(1):51–5
The 30 kDa abnormal protein in avian dystrophic muscle is indistinguishable from carbonic anhydrase III by physicochemical, immunological, and enzymological criteria. Kobayashi R, et al. **J Biochem (Tokyo)** 1990 Jan; 107(1):56–60
GABA-like immunoreactivity of neurons in the chicken diencephalon and mesencephalon. Granda RH, et al. **J Comp Neurol** 1989 Sep 22;287(4):455–69
Insulin-like growth factor receptors in chicken liver membranes: binding properties, specificity, developmental pattern and evidence for a single receptor type. Duclos MJ, et al. **J Endocrinol** 1990 May;125(2):199–206
Plasma clearance of chicken and human insulin-like growth factor-I and their association with circulating binding proteins in chickens. Francis GL, et al. **J Endocrinol** 1990 Mar;124(3):361–70
Purification and biological activity of a single charge isomer of pituitary-derived chicken growth hormone. Houston B, et al. **J Endocrinol** 1990 May;125(2):207–15
Chemical and biological characterization of chicken insulin-like growth factor-II. Kallincos NC, et al. **J Endocrinol** 1990 Jan;124(1):89–97
Short-loop inhibition of thyrotrophin-releasing hormone-induced growth hormone secretion in fowl. Lea RW, et al. **J Endocrinol** 1990 Aug;126(2):237–44
Differential responses of hypothalamic LHRH-I and -II to castration and gonadal steroid or tamoxifen treatment in cockerels. Wilson SC, et al. **J Endocrinol** 1990 Apr; 125(1):139–46
Ammonia production from uric acid, urea, and amino acids and its absorption from the ceca of the cockerel. Karasawa Y. **J Exp Zool Suppl** 1989;3:75–80
Sugar and amino acid transport properties of the chicken ceca. Moretó M, et al. **J Exp Zool Suppl** 1989;3:111–6 (20 ref.)
Growth hormone-binding sites in chicken hypothalamus. Attardo D, et al. **J Mol Endocrinol** 1990 Feb;4(1):23–9
Characterization of calsequestrin of avian skeletal muscle. Damiani E, et al. **J Muscle Res Cell Motil** 1990 Feb; 11(1):48–55
Size and charge heterogeneity of C-protein isoforms in avian skeletal muscle. Expression of six different isoforms in chicken muscle. Takano-Ohmuro H, et al. **J Muscle Res Cell Motil** 1989 Oct;10(5):369–78
Melatonin binding sites in brain of the 2-day-old chicken: an autoradiographic localisation. Stehle J. **J Neural Transm Gen Sect** 1990;81(1):83–9
Chicken growth-associated protein GAP-43 is tightly bound to the actin-rich neuronal membrane skeleton. Moss DJ, et al. **J Neurochem** 1990 Mar;54(3):729–36
Thy-1-like immunoreactivity in developing chicken skeletal muscle: identification of a cross-reactive slow-fiber specific molecule that is not Thy-1. Shahin S, et al. **J Neurosci Res** 1990 May;26(1):45–54
Purification, properties, and developmental changes of cellular retinol-binding protein, type II, in chicken intestine. Goda T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Dec;35(6):545–57
Effects of nitrofurans on adrenal cortical tissue in chickens. Bartlet AL, et al. **J Vet Pharmacol Ther** 1990 Jun; 13(2):206–16
Avian growth hormone receptor assay: use of chicken and turkey liver membranes. Krishnan KA, et al. **Mol Cell Endocrinol** 1989 Oct;66(2):125–34
n-3 fatty acids in eggs from range-fed Greek chickens [letter] Simopoulos AP, et al. **N Engl J Med** 1989 Nov 16; 321(20):1412
Use of oyster shell as calcium supplement. Part 1. Effect on the utilization of gossypol-containing cotton seed cake by the chicken. Aletor VA, et al. **Nahrung** 1990;34(4):311–8
Use of oyster shell as calcium supplement. Part 2. An assessment of the responses of hepatic and serum enzymes, relative organ weights, and bone mineralization in the broiler chicken fed gossypol-containing cottonseed cake supplemented with oyster shell. Aletor VA, et al. **Nahrung** 1990;34(4):319–24
Asymmetric acetylcholinesterase is absent from chick retina, but present in choroid, ciliary muscles and iris. Barat A, et al. **Neurosci Lett** 1990 May 4;112(2-3):302–6
Subcellular localization of a putative kainate receptor in Bergmann glial cells using a monoclonal antibody in the chick and fish cerebellar cortex. Somogyi P, et al. **Neuroscience** 1990;35(1):9–30
Differential regional distribution and release of two forms of gonadotropin-releasing hormone in the chicken brain. Katz IA, et al. **Peptides** 1990 May-Jun;11(3):443–50
Interactions of vitamins A, D3, E, and K in the diet of broiler chicks. Abawi FG, et al. **Poult Sci** 1989 Nov;68(11):1490–8
The effect of adding cholesterol to laying hen diets as powder or predissolved in fat. Berrio LF, et al. **Poult Sci** 1990 Jun; 69(6):972–6
Changes in tissue mineral concentrations associated with sudden-death syndrome in chickens. Buckley WT, et al. **Poult Sci** 1990 Feb;69(2):245–8
The requirement for sulfur amino acid by laying hens as influenced by the protein concentration. Calderon VM, et al. **Poult Sci** 1990 Jun;69(6):934–44
The digestibility of cell-wall polysaccharides from wheat (bran or whole grain), soybean meal, and white lupin meal in cockerels, muscovy ducks, and rats. Carré B, et al. **Poult Sci** 1990 Apr;69(4):623–33
Effect of oligosaccharide-free soybean meal on true metabolizable energy and fiber digestion in adult roosters. Coon CN, et al. **Poult Sci** 1990 May;69(5):787–93
Chicken acrosin: extraction and purification. Froman DP. **Poult Sci** 1990 May;69(5):812–7
Absorption and bioavailability of DL-methionine hydroxy analog compared to DL-methionine. Han YM, et al. **Poult Sci** 1990 Feb;69(2):281–7
Effect of methionine and lysine deficiencies on protein synthesis in the liver and oviduct and in the whole body of laying hens. Hiramoto K, et al. **Poult Sci** 1990 Jan; 69(1):84–9
Protein synthesis in tissues and in the whole body of laying hens during egg formation. Hiramoto K, et al. **Poult Sci** 1990 Feb;69(2):264–9
Relationship of dietary aluminum, phosphorus, and calcium to phosphorus and calcium metabolism and growth performance of broiler chicks. Hussein AS, et al. **Poult Sci** 1990 Jun;69(6):966–71
Effect of dietary aluminum sulfate on calcium and phosphorus metabolism of broiler chicks. Hussein AS, et al. **Poult Sci** 1990 Jun;69(6):985–91
Relative biopotency of triiodothyronine and of thyroxine for inducing oxygen consumption in young chicks. Hwang-Bo J, et al. **Poult Sci** 1990 Jun;69(6):1027–9
Effect of ratio of unsaturated to saturated fatty acids of the dietary lipid fraction on utilization and metabolizable energy of added fats in young chicks. Ketels E, et al. **Poult Sci** 1989 Nov;68(11):1506–12
The relative biological value of feed phosphates for chicks. Nelson TS, et al. **Poult Sci** 1990 Jan;69(1):113–8
Energy exchange of two breeds of hens in respiration chambers. Pesti GM, et al. **Poult Sci** 1990 Jan;69(1):98–104
Isolation, purification, and the amino acid sequence of a secretory trypsin inhibitor from the chicken pancreas. Pubols MH. **Poult Sci** 1990 Apr;69(4):640–6
Influence of dietary calcium level and particle size of calcium source on in vivo calcium solubilization by commercial Leghorns. Rao KS, et al. **Poult Sci** 1989 Nov; 68(11):1499–505
Influence of dietary electrolytes on lysine and arginine absorption in chick intestine. Riley WW Jr, et al. **Poult Sci** 1989 Sep;68(9):1255–62
The utilization of calcium soaps from animal fat by laying hens. Rising R, et al. **Poult Sci** 1990 May;69(5):768–73
The influence of dietary tryptophan on broiler chick growth and lipid metabolism as mediated by dietary protein levels. Rogers SR, et al. **Poult Sci** 1990 May;69(5):746–56
Effect of several growth factors on plasminogen activator activity in granulosa and theca cells of the domestic hen. Tilly JL, et al. **Poult Sci** 1990 Feb;69(2):292–9
Variation in the three-week body temperature of broilers and Athens-Canadian randombred chickens. Washburn KW, et al. **Poult Sci** 1990 Mar;69(3):486–8
Manganese utilization in chicks as affected by excess calcium and phosphorus ingestion. Wedekind KJ, et al. **Poult Sci** 1990 Jun;69(6):977–84
Bioavailability of manganese from feed grade manganese oxides for broiler chicks. Wong-Valle J, et al. **Poult Sci** 1989 Oct;68(10):1368–73
Cytosolic aspartate aminotransferases from different chicken tissues: purification and characterization of their multiple forms. Imperial S, et al. **Prep Biochem** 1989;19(2):113–27
Dietary fishmeal versus soyabean meal: an assessment of serum and liver enzyme response in the chicken. Aletor VA. **Res Vet Sci** 1990 May;48(3):267–70
Kinetics of glycylsarcosine transport by isolated chicken intestinal epithelial cells. Calonge ML, et al. **Rev Esp Fisiol** 1989 Dec;45(4):373–6
Ultrastructural localisation of alkaline phosphatase in the intertubular tissue of the testis in the domestic fowl. Gunawardana VK. **Tissue Cell** 1990;22(2):113–21
Sequential changes in tissue D-fructose-1,6-diphosphate aldolase activity in chickens experimentally infected with Borrelia anserina. Tiwari S, et al. **Vet Res Commun** 1989; 13(6):435–40
Utilization of dietary sodium selenite, barley, oats and meat meal selenium by the chick. Hassan S, et al. **Zentralbl Veterinarmed** [A] 1990 May;37(4):270–7
[Experimental laboratory diagnostic and residual toxicological studies in young cocks after feeding mercury-disinfected seed with and without selenium supplementation] Wilsdorf G, et al. **Arch Exp Veterinarmed** 1989 Nov;43(6):867–76 (Eng. Abstr.) **(Ger)**
[The effect of different high levels of soy extract pellets in the ration on the digestibility of crude nutrients, basic and sulfur-containing amino acids of wheat in colostomized laying hybrids] Gruhn K, et al. **Arch Tierernahr** 1989 Dec; 39(12):1045–52 (Eng. Abstr.) **(Ger)**
[The effect of different high doses of field peas on the digestibility of their crude nutrients in colostomized laying hens] Gruhn K, et al. **Arch Tierernahr** 1990 Apr; 40(4):297–303 (Eng. Abstr.) **(Ger)**
[Methodic recommendations for the determination of whole body protein synthesis rates in tracer studies] Krawielitzki K, et al. **Arch Tierernahr** 1989 Oct;39(10):799–811 (Eng. Abstr.) **(Ger)**
[Parameters of nitrogen metabolism for male broilers of Tetra 82 descent] Müller A, et al. **Arch Tierernahr** 1989 Nov; 39(11):901–10 (Eng. Abstr.) **(Ger)**
[The vitamin A supply of laying hens including during rearing. 1. Testing of mixed feed with a varied vitamin A supplementation in chicks and young hens] Richter G, et al. **Arch Tierernahr** 1989 Dec;39(12):1053–64 (Eng. Abstr.) **(Ger)**
[The compatibility of the new ionophore-coccidiostats with other chemotherapeutics in broilers] Laczay P, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Oct;96(9):449–51 (Eng. Abstr.) **(Ger)**
[Effect of copper and selenium on the histopathologic picture of the internal organs and the accumulation of these metals in hens] Madej JA, et al. **Pol Arch Weter** 1988;28(1-2):45–61 (Eng. Abstr.) **(Pol)**
[Cross-reactions of GTP-binding proteins with other components of the adenylate cyclase system in molluscs and birds] Kuznetsova LA, et al. **Dokl Akad Nauk SSSR** 1989 Nov-Dec;309(1):248–51 **(Rus)**
[The effect of sodium ions on amino acid and peptide assimilation in the small intestine of developing chicks] Kushak RI, et al. **Fiziol Zh SSSR** 1989 Sep;75(9):1248–55 (Eng. Abstr.) **(Rus)**
[Lipid peroxidation and oxidative phosphorylation in the heart and skeletal muscles of chickens developing under conditions of short-term cooling] Stepanian RA, et al. **Zh Evol Biokhim Fiziol** 1990 Jan-Feb;26(1):73–7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Morphological characterization of chicken anaemia agent (CAA). Gelderblom H, et al. **Arch Virol** 1989; 109(1-2):115–20
Isolation of Mycoplasma synoviae from infectious synovitis of chickens. Morrow CJ, et al. **Aust Vet J** 1990 Apr; 67(4):121–4
Isolation of Mycoplasma gallinarum and M. gallinaceum from the reproductive tract of hens [letter] Wang Y, et al. **Aust Vet J** 1990 Jan;67(1):31–2
Characterization of avian reovirus strain-specific polymorphisms. Clark FD, et al. **Avian Dis** 1990 Apr-Jun; 34(2):304–14
Reduction of Salmonella typhimurium concentration in broiler chickens by milk or whey. DeLoach JR, et al. **Avian Dis** 1990 Apr-Jun;34(2):389–92
Hemagglutination, hydrophobicity, enterotoxigenicity, and drug-resistance characteristics of avian Escherichia coli. Erganiş O, et al. **Avian Dis** 1989 Oct-Dec;33(4):631–5
Production of Salmonella enteritidis-contaminated eggs by experimentally infected hens. Gast RK, et al. **Avian Dis** 1990 Apr-Jun;34(2):438–46
Isolation of serotype 2 Marek's disease virus from birds belonging to genus Gallus in Japan. Lin JA, et al. **Avian Dis** 1990 Apr-Jun;34(2):336–44
Chicken anemia agent in the United States: isolation of the virus and detection of antibody in broiler breeder flocks. McNulty MS, et al. **Avian Dis** 1989 Oct-Dec;33(4):691–4
Monitoring poultry farms for Salmonella by drag-swab sampling and antigen-capture immunoassay. Mallinson ET, et al. **Avian Dis** 1989 Oct-Dec;33(4):684–90
The isolation and characterization of chicken anemia agent (CAA) from broilers in the United States. Rosenberger JK, et al. **Avian Dis** 1989 Oct-Dec;33(4):707–13
Replication of a waterfowl-origin influenza virus in the kidney and intestine of chickens. Slemons RD, et al. **Avian Dis** 1990 Apr-Jun;34(2):277–84
Detection of fowlpox virus DNA by in situ hybridization using a biotinylated probe. Tanizaki E, et al. **Avian Dis** 1990 Apr-Jun;34(2):374–80
Serological classification of Japanese isolates of Haemophilus paragallinarum using two serovar-specific monoclonal antibodies. Yamaguchi T, et al. **Avian Dis** 1990 Apr-Jun; 34(2):364–8
Scanning and transmission electron microscopic observations of bacteria adhering to ileal epithelial cells in growing broiler and White Leghorn chickens. Yamauchi K, et al. **Br Poult Sci** 1990 Mar;31(1):129–37
The prevalence of verocytotoxin-producing Escherichia coli and antimicrobial resistance patterns of nonverocytotoxin-producing Escherichia coli and Salmonella in Ontario broiler chickens. Irwin RJ, et al. **Can J Vet Res** 1989 Oct;53(4):411–8
Reduction in faecal excretion of Salmonella typhimurium strain F98 in chickens vaccinated with live and killed S. typhimurium organisms. Barrow PA, et al. **Epidemiol Infect** 1990 Jun;104(3):413–26
Further studies on the inhibition of colonization of the chicken alimentary tract with Salmonella typhimurium by pre-colonization with an avirulent mutant. Berchieri A Jr, et al. **Epidemiol Infect** 1990 Jun;104(3):427–41
Salmonella enteritidis phage type 4 from the contents of intact eggs: a study involving naturally infected hens. Humphrey TJ, et al. **Epidemiol Infect** 1989 Dec;103(3):415–23
Adherence pili of avian strains of Escherichia coli O78. Yerushalmi Z, et al. **Infect Immun** 1990 Apr;58(4):1129–31
The occurrence in the U.K. of Listeria species in raw

chickens and soft cheeses. Pini PN, et al. **Int J Food Microbiol** 1988 Jun;6(4):317–26

A comparison of two procedures for the isolation of Listeria monocytogenes from raw chickens and soft cheese. Pini PN, et al. **Int J Food Microbiol** 1988 Dec 31;7(4):331–7

A note on Aeromonas spp. from chickens as possible food-borne pathogens. Kirov SM, et al. **J Appl Bacteriol** 1990 Apr;68(4):327–34

'Haemophilus gallinarum'—a re-examination. Blackall PJ, et al. **J Gen Microbiol** 1989 Feb;135 (Pt 2):469–74

Generation of seal influenza virus variants pathogenic for chickens, because of hemagglutinin cleavage site changes. Li SQ, et al. **J Virol** 1990 Jul;64(7):3297–303

Phylogenetic distribution of the novel avian endogenous provirus family EAV-0. Resnick RM, et al. **J Virol** 1990 Oct;64(10):4640–53

Survival and growth of Listeria monocytogenes on irradiated poultry carcasses [letter] Mead GC, et al. **Lancet** 1990 Apr 28;335(8696):1036

A role of secreted proteinase of Candida albicans for the invasion of chick chorio-allantoic membrane. Kobayashi I, et al. **Microbiol Immunol** 1989;33(9):709–19

Listeria monocytogenes colonization of broiler chickens. Bailey JS, et al. **Poult Sci** 1990 Mar;69(3):457–61

Effect of alanine-producing bacteria on the growth of chicks. Furuse M, et al. **Poult Sci** 1990 Jun;69(6):1023–6

The use of carcass halves for reducing the variability in salmonellae numbers with broiler-processing trials. Izat AL, et al. **Poult Sci** 1990 May;69(5):864–6

Inhibition by mannose of in vitro colonization of chicken small intestine by Salmonella typhimurium. Oyofo BA, et al. **Poult Sci** 1989 Oct;68(10):1351–6

Clinical and pathological features of Aspergillus fumigatus infections in poultry in southern Nigeria. Okoye JO, et al. **Rev Elev Med Vet Pays Trop** 1989;42(2):153–4

Antimicrobial resistance of Escherichia coli isolated from chickens. Chulasiri M, et al. **Vet Microbiol** 1989 Dec; 21(2):189–94

MAFF Salmonella policy attacked [news] **Vet Rec** 1989 Nov 4;125(19):468

Immunisation of laying hens against Salmonella enteritidis with live attenuated vaccines. Barrow PA, et al. **Vet Rec** 1990 Mar 10;126(10):241–2

Competitive exclusion—Salmonella in poultry [letter] Fowler NG, et al. **Vet Rec** 1989 Nov 11;125(20):512

Egg transmission after infection of hens with Salmonella enteritidis phage type 4. Timoney JF, et al. **Vet Rec** 1989 Dec 9;125(24):600–1

A novel avian virus with trisegmented double-stranded RNA and further observations on previously described similar viruses with bisegmented genome. Leite JP, et al. **Virus Res** 1990 Jun;16(2):119–26

[Primary serologic investigation of HBV-like virus existence in domestic animals and fowls] Tang H, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Jun;21(2):181–4 (Eng. Abstr.) **(Chi)**

[Salmonella gallinarum biovar gallinarum as the cause of a highly acute septicemic disease in adult laying hens kept in battery cages] Hinz KH, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Sep;96(8):421–3 (Eng. Abstr.) **(Ger)**

[Synthesis of B group vitamins by lactobacilli in chick digestive tract in an industrial environment] Kvasnikov EI, et al. **Mikrobiol Zh** 1985 Sep–Oct;47(5):26–30 (Eng. Abstr.) **(Rus)**

[The antagonistic activity of lactic acid bacteria in relation to the causative agents of intestinal diseases in domestic birds] Kvasnikov EI, et al. **Mikrobiol Zh** 1983 Sep–Oct; 45(5):27–32 (Eng. Abstr.) **(Rus)**

[The role of the public health physician-nutritionist in preventing salmonellosis] Okladnikov NI. **Vopr Pitan** 1989 Sep–Oct;(5):72–3 **(Rus)**

[Extraintestinal isolation of Salmonella in chickens: epidemiologic study of 3 salmonellosis outbreaks after ingestion of raw eggs (published erratum appears in Microbiologia 1988 Feb;4(1):65)] Sesma B, et al. **Microbiologia** 1987 Oct;3(3):209–12 (Eng. Abstr.) **(Spa)**

PARASITOLOGY

Interaction of T-2 fusariotoxin and monensin in broiler chickens infected with Coccidia. Ványi A, et al. **Acta Vet Hung** 1989;37(4):327–33

Avian eimeria: invasion in foreign host birds and generation of partial immunity against coccidiosis. Augustine PC, et al. **Avian Dis** 1990 Jan–Mar;34(1):196–202

Cryptosporidiosis in chickens from southern Spain. Fernández A, et al. **Avian Dis** 1990 Jan–Mar;34(1):224–7

Effect of Cryptosporidium baileyi on broilers infected at 26 days of age. Goodwin MA, et al. **Avian Dis** 1990 Apr–Jun; 34(2):458–62

Experimental biliary cryptosporidiosis in broiler chickens. Hatkin JM, et al. **Avian Dis** 1990 Apr–Jun;34(2):454–7

An outbreak of Eimeria necatrix coccidiosis in breeder pullets: analysis of immediate and possible long-term effects on performance. McDougald LR, et al. **Avian Dis** 1990 Apr–Jun;34(2):485–7

Anticestodal action of oxfendazole on Raillietina tetragona in experimentally infected chickens. Nurelhuda IE, et al. **Br Vet J** 1989 Sep–Oct;145(5):458–61

The pathogenicity of Cryptosporidium parvum Tyzzer, 1912 and C. Baileyi Current, Upton et Haynes, 1986 for chickens. Palkovič L, et al. **Folia Parasitol (Praha)** 1989;36(3):209–17

Transmission of Plasmodium gallinaceum by adult Aedes aegypti infected as larvae. Weathersby AB, et al. **J Am Mosq Control Assoc** 1990 Mar;6(1):152–3

Pathological effects of Echinostoma caproni (Trematoda) in the domestic chick. Kim S, et al. **J Helminthol** 1989 Sep; 63(3):227–30

Early schizonts of Leucocytozoon caulleryi. Isobe T, et al. **J Parasitol** 1990 Aug;76(4):587–9

Detection of schizonts in chickens recovered from natural infection with Leucocytozoon caulleryi. Inoue I. **Nippon Juigaku Zasshi** 1989 Aug;51(4):813–4

Genetically engineered antigen confers partial protection against avian coccidial parasites. Danforth HD, et al. **Poult Sci** 1989 Dec;68(12):1643–52

Diclazuril, a new broad-spectrum anticoccidial for chickens. 3. Floor-pen trials. Vanparijs O, et al. **Poult Sci** 1990 Jan; 69(1):60–4

Interactive effects of sodium zeolite A (Ethacal) and monensin in uninfected and Eimeria acervulina-infected chicks. Ward TL, et al. **Poult Sci** 1990 Feb;69(2):276–80

Anticoccidial effect of monensin against Eimeria mitis and Eimeria dispersa. Watkins KL, et al. **Poult Sci** 1990 Jun; 69(6):1009–11

Apparent inability of Cryptosporidium baileyi of chickens to infect poultry handlers in Bangkok. Jantanavivat C. **Trans R Soc Trop Med Hyg** 1989 Sep–Oct;83(5):651

The effect of niclosamide on Raillietina tetragona. Elowni EE, et al. **Vet Res Commun** 1989;13(6):451–3

Ivermectin as a bird anthelmintic—trials with naturally infected domestic fowl. Oksanen A, et al. **Zentralbl Veterinarmed [B]** 1989 Sep;36(7):495–9

A study of the life cycle of Eimeria praecox, Johnson 1930. Salisch H. **Zentralbl Veterinarmed [B]** 1990 Jul;37(5):363–8

[Subclinical coccidiosis in broilers and pullets] Salisch H, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Nov–Dec; 96(10):493–6 (Eng. Abstr.) **(Ger)**

[Blastocystis galli sp. n. (Protista: Rhizopoda) from the intestines of domestic hens] Belova LM, et al. **Parazitologiia** 1990 Mar–Apr;24(2):164–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Intrinsic reflexes mediated via peptidergic neurons in the smooth muscle esophagus of the hen. Neya T, et al. **Acta Med Okayama** 1990 Jun;44(3):129–33

Effect of indomethacin and vasotocin on oviposition in the hen (Gallus domesticus). Rząsa J, et al. **Acta Physiol Pol** 1989 Jan–Feb;40(1):111–5

Ontogenetic development of the ophthalmic rete in relation to brain cooling in chickens and pigeons. Arad Z, et al. **Am J Anat** 1990 Jan;187(1):98–103

Fractionation of cock spermatozoa. Gehlaut BS, et al. **Arch Exp Veterinarmed** 1989;43(4):603–8

Study on effects of feeding laying hens on separate mycotoxins (aflatoxins, patulin, or citrinin)-contaminated diets on the egg quality and tissue constituents. Abdelhamid AM, et al. **Arch Tierernahr** 1990 Apr;40(4):305–16

Decreased egg production in commercial laying hens fed zearalenone- and deoxynivalenol-contaminated grain sorghum. Branton SL, et al. **Avian Dis** 1989 Oct–Dec; 33(4):804–8

Chicken hypotensive peptide: purification and characterization. Barbato GF, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):916–20

Effect of gastric distention on RNA synthesis in neonatal chick liver. Oka T, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):973–7

Inhibition of aldosterone secretion by atrial natriuretic peptide in chicken adrenocortical cells. Rosenberg J, et al. **Biochim Biophys Acta** 1989 Nov 20;1014(2):189–94

Radioiodination of chicken luteinizing hormone without affecting receptor binding potency. Kikuchi M, et al. **Biol Reprod** 1989 Dec;41(6):1047–54

Enzyme supplementation of a poultry diet containing rye and wheat. Pettersson D, et al. **Br J Nutr** 1989 Jul; 62(1):139–49

Behaviour of laying hens in cages with nest sites. Appleby MC. **Br Poult Sci** 1990 Mar;31(1):71–80

Behaviour of laying hens in a deep litter house. Appleby MC, et al. **Br Poult Sci** 1989 Sep;30(3):545–53

Fear of humans by laying hens in different tiers of a battery: behavioural and physiological responses. Barnett JL, et al. **Br Poult Sci** 1989 Sep;30(3):497–504

Zinc content of fowl seminal plasma and its effects on spermatozoa after storage at 4 degrees C. Blesbois E, et al. **Br Poult Sci** 1989 Sep;30(3):677–85

Quantification of reproductive changes and nutrient requirements of broiler breeder pullets at sexual maturity. Bowmaker JE, et al. **Br Poult Sci** 1989 Sep;30(3):663–76

Behavioural differences between laying hen populations selected for high and low efficiency of food utilisation. Braastad BO, et al. **Br Poult Sci** 1989 Sep;30(3):533–44

Effects of treadmill exercise on the distribution of blood flow between the hindlimb muscles and abdominal viscera of the laying fowl. Brackenbury JH, et al. **Br Poult Sci** 1990 Mar;31(1):207–14

Shell gland adenosine triphosphatase in hens producing strong and weak egg shells. Castaldo DJ, et al. **Br Poult Sci** 1990 Mar;31(1):225–9

Air hygiene in a pullet house: spatial homogeneity of aerial pollutants. Conceição MA, et al. **Br Poult Sci** 1989 Dec; 30(4):765–76

Behavioural consequences of partial beak amputation (beak trimming) in poultry. Duncan IJ, et al. **Br Poult Sci** 1989 Sep;30(3):479–88

Effects of interactions between photostimulation, dietary restriction and dietary maize oil dilution on plasma LH and ovarian and oviduct weights in broiler breeder females during rearing. Dunn IC, et al. **Br Poult Sci** 1990 Jun; 31(2):415–27

Effect of stunning on spontaneous physical activity and evoked activity in the brain. Gregory NG, et al. **Br Poult Sci** 1990 Mar;31(1):215–20

Effect of ventricular fibrillation at stunning and ineffective bleeding on carcase quality defects in broiler chickens. Gregory NG, et al. **Br Poult Sci** 1989 Dec;30(4):825–9

Relationships between fear of humans, productivity and cage position of laying hens. Hemsworth PH, et al. **Br Poult Sci** 1989 Sep;30(3):505–18

Effect of plumage renewal after induced moulting on subsequent laying efficiency and persistence. Herremans M, et al. **Br Poult Sci** 1989 Sep;30(3):613–22

Musculo-skeletal lesions in adult male broiler breeder fowls and their relationships with body weight and fertility at 60 weeks of age. Hocking PM, et al. **Br Poult Sci** 1989 Dec;30(4):777–84

Response of laying hens to asymmetrical interrupted lighting regimens: reproductive performance, body weight and carcase composition. Lewis PD, et al. **Br Poult Sci** 1990 Mar;31(1):33–43

Response of laying hens to asymmetrical interrupted lighting regimens: physiological aspects. Lewis PD, et al. **Br Poult Sci** 1990 Mar;31(1):45–52

Duration of egg formation in hens selected for increased rate of lay under 23 h and 24 h light-dark cycles. Naito M, et al. **Br Poult Sci** 1990 Jun;31(2):371–5

Recovery of ova and their re-insertion into the hen's oviduct through a fistula. Pancer Z, et al. **Br Poult Sci** 1989 Dec; 30(4):953–7

Movement of broiler chickens reared in commercial conditions. Preston AP, et al. **Br Poult Sci** 1989 Sep;30(3):489–96

Modelling the relationships of egg weight, specific gravity, shell calcium and shell thickness. Sooncharenying S, et al. **Br Poult Sci** 1989 Sep;30(3):623–31

Elucidation of the mechanism responsible for the temperature-dependent reversible inactivation of the motility of fowl spermatozoa. Thomson MF, et al. **Br Poult Sci** 1989 Sep;30(3):687–92

Effect of 1 alpha,25-dihydroxycholecalciferol on egg shell quality and egg production. Tsang CP, et al. **Br Poult Sci** 1990 Jun;31(2):241–7

Effect of glucocorticoids on gastrointestinal emptying in young broilers. Tur J, et al. **Br Poult Sci** 1989 Sep; 30(3):693–8

Egg shell quality responses of pullets given saline drinking water at different ages. Yoselewitz I, et al. **Br Poult Sci** 1989 Sep;30(3):715–8

Activity-related rise in extracellular potassium concentration in the brain of 1-3-day-old chicks. Syková E, et al. **Brain Res Bull** 1990 Apr;24(4):569–75

Are specific proteins implicated in the learning process of imprinting? Brown MW, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1-2):294–7

Abolition of monocular optokinetic nystagmus directional asymmetry after unilateral visual deprivation in adult vertebrates: involvement of the GABAergic mechanism. Yucel YH, et al. **Brain Res Dev Brain Res** 1990 May 1; 53(2):179–85

Effect of fasting and acute heat stress on body temperature, blood acid-base and electrolyte status in chickens. Ait-Boulahsen A, et al. **Comp Biochem Physiol [A]** 1989; 94(4):683–7

Comparison between constant-protein, calorie-restricted and protein-restricted, calorie-restricted diets on growth, in vitro lipogenesis and plasma growth hormone, thyroxine, triiodothyronine and somatomedin-C (Sm-C) of young chickens. Rosebrough R, et al. **Comp Biochem Physiol [A]** 1989;93(2):337–43

Vitamin C amelioration of the adrenal stress response in broiler chickens being prepared for slaughter. Satterlee DG, et al. **Comp Biochem Physiol [A]** 1989;94(4):569–74

Serotonin receptors for chloride secretion in hen colon. Hansen MB, et al. **Comp Biochem Physiol [C]** 1989; 94(1):189–97

Cytoskeletal protein and mRNA accumulation during brush border formation in adult chicken enterocytes. Fath KR, et al. **Development** 1990 Jun;109(2):449–59

Respiratory responses of domestic fowl to hyperthermia following selective air sac occlusions. Brackenbury JH, et al. **Exp Physiol** 1990 May;75(3):391–400

Effect of electrical field stimulation on muscle strips from chicken crop. Denac M, et al. **Exp Physiol** 1990 Jan; 75(1):69–73

Autotransplantation of avian parathyroid glands: an animal model for studying parathyroid function. Cole JA, et al. **Gen Comp Endocrinol** 1989 Dec;76(3):451–60

Absence of an effect of naloxone, an opioid antagonist, on luteinizing hormone release in vivo and luteinizing hormone-releasing hormone I release in vitro in intact, castrated, and food restricted cockerels. Lal P, et al.

Gen Comp Endocrinol 1990 Feb;77(2):239–45
Thyroid function in sex-linked and autosomal dwarf chickens. Lam SK, et al. **Gen Comp Endocrinol** 1989 Nov; 76(2):200–4
Possible participation of calcium in growth hormone release and in thyrotropin-releasing hormone and human pancreatic growth hormone-releasing factor synergy in a primary culture of chicken pituitary cells. Perez FM, et al. **Gen Comp Endocrinol** 1989 Sep;75(3):481–91
Development of temporal integration in newborn chickens. Gray L. **Hear Res** 1990 May;45(3):169–77
Ambient temperature: a factor affecting performance and physiological response of broiler chickens. Donkoh A. **Int J Biometeorol** 1989 Dec;33(4):259–65
Cardiac receptors evoke ventilatory response with increased venous PCO2 at constant arterial PCO2. Estavillo JA. **J Appl Physiol** 1990 Jan;68(1):369–73
Neural coding in the chick cochlear nucleus. Warchol ME, et al. **J Comp Physiol [A]** 1990 Mar;166(5):721–34
Neural response to very low-frequency sound in the avian cochlear nucleus. Warchol ME, et al. **J Comp Physiol [A]** 1989 Nov;166(1):83–95
Feedback effects of growth hormone on anterior pituitary function in chickens. Lea RW, et al. **J Endocrinol** 1990 Jun;125(3):409–15
Physiological roles of chicken LHRH-I and -II in the control of gonadotrophin release in the domestic chicken. Sharp PJ, et al. **J Endocrinol** 1990 Feb;124(2):291–9
Maturational changes in the LH response of domestic fowl to synthetic chicken LHRH-I and -II. Wilson SC, et al. **J Endocrinol** 1989 Nov;123(2):311–8
The avian ovary: model for endocrine studies. Bahr J. **J Exp Zool Suppl** 1990;4:192–4 (20 ref.)
The avian as an animal model for the study of the vitamin D endocrine system. Norman AW. **J Exp Zool Suppl** 1990; 4:37–45 (33 ref.)
Endocrine-nutrition interactions in birds. Scanes CG, et al. **J Exp Zool Suppl** 1990;4:98–105 (52 ref.)
Feedback-inhibition of growth hormone (GH) secretion in fowl: GH-induced down-regulation of thyrotrophin-releasing hormone binding to pituitary membranes. Harvey S, et al. **J Mol Endocrinol** 1990 Feb; 4(1):13–21
Effect of immunization of sexually immature pullets against poly-alpha-L-glutamic acid on long-term fertility. Froman DP, et al. **J Reprod Fertil** 1990 Mar;88(2):405–9
Physiological changes during tonic immobility in Gallus gallus var domesticus. Gentle MJ, et al. **Physiol Behav** 1989 Nov;46(5):843–7
Chronic stressors, tonic immobility and leucocytic responses in the domestic fowl. Jones RB. **Physiol Behav** 1989 Sep; 46(3):439–42
Cardiac hypotensive extract: responses of single comb White Leghorn hens fed low- or high-sodium diets. Anthony HL, et al. **Poult Sci** 1990 Apr;69(4):679–85
Influence of the sense of taste on broiler chick feed consumption. Balog JM, et al. **Poult Sci** 1989 Nov; 68(11):1519–26
Effects of lighting program during the growing period and dietary fat during the laying period on broiler breeder performance. Brake J, et al. **Poult Sci** 1989 Sep; 68(9):1185–92
Effect of feeding diets containing corn treated with a commercial mold inhibitor (Myco Curb) on broiler-breeder performance. Brake J, et al. **Poult Sci** 1990 Jan;69(1):37–44
Evaluation of corn gluten feed in the diets of laying hens. Castanon F, et al. **Poult Sci** 1990 Jan;69(1):90–7
Effect of refeeding following short-term deprivation of feed or water, or both, on selected physiological parameters for broiler chickens. Chamblee TN, et al. **Poult Sci** 1989 Dec; 68(12):1619–23
Effect of environmental stress on the ascorbic acid requirement of laying hens. Cheng TK, et al. **Poult Sci** 1990 May;69(5):774–80
Molt induced by gonadotropin-releasing hormone agonist as a model for studying endocrine mechanisms of molting in laying hens. Dickerman RW, et al. **Poult Sci** 1989 Oct; 68(10):1402–8
Calcium reserve assembly: a basic structural unit of the calcium reserve system of the hen egg shell [published erratum appears in Poult Sci 1989 Dec;68(12):1738] Dieckert JW, et al. **Poult Sci** 1989 Nov;68(11):1569–84
Effects of various feeding regimens on reproduction in broiler-breeder males. Fontana EA, et al. **Poult Sci** 1990 Feb;69(2):209–16
Some observations on the influence of vitamin D metabolites when added to the diet of commercial laying hens. Harms RH, et al. **Poult Sci** 1990 Mar;69(3):426–32
Avian sperm-egg interaction: perivitelline layer possesses receptor activity for spermatozoa. Howarth B. **Poult Sci** 1990 Jun;69(6):1012–5
Fertility following intrauterine insemination near the time of oviposition. Howarth B Jr. **Poult Sci** 1990 Jan; 69(1):138–41
Influence of neuraminidase on fertility and on sperm storage in the hen's oviduct. Howarth B Jr. **Poult Sci** 1990 Jan; 69(1):119–23
Production and egg-quality responses of White Leghorn layers to anticoccidial agents. Jones JE, et al. **Poult Sci** 1990 Mar;69(3):378–87
Reproduction responses of broiler-breeders to anticoccidial agents. Jones JE, et al. **Poult Sci** 1990 Jan;69(1):27–36
Follicular control of oviposition in the hen. Kelly JD, et al. **Poult Sci** 1990 Feb;69(2):288–91
Laying performance and fear response of White Leghorns as influenced by floor space allowance and group size. Lee K. **Poult Sci** 1989 Oct;68(10):1332–6
The effect of different feed restriction treatments during rearing on the luteinizing hormone concentrations, body weight, and fertility of broiler-breeder cockerels. Lilburn MS, et al. **Poult Sci** 1990 May;69(5):860–3
The effect of feeding lovastatin and colestipol on production and cholesterol content of eggs. Luhman CM, et al. **Poult Sci** 1990 May;69(5):852–5
Barley and full-fat canola seed in layer diets. Nwokolo E, et al. **Poult Sci** 1989 Nov;68(11):1485–9
Lower gut contents and defecatory responses of broiler chickens as affected by feed withdrawal and electrical treatment at slaughter. Papa CM, et al. **Poult Sci** 1989 Nov; 68(11):1478–84
Examination of the physical characteristics in a diverse group of dwarf White Leghorn pullets before and after first oviposition. Renden JA, et al. **Poult Sci** 1990 Jan; 69(1):16–26
Effects of dietary energy on semen production, fertility, plasma testosterone, and carcass composition of broiler-breeder males in cages. Sexton KJ, et al. **Poult Sci** 1989 Dec;68(12):1688–94
Effect of acclimatization to an excreta-collection harness on excreta energy voided during a nitrogen-corrected true metabolizable energy bioassay. Sibbald IR, et al. **Poult Sci** 1989 Dec;68(12):1707–9
Breeding-hen and progeny performance when hens are fed excessive dietary zinc. Stahl JL, et al. **Poult Sci** 1990 Feb; 69(2):259–63
Science and the art of incubation. Tullett SG. **Poult Sci** 1990 Jan;69(1):1–15 (79 ref.)
Effect of fluorescent light on hatchability of commercial broiler parent stock eggs and on body weight of chickens hatched under large-scale commercial conditions. Zakaria AH. **Poult Sci** 1989 Nov;68(11):1585–7
Factors determining gastrointestinal transit time of several markers in the domestic fowl. Vergara P, et al. **Q J Exp Physiol** 1989 Nov;74(6):867–74
Endocrinological and behavioural effects of p-chlorophenylalanine (PCPA) oral administration to broody turkey hens (Meleagris gallopavo). Guémené D, et al. **Reprod Nutr Dev** 1989;29(4):469–76
Morphology of medullary bone during the egg formation cycle. Wilson S, et al. **Res Vet Sci** 1990 Mar;48(2):216–20
Unscrambling an egg [letter] **Science** 1990 Jul 20; 249(4966):228
An evaluation of the effectiveness of handheld stunners for stunning chickens. Gregory NG, et al. **Vet Rec** 1990 Mar 24;126(12):290–1
Limb bone strength and movement in laying hens from different housing systems. Knowles TG, et al. **Vet Rec** 1990 Apr 14;126(15):354–6
Tonic immobility in spent hens after catching and transport. Mills DS, et al. **Vet Rec** 1990 Mar 3;126(9):210–2
Influence of vasotocin and isoproterenol on the in vitro motility of the follicular stalks and infundibulum in the domestic hen. Wechsung E, et al. **Zentralbl Veterinarmed [A]** 1990 May;37(4):316–20
[Effects of prostaglandins, leukotrienes, VIP, carbachol and isopropylnoradrenaline on uterine and vaginal motility in the chicken] Houvenaghel A, et al. **Verh K Acad Geneeskd Belg** 1989;51(2):153–74; discussion 175–6 (Eng. Abstr.) **(Dut)**
[Storage of spermatozoa in the oviducts of birds: morphologic, histologic and functional approach] Brillard JP. **Reprod Nutr Dev** 1990;30(2):161–74 (61 ref.) (Eng. Abstr.) **(Fre)**
[Spermatozoa transport in the oviduct of the chicken and the turkey] Brillard JP. **Reprod Nutr Dev** 1990;30(2):175–82 (37 ref.) (Eng. Abstr.) **(Fre)**
[Fertility results after insemination of a moderate count of cock sperm, diluted in Blumberger cock sperm diluent and homologous seminal plasma] Schramm GP. **Arch Exp Veterinarmed** 1989 Nov;43(6):917–9 (Eng. Abstr.) **(Ger)**
[The vitamin A supply of laying hens including during rearing. 2. Effect of varied vitamin A supplementation of mixed feed in rearing on production in the laying period] Richter G, et al. **Arch Tierernahr** 1990 Mar;40(3):221–7 (Eng. Abstr.) **(Ger)**
[The evaluation of fertility characteristics in hens using fluorescence microscopy] Rohloff D, et al. **Berl Munch Tierarztl Wochenschr** 1990 Feb 1;103(2):37–9 (Eng. Abstr.) **(Ger)**
[Fundamental ethological and ecological aspects for the husbandry of domestic animals, especially for hens] Fölsch DW. **DTW Dtsch Tierarztl Wochenschr** 1990 Jun; 97(6):228–30 (Eng. Abstr.) **(Ger)**
[The mechanisms of the influence of the anterior and posterior hypothalamus on the electrical activity of the large hemispheres of the forebrain and on autonomic reactions in hens] Baklavadzhian OG, et al. **Zh Evol Biokhim Fiziol** 1990 Mar-Apr;26(2):186–92 (Eng. Abstr.) **(Rus)**
[Vestibular evoked potentials in "Gallus Domesticus"] Weisleder P, et al. **Arch Neurobiol (Madr)** 1989 Nov-Dec; 52(6):307–13 (Eng. Abstr.) **(Spa)**

SURGERY

Selective denervation of the Musculus pectoralis muscle in the chicken. Buhr RJ. **Poult Sci** 1990 Jan;69(1):124–32
[Several surgical operations in animal husbandry for healthy birds required or implemented by animal welfare regulations] Korbel R, et al. **Tierarztl Prax** 1989;17(4):380–7 (35 ref.) (Eng. Abstr.) **(Ger)**

CHIKUNGUNYA VIRUS

ISOLATION & PURIFICATION

Isolation of Chikungunya virus in Australia [letter] Harnett GB, et al. **Med J Aust** 1990 Mar 19;152(6):328–9

CHILBLAINS see under **FROSTBITE**

CHILD

see related
ONLY CHILD

The child slayer. A 25-year survey of homicides involving preadolescent victims. Myers SA. **Arch Gen Psychiatry** 1967 Aug;17(2):211–3
Organized dentistry's NCDHM spreads the oral health story [editorial] Tillis BP. **N Y State Dent J** 1990 Feb;56(2):5
The ethical challenge of sick children. Gillett G. **Pediatrician** 1990;17(2):59–62
Consequences of empowering children to care for themselves. Lewis MA, et al. **Pediatrician** 1990;17(2):63–7
[International Convention on Children's Rights and problems of social protection of children in our country] Grebesheva II, et al. **Pediatriia** 1990;(6):5–9 **(Rus)**

CHILD, ABANDONED

Boarder babies: children with special health needs. Dahl-Regis MM, et al. **J Natl Med Assoc** 1990 Jul; 82(7):473–7
The children nobody wants. Carlson MJ. **Ohio Med** 1989 Oct;85(10):761–3
Rearing children in hospital facilities ("boarder babies") [letter] Fomufod AK, et al. **Pediatrics** 1990 Jan;85(1):137–8
The cost and fate of abandoned black children [letter] Coovadia HM, et al. **S Afr Med J** 1990 May 5;77(9):484–5

HISTORY

Whatever happened to Mary Ellen? Lazoritz S. **Child Abuse Negl** 1990;14(2):143–9

CHILD ABUSE

Children of mentally retarded parents. Accardo PJ, et al. **Am J Dis Child** 1990 Jan;144(1):69–70 (24 ref.)
Incidence of impact trauma with cranial injuries ascribed to shaking. Alexander R, et al. **Am J Dis Child** 1990 Jun; 144(6):724–6
Medical evaluation of abused and neglected children. Flaherty EG, et al. **Am J Dis Child** 1990 Mar;144(3):330–4
Ocular and associated systemic findings in suspected child abuse. A necropsy study. Elner SG, et al. **Arch Ophthalmol** 1990 Aug;108(8):1094–101
ABC of child abuse. Medical reports. Meadow R, et al. **BMJ** 1989 Sep 2;299(6699):616–7 (0 ref.)
An unusual case of child abuse. Carrotte PV. **Br Dent J** 1990 Jun 9;168(11):444–5
Plasma dopamine-beta-hydroxylase and preschool behavior in children with conduct disorder. Rogeness GA, et al. **Child Psychiatry Hum Dev** 1989 Winter;20(2):149–56
Children's literature and child abuse. Pardeck JT. **Child Welfare** 1990 Jan-Feb;69(1):83–8
Instruction in child abuse and neglect in the predoctoral curriculum. Posnick WR, et al. **J Dent Educ** 1990 Feb; 54(2):158–9
Nonfracture-associated fatal fat embolism in a case of child abuse. Nichols GR 2d, et al. **J Forensic Sci** 1990 Mar; 35(2):493–9
The plight of deprived children: a lingering problem in American democracy. Bloch H. **J Natl Med Assoc** 1990 Feb;82(2):119, 123–4
Child abuse: a time for new awareness. Gibson GL, et al. **J Okla State Med Assoc** 1990 Apr;83(4):169–71
Child abuse and neglect as seen in General Hospital, Kuala Lumpur--a two year study. Kassim MS, et al. **Med J Malaysia** 1989 Jun;44(2):111–21
Education of the physician in child abuse. Alexander RC. **Pediatr Clin North Am** 1990 Aug;37(4):971–88 (31 ref.)
The neglect of our children. Helfer RE. **Pediatr Clin North Am** 1990 Aug;37(4):923–42 (42 ref.)
Future role of the pediatrician in child abuse and neglect. Krugman RD. **Pediatr Clin North Am** 1990 Aug; 37(4):1003–11 (33 ref.)
Unusual manifestations of child abuse. Reece RM. **Pediatr Clin North Am** 1990 Aug;37(4):905–21 (32 ref.)
Preparing for the next decade: proceedings of the Third Annual National Child Abuse Conference. Philadelphia, March 16–17, 1989. **Pediatr Emerg Care** 1989 Dec; 5(4):291–7
Use of a computer simulation to evaluate a seminar on child abuse. Kost S, et al. **Pediatr Emerg Care** 1989 Sep; 5(3):202–3
A conceptual approach to child maltreatment. Sassower R,

et al. **Pediatrician** 1990;17(2):74–8
Child abuse. When to be suspicious and what to do then. Altieri MF. **Postgrad Med** 1990 Feb 1;87(2):153–6, 161–2 (11 ref.)
Non-accidental injury [letter] Sprigg A. **Radiogr Today** 1990 May;56(636):36
Child abuse and delinquency: the empirical and theoretical links. Howing PT, et al. **Soc Work** 1990 May;35(3):244–9 (57 ref.)
A foreign body in a four-day-old infant's esophagus: a case of negligence. Doğruyol H, et al. **Turk J Pediatr** 1989 Apr–Jun;31(2):163–6
[Child abuse: report of three cases] Liao HB, et al. **Acta Paediatr Sin** 1989 May–Jun;30(3):216–22 (Eng. Abstr.) **(Chi)**
[Health status of former prisoners of the Nazi concentration camp for children in Lodz] Matuszewski H, et al. **Przegl Lek** 1990;47(1):18–20 **(Pol)**
[Child abuse and custody disputes: when should the caregiver report the case to police and social services, and when is there an obligation to do so?] Persson L. **Lakartidningen** 1990 Feb 21;87(8):538, 543 **(Swe)**

CHEMICALLY INDUCED

Esophagitis, epiglottitis, and cocaine alkaloid ("crack"): "accidental" poisoning or child abuse? Kharasch S, et al. **Pediatrics** 1990 Jul;86(1):117–9

COMPLICATIONS

Childhood antecedents of antisocial behavior: parental alcoholism and physical abusiveness. Pollock VE, et al. **Am J Psychiatry** 1990 Oct;147(10):1290–3
Injuries caused by child abuse. Ledbetter DJ, et al. **Compr Ther** 1989 Oct;15(10):9–13
Neurologic manifestations of child abuse. Benzel EC, et al. **South Med J** 1989 Nov;82(11):1347–51
[Induced hypoglycemia. A unusual case of child battering] Caruso M, et al. **Minerva Pediatr** 1989 Oct;41(10):525–8 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Differentiation of child abuse from osteogenesis imperfecta [see comments] Ablin DS, et al. **AJR Am J Roentgenol** 1990 May;154(5):1035–46 (75 ref.) Comment in: AJR Am J Roentgenol 1990 May;154(5):1047–8.
Diagnostic imaging in infant abuse. Kleinman PK. **AJR Am J Roentgenol** 1990 Oct;155(4):703–12 (90 ref.)
Differentiation of child abuse and osteogenesis imperfecta: medical and legal implications [comment] Kleinman PK. **AJR Am J Roentgenol** 1990 May;154(5):1047–8 Comment on: AJR Am J Roentgenol 1990 May;154(5):1035–46.
Child abuse and neglect [editorial] Jarris RF Jr. **Am Fam Physician** 1990 Apr;41(4):1138, 1141
Shaken baby syndrome. Spaide RF, et al. **Am Fam Physician** 1990 Apr;41(4):1145–52 (39 ref.)
Undiagnosed abuse in children younger than 3 years with femoral fracture. Dalton HJ, et al. **Am J Dis Child** 1990 Aug;144(8):875–8
Childhood sexual and physical abuse in adult patients with borderline personality disorder. Ogata SN, et al. **Am J Psychiatry** 1990 Aug;147(8):1008–13
Sexual and physical abuse histories and psychiatric symptoms among male psychiatric outpatients. Swett C Jr, et al. **Am J Psychiatry** 1990 May;147(5):632–6
Are preterm infants at risk for subsequent fractures? Dahlenburg SL, et al. **Arch Dis Child** 1989 Oct;64(10 Spec No):1384–5
Retinal hemorrhage predicts neurologic injury in the shaken baby syndrome. Wilkinson WS, et al. **Arch Ophthalmol** 1989 Oct;107(10):1472–4
Osteogenesis imperfecta in the differential diagnosis of child abuse. Paterson CR, et al. **BMJ** 1989 Dec 9; 299(6713):1451–4
Skin diseases that may mimic child abuse [letter] Colver GB, et al. **Br J Dermatol** 1990 Jul;123(1):129
Congenital indifference to pain mistaken for non-accidental injury. Spencer JA, et al. **Br J Radiol** 1990 Apr; 63(748):308–10
Observing interactions of abusive and nonabusive dyads: information extracted by accurate and inaccurate judges. Walden TA, et al. **J Abnorm Child Psychol** 1990 Jun; 18(3):241–54
Neonatal rib fracture: birth trauma or child abuse? Rizzolo PJ, et al. **J Fam Pract** 1989 Nov;29(5):561–3
Discussion of "A Case of Panhypogammaglobulinemia Masquerading as Child Abuse" with regard to the involution of the thymus [letter; comment] Fukunaga T. **J Forensic Sci** 1990 Mar;35(2):232–4 Comment on: J Forensic Sci 1988 Nov;33(6):1493–6.
Undiagnosed, untreated acute lymphoblastic leukemia presenting as suspected child abuse. McClain JL, et al. **J Forensic Sci** 1990 May;35(3):735–9
An examination of defense style in parents who abuse children. Brennan J, et al. **J Nerv Ment Dis** 1990 Sep; 178(9):592–5
Nonaccidental injury in osteogenesis imperfecta: a case report. Knight DJ, et al. **J Pediatr Orthop** 1990 Jul–Aug; 10(4):542–4
Assessing child abuse: the TRIADS checklist. Burgess AW, et al. **J Psychosoc Nurs Ment Health Serv** 1990 Apr; 28(4):6–8, 10–4
Radiological aspects of non-accidental injury. Chapman S. **J R Soc Med** 1990 Feb;83(2):67–71 (27 ref.)
Osteogenesis imperfecta and other bone disorders in the differential diagnosis of unexplained fractures. Paterson CR. **J R Soc Med** 1990 Feb;83(2):72–4
Recognition of the subtle signs of child abuse. Miles RL, et al. **J Tenn Med Assoc** 1990 Jan;83(1):20–1 (5 ref.)
Occult ocular damage as a leading sign in the battered child syndrome. Levy I, et al. **Metab Pediatr Syst Ophthalmol** 1990;13(1):20–2
Child abuse. Vince J. **P N G Med J** 1990 Mar;33(1):1–4
Inflicted injury versus accidental injury. Johnson CF. **Pediatr Clin North Am** 1990 Aug;37(4):791–814 (87 ref.)
Pediatric interview assessment of child abuse. Challenges and opportunities. Newberger EH. **Pediatr Clin North Am** 1990 Aug;37(4):943–54 (19 ref.)
Shaken baby syndrome diagnosed by magnetic resonance imaging. Levin AV, et al. **Pediatr Emerg Care** 1989 Sep; 5(3):181–6 (32 ref.)
Pediculosis masquerades as child abuse. Ragosta K. **Pediatr Emerg Care** 1989 Dec;5(4):253–4
A "hole in a rib" as a sign of child abuse. Magid N, et al. **Pediatr Radiol** 1990;20(5):334–6
Orofacial signs of child abuse and neglect: a dental perspective. Ambrose JB. **Pediatrician** 1989;16(3–4):188–92 (15 ref.)
Bite marks, oral and facial injuries—harbingers of severe child abuse? Sperber ND. **Pediatrician** 1989;16(3–4):207–11 (8 ref.)
Abdominal trauma—child abuse [letter] Dworkind M, et al. **Pediatrics** 1990 May;85(5):892
Non-accidental injury. Goggins M. **Radiogr Today** 1989 Sep; 55(628):35
Bone scintigraphy in the evaluation of extraskeletal injuries from child abuse. Howard JL, et al. **Radiographics** 1990 Jan;10(1):67–81
Nonaccidental craniocerebral trauma (child abuse): MR imaging [editorial] Ball WS Jr. **Radiology** 1989 Dec; 173(3):609–10
Head injury in child abuse: evaluation with MR imaging. Sato Y, et al. **Radiology** 1989 Dec;173(3):653–7
[The school physician and the abused child] Mantz J. **Ann Pediatr (Paris)** 1990 Feb;37(2):123–6 (Eng. Abstr.) **(Fre)**
[Are prosecuted parents allowed the benefit of the doubt in cases of child abuse?] Aakhus T, et al. **Tidsskr Nor Laegeforen** 1990 Feb 20;110(5):627–8 (Eng. Abstr.) **(Nor)**
[Children in distress] Lie SO. **Tidsskr Nor Laegeforen** 1990 Jun 20;110(16):2047–9 (17 ref.) **(Nor)**
[Late stenosis as a complication of an intramural duodenal hematoma] Albert Cazalla A, et al. **An Esp Pediatr** 1989 Aug;31(2):155–7 **(Spa)**
[Algorithm of battered children at entrance to a third-level pediatric hospital center] Loredo-Abdalá A, et al. **Bol Med Hosp Infant Mex** 1990 Feb;47(2):91–5 (Eng. Abstr.) **(Spa)**

ECONOMICS

Costs and effectiveness of interventions in child maltreatment. Dubowitz H. **Child Abuse Negl** 1990; 14(2):177–86 (21 ref.)

EPIDEMIOLOGY

Battered and abused children in the East and West. Dogramaci I. **Acta Paediatr Sin** 1988 Dec;29 Suppl B:26B–32B
Serial abuse in children who are shaken. Alexander R, et al. **Am J Dis Child** 1990 Jan;144(1):58–60
The sexually abused battered child. Hobbs CJ, et al. **Arch Dis Child** 1990 Apr;65(4):423–7
Patterns of osseous injuries and psychosocial factors affecting victims of child abuse. Krishnan J, et al. **Aust N Z J Surg** 1990 Jun;60(6):447–50
Child abuse and neglect in a developing country. Farinatti FA, et al. **Child Abuse Negl** 1990;14(1):133–4
An incidence survey of battered children in two elementary schools of Seoul. Kim K, et al. **Child Abuse Negl** 1990; 14(2):273–6
Profile of abused and neglected American Indian children in the Southwest. Lujan C, et al. **Child Abuse Negl** 1989; 13(4):449–61
Maltreatment among runaway and homeless youth. Powers JL, et al. **Child Abuse Negl** 1990;14(1):87–98
The hand as a target organ in child abuse. Johnson CF, et al. **Clin Pediatr (Phila)** 1990 Feb;29(2):66–72
On the epidemiology of child abuse [editorial] McIntyre RV. **J Okla State Med Assoc** 1990 Jan;83(1):7
Health risk behaviors and attempted suicide in adolescents who report prior maltreatment. Riggs S, et al. **J Pediatr** 1990 May;116(5):815–21
Child abuse reporting in South Carolina, 1975–1987 [see comments] Mader TJ. **J S C Med Assoc** 1990 Mar; 86(3):133–7 Comment in: J S C Med Assoc 1990 Mar;86(3):173–4.
Prevalence of sexual abuse, physical abuse, and concurrent traumatic life events in a general medical population. Greenwood CL, et al. **Mayo Clin Proc** 1990 Aug; 65(8):1067–71
History of physical and sexual abuse in women with chronic pelvic pain. Rapkin AJ, et al. **Obstet Gynecol** 1990 Jul; 76(1):92–6
Frequency of suspected abuse/neglect in burn patients. Rosenberg NM, et al. **Pediatr Emerg Care** 1989 Dec; 5(4):219–21
The state of South Dakota's child: 1989. Wilson AL. **S D J Med** 1990 Jan;43(1):5–10
[The problem of child abuse in East Germany. A 5-year analysis] Sachers P. **Padiatr Grenzgeb** 1989;28(4):219–22 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Social and medical problems in children of heroin-addicted parents. A study of 75 patients. Casado-Flores J, et al. **Am J Dis Child** 1990 Sep;144(9):977–9
Source of health problems in childhood: biological aspects. Behrman RE. **Bull N Y Acad Med** 1989 Mar;65(3):278–84 (14 ref.)
Effects of infant cries on alcohol consumption in college males at risk for child abuse. Stasiewicz PR, et al. **Child Abuse Negl** 1989;13(4):463–70
Substance abuse and child abuse. Impact of addiction on the child. Bays J. **Pediatr Clin North Am** 1990 Aug; 37(4):881–904 (87 ref.)

HISTORY

Whatever happened to Mary Ellen? Lazoritz S. **Child Abuse Negl** 1990;14(2):143–9

LEGISLATION & JURISPRUDENCE

ABC of child abuse. Protecting the child. Mitchels B. **BMJ** 1989 Aug 26;299(6698):559–62 (8 ref.)
ABC of child abuse. About courts. Mitchels B, et al. **BMJ** 1989 Sep 9;299(6700):671–4 (0 ref.)
The relationship of child abuse indicators to the assessment of perceived risk and to the court's decision to separate. Dalgleish LI, et al. **Child Abuse Negl** 1989;13(4):491–506
Parental compliance to court-ordered treatment interventions in cases of child maltreatment. Famularo R, et al. **Child Abuse Negl** 1989;13(4):507–14
Residents' attitudes toward the legal system and court testimony in child abuse. Jones JG, et al. **Child Abuse Negl** 1990;14(1):79–85
Professionals' adherence to mandatory child abuse reporting laws: effects of responsibility attribution, confidence ratings, and situational factors. Kalichman SC, et al. **Child Abuse Negl** 1990;14(1):69–77
Countertransference and failure to report child abuse and neglect. Pollak J, et al. **Child Abuse Negl** 1989;13(4):515–22
Outcome study of protective services: comparison of interviews and records as data sources. Shireman JF, et al. **Child Welfare** 1990 Mar–Apr;69(2):167–79
Legal alternatives for fetal injury. Rhodes AM. **MCN** 1990 Mar–Apr;15(2):111
Drug use during pregnancy. New Minnesota law requires doctors to test and report. Fortney DM. **Minn Med** 1990 Apr;73(4):41–3
The expert witness: medical testimony in child abuse and neglect. Gravatt AR. **N C Med J** 1990 Jun;51(6):274–5
Preparation for court testimony in child abuse cases. Chadwick DL. **Pediatr Clin North Am** 1990 Aug; 37(4):955–70 (43 ref.)
Clinical flexibility and confidentiality: effects of reporting laws. Weinstock R, et al. **Psychiatr Q** 1989 Fall; 60(3):195–214
[Child abuse or accidental poisoning with isopropanol?] Fechner G, et al. **Beitr Gerichtl Med** 1989;47:73–5 (Eng. Abstr.) **(Ger)**
[The differential diagnosis of sudden infant death or child abuse—a case of fatal hyperthermia] Joachim H, et al. **Beitr Gerichtl Med** 1989;47:333–6 (Eng. Abstr.) **(Ger)**
[Violence in families and its prevention. Also a plea for abolishing the parental right to inflict physical punishment. A report of the "Violence Commission" of the federal government] Remschmidt H, et al. **Prax Kinderpsychol Kinderpsychiatr** 1990 May–Jun; 39(5):162–7 (34 ref.) (Eng. Abstr.) **(Ger)**
[Child rearing without callousness and physical punishment?] Strunk P. **Z Kinder Jugendpsychiatr** 1990 Jun;18(2):59–60 **(Ger)**
[Quasi-static and dynamic bending stress of the pediatric femur for producing a femoral fracture] Miltner E, et al. **Z Rechtsmed** 1989;102(8):535–44 (Eng. Abstr.) **(Ger)**
[Pediatric skull fractures and child abuse. A critical comment on the contribution "Experimental studies of skull fractures in the infant" by W. Weber] Möller JC. **Z Rechtsmed** 1990; 103(4):311–3 **(Ger)**
[Adolescents, violence and the law] Losana C. **Minerva Pediatr** 1990 Mar;42(3):107–10 (0 ref.) **(Ita)**

MORTALITY

Munchausen syndrome by proxy [letter] **Child Abuse Negl** 1990;14(2):289–90

PATHOLOGY

Traumatic sub-arachnoid haemorrhage as part of the NAI syndrome. Sivaloganathan S. **Med Sci Law** 1990 Apr; 30(2):138–40

PHYSIOPATHOLOGY

Effect of medical and social risk factors on outcome of

prematurity and very low birth weight. Leonard CH, et al. **J Pediatr** 1990 Apr;116(4):620–6
[Water deprivation. An uncommon form of child abuse] Desprez P, et al. **Arch Fr Pediatr** 1990 Apr;47(4):287–9 (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

Towards breaking the cycle of intergenerational abuse. Leifer M, et al. **Am J Psychother** 1990 Jan;44(1):116–28
Behavioral treatment of child abuse. A developmental perspective. Azar ST, et al. **Behav Modif** 1990 Jul; 14(3):279–300 (70 ref.)
Behavioral treatment of child neglect. Lutzker JR. **Behav Modif** 1990 Jul;14(3):301–15 (23 ref.)
ABC of child abuse. Case conferences. McMurray J. **BMJ** 1989 Aug 19;299(6697):500–2 (4 ref.)
Moving child abuse and neglect prevention programs forward: improving program evaluations. Fink A, et al. **Child Abuse Negl** 1990;14(2):187–206 (31 ref.)
Acceptability of positive and punitive discipline methods: comparisons among abusive, potentially abusive, and nonabusive parents. Kelley ML, et al. **Child Abuse Negl** 1990;14(2):219–26
International Society for Prevention of Child Abuse and Neglect--president's message: establishing priorities. Oates K. **Child Abuse Negl** 1990;14(1):1–2
Early intervention keeps medically fragile babies at home. Lima L, et al. **Child Today** 1990 Jan–Feb;19(1):28–32
The intersection of disability and child abuse in England and the United States. Cohen S, et al. **Child Welfare** 1990 May–Jun;69(3):253–62
Can we protect children from abuse? A review of three cases. Hansen CM, et al. **Child Welfare** 1989 Nov–Dec; 68(6):615–21
Child abuse: new perspectives [editorial; comment] Porter RC. **J S C Med Assoc** 1990 Mar;86(3):173–4 Comment on: J S C Med Assoc 1990 Mar;86(3):133–7.
Green star and underclass [letter] Gordon RR. **Lancet** 1990 Jul 7;336(8706):57–8
Pediatrician's role in preventing child maltreatment. Dubowitz H. **Pediatr Clin North Am** 1990 Aug; 37(4):989–1002 (52 ref.)
Networking in a rural community focuses on at-risk children. Epstein MR. **Public Health Rep** 1990 Jul–Aug; 105(4):428–30
A proposal for a foster grandmother intervention program to prevent child abuse. Neergaard JA. **Public Health Rep** 1990 Jan–Feb;105(1):89–93
Volunteer peer support therapy for abusive and neglectful families. Upsal MS. **Public Health Rep** 1990 Jan–Feb; 105(1):80–4
Prenatal screening of pregnant mothers for parenting difficulties: final results from the Queen Mary Child Care Unit. Egan TG, et al. **Soc Sci Med** 1990;30(3):289–95
Preventing child abuse and neglect in Texas. Smith PB, et al. **Tex Med** 1990 Feb;86(2):44–5
[Causes and prevention of violence. Report on the work of the "Violence Commission" of the federal government] Remschmidt H, et al. **Z Kinder Jugendpsychiatr** 1990 Jun; 18(2):99–106 **(Ger)**
[Violence involving minors. Reflections on medical ethics] Cattorini P. **Minerva Pediatr** 1989 Nov;41(11):553–8 (19 ref.) (Eng. Abstr.) **(Ita)**

PSYCHOLOGY

Sibling violence and agonistic interactions among middle adolescents. Goodwin MP, et al. **Adolescence** 1990 Summer;25(98):451–67
Child abuse and violence in single-parent families: parent absence and economic deprivation. Gelles RJ. **Am J Orthopsychiatry** 1989 Oct;59(4):492–501
Reported history of physical and sexual abuse and severity of symptomatology in women psychiatric outpatients. Surrey J, et al. **Am J Orthopsychiatry** 1990 Jul;60(3):412–7
Physical and sexual abuse in adolescent girls with borderline personality disorder. Westen D, et al. **Am J Orthopsychiatry** 1990 Jan;60(1):55–66
Dissociative symptoms in relation to childhood physical and sexual abuse. Chu JA, et al. **Am J Psychiatry** 1990 Jul; 147(7):887–92
Frequency and correlates of childhood sexual and physical abuse histories in adult female borderline inpatients. Shearer SL, et al. **Am J Psychiatry** 1990 Feb;147(2):214–6
Etiological models of child maltreatment. A behavioral perspective. Ammerman RT. **Behav Modif** 1990 Jul; 14(3):230–54 (85 ref.)
Behavioral assessment of child-abusive and neglectful families. Recent developments and current issues. Hansen DJ, et al. **Behav Modif** 1990 Jul;14(3):255–78 (75 ref.)
ABC of child abuse. Role of the child psychiatry team. Nicol AR. **BMJ** 1989 Aug 12;299(6696):451–2 (0 ref.)
Reported maltreatment in children with multiple disabilities. Benedict MI, et al. **Child Abuse Negl** 1990;14(2):207–17
Child physical and sexual abuse: the roles of sadism and sexuality. Crivillé A. **Child Abuse Negl** 1990;14(1):121–7
Child abuse: adolescent records vs. adult recall. Della Femina D, et al. **Child Abuse Negl** 1990;14(2):227–31
Fatal maltreatment by mothers: a proposed framework. Korbin JE. **Child Abuse Negl** 1989;13(4):481–9
Mental representations of physically and sexually abused latency-aged females. Stovall G, et al. **Child Abuse Negl** 1990;14(2):233–42
The effects of familial risk factors on social–cognitive abilities in children. Walker EF, et al. **Child Psychiatry Hum Dev** 1990 Summer;20(4):253–67
Munchausen by proxy syndrome: the triad of abuse, self-abuse, and deception. Sigal M, et al. **Compr Psychiatry** 1989 Nov–Dec;30(6):527–33 (21 ref.)
Substance abuse in women: relationship between chemical dependency of women and past reports of physical and/or sexual abuse. Ladwig GB, et al. **Int J Addict** 1989 Aug; 24(8):739–54
Multiple personality [letter; comment] Heffron WM, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May;29(3):488 Comment on: J Am Acad Child Adolesc Psychiatry 1989 Jul;28(4):612–7.
Suffocation, recurrent apnea, and sudden infant death. Meadow R. **J Pediatr** 1990 Sep;117(3):351–7
Munchausen syndrome by proxy. Kahan BB, et al. **J Sch Health** 1990 Mar;60(3):108–10
Parental stress response to sexual abuse and ritualistic abuse of children in day-care centers. Kelley SJ. **Nurs Res** 1990 Jan–Feb;39(1):25–9
Family environment factors associated with child abuse. Justice B, et al. **Psychol Rep** 1990 Apr;66(2):458
Self-esteem and stress as factors in abuse of children. Lawson KA, et al. **Psychol Rep** 1989 Dec;65(3 Pt 2):1259–65
[Attachment for the aggressor: on the Stockholm syndrome in children] Tridon P, et al. **Ann Pediatr (Paris)** 1990 Apr; 37(4):247–9 (4 ref.) **(Fre)**
[Violence in adolescence. Sudden and provoked violence] Caffo E. **Minerva Pediatr** 1990 Mar;42(3):115–8 (5 ref.) **(Ita)**
[Early detection and cognitive rescue of abused children] Mirabal B, et al. **Bol Asoc Med P R** 1990 May;82(5):200–3 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Radiologic imaging of inflicted injury in the child abuse syndrome. Merten DF, et al. **Pediatr Clin North Am** 1990 Aug;37(4):815–37 (50 ref.)
Visceral injury in battered children: a changing perspective. Sivit CJ, et al. **Radiology** 1989 Dec;173(3):659–61

REHABILITATION

Infants at social risk: maternal depression and family support services as mediators of infant development and security of attachment. Lyons-Ruth K, et al. **Child Dev** 1990 Feb; 61(1):85–98
Specialized foster care: treating seriously emotionally disturbed children. Chamberlain P, et al. **Child Today** 1990 Jan–Feb;19(1):24–7
Adolescent abuse forums: improving services for maltreated adolescents. Jaklitsch B, et al. **Child Today** 1990 Jan–Feb; 19(1):13–5

THERAPY

Behavioral treatment of the victims of child abuse and neglect. Fantuzzo JW. **Behav Modif** 1990 Jul;14(3):316–39 (60 ref.)

CHILD ABUSE, SEXUAL

Urinary tract symptoms and urinary tract infection following sexual abuse. Klevan JL, et al. **Am J Dis Child** 1990 Feb; 144(2):242–4
Child sexual abuse in west China [letter] Yuan LM. **Am J Psychiatry** 1990 Feb;147(2):258
Lichen sclerosus [letter; comment] Harrington CI. **Arch Dis Child** 1990 Mar;65(3):335 Comment on: Arch Dis Child 1989 Aug;64(8):1204–6.
Lichen sclerosus and sexual abuse [letter; comment] Priestley BL, et al. **Arch Dis Child** 1990 Mar;65(3):335 Comment on: Arch Dis Child 1989 Aug;64(8):1204–6.
Child sexual abuse [letter] Eke F. **BMJ** 1989 Sep 16; 299(6701):742
ABC of child abuse. Abuse: the experience. Fraser S. **BMJ** 1989 Sep 16;299(6701):731–2
Women who sexually abuse children. Wilkins R. **BMJ** 1990 May 5;300(6733):1153–4 (18 ref.)
Examination of sexually abused children [letter] Jacobs J. **Can Med Assoc J** 1989 Oct 15;141(8):767
Assessment of child sexual abuse: clinical use of fables. Miller TW, et al. **Child Psychiatry Hum Dev** 1989 Winter; 20(2):123–33
Countertransference issues in the in-home treatment of child sexual abuse. Reynolds-Mejia P, et al. **Child Welfare** 1990 Jan–Feb;69(1):53–61
An experimental evaluation of interdisciplinary training in intervention with sexually abused adolescents. Sullivan R, et al. **Health Soc Work** 1990 Aug;15(3):207–14
Community notification of child sexual abuse. Hynes M, et al. **Ir Med J** 1989 Sep;82(3):115–7
Child sexual abuse and premarital intercourse among high-risk adolescents. Polit DF, et al. **J Adolesc Health Care** 1990 May;11(3):231–4
Child sexual abuse: a physician's introduction to historical and medical validation [published erratum appears in J Am Osteopath Assoc 1989 Oct;89(10):1246] Finkel MA. **J Am Osteopath Assoc** 1989 Sep;89(9):1143–9
Sexual Assault Centre, Auckland, New Zealand. Goodyear F. **Med Law** 1989;8(3):297–302
Child sexual abuse: a new approach. Gwynn P. **Med Law** 1989;8(6):623–30
Sexual assault and sexually transmitted diseases: detection and management in adults and children. Schwarcz SK, et al. **Rev Infect Dis** 1990 Jul–Aug;12 Suppl 6:S682–90 (69 ref.)
Child sexual abuse and gonococcal conjunctivitis. A case report. O'Farrell N, et al. **S Afr Med J** 1990 Jun 16; 77(12):647–8

COMPLICATIONS

Association of bulimia with sexual abuse [letter; comment] Schwartz HJ. **Am J Psychiatry** 1990 Jul;147(7):957 Comment on: Am J Psychiatry 1989 Feb;146(2):239–41.
Medical problems of adults who were sexually abused in childhood [letter; comment] **BMJ** 1990 Apr 7; 300(6729):941–2 Comment on: BMJ 1990 Mar 17;300(6726):705–8.
Ethical considerations in testing victims of sexual abuse for HIV infection [comment] Fost N. **Child Abuse Negl** 1990; 14(1):5–7 Comment on: Child Abuse Negl 1990;14(1):9–17.
Developing guidelines for HIV antibody testing among victims of pediatric sexual abuse [see comments] Gellert GA, et al. **Child Abuse Negl** 1990;14(1):9–17 Comment in: Child Abuse Negl 1990;14(1):5–7.
Sexual abuse and human papillomavirus infection [letter; comment] Gutman LT. **J Pediatr** 1990 Mar;116(3):495–6 Comment on: J Pediatr 1989 Jul;115(1):1–9.

DIAGNOSIS

Child sexual abuse. Physical examination. Lindblad F, et al. **Acta Paediatr Scand** 1989 Nov;78(6):935–43
Child sexual abuse. Characteristics of the assaults in a population of children, 0–17 years of age, molested by a relative or an acquaintance. Lindblad F, et al. **Acta Paediatr Scand** 1990 Jan;79(1):90–7
Child sexual abuse. The suspects, the suspicions and the background. Lindblad F. **Acta Paediatr Scand** 1990 Jan; 79(1):98–106
Urinary tract infection and sexual abuse [letter] Mehl AL. **Am J Dis Child** 1990 Oct;144(10):1073–4
Sexual abuse histories and sequelae in female psychiatric emergency room patients. Briere J, et al. **Am J Psychiatry** 1989 Dec;146(12):1602–6
Childhood sexual and physical abuse in adult patients with borderline personality disorder. Ogata SN, et al. **Am J Psychiatry** 1990 Aug;147(8):1008–13
Sexual and physical abuse histories and psychiatric symptoms among male psychiatric outpatients. Swett C Jr, et al. **Am J Psychiatry** 1990 May;147(5):632–6
Pictorial essay. Child sexual abuse. Part one. **Aust Fam Physician** 1990 Apr;19(4):603, 605, 606
Child sexual abuse [letter] **BMJ** 1989 Sep 9;299(6700):681
ABC of child abuse. Child sexual abuse—II. Bamford F, et al. **BMJ** 1989 Aug 5;299(6695):377–82 (1 ref.)
Child sexual abuse presenting as organic disease. Brown RM, et al. **BMJ** 1989 Sep 2;299(6699):614–5
Are the genitalia of anatomical dolls distorted? Bays J. **Child Abuse Negl** 1990;14(2):171–5
Major difficulties for physicians who are examining sexually abused children [letter; comment] Hobbs CJ, et al. **Child Abuse Negl** 1990;14(2):290–4 Comment on: Child Abuse Negl 1989;13(2):179–93.
Syphilis as a sole indicator of sexual abuse: two cases with no intervention. Horowitz S, et al. **Child Abuse Negl** 1990; 14(1):129–32
Interpreting children's labels for sex-related body parts of anatomically explicit dolls. Schor DP, et al. **Child Abuse Negl** 1989;13(4):523–31
Violence against women: the educators' and physicians' responsibilities [letter] **Fam Med** 1990 May–Jun; 22(3):172–3, 239
Childhood sexual abuse [letter] Curry JR. **Hosp Community Psychiatry** 1990 Jul;41(7):807
Resolved: child sex abuse is overdiagnosed [published erratum appears in J Am Acad Child Adolesc Psychiatry 1990 May;29(3):497] Quinn KM, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Sep;28(5):789–97
What is child sexual abuse? Friedman SR. **J Clin Psychol** 1990 May;46(3):372–5
Suspected child sexual abuse [clinical conference] [published erratum appears in J Fam Pract 1990 Jul;31(1):17] Goldberg H, et al. **J Fam Pract** 1990 May;30(5):523–4, 527–8, 529–32
Genitalia in human figure drawings: childrearing practices and child sexual abuse. Hibbard RA, et al. **J Pediatr** 1990 May;116(5):822–8
Documenting sexual abuse in prepubertal girls. Aiken MM. **MCN** 1990 May–Jun;15(3):176–7
The pitfalls which may be encountered during an examination for signs of sexual abuse [letter] Moffat R. **Med Sci Law** 1990 Jul;30(3):273–4
The pitfalls which may be encountered during an examination for signs of sexual abuse. Paul DM. **Med Sci Law** 1990 Jan;30(1):3–11
Detecting and proving the sexual abuse of children [letter; comment] Turvill P. **Med Sci Law** 1989 Oct;29(4):346–7 Comment on: Med Sci Law 1989 Jan;29(1):33–46.
Medical evaluation of sexual assault findings in the Auckland region. Goodyear-Smith FA. **N Z Med J** 1989 Sep 27; 102(876):493–5
Case study analysis of pseudocyesis: consideration of the

diagnosis of child sexual abuse. Hennessy MB, et al. **Nurse Pract** 1990 Feb;15(2):31–2
Child abuse. Vince J. **P N G Med J** 1990 Mar;33(1):1–4
Use of the colposcope in childhood sexual abuse examinations. McCann J. **Pediatr Clin North Am** 1990 Aug; 37(4):863–80 (36 ref.)
The medical evaluation of the sexually abused child. Paradise JE. **Pediatr Clin North Am** 1990 Aug;37(4):839–62 (93 ref.)
Urinary symptoms in child sexual abuse. Reinhart MA, et al. **Pediatr Nephrol** 1989 Oct;3(4):381–5
Allegations of sexual abuse [letter] Fay RE. **Pediatrics** 1990 Sep;86(3):488–90
Introital diameter as the criterion for sexual abuse [comment] Heger A, et al. **Pediatrics** 1990 Feb;85(2):222–3 Comment on: Pediatrics 1990 Feb;85(2):182–7.
Anatomically correct dolls used in interviews of young children suspected of having been sexually abused. Leventhal JM, et al. **Pediatrics** 1989 Nov;84(5):900–6
Genital findings in prepubertal girls selected for nonabuse: a descriptive study. McCann J, et al. **Pediatrics** 1990 Sep; 86(3):428–39
Comparison of genital examination techniques in prepubertal girls [see comments] McCann J, et al. **Pediatrics** 1990 Feb; 85(2):182–7 Comment in: Pediatrics 1990 Feb;85(2):222–3.
Lessons learned from Cleveland [editorial] Elliott A. **Practitioner** 1990 May 22;234(1489):507–8
[Pretending it didn't happen; the family physician and the sequelae of sexual violence] Wemekamp H. **Ned Tijdschr Geneeskd** 1989 Aug 12;133(32):1577–9 **(Dut)**
[Lichen sclerosus et atrophicus in children can be misinterpreted as sexual abuse] Wahlgren CF. **Lakartidningen** 1990 Feb 7;87(6):387 **(Swe)**
[Investigation of sexual abuse. Examination of children should be done under narcosis!] Wijma B, et al. **Lakartidningen** 1989 Aug 30;86(35):2834–5 **(Swe)**

EPIDEMIOLOGY

Accuracy of adults' reports of abuse in childhood [letter] Rich CL. **Am J Psychiatry** 1990 Oct;147(10):1389–90
The sexually abused battered child. Hobbs CJ, et al. **Arch Dis Child** 1990 Apr;65(4):423–7
Prevalence of child sexual abuse. Badgley RF. **Can J Public Health** 1989 Jul–Aug;80(4):296–8
Prevalence and correlates of unwanted sexual acts in childhood in a national Canadian sample. Bagley C. **Can J Public Health** 1989 Jul–Aug;80(4):295–6
Child abuse and neglect in a developing country. Farinatti FA, et al. **Child Abuse Negl** 1990;14(1):133–4
Sexual abuse in a national survey of adult men and women: prevalence, characteristics, and risk factors. Finkelhor D, et al. **Child Abuse Negl** 1990;14(1):19–28
Child sexual abuse as an international health problem. deChesnay M. **Int Nurs Rev** 1989 Sep–Oct;36(5):149–53 (30 ref.)
Childhood sexual abuse in women with bulimia. Bulik CM, et al. **J Clin Psychiatry** 1989 Dec;50(12):460–4
Sexually abused adolescents: a distinct group among sexually abused children presenting to a children's hospital. Gardner JJ, et al. **J Paediatr Child Health** 1990 Feb;26(1):22–4
Health risk behaviors and attempted suicide in adolescents who report prior maltreatment. Riggs S, et al. **J Pediatr** 1990 May;116(5):815–21
The role of the paediatric surgeon in alleged child sexual abuse. Lafferty PM, et al. **J Pediatr Surg** 1990 Apr; 25(4):434–7
Prevalence of sexual abuse, physical abuse, and concurrent traumatic life events in a general medical population. Greenwood CL, et al. **Mayo Clin Proc** 1990 Aug; 65(8):1067–71
Methodological considerations in research on child sexual abuse. Plunkett A, et al. **Paediatr Perinat Epidemiol** 1990 Jul;4(3):351–60 (33 ref.)
Validity of a short measure of child sexual abuse for use in adult mental health surveys. Bagley C. **Psychol Rep** 1990 Apr;66(2):449–50
Is the prevalence of child sexual abuse decreasing? Evidence from a random sample of 750 young adult women. Bagley C. **Psychol Rep** 1990 Jun;66(3 Pt 1):1037–8
Development of a measure of unwanted sexual contact in childhood, for use in community mental health surveys. Bagley C. **Psychol Rep** 1990 Apr;66(2):401–2
Prevalence of sexual abuse history in a random sample of Norwegian women. Schei B. **Scand J Soc Med** 1990; 18(1):63–8
[Incest. A descriptive study of incest registered at the department of social medicine in Copenhagen during the period Jan. 1, 1987–Dec. 31, 1987] Zimmermann–Belsing T, et al. **Ugeskr Laeger** 1989 Oct 9;151(41):2644–7 (Eng. Abstr.) **(Dan)**

LEGISLATION & JURISPRUDENCE

"False confessions" and identification with the aggressor: another forensic misuse of a psychiatric concept. Perr IN. **Bull Am Acad Psychiatry Law** 1990;18(2):143–51
Women who molest children. Rowan EL, et al. **Bull Am Acad Psychiatry Law** 1990;18(1):79–83
Child sexual abuse: who goes home? Jaudes PK, et al. **Child Abuse Negl** 1990;14(1):61–8
The impact of mandatory reporting legislation on reporting behavior. Lamond DA. **Child Abuse Negl** 1989;13(4):471–80
The extent, nature, and validity of sexual abuse allegations in custody/visitation disputes. Thoennes N, et al. **Child Abuse Negl** 1990;14(2):151–63
The sex abuse controversy [letter; comment] **J Am Acad Child Adolesc Psychiatry** 1989 Sep; 28(5):799–802 Comment on: J Am Acad Child Adolesc Psychiatry 1988 Sep;27(5):645–9.
Child sexual abuse: why the controversy? [editorial] Terr LC. **J Am Acad Child Adolesc Psychiatry** 1989 Sep; 28(5):788
The cleveland enquiry. Butler–Sloss. **Med Leg J** 1989;57 (Pt 3):149–59; discussion 159–63
Forensic science: DNA fingerprinting on trial [news] Anderson A. **Nature** 1989 Dec 21–28;342(6252):844
(Mis)understanding Cleveland: foundational issues and the sexual abuse of children. Kessel R. **Paediatr Perinat Epidemiol** 1989 Oct;3(4):347–52
Frequency and significance of physical evidence in legally proven cases of child sexual abuse. De Jong AR, et al. **Pediatrics** 1989 Dec;84(6):1022–6
[Results of forensic medicine victim/perpetrator studies following sex offenses] Kleemann WJ, et al. **Arch Kriminol** 1990 Jan–Feb;185(1–2):19–26 (Eng. Abstr.) **(Ger)**
[Sexual abuse of girls within the family—results of an analysis of expert psychological credibility assessment] Gaenslen–Jordan C, et al. **Psychother Psychosom Med Psychol** 1990 Jul;40(7):241–7 (Eng. Abstr.) **(Ger)**
[Child abuse and custody disputes: when should the caregiver report the case to police and social services, and when is there an obligation to do so?] Persson L. **Lakartidningen** 1990 Feb 21;87(8):538, 543 **(Swe)**

PATHOLOGY

Child sexual abuse. Part 2. MrnaneM. **Aust Fam Physician** 1990 May;19(5):788–90
Cause of concern [letter; comment] Cradduck G. MCN 1990 Mar–Apr;15(2):130 Comment on: MCN 1989 Jul–Aug;14(4):252–4.

PREVENTION & CONTROL

Prevention of child sexual abuse. Myth or reality. Reppucci ND, et al. **Am Psychol** 1989 Oct;44(10):1266–75 (45 ref.)
Child sexual abuse: factors affecting victims' removal from home. Pellegrin A, et al. **Child Abuse Negl** 1990;14(1):53–60
Child sexual abuse prevention programs: what makes them effective in protecting children? Kraizer S, et al. **Child Today** 1989 Sep–Oct;18(5):23–7
The intersection of disability and child abuse in England and the United States. Cohen S, et al. **Child Welfare** 1990 May–Jun;69(3):253–62
Attitudes towards child sexuality. Daigle M, et al. **Med Law** 1989;8(4):379–90 (23 ref.)
The accountability of incest offenders. de Chesnay M, et al. **Med Law** 1989;8(3):281–6

PSYCHOLOGY

Child sexual abuse and adolescent prostitution: a comparative analysis. Seng MJ. **Adolescence** 1989 Fall;24(95):665–75
Children's knowledge of sexuality: a comparison of sexually abused and nonabused children. Gordon BN, et al. **Am J Orthopsychiatry** 1990 Apr;60(2):250–7
Treatment failures: the role of sexual victimization in women's addictive behavior. Root MP. **Am J Orthopsychiatry** 1989 Oct;59(4):542–9
Admitters and deniers among adolescent sex offenders and their families: a preliminary study. Sefarbi R. **Am J Orthopsychiatry** 1990 Jul;60(3):460–5
Reported history of physical and sexual abuse and severity of symptomatology in women psychiatric outpatients. Surrey J, et al. **Am J Orthopsychiatry** 1990 Jul;60(3):412–7
Physical and sexual abuse in adolescent girls with borderline personality disorder. Westen D, et al. **Am J Orthopsychiatry** 1990 Jan;60(1):55–66
Dissociative symptoms in relation to childhood physical and sexual abuse. Chu JA, et al. **Am J Psychiatry** 1990 Jul; 147(7):887–92
Psychological distress related to sexual abuse in a patient undergoing hemodialysis [letter] Krawczyk J, et al. **Am J Psychiatry** 1990 May;147(5):673–4
Using countertransference in the hypnosis of trauma victims: a model for turning hazard into healing. Peebles–Kleiger MJ. **Am J Psychother** 1989 Oct;43(4):518–30
Common psychological defenses seen in the treatment of sexually abused adolescents. Shapiro S, et al. **Am J Psychother** 1990 Jan;44(1):68–74
Childhood sexual abuse: toward a self-care framework for nursing intervention and research. Rew L. **Arch Psychiatr Nurs** 1990 Jun;4(3):147–53
Rapists and child molesters: psychometric comparisons. Hillbrand M, et al. **Arch Sex Behav** 1990 Feb;19(1):65–71
Young adult women who report childhood intrafamilial sexual abuse: subsequent adjustment. Jackson JL, et al. **Arch Sex Behav** 1990 Jun;19(3):211–21
Counselling the victims of child sexual assault. McMichael A. **Aust Fam Physician** 1990 Apr;19(4):481, 483–6, 489
Medical problems of adults who were sexually abused in childhood [letter; comment] **BMJ** 1990 May 5; 300(6733):1197 Comment on: BMJ 1990 Mar 17;300(6726):705–8.
Medical problems of adults who were sexually abused in childhood [see comments] Arnold RP, et al. **BMJ** 1990 Mar 17;300(6726):705–8 Comment in: BMJ 1990 Apr 7;300(6729):941–2. Comment in: BMJ 1990 May 5;300(6733):1197.
Women who sexually abuse children [letter] Welldon EV. **BMJ** 1990 Jun 9;300(6738):1527–8
Psychological sequelae of sexual abuse in childhood. Hooper PD. **Br J Gen Pract** 1990 Jan;40(330):29–31
The significance of childhood sexual abuse for adult psychiatry. Whitwell D. **Br J Hosp Med** 1990 May; 43(5):346–52 (26 ref.)
Father–daughter incest: 25 years of experience of psychoanalytic psychotherapy with the victims. Bigras J. **Can J Psychiatry** 1989 Nov;34(8):804–6
The impact of group therapy for adult survivors of childhood sexual abuse. Carver CM, et al. **Can J Psychiatry** 1989 Nov; 34(8):753–8
A female sex offender with multiple paraphilias: a psychologic, physiologic (laboratory sexual arousal) and endocrine case study. Cooper AJ, et al. **Can J Psychiatry** 1990 May;35(4):334–7
The process of victimization: the victims' perspective. Berliner L, et al. **Child Abuse Negl** 1990;14(1):29–40
Child physical and sexual abuse: the roles of sadism and sexuality. Crivillé A. **Child Abuse Negl** 1990;14(1):121–7
Why sexual abuse? An exploration of the intergenerational hypothesis. Faller KC. **Child Abuse Negl** 1989;13(4):543–8
Long-term psychological correlates of childhood sexual abuse in two samples of college men. Fromuth ME, et al. **Child Abuse Negl** 1989;13(4):533–42
Child sexual abuse: very young perpetrators [letter; comment] Haugaard JJ. **Child Abuse Negl** 1990;14(2):294–5 Comment on: Child Abuse Negl 1988;12(4):579–82.
Female child perpetrators: children who molest other children. Johnson TC. **Child Abuse Negl** 1989;13(4):571–85
Sexually abused and nonabused children's conceptions of personal body safety. Miller–Perrin CL, et al. **Child Abuse Negl** 1990;14(1):99–112
Parental responses to extrafamilial child sexual assault. Regehr C. **Child Abuse Negl** 1990;14(1):113–20
Factors associated with divorce in intrafamily child sexual abuse cases. Sirles EA, et al. **Child Abuse Negl** 1990; 14(2):165–70
Mental representations of physically and sexually abused latency-aged females. Stovall G, et al. **Child Abuse Negl** 1990;14(2):233–42
Gender dysphoria and sexual abuse: a case report. Zucker KJ, et al. **Child Abuse Negl** 1990;14(2):281–3
Depressive characteristics of sexually abused children. Elliott DJ, et al. **Child Psychiatry Hum Dev** 1990 Fall;21(1):37–48
Children of sex rings. Hunt P, et al. **Child Welfare** 1990 May–Jun;69(3):195–207
Responsibility and management strategies in child sexual abuse: a comparison of child protective workers, nurses, and police officers. Kelley SJ. **Child Welfare** 1990 Jan–Feb; 69(1):43–51
The relevance of childhood sexual abuse to adult psychiatric inpatient care. Jacobson A, et al. **Hosp Community Psychiatry** 1990 Feb;41(2):154–8
Dissociation and abuse among multiple-personality patients, prostitutes, and exotic dancers. Ross CA, et al. **Hosp Community Psychiatry** 1990 Mar;41(3):328–30
Differential drug use patterns among sexually abused adolescent girls in treatment for chemical dependency. Harrison PA, et al. **Int J Addict** 1989 Jun;24(6):499–514
Substance abuse in women: relationship between chemical dependency of women and past reports of physical and/or sexual abuse. Ladwig GB, et al. **Int J Addict** 1989 Aug; 24(8):739–54
Sexual abuse intervention: a support group for parents who have a sexually abused child. Mara BA, et al. **Int J Group Psychother** 1990 Jan;40(1):63–77
Incest: the unknowable trauma. Bernstein AE. **J Am Med Wom Assoc** 1990 Jan–Feb;45(1):23–6
Evaluation and diagnosis of sexual abuse of little girls. Sherkow SP. **J Am Psychoanal Assoc** 1990;38(2):347–69
Long-term effects of sibling incest. Daie N, et al. **J Clin Psychiatry** 1989 Nov;50(11):428–31
Emotional indicators in human figure drawings of sexually victimized and nonabused children. Hibbard RA, et al. **J Clin Psychol** 1990 Mar;46(2):211–9
Female sex offenders: severe victims and victimizers. Travin S, et al. **J Forensic Sci** 1990 Jan;35(1):140–50
Initial psychological effects of sexual abuse on female children as reflected in the Hand Test. Rasch MA, et al. **J Pers Assess** 1989 Winter;53(4):761–9
A piece of my mind. Secret pain. Barthauer L. **JAMA** 1990 Sep 19;264(11):1457
The sexual abuse, eating disorder and addiction (SEA) triad: syndrome or coincidence? Minovitz O, et al. **Med Law** 1989;8(1):59–61
Parental stress response to sexual abuse and ritualistic abuse of children in day-care centers. Kelley SJ. **Nurs Res** 1990 Jan–Feb;39(1):25–9
Child sexual abuse sequelae and body-image surgery. Morgan E, et al. **Plast Reconstr Surg** 1990 Sep;86(3):475–8; discussion 479–80
Sexual abuse in patients with eating disorders. Tice L, et al. **Psychiatr Med** 1989;7(4):257–67
Sexual abuse and premenstrual syndrome: comparison between a lower and higher socioeconomic group.

Paddison PL, et al. **Psychosomatics** 1990 Summer; 31(3):265–72
Use of support groups with adult female survivors of child sexual abuse. Knight C. **Soc Work** 1990 May;35(3):202–6
[Sex abuse within the family] Buddeberg-Fischer B. **Ther Umsch** 1990 Mar;47(3):186–92 (Eng. Abstr.) **(Ger)**
[Investigation of child sexual abuse: if psychoanalysis is used it must not be done in metaphor only] Bodegård G. **Lakartidningen** 1990 Jun 27;87(26–27):2249–51 **(Swe)**
[The importance of applying psychoanalytical knowledge when investigating sexual abuse of children] Bodegård G. **Lakartidningen** 1990 May 30;87(22):1953–6 **(Swe)**
[Investigation of abuse demands professionalism and an attitude of understanding] Lindblad F. **Lakartidningen** 1990 May 30;87(22):1957–8 **(Swe)**

REHABILITATION

Can men who abuse children change? Saphira M. **Med Law** 1989;8(2):125–9

THERAPY

A pilot study for a structured, time-limited therapy group for sexually abused pre-adolescent children. Corder BF, et al. **Child Abuse Negl** 1990;14(2):243–51
Pediatrician–therapist cooperation in the treatment of sexually abused children. Madansky D, et al. **Child Abuse Negl** 1990;14(2):277–9
Group therapy techniques for sexually abused preteen girls. Berman P. **Child Welfare** 1990 May–Jun;69(3):239–52

CHILD ADVOCACY

Social pediatrics: being good ancestors, a pediatric agenda for 100 years. Aldrich RA. **Acta Paediatr Jpn Overseas Ed** 1990 Apr;32(2):117–22
A litany for change. Waldman HB. **ASDC J Dent Child** 1990 May–Jun;57(3):194–7
We must rescue them. Leber G. **Hastings Cent Rep** 1989 Nov–Dec;19(6):26–7
Abortion: the right to an argument. Meilaender G. **Hastings Cent Rep** 1989 Nov–Dec;19(6):13–6
Advocates for children. Swanson J. **Iowa Med** 1990 May; 80(5):247–8
The zygote: to be or not be a person. Bedate CA, et al. **J Med Philos** 1989 Dec;14(6):641–5
Metaphysical accounts of the zygote as a person and the veto power of facts. Bole TJ 3d. **J Med Philos** 1989 Dec; 14(6):647–53
Infant suffering and nurse advocacy in neonatal intensive care. Penticuff JH. **Nurs Clin North Am** 1989 Dec; 24(4):987–97 (84 ref.)
[Treatment considerations for children during terminal care] Saugstad OD, et al. **Tidsskr Nor Laegeforen** 1990 Jun 20; 110(16):2084–7 (Eng. Abstr.) **(Nor)**
[Prepare the child—a way reduce emotional damages] Lundqvist M, et al. **Lakartidningen** 1990 Jul 11; 87(28–29):2334–5 **(Swe)**
[Child abuse and custody disputes: when should the caregiver report the case to police and social services, and when is there an obligation to do so?] Persson L. **Lakartidningen** 1990 Feb 21;87(8):538, 543 **(Swe)**

HISTORY

Individual rights versus the public health: the controversy over the integration of retarded hepatitis B carriers into the New York City public school system. Muraskin W. **J Hist Med Allied Sci** 1990 Jan;45(1):64–98

LEGISLATION & JURISPRUDENCE

Therapeutic case advocacy: a model for interagency collaboration in serving emotionally disturbed children and their families. Young TM. **Am J Orthopsychiatry** 1990 Jan; 60(1):118–24
Advocacy: linking the political forces to achieve program success. Weill JD. **Bull N Y Acad Med** 1989 Mar; 65(3):413–8
A French homunculus in a Tennessee court. Annas GJ. **Hastings Cent Rep** 1989 Nov–Dec;19(6):20–2
Operation rescue: domestic terrorism or legitimate civil rights protest? Nathanson B. **Hastings Cent Rep** 1989 Nov–Dec; 19(6):28–32
In the matter of Cabrera. Barkow JM. **Issues Law Med** 1989 Winter;5(3):371–2
Sterilization for the mentally retarded adolescent. Balancing the equities/the Cincinnati experience. Rauh JL, et al. **J Adolesc Health Care** 1989 Nov;10(6):467–72
Religious exemptions to child neglect laws still being passed despite convictions of parents [news] Skolnick A. **JAMA** 1990 Sep 12;264(10):1226, 1229, 1233
Religious beliefs and parental duty. Brahams D. **Lancet** 1990 Jul 14;336(8707):107–8
Protection of the child as non-therapeutic research subject. Lumenta B. **Paediatr Indones** 1989 Jul–Aug;29(7–8):166–72 (13 ref.)
[The Children's Rights convention] Sénécal J. **Bull Acad Natl Med** 1989 Nov;173(8):1025–30; discussion 1030–1 (Eng. Abstr.) **(Fre)**
[Violence in families and its prevention. Also a plea for abolishing the parental right to inflict physical punishment. A report of the "Violence Commission" of the federal government] Remschmidt H, et al. **Prax Kinderpsychol Kinderpsychiatr** 1990 May–Jun; 39(5):162–7 (34 ref.) (Eng. Abstr.) **(Ger)**
[Child rearing without callousness and physical punishment?] Strunk P. **Z Kinder Jugenpsychiatr** 1990 Jun;18(2):59–60 **(Ger)**
[Adolescents, violence and the law] Losana C. **Minerva Pediatr** 1990 Mar;42(3):107–10 (0 ref.) **(Ita)**

STANDARDS

[International Convention on Children's Rights] Mozziconacci P. **Ann Pediatr (Paris)** 1990 Jan;37(1):7–8 **(Fre)**

TRENDS

Models of effective advocacy for children. First E. **Bull N Y Acad Med** 1989 Mar;65(3):390–4
Advocacy for children. Castell-McGregor SN, et al. **J Paediatr Child Health** 1990 Feb;26(1):1–3

CHILD BEHAVIOR

The influence of paranoic parents on the education of children. Cupalová R, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;122:383–6
Anticipatory pediatrics [letter] Baldwin JV. **Am J Dis Child** 1967 Aug;114(2):212–4
Children's television-viewing habits and the family environment. Taras HL, et al. **Am J Dis Child** 1990 Mar; 144(3):357–9
How neonatal nurses report infants' pain. Pigeon HM, et al. **Am J Nurs** 1989 Nov;89(11):1529–30
Functional eyelid pulling in children. Catalano RA, et al. **Am J Ophthalmol** 1990 Sep 15;110(3):300–2
The child who does not finish his work. Millar TP. **Arch Gen Psychiatry** 1967 Jul;17(1):9–15
Clinical application of human responses classification system: child example. West PP, et al. **Arch Psychiatr Nurs** 1989 Oct;3(5):300–4
A study of behavior modification for developmentally disabled children. Boj JR, et al. **ASDC J Dent Child** 1989 Nov–Dec;56(6):452–7
Behavioral themes in dentistry for children: 1968–1990. Pinkham JR. **ASDC J Dent Child** 1990 Jan–Feb;57(1):38–45
An 'unpleasant' aspect of dentistry [letter; comment] **Br Dent J** 1989 Nov 11;167(9):302 Comment on: Br Dent J 1989 Sep 23;167(6):186–7.
Experiences in school as determinants of behaviour in a discussion situation. Skaalvik EM, et al. **Br J Educ Psychol** 1990 Jun;60 (Pt 2):133–41
Child outcome following mid-trimester amniocentesis: development, behaviour, and physical status at age 4 years. Finegan JA, et al. **Br J Obstet Gynaecol** 1990 Jan; 97(1):32–40
An overview of non-pharmacological pedodontic behaviour management techniques for the general practitioner. Piedalue RJ, et al. **Can Dent Assoc J** 1990 Feb;56(2):137–44 (50 ref.)
The behaviour of 3-year-old children who were born preterm. Walker J. **Child Care Health Dev** 1989 Sep–Oct; 15(5):297–313
Children's responses to angry adult behavior as a function of marital distress and history of interparent hostility. Cummings JS, et al. **Child Dev** 1989 Oct;60(5):1035–43
Mother–toddler problem solving: antecedents in attachment, home behavior, and temperament. Frankel KA, et al. **Child Dev** 1990 Jun;61(3):810–9
Young children's preference for mental state versus behavioral descriptions of human action. Lillard AS, et al. **Child Dev** 1990 Jun;61(3):731–41
Physical activity and children. Strong WB. **Circulation** 1990 May;81(5):1697–701 (43 ref.)
Parental stimulation of high-risk infants in naturalistic settings. Vietze PM. **Clin Perinatol** 1990 Mar;17(1):11–29
Iris pigmentation and sociability in childhood: a re-examination. Rubin KH, et al. **Dev Psychobiol** 1989 Nov; 22(7):717–25
Body measurements, neurological and behavioural development in six-year-old children born preterm and/or small-for-gestational-age. Hadders-Algra M, et al. **Early Hum Dev** 1990 Apr;22(1):1–13
Anaesthetic induction in children [letter] Tadmor C, et al. **Eur J Anaesthesiol** 1989 Nov;6(6):468
Self-regulation of food intake among rural Mexican preschool children. Garcia SE, et al. **Eur J Clin Nutr** 1990 May;44(5):371–80
The relationship of eating frequency and caloric density to energy intake among rural Mexican preschool children. Garcia SE, et al. **Eur J Clin Nutr** 1990 May;44(5):381–7
Planning for contact between the generations: an effective approach. Lambert DJ, et al. **Gerontologist** 1990 Aug; 30(4):553–6
Neonatal behavior of small for gestational age infants. Iyer RS, et al. **Indian Pediatr** 1989 Oct;26(10):987–91
Effects of maternal discipline and nurturance on toddler's behavior and affect. Pfiffner LJ, et al. **J Abnorm Child Psychol** 1989 Oct;17(5):527–40
A latent class model of smoking experimentation in children. Fergusson DM, et al. **J Child Psychol Psychiatry** 1989 Sep; 30(5):761–73
Behaviour and personality in childhood as predictors of adult psychiatric disorder. Rodgers B. **J Child Psychol Psychiatry** 1990 Mar;31(3):393–414
Behavioral changes after closed head injury in children. Fletcher JM, et al. **J Consult Clin Psychol** 1990 Feb; 58(1):93–8
Abstracts of papers, seventh annual meeting of the Society for Behavioral Pediatrics. November 9–10, 1989, Cambridge, Massachusetts. **J Dev Behav Pediatr** 1989 Oct; 10(5):264–76
The usefulness of reaction time tasks in studying attention and organization of behavior in young children. Weissberg R, et al. **J Dev Behav Pediatr** 1990 Apr;11(2):59–64
Children don't always tell the truth. Kaplan JM. **J Forensic Sci** 1990 May;35(3):661–7
Who profits from tobacco sales to children? DiFranza JR, et al. **JAMA** 1990 May 23–30;263(20):2784–7
Intentional injuries among children and adolescents in Massachusetts. Guyer B, et al. **N Engl J Med** 1989 Dec 7;321(23):1584–9
Diet and behaviour [letter] Welch JC. **N Z Med J** 1989 Dec 13;102(881):650
Development of a system for monitoring infant state behavior. Keefe MR, et al. **Nurs Res** 1989 Nov–Dec; 38(6):344–7
The relationship of temperament to pre- and posthospitalization behavioral responses of school-age children. McClowry SG. **Nurs Res** 1990 Jan–Feb; 39(1):30–5
Impact of caretaker stress on behavioral adjustment of very low birth weight preschool children. Tobey GY, et al. **Nurs Res** 1990 Mar–Apr;39(2):84–9
A prospective survey of reactions to blood tests by children and adolescents. Fradet C, et al. **Pain** 1990 Jan;40(1):53–60
Cosleeping in a community sample of 2- and 3-year-old children. Madansky D, et al. **Pediatrics** 1990 Aug; 86(2):197–203
Infant temperament and school age behavior: 6-year longitudinal study in a pediatric practice. Wasserman RC, et al. **Pediatrics** 1990 May;85(5):801–7
Evaluation of a young child's behavior: effects of attractiveness and sex. Horvath T, et al. **Percept Mot Skills** 1989 Dec;69(3 Pt 1):1051–6
Children's television viewing with family members. Lawrence FC, et al. **Psychol Rep** 1989 Oct;65(2):395–400
The effects on children and adolescents of parents' excessive drinking: an international review. Plant MA, et al. **Public Health Rep** 1989 Sep–Oct;104(5):433–42 (87 ref.)
Hearing identification in difficult-to-test children. A study of 142 infants and children. Fjermedal O. **Scand Audiol** 1989;18(3):185–91
Developmental assessment. Volkmar FR. **Semin Perinatol** 1989 Dec;13(6):467–73 (36 ref.)
[The mental health of single and non-single children: two years' community follow-up study] Tao GT. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Apr; 22(2):80–3, 125–6 (Eng. Abstr.) **(Chi)**
[The effect of blue light on the behavior of neonates] Dittrichová J, et al. **Cesk Pediatr** 1989 Sep;44(9):529–32 (Eng. Abstr.) **(Cze)**
[Psychosocial aspects of the so-called short-bowel syndrome in children] Brand PL, et al. **Ned Tijdschr Geneeskd** 1989 Oct 21;133(42):2078–81 (Eng. Abstr.) **(Dut)**
[Television, the child and the pediatrician] Royer P. **Arch Fr Pediatr** 1990 Apr;47(4):241–6 (36 ref.) **(Fre)**
[Comparison of the behavior of full-term infant mothers and premature infant mothers during an interaction with their babies] Le Blanc M. **Psychiatr Enfant** 1989;32(1):249–67 (Eng. Abstr.) **(Fre)**
[Mothers and infants as initiators of interaction in several mother/child pairs (2–4 months] Genta ML, et al. **Minerva Pediatr** 1989 Jun;41(6):305–10 (Eng. Abstr.) **(Ita)**
[The behavior of children with nocturnal enuresis and children with recurrent abdominal pain] Cuturić N, et al. **Lijec Vjesn** 1989 Aug;111(8):254–6 (Eng. Abstr.) **(Scr)**

DRUG EFFECTS

Pre-induction behaviour of children. A review of placebo-controlled trials of sedatives. Morgan-Hughes JO, et al. **Anaesthesia** 1990 Jun;45(6):427–35 (40 ref.)
Effect of artificial food colours on childhood behaviour. Pollock I, et al. **Arch Dis Child** 1990 Jan;65(1):74–7
Mental status changes in children receiving glucocorticoids. Review of the literature. Satel SL. **Clin Pediatr (Phila)** 1990 Jul;29(7):383–8 (49 ref.)
Paradoxical reactions to rectal midazolam as premedication in children. Roelofse JA, et al. **Int J Oral Maxillofac Surg** 1990 Feb;19(1):2–6
Prenatal exposure to drugs: behavioral distortions reflecting CNS impairment? Rodning C, et al. **Neurotoxicology** 1989 Fall;10(3):629–34
Aspartame: effects on learning, behavior, and mood. Saravis S, et al. **Pediatrics** 1990 Jul;86(1):75–83
[Oral preanesthetic medication in children] Bosshard JP, et al. **Rev Med Suisse Romande** 1989 Aug;109(8):617–27 **(Fre)**

PHYSIOLOGY

Conditioned meal initiation in young children. Birch LL, et al. **Appetite** 1989 Oct;13(2):105–13
Behavioral responsivity in preterm infants. Coll CG. **Clin Perinatol** 1990 Mar;17(1):113–23

Behavioral and psychophysiologic assessment of the preterm infant. Lester BM, et al. **Clin Perinatol** 1990 Mar; 17(1):155–71

Protective apathy, a hypothesis about the behavioral organization and its relation to clinical and physiologic status of the preterm infant during the newborn period. Tronick EZ, et al. **Clin Perinatol** 1990 Mar;17(1):125–54

Language and neurodevelopmental outcome of low–birthweight infants at three years. Vohr BR, et al. **Dev Med Child Neurol** 1989 Oct;31(5):582–90

Caloric intake and activity levels are related in young children. Vara L, et al. **Int J Obes** 1989;13(5):613–7

Longitudinal and cross-sectional comparisons of young children's cognitive ERPs and behavior in a picture–matching task: preliminary findings. Friedman D, et al. **Int J Psychophysiol** 1990 Apr;8(3):213–21

[Behavioral determination of visual acuity in 1–to–4–year–old children] Heersema DJ, et al. **Tijdschr Kindergeneeskd** 1989 Dec;57(6):210–4 (Eng. Abstr.) **(Dut)**

CHILD BEHAVIOR DISORDERS

Conduct disorder: a review. Laite GE, et al. **Indiana Med** 1990 Mar;83(3):172–9 (0 ref.)

Normal controls and biological reference values in child psychiatry: defining normal. Kruesi MJ, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May; 29(3):449–52

BLOOD

Plasma dopamine–beta–hydroxylase and preschool behavior in children with conduct disorder. Rogeness GA, et al. **Child Psychiatry Hum Dev** 1989 Winter;20(2):149–56

CEREBROSPINAL FLUID

Lack of seasonal variation in pediatric lumbar cerebrospinal fluid neurotransmitter metabolite concentrations. Swedo SE, et al. **Acta Psychiatr Scand** 1989 Dec;80(6):644–9

Cerebrospinal fluid monoamine metabolites, aggression, and impulsivity in disruptive behavior disorders of children and adolescents. Kruesi MJ, et al. **Arch Gen Psychiatry** 1990 May;47(5):419–26

CHEMICALLY INDUCED

Effect of artificial food colours on childhood behaviour. Pollock I, et al. **Arch Dis Child** 1990 Jan;65(1):74–7

[Lead poisoning causing isolated behavior disorders in children (letter)] Vitoux–Brot C, et al. **Presse Med** 1989 Sep 30;18(30):1482 **(Fre)**

COMPLICATIONS

Childhood comorbidity of anxiety/affective disorders and behavior disorders. Woolston JL, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Sep;28(5):707–13

DIAGNOSIS

Comments on the conduct disorder diagnosis [letter] Jenkins RL. **Am J Psychiatry** 1990 Jun;147(6):812–3

Plasma dexamethasone levels in children given the dexamethasone suppression test. Naylor MW, et al. **Biol Psychiatry** 1990 Mar 15;27(6):592–600

Teacher's perception of primary schoolchildren's undesirable behaviors: the effect of teaching experience, pupil's age, sex and ability stream. Borg MG, et al. **Br J Educ Psychol** 1990 Jun;60 (Pt 2):220–6

Pre–morbid psychopathology in schizophrenia spectrum. Parnas J, et al. **Br J Psychiatry** 1989 Nov;155:623–7

On the usefulness of the DSM–III–R versus the DSM–III for child psychiatrists. McConville BJ, et al. **Can J Psychiatry** 1990 Jun;35(5):367–75 (65 ref.)

Mothers' views on the ages of onset for four childhood disorders. Sullivan A, et al. **Child Psychiatry Hum Dev** 1990 Summer;20(4):269–78

The differential validity of teacher ratings of inattention/overactivity and aggression. Atkins MS, et al. **J Abnorm Child Psychol** 1989 Aug;17(4):423–35

Principal components analyses of behavior problems in Jamaican clinic–referred children: teacher reports for ages 6–17. Lambert MC, et al. **J Abnorm Child Psychol** 1989 Oct;17(5):553–62

Child behavior profile types in a general population sample of boys 6 to 11 years old. McArdle J, et al. **J Abnorm Child Psychol** 1989 Dec;17(6):597–607

Behavioral and cognitive subtypes of ADHD. August GJ, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Sep; 28(5):739–48

The children's self–report questionnaire: factor score age trends and gender differences. Beitchman JH, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Sep;28(5):714–22

The pediatrician as gatekeeper to mental health care for children: do parents' concerns open the gate? Dulcan MK, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May; 29(3):453–8

Internal consistency of DSM–III diagnoses using the symptom scales of the Child Assessment Schedule. Hodges K, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jul; 29(4):635–41

Variations on the theme of conduct [letter] Jenkins RL. **J Am Acad Child Adolesc Psychiatry** 1990 Mar;29(2):315

Normal controls and biological reference values in child psychiatry: defining normal. Kruesi MJ, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May; 29(3):449–52

Comparison of DSM–III and DSM–III–R diagnoses for prepubertal children: changes in prevalence and validity. Lahey BB, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jul;29(4):620–6

A symptom self–report measure for preschool children. Martini DR, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jul;29(4):594–600

Catecholamines and diagnoses in children. Rogeness GA, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Mar; 29(2):234–41

ADDH and conduct disorder: degree of diagnostic overlap and differences among correlates. Szatmari P, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Nov; 28(6):865–72

Problem behavior in international adoptees: III. Diagnosis of child psychiatric disorders. Verhulst FC, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May;29(3):420–8

Convergence of DSM–III diagnoses and self–reported symptoms in child and adolescent inpatients. Weinstein SR, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jul; 29(4):627–34

The Behavioral Summarized Evaluation: validity and reliability of a scale for the assessment of autistic behaviors. Barthelemy C, et al. **J Autism Dev Disord** 1990 Jun; 20(2):189–204

The children's behaviour questionnaire for completion by parents and teachers in a Chinese sample. Ekblad S. **J Child Psychol Psychiatry** 1990 Jul;31(5):775–91

Reliability of psychiatric diagnosis in referred adolescents. Rey JM, et al. **J Child Psychol Psychiatry** 1989 Nov; 30(6):879–88

The clinical significance of neurocognitive impairments among children with psychiatric disorders: diagnosis and situational specificity. Szatmari P, et al. **J Child Psychol Psychiatry** 1990 Jan;31(2):287–99

Psychosocial screening in pediatric practice: identifying high–risk children [letter; comment] Chessare JB. **J Dev Behav Pediatr** 1989 Dec;10(6):340–1 Comment on: J Dev Behav Pediatr 1989 Jun;10(3):134–8.

Behavior classification system for children with developmental, psychiatric, and chronic medical problems. Thompson RJ Jr, et al. **J Pediatr Psychol** 1989 Dec; 14(4):559–75

The reliability and validity of the Tokyo Autistic Behaviour Scale. Kurita H, et al. **Jpn J Psychiatry Neurol** 1990 Mar; 44(1):25–32

Parental self–assessment and behavioral problems of preschool children. Pehrson KL. **Milit Med** 1990 Apr; 155(4):148–52

Pseudoseizures in impaired children [letter; comment] Neill JC. **Neurology** 1990 Jul;40(7):1146 Comment on: Neurology 1990 Jan;40(1):156–7.

Episodic symptoms in children [letter; comment] Woody RC. **Neurology** 1990 Jun;40(6):1011 Comment on: Neurology 1990 Jan;40(1):156–7.

[Complexity of diagnostic and therapeutic approaches in very young children with language and/or behavior problems] Malarrive J. **Rev Laryngol Otol Rhinol (Bord)** 1989; 110(4):335–7 (Eng. Abstr.) **(Fre)**

[Reflections on the work of a medico–pedagogical office in the school sector] Scherler B. **Rev Med Suisse Romande** 1990 Apr;110(4):385–9 **(Fre)**

[Intervention–oriented diagnosis of aggressiveness in children] Zimmermann VW. **Prax Kinderpsychol Kinderpsychiatr** 1989 Nov;38(9):335–42 (Eng. Abstr.) **(Ger)**

[Psychodiagnosis of social–cooperative behavior in childhood. An experimental approach] Zimmermann W. **Psychiatr Neurol Med Psychol Beih** 1990;42:1–122 **(Ger)**

[Self evaluation questionnaires for clinical psychodiagnosis in school–age children] Littmann E. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Nov; 41(11):641–50 (16 ref.) (Eng. Abstr.) **(Ger)**

[Symptoms of dementia misdiagnosed as psychosocial development disorder in congenital aqueduct stenosis] Schulze D, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Feb;42(2):107–12 (Eng. Abstr.) **(Ger)**

[Reliability of child and adolescent psychiatry diagnoses in ICD–10] Blanz B, et al. **Z Kinder Jugenpsychiatr** 1990 Jun; 18(2):78–86 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Isofloxythepin in restless oligophrenic children. Zapletálek M, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):265

A case of Tourette syndrome developing during haloperidol treatment. Karagianis JL, et al. **Can J Psychiatry** 1990 Apr; 35(3):228–32

The clonidine patch and behavior problems [letter] Comings DE, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jul; 29(4):667–8

The concurrent use of lithium and methylphenidate in a child. Licamele WL, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Sep;28(5):785–7

ECONOMICS

Cure for overhospitalization? [letter] Masters KJ. **J Am Acad Child Adolesc Psychiatry** 1990 Jan;29(1):149

ENZYMOLOGY

Elevated platelet MAO is related to impulsivity in disruptive behavior disorders. Stoff DM, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Sep;28(5):754–60

EPIDEMIOLOGY

Mental health in Dutch adolescents: self–reported competencies and problems for ages 11–18. Verhulst FC, et al. **Acta Psychiatr Scand Suppl** 1989;356:1–48

Temper tantrums. Prevalence and etiology in a non–referral outpatient setting. Bhatia MS, et al. **Clin Pediatr (Phila)** 1990 Jun;29(6):311–5

DSM–III disorders in a large sample of adolescents. McGee R, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jul; 29(4):611–9

Problems and competencies reported by parents of Australian and American children. Achenbach TM, et al. **J Child Psychol Psychiatry** 1990 Jan;31(2):265–86

Sex differences in the hyperkinetic syndrome of childhood. James A, et al. **J Child Psychol Psychiatry** 1990 Mar; 31(3):437–46

An epidemiological study of behaviour problems in school children in urban areas of Beijing. Wang YF, et al. **J Child Psychol Psychiatry** 1989 Nov;30(6):907–12

Methodologic note for child epidemiological surveys: the effects of instructions on estimates of behavior prevalence. Woodward CA, et al. **J Child Psychol Psychiatry** 1989 Nov; 30(6):919–24

Social competence and behavior problems in premature children at school age. Ross G, et al. **Pediatrics** 1990 Sep; 86(3):391–7

Children's reactions to war–related stress. Affective symptoms and behaviour problems. Chimienti G, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Nov;24(6):282–7

[Inpatient therapy in child and adolescent psychiatry—analyses of a inpatient population] Goldbeck L, et al. **Prax Kinderpsychol Kinderpsychiatr** 1990 Mar; 39(3):87–93 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Pre–school children with uncooperative behavior in the dental situation. Some characteristics and background factors. Mejàre I, et al. **Acta Odontol Scand** 1989 Dec; 47(6):337–45

Television violence [letter; comment] Gadow KD, et al. **Arch Gen Psychiatry** 1990 Jun;47(6):595–6 Comment on: Arch Gen Psychiatry 1989 Apr;46(4):376–9.

The effects of a mother's second pregnancy on the firstborn child. Harris MJ, et al. **Aust N Z J Obstet Gynaecol** 1989 Aug;29(3 (Pt 2)):319–21

Child sexual abuse presenting as organic disease. Brown RM, et al. **BMJ** 1989 Sep 2;299(6699):614–5

Significance of extreme temperament in infancy for clinical status in pre–school years. I: Value of extreme temperament at 4–8 months for predicting diagnosis at 4.7 years. Maziade M, et al. **Br J Psychiatry** 1989 Apr;154:535–43

Significance of extreme temperament in infancy for clinical status in pre–school years. II: Patterns of temperament change and implications for the appearance of disorders. Maziade M, et al. **Br J Psychiatry** 1989 Apr;154:544–51

The use and effectiveness of elbow splints in the Rett syndrome. Aron M. **Brain Dev** 1990;12(1):162–3

Is classical Rett syndrome ever present in males? Coleman M. **Brain Dev** 1990;12(1):31–2

Characteristics of motor disturbances of the Rett syndrome. Nomura Y, et al. **Brain Dev** 1990;12(1):27–30

Family study of Kenyan children with school refusal. Obondo A, et al. **East Afr Med J** 1990 Feb;67(2):100–8

Marital adjustment and behaviour problems in children. Lucey C, et al. **Ir J Med Sci** 1989 Nov;158(11):269–71

Violence and conduct disorder [letter; comment] Jenkins RL. **J Am Acad Child Adolesc Psychiatry** 1990 Jan;29(1):150–1 Comment on: J Am Acad Child Adolesc Psychiatry 1989 May;28(3):431–6.

Disproportionate referrals for child academic/behavior problems: replication and extension. Tarnowski KJ, et al. **J Consult Clin Psychol** 1990 Apr;58(2):240–3

Behavioral problems in children of torture victims: a sequel to cultural maladaptation or to parental torture? Weile B, et al. **J Dev Behav Pediatr** 1990 Apr;11(2):79–80

Five cases demonstrating the distinctive behavioural features of chromosome deletion 17(p11.2 p11.2) (Smith–Magenis syndrome). Colley AF, et al. **J Paediatr Child Health** 1990 Feb;26(1):17–21

A 6 year follow–up of childhood enuresis: prevalence in adolescence and consequences for mental health. Feehan M, et al. **J Paediatr Child Health** 1990 Apr;26(2):75–9

Communication disorders and emotional/behavioral disorders in children and adolescents. Prizant BM, et al. **J Speech Hear Disord** 1990 May;55(2):179–92 (55 ref.)

Diet and behaviour [letter; comment] Mitchell L. **N Z Med J** 1989 Nov 8;102(879):593–4 Comment on: N Z Med J 1989 Sep 27;102(876):499–500.

Diet and behaviour [see comments] Williams S, et al. **N Z Med J** 1989 Sep 27;102(876):499–500 Comment in: N Z Med J 1989 Nov 8;102(879):593–4.

Epilepsy in children with attention deficit disorder: cognitive, behavioral, and neuroanatomic indices. Kinney RO, et al. **Pediatr Neurol** 1990 Jan–Feb;6(1):31–7

Cognitive and behavioral sequelae of mild head injury in children. Bijur PE, et al. **Pediatrics** 1990 Sep;86(3):337–44

Chronic conditions, socioeconomic risks, and behavioral problems in children and adolescents. Gortmaker SL, et al. **Pediatrics** 1990 Mar;85(3):267–76

[Family life events and behavior problems in children] Guo LT. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Aug;22(4):242–5, 255 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

Measurement of cortisol and lymphocyte subpopulations in depressed and conduct-disordered adolescents. Targum SD, et al. **J Affective Disord** 1990 Feb;18(2):91–6

PREVENTION & CONTROL

Widening the debate on educational reform: prevention as a viable alternative. Pianta RC. **Except Child** 1990 Jan; 56(4):306–13 (45 ref.)

Primary prevention of conduct disorder: issues and prospects. Boyle MH, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Mar;29(2):227–33

Residency training in behavioral pediatrics. Glasscock SG, et al. **J Dev Behav Pediatr** 1989 Oct;10(5):262–3

Use of the Adjective Generation Technique to measure effects of training parents. Peters CL, et al. **Psychol Rep** 1989 Dec;65(3 Pt 2):1216–8

PSYCHOLOGY

Patients in child and adolescent psychiatric care: psychopathology and background factors. Ostman O. **Acta Psychiatr Scand** 1989 Oct;80(4):408–14

Foster child behavior [letter; comment] Barnett D. **Am J Orthopsychiatry** 1990 Apr;60(2):312–4 Comment on: Am J Orthopsychiatry 1989 Oct;59(4):502–9.

Family characteristics and measures of behavior in foster and nonfoster children [see comments] Hulsey TC, et al. **Am J Orthopsychiatry** 1989 Oct;59(4):502–9 Comment in: Am J Orthopsychiatry 1990 Apr;60(2):312–4.

Maternal depression and the emotional development of the child. Caplan HL, et al. **Br J Psychiatry** 1989 Jun; 154:818–22

Female child perpetrators: children who molest other children. Johnson TC. **Child Abuse Negl** 1989;13(4):571–85

Depressed mothers' judgments about their children: an examination of the depression-distortion hypothesis. Richters J, et al. **Child Dev** 1989 Oct;60(5):1068–75

A study of disrupted adoptive placements of adolescents. Berry M, et al. **Child Welfare** 1990 May–Jun;69(3):209–25

From acting out to interactive play. Willock B. **Int J Psychoanal** 1990;71 (Pt 2):321–34

Correlates of parental distress and competence in a child psychiatric population. Eisenberg J, et al. **Isr J Psychiatry Relat Sci** 1989;26(3):150–6

Psychiatric risk in children with speech and language disorders. Beitchman JH, et al. **J Abnorm Child Psychol** 1990 Jun;18(3):283–96

The impact of school emotional climate on student psychopathology. Kasen S, et al. **J Abnorm Child Psychol** 1990 Apr;18(2):165–77

Sequences of staff-child interactions on a psychiatric inpatient unit. Natta MB, et al. **J Abnorm Child Psychol** 1990 Feb;18(1):1–14

Marital discord and child behavior problems: a meta-analysis. Reid WJ, et al. **J Abnorm Child Psychol** 1990 Feb; 18(1):105–17

Seasonal variations in the child and adolescent psychoses. Garralda ME, et al. **J Adolesc** 1989 Sep;12(3):315–21

The adolescent outcome of hyperactive children diagnosed by research criteria: I. An 8-year prospective follow-up study. Barkley RA, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jul;29(4):546–57

Recurrent abdominal pain in children: psychiatric diagnoses and parental psychopathology. Garber J, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jul;29(4):648–56

Aggression and counteraggression during child psychiatric hospitalization. Garrison WT, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Mar;29(2):242–50

Early childhood bereavement. Kranzler EM, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jul;29(4):513–20

Elvis Presley and the Rieger Award [editorial] McDermott JF Jr. **J Am Acad Child Adolesc Psychiatry** 1989 Sep; 28(5):654

Language delay and parental perceptions [letter] Paul R, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jul; 29(4):669–70

Quality of perceived parenting in oppositional and conduct disordered adolescents. Rey JM, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May;29(3):382–5

Four-year follow-up of an epidemiological sample. Verhulst FC, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May; 29(3):440–8

Risk factors for behavioral and emotional disorder in preadolescent children. Williams S, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May;29(3):413–9

Determinants of dentists' management of difficult child patients. Wright FA, et al. **J Behav Med** 1990 Apr; 13(2):175–82

Subgrouping conduct disorder by psychiatric family history. Hamdan-Allen G, et al. **J Child Psychol Psychiatry** 1989 Nov;30(6):889–97

The Seventh Jack Tizard Memorial Lecture. Aspects of adoption. Hersov L. **J Child Psychol Psychiatry** 1990 May; 31(4):493–510 (60 ref.)

Autonomic nervous system (ANS) activity, personality characteristics and disruptive behaviour in girls. Maliphant R, et al. **J Child Psychol Psychiatry** 1990 May;31(4):619–28

Perceptual rotations on children's Rorschachs. O'Neill AM. **J Clin Psychol** 1989 Sep;45(5):809–13

Role of maternal depression in perceptions of child maladjustment. Conrad M, et al. **J Consult Clin Psychol** 1989 Oct;57(5):663–7

Caution: television may be hazardous to a child's mental health [published erratum appears in J Dev Behav Pediatr 1989 Dec;10(6):320] Singer DG. **J Dev Behav Pediatr** 1989 Oct;10(5):259–61

The role of central nervous system functioning and family functioning in behavioral problems of children with myelodysplasia. Thompson RJ, et al. **J Dev Behav Pediatr** 1989 Oct;10(5):242–8

Disordered children's acknowledgment of multiple emotions. Meerum Terwogt M. **J Gen Psychol** 1990 Jan;117(1):59–69

Psychic seizure. Basu J. **J Indian Med Assoc** 1989 Jun; 87(6):141

Behavior problems in children with the presenting problem of poor school performance. Thompson RJ Jr, et al. **J Pediatr Psychol** 1990 Feb;15(1):3–20

The relationship between defenses and symptoms in adolescent psychopathology. Noam GG, et al. **J Pers Assess** 1990 Spring;54(1–2):311–27

Hand Test characteristics of severely behavior handicapped children. Wagner EE, et al. **J Pers Assess** 1990 Summer; 54(3–4):802–6

Paediatrician identification of psychological factors associated with general paediatric consultations. Garralda ME, et al. **J Psychosom Res** 1990;34(3):303–12

Influence of self-concept on school adjustment among middle-school students. Haynes NM. **J Soc Psychol** 1990 Apr;130(2):199–207

A rating scale for the severity of psychopathology in children. Grigoroiu-Serbănescu M. **Neurol Psychiatr (Bucur)** 1989 Jul–Sep;27(3):201–8

Communication disturbances and hyperactive/conduct-disturbed behavior. David OJ, et al. **Psychiatry** 1989 Nov;52(4):379–92

Therapeutic processes. A longitudinal view. Abrams S. **Psychoanal Study Child** 1989;44:43–56

The reality in fantasy-making. Cohen S. **Psychoanal Study Child** 1989;44:57–72

The Child Behaviour Checklist and the Rutter Parental Questionnaire: a comparison between two screening instruments. Fombonne E. **Psychol Med** 1989 Aug; 19(3):777–85

Perceived parental inconsistency as a factor in the emotional development of behaviour-disordered children. Brand HJ, et al. **Psychol Rep** 1990 Apr;66(2):620–2

Interactions of mothers and fathers with conduct problem children: comparison with a nonclinic group. Webster-Stratton C, et al. **Public Health Nurs** 1989 Dec; 6(4):218–23

Temperament, behavior problems, and learning skills in very low birth weight preschoolers. Schraeder BD, et al. **Res Nurs Health** 1990 Feb;13(1):27–34

Family routines and conduct disorders in adolescent girls. Keltner B, et al. **West J Nurs Res** 1990 Apr;12(2):161–70; discussion 170–4

Learning disabilities and behavioural problems in children with epilepsy. Renier WO. **Wien Klin Wochenschr** 1990 Apr 13;102(8):218–22 (37 ref.)

[Sex inequality in mental disorders. Attempt at understanding of an interrupted development between childhood and adulthood] Bolognini M, et al. **Rev Med Suisse Romande** 1989 Oct;109(10):777–83 **(Fre)**

[Psychological damage to children by the alcohol dependence of their parents] Metzler M. **Z Arztl Fortbild (Jena)** 1989;83(16):825–6 (6 ref.) **(Ger)**

[Psychiatric manifestations in children with speech disorders with and without minimal brain dysfunction] Berger F, et al. **Z Kinder Jugenpsychiatr** 1990 Jun;18(2):71–7 (Eng. Abstr.) **(Ger)**

REHABILITATION

Achievement in an alternative high school for emotionally/behaviorally disturbed students. Stedman JM, et al. **Adolescence** 1989 Fall;24(95):623–30

Occupational therapy intervention with an adolescent with brain injury and behavioral disorders. Davidson DA. **Am J Occup Ther** 1990 Feb;44(2):168–71

Studies of the maintenance of subsidized foster placements in the Casey Family Program. Walsh JA, et al. **Child Welfare** 1990 Mar–Apr;69(2):99–114

Children's mental health services: a parent perspective. Tarico VS, et al. **Community Ment Health J** 1989 Winter; 25(4):313–26

Follow-up of maladjusted academically underachieving children treated in a therapeutic community. Lowenstein LF. **Int J Rehabil Res** 1989;12(3):297–305

Predictors of the use of seclusion on an inpatient child psychiatric unit. Millstein KH, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Mar;29(2):256–64

Youth and America's future: the forgotten half. Haggerty RJ. **J Dev Behav Pediatr** 1989 Dec;10(6):321–5; discussion 326–9

Scouting in adolescent treatment programs: building a foundation. Austin BD. **J Psychosoc Nurs Ment Health Serv** 1990 Jul;28(7):24–5

Unique interventions for child inpatient psychiatry. Jones RN, et al. **J Psychosoc Nurs Ment Health Serv** 1990 Jul; 28(7):29–31

[Possibilities of the rehabilitation of children and adolescents with behavior disorders] Knölker U. **Off Gesundheitswes** 1989 Aug–Sep;51(8–9):477–82 (Eng. Abstr.) **(Ger)**

[Theory and methods of the project "Hjemme er bedst" (Home is best)] Sölling O. **Off Gesundheitswes** 1989 Aug–Sep;51(8–9):538–9 (Eng. Abstr.) **(Ger)**

[Theory and methods of the project] Wengel H. **Off Gesundheitswes** 1989 Aug–Sep;51(8–9):540–2 **(Ger)**

THERAPY

Who gets treated? Factors associated with referral in children with psychiatric disorders. Costello EJ, et al. **Acta Psychiatr Scand** 1990 Jun;81(6):523–9

Informed consent as a framework for treatment: ethical and therapeutic considerations. Jensen PS, et al. **Am J Psychother** 1989 Jul;43(3):378–86

Psychotherapy for children and adolescents. Kazdin AE. **Annu Rev Psychol** 1990;41:21–54 (90 ref.)

Nightmare on paper only. Murtagh J. **Aust Fam Physician** 1990 Apr;19(4):571, 573

A context analysis of contingent teacher attention. Martens BK. **Behav Modif** 1990 Apr;14(2):138–56

Admitting whole families: an alternative to residential care. Dydyk BJ, et al. **Can J Psychiatry** 1989 Oct;34(7):694–9

The effects of training in social perspective taking on socially maladjusted girls. Chalmers JB, et al. **Child Dev** 1990 Feb; 61(1):178–90

Psychiatric hospitalization of preschool children: a follow-up study. Dalton R, et al. **Child Psychiatry Hum Dev** 1990 Fall;21(1):57–64

Use of the timeout procedure in a child psychiatry inpatient milieu: combining dynamic and behavioral approaches. Kennedy P, et al. **Child Psychiatry Hum Dev** 1990 Spring; 20(3):207–16

Intensive day treatment provides an alternative to residential care. Hamm J. **Child Today** 1989 Sep–Oct;18(5):11–5

Combining day patient treatment with family work in a child psychiatry clinic. Place M, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(6):373–8

Sometimes patent medicine works: a reply to Braaten, Kauffman, Braaten, Polsgrove, and Nelson [comment] Algozzine B, et al. **Except Child** 1990 Apr;56(6):552–7; discussion 558–60 Comment on: Except Child 1988 Sep;55(1):21–7.

Students with low-incidence disabilities in disadvantaged, rural settings. Capper CA. **Except Child** 1990 Jan; 56(4):338–44

Consultation-based programming: instituting the collaborative ethic in schools. Phillips V, et al. **Except Child** 1990 Jan;56(4):291–304 (120 ref.)

Short-term psychiatric inpatient treatment of preschool children. Mansheim P. **Hosp Community Psychiatry** 1990 Jun;41(6):670–2

Paradoxical interventions embedded in a focal approach to family therapy. Afek E. **Isr J Psychiatry Relat Sci** 1988; 25(3–4):212–23

Marriage by arrangement: a metaphor for one particular use of network therapy. Reed CY. **J Adolesc** 1989 Sep; 12(3):279–94

Psychoanalytic treatment of children and adolescents. Sholevar GP, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Sep;28(5):685–90 (37 ref.)

Management of a hyperactive-conduct disordered child through correspondence training: a preliminary study. Paniagua FA, et al. **J Behav Ther Exp Psychiatry** 1990 Mar;21(1):63–8

Premature termination from treatment among children referred for antisocial behavior. Kazdin AE. **J Child Psychol Psychiatry** 1990 Mar;31(3):415–25

Inpatient social-cognitive skills training groups with conduct disordered and attention deficit disordered children. Kolko DJ, et al. **J Child Psychol Psychiatry** 1990 Jul;31(5):737–48

Reducing bedtime tantrums: comparison between positive routines and graduated extinction. Adams LA, et al. **Pediatrics** 1989 Nov;84(5):756–61

Complementary therapies for common conditions. Lewith G. **Practitioner** 1990 Feb 8;234(1482):123–5

The analyst's visual images and the child analyst's trap. Norman J. **Psychoanal Study Child** 1989;44:117–35

Coercion. Technical problems in the psychoanalysis of children. Valeros JA. **Psychoanal Study Child** 1989; 44:165–87

Parent use of DRI on high rate disruptive behavior: direct and collateral benefits. Friman PC, et al. **Res Dev Disabil** 1990;11(2):249–54

["Marcotte" a therapeutic kindergarten. A method of treatment of psychopathology in 2-to-5-year-old children] Bonard O. **Rev Med Suisse Romande** 1989 Oct; 109(10):785–90 **(Fre)**

[Consultations for infants in an infant-juvenile psychiatric service. Catamnestic study based on 28 cases. Evaluation of therapeutic interventions performed and results obtained as a function of the family psychodynamic organization] Macias M. **Rev Med Suisse Romande** 1990 Feb; 110(2):161–72 **(Fre)**

[The therapeutic relationship at an evening therapy workshop] Zanone F. **Rev Med Suisse Romande** 1989 Oct;

109(10):823–7 (Fre)
[Evaluation of the management of psychiatrically disordered and ill children and adolescents in 3 rural districts. Data of a nearly complete consultation population] Remschmidt H, et al. **Nervenarzt** 1990 Jan;61(1):34–45 (Ger)
[Systemically oriented family counseling (and treatment) within the scope of a social psychiatry service] Martin A. **Off Gesundheitswes** 1989 Aug–Sep;51(8–9):543–8 (Eng. Abstr.) (Ger)
[Theraplay—a direct communication play therapy] Franke U. **Prax Kinderpsychol Kinderpsychiatr** 1990 Jan;39(1):12–7 (Eng. Abstr.) (Ger)
[The technic of inquiry in inpatient treatment of aggressive children with behavioral disorders] Hobrücker B. **Prax Kinderpsychol Kinderpsychiatr** 1990 Feb;39(2):38–44 (Eng. Abstr.) (Ger)
[Effects of systemic family therapy on the organization and operation of a pediatric psychotherapy unit] Mangold B. **Prax Kinderpsychol Kinderpsychiatr** 1990 Mar;39(3):94–7 (Eng. Abstr.) (Ger)
[How did things go? Results and conclusions of follow–up of one year's clients] Zürn H, et al. **Prax Kinderpsychol Kinderpsychiatr** 1990 May–Jun; 39(5):185–90 (Eng. Abstr.) (Ger)
[Concept and services provided by a mobile pediatric and adolescent psychiatric service in a rural area] Remschmidt H, et al. **Psychiatr Prax** 1990 May;17(3):99–106 (Eng. Abstr.) (Ger)
[Comments on psychotherapy of the child] Biebricher D. **Ther Umsch** 1990 Mar;47(3):241–6 (Eng. Abstr.) (Ger)
[Family therapy] Wanschura TE. **Wien Med Wochenschr** 1989 Sep 30;139(18):445–6 (Ger)
[Effects of partial inpatient treatment of preschool children with behavior disorders and developmental delay] Döpfner M, et al. **Z Kinder Jugenpsychiatr** 1989 Sep;17(3):131–9 (Eng. Abstr.) (Ger)
[Effectiveness of child and adolescent psychotherapy within the scope of meta–analyses] Heekerens HP. **Z Kinder Jugenpsychiatr** 1989 Sep;17(3):150–7 (Ger)
[Inhibited aggression as a behavioral disorder in children and possibilities for therapy exemplified by an integrative therapy model] Knoblach D. **Z Klin Psychol Psychopathol Psychother** 1989;37(4):458–65 (Eng. Abstr.) (Ger)
[Psychotherapy of children and adolescents] Müller–Küppers M. **Z Psychosom Med Psychoanal** 1990;36(2):131 (Ger)
[Family therapy—recent developments and outlook] Wirsching M. **Z Psychosom Med Psychoanal** 1990; 36(2):127–30 (10 ref.) (Ger)

CHILD CARE

see related
CHILD REARING
Parental attitudes and knowledge of child safety. A national survey. Eichelberger MR, et al. **Am J Dis Child** 1990 Jun; 144(6):714–20
Acute gastrointestinal illness and child care arrangements. Alexander CS, et al. **Am J Epidemiol** 1990 Jan; 131(1):124–31
The buffering effect of social support on parental stress. Koeske GF, et al. **Am J Orthopsychiatry** 1990 Jul; 60(3):440–51
Maternal employment [editorial] Graham PJ. **Arch Dis Child** 1990 Jun;65(6):565–6
The ability of mothers to read a thermometer. Banco L, et al. **Clin Pediatr (Phila)** 1990 Jun;29(6):343–5
The debate on day care continued [letter] Kestenberg JS. **J Am Acad Child Adolesc Psychiatry** 1989 Nov;28(6):963–4
Child care choices of women physicians. Sinal S, et al. **J Am Med Wom Assoc** 1989 Nov–Dec;44(6):183–4
Responses to "parenthood and practice" [letter] **N Y State J Med** 1990 Jun;90(6):334–5
Rearing children in hospital facilities ("boarder babies") [letter] Fomufod AK, et al. **Pediatrics** 1990 Jan;85(1):137–8
An evaluation of the impact of care groups on knowledge about oral fluid therapy. Bac DJ, et al. **S Afr Med J** 1989 Nov 4;76(9):500–2
Child health and child care in Okelele: an indigenous area of the city of Ilorin, Nigeria. Adedoyin MA, et al. **Soc Sci Med** 1989;29(12):1333–41
Women's education and its influence on attitudes to aspects of child–care in a village community in Kerala. Kutty VR. **Soc Sci Med** 1989;29(11):1299–303
Households, resources, and child health in a self–help settlement in Cairo, Egypt. Tekce B. **Soc Sci Med** 1990; 30(8):929–40

HISTORY
[History and activities of the Association of Children's Friends. II.] Winkiel W. **Pediatr Pol** 1989 Aug–Sep; 64(8–9):583–90 (Pol)

METHODS
Safe care/safe play: child care as a site for injury prevention. Finn–Stevenson M, et al. **Child Today** 1990 Mar–Apr; 19(2):16–20, 32
Window helps autistic child [letter] Dunn D, et al. **Tex Med** 1990 Jun;86(6):7
[Experience with the teaching of the course on "The status and dynamics of children's health"] Berzin' VI, et al. **Gig Sanit** 1989 Dec;(12):29–31 (Rus)

ORGANIZATION & ADMINISTRATION
[Medical workers determine the course of perestroika (discussion initiated by V.Iu. Al'bitskiĭ's article)] Slobodian LM. **Pediatriia** 1990;(5):87–9 (Rus)

TRENDS
Addressing the nation's child care crisis: the school of the twenty–first century. Zigler EF. **Am J Orthopsychiatry** 1989 Oct;59(4):484–91
Can we make time for children? The economy, work schedules, and child care. Presser HB. **Demography** 1989 Nov;26(4):523–43
The children nobody wants. Carlson MJ. **Ohio Med** 1989 Oct;85(10):761–3
[Status and prospects of the development of postgraduate training of public health physicians in child and adolescent care] Sukharev AG, et al. **Gig Sanit** 1990 Mar;(3):79–81 (Eng. Abstr.) (Rus)
[Current demographic processes and the problems of childhood] Bednyĭ MC. **Pediatriia** 1990;(5):5–10 (Rus)

CHILD CUSTODY see under **CHILD WELFARE**

CHILD DAY CARE CENTERS

see related
NURSERIES
Acute respiratory tract infections in children. A three–year follow–up from birth. Harsten G, et al. **Acta Paediatr Scand** 1990 Apr;79(4):402–9
Role of enteric adenoviruses in acute gastroenteritis in children attending day–care centres. Paerregaard A, et al. **Acta Paediatr Scand** 1990 Mar;79(3):370–1
Decreased absence due to infectious diseases in children at two day care centres over an eight–year interval. Söderström M, et al. **Acta Paediatr Scand** 1990 Apr; 79(4):454–60
Hazardous noise at a child care center. Siebert GW. **Am Ind Hyg Assoc J** 1989 Nov;50(11):A809
Infectious conditions in day care: there is more than enteritis and rhinitis [letter] Fosarelli P. **Am J Dis Child** 1990 Sep; 144(9):955–6
Invasive disease due to multiply resistant Streptococcus pneumoniae in a Houston, Tex, day–care center. Rauch AM, et al. **Am J Dis Child** 1990 Aug;144(8):923–7
Acute gastrointestinal illness and child care arrangements. Alexander CS, et al. **Am J Epidemiol** 1990 Jan; 131(1):124–31
Direct caregiver intervention in infant peer social encounters. Russon AE, et al. **Am J Orthopsychiatry** 1990 Jul; 60(3):428–39
The prevention of intellectual impairment in children of impoverished families: findings of a randomized trial of educational day care. Martin SL, et al. **Am J Public Health** 1990 Jul;80(7):844–7
Infections in child day care centers as they relate to internal medicine. Reves RR, et al. **Annu Rev Med** 1990;41:383–91 (35 ref.)
Risk factors for fecal colonization with trimethoprim–resistant and multiresistant Escherichia coli among children in day–care centers in Houston, Texas. Reves RR, et al. **Antimicrob Agents Chemother** 1990 Jul; 34(7):1429–34
Acute illness in day care: how much does it cost? Haskins R. **Bull N Y Acad Med** 1989 Mar;65(3):319–43 (47 ref.)
Hib vaccine coverage in children attending day care/nursery school in East York. Whiting CM, et al. **Can J Public Health** 1990 Mar–Apr;81(2):152–5
Cytomegalovirus infection in day–care centres: risks to pregnant women. Infectious Diseases and Immunization Committee, Canadian Paediatric Society. **Can Med Assoc J** 1990 Mar 15;142(6):547–9 (25 ref.)
Quality of infants' attachments to professional caregivers: relation to infant–parent attachment and day–care characteristics. Goossens FA, et al. **Child Dev** 1990 Jun; 61(3):832–7
Serving refugee children and families in Head Start. Broughton C. **Child Today** 1989 Sep–Oct;18(5):6–10
Asymptomatic Yersinia enterocolitica infections during an outbreak in a day–nursery [letter] Van Ossel C, et al. **Eur J Clin Microbiol Infect Dis** 1990 Feb;9(2):148
Use of tofu in preschool meals. Ashraf HR, et al. **J Am Diet Assoc** 1990 Aug;90(8):1114–6
A cluster of Edwardsiella tarda infection in a day–care center in Florida [letter] Desenclos JC, et al. **J Infect Dis** 1990 Sep;162(3):782
Molecular epidemiology of rotavirus in children attending day care centers in Houston. O'Ryan ML, et al. **J Infect Dis** 1990 Oct;162(4):810–6
Day care center directors' perceptions of the nurse consultant's role. Crowley AA. **J Sch Health** 1990 Jan; 60(1):15–8
Language skills of children with different preschool experiences. Roberts JE, et al. **J Speech Hear Res** 1989 Dec;32(4):773–86
Occupational risk of human parvovirus B19 infection for school and day–care personnel during an outbreak of erythema infectiosum [see comments] Gillespie SM, et al. **JAMA** 1990 Apr 18;263(15):2061–5 Comment in: JAMA 1990 Apr 18;263(15):2096–7.
Occupational risks for child–care providers and teachers [editorial; comment] Pickering LK, et al. **JAMA** 1990 Apr 18;263(15):2096–7 Comment on: JAMA 1990 Apr 18;263(15):2061–5.
Mass sociogenic illness in a day–care center—Florida. **MMWR** 1990 May 11;39(18):301–4
Cytomegalovirus and child day care. Evidence for an increased infection rate among day–care workers. Adler SP. **N Engl J Med** 1989 Nov 9;321(19):1290–6
Parental stress response to sexual abuse and ritualistic abuse of children in day–care centers. Kelley SJ. **Nurs Res** 1990 Jan–Feb;39(1):25–9
Outbreak of Haemophilus influenzae type b meningitis in a day care center. Andersson von Rosen I, et al. **Pediatr Infect Dis J** 1990 May;9(5):326–32
Evaluation of a sick child day care program: lack of detected increased risk of subsequent infections. MacDonald KL, et al. **Pediatr Infect Dis J** 1990 Jan;9(1):15–20
Asymptomatic human calicivirus infection in a day care center. Matson DO, et al. **Pediatr Infect Dis J** 1990 Mar; 9(3):190–6
Longitudinal study of Giardia lamblia infection in a day care center population. Rauch AM, et al. **Pediatr Infect Dis J** 1990 Mar;9(3):186–9
Hepatitis B virus transmission between children in day care. Shapiro CN, et al. **Pediatr Infect Dis J** 1989 Dec; 8(12):870–5
Risk of injury to children less than 5 years of age in day care versus home care settings. Rivara FP, et al. **Pediatrics** 1989 Dec;84(6):1011–6
Prevalence of Giardia lamblia and risk factors for infection among children attending day–care facilities in Denver. Novotny TE, et al. **Public Health Rep** 1990 Jan–Feb; 105(1):72–5
Outbreaks of infections with erythromycin–resistant group A streptococci in child day care centres. Holmström L, et al. **Scand J Infect Dis** 1990;22(2):179–85
A prospective study of infectious morbidity and antibiotic consumption among children in different forms of municipal day–care. Petersson C, et al. **Scand J Infect Dis** 1989;21(4):449–57
Animals in nurseries and child–minders' premises [editorial] Davies EB. **Vet Rec** 1990 Mar 17;126(11):270
[Injuries at day care centers and family day nurseries. A two–year case–load of a casualty department involving children under 7 years of age] Balslev T, et al. **Ugeskr Laeger** 1990 Apr 2;152(14):1003–5 (Eng. Abstr.) (Dan)
[Cryptosporidiosis in children: epidemics and sporadic cases] Bretagne S, et al. **Ann Pediatr (Paris)** 1990 Jun;37(6):381–6 (Eng. Abstr.) (Fre)
[Giardia lamblia infestation at child day care centers. Nutritional impact in infested children] Varga L, et al. **Arch Fr Pediatr** 1990 Jan;47(1):5–8 (Eng. Abstr.) (Fre)
[Social responsibilities in pediatrics and their realization in Czechoslovakia. 3. Social aspects of the pediatric care of children at public facilities] Dunovský J. **Padiatr Grenzgeb** 1989;28(5):283–90 (Eng. Abstr.) (Ger)
[Immunologic studies of children in day care centers] Passauer I, et al. **Padiatr Grenzgeb** 1990;29(3):221–8 (Eng. Abstr.) (Ger)
[Effect of the transition from the family to day care and from day care to kindergarten on the health and development of preschool children] Schmidt–Kolmer E. **Padiatr Grenzgeb** 1989;28(4):195–203 (Ger)
[Differences in the development of Hungarian children, raised at home or in a child day care center] Seregi J, et al. **Padiatr Grenzgeb** 1989;28(6):371–81 (Eng. Abstr.) (Ger)
[Clinical and immunologic effects following oral immunization against influenza in children in day care and infection susceptible young children] Wiersbitzky S, et al. **Padiatr Grenzgeb** 1990;29(1):43–51 (Eng. Abstr.) (Ger)
[Experience in computer formation of food rations] Narimanov NM, et al. **Vopr Pitan** 1989 Sep–Oct;(5):69–72 (Rus)
[Enterobiasis—incidence and therapy in various child care centers in Bratislava] Krčméryová T, et al. **Cesk Pediatr** 1989 Dec;44(12):734–5 (Slo)
[Is the 1st year in day care so bad?] Costa Bou X. **An Esp Pediatr** 1989 Nov;31(5):449–54 (Eng. Abstr.) (Spa)

LEGISLATION & JURISPRUDENCE
Triage decisions in child care for sick children. Desguin BW, et al. **Am J Dis Child** 1990 Feb;144(2):190–6

MANPOWER
"Awareness" of hepatitis B infection among child day–care staff members [letter] Ferson MJ. **Med J Aust** 1989 Oct 16;151(8):484–5
Increased rate of cytomegalovirus infection among day care center workers. Pass RF, et al. **Pediatr Infect Dis J** 1990 Jul;9(7):465–70

STANDARDS
Playground hazards in Atlanta child care centers. Sacks JJ, et al. **Am J Public Health** 1990 Aug;80(8):986–8
Health and safety standards being developed for child–care programs [news] Skolnick A. **JAMA** 1989 Dec 22–29;

262(24):3387–8
Day care—the pediatrician's perspective. Brannon CC, et al. **Tex Med** 1989 Nov;85(11):27–31
[Hygienic evaluation of the number of stories at children's day care establishments] Terent'eva GV, et al. **Gig Sanit** 1989 Aug;(8):88–90 **(Rus)**
[Guidelines for parents and caretakers responsible for the health conditions at child care centers] Costa Bou X. **An Esp Pediatr** 1990 Jan;32(1):63–7 (34 ref.) **(Spa)**

STATISTICS & NUMERICAL DATA

[An analysis of the seasonal rise in hepatitis A morbidity at a children's center and ways to improve the sanitary epidemiologic surveillance for this infection among organized preschoolers] Gudkov VG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Mar;(3):39–44 (Eng. Abstr.) **(Rus)**

SUPPLY & DISTRIBUTION

Day care programs affiliated with teaching hospitals: report of the Dependent Care Task Force. Epps RP, et al. **J Am Med Wom Assoc** 1990 Jan–Feb;45(1):20–2

TRENDS

Addressing the nation's child care crisis: the school of the twenty-first century. Zigler EF. **Am J Orthopsychiatry** 1989 Oct;59(4):484–91

CHILD DEVELOPMENT

see related
CHILD PSYCHOLOGY
GROWTH
MOTOR SKILLS
PERSONALITY DEVELOPMENT

Health and development of 8-year-old children whose mothers abused amphetamine during pregnancy. Eriksson M, et al. **Acta Paediatr Scand** 1989 Nov;78(6):944–9
Auxology and education: some educational implications from the relationships between physical and mental growth in Swedish schoolchildren. Lindgren GW. **Acta Paediatr Scand Suppl** 1989;350:105–20
Psychomotor and mental development during infancy. Relation to psychosocial conditions and health. Part IV of a longitudinal study of children in a new Stockholm suburb. Nordberg L, et al. **Acta Paediatr Scand Suppl** 1989; 353:1–35
Development of auditory brainstem evoked response in normal Chinese children. Hung KL. **Acta Paediatr Sin** 1989 Jan–Feb;30(1):23–9
Do small children react emotionally to affective mimic stimuli? de Oliveira GE, et al. **Acta Paedopsychiatr** 1989; 52(1):26–35
Restriction and defense: the life style and world of psychic disturbed adolescents. Reinhard HG. **Acta Paedopsychiatr** 1989;52(1):44–51
The changing nature of the parent–adolescent relationship from early to late adolescence. Newman BM. **Adolescence** 1989 Winter;24(96):915–24
Grade, pubertal status, and gender-related variations in conflictual issues among adolescents. Papini DR, et al. **Adolescence** 1989 Winter;24(96):977–87
Social influences on children's cognition: state of the art and future directions. Azmitia M, et al. **Adv Child Dev Behav** 1989;22:89–144 (185 ref.)
The development of representation in young children. DeLoache JS. **Adv Child Dev Behav** 1989;22:1–39
Children's understanding of mental phenomena. Estes D, et al. **Adv Child Dev Behav** 1989;22:41–87
Understanding maps as symbols: the development of map concepts in children. Liben LS, et al. **Adv Child Dev Behav** 1989;22:145–201 (75 ref.)
The development of spatial perspective taking. Newcombe N. **Adv Child Dev Behav** 1989;22:203–47 (140 ref.)
Imitation in infancy: a critical review. Poulson CL, et al. **Adv Child Dev Behav** 1989;22:271–98 (80 ref.)
Developmental studies of alertness and encoding effects of stimulus repetition. Smothergill DW, et al. **Adv Child Dev Behav** 1989;22:249–70 (41 ref.)
Anticipatory pediatrics [letter] Baldwin JV. **Am J Dis Child** 1967 Aug;114(2):212–4
Effects of birth weight and sociodemographic variables on mental development of neonatal intensive care unit survivors. Resnick MB, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):374–8
An analysis of the relationship between proximal and distal motor control. Case-Smith J, et al. **Am J Occup Ther** 1989 Oct;43(10):657–62
Praxis on verbal command and imitation. Cermak SA, et al. **Am J Occup Ther** 1990 Jul;44(7):641–5
Children's social and emotional development appears in book [letter; comment] Pratt PN. **Am J Occup Ther** 1989 Dec; 43(12):852–3 Comment on: Am J Occup Ther 1989 Jun;43(6):365–9.
Influence of gestational age on early neuromotor development in the preterm infant. Piper MC, et al. **Am J Perinatol** 1989 Oct;6(4):405–11
Prediction of adult-onset schizophrenia from childhood home movies of the patients. Walker E, et al. **Am J Psychiatry** 1990 Aug;147(8):1052–6
Cognitive development, types of logic, and psychoanalytic theory. van den Daele L. **Am J Psychoanal** 1989 Dec; 49(4):281–95 (48 ref.)
Educational infant care and the public health [editorial] Leviton M, et al. **Am J Public Health** 1990 Jul;80(7):790–1
The prevention of intellectual impairment in children of impoverished families: findings of a randomized trial of educational day care. Martin SL, et al. **Am J Public Health** 1990 Jul;80(7):844–7
Norrie's disease: a prospective study of development. Goodyear HM, et al. **Arch Dis Child** 1989 Nov; 64(11):1587–92
Early diet in preterm babies and developmental status in infancy. Lucas A, et al. **Arch Dis Child** 1989 Nov; 64(11):1570–8
Five year outcome of preterm sextuplets related to size at birth. Marlow N, et al. **Arch Dis Child** 1990 Apr;65(4):451–2
Follow up of premature babies treated with artificial surfactant (ALEC). Morley CJ, et al. **Arch Dis Child** 1990 Jul;65(7 Spec No):667–9
Growth and development in premature twins. Morley R, et al. **Arch Dis Child** 1989 Jul;64(7):1042–5
Anthropometric measurements and growth charts for Cree children of James Bay, from 0 to 5 years old. Lavallée C. **Arctic Med Res** 1988;47 Suppl 1:204–8
Long-term outcome for children with congenital heart defects. A study from 1 year birth cohort born in 1966 in northern Finland. Nuutinen M, et al. **Arctic Med Res** 1989 Oct;48(4):175–84
Society expects enrichment [editorial] Teuscher GW. **ASDC J Dent Child** 1990 Mar–Apr;57(2):96
Praise is an elixir [editorial] Teuscher GW. **ASDC J Dent Child** 1989 Nov–Dec;56(6):416
The nine-year-old and a sense of justice [editorial] Teuscher GW. **ASDC J Dent Child** 1990 Jul–Aug;57(4):256
Another fork in the road [editorial] Teuscher GW. **ASDC J Dent Child** 1990 May–Jun;57(3):176
Child Survival and Development toward Health for All: roles and strategies for Asia-Pacific universities. Raymond JS, et al. **Asia Pac J Public Health** 1989;3(2):118–28
Developmental changes in high-frequency sensitivity. Trehub SE, et al. **Audiology** 1989;28(5):241–9
Low birthweight and impaired growth to 5 years in Australian aborigines [published erratum appears in Aust Paediatr J 1989 Dec;25(6):384] Gracey M, et al. **Aust Paediatr J** 1989 Oct;25(5):279–83
Selective improvement in cognitive test scores of extremely low birthweight infants aged between 2 and 5 years. Kitchen WH, et al. **Aust Paediatr J** 1989 Oct;25(5):288–91
Early childhood development: a comparative study of beliefs held by adolescents, medical students and mothers. Sawyer MG, et al. **Aust Paediatr J** 1989 Aug;25(4):226–9
Opportunistic developmental surveillance in general practice. Houston HL, et al. **Br J Gen Pract** 1990 Jun;40(335):230–2
Child outcome following mid-trimester amniocentesis: development, behaviour, and physical status at age 4 years. Finegan JA, et al. **Br J Obstet Gynaecol** 1990 Jan; 97(1):32–40
Attachment and morality: developmental themes with different values. Wolff S. **Br J Psychiatry** 1990 Feb; 156:266–71 (40 ref.)
Close encounters of the witness kind: children's memory for a simulated health inspection. Davies G, et al. **Br J Psychol** 1989 Nov;80 (Pt 4):415–29
Children's knowledge of court proceedings. Flin RH, et al. **Br J Psychol** 1989 Aug;80 (Pt 3):285–97
Age and social competence in preschoolers' decoding of facial expression. Philippot P, et al. **Br J Soc Psychol** 1990 Mar;29 (Pt 1):43–54
Child health and the family. Butler JA. **Bull N Y Acad Med** 1989 Mar;65(3):285–98 (30 ref.)
The school's role in achieving better health. Comer JP. **Bull N Y Acad Med** 1989 Mar;65(3):344–50
Shaping humane values—popular media and much more. van Dyck NB. **Bull N Y Acad Med** 1989 Mar;65(3):351–5
If children are developing poorly, ask what they had for breakfast. Lechky O. **Can Med Assoc J** 1990 Aug 1; 143(3):210–3
Effects of a tactile stimulation/range-finding programme on the development of VLBW-neonates during the first year of life. Helders PJ, et al. **Child Care Health Dev** 1989 Nov–Dec;15(6):369–80
The relevance of parental involvement programmes in developing countries. O'Toole B. **Child Care Health Dev** 1989 Sep–Oct;15(5):329–42
Behaviour management cards as a method of anticipatory guidance for parents. Showers J. **Child Care Health Dev** 1989 Nov–Dec;15(6):401–15
Cross-cultural differences in developmental rates: a comparison between British and Brazilian children. Victora MD, et al. **Child Care Health Dev** 1990 May–Jun; 16(3):151–64
Minority children. **Child Dev** 1990 Apr;61(2):263–589
Peer social skills in toddlers: competencies and constraints illustrated by same-age and mixed-age interaction. Brownell CA. **Child Dev** 1990 Jun;61(3):838–48
The effects of mastery and competitive conditions on self-assessment at different ages. Butler R. **Child Dev** 1990 Feb;61(1):201–10
Age versus schooling effects on intelligence development. Cahan S, et al. **Child Dev** 1989 Oct;60(5):1239–49
Small-scale deceit: deception as a marker of two-, three-, and four-year-olds' early theories of mind. Chandler M, et al. **Child Dev** 1989 Dec;60(6):1263–77
Children's agency beliefs, cognitive performance, and conceptions of effort and ability: individual and developmental differences. Chapman M, et al. **Child Dev** 1989 Oct;60(5):1229–38
Young children's causal inferences. Das Gupta P, et al. **Child Dev** 1989 Oct;60(5):1138–46
The emergent personologist: the structure and content of 3 1/2-, 5 1/2-, and 7 1/2-year-olds' concepts of themselves and other persons. Eder RA. **Child Dev** 1989 Oct; 60(5):1218–28
Beginning school math competence: minority and majority comparisons. Entwisle DR, et al. **Child Dev** 1990 Apr; 61(2):454–71
Developing theories of the mind: children's and adults' concepts of mental activities. Fabricius WV, et al. **Child Dev** 1989 Dec;60(6):1278–90
Developmental outcome of minority infants: a process-oriented look into our beginnings. Garcia Coll CT. **Child Dev** 1990 Apr;61(2):270–89 (135 ref.)
Problem solving, recall, and mapping relations in isomorphic transfer and nonisomorphic transfer among preschoolers and elementary school children. Gholson B, et al. **Child Dev** 1989 Oct;60(5):1172–87
A global developmental trend in cognitive processing speed. Hale S. **Child Dev** 1990 Jun;61(3):653–63
Heider's foreseeability level of responsibility attribution: does it come after intentionality? Hook JG. **Child Dev** 1989 Oct; 60(5):1212–7
When experimental findings conflict with everyday observations: reflections on children's category learning [comment] [see comments] Kemler Nelson DG. **Child Dev** 1990 Jun;61(3):606–10 Comment on: Child Dev 1990 Jun;61(3):593–605. Comment in: Child Dev 1990 Jun;61(3):611–3.
Daily emotional states as reported by children and adolescents. Larson R, et al. **Child Dev** 1989 Oct; 60(5):1250–60
Development differences in decoding the meanings of the appraisal actions of teachers. Lord CG, et al. **Child Dev** 1990 Feb;61(1):191–200
Income level, gender, ethnicity, and household composition as predictors of children's school-based competence. Patterson CJ, et al. **Child Dev** 1990 Apr;61(2):485–94
Patterns of compliance from eighteen to thirty months of age. Schneider-Rosen K, et al. **Child Dev** 1990 Feb; 61(1):104–12
Lies and truth: a study of the development of the concept. Strichartz AF, et al. **Child Dev** 1990 Feb;61(1):211–20
Children and adults learn family-resemblance categories analytically [see comments] Ward TB, et al. **Child Dev** 1990 Jun;61(3):593–605 Comment in: Child Dev 1990 Jun;61(3):606–10.
Further comments on the attribute availability hypothesis of children's category learning [comment] Ward TB. **Child Dev** 1990 Jun;61(3):611–3 Comment on: Child Dev 1990 Jun;61(3):606–10.
Predictors of Haitian-American infant development at twelve months. Widmayer SM, et al. **Child Dev** 1990 Apr; 61(2):410–5
American conceptions of infant development from 1955 to 1984: what the experts are telling parents. Young KT. **Child Dev** 1990 Feb;61(1):17–28
Concepts of potency and resistance in causal prediction. Zelazo PD, et al. **Child Dev** 1989 Dec;60(6):1307–15
Vestibular disorders. Causes and effects of a hidden problem [see comments] Blomgren J. **Child Today** 1989 Jul–Aug; 18(4):14–7 Comment in: Child Today 1990 Jan–Feb;19(1):3.
20 years on Sesame Street. Lystad M. **Child Today** 1989 Sep–Oct;18(5):20–2
Advances in child health in China. Zhou HK. **Chin Med J [Engl]** 1989 Aug;102(8):575–8
Early intervention: why, for whom, how, and at what cost? Ramey CT, et al. **Clin Perinatol** 1990 Mar;17(1):47–55 (21 ref.)
The Mother-Infant Transaction Program. The content and implications of an intervention for the mothers of low-birthweight infants. Rauh VA, et al. **Clin Perinatol** 1990 Mar;17(1):31–45
Preterm birth: to correct or not to correct. Blasco PA. **Dev Med Child Neurol** 1989 Dec;31(6):816–21
Significance of prenatal, perinatal and postnatal factors in the development of AGA preterm infants at five to seven years. Largo RH, et al. **Dev Med Child Neurol** 1989 Aug; 31(4):440–56 (37 ref.)
Predicting developmental outcome at school age from infant tests of normal, at-risk and retarded infants. Largo RH, et al. **Dev Med Child Neurol** 1990 Jan;32(1):30–45
Visual information processing in infancy. Sontheimer D. **Dev Med Child Neurol** 1989 Dec;31(6):787–96
The development and study of visual acuity. van Hof-van Duin J. **Dev Med Child Neurol** 1989 Aug;31(4):547–52 (35 ref.)
Bibliography of developmental medicine and child neurology: selected books and articles received in 1989. **Dev Med Child Neurol Suppl** 1990 Apr;60:1–165
Iris pigmentation and sociability in childhood: a re-examination. Rubin KH, et al. **Dev Psychobiol** 1989 Nov; 22(7):717–25
Body measurements, neurological and behavioural development in six-year-old children born preterm and/or small-for-gestational-age. Hadders-Algra M, et al.

Early Hum Dev 1990 Apr;22(1):1–13

Probability learning and Piagetian probability conceptions in children 5 to 12 years old. Kreitler S, et al. **Genet Soc Gen Psychol Monogr** 1989 Nov;115(4):505–33

Information integration by children: the identification of rules by an alternative method. Lohaus A, et al. **Genet Soc Gen Psychol Monogr** 1989 Aug;115(3):329–47

Aerobics enhances cardiovascular fitness and agility in preschoolers. Alpert B, et al. **Health Psychol** 1990; 9(1):48–56

Influence of malnutrition on social maturity, visual motor coordination & memory in rural school children. Upadhyay SK, et al. **Indian J Med Res** 1989 Oct;90:320–7

A study of height and weight of urban school-going children of Imphal. Yaima E, et al. **Indian J Public Health** 1989 Jan–Mar;33(1):15–20

Cardiorespiratory response to stress test in normal Indian boys and adolescents. Bhave S, et al. **Indian Pediatr** 1989 Sep;26(9):882–7

Integrated child development services programme. Ghosh S. **Indian Pediatr** 1989 Sep;26(9):855–62

Understanding child development. Holt KS. **Indian Pediatr** 1990 Jan;27(1):9–13

Monitoring and continuing education system in ICDS scheme—a module for national health programmes. Kapil U. **Indian Pediatr** 1989 Sep;26(9):863–7

Profile of blood pressure in normal school children. Laroia D, et al. **Indian Pediatr** 1989 Jun;26(6):531–6

Use of body mass index for assessing the growth status of infants. Raman L, et al. **Indian Pediatr** 1989 Jul;26(7):630–5

Prenatal exposure to tobacco: II. Effects on cognitive functioning at age three. Sexton M, et al. **Int J Epidemiol** 1990 Mar;19(1):72–7

The compulsion to repeat in action: a developmental perspective. Busch F. **Int J Psychoanal** 1989;70 (Pt 3):535–44

A cognitive perspective on object relations, drive development and ego structure in the second and third years of life. Posener JA. **Int J Psychoanal** 1989;70 (Pt 4):627–43

Childhood depression: problems of definition. Verhulst FC. **Isr J Psychiatry Relat Sci** 1989;26(1–2):3–11

Impact of diagnosed depression and self-reported mood on mothers' control strategies: a longitudinal study. Kochanska G, et al. **J Abnorm Child Psychol** 1989 Oct;17(5):493–511

Implications of criminal career research for the prevention of offending. Farrington DP. **J Adolesc** 1990 Jun; 13(2):93–113

Child development knowledge, childrearing attitudes, and social support among first- and second-time adolescent mothers. Seymore C, et al. **J Adolesc Health Care** 1990 Jul;11(4):343–50

Childhood rituals: normal development or obsessive-compulsive symptoms? Leonard HL, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jan;29(1):17–23

Physical, achievement and personality characteristics of Chinese children. Falbo T, et al. **J Biosoc Sci** 1989 Oct; 21(4):483–95

Measurement of spontaneous rotational movement (circling) in normal children. Gospe SM Jr, et al. **J Child Neurol** 1990 Jan;5(1):31–4

Sensorimotor and action development in autistic children from infancy to early childhood. Lösche G. **J Child Psychol Psychiatry** 1990 Jul;31(5):749–61

Maternal psychological state and infant development with mothers under twenty: a research note. Melhuish EC. **J Child Psychol Psychiatry** 1989 Nov;30(6):925–30

Abstracts of papers, seventh annual meeting of the Society for Behavioral Pediatrics. November 9–10, 1989, Cambridge, Massachusetts. **J Dev Behav Pediatr** 1989 Oct; 10(5):264–76

Instructional control of generalized relational matching to sample in children. Lowenkron B. **J Exp Anal Behav** 1989 Nov;52(3):293–309

Place and action in children's representations of stories. Ackerman BP, et al. **J Exp Child Psychol** 1989 Oct; 48(2):246–69

The relation between item identification difficulty and elaborative conceptual processing for children and adults. Ackerman BP, et al. **J Exp Child Psychol** 1990 Jun; 49(3):399–427

Timing and accuracy of visually directed movements in children: control of direction and amplitude components. Bard C, et al. **J Exp Child Psychol** 1990 Aug;50(1):102–18

Changes in infants' visual scanning across the 2- to 14-week age period. Bronson GW. **J Exp Child Psychol** 1990 Feb; 49(1):101–25

A componential analysis of an early learning deficit in mathematics. Geary DC. **J Exp Child Psychol** 1990 Jun; 49(3):363–83

The development of spatial relation representations: evidence from studies of cerebral lateralization. Koenig O, et al. **J Exp Child Psychol** 1990 Aug;50(1):119–30

P300 and probability in children. Ladish C, et al. **J Exp Child Psychol** 1989 Oct;48(2):212–23

Relationships between study organization, retrieval organization, and general and strategy-specific memory knowledge in young children. Lange G, et al. **J Exp Child Psychol** 1990 Feb;49(1):126–46

Relation of knowledge and performance in boys' tennis: age and expertise. McPherson SL, et al. **J Exp Child Psychol** 1989 Oct;48(2):190–211

Developmental differences in visual processing: strategy versus structure. Ruskin EM, et al. **J Exp Child Psychol** 1990 Aug;50(1):1–24

Mechanisms of attention: a developmental study. Tipper SP, et al. **J Exp Child Psychol** 1989 Dec;48(3):353–78

Complementary versus contrastive classification in preschool children. Waxman SR, et al. **J Exp Child Psychol** 1989 Dec;48(3):410–22

Developmental trends in the understanding of perceptual adaptation. Winer GA. **J Exp Child Psychol** 1989 Oct; 48(2):293–314

Size of critical band in infants, children, and adults. Schneider BA, et al. **J Exp Psychol [Hum Percept]** 1990 Aug; 16(3):642–52

Form characteristics of category-retrieval relationships in children and adults. Lange G, et al. **J Gen Psychol** 1990 Jan;117(1):5–14

Mental rotation, age, and conservation. Foulkes D, et al. **J Genet Psychol** 1989 Dec;150(4):449–51

The relative salience of sex, race, age, and glasses in children's social perception. McGraw KO, et al. **J Genet Psychol** 1989 Sep;150(3):251–67

Information integratio- in an area judgment task: effect of aids on children's perceptual judgments. Mullet E, et al. **J Genet Psychol** 1989 Dec;150(4):375–88

The balance-scale dilemma: either the subject or the experimenter muddles through. Normandeau S, et al. **J Genet Psychol** 1989 Sep;150(3):237–50

Are dolls real? Developmental changes in the child's definition of reality. Prawat RS, et al. **J Genet Psychol** 1989 Dec;150(4):359–74

The developmental progression of children's knowledge constructions for heating and cooling. Slone M, et al. **J Genet Psychol** 1990 Jun;151(2):255–66

The development of structural complexity in the child's concept of family: the effect of cognitive stage, sex, and intactness of family. Wedemeyer NV, et al. **J Genet Psychol** 1989 Dec;150(4):341–57

Effects of high-rise living on physical and mental development of children. Oda M, et al. **J Hum Ergol (Tokyo)** 1989 Dec;18(2):231–5

Early recollections and college achievement. Rogers GW Jr. **J Individ Psychol** 1977 Nov;33(2):233–9

Neuro-developmental study of profoundly mentally handicapped children in hospital care. Minns RA, et al. **J Ment Defic Res** 1989 Dec;33 (Pt 6):439–54

Iron needs during rapid growth and mental development. Filer LJ Jr. **J Pediatr** 1990 Aug;117(2 Pt 2):S143–6 (23 ref.)

Genitalia in human figure drawings: childrearing practices and child sexual abuse. Hibbard RA, et al. **J Pediatr** 1990 May;116(5):822–8

Effect of medical and social risk factors on outcome of prematurity and very low birth weight. Leonard CH, et al. **J Pediatr** 1990 Apr;116(4):620–6

Eight-year school performance and growth of preterm, small for gestational age infants: a comparative study with subjects matched for birth weight or for gestational age. Robertson CM, et al. **J Pediatr** 1990 Jan;116(1):19–26

Growth achievement of very low birth weight premature children at school age. Ross G, et al. **J Pediatr** 1990 Aug; 117(2 Pt 1):307–9

Effects of untreated maternal hyperphenylalaninemia on the fetus: further study of families identified by routine cord blood screening. Waisbren SE, et al. **J Pediatr** 1990 Jun; 116(6):926–9

Early assessment of sensorimotor and cognitive development in high-risk infants. Bendell-Estroff D, et al. **J Pediatr Psychol** 1989 Dec;14(4):549–57

Developmental progress of newborns undergoing neonatal surgery. Ludman L, et al. **J Pediatr Surg** 1990 May; 25(5):469–71

Growth and development at the age of 1.5 years in children with maternal hypertension. Martikainen A. **J Perinat Med** 1989;17(4):259–69

The infant at risk. Brazelton TB. **J Perinatol** 1989 Sep; 9(3):307–10

Motor development at term of very low birthweight infants with bronchopulmonary dysplasia. Byrne PJ, et al. **J Perinatol** 1989 Sep;9(3):301–6

Children's control over attention to phonological and semantic properties of words. Bialystok E, et al. **J Psycholinguist Res** 1989 Jul;18(4):369–87

Growth patterns in Saudi Arabian children. Wong SS, et al. **J R Soc Health** 1990 Apr;110(2):64–6, 69

Comparison between the development of Malaysian and Denver children. Chen ST. **J Singapore Paediatr Soc** 1989; 31(3–4):178–85

The underarm throw for accuracy in children. Van Rossum JH, et al. **J Sports Sci** 1989 Summer;7(2):101–12

Physical growth of Chinese children from birth to 6 years old in urban and rural areas in 1985. Ching RJ, et al. **J Trop Pediatr** 1989 Oct;35(5):255–60

Field trial of TALC direct recording scale [news] Weeks AD. **J Trop Pediatr** 1989 Oct;35(5):261–2

Blood pressure profiles of a group of African children in the first year of life. Youmbissi TJ, et al. **J Trop Pediatr** 1989 Oct;35(5):245–6

Enhancing the outcomes of low-birth-weight, premature infants. A multisite, randomized trial. The Infant Health and Development Program. **JAMA** 1990 Jun 13; 263(22):3035–42

Low-birth-weight infants. Can we enhance their development? [editorial] Richmond J. **JAMA** 1990 Jun 13; 263(22):3069–70

The relation between EEG and mental development following cardiac surgery performed under simple deep hypothermia in children. Iwamoto I, et al. **Jpn J Surg** 1990 Mar;20(2):158–62

Children who walk late [editorial] **Lancet** 1990 Sep 1; 336(8714):540–1

Early diet in preterm babies and developmental status at 18 months. Lucas A, et al. **Lancet** 1990 Jun 23; 335(8704):1477–81

Fitting care to the sick infant or child [editorial] Bishop BE. **MCN** 1989 Sep–Oct;14(5):303

A developmental approach to diabetes in children: school age–adolescence. Lipman TH, et al. **MCN** 1989 Sep–Oct; 14(5):330–2

Routine care: promoting development in hospitalized infants. Nugent KE. **MCN** 1989 Sep–Oct;14(5):318–21

Intrapartum fetal monitoring—a disappointing story [editorial; comment] Freeman R. N **Engl J Med** 1990 Mar 1;322(9):624–6 Comment on: N Engl J Med 1990 Mar 1;322(9):588–93.

Effects of electronic fetal-heart-rate monitoring, as compared with periodic auscultation, on the neurologic development of premature infants [see comments] Shy KK, et al. **N Engl J Med** 1990 Mar 1;322(9):588–93 Comment in: N Engl J Med 1990 Mar 1;322(9):624–6.

The organization and coherence of socioemotional, cognitive, and representational development: illustrations through a developmental psychopathology perspective on Down syndrome and child maltreatment. Cicchetti D. **Nebr Symp Motiv** 1988;36:259–366 (375 ref.)

Emotion and self-regulation. Thompson RA. **Nebr Symp Motiv** 1988;36:367–467 (246 ref.)

The effects of developmental factors on IQ in hemiplegic children. Banich MT, et al. **Neuropsychologia** 1990; 28(1):35–47

Guidance of visual reaching with the aid of a TV monitor: the effects of monitor position and of left/right and up/down reversals of the image in relation to age. Brechmann M, et al. **Neuropsychologia** 1989; 27(11–12):1383–97

The development of concepts of economic and social inequality. Leahy RL. **New Dir Child Dev** 1990 Winter; (46):107–20

The role of gender identity and gender constancy in sex-differentiated development. Maccoby EE. **New Dir Child Dev** 1990 Spring;(47):5–20 (28 ref.)

Developmental decline in infants born to HIV-infected intravenous drug-using mothers. Kletter R, et al. **NIDA Res Monogr** 1989;95:409–10

An introduction to using children's drawings as an assessment tool. Wilson D, et al. **Nurse Pract** 1990 Mar;15(3):23–4, 27, 30–5

European longitudinal study of pregnancy and childhood (ELSPAC). **Paediatr Perinat Epidemiol** 1989 Oct; 3(4):460–9

The growth chart—a road to health chart? Maternal comprehension of the growth chart in two Somali villages. Aden AS, et al. **Paediatr Perinat Epidemiol** 1990 Jul; 4(3):340–50

Turning towards the father. Dragonas T. **Paediatr Perinat Epidemiol** 1990 Jul;4(3):247–54 (58 ref.)

The Dunedin Multidisciplinary Health and Development Study: a 15 year longitudinal study. Silva PA. **Paediatr Perinat Epidemiol** 1990 Jan;4(1):76–107

Are boys with the syndrome of agenesis of the anterior abdominal wall muscles always infertile when they grow up? Burger RA, et al. **Pediatr Nephrol** 1989 Apr;3(2):185

Pediatrician and school readiness. Dworkin PH. **Pediatr Rev** 1989 Sep;11(3):67–8

Children of divorce: recent findings regarding long-term effects and recent studies of joint and sole custody. Wallerstein JS, et al. **Pediatr Rev** 1990 Jan;11(7):197–204

Habilitation and rehabilitation of visually impaired and blind children. Jan JE, et al. **Pediatrician** 1990;17(3):202–7 (46 ref.)

Selected papers presented at the fourth annual research symposium of the Society for Developmental Pediatrics. Williamsburg, VA, November 17 to 19, 1988. **Pediatrics** 1990 Mar;85(3 Pt 2):393–452

Recommendations for developmental monitoring: the role of surveillance [letter; comment] Cunningham RD Jr. **Pediatrics** 1990 Jun;85(6):1127–9 Comment on: Pediatrics 1989 Dec;84(6):1000–10.

British and American recommendations for developmental monitoring: the role of surveillance [see comments] Dworkin PH. **Pediatrics** 1989 Dec;84(6):1000–10 Comment in: Pediatrics 1990 Jun;85(6):1127–9.

Phototherapy for neonatal hyperbilirubinemia: six-year follow-up of the National Institute of Child Health and Human Development clinical trial. Scheidt PC, et al. **Pediatrics** 1990 Apr;85(4):455–63

Nonhandicapped very-low-birth-weight infants at one year of age: developmental profile. Williamson WD, et al. **Pediatrics** 1990 Mar;85(3 Pt 2):405–10

Population-based study of the developmental outcome of children exposed to chloride-deficient infant formula. Willoughby A, et al. **Pediatrics** 1990 Apr;85(4):485–90

Developmental lag in reading in relation to physical growth and sex differences. Beech JR. **Percept Mot Skills** 1989

Dec;69(3 Pt 1):748–50
Developmental characteristics of figure drawings made by boys and girls ages five through eleven. Brown EV. **Percept Mot Skills** 1990 Feb;70(1):279–88
Influence of age, sex, hearing loss, and balance on development of sidearm striking by deaf children. Butterfield SA. **Percept Mot Skills** 1990 Apr;70(2):361–2
On development of visual–motor performance in normal boys and boys with minimal brain dysfunction. Cakirpaloglu P, et al. **Percept Mot Skills** 1990 Apr;70(2):426
Reliability of the Prueba de Coordinación Corporal para Niños (body coordination test for children). Camacho–Araya T, et al. **Percept Mot Skills** 1990 Jun;70(3 Pt 1):832–4
Comparison of narrative recall in 11-yr.-old children and adults. Cornish IM. **Percept Mot Skills** 1990 Feb;70(1):162
A construct validation study of the Human Figure Drawing Test. Fabry JJ, et al. **Percept Mot Skills** 1990 Apr; 70(2):465–6
Beginning kindergarteners' perception of number. Fischer FE, et al. **Percept Mot Skills** 1990 Apr;70(2):419–25
Factor analysis of the Reitan–Indiana Neuropsychological Test Battery. Foxcroft CD. **Percept Mot Skills** 1989 Dec; 69(3 Pt 2):1303–13
Development of handwriting in primary school: a longitudinal study. Hamstra–Bletz L, et al. **Percept Mot Skills** 1990 Jun;70(3 Pt 1):759–70
Influence of age on proprioceptive accuracy in two dimensions. Hearn M, et al. **Percept Mot Skills** 1989 Dec; 69(3 Pt 1):811–8
Number concepts of preschool children. Leder GC. **Percept Mot Skills** 1989 Dec;69(3 Pt 1):1048–50
Effects of lateral ball location, grade, and sex on catching. McConnell A, et al. **Percept Mot Skills** 1990 Feb; 70(1):59–66
Effect of input devices on eye–hand coordination in young children. Naido R, et al. **Percept Mot Skills** 1990 Jun;70(3 Pt 1):984–6
Monocular and binocular measurements of smooth eye-pursuit by rural children in kindergarten and grade two. Palmer LL, et al. **Percept Mot Skills** 1990 Apr; 70(2):608–10
Outcome for preschoolers of very low birthweight: sociocultural and environmental influences. Pfeiffer SI, et al. **Percept Mot Skills** 1990 Jun;70(3 Pt 2):1367–78
The function of self–touchings, posture shifts, and motor discharges in children from 3 to 6 years of age. Rögels PL, et al. **Percept Mot Skills** 1990 Jun;70(3 Pt 2):1169–78
Influences of TV games on physical and psychological development of Japanese kindergarten children. Shimai S, et al. **Percept Mot Skills** 1990 Jun;70(3 Pt 1):771–6
Interrater reliability of the Koppitz Developmental Scoring method in the clinical evaluation of the single case. Svensson PW, et al. **Percept Mot Skills** 1990 Apr; 70(2):615–23
Emergence of drawing devices for total and partial occlusion: a longitudinal study. Chen MJ, et al. **Perception** 1989; 18(4):445–55
Conditioned flavor preferences in young children. Birch LL, et al. **Physiol Behav** 1990 Mar;47(3):501–5
Relationships among children's health-related behaviors: a multivariate, developmental perspective. Terre L, et al. **Prev Med** 1990 Mar;19(2):134–46
Using the longitudinal Guttman simplex as a basis for measuring growth. Collins LM, et al. **Psychol Bull** 1990 Jul;108(1):128–34 (19 ref.)
Right hemispheric dysfunction in nonverbal learning disabilities: social, academic, and adaptive functioning in adults and children. Semrud–Clikeman M, et al. **Psychol Bull** 1990 Mar;107(2):196–209 (130 ref.)
Cognitive and social–emotional development of children in different preschool environments. Brand HJ, et al. **Psychol Rep** 1989 Oct;65(2):480–2
Development and stability in visual sustained attention in 14, 20, and 26 week old infants. Richards JE. **Psychophysiology** 1989 Jul;26(4):422–30
Neonatal measures of attention and early cognitive status. Becker PT, et al. **Res Nurs Health** 1989 Dec;12(6):381–8
Longitudinal studies: social and psychological factors. Sand EA. **Rev Epidemiol Sante Publique** 1989;37(5–6):485–97
'Birth to Ten'—a study of children of the 1990s living in the Johannesburg–Soweto area [editorial] Yach D, et al. **S Afr Med J** 1990 Apr 7;77(7):325–6
Predictions of developmental patterns during infancy: assessments of children 0–1 years. Risholm–Mothander P. **Scand J Psychol** 1989;30(3):161–7
Perceptual and intellectual development in infancy. Bremner JG. **Sci Prog** 1989;73(292 Pt 4):443–56 (22 ref.)
Developmental assessment. Volkmar FR. **Semin Perinatol** 1989 Dec;13(6):467–73 (36 ref.)
Physical growth measurements of 18,719 primary school children living in Adana, Turkey. Dindar H, et al. **Turk J Pediatr** 1989 Jan–Mar;31(1):45–56
The role of developmental disorders in chronic recurrent respiratory diseases in infants. Székely E. **Z Kinderchir** 1988 Sep;43 Suppl 1:13–4
[The effect of intrapartum and neonatal asphyxia on the cognitive and behavioral development of children] Yang L. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1990 Feb;23(1):12–6, 61 (Eng. Abstr.) **(Chi)**
[Differences in length and weight growth patterns between urban and rural infants] Yang M, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Jun;20(2):194–7 (Eng. Abstr.) **(Chi)**
[The child at risk in modern society] Dunovský J, et al. **Cas Lek Cesk** 1990 Jun 1;129(22):673–7 (Eng. Abstr.) **(Cze)**
[Follow-up of the development of children up to the age of 8–12 years after prenatal glucose infusion] Přibylová H, et al. **Cesk Gynekol** 1989 Jun;54(5):321–6 (Eng. Abstr.) **(Cze)**
[The status of the neonate with a birthweight over 4000g and his development in the first year of life] Dort J, et al. **Cesk Pediatr** 1989 Dec;44(12):737–8 **(Cze)**
[Moral development in children] Malá E. **Cesk Psychiatr** 1989 Aug;85(4):260–4 (Eng. Abstr.) **(Cze)**
[Health aspects of the educational process in elementary schools] Provazník K, et al. **Zdrav Aktual** 1981;199:1–165 **(Cze)**
[A study of the sequelae of perinatal hypoxia and convulsions in full-term newborn infants] Groenendaal F, et al. **Ned Tijdschr Geneeskd** 1990 Jun 23;134(25):1223–7 (Eng. Abstr.) **(Dut)**
[Correlation of risk factors and disorders of neurophysiologic development in children at risk] Stojčević–Polovina M. **Acta Med Iugosl** 1990;44(1):55–8 **(Fre)**
[The intellectual development of children with severe early kidney insufficiency] Loirat C, et al. **Ann Pediatr (Paris)** 1990 Feb;37(2):94–8 (14 ref.) (Eng. Abstr.) **(Fre)**
[Iron deficiency and psychomotor development tests. Longitudinal study between 10 months and 4 years of age] Dommergues JP, et al. **Arch Fr Pediatr** 1989 Aug–Sep; 46(7):487–90 (Eng. Abstr.) **(Fre)**
[Evoked potentials and the mode of cognitive development in boys 6 to 8 years of age presenting hyperactivity with attention deficit] Robaye P, et al. **Neurophysiol Clin** 1990 Apr;20(1):13–33 (Eng. Abstr.) **(Fre)**
[Skin contact as a first experience. From touching to caressing] de Ajuriaguerra J. **Psychiatr Enfant** 1989; 32(2):325–49 (70 ref.) (Eng. Abstr.) **(Fre)**
[Dyslexia: a continuing developmental approach] Høien T. **Psychiatr Enfant** 1989;32(2):617–38 (0 ref.) (Eng. Abstr.) **(Fre)**
["Les liaisons dangereuses": reflections on the optimal psychic ties for mental development] Paunier A, et al. **Psychiatr Enfant** 1989;32(2):415–49 (34 ref.) (Eng. Abstr.) **(Fre)**
[Sex inequality in mental disorders. Attempt at understanding of an interrupted development between childhood and adulthood] Bolognini M, et al. **Rev Med Suisse Romande** 1989 Oct;109(10):777–83 **(Fre)**
[Evaluation of the psychomotor prognosis of premature infants: current aspects and trends] Fawer CL. **Rev Med Suisse Romande** 1989 Nov;109(11):911–9 **(Fre)**
["Normalcy" of development in children] Largo R. **Rev Med Suisse Romande** 1989 Sep;109(9):727–31 **(Fre)**
[A longitudinal study on the socio–emotional development of infants and on the implications for baby–sitters] Pierrehumbert B, et al. **Rev Med Suisse Romande** 1989 Oct; 109(10):805–12 **(Fre)**
[The physical development of infants and young children. 6. Skinfold thickness—a longitudinal study] Bewer GI, et al. **Arztl Jugendkd** 1989;80(5):245–58 (Eng. Abstr.) **(Ger)**
[Age on starting school and school achievement] Richter J, et al. **Arztl Jugendkd** 1990;81(2):94–9 (Eng. Abstr.) **(Ger)**
[Secular acceleration in psychological and somatic trends. A review] Rösler HD. **Arztl Jugendkd** 1990;81(2):76–85 (55 ref.) (Eng. Abstr.) **(Ger)**
[The arterial blood supply of the ascending colon] Kaufmann HP. **Chirurg** 1989 Aug;60(8):517–20 (Eng. Abstr.) **(Ger)**
[Assessment of fine motor skills in young children and school children] Pothmann R, et al. **Fortschr Med** 1989 Sep 30; 107(28):592–5 (Eng. Abstr.) **(Ger)**
[Treatment and rehabilitation in juvenile hearing disorders] Zorowka P, et al. **Fortschr Med** 1990 Jul 30;108(22):429–32 (Eng. Abstr.) **(Ger)**
[Is the visual fixation mark adequate visual attraction for babies in the 1st year of life?] Friedrich D. **Klin Monatsbl Augenheilkd** 1989 Aug;195(2):79–82 (Eng. Abstr.) **(Ger)**
[Measuring short-term periodicity of pediatric growth] Hermanussen M, et al. **Monatsschr Kinderheilkd** 1989 Jul; 137(7):403–10 (Eng. Abstr.) **(Ger)**
[Intellectual development of phenylketonuria children treated early—a longitudinal study. 10 years' concomitant psychological study in The Netherlands] Slijper FM, et al. **Monatsschr Kinderheilkd** 1989 Oct;137(10):662–5 (Eng. Abstr.) **(Ger)**
[Social responsibilities in pediatrics and their realization in Czechoslovakia. 1. Social pediatric responsibilities of an ambulatory care pediatrician in general practice] Dunovský J. **Padiatr Grenzgeb** 1989;28(5):267–75 (Eng. Abstr.) **(Ger)**
[The needs of a child from the social pediatric viewpoint] Dunovský J, et al. **Padiatr Grenzgeb** 1989;28(4):213–7 (Eng. Abstr.) **(Ger)**
[Effect of the transition from the family to day care and from day care to kindergarten on the health and development of preschool children] Schmidt–Kolmer E. **Padiatr Grenzgeb** 1989;28(4):195–203 **(Ger)**
[Differences in the development of Hungarian children, raised at home or in a child day care center] Seregi J, et al. **Padiatr Grenzgeb** 1989;28(6):371–81 (Eng. Abstr.) **(Ger)**
[Coping with a handicapped child] Pfeiffer EM. **Prax Kinderpsychol Kinderpsychiatr** 1989 Oct;38(8):288–93 (Eng. Abstr.) **(Ger)**
[Causes and diagnosis of short stature] Blümel P, et al. **Wien Med Wochenschr** 1989 Sep 30;139(18):427–8 **(Ger)**
[Nonspecific reactivity of former pediatric patients with asthma in clinical remission] Steinbrugger B, et al. **Wien Med Wochenschr Suppl** 1989;104:suppl 45–6 **(Ger)**
[Effect of maternal smoking in pregnancy on physical and mental development of the school child] Schwarz W. **Z Arztl Fortbild (Jena)** 1989;83(21):1057–8 (15 ref.) **(Ger)**
[Anthropometric studies of healthy, athletic girls 9 to 12 years of age] Brauer BM, et al. **Z Gesamte Hyg** 1990 Jun; 36(6):331–3 (Eng. Abstr.) **(Ger)**
[A conservative, surgery–delaying attitude in the treatment of concomitant hydrocephalus in patients with meningomyelocele] Jenny P, et al. **Z Kinderchir** 1989 Oct; 44(5):273–4 (Eng. Abstr.) **(Ger)**
[Growth and development of very–low–birth–weight infants] Arad I, et al. **Harefuah** 1990 Jan 1;118(1):1–5 (Eng. Abstr.) **(Heb)**
[Comparing development with physical fitness, motor ability, and health of children among various living environment] Nagata A, et al. **Ann Physiol Anthropol** 1989 Oct; 8(4):219–26 (Eng. Abstr.) **(Jpn)**
[Effects of different types of writing on the functional state and development of children] Bazarnyĭ VF, et al. **Gig Sanit** 1990 Apr;(4):16–8 **(Rus)**
[Various hygienic aspects of teaching and upbringing the children in boarding schools in Moscow] Loseva OA, et al. **Gig Sanit** 1989 Nov;(11):16–9 **(Rus)**
[Status of reproductive function and the development and health of children of female workers in the synthetic leather industry] Ivanova NIu, et al. **Gig Tr Prof Zabol** 1989; (7):28–31 (Eng. Abstr.) **(Rus)**
[Long term results of the development of children delivered by cesarean section] Abdullakhodzhaev MS, et al. **Pediatriia** 1989;(10):106 **(Rus)**
[Complex individual assessment of physical development of children 1–11 years of age according to common intergroup standards] Maksimova TM, et al. **Pediatriia** 1990;(6):56–60 **(Rus)**
[Prognosis of the development of children with very low birth weight] Turabelidze GS, et al. **Pediatriia** 1989; (8):103–6 (42 ref.) **(Rus)**
[Health status of illegitimate children during their 1st year of life] Titova ELa, et al. **Sov Zdravookhr** 1990;(5):38–41 (Eng. Abstr.) **(Rus)**
[Prospective study of the prevalence of iron deficiency in breast-fed infants in Cantabria, its relation to the introduction of cow's milk and psychomotor development] González de Aledo Linos A, et al. **An Esp Pediatr** 1990 Jan;32(1):24–7 (29 ref.) (Eng. Abstr.) **(Spa)**
[A revised Denver test: a useful instrument for evaluating psychomotor development at a pediatric outpatient department] González de Aledo Linos A. **An Esp Pediatr** 1989 Oct;31(4):372–9 (Eng. Abstr.) **(Spa)**
[Early detection and cognitive rescue of abused children] Mirabal B, et al. **Bol Asoc Med P R** 1990 May;82(5):200–3 (Eng. Abstr.) **(Spa)**
[Behavioral development and nerve conduction velocity during recovery from malnutrition] Vega–Franco L, et al. **Bol Med Hosp Infant Mex** 1990 Feb;47(2):85–90 (Eng. Abstr.) **(Spa)**
[Growth of the child in relation to health status] Malacara JM, et al. **Gac Med Mex** 1989 Jul–Aug;125(7–8):203–12 (15 ref.) **(Spa)**

DRUG EFFECTS

Therapeutic challenges. Prenatal and paediatric safety considerations. Kauffman RE. **Drug Saf** 1990;5 Suppl 1:65–70 (17 ref.)
36- and 48-month neurobehavioral follow-up of children prenatally exposed to marijuana, cigarettes, and alcohol. Fried PA, et al. **J Dev Behav Pediatr** 1990 Apr;11(2):49–58
The long-term effects of exposure to low doses of lead in childhood. An 11-year follow-up report. Needleman HL, et al. **N Engl J Med** 1990 Jan 11;322(2):83–8
Maternal marijuana use during lactation and infant development at one year. Astley SJ, et al. **Neurotoxicol Teratol** 1990 Mar–Apr;12(2):161–8
Prenatal narcotic exposure: perinatal and developmental effects. Kaltenbach KA, et al. **Neurotoxicology** 1989 Fall; 10(3):597–604 (31 ref.)
Psychological development of children who were treated antenatally with corticosteroids to prevent respiratory distress syndrome. Schmand B, et al. **Pediatrics** 1990 Jul; 86(1):58–64
Health and developmental outcomes of a surfactant controlled trial: follow-up at 2 years. Ware J, et al. **Pediatrics** 1990 Jun;85(6):1103–7
[Maternal haloperidol effects on pregnancy and development of the children] Kato T, et al. **Seishin Shinkeigaku Zasshi** 1990;92(5):277–93 **(Jpn)**

PHYSIOLOGY

Growth in children with partially treated coeliac disease

[letter] Paerregaard A, et al. **Acta Paediatr Scand** 1990 May; 79(5):563

Variation of growth in length and weight of children. I. Years 1 and 2. Sorva R, et al. **Acta Paediatr Scand** 1990 May; 79(5):490–7

Variation of growth in height and weight of children. II. After infancy. Sorva R, et al. **Acta Paediatr Scand** 1990 May;79(5):498–506

The infancy–childhood–puberty model of growth: clinical aspects. Tse WY, et al. **Acta Paediatr Scand Suppl** 1989; 356:38–43; discussion 44–5 (19 ref.)

Malabsorption of carbohydrate from rice and child growth: a longitudinal study with the breath–hydrogen test in Burmese village children. Khin–Maung–U, et al. **Am J Clin Nutr** 1990 Aug;52(2):348–52

The effects of socioeconomic status on hand size and strength, vestibular function, visuomotor integration, and praxis in preschool children. Bowman OJ, et al. **Am J Occup Ther** 1990 Jul;44(7):610–21

Body part identification in 1– to 2–year–old children. Witt A, et al. **Am J Occup Ther** 1990 Feb;44(2):147–53 (32 ref.)

Factors influencing the growth of Bahraini school–children [letter; comment] Bittles AH. **Ann Hum Biol** 1989 Nov–Dec;16(6):553–5 Comment on: Ann Hum Biol 1989 Mar–Apr;16(2):155–67.

The secular trend in height of primary school children in England and Scotland 1972–79 and 1979–86. Chinn S, et al. **Ann Hum Biol** 1989 Sep–Oct;16(5):387–95

The growth of Melanesian and Indian children in Fiji. Clegg EJ. **Ann Hum Biol** 1989 Nov–Dec;16(6):507–28

Using the LMS method to measure skewness in the NCHS and Dutch National height standards. Cole TJ. **Ann Hum Biol** 1989 Sep–Oct;16(5):407–19

Growth of remote Australian aborigines from birth to two years [published erratum appears in Ann Hum Biol 1990 Jan–Feb;17(1):69] Gracey M, et al. **Ann Hum Biol** 1989 Sep–Oct;16(5):421–8

Heights and weights of Swedish school children born in 1955 and 1967. Lindgren GW, et al. **Ann Hum Biol** 1989 Sep–Oct;16(5):397–406

Lack of linkage between height and weight and age at menarche during the secular shift in growth of Japanese children. Tsuzaki S, et al. **Ann Hum Biol** 1989 Sep–Oct; 16(5):429–36

Development of eating behavior and its relation to physical growth in normal weight preschool children. Nakao H, et al. **Appetite** 1990 Feb;14(1):45–57

The properties of spontaneous and evoked acoustic emissions in neonates and children: a preliminary report. Bonfils P, et al. **Arch Otorhinolaryngol** 1989;246(5):249–51

Predicting learning and other developmental disabilities: assessment of reproductive and caretaking variables. Molfese VJ, et al. **Birth Defects** 1989;25(6):1–23 (102 ref.)

The social context of malnutrition in childhood. Karp RJ. **Bull N Y Acad Med** 1989 Dec;65(10):1026–31; discussion 1085–8

The role of early nutrition in subsequent development and optimal future health. Winick M. **Bull N Y Acad Med** 1989 Dec;65(10):1020–5

Targeting infant stimulation efforts. Theoretical challenges for research and intervention. Horowitz FD. **Clin Perinatol** 1990 Mar;17(1):185–95 (32 ref.)

Effect of sex, psychosocial disadvantages and biological risk factors on EEG maturation. Harmony T, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jun; 75(6):482–91

Electrically and mechanically elicited blink reflexes in infants and children—maturation and recovery curves of blink reflex. Hatanaka T, et al. **Electroencephalogr Clin Neurophysiol** 1990 Jul;76(1):39–46

Cortical responses to speech sounds and their formants in normal infants: maturational sequence and spatiotemporal analysis. Novak GP, et al. **Electroencephalogr Clin Neurophysiol** 1989 Oct; 73(4):295–305

The LMS method for constructing normalized growth standards. Cole TJ. **Eur J Clin Nutr** 1990 Jan;44(1):45–60

A study on nutrition, growth and development of a high–risk group of children of urban leprosy patients. Saha K, et al. **Eur J Clin Nutr** 1990 Jun;44(6):471–9

Dietary intakes and activity levels of stunted and non–stunted children in Kingston, Jamaica. Part 1. Dietary intakes. Walker SP, et al. **Eur J Clin Nutr** 1990 Jul;44(7):527–34

Comparison of energy expenditure estimated in healthy infants using the doubly labelled water and energy balance methods. Wong WW, et al. **Eur J Clin Nutr** 1990 Mar; 44(3):175–84

Physical activity and coronary heart disease risk factors during childhood and adolescence. Després JP, et al. **Exerc Sport Sci Rev** 1990;18:243–61 (93 ref.)

Foot growth in children age one to five years. Gould N, et al. **Foot Ankle** 1990 Feb;10(4):211–3

The growth, development and education of Finnish twins: a longitudinal follow–up study in a birth cohort from pregnancy to nineteen years of age. Moilanen I, et al. **Growth Dev Aging** 1989 Winter;53(4):145–50

A longitudinal study of obesity in Japan: relationship of body habitus between at birth and at age 17. Muramatsu S, et al. **Int J Obes** 1990 Jan;14(1):39–45

Influence of body fat distribution during childhood on body fat distribution in adulthood: a two–decade follow–up study. Rolland–Cachera MF, et al. **Int J Obes** 1990; 14(6):473–81

ERP study of the development of the holistic and analytic modes of processing between 6 and 8 years. Robaey P, et al. **Int J Psychophysiol** 1989 Nov;8(2):145–53

Context effects in phoneme and word recognition by young children and older adults. Nittrouer S, et al. **J Acoust Soc Am** 1990 Jun;87(6):2705–15

Normal growth and development with unrestricted protein intake after severe infantile propionic acidaemia. Luder AS, et al. **J Inherited Metab Dis** 1989;12(3):307–11

Gross motor milestones in preterm infants: correction for degree of prematurity. Allen MC, et al. **J Pediatr** 1990 Jun;116(6):955–9

Developmental outcome of neonates treated with extracorporeal membrane oxygenation. Adolph V, et al. **J Pediatr Surg** 1990 Jan;25(1):43–6

Music, communication and medicine: discussion paper. Aldridge D. **J R Soc Med** 1989 Dec;82(12):743–6

Viewing the development of speech perception as an innately guided learning process. Jusczyk PW, et al. **Lang Speech** 1988 Jul–Sep;31 (Pt 3):217–38 (93 ref.)

Serum apolipoprotein E in children and adolescents: the Bogalusa Heart Study. Srinivasan SR, et al. **Metabolism** 1989 Dec;38(12):1173–8

Developmental pharmacology: ontogenic basis of drug disposition. Reed MD, et al. **Pediatr Clin North Am** 1989 Oct;36(5):1053–74 (62 ref.)

The changing face of child health. Smith R. **Practitioner** 1990 May 22;234(1489):537

Normal foot variations. Steele K. **Practitioner** 1990 May 22; 234(1489):553–5

A longitudinal study on infant growth during the first sixth months of life, in relation to the nutrition of the lactating mothers and to the breastmilk output. Chen XC, et al. **Prog Food Nutr Sci** 1989;13(2):113–37

Developmental evidence for modality–dependent P300 generators: a normative study. Johnson R Jr. **Psychophysiology** 1989 Nov;26(6):651–67

How old is old enough? The ages of rights and responsibilities. Committee on Child Psychiatry. Group for the Advancement of Psychiatry. **Rep Group Adv Psychiatry** 1989;(126):1–124

Growth and development of West Indian children. Part I: Growth. Walker SP, et al. **West Indian Med J** 1989 Dec; 38(4):197–204

[Reference values of the ferritin concentration in the serum in children] Liappis N, et al. **Klin Padiatr** 1990 Mar–Apr; 202(2):99–102 (Eng. Abstr.) **(Ger)**

[IgG subclass level in healthy children] Zielen S, et al. **Monatsschr Kinderheilkd** 1990 Jul;138(7):377–80 (Eng. Abstr.) **(Ger)**

[Cholesterol, triglycerides and lipoproteins in the serum of healthy, normal weight children between 6 and 12 years of age] Zwiauer K, et al. **Wien Klin Wochenschr** 1990 May 11;102(10):299–303 (Eng. Abstr.) **(Ger)**

[Development of the responses to the sensory stimuli in infants and children] Kaga M. **No To Shinkei** 1989 Sep; 41(9):863–76 (82 ref.) **(Jpn)**

[Physical development of children and adolescents of the Gdańsk– Sopot–Gdynia region aged 8–19 years] Drabik J. **Pediatr Pol** 1989 Jul;64(7):483–90 (Eng. Abstr.) **(Pol)**

[Value of echoencephalography in the diagnosis of periventricular leukomalacia in children and the prognosis of their development] Ozerova OE, et al. **Akush Ginekol (Mosk)** 1989 Sep;(9):59–62 (Eng. Abstr.) **(Rus)**

[Activation processes and emotions in the ontogeny of the child] Farber DA, et al. **Fiziol Cheloveka** 1989 May–Jun; 15(3):61–8 **(Rus)**

[Study of the effects of combined environmental and hereditary factors on the health status of 6–year–old children in Yerevan] Aslanian SA, et al. **Gig Sanit** 1989 Sep;(9):10–3 **(Rus)**

[Significance of the achieved level of child's somatic development for his functional abilities] Kocharova SG. **Gig Sanit** 1990 May;(5):65–8 **(Rus)**

[Evaluation of the efficacy of work during the summer in improving the health of preschool children] Lashneva IP. **Gig Sanit** 1990 Feb;(2):39–42 **(Rus)**

[Health status of children born to young mothers] Leonov IT, et al. **Pediatriia** 1990;(3):65–7 **(Rus)**

[Effect of the living conditions and life style of the family on children's health] Molchanova LF. **Pediatriia** 1990; (3):72–7 **(Rus)**

[Neurologic and mental development as an indicator of the health status of young children] Pechora KL, et al. **Pediatriia** 1990;(1):99–100 **(Rus)**

[Development of children born to mothers treated by normobaric hypoxia] Verbonol' VIu, et al. **Pediatriia** 1990; (5):55–9 **(Rus)**

CHILD DEVELOPMENT DEVIATIONS see **CHILD DEVELOPMENT DISORDERS**

CHILD DEVELOPMENT DISORDERS

Pediatric AIDS, developmental disabilities, and education: a review. Klindworth LM, et al. **AIDS Educ Prev** 1989 Winter;1(4):291–302 (42 ref.)

Theory and research in practice: an opportunity group for young children with developmental difficulties. Campion J, et al. **Child Care Health Dev** 1989 Sep–Oct;15(5):343–61

Developmental disorders in childhood. Accardo P, et al. **Compr Ther** 1989 Dec;15(12):3–10

Annual meeting of the American Academy for Cerebral Palsy and Developmental Medicine, 1989. Abstracts. **Dev Med Child Neurol Suppl** 1989 Oct;59:1–52

Annual meeting of the American Academy for Cerebral Palsy and Developmental Medicine, 1990. Abstracts. **Dev Med Child Neurol Suppl** 1990 Sep;62:1–49

Serving infants and children with special health care needs in the 1990s—are we ready? Lucas BL. **J Am Diet Assoc** 1989 Nov;89(11):1599–601

A predoctoral program in dental care for the developmentally disabled. Ferguson FS, et al. **J Dent Educ** 1990 Sep;54(9):576–8

The family physician's role with parents of young children with developmental disabilities. Parette HP Jr, et al. **J Fam Pract** 1990 Sep;31(3):288–96

Developmental disabilities and HIV infection: a symposium on issues and public policy. Proceedings of a symposium. Bethesda, Maryland, November 9–10, 1988. **Ment Retard** 1989 Aug;27(4):197–262

BLOOD

[Nocturnal growth hormone secretion in children with constitutional and acquired developmental delay] Butenandt O. **Monatsschr Kinderheilkd** 1990 Apr; 138(4):198–201 (Eng. Abstr.) **(Ger)**

CHEMICALLY INDUCED

Prenatal/early postnatal exposure to lead and risk of developmental impairment. Bellinger D. **Birth Defects** 1989;25(6):73–97

Toxicity of lead at low dose. Bell A. **Br J Ind Med** 1990 Apr;47(4):288

Low–level exposures to lead: the Sydney lead study. Cooney GH, et al. **Dev Med Child Neurol** 1989 Oct;31(5):640–9

CLASSIFICATION

[Neurologic and mental development as an indicator of the health status of young children] Pechora KL, et al. **Pediatriia** 1990;(1):99–100 **(Rus)**

COMPLICATIONS

Developmental Foix–Chavany–Marie syndrome: polymicrogyria or macrogyria? [letter; comment] Becker PS. **Ann Neurol** 1990 Jun;27(6):693–4 Comment on: Ann Neurol 1989 Jun;25(6):547–54.

Symptomatology in children with focal sharp waves of genetic origin. Doose H. **Eur J Pediatr** 1989 Dec; 149(3):210–5

Opening comments on the Conference on Developmental Disabilities and HIV infection. Gray CD. **Ment Retard** 1989 Aug;27(4):199–200

Political reflections on AIDS and developmental disabilities: conference keynote address. Westmoreland TM. **Ment Retard** 1989 Aug;27(4):203–6

[Developmental disorders in young children with Duchenne's muscular dystrophy: implications for diagnosis and treatment] van der Burg JJ, et al. **Tijdschr Kindergeneeskd** 1989 Dec;57(6):221–5 (Eng. Abstr.) **(Dut)**

DIAGNOSIS

Calculation of sensitivity and specificity [letter] Piper MC, et al. **Am J Dis Child** 1990 Sep;144(9):958–9

The Miller Assessment for Preschoolers: clinical use with children with developmental delays. Daniels LE, et al. **Am J Occup Ther** 1990 Jan;44(1):48–53

Integrating motor control and motor learning concepts with neuropsychological perspectives on apraxia and developmental dyspraxia. Goodgold–Edwards SA, et al. **Am J Occup Ther** 1990 May;44(5):431–9 (51 ref.)

The relationship between form and space perception, constructional abilities, and clumsiness in children. Murray EA, et al. **Am J Occup Ther** 1990 Jul;44(7):623–8

Touch Inventory for Elementary–School–Aged Children. Royeen CB, et al. **Am J Occup Ther** 1990 Feb;44(2):155–9

The Peabody Developmental Fine Motor Scale: an interrater reliability study. Stokes NA, et al. **Am J Occup Ther** 1990 Apr;44(4):334–40

Is late walking a marker of morbidity? Steering Committee, Oxford Region Child Development Project. Johnson A, et al. **Arch Dis Child** 1990 May;65(5):486–8

Research in infant assessment. Proceedings of a symposium held by the Association for Children and Adults with Learning Disabilities (ACLD), Inc. February 15, 1989, Miami Beach, Florida. **Birth Defects** 1989;25(6): 1–169

Predicting learning and other developmental disabilities: assessment of reproductive and caretaking variables. Molfese VJ, et al. **Birth Defects** 1989;25(6):1–23 (102 ref.)

Communicating an evolutionary diagnosis of disability to parents. Cottrell DJ, et al. **Child Care Health Dev** 1990 Jul–Aug;16(4):211–8

Developmental evaluation and therapy program. Functional approach to developmental delays in infant behavior. Weiss AE, et al. **Clin Pediatr (Phila)** 1970 Oct;9(10):570–2

Neurodevelopmental outcome, growth and health of extremely low–birthweight survivors: how soon can we tell? Astbury J, et al. **Dev Med Child Neurol** 1990 Jul; 32(7):582–9

The Denver Developmental Screening Test: how good is its predictive validity? Greer S, et al. **Dev Med Child Neurol** 1989 Dec;31(6):774–81

Myelination patterns on magnetic resonance of children with developmental delay. Harbord MG, et al. **Dev Med Child Neurol** 1990 Apr;32(4):295–303

The effect of early referral and intervention on the developmentally disabled infant: evaluation at 18 months of age. Sharkey MA, et al. **J Am Board Fam Pract** 1990 Jul–Sep;3(3):163–70

Turntaking and pragmatic language skills of developmentally delayed children: a research note. Kysela GM, et al. **J Commun Disord** 1990 Apr;23(2):135–49

Neurodevelopmental follow-up of infants with birthweight less than 801 grams with intracranial hemorrhage. Kilbride HW, et al. **J Perinatol** 1989 Dec;9(4):376–81

Pediatrician and school readiness. Dworkin PH. **Pediatr Rev** 1989 Sep;11(3):67–8

Denver Developmental Test problems [letter] Hersher L. **Pediatrics** 1990 Jul;86(1):148–9

Normal and abnormal white matter maturation. Dietrich RB, et al. **Semin Ultrasound CT MR** 1988 Jun;9(3):192–200 (21 ref.)

Growth and development of West Indian children. Part 2: Development. Walker SP, et al. **West Indian Med J** 1990 Mar;39(1):12–9 (31 ref.)

[Detection of signs of early dysontogenesis in children] Dikiĭ NT. **Vrach Delo** 1989 Aug;(8):100–1 (Eng. Abstr.) **(Rus)**

[The prone position as an indicator of deviated motor development during the first year of life] Benavides-González HM, et al. **Bol Med Hosp Infant Mex** 1989 Sep;46(9):591–6 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Infants weighing 1,000 g or less at birth. Outcome at 8–11 years of age. Vekerdy-Lakatos Z, et al. **Acta Paediatr Scand Suppl** 1989;360:62–71

Wisconsin's Birth and Development Outcome Monitoring Program. Aronson R, et al. **Wis Med J** 1990 Mar; 89(3):115–8

[Comparison of the results of clinico-epidemiological examination of retarded children-orphans and retarded children brought up in the family] Kryzhanovskaia IL. **Zh Nevropatol Psikhiatr** 1990;90(3):75–8 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Perinatal growth retardation in preterm infants. Greisen G, et al. **Acta Paediatr Scand Suppl** 1989;360:43–7

Intellectual impairment with regional cerebral dysfunction after low neonatal cerebral blood flow. Lou HC, et al. **Acta Paediatr Scand Suppl** 1989;360:72–82

Significance of the open opercular sign [letter; comment] Amit R, et al. **Ann Neurol** 1990 Feb;27(2):214 Comment on: Ann Neurol 1989 Feb;25(2):196–9.

Early diet in preterm babies and developmental status in infancy [letter] Williams LH, et al. **Arch Dis Child** 1990 Aug;65(8):914

Prenatal exposure to teratogenic agents and neurodevelopmental outcome. Adams J. **Birth Defects** 1989;25(6):63–72 (35 ref.)

Clinical features of the early stage of the Rett syndrome. Nomura Y, et al. **Brain Dev** 1990;12(1):16–9

Early development of boys with Duchenne muscular dystrophy. Smith RA, et al. **Dev Med Child Neurol** 1990 Jun;32(6):519–27

Developmental delay in congenital myotonic dystrophy after neonatal intensive care. Nicholson A, et al. **Early Hum Dev** 1990 May;22(2):99–103

The frequency of disturbances of somatic development in young people with type I diabetes in dependence on duration and age at onset of the disease. Gens E, et al. **Exp Clin Endocrinol** 1990 Feb;95(1):97–104

Reversal of microcephaly and developmental delay after cure of hyperinsulinemic hypoglycemia. Gottschalk ME, et al. **J Pediatr** 1990 Sep;117(3):432–4

Late effects of early malnutrition [letter] Carmona da Mota H, et al. **Lancet** 1990 May 12;335(8698):1158

Developmental services for children with HIV infection. Crocker AC. **Ment Retard** 1989 Aug;27(4):223–5

Developmental problems in children with HIV infection. Diamond GW. **Ment Retard** 1989 Aug;27(4):213–7 (21 ref.)

Emerging patterns of services and case finding for children with HIV infection. Hopkins KM. **Ment Retard** 1989 Aug; 27(4):219–22

Maternal phenylketonuria. Pullon DH, et al. **N Z Med J** 1990 Aug 22;103(896):397–8

[Near infrared spectrophotometry—a non-invasive, continuous method for monitoring of cerebral status in newborn infants] Skov L, et al. **Ugeskr Laeger** 1990 Jun 4;152(23):1646–50 (30 ref.) (Eng. Abstr.) **(Dan)**

[The divorce of parents, an ordeal for children to overcome, cause or factor of possible psychopathologic decompensation] Beverina M. **Ann Med Psychol (Paris)** 1989 Mar-Apr;147(2):210–4 (0 ref.) **(Fre)**

[Neurotic disorders in childhood and parental influences] Vacola G. **Ann Med Psychol (Paris)** 1989 Mar-Apr; 147(2):226–32 (10 ref.) **(Fre)**

[Psychomotor and intellectual development in 52 children with congenital hypothyroidism screened at birth. Factors likely to have an effect on prognosis] Toublanc JE, et al. **Arch Fr Pediatr** 1990 Mar;47(3):191–5 (Eng. Abstr.) **(Fre)**

[Children of depressed parents] Guedeney N. **Psychiatr Enfant** 1989;32(1):269–309 (82 ref.) (Eng. Abstr.) **(Fre)**

[The position of the German Society for Gynecology and Obstetrics on the need for pediatric follow-up after intervention during vaginal delivery] Berg D. **Z Geburtshilfe Perinatol** 1989 Sep-Oct;193(5):238–40 **(Ger)**

[Malabsorption and developmental retardation due to secondary trypsin deficiency] Galil A, et al. **Harefuah** 1990 Jan 1;118(1):10–2 (Eng. Abstr.) **(Heb)**

[Association between iron deficiency and development] Palti H. **Harefuah** 1990 May 1;118(9):535–8 (28 ref.) **(Heb)**

[Study of the effects of combined environmental and hereditary factors on the health status of 6-year-old children in Yerevan] Aslanian SA, et al. **Gig Sanit** 1989 Sep;(9):10–3 **(Rus)**

GENETICS

Developmental outcome in 49,XXXXY Klinefelter syndrome. Sheridan MK, et al. **Dev Med Child Neurol** 1990 Jun;32(6):532–9

Genetics and child psychiatry. Leckman JF, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Mar;29(2):174–6

Partial monosomy 3q in a boy with short stature, developmental delay, and mild dysmorphic features. Brueton LA, et al. **J Med Genet** 1989 Nov;26(11):729–30 (5 ref.)

NURSING

A descriptive study of infants and toddlers exposed prenatally to substance abuse. Free T, et al. **MCN** 1990 Jul-Aug; 15(4):245–9

PATHOLOGY

MR imaging of brain maturation in normal and developmentally handicapped children. Martin E, et al. **J Comput Assist Tomogr** 1990 Sep-Oct;14(5):685–92

PHYSIOPATHOLOGY

Normal foot variations. Steele K. **Practitioner** 1990 May 22; 234(1489):553–5

PREVENTION & CONTROL

Development of the Miller Screening for Preschoolers. Miller LJ. **Am J Occup Ther** 1989 Sep;43(9):596–601

Prevention of intellectual and other disabilities: the Singapore experience. Lyen KR. **Asia Pac J Public Health** 1989; 3(4):278–84

Health surveillance of preschool children: four years' experience. Colver AF. **BMJ** 1990 May 12; 300(6734):1246–8

How good is general practice developmental screening? Dearlove J, et al. **BMJ** 1990 May 5;300(6733):1177–80

Screening and surveillance of school aged children. Tuke JW. **BMJ** 1990 May 5;300(6733):1180–2

Periodic health examination, 1989 update: 3. Preschool examination for developmental, visual and hearing problems. Canadian Task Force on the Periodic Health Examination. **Can Med Assoc J** 1989 Dec 1;141(11):1136–40 (25 ref.)

The role of the community mental health center in prevention of infant, child and adolescent disorders: retrospect and prospect. Berlin IN. **Community Ment Health J** 1990 Feb; 26(1):89–106 (34 ref.)

Early identification of developmentally disabled and at-risk preschool children. Kochanek TT, et al. **Except Child** 1990 Apr;56(6):528–38

Discharge planning for the child with infantile spasms. Kongelbeck SR. **J Neurosci Nurs** 1990 Aug;22(4):238–44

The Pediatric Early Elementary Examination: sensitivity and specificity. Kenny T, et al. **J Pediatr Psychol** 1990 Feb; 15(1):21–6

Developmental screening for pre-school children: is it worthwhile? Bain J. **J R Coll Gen Pract** 1989 Apr; 39(321):133–5

British and American recommendations for developmental monitoring: the role of surveillance [see comments] Dworkin PH. **Pediatrics** 1989 Dec;84(6):1000–10 Comment in: Pediatrics 1990 Jun;85(6):1127–9.

Early intervention for vulnerable infants and their families: an emerging agenda. Kruskal MO, et al. **Semin Perinatol** 1989 Dec;13(6):506–12 (41 ref.)

Research on the sequelae of prematurity: early learning, early interventions and later outcomes. Scott DT, et al. **Semin Perinatol** 1989 Dec;13(6):495–505 (76 ref.)

Clinical approaches to families in early intervention. Zeanah CH, et al. **Semin Perinatol** 1989 Dec;13(6):513–22 (68 ref.)

[Preventive examinations in childhood. Examinations by specialists?] Palitzsch D. **Fortschr Med** 1990 Jan 30; 108(3):35–6 **(Ger)**

[The nature and characteristics of preventive services in a pediatric clinic for children from families with social risk factors] Kamsiuk LG, et al. **Pediatriia** 1990;(5):103–6 **(Rus)**

PSYCHOLOGY

Psychological predictors of adjustment by siblings of developmentally disabled children. Dyson L, et al. **Am J Ment Retard** 1989 Nov;94(3):292–302

The social construction of ecocultural niches: family accommodation of developmentally delayed children. Gallimore R, et al. **Am J Ment Retard** 1989 Nov; 94(3):216–30

The perception of phoneme sequence: a comparison of dyspraxic and normal children. Bridgeman E, et al. **Br J Disord Commun** 1988 Dec;23(3):245–52

Infantile colic and transient developmental lag in the first year of life. Sloman J, et al. **Child Psychiatry Hum Dev** 1990 Fall;21(1):25–36

Asthma and adaptation: exploring the family system. Caroselli-Karinja MF. **J Psychosoc Nurs Ment Health Serv** 1990 Apr;28(4):34–9

Treatment of destructive behaviors in persons with developmental disabilities. **Natl Inst Health Consensus Dev Conf Consensus Statement** 1989 Sep 11–13;7(9):1–14 (34 ref.)

Chronic illness and early development: parent-child relationships. Goldberg S. **Pediatr Ann** 1990 Jan; 19(1):35–41 (21 ref.)

Developmental and family effects of autism. Levitas A. **Pediatr Ann** 1990 Jan;19(1):52–8 (14 ref.)

Comparing scores on the Stanford-Binet, Fourth Edition with the WISC-R for exceptional children. Hollinger CL, et al. **Psychol Rep** 1990 Jun;66(3 Pt 1):979–84

REHABILITATION

A sensorimotor program for improving writing readiness skills in elementary-age children. Oliver CE. **Am J Occup Ther** 1990 Feb;44(2):111–6 (30 ref.)

Children with special needs. An original approach. Julien G. **Arctic Med Res** 1988;47 Suppl 1:516–8

Children with developmental disabilities in the child welfare system: a national survey. Richardson M, et al. **Child Welfare** 1989 Nov-Dec;68(6):605–13

A community-based rehabilitation programme for pre-school disabled children in Guyana. O'Toole B. **Int J Rehabil Res** 1988;11(4):323–34

Intervention services for developmentally delayed infants and toddlers in Arkansas. Ashcraft EW, et al. **J Arkansas Med Soc** 1989 Oct;86(5):191–3

Affecting the planning and implementation of developmental services for children and adults with HIV infection. Crocker AC, et al. **Ment Retard** 1989 Aug;27(4):255–62

Concerns in child welfare, developmental disabilities, and HIV infection. Spitzborg R. **Ment Retard** 1989 Aug; 27(4):239–40

[Early treatment. An overview] Aimard P. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(4):355–7 (Eng. Abstr.) **(Fre)**

[New program of the German Academy of Developmental Rehabilitation] Moll H. **Monatsschr Kinderheilkd** 1990 May;138(5):294 **(Ger)**

[Some remarks on early education and therapy from the systemic viewpoint] Kilian H. **Prax Kinderpsychol Kinderpsychiatr** 1989 Oct;38(8):277–82 (Eng. Abstr.) **(Ger)**

THERAPY

The effect of mouth closure on drooling and speech. Iammatteo PA, et al. **Am J Occup Ther** 1990 Aug; 44(8):686–91

Comparison of constant time delay and the system of least prompts in teaching preschoolers with developmental delays. Doyle PM, et al. **Res Dev Disabil** 1990;11(1):1–22

CHILD DEVELOPMENT DISORDERS, PERVASIVE

CHEMICALLY INDUCED

[Epilepsy-acquired aphasia syndrome with psychosis. Report of a case] Zivi A, et al. **Ann Pediatr (Paris)** 1990 Jun; 37(6):391–4 (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Pervasive developmental disorders and psychoses in adult life. Clarke DJ, et al. **Br J Psychiatry** 1989 Nov;155:692–9

DIAGNOSIS

Autism, Asperger's syndrome and semantic-pragmatic disorder: where are the boundaries? Bishop DV. **Br J Disord Commun** 1989 Aug;24(2):107–21 (33 ref.)

DSM-III and DSM-III-R diagnosis of autism and pervasive developmental disorder in nursery school children. Hertzig ME, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jan; 29(1):123–6

Autism and pervasive developmental disorders. Gillberg C. **J Child Psychol Psychiatry** 1990 Jan;31(1):99–119 (141 ref.)

Disintegrative disorder or "late onset" autism. Volkmar FR, et al. **J Child Psychol Psychiatry** 1989 Sep;30(5):717–24

A five-year follow-up of preschool children diagnosed as having an atypical pervasive developmental disorder. Demb HB, et al. **J Dev Behav Pediatr** 1989 Dec;10(6):292–8

EPIDEMIOLOGY

[Prevalence and socio-demographic factors] Chevallier P. **Psychiatr Enfant** 1989;32(2):543-91 (70 ref.) (Eng. Abstr.) **(Fre)**

ETIOLOGY

[The psychotic component of so-called normal parents] Nakov A, et al. **Psychiatr Enfant** 1989;32(2):495-518 (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

Asperger's syndrome and autism: comparison of early history and outcome. Szatmari P, et al. **Dev Med Child Neurol** 1989 Dec;31(6):709-20

PSYCHOLOGY

Maternal characteristics and perceptions of pervasive and situational hyperactives and normal controls. Beck SJ, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jul; 29(4):558-65

Asperger's syndrome and autism: neurocognitive aspects. Szatmari P, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jan;29(1):130-6

[The child as a substitute] Sabbadini A. **Psychiatr Enfant** 1989;32(2):519-41 (Eng. Abstr.) **(Fre)**

REHABILITATION

Effects of redesigning the physical environment on self-stimulation and on-task behavior in three autistic-type developmentally disabled individuals. Duker PC, et al. **J Autism Dev Disord** 1989 Sep;19(3):449-60

CHILD DEVELOPMENT DISORDERS, SPECIFIC see **CHILD DEVELOPMENT DISORDERS**

CHILD, EXCEPTIONAL

Early nutrition intervention services for children with special health care needs. Hine RJ, et al. **J Am Diet Assoc** 1989 Nov;89(11):1636-9

Are dietitians prepared to work with handicapped infants? PL 99-457 offers new opportunities. Kaufman M. **J Am Diet Assoc** 1989 Nov;89(11):1602-5

Serving infants and children with special health care needs in the 1990s--are we ready? Lucas BL. **J Am Diet Assoc** 1989 Nov;89(11):1599-601

EDUCATION

The prime factor in education. Greer JV. **Except Child** 1989 Nov;56(3):191-3

CHILD, GIFTED

Pre-school assessment of gifted children. Roden A. **Public Health** 1989 Nov;103(6):441-6

PSYCHOLOGY

Art and accuracy: the drawing ability of idiot-savants. Hermelin B, et al. **J Child Psychol Psychiatry** 1990 Jan; 31(2):217-28

The recognition failure and graphic success of idiot-savant artists. O'Connor N, et al. **J Child Psychol Psychiatry** 1990 Jan;31(2):203-15

Three wishes of gifted and nongifted adolescents. Chiu JP, et al. **J Genet Psychol** 1990 Jun;151(2):133-8

Personality assessment with children of superior intelligence: divergence versus psychopathology. Gallucci NT. **J Pers Assess** 1989 Winter;53(4):749-60

Enhanced right hemisphere involvement during cognitive processing may relate to intellectual precocity. O'Boyle MW, et al. **Neuropsychologia** 1990;28(2):211-6

Music of the self and others. Longitudinal observations on musical giftedness. Pruett KD. **Psychoanal Study Child** 1989;44:87-100

Test-retest stability of WISC-R IQs among young gifted students. Ellzey JT, et al. **Psychol Rep** 1990 Jun;66(3 Pt 1):1023-6

Relationship between perceived parental behaviors and the self-esteem of gifted children. Enright KM, et al. **Psychol Rep** 1989 Dec;65(3 Pt 1):931-7

Learning style, repeated stimuli, and originality in intellectually gifted adolescents. Masten WG. **Psychol Rep** 1989 Dec;65(3 Pt 1):751-4

Self-consciousness, self-esteem and depression of gifted school children. Pearson M, et al. **Psychol Rep** 1990 Jun; 66(3 Pt 1):960-2

CHILD GUIDANCE

[Possibilities of the rehabilitation of children and adolescents with behavior disorders] Knölker U. **Off Gesundheitswes** 1989 Aug-Sep;51(8-9):477-82 (Eng. Abstr.) **(Ger)**

METHODS

[Are child guidance centers oriented to the middle class? Consequences for psychosocial planning] Ehrhardt KJ. **Prax Kinderpsychol Kinderpsychiatr** 1989 Nov;38(9):329-35 (Eng. Abstr.) **(Ger)**

CHILD GUIDANCE CLINICS see under **COMMUNITY MENTAL HEALTH CENTERS**

CHILD HEALTH SERVICES

Proceedings of the International Symposium on Child Health Care in the East and West. April 4, 1988, Taipei, Taiwan. **Acta Paediatr Sin** 1988 Dec;29 Suppl B:1B-71B

Child health in Taiwan. Chen CL. **Acta Paediatr Sin** 1988 Dec;29 Suppl B:23B-25B

The pediatrician and primary health care. Hallman N. **Acta Paediatr Sin** 1988 Dec;29 Suppl B:19B-22B

Attitudes regarding parental presence during medical procedures. Merritt KA, et al. **Am J Dis Child** 1990 Mar; 144(3):270-1

Changes in attitudes and beliefs regarding parent participation and home programs: an update. Bazyk S. **Am J Occup Ther** 1989 Nov;43(11):723-8

Response to the presidential address: Our children: our future. Benedek EP. **Am J Psychiatry** 1990 Sep; 147(9):1120-5

Health for all children [letter] **Arch Dis Child** 1990 Jul; 65(7):812-3

Screening infants for hearing loss. Brown J, et al. **Arch Dis Child** 1989 Oct;64(10):1488-95

Research in community child health [see comments] Polnay L. **Arch Dis Child** 1989 Jul;64(7):981-3 Comment in: Arch Dis Child 1990 Jan;65(1):158.

Terminology in community child health--an urgent need for consensus. Stone DH. **Arch Dis Child** 1990 Aug;65(8):817-8

An outline of preventive psychiatric programs for children. Bolman WM. **Arch Gen Psychiatry** 1967 Jul;17(1):5-8

The use of dental sealants in the Washington State Medical Assistance Program: a second-year report. Faine RC, et al. **ASDC J Dent Child** 1989 Nov-Dec;56(6):450-1

The impact of the Integrated Child Development Services Scheme in north India. Chaturvedi S, et al. **Asia Pac J Public Health** 1989;3(4):291-6

Teaching health professionals to teach. Grant JP. **Asia Pac J Public Health** 1989;3(2):98-104

The effect of maternal and child health and family planning services on mortality: is prevention enough? Fauveau V, et al. **BMJ** 1990 Jul 14;301(6743):103-7

"Health for All Children" and the new contract [editorial; comment] [see comments] Hall DM. **BMJ** 1989 Dec 2; 299(6712):1352-3 Comment on: BMJ 1989 Dec 2;299(6712):1351-2. Comment in: BMJ 1990 Feb 24;300(6723):536.

Preventing iron deficiency in preschool children by implementing an educational and screening programme in an inner city practice. James J, et al. **BMJ** 1989 Sep 30; 299(6703):838-40

Child health surveillance [see comments] Polnay L. **BMJ** 1989 Dec 2;299(6712):1351-2 Comment in: BMJ 1989 Dec 2;299(6712):1352-3. Comment in: BMJ 1990 Jan 13;300(6717):119-20.

General practitioners and child health preventive services [letter] Stein H, et al. **BMJ** 1989 Oct 21;299(6706):1033

Policy document: the dental needs of children. **Br Dent J** 1990 Jan 20;168(2):79-81

Some parental views on the Community Dental Service [see comments] Whittle JG, et al. **Br Dent J** 1990 Jan 20; 168(2):64-6 Comment in: Br Dent J 1990 Feb 24;168(4):138.

Child health: one hundred years of progress and today's challenges. 1988 Annual Health Conference, the New York Academy of Medicine. **Bull N Y Acad Med** 1989 Mar; 65(3):255-418

The preschool medical: an evaluation of this examination and its role in child health surveillance. Jones C, et al. **Child Care Health Dev** 1989 Nov-Dec;15(6):425-34

Serving refugee children and families in Head Start. Broughton C. **Child Today** 1989 Sep-Oct;18(5):6-10

The New Jersey experience [editorial] Brown AS, et al. **Cleft Palate J** 1990 Jan;27(1):1-2

The Colorado WIC program. Sage A. **Colo Med** 1990 Mar; 87(3):88-9

Hearing screening in health examination services for young children at health centers in Japan. Yokoyama T, et al. **Eur Arch Otorhinolaryngol** 1990;247(5):305-11

A grand alliance takes shape behind 'Facts for Life'. Allan D. **Hygie** 1989 Dec;8(4):10-2

Passage to child survival [editorial] Gunatilake S. **Hygie** 1989 Dec;8(4):3-4 **(Eng, Fre)**

Knowledge and attitude among child development project officers towards breast feeding. Kapil U, et al. **Indian J Pediatr** 1989 Nov-Dec;56(6):771-4

1990s--a decade for doing the obvious for children [editorial] Verma IC. **Indian J Pediatr** 1990 Jan-Feb;57(1):1-3

Appropriate technologies for mother and child health care in developing countries. Vani SN. **Indian Pediatr** 1989 Nov; 26(11):1124-30

Health needs of Iowa's children. **Iowa Med** 1990 May; 80(5):271-2

Health visitors as educators. Foster MC, et al. **J Adv Nurs** 1990 Mar;15(3):286-92

Promoting parent-provider interaction during young children's health-supervision visits. Finney JW, et al. **J Appl Behav Anal** 1990 Summer;23(2):207-13

The child in the EMS system [published erratum appears in J Fla Med Assoc 1989 Dec;76(12):1015] Luten RC. **J Fla Med Assoc** 1989 Sep;76(9):783-6

Evaluation of a primary health care programme in The Gambia. II. Its impact on mortality and morbidity in young children. Greenwood BM, et al. **J Trop Med Hyg** 1990 Apr;93(2):87-97

Pediatric AIDS care in Maryland. Johnson JP. **Md Med J** 1990 Feb;39(2):167-72

Emerging patterns of services and case finding for children with HIV infection. Hopkins KM. **Ment Retard** 1989 Aug; 27(4):219-22

The Secretary's Work Group on Pediatric HIV Infection and Disease. Novello AC. **Ment Retard** 1989 Aug; 27(4):201-2

Robert J. Mann, MD. A healer of Third World children. Lamberts MA. **Mich Med** 1990 Mar;89(3):26-7

The crisis in New York City's perinatal services. Chavkin W, et al. **N Y State J Med** 1989 Dec;89(12):658-63 (34 ref.)

Developing prehospital advanced life support for children: the New York City experience. Foltin G, et al. **Pediatr Emerg Care** 1990 Jun;6(2):141-4

Pediatric problems in a suburban shelter for homeless families [published erratum appears in Pediatrics 1990 Mar;85(3):369] Bass JL, et al. **Pediatrics** 1990 Jan;85(1):33-8

Structured encounter form: the impact on provider performance and recording of well-child care. Duggan AK, et al. **Pediatrics** 1990 Jan;85(1):104-13

Can home visitation improve the health of women and children at environmental risk? Olds DL, et al. **Pediatrics** 1990 Jul;86(1):108-16 (40 ref.)

Physician involvement strategies to promote the medical home. Sia CC, et al. **Pediatrics** 1990 Jan;85(1):128-30

Using 1990 national MCH objectives to assess health status and risk in an American Indian community. Campbell BC, et al. **Public Health Rep** 1989 Nov-Dec;104(6):627-31

An assessment of a rural health programme on child and maternal care: the Ogbomoso Community Health Care Programme (CHCP), Oyo State, Nigeria. Iyun F. **Soc Sci Med** 1989;29(8):933-8

Relationship of the morbidity of under-fives to anthropometric measurements and community health intervention. Schelp FP, et al. **Trop Med Parasitol** 1990 Jun;41(2):121-6

Health care needs and services for technology-dependent children in developmental centers. Crain LS, et al. **West J Med** 1990 Apr;152(4):434-8

[The role of the pediatric health and vaccination card in the system of uniform preventive screening in children] Hanousek L. **Cesk Pediatr** 1989 Aug;44(8):488-9 **(Cze)**

[Rheumatic fever in a developing country in North Africa] Kopecká B, et al. **Cesk Pediatr** 1989 Sep;44(9):533-5 (Eng. Abstr.) **(Cze)**

[What do we owe the families of diabetic children?] Lebl J, et al. **Cesk Pediatr** 1989 Dec;44(12):729-33 (Eng. Abstr.) **(Cze)**

[Utilization of medical services for children in an area of Copenhagen] Fischerman M, et al. **Ugeskr Laeger** 1989 Nov 20;151(47):3151-5 (Eng. Abstr.) **(Dan)**

[The effect of visits by community nurses on families with small children--a survey of two population groups with normal and reduced number of visits] Guldager E. **Ugeskr Laeger** 1990 Jul 2;152(27):1972-7 (Eng. Abstr.) **(Dan)**

[Telephone consultations with the pediatrician on-call] Wolthers OD. **Ugeskr Laeger** 1990 Apr 9;152(15):1089-90 (Eng. Abstr.) **(Dan)**

[Child health in a developing population with changing patterns of belief (Gaza 1973-1983)] Lasch EE. **Harefuah** 1990 May 1;118(9):522-5 (Eng. Abstr.) **(Heb)**

[Pediatric health services] Wefring KW. **Tidsskr Nor Laegeforen** 1989 Nov 30;109(33):3459 **(Nor)**

[Mother-child contact as basis of the organization of inpatient services to the newborn infants (letter)] Levin AN. **Pediatriia** 1990;(6):101-3 **(Rus)**

[Present-day health education of mothers at a children's polyclinic] Shadzhene OIu. **Pediatriia** 1990;(4):88-90 **(Rus)**

[Organization of deafness services to children in Moscow] Savinova TV, et al. **Vestn Otorinolaringol** 1989 Jul-Aug; (4):73-6 (Eng. Abstr.) **(Rus)**

[Consultation topics in pediatric ambulatory consultation (published erratum appears in An Esp Pediatr 1990 Apr;32(4):374)] **An Esp Pediatr** 1990 Mar;32(3):241-5 **(Spa)**

[A multicenter study of ambulatory pediatric service] Prandi F. **An Esp Pediatr** 1990 Mar;32(3):191-2 **(Spa)**

ECONOMICS

Child health insurance system in South Korea. Lee DB. **Acta Paediatr Sin** 1988 Dec;29 Suppl B:66B-71B

Child health insurance system in the U.S. Parris TG Jr. **Acta Paediatr Sin** 1988 Dec;29 Suppl B:56B-65B

Health maintenance organizations vs indemnity insurance for children with chronic illness. Trading gaps in coverage. Horwitz SM, et al. **Am J Dis Child** 1990 May;144(5):581-6

The Capitation Study. 2. Does capitation encourage more prevention? Lennon MA, et al. **Br Dent J** 1990 Mar 10; 168(5):213-5

Sources of support: the financial and political base for children's health care. Schlesinger M. **Bull N Y Acad Med** 1989 Mar;65(3):400-7

Well-child care: how much is enough? [see comments] Wagner JL, et al. **Health Aff (Millwood)** 1989 Fall; 8(3):147-57 Comment in: Health Aff (Millwood) 1990

Spring;9(1):200–3.
From the Health Care Financing Administration. Hays LB. **JAMA** 1990 Jan 26;263(4):496
The child with multiple congenital anomalies. Davenport SL. **Pediatr Ann** 1990 Jan;19(1):23–33
Financing the health care of children with chronic illnesses. Newacheck PW. **Pediatr Ann** 1990 Jan;19(1):60–3 (14 ref.)
Mothers' satisfaction with the cost of children's care: the role of practice settings and actual expenses. Dutton D, et al. **Soc Sci Med** 1990;30(12):1297–311
Assisting national governments to improve infant health: the case of Zimbabwe. Sanders D. **Trans R Soc Trop Med Hyg** 1989 Jan–Feb;83(1):32
[Medical expenses of children with catastrophic illness in the Republic of China] Lu HK. **Acta Paediatr Sin** 1988 Oct; 29 Suppl A:19A–24A **(Chi)**
[The fees and charges in the pediatric clinics in the Republic of China] Yu BS. **Acta Paediatr Sin** 1988 Oct;29 Suppl A:13A–18A **(Chi)**
[Economic substantiation of intensifying the activities of pediatric surgical departments] Bushmelev VA, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):11–4 (Eng. Abstr.) **(Rus)**
[Maternal and child care in the new economic system] Baranov AA. **Pediatriia** 1990;(1):5–8 **(Rus)**
[Training of medical students in economics] Ermakov VV, et al. **Sov Zdravookhr** 1989;(10):61–2 **(Rus)**

HISTORY

A history of regionalized premature care in rural Illinois. Miller TC. **Am J Perinatol** 1989 Oct;6(4):384–92
Evolution of social services for children with emotional disorders. Petr CG, et al. **Soc Work** 1990 May;35(3):228–34
[The history of social pediatrics in Ostrava] Březina Z. **Cas Lek Cesk** 1990 Jun 1;129(22):698–700 **(Cze)**
[Medical care of children just before the Revolution] Monnet P. **Pediatrie** 1989;44(5):351–5 **(Fre)**
[The role of the Kiev Institute of Orthopedics in the founding of the traumatologic and orthopedic services] Galko GV, et al. **Ortop Travmatol Protez** 1989 Oct;(10):73–7 **(Rus)**

LEGISLATION & JURISPRUDENCE

Therapeutic case advocacy: a model for interagency collaboration in serving emotionally disturbed children and their families. Young TM. **Am J Orthopsychiatry** 1990 Jan; 60(1):118–24
Ending the reign of dogma: designing a child health policy for America. The Duncan W. Clark lecture. Silver GA. **Bull N Y Acad Med** 1989 Mar;65(3):255–77
Advocacy: linking the political forces to achieve program success. Weill JD. **Bull N Y Acad Med** 1989 Mar; 65(3):413–8
Legal issues in pediatric plastic surgery. Rudd LJ. **Clin Plast Surg** 1990 Jan;17(1):1–6 (25 ref.)
The medical home and PL 99–457 in Hawaii. Sia CC, et al. **Hawaii Med J** 1989 Dec;48(12):529, 531–2, 534–5
Toward a national child health policy [editorial] Harvey B. **JAMA** 1990 Jul 11;264(2):253–4
[Feasibility study of health insurance for children] Tsai HC. **Acta Paediatr Sin** 1988 Oct;29 Suppl A:38A–43A **(Chi)**
[Pediatric management from the legal viewpoint (2)] Breunung M, et al. **Z Arztl Fortbild (Jena)** 1989; 83(14):737–41 (21 ref.) **(Ger)**

MANPOWER

Home visitors and child health: analysis of selected programs. Chapman J, et al. **Pediatrics** 1990 Jun;85(6):1059–68
[Improving the qualifications of organizers of maternal and child health services] Veselov NG. **Pediatriia** 1990;(5):75–7 **(Rus)**

METHODS

The ABCs of health supervision. Introducing medical students to the outpatient department. Widome MD. **Clin Pediatr (Phila)** 1990 Jul;29(7):418–20
Proposed method of well-child care in a resident's clinic. Backes CR, et al. **J Am Osteopath Assoc** 1989 Sep; 89(9):1158–62

ORGANIZATION & ADMINISTRATION

Understanding non-attendance in outpatient paediatric clinics. Andrews R, et al. **Arch Dis Child** 1990 Feb; 65(2):192–5
Children's services in the new NHS—a struggle for survival? Appleyard WJ. **Arch Dis Child** 1990 Jun;65(6):635–7
Child health surveillance [letter; comment] **BMJ** 1990 Jan 13;300(6717):119–20 Comment on: BMJ 1989 Dec 2;299(6712):1351–2.
Child health surveillance. Bain J. **BMJ** 1990 May 26; 300(6736):1381–2
ABC of child abuse. Case conferences. McMurray J. **BMJ** 1989 Aug 19;299(6697):500–2 (4 ref.)
Immunisation: causes of failure and strategies and tactics for success [see comments] Nicoll A, et al. **BMJ** 1989 Sep 30; 299(6703):808–12 (46 ref.) Comment in: BMJ 1989 Oct 28;299(6707):1102–3. Comment in: BMJ 1989 Nov 11;299(6709):1220.
The development of a hypnotherapy service for children. Sokel B, et al. **Child Care Health Dev** 1990 Jul–Aug; 16(4):227–33
Intensive day treatment provides an alternative to residential care. Hamm J. **Child Today** 1989 Sep–Oct;18(5):11–5
A child-oriented emergency medical services system. Ludwig S, et al. **Curr Probl Pediatr** 1990 Mar;20(3):109–58
The organization of services for children with diabetes in the United Kingdom: report of the British Paediatric Association Working Party. **Diabetic Med** 1990 Jun; 7(5):457–64
Behavioural change strategies to enhance child survival. Deeds SG, et al. **Hygie** 1989 Dec;8(4):19–22
The facts on the Facts for Life in Turkey. Gleason GR, et al. **Hygie** 1989 Dec;8(4):12–3
Sri Lanka's religious leaders back Facts for Life. Perera M. **Hygie** 1989 Dec;8(4):14–5
Facts for Life in the Philippines. Tolentino GN. **Hygie** 1989 Dec;8(4):16–7
Changes in national child health care policies and their effects on the public health nurse's work in child health care in Finland. Lauri SH. **J Adv Nurs** 1989 Dec;14(12):1034–7
Family support and parenting education in the home: an effective extension of clinic-based preventive health care services for poor children. Hardy JB, et al. **J Pediatr** 1989 Dec;115(6):927–31
Use of a contraindications checklist by practice nurses performing immunizations at a well child clinic. Liston A, et al. **J R Coll Gen Pract** 1989 Feb;39(319):59–61
Working with African nations to improve the health of their children. Combatting childhood communicable diseases. Foster SO, et al. **JAMA** 1990 Jun 27;263(24):3303–5
Child health in the inner cities [editorial] **Lancet** 1989 Oct 14;2(8668):900–1
The role of PKK in the immunization programme. Soegijanto S, et al. **Paediatr Indones** 1989 Jul–Aug;29(7–8):133–40
A pediatrician's view [editorial] Hoekelman RA. **Pediatr Ann** 1990 Jan;19(1):11–2
Toward a comprehensive emergency medical system for children. Haller JA Jr. **Pediatrics** 1990 Jul;86(1):120–2
Paediatric surveillance clinics: setting up. Waine C. **Practitioner** 1990 Mar 8;234(1484):210–1
Meeting minority health needs through special MCH projects. Hutchins V, et al. **Public Health Rep** 1989 Nov–Dec;104(6):621–6
Wisconsin's Birth and Development Outcome Monitoring Program. Aronson R, et al. **Wis Med J** 1990 Mar; 89(3):115–8
[Child health care is a first priority in public health tasks] Yang HC. **Acta Paediatr Sin** 1988 Oct;29 Suppl A:47A–48A **(Chi)**
[The economics of global health: from the hospital to ambulatory practice] Frutiger P. **Rev Med Suisse Romande** 1989 Sep;109(9):741–8 **(Fre)**
[Soviet–Polish cooperation in the field of maternal and child health] Eristavi GV, et al. **Akush Ginekol (Mosk)** 1990 Jan; (1):3 **(Rus)**
[Experience with the teaching of the course on "The status and dynamics of children's health"] Berzin' VI, et al. **Gig Sanit** 1989 Dec;(12):29–31 **(Rus)**
[Activities of preschool children's institutions of the sanatorium type] Lysyĭ AE. **Gig Sanit** 1989 Nov;(11):61–2 **(Rus)**
[Experience with the organizational activities of the regional sanitary-epidemiologic station regarding the prevention of enterobiasis among the population] Lysyĭ AE, et al. **Gig Sanit** 1989 Dec;(12):77–8 **(Rus)**
[Organizational and social aspects of pediatric surgery] Doletskiĭ SIa. **Khirurgiia (Mosk)** 1989 Nov;(11):5–10 (Eng. Abstr.) **(Rus)**
[Handicapped children—mercy and rehabilitation] **Ortop Travmatol Protez** 1990 Jan;(1):1–2 **(Rus)**
[Analytical review of the research in the field of pediatrics in 1988] Efimova AA, et al. **Pediatriia** 1989;(9):90–6 **(Rus)**
[The role of pediatric polyclinics in social and legal work concerning maternal and child health] Grebesheva II, et al. **Pediatriia** 1990;(2):57–62 **(Rus)**
[Rehabilitation treatment of children in ambulatory-polyclinical conditions] Grebesheva II, et al. **Pediatriia** 1989;(9):85–9 **(Rus)**
[Differential observation of health status group II children at a pediatric clinic] Iakunina LA, et al. **Pediatriia** 1989; (8):44–8 **(Rus)**
[The nature and characteristics of preventive services in a pediatric clinic for children from families with social risk factors] Kamsiuk LG, et al. **Pediatriia** 1990;(5):103–6 **(Rus)**
[Problems of medico-social rehabilitation of handicapped children] Kamsiuk LG. **Pediatriia** 1990;(2):5–10 **(Rus)**
[Medical rehabilitation and social adaptation of children with mucoviscidosis] Kapranov NI, et al. **Pediatriia** 1989; (8):51–5 **(Rus)**
[Effectiveness of the treatment of frequently ill children in the sanatoria of preschool institutions] Kuznetsova VN. **Pediatriia** 1990;(3):83–5 **(Rus)**
[Use of GAZ-24-13 ambulances for mobile neonatal resuscitation and intensive care] Likhacheva AS, et al. **Pediatriia** 1989;(8):84–8 **(Rus)**
[Organization of health services for neonates and the tasks of its improvement] Machinskaia LA. **Pediatriia** 1990; (4):5–9 (Eng. Abstr.) **(Rus)**
[Status of sanatorium and health resort services for children with non-tuberculous diseases and the problems of their further improvement] Sarycheva SIa. **Pediatriia** 1989; (9):5–9 **(Rus)**
[Ways of practical solution of socio-hygienic problems of reducing infant mortality] Sevkovskaia ZA. **Pediatriia** 1990; (5):71–4 **(Rus)**
[The environment and children's health] Studenikin MIa, et al. **Pediatriia** 1989;(8):5–9 **(Rus)**
[Infant mortality in the USSR and the ways of its reduction] Vaganov NN. **Pediatriia** 1990;(3):5–8 **(Rus)**
[A method of computing the work input in planning dental outpatient care for children's collectives] Udovitskaia EV, et al. **Stomatologiia (Mosk)** 1990 May–Jun;69(3):82–3 **(Rus)**
[Organization of services for children with congenital cleft palate and lip and ways to improve them] Kozlov VA. **Vestn Khir** 1989 Apr;142(4):136–9 **(Rus)**
[Experience in organizing a children's ophthalmological service in a rural district of Kazakhstan] Teleuova TS, et al. **Vestn Oftalmol** 1990 May–Jun;106(3):9–11 (Eng. Abstr.) **(Rus)**

STANDARDS

The crisis of child health in developing countries. Habte D. **Acta Paediatr Scand** 1990 Feb;79(2):130–6
Primary health care for the children of Sarawak. Benster R, et al. **Br J Hosp Med** 1989 Dec;42(6):488–90
The health of mothers and children in the context of HIV/AIDS [news] **Bull Int Union Tuberc Lung Dis** 1990 Mar;65(1):55–8
Listen to child health experts, not economists [letter; comment] **Health Aff (Millwood)** 1990 Spring;9(1):200–3 Comment on: Health Aff (Millwood) 1989 Fall;8(3):147–57.
The perinatal paradox: doing more and accomplishing less [see comments] Rosenblatt RA. **Health Aff (Millwood)** 1989 Fall;8(3):158–68 Comment in: Health Aff (Millwood) 1990 Spring;9(1):195–200.
Evaluation of nutritional and immunization services in a tribal ICDS block of Rajasthan. Bhandari B, et al. **Indian Pediatr** 1989 Apr;26(4):330–2
Medical audit by peer review and competitive self-appraisal as tools for promoting efficiency: a case study in Lahore, Pakistan. Awan AK, et al. **Int J Gynaecol Obstet** 1989 Sep; 30(1):27–32
The effect of early referral and intervention on the developmentally disabled infant: evaluation at 18 months of age. Sharkey MA, et al. **J Am Board Fam Pract** 1990 Jul–Sep;3(3):163–70
Process and outcome evaluation of preventive care for infants in two types of practices. Palti H, et al. **J Community Health** 1989 Winter;14(4):243–54
Pediatric digital chest imaging. Tarver RD, et al. **J Thorac Imaging** 1990 Jan;5(1):31–5
American Academy of Pediatrics Provisional Committee on International Child Health: Statement of principle. **Pediatrics** 1990 Feb;85(2):226–7
American Medical Association Commission on Emergency Medical Services: Pediatric emergencies. An excerpt from "Guidelines for the Categorization of Hospital Emergency Capabilities". **Pediatrics** 1990 May;85(5):879–87
Paediatric surveillance clinics: audit. Waine C. **Practitioner** 1990 Apr 8;234(1486):333
Medicaid maternal and child health care: prepaid plans vs. private fee-for-service. Reis J. **Res Nurs Health** 1990 Jun; 13(3):163–71
Services to families with children. A study of community work in Uppsala. Lagerberg D, et al. **Scand J Soc Med** 1990;18(1):31–7
Assessment of appropriate child care at district level: how useful are mortality rates? Van Lerberghe W, et al. **Trans R Soc Trop Med Hyg** 1989 Jan–Feb;83(1):23–6
[Maternal and child health in the Fourth World. Initial results of a socio-epidemiological survey] Godin I, et al. **Arch Belg** 1989;47(1–4):16–9 (Eng. Abstr.) **(Fre)**
[Analysis of the effectiveness of the public health system with special reference to the health of children] Köhler L, et al. **Arztl Jugendkd** 1990;81(1):4–13 (Eng. Abstr.) **(Ger)**
[Study of the degree of discrepancies between analytical and theoretical results of the evaluation of daily food rations] Schlegel-Zawadzka M, et al. **Rocz Panstw Zakl Hig** 1989; 40(2):107–13 (Eng. Abstr.) **(Pol)**
[Search for the ways of evaluation of the effectiveness of introducing the results of research studies to the care of children and adolescents] Serdiukovskaia GN, et al. **Gig Sanit** 1990 Mar;(3):51–5 **(Rus)**
[Practical activities of a pediatrician and the tasks of postgraduate training] Tarasova TV. **Pediatriia** 1990; (1):82–5 **(Rus)**
[Improving the activities of tuberculosis sanatoria for children and adolescents] Loboda MV, et al. **Probl Tuberk** 1990;(3):6–8 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

A descriptive study of the clinical practice patterns of occupational therapists working with infants and young children. Lawlor MC, et al. **Am J Occup Ther** 1989 Nov; 43(11):755–64
Decreases in dental caries do not mean that children no longer need dental services. Waldman HB. **ASDC J Dent Child** 1990 Jul–Aug;57(4):284–8
Who provides what dental services for children? We need more information. Waldman HB. **ASDC J Dent Child** 1990 Jul–Aug;57(4):289–92

Health surveillance of preschool children: four years' experience. Colver AF. **BMJ** 1990 May 12; 300(6734):1246–8

Preparedness for pediatric emergencies encountered in the practitioner's office. Altieri M, et al. **Pediatrics** 1990 May; 85(5):710–4

SUPPLY & DISTRIBUTION

Need grows for children's services. Eubanks P. **Hospitals** 1990 Jan 20;64(2):65

Better prospects for child survival. Monteiro CA, et al. **World Health Forum** 1989;10(2):222–7

TRENDS

Child health in the United States: prospects for the 1990s. Vanderpool NA, et al. **Annu Rev Public Health** 1990; 11:185–205 (77 ref.)

Child health in circumpolar areas. Bain HW. **Arctic Med Res** 1988;47 Suppl 1:504–9

Children with special needs. An original approach. Julien G. **Arctic Med Res** 1988;47 Suppl 1:516–8

Trends in the delivery of mental health services for children and adolescents. Philips I. **Bull Menninger Clin** 1990 Winter;54(1):95–100; discussion 101–6

Models of effective advocacy for children. First E. **Bull N Y Acad Med** 1989 Mar;65(3):390–4

Child health in New York City. Joseph SC. **Bull N Y Acad Med** 1989 Mar;65(3):395–9

Programs that succeed for the disadvantaged. Schorr LB. **Bull N Y Acad Med** 1989 Mar;65(3):408–12

Child health care and social factors: poverty, class, race. Starfield B. **Bull N Y Acad Med** 1989 Mar;65(3):299–306 (18 ref.)

Integrated child development services programme. Ghosh S. **Indian Pediatr** 1989 Sep;26(9):855–62

Monitoring and continuing education system in ICDS scheme—a module for national health programmes. Kapil U. **Indian Pediatr** 1989 Sep;26(9):863–7

Pediatric outreach clinics in Arkansas. Feild CR, et al. **J Arkansas Med Soc** 1989 Dec;86(7):270–1

Priorities in primary health care in children in the seventh Five-year Plan. Chakraborty B. **J Indian Med Assoc** 1989 May;87(5):122–4

Health still only for some by the year 2000? Schuftan C. **J Trop Pediatr** 1989 Aug;35(4):197–8

Curing and caring: from two to eighteen. Marshall WJ. **Ohio Med** 1989 Oct;85(10):749–50

Past and present: The "Century of the Child". Linenthal AJ. **Pharos** 1990 Spring;53(2):51

The changing face of child health. Smith R. **Practitioner** 1990 May 22;234(1489):537

Early intervention for vulnerable infants and their families: an emerging agenda. Kruskal MO, et al. **Semin Perinatol** 1989 Dec;13(6):506–12 (41 ref.)

[Pediatric health care, mortality rate and causes of death in the Republic of China] Chen JL. **Acta Paediatr Sin** 1988 Oct;29 Suppl A:6A–12A **(Chi)**

[Recent progress and demands in pediatric health care with respect to the social change in the Republic of China] Lu HK. **Acta Paediatr Sin** 1988 Oct;29 Suppl A:1A–4A **(Chi)**

[Maternal and child welfare in Quart Monde—status and viewpoint of a research action in Brussels] Hendrick P. **Arch Belg** 1988;46(11–12):501–11 **(Fre)**

[Social responsibilities in pediatrics and their realization in Czechoslovakia. 1. Social pediatric responsibilities of an ambulatory care pediatrician in general practice] Dunovský J. **Padiatr Grenzgeb** 1989;28(5):267–75 (Eng. Abstr.) **(Ger)**

[Social responsibilities in pediatrics and their realization in Czechoslovakia. 2. Social responsibilities of practice at ambulatory and inpatient pediatric departments] Dunovský J. **Padiatr Grenzgeb** 1989;28(5):277–81 (Eng. Abstr.) **(Ger)**

[Social responsibilities in pediatrics and their realization in Czechoslovakia. 3. Social aspects of the pediatric care of children at public facilities] Dunovský J. **Padiatr Grenzgeb** 1989;28(5):283–90 (Eng. Abstr.) **(Ger)**

[Current problems of the activities of ambulatory-polyclinical establishments in child health care] Grebesheva II. **Pediatriia** 1989;(10):5–9 **(Rus)**

[Interdepartmental approach to the prevention of chronic noninfectious diseases in children] Leparskiĭ EA, et al. **Pediatriia** 1989;(12):5–9 **(Rus)**

[The status and developmental prospects of hospital surgical care for children in the Ukrainian SSR] Bernadskiĭ IuI, et al. **Stomatologiia (Mosk)** 1989 Jul–Aug;68(4):72–3 **(Rus)**

[The status and developmental prospects of sanatorium-health resort care of children] Borovik EB. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jul–Aug;(4):1–5 **(Rus)**

UTILIZATION

Health complaints and drug consumption during the first 18 months of life. Håkansson A. **Fam Pract** 1989 Sep; 6(3):210–6

Community participation in child health promotional activities at a primary health centre in Haryana. Kumar S, et al. **Indian Pediatr** 1989 Jul;26(7):710–3

Maternal health locus of control beliefs, utilization of childhood preventive health services, and infant health. Tinsley BJ, et al. **J Dev Behav Pediatr** 1989 Oct; 10(5):236–41

Life table methods applied to use of medical care and of prescription drugs in early childhood. Rasmussen F, et al. **J Epidemiol Community Health** 1989 Jun;43(2):140–6

Access to office-based physicians under capitation reimbursement and Medicaid case management. Findings from the Children's Medicaid Program. Hohlen MM, et al. **Med Care** 1990 Jan;28(1):59–68

Variations in rates of hospitalization of children [letter; comment] **N Engl J Med** 1990 Jan 18;322(3):206–7 Comment on: N Engl J Med 1989 May 4;320(18):1183–7.

Medical insurance and childhood general practitioner contacts [see comments] Fergusson DM, et al. **N Z Med J** 1989 Nov 22;102(880):609–10 Comment in: N Z Med J 1990 Jan 24;103(882):25.

Pediatric deaths and emergency medical services (EMS) in urban and rural areas. Gausche M, et al. **Pediatr Emerg Care** 1989 Sep;5(3):158–62

Health care use by children receiving mental health services. Kelleher K, et al. **Pediatrics** 1990 Jan;85(1):114–8

Child health clinic attendance during the first two years of life. While A. **Public Health** 1990 Mar;104(2):141–6

Public health nursing interventions to improve the use of a health service: using a pilot study to guide research. Selby ML, et al. **Public Health Nurs** 1990 Mar;7(1):3–12

Child health and health care utilisation. A community-based survey in Mitchell's Plain, CP. Lachman PI, et al. **S Afr Med J** 1990 May 5;77(9):467–70

CHILD, HOSPITALIZED

Parents and paediatric anaesthesia: a prospective survey of parental attitudes to their presence at induction. Braude N, et al. **Ann R Coll Surg Engl** 1990 Jan;72(1):41–4

Routine care: promoting development in hospitalized infants. Nugent KE. **MCN** 1989 Sep–Oct;14(5):318–21

[Social and economic consequences for families with preschool children related to emergency hospitalization of children under 7 years of age. A questionnaire study] Balslev T, et al. **Ugeskr Laeger** 1990 Jul 23;152(30):2174–7 (Eng. Abstr.) **(Dan)**

[Limited-time admissions for observation at the Psychiatric Hospital for Children in Risskov during the period 1 January 1984–31 December 1986] Dehlholm B, et al. **Ugeskr Laeger** 1990 Mar 26;152(13):919–22 (Eng. Abstr.) **(Dan)**

PSYCHOLOGY

Preoperative parental anxiety predicts behavioural and emotional responses to induction of anaesthesia in children. Bevan JC, et al. **Can J Anaesth** 1990 Mar;37(2):177–82

Lengthy or repeated hospitalization in infancy. Issues in stimulation and intervention. Goldberger J. **Clin Perinatol** 1990 Mar;17(1):197–206 (10 ref.)

Short-term psychiatric inpatient treatment of preschool children. Mansheim P. **Hosp Community Psychiatry** 1990 Jun;41(6):670–2

Visitors in a pediatric ward [letter] Fakhir S. **Indian Pediatr** 1989 Jun;26(6):609–10

The psychosocial impact of play on hospitalized children. Rae WA, et al. **J Pediatr Psychol** 1989 Dec;14(4):617–27

Coping behaviors of hospitalized preschool children. Ritchie JA, et al. **Matern Child Nurs J** 1988 Fall;17(3):153–71

Fitting care to the sick infant or child [editorial] Bishop BE. **MCN** 1989 Sep–Oct;14(5):303

The relationship of temperament to pre- and posthospitalization behavioral responses of school-age children. McClowry SG. **Nurs Res** 1990 Jan–Feb; 39(1):30–5

Pain location: validity and reliability of body outline markings by hospitalized children and adolescents. Savedra MC, et al. **Res Nurs Health** 1989 Oct;12(5):307–14

[Comparative management in the treatment of pediatric diabetes] Mäenpää J. **Duodecim** 1989;105(22):1861–6 **(Fin)**

[A psychiatric consultation service at a pediatric hospital. Definitions, nomenclature, perspectives] Sauvage D, et al. **Arch Fr Pediatr** 1989 Oct;46(8):559–65 (Eng. Abstr.) **(Fre)**

[Preanesthetic consultation in pediatrics: experience with the use of drawings] Cohen Salmon D, et al. **Cah Anesthesiol** 1989 Oct;37(6):415–24 (Eng. Abstr.) **(Fre)**

[Emotional reactions of children to hospitalization] Breitkopf L. **Z Kinderchir** 1990 Feb;45(1):3–8 (18 ref.) (Eng. Abstr.) **(Ger)**

[Behavioral somatic disorders in hospitalized children] Guasco G, et al. **Pediatr Med Chir** 1989 Nov–Dec; 11(6):687–97 (Eng. Abstr.) **(Ita)**

[The role of child psychiatry and adolescent psychiatry at somatic pediatric departments] Seip M. **Tidsskr Nor Laegeforen** 1990 Mar 30;110(9):1065–6 **(Nor)**

[Procedures in hospital admissions: tradition and proposals] Obuchowska I. **Pediatr Pol** 1989 Feb;64(2):123–9 **(Pol)**

[Prepare the child—a way reduce emotional damages] Lundqvist M, et al. **Lakartidningen** 1990 Jul 11; 87(28–29):2334–5 **(Swe)**

STATISTICS & NUMERICAL DATA

Hospital use by children in the United States and Canada. Kozak LJ, et al. **Vital Health Stat 5** 1984 Aug;5(1):1–59

CHILD, INSTITUTIONALIZED

Circulation flow of enteropathogenic bacteria in institutionalized children. I. An epidemiologic study. Lacerda MD, et al. **Mem Inst Oswaldo Cruz** 1988 Oct–Dec; 83(4):465–70

Hepatitis C in institutionalized children [letter] Vranckx R, et al. **N Engl J Med** 1990 Jul 5;323(1):64

[Social responsibilities in pediatrics and their realization in Czechoslovakia. 3. Social aspects of the pediatric care of children at public facilities] Dunovský J. **Padiatr Grenzgeb** 1989;28(5):283–90 (Eng. Abstr.) **(Ger)**

[Antigenic characteristics of influenza B virus strains isolated in an orphanage during an influenza outbreak in Moscow in the winter of 1988] Reĭzin FN, et al. **Vopr Virusol** 1989 Sep–Oct;34(5):562–4 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

[Various hygienic aspects of teaching and upbringing the children in boarding schools in Moscow] Loseva OA, et al. **Gig Sanit** 1989 Nov;(11):16–9 **(Rus)**

[Comparison of the results of clinico-epidemiological examination of retarded children-orphans and retarded children brought up in the family] Kryzhanovskaia IL. **Zh Nevropatol Psikhiatr** 1990;90(3):75–8 (Eng. Abstr.) **(Rus)**

[The course of protracted reactive depression in young children] Shevchenko IuS, et al. **Zh Nevropatol Psikhiatr** 1989;89(8):80–4 (Eng. Abstr.) **(Rus)**

CHILD LANGUAGE see under **LANGUAGE DEVELOPMENT**

CHILD MOLESTATION, SEXUAL see **CHILD ABUSE, SEXUAL**

CHILD NEGLECT see **CHILD ABUSE**

CHILD NUTRITION

Undernourished children [letter] Bomgaars MR. **Am Fam Physician** 1990 Aug;42(2):315

Age-specific responsiveness of weight and length to nutritional supplementation. Lutter CK, et al. **Am J Clin Nutr** 1990 Mar;51(3):359–64

Nutritional status of school age girls working in different handicraft centres of Srinagar City. Raina V, et al. **Br J Ind Med** 1990 Jul;47(7):502–4

Nutrition, children and health. Proceedings of a symposium. New York, March 9, 1989. **Bull N Y Acad Med** 1989 Dec; 65(10):1011–174

New York State's initiatives in child nutrition. Cuomo MR. **Bull N Y Acad Med** 1989 Dec;65(10):1014–9

Childhood nutrition education in health promotion and disease prevention. Olson CM. **Bull N Y Acad Med** 1989 Dec;65(10):1143–53; discussion 1154–60

The role of early nutrition in subsequent development and optimal future health. Winick M. **Bull N Y Acad Med** 1989 Dec;65(10):1020–5

Universal cholesterol screening of children could do more harm than good, MD contends. **Can Med Assoc J** 1990 Aug 1;143(3):211

If children are developing poorly, ask what they had for breakfast. Lechky O. **Can Med Assoc J** 1990 Aug 1; 143(3):210–3

Advances in child health in China. Zhou HK. **Chin Med J [Engl]** 1989 Aug;102(8):575–8

Post-prandial plasma aminograms in the assessment of protein quality for young children: maize and grain amaranth, alone and combined. Graham GG, et al. **Eur J Clin Nutr** 1990 Jan;44(1):35–43

A comparison of methods of dietary assessment in Australian children aged 11–12 years. Jenner DA, et al. **Eur J Clin Nutr** 1989 Oct;43(10):663–73

Evaluation of nutritional and immunization services in a tribal ICDS block of Rajasthan. Bhandari B, et al. **Indian Pediatr** 1989 Apr;26(4):330–2

Nutritional profile of preschool children of armed forces families around Hyderabad. Joshi NM, et al. **Indian Pediatr** 1989 Apr;26(4):333–7

Nutritional status of pre-school children of urban slum communities in Delhi. Kapil U, et al. **Indian Pediatr** 1989 Apr;26(4):338–42

Nutrition in preschool children: strengthen approach to promotion [editorial] Madan S. **Indian Pediatr** 1989 Apr; 26(4):311–3

Use of tofu in preschool meals. Ashraf HR, et al. **J Am Diet Assoc** 1990 Aug;90(8):1114–6

Tube feeding the young child: current practices and concerns of pediatric nutritionists. Dorf A. **J Am Diet Assoc** 1989 Nov;89(11):1658–60

Early nutrition intervention services for children with special health care needs. Hine RJ, et al. **J Am Diet Assoc** 1989 Nov;89(11):1636–9

Anthropometric and dietary assessment of omnivore and lacto-ovo-vegetarian children. Tayter M, et al. **J Am Diet Assoc** 1989 Nov;89(11):1661–3

Dietary assessment instruments for preschool children: reliability of parental responses to the 24-hour recall and a food frequency questionnaire. Treiber FA, et al. **J Am Diet Assoc** 1990 Jun;90(6):814–20

Surveillance of severe pediatric undernutrition: conceptual and practical issues. Trowbridge FL, et al. **J Nutr** 1990 Aug;120(8):943–7

Requirements and upper limits of vitamin D intake in the term neonate, infant, and older child. Chesney RW. **J Pediatr** 1990 Feb;116(2):159–66 (66 ref.)

Trace minerals in the nutrition of children. Milner JA. **J Pediatr** 1990 Aug;117(2 Pt 2):S147–55 (70 ref.)

The nutritional value of oat flour for very young children. Graham GG, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr; 10(3):344–50

Protein turnover in malnourished patients with cystic fibrosis: effects of elemental and nonelemental nutritional supplements. Pelekanos JT, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr;10(3):339–43

Iron status of infancy and early childhood in south Taiwan. Chiou SS, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 Jan;6(1):30–7

European Society for Paediatric Gastroenterology and Nutrition (ESPGAN) and North American Society for Paediatric Gastroenterology (NASPGN). Abstracts presented at the third joint meeting. Amsterdam, The Netherlands, May 23–26, 1990. **Pediatr Res** 1990 May; 27(5):529–45

Parent education in youth-directed nutrition interventions. Crockett SJ, et al. **Prev Med** 1989 Jul;18(4):475–91 (25 ref.)

Third report of the Sub-committee on Nutritional Surveillance. Committee on Medical Aspects of Food Policy. **Rep Health Soc Subj (Lond)** 1988;33:1–13

The diets of British schoolchildren. Sub-committee on Nutritional Surveillance. Committee on Medical Aspects of Food Policy. **Rep Health Soc Subj (Lond)** 1989;36:1–293

Nutrition and cancer in children. Holcomb GW 3d, et al. **Surg Annu** 1990;22:129–42 (85 ref.)

Relationship of the morbidity of under-fives to anthropometric measurements and community health intervention. Schelp FP, et al. **Trop Med Parasitol** 1990 Jun;41(2):121–6

[Dietary intervention and follow-up study in 1-to-2-year-old children on macrobiotic diets] Dagnelie PC, et al. **Ned Tijdschr Geneeskd** 1990 Feb 17;134(7):341–5 (Eng. Abstr.) **(Dut)**

[The role of medium chain triglycerides in pediatric nutrition] Charritat JL, et al. **Ann Pediatr (Paris)** 1989 Nov; 36(9):607–10 **(Fre)**

[The evaluation of nutritional status in pediatric practice] Girardet JP, et al. **Ann Pediatr (Paris)** 1989 Nov; 36(9):617–20 **(Fre)**

[In what way does the diet of our children affect oral-dental health? Results of a survey on the diet of school children in Louvain] Vinckier F, et al. **Rev Belge Med Dent** 1989; 44(1):89–97 (Eng. Abstr.) **(Fre)**

[5th annual meeting of the Society for Pediatric Gastroenterology and Nutrition. 22–24 March 1990, Tübingen. Abstracts] **Monatsschr Kinderheilkd** 1990 Feb; 138(2):100–6 **(Ger)**

[Study of the degree of discrepancies between analytical and theoretical results of the evaluation of daily food rations] Schlegel-Zawadzka M, et al. **Rocz Panstw Zakl Hig** 1989; 40(2):107–13 (Eng. Abstr.) **(Pol)**

[Evaluation of vitamin supply for preschool children in Tashkent] Voronina NV. **Pediatriia** 1990;(2):112 **(Rus)**

[Nutrition at an orphanage for preschool age children in the Sverdlovsk area] Eremin IuN, et al. **Vopr Pitan** 1989 Nov-Dec;(6):68–9 **(Rus)**

[Nutrition and the physical work capacity of young athletes] Mostova LA, et al. **Vopr Pitan** 1990 Jan-Feb;(1):11–8 (83 ref.) **(Rus)**

[New dairy products in the nutrition of children of preschool and school age] Mostovaia LA, et al. **Vopr Pitan** 1989 May-Jun;(3):30–3 (Eng. Abstr.) **(Rus)**

[Regulation of the mineral composition of processed cheese for the nutrition of school-age children] Zakharova NP, et al. **Vopr Pitan** 1989 May-Jun;(3):71–3 **(Rus)**

[Prevalence of breast feeding and its relation to cardiovascular risk factors in the pediatric population of Fuenlabrada] Cobaleda Rodrigo A, et al. **An Esp Pediatr** 1989 Oct;31(4):350–5 (32 ref.) (Eng. Abstr.) **(Spa)**

[Dietary survey at the nursery of the Polytechnic University of Valencia] Farré Rovira R, et al. **An Esp Pediatr** 1990 Feb;32(2):122–6 (Eng. Abstr.) **(Spa)**

[Evaluation of the nutritional status of children seen at the ONI of Guadalajara] Vásquez-Garibay EM, et al. **Bol Med Hosp Infant Mex** 1989 Dec;46(12):771–8 (Eng. Abstr.) **(Spa)**

CHILD NUTRITION DISORDERS

BLOOD

[Clinical significance of the structure and function of cell membranes in children with respiratory tract diseases associated with paratrophy] Sinitskaia VA. **Pediatriia** 1990; (2):108–9 **(Rus)**

COMPLICATIONS

Immune profile of children with lower respiratory tract infection in relation to nutritional status. Chatterjee R, et al. **J Commun Dis** 1988 Dec;20(4):327–33

[The life style of children with digestive diseases living in rural areas] Kamaev IA, et al. **Gig Sanit** 1989 Sep;(9):37–9 **(Rus)**

DIET THERAPY

Galantase (beta-galactosidase) treatment in pediatric practice. Horváth K, et al. **Ther Hung** 1989;37(2):107–10 (14 ref.)

EPIDEMIOLOGY

Discriminant function analysis: a case study of some socioeconomic constraints on child nutrition. Rao KV, et al. **Indian J Med Res** 1990 Feb;92:66–71

Identifying the malnourished within Peru: regional variation in the performance of a nutrition indicator. Leon ME, et al. **Int J Epidemiol** 1990 Mar;19(1):214–6

ETIOLOGY

Prevalence of nutrition-related problems among long-term survivors of allogeneic marrow transplantation. Lenssen P, et al. **J Am Diet Assoc** 1990 Jun;90(6):835–42

[Clinical aspects of cow milk protein and gluten intolerance in children] Kaczmarski M. **Pol Tyg Lek** 1989 Jan 23; 44(4):86–8 (Eng. Abstr.) **(Pol)**

METABOLISM

Energy expenditure/basal metabolic rate ratios in normal and marginally undernourished Colombian children 6–16 years of age. Spurr GB, et al. **Eur J Clin Nutr** 1989 Aug; 43(8):515–27

Protein turnover in malnourished patients with cystic fibrosis: effects of elemental and nonelemental nutritional supplements. Pelekanos JT, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr;10(3):339–43

MORTALITY

Breastfeeding improves survival, but not nutritional status, of 12–35 months old children in rural Bangladesh. Briend A, et al. **Eur J Clin Nutr** 1989 Sep;43(9):603–8

PREVENTION & CONTROL

Age-specific responsiveness of weight and length to nutritional supplementation. Lutter CK, et al. **Am J Clin Nutr** 1990 Mar;51(3):359–64

Protection of children from seasonal nutritional stress in an Andean agricultural community. Leonard WR. **Eur J Clin Nutr** 1989 Sep;43(9):597–602

In Tanzania: The Iringa Nutrition Programme. Chorlton R. **Hygie** 1989 Dec;8(4):5–9

The Madurai experience in preventing nutritional blindness. Venkataswamy G. **Indian J Pediatr** 1989 Jan-Feb;56(1):1–3

Integrated child development services programme. Ghosh S. **Indian Pediatr** 1989 Sep;26(9):855–62

Monitoring and continuing education system in ICDS scheme—a module for national health programmes. Kapil U. **Indian Pediatr** 1989 Sep;26(9):863–7

THERAPY

Parenteral nutrition, and fluid and electrolyte therapy. Arnold WC. **Pediatr Clin North Am** 1990 Apr;37(2):449–61 (47 ref.)

CHILD, PRESCHOOL

Language and neurodevelopmental outcome of low-birthweight infants at three years. Vohr BR, et al. **Dev Med Child Neurol** 1989 Oct;31(5):582–90

Research support for Head Start [letter] **Science** 1990 Jun 8;248(4960):1174–6

[Evaluation of the efficacy of work during the summer in improving the health of preschool children] Lashneva IP. **Gig Sanit** 1990 Feb;(2):39–42 **(Rus)**

CHILD PSYCHIATRY

Incisive neuroleptic drugs in child psychiatry. Stárková L, et al. **Act Nerv Super (Praha)** 1989 Jun;31(2):120

Child psychiatry: the paediatrician's contribution. Graham P. **Acta Paediatr Jpn Overseas Ed** 1990 Apr;32(2):123–31

Treatment of some cases in child psychiatry with incisive neuroleptic drugs. Stárková L, et al. **Acta Univ Palacki Olomuc Fac Med** 1989;123:287–91

ABC of child abuse. Role of the child psychiatry team. Nicol AR. **BMJ** 1989 Aug 12;299(6696):451–2 (0 ref.)

Catchers in the rye. Schowalter JE. **J Am Acad Child Adolesc Psychiatry** 1990 Jan;29(1):10–6

Interface between research and clinical practice in child psychiatry—some personal reflections: discussion paper. Rutter M. **J R Soc Med** 1990 Jul;83(7):444–7

Consultation-liaison in child psychiatry and the evolution of pediatric psychiatry. Fritz GK. **Psychosomatics** 1990 Winter;31(1):85–90

How old is old enough? The ages of rights and responsibilities. Committee on Child Psychiatry. Group for the Advancement of Psychiatry. **Rep Group Adv Psychiatry** 1989;(126):1–124

A comparative study of new cases seen at the Child Psychiatric Clinic in 1975 and 1985. Ko SM, et al. **Singapore Med J** 1989 Dec;30(6):553–6

[Limited-time admissions for observation at the Psychiatric Hospital for Children in Risskov during the period 1 January 1984–31 December 1986] Dehlholm B, et al. **Ugeskr Laeger** 1990 Mar 26;152(13):919–22 (Eng. Abstr.) **(Dan)**

[A study of protective mechanisms in child psychiatry] Aro H. **Duodecim** 1989;105(18):1520–2 **(Fin)**

[Liaison psychiatric aspects in the field of child and adolescent psychiatry] Bürgin D. **Schweiz Rundsch Med Prax** 1990 Jun 19;79(25):804–8 (Eng. Abstr.) **(Ger)**

[Multi-family groups] Albretsen CS. **Tidsskr Nor Laegeforen** 1990 Mar 30;110(9):1094–5 (Eng. Abstr.) **(Nor)**

[The role of child psychiatry and adolescent psychiatry at somatic pediatric departments] Seip M. **Tidsskr Nor Laegeforen** 1990 Mar 30;110(9):1065–6 **(Nor)**

[Children and disasters. Guidelines for a working model—experiences from the mental health services for children after the aircrash at Brønnøysund] Sørensen E. **Tidsskr Nor Laegeforen** 1989 Nov 30;109(33):3403–6 (Eng. Abstr.) **(Nor)**

[Function and tasks of a psychiatric unit for children and adolescents at a regional hospital] Vandvik IH, et al. **Tidsskr Nor Laegeforen** 1989 Nov 30;109(33):3440–3 (Eng. Abstr.) **(Nor)**

[Child psychiatry at a general hospital. The aims of preventive "liaison child psychiatry"] Wilkinson SR. **Tidsskr Nor Laegeforen** 1989 Nov 30;109(33):3443–5 (Eng. Abstr.) **(Nor)**

[Investigation of abuse demands professionalism and an attitude of understanding] Lindblad F. **Lakartidningen** 1990 May 30;87(22):1957–8 **(Swe)**

EDUCATION

The coming crisis in funding child psychiatry training. McKelvey RS. **Am J Psychiatry** 1990 Sep;147(9):1220–4

Child psychiatry fellowship training [letter] Masters KJ. **Am J Psychiatry** 1989 Dec;146(12):1643

Child psychiatry and the paediatrician in training. Whitehouse W. **Child Care Health Dev** 1990 May-Jun; 16(3):197–203

Passing the boards [letter] Fox G. **J Am Acad Child Adolesc Psychiatry** 1990 May;29(3):484

Training in research [letter] Magen J. **J Am Acad Child Adolesc Psychiatry** 1989 Nov;28(6):966

The American Board of Psychiatry and Neurology and its examinations in child neurology. Bell WE. **J Child Neurol** 1990 Apr;5(2):80–3

Public child psychiatry training. Angell RH. **New Dir Ment Health Serv** 1989 Winter;(44):17–26

HISTORY

History of child and adolescent psychiatry ideas and organizations in the United States: a twentieth-century review. Slaff B. **Adolesc Psychiatry** 1989;16:31–52

[Georges Amado (1917–1988)] Cahn R. **Psychiatr Enfant** 1989;32(1):5–14 **(Fre)**

[The history of pediatric neuropsychiatry in Romania] Milea S, et al. **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1989 Jul-Sep;34(3):170–4 **(Rum)**

[The Center for Pediatric Neuropsychiatry (1946–1973)] Stefan M, et al. **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1989 Jul-Sep;34(3):186–8 **(Rum)**

[Elizaveta Aleksandrovna Osipova (on the centenary of her birth)] Kniazeva MP, et al. **Zh Nevropatol Psikhiatr** 1989; 89(11):127–8 **(Rus)**

LEGISLATION & JURISPRUDENCE

Grasping the nettle: forensic child psychiatry. Connell HM. **Aust N Z J Psychiatry** 1989 Dec;23(4):512–6

METHODS

Working alongside the general practitioner: a child psychiatric clinic in the general practice setting. Subotsky F, et al. **Child Care Health Dev** 1990 May-Jun;16(3):189–96

[Several current aspects of medical ethics in infanto-juvenile psychiatry] Thévenot JP, et al. **Ann Med Psychol (Paris)** 1989 Mar-Apr;147(2):190–3 (0 ref.) **(Fre)**

[Classification of psychiatric disorders in children: a comparison of the most frequent systems] Pedreira Massa JL, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Nov-Dec;17(6):407–16 (Eng. Abstr.) **(Spa)**

ORGANIZATION & ADMINISTRATION

Christchurch child psychiatric unit [letter] Ney PG. **N Z Med J** 1989 Nov 22;102(880):620

TRENDS

Fact and fashion: changing practices in child psychiatry. Wolff S. **J R Soc Med** 1989 Jun;82(6):324–8 (48 ref.)

[A psychiatric consultation service at a pediatric hospital.

Definitions, nomenclature, perspectives] Sauvage D, et al. **Arch Fr Pediatr** 1989 Oct;46(8):559–65 (Eng. Abstr.) **(Fre)**

[The future of child and adolescent psychiatry] Nissen G. **Nervenarzt** 1989 Aug;60(8):496–500 (23 ref.) **(Ger)**

CHILD PSYCHOLOGY

Imitation in infancy: a critical review. Poulson CL, et al. **Adv Child Dev Behav** 1989;22:271–98 (80 ref.)

Children's social and emotional development appears in book [letter; comment] Pratt PN. **Am J Occup Ther** 1989 Dec; 43(12):852–3 Comment on: Am J Occup Ther 1989 Jun;43(6):365–9.

Children's drawings of an anxiety–eliciting topic: effects on the size of the drawing. Fox TJ, et al. **Br J Clin Psychol** 1990 Feb;29 (Pt 1):71–81

The process of victimization: the victims' perspective. Berliner L, et al. **Child Abuse Negl** 1990;14(1):29–40

Sexually abused and nonabused children's conceptions of personal body safety. Miller–Perrin CL, et al. **Child Abuse Negl** 1990;14(1):99–112

Kung infancy: the social context of object exploration. Bakeman R, et al. **Child Dev** 1990 Jun;61(3):794–809

The role of dyadic affect in play and infant sex in predicting infant response to the still–face situation. Carter AS, et al. **Child Dev** 1990 Jun;61(3):764–73

Social contingency effects on subsequent perceptual–cognitive tasks in young infants. Dunham P, et al. **Child Dev** 1989 Dec;60(6):1486–96

Effects of mother–infant social interactions on infants' subsequent contingency task performance. Dunham P, et al. **Child Dev** 1990 Jun;61(3):785–93

Mother–toddler problem solving: antecedents in attachment, home behavior, and temperament. Frankel KA, et al. **Child Dev** 1990 Jun;61(3):810–9

Young children's understanding of counting and cardinality. Frye D, et al. **Child Dev** 1989 Oct;60(5):1158–71

Activity levels as a dimension of temperament in toddlers: its relevance for the organismic specificity hypothesis. Gandour MJ. **Child Dev** 1989 Oct;60(5):1092

Developmental outcome of minority infants: a process–oriented look into our beginnings. Garcia Coll CT. **Child Dev** 1990 Apr;61(2):270–89 (135 ref.)

Marital quality and child functioning: a longitudinal investigation. Howes P, et al. **Child Dev** 1989 Oct; 60(5):1044–51

Hand, arm, and facial actions of young infants to a social and nonsocial stimulus. Legerstee M, et al. **Child Dev** 1990 Jun;61(3):774–84

Infant proneness–to–distress temperament, maternal personality, and mother–infant attachment: associations and goodness of fit. Mangelsdorf S, et al. **Child Dev** 1990 Jun; 61(3):820–31

Emerging social regulatory capacities as seen in the still–face situation. Mayes LC, et al. **Child Dev** 1990 Jun;61(3):754–63

Auditory frequency resolution in human infancy. Spetner NB, et al. **Child Dev** 1990 Jun;61(3):632–52

Effects of motion and figural goodness on haptic object perception in infancy. Streri A, et al. **Child Dev** 1989 Oct; 60(5):1111–25

Predictors of Haitian–American infant development at twelve months. Widmayer SM, et al. **Child Dev** 1990 Apr; 61(2):410–5

Infants' detection of correlations among feature categories. Younger B. **Child Dev** 1990 Jun;61(3):614–20

Minors' dissatisfaction with their life circumstances. Adelman HS, et al. **Child Psychiatry Hum Dev** 1989 Winter; 20(2):135–47

The normal crying curve: what do we really know? Barr RG. **Dev Med Child Neurol** 1990 Apr;32(4):356–62

Lateral asymmetry in attention for three–month–old human infants during face–to–face interaction with mother. Fogel A, et al. **Dev Psychobiol** 1990 Jan;23(1):1–14

Development of head position preference during early infancy: a longitudinal study in the daily life situation. Hopkins B, et al. **Dev Psychobiol** 1990 Jan;23(1):39–53

Task constraints and infant grip configurations. Newell KM, et al. **Dev Psychobiol** 1989 Dec;22(8):817–31

Determinants of adjustment for children of divorcing parents. Oppenheimer K, et al. **Fam Med** 1990 Mar–Apr; 22(2):107–11

Children of divorced and separated parents: summary and review of findings from a long–term follow–up study in the UK. Wadsworth M, et al. **Fam Pract** 1990 Jun; 7(2):104–9

Child health psychology. Drotar D, et al. **Health Psychol** 1989;8(6):781–4

Children's attitudes toward elderly individuals: a comparison of two ethnic groups. Zandi T, et al. **Int J Aging Hum Dev** 1990;30(3):161–74

The child: a pragmatic instrument in primary health care. Onyejiaku EE, et al. **Int Nurs Rev** 1989 Nov–Dec; 36(6):185–7

What motivates infants? [letter; comment] Smith RH. **J Am Acad Child Adolesc Psychiatry** 1990 Mar;29(2):315–6 Comment on: J Am Acad Child Adolesc Psychiatry 1989 Sep;28(5):657–68.

Implications of research on infant development for psychodynamic theory and practice [see comments] Zeanah CH, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Sep; 28(5):657–68 (125 ref.) Comment in: J Am Acad Child Adolesc Psychiatry 1990 Mar;29(2):315–6.

A longitudinal study of the contribution of dental experience to dental anxiety in children between 9 and 12 years of age. Murray P, et al. **J Behav Med** 1989 Jun;12(3):309–20

Pretend play with mothers and siblings: relations between early performance and partners. Dale N. **J Child Psychol Psychiatry** 1989 Sep;30(5):751–9

Parent–child agreement on symptoms assessed via a clinical research interview for children: the Child Assessment Schedule (CAS). Hodges K, et al. **J Child Psychol Psychiatry** 1990 Mar;31(3):427–36

Fears of children and adolescents: a cross–sectional Australian study using the Revised–Fear Survey Schedule for Children. King NJ, et al. **J Child Psychol Psychiatry** 1989 Sep;30(5):775–84

Very young infants yawn or cry after watching animated programs [letter] Mizukami K, et al. **J Dev Behav Pediatr** 1990 Jun;11(3):163

Form categorization in 10–month–olds. Colombo J, et al. **J Exp Child Psychol** 1990 Apr;49(2):173–88

The role of symmetrical and asymmetrical social conflict in cognitive change. Russell J, et al. **J Exp Child Psychol** 1990 Feb;49(1):58–78

Belief revision in children: the role of prior knowledge and strategies for generating evidence. Schauble L. **J Exp Child Psychol** 1990 Feb;49(1):31–57

Infants' perception of timbre: classification of complex tones by spectral structure. Trehub SE, et al. **J Exp Child Psychol** 1990 Apr;49(2):300–13

Infant categorization: memory for category–level and specific item information. Younger B. **J Exp Child Psychol** 1990 Aug;50(1):131–55

Phase– or energy–based face discrimination: some problems. Badcock DR. **J Exp Psychol [Hum Percept]** 1990 Feb; 16(1):217–20

Discrimination learning during the first year: stimulus and positional cues. Colombo J, et al. **J Exp Psychol [Learn Mem Cogn]** 1990 Jan;16(1):98–109

Roles of function, reminding, and variability in categorization by 3–month–old infants. Greco C, et al. **J Exp Psychol [Learn Mem Cogn]** 1990 Jul;16(4):617–33

Stability of habituation responses across multiple sessions in 4–month–old infants. Pomerleau A, et al. **J Genet Psychol** 1989 Dec;150(4):445–8

The infant's concept of agency: the distinction between social and nonsocial objects. Poulin–Dubois D, et al. **J Genet Psychol** 1990 Mar;151(1):77–90

Feeding behavior of 6– to 12–month–old infants: assessment and sources of parental information. Pridham KF. **J Pediatr** 1990 Aug;117(2 Pt 2):S174–80

Some effects of sex–linked clothing and gender schema on the stereotyping of infants. Leone C, et al. **J Soc Psychol** 1989 Oct;129(5):609–19

A Children's Health Belief Model. Bush PJ, et al. **Med Care** 1990 Jan;28(1):69–86

Assessing the veracity of children's testimony. Sheehy NP, et al. **Med Law** 1989;8(3):311–5

A story for Larry. Duckworth E, et al. **New Dir Child Dev** 1990 Spring;(47):71–6

Infant response to frustrating and mildly stressful events: a positive look at anger in the first year. Fox NA. **New Dir Child Dev** 1989 Fall;(45):47–64 (47 ref.)

Impact of caretaker stress on behavioral adjustment of very low birth weight preschool children. Tobey GY, et al. **Nurs Res** 1990 Mar–Apr;39(2):84–9

Children of divorce: recent findings regarding long–term effects and recent studies of joint and sole custody. Wallerstein JS, et al. **Pediatr Rev** 1990 Jan;11(7):197–204

Children's competence to consent to medical procedures. Koocher GP, et al. **Pediatrician** 1990;17(2):68–73

Psychological development of children who were treated antenatally with corticosteroids to prevent respiratory distress syndrome. Schmand B, et al. **Pediatrics** 1990 Jul; 86(1):58–64

Visual feedback and anticipatory hand orientation during infants' reaching. Morrongiello BA, et al. **Percept Mot Skills** 1989 Dec;69(3 Pt 1):787–802

Infants' reactions to visual movement of the environment. Delorme A, et al. **Perception** 1989;18(5):667–73

Effects of reward and familiarity of reward agent on spontaneous play in preschoolers: a field study. Gomide PI, et al. **Psychol Rep** 1989 Oct;65(2):427–34

Personality variables as assessed by the MMPI and their relationship to mother–infant interactional behaviors at age three months. Kaeller MG, et al. **Psychol Rep** 1990 Jun; 66(3 Pt 1):899–904

Conservatism of Israeli junior high school students: interethnic differences. Katz YJ. **Psychol Rep** 1989 Oct; 65(2):635–41

Infant sensitivity to audiovisually coherent events. Schiff W, et al. **Psychol Res** 1989;51(3):102–6

Development and stability in visual sustained attention in 14, 20, and 26 week old infants. Richards JE. **Psychophysiology** 1989 Jul;26(4):422–30

Temperament, behavior problems, and learning skills in very low birth weight preschoolers. Schraeder BD, et al. **Res Nurs Health** 1990 Feb;13(1):27–34

Attention and learning in infancy: investigative and clinical issues. **Semin Perinatol** 1989 Dec;13(6):435–522

Attention in infancy and the prediction of cognitive capacities in childhood. Bornstein MH. **Semin Perinatol** 1989 Dec; 13(6):450–7 (52 ref.)

The acquisition of adaptive behavior in infancy: developmentally at–risk infants. Carter AS, et al. **Semin Perinatol** 1989 Dec;13(6):474–81 (37 ref.)

Investigations of learning processes in infants. Mayes LC. **Semin Perinatol** 1989 Dec;13(6):437–49 (112 ref.)

Research on infant categorization. Reznick JS. **Semin Perinatol** 1989 Dec;13(6):458–66 (66 ref.)

Research on the sequelae of prematurity: early learning, early interventions and later outcomes. Scott DT, et al. **Semin Perinatol** 1989 Dec;13(6):495–505 (76 ref.)

The human nature of the youngest humans: prematurely born babies. Thoman EB, et al. **Semin Perinatol** 1989 Dec; 13(6):482–94 (121 ref.)

[Moral development in children] Malá E. **Cesk Psychiatr** 1989 Aug;85(4):260–4 (Eng. Abstr.) **(Cze)**

[Children facing their parents' depression] Rault A, et al. **Ann Med Psychol (Paris)** 1989 Mar–Apr;147(2):222–5 (0 ref.) **(Fre)**

[Emotional attachment in children] Soulayrol R, et al. **Ann Pediatr (Paris)** 1990 Jan;37(1):65–7 **(Fre)**

[Psychological factors and strabismus] Zenatti C, et al. **Ophtalmologie** 1989 Apr–May;3(2):164–6 (Eng. Abstr.) **(Fre)**

[Skin contact as a first experience. From touching to caressing] de Ajuriaguerra J. **Psychiatr Enfant** 1989; 32(2):325–49 (70 ref.) (Eng. Abstr.) **(Fre)**

[Mimetic desires and libidinal desires] Beal–Guarin CP. **Rev Med Suisse Romande** 1989 Oct;109(10):829–32 **(Fre)**

[Phobic symptoms in childhood] Porret JM. **Rev Med Suisse Romande** 1989 Oct;109(10):813–8 **(Fre)**

[Some findings in infant observation and the new developmental psychology] Hartkamp N. **Prax Kinderpsychol Kinderpsychiatr** 1990 Apr;39(4):120–6 (46 ref.) (Eng. Abstr.) **(Ger)**

[Infant characteristics and anger reduction] Mischkulnig M. **Z Exp Angew Psychol** 1989;36(4):567–78 (Eng. Abstr.) **(Ger)**

[Definitions and concepts in evolutive neurology (letter)] Llorens Terol J, et al. **Neurologia** 1987 May–Jun;2(3):147–8 **(Spa)**

EDUCATION

Residency training in behavioral pediatrics. Glasscock SG, et al. **J Dev Behav Pediatr** 1989 Oct;10(5):262–3

HISTORY

Child study at Clark University: 1894–1904. White SH. **J Hist Behav Sci** 1990 Apr;26(2):131–50

CHILD REACTIVE DISORDERS

DIAGNOSIS

[Reactive disorders in children: an obsolete concept?] Bettschart W, et al. **Rev Med Suisse Romande** 1989 Oct; 109(10):769–75 **(Fre)**

ETIOLOGY

[Effect of marked obesity on the emotional status of children] Malecka–Tendera E, et al. **Wiad Lek** 1989 Feb 15; 42(4):234–8 (Eng. Abstr.) **(Pol)**

PREVENTION & CONTROL

A prevention program for bereaved children. Siegel K, et al. **Am J Orthopsychiatry** 1990 Apr;60(2):168–75

PSYCHOLOGY

Styles of conflict resolution and cooperation between divorced parents: effects on child behavior and adjustment. Camara KA, et al. **Am J Orthopsychiatry** 1989 Oct; 59(4):560–75

Ongoing postdivorce conflict: effects on children of joint custody and frequent access. Johnston JR, et al. **Am J Orthopsychiatry** 1989 Oct;59(4):576–92

Immigrant children: psychiatric disorder, school performance, and service utilization. Munroe–Blum H, et al. **Am J Orthopsychiatry** 1989 Oct;59(4):510–9

Children surviving parental murder [letter; comment] McCune N, et al. **Br J Psychiatry** 1989 Jun;154:889 Comment on: Br J Psychiatry 1988 Nov;153:624–30.

Studies of the affective state in bereaved children. Cheifetz PN, et al. **Can J Psychiatry** 1989 Oct;34(7):688–92

The relationship between defenses and symptoms in adolescent psychopathology. Noam GG, et al. **J Pers Assess** 1990 Spring;54(1–2):311–27

THERAPY

Children of victims of terrorism revisited: integrating individual and family treatment approaches. Dreman S, et al. **Am J Orthopsychiatry** 1990 Apr;60(2):204–9

CHILD REARING

see related

SOCIALIZATION

Just like mommy [letter] Balk SJ. **Am J Dis Child** 1990 Oct; 144(10):1076

Poverty and early childhood parenting: toward a framework for intervention. Halpern R. **Am J Orthopsychiatry** 1990 Jan;60(1):6–18 (60 ref.)

Work in the family and employing organization. Zedeck S, et al. **Am Psychol** 1990 Feb;45(2):240–51 (125 ref.)
Early family experiences of women with bulimia and depression. Stuart GW, et al. **Arch Psychiatr Nurs** 1990 Feb;4(1):43–52
Perceived parental rearing styles of agoraphobic and socially phobic in–patients. Arrindell WA, et al. **Br J Psychiatry** 1989 Oct;155:526–35
The child–rearing values of Asian and British parents and young people: an inter–ethnic and inter–generational comparison in the evaluation of Kohn's 13 qualities. Stopes–Roe M, et al. **Br J Soc Psychol** 1990 Jun;29 (Pt 2):149–60
Acceptability of positive and punitive discipline methods: comparisons among abusive, potentially abusive, and nonabusive parents. Kelley ML, et al. **Child Abuse Negl** 1990;14(2):219–26
Behaviour management cards as a method of anticipatory guidance for parents. Showers J. **Child Care Health Dev** 1989 Nov–Dec;15(6):401–15
Parental agreement on child–rearing orientations: relations to parental, marital, family, and child characteristics. Deal JE, et al. **Child Dev** 1989 Oct;60(5):1025–34
Children's expectations of the outcomes of social strategies; relations with sociometric status and maternal disciplinary styles. Hart CH, et al. **Child Dev** 1990 Feb;61(1):127–37
Black grandmothers in multigenerational households: diversity in family structure and parenting involvement in the Woodlawn community. Pearson JL, et al. **Child Dev** 1990 Apr;61(2):434–42
Needs and technics for counseling parents of young children. Good preventive pediatrics must include attention to child behavior and parental counseling. Browder JA. **Clin Pediatr (Phila)** 1970 Oct;9(10):599–604
Marital stability throughout the child–rearing years. Heaton TB. **Demography** 1990 Feb;27(1):55–63
An examination of the differential relationship of marital discord to parents' discipline strategies for boys and girls. Dadds MR, et al. **J Abnorm Child Psychol** 1990 Apr; 18(2):121–9
Impact of diagnosed depression and self–reported mood on mothers' control strategies: a longitudinal study. Kochanska G, et al. **J Abnorm Child Psychol** 1989 Oct;17(5):493–511
Effects of maternal discipline and nurturance on toddler's behavior and affect. Pfiffner LJ, et al. **J Abnorm Child Psychol** 1989 Oct;17(5):527–40
Long–term follow–up study of cerebral palsy children and coping behaviour of parents. Hirose T, et al. **J Adv Nurs** 1990 Jul;15(7):762–70
Determinants of maternal child–rearing attitudes. Rauh VA, et al. **J Am Acad Child Adolesc Psychiatry** 1990 May; 29(3):375–81
Cross–cultural patterns in the training of children: an evolutionary perspective. Low BS. **J Comp Psychol** 1989 Dec;103(4):311–9
Parenting behaviors of homosexual and heterosexual fathers. Bigner JJ, et al. **J Homosex** 1989;18(1–2):173–86
Genitalia in human figure drawings: childrearing practices and child sexual abuse. Hibbard RA, et al. **J Pediatr** 1990 May;116(5):822–8
Parenthood and practice. Scanlon AT. **N Y State J Med** 1990 Jun;90(6):326–7
Grandmothers' responsibility in raising two–year olds facilitates their grandchildren's adaptive behavior: a preliminary intrafamilial investigation of mothers' and maternal grandmothers' effects. Tomlin AM, et al. **Psychol Aging** 1989 Mar;4(1):119–21
Cross–national generalizability of dimensions of perceived parental rearing practices: Hungary and The Netherlands; a correction and repetition with healthy adolescents. Arrindell WA, et al. **Psychol Rep** 1989 Dec;65(3 Pt 2):1079–88
Perceived parental inconsistency as a factor in the emotional development of behaviour–disordered children. Brand HJ, et al. **Psychol Rep** 1990 Apr;66(2):620–2
Use of the Adjective Generation Technique to measure effects of training parents. Peters CL, et al. **Psychol Rep** 1989 Dec;65(3 Pt 2):1216–8
Child–rearing—a task for fathers as well as mothers. Paltiel FL. **World Health Forum** 1989;10(2):249–57
["Better parenthood"—child rearing behavior of mothers with handicapped children and their evaluation by specialists] Krause MP. **Prax Kinderpsychol Kinderpsychiatr** 1989 Oct;38(8):283–8 (Eng. Abstr.) (Ger)
[Perceived child rearing behavior by juvenile diabetics at the time of puberty] Wisiak UV, et al. **Prax Kinderpsychol Kinderpsychiatr** 1989 Dec;38(10):354–7 (Eng. Abstr.) (Ger)
[How did things go? Results and conclusions of follow–up of one year's clients] Zürn H, et al. **Prax Kinderpsychol Kinderpsychiatr** 1990 May–Jun; 39(5):185–90 (Eng. Abstr.) (Ger)
[Effect of the parental home on the oral health status of children] Schneider HG, et al. **Z Gesamte Hyg** 1989 Sep; 35(9):523–6 (Eng. Abstr.) (Ger)
[Child rearing without callousness and physical punishment?] Strunk P. **Z Kinder Jugendpsychiatr** 1990 Jun;18(2):59–60 (Ger)

ETHNOLOGY

Playwork as a tool in the socialization of an Inuit child. Briggs JL. **Arctic Med Res** 1990 Jan;49(1):34–8
Union patterns and children's living arrangements in Latin America. Richter K. **Demography** 1988 Nov;25(4):553–66

PSYCHOLOGY

Child development knowledge, childrearing attitudes, and social support among first– and second–time adolescent mothers. Seymore C, et al. **J Adolesc Health Care** 1990 Jul;11(4):343–50
Autocratic vs. democratic child rearing practices: an example of second–order change. Kern RM, et al. **J Individ Psychol** 1977 Nov;33(2):223–31
Single parents: interaction of parenting and sexual issues. Darling CA, et al. **J Sex Marital Ther** 1989 Winter; 15(4):227–45
[Effects of the transformation of parental roles on the development of the child's personality] Le Camus J, et al. **Psychiatr Enfant** 1989;32(1):31–54 (Eng. Abstr.) (Fre)

CHILD SPACING see **BIRTH INTERVALS**

CHILD WELFARE

see related
FOSTER HOME CARE

Who is breast–feeding? Implications of associated social and biomedical variables for research on the consequences of method of infant feeding. Ford K, et al. **Am J Clin Nutr** 1990 Sep;52(3):451–6
Response to the presidential address: Our children: our future. Benedek EP. **Am J Psychiatry** 1990 Sep; 147(9):1120–5
A litany for change. Waldman HB. **ASDC J Dent Child** 1990 May–Jun;57(3):194–7
Child sexual abuse: factors affecting victims' removal from home. Pellegrin A, et al. **Child Abuse Negl** 1990;14(1):53–60
Can we protect children from abuse? A review of three cases. Hansen CM, et al. **Child Welfare** 1989 Nov–Dec; 68(6):615–21
Responsibility and management strategies in child sexual abuse: a comparison of child protective workers, nurses, and police officers. Kelley SJ. **Child Welfare** 1990 Jan–Feb; 69(1):43–51
Children with developmental disabilities in the child welfare system: a national survey. Richardson M, et al. **Child Welfare** 1989 Nov–Dec;68(6):605–13
Child labour, adult literacy and employment rates in India. Raju TN. **Indian J Pediatr** 1989 Mar–Apr;56(2):193–200
Workshop on child labour. **Indian Pediatr** 1990 Jan; 27(1):67–71
Child labor. Banerjee SR. **Indian Pediatr** 1990 Jan;27(1):3–6
Growing up healthy: how are we doing? [editorial] Marino RV. **J Am Osteopath Assoc** 1989 Sep;89(9):1122, 1124, 1129
Race, consanguinity and social features in Birmingham babies: a basis for prospective study. Bundey S, et al. **J Epidemiol Community Health** 1990 Jun;44(2):130–5
Health for all children by the year 2000. Buck AE. **Med War** 1989 Oct–Dec;5(4):205–6
Concerns in child welfare, developmental disabilities, and HIV infection. Spitzborg R. **Ment Retard** 1989 Aug; 27(4):239–40
Children of divorce: recent findings regarding long–term effects and recent studies of joint and sole custody. Wallerstein JS, et al. **Pediatr Rev** 1990 Jan;11(7):197–204
[The child at risk in modern society] Dunovský J, et al. **Cas Lek Cesk** 1990 Jun 1;129(22):673–7 (Eng. Abstr.) (Cze)
[Health and educational problems in nature schools] Pelech L, et al. **Cesk Pediatr** 1989 Sep;44(9):558–61 (Cze)
[Children's life conditions must be improved (editorial)] Jespersen I. **Ugeskr Laeger** 1989 Nov 20;151(47):3137 (Dan)
[Life conditions of families with children in the Municipality of Copenhagen. 1. A description based on registered data] Liebach B, et al. **Ugeskr Laeger** 1989 Nov 20; 151(47):3144–7 (Eng. Abstr.) (Dan)
[Life conditions of families with children in the Municipality of Copenhagen. 2. Life conditions distributed in social districts] Liebach B, et al. **Ugeskr Laeger** 1989 Nov 20; 151(47):3148–51 (Eng. Abstr.) (Dan)
[Observations on the collaboration between the Psychosocial Service and the Cantonal Office of Minors derived from common situations] Wildhaber L. **Rev Med Suisse Romande** 1990 Jan;110(1):49–52 (Fre)
[Guidelines for parents and caretakers responsible for the health conditions at child care centers] Costa Bou X. **An Esp Pediatr** 1990 Jan;32(1):63–7 (34 ref.) (Spa)
[Child abuse and custody disputes: when should the caregiver report the case to police and social services, and when is there an obligation to do so?] Persson L. **Lakartidningen** 1990 Feb 21;87(8):538, 543 (Swe)

ECONOMICS

Costs and effectiveness of interventions in child maltreatment. Dubowitz H. **Child Abuse Negl** 1990; 14(2):177–86 (21 ref.)
Patterns of take–up of the Family Fund, the characteristics of eligible non–claimants and the reasons for not claiming. Lawton D, et al. **Child Care Health Dev** 1990 Jan–Feb; 16(1):35–53

HISTORY

The plight of deprived children: a lingering problem in American democracy. Bloch H. **J Natl Med Assoc** 1990 Feb;82(2):119, 123–4
The orphan trains. Fried R. **Ohio Med** 1990 Jun;86(6):474–6
[The history of social pediatrics in Ostrava] Březina Z. **Cas Lek Cesk** 1990 Jun 1;129(22):698–700 (Cze)
[History and activities of the Association of Children's Friends. II.] Winkiel W. **Pediatr Pol** 1989 Aug–Sep; 64(8–9):583–90 (Pol)
[History and activities of the Children's Friends' Association] Winkiel W. **Pediatr Pol** 1989 Jul;64(7):513–7 (Pol)

LEGISLATION & JURISPRUDENCE

Custody after divorce: demographic and attitudinal patterns. Pearson J, et al. **Am J Orthopsychiatry** 1990 Apr; 60(2):233–49 (63 ref.)
Tarasoff and threats of patricide by a 9–year–old boy [letter] Myers WC, et al. **Am J Psychiatry** 1990 Apr;147(4):535–6
Child labor in 1990: prevalence and health hazards. Pollack SH, et al. **Annu Rev Public Health** 1990;11:359–75 (48 ref.)
A study of families in high–conflict custody disputes: effects of psychiatric evaluation. Simons VA, et al. **Bull Am Acad Psychiatry Law** 1990;18(1):85–97
Advocacy: linking the political forces to achieve program success. Weill JD. **Bull N Y Acad Med** 1989 Mar; 65(3):413–8
Examining the needs of youth in secure custody: why we need to "recreate the wheel" in Canadian juvenile justice. Leschied AW, et al. **Can J Psychiatry** 1989 Oct;34(7):675–9
Child sexual abuse: who goes home? Jaudes PK, et al. **Child Abuse Negl** 1990;14(1):61–8
Whatever happened to Mary Ellen? Lazoritz S. **Child Abuse Negl** 1990;14(2):143–9
The extent, nature, and validity of sexual abuse allegations in custody/visitation disputes. Thoennes N, et al. **Child Abuse Negl** 1990;14(2):151–63
Keeping children on top of the states' policy agendas. Scales P, et al. **Child Welfare** 1990 Jan–Feb;69(1):23–32
Outcome study of protective services: comparison of interviews and records as data sources. Shireman JF, et al. **Child Welfare** 1990 Mar–Apr;69(2):167–79
A French homunculus in a Tennessee court. Annas GJ. **Hastings Cent Rep** 1989 Nov–Dec;19(6):20–2
Resolving disputes over frozen embryos. Robertson JA. **Hastings Cent Rep** 1989 Nov–Dec;19(6):7–12
Juvenile Justice Act—a comprehensive approach towards justice for children. Das A. **Indian J Pediatr** 1989 Sep–Oct; 56(5):562–7
The law and the nonlegal professionals: on decision–making by medical doctors and social workers. Andenaes K. **Int J Law Psychiatry** 1989;12(4):263–74
A custody and placement evaluation of an infant with a psychotic, mentally retarded mother [clinical conference] Volkmar FR, et al. **J Am Acad Child Adolesc Psychiatry** 1990 Jul;29(4):661–6
Child abuse reporting in South Carolina, 1975–1987 [see comments] Mader TJ. **J S C Med Assoc** 1990 Mar; 86(3):133–7 Comment in: J S C Med Assoc 1990 Mar;86(3):173–4.
Child abuse: new perspectives [editorial; comment] Porter RC. **J S C Med Assoc** 1990 Mar;86(3):173–4 Comment on: J S C Med Assoc 1990 Mar;86(3):133–7.
Pregnancy & drugs. Physicians face new testing and reporting law. Jopke T. **Minn Med** 1990 Apr;73(4):29–32
(Mis)understanding Cleveland: foundational issues and the sexual abuse of children. Kessel R. **Paediatr Perinat Epidemiol** 1989 Oct;3(4):347–52
Validity of a child interview measure of attachment as used in child custody evaluations. Marcus RF, et al. **Percept Mot Skills** 1990 Jun;70(3 Pt 1):1043–54
[Aspects of family–oriented diagnosis in compulsory legal family expert assessment] Mladek G, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1990 Jun; 42(6):356–63 (Eng. Abstr.) (Ger)
[Pediatric management from the legal viewpoint (2)] Breunung M, et al. **Z Arztl Fortbild (Jena)** 1989; 83(14):737–41 (21 ref.) (Ger)

TRENDS

Child health in circumpolar areas. Bain HW. **Arctic Med Res** 1988;47 Suppl 1:504–9
Moving child abuse and neglect prevention programs forward: improving program evaluations. Fink A, et al. **Child Abuse Negl** 1990;14(2):187–206 (31 ref.)
Families on Welfare foster children with special needs. Myers MG. **Child Today** 1989 Jul–Aug;18(4):6–9, 29
[The needs of a child from the social pediatric viewpoint] Dunovský J, et al. **Padiatr Grenzgeb** 1989;28(4):213–7 (Eng. Abstr.) (Ger)
[Are children facing a better future?] Sjölin S. **Lakartidningen** 1990 Mar 28;87(13):1033–4 (Swe)

CHILDBIRTH see **LABOR**

CHILDHOOD SCHIZOPHRENIA see **SCHIZOPHRENIA, CHILDHOOD**

CHILOMASTIX see **MASTIGOPHORA**

CHIMERA

Association of pigmentary anomalies with chromosomal and genetic mosaicism and chimerism [letter; comment] Read AP, et al. **Am J Hum Genet** 1990 Jul;47(1):166–8 Comment on: Am J Hum Genet 1989 Aug;45(2):193–205.

The occurrence of mouse–type oligosaccharides in mouse–human chimeric immunoglobulin G. Matsui T, et al. **Biochem Biophys Res Commun** 1989 Oct 16; 164(1):245–50

A novel strategy for producing chimeric bispecific antibodies by gene transfection. Songsivilai S, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):271–6

Construction, expression, and preliminary characterization of chimeric class mu glutathione S–transferases with altered catalytic properties. Zhang PH, et al. **Biopolymers** 1990 Jan;29(1):159–69

The type of chimerism after allogeneic bone marrow transplantation as detected by isoenzymatic polymorphism. Grahovac B, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 3:93–4

Restriction fragment length polymorphism analysis with a cross–reactive HLA class II DR–beta gene probe for the detection of engraftment of MHC–mismatched marrow in the rhesus monkey. Moses RD, et al. **Bone Marrow Transplant** 1989 Sep;4(5):475–81

Origin of marrow stromal cells and haemopoietic chimaerism following bone marrow transplantation determined by in situ hybridisation. Athanasou NA, et al. **Br J Cancer** 1990 Mar;61(3):385–9

Chimaerism following allogeneic bone marrow transplantation: detection of residual host cells using the polymerase chain reaction. Lawler M, et al. **Br J Haematol** 1989 Oct;73(2):205–10

High level, regulated expression of the chimeric P–enolpyruvate carboxykinase (GTP)–bacterial O6–alkylguanine–DNA alkyltransferase (ada) gene in transgenic mice. Lim IK, et al. **Cancer Res** 1990 Mar 15; 50(6):1701–8

Chimeric immunoglobulin–T cell receptor proteins form functional receptors: implications for T cell receptor complex formation and activation. Goverman J, et al. **Cell** 1990 Mar 23;60(6):929–39

Treatment of donor cells with L–leucyl–L–leucine methyl ester prevents induction of graft–vs–host–like reaction in [lpr/lpr——+/+] chimera. Okuyama H, et al. **Clin Immunol Immunopathol** 1990 Jan;54(1):26–39

Expression of the homeobox Chick–en gene in chick/quail chimeras with inverted mes–metencephalic grafts. Martinez S, et al. **Dev Biol** 1990 Jun;139(2):432–6

Effects of the lethal yellow (Ay) mutation in mouse aggregation chimeras. Barsh GS, et al. **Development** 1990 Jul;109(3):683–90

XY follicle cells in ovaries of XX——XY female mouse chimaeras. Burgoyne PS, et al. **Development** 1988 Dec; 104(4):683–8

Head morphogenesis in embryonic avian chimeras: evidence for a segmental pattern in the ectoderm corresponding to the neuromeres. Couly G, et al. **Development** 1990 Apr; 108(4):543–58

Systematic elimination of parthenogenetic cells in mouse chimeras. Fundele R, et al. **Development** 1989 May; 106(1):29–35

Systematic non–uniform distribution of parthenogenetic cells in adult mouse chimaeras. Nagy A, et al. **Development** 1989 Jun;106(2):321–4

Implants of quail thymic epithelium generate permanent tolerance in embryonically constructed quail/chick chimeras. Ohki H, et al. **Development** 1988 Dec; 104(4):619–30

Postnatal development of parthenogenetic in equilibrium with fertilized mouse aggregation chimeras. Paldi A, et al. **Development** 1989 Jan;105(1):115–8

Production of somatic and germline chimeras in the chicken by transfer of early blastodermal cells. Petitte JN, et al. **Development** 1990 Jan;108(1):185–9

Intermolecular transphosphorylation between insulin receptors and EGF–insulin receptor chimerae. Ballotti R, et al. **EMBO J** 1989 Nov;8(11):3303–9

Development of chimaeric two–cell mouse embryos produced by allogenic exchange of single nucleus from two– and eight–cell embryos. Kono T, et al. **Gamete Res** 1989 Dec;24(4):375–84

Introns in the 3'–untranslated region can inhibit chimeric CAT and beta–galactosidase gene expression. Evans MJ, et al. **Gene** 1989 Dec 7;84(1):135–42

Genetically engineered (chimeric) antibodies. Morrison SL. **Hosp Pract [Off]** 1989 Oct 15;24(10):65–9, 72–4, 77–80

Donor and recipient specific tolerance in cells from semi–allogeneic, H–2 subregion compatible or fully allogeneic bone marrow chimeras attributable to clonal deletion. Onoé K, et al. **Immunobiology** 1989 Jun; 179(2–3):172–89

Lymphoid cell transfers between adult C57BL/6 mice differing at the lpr and/or nu locus. Humoral immunity phenotype of the chimeras. Jachez B, et al. **Immunology** 1989 Oct;68(2):169–74

Introduction of guest peptides into Escherichia coli alkaline phosphatase. Excision and purification of a dynorphin analogue from an active chimeric protein. Freimuth PI, et al. **J Biol Chem** 1990 Jan 15;265(2):896–901

Expression of chimeric cDNAs in cell culture defines a region of UDP glucuronosyltransferase involved in substrate selection. Mackenzie PI. **J Biol Chem** 1990 Feb 25;265(6):3432–5

Localization of residues that confer antibody binding specificity using human chorionic gonadotropin/luteinizing hormone beta subunit chimeras and mutants. Moyle WR, et al. **J Biol Chem** 1990 May 25;265(15):8511–8

Chimeric muscarinic cholinergic: beta–adrenergic receptors that activate Gs in response to muscarinic agonists. Wong SK, et al. **J Biol Chem** 1990 Apr 15;265(11):6219–24

Mutagenesis and chimeric genes define determinants in the beta subunits of human chorionic gonadotropin and lutropin for secretion and assembly. Matzuk MM, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1429–38

Characterization of a human T cell–specific chimeric antibody (CD7) with human constant and mouse variable regions. Heinrich G, et al. **J Immunol** 1989 Dec 1; 143(11):3589–97

A chimeric mouse–human antibody that retains specificity for HIV gp120 and mediates the lysis of HIV–infected cells. Liou RS, et al. **J Immunol** 1989 Dec 15;143(12):3967–75

Analysis of the structure–function relationship of tumour necrosis factor. Human/mouse chimeric TNF proteins: general properties and epitope analysis. Tavernier J, et al. **J Mol Biol** 1990 Jan 20;211(2):493–501

Extragonadal teratocarcinoma derived from embryonal stem cells in chimaeric mice. Hardy K, et al. **J Pathol** 1990 Jan; 160(1):71–6

Alternative homologous and nonhomologous products arising from intramolecular recombination. Frappier D, et al. **J Virol** 1990 Oct;64(10):5058–65

Improved embryo adhesion method for rat chimera production. Yamashita T, et al. **Lab Anim Sci** 1989 Sep; 39(5):446–8

Production and properties of chimeric antibody molecules. Shin SU, et al. **Methods Enzymol** 1989;178:459–76

Regulation of chimeric phosphoenolpyruvate carboxykinase genes by the trans–dominant locus TSE1. Thayer MJ, et al. **Mol Cell Biol** 1990 Jun;10(6):2660–8

Cell allocation in mammalian CNS formation: evidence from murine interspecies aggregation chimeras. Goldowitz D. **Neuron** 1989 Dec;3(6):705–13

Neuronal expression of chimeric genes in transgenic mice. Russo AF, et al. **Neuron** 1988 Jun;1(4):311–20

Construction of recombinant DNA molecules by the use of a single stranded DNA generated by the polymerase chain reaction: its application to chimeric hepatitis A virus/poliovirus subgenomic cDNA. Wychowski C, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):913–8

Expression and secretion of aequorin as a chimeric antibody by means of a mammalian expression vector. Casadei J, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2047–51

Altering enzymatic activity: recruitment of carboxypeptidase activity into an RTEM beta–lactamase/penicillin–binding protein 5 chimera. Chang YH, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2823–7

Homologous recombination in hybridoma cells: heavy chain chimeric antibody produced by gene targeting. Fell HP, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8507–11

Expression of immunoglobulin–T–cell receptor chimeric molecules as functional receptors with antibody–type specificity. Gross G, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10024–8

Expression of 12 rabbit IgA C alpha genes as chimeric rabbit–mouse IgA antibodies. Schneiderman RD, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7561–5

Transfection of beta–casein chimeric gene and hormonal induction of its expression in primary murine mammary epithelial cells. Yoshimura M, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3670–4

Grafts of the bursal primordium in quail—chick chimeras are tolerated after implantation of thymic epithelium. Corbel C, et al. **Prog Clin Biol Res** 1989;307:31–43

Allogeneic versus semiallogeneic F1 bone marrow transplantation into sublethally irradiated MHC–disparate hosts. Effects on mixed lymphoid chimerism, skin graft tolerance, host survival, and alloreactivity. Pierce GE. **Transplantation** 1990 Jan;49(1):138–44

Construction of novel viroid chimeras containing portions of tomato apical stunt and citrus exocortis viroids. Owens RA, et al. **Virology** 1990 Mar;175(1):238–46

[Man–nude mouse tissue chimera: characterization of cell population by in situ hybridization] Plenat F, et al. **C R Acad Sci [III]** 1989;310(3):53–9 (Eng. Abstr.) **(Fre)**

[Early development of the thymus–dependent cells attributable to recipient micro–environment in bone marrow chimera mice] Iwabuchi C. **Hokkaido Igaku Zasshi** 1989 Nov;64(6):777–91 (Eng. Abstr.) **(Jpn)**

GENETICS

The production of mouse fetal–placental chimeras using trisomy 16 and euploid blastocysts. Bogart MH, et al. **Anat Embryol (Berl)** 1990;181(2):137–47

Cytogenetic analysis of chimerism and leukemia relapse in chronic myelogenous leukemia patients after T cell–depleted bone marrow transplantation. Offit K, et al. **Blood** 1990 Mar 15;75(6):1346–55

Mixed chimerism after allogeneic bone marrow transplantation for leukemias. Bertheas MF, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:61–3

Chimerism studies using in situ hybridization for the Y chromosome after T cell–depleted bone marrow transplantation. Przepiorka D, et al. **Bone Marrow Transplant** 1990 Apr;5(4):253–7

Purkinje cell loss is due to a direct action of the weaver gene in Purkinje cells: evidence from chimeric mice. Smeyne RJ, et al. **Brain Res Dev Brain Res** 1990 Mar 1; 52(1–2):211–8

Cell lineage analyses of epithelia and blood vessels in chimeric mouse embryos by use of an embryonic stem cell line expressing the beta–galactosidase gene. Kadokawa Y, et al. **Cell Differ Dev** 1990 Mar;29(3):187–94

Comparison of epidermal patch size in X–chromosome–linked mosaic and dizygotic chimeric mice. Ng YK, et al. **Cell Differ Dev** 1990 Apr;30(1):27–34

A mouse embryonic stem cell line showing pluripotency of differentiation in early embryos and ubiquitous beta–galactosidase expression. Suemori H, et al. **Cell Differ Dev** 1990 Mar;29(3):181–6

Six separate sex chromosome anomalies in an Arabian mare. Klunder LR, et al. **Equine Vet J** 1990 May;22(3):218–20

When is a filly not a filly? [editorial; comment] Leadon DP. **Equine Vet J** 1990 May;22(3):149 Comment on: Equine Vet J 1990 May;22(3):211–4.

Diploid–triploid chimaerism (64, XX/96,XXY) in an intersex foal [see comments] Power MM, et al. **Equine Vet J** 1990 May;22(3):211–4 Comment in: Equine Vet J 1990 May;22(3):149.

Dispermic chimera associated with dysgerminoma. Takizawa H, et al. **Exp Clin Immmunogenet** 1989;6(2):133–42

Double fertilization in vitro and the origin of human chimerism. Van de Leur SJ, et al. **Fertil Steril** 1990 Sep; 54(3):539–40

Fetal blood sampling demonstrating cnimerism in monozygotic twins discordant for sex and tissue karyotype (46,XY and 45,X). Gonsoulin W, et al. **Prenat Diagn** 1990 Jan;10(1):25–8

Chimeras of the Gs alpha subunit that had the NH2– or COOH–terminal sequence substituted for the corresponding region of the Gi alpha subunit constitutively activate adenylyl cyclase. Heasley LE, et al. **Soc Gen Physiol Ser** 1990;45:117–24

Pseudogenes, chimaeric genes and the timing of antigen variation in African trypanosomes. Pays E. **Trends Genet** 1989 Dec;5(12):389–91 (21 ref.)

[Chimerism pattern following allogeneic bone marrow transplantation; a retrospective study of the connection with post–transplantation complications] Vlieger AM, et al. **Ned Tijdschr Geneeskd** 1990 May 5;134(18):908–13 (Eng. Abstr.) **(Dut)**

[Chimeras in the study of the mammalian nervous system] Hanaoka K. **Tanpakushitsu Kakusan Koso** 1990 May;35(7 Suppl):1197–205 **(Jpn)**

[Mutant gene expression in mouse aggregation chimeras. 8. The effect of the white gene on coat pigmentation] Malinina NA, et al. **Ontogenez** 1989 Sep–Oct;20(5):478–85 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

A rare case of embryonic chimerism in human twins. Osińska M, et al. **Arch Immunol Ther Exp (Warsz)** 1971;19(5):657–65

A case of chimerism in an erythrocytic enzyme group system. Schlesinger D, et al. **Arch Immunol Ther Exp (Warsz)** 1971; 19(5):675–8

Increased expression of Ia antigens on B cells after neonatal induction of lymphoid chimerism in mice: role of interleukin 4. Abramowicz D, et al. **Eur J Immunol** 1990 Mar;20(3):469–76

Cyclophosphamide–induced chimera–type tolerance to allografts: an overview of drug–induced immunological tolerance. Mayumi H, et al. **Fukuoka Igaku Zasshi** 1990 Jan;81(1):20–39 (212 ref.)

Adoptive transfer of viable motheaten humoral autoimmunity in cyclophosphamide–immunodepressed beige recipient mice. Kuntz L, et al. **Immunology** 1990 Aug;70(4):520–6

A homing receptor–IgG chimera as a probe for adhesive ligands of lymph node high endothelial venules. Watson SR, et al. **J Cell Biol** 1990 Jun;110(6):2221–9

Successful bone marrow transplantation with split lymphoid chimerism in DiGeorge syndrome. Borzy MS, et al. **J Clin Immunol** 1989 Sep;9(5):386–92

Specific tolerance induction across a xenogeneic barrier: production of mixed rat/mouse lymphohematopoietic chimeras using a nonlethal preparative regimen. Sharabi Y, et al. **J Exp Med** 1990 Jul 1;172(1):195–202

Determination of mixed chimerism by a simple flow cytometry method. Leenarets PL, et al. **J Immunol Methods** 1990 Jul 3;130(2):163–9

In vitro and in vivo properties of human/mouse chimeric monoclonal antibody specific for common acute lymphocytic leukemia antigen. Saga T, et al. **J Nucl Med** 1990 Jun;31(6):1077–83

Clonal deletion: a mechanism of tolerance in mixed bone marrow chimeras. Yu JC, et al. **J Surg Res** 1990 Jun; 48(6):517–22

PHYSIOLOGY

Modification of strain–specific femoral bone density by bone marrow chimerism in mice: a study on the spontaneously osteoporotic mouse (SAM–P/6). Tsuboyama T, et al. **Bone** 1989;10(4):269–77

Do CNS anlagen have plasticity in differentiation? Analysis

in quail–chick chimera. Nakamura H. **Brain Res** 1990 Mar 12;511(1):122–8

Rat granulated metrial gland cells differentiate in pregnant chimeric mice and may be cytotoxic for mouse trophoblast. Peel S, et al. **Cell Differ Dev** 1989 Oct;28(1):55–64

Regeneration of a chimeric retina from single cells in vitro: cell–lineage–dependent formation of radial cell columns by segregated chick and quail cells. Layer PG, et al. **Cell Tissue Res** 1990 Feb;259(2):187–98

The contribution made by cells from a single somite to tissues within a body segment and assessment of their integration with similar cells from adjacent segments. Bagnall KM, et al. **Development** 1989 Dec;107(4):931–43

Temporal and spatial selection against parthenogenetic cells during development of fetal chimeras. Fundele RH, et al. **Development** 1990 Jan;108(1):203–11

Fractal geometry in mosaic organs: a new interpretation of mosaic pattern. Iannaccone PM. **FASEB J** 1990 Mar; 4(5):1508–12

Synapse formation on quail trochlear neurons transplanted in duck embryos before naturally occurring motor neuron death. Sohal GS, et al. **Int J Dev Neurosci** 1990;8(1):9–16

Numerical matching between granule and Purkinje cells in lurcher chimeric mice: a hypothesis for the trophic rescue of granule cells from target–related cell death. Vogel MW, et al. **J Neurosci** 1989 Oct;9(10):3454–62

Probabilistic division systems modeling the generation of mosaic fields [published erratum appears in J Theor Biol 1990 Mar 22;143(2):285] Iannaccone PM, et al. **J Theor Biol** 1989 Dec 7;141(3):363–77

CHIMERA, RADIATION see **RADIATION CHIMERA**

CHIMPANSEE TROGLODYTES

Trauma, degenerative disease, and other pathologies among the Gombe chimpanzees. Jurmain R. **Am J Phys Anthropol** 1989 Oct;80(2):229–37

Dental pathologies in ten free–ranging chimpanzees from Gombe National Park, Tanzania. Kilgore L. **Am J Phys Anthropol** 1989 Oct;80(2):219–27

Mortality of wild and captive chimpanzees. Courtenay J, et al. **Folia Primatol (Basel)** 1989;52(3–4):167–77

An epizootic of whooping cough among chimpanzees in a zoo. Gustavsson OE, et al. **Folia Primatol (Basel)** 1990; 55(1):45–50

Sialolithiasis in two chimpanzees. Orkin JL, et al. **J Am Vet Med Assoc** 1990 May 15;196(10):1651–3

Rigid plastic balls as enrichment devices for captive chimpanzees. Bloomsmith MA, et al. **Lab Anim Sci** 1990 May;40(3):319–22

Megaloblastic anemia in a handreared chimpanzee. Vié JC, et al. **Lab Anim Sci** 1989 Nov;39(6):613–5

Apparent false positive reaction to intradermal tuberculin test in a chimpanzee [letter] Shannon D. **Vet Rec** 1990 Jan 13; 126(2):45

[Disease of the laryngeal sacs (sacci laryngis) in a pygmy chimpanzee (Pan paniscus)] Rietschel W, et al. **Tierarztl Prax** 1989;17(3):323–6 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

Position and orientation of the foramen magnum in higher primates. Luboga SA, et al. **Am J Phys Anthropol** 1990 Jan;81(1):67–76

Morphology of synapses at the base of hair cells in the organ of Corti of the chimpanzee. Nadol JB Jr, et al. **Ann Otol Rhinol Laryngol** 1990 Mar;99(3 Pt 1):215–20

Intracytoplasmic crystalline inclusions in the hepatocytes of humans and chimpanzees. Schaff Z, et al. **Ultrastruct Pathol** 1990 Jul–Aug;14(4):303–9

BLOOD

Complexity of the Rh antigen demonstrated by comparative tests using antisera of human and primate origins. Socha WW, et al. **Exp Clin Immunogenet** 1989;6(2):150–5

The fibrinolytic potential of the normal primate following the generation of thrombin in vivo. Giles AR, et al. **Thromb Haemost** 1990 Jun 28;63(3):476–81

GENETICS

Multiple restriction fragment length polymorphisms associated with the Vc determinant of the MN blood group–related chimpanzee V–A–B–D system. Rearden A, et al. **Biochem Genet** 1990 Apr;28(3–4):223–31

Remodelling the involucrin gene and why we are not chimps. Dover GA. **Bioessays** 1990 May;12(5):241–3 (18 ref.)

Organization of the chimpanzee C4–CYP21 region: implications for the evolution of human genes. Kawaguchi H, et al. **Eur J Immunol** 1990 Apr;20(4):739–45

Shared class II MHC polymorphisms between humans and chimpanzees. Fan WM, et al. **Hum Immunol** 1989 Oct; 26(2):107–21

A statistical test that supports a human/chimpanzee clade based on noncoding DNA sequence data. Williams SA, et al. **Mol Biol Evol** 1989 Jul;6(4):325–30

Vectorial expansion of the involucrin gene and the relatedness of the hominoids. Djian P, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8447–51

IMMUNOLOGY

Diagnosis of inhalant allergy in a chimpanzee using "in vivo" and "in vitro" tests. Halpern GM, et al. **Allergol Immunopathol (Madr)** 1989 Sep–Oct;17(5):271–6

HIV–infected humans, but not chimpanzees, have circulating cytotoxic T lymphocytes that lyse uninfected CD4+ cells. Zarling JM, et al. **J Immunol** 1990 Apr 15;144(8):2992–8

Further studies of 48–1 antigen in serial liver biopsies from chimpanzees infected with hepatitis delta virus. Sugitani M, et al. **J Med Virol** 1990 Jun;31(2):148–54

Challenge of chimpanzees (Pan troglodytes) immunized with human immunodeficiency virus envelope glycoprotein gp120. Arthur LO, et al. **J Virol** 1989 Dec;63(12):5046–53

Synthetic peptides define the fine specificity of the human immunodeficiency virus (HIV) gp160 humoral immune response in HIV type 1–infected chimpanzees. Warren RQ, et al. **J Virol** 1990 Feb;64(2):486–92

INJURIES

Use of an oral sedative for immobilisation of a chimpanzee (Pan troglodytes). Knottenbelt MK, et al. **Vet Rec** 1990 Apr 21;126(16):404

MICROBIOLOGY

Isolation and partial characterization of an HIV–related virus occurring naturally in chimpanzees in Gabon. Peeters M, et al. **AIDS** 1989 Oct;3(10):625–30

In vitro replication and expression of hepatitis B virus from chronically infected primary chimpanzee hepatocytes. Jacob JR, et al. **Hepatology** 1989 Dec;10(6):921–7

Antibody–mediated in vitro neutralization of human immunodeficiency virus type 1 abolishes infectivity for chimpanzees. Emini EA, et al. **J Virol** 1990 Aug; 64(8):3674–8

In vitro susceptibility of T lymphocytes from chimpanzees (Pan troglodytes) to human herpesvirus 6 (HHV–6): a potential animal model to study the interaction between HHV–6 and human immunodeficiency virus type 1 in vivo. Lusso P, et al. **J Virol** 1990 Jun;64(6):2751–8

HIV–1 origins. A finger on the missing link [news; comment] Desrosiers RC. **Nature** 1990 May 24;345(6273):288–9 Comment on: Nature 1990 May 24;345(6273):356–9.

Genetic organization of a chimpanzee lentivirus related to HIV–1 [see comments] Huet T, et al. **Nature** 1990 May 24;345(6273):356–9 Comment in: Nature 1990 May 24;345(6273):288–9.

[Primates in the study of hepatitis viruses] Pillot J. **Pathol Biol (Paris)** 1990 Mar;38(3):177–81 (Eng. Abstr.) **(Fre)**

PARASITOLOGY

Infection of chimpanzees with the Uganda I/CDC strain of Plasmodium malariae. Collins WE, et al. **Am J Trop Med Hyg** 1990 Feb;42(2):99–103

The presence of pinworms (Enterobius sp.) in the mesenteric lymph nodes, liver and lungs of a chimpanzee, Pan troglodytes. Zhang GW, et al. **J Helminthol** 1990 Mar; 64(1):29–34

PHYSIOLOGY

A qualitative and quantitative analysis of the activation and inactivation of protein C in vivo in a primate model. Hoogendoorn H, et al. **Blood** 1990 Jun 1;75(11):2164–71

Acquisition of fertilizing capacity by chimpanzee sperm. Gould KG, et al. **Folia Primatol (Basel)** 1990;54(1–2):105–8

Form perception and visual acuity in a chimpanzee. Matsuzawa T. **Folia Primatol (Basel)** 1990;55(1):24–32

[Behavioral instrumental reactions and the heart rhythm in chimpanzees with different rates of approach to a natural food stimulus] Syrenskiĭ VI, et al. **Zh Vyssh Nerv Deiat** 1990 Mar–Apr;40(2):369–71 **(Rus)**

PSYCHOLOGY

Infant chimpanzees spontaneously perceive both concrete and abstract same/different relations. Oden DL, et al. **Child Dev** 1990 Jun;61(3):621–31

Conspecific screams and laughter: cardiac and behavioral reactions of infant chimpanzees. Berntson GG, et al. **Dev Psychobiol** 1989 Dec;22(8):771–87

Tool use and tool making in wild chimpanzees. Boesch C, et al. **Folia Primatol (Basel)** 1990;54(1–2):86–99

Chimpanzee use of a tool–set to get honey. Brewer SM, et al. **Folia Primatol (Basel)** 1990;54(1–2):100–4

A case of lethal infant abuse in an established group of chimpanzees. Spijkerman RP, et al. **Folia Primatol (Basel)** 1990;55(1):41–4

Peer interaction in infant chimpanzees. Tomasello M, et al. **Folia Primatol (Basel)** 1990;55(1):33–40

SURGERY

Inguinal hernial surgery in an infant chimpanzee. Taylor AF, et al. **J Med Primatol** 1989;18(5):415–7

CHIMPANZEE see **CHIMPANSEE TROGLODYTES**

CHIMPANZEE CORYZA AGENT see **RESPIRATORY SYNCYTIAL VIRUSES**

CHIMPANZEE RETROVIRUSES see **SIMIAN RETROVIRUSES**

CHIN

A localized, recurrent pustular eruption following amoxycillin administration. Shuttleworth D. **Clin Exp Dermatol** 1989 Sep;14(5):367–8

Early secondary bone grafting of alveolar cleft defects. A comparison between chin and rib grafts. Borstlap WA, et al. **J Craniomaxillofac Surg** 1990 Jul;18(5):201–5

[A case of Burkitt's lymphoma with numb chin syndrome as the initial manifestation] Iwatsuji K, et al. **Rinsho Shinkeigaku** 1989 Jun;29(6):764–8 (Eng. Abstr.) **(Jpn)**

[Chin neuropathy and cancer of the lung (letter)] Martí J, et al. **Neurologia** 1988 Jan–Feb;3(1):36–7 **(Spa)**

ABNORMALITIES

Subepidermal calcified nodule. Vázquez Doval J, et al. **Dermatol Monatsschr** 1990;176(2–3):133–8

ANATOMY & HISTOLOGY

Changes in the soft tissue chin after orthodontic treatment. Singh RN. **Am J Orthod Dentofacial Orthop** 1990 Jul; 98(1):41–6

A new cephalometric parameter to aid in dental base relationship analysis. Sarhan OA. **Angle Orthod** 1990 Spring;60(1):59–63

Long–term stability of the lower labial segment relative to the A–Pog line. Houston WJ, et al. **Eur J Orthod** 1990 Aug;12(3):302–10 (18 ref.)

INNERVATION

Numb chin syndrome in the elderly [letter] Furukawa T. **J Neurol Neurosurg Psychiatry** 1990 Feb;53(2):173

Recovery of neurosensory function following orthognathic surgery. Karas ND, et al. **J Oral Maxillofac Surg** 1990 Feb;48(2):124–34

Early scalp responses evoked by stimulation of the mental nerve in humans. Leandri M, et al. **Neurology** 1990 Feb; 40(2):315–20

Mental nerve neuropathy in systemic cancer. Report of three cases. Peñarrocha Diago M, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jan;69(1):48–51

[Exteroceptive suppression after mental nerve stimulation in patients with chronic headache] Nakashima K, et al. **Rinsho Shinkeigaku** 1990 Feb;30(2):133–8 (Eng. Abstr.) **(Jpn)**

[Non–tumor chin neuropathy (letter)] Marco M, et al. **Med Clin (Barc)** 1990 May 12;94(18):718 **(Spa)**

[Paraneoplastic thrombosis of the upper longitudinal sinus, chronic disseminated intravascular coagulation and mental neuropathy in a female patient with carcinoma of the breast (letter)] Kulisevsky J, et al. **Neurologia** 1986 Jan–Feb; 1(1):45–7 **(Spa)**

PATHOLOGY

Extraskeletal myxoid chondrosarcoma of the head and neck: a case report. Liu–Shindo M, et al. **Otolaryngol Head Neck Surg** 1989 Oct;101(4):485–8

PHYSIOLOGY

[Palmo–mental reflex and anti–HIV seropositivity] Thomas P, et al. **Ann Med Interne (Paris)** 1989;140(8):740–1 **(Fre)**

RADIOGRAPHY

Traumatically implanted glass bead. Smith BR. **Oral Surg Oral Med Oral Pathol** 1990 Feb;69(2):266

SURGERY

A critical comparison of osteoplastic and alloplastic augmentation genioplasty. Guyuron B, et al. **Aesthetic Plast Surg** 1990 Summer;14(3):199–206

Submental W–plasty for correction of 'turkey gobbler' deformities. Ehlert TK, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jun;116(6):714–7

Genioplasty. Spear SL, et al. **Clin Plast Surg** 1989 Oct; 16(4):695–706 (39 ref.)

[The repair of large defects of the facio–mandibulo–cervical region by bilateral pectoral–deltoid flaps—report of 10 cases] Lan XJ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Sep;2(3):179–81 **(Chi)**

[The application of local triangular subcutaneous pedunculated skin flaps to repair soft tissue defects of the maxillo–facio–cervical region (report of 62 cases)] Zhou XY. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Jun;2(2):106–8, 154 (Eng. Abstr.) **(Chi)**

[The contribution of genioplasty in esthetic surgery of the face] Lecointre F, et al. **Ann Chir Plast Esthet** 1989; 34(5):395–401 (16 ref.) (Eng. Abstr.) **(Fre)**

[Rhino–genioplasty] Romain P, et al. **Rev Stomatol Chir Maxillofac** 1990;91(3):233–9 (29 ref.) (Eng. Abstr.) **(Fre)**

CHINACRIN see **QUINACRINE**

CHINCHILLA

The effect of isotretinoin on propylene glycol-induced cholesteatoma in chinchilla middle ears. Jove MA, et al. **Am J Otolaryngol** 1990 Jan–Feb;11(1):5–9

Blood collection from the transverse sinus in the chinchilla. Boettcher FA, et al. **Lab Anim Sci** 1990 Mar;40(2):223–4

Caesarean section in a chinchilla [letter; comment] **Vet Rec** 1990 May 12;126(19):490 Comment on: Vet Rec 1990 Apr 14;126(15):370.

Chinchilla deaths due to Clostridium perfringens A enterotoxin [letter] Bartoszce M, et al. **Vet Rec** 1990 Apr 7;126(14):341–2

Caesarean section in a chinchilla [letter] [see comments] Stephenson RS. **Vet Rec** 1990 Apr 14;126(15):370 Comment in: Vet Rec 1990 Apr 28;126(17):441. Comment in: Vet Rec 1990 May 12;126(19):490.

ANATOMY & HISTOLOGY

Pigmented cells of the stria vascularis and spiral ligament of the chinchilla. Wright CG, et al. **Acta Otolaryngol (Stockh)** 1989 Sep–Oct;108(3–4):190–200

Primary vestibular projections in the chinchilla. Suárez C, et al. **Arch Otorhinolaryngol** 1989;246(5):242–8

New structural features of synapses in the anteroventral cochlear nucleus prepared by direct freezing and freeze-substitution. Tatsuoka H, et al. **J Comp Neurol** 1989 Dec 15;290(3):343–57

The vestibular nerve of the chinchilla. III. Peripheral innervation patterns in the utricular macula. Fernández C, et al. **J Neurophysiol** 1990 Apr;63(4):767–80

Electron microscopy of absorptive enterocytes in the large intestine of the chinchilla (Chinchilla laniger). Chen–Pan C, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):1079–82

METABOLISM

Concentration of salicylate in serum and perilymph of the chinchilla. Boettcher FA, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jun;116(6):681–4

Purification and N-terminal characterization of Chinchilla villidera alpha-1-antitrypsin. Diven WF, et al. **Comp Biochem Physiol [B]** 1990;95(1):39–44

PHYSIOLOGY

The chinchilla's vestibulo-ocular reflex. Merwin WH Jr, et al. **Acta Otolaryngol (Stockh)** 1989 Sep–Oct;108(3–4):161–7

Non-N-methyl-D-aspartate receptors may mediate ipsilateral excitation at lateral superior olivary synapses. Caspary DM, et al. **Brain Res** 1989 Nov 27;503(1):83–90

The relation among hearing loss, sensory cell loss and tuning characteristics in the chinchilla. Davis RI, et al. **Hear Res** 1989 Aug;41(1):1–14

Neural correlates of gap detection in auditory nerve fibers of the chinchilla. Zhang W, et al. **Hear Res** 1990 Jul; 46(3):181–200

Middle-ear response in the chinchilla and its relationship to mechanics at the base of the cochlea. Ruggero MA, et al. **J Acoust Soc Am** 1990 Apr;87(4):1612–29

The vestibular nerve of the chinchilla. IV. Discharge properties of utricular afferents. Goldberg JM, et al. **J Neurophysiol** 1990 Apr;63(4):781–90

The vestibular nerve of the chinchilla. V. Relation between afferent discharge properties and peripheral innervation patterns in the utricular macula. Goldberg JM, et al. **J Neurophysiol** 1990 Apr;63(4):791–804

SURGERY

Caesarean section in a chinchilla [letter; comment] Jones AK. **Vet Rec** 1990 Apr 28;126(17):441 Comment on: Vet Rec 1990 Apr 14;126(15):370.

CHINESE AMERICANS see **ASIAN AMERICANS**

CHINESE HERBAL DRUGS see **DRUGS, CHINESE HERBAL**

CHINESE MEDICINE, TRADITIONAL see **MEDICINE, CHINESE TRADITIONAL**

CHIPMUNKS see **SCIURIDAE**

CHIRONEX VENOMS see **COELENTERATE VENOMS**

CHIRONOMIDAE see under **DIPTERA**

CHIROPODY see **PODIATRY**

CHIROPRACTIC

AMA policy on chiropractic [letter; comment] Cherkin D. **Am J Public Health** 1989 Nov;79(11):1569–70 Comment on: Am J Public Health 1989 May;79(5):636–7.

Vertebral artery injuries following chiropractic cervical spine manipulation—case reports. Raskind R, et al. **Angiology** 1990 Jun;41(6):445–52

Low back pain: comparison of chiropractic and hospital outpatient treatment [letter] **BMJ** 1990 Jun 23; 300(6740):1647–50

Low back pain: comparison of chiropractic and hospital outpatient treatment [letter] **BMJ** 1990 Aug 11; 301(6747):341–2

Low back pain: comparison of chiropractic and hospital outpatient treatment [letter] Meade TW, et al. **BMJ** 1990 Jun 30;300(6741):1723

Low back pain of mechanical origin: randomised comparison of chiropractic and hospital outpatient treatment. Meade TW, et al. **BMJ** 1990 Jun 2;300(6737):1431–7

A case of subdural hematoma and temporal bone fracture as complications of chiropractic manipulation. Stuart PJ, et al. **J Emerg Med** 1989 Nov–Dec;7(6):615–7

Interexaminer reliability of the innatometer. Balmer EM. **J Manipulative Physiol Ther** 1990 May;13(4):229–33

Occupational repetitive motion injury: clinical overview and chiropractic implication. Bohm J. **J Manipulative Physiol Ther** 1990 Jun;13(5):267–72 (22 ref.)

Infantile colic treated by chiropractors: a prospective study of 316 cases [letter] Charlton K. **J Manipulative Physiol Ther** 1990 Jun;13(5):288

The chiropractic paradigm. Coulter ID. **J Manipulative Physiol Ther** 1990 Jun;13(5):279–87

Addressing the issue of cataloging and making accessible chiropractic literature: Part II. Pilot software development program. Curl DD, et al. **J Manipulative Physiol Ther** 1990 Jul–Aug;13(6):309–15

Addressing the issue of cataloging and making chiropractic literature accessible: Part I: Defining the problem. Curl DD, et al. **J Manipulative Physiol Ther** 1990 Jun; 13(5):262–6

Publishing research [editorial] Earnest JP. **J Manipulative Physiol Ther** 1990 Jan;13(1):33–5

Chiropractic in the yellow pages: a content analysis study [letter] Falco R. **J Manipulative Physiol Ther** 1990 Jan; 13(1):46–7

The chiropractic management and rehabilitation of cervical trauma [see comments] Fitz-Ritson D. **J Manipulative Physiol Ther** 1990 Jan;13(1):17–25 (36 ref.) Comment in: J Manipulative Physiol Ther 1990 May;13(4):236–7.

Chiropractic management of enuresis: time-series descriptive design. Gemmell HA, et al. **J Manipulative Physiol Ther** 1989 Oct;12(5):386–9

An evaluation of chiropractic manipulation as a treatment of hyperactivity in children. Giesen JM, et al. **J Manipulative Physiol Ther** 1989 Oct;12(5):353–63

The physics of spinal manipulation. Part II. A theoretical consideration of the adjustive force. Haas M. **J Manipulative Physiol Ther** 1990 Jun;13(5):253–6

Dietary intervention in the clinical prevention of ischemic heart disease. Jamison JR. **J Manipulative Physiol Ther** 1990 Jun;13(5):247–52

A comparison of chiropractic, medical and osteopathic care for work-related sprains and strains. Johnson MR, et al. **J Manipulative Physiol Ther** 1989 Oct;12(5):335–44

A critical look at the subluxation hypothesis [letter] Keating JC Jr. **J Manipulative Physiol Ther** 1990 Jul–Aug; 13(6):350–3

The influence of political medicine on chiropractic dogma: implications for scientific development [see comments] Keating JC Jr, et al. **J Manipulative Physiol Ther** 1989 Oct;12(5):393–8 (35 ref.) Comment in: J Manipulative Physiol Ther 1990 May;13(4):234–5.

Commentary: beyond the theosophy of chiropractic [letter; comment] Kreisberg J. **J Manipulative Physiol Ther** 1989 Dec;12(6):496–7 Comment on: J Manipulative Physiol Ther 1989 Apr;12(2):147–50.

A comparison of patients and patient complaints at six chiropractic teaching clinics [letter; comment] Lambert CC. **J Manipulative Physiol Ther** 1990 Feb;13(2):112 Comment on: J Manipulative Physiol Ther 1989 Apr;12(2):79–85.

A survey of recently graduated chiropractors in Australia. Leboeuf C, et al. **J Manipulative Physiol Ther** 1990 Mar–Apr;13(3):152–6

A review of data reports published in the Journal of Manipulative and Physiological Therapeutics from 1986 to 1988. Leboeuf C. **J Manipulative Physiol Ther** 1990 Feb; 13(2):89–95

Women chiropractors: issues of career and family. Mannington JV, et al. **J Manipulative Physiol Ther** 1989 Dec;12(6):434–9

Beyond the theosophy of chiropractic [letter] Mestanier P. **J Manipulative Physiol Ther** 1990 Jan;13(1):47–8

Time course considerations for the effects of unilateral lower cervical adjustments with respect to the amelioration of cervical lateral-flexion passive end-range asymmetry. Nansel D, et al. **J Manipulative Physiol Ther** 1990 Jul–Aug; 13(6):297–304

Effect of unilateral spinal adjustments on goniometrically-assessed cervical lateral-flexion end-range asymmetries in otherwise asymptomatic subjects [see comments] Nansel DD, et al. **J Manipulative Physiol Ther** 1989 Dec;12(6):419–27 Comment in: J Manipulative Physiol Ther 1990 May;13(4):237.

Science in chiropractic: too much or too little? [letter; comment] Nelson WA. **J Manipulative Physiol Ther** 1990 Mar–Apr;13(3):172 Comment on: J Manipulative Physiol Ther 1989 Oct;12(5):399–401.

Science in chiropractic: too much or too little? [see comments] Phillips RB. **J Manipulative Physiol Ther** 1989 Oct;12(5):399–401 Comment in: J Manipulative Physiol Ther 1990 Mar–Apr;13(3):172.

Attitudes and habits of chiropractors concerning referrals to other health care providers [letter; comment] Steels B, et al. **J Manipulative Physiol Ther** 1989 Oct;12(5):404–5 Comment on: J Manipulative Physiol Ther 1988 Dec;11(6):480–3.

Ehlers-Danlos syndrome. Taylor JA, et al. **J Manipulative Physiol Ther** 1990 Jun;13(5):273–8

Chiropractors and low back pain [letter] **Lancet** 1990 Sep 1;336(8714):572–3

Chiropracters and low back pain [editorial] **Lancet** 1990 Jul 28;336(8709):220

Should general anaesthesia be available to patients undergoing chiropractic treatment [letter] Gorman RF. **Med J Aust** 1990 May 7;152(9):501

Wallenberg's syndrome following neck manipulation. Frumkin LR, et al. **Neurology** 1990 Apr;40(4):611–5 (29 ref.)

The chiropractic profession. Nilsson N. **Ugeskr Laeger** 1989 Sep 25;151(39):2527

[Dissections of the vertebral artery following cervical chiropractic manipulations] Krieger D, et al. **Dtsch Med Wochenschr** 1990 Apr 13;115(15):580–3 (Eng. Abstr.) **(Ger)**

[Manipulation treatment by physicians, physiotherapists and chiropractors (letter)] Stokke O. **Tidsskr Nor Laegeforen** 1990 Feb 10;110(4):526–7 **(Nor)**

[The old enigma of chiropractors] Lane L. **Lakartidningen** 1989 Nov 29;86(48):4209 **(Swe)**

ECONOMICS

Chiropractic and health benefits [letter] Lamont MK. **N Z Med J** 1990 Aug 8;103(895):380

EDUCATION

The need for innovation in clinical training: faculty practice plans in chiropractic education. Bergmann TF, et al. **J Manipulative Physiol Ther** 1989 Dec;12(6):491–5

Journal of Manipulative and Physiological Therapeutics: a bibliographic analysis [letter; comment] Gemmell HA. **J Manipulative Physiol Ther** 1989 Dec;12(6):499 Comment on: J Manipulative Physiol Ther 1989 Feb;12(1):15–20.

Nutritional intervention in chiropractic clinical practice: the chiropractic student's perspective. Jamison JR. **J Manipulative Physiol Ther** 1990 May;13(4):195–203

Nutrition education of chiropractic students: a survey of colleges recognized by the Council on Chiropractic Education. Jamison JR. **J Manipulative Physiol Ther** 1990 Jul–Aug;13(6):316–21

Assessing the worth of intern performance. Sauter RC, et al. **J Manipulative Physiol Ther** 1990 Mar–Apr;13(3):169–70

INSTRUMENTATION

Normal paraspinal tissue compliance: the reliability of a new clinical and experimental instrument. Jansen RD, et al. **J Manipulative Physiol Ther** 1990 Jun;13(5):243–6

LEGISLATION & JURISPRUDENCE

AMA enjoined from boycotting chiropractors. Berg RN. **J Med Assoc Ga** 1990 Jun;79(6):391–3

METHODS

The chiropractic management and rehabilitation of cervical trauma [letter; comment] Barge FH. **J Manipulative Physiol Ther** 1990 May;13(4):236–7 Comment on: J Manipulative Physiol Ther 1990 Jan;13(1):17–25.

Effects of a chiropractic adjustment on changes in pupillary diameter: a model for evaluating somatovisceral response [letter] Charlton K. **J Manipulative Physiol Ther** 1990 Feb; 13(2):113–4

The influence of political medicine on chiropractic dogma: applications for scientific development [letter; comment] Coulter ID. **J Manipulative Physiol Ther** 1990 May; 13(4):234–5 Comment on: J Manipulative Physiol Ther 1989 Oct;12(5):393–8.

The physics of spinal manipulation. Part I. The myth of F = ma. Haas M. **J Manipulative Physiol Ther** 1990 May; 13(4):204–6

Reliability of manual muscle testing with a computerized dynamometer. Hsieh CY, et al. **J Manipulative Physiol Ther** 1990 Feb;13(2):72–82

A review of the research papers published by the international College of Applied Kinesiology from 1981 to 1987. Klinkoski B, et al. **J Manipulative Physiol Ther** 1990 May;13(4):190–4

Report from the Consensus Conference on the Validation of Chiropractic Methods [editorial] Lawrence DJ. **J Manipulative Physiol Ther** 1990 Jul–Aug;13(6):295–6 (0 ref.)

The sensitivity and specificity of seven lumbo-pelvic orthopedic tests and the arm-fossa test. Leboeuf C. **J Manipulative Physiol Ther** 1990 Mar–Apr;13(3):138–43

A chiropractic approach to the treatment of dysmenorrhea. Liebl NA, et al. **J Manipulative Physiol Ther** 1990 Feb; 13(2):101–6

The role of experience in clinical accuracy. Mior SA, et al. **J Manipulative Physiol Ther** 1990 Feb;13(2):68–71

Intra- and interobserver reliability of passive motion palpation of the lumbar spine. Mootz RD, et al. **J Manipulative Physiol Ther** 1989 Dec;12(6):440–5

Effect of unilateral spinal adjustments on goniometrically

assessed cervical lateral-flexion end-range asymmetries in otherwise asymptomatic subjects [letter; comment] Nilsson N. **J Manipulative Physiol Ther** 1990 May;13(4):237 Comment on: J Manipulative Physiol Ther 1989 Dec;12(6):419-27.

Effects of chiropractic treatment on blood pressure and anxiety: a randomized and controlled trial [letter; comment] Nykoliation J. **J Manipulative Physiol Ther** 1990 Feb; 13(2):113 Comment on: J Manipulative Physiol Ther 1988 Dec;11(6):484-8.

'Snapping hip' and sacroiliac sprain: example of a cause-effect relationship [comment] Schneider MJ. **J Manipulative Physiol Ther** 1990 Feb;13(2):114-5 Comment on: J Manipulative Physiol Ther 1989 Oct;12(5):390-2.

Manual therapy considerations at the thoracolumbar junction: an anatomical and functional perspective. Singer KP, et al. **J Manipulative Physiol Ther** 1990 Feb;13(2):83-8

Computer-aided pattern analysis of temperature differentials. Stewart MS, et al. **J Manipulative Physiol Ther** 1989 Oct; 12(5):345-52

Skin accelerometer displacement and relative bone movement of adjacent vertebrae in response to chiropractic percussion thrusts. Triano J. **J Manipulative Physiol Ther** 1989 Oct; 12(5):406-11

TRENDS

Chiropractic: perspectives and concerns. Bohm J. **J Manipulative Physiol Ther** 1990 May;13(4):225-8

Caves, wizards and the state of the petunia patch. Charlton KH. **J Manipulative Physiol Ther** 1990 Jul-Aug;13(6):343-5

Protection of practice rights [letter] Nelson WA. **J Manipulative Physiol Ther** 1990 Feb;13(2):112-3

CHIROPTERA

Detection of rabies virus antibodies in fruit bats (Eidolon helvum) from Nigeria. Aghomo HO, et al. **J Wildl Dis** 1990 Apr;26(2):258-61

Prevalence of rabies specific antibodies in the Mexican free-tailed bat (Tadarida brasiliensis mexicana) at Lava Cave, New Mexico. Steece R, et al. **J Wildl Dis** 1989 Oct; 25(4):490-6

Rabies. Bat rabies. **Wkly Epidemiol Rec** 1990 Jan 26; 65(4):24-5 **(Eng, Fre)**

[The Veterinary Chief Inspection for Public Health. Rabies in bats] **Tijdschr Diergeneeskd** 1989 Sep 1;114(17):913-6 **(Dut)**

[The Veterinary Chief Inspection of Public Health. Rabies in bats] Visser G. **Tijdschr Diergeneeskd** 1990 Aug 15; 115(15-16):752-3 **(Dut)**

ANATOMY & HISTOLOGY

Fine structure of the boundary tissue of the seminiferous tubuli of the vampire bat (Desmodus rotundus, G.; Microchiroptera). Orsi AM, et al. **Gegenbaurs Morphol Jahrb** 1990;136(1):103-10

The megachiropteran pineal organ: a comparative morphological and volumetric investigation with special emphasis on the remarkably large pineal of Dobsonia praedatrix. Bhatnagar KP, et al. **J Anat** 1990 Feb; 168:143-66

Functional organization of ascending and descending connections of the cochlear nucleus of horseshoe bats. Vater M, et al. **J Comp Neurol** 1990 Feb 15;292(3):373-95

Connections and frequency representation in the auditory brainstem of the mustache bat, Pteronotus parnellii. Zook JM, et al. **J Comp Neurol** 1989 Dec 8;290(2):243-61

The male reproductive pattern and histology of the testes of the lesser yellow house bat, Scotophilus borbonicus (E Geoffroy, 1803) (Chiroptera: Vespertilionidae). van der Merwe NJ, et al. **J S Afr Vet Assoc** 1989 Jun;60(2):83-6

Fine structure of bat deep posterior lingual glands (von Ebner's) [published erratum appears in J Submicrosc Cytol Pathol 1990 Jan;22(1):following 158] Azzali G, et al. **J Submicrosc Cytol Pathol** 1989 Oct;21(4):669-84

Venular vasomotion in the bat wing. Torres Filho IP. **Microvasc Res** 1990 Mar;39(2):246-9

BLOOD

Hemoglobins from bats (Myotis myotis and Rousettus aegyptiacus): a possible example of molecular adaptation to different physiological requirements. Condò SG, et al. **Biol Chem Hoppe Seyler** 1989 Aug;370(8):861-7

Plasma progesterone concentrations in the female Natal clinging bat (Miniopterus schreibersii natalensis). van der Merwe M, et al. **J Reprod Fertil** 1989 Nov;87(2):665-9

CLASSIFICATION

Are megabats flying primates? Contrary evidence from a mitochondrial DNA sequence. Bennett S, et al. **Aust J Biol Sci** 1988;41(3):327-32

Phylogenetic relations between microbats, megabats and primates (Mammalia: Chiroptera and Primates). Pettigrew JD, et al. **Philos Trans R Soc Lond [Biol]** 1989 Nov 30; 325(1229):489-559 (209 ref.)

EMBRYOLOGY

Cellular composition and steroidogenic capacity of the ovary of Macrotus californicus (Chiroptera: Phyllostomatidae) during and after delayed embryonic development. Crichton EG, et al. **Cell Tissue Res** 1990 May;260(2):355-66

GROWTH & DEVELOPMENT

Developmental aspects of the neocortex of the bat. Ferrer I. **Neurosci Res** 1989 Aug;6(6):573-80

METABOLISM

Cerebral cortical concentrations of bioamines and their metabolites during arousal and after feeding in the little brown bat (Myotis lucifugus). Bauman WA, et al. **Brain Res** 1989 Oct 23;500(1-2):156-60

Histochemical and biochemical plasticity of muscle fibers in the little brown bat (Myotis lucifugus). Brigham RM, et al. **J Comp Physiol [B]** 1990;160(2):183-6

Cholecystokinin (CCK)-like immunoreactivity in the brain of the little brown bat (Myotis lucifugus). Cotter JR, et al. **J Hirnforsch** 1990;31(1):87-97

Seasonal changes in pancreatic insulin and glucagon in the little brown bat (Myotis lucifugus). Bauman WA. **Pancreas** 1990 May;5(3):342-6

MICROBIOLOGY

Bat rabies--France. **Can Dis Wkly Rep** 1990 Apr 14; 16(15):70-1 **(Eng, Fre)**

Present status of bat-rabies in Europe. Müller WW. **Parassitologia** 1988 Jan-Apr;30(1):121-2

The rabies viruses of bats. King A, et al. **Vet Microbiol** 1990 Jun;23(1-4):165-74

[Bacterial, viral and parasitological study of a population of Chaerophon pumila bats in Anjiro, Madagascar] Cassel-Beraud AM, et al. **Arch Inst Pasteur Madagascar** 1989;56(1):233-9 (Eng. Abstr.) **(Fre)**

PARASITOLOGY

Larval migration in oral and parenteral Toxocara pteropodis infections and a comparison with T. canis dispersal in the flying fox, Pteropus poliocephalus. Prociv P. **Int J Parasitol** 1989 Dec;19(8):891-6

Spinturnicid mites (Gamasida: Spinturnicidae) associated with bats in central Brazil. Gettinger D, et al. **J Med Entomol** 1989 Sep;26(5):491-3

Epizoic fauna of Plecotus mexicanus (Chiroptera: Vespertilionidae) in Tlaxcala, Mexico. Morales-Malacara JB, et al. **J Med Entomol** 1990 Jul;27(4):440-5

PHYSIOLOGY

Implantation, development of the fetal membranes, and placentation in the captive black mastiff bat, Molossus ater. Rasweiler JJ 4th. **Am J Anat** 1990 Feb;187(2):109-36

Functional innervation of the myometrium of Myotis lucifugus, the little brown bat. Buchanan GD, et al. **Biol Reprod** 1990 Feb;42(2):207-16

Distensibility of capillaries in the bat wing. Bouskela E, et al. **Blood Vessels** 1989;26(6):325-34

The status of the corpus luteum during pregnancy in Miniopterus schreibersii (Chiroptera: Vespertilionidae) with emphasis on its role in developmental delay. Crichton EG, et al. **Cell Tissue Res** 1989 Oct;258(1):183-201

Frequency and space representation in the inferior colliculus of the FM bat, Eptesicus fuscus. Poon PW, et al. **Exp Brain Res** 1990;79(1):83-91

Neural control of vocalization in bats: mapping of brainstem areas with electrical microstimulation eliciting species-specific echolocation calls in the rufous horseshoe bat. Schuller G, et al. **Exp Brain Res** 1990;79(1):192-206

Neural mechanisms of ranging are different in two species of bats. Berkowitz A, et al. **Hear Res** 1989 Sep; 41(2-3):255-64

Spatial tuning of auditory neurons in the superior colliculus of the echolocating bat, Myotis lucifugus. Wong D. **Hear Res** 1984 Dec;16(3):261-70

Flights of fancy. Morowitz HJ. **Hosp Pract [Off]** 1990 Apr 15;25(4):19-20

Clutter interference and the integration time of echoes in the echolocating bat, Eptesicus fuscus. Simmons JA, et al. **J Acoust Soc Am** 1989 Oct;86(4):1318-32

The acoustic basis for target discrimination by FM echolocating bats. Simmons JA, et al. **J Acoust Soc Am** 1989 Oct;86(4):1333-50

Central acoustic tract in an echolocating bat: an extralemniscal auditory pathway to the thalamus. Casseday JH, et al. **J Comp Neurol** 1989 Sep 8;287(2):247-59

Frequency and space representation in the primary auditory cortex of the frequency modulating bat Eptesicus fuscus. Jen PH, et al. **J Comp Physiol [A]** 1989 Apr;165(1):1-14

Ontogenesis of tonotopy in inferior colliculus of a hipposiderid bat reveals postnatal shift in frequency-place code. Rübsamen R, et al. **J Comp Physiol [A]** 1989 Oct; 165(6):755-69

Convergence of temporal and spectral information into acoustic images of complex sonar targets perceived by the echolocating bat, Eptesicus fuscus. Simmons JA, et al. **J Comp Physiol [A]** 1990 Feb;166(4):449-70

The influence of the auditory cortex on acoustically evoked cerebellar responses in the CF-FM bat, Rhinolophus pearsonic chinesis. Sun DX, et al. **J Comp Physiol [A]** 1990 Feb;166(4):477-87

Principles of auditory information-processing derived from neuroethology. Suga N. **J Exp Biol** 1989 Sep;146:277-86 (33 ref.)

The black mastiff bat (Molossus ater): a novel, mammalian model for studies of ovarian, uterine, and placental biology. Rasweiler JJ 4th. **J Exp Zool Suppl** 1990;4:210-2

Determinants of horizontal sound location selectivity of binaurally excited neurons in an isofrequency region of the mustache bat inferior colliculus. Fuzessery ZM, et al. **J Neurophysiol** 1990 May;63(5):1128-47

Delay-tuned neurons in auditory cortex of mustached bat are not suited for processing directional information. Suga N, et al. **J Neurophysiol** 1990 Jul;64(1):225-35

Noradrenaline enhances temporal auditory contrast and neuronal timing precision in the cochlear nucleus of the mustached bat. Kössl M, et al. **J Neurosci** 1989 Dec; 9(12):4169-78

Dynamic aspects of the LHRH system associated with ovulation in the little brown bat (Myotis lucifugus). Anthony EL, et al. **J Reprod Fertil** 1989 Nov;87(2):671-86

Reproduction in the rusty bat, Pipistrellus rusticus, in the northern Transvaal bushveld, South Africa. van der Merwe M, et al. **J Reprod Fertil** 1990 Jul;89(2):537-42

Sensory-motor control: listening to the voice within [news; comment] Grinnell AD. **Nature** 1989 Oct 12; 341(6242):488-9 Comment on: Nature 1989 Oct 12;341(6242):526-32.

A possible neuronal basis for Doppler-shift compensation in echo-locating horseshoe bats [see comments] Metzner W. **Nature** 1989 Oct 12;341(6242):529-32 Comment in: Nature 1989 Oct 12;341(6242):488-9.

Behavioral auditory thresholds in neonate lesser spear-nosed bats, Phyllostomus discolor. Esser KH, et al. **Naturwissenschaften** 1990 Jun;77(6):292-4

Auditory adaptations for prey capture in echolocating bats. Neuweiler G. **Physiol Rev** 1990 Jul;70(3):615-41 (151 ref.)

Reproduction in the Indian mouse-tailed bat, Rhinopoma hardwickei hardwickei (Chiroptera, Rhinopomatidae). Karim KB, et al. **Reprod Fertil Dev** 1989;1(3):255-64

Biosonar and neural computation in bats. Suga N. **Sci Am** 1990 Jun;262(6):60-8

[Reproductive biology of Artibeus lituratus (Olfers, 1818) (Chiroptera: Phyllostomidae)] dos Reis SF. **Rev Bras Biol** 1989 May;49(2):369-72 (Eng. Abstr.) **(Por)**

[Neuronal reactions of the amygdaloid complex in bats to acoustic stimuli] Andreeva NG. **Nerv Sist** 1989;28:78-88 **(Rus)**

[Acoustic signaling in the common long-eared bat Plecotus auritus] Konstantinov AI, et al. **Nerv Sist** 1989;28:50-8 **(Rus)**

CHITIN

Chitin-chitosan membranes. Separations of amino acids and polypeptides. Pellegrino JJ, et al. **Ann N Y Acad Sci** 1990; 589:229-44

ANALOGS & DERIVATIVES

Chitin-chitosan membranes. Separations of amino acids and polypeptides. Pellegrino JJ, et al. **Ann N Y Acad Sci** 1990; 589:229-44

Metacyclogenesis of Trypanosoma vivax in vitro: attachment to chitosan gel. Stiles JK, et al. **Ann Trop Med Parasitol** 1990 Apr;84(2):197-200

Chitosan--as a biomaterial. Chandy T, et al. **Biomater Artif Cells Artif Organs** 1990;18(1):1-24 (37 ref.)

N-acetylation in chitosan and the rate of its enzymic hydrolysis. Hirano S, et al. **Biomaterials** 1989 Oct; 10(8):574-6

Reconstruction of parodontal tissue with chitosan. Muzzarelli R, et al. **Biomaterials** 1989 Nov;10(9):598-603

Inhibition by sulfated chitin derivatives of invasion through extracellular matrix and enzymatic degradation by metastatic melanoma cells. Saiki I, et al. **Cancer Res** 1990 Jun 15;50(12):3631-7

Preparation and release characteristics of cisplatin albumin microspheres containing chitin and treated with chitosan. Nishioka Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Nov; 37(11):3074-7

6-O-carboxymethyl-chitin (CM-chitin) as a drug carrier. Watanabe K, et al. **Chem Pharm Bull (Tokyo)** 1990 Feb; 38(2):506-9

Chitosan: evaluation of a new hemostatic agent. Kind GM, et al. **Curr Surg** 1990 Jan-Feb;47(1):37-9

Circular dichroism study of membrane dynamics. Effects of carboxymethyl-chitin. Nishiya T, et al. **J Biochem (Tokyo)** 1990 Feb;107(2):217-21

Inhibitory effect of chitin heparinoids on the lung metastasis of B16-BL6 melanoma. Murata J, et al. **Jpn J Cancer Res** 1989 Sep;80(9):866-72

Inhibition of tumor cell arrest in lungs by antimetastatic chitin heparinoid. Murata J, et al. **Jpn J Cancer Res** 1990 May; 81(5):506-13

Effect of chitin heparinoids on the activation of peritoneal macrophages and on the production of monokines in mice. Nishimura K, et al. **Mol Biother** 1990 Jun;2(2):115-20

Synthesis, characterization, and in vitro stability of chitosan-methotrexate conjugates. Sanzgiri YD, et al. **Pharm Res** 1990 Apr;7(4):418-21

ANALYSIS

Preparation and release characteristics of cisplatin albumin

microspheres containing chitin and treated with chitosan. Nishioka Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Nov; 37(11):3074–7

Visualization of chitin–protein layer formation in Ascaris lumbricoides egg–shells. Sromová D, et al. **Folia Parasitol (Praha)** 1990;37(1):77–80

The hard parts (trophi) of the rotifer mastax do contain chitin: evidence from studies on Brachionus plicatilis. Klusemann J, et al. **Histochemistry** 1990;94(3):277–83

Immunocytochemical detection of chitin in Pneumocystis carinii. Walker AN, et al. **Infect Immun** 1990 Feb; 58(2):412–5

ANTAGONISTS & INHIBITORS

[Effectiveness of 2,6–dihalogenbenzoyl urea derivatives as potential inhibitors of chitin biosynthesis regarding the house fly Musca domestica L. and cockroach Blatella germanica L.] Styczyńska B, et al. **Rocz Panstw Zakl Hig** 1989;40(1):73–85 (Eng. Abstr.) **(Pol)**

BIOSYNTHESIS

Effect of alpha factor pheromone on the activity of enzymes which catalyze the synthesis and hydrolysis of cell wall structural polymers from Saccharomyces cerevisiae. Ruiz T, et al. **Biochem Int** 1989 Sep;19(3):571–81

Chitin biosynthesis enhancement by the endochitinase inhibitor allosamidin. Peter MG, et al. **Biol Chem Hoppe Seyler** 1990 Jun;371(6):471–3

Efficacy of chitin synthesis inhibitors on nymphal German cockroaches (Dictyoptera: Blattellidae). DeMark JJ, et al. **J Econ Entomol** 1989 Dec;82(6):1633–7

Ovicidal activity of chitin synthesis inhibitors when fed to adult German cockroaches (Dictyoptera: Blattellidae). DeMark JJ, et al. **J Med Entomol** 1990 Jul;27(4):551–5

The use of flow cytometry to monitor chitin synthesis in regenerating protoplasts of Candida albicans. Hector RF, et al. **J Med Vet Mycol** 1990;28(1):51–7

METABOLISM

Beta–N–acetylglucosaminidase from Aspergillus nidulans which degrades chitin oligomers during autolysis. Reyes F, et al. **FEMS Microbiol Lett** 1989 Nov;53(1–2):83–7

Comparison of the chitinolytic properties of Clostridium sp. strain 9.1 and a chitin–degrading bacterium from the intestinal tract of the plaice, Pleuronectes platessa (L.). Pel R, et al. **J Gen Microbiol** 1990 Apr;136 (Pt 4):695–704

Chitin metabolism: a target for drugs against parasites. Spindler KD, et al. **Parasitol Res** 1990;76(4):283–8 (54 ref.)

CHITIN SYNTHASE see under **GLUCOSYLTRANSFERASES**

CHITINASE

Crystallization of hevamine, an enzyme with lysozyme/chitinase activity from Hevea brasiliensis latex. Rozeboom HJ, et al. **J Mol Biol** 1990 Apr 5;212(3):441–3

GENETICS

Gene cloning of chitinase A1 from Bacillus circulans WL–12 revealed its evolutionary relationship to Serratia chitinase and to the type III homology units of fibronectin. Watanabe T, et al. **J Biol Chem** 1990 Sep 15;265(26):15659–65

Isolation of complementary DNA clones encoding pathogenesis–related proteins P and Q, two acidic chitinases from tobacco. Payne G, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):98–102

ISOLATION & PURIFICATION

Purification and characterization of an insect alpha–amylase inhibitor/endochitinase from seeds of Job's Tears (Coix lachryma–jobi). Ary MB, et al. **Biochim Biophys Acta** 1989 Dec 21;999(3):260–6

Chitinase activity from Candida albicans and its inhibition by allosamidin. Dickinson K, et al. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1417–21

METABOLISM

Endochitinase from Aspergillus nidulans implicated in the autolysis of its cell wall. Reyes F, et al. **FEMS Microbiol Lett** 1989 Jul 1;51(1):119–24

Chitinase system of Bacillus circulans WL–12 and importance of chitinase A1 in chitin degradation. Watanabe T, et al. **J Bacteriol** 1990 Jul;172(7):4017–22

Comparison of the chitinolytic properties of Clostridium sp. strain 9.1 and a chitin–degrading bacterium from the intestinal tract of the plaice, Pleuronectes platessa (L.). Pel R, et al. **J Gen Microbiol** 1990 Apr;136 (Pt 4):695–704

Crystallization of hevamine, an enzyme with lysozyme/chitinase activity from Hevea brasiliensis latex. Rozeboom HJ, et al. **J Mol Biol** 1990 Apr 5;212(3):441–3

CHLAMYDIA

[Chlamydiae. 1] Del Piano M, et al. **Ann Ig** 1989 Sep–Oct; 1(5):1067–86 (63 ref.) (Eng. Abstr.) **(Ita)**

ANALYSIS

Identification of lectin–binding proteins in Chlamydia species. Swanson AF, et al. **Infect Immun** 1990 Feb;58(2):502–7

CLASSIFICATION

A new respiratory tract pathogen: Chlamydia pneumoniae strain TWAR. Grayston JT, et al. **J Infect Dis** 1990 Apr; 161(4):618–25 (32 ref.)

[Is Chlamydia TWAR of significance in The Netherlands?] Stolk–Engelaar MV, et al. **Ned Tijdschr Geneeskd** 1990 Jun 2;134(22):1094–7 (Eng. Abstr.) **(Dut)**

DRUG EFFECTS

In vitro susceptibilities of Chlamydia pneumoniae (Chlamydia sp. strain TWAR). Chirgwin K, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1634–5

GENETICS

The nucleotide sequence of the 60 kDa cysteine rich outer membrane protein of Chlamydia pneumoniae strain IOL–207. Watson MW, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5299

Conserved DNA sequences in chlamydial plasmids. Hugall A, et al. **Plasmid** 1989 Sep;22(2):91–8

GROWTH & DEVELOPMENT

Amino acid requirements for growth of Chlamydia pneumoniae in cell cultures: growth enhancement by lysine or methionine depletion. Kuo CC, et al. **J Clin Microbiol** 1990 Jun;28(6):1098–100

A sensitive cell line, HL cells, for isolation and propagation of Chlamydia pneumoniae strain TWAR. Kuo CC, et al. **J Infect Dis** 1990 Sep;162(3):755–8

[Electron microscopic study of the development of chlamydia, isolated from swine, in chicken embryonic yolk cells] Bortnichuk VA, et al. **Mikrobiol Zh** 1984 Jan–Feb; 46(1):56–61 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Prevalence of antibodies to Chlamydia pneumoniae in a pediatric hospital population in Belgium. Van Renterghem L, et al. **Eur J Clin Microbiol Infect Dis** 1990 May; 9(5):347–9

Antibody response to epitopes of chlamydial major outer membrane proteins on infectious elementary bodies and of the reduced polyacrylamide gel electrophoresis–separated form. Baghian A, et al. **Infect Immun** 1990 May; 58(5):1379–83

Characterization of murine monoclonal and murine, rabbit, and human polyclonal antibodies against chlamydial lipopolysaccharide. Brade L, et al. **Infect Immun** 1990 Jan; 58(1):205–13

Structural and antigenic analysis of Chlamydia pneumoniae. Campbell LA, et al. **Infect Immun** 1990 Jan;58(1):93–7

Chlamydial vaccines. Schnorr KL. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1548–61 (179 ref.)

Serological response to Chlamydia pneumoniae infection. Campbell LA, et al. **J Clin Microbiol** 1990 Jun;28(6):1261–4

Enzyme immunoassay to determine exposure to Chlamydia pneumoniae (strain TWAR). Ladany S, et al. **J Clin Microbiol** 1989 Dec;27(12):2778–83

Prevalence of chlamydial antibody in Malaysians. Ngeow YF, et al. **J Clin Pathol** 1990 May;43(5):400–2

The association between chlamydial–specific IgG and IgA antibodies and pregnancy outcome in an in vitro fertilization program. Lunenfeld E, et al. **J In Vitro Fert Embryo Transf** 1989 Aug;6(4):222–7

Chlamydial antibody, as determined with an enzyme–linked immunosorbent assay, in tubal factor infertility. Minassian SS, et al. **J Reprod Med** 1990 Feb;35(2):141–5

A soluble 60 kiloDalton antigen of Chlamydia spp. is a homologue of Escherichia coli GroEL. Bavoil P, et al. **Mol Microbiol** 1990 Mar;4(3):461–9

Chlamydial antibodies [letter; comment] Cursons R, et al. **N Z Med J** 1990 Apr 25;103(888):190 Comment on: N Z Med J 1990 Feb 28;103(884):63–5.

Chlamydia infections in racing pigeons in Great Britain: a retrospective serological survey. Alexander DJ, et al. **Vet Rec** 1989 Aug 26;125(9):239

[Biochemical characteristics and antigenic structures of Chlamydia] Puy H, et al. **Ann Biol Clin (Paris)** 1989; 47(8):485–91 (69 ref.) (Eng. Abstr.) **(Fre)**

[Value of the Twar strain for chlamydiosis serology. Choice of a strategy of detecting antibodies] Roger A, et al. **Presse Med** 1990 Apr 28;19(17):790–4 (Eng. Abstr.) **(Fre)**

[Obtaining erythrocyte diagnosticum for the detection of chlamydial antigen] Vinograd NA, et al. **Mikrobiol Zh** 1989 May–Jun;51(3):84–7 (Eng. Abstr.) **(Rus)**

[Diagnostic significance of intracutaneous test (with chlamydial allergens) in urogenital infections and sterility] Sakhel' MI, et al. **Sov Med** 1989;(7):89–93 **(Rus)**

ISOLATION & PURIFICATION

Use of HL cells for improved isolation and passage of Chlamydia pneumoniae. Cles LD, et al. **J Clin Microbiol** 1990 May;28(5):938–40

Rapid identification of Chlamydia psittaci and TWAR (C pneumoniae) in sputum samples using an amplified enzyme immunoassay [letter] Sillis M, et al. **J Clin Pathol** 1990 Mar;43(3):260

Detection and differentiation of Chlamydia trachomatis, Chlamydia psittaci, and Chlamydia pneumoniae by DNA amplification. Holland SM, et al. **J Infect Dis** 1990 Oct; 162(4):984–7

Isolation of Chlamydia pneumoniae from middle ear aspirates of otitis media with effusion: a case report [letter] Ogawa H, et al. **J Infect Dis** 1990 Oct;162(4):1000–1

PATHOGENICITY

[The role of Chlamydia infection in the development of infectious inflammatory diseases in premature newborn infants] Dement'eva GM, et al. **Pediatriia** 1990;(1):18–21 (Eng. Abstr.) **(Rus)**

CHLAMYDIA INFECTIONS

Reports from the Symposium on Avian Chlamydiosis. 125th annual AVMA meeting. Portland, Oregon, 1988. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1501–76

Chlamydial infections—past, present, future. Schachter J. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1501–6 (54 ref.)

The relation of chlamydial infection of the cervix to time elapsed from the onset of menses. Rosenthal GE, et al. **J Clin Epidemiol** 1990;43(1):15–20

Chlamydia trachomatis peritonitis: another cause of protein–rich lymphocytic ascites. Votte–Lambert A, et al. **J Clin Gastroenterol** 1990 Jun;12(3):341–3 (11 ref.)

Perinatal transmission of bacterial sexually transmitted diseases. Part II: Group B streptococcus and Chlamydia trachomatis. Fletcher JL Jr, et al. **J Fam Pract** 1990 Jun; 30(6):689–96 (77 ref.)

Prostatitis associated with Chlamydia trachomatis in 6 patients. Bruce AW, et al. **J Urol** 1989 Oct;142(4):1006–7

A clinical virology database for a regional virology service. Ahmed K, et al. **J Virol Methods** 1989 Dec;26(3):255–67

Chlamydia trachomatis infections in adolescents. Bell TA. **Med Clin North Am** 1990 Sep;74(5):1225–33 (59 ref.)

Chlamydial infection in women. McGregor JA. **Obstet Gynecol Clin North Am** 1989 Sep;16(3):565–92 (111 ref.)

Erythema nodosum—a manifestation of Chlamydia pneumoniae (strain TWAR) infection. Erntell M, et al. **Scand J Infect Dis** 1989;21(6):693–6

Experimental chlamydial epididymitis. Jantos C, et al. **Urol Int** 1989;44(5):279–83

[The role of the ophthalmologist in detecting sexually transmitted diseases caused by Chlamydia trachomatis—apropos of 194 cases] Belloir–Furet F. **Bull Soc Ophtalmol Fr** 1989 Mar;89(3):403–12, 415–6 (25 ref.) **(Fre)**

[Chlamydia trachomatis perihepatitis (Fitz Hugh–Curtis syndrome). Apropos of 20 cases] Piton S, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(4):447–54 (Eng. Abstr.) **(Fre)**

[Acute severe meningoencephalitis caused by Chlamydia trachomatis (letter)] Hoen B, et al. **Presse Med** 1990 Feb 17;19(6):265–6 **(Fre)**

[Meningo–encephalitis caused by Chlamydia trachomatis (letter)] Humbert P. **Presse Med** 1990 Jun 30;19(26):1243 **(Fre)**

[Vulvo–cervico–vaginal infections caused by common (non–herpetic) germs] Body G. **Rev Fr Gynecol Obstet** 1989 Mar 25;84(3 Pt 2):257–9; discussion 265–7 (Eng. Abstr.) **(Fre)**

[Clinical and serological characterization of Chlamydia–induced arthritis] Wollenhaupt HJ, et al. **Dtsch Med Wochenschr** 1989 Dec 1;114(50):1949–54 (Eng. Abstr.) **(Ger)**

[Chlamydia and Mycoplasma infections of newborns] Schiefer HG, et al. **Immun Infekt** 1990 Feb;18(1):3–8 (25 ref.) (Eng. Abstr.) **(Ger)**

[Chlamydiae. 2. Chlamydia trachomatis] Del Piano M, et al. **Ann Ig** 1989 Sep–Oct;1(5):1087–118 (97 ref.) (Eng. Abstr.) **(Ita)**

[Persistent lymphedema of the penis and scrotum after recurrent episodes of cellulitis and urethritis caused by Chlamydia trachomatis] Carlino A, et al. **G Ital Dermatol Venereol** 1989 Jun;124(6):303–5 (Eng. Abstr.) **(Ita)**

[A case of pneumonia caused by Chlamydia pneumoniae, strain TWAR] Kishimoto T, et al. **Kansenshogaku Zasshi** 1990 Apr;64(4):510–5 (Eng. Abstr.) **(Jpn)**

[Chlamydia pneumonia and bronchitis in children] Shamansurova EA. **Pediatriia** 1989;(10):57–60 **(Rus)**

[Inflammation of the female genital organs caused by Chlamydia trachomatis] Buković D, et al. **Lijec Vjesn** 1989 Aug;111(8):296–300 (Eng. Abstr.) **(Scr)**

[The patient, the doctor, Chlamydia law and reality] Stenberg K. **Lakartidningen** 1990 Feb 7;87(6):367 **(Swe)**

BLOOD

Chlamydia trachomatis—role in tubal infertility. Garland SM, et al. **Aust N Z J Obstet Gynaecol** 1990 Feb;30(1):83–6

CLASSIFICATION

[Better to generalize than to include all chlamydia infections in venereology] Mårdh PA. **Lakartidningen** 1990 Feb 14; 87(7):459–61 **(Swe)**

COMPLICATIONS

Fetal death from chlamydial infection across intact amniotic membranes. Thorp JM Jr, et al. **Am J Obstet Gynecol** 1989 Nov;161(5):1245–6

Chlamydial conjunctivitis and genital gonorrhea in pregnancy. Pamel GJ, et al. **Arch Ophthalmol** 1990 Mar; 108(3):327

Bilateral meralgia paresthetica associated with pelvic inflammatory disease [see comments] Rotenberg AS. **Can Med Assoc J** 1990 Jan 1;142(1):42–3 Comment in: Can Med Assoc J 1990 Apr 1;142(7):708–9. Comment in: Can Med Assoc J 1990 Jul 15;143(2):90.

Antibodies to Chlamydia trachomatis in women with infertility, pelvic inflammatory disease and ectopic pregnancy. Kihlström E, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 May–Jun; 35(2–3):199–204

Chlamydial infection—a female and/or male infertility factor? Eggert-Kruse W, et al. **Fertil Steril** 1990 Jun; 53(6):1037–43

High prevalence of silent chlamydia colonization of the tubal mucosa in infertile women. Marana R, et al. **Fertil Steril** 1990 Feb;53(2):354–6

Is serology of any use when searching for correlations between Chlamydia trachomatis infection and male infertility? Ruijs GJ, et al. **Fertil Steril** 1990 Jan;53(1):131–6

Gastrointestinal obstruction associated with Chlamydia trachomatis. Pegg DJ, et al. **Genitourin Med** 1990 Feb; 66(1):26–7

An experimental model for salpingitis due to Chlamydia trachomatis and residual tubal infertility in the mouse. Zana J, et al. **Hum Reprod** 1990 Apr;5(3):274–8

Chlamydia trachomatis as a cause of abortion. Hossain A, et al. **J Hyg Epidemiol Microbiol Immunol** 1990;34(1):53–5

The role of Neisseria gonorrhoeae and Chlamydia trachomatis in pelvic inflammatory disease and its sequelae in Zimbabwe. De Muylder X, et al. **J Infect Dis** 1990 Aug; 162(2):501–5

Chlamydia trachomatis and inflammatory bowel disease—a coincidence? Orda R, et al. **J R Soc Med** 1990 Jan; 83(1):15–7

The association between Chlamydia trachomatis and ectopic pregnancy. A matched-pair, case-control study [see comments] Chow JM, et al. **JAMA** 1990 Jun 20; 263(23):3164–7 Comment in: JAMA 1990 Jun 20;263(23):3191–2.

Chlamydia trachomatis as a possible agent of human autoimmune diseases. Ghinsberg RC, et al. **Microbiologica** 1989 Oct;12(4):291–6

Isolation of Chlamydia trachomatis from amniotic fluid. Thomas GB, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):519–20

Endocervical chlamydial infection in women with gonorrhoea. Lim KB, et al. **Singapore Med J** 1989 Oct; 30(5):457–9

Afebrile pneumonia associated with chlamydial infection in infants less than 6 months of age: initial results of a three year prospective study. Limudomporn S, et al. **Southeast Asian J Trop Med Public Health** 1989 Jun; 20(2):285–90

[The prevalence of Chlamydia trachomatis infections in new patients at the Infertility Clinic, UOFS, Bloemfontein] Marais NF, et al. **S Afr Med J** 1990 Mar 3;77(5):232–3 (Eng. Abstr.) **(Afr)**

[What is your diagnosis? Reiter's syndrome] Dupin P, et al. **Ann Dermatol Venereol** 1989;116(10):735–6 **(Fre)**

[Perihepatitis of venereal origin or Fitz-Hugh-Curtis syndrome. Apropos of 7 cases seen at the Hôpital Prinicpal] Peghini M, et al. **Dakar Med** 1988;33(1–4):71–4 (Eng. Abstr.) **(Fre)**

[Statistical study of the factors influencing the prognosis in tuboplasty operations. Importance of the status of the ampullary mucosa and of chlamydial infection] Henry-Suchet J, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(5):571–80 (Eng. Abstr.) **(Fre)**

[Osler's endocarditis possibly caused by Chlamydia pneumoniae (TWAR stain) (letter)] Dumont D, et al. **Presse Med** 1990 Jun 2;19(22):1054 **(Fre)**

[Serum IgG antibodies to Chlamydia trachomatis in HLA-B-27 positive patients with rheumatic diseases] Breustedt W, et al. **Dermatol Monatsschr** 1989;175(8):474–8 (Eng. Abstr.) **(Ger)**

[Infection of Chlamydia trachomatis and dysplasia lesions of the cervix uteri (CIN)] Alberico S, et al. **Minerva Ginecol** 1989 Jul;41(7):343–7 (Eng. Abstr.) **(Ita)**

[Morphological semen changes in Chlamydia trachomatis infection] Maciejewski Z, et al. **Ginekol Pol** 1989 Jun; 60(6):314–7 (Eng. Abstr.) **(Pol)**

[Chlamydia infection in infertility of inflammatory etiology] Arakelova ON, et al. **Akush Ginekol (Mosk)** 1989 Oct; (10):62–3 **(Rus)**

[The role of Chlamydia infection in the etiology of infertility] Lineeva ZA, et al. **Akush Ginekol (Mosk)** 1989 Jul;(7):59–60 **(Rus)**

[Serologic indicators of Chlamydia infection in infertile women] Shatkin AA, et al. **Akush Ginekol (Mosk)** 1990 Feb;(2):69–71 **(Rus)**

[Chlamydia—a mild disease with severe complications] Frykman H. **Lakartidningen** 1989 Oct 18;86(42):3549–51 **(Swe)**

DIAGNOSIS

Effective sampling device and mucopurulent cervicitis in women with chlamydial cervical infection. Svensson L, et al. **Acta Obstet Gynecol Scand** 1989;68(1):79–82

Isolation of Chlamydia trachomatis from the middle ear aspirates of otitis media. Ogawa H, et al. **Acta Otolaryngol (Stockh)** 1990 Jul–Aug;110(1–2):105–9

Acute hypoxemic respiratory failure caused by Chlamydia trachomatis and diagnosed by flexible bronchoscopy. Wheeler WB, et al. **Am Rev Respir Dis** 1990 Aug; 142(2):471–3

Fitz-Hugh-Curtis syndrome: three cases confirmed by laparoscopy. Toki T, et al. **Asia Oceania J Obstet Gynaecol** 1990 Jun;16(2):105–10

Women with Chlamydia trachomatis infection [letter; comment] **BMJ** 1989 Dec 16;299(6714):1527 Comment on: BMJ 1989 Nov 4;299(6708):1136–7.

Chlamydia trachomatis infection [letter; comment] Griffiths M. **BMJ** 1989 Dec 9;299(6713):1466 Comment on: BMJ 1989 Nov 4;299(6708):1136–7.

Detection, treatment, and follow up of women with Chlamydia trachomatis infection seeking abortion in inner city general practices [see comments] Southgate L, et al. **BMJ** 1989 Nov 4;299(6708):1136–7 Comment in: BMJ 1989 Dec 9;299(6713):1466. Comment in: BMJ 1989 Dec 16;299(6714):1527.

Should asymptomatic patients be tested for Chlamydia trachomatis in general practice? Buhaug H, et al. **Br J Gen Pract** 1990 Apr;40(333):142–5

Genital Chlamydia infections. Ehret JM, et al. **Clin Lab Med** 1989 Sep;9(3):481–500 (140 ref.)

Cytopathological detection of Chlamydia trachomatis in vaginopancervical (Fast) smears [letter; comment] Lindner LE, et al. **Diagn Cytopathol** 1989;5(4):440–2 Comment on: Diagn Cytopathol 1988;4(3):224–9.

Chlamydia pneumoniae, strain TWAR, as the cause of an outbreak in a boys' school previously called psittacosis. Pether JV, et al. **Epidemiol Infect** 1989 Oct;103(2):395–400

Evaluation of a commercial enzyme immunoassay versus culture for the detection of Chlamydia trachomatis. Bäckman M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):778–82

Comparison of three non-culture techniques for detection of Chlamydia trachomatis in genital tract specimens. Hall CJ, et al. **Eur J Clin Microbiol Infect Dis** 1989 Oct; 8(10):866–70

Detection of Chlamydia trachomatis in formalin-fixed endometrial tissue. Ersbak V, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jul–Aug; 36(1–2):147–51

Age and sex correlation of Chlamydia trachomatis infections evaluated by the culture technique and by an enzyme immunosorbent assay, IDEIA. Ostergaard L, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Mar;34(3):273–81

Predictors of Chlamydia trachomatis infection in women in general practice. Bro F, et al. **Fam Pract** 1990 Jun; 7(2):138–43

Towards developing a diagnostic algorithm for Chlamydia trachomatis and Neisseria gonorrhoeae cervicitis in pregnancy. Braddick MR, et al. **Genitourin Med** 1990 Apr; 66(2):62–5

Chlamydia trachomatis among sexually active teenage girls: influence of sampling location and clinical signs on the detection rate. Rahm VA, et al. **Genitourin Med** 1990 Apr; 66(2):66–9

Use of the Cytobrush for concurrent endocervical cytology and chlamydia sampling. Szarewski A, et al. **Genitourin Med** 1990 Jun;66(3):205–7

TestPack Chlamydia, a new rapid assay for the direct detection of Chlamydia trachomatis. Coleman P, et al. **J Clin Microbiol** 1989 Dec;27(12):2811–4

Accuracy of Chlamydia trachomatis antigen detection methods in a low-prevalence population in a primary care setting. Gann PH, et al. **J Clin Microbiol** 1990 Jul; 28(7):1580–5

Evaluation of Syva enzyme immunoassay for detection of Chlamydia trachomatis in genital specimens. Gaydos CA, et al. **J Clin Microbiol** 1990 Jul;28(7):1541–4

Comparison of Kodak Surecell Chlamydia Test Kit with culture for the diagnosis of chlamydial conjunctivitis in infants. Hammerschlag MR, et al. **J Clin Microbiol** 1990 Jun;28(6):1441–2

Effect of endocervical specimen quality on detection of Chlamydia trachomatis and on the incidence of false-positive results with the Chlamydiazyme method. Kellogg JA, et al. **J Clin Microbiol** 1990 Jun;28(6):1108–13

Comparison of IDEIA III and cell culture for the detection of Chlamydia trachomatis in endocervical specimens. Lebar WD, et al. **J Clin Microbiol** 1990 Jun;28(6):1447–8

Effect of patient characteristics on performance of an enzyme immunoassay for detecting cervical Chlamydia trachomatis infection. Magder LS, et al. **J Clin Microbiol** 1990 Apr; 28(4):781–4

Confirmatory assay increases specificity of the chlamydiazyme test for Chlamydia trachomatis infection of the cervix. Moncada J, et al. **J Clin Microbiol** 1990 Aug; 28(8):1770–3

Evaluation of a nonisotopic probe for detection of Chlamydia trachomatis in endocervical specimens. Woods GL, et al. **J Clin Microbiol** 1990 Feb;28(2):370–2

An atypical presentation of the Fitz-Hugh-Curtis syndrome. McCormick M, et al. **J Emerg Med** 1990 Jan–Feb;8(1):55–8

Test of cure for genital Chlamydia trachomatis infection in women. Ferris DG, et al. **J Fam Pract** 1990 Jul;31(1):36–41

The diagnosis and management of chlamydial cervicitis: a test of cure. Southgate L. **J Fam Pract** 1990 Jul;31(1):33–5

A new diagnostic index for predicting cervical infection with either Chlamydia trachomatis or Neisseria gonorrhoeae. Rosenthal GE, et al. **J Gen Intern Med** 1990 Jul–Aug; 5(4):319–26

Culture-negative endocarditis probably due to Chlamydia pneumoniae. Marrie TJ, et al. **J Infect Dis** 1990 Jan; 161(1):127–9 (14 ref.)

Sexually transmitted diseases and Chlamydia trachomatis in women consulting for contraception. Avonts D, et al. **J R Coll Gen Pract** 1989 Oct;39(327):418–20

Treatment of Chlamydia trachomatis identified with Chlamydiazyme during pregnancy. Impact on perinatal complications and infants. Black-Payne C, et al. **J Reprod Med** 1990 Apr;35(4):362–7

Urinary leukocyte esterase screening test for asymptomatic chlamydial and gonococcal infections in males [see comments] Shafer MA, et al. **JAMA** 1989 Nov 10; 262(18):2562–6 Comment in: JAMA 1990 Jul 25;264(4):453.

Sterile pyuria and Chlamydia trachomatis [letter] Matthews RS, et al. **Lancet** 1990 Aug 11;336(8711):385

Comparison of chemiluminescent DNA probe to cell culture for the screening of Chlamydia trachomatis in a gynecology clinic population. Mercer LJ, et al. **Obstet Gynecol** 1990 Jul;76(1):114–7

Chlamydial infections. Graham JM, et al. **Prim Care** 1990 Mar;17(1):85–93 (33 ref.)

General colorimetric method for DNA diagnostics allowing direct solid-phase genomic sequencing of the positive samples. Wahlberg J, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6569–73

Diagnosis of infection caused by Chlamydia pneumoniae (strain TWAR) in patients with "ornithosis" in southern Sweden 1981–1987. Persson K, et al. **Scand J Infect Dis** 1989;21(6):675–9

Evaluation of a genus-specific monoclonal antibody in an amplified enzyme-linked immunoassay in the detection of Chlamydia in urine samples from men. Jawad AJ, et al. **Sex Transm Dis** 1990 Apr–Jun;17(2):87–9

Endocervical chlamydial infection in female contacts of patients with nongonococcal urethritis. Lim KB, et al. **Singapore Med J** 1989 Apr;30(2):164–6

Enzyme immunoassay (Chlamydiazyme) for the detection of chlamydial antigen in endocervical specimens. Srivasin V, et al. **Singapore Med J** 1989 Oct;30(5):449–50

[Clinical aspects of chlamydial genital infections in women] Karadzhova R, et al. **Akush Ginekol (Sofiia)** 1989; 28(5):69–75 (20 ref.) **(Bul)**

[Contribution of the bacteriology laboratory in genital infections in women] Péan Y. **Rev Fr Gynecol Obstet** 1989 Mar 25;84(3 Pt 2):245–9; discussion 254–6 (Eng. Abstr.) **(Fre)**

[Diagnosis of genital Chlamydia trachomatis infections using antigen detection and cell culture (letter)] Bernatchez H. **Union Med Can** 1989 Jul–Aug;118(4):144–5, 147 **(Fre)**

[Diagnosis of genital Chlamydia trachomatis infections using antigen detection and cell culture] Bernatchez H, et al. **Union Med Can** 1989 Mar–Apr;118(2):81–5 (Eng. Abstr.) **(Fre)**

[Early screening using a direct test for genital chlamydiosis in women] Estany A, et al. **Union Med Can** 1989 Sep–Oct; 118(5):197, 199–201, 203–4 (34 ref.) (Eng. Abstr.) **(Fre)**

[Clinical aspects and simple laboratory parameters in Chlamydia infections] Spitzer D, et al. **Arch Gynecol Obstet** 1989;245(1–4):458–60 **(Ger)**

[Immunologic detection of genital Chlamydia infections in gynecology and obstetrics] Schieder K, et al. **Gynakol Rundsch** 1989;29(3):177–9 **(Ger)**

[Chlamydia trachomatis infection in pregnancy] Schön HJ, et al. **Gynakol Rundsch** 1989;29 Suppl 2:173–7 **(Ger)**

[Pathogen spectrum, clinical aspects and laboratory values in ascending infections in gynecology] Spitzer D, et al. **Gynakol Rundsch** 1989;29(3):175–7 **(Ger)**

[Nucleic acid hybridization for direct detection of Chlamydia trachomatis. Comparison of a radioactive with a non-radioactive procedure] Näher H, et al. **Hautarzt** 1990 Mar;41(3):151–4 (Eng. Abstr.) **(Ger)**

[Chlamydia-induced arthritis: diagnosis—follow-up—therapy] Wollenhaupt J, et al. **Wien Med Wochenschr** 1990 Jun 30;140(12):302–6 (25 ref.) (Eng. Abstr.) **(Ger)**

[Response to the contribution, "Chlamydia infections", by U. B. Hoyme] Schieck H, et al. **Zentralbl Gynakol** 1990; 112(9):585–7 **(Ger)**

[The usefulness of Chlamydia testpack for the diagnosis of Chlamydia trachomatis infection in genito-urinary tract] Iwasa T, et al. **Hinyokika Kiyo** 1989 Oct;35(10):1721–4 (Eng. Abstr.) **(Jpn)**

[Detection of Chlamydia trachomatis antigen for diagnosis of respiratory infection I. Cross reaction with bacteriae consisting normal flora respiratory tract] Yamazaki T, et al. **Kansenshogaku Zasshi** 1989 Oct;63(10):1195–200 (Eng. Abstr.) **(Jpn)**

[Serodiagnosis of Chlamydia infection] Ishi K, et al. **Nippon Rinsho** 1990 Feb;48 Suppl:385–7 **(Jpn)**

[Diagnostic methods in Chlamydia trachomatis infection. A review of current methods] Schiøtz HA. **Tidsskr Nor Laegeforen** 1990 Jan 20;110(2):204–7 (Eng. Abstr.) **(Nor)**

[Correlation of detection of Chlamydia infection of the urethra sperm] Choroszy-Król I, et al. **Przegl Dermatol** 1990 Jan-Feb;77(1):72-5 (Eng. Abstr.) **(Pol)**

[Chlamydia trachomatis in smears of irradiated uterine cervix: cytologic and immunocytochemical aspects] Santos DR, et al. **Rev Paul Med** 1989 Jul-Dec;107(4-6):229-32 (Eng. Abstr.) **(Por)**

[Chlamydia infection in obstetrics and gynecology] Liseeva ZA. **Akush Ginekol (Mosk)** 1989 Oct;(10):8-11 (51 ref.) **(Rus)**

[Clinical aspects, diagnosis and treatment of urogenital Chlamydia infection] Savicheva AM, et al. **Akush Ginekol (Mosk)** 1989 Jul;(7):74-8 **(Rus)**

[Significance of the immunofluorescence reaction in the diagnosis of swine chlamydiosis] Bortnichuk VA. **Mikrobiol Zh** 1989 May-Jun;51(3):65-8 (Eng. Abstr.) **(Rus)**

[Diagnostic significance of intracutaneous test (with chlamydial allergens) in urogenital infections and sterility] Sakhel' MI, et al. **Sov Med** 1989;(7):89-93 **(Rus)**

[Evaluation of the variability of rapid diagnosis of infection by Chlamydia trachomatis using direct immunofluorescence] Hernández Aguado I, et al. **Med Clin (Barc)** 1990 Jan 13;94(1):9-11 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Roxithromycin and erythromycin in chlamydia-negative non-gonococcal urethritis. Worm AM. **Acta Derm Venereol (Stockh)** 1990;70(3):269-71

Efficacy and safety of ofloxacin in the treatment of nongonococcal sexually transmitted disease. Batteiger BE, et al. **Am J Med** 1989 Dec 29;87(6C):75S-77S

Chlamydia trachomatis infection in pregnancy and effect of treatment on outcome. Ryan GM Jr, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):34-9

Dose-ranging study of fleroxacin for treatment of uncomplicated Chlamydia trachomatis genital infections. Bowie WR, et al. **Antimicrob Agents Chemother** 1989 Oct; 33(10):1774-7

Ofloxacin treatment of nongonococcal urethritis. A multi-center study in Asia. Kawada Y, et al. **Arzneimittelforschung** 1990 Feb;40(2 Pt 1):190-2

Randomized comparison of ofloxacin and doxycycline for chlamydia and ureaplasma urethritis and cervicitis. Mogabgab WJ, et al. **Chemotherapy** 1990;36(1):70-6

Two familial cases of malignant Reiter's syndrome. Wattiaux MJ, et al. **Clin Exp Rheumatol** 1989 Sep-Oct;7(5):541-5

Ofloxacin in the treatment of gonococcal and chlamydial urethritis. Blomer R, et al. **Clin Ther** 1988;10(3):263-5

Lack of efficacy of fusidic acid in the treatment of chlamydial conjunctivitis [letter] Stenberg K, et al. **Eur J Clin Microbiol Infect Dis** 1990 Jan;9(1):57-8

Comparative studies of azithromycin in skin and soft-tissue infections and sexually transmitted infections by Neisseria and Chlamydia species. Lassus A. **J Antimicrob Chemother** 1990 Jan;25 Suppl A:115-21

Short-course erythromycin therapy for endocervical chlamydia during pregnancy. Thomason JL, et al. **J Fam Pract** 1990 Jun;30(6):711-2

Antibiotic therapy for pelvic inflammatory disease. Pastorek JG 2d. **J Reprod Med** 1990 Mar;35(3 Suppl):329-32 (19 ref.)

Improved pregnancy outcome following successful treatment of chlamydial infection [see comments] Cohen I, et al. **JAMA** 1990 Jun 20;263(23):3160-3 Comment in: JAMA 1990 Jun 20;263(23):3191-2.

Ciprofloxacin compared with doxycycline for nongonococcal urethritis. Ineffectiveness against Chlamydia trachomatis due to relapsing infection. Hooton TM, et al. **JAMA** 1990 Sep 19;264(11):1418-21

Amoxicillin therapy for Chlamydia trachomatis in pregnancy. Crombleholme WR, et al. **Obstet Gynecol** 1990 May; 75(5):752-6

Treatment of Chlamydia trachomatis genital infection. Toomey KE, et al. **Rev Infect Dis** 1990 Jul-Aug;12 Suppl 6:S645-55 (114 ref.)

Chlamydia trachomatis--clinical significance and strategies of intervention. Weström LV. **Semin Dermatol** 1990 Jun; 9(2):117-25 (71 ref.)

Clindamycin and ibuprofen effects on chlamydial salpingitis in mice. Blanco JD, et al. **Sex Transm Dis** 1989 Oct-Dec; 16(4):192-4

The effects of an STD educational intervention on follow-up appointment keeping and medication-taking compliance. Blonna R, et al. **Sex Transm Dis** 1989 Oct-Dec; 16(4):198-200

Pivampicillin versus doxycycline in the treatment of chlamydial urethritis in men. Lassus AB, et al. **Sex Transm Dis** 1990 Jan-Mar;17(1):20-2

[Treatment of urogenital Chlamydia infections (letter)] **Ugeskr Laeger** 1989 Dec 4;151(49):3331-2 **(Dan)**

[Results of detection and early treatment of Chlamydia trachomatis infections in pregnancy] Legris M, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(5):581-5 (Eng. Abstr.) **(Fre)**

[Proposal for a new therapeutic strategy in high genital infections] Verhoest P, et al. **Rev Fr Gynecol Obstet** 1989 Dec;84(12):933-40 (Eng. Abstr.) **(Fre)**

[Male genito-urinary tract infection caused by Chlamydia trachomatis and seminal characteristics: use of minocycline] Lombardo F, et al. **Arch Ital Urol Nefrol Androl** 1990 Mar; 62(1):47-53 (Eng. Abstr.) **(Ita)**

[Antibiotic treatment of urogenital infections caused by Chlamydia trachomatis. Preliminary study] Zanetti S, et al. **G Ital Dermatol Venereol** 1989 Jun;124(6):307-9 (Eng. Abstr.) **(Ita)**

[The effect of tetracycline therapy on the laboratory indices of chlamydia infection in Reiter's disease (preliminary report)] Khamraev AA, et al. **Revmatologiia (Mosk)** 1990 Jan-Mar;(1):17-21 (Eng. Abstr.) **(Rus)**

[The importance of tetracycline treatment of cervical Chlamydia trachomatis infections: control with cervical smears] Demirezen S, et al. **Mikrobiyol Bul** 1988 Apr; 22(2):120-5 (Eng. Abstr.) **(Tur)**

EPIDEMIOLOGY

Epidemiological evaluation of the incidence of Chlamydia trachomatis infection in pregnancy. Pungetti D, et al. **Acta Eur Fertil** 1989 Mar-Apr;20(2):97-8

Chlamydia pneumoniae strain TWAR, Mycoplasma pneumoniae, and viral infections in acute respiratory disease in a university student health clinic population. Thom DH, et al. **Am J Epidemiol** 1990 Aug;132(2):248-56

Screening for chlamydial cervicitis in a sexually active university population. Malotte CK, et al. **Am J Public Health** 1990 Apr;80(4):469-71

The prevalence of Neisseria gonorrhoeae and Chlamydia trachomatis in victims of sexual assault. Sturm JT, et al. **Ann Emerg Med** 1990 May;19(5):587-90

Chlamydial infection and male infertility: an epidemiological study. Custo GM, et al. **Arch Androl** 1989;23(3):243-8

Screening pregnant women for Chlamydia--Quebec. Auger P, et al. **Can Dis Wkly Rep** 1990 Mar 10;16(10):45-6 **(Eng, Fre)**

Yearly incidence of Chlamydia trachomatis infection of the cervix in a university student health service population over four years--British Columbia. Noble MA, et al. **Can Dis Wkly Rep** 1989 Sep 9;15(36):181-3; discussion 183-4 **(Eng, Fre)**

A prospective study of genital infections in a family-planning clinic. 2. Chlamydia infection--the identification of a high-risk group. Macaulay ME, et al. **Epidemiol Infect** 1990 Feb;104(1):55-61

A study of human respiratory tract chlamydial infections in Cambridgeshire 1986-88. Wreghitt TG, et al. **Epidemiol Infect** 1990 Jun;104(3):479-88

Prevalence of asymptomatic carriers of Chlamydia trachomatis among pregnant and non-pregnant women in south-western Greece. Arkoulis T, et al. **Eur J Epidemiol** 1989 Dec;5(4):526-8

Epidemiological aspects of chlamydial infections and tubal abnormalities in infertile couples. Ruijs GJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jul-Aug; 36(1-2):107-16

Limbal disease in trachoma and other ocular chlamydial infections: risk factors for corneal vascularisation. Dawson CR, et al. **Eye** 1989;3 (Pt 2):204-9

Prevalence of Chlamydia trachomatis infection in pregnant women in Zaire [letter] Beaujean G, et al. **Genitourin Med** 1990 Apr;66(2):124-5

Syphilis, gonorrhoea and genital chlamydial infection in a Somali village. Ismail SO, et al. **Genitourin Med** 1990 Apr; 66(2):70-5

The prevalence of Chlamydia infection in outpatient clinics in Beijing, China [letter] Ni AP, et al. **Genitourin Med** 1990 Apr;66(2):125

Declining incidence of Chlamydia trachomatis in women attending a provincial genitourinary medicine clinic [letter] Shanmugaratnam K, et al. **Genitourin Med** 1989 Dec; 65(6):400

Falling prevalence of Chlamydia trachomatis infection among female patients attending the Department of Genito-urinary Medicine, Bournemouth [letter] Sivakumar K, et al. **Genitourin Med** 1989 Dec;65(6):400

Chlamydia trachomatis infections in the female rectums. Thompson CI, et al. **Genitourin Med** 1989 Aug;65(4):269-73

Seroepidemiology of chlamydia in Costa Rica. Vetter KM, et al. **Genitourin Med** 1990 Jun;66(3):182-8

Prevalence of Chlamydia trachomatis infection in the Turkish female population. Yildiz A, et al. **Gynecol Obstet Invest** 1990;29(4):282-4

Prevalence of Chlamydia trachomatis in cases of genital non-gonococcal infection according to microbiological and serological investigations. Mazara M, et al. **Infection** 1989 Nov-Dec;17(6):360-3

Chlamydia trachomatis urethritis in university men: risk factors and rates. Leka TW, et al. **J Am Board Fam Pract** 1990 Apr-Jun;3(2):81-6

Review of the epidemiology of chlamydiosis in the United States. Williams LP Jr. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1518-21 (13 ref.)

Enzyme immunoassay to determine exposure to Chlamydia pneumoniae (strain TWAR). Ladany S, et al. **J Clin Microbiol** 1989 Dec;27(12):2778-83

The association between chlamydial-specific IgG and IgA antibodies and pregnancy outcome in an in vitro fertilization program. Lunenfeld E, et al. **J In Vitro Fert Embryo Transf** 1989 Aug;6(4):222-7

Sex, lives, and chlamydia rates [editorial; comment] Dan BB. JAMA 1990 Jun 20;263(23):3191-2 Comment on: JAMA 1990 Jun 20;263(23):3155-9. Comment on: JAMA 1990 Jun 20;263(23):3160-3. Comment on: JAMA 1990 Jun 20;263(23):3164-7.

Post-abortion chlamydial pelvic infection [letter; comment] Cohn M, et al. **Lancet** 1989 Nov 18;2(8673):1219 Comment on: Lancet 1989 Oct 14;2(8668):928-9.

Chlamydial prevalence: an increase? [letter] Driscoll GL, et al. **Med J Aust** 1989 Dec 4-18;151(11-12):722-3

Genital Chlamydia trachomatis infection in Western Australia [letter] Sesnan K, et al. **Med J Aust** 1990 Jan 15; 152(2):108-9

Asymptomatic Chlamydia infection in pregnant women. Hagley MT, et al. **Ohio Med** 1989 Nov;85(11):905-7

Appendix. Chlamydial infections in men. **Prim Care** 1990 Mar;17(1):205-6

Etiology of urethritis in Thai men. Kuvanont K, et al. **Sex Transm Dis** 1989 Jul-Sep;16(3):137-40

Endocervical chlamydial infection in women attending a sexually transmitted disease clinic in Singapore. Lim KB, et al. **Singapore Med J** 1989 Apr;30(2):167-9

Chlamydia in pregnant women: southeastern Wisconsin. Baumgardner DJ, et al. **Wis Med J** 1989 Sep;88(9):12-5

[Prevalence of Chlamydia trachomatis infection in infants & children] Jhon TM, et al. **Acta Paediatr Sin** 1989 May-Jun;30(3):187-90 (Eng. Abstr.) **(Chi)**

[Frequency of Chlamydia trachomatis in women under 35 years of age consulting the general practitioner for gynecologic or obstetric reasons] Nielsen JB, et al. **Ugeskr Laeger** 1990 Mar 5;152(10):662-3 (Eng. Abstr.) **(Dan)**

[Prevalence and risk factors of Chlamydia trachomatis infection in clients of a venereal disease clinic in Amsterdam] van den Hoek JA, et al. **Ned Tijdschr Geneeskd** 1989 Dec 2;133(48):2392-6 (Eng. Abstr.) **(Dut)**

[Prevalence and risk factors of Chlamydia trachomatis infections in clients of a venereal disease outpatient clinic in Amsterdam (letter)] van Zuiden M. **Ned Tijdschr Geneeskd** 1990 Feb 3;134(5):249 **(Dut)**

[Cervical infection caused by Chlamydia trachomatis at a family planning center: prevalence, analysis of risk factors, prediction model] Chi Nguyen Duy, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(8):977-87 (Eng. Abstr.) **(Fre)**

[The sequela of peri-hepatitis due to Chlamydia trachomatis (Fitz-Hugh-Curtis syndrome) seen during an ectopic pregnancy] Picaud A, et al. **Rev Fr Gynecol Obstet** 1990 Jun;85(6):365-8 (Eng. Abstr.) **(Fre)**

[The incidence of genital chlamydial infections in patients of a venereologic consultation clinic] Breustedt W. **Dermatol Monatsschr** 1989;175(7):443-9 (Eng. Abstr.) **(Ger)**

[Chlamydia infection in gynecology] Carol W, et al. **Gynakol Rundsch** 1990;30(2):84-91 (Eng. Abstr.) **(Ger)**

[The frequency of Chlamydia detection in gynecologic and obstetrical patients and newborns] Link M, et al. **Zentralbl Gynakol** 1989;111(22):1490-6 (Eng. Abstr.) **(Ger)**

[Epidemiological survey of Chlamydia trachomatis infections from 1984 to 1988] Bessho H, et al. **Kansenshogaku Zasshi** 1990 Jan;64(1):80-6 (Eng. Abstr.) **(Jpn)**

[Epidemiological study on Chlamydia trachomatis infection in pregnant housewives and investigation on its influence on outcome of pregnancy and on their newborns] Nishimura M, et al. **Kansenshogaku Zasshi** 1990 Feb; 64(2):179-87 (Eng. Abstr.) **(Jpn)**

[Prevalence of Chlamydia trachomatis and Neisseria gonorrhoeae in 3 groups of Ecuadorian women with different sexual behaviors] Narváez M, et al. **Bol Of Sanit Panam** 1989 Sep;107(3):220-5 (Eng. Abstr.) **(Spa)**

[Has the Chlamydia epidemic culminated?] Herrmann B, et al. **Lakartidningen** 1989 Oct 18;86(42):3567-9 **(Swe)**

ETIOLOGY

The correlation between Chlamydia antigen, antibody, vaginal colonization and contraceptive method in young unmarried women. Blum M, et al. **Adv Contracept** 1990 Mar;6(1):41-5

Clinical predictors of Chlamydia trachomatis endocervicitis in adolescent women. Looking for the right combination. Remafedi G, et al. **Am J Dis Child** 1989 Dec; 143(12):1437-42

Serovars of Chlamydia trachomatis causing postabortion salpingitis. Persson K, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):795-8

Chlamydia trachomatis, tubal disease and the incidence of symptomatic and asymptomatic infection following hysterosalpingography. Forsey JP, et al. **Hum Reprod** 1990 May;5(4):444-7

Chlamydia trachomatis cervical infection and oral contraceptive use among adolescent girls. Oh MK, et al. **J Adolesc Health Care** 1989 Sep;10(5):376-81

Decreased risk of symptomatic chlamydial pelvic inflammatory disease associated with oral contraceptive use. Wølner-Hanssen P, et al. **JAMA** 1990 Jan 5; 263(1):54-9

A raw milk--Chlamydia connection? Walterspiel JN, et al. **Pediatr Infect Dis J** 1989 Dec;8(12):893

A clinical and epidemiological study of "ornithosis" caused by Chlamydia psittaci and Chlamydia pneumoniae (strain TWAR). Frydén A, et al. **Scand J Infect Dis** 1989; 21(6):681-91

[Contraception and tubal sterility of infective origin] Gayer

ML, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990; 19(2):155–64 (Eng. Abstr.) **(Fre)**

[Studies on Chlamydia pneumoniae, strain TWAR, infection. I. Experimental infection of C. pneumoniae in mice and serum antibodies against TWAR by MFA. Kishimoto T. **Kansenshogaku Zasshi** 1990 Jan;64(1):124–31 (Eng. Abstr.) **(Jpn)**

[Bronchopneumonia caused by Chlamydia trachomatis in the premature infant] Vilanova Juanola JM, et al. **An Esp Pediatr** 1989 Aug;31(2):152–4 **(Spa)**

IMMUNOLOGY

Some characteristics of a secreted chlamydial antigen recognized by IgG from C. trachomatis patient sera. Stuart ES, et al. **Immunology** 1989 Dec;68(4):469–73

Experimental infection with Chlamydia pneumoniae in nonhuman primates. Holland SM, et al. **Infect Immun** 1990 Mar;58(3):593–7

Serological response to Chlamydia pneumoniae infection. Campbell LA, et al. **J Clin Microbiol** 1990 Jun;28(6):1261–4

Chlamydial disease pathogenesis. The 57-kD chlamydial hypersensitivity antigen is a stress response protein. Morrison RP, et al. **J Exp Med** 1989 Oct 1;170(4):1271–83

Prevalence of Chlamydia trachomatis IgG and IgA antibody in gynaecology inpatients as determined by serum indirect immunoperoxidase assay. Jennings OG, et al. **S Afr Med J** 1990 Mar 3;77(5):234–7

Serologic evidence for the role of Chlamydia trachomatis, Neisseria gonorrhoeae, and Mycoplasma hominis in the etiology of tubal factor infertility and ectopic pregnancy. Miettinen A, et al. **Sex Transm Dis** 1990 Jan–Mar;17(1):10–4

Seminal antisperm antibodies and genitourinary infection. Mićić S, et al. **Urology** 1990 Jan;35(1):54–6

[Immune response against Chlamydia trachomatis inoculation in mice—changes in interferon activity, antibody titers and weight of the spleen as parameters of infection] Kikuchi H, et al. **Kansenshogaku Zasshi** 1989 Aug;63(8):838–44 (Eng. Abstr.) **(Jpn)**

[Characteristics of the immune status of female cattle breeders with chlamydia infections] Feizulla MF, et al. **Gig Tr Prof Zabol** 1989;(11):24–6 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Detection of Chlamydia trachomatis in cervical smears from pregnant population. Maguire NC, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):204–7

Chlamydia trachomatis in cervical uterine irradiated cancer patients. Maeda MY, et al. **Diagn Cytopathol** 1990;6(2):86–8

Bartholin's abscess: the role of Chlamydia trachomatis. Bieker OP, et al. **Genitourin Med** 1990 Feb;66(1):24–5

Variation in virulence among oculogenital serovars of Chlamydia trachomatis in experimental genital tract infection. Ito JI Jr, et al. **Infect Immun** 1990 Jun; 58(6):2021–3

Cinematographic observations of growth cycles of Chlamydia trachomatis in primary cultures of human amniotic cells. Neeper ID, et al. **Infect Immun** 1990 Jul; 58(7):2042–7

Rectal carriage of Chlamydia trachomatis in women [letter] Pratt BC, et al. **J Clin Pathol** 1989 Dec;42(12):1309–10

A new respiratory tract pathogen: Chlamydia pneumoniae strain TWAR. Grayston JT, et al. **J Infect Dis** 1990 Apr; 161(4):618–25 (32 ref.)

Isolation of Chlamydia pneumoniae from middle ear aspirates of otitis media with effusion: a case report [letter] Ogawa H, et al. **J Infect Dis** 1990 Oct;162(4):1000–1

Spread and persistence of infection with a trachoma biovar strain of Chlamydia trachomatis in multiplying and nonmultiplying McCoy cells. Benes S. **Sex Transm Dis** 1990 Jan–Mar;17(1):1–6

[Is Chlamydia TWAR of significance in The Netherlands?] Stolk-Engelaar MV, et al. **Ned Tijdschr Geneeskd** 1990 Jun 2;134(22):1094–7 (Eng. Abstr.) **(Dut)**

[Isolation of Chlamydia trachomatis from the endometrium and endometritis. Apropos of a series of 42 patients] Zorn B, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(5):627–34 (Eng. Abstr.) **(Fre)**

[Value of the Twar strain for chlamydiosis serology. Choice of a strategy of detecting antibodies] Roger A, et al. **Presse Med** 1990 Apr 28;19(17):790–4 (Eng. Abstr.) **(Fre)**

[Cultural and serologic Chlamydia detection in diagnosis of sterility and increased risk of infection] Degen KW, et al. **Geburtshilfe Frauenheilkd** 1990 May;50(5):371–4 (Eng. Abstr.) **(Ger)**

[Microbiologic findings including Chlamydia serology in cervix dysplasia and human papillomavirus infection] Mayer HO, et al. **Gynakol Rundsch** 1989;29 Suppl 2:88–91 **(Ger)**

[Comparison between culture method and direct immunofluorescence test for detection of Chlamydia trachomatis and follow-up survey of antigen positive patients] Bessho H, et al. **Kansenshogaku Zasshi** 1990 Mar; 64(3):284–8 (Eng. Abstr.) **(Jpn)**

[The role of Chlamydia infection in the development of infectious inflammatory diseases in premature newborn infants] Dement'eva GM, et al. **Pediatriia** 1990;(1):18–21 (Eng. Abstr.) **(Rus)**

[Chlamydia trachomatis pneumonia in Spain: apropos of a case] Ortega Páez J, et al. **An Esp Pediatr** 1990 Apr; 32(4):365–7 **(Spa)**

PATHOLOGY

Similarity in pathogenic features in lung and peritoneal infection by Coxiella burnetii, typhus group rickettsiae, and Chlamydiae. Khavkin T, et al. **Ann N Y Acad Sci** 1990; 590:85–103 (62 ref.)

Detection of Chlamydia trachomatis by papanicolaou-stained smear and its limitations. Shiina Y, et al. **Diagn Cytopathol** 1990;6(2):148–51

Histopathology of endocervical infection caused by Chlamydia trachomatis, herpes simplex virus, Trichomonas vaginalis, and Neisseria gonorrhoeae. Kiviat NB, et al. **Hum Pathol** 1990 Aug;21(8):831–7

The ovine immune response to Chlamydia psittaci; histopathology of the lymph node. Huang HS, et al. **J Comp Pathol** 1990 Jan;102(1):89–97

Severity of salpingitis in mice after primary and repeated inoculation with a human strain of Chlamydia trachomatis. Tuffrey M, et al. **J Exp Pathol (Oxford)** 1990 Jun; 71(3):403–10

The effect of Chlamydia trachomatis infection on the host cell cytoskeleton and membrane compartments. Campbell S, et al. **J Gen Microbiol** 1989 Sep;135 (Pt 9):2379–86

Chlamydia trachomatis infection of human fallopian tube organ cultures. Cooper MD, et al. **J Gen Microbiol** 1990 Jun;136 (Pt 6):1109–15

Correlation of infertility with altered tubal morphology and function in mice with salpingitis induced by a human genital-tract isolate of Chlamydia trachomatis. Tuffrey M, et al. **J Reprod Fertil** 1990 Jan;88(1):295–305

[Viral and chlamydial diseases of the uterine cervix—histocytological correlates] Zavadilová H, et al. **Cesk Patol** 1989 Nov;25(4):217–25 (Eng. Abstr.) **(Cze)**

[An ultrastructural and morphometric analysis of the polymorphonuclear leukocytes from lesion foci and from the peripheral blood in patients with a gonorrhea-chlamydial urogenital infection before and during treatment with doxycycline combined with T-activin] Delektorskiĭ VV, et al. **Vestn Dermatol Venerol** 1990;(2):15–21 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Dose previous Chlamydia trachomatis infection influence the pregnancy rate of in vitro fertilization and embryo replacement? Osser S, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):40–4

Male genital mycoplasmas and Chlamydia trachomatis culture: its relationship with accessory gland function, sperm quality, and autoimmunity. Soffer Y, et al. **Fertil Steril** 1990 Feb;53(2):331–6

A role in vivo for tumor necrosis factor alpha in host defense against Chlamydia trachomatis. Williams DM, et al. **Infect Immun** 1990 Jun;58(6):1572–6

The effect of chlamydial infection on the initiation of premature labour: serial measurements of intrauterine prostaglandin E2 in amniotic fluid, allantoic fluid and utero-ovarian vein, using catheterised sheep experimentally infected with an ovine abortion strain of Chlamydia psittaci [published errata appear in Prostaglandins Leukot Essent Fatty Acids 1990 Apr;39(4):336 and 1990 Jul;40(3):238] Howie A, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Sep; 37(3):203–11

[The role of Chlamydia trachomatis in producing abnormal movements by spermatozoa] Diquelou JY, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(5):615–25 (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

Is it cost-beneficial to screen adolescent males for chlamydia? [comment] Alexander ER. **Am J Public Health** 1990 May; 80(5):531–2 Comment on: Am J Public Health 1990 May;80(5):545–50.

Screening for Chlamydia trachomatis in adolescent males: a cost-based decision analysis [see comments] Randolph AG, et al. **Am J Public Health** 1990 May;80(5):545–50 Comment in: Am J Public Health 1990 May;80(5):531–2.

1989 Canadian guidelines for screening for Chlamydia trachomatis infection. **Can Dis Wkly Rep** 1989 Nov;15 Suppl 5:1–13 **(Eng, Fre)**

Immunization against chlamydial genital infection in guinea pigs with UV-inactivated and viable chlamydiae administered by different routes. Rank RG, et al. **Infect Immun** 1990 Aug;58(8):2599–605

Screening asymptomatic adolescent males for chlamydia. Braverman PK, et al. **J Adolesc Health Care** 1990 Mar; 11(2):141–4

Interlaboratory test discordance in screening adolescents for Chlamydia with direct immunofluorescence. Frisch LE. **J Adolesc Health Care** 1989 Nov;10(6):545–7

Screening and treatment to prevent post abortion chlamydial pelvic infection [letter] [see comments] Wood SM, et al. **Lancet** 1989 Oct 14;2(8668):928–9 Comment in: Lancet 1989 Nov 18;2(8673):1219.

Prophylaxis of chlamydial conjunctivitis [letter; comment] Combs JT. **Pediatr Infect Dis J** 1990 Mar;9(3):225 Comment on: Pediatr Infect Dis J 1989 Aug;8(8):491–5.

Screening at-risk groups for Chlamydia trachomatis. **Practitioner** 1989 Nov 22;233(1479):1518

Routine screening for genital Chlamydia trachomatis in adolescent females. Fortenberry JD, et al. **Sex Transm Dis** 1989 Oct–Dec;16(4):168–72

Protective effect of polyclonal and monoclonal antibodies against abortion in mice infected by Chlamydia psittaci. Buzoni-Gatel D, et al. **Vaccine** 1990 Aug;8(4):342–6

Chlamydia: management in the physician's office. Vaughn ML, et al. **Wis Med J** 1990 Apr;89(4):159–61

[Chlamydia infection and pregnancy—routine screening and treatment of 3,561 pregnant patients] Bülau A, et al. **Gynakol Rundsch** 1989;29(3):180–2 **(Ger)**

[Chlamydia infection in pregnancy: screening of mothers and their newborn infants] Schlögl H, et al. **Gynakol Rundsch** 1989;29 Suppl 2:177–9 **(Ger)**

[Chlamydia screening in over 5,000 pregnant patients] Wild E, et al. **Gynakol Rundsch** 1989;29 Suppl 2:392–3 **(Ger)**

[Relevance of routine diagnosis of Chlamydia and HIV infections in Vienna prostitutes] Kopp W, et al. **Z Hautkr** 1990 Jul;65(7):690–2 (Eng. Abstr.) **(Ger)**

[Is the Infectious Diseases Law an aid or a burden in the fight against Chlamydia?] Rahm VA. **Lakartidningen** 1989 Oct 18;86(42):3552–3 **(Swe)**

[The role of legislation should not be overestimated when the results of Chlamydia prevention are scrutinized] Sandström E. **Lakartidningen** 1990 Jan 17;87(3):103 **(Swe)**

RADIONUCLIDE IMAGING

Evaluation of a radioactive rRNA:cDNA-hybridisation assay for the direct detection of Chlamydia trachomatis in urogenital specimens. Näher H, et al. **Genitourin Med** 1989 Oct;65(5):319–22

TRANSMISSION

Chlamydia trachomatis in infants: a prospective study [letter; comment] Powell K, et al. **Arch Dis Child** 1990 Mar; 65(3):336 Comment on: Arch Dis Child 1989 Apr;64(4):525–9.

Risks of donor insemination [letter; comment] Robinson JN, et al. **BMJ** 1989 Dec 16;299(6714):1531 Comment on: BMJ 1989 Nov 11;299(6709):1178–9.

Promiscuity and public health: some clinical and ethical issues [clinical conference] Hager WD, et al. **Hosp Pract [Off]** 1990 Sep 15;25(9):63, 66, 69–70 passim

Chlamydial infection in female prostitutes in Singapore. Lim KB, et al. **Singapore Med J** 1989 Jun;30(3):263–4

[Urogenital chlamydial infection in men and their sexual contacts] Strauss J, et al. **Cas Lek Cesk** 1990 Mar 16; 129(11):343–9 (Eng. Abstr.) **(Cze)**

[Chlamydia trachomatis infection in a newborn infant delivered by cesarean section] Sato S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Mar;42(3):295–8 (9 ref.) **(Jpn)**

[Legislation of Chlamydia infections made the tracing of transmission easier] Ramstedt K, et al. **Lakartidningen** 1989 Dec 27;86(52):4593 **(Swe)**

[Legal regulation of Chlamydia infections restores order at a chaotic department] Stenberg K. **Lakartidningen** 1990 Mar 14;87(11):830, 832 **(Swe)**

URINE

Detection of Chlamydia trachomatis antigens in urine as an alternative to swabs and cultures. Chernesky M, et al. **J Infect Dis** 1990 Jan;161(1):124–6

The use of dipsticks to detect Chlamydia in males [letter; comment] Bell TA, et al. **JAMA** 1990 Jul 25;264(4):453 Comment on: JAMA 1989 Nov 10;262(18):2562–6.

VETERINARY

Chlamydial infections in free-living birds. Brand CJ. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1531–5 (35 ref.)

Chlamydiosis—an enigma for the pet bird industry. Clubb SL. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1521–4 (11 ref.)

Serodiagnosis of avian Chlamydia infections. Grimes JE. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1561–4 (24 ref.)

Chlamydia spp infection in turkey flocks in Minnesota. Newman JA. **J Am Vet Med Assoc** 1989 Dec 1; 195(11):1528–30

The USDA requirements for control of chlamydiosis in imported birds. Ritchie WH. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1541–2

Chlamydial vaccines. Schnorr KL. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1548–61 (179 ref.)

Biology of chlamydiae. Wyrick PB, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1507–12 (45 ref.)

Detection of Chlamydia psittaci in free-ranging koalas (Phascolarctos cinereus): DNA hybridization and immuno-slot blot analyses. Girjes AA, et al. **Vet Microbiol** 1989 Nov;21(1):21–30

Concurrent infection of enterocytes with Eimeria scabra and other enteropathogens in swine. Koudela B, et al. **Vet Parasitol** 1990 Feb;35(1–2):71–7

Chlamydia infections in racing pigeons in Great Britain: a retrospective serological survey. Alexander DJ, et al. **Vet Rec** 1989 Aug 26;125(9):239

[Seroepidemiologic studies of the detection of antibodies to Brucella, Chlamydia, Leptospira, BVD/MD virus, IBR/IPV virus and enzootic bovine leukosis virus (EBL) in dromedary mares (Camelus dromedarius)] Wernery U, et al. **DTW Dtsch Tierarztl Wochenschr** 1990 Mar; 97(3):134–5 (Eng. Abstr.) **(Ger)**

[Veterinary aspects of zoonose-related diseases in humans] Truszczyński M. **Przegl Epidemiol** 1989;43(2):192-204 (Eng. Abstr.) **(Pol)**

[Immunologic status in cattle naturally infected with the microorganisms Chlamydia trachomatis and Chlamydia psittaci] Deptula W, et al. **Vet Med (Praha)** 1990 Feb; 35(2):73-80 (Eng. Abstr.) **(Slo)**

CHLAMYDIA PSITTACI

ANALYSIS

Muramic acid is not detectable in Chlamydia psittaci or Chlamydia trachomatis by gas chromatography-mass spectrometry. Fox A, et al. **Infect Immun** 1990 Mar; 58(3):835-7

CLASSIFICATION

Genetic, immunologic, and pathologic characterization of avian chlamydial strains. Andersen AA, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1512-6 (22 ref.)

Plasmid diversity within the genus Chlamydia. Lusher M, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1145-51

DRUG EFFECTS

[In vitro sensitivity of Chlamydiae to antibiotics] Dailloux M, et al. **Pathol Biol (Paris)** 1990 May;38(5):426-30 (Eng. Abstr.) **(Fre)**

GENETICS

Sequence analysis of the major outer membrane protein gene of an ovine abortion strain of Chlamydia psittaci. Herring AJ, et al. **FEMS Microbiol Lett** 1989 Nov;53(1-2):153-8

Multiple tandem promoters of the major outer membrane protein gene (omp1) of Chlamydia psittaci. Yuan Y, et al. **Infect Immun** 1990 Sep;58(9):2850-5

The nucleotide sequence of the 60 kDa cysteine rich outer membrane protein of Chlamydia psittaci strain EAE/A22/M. Watson MW, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5300

GROWTH & DEVELOPMENT

A raw milk--Chlamydia connection? Walterspiel JN, et al. **Pediatr Infect Dis J** 1989 Dec;8(12):893

[Effects of DEAE-dextran, centrifugation, cycloheximide and their combination on infection and growth of Chlamydia psittaci bird isolates] Miyake T, et al. **Kansenshogaku Zasshi** 1990 Jan;64(1):87-95 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Clinical and immunological responses of ewes following vaccination with an experimental formalin-inactivated Chlamydia psittaci (ovis) vaccine and subsequent challenge with the live organism during pregnancy. Wilsmore AJ, et al. **Br Vet J** 1990 Jul-Aug;146(4):341-8

Protection of ewes vaccinated with A22 strain Chlamydia psittaci (ovis) against challenge in pregnancy with homologous and heterologous strains of the organism. Wilsmore AJ, et al. **Br Vet J** 1990 Jul-Aug;146(4):349-53

Serological response to chlamydial infection in sheep, studied by enzyme-linked immunosorbent assay and immunoblotting. Cevenini R, et al. **FEMS Microbiol Immunol** 1989 Dec;1(8-9):459-64

The presence of ornithosis antibodies in Teheran's "city"-pigeons. Bashiribod H. **Geogr Med Suppl** 1989; 5:207-8

Immunological specificity of monoclonal antibodies to Chlamydia psittaci ovine abortion strain. Puy H, et al. **Immunol Lett** 1990 Jan;23(3):217-21

Immunization against chlamydial genital infection in guinea pigs with UV-inactivated and viable chlamydiae administered by different routes. Rank RG, et al. **Infect Immun** 1990 Aug;58(8):2599-605

Methods of chlamydial antigen detection. Brown PA, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1567-70 (17 ref.)

The ovine immune response to Chlamydia psittaci; histopathology of the lymph node. Huang HS, et al. **J Comp Pathol** 1990 Jan;102(1):89-97

Rapid diagnosis of psittacosis [letter; comment] Sillis M, et al. **Lancet** 1990 Mar 24;335(8691):726 Comment on: Lancet 1990 Feb 24;335(8687):471.

Protective effect of polyclonal and monoclonal antibodies against abortion in mice infected by Chlamydia psittaci. Buzoni-Gatel D, et al. **Vaccine** 1990 Aug;8(4):342-6

Monoclonal antibodies to Chlamydia psittaci guinea pig inclusion conjunctivitis (GPIC) strain. Cherian PV, et al. **Vet Microbiol** 1990 Mar;22(1):43-51

Seroprevalence of Chlamydia psittaci-specific antibodies in small stock in Namibia--epidemiological study with an enzyme-linked immunosorbent assay (ELISA). Apel J, et al. **Zentralbl Veterinarmed [B]** 1989 Aug;36(6):447-58

[Inventory of the shedding of Chlamydia psittaci by parakeets in the Utrecht area using ELISA] Dorrestein GM, et al. **Tijdschr Diergeneeskd** 1989 Dec 15;114(24):1227-36 (Eng. Abstr.) **(Dut)**

[Incidence of Coxiella burnetti and Chlamydia psittaci in cattle in southern Bohemia] Lisák V, et al. **Vet Med (Praha)** 1989 Jul;34(7):403-10 (Eng. Abstr.) **(Slo)**

ISOLATION & PURIFICATION

Use of the IDEIA ELISA to detect Chlamydia psittaci (ovis) in material from aborted fetal membranes and milk from ewes affected by ovine enzootic abortion. Thomas R, et al. **Br Vet J** 1990 Jul-Aug;146(4):364-7

Pregnancy complicated by severe Chlamydia psittaci infection acquired from a goat flock: a case report. Villemonteix P, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Oct;37(1):91-4

Isolation and identification of Chlamydia psittaci from pet birds. Pearson JE, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1564-7 (10 ref.)

Detection and differentiation of Chlamydia trachomatis, Chlamydia psittaci, and Chlamydia pneumoniae by DNA amplification. Holland SM, et al. **J Infect Dis** 1990 Oct; 162(4):984-7

A polymerase chain reaction (PCR) protocol for the specific detection of Chlamydia spp. Pollard DR, et al. **Mol Cell Probes** 1989 Dec;3(4):383-9

A simple staining method for the identification of chlamydial elementary bodies in the fetal membranes of sheep affected by ovine enzootic abortion. Dagnall GJ, et al. **Vet Microbiol** 1990 Jan;21(3):233-9

Detection of Chlamydia psittaci in free-ranging koalas (Phascolarctos cinereus): DNA hybridization and immuno-slot blot analyses. Girjes AA, et al. **Vet Microbiol** 1989 Nov;21(1):21-30

PATHOGENICITY

Observations on the pathogenesis of Chlamydia psittaci infection of pregnant sheep. Buxton D, et al. **J Comp Pathol** 1990 Feb;102(2):221-37

PHYSIOLOGY

Characterization of the cytochalasin D-resistant (pinocytic) mechanisms of endocytosis utilized by chlamydiae. Reynolds DJ, et al. **Infect Immun** 1990 Oct;58(10):3208-16

Biology of chlamydiae. Wyrick PB, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1507-12 (45 ref.)

ULTRASTRUCTURE

Ultrastructural studies on the intracellular fate of Chlamydia psittaci (strain guinea pig inclusion conjunctivitis) and Chlamydia trachomatis (strain lymphogranuloma venereum 434): modulation of intracellular events and relationship with endocytic mechanism. Prain CJ, et al. **J Gen Microbiol** 1989 Jul;135 (Pt 7):2107-23

CHLAMYDIA TRACHOMATIS

[Chlamydiae. 2. Chlamydia trachomatis] Del Piano M, et al. **Ann Ig** 1989 Sep-Oct;1(5):1087-118 (97 ref.) (Eng. Abstr.) **(Ita)**

ANALYSIS

Muramic acid is not detectable in Chlamydia psittaci or Chlamydia trachomatis by gas chromatography-mass spectrometry. Fox A, et al. **Infect Immun** 1990 Mar; 58(3):835-7

Detection of the surface-exposed 18-kilodalton binding protein in Chlamydia trachomatis by immunogold staining. Gray GJ, et al. **J Bacteriol** 1990 Jun;172(6):3524-8

CLASSIFICATION

Serovars of Chlamydia trachomatis causing postabortion salpingitis. Persson K, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):795-8

[Serotype distribution of urogenitally located Chlamydia trachomatis in Rotterdam] Wagenvoort JH, et al. **Ned Tijdschr Geneeskd** 1989 Sep 30;133(39):1936-9 (Eng. Abstr.) **(Dut)**

DRUG EFFECTS

In vitro activity of ofloxacin against Chlamydia trachomatis. Schachter J, et al. **Am J Med** 1989 Dec 29;87(6C):14S-16S (13 ref.)

The sensitivity of Neisseria gonorrhoeae, Chlamydia trachomatis, and herpes simplex type II to disinfection with povidone-iodine. Benevento WJ, et al. **Am J Ophthalmol** 1990 Mar 15;109(3):329-33

In vitro synergy of clindamycin and aminoglycosides against Chlamydia trachomatis. Pearlman MD, et al. **Antimicrob Agents Chemother** 1990 Jul;34(7):1399-401

In vitro activity of tosufloxacin (A-61827; T-3262) against selected genital pathogens. Segreti J, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):971-3

In vitro activities of lomefloxacin, tetracycline, penicillin, spectinomycin, and ceftriaxone against Neisseria gonorrhoeae and Chlamydia trachomatis. Talbot H, et al. **Antimicrob Agents Chemother** 1989 Dec;33(12):2049-51

In vitro studies of Chlamydia trachomatis susceptibility and resistance to rifampin and rifabutin. Treharne JD, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1393-4

In vitro activity of lomefloxacin (SC 47111 or NY-198) against Chlamydia trachomatis strains. Segreti J, et al. **Diagn Microbiol Infect Dis** 1989 May-Jun;12(3 Suppl):87S-88S

Inhibition of growth of Chlamydia trachomatis by tumor necrosis factor is accompanied by increased prostaglandin synthesis. Holtmann H, et al. **Infect Immun** 1990 Oct; 58(10):3168-72

In-vitro activity of azithromycin against Chlamydia trachomatis. Scieux C, et al. **J Antimicrob Chemother** 1990 Jan;25 Suppl A:7-10

In-vitro activity of azithromycin, erythromycin, ciprofloxacin and norfloxacin against Neisseria gonorrhoeae, Haemophilus ducreyi, and Chlamydia trachomatis. Slaney L, et al. **J Antimicrob Chemother** 1990 Jan;25 Suppl A:1-5

In-vitro activity of ofloxacin against Chlamydia trachomatis. Sambri V, et al. **J Chemother** 1989 Aug;1(4):231-2

Inhibition of growth of Chlamydia trachomatis by the calcium antagonist verapamil. Shainkin-Kestenbaum R, et al. **J Gen Microbiol** 1989 Jun;135 (Pt 6):1619-23

[In vitro sensitivity of Chlamydiae to antibiotics] Dailloux M, et al. **Pathol Biol (Paris)** 1990 May;38(5):426-30 (Eng. Abstr.) **(Fre)**

[Evaluation of in vitro activity of rokitamycin against Chlamydia trachomatis] Bannai H, et al. **Kansenshogaku Zasshi** 1990 Jun;64(6):687-92 (Eng. Abstr.) **(Jpn)**

[Study on the inhibitory effects of minocycline on genital Chlamydia trachomatis in McCoy cell culture] Hosomura Y. **Kansenshogaku Zasshi** 1990 Mar;64(3):310-20 (Eng. Abstr.) **(Jpn)**

[Clinical effect of NY-198 (lomefloxacin) for sexually transmitted disease--bacteriological effect of U. urealyticum] Kawamura N, et al. **Kansenshogaku Zasshi** 1990 Jan;64(1):1-11 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

High-resolution 31P nuclear magnetic resonance study of Chlamydia trachomatis: induction of ATPase activity in elementary bodies. Peeling RW, et al. **Infect Immun** 1989 Nov;57(11):3338-44

GENETICS

Chlamydial DNA is absent from the joints of patients with sexually acquired reactive arthritis. Wordsworth BP, et al. **Br J Rheumatol** 1990 Jun;29(3):208-10

Determination of the number of tuf genes in Chlamydia trachomatis and Neisseria gonorrhoeae. Goldstein BP, et al. **FEMS Microbiol Lett** 1989 Aug;51(3):305-9

Chlamydia trachomatis 60 kDa cysteine rich outer membrane protein: sequence homology between trachoma and LGV biovars. Watson MW, et al. **FEMS Microbiol Lett** 1989 Dec;53(3):293-7

Cloning, characterization and sequence of a novel 59-kDa protein of Chlamydia trachomatis. Kahane S, et al. **Gene** 1990 May 31;90(1):61-7

Expression of the Chlamydia trachomatis major outer membrane protein-encoding gene in Escherichia coli: role of the 3' end in mRNA stability. Kaul R, et al. **Gene** 1990 Mar 1;87(1):97-103

Sulfur-rich proteins of Chlamydia trachomatis: developmentally regulated transcription of polycistronic mRNA from tandem promoters. Lambden PR, et al. **Gene** 1990 Mar 1;87(1):105-12

Evaluation of a radioactive rRNA:cDNA-hybridisation assay for the direct detection of Chlamydia trachomatis in urogenital specimens. Näher H, et al. **Genitourin Med** 1989 Oct;65(5):319-22

The 75-kilodalton cytoplasmic Chlamydia trachomatis L2 polypeptide is a DnaK-like protein. Birkelund S, et al. **Infect Immun** 1990 Jul;58(7):2098-104

Developmental cycle-specific host-free RNA synthesis in Chlamydia spp. Crenshaw RW, et al. **Infect Immun** 1990 Oct;58(10):3194-201

The Chlamydia trachomatis hyp operon is homologous to the groE stress response operon of Escherichia coli. Morrison RP, et al. **Infect Immun** 1990 Aug;58(8):2701-5

A polymerase chain reaction-based approach to cloning sigma factors from eubacteria and its application to the isolation of a sigma-70 homolog from Chlamydia trachomatis. Engel JN, et al. **J Bacteriol** 1990 May; 172(5):2447-55

Chlamydia trachomatis RNA polymerase major sigma subunit. Sequence and structural comparison of conserved and unique regions with Escherichia coli sigma 70 and Bacillus subtilis sigma 43. Koehler JE, et al. **J Biol Chem** 1990 Aug 5;265(22):13206-14

Chlamydial disease pathogenesis. The 57-kD chlamydial hypersensitivity antigen is a stress response protein. Morrison RP, et al. **J Exp Med** 1989 Oct 1;170(4):1271-83

Nucleotide sequence of the major outer membrane protein gene from Chlamydia trachomatis serovar H. Hamilton PT, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8366

The major outer membrane protein nucleotide sequence of Chlamydia trachomatis, serovar E. Peterson EM, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3414

The nucleotide sequence of major outer membrane protein gene of Chlamydia trachomatis serovar F. Zhang YX, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1061

Diversity of the Chlamydia trachomatis common plasmid in biovars with different pathogenicity. Comanducci M, et al. **Plasmid** 1990 Mar;23(2):149-54

The 7.5-kb plasmid present in Chlamydia trachomatis is not essential for the growth of this microorganism. Peterson EM, et al. **Plasmid** 1990 Mar;23(2):144-8

General colorimetric method for DNA diagnostics allowing

direct solid-phase genomic sequencing of the positive samples. Wahlberg J, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6569–73

Synthesis of digoxigenin-labelled DNA probe by polymerase chain reaction: application to Epstein-Barr virus and Chlamydia trachomatis. Griffais R, et al. **Res Virol** 1990 May-Jun;141(3):331–5

GROWTH & DEVELOPMENT

Reversion of the antichlamydial effect of tumor necrosis factor by tryptophan and antibodies to beta interferon. Shemer-Avni Y, et al. **Infect Immun** 1989 Nov; 57(11):3484–90

Growth of an ocular strain of Chlamydia trachomatis on Chang conjunctival cells. Moffa TG, et al. **Ophthalmic Res** 1989;21(5):388–91

A raw milk—Chlamydia connection? Walterspiel JN, et al. **Pediatr Infect Dis J** 1989 Dec;8(12):893

Spread and persistence of infection with a trachoma biovar strain of Chlamydia trachomatis in multiplying and nonmultiplying McCoy cells. Benes S. **Sex Transm Dis** 1990 Jan-Mar;17(1):1–6

IMMUNOLOGY

The correlation between Chlamydia antigen, antibody, vaginal colonization and contraceptive method in young unmarried women. Blum M, et al. **Adv Contracept** 1990 Mar;6(1):41–5

Immunohistochemical detection of chlamydial antigens in association with cystitis. Shurbaji MS, et al. **Am J Clin Pathol** 1990 Mar;93(3):363–6

Development of immunity to ocular chlamydial infection. Taylor HR. **Am J Trop Med Hyg** 1990 Apr;42(4):358–64

Evaluation of chlamydial tests in early trachoma. Elbagir A, et al. **APMIS** 1990 Mar;98(3):276–80

Antichlamydial activity of saliva. Genç M, et al. **APMIS** 1990 May;98(5):432–6

Antibodies to Chlamydia trachomatis in women with infertility, pelvic inflammatory disease and ectopic pregnancy. Kihlström E, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 May-Jun; 35(2-3):199–204

Antichlamydial activity of tear fluid. Elbagir AN, et al. **Eye** 1989;3 (Pt 6):834–9

Some characteristics of a secreted chlamydial antigen recognized by IgG from C. trachomatis patient sera. Stuart ES, et al. **Immunology** 1989 Dec;68(4):469–73

The 75-kilodalton protein of Chlamydia trachomatis: a member of the heat shock protein 70 family? Danilition SL, et al. **Infect Immun** 1990 Jan;58(1):189–96

Differences in susceptibilities of the lymphogranuloma venereum and trachoma biovars of Chlamydia trachomatis to neutralization by immune sera. Peterson EM, et al. **Infect Immun** 1990 Apr;58(4):938–43

Mapping antigenic sites on the major outer membrane protein of Chlamydia trachomatis with synthetic peptides. Zhong GM, et al. **Infect Immun** 1990 May;58(5):1450–5

Immunoaccessible peptide sequences of the major outer membrane protein from Chlamydia trachomatis serovar C. Zhong GM, et al. **Infect Immun** 1990 Oct;58(10):3438–41

Comparison of immunofluorescence tests for detecting antibodies to Chlamydia trachomatis [letter] Forsey T, et al. **J Clin Microbiol** 1989 Oct;27(10):2400

Accuracy of Chlamydia trachomatis antigen detection methods in a low-prevalence population in a primary care setting. Gann PH, et al. **J Clin Microbiol** 1990 Jul; 28(7):1580–5

Comparison of two enzyme immunoassays to culture for the diagnosis of chlamydial conjunctivitis and respiratory infections in infants. Hammerschlag MR, et al. **J Clin Microbiol** 1990 Aug;28(8):1725–7

Identification and characterization of T helper cell epitopes of the major outer membrane protein of Chlamydia trachomatis. Su H, et al. **J Exp Med** 1990 Jul 1; 172(1):203–12

Surface-exposed epitopes on the major outer-membrane protein of Chlamydia trachomatis defined with peptide antisera. Conlan JW, et al. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3219–28

Adherence of multiple serovars of Chlamydia trachomatis to a common receptor on HeLa and McCoy cells is mediated by thermolabile protein(s). Vretou E, et al. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3229–37

An enzyme immunoassay to detect specific antibodies to protein and lipopolysaccharide antigens of Chlamydia trachomatis. Ossewaarde JM, et al. **J Immunol Methods** 1989 Oct 24;123(2):293–8

Differential human serologic response to two 60,000 molecular weight Chlamydia trachomatis antigens. Wagar EA, et al. **J Infect Dis** 1990 Oct;162(4):922–7

Prevalence of chlamydial antibodies in women with tubal disease: impact of Chlamydia trachomatis on the demand for in vitro fertilisation [see comments] Peek JC, et al. **N Z Med J** 1990 Feb 28;103(884):63–5 Comment in: N Z Med J 1990 Apr 25;103(888):190.

Chlamydia trachomatis in reactive arthritis. Keat A, et al. **Rheumatol Int** 1989;9(3–5):197–200

Immunoblot analysis of antibody response to Chlamydia trachomatis in patients with reactive arthritis and ankylosing spondylitis. Kihlström E, et al. **Scand J Rheumatol** 1989;18(6):377–83

Comparison of chlamydial culture with Chlamydiazyme assay during erythromycin PCE treatment of Chlamydia genital infections. Havlichek DH Jr, et al. **Sex Transm Dis** 1990 Jan-Mar;17(1):48–50

Enzyme immunoassay (Chlamydiazyme) for the detection of chlamydial antigen in endocervical specimens. Srivasin V, et al. **Singapore Med J** 1989 Oct;30(5):449–50

[Serum IgG antibodies to Chlamydia trachomatis in HLA-B-27 positive patients with rheumatic diseases] Breustedt W, et al. **Dermatol Monatsschr** 1989;175(8):474–8 (Eng. Abstr.) **(Ger)**

[Clinical and serological characterization of Chlamydia-induced arthritis] Wollenhaupt HJ, et al. **Dtsch Med Wochenschr** 1989 Dec 1;114(50):1949–54 (Eng. Abstr.) **(Ger)**

[Cultural and serologic Chlamydia detection in diagnosis of sterility and increased risk of infection] Degen KW, et al. **Geburtshilfe Frauenheilkd** 1990 May;50(5):371–4 (Eng. Abstr.) **(Ger)**

[Immunologic detection of genital Chlamydia infections in gynecology and obstetrics] Schieder K, et al. **Gynakol Rundsch** 1989;29(3):177–9 **(Ger)**

[Antibodies to cell culture cells as an interference factor in chlamydia serology] Oehme A, et al. **Immun Infekt** 1990 Feb;18(1):9–10 (Eng. Abstr.) **(Ger)**

[Role of Chlamydia trachomatis in women with vulvovaginitis] Panama S, et al. **G Batteriol Virol Immunol** 1988 Jan-Dec;81(1-12):40–6 **(Ita)**

[Chlamydia trachomatis and ectopic pregnancy. A causal relationship] Skjeldestad FE, et al. **Tidsskr Nor Laegeforen** 1989 Aug 30;109(24):2424–6 (Eng. Abstr.) **(Nor)**

[Chlamydia trachomatis and infertility in women] von Düring V, et al. **Tidsskr Nor Laegeforen** 1989 Aug 30; 109(24):2427–9 (Eng. Abstr.) **(Nor)**

[Serologic indicators of Chlamydia infection in infertile women] Shatkin AA, et al. **Akush Ginekol (Mosk)** 1990 Feb;(2):69–71 **(Rus)**

[Monoclonal antibodies in the diagnosis of paratrachoma] Budagovskaia SN, et al. **Vestn Oftalmol** 1990 Mar-Apr; 106(2):56–8 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Isolation of Chlamydia trachomatis from the middle ear aspirates of otitis media. Ogawa H, et al. **Acta Otolaryngol (Stockh)** 1990 Jul-Aug;110(1–2):105–9

Culture, ELISA and immunofluorescence tests for the diagnosis of conjunctivitis caused by Chlamydia trachomatis in neonates and adults. Stenberg K, et al. **APMIS** 1990 Jun;98(6):514–20

Detection of plasmid DNA from all Chlamydia trachomatis serovars with a two-step polymerase chain reaction. Welch D, et al. **Appl Environ Microbiol** 1990 Aug;56(8):2494–8

Detection of Chlamydia trachomatis in cervical smears from pregnant population. Maguire NC, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):204–7

Genital Chlamydia infections. Ehret JM, et al. **Clin Lab Med** 1989 Sep;9(3):481–500 (140 ref.)

Vaginal microbial flora in women with and without vaginal discharge registered in general practice. Bro F. **Dan Med Bull** 1989 Oct;36(5):483–5

Chlamydia trachomatis in cervical uterine irradiated cancer patients. Maeda MY, et al. **Diagn Cytopathol** 1990;6(2):86–8

Isolation of Chlamydia Trachomatis from fallopian tubes of healthy women undergoing tubal sterilisation by minlaparotomy in Kenya. Sinei KA, et al. **East Afr Med J** 1989 Jun;66(6):388–92

Evaluation of a commercial enzyme immunoassay versus culture for the detection of Chlamydia trachomatis. Bäckman M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Sep;8(9):778–82

Comparison of three non-culture techniques for detection of Chlamydia trachomatis in genital tract specimens. Hall CJ, et al. **Eur J Clin Microbiol Infect Dis** 1989 Oct; 8(10):866–70

Prevalence of asymptomatic carriers of Chlamydia trachomatis among pregnant and non-pregnant women in south-western Greece. Arkoulis T, et al. **Eur J Epidemiol** 1989 Dec;5(4):526–8

Age and sex correlation of Chlamydia trachomatis infections evaluated by the culture technique and by an enzyme immunosorbent assay, IDEIA. Ostergaard L, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Mar;34(3):273–81

High prevalence of silent chlamydia colonization of the tubal mucosa in infertile women. Marana R, et al. **Fertil Steril** 1990 Feb;53(2):354–6

Bartholin's abscess: the role of Chlamydia trachomatis. Bleker OP, et al. **Genitourin Med** 1990 Feb;66(1):24–5

A comparison of cytobrush and cotton swab sampling for the detection of Chlamydia trachomatis by cell culture. Lees MI, et al. **Genitourin Med** 1990 Aug;66(4):267–9

Use of the Cytobrush for concurrent endocervical cytology and chlamydia sampling. Szarewski A, et al. **Genitourin Med** 1990 Jun;66(3):205–7

A rapid chemiluminescent DNA hybridization assay for the detection of Chlamydia trachomatis. Clyne JM, et al. **J Biolumin Chemilumin** 1989 Jul;4(1):357–66

Quantitative culture of endocervical Chlamydia trachomatis. Barnes RC, et al. **J Clin Microbiol** 1990 Apr;28(4):774–80

TestPack Chlamydia, a new rapid assay for the direct detection of Chlamydia trachomatis. Coleman P, et al. **J Clin Microbiol** 1989 Dec;27(12):2811–4

Evaluation of Syva enzyme immunoassay for detection of Chlamydia trachomatis in genital specimens. Gaydos CA, et al. **J Clin Microbiol** 1990 Jul;28(7):1541–4

Effect of endocervical specimen quality on detection of Chlamydia trachomatis and on the incidence of false-positive results with the Chlamydiazyme method. Kellogg JA, et al. **J Clin Microbiol** 1990 Jun;28(6):1108–13

Comparison of buffalo green monkey cells and McCoy cells for isolation of Chlamydia trachomatis in a microtiter system. Krech T, et al. **J Clin Microbiol** 1989 Oct; 27(10):2364–5

Comparison of IDEIA III and cell culture for the detection of Chlamydia trachomatis in endocervical specimens. Lebar WD, et al. **J Clin Microbiol** 1990 Jun;28(6):1447–8

Effect of patient characteristics on performance of an enzyme immunoassay for detecting cervical Chlamydia trachomatis infection. Magder LS, et al. **J Clin Microbiol** 1990 Apr; 28(4):781–4

Use of polymerase chain reaction for detection of Chlamydia trachomatis. Ostergaard L, et al. **J Clin Microbiol** 1990 Jun;28(6):1254–60

Evaluation of three Chlamydia trachomatis immunoassays with an unbiased, noninvasive clinical sample. Paul ID, et al. **J Clin Microbiol** 1990 Feb;28(2):220–2

Molecular techniques for the detection of Chlamydia trachomatis. Peterson EM, et al. **J Clin Microbiol** 1989 Oct; 27(10):2359–63

Ortho enzyme immunoassay versus McCoy cell monolayers stained by iodine or fluorescent antibody for detection of Chlamydia trachomatis. Phillips LE, et al. **J Clin Microbiol** 1990 Jul;28(7):1647–8

Evaluation of a nonisotopic probe for detection of Chlamydia trachomatis in endocervical specimens. Woods GL, et al. **J Clin Microbiol** 1990 Feb;28(2):370–2

Rectal carriage of Chlamydia trachomatis in women [letter] Pratt BC, et al. **J Clin Pathol** 1989 Dec;42(12):1309–10

Favourable effect of detergent on antigen detection and comparison of enzyme linked detection systems in an ELISA for Chlamydia trachomatis. Noorduyn LA, et al. **J Immunoassay** 1989;10(4):429–48

Detection and differentiation of Chlamydia trachomatis, Chlamydia psittaci, and Chlamydia pneumoniae by DNA amplification. Holland SM, et al. **J Infect Dis** 1990 Oct; 162(4):984–7

Comparison of direct immunofluorescent staining and an enzyme-linked immunoabsorbent assay for identifying Chlamydia trachomatis in cervical and urethral specimens. Wiesmeier E, et al. **J Reprod Med** 1989 Aug;34(8):517–9

Sterile pyuria and Chlamydia trachomatis [letter] Matthews RS, et al. **Lancet** 1990 Aug 11;336(8711):385

Comparison of a DNA probe with culture for detecting Chlamydia trachomatis directly from genital specimens. Gratton CA, et al. **Mol Cell Probes** 1990 Feb;4(1):25–31

A polymerase chain reaction (PCR) protocol for the specific detection of Chlamydia spp. Pollard DR, et al. **Mol Cell Probes** 1989 Dec;3(4):383–9

Comparison of chemiluminescent DNA probe to cell culture for the screening of Chlamydia trachomatis in a gynecology clinic population. Mercer LJ, et al. **Obstet Gynecol** 1990 Jul;76(1):114–7

Isolation of Chlamydia trachomatis from amniotic fluid. Thomas GB, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):519–20

Detection of Chlamydia trachomatis by the polymerase chain reaction. Griffais R, et al. **Res Microbiol** 1989 Feb; 140(2):139–41

Evaluation of a genus-specific monoclonal antibody in an amplified enzyme-linked immunoassay in the detection of Chlamydia in urine samples from men. Jawad AJ, et al. **Sex Transm Dis** 1990 Apr-Jun;17(2):87–9

[Chlamydia trachomatis in at-risk groups in legal abortion in the first trimester] Knudsen A, et al. **Ugeskr Laeger** 1989 Nov 20;151(47):3157–9 (Eng. Abstr.) **(Dan)**

[Isolation of Chlamydia trachomatis from the endometrium and endometritis. Apropos of a series of 42 patients] Zorn B, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(5):627–34 (Eng. Abstr.) **(Fre)**

[Microbiologic findings including Chlamydia serology in cervix dysplasia and human papillomavirus infection] Mayer HO, et al. **Gynakol Rundsch** 1989;29 Suppl 2:88–91 **(Ger)**

[The frequency of Chlamydia detection in gynecologic and obstetrical patients and newborns] Link M, et al. **Zentralbl Gynakol** 1989;111(22):1490–6 (Eng. Abstr.) **(Ger)**

[Isolation of Chlamydia trachomatis in non-gonococcal urethritis] Molinaro GC, et al. **G Batteriol Virol Immunol** 1988 Jan-Dec;81(1-12):90–5 **(Ita)**

[Comparison between culture method and direct immunofluorescence test for detection of Chlamydia trachomatis and follow-up survey of antigen positive patients] Bessho H, et al. **Kansenshogaku Zasshi** 1990 Mar; 64(3):284–8 (Eng. Abstr.) **(Jpn)**

[Chlamydia trachomatis: significance of endocervical sampling in diagnosis by the Papanicolaou method] Cavaliere MJ, et al. **Rev Paul Med** 1989 Jan-Feb; 107(1):25–8 (Eng. Abstr.) **(Por)**

[Chlamydia trachomatis in smears of irradiated uterine cervix: cytologic and immunocytochemical aspects] Santos DR, et al. **Rev Paul Med** 1989 Jul-Dec;107(4–6):229–32 (Eng.

Abstr.) (Por)
[Detection of Chlamydia trachomatis in clinical material 1985–1988] Cisláková L, et al. **Cesk Gynekol** 1990 Apr; 55(3):168–72 (Eng. Abstr.) (Slo)
[Detection of Chlamydia trachomatis in urethral samples by direct immunofluorescence] Schuster MW, et al. **Rev Saude Publica** 1989 Dec;23(6):443–6 (Eng. Abstr.) (Spa)

METABOLISM

Cyclic AMP inhibits protein synthesis in Chlamydia trachomatis at a transcriptional level. Kaul R, et al. **Biochim Biophys Acta** 1990 Jun 12;1053(1):106–12
Characterization and identification of early proteins in Chlamydia trachomatis serovar L2 by two-dimensional gel electrophoresis. Lundemose AG, et al. **Infect Immun** 1990 Aug;58(8):2478–86

PATHOGENICITY

Variation in virulence among oculogenital serovars of Chlamydia trachomatis in experimental genital tract infection. Ito JI Jr, et al. **Infect Immun** 1990 Jun; 58(6):2021–3
Chlamydia trachomatis-host cell interactions: role of the chlamydial major outer membrane protein as an adhesin. Su H, et al. **Infect Immun** 1990 Apr;58(4):1017–25

PHYSIOLOGY

Influence of whole human milk, and fractions thereof, on inclusion-formation of Chlamydia trachomatis in McCoy cells. Elbagir A, et al. **APMIS** 1990 Jul;98(7):609–14
Characterization of the cytochalasin D-resistant (pinocytic) mechanisms of endocytosis utilized by chlamydiae. Reynolds DJ, et al. **Infect Immun** 1990 Oct;58(10):3208–16
Biology of chlamydiae. Wyrick PB, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1507–12 (45 ref.)
Chlamydia trachomatis infection of human fallopian tube organ cultures. Cooper MD, et al. **J Gen Microbiol** 1990 Jun;136 (Pt 6):1109–15

ULTRASTRUCTURE

The development of Chlamydia trachomatis inclusions within the host eukaryotic cell during interphase and mitosis. Campbell S, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1153–65
Ultrastructural studies on the intracellular fate of Chlamydia psittaci (strain guinea pig inclusion conjunctivitis) and Chlamydia trachomatis (strain lymphogranuloma venereum 434): modulation of intracellular events and relationship with endocytic mechanism. Prain CJ, et al. **J Gen Microbiol** 1989 Jul;135 (Pt 7):2107–23
[Visualization of the developmental cycle of Chlamydia trachomatis using electron transmission microscopy] Stefánik M, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jul;38(4):199–203 (Eng. Abstr.) (Slo)

CHLAMYDIACEAE INFECTIONS

DRUG THERAPY

Comparison of chlamydial culture with Chlamydiazyme assay during erythromycin PCE treatment of Chlamydia genital infections. Havlichek DH Jr, et al. **Sex Transm Dis** 1990 Jan–Mar;17(1):48–50

EPIDEMIOLOGY

Prevalence and epidemiologic correlates of Chlamydia trachomatis in rural and urban populations. Winter L, et al. **Sex Transm Dis** 1990 Jan–Mar;17(1):30–6

CHLAMYDOMONAS

ANALYSIS

Ubiquitin in Chlamydomonas reinhardii. Distribution in the cell and effect of heat shock and photoinhibition on its conjugate pattern. Wettern M, et al. **Eur J Biochem** 1990 Aug 17;191(3):571–6
The mitosis-specific monoclonal antibody MPM-2 recognizes phosphoproteins associated with the nuclear envelope in Chlamydomonas reinhardtii cells. Harper JD, et al. **Eur J Cell Biol** 1990 Apr;51(2):272–8
Chloroplast transit peptides from the green alga Chlamydomonas reinhardtii share features with both mitochondrial and higher plant chloroplast presequences. Franzén LG, et al. **FEBS Lett** 1990 Jan 29;260(2):165–8

CYTOLOGY

Cellular asymmetry in Chlamydomonas reinhardtii. Holmes JA, et al. **J Cell Sci** 1989 Oct;94 (Pt 2):273–85

DRUG EFFECTS

Isolation and genetic analysis of Chlamydomonas reinhardtii strains resistant to cadmium. Collard JM, et al. **Appl Environ Microbiol** 1990 Jul;56(7):2051–5
Mechanism of cell destructive action of organophosphorus insecticide phosalone in Clamydomonas reinhardtii algal cells. Netrawali MS, et al. **Bull Environ Contam Toxicol** 1990 Jun;44(6):819–25
Effects of cadmium on a microbial food chain, Chlamydomonas reinhardii and Tetrahymena vorax. Lawrence SG, et al. **Sci Total Environ** 1989 Nov; 87–88:381–95

ENZYMOLOGY

Purification and characterization of protein disulphide-isomerase from the unicellular green alga Chlamydomonas reinhardii. A 120 kDa dimer antigenically distinct from the vertebrate enzyme. Kaska DD, et al. **Biochem J** 1990 May 15;268(1):63–8
The dithiothreitol-stimulated dissociation of the chloroplast coupling factor 1 epsilon-subunit is reversible. Duhe RJ, et al. **Biochim Biophys Acta** 1990 May 15;1017(1):70–8
Strikingly low ATPase activities in flagellar axonemes of a Chlamydomonas mutant missing outer dynein arms. Kagami O, et al. **Eur J Biochem** 1990 Apr 30;189(2):441–6
Purification and properties of L-aspartate aminotransferase of Chlamydomonas reinhardtii. Lain-Guelbenzu B, et al. **Eur J Biochem** 1990 Mar 30;188(3):529–33
Purification of the glutamyl-tRNA reductase from Chlamydomonas reinhardtii involved in delta-aminolevulinic acid formation during chlorophyll biosynthesis. Chen MW, et al. **J Biol Chem** 1990 Mar 5; 265(7):4058–63
Purification and characterization of Chlamydomonas reinhardtii chloroplast glutamyl-tRNA synthetase, a natural misacylating enzyme. Chen MW, et al. **J Biol Chem** 1990 Mar 5;265(7):4054–7
Purification and functional characterization of the Glu-tRNA(Gln) amidotransferase from Chlamydomonas reinhardtii. Jahn D, et al. **J Biol Chem** 1990 May 15; 265(14):8059–64

GENETICS

Translational regulation of chloroplast gene expression during the light-dark cell cycle of Chlamydomonas: evidence for control by ATP/energy supply. Michaels A, et al. **Biochem Biophys Res Commun** 1990 Aug 16; 170(3):1082–8
Synthesis of EF-Tu and distribution of its mRNA between stroma and thylakoids during the cell cycle of Chlamydomonas reinhardii. Breidenbach E, et al. **Biochim Biophys Acta** 1990 Apr 6;1048(2–3):209–16
Cell cycle-dependent transcriptional and post-transcriptional regulation of chloroplast gene expression in Chlamydomonas reinhardtii. Leu S, et al. **Biochim Biophys Acta** 1990 Jul 30;1049(3):311–7
Basal body chromosomes? Goodenough UW. **Cell** 1989 Oct 6;59(1):1–3 (18 ref.)
Basal body/centriolar DNA: molecular genetic studies in Chlamydomonas. Hall JL, et al. **Cell** 1989 Oct 6; 59(1):121–32
Genetic interactions of mutations affecting flagella and basal bodies in Chlamydomonas. Dutcher SK, et al. **Cell Motil Cytoskeleton** 1989;14(1):104–17 (56 ref.)
Characterization of transcribed dispersed repetitive DNAs in the nuclear genome of the green alga Chlamydomonas reinhardtii. Day A, et al. **Curr Genet** 1989 Sep;16(3):165–76
A gene essential for viability and flagellar regeneration maps to the uni linkage group of Chlamydomonas reinhardtii [published erratum appears in Curr Genet 1989 Aug;16(2):129] Larkin JC, et al. **Curr Genet** 1989 May; 15(5):377–84
Mitochondrial DNA of Chlamydomonas reinhardtii: the ND4 gene encoding a subunit of NADH dehydrogenase. Pratje E, et al. **Curr Genet** 1989 Jul;16(1):61–4
The argininosuccinate lyase gene of Chlamydomonas reinhardtii: an important tool for nuclear transformation and for correlating the genetic and molecular maps of the ARG7 locus. Debuchy R, et al. **EMBO J** 1989 Oct; 8(10):2803–9
Light regulation of the 22 kd heat shock gene transcription and its translation product accumulation in Chlamydomonas reinhardtii. Ish-Shalom D, et al. **EMBO J** 1990 Sep;9(9):2657–61
Expression of foreign DNA in Chlamydomonas reinhardtii. Bingham SE, et al. **FEMS Microbiol Lett** 1989 Nov; 53(1–2):77–81
Nucleotide sequence of cloned nad4 (urf4) gene from Chlamydomonas reinhardtii mitochondrial DNA. Ma DP, et al. **Gene** 1989 Dec 28;85(2):363–70
Antibiotic resistance mutations in the chloroplast 16S and 23S rRNA genes of Chlamydomonas reinhardtii: correlation of genetic and physical maps of the chloroplast genome. Harris EH, et al. **Genetics** 1989 Oct;123(2):281–92
Isolation and characterization of a complementary DNA clone for an algal pre-apoplastocyanin. Merchant S, et al. **J Biol Chem** 1990 Jul 25;265(21):12372–9
Stable nuclear transformation of Chlamydomonas using the Chlamydomonas gene for nitrate reductase. Kindle KL, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):2589–601
Analysis of Chlamydomonas reinhardtii histones and chromatin. Morris RL, et al. **J Protozool** 1990 Mar–Apr; 37(2):117–23
Isolation and characterization of cDNA clones encoding photosystem I subunits with molecular masses 11.0, 10.0 and 8.4 kDa from Chlamydomonas reinhardtii. Franzén LG, et al. **Mol Gen Genet** 1989 Oct;219(1–2):137–44
Cotranscription of the wild-type chloroplast atpE gene encoding the CF1/CF0 epsilon subunit with the 3' half of the rps7 gene in Chlamydomonas reinhardtii and characterization of frameshift mutations in atpE. Robertson D, et al. **Mol Gen Genet** 1990 Apr;221(2):155–63
A Chlamydomonas gene encodes a G protein beta subunit-like polypeptide. Schloss JA. **Mol Gen Genet** 1990 May;221(3):443–52
Sequence of a cDNA from Chlamydomonas reinhardii encoding a ubiquitin 52 amino acid extension protein. Callis J, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8377
Nucleotide sequence of the chloroplast large subunit rRNA gene from Chlamydomonas reinhardtii. Lemieux C, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):7997
Nucleotide sequence of Chlamydomonas moewusii chloroplastic tRNA(thr). Richard M, et al. **Nucleic Acids Res** 1990 May 25;18(10):3061
Nucleotide sequence of the chloroplast gene for the 4 kD K polypeptide of photosystem II (psbK) and the psbK-tufA intergenic region of Chlamydomonas reinhardtii. Silk GW, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4930
Light affects the structure of Chlamydomonas chloroplast chromosomes. Thompson RJ, et al. **Nucleic Acids Res** 1990 May 11;18(9):2625–31
Nucleotide sequences of the Chlamydomonas reinhardtii chloroplast genes for tryptophan and glycine transfer RNAs. Zhang DH, et al. **Nucleic Acids Res** 1989 Nov 11; 17(21):8873
Rescue of a paralyzed-flagella mutant of Chlamydomonas by transformation. Diener DR, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5739–43
cDNA cloning, sequence, and expression of carbonic anhydrase in Chlamydomonas reinhardtii: regulation by environmental CO2 concentration. Fukuzawa H, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4383–7
High-frequency nuclear transformation of Chlamydomonas reinhardtii. Kindle KL. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1228–32
Stable nuclear transformation of Chlamydomonas reinhardtii by using a C. reinhardtii gene as the selectable marker. Mayfield SP, et al. **Proc Natl Acad Sci U S A** 1990 Mar; 87(6):2087–91

METABOLISM

Purification, characterization, and complete amino acid sequence of a thioredoxin from a green alga, Chlamydomonas reinhardtii. Decottignies P, et al. **Arch Biochem Biophys** 1990 Jul;280(1):112–21
Stress-induced protein synthesis in Chlamydomonas reinhardtii. Nicholson P, et al. **FEMS Microbiol Lett** 1989 Aug;51(3):283–7
Mechanism of photoinhibition in vivo. A reversible light-induced conformational change of reaction center II is related to an irreversible modification of the D1 protein. Ohad I, et al. **J Biol Chem** 1990 Feb 5;265(4):1972–9
The systems of photo- and pheromone signals transduction in unicellular eukaryotes. Dumler IL, et al. **J Protein Chem** 1989 Jun;8(3):387–9
Photoinactivation of photosystem II and degradation of the D 1 protein are reduced in a cytochrome b6/f-less mutant of Chlamydomonas reinhardtii. Shochat S, et al. **Z Naturforsch [C]** 1990 May;45(5):395–401

PHYSIOLOGY

Induction of cytosine-rich poly(A)+ RNAs in Chlamydomonas reinhardtii by cell wall removal. Su X, et al. **Exp Cell Res** 1990 Mar;187(1):54–8
Wheat germ agglutinin induces mating reactions in Chlamydomonas eugametos by cross-linking agglutinin-associated glycoproteins in the flagellar membrane. Kooijman R, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1677–87
Regulated secretion of a serine protease that activates an extracellular matrix-degrading metalloprotease during fertilization in Chlamydomonas. Snell WJ, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1689–94
Calcium influx regulates antibody-induced glycoprotein movements within the Chlamydomonas flagellar membrane. Bloodgood RA, et al. **J Cell Sci** 1990 May;96 (Pt 1):27–33
[The functional similarity of vertebrate rhodopsin and of a photosensitive pigment from the unicellular flagellate alga Chlamydomonas reinhardtii] Korol'kov SN, et al. **Zh Evol Biokhim Fiziol** 1989 Nov–Dec;25(6):777–80 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

The basal bodies of Chlamydomonas reinhardtii do not contain immunologically detectable DNA. Johnson KA, et al. **Cell** 1990 Aug 24;62(4):615–9
Nucleus-basal body connector in Chlamydomonas: evidence for a role in basal body segregation and against essential roles in mitosis or in determining cell polarity. Wright RL, et al. **Cell Motil Cytoskeleton** 1989;14(4):516–26
Microtubule translocation caused by three subspecies of inner-arm dynein from Chlamydomonas flagella. Kagami O, et al. **FEBS Lett** 1990 May 21;264(2):179–82
Three distinct inner dynein arms in Chlamydomonas flagella: molecular composition and location in the axoneme. Piperno G, et al. **J Cell Biol** 1990 Feb;110(2):379–89

CHLOASMA see **MELANOSIS**

CHLODITAN see MITOTANE

CHLORAL HYDRATE

Oral premedication in children: a comparison of chloral hydrate, diazepam, alprazolam, midazolam and placebo for day surgery. Anderson BJ, et al. **Anaesth Intensive Care** 1990 May;18(2):185–93

Reversible neural inactivation by cooling in anesthetized and freely behaving rats. Campeau S, et al. **J Neurosci Methods** 1990 Apr;32(1):25–35

Weaning infants from sedation [letter] Gordin P. **MCN** 1990 Mar–Apr;15(2):74, 130

ADMINISTRATION & DOSAGE

Sedation for CT examinations in children [letter] Cremin BJ. **Br J Radiol** 1990 Apr;63(748):316

A sweet solution to a contrast problem. Foulner D. **Br J Radiol** 1990 Mar;63(747):219–20

Efficacy of sedation of children with chloral hydrate. Rumm PD, et al. **South Med J** 1990 Sep;83(9):1040–3

[Premedication in children—a clinical trial of bromazepam and chloral hydrate suppositories] Shimoyama M, et al. **Masui** 1990 Jan;39(1):64–9 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Chloral hydrate in paediatric practice [letter; comment] Buchanan N. **Med J Aust** 1989 Oct 2;151(7):422–3 Comment on: Med J Aust 1988 Dec 5–19;149(11–12):686–8.

Respiratory insufficiency following chloral hydrate sedation in two children with Leigh disease (subacute necrotizing encephalomyelopathy). Greenberg SB, et al. **Pediatr Radiol** 1990;20(4):287–8

Direct hyperbilirubinemia associated with chloral hydrate administration in the newborn. Lambert GH, et al. **Pediatrics** 1990 Aug;86(2):277–81

ANALOGS & DERIVATIVES

[The effect of antifungal agents on the chemoluminescence of polymorphonuclear leukocytes] Vorob'ev AA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Oct;(10):87–91 (Eng. Abstr.) **(Rus)**

METABOLISM

Comparative study of the tissue distribution of NADH and NADPH-dependent chloral hydrate reducing enzymes in the rat. Ogino K, et al. **Bull Environ Contam Toxicol** 1990 Mar;44(3):377–9

PHARMACOKINETICS

Determination of chloral hydrate metabolism in adult and neonate biological fluids after single-dose administration. Gorecki DK, et al. **J Chromatogr** 1990 Jun 29;528(2):333–41

PHARMACOLOGY

The effects of anesthetics on the concentrations of cholecystokinin octapeptide sulfate-like immunoreactivity in rat brain regions. Kushima Y, et al. **Neuropeptides** 1989 Nov–Dec;14(4):225–30

Electrophysiologic assessment of low-frequency hearing: sedation effects. Palaskas CW, et al. **Otolaryngol Head Neck Surg** 1989 Oct;101(4):434–41

POISONING

[Chloral hydrate: 2 cases of fatal poisoning] Finini G, et al. **Rev Med Suisse Romande** 1989 Sep;109(9):759–60 **(Fre)**

THERAPEUTIC USE

Chloral hydrate in intractable status epilepticus. Lampl Y, et al. **Ann Emerg Med** 1990 Jun;19(6):674–6

[Use of chlotazol in the complex treatment of recurrent bronchitis and chronic pneumonia in children] Bogadel'nikov IV, et al. **Pediatriia** 1990;(2):110–1 **(Rus)**

TOXICITY

The induction of aneuploidy in cultured Chinese hamster cells by propionaldehyde and chloral hydrate. Furnus CC, et al. **Mutagenesis** 1990 Jul;5(4):323–6

Gastric mucosal injury induced by chloral hydrate. Ogino K, et al. **Toxicol Lett** 1990 Jul;52(2):129–33

CHLORALOSE

PHARMACOLOGY

Influence of pentobarbital and chloralose on metabolic and hemodynamic changes in liver ischemia. Nordström G, et al. **Ann Surg** 1990 Jul;212(1):23–9

Alpha-chloralose opens the chloride channel of frog isolated sensory neurons. Ishizuka S, et al. **Brain Res** 1989 Sep 25; 498(1):181–4

Dissociation by chloralose of the cardiovascular and cerebrovascular responses evoked from the cerebellar fastigial nucleus. Iadecola C, et al. **J Cereb Blood Flow Metab** 1990 May;10(3):375–82

Influence of alpha-chloralose on muscle relaxant effect of chlorzoxazone in rats and pharmacodynamic analysis. Kaneko I, et al. **J Pharmacobiodyn** 1989 Aug;12(8):441–7

The effects of chloralose on the brainstem auditory evoked potential of the rat. Shaw NA. **Neuropharmacology** 1990 Jun;29(6):561–5

POISONING

[Severe poisoning caused by chloralose] Gosset S, et al. **Cah Anesthesiol** 1989 Jun–Jul;37(4):293–4 **(Fre)**

CHLORAMBUCIL

Lack of drug-induced DNA cross-links in chlorambucil-resistant Chinese hamster ovary cells. Jiang BZ, et al. **Cancer Res** 1989 Oct 15;49(20):5514–7

ADMINISTRATION & DOSAGE

High-dose short-term chlorambucil for intractable sympathetic ophthalmia and Behçet's disease. Tessler HH, et al. **Br J Ophthalmol** 1990 Jun;74(6):353–7

Phase 2 study of mitozantrone in combination with chlorambucil and prednisolone for relapsed and refractory non-Hodgkins lymphoma. Jones L, et al. **Hematol Oncol** 1990 Jan–Feb;8(1):41–5

[Programs of immunosuppressive and anti-inflammatory therapy of primary idiopathic glomerulonephritis. II. Membranous, membrano- proliferative and mesangial glomerulonephritis] Klinger M, et al. **Przegl Lek** 1989; 46(12):816–21 **(Pol)**

[Use of chlorbutin in the complex treatment of systemic forms of juvenile rheumatoid arthritis] Shakhbazian IE, et al. **Pediatriia** 1990;(3):50–5 **(Rus)**

[The successful treatment of partial red-cell aplasia of the bone marrow with low doses of cytosar and chlorbutin] Pivnik AV, et al. **Ter Arkh** 1989;61(7):143–5 **(Rus)**

ADVERSE EFFECTS

Chlorambucil lung toxicity. Giles FJ, et al. **Acta Haematol (Basel)** 1990;83(3):156–8 (21 ref.)

Allergic reaction with immune hemolytic anemia resulting from chlorambucil. Thompson-Moya L, et al. **Am J Hematol** 1989 Nov;32(3):230–1

Hypokalaemia and lactic acidosis in a patient with myelomonocytic leukemia. Gerding MN, et al. **Neth J Med** 1990 Feb;36(1–2):58–61

ANALOGS & DERIVATIVES

Cytotoxicity of chlorambucil and chlorambucil-fatty acid conjugates against human lymphomas and normal human peripheral blood lymphocytes. Anel A, et al. **Biochem Pharmacol** 1990 Sep 15;40(6):1193–200

Physicochemical and pharmacokinetic parameters of seven lipophilic chlorambucil esters designed for brain penetration. Greig NH, et al. **Cancer Chemother Pharmacol** 1990;25(5):311–9

Pharmacokinetics of chlorambucil-tertiary butyl ester, a lipophilic chlorambucil derivative that achieves and maintains high concentrations in brain. Greig NH, et al. **Cancer Chemother Pharmacol** 1990;25(5):320–5

Effects of intra-arterial chemotherapy with a new lipophilic anticancer agent, estradiol-chlorambucil (KM2210), dissolved in lipiodol on experimental liver tumor in rats. Egawa H, et al. **J Surg Oncol** 1990 Jun;44(2):109–14

[Acute monoblastic leukemia in non-Hodgkin's malignant lymphoma treated with prednimustine (letter)] Mahe M, et al. **Therapie** 1989 Sep–Oct;44(5):378–9 **(Fre)**

BLOOD

High-performance liquid chromatography of chlorambucil prodrugs structurally related to lipids in rat plasma. Gonçalves JC, et al. **J Chromatogr** 1989 Sep 29;494:389–96

Gas chromatographic assay for chlorambucil and phenylacetic mustard in plasma. Lohmar F, et al. **J Chromatogr** 1989 Oct 27;495:281–7

CHEMICAL SYNTHESIS

Characterization of glutathione conjugates of chlorambucil by fast atom bombardment and thermospray liquid chromatography/mass spectrometry. Dulik DM, et al. **Biomed Environ Mass Spectrom** 1990 Apr;19(4):248–52

METABOLISM

The spontaneous and glutathione S-transferase-mediated reaction of chlorambucil with glutathione. Ciaccio PJ, et al. **Cancer Commun** 1990;2(8):279–85

PHARMACOLOGY

Studies on drug resistance in chronic lymphocytic leukemia. Silber R, et al. **Adv Enzyme Regul** 1989;29:267–76

Expression of human glutathione S-transferases in Saccharomyces cerevisiae confers resistance to the anticancer drugs adriamycin and chlorambucil. Black SM, et al. **Biochem J** 1990 Jun 1;268(2):309–15

Possible role of inhibition of glutathione S-transferase in the partial reversal of chlorambucil resistance by indomethacin in a Chinese hamster ovary cell line. Hall A, et al. **Cancer Res** 1989 Nov 15;49(22):6265–8

Glutathione S-transferase activity, sulfhydryl group and glutathione levels, and DNA cross-linking activity with chlorambucil in chronic lymphocytic leukemia. Johnston JB, et al. **J Natl Cancer Inst** 1990 May 2;82(9):776–9

Genetic and molecular analysis of chlorambucil-induced germ-line mutations in the mouse. Rinchik EM, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1416–20

THERAPEUTIC USE

Comment on the article by Furst et al [letter; comment] Moreland L, et al. **Arthritis Rheum** 1989 Dec;32(12):1631–2 Comment on: Arthritis Rheum 1989 May;32(5):584–93.

Cytotoxicity of chlorambucil and chlorambucil-fatty acid conjugates against human lymphomas and normal human peripheral blood lymphocytes. Anel A, et al. **Biochem Pharmacol** 1990 Sep 15;40(6):1193–200

Effects of chlorambucil and therapeutic decision in initial forms of chronic lymphocytic leukemia (stage A): results of a randomized clinical trial on 612 patients. The French Cooperative Group on Chronic Lymphocytic Leukemia. **Blood** 1990 Apr 1;75(7):1414–21

A randomized clinical trial of chlorambucil versus COP in stage B chronic lymphocytic leukemia. The French Cooperative Group on Chronic Lymphocytic Leukemia. **Blood** 1990 Apr 1;75(7):1422–5

Re: "A phase I trial with chlorambucil administered in short pulses in patients with advanced malignancies" [letter] Moncino MD, et al. **Cancer Invest** 1990;8(1):117

Retreatment of membranous nephropathy with steroids and chlorambucil after initial unresponsiveness to alternate-day prednisone [letter] Tietjen DP. **Clin Nephrol** 1990 Mar; 33(3):152

The use of chlorambucil in the treatment of bullous pemphigoid. Milligan A, et al. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):796–801

Remission induced by chlorambucil in steroid-responsive, frequently relapsing nephrotic syndrome that relapsed after cyclophosphamide. Bailey RR. **N Z Med J** 1989 Jul 26; 102(872):379–81

[Renal amyloidosis in rheumatoid polyarthritis stabilized for 13 years with chlorambucil] Maugars Y, et al. **Rev Rhum Mal Osteoartic** 1990 Jan;57(1):41–4 (13 ref.) **(Fre)**

[Immunosuppressors in Behçet's disease] Pivetti Pezzi P, et al. **Ann Ital Med Int** 1986 Dec;1(4):324–8 (Eng. Abstr.) **(Ita)**

CHLORAMINES

Bromination, no-carrier-added radiobromination and simultaneously-occurring chlorination by chloramine T. Suehiro M, et al. **Int J Rad Appl Instrum [A]** 1990; 41(5):439–47

ADVERSE EFFECTS

[A patient with IGE-mediated allergy to chloramine T received occupational injury compensation] Blomqvist A, et al. **Lakartidningen** 1989 Nov 29;86(48):4262–4 **(Swe)**

ANALYSIS

[Reducing chloramines in drinking water] Becker FF, et al. **Biomed Tech (Berlin)** 1989 Nov;34(11):280–8 (Eng. Abstr.) **(Ger)**

ANTAGONISTS & INHIBITORS

[Phagocytic reaction of the leukocytes in relation to chloramine-resistant opportunistic microbes] Balakliets NI, et al. **Mikrobiol Zh** 1985 Mar–Apr;47(2):78–81 (Eng. Abstr.) **(Rus)**

METABOLISM

Formation of chloramine derivatives of histamine: role of histamine chloramines in bronchoconstriction. Wright CD, et al. **Biochem Biophys Res Commun** 1989 Dec 29; 165(3):1018–26

PHARMACOLOGY

Modification of single sodium channels in neuroblastoma cells by chloramine-T. Iliev IG. **Acta Physiol Pharmacol Bulg** 1989;15(4):59–69

Effects of ozone, chlorine dioxide, chlorine, and monochloramine on Cryptosporidium parvum oocyst viability. Korich DG, et al. **Appl Environ Microbiol** 1990 May;56(5):1423–8

Enumeration of Enterobacter cloacae after chloramine exposure. Watters SK, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3226–8

Ammonia-oxidizing bacteria in a chloraminated distribution system: seasonal occurrence, distribution and disinfection resistance. Wolfe RL, et al. **Appl Environ Microbiol** 1990 Feb;56(2):451–62

Some properties of sodium channels in neuroblastoma cells modified with scorpion toxin and chloramine-T. Single channel measurements. Mozhayeva GN, et al. **Gen Physiol Biophys** 1990 Feb;9(1):3–17

Inactivation of Legionella pneumophila by monochloramine. Cunliffe DA. **J Appl Bacteriol** 1990 May;68(5):453–9

Killing of Coccidioides immitis by hypochlorous acid or monochloramine. Galgiani JN. **J Med Vet Mycol** 1990; 28(2):173–81

Chloramine-T alters the nerve membrane birefringence response. Landowne D. **J Membr Biol** 1990 Feb; 113(2):123–9

Bactericidal effect of a disinfectant dental stone on irreversible hydrocolloid impressions and stone casts.

Schutt RW. **J Prosthet Dent** 1989 Nov;62(5):605–7

Modification of electrophysiological and pharmacological properties of K channels in neuroblastoma cells induced by the oxidant chloramine–T. Rouzaire–Dubois B, et al. **Pflugers Arch** 1990 Jun;416(4):393–7

[Phagocytosis of chloramine B sensitive and resistant staphylococci isolated from healthy persons and patients] Balakliets NI, et al. **Antibiot Khimioter** 1989 Aug; 34(8):610–4 (Eng. Abstr.) **(Rus)**

[Interactions of chloramine with Pseudomonas aeruginosa] Levi MI, et al. **Gig Sanit** 1989 Jul;(7):81–3 **(Rus)**

[Quantitative evaluation of comparative resistance of various phages and viruses to monochloramine–B] Liarskiĭ PP, et al. **Gig Sanit** 1990 Mar;(3):22–5 **(Rus)**

[The sensitivity to antibiotics and chloramine B of opportunistic microorganisms isolated from patients] Balakliets NI, et al. **Mikrobiol Zh** 1989 Nov–Dec;51(6):83–6 (Eng. Abstr.) **(Rus)**

CHLORAMIPHENE see **CLOMIPHENE**

CHLORAMPHENICOL

Tetracyclines, macrolides, lincosamides & chloramphenicol. Ruiz NM, et al. **Bol Asoc Med P R** 1990 Jan;82(1):8–17 (23 ref.)

ADMINISTRATION & DOSAGE

[20 years' therapy with high doses of chloramphenicol in bacterial inflammations of the meninges] Duniewicz M, et al. **Cas Lek Cesk** 1989 Oct 6;128(41):1303–5 (Eng. Abstr.) **(Cze)**

ADVERSE EFFECTS

Optic neuritis and chloramphenicol. Chang N, et al. **Am J Dis Child** 1966 Jul;112(1):46–8 (10 ref.)

Candida esophagitis after antibiotic use. Thapa BR, et al. **Indian J Pediatr** 1989 Mar–Apr;56(2):296–9

Chloramphenicol and preleukaemia/leukaemia [letter; comment] Mitra A. **J Assoc Physicians India** 1989 Sep; 37(9):613–4 Comment on: J Assoc Physicians India 1988 May;36(5):351.

Lack of predictability of chloramphenicol toxicity in paediatric patients. Nahata MC. **J Clin Pharm Ther** 1989 Aug;14(4):297–303

Chloramphenicol and jaundice in a baby [letter] Furuyama M, et al. **Lancet** 1967 Aug 12;2(7511):366–7

ANALOGS & DERIVATIVES

[The effect of derivatives of 1–(p–nitrophenyl)–2–amino–1,3–propanediol and beta–chloroethylphosphonic acid on the growth of enterobacteria] Shatilo VA, et al. **Mikrobiol Zh** 1984 Nov–Dec;46(6):39–42 (Eng. Abstr.) **(Rus)**

ANALYSIS

Chloramphenicol and oxytetracycline residues in milk and tissues from cows and bullocks treated with an injectable formulation. Guillot P, et al. **Food Addit Contam** 1989 Oct–Dec;6(4):467–73

Monoclonal antibody–mediated clean–up procedure for the high–performance liquid chromatographic analysis of chloramphenicol in milk and eggs. van de Water C, et al. **J Chromatogr** 1989 Sep 8;478(1):205–15

Monitoring of chloramphenicol residues in muscle tissues by an immunoassay (La Carte test). Laurensen JJ, et al. **Vet Q** 1990 Apr;12(2):121–3

[Determination of residues of chloramphenicol in food of animal origin] Plantikow A, et al. **Nahrung** 1989; 33(10):1021–2 **(Ger)**

BLOOD

Short–column liquid chromatographic assay for caffeine and chloramphenicol in serum. Markin RS, et al. **J Chromatogr** 1990 Feb 23;525(2):464–70

Rapid monitoring of chloramphenicol in microsamples of plasma by capillary gas chromatography with electron–capture detection. Weber L. **J Chromatogr** 1990 Feb 23;525(2):454–8

METABOLISM

Use of a fluorescent chloramphenicol derivative as a substrate for CAT assays. Hruby DE, et al. **Biotechniques** 1990 Feb; 8(2):170–1

Identification of a rRNA/chloramphenicol interaction site within the peptidyltransferase center of the 50 S subunit of the Escherichia coli ribosome. Marconi RT, et al. **J Biol Chem** 1990 May 15;265(14):7894–9

Purification, properties and immunological detection of a bromoperoxidase–catalase from Streptomyces venezuelae and from a chloramphenicol–nonproducing mutant. Knoch M, et al. **J Gen Microbiol** 1989 Sep;135 (Pt 9):2493–502

A rapid technique for detection of resistance to chloramphenicol in Streptococcus pneumoniae and comparison with minimum inhibitory concentration and disk–diffusion methods. Walker CW, et al. **J Med Microbiol** 1990 Feb;31(2):133–6

PHARMACOKINETICS

The pharmacokinetics of chloramphenicol in plasma and saliva of dairy cows. Dotter A, et al. **J Vet Pharmacol Ther** 1990 Mar;13(1):81–5

[A specific protein inhibiting membrane permeation of chloramphenicol in Pseudomonas aeruginosa] O'Hara K, et al. **Jpn J Antibiot** 1990 Apr;43(4):754–6 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Antibiotic susceptibility of type b Haemophilus influenzae and Streptococcus pneumoniae, and antibiotic concentration in cerebrospinal fluid. Fujita K, et al. **Acta Paediatr Jpn Overseas Ed** 1990 Apr;32(2):132–8

In vivo effects of chloramphenicol, tetracycline, and gentamicin on bovine neutrophil function and morphologic features. Paape MJ, et al. **Am J Vet Res** 1990 Jul; 51(7):1055–61

Cross–resistance to fluoroquinolones in multiple–antibiotic–resistant (Mar) Escherichia coli selected by tetracycline or chloramphenicol: decreased drug accumulation associated with membrane changes in addition to OmpF reduction. Cohen SP, et al. **Antimicrob Agents Chemother** 1989 Aug;33(8):1318–25

Chloramphenicol modifies benzodiazepine receptor rhythm in the pontomesencephalic formation of the rat. López–Colomé AM, et al. **Brain Res** 1990 May 28; 517(1–2):347–50

Correlation between the effects of fosfomycin and chloramphenicol on Escherichia coli. Mengin–Lecreulx D, et al. **FEMS Microbiol Lett** 1990 Jan 1;54(1–3):129–33

Intermediary metabolism in a lizard, Calotes versicolor: role of thyroid hormones. Jacob V, et al. **Gen Comp Endocrinol** 1990 Feb;77(2):324–36

Influence of metronidazole, chloramphenicol, clindamycin and penicillin G on growth and neuraminidase activity of Bacteroides fragilis. Ferreira MC, et al. **J Antimicrob Chemother** 1989 Aug;24(2):157–64

In–vitro susceptibility of Haemophilus influenzae to meropenem compared with imipenem, five other beta–lactams, chloramphenicol and ciprofloxacin. Powell M, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:175–81

Four codons in the cat–86 leader define a chloramphenicol–sensitive ribosome stall sequence. Rogers EJ, et al. **J Bacteriol** 1990 Jan;172(1):110–5

Chloramphenicol–induced translational activation of cat messenger RNA in vitro. Dick T, et al. **J Mol Biol** 1990 Apr 20;212(4):661–8

Chloramphenicol resistant Salmonella species isolated between 1978 and 1987. Talawadekar NN, et al. **J Postgrad Med** 1989 Apr;35(2):79–82

Multiresistant Salmonella typhi in India [letter] **Lancet** 1990 Jul 28;336(8709):252

Type of inhibition of peptide bond formation by chloramphenicol depends on the temperature and the concentration of ammonium ions. Kalpaxis DL, et al. **Mol Pharmacol** 1989 Oct;36(4):615–9

Mitochondrial protein synthesis may be involved in long–term memory formation. Fride E, et al. **Pharmacol Biochem Behav** 1989 Apr;32(4):873–8

The biogenesis of the cyanellae of Cyanophora paradoxa. II. Pulse–labelling of cyanellar polypeptides in the presence of transcriptional and translational inhibitors. Burnap RL, et al. **Proc R Soc Lond [Biol]** 1989 Oct 23;238(1290):73–87

Mathematical modelling of growth of Escherichia coli at subinhibitory levels of chloramphenicol or tetracyclines. Comby S, et al. **Res Microbiol** 1989 Mar–Apr;140(3):243–54

Effects of chloramphenicol, cimetidine and phenobarbital on and tolerance to xylazine–ketamine anesthesia in dogs. Nossaman BC, et al. **Vet Hum Toxicol** 1990 Jun;32(3):216–9

Minus–strand RNA synthesis by the segmented double–stranded RNA bacteriophage phi 6 requires continuous protein synthesis. Pagratis N, et al. **Virology** 1990 Jul;177(1):281–8

[Effect of chloramphenicol on DNA repair synthesis in fetal liver cells of rats] Wang AP, et al. **Chung Kuo Yao Li Hsueh Pao** 1989 Nov;10(6):543–5 (Eng. Abstr.) **(Chi)**

THERAPEUTIC USE

Topical antibiotic prophylaxis for cataract surgery: a controlled trial of fusidic acid and chloramphenicol. Dallison IW, et al. **Aust N Z J Ophthalmol** 1989 Aug; 17(3):289–93

Management of clinical cases of peste des petits ruminants (PPR) disease in goats. Wosu LO. **Beitr Trop Landwirtsch Veterinarmed** 1989;27(3):357–61

Use of chloramphenicol in a hospice. Sykes NP. **Br J Clin Pract** 1989 Dec;43(12):443–6

Ofloxacin in the treatment of typhoid fever unresponsive to chloramphenicol. Yousaf M, et al. **Clin Ther** 1990 Jan–Feb; 12(1):44–7

Norfloxacin ophthalmic versus chloramphenicol in bacterial conjunctivitis and blepharoconjunctivitis [letter] Avisar R, et al. **DICP** 1990 Jun;24(6):640–1

Topical ocular chloramphenicol: clinical pharmacology and toxicity in optometric practice. Kairys D, et al. **J Am Optom Assoc** 1990 Jan;61(1):14–7

Efficacies of erythromycin and chloramphenicol in extinguishing fecal shedding of Campylobacter jejuni in dogs. Monfort JD, et al. **J Am Vet Med Assoc** 1990 Apr 1;196(7):1069–72

Veterinarians receive fines in chloramphenicol case, but maintain they did not illegally use chloramphenicol [news] Reotutar R. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1477

New and old drugs for treating typhoid fever [letter] Finkelstein R, et al. **J Infect Dis** 1990 Jan;161(1):159

Chloramphenicol and bacterial meningitis: time for change [letter] Golledge CL. **Med J Aust** 1989 Dec 4–18; 151(11–12):727–8

Tetracyline therapy for children? [letter; comment] Erlichman M. **Pediatr Infect Dis J** 1990 Apr;9(4):304–5 Comment on: Pediatr Infect Dis J 1989 Mar;8(3):152–5.

Release of endotoxin after antibiotic treatment of Gram–negative bacterial meningitis. Mertsola J, et al. **Pediatr Infect Dis J** 1989 Dec;8(12):904–6

Once daily ceftriaxone vs. chloramphenicol for treatment of typhoid fever in children. Moosa A, et al. **Pediatr Infect Dis J** 1989 Oct;8(10):696–9

Comparative efficacies of aztreonam and chloramphenicol in children with typhoid fever. Tanaka–Kido J, et al. **Pediatr Infect Dis J** 1990 Jan;9(1):44–8

Furazolidone and chloramphenicol for treatment of typhoid fever. Carcelen A, et al. **Scand J Gastroenterol Suppl** 1989; 169:19–23

Experience of changing antibiotic protocol in childhood bacterial meningitis in Vanuatu. McKay T. **Trop Doct** 1989 Oct;19(4):158–9

[Perioperative prevention of infection with chloramphenicol] Berndt H, et al. **Z Arztl Fortbild (Jena)** 1989;83(15):777–8 **(Ger)**

[Combination therapy with ofloxacin and chloramphenicol against typhoid fever] Kurimura O, et al. **Kansenshogaku Zasshi** 1990 Jun;64(6):752–7 (Eng. Abstr.) **(Jpn)**

CHLORAMPHENICOL ACETYLTRANSFERASE

see related

CHLORAMPHENICOL RESISTANCE

Refined crystal structure of type III chloramphenicol acetyltransferase at 1.75 A resolution. Leslie AG. **J Mol Biol** 1990 May 5;213(1):167–86

ANALYSIS

Direct measurement of CAT activity by incubation of CAT–expressing cells in medium containing chloramphenicol. Alter DC, et al. **Biotechniques** 1988 Jun; 6(6):526–30

BIOSYNTHESIS

A rapid technique for detection of resistance to chloramphenicol in Streptococcus pneumoniae and comparison with minimum inhibitory concentration and disk–diffusion methods. Walker CW, et al. **J Med Microbiol** 1990 Feb;31(2):133–6

Expression of chloramphenicol acetyltransferase (CAT) from rodent type I collagen promoters in transfected osteosarcoma cells in vivo. Zernik J, et al. **Matrix** 1989 Nov;9(5):376–81

GENETICS

In vivo transfection of murine lungs with a functioning prokaryotic gene using a liposome vehicle. Brigham KL, et al. **Am J Med Sci** 1989 Oct;298(4):278–81

Expression of a prokaryotic gene in cultured lung endothelial cells after lipofection with a plasmid vector. Brigham KL, et al. **Am J Respir Cell Mol Biol** 1989 Aug;1(2):95–100

The maximum rate of gene expression is dependent on the downstream context of unfavourable codons. Varenne S, et al. **Biochimie** 1989 Nov–Dec;71(11–12):1221–9

Simple screening for the presence of antibiotic resistant CAT gene plasmids in bacteria. Alter DC, et al. **Biotechniques** 1989 Mar;7(3):247–8

Single cell analysis of transfected gene expression in primary heart cultures containing multiple cell types. Antin PB, et al. **Biotechniques** 1988 Jul–Aug;6(7):640–2, 645–9 (17 ref.)

Liposome mediated gene transfer. Mannino RJ, et al. **Biotechniques** 1988 Jul–Aug;6(7):682–90

A CAT expression vector with virtually no background: pUMSVOCAT. Salier JP, et al. **Biotechniques** 1989 Jan; 7(1):30–1

Identification of transgenic mice carrying the CAT gene with PCR amplification. Walter CA, et al. **Biotechniques** 1989 Nov–Dec;7(10):1065–70

Retrovirus–mediated gene transfer into mouse cerebellar primary culture and its application to the neural transplantation. Tsuda M, et al. **Brain Res Bull** 1990 Jun; 24(6):787–92

Stable lines of transgenic zebrafish exhibit reproducible patterns of transgene expression. Stuart GW, et al. **Development** 1990 Jul;109(3):577–84

Expression of various viral and cellular enhancer–promoters during differentiation of human embryonal carcinoma cells. Hasegawa T, et al. **Differentiation** 1990 Feb;42(3):191–8

The 5'-leader sequence of tobacco mosaic virus RNA mediates initiation–factor–4E–independent, but still initiation–factor–4A–dependent translation in yeast extracts. Altmann M, et al. **Gene** 1990 Jul 2;91(1):127–9

Comparative expression of the pC194 cat gene in Streptococcus pneumoniae, Bacillus subtilis and Escherichia coli. Ballester S, et al. **Gene** 1990 Jan 31; 86(1):71–9

Introns in the 3'-untranslated region can inhibit chimeric CAT and beta-galactosidase gene expression. Evans MJ, et al. **Gene** 1989 Dec 7;84(1):135–42

Nucleotide sequence of the chloramphenicol acetyltransferase gene of Streptomyces acrimycini. Murray IA, et al. **Gene** 1989 Dec 26;85(2):283–91

Glucocorticoid-inducible expression of a glutamine synthetase-CAT-encoding fusion plasmid after transfection of intact chicken retinal explant cultures. Pu HF, et al. **Gene** 1990 May 14;89(2):259–63

Investigation into the nature of a Bacillus promoter cloned into a promoter-probe plasmid. Teixeira AV, et al. **Gene** 1989 Sep 1;81(1):159–63

Translational attenuation as the regulator of inducible cat genes. Lovett PS. **J Bacteriol** 1990 Jan;172(1):1–6 (39 ref.)

Bacillus subtilis mutant allele sup-3 causes lysine insertion at ochre codons: use of sup-3 in studies of translational attenuation. Mulbry WW, et al. **J Bacteriol** 1989 Oct; 171(10):5322–4

Four codons in the cat-86 leader define a chloramphenicol-sensitive ribosome stall sequence. Rogers EJ, et al. **J Bacteriol** 1990 Jan;172(1):110–5

Erythromycin induces expression of the chloramphenicol acetyltransferase gene cat-86. Rogers EJ, et al. **J Bacteriol** 1990 Aug;172(8):4694–5

Eukaryotic promoters drive gene expression in Escherichia coli. Antonucci TK, et al. **J Biol Chem** 1989 Oct 25; 264(30):17656–9

Targeting genes: delivery and persistent expression of a foreign gene driven by mammalian regulatory elements in vivo. Wu CH, et al. **J Biol Chem** 1989 Oct 15; 264(29):16985–7

Chloramphenicol-induced translational activation of cat messenger RNA in vitro. Dick T, et al. **J Mol Biol** 1990 Apr 20;212(4):661–8

Ick suppresses gene expression from various promoters including human T-cell leukemia virus type I promoter. Ohta M, et al. **Jpn J Cancer Res** 1990 May;81(5):440–4

Context effects and inefficient initiation at non-AUG codons in eucaryotic cell-free translation systems. Kozak M. **Mol Cell Biol** 1989 Nov;9(11):5073–80

Regulation of transfected glycoprotein hormone alpha-gene expression in primary pituitary cell cultures. Burrin JM, et al. **Mol Endocrinol** 1989 Oct;3(10):1643–51

A new series of CAT expression vectors. Clark AR, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10130

A modified CAT expression vector with convenient cloning sites. Wu YL, et al. **Nucleic Acids Res** 1990 Apr 11; 18(7):1919

Stability of CAT gene transcript depends on the 3'-end structure. Sato K, et al. **Nucleic Acids Symp Ser** 1989; (21):23–4

Transfection of Leishmania enriettii and expression of chloramphenicol acetyltransferase gene. Laban A, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9119–23

Tissue-specific expression and methylation of a thyroglobulin-chloramphenicol acetyltransferase fusion gene in transgenic mice. Ledent C, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6176–80

Hair-specific expression of chloramphenicol acetyltransferase in transgenic mice under the control of an ultra-high-sulfur keratin promoter. McNab AR, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6848–52

Initiation of protein synthesis from a termination codon. Varshney U, et al. **Proc Natl Acad Sci U S A** 1990 Feb; 87(4):1586–90

Progesterone decreases DNA binding factor activity and the expression in Xenopus oocytes of a cAMP responsive gene from rat liver. Williams JA, et al. **Second Messengers Phosphoproteins** 1988–89; 12(5–6):261–70

Differential inhibition of downstream gene expression by the cauliflower mosaic virus 35S RNA leader. Fütterer J, et al. **Virus Genes** 1989 Sep;3(1):45–55

METABOLISM

Evidence for transition-state stabilization by serine-148 in the catalytic mechanism of chloramphenicol acetyltransferase. Lewendon A, et al. **Biochemistry** 1990 Feb 27;29(8):2075–80

Use of a fluorescent chloramphenicol derivative as a substrate for CAT assays. Hruby DE, et al. **Biotechniques** 1990 Feb; 8(2):170–1

Reaction products of chloramphenicol acetyltransferases from enterobacteria and Haemophilus influenzae. Powell M, et al. **J Antimicrob Chemother** 1989 Dec;24(6):897–903

Import of precursor proteins into mitochondria: site of polypeptide unfolding. Skerjanc IS, et al. **J Biol Chem** 1990 Jun 5;265(16):9444–51

Direct determination of chloramphenicol acetyltransferase (CAT) activity in homogenates of transfected mammalian cells by high performance liquid chromatography. Siegert H, et al. **J Clin Chem Clin Biochem** 1990 Apr;28(4):217–9

Use of commercially available rapid chloramphenicol acetyltransferase test to detect resistance in Salmonella species. de la Maza L, et al. **J Clin Microbiol** 1990 Aug; 28(8):1867–9

CHLORAMPHENICOL RESISTANCE

Family outbreak of chloramphenicol-ampicillin resistant Haemophilus influenzae type b disease [letter] Brightman CA, et al. **Lancet** 1990 Feb 10;335(8685):351–2

Fatal meningitis caused by chloramphenicol-resistant Haemophilus influenzae [letter] Jenner BM, et al. **Med J Aust** 1990 Mar 19;152(6):335–6

Antibiotic resistance in Haemophilus influenzae in Japan [letter] Fujita K, et al. **Pediatr Infect Dis J** 1989 Sep; 8(9):658

Could you please tell me if there is reported resistance of pneumococci (or meningococci) to chloramphenicol? Bailey R. **Trop Doct** 1990 Apr;20(2):73

GENETICS

Hybridization analysis of three chloramphenicol resistance determinants from Clostridium perfringens and Clostridium difficile. Rood JI, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1569–74

The pUC18CM plasmids: a chloramphenicol resistance gene cassette for site-directed insertion and deletion mutagenesis in Escherichia coli. Schweizer HP. **Biotechniques** 1990 Jun; 8(6):612–3, 616

Chloramphenicol resistance in Streptomyces: cloning and characterization of a chloramphenicol hydrolase gene from Streptomyces venezuelae. Mosher RH, et al. **J Gen Microbiol** 1990 Feb;136 (Pt 2):293–301

Plasmid-mediated chloramphenicol resistance in Staphylococcus hyicus. Schwarz S, et al. **J Gen Microbiol** 1989 Dec;135 (Pt 12):3329–36

[Genetic instability of determinants of resistance to chloramphenicol and kanamycin in Streptomyces lividans 66] Starodubtseva LI, et al. **Genetika** 1989 Jun; 25(6):1001–12 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

[Study of the inactivation of antibiotics by bacterial colonies] Babkov VV, et al. **Antibiot Khimioter** 1990 Jan;35(1):26–7 (Eng. Abstr.) **(Rus)**

CHLORANIL see under **QUINONES**

CHLORATES

ANALYSIS

The structure of hexaaquanickel(II) chlorate. Gallucci JC, et al. **Acta Crystallogr C** 1990 Mar 15;46 (Pt 3):350–4

METABOLISM

A modified method for the production of 36ClO3- for use in plant nitrate transport studies. Ruiz-Cristin J, et al. **Anal Biochem** 1989 Oct;182(1):146–50

PHARMACOLOGY

Chlorate inhibits tyrosine sulfation of human type III procollagen without affecting its secretion or processing. Jukkola A, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):264–9

Modulation of cell surface heparan sulfate structure by growth of cells in the presence of chlorate. Keller KM, et al. **Biochemistry** 1989 Oct 3;28(20):8100–7

Genetic analysis of Aspergillus niger: isolation of chlorate resistance mutants, their use in mitotic mapping and evidence for an eighth linkage group. Debets AJ, et al. **Mol Gen Genet** 1990 May;221(3):453–8

POISONING

[Anabolic effects of sodium selenite, vitamin E and retabolil in experimental hypotrophy induced by a pesticide] Makhmudov TM, et al. **Vopr Pitan** 1989 May-Jun;(3):61–4 (Eng. Abstr.) **(Rus)**

CHLORBUTOL see **CHLOROBUTANOL**

CHLORDAN

ANALOGS & DERIVATIVES

Organochlorine compounds in human adipose tissue from north Texas. Adeshina F, et al. **J Toxicol Environ Health** 1990;29(2):147–56

ANALYSIS

Chlordane residues in rat and monkey tissues following subchronic inhalation exposure to technical chlordane. Khasawinah AM. **Bull Environ Contam Toxicol** 1989 Sep; 43(3):459–66

BLOOD

Interruption of chronic chlordane exposure and plasma residue levels in occupational workers. Takamiya K. **Bull Environ Contam Toxicol** 1990 Jun;44(6):905–9

PHARMACOLOGY

Hepatic accumulation of 125I-thyroxine in the rat: augmentation by phenobarbital and chlordane. Bernstein G, et al. **Endocrinology** 1968 Feb;82(2):406–9

POISONING

EEG in pesticides [letter; comment] Marcus SM. **Clin Electroencephalogr** 1989 Oct;20(4):VIII–X Comment on: Clin Electroencephalogr 1989 Apr;20–2:ix–x.

A case of chlordane poisoning in two dogs and a cat. Staley E, et al. **Vet Hum Toxicol** 1990 Feb;32(1):57

RADIATION EFFECTS

Destruction of pesticides and their formulations in water using short wavelength UV light. Peterson D, et al. **Bull Environ Contam Toxicol** 1990 May;44(5):744–50

STANDARDS

Corporate crime: why we cannot trust industry-derived safety studies. Epstein SS. **Int J Health Serv** 1990; 20(3):443–58

TOXICITY

Inhibition of hepatocyte gap junctional intercellular communication by endosulfan, chlordane and heptachlor. Ruch RJ, et al. **Carcinogenesis** 1990 Jul;11(7):1097–101

Long-term alteration of adult bone marrow colony formation by prenatal chlordane exposure. Barnett JB, et al. **Fundam Appl Toxicol** 1990 May;14(4):688–95

Comparative inhalation toxicity of technical chlordane in rats and monkeys. Khasawinah AM, et al. **J Toxicol Environ Health** 1989;28(3):327–47

Chlordane: 24-month tumorigenicity and chronic toxicity test in mice. Khasawinah AM, et al. **Regul Toxicol Pharmacol** 1989 Dec;10(3):244–54

Chlordane: thirty-month tumorigenicity and chronic toxicity test in rats. Khasawinah AM, et al. **Regul Toxicol Pharmacol** 1989 Oct;10(2):95–109

Cytotoxic T-lymphocyte and NK responses in mice treated prenatally with chlordane. Blaylock BL, et al. **Toxicol Lett** 1990 Mar;51(1):41–9

CHLORDIAZEPOXIDE

Partial cross-dependence on ethanol in mice dependent on chlordiazepoxide. Chan AW, et al. **Pharmacol Biochem Behav** 1990 Feb;35(2):379–84

Schedule-induced chlordiazepoxide intake: differential effect of cocaine and ethanol histories. Falk JL, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):393–6

ADMINISTRATION & DOSAGE

A liquid diet model of chlordiazepoxide dependence in mice. Chan AW, et al. **Pharmacol Biochem Behav** 1989 Dec; 34(4):839–45

ADVERSE EFFECTS

Cholestatic jaundice associated with chlordiazepoxide hydrochloride (Librium) therapy. Report of a case and review of the literature. Lo KJ, et al. **Am J Dig Dis** 1967 Aug;12(8):845–9 (6 ref.)

Oral administration of chlordiazepoxide plus sodium nitrite investigated for tumor initiating activity in the rat liver. Mereto E, et al. **Cancer Lett** 1990 Aug;53(1):61–5

Drug-induced chronic pigmented purpura. Nishioka K, et al. **J Dermatol** 1989 Jun;16(3):220–2

Withdrawal from benzodiazepine dependence as a discriminative stimulus. Emmett-Oglesby MW, et al. **NIDA Res Monogr** 1989;95:284

Evidence that the increased anxiety detected in the elevated plus-maze during chlordiazepoxide withdrawal is not due to enhanced noradrenergic activity. Baldwin HA, et al. **Pharmacol Biochem Behav** 1989 Dec;34(4):931–3

ANALOGS & DERIVATIVES

HPLC analysis of the nitrosation products of chlordiazepoxide. Mazzei M, et al. **Farmaco** 1989 Sep; 44(9):883–91

DNA damage induced in rats by oral administration of chlordiazepoxide plus sodium nitrite or of N-nitrosochlordiazepoxide. Robbiano L, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):186–90

ANTAGONISTS & INHIBITORS

Inhibition by antimanic drugs of hyperactivity induced by methamphetamine-chlordiazepoxide mixture in mice. Okada K, et al. **Pharmacol Biochem Behav** 1990 Apr; 35(4):897–901

ISOLATION & PURIFICATION

[A comparative evaluation of methods for the isolation of khlozepid from human cadaveric liver] Lanshchikov AS. **Sud Med Ekspert** 1989 Oct-Dec;32(4):47–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Chronic treatment with ethanol or chlordiazepoxide alters the metabolism of chlordiazepoxide. Chan AW, et al. **Pharmacol Biochem Behav** 1990 Feb;35(2):363–6

PHARMACOKINETICS

How chronically administered valproate increases chlordiazepoxide transfer through the blood-brain barrier.

Riant P, et al. **Fundam Clin Pharmacol** 1990;4(1):105–14

PHARMACOLOGY

Chronic ethanol and chlordiazepoxide: contrasting effects on reward learning. File SE, et al. **Alcohol** 1990 Jul–Aug; 7(4):307–10

A conflict procedure not requiring deprivation: evidence that chronic ethanol treatment induces tolerance to the anticonflict action of ethanol and chlordiazepoxide. Criswell HE, et al. **Alcoholism (N Y)** 1989 Oct;13(5):680–5

State-dependent fear extinction with two benzodiazepine tranquilizers. Bouton ME, et al. **Behav Neurosci** 1990 Feb; 104(1):44–55

Independence of benzodiazepine and opiate action in the suppression of isolation distress in rat pups. Carden SE, et al. **Behav Neurosci** 1990 Feb;104(1):160–6

Brain benzodiazepine receptor–mediated effects on plasma catecholamine and corticosterone concentrations in rats. De Boer SF, et al. **Brain Res Bull** 1990 Jun;24(6):843–7

Differential effects of Tyr-MIF-1 and naloxone in two animal models involving benzodiazepine. Kastin AJ, et al. **Brain Res Bull** 1989 Dec;23(6):443–6

The discriminative stimulus properties of ethanol and acute ethanol withdrawal states in rats. Gauvin DV, et al. **Drug Alcohol Depend** 1989 Oct;24(2):103–13

Effects of chlordiazepoxide and buspirone on plasma catecholamine and corticosterone levels in rats under basal and stress conditions. de Boer SF, et al. **Endocrinol Exp** 1990 Mar;24(1–2):229–39

Inhibition by chlordiazepoxide of adenosine-stimulated glucagon secretion. Chapal J, et al. **Fundam Clin Pharmacol** 1990;4(2):201–12

Pituitary thyrotropin-releasing hormone (TRH) receptors: effects of TRH, drugs mimicking TRH action, and chlordiazepoxide. Hinkle PM, et al. **Mol Endocrinol** 1989 Sep;3(9):1337–44

Behavioral effects of yohimbine and chlordiazepoxide: dependence on the rat's previous familiarization with the test conditions. Gentsch C, et al. **Neuropsychobiology** 1989; 22(2):101–7

Antipanic drug treatments: failure to exhibit anxiolytic-like effects on defensive burying behavior. Beardslee SL, et al. **Pharmacol Biochem Behav** 1990 Feb;35(2):451–5

Discriminative stimulus properties of CL218872 and chlordiazepoxide in the rat. Gardner CR. **Pharmacol Biochem Behav** 1989 Dec;34(4):711–5

Chlordiazepoxide alters intravenous cocaine self-administration in rats. Goeders NE, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):859–66

A contingent, conditioned suppression of eating following chronic benzodiazepine-induced hyperphagia. Hunt T, et al. **Pharmacol Biochem Behav** 1990 Feb;35(2):373–8

Brain benzodiazepine receptors in fathead minnows and the behavioral response to alarm pheromone. Rehnberg BG, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):435–42

Chlordiazepoxide and valproate enhancement of saline drinking by nondeprived rats: effects of bicuculline, picrotoxin and Ro15–1788. Shephard RA, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):285–90

Evaluation of alprazolam-induced behavioural effects: differences with chlordiazepoxide after interaction with desipramine and rolipram, a cAMP phosphodiesterase inhibitor. Cannizzaro G, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:53–4

Single and repeated treatment with chlordiazepoxide and sodium valproate and head-twitch responses induced in rats with rolipram, a potential antidepressant drug. Cannizzaro G, et al. **Pharmacol Res** 1989 Nov–Dec;21 Suppl 1:51–2

Plasma catecholamine and corticosterone levels during active and passive shock-prod avoidance behavior in rats: effects of chlordiazepoxide. De Boer SF, et al. **Physiol Behav** 1990 Jun;47(6):1089–98

One-trial tolerance to the anxiolytic effects of chlordiazepoxide in the plus-maze. File SE. **Psychopharmacology (Berl)** 1990;100(2):281–2

Characterisation of the phenomenon of "one-trial tolerance" to the anxiolytic effect of chlordiazepoxide in the elevated plus-maze. File SE, et al. **Psychopharmacology (Berl)** 1990; 102(1):98–101

Competition for sucrose-pellets in triads of male Wistar rats: effects of acute and subchronic chlordiazepoxide. Gentsch C, et al. **Psychopharmacology (Berl)** 1990;100(4):530–4

Chlordiazepoxide reduces discriminability but not rate of forgetting in delayed conditional discrimination. Tan S, et al. **Psychopharmacology (Berl)** 1990;101(4):550–4

Chlordiazepoxide and the moderation of the initial response to reward reduction. Flaherty CF, et al. **Q J Exp Psychol [B]** 1990 Feb;42(1):87–105

[Effect of benzodiazepines on enzyme-metabolizing drugs. III. Activity of microsomal monooxygenases in the rat liver exposed to chlordiazepoxide and elevated environmental temperature] Pachecka J, et al. **Acta Pol Pharm** 1989; 46(2):183–6 (Eng. Abstr.) **(Pol)**

THERAPEUTIC USE

Detoxification of alcoholics: improving care by symptom-triggered sedation. Wartenberg AA, et al. **Alcoholism (N Y)** 1990 Feb;14(1):71–5

Irritable bowel syndrome: therapeutic evaluation of indigenous drugs. Yadav SK, et al. **Indian J Med Res** 1989 Dec;90:496–503

TOXICITY

Potentiation of ifosfamide toxicity by chlordiazepoxide, diazepam and oxazepam. Furusawa S, et al. **Chem Pharm Bull (Tokyo)** 1989 Dec;37(12):3420–2

Effects of DM-9384, a pyrrolidone derivative, on alcohol- and chlordiazepoxide-induced amnesia in mice. Nabeshima T, et al. **Pharmacol Biochem Behav** 1990 Jun;36(2):233–6

Genotoxicity of N-nitrosochlordiazepoxide in cultured mammalian cells. Brambilla G, et al. **Toxicol Appl Pharmacol** 1989 Mar 1;97(3):480–8

DNA damage induced in rats by oral administration of chlordiazepoxide plus sodium nitrite or of N-nitrosochlordiazepoxide. Robbiano L, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):186–90

CHLORELLA

The radioprotective effects of aqueous extract from chlorococcal freshwater algae (Chlorella kessleri) in mice and rats. Rotkovská D, et al. **Strahlenther Onkol** 1989 Nov; 165(11):813–6

Ovine chlorellosis in the Sudan. Zakia AM, et al. **Vet Rec** 1989 Dec 16;125(25):625–6

5-Azacytidine-resistant mutants of Chlorella virus IL-3A. Burbank DE, et al. **Virology** 1990 May;176(1):311–5

ANALYSIS

Immunological identification and quantification of light harvesting chlorophyll a/b protein of Chlorella protothecoides. Sasidharan A, et al. **Indian J Biochem Biophys** 1990 Feb;27(1):1–4

Effect of Chlorella vulgaris extracts on murine cytomegalovirus infections. Ibusuki K, et al. **Nat Immun Cell Growth Regul** 1990;9(2):121–8

DRUG EFFECTS

Measurement of manganese amelioration of cadmium toxicity in Chlorella pyrenoidosa using turbidostat culture. Bennett WN. **Arch Environ Contam Toxicol** 1990 Jan–Feb; 19(1):118–23

Impact of bimetallic combinations of Cu, Ni and Fe on growth rate, uptake of nitrate and ammonium, 14CO2 fixation, nitrate reductase and urease activity of Chlorella vulgaris. Mallick N, et al. **Biol Met** 1990;2(4):223–8

ENZYMOLOGY

Induction and synthesis of nitrate reductase in Chlorella vulgaris. Sherman TD, et al. **Arch Biochem Biophys** 1989 Nov 1;274(2):525–31

GENETICS

The hexose carrier from Chlorella. cDNA cloning of a eucaryotic H+-cotransporter. Sauer N, et al. **FEBS Lett** 1989 Dec 18;259(1):43–6

A glutamate dehydrogenase gene sequence. Cock JM, et al. **Nucleic Acids Res** 1989 Dec 25;17(24):10500

Primary structure of the chloroplast small subunit ribosomal RNA gene from Chlorella vulgaris. Huss VA, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9487

Cloning and sequencing the cytosine methyltransferase gene M. CviJI from Chlorella virus IL-3A. Shields SL, et al. **Virology** 1990 May;176(1):16–24

GROWTH & DEVELOPMENT

[Growth and development of unicellular algae in the algae–bacteria–fish biocenosis system during space flight] Levinskikh MA, et al. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):32–5 (Eng. Abstr.) **(Rus)**

[Study of the growth and development of Chlorella on "Kosmos-1887"] Sychev VN, et al. **Kosm Biol Aviakosm Med** 1989 Sep–Oct;23(5):35–9 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Variability of allergenicity in eight strains of the green algal genus Chlorella. Tiberg E, et al. **Int Arch Allergy Appl Immunol** 1989;90(3):301–6

Augmentation of the resistance against Escherichia coli by oral administration of a hot water extract of Chlorella vulgaris in rats. Hasegawa T, et al. **Int J Immunopharmacol** 1989;11(8):971–6

CHLORETHAZINE see **MECHLORETHAMINE**

CHLORETHIAZOLE see **CHLORMETHIAZOLE**

CHLORFENVINPHOS see under **INSECTICIDES, ORGANOPHOSPHATE**

CHLORGUANID see **CHLOROGUANIDE**

CHLORHEXIDINE

Chlorhexidine baths [letter; comment] **Eur J Vasc Surg** 1990 Feb;4(1):107 Comment on: Eur J Vasc Surg 1989 Aug;3(4):323–6.

Surgical hand disinfection: comparison of 4% chlorhexidine detergent solution and 2% triclosan detergent solution. Bendig JW. **J Hosp Infect** 1990 Feb;15(2):143–8

Rationalizing whole body disinfection. Byrne DJ, et al. **J Hosp Infect** 1990 Feb;15(2):183–7

Hygienic hand disinfection: a comparative study with chlorhexidine detergents and soap. Nicoletti G, et al. **J Hosp Infect** 1990 May;15(4):323–37

ADMINISTRATION & DOSAGE

Effect of chlorhexidine scrub on postoperative bacterial counts. Dahl J, et al. **Am J Surg** 1990 May;159(5):486–8

Patient tolerance study of topical chlorhexidine diphosphanilate: a new topical agent for burns. Miller LM, et al. **Burns** 1990 Jun;16(3):217–20

A clinical and microbiological comparison of the effects of water and 0.02% chlorhexidine as coolants during ultrasonic scaling and root planing. Taggart JA, et al. **J Clin Periodontol** 1990 Jan;17(1):32–7

Development and in vitro evaluation of an intra-oral controlled-release delivery system for chlorhexidine. Mirth DB, et al. **J Dent Res** 1989 Aug;68(8):1285–8

The effect of sustained release application of chlorhexidine on salivary levels of Streptococcus mutans in partial denture wearers. Zyskind D, et al. **J Oral Rehabil** 1990 Jan;17(1):61–6

A new degradable controlled release device for treatment of periodontal disease: in vitro release study. Steinberg D, et al. **J Periodontol** 1990 Jul;61(7):393–8

[Stage-by-stage lavage of the abdominal cavity in the treatment of diffuse suppurative peritonitis] Dadvani SA, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):101–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Savlon keratopathy a clinical profile. Khurana AK, et al. **Acta Ophthalmol (Copenh)** 1989 Aug;67(4):465–6

Effect of antimicrobial solution lavage on the palmar digital tendon sheath in horses. Baird AN, et al. **Am J Vet Res** 1990 Sep;51(9):1488–94

Bladder irrigation or irritation? Elliott TS, et al. **Br J Urol** 1989 Oct;64(4):391–4

Allergic contact dermatitis from chlorhexidine diacetate in a skin swab. Reynolds NJ, et al. **Contact Dermatitis** 1990 Feb;22(2):103–4

Contact urticaria from chlorhexidine. Wong WK, et al. **Contact Dermatitis** 1990 Jan;22(1):52

Staining of residual caries under freshly-packed amalgam restorations exposed to tea/chlorhexidine in vitro. Kidd EA, et al. **Int Dent J** 1990 Aug;40(4):219–24

ANALOGS & DERIVATIVES

Alcohol-impregnated wipes as an alternative in hand hygiene. Butz AM, et al. **Am J Infect Control** 1990 Apr; 18(2):70–6

In vitro and in vivo evaluation of a 0.5% chlorhexidine gluconate teat dip. Boddie RL, et al. **J Am Vet Med Assoc** 1990 Mar 15;196(6):890–3

Wet disc testing of mafenide hydrochloride, chlorhexidine gluconate, and triple antibiotic solution against bacteria isolated from burn wounds. Holder IA. **J Burn Care Rehabil** 1990 Jul–Aug;11(4):301–4

Interaction between chlorhexidine digluconate and sodium lauryl sulfate in vivo. Barkvoll P, et al. **J Clin Periodontol** 1989 Oct;16(9):593–5

In vitro virucidal effectiveness of a 0.12%-chlorhexidine gluconate mouthrinse. Bernstein D, et al. **J Dent Res** 1990 Mar;69(3):874–6

Oral gram-negative bacilli in bone marrow transplant patients given chlorhexidine rinses. Brown AT, et al. **J Dent Res** 1989 Jul;68(7):1199–204

Effects of a chlorhexidine gluconate oral rinse on the incidence of alveolar osteitis in mandibular third molar surgery. Berwick JE, et al. **J Oral Maxillofac Surg** 1990 May;48(5):444–8; discussion 449

Supragingival irrigation with 0.06% chlorhexidine in naturally occurring gingivitis. I. 6 month clinical observations. Flemmig TF, et al. **J Periodontol** 1990 Feb; 61(2):112–7

The effect of a 0.125% chlorhexidine rinse on inflammation after periodontal surgery. Vaughan ME, et al. **J Periodontol** 1989 Dec;60(12):704–8

Effects of subgingival irrigation on bacteremia following scaling and root planing. Waki MY, et al. **J Periodontol** 1990 Jul;61(7):405–11

The effect of bacteriostatic lubricant on group B streptococcal cultures of the female genital tract. Brady K, et al. **Obstet Gynecol** 1989 Dec;74(6):848–50

Chlorhexidine prophylaxis for chemotherapy- and radiotherapy-induced stomatitis: a randomized double-blind trial. Ferretti GA, et al. **Oral Surg Oral Med Oral Pathol** 1990 Mar;69(3):331–8

Comparison of three skin preparation techniques in the dog. Part 1: Experimental trial. Osuna DJ, et al. **Vet Surg** 1990 Jan–Feb;19(1):14–9

Comparison of three skin preparation techniques. Part 2: Clinical trial in 100 dogs. Osuna DJ, et al. **Vet Surg** 1990 Jan–Feb;19(1):20–3

[Determination of bactericidal minimum concentrations of 3 antiseptics and 1 disinfectant on 580 hospital gram-negative bacilli] Girardo P, et al. **Pathol Biol (Paris)** 1989 Jun;37(5 Pt 2):605–11 (Eng. Abstr.)

(Fre)

[Treatment of the sputum with Soviet-produced chlorhexidine bigluconicum] Golyshevskaia VI, et al. **Probl Tuberk** 1990;(3):41-4 (Eng. Abstr.) (Rus)

[The use of chlorhexidine bigluconate in the combined treatment of patients with chronic generalized (granulomatous) candidiasis] Sambukova GA, et al. **Vestn Dermatol Venerol** 1989;(6):49-51 (Eng. Abstr.) (Rus)

ANALYSIS

Study of chlorhexidine-tenside interactions by means of charge-transfer chromatography. Cserháti T, et al. **Pharm Acta Helv** 1990;65(4):113-6

ANTAGONISTS & INHIBITORS

Chlorhexidine inactivation by saliva. Spijkervet FK, et al. **Oral Surg Oral Med Oral Pathol** 1990 Apr;69(4):444-9

PHARMACOLOGY

Disinfecting effect of a disposable lubricant during cystoscopy. Scholtmeijer RJ, et al. **Child Nephrol Urol** 1990;10(1):22-5

Uptake of 14C-chlorhexidine diacetate to Escherichia coli and Pseudomonas aeruginosa and its release by azolectin. Fitzgerald KA, et al. **FEMS Microbiol Lett** 1989 Aug; 51(3):327-32

The effects of surfactant systems and moisturizing products on the residual activity of a chlorhexidine gluconate handwash using a pigskin substrate. Benson L, et al. **Infect Control Hosp Epidemiol** 1990 Feb;11(2):67-70

The effect of sub-inhibitory concentrations of chlorhexidine on the proteolytic activity of Bacteroides gingivalis. Millward TA, et al. **J Antimicrob Chemother** 1990 Jan; 25(1):31-7

Effect of phenoxyethanol, chlorhexidine and their combination on subgingival plaque bacteria. Wilson M, et al. **J Antimicrob Chemother** 1990 Jun;25(6):921-9

The effects of chlorhexidine on the maximum specific growth rate, biomass and hydrolytic enzyme production of Bacteroides gingivalis grown in continuous culture. Minhas T, et al. **J Appl Bacteriol** 1989 Sep;67(3):309-16

Effects of chlorhexidine solution on neutrophil locomotion in vitro. Watts TL, et al. **J Dent** 1989 Dec;17(6):287-9

The effect of pH on the sensitivity of species of Lactobacillus to chlorhexidine and the antibiotics minocycline and spiramycin. Cleghorn B, et al. **J Dent Res** 1989 Jul; 68(7):1146-50

In vivo effects of zinc and chlorhexidine on dental plaque ureolysis and glycolysis. Giertsen E, et al. **J Dent Res** 1989 Jun;68(6):1132-4

Effects of varnishes containing chlorhexidine on the human dental plaque flora. Schaeken MJ, et al. **J Dent Res** 1989 Dec;68(12):1786-9

Magnesium and chlorhexidine MIC determination [letter] Baillie LW. **J Hosp Infect** 1989 Oct;14(3):264-6

The effect of sodium alginate on the antibacterial activity of chlorhexidine, gentamicin and ciprofloxacin. Baillie LW. **J Hosp Infect** 1989 Aug;14(2):171-4

Effective inactivation of human immunodeficiency virus with chlorhexidine antiseptics containing detergents and alcohol. Montefiori DC, et al. **J Hosp Infect** 1990 Apr;15(3):279-82

An in-use comparison of chlorhexidine gluconate 4% w/v, glycol-poly-siloxane plus methylcelluloae and a liquid soap in a special care baby unit. Webster J, et al. **J Hosp Infect** 1989 Aug;14(2):141-51

The effect of chlorhexidine acetate on the corneal penetration of sorbitol from an arnolol formulation in the albino rabbit. Ashton P, et al. **J Ocul Pharmacol** 1990 Spring;6(1):37-42

In vitro activity of a chlorhexidine-containing mouthwash against subgingival bacteria. Wade WG, et al. **J Periodontol** 1989 Sep;60(9):521-5

Susceptibility of oral bacteria to phenoxyethanol and phenoxyethanol/chlorhexidine combinations. Wilson M, et al. **J Periodontol** 1990 Aug;61(8):536-41

[Chlorhexidine (hibitane)-alcohol refrigerated porcine skin—a simple and long-term stored xenograft] Zhu DA, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1986 Sep;2(3):203-5, 235-6 (Eng. Abstr.) (Chi)

[In vitro prompt killing by chlorhexidine of human colorectal carcinoma cell lines] Xu SH. **Chung Hua Wai Ko Tsa Chih** 1990 Jan;28(1):40-2, 62 (Eng. Abstr.) (Chi)

POISONING

Accidental feeding of a dilute antiseptic solution to five babies [letter] Mucklow ES. **Arch Dis Child** 1989 Jul;64(7):1095-6

THERAPEUTIC USE

The effect of chlorhexidine supplementation in a periodontal dressing. Othman S, et al. **Acta Odontol Scand** 1989 Dec; 47(6):361-6

The role of chlorhexidine in clinical dentistry. Pruthi VK, et al. **Can Dent Assoc J** 1989 Dec;55(12):995-7 (32 ref.)

Effect of an antimicrobial-containing varnish on root demineralisation in situ. Huizinga ED, et al. **Caries Res** 1990;24(2):130-2

The use of 0.5% chlorhexidine in 70% alcohol for disinfection of the ear-canal in children with serous otitis media [letter; comment] Denton GW. **Int J Pediatr Otorhinolaryngol** 1990 Mar;19(1):80-1 Comment on: Int J Pediatr Otorhinolaryngol 1988 Nov;16(2):119-24.

Efficacy of chlorhexidine and sanguinarine mouthrinses on selected salivary microflora. Hoover JN, et al. **J Can Dent Assoc** 1990 Apr;56(4):325-7

The effects of 0.5% chlorhexidine and 0.2% triclosan containing toothpastes on salivary bacterial counts. Jenkins S, et al. **J Clin Periodontol** 1990 Feb;17(2):85-9

Comparative antiplaque activity of sanguinarine and chlorhexidine in man. Quirynen M, et al. **J Clin Periodontol** 1990 Apr;17(4):223-7

A comparison of the effect of chlorhexidine antisepsis, soap and antibiotics on bacteriuria, perineal colonization and environmental contamination in spinally injured patients. Sanderson PJ, et al. **J Hosp Infect** 1990 Apr;15(3):235-43

A clinical comparison of antibacterial mouthrinses; effects of chlorhexidine, phenolics, and sanguinarine on dental plaque and gingivitis [see comments] Grossman E, et al. **J Periodontol** 1989 Aug;60(8):435-40 Comment in: J Periodontol 1990 May;61(5):306-7.

Irrigation with 0.06% chlorhexidine in naturally occurring gingivitis. II. 6 months microbiological observations. Newman MG, et al. **J Periodontol** 1990 Jul;61(7):427-33

Re: A Clinical Comparison of Antibacterial Mouthrinses (J Periodontol 1989;60:435:440) [letter; comment] Stoller NH. **J Periodontol** 1990 May;61(5):306-7 Comment on: J Periodontol 1989 Aug;60(8):435-40.

Oral antimicrobial agents—chlorhexidine. Ferretti GA, et al. **NCI Monogr** 1990;(9):51-5 (48 ref.)

Chlorhexidine rinse in prevention of dental caries in patients following radiation therapy. Epstein JB, et al. **Oral Surg Oral Med Oral Pathol** 1989 Oct;68(4):401-5

Effect of chlorhexidine-sodium fluoride gel applied by tray or by toothbrush on salivary mutans streptococci. Östela I, et al. **Proc Finn Dent Soc** 1990;86(1):9-14

Effect of different carriers preventive measures in children highly infected with mutans streptococci. Lindquist B, et al. **Scand J Dent Res** 1989 Aug;97(4):330-7

Antibacterial activity of dental gels containing combinations of amine fluoride, stannous fluoride, and chlorhexidine against cariogenic bacteria. Ostela I, et al. **Scand J Dent Res** 1990 Feb;98(1):1-7

[Conditions of the routine use of chlorhexidine preparations in periodontics and oral surgery] Dóri F, et al. **Fogorv Sz** 1988 Mar;81(3):73-8 (Eng. Abstr.) (Hun)

CHLORHYDRINS see **CHLOROHYDRINS**

CHLORIDE PEROXIDASE see under **PEROXIDASES**

CHLORIDES

Prevention of bovine mastitis by a postmilking teat disinfectant containing chlorous acid and chlorine dioxide in a soluble polymer gel. Oliver SP, et al. **J Dairy Sci** 1989 Nov;72(11):3091-7

Characterization of neuropeptide-induced membrane chloride currents in Xenopus oocytes primed with exogenous mRNA. Meyerhof W, et al. **J Protein Chem** 1989 Jun;8(3):365-8

[Sensitivity of the prosobranch mollusk Potamopyrgus jenkinsi Smith to the action of metallic chlorides (ZnCl2, BaCl2, CuCl2) and to the synthetic molluscacide N-tritylmorpholine] Vareille-Morel C, et al. **Ann Rech Vet** 1990;21(2):111-8 (Eng. Abstr.) (Fre)

ADMINISTRATION & DOSAGE

Effects of lithium on stimulated metabolic parameters in dog thyroid slices. Tseng FY, et al. **Acta Endocrinol (Copenh)** 1989 Nov;121(5):615-20

Effects of subcutaneous injections of zinc chloride on seizures induced by noise and by kainic acid. Morton JD, et al. **Epilepsia** 1990 Mar-Apr;31(2):139-44

Zinc chloride paste for the debridement of chronic leg ulcers. Falanga V, et al. **J Dermatol Surg Oncol** 1990 Jul; 16(7):658-61

Influence of dietary undetermined anion on acid-base status and performance in pigs. Patience JF, et al. **J Nutr** 1990 Jun;120(6):579-87

ANALYSIS

Morphometry and elemental analysis of rat exocrine pancreas following administration of trypsin inhibitor. Sato T, et al. **Acta Anat (Basel)** 1990;137(1):65-76

Chloride, the "other" anion of pancreatic secretion. Rothman SS, et al. **Am J Dig Dis** 1966 Mar;11(3):251-6

Congenital chloride diarrhoea: case report and review of the literature. Abdullah AM, et al. **Ann Trop Paediatr** 1990 Mar;10(1):71-4 (18 ref.)

Biological degradation of 2,4-dichlorophenoxyacetic acid: chloride mass balance in stirred tank reactors. Kelly MP, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2717-9

Quantification of chloride in sweat with the Cystic Fibrosis Indicator System. Warwick WJ, et al. **Clin Chem** 1990 Jan; 36(1):96-8

Abnormal sweat chloride in auto-immune hypothyroidism. Squires L, et al. **Clin Pediatr (Phila)** 1989 Nov;28(11):535-6

Solute concentrations of the pulmonary epithelial lining fluid of anesthetized rats. Effros RM, et al. **J Appl Physiol** 1990 Jan;68(1):275-81

The magnesium, calcium, sodium, potassium and chloride contents of the term human placenta. Challier JC, et al. **Magnes Res** 1988 Dec;1(3-4):141-5

Population-based study of the developmental outcome of children exposed to chloride-deficient infant formula. Willoughby A, et al. **Pediatrics** 1990 Apr;85(4):485-90

A new double-barrelled, ionophore-based microelectrode for chloride ions. Kondo Y, et al. **Pflugers Arch** 1989 Sep; 414(6):663-8

Chloride concentration of rat parotid saliva evoked by electrical stimulation of parasympathetic or sympathetic nerves with or without antagonists. Schneyer CA, et al. **Proc Soc Exp Biol Med** 1990 May;194(1):32-5

Depressive illness and abnormal sweat electrolytes. A case report. Pelteret RM. **S Afr Med J** 1990 Jan 20;77(2):107-8

Element concentrations in the intestinal mucosa of the mouse as measured by X-ray microanalysis. von Zglinicki T, et al. **Scanning Microsc** 1989 Jun;3(2):483-90; discussion 490-3

[The sweat test in cystic fibrosis] Stur O. **Padiatr Padol** 1990; 25(2):107-10 (3 ref.) (Eng. Abstr.) (Ger)

[Practical results and their importance for spreading chloride emissions through heat generation and fertilizer drying] Ponsold B. **Z Gesamte Hyg** 1990 Apr;36(4):206-9 (Eng. Abstr.) (Ger)

[Modified method for the identification of sodium chlorite and sodium hypochlorite as food additives] Kamikura M, et al. **Eisei Shikenjo Hokoku** 1989;(107):138-41 (Eng. Abstr.) (Jpn)

[Acidic components of precipitation: humid deposition of S, N and Cl compounds] Fernández Patier R, et al. **Rev Sanid Hig Publica (Madr)** 1989 Jul-Aug;63(7-8):67-80 (Eng. Abstr.) (Spa)

ANTAGONISTS & INHIBITORS

Somatostatin mediates bombesin inhibition of chloride secretion by rectal gland. Silva P, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1459-63

BLOOD

Kinetics of reversible DIDS inhibition of chloride self exchange in human erythrocytes. Janas T, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):C601-6

The effects of dansylation on the pH dependence of SO4(2-) and Cl- equilibrium exchange and on the H+/SO4(2-) cotransport across the red blood cell membrane. Berghout A, et al. **Biochim Biophys Acta** 1989 Nov 17;986(1):75-82

Immediate changes in plasma potassium, sodium and chloride induced by intravenous induction agents. Bali IM, et al. **Br J Anaesth** 1974 Dec;46(12):929-33

Plasma chloride and alkalaemia in pyloric stenosis. Goh DW, et al. **Br J Surg** 1990 Aug;77(8):922-3

Hyperchloremia and the incidence of bromism in 1990 [comment] Bowers GN Jr, et al. **Clin Chem** 1990 Aug;36(8 Pt 1):1399-403 Comment on: Clin Chem 1990 Aug;36(8 Pt 1):1470-3.

Influence of aspirin on in vitro direct potentiometry of Cl- in serum. Lewandowski R, et al. **Clin Chem** 1989 Oct; 35(10):2146

Evaluation of improved Ektachem chloride slides with respect to purine interference. Potter JL, et al. **Clin Chem** 1990 Feb;36(2):386

The chloride shift may facilitate oxygen loading and unloading to/from the hemoglobin from the brown bear (Ursus arctos L.). Brix O, et al. **Comp Biochem Physiol [B]** 1990;95(4):865-8

Linearization of the relationship between postmortem plasma chloride concentration and postmortem interval in rats. Querido D. **Forensic Sci Int** 1990 Mar;45(1-2):117-28

[3H]bumetanide binding to avian erythrocyte membranes. Correlation with activation and deactivation of Na/K/2Cl cotransport. Pewitt EB, et al. **J Biol Chem** 1990 Aug 25; 265(24):14364-70

Influence of protein on the determination of sodium, potassium and chloride in serum by Ektachem DT 60 with the DTE module; evaluation with special attention to a possible protein error by flame atomic emission spectrometry and ion-selective electrodes; proposals to their calibration. Külpmann WR. **J Clin Chem Clin Biochem** 1989 Oct;27(10):815-24

Kinetics of activation and inactivation of swelling-stimulated K+/Cl- transport. The volume-sensitive parameter is the rate constant for inactivation. Jennings ML, et al. **J Gen Physiol** 1990 Jun;95(6):1021-40

The significance of alkalosis and hypochloremia in hypertrophic pyloric stenosis. Breaux CW Jr, et al. **J Pediatr Surg** 1989 Dec;24(12):1250-2

The functional rectal bladder—prevention of hyperchloremic acidosis following vesico-sigmoidostomy in dogs. Miller K, et al. **J Urol** 1990 Aug;144(2 Pt 1):375-80

Mechanism of normochloremic and hyperchloremic acidosis in diabetic ketoacidosis. Oh MS, et al. **Nephron** 1990; 54(1):1-6 (13 ref.)

[Relation between hypertension and plasma minerals in therapy with various antihypertensive agents] Zulić I, et al. **Med Arh** 1983;37(2):77-9 (Eng. Abstr.) (Ser)

DIAGNOSTIC USE

Duchenne muscular dystrophy. Use of rubidium chloride Rb 86 in the detection of carriers of the gene. Bradley WG, et al. **Arch Neurol** 1971 Sep;25(3):193-7

Myocardial blood flow in man as measured by a coincidence counting system and a single bolus of 84RbCl. Knoebel SB, et al. **Circulation** 1967 Aug;36(2):187-96

ISOLATION & PURIFICATION

[Distinction between sodium chlorite and sodium hypochlorite by ion-chromatography] Goda Y, et al. **Eisei Shikenjo Hokoku** 1989;(107):105-8 (Eng. Abstr.) **(Jpn)**

METABOLISM

Intracellular elemental composition of single muscle fibres in muscular dystrophy and dystrophia myotonica. Edström L, et al. **Acta Neurol Scand** 1989 Nov;80(5):419-24

The molecular basis of chloride channel dysregulation in cystic fibrosis. de Jonge HR. **Acta Paediatr Scand Suppl** 1989;363:14-8; discussion 18-9 (23 ref.)

Actions of the Cl- channel blocker NPPB on absorptive and secretory transport processes of Na+ and Cl- in rat descending colon. Diener M, et al. **Acta Physiol Scand** 1989 Oct;137(2):215-22

Olsalazine sodium stimulates chloride transport across the bullfrog cornea. Odlind B, et al. **Acta Physiol Scand** 1990 May;139(1):241-2

The effect of furosemide on the chloride concentration in the macula densa and in cortical thick ascending limb cells. Salomonsson M, et al. **Acta Physiol Scand** 1990 Jun; 139(2):387-8

Intestinal fluid transport in the small intestine of normotensive and spontaneously hypertensive rats: the importance of enteric nerves, chloride and bicarbonate secretion. Tantisira MH, et al. **Acta Physiol Scand** 1990 Feb;138(2):213-9

Na+, K+, Cl- coupled transport in squid axon. Altamirano AA, et al. **Acta Physiol Scand Suppl** 1989;582:16

Intracellular chloride homeostasis in vertebrate nerve cells. Alvarez-Leefmans FJ, et al. **Acta Physiol Scand Suppl** 1989; 582:17

Chloride channels in the mammalian central nervous system. Bormann J. **Acta Physiol Scand Suppl** 1989;582:20

Components of chloride regulation in neocortical neurones. Deisz RA, et al. **Acta Physiol Scand Suppl** 1989;582:19

Regulation of GABA-ergic receptor activity by changes in intracellular calcium: electrophysiological investigation in neurones and endocrine cells. Feltz P, et al. **Acta Physiol Scand Suppl** 1989;582:10

GABA triggers a Cl- efflux from cultured glial cells. Kettenmann H. **Acta Physiol Scand Suppl** 1989;582:50

Regulation of electrogenic Na-absorption and induced Cl-secretion in an intestinal epithelium: delayed effects of aldosterone. Skadhauge E, et al. **Acta Physiol Scand Suppl** 1989;583:69-73

Distinct actions of alcohols, barbiturates and benzodiazepines on GABA-activated chloride channels. Harris RA. **Alcohol** 1990 May-Jun;7(3):273-5 (19 ref.)

Defective regulation of epithelial Cl- permeability and protein secretion in cystic fibrosis: the putative basic defect. Kirk KL. **Am J Kidney Dis** 1989 Oct;14(4):333-8 (37 ref.)

Immune-related intestinal chloride secretion. II. Effect of adenosine on T84 cell line. Barrett KE, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C902-12

Effects of tetrodotoxin on chloride secretion in rabbit distal colon: tissue and cellular studies. Biagi B, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):G223-30

Lung epithelial ion transport and fluid movement during the perinatal period. Bland RD. **Am J Physiol** 1990 Aug;259(2 Pt 1):L30-7 (94 ref.)

Cl-HCO3 exchange and anion conductance in rat duodenal apical membrane vesicles. Brown CD, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):G661-7

Active chloride transport in isolated posterior midgut of tobacco hornworm (Manduca sexta). Chao AC, et al. **Am J Physiol** 1989 Oct;257(4 Pt 2):R752-61

Duramycin enhances chloride secretion in airway epithelium. Cloutier MM, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):C450-4

Protein kinase C mediates cholinergically regulated protein phosphorylation in a Cl(-)-secreting epithelium. Cohn JA. **Am J Physiol** 1990 Feb;258(2 Pt 1):C227-33

H+ and HCO3- flux across apical surface of rat distal colon. Feldman GM, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):C35-40

Contribution of Cl(-)-OH- exchange to electroneutral NaCl absorption in rat distal colon. Foster ES, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):G261-7

Diluting segment in kidney of dogfish shark. I. Localization and characterization of chloride absorption. Friedman PA, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):R398-408

Determinants of the transmembrane distribution of chloride in rat lymphocytes: role of Cl(-)-HCO3- exchange. Garcia-Soto JJ, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1108-16

Chloride transport across the membrane of parotid secretory granules. Gasser KW, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):C413-20

Total CO2 transport in rat cortical collecting duct in chloride-depletion alkalosis. Gifford JD, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):F848-53

Evidence for two distinct chloride uniport pathways in brown adipose tissue mitochondria. Ježek P, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):C1142-8

Cotransport of sodium and chloride by the adult mammalian choroid plexus. Johanson CE, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C211-6

Na(+)-H+ and Na(+)-dependent Cl(-)-HCO3- exchange control pHi in vascular smooth muscle. Kahn AM, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):C134-43

Na(+)-K(4)-Cl- cotransport in cultured cells derived from human retinal pigment epithelium. Kennedy BG. **Am J Physiol** 1990 Jul;259(1 Pt 1):C29-34

Calcium and alpha-adrenergic regulation of Na-Cl(K) cotransport in rabbit tracheal epithelial cells. Liedtke CM. **Am J Physiol** 1990 Aug;259(2 Pt 1):L66-72

Chloride channels in the apical membrane of cortical collecting duct cells. Light DB, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):F273-80

Basolateral K+ channels in airway epithelia. II. Role in Cl- secretion and evidence for two types of K+ channel. McCann JD, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):L343-8

Regulatory volume increase in mammalian jejunal villus cells is due to bumetanide-sensitive NaKCl2 cotransport. MacLeod RJ, et al. **Am J Physiol** 1990 May;258(5 Pt 1):G665-74

Chloride channels in the apical membrane of a distal nephron A6 cell line. Marunaka Y, et al. **Am J Physiol** 1990 Feb; 258(2 Pt 1):C352-68

C. difficile toxin A increases intestinal permeability and induces Cl- secretion. Moore R, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):G165-72

Evidence for chloride secretion in the intestine of the winter flounder. O'Grady SM, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C243-7

Postnatal development of colonic electrolyte transport in rabbits. O'Loughlin EV, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):G447-53

Mechanism of angiotensin II stimulation of Na-K-Cl cotransport of vascular smooth muscle cells. Owen NE, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):C629-36

Fluorescent stilbene (BADS) binding proteins in anion-transporting epithelia. Pearce SF, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):C439-49

Different effects of sodium or chloride depletion on angiotensin II receptors in rats. Ray PE, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):R1008-15

Localization of Cl- conductance in normal and Cl- impermeability in cystic fibrosis sweat duct epithelium. Reddy MM, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):C727-35

Volume-activated K+ and Cl- pathways of dissociated epithelial cells (MDCK): role of Ca2+. Rothstein A, et al. **Am J Physiol** 1990 May;258(5 Pt 1):C827-34

Effects of apical membrane Cl(-)-formate exchange on cell volume in rabbit proximal tubule. Schild L, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):F530-6

Bradykinin stimulates airway epithelial Cl- secretion via two second messenger pathways. Smith JJ, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):L369-77

Furosemide blocks basolateral membrane Cl- permeability in gallbladder epithelium. Stoddard JS, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C1150-8

Aldosterone and glucocorticoid receptor-specific agonists regulate ion transport in rat proximal colon. Turnamian SG, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):G492-8

Vasoactive intestinal peptide stimulates active K+ transport and Na(+)-K(+)-Cl- cotransport in HT-29 cells. Turner JT, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C266-73

Development and biological applications of chloride-sensitive fluorescent indicators. Verkman AS. **Am J Physiol** 1990 Sep;259(3 Pt 1):C375-88 (58 ref.)

Histamine augments colonic secretion in guinea pig distal colon. Wang YZ, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):G432-9

H2 receptors mediate cyclical chloride secretion in guinea pig distal colon. Wang YZ, et al. **Am J Physiol** 1990 Jun; 258(6 Pt 1):G887-93

Characterization of a muscarinic receptor controlling Cl- secretion in hen trachea. Winding B, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):C982-7

Role of calcium in mediating action of carbachol in T84 cells. Wong SM, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):C976-85

Sweat sodium and chloride concentrations--essential criteria for the diagnosis of cystic fibrosis in adults. Hall SK, et al. **Ann Clin Biochem** 1990 Jul;27 (Pt 4):318-20

Bicarbonate, chloride, and proton transport systems. **Ann N Y Acad Sci** 1989;574:1-505

Heterogeneity of anion exchangers mediating chloride transport in the proximal tubule. Aronson PS, et al. **Ann N Y Acad Sci** 1989;574:96-101

Regulatory mechanisms of chloride transport in corneal epithelium. Candia OA. **Ann N Y Acad Sci** 1989;574:416-27

Primary active electrogenic chloride transport across the Aplysia gut. Gerencser GA. **Ann N Y Acad Sci** 1989; 574:1-10

Electrogenic chloride transport in algae. Gradmann D. **Ann N Y Acad Sci** 1989;574:20-9

Mechanisms of chloride transport in secretory epithelia. Greger R, et al. **Ann N Y Acad Sci** 1989;574:403-15 (41 ref.)

The Na-K-Cl cotransporter in the kidney. Kinne RK. **Ann N Y Acad Sci** 1989;574:63-74 (43 ref.)

Cl- conductance and acid secretion in the human sweat duct. Quinton PM, et al. **Ann N Y Acad Sci** 1989;574:438-46

Structure and function of the band 3 Cl-/HCO3- transporter. Reithmeier RA, et al. **Ann N Y Acad Sci** 1989;574:75-83

Regulation of transepithelial chloride transport by amphibian gallbladder epithelium. Reuss L. **Ann N Y Acad Sci** 1989; 574:370-84

Cell volume changes and the activity of the chloride conductance path. Rothstein A, et al. **Ann N Y Acad Sci** 1989;574:294-308

Halorhodopsin: a light-driven active chloride transport system. Zimányi L, et al. **Ann N Y Acad Sci** 1989;574:11-9

Regulation of Cl- and K+ channels in airway epithelium. McCann JD, et al. **Annu Rev Physiol** 1990;52:115-35 (42 ref.)

A study of steady state and kinetic regulation of chloride ion and osmotic pressure in hemolymph of oysters, Crassostrea virginica, exposed to tri-n-butyltin. Bokman E, et al. **Arch Environ Contam Toxicol** 1989 Nov; 18(6):832-8

Ca2+ mobilization and Cl efflux in submandibular salivary cells of adult and newborn rats. Martinez JR, et al. **Arch Oral Biol** 1989;34(3):147-52

ATP-sensitive K+ channels reveal the effects of intracellular chloride variations on cytoplasmic ATP concentrations and mitochondrial function. de Weille JR, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):1137-42

Electroneutral, HCO3(-)-independent, pH gradient-dependent uphill transport of Cl- by ileal brush-border membrane vesicles. Possible role in the pathogenesis of chloridorrhea. Vasseur M, et al. **Biochem J** 1989 Nov 1;263(3):775-84

Inhibition of chloride/bicarbonate antiports in monkey kidney cells (Vero) by non-steroidal anti-inflammatory drugs. Tønnessen TI, et al. **Biochem Pharmacol** 1989 Oct 15;38(20):3583-91

Anion transport systems in the mouse erythrocyte: kinetic studies in situ and after expression of mouse erythroid band 3 protein in oocytes of Xenopus laevis. Passow H, et al. **Biochem Soc Trans** 1989 Oct;17(5):812-5

Mechanisms of trans-chloride activation of a Cl-/H+ symport in brush-border membrane vesicles from guinea-pig ileum. Vasseur M, et al. **Biochem Soc Trans** 1989 Dec;17(6):1004

A Cl(-)-translocating adenosinetriphosphatase in Acetabularia acetabulum. 2. Reconstitution of the enzyme into liposomes and effect of net charges of liposomes on chloride permeability and reconstitution. Ikeda M, et al. **Biochemistry** 1990 Feb 27;29(8):2065-70

A Cl(-)-translocating adenosinetriphosphatase in Acetabularia acetabulum. 1. Purification and characterization of a novel type of adenosinetriphosphatase that differs from chloroplast F1 adenosinetriphosphatase. Ikeda M, et al. **Biochemistry** 1990 Feb 27;29(8):2057-65

Effect of chloride ion on the thermal decay process of the batho intermediate of iodopsin at low temperature. Imamoto Y, et al. **Biochemistry** 1989 Nov 28;28(24):9412-6

A monoclonal antibody which inhibits H+/K(+)-ATPase activity but not chloride conductance. Benkouka F, et al. **Biochim Biophys Acta** 1989 Dec 28;987(2):205-11

Reconstitution of a kidney chloride channel and its identification by covalent labeling. Breuer W. **Biochim Biophys Acta** 1990 Feb 28;1022(2):229-36

Na+/K+/Cl(-)-cotransporter mediated Rb+ fluxes in membrane vesicles from kidneys of normotensive and hypertensive rats. Ferrandi M, et al. **Biochim Biophys Acta** 1990 Jan 15;1021(1):13-20

Inhibiting conductive Cl uptake in membrane vesicles: specificity of alpha-phenylcinnamate. Forsyth GW, et al. **Biochim Biophys Acta** 1989 Oct 26;977(1):19-25

A 35Cl(-)-NMR study of the singular anion-binding properties of dromedary hemoglobin. Lundberg P, et al. **Biochim Biophys Acta** 1989 Nov 9;999(1):12-8

A quantitative assessment of the use of 36Cl- distribution to measure plasma membrane potential in isolated hepatocytes. Nobes CD, et al. **Biochim Biophys Acta** 1989 Dec 11;987(1):115-23

Net efflux of chloride from cell suspensions measured with a K+ electrode. Rothstein A, et al. **Biochim Biophys Acta** 1989 Dec 28;987(2):239-42

Na+ participates in loop diuretic-sensitive Cl(-)-cation co-transport in the pancreatic beta-cells. Sandström PE, et al. **Biochim Biophys Acta** 1990 Apr 13;1023(2):191-6

Stimulation by aldosterone of a conductive chloride pathway in toad skin. Crabbe J, et al. **Biol Cell** 1989;66(1-2):173-7

Effects of interaction between 65Zn, cadmium, and copper in rats. Chmielnicka J, et al. **Biol Trace Elem Res** 1988 Sep-Dec;17:285-92

Fluorescence measurement of chloride transport in monolayer cultured cells. Mechanisms of chloride transport in fibroblasts. Chao AC, et al. **Biophys J** 1989 Dec; 56(6):1071-81

GABAA receptor-mediated increase in membrane chloride conductance in rat paratracheal neurones. Allen TG, et al. **Br J Pharmacol** 1990 Jun;100(2):261-8

Allosteric modulation of t-[35S]butylbicyclophosphorothionate binding in rat brain by melatonin. Niles LP, et al. **Brain Res Bull** 1990 Apr; 24(4):635-8

Optimal bone resorption by isolated rat osteoclasts requires chloride/bicarbonate exchange. Hall TJ, et al. **Calcif Tissue Int** 1989 Dec;45(6):378-80

Cystic fibrosis affects chloride and sodium channels in human

airway epithelia. Duszyk M, et al.
Can J Physiol Pharmacol 1989 Oct;67(10):1362–5
Measurement with microelectrodes of intracellular Na+, K+, H+ and Cl- activities and of membrane potential in normal rat liver slices and during the 4-dimethylaminoazobenzene-induced rat hepatocarcinogenesis. Comolli R, et al.
Cancer Biochem Biophys 1990 Jan;11(1):13–22
A long-lasting potentiation of calmodulin-mediated chloride channel activity without a mediation of protein kinase C in Xenopus oocytes injected with rat brain mRNA. Kaneko S, et al. **Cell Calcium** 1990 Apr;11(4):309–17
Single channel recordings from human cardiac sarcoplasmic reticulum. Holmberg SR, et al. **Circ Res** 1989 Nov; 65(5):1445–9
Chloride efflux in cyclic AMP-induced configurational change of bovine pulmonary artery endothelial cells. Ueda S, et al. **Circ Res** 1990 Apr;66(4):957–67
In vitro studies of theophylline-induced changes in Na, K and Cl transport in hen (Gallus domesticus) colon suggesting bidirectional, basolateral NaK2Cl cotransport. Andersen V, et al. **Comp Biochem Physiol [A]** 1990; 96(1):187–93
Effects of diphenylamine-2-carboxylate on sodium and chloride transport across bovine tracheal epithelium: studies in monolayers and in the native tissue. Durand J. **Comp Biochem Physiol [A]** 1989;94(3):447–53
Serotonin-induced chloride secretion in hen colon. Possible second messengers. Hansen MB, et al.
Comp Biochem Physiol [A] 1989;94(2):315–21
Efflux of chloride from lactating rat mammary tissue slices. Shennan DB, et al. **Comp Biochem Physiol [A]** 1990; 95(3):367–71
Serotonin receptors for chloride secretion in hen colon. Hansen MB, et al. **Comp Biochem Physiol [C]** 1989; 94(1):189–97
Coupling of 22Na and 36Cl uptake in cultured pigmented ciliary epithelial cells: a proposed role for the isoenzymes of carbonic anhydrase. Helbig H, et al. **Curr Eye Res** 1989 Nov;8(11):1111–9
Ion transport in normal and inflamed human jejunum in vitro. Changes with electric field stimulation and theophylline. Hubel KA, et al. **Dig Dis Sci** 1990 Jul;35(7):815–20
The mitochondrial inner-membrane anion channel possesses two mercurial-reactive regulatory sites. Beavis AD.
Eur J Biochem 1989 Nov 20;185(3):511–9
Suppression of GABA-induced chloride current by 3-amino-1-methyl-5H-pyrido[4,3-b]indole (Trp-P-2). Kanai Y, et al. **Eur J Pharmacol** 1989 Aug 3;166(3):553–6
Modulation of GABA-stimulated Cl- flux by a benzodiazepine agonist and an 'inverse agonist' after chronic flurazepam treatment. Ngur DO, et al.
Eur J Pharmacol 1990 Feb 13;176(3):351–6
Reversal of the epinephrine stimulation of Cl- transport in bullfrog cornea by phorbol esters. Reinach PS, et al.
Exp Eye Res 1989 Nov;49(5):739–49
Effects of neurokinins on ion transport and sulfated macromolecule release in the isolated ferret trachea. Mizoguchi H, et al. **Exp Lung Res** 1989 Dec;15(6):837–48
Alpha 1-adrenergic stimulation of Cl- efflux in isolated brown adipocytes. Dasso L, et al. **FEBS Lett** 1990 Mar 12;262(1):25–8
Anion binding to the chloride pump, halorhodopsin, and its implications for the transport mechanism. Lanyi JK, et al. **FEBS Lett** 1990 Jun 4;265(1-2):1–6 (35 ref.)
Functional expression of Ca2(+)-mobilizing alpha-thrombin receptors in mRNA-injected Xenopus oocytes. Van Obberghen-Schilling E, et al. **FEBS Lett** 1990 Mar 26; 262(2):330–4
Uncoupling of sodium chloride transport in premalignant mouse colon. Davies RJ, et al. **Gastroenterology** 1990 Jun; 98(6):1502–8
The Na-K-Cl cotransport in essential hypertension: cellular functions and genetic environment interactions. Canessa ML. **Int J Cardiol** 1989;25 Suppl 1:S37–45 (50 ref.)
Furosemide-sensitive Cl transport in bovine retinal pigment epithelium. Frambach DA, et al.
Invest Ophthalmol Vis Sci 1989 Oct;30(10):2271–4
Chloride transport pathways and their bioenergetic implications in the obligate acidophile Bacillus coagulans. McLaggan D, et al. **J Bacteriol** 1990 Mar;172(3):1485–90
Actions of avermectin B1a on the gamma-aminobutyric acidA receptor and chloride channels in rat brain. Abalis IM, et al. **J Biochem Toxicol** 1986 Mar;1(1):69–82
Properties and photochemistry of a halorhodopsin from the haloalkalophile, Natronobacterium pharaonis. Duschl A, et al. **J Biol Chem** 1990 Jan 25;265(3):1261–7
An ATP-driven Cl- pump in the brain. Shiroya T, et al. **J Biol Chem** 1989 Oct 15;264(29):17416–21
Cholesterol is required for the reconstruction of the sodium- and chloride-coupled, gamma-aminobutyric acid transporter from rat brain. Shouffani A, et al.
J Biol Chem 1990 Apr 15;265(11):6002–8
A cystic fibrosis phenotype in cells cultured from sweat gland secretory coil. Altered kinetics of 36Cl efflux. Wood LC, et al. **J Biol Chem** 1990 Aug 5;265(22):12796–800
Isolation and reconstitution of the chloride transporter of clathrin-coated vesicles. Xie XS, et al. **J Biol Chem** 1989 Nov 15;264(32):18870–3
Regulation of Na+/H+ and Cl-/HCO3- antiports in Vero cells. Tønnessen TI, et al. **J Cell Physiol** 1990 Apr; 143(1):178–87
Chloride secretory response of cystic fibrosis human airway epithelia. Preservation of calcium but not protein kinase C- and A-dependent mechanisms. Boucher RC, et al.
J Clin Invest 1989 Nov;84(5):1424–31
A1 adenosine receptors inhibit chloride transport in the shark rectal gland. Dissociation of inhibition and cyclic AMP. Kelley GG, et al. **J Clin Invest** 1990 May;85(5):1629–36
Luminal chloride modulates rat distal tubule bidirectional bicarbonate flux in vivo. Levine DZ, et al.
J Clin Invest 1990 Jun;85(6):1793–8
Basolateral membrane sodium-independent Cl-/HCO3- exchanger in rat inner medullary collecting duct cell. Star RA. **J Clin Invest** 1990 Jun;85(6):1959–66
Regulation of active sodium and potassium transport in the distal colon of the rat. Role of the aldosterone and glucocorticoid receptors. Turnamian SG, et al.
J Clin Invest 1989 Dec;84(6):1924–9
Augmented bicarbonate reabsorption by both the proximal and distal nephron maintains chloride-deplete metabolic alkalosis in rats. Wesson DE. **J Clin Invest** 1989 Nov; 84(5):1460–9
Chloride current in mammalian cardiac myocytes. Novel mechanism for autonomic regulation of action potential duration and resting membrane potential. Harvey RD, et al. **J Gen Physiol** 1990 Jun;95(6):1077–102
Basolateral membrane Na(+)-independent Cl-/HCO3- exchange in the inner stripe of the rabbit outer medullary collecting tubule. Hays SR, et al. **J Gen Physiol** 1990 Feb; 95(2):347–67
Effects of insulin and phosphatase on a Ca2(+)-dependent Cl- channel in a distal nephron cell line (A6). Marunaka Y, et al. **J Gen Physiol** 1990 May;95(5):773–89
Congenital choridorrhea in Korean infants. Lee YD, et al.
J Korean Med Sci 1988 Sep;3(3):123–9
Na+, K+, H+, Cl-, and Ca2+ concentrations in cystic fibrosis eccrine sweat in vivo and in vitro. Sato K, et al.
J Lab Clin Med 1990 Apr;115(4):504–11
Synthesis, metabolism, and pharmacological activity of 3 alpha-hydroxy steroids which potentiate GABA-receptor-mediated chloride ion uptake in rat cerebral cortical synaptoneurosomes. Purdy RH, et al.
J Med Chem 1990 Jun;33(6):1572–81
D2O-induced cell excitation. Andjus PR, et al.
J Membr Biol 1990 May;115(2):123–7
Cl- transport in basolateral renal medullary vesicles: I. Cl- transport in intact vesicles. Bayliss JM, et al.
J Membr Biol 1990 Jan;113(1):49–56
Responses of gamma-aminobutyrate receptor from rat brain: similarity of different preparation methods; muscimol induced desensitization and chloride exchange. Cash DJ, et al. **J Membr Biol** 1989 Nov;111(3):229–40
Chloride conductive and cotransport mechanisms in cultures of canine tracheal epithelial cells measured by an entrapped fluorescent indicator. Chao AC, et al. **J Membr Biol** 1990 Feb;113(3):193–202
Effect of K+ channels in the apical plasma membrane on epithelial secretion based on secondary active Cl- transport. Cook DI, et al. **J Membr Biol** 1989 Sep; 110(2):139–46
Ca2+ pumping ATPase of cardiac sarcolemma is insensitive to membrane potential produced by K+ and Cl- gradients but requires a source of counter-transportable H+. Dixon DA, et al. **J Membr Biol** 1989 Dec;112(2):169–83
Inhibition of chloride binding to the anion transport site by diethylpyrocarbonate modification of Band 3. Hamasaki N, et al. **J Membr Biol** 1990 Jun;116(1):87–91
Inhibition of an outwardly rectifying anion channel by HEPES and related buffers. Hanrahan JW, et al.
J Membr Biol 1990 Jun;116(1):65–77
Blockade of a mitochondrial cationic channel by an addressing peptide: an electrophysiological study. Henry JP, et al. **J Membr Biol** 1989 Dec;112(2):139–47
Effects of PCMBS on the water and small solute permeabilities in frog urinary bladder. Ibarra C, et al.
J Membr Biol 1990 Jun;116(1):57–64
Chloride and potassium channels in U937 human monocytes. Kanno T, et al. **J Membr Biol** 1990 Jun;116(2):149–61
Activation of Cl-/OH- exchange by parachloromercuribenzoic acid in rabbit renal brush-border membranes. Karniski LP. **J Membr Biol** 1989 Nov; 112(1):59–66
Nitrate and chloride ions have different permeation pathways in skeletal muscle fibers of Rana pipiens. Kotsias BA, et al. **J Membr Biol** 1990 Apr;115(1):95–108
cAMP-activated chloride channel in the basolateral membrane of the thick ascending limb of the mouse kidney. Paulais M, et al. **J Membr Biol** 1990 Feb;113(3):253–60
Characterization of Cl- transport in vacuolar membrane vesicles using a Cl(-)-sensitive fluorescent probe: reaction kinetic models for voltage- and concentration-dependence of Cl- flux. Pope AJ, et al. **J Membr Biol** 1990 Jun; 116(2):129–37
Roles of external and cellular Cl- ions on the activation of an apical electrodiffusional Cl- pathway in toad skin. Procopio J, et al. **J Membr Biol** 1990 Jul;117(1):57–67
Cl- transport in basolateral renal medullary vesicles: II. Cl- channels in planar lipid bilayers. Reeves WB, et al.
J Membr Biol 1990 Jan;113(1):57–65
Single chloride channels in endosomal vesicle preparations from rat kidney cortex. Schmid A, et al. **J Membr Biol** 1989 Nov;111(3):265–75
Zinc inhibition of chloride efflux from skeletal muscle of Rana pipiens and its modification by external pH and chloride activity. Spalding BC, et al. **J Membr Biol** 1990 Jul;116(3):195–214
Bicarbonate permeability of the outwardly rectifying anion channel. Tabcharani JA, et al. **J Membr Biol** 1989 Dec; 112(2):109–22
Transmembrane 36Cl- flux measurements and desensitization of the gamma-aminobutyric acidA receptor. Kardos J, et al. **J Neurochem** 1990 Oct;55(4):1095–9 (35 ref.)
In vivo administration of ethanol enhances the function of the gamma-aminobutyric acid-dependent chloride channel in the rat cerebral cortex. Sanna E, et al. **J Neurochem** 1990 Feb;54(2):696–8
Excitatory amino acid-induced toxicity in chick retina: amino acid release, histology, and effects of chloride channel blockers. Zeevalk GD, et al. **J Neurochem** 1989 Nov; 53(5):1610–9
Benzodiazepine agonist and inverse agonist actions on GABAA receptor-operated chloride channels. II. Chronic effects of ethanol. Buck KJ, et al.
J Pharmacol Exp Ther 1990 May;253(2):713–9
Effect of Na+ and K+ on Cl- distribution in guinea-pig vas deferens smooth muscle: evidence for Na+, K+, Cl- co-transport. Aickin CC, et al. **J Physiol (Lond)** 1990 Feb; 421:13–32
Intracellular chloride and the mechanism for its accumulation in rat lumbrical muscle. Aickin CC, et al.
J Physiol (Lond) 1989 Apr;411:437–55
The effect of loop diuretics on Cl- transport in smooth muscle of the guinea-pig vas deferens and taenia from the caecum. Aickin CC, et al. **J Physiol (Lond)** 1990 Feb; 421:33–53
Intracellular chloride activity in glial cells of the leech central nervous system. Ballanyi K, et al. **J Physiol (Lond)** 1990 Jan;420:325–36
The coupled movements of sodium and chloride across the basolateral membrane of frog skin epithelium. Fernandes PL, et al. **J Physiol (Lond)** 1989 Sep;416:403–20
Characterization of a phosphorylation-activated Cl-selective channel in isolated Necturus enterocytes. Giraldez F, et al. **J Physiol (Lond)** 1989 Sep;416:517–37
Acetylcholine-gated and chloride conductance channel expression in rat muscle membrane. Heathcote RD.
J Physiol (Lond) 1989 Jul;414:473–97
Sodium nitroprusside alters Ca2+ flux components and Ca2(+)-dependent fluxes of K+ and Cl- in rat aorta. Magliola L, et al. **J Physiol (Lond)** 1990 Feb;421:411–24
Chloride conductance activated by external agonists and internal messengers in rat peritoneal mast cells. Matthews G, et al. **J Physiol (Lond)** 1989 Nov;418:131–44
GABA-gated chloride channels: regulation, structure and sites of gene expression in the brain. Möhler H.
J Protein Chem 1989 Jun;8(3):349–52
Histochemical observation of distribution of chloride ion around ciliary epithelium. Yamashita H, et al.
Jpn J Ophthalmol 1989;33(4):413–7
Changes in distribution of chloride ions in embryonic chicken retinal pigment epithelium. Yamashita H, et al.
Jpn J Ophthalmol 1990;34(1):22–9
Effects of autonomic agents and chemical mediators on ion transport by canine tracheal epithelium. Sugahara K, et al. **Jpn J Physiol** 1989;39(3):421–8
Glucagon stimulates chloride transport independently of cyclic AMP in the rat medullary TAL. Ando Y, et al.
Kidney Int 1989 Nov;36(5):760–7
K-Cl cotransport systems. Warnock DG, et al.
Kidney Int 1989 Sep;36(3):412–7 (36 ref.)
Towards the biochemical defect in cystic fibrosis [editorial] **Lancet** 1989 Dec 16;2(8677):1433
Amoxapine inhibition of GABA-stimulated chloride conductance: investigations of potential sites of activity. Ikeda M, et al. **Life Sci** 1989;45(20):1903–10
Factors affecting actions of ethanol on GABA-activated chloride channels. McQuilkin SJ, et al. **Life Sci** 1990; 46(7):527–41
The response of chloride transport to cyclic AMP, calcium and hypotonic shock in normal and cystic fibrosis fibroblasts. Mastrocola T, et al. **Life Sci** 1990;46(23):1661–9
cAMP dependent chloride conductance is not different in cystic fibrosis fibroblasts. Squassoni E, et al. **Life Sci** 1990; 46(18):1265–70
Interaction of (Na + K + 2 Cl) cotransport and the Na/K pump in cultured chick cardiac myocytes. Liu S, et al.
Mol Cell Biochem 1989 Sep 7;89(2):147–50
Chloride channels mediate the response to gonadotropin-releasing hormone (GnRH) in Xenopus oocytes injected with rat anterior pituitary mRNA. Yoshida S, et al. **Mol Endocrinol** 1989 Dec;3(12):1953–60
Steroid modulation of the GABA/benzodiazepine receptor-linked chloride ionophore. Gee KW.
Mol Neurobiol 1988 Winter;2(4):291–317 (98 ref.)
Electrophysiological study of tert-butylbicyclophosphorothionate-induced block of spontaneous chloride channels. Hamann M, et al.
Mol Pharmacol 1990 Apr;37(4):578–82
Characterization of steroid interactions with gamma-aminobutyric acid receptor-gated chloride ion channels: evidence for multiple steroid recognition sites. Marrow AL, et al. **Mol Pharmacol** 1990 Feb;37(2):263–70
Functional chloride channels by mammalian cell expression of rat glycine receptor subunit. Sontheimer H, et al.
Neuron 1989 May;2(5):1491–7

Comparison of lindane, bicyclophosphate and picrotoxin binding to the putative chloride channel sites in rat brain and Torpedo electric organ. Thompson RG, et al. **Neurotoxicol Teratol** 1990 Jan–Feb;12(1):57–63

"Chloride–shunt" syndrome: an overlooked cause of renal hypercalciuria. Rodríguez–Soriano J, et al. **Pediatr Nephrol** 1989 Apr;3(2):113–21

Does lithium carbonate affect the ion transport abnormality in cystic fibrosis? [see comments] Anbar RD, et al. **Pediatr Pulmonol** 1990;8(2):82–8 Comment in: Pediatr Pulmonol 1990;8(2):72–3.

Inactivation of calcium–activated chloride conductance in Xenopus oocytes: roles of calcium and protein kinase C. Boton R, et al. **Pflugers Arch** 1990 Apr;416(1–2):1–6

Pharmacological block of chloride channels of developing rat skeletal muscle affects the differentiation of specific contractile properties. De Luca A, et al. **Pflugers Arch** 1990 Apr;416(1–2):17–21

Effects of glucagon on Na+, Cl–, K+, Mg2+ and Ca2+ transports in cortical and medullary thick ascending limbs of mouse kidney. Di Stefano A, et al. **Pflugers Arch** 1989 Sep;414(6):640–6

Stimulation of Cl/HCO3 exchange in rat duodenal brush border membrane vesicles by cAMP. Dunk CR, et al. **Pflugers Arch** 1989 Sep;414(6):701–5

Secretagogue and second messenger–activated Cl– permeabilities in isolated pancreatic zymogen granules. Fuller CM, et al. **Pflugers Arch** 1989 Oct;415(1):29–36

Analysis of anion conductance in frog skin. Nagel W, et al. **Pflugers Arch** 1990 Apr;416(1–2):53–61

A large, multiple–conductance chloride channel in normal human T lymphocytes. Schlichter LC, et al. **Pflugers Arch** 1990 Jun;416(4):413–21

Secretagogues increase apical membrane conductance of isolated bullfrog corneal epithelium pretreated with loop diuretics. Schoen HF. **Pflugers Arch** 1989 Sep;414(6):713–8

A reappraisal of frog muscle chloride conductance–voltage relations at pH9. Vaughan P. **Pflugers Arch** 1989 Dec; 415(3):316–21

Chloride transport in cultured nasal epithelium of cystic fibrosis patients. Verbeek E, et al. **Pflugers Arch** 1990 Feb; 415(5):540–6

Diazepam sensitizes mice to FG 7142 and reduces muscimol–stimulated 36Cl– flux. Lewin E, et al. **Pharmacol Biochem Behav** 1989 Jun;33(2):465–8

Halorhodopsin, a light–driven electrogenic chloride–transport system. Lanyi JK. **Physiol Rev** 1990 Apr;70(2):319–30 (82 ref.)

Cholinergic–induced HCO3– loss from rat parotid acini. Nauntofte B, et al. **Proc Finn Dent Soc** 1989;85(4–5):307–17

Separate Cl– conductances activated by cAMP and Ca2+ in Cl(–)–secreting epithelial cells. Cliff WH, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):4956–60

Inhibition of Na–K–Cl cotransport in Ehrlich ascites cells by antiserum against purified proteins of the cotransporter. Dunham PB, et al. **Proc Natl Acad Sci U S A** 1990 Sep; 87(17):6828–32

Cl– permeability of human sweat duct cells monitored with fluorescence–digital imaging microscopy: evidence for reduced plasma membrane Cl– permeability in cystic fibrosis. Ram SJ, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10166–70

Evidence for furosemide–sensitive Na+–K+–Cl– co–transport in lactating rat mammary tissue. Shennan DB. **Q J Exp Physiol** 1989 Nov;74(6):927–38

23Na, 19F, 35Cl and 31P multinuclear nuclear magnetic resonance studies of perfused rat kidney. Gupta RK, et al. **Renal Physiol Biochem** 1989 May–Jun;12(3):144–60

Binding of ions to nuclear chromatin. von Zglinicki T, et al. **Scanning Microsc** 1989 Dec;3(4):1231–7; discussion 1237–9

A voltage–dependent chloride current linked to the cell cycle in ascidian embryos. Block ML, et al. **Science** 1990 Mar 2;247(4946):1090–2

Cell cycle dependence of chloride permeability in normal and cystic fibrosis lymphocytes. Bubien JK, et al. **Science** 1990 Jun 15;248(4961):1416–9

Role of potassium and chloride channels in volume regulation by T lymphocytes. Cahalan MD, et al. **Soc Gen Physiol Ser** 1988;43:281–301

[Serotonin modulation of acetylcholine–induced currents in mollusk neurons as dependent on cyclic guanosine monophosphate] Diatlov VA. **Neirofiziologiia** 1989; 21(6):845–8 (Eng. Abstr.) **(Rus)**

[Pentobarbital interaction with the GABA–activated ion channels of the neurons in the rat cerebellum] Valeev AE, et al. **Neirofiziologiia** 1990;22(1):93–8 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Chloride transport across the basolateral membrane of rabbit proximal convoluted tubules. Ishibashi K, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):F1569–78

Cell swelling activates basolateral membrane Cl and K conductances in rabbit proximal tubule. Welling PA, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):F951–62

Stilbenes inhibit exchange of chloride between blood, choroid plexus and cerebrospinal fluid. Deng QS, et al. **Brain Res** 1989 Oct 30;501(1):183–7

MIF–1 and Tyr–MIF–1 augment muscimol–stimulated chloride uptake in cerebral cortex. Miller LG, et al. **Brain Res Bull** 1989 Dec;23(6):413–5

GABA–stimulated chloride uptake and enhancement by diazepam in synaptoneurosomes from rat brain during prenatal and postnatal development. Kellogg CK, et al. **Brain Res Dev Brain Res** 1989 Sep 1;49(1):87–95

Reduced GABA–mediated chloride flux in entorhinal cortex–kindled rat brains. Sneddon WB, et al. **Epilepsy Res** 1990 May–Jun;6(1):18–22

Cytosolic pH regulation in osteoblasts. Regulation of anion exchange by intracellular pH and Ca2+ ions. Green J, et al. **J Gen Physiol** 1990 Jan;95(1):121–45

Single chloride–selective channel from cardiac sarcoplasmic reticulum studied in planar lipid bilayers. Rousseau E. **J Membr Biol** 1989 Aug;110(1):39–47

Inter–organ relation between salivary gland and kidney in lithium excretion. II. Salivary, renal and systemic clearances of lithium under continuous stimulation of salivation in water loaded dogs. Watanabe J, et al. **J Pharmacobiodyn** 1989 Sep;12(9):537–43

Intratubular albumin blunts the response to furosemide–A mechanism for diuretic resistance in the nephrotic syndrome. Kirchner KA, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1097–101

Chloride and bicarbonate transport in fetal red cells. Brahm J, et al. **J Physiol (Lond)** 1989 Dec;419:141–56

Determination of ionic permeability coefficients of the plasma membrane of Xenopus laevis oocytes under voltage clamp. Costa PF, et al. **J Physiol (Lond)** 1989 Jun;413:199–211

Stimulation of chloride secretion by N–formyl–methionylleucylphenylalanine (FMLP) in rabbit ileal mucosa. Finley RB, et al. **J Physiol (Lond)** 1989 Oct; 417:403–19

Chloride permeability regulation via a cyclic AMP pathway in cultured human sweat duct cells. Pedersen PS. **J Physiol (Lond)** 1990 Feb;421:379–97

Uptakes of iodide and chloride by primary cultures of mouse astrocytes and neurons. Chow SY, et al. **Neurochem Res** 1989 Oct;14(10):963–9

Plasma lithium as a marker of lithium chloride in wild Norway rats (R. norvegicus). Sterner RT. **Physiol Behav** 1990 May;47(5):1013–5

Two–phase clearance of lithium from plasma in rats. Sterner RT. **Psychol Rep** 1990 Feb;66(1):313–4

Chloride transport in embryonic cells: effect of ethanol and GABA. Zimmerman EF, et al. **Teratology** 1989 Dec; 40(6):593–601

[Transport of chloride, bicarbonate, and proton in the proximal tubules] Sasaki S. **Nippon Rinsho** 1989 Jul; 47(7):1513–8 **(Jpn)**

PHARMACOLOGY

Chloride ion plays an important role in sodium induced volume expansion in normal humans. Tomita Y, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 1):485–7

Osmotic stimulation of Na(+)–K(+)–Cl– cotransport in squid giant axon is [Cl–]i dependent. Breitwieser GE, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):C749–53

Effect of Na and Cl infusion on loop function and plasma renin activity in rats. Lorenz JN, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1328–35

Membrane effects of chloride substitutes in guinea pig gallbladder epithelial cells. Wehner F, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):C766–74

Influence of Cl– on pH(i) in oxyticopeptic cells of in vitro frog gastric mucosa. Yanaka A, et al. **Am J Physiol** 1990 May;258(5 Pt 1):G815–24

Antigenic nature of the chloride–stimulated cellobiosidase and other cellulases of Fibrobacter succinogenes subsp. succinogenes S85 and related fresh isolates. Huang L, et al. **Appl Environ Microbiol** 1990 May;56(5):1229–34

Ontogenetic differences in the association of gustatory and tactile cues with lithium chloride and footshock. Hoffmann H, et al. **Behav Neural Biol** 1990 May;53(3):441–50

Effect of lithium chloride–induced aversion on appetitive and consummatory behavior. Wolgin DL, et al. **Behav Neurosci** 1990 Jun;104(3):438–40

Na(+)– and Cl(–)–dependent [3H]GABA binding to catfish brain particles. King SM, et al. **Biochem Int** 1990; 20(4):821–31

Selective effect of zinc compared to other divalent metals on L–triiodothyronine binding to rat c–erbA alpha and beta proteins. Lu C, et al. **Biochem Int** 1990;21(1):191–8

Fluoroaluminate activation of different components of the calcium signal in an exocrine cell. Shuttleworth TJ. **Biochem J** 1990 Jul 15;269(2):417–22

Interactions between lithium, inositol and mono–oleoylglycerol in the regulation of insulin secretion from isolated perifused rat islets. Zawalich WS, et al. **Biochem J** 1989 Sep 1;262(2):557–61

Zinc increases EGF–stimulated DNA synthesis in primary mouse hepatocytes. Studies in tumor promoter–treated cell cultures. Kobusch AB, et al. **Biochem Pharmacol** 1990 Feb 1;39(3):555–8

Lithium but not cholinergic ligands influence guanylate cyclase activity in intact human lymphocytes. Schubert T, et al. **Biochem Pharmacol** 1990 Feb 1;39(3):439–44

Effect of oligosaccharides and chloride on the oligomeric structures of external, internal, and deglycosylated invertase. Reddy AV, et al. **Biochemistry** 1990 Mar 13; 29(10):2482–7

Effects of chloride on chicken iodopsin and the chromophore transfer reactions from iodopsin to scotopsin and B–photopsin. Shichida Y, et al. **Biochemistry** 1990 Jun 19; 29(24):5843–8

Interaction between protein kinase C and regulatory ligand is enhanced by a chelatable pool of cellular zinc. Forbes IJ, et al. **Biochim Biophys Acta** 1990 Jul 12;1053(2–3):113–7

6–aminohexanoate and chloride ion in the activation by urokinase of porcine plasminogens. Machovich R, et al. **Biochim Biophys Acta** 1990 Aug 1;1040(1):109–11

Transepithelial electrical responses to Cl– of nonsensory region of gerbil utricle. Marcus DC, et al. **Biochim Biophys Acta** 1989 Dec 11;987(1):56–62

Control of bacteriorhodopsin color by chloride at low pH. Significance for the proton pump mechanism. Renthal R, et al. **Biochim Biophys Acta** 1990 Apr 26;1016(3):378–84

Lithium, brain, and RBC NMR parameter T–1 [letter] Garber HJ, et al. **Biol Psychiatry** 1989 Dec;26(8):854–6

Orthovanadate and fluoroaluminate stimulate inositol phosphate production and in vitro ovulation in goldfish (Carassius auratus) follicles. Ranjan M, et al. **Biol Reprod** 1990 Aug;43(2):323–34

Interaction of vanadate and chloride in chicks. Hill CH. **Biol Trace Elem Res** 1989–90 Winter;23:1–10

Chloride ion increases [3H]dopamine accumulation by synaptic vesicles purified from rat striatum: inhibition by thiocyanate ion. Erickson JD, et al. **Brain Res** 1990 May 14;516(1):155–60

Chloride effect on a neutral–carrier–based pH–sensitive microelectrode and its intracellular application. Fujimoto M, et al. **Bull Osaka Med Coll** 1988 Nov;34(1–2):13–26

Lithium changes the ectodermal fate of individual frog blastomeres because it causes ectopic neural plate formation. Klein SL, et al. **Development** 1989 Jul; 106(3):599–610

Effect of lithium on deoxyribonucleic acid synthesis and iodide uptake in porcine thyroid cells in culture. Tsuchiya Y, et al. **Endocrinology** 1990 Jan;126(1):460–5

Melatonin reduction by lithium and albinism in quail and hamsters. Lauber JK, et al. **Gen Comp Endocrinol** 1989 Dec; 76(3):414–20

Lithium counteracts histamine suppression of human T cell mitogenesis. Hall TJ, et al. **Immunol Lett** 1990 May; 24(2):103–5

The denatured states of ribonuclease–A: mechanism of denaturation by lithium chloride. Ahmad F, et al. **Indian J Biochem Biophys** 1989 Oct;26(5):301–4

Acid and alkaline phosphatase activities in lithium treated testis, prostate and seminal vesicles of adult albino rats: evidence of duration and dose dependent response. Ghosh D, et al. **Indian J Exp Biol** 1990 Jun;28(6):553–6

Aluminum chloride hexahydrate versus palmar hyperhidrosis. Evaporimeter assessment. Goh CL. **Int J Dermatol** 1990 Jun;29(5):368–70

Circular dichroism of bovine serum albumin in divalent salt solutions. Sun SF, et al. **Int J Pept Protein Res** 1989 Jul; 34(1):46–51

A chloride– and calcium–dependent glutamate–binding protein from rat brain. Identification as a ubiquitous constituent of the inner mitochondrial membrane. Brose N, et al. **J Biol Chem** 1990 Jun 25;265(18):10604–10

The histamine degradative uptake pathway in human vascular endothelial cells and skin fibroblasts is dependent on extracellular Na+ and Cl–. Haddock RC, et al. **J Biol Chem** 1990 Aug 25;265(24):14395–401

Lithium ions induce prestalk–associated gene expression and inhibit prespore gene expression in Dictyostelium discoideum. Peters DJ, et al. **J Cell Sci** 1989 May;93 (Pt 1):205–10

Ambient Cl– ions modify rat mesangial cell contraction by modulating cell inositol trisphosphate and Ca2+ via enhanced prostaglandin E2. Okuda T, et al. **J Clin Invest** 1989 Dec;84(6):1866–72

Lithium chloride stimulates human monocytes to secrete tumor necrosis factor/cachectin. Kleinerman ES, et al. **J Leukoc Biol** 1989 Nov;46(5):484–92

Ion and temperature effects on the binding of gamma–aminobutyrate to its receptors and the high–affinity transport system. Shank RP, et al. **J Neurochem** 1990 Jun; 54(6):2007–15

Effects of lithium chloride on testicular steroidogenic and gametogenic functions in mature male albino rats. Ghosh D, et al. **Life Sci** 1990;46(2):127–37

Inhibition of hormone–stimulated ornithine decarboxylase activity by lithium chloride. Richards JF, et al. **Life Sci** 1990;47(3):233–40

Interaction of lead and zinc in cultured astroglia. Rowles TK, et al. **Metab Brain Dis** 1989 Sep;4(3):187–201

Fertilization envelope assembly in sea urchin eggs inseminated in chloride–deficient sea water: II. Biochemical effects. Green JD, et al. **Mol Reprod Dev** 1990 Feb; 25(2):177–85

Lithium can transform ear placodes of Xenopus into multiple otic vesicles connected by tubes. Gutknecht D, et al. **Naturwissenschaften** 1990 May;77(5):235–7

Determination of monoamines in rat brain regions after chronic administration of lithium. Casado M, et al. **Neurochem Res** 1989 Sep;14(9):905–8

Chloride dependence of the K(+)–stimulated release of taurine from synaptosomes. Sánchez Olea R, et al. **Neurochem Res** 1990 May;15(5):535–40

Changes in cerebral inositol–1–phosphate concentrations in LiCl–treated rats: regional and strain differences. Savolainen KM, et al. **Neurochem Res** 1990 May; 15(5):541–5

Chloride and magnesium dependence of vasopressin release

from rat permeabilized neurohypophysial nerve endings. Dayanithi G, et al. **Neurosci Lett** 1989 Dec 4;106(3):305–9
Effect of LiCl pretreatment on cholinomimetic–induced seizures and seizure–induced brain edema in rats. Terry JB, et al. **Neurosci Lett** 1990 Jun 22;114(1):123–7
Biological effects of lithium chloride on the insect trypanosomatid Herpetomonas samuelpessoai. Nakamura CV, et al. **Parasitology** 1989 Oct;99 Pt 2:193–7
Influence of drugs and ionic gradients on gastric secretory epithelium in vitro. Mihalas GI, et al. **Physiologie** 1989 Oct–Dec;26(4):317–22
Deletion of stably integrated DNA is suppressed by cadmium and zinc. Abrams JM, et al.
Proc Natl Acad Sci U S A 1989 Dec;86(23):9380–4
Lithium chloride potentiates tumor necrosis factor–mediated cytotoxicity in vitro and in vivo. Beyaert R, et al.
Proc Natl Acad Sci U S A 1989 Dec;86(23):9494–8
Two pharmacologically distinct sodium– and chloride–coupled high–affinity gamma–aminobutyric acid transporters are present in plasma membrane vesicles and reconstituted preparations from rat brain. Kanner BI, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2550–4
Role of chloride in hypertonicity–induced contractures of rat soleus muscle. Bruton JD. **Q J Exp Physiol** 1989 Jul; 74(4):565–7
The role of response–contingent incentives in lithium chloride–mediated suppression of an operant response. Meachum CL. **Q J Exp Psychol [B]** 1990 May;42(2):175–95
Overshadowing of a context aversion by a novel incentive in operant conditioning. Meachum CL.
Q J Exp Psychol [B] 1990 May;42(2):197–210
Sensitivity of the sodium efflux in single barnacle muscle fibers to the microinjection of aluminum. Bittar EE, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):174–85
[The increase of protein synthesis by zinc can resist the damage induced by streptozotocin on islet cells] Tu YH, et al. **Sheng Li Hsueh Pao** 1989 Aug;41(4):375–80 (Eng. Abstr.) **(Chi)**
[The effect of CdCl2 and ZnCl2 on Dunn osteosarcoma] Noda K. **Nippon Seikeigeka Gakkai Zasshi** 1990 Jan; 64(1):70–5 (Eng. Abstr.) **(Jpn)**
[Sonochemical destruction of pollution of industrial waste waters] Agranonik IaR, et al. **Antibiot Khimioter** 1990 Feb; 35(2):48–51 **(Rus)**
[The effect of anions on spectral properties of iodopsin and native cones in the frog retina (microspectrophotometric study)] Novitskiĭ IIu, et al. **Biorg Khim** 1989 Aug; 15(8):1037–43 (Eng. Abstr.) **(Rus)**
[Dependence of the effects of tripeptide MIF and lithium chloride on the degree of supersensitivity of dopamine receptors of the brain] Bondarenko NA, et al.
Biull Eksp Biol Med 1989 Aug;108(8):196–9 (Eng. Abstr.) **(Rus)**
[The role of chloride ions in histamine–induced electric reactions of the glandular cells of the stomach] Smirnova ZhP, et al. **Fiziol Zh** 1989 Nov–Dec;35(6):54–7 (Eng. Abstr.) **(Rus)**
[The effect of ionites on the biological activity of influenza virus] Mitchenko VP, et al. **Mikrobiol Zh** 1984 Jan–Feb; 46(1):84–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Calcium–dependent regulation of airway epithelial chloride channels. Clancy JP, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):L25–32
Isoproterenol activates a chloride current, not the transient outward current, in rabbit ventricular myocytes. Harvey RD, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):C1177–81
Zinc blocks apical membrane anion exchange in gallbladder epithelium. Kitchens DL, et al. **Am J Physiol** 1990 May; 258(5 Pt 1):G745–52
Apical membrane Cl– channels in airway epithelia: anion selectivity and effect of an inhibitor. Li M, et al.
Am J Physiol 1990 Aug;259(2 Pt 1):C295–301
An alkaline pH–activated Cl(–)–anion exchanger regulates pH homeostasis in fibroblasts. Lin PY, et al.
Am J Physiol 1990 Jan;258(1 Pt 1):C132–9
Chloride channels in the apical membrane of a distal nephron A6 cell line. Marunaka Y, et al. **Am J Physiol** 1990 Feb; 258(2 Pt 1):C352–68
Cardiac antisecretory peptide inhibits intestinal chloride secretion. O Grady SM, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):C775–80
Proximal tubule volume regulation in hyperosmotic media: intracellular K+, Na+, and Cl–. Rome L, et al.
Am J Physiol 1989 Dec;257(6 Pt 1):C1093–100
Double–barreled chloride channels of collecting duct basolateral membrane. Sansom SC, et al. **Am J Physiol** 1990 Jul;259(1 Pt 2):F46–52
Furosemide blocks basolateral membrane Cl– permeability in gallbladder epithelium. Stoddard JS, et al.
Am J Physiol 1990 Jun;258(6 Pt 1):C1150–8
A simple assay for agonist–regulated Cl and K conductances in salt–secreting epithelial cells. Venglarik CJ, et al.
Am J Physiol 1990 Aug;259(2 Pt 1):C358–64
Mechanisms of chloride transport in secretory epithelia. Greger R, et al. **Ann N Y Acad Sci** 1989;574:403–15 (41 ref.)
Possible role of outwardly rectifying anion channels in epithelial transport. Hanrahan JW, et al.
Ann N Y Acad Sci 1989;574:30–43
Cell volume changes and the activity of the chloride conductance path. Rothstein A, et al.
Ann N Y Acad Sci 1989;574:294–308
Phosphorylation–dependent regulation of apical membrane chloride channels in normal and cystic fibrosis airway epithelium. Welsh MJ, et al. **Ann N Y Acad Sci** 1989; 574:44–51
Epithelial electrolyte transport: interrelationships between H+, HCO3– and Cl–. Case RM, et al.
Biochem Soc Trans 1989 Oct;17(5):803–5
(Dys)regulation of epithelial chloride channels. de Jonge HR, et al. **Biochem Soc Trans** 1989 Oct;17(5):816–8
Chloride channels of biological membranes. Franciolini F, et al. **Biochim Biophys Acta** 1990 May 7;1031(2):247–59 (84 ref.)
Chloride–dependence of amino acid transport in rabbit ileum. Munck LK, et al. **Biochim Biophys Acta** 1990 Aug 10; 1027(1):17–20
The 20–pS chloride channel of the human airway epithelium. Duszyk M, et al. **Biophys J** 1990 Feb;57(2):223–30
Different sites control voltage dependence and conductance of sarcoball anion channel. Hals GD, et al. **Biophys J** 1990 May;57(5):1037–47
Influences of external Ca2+ on the GABA–induced chloride current and the efficacy of diazepam in internally perfused frog sensory neurons. Akaike N, et al. **Brain Res** 1989 Dec 18;504(2):293–6
Chronic exposure of developing cortical neurons to GABA down–regulates GABA/benzodiazepine receptors and GABA–gated chloride currents. Hablitz JJ, et al.
Brain Res 1989 Nov 6;501(2):332–8
Low calcium–induced release of glutamate results in autotoxicity of cerebellar granule cells. McCaslin PP, et al. **Brain Res** 1990 Apr 16;513(2):280–5
Piperidine discriminates between the transient and the persistent components of the ACh–induced chloride current in Aplysia neurons. Takahama K, et al.
Brain Res 1990 Jan 29;508(1):161–4
Calcium–dependent chloride currents elicited by injection of ethanol into Xenopus oocytes. Wafford KA, et al.
Brain Res 1989 Dec 29;505(2):215–9
Similarities between the effects of lindane (gamma–HCH) and picrotoxin on ligand–gated chloride channels in crayfish muscle membrane. Zufall F, et al. **Brain Res** 1989 Dec 4;503(2):342–5
Developmental changes in the regulation of glycine–activated Cl– channels of cultured rat medullary neurons. Lewis CA, et al. **Brain Res Dev Brain Res** 1990 Feb 1;51(2):287–90
Large unit conductance voltage chloride channels are expressed in mouse neural crest cells and embryonic dorsal root ganglion cells. Rabasseda X, et al.
Brain Res Dev Brain Res 1990 Feb 1;51(2):283–6
Fluorescent labelling of Na+, K(+)–ATPase in intact cells by use of a fluorescent derivative of ouabain: salinity and teleost chloride cells. McCormick SD. **Cell Tissue Res** 1990 May;260(3):529–33
Cytoplasmic Ca2+ oscillations evoked by receptor stimulation, G–protein activation, internal application of inositol trisphosphate or Ca2+: simultaneous microfluorimetry and Ca2+ dependent Cl– current recording in single pancreatic acinar cells. Osipchuk YV, et al. **EMBO J** 1990 Mar;9(3):697–704
Stimulation of luteinizing hormone release by gamma–aminobutyric acid (GABA) agonists: mediation by GABAA–type receptors and activation of chloride and voltage–sensitive calcium channels. Virmani MA, et al.
Endocrinology 1990 May;126(5):2499–505
Reduced GABA–mediated chloride flux in entorhinal cortex–kindled rat brains. Sneddon WB, et al.
Epilepsy Res 1990 May–Jun;6(1):18–22
Enhancement of benzodiazepine receptor binding by L–lysine is chloride–dependent and due to increase in binding affinity. Gao XM, et al. **Eur J Pharmacol** 1989 Dec 7;173(2–3):197–200
Small conductance chloride channels in the apical membrane of thyroid cells. Champigny G, et al. **FEBS Lett** 1990 Jan 1;259(2):263–8
Evidence for two independent pathways in the stimulation of steroidogenesis by luteinizing hormone involving chloride channels and cyclic AMP. Choi MS, et al.
FEBS Lett 1990 Feb 26;261(2):402–4
Electrophysiological expression of endothelin and angiotensin receptors in Xenopus oocytes injected with rat heart mRNA. Lory P, et al. **FEBS Lett** 1989 Dec 4; 258(2):289–92
Chloride enters glial cells and photoreceptors in response to light stimulation in the retina of the honey bee drone. Coles JA, et al. **GLIA** 1989;2(5):287–97
A GTP–binding protein activates chloride channels in a renal epithelium. Schwiebert EM, et al. **J Biol Chem** 1990 May 15;265(14):7725–8
Chloride action potentials and currents in embryonic skeletal muscle of the chick. Steele JA. **J Cell Physiol** 1990 Mar; 142(3):603–9
Voltage–dependent and Ca2(+)–activated ion channels in human neutrophils. Krause KH, et al. **J Clin Invest** 1990 Feb;85(2):491–8
Activation of normal and cystic fibrosis Cl– channels by voltage, temperature, and trypsin. Welsh MJ, et al.
J Clin Invest 1989 Dec;84(6):2002–7
Identification and regulation of whole–cell chloride currents in airway epithelium. McCann JD, et al. **J Gen Physiol** 1989 Dec;94(6):1015–36
Glycine–gated chloride current in acutely isolated rat hypothalamic neurons. Akaike N, et al. **J Neurophysiol** 1989 Dec;62(6):1400–9
Inhibitory role of dentate hilus neurons in guinea pig hippocampal slice. Müller W, et al. **J Neurophysiol** 1990 Jul;64(1):46–56
Calcium–dependent chloride current in neurones of the rabbit pelvic parasympathetic ganglia. Akasu T, et al.
J Physiol (Lond) 1990 Mar;422:303–20
A novel calcium–dependent chloride current in Xenopus oocytes injected with brain messenger RNA. Gillo B, et al. **J Physiol (Lond)** 1989 Oct;417:47–61
A calcium– and voltage–dependent chloride current in developing chick skeletal muscle. Hume RI, et al.
J Physiol (Lond) 1989 Oct;417:241–61
Barbiturate regulation of kinetic properties of the GABAA receptor channel of mouse spinal neurones in culture. MacDonald RL, et al. **J Physiol (Lond)** 1989 Oct; 417:483–500
Characteristics of GABA–activated chloride channels in mammalian dorsal root ganglion neurones. Robertson B. **J Physiol (Lond)** 1989 Apr;411:285–300
Niflumic and flufenamic acids are potent reversible blockers of Ca2(+)–activated Cl– channels in Xenopus oocytes. White MM, et al. **Mol Pharmacol** 1990 May;37(5):720–4
Extracellular sodium and chloride depletion enhances nonexocytotic noradrenaline release induced by energy deficiency in rat heart. Kurz T, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Sep; 340(3):265–9
From binding studies to the molecular biology of GABA receptors. Knapp RJ, et al. **Neurochem Res** 1990 Feb; 15(2):105–12 (74 ref.)
Apparent desensitization of NMDA responses in Xenopus oocytes involves calcium–dependent chloride current. Leonard JP, et al. **Neuron** 1990 Jan;4(1):53–60
Calcium and calcium–dependent chloride currents generate action potentials in solitary cone photoreceptors. Maricq AV, et al. **Neuron** 1988 Aug;1(6):503–15
Functional properties of recombinant rat GABAA receptors depend upon subunit composition. Verdoorn TA, et al.
Neuron 1990 Jun;4(6):919–28
Determination of GABA receptor–linked Cl– fluxes in rat cerebellar granule cells using a fluorescent probe SPQ. Engblom AC, et al. **Neurosci Lett** 1989 Oct 9;104(3):326–30
Beta–alanine induced ion channels in the membrane of cultured spinal cord neurons. Mathers DA, et al.
Neurosci Lett 1990 Jan 1;108(1–2):127–31
A chloride channel in excised patches from cultured rat hippocampal neurons. Shukla H, et al. **Neurosci Lett** 1990 May 4;112(2–3):229–33
GABAA receptor–mediated chloride flux in brain homogenates from rat lines with differing innate alcohol sensitivities. Korpi ER, et al. **Neuroscience** 1989; 32(2):387–92
Chloride current activated by cyclic AMP and parathyroid hormone in rat osteoblasts. Chesnoy–Marchais D, et al.
Pflugers Arch 1989 Oct;415(1):104–14
Anion channels in a leaky epithelium. A patch–clamp study of choroid plexus. Christensen O, et al. **Pflugers Arch** 1989 Oct;415(1):37–46
Changes in membrane ionic conductances and excitability characteristics of rat skeletal muscle during aging. De Luca A, et al. **Pflugers Arch** 1990 Feb;415(5):642–4
Optical evidence for a chloride conductance in the T–system of frog skeletal muscle. Heiny JA, et al. **Pflugers Arch** 1990 May;416(3):288–95
Properties and regulation of chloride channels in cystic fibrosis and normal airway cells. Kunzelmann K, et al.
Pflugers Arch 1989 Nov;415(2):172–82
Diphenylamine–2–carboxylate (DPC) inhibits both Cl– conductance and cyclooxygenase of canine tracheal epithelium. Stutts MJ, et al. **Pflugers Arch** 1990 Feb; 415(5):611–6
K(+)–induced swelling of vestibular dark cells is dependent on Na+ and Cl– and inhibited by piretanide. Wangemann P, et al. **Pflugers Arch** 1990 May;416(3):262–9
Direct modulation of secretory chloride channels by arachidonic and other cis unsaturated fatty acids. Hwang TC, et al. **Proc Natl Acad Sci U S A** 1990 Aug; 87(15):5706–9
Separate hemodynamic roles for chloride and sodium in deoxycorticosterone acetate–salt hypertension. Passmore JC, et al. **Proc Soc Exp Biol Med** 1990 Jul;194(3):283–8
Chloride distribution in rat extensor digitorum longus muscle. Grossie J. **Prog Clin Biol Res** 1990;327:795–803
Steady–state coupling of ion–channel conformations to a transmembrane ion gradient. Richard EA, et al. **Science** 1990 Mar 9;247(4947):1208–10
Genetic differences in the ethanol sensitivity of GABAA receptors expressed in Xenopus oocytes. Wafford KA, et al. **Science** 1990 Jul 20;249(4966):291–3

POISONING

Cholinergic and noradrenergic toxicity of intraventricular aluminum chloride in the rat hippocampus. Zubenko GS, et al. **Brain Res** 1989 Oct 2;498(2):381–4
[Acute poisoning by inhalation of zinc and aluminum chloride (12 cases)] Harry P, et al. **J Toxicol Clin Exp** 1989 Sep–Oct; 9(5):359–62 **(Fre)**

THERAPEUTIC USE

The management of Frey's syndrome with aluminium chloride hexahydrate antiperspirant. Black MJ, et al. **Ann R Coll Surg Engl** 1990 Jan;72(1):49–52

Dose-related effects of ZnCl2 on dental plaque formation and plaque acidogenicity in vivo. Giertsen E, et al. **Caries Res** 1989;23(4):272–7

Clinical efficacy of a dentifrice and oral rinse containing sanguinaria extract and zinc chloride during 6 months of use. Harper DS, et al. **J Periodontol** 1990 Jun;61(6):352–8

Effect of 6 months use of a dentifrice and oral rinse containing sanguinaria extract and zinc chloride upon the microflora of the dental plaque and oral soft tissues. Harper DS, et al. **J Periodontol** 1990 Jun;61(6):359–63

Effects of lithium on an amphetamine animal model of bipolar disorder. Cappeliez P, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(3):347–58

A case of hyperhidrosis successfully treated with 20% aluminium chloride hexahydrate in 95% ethyl alcohol. Ganeshmoorthy J, et al. **Singapore Med J** 1990 Feb; 31(1):85–6

TOXICITY

The histopathology of rat lung following exposure to zinc oxide/hexachloroethane smoke or installation with zinc chloride followed by treatment with 70% oxygen. Brown RF, et al. **Environ Health Perspect** 1990 Apr;85:81–7

Changes in excitability of CA1 pyramidal neurons in slices prepared from AlCl3-treated rabbits. Franceschetti S, et al. **Epilepsy Res** 1990 May–Jun;6(1):39–48

Discriminative properties of morphine that modulate associations between tastes and lithium chloride. Martin GM, et al. **J Exp Psychol [Anim Behav]** 1990 Jan; 16(1):56–68

Maternally-mediated neonatal lithium–cesium interaction in the mouse. Messiha FS. **Physiol Behav** 1989 Jul;46(1):89–95

CHLORIGUANE see **CHLOROGUANIDE**

CHLORIMIPRAMINE see **CLOMIPRAMINE**

CHLORINATED HYDROCARBONS see **HYDROCARBONS, CHLORINATED**

CHLORINE

Disinfection of bacteria in water systems by using electrolytically generated copper:silver and reduced levels of free chlorine. Yahya MT, et al. **Can J Microbiol** 1990 Feb;36(2):109–16

Physiological effects in fish exposed to effluents from mills with six different bleaching processes. Lehtinen KJ, et al. **Ecotoxicol Environ Safety** 1990 Feb;19(1):33–46

Bromination, no-carrier-added radiobromination and simultaneously-occurring chlorination by chloramine T. Suehiro M, et al. **Int J Rad Appl Instrum [A]** 1990; 41(5):439–47

Prevention of bovine mastitis by a postmilking teat disinfectant containing chlorous acid and chlorine dioxide in a soluble polymer gel. Oliver SP, et al. **J Dairy Sci** 1989 Nov;72(11):3091–7

The efficacy of chlorination and filtration in the control and eradication of Legionella from dental chair water systems. Pankhurst CL, et al. **J Hosp Infect** 1990 Jul;16(1):9–18

Mutagens in chlorinated water. Meier JR. **Prog Clin Biol Res** 1990;340E:11–9

[The basis of the disinfection of water] Carlson S. **Schriftenr Ver Wasser Boden Lufthyg** 1989;81:25–49 (34 ref.) **(Ger)**

ADVERSE EFFECTS

Mercury in the Swedish chloralkali industry—an evaluation of the exposure and preventive measures over 40 years. Sällsten G, et al. **Ann Occup Hyg** 1990 Apr;34(2):205–14

The pulmonary sequelae associated with accidental inhalation of chlorine gas [see comments] Schwartz DA, et al. **Chest** 1990 Apr;97(4):820–5 Comment in: Chest 1990 Apr;97(4):773–5.

Effect of chlorine gas leak on the pulmonary functions of school children. Pherwani AV, et al. **Indian J Pediatr** 1989 Jan–Feb;56(1):125–8

Effect of reclassification of chloracne cases [letter] Bond GG, et al. **J Occup Med** 1990 May;32(5):423

ANALYSIS

Chlorination, water hardness and serum cholesterol in forty-six Wisconsin communities. Zeighami EA, et al. **Int J Epidemiol** 1990 Mar;19(1):49–58

Two sources of contamination of a hydrotherapy pool by environmental organisms. Aspinall ST, et al. **J Hosp Infect** 1989 Nov;14(4):285–92

BLOOD

[Significance of chloride analysis in clinical tests] Koide H. **Nippon Rinsho** 1989 Dec;48 Suppl:639–42 **(Jpn)**

DIAGNOSTIC USE

A modified method for the production of 36ClO3– for use in plant nitrate transport studies. Ruiz-Cristin J, et al. **Anal Biochem** 1989 Oct;182(1):146–50

METABOLISM

Endogenous prostanoids control ion transport across neonatal porcine ileum in vitro. Argenzio RA, et al. **Am J Vet Res** 1990 May;51(5):747–51

Inhibition of 36Cl uptake by stilbene sulphonic acid derivatives and loop diuretics in rat submandibular salivary acini. Martinez JR, et al. **Arch Oral Biol** 1989;34(7):535–40

Stimulation of the chlorinating activity of human myeloperoxidase by thyroid hormones and analogues. Van Zyl JM, et al. **Horm Metab Res** 1989 Aug;21(8):441–4

Multiresidue procedures for the determination of chlorinated dibenzodioxins and dibenzofurans in a variety of foods using capillary gas chromatography-electron-capture detection. Jasinski JS. **J Chromatogr** 1989 Sep 15; 478(2):349–67

Stimulation of Na(+)-H+ exchange, the Na(+)-K+ pump and Na+,K+,Cl- cotransport by endothelin-1 in cultured vascular smooth muscle cells. Rosati C, et al. **J Hypertens Suppl** 1989 Dec;7(6):S138–9

[Histochemical evaluation of the distribution of chloride ion around retinal pigment epithelium in various animal species] Yamashita H, et al. **Nippon Ganka Gakkai Zasshi** 1989 Aug; 93(8):830–5 (Eng. Abstr.) **(Jpn)**

[Cl–, HCO3–, and H+ transport in collecting duct] Matsuzaki K, et al. **Nippon Rinsho** 1989 Jul;47(7):1561–72 (81 ref.) **(Jpn)**

[Mechanisms of ion transport in the distal nephron segments] Yoshitomi K, et al. **Nippon Rinsho** 1989 Jul;47(7):1547–53 **(Jpn)**

[Characteristics of GABA-activated chlorine channels in hippocampal slices] Vorob'ev VS. **Biull Eksp Biol Med** 1989 Aug;108(8):172–4 (Eng. Abstr.) **(Rus)**

[Effect of a change in the effectiveness of a benzodiazepine-GABA-ionophore complex blockade on the reproduction of an amnesic memory trace in mice after preliminary diazepam administration] Il'iuchenok RIu, et al. **Zh Vyssh Nerv Deiat** 1989 May–Jun;39(3):499–505 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

KCl potentiation of the virucidal effectiveness of free chlorine at pH 9.0. Berg G, et al. **Appl Environ Microbiol** 1990 Jun;56(6):1571–5

Inactivation of human and simian rotaviruses by chlorine dioxide. Chen YS, et al. **Appl Environ Microbiol** 1990 May; 56(5):1363–6

Fluorescent-antibody method useful for detecting viable but nonculturable Salmonella spp. in chlorinated wastewater. Desmonts C, et al. **Appl Environ Microbiol** 1990 May; 56(5):1448–52

Effects of ozone, chlorine dioxide, chlorine, and monochloramine on Cryptosporidium parvum oocyst viability. Korich DG, et al. **Appl Environ Microbiol** 1990 May;56(5):1423–8

Efficacy of copper and silver ions and reduced levels of free chlorine in inactivation of Legionella pneumophila. Landeen LK, et al. **Appl Environ Microbiol** 1989 Dec; 55(12):3045–50

Inactivation of gerbil-cultured Giardia lamblia cysts by free chlorine. Rubin AJ, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2592–4

Rapid detection of chlorine-induced bacterial injury by the direct viable count method using image analysis. Singh A, et al. **Appl Environ Microbiol** 1990 Feb;56(2):389–94

Enumeration of Enterobacter cloacae after chloramine exposure. Watters SK, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3226–8

Hatching eggs sanitized with chlorine dioxide foam: egg hatchability and bactericidal properties. Patterson PH, et al. **Avian Dis** 1990 Jan–Mar;34(1):1–6

Survival of Legionella pneumophila within cysts of Acanthamoeba polyphaga following chlorine exposure. Kilvington S, et al. **J Appl Bacteriol** 1990 May;68(5):519–25

Use of natural mRNAs in the cell-free protein-synthesizing systems of the moderate halophile Vibrio costicola. Choquet CG, et al. **J Bacteriol** 1990 Jun;172(6):3462–8

Mycobacteria in public water supplies: comparative resistance to chlorine. Pelletier PA, et al. **Microbiol Sci** 1988 May;5(5):147–8

The tetrachlorodecaoxygen complex reverses the effect of cortisone on wound healing. Hatz RA, et al. **Plast Reconstr Surg** 1989 Dec;84(6):953–9

[Development of antibiotic resistance in purified sewage effluents subjected to chlorination] Morozzi G, et al. **Ann Ig** 1989 Jan–Apr;1(1–2):351–62 (Eng. Abstr.) **(Ita)**

[Comparison of the effectiveness of water disinfection by electrolysis and chlorination] Erusalimskaia LF, et al. **Gig Sanit** 1989 Nov;(11):73–5 **(Rus)**

POISONING

Medical planning for toxic releases into the community: the example of chlorine gas [letter; comment] Jackson JR. **Br J Ind Med** 1989 Oct;46(10):752 Comment on: Br J Ind Med 1989 Apr;46(4):277–85.

Treatment of acute chlorine gas inhalation with nebulized sodium bicarbonate. Vinsel PJ. **J Emerg Med** 1990 May–Jun;8(3):327–9

Six month follow-up of fourteen victims with short-term exposure to chlorine gas. Abhyankar A, et al. **J Soc Occup Med** 1989 Winter;39(4):131–2

THERAPEUTIC USE

Failure of tetrachlorodecaoxygen anion complex to assist wound healing [letter] Hughes LE, et al. **Lancet** 1989 Nov 25;2(8674):1271

TOXICITY

Chlorine dioxide and hemodialysis. Smith RP, et al. **Regul Toxicol Pharmacol** 1990 Feb;11(1):42–62 (90 ref.)

CHLORISONDAMINE

PHARMACOLOGY

Anomalous voltage dependence of channel blockade at a crustacean glutamate-mediated synapse. Lingle CJ. **J Physiol (Lond)** 1989 Feb;409:403–30

Non-nicotinic, non-muscarinic ganglionic transmission in the feline jejunum. Gustafsson BI, et al. **Pharmacol Toxicol** 1990 Feb;66(2):155–6

CHLORMADINONE

ADMINISTRATION & DOSAGE

[Blood lipids and the clinical state of hormone-treated women during menopause] Dominiczak-Gawrońska M. **Ann Acad Med Stetin** 1989;35:145–66 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

[Changes in arterial blood pressure of women using hormonal contraceptives in relation to their cardiovascular history] Manuilova IA, et al. **Akush Ginekol (Mosk)** 1989 Jul; (7):48–51 (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

[Synthesis of chlormadinol acetate-3-beta-O-alpha-1-arabinofuranosides with positive inotropic action] Schwabe K. **Pharmazie** 1990 Apr; 45(4):250–1 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Respiration effect of synthetic progestin in small doses in normal men. Mikami M, et al. **Chest** 1989 Nov;96(5):1073–5

Effect of a synthetic progestin on ventilatory response to hypoxia in anesthetized rats. Kimura H, et al. **J Appl Physiol** 1989 Nov;67(5):1754–8

The influence of mestranol and chlormadinone given separately or in combination on the effects evoked by a high-fat diet in female rabbits. Jaworska M, et al. **Pol J Pharmacol Pharm** 1989 Mar–Apr;41(2):157–67

[The action of Sequostat in comparison to Sequence Ovosiston on selected metabolic parameters] Etzrodt R, et al. **Zentralbl Gynakol** 1990;112(8):489–96 (Eng. Abstr.) **(Ger)**

[Effects of anti-androgens on sexual function. Double-blind comparative studies on allylestrenol and chlormadinone acetate Part I: Nocturnal penile tumescence monitoring] Kumamoto Y, et al. **Hinyokika Kiyo** 1990 Feb;36(2):213–26 (Eng. Abstr.) **(Jpn)**

[Effects of anti-androgens on sexual function. Double-blind comparative studies on allylestrenol and chlormadinone acetate. Part II: Self-assessment questionnaire method] Kumamoto Y, et al. **Hinyokika Kiyo** 1990 Feb;36(2):227–44 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Obese patients with sleep apnea syndrome treated by progesterone. Kimura H, et al. **Tohoku J Exp Med** 1988 Dec;156 Suppl:151–7

[Clinical studies on morphological changes in the prostate in patients with benign prostatic hypertrophy after antiandrogen therapy—by means of transrectal ultrasonotomography] Suzuki K, et al. **Hinyokika Kiyo** 1990 May;36(5):557–60 (Eng. Abstr.) **(Jpn)**

CHLORMEQUAT see under **AMMONIUM COMPOUNDS**

CHLORMERODRIN

TOXICITY

Mercury compounds: lipophilicity and toxic effects on isolated myocardial tissue. Halbach S. **Arch Toxicol** 1990; 64(4):315–9

CHLORMEROPRIN see **CHLORMERODRIN**

CHLORMETHAMPHETAMINE see under **METHAMPHETAMINE**

CHLORMETHAZANONE see **CHLORMEZANONE**

CHLORMETHIAZOLE

ADMINISTRATION & DOSAGE

[Severe course of delirium tremens. Results of treatment and

late prognosis] Horstmann E, et al. **Med Klin** 1989 Dec 15;84(12):569–73 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

The modulation by chlormethiazole of the GABAA–receptor complex in rat brain. Cross AJ, et al. **Br J Pharmacol** 1989 Sep;98(1):284–90

THERAPEUTIC USE

Chlormethiazole sedation for critically ill patients in renal failure. Gray PA, et al. **Anaesthesia** 1989 Nov;44(11):913–5

CHLORMETHINE see **MECHLORETHAMINE**

CHLORMEZANONE

PHARMACOKINETICS

[Pharmacokinetics of chlormezanone in healthy volunteers] Gautier V, et al. **Therapie** 1990 Jul–Aug;45(4):315–9 (Eng. Abstr.) **(Fre)**

POISONING

Central anticholinergic syndrome after ofloxacin overdose and therapeutic doses of diphenhydramine and chlormezanone. Koppel C, et al. **J Toxicol Clin Toxicol** 1990;28(2):249–53

CHLOROACETOPHENONE

ADVERSE EFFECTS

[Contact allergies to CN and CS ("tear gas") in participants in demonstrations] Fuchs T, et al. **Z Hautkr** 1990 Mar; 65(3):288–92, 295 (Eng. Abstr.) **(Ger)**

2–CHLOROADENOSINE

ANALOGS & DERIVATIVES

Profound toxicity of deoxyadenosine and 2–chlorodeoxyadenosine toward human monocytes in vitro and in vivo. Carrera CJ, et al. **Adv Exp Med Biol** 1989; 253B:219–25

Activity of 2–chloro–2'–deoxyadenosine in chronic lymphocytic leukemia, hairy cell leukemia, and autoimmune hemolytic anemia. Carson DA, et al. **Adv Exp Med Biol** 1989;253A:427–31 (13 ref.)

The mechanism of 2–chlorodeoxyadenosine–induced cell death. Wataya Y, et al. **Adv Exp Med Biol** 1989; 253B:227–34

Induction of DNA double–strand breaks in Chinese hamster V79 cells by 2–chlorodeoxyadenosine. Tanabe K, et al. **Chem Biol Interact** 1989;71(2–3):167–75

Lasting remissions in hairy–cell leukemia induced by a single infusion of 2–chlorodeoxyadenosine. Piro LD, et al. **N Engl J Med** 1990 Apr 19;322(16):1117–21

PHARMACOLOGY

2–Chloroadenosine–sensitive calcium channels in synaptosomes: effects of Ba2+. Arvin B, et al. **Biochem Soc Trans** 1989 Dec;17(6):1064–5

The 2–chloroadenosine inhibition of histamine–induced inositol phosphates accumulation in mouse brain and calcium ions. Alexander SP, et al. **Br J Pharmacol** 1989 Dec;98 Suppl:832P

2–chloroadenosine attenuates kainic acid–induced toxicity within the rat straitum: relationship to release of glutamate and Ca2+ influx. Arvin B, et al. **Br J Pharmacol** 1989 Sep;98(1):225–35

2–Chloroadenosine induction of vagally–mediated and atropine–resistant bronchomotor responses in anaesthetized guinea–pigs. Manzini S, et al. **Br J Pharmacol** 1990 Jun; 100(2):251–6

Occupancy of adenosine receptors on human neutrophils inhibits respiratory burst stimulated by ingestion of complement–coated particles and occupancy of chemoattractant but not Fc receptors. Kubersky SM, et al. **Inflammation** 1989 Oct;13(5):591–9

Is the adenosine receptor modulation of histamine–induced accumulation of inositol phosphates in cerebral cortical slices mediated by effects on calcium ion fluxes? Alexander SP, et al. **J Neurochem** 1990 Oct;55(4):1138–41

Regional difference in responsiveness of adenosine–sensitive cyclic AMP–generating systems in chronic epileptic cerebral cortex of the rat. Hattori Y. **J Neurochem** 1990 Oct;55(4):1294–303

Hemodynamic effects of adenosine agonists in the conscious spontaneously hypertensive rat. Webb RL, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):1090–9

2–Chloroadenosine reduces the N calcium current of cultured mouse sensory neurones in a pertussis toxin–sensitive manner. Gross RA, et al. **J Physiol (Lond)** 1989 Apr; 411:585–95

P–CHLOROAMPHETAMINE see under **AMPHETAMINES**

CHLOROBENZENES

Isotopically labeled chlorobenzenes as probes for the mechanism of cytochrome P–450 catalyzed aromatic hydroxylation. Korzekwa KR, et al. **Biochemistry** 1989 Nov 14;28(23):9019–27

METABOLISM

Hexachlorobenzene uptake by fathead minnows and macroinvertebrates in recirculating sediment/water systems. Schuytema GS, et al. **Arch Environ Contam Toxicol** 1990 Jan–Feb;19(1):1–9

Possible reactive intermediates in the oxidative biotransformation of hexachlorobenzene. van Ommen B, et al. **Drug Metabol Drug Interact** 1989;7(2–3):213–43 (88 ref.)

Biological monitoring of exposure to monochlorobenzene. Kusters E, et al. **Int Arch Occup Environ Health** 1990; 62(4):329–31

Mechanisms of bacterial degradation and transformation of chlorinated monoaromatic compounds. Häggblom M. **J Basic Microbiol** 1990;30(2):115–41 (165 ref.)

In vivo and in vitro interaction of 1,2–dichlorobenzene with nucleic acids and proteins of mice and rats. Colacci A, et al. **Tumori** 1990 Aug 31;76(4):339–44

The different genotoxicity of p–dichlorobenzene in mouse and rat: measurement of the in vivo and in vitro covalent interaction with nucleic acids. Lattanzi G, et al. **Tumori** 1989 Aug 31;75(4):305–10

Methylsulphone metabolites of m–dichlorobenzene as ligands for alpha 2u–globulin in rat kidney and urine. Larsen GL, et al. **Xenobiotica** 1990 Jan;20(1):7–17

PHARMACOKINETICS

Physiological pharmacokinetic model of hexachlorobenzene in the rat. Freeman RA, et al. **Health Phys** 1989;57 Suppl 1:139–45; discussion 145–7

Effects of cholesterol feeding on the distribution, metabolism, and accumulation of pentachlorobenzene in rats. Umegaki K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Aug; 35(4):291–301

PHARMACOLOGY

Distinction between octachlorostyrene and hexachlorobenzene in their potentials to induce ethoxyphenoxazone deethylase and cause porphyria in rats and mice. Smith AG, et al. **J Biochem Toxicol** 1986 Mar; 1(1):105–17

The efficacy of ceruminolytics [letter; comment] Freedman A. **J Otolaryngol** 1990 Apr;19(2):150–1 Comment on: J Otolaryngol 1989 Oct;18(6):263–7.

POISONING

Hexachlorobenzene episode in Turkey. Gocmen A, et al. **Biomed Environ Sci** 1989 Mar;2(1):36–43

[Hygienic regulation of the p–chlorobenzalchloride level in reservoir water] Pi'sko GT, et al. **Gig Sanit** 1989 Aug; (8):74–5 **(Rus)**

TOXICITY

Effects of chlorinated benzenes on diatom fatty acid composition and quantitative morphology. I. 1,2,4–Trichlorobenzene. Sicko–Goad L, et al. **Arch Environ Contam Toxicol** 1989 Sep;18(5):629–37

Effects of chlorinated benzenes on diatom fatty acid composition and quantitative morphology. II. 1,3,5–Trichlorobenzene. Sicko–Goad L, et al. **Arch Environ Contam Toxicol** 1989 Sep;18(5):638–46

Effects of chlorinated benzenes on diatom fatty acid composition and quantitative morphology. IV. Pentachlorobenzene and comparison with trichlorobenzene isomers. Sicko–Goad L, et al. **Arch Environ Contam Toxicol** 1989 Sep;18(5):656–68

Dose–response relationships in hexachlorobenzene–induced porphyria. Kennedy SW, et al. **Biochem Pharmacol** 1990 Sep 15;40(6):1381–8

Thyroid function and thyroxine metabolism in hexachlorobenzene–induced porphyria. Kleiman de Pisarev DL, et al. **Biochem Pharmacol** 1990 Mar 1;39(5):817–25

Sexual dimorphism of cytochrome P–450 induction by hexachlorobenzene in rats. Green JA, et al. **Biochem Soc Trans** 1989 Dec;17(6):1016–7

Calibration of the freshwater mussel, Elliptio complanata, for quantitative biomonitoring of hexachlorobenzene and octachlorostyrene in aquatic systems. Russell RW, et al. **Bull Environ Contam Toxicol** 1989 Oct;43(4):576–82

Biochemical, morphological and flow–cytometric evaluation of the effects of hexachlorobenzene on rat liver. Rizzardini M, et al. **Cell Biol Toxicol** 1990 Apr;6(2):185–203

Toxicology update. Willhite CC, et al. **J Appl Toxicol** 1990 Aug;10(4):307–10 (35 ref.)

Induction of cytochrome P–450 isozymes by hexachlorobenzene in rats and aromatic hydrocarbon (Ah)–responsive mice. Linko P, et al. **J Biochem Toxicol** 1986 Jun;1(2):95–107

Enhanced thyroxine metabolism in hexachlorobenzene–intoxicated rats. Kleiman de Pisarev DL, et al. **J Endocrinol Invest** 1989 Dec;12(11):767–72

Comparison of the toxicity of p–dichlorobenzene (p–DCB) administered to male F344 rats orally or by the inhalation route. Umemura T, et al. **Sci Rep Res Inst Tohoku Univ [Med]** 1989 Dec;36(1–4):1–9

Effects of ozone, hexachlorobenzene, and bis(tri–n–butyltin)oxide on natural killer activity in the rat lung. Van Loveren H, et al. **Toxicol Appl Pharmacol** 1990 Jan;102(1):21–33

Acetone compared to other ketones in modifying the hepatotoxicity of inhaled 1,2–dichlorobenzene in rats and mice. Brondeau MT, et al. **Toxicol Lett** 1989 Oct; 49(1):69–78

Sex difference in inhalation toxicity of p–dichlorobenzene (p–DCB) in rats. Umemura T, et al. **Toxicol Lett** 1990 Jul; 52(2):209–14

The excretion of chlorophenylmercapturic acid, chlorophenols and a guanine adduct in the urine of chlorobenzene–treated rats after phenobarbital pretreatment. Krewet E, et al. **Toxicology** 1989 Nov; 59(1):67–79

[Hygienic regulation of the p–chlorobenzalchloride level in reservoir water] Pi'sko GT, et al. **Gig Sanit** 1989 Aug; (8):74–5 **(Rus)**

[Actual nutrition and biochemical parameters of the food status of workers exposed to chlorobenzene] Feoktistova AI, et al. **Vopr Pitan** 1989 May–Jun;(3):25–9 (Eng. Abstr.) **(Rus)**

CHLOROBENZOATES

METABOLISM

Chemotaxis of Pseudomonas putida toward chlorinated benzoates. Harwood CS, et al. **Appl Environ Microbiol** 1990 May;56(5):1501–3

Reductive dechlorination of 3–chlorobenzoate is coupled to ATP production and growth in an anaerobic bacterium, strain DCB–1. Dolfing J. **Arch Microbiol** 1990;153(3):264–6

Degradation of mono– and dichlorobenzoic acid isomers by two natural isolates of Alcaligenes denitrificans. Miguez CB, et al. **Arch Microbiol** 1990;154(2):139–43

Strain DCB–1 conserves energy for growth from reductive dechlorination coupled to formate oxidation. Mohn WW, et al. **Arch Microbiol** 1990;153(3):267–71

Degradation of 2–chlorobenzoate by Pseudomonas cepacia 2CBS. Fetzner S, et al. **Biol Chem Hoppe Seyler** 1989 Nov; 370(11):1173–82

Metabolism of 3–chlorobenzoate by a Pseudomonas (diff) spp. Vora KA, et al. **Indian J Exp Biol** 1989 Nov; 27(11):967–71

Mechanisms of bacterial degradation and transformation of chlorinated monoaromatic compounds. Häggblom M. **J Basic Microbiol** 1990;30(2):115–41 (165 ref.)

PHARMACOKINETICS

Energy–dependent uptake of 4–chlorobenzoate in the coryneform bacterium NTB–1. Groenewegen PE, et al. **J Bacteriol** 1990 Jan;172(1):419–23

[Peripheral metabolism of Pseudomonal putida transconjugants degrading chloro– and methylaromatic compounds] Mal'tseva OV, et al. **Mikrobiologiia** 1990 Jan–Feb;59(1):163–5 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Chemical modification of spinach plastocyanin using 4–chloro–3,5–dinitrobenzoic acid: characterization of four singly–modified forms. Gross EL, et al. **Biochim Biophys Acta** 1990 Mar 15;1016(1):107–14

O–CHLOROBENZYLIDENE MALONITRILE see under **NITRILES**

CHLOROBUTANOL

ADMINISTRATION & DOSAGE

An open multiple dose study of Optrex Eye Lotion in eye irritation due to hayfever. Clark MJ, et al. **Br J Clin Pract** 1989 Oct;43(10):357–9

ADVERSE EFFECTS

Allergic contact dermatitis from Cerumenex in a child. Balato N, et al. **Contact Dermatitis** 1989 Nov;21(5):348–9

Pulmonary complications from ophthalmic preparations [published erratum appears in Mayo Clin Proc 1990 Jul;65(7):1032] Prakash UB, et al. **Mayo Clin Proc** 1990 Apr;65(4):521–9

PHARMACOLOGY

The airways effects of inhaled chlorbutol in asthmatic subjects. Windom H, et al. **Eur Respir J** 1990 Jun;3(6):725–7

Effects of heparin and chlorbutol on bacterial colonisation of intravascular cannulae in an in vitro model. Elliott TS, et al. **J Hosp Infect** 1989 Oct;14(3):193–200

The efficacy of ceruminolytics [letter; comment] Freedman A. **J Otolaryngol** 1990 Apr;19(2):150–1 Comment on: J Otolaryngol 1989 Oct;18(6):263–7.

CHLORODINITROBENZENE see **DINITROCHLOROBENZENE**

CHLOROFORM

Stroma–free hemoglobin solutions purified by chloroform and pasteurization. Pfistoupil TI, et al. **Int J Artif Organs** 1990 Jun;13(6):383–7

Efficient and effective root canal retreatment without chloroform. Zakariasen KL, et al. **J Can Dent Assoc** 1990 Jun;56(6):509–12

Selective extraction of outer-membrane proteins from membrane complexes of Pseudomonas maltophila by chloroform–methanol. Chin J, et al. **Vet Microbiol** 1990 Mar;22(1):69–78

[First experiments with chloroform in Spain (letter)] Vaca Miguel JM. **Rev Esp Anestesiol Reanim** 1990 Jan–Feb; 37(1):42–3 **(Spa)**

ANALOGS & DERIVATIVES

Oxidant-induced haemoprotein degradation in rat tissue slices: effect of bromotrichloromethane, antioxidants and chelators. Hidalgo FJ, et al. **Biochim Biophys Acta** 1990 Mar 1;1037(3):313–20

In vivo and in vitro 31P-NMR spectroscopy of rat liver treated with halocarbons. Towner RA, et al. **Biochim Biophys Acta** 1989 Oct 13;993(1):92–9

Perturbations in polyamines and related enzymes following chlordecone-potentiated bromotrichloromethane hepatotoxicity. Rao SB, et al. **J Biochem Toxicol** 1990 Spring;5(1):23–32

Metabolism-based covalent bonding of the heme prosthetic group to its apoprotein during the reductive debromination of BrCCl3 by myoglobin. Osawa Y, et al. **J Biol Chem** 1990 Jun 25;265(18):10340–6

ANALYSIS

Identification of chloroform formed by disinfection with sodium hypochlorite and spirit. Teien G, et al. **Acta Pharm Nord** 1989;1(5):311

[Exposure to chloroform in persons frequenting an indoor swimming pool] Olivo R, et al. **Ann Ig** 1989 Jan–Apr; 1(1–2):173–83 (Eng. Abstr.) **(Ita)**

BLOOD

Plasma chloroform concentrations in swimmers using indoor swimming pools. Aggazzotti G, et al. **Arch Environ Health** 1990 May–Jun;45(3):175–9

HISTORY

[The tragic and marvelous history of anesthesia] Arnulf G. **Presse Med** 1989 Sep 30;18(30):1485–6 **(Fre)**

METABOLISM

Multiple activation of chloroform in hepatic microsomes from uninduced B6C3F1 mice. Testai E, et al. **Toxicol Appl Pharmacol** 1990 Jul;104(3):496–503

PHARMACOKINETICS

Development of a physiologically based pharmacokinetic model for chloroform. Corley RA, et al. **Toxicol Appl Pharmacol** 1990 May;103(3):512–27

PHARMACOLOGY

[Structure and biological features of the temperate phage of Bacillus thuringiensis var. galleriae 69/9, sensitive to chloroform] Koretskaia NG, et al. **Mol Gen Mikrobiol Virusol** 1989 Aug;(8):27–34 (Eng. Abstr.) **(Rus)**

POISONING

Interactions of water contaminants. I. Plasma enzyme activity and response surface methodology following gavage administration of CCl4 and CHCl3 or TCE singly and in combination in the rat. Borzelleca JF, et al. **Fundam Appl Toxicol** 1990 Apr;14(3):477–90

TOXICITY

Continuous in vivo measurement of hepatic lipoperoxidation using chemiluminescence: halothane and chloroform compared. Cohen PJ, et al. **Anesth Analg** 1990 Mar; 70(3):296–8

Potentiation of chloroform-induced hepatotoxicity by methyl isobutyl ketone and two metabolites. Vézina M, et al. **Can J Physiol Pharmacol** 1990 Aug;68(8):1055–61

A CCl4/CHCl3 interaction study in isolated hepatocytes: selection of a vehicle. O'Hara TM, et al. **Fundam Appl Toxicol** 1989 Oct;13(3):605–15

Evidence for the involvement of organelles in the mechanism of ketone-potentiated chloroform-induced hepatotoxicity. Hewitt LA, et al. **Liver** 1990 Feb;10(1):35–48

Halomethane hepatotoxicity: induction of lipid peroxidation and inactivation of cytochrome P-450 in rat liver microsomes under low oxygen partial pressures. de Groot H, et al. **Toxicol Appl Pharmacol** 1989 Mar 1;97(3):530–7

Toxic interactions between carbon tetrachloride and chloroform in cultured rat hepatocytes. Lamb RG, et al. **Toxicol Appl Pharmacol** 1989 Oct;101(1):106–13

CHLOROGENIC ACID

ANALYSIS

[Determination of choleretic constituents in Artemisia scoparia Waldst. et Kit. by TLC densitometry] Zhang QW, et al. **Yao Hsueh Hsueh Pao** 1989 Jan;24(1):43–7 (Eng. Abstr.) **(Chi)**

THERAPEUTIC USE

Inhibitory effects of chlorogenic acid, reserpine, polyprenoic acid (E-5166), or coffee on hepatocarcinogenesis in rats and hamsters. Tanaka T, et al. **Basic Life Sci** 1990;52:429–40

CHLOROGUANIDE

ADMINISTRATION & DOSAGE

Antimalarial prophylaxis in pregnant Nigerian women [letter; comment] Fleming AF. **Lancet** 1990 Jan 6;335(8680):45 Comment on: Lancet 1989 Oct 7;2(8667):830–4.

Diagnosis of malaria during chloroquine/proguanil prophylaxis [letter] [see comments] Hengy C, et al. **Lancet** 1990 Jan 13;335(8681):121 Comment in: Lancet 1990 Feb 24;335(8687):472.

ADVERSE EFFECTS

Proguanil, chloroquine, and mouth ulcers [letter] Drysdale SF, et al. **Lancet** 1990 Jan 20;335(8682):164

ANALOGS & DERIVATIVES

Sensitivity of Plasmodium falciparum to chlorproguanil in Gambian children after five years of continuous chemoprophylaxis. Allen SJ, et al. **Trans R Soc Trop Med Hyg** 1990 Mar–Apr;84(2):218

In vitro activity of proguanil, chlorproguanil and their main metabolites against Plasmodium falciparum. Eriksson B, et al. **Trans R Soc Trop Med Hyg** 1989 Jul–Aug;83(4):488

A comparative study of Lapudrine (chlorproguanil) and Maloprim (pyrimethamine and dapsone) as chemoprophylactics against malaria in Gambian children. Greenwood BM, et al. **Trans R Soc Trop Med Hyg** 1989 Mar–Apr;83(2):182–8

ANALYSIS

Assay method for the simultaneous determination of proguanil, chloroquine and their major metabolites in biological fluids. Taylor RB, et al. **J Chromatogr** 1990 May 18;527(2):490–7

PHARMACOKINETICS

Multiple-dose kinetics in healthy volunteers and in vitro antimalarial activity of proguanil plus dapsone. Edstein MD, et al. **Chemotherapy** 1990;36(3):169–76

Excretion of proguanil in human saliva. Onyeji CO, et al. **J Pharm Pharmacol** 1989 Dec;41(12):872–3

PHARMACOLOGY

In vitro activity of proguanil, chlorproguanil and their main metabolites against Plasmodium falciparum. Eriksson B, et al. **Trans R Soc Trop Med Hyg** 1989 Jul–Aug;83(4):488

THERAPEUTIC USE

Chemoprophylaxis of malaria: underlying principles and their realization. Wernsdorfer WH. **Med Trop (Mars)** 1990 Jan–Mar;50(1):119–24 (25 ref.)

Proguanil–sulphonamide for malaria prophylaxis. Karwacki JJ, et al. **Trans R Soc Trop Med Hyg** 1990 Jan–Feb; 84(1):55–7

[Difficulties in the prevention of malaria in Spain continue (letter)] Gómez-Olivé X, et al. **Med Clin (Barc)** 1990 Mar 31;94(12):477–8 **(Spa)**

CHLOROHYDRINS

ADVERSE EFFECTS

Mortality of workers potentially exposed to epichlorohydrin. Enterline PE, et al. **Br J Ind Med** 1990 Apr;47(4):269–76

Morbidity prevalence study of workers with potential exposure to epichlorohydrin. Tsai SP, et al. **Br J Ind Med** 1990 Jun;47(6):392–9

Occupational sensitization to epichlorohydrin (ECH) and bisphenol-A during the manufacture of epoxy resin. van Joost T, et al. **Contact Dermatitis** 1990 Feb;22(2):125–6

[Development of immunologic deficiency conditions and sensitization in industrial workers and methodologic approach to their detection and evaluation] Dueva LA, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):76–82 (Eng. Abstr.) **(Rus)**

BLOOD

Determination of trichloroethanol, the active metabolite of chloral hydrate, in plasma by liquid chromatography. Gupta RN. **J Chromatogr** 1990 Feb 2;500:655–9

METABOLISM

Hepatic fatty acid conjugation of 2-chloroethanol and 2-bromoethanol in rats. Kaphalia BS, et al. **J Biochem Toxicol** 1989 Fall;4(3):183–8

PHARMACOLOGY

Effect of alpha-chlorohydrin on in situ pH in rat testis and epididymis. Caflisch CR, et al. **Contraception** 1990 Feb; 41(2):207–12

The automated analysis of rat sperm motility following subchronic epichlorohydrin administration: methodologic and statistical considerations. Toth GP, et al. **J Androl** 1989 Sep–Oct;10(5):401–15

CHLOROMERCURIBENZOATES

PHARMACOLOGY

Activation of Cl-/OH- exchange by parachloromercuribenzoic acid in rabbit renal brush-border membranes. Karniski LP. **J Membr Biol** 1989 Nov; 112(1):59–66

Effect of p-mercuribenzoate on the subestimation of angiotensin-converting enzyme measurement during chick retina development. Nunes-Mamede ML, et al. **J Neurosci Methods** 1990 Jan;31(1):7–11

CHLOROMERCURINITROPHENOLS see under **PHENYLMERCURY COMPOUNDS**

CHLOROMERCURIPHENYLSULFONATE see under **PHENYLMERCURY COMPOUNDS**

CHLOROMETHYL METHYL ETHER see under **METHYL ETHERS**

CHLOROPHENOLS

Degradation of pentachlorophenol by polyurethane-immobilized Flavobacterium cells. O'Reilly KT, et al. **Appl Environ Microbiol** 1989 Sep;55(9):2113–8

Use of phenolic and chlorocresol disinfectants near dairy premises [letter; comment] Sumner J. **Vet Rec** 1990 Mar 10;126(10):249 Comment on: Vet Rec 1990 Feb 3;126(5):121.

X-ray and fluorescence studies on phospholipid bilayers. IX. Interactions with pentachlorophenol. Suwalsky M, et al. **Z Naturforsch [C]** 1990 Mar–Apr;45(3–4):265–72

ADVERSE EFFECTS

Chloracne associated with employment in the production of pentachlorophenol. O'Malley MA, et al. **Am J Ind Med** 1990;17(4):411–21

Pentachlorophenol-associated aplastic anemia, red cell aplasia, leukemia and other blood disorders. Roberts HJ. **J Fla Med Assoc** 1990 Feb;77(2):86–90 (32 ref.)

A comparison of exposure estimates by worker raters and industrial hygienists. Teschke K, et al. **Scand J Work Environ Health** 1989 Dec;15(6):424–9

ANALYSIS

The use of Brauman's least squares approach for the quantification of deuterated chlorophenols. Korzekwa K, et al. **Biomed Environ Mass Spectrom** 1990 Apr;19(4):211–7

Detection and isolation of pentachlorophenol in oil samples associated with the Spanish toxic oil syndrome. Guitart R, et al. **Bull Environ Contam Toxicol** 1990 Aug;45(2):181–8

Effect of solvents on the photodegradation rates of octachlorodibenzo-p-dioxin. Hung LS, et al. **Bull Environ Contam Toxicol** 1990 Mar;44(3):380–6

Chemical derivatization analysis of phenols. Part VI. Determination of chlorinated phenolics in pulp and paper effluents. Lee HB, et al. **J Assoc Off Anal Chem** 1989 Nov–Dec;72(6):979–84

Use of polymeric sorbents for the off-line preconcentration of priority pollutant phenols from water for high-performance liquid chromatographic analysis. Gawdzik B, et al. **J Chromatogr** 1990 Jun 15;509(1):135–40

Determination of 2,4-dichlorophenol in urine and serum by high performance liquid chromatography and gas chromatography. Baumann A, et al. **Pharmazie** 1990 Mar; 45(3):218–9

METABOLISM

Anaerobic dechlorination of 2,4-dichlorophenol in freshwater sediments in the presence of sulfate. Kohring GW, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2735–7

Monohydroxylation of phenol and 2,5-dichlorophenol by toluene dioxygenase in Pseudomonas putida F1. Spain JC, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2648–52

Reductive dehalogenation of dichloroanilines by anaerobic microorganisms in fresh and dichlorophenol-acclimated pond sediment. Struijs J, et al. **Appl Environ Microbiol** 1989 Oct;55(10):2527–31

Degradation of pentachlorophenol by a Flavobacterium species grown in continuous culture under various nutrient limitations. Topp E, et al. **Appl Environ Microbiol** 1990 Feb;56(2):541–4

Sequential anaerobic degradation of 2,4-dichlorophenol in freshwater sediments. Zhang X, et al. **Appl Environ Microbiol** 1990 Apr;56(4):1119–27

Interaction of chlorinated phenols with thyroxine binding sites of human transthyretin, albumin and thyroid binding globulin. van den Berg KJ. **Chem Biol Interact** 1990; 76(1):63–75

Enzymatic dehalogenation of pentachlorophenol by extracts from Arthrobacter sp. strain ATCC 33790. Schenk T, et al. **J Bacteriol** 1989 Oct;171(10):5487–91

Mechanisms of bacterial degradation and transformation of chlorinated monoaromatic compounds. Häggblom M.

J Basic Microbiol 1990;30(2):115–41 (165 ref.)

PHARMACOKINETICS

Effect of pH on the accumulation kinetics of pentachlorophenol in goldfish. Stehly GR, et al. **Arch Environ Contam Toxicol** 1990 May–Jun;19(3):464–70

Some pharmacokinetic data of the liver–fluke anthelmintic nitroclofene in ruminant and pre–ruminant kids. Ladage CA, et al. **J Vet Pharmacol Ther** 1989 Dec;12(4):451–4

PHARMACOLOGY

Vitamin K–dependent carboxylase: inhibitory action of polychlorinated phenols. Grossman CP, et al. **Biochem Pharmacol** 1990 Sep 15;40(6):1351–5

The role of sulfation in the metabolic activation of N–hydroxy–4'–fluoro–4–acetylaminobiphenyl. van de Poll ML, et al. **Carcinogenesis** 1989 Dec;10(12):2285–91

Uncoupling properties of a chlorophenol series on Acer cell suspensions: a QSAR study. Ravanel P, et al. **Ecotoxicol Environ Safety** 1989 Dec;18(3):337–45

POISONING

Association between soft tissue sarcomas, malignant lymphomas, and phenoxy herbicides/chlorophenols: evidence from occupational cohort studies. Johnson ES. **Fundam Appl Toxicol** 1990 Feb;14(2):219–34 (124 ref.)

Aplastic anaemia associated with organochlorine pesticide: case reports and review of evidence. Rugman FP, et al. **J Clin Pathol** 1990 Feb;43(2):98–101

TOXICITY

Toxicity test procedures for Hyalella azteca, and chronic toxicity of cadmium and pentachlorophenol to H. azteca, Gammarus fasciatus, and Daphnia magna. Borgmann U, et al. **Arch Environ Contam Toxicol** 1989 Sep;18(5):756–64

Effects of pentachlorophenol and other chemical preservatives on the health of wood–treating workers in Hawaii. Gilbert FI Jr, et al. **Arch Environ Contam Toxicol** 1990 Jul–Aug;19(4):603–9

Bovine spermatozoa as an in vitro model for studies on the cytotoxicity of chemicals: effects of chlorophenols. Seibert H, et al. **Cell Biol Toxicol** 1989 Nov;5(3):315–30

Development of a standardized reproduction toxicity test with the earthworm species Eisenia fetida andrei using copper, pentachlorophenol and 2,4–dichloroaniline. van Gestel CA, et al. **Ecotoxicol Environ Safety** 1989 Dec; 18(3):305–12

Induction of prophage lambda by chlorophenols. DeMarini DM, et al. **Environ Mol Mutagen** 1990;15(1):1–9

Teratogenic assessment of 2,4–dichlorophenol in Fischer 344 rats. Rodwell DE, et al. **Fundam Appl Toxicol** 1989 Nov; 13(4):635–40

The effect of 2,4–dichlorophenol on growth and plasmidic beta–lactamase activity in Escherichia coli. Espigares M, et al. **J Appl Toxicol** 1989 Dec;9(6):427–31

The effect of pentachlorophenol and its metabolite tetrachlorohydroquinone on cell growth and the induction of DNA damage in Chinese hamster ovary cells. Ehrlich W. **Mutat Res** 1990 Aug;244(4):299–302

[Accumulation of chlorophenols in fishes in wood–pulp industry waste waters] Grachev MA, et al. **Dokl Akad Nauk SSSR** 1989;309(2):508–11 **(Rus)**

URINE

Biological monitoring of exposure to monochlorobenzene. Kusters E, et al. **Int Arch Occup Environ Health** 1990; 62(4):329–31

The excretion of chlorophenylmercapturic acid, chlorophenols and a guanine adduct in the urine of chlorobenzene–treated rats after phenobarbital pretreatment. Krewet E, et al. **Toxicology** 1989 Nov; 59(1):67–79

CHLOROPHENYL GABA see BACLOFEN

P–CHLOROPHENYLALANINE

ANALOGS & DERIVATIVES

Tryptophan hydroxylase activity in hypothalamus and brainstem of neonatal and adult rats treated with hydrocortisone or parachlorophenylalanine. Park DH, et al. **Neurosci Res** 1989 Oct;7(1):76–80

PHARMACOLOGY

Serotonin depletion with P–chlorophenylalanine in the cat: effects on carbachol–induced defensive behavior and regional brain amine content. Romaniuk A, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(4):130–40

Effects of p–chlorophenylalanine on microvascular permeability changes in spinal cord trauma. An experimental study in the rat using 131I–sodium and lanthanum tracers. Olsson Y, et al. **Acta Neuropathol (Berl)** 1990;79(6):595–603

Increased 5–hydroxytryptamine immunoreactivity in traumatized spinal cord. An experimental study in the rat. Sharma HS, et al. **Acta Neuropathol (Berl)** 1990;80(1):12–7

Electrical stimulation of the gastrocnemius muscle in the spontaneously hypertensive rat increases the pain threshold: role of different serotonergic receptors. Hoffmann P, et al. **Acta Physiol Scand** 1990 Feb;138(2):125–31

Persistent effects of a serotonin depletor (p–chlorophenylalanine) in regenerated planaria (Dugesia dorotocephala). Kimmel HD, et al. **Behav Neurosci** 1990 Feb;104(1):127–34

Effect of phenylalanine, p–chlorophenylalanine and alpha–methylphenylalanine on glucose uptake in vitro by the brain of young rats. Rodrigues NR, et al. **Biochem Soc Trans** 1990 Jun;18(3):419

In vivo tyrosine hydroxylation rate in retina: effects of phenylalanine and tyrosine administration in rats pretreated with p–chlorophenylalanine. Fernstrom MH, et al. **Brain Res** 1989 Oct 16;499(2):291–8

The analgesic effect of tricyclic antidepressants. Tura B, et al. **Brain Res** 1990 Jun 4;518(1–2):19–22

Tryptophan hydroxylase inhibition increases preprotachykinin mRNA in developing and adult medullary raphe nuclei. Walker PD, et al. **Brain Res Mol Brain Res** 1990 Jul;8(2):113–9

p–chlorophenylalanine attenuates the pituitary–adrenocortical response to 5–HT1A receptor agonists in mice. Matsuda T, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):295–7

Subchronic administration of para–chlorophenylalanine enhances serotonin–stimulated phosphoinositide hydrolysis in rat hippocampal slices. Kusumi I, et al. **J Neural Transm Gen Sect** 1990;80(3):181–8

Hypoalgesia induced by counter–irritation is not affected by pCPA pretreatment. Calvino B. **Pharmacol Biochem Behav** 1990 Mar;35(3):731–4

Effect of pCPA on nicotine–induced analgesia. Cooley JE, et al. **Pharmacol Biochem Behav** 1990 Jun;36(2):413–5

Effects of p–chlorophenylalanine and scopolamine on retention of habits in rats. Vanderwolf CH, et al. **Pharmacol Biochem Behav** 1990 Apr;35(4):847–53

Discriminative stimulus properties of 8–OH–DPAT in rats are not altered by pretreatment with para–chlorophenylalanine. Kalkman HO. **Psychopharmacology (Berl)** 1990;101(1):39–42

Endocrinological and behavioural effects of p–chlorophenylalanine (PCPA) oral administration to broody turkey hens (Meleagris gallopavo). Guémené D, et al. **Reprod Nutr Dev** 1989;29(4):469–76

THERAPEUTIC USE

Edema formation and cellular alterations following spinal cord injury in the rat and their modification with p–chlorophenylalanine. Sharma HS, et al. **Acta Neuropathol (Berl)** 1990;79(6):604–10

CHLOROPHOS see TRICHLORFON

CHLOROPHYLL

see related

PHOTOSYNTHESIS

The contribution of the carotenoid to the visible circular dichroism of the light–harvesting antenna of Rhodospirillum rubrum. Lozano RM, et al. **Biochem J** 1990 Sep 1;270(2):469–72

EPR signals from modified charge accumulation states of the oxygen evolving enzyme in Ca2+–deficient photosystem II. Boussac A, et al. **Biochemistry** 1989 Nov 14;28(23):8984–9

A Mössbauer analysis of the low–potential iron–sulfur center in photosystem I: spectroscopic evidence that FX is a [4Fe–4S] cluster. Petrouleas V, et al. **Biochemistry** 1989 Nov 14;28(23):8980–3

Extrinsic 33–kilodalton protein of spinach oxygen–evolving complexes: kinetic studies of folding and disulfide reduction. Tanaka S, et al. **Biochemistry** 1989 Sep 5; 28(18):7188–93

Molecular basis of the heat denaturation of photosystem II. Thompson LK, et al. **Biochemistry** 1989 Aug 8; 28(16):6686–95

Chlorophyll a fluorescence lifetime distributions in open and closed photosystem II reaction center preparations. Govindjee, et al. **Biochim Biophys Acta** 1990 Feb 2; 1015(2):173–9

Structure of donor side components in photosystem II predicted by computer modelling. Svensson B, et al. **EMBO J** 1990 Jul;9(7):2051–9

Two–dimensional crystals of the photosystem II reaction center complex from higher plants. Bassi R, et al. **Eur J Cell Biol** 1989 Oct;50(1):84–93

Polypeptide composition of higher plant photosystem I complex. Identification of psaI, psaJ and psaK gene products. Ikeuchi M, et al. **FEBS Lett** 1990 Apr 24; 263(2):274–8

Amino–terminal sequence of the 21 kDa apoprotein of a minor light–harvesting pigment–protein complex of the Photosystem II antenna (LHC IId/CP24). Morishige DT, et al. **FEBS Lett** 1990 May 21;264(2):239–42

Modified reaction centers from Rhodobacter sphaeroides R26. 2: Bacteriochlorophylls with modified C–3 substituents at sites BA and BB. Struck A, et al. **FEBS Lett** 1990 Jul 30;268(1):180–4

Lumen–side topography of the alpha–subunit of the chloroplast cytochrome b–559. Tae GS, et al. **FEBS Lett** 1989 Dec 18;259(1):161–4

Prediction of the conformation of D1/D2 heterodimer of photosynthetic reaction centre II using a modified Chou–Fasman method. Rawal RK, et al. **Indian J Biochem Biophys** 1990 Jun;27(3):155–8

Photophysical studies of pheophorbide a and pheophytin a. Phosphorescence and photosensitized singlet oxygen luminescence. Krasnovsky AA Jr, et al. **J Photochem Photobiol B** 1990 Apr 15;5(2):245–54

N–terminal amino acid sequence analysis of small subunits of photosystem I reaction center complex from a thermophilic cyanobacterium, Synechococcus elongatus Nägeli. Enami I, et al. **Protein Seq Data Anal** 1990 Jul; 3(3):257–62

ANALOGS & DERIVATIVES

Inhibition of 1,2–dimethylhydrazine–induced nuclear damage in rat colonic epithelium by chlorophyllin. Robins EW, et al. **Anticancer Res** 1989 Jul–Aug;9(4):981–5

Antimutagenic effects of chlorophyllin. Bronzetti G, et al. **Basic Life Sci** 1990;52:463–8

Inhibition of the genotoxicity of 3–amino–1–methyl–5H–pyrido[4,3–b]indole (Trp–P–2) in Drosophila by chlorophyll. Negishi T, et al. **Basic Life Sci** 1990;52:341–4

Red shift of absorption maxima in chlorobiineae through enzymic methylation of their antenna bacteriochlorophylls. Bobe FW, et al. **Biochemistry** 1990 May 8;29(18):4340–8

Biosynthetic studies of substituent homologation in bacteriochlorophylls c and d. Huster MS, et al. **Biochemistry** 1990 May 8;29(18):4348–55

Probing the bacteriochlorophyll binding site by reconstitution of the light–harvesting complex of Rhodospirillum rubrum with bacteriochlorophyll a analogues. Parkes–Loach PS, et al. **Biochemistry** 1990 Mar 27;29(12):2951–60

Temperature–dependent conformational changes in the bacteriopheophytins of Rhodobacter sphaeroides reaction centers. Peloquin JM, et al. **Biochemistry** 1990 May 22; 29(20):4892–8

Monomeric bacteriochlorophyll is required for the triplet energy transfer between the primary donor and the carotenoid in photosynthetic bacterial reaction centers. Frank HA, et al. **Biochim Biophys Acta** 1989 Sep 28; 976(2–3):222–32

Selective solubilization of chlorosome proteins in Chloroflexus aurantiacus. Eckhardt A, et al. **FEBS Lett** 1990 Jul 16;267(2):199–202

A protein conformational change associated with the photoreduction of the primary and secondary quinones in the bacterial reaction center. Nabedryk E, et al. **FEBS Lett** 1990 Jun 18;266(1–2):59–62

Promoter mapping and nucleotide sequence of the bchC bacteriochlorophyll biosynthesis gene from Rhodobacter capsulatus. Wellington CL, et al. **Gene** 1989 Nov 30; 83(2):251–61

Localizing efficiency of [48V]vanadyl–pheophorbide in tumor as a new tumor imaging agent. Iwai K, et al. **Int J Rad Appl Instrum [B]** 1989;16(8):783–9

Specific inhibition of antenna bacteriochlorophyll synthesis in Chlorobium vibrioforme by anesthetic gases. Ormerod JG, et al. **J Bacteriol** 1990 Mar;172(3):1352–60

Gene encoding the 5.7–kilodalton chlorosome protein of Chloroflexus aurantiacus: regulated message levels and a predicted carboxy–terminal protein extension. Theroux SJ, et al. **J Bacteriol** 1990 Aug;172(8):4497–504

Rhodobacter capsulatus genes involved in early steps of the bacteriochlorophyll biosynthetic pathway. Yang ZM, et al. **J Bacteriol** 1990 Sep;172(9):5001–10

Generation of free radicals by photoexcitation of pheophorbide alpha, haematoporphyrin and protoporphyrin. Haseloff RF, et al. **J Photochem Photobiol B** 1989 Aug;3(4):593–602

Photophysical studies of pheophorbide a and pheophytin a. Phosphorescence and photosensitized singlet oxygen luminescence. Krasnovsky AA Jr, et al. **J Photochem Photobiol B** 1990 Apr 15;5(2):245–54

Photosensitizing properties of phorbides. Röder B. **J Photochem Photobiol B** 1990 May;5(3–4):519–21

In vivo effects of single or combined dietary antimutagens on mutagen–induced chromosomal aberrations. Renner HW. **Mutat Res** 1990 Jun;244(2):185–8

Evidence for a radioprotective effect of chlorophyllin in Drosophila. Zimmering S, et al. **Mutat Res** 1990 Sep; 245(1):47–9

Chlorophyll derivatives—a new photosensitizer for photodynamic therapy of cancer in mice. Park YJ, et al. **Yonsei Med J** 1989 Sep;30(3):212–8

[Evaluation of the efficacy of photodynamic therapy on experimental hepatocellular carcinoma—using local injection of photosensitizer] Yamashita Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Apr 20;25(4):770–5 (Eng. Abstr.) **(Jpn)**

[Evaluation of photodynamic therapy using pheophorbide–a as a photosensitizer] Yamashita Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1990 Jun 20;25(6):1123–8 (Eng. Abstr.) **(Jpn)**

[The quantitative study of inhibitory effect of pentosan polysulfate and chlorophyllin on the experimental calcium oxalate stone] Miyazawa K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jun;80(6):861–9 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Particles of photosystem 2 contain plantacyanin. Nersissian AM, et al. **Biochem Biophys Res Commun** 1990 Apr 16; 168(1):232–9

Spin-label ESR studies of lipid–protein interactions in thylakoid membranes. Li G, et al. **Biochemistry** 1989 Sep 5;28(18):7446–52

EXAFS structural study of FX, the low-potential Fe–S center in photosystem I. McDermott AE, et al. **Biochemistry** 1989 Oct 3;28(20):8056–9

Fourier transform infrared difference spectroscopy shows no evidence for an enolization of chlorophyll a upon cation formation either in vitro or during P700 photooxidation. Nabedryk E, et al. **Biochemistry** 1990 Apr 3;29(13):3242–7

EPR characterization of the CP47–D1–D2–cytochrome b–559 complex of photosystem II. Petersen J, et al. **Biochemistry** 1990 Apr 3;29(13):3226–31

Molecular weight determination of an active photosystem I preparation from a thermophilic cyanobacterium, Synechococcus elongatus. Schafheutle ME, et al. **Biochemistry** 1990 Feb 6;29(5):1216–25

Chlorophylls in foods. Schwartz SJ, et al. **Crit Rev Food Sci Nutr** 1990;29(1):1–17 (199 ref.)

Chlorophyll a fluorescence measurements of isolated spinach thylakoids obtained by using single-laser-based flow cytometry. Xu C, et al. **Cytometry** 1990;11(3):349–58

Differential biogenesis of photosystem–II in mesophyll and bundle-sheath cells of 'malic' enzyme NADP(+)-type C4 plants. A comparative protein and RNA analysis. Oswald A, et al. **Eur J Biochem** 1990 May 31;190(1):185–94

Correlation of some published amino acid sequences for photosystem I polypeptides to a 17 kDa LHCI pigment–protein and to subunits III and IV of the core complex. Anandan S, et al. **FEBS Lett** 1989 Oct 9; 256(1–2):150–4

Chloroplast transit peptides from the green alga Chlamydomonas reinhardtii share features with both mitochondrial and higher plant chloroplast presequences. Franzén LG, et al. **FEBS Lett** 1990 Jan 29;260(2):165–8

Immunological identification and quantification of light harvesting chlorophyll a/b protein of Chlorella prototheocoides. Sasidharan A, et al. **Indian J Biochem Biophys** 1990 Feb;27(1):1–4

Localization of light-harvesting complex II to the occluded surfaces of photosynthetic membranes. Hinshaw JE, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1725–31

[Comparative analysis of sequences of protein D2 from photosystem 2 reaction center and various Ca 2+-binding proteins] Semin BK, et al. **Mol Biol (Mosk)** 1989 Sep–Oct; 23(5):1350–4 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Effect of metal chelators on thermoluminescence peaks of spinach chloroplasts and photosystem II particles: probing the water oxidation cycle with 8-hydroxyquinoline. Hegde U, et al. **Indian J Biochem Biophys** 1990 Feb;27(1):5–8

BIOSYNTHESIS

Chlorophyll-free chromoplasts from daffodil contain most of the enzymes for chlorophyll synthesis in a highly active form. Lützow M, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):94–100

Co-ordination of chromophore–apoprotein synthesis in the developing leaf of Avena sativa L. Bennett AP, et al. **Biochem Soc Trans** 1990 Jun;18(3):499–500

A novel metabolic form of the 32 kDa-D1 protein in the grana-localized reaction center of photosystem II. Callahan FE, et al. **J Biol Chem** 1990 Sep 15;265(26):15357–60

Purification of the glutamyl-tRNA reductase from Chlamydomonas reinhardtii involved in delta-aminolevulinic acid formation during chlorophyll biosynthesis. Chen MW, et al. **J Biol Chem** 1990 Mar 5; 265(7):4058–63

In vitro synthesis of chlorophyll a in the dark triggers accumulation of chlorophyll a apoproteins in barley etioplasts. Eichacker LA, et al. **J Biol Chem** 1990 Aug 15;265(23):13566–71

DEFICIENCY

Temperature sensitivity as a general phenomenon in a collection of chlorophyll-deficient mutants of sweetclover (Melilotus alba). Yang CM, et al. **Biochem Genet** 1990 Feb; 28(1–2):31–40

GENETICS

Glu-69 of the D2 protein in photosystem II is a potential ligand to Mn involved in photosynthetic oxygen evolution. Vermaas W, et al. **Biochemistry** 1990 Jun 5;29(22):5325–32

Sequence and transcriptional analysis of the barley ctDNA region upstream of psbD–psbC encoding trnK(UUU), rps16, trnQ(UUG), psbK, psbI, and trnS(GCU). Berends Sexton T, et al. **Curr Genet** 1990 May;17(5):445–54

Evolutionary relationship of psbA genes from cyanobacteria, cyanelles and plastids. Janssen I, et al. **Curr Genet** 1989 May;15(5):335–40

The psbA-gene from a red alga resembles those from cyanobacteria and cyanelles. Maid U, et al. **Curr Genet** 1990 Mar;17(3):255–9

Nucleotide sequences of cDNA clones encoding the entire precursor polypeptide for subunit VI and of the plastome-encoded gene for subunit VII of the photosystem I reaction center from spinach. Steppuhn J, et al. **Curr Genet** 1989 Aug;16(2):99–108

Blue light regulates the accumulation of two psbD–psbC transcripts in barley chloroplasts. Gamble PE, et al. **EMBO J** 1989 Oct;8(10):2785–94

Anti-sense RNA efficiently inhibits formation of the 10 kd polypeptide of photosystem II in transgenic potato plants: analysis of the role of the 10 kd protein. Stockhaus J, et al. **EMBO J** 1990 Sep;9(9):3013–21

Differential sensitivity of bicarbonate-reversible formate effects on herbicide-resistant mutants of Synechocystis 6714. Govindjee, et al. **FEBS Lett** 1990 Jul 16;267(2):273–6

Modification of a glnB-like gene product by photosynthetic electron transport in the cyanobacterium Synechococcus 6301. Harrison MA, et al. **FEBS Lett** 1990 May 7; 264(1):25–8

Photosystem I reaction-centre proteins contain leucine zipper motifs. A proposed role in dimer formation. Webber AN, et al. **FEBS Lett** 1990 May 7;264(1):1–4

Different and rapid responses of four cyanobacterial psbA transcripts to changes in light intensity. Bustos SA, et al. **J Bacteriol** 1990 Apr;172(4):1998–2004

Structure and targeted mutagenesis of the gene encoding 8-kDa subunit of photosystem I from the cyanobacterium Synechocystis sp. PCC 6803 [published erratum appears in J Biol Chem 1990 Jan 25;265(3):1821] Chitnis PR, et al. **J Biol Chem** 1989 Nov 5;264(31):18374–80

Insertional inactivation of the gene encoding subunit II of photosystem I from the cyanobacterium Synechocystis sp. PCC 6803. Chitnis PR, et al. **J Biol Chem** 1989 Nov 5; 264(31):18381–5

Mutations at the transit peptide–mature protein junction separate two cleavage events during chloroplast import of the chlorophyll a/b-binding protein. Clark SE, et al. **J Biol Chem** 1989 Oct 15;264(29):17544–50

Transport of proteins into chloroplasts. Import and maturation of precursors to the 33–, 23–, and 16-kDa proteins of the photosynthetic oxygen-evolving complex. James HE, et al. **J Biol Chem** 1989 Nov 25;264(33):19573–6

Movement of newly imported light-harvesting chlorophyll-binding protein from unstacked to stacked thylakoid membranes is not affected by light treatment or absence of amino-terminal threonines. Kohorn BD, et al. **J Biol Chem** 1990 Feb 5;265(4):2118–23

Light to dark transition modulates the phase of antenna chlorophyll protein gene expression. Lam E, et al. **J Biol Chem** 1989 Dec 5;264(34):20175–6

The primary structure of a 4.0-kDa photosystem I polypeptide encoded by the chloroplast psaI gene. Scheller HV, et al. **J Biol Chem** 1989 Nov 5;264(31):18402–6

Characterization of phytochrome-regulated gene expression in a photoautotrophic cell suspension: possible role for calmodulin. Lam E, et al. **Mol Cell Biol** 1989 Nov; 9(11):4819–23

Isolation and characterization of cDNA clones encoding photosystem I subunits with molecular masses 11.0, 10.0 and 8.4 kDa from Chlamydomonas reinhardtii. Franzén LG, et al. **Mol Gen Genet** 1989 Oct;219(1–2):137–44

Nucleotide sequence of an apple nuclear gene encoding a light-harvesting chlorophyll a/b binding polypeptide of photosystem II. Chen HQ, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):679

Nucleotide sequence of the psbI gene of the cyanobacterium, Anacystis nidulans 6301. Chen JC, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):4017

Nucleotide sequence of the psbK gene of the cyanobacterium, Anacystis nidulans 6301. Fukuda M, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7521

Nucleotide sequence of the chloroplast psbI and trnS-GCU genes from mustard (Sinapis alba). Neuhaus H, et al. **Nucleic Acids Res** 1990 Jan 25;18(2):368

Nucleotide sequence of the psaC gene of the cyanobacterium Synechococcus vulcanus. Shimizu T, et al. **Nucleic Acids Res** 1990 Jun 25;18(12):3644

Nucleotide sequence of the chloroplast gene for the 4 kD K polypeptide of photosystem II (psbK) and the psbK–tufA intergenic region of Chlamydomonas reinhardtii. Silk GW, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4930

Nucleotide sequence of the psbK gene of the cyanelle genome of Cyanophora paradoxa. Stirewalt VL, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10096

Nucleotide sequences of the chloroplast psbA and trnH genes from cotton Gossypium hirsutum. Ulmasov TN, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):186

An additional promoter within the protein-coding region of the psbD–psbC gene cluster in tobacco chloroplast DNA. Yao WB, et al. **Nucleic Acids Res** 1989 Dec 11; 17(23):9583–91

Nucleotide sequence of the psbK gene of the cyanobacterium Synechocystis 6803. Zhang ZH, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1284

Rhythmic regulation of the light-harvesting chlorophyll a/b protein and the small subunit of ribulose-1,5-bisphosphate carboxylase mRNA in rye seedlings. Ernst D, et al. **Photochem Photobiol** 1990 Jul;52(1):29–33

Analysis of the diurnal expression patterns of the tomato chlorophyll a/b binding protein genes. Influence of light and characterization of the gene family. Kellmann JW, et al. **Photochem Photobiol** 1990 Jul;52(1):35–41

Phytochrome-regulated expression of genes encoding light-harvesting chlorophyll a/b-protein in two long hypocotyl mutants and wild type plants of Arabidopsis thaliana. Sun L, et al. **Photochem Photobiol** 1990 Jul; 52(1):51–6

Defective chlorophyll a/b-binding protein genes in the genome of a homosporous fern. Pichersky E, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):195–9

Anacystis mutants with different tolerances to DCMU-type herbicides show differences in architecture and dynamics of the photosynthetic apparatus, depending on site and mode of the amino acid exchanges in the D 1 protein. Koenig F. **Z Naturforsch [C]** 1990 May;45(5):446–51

A rapid method for partial mRNA and DNA sequence analysis of the photosystem IIpsbA gene. Naber D, et al. **Z Naturforsch [C]** 1990 May;45(5):418–22

Amino acid substitutions in the D1 protein of photosystem II affect QB- stabilization and accelerate turnover of D1. Ohad N, et al. **Z Naturforsch [C]** 1990 May;45(5):402–7

Targeted deletion mutagenesis of the beta subunit of cytochrome b559 protein destabilizes the reaction center of photosystem II. Pakrasi HB, et al. **Z Naturforsch [C]** 1990 May;45(5):423–9

[Photosystem II of rye. Nucleotide sequence of psbB and psbH genes, coding 47-kDa of chlorophyll(a)-binding and 10-kDa phosphorylated subunits] Bukharov AA, et al. **Bioorg Khim** 1989 Jul;15(7):927–39 (Eng. Abstr.) **(Rus)**

[Photosystem II of rye. Nucleotide sequence of genes psbE, psbF, psbL and OPC40 of chloroplast DNA] Kolosov VL, et al. **Bioorg Khim** 1989 Sep;15(9):1284–6 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Epitope mapping of the monoclonal antibody FAC2 on the apoprotein of Cpa-1 in photosystem II. Frankel LK, et al. **FEBS Lett** 1989 Nov 6;257(2):279–82

Immunological characterization of the Prochlorothrix hollandica and Prochloron sp. chlorophyll a/b antenna proteins. Bullerjahn GS, et al. **FEMS Microbiol Lett** 1990 Jan 15;55(1–2):99–105

Characterization of conformers of D 1 of photosystem II using site-directed antibodies. Besford RT, et al. **Z Naturforsch [C]** 1990 Jun;45(6):621–6

ISOLATION & PURIFICATION

Characterization by electron microscopy of isolated particles and two-dimensional crystals of the CP47–D1–D2–cytochrome b–559 complex of photosystem II. Dekker JP, et al. **Biochemistry** 1990 Apr 3;29(13):3220–5

The psbC start codon in Synechocystis sp. PCC 6803. Carpenter SD, et al. **FEBS Lett** 1990 Jan 15;260(1):135–7

Comparison of the D1/D2/cytochrome b559 reaction centre complex of photosystem two isolated by two different methods. Gounaris K, et al. **FEBS Lett** 1990 Jun 4; 265(1–2):88–92

Characterization and N-terminal sequence of a 5 kDa polypeptide in the photosystem I core complex from spinach. Hoshina S, et al. **FEBS Lett** 1989 Dec 4; 258(2):305–8

Amino acid sequence of photosystem I subunit IV from the cyanobacterium Synechocystis PCC 6803. Rousseau F, et al. **FEBS Lett** 1990 Jan 29;260(2):241–4

METABOLISM

Enhancement of chlorophyll a fluorescence yield, low-temperature F685/F730 fluorescence emission ratio, and electron transport rate by ether phospholipids (platelet activating factor and analogs) in isolated chloroplasts. Argyroudi-Akoyunoglou JH, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):271–9

Roles of Ca2+ in O2 evolution in higher plant photosystem II: effects of replacement of Ca2+ site by other cations. Ono T, et al. **Arch Biochem Biophys** 1989 Dec;275(2):440–8

Kinetics of photoinhibition in hydroxylamine-extracted photosystem II membranes: relevance to photoactivation and sites of electron donation. Blubaugh DJ, et al. **Biochemistry** 1990 May 29;29(21):5109–18

Interaction of ammonia with the water splitting enzyme of photosystem II. Boussac A, et al. **Biochemistry** 1990 Jan 9;29(1):24–32

The S3 state of photosystem II: differences between the structure of the manganese complex in the S2 and S3 states determined by X-ray absorption spectroscopy. Guiles RD, et al. **Biochemistry** 1990 Jan 16;29(2):471–85

The S0 state of photosystem II induced by hydroxylamine: differences between the structure of the manganese complex in the S0 and S1 states determined by X-ray absorption spectroscopy. Guiles RD, et al. **Biochemistry** 1990 Jan 16;29(2):486–96

Directed alteration of the D1 polypeptide of photosystem II: evidence that tyrosine-161 is the redox component, Z, connecting the oxygen-evolving complex to the primary electron donor, P680. Metz JG, et al. **Biochemistry** 1989 Aug 22;28(17):6960–9

Manganese and calcium requirements for reconstitution of oxygen-evolution activity in manganese-depleted photosystem II membranes. Miller AF, et al. **Biochemistry** 1989 Oct 3;28(20):8181–90

Electron-transfer events leading to reconstitution of oxygen-evolution activity in manganese-depleted photosystem II membranes. Miller AF, et al. **Biochemistry** 1990 Feb 13;29(6):1385–92

A calcium-specific site influences the structure and activity

of the manganese cluster responsible for photosynthetic water oxidation. Sivaraja M, et al. **Biochemistry** 1989 Nov 28;28(24):9459–64

Characterization of the multiple forms of cytochrome b559 in photosystem II. Thompson LK, et al. **Biochemistry** 1989 Oct 3;28(20):8048–56

Chlorophyll a fluorescence transient as an indicator of active and inactive Photosystem II in thylakoid membranes. Cao J, et al. **Biochim Biophys Acta** 1990 Feb 2;1015(2):180–8

Evidence that the amino-terminus of the 33 kDa extrinsic protein is required for binding to the Photosystem II complex. Eaton-Rye JJ, et al. **Biochim Biophys Acta** 1989 Nov 23;977(2):219–26

The ATP-dependent post translational modification of ferredoxin: NADP+ oxidoreductase. Hodges M, et al. **Biochim Biophys Acta** 1990 May 22;1052(3):446–52

ENDOR studies of the intermediate electron acceptor radical anion I-. in Photosystem II reaction centers. Lubitz W, et al. **Biochim Biophys Acta** 1989 Nov 23;977(2):227–32

The transit peptide of a chloroplast thylakoid membrane protein is functionally equivalent to a stromal-targeting sequence. Hand JM, et al. **EMBO J** 1989 Nov; 8(11):3195–206

Functional and structural analysis of photosystem II core complexes from spinach with high oxygen evolution capacity. Haag E, et al. **Eur J Biochem** 1990 Apr 20; 189(1):47–53

Cleavage of a synthetic COOH-terminal oligopeptide of D1 precursor protein by a purified processing enzyme. Fujita S, et al. **FEBS Lett** 1989 Sep 11;255(1):1–4

Restoration of light induced photosystem II inhibition without de novo protein synthesis. Hundal T, et al. **FEBS Lett** 1990 Jul 16;267(2):203–6

Light-induced D1-protein degradation in isolated photosystem II core complexes. Virgin I, et al. **FEBS Lett** 1990 Aug 20;269(1):45–8

Thermal stability of electron transport in PS II membranes and particles from the thermophilic cyanobacteria. Kaurov YuN, et al. **Gen Physiol Biophys** 1990 Apr;9(2):189–202

Evolution of oxygen evolving reaction center–II of thylakoids. Raval MK. **Indian J Biochem Biophys** 1990 Feb; 27(1):9–12

Light-dependent D1 protein synthesis and translocation is regulated by reaction center II. Reaction center II serves as an acceptor for the D1 precursor. Adir N, et al. **J Biol Chem** 1990 Jul 25;265(21):12563–8

Mechanism of photoinhibition in vivo. A reversible light-induced conformational change of reaction center II is related to an irreversible modification of the D1 protein. Ohad I, et al. **J Biol Chem** 1990 Feb 5;265(4):1972–9

The chloroplast reductase-binding protein is identical to the 16.5-kDa polypeptide described as a component of the oxygen-evolving complex. Soncini FC, et al. **J Biol Chem** 1989 Dec 15;264(35):21112–5

Nucleotide sequence of the genes for ribosomal protein S4 and tRNA(Arg) from the chlorophyll c-containing alga Cryptomonas phi. Douglas SE, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1903

Prediction of leader peptide cleavage sites for polypeptides of the thylakoid lumen. Howe CJ, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3417

Photoreduction of NADP+ by isolated reaction centers of photosystem II: requirement for plastocyanin. Arnon DI, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5930–4

Pathway of proton transfer in bacterial reaction centers: replacement of serine-L223 by alanine inhibits electron and proton transfers associated with reduction of quinone to dihydroquinone. Paddock ML, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6803–7

Femtosecond dynamics of energy transfer in B800-850 light-harvesting complexes of Rhodobacter sphaeroides. Trautman JK, et al. **Proc Natl Acad Sci U S A** 1990 Jan; 87(1):215–9

Molecular modelling studies on the binding of phenylurea inhibitors to the D 1 protein of photosystem II. Bowyer J, et al. **Z Naturforsch [C]** 1990 May;45(5):379–87

A new ioxynil-resistant mutant in Synechocystis PCC 6714: hypothesis on the interaction of ioxynil with the D 1 protein. Creuzet S, et al. **Z Naturforsch [C]** 1990 May; 45(5):436–40

Determination of catabolism of the photosystem II D 1 subunit by structural motifs in the polypeptide sequence. Shipton CA, et al. **Z Naturforsch [C]** 1990 May; 45(5):388–94

Photoinactivation of photosystem II and degradation of the D 1 protein are reduced in a cytochrome b6/f-less mutant of Chlamydomonas reinhardtii. Shochat S, et al. **Z Naturforsch [C]** 1990 May;45(5):395–401

[Effect of space flight factors on the pigment and lipid composition of wheat] Rumiantseva VB, et al. **Kosm Biol Aviakosm Med** 1990 Jan-Feb;24(1):53–5 **(Rus)**

PHARMACOLOGY

Inhibition of the genotoxicity of 3-amino-1-methyl-5H-pyrido[4,3-b]indole (Trp-P-2) in Drosophila by chlorophyll. Negishi T, et al. **Basic Life Sci** 1990;52:341–4

PHYSIOLOGY

Chlorophyll a fluorescence transient as an indicator of active and inactive Photosystem II in thylakoid membranes. Cao J, et al. **Biochim Biophys Acta** 1990 Feb 2;1015(2):180–8

Chlorophyll regulates accumulation of the plastid-encoded chlorophyll apoproteins CP43 and D1 by increasing apoprotein stability. Mullet JE, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4038–42

THERAPEUTIC USE

[The efficacy of the natural antibacterial preparation chlorophyllypt in the combined treatment of acute lung abscesses] Nikitin AV, et al. **Ter Arkh** 1989;61(8):113–6 (Eng. Abstr.) **(Rus)**

CHLOROPHYLLIDES see under **CHLOROPHYLL**

CHLOROPHYTA see **ALGAE, GREEN**

CHLOROPLAST COUPLING FACTOR see **H(+)-TRANSPORTING ATPASE**

CHLOROPLASTS

see related
PHOTOSYNTHESIS

Sequence and transcriptional analysis of the barley ctDNA region upstream of psbD-psbC encoding trnK(UUU), rps16, trnQ(UUG), psbK, psbI, and trnS(GCU). Berends Sexton T, et al. **Curr Genet** 1990 May;17(5):445–54

Pseudogenes and short repeated sequences in the rice chloroplast genome. Shimada H, et al. **Curr Genet** 1989 Oct;16(4):293–301

Nucleotide sequence and transcripts of the pea chloroplast gene encoding CFo subunit III of ATP synthase. Huttly AK, et al. **Gene** 1990 Jun 15;90(2):227–33

Cloning and characterization of chloroplast ribosomal protein-encoding genes, rpl16 and rps3, of the marine macro-algae, Gracilaria tenuistipitata. Kao JS, et al. **Gene** 1990 Jun 15;90(2):221–6

Antibiotic resistance mutations in the chloroplast 16S and 23S rRNA genes of Chlamydomonas reinhardtii: correlation of genetic and physical maps of the chloroplast genome. Harris EH, et al. **Genetics** 1989 Oct;123(2):281–92

Nucleotide sequence and map positions of the duplicated gene for chloroplast ribosomal protein S15 in Zea mays (maize). Fitzky B, et al. **Nucleic Acids Res** 1990 Jun 11; 18(11):3407

Nucleotide sequences of the Chlamydomonas reinhardtii chloroplast genes for tryptophan and glycine transfer RNAs. Zhang DH, et al. **Nucleic Acids Res** 1989 Nov 11; 17(21):8873

[Evolutionary origin of the intracellular oligogenic system] Ishida MR. **Tanpakushitsu Kakusan Koso** 1990 Apr; 35(5):805–13 (21 ref.) **(Jpn)**

[Rice chloroplast genome] Shimada H. **Tanpakushitsu Kakusan Koso** 1989 Nov;34(14):1863–72 **(Jpn)**

[Photosystem II of rye. Nucleotide sequence of genes psbE, psbF, psbL and OPC40 of chloroplast DNA] Kolosov VL, et al. **Bioorg Khim** 1989 Sep;15(9):1284–6 (Eng. Abstr.) **(Rus)**

[Cloning of chloroplast psbA and rbcL-genes from cotton Gossipium hirsutum] Ul'masov TN, et al. **Mol Gen Mikrobiol Virusol** 1989 Aug;(8):17–20 (Eng. Abstr.) **(Rus)**

ANALYSIS

Spin-label ESR studies of lipid-protein interactions in thylakoid membranes. Li G, et al. **Biochemistry** 1989 Sep 5;28(18):7446–52

Extrinsic 33-kilodalton protein of spinach oxygen-evolving complexes: kinetic studies of folding and disulfide reduction. Tanaka S, et al. **Biochemistry** 1989 Sep 5; 28(18):7188–93

Chloroplast transit peptides from the green alga Chlamydomonas reinhardtii share features with both mitochondrial and higher plant chloroplast presequences. Franzén LG, et al. **FEBS Lett** 1990 Jan 29;260(2):165–8

A conserved cleavage-site motif in chloroplast transit peptides. Gavel Y, et al. **FEBS Lett** 1990 Feb 26; 261(2):455–8

The nucleotide sequence and characterization of four chloroplast tRNAs from the alga codium fragile. Francis MA, et al. **J Biol Chem** 1989 Oct 15;264(29):17243–9

The primary structure of a 4.0-kDa photosystem I polypeptide encoded by the chloroplast psaI gene. Scheller HV, et al. **J Biol Chem** 1989 Nov 5;264(31):18402–6

Function of plastid mRNA 3' inverted repeats. RNA stabilization and gene-specific protein binding. Stern DB, et al. **J Biol Chem** 1989 Nov 5;264(31):18742–50

Contrasting evolutionary histories of chloroplast thioredoxins f and m. Hartman H, et al. **Mol Biol Evol** 1990 May; 7(3):247–54

Presence in the stroma of chloroplasts of a large pool of a ribosomal protein not structurally related to any Escherichia coli ribosomal protein. Zhou DX, et al. **Mol Gen Genet** 1989 Oct;219(1-2):204–8

Chloroplast DNA sequence from a miocene Magnolia species. Golenberg EM, et al. **Nature** 1990 Apr 12; 344(6267):656–8

Nucleotide and derived amino acid sequence of rps2 from maize chloroplasts. Igloi GL, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):663

DRUG EFFECTS

Quinolones and coumarins eliminate chloroplasts from Euglena gracilis. Krajčovič J, et al. **Antimicrob Agents Chemother** 1989 Nov;33(11):1883–9

Determination of four apparent mercury interaction sites in photosystem II by using a new modification of the Stern-Volmer analysis. Samson G, et al. **Biochem Biophys Res Commun** 1990 Jan 30;166(2):873–8

Study of the mode of action of some nitrodiphenyl ethers. Piekarski D, et al. **Free Radic Res Commun** 1990; 10(1-2):85–93

Different effect of hyperthermia and heat shock on the action of quinolone drugs versus some mutagens against chloroplasts of Euglena gracilis. Krajčovič J, et al. **Mutat Res** 1990 May;244(1):21–5

ENZYMOLOGY

Partial purification of a thylakoid-bound enzyme using temperature-induced phase partitioning. Sánchez-Ferrer A, et al. **Anal Biochem** 1990 Feb 1;184(2):279–82

Chlorophyll-free chromoplasts from daffodil contain most of the enzymes for chlorophyll synthesis in a highly active form. Lützow M, et al. **Arch Biochem Biophys** 1990 Feb 15;277(1):94–100

Amino acid sequence of spinach chloroplast fructose-1,6-bisphosphatase. Marcus F, et al. **Arch Biochem Biophys** 1990 May 15;279(1):151–7

Modulation of spinach chloroplast NADP-glyceraldehyde-3-phosphate dehydrogenase by chaotropic anions. Wolosiuk RA, et al. **Arch Biochem Biophys** 1990 May 15;279(1):70–7

Purification and characterization of acetohydroxyacid reductoisomerase from spinach chloroplasts. Dumas R, et al. **Biochem J** 1989 Sep 15;262(3):971–6

On the mechanism of sulfite activation of chloroplast thylakoid ATPase and the relation of ADP tightly bound at a catalytic site to the binding change mechanism. Du ZY, et al. **Biochemistry** 1990 Jan 16;29(2):402–7

On the question of interheme electron transfer in the chloroplast cytochrome b6 in situ. Furbacher PN, et al. **Biochemistry** 1989 Nov 14;28(23):8990–8

A Cl(-)-translocating adenosinetriphosphatase in Acetabularia acetabulum. 1. Purification and characterization of a novel type of adenosinetriphosphatase that differs from chloroplast F1 adenosinetriphosphatase. Ikeda M, et al. **Biochemistry** 1990 Feb 27;29(8):2057–65

Rotational dynamics of chloroplast ATP synthase in phospholipid vesicles. Musier-Forsyth KM, et al. **Biochemistry** 1990 Apr 3;29(13):3236–41

Promotion and inhibition of catalytic cooperativity of the Ca2+-dependent ATPase activity of spinach chloroplast coupling factor 1 (CF1). Andralojc PJ, et al. **Biochim Biophys Acta** 1990 Mar 15;1016(1):55–62

Activation/inactivation and uni-site catalysis by the reconstituted ATP-synthase from chloroplasts. Fromme P, et al. **Biochim Biophys Acta** 1990 Mar 15;1016(1):29–42

The ATP-dependent post translational modification of ferredoxin: NADP+ oxidoreductase. Hodges M, et al. **Biochim Biophys Acta** 1990 May 22;1052(3):446–52

The chloroplast CF0I subunit can replace the b-subunit of the F0F1-ATPase in a mutant strain of Escherichia coli K12. Schmidt G, et al. **Biochim Biophys Acta** 1990 Feb 2;1015(2):195–9

Induction by different thioredoxins of ATPase activity in coupling factor 1 from spinach chloroplasts. Galmiche JM, et al. **Biochimie** 1990 Jan;72(1):25–32

Single channel H+ currents through reconstituted chloroplast ATP synthase CF0-CF1. Wagner R, et al. **EMBO J** 1989 Oct;8(10):2827–34

Analysis of the promotors of the single-copy genes for plastocyanin and subunit delta of the chloroplast ATP synthase from spinach. Bichler J, et al. **Eur J Biochem** 1990 Jun 20;190(2):415–26

Reconstitution of photophosphorylation in EDTA-treated thylakoids by added chloroplast coupling factor 1 (ATPase) and chloroplast coupling factor 1 lacking the delta subunit. Structural or functional? Engelbrecht S, et al. **Eur J Biochem** 1990 Apr 20;189(1):193–7

Structural and catalytic properties of oxidized and reduced chloroplast NADP-malate dehydrogenase upon denaturation and renaturation. Scheibe R, et al. **Eur J Biochem** 1990 May 20;189(3):581–7

Concerted action of cosolvents, chaotropic anions and thioredoxin on chloroplast fructose-1,6-bisphosphatase. Reactivity to iodoacetamide. Stein M, et al. **Eur J Biochem** 1989 Nov 6;185(2):425–31

Multiple coordinate controls contribute to a balanced expression of ribulose-1,5-bisphosphate carboxylase/oxygenase subunits in rye leaves. Winter U, et al. **Eur J Biochem** 1990 Jan 26;187(2):445–53

The same domain motif for ubiquinone reduction in mitochondrial or chloroplast NADH dehydrogenase and bacterial glucose dehydrogenase. Friedrich T, et al. **FEBS Lett** 1990 Jun 4;265(1-2):37–40

Investigation of the substrate specificity of thylakoid protein kinase using synthetic peptides. White IR, et al. **FEBS Lett** 1990 Aug 20;269(1):49–52

Molecular cloning of cDNA encoding potato amyloplast alpha-glucan phosphorylase and the structure of its transit

peptide. Nakano K, et al. **J Biochem (Tokyo)** 1989 Oct; 106(4):691–5

Purification and characterization of Chlamydomonas reinhardtii chloroplast glutamyl-tRNA synthetase, a natural misacylating enzyme. Chen MW, et al. **J Biol Chem** 1990 Mar 5;265(7):4054–7

Subunit interactions within the chloroplast ATP synthase (CF0–CF1) as deduced by specific depletion of CF0 polypeptides. Feng Y, et al. **J Biol Chem** 1990 Jul 25; 265(21):12481–5

Purification and reconstitution of active chloroplast F0. Feng Y, et al. **J Biol Chem** 1990 Mar 25;265(9):5104–9

Chromatographic purification of the chloroplast ATP synthase (CF0–CF1) and the role of CF0 subunit IV in proton conduction. Feng Y, et al. **J Biol Chem** 1990 Jul 25;265(21):12474–80

Active/Inactive state transitions of the chloroplast F1 ATPase are induced by a slow binding and release of Mg2+. Relationship to catalysis and control of F1 ATPases. Guerrero KJ, et al. **J Biol Chem** 1990 Sep 25; 265(27):16280–7

Energy-dependent conformational changes in the epsilon subunit of the chloroplast ATP synthase (CF0CF1). Komatsu-Takaki M. **J Biol Chem** 1989 Oct 25; 264(30):17750–3

Tagetitoxin inhibits RNA synthesis directed by RNA polymerases from chloroplasts and Escherichia coli. Mathews DE, et al. **J Biol Chem** 1990 Jan 5;265(1):493–8

Substrate binding-induced alteration of nucleotide binding site properties of chloroplast coupling factor 1. Shapiro AB, et al. **J Biol Chem** 1990 Mar 15;265(8):4340–7

The chloroplast reductase-binding protein is identical to the 16.5-kDa polypeptide described as a component of the oxygen-evolving complex. Soncini FC, et al. **J Biol Chem** 1989 Dec 15;264(35):21112–5

Strong functional GC pressure in a light-regulated maize gene encoding subunit GAPA of chloroplast glyceraldehyde-3-phosphate dehydrogenase: implications for the evolution of GAPA pseudogenes. Quigley F, et al. **J Mol Evol** 1989 Nov;29(5):412–21

The ion channel of the ATP-synthase from chloroplasts. Grotjohann I, et al. **J Protein Chem** 1989 Jun;8(3):379–80

Biomembranes. Part N. Transport in bacteria, mitochondria, and chloroplasts: protonmotive force. **Methods Enzymol** 1986;126:1–832

Synthesis of enzyme-bound adenosine triphosphate by chloroplast coupling factor CF1. Feldman RI. **Methods Enzymol** 1986;126:643–9

Use of ADP analogs for functional and structural analysis of F1-ATPase. Schäfer G, et al. **Methods Enzymol** 1986; 126:682–712

Nucleotide sequence of the maize chloroplast rpo B/C1/C2 operon: comparison between the derived protein primary structures from various organisms with respect to functional domains. Igloi GL, et al. **Mol Gen Genet** 1990 May;221(3):379–94

Rice chloroplast RNA polymerase genes: the absence of an intron in rpoC1 and the presence of an extra sequence in rpoC2. Shimada H, et al. **Mol Gen Genet** 1990 May; 221(3):395–402

Nucleotide sequence of pea cDNA encoding chloroplast carbonic anhydrase. Roeske CA, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3413

The Euglena gracilis chloroplast rpoB gene. Novel gene organization and transcription of the RNA polymerase subunit operon. Yepiz-Plascencia GM, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1869–78

Cell-specific expression in transgenic plants reveals nonoverlapping roles for chloroplast and cytosolic glutamine synthetase. Edwards JW, et al. **Proc Natl Acad Sci U S A** 1990 May;87(9):3459–63

Maize chloroplast RNA polymerase: the 180-, 120-, and 38-kilodalton polypeptides are encoded in chloroplast genes. Hu J, et al. **Proc Natl Acad Sci U S A** 1990 Feb; 87(4):1531–5

Genetics and evolution of chloroplast isozymes of triosephosphate isomerase. Feierabend J, et al. **Prog Clin Biol Res** 1990;344:665–82

[Characterization of a cloned DNA fragment of rice chloroplast and location rbcL gene in the recombinant plasmid] Shen ZW, et al. **I Chuan Hsueh Pao** 1989; 16(6):430–5 (Eng. Abstr.) **(Chi)**

METABOLISM

Chloroplast thylakoid membrane-bound Ca2+ acts in a gating mechanism to regulate energy-coupled proton fluxes. Dilley RA, et al. **Ann N Y Acad Sci** 1989;574:246–67

Protons, the thylakoid membrane, and the chloroplast ATP synthase. Junge W. **Ann N Y Acad Sci** 1989;574:268–86

Enhancement of chlorophyll a fluorescence yield, low-temperature F685/F730 fluorescence emission ratio, and electron transport rate by ether phospholipids (platelet activating factor and analogs) in isolated chloroplasts. Argyroudi-Akoyunoglou JH, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):271–9

Concentrations of long-chain acyl-acyl carrier proteins during fatty acid synthesis by chloroplasts isolated from pea (Pisum sativum), safflower (Carthamus tinctoris), and amaranthus (Amaranthus lividus) leaves. Roughan G, et al. **Arch Biochem Biophys** 1990 Jan;276(1):38–46

Translational regulation of chloroplast gene expression during the light-dark cell cycle of Chlamydomonas: evidence for control by ATP/energy supply. Michaels A, et al. **Biochem Biophys Res Commun** 1990 Aug 16; 170(3):1082–8

The S0 state of photosystem II induced by hydroxylamine: differences between the structure of the manganese complex in the S0 and S1 states determined by X-ray absorption spectroscopy. Guiles RD, et al. **Biochemistry** 1990 Jan 16;29(2):486–96

Synthesis of EF-Tu and distribution of its mRNA between stroma and thylakoids during the cell cycle of Chlamydomonas reinhardii. Breidenbach E, et al. **Biochim Biophys Acta** 1990 Apr 6;1048(2-3):209–16

Cell cycle-dependent transcriptional and post-transcriptional regulation of chloroplast gene expression in Chlamydomonas reinhardtii. Leu S, et al. **Biochim Biophys Acta** 1990 Jul 30;1049(3):311–7

ADP-ribosylation of thylakoid membrane polypeptides by cholera toxin is correlated with inhibition of thylakoid GTPase activity and protein phosphorylation. Millner PA, et al. **Cell Signal** 1989;1(5):421–33

An in vitro transcription termination system to analyze chloroplast promoters: identification of multiple promoters for the spinach atpB gene. Chen LJ, et al. **Curr Genet** 1990 Jan;17(1):55–64

Cultivar variability for the presence of plastid DNA in pollen of Pisum sativum L.: implications for plastid transmission. Corriveau JL, et al. **Curr Genet** 1989 Jul;16(1):47–51

Structure and expression of cytochrome f in an Oenothera plastome mutant. Johnson EM, et al. **Curr Genet** 1990 Jun; 17(6):529–34

An internal part of the chloroplast atpA gene sequence is present in the mitochondrial genome of Triticum aestivum: molecular organisation and evolutionary aspects. Jubier MF, et al. **Curr Genet** 1990 Jun;17(6):523–8

Processing of chloroplast ribosomal RNA transcripts in Euglena gracilis bacillaris [published erratum appears in Curr Genet 1989 Aug;16(2):129] McGarvey P, et al. **Curr Genet** 1989 May;15(5):363–70

The divergently transcribed rbcL and atpB genes of tobacco plastid DNA are separated by nineteen base pairs. Orozco EM Jr, et al. **Curr Genet** 1990 Jan;17(1):65–71

The identification and localization of 33 pea chloroplast transcription initiation sites. Woodbury NW, et al. **Curr Genet** 1989 Dec;16(5–6):433–45

Targeting and assembly of chloroplast proteins. Gray JC. **Curr Opin Cell Biol** 1989 Aug;1(4):706–11 (28 ref.)

Blue light regulates the accumulation of two psbD-psbC transcripts in barley chloroplasts. Gamble PE, et al. **EMBO J** 1989 Oct;8(10):2785–94

The transit peptide of a chloroplast thylakoid membrane protein is functionally equivalent to a stromal-targeting sequence. Hand JM, et al. **EMBO J** 1989 Nov; 8(11):3195–206

Targeting of proteins to the thylakoid lumen by the bipartite transit peptide of the 33 kd oxygen-evolving protein. Ko K, et al. **EMBO J** 1989 Nov;8(11):3187–94

Correlation of the expression of the nuclear photosynthetic gene ST-LS1 with the presence of chloroplasts. Stockhaus J, et al. **EMBO J** 1989 Sep;8(9):2445–51

Synthesis of different nucleoside 5'-diphospho-sulfoquinovoses and their use for studies on sulfolipid biosynthesis in chloroplasts. Heinz E, et al. **Eur J Biochem** 1989 Sep 15;184(2):445–53

The effect of ultraviolet irradiation on protein synthesis by chloroplast ribosomes. Biswas S, et al. **Exp Cell Res** 1966 Mar;41(3):682–5

The cyanelle genome of Cyanophora paradoxa encodes ribosomal proteins not encoded by the chloroplasts genomes of higher plants. Bryant DA, et al. **FEBS Lett** 1990 Jan 1;259(2):273–80

Pyruvate uptake induced by a pH jump in mesophyll chloroplasts of maize and sorghum, NADP-malic enzyme type C4 species. Ohnishi J, et al. **FEBS Lett** 1990 Aug 20;269(1):122–4

Light-induced D1-protein degradation in isolated photosystem II core complexes. Virgin I, et al. **FEBS Lett** 1990 Aug 20;269(1):45–8

Tetracaine inhibition of electron transport in pea chloroplasts is coupled to calcium displacement by the local anesthetic. Semin BK, et al. **Gen Physiol Biophys** 1990 Feb;9(1):65–70

Effect of metal chelators on thermoluminescence peaks of spinach chloroplasts and photosystem II particles: probing the water oxidation cycle with 8-hydroxyquinoline. Hegde U, et al. **Indian J Biochem Biophys** 1990 Feb;27(1):5–8

Effect of magnesium and calcium ions on photoinduced lipid peroxidation and thylakoid breakdown of cell-free chloroplasts. Panda S, et al. **Indian J Biochem Biophys** 1990 Jun;27(3):159–63

Evolution of oxygen evolving reaction center-II of thylakoids. Raval MK. **Indian J Biochem Biophys** 1990 Feb; 27(1):9–12

Chloroplast thylakoid proteins associated with sequestered proton-buffering domains. Plastocyanin contributes buffering groups to localized proton domains. Allnutt FC, et al. **J Bioenerg Biomembr** 1989 Aug;21(4):535–51

Light-dependent D1 protein synthesis and translocation is regulated by reaction center II. Reaction center II serves as an acceptor for the D1 precursor. Adir N, et al. **J Biol Chem** 1990 Jul 25;265(21):12563–8

31P NMR studies of spinach leaves and their chloroplasts. Bligny R, et al. **J Biol Chem** 1990 Jan 25;265(3):1319–26

Mutations at the transit peptide-mature protein junction separate two cleavage events during chloroplast import of the chlorophyll a/b-binding protein. Clark SE, et al. **J Biol Chem** 1989 Oct 15;264(29):17544–50

Transport of proteins into chloroplasts. Import and maturation of precursors to the 33-, 23-, and 16-kDa proteins of the photosynthetic oxygen-evolving complex. James HE, et al. **J Biol Chem** 1989 Nov 25;264(33):19573–6

Identification of a plastid-specific ribosomal protein in the 30 S subunit of chloroplast ribosomes and isolation of the cDNA clone encoding its cytoplasmic precursor. Johnson CH, et al. **J Biol Chem** 1990 Aug 5;265(22):12790–5

Light-induced transcription of chloroplast genes. psbA transcription is differentially enhanced in illuminated barley. Klein RR, et al. **J Biol Chem** 1990 Feb 5; 265(4):1895–902

Identification and characterization of large, complex forms of chloroplast translational initiation factor 2 from Euglena gracilis. Ma L, et al. **J Biol Chem** 1990 Aug 15; 265(23):13560–5

Expression in Escherichia coli and purification of a translocation-competent precursor of the chloroplast protein ferredoxin. Pilon M, et al. **J Biol Chem** 1990 Feb 25;265(6):3358–61

A new rearrangement of angiosperm chloroplast DNA in rye (Secale cereale) involving translocation and duplication of the ribosomal rpS15 gene. Prombona A, et al. **J Biol Chem** 1989 Nov 15;264(32):19060–5

A ribosomal protein is encoded in the chloroplast DNA in a lower plant but in the nucleus in angiosperms. Isolation of the spinach L21 protein and cDNA clone with transit and an unusual repeat sequence. Smooker PM, et al. **J Biol Chem** 1990 Sep 25;265(27):16699–703

Physical mechanism of ATP formation in biomembranes. Blumenfeld LA. **J Biomol Struct Dyn** 1988 Aug;6(1):23–33

Accumulation, stability, and localization of a major chloroplast heat-shock protein. Chen Q, et al. **J Cell Biol** 1990 Jun;110(6):1873–83

Import of proteins into the chloroplast lumen. Weisbeek P, et al. **J Cell Sci Suppl** 1989;11:199–223 (44 ref.)

Dispersed repeats and structural reorganization in subclover chloroplast DNA. Milligan BG, et al. **Mol Biol Evol** 1989 Jul;6(4):355–68

Chloroplast DNA evolves slowly in the palm family (Arecaceae). Wilson MA, et al. **Mol Biol Evol** 1990 Jul; 7(4):303–14

In vitro analysis of the pea chloroplast 16S rRNA gene promoter. Sun E, et al. **Mol Cell Biol** 1989 Dec; 9(12):5650–9

Cotranscription of the wild-type chloroplast atpE gene encoding the CF1/CF0 epsilon subunit with the 3' half of the rps7 gene in Chlamydomonas reinhardtii and characterization of frameshift mutations in atpE. Robertson D, et al. **Mol Gen Genet** 1990 Apr;221(2):155–63

Genes for the plastid elongation factor Tu and ribosomal protein S7 and six tRNA genes on the 73 kb DNA from Astasia longa that resembles the chloroplast DNA of Euglena. Siemeister G, et al. **Mol Gen Genet** 1990 Feb; 220(3):425–32

Evolutionary transfer of the chloroplast tufA gene to the nucleus. Baldauf SL, et al. **Nature** 1990 Mar 15; 344(6263):262–5

The gain of two chloroplast tRNA introns marks the green algal ancestors of land plants. Manhart JR, et al. **Nature** 1990 May 17;345(6272):268–70

Euglena gracilis chloroplast ribosomal protein operon: a new chloroplast gene for ribosomal protein L5 and description of a novel organelle intron category designated group III. Christopher DA, et al. **Nucleic Acids Res** 1989 Oct 11; 17(19):7591–608

Prediction of leader peptide cleavage sites for polypeptides of the thylakoid lumen. Howe CJ, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3417

Nucleotide sequence and map positions of the duplicated gene for maize (Zea mays) chloroplast ribosomal protein L2. Kavousi M, et al. **Nucleic Acids Res** 1990 Jul 25; 18(14):4244

Nucleotide sequence of the psbA gene encoded by the Vicia faba chloroplast genome. Ko K. **Nucleic Acids Res** 1990 Jan 25;18(2):375

Nucleotide sequence of the mustard chloroplast genes trnH and rps19'. Nickelsen J, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1051

Interaction of a 3' RNA region of the mustard trnK gene with chloroplast proteins. Nickelsen J, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):9637–48

Nucleotide sequence of Chlamydomonas moewusii chloroplastic tRNA(thr). Richard M, et al. **Nucleic Acids Res** 1990 May 25;18(10):3061

Nucleotide sequence of the chloroplast gene for the 4 kD K polypeptide of photosystem II (psbK) and the psbK-tufA intergenic region of Chlamydomonas reinhardtii. Silk GW, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4930

Nucleotide sequence of a 3.46 kb region of maize chloroplast DNA containing the gene cluster rpoC2-rps2-atpI-atpH. Stahl D, et al. **Nucleic Acids Res** 1990 May 25;18(10):3073–4

Initiation complex formation on Euglena chloroplast 30S subunits in the presence of natural mRNAs. Wang CC, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):9735–47

Hsp70 proteins, similar to Escherichia coli DnaK, in chloroplasts and mitochondria of Euglena gracilis. Amir-Shapira D, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1749–52

Different fates of the chloroplast tufA gene following its transfer to the nucleus in green algae. Baldauf SL, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5317–21

Transient foreign gene expression in chloroplasts of cultured tobacco cells after biolistic delivery of chloroplast vectors. Daniell H, et al. **Proc Natl Acad Sci U S A** 1990 Jan; 87(1):88–92

Identification of heat shock protein hsp70 homologues in chloroplasts. Marshall JS, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):374–8

Chlorophyll regulates accumulation of the plastid-encoded chlorophyll apoproteins CP43 and D1 by increasing apoprotein stability. Mullet JE, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4038–42

Sequence analysis and protein import studies of an outer chloroplast envelope polypeptide. Salomon M, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5778–82

The regulatory role of thioredoxin in chloroplasts. Knaff DB. **Trends Biochem Sci** 1989 Nov;14(11):433–4 (22 ref.)

Protein transport into and within chloroplasts. Smeekens S, et al. **Trends Biochem Sci** 1990 Feb;15(2):73–6 (38 ref.)

[Protein kinases and the photosynthetic activity of chloroplasts] Gemel J. **Postepy Biochem** 1989;35(3):337–45 (48 ref.) **(Pol)**

[Kinetic characteristics of the pyruvate transport system in the wheat chloroplast envelope] Protas AF, et al. **Ukr Biokhim Zh** 1989 Sep–Oct;61(5):106–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Chlorophyll a fluorescence transient as an indicator of active and inactive Photosystem II in thylakoid membranes. Cao J, et al. **Biochim Biophys Acta** 1990 Feb 2;1015(2):180–8

Chloroplast gene regulation: interaction of the nuclear and chloroplast genomes in the expression of photosynthetic proteins. Mayfield SP. **Curr Opin Cell Biol** 1990 Jun; 2(3):509–13 (12 ref.)

Transcriptional regulation and DNA methylation in plastids during transitional conversion of chloroplasts to chromoplasts. Kobayashi H, et al. **EMBO J** 1990 Feb; 9(2):307–13

Interactions between the nucleus and cytoplasmic organelles during the cell cycle of Euglena gracilis in synchronized cultures. IV. An aggregate form of chloroplasts in association with the nucleus appearing prior to chloroplast division. Ehara T, et al. **Exp Cell Res** 1990 Sep; 190(1):104–12

Uni-site catalysis in thylakoids. The influence of membrane energization on ATP hydrolysis and ATP-Pi exchange. Fromme P, et al. **FEBS Lett** 1990 Aug 20;269(1):247–51

Transcription and translation of the chloroplast atpB-gene and assembly of ATP synthase subunit beta. Leu S, et al. **FEBS Lett** 1990 Aug 20;269(1):41–4

A novel method for measuring membrane conductance changes by a voltage-sensitive optical probe. Rosemberg Y, et al. **FEBS Lett** 1990 Apr 9;263(1):155–8

Nucleotide sequence of the chloroplast rbcL gene from cotton Gossypium hirsutum. Gulov MK, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):185

Nucleotide sequence of the psbH gene of the cyanobacterium Synechocystis 6803. Mayes SR, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):194

Chloroplast genes transferred to the nuclear plant genome have adjusted to nuclear base composition and codon usage. Oliver JL, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):65–73

Nucleotide sequences of the chloroplast psbA and trnH genes from cotton Gossypium hirsutum. Ulmasov TN, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):186

ULTRASTRUCTURE

The chloroplast chromosomes in land plants. Sugiura M. **Annu Rev Cell Biol** 1989;5:51–70 (138 ref.)

Lipid–protein interactions in stacked and destacked thylakoid membranes and the influence of phosphorylation and illumination. Spin label ESR studies. Li G, et al. **Biochim Biophys Acta** 1990 May 24;1024(2):278–84

Lumen-side topography of the alpha-subunit of the chloroplast cytochrome b-559. Tae GS, et al. **FEBS Lett** 1989 Dec 18;259(1):161–4

Light affects the structure of Chlamydomonas chloroplast chromosomes. Thompson RJ, et al. **Nucleic Acids Res** 1990 May 11;18(9):2625–31

Direct observation of large chiral domains in chloroplast thylakoid membranes by differential polarization microscopy [published erratum appears in Proc Natl Acad Sci U S A 1990 Feb;87(3):1257] Finzi L, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8748–52

CHLOROPRENE see under **BUTADIENES**

CHLOROQUINE

ADMINISTRATION & DOSAGE

Concentration dependency of cyclosporin and chloroquine as inhibitors of cell proliferation and immunoglobulin production upon mitogen stimulation of mononuclear cells. Van Loenen HJ, et al. **Clin Exp Rheumatol** 1990 Jan–Feb; 8(1):59–61

Febrile illness in an Afghani "freedom fighter". Aboff BM. **J Tenn Med Assoc** 1989 Nov;82(11):599

Acute gluteal abscesses: injectable chloroquine as a cause. Ahmed ME, et al. **J Trop Med Hyg** 1989 Oct;92(5):317–9

Antimalarial prophylaxis in pregnant Nigerian women [letter; comment] Fleming AF. **Lancet** 1990 Jan 6;335(8680):45 Comment on: Lancet 1989 Oct 7;2(8667):830–4.

Diagnosis of malaria during chloroquine/proguanil prophylaxis [letter] [see comments] Hengy C, et al. **Lancet** 1990 Jan 13;335(8681):121 Comment in: Lancet 1990 Feb 24;335(8687):472.

Further observations on chemoprophylaxis and prevalence of malaria using questionnaire data in urban and rural areas of Burkina Faso. Bosman A, et al. **Parassitologia** 1988 May–Dec;30(2–3):257–62

[Results of treatment of porphyria cutanea tarda with bloodletting and chloroquine] Seubert S, et al. **Z Hautkr** 1990 Mar;65(3):223–5 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Risks and benefits of prophylactic antimalarial drugs [letter; comment] Mallett R, et al. **BMJ** 1989 Dec 2;299(6712):1400 Comment on: BMJ 1989 Oct 28;299(6707):1057–8.

Prospective in vitro testing for drug-induced neutropenia in a patient requiring anti-malarial prophylaxis: confirmation of findings on exposure of patient to drug. Humphrey CA, et al. **Clin Lab Haematol** 1990;12(1):31–6

Toxic psychosis due to chloroquine [letter] Garg P, et al. **Indian J Pediatr** 1990 Jan–Feb;57(1):133–4

Chloroquine and psoriasis [letter] Katugampola G, et al. **Int J Dermatol** 1990 Mar;29(2):153–4

Responsiveness of chloroquine-induced pruritus to antihistamine therapy—a clinical survey. Okor RS. **J Clin Pharm Ther** 1990 Apr;15(2):147–50

Effects of clemastine, ketotifen and prednisolone on chloroquine-induced pruritus. Abila B, et al. **J Trop Med Hyg** 1989 Oct;92(5):356–9

Proguanil, chloroquine, and mouth ulcers [letter] Drysdale SF, et al. **Lancet** 1990 Jan 20;335(8682):164

Toxicological consequences of chloroquine and ethanol on the developing fetus. Sharma A, et al. **Pharmacol Biochem Behav** 1989 Sep;34(1):77–82

Chloroquine-induced pruritus in Malawi: lack of association with onchocerciasis. Burnham G, et al. **Trans R Soc Trop Med Hyg** 1989 Jul–Aug;83(4):527–8

[Acute psychosis after ingestion of chloroquine (letter)] Masson C, et al. **Presse Med** 1990 Feb 24;19(7):334 **(Fre)**

[Suspected convulsion-inducing effect of chloroquine (Resochin)] Fröscher W, et al. **Nervenarzt** 1989 Dec; 60(12):762–3 **(Ger)**

[Side effects of chloroquine therapy] Krause A, et al. **Z Arztl Fortbild (Jena)** 1989;83(22):1121–3 **(Ger)**

ANALOGS & DERIVATIVES

Intramuscular delagil therapy in malaria. Várnay F. **Ther Hung** 1989;37(4):199–201

[Field observation on the relapse pattern in patients naturally infected with vivax malaria from spring to autumn seasons in Cili County, Hunan Province] Yuan HA, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(3):184–6 (Eng. Abstr.) **(Chi)**

[Use of the resochin test in pediatric rheumatology] Davidovskiĭ LIa, et al. **Pediatriia** 1989;(9):112 **(Rus)**

ANALYSIS

Assay method for the simultaneous determination of proguanil, chloroquine and their major metabolites in biological fluids. Taylor RB, et al. **J Chromatogr** 1990 May 18;527(2):490–7

Determination of saliva: total plasma chloroquine levels relationship by high performance liquid chromatography. Brown-Awala EA, et al. **J Clin Pharmacol** 1989 Dec; 29(12):1135–9

Sensitive radioimmunoassay and enzyme-linked immunosorbent assay for the simultaneous determination of chloroquine and its metabolites in biological fluids. Escande C, et al. **J Pharm Sci** 1990 Jan;79(1):23–7

ANTAGONISTS & INHIBITORS

Diazepam does not improve the mechanical performance of rat cardiac papillary muscle exposed to chloroquine in vitro. Riou B, et al. **Intensive Care Med** 1989;15(6):390–5

Desipramine or cyproheptadine for reversing chloroquine resistance? [letter; comment] [see comments] Basco LK, et al. **Lancet** 1990 Feb 17;335(8686):422 Comment on: Lancet 1989 Nov 25;2(8674):1282–3. Comment in: Lancet 1990 May 12;335(8698):1155.

Desipramine and cyproheptadine for reversal of chloroquine resistance in Plasmodium falciparum [letter; comment] [see comments] Bitonti AJ, et al. **Lancet** 1989 Nov 25; 2(8674):1282–3 Comment on: Lancet 1989 Aug 5;2(8658):334–5. Comment in: Lancet 1990 Feb 17;335(8686):422.

BLOOD

Uptake of chloroquine by human erythrocytes. Ferrari V, et al. **Biochem Pharmacol** 1990 Feb 15;39(4):753–62

Chloroquine blood levels after administration of the liposome-encapsulated drug in relation to therapy of murine malaria. Peeters PA, et al. **Pharm Res** 1989 Sep; 6(9):787–93

METABOLISM

Sequence preference of chloroquine binding to DNA and prevention of Z-DNA formation. Kwakye-Berko F, et al. **Mol Biochem Parasitol** 1990 Mar;39(2):275–8

Reversal of drug-resistant falciparum malaria by calcium antagonists: potential for host cell toxicity. Watt G, et al. **Trans R Soc Trop Med Hyg** 1990 Mar–Apr;84(2):187–90

PHARMACOKINETICS

An improved formulation of chloroquine for intramuscular administration: absorption kinetics in rabbits. Prakongpan S, et al. **J Pharm Pharmacol** 1989 Oct;41(10):726–8

[Interaction of cholestyramine and chloroquine] Gendrel D, et al. **Arch Fr Pediatr** 1990 May;47(5):387–8 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Effects of cyclosporin and chloroquine on the mitogen-driven cell proliferation and Ig production of human mononuclear cells. van Loenen HJ, et al. **Agents Actions** 1990 Jan;29(1–2):103–4

Inhibition of human immunodeficiency virus infectivity by chloroquine. Tsai WP, et al. **AIDS Res Hum Retroviruses** 1990 Apr;6(4):481–9

A rapid in vitro test for chloroquine-resistant Plasmodium falciparum. Gluzman IY, et al. **Am J Trop Med Hyg** 1990 Jun;42(6):521–6

Effects of chloroquine on the metabolism of phosphatidylcholine associated with low density lipoprotein in arterial smooth muscle cells. Ishikawa Y, et al. **Atherosclerosis** 1989 Nov;80(1):1–7

The potentiating action of tetrandrine in combination with chloroquine or qinghaosu against chloroquine-sensitive and resistant falciparum malaria. Ye ZG, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):758–65

Kinetic modelling of the response of Plasmodium falciparum to chloroquine and its experimental testing in vitro. Implications for mechanism of action of and resistance to the drug. Geary TG, et al. **Biochem Pharmacol** 1990 Aug 15;40(4):685–91

Possible chloroquine-induced modification of N-acetylation of isoniazid and sulphadimidine in the rat. Nwankwo JO, et al. **Biochem Pharmacol** 1990 Aug 1;40(3):654–9

Time-dependent effects of chloroquine on pH of hepatocyte lysosomes. Tietz PS, et al. **Biochem Pharmacol** 1990 Sep 15;40(6):1419–21

Effects of intermediary metabolites and electron transport inhibitors on action of chloroquine on Brugia pahangi and Onchocerca volvulus. VandeWaa EA, et al. **Biochem Pharmacol** 1989 Dec 1;38(23):4327–32

Effects of chloroquine on the torsional dynamics and rigidities of linear and supercoiled DNAs at low ionic strength. Wu P, et al. **Biopolymers** 1989 Oct; 28(10):1695–703

Plasma from patients with severe Lassa fever profoundly modulates f-met-leu-phe induced superoxide generation in neutrophils. Roberts PJ, et al. **Br J Haematol** 1989 Oct; 73(2):152–7

Chloroquine's modulation of endothelial cell activity induced with basic fibroblast growth factor and human serum: effect on mitogenesis, protease production and cell migration. Inyang AL, et al. **Cell Biol Int Rep** 1990 Jan;14(1):35–46

Regression of autophagic vacuoles in mouse pancreatic cells: a morphometric study of the effect of methylamine and chloroquine followed by cycloheximide treatment. Kovacs J, et al. **Cell Biol Int Rep** 1989 Sep;13(9):805–11

Effect of the insulin degradation inhibitors bacitracin and chloroquine on insulin binding data to H35 rat hepatoma cells. de Vries CP, et al. **Diabete Metab** 1990 Mar–Apr; 16(2):70–6

Depressant effects of chloroquine on the isolated guinea-pig heart. Tona L, et al. **Eur J Pharmacol** 1990 Mar 27; 178(3):293–301

Formation of myeloid bodies in rat liver lysosomes after chloroquine administration. Abraham R, et al. **Exp Mol Pathol** 1968 Oct;9(2):212–29

Plasmodium chabaudi: in vivo effects of Ca2+ antagonists on chloroquine-resistant and chloroquine-sensitive parasites. Tanabe K, et al. **Exp Parasitol** 1990 May; 70(4):419–26

Chloroquine resistant Plasmodium falciparum malaria in Calcutta. A case report. Das MS, et al. **Indian J Malariol** 1988 Dec;25(2):99–101

Drug resistant P. falciparum in Madras (Tamil Nadu) and district Jabalpur (Madhya Pradesh). Ghosh SK, et al. **Indian J Malariol** 1989 Jun;26(2):87–90

Micro in vitro assessment of Plasmodium falciparum sensitivity to chloroquine and mefloquine in Gujarat. Karmakar P, et al. **Indian J Malariol** 1990 Mar;27(1):37–42

Epidemiological implications of population migration: Part II. Evidence of chloroquine resistant Plasmodium falciparum malaria in Kheda district, Gujarat. Sharma RC, et al. **Indian J Malariol** 1988 Dec;25(2):117–8

Chloroquine resistant imported Plasmodium falciparum in an industrial complex at Hardwar (U.P.). Sinha S, et al. **Indian J Malariol** 1989 Jun;26(2):123–5

Sensitivity of Plasmodium falciparum to chloroquine in Calcutta. Das MS, et al. **Indian J Public Health** 1988 Jul–Sep;32(3):162–3

Absence of effect of chloroquine in vivo on neutrophil oxidative metabolism in human subjects. Salmon D, et al.

J Antimicrob Chemother 1990 Mar;25(3):367–70

Glucocorticoid regulation of chloroquine nonsensitive insulin degradation in cultured fetal rat hepatocytes. Ali M, et al. **J Biol Chem** 1989 Dec 15;264(35):20992–7

The surface activity of the same subpopulation of galactosyl receptors on isolated rat hepatocytes is modulated by colchicine, monensin, ATP depletion, and chloroquine. McAbee DD, et al. **J Biol Chem** 1990 Jan 15;265(2):629–35

Localization of the focus of origin of resistance in Plasmodium falciparum. Nagaraj C, et al.
J Commun Dis 1989 Dec;21(4):323–32

A longitudinal study of P. falciparum response to chloroquine in relation to the epidemiology. Nagaraj C, et al.
J Commun Dis 1989 Sep;21(3):229–40

The hyperreactive malarial splenomegaly syndrome in a European: has the treatment a modulatory effect on the immune system? [letter] Betticher DC, et al.
J Infect Dis 1990 Jan;161(1):157–9

Inhibition of metoprolol metabolism by chloroquine and other antimalarial drugs. Lancaster DL, et al.
J Pharm Pharmacol 1990 Apr;42(4):267–71

The preferential effects of chloroquine on the IgM and IgG subclass responses to TI and TD antigens in BALB/cAn mice. Lewis GM, et al. **J Pharm Pharmacol** 1990 Jan; 42(1):60–1

The in-vitro and ex-vivo effects of chloroquine sulphate on platelet function: implications for malaria prophylaxis in patients with impaired haemostasis. Cummins D, et al.
J Trop Med Hyg 1990 Apr;93(2):112–5

Isolated malaria outbreak in Somalia: role of chloroquine-resistant Plasmodium falciparum demonstrated in Balcad epidemic. Warsame M, et al.
J Trop Med Hyg 1990 Aug;93(4):284–9

Desipramine reversal of chloroquine resistance in wild isolates of Plasmodium falciparum [letter] Salama A, et al. **Lancet** 1990 Jan 20;335(8682):164–5

Chloroquine-resistant Plasmodium vivax [letter] Whitby M, et al. **Lancet** 1989 Dec 9;2(8676):1395

Cytochrome P-450 activity in malarial parasites and its possible relationship to chloroquine resistance. Ndifor AM, et al. **Mol Biochem Parasitol** 1990 Jun;41(2):251–7

Several alleles of the multidrug-resistance gene are closely linked to chloroquine resistance in Plasmodium falciparum [see comments] Foote SJ, et al. **Nature** 1990 May 17; 345(6272):255–8 Comment in: Nature 1990 May 17;345(6272):202–3.

Malaria: the path of drug resistance [news; comment] Newbold C. **Nature** 1990 May 17;345(6272):202–3 Comment on: Nature 1990 May 17;345(6272):253–5. Comment on: Nature 1990 May 17;345(6272):255–8.

Chloroquine resistance not linked to mdr-like genes in a Plasmodium falciparum cross [see comments] Wellems TE, et al. **Nature** 1990 May 17;345(6272):253–5 Comment in: Nature 1990 May 17;345(6272):202–3.

The effects of chloroquine on the infectivity of chloroquine-sensitive and -resistant populations of Plasmodium yoelii nigeriensis to mosquitoes. Ichimori K, et al. **Parasitology** 1990 Jun;100 Pt 3:377–81

Chloroquine alters the processing of secretin in isolated rat pancreatic acinar cells. Izzo RS, et al. **Regul Pept** 1990 Feb 4;27(2):273–82

Chloroquine-resistant Plasmodium falciparum malaria in the Kavango region of Namibia. Sharp BL, et al.
S Afr Med J 1990 Sep 15;78(6):322–3

Effects of chloroquine on release of mediators from mast cells. Green KB, et al. **Skin Pharmacol** 1989;2(2):77–85

In vitro sensitivity of multiresistant Plasmodium falciparum to new candidate antimalarial drugs in western Thailand. Schildbach S, et al.
Southeast Asian J Trop Med Public Health 1990 Mar; 21(1):29–38

Sensitivity in vitro of Plasmodium falciparum to chloroquine and mefloquine in two regions of Benin. Chippaux JP, et al. **Trans R Soc Trop Med Hyg** 1989 Sep–Oct;83(5):584–5

Differences in drug response of Plasmodium falciparum within an area of the Amazon region. Kremsner PG, et al. **Trans R Soc Trop Med Hyg** 1989 Mar–Apr;83(2):158–61

Sudden increase in number of isolates of Plasmodium falciparum resistant to chloroquine in Madagascar. Lepers JP, et al. **Trans R Soc Trop Med Hyg** 1989 Jul–Aug; 83(4):491–2

Susceptibility of Plasmodium falciparum strains to chloroquine and mefloquine in the Amazonas Federal Territory of Venezuela. Maynadié M, et al.
Trans R Soc Trop Med Hyg 1989 Sep–Oct;83(5):586–8

Falciparum malaria resistant to chloroquine, quinine and Fansidar in a non-immune patient infected in Ghana. Nguyen C, et al. **Trans R Soc Trop Med Hyg** 1989 Jul–Aug; 83(4):485–6

Chloroquine resistant Plasmodium falciparum in indigenous residents of Cameroon. Oduola AM, et al.
Trans R Soc Trop Med Hyg 1989 May–Jun;83(3):308–10

Acidotropic amines inhibit proteolytic processing of flavivirus prM protein. Randolph VB, et al. **Virology** 1990 Feb;174(2):450–8

[A handy medium for in vitro assessment of sensitivity of Plasmodium falciparum to chloroquine and mefloquine in the field] Liu DQ, et al.
Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1989;7(2):112–4 (Eng. Abstr.) **(Chi)**

[Development of chloroquine resistance in Plasmodium falciparum in Gabon between 1984 and 1987–88 (in vivo evaluation in a school environment)] Richard-Lenoble D, et al. **Ann Soc Belg Med Trop** 1989 Jun;69(2):113–9 (Eng. Abstr.) **(Fre)**

[The in-vitro action of chloroquine on the infectivity of gametocytes of Plasmodium berghei Anka] Said A, et al. **Ann Soc Belg Med Trop** 1989 Sep;69(3):209–11 (Eng. Abstr.) **(Fre)**

[Antiaggregation action of chloroquine] Bertrand E, et al. **Med Trop (Mars)** 1990 Jan–Mar;50(1):143–6 (Eng. Abstr.) **(Fre)**

[Evaluation of Plasmodium falciparum susceptibility to chloroquine and amodiaquine using a simplified, in vivo, 7-day test in southern Cameroon] Gazin P, et al.
Med Trop (Mars) 1990 Jan–Mar;50(1):27–31 (Eng. Abstr.) **(Fre)**

[Uncommon clinical aspects of Plasmodium falciparum malaria] Plasse M, et al. **Pediatrie** 1990;45(5):311–4 (Eng. Abstr.) **(Fre)**

POISONING

Chloroquine poisoning in a child. Kelly JC, et al.
Ann Emerg Med 1990 Jan;19(1):47–50

Chloroquine phosphate induced haematemesis. Bhasin DK, et al. **Hum Toxicol** 1989 Sep;8(5):387–8

[Treatment of acute chloroquine poisoning] Siboni AH, et al. **Ugeskr Laeger** 1990 Apr 2;152(14):1013–5 (Eng. Abstr.) **(Dan)**

[Small intestine wash-out: technic and indications in acute severe chloroquine poisoning in underdeveloped surgical environments] Steiner E, et al. **Ann Chir** 1990;44(5):411–2 (Eng. Abstr.) **(Fre)**

[Role of single-therapy diazepam in severe poisonings by chloroquine (letter)] Saissy JM, et al. **Presse Med** 1989 Dec 9;18(41):2022–3 **(Fre)**

[Chloroquine poisoning] Aasarød K, et al.
Tidsskr Nor Laegeforen 1990 Feb 10;110(4):488–9 (Eng. Abstr.) **(Nor)**

THERAPEUTIC USE

A trial of chloroquine-medicated salt for malaria suppression in Uganda. Hall SA, et al. **Am J Trop Med Hyg** 1967 Jul; 16(4):429–42

Effect of malaria chemoprophylaxis on the development of antibodies to Plasmodium falciparum in expatriates living in west Africa. Philpott J, et al. **Am J Trop Med Hyg** 1990 Jan;42(1):28–35

Failure of chloroquine prophylaxis for falciparum malaria in pregnant women in Madang, Papua New Guinea. Brabin BJ, et al. **Ann Trop Med Parasitol** 1990 Feb;84(1):1–9

Efficacy of chloroquine in the treatment of malaria in children under five years in Baissa (Gongola State, Nigeria). Daniel HI, et al. **Ann Trop Med Parasitol** 1989 Aug;83(4):331–8

Continuation of chloroquine-susceptible Plasmodium falciparum parasitemia in volunteers receiving chloroquine therapy. Murphy JR, et al.
Antimicrob Agents Chemother 1990 Apr;34(4):676–9

Malaria prophylaxis in high-risk travelers [letter; comment] Catino D. **Arch Intern Med** 1990 Apr;150(4):916 Comment on: Arch Intern Med 1989 Jan;149(1):178–9.

Extension of multiple drug resistant Plasmodium falciparum malaria in Africa: report of a Central African case. Belec L, et al. **Biomed Pharmacother** 1989;43(9):699–702 (33 ref.)

Home treatment of febrile children with antimalarial drugs in Togo. Deming MS, et al. **Bull World Health Organ** 1989; 67(6):695–700

Sensitivity of Plasmodium falciparum to chloroquine and sulfadoxine/pyrimethamine in Nigerian children. Ekanem OJ, et al. **Bull World Health Organ** 1990;68(1):45–52

Therapeutic failure with chloroquine in Plasmodium falciparum infections; possibility of high grade resistance. Wijesundera MD, et al. **Ceylon Med J** 1989 Jun;34(2):77–85

Antagonism of serum of mice infected with chloroquine-resistant 'NS' line to the antimalarial action of chloroquine. Li GD, et al.
Chung Kuo Yao Li Hsueh Pao 1989 May;10(3):257–60

Efficacies of chloroquine and pyrimethamine-sulphadoxine in a Nigerian population with chloroquine resistant P. falciparum malaria. Usanga EA, et al. **East Afr Med J** 1990 May;67(5):295–301

Chloroquine sensitivity of P. falciparum in Koraput district, Orissa. Mohapatra SS, et al. **Indian J Malariol** 1989 Mar; 26(1):33–9

Radical treatment of vivax malaria in Madhya Pradesh, India. Singh N, et al. **Indian J Malariol** 1990 Mar;27(1):55–6

A focus of high degree chloroquine resistant P. falciparum in Mandla district (M.P.). Singh N, et al.
Indian J Malariol 1989 Mar;26(1):45–51

A study on tropical splenomegaly syndrome and chloroquine prophylaxis. Gupta OP, et al. **J Assoc Physicians India** 1989 Sep;37(9):570–5

Malaria in Leicester 1983–1988: a review of 114 cases. Wiselka MJ, et al. **J Infect** 1990 Mar;20(2):103–10 (15 ref.)

Chloroquine-resistant malaria in Jos, Nigeria. Okeahialam BN, et al. **J Trop Med Hyg** 1989 Oct;92(5):365–6

Reactive oxygen species generation by Kupffer cells and blood monocytes of mice infected with Plasmodium berghei and the chloroquine treatment. Prasad RN, et al. **Jpn J Exp Med** 1990 Feb;60(1):1–4

Field study of cyproheptadine/chloroquine synergism in falciparum malaria [letter] Björkman A, et al. **Lancet** 1990 Jul 7;336(8706):59–60

Plasmodium vivax resistance to chloroquine? Rieckmann KH, et al. **Lancet** 1989 Nov 18;2(8673):1183–4

Reversal of chloroquine-resistant falciparum malaria [letter; comment] Watt G, et al. **Lancet** 1990 May 12; 335(8698):1155 Comment on: Lancet 1990 Feb 17;335(8686):422.

Open comparison of intramuscular chloroquine and quinine in children with severe chloroquine-sensitive falciparum malaria. White NJ, et al. **Lancet** 1989 Dec 2;2(8675):1313–6

Chloroquine resistant falciparum malaria in children. Rampengan TH, et al. **Paediatr Indones** 1989 Jan–Feb; 29(1–2):13–9

Chloroquine resistance in Plasmodium falciparum in KwaZulu, 1983–1988. Hansford CF. **S Afr Med J** 1989 Nov 18;76(10):546–7

Disease-modifying anti-rheumatic drug therapy. An expensive therapy despite inexpensive drugs. Borg G, et al. **Scand J Rheumatol** 1990;19(2):115–21

The first case of Plasmodium falciparum resistant to chloroquine treatment discovered in the Republic of Afghanistan. Delfini LF. **Trans R Soc Trop Med Hyg** 1989 May–Jun;83(3):316

Sensitivity to chloroquine in vivo and in vitro of Plasmodium falciparum in Sokoto, Nigeria. Elueze EI, et al.
Trans R Soc Trop Med Hyg 1990 Jan–Feb;84(1):45

Chloroquine resistance of Plasmodium falciparum in semi-immune children in Zaria, northern Nigeria. Lege-Oguntoye L, et al. **Trans R Soc Trop Med Hyg** 1989 Sep–Oct;83(5):599–601

Does chloroquine resistance occur in refugee camps in eastern Sudan? Lienhardt C, et al.
Trans R Soc Trop Med Hyg 1989 Jul–Aug;83(4):486–7

Multiple drug resistance of Plasmodium falciparum in Liberia. Monson MH, et al.
Trans R Soc Trop Med Hyg 1989 May–Jun;83(3):311–2

A mixed infection of vivax and falciparum malaria apparently resistant to 4-aminoquinoline: a case report. Schuurkamp GJ, et al. **Trans R Soc Trop Med Hyg** 1989 Sep–Oct; 83(5):607–8

Malaria relapses and chloroquine resistance at the BHEL industrial complex, Hardwar, India. Sinha S, et al.
Trans R Soc Trop Med Hyg 1989 Sep–Oct;83(5):606

Chloroquine-resistant Plasmodium falciparum malaria in Senegal. Trape JF, et al. **Trans R Soc Trop Med Hyg** 1989 Nov–Dec;83(6):761

Status of the response of Plasmodium falciparum to chloroquine and mefloquine in Iran. Edrissian GH.
Trop Geogr Med 1989 Oct;41(4):297–303

Integrated malaria control achieves results in Mayotte. Julvez J, et al. **World Health Forum** 1989;10(2):213–8

[Experimental studies on the incubation period and relapse patterns in vivax malaria in west Hunan] Wang ZM, et al.
Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1989;7(3):181–3 (Eng. Abstr.) **(Chi)**

[The emergence of chloroquine-resistant malaria in Dakar, Senegal] Gaye O, et al. **Ann Soc Belg Med Trop** 1990 Mar; 70(1):33–7 (Eng. Abstr.) **(Fre)**

[The treatment of Plasmodium falciparum malaria in the Malagasy Highland Plateaux. Development of fever and parasite density. Clinical aspects] Lepers JP, et al.
Arch Inst Pasteur Madagascar 1989;56(1):155–9 (Eng. Abstr.) **(Fre)**

[In vivo chemosensitivity of Plasmodium falciparum in the Islamic Federal Republic of the Comoros] Blanchy S, et al. **Bull Soc Pathol Exot Filiales** 1989;82(4):493–502 (Eng. Abstr.) **(Fre)**

[Evaluation of the efficacy of amino 4-quinolones in a chemoresistant zone. Proposals for new therapeutic schemes] Hengy C, et al. **Med Trop (Mars)** 1990 Jan–Mar; 50(1):109–11 (Eng. Abstr.) **(Fre)**

[Malaria on the Turkish Riviera (letter)] Kretschmer H.
Dtsch Med Wochenschr 1990 Mar 9;115(10):396 **(Ger)**

[In vivo resistance of Plasmodium falciparum to 4-aminoquinolines and to a sulfadoxine-pyrimethamine combination. II. Study of Manaus, Amazonas 1983–1984] Reyes S, et al. **Rev Bras Malariol Doencas Trop** 1986; 38:37–44 (Eng. Abstr.) **(Por)**

[Use of chloroquine in the treatment of desquamative interstitial pneumonia] Carrasco Gandía S, et al.
An Esp Pediatr 1989 Jul;31(1):70–2 (10 ref.) **(Spa)**

[Difficulties in the prevention of malaria in Spain continue (letter)] Gómez-Olivé X, et al. **Med Clin (Barc)** 1990 Mar 31;94(12):477–8 **(Spa)**

TOXICITY

Effects of long-term chloroquine exposure on the phospholipid metabolism in retina and pigment epithelium of the mouse. Hallberg A, et al.
Acta Ophthalmol (Copenh) 1990 Apr;68(2):125–30

URINE

Ion exchange paper adsorption and thin-layer chromatography for detection of chloroquine in urine for the study of chemosensitivity of Plasmodium falciparum. Estadieu M, et al. **Ann Trop Med Parasitol** 1989 Dec; 83(6):577–81

Evaluation of test sensitivity and test specificity of three field methods for quantification of chloroquine in urine using liquid chromatography as reference method. Bergqvist Y,

et al. **Ther Drug Monit** 1990 Jul;12(4):366–72

CHLOROQUINOLINOLS see under **HYDROXYQUINOLINES**

CHLOROSIS see **ANEMIA, HYPOCHROMIC**

CHLOROTHIAZIDE

ANALYSIS

Effect of temperature and fat content on the solubility of hydrochlorothiazide and chlorothiazide in milk. Macheras PE, et al. **J Pharm Sci** 1989 Nov;78(11):933–6

PHARMACOKINETICS

Absorption and disposition kinetics of chlorothiazide in protein–calorie malnutrition. Jung D, et al. **Biopharm Drug Dispos** 1990 Jan–Feb;11(1):53–60

High–performance liquid chromatographic method for studies on the photodecomposition kinetics of chlorothiazide. Ulvi V, et al. **J Chromatogr** 1990 May 16; 507:151–6

PHARMACOLOGY

The effect of verapamil and thiazide in the prevention of renal stone formation. Halabe A, et al. **Urol Res** 1990; 18(2):155–8

CHLOROTRIANISENE

METABOLISM

Role of P–450c in the formation of a reactive intermediate of chlorotrianisene (TACE) by hepatic microsomes from methylcholanthrene–treated rats. Juedes MJ, et al. **Drug Metab Dispos** 1990 Mar–Apr;18(2):131–7

Inactivation of the uterine estrogen receptor binding of estradiol during P–450 catalyzed metabolism of chlorotrianisene (TACE). Speculation that TACE antiestrogenic activity involves covalent binding to the estrogen receptor. Kupfer D, et al. **FEBS Lett** 1990 Feb 12;261(1):59–62

PHARMACOLOGY

Further observations on the induction of ovulation with clomiphene. Charles D, et al. **Fertil Steril** 1966 May–Jun; 17(3):351–62

Differential responses of pituitary kallikrein and prolactin to tamoxifen and chlorotrianisene. Powers CA, et al. **Mol Cell Endocrinol** 1989 Sep;66(1):93–100

CHLOROXACILLIN see **CLOXACILLIN**

CHLORPHENAMIDINE see under **AMIDINES**

CHLORPHENAMINE see **CHLORPHENIRAMINE**

CHLORPHENIRAMINE

ADMINISTRATION & DOSAGE

Treatment of acute otitis media in children. IV. A fourth clinical trial. Stickler GB, et al. **Am J Dis Child** 1967 Aug; 114(2):123–30

ADVERSE EFFECTS

Contact dermatitis from dexchlorpheniramine. Cusano F, et al. **Contact Dermatitis** 1989 Nov;21(5):340

Contact dermatitis due to chlorpheniramine maleate in eyedrops. Tosti A, et al. **Contact Dermatitis** 1990 Jan; 22(1):55

PHARMACOKINETICS

Pharmacokinetics and pharmacodynamics of terfenadine and chlorpheniramine in the elderly. Simons KJ, et al. **J Allergy Clin Immunol** 1990 Mar;85(3):540–7

Chlorpheniramine dissolution and relative urinary excretion from commercial products. Hsu HY, et al. **J Pharm Sci** 1989 Oct;78(10):844–7

PHARMACOLOGY

Is blockade of conditioned flavor aversions by chlorpheniramine the result of state dependency? Green KF. **Behav Neural Biol** 1990 Jul;54(1):56–62

Psychomotor stimulant effects of the stereoisomers of chlorpheniramine. Bergman J. **Psychopharmacology (Berl)** 1990;100(1):132–4

[Behavioral study on an antitussive and expectorant, and of its constituents. I. Effects on ambulatory activity and discrete lever–press avoidance response in mice] Kuribara H, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1989 Oct; 24(5):417–29 (Eng. Abstr.) **(Jpn)**

[Behavioral study on an antitussive and expectorant, and of its constituents. II. Effects on ambulatory activity after repeated administration, and a modification of the methamphetamine sensitivity in mice] Kuribara H, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1989 Oct;24(5):430–8 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Randomized, double–blind, parallel groups, placebo–controlled study of efficacy and safety of Rynatan in the treatment of allergic rhinitis using an acute model. Weiler JM, et al. **Ann Allergy** 1990 Jan;64(1):63–7

Efficacy of chlorpheniramine maleate for management of pruritus in cats. Miller WH Jr, et al. **J Am Vet Med Assoc** 1990 Jul 1;197(1):67–70

Effectiveness of antihistamines in common cold. Sakchainanont B, et al. **J Med Assoc Thai** 1990 Feb; 73(2):96–101

Neurocysticercosis: treatment with albendazole and dextrochloropheniramine [see comments] Agapejev S, et al. **Trans R Soc Trop Med Hyg** 1989 May–Jun;83(3):377–83 Comment in: Trans R Soc Trop Med Hyg 1990 Jan–Feb;84(1):174.

[Loratadine and dexchlorpheniramine in the treatment of perennial allergic rhinitis in pediatric patients] Longo G, et al. **Minerva Pediatr** 1990 May;42(5):179–83 (Eng. Abstr.) **(Ita)**

CHLORPHENTERMINE see under **PHENTERMINE**

CHLORPHTHALIDOLONE see **CHLORTHALIDONE**

CHLORPROMAZINE

Acute myocardial infarction improved by neuroleptic analgesic therapy. Yanagisawa H. **South Med J** 1990 Jul; 83(7):839–42

ADMINISTRATION & DOSAGE

Lytic cocktail in children. Rectal versus intramuscular administration. Laub M, et al. **Anaesthesia** 1990 Feb; 45(2):110–2

Influence of topical anesthesia on the sedation of pediatric emergency department patients with lacerations. Pierluisi GJ, et al. **Pediatr Emerg Care** 1989 Dec;5(4):211–5

[Symptomatic treatment of terminal painful glaucoma by the retrobulbar administration of aminazine] Bastrikov NI. **Vestn Oftalmol** 1989 Sep–Oct;105(5):47–9 (Eng. Abstr.) **(Rus)**

[Remission of benzodiazepine–resistant delirium tremens after treatment with Laborit's lytic cocktail (letter)] Iruela LM, et al. **Med Clin (Barc)** 1989 Dec 2;93(18):717 **(Spa)**

ADVERSE EFFECTS

Total dosage of chlorpromazine and ocular opacities. Buffaloe WJ, et al. **Am J Psychiatry** 1967 Aug;124(2):250–1

Neuroleptic malignant syndrome in the intensive therapy unit. Montgomery JN, et al. **Anaesthesia** 1990 Apr; 45(4):311–3 (15 ref.)

Peroxisomal and mitochondrial proliferation and increased alanine: glyoxylate aminotransferase activity in human liver after chlorpromazine–induced cholestasis. Cooper PJ, et al. **Biochem Soc Trans** 1989 Dec;17(6):1071–2

Neuroleptic–associated autoantibodies. A prevalence study. Canoso RT, et al. **Biol Psychiatry** 1990 Apr 15;27(8):863–70

Adverse interaction between cimetidine and chlorpromazine in two cases of chronic schizophrenia. Byrne A, et al. **Br J Psychiatry** 1989 Sep;155:413–5

Tardive dystonia. The benefits of time [see comments] Cooper SJ, et al. **Br J Psychiatry** 1989 Jul;155:113–5 Comment in: Br J Psychiatry 1989 Nov;155:715–6.

Neuroleptic malignant syndrome in a case of post–partum psychosis. Price DK, et al. **Br J Psychiatry** 1989 Dec; 155:849–52

Chlorpromazine–induced liver and bone marrow granulomas associated with agranulocytosis. Ben–Yehuda A, et al. **Isr J Med Sci** 1990 Aug;26(8):449–51

Largactil in pyogenic meningitis (relapse case) [letter] Singh BJ. **J Assoc Physicians India** 1989 Jul;37(7):475

Neuroleptic malignant syndrome: a case report with post–mortem brain and muscle pathology [see comments] Jones EM, et al. **J Neurol Neurosurg Psychiatry** 1989 Aug; 52(8):1006–9 Comment in: J Neurol Neurosurg Psychiatry 1990 Mar;53(3):271.

Neuroleptic malignant syndrome from chlorpromazine: case report [letter] Mahmood T, et al. **J R Coll Gen Pract** 1989 May;39(322):211

Management of heat stroke [letter] Greenslade GL. **J R Nav Med Serv** 1989 Spring;75(1):53

Chlorpromazine–induced immunopathy: progressive increase in serum IgM. Zucker S, et al. **Medicine (Baltimore)** 1990 Mar;69(2):92–100

Ventricular fibrillation due to lithium withdrawal—an interaction with chlorpromazine? Stevenson RN, et al. **Postgrad Med J** 1989 Dec;65(770):936–8

[Cardiotoxicity of antipsychotic drugs: abnormal ECG in 1266 cases] Song SY. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Apr; 22(2):77–9, 125 (Eng. Abstr.) **(Chi)**

ANALOGS & DERIVATIVES

Is hemoglobin a catalyst for sulfoxidation of chlorpromazine? An investigation with isolated purified hemoglobin and hemoglobin in monooxygenase and peroxidase mimicking systems. Kelder PP, et al. **Biochem Pharmacol** 1989 Oct 15;38(20):3593–9

The metabolism of chlorpromazine N–oxide in man and dog. Jaworski TJ, et al. **Xenobiotica** 1990 Jan;20(1):107–15

ANALYSIS

Enzyme–amplified receptor assay screening test for chlorpromazine, trifluoperazine, and phencyclidine. Hallowell SF, et al. **J Clin Lab Anal** 1990;4(1):64–73

BLOOD

Evidence for cooperative binding of chlorpromazine with hemoglobin: equilibrium dialysis, fluorescence quenching and oxygen release study. Bhattacharyya M, et al. **Biochem Biophys Res Commun** 1990 Mar 30;167(3):1146–53

Binding of two spin–labelled derivatives of chlorpromazine to human erythrocytes. Olivier JL, et al. **Biochem J** 1989 Dec 15;264(3):633–41

HISTORY

[The introduction of chlorpromazine to North America (letter)] Beausejour A. **Psychiatr J Univ Ottawa** 1989 Sep; 14(3):502 **(Fre)**

METABOLISM

Cooperative binding of chlorpromazine with hemoglobin. Bhattacharyya M, et al. **Biochem Int** 1989 Dec; 19(6):1363–72

Is hemoglobin a catalyst for sulfoxidation of chlorpromazine? An investigation with isolated purified hemoglobin and hemoglobin in monooxygenase and peroxidase mimicking systems. Kelder PP, et al. **Biochem Pharmacol** 1989 Oct 15;38(20):3593–9

Activation of chlorpromazine by the myeloperoxidase system of the human neutrophil. van Zyl JM, et al. **Biochem Pharmacol** 1990 Sep 1;40(5):947–54

In vivo photodegradation of chlorpromazine. Schoonderwoerd SA, et al. **Photochem Photobiol** 1989 Nov; 50(5):659–64

The noncompetitive blocker [3H]chlorpromazine labels three amino acids of the acetylcholine receptor gamma subunit: implications for the alpha–helical organization of regions MII and for the structure of the ion channel. Revah F, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4675–9

PHARMACOKINETICS

Chlorpromazine disposition in relation to age in children. Furlanut M, et al. **Clin Pharmacokinet** 1990 Apr; 18(4):329–31

Bioequivalence of two thorazine tablet formulations using radioimmunoassay and gas chromatographic–mass spectrometric methods. Midha KK, et al. **J Pharm Sci** 1990 Mar;79(3):196–201

PHARMACOLOGY

Effect of intracerebral injection of chlorpromazine and diazepam on acid phosphatase activity in the mouse brain. Tanwar RK, et al. **Acta Anat (Basel)** 1990;138(2):121–7

The beneficial effect of chlorpromazine on dorsal skin flap survival. Angel MF, et al. **Ann Plast Surg** 1989 Dec; 23(6):492–7

Competing voice messages. Effects of message load and drugs on the ability of acute schizophrenics to attend. Rappaport M. **Arch Gen Psychiatry** 1967 Jul;17(1):97–103

Anti–ischemic and membrane stabilizing activity of calmodulin inhibitors. Beręsewicz A. **Basic Res Cardiol** 1989 Nov–Dec;84(6):631–45

Protective effect of chlorpromazine against the lethality of interleukin 1 in adrenalectomized or actinomycin D–sensitized mice. Bertini R, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):942–6

The inhibition of glutamate dehydrogenase by some antipsychotic drugs. Couée I, et al. **Biochem Pharmacol** 1990 Mar 1;39(5):827–32

Chlorpromazine makes the platelet plasma membrane permeable for low–molecular weight substances and reduces ATP production. Holmsen H, et al. **Biochem Pharmacol** 1990 Jul 15;40(2):373–6

Chlorpromazine is unable to block the protein kinase C translocation to human platelet plasma membranes stimulated by phorbol ester. Font J, et al. **Biochem Soc Trans** 1989 Dec;17(6):1008–9

Mechanism of local anesthetic effect on mitochondrial ATP synthase as deduced from photolabelling and inhibition studies with phenothiazine derivatives. Dabbeni–Sala F, et al. **Biochim Biophys Acta** 1990 Jul 9;1026(1):117–25

Failure to find interference between anti–HLA antibodies and chlorpromazine. Alexander RC, et al. **Biol Psychiatry** 1990 Mar 15;27(6):642–8

Different effects of chlorpromazine on bleomycin– and epirubicin induced cytotoxicity. Grankvist K, et al. **Biosci Rep** 1990 Apr;10(2):173–7

Modulation of sodium current kinetics by chlorpromazine in freshly–isolated striatal neurones of the adult guinea–pig. Ogata N, et al. **Br J Pharmacol** 1989 Dec;98(4):1173–84

Neuroleptic and anti–depressant drug treatment abolishes conditioned immunosuppression in mice. Gorczynski RM, et al. **Brain Behav Immun** 1989 Dec;3(4):312–9

High chlorpromazine doses and liver function. Castro–e–Silva Júnior O, et al. **Braz J Med Biol Res** 1989; 22(3):351–3

Effect of chlorpromazine and biliary drainage on portal blood flow and mitochondrial function during extrahepatic cholestasis. Roselino JE, et al. **Braz J Med Biol Res** 1989; 22(7):889–93

Reversible drug effects on the metabolic activation of polymorphonuclear leukocytes. Takanaka K, et al. **Chem Biol Interact** 1990;73(2-3):309-21

Intramuscular injection of chlorpromazine decreases intraocular pressure by lowering systemic blood pressure. Liu JH, et al. **Curr Eye Res** 1989 Dec;8(12):1315-21

Chlorpromazine attenuates the pulmonary vascular response to isocapneic alveolar hypoxia in piglets. Konduri GG, et al. **Dev Pharmacol Ther** 1990;14(4):238-44

Effects of chlorpromazine on pattern and flash ERGs and VEPs compared to oxazepam and to placebo in normal subjects. Bartel P, et al. **Electroencephalogr Clin Neurophysiol** 1990 Sep-Oct; 77(5):330-9

Assays for corticotropin-releasing factor (CRF) using rats treated with morphine, chlorpromazine, dexamethasone and Nembutal. Arimura A, et al. **Endocrinology** 1967 Aug; 81(2):235-45

Effect of enzyme induction on bioavailability of hetacillin in patients treated with anticonvulsants and chlorpromazine. Galanopoulou P, et al. **Eur J Drug Metab Pharmacokinet** 1990 Jan-Mar;15(1):15-8

Evidence that chlorpromazine and prostaglandin E1 but not neomycin interfere with the inositol phospholipid metabolism in intact human platelets. Tysnes OB, et al. **FEBS Lett** 1990 May 7;264(1):33-6

A comparison of the effects of chlorpromazine and more selective histamine and 5-hydroxytryptamine antagonists on human IgG synthesis in vitro. Martinez F, et al. **Int J Immunopharmacol** 1990;12(2):185-91

Effects of chlorpromazine and low calcium on the cytoskeleton and the secretory function of hepatocytes in vitro. Kawahara H, et al. **J Hepatol** 1990 Jan;10(1):8-16

Accumulation of inositol phosphates induced by chlorpromazine in C6 glioma cells. Leli U, et al. **J Neurochem** 1989 Dec;53(6):1918-24

Calcium antagonists fail to protect mammalian spinal neurons after physical injury. Shi RY, et al. **J Neurotrauma** 1989 Winter;6(4):261-76; discussion 277-8

Ionization constants, octanol partition coefficients and cholinesterase inhibitor constants for chlorpromazine and its metabolites. Whelpton R. **J Pharm Pharmacol** 1989 Dec; 41(12):856-8

Divergent pharmacological effects of three calmodulin antagonists, N-(6-aminohexyl)-5-chloro-1-naphthalenesulfonamide (W-7), chlorpromazine and calmidazolium, on isometric tension development and myosin light chain phosphorylation in intact bovine tracheal smooth muscle. Asano M. **J Pharmacol Exp Ther** 1989 Nov;251(2):764-73

Inotropic and lusitropic effects of chlorpromazine on rat left ventricular papillary muscle. Clergue M, et al. **J Pharmacol Exp Ther** 1990 Apr;253(1):296-304

Potent blocking action of chlorpromazine on two types of calcium channels in cultured neuroblastoma cells. Ogata N, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1142-9

Differential block of sodium and calcium channels by chlorpromazine in mouse neuroblastoma cells. Ogata N, et al. **J Physiol (Lond)** 1990 Jan;420:165-83

Effects of chlorpromazine in the nucleus reticularis lateralis on the cat cerebellar potentials. Hagiwara Y, et al. **Jpn J Pharmacol** 1989 Sep;51(1):1-9

Effect of chlorpromazine on transmigration of mitochondrial aspartate aminotransferase in rat liver. Kondoh M, et al. **Kitasato Arch Exp Med** 1989 Dec;62(4):181-6

Antagonism of presynaptic dopamine receptors by phenothiazine drug metabolites. Nowak JZ, et al. **Life Sci** 1990;46(6):443-51

The chlorpromazine inhibition of transport ATPase and acetylcholinesterase activities in the microsomal membranes of rat in vitro and in vivo. Mazumder B, et al. **Mol Cell Biochem** 1990 Jun 1;95(1):13-20

The effects of amphetamine and chlorpromazine on independent ingestion of milk in preweanling rats. Capuano CA, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):567-72

Therapeutic and hypothermic properties of diazepam altered by a diazepam-chlorpromazine association. Taukulis HK, et al. **Pharmacol Biochem Behav** 1989 Sep;34(1):1-6

Listening, priming and emotion under a neuroleptic drug. Hartley LR, et al. **Physiol Behav** 1990 May;47(5):837-41

The effect of calmodulin inhibitors of the adenylate cyclase system. Okruhlicová L, et al. **Physiol Bohemoslov** 1990; 39(2):151-5

Directional running in mice: effects of cocaine and chlorpromazine. Dews PB. **Psychopharmacology (Berl)** 1990;101(2):190-5

Comparison of the toxic and radiosensitizing effects of five therapeutic drugs on the mouse jejunum. Veena K, et al. **Strahlenther Onkol** 1990 Aug;166(8):554-6

Improved liver preservation with UW solution by chlorpromazine donor pretreatment. Sundberg R, et al. **Transplant Proc** 1990 Apr;22(2):508

How reserpine and chlorpromazine act: the impact of key discoveries on the history of psychopharmacology. Curzon G. **Trends Pharmacol Sci** 1990 Feb;11(2):61-3 (34 ref.)

[The effect of calmodulin and chlorpromazine on the activity of phospholipases A2 from various sources] Azizova NN, et al. **Biokhimiia** 1990 Jan;55(1):23-8 (Eng. Abstr.) **(Rus)**

[Effect of seduxen and aminazin on the interaction of the cerebral hemispheres in man] Egorov AIu. **Fiziol Cheloveka** 1989 May-Jun;15(3):128-34 **(Rus)**

[Effect of aminazine, caffeine and the intensity of mental stress on psychophysiological functions and work effectiveness of humans] Navakatikian AO, et al. **Fiziol Zh** 1989 Nov-Dec;35(6):79-83 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Some parameters of the immune system at schizophrenia therapy with chlorpromazine and zetidoline. Tuma I, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):272-3

Heterogeneity of laboratory test results for antiphospholipid antibodies in patients treated with chlorpromazine and other phenothiazines. Lillicrap DP, et al. **Am J Clin Pathol** 1990 Jun;93(6):771-5

Response of non-migrainous headaches to chlorpromazine. Barclay CL, et al. **Headache** 1990 Jan;30(2):85-7

The treatment of heroin addicts with dextromethorphan: a double-blind comparison of dextromethorphan with chlorpromazine. Koyuncuoğlu H, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 Apr;28(4):147-52

Chlorpromazine protects rat spinal cord against contusion injury. Sadanaga KK, et al. **J Neurotrauma** 1989 Fall; 6(3):153-61

Improvement of liver preservation quality with UW solution by chlorpromazine pretreatment of the donor in an experimental model. Sundberg R, et al. **Transplantation** 1989 Nov;48(5):742-4

TOXICITY

Studies on experimental conditions for detecting phototoxic potentials of drugs in Balb/c mice. Wagai N, et al. **J Toxicol Sci** 1989 Aug;14(3):197-204

Inhibitory effect of chlorpromazine on rat reproduction: a two week administration test before mating. Yokoya H. **J Toxicol Sci** 1990 Feb;15(1):15-28

Manners of arginine vasopressin secretion in schizophrenic patients--with reference to the mechanism of water intoxication. Kishimoto T, et al. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):161-9

CHLORPROPAMIDE

Effects of the mechanical energy of multi-tableting compression on the polymorphic transformations of chlorpropamide. Otsuka M, et al. **J Pharm Pharmacol** 1989 Oct;41(10):665-9

ADVERSE EFFECTS

Lichenoid drug eruption from chlorpropamide and tolazamide. Franz CB, et al. **J Am Acad Dermatol** 1990 Jan;22(1):128-9

Pseudoinsulinoma--the Diamox-Diabinese switch [letter] Hooper PL, et al. **N Engl J Med** 1990 Aug 16;323(7):488

[Clinical case. Hypoglycemic coma] **Union Med Can** 1990 Jul-Aug;119(4):184, 229 **(Fre)**

PHARMACOKINETICS

Comparative bioavailability of two brands of chlorpropamide in Kenyans. Ondari CO, et al. **East Afr Med J** 1989 Oct; 66(10):663-8

PHARMACOLOGY

Postreceptor regulation of insulin action in primary cultures of rat hepatocytes by oral hypoglycemic agents: effects of linogliride and chlorpropamide. Salhanick AI, et al. **Horm Metab Res** 1989 Nov;21(11):596-601

CHLORPROPHAM see under **HERBICIDES, CARBAMATE**

CHLORPROPHENPYRIDAMINE see **CHLORPHENIRAMINE**

CHLORPROTHIXENE

ANALYSIS

A nuclear magnetic resonance (NMR) method for the determination of the cis/trans isomeric content of chlorprothixene. Rosler KH, et al. **Pharm Res** 1989 Aug; 6(8):706-8

PHARMACOLOGY

[Effect of drugs possessing antialcoholic activity on ethanol pharmacokinetics] Lelevich VV, et al. **Farmakol Toksikol** 1989 Jul-Aug;52(4):85-8 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Chlorprothixene-induced hypouricemia: a biologic indicator of drug compliance. Shalev A, et al. **J Clin Psychiatry** 1989 Nov;50(11):424-7

Bromazepam in generalized anxiety. Randomized, multi-practice comparisons with both chlorprothixene and placebo. Kragh-Sørensen P, et al. **Psychopharmacology (Berl)** 1990;100(3):383-6

CHLORPYRIFOS see **DURSBAN**

CHLORQUINALDOL see under **HYDROXYQUINOLINES**

CHLORTETRACYCLINE

Chlorotetracycline induced fluorescence of antherozoids in ferns. Singh J, et al. **Stain Technol** 1990;65(3):125-30

ANALYSIS

Case report: an investigation of chlortetracycline and oxytetracycline residues in suspect swine slaughtered in Manitoba, Canada, October 1987 to March 1988. Salisbury CD, et al. **Food Addit Contam** 1990 May-Jun;7(3):369-73

Liquid chromatographic determination of epimerization of chlortetracycline residue to 4-epi-chlortetracycline residue in animal feed, using McIlvain's buffer as extractant. Martinez EE, et al. **J Assoc Off Anal Chem** 1989 Sep-Oct; 72(5):848-50

[Stability of chlortetracycline hydrochloride in drug forms for external administration] Wojdak H, et al. **Pharmazie** 1990 Mar;45(3):220-1 **(Ger)**

BIOSYNTHESIS

[Determinants of resistance to chlortetracycline and other antibiotics in chlortetracycline-producing strain of Streptomyces aureofaciens] Chinenova TA, et al. **Genetika** 1990 Apr;26(4):636-47 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Optical response of the indicator chlortetracycline to membrane potential. Tang S, et al. **Cell Calcium** 1990 Jun-Jul;11(6):425-9

Use of chlortetracycline fluorescence for the detection of Ca storing intracellular vesicles in normal human erythrocytes. Engelmann B, et al. **J Cell Physiol** 1990 May; 143(2):357-63

Release of calcium from intracellular stores in rat basophilic leukemia cells monitored with the fluorescent probe chlortetracycline. Marcotte GV, et al. **J Cell Physiol** 1990 Jan;142(1):78-88

[The use of a chlortetracycline fluorescent probe for recording the dynamic content of intracellular calcium in neurons (a reply to the editorial commentary on the article by V. P. Nikitin and M. O. Samollov The participation of the calcium-binding membrane components in the neurophysiological mechanisms of habituation in the edible snail)] Samollov MO, et al. **Neirofiziologiia** 1990; 22(3):421-3 **(Rus)**

PHARMACOKINETICS

Chlortetracycline in swine--bioavailability and pharmacokinetics in fasted and fed pigs. Kilroy CR, et al. **J Vet Pharmacol Ther** 1990 Mar;13(1):49-58

[Feed preparation and pharmacokinetics of chlortetracycline in piglets] Sutter HM, et al. **Schweiz Arch Tierheilkd** 1990; 132(4):175-81 (Eng. Abstr.) **(Ger)**

[The effect of feed preparation on the pharmacokinetics of peroral administration of chlortetracycline in weaned piglets] Sutter HM, et al. **Tierarztl Prax** 1990 Feb; 18(1):27-32 (Eng. Abstr.) **(Ger)**

[Studies on the pharmaceutical availability of chlortetracycline hydrochloride in selected ointment bases] Gadomska-Nowak M, et al. **Acta Pol Pharm** 1989; 46(1):70-3 (Eng. Abstr.) **(Pol)**

PHARMACOLOGY

[Effect of tetracycline on arylamidase activity in the liver of rabbits of different age] Khavkova Z, et al. **Antibiot Khimioter** 1989 Oct;34(10):766-9 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Treatment of chlamydiosis in exotic birds in the United States. Flammer K. **J Am Vet Med Assoc** 1989 Dec 1; 195(11):1537-40 (30 ref.)

Evaluation of the efficacy of chlortetracycline for the control of chronic respiratory disease caused by Escherichia coli and Mycoplasma gallisepticum. Timms LM, et al. **Res Vet Sci** 1989 Nov;47(3):377-82

Antibiotic treatment of experimental Mycoplasma californicum mastitis. Ball HJ, et al. **Vet Rec** 1989 Sep 30; 125(14):377-8

CHLORTHALIDONE

ADMINISTRATION & DOSAGE

Comparison of the antihypertensive effects of betaxolol and chlorthalidone as monotherapy and in combination. Burris JF, et al. **Arch Intern Med** 1989 Nov;149(11):2437-41

Rapid reduction of severe asymptomatic hypertension. A prospective, controlled trial. Zeller KR, et al. **Arch Intern Med** 1989 Oct;149(10):2186-9

Efficacy and tolerability of long term oxprenolol and chlorthalidone singly and in combination in hypertensive blacks. Obel AO. **Jpn Heart J** 1990 Mar;31(2):183-92

ADVERSE EFFECTS

Chlorthalidone-induced pseudoporphyria: clinical and microscopic findings of a case. Baker EJ, et al. **J Am Acad Dermatol** 1989 Nov;21(5 Pt 1):1026-9

PHARMACOLOGY

Effects on casual and 24-h ambulatory blood pressure of slow-release nicardipine and chlorthalidone in arterial essential hypertension: double-blind, crossover study. Celentano A, et al. **Int J Clin Pharmacol Ther Toxicol** 1990 May;28(5):190-6

THERAPEUTIC USE

Long-term treatment with chlorthalidone reduces experimental hydrops but does not prevent the hearing loss. Horner KC, et al. **Acta Otolaryngol (Stockh)** 1989 Sep-Oct; 108(3-4):175-83

Assessment of a fixed-dosage combination of atenolol and chlorthalidone (Tenoretic) in hypertensive Nigerians. Salako LA, et al. **Afr J Med Med Sci** 1990 Mar;19(1):57-61

Combined low-dose medication and primary intervention over a 30-month period for sustained high blood pressure in childhood. Berenson GS, et al. **Am J Med Sci** 1990 Feb; 299(2):79-86

Evaluation of a three-stage management program for Menière's disease. Raivio M, et al. **Am J Otol** 1989 Nov; 10(6):443-6

Haemodynamic resistance of forearm vessels during prolonged drug treatment of essential hypertension. Vitols AV, et al. **Cor Vasa** 1990;32(1):36-44

Long-term antihypertensive efficacy of ketanserin plus chlorthalidone. Fasano ML, et al. **Drugs Exp Clin Res** 1989; 15(11-12):587-90

Chlorthalidone does not increase the hypotensive effect of nifedipine in essential hypertensives: a crossover multicentre study [published erratum appears in J Hypertens Suppl 1990 Apr;8(4):399] Salvetti A, et al. **J Hypertens Suppl** 1989 Dec;7(6):S250-1

Chlorthalidone alone or in fixed combination with slow-release metoprolol in the management of arterial hypertension: a long-term study of 545 patients. Bichisao E, et al. **J Int Med Res** 1989 Jul-Aug;17(4):339-49

[A comparative study of atenolol (Tenormin) and the combined preparation atenolol/chlorthalidone (Tenoretic Mite) in essential hypertension. A randomized double-blind study from general practice] Pilgaard S, et al. **Ugeskr Laeger** 1990 Apr 9;152(15):1083-6 (Eng. Abstr.) **(Dan)**

[Gallopamil and chlorthalidone versus atenolol and chlorthalidone in the treatment of obstructive hypertrophic cardiomyopathy in patients with arterial hypertension: polycardiographic evaluation of the systolic and diastolic function of the left ventricle] Chieppa S, et al. **Cardiologia** 1989 Aug;34(8):695-9 (Eng. Abstr.) **(Ita)**

[Intraerythrocytic potassium and diuretic therapy] Otto GL, et al. **Arq Bras Cardiol** 1989 Feb;52(2):91-3 (Eng. Abstr.) **(Por)**

CHLORTHIAZID see **CHLOROTHIAZIDE**

CHLORZOXAZONE see under **BENZOXAZOLES**

CHOANAL ATRESIA

COMPLICATIONS

Choanal atresia as a feature of ectrodactyly-ectodermal dysplasia-clefting (EEC) syndrome [see comments] Christodoulou J, et al. **J Med Genet** 1989 Sep;26(9):586-9 Comment in: J Med Genet 1990 Mar;27(3):213.

[The CHARGE association] Allouche C, et al. **Pediatrie** 1989;44(5):391-5 (12 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Diagnosis and treatment of congenital choanal atresia. Rizzo KA, et al. **Trans Pa Acad Ophthalmol Otolaryngol** 1989; 41:842-6

ETIOLOGY

Anterior nasal stenosis secondary to accessory nasal bones. Zukowski ML, et al. **Ann Plast Surg** 1990 Aug;25(2):98-9

PATHOLOGY

[An unusual polymalformation syndrome: "CHARGE association" with unilateral "morning glory syndrome"] Risse JF, et al. **Ophtalmologie** 1989 Jun-Aug;3(3):196-8 (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

Olfactory function following late repair of choanal atresia. Gross-Isseroff R, et al. **Laryngoscope** 1989 Nov; 99(11):1165-6

SURGERY

Access by Le Fort I osteotomy for correction of unilateral choanal atresia. Resouly A, et al. **Clin Otolaryngol** 1990 Jun;15(3):281-2

Current management of choanal atresia. Morgan DW, et al. **Int J Pediatr Otorhinolaryngol** 1990 Mar;19(1):1-13

A simple transnasal procedure for treating choanal atresia. Wolach B, et al. **Int J Pediatr Otorhinolaryngol** 1990 Jun; 19(2):185-8

Bilateral choanal atresia: key to success with the transnasal approach. Singh B. **J Laryngol Otol** 1990 Jun;104(6):482-4

THERAPY

Who's in CHARGE? Multidisciplinary management of patients with CHARGE association. Blake KD, et al. **Arch Dis Child** 1990 Feb;65(2):217-23

CHOICE BEHAVIOR

Situational characteristics of safety belt use. Fockler SK, et al. **Accid Anal Prev** 1990 Apr;22(2):109-18

Early experience and the consumption of alcohol by adult C57BL/6J mice. Ho A, et al. **Alcohol** 1989 Nov-Dec; 6(6):511-5

Long and short alcohol deprivation: effects on AA and P alcohol-preferring rats. Sinclair JD, et al. **Alcohol** 1989 Nov-Dec;6(6):505-9

Life after residency. Setting priorities in pediatric professional life. Boyce WT. **Am J Dis Child** 1990 Aug;144(8):858-60

The relationship between admission criteria and practice preferences. Swinehart S, et al. **Am J Occup Ther** 1990 May;44(5):447-52

The development of olfactory preferences for artificial odors briefly experienced by the precocial spiny mouse young. Janus C. **Behav Neural Biol** 1989 Nov;52(3):430-6

Food choice in modern society. Ilmonen K. **Bibl Nutr Dieta** 1990;(45):30-51 (54 ref.)

Trends in the choice of food and indicators of differences in consumption styles. Tollin K. **Bibl Nutr Dieta** 1990; (45):17-29 (15 ref.)

How do people choose their doctor? Salisbury CJ. **BMJ** 1989 Sep 2;299(6699):608-10

Patient choice in a practice with men and women general practitioners. Graffy J. **Br J Gen Pract** 1990 Jan; 40(330):13-5

Interest in alternative birthplaces among women in Ottawa-Carleton. Soderstrom B, et al. **Can Med Assoc J** 1990 May 1;142(9):963-9

Factors in the resolution of adolescent premarital pregnancies. Cooksey EC. **Demography** 1990 May; 27(2):207-18

Determinants of exercise behavior. Sallis JF, et al. **Exerc Sport Sci Rev** 1990;18:307-30 (77 ref.)

The validity of health limitations as a reason for deciding to retire. Boaz RF, et al. **Health Serv Res** 1990 Jun; 25(2):361-86

The poisoned nest: dynamic aspects of exogamous marriage. Paris J, et al. **J Am Acad Psychoanal** 1989 Fall; 17(3):493-500

Effects of chosen versus assigned jobs on the work performance of persons with severe handicaps. Parsons MB, et al. **J Appl Behav Anal** 1990 Summer;23(2):253-8

Assessing food preferences among persons with profound mental retardation: providing opportunities to make choices. Parsons MB, et al. **J Appl Behav Anal** 1990 Summer;23(2):183-95

Refining the forced-choice method for the detection of malingering. Hiscock M, et al. **J Clin Exp Neuropsychol** 1989 Dec;11(6):967-74

Tests of preferences of young deer mice (Peromyscus maniculatus bairdi) for siblings versus nonsiblings. Dewsbury DA. **J Comp Psychol** 1990 Jun;104(2):174-6

Tests of preferences of adult deer mice (Peromyscus maniculatus bairdi) for siblings versus nonsiblings. Dewsbury DA. **J Comp Psychol** 1990 Jun;104(2):177-82

Choice behavior in transition: development of preference for the higher probability of reinforcement. Bailey JT, et al. **J Exp Anal Behav** 1990 May;53(3):409-22

Determinants of choice for pigeons and humans on concurrent-chains schedules of reinforcement. Belke TW, et al. **J Exp Anal Behav** 1989 Sep;52(2):97-109

Choice with uncertain outcomes: conditioned reinforcement effects. Dunn R, et al. **J Exp Anal Behav** 1990 Mar; 53(2):201-18

Short-term memory for responses: the "choose-small" effect. Fetterman JG, et al. **J Exp Anal Behav** 1989 Nov; 52(3):311-24

Risky choice as a function of amount and variance in food supply. Hastjarjo T, et al. **J Exp Anal Behav** 1990 Jan; 53(1):155-61

Quinine pellets as an inferior good and a Giffen good in rats. Hastjarjo T, et al. **J Exp Anal Behav** 1990 Mar;53(2):263-71

Unification of models for choice between delayed reinforcers. Killeen PR, et al. **J Exp Anal Behav** 1990 Jan;53(1):189-200

Choice between delayed reinforcers and fixed-ratio schedules requiring forceful responding. Mazur JE, et al. **J Exp Anal Behav** 1990 Jan;53(1):175-87

Preference for starting and finishing behavior patterns. Shimp CP, et al. **J Exp Anal Behav** 1989 Nov;52(3):341-52

Suboptimal choice in a percentage-reinforcement procedure: effects of signal condition and terminal-link length. Spetch ML, et al. **J Exp Anal Behav** 1990 Mar;53(2):219-34

Locomotion, active choice, and spatial memory in children. Foreman N, et al. **J Gen Psychol** 1990 Apr;117(2):215-33

Effects of ratio reinforcement schedules on choice behavior. Huang IN, et al. **J Gen Psychol** 1990 Jan;117(1):99-106

Personal thoughts on abortion [editorial] **J Med Assoc Ga** 1990 Jan;79(1):21-2

Choices: contraception, pregnancy, birth, and abortion. Klein L. **J Med Assoc Ga** 1990 Jan;79(1):31-3

School of nursing variables related to male student college choice. Kippenbrock T. **J Nurs Educ** 1990 Mar; 29(3):118-21

Social and cognitive strategies for coping with accountability: conformity, complexity, and bolstering. Tetlock PE, et al. **J Pers Soc Psychol** 1989 Oct;57(4):632-40

Health as artifact. Bateson MC. **J Prof Nurs** 1989 Nov-Dec; 5(6):322-5

Relationships among preference for educational structure, self-directed learning, instructional methods, and achievement. Russell JM. **J Prof Nurs** 1990 Mar-Apr; 6(2):86-93

Factors in functional assessment. Behrman AL. **J Rehabil Res Dev Clin Suppl** 1990;(2):17-30

Seat cushion selection. Ferguson-Pell MW. **J Rehabil Res Dev Clin Suppl** 1990;(2):49-73

A participatory planning process for wheelchair selection. Ozer MN. **J Rehabil Res Dev Clin Suppl** 1990;(2):31-6

Prescription considerations and a comparison of conventional and lightweight wheelchairs. Ragnarsson KT. **J Rehabil Res Dev Clin Suppl** 1990;(2):8-16

Differences in color preferences of school-age children in varying stages of health: a preliminary study. Fleming JW, et al. **Matern Child Nurs J** 1988 Fall;17(3):173-89

Theories and observations on sexual selection and female choice in human beings. Perper T. **Med Anthropol** 1989 Jul;11(4):409-54 (77 ref.)

Whose utilities for decision analysis? Boyd NF, et al. **Med Decis Making** 1990 Jan-Mar;10(1):58-67

N-way sensitivity analysis: a verification and stability-assessment technique for completely subjective decision analysis trees. Hughes C, et al. **Med Decis Making** 1990 Jan-Mar;10(1):68-74

Treatment preferences of patients and physicians: influences of summary data when framing effects are controlled. Mazur DJ, et al. **Med Decis Making** 1990 Jan-Mar; 10(1):2-5

Seat belts: personal choice or necessity? Blatchford GJ, et al. **Nebr Med J** 1990 May;75(5):117-20

Subclassification of non-pathological left-handers poses problems for theories of handedness. Peters M. **Neuropsychologia** 1990;28(3):279-89

Setting priorities during the shortage. Hendrickson G, et al. **Nurs Outlook** 1989 Nov-Dec;37(6):280-4

Self-assertion and nurses: a different voice. Kilkus SP. **Nurs Outlook** 1990 May-Jun;38(3):143-5, 135

Multiple indicators of side preference in the rat. Becker G, et al. **Percept Mot Skills** 1990 Jun;70(3 Pt 1):947-56

Note on color preference and color vision test performance. Buckalew LW, et al. **Percept Mot Skills** 1989 Dec;69(3 Pt 1):1039-42

Preference among research cigarettes with varying nicotine yields. Boren JJ, et al. **Pharmacol Biochem Behav** 1990 May; 36(1):191-3

Voluntary consumption of beverage alcohol by vervet monkeys: population screening, descriptive behavior and biochemical measures. Ervin FR, et al. **Pharmacol Biochem Behav** 1990 Jun;36(2):367-73

Preference conditioning by concurrent diets with delayed proportional reinforcement. Baker BJ, et al. **Physiol Behav** 1989 Oct;46(4):585-90

Olfactory self-selection of protein-containing foods. Heinrichs SC, et al. **Physiol Behav** 1990 Mar;47(3):409-13

Choosing a physician [letter] Ennis AL. **Postgrad Med** 1990 Feb 1;87(2):29

Smokers' preferences for assistance with cessation. Owen N, et al. **Prev Med** 1990 Jul;19(4):424-31

Female copying increases the variance in male mating success. Wade MJ, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5749-53

An economic theory of choice and its implications for suicide. Lester D. **Psychol Rep** 1990 Jun;66(3 Pt 2):1112-4

Four-choice win-stay water escape acquisition by rats. Means LW, et al. **Psychol Rep** 1990 Feb;66(1):67-70

Response-stimulus interval in choice serial reaction time: interaction with sleep deprivation, choice, and practice. Wilkinson RT. **Q J Exp Psychol [A]** 1990 May;42(2):401-23

Contrast effects in flavour preference learning. Capaldi E, et al. **Q J Exp Psychol [B]** 1989 Aug;41(3):307-23

The norm for perceived husband superiority: a cause of human assortative marriage. James WH. **Soc Biol** 1989 Fall-Winter;36(3-4):271-8

Further possible causes of assortative mating: the norm for perceived husband superiority. Mascie-Taylor CG. **Soc Biol** 1989 Fall-Winter;36(3-4):284-5

A logit analysis of hospital choice behavior in Chollabukdo Province of Korea. Kim BR. **Soc Sci Med** 1990; 30(10):1119-29

[Analysis of non-optimal behavior in a dichotomous choice situation] Proteau L, et al. **Can J Sport Sci** 1990 Mar; 15(1):28-37 (Eng. Abstr.) **(Fre)**

[A comparison of win-shift and win-stay performance of rats in a radial arm maze] Tsuda Y, et al. **Shinrigaku Kenkyu** 1989 Jun;60(2):109-12 (Eng. Abstr.) **(Jpn)**

[Effects of choosing a task on interpersonal feeling and appreciation] Yagi Y, et al. **Shinrigaku Kenkyu** 1989 Aug; 60(3):170-9 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

6-Hydroxydopamine lesions of the olfactory tubercle do not alter (+)-amphetamine-conditioned place preference. Clarke PB, et al. **Behav Brain Res** 1990 Jan 1;36(1-2):185-8

Temperature preference as an indicator of the chronic toxicity of cupric ions to Mozambique tilapia. Welch TJ, et al. **Bull Environ Contam Toxicol** 1989 Nov;43(5):761-8

Characterization of dynorphin A(1-17)-induced place preference in rats. Iwamoto ET. **NIDA Res Monogr** 1989; 95:308-9

Choice reaction time as a measure of recovery from general anesthesia. Letourneau JE. **Percept Mot Skills** 1990 Feb; 70(1):256-8

Effects of vasopressin on spontaneous black-white choices in a T-maze. Alliot J. **Pharmacol Biochem Behav** 1990 Apr; 35(4):981-7

Anxiogenic effects of a benzodiazepine receptor partial inverse agonist, RO 19-4603, in a light/dark choice situation. Belzung C, et al. **Pharmacol Biochem Behav** 1990 Jul;36(3):593-6

Taste vs. CNS effects in voluntary oral opiate intake: studies with a novel device and technique. Carlson KR. **Pharmacol Biochem Behav** 1989 Oct;34(2):419-23

Schedule-induced cocaine drinking: choice between cocaine and vehicle. Falk JL, et al. **Pharmacol Biochem Behav** 1990 Jan;35(1):187-93

Effects of cocaine and d-amphetamine on sustained and selective attention in rats. Grilly DM, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):733-9

Reversal of a mecamylamine-induced cognitive deficit with the D2 agonist, LY 171555. Levin ED, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):919-22

Parker and Radow test of drug withdrawal aversion: opposite effect in rats chronically infused with sufentanil or amphetamine. Mucha RF, et al. **Pharmacol Biochem Behav** 1990 Jan;35(1):219-24

Preference for cocaine by the weight pulling method in rats. Suzuki T, et al. **Pharmacol Biochem Behav** 1990 Jul; 36(3):661-9

The effect of protein or carbohydrate breakfasts on subsequent plasma amino acid levels, satiety and nutrient selection in normal males. Teff KL, et al. **Pharmacol Biochem Behav** 1989 Dec;34(4):829-37

Oral opiate intake in a free-choice procedure in the rat. Sala M, et al. **Pharmacol Res** 1989 Nov-Dec;21 Suppl 1:67-8

Effects of clonidine on self-selection of nutrients. Chafetz MD, et al. **Physiol Behav** 1989 Dec;46(6):999-1002

Nicotine conditions place preferences after intracerebral administration in rats. Iwamoto ET. **Psychopharmacology (Berl)** 1990;100(2):251-7

Conditioned taste aversion and place preference with buspirone and gepirone. Neisewander JL, et al. **Psychopharmacology (Berl)** 1990;100(4):485-90

SCH 23390 blocks drug-conditioned place-preference and place-aversion: anhedonia (lack of reward) or apathy (lack of motivation) after dopamine-receptor blockade? Acquas E, et al. **Psychopharmacology (Berlin)** 1989;99(2):151-5

Effect of d-amphetamine, secobarbital, and marijuana on choice behavior: social versus nonsocial options. Heishman SJ, et al. **Psychopharmacology (Berlin)** 1989;99(2):156-62

[Effects of scopolamine on delayed matching and non-matching to sample responses in T-maze in rats] Furukawa S, et al. **Yakubutsu Seishin Kodo** 1989 Sep; 9(3):273-80 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Specific behaviour as an objective indicator of emotional arousal in man. Kukleta M. **Act Nerv Super (Praha)** 1989 Oct;31(3):235-6

Sensory influences on food intake. Booth DA. **Nutr Rev** 1990 Feb;48(2):71-7; discussion 114-31 (31 ref.)

Assessment of the sensory properties of food. MacFie HJ. **Nutr Rev** 1990 Feb;48(2):87-93; discussion 114-31 (16 ref.)

Is there a genetic control of morphine preference in rat? Rönnbäck L. **Pharmacol Biochem Behav** 1990 Jan; 35(1):15-20

Preferences for opioids by the weight pulling method in rats. Suzuki T, et al. **Pharmacol Biochem Behav** 1990 Feb; 35(2):413-8

Enkephalins, their constituents and voluntary drinking of ethanol by the rat. Messiha FS. **Physiol Behav** 1989 Jul; 46(1):29-33

Psychobiology of newborn auditory preferences. Fifer WP, et al. **Semin Perinatol** 1989 Oct;13(5):430-3

[Free choice of salt solutions and functional enzyme-transport mechanisms of the small intestine in relation to different calcium levels in the body] Gurman EG, et al. **Fiziol Zh** 1990 May-Jun;36(3):35-40 (Eng. Abstr.) **(Rus)**

[The preference for movement direction in a T-maze in planarians] Bianki VL, et al. **Zh Vyssh Nerv Deiat** 1990 Jan-Feb;40(1):102-7 (Eng. Abstr.) **(Rus)**

[The time of a complex sensorimotor choice reaction in subjects with differing functional mobility of the nervous processes] Makarenko NV. **Zh Vyssh Nerv Deiat** 1989 Sep-Oct;39(5):813-8 (Eng. Abstr.) **(Rus)**

[The activity of rat frontal cortex neurons as reflection of brain prognostic activity] Orlov AA, et al. **Zh Vyssh Nerv Deiat** 1990 Jan-Feb;40(1):185-7 **(Rus)**

CHOKING see **AIRWAY OBSTRUCTION**

CHOLAGOGUES AND CHORETICS

Biliary excretion and choleretic effect of cefmetazole in rats. Gonzalez J, et al. **Antimicrob Agents Chemother** 1989 Nov; 33(11):1970-4

[Choleretic effects of methanol extracts obtained from various Chinese traditional medicine] Sasaki T, et al. **Yakugaku Zasshi** 1989 Jul;109(7):487-95 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Capillary gas chromatographic determination of epomediol in human plasma and urine using a rapid solid-phase extraction. Girometta MA, et al. **Biomed Chromatogr** 1989 Sep;3(5):199-202

[Determination of choleretic constituents in Artemisia scoparia Waldst. et Kit. by TLC densitometry] Zhang QW, et al. **Yao Hsueh Hsueh Pao** 1989 Jan;24(1):43-7 (Eng. Abstr.) **(Chi)**

DIAGNOSTIC USE

[The ultrasonic diagnosis of chronic cholecystitis using the choleretic test] Pimanov SI. **Ter Arkh** 1990;62(2):82-4 (Eng. Abstr.) **(Rus)**

METABOLISM

Hypercholeresis after release of protracted extrahepatic cholestasis. Case report. Friman S, et al. **Acta Chir Scand** 1989 Jun-Jul;155(6-7):355-6

PHARMACOKINETICS

Hepatic biotransformation and choleretic effect of 7-ketolithocholic acid in the rat. Kanai S, et al. **Lipids** 1989 Oct;24(10):859-65

PHARMACOLOGY

Reversal of ethinylestradiol-induced cholestasis by epomediol in rat. The role of liver plasma-membrane fluidity. Miccio M, et al. **Biochem Pharmacol** 1989 Oct 15; 38(20):3559-63

Choleretic mechanism and effects of cyclobutyrol in the rat: dose-response relationship. Monte MJ, et al. **Biomed Biochim Acta** 1990;49(1):83-90

Pre-replicative phase-related changes in bile acid-induced choleresis in the regenerating rat liver. Garcia-Marin JJ, et al. **Clin Sci** 1990 Jan;78(1):55-62

Experimental study of the cholagogic and choleretic actions of some of the basic ingredients of essential oils on laboratory animals. Rangelov A, et al. **Folia Med (Plovdiv)** 1988;30(4):30-8

An experimental characterisation of cholagogic and cholesteric activity of a group of essential oils. Rangelov A. **Folia Med (Plovdiv)** 1989;31(1):46-53

Hypercholeretic bile acids: a clue to the mechanism? [comment] Erlinger S. **Hepatology** 1990 May;11(5):888-90 Comment on: Hepatology 1990 May;11(5):743-9.

The ursodeoxycholate dose-dependent formation of ursodeoxycholate-glucuronide in the rat and the choleretic potencies [see comments] Takikawa H, et al. **Hepatology** 1990 May;11(5):743-9 Comment in: Hepatology 1990 May;11(5):888-90.

Estradiol-17 beta-D-glucuronide (E-17G) cholestasis in perfused rat liver: fate of E-17G and choleretic responses to bile salts. Utili R, et al. **Hepatology** 1990 May; 11(5):735-42

[Effect of proglumide (PGM) on bile flow and contents in humans and animals] Fang XC. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Aug; 11(4):278-82 (Eng. Abstr.) **(Chi)**

THERAPEUTIC USE

Influence of "shuganjieyu" herbs on choleretic function in anesthetized rats. Tian ZS, et al. **J Tradit Chin Med** 1982 Mar;2(1):39-44

Choleretic effects of ursodeoxycholic acid on experimentally-induced intrahepatic cholestasis. Mizoguchi Y, et al. **Osaka City Med J** 1989 Nov;35(2):83-91

[Use of cholagogic agents in the therapy of patients with dysfunction of the bile-secreting system] Nogaller AM, et al. **Klin Med (Mosk)** 1989 Sep;67(9):129-35 (4 ref.) **(Rus)**

[A rationale for the use of Carlsbad salt-enriched water in treating patients with biliary tract diseases at a sanatorium] Ignatova NZ, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Nov-Dec; (6):50-1 **(Rus)**

CHOLALIC ACIDS see **CHOLIC ACIDS**

CHOLANES

CHEMICAL SYNTHESIS

Antimicrobial activity of basic cholane derivatives, VIII. Bellini AM, et al. **Arch Pharm (Weinheim)** 1989 Dec; 322(12):879-83

PHARMACOLOGY

Antimicrobial activity of basic cholane derivatives. Part IX. Bellini AM, et al. **Arch Pharm (Weinheim)** 1990 Apr; 323(4):201-5

Quantitative structure-antimicrobial activity relationship in 5 beta-cholanyl-24-benzylamine derivatives. Fini A, et al. **J Pharm Sci** 1990 Jul;79(7):603-5

CHOLANGIOGRAPHY

Intraoperative flexible videocholedochoscopy. An improved technique for evaluating the common duct. Apelgren KN, et al. **Am Surg** 1990 Mar;56(3):178-81

Pre-operative ultrasound measurement of bile duct diameter: basis for selective cholangiography. Hunt DR, et al. **Aust N Z J Surg** 1990 Mar;60(3):189-92

Selective per-operative cholangiography and scoring method for selection. Abdul Ghani AK. **Bangladesh Med Res Counc Bull** 1989 Dec;15(2):81-9 (41 ref.)

Operative cholangiography in elective cholecystectomy. Pernthaler H, et al. **Br J Surg** 1990 Apr;77(4):399-400

Percutaneous transhepatic biliary drainage: a review. Yee AC, et al. **Crit Rev Diagn Imaging** 1990;30(3):247-79 (105 ref.)

Serum diatrizoate level during intraoperative cholangiography in patients without choledochal obstructions. Sakahira K, et al. **Dig Dis Sci** 1990 Sep; 35(9):1085-8

Diagnostic cholangioscopy—comparison with conventional methods (radiology, ultrasonography). Jeppsson B, et al. **Endoscopy** 1989 Dec;21 Suppl 1:344-6 (19 ref.)

Cholangiographic appearance simulating sclerosing cholangitis in metastatic adenocarcinoma of the liver. Vilgrain V, et al. **Gastroenterology** 1990 Sep;99(3):850-3

Percutaneous fiberocholangioscopies. Gazzaniga GM, et al. **Hepatogastroenterology** 1989 Oct;36(5):367-75

Biliary ascariasis. Verhaeghe L, et al. **J Belge Radiol** 1989 Aug;72(4):293-6

Hilar biliary strictures after liver transplantation: cholangiography and percutaneous treatment. Ward EM, et al. **Radiology** 1990 Oct;177(1):259-63

[Selective intraoperative cholangiography] Famos M, et al. **Helv Chir Acta** 1990 Apr;56(6):897-901 (Eng. Abstr.) **(Ger)**

[The results and tolerability of infusion cholegraphy using ioglycamide-85 (12.75 g meglumine salt in 75 ml) in comparison with the use of a hypotonic adipiodone solution (10 g meglumine salt in 100 ml)] Ronneburg HP. **Radiol Diagn (Berl)** 1990;31(3):253-60 (Eng. Abstr.) **(Ger)**

[Choledocholithiasis: risk factors and their significance for pre- and intraoperative diagnosis] Mickley V, et al. **Zentralbl Chir** 1990;115(2):89-94 (Eng. Abstr.) **(Ger)**

[Current indications for percutaneous transhepatic cholangiography (PTC)] Ghilardi G, et al. **Minerva Chir** 1989 Dec 31;44(23-24):2383-8 (Eng. Abstr.) **(Ita)**

[Intraoperative cholangiography] Kuzin MI, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):10-4 (Eng. Abstr.) **(Rus)**

[Significance of peroperative cholangiography in elective geriatric surgery of the bile ducts] Planells Roig MV, et al. **Rev Esp Enferm Dig** 1990 May;77(5):333-6 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

The value of radiomanometry in bile duct surgery. Daniel O. **Ann R Coll Surg Engl** 1972 Dec;51(6):357-72

A cholangiographic clamp as an aid in the performance of operative cholangiography. Lazarus HM. **Surg Gynecol Obstet** 1990 Aug;171(2):154-6

[Interventional radiology in bile duct diseases] Brambs HJ, et al. **Chirurg** 1989 Dec;60(12):840-5 (15 ref.) **(Ger)**

[The diagnostic value of so-called "post-cholecystectomy bile duct dilatation"] Ecsedy G, et al. **Chirurg** 1990 May; 61(5):387-91 (Eng. Abstr.) **(Ger)**

[Interventional percutaneous diagnosis and therapy of the bile ducts] Hauenstein KH, et al. **Chirurg** 1989 Dec; 60(12):831-9 **(Ger)**

[A device for measuring the width of the common bile duct on cholangiograms] Ostrovskii VP, et al. **Klin Khir** 1989; (9):64 **(Rus)**

[A device for fixation of ligatures on the cystic duct] Nechai AI, et al. **Vestn Khir** 1989 May;142(5):122 **(Rus)**

METHODS

CT of the extrahepatic bile ducts: wall thickness and contrast enhancement in normal and abnormal ducts. Schulte SJ, et al. **AJR Am J Roentgenol** 1990 Jan;154(1):79-85

Choledochal cyst: findings on cholangiopancreatography with emphasis on ectasia of the common channel. Wiedmeyer DA, et al. **AJR Am J Roentgenol** 1989 Nov; 153(5):969-72

Operative cholangiography. Shively EH, et al. **Am J Surg** 1990 Apr;159(4):380-4; discussion 385

A simple, cost-effective method for operative cholangiography. Thompson JE Jr, et al. **Am J Surg** 1989 Nov;158(5):461-2

Percutaneous transhepatic cholangiography using Chiba needle by blind method. Kumar L, et al. **J Indian Med Assoc** 1989 Oct;87(10):235-7

Fine needle percutaneous transhepatic cholangiogram (PTC). Shamsi Z, et al. **JPMA** 1989 Aug;39(8):219-21

Ultrasound-guided percutaneous transhepatic cholangiography and drainage in patients with hilar cholangiocarcinoma. Laméris JS, et al. **Semin Liver Dis** 1990 May;10(2):121-5

A simplified technique to relax the sphincter of Oddi during intraoperative cholangiography. al-Jurf A.

Surg Gynecol Obstet 1990 Feb;170(2):163–4

Percutaneous transhepatic cholangioscopy in biliary complications after liver transplantation. Wiechel KL. **Transplant Proc** 1990 Feb;22(1):175

[Intravenous cholangiocholecystography using ioglycamide—indications and value] Wujciak D, et al. **Radiol Diagn (Berl)** 1990;31(3):247–51 (Eng. Abstr.) **(Ger)**

[The value of tomographic cholangiography in diagnosing the non-visualized gall bladder] Bryc S, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1985;40:223–9 (Eng. Abstr.) **(Pol)**

[A new method of diagnosing the extent of stenosis of the terminal common bile duct and a major duodenal papilla] Iangibaev Z. **Vestn Khir** 1990 Jan;144(1):121–2 **(Rus)**

[Diagnostic possibilities of intraoperative examination of bile ducts] Kochnev OS. **Vestn Khir** 1990 Mar;144(3):56–7 **(Rus)**

[Evaluation of the status of bile ducts and the patency of the terminal part of the common bile duct] Nechai AI, et al. **Vestn Khir** 1990 Mar;144(3):60–1 **(Rus)**

[Concerning surgical cholangiography] Nikovskiĭ DL. **Vestn Khir** 1990 Mar;144(3):61–4 **(Rus)**

STANDARDS

Is intravenous cholangiography an alternative to the routine per-operative cholangiogram? Huddy SP, et al. **Postgrad Med J** 1989 Dec;65(770):896–9

[Analysis of the causes of errors in the interpretation of intraoperative cholangiography] Małek G, et al. **Pol Przegl Radiol** 1988 Nov–Dec;52(6):299–301 (Eng. Abstr.) **(Pol)**

UTILIZATION

Relevance of routine operative cholangiograms and modifications in criteria for selective use. Ranjan D, et al. **Md Med J** 1990 Jun;39(6):565–7

[Endoscopic retrograde cholangiography and perioperative cholangiography: to use both, one or none?] Carvajal A, et al. **GEN** 1989 Jan–Mar;43(1):28–33 (Eng. Abstr.) **(Spa)**

CHOLANGIOMA

Hilar cholangiocarcinoma. Czerniak A, et al. **Aust N Z J Surg** 1989 Nov;59(11):837–44 (96 ref.)

ANALYSIS

Cytokeratin expression in cells of the rodent bile duct developing under normal and pathological conditions. Carthew P, et al. **Br J Exp Pathol** 1989 Dec;70(6):717–25

Expression of laminin in benign and malignant sclerosing lesions of extrahepatic bile ducts. Haglund C, et al. **J Clin Pathol** 1989 Sep;42(9):927–30

BLOOD

Serum unconjugated primary and secondary bile acids in patients with cholangiocarcinoma and hepatocellular carcinoma. Changbumrung S, et al. **J Med Assoc Thai** 1990 Feb;73(2):81–90

Detection of a biliary cell membrane glycoprotein in the serum of cholangiocarcinoma-bearing rats. Possible relevance to the membrane proteins used as serum tumor markers in humans. Scoazec JY, et al. **Lab Invest** 1990 Apr; 62(4):459–66

COMPLICATIONS

Cholangiocarcinoma in an immunosuppressed kidney transplant patient. A case report and review of literature. Storms P, et al. **Acta Chir Belg** 1990 Jan–Feb;90(1):24–6 (26 ref.)

Biliary endoprosthesis dysfunction in patients with malignant hilar tumors: successful treatment by percutaneous replacement of the stent. Jackson JE, et al. **AJR Am J Roentgenol** 1990 Aug;155(2):391–5

A comparison of right versus left hepatic duct endoprosthesis insertion in malignant hilar biliary obstruction. Polydorou AA, et al. **Endoscopy** 1989 Nov;21(6):266–71

Spontaneous cutaneous biliary fistula: a rare complication of cholangiocarcinoma. Kuo YC, et al. **J Clin Gastroenterol** 1990 Aug;12(4):451–3

Pulmonary vasculitis associated with cholangiocarcinoma of liver. Ong EL, et al. **Postgrad Med J** 1989 Oct; 65(768):791–3

Early changes in cholestatic livers as a consequence of hepatic duct carcinoma: a histological and histochemical exploration. James J, et al. **Semin Liver Dis** 1990 May; 10(2):91–101

The use of lasers in the treatment of cholangiocarcinoma. Birkett DH, et al. **Surg Endosc** 1989;3(3):121–3

Palliation for nonpancreatic malignant obstruction of the biliary tract. Finch MD, et al. **Surg Gynecol Obstet** 1990 May;170(5):437–40

[Choledocho-gastric fistula. A rare complication of a cholangiocarcinoma] Beck A, et al. **Radiologe** 1989 Aug; 29(8):391–3 (Eng. Abstr.) **(Ger)**

[Primary cholangiocellular cancer of the liver with an eosinophilic leukemoid reaction] Traianova TG, et al. **Ter Arkh** 1989;61(10):44–6 **(Rus)**

DIAGNOSIS

Metastatic prostatic carcinoma presenting as cholangiocarcinoma ("Klatskin tumor") [letter] Chen MC, et al. **Ann Intern Med** 1990 Jun 1;112(11):881

Brush cytology evaluation of lesions encountered during ERCP. Scudera PL, et al. **Gastrointest Endosc** 1990 May–Jun;36(3):281–4

Diagnosis and treatment of cholangiocellular carcinoma of the liver. Kawarada Y, et al. **Hepatogastroenterology** 1990 Apr;37(2):176–81 (39 ref.)

Ultrasound-guided percutaneous transhepatic cholangiography and drainage in patients with hilar cholangiocarcinoma. Laméris JS, et al. **Semin Liver Dis** 1990 May;10(2):121–5

Carcinoma of the hepatic confluence 25 years after Klatskin's description: diagnosis and endoscopic management. Van Leeuwen DJ, et al. **Semin Liver Dis** 1990 May;10(2):102–13 (60 ref.)

Magnetic resonance imaging of liver tumors. Weissleder R, et al. **Semin Ultrasound CT MR** 1989 Feb;10(1):63–77 (59 ref.)

[A pseudometastatic form of cholangiocarcinoma (letter)] Barthet M, et al. **Gastroenterol Clin Biol** 1990;14(5):515 **(Fre)**

[Primary malignant neoplasms of the liver. Contribution of echography to the preoperative diagnosis] Lovotti D, et al. **Minerva Chir** 1989 Oct 15;44(19):2059–64 (Eng. Abstr.) **(Ita)**

[The CT and US aspects in hepatic cholangiocarcinoma due to thorium dioxide (thorotrast). A case report and review of the literature] Lupi L, et al. **Radiol Med (Torino)** 1990 Apr;79(4):399–401 (10 ref.) **(Ita)**

[A case of cholangiocarcinoma who showed mimicking appearance of primary sclerosing cholangitis on the cholangiography] Ishizaki Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Nov; 86(11):2606–10 **(Jpn)**

[An immunohistochemical study on primary carcinoma of the liver] Seo JK. **Sangyo Ika Daigaku Zasshi** 1989 Dec 1;11(4):429–39 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Oral contraceptive use and liver cancer. Palmer JR, et al. **Am J Epidemiol** 1989 Nov;130(5):878–82

Primary liver cancer in Japan. Clinicopathologic features and results of surgical treatment. Liver Cancer Study Group of Japan. **Ann Surg** 1990 Mar;211(3):277–87

Cholangiocarcinoma in north-east Thailand [letter] Vatanasapt V, et al. **Lancet** 1990 Jan 13;335(8681):116–7

ETIOLOGY

Oral contraceptive use and liver cancer. Palmer JR, et al. **Am J Epidemiol** 1989 Nov;130(5):878–82

Intrahepatic cholesterol stones associated with peripheral cholangiocellular carcinoma: an autopsy case. Terada T, et al. **Am J Gastroenterol** 1989 Nov;84(11):1434–6

Increased secondary bile acids in a choledochal cyst. Possible role in biliary metaplasia and carcinoma. Reveille RM, et al. **Gastroenterology** 1990 Aug;99(2):525–7

Influence of incomplete bile duct obstruction on the occurrence of cholangiocarcinoma induced by diisopropanolnitrosamine in hamsters. Kinami Y, et al. **Oncology** 1990;47(2):170–6

GENETICS

Analysis of ras gene mutations in human hepatic malignant tumors by polymerase chain reaction and direct sequencing. Tada M, et al. **Cancer Res** 1990 Feb 15;50(4):1121–4

Oncogene expression in cholangiocarcinoma and in normal hepatic development. Voravud N, et al. **Hum Pathol** 1989 Dec;20(12):1163–8

Cholangiocarcinoma in two siblings with emphysema and alpha-1-antitrypsin deficiency. Parham DM, et al. **Q J Med** 1989 Apr;71(264):359–67

METABOLISM

Production of basic fibroblast growth factor-like factor by cultured human cholangiocellular carcinoma cells. Matsuzaki K, et al. **Jpn J Cancer Res** 1990 Apr;81(4):345–54

PATHOLOGY

Cytologic diagnosis of liver fluke infestation in a patient with subsequently documented cholangiocarcinoma. Papillo JL, et al. **Acta Cytol** 1989 Nov–Dec;33(6):865–9

Endoscopic retrograde wire-guided brush cytology for diagnosis of patients with malignant obstruction of the bile duct. Foutch PG, et al. **Am J Gastroenterol** 1990 Jul; 85(7):791–5

A clinicopathologic study of intrahepatic cholangiocarcinoma containing a component of squamous cell carcinoma. Nakajima T, et al. **Cancer** 1990 Mar 15; 65(6):1401–4

Pathological observations of intrahepatic peribiliary glands in 1,000 consecutive autopsy livers. II. A possible source of cholangiocarcinoma. Terada T, et al. **Hepatology** 1990 Jul;12(1):92–7

Klatskin tumors. **Semin Liver Dis** 1990 May;10(2):85–148

Surgical pathology of cholangiocarcinoma of the liver hilus (Klatskin tumor). Bosma A. **Semin Liver Dis** 1990 May; 10(2):85–90

Preoperative TNM classification of proximal extrahepatic bile duct carcinoma by endosonography. Tio TL, et al. **Semin Liver Dis** 1990 May;10(2):114–20

Atrophy of left lobe of the liver associated with hepatolithiasis and cholangiocarcinoma. Mohd TH, et al. **Singapore Med J** 1989 Dec;30(6):607–8

Expression of glycoconjugates in intrahepatic cholangiocellular carcinoma. Zhang SM, et al. **Virchows Arch [A]** 1989;415(5):395–401

[Palliation of malignant bile duct obstruction] Eitan A, et al. **Harefuah** 1990 Mar 1;118(5):252–4 (Eng. Abstr.) **(Heb)**

RADIOGRAPHY

CT of hilar cholangiocarcinoma: late contrast enhancement in six patients. Takayasu K, et al. **AJR Am J Roentgenol** 1990 Jun;154(6):1203–6

Suture granuloma masquerading as malignancy of the biliary tract. Murphy JR, et al. **Dig Dis Sci** 1990 Sep;35(9):1176–9

Lymphoma in the wall of the bile ducts: radiologic imaging. Tartar VM, et al. **Gastrointest Radiol** 1990 Winter; 15(1):53–7

Roentgenologic appearance of a thorotrast-induced small cholangiocarcinoma in a case of thorotrastosis. An autopsy case of massive gastrointestinal bleeding of esophageal varices. Sasaki F, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 May 25; 49(5):568–73

[Differentiation of malignant liver tumors using rapid dynamic CT] Zwicker C, et al. **ROFO** 1990 Mar; 152(3):293–302 (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

Treatment of malignant biliary obstruction with a high-dose rate remote afterloading device using a 10 F nasobiliary tube. Urban MS, et al. **Gastrointest Endosc** 1990 May–Jun; 36(3):292–6

The role of radiotherapy in the treatment of bile duct carcinoma. Veeze-Kuijpers B, et al. **Int J Radiat Oncol Biol Phys** 1990 Jan;18(1):63–7

Results of radiation therapy in carcinoma of the proximal bile duct (Klatskin tumor). González González D, et al. **Semin Liver Dis** 1990 May;10(2):131–41

SECONDARY

Clinical significance of implantation metastases after surgical treatment of cholangiocarcinoma. Verbeek PC, et al. **Semin Liver Dis** 1990 May;10(2):142–4

SURGERY

A case of hilar cholangiocarcinoma treated by microwave tissue coagulation therapy via percutaneous transhepatic choledochoscopy [letter] Seki T, et al. **Am J Gastroenterol** 1990 May;85(5):623–5

Management of proximal cholangiocarcinomas by surgical resection and radiotherapy. Cameron JL, et al. **Am J Surg** 1990 Jan;159(1):91–7; discussion 97–8

A palliative procedure for high bile duct carcinoma. Ritchie HD, et al. **Ann R Coll Surg Engl** 1972 Dec;51(6):389–95

Changing patterns in diagnosis and management of bile duct cancer. Tompkins RK, et al. **Ann Surg** 1990 May; 211(5):614–20; discussion 620–1

Pancreaticoduodenectomy and the celiac artery compression syndrome. Kohler TR, et al. **Ann Vasc Surg** 1990 Jan; 4(1):77–80

Liver transplantation for malignant tumours. Ringe B, et al. **Baillieres Clin Gastroenterol** 1989 Oct;3(4):787–97

Truncoumbilical bypass of the portal vein in radical resection of biliary tract tumour involving the hepatic duct confluence. Kumada K, et al. **Br J Surg** 1990 Jul; 77(7):749–51

Clinical experience in 20 hepatic resections for peripheral cholangiocarcinoma. Chen MF, et al. **Cancer** 1989 Dec 1; 64(11):2226–32

Primary hepatic malignancies: resection or liver transplantation? Otto G, et al. **Eur J Surg Oncol** 1990 Aug; 16(4):346–51

Diagnosis and treatment of cholangiocellular carcinoma of the liver. Kawarada Y, et al. **Hepatogastroenterology** 1990 Apr;37(2):176–81 (39 ref.)

Technical considerations for the management of primary cholangiocarcinoma of the porta hepatis. Lygidakis NJ, et al. **Semin Liver Dis** 1990 May;10(2):126–30

Decision-making in the treatment of patients with malignant proximal bile duct obstruction. Van der Heyde MN, et al. **Semin Liver Dis** 1990 May;10(2):145–8

Outcome of radical surgery in hilar cholangiocarcinoma. Hadjis NS, et al. **Surgery** 1990 Jun;107(6):597–604

Percutaneous-endoscopic placement of endoprostheses for relief of jaundice caused by inoperable bile duct strictures. Hall RI, et al. **Surgery** 1990 Feb;107(2):224–7

Hepatic segmentectomy with caudate lobe resection for bile duct carcinoma of the hepatic hilus. Nimura Y, et al. **World J Surg** 1990 Jul–Aug;14(4):535–43; discussion 544

[Principles of the surgical treatment of proximal gall bladder carcinoma] Kremer B, et al. **Dtsch Med Wochenschr** 1990 Jun 1;115(22):863–7 (15 ref.) **(Ger)**

[Treatment of primary liver tumors] Müller R, et al. **Z Gastroenterol [Verh]** 1990 Apr;25:110–2 (43 ref.) **(Ger)**

[Surgical treatment of malignant tumor of the hepatic duct

junction] Wolff H, et al. **Zentralbl Chir** 1990;115(1):1–14 (Eng. Abstr.) **(Ger)**

THERAPY

Radiofrequency thermotherapy for malignant liver tumors. Nagata Y, et al. **Cancer** 1990 Apr 15;65(8):1730–6

Current management of cholangiocarcinoma. Vogt DP. **Oncology (Williston Park)** 1988 Jun;2(6):37–44, 54 (30 ref.)

Treatment of inoperable bile duct carcinoma [letter] Neuhaus H, et al. **Surg Endosc** 1989;3(4):220–1

[Intraarterial and intraportal chemotherapy combined with decollateralization for cholangiocellular carcinoma and metastatic liver cancer] Nagano H, et al. **Gan To Kagaku Ryoho** 1990 Aug;17(8 Pt 2):1758–62 (Eng. Abstr.) **(Jpn)**

CHOLANGIOPANCREATOGRAPHY, ENDOSCOPIC RETROGRADE

Choledochal cyst: findings on cholangiopancreatography with emphasis on ectasia of the common channel. Wiedmeyer DA, et al. **AJR Am J Roentgenol** 1989 Nov; 153(5):969–72

Controversies, dilemmas, and dialogues. What is the role of endoscopy in the management of biliary pancreatitis, and when should it be utilized? Zimmon D, et al. **Am J Gastroenterol** 1990 Jan;85(1):9–11

Endoscopic retrograde cholangiopancreatography in the preoperative diagnosis of pancreatic neoplasms associated with cysts. Pinson CW, et al. **Am J Surg** 1990 May; 159(5):510–3

Investigation of obstructive jaundice. Endoscopic retrograde cholangiopancreatography (ERCP) or CT scan of the abdomen. Himal HS. **Am Surg** 1990 Mar;56(3):192–3

Immediate effects of the endoscopic sphincterotomy on the motility of the sphincter of Oddi. Romanello LM, et al. **Arq Gastroenterol** 1988 Oct–Dec;25(4):193–7

Effect of intranasal oxygen on hypoxia and tachycardia during endoscopic cholangiopancreatography. Griffin SM, et al. **BMJ** 1990 Jan 13;300(6717):83–4

Endoscopic palliation of malignant biliary obstruction in a child. Bickerstaff KI, et al. **Br J Surg** 1989 Oct; 76(10):1092–3

Bile duct size after cholecystectomy: an endoscopic retrograde cholangiopancreatographic study. Chung SC, et al. **Br J Surg** 1990 May;77(5):534–5

Endoscopic sphincterotomy in hepatic hydatid disease open to the biliary tree. Vignote ML, et al. **Br J Surg** 1990 Jan; 77(1):30–1

Role of endoscopic retrograde cholangiopancreatography in differentiating pancreatic cancer coexisting with chronic pancreatitis. Shemesh E, et al. **Cancer** 1990 Feb 15; 65(4):893–6

Endoscopic retrograde choledocho–pancreatography. A review with a report of a collaborative series. Burwood RJ, et al. **Clin Radiol** 1973 Oct;24(4):397–415 (74 ref.)

Patency of the Santorini duct and acute biliary pancreatitis. A prospective ERCP study. Nowak A, et al. **Endoscopy** 1990 May;22(3):124–6

Detection of large intrahepatic cholangiectases in patients with primary sclerosing cholangitis by endoscopic retrograde cholangiography. Theilmann L, et al. **Endoscopy** 1990 Jan;22(1):49–50

Postcholecystectomy syndrome in northern India—study on the diagnostic and therapeutic role of ERCP. Dilawari JB, et al. **Gastroenterol Jpn** 1990 Jun;25(3):394–9

Endoscopy for gallstone pancreatitis. Ranson JH. **Gastroenterology** 1989 Dec;97(6):1592–3

Cholangiographic appearance simulating sclerosing cholangitis in metastatic adenocarcinoma of the liver. Vilgrain V, et al. **Gastroenterology** 1990 Sep;99(3):850–3

The role of endoscopy in diseases of the biliary tract and pancreas. Guidelines for clinical application. **Gastrointest Endosc** 1989 Nov–Dec;35(6):598–9

Opacification of the portal system during ERCP: demonstration of an anomalous pancreatico–portal connection in a patient with pancreatic carcinoma. Ben–Zvi JS, et al. **Gastrointest Endosc** 1989 Sep–Oct;35(5):445–7

Intermittent biliary obstruction secondary to a mobile ampullary adenoma. Goldberg RI, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):574–6

Recurrent pancreatitis in a young patient associated with a solitary nonopaque concretion in the main pancreatic duct. Lorente JA, et al. **Gastrointest Endosc** 1990 Jan–Feb; 36(1):63–5

Retroperitoneal lymphoma causing pancreatic ductal obstruction on endoscopic retrograde cholangiopancreatography [letter] Moreira VF, et al. **Gastrointest Endosc** 1990 Jan–Feb;36(1):80–2

The evolution of diagnostic ERCP [editorial] Schuman BM. **Gastrointest Endosc** 1990 Mar–Apr;36(2):155–6

Teaching gastrointestinal endoscopy by computer simulation: a prototype for colonoscopy and ERCP. Williams CB, et al. **Gastrointest Endosc** 1990 Jan–Feb;36(1):49–54

Hypoxia and tachycardia during endoscopic retrograde cholangiopancreatography: detection by pulse oximetry. Woods SD, et al. **Gastrointest Endosc** 1989 Nov–Dec; 35(6):523–5

Universal utilization of endoscopic retrograde pancreatography for investigation of pancreatic disease [editorial] Keith RG. **Int J Pancreatol** 1989 Dec;5(4):313–5

Endoscopic sphincterotomy [letter; comment] Neoptolemos J. **Lancet** 1989 Oct 21;2(8669):978 Comment on: Lancet 1989 Aug 19;2(8660):431–4.

ERCP in the assessment of patients with post–cholecystectomy syndrome: benefits and limitations. Marotta F, et al. **Neth J Med** 1989 Dec;35(5–6):232–40

Pancrease divisum: CT and ERCP findings. Seto H, et al. **Radiat Med** 1990 Jan–Feb;8(1):20–1

Comparison of regional pancreatic tissue fluid pressure and endoscopic retrograde pancreatographic morphology in chronic pancreatitis. Ebbehøj N, et al. **Scand J Gastroenterol** 1990 Jul;25(7):756–60

Endoscopic retrograde cholangiopancreatography, endoscopic sphincterotomy, and biliary drainage. Ghazi A, et al. **Surg Clin North Am** 1989 Dec;69(6):1249–74

Cholecystocolic fistula: an unusual presentation and diagnosis by endoscopic retrograde cholangiopancreatography. Sing RF, et al. **Surg Endosc** 1990;4(1):39–40

Pancreatic and biliary pressure changes during ERCP. Sunderland GT, et al. **Surg Endosc** 1990;4(1):23

Endoscopic management of choledocholithiasis during pregnancy. Baillie J, et al. **Surg Gynecol Obstet** 1990 Jul; 171(1):1–4

[Endoscopic retrograde cholangiopancreatography in the diagnosis of diseases of the biliary system and pancreas] Nikolov S, et al. **Vutr Boles** 1989;28(4):84–6 **(Bul)**

[Diverticulosis of the distal end of the choledochus demonstrated by retrograde endoscopic cholangiopancreatography. Apropos of 5 case reports] Bastid C, et al. **Acta Gastroenterol Belg** 1989 Jan–Apr; 52(1–2):33–8 (Eng. Abstr.) **(Fre)**

[Retroduodenal perforation following endoscopic papillotomy] Gögler H, et al. **Chirurg** 1989 Jul;60(7):492–4 **(Ger)**

[A life–threatening contrast–medium reaction during ERCP (letter)] Zimmerer J, et al. **Dtsch Med Wochenschr** 1990 Jul 6;115(27):1077–8 **(Ger)**

[Endoscopic papillotomy as an early measure in acute pancreatitis—a critical classification of indications] Lankisch PG, et al. **Internist (Berl)** 1989 Nov;30(11):725–9 (44 ref.) **(Ger)**

[Surgical, endoscopic or radiologic interventional therapy in bile duct cancer] Böttger T, et al. **Langenbecks Arch Chir** 1990;375(1):39–45 (Eng. Abstr.) **(Ger)**

[A comparison of the efficacy of sonography, computed tomography, ERCP and angiography in the diagnosis of primary bile duct carcinoma] Crone–Münzebrock W, et al. **ROFO** 1989 Nov;151(5):523–6 (Eng. Abstr.) **(Ger)**

[Comparative efficacy of sonography, computed tomography, ERCP and angiography in the diagnosis of primary carcinomas of the gallbladder] Crone–Münzebrock W, et al. **Rontgenblatter** 1990 Jun;43(6):261–5 (Eng. Abstr.) **(Ger)**

[Comparative efficacy of sonography, computed tomography, ERCP and angiography in the diagnosis of primary papillary carcinomas] Crone–Münzebrock W, et al. **Rontgenblatter** 1990 Jun;43(6):266–9 (Eng. Abstr.) **(Ger)**

[ERCP in bile duct dilatation with jaundice due to spontaneous hydatid cyst rupture. Diagnosis, differential diagnosis, therapy and result] Meier R, et al. **Schweiz Rundsch Med Prax** 1990 Apr 10;79(15):443–7 (Eng. Abstr.) **(Ger)**

[ERCP under ceftriaxone antibiotic cover in patients with obstructive jaundice] Werth B, et al. **Schweiz Rundsch Med Prax** 1990 Mar 27;79(13):387–8 (Eng. Abstr.) **(Ger)**

[Intrahepatic biliary lithiasis: endoscopic transpapillary treatment] De Sanctis G, et al. **Minerva Chir** 1990 Mar 31;45(6):377–81 (Eng. Abstr.) **(Ita)**

[Comparison of traditional methods and digital technics in the study of the biliary and pancreatic systems using endoscopic retrograde cholangiopancreatography (ERCP)] Bonetti MG, et al. **Radiol Med (Torino)** 1990 Jun; 79(6):610–3 (Eng. Abstr.) **(Ita)**

[Hydatid cysts of the liver ruptured into the bile ducts. Remarks on 2 cases] La Seta F, et al. **Radiol Med (Torino)** 1989 Nov;78(5):534–7 **(Ita)**

[Duodenoscopic cholangiopancreatography (ERCP) in the diagnosis of iatrogenic lesions of the common bile duct] Orsitto E, et al. **Radiol Med (Torino)** 1989 Sep;78(3):196–9 (Eng. Abstr.) **(Ita)**

[A comparative study of histopathological findings of resectable pancreatic carcinoma (t1, t2 cases) with ERCP and CT images] Ichikawa T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Feb 25; 50(2):114–22 (Eng. Abstr.) **(Jpn)**

[Preoperative diagnosis of a case of biliobiliary fistula] Horibe T, et al. **Nippon Naika Gakkai Zasshi** 1989 Oct; 78(10):1466–9 **(Jpn)**

[Endoscopic retrograde cholangio–pancreatography in suspected acute gallstone pancreatitis] Lygren I, et al. **Tidsskr Nor Laegeforen** 1990 Apr 10;110(10):1216–8 (Eng. Abstr.) **(Nor)**

[Endoscopic retrograde cholangiopancreatography in surgery] Lutsevich EV, et al. **Sov Med** 1989;(11):68–71 **(Rus)**

[Value of endoscopic retrograde cholangiopancreatography in cancer of the pancreas] Aparcero M, et al. **GEN** 1988 Oct–Dec;42(4):147–51 (Eng. Abstr.) **(Spa)**

[Acute pancreatitis and diagnostic and therapeutic endoscopic retrograde cholangiopancreatography] Aparcero M, et al. **GEN** 1989 Jan–Mar;43(1):39–45 (Eng. Abstr.) **(Spa)**

[Usefulness of endoscopic retrograde cholangiopancreatography in diagnosis of choledochal cysts in children] Guelrud M, et al. **GEN** 1989 Jan–Mar; 43(1):9–12 (Eng. Abstr.) **(Spa)**

[Anomaly of the biliopancreatic junction, choledocal cyst and pancreatic lithiasis. Endoscopic possibilities] Martín L, et al. **Rev Esp Enferm Apar Dig** 1989 Dec;76(6 Pt 2):685–8 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Pancreatitis after endoscopic retrograde cholangiopancreatography. An underreported disease whose severity is often unappreciated. Stanten R, et al. **Arch Surg** 1990 Aug;125(8):1032–4; discussion 1035

Sepsis following injection of obstructed pancreatic ducts [letter] Ayela P, et al. **Endoscopy** 1989 Sep;21(5):242

Cystic duct entry—another cause of pseudocalculus. Berkowitz I, et al. **Endoscopy** 1990 Mar;22(2):85–7

Septicemia after endoscopic retrograde cholangiopancreatography. Deviere J, et al. **Endoscopy** 1990 Mar;22(2):72–5

Changes in plasma active renin and prorenin after endoscopic retrograde pancreatography. Higaki J, et al. **Methods Find Exp Clin Pharmacol** 1989 Nov;11(11):703–5

Pseudomonas septicaemia after endoscopic retrograde cholangiopancreatography—an unresolved problem. Bass DH, et al. **S Afr Med J** 1990 May 19;77(10):509–11 (24 ref.)

[Complications of endoscopic retrograde cholangiopancreatography] Todorov T, et al. **Khirurgiia (Sofiia)** 1989;42(4):90–2 **(Bul)**

[Arrhythmia during endoscopic retrograde cholangiopancreatography (ERCP) and colonoscopy] Wierzbicka–Paczos E. **Pol Arch Med Wewn** 1989 May; 81(5):295–302 (Eng. Abstr.) **(Pol)**

INSTRUMENTATION

Endoscopic retrograde wire–guided brush cytology for diagnosis of patients with malignant obstruction of the bile duct. Foutch PG, et al. **Am J Gastroenterol** 1990 Jul; 85(7):791–5

Precut (needle knife) papillotomy for impacted common bile duct stone at the ampulla. Leung JW, et al. **Am J Gastroenterol** 1990 Aug;85(8):991–3

Precut papillotomy—a risky technique for experts only [editorial; comment] Cotton PB. **Gastrointest Endosc** 1989 Nov–Dec;35(6):578–9 Comment on: Gastrointest Endosc 1989 Nov–Dec;35(6):499–503.

Take care with the tip of your video duodenoscope [letter] Cotton PB. **Gastrointest Endosc** 1989 Nov–Dec;35(6):582–3

A new pediatric duodenoscope: successful cannulation without a cannula elevator. Mauer K, et al. **Gastrointest Endosc** 1989 Sep–Oct;35(5):437–9

The needle knife: a valuable tool in diagnostic and therapeutic ERCP [see comments] Siegel JH, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):499–503 Comment in: Gastrointest Endosc 1989 Nov–Dec;35(6):578–9.

[Transpapillary endoprostheses in malignant and benign bile duct diseases] Liebe S, et al. **Z Gesamte Inn Med** 1989 Oct 15;44(20):612–7 (Eng. Abstr.) **(Ger)**

[ERCP and associated methods in children—cases from a personal patient sample] Kautz G, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:54–6 **(Ger)**

[ERCP in children] Rösch W. **Z Kinderchir** 1988 Sep;43 Suppl 1:52–3 **(Ger)**

[Endoscopic retrograde cholangiopancreatography using a lateral vision gastroscope] Aparcero M, et al. **GEN** 1988 Jan–Mar;42(1):29–33 (Eng. Abstr.) **(Spa)**

METHODS

Endoscopic retrograde cholangiopancreatography in a general surgery practice. Scheeres DE, et al. **Am Surg** 1990 Mar;56(3):185–91

Endoscopic retrograde cholangiopancreatography using a mobile image intensifier. Vellacott KD, et al. **Ann R Coll Surg Engl** 1990 Mar;72(2):132–4

Critical appraisal of therapeutic endoscopy in biliary tract diseases. Cotton PB. **Annu Rev Med** 1990;41:211–22 (15 ref.)

ERCP without fluoroscopy [letter] Choksi AP, et al. **Endoscopy** 1990 Mar;22(2):91

Common bile duct laser lithotripsy. Berci G, et al. **Gastrointest Endosc** 1990 Mar–Apr;36(2):137–8

Ultrasound guided pancreatic ductography. Das K, et al. **Indian J Gastroenterol** 1990 Apr;9(2):129–30

Endoscopic cysto–enterostomy of cysts of chronic calcifying pancreatitis. Sahel J. **Z Gastroenterol** 1990 Mar;28(3):170–2

[Endoscopic treatment of pancreatic cysts and pseudocysts] Sahel J. **Ann Chir** 1990;44(1):60–2 **(Fre)**

UTILIZATION

[Endoscopic retrograde cholangiography and perioperative cholangiography: to use both, one or none?] Carvajal A, et al. **GEN** 1989 Jan–Mar;43(1):28–33 (Eng. Abstr.) **(Spa)**

VETERINARY

ERCP in a nonhuman primate. Siegel JH, et al. **Gastrointest Endosc** 1989 Nov-Dec;35(6):557-9

CHOLANGITIS

BLOOD

[Plasma level and effects of thromboxane A2 and 6-keto-PGF1 alpha in patients with acute obstructive suppurative cholangitis] Miao XY. **Chung Hua Wai Ko Tsa Chih** 1990 Apr;28(4):228-30, 253-4 (Eng. Abstr.) **(Chi)**

CHEMICALLY INDUCED

Severe jaundice with destructive cholangitis after administration of methyltestosterone [letter] Hartleb M, et al. **Am J Gastroenterol** 1990 Jun;85(6):766-7

COMPLICATIONS

Eosinophilic cholangitis: a self-limited cause of extrahepatic biliary obstruction. Rosengart TK, et al. **Am J Gastroenterol** 1990 May;85(5):582-5

Cholescintigraphy in AIDS-related cholangitis: a case report. Kolin E, et al. **Clin Nucl Med** 1989 Oct;14(10):725-7

Infection of mural thrombus: a case report and literature review. Cheung A, et al. **J Intern Med** 1990 Apr; 227(4):281-3 (8 ref.)

Eosinophilic ureteritis associated with eosinophilic cholangitis: a case report. Platt ML, et al. **J Urol** 1990 Jul;144(1):127-9

[Biliary diseases in acquired immunodeficiency syndrome. Apropos of 2 cases] Gallot-Lavallée-Villars S, et al. **Schweiz Med Wochenschr** 1990 Jun 2;120(22):833-5 (Eng. Abstr.) **(Fre)**

[Morpho-functional features of concomitant pathology of the biliary system and pancreas in children] Lapshin VF, et al. **Pediatriia** 1990;(6):111-2 **(Rus)**

[Mechanical jaundice in cholangitis] Khachatrian RG, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):87-90 (Eng. Abstr.) **(Rus)**

[Bronchobiliary fistula (letter)] Fernández de la Puebla RA, et al. **Med Clin (Barc)** 1990 May 5;94(17):678-9 **(Spa)**

DIAGNOSIS

Oriental cholangiohepatitis: sonographic findings in 48 cases. Lim JH, et al. **AJR Am J Roentgenol** 1990 Sep;155(3):511-4

Trichosporon cholangitis associated with hyperbilirubinemia, and findings suggesting primary sclerosing cholangitis on endoscopic retrograde cholangiopancreatography. Patel SA, et al. **Am J Gastroenterol** 1990 Jan;85(1):84-7

Radiological features of AIDS related cholangitis. McCarty M, et al. **Clin Radiol** 1989 Nov;40(6):582-5

[Postcholecystectomy syndrome caused by inflammation of the terminal choledochus and papilla] Zennaro F. **Ann Ital Chir** 1989;60(3):127-31 (31 ref.) **(Ita)**

[Roentgenologic and endoscopic procedures in the diagnosis and treatment of benign diseases of the biliary tract (review of the literature)] Efendiev VM, et al. **Khirurgiia (Mosk)** 1990 Apr;(4):145-9 (80 ref.) **(Rus)**

[Diagnosis and treatment of acute cholangitis] Gadiev SI. **Klin Khir** 1989;(9):33-5 (Eng. Abstr.) **(Rus)**

[A case of severe clonorchiasis] Sorokopud OP, et al. **Klin Med (Mosk)** 1990 Jan;68(1):111-2 **(Rus)**

[Cholangitis in the middle-aged and elderly] Rodionov VV, et al. **Sov Med** 1990;(2):53-6 **(Rus)**

DRUG THERAPY

Intractable cholangitis due to conduit obstruction. Golladay ES, et al. **J Arkansas Med Soc** 1990 Aug;87(3):116-8

Antibiotics for cholangitis [letter] [published erratum appears in Lancet 1990 Jan 13;335(8681):122] [comment] French GL, et al. **Lancet** 1989 Nov 25;2(8674):1271-2 Comment on: Lancet 1989 Sep 30;2(8666):781-2.

[Antibiotics in the treatment of biliary tract infections] Perkowski H. **Wiad Lek** 1989 Jan 15;42(2):101-5 (67 ref.) (Eng. Abstr.) **(Pol)**

ENZYMOLOGY

[Lysozyme-forming function of the liver in complicated acute cholecystitis] Lokhvitskiĭ SV, et al. **Vestn Khir** 1989 May;142(5):29-30 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Cholangitis associated with cholecystitis in patients with acquired immunodeficiency syndrome. Iannuzzi C, et al. **Arch Surg** 1990 Sep;125(9):1211-3

Post-choledochoenterostomy 'sump syndrome'. Miros M, et al. **Aust N Z J Surg** 1990 Feb;60(2):109-12

Campylobacter fetus cholangitis and bacteremia. Douketis J, et al. **Can Med Assoc J** 1989 Nov 1;141(9):925-6

The relationship between a subcutaneously placed afferent jejunal loop in a hepaticojejunostomy and postoperative cholangitis. Takada T, et al. **Int Surg** 1989 Jul-Sep; 74(3):167-70

Cholangitis after the Kasai operation for biliary atresia [letter] Rathore MH. **J Pediatr Surg** 1990 Mar;25(3):376

A case report of acute obstructive suppurative cholangitis in a non-O-1 Vibrio cholerae biliary carrier. Nishikawa M, et al. **Nippon Geka Hokan** 1989 Jan 1;58(1):155-61

[Definition and epidemiology of the post-cholecystectomy syndrome] Germiniani R. **Ann Ital Chir** 1989;60(3):107-12 (45 ref.) **(Ita)**

[The postcholecystectomy syndrome and suppurative-inflammatory involvement of the biliary tract (apropos of the discussion held at the 16th Congress of Surgeons of the Ukrainian SSR)] Andriushchenko VP. **Klin Khir** 1989;(9):43-4 **(Rus)**

[Clinical significance of juxtapapillary duodenal diverticula] González JA, et al. **GEN** 1988 Jul-Sep;42(3):91-4 (Eng. Abstr.) **(Spa)**

[Oriental cholangiohepatitis] Lauretta RP, et al. **GEN** 1987 Oct-Dec;41(4):171-3 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

[Rapid methods of detection of bacteria in the bile] Buianov VM, et al. **Sov Med** 1989;(11):30-4 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Benign non-traumatic inflammatory strictures of the extrahepatic biliary system [letter; comment] Krukowski ZH, et al. **Br J Surg** 1989 Dec;76(12):1354 Comment on: Br J Surg 1989 Aug;76(8):849-52.

[Changes in the architectonics of the bile ducts in inflammatory processes] Tsaĭ GE, et al. **Klin Khir** 1989; (9):19-20 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Long-term follow-up study of patients with cholangitis after successful Kasai operation in biliary atresia: selection of recipients for liver transplantation [see comments] Ohkohchi N, et al. **J Pediatr Gastroenterol Nutr** 1989 Nov; 9(4):416-20 Comment in: J Pediatr Gastroenterol Nutr 1989 Nov;9(4):405-6.

Studies on intestinal motility and mechanism of cholangitis after biliary reconstruction [published erratum appears in J Pediatr Surg 1990 Mar;25(3):377] Takano K, et al. **J Pediatr Surg** 1989 Dec;24(12):1225-31

PREVENTION & CONTROL

Intussusception-type antireflux valve in the Roux-en-Y loop to prevent ascending cholangitis after hepatic portojejunostomy. Nakajo T, et al. **J Pediatr Surg** 1990 Mar;25(3):311-4

[Pharmacokinetics and clinical evaluation of aztreonam in pediatric surgery] Yura J, et al. **Jpn J Antibiot** 1990 Mar; 43(3):534-42 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Role of computed tomography in the management of recurrent pyogenic cholangitis. Fan ST, et al. **Aust N Z J Surg** 1990 Aug;60(8):599-605

[Radiologic aspects of noncalculous inflammation of the biliary tract in AIDS] Yana C, et al. **J Radiol** 1989 Jun-Jul; 70(6-7):411-4 (Eng. Abstr.) **(Fre)**

RADIONUCLIDE IMAGING

[Scintigraphy of the liver and biliary tract in the diagnosis of diseases associated with mechanical jaundice] Ozerov VF, et al. **Vestn Khir** 1989 Jul;143(7):7-9 **(Rus)**

SURGERY

Recurrent pyogenic cholangiohepatitis. Kashi H, et al. **Ann R Coll Surg Engl** 1989 Nov;71(6):387-9

Emergency surgery for severe acute cholangitis. The high-risk patients. Lai EC, et al. **Ann Surg** 1990 Jan; 211(1):55-9

Endoscopic decompression for acute cholangitis due to stones. Worthley CS, et al. **Aust N Z J Surg** 1990 May; 60(5):355-9

Management of severe acute cholangitis. Lai EC. **Br J Surg** 1990 Jun;77(6):604-5 (7 ref.)

Long-term follow-up study of patients with cholangitis after successful Kasai operation in biliary atresia: selection of recipients for liver transplantation [see comments] Ohkohchi N, et al. **J Pediatr Gastroenterol Nutr** 1989 Nov; 9(4):416-20 Comment in: J Pediatr Gastroenterol Nutr 1989 Nov;9(4):405-6.

[Endoscopic papillosphincterotomy in the treatment of stenosing papillitis and choledocholithiasis] Khlebarov I. **Vutr Boles** 1989;28(5):71-4 (Eng. Abstr.) **(Bul)**

[Diagnosis, etiology and treatment of cholangitis following bilio-digestive surgery] Carrel T, et al. **Helv Chir Acta** 1990 Apr;56(6):891-6 (Eng. Abstr.) **(Fre)**

[Indications and results of 977 cases of papillosphincterostomy] Fedele E. **G Chir** 1989 Jul-Aug; 10(7-8):415-9 **(Ita)**

[Endoscopic papillotomy today. Indications and results] Purri P, et al. **Minerva Chir** 1990 Feb;45(3-4):169-71 (Eng. Abstr.) **(Ita)**

[Method for treatment of opisthorchiasis-induced cholangitis] A Ïperovich BI, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):112-4 **(Rus)**

[Diagnosis and treatment of post-cholecystectomy syndrome] Gostishchev, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):8-11 (Eng. Abstr.) **(Rus)**

[Endoscopic papillosphincterotomy in patients with acute cholecystitis and lesions of the common bile duct] Krenda Ï AP, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):62-6 (Eng. Abstr.) **(Rus)**

[Treatment of nontumorous obstructive jaundice and cholangitis in middle-aged and elderly patients] Rodionov VV, et al. **Khirurgiia (Mosk)** 1989 Dec;(12):72-6 (Eng. Abstr.) **(Rus)**

[Bacteriocholia and antibiotic prevention of postoperative suppurative-septic complications in patients with inflammatory diseases of the biliary tract] Buianov VM, et al. **Klin Khir** 1990;(1):55-60 (122 ref.) **(Rus)**

[Evaluation of the methods of completion of surgical procedures of the biliary tract] Feofilov GL, et al. **Vestn Khir** 1990 Jan;144(1):104-7 **(Rus)**

THERAPY

Precut (needle knife) papillotomy for impacted common bile duct stone at the ampulla. Leung JW, et al. **Am J Gastroenterol** 1990 Aug;85(8):991-3

Endoscopic sphincterotomy in acute cholangitis due to choledocholithiasis. Ditzel H, et al. **Hepatogastroenterology** 1990 Apr;37(2):204-7

Severe acute cholangitis: the role of emergency nasobiliary drainage. Lai EC, et al. **Surgery** 1990 Mar;107(3):268-72

[Endoscopic treatment of cholangitis via an external nasobiliary drain] Vladimirov B, et al. **Vutr Boles** 1989; 28(5):75-7 (Eng. Abstr.) **(Bul)**

[Current concepts of the treatment of cholelithiasis in aged patients] Bahnini J, et al. **J Chir (Paris)** 1989 Nov; 126(11):611-8 (60 ref.) (Eng. Abstr.) **(Fre)**

VETERINARY

Primary cholangiohepatitis in a horse. Schulz KS, et al. **Cornell Vet** 1990 Jan;80(1):35-40

Case for diagnosis. Necrotizing granulomatous cholangiohepatitis with multifocal caseonecrotic granulomas caused by Chlamydia psittaci organisms and a concomitant enteric infection. Dochterman LW, et al. **Milit Med** 1990 Mar;155(3):138, 140-1

CHOLANGITIS, CHRONIC NONSUPPURATIVE DESTRUCTIVE see **LIVER CIRRHOSIS, BILIARY**

CHOLANGITIS, SCLEROSING

Advances in primary sclerosing cholangitis. Lindor KD, et al. **Am J Med** 1990 Jul;89(1):73-80 (83 ref.)

[Primary sclerosing cholangitis] Nečas F, et al. **Rozhl Chir** 1990 Feb;69(2):87-90 (Eng. Abstr.) **(Cze)**

[Primary sclerosing cholangitis] Oren R. **Harefuah** 1989 Jul; 117(1-2):25-8 (37 ref.) **(Heb)**

BLOOD

Raised histamine concentrations in chronic cholestatic liver disease. Gittlen SD, et al. **Gut** 1990 Jan;31(1):96-9

CHEMICALLY INDUCED

Sclerosing cholangitis induced by formaldehyde solution injected into the biliary tree of rats. Houry S, et al. **Arch Surg** 1990 Aug;125(8):1059-61

Serious chemical sclerosing cholangitis associated with hepatic arterial 5FU and MMC chemotherapy. Fukuzumi S, et al. **Eur J Surg Oncol** 1990 Jun;16(3):251-5

COMPLICATIONS

Pancreatic ductal morphology and exocrine function in primary sclerosing cholangitis. Lindström E, et al. **Acta Chir Scand** 1990 Jun-Jul;156(6-7):451-6

Does primary sclerosing cholangitis occurring in association with inflammatory bowel disease differ from that occurring in the absence of inflammatory bowel disease? A study of sixty-six subjects. Rabinovitz M, et al. **Hepatology** 1990 Jan;11(1):7-11

Association of primary sclerosing cholangitis and celiac disease: fact or fancy? Schrumpf E. **Hepatology** 1989 Dec; 10(6):1020-1

[Sclerosing cholangitis revealing histiocytosis X] Neveu I, et al. **Arch Fr Pediatr** 1990 Mar;47(3):197-9 (Eng. Abstr.) **(Fre)**

[Sclerosing cholangitis in the course of histiocytosis X (letter)] Puel O, et al. **Arch Fr Pediatr** 1990 Feb;47(2):155-6 **(Fre)**

[Aortocaval fistula in ulcerative colitis and primary sclerosing cholangitis] Bozkurt T, et al. **Internist (Berl)** 1989 Dec; 30(12):827-9 **(Ger)**

[A 28-year-old patient with chronic diarrhea, liver disease, pericarditis and polyarthritis. A case report with special reference to the differential diagnosis of arthritis] Hundegger K, et al. **Internist (Berl)** 1990 Mar;31(3):245-8 **(Ger)**

[Primary sclerosing cholangitis and inflammatory bowel disease] Schrumpf E, et al. **Tidsskr Nor Laegeforen** 1990 Apr 10;110(10):1212-6 (Eng. Abstr.) **(Nor)**

DIAGNOSIS

Trichosporon cholangitis associated with hyperbilirubinemia, and findings suggesting primary sclerosing cholangitis on endoscopic retrograde cholangiopancreatography. Patel SA, et al. **Am J Gastroenterol** 1990 Jan;85(1):84-7

Glomerulonephritis associated with inflammatory bowel disease. Report of a patient with chronic ulcerative colitis,

sclerosing cholangitis, and acute glomerulonephritis. Wilcox GM, et al. **Gastroenterology** 1990 Mar;98(3):786–91 (37 ref.)

Severe acute pancreatitis as the presenting symptom of primary sclerosing cholangitis: treatment by endoscopic insertion of a biliary stent. Goldin E, et al. **Int Surg** 1990 Jan–Mar;75(1):58–60

Diffuse biliary tract involvement mimicking primary sclerosing cholangitis after bone marrow transplantation. Geubel AP, et al. **J Hepatol** 1990 Jan;10(1):23–8

The syndrome of primary sclerosing cholangitis. Ludwig J, et al. **Prog Liver Dis** 1990;9:555–66 (51 ref.)

Primary sclerosing cholangitis—a report of 2 cases. Chong RS, et al. **Singapore Med J** 1989 Dec;30(6):574–7

[Olmstedt syndrome—associated with primary sclerosing cholangitis and immune deficiency of uncertain origin] Georgii A, et al. **Hautarzt** 1989 Nov;40(11):708–12 (Eng. Abstr.) **(Ger)**

[A case of cholangiocarcinoma who showed mimicking appearance of primary sclerosing cholangitis on the cholangiography] Ishizaki Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Nov; 86(11):2606–10 **(Jpn)**

[Primary sclerosing cholangitis. A report of 2 cases and review of the literature] dos Santos LF, et al. **Arq Gastroenterol** 1989 Jan–Jun;26(1–2):17–24 (27 ref.) (Eng. Abstr.) **(Por)**

[Clinical aspects and diagnosis of primary sclerosing cholangitis] Ponomarev AA. **Sov Med** 1990;(6):42–6 (46 ref.) **(Rus)**

DRUG THERAPY

Effect of different doses of ursodeoxycholic acid in chronic liver disease. Podda M, et al. **Dig Dis Sci** 1989 Dec;34(12 Suppl):59S–65S

Asymptomatic primary sclerosing cholangitis treated with ursodeoxycholic acid. Hayashi H, et al. **Gastroenterology** 1990 Aug;99(2):533–5

Ursodeoxycholic acid for primary sclerosing cholangitis. Chazouillères O, et al. **J Hepatol** 1990 Jul;11(1):120–3

ETIOLOGY

[Sclerosing cholangitis subsequent to surgical intervention for hepatic hydatidosis. A clinical case] Caccamo L, et al. **Minerva Med** 1989 Aug;80(8):865–8 **(Ita)**

GENETICS

Association of primary sclerosing cholangitis with HLA–DRw52a [see comments] Prochazka EJ, et al. **N Engl J Med** 1990 Jun 28;322(26):1842–4 Comment in: N Engl J Med 1990 Jun 28;322(26):1879–81.

IMMUNOLOGY

Activation of the complement system in primary sclerosing cholangitis. Senaldi G, et al. **Gastroenterology** 1989 Dec; 97(6):1430–4

Bile duct antibodies crossreacting with blood group antigens in primary sclerosing cholangitis. Jeffrey GP, et al. **Gut** 1990 Jun;31(6):698–701

Autoreactivity to hepatocellular antigens in primary biliary cirrhosis and primary sclerosing cholangitis. Bedlow AJ, et al. **J Clin Lab Immunol** 1989 Nov;30(3):103–9

The immunology of primary sclerosing cholangitis. Chapman RW. **Springer Semin Immunopathol** 1990;12(1):121–8 (45 ref.)

METABOLISM

Expression of laminin in benign and malignant sclerosing lesions of extrahepatic bile ducts. Haglund C, et al. **J Clin Pathol** 1989 Sep;42(9):927–30

Distribution of HLA–DR, HLA–DP, HLA–DQ antigens in liver tissue from patients with primary sclerosing cholangitis. Broomé U, et al. **Scand J Gastroenterol** 1990 Jan;25(1):54–8

PATHOLOGY

Diseases of the pancreas and the pancreaticobiliary tree. Proceedings of the Gastrointestinal Pathology Society symposium. **Am J Surg Pathol** 1989;13 Suppl 1:39–103

Surgical pathology of the syndrome of primary sclerosing cholangitis. Ludwig J. **Am J Surg Pathol** 1989;13 Suppl 1:43–9 (28 ref.)

Sclerosing cholangitis and hepatic microvesicular steatosis in cystic fibrosis and chronic pancreatitis [letter] MacSween RN. **J Clin Pathol** 1990 Feb;43(2):173

Unifocal stricture of the common bile duct in two children: a localized form of primary sclerosing cholangitis. Sokal EM, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug; 11(2):268–74

PHYSIOPATHOLOGY

Patients with asymptomatic primary sclerosing cholangitis frequently have progressive disease. Porayko MK, et al. **Gastroenterology** 1990 Jun;98(6):1594–602

Spontaneous healing of sclerosing cholangitis associated with stricture of the main pancreatic duct. Bastid C, et al. **Pancreas** 1990 Jul;5(4):489–92

RADIOGRAPHY

Multiple hepatic abscesses: cholangiographic changes simulating sclerosing cholangitis and resolution after percutaneous drainage. Steinhart AH, et al. **Am J Gastroenterol** 1990 Mar;85(3):306–8

Detection of large intrahepatic cholangiectases in patients with primary sclerosing cholangitis by endoscopic retrograde cholangiography. Theilmann L, et al. **Endoscopy** 1990 Jan;22(1):49–50

Cholangiographic appearance simulating sclerosing cholangitis in metastatic adenocarcinoma of the liver. Vilgrain V, et al. **Gastroenterology** 1990 Sep;99(3):850–3

SURGERY

Primary sclerosing cholangitis: the emerging role for liver transplantation. Langnas AN, et al. **Am J Gastroenterol** 1990 Sep;85(9):1136–41

Development of colon cancer after liver transplantation for primary sclerosing cholangitis associated with ulcerative colitis. Higashi H, et al. **Hepatology** 1990 Mar;11(3):477–80

[Ulcerative colitis and primary sclerosing cholangitis—does proctocolectomy have a therapeutic effect?] Dirks E, et al. **Z Gastroenterol** 1990 Apr;28(4):222–4 **(Ger)**

CHOLATES see **CHOLIC ACIDS**

CHOLECALCIFEROLS

ADMINISTRATION & DOSAGE

Vitamin D3 administration increases the membrane fluidity of intestinal mitochondria. Tolosa de Talamoni N, et al. **Biochem Int** 1989 Oct;19(4):701–7

Efficacy of several vitamin D compounds in the prevention of tibial dyschondroplasia in broiler chickens. Edwards HM Jr. **J Nutr** 1990 Sep;120(9):1054–61

Effect of vitamin D3 administration on serum 25–hydroxyvitamin D3, 1,25–dihydroxyvitamin D3 and osteocalcin in vitamin D–deficient elderly people. Guillemant S, et al. **J Steroid Biochem** 1989 Dec; 33(6):1155–9

Influence of medium chain triglycerides and vitamin D3 on digestive and metabolic utilization of protein in rats with intestinal resection. Aliaga IL, et al. **Nahrung** 1990; 34(2):181–8

ANALYSIS

Determination of vitamin D3 in margarines, oils and other supplemented food products using HPLC. Johnsson H, et al. **Int J Vitam Nutr Res** 1989;59(3):262–8

[Microencapsulization of cholecalciferol by coacervation] Sawicka J. **Pharmazie** 1990 Apr;45(4):264–5 (Eng. Abstr.) **(Ger)**

BIOSYNTHESIS

Cutaneous formation of vitamin D in psoriasis [letter] Matsuoka LY, et al. **Arch Dermatol** 1990 Aug;126(8):1107–8

Use of topical sunscreen for the evaluation of regional synthesis of vitamin D3. Matsuoka LY, et al. **J Am Acad Dermatol** 1990 May;22(5 Pt 1):772–5

Suntanning and cutaneous synthesis of vitamin D3. Matsuoka LY, et al. **J Lab Clin Med** 1990 Jul;116(1):87–90

BLOOD

Thin–layer chromatography as an efficient alternative to high–performance liquid chromatography in the assay of plasma vitamin D3 metabolites. Justová V. **J Chromatogr** 1989 Nov 10;496(1):242–4

DEFICIENCY

Dietary boron modified the effects of magnesium and molybdenum on mineral metabolism in the cholecalciferol–deficient chick. Hunt CD. **Biol Trace Elem Res** 1989 Nov;22(2):201–20

Ontogeny and effect of vitamin D deprivation on rat serum 25–hydroxyvitamin D binding protein. Rojanasathit S, et al. **Endocrinology** 1977 Mar;100(3):642–7

METABOLISM

1,25–Dihydroxyvitamin D3–inducible catabolism of vitamin D metabolites in mouse intestine. Tomon M, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):G557–63

Characterization of pig kidney microsomal cytochrome P–450 catalysing 25–hydroxylation of vitamin D3 and C27 steroids. Bergman T, et al. **Biochem J** 1990 Sep 1; 270(2):345–50

Calcium ion influence on thermotropic behaviour of dipalmitoylphosphatidylcholine–vitamin D3 systems. Castelli F, et al. **Chem Phys Lipids** 1990 Jan;52(2):129–38

Influence of dietary vitamin D3 on the circulating concentration of its active metabolites in the chick and rat. Hughes MR, et al. **Endocrinology** 1977 Mar;100(3):799–806

Precursors for cholesterol synthesis (7–dehydrocholesterol, 7–dehydrodesmosterol, and desmosterol): cholesterol/7–dehydrocholesterol ratio as an index of development and aging in PNS but not in CNS. Bourre JM, et al. **J Neurochem** 1990 Apr;54(4):1196–9

Interactions of vitamins A, D3, E, and K in the diet of broiler chicks. Abawi FG, et al. **Poult Sci** 1989 Nov;68(11):1490–8

PHARMACOKINETICS

Effects of a dietary magnesium deficiency and excess vitamin D3 on swine coronary arteries. Ito M, et al. **J Am Coll Nutr** 1990 Apr;9(2):155–63 (49 ref.)

PHARMACOLOGY

Relationship of mineral metabolism and long–term calcium and cholecalciferol supplementation to blood pressure in normotensive men. Orwoll ES, et al. **Am J Clin Nutr** 1990 Oct;52(4):717–21

Involvement of vitamin D3 with cardiovascular function. III. Effects on physical and morphological properties. Weishaar RE, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):E134–42

Identification of glyoxylate cycle enzymes in chick liver—the effect of vitamin D3: cytochemistry and biochemistry. Davis WL, et al. **Anat Rec** 1990 Jul;227(3):271–84

Comparison of the inhibitions of proliferation of normal and psoriatic fibroblasts by 1 alpha,25–dihydroxyvitamin D3 and synthetic analogues of vitamin D3 with an oxygen atom in their side chain. Morimoto S, et al. **Biochem Int** 1989 Nov;19(5):1143–9

The glyoxylate cycle in rat epiphyseal cartilage: the effect of vitamin–D3 on the activity of the enzymes isocitrate lyase and malate synthase. Davis WL, et al. **Bone** 1989; 10(3):201–6

Long–term administration of vitamin D3 metabolites alters PTH–responsive osteoblastic adenylate cyclase in rats. Mortensen B, et al. **Calcif Tissue Int** 1990 May;46(5):339–45

Jun–Fos and receptors for vitamins A and D recognize a common response element in the human osteocalcin gene. Schüle R, et al. **Cell** 1990 May 4;61(3):497–504

Effects of dexamethasone and vitamin D3 on cartilage differentiation in a clonal chondrogenic cell population. Grigoriadis AE, et al. **Endocrinology** 1989 Oct; 125(4):2103–10

Inhibition of angiogenesis by vitamin D3 analogues. Oikawa T, et al. **Eur J Pharmacol** 1990 Mar 20;178(2):247–50

Effects of vitamin D3, 25(OH) vitamin D3, 24,25(OH)2 vitamin D3, and 1,25(OH)2 vitamin D3 on the in vitro intestinal calcium absorption in the marine teleost, Atlantic cod (Gadus morhua). Sundell K, et al. **Gen Comp Endocrinol** 1990 Apr;78(1):74–9

Nutritive utilization of phosphorus in the rat: influence of intestinal resection and dietary medium chain triglycerides and vitamin D3. Barrionuevo M, et al. **Int J Vitam Nutr Res** 1989;59(3):255–61

Differences in mineral metabolism among nonhuman primates receiving diets with only vitamin D3 or only vitamin D2. Marx SJ, et al. **J Clin Endocrinol Metab** 1989 Dec; 69(6):1282–90

Influence of dietary calcium and cholecalciferol on composition of plasma lipids in young pigs. Foley MK, et al. **J Nutr** 1990 Jan;120(1):45–51

Prevention of immunological disorders in MRL/l mice by a new synthetic analogue of vitamin D3: 22–oxa–1 alpha,25–dihydroxyvitamin D3. Abe J, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Feb;36(1):21–31

Nutritive utilization of calcium in rats: effects of dietary fat components and vitamin D3 on intestinal resected rats. Campos MS, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Oct; 35(5):511–21

PHYSIOLOGY

The effect of 1,25–dihydroxyvitamin D3 on human osteoblast–like osteosarcoma cell: modification of response to PTH. Ikeda K, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):889–97

POISONING

Cholecalciferol rodenticide toxicity in a domestic cat. Thomas JB, et al. **Aust Vet J** 1990 Jul;67(7):274–5

Salmon calcitonin as adjunct treatment for vitamin D toxicosis in a dog. Dougherty SA, et al. **J Am Vet Med Assoc** 1990 Apr 15;196(8):1269–72

Hypercalcemia secondary to cholecalciferol rodenticide toxicosis in two dogs. Fooshee SK, et al. **J Am Vet Med Assoc** 1990 Apr 15;196(8):1265–8

Toxicology of selected pesticides, drugs, and chemicals. Anticoagulant, cholecalciferol, and bromethalin–based rodenticides. Dorman DC. **Vet Clin North Am Small Anim Pract** 1990 Mar; 20(2):339–52 (52 ref.)

STANDARDS

[Cholecalciferol Reference Standard (Control 871) of National Institute of Hygienic Sciences] Tanaka M, et al. **Eisei Shikenjo Hokoku** 1989;(107):154–6 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

The rate of bone mineral loss in normal men and the effects of calcium and cholecalciferol supplementation. Orwoll ES, et al. **Ann Intern Med** 1990 Jan 1;112(1):29–34

[Reaction of osseous tissue and the osteoclast population in rats to biphosphonates and vitamin D3 under conditions of hypokinesia] Gol'dovskaia MD, et al. **Kosm Biol Aviakosm Med** 1989 Aug–Sep;23(4):47–51 (Eng. Abstr.) **(Rus)**

[Vitamin D3 in the combined treatment of patient with hypoparathyroidism] Komissarenko IV, et al.

Vrach Delo 1989 Jul;(7):14–6 (Eng. Abstr.) (Rus)

TOXICITY

Vascular calcium overload produced by administration of vitamin D3 and nicotine in rats. Changes in tissue calcium levels, blood pressure, and pressor responses to electrical stimulation or norepinephrine in vivo. Thorin E, et al. J Cardiovasc Pharmacol 1990 Aug;16(2):257–66

Effect of toxic doses of cholecalciferol (vitamin D3) on alkaline phosphatase levels in serum and gingival tissues of rats. Güven Y, et al. J Nihon Univ Sch Dent 1990 Jun; 32(2):77–80

CHOLECYSTECTOMY

Computerised evaluation of the electrocardiogram during and for a short period after gall bladder surgery. Jakobsson J, et al. Acta Anaesthesiol Scand 1989 Aug;33(6):474–7

Comparison of the effects of continuous intrapleural vs epidural administration of 0.5% bupivacaine on pain, metabolic response and pulmonary function following cholecystectomy. Scott NB, et al. Acta Anaesthesiol Scand 1989 Oct;33(7):535–9

Biliary tract surgery: a bacteriologic and epidemiologic study. Hambraeus A, et al. Acta Chir Scand 1990 Feb; 156(2):155–62

Lung mechanics during upper abdominal surgery. Larsson A, et al. Acta Chir Scand 1989 Jun–Jul;155(6–7):329–32

Laparoscopic cholecystectomy [letter] Airan MC. Am J Surg 1990 Jun;159(6):619

Evaluation of duodenogastric reflux in gallstone disease before and after simple cholecystectomy. Cabrol J, et al. Am J Surg 1990 Sep;160(3):283–6

Cholecystectomy provides long-term symptom relief in patients with acalculous gallbladders. Gilliland TM, et al. Am J Surg 1990 May;159(5):489–92

Duodenogastric reflux of bile acids, gastrin and parietal cells, and gastric acid secretion before and 6 months after cholecystectomy. Lorusso D, et al. Am J Surg 1990 Jun; 159(6):575–8

Choledochoscopy and common bile duct exploration. Wheeler BR, et al. Am Surg 1990 Mar;56(3):182–4 (14 ref.)

Steady-state pharmacokinetics of interpleural bupivacaine in patients after cholecystectomy. Kastrissios H, et al. Anaesth Intensive Care 1990 May;18(2):200–4

Post-cholecystectomy pulmonary function following interpleural bupivacaine and intramuscular pethidine [see comments] Oxorn DC, et al. Anaesth Intensive Care 1989 Nov;17(4):440–3 Comment in: Anaesth Intensive Care 1990 May;18(2):271–2.

Epidural morphine provides greater pain relief than patient-controlled intravenous morphine following cholecystectomy. Loper KA, et al. Anesth Analg 1989 Dec; 69(6):826–8

Intrathecal morphine dose-response data for pain relief after cholecystectomy. Yamaguchi H, et al. Anesth Analg 1990 Feb;70(2):168–71

Anesthesia with abdominal surgery leads to intense REM sleep during the first postoperative week. Knill RL, et al. Anesthesiology 1990 Jul;73(1):52–61

Cholecystectomy in a patient with paroxysmal nocturnal hemoglobinuria: anesthetic implications and management in the perioperative period. Ogin GA. Anesthesiology 1990 Apr;72(4):761–4

Ongoing 'threats' to biliary surgery. Cooperman AM, et al. Arch Surg 1989 Dec;124(12):1368

Systemic antibiotic regimens for acute cholecystitis treated by early cholecystectomy. Lau WY, et al. Aust N Z J Surg 1990 Jul;60(7):539–43

Interpleural catheter for analgesia after cholecystectomy: the surgical perspective. Schroeder D, et al. Aust N Z J Surg 1990 Sep;60(9):689–94

Hormonal and metabolic responses to cholecystectomy: comparison of extradural somatostatin and diamorphine. Desborough JP, et al. Br J Anaesth 1989 Nov;63(5):508–15

Pharmacokinetics of interpleural bupivacaine in patients undergoing cholecystectomy. Mogg GA, et al. Br J Anaesth 1990 Jun;64(6):657–61

Appendicectomy at cholecystectomy—an appraisal. Donaldson DR, et al. Br J Clin Pract 1989 Jan;43(1):15–8

Complications of cholecystectomy in district general hospitals. Habib NA, et al. Br J Clin Pract 1990 May; 44(5):189–92

Colorectal cancer and cholecystectomy [letter] Bundred NJ. Br J Surg 1989 Oct;76(10):1099

Bile duct size after cholecystectomy: an endoscopic retrograde cholangiopancreatographic study. Chung SC, et al. Br J Surg 1990 May;77(5):534–5

Antibiotic prophylaxis and postoperative sepsis after cholecystectomy [letter] [corrected and republished letter originally printed in Br J Surg 1989 Jul;76(7):764] [comment] Menzies D, et al. Br J Surg 1989 Oct; 76(10):1104 Comment on: Br J Surg 1989 Apr;76(4):374–7.

Bile leaks after simple cholecystectomy [letter; comment] Misra MC, et al. Br J Surg 1990 May;77(5):593–4 Comment on: Br J Surg 1989 Oct;76(10):1046–8.

Operative cholangiography in elective cholecystectomy. Pernthaler H, et al. Br J Surg 1990 Apr;77(4):399–400

Elective abdominal surgery depresses muscle protein synthesis and increases subjective fatigue: effects lasting more than 30 days. Petersson B, et al. Br J Surg 1990 Jul; 77(7):796–800

Bile leaks after simple cholecystectomy [see comments] Rayter Z, et al. Br J Surg 1989 Oct;76(10):1046–8 Comment in: Br J Surg 1990 May;77(5):593–4.

Narcotic analgesic, its antagonists and common bile duct pressure. Gao YH, et al. Can J Anaesth 1990 May;37(4 Pt 2):S143

The night of intense REM sleep after anesthesia and surgery increases urinary catecholamines. Knill RL, et al. Can J Anaesth 1990 May;37(4 Pt 2):S12

Diaphragmatic breathing maneuvers and movement of the diaphragm after cholecystectomy. Chuter TA, et al. Chest 1990 May;97(5):1110–4

Patient-controlled analgesia for postcholecystectomy pain: a pilot study. Gonsalves L, et al. Cleve Clin J Med 1990 Jan–Feb;57(1):57–9

What are the indications for cholecystectomy? Potts JR 3d. Cleve Clin J Med 1990 Jan–Feb;57(1):40–7 (74 ref.)

Changes in iron, zinc, and copper concentrations in serum and in their binding to transport proteins after cholecystectomy and cardiac surgery. Fraser WD, et al. Clin Chem 1989 Nov;35(11):2243–7

Treatment of suspected postcholecystectomy diarrhea with psyllium hydrophilic mucilloid. Strommen GL, et al. Clin Pharm 1990 Mar;9(3):206–8

Decision-making in postcholecystectomy pain and biliary dyskinesia. Lasson A, et al. Dig Dis 1989;7(6):288–300 (72 ref.)

Experimental pancreatic cancer in the Syrian hamster: effect of cholecystectomy. Chester JF, et al. Digestion 1989; 44(1):36–40

Pharmacokinetics of ketoprofen enantiomers in cholecystectomy patients: influence of probenecid. Foster RT, et al. Eur J Clin Pharmacol 1989;37(6):589–94

Bile rifaximin concentration after oral administration in patients undergoing cholecystectomy. Verardi S, et al. Farmaco 1990 Jan;45(1):131–5

Postcholecystectomy syndrome in northern India—study on the diagnostic and therapeutic role of ERCP. Dilawari JB, et al. Gastroenterol Jpn 1990 Jun;25(3):394–9

Follow-up 6 to 11 years after duodenoscopic sphincterotomy for stones in patients with prior cholecystectomy. Hawes RH, et al. Gastroenterology 1990 Apr;98(4):1008–12

Changes in bile duct diameter after cholecystectomy: a 5-year prospective study. Hunt DR, et al. Gastroenterology 1989 Dec;97(6):1485–8

Effect of cholecystectomy on bile acid kinetics. Sweeting J. Gastroenterology 1989 Dec;97(6):1593–4

Increased oxidoreduction of deoxycholic acid in cholecystectomised patients. Einarsson K, et al. Gut 1989 Sep;30(9):1275–8

Sympathetic activation: a mechanism for morphine induced pain and rises in liver enzymes after cholecystectomy? Roberts-Thomson IC, et al. Gut 1990 Feb;31(2):217–21

Rapidly progressive glomerulonephritis following visceral sepsis [letter] Agarwal SK, et al. J Assoc Physicians India 1990 Mar;38(3):247–8

The distribution of aztreonam in serum, bile, skin and subcutaneous tissues in patients undergoing cholecystectomy. Mosley JG, et al. J Hosp Infect 1990 May;15(4):389–92

Duodenal diverticula: a potential cause of morbidity during cholecystectomy. Sayers RD, et al. J R Coll Surg Edinb 1990 Jun;35(3):186–7

Role of glutamine and its analogs in posttraumatic muscle protein and amino acid metabolism. Vinnars E, et al. JPEN J Parenter Enteral Nutr 1990 Jul–Aug;14(4 Suppl):125S–129S

Comparison of continuous epidural infusion of fentanyl and fentanyl-bupivacaine for post cholecystectomy pain control. Huang FY, et al. Ma Tsui Hsueh Tsa Chi 1990 Mar;28(1):9–13

Relevance of routine operative cholangiograms and modifications in criteria for selective use. Ranjan D, et al. Md Med J 1990 Jun;39(6):565–7

A comparative study of cefotaxime sodium versus a combination of cefapirin and gentamicin in the prophylactic treatment of patients undergoing cholecystectomy. Ker CG, et al. Methods Find Exp Clin Pharmacol 1989 Nov; 11(11):711–5

ERCP in the assessment of patients with post-cholecystectomy syndrome: benefits and limitations. Marotta F, et al. Neth J Med 1989 Dec;35(5–6):232–40

Laparoscopic cholecystectomy [editorial] Terblanche J. S Afr Med J 1990 Sep 15;78(6):296–7

Controlled comparison of cefmetazole with cefoxitin for prophylaxis in elective cholecystectomy. Berne TV, et al. Surg Gynecol Obstet 1990 Feb;170(2):137–40

Modern standards for comparison of cholecystectomy with alternative treatments for symptomatic cholelithiasis with emphasis on long-term relief of symptoms. Gilliland TM, et al. Surg Gynecol Obstet 1990 Jan;170(1):39–44

Human duodenal myoelectric activity after operation and with pacing. Soper NJ, et al. Surgery 1990 Jan;107(1):63–8

The role of interventional radiology for complications of cholecystectomy. vanSonnenberg E, et al. Surgery 1990 Jun;107(6):632–8

Electromyographic activity of the gastrointestinal tract following cholecystectomy. Coelho JC, et al. World J Surg 1990 Jul–Aug;14(4):523–7; discussion 527–8

Highly selective vagotomy combined with cholecystectomy: is there an increased risk of diarrhea? Schein M. World J Surg 1989 Nov–Dec;13(6):782–4; discussion 785

[Simultaneous cholecystectomy with colon surgery] Tsai JD, et al. Chung Hua I Hsueh Tsa Chih 1989 Apr;43(4):261–3 (Eng. Abstr.) (Chi)

[Hypoferremia following surgery: a defense mechanism after operative trauma] Zhang XL. Chung Hua Wai Ko Tsa Chih 1990 Feb;28(2):113–8, 128 (Eng. Abstr.) (Chi)

[Is extracorporeal lithotripsy in appendicular lithiasis an alternative to cholecystectomy?] Moreaux J. Bull Acad Natl Med 1990 Jan;174(1):45–50; discussion 50–3 (Eng. Abstr.) (Fre)

[Unnecessary cholecystectomy] Benhamou G. Presse Med 1990 Jul 7–14;19(27):1261–2 (Fre)

[Results of biliary surgery in a teaching center] Mentha G, et al. Schweiz Med Wochenschr 1990 Feb 17;120(7):226–30 (Eng. Abstr.) (Fre)

[Long-term results of corrective surgery of iatrogenic bile duct injuries] Böttger T, et al. Chirurg 1990 May; 61(5):396–401 (Eng. Abstr.) (Ger)

[The diagnostic value of so-called "post-cholecystectomy bile duct dilatation"] Ecsedy G, et al. Chirurg 1990 May; 61(5):387–91 (Eng. Abstr.) (Ger)

[Bronchobiliary fistula] Fabian W. Chirurg 1990 Feb; 61(2):137–9 (Ger)

[Selective intraoperative cholangiography] Famos M, et al. Helv Chir Acta 1990 Apr;56(6):897–901 (Eng. Abstr.) (Ger)

[Perioperative glucose resorption and hormonal reaction following intraduodenal glucose administration] Butters M, et al. Infusionstherapie 1989 Aug;16(4):156–9 (Eng. Abstr.) (Ger)

["Sense and nonsense in non-surgical gallstone treatment" (editorial)] Arnold W. Leber Magen Darm 1990 Mar; 2(2):57–8 (Ger)

[Epidural hematoma following peridural anesthesia] Reith C. Reg Anaesth 1989 Sep;12(5):99–101 (Eng. Abstr.) (Ger)

[A massively dilated ductus choledochus in choledocholithiasis following cholecystectomy and choledochojejunostomy] Petri H, et al. ROFO 1989 Oct; 151(4):496–7 (Ger)

[Endoscopic perfusion manometry: diagnosis of functional biliary disorders] Liebe S, et al. Z Gesamte Inn Med 1989 Oct 15;44(20):626–31 (Eng. Abstr.) (Ger)

[Choledocholithiasis: risk factors and their significance for pre- and intraoperative diagnosis] Mickley V, et al. Zentralbl Chir 1990;115(2):89–94 (Eng. Abstr.) (Ger)

[Intestinal loop incarceration in the drainage canal. A rare cause of postoperative ileus] Tielmann HJ, et al. Zentralbl Chir 1989;114(20):1367–70 (Ger)

[Postcholecystectomy syndrome and secondary bile duct calculi: therapy notes] Doldi SB, et al. Ann Ital Chir 1989; 60(3):119–26 (42 ref.) (Ita)

[Post-cholecystectomy pseudo-syndromes] Doldi SB. Ann Ital Chir 1989;60(3):143–5 (4 ref.) (Ita)

[Clinical and instrumental diagnosis of the postcholecystectomy syndrome] Fichera G, et al. Ann Ital Chir 1989;60(3):113–7 (29 ref.) (Ita)

[The postcholecystectomy syndrome caused by biliary and pyloroduodenal dyskinesia] Granelli P. Ann Ital Chir 1989; 60(3):137–41 (30 ref.) (Ita)

[Rare malformation of the bile ducts of surgical interest] Picardi N, et al. Ann Ital Chir 1989 Sep–Oct;60(5):399–403; discussion 404 (Eng. Abstr.) (Ita)

[Postcholecystectomy syndrome caused by inflammation of the terminal choledochus and papilla] Zennaro F. Ann Ital Chir 1989;60(3):127–31 (31 ref.) (Ita)

[A case of volvulus of the gallbladder] Balli C, et al. Minerva Chir 1989 Aug 31;44(15–16):1831–4 (Eng. Abstr.) (Ita)

[Our experience with recurrent biliary calculosis after cholecystectomy] De Nisi A, et al. Minerva Chir 1990 Jun 15;45(11):813–20 (Eng. Abstr.) (Ita)

[Acute cholecystitis: surgical treatment] Di Gaetano P, et al. Minerva Chir 1990 Jan;45(1–2):79–81 (17 ref.) (Eng. Abstr.) (Ita)

[The effect of cholecystectomy intervention on the symptomatology in patients with biliary lithiasis] Gallo E, et al. Minerva Med 1989 Oct;80(10):1103–9 (Eng. Abstr.) (Ita)

[Concomitant coronary artery bypass and cholecystectomy: a case report] Hoshino R, et al. Kyobu Geka 1989 Nov; 42(12):1043–6 (Eng. Abstr.) (Jpn)

[Effectiveness of infiltration anesthesia of postoperative abdominal wound using bupivacaine solution for alleviation of postoperative pain] Bielecki K, et al. Wiad Lek 1989 Feb 15;42(4):223–4 (Eng. Abstr.) (Pol)

[Cholecystectomy in asymptomatic gallstones. Indications, opportunities and arguments in favor of surgical intervention] Popovici A. Rev Med Interna [Med Interna] 1989 Sep–Oct; 41(5):391–400 (40 ref.) (Eng. Abstr.) (Rum)

[Ultrasonic evaluation of the course of the wound process after cholecystectomy] Buianov VM, et al. Khirurgiia (Mosk) 1990 Feb;(2):33–6 (Eng. Abstr.) (Rus)

[Combined operations in cholelithiasis] Uspenskii LV, et al. Khirurgiia (Mosk) 1989 Oct;(10):60–5 (Eng. Abstr.) (Rus)

[A diagnostic algorithm in the postcholecystectomy syndrome] Andriushchenko VP, et al. Klin Khir 1989; (9):13–5 (Eng. Abstr.) (Rus)

[The postcholecystectomy syndrome and

suppurative-inflammatory involvement of the biliary tract (apropos of the discussion held at the 16th Congress of Surgeons of the Ukrainian SSR)] Andriushchenko VP. **Klin Khir** 1989;(9):43–4 **(Rus)**

[Suppuration of the postcholecystectomy wound] El-Jamal MS, et al. **Klin Khir** 1989;(9):15–7 (Eng. Abstr.) **(Rus)**

[Drainage of the abdominal cavity after cholecystectomy] Myshkin KI, et al. **Vestn Khir** 1990 Feb;144(2):108–9 **(Rus)**

[Therapeutic tactics in inflammatory diseases of the gallbladder in patients with bronchial asthma] Smakov GM, et al. **Vestn Khir** 1989 Jul;143(7):14–7 (Eng. Abstr.) **(Rus)**

[The postcholecystectomy syndrome in peptic ulcer] Gredzhev AF, et al. **Vrach Delo** 1989 Oct;(10):32–4 (Eng. Abstr.) **(Rus)**

[Acute low triiodothyronine syndrome in the perioperative period] Langer P, et al. **Bratisl Lek Listy** 1990 Jun; 91(6):489–91 (Eng. Abstr.) **(Slo)**

[Choledocholithiasis in non-cholecystectomized patients: endoscopic sphincterotomy and afterwards ... cholecystectomy?] Moreira Vicente VF, et al. **Rev Esp Enferm Apar Dig** 1989 Sep;76(3):215–21 (73 ref.) (Eng. Abstr.) **(Spa)**

[Diagnosis of choledocholithiasis and residual lithiasis. Ultrasonic postcholecystectomy] Segura JM, et al. **Rev Esp Enferm Apar Dig** 1989 Dec;76(6 Pt 2):627–30 (Eng. Abstr.) **(Spa)**

[Choledocholithiasis in non-cholecystectomized patients (gallbladder in situ): a therapeutic dilemma] Moreira VF, et al. **Rev Esp Enferm Dig** 1990 May;77(5):345–55 (126 ref.) **(Spa)**

[Significance of peroperative cholangiography in elective geriatric surgery of the bile ducts] Planells Roig MV, et al. **Rev Esp Enferm Dig** 1990 May;77(5):333–6 (Eng. Abstr.) **(Spa)**

[Percutaneous aortic valvuloplasty prior to major abdominal surgery] Uriarte P, et al. **Rev Med Chil** 1989 Jan;117(1):42–5 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Cholecystectomy and colon cancer. Berkel J, et al. **Am J Gastroenterol** 1990 Jan;85(1):61–4

Increased morbidity in surgical patients undergoing secondary (incidental) cholecystectomy. Green JD, et al. **Ann Surg** 1990 Jan;211(1):50–4

Iatrogenic injury to the bile duct. Who, how, where? Moossa AR, et al. **Arch Surg** 1990 Aug;125(8):1028–30; discussion 1030–1

Balloon dilatation of biliary strictures: experience and review of the literature. Gya D, et al. **Aust N Z J Surg** 1990 May; 60(5):361–4

Typhoid abscess following cholecystectomy and exploration of the common bile duct. Duthie GS, et al. **Br J Hosp Med** 1990 Feb;43(2):156

Scintigraphic detection of bile leakage after cholecystectomy. Chak SP, et al. **Clin Nucl Med** 1990 Feb;15(2):116

The influence of cholecystectomy on the duodenogastric reflux of bile. Hubens A, et al. **Hepatogastroenterology** 1989 Oct;36(5):384–6

Biliary reflux after cholecystectomy: a prospective study. Nano M, et al. **Hepatogastroenterology** 1990 Apr; 37(2):233–4

Cholecystectomy and colorectal cancer: an improbable correlation. Li Destri G, et al. **Ital J Surg Sci** 1989; 19(4):355–9

Closure of cystic duct stump leak by nasobiliary tube drainage. Barthel JS, et al. **J Clin Gastroenterol** 1989 Oct; 11(5):574–7

Cholecystectomy, duodeno-gastric reflux and polyposis. Spigelman AD, et al. **J R Soc Med** 1989 Jul;82(7):436–7

Possible role of autonomic afferents in treatment of postoperative hiccups [letter] Rosenberg J, et al. **Lancet** 1989 Oct 7;2(8667):873

A remarkable subhepatic tumour. Sok D, et al. **Neth J Surg** 1989 Oct;41(5):114–6

Hepatobiliary compensation for the loss of gallbladder function after cholecystectomy. An experimental study in the cat. Friman S, et al. **Scand J Gastroenterol** 1990 Mar; 25(3):307–14

[Is there a relationship between cholecystectomy and colonic cancer?] Heller FR. **Acta Gastroenterol Belg** 1988 Nov-Dec;51(6):517–20 (25 ref.) (Eng. Abstr.) **(Fre)**

[Definition and epidemiology of the post-cholecystectomy syndrome] Germiniani R. **Ann Ital Chir** 1989;60(3):107–12 (45 ref.) **(Ita)**

[Correlation between post-cholecystectomy syndrome and biliary reflux gastritis. Endoscopic study] Nudo R, et al. **Ann Ital Chir** 1989 Jul-Aug;60(4):291–300; discussion 300–2 (31 ref.) (Eng. Abstr.) **(Ita)**

[Duodenoscopic cholangiopancreatography (ERCP) in the diagnosis of iatrogenic lesions of the common bile duct] Orsitto E, et al. **Radiol Med (Torino)** 1989 Sep;78(3):196–9 (Eng. Abstr.) **(Ita)**

[Diagnosis and treatment of post-cholecystectomy syndrome] Gostishchev, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):8–11 (Eng. Abstr.) **(Rus)**

[Causes of recurrence of pain in patients after cholecystectomy and its treatment] Kochnev OS, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):46–51 (Eng. Abstr.) **(Rus)**

[Diagnosis and treatment of biliary-pleural fistula] Postrelov NA, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):130–1 **(Rus)**

[Function of the esophagogastric junction in patients after operations on the abdominal organs] Sakhautdinov VG, et al. **Klin Khir** 1989;(10):32–3 (Eng. Abstr.) **(Rus)**

[A case of pulmonary thromboembolism after cholecystectomy] Epishin AV, et al. **Klin Med (Mosk)** 1989 Dec;67(12):104–5 **(Rus)**

ECONOMICS

A computer model for evaluating the costs of cholecystectomy or ursodiol treatment in the management of cholelithiasis. Crain K. **Clin Ther** 1990 May-Jun; 12(3):250–62

Medical management of gallstones: a cost-effectiveness analysis. Weinstein MC, et al. **J Gen Intern Med** 1990 Jul-Aug;5(4):277–84

INSTRUMENTATION

A retractor for simplified cholecystectomy. Hand RH. **Surg Gynecol Obstet** 1989 Nov;169(5):463

[A surgical clamp] Vil'tsaniuk AA, et al. **Klin Khir** 1990;(1):76 **(Rus)**

METHODS

Elective cholecystectomy without drainage and without prophylactic antibiotics. A prospective randomized trial with clinical and bacteriological aspects. Druart ML, et al. **Acta Chir Belg** 1990 May-Jun;90(3):79–85

Laparoscopic cholecystectomy. Snow LL, et al. **Ala Med** 1990 May;59(11):18–22

Laparoscopic cholecystectomy [editorial] Cuschieri A, et al. **Am J Surg** 1990 Mar;159(3):273

Simple elective cholecystectomy: to drain or not. Lewis RT, et al. **Am J Surg** 1990 Feb;159(2):241–5 (40 ref.)

Operative cholangiography. Shively EH, et al. **Am J Surg** 1990 Apr;159(4):380–4; discussion 385

Coelioscopic cholecystectomy. Preliminary report of 36 cases. Dubois F, et al. **Ann Surg** 1990 Jan;211(1):60–2

Endoscopic laser cholecystectomy. A new approach to gallbladder removal. Jackson DC, et al. **AORN J** 1990 Jun; 51(6):1546–52

Partial cholecystectomy. Douglas PR, et al. **Aust N Z J Surg** 1990 Aug;60(8):595–7

Percutaneous cholecystolithotomy [letter] Cheslyn-Curtis S, et al. **BMJ** 1990 Aug 11;301(6747):339–40

Partial cholecystectomy [letter; comment] Schein M, et al. **Br J Surg** 1989 Oct;76(10):1099 Comment on: Br J Surg 1989 Jul;76(7):693–5.

Modified subtotal cholecystectomy for high-risk patients. Bickel A, et al. **Can J Surg** 1990 Feb;33(1):13–4

Laparoscopic general surgery [see comments] McKernan JB, et al. **J Med Assoc Ga** 1990 Mar;79(3):157–9 (9 ref.) Comment in: J Med Assoc Ga 1990 Mar;79(3):148. Comment in: J Med Assoc Ga 1990 Mar;79(3):149.

Commentary on laparoscopic cholecystectomy [editorial; comment] Wilson JP. **J Med Assoc Ga** 1990 Mar;79(3):149 Comment on: J Med Assoc Ga 1990 Mar;79(3):157–9.

The laparoscopic revolution—walk carefully before we run [editorial] Cuschieri A. **J R Coll Surg Edinb** 1989 Dec; 34(6):295

Laparoscopic cholecystectomy. A community hospital experience. Harris B. **N C Med J** 1990 Jul;51(7):324–5

Common duct stone push-through. Goco IR, et al. **South Med J** 1990 Sep;83(9):1033–5

Gallstones: laparoscopic treatment—cholecystectomy, cholecystostomy, and lithotripsy. Our own technique. Perissat J, et al. **Surg Endosc** 1990;4(1):1–5

Laparoscopic laser cholecystectomy. A comparison with mini-lap cholecystectomy. Reddick EJ, et al. **Surg Endosc** 1989;3(3):131–3

Operative strategy in Mirizzi syndrome. Dewar G, et al. **Surg Gynecol Obstet** 1990 Aug;171(2):157–9

A cholangiographic clamp as an aid in the performance of operative cholangiography. Lazarus HM. **Surg Gynecol Obstet** 1990 Aug;171(2):154–6

Laparoscopic cholecystectomy. Kusminsky RE, et al. **W V Med J** 1990 Aug;86(8):336–7

[Cholecystectomy under celioscopy] Dubois F, et al. **Ann Chir** 1990;44(3):206–5; discussion 205–6 (Eng. Abstr.) **(Fre)**

[Cholecystectomy by celioscopy (letter)] Martin P, et al. **Gastroenterol Clin Biol** 1989 Aug-Sep;13(8-9):751–2 **(Fre)**

[Apropos of cholecystectomy under celioscopy (letter)] Noureddine M. **Presse Med** 1990 Feb 24;19(7):337 **(Fre)**

[Celioscopic cholecystectomy, an exceptional technic (letter)] Roseau E. **Presse Med** 1989 Oct 7;18(31):1528 **(Fre)**

[Support for cholecystectomy—the "gold standard" of gallstone therapy] Trede M, et al. **Chirurg** 1990 May; 61(5):365–9 **(Ger)**

[Surgical treatment of cholelithiasis] Rückauer KD, et al. **Fortschr Med** 1989 Nov 10;107(32):688–91 (20 ref.) (Eng. Abstr.) **(Ger)**

[Laparoscopic cholecystectomy. Personal experiences in 20 cases] Klaiber C, et al. **Schweiz Rundsch Med Prax** 1990 Jun 19;79(25):787–90 (Eng. Abstr.) **(Ger)**

[Therapy standards in gastroenterologic surgery. Acute cholecystitis] Gall FP, et al. **Z Gastroenterol [Verh]** 1990 Apr;25:94–5 **(Ger)**

[Microflora in patients with complicated forms of acute cholecystitis treated by low-frequency ultrasonics and sulfacrylate glue] Dusmagambetov MU, et al. **Antibiot Khimioter** 1990 Feb;35(2):46–8 (Eng. Abstr.) **(Rus)**

[Acute acalculous cholecystitis in emergency surgery] Lutsevich EV, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):3–8 (Eng. Abstr.) **(Rus)**

[Decompression of the gallbladder in acute cholecystitis in middle-aged and elderly patients] Pantsyrev IuM, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):17–20 (Eng. Abstr.) **(Rus)**

[Characteristics and results of the treatment of cholelithiasis in elderly patients] Shchigel B, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):18–22 (Eng. Abstr.) **(Rus)**

[A modified method of cholecystectomy] Shevchenko VS. **Klin Khir** 1989;(9):63 **(Rus)**

[Evaluation of the methods of completion of surgical procedures of the biliary tract] Feofilov GL, et al. **Vestn Khir** 1990 Jan;144(1):104–7 **(Rus)**

[Detection of lesions of the bile ducts] Milonov OB, et al. **Vestn Khir** 1990 Mar;144(3):58–60 **(Rus)**

[Acute cholecystitis. Percutaneous cholecystectomy guided by ultrasound as a therapeutic alternative for seriously ill patients] Hederström E, et al. **Lakartidningen** 1989 Aug 30;86(35):2860–3 (Eng. Abstr.) **(Swe)**

MORTALITY

[Analysis of causes of death following surgery for gallstones] Yu P. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1990 Apr;12(2):146–9 (Eng. Abstr.) **(Chi)**

NURSING

Laser cholecystectomy. A perioperative nursing view. Swazuk KJ, et al. **AORN J** 1989 Nov;50(5):998–1001, 1004–5

PSYCHOLOGY

Psychosocial factors in women who undergo cholecystectomy. A case-control study. Bianchi MT, et al. **Psychopathology** 1989;22(6):335–43

[Relationship between perioperative anxiety and postoperative recovery] Boeke S, et al. **Ned Tijdschr Geneeskd** 1990 Mar 10;134(10):483–6 (Eng. Abstr.) **(Dut)**

[Psychological determinants of symptoms in patients after cholecystectomy] Swiątnicka E, et al. **Wiad Lek** 1989 Jun 15;42(12):784–7 (Eng. Abstr.) **(Pol)**

STANDARDS

Gallstone lithotripsy vs cholecystectomy. A preliminary cost-benefit analysis. Rothschild JG, et al. **Arch Surg** 1990 Jun;125(6):710–3; discussion 713–4

STATISTICS & NUMERICAL DATA

Carcinoma of the gallbladder. Does radical resection improve outcome? Donohue JH, et al. **Arch Surg** 1990 Feb; 125(2):237–41

Results of cholecystectomy in a community general hospital. Hoffman E, et al. **Md Med J** 1990 Jul;39(7):679–81

[Acute cholecystitis with and without gallstones. The frequency of surgical interventions in Frederiksberg during the period 1978–1988] Teilum D, et al. **Ugeskr Laeger** 1990 Jun 18;152(25):1827–8 (Eng. Abstr.) **(Dan)**

[Is simultaneous cholecystectomy and choledochal exploration obsolete?] Förster R, et al. **Dtsch Med Wochenschr** 1990 Apr 13;115(15):563–9 (Eng. Abstr.) **(Ger)**

TRENDS

Advances in therapeutic biliary endoscopy. Ponsky JL. **Ohio Med** 1990 Mar;86(3):189–90

[Cholecystectomy via celioscopy, a technic of the future (letter)] Perissat J. **Presse Med** 1990 Feb 24;19(7):337 **(Fre)**

UTILIZATION

Cholecystectomy rate in autopsies from a Danish urban area. Frederiksberg 1914–1987. Teilum D, et al. **Acta Chir Scand** 1989 Apr-May;155(4-5):273–5

CHOLECYSTITIS

Changing spectrum of cholelithiasis and cholecystitis in infants and children. Bailey PV, et al. **Am J Surg** 1989 Dec;158(6):585–8

Xanthogranulomatous cholecystitis. Benbow EW. **Br J Surg** 1990 Mar;77(3):255–6 (22 ref.)

Acute cholecystitis in the emergency department. Cox GR, et al. **J Emerg Med** 1989 Sep-Oct;7(5):501–11 (83 ref.)

[Acute and chronic inflammation of the gallbladder] Bitter J. **Zdrav Aktual** 1983;204:129–32 **(Cze)**

[Acute cholecystitis in childhood] Rafaeli Z, et al. **Med Arh** 1987;41(4):199–200 (Eng. Abstr.) **(Ser)**

BLOOD

[The determination of the leukocytic index of intoxication in cholecystitis] Fishchenko AIa, et al. **Klin Khir** 1989; (9):68–9 **(Rus)**

[Functional and metabolic activity of lymphocytes in chronic hepatitis, liver cirrhosis and chronic cholecystitis] Nikolaev AI, et al. **Ter Arkh** 1989;61(9):109–12 **(Rus)**

COMPLICATIONS

Empyema of the gallbladder: a case with unusual presentation. Krogh J. **Acta Chir Belg** 1989 Jul–Aug; 89(4):204–5

Chronic right upper quadrant pain without gallstones: does HIDA scan predict outcome after cholecystectomy? Westlake PJ, et al. **Am J Gastroenterol** 1990 Aug; 85(8):986–90

Cholangitis associated with cholecystitis in patients with acquired immunodeficiency syndrome. Iannuzzi C, et al. **Arch Surg** 1990 Sep;125(9):1211–3

Predictive factors for bactibilia in acute cholecystitis. Thompson JE Jr, et al. **Arch Surg** 1990 Feb;125(2):261–4

Hepatic artery aneurysm and acute cholecystitis. Briggs PJ, et al. **Br J Clin Pract** 1989 Dec;43(12):462–3

Empyema of the gallbladder in a patient with AIDS-related complex. Yao L, et al. **Clin Imaging** 1990 May;14(2):157–8

Acute gallbladder infection with pneumococcal septicemia. Shechter P, et al. **Isr J Med Sci** 1990 Feb;26(2):105–6

Acute septic cholecystitis in patients with burn injuries. Slater H, et al. **J Burn Care Rehabil** 1989 Sep–Oct;10(5):445–7

Fungal cholecystitis and AIDS [letter] Cervia JS, et al. **J Infect Dis** 1990 Feb;161(2):358

Ultrasound diagnosis of perforation of the gallbladder: real-time application and the demonstration of a new sonographic sign. Chau WK, et al. **JCU** 1988 Jun; 16(5):258–60

Xanthogranulomatous cholecystitis associated with carcinoma of the gallbladder. Benbow EW. **Postgrad Med J** 1989 Aug;65(766):528–31 (15 ref.)

[Suppurative-septic complications following operations for acute cholecystitis] Radzhak M. **Khirurgiia (Sofiia)** 1990; 43(2):42–4 **(Bul)**

[A case of anaerobic emphysematous cholecystitis with a subhepatic abscess] Dvořák J, et al. **Rozhl Chir** 1990 Mar; 69(3):135–8 (Eng. Abstr.) **(Cze)**

[Acute cholecystitis with and without gallstones. The frequency of surgical interventions in Frederiksberg during the period 1978–1988] Teilum D, et al. **Ugeskr Laeger** 1990 Jun 18;152(25):1827–8 (Eng. Abstr.) **(Dan)**

[A case of AIDS manifested by alithiasic cholecystitis (letter)] Beytout J, et al. **Gastroenterol Clin Biol** 1990;14(6–7):602–3 **(Fre)**

[Liver abscess caused by gallbladder perforation during pyocholecystitis: apropos of a case (letter)] Gilly FN, et al. **J Chir (Paris)** 1989 Oct;126(10):544–5 **(Fre)**

[Diagnosis and surgical treatment of obstructive jaundice in benign diseases] Cherniavskiĭ AA, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):15–8 (Eng. Abstr.) **(Rus)**

[Diagnosis and treatment of mechanical jaundice in non-neoplastic diseases in middle-aged and elderly patients] Gilenko IA. **Khirurgiia (Mosk)** 1989 Aug; (8):98–101 **(Rus)**

[Acute calculous cholecystitis in complete situs inversus viscerum] Kozan' IV, et al. **Khirurgiia (Mosk)** 1989 Dec; (12):123 **(Rus)**

[Intraoperative cholangiography] Kuzin MI, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):10–4 (Eng. Abstr.) **(Rus)**

[Hiatal hernia associated with chronic calculous cholecystitis and appendiceal diverticulosis] Galimov OV. **Klin Khir** 1989;(10):66 **(Rus)**

[Status of the hepatobiliary system in children with cutaneous and cutaneo-respiratory manifestations of allergy] Balabolkin II, et al. **Pediatriia** 1990;(5):22–5 (Eng. Abstr.) **(Rus)**

[Diagnostic possibilities of echography of the pancreas in children with chronic diseases of the gastroduodenal and biliary systems] Dvoriakovskiĭ IV, et al. **Pediatriia** 1989; (12):47–52 (Eng. Abstr.) **(Rus)**

[Morpho-functional features of concomitant pathology of the biliary system and pancreas in children] Lapshin VF, et al. **Pediatriia** 1990;(6):111–2 **(Rus)**

[Gangrenous cholecystitis in situs inversus of the internal organs] Go'din ES, et al. **Vestn Khir** 1989 Jun;142(6):51–2 **(Rus)**

[Pathogenesis of jaundice in acute cholecystitis] Grinev MV, et al. **Vestn Khir** 1989 Jul;143(7):3–7 (Eng. Abstr.) **(Rus)**

[Acute cholecystitis complicated by hemorrhage] Labazanov MM, et al. **Vestn Khir** 1989 Dec;144(12):28–9 **(Rus)**

[Paracholecystic and intrahepatic abscesses as a complication of acute cholecystitis] Nikhinson RA, et al. **Vestn Khir** 1989 Apr;142(4):74–7 (Eng. Abstr.) **(Rus)**

[Methods of surgical treatment of common bile duct obstruction] Nurmukhamedov RM, et al. **Vestn Khir** 1989 Dec;144(12):19–21 **(Rus)**

[Acute destructive cholecystitis associated with perforated diverticulosis of the colon] Timerbulatov VM, et al. **Vestn Khir** 1989 Sep;143(9):55 **(Rus)**

[Hemoperitoneum secondary to acute cholecystitis in kidney transplant] Díaz del Río Botas M, et al. **Rev Esp Enferm Dig** 1990 Apr;77(4):305–8 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Prompt diagnosis of acute cholecystitis in the critically ill [letter] Goldfarb R, et al. **Am J Surg** 1990 Aug;160(2):235

HELLP—it's not cholecystitis. Watson CJ, et al. **Br J Surg** 1990 May;77(5):539–40

Cholearthropathy imitating polymyalgia (PMR)? [letter] Parsons JS. **J Am Geriatr Soc** 1990 Jun;38(6):723

Role of ultrasonography in non-visualised gallbladder on oral cholecystography. Sood RG, et al. **J Assoc Physicians India** 1989 Dec;37(12):777–9

Acute perforated appendicitis—an unusual variant simulating acute acalculous cholecystitis. Evans RH, et al. **JCU** 1988 Sep;16(7):513–5

Chronic acalculous cholecystitis: difficulties in diagnosis. Begley VJ. **Milit Med** 1989 Nov;154(11):567–71

Cholescintigraphy versus infusion cholecystography in acute cholecystitis. Edlund G, et al. **Nuklearmedizin** 1990 Mar; 29(2):51–3

Cholecystokinin sonography: lack of utility in diagnosis of acute acalculous cholecystitis. Raduns K, et al. **Radiology** 1990 May;175(2):463–6

[Acute acalculous cholecystitis: apropos of 6 cases] Krawczykowski D, et al. **Acta Chir Belg** 1990 May–Jun; 90(3):89–96 (Eng. Abstr.) **(Fre)**

[Echography in typhoidal cholecystitis in Dakar] Faye MA, et al. **Dakar Med** 1988;33(1–4):52–5 (6 ref.) (Eng. Abstr.) **(Fre)**

[Infiltrating hematoma of the hepatic pedicle and gallbladder wall. Ultrasonographic and x-ray computed tomographic aspects] Dao TH, et al. **J Radiol** 1989 Jun–Jul;70(6–7):431–3 (Eng. Abstr.) **(Fre)**

[Echo-deficient gallbladder space-occupying density] Strunk H. **Leber Magen Darm** 1989 Jul;19(4):196,211 **(Ger)**

[Differential ultrasound diagnosis of the healthy, inflamed and diseased gallbladder] Hagelstein H, et al. **Zentralbl Chir** 1990;115(6):341–6 (Eng. Abstr.) **(Ger)**

[Acute non-calculous cholecystitis] Kvam AM, et al. **Tidsskr Nor Laegeforen** 1990 Feb 28;110(6):709–10 (Eng. Abstr.) **(Nor)**

[Periarteritis nodosa with clinical manifestations of acute cholecystitis] Makówka K, et al. **Wiad Lek** 1989 May 15; 42(10):675–8 (Eng. Abstr.) **(Pol)**

[Potential for echographic diagnosis of postoperative cholecystitis at an intensive therapy and resuscitation unit] Polutornova TV, et al. **Anesteziol Reanimatol** 1989 Jul–Aug;(4):60–1 (Eng. Abstr.) **(Rus)**

[Hepatic adenoma simulating acute cholecystitis] Mavrin MI, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):84–5 **(Rus)**

[Ultrasonic semeiotics and diagnosis of acute cholecystitis] Postolov PM, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):21–3 (Eng. Abstr.) **(Rus)**

[Ultrasonic examination of bile density and gallbladder walls in various forms of acute cholecystitis] Vasi'ev Ve, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):66–9 **(Rus)**

[Acute enzymatic cholecystitis: difficulties in diagnosis and surgical treatment] Girlia VI. **Klin Khir** 1990;(4):10–1 (Eng. Abstr.) **(Rus)**

[Incarceration of the greater omentum simulating acute cholecystitis] Kovalev AP, et al. **Klin Khir** 1990;(4):65 **(Rus)**

[Echography and cholecystography in the diagnosis of chronic calculous cholecystitis] Lupal'tsev VI, et al. **Klin Khir** 1989;(9):35–7 (Eng. Abstr.) **(Rus)**

[Diagnosis, surgical treatment procedure and results in acute cholecystitis in young patients] Sukharev VF, et al. **Klin Khir** 1989;(9):29–31 (Eng. Abstr.) **(Rus)**

[Antipyrine test in the diagnosis of chronic cholecystitis] Gorchakova LA, et al. **Klin Med (Mosk)** 1989 Nov; 67(11):65–7 (Eng. Abstr.) **(Rus)**

[Diagnostic and therapeutic cholecystoscopy] Sinev IuV, et al. **Klin Med (Mosk)** 1989 Aug;67(8):76–80 (Eng. Abstr.) **(Rus)**

[The ultrasonic diagnosis of chronic cholecystitis using the choleretic test] Pimanov SI. **Ter Arkh** 1990;62(2):82–4 (Eng. Abstr.) **(Rus)**

[The diagnosis of cholecystitis by ultrasonic densitometry] Rotanov OP, et al. **Ter Arkh** 1989;61(9):113–5 (Eng. Abstr.) **(Rus)**

[Effectiveness of laparoscopy in the diagnosis of diseases simulating "acute abdomen"] Kononov AG, et al. **Vestn Khir** 1989 Jul;143(7):37–9 (Eng. Abstr.) **(Rus)**

[Nephroblastoma of the right kidney simulating clinical picture of acute destructive cholecystitis] Kri'l VA, et al. **Vestn Khir** 1989 Jul;143(7):66 **(Rus)**

[Ultrasonic examination in biliary tract diseases] Nikolenko KK, et al. **Vestn Khir** 1989 Apr;142(4):118–21 (Eng. Abstr.) **(Rus)**

[Differential diagnosis of acute cholecystitis in women] Perkin EM, et al. **Vestn Khir** 1990 Feb;144(2):56 **(Rus)**

[Acute cholecystitis caused by Pseudomonas aeruginosa] Sokol BG, et al. **Vestn Khir** 1990 Feb;144(2):57 **(Rus)**

[The use of echo- and scintigraphic study of the biliary system in chronic cholecystitis] Dynnik OB, et al. **Vrach Delo** 1990 Feb;(2):53–5 (Eng. Abstr.) **(Rus)**

[The radiodiagnosis of acute and chronic cholecystitis] Giorgadze KL, et al. **Vrach Delo** 1989 Nov;(11):22–4 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Cholecystectomy as the treatment of choice in cystic fibrosis [letter] Bilton D, et al. **Am J Surg** 1990 Sep;160(3):323–4

[Biliary excretion and clinical efficacy of T-3262 (tosufloxacin tosilate) administered in the treatment of cholecystitis] Sugata F, et al. **Jpn J Antibiot** 1989 Sep; 42(9):1873–81 (Eng. Abstr.) **(Jpn)**

[Single-daily-dose treatment of ceftriaxone for biliary tract infections and bacterial counts in bile] Tanimura H, et al. **Nippon Geka Hokan** 1989 May 1;58(3):299–309 (Eng. Abstr.) **(Jpn)**

[Antibiotics in the treatment of biliary tract infections] Perkowski H. **Wiad Lek** 1989 Jan 15;42(2):101–5 (67 ref.) (Eng. Abstr.) **(Pol)**

[Experimental bases of directed transport of antibiotics in suppurative-inflammatory diseases of the liver and biliary tract] Zhumadilov ZhSh, et al. **Biull Eksp Biol Med** 1990 May;109(5):449–51 (Eng. Abstr.) **(Rus)**

[The characteristics of the action of polyphytochol on the course of experimental hepatitis and cholecystitis] Ubeeva IP, et al. **Farmakol Toksikol** 1990 Mar–Apr;53(2):43–5 (Eng. Abstr.) **(Rus)**

[Use of adrenergic blockaders for correction of pulmonary functions in the treatment of acute cholecystitis] Kharchenko VG, et al. **Klin Med (Mosk)** 1989 Nov; 67(11):50–2 (Eng. Abstr.) **(Rus)**

[Laboratory study of the bile in assessing the efficacy of treating cholecystitis with the preparation mitrogil] Bekchanov N, et al. **Lab Delo** 1990;(1):68–9 **(Rus)**

[A method of regional lymphotropic antibiotic therapy of acute cholecystitis] Dzhumabaev SU, et al. **Vestn Khir** 1990 Mar;144(3):39–40 **(Rus)**

[Fenigidin in the treatment of patients with chronic cholecystitis in combination with chronic ischemic heart disease] Kushnir VE, et al. **Vrach Delo** 1990 May;(5):21–3 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

[Lysozyme-forming function of the liver in complicated acute cholecystitis] Lokhvitskiĭ SV, et al. **Vestn Khir** 1989 May;142(5):29–30 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

The increasing prevalence of acalculous cholecystitis in outpatients. Results of a 7-year study. Savoca PE, et al. **Ann Surg** 1990 Apr;211(4):433–7

The incidence of cholelithiasis and cholecystitis in Rochester, Minn, 1950 through 1969. Maram ES, et al. **Arch Intern Med** 1990 Sep;150(9):1833–6

ETIOLOGY

Ischemic colitis and acalculous necrotizing cholecystitis as rare manifestations of cholesterol emboli in the same patient. Moolenaar W, et al. **Am J Gastroenterol** 1989 Nov; 84(11):1421–2

Posttraumatic acute cholecystitis on the rehabilitation service. Kiel MK. **Arch Phys Med Rehabil** 1990 Jul; 71(8):610–1

Acute non-calculous cholecystitis. Mayer M, et al. **Br J Clin Pract** 1990 Mar;44(3):113–5

Pathogenesis of acute cholecystitis after gastrectomy. Takahashi T, et al. **Br J Surg** 1990 May;77(5):536–9

Are all gallstones "silent" until acute cholecystitis occurs? Achord JL. **Gastroenterology** 1989 Dec;97(6):1591–2

Does visceral ischemia play a role in the pathogenesis of acute acalculous cholecystitis? Savoca PE, et al. **J Clin Gastroenterol** 1990 Feb;12(1):33–6

Allergic granulomatosis and angiitis (Churg-Strauss syndrome) presenting as acute acalculous cholecystitis. Imai H, et al. **J Rheumatol** 1990 Feb;17(2):247–9

Acute cholecystitis and Fasciola sp. infection in Thailand: report of two cases. Tesana S, et al. **Southeast Asian J Trop Med Public Health** 1989 Sep; 20(3):447–52 (19 ref.)

[Acute alithiasic cholecystitis: gallbladder site of Staphylococcus aureus septicemia (letter)] Moirand R, et al. **Gastroenterol Clin Biol** 1990;14(4):403 **(Fre)**

[Alithiasic cholecystitis and viral hepatitis B disclosing periarteritis nodosa] Sautereau D, et al. **Gastroenterol Clin Biol** 1990;14(4):391–3 (Eng. Abstr.) **(Fre)**

[Ultrasonic diagnosis and treatment of a rare form of isolated gallbladder injury] Temesi M, et al. **Orv Hetil** 1990 Aug 19;131(33):1821–3 (Eng. Abstr.) **(Hun)**

[Gallbladder empyema caused by common bile duct compression by primary cysts of the pancreas. A clinical case] Cossavella D, et al. **Minerva Chir** 1989 Nov 15; 44(21):2267–9 (Eng. Abstr.) **(Ita)**

[Acute cholecystitis in patients with mechanical trauma] Skliarevskiĭ VV. **Khirurgiia (Mosk)** 1989 Jul;(7):40–2 (Eng. Abstr.) **(Rus)**

[Acute cholecystitis in a patient with situs inversus of the internal organs] Kuzlo VG, et al. **Klin Khir** 1990;(4):64–5 **(Rus)**

[Acute diseases of the gallbladder and pancreas in patients with severe trauma and shock (characteristics of the diagnosis and treatment)] Grinev MV, et al. **Vestn Khir** 1989 Nov;143(11):71–4 (Eng. Abstr.) **(Rus)**

[A case of postoperative cholecystitis] Kisliakov VA. **Vestn Khir** 1990 Jan;144(1):71 **(Rus)**

[The role of sensitization to autologous intestinal microflora in the development of chronic cholecystitis] Zhura II, et al. **Vrach Delo** 1990 Feb;(2):51–2 (Eng. Abstr.) **(Rus)**

[Acute necrotizing cholecystitis in infancy: report of a case] Ugalde-Fernández JH, et al. **Bol Med Hosp Infant Mex** 1989 Aug;46(8):564–6 (Eng. Abstr.) **(Spa)**

[Thickening of the bladder wall versus alithiasic cholecystitis in acute hepatitis A (letter)] Casas Fernández de Tejerina J, et al. **Rev Clin Esp** 1989 Sep;185(4):220–1 **(Spa)**

IMMUNOLOGY

[Disordered immunologic reactivity in patients with chronic

calculous cholecystitis] Koval'chuk LA, et al. **Klin Khir** 1989;(9):6–7 (Eng. Abstr.) **(Rus)**

[Diagnosis of immunologic deficiency and its correction in suppurative infection of the abdominal cavity] Briskin BS, et al. **Klin Med (Mosk)** 1989 Oct;67(10):128–32 **(Rus)**

[Correction of immunological status of patients with cholelithiasis for the prevention of postoperative complications] Aleksandrov VN, et al. **Vestn Khir** 1990 Mar;144(3):108–11 (Eng. Abstr.) **(Rus)**

METABOLISM

Decreased gallbladder prostacyclin production in hypovolemic shock compared to Escherichia coli sepsis. Williams W, et al. **Curr Surg** 1989 Sep–Oct;46(5):386–8

Prostanoids and leukotrienes in experimental feline cholecystitis. Kaminski DL, et al. **Hepatology** 1990 Jun; 11(6):1003–9

[Correlations of the indicators of biochemical composition and physico-chemical properties of the bile in chronic cholecystitis] Tadziev IIa, et al. **Klin Med (Mosk)** 1989 Nov;67(11):52–8 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

[Microflora in patients with complicated forms of acute cholecystitis treated by low-frequency ultrasonics and sulfacrylate glue] Dusmagambetov MU, et al. **Antibiot Khimioter** 1990 Feb;35(2):46–8 (Eng. Abstr.) **(Rus)**

[Rapid methods of detection of bacteria in the bile] Buianov VM, et al. **Sov Med** 1989;(11):30–4 (Eng. Abstr.) **(Rus)**

[Cholecystic hepatitis and other systemic manifestations caused by Mycoplasma pneumoniae] Morales Sánchez M, et al. **An Esp Pediatr** 1990 Jan;32(1):80–2 **(Spa)**

[Bacteriologic findings as a prognostic factor in the course of acute cholecystitis] Calpena Rico R, et al. **Rev Esp Enferm Apar Dig** 1989 Nov;76(5):465–70 (Eng. Abstr.) **(Spa)**

PARASITOLOGY

Schistosomal cholecystitis: report of six cases. al-Saleem T, et al. **Ann R Coll Surg Engl** 1989 Nov;71(6):366–7

PATHOLOGY

Isolated necrotizing panarteritis of the gallbladder. Case report. Nøhr M, et al. **Acta Chir Scand** 1989 Sep; 155(9):485–7

Disseminated cytomegalovirus infection presenting with acalculous cholecystitis and acute pancreatitis. Bigio EH, et al. **Arch Pathol Lab Med** 1989 Nov;113(11):1287–9

Histopathological study of xanthogranulomatous cholecystitis. Singh UR, et al. **Indian J Med Res** 1989 Aug; 90:285–8

Xanthogranulomatous cholecystitis (XGC): a clinicopathological study of 21 cases. Solanki RL, et al. **Indian J Pathol Microbiol** 1989 Oct;32(4):256–60

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 33–1990. A 72-year-old Chinese woman with recent abdominal pain and a right-sided abdominal mass. **N Engl J Med** 1990 Aug 16; 323(7):467–75

Xanthogranulomatous cholecystitis. Histopathological study and classification. Franco V, et al. **Pathol Res Pract** 1990 Jun;186(3):383–90

[Xantogranulomatous cholecystitis. A clinicopathologic study of a case] Sáenz de Santamaría Morales FJ, et al. **Rev Esp Enferm Dig** 1990 Feb;77(2):155–7 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

[Function of the esophagogastric junction in patients after operations on the abdominal organs] Sakhautdinov VG, et al. **Klin Khir** 1989;(10):32–3 (Eng. Abstr.) **(Rus)**

[Clinical interpretation of the results of the studies of gallbladder contractility] Pimanov SI. **Klin Med (Mosk)** 1990 May;68(5):106–10 (Eng. Abstr.) **(Rus)**

[Various aspects of diagnosis and treatment of functional intestinal obstruction] Rusakov VI, et al. **Vestn Khir** 1990 Jan;144(1):43–5 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Preventing a hot gallbladder: promising new application of a new drug. Borum M, et al. **Gastroenterology** 1990 Jan; 98(1):240–1

RADIOGRAPHY

[Radiologic aspects of noncalculous inflammation of the biliary tract in AIDS] Yana C, et al. **J Radiol** 1989 Jun–Jul; 70(6–7):411–4 (Eng. Abstr.) **(Fre)**

[Mirizzi syndrome and its variants] Meyer GJ, et al. **Z Gastroenterol** 1990 Apr;28(4):202–5 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

Radionuclide angiography in suspected acute cholecystitis: further observations. Colletti PM, et al. **Clin Nucl Med** 1989 Dec;14(12):867–73

Acute cholecystitis in a patient with situs inversus. Moreno AJ, et al. **Clin Nucl Med** 1990 May;15(5):350–1

The diagnosis of acute complicated cholecystitis by Tc-99m sulfur colloid liver imaging. Weisgrau RA, et al. **Clin Nucl Med** 1990 Apr;15(4):240–2

Association between false negative hepatobiliary scans and initial gallbladder visualization after 30 min. Hicks RJ, et al. **Eur J Nucl Med** 1990;16(8–10):747–53

Diagnostic values of gallbladder hyperperfusion and the rim sign in radionuclide angiography and hepatobiliary imaging. Aburano T, et al. **Gastrointest Radiol** 1990 Summer;15(3):229–32

Cholescintigraphy for acute cholecystitis: false positive results caused by chronic cholecystitis. Klingensmith WC 3d, et al. **Gastrointest Radiol** 1990 Spring;15(2):129–32

Morphine-augmented hepatobiliary scintigraphy in the severely ill: caution is in order. Fig LM, et al. **Radiology** 1990 May;175(2):467–73

Morphine cholescintigraphy. Flancbaum L, et al. **Surg Gynecol Obstet** 1990 Sep;171(3):227–32

Use of cholescintigraphy with morphine in critically ill patients with suspected cholecystitis. Flancbaum L, et al. **Surgery** 1989 Oct;106(4):668–73; discussion 673–4

[Acute cholecystitis. Early diagnostic study using cholescintigraphy with Tc99m-IDA] Meo G, et al. **Minerva Chir** 1990 Jan;45(1–2):75–8 (Eng. Abstr.) **(Ita)**

REHABILITATION

[The early rehabilitation of patients with surgically treated calculous cholecystitis] Dolgosh SS, et al. **Klin Khir** 1989; (9):45 **(Rus)**

SURGERY

Acute cholecystitis in the elderly. Edlund G, et al. **Am J Surg** 1990 Apr;159(4):414–6; discussion 416

Systemic antibiotic regimens for acute cholecystitis treated by early cholecystectomy. Lau WY, et al. **Aust N Z J Surg** 1990 Jul;60(7):539–43

Partial cholecystectomy [letter; comment] Schein M, et al. **Br J Surg** 1989 Oct;76(10):1099 Comment on: Br J Surg 1989 Jul;76(7):693–5.

Laparoscopy-guided percutaneous cholecystostomy. Auguste LJ. **Gastrointest Endosc** 1990 Jan–Feb;36(1):58–60

Percutaneous cholecystostomy in acute acalculous cholecystitis. Berger H, et al. **Hepatogastroenterology** 1989 Oct;36(5):346–8

Advantages of elective surgical treatment of gallstones. McSherry CK. **Hepatogastroenterology** 1989 Oct; 36(5):330–2 (15 ref.)

Acute acalculous cholecystitis in a young child. Chandra J, et al. **Indian J Pediatr** 1989 Jul–Aug;56(4):533–4

Rapidly progressive glomerulonephritis following visceral sepsis [letter] Agarwal SK, et al. **J Assoc Physicians India** 1990 Mar;38(3):247–8

Percutaneous cholecystostomy: an alternative to surgical cholecystostomy for acute cholecystitis? McGahan JP, et al. **Radiology** 1989 Nov;173(2):481–5

The influence of age on early surgical treatment of acute cholecystitis. Hidalgo LA, et al. **Surg Gynecol Obstet** 1989 Nov;169(5):393–6

Cholecystostomy as a definitive operation. Kaufman M, et al. **Surg Gynecol Obstet** 1990 Jun;170(6):533–7

[The procedure and treatment of acute cholecystitis in young people] Latif M, et al. **Khirurgiia (Sofiia)** 1990;43(2):55–7 (53 ref.) **(Bul)**

[Acalculous gangrenous cholecystitis in a toddler] Koudelka J, et al. **Rozhl Chir** 1989 Sep;68(8–9):612–5 (Eng. Abstr.) **(Cze)**

[Biliary ascariasis. A case of massive infestation; the importance of the peroperative choledoscopy] Eymeri JC, et al. **Chir Pediatr** 1989;30(3):178–80 (Eng. Abstr.) **(Fre)**

[Current concepts of the treatment of cholelithiasis in aged patients] Bahnini J, et al. **J Chir (Paris)** 1989 Nov; 126(11):611–8 (60 ref.) (Eng. Abstr.) **(Fre)**

[Gallstone ileus. A report of 104 cases] Hildebrandt J, et al. **Chirurg** 1990 May;61(5):392–5 (Eng. Abstr.) **(Ger)**

[Acute acalculous cholecystitis. A stress-induced complication] Schirren J, et al. **Chirurg** 1990 May; 61(5):382–6 (Eng. Abstr.) **(Ger)**

[Therapy standards in gastroenterologic surgery. Acute cholecystitis] Gall FP, et al. **Z Gastroenterol [Verh]** 1990 Apr;25:94–5 **(Ger)**

[Acute alithiasic cholecystitis (pathogenetic and clinical considerations)] Basile M, et al. **Chir Ital** 1989 Feb; 41(1):50–5 (Eng. Abstr.) **(Ita)**

[Acute cholecystitis: surgical treatment] Di Gaetano P, et al. **Minerva Chir** 1990 Jan;45(1–2):79–81 (17 ref.) (Eng. Abstr.) **(Ita)**

[Treatment of acute cholecystitis and its complications] Viti M, et al. **Minerva Chir** 1989 Nov 30;44(22):2307–10 (17 ref.) (Eng. Abstr.) **(Ita)**

[A case of severe emphysematous cholecystitis with extension to the intrahepatic bile duct--trial of percutaneous transhepatic cholecystodrainage] Ohno H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Sep;86(9):2255–9 (8 ref.) **(Jpn)**

[Surgical treatment of developmental anomalies of the gallbladder and chronic cholecystitis in children] Bairov GA, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):47–50 (Eng. Abstr.) **(Rus)**

[Treatment of acute cholecystitis complicated by mechanical jaundice] Gilenko IA. **Khirurgiia (Mosk)** 1989 Jul;(7):36–9 (Eng. Abstr.) **(Rus)**

[Use of endoscopic and surgical methods in the treatment of patients with acute cholecystitis] Ivanov PA, et al. **Khirurgiia (Mosk)** 1989 Dec;(12):76–80 (Eng. Abstr.) **(Rus)**

[Endoscopic papillosphincterotomy in patients with acute cholecystitis and lesions of the common bile duct] Krenda I AP, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):62–6 (Eng. Abstr.) **(Rus)**

[Use of laser irradiation in laparotomy in acute abdominal diseases] Kurbanov IA. **Khirurgiia (Mosk)** 1990 Apr; (4):116–20 **(Rus)**

[Acute acalculous cholecystitis in emergency surgery] Lutsevich EV, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):3–8 (Eng. Abstr.) **(Rus)**

[Surgical treatment of acute cholecystitis complicated by peritonitis in middle-aged and elderly patients] Pantsyrev IuM, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):6–10 (Eng. Abstr.) **(Rus)**

[Decompression of the gallbladder in acute cholecystitis in middle-aged and elderly patients] Pantsyrev IuM, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):17–20 (Eng. Abstr.) **(Rus)**

[Direct cholecystography after laparoscopic cholecystostomy in acute cholecystitis] Postolov PM, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):84–8 (Eng. Abstr.) **(Rus)**

[Errors, hazards and complications of laparoscopic cholecystostomy in acute cholecystitis] Postolov PM, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):68–72 **(Rus)**

[Acute cholecystitis and its complications] Rodionov VV, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):31–6 (Eng. Abstr.) **(Rus)**

[Surgical interventions in concurrent and concomitant diseases in patients with myasthenia gravis] Shkrob OS, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):5–9 (Eng. Abstr.) **(Rus)**

[Diathermic laparoscopic cholecystostomy] Tashkinov VI, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):119–20 **(Rus)**

[Combined operations in diseases of the stomach and duodenum] Uspenskiĭ LV, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):60–6 (Eng. Abstr.) **(Rus)**

[Bacteriocholia and antibiotic prevention of postoperative suppurative-septic complications in patients with inflammatory diseases of the biliary tract] Buianov VM, et al. **Klin Khir** 1990;(1):55–60 (122 ref.) **(Rus)**

[Successful treatment of gangrenous cholecystitis in a child] Grokhovskiĭ VI, et al. **Klin Khir** 1990;(6):53–4 **(Rus)**

[Surgical treatment of acalculous cholecystitis] Makeev AF, et al. **Klin Khir** 1989;(9):31–3 (Eng. Abstr.) **(Rus)**

[A case of pulmonary thromboembolism after cholecystectomy] Epishin AV, et al. **Klin Med (Mosk)** 1989 Dec;67(12):104–5 **(Rus)**

[Preanesthetic preparation and induction anesthesia in acute cholecystitis in middle-aged and elderly patients] Akhundov AA, et al. **Vestn Khir** 1989 Oct;143(10):101–5 (Eng. Abstr.) **(Rus)**

[Diagnostic procedures during surgical treatment of cholecystitis] Al'perovich BI. **Vestn Khir** 1990 Mar; 144(3):52–3 **(Rus)**

[Evaluation of the methods of completion of surgical procedures of the biliary tract] Feofilov GL, et al. **Vestn Khir** 1990 Jan;144(1):104–7 **(Rus)**

[Acute gastroduodenal ulcer caused by surgery of the biliary tract] Kurygin AA, et al. **Vestn Khir** 1990 Jan;144(1):123–5 **(Rus)**

[Detection of lesions of the bile ducts] Milonov OB, et al. **Vestn Khir** 1990 Mar;144(3):58–60 **(Rus)**

[Concerning surgical cholangiography] Nikovskiĭ DL. **Vestn Khir** 1990 Mar;144(3):61–4 **(Rus)**

[Laparoscopic microcholecystostomy in the treatment of acute cholecystitis] Pantsyrev IuM, et al. **Vestn Khir** 1990 Feb;144(2):30–4 (Eng. Abstr.) **(Rus)**

[Postoperative complications in biliary tract surgery and their prevention and treatment] Rzaev NM, et al. **Vestn Khir** 1990 Jan;144(1):125–7 **(Rus)**

[Therapeutic tactics in inflammatory diseases of the gallbladder in patients with bronchial asthma] Smakov GM, et al. **Vestn Khir** 1989 Jul;143(7):14–7 (Eng. Abstr.) **(Rus)**

THERAPY

Ablation of the cystic duct and gallbladder: clinical observations. Becker CD, et al. **Radiology** 1990 Sep; 176(3):687–90

[The role of a sympathetic pharmacologic blockade in restoring blood flow to the organ in acute cholecystitis] Kharchenko VG, et al. **Klin Khir** 1989;(9):4–6 (Eng. Abstr.) **(Rus)**

[The effect of sodium-magnesium-calcium sulfate water on bile secretion and bile formation in patients with chronic cholecystitis] Poshtar' TIa, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1990 Jan–Feb;(1):54–6 **(Rus)**

CHOLECYSTOGRAPHY

Nonvisualized gallbladder on oral cholecystography: implications for lithotripsy. Wong K, et al. **Gastrointest Radiol** 1990 Spring;15(2):126–8

Role of ultrasonography in non-visualised gallbladder on oral cholecystography. Sood RG, et al. **J Assoc Physicians India** 1989 Dec;37(12):777–9

Gallstone composition in relation to buoyancy at oral

cholecystography. Malet PF, et al. **Radiology** 1990 Oct; 177(1):167–9

[Morphological changes in the gallbladder after extracorporeal shock-wave lithotripsy] Schumacher KA, et al. **ROFO** 1990 Jul;153(1):76–8 (Eng. Abstr.) **(Ger)**

[Echography and cholecystography in the diagnosis of chronic calculous cholecystitis] Lupal'tsev VI, et al. **Klin Khir** 1989;(9):35–7 (Eng. Abstr.) **(Rus)**

METHODS

[Intravenous cholangiocholecystography using ioglycamide—indications and value] Wujciak D, et al. **Radiol Diagn (Berl)** 1990;31(3):247–51 (Eng. Abstr.) **(Ger)**

[Direct cholecystography after laparoscopic cholecystostomy in acute cholecystitis] Postolov PM, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):84–8 (Eng. Abstr.) **(Rus)**

STANDARDS

Comparison of oral cholecystography (OCG) with real time ultrasonography in the diagnosis of cholelithiasis at the Tikur Anbessa Hospital, Addis Ababa, Ethiopia. Tilahun E, et al. **East Afr Med J** 1990 Jan;67(1):39–42

CHOLECYSTOKININ

ADMINISTRATION & DOSAGE

Peptidergic control of male rat sexual behavior: the effects of intracerebral injections of substance P and cholecystokinin. Dornan WA, et al. **Physiol Behav** 1989 Sep;46(3):547–56

Short- and long-term effects of secretin and a cholecystokinin-like peptide on pancreatic growth and synthesis of RNA and polyamines. Haarstad H, et al. **Scand J Gastroenterol** 1989 Aug;24(6):721–32

The effects of graded doses of a cholecystokinin-like peptide with and without secretin on pancreatic growth and synthesis of RNA and polyamines in rats. Haarstad H, et al. **Scand J Gastroenterol** 1989 Oct;24(8):907–15

ANALOGS & DERIVATIVES

Molecular variants of cholecystokinin after endogenous stimulation in humans: a time study. Eysselein VE, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):G951–7

Molecular forms of cholecystokinin in rat intestine. Turkelson CM, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):G364–71

Pancreatic receptors for cholecystokinin: evidence for three receptor classes. Yu DH, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):G86–95

Receptor binding of cholecystokinin analogues in isolated rat pancreatic acini. Doi R, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):286–92

Acute experimental pancreatitis causes prolonged impairment of rat pancreatic secretion. Murayama KM, et al. **Curr Surg** 1989 Nov–Dec;46(6):467–9

Immune recognition of affinity-labelled cholecystokinin receptor. Dufresne M, et al. **Eur J Biochem** 1990 Jul 20; 191(1):141–6

A new probe for affinity labelling pancreatic cholecystokinin receptor with minor modification of its structure. Fourmy D, et al. **Eur J Biochem** 1989 Nov 6;185(2):397–403

[3H]pBC 264, first highly potent and very selective radioligand for CCK-B receptors. Durieux C, et al. **Eur J Pharmacol** 1989 Sep 13;168(2):269–70

Synthesis of cyclic analogues of cholecystokinin highly selective for central receptors. Rodriguez M, et al. **Int J Pept Protein Res** 1990 May;35(5):441–51

Synthesis and biological activities of some cholecystokinin analogues substituted in position 29 by a beta-alanine. Rodriguez M, et al. **Int J Pept Protein Res** 1989 Nov; 34(5):394–404

Novel glutamic acid derived cholecystokinin receptor ligands. Freidinger RM, et al. **J Med Chem** 1990 Feb; 33(2):591–5

Synthesis and biological activity of some partially modified retro-inverso analogues of cholecystokinin. Rodriguez M, et al. **J Med Chem** 1989 Oct;32(10):2331–9

Cyclic cholecystokinin analogues that are highly selective for rat and guinea pig central cholecystokinin receptors. Rodriguez M, et al. **Mol Pharmacol** 1990 Sep;38(3):333–41

Development of a class of selective cholecystokinin type B receptor antagonists having potent anxiolytic activity. Hughes J, et al. **Proc Natl Acad Sci U S A** 1990 Sep; 87(17):6728–32

Investigation of behavioral and electrophysiological responses induced by selective stimulation of CCKB receptors by using a new highly potent CCK analog, BC 264. Dauge V, et al. **Synapse** 1990;6(1):73–80

[Synthesis and biological activity of new cholecystokinin (CCK)-analogs with a special CCK-A receptor antagonistic effect] Boomgaarden M, et al. **Pharmazie** 1990 May;45(5):377–8 **(Ger)**

ANALYSIS

Effect of psychoactive drugs on lymphocyte neuropeptides. Sacerdote P, et al. **Ann N Y Acad Sci** 1990;594:270–9

Neuropeptide content and connectivity of the rat claustrum. Eiden LE, et al. **Brain Res** 1990 Jul 23;523(2):245–50

Cionin: a disulfotyrosyl hybrid of cholecystokinin and gastrin from the neural ganglion of the protochordate Ciona intestinalis. Johnsen AH, et al. **J Biol Chem** 1990 Feb 25; 265(6):3054–8

Immunohistochemical studies on cholecystokinin (CCK)-immunoreactive neurons in the rat using sequence specific antisera and with special reference to the caudate nucleus and primary sensory neurons. Hökfelt T, et al. **J Chem Neuroanat** 1988 Jan–Feb;1(1):11–51

Ultrastructural identification of neuropeptides in the central nervous system. Maley BE. **J Electron Microsc Tech** 1990 May;15(1):67–80 (107 ref.)

Non-sulphated cholecystokinin in human medullary thyroid carcinomas. Rehfeld JF, et al. **J Endocrinol** 1990 Mar; 124(3):501–6

Localization of immunoreactive cholecystokinin precursor to amacrine cells and bipolar cells of the macaque monkey retina. Marshak DW, et al. **J Neurosci** 1990 Sep; 10(9):3045–55

Cholecystokinin in rat olfactory bulb is mainly contained in intrinsic neurons. Bönnemann C, et al. **Neurosci Lett** 1989 Sep 11;103(3):281–6

Distribution of peptidergic terminals of enteric origin in the rat celiac ganglion. Hamaji M, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):121–4

ANTAGONISTS & INHIBITORS

Effect of CCK antagonist L 364718 on meal-induced pancreatic secretion in rats. O'Rourke MF, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):G179–84

Potent cholecystokinin antagonist L 364718 stimulates food intake in rats. Reidelberger RD, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1512–8

Effects of the CCK receptor antagonist L364,718 on pancreatic growth in adult and developing animals. Zucker KA, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):G511–6

Pharmacokinetics and tolerance of repeated oral doses of loxiglumide. Setnikar I, et al. **Arzneimittelforschung** 1989 Nov;39(11):1454–9

Hunger in humans induced by MK-329, a specific peripheral-type cholecystokinin receptor antagonist. Wolkowitz OM, et al. **Biol Psychiatry** 1990 Jul 15; 28(2):169–73

Reversal of the anorectic effect of (+)-fenfluramine in the rat by the selective cholecystokinin receptor antagonist MK-329. Cooper SJ, et al. **Br J Pharmacol** 1990 Jan; 99(1):65–70

Oral administration of loxiglumide (CCK antagonist) inhibits postprandial gallbladder contraction without affecting gastric emptying. Corazziari E, et al. **Dig Dis Sci** 1990 Jan; 35(1):50–4

Effects of CCK-receptor antagonists on CCK-stimulated pepsinogen secretion and calcium increase in isolated guinea pig gastric chief cells. Sakamoto C, et al. **Dig Dis Sci** 1990 Jul;35(7):873–8

Influence of CCK antagonist L-364,718, pancreastatin (33–49) and a somatostatin analogue on camostate-induced rat pancreatic hypertrophy. Schmidt WE, et al. **Digestion** 1989;44(2):105–16

The effect of loxiglumide (CR-1505) on basal and bombesin-stimulated gallbladder volume in man. Douglas BR, et al. **Eur J Pharmacol** 1989 Jul 18;166(2):307–9

Characterization of neuronal cholecystokinin receptor by L-364,718 in Auerbach's plexus. Zelles T, et al. **Eur J Pharmacol** 1990 Mar 13;178(1):101–4

Effect of loxiglumide on gallbladder contractile response to cerulein and food in humans. Malesci A, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1307–10

Effects of loxiglumide on gallbladder emptying in healthy volunteers. Niederau C, et al. **Gastroenterology** 1989 Nov; 97(5):1331–6

Effects of a cholecystokinin receptor antagonist on intestinal phase of pancreatic and biliary responses in man. Hildebrand P, et al. **J Clin Invest** 1990 Mar;85(3):640–6

A model of gastric emptying in cats shows solid emptying is promoted by MK-329: a CCK antagonist [see comments] Gould RJ, et al. **J Nucl Med** 1990 Sep;31(9):1494–9 Comment in: J Nucl Med 1990 Sep;31(9):1499–500.

Effect of the novel cholecystokinin receptor antagonist CR-1392 on cholecystokinin-induced antroduodenal and pyloric motor activity in vivo. Allescher HD, et al. **J Pharmacol Exp Ther** 1989 Dec;251(3):1134–41

Cholecystokinin receptor antagonism by peptidergic and non-peptidergic agents in rat pancreas. Dembinski A, et al. **J Physiol (Lond)** 1989 Apr;411:419–35

Distinct requirements for activation at CCK-A and CCK-B/gastrin receptors: studies with a C-terminal hydrazide analogue of cholecystokinin tetrapeptide (30–33). Lin CW, et al. **Mol Pharmacol** 1989 Dec;36(6):881–6

Effect of L-364,718 on GRP-stimulated pancreatic and gastric secretions and GI peptides in conscious dogs. Hosotani R, et al. **Pancreas** 1989;4(5):550–5

Cholecystokinin antagonist prevents hyperamylasemia and improves pancreatic exocrine function in cerulein-induced acute pancreatitis. Murayama KM, et al. **Pancreas** 1990 Jul; 5(4):439–44

Failure of a potent cholecystokinin antagonist to protect against diet-induced pancreatitis in mice. Ohshio G, et al. **Pancreas** 1989;4(6):739–43

Proglumide analogues CR 1409 and CR 1392 inhibit cholecystokinin-stimulated insulin release more potently than exocrine secretion from the isolated perfused rat pancreas. Okabayashi Y, et al. **Pancreas** 1990 May; 5(3):291–7

Effect of CCK antagonists CR 1409 and CR 1505 on rat pancreatic exocrine secretion in vivo. Shiratori K, et al. **Pancreas** 1989;4(6):744–50

Effect of a new cholecystokinin receptor antagonist loxiglumide on acute pancreatitis in two experimental animal models. Tani S, et al. **Pancreas** 1990 May; 5(3):284–90

L364,718 antagonizes the cholecystokinin-induced suppression of locomotor activity. Soar J, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):637–40

Effects of the CCK receptor antagonist MK-329 on food intake in pigs. Ebenezer IS, et al. **Physiol Behav** 1990 Jan; 47(1):145–8

Effect of intracerebroventricular and systemic injections of caerulein, a CCK analogue, on electrical self-stimulation and its interaction with the CCKA receptor antagonist, L-364,718 (MK-329). Hamilton MH, et al. **Psychopharmacology (Berl)** 1990;101(3):384–9

In vivo comparison of inhibition with proglumide and CR-1409 of cholecystokinin-induced pressure in the biliary tract of the guinea pig. Poston GJ, et al. **Surg Gynecol Obstet** 1990 Mar;170(3):217–22

Proglumide inhibits cholecystokinin and meal-stimulated pancreatic secretion and release of pancreatic polypeptide. Beauchamp RD, et al. **Surgery** 1990 Sep;108(3):553–8

[The effect of cholecystokinin antagonists on satiety induced by cholecystokinin octapeptide in dogs] Sakatani N, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Oct 20;65(10):1149–58 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Preprocholecystokinin mRNA in rat brain: regional expression includes thalamus [letter] Voigt M. **Brain Res Mol Brain Res** 1989 Nov;6(2–3):221

Glycine-extended processing intermediates of gastrin and cholecystokinin in human plasma. DelValle J, et al. **Gastroenterology** 1989 Nov;97(5):1159–63

A cholecystokinin-metabolizing enzyme in rat intestine. Turkelson CM, et al. **Peptides** 1990 Mar–Apr;11(2):213–9

BLOOD

Role of cholecystokinin in feeding and lactation. Lindén A. **Acta Physiol Scand Suppl** 1989;585:i–vii, 1–49

Coffee stimulation of cholecystokinin release and gallbladder contraction in humans. Douglas BR, et al. **Am J Clin Nutr** 1990 Sep;52(3):553–6

Gallbladder function and plasma cholecystokinin levels in diabetes mellitus. Mitsukawa T, et al. **Am J Gastroenterol** 1990 Aug;85(8):981–5

Molecular variants of cholecystokinin after endogenous stimulation in humans: a time study. Eysselein VE, et al. **Am J Physiol** 1990 Jun;258(6 Pt 1):G951–7

Capsaicin attenuates hindbrain neuron responses to circulating cholecystokinin. Ritter RC, et al. **Am J Physiol** 1989 Nov;257(5 Pt 2):R1162–8

Lack of effect of the specific cholecystokinin receptor antagonist loxiglumide on cholecystokinin clearance from plasma in man. Jebbink MC, et al. **Br J Clin Pharmacol** 1990 Jun;29(6):770–3

On optimising the diagnostic yield of secretin pancreozymin tests. Hunt LP, et al. **Clin Chim Acta** 1989 Dec 29; 186(1):91–108

Cholecystokinin in plasma. Cantor P. **Digestion** 1989; 42(4):181–201 (162 ref.)

Cholecystokinin, secretin, pancreatic polypeptide in relation to gallbladder dynamics and gastrointestinal interdigestive motility. Qvist N, et al. **Digestion** 1990;45(3):130–7

Effect of loxiglumide (CR-1505) on bombesin- and meal-stimulated plasma cholecystokinin in man. Jansen JB, et al. **Eur J Clin Pharmacol** 1990;38(4):367–70

Glycine-extended processing intermediates of gastrin and cholecystokinin in human plasma. DelValle J, et al. **Gastroenterology** 1989 Nov;97(5):1159–63

Lack of cholinergic control in feedback regulation of pancreatic secretion in the rat. Guan D, et al. **Gastroenterology** 1990 Feb;98(2):437–43

Effect of pancreatic proteases on plasma cholecystokinin, secretin, and pancreatic exocrine secretion in response to sodium oleate. Li P, et al. **Gastroenterology** 1990 Jun; 98(6):1642–8

Regulation of plasma cholecystokinin levels by bile and bile acids in the rat. Ohta H, et al. **Gastroenterology** 1990 Sep; 99(3):819–25

Effect of various triglycerides on plasma cholecystokinin levels in rats. Douglas BR, et al. **J Nutr** 1990 Jul; 120(7):686–90

Saturation of fat and cholecystokinin release: implications for pancreatic carcinogenesis [see comments] Beardshall K, et al. **Lancet** 1989 Oct 28;2(8670):1008–10 Comment in: Lancet 1989 Dec 2;2(8675):1338.

Weight loss and altered circulating GI peptide levels of rats exposed chronically to nicotine. Chowdhury P, et al. **Pharmacol Biochem Behav** 1989 Jul;33(3):591–4

Effect of immunoneutralisation of cholecystokinin on bombesin-stimulated pancreatic enzyme secretion in the rat. Lamers CB, et al. **Regul Pept** 1989 Dec;26(3):297–304

[Plasma cholecystokinin level in chronic pancreatitis] Mössner J, et al. **Z Gastroenterol** 1989 Aug;27(8):401–5 (Eng. Abstr.) **(Ger)**

[Plasma cholecystokinin-pancreozymin assay and the clinical

significance] Kobayashi K, et al. **Nippon Rinsho** 1990 Feb; 48 Suppl:27–9 **(Jpn)**

[Plasma cholecystokinin concentration in patients with chronic pancreatitis measured by bioassay] Koide M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Oct; 86(10):2419–24 (Eng. Abstr.) **(Jpn)**

[Basal plasma cholecystokinin levels in digestive diseases—comparison between CCK-8 like bioactivity by bioassay and CCK immunoreactivity by radioimmunoassay] Nakamura R, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Nov;86(11):2572–8 (Eng. Abstr.) **(Jpn)**

CHEMICAL SYNTHESIS

Synthesis and biological activity of some partially modified retro–inverso analogues of cholecystokinin. Rodriguez M, et al. **J Med Chem** 1989 Oct;32(10):2331–9

DIAGNOSTIC USE

Cholecystokinin provocation test [letter] Lennon GM, et al. **Br J Surg** 1990 Feb;77(2):234

Scintigraphic cholecystokinin–induced bile reflux named as Krishnamurthy–Bobba sign [letter; comment] Brar HS. **J Nucl Med** 1990 Feb;31(2):248–9 Comment on: J Nucl Med 1989 Jul;30(7):1192–7.

Simultaneous measurement of gallbladder emptying with cholescintigraphy and US during infusion of physiologic doses of cholecystokinin: a comparison. Masclee AA, et al. **Radiology** 1989 Nov;173(2):407–10

[A comparative study of gallbladder function using echography and HIDA–CCK] Ceia R, et al. **Acta Med Port** 1989 Nov–Dec;2(6):257–62 (Eng. Abstr.) **(Por)**

GENETICS

In situ hybridization of peptide mRNAs on vibratome sections. Réthelyi M, et al. **Acta Morphol Hung** 1989; 37(1–2):55–63

Differential cholecystokinin gene expression in brain and gut of the fasted rat. Greenstein RJ, et al. **Am J Med Sci** 1990 Jan;299(1):32–7

Somatostatin regulates duodenal cholecystokinin and somatostatin messenger RNA. Kanayama S, et al. **Am J Physiol** 1990 Mar;258(3 Pt 1):G358–64

Expression of the cholecystokinin gene in the neuron and paraneuron. Takahashi Y, et al. **Arch Histol Cytol** 1989;52 Suppl:63–8 (16 ref.)

Ontogeny of tyrosine hydroxylase and cholecystokinin gene expression in the rat mesencephalon. Burgunder JM, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1–2):85–93

Procholecystokinin processing in rat cerebral cortex during development. Mogensen NW, et al. **Brain Res Dev Brain Res** 1990 Jun 1;54(1):81–6

Detection of CCK mRNA in the motor nucleus of the rat trigeminal nerve with in situ hybridization histochemistry. Sutin EL, et al. **Brain Res Mol Brain Res** 1990 Jun;8(1):63–8

Tyrosine hydroxylase and cholecystokinin mRNA levels in the substantia nigra, ventral tegmental area, and locus ceruleus are unaffected by acute and chronic haloperidol administration. Cottingham SL, et al. **Cell Mol Neurobiol** 1990 Mar;10(1):41–50

Posttranslational attenuation of peptide gene expression. Rehfeld JF. **FEBS Lett** 1990 Jul 30;268(1):1–4 (28 ref.)

The cholecystokinin gene is abundantly co–expressed with gastrin–releasing peptide, enkephalin and neuropeptide Y genes in a clonal human neuroepithelioma cell line. Verbeeck MA, et al. **FEBS Lett** 1990 Jul 30;268(1):88–90

Level of expression and chromosome mapping of the mouse cholecystokinin gene: implications for murine models of genetic obesity. Friedman JM, et al. **Genomics** 1989 Oct; 5(3):463–9

A transcriptional enhancer essential for the expression of the rat cholecystokinin gene contains a sequence identical to the –296 element of the human c–fos gene. Haun RS, et al. **J Biol Chem** 1990 Sep 15;265(26):15455–63

Neuronal localization of cholecystokinin mRNA in the rat brain by using in situ hybridization histochemistry. Ingram SM, et al. **J Comp Neurol** 1989 Sep 8;287(2):260–72

Cholecystokinin and neurotensin mRNAs are differentially expressed in subnuclei of the ventral tegmental area. Jayaraman A, et al. **J Comp Neurol** 1990 Jun 8; 296(2):291–302

Procholecystokinin and proenkephalin A mRNA expression is modulated by cyclic AMP and noradrenaline. Monstein HJ, et al. **J Mol Endocrinol** 1990 Feb;4(1):37–41

Distribution of CCK mRNA in particular regions (hippocampus, periaqueductal grey and thalamus) of the rat by in situ hybridization. Lanaud P, et al. **Neurosci Lett** 1989 Sep 25;104(1–2):38–42

Hormonal control of neuropeptide gene expression in sexually dimorphic olfactory pathways. Simerly RB. **Trends Neurosci** 1990 Mar;13(3):104–10 (49 ref.)

[Chemical neuro–anatomy of the thalamus: an example of the co–expression of 2 neuropeptides, cholecystokinin and intestinal vasoactive peptide] Burgunder JM. **Schweiz Med Wochenschr** 1990 Aug 18;120(33):1180–5 (35 ref.) (Eng. Abstr.) **(Fre)**

[Gene structure and gene expression regulation of cholecystokinin and processing of the precursors] Takahashi Y, et al. **Nippon Rinsho** 1989 Oct;47(10):2255–9 **(Jpn)**

IMMUNOLOGY

Low immunoreactivity of canine cholecystokinin–58. Turkelson CM, et al. **Gastroenterology** 1990 Sep; 99(3):646–51

ISOLATION & PURIFICATION

Characterization of the major form of cholecystokinin in human intestine: CCK–58. Eysselein VE, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):G253–60

Molecular forms of cholecystokinin in rat intestine. Turkelson CM, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):G364–71

Polypeptides related to mammalian procholecystokinin in the brain of an invertebrate, a marine worm, Nereis diversicolor: evidence from in ovo translation of mRNA. Guissi–Kadri S, et al. **Gen Comp Endocrinol** 1990 Mar; 77(3):339–47

METABOLISM

Immunocytochemical demonstration of cholecystokinin–like immunoreactivity in spermatozoa in monkey testis and epididymis. Pelto–Huikko M, et al. **Acta Physiol Scand** 1989 Nov;137(3):465–6

Presence of cholecystokinin mRNA in dopamine cells in the ventral mesencephalon of a human with schizophrenia. Schalling M, et al. **Acta Physiol Scand** 1989 Nov; 137(3):467–8

Binding of cholecystokinin and somatostatin to isolated porcine gastric mucosal cells and effects on aminopyrine uptake. Sjödin L, et al. **Acta Physiol Scand** 1990 Mar; 138(3):369–76

Novel activity of angiotensin–converting enzyme. Hydrolysis of cholecystokinin and gastrin analogues with release of the amidated C–terminal dipeptide. Dubreuil P, et al. **Biochem J** 1989 Aug 15;262(1):125–30

The role of carbohydrate moieties of cholecystokinin receptors in cholecystokinin octapeptide binding: alteration of binding data by specific lectins. Santer R, et al. **Biochim Biophys Acta** 1990 Jan 23;1051(1):78–83

Coexistence of somatostatin with neuropeptide Y, but not with cholecystokinin or vasoactive intestinal peptide, in neurons of the rat amygdala. McDonald AJ. **Brain Res** 1989 Oct 23;500(1–2):37–45

Procholecystokinin processing in rat cerebral cortex during development. Mogensen NW, et al. **Brain Res Dev Brain Res** 1990 Jun 1;54(1):81–6

Regional distribution of the messenger RNA coding for the neuropeptide cholecystokinin in the human brain examined by in situ hybridization. Savasta M, et al. **Brain Res Mol Brain Res** 1990 Feb;7(2):91–104

Species–specific expression of cholecystokinin messenger RNA in rodent dorsal root ganglia. Seroogy KB, et al. **Brain Res Mol Brain Res** 1990 Feb;7(2):171–6

Luminal bile regulates cholecystokinin release in conscious rats. Nakamura R, et al. **Dig Dis Sci** 1990 Jan;35(1):55–60

Novel localizations of central– and peripheral–type cholecystokinin binding sites in Syrian hamster brain as determined by autoradiography. Miceli MO, et al. **Eur J Pharmacol** 1989 Oct 10;169(2–3):215–24

Kinetics of enteroendocrine cells with implications for their origin: a study of the cholecystokinin and gastrin subpopulations combining tritiated thymidine labelling with immunocytochemistry in the mouse. Thompson EM, et al. **Gut** 1990 Apr;31(4):406–11

Sources of neostriatal cholecystokinin in the cat. Adams CE, et al. **J Comp Neurol** 1990 Feb 22;292(4):563–74

Cholecystokinin–, galanin–, and corticotropin–releasing factor–like immunoreactive projections from the nucleus of the solitary tract to the parabrachial nucleus in the rat. Herbert H, et al. **J Comp Neurol** 1990 Mar 22;293(4):581–98

Substance P–, FMRFamide–, and gastrin/cholecystokinin–like immunoreactive neurons in the thoraco–abdominal ganglia of the flies Drosophila and Calliphora. Lundquist T, et al. **J Comp Neurol** 1990 Apr 8;294(2):161–78

Immunohistochemical localization of cholecystokinin in the medial preoptic area and anterior hypothalamus of the Brazilian gray short–tailed opossum: a sex difference. Fox CA, et al. **J Neurobiol** 1990 Jul;21(5):705–18

Regional distribution of calcitonin gene–related peptide–, substance P–, cholecystokinin–, Met5–enkephalin–, and dynorphin A (1–8)–like materials in the spinal cord and dorsal root ganglia of adult rats: effects of dorsal rhizotomy and neonatal capsaicin. Pohl M, et al. **J Neurochem** 1990 Oct;55(4):1122–30

Sulfation of tert–butoxycarbonylcholecystokinin and other peptides by rat liver tyrosylprotein sulfotransferase. Rens–Domiano S, et al. **Mol Pharmacol** 1989 Oct; 36(4):647–53

Levels of CCK immunoreactivity and dopamine in the nucleus accumbens after 6–hydroxydopamine lesions of the ventral tegmental area and the nucleus accumbens. Igarashi Y, et al. **Neuropeptides** 1989 Aug–Sep;14(2):71–6

Effect of dopamine depletion upon the K(+)–evoked release of CCK from superfused striatal slices. Sierralta J, et al. **Neurosci Lett** 1990 May 4;112(2–3):313–7

Cholecystokinin and gastric emptying. **Nutr Rev** 1989 Aug; 47(8):255–6

Importance of sulfation of gastrin or cholecystokinin (CCK) on affinity for gastrin and CCK receptors. Huang SC, et al. **Peptides** 1989 Jul–Aug;10(4):785–9

Pharmacokinetics and organ catabolism of cholecystokinin octapeptide in pigs. Cuber JC, et al. **Regul Pept** 1989 Dec; 26(3):203–13

Receptor type for cholecystokinin on isolated intestinal muscle cells of the guinea pig. Morini G, et al. **Regul Pept** 1990 May 21;28(3):313–21

Cholecystokinin binding and degradation by isolated rat liver cells. Wolfe MM, et al. **Regul Pept** 1990 Jan;27(1):27–36

Concentrations of mRNAs encoding for preprosomatostatin and preprocholecystokinin are increased after kainic acid–induced seizures. Olenik C, et al. **Synapse** 1989; 4(3):223–8

Interaction of CCK with pancreatic acinar cells. Jensen RT, et al. **Trends Pharmacol Sci** 1989 Oct;10(10):418–23 (33 ref.)

PHARMACOKINETICS

Saturation of fat and cholecystokinin release [letter; comment] Thompson GR. **Lancet** 1989 Dec 2;2(8675):1338 Comment on: Lancet 1989 Oct 28;2(8670):1008–10.

PHARMACOLOGY

Cholecystokinin causes contraction of the pupillary sphincter in monkeys but not in cats, rabbits, rats and guinea–pigs: antagonism by lorglumide. Bill A, et al. **Acta Physiol Scand** 1990 Apr;138(4):479–85

Cholecystokinin and satiation with alcohol. Kulkosky PJ, et al. **Alcohol** 1989 Sep–Oct;6(5):395–402

Effect of cholecystokinin on taste responsiveness in rats. Giza BK, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):R1371–9

Pancreatic receptors for cholecystokinin: evidence for three receptor classes. Yu DH, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):G86–95

Effects of cholecystokinin and carbamylcholine on Paneth cell secretion in mice: a comparison with pancreatic acinar cells. Satoh Y, et al. **Anat Rec** 1989 Oct;225(2):124–32

Cholecystokinin induced gallbladder contraction is influenced by nicotinic and muscarinic receptors. Pozo MJ, et al. **Arch Int Physiol Biochim** 1989 Oct;97(5):403–8

Cholecystokinin activates Gi1–, Gi2–, Gi3– and several Gs–proteins in rat pancreatic acinar cells. Schnefel S, et al. **Biochem J** 1990 Jul 15;269(2):483–8

Coexisting peptides in hypothalamic neuroendocrine systems: some functional implications. Bondy CA, et al. **Cell Mol Neurobiol** 1989 Dec;9(4):427–46 (86 ref.)

Pharmacological activities of synthetic human cholecystokinin–33 of which tyrosine was sulfated by arylsulfotransferase. Hagiwara M, et al. **Chem Pharm Bull (Tokyo)** 1990 May;38(5):1369–72

Cholecystokinin in the entero–insular axis. Okabayashi Y, et al. **Diabetes Res Clin Pract** 1989;7 Suppl 1:S79–85 (41 ref.)

Cholecystokinin–induced contraction of opossum sphincter of Oddi. Mechanism of action. Hanyu N, et al. **Dig Dis Sci** 1990 May;35(5):567–76

Cholecystokinin in the inhibition of gastric secretion and gastric emptying in humans. Konturek SJ, et al. **Digestion** 1990;45(1):1–8

Exaggeration of the cholecystokinin–induced motor response in the cat gastrointestinal tract. Mangel AW, et al. **Digestion** 1989;43(4):196–203

The diacylglycerol kinase inhibitor, R59022, potentiates cholecystokinin–induced enzyme secretion from rabbit pancreatic acini. Ederveen AG, et al. **Eur J Biochem** 1990 Mar 10;188(2):333–8

Evidence that decreased feeding induced by systemic injection of cholecystokinin is mediated by CCK–A receptors. Dourish CT, et al. **Eur J Pharmacol** 1989 Dec 7;173(2–3):233–4

The influence of tifluadom on cholecystokinin–induced antinociception. Gericke M, et al. **Eur J Pharmacol** 1990 May 3;180(1):187–90

Contribution of baroreceptor reflexes to blood pressure and sympathetic responses to cholecystokinin and vasoactive intestinal peptide in anesthetized dogs. Koyama S, et al. **Eur J Pharmacol** 1990 Jan 17;175(3):245–51

Evidence for autocrine growth stimulation of cultured colon tumor cells by a gastrin/cholecystokinin–like peptide. Hoosein NM, et al. **Exp Cell Res** 1990 Jan;186(1):15–21

Interaction of cholecystokinin and diazepam: effects on brain monoamines. Rybarczyk MC, et al. **Fundam Clin Pharmacol** 1990;4(2):245–53

Cholecystokinin and secretin prevent the intestinal mucosal hypoplasia of total parenteral nutrition in the dog. Hughes CA, et al. **Gastroenterology** 1978 Jul;75(1):34–41

Effect of truncal vagotomy on cholecystokinin release, gallbladder contraction, and gallbladder sensitivity to cholecystokinin in humans. Masclee AA, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1338–44

Effects of pirenzepine on CCK–stimulated canine pancreatic exocrine secretion. Salido GM, et al. **Gen Pharmacol** 1990; 21(2):195–8

Lack of metabolic effects of cholecystokinin on hepatocytes. Kost LJ, et al. **Hepatology** 1990 Aug;12(2):301–5

Trophic effects of cholecystokinin and calcitonin gene–related peptide on ventral spinal cord in culture. Iwasaki Y, et al. **Int J Neurosci** 1989 Oct;48(3–4):285–9

Regulation of pancreatic endocrine function by cholecystokinin: studies with MK–329, a nonpeptide cholecystokinin receptor antagonist. Liddle RA, et al. **J Clin Endocrinol Metab** 1990 May;70(5):1312–8

Role of postnatal androgens in sexual differentiation of the lordosis–inhibiting effect of central injections of

cholecystokinin. Ulibarri C, et al. **J Neurobiol** 1990 Jul; 21(5):796–807

Effects of long-term haloperidol treatment on the responsiveness of accumbens neurons to cholecystokinin and dopamine: electrophysiological and radioligand binding studies in the rat. Debonnel G, et al. **J Neurosci** 1990 Feb;10(2):469–78

Hippocampal mossy fiber denervation induces a supersensitivity to cholecystokinin of CA3 pyramidal neurons in the guinea pig but not in the rat. Debonnel G, et al. **J Pharmacol Exp Ther** 1990 Sep;254(3):1038–44

Inhibition of acid formation and stimulation of somatostatin release by cholecystokinin-related peptides in rabbit gastric glands. Bengtsson P, et al. **J Physiol (Lond)** 1989 Dec; 419:765–74

Comparative effects of mammalian pancreastatins on the pancreatic exocrine secretion. Funakoshi A, et al. **Jpn J Physiol** 1989;39(6):901–5

Difference in effects of sodium fluoride and cholecystokinin on diacylglycerol accumulation and calcium increase in guinea pig gastric chief cells. Nakano O, et al. **Life Sci** 1990;47(7):647–54

Neurotrophic effect of cholecystokinin on ventral spinal cord in culture. Iwasaki Y, et al. **Neurol Res** 1989 Dec; 11(4):231–2

Effects of a new cholecystokinin analogue (JMV 236) on food intake and brain monoamines in the rat. Gourch A, et al. **Neuropeptides** 1990 Jan;15(1):37–41

Cholecystokinin interferes with the thermoregulatory effect of exogenous and endogenous opioids. Kapás L, et al. **Neuropeptides** 1989 Aug–Sep;14(2):85–92

Some pharmacological characteristics of the guinea pig ileum opioid system activated by cholecystokinin. Valeri P, et al. **Neuropharmacology** 1990 Mar;29(3):231–6

Effect of CCK on insulin, glucagon, and pancreatic polypeptide levels in humans. Schmid R, et al. **Pancreas** 1989;4(6):653–61

Secretagogue and second messenger-activated Cl- permeabilities in isolated pancreatic zymogen granules. Fuller CM, et al. **Pflugers Arch** 1989 Oct;415(1):29–36

Effects of cholecystokinin and calcitonin on evoked brain potentials and satiety in man. Pietrowsky R, et al. **Physiol Behav** 1989 Sep;46(3):513–9

Pancreatic glucagon does not alter intrameal gastric emptying of milk in the rat. Stockinger Z, et al. **Physiol Behav** 1989 Jun;45(6):1259–61

Development of a class of selective cholecystokinin type B receptor antagonists having potent anxiolytic activity. Hughes J, et al. **Proc Natl Acad Sci U S A** 1990 Sep; 87(17):6728–32

Neuropharmacological profile of V-9-M, a putative neuropeptide derived from procholecystokinin. Itoh S, et al. **Prog Neurobiol** 1990;34(5):429–36 (26 ref.)

Stimulation of prostaglandin synthesis by cholecystokinin in primary culture cells of bovine gallbladder muscle. Hidaka T, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Nov;38(2):113–7

Delayed biliary-to-bowel transit in cholescintigraphy after cholecystokinin treatment [see comments] Kim CK, et al. **Radiology** 1990 Aug;176(2):553–6 Comment in: Radiology 1990 Aug;176(2):317–8.

Role of gastrin and cholecystokinin in the growth-promoting action of bombesin on the gastroduodenal mucosa and the pancreas. Dembiński A, et al. **Regul Pept** 1990 Mar 5; 27(3):343–54

Effects of pancreatic polypeptide on biliary flow and bile acid secretion stimulated by secretin and cholecystokinin in the conscious pig. Langlois A, et al. **Regul Pept** 1990 Jan;27(1):139–47

Effects of endogenous and exogenous cholecystokinin and of infusion with the cholecystokinin antagonist L-364,718 on pancreatic and gastrointestinal growth. Axelson J, et al. **Scand J Gastroenterol** 1990 May;25(5):471–80

Inhibition of polyamine synthesis by alpha-difluoromethylornithine and its effects on pancreatic secretion and growth in the rat. Haarstad H, et al. **Scand J Gastroenterol** 1989 Aug;24(6):733–44

Changes of the ductus hepatocholedochus after gastric stimulant. Results of early functional sonography. Heistermann P, et al. **Surg Endosc** 1989;3(3):134–6

Post prandial and cholecystokinin-induced emptying of the gall bladder in dogs. Rothuizen J, et al. **Vet Rec** 1990 May 19;126(20):505–7

[Effects of cholecystokinin, gastrin and proglumide on bile secretion in rats] Zhang J, et al. **Sheng Li Hsueh Pao** 1990 Apr;42(2):175–80 (Eng. Abstr.) **(Chi)**

[Role of a guanine nucleotide regulatory protein in exocrine pancreatic secretion—effects of cholera toxin and pertussis toxin on cholecystokinin action] Matozaki T, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Aug 20;65(8):743–9 (Eng. Abstr.) **(Jpn)**

[Characterization of cholecystokinin receptors in gastric chief cells—effect of CCK analogs and CCK receptor antagonists on chief cells] Matozaki T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jul;86(7):1424–8 (Eng. Abstr.) **(Jpn)**

[Potentiating effect of secretin on cholecystokinin-stimulated exocrine pancreatic secretion in rats] Moriyoshi Y. **Nippon Shokakibyo Gakkai Zasshi** 1989 Oct;86(10):2425–33 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Role of cholecystokinin in intestinal phase and meal-induced pancreatic secretion. Dale WE, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):G782–90

Reduced cholecystokinin mediates the inhibition of pancreatic growth induced by bile salts. Gomez G, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):G86–92

Role of endogenous cholecystokinin on vagally stimulated pancreatic secretion in dogs. Kim CK, et al. **Am J Physiol** 1989 Dec;257(6 Pt 1):G944–9

Endogenous cholecystokinin does not decrease food intake or gastric emptying in fasted rats. Smith GP, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1462–6

Appetite regulation by gut peptides. Morley JE. **Annu Rev Nutr** 1990;10:383–95 (75 ref.)

The interaction of central oxytocin and cholecystokinin regulates grooming behavior in the rat. Kaltwasser MT, et al. **Brain Res** 1989 Sep 4;496(1-2):380–4

Chronic administration of cholecystokinin antagonists reverses the enhancement of spinal morphine analgesia induced by acute pretreatment. Kellstein DE, et al. **Brain Res** 1990 May 21;516(2):263–70

Role of cholecystokinin in bombesin- and meal-stimulated pancreatic polypeptide secretion in dogs. Jansen JB, et al. **Dig Dis Sci** 1990 Sep;35(9):1073–7

Feline cholescintigraphy. Studies on role of cholecystokinin in regulation of gallbladder function. Niewiarowski T, et al. **Dig Dis Sci** 1990 Sep;35(9):1098–104

Integrated actions of cholecystokinin on the gastrointestinal tract: use of the cholecystokinin bioassay. Liddle RA. **Gastroenterol Clin North Am** 1989 Dec;18(4):735–56 (82 ref.)

Role of cholecystokinin in the control of food intake. Peikin SR. **Gastroenterol Clin North Am** 1989 Dec;18(4):757–75 (122 ref.)

Role of secretin and cholecystokinin in oleic acid-stimulated pancreatic secretion in rats. Shiratori K, et al. **Gastroenterol Jpn** 1990 Feb;25(1):104–11

Cholecystokinin is not a major hormonal regulator of lower esophageal sphincter pressure. Brazer SR, et al. **Gastroenterology** 1990 Sep;99(3):641–5

Effects of an antral mucosectomy, L-364,718 and atropine on cephalic phase of gastric and pancreatic secretion in dogs. Konturek SJ, et al. **Gastroenterology** 1990 Jan; 98(1):47–55

Role of cholecystokinin and the cholinergic system in intestinal stimulation of gallbladder contraction in man. Hopman WP, et al. **Hepatology** 1990 Feb;11(2):261–5

Redundant vagal mediation of the synergistic satiety effect of pancreatic glucagon and cholecystokinin in sham feeding rats. Le Sauter J, et al. **J Auton Nerv Syst** 1990 Apr; 30(1):13–22

Effects of a novel cholecystokinin (CCK) receptor antagonist, MK-329, on gallbladder contraction and gastric emptying in humans. Implications for the physiology of CCK. Liddle RA, et al. **J Clin Invest** 1989 Oct;84(4):1220–5

A cholecystokinin-like hormone activates a feeding-related neural circuit in lobster. Turrigiano GG, et al. **Nature** 1990 Apr 26;344(6269):866–8

Possible role of cholecystokinin in the development of acute pancreatitis in rats. Shinya H, et al. **Nippon Geka Hokan** 1989 Jan 1;58(1):3–17

The role of CCK caerulein, and CCK antagonists in nociception. Baber NS, et al. **Pain** 1989 Dec;39(3):307–28 (88 ref.)

Role of cholecystokinin in bombesin-stimulated pancreatic enzyme secretion in conscious rats. de Jong AJ, et al. **Pancreas** 1990 Mar;5(2):194–9

Fluoxetine reduces food intake by a cholecystokinin-independent mechanism. Cooper SJ, et al. **Pharmacol Biochem Behav** 1990 Jan;35(1):51–4

Lack of interaction between cholecystokinin and opioid systems in the central control of breathing. Dierssen M, et al. **Rev Esp Fisiol** 1989;45 Suppl:185–90

Effects of cholecystokinin and cholinergic receptor blockade on guinea pig pepsinogen secretion. Basson MD, et al. **Scand J Gastroenterol** 1990 Aug;25(8):825–33

Endogenous cholecystokinin reduces feeding in young rats. Weller A, et al. **Science** 1990 Mar 30;247(4950):1589–91

Cholecystokinin and anxiety. Ravard S, et al. **Trends Pharmacol Sci** 1990 Jul;11(7):271–3 (33 ref.)

[Gastrointestinal hormones—function and clinical significance. 1: The classical enterohormones gastrin, cholecystokinin and secretin] Mössner J. **Fortschr Med** 1990 Jan 30;108(3):37–9 (28 ref.) (Eng. Abstr.) **(Ger)**

[Principles of physiologic control in the upper gastrointestinal tract] Fried M. **Schweiz Rundsch Med Prax** 1989 Aug 22; 78(34):889–90 (0 ref.) **(Ger)**

[The clinical significance of hormone regulation of exocrine pancreas secretion in the human] Beglinger C. **Z Gastroenterol** 1989 Dec;27 Suppl 3:27–8 (23 ref.) **(Ger)**

[Effect of CCK on the large intestine] Kishimoto M, et al. **Nippon Heikatsukin Gakkai Zasshi** 1989 Oct;25(5):226–8 **(Jpn)**

[Neurohumoral regulation of the secretory function of the pancreas during adaptation to protein-enriched food] Kuznetsova OA, et al. **Fiziol Zh** 1989 Nov-Dec;35(6):57–61 (Eng. Abstr.) **(Rus)**

[A microiontophoretic analysis of the participation of cholecystokinin-octapeptide and beta-endorphin in the central mechanisms of interspecific aggressiveness in rats] Pletnikov MV. **Zh Vyssh Nerv Deiat** 1990 Mar-Apr; 40(2):380–2 **(Rus)**

[The participation of the octapeptide cholecystokinin and beta-endorphin in the neurochemical support of the interspecific and intraspecific aggressivity of rats] Pletnikov MV. **Zh Vyssh Nerv Deiat** 1989 Jul-Aug;39(4):770–3 **(Rus)**

SECRETION

Effects of atropine, proglumide, and somatostatin analogue (SMS 201-995) on bombesin-induced gallbladder contraction and CCK secretion in humans. Mitsukawa T, et al. **Am J Gastroenterol** 1989 Nov;84(11):1371–4

Luminal CCK-releasing factors in the isolated vascularly perfused rat duodenojejunum. Cuber JC, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):G191–7

Regulation of cholecystokinin secretion by food, hormones, and neural pathways in the rat. Lewis LD, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):G512–8

Intravenous amino acids stimulate human gallbladder emptying and hormone release. Nealon WH, et al. **Am J Physiol** 1990 Aug;259(2 Pt 1):G173–8

Effect of partial gastrectomy with Billroth II or Roux-en-Y anastomosis on postprandial and cholecystokinin-stimulated gallbladder contraction and secretion of cholecystokinin and pancreatic polypeptide. Rieu PN, et al. **Dig Dis Sci** 1990 Sep;35(9):1066–72

Role of the gastric phase in fat-induced gallbladder contraction and cholecystokinin secretion in humans. Masclee AA, et al. **Eur J Clin Invest** 1989 Oct;19(5):442–7

Effect of truncal vagotomy on cholecystokinin release, gallbladder contraction, and gallbladder sensitivity to cholecystokinin in humans. Masclee AA, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1338–44

Effects of ursodeoxycholic acid on gallbladder contraction and cholecystokinin release in gallstone patients and normal subjects. van Erpecum KJ, et al. **Gastroenterology** 1990 Sep;99(3):836–42

Differences in stimulatory effects between rat pancreatic secretory trypsin inhibitor-61 and -56 on rat pancreas. Miyasaka K, et al. **Jpn J Physiol** 1989;39(6):891–9

Blockade of bombesin receptors with [Leu14-psi(CH2NH)-Leu13]bombesin fails to suppress nutrient-induced CCK release from rat duodenojejunum. Cuber JC, et al. **Peptides** 1990 Mar-Apr;11(2):255–8

Interactions between bile and pancreatic juice diversions on cholecystokinin release and pancreas in conscious rats. Nakamura R, et al. **Proc Soc Exp Biol Med** 1989 Nov; 192(2):182–6

Meal-related cholecystokinin secretion in eating and affective disorders. Geracioti TD Jr, et al. **Psychopharmacol Bull** 1989;25(3):444–9 (24 ref.)

Response of cholecystokinin, secretin, and pancreatic secretion to graded doses of bombesin. Miyata M, et al. **Surg Forum** 1978;29:390–2

Effect of total jejunoileal denervation on fat-stimulated release of peptide YY and cholecystokinin. Evers BM, et al. **Surgery** 1990 Aug;108(2):248–52; discussion 252–3

Endocrine function of the pancreas after transplantation: the contribution of partial pancreatectomy, systemic hormone delivery, and duct obliteration to glucose regulation by the canine pancreas. Gooszen HG, et al. **Transplant Proc** 1990 Apr;22(2):712–5

[Lipids, proteins and carbohydrates stimulate the secretion of intestinal cholecystokinin in the pig] Cuber JC, et al. **Reprod Nutr Dev** 1990;30(2):267–75 (Eng. Abstr.) **(Fre)**

[Effect of pancreatico-biliary diversion on endogenous CCK secretion, pancreatic enzyme synthesis, and amylase release] Ishizuka Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Mar;87(3):830–9 (Eng. Abstr.) **(Jpn)**

TOXICITY

Increased canine pancreatic acinar cell damage after organophosphate and acetylcholine or cholecystokinin. Liu S, et al. **Pancreas** 1990 Mar;5(2):177–82

CHOLECYSTOKININ OCTAPEPTIDE see **SINCALIDE**

CHOLECYSTOKININ OCTAPEPTIDE RECEPTORS see **RECEPTORS, CHOLECYSTOKININ**

CHOLECYSTOKININ-PANCREOZYMIN RECEPTORS see **RECEPTORS, CHOLECYSTOKININ**

CHOLECYSTOKININ RECEPTORS see **RECEPTORS, CHOLECYSTOKININ**

CHOLECYSTOSTOMY

Laparoscopy-guided percutaneous cholecystostomy. Auguste LJ. **Gastrointest Endosc** 1990 Jan-Feb;36(1):58–60

Acute acalculous cholecystitis in a young child. Chandra J, et al. **Indian J Pediatr** 1989 Jul-Aug;56(4):533–4

Ryle's tube drainage of afferent loop after partial gastrectomy and that of gall bladder after cholecystojejunostomy. Mishra SB, et al. **J Indian Med Assoc** 1989 Sep;87(9):212–3

Ablation of the cystic duct and gallbladder: clinical observations. Becker CD, et al. **Radiology** 1990 Sep; 176(3):687–90

Carcinoma of the gallbladder: a risk associated with

gallbladder-preserving treatments for cholelithiasis. So CB, et al. **Radiology** 1990 Jan;174(1):127-30

ADVERSE EFFECTS

Percutaneous interventional gallbladder procedures: personal experience and literature review. Teplick SK, et al. **Gastrointest Radiol** 1990 Spring;15(2):133-6 (26 ref.)

[Errors, hazards and complications of laparoscopic cholecystostomy in acute cholecystitis] Postolov PM, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):68-72 **(Rus)**

INSTRUMENTATION

Novel nitinol basket instrument for percutaneous cholecystolithotomy. Cope C. **AJR Am J Roentgenol** 1990 Sep;155(3):515-6

[A clamping drain for transcutaneous laparoscopic cholecystostomy] Taranenko LD, et al. **Klin Khir** 1989; (9):65 **(Rus)**

METHODS

Percutaneous cholecystostomy and lithotripsy of gallstones. MacFadyen BV Jr, et al. **Am Surg** 1990 Apr;56(4):226-31 (22 ref.)

A comparison of cholecysto- and choledochoenterostomy for obstructing pancreatic cancer. Rappaport MD, et al. **Am Surg** 1990 Jul;56(7):433-5

Utilization of a silicone gastrostomy feeding port in the gallbladder [letter] Jacob H, et al. **Gastrointest Endosc** 1990 Jan-Feb;36(1):75

Porcine model for the development of interventional techniques in the gallbladder. Sullivan KL, et al. **Invest Radiol** 1989 Oct;24(10):754-7

Percutaneous cholecystostomy: an alternative to surgical cholecystostomy for acute cholecystitis? McGahan JP, et al. **Radiology** 1989 Nov;173(2):481-5

Percutaneous gallbladder intervention [editorial; comment] Picus D. **Radiology** 1990 Jul;176(1):5-6 Comment on: Radiology 1990 Jul;176(1):15-8. Comment on: Radiology 1990 Jul;176(1):19-24.

Percutaneous cholecystolithotomy: preliminary experience and technical considerations. Picus D, et al. **Radiology** 1989 Nov;173(2):487-91

The benefits of percutaneous cholecystostomy for decompression of selected cases of obstructive jaundice [see comments] vanSonnenberg E, et al. **Radiology** 1990 Jul; 176(1):15-8 Comment in: Radiology 1990 Jul;176(1):5-6.

Percutaneous stone clearance of the gallbladder through an access cholecystostomy. Laparoscopic-guided technique. Abd el Ghany AB, et al. **Surg Endosc** 1989;3(3):126-30

Gallstones: laparoscopic treatment--cholecystectomy, cholecystostomy, and lithotripsy. Our own technique. Perissat J, et al. **Surg Endosc** 1990;4(1):1-5

Experience with mini-invasive endoscopic removal of gallstones. Roesel RW. **Surg Endosc** 1989;3(3):124-5

[Decompression of the gallbladder in acute cholecystitis in middle-aged and elderly patients] Pantsyrev IuM, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):17-20 (Eng. Abstr.) **(Rus)**

[Direct cholecystography after laparoscopic cholecystostomy in acute cholecystitis] Postolov PM, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):84-8 (Eng. Abstr.) **(Rus)**

[Diathermic laparoscopic cholecystostomy] Tashkinov VI, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):119-20 **(Rus)**

[Pancreatoduodenal resection with cholecystopancreatostomy. Morphofunctional substantiation and clinical results] Shalimov AA, et al. **Klin Khir** 1989;(11):28-30 (Eng. Abstr.) **(Rus)**

[Evaluation of the methods of completion of surgical procedures of the biliary tract] Feofilov GL, et al. **Vestn Khir** 1990 Jan;144(1):104-7 **(Rus)**

[Laparoscopic microcholecystostomy in the treatment of acute cholecystitis] Pantsyrev IuM, et al. **Vestn Khir** 1990 Feb;144(2):30-4 (Eng. Abstr.) **(Rus)**

CHOLEDOCHAL CYST

Choledochal cyst in a pregnant adult [letter] Aszodi A, et al. **Am J Gastroenterol** 1990 Aug;85(8):1048-9

Choledochal cyst. Dasgupta TK, et al. **J Indian Med Assoc** 1989 Oct;87(10):240-1

Pancreas divisum, pancreatic pseudocyst, and choledochal cyst in an 8-year-old child [letter; comment] Misra SP, et al. **J Pediatr Surg** 1989 Oct;24(10):1111 Comment on: J Pediatr Surg 1989 Jan;24(1):52-3.

Dilatation of the biliary ductal system: choledochal cysts. Mani S. **Mt Sinai J Med** 1990 May;57(3):177-84

COMPLICATIONS

Complications of choledochal cysts in adulthood. Hopkins NF, et al. **Ann R Coll Surg Engl** 1990 Jul;72(4):229-35

Intestinal intussusception as a presenting feature of choledochocele. Ramos A, et al. **Gastrointest Radiol** 1990 Summer;15(3):211-4

Pseudopancreatitis in choledochal cyst in children: intraoperative study of amylase levels in the serum. Todani T, et al. **J Pediatr Surg** 1990 Mar;25(3):303-6

Small cell carcinoma of the pancreas in association with a choledochal cyst: immunohistochemical characterization and complete response to combination chemotherapy. Duggan DB, et al. **Med Pediatr Oncol** 1989;17(6):506-9

Biliary malignancies occurring in choledochal cysts. Yoshida H, et al. **Radiology** 1989 Nov;173(2):389-92

Trousseau's syndrome caused by malignant degeneration of a choledochal cyst. Poole GV. **South Med J** 1989 Oct; 82(10):1283-4

[A study of concomitant chronic pancreatitis in forty-one cases of adult congenital biliary dilatation] Kubota H, et al. **Nippon Geka Gakkai Zasshi** 1989 Jul;90(7):1026-31 (Eng. Abstr.) **(Jpn)**

[A case of congenital choledochal cyst with prehepatic portal occlusion, liver abscess, and cholelithiasis] Muramatsu Y, et al. **Rinsho Hoshasen** 1990 Jun;35(6):761-4 (Eng. Abstr.) **(Jpn)**

[Hepato-choledochal cyst] Polupan VN, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):85-6 **(Rus)**

[Congenital hepatic fibrosis associated with choledochal cyst] Ramírez-Aguilera MJ, et al. **Bol Med Hosp Infant Mex** 1989 Dec;46(12):803-7 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Antenatal diagnosis of choledochal cyst at 15 weeks' gestation: etiologic implications and management [letter; comment] Greenholz SK. **J Pediatr Surg** 1990 May; 25(5):584 Comment on: J Pediatr Surg 1989 Sep;24(9):936-8.

Ultrasonography and 99mTc-DISIDA cholescintigraphy in the diagnosis of choledochal cyst in children. Jaw TS, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Dec; 5(12):688-96

Hemorrhage into a choledochal cyst in a hemophiliac child. Stein M, et al. **Pediatr Radiol** 1989;20(1-2):118-9

Complementary use of Doppler sonography and delayed right lateral scintigraphy for the diagnosis of choledochal cysts. Parvey HR, et al. **South Med J** 1990 Aug;83(8):970-2 (6 ref.)

[Choledochal cyst: findings of intravenous radionuclide cholescintigraphy, sonography, and endoscopic retrograde cholangiography] Kao PF, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Sep;88(9):950-4 **(Chi)**

[You make the diagnosis. Type Ic (according to Todani) choledochal cyst] Gödl I, et al. **Padiatr Padol** 1990; 25(1):33-7 **(Ger)**

[Choledochal cyst in a child] Dawidowicz-Szczepanowska A, et al. **Wiad Lek** 1989 Feb 1;42(3):173-5 (Eng. Abstr.) **(Pol)**

ENZYMOLOGY

[Analysis of pancreatic enzymes in the bile of congenital choledochal cyst with anomalous pancreaticobiliary ductal union] Shibata T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jul;86(7):1513-8 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

[Cystic anomalies of the external bile ducts in children] Ergashev NSh. **Vestn Khir** 1989 Dec;144(12):33-6 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Congenital biliary dilatation: a spectrum of disease detailed by ultrasound. Young W, et al. **Br J Radiol** 1990 May; 63(749):333-6

Primary papillary hyperplasia of the gallbladder and cystic and common bile ducts. Albores-Saavedra J, et al. **Hum Pathol** 1990 Feb;21(2):228-31

RADIOGRAPHY

Common channel ectasia in choledochal cyst [letter] Brunelle F. **AJR Am J Roentgenol** 1990 Aug;155(2):421

Choledochal cyst: findings on cholangiopancreatography with emphasis on ectasia of the common channel. Wiedmeyer DA, et al. **AJR Am J Roentgenol** 1989 Nov; 153(5):969-72

Computed tomography with intravenous cholangiography contrast: a method for visualizing choledochal cysts. Höglund M, et al. **Eur J Radiol** 1990 Mar-Apr; 10(2):159-61; discussion 162-3

Multiple choledochal cysts with stones (a case report with review of literature). Bhagvat SR, et al. **J Assoc Physicians India** 1989 Nov;37(11):719-20

Cystic right upper quadrant mass. Jacoby JH. **N J Med** 1990 Jun;87(6):498-9

[Anomaly of the biliopancreatic junction, choledocal cyst and pancreatic lithiasis. Endoscopic possibilities] Martín L, et al. **Rev Esp Enferm Apar Dig** 1989 Dec;76(6 Pt 2):685-8 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

Complementary use of Doppler sonography and delayed right lateral scintigraphy for the diagnosis of choledochal cysts. Parvey HR, et al. **South Med J** 1990 Aug;83(8):970-2 (6 ref.)

SURGERY

Surgical techniques and long-term results in the treatment of choledochal cyst. Joseph VT. **J Pediatr Surg** 1990 Jul; 25(7):782-7

Surgical treatment of congenital choledochal cyst. Wang DS, et al. **Singapore Med J** 1990 Feb;31(1):53-5

Subtotal cystectomy and antirefluxing hepaticoduodenostomy for choledochus cyst in children. Sarkar PK, et al. **Z Kinderchir** 1989 Dec;44(6):340-2

[Diagnostic and therapeutic tactics in various forms of cholangiopathies in children] Stepanov EA, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):50-4 (Eng. Abstr.) **(Rus)**

[Surgical treatment of common bile duct cyst] Pankov VI, et al. **Klin Khir** 1990;(6):52-3 **(Rus)**

[Congenital cystic dilatation of the common bile duct in children] Lukoianova GM, et al. **Vestn Khir** 1990 Jan; 144(1):81-3 **(Rus)**

CHOLEDOCHODUODENOSTOMY see **CHOLEDOCHOSTOMY**

CHOLEDOCHOJEJUNOSTOMY see **CHOLEDOCHOSTOMY**

CHOLEDOCHOLITHIASIS see **COMMON BILE DUCT CALCULI**

CHOLEDOCHOSTOMY

Pancreatic cystocholedochostomy. First report of a case. Thompson NW, et al. **Arch Surg** 1989 Nov;124(11):1343-6

Hypervolaemic haemodilution in an anaemic Jehovah's Witness. Trouwborst A, et al. **Br J Anaesth** 1990 May; 64(5):646-8

[Diagnosis, etiology and treatment of cholangitis following bilio-digestive surgery] Carrel T, et al. **Helv Chir Acta** 1990 Apr;56(6):891-6 (Eng. Abstr.) **(Fre)**

[Postoperative complications following biliodigestive anastomoses] Genoni M, et al. **Helv Chir Acta** 1990 Apr; 56(6):903-6 (Eng. Abstr.) **(Ger)**

[A massively dilated ductus choledochus in choledocholithiasis following cholecystectomy and choledochojejunostomy] Petri H, et al. **ROFO** 1989 Oct; 151(4):496-7 **(Ger)**

[Indications for and comparisons between transduodenal papillostomy and choledochoduodenostomy] Natalini E, et al. **Ann Ital Chir** 1989;60(2):93-8; discussion 99 (38 ref.) (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Sonography accurately detects biliary obstruction in patients with surgically created biliary-enteric anastomosis. Wilson SR, et al. **AJR Am J Roentgenol** 1990 Oct;155(4):789-94

Treatment of postcholedochoduodenostomy symptoms. Eaton MC, et al. **Aust N Z J Surg** 1989 Oct;59(10):771-4

Post-choledochoenterostomy 'sump syndrome'. Miros M, et al. **Aust N Z J Surg** 1990 Feb;60(2):109-12

Liver abscesses: successful treatment with choledochoduodenostomy. Fischer MJ. **South Med J** 1990 Feb;83(2):253-4 (6 ref.)

[Repeated operations on the extrahepatic bile ducts] Potashov LV, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):42-5 (Eng. Abstr.) **(Rus)**

[Deep duodenobiliary reflux after supraduodenal choledochoduodenostomy] Skiba VV, et al. **Klin Khir** 1989; (9):59-60 **(Rus)**

[Characteristics of diagnosis and treatment of pyogenic abscess of the liver in an elderly patient] Koval'chuk VI, et al. **Vestn Khir** 1990 Mar;144(3):38-9 **(Rus)**

INSTRUMENTATION

A simple technique of T-tube insertion in transplantation of the liver. Ayalon A, et al. **Surg Gynecol Obstet** 1990 Mar; 170(3):249

[Use of mechanical devices in biliary tract surgery] Gusarev VF, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):114-9 **(Rus)**

[An extractor for removal of calculi from the bile ducts] Kirichenko MN. **Vestn Khir** 1989 Apr;142(4):98-9 **(Rus)**

METHODS

A comparison of cholecysto- and choledochoenterostomy for obstructing pancreatic cancer. Rappaport MD, et al. **Am Surg** 1990 Jul;56(7):433-5

Percutaneous endoscopic duodenostomy: a misnomer? [letter; comment] Alberti-Flor JJ. **Gastrointest Endosc** 1989 Nov-Dec;35(6):582 Comment on: Gastrointest Endosc 1989 Mar-Apr;35(2):104-5.

Surgical treatment of congenital choledochal cyst. Wang DS, et al. **Singapore Med J** 1990 Feb;31(1):53-5

Choledochocholedochostomy without a T tube or internal stent in transplantation of the liver. Rouch DA, et al. **Surg Gynecol Obstet** 1990 Mar;170(3):239-44

[Enlarged choledocho-duodenostomy] Zhao FK. **Chung Hua Wai Ko Tsa Chih** 1990 Apr;28(4):209-10, 252 (Eng. Abstr.) **(Chi)**

[Hepaticojejunostomy with a subcutaneous blind jejunum segment. An alternative in the treatment of stenosing bile duct diseases] Sachse RE, et al. **Chirurg** 1990 May; 61(5):402-6 (Eng. Abstr.) **(Ger)**

[A modified method of hepaticocholedochojejunal anastomosis] Atanasov D, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):28-31 (Eng. Abstr.) **(Rus)**

[Indications for choledochotomy and methods for its performance] Baskakov VA, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):54-7 (Eng. Abstr.) **(Rus)**

[Surgical tactics in mechanical jaundice] Nesterenko IuA, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):14–7 (Eng. Abstr.) **(Rus)**

[Choledochoduodenostomy in choledocholithiasis and benign strictures of the common bile duct] Nikolaev No, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):11–4 (Eng. Abstr.) **(Rus)**

[Decompression of the gallbladder in acute cholecystitis in middle-aged and elderly patients] Pantsyrev IuM, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):17–20 (Eng. Abstr.) **(Rus)**

[Characteristics and results of the treatment of cholelithiasis in elderly patients] Shchigel B, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):18–22 (Eng. Abstr.) **(Rus)**

[Comparative evaluation of the results of traditional and laser papillosphincterotomy] Skobelkin OK, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):24–6 (Eng. Abstr.) **(Rus)**

[A method of choledochojejunostomy] Korotkiĭ VN, et al. **Klin Khir** 1989;(9):67 **(Rus)**

[Evaluation of the methods of completion of surgical procedures of the biliary tract] Feofilov GL, et al. **Vestn Khir** 1990 Jan;144(1):104–7 **(Rus)**

[Methods of surgical treatment of common bile duct obstruction] Nurmukhamedov RM, et al. **Vestn Khir** 1989 Dec;144(12):19–21 **(Rus)**

[Late results of endoscopic papillosphincterotomy in patients with non-neoplastic diseases of the common bile duct] Rodionov VV, et al. **Vestn Khir** 1989 Jul;143(7):11–3 (Eng. Abstr.) **(Rus)**

CHOLEDOCHUS see **COMMON BILE DUCT**

CHOLELITHIASIS

Changing spectrum of cholelithiasis and cholecystitis in infants and children. Bailey PV, et al. **Am J Surg** 1989 Dec;158(6):585–8

Disappearing gall-stones. Gardner AM, et al. **Br J Surg** 1966 Feb;53(2):114–20 (15 ref.)

Bilateral intrahepatic lithiasis without extrahepatic bile duct stones. Tsuchiya R, et al. **Gastroenterol Jpn** 1990 Feb; 25(1):122–9

"The liver and gallbladder flush" [letter] Bhalotra R. **J Clin Gastroenterol** 1990 Apr;12(2):243

Gallstones: epidemiological advance versus preventive stalemate [editorial] **Lancet** 1990 Jan 6;335(8680):21–2

Stones and kilograms [editorial] [published erratum appears in Lancet 1989 Oct 14;2(8668):934] [see comments] **Lancet** 1989 Oct 7;2(8667):844 Comment in: Lancet 1989 Dec 2;2(8675):1343.

Simulation of gallstone fragments by cavitation bubbles during extracorporeal shock wave lithotripsy: physical basis and in vitro demonstration. Brink JA, et al. **Radiology** 1990 Mar;174(3 Pt 1):787–91

Interventional radiology in the gallbladder: diagnosis, drainage, dissolution, and management of stones. vanSonnenberg E, et al. **Radiology** 1990 Jan;174(1):1–6 (57 ref.)

[Cholelithiasis] Dvořák K. **Zdrav Aktual** 1983;204:122–8 **(Cze)**

[Our experience with recurrent biliary calculosis after cholecystectomy] De Nisi A, et al. **Minerva Chir** 1990 Jun 15;45(11):813–20 (Eng. Abstr.) **(Ita)**

[Pathophysiology and clinical features of gallstone disease] Kameda H. **Nippon Naika Gakkai Zasshi** 1989 Aug; 78(8):1140–9 **(Jpn)**

[Cholelithiasis (mechanisms of lithogenesis and current aspects of treatment)] Minushkin ON, et al. **Klin Med (Mosk)** 1990 Mar;68(3):35–44 (62 ref.) **(Rus)**

ANALYSIS

Simple enzymatic determination of total cholesterol in gallstones. Wei JS, et al. **Clin Chem** 1989 Nov;35(11):2247–9

Bile acid composition in brown pigment stones. Akiyoshi T, et al. **Dig Dis Sci** 1990 Jan;35(1):27–32

Qualitative and quantitative comparison of gallbladder proteins from patients with and without cholesterol gallstones. Yu L, et al. **Dig Dis Sci** 1990 Jan;35(1):47–9

Gallbladder stone fragments in feces after biliary extracorporeal shock-wave lithotripsy. Greiner L, et al. **Gastroenterology** 1990 Jun;98(6):1620–4

Addition of N-acetylcysteine to aqueous model bile systems accelerates dissolution of cholesterol gallstones. Niu N, et al. **Gastroenterology** 1990 Feb;98(2):454–63

High protein and total lipid concentration are associated with reduced metastability of bile in an early stage of cholesterol gallstone formation. Strasberg SM, et al. **Gastroenterology** 1990 Mar;98(3):739–46

Bile concentration is a key factor for nucleation of cholesterol crystals and cholesterol saturation index in gallbladder bile of gallstone patients. van Erpecum KJ, et al. **Hepatology** 1990 Jan;11(1):1–6

Mechanical property studies of human gallstones. Stranne SK, et al. **J Biomed Mater Res** 1990 Aug;24(8):1049–57

Isolation of an acidic protein from cholesterol gallstones, which inhibits the precipitation of calcium carbonate in vitro. Shimizu S, et al. **J Clin Invest** 1989 Dec;84(6):1990–6

Differences in gallstone structure in primary common bile duct lithiasis and gallbladder lithiasis. García Ontiveros A, et al. **Klin Wochenschr** 1990 May 17;68(10):496–502

Predicting gallstone composition with CT: in vivo and in vitro analysis. Brakel K, et al. **Radiology** 1990 Feb; 174(2):337–41

Gallbladder stones classified by chemical analysis of cholesterol content. Frederiksberg, 1987–1988. Ravnborg L, et al. **Scand J Gastroenterol** 1990 Jul;25(7):720–4

[Stone formation and amino acid analysis of glycoproteins of gallstones] Shi F. **Chung Hua Wai Ko Tsa Chih** 1989 Jun;27(6):350–3, 381 (Eng. Abstr.) **(Chi)**

[Analysis of bile and gallstones in 116 patients with symptomatic cholelithiasis (letter)] Edgar PA. **Ned Tijdschr Geneeskd** 1990 May 5;134(18):926 **(Dut)**

[Analysis of bile and gallstones in 116 patients with symptomatic cholelithiasis] van Erpecum KJ, et al. **Ned Tijdschr Geneeskd** 1990 Jan 20;134(3):116–20 (Eng. Abstr.) **(Dut)**

[Dissolution of cholesterol mixed stones with methyl tertiary butyl ether in vitro] Fukasawa S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Oct;86(10):2413–8 (Eng. Abstr.) **(Jpn)**

[Comparison of the chemical composition of bile calculi in the gallbladder and in bile ducts] Kubiak J, et al. **Wiad Lek** 1989 Nov 15–Dec 15;42(22–24):1110–4 (Eng. Abstr.) **(Pol)**

BLOOD

Serum lipids and gallstones: a case-control study. Thijs C, et al. **Gastroenterology** 1990 Sep;99(3):843–9

Plasma insulin, serum lipids and lipoproteins in gall stone disease in non-insulin dependent diabetic subjects: a case control study. Laakso M, et al. **Gut** 1990 Mar;31(3):344–7

[Changes in serum levels of pituitary gonadotropic hormones in women with gallstones] Zhao HL. **Chung Hua Wai Ko Tsa Chih** 1990 Jan;28(1):33–6, 61 (Eng. Abstr.) **(Chi)**

CHEMICALLY INDUCED

Right upper quadrant calcification in a patient receiving long-term cholestyramine therapy for primary biliary cirrhosis. Wells RF, et al. **Am J Dig Dis** 1968 Jan; 13(1):86–94

Octreotide is effective in acromegaly but often results in cholelithiasis [comment] Daughaday WH. **Ann Intern Med** 1990 Feb 1;112(3):159–60 (20 ref.) Comment on: Ann Intern Med 1990 Feb 1;112(3):173–81.

Apparent biliary pseudolithiasis during ceftriaxone therapy. Heim-Duthoy KL, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):1146–9

Gall stones and treatment with octreotide for acromegaly [letter; comment] **BMJ** 1989 Nov 4;299(6708):1162–3 Comment on: BMJ 1989 Sep 2;299(6699):604–5.

Changes in glucose tolerance and development of gall stones during high dose treatment with octreotide for acromegaly [see comments] McKnight JA, et al. **BMJ** 1989 Sep 2; 299(6699):604–5 Comment in: BMJ 1989 Nov 4;299(6708):1162. Comment in: BMJ 1989 Nov 4;299(6708):1162–3.

Estrogen-induced gallstones in males. Sweeting J. **Gastroenterology** 1990 Mar;98(3):800–1

Incidence of gallbladder lithiasis after ceftriaxone treatment. Cometta A, et al. **J Antimicrob Chemother** 1990 Apr; 25(4):689–95

Chronic treatment with a long-acting somatostatin analogue in a patient with intestinal carcinoid tumor: occurrence of cholelithiasis. Roti E, et al. **J Endocrinol Invest** 1990 Jan; 13(1):69–72

Increased incidence of cholelithiasis in heart transplant recipients receiving cyclosporine therapy. Spes CH, et al. **J Heart Transplant** 1990 Jul-Aug;9(4):404–7

The influence of pregnancy and contraceptive steroids on the biliary tract and its reference to cholesterol gallstone formation. Rådberg G, et al. **Scand J Gastroenterol** 1990 Feb;25(2):97–102 (75 ref.)

[Experimental study on the relation of estrogens to gallstone formation] Xue HZ. **Chung Hua Wai Ko Tsa Chih** 1989 Nov;27(11):686–8, 702–3 (Eng. Abstr.) **(Chi)**

CLASSIFICATION

Mirizzi syndrome and cholecystobiliary fistula: a unifying classification. Csendes A, et al. **Br J Surg** 1989 Nov; 76(11):1139–43

[The classification of a combination of cholelithiasis and urolithiasis] Korita VR, et al. **Klin Khir** 1989;(9):17–9 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Controversies, dilemmas, and dialogues. What is the role of endoscopy in the management of biliary pancreatitis, and when should it be utilized? Zimmon D, et al. **Am J Gastroenterol** 1990 Jan;85(1):9–11

Early endoscopic sphincterotomy in patients with gallstone pancreatitis [letter; comment] Ludewig RM. **Am J Surg** 1989 Nov;158(5):479 Comment on: Am J Surg 1988 Jun;155(6):719.

Gallstones with ulcerative proctitis [letter] Baker AL, et al. **Ann Intern Med** 1974 Apr;80(4):552–3

Risk factors for acute pancreatitis in patients with migrating gallstones. Oría A, et al. **Arch Surg** 1989 Nov; 124(11):1295–6

Management of gallstone pancreatitis. Fielding GA, et al. **Aust N Z J Surg** 1989 Oct;59(10):775–81

Endoscopic decompression for acute cholangitis due to stones. Worthley CS, et al. **Aust N Z J Surg** 1990 May; 60(5):355–9

Gastric outflow obstruction: an unusual complication of cholelithiasis. Williams B, et al. **Br J Clin Pract** 1989 Nov; 43(11):417–8

Gallstone ileus. Clavien PA, et al. **Br J Surg** 1990 Jul; 77(7):737–42 (42 ref.)

Gall-stone ileus. Stitt RB, et al. **Br J Surg** 1967 Aug; 54(8):673–8

Cholecystopleural fistula with cholelithiasis presenting as a right pleural effusion. Cunningham LW, et al. **Chest** 1990 Mar;97(3):751–2

Prevalence of gallstones in patients with primary immunoglobulin deficiency. Evidence for lack of association. De Santis A, et al. **Dig Dis Sci** 1990 Jun; 35(6):716–20

Cholelithiasis in inflammatory bowel disease. A case-control study. Lorusso D, et al. **Dis Colon Rectum** 1990 Sep; 33(9):791–4

Patency of the Santorini duct and acute biliary pancreatitis. A prospective ERCP study. Nowak A, et al. **Endoscopy** 1990 May;22(3):124–6

An unusual case of obstruction of the colon. Nguyen KT, et al. **Eur J Radiol** 1990 Mar-Apr;10(2):154–5

Are all gallstones "silent" until acute cholecystitis occurs? Achord JL. **Gastroenterology** 1989 Dec;97(6):1591–2

Endoscopy for gallstone pancreatitis. Ranson JH. **Gastroenterology** 1989 Dec;97(6):1592–3

Gallstones in Crohn's disease. Kangas E, et al. **Hepatogastroenterology** 1990 Feb;37(1):83–4

Gallstone pancreatitis: when is the optimal time for intervention? Elliott DW. **Hepatology** 1989 Dec; 10(6):1022–4

Gallstone pancreatitis: mechanisms and management. Frakes JT. **Hosp Pract [Off]** 1990 Sep 30;25(9A):56–60, 63–4 (9 ref.)

Calculus biliary tract disease in beta-thalassemia trait [letter] Thapa BR, et al. **Indian Pediatr** 1989 Dec;26(12):1271–2

Fungal cholecystitis and AIDS [letter] Cervia JS, et al. **J Infect Dis** 1990 Feb;161(2):358

A case-control study of gallstones: a major risk factor for biliary tract cancer. Kato I, et al. **Jpn J Cancer Res** 1990 Jun-Jul;81(6-7):578–83

Gallstone jejunal perforation: surgical implications. Limjoco UR. **Milit Med** 1990 Jan;155(1):42–4

Gallstone appendicitis [letter] Siegal J, et al. **N Y State J Med** 1990 Feb;90(2):77

Gallstone ileus associated with Crohn's disease. Senofsky GM, et al. **Surgery** 1990 Jul;108(1):114–7

[Matched investigation of risk factors in coronary heart patients with gallstones] Zhou X. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1990 Feb; 11(1):5–8 (Eng. Abstr.) **(Chi)**

[Acute cholecystitis with and without gallstones. The frequency of surgical interventions in Frederiksberg during the period 1978–1988] Teilum D, et al. **Ugeskr Laeger** 1990 Jun 18;152(25):1827–8 (Eng. Abstr.) **(Dan)**

[Mirizzi syndrome] Cabooter M, et al. **Ned Tijdschr Geneeskd** 1990 Apr 7;134(14):708–11 (Eng. Abstr.) **(Dut)**

[Massive hemobilia caused by erosion of the hepatic artery by cholelithiasis with cholecysto-duodenal fistula] Bloch P, et al. **Ann Chir** 1989;43(10):840–2 (Eng. Abstr.) **(Fre)**

[Infrahepatic hematoma secondary to gangrenous cholelithiasic hemocholecyst treated with antivitamins K] Leblanc I, et al. **Ann Chir** 1989;43(10):838–9 (Eng. Abstr.) **(Fre)**

[Treatment of acute calculi-induced pancreatitis] Belghiti J. **Ann Gastroenterol Hepatol (Paris)** 1990 May;26(3):93–100 (46 ref.) **(Fre)**

[Ultrasonographic and x-ray computed tomographic aspects of Mirizzi's syndrome] Mathieu D, et al. **Gastroenterol Clin Biol** 1989 Nov;13(11):905–9 (16 ref.) (Eng. Abstr.) **(Fre)**

[Ultrasonic diagnosis and treatment of a rare form of isolated gallbladder injury] Temesi M, et al. **Orv Hetil** 1990 Aug 19;131(33):1821–3 (Eng. Abstr.) **(Hun)**

[Biliary ileus: review of the literature and presentation of 7 cases] Cicconi M, et al. **Ann Ital Chir** 1989 Jul-Aug; 60(4):309–14 (48 ref.) (Eng. Abstr.) **(Ita)**

[Cancer of the colon and cholelithiasis: bile bacteria, composition of the stones and the bile] Gafà M, et al. **Ann Ital Chir** 1989 Jul-Aug;60(4):283–90 (Eng. Abstr.) **(Ita)**

[A case of adrenal myelolipoma with colonic cancer and gallstones] Kunieda Y, et al. **Gan No Rinsho** 1990 Jul; 36(8):949–54 (Eng. Abstr.) **(Jpn)**

[A case of congenital choledochal cyst with prehepatic portal occlusion, liver abscess, and cholelithiasis] Muramatsu Y, et al. **Rinsho Hoshasen** 1990 Jun;35(6):761–4 (Eng. Abstr.) **(Jpn)**

[Diagnosis and surgical treatment of obstructive jaundice in benign diseases] Cherniavskiĭ AA, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):15–8 (Eng. Abstr.) **(Rus)**

[Diagnosis and treatment of mechanical jaundice in non-neoplastic diseases in middle-aged and elderly patients] Gilenko IA. **Khirurgiia (Mosk)** 1989 Aug; (8):98–101 **(Rus)**

[Large calculus of the gallbladder penetrating into the common bile duct through the cystic duct] Kogan AS, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):131–2 **(Rus)**

[Acute calculous cholecystitis in complete situs inversus viscerum] Kozan' IV, et al. **Khirurgiia (Mosk)** 1989 Dec;

(12):123 (Rus)
[Intraoperative cholangiography] Kuzin MI, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):10–4 (Eng. Abstr.) (Rus)
[Surgical treatment of chronic calculous pancreatitis] Nosal'chuk NK, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):86–7 (Rus)
[Intestinal obstruction caused by a gallstone associated with mucocele of the appendix] Begezhanov BA, et al. **Klin Khir** 1990;(4):69–70 (Rus)
[Cholelithiasis as a risk factor for the occurrence of gallbladder cancer] Dudenko GI, et al. **Klin Khir** 1989; (9):55 (Rus)
[Hiatal hernia associated with chronic calculous cholecystitis and appendiceal diverticulosis] Galimov OV. **Klin Khir** 1989;(10):66 (Rus)
[Obstructive ileus caused by a gallstone] Koshevarov MN, et al. **Klin Khir** 1990;(4):65–6 (Rus)
[The treatment of cholangiogenic liver abscesses by the use of hemosorption and extracorporeal membrane oxygenation] Kukosh MV, et al. **Klin Khir** 1989;(9):60–1 (Rus)
[The role of cholelithiasis in the etiology and pathogenesis of acute pancreatitis] Loboda DI, et al. **Klin Khir** 1989; (11):47–50 (56 ref.) (Rus)
[Perforation of the jejunum by a gallstone] Mukaramov AM, et al. **Klin Khir** 1990;(2):56–7 (Rus)
[Acute obstruction of the small intestine caused by gallstones] Rukhliada NV, et al. **Klin Khir** 1989;(9):58–9 (Rus)
[Cholescintigraphy in the evaluation of duodenogastric reflux in cholelithiasis] Tsypliaev VA, et al. **Med Radiol (Mosk)** 1990 Mar;35(3):36–8 (Eng. Abstr.) (Rus)
[Mechanical jaundice in cholangitis] Khachatrian RG, et al. **Vestn Akad Med Nauk SSSR** 1989;(12):87–90 (Eng. Abstr.) (Rus)
[Cholecysto–colonic fistula as a complication of cholelithiasis] Chaĭkovskiĭ IuIa, et al. **Vestn Khir** 1989 Apr; 142(4):46 (Rus)
[Surgical treatment of occlusive intestinal obstruction caused by cholelithiasis] Gorbunov OM, et al. **Vestn Khir** 1990 Mar;144(3):40–1 (Rus)
[Cholelithiasis complicated by cholecysto–colonic fistula] Kadyrov ZL. **Vestn Khir** 1989 Apr;142(4):47 (Rus)
[Conservative treatment of Bouveret's syndrome] Karpov IB, et al. **Vestn Khir** 1989 Jul;143(7):62–3 (Rus)
[Acute cholecystitis complicated by hemorrhage] Labazanov MM, et al. **Vestn Khir** 1989 Dec;144(12):28–9 (Rus)
[Methods of surgical treatment of common bile duct obstruction] Nurmukhamedov RM, et al. **Vestn Khir** 1989 Dec;144(12):19–21 (Rus)
[Cholelithiasis and acute pancreatitis] Zavarský F, et al. **Rozhl Chir** 1990 Feb;69(2):114–8 (Eng. Abstr.) (Slo)
[Correlation of etiology and severity in a series of 506 cases of acute pancreatitis] Oller B, et al. **Rev Esp Enferm Apar Dig** 1989 Dec;76(6 Pt 2):640–4 (Eng. Abstr.) (Spa)
[Acute pancreatitis of biliary etiology] Pérez Castrillón JL, et al. **Rev Esp Enferm Dig** 1990 May;77(5):337–40 (Eng. Abstr.) (Spa)
[Cholelithiasis and cholecysto–colonic fistula: a rare form of biliary ileus] Serrano R, et al. **Rev Esp Enferm Dig** 1990 Jan;77(1):55–7 (Eng. Abstr.) (Spa)

DIAGNOSIS

Gallstones in bili–digestive shunts diagnosed by ultrasound. An unusual cause of obstruction. Hederström E, et al. **Acta Radiol** 1989 Sep–Oct;30(5):549–50
Oriental cholangiohepatitis: sonographic findings in 48 cases. Lim JH, et al. **AJR Am J Roentgenol** 1990 Sep;155(3):511–4
Accuracy of sonography for determining the number and size of gallbladder stones before and after lithotripsy. Mathieson JR, et al. **AJR Am J Roentgenol** 1989 Nov; 153(5):977–80
Clinical evaluation for gallstone disease: usefulness of symptoms and signs in diagnosis. Diehl AK, et al. **Am J Med** 1990 Jul;89(1):29–33
Pre–operative ultrasound measurement of bile duct diameter: basis for selective cholangiography. Hunt DR, et al. **Aust N Z J Surg** 1990 Mar;60(3):189–92
Clinical significance of ultrasonographically detected coincidental gallstones. Cucchiaro G, et al. **Dig Dis Sci** 1990 Apr;35(4):417–21
Comparison of oral cholecystography (OCG) with real time ultrasonography in the diagnosis of cholelithiasis at the Tikur Anbessa Hospital, Addis Ababa, Ethiopia. Tilahun E, et al. **East Afr Med J** 1990 Jan;67(1):39–42
Cystic duct entry—another cause of pseudocalculus. Berkowitz I, et al. **Endoscopy** 1990 Mar;22(2):85–7
Diagnostic cholangioscopy—comparison with conventional methods (radiology, ultrasonography). Jeppsson B, et al. **Endoscopy** 1989 Dec;21 Suppl 1:344–6 (19 ref.)
Role of colonoscopy in gallstone ileus:—a case report. Patel SA, et al. **Endoscopy** 1989 Nov;21(6):291–2
Combined colonic and biliary surgery: assessment of risk in elderly patients. Michel LA, et al. **Int Surg** 1989 Oct–Dec; 74(4):244–6
Role of ultrasonography in non–visualised gallbladder on oral cholecystography. Sood RG, et al. **J Assoc Physicians India** 1989 Dec;37(12):777–9
Acute abdominal pain: the value of liver function tests in suspected cholelithiasis. Dunlop MG, et al. **J R Coll Surg Edinb** 1989 Jun;34(3):124–7
Prenatal detection of gallstones. Abbitt PL, et al. **JCU** 1990 Mar–Apr;18(3):202–4
Cholelithiasis in a six–week–old asymptomatic neonate. Wagner LD, et al. **JCU** 1989 Nov–Dec;17(9):692–4
Intact stones or fragments? Potential pitfalls in the imaging of patients after biliary extracorporeal shock wave lithotripsy. Khouri MR, et al. **Radiology** 1990 Oct; 177(1):147–51
Cholelithiasis in a 5–year–old girl—case report. López HB, et al. **Rontgenblatter** 1990 Aug;43(8):349–51
Polarized light microscopic examination of human bile in the diagnosis of microlithiasis of the gallbladder. Gogna A, et al. **Trop Gastroenterol** 1989 Jul–Sep;10(3):167–72
[Gallstone ileus—the diagnostic and surgical problems] Stoianov S, et al. **Khirurgiia (Sofiia)** 1989;42(6):15–9 (7 ref.) (Eng. Abstr.) (Bul)
[Experience in mid–operative detection of intrahepatic biliary calculus] Hu ZZ. **Chung Hua I Hsueh Tsa Chih** 1989 Sep; 69(9):529–30 (Chi)
[Sonography as the basic diagnostic method in cholelithiasis] Grossmann F. **Rozhl Chir** 1989 Jul;68(7):484–7 (Eng. Abstr.) (Cze)
[Pyocholecyst strangulated in a Spiegelan hernia (letter)] Laborde Y, et al. **J Chir (Paris)** 1989 Dec;126(12):700–1 (Fre)
[Fetal cholelithiasis. Apropos of 3 cases and review of the literature] Broussin B, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(1):90–5 (14 ref.) (Eng. Abstr.) (Fre)
[Ultrasound evaluation of gallbladder function using planimetry] Janowitz P, et al. **Ultraschall Med** 1990 Jun; 11(3):135–8 (Eng. Abstr.) (Ger)
[Differential ultrasound diagnosis of the healthy, inflamed and diseased gallbladder] Hagelstein H, et al. **Zentralbl Chir** 1990;115(6):341–6 (Eng. Abstr.) (Ger)
[X–ray diffraction study of biliary calculi. Morphological and composition correlations of calculi] Bassi N, et al. **G Clin Med** 1990 May;71(5):331–5 (Eng. Abstr.) (Ita)
[The importance of intraoperative diagnosis in biliary lithiasis] Pancaldi R, et al. **Minerva Chir** 1989 Sep 30; 44(18):1989–94 (Eng. Abstr.) (Ita)
[Indication of diagnostic imaging of ultrasonography and computed tomography for extracorporeal shock wave lithotripsy in gallbladder stones] Murata I, et al. **Nippon Rinsho** 1989 Dec;47(12):2748–52 (Jpn)
[Studies on cholangiographic and endoscopic findings of primary intrahepatic cholesterol stones] Kondo S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Dec;86(12):2779–86 (Eng. Abstr.) (Jpn)
[Endoscopic retrograde cholangio–pancreatography in suspected acute gallstone pancreatitis] Lygren I, et al. **Tidsskr Nor Laegeforen** 1990 Apr 10;110(10):1216–8 (Eng. Abstr.) (Nor)
[Value of ultrasonography for the diagnosis of cholelithiasis in light of surgical verification] Szpakowicz J, et al. **Przegl Lek** 1990;47(2):283–6 (Eng. Abstr.) (Pol)
[Asymptomatic biliary lithiasis] Acalovschi M. **Rev Med Interna [Med Interna]** 1989 May–Jun;41(3):239–47 (28 ref.) (Rum)
[Roentgenologic and endoscopic procedures in the diagnosis and treatment of benign diseases of the biliary tract (review of the literature)] Efendiev VM, et al. **Khirurgiia (Mosk)** 1990 Apr;(4):145–9 (80 ref.) (Rus)
[Value of ultrasonic examination in the diagnosis of cholelithiasis] Kulig I, et al. **Khirurgiia (Mosk)** 1990 Jan; (1):26–7 (Rus)
[Echography and cholecystography in the diagnosis of chronic calculous cholecystitis] Lupal'tsev VI, et al. **Klin Khir** 1989;(9):35–7 (Eng. Abstr.) (Rus)
[The importance of the NBT test in the prognosis and assessment of treatment efficacy in complicated forms of cholelithiasis] Zemskov VS, et al. **Klin Khir** 1989;(9):28–9 (Eng. Abstr.) (Rus)
[Diagnostic possibilities of mathematical analysis in the evaluation of lithogenicity of the bile] Ivanchenkova RA. **Klin Med (Mosk)** 1990 Apr;68(4):86–8 (Eng. Abstr.) (Rus)
[Diagnostic and therapeutic cholecystoscopy] Sinev IuV, et al. **Klin Med (Mosk)** 1989 Aug;67(8):76–80 (Eng. Abstr.) (Rus)
[The calcium content in the bile of patients with cholelithiasis, chronic hepatitis, liver cirrhosis and in healthy subjects] Dzhuraev KhSh, et al. **Lab Delo** 1990; (1):23–4 (Eng. Abstr.) (Rus)
[Laboratory diagnosis of cholelithiasis (review of the literature)] Ganitkevich IaV. **Lab Delo** 1990;(2):4–8 (38 ref.) (Rus)
[Ultrasonic and x–ray parallels in the diagnosis of cholelithiasis] Pantsyrev IuM, et al. **Med Radiol (Mosk)** 1989 Sep;34(9):22–7 (Eng. Abstr.) (Rus)
[Echosonography and retrograde cholangiopancreatography in selecting surgical tactics in mechanical jaundice] Kanorskiĭ ID, et al. **Sov Med** 1989;(10):35–7 (Eng. Abstr.) (Rus)
[Ultrasonic examination in biliary tract diseases] Nikolenko KK, et al. **Vestn Khir** 1989 Apr;142(4):118–21 (Eng. Abstr.) (Rus)
[Fetal cholelithiasis. A clinical case and review of the literature] López Gutiérrez JC, et al. **An Esp Pediatr** 1990 May;32(5):468–9 (Spa)
[Bouveret's syndrome. Diagnostic and therapeutic considerations apropos of a new case] Cruz Vicente JM, et al. **Rev Esp Enferm Apar Dig** 1989 Nov;76(5):499–501 (Eng. Abstr.) (Spa)

DRUG THERAPY

Methyl–tert–butyl–ether for treating bile duct stones: the British experience. Neoptolemos JP, et al. **Br J Surg** 1990 Jan;77(1):32–5
Pharmacological aspects and therapeutic effects of ursodeoxycholic acid. Leuschner U, et al. **Dig Dis** 1990; 8(1):12–22 (81 ref.)
Advances in bile acid therapy. Proceedings of the Second International Ursodeoxycholic Acid Symposium. Vail, Colorado, August 26 and 27, 1988. **Dig Dis Sci** 1989 Dec; 34(12 Suppl):1S–65S
Preventing a hot gallbladder: promising new application of a new drug. Borum M, et al. **Gastroenterology** 1990 Jan; 98(1):240–1
Gallstone recurrence after oral bile acid dissolution treatment [letter; comment] Borum M, et al. **Gastroenterology** 1990 Jun;98(6):1723–4 Comment on: Gastroenterology 1989 Sep;97(3):726–31.
Dissolution of calcium bilirubinate and calcium carbonate debris remaining after methyl tert–butyl ether dissolution of cholesterol gallstones. Nelson PE, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1345–50
Gallstone dissolution in vitro using methyl tert–butyl ether: radiologic selection criteria. Nelson PE, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1280–3
In vivo kinetics of radiolucent gallstone dissolution by oral dihydroxy bile acids. Senior JR, et al. **Gastroenterology** 1990 Jul;99(1):243–51
Effects of ursodeoxycholic acid on gallbladder contraction and cholecystokinin release in gallstone patients and normal subjects. van Erpecum KJ, et al. **Gastroenterology** 1990 Sep;99(3):836–42
Tissue response of the biliary and digestive system of rabbits after MTBE infusion into the gallbladder. Adam G, et al. **Invest Radiol** 1990 Jan;25(1):58–61
Cost–effectiveness of ursodiol: the creature from the black box. Diehl AK. **J Gen Intern Med** 1990 Jul–Aug;5(4):374–5
Gallstone dissolution agents. Fink A, et al. **Ohio Med** 1990 Mar;86(3):210–3
A new agent for gallstone dissolution: experimental and clinical evaluation. Mack EA, et al. **Surg Forum** 1978; 29:438–9
Medical dissolution of gallstones by ursodeoxycholic acid: a clinical trial on 14 patients. Lin JT, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Apr;88(4):370–6
[Clinical and experimental observations of jinqiancao gao on preventive and therapeutic effects in cholelithiasis] Zhang GS, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jul; 9(7):396–7, 387 (Eng. Abstr.) (Chi)
[Oral dissolving treatment of gallbladder calculi: focus in 1989] Erlinger S. **Ann Chir** 1989;43(6):417–9 (Eng. Abstr.) (Fre)
[Methods and results of gallstone dissolution] Encke A, et al. **Chirurg** 1990 May;61(5):354–8 (19 ref.) (Ger)
[Chemolitholysis of gallstones as ambulatory treatment by the established physician] Kienzle HF, et al. **Leber Magen Darm** 1989 Sep;19(5):248–52, 254 (Eng. Abstr.) (Ger)
[Dissolution of gallstones by the established physician] Leuschner U. **Leber Magen Darm** 1989 Sep;19(5):228–9 (Ger)
[Percutaneous transhepatic lysis of gallstones] Schumacher KA, et al. **ROFO** 1990 Apr;152(4):446–52 (Eng. Abstr.) (Ger)
[New aspects in therapeutic use of ursodeoxycholic acid] Held C. **Z Arztl Fortbild (Jena)** 1990;84(5):199–201 (16 ref.) (Ger)
[Nucleation time and growth time in patients with cholesterol gallstone—factors affecting nucleation time and growth time and effect of UDCA and CDCA] Nomura Y. **Nippon Shokakibyo Gakkai Zasshi** 1989 May;86(5):1103–13 (Eng. Abstr.) (Jpn)
[A new experimental trial for dissolution of gallbladder stones] Shimoda I, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Oct;86(10):2481 (Jpn)
[Experimental studies on dissolution of cholesterol gallstones using MTBE] Yamashita N. **Nippon Shokakibyo Gakkai Zasshi** 1990 May;87(5):1183–90 (Eng. Abstr.) (Jpn)
[Dissolution of residual biliary calculi in early postoperative periods] Postolov PM, et al. **Khirurgiia (Mosk)** 1989 Dec; (12):67–71 (Eng. Abstr.) (Rus)
[Medical treatment of cholelithiasis. I. Bile acids] Moreno Sánchez D. **Rev Esp Enferm Dig** 1990 Feb;77(2):159–64 (96 ref.) (Eng. Abstr.) (Spa)

ENZYMOLOGY

An appraisal of the role of biliary phospholipases in the pathogenesis of gallstone disease. Groen AK, et al. **Biochim Biophys Acta** 1989 Nov 28;1006(2):179–82
On the saturation of the cholesterol 7 alpha–hydroxylase in human liver microsomes. Einarsson K, et al. **J Lipid Res** 1989 Oct;30(10):1477–81
[The changes of beta–glucuronidase in rabbit model with calcium bilirubinate stone] Li N, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Jun;21(2):185–7 (Eng. Abstr.) (Chi)

EPIDEMIOLOGY

High incidence of cholelithiasis in older patients with homozygous beta-thalassemia. Goldfarb A, et al. **Acta Haematol (Basel)** 1990;83(3):120–2

Re: "Prevalence of gallstone disease in a general population of Okinawa, Japan" [letter; comment] Capocaccia L. **Am J Epidemiol** 1990 Jun;131(6):1098–9 Comment on: Am J Epidemiol 1988 Sep;128(3):598–605.

Risk factors for gallstone disease in the Hispanic populations of the United States. Maurer KR, et al. **Am J Epidemiol** 1990 May;131(5):836–44

Gallstone prevalence and gallbladder volume in children and adolescents: an epidemiological ultrasonographic survey and relationship to body mass index. Palasciano G, et al. **Am J Gastroenterol** 1989 Nov;84(11):1378–82

Prevalence of gallstones in elderly black women in Soweto, Johannesburg, as assessed by ultrasound. Walker AR, et al. **Am J Gastroenterol** 1989 Nov;84(11):1383–5

The incidence of cholelithiasis and cholecystitis in Rochester, Minn, 1950 through 1969. Maram ES, et al. **Arch Intern Med** 1990 Sep;150(9):1833–6

Incidence of cholelithiasis in Egyptians and its relationship with cholesterol. Zaki OA, et al. **Br J Surg** 1967 Aug; 54(8):713–7

Gallstone disease in an Ethiopian referral hospital [published erratum appears in Ethiop Med J 1990 Jan;28(1):47] Kefene H, et al. **Ethiop Med J** 1989 Oct;27(4):209–16

Cholelithiasis among American Indians [letter; comment] Shaheb S. **Gastroenterology** 1990 Jan;98(1):251–2 Comment on: Gastroenterology 1989 Mar;96(3):825–30.

Pancreas divisum. A predisposing factor to pancreatitis? Hayakawa T, et al. **Int J Pancreatol** 1989 Dec;5(4):317–26 (38 ref.)

Gall bladder disease: an analytical report of 250 cases. Singh A, et al. **J Indian Med Assoc** 1989 Nov;87(11):253–6

Cholelithiasis in infants, children, and adolescents. Holcomb GW Jr, et al. **Pediatr Rev** 1990 Mar;11(9):268–74 (19 ref.)

Gallstones and plasma lipids in a Danish population. Jørgensen T. **Scand J Gastroenterol** 1989 Oct;24(8):916–22

Gallstones and diet in a Danish population. Jørgensen T, et al. **Scand J Gastroenterol** 1989 Sep;24(7):821–6

The epidemiology of gallstones in a 70-year-old Danish population. Jørgensen T, et al. **Scand J Gastroenterol** 1990 Apr;25(4):335–40

Prevalence of gallstones at autopsy at the Institutes of Forensic Medicine in Aarhus and Copenhagen, Denmark, in 1944–1985. Teilum D. **Scand J Gastroenterol** 1990 Apr; 25(4):401–4

The prevalence of gallstone disease in a Dutch population. Thijs C, et al. **Scand J Gastroenterol** 1990 Feb;25(2):155–60 (26 ref.)

Biliary stones and bacteriae in bile study in 211 consecutive cases. Matin MA, et al. **Tokushima J Exp Med** 1989 Jun; 36(1–2):11–6

[An epidemiological survey of gallstones with gray-scale ultrasound] Zhao Y, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1990 Jun;21(2):217–20 (Eng. Abstr.) **(Chi)**

[Epidemiology of gallbladder calculi in young females] Pannwitz H, et al. **Leber Magen Darm** 1990 Jul; 20(4):189–92, 194 (Eng. Abstr.) **(Ger)**

[Prevalence of cholelithiasis. Results of an epidemiologic study using sonography in East Germany] Berndt H, et al. **Z Gastroenterol** 1989 Nov;27(11):662–6 (Eng. Abstr.) **(Ger)**

[The Boario project. A study of the prevalence of lithiasis in a spa population] Rusticali AG, et al. **Minerva Med** 1990 Apr;81(4):301–6 (Eng. Abstr.) **(Ita)**

[The interrelationship of cholelithiasis and ischemic heart disease] Kushnir VE, et al. **Vrach Delo** 1989 Dec;(12):57–8 (Eng. Abstr.) **(Rus)**

[Cholelithiasis in childhood] Alonso Calderón JL, et al. **An Esp Pediatr** 1989 Aug;31(2):114–7 (Eng. Abstr.) **(Spa)**

ETHNOLOGY

Frequency of clinical gallstone disease among Yemenite Jews in Israel. Weingarten MA, et al. **Isr J Med Sci** 1990 Apr; 26(4):200–4

ETIOLOGY

Hepatolithiasis and clogged endoprosthesis after endoscopic retrograde biliary drainage [letter] Takahashi T, et al. **Am J Gastroenterol** 1990 Sep;85(9):1204–5

Gall stones in homozygous sickle cell disease [letter] Webb DK, et al. **Arch Dis Child** 1989 Sep;64(9):1342

Delayed formation of gallstone after transcatheter arterial embolization for hepatocellular carcinoma. Is elective cholecystectomy advisable during hepatectomy? Jeng KS, et al. **Arch Surg** 1989 Nov;124(11):1319–22

Effect on pregnancy on gallstone formation. Sali A, et al. **Aust N Z J Obstet Gynaecol** 1989 Nov;29(4):386–9

Biliary lipid composition and gallstone formation in rabbits fed on soy protein, cholesterol, casein and modified casein. Ozben T. **Biochem J** 1989 Oct 1;263(1):293–6

A case of biliary calculi of parasitic origin. Robinson KP. **Br J Surg** 1966 May;53(5):430–3 (16 ref.)

Effect of age and sensitivity to cholecystokinin on gallstone formation in the guinea pig. Poston GJ, et al. **Gastroenterology** 1990 Apr;98(4):993–9

Increased volume and decreased emptying of the gallbladder in large (morbidly obese, tall normal, and muscular normal) people. Vezina WC, et al. **Gastroenterology** 1990 Apr; 98(4):1000–7

Interactions between gall bladder bile and mucosa; relevance to gall stone formation. Jacyna MR. **Gut** 1990 May; 31(5):568–70 (48 ref.)

Cholesterol crystal nucleation: a decade-long search for the missing link in gallstone pathogenesis. Afdhal NH, et al. **Hepatology** 1990 Apr;11(4):699–702 (45 ref.)

Isolation of a potent cholesterol nucleation-promoting activity from human gallbladder bile: role in the pathogenesis of gallstone disease. Groen AK, et al. **Hepatology** 1990 Apr;11(4):525–33

Lipid metabolism in the development of cholesterol gallstones in hamsters. IV. The effect of essential phospholipids and plant sterols on the biliary lipids. Kubota S, et al. **Hiroshima J Med Sci** 1981 Dec;30(4):301–9

Cholelithiasis and teenage mothers. Buiumsohn A, et al. **J Adolesc Health Care** 1990 Jul;11(4):339–42 (16 ref.)

Gallstone formation associated with weight reduction. Dickerman JL. **J Am Osteopath Assoc** 1990 May; 90(5):456–8

Dietary factors in the pathogenesis and management of gallstones. Tandon RK, et al. **J Assoc Physicians India** 1989 May;37(5):337–40 (50 ref.)

Gallbladder sludge and lithiasis in an infant born to a morphine user mother. Figueroa-Colon R, et al. **J Pediatr Gastroenterol Nutr** 1990 Feb;10(2):234–8

Volume and emptying of the gallbladder in patients with cystic fibrosis. Santamaria F, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr;10(3):303–6

Gallstone disease in patients with severe short bowel syndrome dependent on parenteral nutrition. Manji N, et al. **JPEN J Parenter Enteral Nutr** 1989 Sep–Oct; 13(5):461–4

Stones and kilograms [letter; comment] **Lancet** 1989 Dec 2; 2(8675):1343 Comment on: Lancet 1989 Oct 7;2(8667):844.

The effect of alfalfa-corn diets on cholesterol metabolism and gallstones in prairie dogs. Cohen BI, et al. **Lipids** 1990 Mar;25(3):143–8

Gallbladder emptying in perimenopausal women. Petroianu A. **Med Hypotheses** 1989 Oct;30(2):129–30

The risk of gallstones in middle-aged women [letter; comment] **N Engl J Med** 1990 Feb 15;322(7):472–4 Comment on: N Engl J Med 1989 Aug 31;321(9):563–9.

Dietary beans: a risk factor for cholesterol gallstones? **Nutr Rev** 1989 Dec;47(12):369–71 (10 ref.)

Cholelithiasis follows total gastrectomy in Zollinger-Ellison syndrome. Cattey RP, et al. **Surgery** 1989 Dec; 106(6):1070–3

[Research on the fundamental factors and conditions of gallstone formation] Yin GY. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jul;9(7):391–5, 387 (Eng. Abstr.) **(Chi)**

[Basic processes of the formation of fibril-reticular structures in gallstones] Yu CS, et al. **Chung Hua I Hsueh Tsa Chih** 1989 May;69(5):291–3 **(Chi)**

[Mucus histochemical study of bilirubin cholangiolithiasis in rabbit model] Li N, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Dec;20(4):417–20 (Eng. Abstr.) **(Chi)**

[Visceral leishmaniasis disclosed by pigmentary lithiasis (letter)] Benhamou B, et al. **Arch Fr Pediatr** 1990 Jan; 47(1):69 **(Fre)**

[Juxtapapillary diverticula and biliary lithiasis: a causal relation?] Legoux JJ. **Gastroenterol Clin Biol** 1990; 14(2):196–7 **(Fre)**

[Gallbladder polyps and gallbladder stones] Wolpers C. **Dtsch Med Wochenschr** 1989 Dec 8;114(49):1905–12 (Eng. Abstr.) **(Ger)**

[Epidemiology and pathogenesis of gallstones. Status of knowledge and therapeutic consequences] Holstege A, et al. **Fortschr Med** 1989 Nov 10;107(32):673–8 (27 ref.) (Eng. Abstr.) **(Ger)**

[Changes in biliary lithogenicity caused by 4 weeks' weight reduction] Janowitz P, et al. **Leber Magen Darm** 1989 Jul; 19(4):190–5 (Eng. Abstr.) **(Ger)**

[The residual cystic stump syndrome: is it reality or fantasy?] Tritapepe R, et al. **Ann Ital Chir** 1989;60(3):133–5 **(Ita)**

[Cholelithiasis in childhood. Case study contribution] Tabilio S, et al. **Minerva Chir** 1989 Jul 31;44(13–14):1775–6 (10 ref.) (Eng. Abstr.) **(Ita)**

[Biliary lithiasis in thalassemia major] Di Gregorio F, et al. **Pediatr Med Chir** 1989 Jul-Aug;11(4):429–32 (Eng. Abstr.) **(Ita)**

[Lithogenic bile: from supersaturation to cholesterol nucleation] Sipahi AM, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Sep–Oct; 44(5):175–7 **(Por)**

[Cholelithiasis—a complication of aortic valve prosthesis] Gritsenko VV, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):88–9 **(Rus)**

[Acute cholecystitis in patients with mechanical trauma] Skliarevskiĭ VV. **Khirurgiia (Mosk)** 1989 Jul;(7):40–2 (Eng. Abstr.) **(Rus)**

[A new stage in the study of the pathogenesis of cholelithiasis] Dederer IuM, et al. **Klin Med (Mosk)** 1989 Jul;67(7):24–30 (43 ref.) **(Rus)**

[Lithogenic properties of bile in cholelithiasis] Ivanchenkova RA, et al. **Klin Med (Mosk)** 1989 Oct;67(10):92–8 (Eng. Abstr.) **(Rus)**

[Gas-chromatographic analysis of hypercholestanol in the bile and its role in the pathogenesis of cholelithiasis] Krikshtopaĭtis MI, et al. **Sov Med** 1989;(9):19–24 (Eng. Abstr.) **(Rus)**

[Crystallization of cholesterol in the gallbladder bile] Antezana C, et al. **Rev Med Chil** 1988 Sep;116(9):858–62 (Eng. Abstr.) **(Spa)**

GENETICS

Familial hyperlipoproteinemia and gallstones. Singh A. **Can Med Assoc J** 1975 Oct 18;113(8):733–5

HLA antigens in Greek patients with cholelithiasis. Papasteriades C, et al. **Dis Markers** 1990 Jan–Feb; 8(1):17–21

Unilateral renal agenesis associated with various metabolic disorders in three siblings. Uchida S, et al. **Nephron** 1990; 54(1):86–8

[Complicated cholecysto-choledocholithiasis in a patient with atypical glucose-6-phosphate dehydrogenase enzyme defect] Herzig M, et al. **Zentralbl Chir** 1989;114(22):1473–7 **(Ger)**

IMMUNOLOGY

[Clinical significance of serum secretory immunoglobulin A in cholelithiasis and biliary tract obstruction] You XY. **Chung Hua Wai Ko Tsa Chih** 1989 Sep;27(9):550–3, 575 (Eng. Abstr.) **(Chi)**

[Disordered immunologic reactivity in patients with chronic calculous cholecystitis] Koval'chuk LA, et al. **Klin Khir** 1989;(9):6–7 (Eng. Abstr.) **(Rus)**

[Correction of immunological status of patients with cholelithiasis for the prevention of postoperative complications] Aleksandrov VN, et al. **Vestn Khir** 1990 Mar;144(3):108–11 (Eng. Abstr.) **(Rus)**

METABOLISM

Correlations between concentrations of lipids in serum and bile of patients with gallstones [letter] Abu-Farsakh FA, et al. **Clin Chem** 1990 Jan;36(1):170–1

Effects of a concanavalin A-binding biliary glycoprotein on nucleation time of gallbladder bile. Nakano A, et al. **Gastroenterol Jpn** 1990 Feb;25(1):88–92

Gallbladder contractility and gallstone formation in the Richardson Ground Squirrel. Ono K, et al. **Gastroenterol Jpn** 1990 Feb;25(1):93–103

Hepatic biliary lipid secretion and gall bladder biliary lipid mass in gall stone patients: effect of ursodeoxycholic acid. Lanzini A, et al. **Gut** 1990 Feb;31(2):226–30

pH regulation in human gallbladder bile: study in patients with and without gallstones. Marteau C, et al. **Hepatology** 1990 Jun;11(6):997–1002

Cholecystocolonic fistula: malabsorptive consequences of lost bile acids. Benage D, et al. **J Clin Gastroenterol** 1990 Apr; 12(2):192–4

Physico-chemical factors predisposing to pigment gallstone formation in liver cirrhosis. Alvaro D, et al. **J Hepatol** 1990 Mar;10(2):228–34

Lincomycin treatment of guinea pigs causes formation of pigmented phosphate containing gallbladder sludge and stones. Snowball S, et al. **J Hepatol** 1989 Sep;9(2):159–66

Altered bile composition during cholesterol gallstone formation: cause or effect? Magnuson TH, et al. **J Surg Res** 1990 Jun;48(6):584–9

The pathophysiological characteristics of bile from patients with gallstones: the role of prostaglandins and mucin in gallstone formation. Inoue T, et al. **Jpn J Surg** 1990 Jan; 20(1):10–8

Effect of chronic ursocholic acid administration on bile lipid composition and bile acid pool size in gallstone patients. Lanzini A, et al. **Scand J Gastroenterol** 1990 Jul;25(7):711–9

Gallbladder mucin and cholesterol and pigment gallstone formation in hamsters. Malet PF, et al. **Scand J Gastroenterol** 1989 Nov;24(9):1055–60

Bile acid pool size and gallbladder storage capacity in gallstone disease. Nilsell K. **Scand J Gastroenterol** 1990 Apr;25(4):389–94

Fragmentation of human gallstones using ultrasound and electrohydraulic lithotripsy: experimental and clinical experience. Callans LS, et al. **Surgery** 1990 Feb; 107(2):121–7

Lectin binding of intrahepatic bile ducts and peribiliary glands in normal livers and hepatolithiasis. Saito K, et al. **Tohoku J Exp Med** 1990 Jan;160(1):81–92

[Pro-and anti-nucleation activity of biliary proteins in gallbladder bile with and without gallstones] Zhao YT. **Chung Hua I Hsueh Tsa Chih** 1989 Dec;69(12):671–3, 46 (Eng. Abstr.) **(Chi)**

[Correlations of the indicators of biochemical composition and physico-chemical properties of the bile in chronic cholecystitis] Tadziev Ila, et al. **Klin Med (Mosk)** 1989 Nov;67(11):52–8 (Eng. Abstr.) **(Rus)**

[Lipid metabolism in cholelithiasis] Grebenev AL, et al. **Sov Med** 1990;(1):18–22 (Eng. Abstr.) **(Rus)**

[Lithogenesis from the aspect of biliary acid metabolism] Trenčanský A, et al. **Vnitr Lek** 1990 Feb;36(2):180–5 (Eng. Abstr.) **(Slo)**

MICROBIOLOGY

[Anaerobes in biliary tract infection] Fu HQ. **Chung Hua Wai Ko Tsa Chih** 1989 Aug;27(8):454–6, 507

(Eng. Abstr.) (Chi)
[Results of intraoperative bacteriological studies of bile from patients operated on for cholelithiasis] Sowier J, et al. **Wiad Lek** 1989 Apr 30;42(8):514–6 (Eng. Abstr.) (Pol)
[Bacteriocholia and cholic acid level in the bile in cholelithiasis] Bekbergenov BM, et al. **Antibiot Khimioter** 1990 Jan;35(1):37–40 (Eng. Abstr.) (Rus)

MORTALITY

[Analysis of causes of death following surgery for gallstones] Yu P. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1990 Apr;12(2):146–9 (Eng. Abstr.) (Chi)
[Postoperative mortality in surgery of cholelithiasis: a retrospective analysis from the years 1972–1980] Herzog U, et al. **Schweiz Rundsch Med Prax** 1990 Mar 6; 79(10):287–90 (Eng. Abstr.) (Ger)

PARASITOLOGY

Schistosomal cholecystitis: report of six cases. al–Saleem T, et al. **Ann R Coll Surg Engl** 1989 Nov;71(6):366–7

PATHOLOGY

Morphology of the prairie dog gallbladder: normal characteristics and changes during early lithogenesis. Haley–Russell D, et al. **Am J Anat** 1989 Oct;186(2):133–43
Effect of laser fragmentation of cholesterol and mixed gallstones on in vitro dissolution in methyl tert–butyl ether. Smith BF. **Dig Dis Sci** 1990 Feb;35(2):236–41
Quantitative ultrastructural studies of gall bladder epithelium in gall stone free subjects and patients with gall stones. Sahlin S, et al. **Gut** 1990 Jan;31(1):100–5
Epithelial dysplasia in Caroli's disease [letter; comment] Walker NI, et al. **Gut** 1990 May;31(5):584–5 Comment on: Gut 1989 Aug;30(8):1150–3.
Visibility of gallstone fragments at US and fluoroscopy: implications for monitoring gallstone lithotripsy. Garra BS, et al. **Radiology** 1990 Feb;174(2):343–7
Normal neuronal features of the human gallbladder and structural changes in cholelithiasis patients. Conte VP. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Sep–Oct; 44(5):211–3
Atrophy of left lobe of the liver associated with hepatolithiasis and cholangiocarcinoma. Mohd TH, et al. **Singapore Med J** 1989 Dec;30(6):607–8
Gallstones and obesity: observations from 352 autopsied patients. Fraire AE, et al. **Tex Med** 1990 Feb;86(2):26–8
[Three–dimensional morphology of intrahepatic bile ducts in patients with intrahepatic gallstones] Takahashi Y, et al. **Nippon Geka Gakkai Zasshi** 1990 Jan;91(1):86–94 (Eng. Abstr.) (Jpn)
[Long–term follow–up results in nonoperated patients with intrahepatic and predominant intrahepatic type of hepatolithiasis] Okada S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Feb;87(2):218–24 (Eng. Abstr.) (Jpn)
[Microstructure of vesicular agglomerates of the lithogenic bile] Loginov AS, et al. **Biull Eksp Biol Med** 1989 Aug; 108(8):251–4 (Eng. Abstr.) (Rus)
[A case of the combination of cholelithiasis and urolithiasis in a patient with Lobstein's syndrome] Druianov BM, et al. **Klin Khir** 1989;(9):56 (Rus)

PHYSIOPATHOLOGY

Gallstones in gallbladder diseases. Yamamoto M, et al. **Acta Pathol Jpn** 1989 Sep;39(9):582–5
Evaluation of duodenogastric reflux in gallstone disease before and after simple cholecystectomy. Cabrol J, et al. **Am J Surg** 1990 Sep;160(3):283–6
Pathophysiology of gallstone formation. Lee SP. **Clin Ther** 1990 May–Jun;12(3):194–9 (5 ref.)
Natural history of biliary stones. Mok HY, et al. **Dig Dis** 1990;8(1):1–11 (61 ref.)
Gallbladder contraction in patients with pigment and cholesterol stones. Behar J, et al. **Gastroenterology** 1989 Dec;97(6):1479–84
Pathogenesis of gallstones: implications for management. Duane WC. **Hosp Pract [Off]** 1990 Mar 15;25(3):65–76, 79–80 (7 ref.)
Assessment of the motor functions of the gallbladder. Lanzini A, et al. **J Hepatol** 1989 Nov;9(3):383–91 (31 ref.)
Innervation of intrahepatic bile ducts and peribiliary glands in normal human livers, extrahepatic biliary obstruction and hepatolithiasis. An immunohistochemical study. Terada T, et al. **J Hepatol** 1989 Sep;9(2):141–8
Cholescintigraphic observation of the sphincter of Oddi motor activity in patients with gallstone. Aoki Y, et al. **Nippon Geka Hokan** 1989 May 1;58(3):289–98
[Pathophysiology of the formation of gallstone recurrences] Niederau C, et al. **Chirurg** 1990 May;61(5):359–64 (27 ref.) (Ger)
[Esophageal, gastric and duodenal motility in patients with cholelithiasis] Polous IuM, et al. **Klin Med (Mosk)** 1989 Oct;67(10):98–101 (Eng. Abstr.) (Rus)
[Gallbladder contraction] Nieves del Vecchio M. **GEN** 1989 Apr–Jun;43(2):124–9 (56 ref.) (Eng. Abstr.) (Spa)

PREVENTION & CONTROL

The influence of barley fibre on bile composition, gallstone formation, serum cholesterol and intestinal morphology in hamsters. Zhang JX, et al. **APMIS** 1990 Jun;98(6):568–74
Bile acids substituted in the 6 position prevent cholesterol gallstone formation in the hamster. Cohen BI, et al. **Gastroenterology** 1990 Feb;98(2):397–405
Lactose protects against estrogen–induced pigment gallstones in hamsters fed nutritionally adequate purified diets. Hayes KC, et al. **J Nutr** 1989 Nov;119(11):1726–36
Biliary D–glucaric acid: its quantitation and preventive role in gallstone formation. Ho YD, et al. **Scand J Gastroenterol** 1990 Jun;25(6):631–40
Effect of low–cholesterol diet on cholesterol gallstones in prairie dogs. Gurll N, et al. **Surg Forum** 1978;29:440–2
Cholecystokinin prevents parenteral nutrition induced biliary sludge in humans. Sitzmann JV, et al. **Surg Gynecol Obstet** 1990 Jan;170(1):25–31
[Sludge, gallstones and aspirin] Heller FR. **Acta Gastroenterol Belg** 1990 Jan–Feb;53(1):16–21 (26 ref.) (Eng. Abstr.) (Fre)
[Correction of disorders of bile lipid–mineral composition as a method of preventing cholelithiasis] Lukash NV, et al. **Vrach Delo** 1989 Aug;(8):79–81 (Eng. Abstr.) (Rus)
[The correction of disorders of lipid–mineral composition of the bile as a method for preventing cholelithiasis] Lukash NV, et al. **Vrach Delo** 1990 Jan;(1):14–7 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Left hepatic atrophy in Mirizzi syndrome: CT appearance. Pombo F, et al. **Eur J Radiol** 1990 May–Jun;10(3):181–2
Radiographic aspects in transcatheter contact dissolution of calcified gallbladder concrements. Schumacher KA, et al. **Eur J Radiol** 1990 Jan–Feb;10(1):28–34
Radiographic imaging to predict gallstone dissolution: more than meets the eye. Auteri AG, et al. **Gastroenterology** 1990 Jun;98(6):1715–6
Computed tomography evaluation of radiolucent gallstones in vivo. Janowitz P, et al. **Gastrointest Radiol** 1990 Winter; 15(1):58–60
Nonvisualized gallbladder on oral cholecystography: implications for lithotripsy. Wong K, et al. **Gastrointest Radiol** 1990 Spring;15(2):126–8
Gallstones in the pancreatic duct: endoscopic retrograde pancreatographic demonstration. Shapiro MJ, et al. **J Clin Gastroenterol** 1990 Aug;12(4):454–6
CT demonstration of calcifying sludge balls. Feuerstein IM, et al. **J Comput Assist Tomogr** 1990 Mar–Apr;14(2):325–6
Is intravenous cholangiography an alternative to the routine per–operative cholangiogram? Huddy SP, et al. **Postgrad Med J** 1989 Dec;65(770):896–9
Gallstone composition in relation to buoyancy at oral cholecystography. Malet PF, et al. **Radiology** 1990 Oct; 177(1):167–9
[Use of imaging procedures in gallstone ileus] Goldmann A, et al. **Rontgenblatter** 1990 Aug;43(8):345–8 (Eng. Abstr.) (Ger)
[Clinical aspects and therapy of gallstone ileus] Siebermair J, et al. **Wien Med Wochenschr** 1990 Feb 15;140(3):76–9 (Eng. Abstr.) (Ger)
[Mirizzi syndrome and its variants] Meyer GJ, et al. **Z Gastroenterol** 1990 Apr;28(4):202–5 (Eng. Abstr.) (Ger)
[Endoscopic retrograde cholangiography and perioperative cholangiography: to use both, one or none?] Carvajal A, et al. **GEN** 1989 Jan–Mar;43(1):28–33 (Eng. Abstr.) (Spa)

RADIONUCLIDE IMAGING

False–negative morphine–augmented biliary image. Conrad MR, et al. **Clin Nucl Med** 1989 Aug;14(8):625
[The function of the hepatobiliary system in patients with cholelithiasis based on hepatocholescintigraphic data] Berdov BA, et al. **Med Radiol (Mosk)** 1990 Feb;35(2):22–5 (Eng. Abstr.) (Rus)
[Scintigraphy of the liver and biliary tract in the diagnosis of diseases associated with mechanical jaundice] Ozerov VF, et al. **Vestn Khir** 1989 Jul;143(7):7–9 (Rus)

REHABILITATION

[The early rehabilitation of patients with surgically treated calculous cholecystitis] Dolgosh SS, et al. **Klin Khir** 1989; (9):45 (Rus)

SURGERY

Biliary tract surgery: a bacteriologic and epidemiologic study. Hambraeus A, et al. **Acta Chir Scand** 1990 Feb; 156(2):155–62
Long–term follow–up after endoscopic management of retained and recurrent common duct stones. Kullman E, et al. **Acta Chir Scand** 1989 Aug;155(8):395–9
Perinatal aspects of abdominal surgery for nonobstetric disease. Hunt MG, et al. **Am J Perinatol** 1989 Oct; 6(4):412–7
Risk factors that would improve the course and outcome of acute gallstone pancreatitis [letter; comment] Floyd JB Jr. **Am J Surg** 1990 Feb;159(2):270 Comment on: Am J Surg 1988 Nov;156(5):393–6.
Proper timing of surgery for gallstone pancreatitis [editorial] Kelly TR, et al. **Am J Surg** 1990 Apr;159(4):361–2
Endoscopic sphincterotomy for bile duct stones: an institutional review of 272 patients. Bickerstaff KI, et al. **Ann R Coll Surg Engl** 1989 Nov;71(6):384–6
Gallstone pancreatitis. The question of time. Burch JM, et al. **Arch Surg** 1990 Jul;125(7):853–9; discussion 859–60
Ongoing 'threats' to biliary surgery. Cooperman AM, et al. **Arch Surg** 1989 Dec;124(12):1368
Percutaneous cholecystolithotomy. A minimally invasive alternative to cholecystectomy and to shock wave lithotripsy. Griffith DP, et al. **Arch Surg** 1990 Sep; 125(9):1114–8
Safety of operation in biliary pancreatitis during the same hospitalization. Kourtesis GJ, et al. **Aust N Z J Surg** 1990 Feb;60(2):103–7 (16 ref.)
Gallstone pancreatitis: a proposed management strategy. Windsor JA. **Aust N Z J Surg** 1990 Aug;60(8):589–94 (45 ref.)
Selective per–operative cholangiography and scoring method for selection. Abdul Ghani AK. **Bangladesh Med Res Counc Bull** 1989 Dec;15(2):81–9 (41 ref.)
Percutaneous cholecystolithotomy [letter] **BMJ** 1990 Jul 14; 301(6743):120–1
Percutaneous cholecystolithotomy [letter] Cheslyn–Curtis S, et al. **BMJ** 1990 Aug 11;301(6747):339–40
Percutaneous cholecystolithotomy: the first 60 patients. Chiverton SG, et al. **BMJ** 1990 May 19;300(6735):1310–2
Gall bladder function after endoscopic sphincterotomy. Desa LA, et al. **BMJ** 1990 Apr 28;300(6732):1111
Surgical significance of persistent cholecystohepatic ducts. Ortiz VN, et al. **Bol Asoc Med P R** 1989 Sep;81(9):355–8
Complications of cholecystectomy in district general hospitals. Habib NA, et al. **Br J Clin Pract** 1990 May; 44(5):189–92
Management of the Mirizzi syndrome and the surgical implications of cholecystcholedochal fistula. Baer HU, et al. **Br J Surg** 1990 Jul;77(7):743–5
Combined internal and external biliary fistulae treated by percutaneous cholecystlithotomy. Davies MG, et al. **Br J Surg** 1989 Dec;76(12):1258
Asymptomatic gallstones. Gibney EJ. **Br J Surg** 1990 Apr; 77(4):368–72 (85 ref.)
Operative cholangiography in elective cholecystectomy. Pernthaler H, et al. **Br J Surg** 1990 Apr;77(4):399–400
Partial liver resection in the treatment of intra–hepatic duct calculi. Chau GY, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Aug;44(2):115–20
Cholelithiasis in the western region of Saudi Arabia. Mokhtar AM. **East Afr Med J** 1990 Apr;67(4):286–90
Operative laparoscopy: cholecystotomy. Frimberger E. **Endoscopy** 1989 Dec;21 Suppl 1:367–72
Follow–up 6 to 11 years after duodenoscopic sphincterotomy for stones in patients with prior cholecystectomy. Hawes RH, et al. **Gastroenterology** 1990 Apr;98(4):1008–12
Advantages of elective surgical treatment of gallstones. McSherry CK. **Hepatogastroenterology** 1989 Oct; 36(5):330–2 (15 ref.)
Gallstone pancreatitis: optimal timing [letter] Kelly TR. **Hepatology** 1990 Mar;11(3):512–3
XeCl laser in biliary calculus fragmentation: fluence threshold and ablation products. Wrobel R, et al. **IEEE Trans Biomed Eng** 1989 Dec;36(12):1202–9
Effect of bile drainage from the choledochus on bacterial concentration. Chaimoff C, et al. **Isr J Med Sci** 1989 Dec; 25(12):723–5
Rapidly progressive glomerulonephritis following visceral sepsis [letter] Agarwal SK, et al. **J Assoc Physicians India** 1990 Mar;38(3):247–8
The spectrum of cholelithiasis in the first year of life. Schirmer WJ, et al. **J Pediatr Surg** 1989 Oct;24(10):1064–7
Percutaneous ablation of gallstones. Dempsey DT, et al. **J Surg Res** 1990 Aug;49(2):116–20
Percutaneous extraction of gallstones in 20 patients [see comments] Cope C, et al. **Radiology** 1990 Jul;176(1):19–24 Comment in: Radiology 1990 Jul;176(1):5–6.
Percutaneous cholecystolithotomy: preliminary experience and technical considerations. Picus D, et al. **Radiology** 1989 Nov;173(2):487–91
Percutaneous gallbladder intervention [editorial; comment] Picus D. **Radiology** 1990 Jul;176(1):5–6 Comment on: Radiology 1990 Jul;176(1):15–8. Comment on: Radiology 1990 Jul;176(1):19–24.
Percutaneous stone clearance of the gallbladder through an access cholecystostomy. Laparoscopic–guided technique. Abd el Ghany AB, et al. **Surg Endosc** 1989;3(3):126–30
Experience with mini–invasive endoscopic removal of gallstones. Roesel RW. **Surg Endosc** 1989;3(3):124–5
Operative strategy in Mirizzi syndrome. Dewar G, et al. **Surg Gynecol Obstet** 1990 Aug;171(2):157–9
Use of the pulsed dye laser and ultrasonic lithotriptor for removal of multiple intrahepatic gallstones. Flowers BF, et al. **Surg Gynecol Obstet** 1990 May;170(5):443–4
Modern standards for comparison of cholecystectomy with alternative treatments for symptomatic cholelithiasis with emphasis on long–term relief of symptoms. Gilliland TM, et al. **Surg Gynecol Obstet** 1990 Jan;170(1):39–44
Endoscopic sphincterotomy in patients with gallbladder in situ: the influence of periampullary duodenal diverticula. Shemesh E, et al. **Surgery** 1990 Feb;107(2):163–6
Laparoscopic cholecystectomy. Kusminsky RE, et al. **W V Med J** 1990 Aug;86(8):336–7
Current management of intrahepatic stones. Choi TK, et al. **World J Surg** 1990 Jul–Aug;14(4):487–91 (39 ref.)
Highly selective vagotomy combined with cholecystectomy:

is there an increased risk of diarrhea? Schein M. **World J Surg** 1989 Nov–Dec;13(6):782–4; discussion 785
[Enlarged choledocho–duodenostomy] Zhao FK. **Chung Hua Wai Ko Tsa Chih** 1990 Apr;28(4):209–10, 252 (Eng. Abstr.) **(Chi)**
[Biliary ascariasis as complication after cholecystectomy for cholelithiasis] Smits AB, et al. **Ned Tijdschr Geneeskd** 1990 Jul 14;134(28):1369–71 (Eng. Abstr.) **(Dut)**
[Gallstone lithotripsy—the ultimate in the sequence of biliary surgery?] Järvinen HJ. **Duodecim** 1989;105(15):1329–32 (9 ref.) **(Fin)**
[Cholecystectomy under celioscopy] Dubois F, et al. **Ann Chir** 1990;44(3):206–5; discussion 205–6 (Eng. Abstr.) **(Fre)**
[Current concepts of the treatment of cholelithiasis in aged patients] Bahnini J, et al. **J Chir (Paris)** 1989 Nov; 126(11):611–8 (60 ref.) (Eng. Abstr.) **(Fre)**
[Unnecessary cholecystectomy] Benhamou G. **Presse Med** 1990 Jul 7–14;19(27):1261–2 **(Fre)**
[Results of biliary surgery in a teaching center] Mentha G, et al. **Schweiz Med Wochenschr** 1990 Feb 17;120(7):226–30 (Eng. Abstr.) **(Fre)**
[Long–term results of corrective surgery of iatrogenic bile duct injuries] Böttger T, et al. **Chirurg** 1990 May; 61(5):396–401 (Eng. Abstr.) **(Ger)**
[Gallstone ileus. Incidence, clinical aspects, therapy] Braun L. **Chirurg** 1989 Aug;60(8):545–8 (Eng. Abstr.) **(Ger)**
[The diagnostic value of so–called "post–cholecystectomy bile duct dilatation"] Ecsedy G, et al. **Chirurg** 1990 May; 61(5):387–91 (Eng. Abstr.) **(Ger)**
[Bronchobiliary fistula] Fabian W. **Chirurg** 1990 Feb; 61(2):137–9 **(Ger)**
[Gallstone ileus. A report of 104 cases] Hildebrandt J, et al. **Chirurg** 1990 May;61(5):392–5 (Eng. Abstr.) **(Ger)**
[A rare complication following endoscopic papillotomy—gallstone ileus] Schleusner V. **Chirurg** 1989 Dec;60(12):909–11 **(Ger)**
[Support for cholecystectomy—the "gold standard" of gallstone therapy] Trede M, et al. **Chirurg** 1990 May; 61(5):365–9 **(Ger)**
[Surgical treatment of cholelithiasis] Rückauer KD, et al. **Fortschr Med** 1989 Nov 10;107(32):688–91 (20 ref.) (Eng. Abstr.) **(Ger)**
[Indications for endoscopic papillotomy] Scheurer U. **Schweiz Med Wochenschr** 1990 Mar 3;120(9):287–94 (28 ref.) (Eng. Abstr.) **(Ger)**
[Laparoscopic cholecystectomy. Personal experiences in 20 cases] Klaiber C, et al. **Schweiz Rundsch Med Prax** 1990 Jun 19;79(25):787–90 (Eng. Abstr.) **(Ger)**
[Gallstones and no end?] Berndt H, et al. **Z Arztl Fortbild (Jena)** 1990;84(5):183–5 **(Ger)**
[Therapy standards in gastroenterologic surgery. Acute cholecystitis] Gall FP, et al. **Z Gastroenterol [Verh]** 1990 Apr;25:94–5 **(Ger)**
[Intestinal loop incarceration in the drainage canal. A rare cause of postoperative ileus] Tielmann HJ, et al. **Zentralbl Chir** 1989;114(20):1367–70 **(Ger)**
[Postcholecystectomy syndrome and secondary bile duct calculi: therapy notes] Doldi SB, et al. **Ann Ital Chir** 1989; 60(3):119–26 (42 ref.) **(Ita)**
[Indications for and comparisons between transduodenal papillostomy and choledochoduodenostomy] Natalini E, et al. **Ann Ital Chir** 1989;60(2):93–8; discussion 99 (38 ref.) (Eng. Abstr.) **(Ita)**
[Intrahepatic biliary lithiasis: endoscopic transpapillary treatment] De Sanctis G, et al. **Minerva Chir** 1990 Mar 31;45(6):377–81 (Eng. Abstr.) **(Ita)**
[Endoscopic papillotomy today. Indications and results] Purri P, et al. **Minerva Chir** 1990 Feb;45(3–4):169–71 (Eng. Abstr.) **(Ita)**
[Endoscopic sphincterotomy in the treatment of biliary lithiasis. Our experience] Sedici A, et al. **Minerva Chir** 1990 Mar 15;45(5):227–31 (Eng. Abstr.) **(Ita)**
[The effect of cholecystectomy intervention on the symptomatology in patients with biliary lithiasis] Gallo E, et al. **Minerva Med** 1989 Oct;80(10):1103–9 (Eng. Abstr.) **(Ita)**
[The comparative results of endoscopic and transduodenal papillotomy in the treatment of primary, residual and recurrent biliary lithiasis] Purri P, et al. **Minerva Med** 1989 Aug;80(8):885–7 **(Ita)**
[Concomitant coronary artery bypass and cholecystectomy: a case report] Hoshino R, et al. **Kyobu Geka** 1989 Nov; 42(12):1043–6 (Eng. Abstr.) **(Jpn)**
[Lithotomy of bile duct stones by flash–lamp–pumped dye laser] Yamada H, et al. **Nippon Geka Gakkai Zasshi** 1989 Sep;90(9):1602–4 (Eng. Abstr.) **(Jpn)**
[Improvement of problems in gallstone surgery] Fujimura M. **Nippon Geka Hokan** 1989 Jan 1;58(1):1–2 **(Jpn)**
[Peroral cholangiscopic lithotomy for intrahepatic stones] Yugi H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Mar; 87(3):872–7 **(Jpn)**
[Effect od external drainage of the biliary tract on bile infection] Kubiak J, et al. **Wiad Lek** 1990 Apr 15; 43(8):318–23 (Eng. Abstr.) **(Pol)**
[Psychological determinants of symptoms in patients after cholecystectomy] Swiątnicka E, et al. **Wiad Lek** 1989 Jun 15;42(12):784–7 (Eng. Abstr.) **(Pol)**
[Cholecystectomy in asymptomatic gallstones. Indications, opportunities and arguments in favor of surgical intervention] Popovici A. **Rev Med Interna [Med Interna]** 1989 Sep–Oct; 41(5):391–400 (40 ref.) (Eng. Abstr.) **(Rum)**
[Combined surgery of the large intestine and biliary tract] Fedorov VD, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):3–6 (Eng. Abstr.) **(Rus)**
[Diagnosis and treatment of biliary–pleural fistula] Postrelov NA, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):130–1 **(Rus)**
[Characteristics and results of the treatment of cholelithiasis in elderly patients] Shchigel B, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):18–22 (Eng. Abstr.) **(Rus)**
[Surgical interventions in concurrent and concomitant diseases in patients with myasthenia gravis] Shkrob OS, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):5–9 (Eng. Abstr.) **(Rus)**
[Combined operations in cholelithiasis] Uspenskiĭ LV, et al. **Khirurgiia (Mosk)** 1989 Oct;(10):60–5 (Eng. Abstr.) **(Rus)**
[The passing of a large bile concretion after endoscopic papillosphincterotomy] Vorob'ev FP, et al. **Klin Khir** 1989; (9):59 **(Rus)**
[Endoscopic papillosphincterotomy and nasobiliary drainage in the surgery of the organs of the hepato–pancreato–duodenal zone] Lutsevich EV, et al. **Sov Med** 1990;(4):87–90 **(Rus)**
[Diagnostic procedures during surgical treatment of cholecystitis] Al'perovich BI. **Vestn Khir** 1990 Mar; 144(3):52–3 **(Rus)**
[Intraoperative diagnosis of complications of cholelithiasis during its surgical treatment] Danilov MV, et al. **Vestn Khir** 1990 Mar;144(3):53–5 **(Rus)**
[Acute gastroduodenal ulcer caused by surgery of the biliary tract] Kurygin AA, et al. **Vestn Khir** 1990 Jan;144(1):123–5 **(Rus)**
[Concerning surgical cholangiography] Nikovskiĭ DL. **Vestn Khir** 1990 Mar;144(3):61–4 **(Rus)**
[Increasing the effectiveness of lymphosorption in patients with mechanical jaundice] Veronskiĭ GI, et al. **Vestn Khir** 1989 Aug;144(8):29–33 (Eng. Abstr.) **(Rus)**
[Biliary lithiasis] González L, et al. **Rev Esp Enferm Apar Dig** 1989 Dec;76(6 Pt 2):622–6 (50 ref.) (Eng. Abstr.) **(Spa)**
[Significance of peroperative cholangiography in elective geriatric surgery of the bile ducts] Planells Roig MV, et al. **Rev Esp Enferm Dig** 1990 May;77(5):333–6 (Eng. Abstr.) **(Spa)**

THERAPY

The place of lithotripsy and surgery in the management of gallstone disease. Heberer G, et al. **Adv Surg** 1990; 23:291–314 (93 ref.)
Percutaneous cholecystolithotomy with endoscopic lithotripsy by using a pulsed–dye laser: preliminary experience. Bogan ML, et al. **AJR Am J Roentgenol** 1990 Oct;155(4):781–4
Novel nitinol basket instrument for percutaneous cholecystolithotomy. Cope C. **AJR Am J Roentgenol** 1990 Sep;155(3):515–6
Routine liver function tests and serum amylase determinations after biliary lithotripsy: are they necessary? Goodacre BW, et al. **AJR Am J Roentgenol** 1990 Oct; 155(4):771–4
The value of extracorporeal shock–wave lithotripsy in the management of bile duct stones. Lee SH, et al. **AJR Am J Roentgenol** 1990 Oct;155(4):775–9
Gallstone dissolution in methyl tert–butyl ether after mechanical fragmentation: in vitro study. Lu DS, et al. **AJR Am J Roentgenol** 1990 Jul;155(1):67–72
Hepatic subcapsular hematoma: an unusual complication of biliary lithotripsy. McGrath FP, et al. **AJR Am J Roentgenol** 1990 May;154(5):1015–6
Gallstone extracorporeal shock–wave lithotripsy: time and treatment considerations. Nelson RC, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):291–4
Gallstone extracorporeal shock–wave lithotripsy: time and treatment considerations [letter] Nijs HG, et al. **AJR Am J Roentgenol** 1990 Sep;155(3):655–6
Meeting of the Food and Drug Administration Gastroenterology–Urology Device Section Advisory Panel on Extracorporeal Shock–Wave Lithotripsy for Gallbladder Stones. October 19, 1989 [published erratum appears in Am J Gastroenterol 1990 Apr;85(4):486] **Am J Gastroenterol** 1990 Mar;85(3):238–40
Biliary lithotripsy: more questions than answers. The ACG Committee on FDA–Related Matters. Katz S. **Am J Gastroenterol** 1990 May;85(5):497–509 (60 ref.)
Controversies, dilemmas, and dialogues. Sphincterotomy has been recommended as the sole therapy for a frail 87–yr–old woman with right upper quadrant pain and cholecystolithiasis. Do you agree? Siegel JH, et al. **Am J Gastroenterol** 1989 Nov;84(11):1356–7
Nonoperative removal of bilateral intrahepatic biliary stones by endoscopic electrohydraulic lithotripsy. Wakayama T, et al. **Am J Gastroenterol** 1990 Sep;85(9):1168–71 (27 ref.)
Management of patients with symptomatic gallstones: a quantitative analysis. Ransohoff DF, et al. **Am J Med** 1990 Feb;88(2):154–60
The new gallstone destroyers and dissolvers. Rowland GA, et al. **Am J Nurs** 1989 Nov;89(11):1473–6
Percutaneous cholecystostomy and lithotripsy of gallstones. MacFadyen BV Jr, et al. **Am Surg** 1990 Apr;56(4):226–31 (22 ref.)
Continuous alfentanil infusion for extracorporeal shock wave lithotripsy of gallbladder stones. Connelly NR, et al. **Anesth Analg** 1990 Mar;70(3):299–302
Successful outpatient treatment of gallstones with piezoelectric lithotripsy. Albert MB, et al. **Ann Intern Med** 1990 Jul 15;113(2):164–6
Extracorporeal biliary lithotripsy. Review of experimental studies and a clinical update. Barkun AN, et al. **Ann Intern Med** 1990 Jan 15;112(2):126–37 (72 ref.)
Biliary lithotripsy: a perspective. Thistle JL, et al. **Ann Intern Med** 1989 Dec 1;111(11):868–70 (13 ref.)
Extracorporeal shockwave lithotripsy of gallstones. Possibilities and limitations. Vergunst H, et al. **Ann Surg** 1989 Nov;210(5):565–75 (110 ref.)
Choledochoscopic electrohydraulic lithotripsy and lithotomy for stones in the common bile duct, intrahepatic ducts, and gallbladder. Yoshimoto H, et al. **Ann Surg** 1989 Nov; 210(5):576–82
Nonsurgical treatment of gallstone disease. Hofmann AF. **Annu Rev Med** 1990;41:401–15 (83 ref.)
Nurses' role in cholelithotripsy [letter; comment] Dudley SL, et al. **AORN J** 1989 Oct;50(4):740 Comment on: AORN J 1989 Jun;49(6):1520–31.
Nonsurgical management of cholelithiasis. Bruckstein AH. **Arch Intern Med** 1990 May;150(5):960–4 (44 ref.)
Secondary biliary cirrhosis. A limiting factor in the treatment of hepatolithiasis. Jeng KS, et al. **Arch Surg** 1989 Nov; 124(11):1301–5
How many Americans will be eligible for biliary lithotripsy? Magnuson TH, et al. **Arch Surg** 1989 Oct;124(10):1195–9; discussion 1199–200
Gallstone lithotripsy vs cholecystectomy. A preliminary cost–benefit analysis. Rothschild JG, et al. **Arch Surg** 1990 Jun;125(6):710–3; discussion 713–4
Gall bladder lithotripsy [letter; comment] Bateson MC. **BMJ** 1989 Nov 18;299(6710):1284 Comment on: BMJ 1989 Oct 28;299(6707):1060–1.
Gall stones. Bouchier IA. **BMJ** 1990 Mar 3;300(6724):592–7
Gall bladder lithotripsy [letter; comment] Darzi A, et al. **BMJ** 1989 Dec 16;299(6714):1527 Comment on: BMJ 1989 Oct 28;299(6707):1060–1.
Soft–tissue effects of biliary extracorporeal shockwave lithotripsy in swine. Malone DE, et al. **Br J Radiol** 1989 Sep;62(741):843–8
Percutaneous transhepatic cholangioscopic lithotripsy. Chen MF, et al. **Br J Surg** 1990 May;77(5):530–2
Non–operative management of gallstones—a preliminary review. Jones SN, et al. **Clin Radiol** 1989 Nov;40(6):591–7
Gall–bladder stones: new roles for the radiologist. Lees WR, et al. **Clin Radiol** 1989 Nov;40(6):561–3 (6 ref.)
A computer model for evaluating the costs of cholecystectomy or ursodiol treatment in the management of cholelithiasis. Crain K. **Clin Ther** 1990 May–Jun; 12(3):250–62
Biliary tract intervention. LaBerge JM. **Curr Opin Radiol** 1990 Apr;2(2):259–65 (30 ref.)
Restraint urged for biliary lithotripsy [letter; comment] Flick AL. **Dig Dis Sci** 1990 Jul;35(7):916–8 Comment on: Dig Dis Sci 1989 Jul;34(7):1011–5.
Gallstone dissolution therapy with ursodiol. Patient selection. Fromm H. **Dig Dis Sci** 1989 Dec;34(12 Suppl):36S–38S
Gallstone dissolution therapy with ursodiol. Efficacy and safety. Salen G. **Dig Dis Sci** 1989 Dec;34(12 Suppl):39S–43S
Postdissolution gallstone recurrence. A clinical perspective. Thistle JL. **Dig Dis Sci** 1989 Dec;34(12 Suppl):44S–48S
Treatment of stones in the bile duct via duodenoscopy. Classen M, et al. **Endoscopy** 1989 Dec;21 Suppl 1:375–7 (15 ref.)
Percutaneous cholecystolithotomy. Kellett MJ, et al. **Endoscopy** 1989 Dec;21 Suppl 1:365–6
Gallstones: laparoscopic treatment, intracorporeal lithotripsy followed by cholecystostomy or cholecystectomy—a personal technique. Perissat J, et al. **Endoscopy** 1989 Dec; 21 Suppl 1:373–4
Single–step percutaneous transhepatic cholecystoscopy. von Sanden H, et al. **Endoscopy** 1990 May;22(3):149–50
Percutaneous transhepatic cholecysto–lithotripsy (PTCL). Wenk H, et al. **Endoscopy** 1989 Sep;21(5):221–2
Percutaneous cholangioscopy for management of retained biliary tract stones and intrahepatic stones. Yamakawa T. **Endoscopy** 1989 Dec;21 Suppl 1:333–7
Biliary and pancreatic disease in the elderly. Ingber S, et al. **Gastroenterol Clin North Am** 1990 Jun;19(2):433–57 (92 ref.)
Extracorporeal biliary lithotripsy and direct chemolitholysis–an integrated concept. Domschke W. **Gastroenterol Jpn** 1989 Oct;24(5):597–604 (70 ref.)
Therapeutic strategy for intrahepatic lithiasis. Tsuchiya R, et al. **Gastroenterol Jpn** 1989 Dec;24(6):720–7
Densely calcified gallstone treated successfully with piezoelectric lithotripsy. ALbert MB, et al. **Gastroenterology** 1990 Mar;98(3):777–9
ESWL for bile duct stones: making waves in established therapy. Auteri AG, et al. **Gastroenterology** 1990 Feb; 98(2):537–8
ESWL for bile duct stones: making waves in established therapy [corrected and republished article originally printed in Gastroenterology 1990 Feb;98(2):537–8] Auteri AG, et al. **Gastroenterology** 1990 Apr;98(4):1096–7
Postdissolution gallstone recurrence: a lifetime sentence to the rock pile or not? Auteri AG, et al. **Gastroenterology** 1990 Jan;98(1):241–2
ESWL for bile duct stones: making waves in established therapy. Auteri AG, et al. **Gastroenterology** 1990 Apr;

98(4):1096–7
Endoscopic laser lithotripsy of large bile duct stones. Cotton PB, et al. **Gastroenterology** 1990 Oct;99(4):1128–33
Gallstone shock–wave therapy [letter] [published erratum appears in Gastroenterology 1990 Sep;99(3):905] [comment] Keane FB, et al. **Gastroenterology** 1990 Mar;98(3):806–7 Comment on: Gastroenterology 1989 Aug;97(2):457–63.
Extracorporeal shock–wave lithotripsy and methyl tert–butyl ether for partially calcified gallstones. Peine CJ, et al. **Gastroenterology** 1989 Nov;97(5):1229–35
Extracorporeal lithotripsy of bile duct stones using ultrasonography for stone localization. Ponchon T, et al. **Gastroenterology** 1990 Mar;98(3):726–32
Early gallstone recurrence rate after successful shock–wave therapy. Sackmann M, et al. **Gastroenterology** 1990 Feb; 98(2):392–6
Percutaneous dislodgement of an impacted cystic duct stone. Zagoria RJ, et al. **Gastrointest Radiol** 1989 Fall;14(4):337–8
Successful chemical cholecystectomy: a laparoscopic guided technique. Cuschieri A, et al. **Gut** 1989 Dec;30(12):1786–94
Gall stone dissolution with methyl tert–butyl ether: how to avoid complications. Hellstern A, et al. **Gut** 1990 Aug; 31(8):922–5
Electromagnetically generated extracorporeal shockwaves for fragmentation of extra–and intrahepatic bile duct stones: indications, success and problems during a 15 months clinical experience. Staritz M, et al. **Gut** 1990 Feb; 31(2):222–5
Piezoelectric shockwave fragmentation of biliary calculi [letter; comment] Stephenson TJ, et al. **Gut** 1989 Oct; 30(10):1435–6 Comment on: Gut 1989 May;30(5):680–5.
Percutaneous ultrasonic lithotripsy of intrahepatic gallstones under endoscopic control. Andreoni B, et al. **Hepatogastroenterology** 1989 Oct;36(5):406–8
Advantages and disadvantages of the newer "interventional" procedures for the treatment of cholecystolithiasis. Malone DE, et al. **Hepatogastroenterology** 1989 Oct;36(5):317–26 (84 ref.)
Advantages of nonsurgical treatment of bile duct stones. Neoptolemos JP, et al. **Hepatogastroenterology** 1989 Oct; 36(5):313–6 (42 ref.)
Nonsurgical treatment of gallstones: where do we go from here? [editorial] Sauerbruch T. **Hepatogastroenterology** 1989 Oct;36(5):307–8
Treatment of biliary stones using extracorporeal shock waves (ESWL). Sauerbruch T. **Hepatogastroenterology** 1989 Oct; 36(5):309–12 (15 ref.)
Pros and cons of the nonsurgical treatments for gallbladder stones. Thistle JL. **Hepatogastroenterology** 1989 Oct; 36(5):327–9 (17 ref.)
Microprocessor–assisted solvent transfer system for effective contact dissolution of gallbladder stones. Zakko SF, et al. **IEEE Trans Biomed Eng** 1990 Apr;37(4):410–6
Gallbladder preservation in stone disease. **Indian J Gastroenterol** 1989 Oct;8(4):281–3; discussion 283–6
Experimental gallstone dissolution with methyl–tert–butyl ether (MTBE) and transcutaneous ultrasound energy. Griffith SL, et al. **Invest Radiol** 1990 Feb;25(2):146–52
Percutaneous pulsed–dye laser lithotripsy of gallbladder stones in swine. Kopecky KK, et al. **Invest Radiol** 1990 Jun;25(6):627–30
Early endoscopic sphincterotomy in the management of acute gallstone pancreatitis in elderly patients. Shemesh E, et al. **J Am Geriatr Soc** 1990 Aug;38(8):893–6
Medical management of gallstones: a cost–effectiveness analysis. Weinstein MC, et al. **J Gen Intern Med** 1990 Jul–Aug;5(4):277–84
Dissolution of human brown pigment biliary stones. Dai KY, et al. **J Hepatol** 1989 Nov;9(3):301–11
Management of cholesterol gallstones—are there alternatives to cholecystectomy? Halevy J. **J Intern Med** 1990 Jul; 228(1):5–8 (27 ref.)
Extracorporeal shock wave lithotripsy for gallstones [editorial] Johnson AG. **J R Soc Med** 1990 Feb;83(2):66
The effect of volume and number on fragmentation of gallstones by lithotripsy. Arends TW, et al. **J Surg Res** 1990 Apr;48(4):279–83
Colonoscopic removal of a gallstone obstructing the sigmoid colon. Roberts SR, et al. **J Tenn Med Assoc** 1990 Jan; 83(1):18–9
Auricular acupoint pellet pressure therapy in the treatment of cholelithiasis. Wang T, et al. **J Tradit Chin Med** 1990 Jun;10(2):126–31
Plasma shield lasertripsy: in vitro studies. Bhatta KM, et al. **J Urol** 1989 Oct;142(4):1110–2
Symptoms after gallbladder clearance with biliary lithotripsy [letter] Lee SH, et al. **Lancet** 1990 May 5;335(8697):1108
Effect of pulse duration on microsecond–domain laser lithotripsy. Bhatta KM, et al. **Lasers Surg Med** 1989; 9(5):454–7
Fragmentation of biliary stones with a 308 nm excimer laser. Shi W, et al. **Lasers Surg Med** 1990;10(3):284–90
Extracorporeal shock wave lithotripsy for gallstones. Fink A, et al. **Ohio Med** 1990 Mar;86(3):214–8, 213
The principles of lithotripsy and a comparative trial on the treatment of gallstones with surgery. Frost E. **Radiogr Today** 1989 Jun;55(625):18–21
Pancreatic and biliary calculi: percutaneous treatment with tunable dye laser lithotripsy. Feldman RK, et al. **Radiology** 1990 Mar;174(3 Pt 1):793–5
Stonebearing gallbladders: CT anatomy as the key to safe percutaneous lithotripsy. Work in progress. Hruby W, et al. **Radiology** 1989 Nov;173(2):385–7
Percutaneous endoscopic cholecystolithotripsy. Work in progress. Hruby W, et al. **Radiology** 1989 Nov;173(2):477–9
The intercostal pathway for biliary lithotripsy: an evaluation. Malone DE, et al. **Radiology** 1990 Feb;174(2):349–51
Extracorporeal shock wave lithotripsy of calcified gallstones. Work in progress. Rawat B, et al. **Radiology** 1990 Jun; 175(3):667–70
Carcinoma of the gallbladder: a risk associated with gallbladder–preserving treatments for cholelithiasis. So CB, et al. **Radiology** 1990 Jan;174(1):127–30
Gallstone fragmentation with contact electrohydraulic lithotripsy: in vitro study of physical and technical factors. Tung GA, et al. **Radiology** 1990 Mar;174(3 Pt 1):781–5
Cavitation effects during lithotripsy. Part II. Clinical observations. Zeman RK, et al. **Radiology** 1990 Oct; 177(1):163–6
Relationship between stone motion, targeting, and fragmentation during experimental biliary lithotripsy. Zeman RK, et al. **Radiology** 1990 Jul;176(1):125–8
Iodinated contrast medium as an aid to gallstone dissolution with methyl tert–butyl ether: in vitro study. Zhou J, et al. **Radiology** 1990 May;175(2):479–82
Medical therapy of gallstones. Denaro CP. **Ration Drug Ther** 1988 Dec;22 Suppl:1–7 (26 ref.)
Percutaneous endoscopic laser lithotripsy of retained stones in the left hepatic duct. The role of the surgeon. Berci G, et al. **Surg Endosc** 1990;4(1):36–8
Large–bile–duct stones—extracorporeal piezoelectric lithotripsy as adjuvant measure for endoscopic basket extraction. Kohlberger EJ, et al. **Surg Endosc** 1990; 4(1):20–2
Gallstones: laparoscopic treatment—cholecystectomy, cholecystostomy, and lithotripsy. Our own technique. Perissat J, et al. **Surg Endosc** 1990;4(1):1–5
Experimental tissue lesions related to extracorporeal lithotripsy of gallbladder. Ponchon T, et al. **Surg Gynecol Obstet** 1989 Nov;169(5):435–41
Extracorporeal shock wave lithotripsy. An update. Wilson WT, et al. **Urol Clin North Am** 1990 Feb;17(1):231–42 (110 ref.)
Surgical intervention following fragmentation of gallstones by extracorporeal shock lithotripsy [letter] Darzi A, et al. **World J Surg** 1990 Jul–Aug;14(4):552
Limitations of percutaneous transhepatic cholangioscopy in the removal of complicated biliary calculi. Jeng KS, et al. **World J Surg** 1989 Sep–Oct;13(5):603–10 (43 ref.)
[Nursing care of the fragmentation of gas–stones by extracorporeal shock wave] Hu XM. **Chung Hua Hu Li Tsa Chih** 1989 Sep;24(9):522–4 **(Chi)**
[Choledochoscopy management of residual intrahepatic stones and recurrent lesions] Chao ZN. **Chung Hua I Hsueh Tsa Chih** 1989 Jun;69(6):327–8 **(Chi)**
[Extracorporeal shock wave lithotripsy in gallstones: a report of 109 cases] Wang BS. **Chung Hua Wai Ko Tsa Chih** 1989 Nov;27(11):664–7, 701 (Eng. Abstr.) **(Chi)**
[Disruption of biliary calculi in vitro with low amplitude shock waves and verification by chemical dissolution] Beneš J, et al. **Sb Lek** 1989 Oct;91(10):294–9 (Eng. Abstr.) **(Cze)**
[A new era in the treatment of gallstones (editorial)] Kehlet H, et al. **Ugeskr Laeger** 1989 Sep 11;151(37):2347 **(Dan)**
[Extracorporeal shockwave treatment of the deep biliary tract (letter)] Mogensen P, et al. **Ugeskr Laeger** 1990 Aug 20;152(34):2446 **(Dan)**
[Gallstone lithotripsy, an expectation smashed to pieces?] Lockefeer JH, et al. **Ned Tijdschr Geneeskd** 1990 Jun 9; 134(23):1125–6 **(Dut)**
[Shock–wave lithotripsy of gallstones] van Erpecum KJ, et al. **Ned Tijdschr Geneeskd** 1990 Jan 20;134(3):112–5 (26 ref.) **(Dut)**
[Shock wave lithotripsy of gallstones (letter)] Vergunst H, et al. **Ned Tijdschr Geneeskd** 1990 May 5;134(18):924–5 **(Dut)**
[Extracorporeal lithotripsy in gallbladder calculi. Results of a single–center experience of 31 patients] Veyrac M, et al. **Ann Gastroenterol Hepatol (Paris)** 1990 May;26(3):101–4 (Eng. Abstr.) **(Fre)**
[Is extracorporeal lithotripsy in appendicular lithiasis an alternative to cholecystectomy?] Moreaux J. **Bull Acad Natl Med** 1990 Jan;174(1):45–50; discussion 50–3 (Eng. Abstr.) **(Fre)**
[Extracorporeal lithotripsy of biliary lithiasis. 160 patients treated with an EDAP apparatus] Branche D, et al. **Chirurgie** 1989;115(4–5):312–20; discussion 320–1 (Eng. Abstr.) **(Fre)**
[Extracorporeal lithotripsy in the treatment of biliary calculi] Farah A, et al. **Chirurgie** 1989;115(6):360–3; discussion 363–4 (Eng. Abstr.) **(Fre)**
[Extracorporeal lithotripsy in experimental vesicular lithiasis in pigs] Capdeville R, et al. **Gastroenterol Clin Biol** 1990; 14(2):120–3 (Eng. Abstr.) **(Fre)**
[Lithotripsy of biliary calculi by shock waves. Current possibilities and perspectives] Della Bianca P, et al. **Helv Chir Acta** 1990 Apr;56(6):913–6 (Eng. Abstr.) **(Fre)**
[Treatment of gallbladder lithiasis by piezoelectric extracorporeal lithotripsy] Raymond JM, et al. **Presse Med** 1990 Mar 10;19(9):407–9 (Eng. Abstr.) **(Fre)**
[Opioid analgesia during extracorporeal shockwave lithotripsy of gallstones] Schelling G, et al. **Anaesthesist** 1989 Nov;38(11):610–6 (Eng. Abstr.) **(Ger)**
[Biliary extracorporeal shockwave lithotripsy in the surgical treatment concept of cholelithiasis] Meiser G, et al. **Chirurg** 1990 May;61(5):370–5 (Eng. Abstr.) **(Ger)**
[Shockwave therapy of gallstones—indications and results] Sackmann M. **Chirurg** 1990 May;61(5):349–53 (24 ref.) **(Ger)**
[Electromagnetic shockwave lithotripsy of gallstones. Preliminary clinical experiences] Neuhaus H, et al. **Dtsch Med Wochenschr** 1990 Jan 26;115(4):123–8 (Eng. Abstr.) **(Ger)**
[Late complications of ESWL of gallstones with lethal results (letter)] Wenzel H, et al. **Dtsch Med Wochenschr** 1990 Jan 12;115(2):77 **(Ger)**
[Minimal invasive surgery. New methods in the treatment of gallstones] Demling L. **Fortschr Med** 1990 Apr 15; 108(11):24, 26 **(Ger)**
[Cholelithiasis—non–surgical intervention. Definitive and combined use] Salm R, et al. **Fortschr Med** 1989 Nov 10; 107(32):683–7 (31 ref.) (Eng. Abstr.) **(Ger)**
[Litholysis and lithotripsy of gallstones. State of the art and prospects] Waninger J, et al. **Fortschr Med** 1989 Nov 10; 107(32):679–82, 691 (29 ref.) (Eng. Abstr.) **(Ger)**
[Organization of gallbladder lithotripsy with the MPL–9000 at the Zurich university hospital. Initial results] Hoffmann R, et al. **Helv Chir Acta** 1990 Apr;56(6):907–11 (Eng. Abstr.) **(Ger)**
[Value of extracorporeal piezoelectric lithotripsy in treatment of gallstone disease] Rothenbühler JM, et al. **Helv Chir Acta** 1990 Apr;56(6):917–20 (Eng. Abstr.) **(Ger)**
["Sense and nonsense in non–surgical gallstone treatment" (editorial)] Arnold W. **Leber Magen Darm** 1990 Mar; 2(2):57–8 **(Ger)**
[Piezoelectric lithotripsy in the treatment of symptomatic gallstone patients] Riemann JF, et al. **Med Klin** 1990 Apr 15;85(4):176–80 (Eng. Abstr.) **(Ger)**
[The importance of computed tomography and magnetic resonance tomography in shockwave cholelithotripsy] Golder WA, et al. **Radiol Diagn (Berl)** 1989;30(5):531–40 (14 ref.) (Eng. Abstr.) **(Ger)**
[Demonstration of the effect of lithotripsy on biliary calculi using x–ray diagnostic procedures] Kunz B, et al. **Radiol Diagn (Berl)** 1989;30(3):268–70 **(Ger)**
[The organization of gallstone lithotripsy using the MPL–9000 at the Zurich University Hospital, successes and failures. Initial results] Hoffmann R, et al. **Schweiz Med Wochenschr** 1990 Apr 21;120(16):589–92 (Eng. Abstr.) **(Ger)**
[A year experience with extracorporeal shockwave lithotripsy of gallstones] Rothenbühler JM, et al. **Schweiz Med Wochenschr** 1990 Apr 21;120(16):593–5 (Eng. Abstr.) **(Ger)**
[Gallstone treatment using extracorporeal shockwave lithotripsy and adjuvant oral lysis: status and perspective] Staritz M. **Schweiz Rundsch Med Prax** 1990 Mar 27; 79(13):400–2 (Eng. Abstr.) **(Ger)**
[Extracorporeal shockwave lithotripsy of gallbladder calculi] Berndt H. **Z Arztl Fortbild (Jena)** 1990;84(7):299–301 (0 ref.) **(Ger)**
[Therapy of cholecystolithiasis—current status] Sauerbruch T. **Z Gastroenterol [Verh]** 1990 Apr;25:141–3 (36 ref.) **(Ger)**
[Extracorporeal shock–wave lithotripsy of gallstones] Freund HR, et al. **Harefuah** 1989 Aug;117(3–4):49–50 (Eng. Abstr.) **(Heb)**
[Nonsurgical treatment of bile duct stones] Nussinson E. **Harefuah** 1990 Feb 1;118(3):135–8 (Eng. Abstr.) **(Heb)**
[An overview of extracorporeal lithotriptors in current clinical use: technical notes] Montanari E, et al. **Arch Ital Urol Nefrol Androl** 1989 Dec;61(4):399–406 (8 ref.) (Eng. Abstr.) **(Ita)**
[Piezo–ceramic lithotripsy applied to calculi of the bile ducts. Experiences with 45 patients] Uggeri M. **Arch Ital Urol Nefrol Androl** 1989 Dec;61(4):423–5 (Eng. Abstr.) **(Ita)**
[Condition and influence of extracorporeal shockwave lithotripsy on the surrounding organs] Akimoto K, et al. **Nippon Rinsho** 1989 Dec;47(12):2737–40 **(Jpn)**
[Early results of extracorporeal shockwave lithotripsy with GM–1] Atomi Y, et al. **Nippon Rinsho** 1989 Dec; 47(12):2803–6 **(Jpn)**
[Clinical application of extracorporeal shockwave lithotripsy to gallstone diseases] Atomi Y, et al. **Nippon Rinsho** 1989 Dec;47(12):2666–70 **(Jpn)**
[Sonolith 3000 as a lithotripter for urinary and gallbladder stones] Fujita K. **Nippon Rinsho** 1989 Dec;47(12):2807–10 **(Jpn)**
[Experimental study on fragmentation of gallstones by extracorporeal shock waves] Igarashi A, et al. **Nippon Rinsho** 1989 Dec;47(12):2733–6 **(Jpn)**
[Complication of extracorporeal shockwave lithotripsy in gallstone] Kadowaki K, et al. **Nippon Rinsho** 1989 Dec; 47(12):2758–62 **(Jpn)**
[Extracorporeal shock–wave lithotripsy for gallbladder and bile duct stones—position, condition, rate of fragmentation and complete disappearance] Kato H, et al. **Nippon Rinsho** 1989 Dec;47(12):2753–7 **(Jpn)**
[The treatment of gallbladder stones with Piezo–electric shock–wave lithotripter] Takanashi H, et al. **Nippon Rinsho** 1989 Dec;47(12):2741–7 **(Jpn)**

[Clinical study on the endoscopical lithotomy in cholecystolithiasis] Nakata S. **Nippon Shokakibyo Gakkai Zasshi** 1989 May;86(5):1120–4 (Eng. Abstr.) **(Jpn)**

[Cholecystolithotripsy using extracorporeal shock waves] Sakakibara K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Dec;86(12):2787–93 (Eng. Abstr.) **(Jpn)**

[Technique and usefulness of percutaneous transhepatic or trans T-tube cholangiolithotripsy (PTCL)] Shindo H. **Rinsho Hoshasen** 1990 May;35(5):585–91 (Eng. Abstr.) **(Jpn)**

[Non-surgical treatment of biliary lithiasis] Conte VP. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Sep–Oct; 44(5):249–52 (33 ref.) (Eng. Abstr.) **(Por)**

[Late results of the conservative treatment of patients with cholecystitis] Gvozdiak NN, et al. **Vrach Delo** 1989 Dec; (12):61–3 (Eng. Abstr.) **(Rus)**

[Extracorporeal biliary lithotripsy: results in 60 cases of single calculus] Calvo C, et al. **Med Clin (Barc)** 1990 Mar 3; 94(8):286–9 (Eng. Abstr.) **(Spa)**

[Medical treatment of cholelithiasis (II)] Moreno Sánchez M. **Rev Esp Enferm Dig** 1990 Mar;77(3):231–5 (59 ref.) (Eng. Abstr.) **(Spa)**

VETERINARY

Use of ultrasonography to diagnose a cholelith in a 5-year-old horse. Freestone JF. **Aust Vet J** 1989 Sep; 66(9):304–5

Extrahepatic biliary tract rupture: evaluation of the relationship between the site of rupture and the cause of rupture in 15 dogs. Parchman MB, et al. **Cornell Vet** 1990 Jul;80(3):267–72

Ultrasonographic findings in horses with cholelithiasis: eight cases (1985–1987). Reef VB, et al. **J Am Vet Med Assoc** 1990 Jun 1;196(11):1836–40

Unusual hepatic parenchymal crystalloid material and biliary microliths in goats. Collett MG, et al. **J S Afr Vet Assoc** 1989 Sep;60(3):134–8

Annual cyclicity of gall stone prevalence in deer mice (Peromyscus maniculatus gambelii). Schwab RG, et al. **J Wildl Dis** 1989 Oct;25(4):462–8

CHOLELITHIASIS, COMMON BILE DUCT see **COMMON BILE DUCT CALCULI**

CHOLENES

Gas chromatographic and gas chromatographic/tandem mass spectrometric characterization of precursors on the sesterterpene pathway for steroid biosynthesis. Tait AD, et al. **Biomed Environ Mass Spectrom** 1989 Aug;18(8):572–5

Bile acids, LXXIX. Synthesis and reduction of 1,4-dien-3-ones of various bile acids. Iqbal MN, et al. **Steroids** 1989 Mar–May;53(3–5):413–25

ISOLATION & PURIFICATION

Spectroscopic and biological investigation of nimbolide and 28-deoxonimbolide from Azadirachta indica. Kigodi PG, et al. **J Nat Prod** 1989 Nov–Dec;52(6):1246–51

CHOLERA

From the National Institute of Allergy and Infectious Diseases. Summary of the 25th United States–Japan Joint Conference on cholera and related diarrheal diseases. Spriggs DR, et al. **J Infect Dis** 1990 Sep;162(3):584–90

Cholera on the Louisiana Gulf Coast: historical notes and case report. Gergatz SJ, et al. **J La State Med Soc** 1989 Oct;141(10):29–34

A case report of acute obstructive suppurative cholangitis in a non-O-1 Vibrio cholerae biliary carrier. Nishikawa M, et al. **Nippon Geka Hokan** 1989 Jan 1;58(1):155–61

Non-01 Vibrio cholerae septicemia: a case report. Thisyakorn U, et al. **Southeast Asian J Trop Med Public Health** 1990 Mar;21(1):149–50

COMPLICATIONS

Vibrio cholerae non-O1 infection presenting as localized cellulitis. Clark R, et al. **Am J Med Sci** 1989 Nov; 298(5):328–30 (19 ref.)

DIAGNOSIS

Experience with toxin bead ELISA in cholera outbreak [letter] Ramamurthy T, et al. **Lancet** 1990 Aug 11; 336(8711):375–6

Rapid laboratory diagnosis of cholera in the field. Shaffer N, et al. **Trans R Soc Trop Med Hyg** 1989 Jan–Feb; 83(1):119–20

DRUG THERAPY

Double-blind, randomized, controlled clinical trial of norfloxacin for cholera. Bhattacharya SK, et al. **Antimicrob Agents Chemother** 1990 May;34(5):939–40

Single-dose treatment of cholera with furazolidone or tetracycline in a double-blind randomized trial. Rabbani GH, et al. **Antimicrob Agents Chemother** 1989 Sep; 33(9):1447–50

Randomised double blind trial of single dose doxycycline for treating cholera in adults. Alam AN, et al. **BMJ** 1990 Jun 23;300(6740):1619–21

Transferable trimethoprim resistance of Vibrio cholerae O1 encountered in southern India. Jesudason MV, et al. **Trans R Soc Trop Med Hyg** 1990 Jan–Feb;84(1):136–7

EPIDEMIOLOGY

Cholera in 1989. **Can Dis Wkly Rep** 1990 Jun 30;16(26):123–4 **(Eng, Fre)**

Cholera epidemic in Solapur during July–August, 1988. Fule RP, et al. **Indian J Med Res** 1990 Jan;91:24–6

Cholera gastroenteritis amongst children in Delhi. Aggarwal P, et al. **Indian J Pediatr** 1989 Jan–Feb;56(1):93–6

An ElTor cholera outbreak in an endemic community of Calcutta. Sengupta PG, et al. **Indian J Public Health** 1989 Jan–Mar;33(1):21–5

An outbreak of ElTor cholera in rural population of Barmer in Rajasthan State of India, Aug–Sep 1987. Soni GS, et al. **Indian J Public Health** 1989 Apr–Jun;33(2):77–8

Bacteriological study of drinking water during epidemic of cholera in Delhi. Baveja CP, et al. **J Commun Dis** 1989 Mar;21(1):59–61

Outbreak of cholera in Berasia block of Bhopal District in Madhya Pradesh. Patnaik SK, et al. **J Commun Dis** 1989 Jun;21(2):123–8

An investigation of a cholera epidemic in Butiama village of the Mara Region, Tanzania. Killewo JZ, et al. **J Diarrhoeal Dis Res** 1989 Mar–Jun;7(1–2):13–7

Person-to-person transmission of cholera in a psychiatric hospital. Goh KT, et al. **J Infect** 1990 May;20(3):193–200

Several sporadic outbreaks of El Tor cholera in Sunpathong, Chiang Mai, September–October, 1987. Swaddiwudhipong W, et al. **J Med Assoc Thai** 1989 Oct;72(10):583–8

From the Centers for Disease control. Cholera—worldwide, 1989. **JAMA** 1990 Jul 25;264(4):441

Cholera—worldwide, 1989. **MMWR** 1990 Jun 1;39(21):365–7

An outbreak of nosocomial cholera in a 755-bed hospital. Swaddiwudhipong W, et al. **Trans R Soc Trop Med Hyg** 1989 Mar–Apr;83(2):279–81

Cholera epidemic and natural disasters; where is the link. Siddique AK, et al. **Trop Geogr Med** 1989 Oct;41(4):377–82

Cholera in 1989 [published errata appear in Wkly Epidemiol Rec 1990 Jun 1;65(22):171 and 1990 Jul 13;65(28):220] **Wkly Epidemiol Rec** 1990 May 11;65(19):141–2 **(Eng, Fre)**

[Epidemiology of cholera in Algeria from 1971 to 1985] Guechi Z. **Arch Inst Pasteur Alger** 1986;55:15–23 (Eng. Abstr.) **(Fre)**

[Lessons of cholera pandemic VII] Pokrovskiĭ VI, et al. **Vestn Akad Med Nauk SSSR** 1989;(9):60–7 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Cholera today [editorial] Benenson AS. **Arch Environ Health** 1969 Mar;18(3):305

Vibrio cholerae bacteremia associated with gastrectomy. Toeg A, et al. **J Clin Microbiol** 1990 Mar;28(3):603–4

Vibrio cholerae bacteremia in a 22-month-old New Mexican child. Florman AL, et al. **Pediatr Infect Dis J** 1990 Jan; 9(1):63–5

HISTORY

Grosse Ile: the Isle of Sorrows recalls the plague years. Thomson G. **Can Med Assoc J** 1990 Jul 1;143(1):56–9

From whence cometh this dread pestilence? [editorial] Aronson SM. **R I Med J** 1990 Jul;73(7):282–3

Cholera comes to Providence, 1832 [editorial] Aronson SM. **R I Med J** 1990 May;73(5):178–9

[Cholera in 1831. Challenges for science and the federal government] Stamm-Kuhlmann T. **Sudhoffs Arch** 1989; 73(2):176–89 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

The toxin-coregulated pilus (TCP) of Vibrio cholerae: molecular cloning of genes involved in pilus biosynthesis and evaluation of TCP as a protective antigen in the infant mouse model. Sharma DP, et al. **Microb Pathog** 1989 Dec; 7(6):437–48

Immune responses following killed whole vibrio-B subunit oral cholera vaccine in human volunteers. Pitisuttithum P, et al. **Southeast Asian J Trop Med Public Health** 1989 Jun; 20(2):201–5

METABOLISM

Correlation of fecal cAMP with fluid loss in cholera. Aye-Kyaw, et al. **Biochem Med Metab Biol** 1990 Feb; 43(1):80–2

MICROBIOLOGY

An epidemic of Vibrio cholerae el tor Inaba resistant to several antibiotics with a conjugative group C plasmid coding for type II dihydrofolate reductase in Thailand. Tabtieng R, et al. **Am J Trop Med Hyg** 1989 Dec; 41(6):680–6

Vibrio cholerae serogroup O1 in northeast Thailand. Kuyyakanond T, et al. **J Clin Microbiol** 1990 May; 28(5):872–5

[Groups of the species Vibrio cholerae having different epidemic importance] Semiotrochev VL. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Apr;(4):54–8 (Eng. Abstr.) **(Rus)**

[Bacteremia caused by Vibrio cholerae No. 01 (letter)] Fernández-Monrás F, et al. **Med Clin (Barc)** 1990 Apr 21; 94(15):596 **(Spa)**

PHYSIOPATHOLOGY

Effect of cholera toxin on small intestinal motor activity in the fed state. Cowles VE, et al. **Dig Dis Sci** 1990 Mar; 35(3):353–9

PREVENTION & CONTROL

Breast feeding and the risk of severe cholera in rural Bangladeshi children. Clemens JD, et al. **Am J Epidemiol** 1990 Mar;131(3):400–11

Overprescription of cholera vaccine [letter; comment] **BMJ** 1990 Jan 27;300(6719):257–8 Comment on: BMJ 1990 Jan 6;300(6716):25–6.

Preliminary assessment of the safety and immunogenicity of live oral cholera vaccine strain CVD 103-HgR in healthy Thai adults. Migasena S, et al. **Infect Immun** 1989 Nov; 57(11):3261–4

Safety, immunogenicity, and efficacy against cholera challenge in humans of a typhoid-cholera hybrid vaccine derived from Salmonella typhi Ty21a. Tacket CO, et al. **Infect Immun** 1990 Jun;58(6):1620–7

Antibodies directed against the toxin-coregulated pilus isolated from Vibrio cholerae provide protection in the infant mouse experimental cholera model. Sun DX, et al. **J Infect Dis** 1990 Jun;161(6):1231–6

Field trial of oral cholera vaccines in Bangladesh: results from three-year follow-up. Clemens JD, et al. **Lancet** 1990 Feb 3;335(8684):270–3

Modern vaccines. Enteric infections. Levine MM. **Lancet** 1990 Apr 21;335(8695):958–61 (17 ref.)

Significance of toxin-coregulated pili as protective antigens of Vibrio cholerae in the infant mouse model. Sharma DP, et al. **Vaccine** 1989 Oct;7(5):451–6

[Hospital hygiene measures in the care of cholera patients] Schiller WG, et al. **Z Gesamte Hyg** 1990 Mar;36(3):150–1 (Eng. Abstr.) **(Ger)**

THERAPY

The erratic evolution of cholera therapy: from folklore to science. Carpenter CC. **Clin Ther** 1990;12 Suppl A:22–7; discussion 28 (20 ref.)

A double-blind, controlled trial of bioflorin (Streptococcus faecium SF68) in adults with acute diarrhea due to Vibrio cholerae and enterotoxigenic Escherichia coli. Mitra AK, et al. **Gastroenterology** 1990 Oct;99(4):1149–52

Makeshift treatment centre during a cholera epidemic in Bangladesh. Siddique AK, et al. **Trop Doct** 1990 Apr; 20(2):83–5

TRANSMISSION

Epidemic cholera in West Africa: the role of food handling and high-risk foods. St. Louis ME, et al. **Am J Epidemiol** 1990 Apr;131(4):719–28

CHOLERA TOXIN

Activation of immobilized, biotinylated choleragen AI protein by a 19-kilodalton guanine nucleotide-binding protein. Noda M, et al. **Biochemistry** 1989 Sep 19; 28(19):7936–40

Structure-function analysis of protein active sites with anti-idiotypic antibody. Ludwig DS, et al. **Methods Enzymol** 1989;178:163–71

[The detection of a choleriform thermolabile enterotoxin in clinical strains of Proteus isolated in different infections] Gabidullin ZG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Dec;(12):14–6 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Intranasal immunization of mice with recombinant protein antigen of serotype c Streptococcus mutans and cholera toxin B subunit. Takahashi I, et al. **Arch Oral Biol** 1990; 35(6):475–7

Comparison of intranasal inoculation of influenza HA vaccine combined with cholera toxin B subunit with oral or parenteral vaccination. Hirabayashi Y, et al. **Vaccine** 1990 Jun;8(3):243–8

Protection against influenza virus infection by a two-dose regimen of nasal vaccination using vaccines combined with cholera toxin B subunit. Tamura S, et al. **Vaccine** 1989 Aug; 7(4):314–20

ANALYSIS

Use of avidin-biotin-peroxidase complex in immunoassay for detecting cholera toxin. Lee CL, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1990 Feb;23(1):98–100

Cautionary note on the use of the B subunit of cholera toxin as a ganglioside GM1 probe: detection of cholera toxin A subunit in B subunit preparations by a sensitive adenylate cyclase assay. Spiegel S. **J Cell Biochem** 1990 Mar; 42(3):143–52

Comparison of a latex agglutination assay and an enzyme-linked immunosorbent assay for detecting cholera toxin. Almeida RJ, et al. **J Clin Microbiol** 1990 Jan; 28(1):128–30

Experience with toxin bead ELISA in cholera outbreak

[letter] Ramamurthy T, et al. **Lancet** 1990 Aug 11; 336(8711):375–6

BIOSYNTHESIS

[Relationship between the pathogenicity and the toxigenicity of Vibrio cholerae 01 and Vibrio cholerae not 01] Guechi Z. **Arch Inst Pasteur Alger** 1988;56:15–22 (Eng. Abstr.) **(Fre)**

[The toxin-producing capacity of populations of Vibrio cholerae of different origins] Osaulenko OV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Jan;(1):9–13 (Eng. Abstr.) **(Rus)**

[The capacity to produce cholera exotoxin in natural strains of Vibrio cholerae] Smirnova NI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 Mar;(3):6–10 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Localization of ganglioside GM1 with biotinylated choleragen. Asou H. **Methods Enzymol** 1990;184:405–8

GENETICS

Plasmid vectors for constructing translational fusions to the B subunit of cholera toxin. Dertzbaugh MT, et al. **Gene** 1989 Oct 30;82(2):335–42

Expression in Escherichia coli of two mutated genes encoding the cholera toxin B subunit. L'hoir C, et al. **Gene** 1990 Apr 30;89(1):47–52

Role of the P plasmid in attenuation of Vibrio cholerae O1. Bartowsky EJ, et al. **Infect Immun** 1990 Sep;58(9):3129–34

Cholera toxin B-subunit gene fusion: structural and functional analysis of the chimeric protein. Dertzbaugh MT, et al. **Infect Immun** 1990 Jan;58(1):70–9

Molecular genetic approaches to the study of Vibrio cholerae. Manning PA. **Microbiol Sci** 1988 Jul;5(7):196–201 (40 ref.)

[Clinical Aeromonas hydrophila contain the DNA fragments with nucleotide sequence similar to those of hemolysin and cholera-toxin gene] Lai HC, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1990 May;23(2):126–33 (Eng. Abstr.) **(Chi)**

[Inheritance and expression of cholera toxin genes introduced into Vibrio cholerae el tor cells in a hybrid plasmid] Smirnova NI, et al. **Genetika** 1990 Feb;26(2):206–14 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Vaccination against the cholera/coli family of enterotoxins by synthetic peptides. Jacob CO. **Adv Biotechnol Processes** 1990;13:223–54 (84 ref.)

Prospects and problems in synthetic vaccine development: what did we learn from the cholera toxin system? Jacob CO. **Adv Exp Med Biol** 1989;251:9–16 (20 ref.)

Antibodies against a peptide of cholera toxin differing in cross-reactivity with the toxin differ in their specific interactions with the peptide as observed by 1H NMR spectroscopy. Anglister J, et al. **Biochemistry** 1990 Jan 30; 29(4):921–8

Probing antibody diversity by 2D NMR: comparison of amino acid sequences, predicted structures, and observed antibody-antigen interactions in complexes of two antipeptide antibodies. Levy R, et al. **Biochemistry** 1989 Sep 5;28(18):7168–75

Variation in epitopes of the B subunit of Vibrio cholerae non-O1 and Vibrio mimicus cholera toxins. Tamplin ML, et al. **Can J Microbiol** 1990 Jun;36(6):409–13

The effect of opiates on the intestinal immune response to cholera toxin in mice. Dinari G, et al. **Digestion** 1989; 44(1):14–9

Cholera holotoxin and its B subunit enhance Peyer's patch B cell responses induced by orally administered influenza virus: disproportionate cholera toxin enhancement of the IgA B cell response. Chen KS, et al. **Eur J Immunol** 1990 Feb;20(2):433–6

Use of anti-cholera toxin IgA-secreting hybridoma cells for the elaboration of an antigen-specific IgA-ELISPOT-assay. Solbreux PM, et al. **Immunol Invest** 1990 Apr;19(2):119–32

Receptor binding-like specificity of two anti-cholera toxin monoclonal antibodies detected by latex agglutination immunoassay. Lucas GP, et al. **Immunol Lett** 1989 Sep; 22(3):227–34

Synthesis and characterization of Escherichia coli O18 O-polysaccharide conjugate vaccines. Cryz SJ Jr, et al. **Infect Immun** 1990 Feb;58(2):373–7

Oral immunization of mice with a live recombinant Yersinia enterocolitica O:9 strain that produces the cholera toxin B subunit. Sory MP, et al. **Infect Immun** 1990 Aug; 58(8):2420–8

Variation in epitopes of the B subunit of El Tor and classical biotype Vibrio cholerae O1 cholera toxin. Tamplin ML, et al. **J Gen Microbiol** 1989 May;135 (Pt 5):1195–200

The influence of cultural conditions on the expression in Salmonella typhimurium of an antigen related to cholera toxin. Qi GM, et al. **J Med Microbiol** 1989 Nov;30(3):213–7

Altered serum immunoglobulin response to model intestinal antigens during dietary exposure to vomitoxin (deoxynivalenol). Pestka JJ, et al. **Toxicol Lett** 1990 Jan; 50(1):75–84

Immune function in transplanted small intestine. Total secretory IgA production and response against cholera toxin. Xia WY, et al. **Transplantation** 1990 Feb;49(2):277–80

METABOLISM

Interaction of cholera toxin with cloned human goblet cells in monolayer culture. Lencer WI, et al. **Am J Physiol** 1990 Jan;258(1 Pt 1):G96–102

Cholera toxin ADP-ribosylates the receptor-coupled form of pertussis toxin-sensitive G-proteins. Klinz FJ, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):554–60

Coupling of adenosine A1 receptors to a G-protein in coated vesicles isolated from bovine brain: presence of pertussis and cholera toxin substrates. Ros M, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):770–6

Mechanism of activation of cholera toxin by ADP-ribosylation factor (ARF): both low- and high-affinity interactions of ARF with guanine nucleotides promote toxin activation. Bobak DA, et al. **Biochemistry** 1990 Jan 30;29(4):855–61

Meta-iodobenzylguanidine (MIBG), a novel high-affinity substrate for cholera toxin that interferes with cellular mono(ADP-ribosylation). Loesberg C, et al. **Biochim Biophys Acta** 1990 Jan 19;1037(1):92–9

Mechanism of cholera toxin activation by a guanine nucleotide-dependent 19 kDa protein. Noda M, et al. **Biochim Biophys Acta** 1990 May 16;1034(2):195–9

Binding specificity of the combining site of cholera toxin for human erythrocytes. Sugii S. **Can J Microbiol** 1990 Jun;36(6):452–4

Extracellular transport of cholera toxin B subunit using Neisseria IgA protease beta-domain: conformation-dependent outer membrane translocation. Klauser T, et al. **EMBO J** 1990 Jun;9(6):1991–9

Simultaneous immunohistochemical demonstration of intra-axonally transported markers and neuropeptides in the peripheral nervous system of the guinea pig. Lindh B, et al. **Histochemistry** 1989;92(5):367–76

Mutations of GS alpha designed to alter the reactivity of the protein with bacterial toxins. Substitutions at ARG187 result in loss of GTPase activity. Freissmuth M, et al. **J Biol Chem** 1989 Dec 25;264(36):21907–14

Generation of cell surface neoganglioproteins. GM1-neoganglioproteins are non-functional receptors for cholera toxin. Pacuszka T, et al. **J Biol Chem** 1990 May 5;265(13):7673–8

Selective amplification of an mRNA and related pseudogene for a human ADP-ribosylation factor, a guanine nucleotide-dependent protein activator of cholera toxin. Monaco L, et al. **Proc Natl Acad Sci U S A** 1990 Mar; 87(6):2206–10

[Cholestyramine adsorbs Escherichia coli and Vibrio cholerae toxins by way of ion exchange mechanism] Brouillard MY, et al. **Ann Gastroenterol Hepatol (Paris)** 1990 Jan-Feb;26(1):27–30 (Eng. Abstr.) **(Fre)**

PHARMACOKINETICS

Cholera toxin B-gold, a retrograde tracer that can be used in light and electron microscopic immunocytochemical studies. Llewellyn-Smith IJ, et al. **J Comp Neurol** 1990 Apr 8;294(2):179–91

Erythrocyte receptors for cholera and heat-labile enterotoxins of Escherichia coli. Ricci LC, et al. **Res Microbiol** 1989 Jul-Aug;140(6):393–404

PHARMACOLOGY

Studies of cholera toxin-induced changes of alkaline secretion and transepithelial potential difference in the rat intestine in vivo. Tantisira MH, et al. **Acta Physiol Scand** 1990 Jan;138(1):75–84

Relation between small intestinal motor activity and transit in secretory diarrhea. Cowles VE, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):G420–9

Effects of cholera toxin on gene expression in brown preadipocytes differentiating in culture. Herron D, et al. **Am J Physiol** 1989 Nov;257(5 Pt 1):C920–5

Interleukin (IL)-8-induced in vitro human lymphocyte migration is inhibited by cholera and pertussis toxins and inhibitors of protein kinase C. Bacon KB, et al. **Biochem Biophys Res Commun** 1990 Jun 29;169(3):1099–104

IL1 induces proliferation and IL6 mRNA expression in a human astrocytoma cell line: positive and negative modulation by chorela toxin and cAMP. Kasahara T, et al. **Biochem Biophys Res Commun** 1990 Mar 30; 167(3):1242–8

Treatment of cardiac myocytes with 8-(4-chlorophenylthio)-adenosine 3',5'-cyclic monophosphate, forskolin or cholera toxin does not stimulate cellular or heparin-releasable lipoprotein lipase activities. Carroll R, et al. **Biochem J** 1990 Sep 1; 270(2):391–5

Role of guanine nucleotide regulatory proteins in insulin stimulation of glucose transport in rat adipocytes. Influence of bacterial toxins. Ciaraldi TP, et al. **Biochem J** 1989 Dec 1;264(2):389–96

Cholera toxin treatment produces down-regulation of the alpha-subunit of the stimulatory guanine-nucleotide-binding protein (Gs). Milligan G, et al. **Biochem J** 1989 Sep 1;262(2):643–9

Cholera toxin modulation of angiotensin II-stimulated inositol phosphate production in cultured vascular smooth muscle cells. Socorro L, et al. **Biochem J** 1990 Feb 1; 265(3):799–807

Altered responses to modulators of guanine nucleotide binding protein activity in endotoxin tolerance. Coffee KA, et al. **Biochim Biophys Acta** 1990 Aug 17;1035(2):201–5

The activation of rabbit intestinal adenylate cyclase by cholera toxin. Longbottom D, et al. **Biochim Biophys Acta** 1989 Dec 14;1014(3):289–97

Inhibition of murine leukemia (WEHI-3B and L1210) proliferation by cholera toxin B subunit. Pessina A, et al. **Biochim Biophys Acta** 1989 Oct 9;1013(3):206–11

Cholera and pertussis toxins amplify prostacyclin synthesis in aortic smooth muscle cells. Demolle D, et al. **Br J Pharmacol** 1989 Nov;98(3):717–20

Regulation of transforming growth factor beta 1 action by multiple transducing pathways: evidence for both G protein-dependent and -independent signaling. Howe PH, et al. **Cancer Res** 1989 Nov 1;49(21):6024–31

Cholera toxin and its B subunit do not change cytosolic free calcium concentration. Astashkin EI, et al. **Cell Calcium** 1990 Jun-Jul;11(6):419–23

Biphasic regulation of adenylate cyclase by cholera toxin in neuroblastoma x glioma hybrid cells is due to the activation and subsequent loss of the alpha subunit of the stimulatory GTP binding protein (GS). Macleod KG, et al. **Cell Signal** 1990;2(2):139–51

Foetal calf serum enhances cholera toxin-catalysed ADP-ribosylation of the pertussis toxin-sensitive guanine nucleotide binding protein, Gi2, in rat glioma C6BU1 cells. Milligan G. **Cell Signal** 1989;1(1):65–74

Pertussis toxin B-subunit-induced Ca2(+)-fluxes in Jurkat human lymphoma cells: the action of long-term pre-treatment with cholera and pertussis holotoxins. Sommermeyer H, et al. **Cell Signal** 1990;2(2):115–28

The effects of enterotoxins and short-chain fatty acids on water and electrolyte fluxes in ileal and colonic loops in vivo in the rat. Ramakrishna BS, et al. **Digestion** 1990; 45(2):93–101

Follicle-stimulating hormone receptor-mediated uptake of 45Ca2+ by cultured rat Sertoli cells does not require activation of cholera toxin- or pertussis toxin-sensitive guanine nucleotide binding proteins or adenylate cyclase. Grasso P, et al. **Endocrinology** 1990 Aug;127(2):949–56

Regulation by butyrate of the cAMP response to cholera toxin and forskolin in pituitary GH1 cells. Aranda A, et al. **Eur J Biochem** 1990 Feb 14;187(3):683–9

Cholera toxin differentially decreases membrane levels of alpha and beta subunits of G proteins in NG108-15 cells. Klinz FJ, et al. **Eur J Biochem** 1990 Mar 30;188(3):567–76

Cholera toxin modulates the T cell antigen receptor/CD3 complex but not the CD2 molecule and inhibits signaling via both receptor structures in the human T cell lymphoma Jurkat. Sommermeyer H, et al. **Eur J Immunol** 1989 Dec; 19(12):2387–90

Chronic exposure of rat glioma C6 cells to cholera toxin induces loss of the alpha-subunit of the stimulatory guanine nucleotide-binding protein (Gs). Carr C, et al. **Eur J Pharmacol** 1990 Apr 25;188(4–5):203–9

The bimodal growth response of Swiss 3T3 cells to the B subunit of cholera toxin is independent of the density of its receptor, ganglioside GM1. Buckley NE, et al. **Exp Cell Res** 1990 Jul;189(1):13–21

Reduction of adenylyl cyclase activity by cholera toxin in myeloid cells. Long-term down-regulation of Gs alpha subunits by cholera toxin treatment. Hermouet S, et al. **FEBS Lett** 1990 Jul 16;267(2):221–5

5-HT2 and 5-HT3 receptor subtypes mediate cholera toxin-induced intestinal fluid secretion in the rat. Beubler E, et al. **Gastroenterology** 1990 Jul;99(1):83–9

Additive effects of ileal secretagogues in the rat. Charney AN, et al. **Gastroenterology** 1990 Apr;98(4):881–7

Comparative study of Clostridium difficile toxin A and cholera toxin in rabbit ileum. Triadafilopoulos G, et al. **Gastroenterology** 1989 Nov;97(5):1186–92

Cholera toxin-induced fluid secretion in rat gut ligated loops: influence of bile from normal or cholera toxin-immunized rats. Pierre PG, et al. **Immunology** 1989 Nov;68(3):319–24

Hexose transport stimulation and membrane redistribution of glucose transporter isoforms in response to cholera toxin, dibutyryl cyclic AMP, and insulin in 3T3-L1 adipocytes. Clancy BM, et al. **J Biol Chem** 1990 Jul 25;265(21):12434–43

Chemotactic peptide receptor-supported ADP-ribosylation of a pertussis toxin substrate GTP-binding protein by cholera toxin in neutrophil-type HL-60 cells. Iiri T, et al. **J Biol Chem** 1989 Dec 15;264(35):21394–400

Induction of DNA synthesis by cholera toxin in the temperature-sensitive cell-cycle mutants of rat 3Y1 fibroblasts at a restrictive temperature. Kabemura M, et al. **J Cell Sci** 1989 Sep;94 (Pt 1):33–42

Characterization of adrenal autonomy in Cushing's syndrome: a comparison between in vivo and in vitro responsiveness of the adrenal gland. Lamberts SW, et al. **J Clin Endocrinol Metab** 1990 Jan;70(1):192–9

Cholera toxin discriminates between T helper 1 and 2 cells in T cell receptor-mediated activation: role of cAMP in T cell proliferation. Muñoz E, et al. **J Exp Med** 1990 Jul 1;172(1):95–103

Cholera toxin inhibits resting human T cell activation via a cAMP-independent pathway. Anderson DL, et al. **J Immunol** 1989 Dec 1;143(11):3647–52

Noradrenaline release enhanced by cholera toxin and pertussis toxin in rat cerebral cortical slices. Qi SB, et al. **J Pharmacobiodyn** 1989 Apr;12(4):216–9

The role of serotonin in the canine secretory response to cholera toxin in vivo. LaRosa CA, et al. **J Pharmacol Exp Ther** 1989 Oct;251(1):71–6

Reversal and inhibition of cholera toxin–induced secretion in isolated rabbit ileum. Falk G, et al. **J Physiol (Lond)** 1990 Feb;421:399–409

Combination effects of interferon–gamma and cholera toxin on induction of differentiation of an insensitive U–937 clone. Iwanami M, et al. **Jpn J Cancer Res** 1990 May; 81(5):520–6

Cholera and pertussis exotoxins protect mice against the lethal Schwartzman reaction and antagonize the effects of lipopolysaccharide on second messenger systems. Cabeza–Arvelaiz Y, et al. **Lymphokine Res** 1990 Summer; 9(2):125–35

Enhancement of DTH response by cholera toxin B subunit inoculated intranasally together with influenza HA vaccine. Kikuta K, et al. **Microbiol Immunol** 1990;34(3):337–46

Immunomodulatory effects of cholera toxin in mice. Hussain A, et al. **Nat Immun Cell Growth Regul** 1989;8(4):231–44

Stimulatory effects of cholera toxin on arachidonic acid metabolism in Chinese hamster ovary cells. Reitmeyer JC, et al. **Proc Soc Exp Biol Med** 1990 Mar;193(3):181–4

Intraduodenal application of cholera holotoxin increases the potential of clones from Peyer's patch B cells of relevant and unrelated specificities to secrete IgG and IgA. Lebman DA, et al. **Reg Immunol** 1988 Jul–Aug;1(1):32–40

Cholera toxin as a mucosal adjuvant for respiratory antibody responses in mice. Liang XP, et al. **Reg Immunol** 1989 Jul–Aug;2(4):244–8

Effects of cholera toxin, Escherichia coli heat stable toxin and sodium deoxycholate on neurotensin release from the ileum in vivo. Eklund S, et al. **Regul Pept** 1989 Dec; 26(3):241–52

Whole cholera toxin and B subunit act synergistically as an adjuvant for the mucosal immune response of mice to keyhole limpet haemocyanin. Wilson AD, et al. **Scand J Immunol** 1990 Apr;31(4):443–51

Effects of combined cholera toxin and cyclosporine therapy on renal allograft survival in the rat. Tsugita M, et al. **Transplantation** 1989 Dec;48(6):1064–5

Effectiveness of cholera toxin B subunit as an adjuvant for nasal influenza vaccination despite pre–existing immunity to CTB. Tamura S, et al. **Vaccine** 1989 Dec;7(6):503–5

[Role of a guanine nucleotide regulatory protein in exocrine pancreatic secretion—effects of cholera toxin and pertussis toxin on cholecystokinin action] Matozaki T, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Aug 20;65(8):743–9 (Eng. Abstr.) **(Jpn)**

[The effect of indomethacin on the activity of Na+,K+– and HCO3—ATPases and prostaglandin levels in the rat ileum mucosa after exposure to cholera exotoxin] Dolmatova LS. **Vopr Med Khim** 1990 Mar–Apr;36(2):18–9 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Combined treatment of autoimmune MRL/Mp–lpr/lpr mice with cholera toxin plus irradiation. Combined treatment of autoimmune MRL/l mice. Fan JL, et al. **Biotherapy** 1989;1(2):97–102

TOXICITY

Effect of cholera toxin on small intestinal motor activity in the fed state. Cowles VE, et al. **Dig Dis Sci** 1990 Mar; 35(3):353–9

CHOLERA VACCINE

Strategies for the development of vaccines for typhoid fever, shigellosis, and cholera. Miller SI, et al. **Ann N Y Acad Sci** 1989;569:145–54 (61 ref.)

Overprescription of cholera vaccine [letter; comment] **BMJ** 1990 Jan 27;300(6719):257–8 Comment on: **BMJ** 1990 Jan 6;300(6716):25–6.

Overprescription of cholera vaccine [letter; comment] Baddeley PG. **BMJ** 1990 Feb 17;300(6722):466 Comment on: **BMJ** 1990 Jan 6;300(6716):25–6.

Overprescription of cholera vaccine to travellers by general practitioners [see comments] Mott A, et al. **BMJ** 1990 Jan 6;300(6716):25–6 Comment in: **BMJ** 1990 Jan 27;300(6719):257–8. Comment in: **BMJ** 1990 Feb 17;300(6722):466.

ADMINISTRATION & DOSAGE

Immune responses following killed whole vibrio–B subunit oral cholera vaccine in human volunteers. Pitisuttithum P, et al. **Southeast Asian J Trop Med Public Health** 1989 Jun; 20(2):201–5

ADVERSE EFFECTS

Symptoms of reactogenicity in field trial of oral cholera vaccine [letter] Markman B. **Lancet** 1990 Aug 4; 336(8710):320

IMMUNOLOGY

Prospects and problems in synthetic vaccine development: what did we learn from the cholera toxin system? Jacob CO. **Adv Exp Med Biol** 1989;251:9–16 (20 ref.)

Diminished immunogenicity of a recombination–deficient derivative of Vibrio cholerae vaccine strain CVD103. Ketley JM, et al. **Infect Immun** 1990 May;58(5):1481–4

Preliminary assessment of the safety and immunogenicity of live oral cholera vaccine strain CVD 103–HgR in healthy Thai adults. Migasena S, et al. **Infect Immun** 1989 Nov; 57(11):3261–4

Safety, immunogenicity, and efficacy against cholera challenge in humans of a typhoid–cholera hybrid vaccine derived from Salmonella typhi Ty21a. Tacket CO, et al. **Infect Immun** 1990 Jun;58(6):1620–7

Field trial of oral cholera vaccines in Bangladesh: results from three–year follow–up. Clemens JD, et al. **Lancet** 1990 Feb 3;335(8684):270–3

[Ferric ammonium citrate as virulence–enhancing agent in the toxicity test of Vibrio cholerae and the potency assay of cholera vaccine] Tsai MY, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1989 Feb;22(1):75–81 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Development of vaccines against cholera and diarrhoea due to enterotoxigenic Escherichia coli: memorandum from a WHO meeting. **Bull World Health Organ** 1990;68(3):303–12

PHARMACOLOGY

The influence on the secretory IgA antibody levels in lactating women of oral typhoid and parenteral cholera vaccines given alone or in combination. Hahn–Zoric M, et al. **Scand J Infect Dis** 1989;21(4):421–6

STANDARDS

The present status of cholera vaccine [editorial] Pal SC, et al. **J Indian Med Assoc** 1989 May;87(5):105–6

CHOLERAGEN see **CHOLERA TOXIN**

CHOLERAGENOID see **CHOLERA TOXIN**

CHOLERETICS see **CHOLAGOGUES AND CHOLERETICS**

CHOLESTADIENOLS

ANALYSIS

Ultramicro determination of 7–dehydrocholesterol in rat skin by high–performance liquid chromatography with fluorescence detection. Iwata T, et al. **J Chromatogr** 1989 Jul 21;491(2):404–9

METABOLISM

Precursors for cholesterol synthesis (7–dehydrocholesterol, 7–dehydrodesmosterol, and desmosterol): cholesterol/7–dehydrocholesterol ratio as an index of development and aging in PNS but not in CNS. Bourre JM, et al. **J Neurochem** 1990 Apr;54(4):1196–9

Effects of drugs affecting cholesterol biosynthesis pathway on BM 15.766–induced 7–dehydrocholesterol accumulation in rats. An animal model for testing compounds reducing cholesterol synthesis. Pill J, et al. **Methods Find Exp Clin Pharmacol** 1990 Apr;12(3):167–74

Reduction of BM 15.766–induced 7–dehydrocholesterol accumulation by bezafibrate and mevinolin in rats. A non–isotopic in vivo test system for compounds reducing cholesterol synthesis. Pill J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jun; 341(6):552–6

Biosynthetic preparation of labeled 4,4–dimethylzymosterol. Maitra US, et al. **Steroids** 1989 Mar–May;53(3–5):597–605

CHOLESTANES

CHEMICAL SYNTHESIS

Studies of the synthesis of biomarkers. VII. Synthesis of 5 alpha–(17R,20R)–14,15–secocholestane. Li TS, et al. **Steroids** 1990 Jun;55(6):263–5

CHOLESTANOLS

ANALYSIS

Synthesis of 5 beta–cholestane–3 alpha,6 beta,7 alpha,25,26–pentol and identification of a novel bile alcohol, alpha–trichechol, present in the West Indian manatee bile. Yoshii M, et al. **Chem Pharm Bull (Tokyo)** 1989 Jul;37(7):1852–4

Cerebrotendinous xanthomatosis. Hwang SY, et al. **J Dermatol** 1990 Feb;17(2):115–9

Identification of bile alcohols in rat bile. Hiraoka T, et al. **J Lipid Res** 1989 Dec;30(12):1889–93

Use of positive ion fast atom bombardment mass spectrometry for rapid identification of a bile alcohol glucuronide isolated from cerebrotendinous xanthomatosis patients. Dayal B, et al. **Steroids** 1990 Feb;55(2):74–8

CHEMICAL SYNTHESIS

Inhibitors of ergosterol biosynthesis and growth of the trypanosomatid protozoan Crithidia fasciculata. Rahman MD, et al. **J Biol Chem** 1990 Mar 25;265(9):4989–96

METABOLISM

Oxidation of 5 beta–cholestane–3 alpha,7 alpha, 12 alpha–triol into 3 alpha,7 alpha,12 alpha–trihydroxy–5 beta–cholestanoic acid by cytochrome P–450(26) from rabbit liver mitochondria. Dahlbäck H, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):391–5

Characterization of pig kidney microsomal cytochrome P–450 catalysing 25–hydroxylation of vitamin D3 and C27 steroids. Bergman T, et al. **Biochem J** 1990 Sep 1; 270(2):345–50

[Gas–chromatographic analysis of hypercholestanol in the bile and its role in the pathogenesis of cholelithiasis] Krikshtopaitis MI, et al. **Sov Med** 1989;(9):19–24 (Eng. Abstr.) **(Rus)**

TOXICITY

Focal toxicity of oxysterols in vascular smooth muscle cell culture. A model of the atherosclerotic core region. Guyton JR, et al. **Am J Pathol** 1990 Aug;137(2):425–34

URINE

Identification of 3 alpha, 6 alpha, 7 alpha, 12 alpha–tetrahydroxy–5 beta–cholestanoic acid in Zellweger's syndrome. Une M, et al. **J Biochem (Tokyo)** 1989 Sep;106(3):501–4

Studies on steroids. CCXXXXV. Determination of 5 beta–cholestanoic acids in human urine by gas chromatography–mass spectrometry with negative ion chemical ionization detection. Goto J, et al. **J Chromatogr** 1989 Sep 1;493(2):245–55

Increased urinary excretion of bile alcohol glucuronides in patients with primary biliary cirrhosis. Weydert–Huijghebaert S, et al. **J Lipid Res** 1989 Nov; 30(11):1673–9

CHOLESTANONES see under **CHOLESTANES**

CHOLESTASIS

Hypoprothrombinemia and cefotaxime [letter; comment] Danan G, et al. **Am J Gastroenterol** 1990 Jun;85(6):763–4 Comment on: Am J Gastroenterol 1989 Jun;84(6):686–8.

Percutaneous transhepatic biliary drainage: a review. Yee AC, et al. **Crit Rev Diagn Imaging** 1990;30(3):247–79 (105 ref.)

Neonatal cholestasis: an approach for the practicing pediatrician. Heubi JE, et al. **Curr Probl Pediatr** 1990 May; 20(5):233–95 (184 ref.)

Serum diatrizoate level during intraoperative cholangiography in patients without choledochal obstructions. Sakahira K, et al. **Dig Dis Sci** 1990 Sep; 35(9):1085–8

[Jaundice caused by oral contraceptives, pregnancy cholestasis and elevation of transaminases (letter)] Ancey P, et al. **Presse Med** 1989 Sep 30;18(30):1480 **(Fre)**

[Neonatal cholestasis] Valencia–Mayoral P, et al. **Bol Med Hosp Infant Mex** 1989 Oct;46(10):639–40 (8 ref.) **(Spa)**

BLOOD

Pancreatic hormone changes in infantile obstructive jaundice. Hata Y, et al. **Acta Paediatr Jpn Overseas Ed** 1990 Feb; 32(1):27–31

Determination of serum bile acids in hepatobiliary diseases by gas liquid chromatography (fasting serum bile acid levels and endogenous bile acid tolerance test). Kajiyama G, et al. **Hiroshima J Med Sci** 1981 Dec;30(4):263–71

Eicosanoid synthesis in children with cholestatic disease. Dupont J, et al. **J Inherited Metab Dis** 1990;13(2):212–8

The significance of serum mitochondrial aspartate aminotransferase activity in obstructive jaundice: experimental and clinical studies. Sada E, et al. **Jpn J Surg** 1990 Jul;20(4):392–405

Development and reversal of endotoxemia and endotoxin–related death in obstructive jaundice. Diamond T, et al. **Surgery** 1990 Aug;108(2):370–4; discussion 374–5

[Serum lipoprotein profiles in infantile cholestasis: the role of lipoprotein–X (LP–X) in the diagnosis of biliary atresia] Chiou SS, et al. **Acta Paediatr Sin** 1988 May–Jun; 29(3):174–9 (Eng. Abstr.) **(Chi)**

[Lipoprotein cholesterol in the blood plasma of rats with a bile circulation disorder] Finagin LK, et al. **Fiziol Zh** 1989 Jul–Aug;35(4):103–5 (Eng. Abstr.) **(Rus)**

[Evaluation of laboratory parameters of mechanical jaundice] Kliminskiĭ IV, et al. **Sov Med** 1990;(2):120–1 **(Rus)**

[Blood coagulation potential in patients with mechanical jaundice during hemosorption] Lekhtman AM, et al. **Sov Med** 1990;(2):65–7 **(Rus)**

[Determining blood plasma toxicity in patients with mechanical jaundice] Tembulatov MM, et al. **Vestn Khir** 1990 Feb;144(2):57–9 **(Rus)**

[The hemostatic system and DIC syndrome in cholestatic forms of viral hepatitis] Fedenko IuI. **Vrach Delo** 1989 Sep; (9):110–2 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Cholestatic jaundice associated with chlordiazepoxide hydrochloride (Librium) therapy. Report of a case and review of the literature. Lo KJ, et al. **Am J Dig Dis** 1967 Aug;12(8):845–9 (6 ref.)

Cloxacillin-induced cholestasis in a renal allograft patient with chronic hepatitis [letter] Pascual J, et al. **Am J Gastroenterol** 1990 Mar;85(3):335–6

Flucloxacillin induced delayed cholestatic hepatitis. Miros M, et al. **Aust N Z J Med** 1990 Jun;20(3):251–3

Reversal of ethinylestradiol-induced cholestasis by epomediol in rat. The role of liver plasma-membrane fluidity. Miccio M, et al. **Biochem Pharmacol** 1989 Oct 15; 38(20):3559–63

Peroxisomal and mitochondrial proliferation and increased alanine: glyoxylate aminotransferase activity in human liver after chlorpromazine-induced cholestasis. Cooper PJ, et al. **Biochem Soc Trans** 1989 Dec;17(6):1071–2

Cholestatic jaundice associated with lovastatin (mevacor) therapy [letter; comment] Geddes JA. **Can Med Assoc J** 1990 Jul 1;143(1):13–4 Comment on: Can Med Assoc J 1990 Apr 15;142(8):841–2.

Cholestatic jaundice associated with lovastatin (Mevacor) therapy [see comments] McQueen MJ. **Can Med Assoc J** 1990 Apr 15;142(8):841–2 Comment in: Can Med Assoc J 1990 Jul 1;143(1):13–4.

BCNU-induced quantitative and qualitative changes in hepatic cytochrome P-450 can be correlated with cholestasis. Stolzenbach JC, et al. **Cancer Chemother Pharmacol** 1990;25(4):227–35

Cholestasis and pneumonitis induced by gold therapy. Farre JM, et al. **Clin Rheumatol** 1989 Dec;8(4):538–40

Chronic cholestasis, paucity of bile ducts, red cell aplasia, and the Stevens-Johnson syndrome. An ampicillin-associated case. Cavanzo FJ, et al. **Gastroenterology** 1990 Sep;99(3):854–6

Arteriovenous shunting and cholestasis in hepatic hemangiomatosis associated with metoclopramide. Feurle GE. **Gastroenterology** 1990 Jul;99(1):258–62

Inhibition of hepatocytary vesicular transport by cyclosporin A in the rat: relationship with cholestasis and hyperbilirubinemia. Román ID, et al. **Hepatology** 1990 Jul; 12(1):83–91

Estradiol-17 beta-D-glucuronide (E-17G) cholestasis in perfused rat liver: fate of E-17G and choleretic responses to bile salts. Utili R, et al. **Hepatology** 1990 May; 11(5):735–42

Acute prerenal failure and liver dysfunction in a patient with severe ovarian hyperstimulation syndrome. Balasch J, et al. **Hum Reprod** 1990 Apr;5(3):348–51

Release of Ca2+ from the endoplasmic reticulum is not the mechanism for bile acid-induced cholestasis and hepatotoxicity in the intact rat liver. Farrell GC, et al. **J Clin Invest** 1990 Apr;85(4):1255–9

Interleukin-2 induces profound reversible cholestasis: a detailed analysis in treated cancer patients. Fisher B, et al. **J Clin Oncol** 1989 Dec;7(12):1852–62

The role of calcium precipitation in the sulfoglycolithocholate-induced cholestasis of the bile fistula hamster. Bellentani S, et al. **J Hepatol** 1990 May; 10(3):356–63

Enalapril-related cholestatic jaundice. Todd P, et al. **J R Soc Med** 1990 Apr;83(4):271–2

Cholestasis, altered junctional permeability, and inverse changes in sinusoidal and biliary glutathione release by vasopressin and epinephrine. Ballatori N, et al. **Mol Pharmacol** 1990 Jul;38(1):64–71

Amino acid- and glucose-induced cholestasis before and during secretin stimulation. Mathisen O, et al. **Scand J Gastroenterol** 1989 Sep;24(7):851–8

Cholestasis in the rat by means of intravenous administration of cyclosporine vehicle, Cremophor EL. Roman ID, et al. **Transplantation** 1989 Oct;48(4):554–8

[Cholestatic hepatitis and acute kidney insufficiency during treatment with diclofenac] Hovette P, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Nov;25(6):257–8 **(Fre)**

[Hepatic cholestasis probably due to the combination of amoxicillin and clavulanic acid (letter)] Pelletier G, et al. **Gastroenterol Clin Biol** 1990;14(6–7):601 **(Fre)**

[Role of total parenteral nutrition in determining liver insufficiency in patients with cranial injuries. Glucose vs glucose + lipids] Zagara G, et al. **Minerva Anestesiol** 1989 Dec;55(12):509–12 (Eng. Abstr.) **(Ita)**

[Anicteric cholestasis caused by thiocarbamides (letter)] Clotet Solsona J, et al. **Rev Clin Esp** 1989 Sep;185(4):216 **(Spa)**

[Acute submassive cholestatic hepatitis after treatment with carbimazole. Presentation of a new case and review of the literature] Moreno Sánchez D, et al. **Rev Esp Enferm Apar Dig** 1989 Sep;76(3):273–6 (20 ref.) (Eng. Abstr.) **(Spa)**

CLASSIFICATION

Mirizzi syndrome and cholecystobiliary fistula: a unifying classification. Csendes A, et al. **Br J Surg** 1989 Nov; 76(11):1139–43

COMPLICATIONS

Transient carnitine-responsive medium-chain dicarboxylic aciduria in an infant with cholestasis, hypoglycemia and cardiac failure. Matsuo M, et al. **Acta Paediatr Jpn Overseas Ed** 1989 Apr;31(2):211–5

Vitamin E deficiency neuropathy in children with fat malabsorption. Studies in cystic fibrosis and chronic cholestasis. Sokol RJ, et al. **Ann N Y Acad Sci** 1989; 570:156–69

Formation of biliary thrombi in protoporphyrin-induced cholestasis in perfused rat liver. Berenson MM, et al. **Hepatology** 1990 May;11(5):757–63

The pruritus of cholestasis: from bile acids to opiate agonists. Jones EA, et al. **Hepatology** 1990 May;11(5):884–7 (68 ref.)

The role of bile acids in the development of endotoxemia during obstructive jaundice in the rat. Van Bossuyt H, et al. **J Hepatol** 1990 May;10(3):274–9

Essential fatty acid deficiency mimicking porphyria cutanea tarda in a patient with chronic cholestasis. Levy J, et al. **J Pediatr Gastroenterol Nutr** 1990 Feb;10(2):242–5

Obstructive jaundice in a patient with ulcerative colitis, Sjögren's syndrome and sarcoidosis. Johnson CD. **J R Soc Med** 1989 Jun;82(6):362

Pathophysiology of renal failure in obstructive jaundice. Coratelli P, et al. **Miner Electrolyte Metab** 1990;16(1):61–5 (41 ref.)

Influence of incomplete bile duct obstruction on the occurrence of cholangiocarcinoma induced by diisopropanolnitrosamine in hamsters. Kinami Y, et al. **Oncology** 1990;47(2):170–6

Growth failure in cholestatic rats: the effect of malnutrition on insulin-like growth factor I. Descos BP, et al. **Pediatr Res** 1989 Nov;26(5):410–4

[Tuberous xanthoma, xanthoma striatum palmare and hypercholesterolemia following chronic cholestasis of pancreatic origin] Vaillant L, et al. **Ann Dermatol Venereol** 1989;116(11):835–7 **(Fre)**

[Obstructive icterus in patients with hepatic tumor. Result of non-surgical biliary drainage] Hagege H, et al. **Gastroenterol Clin Biol** 1990;14(2):115–9 (Eng. Abstr.) **(Fre)**

[Cholestatic jaundice disclosing lymphoma involving the pancreas (letter)] Pellissier PE, et al. **Gastroenterol Clin Biol** 1990;14(6–7):603–4 **(Fre)**

[The treatment of cholangiogenic liver abscesses by the use of hemosorption and extracorporeal membrane oxygenation] Kukosh MV, et al. **Klin Khir** 1989;(9):60–1 **(Rus)**

DIAGNOSIS

Sonography accurately detects biliary obstruction in patients with surgically created biliary-enteric anastomosis. Wilson SR, et al. **AJR Am J Roentgenol** 1990 Oct;155(4):789–94

A second look at the neostigmine morphine test. Gowen GF. **Am Surg** 1989 Oct;55(10):640–4

Investigation of obstructive jaundice. Endoscopic retrograde cholangiopancreatography (ERCP) or CT scan of the abdomen. Himal HS. **Am Surg** 1990 Mar;56(3):192–3

Magnetic resonance in obstructive jaundice. Gupta RK, et al. **Australas Radiol** 1989 Aug;33(3):245–51

The biliary tract. Han BK. **Clin Diagn Ultrasound** 1989; 24:129–55 (73 ref.)

Exploring subjective vs. objective issues in the validation of computer-based critiquing advice. Rothschild MA, et al. **Comput Methods Programs Biomed** 1990 Jan;31(1):11–8

Some aspects of obstructive jaundice at Kenyatta National Hospital. Okoth FA, et al. **East Afr Med J** 1989 Sep; 66(9):594–7

Accuracy of abdominal ultrasonography and the role of a second investigation in surgical obstructive jaundice. Dwivedi M, et al. **Gastroenterol Jpn** 1989 Oct;24(5):573–9

Imaging diagnosis of obstructive jaundice. Okuda K, et al. **Hepatogastroenterology** 1989 Oct;36(5):398–405 (15 ref.)

Diffuse biliary tract involvement mimicking primary sclerosing cholangitis after bone marrow transplantation. Geubel AP, et al. **J Hepatol** 1990 Jan;10(1):23–8

Cholestasis in infancy—a clinical approach. Quak SH. **J Singapore Paediatr Soc** 1989;31(3–4):170–7 (27 ref.)

ERCP in the assessment of patients with post-cholecystectomy syndrome: benefits and limitations. Marotta F, et al. **Neth J Med** 1989 Dec;35(5–6):232–40

Evaluation of jaundice in general practice. Stevens R. **Practitioner** 1989 May 22;233(1469):781–3

Patterns of serum alkaline phosphatase activity in unilateral hepatic duct obstruction: a clinical and experimental study. Hadjis NS, et al. **Surgery** 1990 Feb;107(2):193–200

[ERCP under ceftriaxone antibiotic cover in patients with obstructive jaundice] Werth B, et al. **Schweiz Rundsch Med Prax** 1990 Mar 27;79(13):387–8 (Eng. Abstr.) **(Ger)**

[The clinical, histological and ultrastructural findings in a case of acute steatosis of pregnancy with a severe cholestatic syndrome] Visconti M, et al. **Minerva Med** 1990 Apr;81(4):307–14 (21 ref.) (Eng. Abstr.) **(Ita)**

[The cholestasis syndrome. A critical evaluation of an exploratory strategy] Buligescu L, et al. **Rev Med Interna [Med Interna]** 1989 Jul–Aug;41(4):353–62 **(Rum)**

[Drug-induced hepatitis following levorin treatment simulating obstructive jaundice] Sernevich PG, et al. **Klin Khir** 1989;(9):54–5 **(Rus)**

[Ultrasonic examination in biliary tract diseases] Nikolenko KK, et al. **Vestn Khir** 1989 Apr;142(4):118–21 (Eng. Abstr.) **(Rus)**

DIET THERAPY

[The effect of a diet enriched with food fibers and polyunsaturated fatty acids on the composition of the lipid components in the enterohepatic circulation system in rabbits with cholestasis] Bogdarin IuA, et al. **Vopr Pitan** 1990 Jan–Feb;(1):44–8 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Protective effects of various Chinese traditional medicines against experimental cholestasis. Sasaki T, et al. **Chem Pharm Bull (Tokyo)** 1990 Feb;38(2):513–6

Effects of ursodeoxycholic acid treatment on nutrition and liver function in patients with cystic fibrosis and longstanding cholestasis. Cotting J, et al. **Gut** 1990 Aug; 31(8):918–21

Concentration of ciprofloxacin in non-functional gallbladder mucosa after single dose intravenous administration. Sayek I, et al. **Infection** 1990 Mar–Apr;18(2):124

Bile plug syndrome: successful management with a mucolytic agent. Brown DM. **J Pediatr Surg** 1990 Mar;25(3):351–2

ENZYMOLOGY

High-molecular-weight alkaline phosphatase and alkaline phosphatase lipoprotein X complex in cholestasis and hepatic malignancy. Wolf P. **Arch Pathol Lab Med** 1990 Jun;114(6):577–9

Alkaline phosphatase in cholestatic and cirrhotic rats. A biochemical and histochemical study. Elsafi ME, et al. **Enzyme** 1989;42(3):145–51

Quantitative changes in acid phosphatase, alkaline phosphatase and 5'-nucleotidase activity in rat liver after experimentally induced cholestasis. Frederiks WM, et al. **Liver** 1990 Jun;10(3):158–66

ETIOLOGY

Obstructing villous adenoma and papillary adenomatosis of the bile ducts. Harshfield DL, et al. **AJR Am J Roentgenol** 1990 Jun;154(6):1217–8

Endoscopic retrograde wire-guided brush cytology for diagnosis of patients with malignant obstruction of the bile duct. Foutch PG, et al. **Am J Gastroenterol** 1990 Jul; 85(7):791–5

Cholestatic hepatitis, cutaneous vasculitis, and vascular deposits of immunoglobulin M and complement associated with hepatitis A virus infection. Dan M, et al. **Am J Med** 1990 Jul;89(1):103–4

Churg-Strauss vasculitis and ascaris infection. Chauhan A, et al. **Ann Rheum Dis** 1990 May;49(5):320–2

The spectrum and natural history of common bile duct stenosis in chronic alcohol-induced pancreatitis. Kalvaria I, et al. **Ann Surg** 1989 Nov;210(5):608–13

Dubin-Johnson syndrome presenting with neonatal cholestasis. Shieh CC, et al. **Arch Dis Child** 1990 Aug; 65(8):898–9

Obstructive jaundice caused by blastomycosis of the lymph nodes around the common bile duct. Chaib E, et al. **Arq Gastroenterol** 1988 Oct–Dec;25(4):198–202

Oestradiol 17 beta-glucuronide and tight junctional permeability increase [letter] Coleman R, et al. **Biochem J** 1990 Mar 1;266(2):622

The pathophysiological significance of increased tight-junctional permeability during oestrogen cholestasis [letter; comment] Jaeschke H. **Biochem J** 1990 Mar 1; 266(2):620–2 Comment on: Biochem J 1989 Jul 1;261(1):297–300.

Cholestasis in association with short-term parenteral alimentation. Brown RS. **Crit Care Med** 1976 Nov–Dec; 4(6):313–6

Obstructive jaundice secondary to non-Hodgkin's lymphoma: usefulness of ultrasound-guided fine-needle aspiration biopsy (UG-FNAB). Di Stasi M, et al. **Eur J Haematol** 1990 Apr;44(4):265–6

Total parenteral nutrition associated cholestasis: a predisposing factor for sepsis in surgical neonates? Bos AP, et al. **Eur J Pediatr** 1990 Feb;149(5):351–3

Villous adenoma of the ampulla of Vater. An unusual cause of biliary colic and obstructive jaundice. Sobol S, et al. **Gastroenterology** 1978 Jul;75(1):107–9 (38 ref.)

Tumour necrosis factor, cholestatic jaundice, and chronic liver disease. Jones A, et al. **Gut** 1990 Aug;31(8):938–9

Venous, biliary, and duodenal obstruction in chronic pancreatitis. Rattner DW, et al. **Hepatogastroenterology** 1990 Jun;37(3):301–6 (40 ref.)

Traumatic neuroma giving rise to biliary obstruction after reconstructive surgery for iatrogenic lesions of the biliary tract—a report of three cases. van Gulik TM, et al. **Hepatogastroenterology** 1989 Aug;36(4):255–7 (18 ref.)

The pathogenesis of cholestasis. Zimniak P, et al. **Hosp Pract [Off]** 1990 Aug 15;25(8):107–11, 114–8, 123–5 (7 ref.)

Ultrasound in obstructive jaundice. Khandelwal N, et al. **Indian J Gastroenterol** 1990 Jan;9(1):51–3

Obstructive jaundice due to chronic duodenal ulcer disease [letter] Shah P, et al. **Indian J Gastroenterol** 1990 Jan; 9(1):97

The relationship between a subcutaneously placed afferent jejunal loop in a hepaticojejunostomy and postoperative cholangitis. Takada T, et al. **Int Surg** 1989 Jul–Sep; 74(3):167–70

Unusual postoperative sequelae of duodenal ulcer. Arora A, et al. **J Assoc Physicians India** 1990 May;38(5):347–9

Small hepatocellular carcinoma presenting as intrabiliary pedunculated polyp and obstructive jaundice. Terada T, et al. **J Clin Gastroenterol** 1989 Oct;11(5):578–83

Toxic epidermal necrolysis associated with acute cholestatic

viral hepatitis A. Werblowsky-Constantini N, et al. **J Clin Gastroenterol** 1989 Dec;11(6):691-3

Nasopharyngeal carcinoma with secondaries at the porta hepatis presenting as obstructive jaundice. Elango S, et al. **J Laryngol Otol** 1990 Jan;104(1):41-2

Gallbladder sludge and lithiasis in an infant born to a morphine user mother. Figueroa-Colon R, et al. **J Pediatr Gastroenterol Nutr** 1990 Feb;10(2):234-8

A subacute rabbit model for hepatobiliary dysfunction during total parenteral nutrition. Gleghorn EE, et al. **J Pediatr Gastroenterol Nutr** 1989 Aug;9(2):246-55 (53 ref.)

Hemangioendothelioma of the hepatobiliary system: the classic and the unusual. Maksimak M, et al. **J Pediatr Gastroenterol Nutr** 1990 Jan;10(1):131-7 (17 ref.)

Gastric heterotopy of the biliary tract. Martinez-Urrutia MJ, et al. **J Pediatr Surg** 1990 Mar;25(3):356-7

A proposed cause for the hepatic dysfunction associated with parenteral nutrition. Whalen GF, et al. **J Pediatr Surg** 1990 Jun;25(6):622-6

A model of reversible obstructive jaundice in the rat. Posner MC, et al. **J Surg Res** 1990 Mar;48(3):204-10

Obstructive jaundice: an unusual presentation of amoebic liver abscess. Khan JA, et al. **J Trop Med Hyg** 1990 Jun; 93(3):194-6

A case of cholestasis: benign and recurrent and not due to measles [letter] Buffet C, et al. **JAMA** 1989 Dec 8; 262(22):3131-2

An analysis of factors contributing to the development of total parenteral nutrition-induced cholestasis. Drongowski RA, et al. **JPEN J Parenter Enteral Nutr** 1989 Nov-Dec; 13(6):586-9

Hyperalimentation-associated neonatal cholestasis: effect of oral gentamicin. Spurr SG, et al. **JPEN J Parenter Enteral Nutr** 1989 Nov-Dec;13(6):633-6

A case report of acute obstructive suppurative cholangitis in a non-0-1 Vibrio cholerae biliary carrier. Nishikawa M, et al. **Nippon Geka Hokan** 1989 Jan 1;58(1):155-61

Hepatobiliary consequences of parenteral alimentation. Balistreri WF, et al. **Prog Liver Dis** 1990;9:567-601 (193 ref.)

Visual stool examination--a screening test for infants with prolonged neonatal cholestasis. Brown SC, et al. **S Afr Med J** 1990 Apr 7;77(7):358-9

Metastatic melanoma: an unusual cause of obstructive jaundice. England MD, et al. **Surgery** 1990 May; 107(5):595-6

[Mirizzi syndrome] Cabooter M, et al. **Ned Tijdschr Geneeskd** 1990 Apr 7;134(14):708-11 (Eng. Abstr.) **(Dut)**

[Cholestasis caused by ulcerative Vater's papillitis in a child with AIDS] de'Angelis GL, et al. **Arch Fr Pediatr** 1990 Jan;47(1):37-8 (Eng. Abstr.) **(Fre)**

[Obstructive icterus in patients with hepatic tumor. Result of non-surgical biliary drainage] Hagege H, et al. **Gastroenterol Clin Biol** 1990;14(2):115-9 (Eng. Abstr.) **(Fre)**

[Ultrasonographic and x-ray computed tomographic aspects of Mirizzi's syndrome] Mathieu D, et al. **Gastroenterol Clin Biol** 1989 Nov;13(11):905-9 (16 ref.) (Eng. Abstr.) **(Fre)**

[ERCP and associated methods in children--cases from a personal patient sample] Kautz G, et al. **Z Kinderchir** 1988 Sep;43 Suppl 1:54-6 **(Ger)**

[A case of icteric hepatoma with laryngeal metastasis and coexisting pancreatic cancer] Nambu T, et al. **Gan No Rinsho** 1990 Mar;36(4):515-20 (Eng. Abstr.) **(Jpn)**

[Obstructive jaundice from benign hepatic cysts] Kuraoka S, et al. **Nippon Geka Gakkai Zasshi** 1990 Feb;91(2):287-9 (Eng. Abstr.) **(Jpn)**

[A case of obstructive jaundice caused by incarceration of pancreatic stones in the ampulla of papilla Vater] Moritomo H, et al. **Nippon Geka Gakkai Zasshi** 1990 Jan;91(1):146-9 (Eng. Abstr.) **(Jpn)**

[A case of obstructive jaundice due to inflammatory pseudotumor-like granuloma] Imafuku K, et al. **Nippon Naika Gakkai Zasshi** 1990 Apr 10;79(4):533-4 **(Jpn)**

[A non-parasitic huge hepatic cyst with obstructive jaundice treated with absolute ethanol] Komiyama K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Nov; 86(11):2597-601 **(Jpn)**

[Multiple myeloma causing obstructive jaundice by extramedullary plasmacytoma after Bence Jones protein loss--an autopsy case report] Hamamoto K, et al. **Rinsho Ketsueki** 1990 Jan;31(1):57-61 (13 ref.) (Eng. Abstr.) **(Jpn)**

[Effects of ovariectomy on the composition of fatty acids of phospholipids in Java macaques with cholestasis] Bogdarin IuA, et al. **Biull Eksp Biol Med** 1990 Jun; 109(6):561-3 (Eng. Abstr.) **(Rus)**

[Mirizzi's syndrome] Shapova Iiants SG, et al. **Sov Med** 1989; (6):97-100 **(Rus)**

[Pathogenesis of jaundice in acute cholecystitis] Grinev MV, et al. **Vestn Khir** 1989 Jul;143(7):3-7 (Eng. Abstr.) **(Rus)**

[Obstructive icterus caused by hydatidosis of the liver] Milišić D, et al. **Acta Chir Iugosl** 1989;36 Suppl 2:597-9 (Eng. Abstr.) **(Scr)**

[Etiology of surgical cholestasis--surgical data 1984-1988] Ratkov S, et al. **Acta Chir Iugosl** 1989;36 Suppl 2:753-5 **(Scr)**

[Hemangioendothelioma of the pancreas and choledochus, as a cause of cholestatic neonatal and Kasabach-Merrit syndromes] Villegas-Alvarez F, et al. **Bol Med Hosp Infant Mex** 1989 Oct;46(10):672-5 (Eng. Abstr.) **(Spa)**

GENETICS

Are changes in expression of actin genes involved in estrogen-induced cholestasis? Reyes-Romero MA. **Med Hypotheses** 1990 May;32(1):39-43 (48 ref.)

IMMUNOLOGY

Anergy in patients with biliary lithiasis [letter; comment] Monson JR. **Br J Surg** 1989 Sep;76(9):988 Comment on: Br J Surg 1989 Feb;76(2):169-72.

Serum levels of carbohydrate antigenic determinant (CA 19.9) in obstructive jaundice [letter] Benamouzig R, et al. **Dig Dis Sci** 1989 Oct;34(10):1640-2

Suppression of cellular immunity in obstructive jaundice is caused by endotoxins: a study with germ-free rats. Greve JW, et al. **Gastroenterology** 1990 Feb;98(2):478-85

Immunological perspectives on pancreatic cancer and jaundice. Monson JR, et al. **Hepatogastroenterology** 1989 Dec;36(6):437-41 (54 ref.)

Modulation of immunosuppression in obstructive jaundice by Tinospora cordifolia. Rege NN, et al. **Indian J Med Res** 1989 Dec;90:478-83

Muramyl dipeptide improves mononuclear phagocyte system function in obstructive jaundice. Dunn CW, et al. **J Surg Res** 1990 Mar;48(3):249-53

[Clinical significance of serum secretory immunoglobulin A in cholelithiasis and biliary tract obstruction] You XY. **Chung Hua Wai Ko Tsa Chih** 1989 Sep;27(9):550-3, 575 (Eng. Abstr.) **(Chi)**

METABOLISM

Effect of obstructive jaundice on the fate of a nephrophilic organic anion in the rat. Sugi K, et al. **Biochim Biophys Acta** 1989 Dec 28;987(2):217-21

Unusual 1 beta-hydroxylated bile acids in children with a paucity in interlobular bile ducts [letter] Kimura A, et al. **Clin Chim Acta** 1989 Nov;185(2):215-7

Albendazole kinetics in patients with echinococcosis: delayed absorption and impaired elimination in cholestasis. Cotting J, et al. **Eur J Clin Pharmacol** 1990;38(6):605-8

Enhanced production of endogenous prostaglandin in obstructive jaundiced pancreas in dogs. Kuroda T, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1292-8

Procollagen expression by nonparenchymal rat liver cells in experimental biliary fibrosis. Milani S, et al. **Gastroenterology** 1990 Jan;98(1):175-84

Norepinephrine-induced cholestasis in the isolated perfused rat liver is secondary to its hemodynamic effects. Lenzen R, et al. **Hepatology** 1990 Aug;12(2):314-21

Antipyrine clearance: prognostic marker for obstructive jaundice. Nazareth HM, et al. **Indian J Gastroenterol** 1990 Jan;9(1):63-6

The effect of obstruction on the biliary excretion of cefoperazone and ceftazidime. Leung JW, et al. **J Antimicrob Chemother** 1990 Mar;25(3):399-406

Etoposide kinetics in patients with obstructive jaundice. Hande KR, et al. **J Clin Oncol** 1990 Jun;8(6):1101-7

Cholesterol and prostaglandin synthesis by cultured human skin fibroblasts in the Alagille syndrome involving paucity of interlobular bile ducts. Dupont J, et al. **J Inherited Metab Dis** 1989;12(4):436-44

Phenobarbital can aggravate a cholestatic bile acid pattern in infants with obstructive cholangiopathy. Nemeth A, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr;10(3):290-7

Plasma amino acids in long-term models for obstructive versus toxic liver injury in developing rats. Weisdorf SA, et al. **J Pediatr Gastroenterol Nutr** 1990 Apr;10(3):371-9

Changes in production of interleukin-1 and interleukin-2 associated with obstructive jaundice and biliary drainage in patients with gastrointestinal cancer. Haga Y, et al. **Surgery** 1989 Nov;106(5):842-8

Obstructive jaundice and renal failure in the rat: the role of renal prostaglandins and the renin-angiotensin system. O'Neill P, et al. **Surgery** 1990 Aug;108(2):356-62

[Pharmacokinetics of lidocaine after intercostal block in cholestatic patients] Vigué B, et al. **Ann Fr Anesth Reanim** 1989;8 Suppl:R153 **(Fre)**

[Electron histochemical alteration on the plasma membrane of biliary epithelial cells in obstructive jaundice] Hara T. **Nippon Geka Gakkai Zasshi** 1989 May;90(5):726-35 (Eng. Abstr.) **(Jpn)**

[Lipid peroxidation and disorders of erythrocyte properties in patients with mechanical jaundice] Petukhov EB, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):27-30 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Obstructive jaundice promotes bacterial translocation from the gut. Deitch EA, et al. **Am J Surg** 1990 Jan;159(1):79-84

MORTALITY

Variceal bleeding is associated with reduced risk of severe cholestasis in primary biliary cirrhosis. Thornton JR, et al. **Q J Med** 1989 May;71(265):467-71

PATHOLOGY

Brushing cytology in biliary tract obstruction. Rupp M, et al. **Acta Cytol** 1990 Mar-Apr;34(2):221-6

Origin, pattern, and mechanism of bile duct proliferation following biliary obstruction in the rat. Slott PA, et al. **Gastroenterology** 1990 Aug;99(2):466-77

Pathology of common bile duct stenosis in cystic fibrosis. Bilton D, et al. **Gut** 1990 Feb;31(2):236-8

Acute cholestatic Hodgkin's lymphoma: an unusual clinical picture. Marinone G, et al. **Haematologica (Pavia)** 1989 May-Jun;74(3):293-6

Semiquantitative assessment of cholestasis and lymphocytic piecemeal necrosis in primary biliary cirrhosis: a histologic and immunohistochemical study. Nakanuma Y, et al. **J Clin Gastroenterol** 1990 Jun;12(3):357-62

Unifocal stricture of the common bile duct in two children: a localized form of primary sclerosing cholangitis. Sokal EM, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug; 11(2):268-74

A potential basis for suppressed inflammatory cell function in pediatric cholestatic hosts. Roughneen PT, et al. **J Pediatr Surg** 1990 Feb;25(2):204-7

Origin and involution of hyperplastic bile ductules following total biliary obstruction. Gall JA, et al. **Liver** 1990 Apr; 10(2):106-15

A quantitative analysis of the liver following ligation of the common bile duct. Gall JA, et al. **Liver** 1990 Apr; 10(2):116-25

Taurocholate-induced gastric damage in rats with obstructive jaundice. Matsuo T, et al. **Scand J Gastroenterol Suppl** 1989;162:83-6

[Obstructive jaundice and advanced gastric carcinoma--correlation with its histopathology] Saida Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Apr 25; 49(4):399-406 (Eng. Abstr.) **(Jpn)**

[Ultrastructural characteristics and succinate dehydrogenase activity of the hepatocyte mitochondria in cholestasis] Eufarov KA, et al. **Biull Eksp Biol Med** 1989 Sep; 108(9):372-5 (Eng. Abstr.) **(Rus)**

[Effects of extracorporeal blood purification on the structural-morphological state of the liver in obstructive jaundice] Ender LA, et al. **Sov Med** 1989;(7):20-2 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Obstructive jaundice and wound healing. Grande L, et al. **Br J Surg** 1990 Apr;77(4):440-2

Reduced water and sodium intakes associated with high levels of natriuretic factor following common bile duct ligation in the rabbit. Oms L, et al. **Br J Surg** 1990 Jul; 77(7):752-5

Plasma retinol transport system and taste acuity in patients with obstructive jaundice. Imamine T, et al. **Gastroenterol Jpn** 1990 Apr;25(2):206-11

Hemodynamic function in dogs with chronic obstructive jaundice: effects of radiocontrast medium. Feinberg SJ, et al. **J Surg Res** 1990 Jul;49(1):55-61

Enhanced gentamicin nephrotoxicity after experimental biliary obstruction in rats. Lucena MI, et al. **Pharmacol Toxicol** 1989 Nov;65(5):352-6

Physiology of bile secretion and cholestasis. Sellinger M, et al. **Prog Liver Dis** 1990;9:237-59 (186 ref.)

[The effect of dimetindene on liver and kidney function in the cholestatic rat] Siegers CP, et al. **Arzneimittelforschung** 1989 Nov;39(11):1440-3 (Eng. Abstr.) **(Ger)**

[Is MAC effected by liver dysfunction?--Bilirubin and MAC] Yasuda N, et al. **Masui** 1990 Jan;39(1):51-5 (Eng. Abstr.) **(Jpn)**

[Effect of obstructive jaundice on the electrophysiological characteristics of the gastric mucosa and gastric acid secretion in rats] Kamiyama Y. **Nippon Geka Gakkai Zasshi** 1990 Apr;91(4):464-71 (Eng. Abstr.) **(Jpn)**

[Experimental study on the interruption of hepatic blood flow in obstructive jaundice, with special reference to the causes of death and prolonged jaundice after biliary decompression] Okada Y. **Nippon Geka Hokan** 1989 May 1;58(3):275-88 (Eng. Abstr.) **(Jpn)**

[Experimental and clinical studies on liver tissue blood flow in obstructive jaundice] Kodama O, et al. **Nippon Shokakibyo Gakkai Zasshi** 1990 Jan;87(1):49-56 (Eng. Abstr.) **(Jpn)**

[Secretory pressure of the liver and bile hydrodynamics in prolonged obstruction of the bile ducts] Kurlat NG. **Klin Khir** 1989;(9):21-2 (Eng. Abstr.) **(Rus)**

[The status of the nervous system in mechanical jaundice] Martynov IuS, et al. **Klin Med (Mosk)** 1989 Jul;67(7):85-9 (Eng. Abstr.) **(Rus)**

[Cholestasis] García Paredes J. **Rev Clin Esp** 1989 Jul-Aug; 185(3):111-2 (15 ref.) **(Spa)**

PREVENTION & CONTROL

Tauroursodeoxycholate prevents taurolithocholate-induced cholestasis and toxicity in rat liver. Schölmerich J, et al. **J Hepatol** 1990 May;10(3):280-3

The effects of enteral stimulation on gallbladder bile during total parenteral nutrition in the neonatal piglet. Cohen IT, et al. **J Pediatr Surg** 1990 Jan;25(1):163-7

Taurohyocholate, taurocholate, and tauroursodeoxycholate but not tauroursocholate and taurodehydrocholate counteract effects of taurolithocholate in rat liver. Schölmerich J, et al. **Res Exp Med (Berl)** 1990;190(2):121-9

Cholecystokinin prevents parenteral nutrition induced biliary sludge in humans. Sitzmann JV, et al. **Surg Gynecol Obstet** 1990 Jan;170(1):25–31

RADIOGRAPHY

Endoscopic retrograde choledocho–pancreatography. A review with a report of a collaborative series. Burwood RJ, et al. **Clin Radiol** 1973 Oct;24(4):397–415 (74 ref.)

Computed tomography evaluation of high–density bile in the gallbladder. Ueda J, et al. **Gastrointest Radiol** 1990 Winter; 15(1):22–6

Fine needle percutaneous transhepatic cholangiogram (PTC). Shamsi Z, et al. **JPMA** 1989 Aug;39(8):219–21

Hilar biliary strictures after liver transplantation: cholangiography and percutaneous treatment. Ward EM, et al. **Radiology** 1990 Oct;177(1):259–63

RADIONUCLIDE IMAGING

Hematobilia causing complete biliary obstruction on Tc–99m DISIDA scan. Williamson MR, et al. **Clin Nucl Med** 1990 Aug;15(8):583

Per rectal thallium scintigraphy for the assessment of portosystemic shunt: an experimental study in the bile duct ligated rats. Van Maldergem L, et al. **Eur J Nucl Med** 1989;15(9):587–90

Cholescintigraphy in the evaluation of jaundice [letter; comment] Morayati SJ. **JAMA** 1990 Apr 18;263(15):2050–1 Comment on: **JAMA** 1989 Dec 1;262(21):3031–4.

[Scintigraphy of the liver and biliary tract in the diagnosis of diseases associated with mechanical jaundice] Ozerov VF, et al. **Vestn Khir** 1989 Jul;143(7):7–9 **(Rus)**

RADIOTHERAPY

The use of lasers in the treatment of cholangiocarcinoma. Birkett DH, et al. **Surg Endosc** 1989;3(3):121–3

[A case of icteric hepatoma which succeeded internal fistulation after radiotherapy] Nambu T, et al. **Rinsho Hoshasen** 1989 Dec;34(13):1637–40 (Eng. Abstr.) **(Jpn)**

SURGERY

Biliary stent or surgical bypass in unresectable pancreatic cancer with obstructive jaundice. Hyöty MK, et al. **Acta Chir Scand** 1990 May;156(5):391–6

Hepatic recovery after biliary decompression of experimental obstructive jaundice. Fraser IA, et al. **Am J Surg** 1989 Nov; 158(5):423–7

Use of mannitol as a measure to prevent postoperative renal failure in patients with obstructive jaundice [letter; comment] Gubern JM, et al. **Am J Surg** 1990 Apr; 159(4):444–5 Comment on: Am J Surg 1989 Feb;157(2):256–63.

Effects of percutaneous transhepatic biliary drainage on blood–bile permeability and selective IgA transport in patients with biliary obstructions. Ohshio G, et al. **Ann Surg** 1990 Apr;211(4):428–32

Benign postoperative biliary strictures. Operate or dilate? Pitt HA, et al. **Ann Surg** 1989 Oct;210(4):417–25; discussion 426–7

Transhepatic endoprosthesis and surgical anastomosis in the palliative treatment of bile duct obstructions. Skjennald A, et al. **Eur J Radiol** 1989 Aug;9(3):167–8

Recanalization of clogged biliary stent [letter] Hsu D. **Gastrointest Endosc** 1990 May–Jun;36(3):322–3

Endoprosthetic insertion for malignant obstructive jaundice: a retrospective review. Tarr KP, et al. **J Am Osteopath Assoc** 1989 Dec;89(12):1525–37

Occlusion of biliary endoprostheses: presentation and management. Lee MJ, et al. **Radiology** 1990 Aug; 176(2):531–4

The benefits of percutaneous cholecystostomy for decompression of selected cases of obstructive jaundice [see comments] vanSonnenberg E, et al. **Radiology** 1990 Jul; 176(1):15–8 Comment in: Radiology 1990 Jul;176(1):5–6.

Expandable metallic biliary endoprostheses: preliminary clinical evaluation. Yoshioka T, et al. **Radiology** 1990 Oct; 177(1):253–7

Electromyographic evaluation of the gastrointestinal tract in patients with chronic Roux–en–Y limb. Coelho JC, et al. **Surg Gynecol Obstet** 1990 May;170(5):399–402

Operative strategy in Mirizzi syndrome. Dewar G, et al. **Surg Gynecol Obstet** 1990 Aug;171(2):157–9

A new technique for decompression of the biliary tract. Silk YN, et al. **Surg Gynecol Obstet** 1989 Dec;169(6):546–8

Percutaneous–endoscopic placement of endoprostheses for relief of jaundice caused by inoperable bile duct strictures. Hall RI, et al. **Surgery** 1990 Feb;107(2):224–7

Endoscopic sphincterotomy in patients with gallbladder in situ: the influence of periampullary duodenal diverticula. Shemesh E, et al. **Surgery** 1990 Feb;107(2):163–6

[Delayed duodenal perforation caused by transhepatic biliary endoprosthesis] Grelet P, et al. **J Radiol** 1989 Nov; 70(11):613–6 (Eng. Abstr.) **(Fre)**

[Endoscopy or surgery in the treatment of obstructive jaundice] Garbarini A, et al. **Minerva Chir** 1990 Apr 15; 45(7):447–54 (Eng. Abstr.) **(Ita)**

[Diagnosis and surgical treatment of obstructive jaundice in benign diseases] Cherniavskiĭ AA, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):15–8 (Eng. Abstr.) **(Rus)**

[Treatment of nontumorous obstructive jaundice and cholangitis in middle–aged and elderly patients] Rodionov VV, et al. **Khirurgiia (Mosk)** 1989 Dec;(12):72–6 (Eng. Abstr.) **(Rus)**

[Bile sorption in hepatic insufficiency in patients with mechanical jaundice] Zhidovinov GI. **Khirurgiia (Mosk)** 1989 Jul;(7):88–92 (Eng. Abstr.) **(Rus)**

[Current status of surgical treatment of mechanical jaundice of non–neoplastic etiology (VII All–Union Congress of Surgeons, Leningrad, October 18–20, 1989)] Artem'eva NN, et al. **Vestn Khir** 1990 Mar;144(3):150–3 **(Rus)**

THERAPY

Preoperative biliary drainage [letter] Lygidakis NJ. **Acta Chir Scand** 1990 May;156(5):417

Percutaneous–endoscopic biliary stenting in patients with occluded surgical bypass. Tsang TK, et al. **Am J Med** 1990 Apr;88(4):344–8

Management of hepatocellular carcinoma presenting as obstructive jaundice. Lau WY, et al. **Am J Surg** 1990 Sep; 160(3):280–2

Prevention of postoperative complications in jaundiced rats. Internal biliary drainage versus oral lactulose. Greve JW, et al. **Ann Surg** 199C Aug;212(2):221–7

Endoscopic palliation of malignant biliary obstruction in a child. Bickerstaff KI, et al. **Br J Surg** 1989 Oct; 76(10):1092–3

Percutaneous biliary drainage for malignancy—an expanding field. Adam A. **Clin Radiol** 1990 Apr;41(4):225–7 (19 ref.)

Biliary tract intervention. LaBerge JM. **Curr Opin Radiol** 1990 Apr;2(2):259–65 (30 ref.)

Self–expanding biliary stents: preliminary clinical experience. Neuhaus H, et al. **Endoscopy** 1989 Sep;21(5):225–8

Endoscopic stenting of strictured bilio–enteric anastomosis. Russo A, et al. **Endoscopy** 1989 Sep;21(5):212–4

Interventional radiological treatment of malignant biliary obstruction. Kauffmann GW, et al. **Eur J Surg Oncol** 1990 Aug;16(4):397–403 (13 ref.)

Endoscopic electrohydraulic lithotripsy. Siegel JH, et al. **Gastrointest Endosc** 1990 Mar–Apr;36(2):134–6

Use of a modified angioplasty balloon catheter in the dilatation of tight biliary strictures. Rao KJ, et al. **Gut** 1990 May;31(5):565–7

The effect of selective therapy on malignant obstructive jaundice. Fletcher DR, et al. **Med J Aust** 1989 Nov 20; 151(10):560–4

Endoscopy can replace surgery for treatment of many patients with biliary obstruction. Cotton PB. **N C Med J** 1990 May;51(5):210–6 (12 ref.)

Self–expandable stainless steel braided endoprosthesis for biliary strictures. Gillams A, et al. **Radiology** 1990 Jan; 174(1):137–40

Cholestatic jaundice in infancy—a plea for urgent full investigation [letter] Millar AJ, et al. **S Afr Med J** 1990 May 19;77(10):538

A modified technique of ultrasonically guided percutaneous transhepatic biliary drainage. Das K, et al. **Surg Endosc** 1989;3(4):191–4

Endoscopic fistulotomy and biliary drainage as the ultimate palliative treatment for obstruction due to malignant tumors of the papilla of Vater. Feretis C, et al. **Surg Endosc** 1990; 4(2):88–90

[Interventional radiology in bile duct diseases] Brambs HJ, et al. **Chirurg** 1989 Dec;60(12):840–5 (15 ref.) **(Ger)**

[Interventional percutaneous diagnosis and therapy of the bile ducts] Hauenstein KH, et al. **Chirurg** 1989 Dec; 60(12):831–9 **(Ger)**

[Changing trends in percutaneous and endoscopic bile duct drainage] Münster B, et al. **Radiol Diagn (Berl)** 1989; 30(5):593–7 (Eng. Abstr.) **(Ger)**

[Palliation of malignant bile duct obstruction] Eitan A, et al. **Harefuah** 1990 Mar 1;118(5):252–4 (Eng. Abstr.) **(Heb)**

[2,450MHz hyperthermia for malignant stenosis of the bile duct—development of a new biliary drainage tube united with a thermocouple] Yanagidaira H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1990 Feb 25; 50(2):195–7 (Eng. Abstr.) **(Jpn)**

[Pilot study of a stent made of a shape memorizing alloy used for obstructive jaundice] Hyodo H, et al. **Rinsho Hoshasen** 1990 May;35(5):571–6 (Eng. Abstr.) **(Jpn)**

[Biliary endoprosthesis using an expandable metallic stent] Morita S, et al. **Rinsho Hoshasen** 1990 Apr;35(4):459–63 (Eng. Abstr.) **(Jpn)**

[Evaluation of a biliary endoprosthesis using expandable metallic stents] Yoshioka T, et al. **Rinsho Hoshasen** 1990 May;35(5):563–9 (Eng. Abstr.) **(Jpn)**

[Ion–exchange hemosorption in the intensive therapy of liver insufficiency in patients with obstructive jaundice] Minina KZ, et al. **Anesteziol Reanimatol** 1989 Jul–Aug;(4):40–2 (Eng. Abstr.) **(Rus)**

[Effectiveness of therapeutic plasmapheresis in patients with obstructive jaundice] Abdullaev EG, et al. **Klin Khir** 1989; (11):62 **(Rus)**

[The use of SKN carbon enterosorbents in the combined treatment of patients with obstructive jaundice. III. The results of clinical research] Zemskov VS, et al. **Klin Khir** 1989;(9):1–3 (Eng. Abstr.) **(Rus)**

[Preoperative enterosorption as a method for preventing postoperative complications in mechanical jaundice in cancer patients] Kaban AP, et al. **Vopr Onkol** 1990; 36(7):850–4 (Eng. Abstr.) **(Rus)**

[Correction of hepatic morphofunctional disorders in mechanical jaundice of a nontumorous nature] Chernykh SN, et al. **Vrach Delo** 1989 Dec;(12):58–61 (Eng. Abstr.) **(Rus)**

[The significance of nonsurgical bile duct drainage in patients with icterus] Paškan J, et al. **Rozhl Chir** 1990 Feb;69(2):71–6 (Eng. Abstr.) **(Slo)**

[Treatment of chronic cholestasis] Rodés J. **Rev Clin Esp** 1989 Jul–Aug;185(3):147–52 (57 ref.) **(Spa)**

URINE

Urinary prostaglandins and renal function in obstructive jaundice. Uemura M, et al. **Scand J Gastroenterol** 1989 Aug; 24(6):705–15

VETERINARY

Influence of induced cholestasis on pharmacokinetics of digoxin and digitoxin in dogs. Miyazawa Y, et al. **Am J Vet Res** 1990 Apr;51(4):605–10

Quantitative hepatobiliary scintigraphy as a measure of bile flow in dogs with cholestatic disease. Rothuizen J, et al. **Am J Vet Res** 1990 Feb;51(2):253–6

Cholestasis associated with extrahepatic bacterial infection in five dogs. Taboada J, et al. **J Vet Intern Med** 1989 Oct–Dec;3(4):216–21

A technique for creating partial obstruction of the common bile duct in the rat. Sekas G. **Lab Anim** 1990 Jul;24(3):284–7

CHOLESTASIS, EXTRAHEPATIC see **BILE DUCT OBSTRUCTION, EXTRAHEPATIC**

CHOLESTASIS, INTRAHEPATIC

Intrahepatic cholestasis. Gentilini P. **Ann Ital Med Int** 1986; 1 Suppl 1:27–35 (19 ref.)

Benign recurrent intrahepatic cholestasis. A report of 26 cases. Brenard R, et al. **J Clin Gastroenterol** 1989 Oct; 11(5):546–51

[Recurrent benign intrahepatic cholestasis: a review and description of a clinical case] Paladini A, et al. **Riv Eur Sci Med Farmacol** 1988 Jun;10(3):225–8 (Eng. Abstr.) **(Ita)**

[Usefulness of the modified fetal biophysical profile in intrahepatic cholestasis of pregnancy] Paublo MA, et al. **Rev Chil Obstet Ginecol** 1987;52(5):296–303 (Eng. Abstr.) **(Spa)**

BLOOD

Lipoprotein (a) serum levels in chronic cholestatic liver disease during treatment with ursodeoxycholic acid [letter] Beuers U, et al. **Arch Intern Med** 1990 Jul;150(7):1542

CHEMICALLY INDUCED

Severe jaundice with destructive cholangitis after administration of methyltestosterone [letter] Hartleb M, et al. **Am J Gastroenterol** 1990 Jun;85(6):766–7

Effect of cyclosporin A on bile flow in experimental animals using technetium–99m EHIDA. Owunwanne A, et al. **Am J Physiol Imaging** 1990;5(1):30–5

Cholestasis induced by oestrogen after liver transplantation. Fedorkow DM, et al. **BMJ** 1989 Oct 28;299(6707):1080–1

Cholestatic hepatitis due to antibacterial combination of amoxicillin and clavulanic acid (augmentin). Stricker BH, et al. **Dig Dis Sci** 1989 Oct;34(10):1576–80

Intrahepatic cholestasis and phospholipidosis associated with the use of trimethoprim–sulfamethoxazole. Muñoz SJ, et al. **Hepatology** 1990 Aug;12(2):342–7

Cholestatic hepatitis due to an amoxycillin/clavulanic acid preparation. Verhamme M, et al. **J Hepatol** 1989 Sep; 9(2):260–4

Prolonged hepatic cholestasis after flucloxacillin therapy. Turner IB, et al. **Med J Aust** 1989 Dec 4–18; 151(11–12):701–5

[Liver damage during use of busulfan (published erratum appears in Ned Tijdschr Geneeskd 1989 Sep 16;133(37):1864)] Adang RP, et al. **Ned Tijdschr Geneeskd** 1989 Jul 29;133(30):1515–8 (Eng. Abstr.) **(Dut)**

COMPLICATIONS

Rifampin relieves pruritus in children with cholestatic liver disease. Cynamon HA, et al. **Gastroenterology** 1990 Apr; 98(4):1013–6

Symptomatic extreme bradycardia in obstructive jaundice [letter] Garg SC, et al. **J Assoc Physicians India** 1989 Oct; 37(10):675

Endotoxaemia and hepatic injury in obstructive jaundice. Shibayama Y. **J Pathol** 1989 Dec;159(4):335–9

Copper–induced dystonia secondary to cholestatic liver disease [letter] Danks DM. **Lancet** 1990 Feb 17; 335(8686):410

[Hepatic lipogranulomatosis and lipoid pneumopathy (letter)] Cadiot G, et al. **Gastroenterol Clin Biol** 1989 Dec; 13(12):1086 **(Fre)**

[Asphyxiating thoracic dysplasia associated with hepatic ductal hypoplasia, agenesis of the corpus callosum and Dandy–Walker syndrome] Trabelsi M, et al. **Pediatrie** 1990; 45(1):35–8 (24 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Benign recurrent intrahepatic cholestasis. A clinico-pathologic study. Lovisetto P, et al. **Ric Clin Lab** 1990 Jan-Mar;20(1):19-27

[The clinico-laboratory characteristics of the cholestatic form of acute alcoholic hepatitis] Vürbanov G. **Vutr Boles** 1989;28(6):36-40 (Eng. Abstr.) **(Bul)**

[Mechanical jaundice: laparotomy or endoscopy?] Kochnev OS, et al. **Khirurgiia (Mosk)** 1990 Feb;(2):26-32 (Eng. Abstr.) **(Rus)**

[Echosonography and retrograde cholangiopancreatography in selecting surgical tactics in mechanical jaundice] Kanorskiĭ ID, et al. **Sov Med** 1989;(10):35-7 (Eng. Abstr.) **(Rus)**

[Clinico-laboratory characteristics of the cholestatic form of acute alcoholic hepatitis] Vürbanov G, et al. **Ter Arkh** 1989; 61(11):48-50 (Eng. Abstr.) **(Rus)**

[The problem of diagnosing jaundice in patients with active liver cirrhosis] Borodina TS. **Voen Med Zh** 1989 Jun;(6):60 **(Rus)**

[Comparative study of various methods in the diagnosis of cholestasis in infants] Römer H, et al. **GEN** 1988 Jan-Mar; 42(1):1-6 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Oral S-adenosylmethionine in the symptomatic treatment of intrahepatic cholestasis. A double-blind, placebo-controlled study. Frezza M, et al. **Gastroenterology** 1990 Jul;99(1):211-5

Treatment of patients with benign recurrent intrahepatic cholestasis [letter; comment] Bircher J. **Hepatology** 1989 Dec;10(6):1030-2 Comment on: Hepatology 1989 Apr;9(4):532-7.

Benign recurrent intrahepatic cholestasis: failure of S-adenosylmethionine therapy. Ghent CN. **Hepatology** 1990 Aug;12(2):367-8

Ursodeoxycholic acid treatment for chronic cholestatic liver disease. James OF. **J Hepatol** 1990 Jul;11(1):5-8 (46 ref.)

The effect of metronidazole on TPN-associated liver dysfunction in neonates. Kubota A, et al. **J Pediatr Surg** 1990 Jun;25(6):618-21

A review of the studies on the clinical use of S-adenosylmethionine (SAMe) for the symptomatic treatment of intrahepatic cholestasis. Coltorti M, et al. **Methods Find Exp Clin Pharmacol** 1990 Jan-Feb; 12(1):69-78 (71 ref.)

Effects of ursodeoxycholic acid on intrahepatic cholestasis. Mizoguchi Y, et al. **Osaka City Med J** 1989 Nov; 35(2):71-82

Choleretic effects of ursodeoxycholic acid on experimentally-induced intrahepatic cholestasis. Mizoguchi Y, et al. **Osaka City Med J** 1989 Nov;35(2):83-91

Methotrexate treatment of chronic cholestatic liver diseases: friend or foe? Kaplan MM. **Q J Med** 1989 Aug; 72(268):757-61

[Relation of changes in plasma TXB2 PGF1alpha and differentiation of signs and symptoms in traditional Chinese medicine in severe icteric hepatitis] Wang C, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1990 Mar;10(3):141-3, 130-1 (Eng. Abstr.) **(Chi)**

ENZYMOLOGY

Mechanism of gamma-glutamyl transpeptidase release in serum during intrahepatic and extrahepatic cholestasis in the rat: a histochemical, biochemical and molecular approach. Bulle F, et al. **Hepatology** 1990 Apr;11(4):545-50

[The influences of endogenous bile acids on maltase and alkaline phosphatase activities in intrahepatic cholestasis rats] Iizuka Y, et al. **Yakugaku Zasshi** 1989 Sep;109(9):680-4 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Left intercostal approach for percutaneous biliary drainage after right trisegmentectomy [letter] Walter RM, et al. **AJR Am J Roentgenol** 1990 Mar;154(3):656

Steroid-responsive chronic hepatic graft-versus-host disease without extrahepatic graft-versus-host disease. Gholson CF, et al. **Am J Gastroenterol** 1989 Oct;84(10):1306-9

Jaundice as a paraneoplastic phenomenon in a T-cell lymphoma. Watterson J, et al. **Gastroenterology** 1989 Nov; 97(5):1319-22 (19 ref.)

Hemorrhage into a choledochal cyst in a hemophiliac child. Stein M, et al. **Pediatr Radiol** 1989;20(1-2):118-9

[Hepatic hydatid cyst with destruction of the biliary confluent. Apropos of 2 cases treated by direct reconstruction] Martin Molinero R, et al. **J Chir (Paris)** 1989 Dec;126(12):672-5 (Eng. Abstr.) **(Fre)**

[Panhypopituitarism revealed by cholestasis in an infant (letter)] Cuvellier JC, et al. **Presse Med** 1989 Oct 14; 18(33):1666 **(Fre)**

[Onset of Philadelphia chromosome negative chronic myeloid leukemia with symptoms of intrahepatic cholestasis] Döbrönte Z, et al. **Orv Hetil** 1989 Oct 22; 130(43):2315-8 (Eng. Abstr.) **(Hun)**

[A research on the cholestasis caused by continuous endotoxemia] Nishida M, et al. **Nippon Geka Gakkai Zasshi** 1990 Feb;91(2):184-90 (Eng. Abstr.) **(Jpn)**

[Hepatocyte necrosis and intrahepatic cholestasis in the postoperative period of patients undergoing heart surgery with the use of extracorporeal circulation: significance of clinical, epidemiologic, surgical and laboratory parameters in evaluating prognosis] de Oliveira e Silva A, et al. **Arq Gastroenterol** 1989 Jul-Sep;26(3):55-64 (Eng. Abstr.) **(Por)**

GENETICS

Discordance for ulcerative colitis in identical twins concordant for cholestatic liver disease. Report of 2 cases. Gregg JA, et al. **Am J Dig Dis** 1970 Jul;15(7):667-71

Interstitial deletion of the short arm of chromosome 20 in arteriohepatic dysplasia (Alagille syndrome). Zhang F, et al. **J Pediatr** 1990 Jan;116(1):73-7

METABOLISM

Carbohydrate metabolism in the course of intrahepatic cholestasis in pregnancy. Wójcicka-Jagodzińska J, et al. **Am J Obstet Gynecol** 1989 Oct;161(4):959-64

Immunoelectron microscopic localization of actin in normal and cholestatic rat hepatocytes. Kachi K, et al. **Gastroenterol Jpn** 1989 Oct;24(5):523-7

Cutaneous photosensitivity and coproporphyrin abnormalities in the Alagille syndrome. Poh-Fitzpatrick MB, et al. **Gastroenterology** 1990 Sep;99(3):831-5

Immunocytochemical studies on cholestatic factor in human liver with or without cholestasis. Yamada S, et al. **Liver** 1990 Jun;10(3):129-36

The hepatic lipid peroxidation, copper and fibrosis in cholestatic rats. Aykac G, et al. **Pharmacol Res** 1989 Nov-Dec;21(6):701-6

Determination of 3 beta-hydroxylated bile acids in human serum and liver tissue. Nagakura T, et al. **Tohoku J Exp Med** 1989 Oct;159(2):165-6

MORTALITY

Prognostic significance of cholestatic alcoholic hepatitis. VA Cooperative Study Group #119. Nissenbaum M, et al. **Dig Dis Sci** 1990 Jul;35(7):891-6

PATHOLOGY

Hepatolithiasis in hereditary hemorrhagic telangiectasia. Ball NJ, et al. **Arch Pathol Lab Med** 1990 Apr;114(4):423-5

Jaundice in Plasmodium falciparum. Chawla LS, et al. **J Assoc Physicians India** 1989 Jun;37(6):390-1

[Cardiomyopathy, polymorphous erythema and liver disease (clinical conference)] **Rev Fac Cien Med Univ Nac Cordoba** 1988;46(1):47-51 **(Spa)**

RADIONUCLIDE IMAGING

Distinct hepatic retention of Tc-99m IDA in arteriohepatic dysplasia (Alagille syndrome). Aburano T, et al. **Clin Nucl Med** 1989 Dec;14(12):874-6

SURGERY

Biliary endoprosthesis dysfunction in patients with malignant hilar tumors: successful treatment by percutaneous replacement of the stent. Jackson JE, et al. **AJR Am J Roentgenol** 1990 Aug;155(2):391-5

A comparison of right versus left hepatic duct endoprosthesis insertion in malignant hilar biliary obstruction. Polydorou AA, et al. **Endoscopy** 1989 Nov;21(6):266-71

Intraoperative fiberoptic choledochoscopy for malignant biliary tract obstruction. Chen MF, et al. **Gastrointest Endosc** 1989 Nov-Dec;35(6):545-7

[Tumors of the hilum of the liver: apropos of 8 cases] Bahi S, et al. **Tunis Med** 1990 Feb;68(2):83-6 (19 ref.) (Eng. Abstr.) **(Fre)**

[Role of operative endoscopy in biliary neoplasia] Garbarini A, et al. **Minerva Chir** 1990 Apr 30;45(8):565-9 (Eng. Abstr.) **(Ita)**

[Endoscopic methods in the diagnosis and treatment of mechanical jaundice of non-neoplastic etiology] Ermolov AS, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):58-61 (Eng. Abstr.) **(Rus)**

[Diagnosis and treatment of mechanical jaundice] Lukichev OD, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):10-4 (Eng. Abstr.) **(Rus)**

[Repeat surgery in focal lesions of the liver] Nikhinson RA, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):34-8 (Eng. Abstr.) **(Rus)**

[Transhepatic endoprosthesis of the bile ducts] Prokubovskiĭ VI, et al. **Khirurgiia (Mosk)** 1990 Jan;(1):18-23 (Eng. Abstr.) **(Rus)**

[Diathermic laparoscopic cholecystostomy] Tashkinov VI, et al. **Khirurgiia (Mosk)** 1989 Jul;(7):119-20 **(Rus)**

THERAPY

Monofilament modification to the Carey-Coons stent [letter] Sacks BA. **AJR Am J Roentgenol** 1989 Nov;153(5):1103-4

Therapeutic plasmapheresis for cholestatic liver diseases: study of 9 cases. Omokawa S, et al. **Prog Clin Biol Res** 1990;337:233-6

Obstructive jaundice in Kawasaki's disease. Luzzatto C, et al. **Z Kinderchir** 1990 Feb;45(1):50-1

[Percutaneous transhepatic bile duct drainage, 10 years after its introduction] Gouma DJ, et al. **Ned Tijdschr Geneeskd** 1989 Dec 16;133(50):2494-9 (71 ref.) **(Dut)**

CHOLESTEATOMA

The pathogenesis and treatment of cholesteatoma. Palva T. **Acta Otolaryngol (Stockh)** 1990 May-Jun;109(5-6):323-30 (37 ref.)

Cholesteatoma versus mucocele of the maxillary sinus [letter; comment] Gardner DG. **J Oral Maxillofac Surg** 1990 Mar; 48(3):330 Comment on: J Oral Maxillofac Surg 1989 Aug;47(8):873-6.

Cholesteatoma. **Otolaryngol Clin North Am** 1989 Oct; 22(5):847-1053

Petrous apex cholesteatoma. Glasscock ME 3d, et al. **Otolaryngol Clin North Am** 1989 Oct;22(5):981-1002 (28 ref.)

Cholesteatoma: what is it, how did it get there, and how do we get rid of it? Jahn AF. **Otolaryngol Clin North Am** 1989 Oct;22(5):847-57 (16 ref.)

[Epidermoid of the petrous apex] Fontal Alvarez M, et al. **An Otorrinolaringol Ibero Am** 1990;17(1):67-76 (Eng. Abstr.) **(Spa)**

COMPLICATIONS

Facial paralysis associated with cholesteatoma unresponsive to surgical therapy [letter] Croxson G. **Am J Otol** 1990 Jul;11(4):297-8

Characteristics of a pathological process in the destroyed tympanic part of the facial canal in chronic otitis media with cholesteatoma. Djerić D, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(5):449-51

[Cholesteatoma and labyrinthine fistula] Martin C, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(5):439-43 (Eng. Abstr.) **(Fre)**

[Labyrinth fistula and cholesteatoma] Crovetto de la Torre MA, et al. **Acta Otorrinolaringol Esp** 1988 Sep-Oct; 39(5):339-43 (Eng. Abstr.) **(Spa)**

CONGENITAL

Congenital cholesteatomas of the cerebellopontine angle. de Souza CE, et al. **Am J Otol** 1989 Sep;10(5):358-63

Congenital cholesteatoma presenting as a post-auricular mass. Reilly PG. **J Laryngol Otol** 1989 Nov; 103(11):1069-70

Duro-cutaneous fistula caused by a 'congenital' cholesteatoma. Viani L, et al. **J Laryngol Otol** 1990 Mar; 104(3):241-3

Profile of congenital cholesteatomas of the petrous apex. DeSouza CE, et al. **J Postgrad Med** 1989 Apr;35(2):93-7 (57 ref.)

Congenital cholesteatomas of the middle ear in children: origin and management. Levenson MJ, et al. **Otolaryngol Clin North Am** 1989 Oct;22(5):941-54 (21 ref.)

DIAGNOSIS

Neuroradiology case of the day. Parasellar epidermoid. Ingram TL, et al. **AJR Am J Roentgenol** 1990 Jun; 154(6):1340-2

Comparison of computed tomography and magnetic resonance imaging in chronic otitis media with cholesteatoma. Koltai PJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Oct;115(10):1231-3

Imaging cholesteatoma. Phelps PD, et al. **Clin Radiol** 1990 Mar;41(3):156-62

Inflammatory diseases of the temporal bone: evaluation with CT and MR. Holliday RA. **Semin Ultrasound CT MR** 1989 Jun;10(3):213-35 (45 ref.)

[A case of cholesteric granuloma of the orbit] Auch-Roy-Mainguy S, et al. **Bull Soc Ophtalmol Fr** 1989 Jun-Jul;89(6-7):837-40 **(Fre)**

[Assessment of central disorders of the statoacusticus nerve using high resolution imaging procedures (PET and MRI)] Morgenstern C, et al. **Laryngorhinootologie** 1990 Jan; 69(1):41-4 (Eng. Abstr.) **(Ger)**

[Cholesteatoma: clinical and surgical study] Rosique M, et al. **Acta Otorrinolaringol Esp** 1988 Jan-Feb;39(1):21-4 (Eng. Abstr.) **(Spa)**

[Cholesteatoma of the kidney pelvis in horseshoe kidney] González Argente FJ, et al. **Actas Urol Esp** 1990 Mar-Apr; 14(2):143-5 (Eng. Abstr.) **(Spa)**

EMBRYOLOGY

[Congenital epidermoid tumors of the temporal bone. 1: Pathogenesis] Otto HD, et al. **HNO** 1990 Feb;38(2):43-9 (47 ref.) (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

A comparative study of enzyme histochemical features in the gerbilline and human cholesteatoma. Aberg B, et al. **Acta Otolaryngol (Stockh)** 1990 Jan-Feb;109(1-2):130-6

EPIDEMIOLOGY

The prevalence of middle ear pathologies in Jerusalem school children. Cohen D, et al. **Am J Otol** 1989 Nov;10(6):456-9

ETIOLOGY

Cholesteatoma of the external ear canal. Farrior J. **Am J Otol** 1990 Mar;11(2):113-6 (23 ref.)

Pathology and pathogenesis of tympanic membrane retraction. Yoon TH, et al. **Am J Otolaryngol** 1990 Jan-Feb;11(1):10-7

Factors influencing the probability of residual cholesteatoma. Gristwood RE, et al. **Ann Otol Rhinol Laryngol** 1990 Feb; 99(2 Pt 1):120–3
Pathogenesis of cholesteatoma based on clinical results of anterior tympanotomy. Morimitsu T, et al. **Auris Nasus Larynx** 1989;16 Suppl 1:S9–14
The lamina propria and cholesteatoma. Ars B, et al. **Clin Otolaryngol** 1989 Oct;14(5):471–5
The risk of cholesteatoma in congenital aural stenosis. Cole RR, et al. **Laryngoscope** 1990 Jun;100(6):576–8
Pathogenesis of cholesteatoma. Sculerati N, et al. **Otolaryngol Clin North Am** 1989 Oct;22(5):859–68 (18 ref.)
Complications of otitis media in children. Farrior J. **South Med J** 1990 Jun;83(6):645–8
[Cholesteatoma of the tympanic cavity caused by osteoma of the mastoid process] Savić D, et al. **Srp Arh Celok Lek** 1987 May–Jun;115(5–6):609–14 (Eng. Abstr.) **(Scc)**

IMMUNOLOGY

Activation of peritoneal macrophages with human cholesteatoma debris and alpha-keratin. Iino Y, et al. **Acta Otolaryngol (Stockh)** 1990 May–Jun;109(5–6):444–9

METABOLISM

Expression of involucrin in human middle ear cholesteatoma. Chao WY, et al. **Am J Otol** 1989 Sep;10(5):385–8
Localization of interleukin-1 in human cholesteatoma. Ahn JM, et al. **Am J Otolaryngol** 1990 Mar–Apr;11(2):71–7
Cytokeratins in induced epidermoid formations and cholesteatoma lesions. Vennix PP, et al. **Arch Otolaryngol Head Neck Surg** 1990 May;116(5):560–5
Keratinization of middle ear cholesteatomas. I. A histochemical study of epidermal transglutaminase. Broekaert D, et al. **Eur Arch Otorhinolaryngol** 1990; 247(5):312–7
Keratinization of middle ear cholesteatomas. II. A histochemical study of epidermal transglutaminase substrates. Broekaert D, et al. **Eur Arch Otorhinolaryngol** 1990;247(5):318–22

PATHOLOGY

The ultrastructure of lymphatic vessels in the human middle ear with cholesteatoma. Nagai T, et al. **Acta Otolaryngol (Stockh)** 1989 Nov–Dec;108(5–6):442–7
The spatial organisation of keratinocytes in acquired middle ear cholesteatoma resembles that of external auditory canal skin and pars flaccida. Youngs R, et al. **Acta Otolaryngol (Stockh)** 1990 Jul–Aug;110(1–2):115–9
Colony-stimulating factor in middle ear cholesteatoma. Huang T, et al. **Am J Otolaryngol** 1989 Nov–Dec; 10(6):393–8
Comparative histology of the tympanic membrane and its relationship to cholesteatoma. Chole RA, et al. **Ann Otol Rhinol Laryngol** 1989 Oct;98(10):761–6
Middle ear as a gas pocket. Sadé J, et al. **Ann Otol Rhinol Laryngol** 1990 Jul;99(7 Pt 1):529–34
A case of recurrent aural cholesteatoma extending into the middle cranial fossa. Harada T, et al. **Auris Nasus Larynx** 1990;16(4):209–13
Cholesteatoma in the oval window niche. Savić D, et al. **Eur Arch Otorhinolaryngol** 1990;247(2):81–3
The surgical anatomy of cholesteatoma. Jackler RK. **Otolaryngol Clin North Am** 1989 Oct;22(5):883–96 (32 ref.)
Biology of cholesteatoma. Michaels L. **Otolaryngol Clin North Am** 1989 Oct;22(5):869–81 (18 ref.)
[Cholesteatoma of the orbit: a rare etiology of orbital tumor] Elmaleh C, et al. **J Fr Ophtalmol** 1989;12(2):139–42 (Eng. Abstr.) **(Fre)**
[Electron microscopy studies of the collagen fiber structure of the human tympanic membrane in an adhesive process] Hartwein J, et al. **Laryngorhinootologie** 1990 Jun; 69(6):333–6 (Eng. Abstr.) **(Ger)**
[A case of cholesteatoma extending into the medial petrous bone] Maeda M, et al. **Rinsho Hoshasen** 1990 Jun; 35(6):737–9 (Eng. Abstr.) **(Jpn)**
[Histologic study of cholesteatoma in surgically treated otorrhea] González Méndez MV, et al. **Acta Otorrinolaringol Esp** 1989 Jul–Aug;40(4):283–4 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

The effect of isotretinoin on propylene glycol-induced cholesteatoma in chinchilla middle ears. Jove MA, et al. **Am J Otolaryngol** 1990 Jan–Feb;11(1):5–9

RADIOGRAPHY

Contemporary radiologic imaging in the evaluation of middle ear–attic–antral complex cholesteatomas. Liu DP, et al. **Otolaryngol Clin North Am** 1989 Oct;22(5):897–909 (15 ref.)

SURGERY

Single-stage surgery for cholesteatoma: an actuarial analysis. Austin DF. **Am J Otol** 1989 Nov;10(6):419–25
A technique for the reconstruction of the posterior canal wall and mastoid obliteration in radical cavity surgery. Hartwein J, et al. **Am J Otol** 1990 May;11(3):169–73
Applications of the KTP laser in chronic ear surgery. Thedinger BS. **Am J Otol** 1990 Mar;11(2):79–84
Surgical treatment of cholesteatoma: a comparison of three techniques. Toner JG, et al. **Am J Otol** 1990 Jul;11(4):247–9
Staging for cholesteatoma in the child, adolescent, and adult. Schuring AG, et al. **Ann Otol Rhinol Laryngol** 1990 Apr; 99(4 Pt 1):256–60
The retraction pocket in the treatment of cholesteatoma. Austin DF. **Arch Otolaryngol** 1976 Dec;102(12):741–3
Anatomical and surgical particularities of cholesteatomas in children. Raffin B, et al. **Arch Otorhinolaryngol** 1989; 246(5):271–3
Hearing after surgery for cholesteatoma using various techniques. Tos M, et al. **Auris Nasus Larynx** 1989; 16(2):61–73
Open-cavity mastoid surgery: its effect on the acoustics of the external ear canal. Evans RA, et al. **Clin Otolaryngol** 1989 Aug;14(4):317–21
Clinical and surgical aspects of cholesteatomas in children. Cruz OL, et al. **Ear Nose Throat J** 1990 Aug;69(8):530, 535–6
Iatrogenic cholesteatoma of the neck. Fliss DM, et al. **Head Neck** 1989 Nov–Dec;11(6):558–61 (22 ref.)
Has the increasing use of grommets influenced the frequency of surgery for cholesteatoma? Padgham N, et al. **J Laryngol Otol** 1989 Nov;103(11):1034–5
Preservation of hearing in cholesteatomas with inner ear invasion. Canalis RF, et al. **J Otolaryngol** 1989 Dec; 18(7):374–9 (6 ref.)
Surgical management of labyrinthine fistulae in chronic otitis media with cholesteatoma by a one-stage closed technique. Ostri B, et al. **ORL J Otorhinolaryngol Relat Spec** 1989; 51(5):295–9
Selection of cases and classification of tympanoplasty. Bellucci RJ. **Otolaryngol Clin North Am** 1989 Oct; 22(5):911–26 (21 ref.)
Surgical techniques and recidivism in cholesteatoma. Edelstein DR, et al. **Otolaryngol Clin North Am** 1989 Oct; 22(5):1029–40 (23 ref.)
Acquired cholesteatoma in the pediatric age group. Edelstein DR, et al. **Otolaryngol Clin North Am** 1989 Oct; 22(5):955–66
Surgical approaches to cholesteatoma. Farrior JB. **Otolaryngol Clin North Am** 1989 Oct;22(5):1015–28 (22 ref.)
Management of cholesteatoma. Parisier SC. **Otolaryngol Clin North Am** 1989 Oct;22(5):927–40
Validating the excision of cholesteatoma. Schuring AG. **Otolaryngol Clin North Am** 1989 Oct;22(5):1041–53
Acquired cholesteatoma in adults. Sheehy JL. **Otolaryngol Clin North Am** 1989 Oct;22(5):967–79 (9 ref.)
Ossicular reconstruction in ears with cholesteatoma. Wehrs RE. **Otolaryngol Clin North Am** 1989 Oct;22(5):1003–13
Surgical management of cholesteatoma in an only hearing ear. Glasscock ME 3d, et al. **Otolaryngol Head Neck Surg** 1990 Mar;102(3):246–50
Densitometry of implanted allograft ear ossicles. Chiossone E, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989; 110(5):457–60
[Tympanoplasty in otitis media with cholesteatoma] Wang Z. **Chung Hua Erh Pi Yen Hou Ko Tsa Chih** 1989;24(1):5–8, 62 (Eng. Abstr.) **(Chi)**
[A new external canal wall-preserving method for aural cholesteatoma surgery—the osteocutaneous flap] Lin IF. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1990 Mar; 6(3):149–54 (Eng. Abstr.) **(Chi)**
[Hearing in patients with chronic otitis media and cholesteatoma] Prucha I, et al. **Cesk Otolaryngol** 1989 Sep; 38(5):289–96 (Eng. Abstr.) **(Cze)**
[Reconstruction of the wall of the canal] Desaulty A, et al. **Acta Otorhinolaryngol Belg** 1989;43(1):7–18 (Eng. Abstr.) **(Fre)**
[Lyophilized homologous bone grafts in middle ear surgery: new perspectives] Maisin JP, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(5):495–7 (Eng. Abstr.) **(Fre)**
[Experiences with the palisade technic of tympanoplasty] Péré P. **Laryngorhinootologie** 1989 Oct;68(10):569–70 (Eng. Abstr.) **(Ger)**
[Experimental studies of the obliteration of extensive radical ear cavities with a new kind of ceramic granulate] Schadel A, et al. **Laryngorhinootologie** 1989 Oct;68(10):571–5 (Eng. Abstr.) **(Ger)**
[Percutaneous treatment of a renal pelvis-calyx cholesteatoma] Diederichs W, et al. **Urologe [A]** 1989 Nov; 28(6):359–60 (Eng. Abstr.) **(Ger)**
[Factors determining the choice of technic in surgical treatment of cholesteatoma] Antolí-Candela Cano F, et al. **Acta Otorrinolaringol Esp** 1989 Dec;40 Suppl 2:203–10 (Eng. Abstr.) **(Spa)**
[Causes of failure in radical surgery of the mastoid] Echeverría Zumárraga M, et al. **Acta Otorrinolaringol Esp** 1989 May–Jun;40(3):181–4 (Eng. Abstr.) **(Spa)**
[Tympanoplasty. Apropos of various clinical cases] García García B, et al. **Acta Otorrinolaringol Esp** 1990 Mar–Apr; 41(2):127–31 (Eng. Abstr.) **(Spa)**

CHOLESTENES

BLOOD

Concentrations of cholestenoic acids in plasma from patients with liver disease. Axelson M, et al. **J Lipid Res** 1989 Dec; 30(12):1877–82
Concentrations of cholestenoic acids in plasma from patients with reduced intestinal reabsorption of bile acids. Axelson M, et al. **J Lipid Res** 1989 Dec;30(12):1883–7

CHEMICAL SYNTHESIS

Inhibitors of sterol synthesis. Chemical synthesis of 5 beta-cholest-8-ene-3 beta,15 alpha-diol and its effects on 3-hydroxy-3-methylglutaryl coenzyme A reductase activity in CHO-K1 cells. Wilson WK, et al. **J Lipid Res** 1989 Jun;30(6):919–28

ISOLATION & PURIFICATION

Identification of 8 alpha,25-dihydroxy-9,10-seco-4,6,10(19)-cholestatrien-3-one as a product of metabolism of 25-hydroxycholecalciferol by liver microsomes. Thierry-Palmer M, et al. **Arch Biochem Biophys** 1990 Mar; 277(2):277–82
Immunosuppressive compounds from a deep water marine sponge, Agelas flabelliformis. Gunasekera SP, et al. **J Nat Prod** 1989 Jul–Aug;52(4):757–61
20-isosterols from the marine bivalve Macoma balthica. Jarzębski A. **Steroids** 1990 Jun;55(6):256–8

METABOLISM

The interaction of cholesterol and cholest-4-en-3-one with dipalmitoylphosphatidylcholine. Comparison based on the use of three fluorophores. Ben-Yashar V, et al. **Biochim Biophys Acta** 1989 Nov 3;985(3):271–8

PHARMACOLOGY

Effect of 4-cholesten-3-one on lecithin-cholesterol acyltransferase activity and the lipid concentration in the serum of normocholesterolaemic and hypercholesterolaemic rats. Tallová J, et al. **Physiol Bohemoslov** 1990;39(2):119–23

TOXICITY

Inhibitors of sterol synthesis. Morphological studies in rats after dietary administration of 5 alpha-cholest-8(14)-en-3 beta-ol-15-one, a potent hypocholesterolemic compound. Smith JH, et al. **Toxicol Pathol** 1989;17(3):506–15

CHOLESTENONES see under **CHOLESTENES**

CHOLESTEROL

Bilateral cholesterol granulomas of the petrous apices: case report and review. Linstrom CJ, et al. **Am J Otol** 1989 Sep;10(5):393–401 (29 ref.)
Highly stable phospholipid/cholesterol electrode coatings for amperometric monitoring of hydrophobic substances in flowing streams. Wang J, et al. **Anal Chem** 1990 Apr 15; 62(8):826–9
Management of multiple cholesterol embolization syndrome—a case report. Kawakami Y, et al. **Angiology** 1990 Mar;41(3):248–52
The effect of cholesterol on the morphology and reactivity of the mixture of lipids used in syphilis serology. Orum O, et al. **APMIS** 1990 Jan;98(1):9–18
Cholesterotic fibrous histiocytoma. Its association with hyperlipoproteinemia [see comments] Hunt SJ, et al. **Arch Dermatol** 1990 Apr;126(4):506–8 Comment in: Arch Dermatol 1990 Apr;126(4):522–3.
Anterior chamber cholesterolosis [letter; comment] Eagle RC Jr, et al. **Arch Ophthalmol** 1990 Jun;108(6):781 Comment on: Arch Ophthalmol 1990 Jan;108(1):14–5.
Cholesterolosis of the anterior chamber [letter; comment] Wand M. **Arch Ophthalmol** 1990 Jun;108(6):780 Comment on: Arch Ophthalmol 1990 Jan;108(1):14–5.
Pathologic quiz case 2. Cholesterol granuloma of the temporal bone. Shikhani AH, et al. **Arch Otolaryngol Head Neck Surg** 1989 Dec;115(12):1476–9
Effects of cholesterol on the structural transitions induced by diacylglycerol in phosphatidylcholine and phosphatidylethanolamine bilayer systems. Coorssen JR, et al. **Biochem Cell Biol** 1990 Jan;68(1):65–9
Cholesterol interactions with tetracosenoic acid phospholipids in model cell membranes: role of the double-bond position. Ayanoglu E, et al. **Biochemistry** 1990 Apr 10;29(14):3466–71
Role of the stereochemistry of the hydroxyl group of cholesterol and the formation of nonbilayer structures in phosphatidylethanolamines. Cheetham JJ, et al. **Biochemistry** 1989 Oct 31;28(22):8928–34
Organization and interaction of cholesterol and phosphatidylcholine in model bilayer membranes. Hyslop PA, et al. **Biochemistry** 1990 Jan 30;29(4):1025–38
Rotational diffusion of a steroid molecule in phosphatidylcholine–cholesterol membranes: fluid–phase microimmiscibility in unsaturated phosphatidylcholine–cholesterol membranes. Pasenkiewicz-Gierula M, et al. **Biochemistry** 1990 May 1; 29(17):4059–69
Phase equilibria of cholesterol/dipalmitoylphosphatidylcholine mixtures: 2H nuclear magnetic resonance and differential scanning calorimetry. Vist MR, et al. **Biochemistry** 1990 Jan 16; 29(2):451–64
Relationships between lipid membrane area, hydrophobic thickness, and acyl-chain orientational order. The effects

of cholesterol. Ipsen JH, et al. **Biophys J** 1990 Mar; 57(3):405–12

Theory of thermal anomalies in the specific heat of lipid bilayers containing cholesterol. Ipsen JH, et al. **Biophys J** 1989 Oct;56(4):661–7

Fluorescence lifetime distributions of diphenylhexatriene-labeled phosphatidylcholine as a tool for the study of phospholipid–cholesterol interactions. Kalb E, et al. **Biophys J** 1989 Dec;56(6):1245–53

Slow motions in oriented phospholipid bilayers and effects of cholesterol or gramicidin. A 19F–NMR T1 rho study. Peng ZY, et al. **Biophys J** 1989 Nov;56(5):877–85

Dynamics of phosphatidylcholine–cholesterol mixed model membranes in the liquid crystalline state. Shin YK, et al. **Biophys J** 1990 Mar;57(3):445–59

Thermodynamics of phosphatidylcholine–cholesterol mixed model membranes in the liquid crystalline state studied by the orientational order parameter. Shin YK, et al. **Biophys J** 1989 Dec;56(6):1093–100

Cholesterol interacts with all of the lipid in bilayer membranes. Implications for models. Singer MA, et al. **Biophys J** 1990 Jan;57(1):153–6

Effect of cholesterol on structural and dynamic properties of tripalmitoyl glyceride. A high-pressure infrared spectroscopic study. Wong PT, et al. **Biophys J** 1989 Nov; 56(5):845–50

Cholesterol dynamics in membranes. Yeagle PL, et al. **Biophys J** 1990 Mar;57(3):413–24

Cholesterol granuloma of the petrous apex. Clifton AG, et al. **Br J Radiol** 1990 Sep;63(753):724–6

Comparative conformational analysis of cholesterol and ergosterol by molecular mechanics. Bagiński M, et al. **Eur Biophys J** 1989;17(3):159–66

Enhanced fluctuations in small phospholipid bilayer vesicles containing cholesterol. Michels B, et al. **Eur Biophys J** 1989;17(4):187–90

Cholesterol enhances the delivery of liposome-encapsulated gallium–67 to tumors. Ogihara-Umeda I, et al. **Eur J Nucl Med** 1989;15(9):612–7

Scintigraphic findings and follow up in Erdheim–Chester disease. Sandrock D, et al. **Eur J Nucl Med** 1990; 16(1):55–60 (24 ref.)

Cholesterol oxidation on fluorocarbon emulsion surface leads to the formation of 7-peroxycholesterol. Beriozov AT, et al. **FEBS Lett** 1990 Jun 18;266(1-2):72–4

A study on the influence of bile acid chemical structure on dissolution of insoluble calcium salts: an in vitro study of the use of bile acid–phosphatidylcholine–cholesterol model bile solution. Yoneda M, et al. **Gastroenterol Jpn** 1990 Jun; 25(3):383–7

The pathology of cholesterol embolism arising as a complication of intra-aortic catheterization. Kennedy A, et al. **Histopathology** 1989 Nov;15(5):515–21

Thermodynamics of water-induced precipitation of cholesterol and its acetate, benzoate and stearate derivatives dissolved in 1,4-dioxane and 2-propanol. Mukhopadhyay L, et al. **Indian J Biochem Biophys** 1989 Oct;26(5):340–2

Water-induced precipitation of cholesterol dissolved in organic solvents in the absence and presence of surfactants and salts. Mukhopadhyay L, et al. **Indian J Biochem Biophys** 1989 Jun;26(3):178–85

Phospholipid/cholesteryl ester microemulsions containing unesterified cholesterol: model systems for low density lipoproteins. Reisinger RE, et al. **J Lipid Res** 1990 May; 31(5):849–58

Altered bile composition during cholesterol gallstone formation: cause or effect? Magnuson TH, et al. **J Surg Res** 1990 Jun;48(6):584–9

Coronary arteriography as a cause of disseminated cholesterol emboli. Peten E, et al. **Nephrol Dial Transplant** 1990;5(2):155–7 (27 ref.)

Orbitofrontal cholesterol granuloma. McNab AA, et al. **Ophthalmology** 1990 Jan;97(1):28–32

Cholesterol emboli syndrome following cardiac catheterization. Freund NS. **Postgrad Med** 1990 Apr; 87(5):55–60

Effects of cholesterol or gramicidin on slow and fast motions of phospholipids in oriented bilayers. Peng ZY, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8758–62

A church-based cholesterol education program. Wiist WH, et al. **Public Health Rep** 1990 Jul-Aug;105(4):381–8

Comet-tail artifact from cholesterol crystals: observations in the postlithotripsy gallbladder and an in vitro model. Shapiro RS, et al. **Radiology** 1990 Oct;177(1):153–6

Cholesterol emboli syndrome [clinical conference] Liput JH. **W V Med J** 1989 Dec;85(12):532–5

[Renal cholesterol embolism. Apropos of 13 cases] Fleury D, et al. **Presse Med** 1990 Jun 2;19(22):1040–4 (Eng. Abstr.) **(Fre)**

[Pampiniform livedo—an acute cardinal symptom of a cutaneous cholesterol embolism] Wolter M, et al. **Dtsch Med Wochenschr** 1990 Mar 23;115(12):452–5 (Eng. Abstr.) **(Ger)**

[Cholesterol atheroembolic renal failure after arteriography. Report of a case diagnosed by renal biopsy] Morita S, et al. **Nippon Jinzo Gakkai Shi** 1989 Nov;31(11):1205–9 (Eng. Abstr.) **(Jpn)**

[Pericarditis caused by cholesterol. Apropos of a clinical case] Torres S, et al. **Rev Port Cardiol** 1989 Oct;8(10):715–9 (Eng. Abstr.) **(Por)**

[Synthesis, properties and interaction with eukaryotic cells of alkylating derivatives of oligodeoxyribonucleotides containing cholesterol or phenazinium residue covalently bound to the 3'-terminus] Butorin AS, et al. **Mol Biol (Mosk)** 1989 Sep-Oct;23(5):1382–90 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Taurine and cholesterol supplementation in the term infant: responses of growth and metabolism. Rassin DK, et al. **JPEN J Parenter Enteral Nutr** 1990 Jul-Aug;14(4):392–7

ADVERSE EFFECTS

Anterior chamber crystals following hyphema [letter] [see comments] Hemady R, et al. **Arch Ophthalmol** 1990 Jan; 108(1):14–5 Comment in: Arch Ophthalmol 1990 Jun;108(6):780. Comment in: Arch Ophthalmol 1990 Jun;108(6):781.

The cholesterol controversy [letter; comment] Dock DS. **Circulation** 1990 Apr;81(4):1440 Comment on: Circulation 1989 Oct;80(4):1070–8.

[Cholelithiasis in childhood. Case study contribution] Tabilio S, et al. **Minerva Chir** 1989 Jul 31;44(13-14):1775–6 (10 ref.) (Eng. Abstr.) **(Ita)**

ANALOGS & DERIVATIVES

Increased serum cholestanol in patients with cerebrotendinous xanthomatosis (CTX): chromatographic study. Michalec C. **Acta Univ Carol [Med] (Praha)** 1988; 34(1-2):111–6

Effect of chemical carcinogens on cholesterol biosynthetic pathways in the skin of mice. Tanimoto Y, et al. **Carcinogenesis** 1990 Sep;11(9):1647–51

Adrenal cortical adenoma causing Cushing's syndrome: correct localization by functional scintigraphy despite nonlocalizing morphological imaging studies. Geatti O, et al. **Clin Nucl Med** 1990 Mar;15(3):168–71

Metabolism of 3 beta-hydroxycholest-5-en-26-oic acid in hamsters. Ayaki Y, et al. **Experientia** 1990 Mar 15; 46(3):267–9

Inhibition of human polymorphonuclear leukocyte respiratory burst activity and aggregation by 6-ketocholestanol. Vasconcelles MJ, et al. **Free Radic Res Commun** 1990;8(3):185–93

Steroidal glycolipid, L-644,257, is a potent enhancer of nonspecific host resistance. Hagmann WK, et al. **Int J Immunopharmacol** 1990;12(2):241–6

Protective action of phospholipid hydroperoxide glutathione peroxidase against membrane-damaging lipid peroxidation. In situ reduction of phospholipid and cholesterol hydroperoxides. Thomas JP, et al. **J Biol Chem** 1990 Jan 5;265(1):454–61

High-performance liquid chromatographic method for isolating coprostanol from sediment extracts. Krahn MM, et al. **J Chromatogr** 1989 Nov 3;481:263–73

Iodomethylnorcholesterol uptake in an aldosteronoma shown by dexamethasone-suppression scintigraphy: relationship to adenoma size and functional activity. Nomura K, et al. **J Clin Endocrinol Metab** 1990 Oct;71(4):825–30

Cholesteryl oleyl and linoleyl ethers do not trace their ester counterparts in animals with plasma cholesteryl ester transfer activity. Green SR, et al. **J Lipid Res** 1989 Sep; 30(9):1405–10

Glycolipids as host resistance stimulators. Ponpipom MM, et al. **J Med Chem** 1990 Feb;33(2):861–7

Magnetic resonance imaging of the brain and spinal cord in cerebrotendinous xanthomatosis. Bencze KS, et al. **J Neurol Neurosurg Psychiatry** 1990 Feb;53(2):166–7

Diagnostic accuracy and pitfalls of [iodine-131]6-beta-iodomethyl-19-norcholesterol (NP-59) imaging. Kazerooni EA, et al. **J Nucl Med** 1990 Apr; 31(4):526–34

Effects of oxysterols on arachidonic acid metabolism and prostacyclin synthesis in bovine aortic smooth muscle cells in culture. Seilan C, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Jan; 39(1):11–8

Unusual cause for recurrent Cushing syndrome and its diagnosis by computed tomography and NP-59 radiocholesterol scanning. Harris RD, et al. **Urology** 1990 Sep;36(3):277–9

[Iodo-methyl norcholesterol scintigraphy in the localization of primary hyperaldosteronism] Khalil SA, et al. **Arch Mal Coeur** 1989 Jul;82(7):1233–5 (9 ref.) (Eng. Abstr.) **(Fre)**

[Cerebrotendinous xanthomatosis and phytosterolemia] Nakamura T, et al. **Tanpakushitsu Kakusan Koso** 1988 Apr; 33(5):794–7 **(Jpn)**

[The effect of liposomes containing cholesterol or 7-ketocholesterol on the capacity of cultured cells to form colonies] Khokhlov AN, et al. **Biull Eksp Biol Med** 1989 Sep;108(9):348–9 (Eng. Abstr.) **(Rus)**

ANALYSIS

Cholesterol pericarditis and cardiac tamponade with congenital hypothyroidism in adulthood. Van Buren PC, et al. **Am Heart J** 1990 Mar;119(3 Pt 1):697–700

Cholesterol and its precursors in human milk during prolonged exclusive breast-feeding. Kallio MJ, et al. **Am J Clin Nutr** 1989 Oct;50(4):782–5

Intrahepatic cholesterol stones associated with peripheral cholangiocellular carcinoma: an autopsy case. Terada T, et al. **Am J Gastroenterol** 1989 Nov;84(11):1434–6

Characterization of two unique cholesterol-rich lipid particles isolated from human atherosclerotic lesions. Chao FF, et al. **Am J Pathol** 1990 Jan;136(1):169–79

Microquantification of cholesterol and cholesteryl esters in rat peritoneal macrophages by reverse-phase high-performance liquid chromatography. Araki N, et al. **Anal Biochem** 1990 Mar;185(2):339–45

A fiberoptic cholesterol biosensor with an oxygen optrode as the transducer. Trettnak W, et al. **Anal Biochem** 1990 Jan;184(1):124–7

Studies on the polyisoprenoid composition in hepatocellular carcinomas and its correlation with their differentiation. Eggens I, et al. **APMIS** 1990 Jun;98(6):535–42

Cholesterol distribution in rat liver and brain mitochondria as determined by stopped-flow kinetics with filipin. Crémel G, et al. **Arch Biochem Biophys** 1990 Apr;278(1):142–7

Influence of fatty acid composition of diet on cholesterol content of eel liver and muscle. Burgos C, et al. **Arch Int Physiol Biochim** 1990 Mar;98(1):1–6

Single and multiple desipramine exposures of cultured cells. Changes in cellular anisotropy and in lipid composition of whole cells and of plasma membranes. Toplak H, et al. **Biochem Pharmacol** 1990 May 1;39(9):1437–43

Simple enzymatic assay for determining cholesterol concentrations in bile. Luhman CM, et al. **Clin Chem** 1990 Feb;36(2):331–3

Electron-capture gas chromatography as a sensitive method for measuring subnanogram amounts of cholesterol in saliva and urine. Schwertner HA, et al. **Clin Chem** 1990 Mar; 36(3):519–21

Solubility determination of cholesterol polymorphs in organic solvents. Stauffer RD, et al. **Clin Chem** 1966 Apr; 12(4):206–10

Simple enzymatic determination of total cholesterol in gallstones. Wei JS, et al. **Clin Chem** 1989 Nov;35(11):2247–9

Qualitative and quantitative comparison of gallbladder proteins from patients with and without cholesterol gallstones. Yu L, et al. **Dig Dis Sci** 1990 Jan;35(1):47–9

Gallbladder contraction in patients with pigment and cholesterol stones. Behar J, et al. **Gastroenterology** 1989 Dec;97(6):1479–84

Bile acids substituted in the 6 position prevent cholesterol gallstone formation in the hamster. Cohen BI, et al. **Gastroenterology** 1990 Feb;98(2):397–405

Lovastatin added to ursodeoxycholic acid further reduces biliary cholesterol saturation. Logan GM, et al. **Gastroenterology** 1990 Jun;98(6):1572–6

Addition of N-acetylcysteine to aqueous model bile systems accelerates dissolution of cholesterol gallstones. Niu N, et al. **Gastroenterology** 1990 Feb;98(2):454–63

High protein and total lipid concentration are associated with reduced metastability of bile in an early stage of cholesterol gallstone formation. Strasberg SM, et al. **Gastroenterology** 1990 Mar;98(3):739–46

Bile concentration is a key factor for nucleation of cholesterol crystals and cholesterol saturation index in gallbladder bile of gallstone patients. van Erpecum KJ, et al. **Hepatology** 1990 Jan;11(1):1–6

Variation in the cholesterol/phospholipid ratio in human spermatozoa and its relationship with capacitation. Hoshi K, et al. **Hum Reprod** 1990 Jan;5(1):71–4

Cholesterol level of rabbit meat and trait relationships among growth, carcass and lean yield performances. Lukefahr SD, et al. **J Anim Sci** 1989 Aug;67(8):2009–17

Quantitative determination of cholesterol in liposome drug products and raw materials by high-performance liquid chromatography. Lang JK. **J Chromatogr** 1990 May 16; 507:157–63

Separation and quantitation of free cholesterol and cholesteryl esters in a macrophage cell line by high-performance liquid chromatography. Vercaemst R, et al. **J Chromatogr** 1989 Sep 29;494:43–52

Isolation of an acidic protein from cholesterol gallstones, which inhibits the precipitation of calcium carbonate in vitro. Shimizu S, et al. **J Clin Invest** 1989 Dec;84(6):1990–6

Changes in human milk at 0600, 1000, 1400, 1800, and 2200 h. Lammi-Keefe CJ, et al. **J Pediatr Gastroenterol Nutr** 1990 Jul;11(1):83–8

Effects of surface charges and cholesterol content on amino acid permeabilities of small unilamellar vesicles. Sada E, et al. **J Pharm Sci** 1990 Mar;79(3):232–5

Histologic, morphometric, and biochemical evolution of vein bypass grafts in a nonhuman primate model. I. Sequential changes within the first three months. Boerboom LE, et al. **J Thorac Cardiovasc Surg** 1990 Jan;99(1):97–106

Ascitic fluid concentrations of fibronectin and cholesterol: comparison of differential diagnostic value with the conventional protein determination. Gerbes AL, et al. **Liver** 1990 Jun;10(3):152–7

The effect of adding cholesterol to laying hen diets as powder or predissolved in fat. Berrio LF, et al. **Poult Sci** 1990 Jun; 69(6):972–6

The effect of feeding lovastatin and colestipol on production and cholesterol content of eggs. Luhman CM, et al. **Poult Sci** 1990 May;69(5):852–5

Gallbladder stones classified by chemical analysis of cholesterol content. Frederiksberg, 1987–1988. Ravnborg L, et al. **Scand J Gastroenterol** 1990 Jul;25(7):720–4

Lack of effect of dietary minerals on liver cholesterol concentrations in rats. Beynen AC, et al. **Z Ernahrungswiss** 1989 Dec;28(4):316–8

[Concentration of lipids in ascitic fluid and the concentration gradient of albumin in blood and ascites: diagnostic significance] Barbare JC, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Nov;25(6):251–6 (Eng. Abstr.) **(Fre)**

[Dissolution of cholesterol mixed stones with methyl tertiary butyl ether in vitro] Fukasawa S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Oct;86(10):2413–8 (Eng. Abstr.) **(Jpn)**

[Studies on cholangiographic and endoscopic findings of primary intrahepatic cholesterol stones] Kondo S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Dec;86(12):2779–86 (Eng. Abstr.) **(Jpn)**

[New probes for the analysis of membrane cholesterol—modified toxins which bind specifically to cholesterol molecules with no cytolytic effects] Iwashita Y. **Seikagaku** 1989 Oct;61(10):1253–9 **(Jpn)**

[Lithogenic bile: from supersaturation to cholesterol nucleation] Sipahi AM, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Sep–Oct; 44(5):175–7 **(Por)**

[Ultrastructural detection of cholesterol in the liver in chronic alcoholic intoxication] Loginov AS, et al. **Biull Eksp Biol Med** 1990 Jun;109(6):619–21 (Eng. Abstr.) **(Rus)**

[Ultrastructural detection of cholesterol in the liver of rats with alcoholic intoxication] Ul'ianova VV, et al. **Biull Eksp Biol Med** 1990 May;109(5):510–2 (Eng. Abstr.) **(Rus)**

[Bile acids and bile cholesterol in patients with viral hepatitis A and B] Gromashevskaia LL, et al. **Vrach Delo** 1989 Aug; (8):114–6 **(Rus)**

[The bile cholate-cholesterol coefficient for assessing the causes of a protracted convalescence in patients with viral hepatitis] Miroshnichenko VP, et al. **Vrach Delo** 1989 Dec; (12):95–8 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Unexpected failure of bile acid malabsorption to stimulate cholesterol synthesis in sitosterolemia with xanthomatosis. Comparison with lovastatin. Nguyen L, et al. **Arteriosclerosis** 1990 Mar–Apr;10(2):289–97

Inhibition of cholesterol biosynthesis in freshly isolated blood mononuclear cells from normolipidemic subjects and hypercholesterolemic patients treated with bezafibrate. Cosentini R, et al. **Atherosclerosis** 1989 Oct;79(2–3):253–5

Mechanism of glucocorticoid enhancement of the responsiveness of ovine adrenocortical cells to adrenocorticotropin. Darbeida H, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1183–91

Stimulation of anchorage independent proliferation of human adrenocortical carcinoma cells by inhibition of cholesterol biosynthesis. Dunnington DJ, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):219–25

Regulation of hepatic cholesterol biosynthesis. Effects of a cytochrome P-450 inhibitor on the formation and metabolism of oxygenated sterol products of lanosterol. Iglesias J, et al. **Biochem J** 1989 Dec 1;264(2):495–502

Cholesterol and bile acid synthesis in Hep G2 cells. Metabolic effects of 26- and 7 alpha-hydroxycholesterol. Javitt NB, et al. **Biochem J** 1989 Sep 15;262(3):989–92

Effect of simvastatin (MK-733) on the regulation of cholesterol synthesis in Hep G2 cells. Nagata Y, et al. **Biochem Pharmacol** 1990 Aug 15;40(4):843–50

Whole body and hepatic cholesterol synthesis rates in the guinea-pig: effect of dietary fat quality. Fernandez ML, et al. **Biochim Biophys Acta** 1990 Jun 14;1044(3):340–8

Tissue-selective inhibition of cholesterol synthesis in vivo by pravastatin sodium, a 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitor. Koga T, et al. **Biochim Biophys Acta** 1990 Jul 16;1045(2):115–20

Effect of drugs which inhibit cholesterol synthesis on syncytia formation in vero cells infected with measles virus. Malvoisin E, et al. **Biochim Biophys Acta** 1990 Feb 23; 1042(3):359–64

Cellular cholesterol metabolism in mitogen-stimulated lymphocytes—requirement for de novo synthesis. Owens D, et al. **Biochim Biophys Acta** 1990 Feb 19;1051(2):138–43

Cholesterol and bile acid synthesis: utilization of D2O for metabolic studies. Javitt NB, et al. **Biomed Environ Mass Spectrom** 1989 Aug;18(8):624–8

Use of deuterated water for measurement of short-term cholesterol synthesis in humans. Jones PJ. **Can J Physiol Pharmacol** 1990 Jul;68(7):955–9 (24 ref.)

Increase in the active form of 3-hydroxy-3-methylglutaryl coenzyme A reductase in human hepatocellular carcinoma: possible mechanism for alteration of cholesterol biosynthesis. Kawata S, et al. **Cancer Res** 1990 Jun 1; 50(11):3270–3

Effect of chemical carcinogens on cholesterol biosynthetic pathways in the skin of mice. Tanimoto Y, et al. **Carcinogenesis** 1990 Sep;11(9):1647–51

Effects of mevinolin, an inhibitor of cholesterol synthesis, on the morphology and function of differentiating and differentiated rat adrenocortical cells in primary culture. Heikkilä P, et al. **Cell Tissue Res** 1990 Jul;261(1):125–32

Effects of inhibition of cholesterol synthesis by simvastatin on the production of adrenocortical steroid hormones and ACTH. Mol MJ, et al. **Clin Endocrinol (Oxf)** 1989 Dec; 31(6):679–89

Bile acids do not regulate the intestinal mucosal cholesterol synthesis: studies in the chronic bile duct-ureter fistula rat model. Castilho LN, et al. **Digestion** 1990;45(3):147–52

Effect of simvastatin on plasma lipids, apolipoproteins and lipoprotein particles in patients with primary hypercholesterolaemia. Bard JM, et al. **Eur J Clin Pharmacol** 1989;37(6):545–50

Rates of cholesterol, ubiquinone, dolichol and dolichyl-P biosynthesis in rat brain slices. Andersson M, et al. **FEBS Lett** 1990 Aug 20;269(1):15–8

Evidence for substrate channeling in the early steps of cholesterogenesis. Miziorko HM, et al. **J Biol Chem** 1990 Jun 15;265(17):9606–9

Rat liver peroxisomes catalyze the initial step in cholesterol synthesis. The condensation of acetyl-CoA units into acetoacetyl-CoA. Thompson SL, et al. **J Biol Chem** 1990 Apr 5;265(10):5731–5

Inappropriate hepatic cholesterol synthesis expands the cellular pool of sterol available for recruitment by bile acids in the rat. Bilhartz LE, et al. **J Clin Invest** 1989 Oct; 84(4):1181–7

A molecular defect in hepatic cholesterol biosynthesis in sitosterolemia with xanthomatosis. Nguyen LB, et al. **J Clin Invest** 1990 Sep;86(3):923–31

Influence of DDT and PCBs in rabbits and goats as related to nucleic acid, protein and lipid metabolism. Chung RA, et al. **J Environ Pathol Toxicol Oncol** 1989 May–Jun; 9(3):283–302

Cholesterol and prostaglandin synthesis by cultured human skin fibroblasts in the Alagille syndrome involving paucity of interlobular bile ducts. Dupont J, et al. **J Inherited Metab Dis** 1989;12(4):436–44

Cholesterol biosynthesis by the cornea. Comparison of rates of sterol synthesis with accumulation during early development. Cenedella RJ, et al. **J Lipid Res** 1989 Jul; 30(7):1079–84

Hepatic cholesterol and lipoprotein conference. Report of a conference. Edwards PA, et al. **J Lipid Res** 1989 Oct; 30(10):1653–9

Regulation of hepatic cholesterol and lipoprotein metabolism in ethinyl estradiol-treated rats. Erickson SK, et al. **J Lipid Res** 1989 Nov;30(11):1763–71

Differential regulation of low density lipoprotein suppression of HMG-CoA reductase activity in cultured cells by inhibitors of cholesterol biosynthesis. Gupta AK, et al. **J Lipid Res** 1990 Feb;31(2):203–15

Evidence for diurnal periodicity in human cholesterol synthesis. Jones PJ, et al. **J Lipid Res** 1990 Apr;31(4):667–73

Tissue-selective acute effects of inhibitors of 3-hydroxy-3-methylglutaryl coenzyme A reductase on cholesterol biosynthesis in lens. Mosley ST, et al. **J Lipid Res** 1989 Sep;30(?):1411–20

Regulation of bile acid synthesis. IV. Interrelationship between cholesterol and bile acid biosynthesis pathways. Pandak WM, et al. **J Lipid Res** 1990 Jan;31(1):79–90

Selective inhibition of cholesterol synthesis in liver versus extrahepatic tissues by HMG-CoA reductase inhibitors. Parker RA, et al. **J Lipid Res** 1990 Jul;31(7):1271–82

Increased sitosterol absorption, decreased removal, and expanded body pools compensate for reduced cholesterol synthesis in sitosterolemia with xanthomatosis. Salen G, et al. **J Lipid Res** 1989 Sep;30(9):1319–30

Synthesis and biological activity of new HMG-CoA reductase inhibitors. 2. Derivatives of 7-(1H-pyrrol-3-yl)-substituted-3,5-dihydroxyhept-6(E)-enoic (-heptanoic) acids. Jendralla H, et al. **J Med Chem** 1990 Jan;33(1):61–70

Inhibitors of cholesterol biosynthesis. 1. trans-6-(2-pyrrol-1-ylethyl)-4-hydroxypyran-2-ones, a novel series of HMG-CoA reductase inhibitors. 1. Effects of structural modifications at the 2- and 5-positions of the pyrrole nucleus. Roth BD, et al. **J Med Chem** 1990 Jan; 33(1):21–31

Inhibitors of cholesterol biosynthesis. 2. 1,3,5-trisubstituted [2-(tetrahydro-4-hydroxy-2-oxopyran-6-yl) ethyl]pyrazoles. Sliskovic DR, et al. **J Med Chem** 1990 Jan;33(1):31–8

A biochemical connection between ras, yeast, and cholesterol synthesis [news] Glover J. **J Natl Cancer Inst** 1990 Sep 5;82(17):1384–5

Cholesterol synthesis is down-regulated during regeneration of peripheral nerve. Goodrum JF. **J Neurochem** 1990 May; 54(5):1709–15

Effects of propionate on lipid biosynthesis in isolated rat hepatocytes. Nishina PM, et al. **J Nutr** 1990 Jul; 120(7):668–73

Regulation of steroidogenesis and cholesterol synthesis by prostaglandin F-2 alpha and lipoproteins in bovine luteal cells. Pate JL, et al. **J Reprod Fertil** 1989 Nov;87(2):439–46

Polyoxygenated sterols and triterpenes: chemical structures and biological activities. Ji YH, et al. **J Steroid Biochem** 1990 May;35(6):741–4 (22 ref.)

Effects of clofibrate on the main regulatory enzymes of cholesterogenesis. Castillo M, et al. **Life Sci** 1990; 46(6):397–403

Cholesterol and bile acids via acetate from the insect juvenile hormone analog methoprene. Quistad GB, et al. **Life Sci** 1974 Nov 15;15(10):1797–804

Inhibition of cholesterol synthesis by lovastatin tested on six human cell types in vitro. Sviridov DD, et al. **Lipids** 1990 Mar;25(3):177–9

Decreased cholesterol biosynthesis in sitosterolemia with xanthomatosis: diminished mononuclear leukocyte 3-hydroxy-3-methylglutaryl coenzyme A reductase activity and enzyme protein associated with increased low-density lipoprotein receptor function. Nguyen LB, et al. **Metabolism** 1990 Apr;39(4):436–43

Effects of drugs affecting cholesterol biosynthesis pathway on BM 15.766-induced 7-dehydrocholesterol accumulation in rats. An animal model for testing compounds reducing cholesterol synthesis. Pill J, et al. **Methods Find Exp Clin Pharmacol** 1990 Apr;12(3):167–74

Microsomal redox systems in brown adipose tissue: high lipid peroxidation, low cholesterol biosynthesis and no detectable cytochrome P-450. Sekhar BS, et al. **Mol Cell Biochem** 1990 Feb 9;92(2):147–57

Influence of pravastatin, a specific inhibitor of HMG-CoA reductase, on hepatic metabolism of cholesterol. Reihnér E, et al. **N Engl J Med** 1990 Jul 26;323(4):224–8

Reduction of BM 15.766-induced 7-dehydrocholesterol accumulation by bezafibrate and mevinolin in rats. A non-isotopic in vivo test system for compounds reducing cholesterol synthesis. Pill J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 Jun; 341(6):552–6

Effect of diet and substrate on the in vitro measurement of cholesterol and fatty-acid synthesis in hepatic tissue of Japanese quail. Hood RL. **Poult Sci** 1990 Apr;69(4):647–51

Propionate inhibits hepatocyte lipid synthesis. Wright RS, et al. **Proc Soc Exp Biol Med** 1990 Oct;195(1):26–9

Critical analysis of the use of 14C-acetate for measuring in vivo rat cholesterol synthesis. Lutton C, et al. **Reprod Nutr Dev** 1990;30(1):71–84

Modifying influence of fasting on liver hyperplasia induced by lead nitrate. Dessi S, et al. **Res Commun Chem Pathol Pharmacol** 1990 Apr; 68(1):103–16

Oxidative metabolism of cholesterol precursors: sensitivity to ketoconazole, an inhibitor of cytochrome P-450. Iglesias J, et al. **Steroids** 1989 Mar–May;53(3–5):311–28

[Use of amphotericin B-cells to detect inhibitors of cellular cholesterol biosynthesis] Sun XM, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Oct;9(10):604–6, 581–2 (Eng. Abstr.) **(Chi)**

[Does malonate take part in the synthesis of sterols?] Klimov AN, et al. **Biokhimiia** 1990 Mar;55(3):549–53 (Eng. Abstr.) **(Rus)**

BLOOD

A cholesterol screening and health assessment of medical students. Girard J, et al. **Acad Med** 1990 Jun;63(6):422

Components of the type-A behavior pattern and their relevance for CHD-risk factors: results from the GDR-MONICA project. Weiss M. **Act Nerv Super (Praha)** 1990 Mar;32(1):38–40

How far is the Belgian population from the recommended nutritional goals and ideal serum cholesterol levels: the B.I.R.N.H. Study. Kornitzer M. **Acta Cardiol** 1989; 44(6):465

Pretreatment serum cholesterol level as a prognostic indicator in infants and children with hepatoblastoma. Liu HC, et al. **Acta Paediatr Sin** 1988 Jul–Aug;29(4):254–60

Cholesterol and you—do you "Know Your Number"? Hardiman MA. **Ala Med** 1989 Nov;59(5):31–2

Future cholesterol levels can be predicted to assess coronary disease risk. **Am Fam Physician** 1989 Aug;40(2):308, 310, 314

Screening for high blood cholesterol. U.S. Preventive Services Task Force. **Am Fam Physician** 1990 Feb; 41(2):503–13 (84 ref.)

Lipid abnormalities and diuretics [letter] Feeman WE Jr. **Am Fam Physician** 1990 Aug;42(2):315, 318, 321–4

Lipid abnormalities and diuretics. Moser M. **Am Fam Physician** 1989 Oct;40(4):213–20 (45 ref.)

The effects of clonidine hydrochloride versus atenolol monotherapy on serum lipids, lipid subfractions, and apolipoproteins in mild hypertension. Houston MC, et al. **Am Heart J** 1990 Jul;120(1):172–9

Effect of a modified, well-tolerated niacin regimen on serum total cholesterol, high density lipoprotein cholesterol and the cholesterol to high density lipoprotein ratio. Alderman JD, et al. **Am J Cardiol** 1989 Oct 1;64(12):725–9

Blood cholesterol screening in several environments using a portable, dry-chemistry analyzer and fingerstick blood samples. Lipid Research Clinics Cholesterol Screening Study Group. Bradford RH, et al. **Am J Cardiol** 1990 Jan 1;65(1):6–13

Clinical trials including an update on the Helsinki Heart Study. Brown WV. **Am J Cardiol** 1990 Sep 4; 66(6):11A–15A (9 ref.)

Propranolol-induced lipid changes and their prognostic significance after a myocardial infarction: the Beta-Blocker Heart Attack Trial experience. Byington RP, et al. **Am J Cardiol** 1990 Jun 1;65(20):1287–91

Effect of elective hospitalization on plasma lipoprotein cholesterol and apolipoproteins A-I, B and Lp(a). Genest JJ, et al. **Am J Cardiol** 1990 Mar 1;65(9):677–9

Comparison of the effects of lovastatin and gemfibrozil on lipids and glucose control in non-insulin-dependent diabetes mellitus. Goldberg R, et al. **Am J Cardiol** 1990 Sep 18;66(8):16B–21B

Alcohol consumption, serum lipids and severity of angiographically determined coronary artery disease. Handa K, et al. **Am J Cardiol** 1990 Feb 1;65(5):287–9

Variation in the Reflotron method of cholesterol measurement. Lefebvre RC, et al. **Am J Cardiol** 1990 Apr

1;65(13):916–7
Clinical benefits and cost–effectiveness of lowering serum cholesterol levels: the case of simvastatin and cholestyramine in The Netherlands. Martens LL, et al. **Am J Cardiol** 1990 Mar 20;65(12):27F–32F
Dyslipidemias with desirable plasma total cholesterol levels and angiographically demonstrated coronary artery disease. Miller M, et al. **Am J Cardiol** 1990 Jan 1;65(1):1–5
Serum lipid response of hypercholesterolemic men to single and divided doses of canned beans. Anderson JW, et al. **Am J Clin Nutr** 1990 Jun;51(6):1013–9
Quantitative changes in dietary fat intake and serum cholesterol in women: results from a randomized, controlled trial. Boyd NF, et al. **Am J Clin Nutr** 1990 Sep; 52(3):470–6
Influence of diet and physical activity on blood serum cholesterol of young men. Campbell DE. **Am J Clin Nutr** 1966 Feb;18(2):79–85
Serum cholesterol and bowel flora in the newborn. Harrison VC, et al. **Am J Clin Nutr** 1975 Dec;28(12):1351–5
Some interesting relationships between dietary carbohydrates and serum cholesterol. Lopez A, et al. **Am J Clin Nutr** 1966 Feb;18(2):149–53
Dietary carbohydrate and serum cholesterol levels in man. McGandy RB, et al. **Am J Clin Nutr** 1966 Apr;18(4):237–42
Relation of body size and composition to clinical biochemical and hematologic indices in US men and women. Micozzi MS, et al. **Am J Clin Nutr** 1989 Dec;50(6):1276–81
Cholesterol–lowering effect of a low–fat diet containing lean beef is reversed by the addition of beef fat. O'Dea K, et al. **Am J Clin Nutr** 1990 Sep;52(3):491–4
Increase in body fatness as a major determinant of changes in serum total cholesterol and high density lipoprotein cholesterol in young men over a 10–year period. Berns MA, et al. **Am J Epidemiol** 1989 Dec;130(6):1109–22
Total and HDL cholesterol and their correlates in elderly men in Finland, Italy, and The Netherlands. Kromhout D, et al. **Am J Epidemiol** 1990 May;131(5):855–63
Serum plant sterols and cholesterol precursors reflect cholesterol absorption and synthesis in volunteers of a randomly selected male population. Miettinen TA, et al. **Am J Epidemiol** 1990 Jan;131(1):20–31
Analysis of genetic and environmental sources of variation in serum cholesterol in Tecumseh, Michigan. I. Analysis of the frequency distribution for evidence of a genetic polymorphism. Sing CF, et al. **Am J Hum Genet** 1975 May; 27(3):333–47
Rationale for cholesterol lowering. Havel RJ. **Am J Med** 1989 Oct 16;87(4A):2S–4S (22 ref.)
Coffee consumption and serum lipids: a randomized, crossover clinical trial. Rosmarin PC, et al. **Am J Med** 1990 Apr;88(4):349–56
Overview of clinical trials of cholesterol lowering in relationship to epidemiologic studies. Tyroler HA. **Am J Med** 1989 Oct 16;87(4A):14S–19S (28 ref.)
Cholesterol–lowering effect of hydroxychloroquine in patients with rheumatic disease: reversal of deleterious effects of steroids on lipids. Wallace DJ, et al. **Am J Med** 1990 Sep;89(3):322–6
Atherosclerosis, serum cholesterol and the homocysteine theory: a study of 194 consecutive autopsies. McCully KS. **Am J Med Sci** 1990 Apr;299(4):217–21
Cholesterol. Interpreting the new guidelines. Becker DM, et al. **Am J Nurs** 1989 Dec;89(12):1621–4
Lipid and apolipoprotein levels in six Solomon Island societies differ from those in a U.S. white population. Kottke BA, et al. **Am J Phys Anthropol** 1990 Apr; 81(4):483–91
Strategies for increasing house staff management of cholesterol with inpatients. Boekeloo BO, et al. **Am J Prev Med** 1990;6(2 Suppl):51–9
Precision and accuracy of a portable blood analyzer system during cholesterol screening. Greenland P, et al. **Am J Public Health** 1990 Feb;80(2):181–4
Walking and serum cholesterol in adults. Tucker LA, et al. **Am J Public Health** 1990 Sep;80(9):1111–3
Serum biochemical indicators of liver function in neonatal foals. Bauer JE, et al. **Am J Vet Res** 1989 Dec; 50(12):2037–41
Variations of serum vitamin E, cholesterol, and total serum lipid concentrations in horses during a 72–hour period. Craig AM, et al. **Am J Vet Res** 1989 Sep;50(9):1527–31
Choosing a cholesterol screening service vendor. Lefebvre RC. **Am Pharm** 1990 Aug;30(8):37–41
The relationship between serum cholesterol and serum thyrotropin, thyroxine and tri–iodothyronine concentrations in suspected hypothyroidism. Elder J, et al. **Ann Clin Biochem** 1990 Mar;27 (Pt 2):110–3
Serum cholesterol methodology: 100 years of development. Copeland BE. **Ann Clin Lab Sci** 1990 Jan–Feb;20(1):1–11 (25 ref.)
Cholesterol and screening of asymptomatic adults [letter; comment] Muldoon MF. **Ann Intern Med** 1990 Mar 1; 112(5):384–5 Comment on: Ann Intern Med 1989 Apr 15;110(8):622–39.
Fish oil supplementation and plasma cholesterol: the power of a clinical trial [comment] Szatrowski TP. **Ann Intern Med** 1990 Apr 15;112(8):633–4 Comment on: Ann Intern Med 1989 Dec 1;111(11):900–5.
Consensus development conference statement: blood cholesterol and coronary heart disease. Academy of Finland, Medical Research Council. **Ann Med** 1989 Dec; 21(6):415–24 (8 ref.)
Predictors of functional capacity in elderly Finnish men; a path analysis. Lammi UK. **Ann Med** 1990 Feb;22(1):25–30
Plasma cholesterol–lowering activity of monocyte colony–stimulating factor (M–CSF). Shimano H, et al. **Ann N Y Acad Sci** 1990;587:362–70
Atherosclerosis and stroke [letter] Taylor WC, et al. **Ann Neurol** 1990 Jul;28(1):108–9
The influence of barley fibre on bile composition, gallstone formation, serum cholesterol and intestinal morphology in hamsters. Zhang JX, et al. **APMIS** 1990 Jun;98(6):568–74
Recommendations regarding public screening for measuring blood cholesterol. Summary of a National Heart, Lung, and Blood Institute workshop, October 1988. **Arch Intern Med** 1989 Dec;149(12):2650–4
Effectiveness of low–dose lovastatin in lowering serum cholesterol. Experience with 56 patients. Bates MC, et al. **Arch Intern Med** 1990 Sep;150(9):1947–50
Critique of the clinical importance of diurectic–induced hypokalemia and elevated cholesterol level . Freis ED. **Arch Intern Med** 1989 Dec;149(12):2640–8 (76 ref.)
A public health model for cardiovascular risk reduction. Impact of cholesterol screening with brief nonphysician counseling. Gemson DH, et al. **Arch Intern Med** 1990 May; 150(5):985–9
Community cholesterol screening. Impact of labeling on participant behavior. Gordon RL, et al. **Arch Intern Med** 1990 Sep;150(9):1957–60
Within–person fluctuations of serum cholesterol and lipoproteins [see comments] Mogadam M, et al. **Arch Intern Med** 1990 Aug;150(8):1645–8 Comment in: Arch Intern Med 1990 Aug;150(8):1583–5.
SI units:—what do internists think? [letter] Weeth JB. **Arch Intern Med** 1990 Jan;150(1):221
Formulas predicting the percentile of serum cholesterol levels by age in adults. Chung SJ. **Arch Pathol Lab Med** 1990 Aug;114(8):869–75
Calibration as a source of imprecision in cholesterol testing. Ramifications for patient risk classification. Epstein HD, et al. **Arch Pathol Lab Med** 1990 Apr;114(4):399–402
Phenotypic effects of apolipoprotein structural variation on lipid profiles. III. Contribution of apolipoprotein E phenotype to prediction of total cholesterol, apolipoprotein B, and low density lipoprotein cholesterol in the healthy women study. Eichner JE, et al. **Arteriosclerosis** 1990 May–Jun;10(3):379–85
Cholesterol and coronary heart disease mortality. A 23–year follow–up study of 9902 men in Israel. Goldbourt U, et al. **Arteriosclerosis** 1990 Jul–Aug;10(4):512–9
Does measurement of apolipoprotein B have a place in cholesterol management? [comment] Vega GL, et al. **Arteriosclerosis** 1990 Sep–Oct;10(5):668–71 Comment on: Arteriosclerosis 1990 Sep–Oct;10(5):665–7.
Hypocholesterolemic activity of colestipol hydrochloride in SEA quail. Day CE. **Artery** 1989;17(1):49–59
Responsiveness to dietary cholesterol in the domestic fowl is not related to the degree of body fatness. Meijer GW, et al. **Artery** 1989;17(1):1–5
Fall of cholesterol with time on dialysis: impact on atherogenicity. Lapuz M, et al. **ASAIO Trans** 1989 Jul–Sep; 35(3):258–60
The effect of extracorporeal cholesterol removal on the progression of atherosclerosis. Nomura H, et al. **ASAIO Trans** 1989 Jul–Sep;35(3):346–8
Effects of exercise on hypocholesterolemia of stroke–prone spontaneously hypertensive rats. Abe T, et al. **Atherosclerosis** 1989 Oct;79(2–3):113–9
Relationship between plasma cholesterol and coronary artery disease in Asians. Hughes LO, et al. **Atherosclerosis** 1990 Jul;83(1):15–20
Soy cotyledon fiber products reduce plasma lipids. Lo GS, et al. **Atherosclerosis** 1990 May;82(1–2):59–67
Influence of dietary minerals on apolipoprotein B metabolism in rabbits fed semipurified diets containing casein. Samman S, et al. **Atherosclerosis** 1990 May;82(1–2):69–74
Suppression of established atherosclerosis and xanthomas in mature WHHL rabbits by keeping their serum cholesterol levels extremely low. Effect of pravastatin sodium in combination with cholestyramine. Shiomi M, et al. **Atherosclerosis** 1990 Jul;83(1):69–80
Interruption of long–term lipid–lowering treatment with bezafibrate in hypertriglyceridaemic patients. Effects on lipoprotein composition, lipase activities and the plasma lipid fatty acid spectrum. Vessby B, et al. **Atherosclerosis** 1990 May;82(1–2):137–43
Effects of chronic glucagon administration on rat lipoprotein composition. Guettet C, et al. **Biochim Biophys Acta** 1989 Oct 17;1005(3):233–8
Reactivity of HDL subfractions towards lecithin–cholesterol acyltransferase. Modulation by their content in free cholesterol. Simard G, et al. **Biochim Biophys Acta** 1989 Oct 17;1005(3):245–52
Normal serum cholesterol in panic disorder. Tancer ME, et al. **Biol Psychiatry** 1990 Jan 1;27(1):99–101
Immobilization of P. pictorum in open pore agar, alginate and polylysine–alginate microcapsules for serum cholesterol depletion. Garofalo FA, et al. **Biomater Artif Cells Artif Organs** 1989;17(3):271–89
Cholesterol testing [letter] [see comments] **BMJ** 1989 Sep 2;299(6699):624–5 Comment in: BMJ 1989 Oct 14;299(6705):977.
Cholesterol screening programmes [letter; comment] **BMJ** 1989 Oct 14;299(6705):977–8 Comment on: BMJ 1989 Sep 2;299(6699):606–7.
Cholesterol screening programmes: how much potential benefit? [see comments] Khaw KT, et al. **BMJ** 1989 Sep 2;299(6699):606–7 Comment in: BMJ 1989 Oct 14;299(6705):977–8.
Effectiveness and hazards of case finding for a high cholesterol concentration. Kinlay S, et al. **BMJ** 1990 Jun 16;300(6739):1545–7
Cholesterol testing [letter] Mann J. **BMJ** 1989 Aug 5; 299(6695):391
Cholesterol testing [letter] [published erratum appears in BMJ 1989 Nov 4;299(6708):1167] [comment] Mulcahy R. **BMJ** 1989 Oct 14;299(6705):977 Comment on: BMJ 1989 Sep 2;299(6699):624–5.
Lowering cholesterol concentrations and mortality: a quantitative review of primary prevention trials. Muldoon MF, et al. **BMJ** 1990 Aug 11;301(6747):309–14
The effects of a single dose of dilevalol on [3H]–noradrenaline plasma kinetics and plasma lipoprotein cholesterol concentrations. Howes LG, et al. **Br J Clin Pharmacol** 1990 Mar;29(3):281–7
Serum lipid elevation during isotretinoin therapy for acne in the west of Scotland. Walker BR, et al. **Br J Dermatol** 1990 Apr;122(4):531–7
Digestibility of casein, formaldehyde–treated casein and soya–bean protein in relation to their effects on serum cholesterol in rabbits. Kuyvenhoven MW, et al. **Br J Nutr** 1989 Sep;62(2):331–42
Incidence of cholelithiasis in Egyptians and its relationship with cholesterol. Zaki OA, et al. **Br J Surg** 1967 Aug; 54(8):713–7
A time–course study of physiological indicators of handling stress in the tropical fish Piaractus mesopotamicus (pacu). Krieger–Azzolini MH, et al. **Braz J Med Biol Res** 1989; 22(8):1019–22
Predicting adult cholesterol levels from measurements in childhood and adolescence: the Muscatine Study. Lauer RM, et al. **Bull N Y Acad Med** 1989 Dec;65(10):1127–42; discussion 1154–60
A randomized study of changes in serum cholesterol, triglycerides, high density lipoproteins, and cortisol during cardiac surgery in patients anaesthetised with propofol–sufentanil vs enflurane–sufentanil. Cardiac Anaesthesia Research Group. Hall RI, et al. **Can J Anaesth** 1990 May;37(4 Pt 2):S76
Coffee, caffeine, cholesterol, cardiologists and confusion [editorial; comment] Beamish RE. **Can J Cardiol** 1990 Apr; 6(3):93–4 Comment on: Can J Cardiol 1990 Apr;6(3):95–8.
Imipramine treatment and increased serum cholesterol levels [letter] Yeragani VK, et al. **Can J Psychiatry** 1989 Nov; 34(8):845
Universal cholesterol screening of children could do more harm than good, MD contends. **Can Med Assoc J** 1990 Aug 1;143(3):211
Total serum cholesterol and triglycerides and risk of breast cancer: a prospective study of 24,329 Norwegian women. Vatten LJ, et al. **Cancer Res** 1990 Apr 15;50(8):2341–6
Correlations of blood lipids and lipoproteins with coronary artery disease documented by angiography. Qian XX, et al. **Chin Med J [Engl]** 1990 May;103(5):380–4
Role of triglyceride–rich lipoproteins in progression of atherosclerosis [comment] Havel RJ. **Circulation** 1990 Feb; 81(2):694–6 Comment on: Circulation 1990 Feb;81(2):470–6.
The cholesterol facts. A summary of the evidence relating dietary fats, serum cholesterol, and coronary heart disease. A joint statement by the American Heart Association and the National Heart, Lung, and Blood Institute. The Task Force on Cholesterol Issues, American Heart Association. LaRosa JC, et al. **Circulation** 1990 May;81(5):1721–33 (54 ref.)
Cholesterol screening: comparative evaluation of on–site and laboratory–based measurements. Bachorik PS, et al. **Clin Chem** 1990 Feb;36(2):255–60
Accuracy of Reflotron cholesterol assays evaluated [letter; comment] Boerma GJ. **Clin Chem** 1990 Mar;36(3):578–9 Comment on: Clin Chem 1989 Aug;35(8):1734–9.
A comparison of results for cholesterol in human serum obtained by the Reference Method and by the Definitive Method of the National Reference System for cholesterol. Ellerbe P, et al. **Clin Chem** 1990 Feb;36(2):370–5
Blood cholesterol concentration: fingerstick plasma vs venous serum sampling [published erratum appears in Clin Chem 1990 Aug;36(8 Pt 1):1530] Greenland P, et al. **Clin Chem** 1990 Apr;36(4):628–30
Effect of serum lyophilization on the rate constants of enzymatic methods for measuring cholesterol. Kroll MH, et al. **Clin Chem** 1990 Mar;36(3):534–7
Sodium azide lowers cholesterol readings on the "Reflotron,". Poon R, et al. **Clin Chem** 1990 Jun; 36(6):1252–3
Cyclosporine does not interfere in total and high–density lipoprotein cholesterol measurement with use of enzymatic cholesterol assays. Sgoutas DS, et al. **Clin Chem** 1989 Nov; 35(11):2251–2
Changes in plasma cholesterol values as estimated by enzymatic methods after deliberate peroxidation of plasma [letter] Subbiah MT, et al. **Clin Chem** 1990 Aug;36(8 Pt 1):1524–5
Regional interlaboratory standardization of determinations of cholesterol, high–density lipoprotein cholesterol, and

triglycerides. Tetrault GA, et al. **Clin Chem** 1990 Jan; 36(1):145–9

Plasma lipoproteins in infantile visceral leishmaniasis: deficiency of apolipoproteins A–I and A–II. Bekaert ED, et al. **Clin Chim Acta** 1989 Sep 29;184(2):181–91

Serum lipids and cholesterol metabolism during guar gum, plantago ovata and high fibre treatments. Miettinen TA, et al. **Clin Chim Acta** 1989 Aug 31;183(3):253–62

The effect of clomipramine treatment on plasma lipoproteins and high density lipoprotein subfractions in healthy subjects. Skinner ER, et al. **Clin Chim Acta** 1989 Sep 29; 184(2):147–54

Biology of cholesterol, lipoproteins and atherosclerosis. Havel RJ. **Clin Exp Hypertens [A]** 1989;11(5–6):887–900 (18 ref.)

Lipids in cerebrovascular disease: is there an association? Herzberg L, et al. **Clin Exp Neurol** 1987;24:63–5

Serum cholesterol and vitamins A and E in juvenile chronic arthritis. Honkanen VE, et al. **Clin Exp Rheumatol** 1990 Mar–Apr;8(2):187–91

XbaI polymorphism of the apolipoprotein B gene influences plasma lipid response to diet intervention. Tikkanen MJ, et al. **Clin Genet** 1990 May;37(5):327–34

Triglycerides, cholesterol, HDL, LDL, and VLDL cholesterol in serum of phenylketonuric children under dietary control. Schulpi KH, et al. **Clin Pediatr (Phila)** 1989 Oct;28(10):466–9

A review of the analytic performance of the Reflotron System for cholesterol testing. Statland BE. **Clin Ther** 1990 May–Jun;12(3):281–6 (18 ref.)

Relationship of plasma cholesterol level to doses of branch–chain amino acids in sepsis. Chiarla C, et al. **Crit Care Med** 1990 Jan;18(1):32–6

Effects of fish oil supplementation on glucose and lipid metabolism in NIDDM. Borkman M, et al. **Diabetes** 1989 Oct;38(10):1314–9

Abnormal lipoprotein composition in normolipidemic diabetic patients. Iwai M, et al. **Diabetes Care** 1990 Jul; 13(7):792–6

Within–clinic reagent strip lipid measurement. Neil HA, et al. **Diabetic Med** 1989 Dec;6(9):824–8

Alterations in serum lipids and apolipoproteins in male type 1 (insulin–dependent) diabetic patients with microalbuminuria. Dullaart RP, et al. **Diabetologia** 1989 Sep;32(9):685–9

Cellular cholesterol regulation—a defect in the type 2 (non–insulin–dependent) diabetic patient in poor metabolic control. Owens D, et al. **Diabetologia** 1990 Feb;33(2):93–9

Relation of the adrenal and pituitary to the hypocholesterolemic effect of estrogen in rats. Steinberg M, et al. **Endocrinology** 1967 Aug;81(2):340–4

Cholesterol and coronary heart disease prevention—a transatlantic consensus. Brook JG, et al. **Eur Heart J** 1989 Aug;10(8):702–11 (41 ref.)

The effects of simvastatin on plasma lipoproteins and cholesterol homeostasis in patients with heterozygous familial hypercholesterolaemia. Hagemenas FC, et al. **Eur J Clin Invest** 1990 Apr;20(2):150–7

An epidemiological and an experimental study on the effect of olive oil on total serum and HDL cholesterol in healthy volunteers. Mensink RP, et al. **Eur J Clin Nutr** 1989;43 Suppl 2:43–8

Effects of acipimox and cholestyramine on serum lipoproteins, non–cholesterol sterols and cholesterol absorption and elimination. Gylling H, et al. **Eur J Clin Pharmacol** 1989;37(2):111–5

Hypocholesterolemia, an unfavorable feature of prognostic value in chronic myeloid leukemia. Muller CP, et al. **Eur J Haematol** 1989 Sep;43(3):235–9

Effects of orchiectomy and polyestradiol phosphate therapy on serum lipoprotein lipids and glucose tolerance in prostatic cancer patients. Aro J, et al. **Eur Urol** 1990; 17(3):229–35

Capillary GC quantification of cholesterol oxidation products in plasma lipoproteins of fasted humans. Addis PB, et al. **Free Radic Biol Med** 1989;7(2):179–82

Plasma insulin, serum lipids and lipoproteins in gall stone disease in non–insulin dependent diabetic subjects: a case control study. Laakso M, et al. **Gut** 1990 Mar;31(3):344–7

The relation between hypocholesterolemia and degree of maturation in acute myeloid leukemia. Zyada LE, et al. **Hematol Oncol** 1990 Jan–Feb;8(1):65–9

Effect of heat–stable factor (SLF3) on plasma and erythrocyte cholesterol levels and erythrocyte (Na+,K+)–ATPase activity in cholesterol fed rabbits. Gökkuşu C, et al. **Horm Metab Res** 1989 Sep;21(9):523–4

Cholesterol–free diet with a high ratio of polyunsaturated to saturated fatty acids in heterozygous familial hypercholesterolemia: significant lowering effect on plasma cholesterol. Mokuno H, et al. **Horm Metab Res** 1990 Apr; 22(4):246–51

The effect of heat–stable extract from bovine sublingual salivary gland on serum cholesterol and triglyceride levels in normal and hypercholesterolemic rabbits. Omidfar H, et al. **Horm Metab Res** 1989 Dec;21(12):646–8

Zoladex versus danazol in the treatment of pelvic endometriosis: effects on plasma lipid risk factors. Crook D, et al. **Horm Res** 1989;32 Suppl 1:157–60

Effect of dietary zinc and copper on peripheral blood plasma cholesterol, testosterone and histomorphology of testes in rats. Mehta U, et al. **Indian J Exp Biol** 1989 May; 27(5):469–71

Thymus fraction (FIII) effect on cholesterol metabolism: modulation of the low density lipoprotein receptor pathway. Mondola P, et al. **Int J Biochem** 1989; 21(6):627–30

Serum lipids and colorectal adenoma among male self–defence officials in northern Kyushu, Japan. Kono S, et al. **Int J Epidemiol** 1990 Jun;19(2):274–8

Serum cholesterol and primary brain tumours: a case–control study. Neugut AI, et al. **Int J Epidemiol** 1989 Dec; 18(4):798–801

Chlorination, water hardness and serum cholesterol in forty–six Wisconsin communities. Zeighami EA, et al. **Int J Epidemiol** 1990 Mar;19(1):49–58

Reduction in body weight and cholesterol in spontaneously obese dogs by dehydroepiandrosterone. Kurzman ID, et al. **Int J Obes** 1990;14(2):95–104

Biochemical and anthropometric evaluation of the nutritional status of 35–year–old Dutch men with reference to smoking and drinking habits. van Poppel G, et al. **Int J Vitam Nutr Res** 1989;59(4):381–7

Lipids and testicular function. Padrón RS, et al. **Int Urol Nephrol** 1989;21(5):515–9

Psyllium in metamucil lowers cholesterol levels [letter] **Iowa Med** 1989 Sep;79(9):421

The cholesterol controversy. Schrott H, et al. **Iowa Med** 1990 Jul;80(7):349–51

Consensus statement of King's Fund Forum: blood cholesterol measurement in the prevention of coronary heart disease. Smith JP. **J Adv Nurs** 1990 Jan;15(1):1–2

Serum zinc and copper: associations with cholesterol and triglyceride levels in children and adolescents. Cardiovascular risk in young Finns. Laitinen R, et al. **J Am Coll Nutr** 1989 Oct;8(5):400–6

Plasma lipid concentrations in college students performing self–selected exercise. Merrill GF, et al. **J Am Coll Nutr** 1990 Jun;9(3):226–30

Serum cholesterol, fat intake, and breakfast consumption in the United States adult population. Stanton JL Jr, et al. **J Am Coll Nutr** 1989 Dec;8(6):567–72

Reduced serum cholesterol with dietary change using fat–modified and oat bran supplemented diets. Demark–Wahnefried W, et al. **J Am Diet Assoc** 1990 Feb; 90(2):223–9

Lack of effect of vitamin B–6 supplementation on the lipoprotein profile of post–menopausal chronic hemodialysis patients. Pike S, et al. **J Am Diet Assoc** 1990 Jul;90(7):968–72

Cholesterol can be lowered in older persons. Should we care? Kaiser FE, et al. **J Am Geriatr Soc** 1990 Jan;38(1):84–5 (21 ref.)

Serum cholesterol binding reserve and its ratio to serum cholesterol in first degree relatives of patients with ischaemic heart disease. Goyal SP, et al. **J Assoc Physicians India** 1990 Jun;38(6):395–7

Carboxyhaemoglobin and serum cholesterol levels in smokers. Singh N, et al. **J Assoc Physicians India** 1989 Oct;37(10):649–51

Effect of metoprolol and pindolol monotherapy on plasma lipid– and lipoprotein–cholesterol levels (including the HDL subclasses) in mild hypertensive males and females. Szollár LG, et al. **J Cardiovasc Pharmacol** 1990 Jun; 15(6):911–7

Comparison of the reflectance method (Reflotron reflectance photometer) with the absorbance method (automatic analysers) for the determination of cholesterol [see comments] Assmann G, et al. **J Clin Chem Clin Biochem** 1989 Dec;27(12):961–6 Comment in: J Clin Chem Clin Biochem 1990 Apr;28(4):259–60.

Improved method for enzymic determination of cholesterol in lipoproteins separated by electrophoresis on thin layer agarose gels. Aufenanger J, et al. **J Clin Chem Clin Biochem** 1989 Oct;27(10):807–13

The Reflotron Total Cholesterol assay in heparinized venous and capillary blood. Boerma GJ, et al. **J Clin Chem Clin Biochem** 1990 Apr;28(4):255–8

Standardisation of cholesterol determination [letter; comment] Boerma GJ. **J Clin Chem Clin Biochem** 1990 Apr;28(4):259–60 Comment on: J Clin Chem Clin Biochem 1989 Dec;27(12):961–6.

Clinical review: Diagnosis and management of abnormal plasma lipids. Margolis S. **J Clin Endocrinol Metab** 1990 Apr;70(4):821–5

The variability of serum cholesterol measurements: implications for screening and monitoring. Thompson SG, et al. **J Clin Epidemiol** 1990;43(8):783–9

Dietary fiber for reducing blood cholesterol. Lipsky H, et al. **J Clin Pharmacol** 1990 Aug;30(8):699–703 (34 ref.)

Longitudinal study of cyclosporine and lipids in patients undergoing bone marrow transplantation. Luke DR, et al. **J Clin Pharmacol** 1990 Feb;30(2):163–9

Cholesterol measurement and treatment in community practices. Hudson JW, et al. **J Fam Pract** 1990 Aug; 31(2):139–44

Population screening for plasma cholesterol: community–based results from Miami. Harris RE, et al. **J Fla Med Assoc** 1989 Oct;76(10):853–60

Screening for high cholesterol [editorial; comment] Hulley SB, et al. **J Gen Intern Med** 1990 Jan–Feb;5(1):88–9 Comment on: J Gen Intern Med 1990 Jan–Feb;5(1):1–8.

Selective screening for high cholesterol in Australian general practice: the Newcastle Cholesterol Prediction Study [see comments] Kinlay S, et al. **J Gen Intern Med** 1990 Jan–Feb; 5(1):1–8 Comment in: J Gen Intern Med 1990 Jan–Feb;5(1):88–9.

Cholesterol:phospholipid ratio is elevated in platelet plasma membrane in patients with hypertension. Benjamin N, et al. **J Hum Hypertens** 1990 Jun;4(3):273–6

Relationships among the variables age, weight, A/B behaviour, cholesterol, ways of coping and blood pressure levels. Smyth KA. **J Hum Hypertens** 1990 Apr;4(2):116–8

Effects of a new fluid fish oil concentrate, ESKIMO–3, on triglycerides, cholesterol, fibrinogen and blood pressure. Haglund O, et al. **J Intern Med** 1990 May;227(5):347–53

Lack of concordance in classification of coronary heart disease risk: high–risk HDL cholesterol less than 35 mg/dl in subjects with desirable total serum cholesterol, less than 200 mg/dl. Glueck CJ, et al. **J Lab Clin Med** 1990 Sep; 116(3):377–85

Motivation for cholesterol screening [letter; comment] Klevay LM. **J Lab Clin Med** 1990 Feb;115(2):263–4 Comment on: J Lab Clin Med 1989 Aug;114(2):142–51.

Beneficial effects of pinacidil on blood lipids: comparisons with prazosin and placebo in patients with hypertension. Pinacidil–Prazosin and Pinacidil–Placebo Research Groups, Lilly Research Laboratories. Rockhold FW, et al. **J Lab Clin Med** 1989 Dec;114(6):646–54

Alkylthioacetic acids (3–thia fatty acids) as non–beta–oxidizable fatty acid analogues: a new group of hypolipidemic drugs. III. Dissociation of cholesterol– and triglyceride–lowering effects and the induction of peroxisomal beta–oxidation. Aarsland A, et al. **J Lipid Res** 1989 Nov;30(11):1711–8

A rapid and sensitive micro–assay for the enzymatic determination of plasma and lipoprotein cholesterol. Auerbach BJ, et al. **J Lipid Res** 1990 Apr;31(4):738–42

Dietary influences on serum lipids and lipoproteins. Grundy SM, et al. **J Lipid Res** 1990 Jul;31(7):1149–72 (238 ref.)

Rapid labeling of lipoproteins in plasma with radioactive cholesterol. Application for measurement of plasma cholesterol esterification. Yen FT, et al. **J Lipid Res** 1990 Feb;31(2):349–53

Diet to reduce cholesterol: heart recommendations agree with NCI, DHHS [news] Smigel K. **J Natl Cancer Inst** 1990 Mar 21;82(6):450–1

Serum cholesterol and cancer: is there a connection? [news] Smigel K. **J Natl Cancer Inst** 1989 Dec 20;81(24):1863–5

Cancer incidence and cancer mortality in relation to serum cholesterol. Törnberg SA, et al. **J Natl Cancer Inst** 1989 Dec 20;81(24):1917–21

Attenuation of the meal–induced increase in plasma lipids and adipose tissue lipoprotein lipase by guar gum in rats. Deshaies Y, et al. **J Nutr** 1990 Jan;120(1):64–70

Evidence that polyunsaturated lecithin induces a reduction in plasma cholesterol level and favorable changes in lipoprotein composition in hypercholesterolemic rats. Jimenez MA, et al. **J Nutr** 1990 Jul;120(7):659–67

Essential amino acids in relation to hypercholesterolemia induced in rabbits by dietary casein. Kurowska EM, et al. **J Nutr** 1990 Aug;120(8):831–6

Active vs. passive agents: implications for dietary recommendations [letter; comment] Lands WE. **J Nutr** 1990 Mar;120(3):317–9 Comment on: J Nutr 1989 Apr;119(4):529–33.

Cholesterol metabolism in adult baboons is influenced by infant diet. Mott GE, et al. **J Nutr** 1990 Mar;120(3):243–51

Dose response to a dietary oat bran fraction in cholesterol–fed rats. Shinnick FL, et al. **J Nutr** 1990 Jun; 120(6):561–8

Cholesterol–lowering activity of various undigested fractions of soybean protein in rats. Sugano M, et al. **J Nutr** 1990 Sep;120(9):977–85

Changes in distribution of alpha–tocopherol and cholesterol in serum lipoproteins and tissues of rats by dietary PCB and dietary level of protein. Kato N, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Dec;35(6):655–60

Transient control of serum cholesterol homeostasis in adult ExHC (exogenous hypercholesterolemic) rats by dietary cholesterol during weanling period. Lu YF, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Oct;35(5):463–74

Effects of methyl–group acceptors on the regulation of plasma cholesterol level in rats fed high cholesterol diets. Sugiyama K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Dec; 35(6):613–26

Effects of addition of sulfur–containing amino acids and glycine to soybean protein and casein on serum cholesterol levels of rats. Tanaka K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Aug;35(4):323–32

Elevation of serum cholesterol and triglycerides as a complication of amiodarone therapy [letter] Cantor J. **J R Coll Gen Pract** 1989 Jun;39(323):258

The acute effects of exercise duration on serum lipoprotein metabolism. Hughes RA, et al. **J Sports Med Phys Fitness** 1990 Mar;30(1):37–44

Population screening for plasma cholesterol: community–based results from Memphis. Muscat JE, et al. **J Tenn Med Assoc** 1989 Dec;82(12):633–9

Blood lipids in a healthy Karachi population. Molla A, et al. **J Trop Med Hyg** 1990 Aug;93(4):295–9

Therapy for hypercholesterolemia; standardization of cholesterol measurements [letter; comment] **JAMA** 1990 Jan 19;263(3):375–6 Comment on: JAMA 1989 Jun 23–30;261(24):3582–7.

Putting cholesterol control on a diet [letter] **JAMA** 1989 Dec 1;262(21):2998–9

From the Centers for Disease Control. State-specific changes in cholesterol screening and awareness—United States, 1987–1988. **JAMA** 1990 Jun 20;263(23):3133, 3136–7

Portable cholesterol analyzers [letter] **JAMA** 1990 Sep 5; 264(9):1101–3

Reducing cholesterol levels in elderly persons [letter; comment] **JAMA** 1990 Jun 6;263(21):2889–90 Comment on: JAMA 1990 Jan 19;263(3):393.

Is elevated serum cholesterol level a risk factor for coronary heart disease in the elderly? [see comments] Benfante R, et al. **JAMA** 1990 Jan 19;263(3):393–6 Comment in: JAMA 1990 Jun 6;263(21):2889–90.

Reevaluation of serum–plasma differences in total cholesterol concentration. Cloey T, et al. **JAMA** 1990 May 23–30; 263(20):2788–9

Système international units and familiar formulas: the case of lipids [letter; comment] Giral P, et al. **JAMA** 1990 May 2;263(17):2302 Comment on: JAMA 1989 Jul 21;262(3):360–4.

Cholesterol levels and the breast-feeding mom [letter] Jensen RG, et al. **JAMA** 1989 Oct 20;262(15):2092–3

The accuracy of portable cholesterol analyzers in public screening programs [see comments] Naughton MJ, et al. **JAMA** 1990 Mar 2;263(9):1213–7 Comment in: JAMA 1990 Mar 2:263(9):1250–2.

Declining serum cholesterol levels prior to diagnosis of colon cancer. A time–trend, case–control study. Winawer SJ, et al. **JAMA** 1990 Apr 18;263(15):2083–5

Serum cholesterol in neonates and their mothers. A pilot study. Badruddin SH, et al. **JPMA** 1990 May;40(5):108–9

Plasma cholesterol, lipid lowering, and risk for cancer. An update of the results from epidemiologic studies and intervention trials. Lackner KJ, et al. **Klin Wochenschr** 1989 Sep 15;67(18):957–62 (56 ref.)

Association between sympathetic activity and the atherogenic serum cholesterol fraction. Weidmann P, et al. **Klin Wochenschr** 1990 Mar 5;68(5):269–76

Plasma apolipoprotein and lipid profiles in infants in the first year of life. Boediman D, et al. **Kobe J Med Sci** 1989 Jun; 35(3):165–76

Relation between serum cholesterol and diabetic nephropathy [letter] Mulec H, et al. **Lancet** 1990 Jun 23;335(8704):1537–8

Relation between serum cholesterol and diabetic nephropathy [letter] Olczak SA. **Lancet** 1990 Jul 28;336(8709):254

Effects of coronary risk reduction on the pattern of mortality [see comments] Rose G, et al. **Lancet** 1990 Feb 3; 335(8684):275–7 (6 ref.) Comment in: Lancet 1990 Apr 14;335(8694):923.

Cholesterol testing with desk–top machines [letter] Sharp I, et al. **Lancet** 1990 Jan 6;335(8680):55

Effects of coronary risk reduction on mortality [letter] [published erratum appears in Lancet 1990 May 26;335(8700):1292] [comment] Spritz N. **Lancet** 1990 Apr 14;335(8694):923 Comment on: Lancet 1990 Feb 3;335(8684):275–7.

Effect of a lipid–rich fraction from boiled coffee on serum cholesterol. Zock PL, et al. **Lancet** 1990 May 26; 335(8700):1235–7

Reductions of body fat stores and total plasma cholesterol and triglyceride concentrations in several species by bromocriptine treatment. Cincotta AH, et al. **Life Sci** 1989; 45(23):2247–54

The effect of diabetes mellitus on aortic prostanoid synthesis and serum cholesterol levels in the rat fed a high cholesterol diet. Myers SI, et al. **Life Sci** 1990;47(6):587–94

LCAT inhibitors interfere with the enzymatic determination of cholesterol and triglycerides. Harris WS, et al. **Lipids** 1990 Jun;25(6):341–3

Cholesterol testing [letter] Ellin MJ. **Md Med J** 1990 Jul; 39(7):692

Cholesterol testing. Maganzini HC. **Md Med J** 1990 Jan; 39(1):41–6

Lipid levels and risk of atherosclerotic coronary heart disease in the older person. Ettinger WH. **Med Clin North Am** 1989 Nov;73(6):1525–30 (20 ref.)

Reducing blood cholesterol: dietitian or diet fact sheet? [letter; comment] Amos BJ. **Med J Aust** 1990 Feb 5; 152(3):168 Comment on: Med J Aust 1989 Nov 20;151(10):566–8.

Health education, health promotion or drugs? Cholesterol and coronary heart disease [letter] Colquhoun D. **Med J Aust** 1990 Sep 3;153(5):305–6

Reducing blood cholesterol levels in patients with peripheral vascular disease: dietitian or diet fact sheet? [see comments] Heller RF, et al. **Med J Aust** 1989 Nov 20;151(10):566–8 Comment in: Med J Aust 1990 Feb 5;152(3):168.

Dietary fibre [editorial] Nestel PJ. **Med J Aust** 1990 Aug 6;153(3):123–4

The awareness of the risk of elevated cholesterol levels and knowledge about cholesterol–lowering action in Australia. Rushworth RL, et al. **Med J Aust** 1990 Jan 15;152(2):72–5

Health education, health promotion or drugs? Cholesterol and coronary heart disease. Wilson A, et al. **Med J Aust** 1990 Jun 4;152(11):561–3 (39 ref.)

Lipid and apoprotein modifications in body builders during and after self-administration of anabolic steroids. Baldo-Enzi G, et al. **Metabolism** 1990 Feb;39(2):203–8

Development of cholesterol homeostatic memory in the rat is influenced by maternal diets. Brown SA, et al. **Metabolism** 1990 May;39(5):468–73

Factors related to cholesterol screening and cholesterol level awareness—United States, 1989. **MMWR** 1990 Sep 21; 39(37):633–7

State–specific changes in cholesterol screening and awareness—United States, 1987–1988. **MMWR** 1990 May 11;39(18):304–5, 311–4

Phospholipid composition, cholesterol content and cholesterol exchange in Plasmodium falciparum–infected red cells. Maguire PA, et al. **Mol Biochem Parasitol** 1990 Jan 1;38(1):105–12

Effect on plasma cholesterol of a Step 1 diet with or without increased monounsaturated fats [letter] **N Engl J Med** 1990 Jul 26;323(4):273–5

Serum cholesterol levels and stroke mortality [letter; comment] **N Engl J Med** 1989 Nov 9;321(19):1339–41 Comment on: N Engl J Med 1989 Apr 6;320(14):904–10.

Menopause and coronary risk factors [letter] **N Engl J Med** 1990 Mar 8;322(10):698–9

Oat bran and serum cholesterol [letter; comment] **N Engl J Med** 1990 Jun 14;322(24):1746–9 Comment on: N Engl J Med 1990 Jan 18;322(3):147–52.

The effect on serum cholesterol levels of coffee brewed by filtering or boiling. Bak AA, et al. **N Engl J Med** 1989 Nov 23;321(21):1432–7

Must we change our traditional units for cholesterol? [letter] Ellison RC. **N Engl J Med** 1990 Jan 18;322(3):207–8

Reduction of plasma cholesterol levels in normal men on an American Heart Association Step 1 diet or a Step 1 diet with added monounsaturated fat. Ginsberg HN, et al. **N Engl J Med** 1990 Mar 1;322(9):574–9

Trans monounsaturated fatty acids and serum cholesterol levels [editorial; comment] Grundy SM. **N Engl J Med** 1990 Aug 16;323(7):480–1 Comment on: N Engl J Med 1990 Aug 16;323(7):439–45.

Ten–year mortality from cardiovascular disease in relation to cholesterol level among men with and without preexisting cardiovascular disease. Pekkanen J, et al. **N Engl J Med** 1990 Jun 14;322(24):1700–7

Cholesterol embolization after treatment with tissue plasminogen activator [letter] Shapiro LS. **N Engl J Med** 1989 Nov 2;321(18):1270

Cholesterol lowering drugs [letter] Amarasingham R. **N Z Med J** 1990 Aug 8;103(895):380

Are academics always ethical? [letter] [see comments] Cooper M. **N Z Med J** 1990 Apr 11;103(887):161–2 Comment in: N Z Med J 1990 May 23;103(890):252.

Misconceptions about cholesterol [letter] French J, et al. **N Z Med J** 1990 Jan 24;103(882):19–20

Trends in cardiovascular risk factors in Auckland, 1982 to 1987. Jackson R, et al. **N Z Med J** 1990 Aug 8; 103(895):363–5

Total blood cholesterol in a volunteer population. Simmers DG. **N Z Med J** 1990 Jul 25;103(894):337–9

Cholesterol levels [letter; comment] White H, et al. **N Z Med J** 1990 May 23;103(890):252 Comment on: N Z Med J 1990 Apr 11;103(887):161–2.

Influence of cholesterol administration and aging on the development of pulmonary foam cells in F344 rats. Shibuya K, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):1017–24

Cholesterol crusade continues [letter] Freeman WE Jr. **Ohio Med** 1990 Feb;86(2):91

On cholesterol testing of children... [letter] Freeman WE Jr. **Ohio Med** 1989 Nov;85(11):837

Study shows tamoxifen also lowers cholesterol [news] **Oncology (Williston Park)** 1990 Feb;4(2):16

Serum total cholesterol screening for the detection of elevated low–density lipoprotein in children and adolescents: the Bogalusa Heart Study. Dennison BA, et al. **Pediatrics** 1990 Apr;85(4):472–9

Cholesterol screening? [letter; comment] Dennison BA. **Pediatrics** 1990 Jun;85(6):1125–6 Comment on: Pediatrics 1989 Nov;84(5):751–5.

Routine cholesterol surveillance in childhood [letter; comment] Feldman W. **Pediatrics** 1990 Jul;86(1):150–1 Comment on: Pediatrics 1989 Nov;84(5):751–5.

Routine cholesterol surveillance in childhood [see comments] Garcia RE, et al. **Pediatrics** 1989 Nov;84(5):751–5 Comment in: Pediatrics 1990 May;85(5):894–5. Comment in: Pediatrics 1990 Jun;85(6):1125–6. Comment in: Pediatrics 1990 Jul;86(1):150–1.

Plasma cholesterol levels of 6585 children in the United States: results of the know your body screening in five states. Resnicow K, et al. **Pediatrics** 1989 Dec;84(6):969–76

Routine cholesterol screening in childhood [letter; comment] Robertson LD Jr. **Pediatrics** 1990 May;85(5):894–5 Comment on: Pediatrics 1989 Nov;84(5):751–5.

Another view of cholesterol screening [letter] Staines A. **Pediatrics** 1990 Aug;86(2):327–8

Dietary protein source and plasma lipid profiles of infants. Tseng E, et al. **Pediatrics** 1990 Apr;85(4):548–52

The effect of etofibrate on cholesterol and bile acid metabolism in the hamster. De Fabiani E, et al. **Pharmacol Res** 1989 Sep–Oct;21(5):567–76

Effect of 4–cholesten–3–one on lecithin–cholesterol acyltransferase activity and the lipid concentration in the serum of normocholesterolaemic and hypercholesterolaemic rats. Tallová J, et al. **Physiol Bohemoslov** 1990;39(2):119–23

Lowering cholesterol naturally. Nash DT. **Postgrad Med** 1990 Feb 1;87(2):63–5, 68 (10 ref.)

What are the facts on cholesterol? Questions physicians often ask about screening and treatment. Schmidt SB. **Postgrad Med** 1990 Mar;87(4):51–5, 59

The European (EAS) and the American (NCEP) cholesterol guidelines: are they still adequate? Sztern M, et al. **Postgrad Med J** 1989;65 Suppl 1:S2–5

Plasma cholesterol responses to the adrenocorticotropic hormone in Japanese quail following eighteen generations of divergent selection. Marks HL, et al. **Poult Sci** 1990 Feb;69(2):205–8

Screening for raised cholesterol in a small suburban town [published erratum appears in Practitioner 1989 Jun 8;233(1470);815] Almond D, et al. **Practitioner** 1989 Apr 22;233(1467):568–70

Screening for cholesterol? [editorial] Kerrigan P. **Practitioner** 1989 May 8;233(1468):627

Lipid profiles of Yanomamo Indians of Brazil. Mancilha–Carvalho JJ, et al. **Prev Med** 1990 Jan; 19(1):66–75

Cholesterol reduction through low–intensity interventions: results from the Minnesota Heart Health Program. Murray DM, et al. **Prev Med** 1990 Mar;19(2):181–9

Screening using National Cholesterol Education Program guidelines in a population of urban Hispanic mothers. Shea S, et al. **Prev Med** 1989 Nov;18(6):824–32

Red cell membrane lipid dynamics. Lubin B, et al. **Prog Clin Biol Res** 1989;319:507–22; discussion 523–4 (31 ref.)

Age–associated reduction of prostacyclin and thromboxane synthesis is inversely related to plasma cholesterol levels: modulation by dietary cholesterol supplementation. Takahashi R, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Jan; 39(1):65–7

Lipids and lipoproteins as risk indicators for coronary heart disease (a study on male patients with defined vessel findings). Herrmann W, et al. **Przegl Lek** 1989;46(7):604–10 **(Eng, Pol)**

Increased serum total cholesterol to HDL–cholesterol ratio after imipramine [letter] Yeragani VK, et al. **Psychiatry Res** 1990 May;32(2):207–9

Comparisons of referral criteria for public screening of blood cholesterol levels. Wones RG, et al. **Public Health Rep** 1989 Sep–Oct;104(5):425–32

Lowering of plasma cholesterol in herbivores and omnivores by low molecular weight dextran. Adam O, et al. **Res Exp Med (Berl)** 1989;189(4):241–7

Effects of serum storage on the determination of cholesterol. Pini C, et al. **Ric Clin Lab** 1990 Jan–Mar;20(1):37–44

Linkage study of the low–density lipoprotein–receptor gene and cholesterol levels in an Afrikaner family. Quantitative genetics and identification of a minor founder effect. Brink PA, et al. **S Afr Med J** 1990 Mar 17;77(6):292–6

The relationship between dietary factors and serum cholesterol values in the coloured population of the Cape Peninsula. Steyn K, et al. **S Afr Med J** 1990 Jul 21; 78(2):63–7

Reliability of the Reflotron in the determination of cholesterol. Selmer R, et al. **Scand J Clin Lab Invest** 1990 May;50(3):261–71

Improving the quality of plasma cholesterol measurements in primary care. Broughton PM, et al. **Scand J Clin Lab Invest Suppl** 1990;198:43–8 (18 ref.)

Reference system for cholesterol measurements. Cooper GR, et al. **Scand J Clin Lab Invest Suppl** 1990;198:27–31 (14 ref.)

International quality assurance schemes for cholesterol. Grafnetter D. **Scand J Clin Lab Invest Suppl** 1990;198:32–42 (23 ref.)

Cholesterol and coronary heart disease. Grundy SM. **Scand J Clin Lab Invest Suppl** 1990;199:17–24 (23 ref.)

Validation and standardization of cholesterol measurements. McQueen M, et al. **Scand J Clin Lab Invest Suppl** 1990; 198:49–50

Influence of analytical quality and preanalytical variations on measurements of cholesterol in screening programmes. Petersen H, et al. **Scand J Clin Lab Invest Suppl** 1990; 198:66–72 (16 ref.)

Dissociation of changes in plasma cholesterol and hepatic cholesterol synthesis, assessed by precursors in bile, after jejunoileal bypass with 3:1 and 1:3 jejunoileal ratio. Sørensen TI, et al. **Scand J Gastroenterol** 1989 Nov; 24(9):1049–54

Myocardial infarction? Wright K. **Sci Am** 1989 Nov;261(5):30

Fiber fracas at FASEB [news] Moffat A. **Science** 1990 Mar 23;247(4949 Pt 1):1412

Population screening for plasma cholesterol: community–based results from Atlanta. Harris RE, et al. **South Med J** 1989 Nov;82(11):1370–6

Cholesterol: myth or reality? Thompson WG. **South Med J** 1990 Apr;83(4):435–40 (71 ref.)

Serum cholesterol and hemorrhagic stroke in the Honolulu Heart Program. Yano K, et al. **Stroke** 1989 Nov; 20(11):1460–5

Quick reference to National Cholesterol Education Program: adult cholesterol treatment guidelines. Goldman DA. **Tex Med** 1989 Dec;85(12):28–9

Cholesterol education implications for clinical practice. Grundy SM, et al. **Tex Med** 1989 Dec;85(12):23–7

Cholesterol education program offers guidelines [editorial] Price C, et al. **Tex Med** 1989 Dec;85(12):4–5

Expression of fibrinogen receptors in platelets of migraine patients—correlation with GPIIb content and plasma cholesterol—reply [letter; comment] Harrison B, et al. **Thromb Haemost** 1990 Apr 12;63(2):318 Comment on: Thromb Haemost 1989 Jun 30;61(3):419–22.

Lipids and warfarin requirements [letter] Robinson A, et al. **Thromb Haemost** 1990 Feb 19;63(1):148–9

Expression of fibrinogen receptors in platelets of migraine patients—correlation with platelet GPIIb content and plasma cholesterol [see comments] Walkowiak B, et al. **Thromb Haemost** 1989 Jun 30;61(3):419–22 Comment in: Thromb Haemost 1990 Apr 12;63(2):318.

Pharmacological approaches to the modulation of plasma cholesterol. Shepherd J, et al. **Trends Pharmacol Sci** 1988 Sep;9(9):326–9 (28 ref.)

Plasma HDL cholesterol, triglyceride and total cholesterol levels in non insulin treated Nigerian diabetics. Erasmus RT, et al. **Trop Geogr Med** 1989 Jul;41(3):238–41

The effect of chromium picolinate on serum cholesterol and apolipoprotein fractions in human subjects. Press RI, et al. **West J Med** 1990 Jan:152(1):41–5

Total and high-density lipoprotein cholesterol measurements. Hazards in clinical interpretation. Rivin AU. **West J Med** 1989 Sep;151(3):289–91

Characterization of guinea pigs adapted to differently high vitamin C supplies. 1. Blood-levels of cholesterol, glucose, triacylglycerides and hemoglobin. Degkwitz E, et al. **Z Ernahrungswiss** 1990 Mar;29(1):21–6

[15 years' observation and related research on diagnosis and treatment according to traditional Chinese medicine of elevated serum lipids in 54 cases of coronary disease] Bao J, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1990 Apr; 10(4):206–8, 196 (Eng. Abstr.) **(Chi)**

[A double-blind clinical trial—the effects of pantethine on serum lipids in patients with hyperlipidemia] Lu ZL. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Aug; 17(4):221–3 **(Chi)**

[Serum lipids and apolipoproteins AI, B100, CI and CII in patients with apoplexy] Liu BW, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Mar;20(1):9–12 (Eng. Abstr.) **(Chi)**

[The development of cholesterolemia in the Czech population 1985–1988] Skodová Z, et al. **Cas Lek Cesk** 1990 Apr 13; 129(15):452–6 (Eng. Abstr.) **(Cze)**

[What does the reduction of cholesterol benefit? (letter)] **Ugeskr Laeger** 1990 Feb 19;152(8):546–52 **(Dan)**

[The heart society's cholesterol campaign (letter)] **Ugeskr Laeger** 1989 Nov 6;151(45):2991–4 **(Dan)**

[Cholesterol should be treated seriously] Agner E, et al. **Ugeskr Laeger** 1990 Feb 19;152(8):538–40 **(Dan)**

[Distribution of serum total cholesterol in a population with varying risks of cardiovascular disease] Anderson P, et al. **Ugeskr Laeger** 1990 Feb 19;152(8):523–6 (29 ref.) (Eng. Abstr.) **(Dan)**

[The cholesterol campaign of the Heart Society (letter)] Astrup P. **Ugeskr Laeger** 1989 Sep 4;151(36):2275–6 **(Dan)**

[Physicians and cholesterol] Faergeman O. **Ugeskr Laeger** 1990 May 14;152(20):1461 **(Dan)**

[Benefits of cholesterol reduction] Gerdes LU, et al. **Ugeskr Laeger** 1990 Feb 19;152(8):540–4 **(Dan)**

[Threshold values for hypercholesterolemia: single values or percentiles?] Gerdes LU. **Ugeskr Laeger** 1990 Jun 11; 152(24):1736–9 (Eng. Abstr.) **(Dan)**

[Measurement of cholesterol in capillary blood using the Reflotron system. Results from approximately 1,000 comparisons with reference measurements of cholesterol in venous serum] Gerdes LU, et al. **Ugeskr Laeger** 1990 Jun 11;152(24):1739–43 (Eng. Abstr.) **(Dan)**

[Cholesterol and primary health care (letter)] Hilden T. **Ugeskr Laeger** 1989 Sep 25;151(39):2526–7 **(Dan)**

[What is the real advantage of reducing cholesterol? (letter)] Kristensen BO, et al. **Ugeskr Laeger** 1989 Oct 23; 151(43):2821–3 **(Dan)**

[Cholesterol—once again (letter)] la Cour Petersen E. **Ugeskr Laeger** 1990 Feb 19;152(8):545–6 **(Dan)**

[Lipids in the plasma of voluntary blood donors. A 2-year retrospective study (1985–1987)] Mathiesen O, et al. **Ugeskr Laeger** 1989 Oct 2;151(40):2580–2 (Eng. Abstr.) **(Dan)**

[Accuracy of serum cholesterol measurements at central laboratories (letter)] Stahl M, et al. **Ugeskr Laeger** 1989 Sep 25;151(39):2525–6 **(Dan)**

[Assessment of the risk of cardiovascular disease on the basis of total serum cholesterol in a population of young Danish women and men] Voss A, et al. **Ugeskr Laeger** 1990 Feb 19;152(8):526–9 (Eng. Abstr.) **(Dan)**

[The French consensus on cholesterol and dyslipoproteinemias. The board of directors of ARCOL (French Committee on Coordination of Research on Atherosclerosis and Cholesterol)] **Arch Mal Coeur** 1989 Jul-Aug;82(8):1451–4 (11 ref.) **(Fre)**

[A decrease in blood cholesterol after therapy with the pineal extract Crinofizin in 15 patients. Preliminary data] Cazan M, et al. **Endocrinologie** 1989 Apr-Jun;27(2):87–92 **(Fre)**

[Hypercholesterolemia and coronary heart disease (letter)] **Dtsch Med Wochenschr** 1990 Apr 6;115(14):557–8 **(Ger)**

[Coffee and serum cholesterol] Strubelt O. **Dtsch Med Wochenschr** 1990 Mar 23;115(12):479 **(Ger)**

[The effect of silver carp oil on the blood pressure and lipids of spontaneously hypertensive rats] Wirth M, et al. **Nahrung** 1990;34(6):575–8 **(Ger)**

[Methods of cholesterol determination: conventional procedure or "dry chemistry"?] Riesen W, et al. **Ther Umsch** 1990 Jun;47(6):456–66 (Eng. Abstr.) **(Ger)**

[Cholesterol crystal embolization, a rare cause of postoperative ischemic colitis] Pfeifer M, et al. **Vasa** 1990; 19(1):54–8 (Eng. Abstr.) **(Ger)**

[Lipid values in a rural community] Rhomberg HP, et al. **Wien Klin Wochenschr** 1989 Dec 8;101(23):813–6 (Eng. Abstr.) **(Ger)**

[Cholesterol, triglycerides and lipoproteins in the serum of healthy, normal weight children between 6 and 12 years of age] Zwiauer K, et al. **Wien Klin Wochenschr** 1990 May 11;102(10):299–303 (Eng. Abstr.) **(Ger)**

[Comment on the work of Burchard and Tischendorf (Z Ernärungswiss 28:84–91 (1989)) (letter)] Hüve J, et al. **Z Ernahrungswiss** 1989 Sep;28(3):260–4 **(Ger)**

[Correlation of thrombocyte reactivity and serum levels of HbA1c, cholesterol and creatinine in diabetes mellitus] Tóth L, et al. **Orv Hetil** 1990 Feb 25;131(8):405–6, 409–10 (34 ref.) (Eng. Abstr.) **(Hun)**

[Lipid levels in children with psoriasis] Cardin E, et al. **G Clin Med** 1990 Feb;71(2):95–6 (Eng. Abstr.) **(Ita)**

[Blood cholesterol in patients with cancer] Abeatici S, et al. **Minerva Med** 1989 Oct;80(10):1085–90 (Eng. Abstr.) **(Ita)**

[Lipid profile in adiposity in children and adolescents] Guida F, et al. **Minerva Pediatr** 1989 Sep;41(9):449–58 (Eng. Abstr.) **(Ita)**

[Blood cholesterol and dynamic erythrocytic deformation] Ciuffetti G, et al. **Ric Clin Lab** 1989;19 Suppl 1:167–8 **(Ita)**

[Familial history of cancer and dietary pattern, serum cholesterol, serum protein and blood hemoglobin] Yamaguchi N, et al. **Gan No Rinsho** 1990 Feb;Spec No:377–81 (Eng. Abstr.) **(Jpn)**

[Significance of cholesterol analysis in clinical tests] Shibuya Y, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:525–8 **(Jpn)**

[Effect on the lipid profile of diet supplemented with fish oil concentrate] Bøhn KA, et al. **Tidsskr Nor Laegeforen** 1990 May 20;110(13):1693–6 (Eng. Abstr.) **(Nor)**

[Cholesterol status of blood donors. Motivation for dietary changes and their effects] Flesland O, et al. **Tidsskr Nor Laegeforen** 1990 Jun 30;110(17):2226–9 (Eng. Abstr.) **(Nor)**

[Cholesterol as a risk factor of coronary disease in women] Graff-Iversen S. **Tidsskr Nor Laegeforen** 1989 Oct 10; 109(28):2912–4 (Eng. Abstr.) **(Nor)**

[Cholesterol measurement in general practice—the attitude of Norwegian practitioners and their own practice? (letter)] Graff-Iversen S. **Tidsskr Nor Laegeforen** 1990 May 20; 110(13):1744–5 **(Nor)**

[The cholesterol campaign—evaluation of a local action] Matthiesen SB, et al. **Tidsskr Nor Laegeforen** 1990 Mar 20;110(8):983–8 (Eng. Abstr.) **(Nor)**

[Activity of factor XIII and various lipid components of blood serum in patients with diabetes mellitus] Zarzycka B, et al. **Pol Arch Med Wewn** 1987 Mar;77(3):94–100 (Eng. Abstr.) **(Pol)**

[Serum apolipoprotein and lipoprotein levels in patients with diabetes mellitus type 2] Gosiewska A, et al. **Wiad Lek** 1989 Apr 1;42(7):436–40 (Eng. Abstr.) **(Pol)**

[Dyslipidemia and some risk factors in the population outside of the metropolitan region of São Paulo, SP–Brazil. A pilot study] Martins IS, et al. **Rev Saude Publica** 1989 Jun; 23(3):236–43 (Eng. Abstr.) **(Por)**

[The effect of cholesterol level in erythrocyte membranes on the sedimentation rate, electrophoretic motility, and the rate of potassium ferricyanide reduction] Balmukhanov BS, et al. **Biofizika** 1990 Mar-Apr;35(2):293–6 (Eng. Abstr.) **(Rus)**

[Current approaches to the diagnosis and correction of atherogenic dyslipoproteinemia] Oganov RG, et al. **Kardiologiia** 1989 Oct;29(10):15–22 **(Rus)**

[Utilization of glucose and the blood levels of insulin, C-peptide, triglycerides and cholesterol during hemofiltration in patients with acute renal insufficiency] Timokhov VS, et al. **Klin Med (Mosk)** 1989 Nov; 67(11):101–5 **(Rus)**

[Reference methods and materials for the study of the indicators of lipid metabolism (review of the literature)] Filonova VP, et al. **Lab Delo** 1989;(10):28–32 (34 ref.) **(Rus)**

[A micromethod for determining lipoprotein cholesterol in capillary blood] Finagin LK, et al. **Lab Delo** 1989;(7):10–2 (Eng. Abstr.) **(Rus)**

[Study of the mode of operation of the equipment for membrane extraction of substances from the blood in emulsions] Iurtov EV, et al. **Med Tekh** 1989 Sep-Oct; (5):28–32 (Eng. Abstr.) **(Rus)**

[Different types of blood lipoproteins in psoriasis patients. 1. The relationship of dyslipoproteinemias due to disordered cholesterol transport and the course of psoriasis] Keshileva ZB, et al. **Vestn Dermatol Venerol** 1990;(2):7–11 (Eng. Abstr.) **(Rus)**

[The use of ammonium sulfate for the preparation of control sera with elevated levels of cholesterol, triglycerides and high density lipoprotein cholesterol] Khaidukova IL, et al. **Vopr Med Khim** 1989 Sep-Oct;35(5):133–8 (Eng. Abstr.) **(Rus)**

[Lipid peroxidation processes and the dynamics of shifts in the cholesterol level in plasma and erythrocytes under the influence of low-frequency acoustic oscillations] Melkonian M. **Vopr Med Khim** 1989 Jul-Aug;35(4):12–6 (Eng. Abstr.) **(Rus)**

[Study of the effect of rations containing dietary fiber on the level of total lipids and cholesterol in the blood and liver of the rat during a 6.5-month experiment] Arutiunova MB, et al. **Vopr Pitan** 1989 Nov-Dec;(6):47–50 (Eng. Abstr.) **(Rus)**

[Serum cholesterol and triglycerides in patients with benign and malignant tumors of the colon and rectum] Kostić N, et al. **Srp Arh Celok Lek** 1989 May-Jun;117(5–6):325–34 (Eng. Abstr.) **(Scc)**

[Blood cholesterol levels and mortality in cancer] Ginter E. **Bratisl Lek Listy** 1990 Jan;91(1):70–6 (Eng. Abstr.) **(Slo)**

[The effect of different types of infant nutrition on indicators of lipid metabolism in 1-to-4-year-old children] Hromadová M, et al. **Cesk Pediatr** 1989 Oct;44(10):580–3 (Eng. Abstr.) **(Slo)**

[Serum lipid levels in hypercholesterolemic children after 5 years] Pohánka P, et al. **Cesk Pediatr** 1989 Nov; 44(11):641–5 (Eng. Abstr.) **(Slo)**

[Atherogenicity indices and coronary risk] Kusá O, et al. **Vnitr Lek** 1990 Apr;36(4):349–54 (Eng. Abstr.) **(Slo)**

[Activity of total cholesterol and its HDL fraction in vasectomized patients. A 3-month follow-up] Guate Ortiz JL, et al. **Actas Urol Esp** 1989 Jul-Aug;13(4):247–51 (37 ref.) (Eng. Abstr.) **(Spa)**

[Migraine in childhood: lipid metabolism and its implications] Castro-Gago M, et al. **An Esp Pediatr** 1989 Jun;30(6):443–6 (Eng. Abstr.) **(Spa)**

[Dietary recommendations and hypercholesteremia in children] Sarria Chueca A. **An Esp Pediatr** 1990 Feb; 32(2):95–8 (35 ref.) **(Spa)**

[Consensus agreement on controlling blood cholesterol in Spain] **Med Clin (Barc)** 1990 Apr 7;94(13):505–9 (27 ref.) **(Spa)**

[Primary prevention of arteriosclerosis: cost-efficiency ratio in the determination of blood cholesterol] Joven J, et al. **Med Clin (Barc)** 1990 Mar 10;94(9):333–6 (Eng. Abstr.) **(Spa)**

[Study of lipids (cholesterol, triglycerides and phospholipids), plasma lipoproteins (HDL-cholesterol) and apoproteins (apo A and apo B in patients with acute myocardial infarction] Paniagua J, et al. **Med Clin (Barc)** 1989 Jun 24; 93(4):134–8 (Eng. Abstr.) **(Spa)**

[Agreement on the control of blood cholesterol in Spain (editorial)] Rodriguez Artalejo F, et al. **Med Clin (Barc)** 1989 Dec 16;93(20):778–80 (20 ref.) **(Spa)**

[Fuenlabrada study: lipid and lipoprotein levels in children and adolescents associated with ischemic cardiopathy prevalence among their relatives] Plaza I, et al. **Rev Esp Cardiol** 1990 Apr;43(4):212–8 (Eng. Abstr.) **(Spa)**

[Oat has cholesterol-lowering qualities] Bergdahl L. **Lakartidningen** 1989 Nov 1;86(44):3760, 3763 **(Swe)**

[Health education, behavioral medicine or drugs? Strategies in the fight against cholesterol and atherosclerosis] Isacsson SO. **Lakartidningen** 1989 Aug 30;86(35):2825–7, 2830 **(Swe)**

[Connection between cholesterol levels and the risk of ischemic heart disease in men] Orth-Gomér K, et al. **Lakartidningen** 1989 Dec 27;86(52):4600–1 **(Swe)**

[Do not allow the commercialization of the cholesterol test in the USA to encourage us to misguided health promotion!] Werkö L. **Lakartidningen** 1990 May 16; 87(20):1745–6 **(Swe)**

[Mass screening of blood cholesterol levels are not justified] Werkö L. **Lakartidningen** 1989 Sep 6;86(36):2935 **(Swe)**

CHEMICAL SYNTHESIS

A facile synthesis of [14C] epicholesterol. Yan JS, et al. **J Lipid Res** 1990 Jan;31(1):160–2

DIAGNOSTIC USE

Alteration of cephalin-cholesterol flocculation in patients taking oral contraceptive agents [letter] Keidan H. **Can Med Assoc J** 1966 May 7;94(19):1014

GENETICS

Genetic variance and heritability of serum cholesterol and triglycerides among Chinese twin neonates. Chen CJ, et al. **Acta Genet Med Gemellol (Roma)** 1990;39(1):123–31

HISTORY

[Historical development of the cholesterol-atherosclerosis concept] Epstein FH. **Ther Umsch** 1990 Jun;47(6):435–42 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Anaphylactoid reactions mediated by autoantibodies to cholesterol in miniature pigs. Wassef NM, et al. **J Immunol** 1989 Nov 1;143(9):2990–5

ISOLATION & PURIFICATION

Enzymatic determination of lipids in human bile without bilirubin interference: reliable assessment of the cholesterol saturation index (CSI). Aufenanger J, et al. **J Clin Chem Clin Biochem** 1989 Sep;27(9):605–11

METABOLISM

Oxysterols and alcoholic liver disease. Ryzlak MT, et al. **Alcohol Clin Exp Res** 1990 Jun;14(3):490–5

Development of cholesterol embolization syndrome after

intravenous streptokinase for acute myocardial infarction. Queen M, et al. **Am J Cardiol** 1990 Apr 15;65(15):1042–3

Comparison of breast-feeding and formula feeding on intestinal and hepatic cholesterol metabolism in neonatal pigs. Jones PJ, et al. **Am J Clin Nutr** 1990 Jun;51(6):979–84

Lipoprotein degradation and cholesterol esterification in primary cell cultures of rabbit atherosclerotic lesions. Jaakkola O, et al. **Am J Pathol** 1990 Aug;137(2):457–65

Delivery of high-density lipoprotein free and esterified cholesterol to bile by the perfused monkey liver. Scobey MW, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):G644–52

Simultaneous measurement of cholesterol 7 alpha-hydroxylase activity by reverse-phase high-performance liquid chromatography using both endogenous and exogenous [4–14C]cholesterol as substrate. Hylemon PB, et al. **Anal Biochem** 1989 Nov 1;182(2):212–6

Tissue plasminogen activator and cholesterol crystal embolization [letter] Bhardwaj M, et al. **Ann Intern Med** 1989 Oct 15;111(8):687–8

Intestinal cholesterol metabolism. Lichtenstein AH. **Ann Med** 1990 Feb;22(1):49–52 (27 ref.)

Pathways of hormone metabolism in normal and nonneoplastic breast tissue. Miller WR. **Ann N Y Acad Sci** 1990;586:53–9 (37 ref.)

Dietary cholesterol and fats at a young age: do they influence cholesterol metabolism in adult life? Temmerman AM, et al. **Ann Nutr Metab** 1989;33(3):170–80

Cholesterol granuloma presenting in the ear canal. Matt BH, et al. **Ann Otol Rhinol Laryngol** 1990 Aug;99(8):672–3

Specific accumulation of cholesterol-rich liposomes in the inflammatory tissue of rats with adjuvant arthritis. Love WG, et al. **Ann Rheum Dis** 1990 Aug;49(8):611–4

Hepatic cholesterol metabolism following exposure to carbon disulfide in phenobarbital-treated rats. Simmons JE, et al. **Arch Environ Contam Toxicol** 1989 Sep;18(5):678–87

Apoprotein E biosynthesis in the cholesterol-fed guinea pig. Driscoll DM, et al. **Arteriosclerosis** 1990 Jan–Feb; 10(1):31–9

Effects of hypoxia on sterol synthesis, acyl-CoA:cholesterol acyltransferase activity, and efflux of cholesterol in cultured rabbit skin fibroblasts. Mukodani J, et al. **Arteriosclerosis** 1990 Jan–Feb;10(1):106–10

Pathophysiology of reverse cholesterol transport. Insights from inherited disorders of lipoprotein metabolism. Reichl D, et al. **Arteriosclerosis** 1989 Nov–Dec;9(6):785–97 (171 ref.)

Expression of elastase activity by human monocyte-macrophages is modulated by cellular cholesterol content, inflammatory mediators, and phorbol myristate acetate. Rouis M, et al. **Arteriosclerosis** 1990 Mar–Apr;10(2):246–55

Segmental impairment of endothelium-mediated relaxation in thoracic aortas from atherosclerotic rabbits. Comparison to cholesterol infiltration and energy metabolism. Ragazzi E, et al. **Artery** 1989;16(6):327–45

Apolipoprotein E phenotype and cholesterol metabolism in familial hypercholesterolemia. Gylling H, et al. **Atherosclerosis** 1989 Nov;80(1):27–32

The antihypertensive drug propranolol enhances LDL catabolism and alters cholesterol metabolism in human cultured fibroblasts. Mazière C, et al. **Atherosclerosis** 1990 Mar;81(2):151–60

Endothelium-dependent relaxation, cholesterol content and high energy metabolite balance in Watanabe hyperlipemic rabbit aorta. Ragazzi E, et al. **Atherosclerosis** 1989 Dec; 80(2):125–34

Correlation between cholesterol content in circulating immune complexes and atherogenic properties of CHD patients' serum manifested in cell culture. Tertov VV, et al. **Atherosclerosis** 1990 Apr;81(3):183–9

Effect of vitamin C administration on serum and egg-yolk cholesterol level of the chicken. al-Janabi AS, et al. **Aust J Biol Sci** 1988;41(4):403–7

Differences in composition and fluidity of intestinal microvillus membrane vesicles prepared by different methods. Bjorkman DJ, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):433–40

Oxidized LDL increase free cholesterol and fail to stimulate cholesterol esterification in murine macrophages. Roma P, et al. **Biochem Biophys Res Commun** 1990 Aug 31; 171(1):123–31

Lipoprotein-mediated efflux of radiolabeled cholesterol from cells does not indicate net removal of cellular cholesterol mass. Ranganathan S, et al. **Biochem Cell Biol** 1989 Oct; 67(10):719–23

Cholesterol effect on thermostability of the (Ca2+, Mg2+)-ATPase from cardiac muscle sarcolemma. Mas-Oliva J, et al. **Biochem Int** 1990;21(2):233–41

Evidence for reverse cholesterol transport in vivo from liver endothelial cells to parenchymal cells and bile by high-density lipoprotein. Bakkeren HF, et al. **Biochem J** 1990 Jun 15;268(3):685–91

Effect of 25-hydroxycholesterol and bile acids on the regulation of cholesterol metabolism in Hep G2 cells. Carlson TL, et al. **Biochem J** 1989 Nov 15;264(1):241–7

Reverse cholesterol transport in the isolated perfused rat spleen. Mindham MA, et al. **Biochem J** 1990 Jun 1; 268(2):499–505

Short- and long-term effects of biliary drainage on hepatic cholesterol metabolism in the rat. Smit MJ, et al. **Biochem J** 1990 Aug 1;269(3):781–8

Effects of octimibate, an inhibitor of acyl coenzyme A: cholesterol acyltransferase, on cholesterol metabolism in the hamster and rat. Jackson B, et al. **Biochem Pharmacol** 1990 May 1;39(9):1487–9

Interactions of cholesterol/cholesteryl esters with dimyristoylphosphatidylcholine bilayers. Husain R, et al. **Biochem Soc Trans** 1990 Apr;18(2):325

Co-ordinate diurnal variations in the activities of cholesterol-metabolizing enzymes in the rat mammary gland. Shand JH, et al. **Biochem Soc Trans** 1989 Dec; 17(6):1081–2

Acidic phospholipids strikingly potentiate sterol carrier protein 2 mediated intermembrane sterol transfer. Butko P, et al. **Biochemistry** 1990 May 1;29(17):4070–7

Cholesterol metabolism by purified cytochrome P-450scc is highly stimulated by octyl glucoside and stearic acid exclusively in large unilamellar phospholipid vesicles. Dhariwal MS, et al. **Biochemistry** 1989 Oct 17; 28(21):8397–402

Cholesterol oxidase catalyzed oxidation of cholesterol in mixed lipid monolayers: effects of surface pressure and phospholipid composition on catalytic activity. Grönberg L, et al. **Biochemistry** 1990 Apr 3;29(13):3173–8

High-density-lipoprotein-induced cholesterol efflux from arterial smooth muscle cell derived foam cells: functional relationship of the cholesteryl ester cycle and eicosanoid biosynthesis. Pomerantz KB, et al. **Biochemistry** 1990 Feb 20;29(7):1892–9

Uptake of cholesterol by small intestinal brush border membrane is protein-mediated. Thurnhofer H, et al. **Biochemistry** 1990 Feb 27;29(8):2142–8

The interaction of cholesterol and cholest-4-en-3-one with dipalmitoylphosphatidylcholine. Comparison based on the use of three fluorophores. Ben-Yashar V, et al. **Biochim Biophys Acta** 1989 Nov 3;985(3):271–8

Hepatic uptake and processing of free cholesterol from different lipoproteins with and without sodium taurocholate administration. An in vivo study in the rat. Bravo E, et al. **Biochim Biophys Acta** 1990 Jun 28; 1045(1):74–80

Glycerophospholipids and cholesterol composition of bile in bile-fistula rats treated with monensin. Casu A, et al. **Biochim Biophys Acta** 1990 Mar 12;1043(1):113–5

Verapamil enhances high-density lipoprotein processing in Hep G2 cells preloaded with cholesterol. Chappey-Gillet B, et al. **Biochim Biophys Acta** 1990 May 2;1052(2):273–7

Effects of salmon oil and corn oil on plasma lipid level and hepato-biliary cholesterol metabolism in rats. Chautan M, et al. **Biochim Biophys Acta** 1990 Aug 28;1046(1):40–5

Regulation of LTP-I secretion from human monocyte-derived macrophages by differentiation and cholesterol accumulation in vitro. Faust RA, et al. **Biochim Biophys Acta** 1990 Feb 23;1042(3):404–9

Effects of membrane lipid composition on the kinetics of cholesterol exchange between lipoproteins and different species of red blood cells. Gold JC, et al. **Biochim Biophys Acta** 1990 Aug 10;1027(1):85–92

Phosphatidylserine-mediated delivery of cholesterol to macrophages: a novel experimental method for the generation of foam cells. Greenspan P. **Biochim Biophys Acta** 1990 Jun 28;1045(1):94–6

An appraisal of the role of biliary phospholipases in the pathogenesis of gallstone disease. Groen AK, et al. **Biochim Biophys Acta** 1989 Nov 28;1006(2):179–82

The effects of feeding a saturated fat-rich diet on enzymes of cholesterol metabolism in the liver, intestine and aorta of the hamster. Jackson B, et al. **Biochim Biophys Acta** 1990 Jun 28;1045(1):21–8

A modified theta-toxin produced by limited proteolysis and methylation: a probe for the functional study of membrane cholesterol. Ohno-Iwashita Y, et al. **Biochim Biophys Acta** 1990 Apr 30;1023(3):441–8

Interaction of apolipoprotein A-II with recombinant HDL containing egg phosphatidylcholine, unesterified cholesterol and apolipoprotein A-I. Rye KA. **Biochim Biophys Acta** 1990 Feb 6;1042(2):227–36

Effects of sphingomyelin degradation on cholesterol mobilization and efflux to high-density lipoproteins in cultured fibroblasts. Slotte JP, et al. **Biochim Biophys Acta** 1990 Jun 27;1025(2):152–6

Effects of sphingomyelin degradation on cell cholesterol oxidizability and steady-state distribution between the cell surface and the cell interior. Slotte JP, et al. **Biochim Biophys Acta** 1989 Oct 2;985(1):90–6

Intracellular transport of cholesterol in type C Niemann-Pick fibroblasts. Slotte JP, et al. **Biochim Biophys Acta** 1989 Oct 17;1005(3):303–9

Phospholipid lamellae are cholesterol carriers in human bile. Sömjen GJ, et al. **Biochim Biophys Acta** 1990 Jan 16; 1042(1):28–35

Cholesterol removal by peritoneal lavage with phospholipid-HDL apoprotein mixtures in hypercholesterolemic hamsters. Stein O, et al. **Biochim Biophys Acta** 1989 Nov 6;1006(1):144–6

Enzymatic reduction of phospholipid and cholesterol hydroperoxides in artificial bilayers and lipoproteins. Thomas JP, et al. **Biochim Biophys Acta** 1990 Aug 6; 1045(3):252–60

Asymmetric distribution of a fluorescent sterol in synaptic plasma membranes: effects of chronic ethanol consumption. Wood WG, et al. **Biochim Biophys Acta** 1990 Jun 27; 1025(2):243–6

Development of cholesterol metabolism: the effect of diet composition at weaning. Hahn P, et al. **Biol Neonate** 1990; 58(1):1–7

Cholesterol as a target for toxins. de Kruijff B. **Biosci Rep** 1990 Apr;10(2):127–30 (12 ref.)

Effect of oat gum on the physical properties of the gastrointestinal contents and on the uptake of D-galactose and cholesterol by rat small intestine in vitro. Lund EK, et al. **Br J Nutr** 1989 Jul;62(1):91–101

Gallbladder cholesterolosis: an aetiological factor in acute pancreatitis of uncertain origin. Parrilla Paricio P, et al. **Br J Surg** 1990 Jul;77(7):735–6

Effect of experimental schistosomiasis on 14C-4-cholesterol esterification by mouse liver homogenate. Soares MG, et al. **Braz J Med Biol Res** 1990;23(1):7–9

Interaction of iturin A, a lipopeptide antibiotic, with Saccharomyces cerevisiae cells: influence of the sterol membrane composition. Latoud C, et al. **Can J Microbiol** 1990 Jun;36(6):384–9

Low density lipoprotein receptor activity in human intracranial tumors and its relation to the cholesterol requirement. Rudling MJ, et al. **Cancer Res** 1990 Feb 1; 50(3):483–7

Localization of cholesterol in the colonic epithelium of the guinea pig: regional differences and functional implications. Luciano L, et al. **Cell Tissue Res** 1989 Nov;258(2):339–47

Chemistry and biology of N-(7-nitrobenz-2-oxa-1,3-diazol-4-yl)-labeled lipids: fluorescent probes of biological and model membranes. Chattopadhyay A. **Chem Phys Lipids** 1990 Mar;53(1):1–15 (248 ref.)

Effect of natural and structurally modified bile acids on cholesterol metabolizing enzymes in rat liver microsomes. Crestani M, et al. **Chem Phys Lipids** 1989 Oct;51(2):119–26

Calcium channel blockers enhance cholesteryl ester hydrolysis and decrease total cholesterol accumulation in human aortic tissue. Etingin OR, et al. **Circ Res** 1990 Jan; 66(1):185–90

Triggerlike stimulation of cholesterol accumulation and DNA and extracellular matrix synthesis induced by atherogenic serum or low density lipoprotein in cultured cells. Orekhov AN, et al. **Circ Res** 1990 Feb;66(2):311–20

Lectin binding characteristics of a cholesterol nucleation promoting protein. Harvey PR, et al. **Clin Chim Acta** 1989 Nov;185(2):185–9

Effects of the ACAT inhibitor CL 277,082 on cholesterol metabolism in humans. Harris WS, et al. **Clin Pharmacol Ther** 1990 Aug;48(2):189–94

The domestic goat: a useful model to determine effects of diet and exercise on cholesterol accumulation in the body. Richard MJ, et al. **Comp Biochem Physiol [A]** 1990; 95(2):275–80

Caffeine inhibits gallbladder absorption. Magnuson TH, et al. **Curr Surg** 1989 Nov–Dec;46(6):477–9

Cholesterol metabolism in alloxan-induced diabetic rabbits. O'Meara NM, et al. **Diabetes** 1990 May;39(5):626–33

Effect of ursodeoxycholic acid administration on biliary lipid secretion in primary biliary cirrhosis. Roda E, et al. **Dig Dis Sci** 1989 Dec;34(12 Suppl):52S–58S

Effect of laser fragmentation of cholesterol and mixed gallstones on in vitro dissolution in methyl tert-butyl ether. Smith BF. **Dig Dis Sci** 1990 Feb;35(2):236–41

Some measures of lipid metabolism in young sterile males before and after testosterone treatment. Hromadová M, et al. **Endocrinol Exp** 1989 Sep;23(3):205–11

Effect of cholesterol transport inhibitors on steroidogenesis and plasma membrane cholesterol transport in cultured MA-10 Leydig tumor cells. Nagy L, et al. **Endocrinology** 1990 May;126(5):2267–76

Generation of regulatory oxysterols: 26-hydroxylation of cholesterol by ovarian mitochondria. Rennert H, et al. **Endocrinology** 1990 Aug;127(2):738–46

Regulation of rat luteal cell high density lipoprotein receptors: up-regulation in response to changes in intracellular cholesterol concentration. Talavera F, et al. **Endocrinology** 1989 Oct;125(4):2015–21

Pregnenolone synthesis from cholesterol and hydroxycholesterols by mitochondria from ovaries following the stimulation of immature rats with pregnant mare's serum gonadotropin and human choriogonadotropin. Tuckey RC, et al. **Eur J Biochem** 1989 Dec 8;186(1–2):255–9

The insulin response to oral glucose, concentrations of total cholesterol, triglycerides and uric acid in women with idiopathic hirsutism. Budeč M, et al. **Exp Clin Endocrinol** 1989;94(3):300–4

Cholesterol movement between bovine rod outer segment disk membranes and phospholipid vesicles. House K, et al. **Exp Eye Res** 1989 Oct;49(4):561–72

Hep G2 cells as a resource for metabolic studies: lipoprotein, cholesterol, and bile acids. Javitt NB. **FASEB J** 1990 Feb 1;4(2):161–8 (46 ref.)

Diet and metabolic development. Little MT, et al. **FASEB J** 1990 Jun;4(9):2605–11 (62 ref.)

Preliminary evidence that different domains are involved in cytolytic activity and receptor (cholesterol) binding in listeriolysin O, the Listeria monocytogenes thiol-activated toxin. Vazquez-Boland JA, et al. **FEMS Microbiol Lett** 1989 Nov;53(1–2):95–9

Regulation of cholesterol metabolism in the intestine. Field FJ, et al. **Gastroenterology** 1990 Aug;99(2):539–51 (89 ref.)

Dissolution of calcium bilirubinate and calcium carbonate debris remaining after methyl tert-butyl ether dissolution

of cholesterol gallstones. Nelson PE, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1345–50

Intermediary metabolism in a lizard, Calotes versicolor: role of thyroid hormones. Jacob V, et al. **Gen Comp Endocrinol** 1990 Feb;77(2):324–36

Effect of pravastatin on biliary lipid composition and bile acid synthesis in familial hypercholesterolaemia. Hoogerbrugge-vd Linden N, et al. **Gut** 1990 Mar; 31(3):348–50

Cholesterol crystal nucleation: a decade-long search for the missing link in gallstone pathogenesis. Afdhal NH, et al. **Hepatology** 1990 Apr;11(4):699–702 (45 ref.)

Isolation of a potent cholesterol nucleation-promoting activity from human gallbladder bile: role in the pathogenesis of gallstone disease. Groen AK, et al. **Hepatology** 1990 Apr;11(4):525–33

Cholesterol and bile acid metabolism in cultures of primary rat bile ductular epithelial cells. Hylemon PB, et al. **Hepatology** 1990 Jun;11(6):982–8

Lipid metabolism in the development of cholesterol gallstones in hamsters. IV. The effect of essential phospholipids and plant sterols on the biliary lipids. Kubota S, et al. **Hiroshima J Med Sci** 1981 Dec;30(4):301–9

Studies on cholesterol accumulation in radicular cyst fluid—origin of heat-stable cholesterol-binding protein. Yashima M, et al. **Int J Biochem** 1990;22(2):165–9

Role of cell cholesterol in modulating antineoplastic ether lipid uptake, membrane effects and cytotoxicity. Diomede L, et al. **Int J Cancer** 1990 Aug 15;46(2):341–6

Liver cholesterol concentrations in mice fed diets containing various sources of fat, carbohydrates or fiber. Beynen AC, et al. **Int J Vitam Nutr Res** 1989;59(4):401–5

Effects of long-term, moderate exercise on body composition and serum lipid profile: a controlled study in middle-aged Swiss men and women. Suter E, et al. **Int J Vitam Nutr Res** 1989;59(4):423

Effect of methylprednisolone therapy on lipoprotein metabolism in human nephrotic syndrome. Kuzemková L, et al. **Int Urol Nephrol** 1989;21(4):429–34

Icosanoid synthesis as a functional measurement of essential fatty acid requirement. Dupont J, et al. **J Am Coll Nutr** 1990 Jun;9(3):272–6 (19 ref.)

Conversion of cholesterol to pregnenolone mobilizes cytochrome P-450 in the inner membrane of adrenocortical mitochondria: protein rotation study. Ohta Y, et al. **J Biochem (Tokyo)** 1990 Jan;107(1):97–104

Peripheral-type benzodiazepine receptors are involved in the regulation of cholesterol side chain cleavage in adrenocortical mitochondria. Yanagibashi K, et al. **J Biochem (Tokyo)** 1989 Dec;106(6):1026–9

Covalent interaction of chloroacetic and acetic acids with cholesterol. Bhat HK, et al. **J Biochem Toxicol** 1989 Fall; 4(3):189–93

Increased rates of lipid exchange between Mycoplasma capricolum membranes and vesicles in relation to the propensity of forming nonbilayer lipid structures. Bittman R, et al. **J Biol Chem** 1990 Sep 5;265(25):15110–7

The efflux of lysosomal cholesterol from cells. Johnson WJ, et al. **J Biol Chem** 1990 Apr 5;265(10):5546–53

Peripheral-type benzodiazepine receptors mediate translocation of cholesterol from outer to inner mitochondrial membranes in adrenocortical cells. Krueger KE, et al. **J Biol Chem** 1990 Sep 5;265(25):15015–22

Scavenger receptor-mediated uptake and metabolism of lipid vesicles containing acidic phospholipids by mouse peritoneal macrophages. Nishikawa K, et al. **J Biol Chem** 1990 Mar 25;265(9):5226–31

Human apolipoprotein A-IV binds to apolipoprotein A-I/A-II receptor sites and promotes cholesterol efflux from adipose cells. Steinmetz A, et al. **J Biol Chem** 1990 May 15;265(14):7859–63

Cholesterol and vesicular stomatitis virus G protein take separate routes from the endoplasmic reticulum to the plasma membrane. Urbani L, et al. **J Biol Chem** 1990 Feb 5;265(4):1919–23

Proliferating human granulosa-lutein cells in long term monolayer culture: expression of aromatase, cholesterol side-chain cleavage, and 3 beta-hydroxysteroid dehydrogenase. McAllister JM, et al. **J Clin Endocrinol Metab** 1990 Jul;71(1):26–33

Lack of effect of lovastatin therapy on the parameters of whole-body cholesterol metabolism. Goldberg IJ, et al. **J Clin Invest** 1990 Sep;86(3):801–8

Factors to consider when selecting a culture of Lactobacillus acidophilus as a dietary adjunct to produce a hypocholesterolemic effect in humans. Gilliland SE, et al. **J Dairy Sci** 1990 Apr;73(4):905–11

Lactobacillus effects on cholesterol: in vitro and in vivo results. Lin SY, et al. **J Dairy Sci** 1989 Nov;72(11):2885–99

Studies on the biosynthesis of polyisoprenols, cholesterol and ubiquinone in highly differentiated human hepatomas. Eggens I, et al. **J Exp Pathol (Oxford)** 1990 Apr; 71(2):219–32

Niemann-Pick disease type C could result from a genetic deficiency of cholesterol egress from the lysosomes. Den Tandt WR, et al. **J Inherited Metab Dis** 1989;12(4):483–4

Oxidative stress and abnormal cholesterol metabolism in patients with adult respiratory distress syndrome. Cross CE, et al. **J Lab Clin Med** 1990 Apr;115(4):396–404

Structural alterations in lecithin-cholesterol vesicles following interactions with monomeric and micellar bile salts: physical-chemical basis for subselection of biliary lecithin species and aggregative states of biliary lipids during bile formation. Cohen DE, et al. **J Lipid Res** 1990 Jan;31(1):55–70

Synthesis and secretion of apoE in thioglycolate-elicited mouse peritoneal macrophages: effect of cholesterol efflux. Dory L. **J Lipid Res** 1989 Jun;30(6):809–16

Regulation of cholesterol metabolism in the ethionine-induced premalignant rat liver. Erickson SK, et al. **J Lipid Res** 1990 May;31(5):933–45

Evidence for cytokine regulation of cholesterol metabolism in herpesvirus-infected arterial cells by the lipoxygenase pathway. Etingin OR, et al. **J Lipid Res** 1990 Feb; 31(2):299–305

Aspen Hepatic Cholesterol and Lipoprotein Conference 1989. Report of a conference. Grundy SM, et al. **J Lipid Res** 1990 Jul;31(7):1327–33

Differences in the metabolism of oxidatively modified low density lipoprotein and acetylated low density lipoprotein by human endothelial cells: inhibition of cholesterol esterification by oxidatively modified low density lipoprotein. Jialal I, et al. **J Lipid Res** 1989 Oct; 30(10):1561–8

Decreased prostaglandin production by cholesterol-rich macrophages. Mathur SN, et al. **J Lipid Res** 1989 Sep; 30(9):1385–95

Effect of bean intake on biliary lipid secretion and on hepatic cholesterol metabolism in the rat. Rigotti A, et al. **J Lipid Res** 1989 Jul;30(7):1041–8

Cholesterol metabolism in fibroblasts from rabbits resistant to diet-induced hypercholesterolemia. Soma MR, et al. **J Lipid Res** 1990 Jun;31(6):985–94

Effects of treatment with clofibrate, bezafibrate, and ciprofibrate on the metabolism of cholesterol in rat liver microsomes. Ståhlberg D, et al. **J Lipid Res** 1989 Jul; 30(7):953–8

Metabolism of 7 beta-alkyl chenodeoxycholic acid analogs and their effect on cholesterol metabolism in hamsters. Une M, et al. **J Lipid Res** 1990 Jun;31(6):1015–21

Cholesterol transfer from mitochondrial membranes and cells to human and rat serum lipoprotein fractions. van Heusden GP, et al. **J Lipid Res** 1989 Sep;30(9):1357–64

Bile salts in submicellar concentrations promote bidirectional cholesterol transfer (exchange) as a function of their hydrophobicity. Vlahcevic ZR, et al. **J Lipid Res** 1990 Jun; 31(6):1063–71

Precursors for cholesterol synthesis (7-dehydrocholesterol, 7-dehydrodesmosterol, and desmosterol): cholesterol/7-dehydrocholesterol ratio as an index of development and aging in PNS but not in CNS. Bourre JM, et al. **J Neurochem** 1990 Apr;54(4):1196–9

Cholesterol metabolism, digestion rates and postprandial changes in serum of swine fed purified diets containing either casein or soybean protein. Beynen AC, et al. **J Nutr** 1990 May;120(5):422–30

Interrelated effects of dietary fiber and fat on lymphatic cholesterol and triglyceride absorption in rats. Ikeda I, et al. **J Nutr** 1989 Oct;119(10):1383–7

The effects of dietary fiber feeding on cholesterol metabolism in rats. Nishina PM, et al. **J Nutr** 1990 Jul;120(7):800–5

Effects of sitosterol and sitostanol on micellar solubility of cholesterol. Ikeda I, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Aug;35(4):361–9

Effect of dietary methionine and polychlorinated biphenyls on cholesterol metabolism in rats fed a diet containing soy protein isolate. Oda H, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Aug;35(4):333–48

Hypocholesterolemic human milk [published erratum appears in J Pediatr Gastroenterol Nutr 1990 Jul;11(1):144] Jensen RG, et al. **J Pediatr Gastroenterol Nutr** 1990 Jan; 10(1):148–50

Effects of Bay o 2752, a hypocholesterolemic agent, on intestinal taurocholate absorption and cholesterol esterification. Harnett KM, et al. **J Pharmacol Exp Ther** 1989 Nov;251(2):502–9

Formation of progesterone and 1-dehydroprogesterone from cholesterol in fermentation cultures of Mycobacterium aurum. Hörhold C, et al. **J Steroid Biochem** 1990 Jun; 36(1-2):181–3

The effect of alfalfa-corn diets on cholesterol metabolism and gallstones in prairie dogs. Cohen BI, et al. **Lipids** 1990 Mar;25(3):143–8

The processing of exogenous cholesterol in the alveolar compartment of the rat lung. Hayball PJ, et al. **Lipids** 1989 Nov;24(11):957–61

Uptake and metabolism of dolichol and cholesterol in perfused rat liver. Kalén A, et al. **Lipids** 1990 Feb; 25(2):93–9

Effects of phospholipid or cholesterol enrichment of rat intestinal brush border membrane on membrane order and transport of calcium. Schedl HP, et al. **Metabolism** 1989 Dec;38(12):1164–9

Steroidogenesis activator polypeptide (SAP) in the guinea pig adrenal cortex. Frustaci J, et al. **Mol Cell Endocrinol** 1989 Jul;64(2):137–43

Increase in reactive cholesterol in the presynaptic membrane of depolarized Torpedo synaptosomes: blockade by botulinum toxin type A. Egea G, et al. **Neuroscience** 1989; 31(2):521–7

Aging and dietary fat and cholesterol transport. **Nutr Rev** 1989 Oct;47(10):334–6

Mobilisation of tissue cholesterol by apheresis. Thompson GR. **Prog Clin Biol Res** 1990;337:183–7 (16 ref.)

Changes in uptake of linoleic acid and cholesterol by jejunal sacs of rats in vitro, after distal small-bowel resection. Molina MT, et al. **Scand J Gastroenterol** 1990 Jun; 25(6):613–21

Enzymatic coupling of cholesterol intermediates to a mating pheromone precursor and to the ras protein. Schafer WR, et al. **Science** 1990 Sep 7;249(4973):1133–9

Simultaneous quantification of several cholesterol autoxidation and monohydroxylation products by isotope-dilution mass spectrometry. Breuer O, et al. **Steroids** 1990 Apr;55(4):185–92

Elimination of C-6-hydrogen during the formation of ecdysteroids from cholesterol in Locusta migratoria ovaries. Fujimoto Y, et al. **Steroids** 1989 Mar-May; 53(3-5):477–85

Metabolism of [14C]cholesterol to C-20 isomeric [14C]pregn-5-ene-3,20-diols in the tobacco hornworm, Manduca sexta. Lozano R, et al. **Steroids** 1989 Mar-May; 53(3-5):427–36

Mechanisms of cholesterol-controlling operation in the rat. Coyle JJ, et al. **Surg Forum** 1978;29:84–6

Effect of lindane on mitochondrial side-chain cleavage of cholesterol in mice. Sircar S, et al. **Toxicology** 1990 Mar 30;61(1):41–6

Effect of low LDL not due to role in cholesterol metabolism. Support for 'hormone-like' action of LDL [letter] Block LH, et al. **Trends Pharmacol Sci** 1988 Dec;9(12):431

Coronaries, cholesterol and children. The 1989 Long Fox lecture. Lloyd JK. **West Engl Med J** 1990 Mar;105(1):7–11 (43 ref.)

[Cholesterol content and malignant proliferation of cancer cells] Miao JY. **Chung Hua Chung Liu Tsa Chih** 1989 Mar; 11(2):104–7 (Eng. Abstr.) **(Chi)**

[Clearance effect of 3H-cholesterol by Apo-AI/DPPC liposome from cultured SMC of rabbits and tree shrew] Cai CB. **Chung-hua Ping Li Hsueh Tsa Chih** 1990 Mar; 19(1):12–5 (Eng. Abstr.) **(Chi)**

[Can cholesterol be absorbed? (letter)] Faergeman O, et al. **Ugeskr Laeger** 1989 Nov 6;151(45):2991 **(Dan)**

[Cholesterol and lipids in gastroenterology. A symposium. 23 April 1988] **Acta Gastroenterol Belg** 1988 Nov-Dec; 51(6):459–524 **(Fre)**

[The liver: key organ in cholesterol metabolism] Heller FR. **Acta Gastroenterol Belg** 1988 Nov-Dec;51(6):460–9 (Eng. Abstr.) **(Fre)**

[Cholesterol and bile acid dynamics: comparative aspects] Lutton C. **Reprod Nutr Dev** 1990;30(2):145–60 (53 ref.) (Eng. Abstr.) **(Fre)**

[Interaction of cholesterol in plasma and cholesterol in the vessel wall] Demant T. **Arzneimittelforschung** 1990 Mar; 40(3A):350–3 (21 ref.) (Eng. Abstr.) **(Ger)**

[Cholesterol in pleural effusions: a differential diagnostic aid] Hamm H, et al. **Pneumologie** 1990 Feb;44 Suppl 1:180–1 (Eng. Abstr.) **(Ger)**

[Cholesterol metabolism in the arteriosclerotic intima] Künnert B. **Zentralbl Allg Pathol** 1989;135(6):505–9 (29 ref.) (Eng. Abstr.) **(Ger)**

[Cholesterol metabolism and atherosclerosis] Fainaru M. **Harefuah** 1990 Feb 1;118(3):164–7 (28 ref.) **(Heb)**

[In vivo migration of peritoneal macrophages, saturated with fats in vitro] Pataki M, et al. **Morphol Igazsagugyi Orv Sz** 1989 Oct;29(4):243–8 (Eng. Abstr.) **(Hun)**

[Thyroid hormones and lipid metabolism in the elderly (letter)] Canova R, et al. **Minerva Endocrinol** 1989 Jul-Sep; 14(3):197–8 **(Ita)**

[Nucleation time and growth time in patients with cholesterol gallstone—factors affecting nucleation time and growth time and effect of UDCA and CDCA] Nomura Y. **Nippon Shokakibyo Gakkai Zasshi** 1989 May;86(5):1103–13 (Eng. Abstr.) **(Jpn)**

[The study on factors affecting cholesterol solubility in bile: relation to biliary proteins including apolipoprotein A-1] Tazuma S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Aug;86(8):1666–72 (Eng. Abstr.) **(Jpn)**

[Characterization of rouleau formation of disc-like particle in bile by transmission electron microscopy: relation to cholesterol crystal nucleation] Tazuma S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 May;86(5):1168 **(Jpn)**

[Experimental studies on dissolution of cholesterol gallstones using MTBE] Yamashita N. **Nippon Shokakibyo Gakkai Zasshi** 1990 May;87(5):1183–90 (Eng. Abstr.) **(Jpn)**

[Twenty years with cytochromes P-450 involved in cholesterol metabolism] Okuda K. **Seikagaku** 1989 Jun; 61(6):467–81 **(Jpn)**

[Effect of dietary fats and cholesterol on lipoprotein metabolism] Cybulska B, et al. **Przegl Lek** 1989;46(7):615–8 **(Pol)**

[Chylomicron metabolism in experimental cholestasis] Damião AO, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Sep-Oct;44(5):207–10 (Eng. Abstr.) **(Por)**

[Ethanol intoxication and cholesterosis] Bozhko GKh, et al. **Kardiologiia** 1989 Aug;29(8):114–8 (60 ref.) **(Rus)**

[Cholesterol-containing circulating immune complexes—a component of the blood serum in patients with ischemic heart disease that determines its atherogenic properties] Tertov VV, et al. **Kardiologiia** 1989 Aug;29(8):35–8 (Eng. Abstr.) **(Rus)**

[Cholesterol and fatty acids of the nuclei and chromatin of the rat thymus at long intervals following gamma

irradiation] Kulagina TP. **Radiobiologiia** 1990 May-Jun; 30(3):317-20 (Eng. Abstr.) **(Rus)**

[The role of guanidine groups of arginine residues of Na, K-ATPase and glutamate dehydrogenase in an interaction with cholesterol] Kliueva NN, et al. **Ukr Biokhim Zh** 1989 Sep-Oct;61(5):29-34 (Eng. Abstr.) **(Rus)**

[Acceptance of cholesterol by high density lipoproteins in people with dys-alpha-lipoproteinemia and the possible role of apoprotein E in this process] Kozhevnikova KA, et al. **Vopr Med Khim** 1989 Jul-Aug;35(4):43-8 (Eng. Abstr.) **(Rus)**

[The effect of glucagon and concanavalin A on cholesterol accumulation in mouse peritoneal macrophages and human aorta intima cells] Vasil'ev AV, et al. **Vopr Med Khim** 1989 Sep-Oct;35(5):90-3 (Eng. Abstr.) **(Rus)**

[Current concepts on cholesterol and its clinical importance] Sienra-Pérez JC, et al. **Gac Med Mex** 1989 May-Jun; 125(5-6):165-72 (25 ref.) **(Spa)**

[Probucol, HDL and inverse transport of cholesterol] **Med Clin (Barc)** 1989 Oct 28;93(13):22-3 p. (16 ref.) **(Spa)**

[Crystallization of cholesterol in the gallbladder bile] Antezana C, et al. **Rev Med Chil** 1988 Sep;116(9):858-62 (Eng. Abstr.) **(Spa)**

[Biliary composition and bile acid metabolism in young men and women] Covarrubias C, et al. **Rev Med Chil** 1988 Nov; 116(11):1111-4 **(Spa)**

[Oxidation of LDL and cholesterol is an important aspect of atherosclerogenesis] Werkö L. **Lakartidningen** 1989 Nov 22;86(47):4096 **(Swe)**

PHARMACOKINETICS

Plasma lipid transfer activities. Quig DW, et al. **Annu Rev Nutr** 1990;10:169-93 (101 ref.)

Expression of ACTH-induced corticosteroid biosynthesis in newborn rat adrenocortical cells cultured in serum-free and carrier protein-free medium containing a cholesterol-alpha-cyclodextrin complex. Hammami M, et al. **Cell Biol Toxicol** 1986 Mar;2(1):41-52

Cholesterol absorption by the gall bladder. Ross PE, et al. **J Clin Pathol** 1990 Jul;43(7):572-5

Modification of lipid composition of neuroblastoma C1300 N18 cells with liposomes alters the cholesterol content. Gulaya NM, et al. **Neuroscience** 1990;34(3):785-92

PHARMACOLOGY

Evidence for selection of virulent sub-populations of Entamoeba histolytica by cholesterol. Katiyar SK, et al. **Ann Trop Med Parasitol** 1989 Jun;83(3):257-62

Influence of cholesterol oxides on endocytosis of cultured endothelial and smooth muscle cells. Peng SK, et al. **Artery** 1990;17(2):84-95

Inhibition of lysophospholipase by cholesterol in rabbit aorta. Miyake R, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):143-7

Cholesterol-mediated regulation of HMG-CoA reductase in microsomes from human skin fibroblasts and rat liver. George R, et al. **Biochem Cell Biol** 1990 Mar;68(3):674-9

Effect of trifluoperazine and colchicine on smooth muscle cellular proliferative and secretory activity induced by hypercholesterolemic medium in vitro. Mehta UM, et al. **Biochem Int** 1990;21(1):107-16

Stimulated cholesterol-enriched platelets display increased cytosolic Ca2+ and phospholipase A activity independent of changes in inositol trisphosphates and agonist/receptor binding. Sorisky A, et al. **Biochem J** 1990 Feb 1; 265(3):747-54

Effect of cholesterol on membrane microheterogeneity: a study using 1,6-diphenyl-1,3,5-hexatriene fluorescence lifetime distributions. Fiorini R, et al. **Biochim Biophys Acta** 1989 Nov 28;1006(2):198-202

Cytostatic effect of antiestrogens in lymphoid cells: relationship to high affinity antiestrogen-binding sites and cholesterol. Tang BL, et al. **Biochim Biophys Acta** 1989 Nov 20;1014(2):162-72

Role of cholesterol 10-methyl group and effect of "extra" 14-methyl group on silkworm growth and development. Mamiya M, et al. **Chem Pharm Bull (Tokyo)** 1989 Jul; 37(7):1930-1

Solubilization of multilamellar liposomes of egg yolk lecithin by the bile salt sodiumtaurodeoxycholate and the effect of cholesterol—a rapid-ultrafiltration study. Müller K, et al. **Chem Phys Lipids** 1990 Jan;52(2):111-27

Identification of a cholesterol-regulated 180-kDa microsomal protein in rat hepatocytes. Haro D, et al. **Eur J Biochem** 1990 Feb 22;188(1):123-9

Apolipoprotein E expression by human-monocyte-derived macrophages. Modulation by opsonised zymosan and cholesterol. Rouis M, et al. **Eur J Biochem** 1990 Apr 30; 189(2):447-53

Cholesterol is required for the reconstruction of the sodium- and chloride-coupled, gamma-aminobutyric acid transporter from rat brain. Shouffani A, et al. **J Biol Chem** 1990 Apr 15;265(11):6002-8

Cholesterol modulates rat renal brush border membrane phosphate transport. Levi M, et al. **J Clin Invest** 1990 Jan; 85(1):231-7

Modulation of the binding and endocytosis of concanavalin A by guinea pig keratinocytes: reversible antagonistic effects of cholesterol and phospholipid-liposomes. Callaghan TM, et al. **J Invest Dermatol** 1990 Jan; 94(1):58-64

Sterol effects on phospholipid biosynthesis in the yeast strain GL7. Ramgopal M, et al. **J Lipid Res** 1990 Apr;31(4):653-8

Effects of exogenous ganglioside and cholesterol application on excitability of Aplysia neurons. Büsselberg D, et al. **Membr Biochem** 1989;8(1):19-26

Ion channels, membrane lipids and cholesterol: a role for membrane lipid domains in arterial function. Tulenko TN, et al. **Prog Clin Biol Res** 1990;334:187-203

Atherogenic effect of oxidized products of cholesterol. Hubbard RW, et al. **Prog Food Nutr Sci** 1989;13(1):17-44 (71 ref.)

[The effect of cholesterol on the function of staphylotoxin channels] Krasil'nikov OV, et al. **Biofizika** 1989 Sep-Oct; 34(5):906-8 (Eng. Abstr.) **(Rus)**

[The effect of liposomes containing cholesterol or 7-ketocholesterol on the capacity of cultured cells to form colonies] Khokhlov AN, et al. **Biull Eksp Biol Med** 1989 Sep;108(9):348-9 (Eng. Abstr.) **(Rus)**

[The effect of erythrocyte membrane modification on the rate of O2 release] Anikeeva SP. **Vopr Med Khim** 1990 May-Jun;36(3):59-60 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Cholesterol is required for the secretion of the very-low-density lipoprotein: in vivo studies. Khan BV, et al. **Biochim Biophys Acta** 1990 Jun 14;1044(3):297-304

Effects of cholesterol on the interaction of Ca2(+)-ATPase with 1-palmitoyl-2-oleoylphosphatidylethanolamine. An FTIR study. Yang J, et al. **Biochim Biophys Acta** 1990 Jan 15;1021(1):27-32

The influence of cholesterol on synaptic fluidity, dopamine D1 binding and dopamine-stimulated adenylate cyclase. Maguire PA, et al. **Brain Res Bull** 1989 Jul-Aug; 23(1-2):69-74

Effects of endogenous and exogenous cholesterol on the ultrastructure and steroid secretion of undifferentiated rat adrenocortical cells in primary culture. Heikkilä P. **Cell Tissue Res** 1990 Mar;259(3):421-7

Regulation of macrophage apolipoprotein E gene expression by cholesterol. Mazzone T, et al. **J Lipid Res** 1989 Jul; 30(7):1055-64

Cholesterol: the alarm and fear [letter] Broomes EL. **J Natl Med Assoc** 1990 Apr;82(4):237, 256, 264

Variations of membrane cholesterol alter the kinetics of Ca2(+)-dependent K+ channels and membrane fluidity in vascular smooth muscle cells. Bolotina V, et al. **Pflugers Arch** 1989 Dec;415(3):262-8

[The natural history of coronary disease. The role of cholesterol] Ovize M, et al. **Ann Cardiol Angeiol (Paris)** 1990 May;39(5):295-300 (27 ref.) (Eng. Abstr.) **(Fre)**

SECRETION

Inhibition of biliary cholesterol and phospholipid secretion during cyclobutyrol-induced hydrocholeresis. Monte MJ, et al. **Biochem J** 1989 Oct 15;263(2):513-8

Inhibitory action of cyclobutyrol on the secretion of biliary cholesterol and phospholipids. Monte MJ, et al. **Biochem J** 1990 Feb 15;266(1):165-71

Protoporphyrin IX-induced impairment of biliary lipid secretion in the rat. Perez-Barriocanal F, et al. **Clin Sci** 1989 Nov;77(5):473-8

Biliary lipid secretion during the prereplicative phase of rat liver regeneration. Perez-Barriocanal F, et al. **J Exp Pathol (Oxford)** 1990 Feb;71(1):63-8

Effect of acute insulin administration on biliary lipid secretion by the diabetic rat. Villanueva GR, et al. **J Exp Pathol (Oxford)** 1990 Feb;71(1):89-94

Bovine oviductal fluid components and their potential role in sperm cholesterol efflux. Ehrenwald E, et al. **Mol Reprod Dev** 1990 Feb;25(2):195-204

Biliary lipid secretion early after liver transplantation. Ericzon BG, et al. **Transplant Proc** 1990 Aug;22(4):1537-8

URINE

Serum apolipoproteins A and B, lecithin: cholesterol acyl transferase activities and urinary cholesterol levels in nephrotic syndrome patients before and during steroid treatment. Nayak SS, et al. **Nephron** 1990;54(3):234-9

CHOLESTEROL ACYLTRANSFERASE

ANTAGONISTS & INHIBITORS

Accumulation of oleate-rich cholesteryl esters by acetyl-LDL in macrophages in the presence of an acyl-CoA: cholesterol acyltransferase inhibitor (Sandoz 58-035). Shimasaki O, et al. **Biochem Int** 1990;20(2):389-96

Inhibition of acyl coenzyme A: cholesterol acyl transferase by trimethylcyclohexanylmandelate (cyclandelate). Heffron F, et al. **Biochem Pharmacol** 1990 Feb 1; 39(3):575-80

Effects of octimibate, an inhibitor of acyl coenzyme A: cholesterol acyltransferase, on cholesterol metabolism in the hamster and rat. Jackson B, et al. **Biochem Pharmacol** 1990 May 1;39(9):1487-9

Effects of the ACAT inhibitor CL 277,082 on cholesterol metabolism in humans. Harris WS, et al. **Clin Pharmacol Ther** 1990 Aug;48(2):189-94

Rabbit and human liver contain a novel pentacyclic triterpene ester with acyl-CoA: cholesterol acyltransferase inhibitory activity. Tabas I, et al. **J Biol Chem** 1990 May 15; 265(14):8042-51

Potential antiatherosclerotic agents. 6. Hypocholesterolemic trisubstituted urea analogues. DeVries VG, et al. **J Med Chem** 1989 Oct;32(10):2318-25

BLOOD

Associations of lecithin: cholesterol acyltransferase (LCAT) mass concentrations with exercise, weight loss, and plasma lipoprotein subfraction concentrations in men. Williams PT, et al. **Atherosclerosis** 1990 May;82(1-2):53-8

METABOLISM

Effects of hypoxia on sterol synthesis, acyl-CoA:cholesterol acyltransferase activity, and efflux of cholesterol in cultured rabbit skin fibroblasts. Mukodani J, et al. **Arteriosclerosis** 1990 Jan-Feb;10(1):106-10

Defective activity of acyl-CoA:cholesterol O-acyltransferase in Niemann-Pick type C and type D fibroblasts. Byers DM, et al. **Biochem J** 1989 Sep 15;262(3):713-9

12-[(5-iodo-4-azido-2-hydroxybenzoyl)amino]dodecanoic acid: biological recognition by cholesterol esterase and acyl-CoA:cholesterol O-acyltransferase. Kinnunen PM, et al. **Biochemistry** 1990 Feb 13;29(6):1648-54

The effects of feeding a saturated fat-rich diet on enzymes of cholesterol metabolism in the liver, intestine and aorta of the hamster. Jackson B, et al. **Biochim Biophys Acta** 1990 Jun 28;1045(1):21-8

Regulation of cholesteryl ester metabolism in the hamster liver. Ochoa B, et al. **Biochim Biophys Acta** 1990 May 1; 1044(1):133-8

Effect of ischaemia on the activities of human hepatic acyl-CoA:cholesterol acyltransferase and other microsomal enzymes. Smith JL, et al. **Clin Chim Acta** 1989 Oct 16;184(3):259-68

The functional size of acyl-coenzyme A (CoA):cholesterol acyltransferase and acyl-CoA hydrolase as determined by radiation inactivation. Billheimer JT, et al. **J Biol Chem** 1990 May 25;265(15):8632-5

The reactivity of desmosterol and other shellfish- and xanthomatosis-associated sterols in the macrophage sterol esterification reaction. Tabas I, et al. **J Clin Invest** 1989 Dec;84(6):1713-21

Regulation of hepatic cholesterol ester hydrolase and acyl-coenzyme A:cholesterol acyltransferase in the rat. Stone BG, et al. **J Lipid Res** 1989 Nov;30(11):1681-90

CHOLESTEROL DESMOLASE

ANALYSIS

Studies of the immunohistochemical and biochemical localization of the cytochrome P-450scc-linked monooxygenase system in the adult rat brain. Iwahashi K, et al. **Biochim Biophys Acta** 1990 Aug 17;1035(2):182-9

Ultrastructural localization of cytochrome P-450scc in the bovine placentome using protein A-gold technique. Ben-David E, et al. **Biol Reprod** 1990 Jan;42(1):131-8

[Cholesterol-hydroxylating cytochrome P-450 from bovine adrenal cortex mitochondria and human placenta: immunochemical properties and structural characteristics] Usanov SA, et al. **Biokhimiia** 1990 May;55(5):865-77 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Inhibition of electron transfer from adrenodoxin to cytochrome P-450scc by chemical modification with pyridoxal 5'-phosphate: identification of adrenodoxin-binding site of cytochrome P-450scc. Tsubaki M, et al. **Biochemistry** 1989 Aug 22;28(17):6899-907

Inhibition of the activities of P450 cholesterol side-chain cleavage and 3 beta-hydroxysteroid dehydrogenase and the amount of P450 cholesterol side-chain cleavage by testosterone and estradiol-17 beta in hen granulosa cells. Lee HT, et al. **Endocrinology** 1990 Feb;126(2):779-86

Modified acetylenic steroids as potent mechanism-based inhibitors of cytochrome P-450SCC. Olakanmi O, et al. **J Steroid Biochem** 1990 Jul 4;36(4):273-80

BIOSYNTHESIS

Functional expression of microsomal and mitochondrial cytochrome P-450 (d and SCC) in COS-7 cells from cloned cDNA. Minowa O, et al. **Cell Struct Funct** 1990 Feb; 15(1):21-30

Glucocorticoid and cyclic adenosine 3'5'-monophosphate-mediated induction of cholesterol side-chain cleavage cytochrome P450 (P450scc) in MA-10 tumor Leydig cells. Increases in mRNA are cycloheximide sensitive. Hales DB, et al. **Endocrinology** 1990 Jun; 126(6):2800-8

The biosynthesis of cholesterol side-chain cleavage cytochrome P-450 in the rabbit corpus luteum depends upon estrogen. Keyes PL, et al. **Endocrinology** 1990 Sep; 127(3):1186-93

GENETICS

Mechanism for control of hydroxymethylglutaryl-coenzyme A reductase and cytochrome P-450 side chain cleavage message and enzyme in the corpus luteum. Puryear TK, et al. **Endocrinology** 1990 Jun;126(6):2910-8

The structural genes encoding P450scc and P450arom are closely linked on mouse chromosome 9. Youngblood GL, et al. **Endocrinology** 1989 Nov;125(5):2784–6

Cyclic AMP-dependent and -independent regulation of cholesterol side chain cleavage cytochrome P-450 (P-450scc) in rat ovarian granulosa cells and corpora lutea. cDNA and deduced amino acid sequence of rat P-450scc. Oonk RB, et al. **J Biol Chem** 1989 Dec 25;264(36):21934–42

Analysis of the promoter region of the gene encoding mouse cholesterol side-chain cleavage enzyme. Rice DA, et al. **J Biol Chem** 1990 Jul 15;265(20):11713–20

Angiotensin II inhibits luteinizing hormone-stimulated cholesterol side chain cleavage expression and stimulates basic fibroblast growth factor expression in bovine luteal cells in primary culture. Stirling D, et al. **J Biol Chem** 1990 Jan 5;265(1):5–8

Expression of messenger ribonucleic acid species encoding steroidogenic enzymes in human follicles and corpora lutea throughout the menstrual cycle. Doody KJ, et al. **J Clin Endocrinol Metab** 1990 Apr;70(4):1041–5

Alteration in the expression of genes for cholesterol side-chain cleavage enzyme and 21-hydroxylase by hypophysectomy and ACTH administration in the rat adrenal. Imai T, et al. **J Mol Endocrinol** 1990 Jun; 4(3):239–45

Effects of dietary sodium restriction and potassium intake on cholesterol side-chain cleavage cytochrome P-450 and adrenodoxin mRNA levels. Tremblay A, et al. **J Steroid Biochem** 1989;34(1–6):385–90

Insulin-like growth factor-I selectively stimulates cholesterol side-chain cleavage expression in ovarian theca-interstitial cells. Magoffin DA, et al. **Mol Endocrinol** 1990 Mar; 4(3):489–96

cAMP regulates P450scc gene expression by a cycloheximide-insensitive mechanism in cultured mouse Leydig MA-10 cells. Mellon SH, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7775–9

IMMUNOLOGY

Comparison of the immunochemical properties of human placental and bovine adrenal cholesterol side-chain cleavage enzyme complex. Usanov SA, et al. **Biochim Biophys Acta** 1989 Oct 5;998(2):189–95

METABOLISM

The role of sterol carrier protein 2 in stimulation of steroidogenesis in rat adrenal mitochondria by adrenal cytosol. McNamara BC, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):53–62

Hormonal regulation of cytochrome P450 enzymes, cholesterol side-chain cleavage and 17 alpha-hydroxylase/C17-20 lyase in Leydig cells. Payne AH. **Biol Reprod** 1990 Mar;42(3):399–404 (40 ref.)

Regulation of cholesterol side-chain cleavage and 17 alpha-hydroxylase/lyase activities in proliferating human theca interna cells in long term monolayer culture. McAllister JM, et al. **Endocrinology** 1989 Oct; 125(4):1959–66

Density separation of rat adrenocortical cells: morphology, steroidogenesis, and P-450scc expression in primary culture. Roskelley CD, et al. **In Vitro Cell Dev Biol** 1990 May;26(5):493–501

Conversion of cholesterol to pregnenolone mobilizes cytochrome P-450 in the inner membrane of adrenocortical mitochondria: protein rotation study. Ohta Y, et al. **J Biochem (Tokyo)** 1990 Jan;107(1):97–104

Effect of LH injections on testicular steroidogenesis, cholesterol side-chain cleavage P450 mRNA content and Leydig cell morphology in hypogonadal mice. Scott IS, et al. **J Endocrinol** 1990 Apr;125(1):131–8

Regulation of side-chain cleavage enzyme and 3 beta-hydroxysteroid dehydrogenase by Ca2+ second messenger and protein kinase C systems in the placenta of the cow. Shemesh M, et al. **J Reprod Fertil Suppl** 1989; 37:163–72

Effect of lindane on mitochondrial side-chain cleavage of cholesterol in mice. Sircar S, et al. **Toxicology** 1990 Mar 30;61(1):41–6

[Study of the role of lysine residues of the cholesterol hydroxylating cytochrome P-450 by a method of chemical modification] Adamovich TV, et al. **Biokhimiia** 1989 Jul; 54(7):1206–16 (Eng. Abstr.) **(Rus)**

[Chemical modification of cholesterol-hydroxylating cytochrome P-450 from adrenal cortex mitochondria with diethylpyrocarbonate] Pikuleva IA, et al. **Biokhimiia** 1990 Apr;55(4):665–73 (Eng. Abstr.) **(Rus)**

CHOLESTEROL, DIETARY

see related
HYPERCHOLESTEROLEMIA
HYPERCHOLESTEROLEMIA, FAMILIAL

Diet, atherosclerosis, and fish oil. Connor WE, et al. **Adv Intern Med** 1990;35:139–71 (100 ref.)

Cholesterol caveats. Ramírez EA. **Bol Asoc Med P R** 1989 Dec;81(12):477–9

Hypertension does not stimulate the development of hypercholesterolemia or fatty liver induced by a high cholesterol/cholate diet in rats. Hayashi H, et al. **Chem Pharm Bull (Tokyo)** 1989 Jul;37(7):1844–8

Restaurant menu labeling: impact of nutrition information on entree sales and patron attitudes. Albright CL, et al. **Health Educ Q** 1990 Summer;17(2):157–67

The cholesterol brouhaha [editorial] Lacsamana RG. **J Fla Med Assoc** 1989 Oct;76(10):840

Scavenger effect of elastase on calcifications in liver, kidney and central nervous system tissues of rabbits with atherosclerosis induced by cholesterol-rich diet. Yasui M, et al. **J Int Med Res** 1989 Jul-Aug;17(4):350–7

Diet to reduce cholesterol: heart recommendations agree with NCI, DHHS [news] Smigel K. **J Natl Cancer Inst** 1990 Mar 21;82(6):450–1

ADMINISTRATION & DOSAGE

Morphology of the prairie dog gallbladder: normal characteristics and changes during early lithogenesis. Haley-Russell D, et al. **Am J Anat** 1989 Oct;186(2):133–43

Soy protein and casein in cholesterol-enriched diets: effects on plasma lipoproteins in normolipidemic subjects. Meinertz H, et al. **Am J Clin Nutr** 1989 Oct;50(4):786–93

Dietary intake of Americans reporting adherence to a low cholesterol diet (NHANES II). Schectman G, et al. **Am J Public Health** 1990 Jun;80(6):698–703

Cholesterol and diet [letter; comment] Leung SS, et al. **Arch Dis Child** 1989 Nov;64(11):1642–3 Comment on: Arch Dis Child 1989 May;64(5):647–8.

Effects of exercise, dietary cholesterol, and dietary fat on blood lipids. Johnson C, et al. **Arch Intern Med** 1990 Jan; 150(1):137–41

Circulating IgA-Lp complexes in Watanabe heritable hyperlipidemic and cholesterol fed NZW rabbits. Beaumont JL, et al. **Atherosclerosis** 1990 Jun;82(3):227–35

Dietary fish oil added to a hyperlipidemic diet for swine results in reduction in the excessive number of monocytes attached to arterial endothelium. Kim DN, et al. **Atherosclerosis** 1990 Apr;81(3):209–16

Failure of diltiazem to suppress cholesterol-induced atherogenesis of endothelium-denudated arteries in pigs. Sassen LM, et al. **Atherosclerosis** 1990 Apr;81(3):217–24

Biliary lipid composition and gallstone formation in rabbits fed on soy protein, cholesterol, casein and modified casein. Ozben T. **Biochem J** 1989 Oct 1;263(1):293–6

Comparative effects of simvastatin (MK-733) and pravastatin (CS-514) on hypercholesterolemia induced by cholesterol feeding in rabbits [published errata appear in Biochim Biophys Acta 1990 Apr 2;1043(2):225 and 1990 May 1;1044(1):177] Ishida F, et al. **Biochim Biophys Acta** 1990 Feb 23;1042(3):365–73

Cholesteryl ester transfer activity in hamster plasma: increase by fat and cholesterol rich diets. Stein Y, et al. **Biochim Biophys Acta** 1990 Jan 16;1042(1):138–41

Effect of heat-stable factor (SLF3) on plasma and erythrocyte cholesterol levels and erythrocyte (Na+,K+)-ATPase activity in cholesterol fed rabbits. Gökkuşu C, et al. **Horm Metab Res** 1989 Sep;21(9):523–4

Cholesterol-free diet with a high ratio of polyunsaturated to saturated fatty acids in heterozygous familial hypercholesterolemia: significant lowering effect on plasma cholesterol. Mokuno H, et al. **Horm Metab Res** 1990 Apr; 22(4):246–51

Effect of dietary fiber from banana (Musa paradisiaca) on metabolism of carbohydrates in rats fed cholesterol free diet. Usha V, et al. **Indian J Exp Biol** 1989 May;27(5):445–9

Serum cholesterol, fat intake, and breakfast consumption in the United States adult population. Stanton JL Jr, et al. **J Am Coll Nutr** 1989 Dec;8(6):567–72

Lipid management clinic: dietary intervention for patients with hypercholesterolemia. Chima CS, et al. **J Am Diet Assoc** 1990 Feb;90(2):272–4

Clinical effects of mandibular fixation on cholesterol intake and serum lipids: a case study. Harkey AL. **J Am Diet Assoc** 1990 Jan;90(1):102–3

A call for revision of meal examples in pediatric textbooks [letter] [published erratum appears in J Am Diet Assoc 1990 Jun;90(6):790] Kashani IA, et al. **J Am Diet Assoc** 1990 Apr;90(4):517, 520

Effect of dietary restriction on receptor-mediated and independent catabolism of beta-very low density lipoproteins in cholesterol-fed rabbits. Lacombe C, et al. **J Nutr** 1989 Oct;119(10):1513–8

Cholesterol metabolism in adult baboons is influenced by infant diet. Mott GE, et al. **J Nutr** 1990 Mar;120(3):243–51

Effects of methyl-group acceptors on the regulation of plasma cholesterol level in rats fed high cholesterol diets. Sugiyama K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Dec; 35(6):613–26

The influence of diet on the appearance of new lesions in human coronary arteries. Blankenhorn DH, et al. **JAMA** 1990 Mar 23-30;263(12):1646–52

Renal injury of diet-induced hypercholesterolemia in rats. Kasiske BL, et al. **Kidney Int** 1990 Mar;37(3):880–91

A high cholesterol diet ameliorates renal tubular lesions in diabetic rats. Reyes AA, et al. **Proc Soc Exp Biol Med** 1990 Jul;194(3):177–85

Getting to the heart of the cholesterol debate [news] Palca J. **Science** 1990 Mar 9;247(4947):1170–1

Dietary treatment of hypercholesterolemia. Friedman BJ, et al. **Tex Med** 1990 Apr;86(4):31–7 (11 ref.)

[Studies on stroke-prone spontaneously hypertensive rats (SHRSP) fed a high-fat and high-cholesterol diet—changes in serum concentrations and distributions of apolipoproteins A-I, A-IV and E] Ogawa H, et al. **Nippon Eiseigaku Zasshi** 1989 Jun;44(2):622–30 (Eng. Abstr.) **(Jpn)**

[Studies on stroke-prone spontaneously hypertensive rats (SHRSP) fed a high-fat and high-cholesterol diet—effect of taurine on serum lipoprotein metabolism in hypercholesterolemic rats] Ogawa H, et al. **Nippon Eiseigaku Zasshi** 1989 Jun;44(2):648–58 (Eng. Abstr.) **(Jpn)**

[The inhibitory effect of elastase on calcium increase in brain and spinal cord of rabbits with atherosclerosis induced by cholesterol-rich diet] Yasui M, et al. **No To Shinkei** 1989 Aug;41(8):781–7 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Re: "The effect of dietary cholesterol and fat on the risk of lung cancer in Hawaii" [letter; comment] Shekelle RB. **Am J Epidemiol** 1990 Mar;131(3):575–7 Comment on: Am J Epidemiol 1988 Dec;128(6):1241–55.

Carotid artery atherosclerosis in cholesterol-fed female cynomolgus monkeys. Effects of oral contraceptive treatment, social factors, and regional adiposity. Shively CA, et al. **Arteriosclerosis** 1990 May-Jun;10(3):358–66

The cholesterol-heart disease hypothesis (critique)—time to change course? Texon M. **Bull N Y Acad Med** 1989 Oct; 65(8):836–41 (32 ref.)

Persistent impairment of endothelium-dependent relaxation to acetylcholine and progression of atherosclerosis following 6 weeks of cholesterol feeding in the rabbit. Jayakody L, et al. **Can J Physiol Pharmacol** 1989 Nov; 67(11):1454–60

Influence of CDP-choline administration on the aortic wall lesions in dietically hypercholesterolaemic rabbits: a morphometric evaluation. Weber G, et al. **Drugs Exp Clin Res** 1989;15(6-7):321–3

Mackerel oil and atherosclerosis in pigs. Sassen LM, et al. **Eur Heart J** 1989 Sep;10(9):838–46

The effects of taurine on atherosclerosis development in cholesterol-fed rabbits. Petty MA, et al. **Eur J Pharmacol** 1990 May 3;180(1):119–27

Regression of atherosclerosis in cholesterol-fed rabbits: effects of fish oil and verapamil. Zhu BQ, et al. **J Am Coll Cardiol** 1990 Jan;15(1):231–7

Regression of atherosclerotic lesions by high density lipoprotein plasma fraction in the cholesterol-fed rabbit. Badimon JJ, et al. **J Clin Invest** 1990 Apr;85(4):1234–41

Ultrastructure of the intima in WHHL and cholesterol-fed rabbit aortas prepared by ultra-rapid freezing and freeze-etching. Frank JS, et al. **J Lipid Res** 1989 Jul; 30(7):967–78

Role of dietary cholesterol in atherosclerosis: reply to comments of Dr J. T. Lie and Dr B. A. Kottke [letter] Stehbens WB. **Pathology** 1989 Oct;21(4):318–9

The controversial role of dietary cholesterol and hypercholesterolemia in coronary heart disease and atherogenesis. Stehbens WE. **Pathology** 1989 Jul; 21(3):213–21; discussion 222 (138 ref.)

Cholesterol myth club on par with flat earth society [editorial] Griffin GC. **Postgrad Med** 1990 Jan;87(1):13, 16

Diet and coronary heart disease risk factors in a population with varied intake. The Research Group ATS-RF2 of The Italian National Research Council. Trevisan M, et al. **Prev Med** 1990 May;19(3):231–41

[Arteriosclerosis and cancer—fats or carbohydrates? (letter)] Schwandt P, et al. **Wien Klin Wochenschr** 1989 Nov 24; 101(22):787–9 **(Ger)**

[Atherosclerosis and cardiovascular risk factors in the elderly] Carrageta M, et al. **Rev Port Cardiol** 1990 Feb; 9(2):109–12 (20 ref.) (Eng. Abstr.) **(Por)**

[Incorporation of amino acids into liver and serum proteins during prolonged administration to animals of ethanol and cholesterol] Bozhko GKh, et al. **Ukr Biokhim Zh** 1990 Jan-Feb;62(1):30–4 (Eng. Abstr.) **(Rus)**

ANALYSIS

Cholesterol-saturated fat index: ESHA software has it, new egg data changes it [letter; comment] **J Am Diet Assoc** 1990 Apr;90(4):506, 512 Comment on: J Am Diet Assoc 1989 Jun;89(6):807–16.

Gas chromatographic determination of cholesterol in egg products. Beyer JD, et al. **J Assoc Off Anal Chem** 1989 Sep-Oct;72(5):746–8

METABOLISM

Comparison of breast-feeding and formula feeding on intestinal and hepatic cholesterol metabolism in neonatal pigs. Jones PJ, et al. **Am J Clin Nutr** 1990 Jun;51(6):979–84

Effect of dietary fat saturation and cholesterol on LDL composition and metabolism. In vivo studies of receptor and nonreceptor-mediated catabolism of LDL in cebus monkeys. Nicolosi RJ, et al. **Arteriosclerosis** 1990 Jan-Feb; 10(1):119–28

Lipoprotein lipase and hepatic lipase activities in a hypercholesterolaemic (RICO) strain of rat. Effect of dietary cholesterol. Sultan F, et al. **Biochem J** 1990 Mar 1;266(2):349–53

Fish oil prevents effect of high cholesterol diet on active intestinal transport of galactose. Thomson AB, et al. **Can J Physiol Pharmacol** 1989 Aug;67(8):829–36

Hyperlipidaemia increases albuminuria in hypertensive and normotensive rats. Cooper ME, et al. **Clin Exp Pharmacol Physiol** 1990 Mar;17(3):225–8

Hepatic low density lipoprotein receptors, HMG-CoA

reductase, and plasma lipids and apolipoproteins in high- and low-responding rhesus monkeys: effect of cholestyramine treatment. Dory L, et al. **J Lipid Res** 1990 Feb;31(2):279-87

RNA editing: a novel mechanism for the regulation of dietary cholesterol absorption. The Humphry Davy Rolleston lecture 1989. Scott J. **J R Coll Physicians Lond** 1990 Apr; 24(2):101-6

Effects of partial replacement of dietary fat by olestra on dietary cholesterol absorption in man. Jandacek RJ, et al. **Metabolism** 1990 Aug;39(8):848-52

The effect of adding cholesterol to laying hen diets as powder or predissolved in fat. Berrio LF, et al. **Poult Sci** 1990 Jun; 69(6):972-6

[Effect of dietary fats and cholesterol on lipoprotein metabolism] Cybulska B, et al. **Przegl Lek** 1989;46(7):615-8 **(Pol)**

PHARMACOLOGY

Dietary cholesterol and fats at a young age: do they influence cholesterol metabolism in adult life? Temmerman AM, et al. **Ann Nutr Metab** 1989;33(3):170-80

Early changes in fine structures of the aortic arch in hamsters fed a high cholesterol diet. Takasu N, et al. **Arch Histol Cytol** 1990 May;53(2):211-8

Relationship between sensitivity to dietary fat and dietary cholesterol. Clifton PM, et al. **Arteriosclerosis** 1990 May-Jun;10(3):394-401

Responsiveness to dietary cholesterol in the domestic fowl is not related to the degree of body fatness. Meijer GW, et al. **Artery** 1989;17(1):1-5

Cholesterol diet followed by normal diet alters functional and metabolic responses in rabbit aorta. Ragazzi E, et al. **Artery** 1990;17(2):71-83

Aortic antioxidant defence mechanisms: time-related changes in cholesterol-fed rabbits. Del Boccio G, et al. **Atherosclerosis** 1990 Mar;81(2):127-35

Induction of apolipoprotein E gene expression in human and experimental atherosclerotic lesions. Crespo P, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):733-40

Cholesterol-mediated regulation of HMG-CoA reductase in microsomes from human skin fibroblasts and rat liver. George R, et al. **Biochem Cell Biol** 1990 Mar;68(3):674-9

The effects of feeding a saturated fat-rich diet on enzymes of cholesterol metabolism in the liver, intestine and aorta of the hamster. Jackson B, et al. **Biochim Biophys Acta** 1990 Jun 28;1045(1):21-8

Dietary protein and fatty acid composition of liver lipids in the rat. Sjöblom L, et al. **Biochim Biophys Acta** 1990 May 22;1044(2):187-92

Probucol attenuates the development of aortic atherosclerosis in cholesterol-fed rabbits. Daugherty A, et al. **Br J Pharmacol** 1989 Oct;98(2):612-8

A model for demonstration of reversal of impairment of endothelium-dependent relaxation in the cholesterol-fed rabbit. Kappagoda CT, et al. **Can J Physiol Pharmacol** 1990 Jul;68(7):845-50

The domestic goat: a useful model to determine effects of diet and exercise on cholesterol accumulation in the body. Richard MJ, et al. **Comp Biochem Physiol [A]** 1990; 95(2):275-80

The effect of cholesterol administration on lipid biosynthesis by rabbit aortic mitochondria. Whereat AF, et al. **Exp Mol Pathol** 1968 Oct;9(2):230-41

Effect of dietary cholesterol on phosphatidylcholines and phosphatidylethanolamines in bile and gallbladder mucosa in the prairie dog. Booker ML, et al. **Gastroenterology** 1989 Nov;97(5):1261-7

Estrogen enhances dietary cholesterol induction of saturated bile in the hamster. Coyne MJ, et al. **Gastroenterology** 1978 Jul;75(1):76-9

Influence of eicosapentaenoic acid and vitamin E on hepatic hydroxyproline content in rabbits fed cholesterol-rich diet. Omer B, et al. **Int J Vitam Nutr Res** 1989;59(4):396-400

In vivo clearance of low density lipoprotein in pigeons occurs by a receptor-like mechanism that is not down-regulated by cholesterol feeding. Reagan JW Jr, et al. **J Biol Chem** 1990 Jun 5;265(16):9381-91

cis-acting determinants of basal and lipid-regulated apolipoprotein A-IV expression in mice. Williams SC, et al. **J Biol Chem** 1989 Nov 15;264(32):19009-16

Dose response to a dietary oat bran fraction in cholesterol-fed rats. Shinnick FL, et al. **J Nutr** 1990 Jun; 120(6):561-8

Transient control of serum cholesterol homeostasis in adult ExHC (exogenous hypercholesterolemic) rats by dietary cholesterol during weanling period. Lu YF, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Oct;35(5):463-74

Effect of cholestyramine in early weaning on later response to serum and fecal steroid levels and cholesterol 7 alpha-hydroxylase activity to high-cholesterol diet in ExHC rats. Lu YF, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Apr;36(2):131-40

Effects of cholesterol feeding on the distribution, metabolism, and accumulation of pentachlorobenzene in rats. Umegaki K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Aug; 35(4):291-301

Magnesium dietary intake modulates blood lipid levels and atherogenesis. Altura BT, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1840-4

Stress modulates cholesterol-induced changes in plasma and liver fatty acid composition in rats fed n-6 fatty acid-rich oils. Huang YS, et al. **Proc Soc Exp Biol Med** 1990 Oct; 195(1):136-41

Modulation of gamma-glutamyl transpeptidase activity by dietary eicosapentaenoic acid and vitamin E in livers of rabbits on hypercholesterolemic diet. Eryürek FG, et al. **Res Commun Chem Pathol Pharmacol** 1989 Sep; 65(3):389-92

Gamma-glutamyl transpeptidase and acetylcholinesterase activities in brain capillaries of cholesterol-fed rabbits. Eryürek FG, et al. **Res Commun Chem Pathol Pharmacol** 1990 Aug;69(2):245-8

Effect of low-cholesterol diet on cholesterol gallstones in prairie dogs. Gurll N, et al. **Surg Forum** 1978;29:440-2

CHOLESTEROL ESTER STORAGE DISEASE

DIAGNOSIS

Pyrene-methyl lauryl ester, a new fluorescent substrate for lipases: use for diagnosis of acid lipase deficiency in Wolman's and cholesteryl ester storage diseases. Nègre A, et al. **Enzyme** 1989;42(2):110-7

Subclinical course of cholesterol ester storage disease (CESD) diagnosed in adulthood. Report on two cases with remarks on the nature of the liver storage process. Elleder M, et al. **Virchows Arch [A]** 1990;416(4):357-65

GENETICS

[Cholesterol ester storage disease in two siblings] Pérez Rodríguez-Cuesta JM, et al. **An Esp Pediatr** 1990 Mar; 32(3):249-52 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Cholesteryl ester storage disease: hepatopathology and effects of therapy with lovastatin. Di Bisceglie AM, et al. **Hepatology** 1990 May;11(5):764-72

CHOLESTEROL ESTERASE see under **CARBOXYLIC ESTER HYDROLASES**

CHOLESTEROL ESTERS

Organization of the human cholesteryl ester transfer protein gene. Agellon LB, et al. **Biochemistry** 1990 Feb 13; 29(6):1372-6

Phase behavior of cholesteryl ester dispersions which model the inclusions of foam cells. Snow J, et al. **Biochemistry** 1990 Mar 13;29(10):2464-71

Binary phase behavior of cholesteryl oleate with cholesteryl linoleate. Dorset DL. **Biochim Biophys Acta** 1990 Aug 28; 1046(1):57-63

Thermodynamics of water-induced precipitation of cholesterol and its acetate, benzoate and stearate derivatives dissolved in 1,4-dioxane and 2-propanol. Mukhopadhyay L, et al. **Indian J Biochem Biophys** 1989 Oct;26(5):340-2

ANALYSIS

Microquantification of cholesterol and cholesteryl esters in rat peritoneal macrophages by reverse-phase high-performance liquid chromatography. Araki N, et al. **Anal Biochem** 1990 Mar;185(2):339-45

Analysis of the physical state of cholesteryl esters in arterial-smooth-muscle-derived foam cells by differential scanning calorimetry. Hajjar DP, et al. **Biochem J** 1990 Jun 15;268(3):693-7

Cholesterol sulphate levels in the hair and nails of patients with recessive X-linked ichthyosis. Serizawa S, et al. **Clin Exp Dermatol** 1990 Jan;15(1):13-5

Separation and quantitation of free cholesterol and cholesteryl esters in a macrophage cell line by high-performance liquid chromatography. Vercaemst R, et al. **J Chromatogr** 1989 Sep 29;494:43-52

Crystal structure of form II of cholesteryl palmitelaidate at 295 K. Srivastava RC, et al. **J Lipid Res** 1989 Jun; 30(6):893-8

Changes in cholesteryl esters of human milk with total milk lipid. Clark RM, et al. **J Pediatr Gastroenterol Nutr** 1989 Oct;9(3):347-50

BIOSYNTHESIS

Pancreatic cholesterol esterases. 3. Kinetic characterization of cholesterol ester resynthesis by the pancreatic cholesterol esterases. Kyger EM, et al. **Biochemistry** 1990 Apr 24;29(16):3853-8

Angiogenin activates phospholipase C and elicits a rapid incorporation of fatty acid into cholesterol esters in vascular smooth muscle cells. Moore F, et al. **Biochemistry** 1990 Jan 9;29(1):228-33

17 beta-estradiol inhibits LDL oxidation and cholesteryl ester formation in cultured macrophages. Huber LA, et al. **Free Radic Res Commun** 1990;8(3):167-73

Stereoselective formation of a cholesterol ester conjugate from fenvalerate by mouse microsomal carboxyesterase(s). Miyamoto J, et al. **J Biochem Toxicol** 1986 Jun;1(2):79-93

Monocyte colony-stimulating factor enhances uptake and degradation of acetylated low density lipoproteins and cholesterol esterification in human monocyte-derived macrophages. Ishibashi S, et al. **J Biol Chem** 1990 Aug 25;265(24):14109-17

Effects of phorbol 12-myristate 13-acetate on triglyceride and cholesteryl ester synthesis in cultured coronary smooth muscle cells and macrophages. Moinat M, et al. **J Lipid Res** 1990 Feb;31(2):329-34

Modification of phospholipid polar head group with monomethylethanolamine and dimethylethanolamine decreases cholesteryl ester and triacylglycerol synthesis in cultured human fibroblasts. Maziere C, et al. **Lipids** 1990 Jun;25(6):311-5

Propranolol decreases cholesteryl ester accumulation in mouse peritoneal macrophage in vitro. Naruszewicz M, et al. **Mater Med Pol** 1989 Jan-Mar;21(1):10-3

[Stimulation of cholesterol ester synthesis in macrophages by lipoproteins from normal and atherosclerotic human aorta intima] Men'shikov GB, et al. **Biokhimiia** 1990 May; 55(5):917-26 (Eng. Abstr.) **(Rus)**

BLOOD

Reduced arachidonate in serum phospholipids and cholesteryl esters associated with vegetarian diets in humans. Phinney SD, et al. **Am J Clin Nutr** 1990 Mar; 51(3):385-92

Simplified determination of serum cholesterol sulfate by gas-liquid chromatography combined with cyclohexylsilane-bonded phase column purification. Serizawa S, et al. **Arch Dermatol Res** 1989;281(6):411-6

Presence of cholesteryl ester hydroperoxide in human blood plasma. Yamamoto Y, et al. **Biochem Biophys Res Commun** 1989 Dec 29;165(3):988-93

High-density lipoprotein subpopulations as substrates for the transfer of cholesteryl esters to very-low-density lipoproteins. Lasunción MA, et al. **Biochem J** 1990 Sep 1;270(2):441-9

Cholesteryl ester transfer activity in hamster plasma: increase by fat and cholesterol rich diets. Stein Y, et al. **Biochim Biophys Acta** 1990 Jan 16;1042(1):138-41

Influence of serum amyloid A on cholesterol esterification in human plasma. Steinmetz A, et al. **Biochim Biophys Acta** 1989 Nov 28;1006(2):173-8

Alterations in the fatty acyl composition of plasma cholesteryl esters in Brazilian patients with hepatosplenic schistosomiasis mansoni. Gillett MP, et al. **Braz J Med Biol Res** 1989;22(8):949-57

Enhanced net mass transfer of HDL cholesteryl esters to Apo B-containing lipoproteins in patients with peripheral vascular disease. Rühling K, et al. **Clin Chim Acta** 1989 Oct 16;184(3):289-96

Lecithin-cholesterol acyltransferase (LCAT) catalyzes transacylation of intact cholesteryl esters. Evidence for the partial reversal of the forward LCAT reaction. Sorci-Thomas M, et al. **J Biol Chem** 1990 Feb 15; 265(5):2665-70

Persistent abnormalities in lipoprotein composition and cholesteryl ester transfer following lovastatin treatment. Bagdade JD, et al. **J Lipid Res** 1990 Jul;31(7):1263-9

Cholesteryl oleyl and linoleyl ethers do not trace their ester counterparts in animals with plasma cholesteryl ester transfer activity. Green SR, et al. **J Lipid Res** 1989 Sep; 30(9):1405-10

Impaired plasma cholesteryl ester transfer with accumulation of larger high density lipoproteins in some families of baboons (Papio sp.). Kushwaha RS, et al. **J Lipid Res** 1990 Jun;31(6):965-73

Molecular species of cholesteryl esters formed in abetalipoproteinemia: effect of apoprotein B-containing lipoproteins. Subbaiah PV, et al. **J Lipid Res** 1990 May; 31(5):927-32

In vitro incorporation of radiolabeled cholesteryl esters into high and low density lipoproteins. Terpstra AH, et al. **J Lipid Res** 1989 Nov;30(11):1663-71

Rapid labeling of lipoproteins in plasma with radioactive cholesterol. Application for measurement of plasma cholesterol esterification. Yen FT, et al. **J Lipid Res** 1990 Feb;31(2):349-53

High-density lipoprotein cholesteryl ester and protein catabolism in hypercholesterolemic rats induced by copper deficiency. Carr TP, et al. **Metabolism** 1990 May; 39(5):518-24

[The effect of thermally stable factors from cytosol of regenerating liver cells on the processes of cholesterol esterification in rat blood serum after administration of ethionine] Chirkin AA, et al. **Biol Nauki** 1989;(8):21-7 (Eng. Abstr.) **(Rus)**

[The effect of contrasting fat diets on the cholesterol-esterifying activity of the blood plasma] Akhmetov BS, et al. **Vopr Pitan** 1990 Jan-Feb;(1):49-52 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Potential tumor or organ imaging agents--31. Radioiodinated sterol benzoates and carbamates. Van Dort M, et al. **Int J Rad Appl Instrum [B]** 1989;16(6):603-7

[Synthesis and photodynamic action of porphyrin-cholesterol ester and their metal complexes] Huang SQ, et al. **Yao Hsueh Hsueh Pao** 1989;24(11):817-21 (Eng. Abstr.) **(Chi)**

METABOLISM

High K diets markedly reduce atherosclerotic cholesterol ester deposition in aortas of rats with hypercholesterolemia and hypertension. Tobian L, et al. **Am J Hypertens** 1990

Feb;3(2):133–5
Delivery of high-density lipoprotein free and esterified cholesterol to bile by the perfused monkey liver. Scobey MW, et al. **Am J Physiol** 1989 Oct;257(4 Pt 1):G644–52
Cicletanine stimulates cholesteryl ester hydrolase activities and prostacyclin production in arterial smooth muscle cells. Hajjar DP, et al. **Arch Mal Coeur** 1989 Nov;82 Spec No 4:79–84
Influence of high density lipoprotein on esterified cholesterol stores in macrophages and hepatoma cells. Bernard DW, et al. **Arteriosclerosis** 1990 Jan–Feb;10(1):135–44
Effects of chloroquine on the metabolism of phosphatidylcholine associated with low density lipoprotein in arterial smooth muscle cells. Ishikawa Y, et al. **Atherosclerosis** 1989 Nov;80(1):1–7
Total deficiency of plasma cholesteryl ester transfer protein in subjects homozygous and heterozygous for the intron 14 splicing defect. Yamashita S, et al. **Biochem Biophys Res Commun** 1990 Aug 16;170(3):1346–51
Selective uptake of cholesteryl ester from high density lipoproteins by plasma membranes of adipose tissue. Parkes JG, et al. **Biochem Cell Biol** 1990 May;68(5):870–9
Accumulation of oleate-rich cholesteryl esters by acetyl-LDL in macrophages in the presence of an acyl-CoA: cholesterol acyltransferase inhibitor (Sandoz 58–035). Shimasaki O, et al. **Biochem Int** 1990;20(2):389–96
Cholesterol esterification plays a major role in determining low-density-lipoprotein receptor activity in primary monolayer cultures of rat hepatocytes. Salter AM, et al. **Biochem J** 1989 Oct 1;263(1):255–60
Interactions of cholesterol/cholesteryl esters with dimyristoylphosphatidylcholine bilayers. Husain R, et al. **Biochem Soc Trans** 1990 Apr;18(2):325
Platelet-neutrophil-smooth muscle cell interactions: lipoxygenase-derived mono- and dihydroxy acids activate cholesteryl ester hydrolysis by the cyclic AMP dependent protein kinase cascade. Hajjar DP, et al. **Biochemistry** 1989 Oct 31;28(22):8885–91
12-[(5-iodo-4-azido-2-hydroxybenzoyl)amino]dodecanoic acid: biological recognition by cholesterol esterase and acyl-CoA:cholesterol O-acyltransferase. Kinnunen PM, et al. **Biochemistry** 1990 Feb 13;29(6):1648–54
High-density-lipoprotein-induced cholesterol efflux from arterial smooth muscle cell derived foam cells: functional relationship of the cholesteryl ester cycle and eicosanoid biosynthesis. Pomerantz KB, et al. **Biochemistry** 1990 Feb 20;29(7):1892–9
In vitro activity of probucol on cholesteryl ester transport. Chiesa G, et al. **Biochim Biophys Acta** 1990 Aug 6; 1045(3):302–4
Regulation of LTP-I secretion from human monocyte-derived macrophages by differentiation and cholesterol accumulation in vitro. Faust RA, et al. **Biochim Biophys Acta** 1990 Feb 23;1042(3):404–9
Metabolism of 7 beta-hydroxycholesterol in astrocyte primary cultures and derived spontaneously transformed cell lines: correlation between the esterification on C-3 -OH by naturally occurring fatty acids and cytotoxicity. Kupferberg A, et al. **Biochim Biophys Acta** 1990 Aug 28; 1046(1):106–9
Metabolism of cholesteryl ester lipid droplets in a J774 macrophage foam cell model. Mahlberg FH, et al. **Biochim Biophys Acta** 1990 Aug 6;1045(3):291–8
Regulation of cholesteryl ester metabolism in the hamster liver. Ochoa B, et al. **Biochim Biophys Acta** 1990 May 1; 1044(1):133–8
Fate of fatty acids taken up as cholesteryl ester by rat hepatocytes in primary culture from high-density lipoprotein. Pepin D, et al. **Biochim Biophys Acta** 1989 Nov 6;1006(1):52–8
High-density lipoprotein particle uptake and selective uptake of high-density lipoprotein-associated cholesteryl esters by J774 macrophages. Rinninger F, et al. **Biochim Biophys Acta** 1990 Apr 17;1043(3):318–26
Cholesterol esters selectively taken up from high-density lipoproteins are hydrolyzed extralysosomally. Sparrow CP, et al. **Biochim Biophys Acta** 1990 Apr 2;1043(2):203–10
Characterization of human monocytic cell line, U937, in taking up acetylated low-density lipoprotein and cholesteryl ester accumulation. A flow cytometric and HPLC study. Suzuki K, et al. **Biochim Biophys Acta** 1990 Feb 6;1042(2):210–6
Increase in selective hepatic uptake of high-density lipoprotein cholesteryl esters in the fasted rabbit. Wishart R, et al. **Biochim Biophys Acta** 1990 Jun 14;1044(3):382–4
Calcium channel blockers enhance cholesteryl ester hydrolysis and decrease total cholesterol accumulation in human aortic tissue. Etingin OR, et al. **Circ Res** 1990 Jan; 66(1):185–90
Cholesterol ester cycle in rat liver: effects of estradiol and progesterone. Martinez MJ, et al. **Exp Clin Endocrinol** 1990 Apr;95(2):181–91
Lecithin-cholesterol acyltransferase (LCAT) catalyzes transacylation of intact cholesteryl esters. Evidence for the partial reversal of the forward LCAT reaction. Sorci-Thomas M, et al. **J Biol Chem** 1990 Feb 15; 265(5):2665–70
Atherosclerotic cholesterol ester deposition is markedly reduced with a high-potassium diet. Tobian L, et al. **J Hypertens Suppl** 1989 Dec;7(6):S244–5
Differences in the metabolism of oxidatively modified low density lipoprotein and acetylated low density lipoprotein by human endothelial cells: inhibition of cholesterol esterification by oxidatively modified low density lipoprotein. Jialal I, et al. **J Lipid Res** 1989 Oct; 30(10):1561–8
Transfer of cholesteryl ester into high density lipoprotein by cholesteryl ester transfer protein: effect of HDL lipid and apoprotein content. Sparks DL, et al. **J Lipid Res** 1989 Oct;30(10):1491–8
Effects of Bay o 2752, a hypocholesterolemic agent, on intestinal taurocholate absorption and cholesterol esterification. Harnett KM, et al. **J Pharmacol Exp Ther** 1989 Nov;251(2):502–9
Cholesteryl ester analogs inhibit cholesteryl ester but not triglyceride transfer catalyzed by the plasma cholesteryl ester-triglyceride transfer protein. Busch SJ, et al. **Lipids** 1990 Apr;25(4):216–20
Selective inhibition of the uptake by bloodstream form Trypanosoma brucei brucei of serum lipoprotein-associated phospholipid and cholesteryl ester. Vandeweerd V, et al. **Mol Biochem Parasitol** 1990 Jun;41(2):197–206
Noninvasive assessment of lipid disposition in treated and untreated atherosclerotic rabbits. DeForge LE, et al. **Pharm Res** 1989 Dec;6(12):1011–6
[Pathways of intra-articular transport of cholesterol esters] Beloenko ED, et al. **Ortop Travmatol Protez** 1989 Aug; (8):24–7 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Interaction of calcium and cholesterol sulphate induces membrane destabilization and fusion: implications for the acrosome reaction. Cheetham JJ, et al. **Biochim Biophys Acta** 1990 May 24;1024(2):367–72
Increased immunogenicity of human renal carcinoma cells following treatment with cholesterol derivatives. Ludes B, et al. **Eur Urol** 1990;17(2):166–72
Cholesterol sulfate inhibits the fusion of Sendai virus to biological and model membranes. Cheetham JJ, et al. **J Biol Chem** 1990 Jul 25;265(21):12404–9

SECRETION

Fish oil decreases hepatic cholesteryl ester secretion but not apoB secretion in African green monkeys. Parks JS, et al. **J Lipid Res** 1989 Oct;30(10):1535–44

CHOLESTEROL HDL see **LIPOPROTEINS, HDL CHOLESTEROL**

CHOLESTEROL-7-HYDROXYLASE see under **STEROID HYDROXYLASES**

CHOLESTEROL INHIBITORS see **ANTICHOLESTEREMIC AGENTS**

CHOLESTEROL LDL see **LIPOPROTEINS, LDL CHOLESTEROL**

CHOLESTEROL OXIDASE see under **3-HYDROXYSTEROID DEHYDROGENASES**

CHOLESTEROL SIDE-CHAIN CLEAVAGE ENZYME see **CHOLESTEROL DESMOLASE**

CHOLESTEROL VLDL see **LIPOPROTEINS, VLDL CHOLESTEROL**

CHOLESTYRAMINE

Bile acid sequestrants. Ast M, et al. **J Clin Pharmacol** 1990 Feb;30(2):99–106 (40 ref.)
The purity of cholestyramine resin [letter] Goldstein MR. **JAMA** 1989 Dec 8;262(22):3127–8

ADMINISTRATION & DOSAGE

Comparison between low-dose simvastatin and cholestyramine in moderately severe hypercholesterolemia. Deslypere JP. **Acta Cardiol** 1989;44(5):379–88
Sensory/mixability preference evaluation of cholestyramine powder formulations. Shaefer MS, et al. **DICP** 1990 May; 24(5):472–4
[Effects of low-dose cholestyramine in long-term therapy of hypercholesterolemia] Cattin L, et al. **G Clin Med** 1990 Feb;71(2):99–104 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

The effect of cholestyramine on fecal excretion of ingested radioiodinated lipids. Danhof IE. **Am J Clin Nutr** 1966 May;18(5):343–9
Right upper quadrant calcification in a patient receiving long-term cholestyramine therapy for primary biliary cirrhosis. Wells RF, et al. **Am J Dig Dis** 1968 Jan; 13(1):86–94

PHARMACOKINETICS

Pharmacokinetics and pharmacodynamics of pravastatin alone and with cholestyramine in hypercholesterolemia. Pan HY, et al. **Clin Pharmacol Ther** 1990 Aug;48(2):201–7
[Interaction of cholestyramine and chloroquine] Gendrel D, et al. **Arch Fr Pediatr** 1990 May;47(5):387–8 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Cholestyramine resin ameliorates chronic aminonucleoside nephrosis. Diamond JR, et al. **Am J Clin Nutr** 1990 Apr; 51(4):606–11
Bile acids do not mediate the hyperdynamic circulation in portal hypertensive rats. Genecin P, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):G21–5
Reduced cholecystokinin mediates the inhibition of pancreatic growth induced by bile salts. Gomez G, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):G86–92
Effects of acipimox and cholestyramine on serum lipoproteins, non-cholesterol sterols and cholesterol absorption and elimination. Gylling H, et al. **Eur J Clin Pharmacol** 1989;37(2):111–5
Regulation of cholesterol 7 alpha-hydroxylase in the liver. Purification of cholesterol 7 alpha-hydroxylase and the immunochemical evidence for the induction of cholesterol 7 alpha-hydroxylase by cholestyramine and circadian rhythm. Chiang JY, et al. **J Biol Chem** 1990 Mar 5; 265(7):3889–97
Hepatic P-450 cholesterol 7 alpha-hydroxylase. Regulation in vivo at the protein and mRNA level in response to mevalonate, diurnal rhythm, and bile acid feedback. Sundseth SS, et al. **J Biol Chem** 1990 Sep 5;265(25):15090–5
Effects of cholestyramine feeding on tissue lipase activities and plasma fatty acids in the pregnant rat. Haave NC, et al. **J Dev Physiol** 1989 Jul;12(1):11–4
Hepatic low density lipoprotein receptors, HMG-CoA reductase, and plasma lipids and apolipoproteins in high- and low-responding rhesus monkeys: effect of cholestyramine treatment. Dory L, et al. **J Lipid Res** 1990 Feb;31(2):279–87
Effect of cholestyramine in early weaning on later response to serum and fecal steroid levels and cholesterol 7 alpha-hydroxylase activity to high-cholesterol diet in ExHC rats. Lu YF, et al. **J Nutr Sci Vitaminol (Tokyo)** 1990 Apr;36(2):131–40
Effects of cholestyramine and squalene feeding on hepatic and serum plant sterols in the rat. Strandberg TE, et al. **Lipids** 1989 Aug;24(8):705–8
Effect of cholestyramine on activity of gentamicin in vitro [letter] Coltman D, et al. **Pediatrics** 1990 Mar;85(3):390–1
[Treatment of essential hypercholesterolemia by normolipidemic drugs in children] Boucherle A, et al. **Pediatrie** 1989;44(8):633–6 (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Clinical benefits and cost-effectiveness of lowering serum cholesterol levels: the case of simvastatin and cholestyramine in The Netherlands. Martens LL, et al. **Am J Cardiol** 1990 Mar 20;65(12):27F–32F
Cost effectiveness of cholesterol-lowering therapy in The Netherlands. Simvastatin versus cholestyramine. Martens LL, et al. **Am J Med** 1989 Oct 16;87(4A):54S–58S
Effects of simvastatin and cholestyramine in familial and nonfamilial hypercholesterolemia. Multicenter Group I. Stein E, et al. **Arch Intern Med** 1990 Feb;150(2):341–5
Comparison of hypocholesterolemic activities of the bile acid sequestrants cholestyramine and colestipol hydrochloride in cholesterol fed SEA quail. Day CE. **Artery** 1990; 17(5):281–8
Efficacy of a combined bezafibrate retard-colestyramine treatment in patients with hypercholesterolemia. Fischer S, et al. **Arzneimittelforschung** 1990 Apr;40(4):469–72
Suppression of established atherosclerosis and xanthomas in mature WHHL rabbits by keeping their serum cholesterol levels extremely low. Effect of pravastatin sodium in combination with cholestyramine. Shiomi M, et al. **Atherosclerosis** 1990 Jul;83(1):69–80
Serum level of 7 alpha-hydroxycholesterol in hypercholesterolemic patients treated with cholestyramine. Bascoul J, et al. **Biochim Biophys Acta** 1990 Jun 14; 1044(3):357–60
Acipimox in combination with low dose cholestyramine for the treatment of type II hyperlipidaemia. Series JJ, et al. **Br J Clin Pharmacol** 1990 Jul;30(1):49–54
Amiodarone overdose and its management. Goddard CJ, et al. **Br J Clin Pract** 1989 May;43(5):184–6
Efficacy and safety of simvastatin (alone or in association with cholestyramine). A 1-year study in 66 patients with type II hyperlipoproteinaemia. Emmerich J, et al. **Eur Heart J** 1990 Feb;11(2):149–55
Activated charcoal in the treatment of hypercholesterolaemia: dose-response relationships and comparison with cholestyramine. Neuvonen PJ, et al. **Eur J Clin Pharmacol** 1989;37(3):225–30
Increased turnover of very low density lipoprotein triglyceride during treatment with cholestyramine in familial hypercholesterolaemia. Angelin B, et al. **J Intern Med** 1990 Mar;227(3):201–6
Treatment of familial hypercholesterolaemia: a controlled trial of the effects of pravastatin or cholestyramine therapy on lipoprotein and apolipoprotein levels [see comments] Wiklund O, et al. **J Intern Med** 1990 Sep;228(3):241–7 Comment in: J Intern Med 1990 Sep;228(3):201–5.
Simvastatin and cholestyramine in the long-term treatment of hypercholesterolaemia. Ytre-Arne K, et al. **J Intern Med** 1989 Nov;226(5):285–90
Contrasting effects of lovastatin and cholestyramine on low-density lipoprotein cholesterol and 24-hour urinary mevalonate excretion in patients with heterozygous familial

hypercholesterolemia. Pappu AS, et al. **J Lab Clin Med** 1989 Nov;114(5):554–62

Bowel cocktail and severe persistent diarrhea [letter] Tedeschi A, et al. **J Pediatr Gastroenterol Nutr** 1990 Feb; 10(2):270–1

Comparison of simvastatin and cholestyramine in the treatment of primary hypercholesterolaemia. O'Brien RC, et al. **Med J Aust** 1990 May 7;152(9):480–3

Effect of pravastatin, an HMG CoA reductase inhibitor, and cholestyramine, a bile acid sequestrant, on lipoprotein particles defined by their apolipoprotein composition. Bard JM, et al. **Metabolism** 1990 Mar;39(3):269–73

[Cholestyramine adsorbs Escherichia coli and Vibrio cholerae toxins by way of ion exchange mechanism] Brouillard MY, et al. **Ann Gastroenterol Hepatol (Paris)** 1990 Jan–Feb;26(1):27–30 (Eng. Abstr.) **(Fre)**

[HMG–CoA reductase inhibitors in familial hypercholesterolemia. Therapy with simvastatin alone and in combination with cholestyramine in low dosage; a report of 2 years experiences] Geisel J, et al. **Fortschr Med** 1990 Feb 10;108(4):71–2, 75–6 (Eng. Abstr.) **(Ger)**

TOXICITY

Potentiation of azaserine by cholestyramine in the rat. Morgan RG, et al. **Int J Exp Pathol** 1990 Aug;71(4):485–91

CHOLIC ACIDS

Crystal and molecular structures of the inclusion compounds of cholic acid with methanol, ethanol and 1-propanol. Jones EL, et al. **Acta Crystallogr B** 1990 Jun 1;46 (Pt 3):399–405

Formation of delta 2- and delta 3-cholenoic acids from bile acid 3-sulfates by a human intestinal Fusobacterium strain. Robben J, et al. **Appl Environ Microbiol** 1989 Nov; 55(11):2954–9

Asymmetric extraction of membrane lipids by CHAPS. Banerjee P, et al. **Biochim Biophys Acta** 1990 Jun 14; 1044(3):305–14

Hypertension does not stimulate the development of hypercholesterolemia or fatty liver induced by a high cholesterol/cholate diet in rats. Hayashi H, et al. **Chem Pharm Bull (Tokyo)** 1989 Jul;37(7):1844–8

CHAPS solubilization of a G-protein sensitive 5-HT1A receptor from bovine hippocampus. Kline T, et al. **Life Sci** 1989;45(21):1997–2005

ANALYSIS

By-products in the analysis of beta-muricholic acid in biological samples as methyl ester triacetate. Janssen G, et al. **Steroids** 1989 Jun;53(6):677–93

Quantitative determination of residual sodium-cholate in tri(N-butyl)phosphate/sodium-cholate treated factor VIII-preparations. Dengler T, et al. **Vox Sang** 1989; 57(3):161–3

Large-scale gel filtration chromatography for the production of a solvent/detergent-treated high-purity factor VIII concentrate. Dengler T, et al. **Vox Sang** 1990;58(4):257–63

[Determination of bile acids in bear gall drainage by thin layer chromatographic scanning] Wang FS, et al. **Yao Hsueh Hsueh Pao** 1989;24(5):397–400 (Eng. Abstr.) **(Chi)**

[The bile cholate-cholesterol coefficient for assessing the causes of a protracted convalescence in patients with viral hepatitis] Miroshnichenko VP, et al. **Vrach Delo** 1989 Dec; (12):95–8 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Oxidation of 5 beta-cholestane-3 alpha,7 alpha, 12 alpha-triol into 3 alpha,7 alpha,12 alpha-trihydroxy-5 beta-cholestanoic acid by cytochrome P-450(26) from rabbit liver mitochondria. Dahlbäck H, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):391–5

BLOOD

Reductive biotransformation of 3-oxo bile acids in human blood. Goto J, et al. **Chem Pharm Bull (Tokyo)** 1989 Jul; 37(7):1960–2

CHEMICAL SYNTHESIS

Identification of 3 alpha,4 beta,7 alpha-trihydroxy-5 beta-cholanoic acid in human bile: reflection of a new pathway in bile acid metabolism in humans. Dumaswala R, et al. **J Lipid Res** 1989 Jun;30(6):847–56

IMMUNOLOGY

Preparation and comparative properties of antisera against glyco-3 beta,12 alpha-dihydroxy-5-cholen-24-oic acid linked to bovine serum albumin at the C-3, C-15 alpha, and C-24 positions. Ikegawa S, et al. **Chem Pharm Bull (Tokyo)** 1989 Aug;37(8):2147–52

METABOLISM

Alterations of bile acid and bumetanide uptake during culturing of rat hepatocytes. Föllmann W, et al. **Am J Physiol** 1990 Apr;258(4 Pt 1):C700–12

2-Fluoro-beta-alanine, a previously unrecognized substrate for bile acid coenzyme A:amino acid:N-acyltransferase from human liver. Johnson MR, et al. **Biochem Pharmacol** 1990 Sep 15;40(6):1241–6

Identification of cholate as a shared substrate for the unidirectional efflux systems for methotrexate in L1210 mouse cells. Henderson GB, et al. **Biochim Biophys Acta** 1990 Jan 23;1051(1):60–70

Oxidation and reduction of bile acid precursors by rat hepatic 3 alpha-hydroxysteroid dehydrogenase and inhibition by bile acids and indomethacin. Takikawa H, et al. **Biochim Biophys Acta** 1990 Apr 2;1043(2):153–6

Metabolism and effects on biliary lipid secretion of murocholic acid in the hamster. Parquet M, et al. **J Hepatol** 1990 Jul;11(1):111–9

Deficient oxidation of trihydroxycoprostanic acid in liver homogenates from patients with peroxisomal diseases. Casteels M, et al. **J Inherited Metab Dis** 1989;12(4):415–22

Mechanism of intestinal formation of deoxycholic acid from cholic acid in humans: evidence for a 3-oxo-delta 4-steroid intermediate. Björkhem I, et al. **J Lipid Res** 1989 Jul; 30(7):1033–9

[Bacteriocholia and cholic acid level in the bile in cholelithiasis] Bekbergenov BM, et al. **Antibiot Khimioter** 1990 Jan;35(1):37–40 (Eng. Abstr.) **(Rus)**

[Lithogenic properties of bile in cholelithiasis] Ivanchenkova RA, et al. **Klin Med (Mosk)** 1989 Oct;67(10):92–8 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Cholate uptake in basolateral rat liver plasma membrane vesicles and in liposomes. Caflisch C, et al. **Biochim Biophys Acta** 1990 Jan 15;1021(1):70–6

Biological properties of the 2-fluoro-beta-alanine conjugates of cholic acid and chenodeoxycholic acid in the isolated perfused rat liver. Sweeny DJ, et al. **Biochim Biophys Acta** 1990 Aug 13;1054(1):21–5

Transport, metabolism, and effect of chronic feeding of cholylsarcosine, a conjugated bile acid resistant to deconjugation and dehydroxylation. Schmassmann A, et al. **Gastroenterology** 1990 Jan;98(1):163–74

PHARMACOLOGY

Amiloride and taurine inhibit cholate-induced HCO3(-)-rich choleresis in perfused rat livers. Anwer MS, et al. **Am J Physiol** 1990 Sep;259(3 Pt 1):G453–61

Detergents, dimeric G beta gamma, and eicosanoid pathways to muscarinic atrial K+ channels. Yatani A, et al. **Am J Physiol** 1990 May;258(5 Pt 2):H1507–14

Detergent extraction of the human alpha-beta interferon receptor: a soluble form capable of binding interferon. Eid P, et al. **Biochim Biophys Acta** 1990 Apr 23;1034(1):114–7

Effects of calcium and bile acid feeding on colon tumors in the rat. McSherry CK, et al. **Cancer Res** 1989 Nov 1; 49(21):6039–43

Transport, metabolism, and effect of chronic feeding of cholylsarcosine, a conjugated bile acid resistant to deconjugation and dehydroxylation. Schmassmann A, et al. **Gastroenterology** 1990 Jan;98(1):163–74

Cholic acid derivatives against HIV replication [letter; comment] Lloyd G, et al. **J Acquir Immune Defic Syndr** 1990;3(3):290 Comment on: J Acquir Immune Defic Syndr 1989;2(3):264–71.

Multiple copies of a bile acid-inducible gene in Eubacterium sp. strain VPI 12708. Gopal-Srivastava R, et al. **J Bacteriol** 1990 Aug;172(8):4420–6

Sodium cholate-induced changes in the conformation and activity of rat pancreatic cholesterol esterase. Jacobson PW, et al. **J Biol Chem** 1990 Jan 5;265(1):515–21

Effect of chronic ursocholic acid administration on bile lipid composition and bile acid pool size in gallstone patients. Lanzini A, et al. **Scand J Gastroenterol** 1990 Jul;25(7):711–9

Inhibition of sphincter of Oddi motility in Australian possum by cholic acid. Calabuig R, et al. **Surgery** 1989 Nov; 106(5):872–8

THERAPEUTIC USE

Dissolution and retrieval of retained common duct stones. Patterson HC, et al. **Am Surg** 1975 Jan;41(1):48–53

TOXICITY

Is cholic acid responsible for embryo-toxicity of the post-receptive uterine environment? Psychoyos A, et al. **Hum Reprod** 1989 Oct;4(7):832–4

CHOLINE

A simple method to determine released acetylcholine in the presence of choline. Cooper JR. **Life Sci** 1989; 45(21):2041–2

Polyclonal anti-propylbenzilylcholine mustard antibodies selectively recognize labeled muscarinic receptors from rabbit brain. Strang PF, et al. **Neurosci Lett** 1989 Sep 25; 104(1–2):201–8

ADMINISTRATION & DOSAGE

Dietary choline: a limiting factor for the synthesis of acetylcholine by the brain. Wecker L. **Adv Neurol** 1990; 51:139–45 (45 ref.)

Choline may be an essential nutrient in malnourished patients with cirrhosis. Chawla RK, et al. **Gastroenterology** 1989 Dec;97(6):1514–20

Genetics and diet: synergism in hepatocarcinogenesis in rats. Melhem MF, et al. **J Am Coll Nutr** 1990 Apr;9(2):168–73

Effects of a choline-deficient ethionine-supplemented diet on phospholipase C activity in mouse pancreatic acinar cell membranes and in electropermeabilized mouse pancreatic acini. Leli U, et al. **J Pharmacol Exp Ther** 1990 May;253(2):847–50

ANALOGS & DERIVATIVES

Structures of acetylcholine picrate and methoxycarbonylcholine picrate hemihydrate. Frydenvang K, et al. **Acta Crystallogr C** 1988 May 15;44 (Pt 5):841–5

The structure of acetylarsenocholine bromide. Kostick A, et al. **Acta Crystallogr C** 1989 Sep 15;45 (Pt 9):1306–9

Effects of citicholine and of the combination citicholine + piracetam on the memory (experiments on mice). Mosharrof AH, et al. **Acta Physiol Pharmacol Bulg** 1990; 16(1):25–31

Effect of cytidine diphosphate choline on ultraviolet-induced brain edema. Cervós-Navarro J, et al. **Adv Neurol** 1990; 52:421–9

Phosphocholine-containing antigens of Brugia malayi nonspecifically suppress lymphocyte function. Lal RB, et al. **Am J Trop Med Hyg** 1990 Jan;42(1):56–64

Measurement of choline and choline metabolite concentrations using high-pressure liquid chromatography and gas chromatography-mass spectrometry. Pomfret EA, et al. **Anal Biochem** 1989 Jul;180(1):85–90

Study of the effects of oral administration of CDP-choline on open-field behaviour under conditions of chronic hypoxia. Hamdorf G, et al. **Arzneimittelforschung** 1990 May;40(5):519–22

A rat brain cytosolic N-methyltransferase(s) activity converting phosphorylethanolamine into phosphorylcholine. Andriamampandry C, et al. **Biochem Biophys Res Commun** 1990 Sep 14;171(2):758–63

Interaction between rat serum phosphorylcholine binding protein and platelet activating factor. Randell E, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):444–9

Effects of various lysosphingolipids on cell growth, morphology and lipid composition in three neuroblastoma cell lines. Sugiyama E, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):673–9

Studies on the activity of phospholipase D with alkyl phosphorylcholines. Ohno Y, et al. **Biochem Cell Biol** 1990 Jan;68(1):376–9

Isolation and enzymic assay of choline and phosphocholine present in cell extracts with picomole sensitivity. Murray JJ, et al. **Biochem J** 1990 Aug 15;270(1):63–8

Delayed treatment with nerve growth factor (NGF) reverses ECMA-induced cholinergic lesions in rat brain reaggregate cultures. Atterwill CK, et al. **Biochem Pharmacol** 1990 Jun 15;39(12):2073–6

Interactions of myelin basic protein with mixed dodecylphosphocholine/palmitoyllysophosphatidic acid micelles. Mendz GL, et al. **Biochemistry** 1990 Mar 6; 29(9):2304–11

Transdermal delivery of theophylline to premature infants using a hydrogel disc system. Cartwright RG, et al. **Br J Clin Pharmacol** 1990 May;29(5):533–9

Cholinergic but not GABAergic neuronal markers are decreased in primary neuronal cultures treated with choline mustard. Baskey JC, et al. **Brain Res** 1990 Jun 11; 519(1–2):209–16

Hemicholinium-3 prevents the working memory impairments and the cholinergic hypofunction induced by ethylcholine aziridinium ion (AF64A). Chrobak JJ, et al. **Brain Res** 1989 Dec 18;504(2):269–75

Autoradiographic visualization of muscarinic receptors on rat paratracheal neurons in dissociated cell culture. James S, et al. **Brain Res** 1990 Apr 9;513(1):74–80

AF64A depletes hippocampal high-affinity choline uptake but does not alter the density of alpha-bungarotoxin binding sites or modify the effect of exogenous choline. Morley BJ, et al. **Brain Res** 1990 Jun 11;519(1–2):1–5

AF64 depletes hypothalamic high-affinity choline uptake and disrupts the circadian rhythm of locomotor activity without altering the density of nicotinic acetylcholine receptors. Morley BJ, et al. **Brain Res** 1989 Dec 18;504(2):238–46

Loss of striatal angiotensin-converting enzyme following intrastriatal AF64A is not related to destruction of cholinergic interneurons. Walters DE, et al. **Brain Res** 1990 Jan 15;507(1):23–7

Sensitivity to dicholines of membranes from vertebrate and invertebrate muscles. Lorković H. **Comp Biochem Physiol [C]** 1989;94(1):285–8

Effects of AF64A on cholinergic neurotransmission in the sixth abdominal ganglion of the cockroach. Morio Y, et al. **Comp Biochem Physiol [C]** 1989;94(1):121–7

A comparison of choline magnesium trisalicylate and acetylsalicylic acid in patients with rheumatoid arthritis. Le Gallez P, et al. **Curr Med Res Opin** 1990;12(2):71–5

Influence of CDP-choline administration on the aortic wall lesions in dietically hypercholesterolaemic rabbits: a morphometric evaluation. Weber G, et al. **Drugs Exp Clin Res** 1989;15(6–7):321–3

Choline magnesium trisalicylate in patients with aspirin-induced asthma. Szczeklik A, et al. **Eur Respir J** 1990 May;3(5):535–9

Phosphorylcholine and phosphorylethanolamine in human and rhesus monkey lenses. Jernigan HM Jr, et al. **Exp Eye Res** 1989 Nov;49(5):901–9

Effects of chronic in vivo replacement of choline with a false cholinergic precursor. Jenden DJ, et al. **Experientia Suppl** 1989;57:229–35

Changes in brain biogenic monoamines induced by the nootropic drugs adafenoxate and meclofenoxate and by citicholine (experiments on rats). Petkov VD, et al. **Gen Pharmacol** 1990;21(1):71–5

A thymus-independent (type 1) phosphorylcholine antigen isolated from Trichinella spiralis protects mice against pneumococcal infection. Lim PL, et al. **Immunology** 1990 Mar;69(3):443–8

Biochemical consequences of phosphorylcholines low pK with special relevance to human semen: passive pH regulation. Burt CT, et al. **Int J Biochem** 1990;22(2):115–9 (31 ref.)

N-terminal half of a mitochondrial presequence peptide takes a helical conformation when bound to dodecylphosphocholine micelles: a proton nuclear magnetic resonance study. Endo T, et al. **J Biochem (Tokyo)** 1989 Sep;106(3):396–400

Induction of phosphatidylcholine biosynthesis via CDPcholine pathway in lung and liver of rats following intratracheal administration of DDT and endosulfan. Narayan S, et al. **J Biochem Toxicol** 1989 Winter; 4(4):205–10

Quantitation of hexadecylphosphocholine by high-performance thin-layer chromatography with densitometry. Rustenbeck I, et al. **J Chromatogr** 1990 Jan 26;525(1):85–91

Sequence and fine specificity analysis of primary 511 anti-phosphorylcholine antibodies. Feeney AJ, et al. **J Immunol** 1989 Dec 15;143(12):4061–8

Clonal diversity, somatic mutation, and immune memory to phosphocholine-keyhole limpet hemocyanin. Stenzel-Poore MP, et al. **J Immunol** 1989 Dec 15; 143(12):4123–33

Cholinergic deficit induced by ethylcholine aziridinium (AF64A) transiently affects somatostatin and neuropeptide Y levels in rat brain. Hörtnagl H, et al. **J Neurochem** 1990 May;54(5):1608–13

Location in muscarinic acetylcholine receptors of sites for [3H]propylbenzilylcholine mustard binding and for phosphorylation with protein kinase C. Uchiyama H, et al. **J Neurochem** 1990 Jun;54(6):1870–81

Impact of C-reactive protein (CRP) on surfactant function. Li JJ, et al. **J Trauma** 1989 Dec;29(12):1690–7

Beneficial effects of FKS-508 (AF102B), a selective M1 agonist, on the impaired working memory in AF64A-treated rats. Nakahara N, et al. **Jpn J Pharmacol** 1989 Dec;51(4):539–47

Characterization of Trichinella spiralis antigens sharing an immunodominant, carbohydrate-associated determinant distinct from phosphorylcholine. Denkers EY, et al. **Mol Biochem Parasitol** 1990 Jun;41(2):241–9

Fine specificity and heavy chain V gene usage of antibodies to the phosphorylcholine hapten. Lötscher M, et al. **Mol Immunol** 1990 Apr;27(4):369–78

Binding and immunological properties of a synthetic peptide corresponding to the phosphorylcholine-binding region of C-reactive protein. Swanson SJ, et al. **Mol Immunol** 1990 Jul;27(7):679–87

Tacrine or arecoline mediates reversal of anoxia- or AF64A-induced behavioural disorders in the developing rat. Speiser Z, et al. **Neuropharmacology** 1989 Dec; 28(12):1325–32

Ethylcholine aziridinium ion depletes acetylcholine and causes muscarinic receptor supersensitivity in rat retina. Moroi-Fetters SE, et al. **Neurosci Lett** 1990 Feb 16; 109(3):304–8

Atrophy of cholinergic neurons within the rat nucleus basalis magnocellularis following intracortical AF64A infusion. Mouton PR, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):52–7

31P NMR studies of cultured human tumor cells. Influence of pH on phospholipid metabolite levels and the detection of cytidine 5'-diphosphate choline. Kuesel AC, et al. **NMR Biomed** 1990 Apr;3(2):78–89

Blockade of ACh receptors by PrBCM causes deficits in shuttle avoidance performance. Kato S, et al. **Pharmacol Biochem Behav** 1989 Aug;33(4):895–8

Fine specificity and isotype expression of anti-PC antibodies in BALB/c, MRL/Mp-lpr/lpr, and -(+)/+ mice at different ages. Gerber VE, et al. **Scand J Immunol** 1990 Mar;31(3):367–74

High anti-phosphorylcholine antibody levels and mortality associated with pneumonia. Nordenstam G, et al. **Scand J Infect Dis** 1990;22(2):187–95

Phosphocholine epitopes on helminth and protozoal parasites and their presence in the circulation of infected human patients. Lal RB, et al. **Trans R Soc Trop Med Hyg** 1989 Sep-Oct;83(5):652–5

Elevated PC responsive B cells and anti-PC antibody production in transgenic mice harboring anti-PC immunoglobulin genes. Pinkert CA, et al. **Vet Immunol Immunopathol** 1989 Dec;23(3–4):321–32

[The effects on the learning process of 4 pyrrolidine derivatives and of cyticholine (experiments on rats in a water maze)] Getova D, et al. **Eksp Med Morfol** 1990; 29(1):39–44 (Eng. Abstr.) **(Bul)**

[Effect of CDP-choline on senile mental deterioration. Multicenter experience on 237 cases] Serra F, et al. **Minerva Med** 1990 Jun;81(6):465–70 (Eng. Abstr.) **(Ita)**

[Chlorozyl, a new Soviet M-cholinolytic agent, and its effectiveness in duodenal ulcer] Tsimmerman IaS, et al. **Sov Med** 1990;(5):39–43 (Eng. Abstr.) **(Rus)**

ANALYSIS

Measurement of choline and choline metabolite concentrations using high-pressure liquid chromatography and gas chromatography-mass spectrometry. Pomfret EA, et al. **Anal Biochem** 1989 Jul;180(1):85–90

Isolation and enzymic assay of choline and phosphocholine present in cell extracts with picomole sensitivity. Murray JJ, et al. **Biochem J** 1990 Aug 15;270(1):63–8

BLOOD

Choline levels in erythrocytes and plasma: a study of species variation. Miller BL, et al. **Biol Psychiatry** 1989 Nov; 26(7):741–3

Changes in red blood cell choline and choline-bound lipids with oral lithium. Miller BL, et al. **Experientia** 1990 May 15;46(5):454–6

CEREBROSPINAL FLUID

CSF choline and acetylcholinesterase in early-onset vs. late-onset Alzheimer's disease patients. Kumar V, et al. **Acta Neurol Scand** 1989 Nov;80(5):461–6

Cerebrospinal fluid choline levels are decreased in Parkinson's disease. Manyam BV, et al. **Ann Neurol** 1990 Jun;27(6):683–5

Lumbar cerebrospinal fluid choline in healthy aging and in Down's syndrome. Schapiro MB, et al. **Arch Neurol** 1990 Sep;47(9):977–80

Changes of acetylcholine and choline concentrations in cerebrospinal fluids of normal subjects and patients with dementia of Alzheimer-type. Ikeda Y, et al. **J Neural Transm Suppl** 1990;30:25–32

METABOLISM

Effects of nicotinamide on choline and acetylcholine levels in rats. Jenden DJ, et al. **Adv Neurol** 1990;51:131–8

Choline metabolism in cholinergic neurons: implications for the pathogenesis of neurodegenerative diseases. Wurtman RJ, et al. **Adv Neurol** 1990;51:117–25 (27 ref.)

Choline transport by lung epithelium. Fisher AB, et al. **Am J Respir Cell Mol Biol** 1989 Dec;1(6):455–62

Reversal of scopolamine-induced alterations of choline transport across the blood-brain barrier by the nootropics piracetam and pramiracetam. Brust P. **Arzneimittelforschung** 1989 Oct;39(10):1220–2

Conversion of ethanolamine, monomethylethanolamine and dimethylethanolamine to choline-containing compounds by neurons in culture and by the rat brain. Andriamampandry C, et al. **Biochem J** 1989 Dec 1; 264(2):555–62

Conversion of choline to betaine in young rats: a 1H n.m.r. spectroscopic study. Rafter JE, et al. **Biochem Soc Trans** 1989 Dec;17(6):1130–1

Cholinergic but not GABAergic neuronal markers are decreased in primary neuronal cultures treated with choline mustard. Baskey JC, et al. **Brain Res** 1990 Jun 11; 519(1–2):209–16

AF64 depletes hypothalamic high-affinity choline uptake and disrupts the circadian rhythm of locomotor activity without altering the density of nicotinic acetylcholine receptors. Morley BJ, et al. **Brain Res** 1989 Dec 18;504(2):238–46

Autoradiographic distribution of [3H]hemicholinium-3 binding sites in human brain. Pascual J, et al. **Brain Res** 1989 Dec 29;505(2):306–10

Cholinergic and noradrenergic toxicity of intraventricular aluminum chloride in the rat hippocampus. Zubenko GS, et al. **Brain Res** 1989 Oct 2;498(2):381–4

Effect of prenatal exposure to phencyclidine on the postnatal development of the cholinergic system in the rat. Howard SG, et al. **Dev Neurosci** 1990;12(3):204–9

Effect of cetiedil analogs on acetylcholine and choline fluxes in synaptosomes and vesicles. Gaudry-Talarmain YM, et al. **Eur J Pharmacol** 1989 Aug 3;166(3):427–33

Effects of cholinergic drugs on extracellular levels of acetylcholine and choline in rat cortex, hippocampus and striatum studied by brain dialysis. Toide K, et al. **Eur J Pharmacol** 1989 Dec 7;173(2–3):133–41

Effects of chronic in vivo replacement of choline with a false cholinergic precursor. Jenden DJ, et al. **Experientia Suppl** 1989;57:229–35

Cloning and expression of gene fragments encoding the choline-binding domain of pneumococcal murein hydrolases. Sánchez-Puelles JM, et al. **Gene** 1990 Apr 30; 89(1):69–75

Phospholipid biosynthesis in Candida albicans: regulation by the precursors inositol and choline. Klig LS, et al. **J Bacteriol** 1990 Aug;172(8):4407–14

Protein-bound choline is released from the pneumococcal autolytic enzyme during adsorption of the enzyme to cell wall particles. Markiewicz Z, et al. **J Bacteriol** 1990 May; 172(5):2241–4

Primary structure of the yeast choline transport gene and regulation of its expression. Nikawa J, et al. **J Biol Chem** 1990 Sep 15;265(26):15996–6003

Compartment-specific changes in the density of choline and dopamine uptake sites and muscarinic and dopaminergic receptors during the development of the baboon striatum: a quantitative receptor autoradiographic study. Lowenstein PR, et al. **J Comp Neurol** 1989 Oct 15;288(3):428–46

In vitro degradation of choline from selected feedstuffs and choline supplements. Sharma BK, et al. **J Dairy Sci** 1989 Oct;72(10):2772–6

A radiotracer for mapping cholinergic neurons of the brain. Jung YW, et al. **J Med Chem** 1990 Aug;33(8):2065–8

Expression of substrate specificity in facilitated transport systems. Krupka RM. **J Membr Biol** 1990 Jul;117(1):69–78 (36 ref.)

Regulation of high affinity choline uptake. Breer H, et al. **J Neurobiol** 1990 Mar;21(2):269–75

Choline uptake by cerebral capillary endothelial cells in culture. Estrada C, et al. **J Neurochem** 1990 May; 54(5):1467–73

Neurotransmitter changes in guinea-pig brain regions following soman intoxication. Fosbraey P, et al. **J Neurochem** 1990 Jan;54(1):72–9

Small rises in plasma choline reverse the negative arteriovenous difference of brain choline. Klein J, et al. **J Neurochem** 1990 Oct;55(4):1231–6

Molecular species of choline and ethanolamine phospholipids in rat cerebellum during development. Leray C, et al. **J Neurochem** 1990 May;54(5):1677–81

Exogenous nerve growth factor increases the activity of high-affinity choline uptake and choline acetyltransferase in brain of Fisher 344 male rats. Williams LR, et al. **J Neurochem** 1990 Sep;55(3):1042–9

Phospholipid-derived choline intermediates and acetylcholine synthesis in mouse brain synaptosomes. Yavin E, et al. **J Neurosci Res** 1989 Oct;24(2):241–6

Effect of dietary blackcurrant seed oil on mouse macrophage subclasses of choline and ethanolamine glycerophospholipids. Chapkin RS, et al. **J Nutr** 1990 Aug; 120(8):825–30

Alpha-adrenoceptor mediated facilitation of acetylcholine release in the rat perfused heart. Bognar IT, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):702–10

Effect of dimethylaminoethanol, an inhibitor of betaine production, on the disposition of choline in the rat kidney. Lohr J, et al. **J Pharmacol Exp Ther** 1990 Jan;252(1):154–8

Effects of benzoyltropine and tropacocaine on several cholinergic processes in the rat brain. Meyer EM, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):584–90

High-affinity choline transporter in synaptosmal membranes. Breer H, et al. **J Protein Chem** 1989 Jun;8(3):372–4

From the National Institutes of Health. Raub W. **JAMA** 1990 Jul 4;264(1):16

In vivo 13C nuclear magnetic resonance investigations of choline metabolism in rabbit brain. Tunggal B, et al. **Magn Reson Med** 1990 Jan;13(1):90–102

Organic cations substituted for sodium are toxic to cultured rat glioma cells. Mokrasch LC. **Mol Cell Biochem** 1990 Jan 18;92(1):85–9

Acetylcholine release from striatal slices of young adult and aged Fischer 344 rats. Weiler MH. **Neurobiol Aging** 1990 Jul-Aug;11(4):401–7

The regulation of high-affinity choline uptake in vitro in rat cortical and hippocampal synaptosomes by beta-carbolines administered in vivo. Miller JA, et al. **Neurosci Lett** 1990 Jul 13;114(3):351–5

Synaptosomal uptake of choline and of gamma-aminobutyric acid: effects of ethanol and of dimethylsulfoxide. North PE, et al. **Neurotoxicology** 1989 Fall;10(3):569–76

Effects of caerulein and cholecystokinin-octapeptide on acetylcholine and choline contents in the brains of intact and vagotomized mice. Miyate H. **Pharmacol Biochem Behav** 1990 Jan;35(1):143–9

Regulatory changes in presynaptic cholinergic function assessed in rapid autopsy material from patients with Alzheimer disease: implications for etiology and therapy. Slotkin TA, et al. **Proc Natl Acad Sci U S A** 1990 Apr; 87(7):2452–5

Effects of repeated injection of sublethal doses of soman on behavior and on brain acetylcholine and choline concentrations in the rat. Shih TM, et al. **Psychopharmacology (Berl)** 1990;101(4):489–96

Effects of middle cerebral artery occlusion on cerebral cortex choline and acetylcholine in rats. Scremin OU, et al. **Stroke** 1989 Nov;20(11):1524–30

PHARMACOKINETICS

Small pial vessels, but not choroid plexus, exhibit specific biochemical correlates of functional cholinergic innervation. Hamel E, et al. **Brain Res** 1990 May 21; 516(2):301–9

Choline uptake is increased by Ca++ and liposomes+ Ca++ in ascites tumor cells. Ritter C, et al. **Cancer Biochem Biophys** 1989 Oct;10(4):329–35

Uptake and release of choline in cultures of human glioma cells. Walum E. **Cell Mol Neurobiol** 1981 Dec;1(4):389–99

Corticosteroid action on choroid plexus: reduction in Na+-K+-ATPase activity, choline transport capacity, and rate of CSF formation. Lindvall-Axelsson M, et al. **Exp Brain Res** 1989;77(3):605–10

Electrophysiological measurements of volume changes in leech neuropile glial cells. Ballanyi K, et al. **GLIA** 1990; 3(3):151–8

Dysfunction of choline transport system through blood-brain barrier in stroke-prone spontaneously hypertensive rats. Kang YS, et al. **J Pharmacobiodyn** 1990 Jan;13(1):10–9

Evidence for the uptake of neuronally derived choline by glial cells in the leech central nervous system. Wuttke WA,

et al. **J Physiol (Lond)** 1990 Jan;420:387–408

PHARMACOLOGY

Effect of choline esters and oleic acid on the penetration of acyclovir, estradiol, hydrocortisone, nitroglycerin, retinoic acid and trifluorothymidine across hairless mouse skin in vitro. Loftsson T, et al. **Acta Pharm Nord** 1989; 1(5):279–86

Choline derivatives increase two different acid phosphatases in Rhizobium meliloti and Pseudomonas aeruginosa. Lucchini AE, et al. **Arch Microbiol** 1990;153(6):596–9

Organizational changes in cholinergic activity and enhanced visuospatial memory as a function of choline administered prenatally or postnatally or both. Meck WH, et al. **Behav Neurosci** 1989 Dec;103(6):1234–41

Dietary choline alteration. Implications for gamma-aminobutyric acid and other neurotransmitter receptors. Miller LG. **Biochem Pharmacol** 1990 Sep 15; 40(6):1179–82 (37 ref.)

Chronic choline treatment improves the "in vivo" membrane permeability of old hepatocytes to Rb+. Pieri C. **Boll Soc Ital Biol Sper** 1989 Oct;65(10):909–15

AF64A depletes hippocampal high-affinity choline uptake but does not alter the density of alpha-bungarotoxin binding sites or modify the effect of exogenous choline. Morley BJ, et al. **Brain Res** 1990 Jun 11;519(1–2):1–5

Effects of ethanolamine and choline on thiotepa cellular accumulation and cytotoxicity in L1210 cells. Egorin MJ, et al. **Cancer Res** 1990 Jul 15;50(14):4322–7

The inhibition by methionine and choline of liver carcinoma formation in male C3H mice dosed with diethylnitrosamine and fed phenobarbital. Fullerton FR, et al. **Carcinogenesis** 1990 Aug;11(8):1301–5

Prolonged survival of female AKR mice fed diets supplemented with methionine and choline. Wainfan E, et al. **Carcinogenesis** 1990 Mar;11(3):361–3

Structural studies of the lysozyme coded by the pneumococcal phage Cp-1. Conformational changes induced by choline. Sanz JM, et al. **Eur J Biochem** 1990 Jan 26;187(2):409–16

Repression of choline kinase by inositol and choline in Saccharomyces cerevisiae. Hosaka K, et al. **J Bacteriol** 1990 Apr;172(4):2005–12

Effect of choline on the morphology, growth and phospholipid composition of Fusarium graminearum. Wiebe MG, et al. **J Gen Microbiol** 1989 Aug;135 (Pt 8):2155–62

Treatment with oxiracetam or choline restores cholinergic biochemical and pharmacological activities in striata of decorticated rats. Consolo S, et al. **J Neurochem** 1990 Feb; 54(2):571–7

Effects of choline administration on in vivo release and biosynthesis of acetylcholine in the rat striatum as studied by in vivo brain microdialysis. Koshimura K, et al. **J Neurochem** 1990 Feb;54(2):533–9

In vivo substitution of choline for sodium evokes a selective osmoinsensitive increase of extracellular taurine in the rat hippocampus. Lehmann A, et al. **J Neurochem** 1990 Jan; 54(1):126–9

Choline is an inhibitory modulator of cholinergic nerve function in guinea-pig colon. Trout SJ, et al. **J Pharm Pharmacol** 1990 Mar;42(3):211–3

Retrograde amnesia produced by intrastriatal atropine and its reversal by choline. Solana-Figueroa R, et al. **Life Sci** 1990;46(10):679–86

Phosphatidylcholine synthesis in the rat: the substrate for methylation and regulation by choline. Datko AH, et al. **Lipids** 1990 Mar;25(3):135–42

Effect of choline administration on the release of acetylcholine from the striatum as determined by microdialysis in awake rats. Westerink BH, et al. **Neurosci Lett** 1990 May 4;112(2–3):297–301

PHYSIOLOGY

Nerve growth factor infusion into the denervated adult rat hippocampal formation promotes its cholinergic reinnervation. Hagg T, et al. **J Neurosci** 1990 Sep; 10(9):3087–92

Survival of adult basal forebrain cholinergic neurons after loss of target neurons. Sofroniew MV, et al. **Science** 1990 Jan 19;247(4940):338–42

The cholinergic neuronal differentiation factor from heart cells is identical to leukemia inhibitory factor [published erratum appears in Science 1990 Jan 19;247(4940):271] Yamamori T, et al. **Science** 1989 Dec 15;246(4936):1412–6

[Cholinergic control of thalamic function] Steriade M. **Arch Int Physiol Biochim** 1990 Jun;98(3):A11–46 (106 ref.) **(Fre)**

[Regulation of expression of phospholipid-biosynthetic genes in yeast: coordinate repression by inositol and choline] Hosaka K, et al. **Seikagaku** 1990 Jun;62(6):451–6 **(Jpn)**

THERAPEUTIC USE

Clinical and biochemical responses to therapy in Alzheimer's disease and multi-infarct dementia. Corona GL, et al. **Eur Arch Psychiatry Neurol Sci** 1989;239(2):79–86

CHOLINE ACETYLASE see **CHOLINE ACETYLTRANSFERASE**

CHOLINE ACETYLTRANSFERASE

Molecular biology and neurobiology of choline acetyltransferase. Salvaterra PM. **Mol Neurobiol** 1987 Fall; 1(3):247–80 (209 ref.)

ANALYSIS

Brain neurotransmitter changes in three patients who had a fatal hyperthermia syndrome. Kish SJ, et al. **Am J Psychiatry** 1990 Oct;147(10):1358–63

A new western blotting variant. Hutchins J. **Biotechniques** 1989 Mar;7(3):248–51

Choline acetyltransferase activity in omental tissue. Goldsmith HS, et al. **Br J Neurosurg** 1987;1(4):463–6

Differential development of cholinergic neurons from cranial and trunk neural crest cells in vitro. Leblanc GG, et al. **Dev Biol** 1990 Feb;137(2):318–30

Central cholinergic synapses: the septohippocampal system as a model. Frotscher M. **Experientia Suppl** 1989;57:33–41

Cholinergic-GABAergic synaptic interconnections in the rat amygdaloid complex: an electron microscopic double immunostaining study. Nitecka L, et al. **Experientia Suppl** 1989;57:42–9

Immunocytochemical study of the relations of acetylcholinesterase, enkephalin-, substance P-, choline acetyltransferase- and calcitonin gene-related peptide-immunoreactive structures in the ventral horn of rat spinal cord. Hietanen M, et al. **Histochemistry** 1990; 93(5):473–7

Cholinergic and VIPergic innervation in cerebral arteries: a sequential double-labeling immunohistochemical study. Miao FJ, et al. **J Cereb Blood Flow Metab** 1990 Jan; 10(1):32–7

Origins and pathways of choline acetyltransferase-positive parasympathetic nerve fibers to cerebral vessels in rat. Suzuki N, et al. **J Cereb Blood Flow Metab** 1990 May; 10(3):399–408

Distribution of calcitonin gene-related peptide-like immunoreactivity in the medulla oblongata of the cat, in relation to choline acetyltransferase-immunoreactive motoneurones and substance P-immunoreactive fibres. Batten TF, et al. **J Chem Neuroanat** 1989 May-Jun; 2(3):163–76

Cholinergic synapses in the central nervous system: studies of the immunocytochemical localization of choline acetyltransferase. Houser CR. **J Electron Microsc Tech** 1990 May;15(1):2–19 (99 ref.)

A quantitative study of the neurofibrillary tangles and the choline acetyltransferase activity in the cerebral cortex and the amygdala in Alzheimer's disease. Esiri MM, et al. **J Neurol Neurosurg Psychiatry** 1990 Feb;53(2):161–5

Selective loss of cholinergic neurons in the ventral striatum of patients with Alzheimer disease. Lehéricy S, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8580–4

The organization of chemically-identified neural systems in monkey prefrontal cortex: afferent systems. Lewis DA. **Prog Neuropsychopharmacol Biol Psychiatry** 1990; 14(3):371–7

Phase partitioning of beta-bungarotoxin-treated cerebrocortical synaptosomes: quantitation of the toxin-vulnerable population. García-Garayo JJ, et al. **Res Commun Chem Pathol Pharmacol** 1990 Apr;68(1):55–63

GENETICS

Complementary DNAs for choline acetyltransferase from spinal cords of rat and mouse: nucleotide sequences, expression in mammalian cells, and in situ hybridization. Ishii K, et al. **Brain Res Mol Brain Res** 1990 Feb;7(2):151–9

Localization of the choline acetyltransferase (CHAT) gene to human chromosome 10. Cohen-Haguenauer O, et al. **Genomics** 1990 Feb;6(2):374–8

IMMUNOLOGY

Direct inhibition of choline acetyltransferase activity by a monoclonal antibody raised against the plasma membrane of cholinergic nerve terminals. Eder-Colli L, et al. **Brain Res** 1989 Oct 23;500(1–2):90–8

ISOLATION & PURIFICATION

Kinetic and inactivation studies of recombinant Drosophila choline acetyltransferase. Carbini L, et al. **Brain Res Bull** 1990 Jan;24(1):119–24

Large-scale purification of choline acetyltransferase and production of highly specific antisera. Ostermann C, et al. **Eur J Biochem** 1990 Aug 28;192(1):215–8

Purification and isolation of choline acetyltransferase from the electric organ of Torpedo marmorata by affinity chromatography. Raeber AJ, et al. **Eur J Biochem** 1989 Dec 22;186(3):487–92

METABOLISM

Non-Alzheimer-type pattern of brain cholineacetyltransferase reduction in dominantly inherited olivopontocerebellar atrophy. Kish SJ, et al. **Ann Neurol** 1989 Sep;26(3):362–7

Tourette's syndrome: a neurochemical analysis of postmortem cortical brain tissue. Singer HS, et al. **Ann Neurol** 1990 Apr;27(4):443–6

Cholinergic enzyme systems in Parkinson's disease. McGeer PL, et al. **Arch Neurol** 1971 Sep;25(3):265–8

Cholinergic but not GABAergic neuronal markers are decreased in primary neuronal cultures treated with choline mustard. Baskey JC, et al. **Brain Res** 1990 Jun 11; 519(1–2):279–16

Intrafimbrial colchicine produces transient impairment of radial-arm maze performance correlated with morphologic abnormalities of septohippocampal neurons expressing cholinergic markers and nerve growth factor receptor. Di Patre PL, et al. **Brain Res** 1990 Jul 23;523(2):316–20

Nerve growth factor (NGF) reverses axotomy-induced decreases in choline acetyltransferase, NGF receptor and size of medial septum cholinergic neurons. Hagg T, et al. **Brain Res** 1989 Dec 25;505(1):29–38

Small pial vessels, but not choroid plexus, exhibit specific biochemical correlates of functional cholinergic innervation. Hamel E, et al. **Brain Res** 1990 May 21; 516(2):301–9

Basal forebrain and mesopontine tegmental projections to the reticular thalamic nucleus: an axonal collateralization and immunohistochemical study in the rat. Jourdain A, et al. **Brain Res** 1989 Dec 25;505(1):55–65

Growth hormone-releasing hormone and somatostatin influence neuronal expression in developing chick brain. II. Cholinergic neurons. Kentroti S, et al. **Brain Res** 1990 Apr 2;512(2):297–303

Spatial memory deficits in aged rats: contributions of the cholinergic system assessed by ChAT. Luine V, et al. **Brain Res** 1990 Jul 23;523(2):321–4

Cholinergic differentiation of clonal rat pheochromocytoma cells (PC12) induced by retinoic acid: increase of choline acetyltransferase activity and decrease of tyrosine hydroxylase activity. Matsuoka I, et al. **Brain Res** 1989 Nov 13;502(1):53–60

Effects of microencapsulated monosialoganglioside GM1 on cholinergic neurons. Maysinger D, et al. **Brain Res** 1989 Sep 4;496(1–2):165–72

Ultrastructural localization of choline acetyltransferase in the rat rostral ventrolateral medulla: evidence for major synaptic relations with non-catecholaminergic neurons. Milner TA, et al. **Brain Res** 1989 Oct 23;500(1–2):67–89

Loss of true blue labelling from the medial septum following transection of the fimbria-fornix: evidence for the death of cholinergic and non-cholinergic neurons. O'Brien TS, et al. **Brain Res** 1990 Feb 5;508(2):249–56

Immunocytochemical localization of choline acetyltransferase in the carotid body of the cat and rabbit. Wang ZZ, et al. **Brain Res** 1989 Sep 25;498(1):131–4

Axotomy-dependent stimulation of choline acetyltransferase activity by exogenous mouse nerve growth factor in adult rat basal forebrain. Williams LR, et al. **Brain Res** 1989 Oct 2;498(2):243–56

Distribution of choline acetyltransferase and acetylcholinesterase in the vocal motor system of zebra finches. Zuschratter W, et al. **Brain Res** 1990 Apr 16; 513(2):193–201

A comparison of the subnuclear and ultrastructural distribution of acetylcholinesterase and choline acetyltransferase in the rat interpeduncular nucleus. Kawaja MD, et al. **Brain Res Bull** 1990 Mar;24(3):517–23

The role of Ca2+ channels of the L-type in neurotransmitter plasticity of cultured sympathetic neurons. Vidal S, et al. **Brain Res Mol Brain Res** 1989 Nov;6(2–3):187–96

Comparative studies on glutamate decarboxylase and choline acetyltransferase activities in the vertebrate vestibule. López I, et al. **Comp Biochem Physiol [B]** 1990;95(2):375–9

Brain cholinergic enzymes and cortical EEG activity in young and old rats. Sirviö J, et al. **Comp Biochem Physiol [C]** 1989;94(1):277–83

The demonstration of choline acetyltransferase activity in cultured vestibular ganglion cells from the fetal rat. Yamashita H, et al. **Eur Arch Otorhinolaryngol** 1990; 247(4):229–31

Ciliary muscle choline acetyltransferase and acetylcholinesterase after ciliary ganglionectomy. Erickson-Lamy KA, et al. **Exp Eye Res** 1990 Sep; 51(3):295–9

Regulation of neurotransmitter expression by a membrane-derived factor. Lee JM, et al. **Exp Neurol** 1990 May;108(2):109–13

Restoration of cholinergic circuitry in the hippocampus by foetal grafts. Clarke DJ, et al. **Experientia Suppl** 1989; 57:275–87

Effects of colchicine treatment on the cholinergic septohippocampal system. Represa A, et al. **Experientia Suppl** 1989;57:288–94

Effect of early visual pattern deprivation on development and laminar distribution of cholinergic markers in rat visual cortex. Walch C, et al. **Experientia Suppl** 1989;57:295–304

Is the neuronal basis of Alzheimer's disease cholinergic or glutamatergic? Palmer AM, et al. **FASEB J** 1990 Jul; 4(10):2745–52 (40 ref.)

Neuronal aggregation and neurotransmitter regulation: partial purification and characterization of a membrane-derived factor. Adler JE. **Int J Dev Neurosci** 1989;7(5):533–8

Regulation of choline acetyltransferase. Salvaterra PM, et al. **Int Rev Neurobiol** 1989;31:81–143 (271 ref.)

Co-localization of choline acetyltransferase and tyrosine hydroxylase within neurons of the dorsal motor nucleus of the vagus. Armstrong DM, et al. **J Chem Neuroanat** 1990 Mar-Apr;3(2):133–40

Simultaneous demonstration of choline acetyltransferase and

glutamic acid decarboxylase immunoreactivity in the rat interpeduncular nucleus. Kawaja MD, et al. **J Chem Neuroanat** 1990 May-Jun;3(3):165-77

Cholinergic amacrine cells in the developing cat retina. Dann JF. **J Comp Neurol** 1989 Nov 1;289(1):143-55

Choline acetyltransferase-like immunoreactivity in the superior colliculus of the cat and its relation to the pattern of acetylcholinesterase staining. Illing RB. **J Comp Neurol** 1990 Jun 1;296(1):32-46

Immunohistochemical study of choline acetyltransferase-immunoreactive processes and cells innervating the pontomedullary reticular formation in the rat. Jones BE. **J Comp Neurol** 1990 May 15;295(3):485-514

Hippocampal and midline thalamic fibers and terminals in relation to the choline acetyltransferase-immunoreactive neurons in nucleus accumbens of the rat: a light and electron microscopic study. Meredith GE, et al. **J Comp Neurol** 1990 Jun 8;296(2):204-21

Cholinergic innervation of the rat cerebellum: qualitative and quantitative analyses of elements immunoreactive to a monoclonal antibody against choline acetyltransferase. Ojima H, et al. **J Comp Neurol** 1989 Dec 1;290(1):41-52

Embryonic development of four different subsets of cholinergic neurons in rat cervical spinal cord. Phelps PE, et al. **J Comp Neurol** 1990 Jan 1;291(1):9-26

Choline acetyltransferase-immunoreactive profiles are presynaptic to primary sensory fibers in the rat superficial dorsal horn. Ribeiro-da-Silva A, et al. **J Comp Neurol** 1990 May 15;295(3):370-84

Anatomical substrates of cholinergic-autonomic regulation in the rat. Ruggiero DA, et al. **J Comp Neurol** 1990 Feb 1;292(1):1-53

Structure of the starburst amacrine network in the cat retina and its association with alpha ganglion cells. Vardi N, et al. **J Comp Neurol** 1989 Oct 22;288(4):601-11

Biochemical and morphological differentiation of acetylcholinesterase-positive efferent fibers in the mouse cochlea. Emmerling MR, et al. **J Electron Microsc Tech** 1990 Jun;15(2):123-43

The vegetative network in the thoracolumbar spinal cord of the guinea pig: a comparison of the distribution of AChE-enzyme activity and choline acetyltransferase-like immunoreactivity. Davidoff MS, et al. **J Hirnforsch** 1989; 30(6):707-17

Organization of choline acetyltransferase-containing structures in the cranial nerve motor nuclei and lamina IX of the cervical spinal cord of the rat. Ichikawa T, et al. **J Hirnforsch** 1990;31(2):251-7

Cholinergic enzymes in the spinal cord in Alzheimer-type dementia. Yates CM, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(4):311-5

Coexpression of sensory and autonomic neurotransmitter traits by avian neural crest cells in vitro. Leblanc GG. **J Neurobiol** 1990 Jun;21(4):567-77

Effect of phospholipase C from Bacillus cereus on the release of membrane-bound choline-O-acetyltransferase from rat hippocampal tissue. Carroll PT, et al. **J Neurochem** 1990 Mar;54(3):1047-55

A monoclonal antibody raised against plasma membrane of cholinergic nerve terminals of the Torpedo inhibits choline acetyltransferase activity and acetylcholine release. Eder-Colli L, et al. **J Neurochem** 1989 Nov;53(5):1419-27

Cholinergic regulation of vasoactive intestinal peptide content and release in rat frontal cortex and hippocampus. Lapchak PA, et al. **J Neurochem** 1990 Oct;55(4):1340-5

Multiple neurotrophic factors from skeletal muscle: demonstration of effects of basic fibroblast growth factor and comparisons with the 22-kilodalton choline acetyltransferase development factor. McManaman J, et al. **J Neurochem** 1989 Dec;53(6):1763-71

Exogenous nerve growth factor increases the activity of high-affinity choline uptake and choline acetyltransferase in brain of Fisher 344 male rats. Williams LR, et al. **J Neurochem** 1990 Sep;55(3):1042-9

Visual hallucinations and the cholinergic system in dementia [letter] Perry EK, et al. **J Neurol Neurosurg Psychiatry** 1990 Jan;53(1):88

Characterization of two factors enhancing choline acetyltransferase activity in cultures of purified rat motoneurons. Martinou JC, et al. **J Neurosci** 1989 Oct; 9(10):3645-56

Spiny neurons lacking choline acetyltransferase immunoreactivity are major targets of cholinergic and catecholaminergic terminals in rat striatum. Pickel VM, et al. **J Neurosci Res** 1990 Mar;25(3):263-80

Enzymatic activities during differentiation of the human neuroblastoma cells, LA-N-1 and LA-N-2. Singh IN, et al. **J Neurosci Res** 1990 Apr;25(4):476-85

Cholinergic function in cultures of mouse spinal cord neurons. Wang FZ, et al. **J Neurosci Res** 1990 Mar; 25(3):312-23

NGF receptor reexpression and NGF-mediated cholinergic neuronal hypertrophy in the damaged adult neostriatum. Gage FH, et al. **Neuron** 1989 Feb;2(2):1177-84

Interleukin 3 as a trophic factor for central cholinergic neurons in vitro and in vivo. Kamegai M, et al. **Neuron** 1990 Mar;4(3):429-36

Rescue of motoneurons from cell death by a purified skeletal muscle polypeptide: effects of the ChAT development factor, CDF. McManaman JL, et al. **Neuron** 1990 Jun; 4(6):891-8

Tetrahydroaminoacridine facilitates passive avoidance learning in rats with nucleus basalis magnocellularis lesions. Dokla CP, et al. **Neuropharmacology** 1989 Nov; 28(11):1279-82

Excitotoxicity of NMDA and kainic acid is modulated by nigrostriatal dopaminergic fibres. Chapman AG, et al. **Neurosci Lett** 1989 Dec 15;107(1-3):256-60

Testosterone locally increases vasopressin content but fails to restore choline acetyltransferase activity in other regions in the senescent male rat brain. Goudsmit E, et al. **Neurosci Lett** 1990 May 4;112(2-3):290-6

Increase in choline acetyltransferase activity in septum of rats after transient forebrain ischemia: a possible role of factors released in the hippocampus. Hisanaga K, et al. **Neurosci Lett** 1989 Nov 6;105(3):321-5

Lamotrigine protects against kainate but not ibotenate lesions in rat striatum. McGeer EG, et al. **Neurosci Lett** 1990 May 4;112(2-3):348-51

Basic fibroblast growth factor suppressed the enhancement of choline acetyltransferase activity induced by nerve growth factor. Matsuda S, et al. **Neurosci Lett** 1990 Jun 22;114(1):69-74

Relationship between the cortical choline acetyltransferase content and EEG delta-power. Riekkinen P Jr, et al. **Neurosci Res** 1990 Apr;8(1):12-20

The distribution and compartmental organization of the cholinergic neurons in nucleus accumbens of the rat. Meredith GE, et al. **Neuroscience** 1989;31(2):327-45

Choline acetyltransferase-like immunoreactivity in the hippocampal formation of control subjects and patients with Alzheimer's disease. Ransmayr G, et al. **Neuroscience** 1989;32(3):701-14

Choline acetyltransferase activity and [3H]vesamicol binding in the temporal cortex of patients with Alzheimer's disease, Parkinson's disease, and rats with basal forebrain lesions. Ruberg M, et al. **Neuroscience** 1990;35(2):327-33

Nucleus isthmi: its contribution to tectal acetylcholinesterase and choline acetyltransferase in the frog Rana pipiens. Wallace MT, et al. **Neuroscience** 1990;35(3):627-36

Region selective increase in activities of CNS cholinergic marker enzymes during learning of memory tasks in aged rats. Nakamura S, et al. **Pharmacol Biochem Behav** 1989 Dec;34(4):805-10

Influence of ethanol on fetal brain cholinergic enzyme activities. Okonmah AD, et al. **Pharmacology** 1989; 39(6):367-72

Glycyl-L-glutamine opposes the fall in choline acetyltransferase in the denervated superior cervical ganglion of the cat. Koelle GB, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10153-5

Regulatory changes in presynaptic cholinergic function assessed in rapid autopsy material from patients with Alzheimer disease: implications for etiology and therapy. Slotkin TA, et al. **Proc Natl Acad Sci U S A** 1990 Apr; 87(7):2452-5

Decrease in membrane-bound G4 form of acetylcholinesterase in postmortem Alzheimer brain. Schegg KM, et al. **Prog Clin Biol Res** 1989;317:437-52

Regional stimulation of cholinergic function by nerve growth factor in an animal model of Alzheimer's disease. Williams LR, et al. **Prog Clin Biol Res** 1989;317:1179-92

Ultrastructural analysis of choline acetyltransferase-immunoreactive sympathetic preganglionic neurons and their dendritic bundles in rat thoracic spinal cord. Markham JA, et al. **Synapse** 1990; 5(4):299-312

Distributions of choline acetyltransferase and acetylcholinesterase activities in the retinal layers of pigeon red and yellow fields. White LE, et al. **Vision Res** 1990; 30(2):215-23

[Changes in muscarinic cholinergic receptor and choline acetyltransferase in experimental ischemic brain] Mizobuchi H. **Nippon Geka Hokan** 1989 Jan 1;58(1):93-106 (Eng. Abstr.) **(Jpn)**

[Study on Alzheimer's disease and the animal disease model--special reference to acetylcholinergic system] Ueki A, et al. **Seishin Shinkeigaku Zasshi** 1989;91(10):736-50 **(Jpn)**

[Cholinergic neuron] Ichikawa T, et al. **Tanpakushitsu Kakusan Koso** 1990 Mar;35(4 Suppl):622-9 **(Jpn)**

PHYSIOLOGY

Nucleus basalis magnocellularis lesions facilitate two-way active avoidance. Dokla CP, et al. **Physiol Behav** 1989 Oct; 46(4):763-5

THERAPEUTIC USE

[Rheumajecta and Vasolastine treatment of primary fibromyalgia; results of a randomized placebo-controlled double-blind study (published erratum appears in Ned Tijdschr Geneeskd 1990 May 5;134(18):936)] Jacobs JW, et al. **Ned Tijdschr Geneeskd** 1990 Apr 7;134(14):693-7 (Eng. Abstr.) **(Dut)**

[Treatment of primary fibromyalgia with Rheumajecta and Vasolastine; results of a randomized, placebo-controlled, double-blind study (letter)] Nollen AJ. **Ned Tijdschr Geneeskd** 1990 May 26;134(21):1062-3 **(Dut)**

[Treatment of primary fibromyalgia with Rheumajecta and Vasolastine (letter)] van Leemput-Dankaart E. **Ned Tijdschr Geneeskd** 1990 Aug 4;134(31):1515-6 **(Dut)**

CHOLINE DEFICIENCY

BLOOD

Reduction in VLDL, but not HDL, in plasma of rats deficient in choline. Yao ZM, et al. **Biochem Cell Biol** 1990 Feb; 68(2):552-8

COMPLICATIONS

Sex differences in response to four promotion regimens in spite of common first cellular steps in the hepatocellular cancer process initiated by diethylnitrosamine. Cameron RG, et al. **Cancer Lett** 1990 Apr 20;50(2):109-13

The effect of choline and methionine deficiencies on the number and volume percentage of altered hepatic foci in the presence or absence of diethylnitrosamine initiation in rat liver. Sawada N, et al. **Carcinogenesis** 1990 Feb; 11(2):273-81

No enhancement by phenobarbital of the hepatocarcinogenicity of a choline-devoid diet in the rat. Saito R, et al. **Res Commun Chem Pathol Pharmacol** 1990 Aug;69(2):197-207

[Changes of lipid peroxide (LPO) levels in the development of CDE-diet induced acute pancreatitis in mice: preliminary report] Nonaka A, et al. **Nippon Geka Gakkai Zasshi** 1989 Jul;90(7):1127 **(Jpn)**

ENZYMOLOGY

The effect of menhaden oil on choline-deficiency-induced hepatic ornithine decarboxylase activity and hepatocyte insulin receptor binding. Betschart JM, et al. **Carcinogenesis** 1990 Jun;11(6):889-93

Feedback regulation of CTP:phosphocholine cytidylyltransferase translocation between cytosol and endoplasmic reticulum by phosphatidylcholine. Jamil H, et al. **J Biol Chem** 1990 Mar 15;265(8):4332-9

Choline deficiency causes translocation of CTP:phosphocholine cytidylyltransferase from cytosol to endoplasmic reticulum in rat liver. Yao ZM, et al. **J Biol Chem** 1990 Mar 15;265(8):4326-31

Effects of a choline-deficient diet and a hypolipidemic agent on single glutathione S-transferase placental form-positive hepatocytes in rat liver. Yokota K, et al. **Jpn J Cancer Res** 1990 Feb;81(2):129-34

EPIDEMIOLOGY

Choline may be an essential nutrient in malnourished patients with cirrhosis. Chawla RK, et al. **Gastroenterology** 1989 Dec;97(6):1514-20

METABOLISM

Aflatoxin-DNA adduct formation in chronically dosed rats fed a choline-deficient diet. Schrager TF, et al. **Carcinogenesis** 1990 Jan;11(1):177-80

Prevention by free radical scavenger AD5 of prooxidant effects of choline deficiency. Ghoshal AK, et al. **Free Radic Biol Med** 1990;8(1):3-7

Free radicals and lipid peroxidation in liver of rats kept on a diet devoid of choline. Banni S, et al. **Free Radic Res Commun** 1989;7(3-6):233-40

Hepatic poly(ADP ribose) polymerase activity in methyl donor-deficient rats. Henning SM, et al. **J Nutr** 1989 Oct; 119(10):1528-31

Hepatic content of S-adenosylmethionine, S-adenosylhomocysteine and glutathione in rats receiving treatments modulating methyl donor availability. Henning SM, et al. **J Nutr** 1989 Oct;119(10):1478-82

No measurable increase in thymidine glycol or 8-hydroxydeoxyguanosine in liver DNA of rats treated with nafenopin or choline-devoid low-methionine diet. Hegi ME, et al. **Mutat Res** 1990 May;238(3):325-9

Phosphatidylcholine, lysophosphatidylcholine, and lipoprotein secretion by choline-deficient hepatocytes. **Nutr Rev** 1990 Jan;48(1):24-6 (17 ref.)

Methyl group deficiency: effects on one-carbon unit and folate metabolism. **Nutr Rev** 1989 Dec;47(12):375-7

PATHOLOGY

Lack of hepatocarcinogenic potential of acetaminophen in rats with liver damage associated with a choline-devoid diet. Maruyama H, et al. **Carcinogenesis** 1990 Jun; 11(6):895-901

Procarbazine carcinogenicity in methotrexate-treated or lipotrope-deficient male rats. Rogers AE, et al. **Carcinogenesis** 1990 Sep;11(9):1491-5

CHOLINE GLYCEROPHOSPHATE see **GLYCERYLPHOSPHORYLCHOLINE**

CHOLINE KINASE see under **PHOSPHOTRANSFERASES, ATP**

CHOLINE PHOSPHOGLYCERIDES see **PHOSPHATIDYLCHOLINES**

CHOLINEPHOSPHOTRANSFERASE see under **PHOSPHOTRANSFERASES**

CHOLINERGIC AGENTS see **PARASYMPATHOMIMETICS**

CHOLINERGIC-BLOCKING AGENTS see PARASYMPATHOLYTICS

CHOLINERGIC FIBERS

Distribution of cholinergic and adrenergic nerve fibers in the lacrimal glands of dogs. Powell CC, et al. **Am J Vet Res** 1989 Dec;50(12):2084–8

Cholinergic innervation of the ventricular myocardium in the human fetal heart. Onicescu D, et al. **Morphol Embryol (Bucur)** 1989 Oct–Dec;35(4):245–8

Pattern of vegetative innervation of the pia mater vessels in phylogeny. Gadamski R, et al. **Neuropatol Pol** 1989; 27(1):127–40

ANALYSIS

Galanin–like immunoreactivity in sympathetic and parasympathetic neurons of the toad Bufo marinus. Morris JL, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):142–8

DRUG EFFECTS

Cholinergic and C–fibre mediated mechanisms in the stimulation of mucociliary activity induced by prostaglandins and histamine. Dolata J, et al. **Acta Otolaryngol (Stockh)** 1989 Nov–Dec;108(5–6):456–63

Further evidence for a prejunctional action of neuropeptide Y on cholinergic motor neurons in the rat uterine cervix. Stjernquist M, et al. **Acta Physiol Scand** 1990 Jan; 138(1):95–6

Nucleus basalis magnocellularis and memory: differential effects of two neurotoxins. Markowska AL, et al. **Behav Neural Biol** 1990 Jul;54(1):13–26

Cholinergic differentiation of clonal rat pheochromocytoma cells (PC12) induced by retinoic acid: increase of choline acetyltransferase activity and decrease of tyrosine hydroxylase activity. Matsuoka I, et al. **Brain Res** 1989 Nov 13;502(1):53–60

Effect of prenatal exposure to phencyclidine on the postnatal development of the cholinergic system in the rat. Howard SG, et al. **Dev Neurosci** 1990;12(3):204–9

Influence of fenfluramine and norfenfluramine stereoisomers on the firing rate of central monoaminergic neurons in the rat. Scuvée–Moreau J, et al. **Eur J Pharmacol** 1990 Apr 10;179(1–2):211–5

People with Down's syndrome can be distinguished on the basis of cholinergic dysfunction. Sacks B, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1294–5

Effect of dimethylsulphoxide on cholinergic neurotransmission in guinea–pig [letter; comment] Schreiber J, et al. **Lancet** 1990 Jan 20;335(8682):174–5 Comment on: Lancet 1989 May 20;1(8647):1134–5.

Interaction of the pyrethroid insecticides tetramethrin and cypermethrin with enteric cholinergic transmission in the guinea–pig. Tonini M, et al. **Neurotoxicology** 1990 Winter; 10(4):707–15

[Central anticholinergic syndrome during postoperative period] Rupreht J, et al. **Ann Fr Anesth Reanim** 1990; 9(3):295–304 (53 ref.) (Eng. Abstr.) **(Fre)**

[Structural and functional changes in the mitochondrial apparatus of cortical tubules of the solitary kidney in chronic blockade of cholinergic mediation] Barinov EF, et al. **Arkh Anat Gistol Embriol** 1990 Apr;98(4):76–9 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Acetylcholinesterase and Nissl staining in the same histological section. Shipley MT, et al. **Brain Res** 1989 Dec 18;504(2):347–53

Loss of striatal angiotensin–converting enzyme following intrastriatal AF64A is not related to destruction of cholinergic interneurons. Walters DE, et al. **Brain Res** 1990 Jan 15;507(1):23–7

Immunocytochemical localization of choline acetyltransferase in the carotid body of the cat and rabbit. Wang ZZ, et al. **Brain Res** 1989 Sep 25;498(1):131–4

Choline acetyltransferase–like immunoreactivity in the superior colliculus of the cat and its relation to the pattern of acetylcholinesterase staining. Illing RB. **J Comp Neurol** 1990 Jun 1;296(1):32–46

Immunohistochemical study of choline acetyltransferase–immunoreactive processes and cells innervating the pontomedullary reticular formation in the rat. Jones BE. **J Comp Neurol** 1990 May 15;295(3):485–514

The vegetative network in the thoracolumbar spinal cord of the guinea pig: a comparison of the distribution of AChE–enzyme activity and choline acetyltransferase–like immunoreactivity. Davidoff MS, et al. **J Hirnforsch** 1989; 30(6):707–17

CGS–19755 and MK–801 selectively prevent rat striatal cholinergic and gabaergic neuronal degeneration induced by N–methyl–D–aspartate and ibotenate in vivo. Schoepp DD, et al. **J Neural Transm Gen Sect** 1989;78(3):183–93

Cholinergic enzymes in the spinal cord in Alzheimer–type dementia. Yates CM, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(4):311–5

Stereotaxic preparation of circumscribed cortical areas from rat brain for biochemical studies. Hanisch UK, et al. **J Neurosci Methods** 1990 Jan;31(1):53–8

Enzymatic activities during differentiation of the human neuroblastoma cells, LA–N–1 and LA–N–2. Singh IN, et al. **J Neurosci Res** 1990 Apr;25(4):476–85

Effect of huperzine A, a new cholinesterase inhibitor, on the central cholinergic system of the rat. Tang XC, et al. **J Neurosci Res** 1989 Oct;24(2):276–85

The effect of heptyl–physostigmine, a new cholinesterase inhibitor, on the central cholinergic system of the rat. De Sarno P, et al. **Neurochem Res** 1989 Oct;14(10):971–7

The distribution and compartmental organization of the cholinergic neurons in nucleus accumbens of the rat. Meredith GE, et al. **Neuroscience** 1989;31(2):327–45

IMMUNOLOGY

Antibodies in serum of patients with Alzheimer's disease cause immunolysis of cholinergic nerve terminals from the rat cerebral cortex. Bradford HF, et al. **Can J Neurol Sci** 1989 Nov;16(4 Suppl):528–34

Investigations on auto–antibodies in Alzheimer's and Parkinson's diseases, using defined neuronal cultures. Dahlström A, et al. **J Neural Transm Suppl** 1990;29:195–206

METABOLISM

Choline metabolism in cholinergic neurons: implications for the pathogenesis of neurodegenerative diseases. Wurtman RJ, et al. **Adv Neurol** 1990;51:117–25 (27 ref.)

Cholinergic enzyme systems in Parkinson's disease. McGeer PL, et al. **Arch Neurol** 1971 Sep;25(3):265–8

Synthesis, release and receptor binding of acetylcholine in the C1 area of the rostral ventrolateral medulla: contributions in regulating arterial pressure. Arneric SP, et al. **Brain Res** 1990 Mar 12;511(1):98–112

Buccalin is present in the cholinergic motor neuron B16 of Aplysia and it depresses accessory radula closer muscle contractions evoked by stimulation of B16. Cropper EC, et al. **Brain Res** 1990 Mar 26;512(1):175–9

Calbindin–immunoreactive cholinergic neurones in the nucleus basalis of Meynert in Alzheimer–type dementia. Ichimiya Y, et al. **Brain Res** 1989 Oct 16;499(2):402–6

Growth hormone–releasing hormone and somatostatin influence neuronal expression in developing chick brain. II. Cholinergic neurons. Kentroti S, et al. **Brain Res** 1990 Apr 2;512(2):297–303

Striosomal organization of cholinergic and dopaminergic uptake sites and cholinergic M1 receptors in the adult human striatum: a quantitative receptor autoradiographic study. Lowenstein PR, et al. **Brain Res** 1990 Feb 26; 510(1):122–6

Effects of microencapsulated monosialoganglioside GM1 on cholinergic neurons. Maysinger D, et al. **Brain Res** 1989 Sep 4;496(1–2):165–72

Autoradiographic distribution of [3H]hemicholinium–3 binding sites in human brain. Pascual J, et al. **Brain Res** 1989 Dec 29;505(2):306–10

The effects of morphine and traumatic brain injury on central cholinergic neurons. Robinson SE, et al. **Brain Res** 1989 Nov 27;503(1):32–7

Death of subcortical cholinergic neurons in certain neurodegenerative disorders may not be due to an overstimulation of N–methyl–D–aspartate receptors. Sanfeliu C, et al. **Brain Res** 1990 Jan 8;506(2):319–22

Is glutamate a co–transmitter in cortical cholinergic terminals? Effects of nucleus basalis lesion and of presynaptic muscarinic agents. Szerb JC, et al. **Brain Res** 1990 May 7;515(1–2):214–8

Cholinergic synaptic vesicles are metabolically and biophysically heterogeneous even in resting terminals. Whittaker VP. **Brain Res** 1990 Mar 12;511(1):113–21

Modulation by muscarine and opioid receptors of acetylcholine release in slices from striato–striatal grafts in the rat. Wichmann T, et al. **Brain Res** 1990 Mar 5; 510(2):296–302

Hemicholinium–3 binding sites in subnuclei of the rat interpeduncular nucleus: quantitative in vitro autoradiography. Bekenstein JW, et al. **Brain Res Bull** 1990 Feb;24(2):181–4

The developmental expression of the cholinergic–specific antigen Chol–1 in the central and peripheral nervous system of the rat. Derrington EA, et al. **Brain Res Dev Brain Res** 1990 Mar 1;52(1–2):131–40

Evidence for plasticity in neurotransmitter expression in neuronal cultures derived from 3–day–old chick embryo. Mangoura D, et al. **Brain Res Dev Brain Res** 1990 Jan 1;51(1):93–101

Presynaptic regulation of acetylcholine release in the CNS. Raiteri M, et al. **Cell Biol Int Rep** 1989 Dec;13(12):1109–18 (23 ref.)

Vasoactive intestinal polypeptide (VIP) as a cholinergic co–transmitter: some recent results. Whittaker VP. **Cell Biol Int Rep** 1989 Dec;13(12):1039–51 (18 ref.)

Localization of substance P mRNA in cholinergic cells of the rat laterodorsal tegmental nucleus: in situ hybridization histochemistry and immunocytochemistry. Sutin EL, et al. **Cell Mol Neurobiol** 1990 Mar;10(1):19–31

Monitoring of acetylcholine released from postnatal rat basal forebrain cholinergic neurons cultured on membrane filter by cell bed perfusion system and HPLC–ECD. Takei N, et al. **Exp Neurol** 1990 Jun;108(3):229–31

Presence of cholinergic neurons in the vagal afferent system: biochemical and immunohistochemical approaches. Ternaux JP, et al. **J Auton Nerv Syst** 1989 Dec;28(3):233–42

Cholinergic innervation and topographical organization of muscarinic binding sites in rat brain: a comparative autoradiographic study. Tonnaer JA, et al. **J Chem Neuroanat** 1988 Mar–Apr;1(2):95–110

Cholinergic amacrine cells in the developing cat retina. Dann JF. **J Comp Neurol** 1989 Nov 1;289(1):143–55

Anatomical substrates of cholinergic–autonomic regulation in the rat. Ruggiero DA, et al. **J Comp Neurol** 1990 Feb 1;292(1):1–53

Structure of the starburst amacrine network in the cat retina and its association with alpha ganglion cells. Vardi N, et al. **J Comp Neurol** 1989 Oct 22;288(4):601–11

Factors released by ciliary neurons and spinal cord explants induce acetylcholine receptor mRNA expression in cultured muscle cells. Bursztajn S, et al. **J Neurobiol** 1990 Apr;21(3):387–99

Cholinergic function in cultures of mouse spinal cord neurons. Wang FZ, et al. **J Neurosci Res** 1990 Mar; 25(3):312–23

Acetyl–L–carnitine enhances acetylcholine release in the striatum and hippocampus of awake freely moving rats. Imperato A, et al. **Neurosci Lett** 1989 Dec 15; 107(1–3):251–5

Localization of muscarinic receptors on somatostatin–like immunoreactive neurones of the newborn guinea pig urinary bladder in culture. James S, et al. **Neurosci Lett** 1989 Nov 20;106(1–2):13–8

Substance P mRNA is present in a population of CGRP–immunoreactive cholinergic postganglionic sympathetic neurons of the cat: evidence from combined in situ hybridization and immunohistochemistry. Lindh B, et al. **Neurosci Lett** 1989 Dec 15;107(1–3):1–5

Acetylcholine content and distribution in rat cortical synaptosomes after in vivo exposure to quinolinic acid. Metcalf RH, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):219–24

Histochemical demonstration of nerve cell bodies in the retractor penis muscle and the penile artery of the bull. Alaranta S, et al. **Neuroscience** 1989;32(3):823–7

Nerve growth factor affects uninjured, adult rat septohippocampal cholinergic neurons. Fusco M, et al. **Neuroscience** 1989;33(1):47–52

Distribution of nerve growth factor receptor–like immunoreactivity in the adult rat central nervous system. Effect of colchicine and correlation with the cholinergic system—II. Brainstem, cerebellum and spinal cord. Pioro EP, et al. **Neuroscience** 1990;34(1):89–110

Distribution of nerve growth factor receptor–like immunoreactivity in the adult rat central nervous system. Effect of colchicine and correlation with the cholinergic system—I. Forebrain. Pioro EP, et al. **Neuroscience** 1990; 34(1):57–87

Neurogenesis of the basal forebrain in euploid and trisomy 16 mice: an animal model for developmental disorders in Down syndrome. Sweeney JE, et al. **Neuroscience** 1989; 31(2):413–25

[Changes in muscarinic cholinergic receptors and cholinergic neurons in experimental hydrocephalic rat brain] Sakamoto T. **Nippon Geka Hokan** 1989 Jan 1;58(1):80–92 (Eng. Abstr.) **(Jpn)**

[Central acetylcholinergic systems in the normal aged and in the patient with Alzheimer–type dementia (ATD)] Ogawa N. **Rinsho Shinkeigaku** 1989 Dec;29(12):1529–31 (10 ref.) (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Aging is associated with a diffuse impairment of forebrain cholinergic neurons. Altavista MC, et al. **Brain Res** 1990 Jan 29;508(1):51–9

Selective retardation of the development of the basal forebrain cholinergic and pontine catecholaminergic nuclei in the brain of trisomy 16 mouse, an animal model of Down's syndrome. Kiss J, et al. **Brain Res Dev Brain Res** 1989 Dec 1;50(2):251–64

Distribution of degeneration of cholinergic neurons in the septum following axotomy in different portions of the fimbria–fornix: a correlation between degree of cell loss and proximity of neuronal somata to the lesion. Sofroniew MV, et al. **J Chem Neuroanat** 1988 Nov–Dec;1(6):327–37

Visual hallucinations and the cholinergic system in dementia [letter] Perry EK, et al. **J Neurol Neurosurg Psychiatry** 1990 Jan;53(1):88

NGF induction of NGF receptor gene expression and cholinergic neuronal hypertrophy within the basal forebrain of the adult rat. Higgins GA, et al. **Neuron** 1989 Aug;3(2):247–56

An attempt to cause the selective loss of the cholinergic neurons in the basal forebrain of the rat: a new animal model of Alzheimer's disease. Kudo Y, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):125–30

Atrophy of cholinergic neurons within the rat nucleus basalis magnocellularis following intracortical AF64A infusion. Mouton PR, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):52–7

Cortical cholinergic fibers in aging and Alzheimer's disease: a morphometric study. Geula C, et al. **Neuroscience** 1989; 33(3):469–81

PHYSIOLOGY

Animal model of anxiety: effect of diazepam in the rats with cholinergic supersensitivity and reduced turnover–rate of brain norepinephrine. Golda V, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):297–9

Dopaminergic–cholinergic interaction in a myoclonus of papio papio baboon. Rektor I, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):271–2

The EEG time series parametrization method in the study of nociception. Blinowska KJ, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(4):193–206

The role of body turn–brightness associations in the effect of scopolamine on response–to–change in the rat. Lukaszewska I, et al. **Acta Neurobiol Exp (Warsz)** 1989; 49(6):381–6

Advances in the biology of cholinergic neurons. Tuček S, et al. **Adv Neurol** 1990;51:109–15 (79 ref.)

Nerve growth factor and the basal forebrain cholinergic system: a link in the etiopathology of neurodegenerative dementias? Perry EK. **Alzheimer Dis Assoc Disord** 1990; 4(1):1–13 (81 ref.)

Cholinoceptive pontine reticular structures modify the postural adjustments during the limb movements induced by cortical stimulation. Luccarini P, et al. **Arch Ital Biol** 1990 Jan;128(1):19–45

Hippocampal nicotinic cholinergic mechanisms mediate spontaneous alternation and fear during ontogenesis but not later in the rat. Blozovski D, et al. **Behav Brain Res** 1989 Dec 1;35(3):209–20

Comparative effects of ibotenic acid– and quisqualic acid–induced lesions of the substantia innominata on attentional function in the rat: further implications for the role of the cholinergic neurons of the nucleus basalis in cognitive processes. Robbins TW, et al. **Behav Brain Res** 1989 Dec 1;35(3):221–40

The effects of ibotenic acid lesions of the nucleus basalis and cholinergic–rich neural transplants on win–stay/lose–shift and win–shift/lose–stay performance in the rat. Sinden JD, et al. **Behav Brain Res** 1990 Jan 22;36(3):229–49

The durations of hippocampal and cortical cholinergic activation induced by spatial discrimination testing of mice in an eight–arm radial maze decrease as a function of acquisition. Toumane A, et al. **Behav Neural Biol** 1989 Sep; 52(2):279–84

Forskolin stimulation of pepsinogen secretion from frog esophageal mucosa is partly mediated by intrinsic cholinergic neurons. Fong JC, et al. **Biochem Int** 1989 Dec; 19(6):1165–72

Neurochemical and behavioral correlates of unilateral striatal acetylcholinesterase inhibition by fasciculin in rats. Bolioli B, et al. **Brain Res** 1989 Dec 11;504(1):1–6

Enhanced behavioral stereotypies elicited by intrastriatal injection D1 and D2 dopamine agonists in intact rats. Bordi F, et al. **Brain Res** 1989 Dec 18;504(2):276–83

Compartmental ordering of cholinergic innervation in the mediodorsal nucleus of the thalamus in human brain. Brandel JP, et al. **Brain Res** 1990 May 7;515(1–2):117–25

Derivatives of ganglioside GM1 as neuronotrophic agents: comparison of in vivo and in vitro effects. Cannella MS, et al. **Brain Res** 1990 Apr 16;513(2):286–94

Hemicholinium–3 prevents the working memory impairments and the cholinergic hypofunction induced by ethylcholine aziridinium ion (AF64A). Chrobak JJ, et al. **Brain Res** 1989 Dec 18;504(2):269–75

Membrane resistance increase induced in thalamic neurons by stimulation of brainstem cholinergic afferents. Deschênes M, et al. **Brain Res** 1990 Apr 16;513(2):339–42

Cholinergic cell loss and cognitive impairments following intraventricular or intradentate injection of colchicine. Emerich DF, et al. **Brain Res** 1990 May 28;517(1–2):157–67

Age–related cholinergic drug effects on analgesia in two inbred strains of mice. Fagioli S, et al. **Brain Res** 1990 Feb 26;510(1):150–3

Human striatal cholinergic neurons in development, aging and Alzheimer's disease. Geula C, et al. **Brain Res** 1990 Feb 5;508(2):310–2

Nerve growth factor (NGF) reverses axotomy–induced decreases in choline acetyltransferase, NGF receptor and size of medial septum cholinergic neurons. Hagg T, et al. **Brain Res** 1989 Dec 25;505(1):29–38

Small pial vessels, but not choroid plexus, exhibit specific biochemical correlates of functional cholinergic innervation. Hamel E, et al. **Brain Res** 1990 May 21; 516(2):301–9

Development and characterization of clonal cell lines derived from septal cholinergic neurons. Hammond DN, et al. **Brain Res** 1990 Apr 2;512(2):190–200

Restoration of cholinomimetic activity by clonidine in cholinergic plus noradrenergic lesioned rats. Haroutunian V, et al. **Brain Res** 1990 Jan 22;507(2):261–6

Interactions of forebrain cholinergic and somatostatinergic systems in the rat. Haroutunian V, et al. **Brain Res** 1989 Sep 4;496(1–2):98–104

Neither adrenergic nor cholinergic antagonists in the central nervous system affect 2–deoxy–D–glucose(2–DG)–induced hyperglycemia. Iguchi A, et al. **Brain Res** 1990 Mar 5; 510(2):321–5

Age–related structural changes in the rat hippocampus: correlation with working memory deficiency. Kadar T, et al. **Brain Res** 1990 Mar 26;512(1):113–20

Cardiovascular and muscle tone changes produced by microinjection of cholinergic and glutamatergic agonists in dorsolateral pons and medial medulla. Lai YY, et al. **Brain Res** 1990 Apr 23;514(1):27–36

Electrophysiological characteristics of cholinergic and non–cholinergic neurons in the rat medial septum–diagonal band complex. Markram H, et al. **Brain Res** 1990 Apr 9; 513(1):171–4

Effects of transient cerebral ischemia on the hippocampal dentate theta (theta) profile in the acute rat: a study 4–5 months following recirculation. Monmaur P, et al. **Brain Res** 1990 Jan 29;508(1):124–34

Neurotoxic lesions of the nucleus basalis induced by colchicine: effects on spatial navigation in the water maze. Mundy WR, et al. **Brain Res** 1990 Apr 2;512(2):221–8

Cholinergic mechanisms in the ventrolateral medullary depressor area. Murugaian J, et al. **Brain Res** 1989 Nov 6;501(2):355–63

Amelioration of spatial memory impairment by intrahippocampal grafts of mixed septal and raphe tissue in rats with combined cholinergic and serotonergic denervation of the forebrain. Nilsson OG, et al. **Brain Res** 1990 May 7;515(1–2):193–206

Loss of true blue labelling from the medial septum following transection of the fimbria–fornix: evidence for the death of cholinergic and non–cholinergic neurons. O'Brien TS, et al. **Brain Res** 1990 Feb 5;508(2):249–56

Learning about rules but not about reward is impaired following lesions of the cholinergic projection to the hippocampus. Ridley RM, et al. **Brain Res** 1989 Nov 20; 502(2):306–18

The effect of acetylcholine depletion on behavior following traumatic brain injury. Robinson SE, et al. **Brain Res** 1990 Feb 12;509(1):41–6

Septal transplants ameliorate spatial deficits and restore cholinergic functions in rats with a damaged septo–hippocampal connection. Segal M, et al. **Brain Res** 1989 Oct 23;500(1–2):139–48

Descending projections from the dorsolateral pontine tegmentum to the paramedian reticular nucleus of the caudal medulla in the cat. Shiromani PJ, et al. **Brain Res** 1990 May 28;517(1–2):224–8

Pre– and post–ganglionic nerve fibres of the pterygopalatine ganglion and their allocation to the eyeball of rats. Ten Tusscher MP, et al. **Brain Res** 1990 May 28;517(1–2):315–23

Basal forebrain cell loss following fimbria/fornix transection. Tuszynski MH, et al. **Brain Res** 1990 Feb 5;508(2):241–8

Cholinergic effects on spinal dorsal horn neurons in vitro: an intracellular study. Urban L, et al. **Brain Res** 1989 Oct 23;500(1–2):12–20

Evidence for a cholinergic projection from the pedunculopontine tegmental nucleus to the rostral ventrolateral medulla in the rat. Yasui Y, et al. **Brain Res** 1990 May 28;517(1–2):19–24

Distribution of choline acetyltransferase and acetylcholinesterase in the vocal motor system of zebra finches. Zuschratter W, et al. **Brain Res** 1990 Apr 16; 513(2):193–201

Is acetylcholine involved in memory consolidation of over–reinforced learning? Durán–Arévalo M, et al. **Brain Res Bull** 1990 Jun;24(6):725–7

Dissociating performance and learning deficits on spatial navigation tasks in rats subjected to cholinergic muscarinic blockade. Whishaw IQ. **Brain Res Bull** 1989 Oct–Nov; 23(4–5):347–58 (50 ref.)

Cholinergic systems in the rat brain: IV. Descending projections of the pontomesencephalic tegmentum. Woolf NJ, et al. **Brain Res Bull** 1989 Dec;23(6):519–40

Neuronal markers in rat retinal grafts. Aramant R, et al. **Brain Res Dev Brain Res** 1990 Apr 1;53(1):47–61

Relationships between patterns of acetylcholinesterase activity and geniculocortical terminal fields in developing and mature rat visual cortex. Kageyama GH, et al. **Brain Res Dev Brain Res** 1990 Apr 1;53(1):139–44

Possible involvements of intracellular Ca2+ and Ca2+ –dependent protein phosphorylation in cholinergic differentiation of clonal rat pheochromocytoma cells (PC12) induced by glioma–conditioned medium and retinoic acid. Mizuno N, et al. **Brain Res Dev Brain Res** 1989 Nov 1;50(1):1–10

Acetylcholinesterase–containing neurons in the striatum, septum and hippocampus of the rat in embryonic culture and adult in situ. Shingai R, et al. **Brain Res Dev Brain Res** 1990 May 1;53(2):200–7

Role of prefrontal cortex and striatal output systems in short–term memory deficits associated with ageing, basal forebrain lesions, and cholinergic–rich grafts. Dunnett SB. **Can J Psychol** 1990 Jun;44(2):210–32

Spontaneous and nerve–evoked quantal transmission in regenerated motor terminals. Di Gregorio F, et al. **Cell Biol Int Rep** 1989 Dec;13(12):1119–26 (16 ref.)

Innervation of the anococcygeus muscle of the rat. Dail WG, et al. **Cell Tissue Res** 1990 Jan;259(1):139–46

Adaptation of cholinergic enteric neuromuscular transmission in diabetic rat small intestine. Nowak TV, et al. **Diabetes** 1990 Aug;39(8):891–7

Unitary characteristics of presumptive cholinergic tegmental neurons during the sleep–waking cycle in freely moving cats. el Mansari M, et al. **Exp Brain Res** 1989;76(3):519–29

Septohippocampal cholinergic axonal regeneration through peripheral nerve bridges: quantification and temporal development. Hagg T, et al. **Exp Neurol** 1990 Aug; 109(2):153–63

Role of cholecystokinin and the cholinergic system in intestinal stimulation of gallbladder contraction in man. Hopman WP, et al. **Hepatology** 1990 Feb;11(2):261–5

Presence of cholinergic neurons in the vagal afferent system: involvement in a heterogenous reinnervation. Falempin M, et al. **J Auton Nerv Syst** 1989 Dec;28(3):243–50

Involvement of substance P neurons in contractions of canine small intestine produced by mesenteric nerve stimulation. Neya T, et al. **J Auton Nerv Syst** 1989 Jun;27(1):27–34

Co–localization of choline acetyltransferase and tyrosine hydroxylase within neurons of the dorsal motor nucleus of the vagus. Armstrong DM, et al. **J Chem Neuroanat** 1990 Mar–Apr;3(2):133–40

Selective, unilateral cortical infarction increases striatal muscarinic receptor binding: potential evidence for cortical modulation of intrastriatal cholinergic transmission. Filloux F, et al. **J Chem Neuroanat** 1990 Mar–Apr;3(2):125–32

Cholinergic innervation of the superior colliculus in the cat. Hall WC, et al. **J Comp Neurol** 1989 Sep 22;287(4):495–514

Organization of the septal region in the rat brain: cholinergic–GABAergic interconnections and the termination of hippocampo–septal fibers [published erratum appears in J Comp Neurol 1990 Feb 15;292(3):495] Leranth C, et al. **J Comp Neurol** 1989 Nov 8;289(2):304–14

Intrastriatal grafts derived from fetal striatal primordia: II. Reconstitution of cholinergic and dopaminergic systems. Liu FC, et al. **J Comp Neurol** 1990 May 1;295(1):1–14

Hippocampal and midline thalamic fibers and terminals in relation to the choline acetyltransferase–immunoreactive neurons in nucleus accumbens of the rat: a light and electron microscopic study. Meredith GE, et al. **J Comp Neurol** 1990 Jun 8;296(2):204–21

Ontogeny of catecholaminergic and cholinergic cell distributions in the cat's retina. Mitrofanis J, et al. **J Comp Neurol** 1989 Nov 8;289(2):228–46

Cholinergic innervation of the rat cerebellum: qualitative and quantitative analyses of elements immunoreactive to a monoclonal antibody against choline acetyltransferase. Ojima H, et al. **J Comp Neurol** 1989 Dec 1;290(1):41–52

Embryonic development of four different subsets of cholinergic neurons in rat cervical spinal cord. Phelps PE, et al. **J Comp Neurol** 1990 Jan 1;291(1):9–26

Ontogeny of cholinergic neurons in the mouse forebrain. Schambra UB, et al. **J Comp Neurol** 1989 Oct 1; 288(1):101–22

Pattern of acetylcholinesterase activity in the hypothalamus of the cobra, Naja naja. Subhedar N, et al. **J Hirnforsch** 1990;31(1):41–9

Acetylcholine–activated ionic currents in parasympathetic neurons of bullfrog heart. Tateishi N, et al. **J Neurophysiol** 1990 May;63(5):1052–9

Spiny neurons lacking choline acetyltransferase immunoreactivity are major targets of cholinergic and catecholaminergic terminals in rat striatum. Pickel VM, et al. **J Neurosci Res** 1990 Mar;25(3):263–80

Rescue of basal forebrain cholinergic neurons after implantation of genetically modified cells producing recombinant NGF. Strömberg I, et al. **J Neurosci Res** 1990 Mar;25(3):405–11

Effects of lesions in the substantia innominata on active avoidance task and cerebral glucose metabolism. Mihara B. **Keio J Med** 1989 Dec;38(4):419–31

Role of cholinergic mechanisms in alterations of rabbit brain functional activity during sea–sickness. Maksimuk VF, et al. **Neurosci Behav Physiol** 1990 Jan–Feb;20(1):36–45

The cholinergic system of the forebrain modulates activity of GABA–ergic interneurons responsible for presynaptic regulation in the neocortex of kittens. Raevskii VV, et al. **Neurosci Behav Physiol** 1989 Nov–Dec;19(6):443–9

Alimentary conditioned reflexes in dogs on activation and blockage of the cholinoreactive amygdaloid system. Shefer SI. **Neurosci Behav Physiol** 1989 Nov–Dec;19(6):459–65

Influence of morphine on behavioral effects of pharmacological stimulation of cholinergic structures of the cat brain. Shugalev NP. **Neurosci Behav Physiol** 1990 Jan–Feb;20(1):32–3

Mechanisms of memory disturbance during stages of memory acquisition and fixation. Sprints AM. **Neurosci Behav Physiol** 1989 Sep–Oct;19(5):387–92

Excitatory neurotransmitters in kindling: excitatory amino acid, cholinergic, and opiate mechanisms. Cain DP. **Neurosci Biobehav Rev** 1989 Winter;13(4):269–76 (69 ref.)

Tracheal parasympathetic neurons of rat, mouse and guinea pig: partial expression of noradrenergic phenotype and lack of innervation from noradrenergic nerve fibres. Baluk P, et al. **Neurosci Lett** 1989 Jul 31;102(2–3):191–6

Ultrasonic vocalization in rats produced by cholinergic stimulation of the brain. Brudzynski SM, et al. **Neurosci Lett** 1990 Feb 5;109(1–2):222–6

Demonstration of a medial to lateral gradient in the density of cholinergic neuropil in the rat striatum. Burke RE, et al. **Neurosci Lett** 1990 Jan 1;108(1–2):58–64

The anteroventral third ventricle (AV3V) region is essential for pressor, dipsogenic and natriuretic responses to central carbachol. Menani JV, et al. **Neurosci Lett** 1990 Jun 8; 113(3):339–44

Presynaptic M1 muscarinic cholinoceptors mediate inhibition of excitatory synaptic transmission in the hippocampus in vitro. Sheridan RD, et al. **Neurosci Lett** 1990 Jan 22; 108(3):273–8

Interaction of noradrenergic and cholinergic systems in regulation of ocular dominance plasticity. Imamura K, et al. **Neurosci Res** 1989 Aug;6(6):519–36

Relationship between the cortical choline acetyltransferase content and EEG delta–power. Riekkinen P Jr, et al. **Neurosci Res** 1990 Apr;8(1):12–20

Neuropeptide Y (NPY) inhibits dimethylphenylpiperazinium (DMPP)–induced gastric acid secretion in isolated rat stomach. Tsai LH, et al. **Neurosci Res** 1990 Apr;8(1):21–8

Cholinergic system and memory in the rat: effects of chronic ethanol, embryonic basal forebrain brain transplants and

excitotoxic lesions of cholinergic basal forebrain projection system. Arendt T, et al. **Neuroscience** 1989;33(3):435–62

Effect of thalamic parafascicularis nucleus stimulation in regulation of serotoninergic transmission in the cat caudate nucleus: involvement of autoreceptors in the dorsalis raphe nucleus. Becquet D, et al. **Neuroscience** 1989;33(2):293–300

Bimodal regulation of adrenal opiate peptides by cholinergic mechanisms. DeCristofaro JD, et al. **Neuroscience** 1990; 35(1):203–10

Evidence for a cholinergic mechanism of "learned" changes in the responses of barrel field neurons of the awake and undrugged rat. Delacour J, et al. **Neuroscience** 1990; 34(1):1–8

Basic fibroblast growth factor promotes in vitro survival and cholinergic development of rat septal neurons: comparison with the effects of nerve growth factor. Grothe C, et al. **Neuroscience** 1989;31(3):649–61

Selective axonal transport in a single cholinergic axon of Aplysia—role of colchicine-resistant microtubules. Koike H, et al. **Neuroscience** 1989;32(2):539–55

Cholinergic and noradrenergic denervations decrease labelled purine release from electrically stimulated rat cortical slices. Pedata F, et al. **Neuroscience** 1989; 32(3):629–36

The effects of excitotoxic lesions of the basal forebrain on the acquisition, retention and serial reversal of visual discriminations in marmosets. Roberts AC, et al. **Neuroscience** 1990;34(2):311–29

The cholinergic innervation of normal and transplanted superior colliculus in the rat: an immunohistochemical study. Tan MM, et al. **Neuroscience** 1989;32(2):511–20

Comparison of behavioral effects of nucleus basalis magnocellularis lesions and somatosensory cortex ablation in the rat. Wozniak DF, et al. **Neuroscience** 1989; 32(3):685–700

Ibotenic acid lesions of the basal forebrain cholinergic system retard amygdala kindling. Cain DP, et al. **Pharmacol Biochem Behav** 1990 May;36(1):207–10

Pretreatment with an irreversible muscarinic agonist affects responses to apomorphine. Crocker AD, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):511–6

The functional relevance of the area postrema in drug-induced aversion learning. Gallo M, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):543–51

Septal alpha-noradrenergic antagonism in vivo blocks the testing-induced activation of septo-hippocampal cholinergic neurones and produces a concomitant deficit in working memory performance of mice. Marighetto A, et al. **Pharmacol Biochem Behav** 1989 Nov;34(3):553–8

Natriuresis induced by cholinergic stimulation of the locus coeruleus in the rat. De Luca LA Jr, et al. **Physiol Behav** 1990 Apr;47(4):605–10

Changes in electric activity (EEG) of the telencephalon of conscious toads (Bufo paracnemis) caused by cholinergic stimulation of the mesencephalic tegmentum. Hoffmann A, et al. **Physiol Behav** 1990 May;47(5):857–61

Impaired active avoidance responding in rats selectively bred for increased cholinergic function. Overstreet DH, et al. **Physiol Behav** 1990 Apr;47(4):787–8

Reafferentation of the subcortically denervated hippocampus as a model for transplant-induced functional recovery in the CNS. Björklund A, et al. **Prog Brain Res** 1990; 83:411–26 (64 ref.)

NGF-dependent sprouting and regeneration in the hippocampus. Gage FH, et al. **Prog Brain Res** 1990; 83:357–70 (92 ref.)

An embryological view about cholinergic innervation in the cardiovascular system. Shigei T. **Prog Clin Biol Res** 1990; 327:591–3 (15 ref.)

Presynaptic cholinergic inhibition in hippocampal cultures. Segal M. **Synapse** 1989;4(4):305–12

Alpha 2-adrenoceptors mediate the inhibition of cholinergic transmission in parasympathetic ganglia of the rabbit urinary bladder. Tsurusaki M, et al. **Synapse** 1990; 5(3):233–40

Reassessing the cholinergic basal forebrain: nomenclature schemata and concepts [news] [see comments] Butcher LL, et al. **Trends Neurosci** 1989 Dec;12(12):483–5 (18 ref.) Comment in: Trends Neurosci 1990 May;13(5):169.

[Intrahippocampal injection of NGF accelerates spontaneous alteration ontogenesis and the maturation of septohippocampal cholinergic innervation in rats] Hess C, et al. **C R Acad Sci [III]** 1990;310(11):533–8 (Eng. Abstr.) **(Fre)**

[Cholinergic innervation of the outer hair cells. Possible significance for loss of discrimination in sensorineural hearing loss] Plinkert PK. **Laryngorhinootologie** 1989 Aug; 68(8):450–5 (Eng. Abstr.) **(Ger)**

[Responses between iris sphincter and dilator evoked by cholinergic nerve stimulation] Yoshino H, et al. **Nippon Ganka Gakkai Zasshi** 1989 May;93(5):524–8 (Eng. Abstr.) **(Jpn)**

TRANSPLANTATION

Transplantation of septal cholinergic neurons to the hippocampus improves memory impairments of spatial learning in rats treated with AF64A. Ikegami S, et al. **Brain Res** 1989 Sep 4;496(1–2):321–6

ULTRASTRUCTURE

Ultrastructural localization and identification of adrenergic and cholinergic nerve terminals in the olfactory mucosa. Zielinski BS, et al. **Anat Rec** 1989 Nov;225(3):232–45

Ultrastructural localization of choline acetyltransferase in the rat rostral ventrolateral medulla: evidence for major synaptic relations with non-catecholaminergic neurons. Milner TA, et al. **Brain Res** 1989 Oct 23;500(1–2):67–89

Cholinergic and monoaminergic innervation of the cat's thalamus: comparison of the lateral geniculate nucleus with other principal sensory nuclei. Fitzpatrick D, et al. **J Comp Neurol** 1989 Oct 22;288(4):647–75

Organization of cholinergic synapses in the cat's dorsal lateral geniculate and perigeniculate nuclei. Raczkowski D, et al. **J Comp Neurol** 1989 Oct 22;288(4):676–90

Cholinergic synapses in the central nervous system: studies of the immunocytochemical localization of choline acetyltransferase. Houser CR. **J Electron Microsc Tech** 1990 May;15(1):2–19 (99 ref.)

The endomembrane system of cholinergic and non-cholinergic neurons in the medial septal nucleus and vertical limb of the diagonal band of Broca: a cytochemical and immunocytochemical study. Palacios G. **J Histochem Cytochem** 1990 Apr;38(4):563–71

Interleukin-6 as a neurotrophic factor for promoting the survival of cultured basal forebrain cholinergic neurons from postnatal rats. Hama T, et al. **Neurosci Lett** 1989 Oct 9;104(3):340–4

Ultrastructural analysis of choline acetyltransferase–immunoreactive sympathetic preganglionic neurons and their dendritic bundles in rat thoracic spinal cord. Markham JA, et al. **Synapse** 1990; 5(4):299–312

[Efferent neural apparatus of the thymus gland, spleen and lymph nodes and its reaction to electric stimulation of the posterior hypothalamic field] Taiushev KG, et al. **Arkh Anat Gistol Embriol** 1990 Feb;98(2):57–64 (Eng. Abstr.) **(Rus)**

CHOLINERGIC RECEPTORS see **RECEPTORS, CHOLINERGIC**

CHOLINESTERASE INHIBITORS

see related
INSECTICIDES

Synthesis of dibenzodioxazocines and their effects on cholinesterases and muscarinic cholinergic receptors. Gaál J, et al. **Acta Biochim Biophys Hung** 1989;24(1–2):129–42

Inactivation of end-plate acetylcholinesterase during the course of organophosphate intoxications. Besser R, et al. **Arch Toxicol** 1989;63(5):412–5

Inhibition of serum cholinesterase by trialkylphosphorothiolates. Franciskovic L, et al. **Arch Toxicol** 1989;63(6):489–91

The effect of phytochrome action on the activity of cytosolic cholinesterase in oat cells. Kim HY, et al. **Biochem Biophys Res Commun** 1990 May 31;169(1):159–64

The reaction of S-mercuric-N-dansylcysteine with acetylcholinesterase and butyrylcholinesterase. Tomlinson G, et al. **Biochem Cell Biol** 1989 Jul;67(7):337–44

Liver esterases and soman toxicity in the rat following partial hepatectomy. Jokanović M. **Biochem Pharmacol** 1990 Feb 15;39(4):797–9

Inhibition kinetics of acetylcholinesterase with fluoromethyl ketones. Allen KN, et al. **Biochemistry** 1989 Oct 17; 28(21):8466–73

In vitro inhibition of acetylcholinesterase from four marine species by organophosphates and carbamates. Galgani F, et al. **Bull Environ Contam Toxicol** 1990 Aug;45(2):243–9

The interaction of amiloride with acetylcholinesterase and butyrylcholinesterase. Zemach L, et al. **FEBS Lett** 1990 Apr 9;263(1):166–8

Inhibition of cholinesterases by DRP and induction of organophosphate-detoxicating enzymes in rats. Kaliste-Korhonen E, et al. **Gen Pharmacol** 1990; 21(4):527–33

Acute toxicity and anti acetylcholinesterase potential of some biphenyl derivatives to non target species. Rahman MF, et al. **Indian J Exp Biol** 1989 Feb;27(2):138–40

Inhibitory pattern of tissue esterases in rats fed dietary pirimiphos-methyl. Rajini PS, et al. **J Environ Sci Health [B]** 1989 Oct;24(5):509–24

Ionization constants, octanol partition coefficients and cholinesterase inhibitor constants for chlorpromazine and its metabolites. Whelpton R. **J Pharm Pharmacol** 1989 Dec; 41(12):856–8

Selective inhibition of human acetylcholinesterase by galanthamine in vitro and in vivo. Thomsen T, et al. **Life Sci** 1990;46(21):1553–8

In vivo and in vitro cholinesterase inhibitor property of the antitumor agent caracemide. Buccafusco JJ, et al. **Res Commun Chem Pathol Pharmacol** 1990 Feb; 67(2):219–27

Regional brain cholinesterase activity in rats injected intraperitoneally with anatoxin-a(s) or paraoxon. Cook WO, et al. **Toxicol Lett** 1989 Oct;49(1):29–34

[Anti-cholinesterase activity of dopamine D2 receptor antagonist: its clinical significance] Mizumoto A, et al. **Nippon Heikatsukin Gakkai Zasshi** 1989 Aug;25(4):155–65 (Eng. Abstr.) **(Jpn)**

[Characteristics of various types of atypical miniature end-plate currents in rats] Vinogradova IM, et al. **Dokl Akad Nauk SSSR** 1989;307(5):1272–6 **(Rus)**

[The mechanisms of the inhibition of erythrocyte acetylcholinesterase activity by photodynamic herbicides] Braginskaia FI, et al. **Izv Akad Nauk SSSR [Biol]** 1990 Jan-Feb;(1):39–44 (Eng. Abstr.) **(Rus)**

[Reactivation of phosphorylated cholinesterase immobilized in a gelatin membrane] Kugusheva LI, et al. **Ukr Biokhim Zh** 1990 Mar-Apr;62(2):93–6 (Eng. Abstr.) **(Rus)**

[Interaction of membrane-bound and solubilized erythrocyte acetylcholinesterase with carbamates] Kugusheva LI, et al. **Ukr Biokhim Zh** 1990 Jan-Feb;62(1):34–9 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Tetrahydroaminoacridine-lecithin combination treatment in patients with intermediate-stage Alzheimer's disease. Results of a Canadian double-blind, crossover, multicenter study. Gauthier S, et al. **N Engl J Med** 1990 May 3; 322(18):1272–6

Evaluation of a two-drug combination pretreatment against organophosphorus exposure. Solana RP, et al. **Toxicol Appl Pharmacol** 1990 Mar 1;102(3):421–9

[Tactics in the management of pregnancy and labor in myasthenia gravis] Ivanov IP, et al. **Akush Ginekol (Mosk)** 1989 Aug;(8):33–6 **(Rus)**

ADVERSE EFFECTS

Norpethidine induced myoclonus in a patient with renal failure [letter] Reutens DC, et al. **J Neurol Neurosurg Psychiatry** 1989 Dec;52(12):1450–1

Brain cholinesterase inhibition in songbirds from pecan groves sprayed with phosalone and disulfoton. White DH, et al. **J Wildl Dis** 1990 Jan;26(1):103–6

ANALYSIS

A suitable method to monitor inhibition of cholinesterase activities in tissues as induced by reversible enzyme inhibitors. Thomsen T, et al. **Enzyme** 1989;42(4):219–24

Indirect determination of O-ethyl S-(2-diisopropylaminoethyl) methylphosphonothioate in air at low concentrations. Fowler WK, et al. **J Chromatogr** 1989 Sep 8;478(1):51–61

Determination of velnacrine in plasma and urine by high-performance liquid chromatography. Hsu RS, et al. **J Chromatogr** 1989 Sep 29;494:347–53

BLOOD

Cholinesterase inhibition by organic phosphate dust. Whole blood cholinesterase inhibition in vitro by an organic phosphate antihelminthic. Simpson GR. **Arch Environ Health** 1967 Jul;15(1):70–1

Relationship between suxamethonium apnoea, serum cholinesterase activity and inhibitor numbers. King J, et al. **Br J Anaesth** 1974 Dec;46(12):908–11

Simultaneous determination of pethidine (meperidine), phenoperidine, and norpethidine (normeperidine), their common metabolite, by gas chromatography with selective nitrogen detection. Kintz P, et al. **Forensic Sci Int** 1989 Dec;43(3):267–73

Determination of tacrine and its 1-hydroxy metabolite in plasma using column liquid chromatography with ultraviolet detection. Ekman L, et al. **J Chromatogr** 1989 Sep 29;494:397–402

Intra-individual variation in plasma and erythrocyte cholinesterase activities and the monitoring of uptake of organo-phosphate pesticides. Mason HJ, et al. **J Soc Occup Med** 1989 Winter;39(4):121–4

CHEMICAL SYNTHESIS

Novel piperidine derivatives. Synthesis and anti-acetylcholinesterase activity of 1-benzyl-4-[2-(N-benzoylamino)ethyl]piperidine derivatives. Sugimoto H, et al. **J Med Chem** 1990 Jul; 33(7):1880–7

[O-substituted alkylchloroformoximes as substrates and inhibitors of cholinesterases] Ivanov IuIa, et al. **Dokl Akad Nauk SSSR** 1990;310(5):1253–5 **(Rus)**

ISOLATION & PURIFICATION

Crystals of fasciculin 2 from green mamba snake venom. Preparation and preliminary x-ray analysis. le Du MH, et al. **J Biol Chem** 1989 Dec 15;264(35):21401–2

METABOLISM

Interaction and inhibition of acetylcholinesterase from Electrophorus electricus by nitrosamines. Shuttleworth B, et al. **Arch Biochem Biophys** 1990 Jun;279(2):338–44

Putative M2 muscarinic receptors of rat heart have high affinity for organophosphorus anticholinesterases. Silveira CL, et al. **Toxicol Appl Pharmacol** 1990 May;103(3):474–81

PHARMACOKINETICS

[Study on the metabolites of cui-xing-an in rat urine] Li H, et al. **Yao Hsueh Hsueh Pao** 1989;24(4):246–50 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

Effects of tacrine derivatives on the behaviour of laboratory

rats. Koupilová M, et al. **Act Nerv Super (Praha)** 1989 Dec; 31(4):301–3

N–(3,4,5–trimethoxyphenylethyl)–aziridine––a mescaline derivative: interaction with cholinesterases in vitro. Patočka J, et al. **Act Nerv Super (Praha)** 1989 Jun; 31(2):132–3

Age–determined changes in the effects of a newly synthetized cholinesterase inhibitor on exploratory behavior, memory and striatal cholinesterase activity in rats. Castellano C, et al. **Acta Physiol Pharmacol Bulg** 1989;15(3):3–9

Estimation of plasma tacrine concentrations using an in vitro cholinesterase inhibition assay. Moriearty PL, et al. **Alzheimer Dis Assoc Disord** 1989 Fall;3(3):143–7

Acetylcholinesterase inhibitor, pyridostigmine bromide, reduces skin blood flow in humans. Stephenson LA, et al. **Am J Physiol** 1990 Apr;258(4 Pt 2):R951–7

Comparison of anticholinesterases and their effects on acetylcholine–activated ion channels. Wachtel RE. **Anesthesiology** 1990 Mar;72(3):496–503

Effect of organophosphates on dopamine and muscarinic receptor binding in rat brain. Naseem SM. **Biochem Int** 1990;20(4):799–806

Pharmacological significance of acetylcholinesterase inhibition by tetrahydroaminoacridine. Marquis JK. **Biochem Pharmacol** 1990 Sep 1;40(5):1071–6

Differences in plasma carboxylesterase activity: relevance to anticholinesterase sensitivity. Overstreet DH, et al. **Biochem Pharmacol** 1990 Jun 15;39(12):2063–4

Interaction of an organophosphate with a peripheral site on acetylcholinesterase. Friboulet A, et al. **Biochemistry** 1990 Jan 30;29(4):914–20

Absence of substrate inhibition and freezing–inactivation of the mosquito acetylcholinesterase are caused by alterations of hydrophobic interactions. Dary O, et al. **Biochim Biophys Acta** 1990 May 31;1039(1):103–9

Effect of pyridostigmine and syntostigmine pretreatment on the inhibition of acetylcholinesterases by o–pinacolyl–methylphosphonofluoridate. In vitro experiments with rat tissues. Patočka J. **Biomed Biochim Acta** 1989;48(9):715–20

Effects of diisopropylfluorophosphate on brain acetylcholinesterase, butyrylcholinesterase, and neurotoxic esterase in rats. Lim DK, et al. **Biomed Environ Sci** 1989 Sep;2(3):295–304

Effects of acetylcholinesterase specific inhibitors on the development of chick embryos. Parodi M, et al. **Boll Soc Ital Biol Sper** 1989 Sep;65(9):839–45

The effects of anticholinesterases on the latencies of action potentials in mouse skeletal muscles. Kelly SS, et al. **Br J Pharmacol** 1990 Apr;99(4):721–6

Action of an irreversible acetylcholine esterase inhibitor, soman, on muscarinic hyperpolarization in cat bladder parasympathetic ganglia. Kumamoto E, et al. **Br J Pharmacol** 1990 Jan;99(1):157–63

Calcium channel blocker reverses anticholinesterase–induced myopathy. Meshul CK. **Brain Res** 1989 Sep 11;497(1):142–8

MK–801 protects against seizures induced by the cholinesterase inhibitor soman. Braitman DJ, et al. **Brain Res Bull** 1989 Jul–Aug;23(1–2):145–8

Metoclopramide inhibits plasma cholinesterase [letter; comment] Graham SG, et al. **Can J Anaesth** 1989 Nov; 36(6):729–30 Comment on: Can J Anaesth 1988 Sep;35(5):476–8.

Inhibition of acetylcholinesterase by diastereomers of 2–methylamino–1–phenylpropanol and their derivatives. Ngiam TL, et al. **Chem Pharm Bull (Tokyo)** 1989 Sep; 37(9):2423–6

Role of butyrylcholinesterase in canine tracheal smooth muscle function. Adler M, et al. **FEBS Lett** 1990 Jul 2; 267(1):107–10

Pulmonary mechanical responses to cholinesterase inhibitor. Abbrecht PH, et al. **Fundam Appl Toxicol** 1989 Oct; 13(3):593–604

A novel water–soluble dopamine–2 antagonist with anticholinesterase activity in gastrointestinal motor activity. Comparison with domperidone and neostigmine. Iwanaga Y, et al. **Gastroenterology** 1990 Aug;99(2):401–8

Effect of the potentiation of cholinergic activity on the variability in individual GH response to GH–releasing hormone. Mazza E, et al. **J Endocrinol Invest** 1989 Dec; 12(11):795–8

Effect of huperzine A, a new cholinesterase inhibitor, on the central cholinergic system of the rat. Tang XC, et al. **J Neurosci Res** 1989 Oct;24(2):276–85

Echothiophate and cogeners decrease the voltage dependence of end–plate current decay in frog skeletal muscle. Henderson EG, et al. **J Pharmacol Exp Ther** 1989 Dec;251(3):810–6

The effect of the organophosphate trichlorfon on the neuromuscular blocking activity of atracurium in halothane–anesthetized horses. Hildebrand SV, et al. **J Vet Pharmacol Ther** 1989 Sep;12(3):277–82

Pharmacological and biochemical assessment of SM–10888, a novel cholinesterase inhibitor. Natori K, et al. **Jpn J Pharmacol** 1990 Jun;53(2):145–55

Effect of a novel CNS–selective cholinesterase inhibitor, SM–10888, on habituation and passive avoidance responses in mice. Okazaki Y, et al. **Jpn J Pharmacol** 1990 Jun; 53(2):211–20

Enhancement by an ACE inhibitor of first–dose hypotension caused by an alpha 1–blocker [letter] Baba T, et al. **N Engl J Med** 1990 Apr 26;322(17):1237

The effect of heptyl–physostigmine, a new cholinesterase inhibitor, on the central cholinergic system of the rat. De Sarno P, et al. **Neurochem Res** 1989 Oct;14(10):971–7

Inhibition of multiple molecular forms of human brain acetylcholinesterase by different types of inhibitors. Bajgar J, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1989;32(4):425–35

Time course of inhibition of acetylcholinesterase and aliesterases following parathion and paraoxon exposures in rats. Chambers JE, et al. **Toxicol Appl Pharmacol** 1990 May;103(3):420–9

Molecular determinants of the species–selective inhibition of brain acetylcholinesterase. Kemp JR, et al. **Toxicol Appl Pharmacol** 1990 Jun 15;104(2):246–58

[Central anticholinergic syndrome during postoperative period] Rupreht J, et al. **Ann Fr Anesth Reanim** 1990; 9(3):295–304 (53 ref.) (Eng. Abstr.) **(Fre)**

[Atypical miniature end plate currents in neuromuscular synapses of the rat under normal conditions, after acetylcholinesterase inhibition and cooling] Vinogradova IM, et al. **Biull Eksp Biol Med** 1990 Jun;109(6):523–5 (Eng. Abstr.) **(Rus)**

[Simulation of the action of ion channel blockaders on post–synaptic currents] Snetkov VA, et al. **Neirofiziologiia** 1989;21(4):476–84 (Eng. Abstr.) **(Rus)**

[The effect of ionic strength on reversible inhibition of catalytic activity of acetylcholinesterase by thione phosphonates] Vaĭburg GM, et al. **Ukr Biokhim Zh** 1989 Jul–Aug;61(4):107–10 (Eng. Abstr.) **(Rus)**

[A comparative study of the interaction of the cholinesterase from the brain of the cabbage fly, the acetylcholinesterase from bovine erythrocytes and the butyrylcholinesterase from horse blood serum with organophosphorus inhibitors] Grigor'eva GM, et al. **Zh Evol Biokhim Fiziol** 1990 Mar–Apr;26(2):145–50 (Eng. Abstr.) **(Rus)**

[A comparative study of the effect of vinyl phosphoric acid esters on cholinesterase and carboxylesterase activities in mammals and arthropods] Kugusheva LI, et al. **Zh Evol Biokhim Fiziol** 1990 Jan–Feb;26(1):30–4 (Eng. Abstr.) **(Rus)**

POISONING

Acute cholinesterase inhibitor poisoning mimicking pulmonary oedema. De Wilde V, et al. **Acta Clin Belg** 1989; 44(2):133–6

Protecting agricultural applicators from over–exposure to cholinesterase–inhibiting pesticides: perspectives from the California programme. Ames RG, et al. **J Soc Occup Med** 1989 Autumn;39(3):85–92 (30 ref.)

Prompt recovery from severe cholinesterase–inhibitor poisoning––remarks on classification and therapy of organophosphate poisoning. De Wilde V, et al. **Klin Wochenschr** 1990 Jun 19;68(12):615–8

[Poisoning with cholinesterase inhibitors] Quadri F, et al. **Schweiz Med Wochenschr** 1990 Feb 10;120(6):153–4 (Eng. Abstr.) **(Ger)**

[Organic changes in rabbits and rats in thiometon poisoning. II. Relation between ECG curve changes in rabbits and rats and cholinesterase inhibition and lysosomal hydrolase activation in acute thiometon poisoning] Giermaziak H. **Med Pr** 1989;40(3):133–8 (Eng. Abstr.) **(Pol)**

THERAPEUTIC USE

Effects of tetrahydroaminoacridine (tacrine) derivatives and physostigmine in convulsions induced by pentylenetetrazol. Herink J, et al. **Act Nerv Super (Praha)** 1989 Dec; 31(4):303–5

First experience with the application of 7–methoxytacrine to psychiatric patients. Zapletálek M, et al. **Act Nerv Super (Praha)** 1989 Dec;31(4):305–6

Therapeutic trials using tacrine and other cholinesterase inhibitors. Gamzu ER, et al. **Adv Neurol** 1990;51:241–5

Anticholinesterase therapy for death adder envenomation [letter; comment] Currie BJ, et al. **Aust N Z J Med** 1990 Apr;20(2):190–1 Comment on: Aust N Z J Med 1988 Oct;18(6):792–4.

Cholinesterase inhibitor therapy for Alzheimer dementia: what do animal models tell us? Sherman KA, et al. **Prog Clin Biol Res** 1989;317:1209–22

Rational therapy of myasthenia gravis. Finley JC, et al. **Semin Neurol** 1990 Mar;10(1):70–82 (66 ref.)

[Bifocal glasses––progressive glasses. Anticholinesterases] Péchereau A. **Bull Soc Ophtalmol Fr** 1989 Jan;89(1):119–22 (7 ref.) (Eng. Abstr.) **(Fre)**

[Value of ipratropium (Atrovent) in the treatment of chronic obstructive lung diseases in myasthenic patients treated with anticholinesterase agents. Apropos of a case] Robinet G, et al. **Rev Pneumol Clin** 1989;45(4):161–3 (Eng. Abstr.) **(Fre)**

[More or less lowering of blood pressure? Antihypertensive therapy with ACE inhibitors] **Fortschr Med** 1990;108 Suppl 84:1–14 **(Ger)**

[Electroneuromyographic study of alcoholic polyneuropathies and the possibilities of using anticholinesterase drugs] Avakian GN, et al. **Zh Nevropatol Psikhiatr** 1990;90(3):44–9 (Eng. Abstr.) **(Rus)**

TOXICITY

Diphasic EEG effects induced by anticholinesterasic agents in mice. Valente P, et al. **Bull Environ Contam Toxicol** 1989 Nov;43(5):670–5

Inhibition of acetylcholinesterase in the central nervous system of Rana tigrina by an organophosphate. Balasundaram K, et al. **J Biochem Toxicol** 1990 Spring; 5(1):65–6

Role of carboxylesterase in soman, sarin and tabun poisoning in rats. Jokanović M. **Pharmacol Toxicol** 1989 Sep; 65(3):181–4

CHOLINESTERASE REACTIVATORS

Prompt recovery from severe cholinesterase–inhibitor poisoning––remarks on classification and therapy of organophosphate poisoning. De Wilde V, et al. **Klin Wochenschr** 1990 Jun 19;68(12):615–8

[Reactivation of phosphorylated cholinesterase immobilized in a gelatin membrane] Kugusheva LI, et al. **Ukr Biokhim Zh** 1990 Mar–Apr;62(2):93–6 (Eng. Abstr.) **(Rus)**

BLOOD

A high–performance liquid chromatographic assay for HI–6 oxime in plasma. McCluskey MP, et al. **J Anal Toxicol** 1990 Jul–Aug;14(4):239–42

METABOLISM

pH effects in the spontaneous reactivation of phosphinylated acetylcholinesterase. Lieske CN, et al. **Life Sci** 1990; 46(17):1189–96

PHARMACOKINETICS

Pharmacokinetics of the acetylcholinesterase oxime reactivator, HI–6, in rhesus monkeys (Macaca mulatta): effect of atropine, diazepam, and methoxyflurane anesthesia. Clement JG, et al. **Biopharm Drug Dispos** 1990 Apr;11(3):227–32

Disposition kinetics and urinary excretion of 2–pyridine aldoxime methiodide in sheep. Srivastava AK, et al. **Vet Rec** 1989 Oct 21;125(17):436–7

PHARMACOLOGY

Effects of butanedione monoxime on neuromuscular transmission. Gage PW, et al. **Br J Pharmacol** 1990 Jul; 100(3):467–70

Pharmacology of HI–6, an H–series oxime. Rousseaux CG, et al. **Can J Physiol Pharmacol** 1989 Oct;67(10):1183–9 (91 ref.)

Protection of human left ventricular myocardium from cutting injury with 2,3–butanedione monoxime. Mulieri LA, et al. **Circ Res** 1989 Nov;65(5):1441–9

Acetylcholinesterase reactivators antagonize epileptiform bursting induced by paraoxon in guinea pig hippocampal slices. Endres W, et al. **J Pharmacol Exp Ther** 1989 Dec; 251(3):1181–6

The effects of 2,3–butanedione monoxime on initial heat, tension, and aequorin light output of ferret papillary muscles. Blanchard EM, et al. **Pflugers Arch** 1990 Apr; 416(1–2):219–21

THERAPEUTIC USE

Effectiveness of certain drugs in acute malathion intoxication in rats. Husain K, et al. **Ecotoxicol Environ Safety** 1990 Jun;19(3):271–5

Use of continuous infusion of pralidoxime for treatment of organophosphate poisoning in children. Farrar HC, et al. **J Pediatr** 1990 Apr;116(4):658–61

Effect of endogenous carboxylesterase on HI–6 protection against soman toxicity. Maxwell DM, et al. **J Pharmacol Exp Ther** 1990 Aug;254(2):440–4

[Poisoning by organophosphates (letter] Vences A, et al. **Rev Esp Anestesiol Reanim** 1989 Sep–Oct;36(5):298 **(Spa)**

TOXICITY

Neurobehavioral effects of the pyridinium aldoxime cholinesterase reactivator HI–6. Liu WF, et al. **Neurotoxicol Teratol** 1990 Jan–Feb;12(1):73–8

CHOLINESTERASES

Does sequence similarity of human choline esterase, Torpedo acetylcholine esterase and Geotrichum candidum lipase reveal the active site serine residue? [letter] Slabas AR, et al. **Biochem J** 1990 Jul 1;269(1):279–80

ANALYSIS

Determination of cholinesterase by an automated pH stat method. Nabb DP, et al. **Arch Environ Health** 1967 Aug; 15(2):147–54

Acetylcholinesterase and nonspecific cholinesterase activities in rat liver: subcellular localization, molecular forms, and some extraction properties. Berninsone P, et al. **Biochem Cell Biol** 1989 Nov–Dec;67(11–12):817–22

A cytochemical study of the serotoninergic, cholinergic and peptidergic components of the reproductive system in the monogenean parasite, Diclidophora merlangi. Maule AG, et al. **Parasitol Res** 1990;76(5):409–19

Triazophos poisoning in goslings. Quick MP, et al.

Vet Rec 1990 Jul 14;127(2):40–1

A fine structural localization of the non-specific cholinesterase activity in glomerular nerve formations (endings). Dubový P. **Z Mikrosk Anat Forsch** 1990; 104(1):87–96

Contribution to histochemical distribution of non-specific cholinesterase activity in sensory ganglia of some mammals. Dubový P, et al. **Z Mikrosk Anat Forsch** 1989; 103(6):877–87

BIOSYNTHESIS

Tissue-specific processing and polarized compartmentalization of clone-produced cholinesterase in microinjected Xenopus oocytes. Dreyfus PA, et al. **Cell Mol Neurobiol** 1989 Sep;9(3):323–41

BLOOD

Serum cholinesterase activity in infantile and juvenile spinal muscular atrophy. Niebroj-Dobosz I, et al. **Acta Neurol Scand** 1989 Sep;80(3):208–14

Occupational risk of decreased plasma cholinesterase among pesticide production workers in Taiwan. Wu YQ, et al. **Am J Ind Med** 1989;16(6):659–66

Effect of magnesium and preeclampsia on plasma cholinesterase activity [letter; comment] Marx GF. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1754–5 Comment on: Am J Obstet Gynecol 1988 Aug;159(2):309–11.

Crop duster aviation mechanics: high risk for pesticide poisoning. McConnell R, et al. **Am J Public Health** 1990 Oct;80(10):1236–9

Effects of dichlorvos on blood cholinesterase activities of cattle [published erratum appears in Am J Vet Res 1990 Mar;51(3):495] Khan AA, et al. **Am J Vet Res** 1990 Jan; 51(1):79–82

Spectrophotometric determination of circulating cholinesterases in rats. Matthew CB, et al. **Aviat Space Environ Med** 1990 Apr;61(4):374–8

The reaction of S-mercuric-N-dansylcysteine with acetylcholinesterase and butyrylcholinesterase. Tomlinson G, et al. **Biochem Cell Biol** 1989 Jul;67(7):337–44

A naturally occurring molecular form of human plasma cholinesterase is an albumin conjugate. Masson P. **Biochim Biophys Acta** 1989 Oct 19;998(3):258–66

Determination of serum cholinesterase activity and dibucaine numbers by an amperometric choline sensor. Palleschi G, et al. **Biosens Bioelectron** 1990;5(1):27–35

Liver transplantation in patients with alcoholic cirrhosis [letter] Jankowski J. **BMJ** 1990 Aug 18–25;301(6748):390

Relationship between suxamethonium apnoea, serum cholinesterase activity and inhibitor numbers. King J, et al. **Br J Anaesth** 1974 Dec;46(12):908–11

Mechanical stability of serum cholinesterase [letter] Vella F. **Br J Anaesth** 1974 Nov;46(11):837

Changes in serum cholinesterase (EC 3.1.1.8) activity in rats consuming a high-fat diet. Osada J, et al. **Br J Nutr** 1989 Sep;62(2):343–8

Metoclopramide inhibits plasma cholinesterase [letter; comment] Graham SG, et al. **Can J Anaesth** 1989 Nov; 36(6):729–30 Comment on: Can J Anaesth 1988 Sep;35(5):476–8.

Automated conductimetric assay of human serum cholinesterase activity. Duffy P, et al. **Enzyme** 1989; 42(2):98–102

Localization of the peptidase activity of human serum butyrylcholinesterase in a approximately 50-kDa fragment obtained by limited alpha-chymotrypsin digestion. Rao RV, et al. **Eur J Biochem** 1990 Mar 30;188(3):637–43

The effect of 2-(o-cresyl)-4H-1:3:2-benzodioxaphosphorin-2-oxide on tissue cholinesterase and carboxylesterase activities of the rat. Jimmerson VR, et al. **Fundam Appl Toxicol** 1989 Oct; 13(3):568–75

Absence of delayed neurotoxicity and increased plasma butyrylcholinesterase activity in triallate-treated hens. Lapadula DM, et al. **Fundam Appl Toxicol** 1990 Jan; 14(1):191–8

Effect of GABA, muscimol and picrotoxin given in third ventricle on serum cholinesterases and monoamine oxidase and on plasma succinic dehydrogenase in rats. Rattan AK, et al. **Indian J Physiol Pharmacol** 1989 Oct–Dec;33(4):203–6

Erythrocyte and plasma cholinesterase activity in normal pregnancy. Venkataraman BV, et al. **Indian J Physiol Pharmacol** 1990 Jan;34(1):26–8

Probable pseudocholinesterase induction by valproic acid, carbamazepine and phenytoin leading to increased serum aspirin-esterase activity in epileptics. Puche E, et al. **Int J Clin Pharmacol Res** 1989;9(5):309–11

Cholinesterase risk for Iowa farmers. Helmers S, et al. **Iowa Med** 1990 Feb;80(2):73–6

Enzyme immunoassay of human cholinesterase (EC 3.1.1.8). Comparison of immunoreactive substance concentration with catalytic activity concentration in randomly selected serum samples from healthy individuals. Brock A, et al. **J Clin Chem Clin Biochem** 1990 Apr;28(4):221–4

Additional electrophoretic components of cholinesterase in plasma: a phenomenon of no importance to the total plasma cholinesterase activity. Brock A. **J Clin Chem Clin Biochem** 1989 Jul;27(7):429–31

Monoclonal antibodies allow precipitation of esterasic but not peptidasic activities associated with butyrylcholinesterase. Checler F, et al. **J Neurochem** 1990 Sep;55(3):750–5

Sex and storage affect cholinesterase activity in blood plasma of Japanese quail. Hill EF. **J Wildl Dis** 1989 Oct;25(4):580–5

Familial hypercholinesterasemia. Ohkawa J, et al. **Kobe J Med Sci** 1989 Feb;35(1):39–45

Effect of suxamethonium, pancuronium, neostigmine and halothane on serum cholinesterase activity. Choudhury KJ, et al. **Middle East J Anesthesiol** 1989 Oct;10(3):315–21

Serum cholinesterase isoenzymes and the WHHL rabbit: the relationship between the activity of cholinesterase not bound to low-density-lipoprotein and lipoprotein titer. Udom C, et al. **Mol Cell Biochem** 1989 Oct 31;90(2):121–5

Plasma cholinesterase activity in a healthy population group with no occupational exposure to known cholinesterase inhibitors: relative influence of some factors related to normal inter- and intra-individual variations. Brock A, et al. **Scand J Clin Lab Invest** 1990 Jun;50(4):401–8

Association between rat serum cholinesterase and some phospholipid components of lipoproteins in thioacetamide-induced hepatic injury. Osada J, et al. **Toxicology** 1990 Aug;63(2):245–51

Identification of human serum cholinesterase variants using the polymerase chain reaction amplification technique [published erratum appears in Trends Pharmacol Sci 1989 Sep;10(9):345] La Du BN. **Trends Pharmacol Sci** 1989 Aug; 10(8):309–13 (20 ref.)

In vitro effects of cadmium and arsenite on glutathione peroxidase, aspartate and alanine aminotransferases, cholinesterase and glucose-6-phosphate dehydrogenase activities in blood. Sheabar FZ, et al. **Vet Hum Toxicol** 1989 Dec;31(6):528–31

Changes of activities of some transferases, alkaline phosphatase and cholinesterase in the blood of women using oral contraceptives and in vitro influence of these agents on tissular enzyme levels in rat liver. Calić R, et al. **Z Med Lab Diagn** 1989;30(7):375–83

[The preliminary investigation of cholinesterase in depression] Huang MS. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1989 Aug; 22(4):229–30, 254 (Eng. Abstr.) **(Chi)**

[Assessment of nutritional status--a part of routine clinical diagnosis: cholinesterase activity as a nutritional indicator] Ollenschläger G, et al. **Klin Wochenschr** 1989 Nov 3; 67(21):1101–7 (Eng. Abstr.) **(Ger)**

[Behavior of serum cholinesterase and acetylcholinesterase activity in acute dimethoate poisoning] Deike S, et al. **Z Gesamte Inn Med** 1989 Sep 15;44(18):548–9 (Eng. Abstr.) **(Ger)**

[Application to an automatic system of a direct method for determining atypical variants of cholinesterase using succinyldithiocholine as substrate] Capone G, et al. **Quad Sclavo Diagn** 1988 Jan-Dec;24(1-4):189–96 (Eng. Abstr.) **(Ita)**

[Procedure for identifying atypical variants of pseudocholinesterase for the prevention of prolonged apnea induced by succinylcholine] Grisler R, et al. **Quad Sclavo Diagn** 1988 Jan-Dec;24(1-4):213–8 (Eng. Abstr.) **(Ita)**

[Variations in blood cholinesterase activity and exposure to chlorpyrifos in termite-control workers] Jitsunari F, et al. **Nippon Eiseigaku Zasshi** 1990 Feb;44(6):1049–58 (Eng. Abstr.) **(Jpn)**

[Liver disorder owing to estrogen therapy in prostatic cancer. The correlation between serum level of cholinesterase and dose of diethylstilbestrol diphosphate] Yamauchi T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Dec;80(12):1713–9 (Eng. Abstr.) **(Jpn)**

[Significance of cholinesterase analysis in clinical tests] Nakamura S. **Nippon Rinsho** 1989 Dec;48 Suppl:291–4 **(Jpn)**

[Activity of serum enzymes in workers in the enzyme production industry] Kuchuk AA, et al. **Gig Sanit** 1989 Dec;(12):21–3 (Eng. Abstr.) **(Rus)**

[Effect of transfusion of UV-irradiated blood on the changes in serum cholinesterase activity in patients with peritonitis] Zinevich VP, et al. **Vestn Khir** 1989 Jul;143(7):25–8 (Eng. Abstr.) **(Rus)**

[A comparative study of the interaction of the cholinesterase from the brain of the cabbage fly, the acetylcholinesterase from bovine erythrocytes and the butyrylcholinesterase from horse blood serum with organophosphorus inhibitors] Grigor'eva GM, et al. **Zh Evol Biokhim Fiziol** 1990 Mar-Apr;26(2):145–50 (Eng. Abstr.) **(Rus)**

[Clinical and neurohumoral indicators in women-alcoholics of reproductive and climacteric age] Semke VIa, et al. **Zh Nevropatol Psikhiatr** 1990;90(2):71–3 (Eng. Abstr.) **(Rus)**

[Measurement of serum cholinesterase activity: comparison of commercial and laboratory test reagents, enzyme standards and statistical processing of the results] Simeon V. **Arh Hig Rada Toksikol** 1989 Jun;40(2):183–9 (Eng. Abstr.) **(Scr)**

[Butyrylcholinesterase activity in agricultural workers in seasons when pesticides are not used] Siriški J, et al. **Arh Hig Rada Toksikol** 1989 Jun;40(2):215–9 (Eng. Abstr.) **(Scr)**

CEREBROSPINAL FLUID

Activities and kinetic properties of lumbar cerebrospinal fluid cholinesterases in relation to clinical diagnosis, severity, and progression of Alzheimer's disease. Huff FJ, et al. **Can J Neurol Sci** 1989 Nov;16(4):406–10

Human cerebrospinal fluid acetylcholinesterase and butyrylcholinesterase. Evidence for identity between the serum and cerebrospinal fluid butyrylcholinesterase. Rao RV, et al. **Clin Chim Acta** 1989 Aug 15;183(2):135–45

[Electrophoresis of cholinesterases of the cerebrospinal fluid in the Guillain-Barré syndrome] Mercatello A, et al. **Presse Med** 1990 Jan 20;19(2):61–4 (16 ref.) (Eng. Abstr.) **(Fre)**

DEFICIENCY

Cholinesterase deficiency and the Churg-Strauss syndrome. Taylor BL, et al. **Anaesthesia** 1990 Aug;45(8):649–52

Perioperative blood transfusion may conceal atypical pseudocholinesterase. Lovely MJ, et al. **Anesth Analg** 1990 Mar;70(3):326–7

[A family of adult polycystic kidney disease associated with pseudocholinesterase deficiency] Koizumi H, et al. **Nippon Naika Gakkai Zasshi** 1989 Dec;78(12):1747–51 **(Jpn)**

GENETICS

Identification of a frameshift mutation responsible for the silent phenotype of human serum cholinesterase, Gly 117 (GGT——GGAG). Nogueira CP, et al. **Am J Hum Genet** 1990 May;46(5):934–42

Inheritance of low plasma cholinesterase [letter; comment] Evans RT. **Anaesthesia** 1990 Jan;45(1):57–8 Comment on: Anaesthesia 1989 Jun;44(6):480–2.

Structure of the gene for human butyrylcholinesterase. Evidence for a single copy. Arpagaus M, et al. **Biochemistry** 1990 Jan 9;29(1):124–31

Expression of alternatively terminated unusual human butyrylcholinesterase messenger RNA transcripts, mapping to chromosome 3q26-ter, in nervous system tumors. Gnatt A, et al. **Cancer Res** 1990 Apr 1;50(7):1983–7

Glutactin, a novel Drosophila basement membrane-related glycoprotein with sequence similarity to serine esterases. Olson PF, et al. **EMBO J** 1990 Apr;9(4):1219–27

Evidence for a single butyrylcholinesterase gene in individuals carrying the C5 plasma cholinesterase variant (CHE2). Masson P, et al. **FEBS Lett** 1990 Mar 12; 262(1):115–8

Recognition of the Ek1Ek1 homozygote for plasma cholinesterase. Whittaker M, et al. **Hum Hered** 1990; 40(4):247–9

Heterogeneity of the silent gene for plasma cholinesterase. Immunological studies. Whittaker M, et al. **Hum Hered** 1990;40(3):153–8

Gene mapping on chorionic villi chromosomes by hybridization in situ: localization of cholinesterase cDNA binding sites to chromosomes 3q21, 3q26-ter and 16q21. Zakut H, et al. **Hum Reprod** 1989 Nov;4(8):941–6

Acetylcholinesterase and butyrylcholinesterase genes coamplify in primary ovarian carcinomas. Zakut H, et al. **J Clin Invest** 1990 Sep;86(3):900–8

Cholinoceptive properties of human primordial, preantral, and antral oocytes: in situ hybridization and biochemical evidence for expression of cholinesterase genes. Malinger G, et al. **J Mol Neurosci** 1989;1(2):77–84

Molecular biological search for human genes encoding cholinesterases. Soreq H, et al. **Mol Neurobiol** 1987 Spring-Summer;1(1-2):47–80 (100 ref.)

Complete sequence of rabbit butyrylcholinesterase. Jbilo O, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):3990

Amplification of butyrylcholinesterase and acetylcholinesterase genes in normal and tumor tissues: putative relationship to organophosphorous poisoning. Soreq H, et al. **Pharm Res** 1990 Jan;7(1):1–7 (42 ref.)

Genetic variants of human serum cholinesterase influence metabolism of the muscle relaxant succinylcholine. Lockridge O. **Pharmacol Ther** 1990;47(1):35–60 (126 ref.)

[The genetic polymorphism of serum cholinesterase in Yi, Tibetan and Hani ethnic groups of China] Wang LQ, et al. **I Chuan Hsueh Pao** 1988;15(2):138–43 (Eng. Abstr.) **(Chi)**

[A family of pseudocholinesterase deficiency (silent type II)] Yokota H, et al. **Rinsho Byori** 1989 Oct;37(10):1177–80 (Eng. Abstr.) **(Jpn)**

[Isoenzymes of human blood cholinesterases and their genetic control] Shubin PN, et al. **Genetika** 1989 Aug;25(8):1480–7 (Eng. Abstr.) **(Rus)**

[4 families with silent cholinesterase variant] Moreno Monedero MJ, et al. **Rev Esp Anestesiol Reanim** 1990 May-Jun;37(3):164–7 (Eng. Abstr.) **(Spa)**

[A case of silent cholinesterasic variant (letter)] Vidal Martínez J, et al. **Rev Esp Anestesiol Reanim** 1990 Mar-Apr;37(2):110–1 **(Spa)**

ISOLATION & PURIFICATION

[Stabilization of fly head cholinesterase immobilized on a gelatin membrane] Kugusheva LI, et al. **Ukr Biokhim Zh** 1989 Nov-Dec;61(6):92–4 (Eng. Abstr.) **(Rus)**

METABOLISM

N-(3,4,5-trimethoxyphenylethyl)-aziridine--a mescaline derivative: interaction with cholinesterases in vitro. Patočka J, et al. **Act Nerv Super (Praha)** 1989 Jun; 31(2):132–3

Uterine adrenergic and cholinesterase-positive nerves and myometrial catecholamine concentrations during pregnancy in sheep. Renegar RH, et al. **Acta Anat (Basel)** 1990;137(4):373–81

Recovery of non-specific cholinesterase activity in sensory corpuscles of mouse toe skin after irreversible inhibition of this enzyme and cold injury. Dubový P, et al. **Acta Histochem (Jena)** 1990;88(1):77–91

Age-determined changes in the effects of a newly synthetized cholinesterase inhibitor on exploratory behavior, memory and striatal cholinesterase activity in rats. Castellano C, et al. **Acta Physiol Pharmacol Bulg** 1989;15(3):3–9

Effects of acute amphetamine treatment on the butyrylcholinesterase activity in adrenal glands of mice. Bhatnagar M, et al. **Arch Int Pharmacodyn Ther** 1989 Nov-Dec;302:68–73

Cholinergic enzyme systems in Parkinson's disease. McGeer PL, et al. **Arch Neurol** 1971 Sep;25(3):265–8

The effect of phytochrome action on the activity of cytosolic cholinesterase in oat cells. Kim HY, et al. **Biochem Biophys Res Commun** 1990 May 31;169(1):159–64

Ligand stabilization of cholinesterases. Payne CS, et al. **Biochim Biophys Acta** 1989 Nov 9;999(1):46–51

Effects of diisopropylfluorophosphate on brain acetylcholinesterase, butyrylcholinesterase, and neurotoxic esterase in rats. Lim DK, et al. **Biomed Environ Sci** 1989 Sep;2(3):295–304

Special properties of cholinesterases in the cerebral cortex of Alzheimer's disease. Geula C, et al. **Brain Res** 1989 Sep 25;498(1):185–9

Age-related differences in soman toxicity and in blood and brain regional cholinesterase activity. Shih TM, et al. **Brain Res Bull** 1990 Mar;24(3):429–36

Non-specific cholinesterase activity in mouse spinal ganglia. The usefulness of histochemical study and image analysis for simple characterization of neuron subclasses. Dubovy P, et al. **Cell Mol Biol** 1990;36(1):23–40

Influences of trypsin and collagenase on acetylcholine responses of physically isolated single neurons of Aplysia californica. Oyama Y, et al. **Cell Mol Neurobiol** 1990 Jun; 10(2):193–205

Butyrylcholinesterase fluctuation in male albino rats with intracerebroventricular injection of gamma aminobutyric acid, muscimol, and picrotoxin. Rattan AK, et al. **Clin Physiol Biochem** 1990;8(1):16–22

A suitable method to monitor inhibition of cholinesterase activities in tissues as induced by reversible enzyme inhibitors. Thomsen T, et al. **Enzyme** 1989;42(4):219–24

The interaction of amiloride with acetylcholinesterase and butyrylcholinesterase. Zemach L, et al. **FEBS Lett** 1990 Apr 9;263(1):166–8

A comprehensive study of the stability of cocaine and its metabolites. Isenschmid DS, et al. **J Anal Toxicol** 1989 Sep-Oct;13(5):250–6

Differential association and distribution of acetyl- and butyrylcholinesterases within rat liver subcellular organelles. Perelman A, et al. **J Biol Chem** 1990 Jan 5; 265(1):214–20

Determination of pseudocholinesterase activity in the gingival crevicular fluid, saliva, and serum from patients with juvenile periodontitis and rapidly progressive periodontitis. Yamalik N, et al. **J Dent Res** 1990 Jan; 69(1):87–9

Effects of electrical stimulation on molecular forms of butyrylcholinesterase in denervated fast and slow latissimus dorsi muscles of newly hatched chicken. Khaskiye A, et al. **J Neurochem** 1990 Mar;54(3):828–33

The histochemical study of rat sciatic nerve cholinesterase in degeneration and regeneration. Liu XL, et al. **J Reconstr Microsurg** 1990 Jan;6(1):43–7

On the development of behavioral tolerance to organophosphates. III: Behavioral aspects. Wolthuis OL, et al. **Pharmacol Biochem Behav** 1990 Mar;35(3):561–5

Effects induced by phenobarbital and phenytoin on the activity of pseudocholinesterase in serum and liver in the mouse. Puche E, et al. **Pharmacol Toxicol** 1990 Jul; 67(1):91–2

Regional brain cholinesterase activity in rats injected intraperitoneally with anatoxin-a(s) or paraoxon. Cook WO, et al. **Toxicol Lett** 1989 Oct;49(1):29–34

[An observation of protective effect of acupuncture on the gastric mucosa of Wistar rats and the relative histochemical changes of the neurotransmitters] Pan C, et al. **Chen Tzu Yen Chiu** 1990;15(1):48–54 (Eng. Abstr.) **(Chi)**

[Cholinesterase in healthy adults. Significance of sex, age, weight and height for activation of P-cholinesterase] Brock A. **Ugeskr Laeger** 1990 Apr 23;152(17):1233–5 (Eng. Abstr.) **(Dan)**

[Dopamine-glutamate interaction and cholinesterase activity in the corpus striatum of the adult rat] Di Loreto S, et al. **Boll Soc Ital Biol Sper** 1989 Sep;65(9):893–900 (Eng. Abstr.) **(Ita)**

[Organ changes in rabbits and rats in phosphothioaliphatic acid poisoning. I. Effect of inhibition of cholinesterase and various marker lysosomal hydrolases on organ changes in rabbits and rats in phosphothioaliphatic acid poisoning] Giermaziak H. **Med Pr** 1989;40(2):69–79 (Eng. Abstr.) **(Pol)**

[Effect of splenic humoral factors on the cholinesterase activity of liver tissue and blood serum in experimental toxic hepatitis in rats] Shevchenko AV, et al. **Fiziol Zh** 1989 Jul-Aug;35(4):24–7 (Eng. Abstr.) **(Rus)**

[Reactivation of phosphorylated cholinesterase immobilized in a gelatin membrane] Kugusheva LI, et al. **Ukr Biokhim Zh** 1990 Mar-Apr;62(2):93–6 (Eng. Abstr.) **(Rus)**

[A comparative study of the interaction of the cholinesterase from the brain of the cabbage fly, the acetylcholinesterase from bovine erythrocytes and the butyrylcholinesterase from horse blood serum with organophosphorus inhibitors] Grigor'eva GM, et al. **Zh Evol Biokhim Fiziol** 1990 Mar-Apr;26(2):145–50 (Eng. Abstr.) **(Rus)**

[A comparative study of the effect of vinyl phosphoric acid esters on cholinesterase and carboxylesterase activities in mammals and arthropods] Kugusheva LI, et al. **Zh Evol Biokhim Fiziol** 1990 Jan-Feb;26(1):30–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Role of butyrylcholinesterase in canine tracheal smooth muscle function. Adler M, et al. **FEBS Lett** 1990 Jul 2; 267(1):107–10

CHOLINOCEPTIVE SITES see **RECEPTORS, CHOLINERGIC**

CHOLINOCEPTORS see **RECEPTORS, CHOLINERGIC**

CHOLINOLYTICS see **PARASYMPATHOLYTICS**

CHOLINOMIMETICS see **PARASYMPATHOMIMETICS**

CHOLYLGLYCINE see **GLYCOCHOLIC ACID**

CHOLYLTAURINE see **TAUROCHOLIC ACID**

CHONDROBLASTOMA

Epidermal nevus syndrome: report of association with chondroblastoma of bone [letter] Chow MJ, et al. **Pediatr Dermatol** 1989 Dec;6(4):358

COMPLICATIONS

The frequency and diagnostic significance of periostitis in chondroblastoma. Brower AC, et al. **AJR Am J Roentgenol** 1990 Feb;154(2):309–14

DIAGNOSIS

Chondroblastoma of bone. Kurt AM, et al. **Orthopedics** 1990 Jul;13(7):787–90 (12 ref.)

METABOLISM

Cytokeratin expression in chondroblastomas. Semmelink HJ, et al. **Histopathology** 1990 Mar;16(3):257–63

PATHOLOGY

Fine needle aspiration cytology of chondroblastoma of bone. Fanning CV, et al. **Cancer** 1990 Apr 15;65(8):1847–63

Chondroblastoma of bone. Kurt AM, et al. **Hum Pathol** 1989 Oct;20(10):965–76

Test and teach. Number Sixty-two. Chondroblastoma of the scaphoid. Ng JP, et al. **Pathology** 1990 Jan;22(1):10, 49

RADIOGRAPHY

Chondroblastoma of the upper end of the tibia, invading the attachment of the posterior cruciate ligament. De Boeck H, et al. **Acta Orthop Belg** 1989;55(2):129–34

SURGERY

Chondroblastoma of the rib. A case report and review of the literature. Mayo-Smith W, et al. **Clin Orthop** 1990 Feb; (251):230–4 (18 ref.)

Surgical management of chondroblastoma of the temporal bone. Horn KL, et al. **Otolaryngol Head Neck Surg** 1990 Mar;102(3):264–9

[Benign chondroblastoma. A review of 30 cases] Corsat JP, et al. **Rev Chir Orthop** 1989;75(3):179–87 (37 ref.) (Eng. Abstr.) **(Fre)**

[The role of a bone cement filling in intralesional tumor treatment] Willert HG, et al. **Z Orthop** 1989 Jul-Aug; 127(4):376–8 (Eng. Abstr.) **(Ger)**

CHONDROCALCINOSIS

COMPLICATIONS

Initially unrecognized calcium pyrophosphate dihydrate deposition disease as a cause of fever. Rahman MU, et al. **Am J Med** 1990 Jul;89(1):115–6

Cervical myelopathy in C.P.P.D. deposition disease. Parker GD, et al. **Australas Radiol** 1990 Feb;34(1):82–5

Bartter's syndrome and chondrocalcinosis: a possible role for hypomagnesemia in the deposition of calcium pyrophosphate dihydrate (CPPD) crystals. Salvarani C, et al. **Clin Exp Rheumatol** 1989 Jul-Aug;7(4):415–20 (32 ref.)

Camptodactyly, polyepiphyseal dysplasia and mixed crystal deposition disease. Hamza M, et al. **J Rheumatol** 1989 Aug; 16(8):1153–8

Median nerve entrapment and chondrocalcinosis [letter] Richards AJ. **J Rheumatol** 1989 Oct;16(10):1401–2

Lack of association between hypothyroidism and chondrocalcinosis [letter; comment] Smith MD. **J Rheumatol** 1990 Feb;17(2):272–3 Comment on: J Rheumatol 1989 Jun;16(6):807–8.

Pseudogout as a clue and complication in primary hyperparathyroidism. Geelhoed GW, et al. **Surgery** 1989 Dec;106(6):1036–41, discussion 1041–2

[Hemiplegia and contralateral multiple joint disease caused by chondrocalcinosis] Fontanet A, et al. **Rev Rhum Mal Osteoartic** 1989 Nov;56(11):789–90 **(Fre)**

[Calcified thoracic herniated disk and chondrocalcinosis] Gerster JC, et al. **Schweiz Med Wochenschr** 1990 May 26; 120(21):798–800 (Eng. Abstr.) **(Fre)**

[Multiple tendon ruptures in a case of calcium pyrophosphate crystal deposit disease (chondrocalcinosis)] van Linthoudt D, et al. **Schweiz Med Wochenschr** 1989 Aug 26; 119(34):1164–5 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

[Hereditary chondrocalcinosis in Switzerland: a new family (letter)] Gerster JC. **Schweiz Med Wochenschr** 1990 Mar 3;120(9):318 **(Fre)**

[Ultrasound findings in chondrocalcinosis] Kellner H, et al. **Z Rheumatol** 1990 May-Jun;49(3):147–50 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

The prevalence of chondrocalcinosis in the elderly and its association with knee osteoarthritis: the Framingham Study. Felson DT, et al. **J Rheumatol** 1989 Sep; 16(9):1241–5

GENETICS

Familial articular chondrocalcinosis in Spain. Balsa A, et al. **Ann Rheum Dis** 1990 Jul;49(7):531–5

Hereditary chondrocalcinosis in an Ashkenazi Jewish family. Eshel G, et al. **Ann Rheum Dis** 1990 Jul;49(7):528–30

[Hereditary articular chondrocalcinosis in the Osona region (Barcelona): presentation of 3 families] Sanmartí R, et al. **Med Clin (Barc)** 1989 May 27;92(20):780–3 (Eng. Abstr.) **(Spa)**

HISTORY

The first descriptions of chondrocalcinosis [letter] Dieppe P, et al. **Arthritis Rheum** 1989 Oct;32(10):1339–40

PATHOLOGY

[Pathogenetic aspects of chondrocalcinosis of the knee joint meniscus] Fisseler-Eckhoff A, et al. **Pathologe** 1989 Nov; 10(6):340–8 **(Ger)**

[Suture granuloma with calcium pyrophosphate deposits] Mohr W, et al. **Z Orthop** 1990 Mar-Apr;128(2):134–8 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

[The polyarticular and destructive form of chondrocalcinosis] Gabay C, et al. **Rev Med Suisse Romande** 1989 Nov; 109(11):901–6 (21 ref.) **(Fre)**

RADIOGRAPHY

Massive deposition of calcium pyrophosphate dihydrate crystals in the knee. A case report. Komatsu T, et al. **J Bone Joint Surg [Am]** 1990 Jul;72(6):931–5

Calcium pyrophosphate dihydrate crystal deposition patterns in the triangular fibrocartilage complex. Berger RA, et al. **Orthopedics** 1990 Jan;13(1):75–80

Osteophytosis of the knee: anatomic, radiologic, and pathologic investigation. Kindynis P, et al. **Radiology** 1990 Mar;174(3 Pt 1):841–6

Case report 597: Calcium pyrophosphate deposition disorder (CPPD) of the right temporomandibular joint. Lambert RG, et al. **Skeletal Radiol** 1990;19(2):139–41

VETERINARY

Calcium pyrophosphate deposition (chondrocalcinosis) in a dog. Heimann M, et al. **Vet Pathol** 1990 Mar;27(2):122–4

CHONDRODYSPLASIA, HEREDITARY DEFORMING see **EXOSTOSES, MULTIPLE HEREDITARY**

CHONDRODYSPLASIA PUNCTATA

COMPLICATIONS

[Conradi—Hünermann chondrodysplasia punctata and fetal alcoholism] Sarda P, et al. **J Genet Hum** 1989 Dec; 37(4-5):395–9 (Eng. Abstr.) **(Fre)**

[Anesthetic management of a patient with Conradi's syndrome (chondrodysplasia punctata)—a case report] Yorozu T, et al. **Masui** 1989 Aug;38(8):1092–5 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Acro-spondylar variant of punctate epiphyseal dysplasia (report of two cases). Kozlowski K, et al. **ROFO** 1990 Jan; 152(1):115–7

DIAGNOSIS

Prenatal diagnosis of chondrodysplasia punctata by

sonography. Duff P, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):497–500
Prenatal diagnosis of Conradi's syndrome. Case report. Tuck SM, et al. **Prenat Diagn** 1990 Mar;10(3):195–8

ENZYMOLOGY

Rhizomelic chondrodysplasia punctata. Deficiency of 3-oxoacyl-coenzyme A thiolase in peroxisomes and impaired processing of the enzyme. Heikoop JC, et al. **J Clin Invest** 1990 Jul;86(1):126–30
Peroxisomal enzyme deficiency in X-linked dominant Conradi-Hünermann syndrome. Clayton PT, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:358–60
Aberrant subcellular localization of peroxisomal 3-ketoacyl-CoA thiolase in the Zellweger syndrome and rhizomelic chondrodysplasia punctata. Balfe A, et al. **Pediatr Res** 1990 Mar;27(3):304–10

ETIOLOGY

Congenital rubella syndrome associated with calcific epiphyseal stippling and peroxisomal dysfunction [published erratum appears in J Pediatr 1990 Feb;116(2):320] Pike MG, et al. **J Pediatr** 1990 Jan; 116(1):88–94
Stippled epiphyses in fetal alcohol syndrome. Leicher-Düber A, et al. **Pediatr Radiol** 1990;20(5):369–70 (11 ref.)

GENETICS

Close linkage of the murine locus bare patches to the X-linked visual pigment gene: implications for mapping human X-linked dominant chondrodysplasia punctata. Herman GE, et al. **Genomics** 1990 Jul;7(3):307–12
An interstitial deletion in Xp22.3 in a family with X-linked recessive chondrodysplasia punctata and short stature. Petit C, et al. **Hum Genet** 1990 Jul;85(2):247–50
[Symptomatic calcification in the newborn. Phenocopies of chondrodysplasia punctata] Leicher-Düber A, et al. **ROFO** 1990 Apr;152(4):463–8 (Eng. Abstr.) **(Ger)**

CHONDRODYSTROPHIA CALCIFICANS CONGENITA see **CHONDRODYSPLASIA PUNCTATA**

CHONDROECTODERMAL DYSPLASIA see **ELLIS-VAN CREVELD SYNDROME**

CHONDROITIN

A method for the sequence analysis of dermatan sulphate. Fransson LA, et al. **Biochem J** 1990 Jul 15;269(2):381–8
Conformational equilibria of the L-iduronate residue in non-sulphated di-, tetra- and hexa-saccharides and their alditols derived from dermatan sulphate. Inoue Y, et al. **Biochem J** 1990 Jan 15;265(2):533–8
Hypothermic preservation of corneas in a hyperkalaemic solution (CPTES): II. Extended storage in the presence of chondroitin sulphate. Taylor MJ, et al. **Br J Ophthalmol** 1989 Oct;73(10):792–802

ANALOGS & DERIVATIVES

Connective-tissue macromolecules in Golgi chicken tendon organs and at their interface with muscle fibers and adjoining tendinous structures. Maier A, et al. **Am J Anat** 1990 Jul;188(3):239–48
Macrophage secretory products selectively stimulate dermatan sulfate proteoglycan production in cultured arterial smooth muscle cells. Edwards IJ, et al. **Am J Pathol** 1990 Mar;136(3):609–21
Effects of intracameral injection of viscoelastic solutions on corneal endothelium in dogs. Gerding PA Jr, et al. **Am J Vet Res** 1990 Jul;51(7):1086–8
Partial characterization of dermatan sulfate by proton nuclear magnetic resonance spectroscopy. Longas MO. **Anal Biochem** 1990 Jun;187(2):355–8
In vitro mineralization of a three-dimensional collagen matrix by human dental pulp cells in the presence of chondroitin sulphate. Bouvier M, et al. **Arch Oral Biol** 1990;35(4):301–9
Levels of chondroitin-6-sulfate and nonaggregating proteoglycans at articular cartilage contact sites in the knees of young dogs subjected to moderate running exercise. Säämänen AM, et al. **Arthritis Rheum** 1989 Oct; 32(10):1282–92
Metabolic fate of exogenous chondroitin sulfate in the experimental animal. Palmieri L, et al. **Arzneimittelforschung** 1990 Mar;40(3):319–23
Presence and function of chondroitin-4-sulfate on recombinant human soluble thrombomodulin. Nawa K, et al. **Biochem Biophys Res Commun** 1990 Sep 14; 171(2):729–37
Presence of an endo-beta-galactosidase degrading the linkage region between the chondroitin sulfate chain and core peptide of proteoglycan. Takagaki K, et al. **Biochem Biophys Res Commun** 1990 May 31;169(1):15–21
1H-n.m.r. investigation of naturally occurring and chemically oversulphated dermatan sulphates. Identification of minor monosaccharide residues. Bossennec V, et al. **Biochem J** 1990 May 1;267(3):625–30
Influence of collagen lattice on the metabolism of small proteoglycan II by cultured fibroblasts. Greve H, et al. **Biochem J** 1990 Jul 1;269(1):149–55
Extracellular accumulation of small dermatan sulphate proteoglycan II by interference with the secretion-recapture pathway. Schmidt G, et al. **Biochem J** 1990 Mar 1;266(2):591–5
Structural variability of large and small chondroitin sulphate/dermatan sulphate proteoglycans. Heinegård D, et al. **Biochem Soc Trans** 1990 Apr;18(2):209–12 (17 ref.)
The N-linked oligosaccharides of bovine skin proteodermatan sulphate. Scott PG, et al. **Biochem Soc Trans** 1989 Dec;17(6):1031–2
Relationship between dilatation of the rat uterine cervix and a small dermatan sulfate proteoglycan. Kokenyesi R, et al. **Biol Reprod** 1990 Jan;42(1):87–97
Secondary structure of pig skin proteodermatan sulfate: a perspective from Raman spectroscopic studies in aqueous solution. Renugopalakrishnan V, et al. **Biopolymers** 1989 Nov;28(11):1935–8
Secondary structure of a core protein from pig skin proteodermatan sulfate: CD and Fourier transform IR spectroscopic studies in solution. Renugopalakrishnan V, et al. **Biopolymers** 1989 Nov;28(11):1923–33
Pharmacodynamics and pharmacokinetics of dermatan sulfate in humans. Dol F, et al. **Blood** 1989 Oct;74(5):1577–82
Fibroblasts induce heparin synthesis in chondroitin sulfate E containing human bone marrow-derived mast cells. Gilead L, et al. **Blood** 1990 Sep 15;76(6):1188–95
Isolation and some structure analyses of a copolymeric chondroitin sulfate-dermatan sulfate proteoglycan from post-burn, human hypertrophic scar. Garg HG, et al. **Carbohydr Res** 1990 Mar 25;197:159–69
Syntheses of the methyl glycosides of the repeating units of chondroitin 4- and 6-sulfate. Jacquinet JC. **Carbohydr Res** 1990 Jun 1;199(2):153–81
Synthesis of disaccharide fragments of dermatan sulfate. Marra A, et al. **Carbohydr Res** 1989 Dec 21;195(1):39–50
Fractionation of whale cartilage chondroitin sulfate on Sepharose CL-4B in the presence of high concentration of ammonium sulfate. Relationship between molecular size and unit-disaccharide composition of the polysaccharide. Ogamo A, et al. **Carbohydr Res** 1990 Apr 2;198(1):157–162
Quantitation of hyaluronic acid and chondroitin sulphates in rabbit synovial fluid by high-performance liquid chromatography of oligosaccharides enzymatically derived thereof. Motohashi N, et al. **Chem Pharm Bull (Tokyo)** 1990 Mar;38(3):769–73
Self-aggregation of bovine skin proteodermatan sulphate promoted by removal of the three N-linked oligosaccharides. Scott PG, et al. **Connect Tissue Res** 1990; 24(3-4):225–35
Effects of chondroitin-4-sulphate on survival, sizes and ultrastructures of cultured WI-38 fibroblasts and fibroblasts from progeria patients. Schjeide OA, et al. **Cytobios** 1989; 58(236):39–60
Nervous tissue proteoglycans. Margolis RU, et al. **Dev Neurosci** 1989;11(4-5):276–88 (55 ref.)
Chondroitin sulfates in developing mouse tooth germs. An immunohistochemical study with monoclonal antibodies against chondroitin-4 and chondroitin-6 sulfates. Mark MP, et al. **Differentiation** 1990 Mar;43(1):37–50
Inhibition of chondroitin sulfate incorporation into human thyroglobulin by p-nitrophenyl-beta-D-xylopyranoside. Fogelfeld L, et al. **Endocrinology** 1990 Feb;126(2):1064–9
Extracellular matrix of cultured glial cells: selective expression of chondroitin 4-sulfate by type-2 astrocytes and their progenitors. Gallo V, et al. **Exp Cell Res** 1990 Apr;187(2):211–23
Pharmacological properties of dermatan sulfate, of a low molecular weight dermatan sulfate and of two oversulfated derivatives. Dol F, et al. **Folia Haematol (Leipz)** 1989; 116(6):851–7
Transforming growth factors-beta 1 and beta 2 induce synthesis and accumulation of hyaluronate and chondroitin sulfate in vivo. Ogawa Y, et al. **Growth Factors** 1990; 3(1):53–62
Regulated changes in chondroitin sulfation during embryogenesis: an immunohistochemical approach. Mark MP, et al. **Int J Dev Biol** 1990 Mar;34(1):191–204 (62 ref.)
Synthesis of chondroitin sulfate D and heparin proteoglycans in murine lymph node-derived mast cells. The dependence on fibroblasts. Davidson S, et al. **J Biol Chem** 1990 Jul 25;265(21):12324–30
Isolation and characterization of Patnopecten mid-gut gland endo-beta-xylosidase active on peptidochondroitin sulfate. Takagaki K, et al. **J Biol Chem** 1990 Jan 15;265(2):854–60
Immunologic study of artificial skin used in the treatment of thermal injuries. Michaeli D, et al. **J Burn Care Rehabil** 1990 Jan-Feb;11(1):21–6
Transforming growth factor (type beta) promotes the addition of chondroitin sulfate chains to the cell surface proteoglycan (syndecan) of mouse mammary epithelia. Rapraeger A. **J Cell Biol** 1989 Nov;109(5):2509–18
Identification of monoclonal antibodies that recognize novel epitopes in native chondroitin/dermatan sulfate glycosaminoglycan chains: their use in mapping functionally distinct domains of human skin. Sorrell JM, et al. **J Histochem Cytochem** 1990 Mar;38(3):393–402
A monoclonal antibody that recognizes 2,3-, 2,6-, and 4,6-disulphate ester ring substitution in pyranose-containing polysaccharides. Its production, characterization and application for the quantitation of pentosan polysulphate, dextran sulphate, glycosaminoglycan polysulphate and chondroitin sulphate E. Kongtawelert P, et al. **J Immunol Methods** 1990 Jan 24;126(1):39–49
Pharmacologic properties of a low molecular weight dermatan sulfate: comparison with unfractionated dermatan sulfate. Dol F, et al. **J Lab Clin Med** 1990 Jan;115(1):43–51
Evaluations on the usefulness of viscous agents in anterior segment surgery. II. Effect on intraocular pressure and clearance from the anterior chamber. Miyauchi S, et al. **J Ocul Pharmacol** 1989 Fall;5(3):221–32
Immunohistochemical localization of chondroitin sulfate and dermatan sulfate proteoglycan in human gingival connective tissue. Shibutani T, et al. **J Periodont Res** 1989 Sep;24(5):310–3
Proteoglycans of bovine cementum: isolation and characterization. Bartold PM, et al. **Matrix** 1990 Mar; 10(1):10–9
Proteoglycans of the articular disc of the bovine temporomandibular joint. II. Low molecular weight dermatan sulphate proteoglycan. Scott PG, et al. **Matrix** 1989 Aug;9(4):284–92
Microsomal sulfation of proteochondroitin, chondroitin, and chondroitin oligosaccharides. Sugumaran G, et al. **Methods Enzymol** 1989;179:422–7
Specific activity of radiolabeled hexosamines in metabolic labeling experiments. Yanagishita M, et al. **Methods Enzymol** 1989;179:435–45
Effects of fibroblast growth factor and chondroitin sulfate on predamaged corneal endothelium. An organ culture study. Lin CP, et al. **Ophthalmic Res** 1990;22(3):173–7
An in vitro and clinical comparison of corneal storage with chondroitin sulfate corneal storage medium with and without dextran. Lass JH, et al. **Ophthalmology** 1990 Jan; 97(1):96–103
A genetic defect in the biosynthesis of dermatan sulfate proteoglycan: galactosyltransferase I deficiency in fibroblasts from a patient with a progeroid syndrome. Quentin E, et al. **Proc Natl Acad Sci U S A** 1990 Feb; 87(4):1342–6
Interaction of tetranectin with sulphated polysaccharides and trypan blue. Clemmensen I. **Scand J Clin Lab Invest** 1989 Dec;49(8):719–25
The absorption, clearance and metabolic fate of dermatan sulphate administered to man--studies using a radioiodinated derivative. Dawes J, et al. **Thromb Haemost** 1989 Nov 24;62(3):945–9
In vitro effect on Heptest of low molecular weight heparin fractions and preparations with various anti-IIa and anti-Xa activities. Bara L, et al. **Thromb Res** 1990 Feb 15; 57(4):585–92
The effect of dermatan sulfate on in vitro human plasma coagulation, platelet aggregation and beta TG/PF4 release. Cofrancesco E, et al. **Thromb Res** 1990 Feb 1;57(3):405–14
[Morphology of the corneal endothelium following preservation in dextran or chondroitin sulfate containing culture media] Abramo F, et al. **Fortschr Ophthalmol** 1990; 87(3):234–6 (Eng. Abstr.) **(Ger)**
[The effect of chondroitin sulfate preparations on wound healing and the strength of the surgical scar] Fialkova MA, et al. **Biull Eksp Biol Med** 1989 Sep;108(9):350–1 (Eng. Abstr.) **(Rus)**
[The therapeutic effect of a biogenic paste in experimental chronic periodontitis] Frolova OA, et al. **Stomatologiia (Mosk)** 1990 Jan-Feb;69(1):20–2 (Eng. Abstr.) **(Rus)**
[Protective effect on the graft of bioprotectors of the endothelium in reconstructive surgery of the anterior eye segment] Kasparov AA, et al. **Vestn Oftalmol** 1989 Jul-Aug;105(4):13–7 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Chondroitin proteoglycans from squid skin. Isolation, characterization and immunological studies. Karamanos KK, et al. **Eur J Biochem** 1990 Aug 28;192(1):33–8

CHONDROITIN LYASES see under **CHONDROITINASES**

CHONDROITIN SULFATES see under **CHONDROITIN**

CHONDROITINASES

ANALYSIS

A fluorimetric enzyme assay for the diagnosis of Morquio disease type A (MPS IV A). van Diggelen OP, et al. **Clin Chim Acta** 1990 Feb 28;187(2):131–9

PHARMACOLOGY

The effects of chondroitinase ABC on the rabbit intervertebral disc. A roentgenographic and histologic study. Eurell JA, et al. **Clin Orthop** 1990 Jul;(256):238–43
Microvascular effects of chondroitinase ABC and chymopapain. An in vivo experimental study on hamsters and rabbits. Olmarker K, et al. **Clin Orthop** 1990 Aug; (257):274–9

THERAPEUTIC USE

Experimental chemonucleolysis with chondroitinase ABC. Kato F, et al. **Clin Orthop** 1990 Apr;(253):301–8

CHONDROITINSULFATASE see under **CHONDROITINASES**

CHONDROMA

Extraskeletal chondroma of the hand. Case report and review of the literature. DelSignore JL, et al. **Clin Orthop** 1990 May;(254):147–52 (14 ref.)

Primary bony chest wall tumours. Eng J, et al. **J R Coll Surg Edinb** 1990 Feb;35(1):44–7

[Carney's triad: a new case associated with adrenal cortex adenoma] Le Blanc I, et al. **Gastroenterol Clin Biol** 1990; 14(4):399–401 (21 ref.) (Eng. Abstr.) **(Fre)**

[Giant chondroma of the thoracic wall] Zharkov VV, et al. **Grudn Khir** 1989 Nov–Dec;(6):88–90 **(Rus)**

[Clinical considerations concerning a new case of laryngeal chondroma] Macías Fernández JA, et al. **Acta Otorrinolaringol Esp** 1989 Mar–Apr;40(2):145–8 (27 ref.) (Eng. Abstr.) **(Spa)**

ANALYSIS

Immunohistochemical localization of type II collagen in cartilage-forming tumors [published erratum appears in Bull Hosp Jt Dis Orthop Inst 1990 Spring;50(1):69] Huang GQ, et al. **Bull Hosp Jt Dis Orthop Inst** 1989 Spring; 49(1):94–102

COMPLICATIONS

Avascular necrosis of the capital femoral epiphysis in metachondromatosis. Keret D, et al. **J Pediatr Orthop** 1990 Sep–Oct;10(5):658–61

Numb clumsy hands may indicate a surgically treatable cause of myelopathy in the elderly. Pitt MC, et al. **J R Soc Med** 1990 Feb;83(2):119–20

Chondroma of the lumbar spine, a rare cause of sciatica: case report. Bland LI, et al. **Neurosurgery** 1990 Apr;26(4):685–7; discussion 688

[Carney's syndrome disclosed by hemoperitoneum] Tossou H, et al. **Gastroenterol Clin Biol** 1990;14(4):394–8 (38 ref.) (Eng. Abstr.) **(Fre)**

[A case of intracranial chondroma presenting with pontine hemorrhage] Furui T, et al. **No Shinkei Geka** 1990 Jun; 18(6):543–6 (33 ref.) (Eng. Abstr.) **(Jpn)**

CONGENITAL

[Congenital laryngeal chondroma: an unusual cause of congenital stridor] Gundlach P, et al. **Z Kinderchir** 1990 Jun;45(3):182–4 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Parasellar chondroma: a case report. Takizawa H, et al. **Br J Neurosurg** 1987;1(1):147–51 (19 ref.)

Periosteal chondroma. A report of ten cases and review of the literature. Lewis MM, et al. **Clin Orthop** 1990 Jul; (256):185–92 (29 ref.)

[The value of CT and MRT in the diagnosis of cartilage-forming tumors] Reuther G, et al. **ROFO** 1989 Dec;151(6):647–52 (Eng. Abstr.) **(Ger)**

GENETICS

Chromosomal rearrangements in chondromatous tumors. Mandahl N, et al. **Cancer** 1990 Jan 15;65(2):242–8

PATHOLOGY

Recurrence and malignant transformation of endotracheal chondroma. Salminen US, et al. **Ann Thorac Surg** 1990 May;49(5):830–2

Chondroma of the tongue. Report of a case and a consideration of the histogenesis of such lesions. Munro JM, et al. **Arch Pathol Lab Med** 1990 May;114(5):541–2 (10 ref.)

Chondromyxoid fibroma of bone: thirty-six cases with clinicopathologic correlation. Zillmer DA, et al. **Hum Pathol** 1989 Oct;20(10):952–64

Chondromyxoid fibroma of a metatarsal. Crisafulli JA, et al. **J Foot Surg** 1990 Mar–Apr;29(2):164–8

Chondrosarcoma of small bones of the hand arising from enchondroma. Nelson DL, et al. **J Hand Surg [Am]** 1990 Jul;15(4):655–9 (14 ref.)

Chondromatosis of the choroid plexus: case report. Valdueza JM, et al. **Neurosurgery** 1990 Aug;27(2):291–4

A morphometric approach to the grading of chondroid tumours on fine-needle smears. Zeppa P, et al. **Pathol Res Pract** 1989 Nov;185(5):760–3

[Assessment of the grading of cartilaginous tumors of the long tubular bones from the radiologic and pathologic viewpoint] Dietlein M, et al. **Rontgenblatter** 1990 May; 43(5):174–80 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Solitary cartilaginous exostosis of the ilium presenting as an abdominal mass. Lee FA. **Am J Dis Child** 1967 Aug; 114(2):195–7

Mediastinal chondrohamartoma. Brichon PY, et al. **Eur J Cardiothorac Surg** 1987;1(3):176–9 (16 ref.)

Wrist mass in an 18-year-old. Choi RE, et al. **Indiana Med** 1990 Feb;83(2):112–3

Hand tumors: extraskeletal chondroma and osteoma—case reports. Van Demark RE Sr, et al. **S D J Med** 1990 Feb; 43(2):5–7

Primary sternal tumours. Eng J, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(3):289–92

Case report 588: Intracortical chondroma of the left femur. Abdelwahab IF, et al. **Skeletal Radiol** 1990;19(1):59–61

Case report 625. Chondromyxoid fibroma. Davey HA, et al. **Skeletal Radiol** 1990;19(5):395–7

Giant chondroma of the sternum mimicking a mediastinal mass. Fink G, et al. **Thorax** 1990 Aug;45(8):643–4

[Computed tomographic findings in pulmonary hamartochondromas] Görich J, et al. **Rontgenpraxis** 1990 Apr;43(4):138–41 **(Ger)**

SURGERY

Digital chondroma. Galinski AW, et al. **J Foot Surg** 1989 Nov–Dec;28(6):524–6

Tumors of the skull base. Long DM, et al. **Md Med J** 1990 Apr;39(4):355–60

Large exostosis of the mandibular coronoid process. Report of a case. Asanami S, et al. **Oral Surg Oral Med Oral Pathol** 1990 May;69(5):559–62

[Synovial osteochondromatosis: several valuable clinical observations in 12 cases] Lu HS. **Chung Hua Wai Ko Tsa Chih** 1989 May;27(5):276–8, 317–8 (Eng. Abstr.) **(Chi)**

[Synovial chondromatosis] Chen ZX. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Aug; 11(4):265–9 (Eng. Abstr.) **(Chi)**

[Compression neuropathy of the median nerve at the wrist joint caused by chondroma] Hofmann AK, et al. **Handchir Mikrochir Plast Chir** 1990 Mar;22(2):96–8 (Eng. Abstr.) **(Ger)**

[Periosteal chondroma] Szendröi M, et al. **Handchir Mikrochir Plast Chir** 1990 Mar;22(2):99–102 (Eng. Abstr.) **(Ger)**

[Osteocartilaginous neoplasms of the small trochanter: observations on 4 cases] Faldini A, et al. **Arch Putti Chir Organi Mov** 1989;37(2):425–31 (Eng. Abstr.) **(Ita)**

[Chondroma of the larynx. Apropos of a case] Olalla Tabar A, et al. **Acta Otorrinolaringol Esp** 1989 May–Jun; 40(3):239–41 (Eng. Abstr.) **(Spa)**

THERAPY

[Maffucci's syndrome. Embolization and surgical excision] Bodemer C, et al. **Ann Dermatol Venereol** 1989; 116(11):868–9 **(Fre)**

CHONDROMATOSIS, SYNOVIAL

COMPLICATIONS

Pied Piper syndrome—case report. Gryfe JH. **J Can Dent Assoc** 1990 May;56(5):421–2

[Paralysis of the ulnar nerve caused by osteochondromatosis] Patella V, et al. **Arch Putti Chir Organi Mov** 1989; 37(1):239–48 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Synovial chondromatosis of the TMJ: MR and CT findings. Herzog S, et al. **AJNR** 1990 Jul–Aug;11(4):742–5

A case of primary bursal chondromatosis. Ho QH, et al. **ROFO** 1990 Feb;152(2):233–5

[Chondromatosis of the elbow joint—a single-joint arthropathy] Patzak HJ. **Unfallchirurgie** 1990 Apr; 16(2):107–9 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Synovial chondromatosis of the TMJ: case report and review of literature. Gusenbauer AW, et al. **Can Dent Assoc J** 1989 Nov;55(11):897–9 (19 ref.)

Synovial chondromatosis. Sarma DP, et al. **J La State Med Soc** 1990 Jul;142(7):27–30

Synovial chondromatosis with intracranial extension. A case report. Sun S, et al. **Oral Surg Oral Med Oral Pathol** 1990 Jul;70(1):5–9

RADIOGRAPHY

Temporomandibular joint synovial osteochondromatosis: CT manifestations. Munk PL, et al. **Can Assoc Radiol J** 1989 Oct;40(5):274–6

Case report 607: Synovial (osteo) chondromatosis of left hip joint and ileopsoas bursa. Ginai AZ. **Skeletal Radiol** 1990; 19(3):227–31

Case report 609: Synovial (osteo) chondromatosis. Osburn AW, et al. **Skeletal Radiol** 1990;19(3):237–41

SURGERY

The role of arthroscopy in the management of synovial chondromatosis of the shoulder. A case report. Richman JD, et al. **Clin Orthop** 1990 Aug;(257):91–3

Arthroscopic observation and treatment of synovial chondromatosis of the temporomandibular joint. Report of a case and review of the literature. McCain JP, et al. **Int J Oral Maxillofac Surg** 1989 Aug;18(4):233–6 (48 ref.)

Synovial chondromatosis in the distal interphalangeal joint. Harvey FJ, et al. **J Hand Surg [Am]** 1990 Jan;15(1):102–5

[Synovial chondromatosis of the hip] Mechelany E, et al. **Ann Chir** 1989;43(10):824–8 (Eng. Abstr.) **(Fre)**

CHONDROSARCOMA

Laryngeal chondrosarcoma: incidence, pathology, biological behavior, and treatment. Nicolai P, et al. **Ann Otol Rhinol Laryngol** 1990 Jul;99(7 Pt 1):515–23 (52 ref.)

Pleural chondrosarcoma. Bailey SC, et al. **Ann Thorac Surg** 1990 Jun;49(6):996–7

Quiz. Clear-cell chondrosarcoma. Ferraro A, et al. **Chir Organi Mov** 1990 Jan–Mar;75(1):99–105 **(Eng, Ita)**

Extracranial skull base chondrosarcoma. Seidman MD, et al. **Ear Nose Throat J** 1989 Aug;68(8):626–32, 635 (30 ref.)

Multicentric chondrosarcomas associated with Ollier's disease. Review and case report. Lucas D, et al. **J Fla Med Assoc** 1990 Jan;77(1):24–8 (15 ref.)

Primary bony chest wall tumours. Eng J, et al. **J R Coll Surg Edinb** 1990 Feb;35(1):44–7

[Chondrosarcoma of the ribs: report of two cases] Tsukioka K, et al. **Kyobu Geka** 1989 Sep;42(10):849–52 (Eng. Abstr.) **(Jpn)**

[A case of type 1 multiple endocrine neoplasia with chondrosarcoma in the right lung] Kajikazawa N, et al. **Nippon Naika Gakkai Zasshi** 1989 Jun;78(6):826–30 **(Jpn)**

ANALYSIS

Purification and characterization of a hyaluronan-binding protein from rat chondrosarcoma. Crossman MV, et al. **Biochem J** 1990 Mar 1;266(2):399–406

Immunohistochemical localization of type II collagen in cartilage-forming tumors [published erratum appears in Bull Hosp Jt Dis Orthop Inst 1990 Spring;50(1):69] Huang GQ, et al. **Bull Hosp Jt Dis Orthop Inst** 1989 Spring; 49(1):94–102

Characterization of mammalian type IX collagen fragments from limited pepsin digests of a transplantable swarm rat chondrosarcoma. Furuto DK, et al. **Matrix** 1989 Nov; 9(5):353–65

COMPLICATIONS

[Chondrosarcoma in a patient with osteopoikilosis. Apropos of a case] Grimer RJ, et al. **Rev Chir Orthop** 1989; 75(3):188–90 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Fine needle aspiration biopsy of paranasal chondrosarcoma metastatic to lung [letter] Gattuso P, et al. **Acta Cytol** 1990 Jan–Feb;34(1):102–4

Chondrosarcoma in the distal phalanx of the ring finger. A case report. Sivridis E, et al. **Acta Orthop Scand** 1990 Apr; 61(2):183–4

Myxoid chondrosarcoma of the mediastinum. Pescarmona E, et al. **Appl Pathol** 1989;7(5):318–21

Mesenchymal chondrosarcoma. An immunohistochemical study. Swanson PE, et al. **Arch Pathol Lab Med** 1990 Sep; 114(9):943–8

MR and CT evaluation of intraspinal chondrosarcoma. Judd J, et al. **Comput Med Imaging Graph** 1990 May–Jun; 14(3):213–6

Primary chondrosarcoma of heart. Bashi VV, et al. **Indian J Chest Dis Allied Sci** 1989 Jul–Sep;31(3):203–6

Mesenchymal chondrosarcoma of the ethmoid sinus. Takimoto T, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(6):369–74

[Chondrosarcoma with a myxoid component. Apropos of a "giant" tumor recurrence] Di Schino M, et al. **Med Trop (Mars)** 1989 Jul–Sep;49(3):301–4 (Eng. Abstr.) **(Fre)**

[Chondrosarcoma of the fingers. Apropos of 2 cases] Bonnet C, et al. **Rev Rhum Mal Osteoartic** 1990 May;57(5):427–9 **(Fre)**

[Extra-skeletal myxoid chondrosarcoma of the popliteal fossa] Springfeld R, et al. **Beitr Orthop Traumatol** 1990 Mar;37(3):182–6 (Eng. Abstr.) **(Ger)**

[The value of CT and MRT in the diagnosis of cartilage-forming tumors] Reuther G, et al. **ROFO** 1989 Dec;151(6):647–52 (Eng. Abstr.) **(Ger)**

[Chondrosarcoma of the jaws. A review of the literature and the diagnostic and therapeutic considerations] Verrina G, et al. **Minerva Stomatol** 1990 Jun;39(6):493–5 (8 ref.) (Eng. Abstr.) **(Ita)**

[Diagnosis and treatment of mesenchymal chondrosarcoma] Murav'ev GN, et al. **Vopr Onkol** 1989;35(10):1170–5 (Eng. Abstr.) **(Rus)**

[Differential diagnosis of secondary chondrosarcoma of the bones] Petrovichev NN, et al. **Vopr Onkol** 1990; 36(1):96–100 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Thorotrast induced chondrosarcoma of the axilla. Schajowicz F, et al. **Am J Roentgenol Radium Ther Nucl Med** 1967 Aug;100(4):931–7

GENETICS

Chromosomal rearrangements in chondromatous tumors. Mandahl N, et al. **Cancer** 1990 Jan 15;65(2):242–8

A common cytogenetic abnormality and DNA content alterations in dedifferentiated chondrosarcoma. Zalupski MM, et al. **Cancer** 1990 Sep 15;66(6):1176–82

Molecular analysis of a myxoid chondrosarcoma with rearrangements of chromosomes 10 and 22. Shen WP, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):207–15

METABOLISM

A clonal human chondrosarcoma cell line produces an anti-angiogenic antitumor factor. Takigawa M, et al. **Anticancer Res** 1990 Mar-Apr;10(2A):311-5

Intermediary metabolism in the Swarm rat chondrosarcoma chondrocyte. Spencer CA, et al. **Biochem J** 1990 Feb 1; 265(3):911-4

HABP102: a hyaluronan-binding protein from Swarm rat chondrosarcoma. Crossman M, et al. **Biochem Soc Trans** 1990 Apr;18(2):295-6

c-erbB-2 proto-oncogene product [letter; comment] Battifora H. **Histopathology** 1990 Jan;16(1):105-6 Comment on: Histopathology 1989 Jul;15(1):71-6.

Xylosyl transfer to the core protein precursor of the rat chondrosarcoma proteoglycan. Lohmander LS, et al. **J Biol Chem** 1989 Nov 5;264(31):18775-80

PATHOLOGY

Retroperitoneal mesenchymal chondrosarcoma. Report of a case diagnosed by fine needle aspiration cytology. Doria MI Jr, et al. **Acta Cytol** 1990 Jul-Aug;34(4):529-32

Clear cell chondrosarcoma. A case report with topographic analysis. Ding J, et al. **Acta Pathol Jpn** 1989 Aug; 39(8):533-8

Intracerebral mesenchymal chondrosarcoma. Parker JR, et al. **Ann Clin Lab Sci** 1989 Nov-Dec;19(6):401-7

Recurrence and malignant transformation of endotracheal chondroma. Salminen US, et al. **Ann Thorac Surg** 1990 May;49(5):830-2

Pathologic quiz case 2. Mesenchymal chondrosarcoma. Piccirillo JF, et al. **Arch Otolaryngol Head Neck Surg** 1990 Mar;116(3):360-1, 363

Chondrosarcoma arising in an osteochondroma: an unusual cause of an abdominal mass. Robson AK, et al. **Eur J Surg Oncol** 1990 Feb;16(1):60-2

Primary benign and malignant osseous neoplasms of the foot. Murari TM, et al. **Foot Ankle** 1989 Oct;10(2):68-80

Unusual extraskeletal myxoid chondrosarcoma in a child. Klijanienko J, et al. **Histopathology** 1990 Feb;16(2):196-8

Incidence of Wilms' tumor for 10 years and a case report of Wilms' tumor with chondrosarcomatous change. Thilagavathi G, et al. **Indian J Pathol Microbiol** 1990 Jan; 33(1):90-3

Magnetic resonance imaging in malignant bone tumours. Exner GU, et al. **Int Orthop** 1990;14(1):49-55

Chondrosarcoma of small bones of the hand arising from enchondroma. Nelson DL, et al. **J Hand Surg [Am]** 1990 Jul;15(4):655-9 (14 ref.)

Clear-cell chondrosarcoma--a case report. Lee SD, et al. **J Korean Med Sci** 1989 Sep;4(3):155-8

Myxoid tumours in the temporal bone. Charabi S, et al. **J Laryngol Otol** 1989 Dec;103(12):1206-9

Chondrosarcoma--local recurrence and systemic embolization. Scott AD, et al. **J R Soc Med** 1990 Jan; 83(1):48-9

Chondrosarcoma [clinical conference] Jakacki R, et al. **Med Pediatr Oncol** 1990;18(1):61-3

Clear-cell chondrosarcoma. Leggon RE Jr, et al. **Orthopedics** 1990 May;13(5):593-6

Extraskeletal myxoid chondrosarcoma of the head and neck: a case report. Liu-Shindo M, et al. **Otolaryngol Head Neck Surg** 1989 Oct;101(4):485-8

A morphometric approach to the grading of chondroid tumours on fine-needle smears. Zeppa P, et al. **Pathol Res Pract** 1989 Nov;185(5):760-3

Clear cell chondrosarcoma: case report and ultrastructural study. Chan YF, et al. **Pathology** 1989 Apr;21(2):134-7

Primary chondrosarcoma of the left inferior lobar bronchus. Morgenroth A, et al. **Respiration** 1989;56(3-4):241-4

[Assessment of the grading of cartilaginous tumors of the long tubular bones from the radiologic and pathologic viewpoint] Dietlein M, et al. **Rontgenblatter** 1990 May; 43(5):174-80 (Eng. Abstr.) (Ger)

[Clear-cell chondrosarcoma of bone] Povišil C, et al. **Arkh Patol** 1990;52(5):55-8 (Eng. Abstr.) (Rus)

[Malignant transformation in bone cysts] Pašoski S, et al. **Acta Chir Iugosl** 1989;36 Suppl 2:780-2 (Eng. Abstr.) (Scr)

[Chondrosarcoma of the larynx: review of the Western literature and presentation of a new case] Esteller More E, et al. **Acta Otorrinolaringol Esp** 1989 Nov-Dec; 40(6):433-8 (45 ref.) (Eng. Abstr.) (Spa)

[Chondrosarcoma of the thyroid cartilage. Presentation of a case and review of the literature] Pareja Martínez A, et al. **Acta Otorrinolaringol Esp** 1989 Sep-Oct;40(5):373-6 (20 ref.) (Eng. Abstr.) (Spa)

RADIOGRAPHY

Laryngeal chondrosarcoma: CT findings in three patients. Muñoz A, et al. **AJR Am J Roentgenol** 1990 May; 154(5):997-8

Chondrosarcoma of the posterior fossa--case report. Oguro K, et al. **Neurol Med Chir (Tokyo)** 1989 Nov;29(11):1030-8 (41 ref.)

Primary sternal tumours. Eng J, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(3):289-92

[Chondrosarcoma: clinical and radiological analysis of 206 cases] Xu DY. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Jun;23(3):161-4 (Eng. Abstr.) (Chi)

[Computed tomographic differential diagnosis of primary pelvic osteo-, chondro- and Ewing's sarcomas] Heller M, et al. **ROFO** 1990 Aug;153(2):137-42 (Eng. Abstr.) (Ger)

[Primary oral peripheral chondrosarcoma. Anatomo-clinical aspects and presentation of 2 cases with periodontal onset] Favia GF, et al. **Minerva Stomatol** 1989 Dec;38(12):1263-70 (Eng. Abstr.) (Ita)

RADIOTHERAPY

Considerations in fractionated proton radiation therapy: clinical potential and results. Austin-Seymour M, et al. **Radiother Oncol** 1990 Jan;17(1):29-35

Neutron boost irradiation of soft tissue and chondrosarcomas at the West German Tumour Centre in Essen. Budach V, et al. **Strahlenther Onkol** 1990 Jan;166(1):63-8

SECONDARY

Bilateral pleural-based densities in a patient with hip pain. Benditt JO, et al. **Chest** 1990 Feb;97(2):467-8

Secondary chondrosarcoma of the foot. Wu KK. **J Foot Surg** 1989 May-Jun;28(3):260-5

SURGERY

Left occipital lobectomy and the preangular anatomy of reading. Greenblatt SH. **Brain Lang** 1990 May;38(4):576-95

Pelvic allograft. A case report with a follow-up evaluation of 5.5 years. Mnaymneh W, et al. **Clin Orthop** 1990 Jun; (255):128-32

Total femur replacement. A case report with 35-year follow-up study. Present DA, et al. **Clin Orthop** 1990 Feb; (251):166-7

Chest wall reconstruction after resection of primary malignant chest wall tumours. Eng J, et al. **Eur J Cardiothorac Surg** 1990;4(2):101-4

Laryngeal chondrosarcoma: is conservative surgery adequate treatment? Kambič V, et al. **J Laryngol Otol** 1989 Oct; 103(10):970-2

The subtemporal and preauricular infratemporal approach to intradural structures ventral to the brain stem. Sen CN, et al. **J Neurosurg** 1990 Sep;73(3):345-54

Tumors of the skull base. Long DM, et al. **Md Med J** 1990 Apr;39(4):355-60

Intracranial chondrosarcoma--case report. Miyamori T, et al. **Neurol Med Chir (Tokyo)** 1990 Apr;30(4):263-7

Chordoma and chondrosarcoma of the cranial base: an 8-year experience. Sen CN, et al. **Neurosurgery** 1989 Dec; 25(6):931-40; discussion 940-1

Chondrosarcoma of the facial skeleton in a child. Meyer C, et al. **Otolaryngol Head Neck Surg** 1989 Nov;101(5):591-4

[Chondrosarcoma of the rib--a case report] Chang LY, et al. **Chang Keng I Hsueh** 1989 Jun 20;12(2):107-10 (Eng. Abstr.) (Chi)

[Mesenchymal chondrosarcoma] Clarysse P, et al. **Acta Otorhinolaryngol Belg** 1989;43(2):119-24 (Eng. Abstr.) (Dut)

[Parasellar chondrosarcoma: report of a case operated on through a pterional-temporal approach and review of the literature] Sindou M, et al. **Neurochirurgie** 1989; 35(3):186-90 (29 ref.) (Eng. Abstr.) (Fre)

[Parasellar chondrosarcoma: report of a case surgically treated using a pterional-temporal approach and a review of the literature (letter)] Taptas JN. **Neurochirurgie** 1989; 35(6):412 (Fre)

[The role of a bone cement filling in intralesional tumor treatment] Willert HG, et al. **Z Orthop** 1989 Jul-Aug; 127(4):376-8 (Eng. Abstr.) (Ger)

[Limb-preserving resection operations in the management of bone tumors of the shoulder region] Gáspár L, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(3):233-8 (Eng. Abstr.) (Hun)

[The maxillofacial prosthesis: palatal obturators. The principles of treatment and rehabilitation in a case of buccorhinosinusal communication] Fraccari F, et al. **Minerva Stomatol** 1990 Apr;39(4):293-300 (Eng. Abstr.) (Ita)

[Resection of chondrosarcoma of anterior chest wall with pleural dissemination] Akiba T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jan;38(1):160-4 (Eng. Abstr.) (Jpn)

[Chondrosarcoma of the vertebral column L5--S1] Sosnowski R. **Chir Narzadow Ruchu Ortop Pol** 1989; 54(2):167-70 (Eng. Abstr.) (Pol)

[Chondrosarcoma of the larynx] Walewska E. **Otolaryngol Pol** 1989;42(6):452-5 (Eng. Abstr.) (Pol)

[Comparative results of the treatment of patients with osteogenic sarcoma and chondrosarcoma of the extremities] Trishkin VA, et al. **Vestn Khir** 1989 May;142(5):43-5 (Rus)

THERAPY

[Chondrosarcoma of the sinuses: an infrequent tumor] Camps C, et al. **Acta Otorrinolaringol Esp** 1989 May-Jun; 40(3):243-6 (Eng. Abstr.) (Spa)

ULTRASTRUCTURE

Chondrosarcoma and malignant lymphoma. Murakata L, et al. **N J Med** 1989 Aug;86(8):629-32

VETERINARY

Extraskeletal mesenchymal chondrosarcoma in a cow. Uno K, et al. **J Comp Pathol** 1989 Jul;101(1):31-8

Canine extraskeletal osteosarcoma and chondrosarcoma: a clinicopathologic study of 14 cases. Patnaik AK. **Vet Pathol** 1990 Jan;27(1):46-55

CHONDROSTEOMA see **OSTEOCHONDROMA**

CHONDRO-4-SULFATASE see under **SULFATASES**

CHORDA TYMPANI NERVE

ANATOMY & HISTOLOGY

[The intraosseous course of the chorda tympani] Fasel J. **Anat Anz** 1989;168(5):433-5 (Eng. Abstr.) (Ger)

DRUG EFFECTS

Influences on taste in the area of chorda tympani nerve after transtympanic injection of local anesthetic (4% lidocaine). Yamada Y, et al. **Auris Nasus Larynx** 1989;16 Suppl 1:S41-6

Effects of isoproterenol treatment on gustatory neural responses in three inbred strains of mice. Ninomiya Y, et al. **Comp Biochem Physiol [A]** 1989;94(2):263-7

Sugar best single chorda tympani nerve fiber responses to various sugar stimuli in rat and hamster. Tonosaki K, et al. **Comp Biochem Physiol [A]** 1989;94(4):603-5

INJURIES

'Atrophy of fungiform papillae following lingual nerve damage--a suggested mechanism [letter; comment] Cowan PW. **Br Dent J** 1990 Feb 10;168(3):95 Comment on: Br Dent J 1989 Nov 25;167(10):332.

PHYSIOLOGY

Chemospecific deficits in taste detection after selective gustatory deafferentation in rats. Spector AC, et al. **Am J Physiol** 1990 Mar;258(3 Pt 2):R820-6

Specificity of amiloride inhibition of hamster taste responses. Hettinger TP, et al. **Brain Res** 1990 Apr 9;513(1):24-34

Effects of menthol on peripheral nerve and cortical unit responses to thermal stimulation of the oral cavity in the rat. Kosar E, et al. **Brain Res** 1990 Apr 16;513(2):202-11

Non-specific inhibition by amiloride of canine chorda tympani nerve responses to various salts: do Na(+)-specific channels exist in canine taste receptor membranes? Nakamura M, et al. **Brain Res** 1990 Jul 30;524(1):42-8

Taste nerve responses during licking behavior in rats: importance of saliva in responses to sweeteners. Matsuo R, et al. **Neurosci Lett** 1990 Jan 1;108(1-2):121-6

[Developmental changing of rat taste responses from chorda tympani nerve] Maeda S. **Nippon Seirigaku Zasshi** 1990; 52(3):67-83 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Peripheral taste responses in genetically hypertensive rats. Formaker BK, et al. **Physiol Behav** 1990 Jun;47(6):1229-37

SURGERY

Long-term effects of gustatory neurectomy on fungiform papillae in the young rat. Ganchrow JR, et al. **Anat Rec** 1989 Nov;225(3):224-31

Effects of parasympathectomy on androgen responses of the rat submandibular gland. Katsukawa H, et al. **Arch Oral Biol** 1990;35(4):273-5

The effect of chorda tympani section on ipsilateral and contralateral salivary secretion and taste in man. Grant R, et al. **J Neurol Neurosurg Psychiatry** 1989 Sep; 52(9):1058-62

ULTRASTRUCTURE

Mechanisms of middle ear aeration: anatomic and physiologic evidence in primates. Eden AR, et al. **Laryngoscope** 1990 Jan;100(1):67-75

CHORDAE TENDINEAE

Entrapment of tined leads. Res JC, et al. **PACE** 1989 Oct; 12(10):1583-5

[Echocardiography in the diagnosis of rupture of chordae tendineae. Description of a clinical case] Arturi E, et al. **Minerva Cardioangiol** 1990 Jan-Feb;38(1-2):61-4 (Eng. Abstr.) (Ita)

[Clinical pictures of mitral chordal rupture] Idawara H, et al. **J Cardiol Suppl** 1989;22:60-2 (Jpn)

[Modified mitral valve replacement with preservation of chordae tendinae] Furuse A. **Kyobu Geka** 1989 Jul;42(8 Suppl):637-40 (Eng. Abstr.) (Jpn)

[Mitral valvuloplasty for mitral regurgitation due to torn chordae of the posterior leaflet] Tamaki S, et al. **Kyobu Geka** 1990 Jun;43(6):467-70 (Eng. Abstr.) (Jpn)

[Valvuloplasty for acute mitral insufficiency caused by torn chordae (Carpentier method): report of a case] Tsuboi H, et al. **Kyobu Geka** 1990 Jun;43(6):495-7 (Eng. Abstr.) (Jpn)

ABNORMALITIES

Single papillary muscle ("parachute valve") and double-orifice left ventricle in atrioventricular septal defect convergence of chordal attachment: surgical anatomy and results of surgery. Draulans-Noë HA, et al.

Pediatr Cardiol 1990 Jan;11(1):29–35

[Surgical problems in d-TGA with VSD and PS associated with insertion of tricuspid valve chordae to the infundibular septum—the Rastelli operation by translocation of the infundibular septum] Aoki M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1990 Jun;38(6):1011–6 (Eng. Abstr.) **(Jpn)**

[Mitral regurgitation due to anomalous attachment of chordae tendineae to the left atrial wall] Sawa S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Sep;37(9):2053–6 (Eng. Abstr.) **(Jpn)**

[Clinical significance of false tendons of the heart] Kochanowski J, et al. **Pol Arch Med Wewn** 1989 Jun; 81(6):364–7 (22 ref.) **(Pol)**

ANATOMY & HISTOLOGY

The mitral complex. Interaction of the anatomy, physiology, and pathology of the mitral annulus, mitral valve leaflets, chordae tendineae, and papillary muscles. Silverman ME, et al. **Am Heart J** 1968 Sep;76(3):399–418 (226 ref.)

Lymphatics of the cardiac chordae tendineae with particular consideration of their origin. Ichikawa S, et al. **Lymphology** 1989 Sep;22(3):123–31

INJURIES

Ruptured chordae tendineae of the tricuspid valve as a complication of endomyocardial biopsy in heart transplant patients. Braverman AC, et al. **Am J Cardiol** 1990 Jul 1; 66(1):111–3

Rupture of mitral chordae tendineae resulting from blunt chest trauma: diagnosis by transesophageal echocardiography. Turabian M, et al. **Can J Cardiol** 1990 Jun;6(5):180–2

PATHOLOGY

Color Doppler echocardiographic evaluation of patients with a flail mitral leaflet. Pearson AC, et al. **J Am Coll Cardiol** 1990 Jul;16(1):232–9

PHYSIOLOGY

Preservation versus severance of the subvalvular apparatus in mitral valve replacement: an experimental study. Gams E, et al. **Eur J Cardiothorac Surg** 1990;4(5):250–5; discussion 255–6

SURGERY

Artificial mitral valve chordae: experimental and clinical experience. Zussa C, et al. **Ann Thorac Surg** 1990 Sep; 50(3):367–73

Comparative assessment of chordal preservation versus chordal resection during mitral valve replacement. Hennein HA, et al. **J Thorac Cardiovasc Surg** 1990 May; 99(5):828–36; discussion 836–7

[Mitral valve prosthesis with preservation of the chordae and papillary muscles in patients with mitral insufficiency] Konstantinov BA, et al. **Grud Serdechnososudistaia Khir** 1990;(1):10–4 (Eng. Abstr.) **(Rus)**

CHORDATA

Sugar sequences of allergenically active oligosaccharide alcohols isolated from a large-molecular-size sea squirt antigen termed H-antigen. Ohta M, et al. **Arch Biochem Biophys** 1989 Nov 15;275(1):151–65

ANATOMY & HISTOLOGY

Evolution of chordate endocrine organs. Olsson R. **Prog Clin Biol Res** 1990;342:272–81 (41 ref.)

CHORDOMA

Cervical chordoma in childhood: clinical statistical contribution. Bianchi PM, et al. **Int J Pediatr Otorhinolaryngol** 1989 Sep;18(1):39–45

[Chordoma of the base of the cranium. Apropos of a clinical case] Fraile Rodrigo JJ, et al. **Acta Otorrinolaringol Esp** 1988 Jul-Aug;39(4):255–8 (27 ref.) (Eng. Abstr.) **(Spa)**

ANALYSIS

DNA in chordomas of the clivus Blumenbachi. Spaar FW, et al. **Neurosurg Rev** 1990;13(3):219–29

[Expression of embryonal and differentiational proteins in chordomas and in the notochord] Tamayama C, et al. **Gan No Rinsho** 1990 Jan;36(1):7–12 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Cerebrospinal fluid fistula secondary to ecchordosis physaliphora. Macdonald RL, et al. **Neurosurgery** 1990 Mar;26(3):515–8; discussion 518–9

DIAGNOSIS

CT and MR findings in patients with chordomas of the petrous apex. Brown RV, et al. **AJNR** 1990 Jan-Feb; 11(1):121–4

A case of intracranial chordoma investigated by MRI and CT studies. Decrop E, et al. **J Belge Radiol** 1989 Dec; 72(6):485–8

Sacral and presacral tumors: problems in diagnosis and management. Feldenzer JA, et al. **Neurosurgery** 1989 Dec; 25(6):884–91

Sacrococcygeal chordoma: a case report. Fine needle aspiration cytologic and histopathologic findings. Angelopulos N, et al. **Pathologica** 1990 Mar-Apr; 82(1078):167–71

Cranial chordomas in infancy and childhood. A report of two cases and review of the literature. Matsumoto J, et al. **Pediatr Radiol** 1989;20(1-2):28–32 (34 ref.)

[Retroperitoneal location of a chordoma] Enehjelm SD, et al. **Ugeskr Laeger** 1990 Mar 26;152(13):923–4 (Eng. Abstr.) **(Dan)**

METABOLISM

[Expression of EGF receptor and c-neu oncogene product in chordomas] Tamayama C, et al. **Gan No Rinsho** 1990 Jun;36(7):773–6 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Chordomas with malignant spindle cell components. A DNA flow cytometric and immunohistochemical study with histogenetic implications. Hruban RH, et al. **Am J Pathol** 1990 Aug;137(2):435–47

Lumbo-sacral chordoma with high-grade malignant cartilaginous and spindle cell components. Hruban RH, et al. **Am J Surg Pathol** 1990 Apr;14(4):384–9 (24 ref.)

Chordoma metastatic to the ovary. Zukerberg LR, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):208–10

Fine-needle aspiration cytology of sacrococcygeal chordoma. Nijhawan VS, et al. **Diagn Cytopathol** 1989; 5(4):404–7

[Histological diagnosis of brain tumors (13): Chordoma] Taomoto K. **No Shinkei Geka** 1990 Jun;18(6):499–506 (38 ref.) **(Jpn)**

[Chordoma of the 3d ventricle without extradural implantation (letter)] Antigüedad AR, et al. **Neurologia** 1989 Nov;4(9):340–1 **(Spa)**

RADIOGRAPHY

A pain in the rear. Suarez R, et al. **Br J Radiol** 1990 Jan; 63(745):77–8

Case report 576. Anaplastic sacrococcygeal chordoma (dedifferentiated chordoma). Smith J, et al. **Skeletal Radiol** 1989;18(7):561–4

[A chordoma located at L 1/2] Wuttke V, et al. **ROFO** 1989 Oct;151(4):508–9 **(Ger)**

[Thoracic chordoma] Kaulbach C, et al. **Rontgenblatter** 1990 Jul;43(7):295–7 (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

Considerations in fractionated proton radiation therapy: clinical potential and results. Austin-Seymour M, et al. **Radiother Oncol** 1990 Jan;17(1):29–35

SECONDARY

Metastasizing chordoma in early childhood: report of a case at 1.5 T. Horton KM, et al. **Magn Reson Imaging** 1989 Nov-Dec;7(6):689–91

SURGERY

Synchronous abdominal and transsacral approach for excision of sacrococcygeal chordoma. Michel LA, et al. **Acta Chir Belg** 1989 Nov-Dec;89(6):316–9

The extended maxillotomy and subtotal maxillectomy for excision of skull base tumors. Cocke EW Jr, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jan;116(1):92–104

Transoral labiomandibular approach to basiocciput chordomas in childhood. Nagib MG, et al. **Childs Nerv Syst** 1990 May;6(3):126–30 (15 ref.)

The subtemporal and preauricular infratemporal approach to intradural structures ventral to the brain stem. Sen CN, et al. **J Neurosurg** 1990 Sep;73(3):345–54

Chordoma and chondrosarcoma of the cranial base: an 8-year experience. Sen CN, et al. **Neurosurgery** 1989 Dec; 25(6):931–40; discussion 940–1

[Apropos of a case of cervical vertebral chordoma] Sepúlveda Cariñanos F, et al. **Acta Otorrinolaringol Esp** 1988 Nov-Dec;39(6):431–3 **(Spa)**

THERAPY

[The combined treatment of sacrococcygeal chordomas] Tolstopiatov BA, et al. **Vopr Onkol** 1989;35(11):1371–2 **(Rus)**

VETERINARY

Chordoma in a cat. Carpenter JL, et al. **J Am Vet Med Assoc** 1990 Jul 15;197(2):240–2

Immunohistochemical and morphologic features of chordomas in ferrets (Mustela putorius furo). Herron AJ, et al. **Vet Pathol** 1990 Jul;27(4):284–6

CHORDOTOMY see **CORDOTOMY**

CHOREA

Hemichorea and hemiballismus: recent concepts. Lownie SP, et al. **Clin Neuropathol** 1990 Jan-Feb;9(1):46–50 (32 ref.)

CHEMICALLY INDUCED

Acute lithium toxicity—chorea, hypercalcemia and hyperamylasemia. Matsis PP, et al. **Aust N Z J Med** 1989 Dec;19(6):718–20

Choreic movements in the macaque monkey induced by kainic acid lesions of the striatum combined with L-dopa. Pharmacological, biochemical and physiological studies on neural mechanisms. Kanazawa I, et al. **Brain** 1990 Apr;113 (Pt 2):509–35

A case of transient choreoathetosis with amnesic syndrome after acute monoxide poisoning [published erratum appears in Ital J Neurol Sci 1990 Feb;11(1):88] Meucci G, et al. **Ital J Neurol Sci** 1989 Oct;10(5):513–7

Choreoathetosis induced by verapamil and lithium treatment [letter] Helmuth D, et al. **J Clin Psychopharmacol** 1989 Dec;9(6):454–5

(+)-PHNO: a new anti-parkinsonian agent which does not induce chorea in MPTP-treated squirrel monkeys [letter] Rupniak NM, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):622–3

Induction of chorea and dystonia in parkinsonian primates. Boyce S, et al. **Mov Disord** 1990;5(1):3–7

CLASSIFICATION

Typical and atypical forms of paroxysmal choreoathetosis. Nardocci N, et al. **Dev Med Child Neurol** 1989 Oct; 31(5):670–4

COMPLICATIONS

Long-term penicillin in Sydenham's chorea [letter] Walker K, et al. **S Afr Med J** 1989 Nov 18;76(10):582

Choreoacanthocytosis in a Chinese patient—a case report. Ong B, et al. **Singapore Med J** 1989 Oct;30(5):506–8

Putaminal hemorrhage accompanied by hemichorea-hemiballism [letter] Altafullah I, et al. **Stroke** 1990 Jul;21(7):1093–4

DIAGNOSIS

Idiopathic hypoparathyroidism and paroxysmal kinesigenic choreoathetosis [letter; comment] Micheli F, et al. **Ann Neurol** 1989 Sep;26(3):415 Comment on: Ann Neurol 1988 Oct;24(4):585.

Standard neurodiagnostic tests in Sydenham's chorea [letter] Gledhill RF, et al. **J Neurol Neurosurg Psychiatry** 1990 Jun;53(6):534–5

[Chorea mollis, a rare variant of chorea minor] Bernsen PL, et al. **Tijdschr Kindergeneeskd** 1990 Jun;58(3):94–9 (Eng. Abstr.) **(Dut)**

[Changes in the clinical picture of chorea minor] Nikolić V, et al. **Med Pregl** 1989;42(9-10):351–4 (Eng. Abstr.) **(Ser)**

DRUG THERAPY

Successful treatment of age-related chorea with sodium valproate. Hoffman AS, et al. **J Am Geriatr Soc** 1990 Jan; 38(1):56–8

Paroxysmal hypnogenic dystonia responsive to phenytoin [letter; comment] Nair KR. **Mov Disord** 1990;5(2):180–1 Comment on: Mov Disord 1988;3(4):290–4.

Effectiveness of sodium valproate in the treatment of Sydenham's chorea. Daoud AS, et al. **Neurology** 1990 Jul; 40(7):1140–1

Pimozide treatment of Sydenham's chorea. Shannon KM, et al. **Neurology** 1990 Jan;40(1):186

[Choreo-ballistic status treated by GABA] Hashimoto M, et al. **No To Hattatsu** 1989 Sep;21(5):481–5 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Disseminated lupus erythematosus presenting as chorea gravidarum. Donaldson IM, et al. **Arch Neurol** 1971 Sep; 25(3):240–4 (30 ref.)

Choreoathetosis and thalamic haemorrhage. Freilich RJ, et al. **Clin Exp Neurol** 1988;25:115–20

A possible post-streptococcal movement disorder with chorea and tics. Kerbeshian J, et al. **Dev Med Child Neurol** 1990 Jul;32(7):642–4

Chorea: rare expression of neuropsychiatric manifestation of systemic lupus erythematosus [editorial; comment] Amital-Teplizki H, et al. **Isr J Med Sci** 1989 Oct; 25(10):549–51 Comment on: Isr J Med Sci 1989 Oct;25(10):568–70.

Chorea associated with systemic lupus erythematosus in children. A case report [see comments] Lahat E, et al. **Isr J Med Sci** 1989 Oct;25(10):568–70 Comment in: Isr J Med Sci 1989 Oct;25(10):549–51.

Acute hemichorea due to infarction in the corona radiata. Barinagarrementeria F, et al. **J Neurol** 1989 Sep; 236(6):371–2

Paroxysmal kinesigenic dystonic choreoathetosis associated with a thalamic infarct. Camac A, et al. **Mov Disord** 1990; 5(3):235–8

Hemichorea-hemiballism in AIDS [letter; comment] Martínez-Martín P. **Mov Disord** 1990;5(2):180 Comment on: Mov Disord 1989;4(3):266–73.

Adult-onset chorea and dementia with propionic acidemia. Sethi KD, et al. **Neurology** 1989 Oct;39(10):1343–5

Moyamoya disease presenting with chorea. Watanabe K, et al. **Pediatr Neurol** 1990 Jan-Feb;6(1):40–2

A distinctive neurologic syndrome after induced profound

hypothermia. Wical BS, et al. **Pediatr Neurol** 1990 May–Jun;6(3):202–5

Unique neurological signs in Wernicke's encephalopathy? [letter] Lichtigfeld FJ, et al. **S Afr Med J** 1989 Nov 4; 76(9):517–8

[Acute chorea revealing lupus erythematosus disseminatus] Nègre V, et al. **Arch Fr Pediatr** 1989 Oct;46(8):601–4 (74 ref.) (Eng. Abstr.) **(Fre)**

[Isolated choreic movements disclosing multiple sclerosis (letter)] Gras P, et al. **Presse Med** 1990 Apr 21;19(16):764–5 **(Fre)**

[Hemiballismus. Hemichorea. Striatal infarction] Destée A, et al. **Rev Neurol (Paris)** 1990;146(2):150–2 (17 ref.) (Eng. Abstr.) **(Fre)**

[Acute chorea following heart surgery with hypothermia and total bypass] Kececioglu D, et al. **Klin Padiatr** 1990 Mar–Apr;202(2):115–6 (Eng. Abstr.) **(Ger)**

[A case report of central pontine and extrapontine myelinolysis which occurred during pregnancy and was accompanied by choreic movement] Tsutada T, et al. **Rinsho Shinkeigaku** 1989 Oct;29(10):1294–7 (Eng. Abstr.) **(Jpn)**

GENETICS

Peripheral neuropathy in amyotrophic chorea–acanthocytosis. Vita G, et al. **Ann Neurol** 1989 Oct; 26(4):583–7

Senescent cell antigen, band 3, and band 3 mutations in cellular aging. Kay MM. **Biomed Biochim Acta** 1990; 49(2–3):S212–7

Chorea–acanthocytosis: report of a family and neuropathological study of two cases. Alonso ME, et al. **Can J Neurol Sci** 1989 Nov;16(4):426–31

[Kinesic paroxysmal familial choreoathetosis: presentation of a case] Jiménez Jiménez FJ, et al. **Arch Neurobiol (Madr)** 1989 Nov–Dec;52(6):259–64 (Eng. Abstr.) **(Spa)**

HISTORY

Therapeutics in retrospect: iron carbonate in chorea and tic douloureux. Cosnett JE. **J R Soc Med** 1990 Jun;83(6):390–1

IMMUNOLOGY

Childhood adrenal insufficiency, chorea, and antiphospholipid antibodies [letter] Rose CD, et al. **Ann Rheum Dis** 1990 Jun;49(6):421–2

Membrane channel protein abnormalities and autoantibodies in neurological disease. Kay MM, et al. **Brain Res Bull** 1990 Jan;24(1):105–11

Membrane protein band 3 alteration associated with neurologic disease and tissue–reactive antibodies. Kay MM, et al. **Exp Clin Immmunogenet** 1990;7(3):181–99

METABOLISM

Pallidal GABA and chorea in Huntington's disease. Pearson SJ, et al. **J Neural Transm Gen Sect** 1990;81(3):241–6

Normal striatal glucose consumption in two patients with benign hereditary chorea as measured by positron emission tomography. Kuwert T, et al. **J Neurol** 1990 Apr; 237(2):80–4

PATHOLOGY

Striatal and nigral neuron subpopulations in rigid Huntington's disease: implications for the functional anatomy of chorea and rigidity–akinesia. Albin RL, et al. **Ann Neurol** 1990 Apr;27(4):357–65

PHYSIOPATHOLOGY

The role of the subthalamic nucleus in experimental chorea. Evidence from 2–deoxyglucose metabolic mapping and horseradish peroxidase tracing studies. Mitchell IJ, et al. **Brain** 1989 Dec;112 (Pt 6):1533–48

A blinded study of the suppressibility of involuntary movements in Huntington's chorea, tardive dyskinesia, and L–dopa–induced chorea. Walters AS, et al. **Clin Neuropharmacol** 1990 Jun;13(3):236–40

Depth electrographic studies on the caudate nucleus in man. Rosner BS, et al. **Electroencephalogr Clin Neurophysiol** 1966 Apr;20(4):391–6

A case of senile chorea. Friedman JH, et al. **Mov Disord** 1990;5(3):251–3

[Paroxysmal kinesigenic choreoathetosis: autonomic disease or reflex epilepsy?] Cler JM, et al. **Rev Neurol (Paris)** 1990; 146(1):25–9 (Eng. Abstr.) **(Fre)**

[Choreic movements and dopamine—implications to the underlying neural mechanisms involved] Kanazawa I. **Rinsho Shinkeigaku** 1989 Dec;29(12):1519–21 (9 ref.) (Eng. Abstr.) **(Jpn)**

CHOREA, HEREDITARY see **HUNTINGTON CHOREA**

CHORIOADENOMA

ANALYSIS

Lectin binding in tissues from hydatidiform mole, invasive mole and choriocarcinoma to concanavalin–A, wheat germ agglutinin and peanut agglutinin. Juan FT, et al. **Asia Oceania J Obstet Gynaecol** 1989 Dec;15(4):383–93

BLOOD SUPPLY

Preliminary Doppler studies on the uterine artery and myometrium in trophoblastic tumours requiring chemotherapy. Long MG, et al. **Br J Obstet Gynaecol** 1990 Aug;97(8):686–9

DRUG THERAPY

Toxicity of vincristine overdose in a patient with invasive mole. Takada S, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Dec 20;24(11):2617–23

[Treatment of gestational trophoblastic neoplasms with methotrexate and citrovorum factor rescue: analysis of 43 cases] Sha YC, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Nov;24(6):354–6, 382 (Eng. Abstr.) **(Chi)**

RADIOGRAPHY

Clinical significance of hysterography in the diagnosis of choriocarcinoma and invasive mole. Yang XY, et al. **Chin Med J [Engl]** 1990 Apr;103(4):274–7

CHORIOAMNIONITIS

Intrapartum asphyxia in pregnancies complicated by intra–amniotic infection. Maberry MC, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 1):351–4

COMPLICATIONS

Chorioamnionitis and serum IgM in Wilson–Mikity syndrome. Fujimura M, et al. **Arch Dis Child** 1989 Oct; 64(10 Spec No):1379–83

Chorioamnionitis in relation to gestational outcome in a Swedish population. Nordenvall M, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Jul–Aug; 36(1–2):59–67

Histologic chorioamnionitis and preterm delivery in different patient populations. Mueller–Heubach E, et al. **Obstet Gynecol** 1990 Apr;75(4):622–6

[Intrauterine infections as a cause of premature labor] Giebel A, et al. **Arch Gynecol Obstet** 1989;245(1–4):208–11 **(Ger)**

DIAGNOSIS

Amniotic fluid glucose concentration: a rapid and simple method for the detection of intraamniotic infection in preterm labor. Romero R, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):968–74

Evaluation of potential early markers of chorioamnionitis associated with preterm premature ruptured membranes. Goyert G, et al. **Am J Perinatol** 1990 Jan;7(1):33–5

C–reactive protein in preterm premature rupture of the membranes [published erratum appears in Arch Gynecol Obstet 1990;247(2):106] Kurki T, et al. **Arch Gynecol Obstet** 1990;247(1):31–7

C–reactive protein (CRP) and pregnancy. An early indicator of chorioamnionitis. A review. Bek KM, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Apr;35(1):29–33 (25 ref.)

Premature rupture of the membranes and amniotic infections—the significance of laboratory tests. Teichmann AT, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Mar; 34(3):217–22

Subclinical amnionitis in patients with intact membranes in preterm labour. Guvenc M, et al. **Paediatr Perinat Epidemiol** 1989 Oct;3(4):367–74

[Chorioamniotic dissociation and C–reactive protein as predictors of early premature amniotic rupture] Passloer HJ. **Z Geburtshilfe Perinatol** 1990 May–Jun;194(3):115–20 (Eng. Abstr.) **(Ger)**

[C–reactive protein in the maternal serum and risk of maternal infection in premature rupture of the fetal membranes and threatened premature labor] Hirsch W, et al. **Zentralbl Gynakol** 1989;111(21):1404–10 (Eng. Abstr.) **(Ger)**

[C–reactive protein in the maternal serum and risk of fetal infection in premature rupture of the fetal membranes and threatened premature labor] Hirsch W, et al. **Zentralbl Gynakol** 1989;111(21):1411–6 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Effect of acetaminophen on fetal acid–base balance in chorioamnionitis. Kirshon B, et al. **J Reprod Med** 1989 Dec; 34(12):955–9

ENZYMOLOGY

Esterase activity in second– and third–trimester amniotic fluid: an indicator of chorioamnionitis. Hoskins IA, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1543–5

ETIOLOGY

Haemophilus influenzae chorioamnionitis [letter] Winn HN, et al. **Am J Obstet Gynecol** 1989 Nov;161(5):1419

The role of bacterial vaginosis as a cause of amniotic fluid infection, chorioamnionitis and prematurity—a review. Martius J, et al. **Arch Gynecol Obstet** 1990;247(1):1–13 (43 ref.)

Streptococcus pneumoniae associated with second–trimester chorioamnionitis. A case report. Bruno R, et al. **J Reprod Med** 1990 Apr;35(4):429–30

[C–reactive protein and acute–phase proteins in monitoring infection caused by premature rupture of membranes] He JP. **Chung Hua Fu Chan Ko Tsa Chih** 1990 Mar; 25(2):98–101, 125 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

[The value of leukocytes, C–reactive protein and granulocyte elastase in patients with premature rupture of fetal membranes and amniotic infection] Teichmann AT, et al. **Arch Gynecol Obstet** 1989;245(1–4):824–7 (Eng. Abstr.) **(Ger)**

METABOLISM

Prostaglandin E production by the fetal membranes in unexplained preterm labour and preterm labour associated with chorioamnionitis. López Bernal A, et al. **Br J Obstet Gynaecol** 1989 Oct;96(10):1133–9

Effect of amnionitis on the complement system of preterm infants. Kitajima H, et al. **Early Hum Dev** 1990 Jan; 21(1):59–69

Placental lipid contents in preterm labor complicated by chorioamnionitis. Delmis J. **J Perinat Med** 1989; 17(6):417–22

MICROBIOLOGY

Production of prostaglandin E2 by human amnion in vitro in response to addition of media conditioned by microorganisms associated with chorioamnionitis and preterm labor. Lamont RF, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):819–25

Infection and labor. VI. Prevalence, microbiology, and clinical significance of intraamniotic infection in twin gestations with preterm labor. Romero R, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):757–61

Haemophilus influenzae amnionitis with intact membranes: a case report. Silverberg K, et al. **Am J Perinatol** 1990 Jul;7(3):270–1

Histologic chorioamnionitis, microbial infection, and prematurity. Zlatnik FJ, et al. **Obstet Gynecol** 1990 Sep; 76(3 Pt 1):355–9

[Amnionic infection in premature rupture of the fetal membranes] Kosian K. **Gynakol Rundsch** 1989;29 Suppl 2:147–9 **(Ger)**

[Bacteriologic findings in premature rupture of the fetal membranes] Mayer HO, et al. **Gynakol Rundsch** 1989;29 Suppl 2:152–4 **(Ger)**

MORTALITY

[Premature rupture of the fetal membranes—do neonatal maturity and risk of infection require an alternative decision or a compromise] Heinrich J. **Gynakol Rundsch** 1989;29 Suppl 2:200–4 **(Ger)**

[The effect of premature rupture of the fetal membranes on maternal and infant morbidity (analysis of 219 very premature infants with a birth weight of 1,000–1,499 g)] Renziehausen K, et al. **Gynakol Rundsch** 1989;29 Suppl 2:155–8 **(Ger)**

[Maternal mortality in premature rupture of the fetal membranes] Welsch H, et al. **Gynakol Rundsch** 1989;29 Suppl 2:150–1 **(Ger)**

PATHOLOGY

Possible association of acute inflammatory exudate in chorioamnionitis and amniotic squamous metaplasia. Chew RH, et al. **Am J Clin Pathol** 1990 Apr;93(4):582–5

[Histologic diagnosis of amnion infection of the placenta] Karpf EF, et al. **Gynakol Rundsch** 1989;29 Suppl 2:158–61 **(Ger)**

PHYSIOPATHOLOGY

[The role of prostaglandins in premature rupture of the fetal membranes] Husslein P. **Gynakol Rundsch** 1989;29 Suppl 2:141–6 (4 ref.) **(Ger)**

PREVENTION & CONTROL

[Intravenous human immunoglobulin in preventing amniotic infection in premature rupture of fetal membranes] Höckel M, et al. **Arch Gynecol Obstet** 1989;245(1–4):211–3 **(Ger)**

[Premature rupture of the fetal membranes and tocolysis] Grospietsch G, et al. **Gynakol Rundsch** 1989;29 Suppl 2:126–31 (18 ref.) **(Ger)**

[Prenatal procedures and postnatal status of children with a birth weight of less than 1500 g with premature rupture of the fetal membranes] Homm C, et al. **Gynakol Rundsch** 1989;29 Suppl 2:186–8 **(Ger)**

CHORIOCARCINOMA

Choriocarcinoma following term pregnancy—a case report [letter] Chan LC, et al. **Ann Acad Med Singapore** 1990 May; 19(3):421–2

[Primary pulmonary choriocarcinoma] Hermant P, et al. **Rev Mal Respir** 1990;7(2):179–80 (Eng. Abstr.) **(Fre)**

ANALYSIS

HCG assays. A plea for uniformity [comment] Bock JL. **Am J Clin Pathol** 1990 Mar;93(3):432–3 (7 ref.) Comment on: Am J Clin Pathol 1990 Mar;93(3):347–51.

Lectin binding in tissues from hydatidiform mole, invasive mole and choriocarcinoma to concanavalin-A, wheat germ agglutinin and peanut agglutinin. Juan FT, et al. **Asia Oceania J Obstet Gynaecol** 1989 Dec;15(4):383–93

[Trace elements in the serum and cancerous tissue in patients with trophoblastic carcinoma] Fu YL. **Chung Hua I Hsueh Tsa Chih** 1989 Sep;69(9):493–5, 36 (Eng. Abstr.) **(Chi)**

BLOOD SUPPLY

Preliminary Doppler studies on the uterine artery and myometrium in trophoblastic tumours requiring chemotherapy. Long MG, et al. **Br J Obstet Gynaecol** 1990 Aug;97(8):686–9

COMPLICATIONS

Choriocarcinoma following term pregnancy--a case report. Chan ST, et al. **Ann Acad Med Singapore** 1989 Nov; 18(6):724–6

Primary testicular choriocarcinoma with pulmonary metastases presenting as ARDS. McGowan MP, et al. **Chest** 1990 May;97(5):1258–9

Respiratory failure due to choriocarcinoma: a study of 103 dyspneic patients. Kelly MP, et al. **Gynecol Oncol** 1990 Aug;38(2):149–54

Coronary embolism by metastatic choriocarcinoma of the uterus: an unusual cause of ischemic heart disease. Vasiljevic JD, et al. **Gynecol Oncol** 1990 Aug;38(2):289–92

Primary choriocarcinoma of the stomach presenting as gastrointestinal hemorrhage: report of a case. Matsunaga N, et al. **Radiat Med** 1989 Sep–Oct;7(5):220–2

[Metastatic chorionepithelioma--a rare cause of digestive hemorrhage] Vereanu I, et al. **Rev Chir [Chir]** 1989 Nov–Dec;38(6):459–63 (Eng. Abstr.) **(Rum)**

DIAGNOSIS

131I-labelled monoclonal antibody H17E2 in the detection of subcutaneous metastasis from gestational choriocarcinoma. Athanassiou A, et al. **Anticancer Res** 1990 Jul–Aug;10(4):913–5

Choriocarcinoma presenting as an intussusception--a case report. Nkanza NK, et al. **Cent Afr J Med** 1989 Apr; 35(4):389–92

Markedly elevated maternal serum alpha-fetoprotein associated with a normal fetus and choriocarcinoma of the placenta. Ollendorff DA, et al. **Obstet Gynecol** 1990 Sep; 76(3 Pt 2):494–7

Ovarian choriocarcinoma: a difficult diagnosis of an unusual tumor and a review of the hook effect. Wheeler CA, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 2):547–9

Intraplacental choriocarcinoma: a case report. Hallam LA, et al. **Placenta** 1990 May–Jun;11(3):247–51

Update on molar pregnancy and choriocarcinoma. Ilancheran A, et al. **Singapore Med J** 1989 Oct;30(5):473–5 (6 ref.)

[A case of primary anterior mediastinal choriocarcinoma] Narushima M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb;28(2):374–8 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

Photodynamic therapy of choriocarcinoma transplanted to the hamster cheek pouch. I. Intraperitoneal photosensitization. Brand E, et al. **Gynecol Oncol** 1990 Feb; 36(2):200–6

Subrenal capsule assay as a test to predict the effectiveness of chemotherapy in choriocarcinoma. Ogino M, et al. **Gynecol Oncol** 1990 Jul;38(1):32–6

[Treatment of gestational trophoblastic neoplasms with methotrexate and citrovorum factor rescue: analysis of 43 cases] Sha YC, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Nov;24(6):354–6, 382 (Eng. Abstr.) **(Chi)**

[Recurrence of choriocarcinoma following methotrexate monotherapy] Rösler EM, et al. **Zentralbl Gynakol** 1989; 111(24):1617–23 (Eng. Abstr.) **(Ger)**

[The treatment of refractory choriocarcinoma] Takamizawa Y, et al. **Gan To Kagaku Ryoho** 1990 Sep;17(9):1843–7 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Type IV and interstitial collagenolytic activities in normal and malignant trophoblast cells are specifically regulated by the extracellular matrix. Emonard H, et al. **Invasion Metastasis** 1990;10(3):170–7

Human trophoblast xenografts in athymic mice: a model for peripheral aromatization. Johnston JO, et al. **J Steroid Biochem** 1989 Oct;33(4A):521–9

EPIDEMIOLOGY

[Germ cell testicular tumors. Three therapeutic periods] Fargeot P. **Bull Cancer (Paris)** 1990;77(4):331–9 (Eng. Abstr.) **(Fre)**

[Result of registration and follow-up system of gestational trophoblastic disease in Shizuoka Prefecture (from 1977 to 1988)--recent trend and choriocarcinoma following term gestation] Maeda M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Dec; 41(12):1921–8 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Choriocarcinoma of the fallopian tube associated with induced superovulation in an IVF program; a case report. Flam F, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Nov; 33(2):183–6

GENETICS

Studies on the pathogenesis of choriocarcinoma by analysis of restriction fragment length polymorphisms. Azuma C, et al. **Cancer Res** 1990 Feb 1;50(3):488–91

Genetic origin of a trophoblastic choriocarcinoma. Chaganti RS, et al. **Cancer Res** 1990 Oct 1;50(19):6330–3

Expression of a Nagao-type, phosphatidylinositol-glycan anchored alkaline phosphatase in human choriocarcinomas. Lowe ME, et al. **Cancer Res** 1990 Jul 1;50(13):3956–62

Human trophoblast and the choriocarcinoma cell line BeWo express a truncated HLA Class I molecule. Ellis SA, et al. **J Immunol** 1990 Jan 15;144(2):731–5

Human proviral mRNAs down regulated in choriocarcinoma encode a zinc finger protein related to Krüppel. Kato N, et al. **Mol Cell Biol** 1990 Aug;10(8):4401–5

[Studies on the transcriptional regulatory elements of the hCG beta gene cluster using a choriocarcinoma cell line which expresses hCG beta eutopically] Otani T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Dec; 41(12):1885–90 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Antibody to human chorionic gonadotropin detected choriocarcinoma. Flam F, et al. **Acta Obstet Gynecol Scand** 1989;68(3):263–4

Further immunologic studies in patients with choriocarcinoma and hydatidiform mole. Robinson E, et al. **Cancer Res** 1967 Jul;27(7):1202–4

Morphological and immunological characteristics of a rat choriocarcinoma. Verstuyf A, et al. **Int J Cancer** 1989 Nov 15;44(5):879–84

Novel human MHC class I genes are expressed by tumour cell lines representing embryonic and extraembryonic tissues. Rinke de Wit TF, et al. **J Immunogenet** 1989 Aug-Oct;16(4-5):391–6

Differential expression of the HLA class I multigene family by human embryonal carcinoma and choriocarcinoma cell lines. Rinke de Wit TF, et al. **J Immunol** 1990 Feb 1; 144(3):1080–7

METABOLISM

Patterns of human chorionic gonadotropin expression in untreated and 8-bromoadenosine-treated JAR choriocarcinoma cells. Martell RE, et al. **Endocrinology** 1990 May;126(5):2757–64

Cytovillin and other microvillar proteins of human choriocarcinoma cells. Pakkanen R, et al. **J Cell Biochem** 1989 Sep;41(1):1–12

Epidermal growth factor (EGF) receptors in human chorionic gonadotropin-producing tumor: transplantation in nude mice and the effect of EGF on tumor growth. Miyachi Y, et al. **J Clin Endocrinol Metab** 1990 Aug; 71(2):329–34

Distribution of human granulocyte colony-stimulating factor receptors on hematopoietic and nonhematopoietic tumor cell lines. Kuwaki T, et al. **Jpn J Cancer Res** 1990 Jun-Jul; 81(6-7):560–3

Molecular forms of human chorionic gonadotropin in choriocarcinoma serum and urine. Nishimura R, et al. **Jpn J Cancer Res** 1989 Oct;80(10):968–74

Synthesis and secretion of human chorionic gonadotropin and its subunits in choriocarcinoma cells: a comparative study with normal placental cells. Takeuchi Y, et al. **Mol Cell Endocrinol** 1990 Mar 5;69(2-3):145–56

PATHOLOGY

Modulation of transferrin-receptor activity and recycling after induced differentiation of BeWo choriocarcinoma cells. van der Ende A, et al. **Biochem J** 1990 Sep 1; 270(2):451–7

Isolation of clones resistant to 6-thioguanine and G418 from HHUA endometrial carcinoma cells and their application to cell hybridization. Wake N, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):117–23

Malignant and normally developing trophoblastic cells of human placenta display different characteristics defined by histochemical and biochemical mapping of endogenous lectins. Gabius HJ, et al. **Histochemistry** 1989;92(4):283–9

Mucoid carcinoma of the breast with choriocarcinoma in its metastases. Green DM. **Histopathology** 1990 May; 16(5):504–6

Morphological and immunological characteristics of a rat choriocarcinoma. Verstuyf A, et al. **Int J Cancer** 1989 Nov 15;44(5):879–84

Establishment and characterization of a continuous in vitro line from a rat choriocarcinoma. Verstuyf A, et al. **Int J Cancer** 1990 Apr 15;45(4):752–6

Placental site trophoblastic tumor: with features between an exaggerated placental site reaction and a placental site trophoblastic tumor. Collins RJ, et al. **Int J Gynecol Pathol** 1990;9(2):170–7

[Modulation of hCG synthesis by alpha tumor necrosis factor in JAR choriocarcinoma cells] Marth C, et al. **Geburtshilfe Frauenheilkd** 1990 Feb;50(2):122–3 (Eng. Abstr.) **(Ger)**

[Malignant germ cell tumor in XY gonadal dysgenesis (Swyer syndrome)] Spingler H, et al. **Geburtshilfe Frauenheilkd** 1990 Jun;50(6):488–90 (Eng. Abstr.) **(Ger)**

[A case of primary gastric choriocarcinoma] Kawashima Y, et al. **Gan No Rinsho** 1989 Oct;35(12):1466–72 (16 ref.) (Eng. Abstr.) **(Jpn)**

[A primary choriocarcinoma of the stomach with a review of 45 cases in Japan] Masuda R, et al. **Gan No Rinsho** 1990 Aug;36(9):1025–30 (Eng. Abstr.) **(Jpn)**

[An advanced gastric cancer with varied histopathologic features including a choriocarcinoma: report of a case] Orii S, et al. **Gan No Rinsho** 1990 May;36(6):736–42 (Eng. Abstr.) **(Jpn)**

[Primary choriocarcinoma of the bladder: a case report of autopsy] Sone A, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jun;80(6):902–6 (15 ref.) (Eng. Abstr.) **(Jpn)**

[Induction of differentiation in testicular choriocarcinoma cells and its role in cancer therapy] Yamazaki H. **Nippon Hinyokika Gakkai Zasshi** 1989 Nov;80(11):1651–6 (Eng. Abstr.) **(Jpn)**

[Cytomorphological reappraisal of choriocarcinoma cells--a proposal of a four cell pattern] Sasagawa M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1990 Apr; 42(4):339–46 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Clinical significance of hysterography in the diagnosis of choriocarcinoma and invasive mole. Yang XY, et al. **Chin Med J [Engl]** 1990 Apr;103(4):274–7

[Evaluation of hysterography in the diagnosis of choriocarcinoma and invasive mole] Yang XY. **Chung Hua Fu Chan Ko Tsa Chih** 1990 Jan;25(1):26–8, 62 (Eng. Abstr.) **(Chi)**

SECONDARY

Intracerebral choriocarcinoma. Jones WB, et al. **Gynecol Oncol** 1990 Aug;38(2):234–43

Spontaneous renal hemorrhage secondary to choriocarcinoma. Washecka RM, et al. **N Y State J Med** 1990 Aug;90(8):418–9

Testicular germ cell tumor with pineal metastases. Delahunt B, et al. **Neurosurgery** 1990 Apr;26(4):688–91

Brain metastasis from nonseminomatous germ cell tumors of the testis: case report and review of the role of surgery. Jelsma RK, et al. **Neurosurgery** 1989 Nov;25(5):814–9

"Poor prognosis" metastatic gestational trophoblastic disease: the prognostic significance of the scoring system in predicting chemotherapy failures. Mortakis AE, et al. **Obstet Gynecol** 1990 Aug;76(2):272–7

Choriocarcinoma with lung metastases during pregnancy with successful delivery and outcome after chemotherapy. Nabers J, et al. **Thorax** 1990 May;45(5):416–8

[Rupture of neoplastic intracranial aneurysm caused by metastatic uterine choriocarcinoma] Steimle R, et al. **Chirurgie** 1989;115(6):393–6; discussion 396–7 (30 ref.) (Eng. Abstr.) **(Fre)**

[Surgery of metastases of choriocarcinoma] Horch R, et al. **Med Klin** 1990 Mar;85 Suppl 1:147–9 **(Ger)**

[A case of testicular tumor complicating intussusception from metastasis to the jejunum] Muranishi H, et al. **Nippon Naika Gakkai Zasshi** 1989 Dec;78(12):1789–90 **(Jpn)**

[An unusual remission case of metastatic choriocarcinoma to the intestine presenting as rectal bleeding] Ohta H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jul; 41(7):919–22 **(Jpn)**

SECRETION

The effect of interleukin-1 alpha and tumor necrosis factor alpha on the secretion of human chorionic gonadotropin by JAR human choriocarcinoma cells. Silen ML, et al. **Biochem Biophys Res Commun** 1989 Oct 16;164(1):284–9

SURGERY

[Excision of an intracardiac metastasis under chemotherapy] Kerbrat P, et al. **J Chir (Paris)** 1990 Mar;127(3):164–7 (31 ref.) (Eng. Abstr.) **(Fre)**

[Retroperitoneal lymph node dissection for testicular tumor with renal autotransplantation: a case report] Kobayashi Y, et al. **Hinyokika Kiyo** 1990 Mar;36(3):359–62 (Eng. Abstr.) **(Jpn)**

THERAPY

The potential of carboxypeptidase G2: antibody conjugates as anti-tumour agents. II. In vivo localising and clearance properties in a choriocarcinoma model. Melton RG, et al. **Br J Cancer** 1990 Mar;61(3):420–4

[Two cases of so-called extragonadal germinal tumor with "probable" retroperitoneal origin] Miyao N, et al. **Hinyokika Kiyo** 1989 May;35(5):835–8 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Ultrastructural studies on interactions of choriocarcinoma cells with stromal cells in monolayers. Chew EC, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1819–24

URINE

Rapid diagnosis of testicular choriocarcinoma by urinary pregnancy tests [letter] Caulfield MJ, et al. **Lancet** 1990 May 19;335(8699):1230

CHORION

Prevalence and significance of subchorionic hemorrhage in threatened abortion: a sonographic study. Pedersen JF, et al. **AJR Am J Roentgenol** 1990 Mar;154(3):535–7

The chorion genes of the medfly, Ceratitis capitata. II. Characterization of three novel cDNA clones obtained by differential screening of an ovarian library. Tolias PP, et al. **Dev Biol** 1990 Jul;140(1):105–12

Gene evolution and regulation in the chorion complex of Bombyx mori. Hybridization and sequence analysis of multiple developmentally middle A/B chorion gene pairs. Spoerel NA, et al. **J Mol Biol** 1989 Sep 5;209(1):1–19

Nonuniform evolution of duplicated, developmentally controlled chorion genes in a silkmoth. Tsitilou SG, et al. **J Mol Evol** 1989 Nov;29(5):396–406

Sonography in early pregnancy: the significance of subchorionic hemorrhage. Bloch C, et al. **Mt Sinai J Med** 1989 Sep;56(4):290–2 (5 ref.)

Congenital rubella infection: escape of one monozygotic twin with two amnions, one chorion, and single placenta. Wang LN, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Jan;89(1):30–3

ANALYSIS

The clinical significance of absent subchorionic fibrin in the placenta. Naeye RL. **Am J Clin Pathol** 1990 Aug; 94(2):196–8

Soluble fetoproteins in chorioallantoic membrane from chick embryo (Gallus domesticus). Rodríguez-Burgos A. **Comp Biochem Physiol [B]** 1990;96(2):297–303

Human relaxin in the amnion, chorion, decidua parietalis, basal plate, and placental trophoblast by immunocytochemistry and northern analysis. Sakbun V, et al. **J Clin Endocrinol Metab** 1990 Feb;70(2):508–14

ANATOMY & HISTOLOGY

Ultrasonographic criteria for the prenatal diagnosis of placental chorionicity in twin gestations. Winn HN, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1540–2

BLOOD SUPPLY

Doppler velocimetry measured in retrochorionic space and uterine arteries during early human pregnancy. Mercé LT, et al. **Acta Obstet Gynecol Scand** 1989;68(7):603–7

Human alpha- and beta-calcitonin gene-related peptides are vasodilators in human chorionic plate vasculature. Firth KF, et al. **Am J Obstet Gynecol** 1989 Nov;161(5):1318–9

The influence of cell–matrix interactions on the development of quail chorioallantoic vascular system. Britsch S, et al. **Anat Embryol (Berl)** 1989;180(5):479–84

Effects of serotonin on vascular tone of isolated human placental chorionic veins. Gonzalez C, et al. **Gynecol Obstet Invest** 1990;29(2):88–91

Mapping of the microcirculation in the chick chorioallantoic membrane during normal angiogenesis. DeFouw DO, et al. **Microvasc Res** 1989 Sep;38(2):136–47

[Toxicity studies of the incubated chicken egg. With special reference to the extra-embryonal vascular systems] Rosenbruch M. **Derm Beruf Umwelt** 1990 Jan–Feb; 38(1):5–11 (50 ref.) (Eng. Abstr.) **(Ger)**

[Development of utero-chorionic vascular resistance in early pregnancy] Barco MJ, et al. **Rev Esp Fisiol** 1989;45 Suppl:133–8 (Eng. Abstr.) **(Spa)**

CYTOLOGY

Spontaneous cell death in the chorion laeve. Parmley TH. **Am J Obstet Gynecol** 1990 Jun;162(6):1576–81; discussion 1581–3

Different invasion capacity of NBT II and MDCK in the chick embryo chorioallantois. Schroyens W, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1665–8

Transforming growth factor beta 1–induced changes in cell migration, proliferation, and angiogenesis in the chicken chorioallantoic membrane. Yang EY, et al. **J Cell Biol** 1990 Aug;111(2):731–41

DRUG EFFECTS

Angiogenic stimulation compared with angiogenic reaction to injury: distinction by focal and general application of trypsin to the chick chorioallantoic membrane. Thompson WD, et al. **Br J Exp Pathol** 1989 Dec;70(6):627–35

ENZYMOLOGY

Lactate dehydrogenase in labor. IV. Effect of temperature on isoenzymes of placenta and related tissues. Dobryszycka W, et al. **Arch Immunol Ther Exp (Warsz)** 1971;19(5):727–34

Steroid sulfohydrolase in human chorion and decidua: studies using pregnenolone sulfate and dehydroepiandrosterone sulfate as substrate. Chibbar R, et al. **J Clin Endocrinol Metab** 1990 Jun;70(6):1693–701

IMMUNOLOGY

Amniochorion: immunologic aspects—a review. Hunt JS, et al. **Am J Reprod Immunol** 1989 Nov–Dec;21(3–4):114–8 (43 ref.)

Inflammatory responses and the generation of chemoattractant activity in cowpox virus–infected tissues. Chua TP, et al. **Immunology** 1990 Feb;69(2):202–8

METABOLISM

Immunocytochemical localization and messenger ribonucleic acid concentrations for human placental lactogen in amnion, chorion, decidua, and placenta. Sakbun V, et al. **Am J Obstet Gynecol** 1990 May;162(5):1310–7

Amnion cell prostaglandin E2 stimulatory activity in chorion laeve–conditioned medium. Lundin-Schiller S, et al. **Biochim Biophys Acta** 1990 Jul 12;1053(2–3):151–5

Solubilization and characterization of a lactogenic receptor from human placental chorion membranes. Ormandy CJ, et al. **J Cell Biochem** 1990 May;43(1):1–15

Silkmoth chorion antisense RNA. Structural characterization, developmental regulation and evolutionary conservation. Skeiky YA, et al. **J Mol Biol** 1990 May 5;213(1):53–66

Transgenic regulation of moth chorion gene promoters in Drosophila: tissue, temporal, and quantitative control of four bidirectional promoters. Mitsialis SA, et al. **J Mol Evol** 1989 Dec;29(6):486–95

Characterization of glycoconjugates in the bovine endometrium and chorion by lectin histochemistry. Munson L, et al. **J Reprod Fertil** 1989 Nov;87(2):509–17

Oxytocin receptor in human fetal membranes at term and during labor. Benedetto MT, et al. **J Steroid Biochem** 1990 Feb;35(2):205–8

[Effect of human recombinant interleukin-1 alpha on glycosaminoglycan and collagen metabolism in cultured human chorionic cells] Katsura M. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Dec; 41(12):1943–50 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

A role of secreted proteinase of Candida albicans for the invasion of chick chorio-allantoic membrane. Kobayashi I, et al. **Microbiol Immunol** 1989;33(9):709–19

PATHOLOGY

[Hydatidiform changes in the chorion] Zavadil M, et al. **Cesk Patol** 1990 Mar;26(1):37–54 (Eng. Abstr.) **(Cze)**

[The chorion and decidua—morphology and biomolecular processes for their activation exemplified by premature rupture of the fetal membranes] Ludwig H. **Gynakol Rundsch** 1989;29 Suppl 2:115–21 (7 ref.) **(Ger)**

[Chorioamniotic dissociation and C-reactive protein as predictors of early premature amniotic rupture] Passloer HJ. **Z Geburtshilfe Perinatol** 1990 May–Jun;194(3):115–20 (Eng. Abstr.) **(Ger)**

[Evaluation of diagnostic potential of various methods of chorionic sampling in the first trimester of pregnancy] Bakharev VA, et al. **Akush Ginekol (Mosk)** 1990 May; (5):32–5 (Eng. Abstr.) **(Rus)**

[Cytogenetic analysis of chorionic biopsy samples in prenatal diagnosis of chromosome abnormalities] Baranov VS, et al. **Akush Ginekol (Mosk)** 1990 May;(5):35–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Cellular permeation pathways in a leaky epithelium: the human amniochorion. Hardy MA, et al. **Biol Cell** 1989; 66(1–2):149–53

Functional dissection of an early Drosophila chorion gene promoter: expression throughout the follicular epithelium is under spatially composite regulation. Tolias PP, et al. **EMBO J** 1990 May;9(5):1457–64

Biomechanical analysis of human chorioamniotic membranes. Oxlund H, et al. **Eur J Obstet Gynecol Reprod Biol** 1990 Mar;34(3):247–55

Vascularization of ovaries from golden hamsters following implantation into the chick chorioallantoic membrane. Spanel-Borowski K. **Exp Cell Biol** 1989;57(4):219–27

Amplification-control element ACE-3 is important but not essential for autosomal chorion gene amplification. Swimmer C, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(22):8823–7

ULTRASTRUCTURE

Chorionic chromosome abnormalities and intrauterine growth retardation. Verp MS, et al. **J Perinatol** 1990 Mar; 10(1):52–4

[The microtexture of amnion and chorion connective tissue] Klima G, et al. **Anat Anz** 1989;168(5):395–400 (Eng. Abstr.) **(Ger)**

CHORIONIC GONADOTROPIN RECEPTORS see **RECEPTORS, GONADOTROPIN**

CHORIONIC SOMATOMAMMOTROPIN, HUMAN see **PLACENTAL LACTOGEN**

CHORIONIC VILLI

Immunohistologic evidence that villitis in human normal term placentas is an immunologic lesion. Labarrere CA, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):515–22

Fetomaternal transfusion depends on amount of chorionic villi aspirated but not on method of chorionic villus sampling. Shulman LP, et al. **Am J Obstet Gynecol** 1990 May;162(5):1185–8

Non-mosaic trisomy 16 confined to villi [letter] Verp MS, et al. **Lancet** 1989 Oct 14;2(8668):915–6

[Study on common fragile sites in chorionic villi cells cultured in vitro] Ning E, et al. **I Chuan Hsueh Pao** 1989; 16(2):159–65 (Eng. Abstr.) **(Chi)**

[In situ hybridization of chorionic villi cells] Mazura I, et al. **Cas Lek Cesk** 1989 Jul 7;128(28):885–8 (Eng. Abstr.) **(Cze)**

ANALYSIS

Isolation and characterization of Hofbauer cells from human placental villi. Zaccheo D, et al. **Arch Gynecol Obstet** 1989; 246(4):189–200

Male sex-linked protein in human placental villi. Osathanondh V, et al. **J Med Assoc Thai** 1990 Feb;73 Suppl 1:93–6

HIV-1 in trophoblastic and villous Hofbauer cells, and haematological precursors in eight-week fetuses [published erratum appears in Lancet 1990 Apr 28;335(8696):1046] Lewis SH, et al. **Lancet** 1990 Mar 10;335(8689):565–8

Prenatal diagnosis of cytochrome-deficient chronic granulomatous disease [letter] Nakamura M, et al. **Lancet** 1990 Jul 14;336(8707):118–9

Immunohistochemical demonstration of epidermal growth factor (EGF) receptors in normal human placental villi. Kawagoe K, et al. **Placenta** 1990 Jan–Feb;11(1):7–15

ANATOMY & HISTOLOGY

[Morphometric studies of the histologically classified chorionic villi of human placentas] Pöge A, et al. **Zentralbl Allg Pathol** 1989;135(5):395–402 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Effects of 3,4-dihydroxyacetophenone on the biosynthesis of TXA2 and PGI2 in human placental villus and umbilical artery segments in vitro. Yang DS, et al. **Prostaglandins** 1989 Oct;38(4):497–504

ENZYMOLOGY

Identification of an intermediate form of beta-N-acetylhexosaminidase in chorionic villi. Pieretti M, et al. **Clin Chim Acta** 1990 Apr 30;188(2):109–17

Prenatal enzymatic diagnosis of Krabbe disease (globoid-cell leukodystrophy) using chorionic villi. Pitfalls in the use of uncultured villi. Harzer K, et al. **Hum Genet** 1989 Dec; 84(1):83–5

GROWTH & DEVELOPMENT

The development of the human placental villous tree. Castellucci M, et al. **Anat Embryol (Berl)** 1990; 181(2):117–28

IMMUNOLOGY

Cell surface antigen expression of first trimester chorionic villus samples. Lata JA, et al. **Am J Reprod Immunol** 1990 Jan–Feb;22(1–2):18–25

Hormonal and basement membrane markers for immunoidentification of cultured human trophoblast cells. Onisto M, et al. **Int J Gynaecol Obstet** 1989 Oct; 30(2):145–53

Villitis in normal term human placentae: frequency of the lesion determined by monoclonal antibody to HLA-DR antigen. Labarrere CA, et al. **J Reprod Immunol** 1989 Nov; 16(2):127–35

METABOLISM

Aspirin differentially affects thromboxane and prostacyclin production by trophoblast and villous core compartments of human placental villi. Nelson DM, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1593–8

Human placental insulin binding in normal and well-controlled diabetic patients. Nelson DM, et al. **Gynecol Obstet Invest** 1990;29(1):1–5

Localization of leukocytes and cytokines in chorionic villi of normal placentas and complete hydatidiform moles. Berkowitz RS, et al. **Gynecol Oncol** 1990 Jun;37(3):396–400

Prenatal and postnatal diagnosis of Menkes disease, an inherited disorder of copper metabolism. Tønnesen T, et al. **J Inherited Metab Dis** 1989;12 Suppl 1:207–14

Kappa opioid receptors of human placental villi modulate acetylcholine release. Ahmed MS, et al. **Life Sci** 1989; 45(25):2383–93

Placental protein distribution in maternal diabetes mellitus: an immunocytochemical study. Greco MA, et al. **Pediatr Pathol** 1989;9(6):679–90

Simultaneous autoradiography and line immunoelectrophoresis (ARLIE): a novel combination to identify de novo protein synthesis by pregnancy tissues. Fay TN, et al. **Placenta** 1989 Nov–Dec;10(6):543–51

Steroid production by early pregnancy human placental villi in culture. Maslar IA, et al. **Placenta** 1990 May–Jun; 11(3):277–88

PATHOLOGY

Placental villitis and intrauterine growth retardation in a

Swedish population. Nordenvall M, et al. **APMIS** 1990 Jan; 98(1):19–24

Early recurrent miscarriage: histology of conception products. Houwert-de Jong MH, et al. **Br J Obstet Gynaecol** 1990 Jun;97(6):533–5

Sister chromatid exchanges in first-trimester chorionic villi after in vivo and in vitro exposure to diagnostic ultrasound. Carrera P, et al. **Prenat Diagn** 1990 Mar;10(3):141–8

[Immunohistologic study of the significance of the Hofbauer cell for the transplacental HIV infection chain] Jimenez E, et al. **Arch Gynecol Obstet** 1989;245(1–4):171–2 **(Ger)**

PHYSIOLOGY

Trophoblast interaction with fibrin matrix. Epithelialization of perivillous fibrin deposits as a mechanism for villous repair in the human placenta. Nelson DM, et al. **Am J Pathol** 1990 Apr;136(4):855–65

ULTRASTRUCTURE

Fetal vasculogenesis and angiogenesis in human placental villi. Demir R, et al. **Acta Anat (Basel)** 1989;136(3):190–203

Direct chromosome preparation and culture using chorionic villi: an evaluation of the two techniques. Simoni G, et al. **Am J Med Genet** 1990 Feb;35(2):181–3

An ultrastructural study of early chorionic villus formation in the marmoset monkey (Callithrix jacchus). Smith CA, et al. **Anat Embryol (Berl)** 1990;181(1):59–66

Measurement of the villus surface area and its regional variation in the human full-term placenta. Matheus M, et al. **Gegenbaurs Morphol Jahrb** 1989;135(6):851–4

Chromosome abnormalities in early pregnancy analyzed by direct chromosome preparation of chorionic villi. Zhou XT, et al. **Hum Genet** 1989 Oct;83(3):277–9

Gene mapping on chorionic villi chromosomes by hybridization in situ: localization of cholinesterase cDNA binding sites to chromosomes 3q21, 3q26–ter and 16q21. Zakut H, et al. **Hum Reprod** 1989 Nov;4(8):941–6

A confocal and conventional epifluorescence microscope study of the intermediate filaments in chorionic villi. Bradbury FM, et al. **J Anat** 1990 Apr;169:173–87

Prenatal diagnosis of Zellweger syndrome by direct visualization of peroxisomes in chorionic villus fibroblasts by immunofluorescence microscopy. Wanders RJ, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:301–4

A quantitative interference light microscope study of human first trimester chorionic villi. Ockleford CD. **J Microsc** 1990 Feb;157 (Pt 2):225–37

Assessment of the mutagenic effect of maternal factors on human chorionic villi by micronucleus test. Cui YQ, et al. **Prog Clin Biol Res** 1990;340B:217–22

On the varied appearances of the human placental villous surface visualised by scanning electron microscopy. Burton GJ. **Scanning Microsc** 1990 Jun;4(2):501–7

[The cell cycle in normal human chorionic and placental villi. A study using flow cytometry] Jirásek JE, et al. **Cesk Gynekol** 1989 Nov;54(9):673–7 (Eng. Abstr.) **(Cze)**

[Nuclear bridges and nodes in the mature human placenta] Wepler T. **Zentralbl Allg Pathol** 1990;136(3):235–45 (Eng. Abstr.) **(Ger)**

[Chromosome preparation technics and chromosome analysis of chorionic epithelium] Hayashi K. **Rinsho Byori** 1989 Feb; Spec No 80:319–25 **(Jpn)**

[Cytogenetic analysis of chorionic biopsy samples in prenatal diagnosis of chromosome abnormalities] Baranov VS, et al. **Akush Ginekol (Mosk)** 1990 May;(5):35–7 (Eng. Abstr.) **(Rus)**

[Isolated symplasts and stromal syncytial buds of the normal human placenta at 6 to 14 weeks of pregnancy] Voloshchuk IN, et al. **Arkh Anat Gistol Embriol** 1989 Nov;97(11):70–6 (Eng. Abstr.) **(Rus)**

CHORIONIC VILLI SAMPLING

Down syndrome at birth not detected by first-trimester chorionic villus sampling. Bartels I, et al. **Am J Med Genet** 1989 Dec;34(4):606–7

Transcervical chorionic villus sampling and amniocentesis: a comparison of reliability, culture findings, and fetal outcome. Ferguson JE 2d, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):926–31

Benefits of placental biopsies for rapid karyotyping in the second and third trimesters (late chorionic villus sampling) in high-risk pregnancies. Holzgreve W, et al. **Am J Obstet Gynecol** 1990 May;162(5):1188–92

Cytogenetic results of chorionic villus sampling: high success rate and diagnostic accuracy in the United States collaborative study. Ledbetter DH, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):495–501

Feasibility of placental biopsy in the second trimester for fetal diagnosis [letter; comment] Saura R, et al. **Am J Obstet Gynecol** 1990 May;162(5):1362–3 Comment on: Am J Obstet Gynecol 1990 Mar;160(3):581–3.

Cytogenetic findings in 1250 chorionic villus samples obtained in the first trimester with clinical follow-up of the first 1000 pregnancies. Leschot NJ, et al. **Br J Obstet Gynaecol** 1989 Jun;96(6):663–70

Direct chromosome analysis in the second and third trimesters by placental biopsy in 30 pregnancies. Saura R, et al. **Br J Obstet Gynaecol** 1989 Oct;96(10):1215–8

Prenatal diagnosis in Pelizaeus-Merzbacher disease using RFLP analysis. Mäenpää J, et al. **Clin Genet** 1990 Feb; 37(2):141–7

cblC disease: case report and monitoring of a pregnancy at risk by chorionic villus sampling. Zammarchi E, et al. **Clin Invest Med** 1990 Jun;13(3):139–42

Prenatal diagnosis of Tay-Sachs disease. Ambani LM, et al. **Indian Pediatr** 1989 Oct;26(10):1052–3

Prenatal diagnosis of inherited metabolic disease by chorionic villus analysis: the Edinburgh experience. Besley GT, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:263–6

First trimester prenatal diagnosis of 3-hydroxy-3-methylglutaric aciduria. Chalmers RA, et al. **J Inherited Metab Dis** 1989;12 Suppl 2:283–5

First trimester prenatal exclusion of glutaryl-CoA dehydrogenase deficiency (glutaric aciduria type 1). Christensen E. **J Inherited Metab Dis** 1989;12 Suppl 2:277–9

Chorionic villus sampling: diagnostic uses and limitations of enzyme assays. Fowler B, et al. **J Inherited Metab Dis** 1989; 12 Suppl 1:105–17

Three different, non-mosaic sex chromosome abnormalities (direct cytotrophoblasts, mesenchymal core cultures, and abortus skin fibroblasts): implications for elucidating chorionic villi mosaicism. Shulman LP, et al. **J Med Genet** 1989 Dec;26(12):791–2

Prenatal diagnosis of nonketotic hyperglycinemia: enzymatic analysis of the glycine cleavage system in chorionic villi. Hayasaka K, et al. **J Pediatr** 1990 Mar;116(3):444–5

Successful chorionic villus sampling of a triplet gestation. A case report. King CR, et al. **J Reprod Med** 1990 Apr; 35(4):441–3

Diagnostic and therapeutic technology assessment. Chorionic villus sampling: a reassessment. **JAMA** 1990 Jan 12; 263(2):305–6

Chorionic villus sampling [letter] McCormack J, et al. **Lancet** 1990 Sep 8;336(8715):637

Early prenatal diagnosis of genetic abnormality by chorion villus sampling. Fiddes TM, et al. **N Z Med J** 1990 Apr 11;103(887):157–8

Transabdominal placental biopsy in the second and third trimesters of pregnancy: what is the risk of maternal contamination in DNA diagnosis? Gänshirt-Ahlert D, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 1):320–3

Mosaicism in chorionic villus sampling: an association with poor perinatal outcome. Johnson A, et al. **Obstet Gynecol** 1990 Apr;75(4):573–7

Chorionic villus sampling. Shulman LP, et al. **Pediatr Ann** 1989 Nov;18(11):714–5, 719–25

Prenatal diagnosis of a beta-globin gene IVS 1nt/110 mutation in chorionic villus from a mosaic triple-X mother with high HbA2 [letter] Atalay E, et al. **Prenat Diagn** 1990 May;10(5):343–4

The predictive value of cytogenetic diagnosis after CVS: 1500 cases. Breed AS, et al. **Prenat Diagn** 1990 Feb; 10(2):101–10

Seven cases of trisomy 3 mosaicism in chorionic villi. Guerneri S, et al. **Prenat Diagn** 1989 Oct;9(10):691–5

'Late CVS' international registry compilation of data from 24 centres. Holzgreve W, et al. **Prenat Diagn** 1990 Mar; 10(3):159–67

Evaluation of transcervical chorionic villus sampling with a completed follow-up of 1550 consecutive pregnancies. Jahoda MG, et al. **Prenat Diagn** 1989 Sep;9(9):621–8

The value of routine cervical cultures before transcervical chorionic villus sampling. Kagie MJ, et al. **Prenat Diagn** 1989 Aug;9(8):569–73

Prenatal diagnosis of Chinese homozygous alpha-thalassaemia 1 and haemoglobin H disease by analysis of alpha- and phi zeta-globin genes in chorionic villi and amniocytes. Ko TM, et al. **Prenat Diagn** 1989 Oct; 9(10):715–25

A pitfall in the prenatal diagnosis of Lesch-Nyhan syndrome by chorionic villus sampling. Page T, et al. **Prenat Diagn** 1990 Mar;10(3):153–7

The European collaborative study on mosaicism in chorionic villus sampling: data from 1986 to 1987. Vejerslev LO, et al. **Prenat Diagn** 1989 Aug;9(8):575–88

Prenatal diagnosis of hemophilia A by DNA analysis of chorionic villi. Ko TM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Mar;89(3):194–8

Uterine bloodflow velocity waveforms before and after transcervical chorionic villus sampling. Cohen-Overbeek TE, et al. **Ultrasound Med Biol** 1990;16(2):129–32

[Determination of paternity using DNA analysis of chorionic villi] Mosinger B, et al. **Cas Lek Cesk** 1990 Mar 30; 129(13):400–2 (Eng. Abstr.) **(Cze)**

[Transabdominal chorion villus biopsy following abnormal ultrasonic findings in the second trimester] Hertz JM, et al. **Ugeskr Laeger** 1990 Jan 1;152(1):28–30 (Eng. Abstr.) **(Dan)**

[Transcervical chorion villous biopsy for prenatal diagnosis in the first trimester. A report of the activity during the first 4 years] Søndergaard F. **Ugeskr Laeger** 1989 Nov 6; 151(45):2977–82 (Eng. Abstr.) **(Dan)**

[Level of alpha-fetoprotein in maternal serum before and after chorionic villus sampling] Guibaud S, et al. **J Genet Hum** 1989 Sep;37(3):197–202 (Eng. Abstr.) **(Fre)**

[A comparative study of the karyotypes of fetuses of spontaneous early abortions obtained by direct method and by long-term culture] Ogur G, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(4):427–32 (Eng. Abstr.) **(Fre)**

[Study of the choice between sampling of the chorionic villi and the amniotic fluid in prenatal diagnosis] Lefaure G, et al. **Rev Fr Gynecol Obstet** 1989 Oct;84(10):645–8 (Eng. Abstr.) **(Fre)**

[Chorionic villi sampling. Amniocentesis. Cordocentesis] Rudigoz RC, et al. **Rev Fr Gynecol Obstet** 1990 Feb; 85(2):97–100 (18 ref.) (Eng. Abstr.) **(Fre)**

[Amniocentesis versus choriocentesis (chorionic villi sampling) and cordocentesis (fetal blood sampling)] Thoulon JM. **Rev Fr Gynecol Obstet** 1990 Feb;85(2):101–4 (16 ref.) (Eng. Abstr.) **(Fre)**

[Chorionic villi sampling: experience of the initial 500 samples] Donner C, et al. **Rev Med Brux** 1990 Jun; 11(6):211–5 (Eng. Abstr.) **(Fre)**

[Prenatal diagnosis using amniocentesis and chorionic villi sampling: comparative study of chromosomal findings] Vamos E, et al. **Rev Med Brux** 1990 Jun;11(6):223–30 (Eng. Abstr.) **(Fre)**

[Ethical, legal and economic implications of chorionic villi sampling (letter)] László L, et al. **Orv Hetil** 1989 Sep 24; 130(39):2121–2 **(Hun)**

[Sex determination of the embryo by DNA studies of chorionic villi samples] Németi M, et al. **Orv Hetil** 1989 Dec 3;130(49):2629–30, 2633 (Eng. Abstr.) **(Hun)**

[Sex determination of the fetus: strictly by medical advice! (letter)] Papp Z. **Orv Hetil** 1989 Sep 24;130(39):2121–2 **(Hun)**

[Analysis of trophoblast subpopulations on touch smears of chorionic villi during normal pregnancy] Sasaki T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Sep; 41(9):1367–72 (Eng. Abstr.) **(Jpn)**

[The obstetrical aspects of amniocentesis and chorionic biopsy] Bakharev VA, et al. **Akush Ginekol (Mosk)** 1989 Dec;(12):44–6 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Fetal loss rate after chorionic villus sampling and subsequent amniocentesis. Brandenburg H, et al. **Am J Med Genet** 1990 Feb;35(2):178–80

Current assessment of fetal losses as a direct consequence of chorionic villus sampling. Goldberg JD, et al. **Am J Med Genet** 1990 Feb;35(2):174–7

Fetomaternal transfusion depends on amount of chorionic villi aspirated but not on method of chorionic villus sampling. Shulman LP, et al. **Am J Obstet Gynecol** 1990 May;162(5):1185–8

Chorionic villus sampling and rare side-effects: will a randomised controlled trial detect them? Orrell RW, et al. **Int J Gynaecol Obstet** 1990 May;32(1):29–34 (31 ref.)

Spontaneous abortion rate and advanced maternal age: consequences for prenatal diagnosis. Cohen-Overbeek TE, et al. **Lancet** 1990 Jul 7;336(8706):27–9

Complete follow-up in assessing fetal losses after chorion villus sampling [letter] Halliday J, et al. **Lancet** 1990 May 12;335(8698):1156

Perinatal outcome of chorionic villus sampling versus amniocentesis. Hsieh TT, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Sep;88(9):894–9

[Risk of miscarriage after chorionic biopsy is probably not higher than after amniocentesis] Gustavii B, et al. **Lakartidningen** 1989 Nov 29;86(48):4221–2 **(Swe)**

INSTRUMENTATION

Articulated needle guide: report on the first 30 cases. Sonek J, et al. **Obstet Gynecol** 1989 Nov;74(5):821–3

METHODS

Transabdominal and transcervical chorionic villus sampling: efficiency and risk evaluation of 2,411 cases. Brambati B, et al. **Am J Med Genet** 1990 Feb;35(2):160–4

Review of the development and current status of techniques for monitoring embryonic and fetal development in the first trimester of pregnancy. Ward H. **Am J Med Genet** 1990 Feb;35(2):157–9 (11 ref.)

Second-trimester placental biopsy for rapid fetal karyotyping. Cameron AD, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):931–4

Integration of the transabdominal technique into an ongoing chorionic villus sampling program. Copeland KL, et al. **Am J Obstet Gynecol** 1989 Nov;161(5):1289–94

An evaluation of the chorionic villus sampling learning curve. Silver RK, et al. **Am J Obstet Gynecol** 1990 Sep; 163(3):917–22

Current method for first and second trimester prenatal diagnosis: transabdominal chorionic villi sampling. Buckshee K, et al. **Asia Oceania J Obstet Gynaecol** 1990 Mar;16(1):45–8

Chorion villus sampling—transcervical or transabdominal? Finikiotis G, et al. **Aust N Z J Obstet Gynaecol** 1990 Feb; 30(1):63–5

Prenatal diagnosis of alpha-1-antitrypsin deficiency using polymerase chain reaction (PCR). Comparison of conventional RFLP methods with PCR used in combination with allele specific oligonucleotides or RFLP analysis. Schwartz M, et al. **Clin Genet** 1989 Dec; 36(6):419–26

Chorionic villus sampling (CVS). Randomized study of efficacy of two transcervical biopsy methods: aspiration canulas and small forceps. Pons JC, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Sep;32(3):187–94

Efficiency of modified medium for direct chromosome preparation of the chorionic villi. Kangwanpong D, et al.

J Med Assoc Thai 1990 Feb;73 Suppl 1:73–6
Reliability of prenatal diagnosis of genetic diseases by analysis of amplified trophoblast DNA. Rosatelli MC, et al. J Med Genet 1990 Apr;27(4):249–51
The role of transvaginal sonography in chorionic villi sampling. Popp LW, et al. JCU 1990 May;18(4):315–22
A reliable method for obtaining high-resolution banded chromosome preparations from chorionic villus samples. Deng HX, et al. Jinrui Idengaku Zasshi 1990 Jun; 35(2):189–93
Establishment of a cytogenetic service for chorionic villus samples: the split specimen approach [letter] Cantú ES, et al. Prenat Diagn 1990 Feb;10(2):137–9
Transabdominal villus sampling in early second trimester: a safe sampling method for women of advanced age. Jahoda MG, et al. Prenat Diagn 1990 May;10(5):307–11
An improved method of direct chromosome preparation from chorionic villus and high resolution banding technique. Xiao S, et al. Prenat Diagn 1989 Aug;9(8):589–93
[Experiences with transcervical chorionic villi biopsy in 274 studies] Karkut G, et al. Geburtshilfe Frauenheilkd 1989 Aug;49(8):701–4 (Eng. Abstr.) (Ger)
[Early amniocentesis] Klapp J, et al. Geburtshilfe Frauenheilkd 1990 Jun;50(6):443–6 (Eng. Abstr.) (Ger)
[Experiences with transabdominal chorionic villi biopsy] Concin H, et al. Gynakol Rundsch 1989;29 Suppl 2:282–3 (Ger)
[Chorionic biopsy] Flores-Genger H, et al. Gynakol Rundsch 1989;29 Suppl 2:280–1 (Ger)
[Chromosome preparation technics and chromosome analysis of chorionic epithelium] Hayashi K. Rinsho Byori 1989 Feb; Spec No 80:319–25 (Jpn)
[Chromosome preparation technics and chromosome analysis of hydatidiform mole] Ohama K, et al. Rinsho Byori 1989 Feb;Spec No 80:326–33 (Jpn)
[Evaluation of diagnostic potential of various methods of chorionic sampling in the first trimester of pregnancy] Bakharev VA, et al. Akush Ginekol (Mosk) 1990 May; (5):32–5 (Eng. Abstr.) (Rus)
[Cytogenetic analysis of chorionic biopsy samples in prenatal diagnosis of chromosome abnormalities] Baranov VS, et al. Akush Ginekol (Mosk) 1990 May;(5):35–7 (Eng. Abstr.) (Rus)
[Transcervical biopsy and aspiration of villous chorion in the first trimester of pregnancy] Okoev GG, et al. Akush Ginekol (Mosk) 1989 Aug;(8):63–5 (Rus)
[Clinical aspects of early prenatal diagnosis] Vishnevski L, et al. Akush Ginekol (Mosk) 1990 Jan;(1):14–6 (Rus)
[A cytogenetic study of the human chorion for the purpose of the prenatal diagnosis of hereditary diseases] Baranov VS, et al. Tsitologiia 1990;32(1):74–8 (Eng. Abstr.) (Rus)

PSYCHOLOGY

Information on prenatal diagnosis at the antenatal clinic. The women's experiences. Sjögren B, et al. Acta Obstet Gynecol Scand 1989;68(1):35–40
Patients' attitudes following chorionic villus sampling. McCormack MJ, et al. Prenat Diagn 1990 Apr;10(4):253–5
[Women's experience of chorionic villi biopsy and its significance for the course of pregnancy. A qualitative study] Jacobsen VF, et al. Ugeskr Laeger 1990 Jul 30; 152(31):2230–3 (Eng. Abstr.) (Dan)

STANDARDS

Advances in prenatal diagnosis. Social-psychological and policy issues. Kolker A. Int J Technol Assess Health Care 1989;5(4):601–17
Interpretation of chorionic villus sampling laboratory results is just as reliable as amniocentesis. Wright DJ, et al. Obstet Gynecol 1989 Nov;74(5):739–44

STATISTICS & NUMERICAL DATA

Chromosome abnormalities in older women by maternal age: evaluation of regression-derived rates in chorionic villus biopsy specimens. Hook EB. Am J Med Genet 1990 Feb; 35(2):184–7

UTILIZATION

Utilization of amniocentesis and chorionic villus sampling by South Carolina women 35 years of age and older. Knutson C, et al. J S C Med Assoc 1989 Oct;85(10):463–7

CHORIORETINITIS

COMPLICATIONS

Peripheral retinal neovascularization in birdshot retinochoroidopathy. Barondes MJ, et al. Ann Ophthalmol 1989 Aug;21(8):306–8
Shiny multifocal chorioretinitis with papillitis. Cunha De Souza E, et al. Ann Ophthalmol 1989 Dec;21(12):463–4
Diffuse necrotizing retinochoroiditis in a child with AIDS and toxoplasmic encephalitis. Bottoni F, et al. Graefes Arch Clin Exp Ophthalmol 1990;228(1):36–9

DIAGNOSIS

Serologic tests in the diagnosis of presumed toxoplasmic retinochoroiditis. Weiss MJ, et al. Am J Ophthalmol 1990 Apr 15;109(4):407–11
Aqueous humor analysis as a diagnostic tool in toxoplasma uveitis. Kijlstra A, et al. Int Ophthalmol 1989 Dec; 13(6):383–6 (5 ref.)
[Chorioretinopathy of the Birdshot type. Apropos of a case] Malrieu C, et al. Bull Soc Ophtalmol Fr 1989 Jun-Jul; 89(6-7):847–51 (Eng. Abstr.) (Fre)
[Choriocapillaritis (so-called pigment epitheliitis) in Borrelia burgdorferi seroconversion] Bialasiewicz AA, et al. Klin Monatsbl Augenheilkd 1990 Jun;196(6):481–3 (Eng. Abstr.) (Ger)
[Chorioretinitis in miliary tuberculosis] Heine J. Klin Monatsbl Augenheilkd 1989 Oct;195(4):257–8 (Eng. Abstr.) (Ger)
[Recording and analysis of the electrooculography using a personal computer. Initial experiences with normal probands and patients with diseases of the posterior eye segment and intraocular foreign bodies] Walter PM, et al. Klin Monatsbl Augenheilkd 1989 Oct;195(4):261–7 (Eng. Abstr.) (Ger)
[Fluorescein angiography in the diagnosis of injuries of internal ocular membranes] Kashnikov VV, et al. Vestn Oftalmol 1990 Mar-Apr;106(2):28–34 (Eng. Abstr.) (Rus)

DRUG THERAPY

[Presumed toxoplasmic chorioretinitis: comparative study of treatment with pyrimethamine and sulfadiazine or clindamycin] Colin J, et al. J Fr Ophtalmol 1989; 12(3):161–5 (Eng. Abstr.) (Fre)

ETIOLOGY

Chorioretinitis induced by coxsackievirus B4 infection. Hirakata K, et al. Am J Ophthalmol 1990 Feb 15; 109(2):225–7
Syphilitic chorioretinitis. Friberg TR. Arch Ophthalmol 1989 Nov;107(11):1676–7
Retinochoroiditis in acute Epstein-Barr virus infection. Kelly SP, et al. Br J Ophthalmol 1989 Dec;73(12):1002–3
Intraocular nocardiosis: a further case and review. Price NC, et al. Int Ophthalmol 1989 May;13(3):177–80
Vitrectomy for epiretinal membrane with Candida chorioretinitis. McDonald HR, et al. Ophthalmology 1990 Apr;97(4):466–9
[Multifocal chorioretinitis in spontaneous or induced immunodeficiencies] Limon S. Bull Soc Ophtalmol Fr 1989 Aug-Sep;89(8-9):1005–7 (Eng. Abstr.) (Fre)
[Acquired toxoplasmic chorioretinitis] Marduel R, et al. Bull Soc Ophtalmol Fr 1989 May;89(5):719–23 (20 ref.) (Eng. Abstr.) (Fre)
[Acute acquired toxoplasmosis presenting as polymyositis and chorioretinitis in a Japanese male] Yamada T, et al. Rinsho Shinkeigaku 1989 Oct;29(10):1283–6 (Eng. Abstr.) (Jpn)
[Clinical chorioretinal aspects of systemic immune vasculitis. I. General aspects] Munteanu G. Rev Chir [Oftalmol] 1989 Jul-Sep;33(3):171–9 (16 ref.) (Eng. Abstr.) (Rum)
[Clinical chorioretinal aspects in systemic immune vasculitis. II] Munteanu G. Rev Chir [Oftalmol] 1989 Oct-Dec; 33(4):245–51 (0 ref.) (Eng. Abstr.) (Rum)

GENETICS

A 1.4-kb BamHI restriction fragment of genomic DNA correlates with the birdshot retinochoroidopathy susceptibility gene. Patereau C, et al. Exp Clin Immmunogenet 1987;4(3):174–5

IMMUNOLOGY

HLA-B7 and HLA-DR2 antigens and acute posterior multifocal placoid pigment epitheliopathy. Wolf MD, et al. Arch Ophthalmol 1990 May;108(5):698–700
Association of antibody titer and chorioretinal scarring in toxoplasmosis retinochoroiditis. Swanson MW. J Am Optom Assoc 1989 Oct;60(10):735–40
[Intraocular fluid antibody quotients following inoculation with two different antigens in experimental herpes simplex virus retinochoroiditis] Rai T, et al. Nippon Ganka Gakkai Zasshi 1989 May;93(5):625–30 (Eng. Abstr.) (Jpn)

PATHOLOGY

[Retinal pigment epithelial changes related to central serous retinopathy] Dickhoff KV, et al. J Fr Ophtalmol 1989; 12(12):877–81 (Eng. Abstr.) (Fre)

THERAPY

A comparative study concerning the treatment of active toxoplasmic retinochoroiditis with argon laser and medication (follow-up 2-9 years). Theodossiadis GP, et al. Ophthalmologica 1989;199(2-3):77–83

VETERINARY

Ketoconazole therapy in a dog with systemic cryptococcosis. Mason GD, et al. J Am Vet Med Assoc 1989 Oct 1; 195(7):954–6

CHORISMATE MUTASE see under **ISOMERASES**

CHORISMIC ACID see under **CYCLOHEXANECARBOXYLIC ACIDS**

CHORISTOMA

Subcutaneous splenosis [letter] Grantham JR, et al. AJR Am J Roentgenol 1990 Mar;154(3):655
Symptomatic congenital gastroenteric duplication cyst of the esophagus containing exocrine and endocrine pancreatic tissues. Qazi FM, et al. Am J Gastroenterol 1990 Jan; 85(1):65–7
Retroperitoneal accessory spleen. Miller EJ, et al. Am Surg 1990 May;56(5):293–4
Fatal ectopic thymoma. Jansen JD, et al. Ann Thorac Surg 1990 Sep;50(3):469–70
Intrathoracic splenosis [letter] Hart CM, et al. Chest 1990 Apr;97(4):1024
Choristoma of the soft palate. Kainz J, et al. Eur Arch Otorhinolaryngol 1990;247(4):264–6
Heterotopic gastrointestinal cyst of the tongue. Newland JR, et al. Eur Arch Otorhinolaryngol 1990;247(5):326–8
Intrathoracic lobe of the liver. Case report and review of the literature. Rendina EA, et al. Eur J Cardiothorac Surg 1989;3(1):75–8 (20 ref.)
Ectopic induction of cartilage and bone by water-soluble proteins from bovine bone using a polyanhydride delivery vehicle. Lucas PA, et al. J Biomed Mater Res 1990 Jul; 24(7):901–11
[An extra-pancreatic site of glucagonoma: splenic metastasis of unknown pancreatic tumor or glucagonoma of an aberrant pancreas? Study of a case (letter)] Houvenaeghel G, et al. Gastroenterol Clin Biol 1989 Oct;13(10):851 (Fre)
[Ectopic tissue as polypoid lesions of the gallbladder] Günter E, et al. Dtsch Med Wochenschr 1989 Dec 1;114(50):1984 (Ger)
[Frequency and clinical significance of ectopic pancreas] Masi C, et al. Minerva Chir 1990 Jan;45(1-2):5–10 (31 ref.) (Eng. Abstr.) (Ita)
[Two cases of ectopic prostatic tissue in the prostatic urethra] Tochigi T, et al. Nippon Hinyokika Gakkai Zasshi 1989 Nov;80(11):1661–4 (Eng. Abstr.) (Jpn)
[A case of ectopic gastric mucosa in the cervical esophagus] Shirayama Y, et al. Nippon Shokakibyo Gakkai Zasshi 1989 Dec;86(12):2808–11 (13 ref.) (Jpn)
[Heterotopy of colonic mucous membrane in the navel skin of a 1.5 year old child] Rejmanowski T, et al. Pediatr Pol 1989 Mar;64(3):187–8 (Pol)
[Aberrant thyroid gland at the base of the tongue in children] Klačanský I, et al. Cesk Otolaryngol 1990 Jun;39(3):170–4 (Eng. Abstr.) (Slo)
[Accessory liver in gallbladder. Apropos of a case report] Castro Viera GA, et al. Rev Esp Enferm Dig 1990 Apr; 77(4):295–6 (Eng. Abstr.) (Spa)

BLOOD SUPPLY

The arteries of the lingual thyroid: angiographic findings and anatomic variations. Banna M, et al. AJNR 1990 Jul-Aug; 11(4):730–2

COMPLICATIONS

Heterotopic gastric and pancreatic tissue in large bowel. Duphare H, et al. Am J Gastroenterol 1990 Jan;85(1):68–71 (24 ref.)
Lingual thyroid and difficult intubation [letter] Fogarty D. Anaesthesia 1990 Mar;45(3):251
Gastric heterotopia causing airway obstruction. Johnston C, et al. Int J Pediatr Otorhinolaryngol 1989 Sep;18(1):67–72
Lingual thyroid in a young infant presenting as airway obstruction: report of a case [letter] Maddern BR. Int J Pediatr Otorhinolaryngol 1990 Mar;19(1):79–80
A lingual thyroid cyst complicating a foreign body in the oesophagus. Harris WE. J Laryngol Otol 1990 Jun; 104(6):508–10
Heterotopic brain tissue: a rare cause of adult recurrent meningitis. Whittet HB, et al. J Laryngol Otol 1990 Apr; 104(4):328–30
Gastric heterotopy of the biliary tract. Martinez-Urrutia MJ, et al. J Pediatr Surg 1990 Mar;25(3):356–7
Portal vein obstruction by ectopic liver tissue. Matley PJ, et al. J Pediatr Surg 1989 Nov;24(11):1163–4
Painless hematuria and urethral discharge secondary to ectopic prostate. Congleton L, et al. J Urol 1989 Dec; 142(6):1554–5 (25 ref.)
Papillary prostatic epithelial hyperplasia of the urethra: a cause of hematuria in young men. Sogbein SK, et al. J Urol 1989 Nov;142(5):1218–20
Ectopic hyperprolactinemia resulting from an ovarian teratoma. Kallenberg GA, et al. JAMA 1990 May 9; 263(18):2472–4
Heterotopic pancreas: a rare cause of bile duct dilatation--report of a case and review of the literature. Tsunoda T, et al. Jpn J Surg 1990 Mar;20(2):217–20 (9 ref.)
Pituitary enlargement due to lingual thyroid gland and primary hypothyroidism. Hung W, et al. Pediatr Neurol 1990 Jan-Feb;6(1):60–2
Embolization of ectopic kidney to control incontinence. De Groote B, et al. Pediatrics 1990 Feb;85(2):217–9
Conn's syndrome due to an ectopic adrenal adenoma. Arnold J, et al. Postgrad Med J 1989 Nov;65(769):847–8
[Ectopic parathyroid adenoma disclosed by cortical blindness

and hypercalcemic encephalopathy] Bord G, et al. **Bull Soc Ophtalmol Fr** 1988 Dec;88(12):1451–4, 1457–9 (Eng. Abstr.) **(Fre)**

[Malignant transformation of ectopic pancreas. An unusual cause of acquired duodenal stenosis with cholestasis in a 26-year-old patient] Franke U, et al. **Internist (Berlin)** 1989 Aug;30(8):525–7 **(Ger)**

[A rare cause of rectal hemorrhage] Gdanietz K, et al. **Z Kinderchir** 1989 Oct;44(5):308–9 (Eng. Abstr.) **(Ger)**

[Convulsive seizures and heterotopic gray matter; report of two cases] Higuchi T, et al. **Rinsho Hoshasen** 1990 Jun; 35(6):725–8 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Sublingual ectopic thyroid gland with hypothyroidism (letter)] Isanta Pomar C, et al. **Rev Clin Esp** 1989 Nov; 185(8):425 **(Spa)**

[Fibroadenoma on an ectopic breast (letter)] Plaza JA, et al. **Rev Clin Esp** 1990 Feb;186(3):147 **(Spa)**

CONGENITAL

Epibulbar complex choristoma involving the bulbar conjunctiva and cornea. Hayasaka S, et al. **J Pediatr Ophthalmol Strabismus** 1989 Sep–Oct;26(5):251–3

[A peculiar abnormality of the fallopian tube: induced by embryonic kidney tumor?] Carosso C, et al. **Schweiz Med Wochenschr** 1989 Nov 4;119(44):1548–54 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Renal tissue within the adrenal gland simulating an adrenal mass [letter] Barr RG, et al. **AJR Am J Roentgenol** 1990 Sep;155(3):656

Endoscopic evaluation of heterotopic pancreas. Gilmore PR, et al. **Gastrointest Endosc** 1989 Nov–Dec;35(6):563–5

Neuroglial choristoma presenting as congenital lid tumor. Holbach LM, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(6):584–8

Ectopic pituitary adenoma of the sphenoid sinus: report of a case and review of the literature. Tovi F, et al. **Head Neck** 1990 May–Jun;12(3):264–8 (13 ref.)

Unusual MRI appearance of diffuse subcortical heterotopia or "double cortex" in two children. Livingston JH, et al. **J Neurol Neurosurg Psychiatry** 1990 Jul;53(7):617–20

Ectopic pituitary adenoma of the third ventricle. Case report. Kleinschmidt-DeMasters BK, et al. **J Neurosurg** 1990 Jan; 72(1):139–42

Intraoperative endoscopic diagnosis of heterotopic gastric mucosa in the ileum causing recurrent acute intussusception. Turck D, et al. **J Pediatr Gastroenterol Nutr** 1990 Aug;11(2):275–8

Cystic and solid heterotopic brain in the face and neck: a review and report of an unusual case. Hendrickson M, et al. **J Pediatr Surg** 1990 Jul;25(7):766–8 (12 ref.)

Ectopic gingival sebaceous glands presenting as localized periodontitis. Cohen RE, et al. **J Periodontol** 1990 Jan; 61(1):58–60

Suprasellar ectopic pituitary adenoma: case report and review of the literature. Matsumura A, et al. **Neurosurgery** 1990 Apr;26(4):681–5 (26 ref.)

Primary adenocarcinoma of the breast arising in the vulva. Rose PG, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 2):537–9 (8 ref.)

Disorders of migration and sulcation. Pollei SR, et al. **Semin Ultrasound CT MR** 1988 Jun;9(3):231–46 (32 ref.)

[Goiter of the tongue base and bilateral perceptive impairment of hearing] Wetke R. **Ugeskr Laeger** 1989 Oct 16;151(42):2734–5 (Eng. Abstr.) **(Dan)**

[Bone choristoma of the choroid: a diagnosis to keep in mind] Bron A, et al. **Bull Soc Ophtalmol Fr** 1989 Apr;89(4):605–8 (21 ref.) (Eng. Abstr.) **(Fre)**

[Local tumefaction of the gallbladder wall due to pancreatic heterotopia] Collard P, et al. **J Belge Radiol** 1989 Dec; 72(6):471–3 (Eng. Abstr.) **(Fre)**

[Polypoid stomach lesions] Wehrmann K. **Leber Magen Darm** 1989 Jul;19(4):208, 214 **(Ger)**

[Intrathoracic splenosis] Farrés MT, et al. **Radiologe** 1989 Oct;29(10):527–30 (16 ref.) (Eng. Abstr.) **(Ger)**

[A rare pelvic tumor] Benet AE, et al. **Harefuah** 1990 Mar 15;118(6):325–6 (Eng. Abstr.) **(Heb)**

[A study on gastric and small intestinal aberrant pancreas by endoscopic ultrasonography—with special reference to comparison with histological appearance] Hase S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Aug;86(8):1684–91 (Eng. Abstr.) **(Jpn)**

[Ectopic pancreas treated surgically as a suspected gastric polyp] Barczyński M, et al. **Wiad Lek** 1989 Apr 1; 42(7):457–8 (Eng. Abstr.) **(Pol)**

[Scrotal dystopia of the rudimentary accessory kidney] Mishurkin VI, et al. **Vestn Khir** 1989 Apr;142(4):68 **(Rus)**

ETIOLOGY

Ectopic ossification after median sternotomy [letter; comment] Weiman DS. **Ann Thorac Surg** 1990 Mar; 49(3):510 Comment on: Ann Thorac Surg 1989 Aug;48(2):315–6.

Heterotopic bone formation in the patient with burn injuries. A retrospective assessment of contributing factors and methods of investigation. VanLaeken N, et al. **J Burn Care Rehabil** 1989 Jul–Aug;10(4):331–5

Intramural pancreatic pseudocyst in the gastric wall: diagnosis by sonography and ultrasound-guided puncture. Koop I, et al. **J Clin Gastroenterol** 1990 Aug;12(4):466–9

MICROBIOLOGY

Campylobacter pylori colonizing heterotopic gastric tissue in the rectum. Dye KR, et al. **Am J Clin Pathol** 1990 Jan; 93(1):144–7

Helicobacter pylori is not identified in areas of gastric metaplasia of gall bladder. Arnaout AH, et al. **J Pathol** 1990 Apr;160(4):333–4

PATHOLOGY

Solid and papillary neoplasm arising from an ectopic pancreas in the mesocolon. Ishikawa O, et al. **Am J Gastroenterol** 1990 May;85(5):597–601

Ectopic gastric mucosa of the gallbladder: comparison with metaplastic polyp of the gallbladder. Yamamoto M, et al. **Am J Gastroenterol** 1989 Nov;84(11):1423–6 (25 ref.)

Adrenal cortical adenoma in the spinal canal of an 8-year-old girl. Kepes JJ, et al. **Am J Surg Pathol** 1990 May; 14(5):481–4

Multiple cutaneous neuromuscular choristomas. Report of a case and a review of the literature. O'Connell JX, et al. **Am J Surg Pathol** 1990 Jan;14(1):93–6 (6 ref.)

Uterus-like mass of the small intestine. Heterotopia or monodermal teratoma? Peterson CJ, et al. **Am J Surg Pathol** 1990 Apr;14(4):390–4

Hamartoma of the scalp with ectopic meningothelial elements. A distinctive benign soft tissue lesion that may simulate angiosarcoma. Suster S, et al. **Am J Surg Pathol** 1990 Jan;14(1):1–11

Exocrine pancreatic tissue in human liver: a metaplastic process? Wolf HK, et al. **Am J Surg Pathol** 1990 Jun; 14(6):590–5

Nesidioblastosis arising from heterotopic pancreas and presenting with hypertension. A clinical, immunohistochemical and ultrastructural study. Risaliti A, et al. **Ann Chir** 1989;43(6):459–63; discussion 463–4

Osseous choristoma of the tongue. Cabbabe EB, et al. **Ann Plast Surg** 1986 Feb;16(2):150–2

Heterotopic gastrointestinal cyst of the oral cavity. Takato T, et al. **Ann Plast Surg** 1990 Aug;25(2):146–9

Dermal thymus. A light microscopic and immunohistochemical study. Barr RJ, et al. **Arch Dermatol** 1989 Dec;125(12):1681–4

Congenital oral cyst with heterotopic gastrointestinal and respiratory mucosa. Mirchandani R, et al. **Arch Pathol Lab Med** 1989 Nov;113(11):1301–2 (6 ref.)

Cystosarcoma phyllodes arising synchronously in right breast and bilateral axillary ectopic breast tissue. Saleh HA, et al. **Arch Pathol Lab Med** 1990 Jun;114(6):624–6

Intraocular lacrimal gland choristoma. O'Donnell BA, et al. **Aust N Z J Ophthalmol** 1990 May;18(2):211–3

Heterotopic brain tissue in the orbit: case report. Elder JE, et al. **Br J Ophthalmol** 1989 Nov;73(11):928–31

Computed tomography (CT) and magnetic resonance (MR) imaging of heterotopic gray matter presenting with late-onset seizures. Mineura K, et al. **Comput Med Imaging Graph** 1990 May–Jun;14(3):217–20

Panhypopituitarism without diabetes insipidus: magnetic resonance imaging of pituitary stalk transection. Christophe C, et al. **Eur J Pediatr** 1990 Jan;149(4):235–6

Pathologic observations of intrahepatic peribiliary glands in 1000 consecutive autopsy livers. Heterotopic pancreas in the liver. Terada T, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1333–7

Vaginal rhabdomyoma and adenosis. Suarez Vilela D, et al. **Histopathology** 1990 Apr;16(4):393–4

Cutaneous heterotopic meningeal nodules. Theaker JM, et al. **Histopathology** 1990 May;16(5):475–9

Neurohypophyseal ectopy in growth hormone insufficiency. Werder EA, et al. **Horm Res** 1989;31(5–6):210–2

Cyst of ectopic (choristomatous) lacrimal gland. Rao VA, et al. **Indian J Ophthalmol** 1989 Oct–Dec;37(4):189–90

Endosalpingiosis of the vermiform appendix. Cajigas A, et al. **Int J Gynecol Pathol** 1990;9(3):291–5

Neoplasms arising in ectopic ovaries: a case of Brenner tumor in an accessory ovary. Heller DS, et al. **Int J Gynecol Pathol** 1990;9(2):185–9 (16 ref.)

A sebaceous gland in the dorsal surface of the tongue. Kovero O. **Int J Oral Maxillofac Surg** 1989 Oct;18(5):266

Corpus callosotomy for refractory seizures in a patient with cortical heterotopia: case report. Stearns M, et al. **Neurosurgery** 1989 Oct;25(4):633–5; discussion 635–6

Prolactinoma in wall of ovarian dermoid cyst with hyperprolactinemia. Palmer PE, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 2):540–3

Heterotropic brain tissue in the oropharynx. Report of a case. Momose F, et al. **Oral Surg Oral Med Oral Pathol** 1989 Dec;68(6):682–5 (22 ref.)

Branchial cleft fistula with heterotopic salivary gland tissue in the lower neck. Takimoto T, et al. **ORL J Otorhinolaryngol Relat Spec** 1990;52(4):265–8

Ectopic immature renal tissue in a lumbosacral lipoma: pathologic and radiologic findings. Alston SR, et al. **Pediatr Neurosci** 1989;15(2):100–3

Nasal cerebral heterotopia: the so-called nasal glioma or sequestered encephalocele and its variants. Yeoh GP, et al. **Pediatr Pathol** 1989;9(5):531–49

Heterotopic gastric mucosa in the common bile duct. Evans MM, et al. **Surgery** 1990 Jul;108(1):96–100 (16 ref.)

Heterotopic oral gastrointestinal cyst: report of a case. Huang SF, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jun; 88(6):621–3

Heterotopic brain tissue in the lung causing acute respiratory distress in an infant. Fuller C, et al. **Thorax** 1989 Dec; 44(12):1045–6 (10 ref.)

Intracardiac ectopic thyroid: a case report and review of published cases. Richmond I, et al. **Thorax** 1990 Apr; 45(4):293–4 (7 ref.)

[Aberrant pancreas in the gallbladder (letter)] Jarde O, et al. **J Chir (Paris)** 1989 Aug–Sep;126(8–9):476–7 **(Fre)**

[Accessory spleen on the left ovary. Discussion on its pathogenesis] Vuong PN, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(6):753–5 (Eng. Abstr.) **(Fre)**

[Osseous choristoma of the peripapillary choroid] Faure JF, et al. **Ophtalmologie** 1989 Jan–Mar;3(1):53–6 (Eng. Abstr.) **(Fre)**

[Campylobacter pylori in heterotopic gastric mucosa in Meckel's diverticulum] Stolte M, et al. **Leber Magen Darm** 1989 Jul;19(4):209–10 (Eng. Abstr.) **(Ger)**

[Ectopic adrenal cortex tissue] Miersch WD, et al. **Z Urol Nephrol** 1989 Sep;82(9):487–90 (Eng. Abstr.) **(Ger)**

[Splenogonadal fusion] Miersch WD, et al. **Z Urol Nephrol** 1990 Jan;83(1):33–7 (Eng. Abstr.) **(Ger)**

[A mucoepidermoid tumor of an ectopic salivary gland. A case report] Lari G, et al. **Minerva Stomatol** 1990 Jun; 39(6):461–2 (Eng. Abstr.) **(Ita)**

[Heterotopy of gastric glands in the submucosa of the stomach] Cutrona D, et al. **Pathologica** 1989 May–Jun; 81(1073):339–43 (Eng. Abstr.) **(Ita)**

[Heterotopic formation of bone tissue in the eye] Akimov OV. **Vestn Oftalmol** 1989 Sep–Oct;105(5):75–6 **(Rus)**

[Testicular adrenal rests tumor: a difficult diagnosis] Vela Navarrete R, et al. **Actas Urol Esp** 1990 Mar–Apr; 14(2):146–8 (Eng. Abstr.) **(Spa)**

[Presentation and variants of heterotopic salivary tissue in the neck] Carbonell Sanchís R, et al. **An Otorrinolaringol Ibero Am** 1990;17(2):137–43 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

The use of postoperative irradiation for the prevention of heterotopic bone after total hip replacement with biologic fixation (porous coated) prosthesis: an animal model. Konski A, et al. **Int J Radiat Oncol Biol Phys** 1990 Apr; 18(4):861–5

RADIOGRAPHY

Cerebellar heterotopia of the cervical cord (a case report). Davis SJ, et al. **Australas Radiol** 1989 Aug;33(3):282–4

Computed tomography (CT) and magnetic resonance (MR) imaging of heterotopic gray matter presenting with late-onset seizures. Mineura K, et al. **Comput Med Imaging Graph** 1990 May–Jun;14(3):217–20

Splenosis mimicking neoplasm in the perirenal space: CT characteristics. Darling JD, et al. **J Comput Assist Tomogr** 1990 Sep–Oct;14(5):839–41

Heterotopic brain in the middle ear: CT findings. Klein MV, et al. **J Comput Assist Tomogr** 1989 Nov–Dec;13(6):1058–60

Ectopic ovaries associated with absent uterus and pelvic kidney: CT findings. Reed DH, et al. **J Comput Assist Tomogr** 1990 Jan–Feb;14(1):157–8

Thoracic splenosis. Case report and literature review. Roucos S, et al. **J Thorac Cardiovasc Surg** 1990 Feb;99(2):361–3

Single vaginal ectopic ureter via Gartner's duct cyst spontaneously perforating into the bladder. Watanabe K, et al. **J Urol** 1989 Oct;142(4):1044–6

A Vietnamese veteran with multiple pleural nodules. Li C, et al. **Semin Roentgenol** 1990 Jan;25(1):2–4

Computed tomography of myelolipoma in the accessory adrenal gland. Kageyama T, et al. **Urol Radiol** 1989; 11(3):153–5

[A case of thoracic kidney] Nagashima Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Dec; 27(12):1562–7 (11 ref.) (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Splenosis mimicking an intra-abdominal malignancy. White JD, et al. **Am J Med** 1989 Dec;87(6):687–90

Lingual thyroid scanned with technetium 99m pertechnetate. Report of two cases. Dodds WJ, et al. **Am J Roentgenol Radium Ther Nucl Med** 1967 Aug; 100(4):786–91

Scintigraphic demonstration of ectopic autonomously functioning thyroid adenoma with normal cervical thyroid. Hardoff R, et al. **Clin Nucl Med** 1990 Mar;15(3):190

Wandering spleen presenting as a pediatric pelvic mass. Savolaine ER, et al. **Clin Nucl Med** 1989 Aug;14(8):623–4

Localization of mediastinal parathyroid adenoma by T1-201 scintiscan and SPECT. Lind P, et al. **Klin Wochenschr** 1990 May 4;68(9):472–5

[Scintigraphy of an intrathoracic thyroid mass] Takahashi M, et al. **Rinsho Hoshasen** 1990 May;35(5):625–6 **(Jpn)**

SECRETION

Secretion of hormones by ectopic thyroid glands after prolonged thyroxine therapy. Léger J, et al. **J Pediatr** 1990 Jan;116(1):111–4

[Lactating mammary tissue in a mature cystic teratoma of the ovary] Tsubura A, et al. **Gan No Rinsho** 1990 Mar; 36(4):532–6 (14 ref.) (Eng. Abstr.) **(Jpn)**

SURGERY

Ectopic thyroid tissue causing bronchial obstruction. Gleason IO, et al. **Ann Thorac Surg** 1967 Feb;3(2):151–3

Heterotopic pancreas. Farrar WB, et al. **Ir J Med Sci** 1990 Jan;159(1):19–20

Transposition of the lingual thyroid. Leelamanit V. **J Med Assoc Thai** 1989 Jul;72(7):408–12

Parailiac ectopic bone complicating the removal of a bone graft for cervical disc surgery. Magliani VQ, et al. **J Neurosurg Sci** 1989 Apr–Jun;33(2):207–9

Easy method of upper-pole heminephroureterectomy in duplex systems in children. Hurwitz RS. **Urol Clin North Am** 1990 Feb;17(1):115–9

[Sacral teratomas—organized forms] Kheradpir MH. **Chirurg** 1989 Aug;60(8):541–4 (Eng. Abstr.) **(Ger)**

[Heterotopic stomach tissue in the rectum and small intestine] Jenny P. **Z Kinderchir** 1989 Oct;44(5):306–7 (Eng. Abstr.) **(Ger)**

[Intestinal triplication—a case report of embryogenesis of tubular and cystic small intestine duplication] Klumpp H, et al. **Z Kinderchir** 1990 Apr;45(2):117–9 (Eng. Abstr.) **(Ger)**

[Incidence of accessory adrenal cortex tissue of the inguinal region in the child—results of a prospective study] Lochbühler H, et al. **Z Kinderchir** 1989 Dec;44(6):343–4 (Eng. Abstr.) **(Ger)**

[A case of ectopic large pituitary adenoma] Iwai Y, et al. **No Shinkei Geka** 1990 Jan;18(1):71–5 (15 ref.) (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Phakomatous choristoma of the lower eyelid. A light and ultrastructural study. Sinclair-Smith CC, et al. **Arch Pathol Lab Med** 1989 Oct;113(10):1175–7

Phakomatous choristoma: clinical, histopathologic, and ultrastructural findings in a 4-month-old boy. Eustis HS, et al. **J Pediatr Ophthalmol Strabismus** 1990 Jul–Aug; 27(4):208–11 (10 ref.)

VETERINARY

Surgical excision of ectopic thyroid carcinoma involving the base of the tongue in dogs: three cases (1980–1987). Lantz GC, et al. **J Am Vet Med Assoc** 1989 Dec 1;195(11):1606–8

Reduction of hydronephrosis and hydroureter associated with ectopic ureters in two dogs after ureterovesical anastomosis. Ross LA, et al. **J Am Vet Med Assoc** 1990 May 1;196(9):1497–9

Heterotopic bone formation in the ciliary body of an aged guinea pig. Brooks DE, et al. **Lab Anim Sci** 1990 Jan; 40(1):88–90

Ectopic intestinal glands in the forestomach of a F344 rat. Hagiwara A, et al. **Vet Pathol** 1990 May;27(3):201–3

CHOROID

[The dark choroid in macular dystrophy] Chen P, et al. **Chung Hua Yen Ko Tsa Chih** 1990 Jan;26(1):15–6 (Eng. Abstr.) **(Chi)**

[Effects of laser chorioretinal photocoagulation] Risse JF, et al. **Bull Soc Ophtalmol Fr** 1989 May;89(5):739–50 (23 ref.) (Eng. Abstr.) **(Fre)**

ABNORMALITIES

Spinocerebellar ataxia, hypogonadotropic hypogonadism, and choroidal dystrophy (Boucher-Neuhäuser syndrome). Limber ER, et al. **Am J Med Genet** 1989 Jul;33(3):409–14

Retinochoroidal coloboma: varieties of clinical presentations. Steahly LP. **Ann Ophthalmol** 1990 Jan;22(1):9–14

Colobomas of the optic area. Giuffrè G. **Metab Pediatr Syst Ophthalmol** 1989;12(4):100–2

[Central areolar choroid dystrophy] Castier, et al. **Bull Soc Ophtalmol Fr** 1989 Nov;89(11):1263–5 (Eng. Abstr.) **(Fre)**

[Optic disk and choroidal coloboma] Gotsis S, et al. **J Fr Ophtalmol** 1989;12(10):683–5 (Eng. Abstr.) **(Fre)**

[Macular coloboma and alternating diffuse chorio-retinal dysplasia] Lisch K. **Fortschr Ophthalmol** 1989;86(5):469–71 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

The elastic tissue of Bruch's membrane. Connections to choroidal elastic tissue and the ciliary epithelium of the rabbit and human eyes. Korte GE, et al. **Arch Ophthalmol** 1989 Nov;107(11):1654–8

[Dynamics of changes in the thickness of the choroid in patients with stenosis of the internal carotid artery] Ivashina AI, et al. **Vestn Oftalmol** 1989 Jul–Aug;105(4):65–7 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

A simple method for assessing laser photocoagulation coverage of choroidal neovascular membranes. Brod RD, et al. **Am J Ophthalmol** 1990 Sep 15;110(3):313

Varix of the vortex ampulla simulating a choroidal melanoma. Buettner H. **Am J Ophthalmol** 1990 May 15;109(5):607–8

Choroidal neovascular membrane and other chorioretinal complications of acquired syphilis. Halperin LS, et al. **Am J Ophthalmol** 1989 Nov 15;108(5):554–62

Treatment of foveal pigment epithelial detachments with contiguous extrafoveal choroidal neovascular membranes. Maguire JI, et al. **Am J Ophthalmol** 1990 May 15; 109(5):523–9

Chorioretinal anastomoses in age-related macular degeneration. Fryczkowski AW, et al. **Ann Ophthalmol** 1989 Oct;21(10):370–4, 378

Age-related macular degeneration: from neovascular to atrophic. Roy M, et al. **Ann Ophthalmol** 1989 Nov; 21(11):429–31

Choroidal neovascularization in an eye with a macular hole. Smith T, et al. **Ann Ophthalmol** 1989 Sep;21(9):331–2, 336

Krypton laser photocoagulation for idiopathic neovascular lesions. Results of a randomized clinical trial. Macular Photocoagulation Study Group. **Arch Ophthalmol** 1990 Jun;108(6):832–7

Krypton laser photocoagulation for neovascular lesions of age-related macular degeneration. Results of a randomized clinical trial. Macular Photocoagulation Study Group. **Arch Ophthalmol** 1990 Jun;108(6):816–24

Persistent and recurrent neovascularization after krypton laser photocoagulation for neovascular lesions of age-related macular degeneration. Macular Photocoagulation Study Group. **Arch Ophthalmol** 1990 Jun;108(6):825–31

Subretinal hemorrhage from choroidal neovascularization: fluorescein angiographic documentation. Catalano RA, et al. **Arch Ophthalmol** 1990 Feb;108(2):174–5

Encircling photothrombotic therapy for choroidal Greene melanoma using rose bengal. Winward KE, et al. **Arch Ophthalmol** 1990 Apr;108(4):588–94

Outcome of iatrogenic choroidal neovascularisation in sickle cell disease. Fox PD, et al. **Br J Ophthalmol** 1990 Jul; 74(7):417–20

Evidence for retinal pathology following interruption of neural regulation of choroidal blood flow: Müller cells express GFAP following lesions of the nucleus of Edinger-Westphal in pigeons. Fitzgerald ME, et al. **Curr Eye Res** 1990 Jun;9(6):583–98

Main posterior watershed zone of the choroid. Variations of its position in normal subjects. Giuffrè G. **Doc Ophthalmol** 1989 Jun;72(2):175–80

The Cambridge Ophthalmological Symposium 1989. The choroid. Proceedings. **Eye** 1990;4 (Pt 2):243–387

Control of retinal and choroidal blood flow. Bill A, et al. **Eye** 1990;4 (Pt 2):319–25 (25 ref.)

Pulsatile flow in the choroidal circulation: a preliminary investigation. Flower RW, et al. **Eye** 1990;4 (Pt 2):310–8 (5 ref.)

Retinal metabolism and the choroidal circulation [editorial] Foulds WS. **Eye** 1990;4 (Pt 2):ix–x

The choroidal circulation and retinal metabolism—an overview. Foulds WS. **Eye** 1990;4 (Pt 2):243–8 (17 ref.)

In vivo choroidal circulation and its watershed zones. Hayreh SS. **Eye** 1990;4 (Pt 2):273–89 (37 ref.)

Decreased choroidal blood flow associated with retinitis pigmentosa. Langham ME, et al. **Eye** 1990;4 (Pt 2):374–81

Choroidal endothelial junctions in primates. Nagy AR, et al. **Eye** 1990;4 (Pt 2):290–302

Functional anatomy of the choroidal circulation: methyl methacrylate casting of human choroid. Olver JM. **Eye** 1990;4 (Pt 2):262–72

Subretinal hemorrhages with or without choroidal neovascularization in the maculas of patients with pathologic myopia. Hayasaka S, et al. **Graefes Arch Clin Exp Ophthalmol** 1990;228(4):277–80

Natural history of subfoveal pigment epithelial detachments associated with subfoveal or unidentifiable choroidal neovascularization complicating age-related macular degeneration. Singerman LJ, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(6):501–7

Diabetic choroidal and iris vasculature scanning electron microscopy findings. Fryczkowski AW, et al. **Int Ophthalmol** 1989 Jul;13(4):269–79

Laser photocoagulation of subfoveal choroidal neovascularization. Reddy CV, et al. **Int Ophthalmol Clin** 1990 Spring;30(2):138–44 (26 ref.)

An image processing approach to characterizing choroidal blood flow. Klein GJ, et al. **Invest Ophthalmol Vis Sci** 1990 Apr;31(4):629–37

Pathogenesis of laser-induced choroidal subretinal neovascularization. Miller H, et al. **Invest Ophthalmol Vis Sci** 1990 May;31(5):899–908

Transpupillary irradiation of the rabbit retina with the cw-Nd:YAG laser. I. Acute morphologic effects produced using two different pulse forms. van der Zypen E, et al. **Invest Ophthalmol Vis Sci** 1990 Jan;31(1):29–40

Juxtapapillary choroidal neovascular membrane in a patient with Paget's disease and lattice corneal dystrophy. Boehme JD, et al. **J Am Optom Assoc** 1989 Aug;60(8):612–6

Subretinal choroidal neovascularization as a response to penetrating retinal injury in the pigmented rabbit. Hsu HT, et al. **Jpn J Ophthalmol** 1989;33(3):358–66

Comparative study of three fluorescent dyes for angiography: sodium fluorescein, carboxyfluorescein, and calcein. Fang T, et al. **Ophthalmic Surg** 1990 Apr;21(4):250–7

The use of fundus photographs and fluorescein angiograms in the identification and treatment of choroidal neovascularization in the Macular Photocoagulation Study. The Macular Photocoagulation Study Group. Chamberlin JA, et al. **Ophthalmology** 1989 Oct;96(10):1526–34

Choroidal neovascularization after laser photocoagulation for diabetic macular edema. Lewis H, et al. **Ophthalmology** 1990 Apr;97(4):503–10; discussion 510–1

Tunable dye laser photocoagulation for choroidal neovascularization complicating age-related macular degeneration. Singerman LJ, et al. **Retina** 1989;9(4):247–57

Clinicopathologic findings in a patient with serpiginous choroiditis and treated choroidal neovascularization. Wu JS, et al. **Retina** 1989;9(4):292–301

[Treatment of macular choroidal neovascular membrane with krypton red laser photocoagulation] Sun XQ. **Chung Hua Yen Ko Tsa Chih** 1989 Mar;25(2):94–6 (Eng. Abstr.) **(Chi)**

[The segmental characteristic of the human choroidal vessels and its clinical significance] Zhang HR. **Chung Hua Yen Ko Tsa Chih** 1990 Jan;26(1):32–5 (Eng. Abstr.) **(Chi)**

[Choroidal silence] Amalric P. **Bull Mem Acad R Med Belg** 1988;143(10–12):489–98 (Eng. Abstr.) **(Fre)**

[The role of the choroid in diabetic maculopathy] Amalric PM. **J Fr Ophtalmol** 1989;12(10):661–3 (Eng. Abstr.) **(Fre)**

[New occult choroidal vessels in age-related macular degeneration] Cardillo-Piccolino F, et al. **J Fr Ophtalmol** 1989;12(12):869–76 (Eng. Abstr.) **(Fre)**

[Determination of choroid circulatory parameters] Baumgartner R, et al. **Klin Monatsbl Augenheilkd** 1990 May;196(5):342–5 (Eng. Abstr.) **(Ger)**

[Ultrastructural observations of the retinal pigment epithelial cells and the outer segments of the rod visual cells after vortex vein occlusion in rabbit eyes] Kadomoto H. **Nippon Ganka Gakkai Zasshi** 1989 Aug;93(8):817–22 (Eng. Abstr.) **(Jpn)**

[The process of occlusion and re-construction of the choriocapillaries following dye laser photocoagulation] Katoh N, et al. **Nippon Ganka Gakkai Zasshi** 1990 Feb; 94(2):141–51 (Eng. Abstr.) **(Jpn)**

[The effects of vortex vein ligation and partial scleral resection on the subretinal fluid resorption] Kita M, et al. **Nippon Ganka Gakkai Zasshi** 1990 Mar;94(3):263–8 (Eng. Abstr.) **(Jpn)**

[Study on choroidal blood flow at dark and light adaptation. 1. Choroidal blood flow at dark adaptation] Morimoto N. **Nippon Ganka Gakkai Zasshi** 1989 Jul;93(7):790–5 (Eng. Abstr.) **(Jpn)**

[Choroidal blood flow in chronic stage of selective retinal damage after monoiodoacetic acid injection] Nasu K. **Nippon Ganka Gakkai Zasshi** 1990 Feb;94(2):152–9 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Bovine retinal pigment epithelium promotes proliferation of choroidal endothelium in vitro. Morse LS, et al. **Arch Ophthalmol** 1989 Nov;107(11):1659–63

Histological study of choroidal melanocytes in animals with tapetum lucidum cellulosum. Chijiiwa T, et al. **Graefes Arch Clin Exp Ophthalmol** 1990;228(2):161–8

Isolation and characterization of retinal and choroidal biomatrix. Matsuo T. **Jpn J Ophthalmol** 1989;33(3):367–74

[Electron microscopic study of the choroidal melanocytes and elastic fibers] Funata M, et al. **Nippon Ganka Gakkai Zasshi** 1990 Apr;94(4):352–8 (Eng. Abstr.) **(Jpn)**

EMBRYOLOGY

Development of the choroid and related structures. Sellheyer K. **Eye** 1990;4 (Pt 2):255–61 (12 ref.)

[Immunohistochemical study of fibronectin localization during the formation of the vascular coat under the influence of the pigment epithelium in chick embryos] Stroeva OG, et al. **Ontogenez** 1989 Jul–Aug;20(4):350–6 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Asymmetric acetylcholinesterase is absent from chick retina, but present in choroid, ciliary muscles and iris. Barat A, et al. **Neurosci Lett** 1990 May 4;112(2–3):302–6

IMMUNOLOGY

Immune mechanisms in choroido-retinal inflammation in man. Lightman S, et al. **Eye** 1990;4 (Pt 2):345–53 (72 ref.)

INJURIES

Chorioretinal neovascular membranes complicating contusional eye injuries with indirect choroidal ruptures. Wood CM, et al. **Br J Ophthalmol** 1990 Feb;74(2):93–6

Indirect choroidal ruptures: aetiological factors, patterns of ocular damage, and final visual outcome. Wood CM, et al. **Br J Ophthalmol** 1990 Apr;74(4):208–11

[New sub-retinal vessels after chorio-retinal wound caused by intra-ocular foreign body (1 case)] Bego B, et al. **Bull Soc Ophtalmol Fr** 1989 Feb;89(2):263–5 (Eng. Abstr.) **(Fre)**

[Isolated traumatic rupture of the membrane of Bruch complicated by choroid neovascularization] Salvanet-Bouccara A, et al. **Bull Soc Ophtalmol Fr** 1989 Jan;89(1):179–83 (8 ref.) (Eng. Abstr.) **(Fre)**

[Fluorescein angiography in the diagnosis of injuries of

internal ocular membranes] Kashnikov VV, et al. **Vestn Oftalmol** 1990 Mar–Apr;106(2):28–34 (Eng. Abstr.) **(Rus)**

METABOLISM

Angiotensin II receptors labelled with 125I–[Sar1, Ile8]–AII in albino rabbit ocular tissues. Mallorga P, et al. **Curr Eye Res** 1989 Aug;8(8):841–9

MICROBIOLOGY

Histoplasma capsulatum in human ocular tissue. Craig EL, et al. **Arch Ophthalmol** 1974 Apr;91(4):285–9

PARASITOLOGY

Disruption of the choroidoretinal interface by toxoplasma. Tabbara KF. **Eye** 1990;4 (Pt 2):366–73 (24 ref.)

PATHOLOGY

Suprachoroidal dislocation of a posterior chamber intraocular lens. Foster JA, et al. **Am J Ophthalmol** 1990 Jun 15; 109(6):731–2

Large histiocytes in the choroid of leukemic patients. Campbell RA, et al. **Arch Pathol Lab Med** 1990 Feb; 114(2):210–1

Clinical parameters predictive of enlargement of melanocytic choroidal lesions. Augsburger JJ, et al. **Br J Ophthalmol** 1989 Nov;73(11):911–7

Fundus changes in mesangiocapillary glomerulonephritis [letter; comment] Beaumont P. **Br J Ophthalmol** 1989 Nov; 73(11):932 Comment on: Br J Ophthalmol 1989 Apr;73(4):297–302.

Fundus changes in mesangiocapillary glomerulonephritis type II: clinical and fluorescein angiographic findings. Duvall–Young J, et al. **Br J Ophthalmol** 1989 Nov; 73(11):900–6

Fundus changes in mesangiocapillary glomerulonephritis type II: vitreous fluorophotometry. Raines MF, et al. **Br J Ophthalmol** 1989 Nov;73(11):907–10

Merkel cell carcinoma. Long term survival in a patient with proven brain metastasis and presumed choroid metastasis. Alexander E 3d, et al. **Clin Neurol Neurosurg** 1989; 91(4):317–20

A fluorescein angiographic study on patients with proliferative vitreoretinopathy treated by vitrectomy and intraocular daunomycin. Wiedemann P, et al. **Int Ophthalmol** 1989 May;13(3):211–6

Multinucleated giant cells on Bruch's membrane late in recurrent retinal and subretinal hemorrhaging. Wolter JR, et al. **Ophthalmologica** 1989;199(2–3):53–9

Surgical management of the idiopathic uveal effusion syndrome. Johnson MW, et al. **Ophthalmology** 1990 Jun; 97(6):778–85

[Changes in the posterior eye segment in glaucoma patients] Németh J. **Fortschr Ophthalmol** 1990;87(2):138–9 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Choroidal perfusion abnormality with age–related Bruch's membrane change. Pauleikhoff D, et al. **Am J Ophthalmol** 1990 Feb 15;109(2):211–7

Gyrate atrophy of the choroid and retina: ERG of the neural retina and the pigment epithelium. Raitta C, et al. **Br J Ophthalmol** 1990 Jun;74(6):363–7

RADIATION EFFECTS

[The effect of melanin and hemoglobin on the dye laser photocoagulation in pigmented and albino rabbits] Obana A, et al. **Nippon Ganka Gakkai Zasshi** 1989 Aug; 93(8):844–51 (Eng. Abstr.) **(Jpn)**

SURGERY

Considerations and methods for laser surgery in the anterior and posterior segments. Fankhauser F, et al. **Int Ophthalmol Clin** 1990 Spring;30(2):130–7 (88 ref.)

Outflow of aqueous humor following cyclodialysis or ciliochoroidal detachment in rabbit. Joo SH, et al. **Korean J Ophthalmol** 1989 Dec;3(2):65–9

Intraretinal foreign bodies. Management and observations. Slusher MM. **Retina** 1990;10 Suppl 1:S50–4 (7 ref.)

[Revascularization of the choroid in patients with pigmented retinal dystrophy] Lešťák J, et al. **Cesk Oftalmol** 1990 May; 46(3):208–13 (Eng. Abstr.) **(Cze)**

[Quantification of the wavelength dependence of laser–induced choroid coagulation] Lorenz B, et al. **Fortschr Ophthalmol** 1989;86(6):644–54 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Fine structure of the retinal epithelium and tapetum lucidum of the ranch mink Mustela vison. Braekevelt CR. **Acta Anat (Basel)** 1989;135(4):296–302

CHOROID DISEASES

BLOOD

Serpiginous choroidopathy associated with elevated factor VIII–von Willebrand factor antigen. King DG, et al. **Retina** 1990;10(2):97–101

COMPLICATIONS

Electroretinograms in microcephaly with chorioretinal degeneration. Manning FJ, et al. **Am J Ophthalmol** 1990 Apr 15;109(4):457–63

Subretinal hemorrhage from choroidal neovascularization: fluorescein angiographic documentation. Catalano RA, et al. **Arch Ophthalmol** 1990 Feb;108(2):174–5

Retinochoroidal degeneration associated with progressive iris necrosis. Margo CE, et al. **Arch Ophthalmol** 1990 Jul; 108(7):989–92

Choroidal detachment associated with primary retinal detachment. Seelenfreund MH, et al. **Arch Ophthalmol** 1974 Apr;91(4):254–8

Acute angle–closure glaucoma from spontaneous massive hemorrhagic retinal or choroidal detachment. An updated diagnostic and therapeutic approach. Pesin SR, et al. **Ophthalmology** 1990 Jan;97(1):76–84

[Etiopathogenic aspects of flow–like atrophy of the pigment epithelium of eye] Milazzo S, et al. **Bull Soc Ophtalmol Fr** 1989 Dec;89(12):1413–7 (Eng. Abstr.) **(Fre)**

[Bilateral angle block glaucoma in spontaneous choroid detachment] Branda L, et al. **Klin Monatsbl Augenheilkd** 1990 May;196(5):423–4 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Evaluation of patients with obvious or suspected degenerative and dystrophic disorders of the retina, pigment epithelium and choroid. Experience from a Swedish referral center. Skoog KO, et al. **Acta Ophthalmol (Copenh)** 1990 Apr;68(2):131–8

Presumed sarcoid choroidopathy mimicking birdshot retinochoroidopathy. Brod RD. **Am J Ophthalmol** 1990 Mar 15;109(3):357–8

Isolated unilateral hemichoroidal melanosis. Kanter ED, et al. **Ann Ophthalmol** 1990 Jan;22(1):7–8

[Choroidal silence] Amalric P. **Bull Mem Acad R Med Belg** 1988;143(10–12):489–98 (Eng. Abstr.) **(Fre)**

[Retinal folds—diagnostic problems] Rollin JP, et al. **Bull Soc Ophtalmol Fr** 1989 Jan;89(1):193–4 **(Fre)**

DRUG THERAPY

Treatment of Pneumocystis carinii choroidopathy [letter] Koser MW, et al. **Arch Ophthalmol** 1990 Sep;108(9):1214–5

ETIOLOGY

Choroidal neovascular membrane and other chorioretinal complications of acquired syphilis. Halperin LS, et al. **Am J Ophthalmol** 1989 Nov 15;108(5):554–62

Chorioretinal degeneration in infantile malignant osteopetrosis. Ruben JB, et al. **Am J Ophthalmol** 1990 Jul 15;110(1):1–5

The etiology of choroidal folds. A biomechanical explanation. Friberg TR. **Graefes Arch Clin Exp Ophthalmol** 1989;227(5):459–64

Serous retinal detachment resembling central serous chorioretinopathy following organ transplantation. Friberg TR, et al. **Graefes Arch Clin Exp Ophthalmol** 1990; 228(4):305–9

Choroidal detachment, flat anterior chamber, and hypotony as complications of neodymium: YAG laser cyclophotocoagulation. Maus M, et al. **Ophthalmology** 1990 Jan;97(1):69–72

Posterior segment manifestations of ocular trauma. Williams DF, et al. **Retina** 1990;10 Suppl 1:S35–44 (78 ref.)

[Choroidal folds after vitrectomy followed by gas exchange] Tapiero B, et al. **Bull Soc Ophtalmol Fr** 1989 Oct; 89(10):1163–4 **(Fre)**

[The role of the choroid in diabetic maculopathy] Amalric PM. **J Fr Ophtalmol** 1989;12(10):661–3 (Eng. Abstr.) **(Fre)**

[The role of lysosomal enzymes in the pathogenesis of ciliochoroidal detachment] Stroev EA, et al. **Oftalmol Zh** 1989;(7):414–6 (Eng. Abstr.) **(Rus)**

GENETICS

Early findings in central areolar choroidal dystrophy. Hoyng CB, et al. **Acta Ophthalmol (Copenh)** 1990 Jun;68(3):356–60

Helicoid peripapillary chorioretinal degeneration. Brazitikos PD, et al. **Am J Ophthalmol** 1990 Mar 15;109(3):290–4

Hereditary pigmented paravenous chorioretinal atrophy. Noble KG. **Am J Ophthalmol** 1989 Oct 15;108(4):365–9

[Associated forms of hereditary chorioretinal degeneration] Manderieux N, et al. **Ophtalmologie** 1989 Jun–Aug; 3(3):193–5 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Association of birdshot retinochoroidopathy and HLA–A29 antigen. Baarsma GS, et al. **Curr Eye Res** 1990;9 Suppl:63–8

Severe retinochoroidopathy: variations of humoral and cellular immunity to S–antigen in a longitudinal study. Jobin D, et al. **Curr Eye Res** 1990;9 Suppl:91–6

PATHOLOGY

Late developing lesions in birdshot retinochoroidopathy. Soubrane G, et al. **Am J Ophthalmol** 1990 Feb 15; 109(2):204–10

The uveal effusion syndrome and trans–scleral flow. Forrester JV, et al. **Eye** 1990;4 (Pt 2):354–65

Idiopathic polypoidal choroidal vasculopathy (IPCV). Yannuzzi LA, et al. **Retina** 1990;10(1):1–8

[Epidemiology of choroidal folds] Krzykala B, et al. **Bull Soc Ophtalmol Fr** 1989 Feb;89(2):295–6, 299–300 (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

Experience with nontreatment of central serous choroidopathy. Klein ML, et al. **Arch Ophthalmol** 1974 Apr;91(4):247–50

Long–term follow–up of acute multifocal posterior placoid pigment epitheliopathy [published erratum appears in Br J Ophthalmol 1990 May;74(5):320] Williams DF, et al. **Br J Ophthalmol** 1989 Dec;73(12):985–90

PREVENTION & CONTROL

[Practical value of preventive posterior sclerectomy in trabeculectomy] Babushkin AE, et al. **Vestn Oftalmol** 1990 Mar–Apr;106(2):6–7 (Eng. Abstr.) **(Rus)**

SURGERY

The treatment of foveal central serous choroidopathy by krypton red laser. Weinberger D, et al. **Ann Ophthalmol** 1990 Jan;22(1):35–8

Results of laser treatment for sub–retinal neovascular membranes. Carter MJ, et al. **S Afr Med J** 1990 Sep 1; 78(5):250–3

[Treatment of choroidal neovascularization in degenerative myopia] Deutman AF, et al. **Ophtalmologie** 1989 Sep–Dec; 3(4):299–301 (Eng. Abstr.) **(Fre)**

[Surgical destruction of varicose veins in involutional central chorioretinal dystrophy] Katsnel'son LA, et al. **Vestn Oftalmol** 1989 Jul–Aug;105(4):38–41 (Eng. Abstr.) **(Rus)**

[Clinico–angiographic indications for surgical intersection of the superficial temporal artery in patients with central chorioretinal dystrophy] Shilkin GA, et al. **Vestn Oftalmol** 1989 Jul–Aug;105(4):41–4 (Eng. Abstr.) **(Rus)**

[First experience with transvitreal surgery of central chorioretinal dystrophy complicated by exudative detachment of the sensory retina and pigment epithelium] Stoliarenko GE. **Vestn Oftalmol** 1989 Jul–Aug;105(4):6–9 (Eng. Abstr.) **(Rus)**

THERAPY

[The intravasal ultraviolet irradiation of autologous blood in the treatment of central nonexudative chorioretinal dystrophy] Dzhaliashvili OA, et al. **Vestn Oftalmol** 1990 Jan–Feb;106(1):41–3 (Eng. Abstr.) **(Rus)**

CHOROID HEMORRHAGE see under **EYE HEMORRHAGE**

CHOROID NEOPLASMS

Nonocular cancers in patients with choroidal melanoma [letter] Schachat AP, et al. **Ophthalmology** 1990 Jul; 97(7):837–8

COMPLICATIONS

Presumed small choroidal melanomas with serous macular detachments with and without surface laser photocoagulation treatment. Erie JC, et al. **Am J Ophthalmol** 1990 Mar 15;109(3):259–64

Choroidal malignant melanoma in an albino. Casswell AG, et al. **Br J Ophthalmol** 1989 Oct;73(10):840–5

[Incidence of ocular hypertension in melanoma of the eye] Pesme DJ, et al. **Bull Soc Ophtalmol Fr** 1989 Oct; 89(10):1155–6 **(Fre)**

[Macular syndrome in choroidal cavernous hemangioma: the role of laser treatment] Giovannini A, et al. **J Fr Ophtalmol** 1989;12(10):679–82 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Varix of the vortex ampulla simulating a choroidal melanoma. Buettner H. **Am J Ophthalmol** 1990 May 15;109(5):607–8

Accuracy of diagnosis of choroidal melanomas in the Collaborative Ocular Melanoma Study. COMS report no. 1. **Arch Ophthalmol** 1990 Sep;108(9):1268–73

Dislocated lens nuclei simulating choroidal melanomas. Alward WL, et al. **Arch Ophthalmol** 1989 Oct; 107(10):1463–4

Benign fibrous tumor of the choroid. Croxatto JO, et al. **Arch Ophthalmol** 1989 Dec;107(12):1793–6

Fluorescein angiography and hemangiomas of the choroid. Norton EW, et al. **Arch Ophthalmol** 1967 Aug;78(2):121–5

Improvements in the diagnosis of posterior uveal melanomas. Shields JA, et al. **Arch Ophthalmol** 1974 Apr;91(4):259–64

Radioimmunoscintigraphy and immunohistochemistry with melanoma–associated monoclonal antibodies in choroidal melanoma: a comparison of the clinical and immunohistochemical results. Schaling DF, et al. **Br J Ophthalmol** 1990 Sep;74(9):538–41

Choroidal osteoma. Clinical characteristics and long–term follow–up of five cases. Zhang CF, et al. **Chin Med J [Engl]** 1990 Mar;103(3):251–5

The electro–oculogram as an aid in the diagnosis of uveal

melanoma. Brink H, et al. **Int Ophthalmol** 1989 Sep; 13(5):305–9

False positive magnetic resonance imaging of a choroidal nevus simulating choroidal melanoma. Liu KR, et al. **Int Ophthalmol** 1989 Jul;13(4):265–8

Detection of ocular malignancies. Lyons CJ, et al. **J R Soc Med** 1990 Mar;83(3):165–7

Resolution of apparent choroidal melanoma [letter; comment] Gitter KA. **Retina** 1989;9(4):337 Comment on: Retina 1989;9(2):131–5.

[Central serous retinopathy as the first manifestation of malignant melanoma of the choroid] Vlková E, et al. **Cesk Oftalmol** 1989 Jul;45(4):276–8 (Eng. Abstr.) **(Cze)**

[Immunoscintigraphy of choroid melanoma using monoclonal antibodies] Schaling DF, et al. **Ned Tijdschr Geneeskd** 1989 Aug 19;133(33):1644–7 (Eng. Abstr.) **(Dut)**

[Bone choristoma of the choroid: a diagnosis to keep in mind] Bron A, et al. **Bull Soc Ophtalmol Fr** 1989 Apr;89(4):605–8 (21 ref.) (Eng. Abstr.) **(Fre)**

[Diagnosis of choroid melanoma and MRI. Apropos of a case] Kuhne F, et al. **Bull Soc Ophtalmol Fr** 1989 Apr; 89(4):537–40 (16 ref.) **(Fre)**

[Amelanotic melanoma and nuclear magnetic resonance tomography—case report] Schilling A, et al. **Fortschr Ophthalmol** 1989;86(5):472–3 (Eng. Abstr.) **(Ger)**

[The importance of fluorescence angiography in the examination of patients with suspected choroidal tumor] Val'kova IV, et al. **Oftalmol Zh** 1989;(6):333–6 (Eng. Abstr.) **(Rus)**

[Formalization of the process of differential diagnosis of nevi and initial choroid melanomas with the aid of a diagnostic table] Brovkina AF, et al. **Vestn Oftalmol** 1990 May–Jun; 106(3):27–9 (Eng. Abstr.) **(Rus)**

ETIOLOGY

[Choroidal melanoma and suspected naevi in diabetics] Leys A. **J Fr Ophtalmol** 1989;12(12):915–7 (Eng. Abstr.) **(Fre)**

[Risk factors of malignant melanoma of the choroid] Magomedova SI. **Sov Med** 1989;(6):117–8 **(Rus)**

GENETICS

Bilateral choroidal osteoma in three siblings. Noble KG. **Am J Ophthalmol** 1990 Jun 15;109(6):656–60

Estimation of DNA content in uveal melanomas by flow cytometry. Rennie IG, et al. **Eye** 1989;3 (Pt 5):611–7

MORTALITY

Ocular melanoma in Alberta: a 38 year review pointing to the importance of tumor size and tumor histology as predictors of survival. Hayton S, et al. **J Surg Oncol** 1989 Dec;42(4):215–8

Relative survival rates after alternative therapies for uveal melanoma. Seddon JM, et al. **Ophthalmology** 1990 Jun; 97(6):769–77

[Catamnestic follow-up of patients with choroid melanoma] Zangi I, et al. **Sb Lek** 1990 May;92(5):151–4 (Eng. Abstr.) **(Cze)**

PATHOLOGY

Choroidal melanoma presenting at iris root. Spaeth GL. **Arch Ophthalmol** 1967 Aug;78(2):226–7

Clinical parameters predictive of enlargement of melanocytic choroidal lesions. Augsburger JJ, et al. **Br J Ophthalmol** 1989 Nov;73(11):911–7

Tumour-associated retinal pigment epitheliopathy. Damato BE, et al. **Eye** 1990;4 (Pt 2):382–7 (11 ref.)

Diffuse iris nevus in oculodermal melanocytosis: a light and electron microscopic study. Ticho BH, et al. **J Pediatr Ophthalmol Strabismus** 1989 Sep–Oct; 26(5):244–50

Remote metastases from uveal melanoma. Powers T, et al. **J Tenn Med Assoc** 1990 Jan;83(1):11–4 (211 ref.)

Tumor-associated retinal pigment epithelial proliferation simulating retinal pigment epithelial tear. Leff SR, et al. **Retina** 1989;9(4):267–9

[Results of the evaluation of invasiveness of choroid melanoma over 4 years. Apropos of 16 cases] Rosier Diallo L, et al. **Bull Soc Ophtalmol Fr** 1989 Oct;89(10):1159–62 **(Fre)**

[Malignant transformation of a nevus of ota] Sellam R, et al. **Bull Soc Ophtalmol Fr** 1989 Feb;89(2):319–22 (Eng. Abstr.) **(Fre)**

[Clinical aspects of leukemic infiltration of the choroid and the optic nerve] De Laey JJ, et al. **J Fr Ophtalmol** 1989; 12(11):819–25 (30 ref.) (Eng. Abstr.) **(Fre)**

[Osseous choristoma of the peripapillary choroid] Faure JF, et al. **Ophtalmologie** 1989 Jan–Mar;3(1):53–6 (Eng. Abstr.) **(Fre)**

[Tumor markers in malignant choroid melanoma] Scheiffarth OF, et al. **Fortschr Ophthalmol** 1989;86(6):639–43 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

The slow electrooculogram oscillation in malignant choroidal melanoma. Thaler A, et al. **Doc Ophthalmol** 1989 Apr; 71(4):403–7

RADIOGRAPHY

Metabolic imaging of uveal melanoma using positron emission tomography. Brancato R, et al. **Arch Ophthalmol** 1990 Mar;108(3):326–7

RADIONUCLIDE IMAGING

Ocular melanoma [letter; comment] Tullo AB, et al. **Br J Ophthalmol** 1989 Sep;73(9):771–2 Comment on: Br J Ophthalmol 1987 Sep;71(9):651–8.

Ocular melanoma: detection using iodine-123-iodoamphetamine and SPECT imaging. Dewey SH, et al. **J Nucl Med** 1990 Mar;31(3):375–7

[Immunoscintigraphy in the diagnosis of choroid melanoma] Calbiani B, et al. **Radiol Med (Torino)** 1990 Jan–Feb; 79(1–2):92–5 (Eng. Abstr.) **(Ita)**

RADIOTHERAPY

Episcleral radioactive plaque therapy: initial clinical experience with 56 patients. Lean EK, et al. **Am J Clin Oncol** 1990 Jun;13(3):185–90

Cobalt-60 plaque radiotherapy vs enucleation for posterior uveal melanoma. Augsburger JJ, et al. **Am J Ophthalmol** 1990 May 15;109(5):585–92

Analysis of radiation failure after uveal melanoma brachytherapy. Char DH, et al. **Am J Ophthalmol** 1989 Dec 15;108(6):712–6

A rationale for comparing radiation to enucleation in the management of choroidal melanoma [editorial] Robertson DM. **Am J Ophthalmol** 1989 Oct 15;108(4):448–51

The management of metastases to eye and orbit from carcinoma of the breast. Burmeister BH, et al. **Aust N Z J Ophthalmol** 1990 May;18(2):187–90

Changes in height of choroidal melanomas after plaque therapy. Abramson DH, et al. **Br J Ophthalmol** 1990 Jun; 74(6):359–62

Magnetic resonance imaging of juxtapapillary plaques in cadaver eyes. Williams DF, et al. **Br J Ophthalmol** 1990 Jan;74(1):43–6

More on managing metastatic choroidal tumors [letter] Phillips TL. **Oncology (Williston Park)** 1989 Jul;3(7):14

Ocular melanoma: total dose and dose rate effects with Co-60 plaque therapy. Beitler JJ, et al. **Radiology** 1990 Jul; 176(1):275–8

Treatment of choroidal melanoma: MR imaging in the assessment of radioactive plaque position. Hanna SL, et al. **Radiology** 1990 Sep;176(3):851–3

Granulomatous uveitis after treatment of a choroidal melanoma with proton-beam irradiation. Margo CE, et al. **Retina** 1990;10(2):140–3

Cobalt plaque radiotherapy versus enucleation for posterior uveal melanoma: comparison of survival by prognostic index groups. Augsburger JJ, et al. **Trans Am Ophthalmol Soc** 1990;87:348–59; discussion 359–61

[Value of angiography in the surveillance of choroid melanoma treated by cobalt disk] Desjardins L, et al. **J Fr Ophtalmol** 1989;12(6–7):427–30 (Eng. Abstr.) **(Fre)**

[Irradiation treatment of choroidal hemangiomas] Zografos L, et al. **J Fr Ophtalmol** 1989;12(11):797–807 (20 ref.) (Eng. Abstr.) **(Fre)**

[The role of beta-ray therapy in the treatment of choroidal and ciliary body melanomas] Grange JD, et al. **Ophtalmologie** 1989 Jun–Aug;3(3):175–9 (Eng. Abstr.) **(Fre)**

[Development and dosimetry of a 125 iodine applicator for brachytherapy of intraocular tumors] Alberti W, et al. **Fortschr Ophthalmol** 1990;87(2):201–5 (Eng. Abstr.) **(Ger)**

[New radiotherapy approaches in the treatment of malignant choroid melanoma] Felix R, et al. **Fortschr Ophthalmol** 1989;86(6):636–8 (11 ref.) (Eng. Abstr.) **(Ger)**

[The regression behavior of choroid melanoma following radiotherapy—a new prognostic parameter?] Guthoff R, et al. **Klin Monatsbl Augenheilkd** 1990 Jan;196(1):6–10 (Eng. Abstr.) **(Ger)**

[Plexiglass replicas for optimizing selection and site of ruthenium 106 applicators] Menapace R. **Klin Monatsbl Augenheilkd** 1990 Jan;196(1):40–2 (Eng. Abstr.) **(Ger)**

[Brachytherapy of choroidal melanoma using radioactive gold grains—a case report] Kawamura T, et al. **Gan No Rinsho** 1990 Apr;36(5):663–8 (Eng. Abstr.) **(Jpn)**

SECONDARY

Bilateral choroidal neonatal neuroblastoma. Cibis GW, et al. **Am J Ophthalmol** 1990 Apr 15;109(4):445–9

Presumed choroidal metastasis of Merkel cell carcinoma. Small KW, et al. **Ann Ophthalmol** 1990 May;22(5):187–90

Mucinous adenocarcinoma metastatic to the iris, ciliary body, and choroid. Lieb WE, et al. **Br J Ophthalmol** 1990 Jun; 74(6):373–6

Choroidal metastasis of oesophageal squamous cell carcinoma. Mooy CM, et al. **Int Ophthalmol** 1990 Mar; 14(2):63–71

[Metastases of malignant extra-ocular tumors to the choroid. Diagnosis and fractionated radiotherapy] Sassmannshausen J, et al. **Fortschr Ophthalmol** 1990;87(1):69–73 (Eng. Abstr.) **(Ger)**

SURGERY

Cobalt-60 plaque radiotherapy vs enucleation for posterior uveal melanoma. Augsburger JJ, et al. **Am J Ophthalmol** 1990 May 15;109(5):585–92

Comparison of xenon arc and argon laser photocoagulation in the treatment of choroidal melanomas. Shields JA, et al. **Am J Ophthalmol** 1990 Jun 15;109(6):647–55

Postenucleation orbital radiotherapy for the treatment of malignant melanoma of the choroid with extrascleral extension. Hykin PG, et al. **Br J Ophthalmol** 1990 Jan; 74(1):36–9

Fluorescein angiographic findings and results of laser treatment in circumscribed choroidal hemangioma. Bottoni F, et al. **Int Ophthalmol** 1990 Jul;14(4):259–65

[Occurrence of 3 primary carcinomas within 26 months] Petru G, et al. **Wien Med Wochenschr** 1990 Apr 30; 140(8):212–3 (Eng. Abstr.) **(Ger)**

THERAPY

Ferromagnetic hyperthermia and iodine 125 brachytherapy in the treatment of choroidal melanoma in a rabbit model. Mieler WF, et al. **Arch Ophthalmol** 1989 Oct;107(10):1524–8

Encircling photothrombotic therapy for choroidal Greene melanoma using rose bengal. Winward KE, et al. **Arch Ophthalmol** 1990 Apr;108(4):588–94

The conservative management of choroidal melanoma. Billson FA, et al. **Aust N Z J Ophthalmol** 1990 Feb; 18(1):65–75

Current treatment of metastatic choroidal tumors. Gragoudas ES. **Oncology (Williston Park)** 1989 Jun;3(6):103–10; discussion 111 (16 ref.)

ULTRASTRUCTURE

Massive fibrosis of extraocular muscles related to intraocular tumor. Meyer E, et al. **Ophthalmologica** 1990; 200(4):198–202

Lipid crystals in malignant melanoma of the choroid. Margo CE, et al. **Retina** 1990;10(1):68–71

Differences in nuclear pore density among human choroidal melanoma cell types. Sacks-Wilner R, et al. **Ultrastruct Pathol** 1990 Jul–Aug;14(4):311–9

CHOROID PLEXUS

Choroid plexus carcinoma—report of a case with metastases within the central nervous system. Bennedbaek O, et al. **Acta Oncol** 1990;29(2):241–3 (32 ref.)

Late disappearance of fetal choroid plexus cyst: case report and review of the literature. Lodeiro JG, et al. **Am J Perinatol** 1989 Oct;6(4):450–2 (6 ref.)

Xanthoma of the choroid plexus: a case report during gestation. Casanova MF. **Bol Asoc Med P R** 1989 Dec; 81(12):475–6

Choroid plexus papillomas: immunohistochemical study [letter; comment] Lakhani S, et al. **Histopathology** 1990 Apr;16(4):419–20 Comment on: Histopathology 1989 Jul;15(1):61–9.

One-month-old infant with increasing head size [clinical conference] Harmon BH, et al. **Invest Radiol** 1990 Jul; 25(7):862–4

Choroid plexus carcinoma in siblings [letter; comment] Munoz DG. **J Neuropathol Exp Neurol** 1990 Mar; 49(2):192–3 Comment on: J Neuropathol Exp Neurol 1989 Jul;48(4):483–93.

Impact of the genetic background of transgenic mice upon the formation and timing of choroid plexus papillomas. Cho HJ, et al. **J Neurosci Res** 1989 Sep;24(1):115–22

Lipoma and agenesis of the corpus callosum with associated choroid plexus lipomas. In utero diagnosis. Mulligan G, et al. **J Ultrasound Med** 1989 Oct;8(10):583–8 (20 ref.)

Mucous-secreting choroid plexus adenoma—case report and review of the literature. Eljamel MS, et al. **Neuropediatrics** 1990 Feb;21(1):55–6 (16 ref.)

Glial fibrillary acidic protein and cytokeratin in choroid plexus tumors. An immunohistochemical study. Lopes MB, et al. **Pathol Res Pract** 1989 Sep;185(3):339–41

Prospective study on trisomy 18 and fetal choroid plexus cysts [letter] Camurri L, et al. **Prenat Diagn** 1989 Oct; 9(10):742

Fetal choroid plexus cysts: a report of 100 cases. Ostlere SJ, et al. **Radiology** 1990 Jun;175(3):753–5

The role of radiotherapy in the management of choroid plexus neoplasms. Palazzi M, et al. **Tumori** 1989 Oct 31; 75(5):463–9 (58 ref.)

[A case of large malignant choroid plexus papilloma in the third ventricle—immunohistochemical and ultrastructural studies] Sato K, et al. **No To Shinkei** 1989 Oct;41(10):973–8 (Eng. Abstr.) **(Jpn)**

[Duplicate origin of vertebral artery combined with brain tumor] Mashiyama S, et al. **Rinsho Hoshasen** 1989 Jun; 34(6):727–30 (20 ref.) (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

Sudden death from choroid plexus vascular malformation hemorrhage: case report and review of the literature. van Rybroek JJ, et al. **Clin Neuropathol** 1990 Jan–Feb; 9(1):39–45 (34 ref.)

Choroid plexus papilloma in early infants. Kawano H, et al. **Zentralbl Neurochir** 1989;50(3–4):171–5

ANALYSIS

A marker for primary choroid plexus neoplasms. Herbert J, et al. **Am J Pathol** 1990 Jun;136(6):1317–25
Prolactin receptors in the primate choroid plexus. Walsh RJ, et al. **J Anat** 1990 Feb;168:137–41
Histaminergic cells in the choroid plexus of rat. Nilsson C, et al. **J Chem Neuroanat** 1988 Jan–Feb;1(1):53–7
Biochemical study of prolactin binding sites in Xenopus laevis brain and choroid plexus. Muccioli G, et al. **J Exp Zool** 1990 Mar;253(3):311–8
Localization and characterization of binding sites for circulating and cerebroventricular atrial natriuretic factor in rat choroid plexus. Konrad EM, et al. **Neuroendocrinology** 1990 Mar;51(3):304–14

ANATOMY & HISTOLOGY

A stereological study of the ependyma of the mouse spinal cord. With a comparative note on the choroid plexus ependyma [published erratum appears in J Anat 1990 Feb;168:279] Bjugn R, et al. **J Anat** 1989 Oct;166:171–8
The blood–brain barrier. Gregoire N. **J Neuroradiol** 1989; 16(3):238–50 (15 ref.) **(Eng, Fre)**

BLOOD SUPPLY

Anterior choroidal artery: angiographic analysis of variations and anomalies. Takahashi S, et al. **AJNR** 1990 Jul–Aug; 11(4):719–29
Effects of angiotensin II on blood flow to choroid plexus. Maktabi MA, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):H414–8
Effect of atriopeptin on blood flow to cerebrum and choroid plexus. Schalk KA, et al. **Am J Physiol** 1989 Dec;257(6 Pt 2):R1365–9
Effects of endothelin on blood vessels of the brain and choroid plexus. Kadel KA, et al. **Brain Res** 1990 Jun 4; 518(1–2):78–82
Choroid plexus arteriovenous malformation in a full–term neonate. Case report. Wakai S, et al. **J Neurosurg** 1990 Jan;72(1):127–9 (14 ref.)
Vascular effects of acetazolamide on the choroid plexus. Faraci FM, et al. **J Pharmacol Exp Ther** 1990 Jul; 254(1):23–7
Bilateral arteriovenous malformations of the choroid plexus and retina. Iplikçioğlu AC, et al. **Neurosurgery** 1990 Aug; 27(2):302–5
Anterior choroidal artery territory infarction and small–vessel disease [letter; comment] Fisher M, et al. **Stroke** 1989 Nov;20(11):1591–2 Comment on: Stroke 1989 May;20(5):616–9.
[Ataxic hemiparesis: specificity of the vascular territory?] Danek A, et al. **Nervenarzt** 1989 Sep;60(9):585–6 **(Ger)**
[Anterior choroid artery syndrome. Study of 3 cases] Roquer J, et al. **Neurologia** 1989 Jul–Aug;4(6):206–9 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Pathomorphological changes in rat brain choroid plexus due to administration of the amine–curing agent, bis(4–amino–3–methylcyclohexyl)methane. Shibata T, et al. **Virchows Arch [A]** 1990;417(3):203–12

EMBRYOLOGY

Ultrastructural changes in the mouse fetal choroid plexuses following chronic maternal alcoholization. Crăciun C, et al. **Morphol Embryol (Bucur)** 1989 Jul–Sep;35(3):221–5

INJURIES

Avulsion of choroid plexus during revision of ventricular shunting: its high incidence and predictive value on computed tomography scan. Aoki N, et al. **Surg Neurol** 1990 Apr;33(4):256–60

METABOLISM

Cotransport of sodium and chloride by the adult mammalian choroid plexus. Johanson CE, et al. **Am J Physiol** 1990 Feb;258(2 Pt 1):C211–6
Acetazolamide and insulin alter choroid plexus epithelial cell [Na+], pH, and volume. Johanson CE, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):F1538–46
Na(+)–H+ exchange in choroid plexus and CSF in acute metabolic acidosis or alkalosis. Murphy VA, et al. **Am J Physiol** 1990 Jun;258(6 Pt 2):F1528–37
Thyroxine transport from blood to brain via transthyretin synthesis in choroid plexus. Schreiber G, et al. **Am J Physiol** 1990 Feb;258(2 Pt 2):R338–45
Kinetics and Na independence of amino acid uptake by blood side of perfused sheep choroid plexus. Segal MB, et al. **Am J Physiol** 1990 May;258(5 Pt 2):F1288–94
Stilbenes inhibit exchange of chloride between blood, choroid plexus and cerebrospinal fluid. Deng QS, et al. **Brain Res** 1989 Oct 30;501(1):183–7
Atrial natriuretic peptide receptors in cerebral microvessels and choroid plexus of spontaneously hypertensive rats. Okazaki M, et al. **Brain Res** 1990 Jun 4;518(1–2):292–4
Alteration of atrial natriuretic peptide receptors in the choroid plexus of rats with induced or congenital hydrocephalus. Mori K, et al. **Childs Nerv Syst** 1990 Jun; 6(4):190–3
Distinct positive and negative elements control the limited hepatocyte and choroid plexus expression of transthyretin in transgenic mice. Yan C, et al. **EMBO J** 1990 Mar; 9(3):869–78
Comparison between blood and saline perfusion on the uptake of amino acids by choroid plexus of the sheep. Segal MB, et al. **Endocrinol Exp** 1990 Mar;24(1–2):29–36
The neuropeptides vasoactive intestinal polypeptide, peptide histidine isoleucine and neuropeptide Y modulate [3H]noradrenaline release from sympathetic nerves in the choroid plexus. Nilsson C, et al. **Eur J Pharmacol** 1990 Jun 8;181(3):247–52
Corticosteroid action on choroid plexus: reduction in Na+–K+–ATPase activity, choline transport capacity, and rate of CSF formation. Lindvall–Axelsson M, et al. **Exp Brain Res** 1989;77(3):605–10
The subcellular distribution of transferrin in rat choroid plexus studied with immunogold labelling of ultracryosections. Møllgård K, et al. **Histochem J** 1989 Aug;21(8):441–8
Subepithelial basement membrane deposition and intermediate filament expression in choroid plexus neoplasms and ependymomas. Furness PN, et al. **Histopathology** 1990 Mar;16(3):251–5
Serotonin1c receptor reserve in choroid plexus masks receptor subsensitivity. Sanders–Bush E, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):984–8
5–HT–induced transferrin production by choroid plexus epithelial cells in culture: role of 5–HT1c receptor. Tsutsumi M, et al. **J Pharmacol Exp Ther** 1990 Jul; 254(1):253–7
The fetal rat binding protein for insulin–like growth factors is expressed in the choroid plexus and cerebrospinal fluid of adult rats. Tseng LY, et al. **Mol Endocrinol** 1989 Oct; 3(10):1559–68
Similarities in transthyretin gene expression and differences in transcription factors: liver and yolk sac compared to choroid plexus. Costa RH, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6589–93
Functional expression and subcellular localization of an anion exchanger cloned from choroid plexus. Lindsey AE, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5278–82
Distribution of peptidergic nerves in the choroid plexus, focusing on coexistence of neuropeptide Y, vasoactive intestinal polypeptide and peptide histidine isoleucine. Nilsson C, et al. **Regul Pept** 1990 Jan;27(1):11–26

PATHOLOGY

CT diagnostic features of Alzheimer disease: importance of the choroidal/hippocampal fissure complex. George AE, et al. **AJNR** 1990 Jan–Feb;11(1):101–7
MR imaging of choroid plexus lipomas. Truwit CL, et al. **AJNR** 1990 Jan–Feb;11(1):202–4
Are choroid plexus cysts an indication for second–trimester amniocentesis? Benacerraf BR, et al. **Am J Obstet Gynecol** 1990 Apr;162(4):1001–6
Histopathological and immunofluorescence study of the choroid plexus in hepatosplenic schistosomiasis mansoni. Pittella JE, et al. **Am J Trop Med Hyg** 1989 Nov; 41(5):548–52
Pigmented choroid plexus papilloma. Reimund EL, et al. **Arch Pathol Lab Med** 1990 Aug;114(8):902–5 (8 ref.)
Xanthogranuloma of the choroid plexus of lateral ventricle, presenting with parosmia and parageusia. Rutherfoord GS, et al. **Br J Neurosurg** 1987;1(2):285–8
Cerebral fluid overproduction in the absence of tumor or villous hypertrophy of the choroid plexus. Casey KF, et al. **Childs Nerv Syst** 1989 Oct;5(5):332–4
Choroid plexus papillomas in infancy and childhood. Spallone A, et al. **Childs Nerv Syst** 1990 Mar;6(2):71–4
Morphometry of choroid plexus in hydrocephalic guineapigs. Madhavi C, et al. **Indian J Med Res** 1990 Apr;92:89–94
Chondromatosis of the choroid plexus: case report. Valdueza JM, et al. **Neurosurgery** 1990 Aug;27(2):291–4

PHYSIOLOGY

Small pial vessels, but not choroid plexus, exhibit specific biochemical correlates of functional cholinergic innervation. Hamel E, et al. **Brain Res** 1990 May 21; 516(2):301–9
Effects of inhibition of angiotensin converting enzyme and carbonic anhydrase on fluid production by ciliary process, choroid plexus, and pancreas. Vogh BP, et al. **J Ocul Pharmacol** 1989 Winter;5(4):303–11
Anion channels in a leaky epithelium. A patch–clamp study of choroid plexus. Christensen O, et al. **Pflugers Arch** 1989 Oct;415(1):37–46
The mammalian choroid plexus. Spector R, et al. **Sci Am** 1989 Nov;261(5):68–74

SECRETION

Release from live choroid plexus of apical fragments and electrophoretic characterization of their synthetic products. Gudeman DM, et al. **J Neurosci Res** 1989 Oct;24(2):184–91
The contribution from the choroid plexus and the periventricular CNS to amino acids and proteins in the human CSF. Hamberger A, et al. **Neurochem Res** 1990 Mar; 15(3):307–12

SURGERY

The treatment of childhood hydrocephalus by choroid plexus coagulation and artificial cerebrospinal fluid perfusion. Griffith HB, et al. **Br J Neurosurg** 1990;4(2):95–100

ULTRASTRUCTURE

Electron–microscopic studies on the pathogenesis of exencephaly and cranioschisis induced in the rat after neural tube closure: role of the neuroepithelium and choroid plexus. Padmanabhan R. **Acta Anat (Basel)** 1990; 137(1):5–18
Atypical cilia in the choroid plexus of guineapig. Madhavi C, et al. **Indian J Med Res** 1989 Dec;90:484–9
Evidence for separate receptors for insulin and insulin–like growth factor–I in choroid plexus of rat brain by quantitative autoradiography. Davidson DA, et al. **J Histochem Cytochem** 1990 Sep;38(9):1289–94
Ultrastructure and organization of circumventricular organs and endolymphatic tubules in the treefrog, Hyla versicolor. Kemnitz CP, et al. **J Morphol** 1990 May;204(2):197–208

CHOROIDEREMIA

see related
NIGHT BLINDNESS

DIAGNOSIS

[A case of choroideremia] Moyenin P, et al. **Bull Soc Ophtalmol Fr** 1989 May;89(5):671–4 (Eng. Abstr.) **(Fre)**

GENETICS

Choroideremia and hypopituitarism: an association. Menon RK, et al. **Am J Med Genet** 1989 Dec;34(4):511–3
A survey of hereditary aspects of pigmentary retinal dystrophies. Dickinson P, et al. **Aust N Z J Ophthalmol** 1989 Aug;17(3):247–56
Haplotype and multipoint linkage analysis in Finnish choroideremia families. Sankila EM, et al. **Hum Genet** 1989 Dec;84(1):66–70
Choroideremia associated with an X–autosomal translocation. Siu VM, et al. **Hum Genet** 1990 Apr;84(5):459–64
Derivation of clones from the choroideremia locus by preparative field inversion gel electrophoresis. van de Pol TJ, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):725–31
Chromosomal jumping from the DXS165 locus allows molecular characterization of four microdeletions and a de novo chromosome X/13 translocation associated with choroideremia. Cremers FP, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7510–4
[Central areolar choroid dystrophy. Report of involvement of 3 generations] Hutter H, et al. **Klin Monatsbl Augenheilkd** 1989 Sep;195(3):177–80 (Eng. Abstr.) **(Ger)**

PATHOLOGY

A histopathologic study of a choroideremia carrier. Flannery JG, et al. **Invest Ophthalmol Vis Sci** 1990 Feb;31(2):229–36

CHOROIDITIS

COMPLICATIONS

Presumed choroidal tuberculosis in a human immunodeficiency virus infected host. Blodi BA, et al. **Am J Ophthalmol** 1989 Nov 15;108(5):605–7
Harada's disease associated with fibrous dysplasia. Maxwell DP Jr, et al. **Ann Ophthalmol** 1990 Jul;22(7):263–6
Cryptococcal choroiditis. Carney MD, et al. **Retina** 1990; 10(1):27–32
[Treatment of subretinal neovessels in idiopathic recurrent multifocal choroiditis] Coscas G, et al. **Bull Soc Ophtalmol Fr** 1989 Nov;89(11):1275–9 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Choroidal tuberculomas without evidence of extraocular tuberculosis. Mansour AM, et al. **Graefes Arch Clin Exp Ophthalmol** 1990;228(4):382–3
[Multifocal choroiditis: diagnostic aspects and results of photocoagulation. Apropos of 25 cases] Delayre T, et al. **J Fr Ophtalmol** 1989;12(2):97–102 (Eng. Abstr.) **(Fre)**

ETIOLOGY

Multifocal choroiditis uveitis occurring after herpes zoster ophthalmicus. Bloom SM, et al. **Am J Ophthalmol** 1989 Dec 15;108(6):733–5
Pneumocystis carinii choroiditis after long–term aerosolized pentamidine therapy. Dugel PU, et al. **Am J Ophthalmol** 1990 Aug 15;110(2):113–7
Pneumocystis hepatitis and choroiditis despite successful aerosolized pentamidine pulmonary prophylaxis. Hagopian WA, et al. **Chest** 1989 Oct;96(4):949–51
Pneumocystitis carinii choroiditis in patients receiving inhaled pentamidine [letter] Sneed SR, et al. **N Engl J Med** 1990 Mar 29;322(13):936–7
[Pseudotumor of pigment epithelium disclosing serpiginous choroiditis] Kohl M, et al. **Bull Soc Ophtalmol Fr** 1988 Dec;88(12):1421–5 (Eng. Abstr.) **(Fre)**

PATHOLOGY

Clinicopathologic findings in a patient with serpiginous choroiditis and treated choroidal neovascularization. Wu JS, et al. **Retina** 1989;9(4):292–301

CHRIST-SIEMENS SYNDROME see **ECTODERMAL DYSPLASIA**

CHRISTIAN SCIENCE

Comparative longevity of Christian Scientists [letter; comment] **JAMA** 1990 Mar 23–30;263(12):1634 Comment on: **JAMA** 1989 Sep 22–29;262(12):1657–8.

Christian Scientists claim healing efficacy equal if not superior to that of medicine [news] Skolnick A. **JAMA** 1990 Sep 19;264(11):1379–81

Religious exemptions to child neglect laws still being passed despite convictions of parents [news] Skolnick A. **JAMA** 1990 Sep 12;264(10):1226, 1229, 1233

Religious beliefs and parental duty. Brahams D. **Lancet** 1990 Jul 14;336(8707):107–8

Summary judgment. Oppenheim EB. **West J Med** 1989 Dec; 151(6):681

CHRISTIANITY

Anthropometric parameters of schoolchildren with different life-styles. Sabaté J, et al. **Am J Dis Child** 1990 Oct; 144(10):1159–63

Determinants of high density lipoprotein cholesterol in middle-aged Seventh-Day Adventist men and their neighbors. Fraser GE, et al. **Am J Epidemiol** 1989 Nov; 130(5):958–65

The mortality profile of black Seventh-Day Adventists residing in metropolitan Atlanta: a pilot study. Murphy FG, et al. **Am J Public Health** 1990 Aug;80(8):984–5

The Jehovah's Witness patient: considerations for the anesthesiologist. Benson KT. **Anesth Analg** 1989 Nov; 69(5):647–56 (83 ref.)

Preoperative use of erythropoietin in an adolescent Jehovah's Witness. Rothstein P, et al. **Anesthesiology** 1990 Sep; 73(3):568–70

The role of the emergency physician in the management of Jehovah's Witnesses. Fontanarosa PB, et al. **Ann Emerg Med** 1989 Oct;18(10):1089–95

Inbreeding in the Utah Mormons: an evaluation of estimates based on pedigrees, isonymy, and migration matrices. Jorde LB. **Ann Hum Genet** 1989 Oct;53 (Pt 4):339–55

Erythropoietin and anemia of gastrointestinal bleeding in a Jehovah's Witness [letter] Pousada L, et al. **Ann Intern Med** 1990 Apr 1;112(7):552

Management of Jehovah's Witness patients [letter] Kyger ER 3d, et al. **Ann Thorac Surg** 1990 Jul;50(1):167

Hypervolaemic haemodilution in an anaemic Jehovah's Witness. Trouwborst A, et al. **Br J Anaesth** 1990 May; 64(5):646–8

Surgery in Jehovah's Witnesses [letter; comment] Blogg CE, et al. **Can J Anaesth** 1990 Apr;37(3):391–2 Comment on: Can J Anaesth 1989 Sep;36(5):578–85.

Surgery in Jehovah's Witnesses [see comments] Wong DH, et al. **Can J Anaesth** 1989 Sep;36(5):578–85 Comment in: Can J Anaesth 1990 Apr;37(3):391–2.

When passion displaces logic [letter; comment] Heaton PB. **Can Med Assoc J** 1990 Jan 1;142(1):12 Comment on: Can Med Assoc J 1989 Oct 1;141(7):707.

The Jehovah's Witness parent's right to refuse treatment. Healey JM. **Conn Med** 1990 Jun;54(6):357

Treating a Jehovah's Witness adult: beneficence or respect for autonomy? Healey JM. **Conn Med** 1990 May;54(5):293

Medical psychiatric rounds on a gynecologic oncology service: end-stage cervical carcinoma in a Jehovah's Witness refusing treatment [clinical conference] Gise LH, et al. **Gen Hosp Psychiatry** 1989 Sep;11(5):372–6

Use of erythropoietin in Jehovah's Witness patients. Jim RT. **Hawaii Med J** 1990 Jun;49(6):209

Genetic structure of Mennonite populations of Kansas and Nebraska. Crawford MH, et al. **Hum Biol** 1989 Aug; 61(4):493–514

Dietary status of Seventh-Day Adventist vegetarian and non-vegetarian elderly women. Nieman DC, et al. **J Am Diet Assoc** 1989 Dec;89(12):1763–9

Comparing a Christian physicians' support group with the Balint Group. McKee D, et al. **J Fam Pract** 1990 Jan; 30(1):65–8

Aliens in the promised land? Keynote address for the 1986 National Gathering of the United Church of Christ's Coalition for Lesbian/Gay Concerns. Comstock GD. **J Homosex** 1989–90;18(3–4):133–44

A critique of creationist homophobia. Edwards GR. **J Homosex** 1989–90;18(3–4):95–118 (43 ref.)

A bonding of choice: values and identity among lesbian and gay religious leaders. Fischer CB. **J Homosex** 1989–90; 18(3–4):145–74

Health practices and cancer mortality among active California Mormons. Enstrom JE. **J Natl Cancer Inst** 1989 Dec 6;81(23):1807–14

Palliative care in the light of early Christian concepts. Adams JL. **J Palliat Care** 1989 Sep;5(3):5–8

The Christian approach to whole-person medicine. Sheldon MG. **J R Coll Gen Pract** 1989 Apr;39(321):166

Induction chemotherapy in Jehovah's Witnesses with leukaemia [letter] Hargis JB, et al. **Lancet** 1990 Sep 1; 336(8714):563–4

Euthanasia [letter; comment] Limentani AE. **Lancet** 1990 Feb 17;335(8686):414 Comment on: Lancet 1989 Dec 2;2(8675):1321–3.

Should Jehovah's Witnesses be denied intensive chemotherapy for acute leukemia? [letter] Goldberg SL, et al. **N Engl J Med** 1990 Mar 15;322(11):777–8

Passover matzoh and chocolate Easter eggs. Imperato PJ. **N Y State J Med** 1990 Apr;90(4):196–200

The protestant work ethic and type A behaviour: a pilot study. Furnham A. **Psychol Rep** 1990 Feb;66(1):323–8

'Delusion of world destruction' (Wetzel). Comparative study between Japan and West Germany. Tateyama M. **Psychopathology** 1989;22(6):289–94

A practising faith—Christianity [see comments] Hodgson K. **Radiogr Today** 1989 Jul;55(626):58–9 Comment in: Radiogr Today 1989 Aug;55(627):32.

Christianity [letter; comment] Hughes J. **Radiogr Today** 1989 Aug;55(627):32 Comment on: Radiogr Today 1989 Jul;55(626):58–9.

The constant star [editorial] Thomison JB. **South Med J** 1989 Dec;82(12):1461–3

Christianity and the significance of the human body. Scorsone S. **Transplant Proc** 1990 Jun;22(3):943–4

HISTORY

Categorization in concentration camps as a collective fate: a comparison of homosexuals, Jehovah's Witnesses and political prisoners. Lautmann R. **J Homosex** 1990; 19(1):67–88

Discourses of desire: sexuality and Christian women's visionary narratives. Matter EA. **J Homosex** 1989–90; 18(3–4):119–31

St George of England: a study of sainthood and legend. Addington C, et al. **J R Soc Med** 1989 Jul;82(7):434–5

[Martin Luther's seizure disorder] Feldmann H. **Sudhoffs Arch** 1989;73(1):26–44 (Eng. Abstr.) **(Ger)**

[The Hospital of the Knights of St. John of Jerusalem and its later history] Dolev E. **Harefuah** 1989 Dec 15; 117(12):460–1 **(Heb)**

PSYCHOLOGY

Alcohol, drug, and mental health problems among Jewish and Christian men at a university. Monteiro MG, et al. **Am J Drug Alcohol Abuse** 1989;15(4):403–12

The age of saints and the saintliness of age. Kastenbaum R. **Int J Aging Hum Dev** 1990;30(2):95–118

Religious influence on menstrual attitudes and symptoms. Rothbaum BO, et al. **Women Health** 1990;16(1):63–78

CHRISTMAS DISEASE

BLOOD

Evaluation of APTT reagent sensitivity to factor IX and factor IX assay performance. Results from the College of American Pathologists Survey Program. Brandt JT, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):135–41

Biochemical characterisation of the haemophilias on the Witwatersrand. van Wijk MG, et al. **S Afr Med J** 1989 Oct 7;76(7):318–20

Time dependent factor IX inhibitor [letter] Sarode R, et al. **Thromb Haemost** 1989 Dec 29;62(4):1151

COMPLICATIONS

Age and human immunodeficiency virus infection in persons with hemophilia in California. Holman RC, et al. **Am J Public Health** 1990 Aug;80(8):967–9

HBV & HIV seropositivity in multi-transfused haemophilics & thalassaemics in eastern India. De M, et al. **Indian J Med Res** 1990 Jan;91:63–6

Arthroscopy of the knee in hemophilia. Wiedel JD. **Prog Clin Biol Res** 1990;324:231–9

[Intraspinal, extradural hemorrhage in a 7-year-old boy with hemophilia B] Jost W, et al. **Monatsschr Kinderheilkd** 1990 Jan;138(1):36–7 (Eng. Abstr.) **(Ger)**

[Thrombocytopenia in a patient with hemophilia and HIV infection treated with intravenous immunoglobulin and splenectomy] Rozmysłowicz T, et al. **Przegl Dermatol** 1989 Jul–Aug;76(4):302–7 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

Diagnostic symptoms of severe and moderate haemophilia A and B. A survey of 140 cases. Ljung R, et al. **Acta Paediatr Scand** 1990 Feb;79(2):196–200

Carrier detection for hemophilia B: evaluation of multiple polymorphic sites. Mariani G, et al. **Am J Hematol** 1990 Jan;33(1):1–7

Factor IX molecular defects in diagnosing hemophilia B: a review. Tanimoto M. **Nippon Ketsueki Gakkai Zasshi** 1989 Jul;52(4):811–5 (28 ref.)

The use of DNA amplification for genetic counselling related diagnosis in haemophilia B. Tsang TC, et al. **Thromb Haemost** 1989 Jun 30;61(3):343–7

DRUG THERAPY

Disseminated intravascular coagulation and myocardial infarction in a haemophilia B patient during therapy with prothrombin complex concentrates. Chistolini A, et al. **Acta Haematol (Basel)** 1990;83(3):163–5

Induction of immune tolerance in hemophiliacs with inhibitors by combined treatment with i.v. IgG, cyclophosphamide and factor VIII or IX. Nilsson IM, et al. **Prog Clin Biol Res** 1990;324:69–78

Factor IX concentrate versus prothrombin complex concentrate for the treatment of hemophilia B during surgery. Bardin JM, et al. **Transfusion** 1990 Jun;30(5):441–3

EPIDEMIOLOGY

Genetic-epidemiologic study of haemophilia A and B in Hungary. István L, et al. **Hum Hered** 1990;40(1):29–33

Comprehensive clinical and statistical analysis of hemophilia in Korea. Kim KY, et al. **J Korean Med Sci** 1988 Sep; 3(3):107–15

GENETICS

How do carriers of hemophilia experience prenatal diagnosis (PND)? Carriers' Immediate and later reactions to amniocentesis and fetal blood sampling. Tedgård, et al. **Acta Paediatr Scand** 1989 Sep;78(5):692–700

Mutations causing hemophilia B: direct estimate of the underlying rates of spontaneous germ-line transitions, transversions, and deletions in a human gene. Koeberl DD, et al. **Am J Hum Genet** 1990 Aug;47(2):202–17

Frequency of congenital heart defects in patients with hemophilia. Jedele KB, et al. **Am J Med Genet** 1990 Jul; 36(3):333–5

Comparison of direct and indirect methods of carrier detection in an X-linked disease. Koeberl DD, et al. **Am J Med Genet** 1990 Apr;35(4):600–8

Factor IX New London: substitution of proline for glutamine at position 50 causes severe hemophilia B. Lozier JN, et al. **Blood** 1990 Mar 1;75(5):1097–104

A past mutation at isoleucine 397 is now a common cause of moderate/mild haemophilia B. Bottema CD, et al. **Br J Haematol** 1990 Jun;75(2):212–6

A mutation adjacent to the beta cleavage site of factor IX (valine 182 to leucine) results in mild haemophilia Bm. Taylor SA, et al. **Br J Haematol** 1990 Jun;75(2):217–21

Molecular basis of hemophilia. Lozier JN, et al. **Hematol Pathol** 1990;4(1):1–26 (170 ref.)

Recurrent nonsense mutations at arginine residues cause severe hemophilia B in unrelated hemophiliacs. Koeberl DD, et al. **Hum Genet** 1990 Apr;84(5):387–90

Two factor IX mutations in the family of an isolated haemophilia B patient: direct carrier diagnosis by amplification mismatch detection (AMD). Montandon AJ, et al. **Hum Genet** 1990 Jul;85(2):200–4

"Founder" effect in different families with haemophilia B mutation [letter] Thompson AR, et al. **Lancet** 1990 Feb 17;335(8686):418

Disruption of a C/EBP binding site in the factor IX promoter is associated with haemophilia B. Crossley M, et al. **Nature** 1990 May 31;345(6274):444–6

Extragenic factor IX gene RFLP is useful for detecting carriers of Japanese hemophilia B. Tanimoto M, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Jul;52(4):774–7

A less severe form of Haemophilia B Leyden. Crossley M, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4633

Haemophilia B: database of point mutations and short additions and deletions. Giannelli F, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4053–9

Haemophilia B caused by mutation of a potential thrombin cleavage site in factor IX. Winship PR. **Nucleic Acids Res** 1990 Mar 11;18(5):1310

Factor IX Chongqing: a new mutation in the calcium-binding domain of factor IX resulting in severe hemophilia B. Wang NS, et al. **Thromb Haemost** 1990 Feb 19;63(1):24–6

[Hereditary disorders of blood coagulation with hemorrhagic diathesis] Schramm W. **Internist (Berl)** 1989 Sep; 30(9):567–76 (26 ref.) **(Ger)**

[DNA diagnostics in hemophilia A and B] Alkan M, et al. **Schweiz Med Wochenschr** 1989 Sep 23;119(38):1296–302 (Eng. Abstr.) **(Ger)**

[Molecular genetics of hemophilia B and vitamin K-dependent proteins] Kurachi K. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):970–5 **(Jpn)**

METABOLISM

Importance of factor-IX-dependent prothrombinase formation—the Josso pathway—in clotting plasma. Xi M, et al. **Haemostasis** 1989;19(6):301–8

PHYSIOPATHOLOGY

[Evaluation of the liver condition in patients with congenital deficiency of plasma coagulation factors] Kowalewska B, et al. **Pol Arch Med Wewn** 1988 Jun;79(6):296–306 (Eng. Abstr.) **(Pol)**

SURGERY

Wound infection rates after invasive procedures in HIV-1 seropositive versus HIV-1 seronegative hemophiliacs. Buehrer JL, et al. **Ann Surg** 1990 Apr;211(4):492–8

THERAPY

Orthotopic liver transplantation in a patient with combined hemophilia A and B. Delorme MA, et al. **Am J Hematol** 1990 Feb;33(2):136–8

Natural history of HIV-infection in hemophiliacs: clinical, immunological, and virological findings. Kamradt T, et al.

Klin Wochenschr 1989 Oct 17;67(20):1033–41

[Prevention of transfusion-associated virus infections in hemophilic patients needing replacement therapy] Meili EO. **Beitr Infusionther** 1989;24:46–55 (Eng. Abstr.) **(Ger)**

[Coagulation factor IX inhibitor in hemophilia B] Lutze G, et al. **Z Med Lab Diagn** 1990;31(2):113–9 (Eng. Abstr.) **(Ger)**

VETERINARY

Phenotypic correction of factor IX deficiency in skin fibroblasts of hemophilic dogs. Axelrod JH, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5173–7

CHRISTMAS FACTOR see **FACTOR IX**

CHROMAFFIN GRANULES see under **CHROMAFFIN SYSTEM**

CHROMAFFIN SYSTEM

Emergency resection of phaeochromocytoma presenting with hyperamylasaemia and pulmonary oedema after abdominal trauma. Greaves DJ, et al. **Anaesthesia** 1989 Oct; 44(10):841–2

Ultrastructural characterization of enterochromaffin-type cells in human gastric carcinoma. Ohtani H. **Tohoku J Exp Med** 1990 Apr;160(4):333–42

ANALYSIS

Chromogranin A: osmotically active fragments and their susceptibility to proteolysis during lysis of the bovine chromaffin granules. Helle KB, et al. **Acta Physiol Scand** 1990 Apr;138(4):565–74

Interleukin-1 in the noradrenergic chromaffin cells in the rat adrenal medulla. Bartfai T, et al. **Ann N Y Acad Sci** 1990;594:207–13

Chromaffin granule and PC12 cell chondroitin sulfate proteoglycans and their relation to chromogranin A. Gowda DC, et al. **Arch Biochem Biophys** 1990 Sep; 281(2):219–24

Identification and characterization of glycoproteins after extraction of bovine chromaffin-granule membranes with lithium di-iodosalicylate. Purification of glycoprotein II from the soluble fraction. Christie DL, et al. **Biochem J** 1990 Aug 15;270(1):57–61

Chromaffin cell scinderin, a novel calcium-dependent actin filament-severing protein. Rodriguez Del Castillo A, et al. **EMBO J** 1990 Jan;9(1):43–52

A 15 kDa proteolipid found in mediatophore preparations from Torpedo electric organ presents high sequence homology with the bovine chromaffin granule protonophore. Birman S, et al. **FEBS Lett** 1990 Feb 26; 261(2):303–6

Chromogranin A (CgA) in the gastro-entero-pancreatic (GEP) endocrine system. II. CgA in mammalian entero-endocrine cells. Cetin Y, et al. **Histochemistry** 1989; 92(4):265–75

Secretin-cells of the mammalian intestine contain serotonin. Cetin Y. **Histochemistry** 1990;93(6):601–6

Calbindin immunoreactivity is a characteristic of enterochromaffin-like cells (ECL cells) of the human stomach. Furness JB, et al. **Histochemistry** 1989; 92(5):449–51

Localisation of chromogranin A and B, met-enkephalin-arg6-gly7-leu8 and PGP9.5-like immunoreactivity in the developing and adult rat adrenal medulla and extra-adrenal chromaffin tissue. Kent C, et al. **J Anat** 1989 Oct;166:213–25

[Immunocytochemical study of enterochromaffin cells in carcinoma of the large intestine] Chen PH. **Chung-hua Ping Li Hsueh Tsa Chih** 1990 Jun;19(2):86–9 (Eng. Abstr.) **(Chi)**

CYTOLOGY

Morphometrical and cell kinetic studies of normal human colorectal mucosa. Comparison between the proximal and the distal large intestine. Arai T, et al. **Acta Pathol Jpn** 1989 Nov;39(11):725–30

Histogenesis of the human adrenal medulla. An evaluation of the ontogeny of chromaffin and nonchromaffin lineages. Cooper MJ, et al. **Am J Pathol** 1990 Sep;137(3):605–15

The natural history of the chromaffin cell—twenty-five years on the beginning. Coupland RE. **Arch Histol Cytol** 1989; 52 Suppl:331–41 (116 ref.)

Pharmacological stimulation of chromaffin cell proliferation in the adult adrenal medulla. Tischler AS, et al. **Arch Histol Cytol** 1989;52 Suppl:209–16 (56 ref.)

Self-replication of enterochromaffin-like cells in the mouse stomach. Tielemans Y, et al. **Digestion** 1990;45(3):138–46

Human paraganglion cells differentiate into adrenergic neurons in culture. Koistinaho J, et al. **Exp Neurol** 1990 Mar;107(3):277–80

Gastrin stimulates the self-replication rate of enterochromaffinlike cells in the rat stomach. Effects of omeprazole, ranitidine, and gastrin-17 in intact and antrectomized rats. Ryberg B, et al. **Gastroenterology** 1990 Oct;99(4):935–42

Serum gastrin concentration affects the self replication rate of the enterochromaffin like cells in the rat stomach. Tielemans Y, et al. **Gut** 1990 Mar;31(3):274–8

Mitotic stimulation of adrenal medullary chromaffin cells by oxytocin. Plećaš B, et al. **Horm Metab Res** 1990 Jul; 22(7):402–3

Monolayer co-culture of rat heart cells and bovine adrenal chromaffin paraneurons. Trifaró JM, et al. **In Vitro Cell Dev Biol** 1990 Apr;26(4):335–47

Retrieving vesicles in secretion-induced rat chromaffin cells contain fodrin. Fujimoto T, et al. **J Histochem Cytochem** 1989 Nov;37(11):1589–99

Identification of a functional glucocorticoid response element in the phenylethanolamine N-methyltransferase promoter using fusion genes introduced into chromaffin cells in primary culture. Ross ME, et al. **J Neurosci** 1990 Feb; 10(2):520–30

Effects of pinealectomy on the mitotic activity of adrenomedullary chromaffin cells in relation to time of day. Kachi T, et al. **J Pineal Res** 1990;8(1):21–34

Chromatin structure as a molecular marker of cell lineage and developmental potential in neural crest-derived chromaffin cells. Vandenbergh DJ, et al. **Neuron** 1989 Oct; 3(4):507–18

[Intracerebral graft of a line of chromaffin cells. Immunologic aspects and role of nerve growth factor in survival and differentiation of the graft] Menei P, et al. **Neurochirurgie** 1989;35(3):158–63 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Glucocorticoids inhibit acetylcholine-induced current in chromaffin cells. Inoue M, et al. **Am J Physiol** 1989 Nov; 257(5 Pt 1):C906–12

Effect of hypoglycemic sulfonylurea, glibenclamide, on the rate of catecholamine synthesis in cultured adrenal chromaffin cells. Morita K, et al. **Biochem Pharmacol** 1990 Mar 1;39(5):976–8

Effect of 20 weeks' ranitidine treatment on plasma gastrin levels and gastric enterochromaffin-like cell density in the rat. Wallmark B, et al. **Digestion** 1990;45(4):181–8

Mechanisms of toxicity and cellular resistance to 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine and 1-methyl-4-phenylpyridinium in adrenomedullary chromaffin cell cultures. Reinhard JF Jr, et al. **J Neurochem** 1990 Jul;55(1):311–20

Role of phosphoinositide turnover and cyclic AMP accumulation in prostaglandin-stimulated noradrenaline release from cultured adrenal chromaffin cells. Plevin R, et al. **J Pharmacol Exp Ther** 1990 Mar;252(3):1296–303

The enterochromaffin cells in the mouse gastrointestinal tract after streptozotocin treatment. Portela-Gomes GM, et al. **Pathol Res Pract** 1990 Apr;186(2):260–4

EMBRYOLOGY

The sympathoadrenal lineage in avian embryos. I. Adrenal chromaffin cells lose neuronal traits during embryogenesis. Vogel KS, et al. **Dev Biol** 1990 May;139(1):1–12

Early fetal acquisition of the chromaffin and neuronal immunophenotype by human adrenal medullary cells. An immunohistological study using monoclonal antibodies to chromogranin A, synaptophysin, tyrosine hydroxylase, and neuronal cytoskeletal proteins. Molenaar WM, et al. **Exp Neurol** 1990 Apr;108(1):1–9

ENZYMOLOGY

Presence of ectonucleotidases in cultured chromaffin cells: hydrolysis of extracellular adenine nucleotides. Torres M, et al. **Arch Biochem Biophys** 1990 May 15;279(1):37–44

Kinetic studies of chromaffin granule H+-ATPase and effects of bafilomycin A1. Hanada H, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):873–8

Cleavage of recombinant enkephalin precursor by endoproteolytic activity in bovine chromaffin granules. Hook VY, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):722–30

Topography of a vacuolar-type H+-translocating ATPase: chromaffin-granule membrane ATPase I. Apps DK, et al. **Biochem J** 1989 Oct 1;263(1):81–8

Chromogranin A-processing proteinases in purified chromaffin granules: contaminants or endogenous enzymes? Laslop A, et al. **Biochim Biophys Acta** 1990 Jan 29;1033(1):65–72

Cleavage of proenkephalin by a chromaffin granule processing enzyme. Lindberg I, et al. **Endocrinology** 1990 Jan;126(1):480–7

Subcellular distribution of acetylcholinesterase forms in chromaffin cells. Do chromaffin granules contain a specific secretory acetylcholinesterase? Bon S, et al. **Eur J Biochem** 1990 May 31;190(1):221–32

[Recent progress of the studies on the ATPases from chromaffin granule membranes] Moriyama Y. **Tanpakushitsu Kakusan Koso** 1989 Dec;34(15):1968–77 (49 ref.) **(Jpn)**

[Peptidylglycine alpha-amidating monooxygenase from bovine heart atrium secretory granules and adrenal chromaffin granules] Markosian KA, et al. **Biokhimiia** 1989 Dec;54(12):2046–53 (Eng. Abstr.) **(Rus)**

[Relation between the membrane and soluble forms of dopamine beta-monooxygenase] Markosian KA, et al. **Biokhimiia** 1990 Jan;55(1):147–54 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Asynchronous appearance and topographic segregation of neuropeptide-containing cells in the developing rat adrenal medulla. Henion PD, et al. **J Neurosci** 1990 Sep; 10(9):2886–96

IMMUNOLOGY

Adrenal chromaffin granules and secretory granules from thyroid parafollicular cells have several common antigens. Weiler R, et al. **FEBS Lett** 1989 Nov 6;257(2):457–9

[Cellular and humoral immunity in duodenal peptic ulcer with gastrin cell hyperplasia] Zverkov IV, et al. **Ter Arkh** 1990;62(4):101–3 (Eng. Abstr.) **(Rus)**

METABOLISM

Dopamine modulation of pathological human chromaffin tissue. Mannelli M, et al. **Am J Hypertens** 1990 Jun;3(6 Pt 2):22S–24S

Synthesis of chromogranin A, dopamine beta-hydroxylase, and chromaffin vesicles. Corcoran JJ, et al. **Am J Physiol** 1990 Jul;259(1 Pt 1):C161–8

Benzodiazepines facilitate the stimulatory action of gamma-aminobutyric acid (GABA) on basal and veratridine-evoked catecholamine release from cultured bovine adrenal chromaffin cells. Kitayama S, et al. **Arch Int Pharmacodyn Ther** 1989 Jul-Aug;300:254–64

Chromobindin A, a Ca2+- and ATP-dependent chromaffin granule-binding protein, is found in a variety of tissues and in yeast. Martin WH, et al. **Biochem Biophys Res Commun** 1989 Nov 30;165(1):37–42

Carrier-independent entry of 1-methyl-4-phenylpyridinium (MPP+) into adrenal chromaffin cells as a consequence of charge delocalization. Reinhard JF Jr, et al. **Biochem Biophys Res Commun** 1990 May 16;168(3):1143–8

Effect of tuamine, heptaminol and two analogues on uptake and release of catecholamines in cultured chromaffin cells. Delicado EG, et al. **Biochem Pharmacol** 1990 Aug 15; 40(4):821–5

The effect of prenylamine and organic nitrates on the bioenergetics of bovine catecholamine storage vesicles. Grønberg M, et al. **Biochem Pharmacol** 1990 Jul 15; 40(2):351–5

Energetics of reserpine binding and occlusion by the chromaffin granule biogenic amine transporter. Rudnick G, et al. **Biochemistry** 1990 Jan 23;29(3):603–8

GABAA receptor-mediated increase of cytosolic Ca2+ in isolated bovine adrenal chromaffin cells. Kitayama S, et al. **Biochim Biophys Acta** 1990 Jul 12;1053(2-3):189–94

Proteolytic processing of chromogranin A in cultured chromaffin cells. Simon JP, et al. **Biochim Biophys Acta** 1990 Feb 19;1051(2):123–30

Effect of diadenosine polyphosphates on catecholamine secretion from isolated chromaffin cells. Castro E, et al. **Br J Pharmacol** 1990 Jun;100(2):360–4

Effect of quinine on the release of catecholamines from bovine cultured chromaffin cells. Tang R, et al. **Br J Pharmacol** 1990 Mar;99(3):548–52

High-affinity strychnine binding to adrenal medulla chromaffin cell membranes. Yadid G, et al. **Eur J Pharmacol** 1990 Jan 17;175(3):365–6

Rapid increase in inositol pentakisphosphate accumulation by nicotine in cultured adrenal chromaffin cells. Sasakawa N, et al. **FEBS Lett** 1990 Feb 26;261(2):378–80

Histamine containing endocrine cells in the human stomach. Lönroth H, et al. **Gut** 1990 Apr;31(4):383–8

Immunocytochemical mapping of basic fibroblast growth factor in the developing and adult rat adrenal gland. Grothe C, et al. **Histochemistry** 1990;94(2):141–7

Cytochrome b561 is fatty acylated and oriented in the chromaffin granule membrane with its carboxyl terminus cytoplasmically exposed. Kent UM, et al. **J Biol Chem** 1990 Sep 25;265(27):16422–7

The primary structure of glycoprotein III from bovine adrenal medullary chromaffin granules. Sequence similarity with human serum protein-40,40 and rat Sertoli cell glycoprotein. Palmer DJ, et al. **J Biol Chem** 1990 Apr 25; 265(12):6617–23

Dissociation of Ca2+ entry and Ca2+ mobilization responses to angiotensin II in bovine adrenal chromaffin cells. Stauderman KA, et al. **J Biol Chem** 1989 Nov 5; 264(31):18349–55

Identification and purification of a functional amine transporter from bovine chromaffin granules. Stern-Bach Y, et al. **J Biol Chem** 1990 Mar 5;265(7):3961–6

Inositol 1,4,5-trisphosphate-triggered Ca2+ release from bovine adrenal medullary secretory vesicles. Yoo SH, et al. **J Biol Chem** 1990 Aug 15;265(23):13446–8

(+)-PN200-110 and ouabain binding sites in purified bovine adrenomedullary plasma membranes and chromaffin cells. Castillo CJ, et al. **J Neurochem** 1989 Nov;53(5):1442–9

Effect of 5'-(N-ethylcarboxamido)adenosine on adenosine transport in cultured chromaffin cells. Delicado EG, et al. **J Neurochem** 1990 Jun;54(6):1941–6

Mechanism of calcium transport across the plasma membrane of bovine chromaffin cells. Kao LS, et al. **J Neurochem** 1990 Jun;54(6):1972–9

Arachidonic acid liberated by diacylglycerol lipase is essential for the release mechanism in chromaffin cells from bovine adrenal medulla. Rindlisbacher B, et al. **J Neurochem** 1990 Apr;54(4):1247–52

Different patterns of agonist-stimulated increases of 3H-inositol phosphate isomers and cytosolic Ca2+ in bovine adrenal chromaffin cells: comparison of the effects

of histamine and angiotensin II. Stauderman KA, et al. **J Neurochem** 1990 Mar;54(3):946–53

Basic fibroblast growth factor (bFGF) immunoreactivity is present in chromaffin granules. Westermann R, et al. **J Neurochem** 1990 Jul;55(1):285–92

NGF-like trophic support from peripheral nerve for grafted rhesus adrenal chromaffin cells. Kordower JH, et al. **J Neurosurg** 1990 Sep;73(3):418–28

D2 dopamine receptors modulate calcium channel currents and catecholamine secretion in bovine adrenal chromaffin cells. Bigornia L, et al. **J Pharmacol Exp Ther** 1990 Feb; 252(2):586–92

Regulation of serotonin release from enterochromaffin cells of rat cecum mucosa. Simon C, et al. **J Pharmacol Exp Ther** 1990 May;253(2):825–32

Enhancement by GABA of the stimulation-evoked catecholamine release from cultured bovine adrenal chromaffin cells. Kitayama S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 May; 341(5):414–8

GABAergic modulation of catecholamine release from cultured bovine adrenal chromaffin cells. Evidence for the involvement of Cl(-)-dependent Ca2+ entry. Kitayama S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1990 May; 341(5):419–24

Second messengers involved in genetic regulation of the number of calcium channels in bovine adrenal chromaffin cells in culture. Brennan CH, et al. **Neuropharmacology** 1990 Jul;29(7):689–93

gamma-Aminobutyric acid elevates cytosolic Ca in bovine chromaffin cells. Doroshenko PA. **Neurosci Lett** 1989 Sep 25;104(1–2):83–7

Effect of noncompetitive nicotinic receptor blockers on catecholamine release from cultured adrenal chromaffin cells. McKay DB, et al. **Pharmacology** 1990;40(4):224–30

Proenkephalin gene expression in cultured chromaffin cells is regulated at the transcriptional level. Farin CJ, et al. **Prog Clin Biol Res** 1990;328:239–42

Insulin hypoglycemia increases the levels of neuropeptide Y and calcitonin gene-related peptide, but not of chromogranins A and B, in rat chromaffin granules. Laslop A, et al. **Regul Pept** 1989 Dec;26(3):191–202

Release of tryptophan and serotonin into the portal vein of the isolated perfused rat small intestine. Richter G, et al. **Res Exp Med (Berl)** 1989;189(4):281–7

Neural control of serotonin release from duodenal enterochromaffin cells of the cat. Ahlman H, et al. **Surg Forum** 1978;29:404–7

[Location of immunoreactive leucine enkephalin in the digestive gland of the Mollusca Mizuhopecten yessoensis (Jay)] Varaksin AA, et al. **Arkh Anat Gistol Embriol** 1990 Jan;98(1):71–4 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Enhanced hyperplasia of gastric enterochromaffinlike cells in response to omeprazole-evoked hypergastrinemia in rats with portacaval shunts. An immunocytochemical and chemical study. Axelson J, et al. **Gastroenterology** 1990 Sep; 99(3):635–40

Gastrin cell distribution in normal human stomachs and in patients with Zollinger-Ellison syndrome. Voillemot N, et al. **Gastroenterology** 1978 Jul;75(1):61–5

Gastric enterochromaffin-like (ECL) cells in hypergastrinaemic duodenal ulcer disease. Coupe M, et al. **Gut** 1990 Feb;31(2):144–7

G-cells and gastrinaemia in chronic nonspecific bulbitis. Domenichini E, et al. **Scand J Gastroenterol Suppl** 1989; 167:21–2

The distribution of duodenal G cells in duodenal ulcer patients. Giacosa A, et al. **Scand J Gastroenterol Suppl** 1989; 167:58–9

The effect of stress induced experimental gastric ulcers on enterochromaffin cells and on serotonin and 5-hydroxyindolacetic acid levels in stomach and duodenum of the white rat. Orlicz-Szczęsna G, et al. **Z Mikrosk Anat Forsch** 1989;103(3):504–14

PHYSIOLOGY

Effects of combined hypophysectomy and cyproterone acetate on the adrenal chromaffin cells of the rat. Evidence for postnatal migration of adrenal chromaffin cells. Bustami F. **Acta Morphol Neerl Scand** 1988–89;26(4):207–23

Effects of partial resection of acid-secreting mucosa on plasma gastrin and enterochromaffin-like cells in the rat stomach. Ryberg B, et al. **Digestion** 1990;45(2):102–8

Secretory and radioligand binding studies on muscarinic receptors in bovine and feline chromaffin cells. Ballesta JJ, et al. **J Physiol (Lond)** 1989 Nov;418:411–26

An electrophysiological investigation of the characteristics and function of GABAA receptors on bovine adrenomedullary chromaffin cells. Peters JA, et al. **Pflugers Arch** 1989 Oct;415(1):95–103

Fusion of neurotransmitter vesicles with target membrane is calcium independent in a cell-free system. Karli UO, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5912–5

SECRETION

Regulation of secretion in cultured bovine chromaffin cells. Morad M, et al. **Acta Physiol Scand Suppl** 1989;582:40

Role of calcium in secretion and synthesis in bovine adrenal chromaffin cells. Bader MF, et al. **Adv Exp Med Biol** 1990; 269:93–7 (24 ref.)

Stimulation of Ca2(+)-independent catecholamine secretion from digitonin-permeabilized bovine adrenal chromaffin cells by guanine nucleotide analogues. Relationship to arachidonate release. Morgan A, et al. **Biochem J** 1990 Jul 15;269(2):521–6

Kinetic characteristics of calcium-dependent, cholinergic receptor controlled ATP secretion from adrenal medullary chromaffin cells. Ceña V, et al. **Biochim Biophys Acta** 1990 Apr 13;1023(2):213–22

Gastrin secretion from human antral G cells in culture. Campos RV, et al. **Gastroenterology** 1990 Jul;99(1):36–44

Regulation of chromaffin cell secretion and protein kinase C activity by chronic phorbol ester treatment. Wilson SP. **J Biol Chem** 1990 Jan 15;265(2):648–51

Studies on the effect of insulin-like growth factor-I on catecholamine secretion from chromaffin cells. Dahmer MK, et al. **J Neurochem** 1990 Mar;54(3):931–6

Cyclic GMP regulates nicotine-induced secretion from cultured bovine adrenal chromaffin cells: effects of 8-bromo-cyclic GMP, atrial natriuretic peptide, and nitroprusside (nitric oxide). O'Sullivan AJ, et al. **J Neurochem** 1990 May;54(5):1805–8

Multiple effects of honokiol on catecholamine secretion from adrenal chromaffin cells. Liu PS, et al. **Proc Natl Sci Counc Repub China [B]** 1989 Oct;13(4):307–13

ULTRASTRUCTURE

Identification of vasotocin-like immunoreactivity in chromaffin cells of the frog adrenal gland: effect of vasotocin on corticosteroid secretion. Larcher A, et al. **Endocrinology** 1989 Nov;125(5):2691–700

Fine structural classification and comparative distribution of endocrine cells in normal human large intestine. Cristina ML, et al. **Gastroenterology** 1978 Jul;75(1):20–8

Substrate dependency of neurite outgrowth from adult human chromaffin cells. Inhibitory effects of human brain tissue. Flaris N, et al. **Lab Invest** 1990 Apr;62(4):493–7

Association of the GTP-binding protein Rab3A with bovine adrenal chromaffin granules. Darchen F, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5692–6

Effect of scorpion toxin on the enterochromaffin-like cells in normal and Trypanosoma cruzi-infected rats: a morphological study. Toppa NH, et al. **Rev Inst Med Trop Sao Paulo** 1989 Jan–Feb;31(1):7–13

Ultrastructural characterization of enterochromaffin-type cells in human gastric carcinoma. Ohtani H. **Tohoku J Exp Med** 1990 Apr;160(4):333–42

[Enterochromaffin and enterochromaffin-like cells of the stomach during aging in rats] Khomeriki SG. **Arkh Anat Gistol Embriol** 1989 Nov;97(11):64–9 (Eng. Abstr.) **(Rus)**

CHROMANS see under **BENZOPYRANS**

CHROMATES

Patch test reactions to hexavalent and trivalent chromium compounds. Samitz MH, et al. **Arch Dermatol** 1966 Sep; 94(3):304–6

Environmental contamination of chromium in agricultural and animal products near a chromate industry. Khasim DI, et al. **Bull Environ Contam Toxicol** 1989 Nov;43(5):742–6

Nucleotide sequence and expression of a plasmid-encoded chromate resistance determinant from Alcaligenes eutrophus. Nies A, et al. **J Biol Chem** 1990 Apr 5; 265(10):5648–53

ADMINISTRATION & DOSAGE

Trial of 0.5% versus 0.375% potassium dichromate. European Environmental and Contact Dermatitis Research Group (EECDRG). Burrows D, et al. **Contact Dermatitis** 1989 Nov;21(5):351

ADVERSE EFFECTS

Urinary excretion of chromium in chromeplaters after discontinued exposure. Lindberg E, et al. **Am J Ind Med** 1989;16(5):485–92 (8 ref.)

Long-term prognosis in occupational chromate allergy: an attempted 18-year follow-up study. Dannaker CJ, et al. **Contact Dermatitis** 1989 Jul;21(1):59

Hypersensitivity to dichromate among asymptomatic workers in a chromate pigment factory. Decaestecker AM, et al. **Contact Dermatitis** 1990 Jul;23(1):52–3

Allergy to chromate, cobalt and nickel in Łódź 1977–1988. Kieć-Swierczynska M. **Contact Dermatitis** 1990 Apr; 22(4):229–31

Chromate in colour television tube manufacture. Sinclair S, et al. **Contact Dermatitis** 1989 Nov;21(5):353

Nasal septum perforation in chromate-producing industry in Spain [letter] Sanz P, et al. **J Occup Med** 1989 Dec; 31(12):1013–4

The micronucleus assay in human exfoliated cells of the nose and mouth: application to occupational exposures to chromic acid and ethylene oxide. Sarto F, et al. **Mutat Res** 1990 Aug;244(4):345–51

ANALYSIS

Lanthanide luminescence quenching as a detection method in ion chromatography. Chromate in surface and drinking water. Schreurs M, et al. **J Chromatogr** 1989 Dec 1; 482(2):351–9

BLOOD

In vitro interaction of mutagenic chromium (VI) with red blood cells. Branca M, et al. **FEBS Lett** 1989 Oct 23; 257(1):52–4

DIAGNOSTIC USE

[Possibility of using potassium dichromate for detecting phospholipid-containing ultrastructures of nerve tissue] Ulybina IN, et al. **Arkh Anat Gistol Embriol** 1989 Oct; 97(10):91–2 **(Rus)**

IMMUNOLOGY

Chromate sensitization and elicitation from cement with iron sulfate. Bruze M, et al. **Acta Derm Venereol (Stockh)** 1990; 70(2):160–2

METABOLISM

Chromium reduction in Pseudomonas putida. Ishibashi Y, et al. **Appl Environ Microbiol** 1990 Jul;56(7):2268–70

Chromate reduction in Streptomyces. Das S, et al. **Experientia** 1990 Jul 15;46(7):731–3

Induction of lipid peroxidation in mice by hexavalent chromium and its relation to the toxicity. Susa N, et al. **Nippon Juigaku Zasshi** 1989 Dec;51(6):1103–10

PHARMACOLOGY

Influence of vitamin B2 on formation of chromium(V), alkali-labile sites, and lethality of sodium chromate(VI) in Chinese hamster V-79 cells. Sugiyama M, et al. **Cancer Res** 1989 Nov 15;49(22):6180–4

Chromate-resistance in a chromate-reducing strain of Enterobacter cloacae. Ohtake H, et al. **FEMS Microbiol Lett** 1990 Jan 15;55(1–2):85–8

Cloning, nucleotide sequence, and expression of the chromate resistance determinant of Pseudomonas aeruginosa plasmid pUM505. Cervantes C, et al. **J Bacteriol** 1990 Jan; 172(1):287–91

Analysis of proteins cross-linked to DNA after treatment of cells with formaldehyde, chromate, and cis-diamminedichloroplatinum(II). Miller CA 3d, et al. **Mol Toxicol** 1989 Winter;2(1):11–26

Immunodetection of DNA-protein crosslinks by slot blotting. Miller CA 3d, et al. **Mutat Res** 1990 Apr;234(2):97–106

The effect of combined treatment with potassium dichromate and maleic acid on renal function in the rat. Christenson WR, et al. **Toxicol Lett** 1989 Oct;49(1):21–7

POISONING

Acute dichromate poisoning after use of traditional purgatives. A report of 7 cases. Wood R, et al. **S Afr Med J** 1990 Jun 16;77(12):640–2 (19 ref.)

[Study of Ag-NOR, SCE and micronucleus in peripheral blood lymphocyte of chromate producers] Hu HZ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Jun;20(2):178–80 (Eng. Abstr.) **(Chi)**

TOXICITY

One hundred years of chromium and cancer: a review of epidemiological evidence and selected case reports. Langård S. **Am J Ind Med** 1990;17(2):189–215 (77 ref.)

A comparison of the effects of chromate, molybdate and cadmium oxide on respiration in the yeast Saccharomyces cerevisiae. Henderson G. **Biol Met** 1989;2(2):83–8

Cytotoxic and neoplastic transforming effects of industrial hexavalent chromium pigments in Syrian hamster embryo cells. Elias Z, et al. **Carcinogenesis** 1989 Nov;10(11):2043–52

Teratogenicity of combinations of sodium dichromate, sodium arsenate and copper sulphate in the rat. Mason RW, et al. **Comp Biochem Physiol [C]** 1989;93(2):407–11

Influence of metyrapone and phenobarbital on sodium dichromate nephrotoxicity in developing rats. Appenroth D, et al. **J Appl Toxicol** 1990 Jun;10(3):227–32

[The effect of selected irritants on suspended keratinocytes using double vital staining] Heise P, et al. **Dermatol Monatsschr** 1989;175(10):647–54 (Eng. Abstr.) **(Ger)**

[Changes in the occurrence of sister chromatid exchange and chromosome aberrations in bone marrow cells of mice after administration of chromium with drinking water] Go'dina IR, et al. **Gig Sanit** 1989 Nov;(11):7–9 (Eng. Abstr.) **(Rus)**

CHROMATIACEAE

GENETICS

Cloning and expression of a structural gene from Chlorobium vibrioforme that complements the hemA mutation in Escherichia coli. Avissar YJ, et al. **J Bacteriol** 1990 Mar; 172(3):1656–9

METABOLISM

Photoactive yellow protein from the purple phototrophic bacterium, Ectothiorhodospira halophila. Quantum yield of photobleaching and effects of temperature, alcohols, glycerol, and sucrose on kinetics of photobleaching and recovery. Meyer TE, et al. **Biophys J** 1989 Sep;56(3):559–64

CHROMATIDS

DRUG EFFECTS

Cytogenetic effects caused by phorbol ester tumor promoters in HeLa cells: mechanistic aspects. Färber B, et al. **Carcinogenesis** 1989 Dec;10(12):2345–50

Increased frequency of chromatid breaks in lymphocytes of heterozygotes of ataxia telangiectasia after in vitro treatment with caffeine. Pawlak AL, et al. **Mutat Res** 1990 Jun;230(2):197–204

PHYSIOLOGY

Aberrant chromatid separation and aneuploidy. Fitzgerald PH. **Prog Clin Biol Res** 1989;318:103–10 (17 ref.)

RADIATION EFFECTS

Enhanced G2 chromatid radiosensitivity in dyskeratosis congenita fibroblasts. DeBauche DM, et al. **Am J Hum Genet** 1990 Feb;46(2):350–7

Persistence of chromatid damage after G2 phase X-irradiation in lymphoblastoid cells from Gardner's syndrome. Takai S, et al. **Carcinogenesis** 1990 Aug; 11(8):1425–8

Induction and rejoining of chromatid breaks in X-irradiated A-T and normal human G2 fibroblasts. Mozdarani H, et al. **Int J Radiat Biol** 1989 Nov;56(5):645–50

Repair of radiation-induced chromatid aberrations: relationship to G2 arrest in CHO cells. Rowley R. **Int J Radiat Biol** 1990 Sep;58(3):489–98

Enhanced chromatid damage in blood lymphocytes after G2 phase x irradiation, a marker of the ataxia-telangiectasia gene. Sanford KK, et al. **J Natl Cancer Inst** 1990 Jun 20; 82(12):1050–4

Similar kinetics of chromatid aberrations in X-irradiated xrs 5 and wild-type Chinese hamster ovary cells. MacLeod RA, et al. **Mutagenesis** 1990 Jul;5(4):407–10

ULTRASTRUCTURE

Immunophenotype and sister chromatid differentiation: a combined methodology for analyzing cell proliferation in unfractionated lymphocyte cultures. Larramendy ML, et al. **Exp Cell Res** 1990 Jun;188(2):209–13

On the topology of normal chromatids and on their translocations in myelogenous leukemia. Matioli GT. **Med Hypotheses** 1990 May;32(1):11–9 (26 ref.)

CHROMATIN

Chromatin structure of erythroid-specific genes of immature and mature chicken erythrocytes. Delcuve GP, et al. **Biochem J** 1989 Oct 1;263(1):179–86

Conformational changes in chromatin structure induced by the radioprotective aminothiol, WR 1065. Vaughan AT, et al. **Br J Cancer** 1989 Dec;60(6):893–6

Cell lineage specificity of chromatin configuration and gene expression in haemopoietic progenitor cells. Ford AM, et al. **Hamatol Bluttransfus** 1989;32:352–6

Potential genetic functions of tandem repeated DNA sequence blocks in the human genome are based on a highly conserved "chromatin folding code". Vogt P. **Hum Genet** 1990 Mar;84(4):301–36 (316 ref.)

Interaction of chromatin glycoproteins with DNA. Eufemi M, et al. **Ital J Biochem** 1989 Jul-Aug;38(4):281A–283A

The role of the central globular domain of histone H5 in chromatin structure. Chan DC, et al. **J Biomol Struct Dyn** 1984 Oct;2(2):319–32

Higher order structure of chromatin: influence of ionic strength and proteolytic digestion on the birefringence properties of polynucleosomal fibers. Chauvin F, et al. **J Biomol Struct Dyn** 1985 Feb;2(4):805–19

Electric and flow linear dichroism of unfolded and condensed chromatin: a comparative study at low and intermediate ionic strength. Hagmar P, et al. **J Biomol Struct Dyn** 1989 Aug;7(1):19–33

Three-dimensional arrangements of chromatin and chromosomes: old concepts and new techniques. Appels R. **J Cell Sci** 1989 Mar;92 (Pt 3):325–8 (31 ref.)

Calcium-induced chromatin condensation and cyclin phosphorylation during chromatin condensation cycles in ammonia-activated sea urchin eggs. Patel R, et al. **J Cell Sci Suppl** 1989;12:129–44

Assembly and properties of chromatin containing histone H1. Rodríguez-Campos A, et al. **J Mol Biol** 1989 Sep 5; 209(1):135–50

Electron microscopy of ribonucleoprotein complexes on nascent RNA using Miller chromatin spreading method. Osheim YN, et al. **Methods Enzymol** 1989;180:481–509

Chromatin structure as a molecular marker of cell lineage and developmental potential in neural crest-derived chromaffin cells. Vandenbergh DJ, et al. **Neuron** 1989 Oct; 3(4):507–18

Chromatin structure in Alzheimer's disease: effect on 5' leader sequence for NF-L gene and role of aluminum. McLachlan DR, et al. **Prog Clin Biol Res** 1989;317:1061–75 (20 ref.)

DNA methylation and chromatin structure: a view from below. Selker EU. **Trends Biochem Sci** 1990 Mar; 15(3):103–7 (31 ref.)

The structure and assembly of active chromatin. Svaren J, et al. **Trends Genet** 1990 Feb;6(2):52–6 (29 ref.)

ANALYSIS

Use of an immobilized enzyme and specific antibodies to analyse the accessibility and role of histone tails in chromatin structure. Hacques MF, et al. **Biochem Biophys Res Commun** 1990 Apr 30;168(2):637–43

Chromatin structure and gene expression in Alzheimer's disease. Lukiw WJ, et al. **Brain Res Mol Brain Res** 1990 Apr;7(3):227–33

Chromatin organization in rat testis nuclei. Flow cytometric detection of the morphological compaction. Papa S, et al. **Cell Biochem Funct** 1989 Jul;7(3):205–12

Isolation of 8-methoxypsoralen accessible DNA domains from chromatin of intact cells. Mathis GA, et al. **Cell Biol Toxicol** 1990 Jan;6(1):35–45

DNA double staining for a fluorescence energy transfer study of chromatin in liver cells. Bottiroli G, et al. **Cell Biophys** 1989 Dec;15(3):249–63

A 21 KDa protein resides in the nucleosomes of micrococcal nuclease sensitive liver chromatin of Atlantic salmon treated with estradiol. Waters S, et al. **Cell Mol Biol** 1990; 36(2):197–204

Characterization of a tandemly repeated DNA from the fleshfly Sarcophaga bullata. Hershfield B, et al. **Chromosoma** 1990 Apr;99(2):125–30

Bands, interbands and puffs in native Drosophila polytene chromosomes are recognized by a monoclonal antibody to an epitope in the carboxy-terminal tail of histone H1. Hill RJ, et al. **Chromosoma** 1989 Dec;98(6):411–21

A comparison of the number of X-chromatin bodies and of X chromosomes in carcinomas of the cervix uteri. Atkin NB, et al. **Cytobios** 1989;60(241):111–4

Critical electrolyte concentration of the heterochromatin and euchromatin of Triatoma infestans. Mello ML, et al. **Cytobios** 1989;59(237):87–93

Repeat peptide motifs which contain beta-turns and modulate DNA condensation in chromatin. Erard M, et al. **Eur J Biochem** 1990 Jul 20;191(1):19–26

Ultrastructural distribution of ribonucleoprotein complexes during mitosis. snRNP antigens are contained in mitotic granule clusters. Leser GP, et al. **Eur J Cell Biol** 1989 Dec; 50(2):376–89

Identification of La ribonucleoproteins as a component of interchromatin granules. Carmo-Fonseca M, et al. **Exp Cell Res** 1989 Nov;185(1):73–85

Detection of cryptic bands by AluI in eukaryotic chromosomes. Gosálvez J, et al. **Genome** 1989 Aug; 32(4):672–5 (15 ref.)

DNA content and structure of (double) minutes of a methotrexate-resistant cell line. Jongsma AP, et al. **Histochemistry** 1989;93(1):87–92

Acid-soluble tightly-bound chromatin proteins and DNA methylation. Reale A, et al. **Ital J Biochem** 1989 Nov-Dec; 38(6):392A–394A

Distribution of nuclear pores and chromatin organization in neurons and glial cells of the rat cerebellar cortex. Garcia-Segura LM, et al. **J Comp Neurol** 1989 Dec 15; 290(3):440–50

High-resolution detection of newly synthesized DNA by anti-bromodeoxyuridine antibodies identifies specific chromatin domains. Mazzotti G, et al. **J Histochem Cytochem** 1990 Jan;38(1):13–22

Location of nucleosomes in simian virus 40 chromatin. Ambrose C, et al. **J Mol Biol** 1990 Aug 20;214(4):875–84

Analysis of Chlamydomonas reinhardtii histones and chromatin. Morris RL, et al. **J Protozool** 1990 Mar-Apr; 37(2):117–23

Instability of the nuclear chromatin of procyclic Trypanosoma brucei brucei. Hecker H, et al. **Mol Biochem Parasitol** 1989 Dec;37(2):225–34

Small nuclear RNP tightly bound to chromatin is possibly involved in hormonal regulation of gene expression. Konstantinova IM, et al. **Mol Biol Rep** 1990;14(2–3):117–8 (4 ref.)

Accessibility of histone H1(0) and its structural domains to antibody binding in extended and folded chromatin. Banchev TB, et al. **Mol Cell Biochem** 1990 Jun 25; 95(2):167–75

Hamster liver chromatin immunospecific non-histone proteins. Wojtkowiak Z, et al. **Mol Cell Biochem** 1990 Jan 18;92(1):61–7

Immunochemical approaches to the study of histone H1 and high mobility group chromatin proteins. Zlatanova JS. **Mol Cell Biochem** 1990 Jan 18;92(1):1–22 (142 ref.)

Chromatin digestion with restriction endonucleases reveals 150-160 bp of protected DNA in the centromere of chromosome XIV in Saccharomyces cerevisiae. Funk M, et al. **Mol Gen Genet** 1989 Oct;219(1–2):153–60

Chromosome-specific identification and quantification of S1 nuclease-sensitive sites in yeast chromatin by pulsed-field gel electrophoresis. Geigl EM, et al. **Mol Microbiol** 1990 May;4(5):801–10

Electron microscopic localization of acridine orange chromatin interaction products in rat pheochromocytoma PC12 cells. Hara H, et al. **Pathol Res Pract** 1990 Feb; 186(1):102–9

Distribution pattern of acridine orange chromatin interaction products in rat glioma C6 cells at different phases of the cell cycle. Hara H, et al. **Pathol Res Pract** 1990 Feb; 186(1):110–6

A study of the chromatin structure of human beta-like hemoglobin genes in K562 cell line with a modified assay of nick-translation of nuclei. Zhu JD. **Shih Yen Sheng Wu Hsueh Pao** 1989 Dec;22(4):433–44

Fluorescence of plastic embedded tissue sections after curcumin staining. Stockert JC, et al. **Stain Technol** 1989 Jul;64(4):207–9

Variability of euchromatic and heterochromatic regions of Y chromosome in two types of cancer patients. Adhvaryu SG, et al. **Tumori** 1989 Dec 31;75(6):547–9

[Structure of the chromatin with long linker DNA] Osipova TN, et al. **Mol Biol (Mosk)** 1990 Jan-Feb;24(1):69–78 (Eng. Abstr.) **(Rus)**

[Structural-functional characteristics of chromatin fractions in the regenerating liver of adult and old rats] Mozzhukhina TG, et al. **Vestn Akad Med Nauk SSSR** 1990;(1):23–7 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Growth phase dependency of chromatin cleavage and degradation by bleomycin. Moore CW, et al. **Antimicrob Agents Chemother** 1989 Sep;33(9):1592–9

The DNase I sensitive state of "active" globin gene chromatin resists trypsin treatments which disrupt chromatin higher order structure. Lundell M, et al. **Biochemistry** 1989 Dec 12;28(25):9757–65

Human chorionic gonadotropin increases chromatin solubility in isolated bovine and human luteal nuclei. Oechsli M, et al. **Biol Reprod** 1989 Oct;41(4):753–60

Differential scanning calorimetry of nuclei as a test for the effects of anticancer drugs on human chromatin. Almagor M, et al. **Cancer Res** 1989 Oct 15;49(20):5561–6

Caffeine increases sensitivity of DNA to denaturation in chromatin of L1210 cells. Kunicka JE, et al. **Cell Tissue Kinet** 1990 Jan;23(1):31–9

Flow cytometric recognition of clastogen induced chromatin damage in G0/G1 lymphocytes by non-stoichiometric Hoechst fluorochrome binding. Kubbies M. **Cytometry** 1990;11(3):386–94

6DMAP inhibits chromatin decondensation but not sperm histone kinase in sea urchin male pronuclei. Poccia D, et al. **Exp Cell Res** 1990 Jun;188(2):226–34

Seminal fluid from men with agenesis of the Wolffian ducts: zinc-binding properties and effects on sperm chromatin stability. Kvist U, et al. **Int J Androl** 1990 Aug;13(4):245–52

Changes in human sperm chromatin stability during preparation for in-vitro fertilization. Rosenborg L, et al. **Int J Androl** 1990 Aug;13(4):287–96

The condensation of chromatin and histone H1-depleted chromatin by spermine. Marquet R, et al. **J Biomol Struct Dyn** 1986 Oct;4(2):205–18

Polyamine-DNA interactions. Condensation of chromatin and naked DNA. Smirnov IV, et al. **J Biomol Struct Dyn** 1988 Apr;5(5):1149–61

NaCl-induced chromatin condensation. Application of static light scattering at 90 degrees and stopped flow technique. Smirnov IV, et al. **J Biomol Struct Dyn** 1988 Apr; 5(5):1127–34

Sequence-specific chemical modification of chromatin DNA with reactive derivatives of oligonucleotides. Vlassov VV, et al. **Mol Biol Rep** 1990 Feb;14(1):11–5

2,3,7,8-Tetrachlorodibenzo-p-dioxin-inducible aryl hydrocarbon receptor-mediated change in CYP1A1 chromatin structure occurs independently of transcription. Durrin LK, et al. **Mol Cell Biol** 1989 Dec;9(12):5733–7

Antiviral xanthate causes conformational changes in simian virus 40 DNA and chromatin. Waldeck W. **Oncology** 1990; 47(2):191–8

[Physicochemical parameters of rat liver chromatin during nonhormonal induction] Davtian AM, et al. **Biol Nauki** 1989;(10):28–32 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Identification and partial purification of a chromatin bound calmodulin activated histone 3 kinase from calf thymus. Wakim BT, et al. **Biochem Biophys Res Commun** 1990 Aug 31;171(1):84–90

Identification of sites on chromosomal protein HMG-I phosphorylated by casein kinase II. Palvimo J, et al. **FEBS Lett** 1989 Oct 23;257(1):101–4

3'-5' cAMP phosphodiesterase in pig liver nuclei. Lupidi G, et al. **Ital J Biochem** 1990 Jan-Feb;39(1):30–7

Distribution of methylated histones and histone methyltransferases in chicken erythrocyte chromatin. Hendzel MJ, et al. **J Biol Chem** 1989 Nov 15; 264(32):19208–14

Poly(ADP-ribose)-mediated post-translational modification of chromatin-associated human topoisomerase I. Inhibitory effects on catalytic activity. Kasid UN, et al. **J Biol Chem** 1989 Nov 5;264(31):18687–92

Chromatin-associated DNA endonucleases from xeroderma pigmentosum cells are defective in interaction with damaged nucleosomal DNA. Parrish DD, et al. **Mutat Res** 1990 Mar;235(2):65–80

[Isolation of Ca2+, Mg2+-dependent nuclease from calf thymus chromatin] Nikonova LV, et al. **Biokhimiia** 1989 Oct;54(10):1709–18 (Eng. Abstr.) **(Rus)**

[Relation between DNA replication and neutral Mn 2+-dependent DNAse activity in chromatin] Vinter VG, et al. **Biokhimiia** 1990 Jan;55(1):109–13 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Human autoantibodies identify a nuclear

chromatin-associated antigen (PSL or p55) in human platelets. Barque JP, et al. **Eur J Cell Biol** 1990 Feb; 51(1):183-7

Histone autoantigens in murine lupus. Definition of a major epitope within an accessible region of chromatin. Portanova JP, et al. **J Immunol** 1990 Jun 15;144(12):4633-40

ISOLATION & PURIFICATION

Characterization of poly(ADP-ribosyl)ated domains of rat pachytene chromatin. Satyanarayana K, et al. **Biochem J** 1989 Aug 1;261(3):775-86

METABOLISM

Digestion of chromatin DNA with DNAse I in situ: effect of ethanol fixation. Bottone MG, et al. **Basic Appl Histochem** 1989;33(4):347-50

Enzyme coupling method on calibrated nylon spheres: application to the selective trypsinization of histones in chromatin. Michalon P, et al. **Biochem Biophys Res Commun** 1990 Feb 28;167(1):9-15

Saccharomyces cerevisiae chromatin associated protein Yp20 is a guanine nucleotide binding protein. Valansi C, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):667-74

DNA binding properties of Saccharomyces cerevisiae chromatin associated ras-related protein Yp20. Valansi C, et al. **Biochem Biophys Res Commun** 1990 Mar 16; 167(2):628-36

Binding of low mobility group protein from rat liver chromatin with histones studied by chemical cross-linking. Wiland E, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):11-21

Studies on the ATP requirements of in vitro chromatin assembly. Kmiec EB, et al. **Biochem Cell Biol** 1989 Aug; 67(8):443-54

Magnesium induced activation of endogenous nucleases from isolated yeast nuclei: liberation of chromatin fragments of mono- and oligo- nucleosome size. Bhargava P, et al. **Biochem Int** 1990;20(6):1041-8

Actinomycin D binding in vitro: active chromatin preferred. Yu FL, et al. **Biochem Int** 1990;20(4):807-15

Isolation and characterisation of a 167 bp core particle isolated from stripped chicken erythrocyte chromatin. Lindsey GG, et al. **Biochim Biophys Acta** 1989 Dec 22; 1009(3):257-63

Binding of polycyclic and nitropolycyclic aromatic hydrocarbons to specific fractions of rat lung chromatin. Mitchell CE, et al. **Cancer Lett** 1989 Nov 30;48(2):129-34

Uncoupling of DNA excision repair and nucleosomal unfolding in poly(ADP-ribose)-depleted mammalian cells. Mathis G, et al. **Carcinogenesis** 1990 Jul;11(7):1237-9

DNA adduct formation and removal in hepatic chromatin fractions from rats chronically fed 2-acetylaminofluorene. Poirier MC, et al. **Carcinogenesis** 1990 Aug;11(8):1343-7

High levels of de novo methylation and altered chromatin structure at CpG islands in cell lines. Antequera F, et al. **Cell** 1990 Aug 10;62(3):503-14

Site-specific DNA repair at the nucleosome level in a yeast minichromosome. Smerdon MJ, et al. **Cell** 1990 May 18; 61(4):675-84

Transcriptionally defective retroviruses containing lacZ for the in situ detection of endogenous genes and developmentally regulated chromatin. Kerr WG, et al. **Cold Spring Harb Symp Quant Biol** 1989;54 Pt 2:767-76

Active chromatin. Patient RK, et al. **Curr Opin Cell Biol** 1989 Jun;1(3):454-9 (32 ref.)

DNA replication and poly(ADP-ribosyl)ation of chromatin. Anachkova B, et al. **Cytobios** 1989;58(236):19-28

Role of trans-activating proteins in the generation of active chromatin at the PHO5 promoter in S. cerevisiae. Fascher KD, et al. **EMBO J** 1990 Aug;9(8):2523-8

An upstream transcription factor, USF (MLTF), facilitates the formation of preinitiation complexes during in vitro chromatin assembly. Workman JL, et al. **EMBO J** 1990 Apr;9(4):1299-308

Core histone-DNA interactions in sea urchin sperm chromatin. The N-terminal tail of H2B interacts with linker DNA. Hill CS, et al. **Eur J Biochem** 1990 Jan 12; 187(1):145-53

Three-dimensional distribution of DNase I-sensitive chromatin regions in interphase nuclei of embryonal carcinoma cells. de Graaf A, et al. **Eur J Cell Biol** 1990 Jun;52(1):135-41

Molecular and cytogenetic analysis of the heterochromatin-euchromatin junction region of the Drosophila melanogaster X chromosome using cloned DNA sequences. Yamamoto MT, et al. **Genetics** 1990 Aug; 125(4):821-32

Characteristics of lymphocyte chromatin from Alzheimer's disease patients and from young and old normal individuals. Smith TA, et al. **Gerontology** 1989;35(5-6):268-74

Influence of seminal vesicular fluid on the zinc content of human sperm chromatin. Björndahl L, et al. **Int J Androl** 1990 Jun;13(3):232-7

Characteristics of chromatin release during digestion of nuclei with micrococcal nuclease: preferential solubilization of nascent RNA at low enzyme concentration. Telford DJ, et al. **Int J Biochem** 1989; 21(11):1235-40

Histone acetylation alters the capacity of the H1 histones to condense transcriptionally active/competent chromatin. Ridsdale JA, et al. **J Biol Chem** 1990 Mar 25;265(9):5150-6

Simian virus 40 chromatin interaction with the capsid proteins. Bina M, et al. **J Biomol Struct Dyn** 1983 Dec; 1(3):689-704 (42 ref.)

Comparative study of the condensation of chicken erythrocyte and calf thymus chromatins by di- and multivalent cations [published erratum appears in J Biomol Struct Dyn 1988 Jun;5(6):1295-6] Marquet R, et al. **J Biomol Struct Dyn** 1988 Feb;5(4):839-57

Reactivity and adduct formation of a polyaromatic hydrocarbon, 7-bromomethylbenz[a]anthracene, with chromatin histone proteins. Stacks PC, et al. **J Chromatogr** 1990 Jun 8;528(1):25-34

Serum amyloid P component binds to cell nuclei in vitro and to in vivo deposits of extracellular chromatin in systemic lupus erythematosus. Breathnach SM, et al. **J Exp Med** 1989 Oct 1;170(4):1433-8

Pentraxin-chromatin interactions: serum amyloid P component specifically displaces H1-type histones and solubilizes native long chromatin. Butler PJ, et al. **J Exp Med** 1990 Jul 1;172(1):13-8

Aluminium binding to chromatin DNA as revealed by formation of fluorescent complexes with 8-hydroxyquinoline and other ligands. Llorente AR, et al. **J Microsc** 1989 Aug;155 (Pt 2):227-30

Electrostatic mechanism of chromatin folding. Clark DJ, et al. **J Mol Biol** 1990 Feb 20;211(4):883-96

Interaction of HMG14 with chromatin. Graziano V, et al. **J Mol Biol** 1990 Aug 20;214(4):897-910

Chromatin reconstitution on small DNA rings. III. Histone H5 dependence of DNA supercoiling in the nucleosome. Zivanovic Y, et al. **J Mol Biol** 1990 Jul 20;214(2):479-95

The binding of 3H-labelled androgen-receptor complexes to hypothalamic chromatin of neonatal mice: effect of sex and androgenization. Ventanas J, et al. **J Steroid Biochem** 1990 Mar;35(3-4):383-90

Functional interaction of nuclear transport-defective simian virus 40 large T antigen with chromatin and nuclear matrix. Deppert W, et al. **J Virol** 1990 Feb;64(2):838-46

Plasma membrane-mediated nuclear uptake and chromatin binding of insulin in tumor cell lines. Rakowicz-Szulczynska EM, et al. **Mol Carcinog** 1990; 3(3):150-6

Non-histone chromatin proteins in beef thyroid: distinct phosphorylation patterns of several protein kinases. Levasseur S, et al. **Mol Cell Biochem** 1990 Jun 25; 95(2):139-46

Extinction of phosphoenolpyruvate carboxykinase gene expression is associated with loss of a specific chromatin-binding protein from a far upstream domain. Ip YT, et al. **Mol Cell Biol** 1990 Jul;10(7):3782-7

DNA superhelicity enhances the assembly of transcriptionally active chromatin in vitro. Sekiguchi JM, et al. **Mol Gen Genet** 1989 Dec;220(1):73-80

Flow cytometric analysis of rodent epididymal spermatozoal chromatin condensation and loss of free sulfhydryl groups. Evenson DP, et al. **Mol Reprod Dev** 1989;1(4):283-8

Selective repair of specific chromatin domains in UV-irradiated cells from xeroderma pigmentosum complementation group C. Kantor GJ, et al. **Mutat Res** 1990 May;235(3):171-80

P1 nuclease defines a subpopulation of active SV40 chromatin--a new nuclease hypersensitivity assay. Chu Y, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):3705-11

DNA repair in a small yeast plasmid folded into chromatin. Smerdon MJ, et al. **Nucleic Acids Res** 1990 Apr 25; 18(8):2045-51

Laser-induced crosslinking of histones to DNA in chromatin and core particles: implications in studying histone-DNA interactions. Stefanovsky VYu, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10069-81

Identification of a Ets1 variant protein unaffected in its chromatin and in vitro DNA binding capacities by T cell antigen receptor triggering and intracellular calcium rises. Pognonec P, et al. **Oncogene** 1990 Apr;5(4):603-10

Topoisomerase II activity is not involved in the maintenance of active beta-globin chromatin structure in avian reticulocytes. Brotherton TW, et al. **Prog Clin Biol Res** 1989;316B:57-67

Binding of ions to nuclear chromatin. von Zglinicki T, et al. **Scanning Microsc** 1989 Dec;3(4):1231-7; discussion 1237-9

[The chromatin structure of transcriptionally active and inactive repetitive nucleotide sequences] Kukushkin AN, et al. **Biokhimiia** 1990 Apr;55(4):718-23 (Eng. Abstr.) **(Rus)**

[Identification of myosin-like proteins included in chromatin] Oriatkina TN, et al. **Biokhimiia** 1989 Jun;54(6):933-9 (Eng. Abstr.) **(Rus)**

[Study of peripheral chromatin granules--anchorosomes] Prusov AN, et al. **Biokhimiia** 1989 Nov;54(11):1838-46 (Eng. Abstr.) **(Rus)**

[Lipid peroxidation and the polymerase activities of liver chromatin fractions in rats during aging] Levitskiĭ EL, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):693-5 (Eng. Abstr.) **(Rus)**

[Non-histone chromatin proteins participating in the regulation of transcription of globin genes in erythroid cells] Mavletova DA, et al. **Dokl Akad Nauk SSSR** 1989; 307(4):1007-9 **(Rus)**

[Two types of fragmentation of total chromatin by DNAase I--an artifact or reality?] Karagebakian GG, et al. **Mol Gen Mikrobiol Virusol** 1989 Jul;(7):18-21 (Eng. Abstr.) **(Rus)**

[Cholesterol and fatty acids of the nuclei and chromatin of the rat thymus at long intervals following gamma irradiation] Kulagina TP. **Radiobiologiia** 1990 May-Jun; 30(3):317-20 (Eng. Abstr.) **(Rus)**

[Lipid peroxidation and parameters of thermodenaturation of chromatin fractions in the rat liver] Gubskiĭ IuI, et al. **Ukr Biokhim Zh** 1990 Mar-Apr;62(2):76-82 (Eng. Abstr.) **(Rus)**

[Functional activity of fractionated chromatin from rat liver upon a single administration of carbon tetrachloride] Gubskiĭ IuI, et al. **Vopr Med Khim** 1989 Jul-Aug; 35(4):119-24 (Eng. Abstr.) **(Rus)**

[The role of plasma high density lipoproteins as modulators of specific hormonal effect of hydrocortisone] Panin LE, et al. **Vopr Med Khim** 1990 May-Jun;36(3):60-2 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Computer-assisted imaging cytometry of nuclear chromatin reveals bone tumor virus infection and neoplastic transformation of adherent osteoblast-like cells. Schmidt J, et al. **Biochem Biophys Res Commun** 1989 Oct 31; 164(2):728-35

PATHOLOGY

Computerized morphometric differentiation of chromatin changes in splenocytes from normal and calorie-restricted mice. Olson GB, et al. **Anal Quant Cytol Histol** 1989 Oct; 11(5):361-6

Which oral white lesions will become malignant? An image cytometric study. Abdel-Salam M, et al. **Oral Surg Oral Med Oral Pathol** 1990 Mar;69(3):345-50

PHYSIOLOGY

Environmental stimuli and transcriptional activity generate transient changes in DNA torsional tension. Saavedra RA. **Bioessays** 1990 Mar;12(3):125-8 (26 ref.)

Nucleosome positioning modulates accessibility of regulatory proteins to the mouse mammary tumor virus promoter. Piña B, et al. **Cell** 1990 Mar 9;60(5):719-31

Alternative chromatin structure at CpG islands. Tazi J, et al. **Cell** 1990 Mar 23;60(6):909-20

Diffuse kinetochores and holokinetic anaphase chromatin movement during mitosis in the hemipteran Agallia constricta (leafhopper) cell line AC-20. Rieder CL, et al. **Cell Motil Cytoskeleton** 1990;15(4):245-59

Competition between transcription complex assembly and chromatin assembly on replicating DNA. Almouzni G, et al. **EMBO J** 1990 Feb;9(2):573-82

Characterization and nucleosomal core localization of Achlya histones involved in stress-induced chromatin condensation. Pekkala DH, et al. **Exp Cell Res** 1990 Mar; 187(1):16-24

Changes in chromatin chain flexibility during condensation induced by sodium chloride, as evidenced by electric dichroism. Marquet R, et al. **FEBS Lett** 1990 Mar 12; 262(1):131-4

Nuclear envelope assembly around sperm chromatin in cell-free preparations from Drosophila embryos. Ulitzur N, et al. **FEBS Lett** 1989 Dec 18;259(1):113-6

In situ detection of transcriptionally active chromatin and genetic regulatory elements in individual viable mammalian cells. Kerr WG, et al. **Immunol Suppl** 1989;2:74-8; discussion 79

Poly(ADP-ribosylated) histones in chromatin replication. Boulikas T. **J Biol Chem** 1990 Aug 25;265(24):14638-47

Cell-type specific and differential regulation of the human metallothionein genes. Correlation with DNA methylation and chromatin structure. Jahroudi N, et al. **J Biol Chem** 1990 Apr 15;265(11):6506-11

A model of chromatin-dependent DNA replication sequences based on the decondensation units hypothesis. Takahashi M. **J Theor Biol** 1989 Feb 22;136(4):427-65 (150 ref.)

Active beta-globin gene transcription occurs in methylated, DNase I-resistant chromatin of nonerythroid chicken cells. Lois R, et al. **Mol Cell Biol** 1990 Jan;10(1):16-27

Chromatin structures of the rat tyrosine aminotransferase gene relate to the function of its cis-acting elements. Nitsch D, et al. **Mol Cell Biol** 1990 Jul;10(7):3334-42

Hemimethylation of DNA prevents chromatin expression. Deobagkar DD, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1691-5

The cellular chromatin is an important target for SV40 large T antigen in maintaining the transformed phenotype. Richter W, et al. **Virology** 1990 Feb;174(2):543-56

[Degree of chromatin activity and the RNA level in lymphocytes of popliteal lymph nodes of dogs after administration of an antigen] Golovatskiĭ AS. **Arkh Anat Gistol Embriol** 1990 Apr;98(4):61-6 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Deficient G2 phase repair of radiation-induced chromatin damage in the SENCAR mouse. Sanford KK, et al. **Carcinogenesis** 1989 Oct;10(10):1911-6

Quantitative evaluation of radiation-induced changes in sperm morphology and chromatin distribution. Aubele M, et al. **Cytometry** 1990;11(5):586-94

Nonrandom induction of pyrimidine-pyrimidone (6-4) photoproducts in ultraviolet-irradiated human chromatin. Mitchell DL, et al. **J Biol Chem** 1990 Apr 5;265(10):5353-6

Thymine dimer formation as a probe of the path of DNA in and between nucleosomes in intact chromatin. Pehrson JR. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9149-53

[UV-induced formation of DNA-protein cross-links in chromatin in the presence of chemical agents] Miul' EM, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Sep-Oct;(5):766-9 (Eng. Abstr.) **(Rus)**

SECRETION

RNA synthesis by nuclei and chromatin isolated from adult and senescent Wistar rat liver. Park GH, et al. **Gerontology** 1990;36(2):61-75

ULTRASTRUCTURE

Evidence of repetitive patterns of chromatin distribution in cell nuclei of rat liver. Esquivel C, et al. **Acta Anat (Basel)** 1989;136(2):94-8

Two mechanisms of chromatin compaction. Erenpreisa J. **Acta Histochem (Jena)** 1989;86(2):129-35

Duplication of euchromatin without phenotypic effects: a variant of chromosome 16. Bryke CR, et al. **Am J Med Genet** 1990 May;36(1):43-4

Chromatin changes in frog neurons after eighth nerve transection. Bernocchi G, et al. **Basic Appl Histochem** 1989; 33(3):209-17

Disassembly of chromatin into approximately equal to 50 kb units by detergent. Szabó G Jr, et al. **Biochem Biophys Res Commun** 1990 Jun 15;169(2):706-12

Tightly-bound form of poly(ADP-ribose)polymerase in the higher order of chromatin organization. D'Erme M, et al. **Biochem Int** 1990;20(5):887-95

Chromosome structure at interfaces between major chromatin types: alpha- and beta-heterochromatin. Miklos GL, et al. **Bioessays** 1990 Jan;12(1):1-6 (30 ref.)

A case of myelodysplastic syndrome with abnormal chromatin clumping in leucocytes [letter; comment] Varma N, et al. **Br J Haematol** 1989 Sep;73(1):135 Comment on: Br J Haematol 1988 Sep;70(1):49-54.

Quantitative features of chromatin structure in the prognosis of breast cancer. Komitowski D, et al. **Cancer** 1990 Jun 15;65(12):2725-30

Microinjection of p34cdc2 kinase induces marked changes in cell shape, cytoskeletal organization, and chromatin structure in mammalian fibroblasts. Lamb NJ, et al. **Cell** 1990 Jan 12;60(1):151-65

Interphase nuclear envelope lamins form a discontinuous network that interacts with only a fraction of the chromatin in the nuclear periphery. Paddy MR, et al. **Cell** 1990 Jul 13;62(1):89-106

The anchorosome, a special chromatin granule for the anchorage of the interphase chromosome to the nuclear envelope. Fais D, et al. **Cell Biol Int Rep** 1989 Sep; 13(9):747-58

Nuclear fraction enriched in interchromatin granules. Zborek A, et al. **Cell Biol Int Rep** 1990 Jan;14(1):79-88

Fine structural ribonucleoprotein components of the cell nucleus visualized after spreading and high resolution autoradiography. Fakan S, et al. **Chromosoma** 1989 Oct; 98(4):242-9

Chromatin structure and gene activity. Elgin SC. **Curr Opin Cell Biol** 1990 Jun;2(3):437-45 (23 ref.)

Chromosomes and chromatin structure: the extrachromosomal karyoskeleton. Fisher PA. **Curr Opin Cell Biol** 1989 Jun;1(3):447-53 (23 ref.)

Nuclear changes induced in NIH/3T3 cells by transfection and tumorigenesis. Mello ML, et al. **Cytobios** 1989; 60(242-243):135-49

Diabetes-related changes in chromatin structure of brain, liver, and intestinal epithelium. Hartnell JM, et al. **Diabetes** 1990 Mar;39(3):348-53

The differentially expressed 16-kD heat shock genes of Caenorhabditis elegans exhibit differential changes in chromatin structure during heat shock. Dixon DK, et al. **DNA Cell Biol** 1990 Apr;9(3):177-91

Periodicity of DNA folding in higher order chromatin structures. Filipski J, et al. **EMBO J** 1990 Apr;9(4):1319-27

The size of chromatin loops in HeLa cells. Jackson DA, et al. **EMBO J** 1990 Feb;9(2):567-71

Effect of transcription of yeast chromatin on DNA topology in vivo. Pederson DS, et al. **EMBO J** 1990 Jun;9(6):1873-81

Replacement of histone H1 by H5 in vivo does not change the nucleosome repeat length of chromatin but increases its stability. Sun JM, et al. **EMBO J** 1990 May;9(5):1651-8

The superstructure of chromatin and its condensation mechanism. VI. Electric dichroism and model calculations. Koch MH, et al. **Eur Biophys J** 1989;17(5):245-55

Acridine orange-induced precipitation of mouse testicular sperm cell DNA reveals new patterns of chromatin structure. Evenson D, et al. **Exp Cell Res** 1990 Apr; 187(2):328-34

Polyamine addition to preparation media induces chromatin condensation, irreversibly at low ionic strength. Colson P, et al. **FEBS Lett** 1989 Oct 23;257(1):141-4

A yeast protein that influences the chromatin structure of UASG and functions as a powerful auxiliary gene activator. Chasman DI, et al. **Genes Dev** 1990 Apr;4(4):503-14

Optical anisotropy of chromatin. Flow linear dichroism and electric dichroism studies. Dimitrov SI, et al. **J Biomol Struct Dyn** 1988 Apr;5(5):1135-48

Three-dimensional reconstruction of chromatin fibers. Subirana JA, et al. **J Biomol Struct Dyn** 1983 Dec; 1(3):705-14

The diameters of frozen-hydrated chromatin fibers increase with DNA linker length: evidence in support of variable diameter models for chromatin. Athey BD, et al. **J Cell Biol** 1990 Sep;111(3):795-806

Core filaments of the nuclear matrix. He DC, et al. **J Cell Biol** 1990 Mar;110(3):569-80

Radial density distribution of chromatin: evidence that chromatin fibers have solid centers. Smith MF, et al. **J Cell Biol** 1990 Feb;110(2):245-54

Structure of transcriptionally active chromatin: radiological evidence for requirement of torsionally constrained DNA. Rodi CP, et al. **J Cell Physiol** 1989 Nov;141(2):346-52

Appearance of perichromatin granules in decondensing sperm nuclei in fertilized mouse eggs. Takeuchi IK, et al. **J Electron Microsc (Tokyo)** 1989;38(5):403-7

Interleukin 4 induces changes in the chromatin structure of the gamma 1 switch region in resting B cells before switch recombination. Berton MT, et al. **J Exp Med** 1990 Jul 1; 172(1):375-8

Ultrastructural preservation of nuclei and chromatin: improvement with low-temperature methods. Horowitz RA, et al. **J Microsc** 1990 Feb;157 (Pt 2):205-24

Methodical aspects of 3-D reconstruction of chromatin architecture in mouse trophoblast giant nuclei. Montag M, et al. **J Microsc** 1990 May;158 (Pt 2):225-33

Towards light microscopic imaging of hydrated 'native' ribosomal RNA genes. A combined video microscopic and transmission electron microscopic analysis. Spring H, et al. **J Microsc** 1990 Jun;158 (Pt 3):323-33

Structure of nucleosomes and organization of internucleosomal DNA in chromatin. Bavykin SG, et al. **J Mol Biol** 1990 Apr 5;212(3):495-511

Highly preferential nucleation of histone H1 assembly on scaffold-associated regions. Izaurralde E, et al. **J Mol Biol** 1989 Dec 5;210(3):573-85

Specific inhibition of DNA binding to nuclear scaffolds and histone H1 by distamycin. The role of oligo(dA).oligo(dT) tracts. Käs E, et al. **J Mol Biol** 1989 Dec 5;210(3):587-99

Chromatin superstructure-dependent crosslinking with DNA of the histone H5 residues Thr1, His25 and His62. Mirzabekov AD, et al. **J Mol Biol** 1990 Jan 20; 211(2):479-91

A polarized photobleaching study of chromatin reorientation in intact nuclei. Selvin PR, et al. **J Mol Biol** 1990 Aug 20;214(4):911-22

Changes in frequency and localization of human X- and Y-chromatin bodies at interphase during in vitro cellular aging. Mukherjee AB, et al. **Mech Ageing Dev** 1990 Mar 31;53(1):61-71

Transcription factor requirements for in vitro formation of transcriptionally competent 5S rRNA gene chromatin. Felts SJ, et al. **Mol Cell Biol** 1990 May;10(5):2390-401

Serum stimulation of the c-fos enhancer induces reversible changes in c-fos chromatin structure. Feng JL, et al. **Mol Cell Biol** 1990 Mar;10(3):1126-33

Chromatin arrangement in mouse sperm nuclei: an ultrastructural cytochemical study. Biggiogera M. **Mol Reprod Dev** 1989;1(2):91-7

Oogenesis: chromatin and microtubule dynamics during meiotic prophase. Mattson BA, et al. **Mol Reprod Dev** 1990 Apr;25(4):374-83

Gene expression. Chromatin contract to silence [news] Alberts B, et al. **Nature** 1990 Mar 15;344(6263):193-4

Chromatin studies reveal that an ERE is located far upstream of a vitellogenin gene and that a distal tissue-specific hypersensitive site is conserved for two coordinately regulated vitellogenin genes. Burch JB, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4157-65

Chromatin structure of the developmentally regulated early histone genes of the sea urchin Strongylocentrotus purpuratus. Fronk J, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5255-63

DNase I-defined chromatin configuration of the human CD3 gene cluster. Tunnacliffe A. **Nucleic Acids Res** 1990 Feb 11;18(3):459-64

Nuclear chromatin texture to differentiate follicular and papillary carcinoma of the thyroid. Ferrer-Roca O, et al. **Pathol Res Pract** 1989 Nov;185(5):561-6

Morphometric study of chromatin pattern in freeze-fractured rat liver nuclei during malignancy evolution. Marinelli F, et al. **Pathol Res Pract** 1989 Nov;185(5):769-73

Chromatin structure of transposon Tn903 cloned into a yeast plasmid. Estruch F, et al. **Plasmid** 1989 Sep;22(2):143-50

The spatial distribution of exposed nuclear DNA in normal, cancer, and reverse-transformed cells. Krystosek A, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6560-4

Higher-order structure of Saccharomyces cerevisiae chromatin. Lowary PT, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8266-70

Effects of freezing-thawing on the spermatozoon nucleus: a comparative chromatin cytophotometric study in the porcine and human species. Hamamah S, et al. **Reprod Nutr Dev** 1990;30(1):59-64

Role of chromatin structure in transcriptional regulation of MMTV LTR hormone-dependent promoter. Richard-Foy H, et al. **Rev Esp Fisiol** 1990 Mar;46(1):31-7

The organization and substructure of chromatin fibres in the interphase nucleus as studied by scanning electron microscopy. Allen TD. **Scanning Microsc Suppl** 1989; 3:77-85; discussion 85-6

Characterization of chromatin structure by image analysis—a method for the assessment of changes in chromatin organization. Danielsen HE, et al. **Scanning Microsc Suppl** 1989;3:297-302

The application of the maximum entropy method to electron microscopic tomography. Lawrence MC, et al. **Ultramicroscopy** 1989 Nov;31(3):285-301

The SV40 nucleosome-free region is detected throughout the virus life cycle. Kondoleon SK, et al. **Virology** 1989 Nov;173(1):129-35

[Structural and functional status of chromatin in the cerebral cortex neurons after circulatory arrest in the rat] Avrushchenko MSh, et al. **Arkh Anat Gistol Embriol** 1990 Jan;98(1):42-8 (Eng. Abstr.) **(Rus)**

[Determination of the morpho-densitometric parameters of numerous structures in the digital analysis of images] Nikonova EA, et al. **Arkh Anat Gistol Embriol** 1989 Jun; 96(6):94-6 **(Rus)**

[Changes in the structural and functional states of chromatin of the neurons of the cerebral hemisphere cortex in the early post-resuscitation period in rats] Avrushchenko MSh, et al. **Biull Eksp Biol Med** 1990 Apr;109(4):402-5 (Eng. Abstr.) **(Rus)**

[Changes in the chromatin structure of the thyroid cells related to the expression of the thyroglobulin gene] Atakhanova BA, et al. **Probl Endokrinol (Mosk)** 1990 May-Jun;36(3):6-11 (Eng. Abstr.) **(Rus)**

[A karyotype and chromatin study of the peripheral blood lymphocytes of patients with pigmented skin neoplasms] Ganina KP, et al. **Tsitol Genet** 1990 Mar-Apr;24(2):16-21 (Eng. Abstr.) **(Rus)**

[The interphase chromatin of lymphocyte nuclei in psoriasis patients] Butusova NN, et al. **Vestn Dermatol Venerol** 1990; (1):20-2 (Eng. Abstr.) **(Rus)**

[Syndrome of abnormal chromatin clumping in leukocytes (letter)] Recio M, et al. **Sangre (Barc)** 1990 Feb;35(1):86-7 **(Spa)**

CHROMATIN, NERVE see **NISSL BODIES**

CHROMATIN, SEX see **SEX CHROMATIN**

CHROMATIUM

ANALYSIS

Crystallization and characterization of Chromatium vinosum cytochrome c'. McRee DE, et al. **J Biol Chem** 1990 Apr 5;265(10):5364-5

ENZYMOLOGY

Resonance Raman characterization of Chromatium vinosum cytochrome c'. Effect of pH and comparison of equilibrium and photolyzed carbon monoxide species. Hobbs JD, et al. **Biochemistry** 1990 May 1;29(17):4166-74

Purification and characterization of the thermostable ribulose-1,5-bisphosphate carboxylase/oxygenase from the thermophilic purple bacterium Chromatium tepidum. Heda GD, et al. **Eur J Biochem** 1989 Sep 15;184(2):313-9

Direct voltammetry of the Chromatium vinosum enzyme, sulfide:cytochrome c oxidoreductase (flavocytochrome c552). Guo LH, et al. **J Biol Chem** 1990 Feb 5; 265(4):1958-63

GENETICS

Restoration of hydrogenase activity in hydrogenase-negative strains of Escherichia coli by cloned DNA fragments from Chromatium vinosum and Proteus vulgaris. Chaudhuri A, et al. **J Gen Microbiol** 1990 Jun;136 (Pt 6):1153-60

METABOLISM

Kinetics of cyanide binding to Chromatium vinosum ferricytochrome c'. Motie M, et al. **Biochemistry** 1990 Feb 20;29(7):1932-6

Proton NMR study of the comparative electronic/magnetic properties and dynamics of the acid in equilibrium with alkaline transition in a series of ferricytochromes c'. La Mar GN, et al. **J Biol Chem** 1990 Sep 25;265(27):16173-80

Redox properties of several bacterial ferredoxins using square wave voltammetry. Smith ET, et al. **J Biol Chem** 1990 Aug 25;265(24):14371-6

CHROMATOGRAPHY

Separation of oligosaccharides by capillary supercritical fluid chromatography and analysis by direct coupling to high-resolution mass spectrometer: application to analysis of oligomannosidic N-glycans. Leroy Y, et al. **Anal Biochem** 1990 Feb 1;184(2):235-43

Honour issue on the occasion of the 60th birthday of Gerhard Schomburg. **J Chromatogr** 1989 Aug 23;477(1):1-183

Chromatographic and non-chromatographic assay of L-carnitine family components. Marzo A, et al. **J Chromatogr** 1990 May 18;527(2):247-58 (46 ref.)

A novel chromatographic resolution of 21-hydroxysteroid metabolites of progesterone. Senciall IR, et al. **J Steroid Biochem** 1990 Jan;35(1):151-4

[Comparative capillary chromatography and its possibilities in the analysis of polluted air] Liashenko VI, et al.

Gig Sanit 1990 Jan;(1):74–6 (Rus)

INSTRUMENTATION

Accuracy of peak deconvolution algorithms within chromatographic integrators. Papas AN, et al. **Anal Chem** 1990 Feb 1;62(3):234–9

Improved high-speed counter-current chromatograph with three multilayer coils connected in series. II. Separation of various biological samples with a semi-preparative column. Ito Y, et al. **J Chromatogr** 1990 Jan 5;498(1):169–78

High-performance hydrophobic interaction chromatography of proteins on a pellicular support based on hydrophilic resin. Kato Y, et al. **J Chromatogr** 1989 Dec 8;483:401–5

Centrifugal counter-current partition chromatography with helical coil rotor. Simplified counter-current chromatography with a rotating face-seal. Kim LS, et al. **J Chromatogr** 1989 Dec 8;483:359–68

Multilayer coil planet centrifuge for analytical high-speed counter-current chromatography. Oka H, et al. **J Chromatogr** 1989 Sep 22;479(1):53–60

[An optical sensor for analyzing the flow of biological particles in chromatographic processes] Efimov SV, et al. **Lab Delo** 1989;(12):49–51 (Eng. Abstr.) (Rus)

METHODS

A single column method for the assay of adenylate cyclase. Alvarez R, et al. **Anal Biochem** 1990 May 15;187(1):98–103

Analysis of alkyl sulfates in protein solutions by isocratic and gradient ion chromatography. Kunitani MG, et al. **Anal Biochem** 1989 Oct;182(1):103–8

Hydrophobic interaction chromatography in alkaline pH. Narhi LO, et al. **Anal Biochem** 1989 Nov 1;182(2):266–70

"The derivative assay"—an analysis of two fast components of DNA rejoining kinetics. Sandström BE. **Anal Biochem** 1989 Nov 1;182(2):233–6

Application of countercurrent chromatography/thermospray mass spectrometry for the identification of bioactive lignans from plant natural products. Lee YW, et al. **Anal Chem** 1990 Feb 1;62(3):244–8

Large-scale chromatographic procedures. Hedman P, et al. **Biochem Soc Trans** 1990 Apr;18(2):236–7

Solid phase extraction for an improved assay of physostigmine in biological fluids. Hurst PR, et al. **Biomed Chromatogr** 1989 Sep;3(5):226–32

Chromatography as a reference technique for the determination of clinically important steroids. Robards K, et al. **Biomed Chromatogr** 1990 Jan;4(1):1–19 (235 ref.)

Rapid protein matrix reduction by a hydrophobic interaction–based solid phase extraction method. Gisch DJ. **Biotechniques** 1989 Jun;7(6):562–4

Paralog chromatography. Kauvar LM, et al. **Biotechniques** 1990 Feb;8(2):204–9

TED, an improved thermal elution device for the simultaneous hydroxyapatite chromatography of solution DNA/DNA hybrids. Kirsch JA, et al. **Biotechniques** 1990 May;8(5):504–6

A novel method for rapid isolation of plasmid DNA. Zervos PH, et al. **Biotechniques** 1988 Mar;6(3):238–42

Chromatographic demonstration of reversible changes in endothelial permeability. Haselton FR, et al. **J Appl Physiol** 1989 Nov;67(5):2032–48

Computer-assisted method development in chromatography. **J Chromatogr** 1989 Dec 27;485:1–675

Hydrophilic-interaction chromatography for the separation of peptides, nucleic acids and other polar compounds. Alpert AJ. **J Chromatogr** 1990 Jan 19;499:177–96

Purification and analysis of infectious virions and native non-structural antigens from cells infected with tick-borne encephalitis virus. Crooks AJ, et al. **J Chromatogr** 1990 Feb 21;502(1):59–68

Chromatographic studies on the binding, action and metabolism of (-)-deprenyl. Kalász H, et al. **J Chromatogr** 1990 Jan 19;499:589–99

Chromatography of peptides on a multi-coil counter-current chromatograph. Knight M, et al. **J Chromatogr** 1989 Dec 22;484:319–25

Thermodynamic model for electrostatic-interaction chromatography of proteins. Mazsaroff I, et al. **J Chromatogr** 1990 Jan 19;499:63–77

Separation and determination of the ingredients of a cold medicine by micellar electrokinetic chromatography with bile salts. Nishi H, et al. **J Chromatogr** 1990 Jan 12; 498(2):313–23

Binary and ternary salt gradients in hydrophobic-interaction chromatography of proteins. el Rassi Z, et al. **J Chromatogr** 1990 Jan 19;499:141–52

Displacement chromatography on cyclodextrin-silicas. III. Enantiomer separations. Vigh G, et al. **J Chromatogr** 1990 May 11;506:481–93

Purification of human pituitary LH and thyrotrophin by hydrophobic chromatography. Hiyama J, et al. **J Endocrinol** 1990 Jun;125(3):493–500

Silver ion chromatography using solid-phase extraction columns packed with a bonded-sulfonic acid phase. Christie WW. **J Lipid Res** 1989 Sep;30(9):1471–3

Protein chromatography on hydroxyapatite columns. Gorbunoff MJ. **Methods Enzymol** 1990;182:329–39

Hydrophobic chromatography. Kennedy RM. **Methods Enzymol** 1990;182:339–43

CHROMATOGRAPHY, AFFINITY

High-performance liquid affinity chromatography and in situ fluorescent labeling on thin-layer chromatography of glycosphingolipids. Tomono Y, et al. **Anal Biochem** 1990 Feb 1;184(2):360–8

Affinity chromatographic identification of vitamin B12-binding proteins in egg white. Zak Z, et al. **Ann Nutr Metab** 1989;33(6):341–6

L-asparaginase from Erwinia carotovora. An improved recovery and purification process using affinity chromatography. Lee SM, et al. **Appl Biochem Biotechnol** 1989 Oct;22(1):1–11

Easy assembly of ligands for glycosidase affinity chromatography. Bernotas RC, et al. **Biochem J** 1990 Sep 1;270(2):539–40

Isolation of procathepsin D from mature cathepsin D by pepstatin affinity chromatography. Autocatalytic proteolysis of the zymogen form of the enzyme. Conner GE. **Biochem J** 1989 Oct 15;263(2):601–4

Preparation of an affinity chromatography matrix for the selective purification of the dopamine D2 receptor from bovine striatal membranes. Clagett-Dame M, et al. **Biochim Biophys Acta** 1989 Nov 27;986(2):271–80

Purification of the membrane protein enzyme lipoamidase by affinity chromatography. Oizumi J, et al. **Biomed Chromatogr** 1989 Nov;3(6):274–5

Selective adsorption of apoferritin on immobilized Fe(III): demonstration of Fe(III) binding sites. Boyer RF, et al. **Biotechnol Appl Biochem** 1990 Feb;12(1):79–84

Removal of bilirubin from jaundiced serum by immunoaffinity chromatography. Izumi Y, et al. **Clin Chim Acta** 1989 Sep 15;184(1):99–105

Determination of aflatoxin B1 levels in peanut butter using an immunoaffinity column clean-up procedure: inter-laboratory study. Patey AL, et al. **Food Addit Contam** 1990 Jul-Aug;7(4):515–20

Monoclonal antibodies for affinity purification of IL-6/IFN-beta 2 and for neutralization of HGF activity. Novick D, et al. **Hybridoma** 1989 Oct;8(5):561–7

Monoclonal antibodies against birch pollen allergens: characterization by immunoblotting and use for single-step affinity purification of the major allergen Bet v I. Jarolim E, et al. **Int Arch Allergy Appl Immunol** 1989;90(1):54–60

Multiple DNA-binding estrogen receptor forms resolved by interaction with immobilized metal ions. Identification of a metal-binding domain. Hutchens TW, et al. **J Biol Chem** 1989 Oct 15;264(29):17206–12

A mitogenic fibrinogen receptor that differs from glycoprotein IIb-IIIa. Identification by affinity chromatography and by covalent cross-linking. Levesque JP, et al. **J Biol Chem** 1990 Jan 5;265(1):328–33

Affinity chromatography of mammalian and yeast nucleosomes. Two modes of binding of transcriptionally active mammalian nucleosomes to organomercurial-agarose columns, and contrasting behavior of the active nucleosomes of yeast. Walker J, et al. **J Biol Chem** 1990 Apr 5;265(10):5736–46

Eighth International Symposium on Affinity Chromatography and Biological Recognition. Jerusalem, October 29–November 3, 1989. Proceedings. **J Chromatogr** 1990 Jun 27;510:1–371

Isolation of human lactoferrin by affinity chromatography using insolubilized bovine beta-lactoglobulin. Ena JM, et al. **J Chromatogr** 1990 Feb 23;525(2):442–6

Composite affinity sorbents and their cleaning in place. Girot P, et al. **J Chromatogr** 1990 Jun 27;510:213–23

Purification of urokinase by combined cation exchanger and affinity chromatographic cartridges. Hou KC, et al. **J Chromatogr** 1990 Feb 23;525(2):297–306

High-performance affinity chromatography of basic fibroblast growth factor on polystyrene sulphonate resins modified with serine. Jacquot-Dourges MA, et al. **J Chromatogr** 1990 Jun 27;510:141–7

Purification of phospholipase-C from Bacillus cereus by affinity chromatography on 2-(4-aminophenylsulphonyl)ethyl-cellulose. Kamberov E, et al. **J Chromatogr** 1990 Feb 23;525(2):307–18

Simultaneous determination of the primary prostanoids prostaglandin E2, prostaglandin F2 alpha and 6-oxoprostaglandin F1 alpha by immunoaffinity chromatography in combination with negative ion chemical ionization gas chromatography-tandem mass spectrometry. Mackert G, et al. **J Chromatogr** 1989 Sep 29;494:13–22

Novel media for chromatography and immobilization using a radiation grafting technique. Müller-Schulte D. **J Chromatogr** 1990 Jun 27;510:115–21

Tresyl-activated support for high-performance affinity chromatography. Nakamura K, et al. **J Chromatogr** 1990 Jun 27;510:101–13

Potential of the sulfobetaine detergent Zwittergent 3-12 as a desorbing agent in biospecific and bioselective affinity chromatography. Nollstadt KH, et al. **J Chromatogr** 1989 Dec 29;497:87–100

Hydrazido-derivatized supports in affinity chromatography. O'Shannessy DJ. **J Chromatogr** 1990 Jun 27;510:13–21 (43 ref.)

Affinity purification of tissue plasminogen activator using transition-state analogues. Patel A, et al. **J Chromatogr** 1990 Jun 27;510:83–93

One-step purification of trypsin and alpha-chymotrypsin by affinity chromatography on Eupergit-aprotinin, a novel carrier for purification of serine proteases. Schmitt S, et al. **J Chromatogr** 1990 Jun 27;510:239–42

Application of receptor-affinity chromatography to bioaffinity purification. Weber DV, et al. **J Chromatogr** 1990 Jun 27;510:59–69

Double-coated silica supports for high-performance affinity chromatography of proteins. Zhou FL, et al. **J Chromatogr** 1990 Jun 27;510:71–81

Comparison of immunoglobulin binding capacities and ligand leakage using eight different protein A affinity chromatography matrices. Füglistaller P. **J Immunol Methods** 1989 Nov 30;124(2):171–7

Purification of the IL-2 receptor (TAC) by ligand-affinity chromatography and utilization of the immobilized receptor for receptor-affinity chromatography (RAC) purification of IL-2, mutant IL-2, and IL-2 fusion proteins. Smart JE, et al. **J Invest Dermatol** 1990 Jun;94(6 Suppl):158S–163S

Isolation of lipid-free C-reactive protein by affinity chromatography. Coll JM. **Rev Esp Fisiol** 1989 Sep; 45(3):291–6

Inactivation and removal of human immunodeficiency virus in monoclonal purified antihemophilic factor (human) (Hemofil M). Piszkiewicz D, et al. **Thromb Res** 1989 Sep 1;55(5):627–34

[Qualitative analysis of tissue plasminogen activator in plasma obtained from various liver diseases by gel filtration and affinity chromatography] Takatori M, et al. **Rinsho Byori** 1990 Jan;38(1):71–5 (Eng. Abstr.) (Jpn)

[Competitive affinity chromatography of human alpha fetoprotein on immobilized diethylstilbestrol] Terent'ev AA, et al. **Biull Eksp Biol Med** 1990 May;109(5):438–40 (Eng. Abstr.) (Rus)

INSTRUMENTATION

Centrifugal affinity chromatography. Slingerland RJ, et al. **J Chromatogr** 1990 Jun 27;510:205–11

A rapid and specific assay for the du Pont aca discrete clinical analyzer, performed directly on whole blood. Hansen JB, et al. **Transplant Proc** 1990 Jun;22(3):1189–92

METHODS

Immunoaffinity purification of 11-dehydro-thromboxane B2 from human urine and plasma for quantitative analysis by radioimmunoassay. Hayashi Y, et al. **Anal Biochem** 1990 May 15;187(1):151–9

Analysis of a glucose-containing tetrasaccharide by high-performance liquid affinity chromatography. Wang WT, et al. **Anal Biochem** 1989 Oct;182(1):48–53

Use of peptide substrates for affinity purification of protein-serine kinases. Woodgett JR. **Anal Biochem** 1989 Aug 1;180(2):237–41

Evaluation of the interaction of peptides with Cu(II), Ni(II), and Zn(II) by high-performance immobilized metal ion affinity chromatography. Yip TT, et al. **Anal Biochem** 1989 Nov 15;183(1):159–71

Affinity of fibroblast growth factors for beta-cyclodextrin tetradecasulfate. Yuen SN, et al. **Anal Biochem** 1990 Feb 15;185(1):108–11

Large-scale purification of staphylococcal enterotoxins A, B, and C2 by dye ligand affinity chromatography. Brehm RD, et al. **Appl Environ Microbiol** 1990 Apr;56(4):1067–72

Inositol 1,4,5-trisphosphate affinity chromatography. Hirata M, et al. **Biochem Biophys Res Commun** 1990 Apr 16; 168(1):379–86

Rapid purification of the estrogen receptor by sequence-specific DNA affinity chromatography. Peale FV Jr, et al. **Biochemistry** 1989 Oct 31;28(22):8671–5

A calcium-dependent antibody for identification and purification of recombinant proteins. Prickett KS, et al. **Biotechniques** 1989 Jun;7(6):580–9

Immunoaffinity chromatography of diadenosine 5',5'''-P1,P4-tetraphosphate phosphorylase from Saccharomyces cerevisiae. Avila DM, et al. **Biotechnol Appl Biochem** 1990 Jun;12(3):276–83

Immobilized biosystems in research and industry. Kennedy JF, et al. **Biotechnol Genet Eng Rev** 1989;7:297–313 (58 ref.)

A rapid procedure for the purification of IgA1 and IgA2 subclasses from normal human serum using protein G and jackfruit lectin (jacalin) affinity chromatography. Haun M, et al. **Immunol Lett** 1989 Oct;22(4):273–9

Polyacrylamide derivatives to the service of bioseparations. Boschetti E. **J Biochem Biophys Methods** 1989 Jul; 19(1):21–36

Analysis of diethylstilbestrol, dienestrol and hexestrol in biological samples by immunoaffinity extraction and gas chromatography-negative-ion chemical ionization mass spectrometry. Bagnati R, et al. **J Chromatogr** 1990 May 18;527(2):267–78

Affinity chromatography of fibroblast growth factors on substituted polystyrene. Dourges MA, et al. **J Chromatogr** 1990 Mar 16;526(1):35–45

High-performance liquid chromatography of proteins on deformed non-porous agarose beads. Fast boronate affinity chromatography of haemoglobin at neutral pH. Hjertén S, et al. **J Chromatogr** 1990 Feb 2;500:543–53

Differential interaction of peptides and protein surface structures with free metal ions and surface-immobilized metal ions. Hutchens TW, et al. **J Chromatogr** 1990 Feb 2;500:531–42

Surface affinity chromatographic separation of blood cells. VII. Relationship between capacity factors of human peripheral blood cells and the rate of penetration of liquids into xerogel column packings. Matsumoto U, et al. **J Chromatogr** 1990 Mar 30;504(1):69–78

Preparation of adsorbents for affinity chromatography using TSKgel Tresyl-Toyopearl 650M. Nakamura K, et al. **J Chromatogr** 1989 Sep 8;478(1):159–67

Large-scale purification of factor VIII by affinity chromatography: optimization of process parameters. te Booy MP, et al. **J Chromatogr** 1990 Mar 9;503(1):103–14

A novel affinity purification method to isolate peptide specific antibodies. Karlsen A, et al. **J Immunol Methods** 1990 Apr 17;128(2):151–7

An improved method for immobilizing IgG antibodies on protein A-agarose. Sisson TH, et al. **J Immunol Methods** 1990 Mar 9;127(2):215–20

Method for isolation of kappa-opioid binding sites by dynorphin affinity chromatography. Simon J, et al. **J Neurosci Res** 1990 Apr;25(4):549–55

2-Iminobiotin-containing reagent and affinity columns. Fudem-Goldin B, et al. **Methods Enzymol** 1990;184:167–73

Monovalent avidin affinity columns. Kohanski RA, et al. **Methods Enzymol** 1990;184:194–200

Affinity chromatography: general methods. Ostrove S. **Methods Enzymol** 1990;182:357–71

Affinity chromatography: specialized techniques. Ostrove S, et al. **Methods Enzymol** 1990;182:371–9

Chromatography on immobilized reactive dyes. Stellwagen E. **Methods Enzymol** 1990;182:343–57

Interaction of human lactoferrin with DNA: one-step purification by affinity chromatography on single-stranded DNA-agarose. Hutchens TW, et al. **Pediatr Res** 1989 Dec; 26(6):618–22

Comparison of double-filtration and affinity chromatographic techniques. Yamamoto A, et al. **Prog Clin Biol Res** 1990;337:169–81

Phosphotungstate as a useful eluent for antithrombin III purification by heparin-agarose affinity chromatography. Tajima Y, et al. **Thromb Res** 1990 Mar 1;57(5):697–704

Development of an immunoaffinity process for factor IX purification. Tharakan J, et al. **Vox Sang** 1990;58(1):21–9

[Isolation of tubular proximal cells of the human kidney by affinity chromatography using Lotus tetragonolobus lectin] Merlet D, et al. **C R Acad Sci [III]** 1990;310(12):565–70 (Eng. Abstr.) **(Fre)**

[Affinity chromatography of proteases using peptide methyl ketones as ligands] Peters K, et al. **Biomed Biochim Acta** 1990;49(4):173–8 (Eng. Abstr.) **(Ger)**

[Dye-ligand affinity chromatography--simple preparation method of dye ligand resins and their application] Ohshima T, et al. **Seikagaku** 1990 Apr;62(4):283–7 **(Jpn)**

[Separation of phosphoproteins on immobilized iron ions] Muszyńska G. **Postepy Biochem** 1989;35(3):383–93 (30 ref.) **(Pol)**

[Isolation and purification of collagen proteins using biospecific chromatography on a sorbent with collagen-binding fragment of fibronectin] Bychkova VV, et al. **Vopr Med Khim** 1989 Nov-Dec;35(6):129–33 (Eng. Abstr.) **(Rus)**

[The use of immunoaffinity chromatography for isolation of carcinoembryonal antigen] Shcherban' AI, et al. **Vopr Med Khim** 1989 Nov-Dec;35(6):121–4 (Eng. Abstr.) **(Rus)**

CHROMATOGRAPHY, AGAROSE see under **CHROMATOGRAPHY, GEL**

CHROMATOGRAPHY, DEAE-CELLULOSE

METHODS

A reliable method for the purification of bacteriophage lambda DNA. White BA, et al. **Biotechniques** 1989 Jul-Aug;7(7):694, 696

[Isolation of monoclonal antibodies from mouse ascitic fluid using chromatography on "blue" DEAE cellulose] Hrkal Z, et al. **Cesk Farm** 1989 Jul;38(6):276–8 (Eng. Abstr.) **(Cze)**

[A comparison of methods for the determination of A2 hemoglobin] Mora LA, et al. **Bol Med Hosp Infant Mex** 1990 Mar;47(3):168–72 (Eng. Abstr.) **(Spa)**

CHROMATOGRAPHY, EXCLUSION see **CHROMATOGRAPHY, GEL**

CHROMATOGRAPHY, GAS

Complete mass spectrometry/mass spectrometry data field acquisition on the chromatographic time scale by time-resolved ion momentum spectrometry with time-array detection. Eckenrode BA, et al. **Anal Chem** 1990 Jul 15;62(14):1362–7

Improved gas chromatographic determination of nicotine in environmental tobacco smoke. Ogden MW, et al. **Analyst** 1989 Sep;114(9):1005–8

Electron-capture gas chromatography as a sensitive method for measuring subnanogram amounts of cholesterol in saliva and urine. Schwertner HA, et al. **Clin Chem** 1990 Mar; 36(3):519–21

Capillary gas chromatography of retinoids (vitamin A compounds) and apo-retinoids: determination of Kováts retention indices. Furr HC, et al. **J Chromatogr** 1990 May 18;527(2):406–13

Determination of fluparoxan (GR50360) in plasma by gas chromatography. Gristwood WE. **J Chromatogr** 1990 May 18;527(2):436–40

High-performance liquid and gas chromatographic methods for the determination of ciclopirolol. Guinebault P, et al. **J Chromatogr** 1990 Feb 23;525(2):359–67

Determination of phosphoethanolamine in animal tissues by gas chromatography with flame photometric detection. Kataoka H, et al. **J Chromatogr** 1989 Sep 29;494:283–8

Capillary gas chromatography of trihexyphenidyl, procyclidine and cycrimine in biological fluids. Owen JA, et al. **J Chromatogr** 1989 Sep 29;494:135–42

Determination of a cytostatic agent, bendamustine, in plasma using capillary gas chromatography with nitrogen-selective detection. Weber H, et al. **J Chromatogr** 1990 Feb 23;525(2):459–63

Rapid monitoring of chloramphenicol in microsamples of plasma by capillary gas chromatography with electron-capture detection. Weber L. **J Chromatogr** 1990 Feb 23;525(2):454–8

Determination of nornicotine in smokers' urine by gas chromatography following reductive alkylation to N'-propylnornicotine. Zhang Y, et al. **J Chromatogr** 1990 Feb 23;525(2):349–57

Determination of N-acetylaspartic acid in human cerebrospinal fluid by gas chromatography-mass spectrometry. Swahn CG. **J Neurochem** 1990 May; 54(5):1584–8

Steroid determinations in human ovarian follicular fluid using capillary gas chromatography. Vanluchene E, et al. **J Steroid Biochem** 1990 Jan;35(1):83–9

A rapid and sensitive gas chromatographic analysis of methadone and its primary metabolite. Kintz P, et al. **J Toxicol Clin Exp** 1990 Jan-Feb;10(1):15–20

[Retention index of essential oil in temperature-programmed capillary column gas chromatography] Chang LP, et al. **Yao Hsueh Hsueh Pao** 1989;24(11):847–52 (Eng. Abstr.) **(Chi)**

[Gas chromatography studies of exhaust air from an animal body waste salvage industry] Prösch J, et al. **Z Gesamte Hyg** 1989 Jul;35(7):429–31 (Eng. Abstr.) **(Ger)**

[Gas chromatography determination of metalaxyl in plant material] Seefeld F, et al. **Z Gesamte Hyg** 1989 Sep; 35(9):535–7 (Eng. Abstr.) **(Ger)**

[Direct gas chromatography analysis of volatile fatty acids and lactic acids in microbiological diagnosis] Socolowsky S, et al. **Z Gesamte Hyg** 1989 Oct;35(10):596–8 (Eng. Abstr.) **(Ger)**

[Screening of drugs and chemicals by wide-bore capillary gas chromatography with flame ionization and nitrogen phosphorus detectors] Kageura M, et al. **Nippon Hoigaku Zasshi** 1989 Apr;43(2):161–5 (Eng. Abstr.) **(Jpn)**

INSTRUMENTATION

Computer simulation (based on a linear-elution-strength approximation) as an aid for optimizing separations by programmed-temperature gas chromatography. Bautz DE, et al. **Anal Chem** 1990 Aug 1;62(15):1560–7

Use of a gas chromatograph oven for DNA amplification by the polymerase chain reaction. Hoffman LM, et al. **Biotechniques** 1988 Nov-Dec;6(10):932, 934–6

Method for radio-capillary gas chromatography employing a modified oxidation-reduction train and flow-through detector. Croteau RB, et al. **J Chromatogr** 1990 Feb 2; 500:349–54

Potential of wide bore open tubular columns in gas chromatographic analysis of drugs. Mehta AC. **J Chromatogr** 1989 Sep 29;494:1–11 (27 ref.)

Quantitative determination of 1,2-diacylglycerol in thoracic aorta of the rat using Iatroscan TLC/FID: effect of norepinephrine. Okumura K, et al. **Lipids** 1989 Nov; 24(11):982–4

METHODS

Gas chromatographic analysis and storage of gas samples from the middle ear. Jørgensen L, et al. **Acta Otolaryngol (Stockh)** 1990 May-Jun;109(5–6):416–20

Measurement of organic vapors at sub-TLV concentrations using fast gas chromatography. Mouradian RF, et al. **Am Ind Hyg Assoc J** 1990 Feb;51(2):90–5

Comparison of the Fourier transform infrared (FTIR) spectrophotometer and the Miniature Infrared Analyzer (MIRAN) for the determination of trichloroethylene (TCE) in the presence of Freon-113 in workplace air. Xiao HK, et al. **Am Ind Hyg Assoc J** 1990 Jul;51(7):395–401

Evaluation of the Fourier transform infrared (FTIR) spectrophotometer for analysis of trichloroethylene (TCE) in the presence of Freon-113 in carbon disulfide eluates of charcoal air sampling tubes. Xiao HK, et al. **Am Ind Hyg Assoc J** 1990 Jul;51(7):402–4

The effect of sodium chloride concentration, water content, and protein on the gas chromatographic headspace analysis of ethanol in plasma. Watts MT, et al. **Am J Clin Pathol** 1990 Mar;93(3):357–62

Nitrate analysis by capillary gas chromatography. Dunphy MJ, et al. **Anal Biochem** 1990 Feb 1;184(2):381–7

Determination of plasma free fatty acids, free cholesterol, cholesteryl esters, and triacylglycerols directly from total lipid extract by capillary gas chromatography. Lohninger A, et al. **Anal Biochem** 1990 May 1;186(2):243–50

Gas chromatography of C19 and 17-oxogenic steroids in urine. Honour JW, et al. **Ann Clin Biochem** 1990 Jul;27 (Pt 4):338–44

The determination of total and unbound midazolam in human plasma. A comparison of high performance liquid chromatography, gas chromatography and gas chromatography/mass spectrometry. de Vries JX, et al. **Biomed Chromatogr** 1990 Jan;4(1):28–33

Capillary gas chromatographic determination of epomediol in human plasma and urine using a rapid solid-phase extraction. Girometta MA, et al. **Biomed Chromatogr** 1989 Sep;3(5):199–202

Determination of polyamines in urine of normal human and cancer patients by capillary gas chromatography. Jiang XC. **Biomed Chromatogr** 1990 Mar;4(2):73–7

Simultaneous detection and quantitation of O6-monoacetylmorphine, morphine and codeine in urine by gas chromatography with nitrogen specific and/or flame ionization detection. Vu-Duc T, et al. **Biomed Chromatogr** 1990 Mar;4(2):65–9

An improved method of analysing 2,5-hexanedione in urine. Perbellini L, et al. **Br J Ind Med** 1990 Jun;47(6):421–4

Gas-liquid chromatographic method for routine detection of plasma sulfo-, gluco-, and free 3-methoxy-4-hydroxyphenylglycol. Piletz JE, et al. **Clin Chim Acta** 1989 Nov;185(2):165–76

Capillary GC quantification of cholesterol oxidation products in plasma lipoproteins of fasted humans. Addis PB, et al. **Free Radic Biol Med** 1989;7(2):179–82

Enzymatic assay of formic acid and gas chromatography of methanol for urinary biological monitoring of exposure to methanol. Ogata M, et al. **Int Arch Occup Environ Health** 1990;62(3):227–32

Preparation of electrophoric derivatives of N7-(2-hydroxyethyl)guanine, an ethylene oxide DNA adduct. Allam K, et al. **J Chromatogr** 1990 Jan 19;499:571–8

Gas-liquid chromatographic analysis of ethyl fenthion in tissues of native birds. Allender WJ. **J Chromatogr** 1990 May 25;508(1):199–202

Simultaneous determination of keto and non-keto bile acids in human serum by gas chromatography with selected ion monitoring. Eguchi T, et al. **J Chromatogr** 1990 Jan 26; 525(1):25–42

Computerized capillary gas chromatographic analysis of hydrocarbon mixtures in workplace air. Einarsson O, et al. **J Chromatogr** 1990 Jan 12;498(2):381–95

Indirect determination of O-ethyl S-(2-diisopropylaminoethyl) methylphosphonothioate in air at low concentrations. Fowler WK, et al. **J Chromatogr** 1989 Sep 8;478(1):51–61

Comparison of discharge tubes for deuterium-specific gas chromatographic detection with a microwave-induced plasma. Gavlick WK, et al. **J Chromatogr** 1990 May 25; 508(1):187–92

Rapid headspace gas chromatographic method for the determination of liquid/gas partition coefficients. Guitart R, et al. **J Chromatogr** 1989 Jul 21;491(2):271–80

Multiresidue procedures for the determination of chlorinated dibenzodioxins and dibenzofurans in a variety of foods using capillary gas chromatography-electron-capture detection. Jasinski JS. **J Chromatogr** 1989 Sep 15; 478(2):349–67

Capillary gas chromatographic determination of sulphadimidine in pork tissues. Kmošták S, et al. **J Chromatogr** 1990 Mar 9;503(1):260–5

Gas-liquid chromatographic profiling of plasma lipids using high-temperature-polarizable capillary columns. Kuksis A, et al. **J Chromatogr** 1990 Feb 2;500:427–41

Sulfonium salts as derivatizing agents. 2. Determination of theophylline in plasma by automated gas chromatography. Lee BL, et al. **J Chromatogr** 1989 Sep 29;494:109–17

Determination of aliphatic amines by gas and high-performance liquid chromatography. Marzo A, et al. **J Chromatogr** 1990 May 16;507:241–5

Determination of belfosdil, a new calcium channel blocker, in human plasma by capillary gas chromatography with nitrogen-phosphorus detection. Mulvana DE, et al. **J Chromatogr** 1990 May 18;527(2):343–50

Improved procedure for determination of indomethacin in plasma by capillary gas chromatography after solid-phase extraction. Nishioka R, et al. **J Chromatogr** 1990 Mar 16; 526(1):210–4

Improvement of activated carbon for air sampling. Rudling J. **J Chromatogr** 1990 Mar 9;503(1):33–40

Evaluation of direct axial sample introduction for ion mobility detection after capillary gas chromatography. St. Louis RH, et al. **J Chromatogr** 1989 Oct 6;479(2):221–31

Analysis of fatty acids in equine cerebrospinal fluid using gas chromatography with electron-capture detection. Sweeney RW, et al. **J Chromatogr** 1989 Sep 29;494:278–82

Determination of the partial benzodiazepine receptor agonist Ro 16-6028 in plasma by capillary gas chromatography with nitrogen-selective detection after conversion into the ethyl ester derivative. Timm U, et al. **J Chromatogr** 1989 Sep 29;494:119–34

Determination of free malonaldehyde by gas chromatography

with an electron-capture detector. Tomita M, et al. **J Chromatogr** 1990 Mar 16;526(1):174–9

Simultaneous determination of six antiepileptic drugs by capillary gas chromatography. Volmut J, et al. **J Chromatogr** 1990 May 18;527(2):428–35

Rapid diagnosis of tuberculous meningitis by frequency-pulsed electron-capture gas-liquid chromatography detection of carboxylic acids in cerebrospinal fluid. Brooks JB, et al. **J Clin Microbiol** 1990 May;28(5):989–97

Two-dimensional gas chromatography with electron capture detection for the sensitive determination of specific mycobacterial lipid constituents. Larsson L, et al. **J Clin Microbiol** 1989 Oct;27(10):2230–3

Computer-aided headspace gas chromatography applied to blood-alcohol analysis: importance of online process control. Jones AW, et al. **J Forensic Sci** 1989 Sep; 34(5):1116–27

A rapid procedure for the analysis of phenylalanine in brain tissue utilizing electron-capture gas chromatography. Wong JT, et al. **J Neurosci Methods** 1990 May;32(2):105–9

Gas chromatographic procedure for measuring total lipid in breast milk [letter] Clark RM, et al. **J Pediatr Gastroenterol Nutr** 1990 Feb;10(2):271–2

Simultaneous determination of dextropropoxyphene, norpropoxyphene and methaqualone in plasma by gas chromatography with selective nitrogen detection. Kintz P, et al. **J Toxicol Clin Exp** 1990 Mar–Apr;10(2):89–94

Rapid headspace gas chromatography of hexanal as a measure of lipid peroxidation in biological samples. Frankel EN, et al. **Lipids** 1989 Nov;24(11):976–81

A method for the simultaneous analysis of unconjugated and glycine-conjugated bile acids by capillary gas-liquid chromatography. Iida T, et al. **Lipids** 1989 Dec; 24(12):1053–5

Microanalysis of serum fatty acids by gas chromatographic technique. Mancaş DG, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Jan–Mar;93(1):183–6

Simultaneous identification and quantification of several opiates and derivatives by capillary gas chromatography and nitrogen selective detection. Kintz P, et al. **Z Rechtsmed** 1989;103(1):57–62

[Pyrolytic gas chromatography in the analysis of urinary stones] Dubanský A, et al. **Cas Lek Cesk** 1989 Jul 14; 128(29):919–22 (Eng. Abstr.) **(Cze)**

[Determination of nitroglycerin in human plasma using gas chromatography after the administration of dosage forms used in Czechoslovakia] Stehlík P, et al. **Cesk Farm** 1989 Dec;38(10):450–3 (Eng. Abstr.) **(Cze)**

[Assay of vanilmandelic acid (VMA) by gas chromatography using a capillary tube] Beamonte A, et al. **Ann Biol Clin (Paris)** 1989;47(7):403–7 (Eng. Abstr.) **(Fre)**

[Determination of unchanged clonazepam in plasma by gas-liquid chromatography] Marliac Y, et al. **Ann Biol Clin (Paris)** 1989;47(8):503–6 (Eng. Abstr.) **(Fre)**

[Determination of unchanged clobazam in plasma by gas-liquid chromatography] Marliac Y, et al. **Ann Pharm Fr** 1989;47(4):213–20 (Eng. Abstr.) **(Fre)**

[The process of developing and improving the analytical method of benzene in organic solvents for household use: interlaboratory collaborative study] Ikarashi Y, et al. **Eisei Shikenjo Hokoku** 1989;(107):124–7 (Eng. Abstr.) **(Jpn)**

[Determination of blood cyanide using head-space gas chromatography with electron capture detection] Maseda C, et al. **Nippon Hoigaku Zasshi** 1990 Apr;44(2):131–6 (Eng. Abstr.) **(Jpn)**

[Methods of determining formaldehyde levels in the air] Cheka'l VN, et al. **Gig Sanit** 1989 Sep;(9):42–4 **(Rus)**

[Reference methods and materials for the study of the indicators of lipid metabolism (review of the literature)] Filonova VP, et al. **Lab Delo** 1989;(10):28–32 (34 ref.) **(Rus)**

[The detection and separation of antiparkinson preparations in cadaveric material by gas-liquid chromatography] Valnauskas PV. **Sud Med Ekspert** 1989 Jul–Sep;32(3):43–5 (Eng. Abstr.) **(Rus)**

STANDARDS

Use of reference pools to compare the qualitative and quantitative determination of polychlorinated biphenyls by packed and capillary gas chromatography with electron capture detection. Part 1. Serum. Burse VW, et al. **Analyst** 1990 Mar;115(3):243–51

CHROMATOGRAPHY, GAS-LIQUID see **CHROMATOGRAPHY, GAS**

CHROMATOGRAPHY, GAS-LIQUID-MASS SPECTROMETRY see **MASS FRAGMENTOGRAPHY**

CHROMATOGRAPHY, GAS-MASS SPECTROMETRY see **MASS FRAGMENTOGRAPHY**

CHROMATOGRAPHY, GEL

Purification of mouse monoclonal antibodies by chromatography on sepharose 6 B. Diaz-Alonso JM, et al. **Allerg Immunol (Leipz)** 1989;35(3):173–9

Calibration curves for size-exclusion chromatography: description of HPLC gels in terms of porous fractals. le Maire M, et al. **J Biochem (Tokyo)** 1989 Nov;106(5):814–7

Rapid, quantitative method for the isolation and purification of gangliosides by LIPSEP gel chromatography. Kant K, et al. **J Chromatogr** 1989 Sep 29;494:289–96

Gel filtration: a new method to analyze and separate red blood cells with different deformabilities. Rohner F, et al. **J Lab Clin Med** 1990 Sep;116(3):393–9

[Determination of serum bilirubin fractions using gel-filtration] Franzini C, et al. **Quad Sclavo Diagn** 1988 Jan–Dec;24(1–4):1–8 (Eng. Abstr.) **(Ita)**

[Qualitative analysis of tissue plasminogen activator in plasma obtained from various liver diseases by gel filtration and affinity chromatography] Takatori M, et al. **Rinsho Byori** 1990 Jan;38(1):71–5 (Eng. Abstr.) **(Jpn)**

METHODS

Purification of bacteriophage DNA by gel filtration chromatography. González A, et al. **Genet Anal** 1990 Feb; 7(1):2–4

Isolation of mammalian brain tubulin by amino-activated gel chromatography. Lacey E, et al. **J Chromatogr** 1990 Jan 26;525(1):71–84

Protein chromatography with pyridine- and alkyl-thioether-based agarose adsorbents. Oscarsson S, et al. **J Chromatogr** 1990 Jan 19;499:235–47

Gel permeation chromatography combined with capillary electrophoresis for microanalysis of proteins. Yamamoto H, et al. **J Chromatogr** 1989 Oct 20;480:277–83

Purification of hexabrachion (tenascin) from cell culture conditioned medium, and separation from a cell adhesion factor. Aukhil I, et al. **Matrix** 1990 May;10(2):98–111

Gel filtration. Stellwagen E. **Methods Enzymol** 1990; 182:317–28

CHROMATOGRAPHY, GEL PERMEATION see **CHROMATOGRAPHY, GEL**

CHROMATOGRAPHY, HIGH PERFORMANCE LIQUID see **CHROMATOGRAPHY, HIGH PRESSURE LIQUID**

CHROMATOGRAPHY, HIGH PRESSURE LIQUID

Determination of hopanoid levels in bacteria using high-performance liquid chromatography. Barrow KD, et al. **Anal Biochem** 1990 Feb 1;184(2):395–9

Application of high-pressure liquid chromatography to studies of collagen production by isolated cells in culture. Campa JS, et al. **Anal Biochem** 1990 May 1;186(2):257–63

Analysis of protein digests by capillary high-performance liquid chromatography and on-line fast atom bombardment mass spectrometry. Henzel WJ, et al. **Anal Biochem** 1990 Jun;187(2):228–33

Two-dimensional mapping by the high-performance liquid chromatography of oligosaccharides released from glycosphingolipids by endoglycoceramidase. Higashi H, et al. **Anal Biochem** 1990 May 1;186(2):355–62

Analysis of oligogalacturonic acids with 50 or fewer residues by high-performance anion-exchange chromatography and pulsed amperometric detection. Hotchkiss AT Jr, et al. **Anal Biochem** 1990 Feb 1;184(2):200–6

Separation of peptides dissolved in a sodium dodecyl sulfate solution by reversed-phase liquid chromatography: removal of sodium dodecyl sulfate from peptides using an ion-exchange precolumn. Kawasaki H, et al. **Anal Biochem** 1990 May 1;186(2):264–8

Development of a high-performance liquid chromatography assay method and characterization of adenosine diphosphate-ribosylarginine hydrolase in skeletal muscle. Kim ES, et al. **Anal Biochem** 1990 Jun;187(2):251–7

Direct analysis of microbial extracts containing metabolites of ethylenediamine-type antihistamines via high-performance liquid chromatography-thermospray mass spectrometry. Korfmacher WA, et al. **Anal Biochem** 1990 Feb 15;185(1):136–42

Ferrioxamine and its hexadentate iron-chelating metabolites in human post-desferal urine studied by high-performance liquid chromatography and fast atom bombardment mass spectrometry. Lehmann WD, et al. **Anal Biochem** 1990 Feb 1;184(2):219–27

Determination of dityrosine, phosphotyrosine, phosphothreonine, and phosphoserine by high-performance liquid chromatography. Malencik DA, et al. **Anal Biochem** 1990 Feb 1;184(2):353–9

Determination of reduced, oxidized, and protein-bound glutathione in human plasma with precolumn derivatization with monobromobimane and liquid chromatography. Svardal AM, et al. **Anal Biochem** 1990 Feb 1;184(2):338–46

A fluorometric assay for HIV-protease activity using high-performance liquid chromatography. Tamburini PP, et al. **Anal Biochem** 1990 May 1;186(2):363–8

Arylalkylamine (serotonin) N-acetyltransferase assay using high-performance liquid chromatography with fluorescence or electrochemical detection of N-acetyltryptamine. Thomas KB, et al. **Anal Biochem** 1990 Feb 1;184(2):228–34

High-performance liquid affinity chromatography and in situ fluorescent labeling on thin-layer chromatography of glycosphingolipids. Tomono Y, et al. **Anal Biochem** 1990 Feb 1;184(2):360–8

Fractionation of particulate glycogen and bound enzymes using high-performance liquid chromatography. Vardanis A. **Anal Biochem** 1990 May 15;187(1):115–9

A simple and sensitive method for the estimation of microbial lipase activity. Veeraragavan K. **Anal Biochem** 1990 May 1;186(2):301–5

High-performance liquid chromatographic determination of ochratoxin A and its 4R-4-hydroxy metabolite in human urine. Castegnaro M, et al. **Analyst** 1990 Feb;115(2):129–31

Determination of aprotinin by titration with bovine trypsin with end-point detection by high-performance liquid chromatography. Raspi G, et al. **Analyst** 1989 Sep; 114(9):1017–9

Determination of amodiaquine in pharmaceuticals by reaction with periodate and spectrophotometry or by high-performance liquid chromatography. Sanghi SK, et al. **Analyst** 1990 Mar;115(3):333–5

Characterization of methylation of rat liver cytosolic glutathione S-transferases by using reverse-phase h.p.l.c. and chromatofocusing. Johnson JA, et al. **Biochem J** 1990 Sep 1;270(2):483–9

Separation of rat tissue histone H1 subtypes by reverse-phase h.p.l.c. Identification and assignment to a standard H1 nomenclature. Lindner H, et al. **Biochem J** 1990 Jul 15; 269(2):359–63

Determination of malondialdehyde with chemical derivatization into the pyrimidine compound and HPLC. Kishida E, et al. **Biochim Biophys Acta** 1990 Jul 16; 1045(2):187–8

Rapid determination of the benzodiazepine antagonist flumazenil, Ro 15-1788, by high performance liquid chromatography. Bun H, et al. **Biomed Chromatogr** 1989 Nov;3(6):269–71

A reversed phase high performance liquid chromatography approach in determining total red blood cell concentrations of 6-thioguanine, 6-mercaptopurine, methylthioguanine, and methylmercaptopurine in a patient receiving thiopurine therapy. Erdmann GR, et al. **Biomed Chromatogr** 1990 Mar; 4(2):47–51

High performance ion exchange chromatography of human plasma lecithin:cholesterol acyltransferase. Holmquist L. **Biomed Chromatogr** 1989 Nov;3(6):276–8

A sensitive high performance liquid chromatography microassay for bemoradan, a novel cardiotonic agent, in plasma/serum using a semi-automatic liquid/solid extraction sample preparation system—AASP. Huang SM, et al. **Biomed Chromatogr** 1990 Mar;4(2):52–5

Simultaneous determination of some organophosphorus pesticides by high performance liquid chromatography. Kumar R. **Biomed Chromatogr** 1989 Nov;3(6):272–3

Quinidine oxidative metabolism. Identification and biosynthesis of quinidine 10,11-dihydrodiol stereoisomers. Leroyer R, et al. **Biomed Chromatogr** 1990 Mar;4(2):61–4

Rapid detection of extended ganglio-series gangliosides with terminal GalNAc beta 1-4Gal sequence on high performance thin layer chromatography plates. Müthing J, et al. **Biomed Chromatogr** 1990 Mar;4(2):70–2

A rapid method for isolation of human hemoglobin benzo[a]pyrene diol epoxide derived adducts using high performance liquid chromatography. Naylor S, et al. **Biomed Chromatogr** 1989 Nov;3(6):266–8

Multidimensional chromatographic separation of estrogen receptors. Raubenheimer J, et al. **Biomed Chromatogr** 1989 Nov;3(6):255–61

High performance liquid chromatographic separation of cisplatin and its hydrolysis products on alumina and application to studies of their interaction with cysteine. Shearan P, et al. **Biomed Chromatogr** 1990 Mar;4(2):78–82

Simultaneous analysis of furosemide and bumetanide in horse plasma using high performance liquid chromatography. Singh AK, et al. **Biomed Chromatogr** 1989 Nov;3(6):262–5

High resolution chromatography of ribonucleosides and its application to RNA analysis. Tanaka K, et al. **Biomed Chromatogr** 1989 Nov;3(6):246–50

Reversed phase high performance liquid chromatography of glycopeptides. Wang TH, et al. **Biomed Chromatogr** 1989 Nov;3(6):241–5

Identification of indole alkaloids of Catharanthus roseus with liquid chromatography/mass spectrometry using collision-induced dissociation with the thermospray ion repeller. Auriola S, et al. **Biomed Environ Mass Spectrom** 1990 Jul;19(7):400–4

Rapid analysis and purification of polymerase chain reaction products by high-performance liquid chromatography. Katz ED, et al. **Biotechniques** 1990 May;8(5):546–55

High performance liquid chromatography: principles and clinical applications. Bird IM. **BMJ** 1989 Sep 23; 299(6702):783–7 (4 ref.)

Rapid determination of total hydroxyproline (HYP) in human urine by HPLC analysis of the phenylisothiocyonate (PITC)-derivative. Lippincott S, et al. **Bone** 1989; 10(4):265–8

Liquid-chromatographic determination of amiodarone and N-desethylamiodarone in serum. Ou CN, et al. **Clin Chem** 1990 Mar;36(3):532–4

Conflicting results of liquid-chromatographic determinations of alkaline phosphatase isoenzymes [letter; comment] Schoenau E, et al. **Clin Chem** 1989 Nov;35(11):2255–7 Comment on: Clin Chem 1988 Jul;34(7):1518.

3-Methylhistidine determined in plasma by "high-performance" lipid chromatography. van Eijk HM, et al. **Clin Chem** 1990 Mar;36(3):556–9

A high performance liquid chromatography method for the analysis of 35S-cystine: application to the diagnosis of cystinosis. Hall NA, et al. **Clin Chim Acta** 1989 Sep 15; 184(1):1-5

3-Methylglutaconyl-CoA hydratase, 3-methylcrotonyl-CoA carboxylase and 3-hydroxy-3-methylglutaryl-CoA lyase deficiencies: a coupled enzyme assay useful for their detection. Narisawa K, et al. **Clin Chim Acta** 1989 Sep 15;184(1):57-64

Method for rapid separation of 3,5,3'-triiodothyroacetic acid in human serum by fast protein liquid chromatography. Duntas L, et al. **Clin Physiol Biochem** 1989;7(6):310-4

Comparison of a noninstrumented immunoassay for carbamazepine to high performance liquid chromatography and fluorescence polarization immunoassay. Cochran EB, et al. **Epilepsia** 1990 Jul-Aug;31(4):480-4

Preparative high-performance liquid chromatography of minor products of Streptomyces cinnamonensis. Beran M, et al. **Folia Microbiol (Praha)** 1990;35(2):172-5

The determination of nitrate and nitrite in cured meat by HPLC/UV. Dennis MJ, et al. **Food Addit Contam** 1990 Jul-Aug;7(4):455-61

Evaluation of an HPLC method for the determination of sulphiting agents in foods. Pizzoferrato L, et al. **Food Addit Contam** 1990 Mar-Apr;7(2):189-95

A survey using normal-phase high-performance liquid chromatography of aflatoxins in domestic and imported foods in the USSR. Tutelyan VA, et al. **Food Addit Contam** 1989 Oct-Dec;6(4):459-65

The development of a sensitive analysis for 8-hydroxy-2'-deoxyguanosine. Floyd RA. **Free Radic Res Commun** 1990;8(3):139-41

Rapid purification of radioiodinated glucagon with Sep-Pak reversed phase cartridges. Borghi VC, et al. **Horm Metab Res** 1990 Apr;22(4):256-7

13th International Symposium on Column Liquid Chromatography. Stockholm, June 25-30, 1989. Part I. **J Chromatogr** 1990 May 11;506:1-640

Determination of creatinine-related urinary uracil excretion in children by high-performance liquid chromatography. Assmann B, et al. **J Chromatogr** 1990 Feb 23;525(2):277-85

Micro-scale method for itraconazole in plasma by reversed-phase high-performance liquid chromatography. Badcock NR. **J Chromatogr** 1990 Feb 23;525(2):478-83

Analysis of human tear proteins by different high-performance liquid chromatographic techniques. Baier G, et al. **J Chromatogr** 1990 Feb 23;525(2):319-28

High-performance liquid chromatographic analysis of doxacurium, a new long-acting neuromuscular blocker. DeAngelis R, et al. **J Chromatogr** 1990 Feb 23; 525(2):389-400

Determination of tacrine and its 1-hydroxy metabolite in plasma using column liquid chromatography with ultraviolet detection. Ekman L, et al. **J Chromatogr** 1989 Sep 29;494:397-402

Determination of mizoribine in plasma using ion-pair high-performance liquid chromatography. Erdmann GR, et al. **J Chromatogr** 1989 Sep 29;494:354-60

Determination of the oximes 2-hydroxyiminomethyl-3-methyl-1-[2-(3-methyl-3-nitrobutyloxymethyl)]imidazolium chloride and 1-[1-(3-butynyloxymethyl)]-2-hydroxyiminomethyl-3-methylimida zolium chloride in plasma by high-performance liquid chromatography. Ferraris S, et al. **J Chromatogr** 1990 May 18;527(2):361-70

Sensitive high-performance liquid chromatographic assay for the determination of eugenol in body fluids. Fischer IU, et al. **J Chromatogr** 1990 Feb 23;525(2):369-77

High-performance liquid chromatographic determination of teicoplanin in plasma: comparison with a microbiological assay. Georgopoulos A, et al. **J Chromatogr** 1989 Sep 29; 494:340-6

High-performance liquid chromatography of chlorambucil prodrugs structurally related to lipids in rat plasma. Gonçalves JC, et al. **J Chromatogr** 1989 Sep 29;494:389-96

High-performance liquid and gas chromatographic methods for the determination of cicloprolol. Guinebault P, et al. **J Chromatogr** 1990 Feb 23;525(2):359-67

Stereoselective determination of plasma pindolol in endotoxin-pretreated rats by high-performance liquid chromatography. Hasegawa R, et al. **J Chromatogr** 1989 Sep 29;494:381-8

Determination of velnacrine in plasma and urine by high-performance liquid chromatography. Hsu RS, et al. **J Chromatogr** 1989 Sep 29;494:347-53

Sensitive high-performance liquid chromatographic assay for albendazole and its main metabolite albendazole sulphoxide in plasma and cerebrospinal fluid. Hurtado M, et al. **J Chromatogr** 1989 Sep 29;494:403-7

Reversed-phase high-performance liquid chromatographic assay for the determination of mezlocillin in human and rat biological samples. Jungbluth GL, et al. **J Chromatogr** 1989 Sep 29;494:376-80

Determination of the antimitotic agents N-desacetylcolchicine, demecolcine and colchicine in serum and urine. Ko RJ, et al. **J Chromatogr** 1990 Feb 23;525(2):411-8

Liquid chromatography-mass spectrometry for the qualitative analyses of iminodipeptides in the urine of patients with prolidase deficiency. Kodama H, et al. **J Chromatogr** 1990 May 18;527(2):279-88

High-performance liquid chromatographic assay of iomeprol in plasma and urine. Lorusso V, et al. **J Chromatogr** 1990 Feb 23;525(2):401-9

Determination of L-thyroxine in reference serum preparations as the o-phthalaldehyde-N-acetylcysteine derivative by reversed-phase liquid chromatography with electrochemical detection. Lovell G, et al. **J Chromatogr** 1990 Feb 23;525(2):287-96

Short-column liquid chromatographic assay for caffeine and chloramphenicol in serum. Markin RS, et al. **J Chromatogr** 1990 Feb 23;525(2):464-70

High-performance liquid chromatographic determination in human plasma of a new immunomodulatory agent with a peptidyl-hypoxanthine structure (RM 06). Montaldo PG, et al. **J Chromatogr** 1990 Feb 23;525(2):471-7

Combined high-performance liquid chromatographic-continuous-flow fast atom bombardment mass spectrometric analysis of acylcoenzyme A compounds. Norwood DL, et al. **J Chromatogr** 1990 May 18;527(2):289-301

Sensitive analysis of the mycotoxin zearalenone and its metabolites in biological fluids by high-performance liquid chromatography alpha. Prelusky DB, et al. **J Chromatogr** 1989 Sep 29;494:267-77

High-performance liquid chromatographic analysis of imidazolium and pyridinium oximes in plasma and urine. Shih ML, et al. **J Chromatogr** 1990 May 18;527(2):371-9

Determination of crotamiton in plasma and urine by high-performance liquid chromatography. Sioufi A, et al. **J Chromatogr** 1989 Sep 29;494:361-7

Automated gel permeation chromatography of plasma lipoproteins by preparative fast protein liquid chromatography. van Gent T, et al. **J Chromatogr** 1990 Feb 23;525(2):433-41

Fast reliable assay for morphine and its metabolites using high-performance liquid chromatography and native fluorescence detection. Venn RF, et al. **J Chromatogr** 1990 Feb 23;525(2):379-88

Column liquid chromatography of calcium channel blockers. Waki H, et al. **J Chromatogr** 1989 Sep 29;494:408-12

Separation and determination of sertraline and its metabolite, desmethylsertraline, in mouse cerebral cortex by reversed-phase high-performance liquid chromatography. Wiener HL, et al. **J Chromatogr** 1990 May 18;527(2):467-72

High-performance liquid chromatographic assay for timolol in the aqueous humor of the eye. Wu PY, et al. **J Chromatogr** 1989 Sep 29;494:368-75

HPLC of biopolymers, pharmaceuticals, and natural products. Yu WL, et al. **J Chromatogr Sci** 1989 Nov; 27(11):626-52

The identification of antigens in antibody/antigen complexes using high performance liquid chromatography. Wu ZW, et al. **J Immunol Methods** 1989 Nov 30;124(2):165-9

Detection of urinary TGF-alpha by HPLC and western blot in patients with melanoma. Ellis DL, et al. **J Invest Dermatol** 1990 Jul;95(1):27-30

Turnover rate of brain acetylcholine using HPLC separation of the transmitter. Bertrand N, et al. **J Neurochem** 1990 Jul;55(1):27-30

Estimation of 26-hydroxycholesterol in serum by high-performance liquid chromatography and its measurement in patients with atherosclerosis. Harik-Khan R, et al. **J Steroid Biochem** 1990 Jul 4;36(4):351-5

HPLC purification of the main allergen of Parietaria judaica pollen. Polo F, et al. **Mol Immunol** 1990 Feb;27(2):151-7

Development of a preformulation lipophilicity screen utilizing a C-18-derivatized polystyrene-divinylbenzene high-performance liquid chromatographic (HPLC) column. Lambert WJ, et al. **Pharm Res** 1990 Jun; 7(6):577-86

Extraction with methyl tert-butyl ether overcomes erratic elution patterns of 6-keto-prostaglandin F1 alpha on high pressure liquid chromatography. Noort WA, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Feb; 39(2):131-4

Determination of biological peptide leukotrienes C4 and D4 by fluorometric detection combined with high-performance liquid chromatography. Yamashita Y, et al. **Prostaglandins Leukot Essent Fatty Acids** 1990 Feb; 39(2):119-23

Comparison of analysis of digoxin in cardiac patients by HPLC and RIA. Kwong E, et al. **Res Commun Chem Pathol Pharmacol** 1990 Apr;68(1):121-4

Determination of G + C content of DNA using high-performance liquid chromatography for the identification of staphylococci and micrococci. Peyret M, et al. **Res Microbiol** 1989 Sep;140(7):467-75

A simple and sensitive determination for plasmalogen lysophosphatidylethanolamine in rabbit platelets. Morikawa S, et al. **Thromb Res** 1989 Aug 15;55(4):427-38

Clinical correlations of cyclosporine HPLC and FPIA levels in renal transplant recipients. Sridhar N, et al. **Transplant Proc** 1990 Jun;22(3):1257-9

[Application of high resolution liquid chromatography to the test of bile acid tolerance] Marotta F, et al. **G Clin Med** 1990 Jan;71(1):31-6 (Eng. Abstr.) **(Ita)**

[Determination of blood bile acids using high pressure liquid chromatography: comparison of chromatographic, enzymatic and immunoenzymatic methods] Buratti M, et al. **Med Lav** 1990 Jan-Feb;81(1):65-74 (Eng. Abstr.) **(Ita)**

[Clinical laboratory application of HPLC] Kawanishi K. **Rinsho Byori** 1990 Jan;38(1):61-4 (Eng. Abstr.) **(Jpn)**

[Role of HPLC in separation analysis in laboratory medicine] Okabe H. **Rinsho Byori** 1990 Jan;38(1):51-6 (Eng. Abstr.) **(Jpn)**

[Microcolumn exclusion HPLC of globular proteins with refractive index detection] Kever EE, et al. **Bioorg Khim** 1989 Aug;15(8):1019-21 (Eng. Abstr.) **(Rus)**

[Experience with the impression cytology test for detecting vitamin A deficiency in children] Cañete Díaz A, et al. **An Esp Pediatr** 1990 Feb;32(2):139-42 (34 ref.) (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

Automated instrumentation for comprehensive two-dimensional high-performance liquid chromatography of proteins. Bushey MM, et al. **Anal Chem** 1990 Jan 15; 62(2):161-7

Liquid chromatography/time-of-flight mass spectrometry with high-speed integrated transient recording. Emary WB, et al. **Anal Chem** 1990 Jul 1;62(13):1319-24

The Bio-Rad Diamat Analyser: an automated liquid chromatography system for haemoglobin A 1c (HbA 1c) determination. Lim GI, et al. **Ann Acad Med Singapore** 1989 Jul;18(4):357-62

Purification of supercoiled plasmids from crude cell lysates using high performance anion exchange chromatography. Merion M, et al. **Biotechniques** 1989 Jan;7(1):60-7

Polarimetric detection in high-performance liquid chromatography. Lloyd DK, et al. **Chirality** 1989; 1(4):251-64 (63 ref.)

Ceramic hydroxyapatite high-performance liquid chromatography of complexes membrane protein and sodium dodecylsulfate. Horigome T, et al. **Eur J Biochem** 1989 Dec 8;186(1-2):63-9

Determination of 75Se-labelled selenite and metabolites in plasma and urine by high-performance liquid chromatography with on-line radioactivity detection. Baldew GS, et al. **J Chromatogr** 1989 Nov 10;496(1):111-20

Sensitive, indirect photometric detector for high-performance liquid chromatography using a light-emitting diode. Berthod A, et al. **J Chromatogr** 1990 Mar 2;502(2):305-15

Modification of a Dionex System 12 ion chromatograph for sequential determination of the main components in atmospheric precipitation. Nguyen VD. **J Chromatogr** 1989 Dec 1;482(2):413-21

Interference from a Red Top Venojet tube in high-performance liquid chromatographic analysis [letter] Leslie J, et al. **Ther Drug Monit** 1989 Nov;11(6):724-5

[Determination of free catecholamines in the urine using high efficiency liquid chromatography with an electrochemical detector] Iudaev AD, et al. **Lab Delo** 1990;(3):34-8 (Eng. Abstr.) **(Rus)**

METHODS

High-performance liquid chromatographic method for simultaneous screening of the deficiencies of APRT and HPRT. Nishina T, et al. **Adv Exp Med Biol** 1989; 253A:59-65

Optimised conditions for the routine HPLC separation of nucleotides in cell extracts. Perrett D, et al. **Adv Exp Med Biol** 1989;253B:463-8

Amperometric electrochemical detection of pyrroloquinoline quinone in high-performance liquid chromatography. Bergethon PR. **Anal Biochem** 1990 May 1;186(2):324-7

Determination of methylguanidine in plasma and urine by high-performance liquid chromatography with fluorescence detection following postcolumn derivatization. Boppana VK, et al. **Anal Biochem** 1990 Feb 1;184(2):213-8

Protein estimation by the product of integrated peak area and flow rate. Buck MA, et al. **Anal Biochem** 1989 Nov 1;182(2):295-9

Metalloprotein separation and analysis by directly coupled size exclusion high-performance liquid chromatography inductively coupled plasma mass spectroscopy. Mason AZ, et al. **Anal Biochem** 1990 May 1;186(2):187-201

Amino acid analysis using 1-naphthylisocyanate as a precolumn high performance liquid chromatography derivatization reagent. Neidle A, et al. **Anal Biochem** 1989 Aug 1;180(2):291-7

A direct-injection reversed-phase liquid chromatographic micromethod for studying the kinetics of terminal reactions of tetracycline biosynthesis. Neužil J, et al. **Anal Biochem** 1989 Aug 15;181(1):125-9

A thiophilic adsorbent for the one-step high-performance liquid chromatography purification of monoclonal antibodies. Nopper B, et al. **Anal Biochem** 1989 Jul; 180(1):66-71

Large-scale preparation and characterization of N-linked glycopeptides from bovine fetuin. Rice KG, et al. **Anal Biochem** 1990 Feb 1;184(2):249-58

Determination of endogenous concentrations of N1-methylnicotinamide in human plasma and urine by high-performance liquid chromatography. Somogyi A, et al. **Anal Biochem** 1990 May 15;187(1):160-5

Determination of epsilon (gamma-glutamyl)lysine crosslink in proteins using phenylisothiocyanate derivatization and high-pressure liquid chromatographic separation. Tarcsa E, et al. **Anal Biochem** 1990 Apr;186(1):135-40

Analysis of a glucose-containing tetrasaccharide by

high-performance liquid affinity chromatography. Wang WT, et al. **Anal Biochem** 1989 Oct;182(1):48–53

Isolation of pertussis toxin subunit proteins by reverse-phase high-performance liquid chromatography and reconstitution of the holotoxin molecule. Yamakawa Y, et al. **Anal Biochem** 1990 Feb 15;185(1):176–81

Reduction of reequilibration time following gradient elution reversed-phase liquid chromatography. Cole LA, et al. **Anal Chem** 1990 Jan 1;62(1):16–21

Stereoselective determination of free warfarin concentration in protein binding equilibrium using direct sample injection and an on-line liquid chromatographic system. Shibukawa A, et al. **Anal Chem** 1990 Apr 1;62(7):712–6

Determination of glutathione in human plasma using high-performance liquid chromatography with electrochemical detection with a carbon-epoxy resin composite electrode chemically modified with cobalt phthalocyanine. Wring SA, et al. **Analyst** 1989 Dec; 114(12):1571–3

An improved cation exchange HPLC method for the measurement of serum creatinine. Guy JM, et al. **Ann Clin Biochem** 1990 May;27 (Pt 3):223–6

Automated isocratic high-performance liquid chromatography of inositol phosphate isomers. Wreggett KA, et al. **Biochem J** 1989 Sep 15;262(3):997–1000

Measurement of fibroblast collagen synthesis and degradation by reverse-phase high-pressure liquid chromatography. Campa JS, et al. **Biochem Soc Trans** 1989 Dec;17(6):1127–8

Chemiluminescence detection in flow systems. **Biomed Chromatogr** 1990 May;4(3):92–134

Continuous flow determination of nitrite with membrane separation/chemiluminescence detection. Aoki T. **Biomed Chromatogr** 1990 May;4(3):128–30

Determination of urinary tryptophan and its metabolites along the nicotinic acid pathway by high performance liquid chromatography with ultraviolet detection. Bizzarri M, et al. **Biomed Chromatogr** 1990 Jan;4(1):24–7

The determination of total and unbound midazolam in human plasma. A comparison of high performance liquid chromatography, gas chromatography and gas chromatography/mass spectrometry. de Vries JX, et al. **Biomed Chromatogr** 1990 Jan;4(1):28–33

Rapid quantitative determination of epirubicin and its metabolites in plasma using high performance liquid chromatography and fluorescence detection. Dine T, et al. **Biomed Chromatogr** 1990 Jan;4(1):20–3

Low-level interferences in peroxyoxalate chemiluminescence. Gooijer C, et al. **Biomed Chromatogr** 1990 May;4(3):92–5 (7 ref.)

Analysis of drug in tissue homogenates by high performance liquid chromatography with direct injection and column switching. Imai H, et al. **Biomed Chromatogr** 1989 Sep; 3(5):192–5

Studies on the effects of imidazole on the peroxyoxalate chemiluminescence detection system for high performance liquid chromatography. Imai K, et al. **Biomed Chromatogr** 1990 May;4(3):100–4

Determination of nitrated pyrenes and their derivatives by high performance liquid chromatography with chemiluminescence detection after online electrochemical reduction. Imaizumi N, et al. **Biomed Chromatogr** 1990 May;4(3):108–12

Determination of fluorescent cyanobenz[f]isoindole derivatives of dopamine and norepinephrine using high performance liquid chromatography with chemiluminescence detection. Kawasaki T, et al. **Biomed Chromatogr** 1990 May;4(3):113–8

Determination of estriol and creatinine in urine by high performance liquid chromatography. Ke L, et al. **Biomed Chromatogr** 1989 Sep;3(5):196–8

A new method for the quantitation of aflatoxin M1 in urine by high performance liquid chromatography and its application to the etiologic study of hepatoma. Liu ZH, et al. **Biomed Chromatogr** 1990 Mar;4(2):83–6

Isolation of glycoprotein D from herpes simplex virus type 1 by gel filtration high performance liquid chromatography. McGarry TJ, et al. **Biomed Chromatogr** 1989 Sep;3(5):221–5

Determination of lipid hydroperoxides in low density lipoprotein from human plasma using high performance liquid chromatography with chemiluminescence detection. Miyazawa T, et al. **Biomed Chromatogr** 1990 May; 4(3):131–4

Evaluation of pyrimido[5,4-d]pyrimidine derivatives as peroxyoxalate chemiluminescence reagents using a flow injection system. Nakashima K, et al. **Biomed Chromatogr** 1990 May;4(3):105–7

High performance liquid chromatography determination of cyanide in urine by pre-column fluorescence derivatization. Sano A, et al. **Biomed Chromatogr** 1989 Sep;3(5):209–12

Application of high performance liquid chromatography combined with diode-array detection for analysis of proteins and peptides in human cerebrospinal fluid. Silberring J, et al. **Biomed Chromatogr** 1989 Sep;3(5):203–8

A chemiluminometric method for NADPH and NADH using a two-enzyme bioreactor and its application to the determination of magnesium in serum. Tabata M, et al. **Biomed Chromatogr** 1990 May;4(3):123–7

Application of reversed phase high performance liquid chromatography to the analysis of sulphidopeptide leukotrienes in pig bile. Tagari P, et al. **Biomed Chromatogr** 1990 Jan;4(1):39–42

Chemiluminescence high performance liquid chromatography of corticosteroids using lucigenin as post-column reagent. Takeda M, et al. **Biomed Chromatogr** 1990 May;4(3):119–22

High performance liquid chromatography of biological polyamines using immobilized enzyme as post-column reactor followed by electrochemical detection. Watanabe N, et al. **Biomed Chromatogr** 1989 Sep;3(5):187–91

Optimization of an isocratic reversed phase liquid chromatographic system for the separation of fourteen steroids using factorial design and computer simulation. Wei JQ, et al. **Biomed Chromatogr** 1990 Jan;4(1):34–8

Studies on the metabolism of lappaconitine in humans. Identification of the metabolites of lappaconitine in human urine by high performance liquid chromatography. Xie FM, et al. **Biomed Chromatogr** 1990 Jan;4(1):43–6

High resolution purification of DNA restriction fragments using HPLC. Merion M, et al. **Biotechniques** 1988 Mar; 6(3):246–8, 251

Validated HPLC procedures for the analysis of MBY-28090 in human plasma and urine. Gaver RC, et al. **Cancer Chemother Pharmacol** 1989;25(3):195–201

Efficient method for the isolation by HPLC, of a major metabolite of the carcinogen 2-amino-3-methylimidazo [4,5-f]quinoline (IQ), the 5-hydroxy derivative. Vavrek MT, et al. **Cancer Lett** 1990 May 15;51(1):79–83

Assay of methylmalonyl CoA mutase with high-performance liquid chromatography. Kikuchi M, et al. **Clin Chim Acta** 1989 Oct 16;184(3):307–13

Selective determination of hydroxyproline in urine by high-performance liquid chromatography using precolumn derivatization. Teerlink T, et al. **Clin Chim Acta** 1989 Aug 31;183(3):309–15

High resolution high performance liquid chromatography fingerprinting of purified human chorionic gonadotropin demonstrates that oxidation is a cause of hormone heterogeneity. Pollak S, et al. **Endocrinology** 1990 Jan; 126(1):199–208

Changes of several adrenal delta 4-steroids measured by HPLC-UV spectrometry in neonatal patients with congenital adrenal hyperplasia due to 21-hydroxylase deficiency. Saisho S, et al. **Horm Res** 1990;33(1):27–34

A SepPak HPLC method for tricyclic antidepressant drugs in human vitreous humor. Evenson MA, et al. **J Anal Toxicol** 1989 Nov-Dec;13(6):322–5

Fast determination of demeton-S-methylsulfoxide (Metasystox R) in blood plasma. Gellhaus H, et al. **J Anal Toxicol** 1989 Nov-Dec;13(6):330–2

Simultaneous high-performance liquid chromatographic analysis of hippuric acid and ortho-, meta-, and para-methylhippuric acids in urine. Tardif R, et al. **J Anal Toxicol** 1989 Nov-Dec;13(6):313–6

Optimization of an HPLC peroxyoxalate chemiluminescence detection system fo; some dansyl amino acids. Baeyens W, et al. **J Biolumin Chemilumin** 1990 Jan-Mar;5(1):13–23

On the mechanism of peroxyoxalate chemiluminescence. Quenched chemiluminescence as a detection method in HPLC. Gooijer C, et al. **J Biolumin Chemilumin** 1989 Jul; 4(1):479–83

Chemiluminescence in HPLC. Imai K, et al. **J Biolumin Chemilumin** 1989 Jul;4(1):500–4 (3 ref.)

Detection of chemiluminescence in lipid peroxidation of biological systems and its application to HPLC. Miyazawa T, et al. **J Biolumin Chemilumin** 1989 Jul;4(1):475–8

Supercritical fluid chromatography. **J Chromatogr** 1990 Apr 25;505(1):1–305

On-line combination of dialysis and column-switching liquid chromatography as a fully automated sample preparation technique for biological samples. Determination of nitrofuran residues in edible products. Aerts MM, et al. **J Chromatogr** 1990 Feb 2;500:453–68

Simultaneous measurement of acetylcholine and dopamine releases in rat striatum under freely moving conditions with a brain dialysis method. Ajima A, et al. **J Chromatogr** 1989 Sep 29;494:297–302

Liquid chromatographic investigation of quinoxaline antibiotics and their analogues by means of ultraviolet diode-array detection. Alfredson TV, et al. **J Chromatogr** 1990 May 16;507:277–92

Transient changes of mobile phase in the high-performance liquid chromatographic separation of priority pollutant phenols. Andrés MD, et al. **J Chromatogr** 1990 May 16; 507:399–402

Measurement of D-tubocurarine chloride in human urine using solid-phase extraction and reversed-phase high-performance liquid chromatography with ultraviolet detection. Annan RS, et al. **J Chromatogr** 1990 Mar 16; 526(1):228–34

High-performance liquid chromatography of amino acids, peptides and proteins. XCV. Thermodynamic and kinetic investigations on rigid and soft affinity gels with varying particle and pore sizes: comparison of thermodynamic parameters and the adsorption behaviour of proteins evaluated from bath and frontal analysis experiments. Anspach FB, et al. **J Chromatogr** 1990 Jan 19;499:103–24

Determination of plasma homovanillic acid by column liquid chromatography with electrochemical detection. Aravagiri M, et al. **J Chromatogr** 1990 Feb 23;525(2):419–25

Simple isocratic high-performance liquid chromatographic method for measuring pyridoxine kinase activity in crude biological extracts. Argoudelis CJ. **J Chromatogr** 1990 Mar 16;526(1):25–33

Effect of alcohol chain length, concentration and polarity on separations in high-performance liquid chromatography using bonded cyclodextrin columns. Atamna IZ, et al. **J Chromatogr** 1990 Jan 19;499:477–88

Characterization of reversed-phase high-performance liquid chromatographic stationary phases using ribonuclease A. Aubel MT, et al. **J Chromatogr** 1990 Jan 12;498(2):281–91

Use of column switching for the determination of niacinamide in compound feed. Balschukat D, et al. **J Chromatogr** 1990 Feb 21;502(1):79–85

High-performance liquid chromatographic method for the quantification of several diamidine compounds with potential chemotherapeutic value. Berger BJ, et al. **J Chromatogr** 1989 Sep 29;494:191–200

Modified high-performance liquid chromatographic determination of diamine oxidase activity in plasma. Biondi PA, et al. **J Chromatogr** 1990 May 16;507:333–7

High-performance liquid chromatographic determination of an arginine-containing octapeptide antagonist of vasopressin in human plasma by means of a selective post-column reaction with fluorescence detection. Boppana VK, et al. **J Chromatogr** 1990 May 16;507:79–84

Alumina as stationary phase for ion chromatography and column-coupling techniques. Buchberger W, et al. **J Chromatogr** 1989 Dec 1;482(2):401–6

High-performance liquid chromatographic assay for trimetrexate in human plasma. Bullen WW, et al. **J Chromatogr** 1990 Mar 16;526(1):266–72

Characterization of a reversed-phase high-performance liquid chromatographic system for the determination of blood amino acids. Buzzigoli G, et al. **J Chromatogr** 1990 May 16;507:85–93

Purification of core salt-extracted E. coli 30S ribosomal proteins by high-performance liquid chromatography under non-denaturing conditions. Cachia C, et al. **J Chromatogr** 1990 Jan 12;498(2):417–22

Solid-surface room-temperature phosphorescence detection for high-performance liquid chromatography. Campiglia AD, et al. **J Chromatogr** 1990 May 25;508(1):37–49

Proposal for the standardization of the calibration method for the assay of plasma catecholamines. Candito M, et al. **J Chromatogr** 1990 Mar 16;526(1):194–202

Separation and determination of molecular species of phosphatidylcholine in biological samples by high-performance liquid chromatography. Cantafora A, et al. **J Chromatogr** 1990 May 16;507:339–49

High-performance liquid chromatographic assay for nizatidine, a new H2 blocker, in human plasma and urine using disposable solid-phase extraction columns. Carlucci G. **J Chromatogr** 1990 Feb 23;525(2):490–4

High-performance liquid chromatographic method for analysis of 2',3'-dideoxyinosine in human body fluids. Carpen ME, et al. **J Chromatogr** 1990 Mar 16;526(1):69–75

Investigation of the stability of 5-aminosalicylic acid in tablets and suppositories by high-performance liquid chromatography. Cendrowska I, et al. **J Chromatogr** 1990 Jun 15;509(1):195–9

High-performance liquid chromatographic determination of a cysteine protease inhibitor and its ethyl ester in mouse serum and muscle by pre-column fluorescence derivatization. Chao WF, et al. **J Chromatogr** 1990 Mar 16;526(1):77–86

High-performance liquid chromatographic method for a clozapine analogue, CGS 13429, and its N-oxide and desmethyl metabolites. Chovan JP, et al. **J Chromatogr** 1989 Sep 29;494:413–9

Comparison of high-performance liquid chromatography and the Abbott fluorescent polarization radioimmunoassay in the measurement of methotrexate. Cosolo W, et al. **J Chromatogr** 1989 Sep 29;494:201–8

Determination of warfarin in drinking water by high-performance liquid chromatography after solid-phase extraction. Dalbacke J, et al. **J Chromatogr** 1990 May 16; 507:381–7

Determination of nomifensine in rat brain by high-performance liquid chromatography with fluorescence detection. D'Aranno V, et al. **J Chromatogr** 1990 Jan 26;525(1):234–9

Encainide and metabolites analysis in serum or plasma using a reversed-phase high-performance liquid chromatographic technique. Dasgupta A, et al. **J Chromatogr** 1990 Mar 16;526(1):260–5

Optimization of the postcolumn hydrolysis reaction on solid phases for the routine high-performance liquid chromatographic determination of N-methylcarbamate pesticides in food products. De Kok A, et al. **J Chromatogr** 1990 May 16;507:459–72

High-performance liquid chromatographic determination of etretinate and all-trans- and 13-cis-acitretin in human plasma. De Leenheer AP, et al. **J Chromatogr** 1990 Feb 2;500:637–42

High-performance liquid chromatographic determination of 3',5'-cyclic adenosine monophosphate in human platelets. DePetrillo PB, et al. **J Chromatogr** 1990 May 18; 527(2):421–7

DryLab computer simulation for high-performance liquid chromatographic method development. II. Gradient elution. Dolan JW, et al. **J Chromatogr** 1989 Dec 27; 485:91–112 (21 ref.)

Factors influencing the performance of peptide mapping by reversed-phase high-performance liquid chromatography. Dong MW, et al. **J Chromatogr** 1990 Jan 19;499:125–39

Determination of inorganic anions by flow injection analysis

and high-performance liquid chromatography combined with photolytic-electrochemical detection. Dou L, et al. **J Chromatogr** 1990 Jan 19;499:685-97

Rapid and simple high-performance liquid chromatographic determination of saliva antipyrine for routine antipyrine test [letter] Echizen H, et al. **J Chromatogr** 1990 Mar 16; 526(1):296-9

Unexpected elution behaviour of peptides with various reversed-phase columns. Engelhardt H, et al. **J Chromatogr** 1990 Jan 19;499:165-75

High-performance liquid chromatographic measurement of (R)-4-[3-[(2-hydroxy-2-phenethyl)amino]-3-methylbutyl]benzamide monohydrochloride (LY195448) and its p-hydroxy metabolite in human plasma and urine. Engineer MS, et al. **J Chromatogr** 1990 May 18; 527(2):473-80

Comparison between two methods for the determination of the total and free (R)- and (S)-disopyramide in plasma using an alpha 1-acid glycoprotein column. Enquist M, et al. **J Chromatogr** 1989 Sep 29;494:143-56

Use of high-performance liquid chromatography in the pharmaceutical industry. Erni F. **J Chromatogr** 1990 May 16;507:141-9 (22 ref.)

High-performance liquid chromatographic method for the simultaneous assay of a new synthetic penem molecule and its salt-forming agent in injectable formulations. Farina M, et al. **J Chromatogr** 1990 May 16;507:171-6

Separation of spermidine derivatives by reversed-phase high-performance liquid chromatography using a UV-absorbing counter ion. Fransson B, et al. **J Chromatogr** 1990 May 25;508(1):229-31

Dihydrotestosterone binding capacity of androgen-binding protein in tissue extract using high-performance size exclusion chromatography. Frémont S, et al. **J Chromatogr** 1990 Mar 16;526(1):186-93

Separation and determination of lanatosides in Digitalis lanata leaves by high-performance liquid chromatography. Fujii Y, et al. **J Chromatogr** 1990 May 25;508(1):241-6

Appraisal of four pre-column derivatization methods for the high-performance liquid chromatographic determination of free amino acids in biological materials. Fürst P, et al. **J Chromatogr** 1990 Jan 19;499:557-69

Optimization of electrochemical detection in the high-performance liquid chromatography of lignin phenolics from lignocellulosic by-products. Galletti GC, et al. **J Chromatogr** 1990 May 16;507:439-50

High-performance liquid chromatographic determination of aliphatic thiols with aroylacrylic acids as fluorogenic precolumn derivatization reagents. Gatti R, et al. **J Chromatogr** 1990 May 16;507:451-8

Use of polymeric sorbents for the off-line preconcentration of priority pollutant phenols from water for high-performance liquid chromatographic analysis. Gawdzik B, et al. **J Chromatogr** 1990 Jun 15;509(1):135-40

High-performance liquid chromatographic determination of the mucoregulatory drug CO/1408 in rat plasma and urine. Girometta MA, et al. **J Chromatogr** 1990 May 16; 507:227-34

Simultaneous determination of desferrioxamine and ferrioxamine by high-performance liquid chromatography with amperometric detection. Glennon JD, et al. **J Chromatogr** 1990 May 18;527(2):481-9

Determination of a new anti-allergenic agent, 1-[4-[3-[4-[bis-(4-fluorophenyl)hydroxymethyl]-1-piperidinyl] propoxy]-3-methoxyphenyl]ethanone, and its active acidic metabolite in plasma by high-performance liquid chromatography. Greene SV, et al. **J Chromatogr** 1990 May 18;527(2):397-405

Rapid identification and determination of herbicolin A and B by high-performance liquid chromatography. Greiner M, et al. **J Chromatogr** 1990 Mar 2;502(2):437-42

Simultaneous determination of pyrimethamine and mefloquine in human plasma by high-performance liquid chromatography with ultraviolet detection. Guenzi A, et al. **J Chromatogr** 1989 Sep 29;494:219-30

Development and validation of a high-performance liquid chromatographic method for the determination of desmosines in tissues. Guida E, et al. **J Chromatogr** 1990 May 16;507:51-7

Determination of mephenesin in plasma by high-performance liquid chromatography with fluorimetric detection. Guinebault P, et al. **J Chromatogr** 1990 May 16;507:221-5

High-performance liquid chromatographic determination of selected amino acids in rat brain by precolumn derivatization with phenylisothiocyanate. Gunawan S, et al. **J Chromatogr** 1990 Mar 9;503(1):177-87

Isolation of toxic polychlorinated biphenyls by electron donor-acceptor high-performance liquid chromatography on a 2-(1-pyrenyl)ethyldimethylsilylated silica column. Haglund P, et al. **J Chromatogr** 1990 May 16;507:389-98

Evaluation of photometric high-performance liquid chromatographic data for the determination of benflurone metabolites in biological materials with and without concomitant use of a standard. Hais IM, et al. **J Chromatogr** 1990 Feb 2;500:643-53

Improved sample preparation method for high-performance liquid chromatography of deoxyribonucleoside triphosphates from cell culture extracts. Harmenberg J, et al. **J Chromatogr** 1990 May 25;508(1):75-9

High-performance liquid chromatographic determination of five widespread flavonoid aglycones. Hasler A, et al. **J Chromatogr** 1990 May 25;508(1):236-40

Determination of phosphonoformic acid in human plasma and urine by high-performance liquid chromatography with electrochemical detection. Hassanzadeh MK, et al. **J Chromatogr** 1990 Jan 26;525(1):133-40

Application of a computer-assisted high-performance liquid chromatographic multi-wavelength ultraviolet detection system to simultaneous toxicological drug analyses. Hayashida M, et al. **J Chromatogr** 1990 May 11;506:133-43

Determination of quinonoid dihydrobiopterin by high-performance liquid chromatography and electrochemical detection. Heales S, et al. **J Chromatogr** 1989 Sep 29;494:77-85

Physicochemical studies of biologically active peptides by low-temperature reversed-phase high-performance liquid chromatography. Henderson DE, et al. **J Chromatogr** 1990 Jan 19;499:79-88

Determination of purine compounds by ion-pair microbore high-performance liquid chromatography: application to ischemic rat kidney mitochondria. Henke W, et al. **J Chromatogr** 1990 May 18;527(2):498-501

Studies on the uptake of N-methylisoquinolinium ion into rat striatal slices using high-performance liquid chromatography with fluorimetric detection. Hirata Y, et al. **J Chromatogr** 1990 Mar 9;503(1):189-95

Quantification of L-3-(3-hydroxy-4-pivaloyloxyphenyl)alanine (NB-355) by high-performance liquid chromatography using o-phthalaldehyde/N-acetyl-L-cysteine derivatization. Hisaka A, et al. **J Chromatogr** 1989 Sep 29;494:183-9

Catecholamine measurements in urine by high-performance liquid chromatography with amperometric detection—comparison with an autoanalyser fluorescence method. Hjemdahl P, et al. **J Chromatogr** 1989 Sep 29; 494:53-66

High-performance liquid chromatography of proteins on deformed non-porous agarose beads. Fast boronate affinity chromatography of haemoglobin at neutral pH. Hjertén S, et al. **J Chromatogr** 1990 Feb 2;500:543-53

High-performance liquid chromatography of amino acids, peptides and proteins. XCVII. The influence of the gradient elution mode and displacer salt type on the retention properties of closely related protein variants separated by high-performance anion-exchange chromatography. Hodder AN, et al. **J Chromatogr** 1990 May 11;506:17-34

On-line high-performance liquid chromatography for the determination of cephalosporin C and by-products in complex fermentation broths. Holzhauer-Rieger K, et al. **J Chromatogr** 1990 Jan 19;499:609-15

Identification and determination of sulphamethazine and N4-acetylsulphamethazine in meat by high-performance liquid chromatography with photodiode-array detection. Horie M, et al. **J Chromatogr** 1990 Mar 2;502(2):371-8

Preparative high-performance liquid chromatography using detection by thermospray mass spectrometry. Hsu FF, et al. **J Chromatogr** 1989 Sep 15;478(2):429-32

Rapid high-performance liquid chromatographic method for the determination of oxolinic acid in fish serum employing solid-phase extraction. Hustvedt SO, et al. **J Chromatogr** 1989 Sep 29;494:335-9

High-performance liquid chromatographic determination of cis-N-(1-benzyl-2-methylpyrrolidin-3-yl)-5-chloro-2-methoxy-4- methylaminobenzamide in rat blood and brain using electrochemical detection. Imamura Y, et al. **J Chromatogr** 1990 Mar 16;526(1):282-8

High-performance liquid chromatographic assay of rifampicin in human serum. Jamaluddin AB, et al. **J Chromatogr** 1990 Feb 23;525(2):495-7

Solid-phase extraction on silica cartridges as an aid to platelet-activating factor enrichment and analysis. Janero DR, et al. **J Chromatogr** 1990 Mar 16;526(1):11-24

Determination of navelbine and desacetylnavelbine in biological fluids by high-performance liquid chromatography. Jehl F, et al. **J Chromatogr** 1990 Jan 26; 525(1):225-33

High-performance liquid chromatographic method for the determination of carazolol in serum or plasma of pigs. Kadir F, et al. **J Chromatogr** 1990 May 18;527(2):461-6

Determination of creatinine in serum by high-performance liquid chromatography: a comparison of three ion-exchange methods. Kågedal B, et al. **J Chromatogr** 1990 Apr 27;527(1):21-30

Micropellicular stationary phases for rapid protein analysis by high-performance liquid chromatography. Kalghatgi K. **J Chromatogr** 1990 Jan 19;499:267-78

Simultaneous determination of ginsenosides and saikosaponins by high-performance liquid chromatography. Kanazawa H, et al. **J Chromatogr** 1990 May 16;507:327-32

Determination of (R)- and (S)-propranolol in plasma by high-performance liquid chromatography using N-benzoxycarbonylglycyl-L-proline as chiral selector in the mobile phase. Karlsson A, et al. **J Chromatogr** 1989 Sep 29;494:157-71

Reversed-phase high-performance liquid chromatography of proteins and peptides on a pellicular support based on hydrophilic resin. Kato Y, et al. **J Chromatogr** 1990 Mar 2;502(2):416-22

High-performance liquid chromatographic assay for cefotiam and d3-cefotiam in human serum. Kees F, et al. **J Chromatogr** 1990 Feb 23;525(2):484-9

Measurement of methionine enkephalin and leucine enkephalin in rat brain regions by high-performance liquid chromatography with coulometric electrochemical detection. Kim C, et al. **J Chromatogr** 1989 Sep 29; 494:67-76

High-performance liquid chromatography of the drug fosenopril. Kirschbaum J, et al. **J Chromatogr** 1990 May 16;507:165-70

High-performance liquid chromatographic analysis of the enantiomers of flurbiprofen and its metabolites in plasma and urine. Knadler MP, et al. **J Chromatogr** 1989 Sep 29; 494:173-82

Sensitive analysis of plasma physostigmine levels using dual-cell electrochemistry in the redox mode. Knapp S, et al. **J Chromatogr** 1990 Mar 16;526(1):97-107

High-performance liquid chromatographic procedure for the determination of rat plasma concentrations of a new antibacterial agent, (+-)-9-fluoro-6,7-dihydro-8-(4-hydroxy-1-piperidyl)-5-methyl-1-oxo-1H,5H- benzo[i,j]quinolizine-2-carboxylic acid, for topical use. Koike M, et al. **J Chromatogr** 1990 Mar 16;526(1):235-9

High-performance liquid chromatographic determination of etilefrine in human plasma using combined solid-phase and organic solvent extraction and electrochemical detection. Kojima K, et al. **J Chromatogr** 1990 Jan 26;525(1):210-7

Improved high-performance liquid chromatographic method for analysis of cyclosporin A using an automated sample processor. Lachno DR, et al. **J Chromatogr** 1990 Jan 26; 525(1):123-32

Simultaneous quantification of zidovudine and its metabolites in serum and urine by high-performance liquid chromatography using a column-switching technique. Lacroix C, et al. **J Chromatogr** 1990 Jan 26;525(1):240-5

Supercritical fluid chromatography with light-scattering detection. I. Preliminary results of the analysis of polar compounds with packed columns. Lafosse M, et al. **J Chromatogr** 1990 Apr 25;505(1):191-7

Determination of ditekiren, a renin inhibitor peptide, in monkey serum using high-performance liquid chromatography with solid-phase extraction. Lakings DB, et al. **J Chromatogr** 1990 Mar 16;526(1):273-81

Quantitative determination of cholesterol in liposome drug products and raw materials by high-performance liquid chromatography. Lang JK. **J Chromatogr** 1990 May 16; 507:157-63

Simultaneous determination of physostigmine and tetrahydroaminoacridine in a transdermal permeation study by high-performance liquid chromatography. Lau SW, et al. **J Chromatogr** 1990 Mar 16;526(1):87-95

Simultaneous analysis of theophylline, caffeine and eight of their metabolic products in human plasma by gradient high-performance liquid chromatography. Leakey TE. **J Chromatogr** 1990 May 16;507:199-220

Measurement of urinary free catecholamines using high-performance liquid chromatography with electrochemical detection. Lee BL, et al. **J Chromatogr** 1989 Sep 29;494:303-9

Hippuric acid and 3-carboxy-4-methyl-5-propyl-2-furanpropionic acid in serum and urine. Analytical approaches and clinical relevance in kidney diseases. Liebich HM, et al. **J Chromatogr** 1990 Feb 2;500:615-27

Reversed-phase chromatographic behavior of proteins in different unfolded states. Lin SW, et al. **J Chromatogr** 1990 Jan 19;499:89-102

High-performance adsorption chromatography of transfer ribonucleic acids and proteins on 2-microns spherical beads of hydroxyapatite. Influence of sodium chloride and magnesium ions on the resolution. Lindeberg J, et al. **J Chromatogr** 1990 Jan 19;499:153-63

High-performance liquid chromatography of levomepromazine (methotrimeprazine) and its main metabolites. Loennechen T, et al. **J Chromatogr** 1990 Mar 9;503(1):205-15

Rapid high-performance liquid chromatography of nucleic acids with polystyrene-based micropellicular anion exchangers. Maa YF, et al. **J Chromatogr** 1990 May 25; 508(1):61-73

High-performance liquid chromatography of insulin. Accessibility and flexibility. McLeod AN, et al. **J Chromatogr** 1990 Mar 2;502(2):325-36

Reversed-phase chromatographic method development for peptide separations using the computer simulation program ProDigest-LC. Mant CT, et al. **J Chromatogr** 1989 Dec 27;485:365-82

Development of an automated high-performance liquid chromatographic method for the on-line pre-concentration and determination of trace concentrations of pesticides in drinking water. Marvin CH, et al. **J Chromatogr** 1990 Mar 9;503(1):167-76

High-performance liquid chromatographic assay of ampicillin and its prodrug lenampicillin. Marzo A, et al. **J Chromatogr** 1990 May 16;507:235-9

Determination of aliphatic amines by gas and high-performance liquid chromatography. Marzo A, et al. **J Chromatogr** 1990 May 16;507:241-5

Simultaneous high-performance liquid chromatographic determination of norepinephrine, serotonin, acetylcholine and their metabolites in the cerebrospinal fluid of anaesthetized normotensive rats. Matsumoto M, et al. **J Chromatogr** 1990 Mar 16;526(1):1-10

Analytical studies on beta-lactam antibiotics. III. Automated high-performance liquid chromatographic method for the determination of the orally active antibiotic ceftibuten in

human plasma and urine. Matsuura A, et al. **J Chromatogr** 1989 Sep 29;494:231–45

Determination of mepindolol in plasma after transdermal drug delivery by high–performance liquid chromatography with electrochemical detection. Meineke I, et al. **J Chromatogr** 1990 Mar 16;526(1):240–5

Determination of biopolymer (protein) molecular weights by gradient elution, reversed–phase high–performance liquid chromatography with low–angle laser light scattering detection. Mhatre R, et al. **J Chromatogr** 1990 Feb 21; 502(1):21–46

Estimation of the reversed–phase liquid chromatographic lipophilicity parameter log k'w using ET–30 solvatochromism. Michels JJ, et al. **J Chromatogr** 1990 Jan 19;499:435–51

Determination of manidipine and its pyridine metabolite in human serum by high–performance liquid chromatography with ultraviolet detection and column switching. Miyabayashi T, et al. **J Chromatogr** 1989 Sep 29;494:209–17

Determination of penicillin G in milk by high–performance liquid chromatography with automated liquid chromatographic cleanup. Moats WA. **J Chromatogr** 1990 May 16;507:177–85

Determination of a new calcium antagonist, sesamodil fumarate (SD–3211), and its metabolite in plasma by liquid chromatography with electrochemical detection. Morishima K, et al. **J Chromatogr** 1990 May 18; 527(2):381–8

Direct injection of highly protein–bound compounds by column–switching high–performance liquid chromatography. Morita I, et al. **J Chromatogr** 1990 Apr 27;527(1):127–33

Ion mobility detection of polydimethylsilicone oligomers following supercritical fluid chromatographic separation. Morrissey MA, et al. **J Chromatogr** 1990 Apr 25; 505(1):215–25

Assay of the optical isomers of methamphetamine and amphetamine in rat urine using high–performance liquid chromatography with chiral cellulose–based columns. Nagai T, et al. **J Chromatogr** 1990 Jan 26;525(1):203–9

High–performance liquid chromatographic determination of zinc pyrithione in antidandruff preparations based on copper chelate formation. Nakajima K, et al. **J Chromatogr** 1990 Mar 2;502(2):379–84

Measurement of the formation of a thioglucuronide, a metabolite of malotilate, in rat hepatic microsomes by high–performance liquid chromatography. Nakaoka M, et al. **J Chromatogr** 1990 Mar 16;526(1):254–9

Endogenous levels of beta–carotene in human buccal mucosa cells by reversed–phase high–performance liquid chromatography. Newcomb SA, et al. **J Chromatogr** 1990 Mar 16;526(1):47–58

Determination of remoxipride in plasma and urine by reversed–phase column liquid chromatography. Nilsson LB. **J Chromatogr** 1990 Mar 16;526(1):139–50

High–performance liquid chromatography of serum albumins on an N–methylpyridinium polymer–based column. Nishimura K, et al. **J Chromatogr** 1990 Jan 26;525(1):176–82

Determination of an oxadiazole–substituted 1,4–benzodiazepine in plasma by high–performance liquid chromatography with ultraviolet detection and by a radioreceptor assay. Nordholm L, et al. **J Chromatogr** 1989 Sep 29;494:257–65

Determination of mitomycin C in serum by high–performance liquid chromatography with dual–electrode coulometric detection. Ohkubo T, et al. **J Chromatogr** 1990 May 18;527(2):441–6

Analysis of zaprinast in rat and human plasma by automated solid–phase extraction and reversed–phase high–performance liquid chromatography. Picot VS, et al. **J Chromatogr** 1990 May 18;527(2):454–60

Stereospecific high–performance liquid chromatographic assay of acebutolol in human plasma and urine. Piquette–Miller M, et al. **J Chromatogr** 1990 Mar 16; 526(1):129–37

Determination of tauromustine and its demethylated metabolites in plasma and urine. Polacek J, et al. **J Chromatogr** 1990 Mar 16;526(1):151–7

Optimization of multidimensional high–performance liquid chromatography for the determination of drugs in plasma by direct injection, micellar cleanup and photodiode array detection. Posluszny JV, et al. **J Chromatogr** 1990 May 16;507:267–76

Direct serum injection high–performance liquid chromatographic method for the simultaneous determination of phenobarbital, carbamazepine and phenytoin. Rainbow SJ, et al. **J Chromatogr** 1990 May 18; 527(2):389–96

High–performance liquid chromatographic method for the determination of aprotinin in body fluids. Raspi G, et al. **J Chromatogr** 1990 Feb 23;525(2):426–32

High–performance liquid chromatographic determination of propylthiouracil in plasma. Rosseel MT, et al. **J Chromatogr** 1990 May 16;507:247–51

Direct enantiomeric separation of saterinone by high–performance liquid chromatography. Rudolph M. **J Chromatogr** 1990 Jan 26;525(1):161–8

Measurement of ibuprofen in human whole blood by reversed–phase ion–paired high–performance liquid chromatography using a pH–stable polymeric column. Rustum AM. **J Chromatogr** 1990 Mar 16;526(1):246–53

Modified high–performance liquid chromatographic assay for antipyrine and its three major metabolites in urine. St. Peter JV, et al. **J Chromatogr** 1989 Sep 29;494:424–7

Detection of lyso–platelet–activating factor by high–performance liquid chromatography after derivatisation with fluorescent fatty acids. Salari H, et al. **J Chromatogr** 1990 May 18;527(2):303–14

Microassay for the simultaneous determination of cocaine, norcocaine, benzoylecgonine and benzoylnorecgonine by high–performance liquid chromatography. Sandberg JA, et al. **J Chromatogr** 1990 Jan 26;525(1):113–21

High–performance size–exclusion chromatography and molar mass measurement by low–angle laser light scattering of recombinant yeast–derived human hepatitis B virus surface antigen vaccine particles. Sato Y, et al. **J Chromatogr** 1990 May 16;507:25–31

Simultaneous determination of propranolol and 4–hydroxypropranolol enantiomers after chiral derivatization using reversed–phase high–performance liquid chromatography. Schaefer HG, et al. **J Chromatogr** 1990 May 18;527(2):351–9

Simplified method for the determination of atracurium and laudanosine in pig plasma by high–performance liquid chromatography and fluorimetric detection. Schopfer C, et al. **J Chromatogr** 1990 Mar 16;526(1):223–7

Lanthanide luminescence quenching as a detection method in ion chromatography. Chromate in surface and drinking water. Schreurs M, et al. **J Chromatogr** 1989 Dec 1; 482(2):351–9

Determination of nicorandil in plasma using high–performance liquid chromatography with photoconductivity and ultraviolet detection. Application to pre–clinical pharmacokinetics in beagle dogs. Schwende FJ, et al. **J Chromatogr** 1990 Jan 26;525(1):151–60

Simultaneous determination of flurazepam and its metabolites in human plasma by high–performance liquid chromatography. Selinger K, et al. **J Chromatogr** 1989 Sep 29;494:247–56

Effect of stationary and mobile phases on hydrophobic interaction chromatography of proteins and peptides. Smith JA, et al. **J Chromatogr** 1989 Nov 10;496(1):71–82

Determination of sixteen nucleotides, nucleosides and bases using high–performance liquid chromatography and its application to the study of purine metabolism in hearts for transplantation. Smolenski RT, et al. **J Chromatogr** 1990 May 18;527(2):414–20

Separation of carotenes on cyclodextrin–bonded phases. Stalcup AM, et al. **J Chromatogr** 1990 Jan 19;499:627–35

Comparison of high–performance liquid chromatography, supercritical fluid chromatography and capillary zone electrophoresis in drug analysis. Steuer W, et al. **J Chromatogr** 1990 May 16;507:125–40

High–performance liquid chromatographic determination of alterporriol D and E in fermentation of Alternaria porri (Ellis) Ciferri. Suemitsu R, et al. **J Chromatogr** 1990 Mar 9;503(1):282–7

Determination of phenol in poly(vinyl chloride). Suortti T. **J Chromatogr** 1990 May 16;507:417–20

Determination of fungistatic quaternary ammonium compounds in beverages and water samples by high–performance liquid chromatography. Suortti T, et al. **J Chromatogr** 1990 May 16;507:421–5

Simultaneous determination of biogenic amines by reversed–phase high–performance liquid chromatography. Suzuki S, et al. **J Chromatogr** 1990 May 25;508(1):225–8

Direct injection high–performance liquid chromatographic assay of morphine with electrochemical detection, a polymeric column and an alkaline eluent. Tagliaro F, et al. **J Chromatogr** 1990 May 16;507:253–8

High–performance liquid chromatographic determination of urinary mercapturic acids in rat. Tanaka M, et al. **J Chromatogr** 1990 Mar 16;526(1):289–92

Assay method for the simultaneous determination of proguanil, chloroquine and their major metabolites in biological fluids. Taylor RB, et al. **J Chromatogr** 1990 May 18;527(2):490–7

Bioanalysis of suramin in human plasma by ion–pair high–performance liquid chromatography. Tjaden UR, et al. **J Chromatogr** 1990 Jan 26;525(1):141–9

Preparative–scale high–performance liquid chromatographic separation and purification of 3'–azido–3'–deoxythymidine–5'–phosphate. Turcotte JG, et al. **J Chromatogr** 1990 Jan 19;499:55–61

Determination of carboplatin in canine plasma by liquid chromatography with ultraviolet–visible detection and confirmation by atomic absorption spectroscopy. Tyczkowska K, et al. **J Chromatogr** 1990 May 18; 527(2):447–53

Electrochemical determination of 2,6–diisopropylphenol after high–performance liquid chromatography of extracts from serum [letter] Uebel RA, et al. **J Chromatogr** 1990 Mar 16;526(1):293–5

High–performance liquid chromatographic method for studies on the photodecomposition kinetics of chlorothiazide. Ulvi V, et al. **J Chromatogr** 1990 May 16; 507:151–6

Semi–automated high–performance liquid chromatographic method for the simultaneous assay of plasma cortisol and 11–deoxycortisol in the metyrapone test. Underwood RH, et al. **J Chromatogr** 1990 Mar 16;526(1):180–5

Monoclonal antibody–mediated clean–up procedure for the high–performance liquid chromatographic analysis of chloramphenicol in milk and eggs. van de Water C, et al. **J Chromatogr** 1989 Sep 8;478(1):205–15

Automated high–performance liquid chromatographic determination of plasma free fatty acids using on–line derivatization with 9–bromomethylacridine based on micellar phase–transfer catalysis. van der Horst FA, et al. **J Chromatogr** 1990 Feb 2;500:443–52

Separation and quantitation of free cholesterol and cholesteryl esters in a macrophage cell line by high–performance liquid chromatography. Vercaemst R, et al. **J Chromatogr** 1989 Sep 29;494:43–52

High–performance liquid chromatography of sulphadimethoxine and its N1–glucuronide, N4–acetyl and N4–acetyl–N1–glucuronide metabolites in human plasma and urine. Vree TB, et al. **J Chromatogr** 1990 Mar 16; 526(1):119–28

Simultaneous determination of creatine, uric acid and creatinine by high–performance liquid chromatography with direct serum injection and multi–wavelength detection. Werner G, et al. **J Chromatogr** 1990 Feb 23; 525(2):265–75

Determination of prilocaine in human plasma samples using high–performance liquid chromatography with dual–electrode electrochemical detection. Whelpton R, et al. **J Chromatogr** 1990 Mar 16;526(1):215–22

High–performance liquid chromatographic procedure for the determination of clozapine, haloperidol, droperidol and several benzodiazepines in plasma. Wilhelm D, et al. **J Chromatogr** 1990 Jan 26;525(1):218–24

Improved automated precolumn derivatization reaction of fatty acids with bromomethylmethoxycoumarin as label. Wolf JH, et al. **J Chromatogr** 1990 Mar 2;502(2):423–30

Purification of mammalian tyrosyl–tRNA synthetase by high–performance liquid chromatography. Wolfson AD, et al. **J Chromatogr** 1990 Mar 9;503(1):277–81

Determination of fluoxetine and norfluoxetine by high–performance liquid chromatography. Wong SH, et al. **J Chromatogr** 1990 Jan 19;499:601–8

Application of high–performance hydrophobic–interaction chromatography to the characterization of recombinant DNA–derived human growth hormone. Wu SL, et al. **J Chromatogr** 1990 Feb 2;500:595–606

Determination of the monoamine oxidase B inhibitor Ro 19–6327 in plasma by high–performance liquid chromatography using precolumn derivatization with fluorescamine and fluorescence detection. Wyss R, et al. **J Chromatogr** 1990 May 16;507:187–98

Separation and characterization of the metabolic products of lappaconitine in rat urine by high–performance liquid chromatography. Xie FM, et al. **J Chromatogr** 1990 Mar 16;526(1):109–18

Determination of monosaccharides by high–performance liquid chromatography in systemic candidosis. Zaton A, et al. **J Chromatogr** 1990 Jan 26;525(1):169–75

Study of bilirubin binding in human serum by high–performance liquid chromatography. Soltés L, et al. **J Clin Chem Clin Biochem** 1989 Dec;27(12):935–9

An HPLC procedure for separating polyphosphoinositides on hydroxylapatite. Boyle LE, et al. **J Lipid Res** 1990 Jan; 31(1):157–9

Thermospray ionization liquid chromatography–mass spectrometry: a new and highly specific technique for the analysis of bile acids. Setchell KD, et al. **J Lipid Res** 1989 Sep;30(9):1459–69

An improved HPLC–electrochemical detection method for measuring brain levels of 5–S–cysteinyldopamine, 5–S–cysteinyl–3,4–dihydroxyphenylalanine, and 5–S–cysteinyl–3,4–dihydroxyphenylacetic acid. Fornstedt B, et al. **J Neurochem** 1990 Feb;54(2):578–86

A comparison of the distribution of neurotransmitters in brain regions of the rat and guinea–pig using a chemiluminescent method and HPLC with electrochemical detection. Wetherell JR, et al. **J Neurochem** 1989 Nov;53(5):1519–26

Sensitive trace–first liquid chromatographic determination of 4–aminopyridine in 3,4–diaminopyridine. Perry JA, et al. **J Pharm Sci** 1990 May;79(5):437–9

Very rapid and simple assay of taurine in the brain within two minutes by high–performance liquid chromatography with electrochemical detection. Murai S, et al. **J Pharmacol Methods** 1990 May;23(3):195–202

High–performance liquid chromatographic analysis of catecholamines in biological samples by liquid/liquid extraction prepurification. Tsuchiya H, et al. **J Pharmacol Methods** 1990 Mar;23(1):21–30

High–performance liquid chromatography: effective protein purification by various chromatographic modes. Chicz RM, et al. **Methods Enzymol** 1990;182:392–421

Rapid chemical sampling of endogenous species from brain slice preparations. Shiekhattar R, et al. **Neurosci Lett** 1990 Mar 26;111(1–2):189–94

Method for the determination of urinary porphyrins. Sciarra G, et al. **Quad Sclavo Diagn** 1988 Jan–Dec;24(1–4):155–64

A rapid liquid chromatographic method for the determination of metoclopramide in human plasma. Buss DC, et al. **Ther Drug Monit** 1990 May;12(3):293–6

Cyclosporine analysis by high–performance liquid chromatography: precision, accuracy, and minimum detectable quantity. Bowers LD. **Transplant Proc** 1990 Jun; 22(3):1150–4

Cyclosporine measurement by FPIA, PC–RIA, and HPLC following liver transplantation. Burckart GJ, et al. **Transplant Proc** 1990 Jun;22(3):1319–22

Quality assessment of cyclosporine measurements:

comparison of current methods. Holt DW, et al. **Transplant Proc** 1990 Jun;22(3):1234–9

Comment on cyclosporine assay techniques: an attempt for recommendations. Rosenthaler J, et al. **Transplant Proc** 1990 Jun;22(3):1160–5

Failure of 125I–tracer selective monoclonal antibody levels on a whole blood matrix to predict rejection or nephrotoxic episodes in renal transplant patients under anti–lymphocyte globulin and prednisone therapy. Stiller C, et al. **Transplant Proc** 1990 Jun;22(3):1253–4

Japanese conference on cyclosporine blood level monitoring. Takagi H, et al. **Transplant Proc** 1990 Jun;22(3):1224–5

French multicentre study: comparison of two specific and four nonspecific methods for Sandimmune (cyclosporine) blood and plasma (separated at 37 degrees C or at 22 degrees C) monitoring. Vernillet L, et al. **Transplant Proc** 1990 Jun;22(3):1218–23

Determination of urinary oxalate by high–performance liquid chromatography monitoring with an ultraviolet detector. Kataoka K, et al. **Urol Res** 1990;18(1):25–8

[Determination of saponosides from Panax ginseng C.A. Meyer. Comparison of official methods and HPLC] Guédon D, et al. **Ann Pharm Fr** 1989;47(3):169–77 (Eng. Abstr.) **(Fre)**

[A method of assaying VP16 (etoposide) in the plasma using high performance liquid chromatography] Enreille A, et al. **Bull Cancer (Paris)** 1989;76(8):825–7 **(Fre)**

[Analysis of methylmethacrylates in plasma using high–performance liquid chromatography] Larroque M, et al. **J Chromatogr** 1990 Jan 26;525(1):249–52 **(Fre)**

[Determination of enoximone and its principle metabolite in serum and urine using high pressure liquid chromatography] Tarral E, et al. **Therapie** 1990 Jan–Feb; 45(1):1–6 (Eng. Abstr.) **(Fre)**

[Reverse phase–HPLC of toxicologically relevant active substances] Eigendorf HG, et al. **Pharmazie** 1989 Sep; 44(9):645–6 **(Ger)**

[A high pressure liquid chromatography method for detecting the isoniazid derivative isonicotinoyl–hydrazine sodium glucuronide, free isoniazid and acetylisoniazid and its use in pharmacologic studies] Musch E, et al. **Pneumologie** 1990 Feb;44 Suppl 1:490–2 (Eng. Abstr.) **(Ger)**

[Plasma prostaglandin levels in bronchial asthmatic patients measured by the 9–anthryldiazomethane–high performance liquid chromatography method] Kobayashi H, et al. **Arerugi** 1989 Nov;38(11):1203–8 (Eng. Abstr.) **(Jpn)**

[The process of developing and improving the analytical method of benzene in organic solvents for household use: interlaboratory collaborative study] Ikarashi Y, et al. **Eisei Shikenjo Hokoku** 1989;(107):124–7 (Eng. Abstr.) **(Jpn)**

[Determination of nicotinic acid in injections by high–performance liquid chromatography] Tokunaga H, et al. **Eisei Shikenjo Hokoku** 1989;(107):108–12 (Eng. Abstr.) **(Jpn)**

[Clinical application of fast protein liquid chromatography (FPLC) system] Kawai T, et al. **Rinsho Byori** 1990 Jan; 38(1):57–60 (Eng. Abstr.) **(Jpn)**

[Sialom chromatography—size–dependent, chromatographic separation of DNA which is not based on gel permeation mode] Hirabayashi J, et al. **Tanpakushitsu Kakusan Koso** 1989 Aug;34(10):1305–9 **(Jpn)**

[Studies on the metabolism of conjugated drugs. II. 3–Deoxyestradiol 17–sulfate. (2). Analytical procedure for determination by high–performance liquid chromatography of potential metabolites] Watanabe K, et al. **Yakugaku Zasshi** 1989 May;109(5):300–5 (Eng. Abstr.) **(Jpn)**

[Fractional determination of bile acids bound with protein in serum by high–performance liquid chromatography using dual–column switching system] Yoshida S, et al. **Yakugaku Zasshi** 1989 Nov;109(11):847–52 (Eng. Abstr.) **(Jpn)**

[High performance liquid chromatography of leukotriene C4 on the aminopropyl sorbent] Galushko SV, et al. **Bioorg Khim** 1990 Jan;16(1):113–7 (Eng. Abstr.) **(Rus)**

[High performance liquid chromatography of peptide bioregulators, their fragments and derivatives. III. Regularities of sorption, prediction of retention and analysis of peptides by a reversed phase HPLC method] Grigor'eva VD, et al. **Bioorg Khim** 1989 Aug;15(8):1013–8 (Eng. Abstr.) **(Rus)**

[Determination of epoxide hydrolase activity by high performance liquid chromatography] Kravchenko LV, et al. **Biull Eksp Biol Med** 1989 Aug;108(8):179–81 (Eng. Abstr.) **(Rus)**

[Determination of corticosterone in the rat plasma using adsorption micro–HPLC] Khokha AM. **Vopr Med Khim** 1989 Sep–Oct;35(5):122–7 (Eng. Abstr.) **(Rus)**

[Determination of pentoxifylline and its major metabolites in human plasma using HPLC] Ostrovská V, et al. **Cesk Farm** 1990 Jun;39(4):158–60 (Eng. Abstr.) **(Slo)**

STANDARDS

A reassessment of 'use of corrected retention indices based on 1–nitroalkane and alkylarylketone scales for HPLC identification of basic drugs' [letter; comment] Smith RM, et al. **J Anal Toxicol** 1989 Nov–Dec;13(6):375–7 Comment on: J Anal Toxicol 1988 Nov–Dec;12(6):325–9.

VETERINARY

High–performance liquid chromatography determination of erythrocyte membrane phospholipid composition in several animal species. Engen RL, et al. **Am J Vet Res** 1990 Apr; 51(4):577–80

CHROMATOGRAPHY, HIGH SPEED LIQUID see **CHROMATOGRAPHY, HIGH PRESSURE LIQUID**

CHROMATOGRAPHY, ION EXCHANGE

Measurement of extracellular water volume by bromide ion chromatography. Wong WW, et al. **Am J Clin Nutr** 1989 Dec;50(6):1290–4

Analysis of oligogalacturonic acids with 50 or fewer residues by high–performance anion–exchange chromatography and pulsed amperometric detection. Hotchkiss AT Jr, et al. **Anal Biochem** 1990 Feb 1;184(2):200–6

Separation of peptides dissolved in a sodium dodecyl sulfate solution by reversed–phase liquid chromatography: removal of sodium dodecyl sulfate from peptides using an ion–exchange precolumn. Kawasaki H, et al. **Anal Biochem** 1990 May 1;186(2):264–8

Analysis of the water–soluble products of phosphatidylcholine breakdown by ion–exchange chromatography. Bombesin and TPA (12–O–tetradecanoylphorbol 13–acetate) stimulate choline generation in Swiss 3T3 cells by a common mechanism. Cook SJ, et al. **Biochem J** 1989 Oct 15;263(2):581–7

Simplified analysis for glycated hemoglobin by ion–exchange chromatography [letter] Eckerbom S, et al. **Clin Chem** 1989 Nov;35(11):2253

Purification of the isolated beta–chain of adult human haemoglobin from its post–translational modification. Castagnola M, et al. **J Chromatogr** 1989 Sep 29;494:310–7

Microenvironmental contributions to the chromatographic behavior of subtilisin in hydrophobic–interaction and reversed–phase chromatography. Chicz RM, et al. **J Chromatogr** 1990 Feb 2;500:503–18

Purification of urokinase by combined cation exchanger and affinity chromatographic cartridges. Hou KC, et al. **J Chromatogr** 1990 Feb 23;525(2):297–306

Assessment of bilirubin clearance capacity of a newly developed ion–exchange adsorption column and its possible use as a supportive therapy in hepatorenal syndrome. Sone J, et al. **J Clin Apheresis** 1990;5(3):123–7

Separation of isozymic forms of type II calcium/calmodulin–dependent protein kinase using cation–exchange chromatography. Vallano ML. **J Neurosci Methods** 1989 Oct;30(1):1–9

INSTRUMENTATION

Purification of supercoiled plasmids from crude cell lysates using high performance anion exchange chromatography. Merion M, et al. **Biotechniques** 1989 Jan;7(1):60–7

METHODS

Single amino acid contributions to protein retention in cation–exchange chromatography: resolution of genetically engineered subtilisin variants. Chicz RM, et al. **Anal Chem** 1989 Sep 15;61(18):2059–66

Comment of the use of Qiagen columns to purify plasmids. Meyer E. **Biotechniques** 1990 Jul;9(1):39

Endotoxin removal by anion–exchange polymeric matrix. Hou KC, et al. **Biotechnol Appl Biochem** 1990 Jun; 12(3):315–24

Oxalate, phosphate and sulphate determination in serum and urine by ion chromatography. Politi L, et al. **Clin Chim Acta** 1989 Sep 29;184(2):155–65

Analysis of glycoprotein–derived oligosaccharides by high–pH anion–exchange chromatography. Basa LJ, et al. **J Chromatogr** 1990 Jan 19;499:205–20

High–performance liquid chromatography of amino acids, peptides and proteins. XCVII. The influence of the gradient elution mode and displacer salt type on the retention properties of closely related protein variants separated by high–performance anion–exchange chromatography. Hodder AN, et al. **J Chromatogr** 1990 May 11;506:17–34

Performing high salt concentration gradient elution ion–exchange separations using thermospray mass spectrometry. Hsu FF, et al. **J Chromatogr** 1989 Oct 6; 479(2):437–40

Calculation of column performance in nitrate removal from water supplies by anion exchange. Leu RJ, et al. **J Chromatogr** 1990 Jan 19;499:677–83

Purification of monoclonal antibodies by complex–displacement chromatography on CM–cellulose. Torres AR, et al. **J Chromatogr** 1990 Jan 19;499:47–54

Analytical– and preparative–scale separation of molecular variants of alpha–fetoprotein by anion–exchange chromatography on Monobead resins. Van Oers NS, et al. **J Chromatogr** 1990 Jan 26;525(1):59–69

Ion–exchange chromatography. Rossomando EF. **Methods Enzymol** 1990;182:309–17

A semi–continuous method for purification of factor IX complex from human plasma. Tharakan JP, et al. **Vox Sang** 1989;57(4):233–9

[Distinction between sodium chlorite and sodium hypochlorite by ion–chromatography] Goda Y, et al. **Eisei Shikenjo Hokoku** 1989;(107):105–8 (Eng. Abstr.) **(Jpn)**

[Determination of bromide ions in total blood, plasma and urine by ion chromatography with amperometric detection] Abuku S, et al. **Nippon Eiseigaku Zasshi** 1989 Dec; 44(5):945–52 (Eng. Abstr.) **(Jpn)**

CHROMATOGRAPHY, LIQUID

Liquid chromatography: theory and methodology. Dorsey JG, et al. **Anal Chem** 1990 Jun 15;62(12):324R–356R (889 ref.)

Retention mechanisms of reversed–phase liquid chromatography: determination of solute–solvent interaction free energies. Ying PT, et al. **Anal Chem** 1989 Nov 15;61(22):2540–6

A simple, sensitive liquid chromatographic method for quantitation of D–galactose and D–glucose in blood plasma. Griffin BW, et al. **Biomed Chromatogr** 1990 Mar; 4(2):87–8

Improved sample preparation in determination of urinary metanephrines by liquid chromatography with electrochemical detection. Gupta RN. **Clin Chem** 1990 Mar; 36(3):538–40

Comparison of two ELISA screening tests with liquid chromatography for determination of aflatoxins in raw peanuts. Dorner JW, et al. **J Assoc Off Anal Chem** 1989 Nov–Dec;72(6):962–4

Thirteenth International Symposium on Column Liquid Chromatography: Part II. Stockholm, June 25–30, 1989. Proceedings. **J Chromatogr** 1990 May 16;507:1–496

Column liquid chromatography of endotoxins. Somlyo B, et al. **J Chromatogr** 1990 Feb 23;525(2):329–38

[Fluid chromatography in supercritical conditions: a method potentially useful for flavonolignan analysis] Martínez F. **Ann Pharm Fr** 1989;47(3):162–8 (Eng. Abstr.) **(Fre)**

INSTRUMENTATION

Simultaneous enhancement of separation selectivity and solvent strength in reversed–phase liquid chromatography using micelles in hydro–organic solvents. Khaledi MG, et al. **Anal Chem** 1990 Jan 15;62(2):130–6

Microcylinder electrodes as sensitive detectors for high–efficiency, high–speed liquid chromatography. Baur JE, et al. **J Chromatogr** 1989 Nov 17;482(1):65–73

[Modernization of a photoelectric transducer for liquid chromatography] Mazepa IV, et al. **Med Tekh** 1989 Jul–Aug;(4):48–51 (Eng. Abstr.) **(Rus)**

METHODS

Fast liquid chromatographic assay of androgen aromatase activity. Taniguchi H, et al. **Anal Biochem** 1989 Aug 15; 181(1):167–71

Gradient elution in preparative liquid chromatography. Antia FD, et al. **Ann N Y Acad Sci** 1990;589:172–81

Prep–A–Gene: a superior matrix for the purification of DNA and DNA fragments. Willis EH, et al. **Biotechniques** 1990 Jul;9(1):92–9

Computer control of fast protein liquid chromatography (FPLC). Cattan AR, et al. **Comput Biol Med** 1990; 20(2):95–101

Principles and applications of luminescence spectrometry coupled to liquid chromatographic techniques. Baeyens WR, et al. **J Biolumin Chemilumin** 1989 Jul;4(1):484–99 (70 ref.)

Preparative chromatography. Sixth International Symposium on Preparative Chromatography. Washington, DC (U.S.A), May 8–10, 1989. Proceedings. **J Chromatogr** 1989 Dec 22; 484:1–450

Application of 3–(2–furoyl)quinoline–2–carbaldehyde as a fluorogenic reagent for the analysis of primary amines by liquid chromatography with laser–induced fluorescence detection. Beale SC, et al. **J Chromatogr** 1990 Jan 19; 499:579–87

Determination of plasma nefopam by liquid chromatography and electrochemical detection. Burton LC, et al. **J Chromatogr** 1990 Mar 16;526(1):159–68

Characterization of polyimide sorbents by using tracer pulse chromatography. Cooper SD, et al. **J Chromatogr** 1990 Jan 5;498(1):41–53

Purification of histone H1 polypeptides by high–performance cation–exchange chromatography. Gohill J, et al. **J Chromatogr** 1990 Feb 21;502(1):47–57

Reversed–phase liquid chromatographic retention and selectivity surfaces. II. Deoxyribonucleosides. Grushka E, et al. **J Chromatogr** 1989 Dec 27;485:617–30

Determination of trichloroethanol, the active metabolite of chloral hydrate, in plasma by liquid chromatography. Gupta RN. **J Chromatogr** 1990 Feb 2;500:655–9

Combination of positron emission tomography with liquid chromatography in neuropharmacologic research. Hartvig P, et al. **J Chromatogr** 1990 May 16;507:303–10 (9 ref.)

Purification of human serum amyloid A by anion–exchange fast protein liquid chromatography. Hocke G, et al. **J Chromatogr** 1990 Mar 16;526(1):203–9

Rapid assay for hard tissue collagen cross–links using isocratic ion–pair reversed–phase liquid chromatography. James IT, et al. **J Chromatogr** 1990 Jan 26;525(1):43–57

Application of analytical high–speed counter–current chromatography to the isolation of bioactive natural products. Lee YW, et al. **J Chromatogr** 1989 Aug 30; 477(2):434–8

Method for the isolation and liquid chromatographic

determination of eight sulfonamides in milk. Long AR, et al. **J Chromatogr** 1990 Feb 21;502(1):87–94
Separation of beta-lactam antibiotics by micellar electrokinetic chromatography. Nishi H, et al. **J Chromatogr** 1989 Aug 30;477(2):259–70
Enantioselective determination of metoprolol in plasma by liquid chromatography on a silica-bonded alpha 1-acid glycoprotein column. Persson BA, et al. **J Chromatogr** 1990 Feb 2;500:629–36
Comparison of high-performance liquid chromatography, supercritical fluid chromatography and capillary zone electrophoresis in drug analysis. Steuer W, et al. **J Chromatogr** 1990 May 16;507:125–40
Displacement chromatography on cyclodextrin-silicas. I. Separation of positional and geometrical isomers in the reversed-phase mode. Vigh G, et al. **J Chromatogr** 1989 Dec 22;484:237–50
Displacement chromatography on cyclodextrin-silicas. II. Separation of cis-trans isomers in the reversed-phase mode on alpha-cyclodextrin-silica. Vigh G, et al. **J Chromatogr** 1989 Dec 22;484:251–7
A direct liquid chromatographic quantitation of ciprofloxacin in microsamples of plasma with fluorometric detection. el-Yazigi A, et al. **Ther Drug Monit** 1990 Jul;12(4):378–81

CHROMATOGRAPHY, LIQUID, HIGH PRESSURE see **CHROMATOGRAPHY, HIGH PRESSURE LIQUID**

CHROMATOGRAPHY, MASS see **MASS FRAGMENTOGRAPHY**

CHROMATOGRAPHY, MOLECULAR SIEVE see **CHROMATOGRAPHY, GEL**

CHROMATOGRAPHY, THIN LAYER

Thin layer chromatography of dansyl and dinitrophenyl derivatives of amino acids. A review. Bhushan R, et al. **Biomed Chromatogr** 1989 Nov;3(6):233–40 (47 ref.)
Rapid detection of extended ganglio-series gangliosides with terminal GalNAc beta 1-4Gal sequence on high performance thin layer chromatography plates. Müthing J, et al. **Biomed Chromatogr** 1990 Mar;4(2):70–2
Thin-layer chromatographic analysis of myelin lipids, their differential O-deacylation by primary alkylamines and their selective staining by thionine. A limited phylogenetic study. Hack MH, et al. **J Chromatogr** 1990 Feb 23;525(2):339–47
[Method of optimization of the solvent system for thin layer chromatography] Ban YD, et al. **Yao Hsueh Hsueh Pao** 1989;24(11):841–6 (Eng. Abstr.) **(Chi)**
[Detection of glycosphingolipids of ABH and Le antigens on thin-layer plates using the PAP method] Hauser R, et al. **Z Rechtsmed** 1989;103(1):47–56 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

Quantitative determination of 1,2-diacylglycerol in thoracic aorta of the rat using Iatroscan TLC/FID: effect of norepinephrine. Okumura K, et al. **Lipids** 1989 Nov; 24(11):982–4

METHODS

Increased serum cholestanol in patients with cerebrotendinous xanthomatosis (CTX): chromatographic study. Michalec C. **Acta Univ Carol [Med] (Praha)** 1988; 34(1–2):111–6
Direct assay of glycosphingolipid glycosyltransferase activities on thin-layer chromatogram. Gu XB, et al. **Anal Biochem** 1990 Feb 15;185(1):151–5
2',3'-cyclic nucleotide phosphohydrolase activity determined using an image analyzer detection system. Jacks AS 3d, et al. **Anal Biochem** 1990 Feb 1;184(2):321–4
High-performance liquid affinity chromatography and in situ fluorescent labeling on thin-layer chromatography of glycosphingolipids. Tomono Y, et al. **Anal Biochem** 1990 Feb 1;184(2):360–8
Simple screening for the presence of antibiotic resistant CAT gene plasmids in bacteria. Alter DC, et al. **Biotechniques** 1989 Mar;7(3):247–8
A simple, inexpensive thin-layer chromatography method for the analysis of theophylline tablets. Flinn PE, et al. **Bull World Health Organ** 1989;67(5):555–9
Resolution of the neuroexcitatory N-methylaspartic acid (2-methylaminosuccinic acid) enantiomers by ligand-exchange thin-layer chromatography. Euerby MR. **J Chromatogr** 1990 Feb 21;502(1):226–9
Simultaneous determination of insecticides, acaricides and fungicides by thin-layer chromatography. Neicheva A, et al. **J Chromatogr** 1990 Jun 15;509(1):263–9
Quantitation of hexadecylphosphocholine by high-performance thin-layer chromatography with densitometry. Rustenbeck I, et al. **J Chromatogr** 1990 Jan 26;525(1):85–91
Solvent systems for thin layer chromatography of biological dyes. Allison RT, et al. **Med Lab Sci** 1989 Apr;46(2):113–9
[A thin-layer chromatography method for determining the styrene metabolites mandelic and phenylglyoxylic acid in urine] Gartzke J, et al. **Z Gesamte Hyg** 1989 Jun;35(6):361–3 (Eng. Abstr.) **(Ger)**
[Hydrophobic constant values (delta RM0) of functional groups. I. Comparative study of delta RM0 values determined in open (TLC) and closed (OPTLC) chromatographic systems] Vámos J, et al. **Acta Pharm Hung** 1989 Sep;59(5):217–29 (Eng. Abstr.) **(Hun)**
[A bioautographic method of analyzing trichothecene mycotoxins in grain and its products] Kotik AN, et al. **Gig Sanit** 1989 Sep;(9):53–4 **(Rus)**
[The use horizontal flow chromatography for the isolation of phosphatidyl inositols from various tissues] Matsul' VM, et al. **Vopr Med Khim** 1990 Mar–Apr;36(2):80–2 (Eng. Abstr.) **(Rus)**

CHROMATOPHORES

ANALYSIS

Quantitative in vitro assay for crustacean chromatophorotropins and other pigment cell agonists. Britto AL, et al. **Pigment Cell Res** 1990 Jan–Feb;3(1):28–32

CYTOLOGY

Neural control of motile activity of light-sensitive iridophores in the neon tetra. Nagaishi H, et al. **Pigment Cell Res** 1989 Nov–Dec;2(6):485–92

METABOLISM

P+QA- and P+QB- charge recombinations in Rhodopseudomonas viridis chromatophores and in reaction centers reconstituted in phosphatidylcholine liposomes. Existence of two conformational states of the reaction centers and effects of pH and o-phenanthroline. Baciou L, et al. **Biochemistry** 1990 Mar 27;29(12):2966–76
Purification of anterogin, a protein factor necessary for the dispersion of carotenoid droplets in permeabilized xanthophores of goldfish. Zeng ZC, et al. **Cell Motil Cytoskeleton** 1989;14(4):485–90
Amount and turnover rate of the F0F1-ATPase and the stoichiometry of its inhibition by oligomycin in Rhodospirillum rubrum chromatophores. Norling B, et al. **Eur J Biochem** 1989 Dec 8;186(1–2):333–7
Evaluation of the buffer capacity and permeability constant for protons in chromatophores from Rhodobacter capsulatus. Turina MP, et al. **Eur J Biochem** 1990 Aug 28;192(1):39–47
Coupling of ATP hydrolysis to phosphate uptake in Rhodospirillum rubrum chromatophores under the influence of Ca2+ and Mg2+. Montero-Lomelí M, et al. **J Biol Chem** 1989 Dec 15;264(35):21014–7
Phosphorylation of the carotenoid droplet protein p57 by the catalytic subunit of cyclic adenosine monophosphate-dependent protein kinase and the effect of fluoride. Yang CF, et al. **Pigment Cell Res** 1989 Sep–Oct; 2(5):408–13

PHYSIOLOGY

Brain pathways of the chromatophore system in the squid Lolliguncula brevis. Novicki A, et al. **Brain Res** 1990 Jun 11;519(1–2):315–23
Physiological color change in squid iridophores. I. Behavior, morphology and pharmacology in Lolliguncula brevis. Hanlon RT, et al. **Cell Tissue Res** 1990 Jan;259(1):3–14

ULTRASTRUCTURE

Localization of pigment cells in cultured frog skin. Denefle JP, et al. **Am J Anat** 1990 Jun;188(2):212–20
Immunofluorescence evidence for cytoskeletal rearrangement accompanying pigment redistribution in goldfish xanthophores. Walker GR, et al. **Cell Motil Cytoskeleton** 1989;14(4):458–68
Ultrastructural observations of motile iridophores from the freshwater goby, Odontobutis obscura. Matsuno A, et al. **Pigment Cell Res** 1989 Sep–Oct;2(5):431–8
Dermal and epidermal chromatophores of the Antarctic teleost Trematomus bernacchii. Obika M, et al. **Pigment Cell Res** 1990 Jan–Feb;3(1):33–7
[Histologic study of the lumbar glands of Pleurodema thaul (Amphibia, Anura, Leptodactylidae)] de Toledo RC, et al. **Rev Bras Biol** 1989 May;49(2):421–8 (Eng. Abstr.) **(Por)**

CHROMIUM

A blotting method for monitoring the formation of chemically induced DNA-protein complexes. Cohen MD, et al. **Anal Biochem** 1990 Apr;186(1):1–7
On the hydroxyl radical formation in the reaction between hydrogen peroxide and biologically generated chromium(V) species. Shi XG, et al. **Arch Biochem Biophys** 1990 Mar;277(2):342–50
Chromium cross-links glutathione and cysteine to DNA. Borges KM, et al. **Carcinogenesis** 1989 Nov;10(11):2165–8
ESR spin trapping detection of hydroxyl radicals in the reactions of Cr(V) complexes with hydrogen peroxide. Shi XL, et al. **Free Radic Res Commun** 1990;10(1–2):17–26
Interaction of purine nucleotides with inert paramagnetic Cr(III) probes evaluated by NMR relaxation effects. Molecular mechanics calculations on Cr(III) and Co(III) polyphosphate complexes. Cini R, et al. **J Biomol Struct Dyn** 1990 Feb;7(4):859–78
The condensation of DNA by chromium (III) ions. Osterberg R, et al. **J Biomol Struct Dyn** 1984 Oct;2(2):285–90
Surface complexes of xanthophyll films with transition metal ions. Tomoaia-Cotişel M, et al. **Physiologie** 1989 Oct–Dec; 26(4):341–7 (11 ref.)
Factors determining gastrointestinal transit time of several markers in the domestic fowl. Vergara P, et al. **Q J Exp Physiol** 1989 Nov;74(6):867–74
The chromium paradox in modern life. Papers presented at a symposium sponsored by the Association of Government Toxicologists. Bethesda, MD, 23–24 May 1988. **Sci Total Environ** 1989 Oct 1;86(1–2):1–190
Chromium carcinogenicity: California strategies. Alexeeff GV, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):159–68
Chromium and regulation: bits and pieces. Beall JR. **Sci Total Environ** 1989 Oct 1;86(1–2):187–90
Evaluation of issues relating to the carcinogen risk assessment of chromium. Gibb H, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):181–6 (17 ref.)
Development of the revised drinking water standard for chromium. Goldhaber S, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):43–51
Role of epidemiologic studies in evaluating the carcinogenicity of chromium compounds. Hathaway JA. **Sci Total Environ** 1989 Oct 1;86(1–2):169–79 (37 ref.)
Inorganic chemistry of chromium and its speciation in Whetlerite. Katz SA, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):53–7
Environmental chemistry of chromium. Rai D, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):15–23
Kinetics of chromium transformations in the environment. Saleh FY, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):25–41

ADVERSE EFFECTS

We need more family physicians like Dr. S. Siwek J. **Am Fam Physician** 1990 Aug;42(2):299
Dose-response relationships for topically applied antigens. Eun HC, et al. **Br J Dermatol** 1990 Apr;122(4):491–9
Incidence of cancer among ferrochromium and ferrosilicon workers: an extended observation period. Langård S, et al. **Br J Ind Med** 1990 Jan;47(1):14–9
Patch testing with cement containing iron sulfate. Bruze M, et al. **Dermatol Clin** 1990 Jan;8(1):173–6
Lung lesions after experimental combined exposure to nickel and trivalent chromium. Johansson A, et al. **Environ Res** 1989 Oct;50(1):103–19
Bowel perforation associated with intraperitoneal chromic phosphate instillation. Proctor J, et al. **Gynecol Oncol** 1990 Jan;36(1):125–7
[Effects of Cr+6-polluted-well-water on inhabitant's health] Wang JS. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1990 Jan;24(1):6–8 (Eng. Abstr.) **(Chi)**
[Induced pemphigus caused by occupational contact with Basochrom] Tsankov N, et al. **Derm Beruf Umwelt** 1990 May–Jun;38(3):91–3 (Eng. Abstr.) **(Ger)**
[Comment on the contribution by B. Wiemann and L. Bergmann. "Development of bronchial cancer at the site of siderofibrosis"] Schneider WD, et al. **Z Erkr Atmungsorgane** 1989;173(2):186–90 **(Ger)**
[Taste disorders in chromium exposed workers] Seeber H, et al. **Z Gesamte Hyg** 1990 Jan;36(1):33–4 (Eng. Abstr.) **(Ger)**
[Lung cancer in chromium-exposed workers--high prevalence of lung cancer and multiple primary cancers] Nakagawa K, et al. **Gan No Rinsho** 1989 May;Spec No:172–82 **(Jpn)**
[Skin diseases and sensitization to metals in construction workers engaged in the production of pre-cast cellular concrete slabs] Kieć-Swierczyńska M, et al. **Med Pr** 1989; 40(3):192–8 (Eng. Abstr.) **(Pol)**
[Risk factors of the development of the changes in the nervous system after exposure to chromium] Iakovlev NA, et al. **Gig Tr Prof Zabol** 1989;(8):21–4 (Eng. Abstr.) **(Rus)**
[Occupational dermatoses among workers in slag separation plants of the low-carbon ferrichrome industry] Podkin IuS, et al. **Gig Tr Prof Zabol** 1990;(1):20–3 (Eng. Abstr.) **(Rus)**
[Pathogenetic characteristics of diseases of the peripheral nervous system in workers having contact with chromium compounds] Sliusar' TA, et al. **Gig Tr Prof Zabol** 1989; (9):25–8 (Eng. Abstr.) **(Rus)**
[Nickel, chromium and cobalt release from a metal prosthesis in metal-sensitive patients] Vilaplana J, et al. **Med Cutan Ibero Lat Am** 1989;17(6):405–8 (Eng. Abstr.) **(Spa)**

ANALYSIS

Lead and chromium concentrations in the potable water of the eastern province of Saudi Arabia. Hassan HM, et al. **Bull Environ Contam Toxicol** 1989 Oct;43(4):529–33
Environmental contamination of chromium in agricultural and animal products near a chromate industry. Khasim DI, et al. **Bull Environ Contam Toxicol** 1989 Nov;43(5):742–6
Analyses of chromium and nickel in human pulmonary tissue. Investigations in lung cancer patients and a control population under special consideration of medical expertise aspects. Raithel HJ, et al. **Int Arch Occup Environ Health** 1989;61(8):507–12
Recovery of fecal chromium used as a digestibility marker in cattle. Mir PS, et al. **J Dairy Sci** 1989 Oct;72(10):2549–53
Synthesis and characterization of new chromium(III), vanadium(IV), and titanium(III) complexes with biologically active isonicotinic acid hydrazide. Pin Y, et al. **J Inorg Biochem** 1989 Sep;37(1):61–8

Trace metal analysis of chromium and nickel in lung tissue fixed and stored in formalin. Seemann J, et al. **Pathol Res Pract** 1990 Feb;186(1):197–201

Evaluation of the selenium and chromium content of plant foods. Giri J, et al. **Plant Foods Hum Nutr** 1990 Jan; 40(1):49–59

[Nickel and chromium. Analysis of 3 detergents using atomic absorption spectrophotometry] Kokelj F, et al. **G Ital Dermatol Venereol** 1989 Jun;124(6):261–3 (Eng. Abstr.) **(Ita)**

[Detection of trivalent chromium in the air] Burenko TS, et al. **Gig Tr Prof Zabol** 1989;(9):46–7 (Eng. Abstr.) **(Rus)**

BLOOD

Cross-shift and chronic effects of stainless-steel welding related to internal dosimetry of chromium and nickel. Kilburn KH, et al. **Am J Ind Med** 1990;17(5):607–15

[Significance of chromium analysis in clinical tests] Wada O, et al. **Nippon Rinsho** 1989 Dec;48 Suppl:749–51 **(Jpn)**

DIAGNOSTIC USE

Nonradioactive chromium technique for red cell labeling. Sioufi HA, et al. **Vox Sang** 1990;58(3):204–6

METABOLISM

Evidence for a Fenton-type mechanism for the generation of .OH radicals in the reduction of Cr(VI) in cellular media. Shi XL, et al. **Arch Biochem Biophys** 1990 Aug 15; 281(1):90–5

Reduction of hexavalent chromium by ascorbic acid and glutathione with special reference to the rat lung. Suzuki Y, et al. **Arch Toxicol** 1990;64(3):169–76

Chromium in plants. Comparison between the concentration of chromium in Brazilian nonhypo and hypoglycemic plants. Felcman J, et al. **Biol Trace Elem Res** 1988 Sep–Dec; 17:11–6

Effects of extracts of high- and low-chromium brewer's yeast on metabolism of glucose by hepatocytes from rats fed on high- or low-Cr diets. Holdsworth ES, et al. **Br J Nutr** 1990 May;63(3):623–30

Uptake of lead, chromium, cadmium and cobalt by Cladophora glomerata. Vymazal J. **Bull Environ Contam Toxicol** 1990 Mar;44(3):468–72

Influence of vitamin B2 on formation of chromium(V), alkali-labile sites, and lethality of sodium chromate(VI) in Chinese hamster V-79 cells. Sugiyama M, et al. **Cancer Res** 1989 Nov 15;49(22):6180–4

Reduction of hexavalent chromium in a reconstituted system of cytochrome P-450 and cytochrome b5. Mikalsen A, et al. **Chem Biol Interact** 1989;71(2–3):213–21

Effect of carminomycin on the viability of fibroblasts from patients with regular trisomy 21. Rózga B, et al. **Free Radic Res Commun** 1990;8(2):79–83

Evidence for the direct interaction between tightly bound divalent metal ion and ATP on actin. Binding of the lambda isomers of beta gamma-bidentate cratp to actin. Valentin-Ranc C, et al. **J Biol Chem** 1989 Dec 15; 264(35):20871–80

Sodium pyruvate inhibits the spontaneous release of 51Cr from RBC in chromium release assays. Colsky AS, et al. **J Immunol Methods** 1990 May 8;129(1):139–41

Effects of starch, sucrose, fructose and glucose on chromium absorption and tissue concentrations in obese and lean mice. Seaborn CD, et al. **J Nutr** 1989 Oct;119(10):1444–51

Induction of lipid peroxidation in mice by hexavalent chromium and its relation to the toxicity. Susa N, et al. **Nippon Juigaku Zasshi** 1989 Dec;51(6):1103–10

Essentiality of chromium in humans. Anderson RA. **Sci Total Environ** 1989 Oct 1;86(1–2):75–81

Nutritional chemistry of chromium. Iyengar GV. **Sci Total Environ** 1989 Oct 1;86(1–2):69–74

PHARMACOKINETICS

Synergism of ascorbic acid and glutathione in the reduction of hexavalent chromium in vitro. Suzuki Y. **Ind Health** 1990;28(1):9–19

PHARMACOLOGY

Protective effects of certain natural and synthetic complexans on the toxicity of chromium and tin to a N2-fixing cyanobacterium, Anabaena doliolum. Rai LC, et al. **Biomed Environ Sci** 1989 Sep;2(3):271–81

Orotate phosphoribosyltransferase and hypoxanthine/guanine phosphoribosyltransferase from yeast: kinetic analysis with chromium (III) pyrophosphate. Syed DB, et al. **J Inorg Biochem** 1990 Feb;38(2):127–38

Tannic acid and chromic chloride-induced binding of protein to red cells: a preliminary study of possible binding sites and reaction mechanisms. Hunt AF, et al. **Med Lab Sci** 1990 Jul;47(3):189–94

Differential effects of chromium(VI) on constitutive and inducible gene expression in chick embryo liver in vivo and correlation with chromium(VI)-induced DNA damage. Hamilton JW, et al. **Mol Carcinog** 1989;2(5):274–86

Effectiveness of ascorbic acid and chromium in counteracting the negative effects of dietary vanadium on interior egg quality. Benabdeljelil K, et al. **Poult Sci** 1990 May; 69(5):781–6

Mutagenicity and disposition of chromium. Witmer CM, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):131–48

[The effect of chromium and aluminum ions on lactate dehydrogenase isoenzymes in HeLa cells] Hrabač B, et al. **Med Arh** 1986;40(6):301–4 (Eng. Abstr.) **(Scr)**

POISONING

Occupational asthma induced by chromium salts. Olaguibel JM, et al. **Allergol Immunopathol (Madr)** 1989 May-Jun; 17(3):133–6

An outbreak of chromium ulcer in a manufacturing plant. Deng JF, et al. **Vet Hum Toxicol** 1990 Apr;32(2):142–6

CT findings of the nose and paranasal sinuses in chromium intoxication. Kim MJ, et al. **Yonsei Med J** 1989 Sep; 30(3):305–9

THERAPEUTIC USE

Chromium induced clinical improvement in symptomatic hypoglycemia. Clausen J. **Biol Trace Elem Res** 1988 Sep–Dec;17:229–36

Failure of glucose tolerance factor-containing Brewer's yeast to ameliorate spontaneous diabetes in C57BL/KsJ DB/DB mice. Flatt PR, et al. **Diabetes Res** 1989 Mar;10(3):147–51

The effect of chromium picolinate on serum cholesterol and apolipoprotein fractions in human subjects. Press RI, et al. **West J Med** 1990 Jan;152(1):41–5

TOXICITY

One hundred years of chromium and cancer: a review of epidemiological evidence and selected case reports. Langård S. **Am J Ind Med** 1990;17(2):189–215 (77 ref.)

Chromium(VI)-resistant yeast isolated from a sewage treatment plant receiving tannery wastes. Baldi F, et al. **Appl Environ Microbiol** 1990 Apr;56(4):913–8

A prospective cohort study of chromium plating workers in Japan. Takahashi K, et al. **Arch Environ Health** 1990 Mar-Apr;45(2):107–11

Hexavalent chrome: threshold concept for carcinogenicity. Jones RE. **Biomed Environ Sci** 1990 Mar;3(1):20–34 (69 ref.)

Toxicity and accumulation of chromium in Ceratophyllum demersum L. Garg P, et al. **Bull Environ Contam Toxicol** 1990 Mar;44(3):473–8

Acute toxicity and toxic interaction of chromium and nickel to common guppy Poecilia reticulata (Peters). Khangarot BS, et al. **Bull Environ Contam Toxicol** 1990 Jun;44(6):832–9

Effects of chromium and cadmium upon respiration and survival of Callinectes similis. Ramírez P, et al. **Bull Environ Contam Toxicol** 1989 Dec;43(6):850–7

Mechanisms of chromium toxicity in mitochondria. Ryberg D, et al. **Chem Biol Interact** 1990;75(2):141–51

Changes in hepatocyte ploidy in response to chromium, analyzed by computer-assisted microscopy. Garrison JC, et al. **Fundam Appl Toxicol** 1990 Feb;14(2):346–55

Comparative toxicity of trivalent and hexavalent chromium compounds in fig moth Ephestia cautella (Walker). al-Hakkak ZS, et al. **Indian J Exp Biol** 1990 Apr; 28(4):387–9

Genotoxicity of chromium compounds. A review. De Flora S, et al. **Mutat Res** 1990 Mar;238(2):99–172 (257 ref.)

An oxygen dependence in chromium mutagenesis. Sugden KD, et al. **Mutat Res** 1990 Jul;244(3):239–44

On toxicity & mutagenicity of chromium rich brewer's yeast. Li LX, et al. **Prog Clin Biol Res** 1990;340E:199–203

Assessment of heavy metal nephrotoxicity in vitro using isolated rat glomeruli and proximal tubular fragments. Wilks MF, et al. **Renal Physiol Biochem** 1990 Sep-Oct; 13(5):275–84

Micronucleus tests in mice on four chrome-containing pigments. Odagiri Y, et al. **Sangyo Igaku** 1989 Nov; 31(6):438–9

Carcinogenic risk assessment criteria associated with inhalation of airborne particulates containing chromium (VI/III). Friess SL. **Sci Total Environ** 1989 Oct 1; 86(1–2):109–12

Acute and chronic systemic chromium toxicity [published erratum appears in Sci Total Environ 1990 Jun;95:295] Gad SC. **Sci Total Environ** 1989 Oct 1;86(1–2):149–57 (24 ref.)

Inhalation toxicity of chromium dioxide dust to rats after two years exposure. Lee KP, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):83–108

Speciation, bioavailability, and systemic distribution of chromium from Whetlerite dust. Salem H, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):59–64

Molecular basis of hexavalent chromium carcinogenicity: effect on gene expression. Wetterhahn KE, et al. **Sci Total Environ** 1989 Oct 1;86(1–2):113–29

Testicular toxicity following short-term exposure to tri- and hexavalent chromium: an experimental study in the rat. Ernst E. **Toxicol Lett** 1990 May;51(3):269–75

[New toxicokinetic exposure tests for metals based on atomic absorption analysis of the nails] Zaprianov Z, et al. **Probl Khig** 1989;14:75–97 (Eng. Abstr.) **(Bul)**

[Application of renal epithelial cell culture in study of organ toxicity of heavy metals] Morisue H. **Kokubyo Gakkai Zasshi** 1989 Jun;56(2):244–62 (Eng. Abstr.) **(Jpn)**

[Genotoxicity of inorganic metal compounds with umu test] Nakamura S, et al. **Sangyo Igaku** 1989 Nov;31(6):430–1 **(Jpn)**

[So-called Monday leukergy in polishers of chromium-tanned leather] Bulikowski W, et al. **Med Pr** 1989;40(6):390–2 (Eng. Abstr.) **(Pol)**

[Separate and combined effects of chromium trioxide aerosols and noise on animals] Paran'ko NM, et al. **Gig Tr Prof Zabol** 1990;(1):41–3 **(Rus)**

[Nephrotoxic action of platinum, chromium and cadmium compounds on marine bony fishes] Gambarian SP, et al. **Zh Evol Biokhim Fiziol** 1989 Nov-Dec;25(6):729–35 (Eng. Abstr.) **(Rus)**

URINE

Urinary chromium excretion and insulinogenic properties of carbohydrates. Anderson RA, et al. **Am J Clin Nutr** 1990 May;51(5):864–8

Cross-shift and chronic effects of stainless-steel welding related to internal dosimetry of chromium and nickel. Kilburn KH, et al. **Am J Ind Med** 1990;17(5):607–15

Urinary excretion of chromium in chromeplaters after discontinued exposure. Lindberg E, et al. **Am J Ind Med** 1989;16(5):485–92 (8 ref.)

Determination of chromium in urine by stable isotope dilution gas chromatography/mass spectrometry using lithium bis(trifluoroethyl)dithiocarbamate as a chelating agent. Aggarwal SK, et al. **Anal Chem** 1990 Jan 15;62(2):111–5

Analytical chemistry of chromium. Veillon C. **Sci Total Environ** 1989 Oct 1;86(1–2):65–8

[Urine-Cr assay with diphenylcarbazide] Li YQ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1989 Mar;20(1):85–7 (Eng. Abstr.) **(Chi)**

CHROMIUM ALLOYS

see related

DENTAL MATERIALS

Evaluation of friction between edgewise stainless steel brackets and orthodontic wires of four alloys. Kapila S, et al. **Am J Orthod Dentofacial Orthop** 1990 Aug; 98(2):117–26

Load-deflection rate measurements of activated open and closed coil springs. Boshart BF, et al. **Angle Orthod** 1990 Spring;60(1):27–32; discussion 33–4

The bond strengths of various adhesives used for Maryland Bridges. Flood AM, et al. **Aust Dent J** 1989 Oct; 34(5):449–53

The effect of indomethacin, aspirin, and ibuprofen on bone ingrowth into a porous-coated implant. Trancik T, et al. **Clin Orthop** 1989 Dec;(249):113–21

The effects of heat treatments and bead size on the corrosion of porous F75 in saline and serum. Hughes PJ, et al. **J Biomed Mater Res** 1990 Jan;24(1):79–94

Study of the effect of the surface state on the cytocompatibility of a Co-Cr alloy using human osteoblasts and fibroblasts. Naji A, et al. **J Biomed Mater Res** 1990 Jul;24(7):861–71

99mTc-MDP adsorption of some dental alloys with varying surface roughness: effect of oral environment. Anil N, et al. **J Dent** 1989 Dec;17(6):301–4

Effect of visco-elastic behavior on stress development in a metal-ceramic system. Dehoff PH, et al. **J Dent Res** 1989 Aug;68(8):1223–30

Studies on the castability of Co-Cr alloy for cast plates. Part 2: Effect of form of sprue attachment to the wax pattern. Satoh Y, et al. **J Nihon Univ Sch Dent** 1990 Mar;32(1):27–34

A laboratory examination of the behaviour of cast cobalt-chromium clasps. Ghani F, et al. **J Oral Rehabil** 1990 May;17(3):229–37

Bond strengths of three chemical adhesive cements adhered to a nickel-chromium alloy for direct bonded retainers. Atta MO, et al. **J Prosthet Dent** 1990 Feb;63(2):137–43

Rigidity of major connectors when subjected to bending and torsion forces. Ben-Ur Z, et al. **J Prosthet Dent** 1989 Nov; 62(5):557–62

Evaluation of a chemical etching solution for nickel-chromium-beryllium and chromium-cobalt alloys. Ferrari M, et al. **J Prosthet Dent** 1989 Nov;62(5):516–21

The effect of three different surface treatments on the tensile strength of the resin bond to nickel-chromium-beryllium alloy. Kohli S, et al. **J Prosthet Dent** 1990 Jan;63(1):4–8

A method for bonding extracted teeth to a cobalt-chrome prosthesis. Lim KC. **J Prosthet Dent** 1990 Jul;64(1):116

Interfacial strengths of various alloy surface treatments for resin-bonded fixed partial dentures. Lin TH, et al. **J Prosthet Dent** 1990 Aug;64(2):158–62

Properties of cobalt-chromium metal ceramic alloys after heat treatment. Morris HF. **J Prosthet Dent** 1990 Apr; 63(4):426–33

Corrosion properties of soldered joints. Part I: Electrochemical action of dental solder and dental nickel-chromium alloy. Shigeto N, et al. **J Prosthet Dent** 1989 Nov;62(5):512–5

Microscopic examination of embrittled pin-retained base metal casting. Walker RS, et al. **J Prosthet Dent** 1989 Sep; 62(3):348–52

Porous-coated anatomic total hip prostheses: radiographic analysis and clinical correlation. Kattapuram SV, et al. **Radiology** 1990 Mar;174(3 Pt 1):861–4

[Tribologic behavior of metal/metal combinations for artificial hip joints] Streicher RM, et al. **Biomed Tech (Berlin)** 1990 May;35(5):107–11 (Eng. Abstr.) **(Ger)**

[The wear behavior of capsules and heads of CoCrMo casts in long-term implanted all-metal hip prostheses] Semlitsch

M, et al. **Orthopade** 1989 Sep;18(5):377–81 (Eng. Abstr.) **(Ger)**

[The welding of cobalt–chromium, nickel–chromium and silver–palladium alloys using a solid–state laser] Dobberstein H, et al. **Zahn Mund Kieferheilkd** 1990;78(3):259–61 **(Ger)**

[Experimental studies of the laser welding of Co–Cr alloys using a pulsed Nd:YAG–laser] Dobberstein H, et al. **Zahn Mund Kieferheilkd** 1989;77(6):578–9 **(Ger)**

[Experience in preparing metal–ceramic and unit–cast fixed dentures using a new nickel–chromium alloy] Khokhlov AA, et al. **Stomatologiia (Mosk)** 1989 Jul–Aug;68(4):50–1 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Nickel, chromium, cobalt dental alloys and allergic reactions: an overview. Hildebrand HF, et al. **Biomaterials** 1989 Oct; 10(8):545–8 (46 ref.)

[Results of a questionnaire survey of pulmonary complaints in dental technicians: effect of inhalation exposure to heavy metal dusts (cobalt–chromium alloys)] Schröter U, et al. **Pneumologie** 1990 Feb;44 Suppl 1:322–4 (Eng. Abstr.) **(Ger)**

CHROMIUM–COBALT ALLOYS see **CHROMIUM ALLOYS**

CHROMIUM ISOTOPES

Determination of blood volume in dogs using an enriched stable isotope 50Cr. Kunugiyama I, et al. **Nippon Juigaku Zasshi** 1989 Oct;51(5):855–60

CHROMIUM–NICKEL ALLOYS see **CHROMIUM ALLOYS**

CHROMIUM RADIOISOTOPES

Adherence assay of 51chromium–labeled human polymorphonuclear leukocyte using glass beads. Kinoshita Y, et al. **J Immunol Methods** 1989 Nov 13;124(1):29–33

DIAGNOSTIC USE

Measurement of renal functions by double isotope techniques in elderly patients during tenoxicam therapy. Ghose K, et al. **Arch Gerontol Geriatr** 1989 Sep–Oct;9(2):115–22

Determination of single and repeated red cell volumes by the indicator dilution method using carbon monoxide as the indicator. Fukui M, et al. **Crit Care Med** 1989 Nov; 17(11):1199–202

Red blood cell labeling technique using a commercial stannous kit: comparison with 51chromium [letter] Biggi A, et al. **Eur J Haematol** 1990 May;44(5):317–8

A quantitative measurement of cell damage by means of 51Cr–binding. Scaife JF, et al. **Exp Cell Res** 1967 Jun; 46(3):612–5

Evaluation of cytotoxic cell–target cell conjugates. Comparison between flow cytometric analysis and 51Cr binding assay. Heltai S, et al. **Haematologica** 1990 Mar–Apr; 75(2):191–3

AUR memorial award—1988. MRI enhancement of perfused tissues using chromium labeled red blood cells as an intravascular contrast agent. Eisenberg AD, et al. **Invest Radiol** 1989 Oct;24(10):742–53

[51Cr]EDTA intestinal permeability in children with cow's milk intolerance. Schrander JJ, et al. **J Pediatr Gastroenterol Nutr** 1990 Feb;10(2):189–92

Screening of kidney function by plasma creatinine and single–sample 51Cr–EDTA clearance determination—a comparison. Groth S, et al. **Scand J Clin Lab Invest** 1989 Dec;49(8):707–10

Determination of 51Cr–EDTA clearance between 15 and 40 ml/min/1.73 m2 by a single plasma sample. Groth S, et al. **Scand J Clin Lab Invest** 1989 Dec;49(8):711–7

51Cr–EDTA plasma clearance in severe renal failure determined by one plasma sample. Kamper AL, et al. **Scand J Clin Lab Invest** 1989 Oct;49(6):555–9

Intestinal permeability of 51Cr–labelled ethylenediaminetetraacetic acid in patients with Crohn's disease and their healthy relatives. Ainsworth M, et al. **Scand J Gastroenterol** 1989 Oct;24(8):993–8

A double–blind comparison of gastrointestinal effects of ibuprofen standard and ibuprofen sustained release assessed by means of endoscopy and 51–Cr–labelled erythrocytes. Aabakken L, et al. **Scand J Rheumatol** 1989;18(5):307–13

A comparison of results obtained by two different chromium–51 methods of determining platelet survival and recovery. Rock G, et al. **Transfusion** 1990 Jun;30(5):407–10

Evaluation of 99mtechnetium/51chromium post–transfusion recovery of red cells stored in saline, adenine, glucose, mannitol for 42 days. Heaton WA, et al. **Vox Sang** 1989; 57(1):37–42

[Evaluation of blood loss volume and the degree of activity of nonspecific ulcerative colitis by using Cr51–labeled erythrocytes] Kirkin BV, et al. **Khirurgiia (Mosk)** 1990 Mar; (3):57–61 (Eng. Abstr.) **(Rus)**

CHROMOBACTERIUM

ENZYMOLOGY

Partial purification and characterization of ADP sulfurylase from the purple sulfur bacterium Thiocapsa roseopersicina. Algueró M, et al. **Microbiologia** 1988 Dec;4(3):149–60

GROWTH & DEVELOPMENT

Effect of growth conditions on production of violacein by Chromobacterium violaceum (BB–78 strain). Riveros R, et al. **Braz J Med Biol Res** 1989;22(5):569–77

METABOLISM

Bacterial chemistry–III: preliminary studies on trypanosomal activities of Chromobacterium violaceum products. Durán N, et al. **An Acad Bras Cienc** 1989 Mar;61(1):31–6

CHROMOBLASTOMYCOSIS

DIAGNOSIS

[Chromomycosis in the Island of Mayotte (apropos of 3 case reports)] Laporte P. **Med Trop (Mars)** 1990 Apr;50(2):195–6 (Eng. Abstr.) **(Fre)**

DRUG THERAPY

Treatment of chronic murine chromoblastomycosis with the triazole SCH39304. Defaveri J, et al. **Am J Trop Med Hyg** 1990 Jun;42(6):601–6

EPIDEMIOLOGY

Chromoblastomycosis in Malaysia. Jayalakshmi P, et al. **Mycopathologia** 1990 Jan;109(1):27–31

ETIOLOGY

Chromomycosis in a steroid–dependent patient with chronic obstructive pulmonary disease. Greene JN, et al. **Am J Med Sci** 1990 Jan;299(1):54–7

PATHOLOGY

Chromomycosis: a twenty–year analysis of histologically confirmed cases in Jamaica. Bansal AS, et al. **Trop Geogr Med** 1989 Jul;41(3):222–6

RADIONUCLIDE IMAGING

Ga–67 scintigraphy in chromomycosis. Sato M, et al. **Ann Nucl Med** 1989 Mar;3(1):59–62

CHROMOGENIC COMPOUNDS

Comparison of particulate 3,3',5,5'–tetramethylbenzidine and 3,3'–diaminobenzidine as chromogenic substrates for immunoblot. Brand JA, et al. **Biotechniques** 1990 Jan; 8(1):58–60

Determination of alpha 2–macroglobulin–trypsin complex with a new synthetic substrate. Kuroiwa K, et al. **Clin Chem** 1989 Nov;35(11):2169–72

Effects of methylamine and heparin on a rapid chromogenic assay of C1–esterase inhibitor in plasma. Munkvad S, et al. **Clin Chem** 1990 May;36(5):737–41

Falsely low estimation of triglycerides in lipemic plasma by the enzymatic triglyceride method with modified Trinder's chromogen. Shephard MD, et al. **Clin Chem** 1990 Feb; 36(2):325–9

Development of a simple chromogenic factor VIII assay for clinical use. Wagenvoord RJ, et al. **Haemostasis** 1989; 19(4):196–204

Chromogenic endotoxin assay in plasma. Selection of plasma pretreatment and production of standard curves. Fukui H, et al. **J Clin Chem Clin Biochem** 1989 Dec;27(12):941–6

Adaptation and evaluation of a chromogenic test procedure for fibrin monomers on a centrifugal analyzer. van Wersch JW. **J Clin Chem Clin Biochem** 1990 Mar;28(3):169–74

Chromogenic substrates for activated partial thromboplastin time testing: are they worth using? Tripodi A. **Ric Clin Lab** 1989 Oct–Dec;19(4):355–8

[A combined chromogenic–fluorogenic medium for the simultaneous detection of coliform groups and E. coli in water] Manafi M, et al. **Zentralbl Hyg Umweltmed** 1989 Dec;189(3):225–34 (Eng. Abstr.) **(Ger)**

CHEMICAL SYNTHESIS

The chemical synthesis of the chromogenic substrates, H–D–Val–L–Leu–L–Lys–p–nitroanilide (S2251) and H–D–Ile–L–Pro–L–ARG–p–nitroanilide (S2288). Sharma SK, et al. **Thromb Res** 1990 Jan 1;57(1):127–38

DIAGNOSTIC USE

A comparison of chromogen test strip (Chemstrip bG) and serum glucose values in newborns. Holtrop PC, et al. **Am J Dis Child** 1990 Feb;144(2):183–5

Chromogenic assay for equine plasminogen. Welles EG, et al. **Am J Vet Res** 1990 Jul;51(7):1080–5

Reaction rate measurements of proteases and glycosidases with chromogenic methods. Ruhnke M, et al. **Histochem J** 1989 Sep–Oct;21(9–10):535–44

Few–minutes tests for the identification of group A streptococci and enterococci with chromogenic substrates. Kaufhold A, et al. **Int J Med Microbiol** 1989 Dec; 272(2):191–5

[Chromogens in systems for immunoenzyme determination using horseradish peroxidase–labeled antibodies] Votruba T. **Cesk Epidemiol Mikrobiol Imunol** 1989 Sep; 38(5):292–303 (Eng. Abstr.) **(Cze)**

METABOLISM

Chromogenic depsipeptide substrates for beta–lactamases and penicillin–sensitive DD–peptidases. Adam M, et al. **Biochem J** 1990 Sep 1;270(2):525–9

Determination of alpha 2–macroglobulin–trypsin complex with a new synthetic substrate. Kuroiwa K, et al. **Gastroenterol Jpn** 1990 Apr;25(2):278

Automated amidolytic method for evaluating the activated partial thromboplastin time compared with a conventional coagulation method. Tripodi A, et al. **Haemostasis** 1989; 19(4):205–12

Sensitive, soluble chromogenic substrates for HIV–1 proteinase. Richards AD, et al. **J Biol Chem** 1990 May 15;265(14):7733–6

CHROMOGENIC SUBSTRATES see **CHROMOGENIC COMPOUNDS**

CHROMOGRANINS see under **NERVE TISSUE PROTEINS**

CHROMOMYCINS

BIOSYNTHESIS

Biogenesis of chromomycin A3 by Streptomyces griseus. Montanari A, et al. **J Antibiot (Tokyo)** 1990 Jul;43(7):883–9

ISOLATION & PURIFICATION

Isolation and structures of mono– and di–deacetyl chromomycin antibiotics 02–3D and 02–3G from Streptomyces avellaneus. Kawano T, et al. **J Antibiot (Tokyo)** 1990 Jan;43(1):110–3

METABOLISM

A unique binding cavity for divalent cations in the DNA–metal–chromomycin A3 complex. Itzhaki L, et al. **Biopolymers** 1990 Feb 15;29(3):481–9

PHARMACOLOGY

Extensive interference of DNA packaging processes affected by chemotherapeutic drugs. Reich Z, et al. **J Biol Chem** 1990 Sep 15;265(26):16004–6

CHROMOMYCOSIS see **CHROMOBLASTOMYCOSIS**

CHROMONAR see under **COUMARINS**

CHROMONES

The detailed conformational study of a leukotriene antagonist, FPL–55712, using high–field nuclear magnetic resonance spectroscopy. Kawaki H, et al. **J Biomol Struct Dyn** 1985 Aug;3(1):161–71

ADVERSE EFFECTS

Natural occurrence of the mycotoxin fusarochromanone, a metabolite of Fusarium equiseti, in cereal feed associated with tibial dyschondroplasia. Krogh P, et al. **Appl Environ Microbiol** 1989 Dec;55(12):3184–8

Cytotoxicity and genotoxicity of xenoclauxin and desacetyl duclauxin from Penicillium duclauxii (Delacroix). Kawai K, et al. **Cell Biol Toxicol** 1985 Jan;1(2):1–10

ANALYSIS

[HPTLC scanning determination of 6 flavonoids in 166 Rhododendron species] Hu M, et al. **Yao Hsueh Hsueh Pao** 1989;24(12):923–31 (Eng. Abstr.) **(Chi)**

CHEMICAL SYNTHESIS

[Chemistry and pharmacology of pyrane derivatives. XVII. Synthesis of substituted 2–(dialkylamino)–3–formylchromones and their tricyclic derivatives] Balbi A, et al. **Farmaco** 1989 Jun;44(6):565–77 (Eng. Abstr.) **(Ita)**

PHARMACOLOGY

Evidence for a role of cysteinyl leukotrienes in mouse and human sperm function. Basuray R, et al. **J Androl** 1990 Jan–Feb;11(1):47–51

Does leukotriene C4 mediate hypoxic vasoconstriction in isolated ferret lungs? Tseng CM, et al. **J Appl Physiol** 1990 Jan;68(1):253–9

[The effect of leukotriene C4/D4 receptor antagonist (ONO–1078) and thromboxane A2 synthetase inhibitor (OKY–046) on airway hyperresponsiveness induced by ozone exposure in guinea pigs] Okazawa A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1990 Feb;28(2):293–9 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Protective effects of a thromboxane synthetase inhibitor, a thromboxane antagonist, a lipoxygenase inhibitor and a leukotriene C4, D4 antagonist on myocardial injury caused by acute myocardial infarction in the canine heart. Ito T, et al. **Jpn Circ J** 1989 Sep;53(9):1115–21

Leukotriene-receptor antagonist FPL-55712 and t-PA-induced thrombolysis in canine coronary thrombosis. Mehta JL, et al. **Thromb Res** 1990 Apr 1;58(1):13-21
[Eicosanoids in bronchial asthma] Makino S. **Nippon Rinsho** 1990 Jun;48(6):1254-61 **(Jpn)**
[Effect of KP-136 on allergic paw edema in the rat] Hiyama Y, et al. **Nippon Yakurigaku Zasshi** 1990 Mar;95(3):83-90 (Eng. Abstr.) **(Jpn)**

CHROMOSOMAL PROBES see **DNA PROBES**

CHROMOSOMAL PROTEINS, NON-HISTONE

ANALYSIS

The appearance of hepatoma-associated chromosomal non-histone proteins in rat liver after a single dose of 3'-MDAB followed by treatment of phenobarbital. Dong JM, et al. **Cancer Lett** 1990 Jun 15;51(3):259-67
A nucleolar auto-antigen is part of a major chromosomal surface component. Yasuda Y, et al. **Chromosoma** 1990 Apr; 99(2):152-60
Distribution patterns of HP1, a heterochromatin-associated nonhistone chromosomal protein of Drosophila. James TC, et al. **Eur J Cell Biol** 1989 Oct;50(1):170-80
CENP-B: a major human centromere protein located beneath the kinetochore. Cooke CA, et al. **J Cell Biol** 1990 May; 110(5):1475-88
Hamster liver chromatin immunospecific non-histone proteins. Wojtkowiak Z, et al. **Mol Cell Biochem** 1990 Jan 18;92(1):61-7
[Expression of hetero-organic antigens—nonhistone chromosomal proteins of renal nature in liver cells of rats after administration of tetramethylthiuram disulfide and N-nitrosodiethylamine] Klimova AA. **Eksp Onkol** 1990; 12(4):76-7 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Fibrillarin and U3 RNA expression during Xenopus oogenesis and embryo development. Caizergues-Ferrer M, et al. **Mol Biol Rep** 1990;14(2-3):107-8

DRUG EFFECTS

[Modulation of the binding characteristics of thyroid hormone receptors by the chemical modification of non-histone nuclear proteins] Brtko J, et al. **Bratisl Lek Listy** 1990 Mar;91(3):167-71 (Eng. Abstr.) **(Slo)**

GENETICS

Genetic analysis of nonhistone chromosomal protein inheritance in recombinant inbred mouse strains using two-dimensional electrophoresis. Ramagli LS, et al. **Biochem Genet** 1990 Apr;28(3-4):123-36
Presence of female-specific bent-repetitive DNA sequences in the genomes of turkey and pheasant and their interactions with W-protein of chicken. Saitoh H, et al. **Chromosoma** 1989 Oct;98(4):250-8
Duplicated NHP6 genes of Saccharomyces cerevisiae encode proteins homologous to bovine high mobility group protein 1. Kolodrubetz D, et al. **J Biol Chem** 1990 Feb 25; 265(6):3234-9
Molecular cloning of Xenopus fibrillarin, a conserved U3 small nuclear ribonucleoprotein recognized by antisera from humans with autoimmune disease. Lapeyre B, et al. **Mol Cell Biol** 1990 Jan;10(1):430-4
DNA methylation and demethylation events during meiotic prophase in the mouse testis. Trasler JM, et al. **Mol Cell Biol** 1990 Apr;10(4):1828-34
Mouse transition protein 1 is translationally regulated during the postmeiotic stages of spermatogenesis. Yelick PC, et al. **Mol Reprod Dev** 1989;1(3):193-200
Nucleotide sequence of a cDNA for phi, a histone to protamine transition protein from sea cucumber spermatozoa. Prats E, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10097

IMMUNOLOGY

Autoantibodies to nonhistone chromosomal proteins HMG-1 and HMG-2 in sera of patients with juvenile rheumatoid arthritis. Wittemann B, et al. **Arthritis Rheum** 1990 Sep; 33(9):1378-83
Anti-fibrillarin autoantibodies in mercury-treated mice. Hultman P, et al. **Clin Exp Immunol** 1989 Dec;78(3):470-7
[The fibrillarin (Scl-34) autoantibody in systemic scleroderma] Kühn G, et al. **Dermatol Monatsschr** 1990; 176(1):19-26 (Eng. Abstr.) **(Ger)**

METABOLISM

Binding of low mobility group protein from rat liver chromatin with histones studied by chemical cross-linking. Wiland E, et al. **Biochem Biophys Res Commun** 1990 Jan 15;166(1):11-21
Growth-related changes of non-histone chromatin proteins from Kirkman-Robbins hepatoma. Kilianska Z, et al. **Int J Biochem** 1989;21(8):873-81
ADP-ribosylation of proteins in brain regions of rats during postnatal development. Spina-Purrello V, et al. **Int J Dev Neurosci** 1990;8(2):167-74
The ubiquitous nuclear protein, NHP1, binds with high affinity to different sequences of the chicken vitellogenin II gene. Hughes MJ, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8511-20
Cytochalasin D inhibits nuclear translocation of nonhistone proteins induced by lectin and other agents in lymphocytes. Polet H. **Proc Soc Exp Biol Med** 1990 May;194(1):5-9
[Non-histone chromatin proteins participating in the regulation of transcription of globin genes in erythroid cells] Mavletova DA, et al. **Dokl Akad Nauk SSSR** 1989; 307(4):1007-9 **(Rus)**

PHYSIOLOGY

Studies on scaffold attachment sites and their relation to genome function. Gasser SM, et al. **Int Rev Cytol** 1989; 119:57-96 (177 ref.)
The role of nonhistone proteins in the structural organization of chromosomes. Jeppesen P. **Prog Clin Biol Res** 1989; 318:91-101 (22 ref.)

CHROMOSOMAL RNA see **RNA, NUCLEAR**

CHROMOSOMAL TRANSLOCATION see **TRANSLOCATION (GENETICS)**

CHROMOSOME ABERRATIONS

Chromosomes in orthopedic tumors [editorial] Mandahl N. **Acta Orthop Scand** 1990 Apr;61(2):97-8
Chromosomal evolution and tumor progression in a myxoid liposarcoma. Orndal C, et al. **Acta Orthop Scand** 1990 Apr; 61(2):99-105 (21 ref.)
Genetic and epigenetic losses of heterozygosity in cancer predisposition and progression. Scrable HJ, et al. **Adv Cancer Res** 1990;54:25-62 (93 ref.)
Slot blot method for the quantification of DNA sequences and mapping of chromosome rearrangements: application to chromosome 21. Blouin JL, et al. **Am J Hum Genet** 1990 Mar;46(3):518-26
Enhanced G2 chromatid radiosensitivity in dyskeratosis congenita fibroblasts. DeBauche DM, et al. **Am J Hum Genet** 1990 Feb;46(2):350-7
The natural history of cytogenetically abnormal fetuses detected at midtrimester amniocentesis which are not terminated electively: new data and estimates of the excess and relative risk of late fetal death associated with 47,+21 and some other abnormal karyotypes. Hook EB, et al. **Am J Hum Genet** 1989 Dec;45(6):855-61
Association of pigmentary anomalies with chromosomal and genetic mosaicism and chimerism [letter; comment] Read AP, et al. **Am J Hum Genet** 1990 Jul;47(1):166-8 Comment on: Am J Hum Genet 1989 Aug;45(2):193-205.
Chromosome aberrations induced in vitro by low doses of radiation: nondisjunction in lymphocytes of young adults. Uchida IA, et al. **Am J Hum Genet** 1975 May;27(3):419-29
Novel isodicentric chromosome 18 in an abnormal infant with a mosaic karyotype [46,XY/46,XY,-18,+dic(18)(q12.2)]. Bryke CR, et al. **Am J Med Genet** 1990 Jun;36(2):247-50
Duplication of euchromatin without phenotypic effects: a variant of chromosome 16. Bryke CR, et al. **Am J Med Genet** 1990 May;36(1):43-4
De novo direct tandem duplication of the short arm of chromosome 7(p21.1-p14.2). Dębiec-Rychter M, et al. **Am J Med Genet** 1990 Jul;36(3):316-20
DNA polymerase alpha defect in the N syndrome. Floy KM, et al. **Am J Med Genet** 1990 Mar;35(3):301-5
A case of de novo i(12p) with 12q whole-arm translocation mosaicism. Marques-de-Faria AP, et al. **Am J Med Genet** 1989 Aug;33(4):453-6
Transmission of ring 14 chromosome from mother to two sons. Matalon R, et al. **Am J Med Genet** 1990 Aug; 36(4):381-5 (30 ref.)
A ring X chromosome, 46,Y,r(X)(p22.33q28), as a cause of extreme short stature in a male. Ogata T, et al. **Am J Med Genet** 1990 Feb;35(2):241-4
Deletions in chromosome 2 and fragile sites. Palmer CG, et al. **Am J Med Genet** 1990 Jun;36(2):214-8
Ring chromosome 6: clinical and cytogenetic behaviour. Paz-y-Miño C, et al. **Am J Med Genet** 1990 Apr; 35(4):481-3
Chromosome mosaicism in hypomelanosis of Ito. Ritter CL, et al. **Am J Med Genet** 1990 Jan;35(1):14-7
Tetrasomy 18p in a child with trisomy 18 phenotype. Singer TS, et al. **Am J Med Genet** 1990 Jun;36(2):144-7
Transcervical chorionic villus sampling and amniocentesis: a comparison of reliability, culture findings, and fetal outcome. Ferguson JE 2d, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):926-31
Detection of numerical chromosome aberrations in bladder cancer by in situ hybridization. Hopman AH, et al. **Am J Pathol** 1989 Dec;135(6):1105-17
Cytogenetic damage in operation theatre personnel. Natarajan D, et al. **Anaesthesia** 1990 Jul;45(7):574-7
Chromosomal abnormalities and gene amplification in renal cancers induced in rats by nickel subsulfide. Sunderman FW Jr, et al. **Ann Clin Lab Sci** 1990 Jan-Feb;20(1):60-72
Karyotypes of 33 patients with clonal aberrations in chronic lymphocytic leukaemia. Review of 216 abnormal karyotypes in chronic lymphocytic leukaemia. Huret JL, et al. **Ann Genet** 1989;32(3):155-9
Ring chromosome 21 transmitted from mother to daughter: its stability in a lymphoblastoid cell line. Ikeuchi T, et al. **Ann Genet** 1990;33(1):32-5
Clonal structural chromosomal rearrangements in lymphocytes of four patients with Werner's syndrome. Scappaticci S, et al. **Ann Genet** 1990;33(1):5-8
Incontinentia pigmenti: Xp breakpoint is not the same in a case of r(X) and in X/autosome translocations. Sefiani A, et al. **Ann Genet** 1989;32(3):149-51
Ring chromosome 16: a new case. Vianello MG, et al. **Ann Genet** 1990;33(1):36-9 (8 ref.)
How much difference does chromosome banding make? Adjustments in prevalence and mutation rates of human structural cytogenetic abnormalities. Hook EB, et al. **Ann Hum Genet** 1989 Jul;53 (Pt 3):237-42
The molecular biology of acute lymphoblastic leukemia (review). Botti AC, et al. **Anticancer Res** 1990 Mar-Apr; 10(2B):519-25 (80 ref.)
Cytogenetic characterization of two human milk-derived cell line (HBL-100) passages differing in tumorigenicity. Dhaliwal MK, et al. **Anticancer Res** 1990 Jan-Feb; 10(1):113-7
Consistent karyotypic abnormalities in human malignant melanomas. Kacker RK, et al. **Anticancer Res** 1990 Jul-Aug;10(4):859-71
A human adenolymphoma showing the chromosomal aberrations del (7)(p12p14-15) and t(11;19)(q21;p12-13). Mark J, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1565-6
Cytogenetic analysis of cell lines derived from metastases of a mammary carcinoma in a dog. Mellink CH, et al. **Anticancer Res** 1989 Jul-Aug;9(4):1241-4
Cytogenetic studies of 11 meningiomas and their clinical significance. II. Poulsgård L, et al. **Anticancer Res** 1990 Mar-Apr;10(2B):535-8
A case of squamous cell lung carcinoma with tetrasomy 7 and chromosome 1 C-band polymorphism. Rønne M, et al. **Anticancer Res** 1989 Jul-Aug;9(4):1101-3
A case of meningioma with multiclonal origin. Rønne M, et al. **Anticancer Res** 1990 Mar-Apr;10(2B):539-42
Clastogenic inosine nucleotide as components of the chromosome breakage factor in scleroderma patients. Auclair C, et al. **Arch Biochem Biophys** 1990 Apr; 278(1):238-44
Comparison of cellular and whole-animal bioassays for estimation of radiation effects in the polychaete worm Neanthes arenaceodentata (Polychaeta). Anderson SL, et al. **Arch Environ Contam Toxicol** 1990 Mar-Apr; 19(2):164-74
Acute leukemia and cytogenetic abnormalities complicating melphalan treatment of primary systemic amyloidosis. Gertz MA, et al. **Arch Intern Med** 1990 Mar;150(3):629-33
Angiotrophic lymphoma. Presentation in uterine vessels with cytogenetic studies. Davey DD, et al. **Arch Pathol Lab Med** 1990 Aug;114(8):879-82
Abnormal chromosome 9 in a neonate program. Report of three cases. Nakamura Y, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):185-7
The mouse mutant, "wasted": tissue-specific radiation sensitivity and hematopoietic cell lineages. Tezuka H. **Basic Life Sci** 1990;52:379-83
Cytogenetic analysis may improve BMT strategies in acute leukaemias. Bernasconi P, et al. **Bone Marrow Transplant** 1989 Dec;4 Suppl 4:73-6 (12 ref.)
Analytical approaches to detection and characterization of disease-linked chromosome aberrations. Gray JW, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:14-9 (23 ref.)
Demonstration of somatic rearrangements and genomic heterogeneity in human ovarian cancer by DNA fingerprinting. Boltz EM, et al. **Br J Cancer** 1990 Jul; 62(1):23-7
Absence of rearrangement of proto-oncogene MET in 88 cases of myelodysplastic syndromes (MDS). Collyn-d'Hooghe M, et al. **Br J Haematol** 1989 Sep; 73(1):40-2
A cytogenetic and haematological investigation of oil exposed workers in a Norwegian cable manufacturing company. Skyberg K, et al. **Br J Ind Med** 1989 Nov; 46(11):791-8
Cytogenetic findings in 1250 chorionic villus samples obtained in the first trimester with clinical follow-up of the first 1000 pregnancies. Leschot NJ, et al. **Br J Obstet Gynaecol** 1989 Jun;96(6):663-70
Chromosome changes in 43 carcinomas of the cervix uteri. Atkin NB, et al. **Cancer Genet Cytogenet** 1990 Feb; 44(2):229-41
Cytogenetic study of four cancers of the prostate. Babu VR, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):83-7
Involvement of 9p in metastatic ovarian adenocarcinomas. Bello MJ, et al. **Cancer Genet Cytogenet** 1990 Apr; 45(2):223-9
Cytogenetic studies of 44 T-cell acute lymphoblastic leukemias. Berger R, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):69-75
Involvement of both chromosomes 5 in a patient with leukemia secondary to myelodysplastic syndrome [letter] Berkowicz M, et al. **Cancer Genet Cytogenet** 1990 Sep; 48(2):279-80
Ultraviolet-induced chromosomal instability in cultured fibroblasts of heterozygote carriers for xeroderma pigmentosum. Bielfeld V, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):219-26
Cytogenetics of human brain tumors. Bigner SH, et al. **Cancer Genet Cytogenet** 1990 Jul 15;47(2):141-54 (78 ref.)
Three possible cytogenetic subgroups of leiomyosarcoma.

Boghosian L, et al. **Cancer Genet Cytogenet** 1989 Nov; 43(1):39–49

An inter–Nordic prospective study on cytogenetic endpoints and cancer risk. Nordic Study Group on the Health Risk of Chromosome Damage. Brøgger A, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):85–92

Pentasomy 21q in a neonatal case of acute myeloblastic leukemia [letter] Brothman AR, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):135–7

Cytogenetic investigations on a cell line derived from a carcinoma arising in a salivary gland pleomorphic adenoma. Bullerdiek J, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):253–62

Correlation between cytogenetic and histopathological findings in 65 human meningiomas. Casalone R, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):237–43

Pseudodicentric isochromosome(22) in meningiomas [published erratum appears in Cancer Genet Cytogenet 1990 Sep;48(2):following 283] Casalone R, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):273–5

Double minute chromosomes and monosomy 7 in a lymphatic blast crisis of chronic myeloid leukemia [letter] Cigudosa JC, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):133–4

Assessment of chromosome 22 anomalies in neurinomas by combined karyotype and RFLP analyses. Couturier J, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):55–62

Cytogenetic and molecular changes in chronic B–cell leukemia. Crossen PE. **Cancer Genet Cytogenet** 1989 Dec; 43(2):143–50

Isochromosome 12p in mediastinal germ cell tumor. Dal Cin P, et al. **Cancer Genet Cytogenet** 1989 Oct 15;42(2):243–51

Pathogenesis of adult testicular germ cell tumors. A cytogenetic model. de Jong B, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):143–67 (113 ref.)

Increased chromosome breakage by N–methyl–N1–nitro–N–nitrosoguanidine in patients with adenomatous polyposis coli. Delhanty JD, et al. **Cancer Genet Cytogenet** 1989 Oct 15;42(2):263–71

Cytogenetic studies in tuberous sclerosis. Dietrich CU, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):161–77

Cytogenetic study of a case of childhood erythroleukemia. Duarte MH, et al. **Cancer Genet Cytogenet** 1990 Oct 1; 49(1):25–30

Cytogenetic findings in nine leiomyomas of the uterus. Fan SX, et al. **Cancer Genet Cytogenet** 1990 Jul 15;47(2):179–89

Chromosomal rearrangements in Barrett's esophagus. A premalignant lesion of esophageal adenocarcinoma. Garewal HS, et al. **Cancer Genet Cytogenet** 1989 Oct 15; 42(2):281–6

Cytogenetics of breast cancer. Geleick D, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):217–29

Human sperm chromosomes. Long–term effect of cancer treatment. Genescà A, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):251–60

Human malignant melanoma. Significance of chromosomal abnormalities. Grammatico P, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):237–42

Cytogenetic analysis of malignant mesothelioma. Hagemeijer A, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):1–28

New example of 6p involvement in lipoma [letter] Haus O, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):281–3

Monosomy 3 and isochromosome 8q in a uveal melanoma. Horsman DE, et al. **Cancer Genet Cytogenet** 1990 Apr; 45(2):249–53

Radiation exposure and chromosome abnormalities. Human cytogenetic studies at the National Institute of Radiological Sciences, Japan, 1963–1988. Ishihara T, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):13–33

Cytogenetic and clinical investigations in 76 cases with therapy–related leukemia and myelodysplastic syndrome. Iurlo A, et al. **Cancer Genet Cytogenet** 1989 Dec; 43(2):227–41

Multiple clonal chromosome aberrations in squamous cell carcinomas of the larynx. Jin YS, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):209–16

Cytogenetic findings in acute megakaryoblastic leukemia (ANLL–M7). Johansson B, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):119–23

Cytogenetic analysis of 54 cases of myelodysplastic syndrome. Jotterand–Bellomo M, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):157–72

A new case of myelodysplastic syndrome with 6p rearrangement. Jotterand–Bellomo M, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):271–4

Chromosome aberrations in B–cell chronic lymphocytic leukemia. Pathogenetic and clinical implications. Juliusson G, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):143–60 (91 ref.)

Karyotypically unrelated clones in acute leukemias and myelodysplastic syndromes. Kobayashi H, et al. **Cancer Genet Cytogenet** 1990 Jul 15;47(2):171–8

Cytogenetic and molecular genetic analysis of abnormal cells in Hodgkin's disease. Koduru PR, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):109–18

Effect of a low–molecular–weight B cell growth factor on the proliferation of normal and neoplastic lymphocytes in lymphomas. Kovanen PE, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):109–18

Nutritional folate–deficiency in Chinese hamster ovary cells. Chromosomal abnormalities associated with perturbations in nucleic acid precursors. Libbus BL, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):231–42

An improved technique for short–term culturing of human prostatic adenocarcinoma tissue for cytogenetic analysis. Limon J, et al. **Cancer Genet Cytogenet** 1990 Jun; 46(2):191–9

Apparent lack of telomere sequences on double minute chromosomes. Lin CC, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):271–4

Cytogenetic abnormalities and leukemic transformation in hydroxyurea–treated patients with Philadelphia chromosome negative chronic myeloproliferative disease. Löfvenberg E, et al. **Cancer Genet Cytogenet** 1990 Oct 1; 49(1):57–67

Chromosome 1 studies in Wilms' tumor. McDowell H, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):203–9

Double minute chromosomes in the leukocytes of a young girl with breast carcinoma. Madhavi R, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):203–7

Chromosomal differences between acute nonlymphocytic leukemia in patients with prior solid tumors and prior hematologic malignancies. A study of 14 cases with prior breast cancer. Mamuris Z, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):43–50

Cytogenetic and quantitative DNA analysis of primary and xenografted human osteosarcomas. Mandahl N, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):27–34

Structural chromosome aberrations in an adamantinoma. Mandahl N, et al. **Cancer Genet Cytogenet** 1989 Oct 15; 42(2):187–90

Double i(18q) in lymphoma [letter] Mandal AK, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):279–81

Molecular analysis of Philadelphia–negative myeloproliferative syndromes with i(17q). Mareni C, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):195–201

Chromosomal patterns in human benign uterine leiomyomas. Mark J, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):1–13

Cytogenetics in autologous bone marrow transplantation [letter] Maserati E, et al. **Cancer Genet Cytogenet** 1990 Mar; 45(1):137–8

Cytogenetic studies in a canine mammary tumor. Mayr B, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):83–7

Distribution of marker chromosomes in relation to histologic grade in bladder cancer. Milašin J, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):135–42

A cytogenetic study of male breast cancer. Mitchell EL. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):107–12

Isochromosome (8q) in four patients with adenocarcinoma of the lung. Miura I, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):203–7

Recurrent chromosomal aberrations in peripheral T–cell lymphoma. Montaldi A, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):39–48

Cytogenetics of colorectal adenocarcinomas. Muleris M, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):143–56

Detection of chromosome aberrations in interphase tumor nuclei by nonradioactive in situ hybridization. Nederlof PM, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):87–98

Isochromosome 11q in acute monoblastic leukemia (M5a). Niiya K, et al. **Cancer Genet Cytogenet** 1990 Aug 1; 48(1):61–5

Chromosome rearrangements in two uterine sarcomas [published erratum appears in Cancer Genet Cytogenet 1990 Jul 15;47(2):281] Nilbert M, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):27–35

Complex karyotypic changes, including rearrangements of 12q13 and 14q24, in two leiomyosarcomas. Nilbert M, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):217–23

Prognostic significance of single chromosome abnormalities in preleukemic states. Nowell PC, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):1–7

ETS1 gene in myelodysplastic syndrome with chromosome change at 11q23. Ohyashiki K, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):73–80

In vitro cytogenetic effects of recombinant human hematopoietic growth factors on cells derived from myelodysplastic syndromes. Ohyashiki K, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):169–78

Cytogenetic analyses of three papillary carcinomas and a follicular adenoma of the thyroid. Olah E, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):119–29

Abnormalities of chromosome 1 in relation to human malignant diseases. Oláh E, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):179–94

Parathyroid adenoma with t(1;5)(p22;q32) as the sole clonal chromosome abnormality. Orndal C, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):225–8

Complex chromosome rearrangements involving 12q14 in two uterine leiomyomas. Pandis N, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):51–6

Evolution of compound centromeres. A new phenomenon. Paweletz N, et al. **Cancer Genet Cytogenet** 1989 Oct 1; 42(1):75–86

Simple numerical chromosome aberrations in well–differentiated malignant epithelial tumors. Pejovic T, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):95–101

Direct cytogenetic analysis of primary neuroblastoma. Petković I, et al. **Cancer Genet Cytogenet** 1989 Oct 1; 42(1):147–52

Double minute chromosomes and a homogeneously staining chromosome region in C3H10T1/2 murine cells transformed "in vitro" by proton radiation. Privitera E, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):75–86

Chromosomal aberrations suggestive of mutagen–related leukemia after 21 years of "therapeutic" radon exposure. Rechavi G, et al. **Cancer Genet Cytogenet** 1990 Aug 1; 48(1):125–30

Cytogenetic study of solid ovarian tumors. Roberts CG, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):243–53

Analysis of inferred cytogenetic clonal evolution in a metastatic human ovarian carcinoma. Roberts CG, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):53–60

Cytogenetic abnormalities in acute leukemia complicating melphalan–treated multiple myeloma. Rödjer S, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):67–73

Cytogenetic and molecular observations in human and experimental salivary gland tumors. Sandros J, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):153–67 (73 ref.)

Cytogenetic analysis of two C–1300 murine neuroblastoma cell lines expressing discordant malignant behavior. Sawyer J, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):99–106

Progression of chromosome abnormalities after radiation therapy in a patient with Askin's tumor. Sawyer JR, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):89–94

Clonal chromosome abnormalities with preferential involvement of chromosome 3 in patients with porokeratosis of Mibelli. Scappaticci S, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):89–94

Abnormalities involving chromosome 6 in newly diagnosed patients with non–Hodgkin's lymphoma. Nebraska Lymphoma Study Group. Schouten HC, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):73–82

Prognostic and biological importance of chromosome findings in acute lymphoblastic leukemia. Secker–Walker LM. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):1–13 (63 ref.)

Cytogenetic analysis in essential thrombocythemia at diagnosis and at transformation. A 12–year study. Sessarego M, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):57–65

Cytogenetic analysis of a cell line established from a Krukenberg tumor. Sheer D, et al. **Cancer Genet Cytogenet** 1990 May;46(1):71–4

Molecular analysis of a myxoid chondrosarcoma with rearrangements of chromosomes 10 and 22. Shen WP, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):207–15

A human adult Wilms' tumor. Histologic, ultrastructural, and cytogenetic analysis. Sherwood JB, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):35–42

Is chromosome 10 a primary chromosomal abnormality in endometrial adenocarcinoma? Simon D, et al. **Cancer Genet Cytogenet** 1990 Jul 15;47(2):155–62

Chromosomal rearrangements in a primary hepatocellular carcinoma. Simon D, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):255–60

Refractory anemia with excess of blasts in transformation. Clinical, hematologic, and cytogenetic findings in nine patients. Smadja N, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):55–65

Cytogenetic analysis of a plexiform fibrohistiocytic tumor. Smith S, et al. **Cancer Genet Cytogenet** 1990 Aug 1; 48(1):31–4

Cytogenetic study of a patient with the Sézary syndrome. Solé F, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):193–6

Chromosome abnormalities and fragile sites in human melanoma. Sozzi G, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):61–7

i(12p) in a malignant ovarian tumor. Speleman F, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):49–53

Complex cytogenetic changes in benign neoplasms. Report of six lipomas. Sreekantaiah C, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):113–30

Results of chromosome studies and their relation to morphology, course, and prognosis in 120 patients with de novo myelodysplastic syndrome. Suciu S, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):15–26

Chromosome aberrations in nine patients with ovarian cancer. Tanaka K, et al. **Cancer Genet Cytogenet** 1989 Nov; 43(1):1–14

Chromosomal changes in renal cell carcinoma. No evidence for correlation with clinical stage. Teyssier JR, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):197–205

Cytogenetic characterization of a nasopharyngeal carcinoma cell line and its subline. Tien HF, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):31–6

Chromosome analysis as an aid in differential diagnosis of erythroleukemia (M6) and myelodysplasia [letter] Torrabadella M, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):139–40

Cytogenetics of thyroid follicular adenomas. van den Berg E, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):217–22

Characterization of three human malignant mesothelioma cell lines. Versnel MA, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):115–28

Recurrent chromosome aberrations in human lung squamous cell carcinomas. Viegas–Péquignot E, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):37–49

Karyotyping and DNA flow cytometry of metastatic ovarian yolk sac tumor. Vos A, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):223–8

The cytogenetics of renal tumors. Where do we stand, where do we go? Walter TA, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):15–34 (108 ref.)

Highly complex genetic rearrangement involving at least seven breakpoints in a case of chronic myeloid leukemia. Weinstein M, et al. **Cancer Genet Cytogenet** 1990 Aug 1; 48(1):75–81

Cytogenetic studies of esophageal carcinoma cell lines.

Whang-Peng J, et al. **Cancer Genet Cytogenet** 1990 Mar; 45(1):101–20

Chromosome studies in eleven colorectal tumors. Yaseen NY, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):83–97

Ring chromosomes in hypodiploid and hypotetraploid clones from an elderly patient with plasma cell leukemia. Yip MY, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):47–53

The impact of cytogenetics and molecular genetics on the treatment of leukemia. Freireich EJ. **Cancer Invest** 1990; 8(2):311–2

Genotoxicity of [1H]benz[de]isoquinoline-1,3[2H]dione,5 amino-2-,[2-dimethylamino) ethyl] (BIDA) in human lymphocytes. Savaraj N, et al. **Cancer Invest** 1989; 7(2):117–21

Genetic effects of benzene and radiation in ICR and X/Gf mice. Harper BL, et al. **Cancer Lett** 1989 Nov 15; 48(1):59–65

In vitro interaction between two antineoplastic drugs--phopurinum and interferon alpha 2. Lazutka JR, et al. **Cancer Lett** 1989 Sep 15;47(1–2):53–6

Clonal chromosomal changes in chronic lymphocytic leukemia. Nayak BN, et al. **Cancer Lett** 1990 Feb; 49(2):99–105

Cytogenetic abnormalities in cancer: with special emphasis on tumor heterogeneity. Pathak S. **Cancer Metastasis Rev** 1990 Feb;8(4):299–318 (141 ref.)

Characterization of human laryngeal primary and metastatic squamous cell carcinoma cell lines UM-SCC-17A and UM-SCC-17B. Carey TE, et al. **Cancer Res** 1989 Nov 1; 49(21):6098–107

Molecular genetic analysis of chromosome 22 in 81 cases of meningioma. Dumanski JP, et al. **Cancer Res** 1990 Sep 15;50(18):5863–7

Chromosome aberrations in uterine smooth muscle tumors: potential diagnostic relevance of cytogenetic instability. Fletcher JA, et al. **Cancer Res** 1990 Jul 1;50(13):4092–7

Chromosome abnormalities in malignant lymphoma in patients from Kurashiki: histological and immunophenotypic correlations. Konishi H, et al. **Cancer Res** 1990 May 1;50(9):2698–703

Frequent loss of heterozygosity on chromosomes 6q, 11, and 17 in human ovarian carcinomas. Lee JH, et al. **Cancer Res** 1990 May 1;50(9):2724–8

Chromosome and gene rearrangements in immortalized human lymphocytes infected with human T-lymphotropic virus type I. Maruyama K, et al. **Cancer Res** 1990 Sep 1; 50(17 Suppl):5697S–5702S

Low levels of chromosomal mutations in germ cells derived from doxorubicin-treated stem spermatogonia in the mouse. Meistrich ML, et al. **Cancer Res** 1990 Jan 15; 50(2):370–4

Integration of human papillomavirus 16 DNA and genomic rearrangements in immortalized human keratinocyte lines. Popescu NC, et al. **Cancer Res** 1990 Feb 15;50(4):1316–23

Model for the formation of double minutes from prematurely condensed chromosomes of replicating micronuclei in drug-treated Chinese hamster ovary cells undergoing DNA amplification. Sen S, et al. **Cancer Res** 1989 Dec 1;49(23):6731–7

Chromosome analysis of 31 Wilms' tumors. Sheng WW, et al. **Cancer Res** 1990 May 1;50(9):2786–93

Micronucleated erythrocytes as an index of cytogenetic damage in humans: demographic and dietary factors associated with micronucleated erythrocytes in splenectomized subjects. Smith DF, et al. **Cancer Res** 1990 Aug 15;50(16):5049–54

Characterization of micronuclei induced in human lymphocytes by benzene metabolites. Yager JW, et al. **Cancer Res** 1990 Jan 15;50(2):393–9

Cytogenetic effects caused by phorbol ester tumor promoters in HeLa cells: mechanistic aspects. Färber B, et al. **Carcinogenesis** 1989 Dec;10(12):2345–50

Lonidamine: a non-mutagenic antitumor agent. Forster R, et al. **Carcinogenesis** 1990 Sep;11(9):1509–15

Genotoxicity of methylglyoxal: cytogenetic damage in human lymphocytes in vitro and in intestinal cells of mice. Migliore L, et al. **Carcinogenesis** 1990 Sep;11(9):1503–7

Disparate cytogenetic responses of peripheral blood and spleen lymphocytes to ethenoadenine nucleotides in vitro; maximal expression in splenic lymphocytes under conditions of enhanced membrane permeabilization. Modzelewski RA, et al. **Carcinogenesis** 1990 Apr; 11(4):571–6

Formation of DNA-adducts and induction of DNA-crosslinks and chromosomal aberrations by the new potent anthracycline antitumor antibiotics: morpholinodaunomycin, cyanomorpholinodaunomycin and cyanomorpholinoadriamycin. Westendorf J, et al. **Cell Biol Toxicol** 1985 Jan;1(2):87–101

Unusual cytogenetic mosaicism involving chromosome 14 abnormalities in a child with an MR/MCA syndrome and abnormal pigmentation. Cantú ES, et al. **Clin Genet** 1989 Sep;36(3):189–95 (16 ref.)

How necessary is a chromosomal analysis in growth-retarded girls? Eggert P, et al. **Clin Genet** 1990 May;37(5):351–4

A case of 46,XX,r(X) (p1q1) diagnosed by in situ hybridization. Koch J, et al. **Clin Genet** 1990 Mar; 37(3):216–20

In situ hybridization analysis of isodicentric X-chromosomes with short arm fusion. Koch JE, et al. **Clin Genet** 1990 Jun;37(6):450–5

Lack of specificity of DA/DAPI fluorescence. Lin MS, et al. **Clin Genet** 1990 Jan;37(1):74–7

Genotoxicity studies on mice after short term inhalation exposure to methyl isocyanate. Kar RN, et al. **Cytobios** 1989;59(238–239):167–76

Differences in the effectiveness of EDTA to induce SCEs and chromosomal aberrations in CHO and Allium cepa chromosomes. Ortíz T, et al. **Cytobios** 1990; 61(246–247):187–93

Chromosome aberrations and dominant lethals in Culex fatigans due to mercuric chloride. Sharma GP, et al. **Cytobios** 1989;59(238–239):131–5

Telomeric associations in a lymphoblastoid cell line from a patient with B-cell follicular lymphoma. Saltman D, et al. **Cytogenet Cell Genet** 1989;50(4):230–3

Report of the committee on structural chromosome changes in neoplasia. Trent JM, et al. **Cytogenet Cell Genet** 1989; 51(1–4):533–62 (382 ref.)

Spectrum of karyotypic aberrations in cultured human meningiomas. Westphal M, et al. **Cytogenet Cell Genet** 1989; 52(1–2):45–9

Rapid metaphase and interphase detection of radiation-induced chromosome aberrations in human lymphocytes by chromosomal suppression in situ hybridization. Cremer T, et al. **Cytometry** 1990;11(1):110–8

Algorithms for the evaluation of radiation induced chromosome aberration yields per cell from flow karyotypes. Dietzel AH, et al. **Cytometry** 1990;11(6):708–15

Cytogenetic studies in human populations exposed to gas leak at Bhopal, India. Ghosh BB, et al. **Environ Health Perspect** 1990 Jun;86:323–6

Cytogenetic analyses of mice exposed to dichloromethane. Allen J, et al. **Environ Mol Mutagen** 1990;15(4):221–8

Chromosomal aberrations and sister chromatid exchange tests in Chinese hamster ovary cells in vitro. IV. Results with 15 chemicals. Ivett JL, et al. **Environ Mol Mutagen** 1989; 14(3):165–87

Aspects of chromosome preparation [letter] Knierim M, et al. **Environ Mol Mutagen** 1990;15(2):106

Cytogenetic analysis of spontaneous and 2-cyanoethylene oxide-induced tk-/- mutants in TK6 human lymphoblastoid cultures. Kodama Y, et al. **Environ Mol Mutagen** 1989;14(3):149–54

Comparison of three assays for genetic effects of antineoplastic drugs on cancer patients and their nurses. Krepinsky A, et al. **Environ Mol Mutagen** 1990;15(2):83–92

Induction of nuclear aberrations by smokeless tobacco in epithelial cells of human oral mucosa. Livingston GK, et al. **Environ Mol Mutagen** 1990;15(3):136–44

Assays of three carcinogen/non-carcinogen chemical pairs for in vivo induction of chromosome aberrations, sister chromatid exchanges and micronuclei. McFee AF, et al. **Environ Mol Mutagen** 1989;14(4):207–20

A chromosomal basis of lymphoid malignancy in man. Boehm T, et al. **Eur J Biochem** 1989 Oct 20;185(1):1–17 (192 ref.)

Chromosomal abnormality limited to T4 lymphocytes in a patient with T-cell chronic lymphocytic leukaemia. Larramendy ML, et al. **Eur J Haematol** 1990 Jul;45(1):52–9

Chromosomes in plasma-cell malignancies. Van Den Berghe H. **Eur J Haematol Suppl** 1989;51:47–51 (24 ref.)

Ring chromosome 7: report of the fifth case. Caramia GM, et al. **Eur J Pediatr** 1990 Apr;149(7):475–6 (7 ref.)

Residual chromosomal aberrations in female cancer patients after irradiation therapy. Amarose AP, et al. **Exp Mol Pathol** 1967 Aug;7(1):58–91

The human T cell receptor genes are targets for chromosomal abnormalities in T cell tumors. Boehm T, et al. **FASEB J** 1989 Oct;3(12):2344–59 (78 ref.)

Whole blood suspension culture method for chromosome examination of a patient with Ph-positive chronic myeloid leukaemia. Selypes A, et al. **Haematologia (Budap)** 1990; 23(1):57–60

Phenotype-related chromosome aberrations and stem cell involvement in acute myeloid leukemia. Castoldi G, et al. **Haematologica** 1989 Nov-Dec;74(6):525–9 (44 ref.)

Cytogenetics of childhood acute lymphoblastic leukemia in multicenter trials. Harbott J, et al. **Hamatol Bluttransfus** 1990;33:451–8

Karyotype of leukemia cells consistently predicts for response to therapy and survival following salvage therapy in acute myeloblastic leukemia. Keating MJ, et al. **Hamatol Bluttransfus** 1990;33:593–603 (24 ref.)

Association of GP40/CD7+ acute myeloblastic leukemia and chromosome 5 aberrations. Lutz D, et al. **Hamatol Bluttransfus** 1990;33:141–4

Chromosomal aberrations in childhood acute nonlymphoblastic leukemia. Ritterbach J, et al. **Hamatol Bluttransfus** 1990;33:153–6

Cytogenetic study of 130 childhood acute nonlymphocytic leukemias. Schaison G, et al. **Hamatol Bluttransfus** 1990; 33:157–8

Update of the cytogenetic study of childhood non-high-risk acute lymphocytic leukemia at diagnosis in protocol VI of the Dutch Childhood Leukemia Study Group. Slater RM, et al. **Hamatol Bluttransfus** 1990;33:169–73

Prognostic significance of the karyotype in patients with primary myelodysplastic syndrome. Suciu S, et al. **Hamatol Bluttransfus** 1990;33:166–8

Prognostic significance of chromosome analysis in de novo acute myeloid leukemia. Weh HJ, et al. **Hamatol Bluttransfus** 1990;33:150–2

No difference between smoking lung cancer patients and smoking controls in the frequency of spontaneous and mitomycin C induced chromosome aberrations in lymphocytes. Johansson M, et al. **Hereditas** 1989; 111(1):61–3

Transferrin and structural anomalies of chromosome 3 in the blastic phase of chronic myelocytic leukemia. Maserati E, et al. **Hereditas** 1989;111(3):305–8

No significant relationship between age and frequency of chromosome lesions in mentally retarded individuals with or without the fragile X syndrome. Butler MG. **Hum Genet** 1990 Jan;84(2):216–7

Correlation between chromosomal breakpoint positions and synaptic behaviour in human males heterozygous for a pericentric inversion. de Perdigo A, et al. **Hum Genet** 1989 Oct;83(3):274–6

Telomere association of chromosomes induced by aphidicolin in a normal individual. Fuster C, et al. **Hum Genet** 1990 Apr;84(5):424–6

Lymphocyte and sperm chromosome studies in cancer-treated men. Genescà A, et al. **Hum Genet** 1990 Mar;84(4):353–5

Search for chromosomal variations among gas-exposed persons in Bhopal. Goswami HK, et al. **Hum Genet** 1990 Jan;84(2):172–6

Chromosomal in situ suppression hybridization of human gonosomes and autosomes and its use in clinical cytogenetics. Jauch A, et al. **Hum Genet** 1990 Jul; 85(2):145–50

A case of ring chromosome 15 accompanied by almost normal intelligence. Kitatani M, et al. **Hum Genet** 1990 Jun;85(1):138–9

Partial correction of chromosome instability in Fanconi anemia by desferrioxamine [letter; comment] Poot M, et al. **Hum Genet** 1990 May;84(6):581–3 Comment on: Hum Genet 1989 Aug;83(1):49–51.

Cocultivation of Fanconi anemia cells and of mouse lymphoma mutants leads to interspecies complementation of chromosomal hypersensitivity to DNA cross-linking agents. Rosselli F, et al. **Hum Genet** 1990 May;84(6):517–21

Genotoxic effect of benzene hexachloride in cultured human lymphocytes. Rupa DS, et al. **Hum Genet** 1989 Oct; 83(3):271–3

Rate of chromosomal aberrations in prenatally detected hydrops fetalis and hygroma colli. Schwanitz G, et al. **Hum Genet** 1989 Dec;84(1):81–2

Replication studies in the 16p+ variant. Thompson PW, et al. **Hum Genet** 1990 Mar;84(4):371–2

Chromosomal damage in peripheral blood lymphocytes of patients treated for testicular cancer. van den Berg-de Ruiter E, et al. **Hum Genet** 1990 Jan;84(2):191–4

Cytogenetic characterization of ataxia telangiectasia (AT) heterozygotes using lymphoblastoid cell lines and chronic gamma-irradiation. Waghray M, et al. **Hum Genet** 1990 May;84(6):532–4

Chromosome abnormalities in early pregnancy analyzed by direct chromosome preparation of chorionic villi. Zhou XT, et al. **Hum Genet** 1989 Oct;83(3):277–9

Cytogenetic studies in couples experiencing repeated pregnancy losses. De Braekeleer M, et al. **Hum Reprod** 1990 Jul;5(5):519–28 (267 ref.)

Sperm chromosome studies in individuals treated for testicular cancer. Genescà A, et al. **Hum Reprod** 1990 Apr; 5(3):286–90

The frequency of chromosome anomalies in human unfertilized oocytes and uncleaved zygotes after insemination in vitro. Papadopoulos G, et al. **Hum Reprod** 1989 Jul;4(5):568–73

Modes of spontaneous chromosomal mutation and karyotype evolution in ants with reference to the minimum interaction hypothesis. Imai HT, et al. **Idengaku Zasshi** 1988 Apr; 63(2):159–85

Precocious desynapsis of XY-bivalent in mouse germinal cells: influence of mitomycin C on tumour-bearing and normal mice. Dey D, et al. **Indian J Exp Biol** 1989 Sep; 27(9):757–60

Chromatid association in acrocentric chromosomes of abnormal sexual development (ASD) cases. Husain SA, et al. **Indian J Exp Biol** 1989 Oct;27(10):861–3

Frequency of acrocentric association in abnormal sexual development in males and females. Husain SA, et al. **Indian J Exp Biol** 1989 Sep;27(9):761–3

2-Deoxy-D-glucose induced modification of chromosomal damage in UV-irradiated peripheral human leukocytes. Kalia VK, et al. **Indian J Exp Biol** 1989 Nov;27(11):1005–7

Chromosome abnormalities in acute leukemia: its clinical implications and age of onset. Abe R, et al. **Indian J Pediatr** 1989 Nov-Dec;56(6):719–31 (123 ref.)

The locus of the polymorphic epithelial mucin (PEM) tumour antigen on chromosome 1q21 shows a high frequency of alteration in primary human breast tumours. Gendler SJ, et al. **Int J Cancer** 1990 Mar 15;45(3):431–5

Phenotypic characterization, karyotype analysis and in vitro tamoxifen sensitivity of new ER-negative vulvar carcinoma cell lines, UM-SCV-1A and UM-SCV-1B. Grénman SE, et al. **Int J Cancer** 1990 May 15;45(5):920–7

Sister chromatid exchanges and chromosome aberration frequencies in plutonium workers. Brandom WF, et al. **Int J Radiat Biol** 1990 Jul;58(1):195–207

On the nature of interactions leading to radiation-induced chromosomal exchange. Cornforth MN. **Int J Radiat Biol** 1989 Nov;56(5):635–43

Induction of chromosomal aberrations and sister chromatid

exchanges by alpha particles in density-inhibited cultures of mouse 10T1/2 and 3T3 cells. Nagasawa H, et al. **Int J Radiat Biol** 1990 Jan;57(1):35–44

The relationship between colony-forming ability and chromosomal aberrations induced in human T-lymphocytes after gamma-irradiation. Prosser JS, et al. **Int J Radiat Biol** 1990 Aug;58(2):293–301

Induction of chromosome aberrations in human lymphocytes by monochromatic X-rays of quantum energy between 4.8 and 14.6 keV. Sasaki MS, et al. **Int J Radiat Biol** 1989 Dec;56(6):975–88

Cytogenetic effects of radiotherapy: frequency and types of chromosome aberrations. Barrios L, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):371–5

Possible relationship between chromosome alterations and in vitro cellular radiosensitivity of human malignant melanoma. McBride H, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):349–55

Cytogenic effects of diatrizoate and ioxaglate on patients undergoing excretory urography. Nuñez ME, et al. **Invest Radiol** 1990 Jun;25(6):692–7

Carrier detection in xeroderma pigmentosum. Parshad R, et al. **J Clin Invest** 1990 Jan;85(1):135–8

Double minutes arise from circular extrachromosomal DNA intermediates which integrate into chromosomal sites in human HL-60 leukemia cells. Von Hoff DD, et al. **J Clin Invest** 1990 Jun;85(6):1887–95

Prognostic importance of cytogenetic subgroups in de novo pediatric acute nonlymphocytic leukemia. Kalwinsky DK, et al. **J Clin Oncol** 1990 Jan;8(1):75–83

Chromosome abnormalities in skin fibroblasts probably induced by an anti-cancer drug. Sadamori N, et al. **J Dermatol** 1990 Mar;17(3):155–8

Definition of adenovirus type 5 functions involved in the induction of chromosomal aberrations in human cells. Caporossi D, et al. **J Gen Virol** 1990 Apr;71 (Pt 4):801–8

On the frequency of metaphase chromosome aberrations in the small intestine of aged rats. Ellsworth JL, et al. **J Gerontol** 1990 May;45(3):B94–100

The chromosomal complements of cleaved human embryos resulting from in vitro fertilization. Ma S, et al. **J In Vitro Fert Embryo Transf** 1990 Feb;7(1):16–21

Small marker chromosomes in man: origin from pericentric heterochromatin of chromosomes 1, 9, and 16. Callen DF, et al. **J Med Genet** 1990 Mar;27(3):155–9

Mitochondrial genome: defects, disease, and evolution. Clarke A. **J Med Genet** 1990 Jul;27(7):451–6

Unilateral disomy as a possible explanation for Russell–Silver syndrome [letter; comment] Hall JG. **J Med Genet** 1990 Feb;27(2):141–2 Comment on: J Med Genet 1989 Jul;26(7):447–51.

The Baller–Gerold syndrome: phenotypic and cytogenetic overlap with Roberts syndrome. Huson SM, et al. **J Med Genet** 1990 Jun;27(6):371–5

Ring chromosome 7 in a man with multiple congenital anomalies and mental retardation. Koiffmann CP, et al. **J Med Genet** 1990 Jul;27(7):462–4

Cornelia de Lange syndrome with ring chromosome 3. Lakshminarayana P, et al. **J Med Genet** 1990 Jun; 27(6):405–6

X linked neonatal myotubular myopathy: one recombination detected with four polymorphic DNA markers from Xq28. Lehesjoki AE, et al. **J Med Genet** 1990 May;27(5):288–91

Restrictive dermopathy: a report of three cases. Mok Q, et al. **J Med Genet** 1990 May;27(5):315–9

The Townes–Brocks syndrome. O'Callaghan M, et al. **J Med Genet** 1990 Jul;27(7):457–61

Three different, non-mosaic sex chromosome abnormalities (direct cytotrophoblasts, mesenchymal core cultures, and abortus skin fibroblasts): implications for elucidating chorionic villi mosaicism. Shulman LP, et al. **J Med Genet** 1989 Dec;26(12):791–2

Chromosomal radiosensitivity of lymphocytes from Alzheimer's disease patients. Tobi SE, et al. **J Med Genet** 1990 Jul;27(7):437–40

Chromosomal aberrations in germ cells of male mice immunised with attenuated viral vaccines (human). Rao LV, et al. **J Med Microbiol** 1990 Feb;31(2):115–8

Isochromosome of the short arm of chromosome 12: clinically useful markers for male germ cell tumors [published erratum appears in J Natl Cancer Inst 1990 Apr 4;82(7):627] [see comments] Bosl GJ, et al. **J Natl Cancer Inst** 1989 Dec 20;81(24):1874–8 Comment in: J Natl Cancer Inst 1989 Dec 20;81(24):1852–3.

Isochromosome of chromosome 12: clinically useful marker for male germ cell tumors [letter] Duncan AM. **J Natl Cancer Inst** 1990 Sep 5;82(17):1433

Clinical correlations of chromosome change in human solid tumors: the tip of the iceberg? [editorial; comment] Trent JM. **J Natl Cancer Inst** 1989 Dec 20;81(24):1852–3 Comment on: J Natl Cancer Inst 1989 Dec 20;81(24):1874–8.

Thyroid nodularity and chromosome aberrations among women in areas of high background radiation in China [see comments] Wang ZY, et al. **J Natl Cancer Inst** 1990 Mar 21;82(6):478–85 Comment in: J Natl Cancer Inst 1990 Mar 21;82(6):448–9.

Effect of static magnetic field on the induction of chromosome aberrations by 4.9 MeV protons and 23 MeV alpha particles. Takatsuji T, et al. **J Radiat Res (Tokyo)** 1989 Sep;30(3):238–46

Systemic lupus erythematosus and tetrasomy-X. Alvaro-Gracia JM, et al. **J Rheumatol** 1989 Nov; 16(11):1486–8

Cytogenetic study on acute lymphoblastic leukemia. Chen Z, et al. **J Tongji Med Univ** 1990;10(1):31–6

Chromosomal damage induced by human adenovirus type 12 requires expression of the E1B 55-kilodalton viral protein. Schramayr S, et al. **J Virol** 1990 May;64(5):2090–5

Young adults with head and neck cancer express increased susceptibility to mutagen-induced chromosome damage. Schantz SP, et al. **JAMA** 1989 Dec 15;262(23):3313–5

Chromosomal pattern in acute lymphoblastic leukaemia. Abdi SI, et al. **JPMA** 1990 Jan;40(1):9–11

Chromosome abnormalities of gastric cancer detected in cancerous effusions. Misawa S, et al. **Jpn J Cancer Res** 1990 Feb;81(2):148–52

Frequent loss of heterozygosity on chromosomes 16 and 4 in human hepatocellular carcinoma. Zhang WD, et al. **Jpn J Cancer Res** 1990 Feb;81(2):108–11

Structural chromosome aberrations and industrial waste [letter] Tretjak Z, et al. **Lancet** 1990 May 26;335(8700):1288

Isochromosome 11q in a case of acute myelomonocytic leukemia FAB type M4. Xue YQ, et al. **Leuk Res** 1990; 14(6):545–7

Do chromosome abnormalities determine the type of acute leukemia that develops in CML? Bernstein R, et al. **Leukemia** 1990 Jan;4(1):65–8

Chromosome abnormalities in a patient with acquired immunodeficiency syndrome (AIDS) and Burkitt lymphoma-leukemia. Beverstock GC, et al. **Leukemia** 1990 Jun;4(6):445–7

Myeloid surface antigen-positive acute lymphoblastic leukemia (My+ ALL): immunophenotypic, ultrastructural, cytogenetic, and molecular characteristics. Childs CC, et al. **Leukemia** 1989 Nov;3(11):777–83

Two additional cases of t dic(9:12) in acute lymphocytic leukemia (ALL): prognosis in ALL with dic(9:12). Huret JL, et al. **Leukemia** 1990 Jun;4(6):423–5 (18 ref.)

Chromosomal and immunophenotypic patterns in T cell acute lymphoblastic leukemia (T ALL) and lymphoblastic lymphoma (LBL). Kaneko Y, et al. **Leukemia** 1989 Dec; 3(12):886–92

5q- anomaly in lymphoid disorders. Kerim S, et al. **Leukemia** 1990 Jan;4(1):12–5 (28 ref.)

Karyotypic changes from initial diagnosis to relapse in childhood acute leukemia. Shikano T, et al. **Leukemia** 1990 Jun;4(6):419–22

Amylase-producing plasmacytoma cell lines, AD3 and FR4, with der(14)t(8;14) and dic(8)t(1;8) established from ascites. Tagawa S, et al. **Leukemia** 1990 Aug;4(8):600–5

Effect of culture conditions and media on the frequency of chromosomal abnormalities in human sperm chromosome complements. Martin RH, et al. **Mol Reprod Dev** 1990 Jun; 26(2):101–4

Cytogenetics of non-Hodgkin's lymphoma. Levine EG, et al. **Monogr Natl Cancer Inst** 1990;(10):7–12 (57 ref.)

A comparative study of the clastogenic activity of ethylating agents. Asita A. **Mutagenesis** 1989 Nov;4(6):432–6

Effect of deltamethrin, a synthetic pyrethroid, on the induction of chromosome aberrations, micronuclei and sperm abnormalities in mice. Bhunya SP, et al. **Mutagenesis** 1990 May;5(3):229–32

Analysis of the genotoxicity of nine acrylate/methacrylate compounds in L5178Y mouse lymphoma cells. Dearfield KL, et al. **Mutagenesis** 1989 Sep;4(5):381–93

Concurrent detection of gene mutations and chromosomal aberrations induced in vivo in somatic cells. Heddle JA, et al. **Mutagenesis** 1990 Mar;5(2):179–84

Repair kinetics in CHO cells of X-ray induced DNA damage and chromatid aberrations during a cell cycle extended by transient hypothermia. MacLeod RA, et al. **Mutagenesis** 1990 May;5(3):279–83

Similar kinetics of chromatid aberrations in X-irradiated xrs 5 and wild-type Chinese hamster ovary cells. MacLeod RA, et al. **Mutagenesis** 1990 Jul;5(4):407–10

Application of antikinetochore antibody staining (CREST staining) to micronuclei in erythrocytes induced in vivo. Miller BM, et al. **Mutagenesis** 1990 Jul;5(4):411–5

Differential mutant quantitation at the mouse lymphoma tk and CHO hgprt loci. Moore MM, et al. **Mutagenesis** 1989 Sep;4(5):394–403

Effect of treatment protocol and sample time on the frequencies of micronucleated polychromatic erythrocytes in mouse bone marrow and peripheral blood. Tice RR, et al. **Mutagenesis** 1990 Jul;5(4):313–21

Clastogenic effects of known and suspect spindle poisons studied by chromosome analysis in mouse bone marrow cells. Xu W, et al. **Mutagenesis** 1990 Jul;5(4):371–4

A Nordic data base on somatic chromosome damage in humans. Nordic Study Group on the Health Risk of Chromosome Damage. **Mutat Res** 1990 Jul;241(3):325–37

Clastogenic effects produced by black pepper in mitotic cells of Vicia faba. Abraham S, et al. **Mutat Res** 1989 Oct; 224(2):281–5

Evaluation of chromosomal aberrations in bone marrow of 1C3F1 mice. Adler ID, et al. **Mutat Res** 1989 Nov; 224(3):343–5

Clastogenic effects of cis-diamminedichloroplatinum. II. Induction of chromosomal aberrations in primary spermatocytes and spermatogonial stem cells of mice. Adler ID, et al. **Mutat Res** 1990 Mar;243(3):173–8

Comparative induction of gene mutations and chromosome damage by 1-methoxy-1,3,5-cycloheptatriene (MCHT), 1. Results from a battery of standard tests. Asquith JC, et al. **Mutat Res** 1990 May;230(1):71–80

Dose and time dependence of chromosomal aberration yields of bone marrow cells in male Chinese hamsters after a single i.p. injection of aflatoxin B1. Bárta I, et al. **Mutat Res** 1990 Jul;244(3):189–95

DNA polymerase alpha does not mediate G0–G1 increase in yield of X-ray-induced exchange aberrations in human peripheral blood lymphocytes. Bender MA, et al. **Mutat Res** 1990 Jun;244(2):111–4

On the distributions of spontaneous chromosomal aberrations in human peripheral blood lymphocytes in culture. Bender MA, et al. **Mutat Res** 1990 Jul;244(3):215–20

Chromosome analysis of small and large L5178Y mouse lymphoma cell colonies: comparison of trifluorothymidine-resistant and unselected cell colonies from mutagen-treated and control cultures. Blazak WF, et al. **Mutat Res** 1989 Oct;224(2):197–208

Studies on the potential mutagenicity of p-phenylenediamine in oxidative hair dye mixtures. Bracher M, et al. **Mutat Res** 1990 Jul;241(3):313–23

Potentiation of bleomycin-induced chromosome aberrations by the radioprotector reduced glutathione [published erratum appears in Mutat Res 1990 Feb;228(2):230] Chatterjee A, et al. **Mutat Res** 1989 Oct;214(2):207–13

Comparative induction of gene mutations and chromosome damage by 1-methoxy-1,3,5-cycloheptatriene (MCHT), 2. Results using L5178Y mouse lymphoma cells to detect both gene and chromosome damage; validation with ionizing radiation, methyl methanesulphonate, ethyl methanesulphonate and benzo[a]pyrene. Cole J, et al. **Mutat Res** 1990 May;230(1):81–91

Biochemical and cytogenetical characterization of Chinese hamster ovary X-ray-sensitive mutant cells xrs 5 and xrs 6. V. The correlation of DNA strand breaks and base damage to chromosomal aberrations and sister-chromatid exchanges induced by X-irradiation. Darroudi F, et al. **Mutat Res** 1990 Mar;235(2):119–27

Biochemical and cytogenetical characterization of Chinese hamster ovary X-ray-sensitive mutant cells xrs 5 and xrs 6. VI. The correlation between UV-induced DNA lesions and chromosomal aberrations, and their modulations with inhibitors of DNA repair synthesis. Darroudi F, et al. **Mutat Res** 1990 Mar;235(2):129–35

Evaluation of genotoxicity of clofazimine, an antileprosy drug, in mice in vivo. I. Chromosome analysis in bone marrow and spermatocytes. Das RK, et al. **Mutat Res** 1990 Jun;241(2):161–8

Modification of clastogenicity of lead and aluminium in mouse bone marrow cells by dietary ingestion of Phyllanthus emblica fruit extract. Dhir H, et al. **Mutat Res** 1990 Jul;241(3):305–12

Induction of micronuclei in cultured murine splenocytes exposed to elevated levels of ferrous ions, hydrogen peroxide and ultraviolet irradiation. Dreosti IE, et al. **Mutat Res** 1990 Aug;244(4):337–43

Ca antagonist verapamil and tumor promoter 12-O-tetradecanoylphorbol-13- acetate (TPA) induce chromosomal aberrations in human lymphocytes. Friedman J, et al. **Mutat Res** 1990 Jun;244(2):135–9

Acute cytogenetic effects of tyramine, MTCAs, NaCl and soy sauce on rat bone marrow cells in vivo. Fujie K, et al. **Mutat Res** 1990 Apr;240(4):281–8

Clastogenic effects of cesium chloride on mouse bone marrow cells in vivo. Ghosh A, et al. **Mutat Res** 1990 Aug; 244(4):295–8

The effect of the pyrrolizidine alkaloid integerrimine on the chromosomes of mouse bone marrow cells. Gimmler-Luz MC, et al. **Mutat Res** 1990 Jul;241(3):297–304

Sister-chromatid exchange and chromosome aberrations for 4 aliphatic epoxides in mice. Giri AK, et al. **Mutat Res** 1989 Oct;224(2):253–61

Thirteenfold increase of chromosomal aberrations non-randomly distributed in chagasic children treated with nifurtimox. Gorla NB, et al. **Mutat Res** 1989 Oct; 224(2):263–7

The effect of low-dose X-irradiation on numerical and structural chromosome anomaly induction in mouse immature oocytes. Griffin CS, et al. **Mutat Res** 1990 Aug; 231(2):137–42

Genetic effects of hyperbaric oxygen therapy. Guskov EP, et al. **Mutat Res** 1990 Aug;241(4):341–7

Aneuploidies, chromosome aberrations and dominant gene mutations detected in 113,913 consecutive newborn children in Mexico. Hernández A, et al. **Mutat Res** 1990 Sep;232(1):23–9

High-resolution cytogenetic analysis of L5178Y TK+/- 3.7.2C cells: variation in chromosome 11 breakpoints among small-colony TK-/- mutants. Hozier JC, et al. **Mutat Res** 1989 Oct;214(2):195–9

The effect of valproic acid on SCE and chromosome aberrations in epileptic children. Hu LJ, et al. **Mutat Res** 1990 Jan;243(1):63–6

Induction of chromosomal aberrations in male mouse germ cells by uranyl fluoride containing enriched uranium. Hu QY, et al. **Mutat Res** 1990 Jul;244(3):209–14

Comparison of baseline sister-chromatid exchanges (SCE), cyclophosphamide-, ethylnitrosourea (ENU)-induced SCE, ENU-induced cell-cycle delay and chromosome aberrations between Peru and laboratory mice. Huang CC, et al. **Mutat Res** 1990 May;230(1):93–100

Analysis of chromosome aberrations and sister-chromatid

exchanges in peripheral blood lymphocytes of workers with occupational exposure to the mancozeb-containing fungicide Novozir Mn80. Jablonická A, et al. **Mutat Res** 1989 Oct;224(2):143–6

Female-specific dominant lethal effects in mice. Katoh MA, et al. **Mutat Res** 1990 Jun;230(2):205–17

The induction of chromosome aberrations in human purified peripheral blood lymphocytes following in vitro exposure to selenium. Khalil AM. **Mutat Res** 1989 Dec;224(4):503–6

Chromosomal analyses of human lymphocytes exposed in vitro to caprolactam. Kristiansen E, et al. **Mutat Res** 1989 Nov;224(3):329–32

Comparative genotoxicity testing of mainstream whole smoke from cigarettes which burn or heat tobacco. Lee CK, et al. **Mutat Res** 1990 Sep;242(1):37–45

Analysis of cytogenetic effects in bone-marrow cells of rats subchronically exposed to smoke from cigarettes which burn or only heat tobacco. Lee CK, et al. **Mutat Res** 1990 Apr;240(4):251–7

Superoxide dismutase activity and chromosome damage in cultured chromosome instability syndrome cells. Lee KH, et al. **Mutat Res** 1990 Jul;244(3):251–6

A unique human mutant B-lymphoblastoid cell line (ataxia telangiectasia) which exhibits increased sister-chromatid exchange retaining hypersensitivity to neocarzinostatin and bleomycin. Li MJ, et al. **Mutat Res** 1990 Jun;230(2):167–75

Influence of treatment to sacrifice time and the presence of BrdUrd on chemically-induced aberration rates in mouse marrow cells. McFee AF, et al. **Mutat Res** 1990 May; 241(1):95–108

Caprolactam and benzoin: tests for induction of chromosome aberrations and SCEs in mouse bone marrow. McFee AF, et al. **Mutat Res** 1989 Nov;224(3):347–50

Mouse bone marrow cytogenetic damage produced by residues of tequila. Madrigal-Bujaidar E, et al. **Mutat Res** 1990 Jun;241(2):133–7

Induction of characteristic chromosomal aberrations, particularly X-trisomy, in cultured human lymphocytes treated by ochratoxin A, a mycotoxin implicated in Balkan endemic nephropathy. Manolova Y, et al. **Mutat Res** 1990 Aug;231(2):143–9

Cytochrome P-450 and chromosome damage by cyclophosphamide in LEC strain rats predisposed to hereditary hepatitis and liver cancer. Masuda R, et al. **Mutat Res** 1990 Aug;244(4):309–16

Mechanism of chromosome aberration induction in the mouse egg fertilized with sperm recovered from postmeiotic germ cells treated with methyl methanesulfonate. Matsuda Y, et al. **Mutat Res** 1989 Oct;214(2):165–80

Observations on chromosome loss detection by multiple recessive marker expression in strain D61.M of Saccharomyces cerevisiae. Mayer VW, et al. **Mutat Res** 1989 Dec;224(4):471–8

Chromosomal aberrations and sister-chromatid exchanges in lymphocytes of workers exposed to sulphur dioxide. Meng ZQ, et al. **Mutat Res** 1990 May;241(1):15–20

Cytogenetic effects of extremely low doses of plutonium-238 alpha-particle irradiation in CHO K-1 cells. Nagasawa H, et al. **Mutat Res** 1990 Jul;244(3):233–8

Chromosome aberration test and sister-chromatid exchange assay in murine bone marrow cells after in vivo exposure to D-penicillamine alone or combined with cyclophosphamide. Nair ND, et al. **Mutat Res** 1989 Dec; 227(4):237–40

Chromosome aberrations induced by pyrolysates of carbohydrates in Chinese hamster V79 cells. Nishi Y, et al. **Mutat Res** 1989 Oct;227(2):117–23

An examination of respiratory distress and chromosomal abnormalities in the offspring of male mice treated with ethylnitrosourea. Nomura T, et al. **Mutat Res** 1990 Apr; 229(2):115–22

Induction of chromosome aberrations and sister-chromatid exchanges by caprolactam in vitro. Norppa H, et al. **Mutat Res** 1989 Nov;224(3):333–7

Chromosomal aberrations in V79 hamster cells induced by hyperosmotic solutions of NaCl. Nowak C. **Mutat Res** 1990 Jun;230(2):227–34

The use of multiple sampling times in in vitro chromosome assays. Nowak C. **Mutat Res** 1990 Jun;230(2):255–61

cis-diammınedichloroplatinum(II)-induced sister-chromatid exchanges and chromosome aberration formation in cultured human lymphocytes and their inhibition by sodium thiosulfate. Ohe T, et al. **Mutat Res** 1990 Aug;244(4):279–85

A study of mitotic division fidelity and numerical chromosome changes in ageing Syrian hamster dermal cells. Parry EM, et al. **Mutat Res** 1990 Mar;237(2):83–93

Increased frequency of chromatid breaks in lymphocytes of heterozygotes of ataxia telangiectasia after in vitro treatment with caffeine. Pawlak AL, et al. **Mutat Res** 1990 Jun;230(2):197–204

In vivo effects of single or combined dietary antimutagens on mutagen-induced chromosomal aberrations. Renner HW. **Mutat Res** 1990 Jun;244(2):185–8

Involvement of phytochelatins in NiCl2-triggered protection against induction of chromatid aberrations by TEM and MH in Vicia faba root tip meristems? Rieger R, et al. **Mutat Res** 1990 May;244(1):31–5

Genotoxic effects of radiotherapy and chemotherapy on the circulating lymphocytes of breast cancer patients. I. Chromosome aberrations induced in vivo. Rigaud O, et al. **Mutat Res** 1990 Sep;242(1):17–23

Genotoxic effects of radiotherapy and chemotherapy on the circulating lymphocytes of breast cancer patients. II. Alteration of DNA repair and chromosome radiosensitivity. Rigaud O, et al. **Mutat Res** 1990 Sep; 242(1):25–35

Chromosome damage in rat pulmonary alveolar macrophages following ozone inhalation. Rithidech K, et al. **Mutat Res** 1990 May;241(1):67–73

Effects of aluminium sulphate on human leukocyte chromosomes in vitro. Roy AK, et al. **Mutat Res** 1990 Jun;244(2):179–83

The micronucleus assay in human exfoliated cells of the nose and mouth: application to occupational exposures to chromic acid and ethylene oxide. Sarto F, et al. **Mutat Res** 1990 Aug;244(4):345–51

Evaluation of chromosomal aberrations in lymphocytes and micronuclei in lymphocytes, oral mucosa and hair root cells of patients under antiblastic therapy. Sarto F, et al. **Mutat Res** 1990 Feb;228(2):157–69

Suppressing effect of antimutagenic flavorings on chromosome aberrations induced by UV-light or X-rays in cultured Chinese hamster cells. Sasaki YF, et al. **Mutat Res** 1990 Mar;229(1):1–10

Suppressing effects of vanillin, cinnamaldehyde, and anisaldehyde on chromosome aberrations induced by X-rays in mice. Sasaki YF, et al. **Mutat Res** 1990 Apr; 243(4):299–302

Localization of breakpoints in the karyotype of workers professionally exposed to benzene. Sąsiadek M, et al. **Mutat Res** 1989 Oct;224(2):235–40

Chromosomal damage induced by caprolactam in human lymphocytes. Sheldon T. **Mutat Res** 1989 Nov;224(3):325–7

Chromosome aberrations and urinary thioethers in smokers. Sinués B, et al. **Mutat Res** 1990 Apr;240(4):289–93

A comparison of chromosome aberration induction by 25 compounds tested by two Chinese hamster cell (CHL and CHO) systems in culture. Sofuni T, et al. **Mutat Res** 1990 Jun;241(2):175–213

Cytogenetic investigation in lymphocytes of people living in cadmium-polluted areas. Tang XM, et al. **Mutat Res** 1990 Jul;241(3):243–9

Cytogenetic monitoring of chemical workers in production of the drug 1-propoxy-2-acetamino-4-nitrobenzol with reference to their smoking habits. Tanner B, et al. **Mutat Res** 1990 Jul;241(3):291–5

Interaction between X-ray- and restriction endonuclease-induced lesions in the formation of chromosomal aberrations. Tanzarella C, et al. **Mutat Res** 1990 Jul;244(3):197–200

The effect of smoking on the frequencies of asymmetrical and symmetrical chromosome exchanges in human lymphocytes. Tawn EJ, et al. **Mutat Res** 1989 Oct; 224(2):151–6

The induction of chromosomal aberrations and SCEs by visible light in combination with dyes. II. Cell cycle dependence, and the effect of hydroxyl radical scavengers during light exposure in cultures of Chinese hamster ovary cells sensitized with acridine orange. Uggla AH. **Mutat Res** 1990 Aug;231(2):233–42

Chromosomal instability and cellular hypersensitivity to X-radiation of cultured fibroblasts derived from porokeratosis patients' skin. Watanabe R, et al. **Mutat Res** 1990 Jun;230(2):273–8

Inhibition of the adaptive response of human lymphocytes to very low doses of ionizing radiation by the protein synthesis inhibitor cycloheximide. Youngblom JH, et al. **Mutat Res** 1989 Dec;227(4):257–61

Induction of chromosome loss by mixtures of organic solvents including neurotoxins. Zimmermann FK, et al. **Mutat Res** 1989 Oct;224(2):287–303

Prognostic subgroups in B-cell chronic lymphocytic leukemia defined by specific chromosomal abnormalities. Juliusson G, et al. **N Engl J Med** 1990 Sep 13;323(11):720–4

Chromosomal abnormalities in non-Hodgkin's lymphoma [letter; comment] Lawrence HJ, et al. **N Engl J Med** 1990 Feb 15;322(7):475 Comment on: N Engl J Med 1989 Apr 20;320(16):1047–54.

Relation of cytogenetic abnormalities and clinical outcome in metastatic melanoma. Trent JM, et al. **N Engl J Med** 1990 May 24;322(21):1508–11

Chromosome abnormalities in squamous cell carcinoma of the human oral cavity. Ravindran A, et al. **Neoplasma** 1990; 37(2):191–7

Is isochromosome i(12p) present in gonadal precancerous tissue? Vořechovský I, et al. **Neoplasma** 1989;36(6):697–700

High frequency of APC loss in sporadic colorectal carcinoma due to breaks clustered in 5q21–22. Ashton-Rickardt PG, et al. **Oncogene** 1989 Oct;4(10):1169–74

Loss of heterozygosity on chromosomal segments 3p, 6q and 11p in human ovarian carcinomas. Ehlen T, et al. **Oncogene** 1990 Feb;5(2):219–23

Value of aceto-orcein squash preparations in the cytogenetic study of solid tumours. Atkin NB, et al. **Oncology** 1989; 46(6):405–7

Comparison of transforming, antimitotic and chromosomal aberration-inducing properties of melphalan and cyclophosphamide. Chłopkiewicz B, et al. **Pol J Pharmacol Pharm** 1989 Jul–Aug;41(4):293–8

The predictive value of cytogenetic diagnosis after CVS: 1500 cases. Breed AS, et al. **Prenat Diagn** 1990 Feb; 10(2):101–10

Analysis of 4628 cases in the genetic counselling clinic of PUMC Hospital. Ye LZ, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(3):126–30

Chromosome-breaking structure in maize involving a fractured Ac element. Ralston E, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9451–5

The role of nucleotide pool alkylation in the induction of numerical chromosome aberrations. Abbondandolo A, et al. **Prog Clin Biol Res** 1989;318:335–43

Studies on chromosome aberrations and HPRT mutations in lymphocytes and GPA mutation in erythrocytes of atomic bomb survivors. Akiyama M, et al. **Prog Clin Biol Res** 1990;340C:69–80

Conditional dicentric chromosomes in yeast. Bloom K, et al. **Prog Clin Biol Res** 1989;318:149–58

Cytogenetics of human sperm: structural aberrations and DNA replication. Brandriff BF, et al. **Prog Clin Biol Res** 1990;340B:425–34 (32 ref.)

Occupational and lifestyle factors and chromosomal aberrations of spontaneous abortions. Hansteen IL. **Prog Clin Biol Res** 1990;340B:467–75

Chromosome instability associated with human repetitive sequences and DNA amplification. Heartlein MW. **Prog Clin Biol Res** 1990;340B:415–24

Centromere separation and aneuploidy in human mitotic mutants: Roberts syndrome. Jabs EW, et al. **Prog Clin Biol Res** 1989;318:111–8

Chromosomal abnormalities in hematologic malignant diseases. Le Beau MM. **Prog Clin Biol Res** 1990; 340B:325–35 (6 ref.)

Spontaneous and in vitro radiation-induced chromosome aberrations in human spermatozoa: application of a new method. Mikamo K, et al. **Prog Clin Biol Res** 1990; 340B:447–56

The cytogenetic effects of restriction endonucleases following their introduction into cells by electroporation. Morgan WF, et al. **Prog Clin Biol Res** 1990;340B:355–61

The origins and consequences of numerical chromosome changes in Syrian hamster dermal cultures. Parry JM, et al. **Prog Clin Biol Res** 1989;318:353–66

A Nordic prospective study on the relationship between peripheral lymphocyte chromosome damage and cancer morbidity in occupational groups. Nordic Study Group on the Health Risk of Chromosome Damage. Reuterwall C. **Prog Clin Biol Res** 1990;340C:357–66

Mechanisms of chromosome aberrations. Savage JR. **Prog Clin Biol Res** 1990;340B:385–96 (31 ref.)

Centromere separation and aneuploidy: a lesson from multicentric chromosomes. Vig BK, et al. **Prog Clin Biol Res** 1989;318:137–48 (17 ref.)

The centromere and aneuploidy: I. Caffeine-induced detachment and fragmentation of kinetochores of mammalian chromosomes. Zinkowski RP, et al. **Prog Clin Biol Res** 1989;318:43–60

The induction of chromosome damage in CHO cells by beryllium and radiation given alone and in combination. Brooks AL, et al. **Radiat Res** 1989 Dec;120(3):494–507

Telomere staining of human chromosomes and the mechanism of radiation-induced dicentric formation. Cornforth MN, et al. **Radiat Res** 1989 Nov;120(2):205–12

Testing the notion of the one-hit exchange. Cornforth MN. **Radiat Res** 1990 Jan;121(1):21–7

Chromosome aberrations in relation to radiation dose following partial-body exposures in three populations. Kleinerman RA, et al. **Radiat Res** 1990 Jul;123(1):93–101

Thermal tolerance during S phase for cell killing and chromosomal aberrations. Li XL, et al. **Radiat Res** 1990 May;122(2):193–6

Chromosome aberration frequencies produced by a 70-MeV proton beam. Matsubara S, et al. **Radiat Res** 1990 Aug; 123(2):182–91

Human genotoxicity: pesticide applicators and phosphine. Garry VF, et al. **Science** 1989 Oct 13;246(4927):251–5

Chromosome aberration induction in Chinese hamster ovary cells by restriction enzymes with different methylation sensitivity. Winegar RA, et al. **Somat Cell Mol Genet** 1990 May;16(3):251–6

Chromosome aberrations induced in vitro in human lymphocytes by monoenergetic 2.5 MeV neutrons and 60Co gamma rays. Hellin H, et al. **Strahlenther Onkol** 1990 Aug;166(8):549–53

Chromosome aberrations in patients treated with telecobalt therapy for glioblastoma. Léonard A, et al. **Strahlenther Onkol** 1990 Jul;166(7):466–9

Chromosome aberrations in peripheral lymphocytes of patients irradiated with 15-MeV-photons for Morbus Hodgkin. Stephan G, et al. **Strahlenther Onkol** 1990 Jul; 166(7):460–5

Human sperm chromosome analysis in primary infertility: a preliminary report. Lin SJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jun;88(6):567–71

A human hepatocellular carcinoma cell line with multiple copies of structurally normal chromosomes. Wuu KD, et al. **Taiwan I Hsueh Hui Tsa Chih** 1990 Jan;89(1):1–5

Clastogenic effects of benzo[a]pyrene in postimplantation embryos with different genetic background. Adler ID, et al. **Teratogenesis Carcinog Mutagen** 1989;9(6):383–92

Cytogenetic assays in genotoxic studies: somatic cell effects of benzene and germinal cell effects of dibromochloropropane. Au WW, et al. **Teratogenesis Carcinog Mutagen** 1990;10(2):125–34 (32 ref.)

Chromosomal aberrations as a contributing factor for tumor promotion in the mouse skin. Kaina B.

Teratogenesis Carcinog Mutagen 1989;9(6):331–48 (88 ref.)
Micronuclei assay in cytokinesis-blocked binucleated and conventional mononucleated methods in human peripheral lymphocytes. Nath CJ, et al.
Teratogenesis Carcinog Mutagen 1990;10(3):273–9
Cytogenetic surveillance of workers exposed to genotoxic chemicals: preliminary experiences from a prospective cancer study in a cytogenetic cohort. Sorsa M, et al.
Teratogenesis Carcinog Mutagen 1990;10(3):215–21 (13 ref.)
An assessment of the genotoxicity of vanadium. Owusu-Yaw J, et al. **Toxicol Lett** 1990 Feb;50(2–3):327–36
Chromosome aberrations in kidney transplant recipients. Fukuda M, et al. **Transplant Proc** 1987 Feb;19(1 Pt 3):2245–7
Cytogenetic survey of subfertile males in Japan. Matsuda T, et al. **Urol Int** 1989;44(4):194–7
Genotoxic investigations of tobacco protein using microbial and mammalian test systems. Münzner R, et al.
Z Ernahrungswiss 1989 Dec;28(4):300–9
[Genotoxic effect of cigarette smoke condensate on human diploid cell 2BS strain] Gu M.
Chung Hua Chung Liu Tsa Chih 1990 Mar;12(2):101–3 (Eng. Abstr.) **(Chi)**
[Fragile sites of cultured peripheral blood lymphocyte chromosomes in patients with gestational trophoblastic tumor] Xu C. **Chung Hua Fu Chan Ko Tsa Chih** 1990 May; 25(3):159–61, 189 (Eng. Abstr.) **(Chi)**
[Investigation of protective effect of selenium on genetic materials among workers exposed to arsenic] Hu GG.
Chung Hua Yu Fang I Hsueh Tsa Chih 1989 Sep;23(5):286–8 (Eng. Abstr.) **(Chi)**
[Selective accumulation of 147Pm in organism on induction of micronucleus and SCE of bone marrow cells as well as the mutagenic effect on fetal liver and spleen] Zhu SP.
Chung Hua Yu Fang I Hsueh Tsa Chih 1989 May; 23(3):166–9 (Eng. Abstr.) **(Chi)**
[DNA repair capacity, chromosome aberration rate and chromosome fragile sites among members of 7 cancer families] Wu DF.
Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1989 Dec; 11(6):425–9 (Eng. Abstr.) **(Chi)**
[The types and breakpoints of somatic chromosome aberrations in small cell lung cancer (SCLC) patients and heavy smokers] Su YA, et al. **I Chuan Hsueh Pao** 1988; 15(2):150–60 (Eng. Abstr.) **(Chi)**
[Study on structural variation of nucleolar organizer regions (NOR) and the satellite association (SA)] Wang GH.
I Chuan Hsueh Pao 1989;16(1):67–73 (17 ref.) (Eng. Abstr.) **(Chi)**
[Chromosome aberrations induced by bleomycin in the lymphocytes of young and old persons] Musilová J, et al.
Cas Lek Cesk 1989 Sep 8;128(37):1166–9 (Eng. Abstr.) **(Cze)**
[Chromosome aberrations in peripheral blood lymphocytes in workers occupationally exposed to styrene] Smejkalová J, et al.
Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1989;32(4):471–80 (Eng. Abstr.) **(Cze)**
[Dysmorphisms related to autosomal chromosome aberrations in children and adults] Rethoré MO.
Bull Acad Natl Med 1989 Nov;173(8):1093–9; discussion 1100–1 (19 ref.) (Eng. Abstr.) **(Fre)**
[Chromosome analysis of solid tumors and its value in clinical medicine and research] Walter TA, et al.
Dtsch Med Wochenschr 1990 May 4;115(18):708–13 (43 ref.) **(Ger)**
[Tumor cytogenetics and prognosis in neuroblastoma] Christiansen H, et al. **Monatsschr Kinderheilkd** 1989 Oct; 137(10):666–71 (Eng. Abstr.) **(Ger)**
[Changes of the cytogenetic effectiveness of the therapeutic ray of fast neutrons in water phantoms] Gulko GM, et al.
Radiobiol Radiother (Berl) 1989;30(5):459–63 (Eng. Abstr.) **(Ger)**
[Symptomatic calcification in the newborn. Phenocopies of chondrodysplasia punctata] Leicher-Düber A, et al.
ROFO 1990 Apr;152(4):463–8 (Eng. Abstr.) **(Ger)**
[Cytogenetic, endocrinological and immunological studies of tissue cultures from ectopic pregnancies] Schäfer D, et al.
Zentralbl Gynakol 1989;111(22):1476–85 (Eng. Abstr.) **(Ger)**
[Cytogenetics of the malignant hemopathies: cyto-biological correlations and clinical implications] Castoldi GL, et al.
Haematologica (Pavia) 1989 Oct;74(5 Suppl):3–23 (89 ref.) **(Ita)**
[Measurement of DNA content and analysis of chromosome using flow cytometry] Akagi K, et al. **Gan No Rinsho** 1989 Oct;35(13):1559–65 (33 ref.) (Eng. Abstr.) **(Jpn)**
[Cancer and chromosomes] Tanaka K, et al.
Gan To Kagaku Ryoho 1989 Nov;16(11):3519–30 (60 ref.) (Eng. Abstr.) **(Jpn)**
[Correlation of karyotype with clinical features in childhood acute lymphoblastic leukemia] Shikano T.
Hokkaido Igaku Zasshi 1989 Nov;64(6):727–37 (Eng. Abstr.) **(Jpn)**
[Clinical cytogenetic studies on patients with cleft lip and/or cleft palate—2. Chromosome analysis of twins] Hashimoto K, et al. **Kokubyo Gakkai Zasshi** 1990 Mar;57(1):12–5 (Eng. Abstr.) **(Jpn)**
[Cytogenetic studies in couples with repeated spontaneous abortions] Ohno M, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1989 Sep; 41(9):1387–93 (Eng. Abstr.) **(Jpn)**
[Chromosome abnormalities in neuroblastoma] Abe T, et al. **Rinsho Byori** 1989 Feb;Spec No 80:179–88 **(Jpn)**
[Malignant lymphoma] Abe T, et al. **Rinsho Byori** 1989 Feb; Spec No 80:230–41 **(Jpn)**
[Wilms' tumour: chromosome findings and carcinogenesis] Inaba T, et al. **Rinsho Byori** 1989 Feb;Spec No 80:171–8 **(Jpn)**
[Chromosome abnormalities in cancer, with special references to the significance and the assessment] Kamada N. **Rinsho Byori** 1989 Jul;(Spec No 82):87–97 (10 ref.) **(Jpn)**
[A case of chronic neutrophilic leukemia with abnormal karyotype] Kunishima S, et al. **Rinsho Byori** 1989 Aug; 37(8):943–7 (Eng. Abstr.) **(Jpn)**
[Chromosome aberrations and genes in human and experimental leukemias] Maeda S, et al. **Rinsho Byori** 1990 May;38(5):509–13 (14 ref.) (Eng. Abstr.) **(Jpn)**
[Lymphocyte chromosome survey in 100 retinoblastoma patients] Motegi T. **Rinsho Byori** 1989 Feb;Spec No 80:163–70 **(Jpn)**
[Ovarian cancer—assessment of methods for cytogenetic analysis and chromosome aberrations found in ovarian cancer] Tanaka K. **Rinsho Byori** 1989 Feb;Spec No 80:268–80 **(Jpn)**
[Initial symptoms of hematemesis from gastric varix with chromosomal abnormalities of t(2; 8) and 14q+ in a patient with acute lymphoblastic leukemia (FAB: L3)] Amano M, et al. **Rinsho Ketsueki** 1989 Oct;30(10):1830–4 (Eng. Abstr.) **(Jpn)**
[Cytogenetic studies of healthy HTLV-I carriers (Report 1): Cytogenetic studies of an ATL family] Itoyama T, et al. **Rinsho Ketsueki** 1989 Oct;30(10):1769–77 (Eng. Abstr.) **(Jpn)**
[Complex karyotypic abnormality in an aged patient with acute myeloid leukemia (M 2)] Mimori K, et al.
Rinsho Ketsueki 1989 Jun;30(6):868–73 (Eng. Abstr.) **(Jpn)**
[Significance of the chromosomal findings in acute myeloid leukemia with maturation (M2)] Nakamura H, et al.
Rinsho Ketsueki 1989 Jun;30(6):806–14 (Eng. Abstr.) **(Jpn)**
[Myelodysplastic syndrome with complex chromosome abnormalities and peculiar fibril formation in granulocytes] Saito H, et al. **Rinsho Ketsueki** 1990 Jan;31(1):115–20 (Eng. Abstr.) **(Jpn)**
[IBL like T cell lymphoma associated with hemolytic anemia and polyploidy chromosomal abnormality—a case report] Sasagawa Y, et al. **Rinsho Ketsueki** 1990 Jan;31(1):110–4 (Eng. Abstr.) **(Jpn)**
[Hyperdiploidy (greater than 50 chromosomes) has the most favorable prognosis among the major karyotypic subgroups of childhood acute lymphoblastic leukemia] Shikano T, et al. **Rinsho Ketsueki** 1990 Mar;31(3):308–14 (Eng. Abstr.) **(Jpn)**
[Transient myeloproliferative disorder (TMD) with transiently increased tetrasomy-21 cells in a phenotypically normal newborn] Takeda T, et al. **Rinsho Ketsueki** 1989 Jul;30(7):1010–5 (Eng. Abstr.) **(Jpn)**
[Double minute chromosomes (DMs) in a case of acute myelomonocytic leukemia] Takesako T, et al.
Rinsho Ketsueki 1989 Jun;30(6):882–6 (Eng. Abstr.) **(Jpn)**
[Evaluation of the cytostatic activity of 4-(R-alpha-phenylaminobenzylidene)morpholine iodides by the Triticum and Allium tests] Andrzejczuk A, et al.
Acta Pol Pharm 1989;46(1):34–8 (Eng. Abstr.) **(Pol)**
[Results of the exposure to ethylene oxide with special reference to its carcinogenic and hematotoxic effects] Rucińska M, et al. **Med Pr** 1989;40(6):381–9 (40 ref.) (Eng. Abstr.) **(Pol)**
[Biological risk of the use of ultrasonics] Najda J, et al.
Pol Tyg Lek 1989 Jan 30;44(5):133–6 (42 ref.) **(Pol)**
[Epilepsy in ring chromosome 14 syndrome] Duarte MH, et al. **Arq Neuropsiquiatr** 1989 Jun;47(2):205–11 (Eng. Abstr.) **(Por)**
[The induction and elimination of cytogenetic disorders in monkey lymphocytes following thiophosphamide action] Kuzin SM, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):737–9 (Eng. Abstr.) **(Rus)**
[A new mechanism for realization of radiation-induced chromosome aberrations] Zhloba AA, et al.
Dokl Akad Nauk SSSR 1989;308(5):1240–3 **(Rus)**
[Cytogenetic characteristics of H3 oxide induced myeloid leukemia in Wistar rats] Nikolaevskaia NG, et al.
Eksp Onkol 1990;12(3):19–21 (Eng. Abstr.) **(Rus)**
[The causes of appearance of a double insertion of homogeneously staining regions in the chromosome 1 of house mouse (Mus musculus musculus)] Agul'nik SI, et al.
Genetika 1990 Mar;26(3):570–2 (Eng. Abstr.) **(Rus)**
[Meiotic drive of the aberrant chromosome 1 in the house mouse] Agul'nik SI, et al. **Genetika** 1990 Apr;26(4):664–9 (Eng. Abstr.) **(Rus)**
[Chromosome aberrations and dominant lethals in rat oocytes during acute and chronic alcoholic intoxication] Slozina NM, et al. **Genetika** 1990 Jan;26(1):154–7 (Eng. Abstr.) **(Rus)**
[Cytogenetic indicators as the criteria of hygienic evaluation of the effect of static electric field and ion currents] Akimenko VIa, et al. **Gig Sanit** 1989 Oct;(10):50–2 **(Rus)**
[Substantiation of the necessity and possibility of studying the genetic risk of low energy physical factors] Antipenko EN, et al. **Gig Sanit** 1989 Oct;(10):59–63 (45 ref.) **(Rus)**
[Changes in the occurrence of sister chromatid exchange and chromosome aberrations in bone marrow cells of mice after administration of chromium with drinking water] Go'dina IR, et al. **Gig Sanit** 1989 Nov;(11):7–9 (Eng. Abstr.) **(Rus)**
[Complex study of various pathogenetic and physiologic parameters of the health status of watchmen in the oil industry] Il'inskikh NN, et al. **Gig Sanit** 1989 Dec; (12):18–21 (Eng. Abstr.) **(Rus)**
[Cytogenetic examination of workers employed in epoxy resin production] Chernykh LV, et al.
Gig Tr Prof Zabol 1990;(3):51–2 **(Rus)**
[Clinico-genetic and hemostatic disorders in viral hepatitis B] Gebesh VV, et al. **Klin Med (Mosk)** 1990 Mar; 68(3):57–61 (Eng. Abstr.) **(Rus)**
[Modeling, using nucleases, of the effect of radiation on Chinese hamster fibroblasts. On the role of single-stranded DNA breaks, induced by DNAase I, in the initiation of chromosome aberrations] Ganassi EE, et al.
Radiobiologiia 1989 Nov-Dec;29(6):742–5 (Eng. Abstr.) **(Rus)**
[A comparative study of the micronucleus test and chromosome aberrations in PHA-stimulated human lymphocytes] Koliubaeva SN, et al. **Radiobiologiia** 1989 Sep-Oct;29(5):611–4 (Eng. Abstr.) **(Rus)**
[A method of estimating the dose to and magnitude of an irradiated area during partial radiation damage based on the results of a cytogenetic analysis of a culture of peripheral blood lymphocytes] Nugis VIu, et al.
Radiobiologiia 1989 Nov-Dec;29(6):838–40 (Eng. Abstr.) **(Rus)**
[Decrease in the cytogenetic effect of adriblastin and pharmorubicin with the experimental use of tularemia vaccine] Nersesian AK, et al. **Tsitol Genet** 1989 Jul-Aug; 23(4):63–5 (Eng. Abstr.) **(Rus)**
[A new chromosomal rearrangement in cattle] Sharshov AA, et al. **Tsitol Genet** 1990 Mar-Apr;24(2):30–3 (Eng. Abstr.) **(Rus)**
[The effect of culturing conditions on the karyotypic structure of two cell sublines of Indian muntjak skin fibroblasts] Polianskaia GG. **Tsitologiia** 1989 Jul; 31(7):807–17 (Eng. Abstr.) **(Rus)**
[Cytogenetic characteristics of the cell line BHK-21 (C-13) and three of its clones] Urmanova MA, et al.
Tsitologiia 1989 Jul;31(7):799–806 (Eng. Abstr.) **(Rus)**
[The ratio of collagens type I and III in cultures of human fibroblasts with diploid and aberrant chromosome complement] Kukharenko VI, et al. **Vopr Med Khim** 1989 Sep-Oct;35(5):94–6 (Eng. Abstr.) **(Rus)**
[Relation of the occurrence of chromosome aberrations in human peripheral lymphocytes to the cell cycle] Kalina I, et al. **Cas Lek Cesk** 1990 Jan 5;129(1):23–5 (Eng. Abstr.) **(Slo)**
[Ring chromosome 17 and recurring pneumopathy] Lambruschini Ferri N, et al. **An Esp Pediatr** 1989 Nov; 31(5):478–80 (10 ref.) **(Spa)**
[Prenatal diagnosis of chromosome abnormalities and other abnormalities in the amniotic fluid] Avendaño AI, et al.
Rev Chil Pediatr 1988;59 Suppl 3:36–7 **(Spa)**
[Chromosomal diseases] Morizon G. **Rev Chil Pediatr** 1988; 59 Suppl 3:28–35 **(Spa)**

GENETICS

Clonal evolution in Ph-negative, bcr-positive chronic myeloid leukaemia before and after bone marrow transplantation. Secker-Walker LM, et al.
Acta Haematol (Basel) 1989;82(4):205–9
Trisomy 22 mosaicism limited to skin fibroblasts in a mentally retarded, dysmorphic girl. Lund HT, et al.
Acta Paediatr Scand 1990 Jun-Jul;79(6–7):714–8
De novo inverted interstitial ("mirror") duplication of chromosome 8(q13----q24.1) in a liveborn male. Donnenfeld AE, et al. **Am J Med Genet** 1990 Apr; 35(4):529–31
Detection of molecular rearrangements in Prader-Willi syndrome patients by using genomic probes recognizing four loci within the PWCR. Gregory CA, et al.
Am J Med Genet 1990 Apr;35(4):536–45
Cytogenetical studies on a large control population and on persons occupationally exposed to radiation and/or to chemicals. Gundy S. **Ann Ist Super Sanita** 1989; 25(4):549–55
Non-random karyotypic changes in Djungarian hamster tumors induced by 3-methylcholanthrene. Sokova OI, et al. **Arch Geschwulstforsch** 1989;59(6):399–406
Gamma-radiation induced chromosome aberrations in Alzheimer lymphocytes. Tobi SE, et al.
Biochem Soc Trans 1990 Jun;18(3):393–4
Chromosomal aberrations and sister chromatid exchanges in workers exposed to lead. Huang XP, et al.
Biomed Environ Sci 1988 Dec;1(4):382–7
Chromosomal breakpoints within the first intron of the ABL gene are nonrandom in patients with chronic myelogenous leukemia. Jiang XY, et al. **Blood** 1990 Aug 1;76(3):597–601
Relationship of bcr breakpoint to chronic phase duration, survival, and blast crisis lineage in chronic myelogenous leukemia patients presenting in early chronic phase. Morris SW, et al. **Blood** 1990 May 15;75(10):2035–41
Chromosome aberrations and prognostic factors in therapy-related myelodysplasia and acute nonlymphocytic leukemia. Pedersen-Bjergaard J, et al. **Blood** 1990 Sep 15;

76(6):1083–91
Analysis of chromosomal aberrations in workers exposed to low level benzene. Yardley-Jones A, et al. **Br J Ind Med** 1990 Jan;47(1):48–51
Chromosomal rearrangements in chondromatous tumors. Mandahl N, et al. **Cancer** 1990 Jan 15;65(2):242–8
Addition of telomere-associated HeT DNA sequences "heals" broken chromosome ends in Drosophila. Biessmann H, et al. **Cell** 1990 May 18;61(4):663–73
Chromosome breakage in lymphocytes from members of cancer families showing autosomal dominant inheritance. Khouzam MN, et al. **Clin Genet** 1990 Jul;38(1):51–6
Replication error, a new hypothesis to explain the origin of a supernumerary marker chromosome in a mentally retarded boy. Wik Sjöstedt A, et al. **Hereditas** 1989; 111(2):115–23
Pericentromeric structure of human X "isochromosomes": evidence for molecular heterogeneity. Sharp CB, et al. **Hum Genet** 1990 Aug;85(3):330–6
Louis-Bar syndrome: spontaneous and induced chromosomal aberrations in lymphocytes and micronuclei in lymphocytes, oral mucosa and hair root cells. Tomanin R, et al. **Hum Genet** 1990 Jun;85(1):31–8
Chromosome aberrations in metastatic ovarian cancer: relationship with abnormalities in primary tumors. Bello MJ, et al. **Int J Cancer** 1990 Jan 15;45(1):50–4
Application of molecular cytogenetic techniques to the evaluation of renal parenchymal tumors. Kovacs G. **J Cancer Res Clin Oncol** 1990;116(4):318–23 (49 ref.)
Three different, non-mosaic sex chromosome abnormalities (direct cytotrophoblasts, mesenchymal core cultures, and abortus skin fibroblasts): implications for elucidating chorionic villi mosaicism. Shulman LP, et al. **J Med Genet** 1989 Dec;26(12):791–2
Pigmentary abnormalities and mosaicism for chromosomal aberration: association with clinical features similar to hypomelanosis of Ito. Sybert VP, et al. **J Pediatr** 1990 Apr; 116(4):581–6
Supernumerary chromosome 1 in interphase nuclei of atypical germ cells in paraffin-embedded human seminiferous tubules. Walt H, et al. **Lab Invest** 1989 Nov; 61(5):527–31
Hypotonic treatment leads to chromosomal aberrations but not to sister-chromatid exchanges in human lymphocytes. Kalweit S, et al. **Mutat Res** 1990 Sep;245(1):5–9
The usefulness of chromosome analysis in clinical oncology. Sandberg AA. **Oncology (Williston Park)** 1987 Jul; 1(5):21–32, 35–8
The role of the pathologist in the evaluation of first trimester abortions. Novak RW, et al. **Pathol Annu** 1990;25 Pt 1:297–311 (29 ref.)
Familial marker chromosome due to 3:1 disjunction of t(9;15) in a grandparent. Winsor EJ, et al. **Prenat Diagn** 1989 Dec; 9(12):851–5
[Cytogenetic studies of spontaneous abortions in humans] Zhou CR. **Chung Hua Fu Chan Ko Tsa Chih** 1990 Mar; 25(2):89–91, 124 (Eng. Abstr.) **(Chi)**
[Chromosome mutagenicity of a 193 nm Excimer laser] Gebhart E, et al. **Fortschr Ophthalmol** 1990;87(3):229–33 (Eng. Abstr.) **(Ger)**
[Amplification of N-myc in neuroblastoma: paradigm for clinical use of an oncogene alteration] Schwab M. **Klin Padiatr** 1990 Jul-Aug;202(4):197–201 (25 ref.) (Eng. Abstr.) **(Ger)**
[Chromosome instability in patients with malignant melanoma of the skin] Roser M, et al. **Onkologie** 1989 Dec; 12(6):286–90 (Eng. Abstr.) **(Ger)**
[Cytogenetic studies of human lymphocytes under the influence of oxicams] Kullich W, et al. **Z Rheumatol** 1990 Mar-Apr;49(2):77–81 (Eng. Abstr.) **(Ger)**
[Genetic aspects of early spontaneous abortion] Horn LC, et al. **Zentralbl Gynakol** 1990;112(3):123–33 (32 ref.) (Eng. Abstr.) **(Ger)**
[Methods of research on the chromosome level in diagnosing genetic disorders] Ruffini E. **Minerva Pediatr** 1989 Sep; 41(9):491–2 **(Ita)**
[Cytogenetic studies of families with reproductive failure] Mrózek K, et al. **Wiad Lek** 1989 Oct 1-Nov 1; 42(19–21):1014–8 (Eng. Abstr.) **(Pol)**
[Ultrasonic-controlled diagnostic puncture of the umbilical cord in the second trimester of pregnancy] Kacheniuk IuA, et al. **Akush Ginekol (Mosk)** 1990 Feb;(2):72–4 **(Rus)**
[Disorders in the development of female gametes and prenatal pathology] Nikitin AI, et al. **Akush Ginekol (Mosk)** 1990 Jan;(1):45–7 **(Rus)**
[Use of genetic analysis methods in examining patients with endometrial cancer] Polishchuk LZ, et al. **Akush Ginekol (Mosk)** 1990 Feb;(2):49–52 (Eng. Abstr.) **(Rus)**
[Early and late effects of the cytogenetic action of doxorubicin] Klimova MIu, et al. **Antibiot Khimioter** 1990 Jan;35(1):30–2 (Eng. Abstr.) **(Rus)**
[Relation of the antitumor activity of 4'-epidoxorubicin and cytogenetic disorders of tumor cells in experimental studies] Nersesian AK, et al. **Antibiot Khimioter** 1990 Apr; 35(4):39–40 (Eng. Abstr.) **(Rus)**
[Chromosomal changes in primary myelodysplasias] Iavorkovskii LI, et al. **Eksp Onkol** 1990;12(2):10–6 (42 ref.) (Eng. Abstr.) **(Rus)**
[Problem of radiation-induced leukemia] Domracheva EV, et al. **Gematol Transfuziol** 1990 Jun;35(6):3–9 (Eng. Abstr.) **(Rus)**
[Characteristics of chromosomal and mitotic disorders in patients with acute non-lymphoblastic leukemia exposed to chemical factors] Zedginidze AG, et al. **Gematol Transfuziol** 1990 Jan;35(1):25–7 (Eng. Abstr.) **(Rus)**
[Cytogenetic effect of pesticides in relation to their hygienic standardization] German IV. **Gig Sanit** 1990 May;(5):72–4 (Eng. Abstr.) **(Rus)**
[Ecological changes and human heredity] Bochkov NP, et al. **Klin Med (Mosk)** 1990 May;68(5):25–32 (30 ref.) **(Rus)**
[Genetic studies of Arabidopsis seeds during space flight] Anikeeva ID. **Kosm Biol Aviakosm Med** 1990 Jan-Feb; 24(1):22–5 (Eng. Abstr.) **(Rus)**
[Effect of single exposure of the seeds of Lactuca sativa to heavy ions of galactic cosmic radiation at orbital manned space stations "Saliut-6" and "Saliut-7"] Nevzgodina LV, et al. **Kosm Biol Aviakosm Med** 1989 Nov-Dec;23(6):66–70 (Eng. Abstr.) **(Rus)**
[The direct use of cytogenetic data for plotting prognostic curves of the dynamics of neutrophil count after acute relatively uniform gamma irradiation (based on data from the victims of the accident at the Chernobyl Atomic Electric Power Station] Piatkin EK, et al. **Med Radiol (Mosk)** 1990 Feb;35(2):29–32 (Eng. Abstr.) **(Rus)**
[An analysis of the micronuclei in the oral mucosa for assessing the cytogenetic effect of environmental pollutants] ArutiunianRM, et al. **Tsitol Genet** 1990 Mar-Apr;24(2):57–60 (Eng. Abstr.) **(Rus)**
[A karyotype and chromatin study of the peripheral blood lymphocytes of patients with pigmented skin neoplasms] Ganina KP, et al. **Tsitol Genet** 1990 Mar-Apr;24(2):16–21 (Eng. Abstr.) **(Rus)**
[The cytogenetic action of x-ray irradiation on the myelokaryocytes of rats immunized with a tularemia vaccine] Nersesian AK, et al. **Tsitol Genet** 1989 Nov-Dec; 23(6):15–8 (Eng. Abstr.) **(Rus)**
[Chromosome aberrations in hothouse workers coming in contact with pesticides] Sharinov IK, et al. **Tsitol Genet** 1989 Sep-Oct;23(5):60–3 (Eng. Abstr.) **(Rus)**
[A cytogenetic study of the human chorion for the purpose of the prenatal diagnosis of hereditary diseases] Baranov VS, et al. **Tsitologiia** 1990;32(1):74–8 (Eng. Abstr.) **(Rus)**
[The cytogenetic action of antilymphocyte globulin on the lymphocytes of bronchial asthma patients] Lintsov AE, et al. **Tsitologiia** 1990;32(2):156–60 (Eng. Abstr.) **(Rus)**
[The natural background of chromosome anomalies in the bone marrow cells of mice and the control of vaccines for genotoxicity] Volgareva GM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1990 May;(5):14–7 (Eng. Abstr.) **(Rus)**
[Cytogenetic control over the safety of merthiolate] Volgareva GM. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Nov;(11):46–52 (Eng. Abstr.) **(Rus)**
[A case of familial paracentric inversion associated with Down's syndrome. 47, XX, +21, inv (1) (p22p36)] Alonso Villa MJ, et al. **An Esp Pediatr** 1990 Mar;32(3):257–8 **(Spa)**
[A new syndrome of mental retardation and chromosomic instability in 3 siblings] Carnevale A, et al. **Rev Invest Clin** 1989 Jul-Sep;41(3):259–64 (Eng. Abstr.) **(Spa)**
[Bloom syndrome, constitutional and induced genetic instability in 2 cases from Argentina] Gorla NB, et al. **Sangre (Barc)** 1989 Dec;34(6):475–80 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Clonotypic chromosomal aberrations in long-term lines of myelin-specific rat T lymphocytes. Bradl M, et al. **J Neuroimmunol** 1989 Sep;24(1-2):95–104

PHYSIOLOGY

Repair of radiation-induced chromatid aberrations: relationship to G2 arrest in CHO cells. Rowley R. **Int J Radiat Biol** 1990 Sep;58(3):489–98
Further evidence that dichloromethane does not induce chromosome damage. Westbrook-Collins B, et al. **J Appl Toxicol** 1990 Apr;10(2):79–81
Cell killing, chromosomal aberrations, and division delay as thermal sensitivity is modified during the cell cycle. Dewey WC, et al. **Radiat Res** 1990 Jun;122(3):268–74
Preparation for human study of pesticide applicators: sister chromatid exchanges and chromosome aberrations in cultured human lymphocytes exposed to selected fumigants. Garry VF, et al. **Teratogenesis Carcinog Mutagen** 1990;10(1):21–9
[The biological effect of low-frequency noise (cytogenetic and immunologic studies)] Timchenko OI, et al. **Gig Sanit** 1990 Feb;(2):51–3 **(Rus)**

CHROMOSOME ABNORMALITIES

see related
KARYOTYPING
SEX CHROMATIN

Chromosomal abnormalities in clear cell sarcoma. Implications for histogenesis. Bridge JA, et al. **Am J Clin Pathol** 1990 Jan;93(1):26–31
Autosomal dominant microcephaly with mental retardation. Bawle E, et al. **Am J Med Genet** 1989 Jul;33(3):382–4
Antenatal diagnosis of 45,X/48,XYYY. Bryke CR, et al. **Am J Med Genet** 1989 Oct;34(2):207–10
Holoprosencephaly and cytogenetic findings: further information [letter; comment] Cohen MM Jr. **Am J Med Genet** 1989 Oct;34(2):265 Comment on: Am J Med Genet 1988 Aug;30(4):929–38.
Waardenburg syndrome type I in a child with de novo inversion (2)(q35q37.3). Ishikiriyama S, et al. **Am J Med Genet** 1989 Aug;33(4):505–7
Chromosome abnormalities in dyskeratosis congenita [letter; comment] Scappaticci S, et al. **Am J Med Genet** 1989 Dec; 34(4):609–10 Comment on: Am J Med Genet 1989 Jan;32(1):63–6.
Child with deletion of 4q and duplication of 1q [letter] Wade J, et al. **Am J Med Genet** 1989 Aug;33(4):553–4
Very high CA 125 levels during early first trimester in three cases of spontaneous abortion with chromosomal abnormalities. Check JH, et al. **Am J Obstet Gynecol** 1990 Mar;162(3):674–5
Retinoblastoma associated with holoprosencephaly. Desai VN, et al. **Am J Ophthalmol** 1990 Mar 15;109(3):355–6
Morphology in Ki-1(CD30)-positive non-Hodgkin's lymphoma is correlated with clinical features and the presence of a unique chromosomal abnormality, t(2;5)(p23;q35). Bitter MA, et al. **Am J Surg Pathol** 1990 Apr;14(4):305–16
Cytogenetic and molecular analysis of therapy-related leukemia. Rowley JD, et al. **Ann N Y Acad Sci** 1989; 567:130–40 (39 ref.)
Multistage carcinogenesis in murine thymocytes: involvement of oncogenes, chromosomal imbalances and T cell growth factor receptor. Newcomb EW, et al. **Anticancer Res** 1989 Sep-Oct;9(5):1407–15 (104 ref.)
Polyploid abnormalities in day 3 and day 5 merino sheep embryos. Murray JD, et al. **Aust J Biol Sci** 1988; 41(2):157–61
Deletion delta-thalassemia: the 7.2 kb deletion of Corfu delta beta-thalassemia in a non-beta-thalassemia chromosome [letter] Galanello R, et al. **Blood** 1990 Apr 15;75(8):1747–9
Chromosomal abnormalities in untreated patients with non-Hodgkin's lymphoma: associations with histology, clinical characteristics, and treatment outcome. The Nebraska Lymphoma Study Group. Schouten HC, et al. **Blood** 1990 May 1;75(9):1841–7
Correlations between cytogenetics and morphology in myelodysplastic syndromes. Vila L, et al. **Blut** 1990 Apr; 60(4):223–7
p53 gene mRNA expression and chromosome 17p allele loss in breast cancer. Thompson AM, et al. **Br J Cancer** 1990 Jan;61(1):74–8
Chromosomal abnormalities and their correlations with asbestos exposure and survival in patients with mesothelioma. Tiainen M, et al. **Br J Cancer** 1989 Oct; 60(4):618–26
Luteinizing hormone-releasing hormone (LHRH)-expressing cells do not migrate normally in an inherited hypogonadal (Kallmann) syndrome. Schwanzel-Fukuda M, et al. **Brain Res Mol Brain Res** 1989 Dec;6(4):311–26
Molecular genetics of familial Alzheimer's disease. St. George-Hyslop PH, et al. **Can J Neurol Sci** 1989 Nov;16(4 Suppl):465–7 (14 ref.)
Spontaneous remission in myelodysplastic syndrome. A case report. Broun ER, et al. **Cancer Genet Cytogenet** 1990 May; 46(1):125–8
Clonal duplication of the Y chromosome and fra(X)(q28) in a case of epidermoid carcinoma of the esophagus. Casalone R, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):269–71
Benign ovarian teratomas. An analysis of their cellular origin. Dahl N, et al. **Cancer Genet Cytogenet** 1990 May; 46(1):115–23
A case of renal lymphangioma with a karyotype 45,X,-X,idic(7q). Dębiec-Rychter M, et al. **Cancer Genet Cytogenet** 1990 May;46(1):29–33
Chromosomal patterns in Warthin's tumor. A second type of human benign salivary gland neoplasm. Mark J, et al. **Cancer Genet Cytogenet** 1990 May;46(1):35–9
Cytogenetic studies of endometrial malignancies. Milatovich A, et al. **Cancer Genet Cytogenet** 1990 May;46(1):41–53
Complex karyotypic anomalies, including an i(5p) marker chromosome, in malignant mixed mesodermal tumor of the ovary. Pejovic T, et al. **Cancer Genet Cytogenet** 1990 May; 46(1):65–9
Chromosome abnormalities involving heterochromatic regions in monocytic leukemia. Rege-Cambrin G, et al. **Cancer Genet Cytogenet** 1990 May;46(1):99–106
Multiple clonal chromosome abnormalities in a superficial basal cell epithelioma. Scappaticci S, et al. **Cancer Genet Cytogenet** 1989 Oct 15;42(2):309–11
Pleomorphic adenomas with unbalanced chromosomal abnormalities have an increased in vitro lifetime. Stern C, et al. **Cancer Genet Cytogenet** 1990 May;46(1):55–63
Use of conditioned media in cell culture can mask cytogenetic abnormalities in acute leukemia. Sun GX, et al. **Cancer Genet Cytogenet** 1990 May;46(1):107–13
Cytogenetics of carcinoma in situ of the testis. Vos A, et al. **Cancer Genet Cytogenet** 1990 May;46(1):75–81
Nonrandom chromosomal alterations in nickel-transformed Chinese hamster embryo cells. Conway K, et al. **Cancer Res** 1989 Nov 1;49(21):6032–8
Report of the committee on structural chromosome changes in neoplasia. Trent JM, et al. **Cytogenet Cell Genet** 1989;

51(1–4):533–62 (382 ref.)
Chromosomal abnormalities in patients with non-cutaneous T-cell non-Hodgkin's lymphoma. The Nebraska Lymphoma Study Group. Schouten HC, et al. **Eur J Cancer** 1990;26(5):618–22
Differences in bone marrow cytogenetic characteristics between treated and untreated myeloma. Clark RE, et al. **Eur J Cancer Clin Oncol** 1989 Dec;25(12):1789–93
Acute nonlymphocytic leukemia (ANLL) with isochromosome i(17q) as the sole chromosomal anomaly: a distinct entity? Weh HJ, et al. **Eur J Haematol** 1990 May; 44(5):312–4
Heterochromatic chromosome variation and reproductive failure. Bobrow M. **Exp Clin Immunogenet** 1985; 2(2):97–105 (33 ref.)
Effect of the degree of maturation of mouse oocytes at fertilization: a source of chromosome imbalance. Badenas J, et al. **Gamete Res** 1989 Oct;24(2):205–18
A hereditary bisatellite–dicentric supernumerary chromosome in a case of cat–eye syndrome. Lüleci G, et al. **Hereditas** 1989;111(1):7–10
Unusual chromosome 20 anomaly arising "de novo" to give dic(20)qs. Pimentel D, et al. **Hum Genet** 1989 Dec; 84(1):97–8
Molecular analysis of the isochromosome 12P in the Pallister–Killian syndrome. Construction of a mouse–human hybrid cell line containing an i(12p) as the sole human chromosome. Zhang J, et al. **Hum Genet** 1989 Nov;83(4):359–63
Cytogenetic analysis and developmental capacity of normal and abnormal embryos after IVF. Plachot M, et al. **Hum Reprod** 1989 Nov;4(8 Suppl):99–103
T cell non–Hodgkin's lymphoma with uveitis, pancreatitis, digital gangrene and multiple chromosomal abnormalities [letter] Mansour P, et al. **J Clin Pathol** 1990 Aug; 43(8):694–5
Cat eye syndrome associated with aganglionosis of the small and large intestine. Ward J, et al. **J Med Genet** 1989 Oct; 26(10):647–8
Congenital hepatic fibrosis, cystic kidneys, mental retardation, and facial dysmorphy: a new report of an autosomal recessive syndrome. Labrune P, et al. **J Pediatr Gastroenterol Nutr** 1990 May;10(4):540–3
Müllerian dysgenesis associated with a chromosomal anomaly and mental retardation. A case report. Maier D, et al. **J Reprod Med** 1990 Mar;35(3):301–2
Mapping of genes encoding coagulation factors VII and X to the distal portion of the 13q34 by gene dose study in a patient with r(13). Kasai R, et al. **Jinrui Idengaku Zasshi** 1989 Sep;34(3):247–50
Chromosomal destabilization during gene amplification. Ruiz JC, et al. **Mol Cell Biol** 1990 Jun;10(6):3056–66
Cytogenetic study of 130 patients with acute nonlymphocytic leukemia. Michalová K, et al. **Neoplasma** 1990;37(3):283–91
Isochromosome 12p in non–seminoma cell lines: karyologic amplification of c–ki–ras2 without point–mutational activation. Dmitrovsky E, et al. **Oncogene** 1990 Apr; 5(4):543–8
Cytologic diagnosis and chromosome analysis: sensitivity, specificity, accuracy and predictive value in malignant and benign pleural effusions. Giazza G, et al. **Pathologica** 1990 Jan–Feb;82(1077):33–40
Molecular and genetic characterization of a radiation–induced structural rearrangement in mouse chromosome 2 causing mutations at the limb deformity and agouti loci. Woychik RP, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2588–92
Chromosomal abnormalities in non–Hodgkin's lymphomas. Le Beau MM. **Semin Oncol** 1990 Feb;17(1):20–9 (51 ref.)
Perspectives on holoprosencephaly: Part I. Epidemiology, genetics, and syndromology. Cohen MM Jr. **Teratology** 1989 Sep;40(3):211–35 (184 ref.)
Robertsonian translocation associated with azoospermia. Sasagawa I, et al. **Urol Int** 1989;44(6):379–80
[A case of chromosome–13–abnormality (letter)] Conradie JM. **S Afr Med J** 1989 Dec 16;76(12):701–2 **(Afr)**
[Experience with a computer database in a cytogenetic laboratory] Musilová J, et al. **Cas Lek Cesk** 1990 Jun 15; 129(24):742–4 (Eng. Abstr.) **(Cze)**
[Hematologic anomalies and triploidy] Choulot JJ, et al. **Ann Pediatr (Paris)** 1990 May;37(5):339–40 (Eng. Abstr.) **(Fre)**
[Deletion of the long arm of chromosome 18, primary hypothyroidism, Biermer's anemia and IgM hypogammaglobulinemia] Henrot B, et al. **Arch Fr Pediatr** 1989 Dec;46(10):729–32 (Eng. Abstr.) **(Fre)**
[Pure genetic thrombocytopenia. A new clinical entity] Najean Y, et al. **Arch Fr Pediatr** 1990 Feb;47(2):85–9 (Eng. Abstr.) **(Fre)**
[A case of 18 q–syndrome associated with status epilepticus] Kanazawa O, et al. **No To Hattatsu** 1989 Sep;21(5):470–4 (Eng. Abstr.) **(Jpn)**
[Chromosomal diseases] Morizon G. **Rev Chil Pediatr** 1988; 59 Suppl 3:28–35 **(Spa)**

BLOOD

Fetal macrocytosis in association with chromosomal abnormalities. Fisk NM, et al. **Obstet Gynecol** 1989 Oct; 74(4):611–6

CHEMICALLY INDUCED

Cytogenetics and occupational exposure to solvents: a pilot study on leukemias and myelodysplastic disorders. Vineis P, et al. **Tumori** 1990 Aug 31;76(4):350–2

CLASSIFICATION

[Bone diseases: review and classification of congenital developmental disorders] Lenz W. **Monatsschr Kinderheilkd** 1989 Aug;137(8):428–37 (45 ref.) (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Terminal deletion of the long arm of chromosome 10: case report and review of the literature. Gorinati M, et al. **Am J Med Genet** 1989 Aug;33(4):502–4 (12 ref.)
Midtrimester diagnosis and anomalies in the dup(22q) syndrome: correlation of aneuploidy with low maternal serum alpha–fetoprotein and oligohydramnios. Johnson MP, et al. **Am J Med Genet** 1990 May;36(1):94–6
Direct chromosome preparation and culture using chorionic villi: an evaluation of the two techniques. Simoni G, et al. **Am J Med Genet** 1990 Feb;35(2):181–3
Prenatal diagnosis of Pallister–Killian syndrome. Soukup S, et al. **Am J Med Genet** 1990 Apr;35(4):526–8
Attitudes of at–risk and affected individuals regarding presymptomatic testing for autosomal dominant polycystic kidney disease. Sujansky E, et al. **Am J Med Genet** 1990 Apr;35(4):510–5
Counseling and decision dilemmas associated with fetal blood sampling. Ulm JE, et al. **Am J Med Genet** 1990 Jan; 35(1):75–8
Mosaicism in Pallister i(12p) syndrome. Wenger SL, et al. **Am J Med Genet** 1990 Apr;35(4):523–5
Benefits of placental biopsies for rapid karyotyping in the second and third trimesters (late chorionic villus sampling) in high–risk pregnancies. Holzgreve W, et al. **Am J Obstet Gynecol** 1990 May;162(5):1188–92
Cytogenetic results of chorionic villus sampling: high success rate and diagnostic accuracy in the United States collaborative study. Ledbetter DH, et al. **Am J Obstet Gynecol** 1990 Feb;162(2):495–501
The association of single umbilical artery with cytogenetically abnormal pregnancies. Saller DN Jr, et al. **Am J Obstet Gynecol** 1990 Sep;163(3):922–5
When risk factors have little meaning [letter; comment] Bingham P. **BMJ** 1990 Jan 20;300(6718):196 Comment on: BMJ 1989 Dec 23–30;299(6715):1599–600.
Cytogenetic findings in 1250 chorionic villus samples obtained in the first trimester with clinical follow–up of the first 1000 pregnancies. Leschot NJ, et al. **Br J Obstet Gynaecol** 1989 Jun;96(6):663–70
Direct chromosome analysis in the second and third trimesters by placental biopsy in 30 pregnancies. Saura R, et al. **Br J Obstet Gynaecol** 1989 Oct;96(10):1215–8
A cost–benefit analysis of prenatal diagnosis by amniocentesis in Denmark. Goldstein H, et al. **Clin Genet** 1990 Apr; 37(4):241–63
Trisomy of chromosome 20/isochrome 12p [letter] Steele MW, et al. **Clin Genet** 1990 Jul;38(1):79
Interpreting chromosomal abnormalities using Prolog. Cooper G, et al. **Comput Biomed Res** 1990 Apr;23(2):153–64
Biochemical screening for chromosome disorders. Smithells D. **Dev Med Child Neurol** 1990 Feb;32(2):172–4
Improved screening for fetal chromosome abnormalities. Williamson R. **Iowa Med** 1990 Mar;80(3):125–8
Polymalformation syndrome. Vander Elst A. **J Belge Radiol** 1989 Dec;72(6):528–9
Del(4)(q33——qter): another case report of a child with mild dysmorphism. Fagan KA, et al. **J Med Genet** 1989 Dec; 26(12):776–8
Evaluation of maternal serum alpha–fetoprotein and ultrasound examination to screen fetal chromosomal abnormalities. Brizzi L, et al. **J Nucl Med Allied Sci** 1989 Jul–Sep;33(3 Suppl):85–8
Prenatal genetic diagnosis following recurrent early pregnancy loss. Drugan A, et al. **Obstet Gynecol** 1990 Mar; 75(3 Pt 1):381–4
Elevated maternal serum alpha–fetoprotein concentration and fetal chromosomal abnormalities. Stiller RJ, et al. **Obstet Gynecol** 1990 Jun;75(6):994–7
Risk of fetal chromosomal anomalies in patients with elevated maternal serum alpha–fetoprotein. Warner AA, et al. **Obstet Gynecol** 1990 Jan;75(1):64–6
Evaluation of elevations in maternal serum alpha–fetoprotein: a review. Thomas RL, et al. **Obstet Gynecol Surv** 1990 May;45(5):269–83 (101 ref.)
Prospective study on trisomy 18 and fetal choroid plexus cysts [letter] Camurri L, et al. **Prenat Diagn** 1989 Oct; 9(10):742
Exclusion of chromosomal mosaicism in amniotic fluid cultures: efficacy of in situ versus flask techniques. Cheung SW, et al. **Prenat Diagn** 1990 Jan;10(1):41–57
Seven cases of trisomy 3 mosaicism in chorionic villi. Guerneri S, et al. **Prenat Diagn** 1989 Oct;9(10):691–5
Abnormal pregnancy sonogram and chromosomal anomalies: four years' experience with rapid karyotyping. Hentemann M, et al. **Prenat Diagn** 1989 Sep;9(9):605–12 (27 ref.)
Evaluation of transcervical chorionic villus sampling with a completed follow–up of 1550 consecutive pregnancies. Jahoda MG, et al. **Prenat Diagn** 1989 Sep;9(9):621–8
Maternal serum alpha–fetoprotein and fetal triploidy. Pircon RA, et al. **Prenat Diagn** 1989 Oct;9(10):701–7
Femur length in the US prediction of trisomy 21 and other chromosomal abnormalities. Grist TM, et al. **Radiology** 1990 Mar;174(3 Pt 1):837–9
Antenatal diagnosis of fetal abnormalities. Wong HB. **Singapore Med J** 1989 Jun;30(3):294–6
[Prenatal cytogenetic diagnosis at the Institute for Maternal and Child Care (results of 2700 successful examinations in the 2d trimester of pregnancy)] Subrt I, et al. **Cesk Gynekol** 1989 Dec;54(10):768–71 **(Cze)**
[Prenatal cytogenetic diagnosis in the 2d trimester in older pregnant women] Subrt I, et al. **Cesk Gynekol** 1989 Nov; 54(9):677–80 **(Cze)**
[Prenatal diagnosis of triploidy] Wolf H, et al. **Ned Tijdschr Geneeskd** 1990 Feb 24;134(8):394–7 (Eng. Abstr.) **(Dut)**
[Tetrasomy 12p (Pallister–Killian syndrome): possible diagnosis before the age of a year] Chrzanowska K, et al. **J Genet Hum** 1989 Sep;37(3):259–61 (Eng. Abstr.) **(Fre)**
[Prenatal diagnosis of a translocation (X;Y) and genetic counseling] Stora–de Novion H, et al. **J Genet Hum** 1989 Sep;37(3):263–7 (Eng. Abstr.) **(Fre)**
[Fetal blood sampling for karyotype using echoguided puncture of the cord. Study of 103 pregnancies] Boulot P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(8):1007–15 (Eng. Abstr.) **(Fre)**
[Proximal trisomy 19q. Interstitial deletion and ring chromosome derived from 19q] Klein F, et al. **Pediatrie** 1989;44(9):717–20 (Eng. Abstr.) **(Fre)**
[Chorionic villi sampling: experience of the initial 500 samples] Donner C, et al. **Rev Med Brux** 1990 Jun; 11(6):211–5 (Eng. Abstr.) **(Fre)**
[The value of prenatal chromosomal diagnosis in cases of fetal abnormalities: results obtained in 468 pathological pregnancies] Vamos E, et al. **Rev Med Brux** 1990 Jun; 11(6):231–5 (Eng. Abstr.) **(Fre)**
[Experiences with transcervical chorionic villi biopsy in 274 studies] Karkut G, et al. **Geburtshilfe Frauenheilkd** 1989 Aug;49(8):701–4 (Eng. Abstr.) **(Ger)**
[Experiences with transabdominal chorionic villi biopsy] Concin H, et al. **Gynakol Rundsch** 1989;29 Suppl 2:282–3 **(Ger)**
[Chorionic biopsy] Flores–Genger H, et al. **Gynakol Rundsch** 1989;29 Suppl 2:280–1 **(Ger)**
[Invasive prenatal diagnosis: methods, perspectives, limits] Gloning KP, et al. **Gynakol Rundsch** 1989;29 Suppl 2:241–7 (22 ref.) **(Ger)**
[Prenatal diagnosis] Huber JC. **Gynakol Rundsch** 1989;29 Suppl 2:248–50 **(Ger)**
[Sonographic diagnosis in partial mole with increased HCG in triploidy syndrome] Kainer F, et al. **Gynakol Rundsch** 1989;29 Suppl 2:460–1 **(Ger)**
[Principles of DNA diagnosis] Moser H. **Klin Monatsbl Augenheilkd** 1990 May;196(5):265–8 (Eng. Abstr.) **(Ger)**
[Differential diagnosis of a benign course of muscular dystrophy using molecular genetic methods] Wagner M, et al. **Nervenarzt** 1990 Apr;61(4):244–7 **(Ger)**
[Characteristic banding patterns of human chromosomes] Imaizumi K. **Rinsho Byori** 1989 Feb;Spec No 80:1–11 **(Jpn)**
[Chromosome analysis of diagnostic amniotic fluid cell cultures] Kinoshita Y. **Rinsho Byori** 1989 Feb;Spec No 80:310–8 **(Jpn)**
[Indications for chromosomal analysis] Sakamoto H. **Rinsho Byori** 1989 Feb;Spec No 80:12–20 **(Jpn)**
[Congenital ocular malformations encountered in structural and numerical chromosomal anomalies] Chercotă G, et al. **Rev Chir [Oftalmol]** 1989 Jul–Sep;33(3):193–6 (Eng. Abstr.) **(Rum)**
[Ways to improve prenatal diagnosis of chromosome abnormalities and congenital defects of fetal development] Bakharev VA, et al. **Akush Ginekol (Mosk)** 1990 Jan; (1):16–8 **(Rus)**
[Prenatal diagnosis of chromosome abnormalities and other abnormalities in the amniotic fluid] Avendaño AI, et al. **Rev Chil Pediatr** 1988;59 Suppl 3:36–7 **(Spa)**
[Chromosomes and chromosome disorders] Borgström GH. **Nord Med** 1990;105(1):8–9, 26 (Eng. Abstr.) **(Swe)**

ENZYMOLOGY

Superoxide dismutase activity and chromosome damage in cultured chromosome instability syndrome cells. Lee KH, et al. **Mutat Res** 1990 Jul;244(3):251–6

EPIDEMIOLOGY

Chromosome analysis of in situ breast cancer. Nielsen KV, et al. **Acta Oncol** 1989;28(6):919–22
Chromosome abnormalities in older women by maternal age: evaluation of regression–derived rates in chorionic villus biopsy specimens. Hook EB. **Am J Med Genet** 1990 Feb; 35(2):184–7
Chromosomal abnormality associated with congenital heart defect [letter] Lin AE. **Am J Med Genet** 1990 Apr; 35(4):590–1
Frequent occurrence of cytogenetic abnormalities in sporadic nonmedullary thyroid carcinoma. Jenkins RB, et al. **Cancer** 1990 Sep 15;66(6):1213–20
Race, consanguinity and social features in Birmingham babies: a basis for prospective study. Bundey S, et al. **J Epidemiol Community Health** 1990 Jun;44(2):130–5

[The natural occurring incidence of chromosome abnormalities in 330 chorionic villi samples in the first trimester of pregnancy] Ren JH. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Nov;24(6):351–3, 381–2 (Eng. Abstr.) **(Chi)**

[Hereditary diseases and developmental disorders of the nervous system in children (clinico–epidemiological study)] Sadekov IA, et al. **Zh Nevropatol Psikhiatr** 1989;89(8):45–8 (Eng. Abstr.) **(Rus)**

ETIOLOGY

A cytogenetic investigation of the effects of cryopreservation on human sperm. Chernos JE, et al. **Am J Hum Genet** 1989 Nov;45(5):766–77

Cytogenetic study in therapy–related myelodysplastic syndromes (t–MDS) and acute non–lymphocytic leukaemia (t–ANLL). Sozzi G, et al. **Br J Cancer** 1990 Mar; 61(3):425–8

Achalasia due to diffuse esophageal leiomyomatosis and inherited as an autosomal dominant disorder. Report of a family study. Marshall JB, et al. **Gastroenterology** 1990 May;98(5 Pt 1):1358–65

Risk estimates: past, present, and future. Abrahamson S. **Health Phys** 1990 Jul;59(1):99–102

Centromeric heterochromatin instability of chromosomes 1, 9, and 16 in variable immunodeficiency syndrome—a virus–induced phenomenon? Haas OA. **Hum Genet** 1990 Jul;85(2):244–6 (19 ref.)

Chromosomal analysis of human oocytes fertilized by microinjection of spermatozoa into the perivitelline space. Kola I, et al. **Hum Reprod** 1990 Jul;5(5):575–7

USSR: medical effects of Chernobyl disaster [news] Brennan M. **Lancet** 1990 May 5;335(8697):1086

[Is sexual abstinence a factor in the etiology of chromosome abnormalities?] Pellestor F, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(4):421–5 (25 ref.) (Eng. Abstr.) **(Fre)**

[Characteristic features of leukemia in infants during the first year of life] Balakirev SA. **Gematol Transfuziol** 1990 Jan; 35(1):6–8 (Eng. Abstr.) **(Rus)**

GENETICS

Chromosome examinations on six–hour cultures of unstimulated peripheral blood from some patients with childhood leukemia. Selypes A, et al. **Acta Paediatr Hung** 1990;30(1):89–98

Investigations of families with two or more mentally defective siblings. III. Chromosome studies. Wright SW, et al. **Am J Dis Child** 1967 Jul;114(1):69–71

The isochromosome 18p syndrome: confirmation of cytogenetic diagnosis in nine cases by in situ hybridization. Callen DF, et al. **Am J Hum Genet** 1990 Sep;47(3):493–8

Apparent Smith–Lemli–Opitz syndrome and Miller–Dieker syndrome in a family with segregating translocation t(7;17)(q34;p13.1). Berry R, et al. **Am J Med Genet** 1989 Nov;34(3):358–65

Chromosome abnormalities in selected newborn infants with malformations in Brazil. Borovik CL, et al. **Am J Med Genet** 1989 Nov;34(3):320–4

Apparent Fryns syndrome in a boy with a tandem duplication of 1q24–31.2. Clark RD, et al. **Am J Med Genet** 1989 Nov; 34(3):422–6

Infantile hemangioendothelioma of the liver in patient with interstitial deletion of chromosome 6q: report of an autopsy case. Ito H, et al. **Am J Med Genet** 1989 Nov;34(3):325–9

Emerging phenotype of duplication (7p): a report of three cases and review of the literature. Milunsky JM, et al. **Am J Med Genet** 1989 Jul;33(3):364–8 (13 ref.)

Interstitial deletion of (17)(p11.2). A microdeletion syndrome. Another example. de Almeida JC, et al. **Ann Genet** 1989; 32(3):184–6

"Pure" partial trisomy 3p due to the malsegregation of a balanced maternal translocation t (X;3) (p22.3;p21). de Almeida JC, et al. **Ann Genet** 1989;32(3):181–3

Interstitial deletion of the short arm of chromosome 12. Report of a new patient and review of the literature. Fryns JP, et al. **Ann Genet** 1990;33(1):43–5 (14 ref.)

Mosaic 13 trisomy due to de novo 13/13 translocation with subsequent fission. Karyotype: 46,XX,–13, +t(13;13)(p11;q11)/46,XX,del(13)(p11). A second example. Fryns JP, et al. **Ann Genet** 1989;32(3):177–9

Direct duplication 16q11.1——16q13 is not associated with a typical dysmorphic syndrome. Fryns JP, et al. **Ann Genet** 1990;33(1):46–8 (16 ref.)

Partial duplication of the short arm of chromosome 2 (dup(2)(p13——p21) associated with mental retardation and an Aarskog–like phenotype. Fryns JP, et al. **Ann Genet** 1989;32(3):174–6

Normal phenotype and slight mental retardation in de novo distal 8p deletion (8pter——8p23.1:). Fryns JP, et al. **Ann Genet** 1989;32(3):171–3

Ring chromosome 21 transmitted from mother to daughter: its stability in a lymphoblastoid cell line. Ikeuchi T, et al. **Ann Genet** 1990;33(1):32–5

Distal monosomy of the long arm of chromosome 6 (6q25——6qter) inherited by maternal translocation t(6q;17q). Oliveira–Duarte MH, et al. **Ann Genet** 1990; 33(1):56–9 (9 ref.)

The decrease of catalase or esterase D activity in patients with microdeletions of 11p or 13q does not increase their radiosensitivity. Sabatier L, et al. **Ann Genet** 1989; 32(3):144–8

Isochromosome formation and subsequent fission or short arm deletion and subsequent isochromosome formation? [letter] Schinzel A. **Ann Genet** 1990;33(1):60

Incontinentia pigmenti: Xp breakpoint is not the same in a case of r(X) and in X/autosome translocations. Sefiani A, et al. **Ann Genet** 1989;32(3):149–51

A new family with extra material on proximal 15q. Turolla L, et al. **Ann Genet** 1989;32(4):230–2

Diploid/tetraploid mosaicism in a stillborn infant with prune belly anomaly. Urioste M, et al. **Ann Genet** 1990;33(1):49–51 (21 ref.)

Ring chromosome 16: a new case. Vianello MG, et al. **Ann Genet** 1990;33(1):36–9 (8 ref.)

The 18p– syndrome. Report of five cases. Zumel RM, et al. **Ann Genet** 1989;32(3):160–3

Cytogenetics of porcine sperm chromosomes following IVF of zona–free hamster oocytes. Bird JM, et al. **Arch Androl** 1990;25(1):45–57

Osteochondromatosis in an isolated community in Manitoba. Dooley J, et al. **Arctic Med Res** 1988;47 Suppl 1:415–9

Data on families of chromosome translocation carriers ascertained because of habitual spontaneous abortion. Smith A, et al. **Aust N Z J Obstet Gynaecol** 1990 Feb;30(1):57–62

Isochromosome 17q in Ph1–negative leukemia: a clinical, cytogenetic, and molecular study. Becher R, et al. **Blood** 1990 Apr 15;75(8):1679–83

Cytogenetics and their prognostic value in de novo acute myeloid leukaemia: a report on 283 cases. Fenaux P, et al. **Br J Haematol** 1989 Sep;73(1):61–7

Isochromosome 7q is restricted to the lymphoid lineage in T cell acute lymphoblastic leukaemia. Yamada T, et al. **Br J Haematol** 1990 May;75(1):137–8

A Chinese classic phenylketonuria manifested as autism. Chen CH, et al. **Br J Psychiatry** 1989 Aug;155:251–3

High incidence of 17p13 chromosomal abnormalities in malignant histiocytosis. Abe R, et al. **Cancer** 1990 Jun 15; 65(12):2689–96 (20 ref.)

Favorable prognosis associated with hyperdiploidy in children with acute lymphocytic leukemia correlates with extra chromosome 6. A Pediatric Oncology Group study. Jackson JF, et al. **Cancer** 1990 Sep 15;66(6):1183–9

Cytogenetic findings in adult acute leukemia and myeloproliferative disorders with an involvement of megakaryocyte lineage. Ohyashiki K, et al. **Cancer** 1990 Feb 15;65(4):940–8

A cell culture, chromosomal and quantitative DNA analysis of a metastatic epithelioid sarcoma. Deletion 1p, a possible primary chromosomal abnormality in epithelioid sarcoma. Stenman G, et al. **Cancer** 1990 May 1;65(9):2006–13

A common cytogenetic abnormality and DNA content alterations in dedifferentiated chondrosarcoma. Zalupski MM, et al. **Cancer** 1990 Sep 15;66(6):1176–82

Frequency and pattern of karyotypic abnormalities in human prostate cancer. Brothman AR, et al. **Cancer Res** 1990 Jun 15;50(12):3795–803

Nonrandom chromosome alterations that correlate with progression to immortality in rat tracheal epithelial cells transformed with N–methyl–N'–nitro–N–nitrosoguanidine. Endo S, et al. **Cancer Res** 1990 Feb 1;50(3):740–7

Genetic instability and the acquisition of metastatic ability by rat mammary cancer cells following v–H–ras oncogene transfection. Ichikawa T, et al. **Cancer Res** 1990 Oct 1; 50(19):6349–57

Integration of human papillomavirus 16 DNA and genomic rearrangements in immortalized human keratinocyte lines. Popescu NC, et al. **Cancer Res** 1990 Feb 15;50(4):1316–23

Cytogenetic analysis of murine embryo–derived tumors. van Berlo RJ, et al. **Cancer Res** 1990 Jun 1;50(11):3416–21

On the familial occurrence of congenital bilateral absence of vas deferens [letter; comment] Gilgenkrantz S, et al. **Clin Genet** 1990 Feb;37(2):159 Comment on: Clin Genet 1989 Apr;35(4):268–71.

Somatic and germ–line mosaicism in autosomal dominant antecubital pterygium [letter; comment] Hall J. **Clin Genet** 1990 Feb;37(2):160 Comment on: Clin Genet 1988 Jul;34(1):64–9.

Analysis of mosaic states in amniotic fluid using the in–situ colony technique. Welborn JL, et al. **Clin Genet** 1990 Jul; 38(1):14–20

B–cell chronic lymphocytic leukaemia: clonal chromosome abnormalities and prognosis in 89 cases. Geisler CH, et al. **Eur J Haematol** 1989 Nov;43(5):397–403

Replication of the dihydrofolate reductase genes on double minute chromosomes in a murine cell line. Tlsty TD, et al. **Exp Cell Res** 1990 May;188(1):164–8

Possible human analogs of the murine T/t complex. Alper CA, et al. **Exp Clin Immmunogenet** 1985;2(2):125–36 (50 ref.)

Chromosomal and genic sterility of hybrid type in mice and men. Forejt J. **Exp Clin Immmunogenet** 1985;2(2):106–19 (89 ref.)

Microdissection of the Prader–Willi syndrome chromosome region and identification of potential gene sequences. Buiting K, et al. **Genomics** 1990 Mar;6(3):521–7

DXS165 detects a translocation breakpoint in a woman with choroideremia and a de novo X; 13 translocation. Merry DE, et al. **Genomics** 1990 Apr;6(4):609–15

Isochromosome 7q as the sole abnormality in an unusual case of T–cell lineage malignancy. Colwill R, et al. **Hematol Pathol** 1990;4(1):53–8

The human homeobox gene HOX7 maps to chromosome 4p16.1 and may be implicated in Wolf–Hirschhorn syndrome. Ivens A, et al. **Hum Genet** 1990 Apr;84(5):473–6

Edward syndrome with multiple chromosomal defects. Bhat BV, et al. **Indian J Pediatr** 1939 Jan–Feb;56(1):137–9

Genetic analysis of a group of mentally retarded children. Krishnan BR, et al. **Indian J Pediatr** 1989 Mar–Apr; 56(2):249–58

Cytogenetic abnormalities in human ependymomas. Stratton MR, et al. **Int J Cancer** 1989 Oct 15;44(4):579–81

Chromosome 11 allele loss in sporadic insulinoma. Patel P, et al. **J Clin Pathol** 1990 May;43(5):377–8

A genetic diagnostic survey in an institutionalized population of 262 moderately mentally retarded patients: the Borgerstein experience. Fryns JP, et al. **J Ment Defic Res** 1990 Feb;34 (Pt 1):29–40

Gene map of mental retardation. Wahlström J. **J Ment Defic Res** 1990 Feb;34 (Pt 1):11–27

Familial distal dysautonomia. Robinson B, et al. **J Neurol Neurosurg Psychiatry** 1989 Nov;52(11):1281–5

Familial cerebellar ataxia and possible cosegregation with an inversion in chromosome 4 [letter] Young ID, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):441–2

Five cases demonstrating the distinctive behavioural features of chromosome deletion 17(p11.2 p11.2) (Smith–Magenis syndrome). Colley AF, et al. **J Paediatr Child Health** 1990 Feb;26(1):17–21

Satellited chromosome 9 in a boy with multiple anomalies. Harada N, et al. **Jinrui Idengaku Zasshi** 1989 Dec; 34(4):297–305

Autoimmune hemolytic anemia in Gaucher's disease. Haratz D, et al. **Klin Wochenschr** 1990 Jan 19;68(2):94–5

Genes and colour blindness [editorial] **Lancet** 1990 Feb 3; 335(8684):263–4

Detection of breakpoints in submicroscopic chromosomal translocation, illustrating an important mechanism for genetic disease [see comments] Lamb J, et al. **Lancet** 1989 Oct 7;2(8667):819–24 Comment in: Lancet 1989 Dec 16;2(8677):1449.

Association within a family of a balanced autosomal translocation with major mental illness. St Clair D, et al. **Lancet** 1990 Jul 7;336(8706):13–6

Non–mosaic trisomy 16 confined to villi [letter] Verp MS, et al. **Lancet** 1989 Oct 14;2(8668):915–6

Assessment of genetic disorders: pediatrics. Amato RS. **Md Med J** 1989 Nov;38(11):945–8

Recent developments in clinical cytogenetics. Summers D, et al. **Med Lab Sci** 1988 Oct;45(4):318–23 (34 ref.)

Penetrance and low concordance in monozygotic twins in disease: are they the results of alterations in somatic genomes? Kastern W, et al. **Mol Reprod Dev** 1988; 1(1):63–75 (131 ref.)

A double Philadelphia chromosome in myelodysplastic syndrome. Shibuya A, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Jul;52(4):707–11

Abnormal karyotype of fetuses with omphalocele: prediction based on omphalocele contents. Benacerraf BR, et al. **Obstet Gynecol** 1990 Mar;75(3 Pt 1):317–9

Perinatal characteristics of the phenotypically and chromosomally abnormal live–born. Treadwell MC, et al. **Obstet Gynecol** 1990 Sep;76(3 Pt 1):378–80

Congenital hereditary lymphedema (Nonne/Milroy). Farhud DD, et al. **Padiatr Padol** 1989;24(4):305–7

Mapping of the gene for multiple endocrine neoplasia type I to chromosome 11q13. Nordenskjöld M, et al. **Pathol Biol (Paris)** 1989 Nov;37(9):951

Self–limited neonatal familial hyperparathyroidism associated with hypercalciuria and renal tubular acidosis in three siblings. Nishiyama S, et al. **Pediatrics** 1990 Sep;86(3):421–7

Autosomal mendelian disorders and microcytogenetics. de Grouchy J, et al. **Recenti Prog Med** 1990 May;81(5):337–43 (37 ref.)

Recurring chromosome abnormalities in leukemia and lymphoma. Rowley JD. **Semin Hematol** 1990 Apr; 27(2):122–36 (66 ref.)

[Hereditary paracentric inversion of chromosome 3] Neetens A, et al. **Ophtalmologie** 1989 Jan–Mar;3(1):69–72 (Eng. Abstr.) **(Fre)**

[Prenatal diagnosis using amniocentesis and chorionic villi sampling: comparative study of chromosomal findings] Vamos E, et al. **Rev Med Brux** 1990 Jun;11(6):223–30 (Eng. Abstr.) **(Fre)**

[Pili anulati] Iankova R, et al. **Dermatol Monatsschr** 1989; 175(10):658–61 (Eng. Abstr.) **(Ger)**

[Genes and hypertension. Genetic analysis instead of fasting?] Ganten D. **Fortschr Med** 1990 Apr 30;108(13):250–2 **(Ger)**

[Are monozygous twins and twin–specific abnormalities more prevalent following extracorporeal fertilization? A comment on studies of the Gynecologic Clinic of the Erlangen–Nürnberg University] Pfeiffer RA, et al. **Geburtshilfe Frauenheilkd** 1989 Sep;49(9):813–6 (Eng. Abstr.) **(Ger)**

[Familial kidney agenesis: renal adysplasia as a cause of urogenital abnormalities in 3 generations] Schwyzer U, et al. **Geburtshilfe Frauenheilkd** 1989 Aug;49(8):759–61 (Eng. Abstr.) **(Ger)**

[The Pena–Shokeir syndrome] Zeller R, et al. **Gynakol Rundsch** 1989;29(3):148–52 (Eng. Abstr.) **(Ger)**

["Schnyder's rule" of heritability of skin tumors and its extension to cases of segmental presentation] Jung EG. **Hautarzt** 1989 Dec;40(12):761–2 (Eng. Abstr.) **(Ger)**

[Gardner syndrome] Török L, et al. **Hautarzt** 1990 Feb;

41(2):83–6 (Eng. Abstr.) (Ger)
[Central areolar choroid dystrophy. Report of involvement of 3 generations] Hutter H, et al. **Klin Monatsbl Augenheilkd** 1989 Sep;195(3):177–80 (Eng. Abstr.) (Ger)
[Pseudokeratoconus in trisomy 21 and posterior polymorphous corneal dystrophy] Lang GK, et al. **Klin Monatsbl Augenheilkd** 1989 Aug;195(2):95–9 (Eng. Abstr.) (Ger)
[Juvenile form of tyrosinemia type I] Nothjunge J, et al. **Klin Padiatr** 1989 Nov–Dec;201(6):458–63 (Eng. Abstr.) (Ger)
[Benign familiar neonatal seizures] Siemes H. **Monatsschr Kinderheilkd** 1990 Jun;138(6):321–5 (Eng. Abstr.) (Ger)
[Hermansky–Pudlak syndrome in 2 brothers with lung fibrosis] Sültz J, et al. **Pneumologie** 1990 Feb;44 Suppl 1:563–4 (Eng. Abstr.) (Ger)
[Selective vitamin B 12 malabsorption in a 19–year–old patient] Walser A, et al. **Schweiz Med Wochenschr** 1989 Jul 29;119(30):1053–6 (Eng. Abstr.) (Ger)
[Fetal echocardiography and clinical genetics—a close correlation] Zerres K, et al. **Z Kardiol** 1990 Feb; 79(2):96–106 (Eng. Abstr.) (Ger)
[HLA antigen frequencies in patients with autosomal dominant polycystic kidney degeneration] Spengler J, et al. **Z Urol Nephrol** 1989 Dec;82(12):691–4 (Eng. Abstr.) (Ger)
[Methods of research on the chromosome level in diagnosing genetic disorders] Ruffini E. **Minerva Pediatr** 1989 Sep; 41(9):491–2 (Ita)
[Trisomy of the short arm of chromosome 9] Rogóyski A, et al. **Pediatr Pol** 1989 Apr;64(4):248–52 (Pol)
[Genetics of neuropsychiatric disorders] Cacabelos R. **Med Clin (Barc)** 1990 May 12;94(18):699–701 (Spa)
[Genetic counseling in habitual abortion] Aspillaga M, et al. **Rev Chil Pediatr** 1988;59 Suppl 3:38–9 (Spa)

IMMUNOLOGY

[Ring chromosome 17 and recurring pneumopathy] Lambruschini Ferri N, et al. **An Esp Pediatr** 1989 Nov; 31(5):478–80 (10 ref.) (Spa)

METABOLISM

Growth hormone deficiency in children with chromosomal abnormalities [letter; comment] Schwarz HP, et al. **Arch Dis Child** 1990 Mar;65(3):334 Comment on: Arch Dis Child 1988 Sep;63(9):1090–1.
AFP and chromosomal diseases. Doria Lamba Carbone L, et al. **J Nucl Med Allied Sci** 1989 Jul–Sep;33(3 Suppl):67–71 (24 ref.)

PATHOLOGY

Gliogenesis and myelination in the optic nerve of trisomy 19 mice. A quantitative electron–microscopic study. Lorke DE, et al. **Acta Anat (Basel)** 1990;137(3):222–33
Significance of cardiovascular malformations in cystic hygroma: a new interpretation of the pathogenesis. Miyabara S, et al. **Am J Med Genet** 1989 Dec;34(4):489–501
Trisomy 18 at age 21 years. Smith A, et al. **Am J Med Genet** 1989 Nov;34(3):338–9
Rapid chromosome analysis with the use of spontaneously dividing cells derived from umbilical cord blood (fetal and neonatal). Tipton RE, et al. **Am J Obstet Gynecol** 1989 Dec;161(6 Pt 1):1546–8
Detection of numerical chromosomal abnormalities in neoplastic hematopoietic cells by in situ hybridization with a chromosome–specific probe. Anastasi J, et al. **Am J Pathol** 1990 Jan;136(1):131–9
Post–mortem studies on two patients with 1–2 band cytogenetic deletions: 10q26——qter and r(9)(p24q34). Smith A, et al. **Ann Genet** 1989;32(4):220–4
Chromosomal changes in human primary testicular nonseminomatous germ cell tumors. Castedo SM, et al. **Cancer Res** 1989 Oct 15;49(20):5696–701
Syndromology: an updated conceptual overview. IV. Perspectives on malformation syndromes. Cohen MM Jr. **Int J Oral Maxillofac Surg** 1989 Oct;18(5):286–90
Thirty–one autopsy cases of trisomy 18: clinical features and pathological findings. Kinoshita M, et al. **Pediatr Pathol** 1989;9(4):445–57
Human sperm chromosome complements: effects of donor age, freezing and segregation in translocation and inversion carriers. Martin RH. **Prog Clin Biol Res** 1990;340B:435–45 (36 ref.)
[Dysmorphisms related to autosomal chromosome aberrations in children and adults] Rethoré MO. **Bull Acad Natl Med** 1989 Nov;173(8):1093–9; discussion 1100–1 (19 ref.) (Eng. Abstr.) (Fre)
[Correlation of karyotype and placental morphology in early abortion] Röckelein G, et al. **Pathologe** 1989 Sep; 10(5):306–14 (Ger)
[Cytogenetic analysis of chorionic biopsy samples in prenatal diagnosis of chromosome abnormalities] Baranov VS, et al. **Akush Ginekol (Mosk)** 1990 May;(5):35–7 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Duplication 7p de novo and literature review. Zerres K, et al. **Ann Genet** 1989;32(4):225–9 (15 ref.)
Mitotic abnormalities leading to cancer predisposition and progression. Cavenee WK. **Cancer Detect Prev** 1989; 14(2):269–73 (16 ref.)
Uniparental isodisomy 6 associated with deficiency of the fourth component of complement. Welch TR, et al. **J Clin Invest** 1990 Aug;86(2):675–8
[State of the neuroendocrine system in children with congenital defects of development dependent on changes in the karyotype] Mutovin GR, et al. **Pediatriia** 1990; (6):41–5 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Indications for cytogenetic studies. Qazi QH. **Indian J Pediatr** 1989 Jul–Aug;56(4):454–7
[Fetal kidney screening: growth curves and indices] Pruggmayer M, et al. **Geburtshilfe Frauenheilkd** 1989 Aug; 49(8):705–10 (Eng. Abstr.) (Ger)

VETERINARY

Cytogenetic analysis in nine leukaemic cats. Grindem CB, et al. **J Comp Pathol** 1989 Jul;101(1):21–30

CHROMOSOME BANDING

Banding resolution of amniotic cell chromosome preparations for prenatal diagnosis. Kao YS, et al. **Am J Clin Pathol** 1990 Jun;93(6):765–70
Isolation of a cDNA clone and localization of the human glutathione S–transferase 3 genes to chromosome bands 11q13 and 12q13–14. Board PG, et al. **Ann Hum Genet** 1989 Jul;53 (Pt 3):205–13
How much difference does chromosome banding make? Adjustments in prevalence and mutation rates of human structural cytogenetic abnormalities. Hook EB, et al. **Ann Hum Genet** 1989 Jul;53 (Pt 3):237–42
Cytochemical evaluation of C–heterochromatic–DNA in metaphase chromosomes. Pellicciari C, et al. **Basic Appl Histochem** 1990;34(1):79–85
Integration of human papillomavirus 16 DNA and genomic rearrangements in immortalized human keratinocyte lines. Popescu NC, et al. **Cancer Res** 1990 Feb 15;50(4):1316–23
SINEs and LINEs cluster in distinct DNA fragments of Giemsa band size. Chen TL, et al. **Chromosoma** 1989 Nov; 98(5):309–16
Chromosome banding and DNA replication patterns in bird karyotypes. Schmid M, et al. **Cytogenet Cell Genet** 1989; 52(3–4):139–46
The gene for human thioredoxin maps on the short arm of chromosome 3 at bands 3p11–p12. Lafage–Pochitaloff–Huvalé M, et al. **FEBS Lett** 1989 Sep 11;255(1):89–91
Fluorescence banding in four species of Microtidae: an analysis of the evolutive changes of the constitutive heterochromatin. Burgos M, et al. **Genetica** 1990;81(1):11–6
Chromosomal rearrangements in rock wallabies, Petrogale (Marsupialia: Macropodidae). II. G–banding analysis of Petrogale godmani. Eldridge MD, et al. **Genome** 1989 Dec; 32(6):935–40
Detection of cryptic bands by AluI in eukaryotic chromosomes. Gosálvez J, et al. **Genome** 1989 Aug; 32(4):672–5 (15 ref.)
On–line sorting of human chromosomes by centromeric index, and identification of sorted populations by GTG–banding and fluorescent in situ hybridization. Boschman GA, et al. **Hum Genet** 1990 Jun;85(1):41–8
Heterogeneities in the distribution of (GACA)n simple repeats in the karyotypes of primates and mouse. Nanda I, et al. **Hum Genet** 1990 Jul;85(2):187–94
The similarity of phenotypic effects caused by Xp and Xq deletions in the human female: a hypothesis. Therman E, et al. **Hum Genet** 1990 Jul;85(2):175–83
Chromosomal localization of the human protamine genes, PRM1 and PRM2, to 16p13.3 by in situ hybridization. Viguié F, et al. **Hum Genet** 1990 Jul;85(2):171–4
Chromosome C–banding techniques in Dictyocaulus filaria (Rudolphi, 1809) Railliet and Henry, 1907. Cutillas C, et al. **J Helminthol** 1990 Jun;64(2):115–21
Conventional Giemsa–stained and C–banded chromosomes of seven strains of Schistosoma mansoni. Short RB, et al. **J Parasitol** 1989 Dec;75(6):920–6
Exonuclease digestion of human chromosomes for in situ hybridization and R–banding. Bérubé D, et al. **Nucleic Acids Res** 1990 May 11;18(9):2831
Simultaneous localization of cosmids and chromosome R–banding by fluorescence microscopy: application to regional mapping of human chromosome 11. Cherif D, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6639–43
Human chromosome banding with restriction endonucleases HaeIII, HinfI and PstI. Zhang SZ, et al. **Sci China [B]** 1989 Nov;32(11):1350–60
[Comparative study on chromosome C–banding in diploid and triploid types of Paragonimus westermani] Zhao JB, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(2):103–4 (Eng. Abstr.) (Chi)
[Chromosome analysis of solid tumors and its value in clinical medicine and research] Walter TA, et al. **Dtsch Med Wochenschr** 1990 May 4;115(18):708–13 (43 ref.) (Ger)
[Lymphocyte chromosome survey in 100 retinoblastoma patients] Motegi T. **Rinsho Byori** 1989 Feb;Spec No 80:163–70 (Jpn)
[Indications for chromosomal analysis] Sakamoto H. **Rinsho Byori** 1989 Feb;Spec No 80:12–20 (Jpn)

METHODS

R–banding and in situ hybridization localization of single copy genes on high resolution banded chromosomes. Rønne M, et al. **Anticancer Res** 1990 Mar–Apr; 10(2A):375–7
Anatomy of human genome by restriction endonucleases AluI, DdeI, HaeIII, HinfI, Mobol and RsaI, and their application in clinical cytogenetics. Babu A, et al. **Cytobios** 1990;62(248):7–19
High–resolution dynamic and morphological G–bandings (GBG and GTG): a comparative study. Lemieux N, et al. **Hum Genet** 1990 Aug;85(3):261–6
An improved characterization of cattle chromosomes by means of high–resolution G– and R–band comparison. Iannuzzi L. **J Hered** 1990 Jan–Feb;81(1):80–3
A reliable method for obtaining high–resolution banded chromosome preparations from chorionic villus samples. Deng HX, et al. **Jinrui Idengaku Zasshi** 1990 Jun; 35(2):189–93
Synchronization culture of amniotic fluid cells using excess thymidine block followed by deoxycytidine release and its application to high–resolution banding analysis of chromosomes. Hiramoto K, et al. **Jinrui Idengaku Zasshi** 1990 Jun;35(2):195–206
An improved method of direct chromosome preparation from chorionic villus and high resolution banding technique. Xiao S, et al. **Prenat Diagn** 1989 Aug;9(8):589–93
A new technique for C–banding. Bugallo JD, et al. **Stain Technol** 1990;65(1):48–50
[Clinical and experimental chromosome analysis] **Rinsho Byori** 1989 Feb;Spec No 80:1–333 (Jpn)
[Chromosome abnormalities in neuroblastoma] Abe T, et al. **Rinsho Byori** 1989 Feb;Spec No 80:179–88 (Jpn)
[Malignant lymphoma] Abe T, et al. **Rinsho Byori** 1989 Feb; Spec No 80:230–41 (Jpn)
[Chromosome preparation technics and chromosome analysis of chorionic epithelium] Hayashi K. **Rinsho Byori** 1989 Feb; Spec No 80:319–25 (Jpn)
[Giemsa R banding] Ieshima A, et al. **Rinsho Byori** 1989 Feb; Spec No 80:87–95 (Jpn)
[An easy screening methods of sex–chromatin] Iijima K, et al. **Rinsho Byori** 1989 Feb;Spec No 80:70–5 (Jpn)
[Characteristic banding patterns of human chromosomes] Imaizumi K. **Rinsho Byori** 1989 Feb;Spec No 80:1–11 (Jpn)
[Cytogenetic studies in meningioma] Kameyama J, et al. **Rinsho Byori** 1989 Feb;Spec No 80:218–29 (Jpn)
[Chromosome preparation technics and chromosome analysis of gametes, fertilized eggs and early embryos] Kamiguchi Y. **Rinsho Byori** 1989 Feb;Spec No 80:299–309 (Jpn)
[Chromosome analysis of diagnostic amniotic fluid cell cultures] Kinoshita Y. **Rinsho Byori** 1989 Feb;Spec No 80:310–8 (Jpn)
[Cytogenetic analysis of human urinary bladder cancer] Moriyama M, et al. **Rinsho Byori** 1989 Feb;Spec No 80:252–7 (Jpn)
[Pattern of DNA replication] Naritomi K. **Rinsho Byori** 1989 Feb;Spec No 80:138–45 (Jpn)
[Chromosome analysis of lung cancer] Ochi H. **Rinsho Byori** 1989 Feb;Spec No 80:281–7 (Jpn)
[Chromosome preparation technics and chromosome analysis of hydatidiform mole] Ohama K, et al. **Rinsho Byori** 1989 Feb;Spec No 80:326–33 (Jpn)
[High–resolution chromosome banding techniques: ethidium bromide method] Saito F, et al. **Rinsho Byori** 1989 Feb; Spec No 80:146–53 (Jpn)
[G staining] Shimada H. **Rinsho Byori** 1989 Feb;Spec No 80:76–86 (Jpn)
[Chromosome analysis of bone marrow in leukemia] Shinohara T. **Rinsho Byori** 1989 Feb;Spec No 80:189–97 (Jpn)
[Cytogenetic studies of hemopoietic colonies in patients with leukemia and myelodysplastic syndrome in vitro] Sonoda Y, et al. **Rinsho Byori** 1989 Feb;Spec No 80:198–208 (Jpn)
[Practical techniques for chromosome preparations of mammalian meiotic cells] Sonta S. **Rinsho Byori** 1989 Feb; Spec No 80:288–98 (Jpn)
[Ovarian cancer—assessment of methods for cytogenetic analysis and chromosome aberrations found in ovarian cancer] Tanaka K. **Rinsho Byori** 1989 Feb;Spec No 80:268–80 (Jpn)
[The reverse banding by the fluorescent staining technique] Tazawa T, et al. **Rinsho Byori** 1989 Feb;Spec No 80:103–11 (Jpn)
[C–band staining method, nucleolus–organizer–region staining method] Yamada K. **Rinsho Byori** 1989 Feb;Spec No 80:112–8 (Jpn)
[Technique for detecting sister chromatid exchanges] Yamamoto K, et al. **Rinsho Byori** 1989 Feb;Spec No 80:119–28 (Jpn)
[Method for the high resolution G–banding after cell synchronization] Yamamoto Y, et al. **Rinsho Byori** 1989 Feb;Spec No 80:155–62 (Jpn)
[The fragile X chromosome] Yokoyama Y, et al. **Rinsho Byori** 1989 Feb;Spec No 80:129–37 (Jpn)
[Chromosome analysis of renal cell carcinoma] Yoshida MA. **Rinsho Byori** 1989 Feb;Spec No 80:209–17 (Jpn)

[Quinacrine banding (Q-bands)] Yoshida MC. **Rinsho Byori** 1989 Feb;Spec No 80:96-102 **(Jpn)**

CHROMOSOME DELETION

Isolated human growth hormone deficiency due to the hGH-I gene deletion with (type IA) and without (the Israeli-type) hGH antibody formation during hGH therapy. Nishi Y, et al. **Acta Endocrinol (Copenh)** 1990 Feb; 122(2):267-71

Long arm deletion of chromosome 7 unrelated to original karyotype in recurrent t(8;21) acute myeloblastic leukemia. Taniwaki M, et al. **Acta Haematol (Basel)** 1990;83(3):159-62

Terminal deletion of chromosome 10q and its clinical features. Kogasaka R, et al. **Acta Paediatr Jpn Overseas Ed** 1990 Feb;32(1):83-7

Renal cortical tumors. Cytogenetic characterization. Dal Cin P, et al. **Am J Clin Pathol** 1989 Oct;92(4):408-14

Multiple polyposis coli associated with Gardner's syndrome and chromosomal mosaicism: a family analysis. Dhaliwal MK, et al. **Am J Gastroenterol** 1990 Jul;85(7):880-3

Detection of monosomy 7 in interphase cells of patients with myeloid disorders. Kolluri RV, et al. **Am J Hematol** 1990 Feb;33(2):117-22

Polymerase chain reaction amplification applied to the direct detection of a 4 bp deletion in the promoter region of the A gamma gene. Manca L, et al. **Am J Hematol** 1990 Oct; 35(2):131-3

A 6-bp deletion 5' to the G gamma globin gene in beta S chromosomes bearing the Bantu haplotype. Bouhassira EE, et al. **Am J Hum Genet** 1990 Jul;47(1):161-3

Partial aldolase B gene deletions in hereditary fructose intolerance. Cross NC, et al. **Am J Hum Genet** 1990 Jul; 47(1):101-6

Pyruvate dehydrogenase deficiency caused by deletion of a 7-bp repeat sequence in the E1 alpha gene. Dahl HH, et al. **Am J Hum Genet** 1990 Aug;47(2):286-93

Topography of the Duchenne muscular dystrophy (DMD) gene: FIGE and cDNA analysis of 194 cases reveals 115 deletions and 13 duplications. Den Dunnen JT, et al. **Am J Hum Genet** 1989 Dec;45(6):835-47

Molecular studies of DiGeorge syndrome. Fibison WJ, et al. **Am J Hum Genet** 1990 May;46(5):888-95

Order of genes on human chromosome 5q with respect to 5q interstitial deletions. Huebner K, et al. **Am J Hum Genet** 1990 Jan;46(1):26-36

Parental origin of de novo constitutional deletions of chromosomal band 11p13. Huff V, et al. **Am J Hum Genet** 1990 Jul;47(1):155-60

Allele-specific deletion in exon I of the HRAS1 gene. Kasperczyk A, et al. **Am J Hum Genet** 1989 Nov; 45(5):689-96

Angelman syndrome: three molecular classes identified with chromosome 15q11q13-specific DNA markers. Knoll JH, et al. **Am J Hum Genet** 1990 Jul;47(1):149-55

Identification of the functional profilin gene, its localization to chromosome subband 17p13.3, and demonstration of its deletion in some patients with Miller-Dieker syndrome. Kwiatkowski DJ, et al. **Am J Hum Genet** 1990 Mar; 46(3):559-67

Homologous recombination between the LTRs of a human retrovirus-like element causes a 5-kb deletion in two siblings. Mager DL, et al. **Am J Hum Genet** 1989 Dec; 45(6):848-54

Transcription and translation of deleted mitochondrial genomes in Kearns-Sayre syndrome: implications for pathogenesis. Nakase H, et al. **Am J Hum Genet** 1990 Mar; 46(3):418-27

Clinical features and molecular analysis of the alpha thalassemia/mental retardation syndromes. I. Cases due to deletions involving chromosome band 16p13.3. Wilkie AO, et al. **Am J Hum Genet** 1990 Jun;46(6):1112-26

Distal 12p deletion in a stillborn infant. Baroncini A, et al. **Am J Med Genet** 1990 Jul;36(3):358-60

Ullrich-Turner syndrome in an XY female fetus with deletion of the sex-determining portion of the Y chromosome. Blagowidow N, et al. **Am J Med Genet** 1989 Oct; 34(2):159-62

Terminal deletions of the long arm of chromosome 7: five new cases. Bogart MH, et al. **Am J Med Genet** 1990 May; 36(1):53-5

Prader-Willi syndrome: current understanding of cause and diagnosis. Butler MG. **Am J Med Genet** 1990 Mar; 35(3):319-32

Double chromosome anomaly: interstitial deletion 5q and reciprocal translocation (1;11)(p22;q21). de Michelena MI, et al. **Am J Med Genet** 1990 May;36(1):29-32 (10 ref.)

Holoprosencephaly in an infant with a minute deletion of chromosome 21(q22.3). Estabrooks LL, et al. **Am J Med Genet** 1990 Jul;36(3):306-9

Interstitial deletion 2q14q21. Frydman M, et al. **Am J Med Genet** 1989 Dec;34(4):476-9

Craniosynostosis in an infant with an interstitial deletion of 15q [46,XY,del(15)(q15q22.1)]. Fukushima Y, et al. **Am J Med Genet** 1990 Jun;36(2):209-13

Mild phenotypic abnormalities in combined del 9p2 and dup 3p2. Game K, et al. **Am J Med Genet** 1990 Mar;35(3):370-2

Myelodysplasia and leukemia syndrome with monosomy 7: a genetic perspective. Gilchrist DM, et al. **Am J Med Genet** 1990 Mar;35(3):437-41

Terminal deletion of the long arm of chromosome 10: case report and review of the literature. Gorinati M, et al. **Am J Med Genet** 1989 Aug;33(4):502-4 (12 ref.)

Prenatal detection of cyclopia associated with interstitial deletion of 2p. Grundy HO, et al. **Am J Med Genet** 1989 Oct;34(2):268-70

Distal deletion of chromosome 1q in an adult. Halal F, et al. **Am J Med Genet** 1990 Mar;35(3):379-82

Partial expression of Angelman syndrome in mother most likely to be due to mosaicism involving both somatic and germline cells [letter; comment] Hall JG. **Am J Med Genet** 1990 Jul;36(3):369-70 Comment on: Am J Med Genet 1989 Mar;32(3):333-8.

Cytogenetic and molecular study of Angelman syndrome. Imaizumi K, et al. **Am J Med Genet** 1990 Mar;35(3):314-8

Infantile hemangioendothelioma of the liver in patient with interstitial deletion of chromosome 6q: report of an autopsy case. Ito H, et al. **Am J Med Genet** 1989 Nov;34(3):325-9

Terminal deletion of 6q and Fryns syndrome: a microdeletion/syndrome pair? [letter] Krassikoff N, et al. **Am J Med Genet** 1990 Jul;36(3):363-4

Inheritance and phenotypic expression of a t(7;9)(q36;q34)mat. Krauss CM, et al. **Am J Med Genet** 1989 Dec;34(4):514-9

Alagille syndrome (arteriohepatic dysplasia) and del(20)(p11.2). Legius E, et al. **Am J Med Genet** 1990 Apr; 35(4):532-5

Chromosome evolution and high-resolution analysis of leucocytes, bone marrow, and tumor cells of retinoblastoma patients. Lemieux N, et al. **Am J Med Genet** 1990 Aug; 36(4):456-62

Chromosome 6q deletions: a report of two additional cases and a review of the literature. McLeod DR, et al. **Am J Med Genet** 1990 Jan;35(1):79-84 (28 ref.)

Comparison of the 15q deletions in Prader-Willi and Angelman syndromes: specific regions, extent of deletions, parental origin, and clinical consequences. Magenis RE, et al. **Am J Med Genet** 1990 Mar;35(3):333-49

Partial deletion of 14q and partial duplication of 14q in sibs: testicular mosaicism for t(14q;14q) as a common mechanism. Masada CT, et al. **Am J Med Genet** 1989 Dec; 34(4):528-34

Terminal deletion of chromosome 3p in adults: a fourth observation [letter] Meinecke P. **Am J Med Genet** 1990 Aug;36(4):519-20

Choroideremia and hypopituitarism: an association. Menon RK, et al. **Am J Med Genet** 1989 Dec;34(4):511-3

Ectro-amelia syndrome associated with an interstitial deletion of 7q. Morey MA, et al. **Am J Med Genet** 1990 Jan;35(1):95-9

Penile enlargement in 3q23-q25 deletion syndrome [letter] Naguib KK, et al. **Am J Med Genet** 1990 Jul;36(3):361-2

Loss of the 3p25.3 band is critical in the manifestation of del(3p) syndrome: karyotype-phenotype correlation in cases with deficiency of the distal portion of the short arm of chromosome 3. Narahara K, et al. **Am J Med Genet** 1990 Feb;35(2):269-73 (19 ref.)

Duplication of 16q and deletion of 15q. Nyhan WL, et al. **Am J Med Genet** 1989 Oct;34(2):183-6

Deletions in chromosome 2 and fragile sites. Palmer CG, et al. **Am J Med Genet** 1990 Jun;36(2):214-8

Aland Island eye disease (Forsius-Eriksson ocular albinism) and an Xp21 deletion in a patient with Duchenne muscular dystrophy, glycerol kinase deficiency, and congenital adrenal hypoplasia. Pillers DA, et al. **Am J Med Genet** 1990 May;36(1):23-8

Interstitial deletion involving most of Yq. Skare J, et al. **Am J Med Genet** 1990 Aug;36(4):394-7

Molecular-genetic study of Duchenne and Becker muscular dystrophies: deletion analyses of 45 Japanese patients and segregation analyses in their families with RFLPs based on the data from normal Japanese females. Sugino S, et al. **Am J Med Genet** 1989 Dec;34(4):555-61

X-linked cataract and X-linked microphthalmos: how many deletion families? [letter] Warburg M. **Am J Med Genet** 1989 Nov;34(3):451-3

Partial deletion of the long arm of chromosome 11 [del(11)(q23.3——qter)] with abnormal white matter. Wardinsky TD, et al. **Am J Med Genet** 1990 Jan;35(1):60-3

Maternal origin of 15q11-13 deletions in Angelman syndrome suggests a role for genomic imprinting. Williams CA, et al. **Am J Med Genet** 1990 Mar;35(3):350-3

Holoprosencephaly and interstitial deletion of 2(p2101p2109). Wilson WG, et al. **Am J Med Genet** 1989 Oct;34(2):252-4

Chromosome deletion of Xq25 in an individual with X-linked lymphoproliferative disease. Wyandt HE, et al. **Am J Med Genet** 1989 Jul;33(3):426-30

Proximal interstitial deletion of 7q: a case report and review of the literature. Zackowski JL, et al. **Am J Med Genet** 1990 Jul;36(3):328-32 (25 ref.)

Microdeletion in the X-chromosome and prenatal diagnosis in a family with Norrie disease. Zhu DP, et al. **Am J Med Genet** 1989 Aug;33(4):485-8

Distal deletion of the short arm of chromosome 6. Zurcher VL, et al. **Am J Med Genet** 1990 Feb;35(2):261-5

Screening of seven putative 45,X subjects with deoxyribonucleic acid probes to detect low-level mosaicism for Y cell lines. Tho SP, et al. **Am J Obstet Gynecol** 1990 Jan;162(1):59-60

Generation of deletion subclones for sequencing by partial digestion with restriction endonucleases. Lamperti ED, et al. **Anal Biochem** 1990 Feb 15;185(1):187-93

X-chromosome monosomy in the myelin-deficient rat mutant. Rosenbluth J, et al. **Anat Rec** 1990 Mar; 226(3):396-402

Interstitial deletion of (17)(p11.2). A microdeletion syndrome. Another example. de Almeida JC, et al. **Ann Genet** 1989; 32(3):184-6

Interstitial deletion of the short arm of chromosome 12. Report of a new patient and review of the literature. Fryns JP, et al. **Ann Genet** 1990;33(1):43-5 (14 ref.)

Normal phenotype and slight mental retardation in de novo distal 8p deletion (8pter——8p23.1). Fryns JP, et al. **Ann Genet** 1989;32(3):171-3

Molecular deletion patterns in Duchenne muscular dystrophy patients. Lucotte G, et al. **Ann Genet** 1989;32(4):214-9

Distal monosomy of the long arm of chromosome 6 (6q25——6qter) inherited by maternal translocation t(6q;17q). Oliveira-Duarte MH, et al. **Ann Genet** 1990; 33(1):56-9 (9 ref.)

Isochromosome formation and subsequent fission or short arm deletion and subsequent isochromosome formation? [letter] Schinzel A. **Ann Genet** 1990;33(1):60

The 18p- syndrome. Report of five cases. Zumel RM, et al. **Ann Genet** 1989;32(3):160-3

Mitochondrial myopathies: clinical and biochemical features of 30 patients with major deletions of muscle mitochondrial DNA. Holt IJ, et al. **Ann Neurol** 1989 Dec;26(6):699-708

Expression in lung cancer of a transcribed sequence at the DNF15S2 locus at chromosome 3P21. Harbour JW, et al. **Anticancer Res** 1990 Jan-Feb;10(1):23-7

A human adenolymphoma showing the chromosomal aberrations del (7)(p12p14-15) and t(11;19)(q21;p12-13). Mark J, et al. **Anticancer Res** 1989 Nov-Dec;9(6):1565-6

Deletion mapping on the distal third region of chromosome 1p in multiple endocrine neoplasia type IIA. Yang KP, et al. **Anticancer Res** 1990 Mar-Apr;10(2B):527-33

Detection in soil of a deletion in an engineered DNA sequence by using DNA probes. Jansson JK, et al. **Appl Environ Microbiol** 1989 Nov;55(11):3022-5

Deletion of carboxy-terminal residues of murine granulocyte-macrophage colony-stimulating factor results in a loss of biologic activity and altered glycoaylation. LaBranche CC, et al. **Arch Biochem Biophys** 1990 Jan; 276(1):153-9

A large deletion of the long arm of chromosome No. 4 in a child with limb abnormalities. Ockey CH, et al. **Arch Dis Child** 1967 Aug;42(224):428-34

Deletion analysis for Duchenne (and Becker) muscular dystrophy. Kimber RD, et al. **Aust Paediatr J** 1989 Oct; 25(5):292-5

Rapid mapping of deletion and duplication mutations by the polymerase chain reaction. Anderson RD, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):416-20

Partial deletion of human alpha-galactosidase A gene in Fabry disease: direct repeat sequences as a possible cause of slipped mispairing. Fukuhara Y, et al. **Biochem Biophys Res Commun** 1990 Jul 16;170(1):296-300

A very small frame-shifting deletion within exon 19 of the Duchenne muscular dystrophy gene. Matsuo M, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):963-7

Marked decrease of mitochondrial DNA with multiple deletions in a patient with familial mitochondrial myopathy. Otsuka M, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):680-5

Multiple mitochondrial DNA deletions exist in cardiomyocytes of patients with hypertrophic or dilated cardiomyopathy. Ozawa T, et al. **Biochem Biophys Res Commun** 1990 Jul 31;170(2):830-6

Multiple deletions in mitochondrial DNA at direct repeats of non-D-loop regions in cases of familial mitochondrial myopathy. Yuzaki M, et al. **Biochem Biophys Res Commun** 1989 Nov 15;164(3):1352-7

Specific amplification of deleted mitochondrial DNA from a myopathic patient and analysis of deleted region with S1 nuclease. Tanaka-Yamamoto T, et al. **Biochim Biophys Acta** 1989 Nov 2;1009(2):151-5

Rapid identification of M13 phage deletions for sequence analysis. Oshima RG. **Biotechniques** 1988 Jun;6(6):510-1

A rapid procedure for creating nested sets of deletions using mini-prep plasmid DNA samples. Steggles AW. **Biotechniques** 1989 Mar;7(3):241-2

A new hereditary persistence of fetal hemoglobin deletion has the breakpoint within the 3'beta-globin gene enhancer. Camaschella C, et al. **Blood** 1990 Feb 15;75(4):1000-5

The breakpoint of a large deletion causing hereditary persistence of fetal hemoglobin occurs within an erythroid DNA domain remote from the beta-globin gene cluster. Feingold EA, et al. **Blood** 1989 Nov 1;74(6):2178-86

Deletion delta-thalassemia: the 7.2 kb deletion of Corfu delta beta-thalassemia in a non-beta-thalassemia chromosome [letter] Galanello R, et al. **Blood** 1990 Apr 15;75(8):1747-9

Alpha-thalassemia caused by a large (62 kb) deletion upstream of the human alpha globin gene cluster. Hatton CS, et al. **Blood** 1990 Jul 1;76(1):221-7

Localization of the SRC oncogene to chromosome band 20q11.2 and loss of this gene with deletion (20q) in two leukemic patients. Morris CM, et al. **Blood** 1989 Oct; 74(5):1768-73

Molecular anatomy of a 5q interstitial deletion. Nagarajan L, et al. **Blood** 1990 Jan 1;75(1):82-7

RFLP and deletion analysis for X-linked chronic granulomatous disease using the cDNA probe: potential for improved prenatal diagnosis and carrier determination. Pelham A, et al. **Blood** 1990 Aug 15;76(4):820-4

Hemoglobin Birmingham and hemoglobin Galicia: two

unstable beta chain variants characterized by small deletions and insertions. Wilson JB, et al. **Blood** 1990 May 1;75(9):1883–7

Loss of chromosome 11p alleles in cultured cells derived from Wilms' tumours. Brown KW, et al. **Br J Cancer** 1989 Jul;60(1):25–9

Zeta and theta 1–globin gene deletions located on the same chromosome [letter] Ballas SK, et al. **Br J Haematol** 1989 Nov;73(3):429

A single nucleotide deletion in codon 123 of the beta–globin gene causes an inclusion body beta–thalassaemia trait: a novel elongated globin chain beta Makabe. Fucharoen S, et al. **Br J Haematol** 1990 Jul;75(3):393–9

The DNA deletion in an Indian delta beta–thalassaemia begins one kilobase from the A gamma globin gene and ends in an L1 repetitive sequence. Mishima N, et al. **Br J Haematol** 1989 Nov;73(3):375–9

Deletion of 7p: lymphoid and non–lymphoid disorders cluster in different break points [letter] Pedersen B. **Br J Haematol** 1989 Oct;73(2):281–2

11p13 deletion, Wilms' tumour, and aniridia: unusual genetic, non–ocular and ocular features of three cases. Jotterand V, et al. **Br J Ophthalmol** 1990 Sep;74(9):568–70

Familial manic–depressive illness with deleted short arm of chromosome 21: coincidental or causal? el–Badramany MH, et al. **Br J Psychiatry** 1989 Dec;155:856–7

Hemoglobin H disease caused by two gene deletions. Zago MA, et al. **Braz J Med Biol Res** 1989;22(6):675–81

Optimal sequence alignment allowing for long gaps. Gotoh O. **Bull Math Biol** 1990;52(3):359–73

A cell culture, chromosomal and quantitative DNA analysis of a metastatic epithelioid sarcoma. Deletion 1p, a possible primary chromosomal abnormality in epithelioid sarcoma. Stenman G, et al. **Cancer** 1990 May 1;65(9):2006–13

Absence of detectable deletions in the mitochondrial genome of human colon tumors. Heerdt BG, et al. **Cancer Commun** 1990;2(3):109–11

5q deletion. The sole chromosome change in a carcinoma of the bladder. Atkin NB, et al. **Cancer Genet Cytogenet** 1990 May;46(1):129–31

Juvenile chronic myelogenous leukemia with abnormalities of chromosomes 4 and 5. Berg SL, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):55–9

Double minute chromosomes and monosomy 7 in a lymphatic blast crisis of chronic myeloid leukemia [letter] Cigudosa JC, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):133–4

Monosomy 7 syndrome. Clinical heterogeneity in children and adolescents. Daghistani D, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):263–9

Secondary acute promyelocytic leukemia with t(8;21) and t(9;22) at onset and loss of the Philadelphia chromosome at relapse. Dallorso S, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):41–6

Chromosome 3 and 12p rearranged in a well–differentiated peritoneal mesothelioma [letter] Decker HJ, et al. **Cancer Genet Cytogenet** 1990 May;46(1):135–7

Deletion of part of the short arm of chromosome 17 in a congenital fibrosarcoma. Gorman PA, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):193–8 (17 ref.)

Monosomy 3 and isochromosome 8q in a uveal melanoma. Horsman DE, et al. **Cancer Genet Cytogenet** 1990 Apr; 45(2):249–53

Rearrangement of band 10q22 in leiomyoma and leiomyosarcoma of the uterus. Kiechle–Schwarz M, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):95–100

First cytogenetic evidence of homozygosity for the retinoblastoma deletion in chromosome 13. Lemieux N, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):73–8

Detection by electron microscopy of a small subband 13q14.11 deletion in an hereditary retinoblastoma. Lemieux N, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):265–9

Loss of the Y chromosome in meningiomas. A molecular genetic approach. Logan JA, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):41–7

Cytogenetic study of a sclerosing stromal tumor of the ovary. Lopes JM, et al. **Cancer Genet Cytogenet** 1990 Oct 1; 49(1):103–6

High–resolution karyotypes of eighteen Norwegian polyposis patients. Lothe RA, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):69–72

Biclonal chromosome evolution of chronic myelomonocytic leukemia in a child. Massaad L, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):131–7

del(2)(p23): a new recurrent abnormality in acute myeloid leukemia. Najfeld V, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):185–90

Different karyotypic abnormalities, t(1;6) and del(7), in two uterine leiomyomas from the same patient. Nilbert M, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):51–3

c–myb gene analysis in T–cell malignancies with del(6q). Okada M, et al. **Cancer Genet Cytogenet** 1990 Sep; 48(2):229–36

Translocation t(11;13) and deletion of chromosome 7 in a patient with acute myelomonocytic leukemia. Pati A, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):261–3

11q23 abnormalities in children with acute nonlymphocytic leukemia (M4–M5). Association with previous chemotherapy. Prieto F, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):1–11

Partial Xq25 deletion in a family with the X–linked lymphoproliferative disease (XLP) [see comments] Sanger WG, et al. **Cancer Genet Cytogenet** 1990 Jul 15;47(2):163–9 Comment in: Cancer Genet Cytogenet 1990 Jul 15;47(2):271–2.

Blastic transformation associated with 5q– and 12p– [letter] Silva ML, et al. **Cancer Genet Cytogenet** 1990 Jul 15; 47(2):275–6

Deletion of 5q by t(5;17) in therapy–related myelodysplastic syndrome. Vandenberghe EA, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):49–52

A deletion linked to a poly(ADP–ribose) polymerase gene on chromosome 13q33–qter occurs frequently in the normal black population as well as in multiple tumor DNA. Bhatia KG, et al. **Cancer Res** 1990 Sep 1;50(17):5406–13

Absence of IFNA and IFNB genes from human malignant glioma cell lines and lack of correlation with cellular sensitivity to interferons. Miyakoshi J, et al. **Cancer Res** 1990 Jan 15;50(2):278–83

Assignment of common allele loss in osteosarcoma to the subregion 17p13 [see comments] Toguchida J, et al. **Cancer Res** 1989 Nov 15;49(22):6247–51 Comment in: Cancer Res 1990 Apr 15;50(8):2543.

Allelic losses of chromosomes 9, 11, and 17 in human bladder cancer. Tsai YC, et al. **Cancer Res** 1990 Jan 1;50(1):44–7

An internal deletion within an 11p13 zinc finger gene contributes to the development of Wilms' tumor. Haber DA, et al. **Cell** 1990 Jun 29;61(7):1257–69

Switch circular DNA formed in cytokine–treated mouse splenocytes: evidence for intramolecular DNA deletion in immunoglobulin class switching. Matsuoka M, et al. **Cell** 1990 Jul 13;62(1):135–42

Deletion mutants are functionally dominant over wild–type mitochondrial genomes in skeletal muscle fiber segments in mitochondrial disease. Shoubridge EA, et al. **Cell** 1990 Jul 13;62(1):43–9

Deletions and a translocation interrupt a cloned gene at the neurofibromatosis type 1 locus. Viskochil D, et al. **Cell** 1990 Jul 13;62(1):187–92

Frequent deletions of the human X chromosome distal short arm result from recombination between low copy repetitive elements. Yen PH, et al. **Cell** 1990 May 18;61(4):603–10

Cystic fibrosis deletion mutation detected by PCR–mediated site–directed mutagenesis. Friedman KJ, et al. **Clin Chem** 1990 Apr;36(4):695–6

Dysplastic naevi in association with partial deletion of chromosome 11. McDonagh AJ, et al. **Clin Exp Dermatol** 1990 Jan;15(1):44–5

Expression of LFA–1 by a lymphoblastoid cell line from a patient with monosomy 21: effects on intercellular adhesion. Taylor GM, et al. **Clin Exp Immunol** 1990 Sep; 81(3):501–6

Unusual cytogenetic mosaicism involving chromosome 14 abnormalities in a child with an MR/MCA syndrome and abnormal pigmentation. Cantú ES, et al. **Clin Genet** 1989 Sep;36(3):189–95 (16 ref.)

Proximal 15q variant as possible pitfall in the cytogenetic diagnosis of Prader–Willi syndrome. Hoo JJ, et al. **Clin Genet** 1990 Mar;37(3):161–6

Deletion of chromosome 1p: a short review. Howard PJ, et al. **Clin Genet** 1990 Feb;37(2):127–31 (13 ref.)

Two rare cases of 6p partial deletion. Jalal SM, et al. **Clin Genet** 1989 Sep;36(3):196–9

Tandem Y/6 translocation with partial deletion 6 (p23——pter). Kelly PC, et al. **Clin Genet** 1989 Sep; 36(3):204–7

Monosomy X found at first trimester CVS: a diagnostic and counselling dilemma. Leschot NJ, et al. **Clin Genet** 1990 Mar;37(3):236–7

Identification of a second "French Canadian" LDL receptor gene deletion and development of a rapid method to detect both deletions. Ma YH, et al. **Clin Genet** 1989 Oct; 36(4):219–28

Terminal 7q deletion as a cause of holoprosencephaly [letter; comment] Masuno M, et al. **Clin Genet** 1990 Mar;37(3):238 Comment on: Clin Genet 1989 Oct;36(4):262–5.

Deficiency of distal 8p—report of two cases and review of the literature. Pecile V, et al. **Clin Genet** 1990 Apr; 37(4):271–8 (17 ref.)

A familial interstitial deletion of the long arm of chromosome 21. Roland B, et al. **Clin Genet** 1990 Jun;37(6):423–8

Intragenic deletions in 164 boys with Duchenne muscular dystrophy (DMD) studied with dystrophin cDNA. Upadhyaya M, et al. **Clin Genet** 1990 Jun;37(6):456–62

5q– syndrome: complete response to chemotherapy. Conneally E, et al. **Clin Lab Haematol** 1990;12(1):101–3

Deletions and rearrangements in Kluyveromyces lactis mitochondrial DNA. Hardy CM, et al. **Curr Genet** 1989 Dec;16(5–6):419–27

A petite positive strain of Kluyveromyces lactis has a 300 kb deletion in the rDNA cluster. Maleszka R, et al. **Curr Genet** 1989 Dec;16(5–6):429–32

Trisomy 7, trisomy 10, and loss of the Y chromosome in short–term cultures of normal kidney tissue. Elfving P, et al. **Cytogenet Cell Genet** 1990;53(2–3):123–5

Report of the committee on clinical disorders and chromosomal deletion syndromes. Harper PS, et al. **Cytogenet Cell Genet** 1989;51(1–4):563–611 (948 ref.)

Trisomy 7 and sex chromosome loss in human brain tissue. Heim S, et al. **Cytogenet Cell Genet** 1989;52(3–4):136–8

Chromosome 7 long–arm deletions in myeloid disorders: terminal DNA sequences are commonly conserved and breakpoints vary. Kere J, et al. **Cytogenet Cell Genet** 1989; 50(4):226–9

Loss of heterozygosity in human germinal tumors. Radice P, et al. **Cytogenet Cell Genet** 1989;52(1–2):72–6

Meiotic behavior of gonosomically variant females of Akodon azarae (Rodentia, Cricetidae). Solari AJ, et al. **Cytogenet Cell Genet** 1989;52(1–2):57–61

Nonmodal chromosome gain and loss in human fibroblast cultures. Wenger SL. **Cytogenet Cell Genet** 1989; 52(3–4):201

Clinical applications of flow karyotyping in myelocytic leukemia by stimulation of different subpopulations of cells in blood or bone marrow samples. Arkesteijn GJ, et al. **Cytometry** 1990;11(1):196–201

DNA gains, losses, and rearrangements in eukaryotes. Prescott DM. **Dev Biol (N Y 1985)** 1989;6:13–29 (71 ref.)

The albino–deletion complex in the mouse defines genes necessary for development of embryonic and extraembryonic ectoderm. Niswander L, et al. **Development** 1989 Jan;105(1):175–82

Visual evoked potentials in Prader–Willi syndrome. Apkarian P, et al. **Doc Ophthalmol** 1989 Apr;71(4):355–67

Deletion of the gene for subunit III leads to defective assembly of bacterial cytochrome oxidase. Haltia T, et al. **EMBO J** 1989 Dec 1;8(12):3571–9

Genetic ablation of a mouse gene expressed specifically in brain. Kingsley DM, et al. **EMBO J** 1990 Feb;9(2):395–9

Characterization of Schizosaccharomyces pombe minichromosome deletion derivatives and a functional allocation of their centromere. Niwa O, et al. **EMBO J** 1989 Oct;8(10):3045–52

5–Azacytidine induces sex chromosome loss and interchange in immature germ cells of Drosophila mei–9 males. Osgood CJ, et al. **Environ Mol Mutagen** 1989;14(3):135–45

Deletion of 14q in non–Hodgkin's lymphoma. Kristoffersson U, et al. **Eur J Haematol** 1990 Apr;44(4):261–4

Different large deletions of T cell receptor V beta genes in natural populations of mice. Jouvin–Marche E, et al. **Eur J Immunol** 1989 Oct;19(10):1921–6

Severe mental retardation in a patient with tricho–rhino–phalangeal syndrome type I and 8q deletion. Hamers A, et al. **Eur J Pediatr** 1990 Jun;149(9):618–20

Deletion screening and prenatal diagnosis of Duchenne muscular dystrophy using cDNA probes Cf 23a and Cf 56a. Herrmann FH, et al. **Eur J Pediatr** 1990 Jan; 149(4):263–5

Gene deletions within the human immunoglobulin heavy chain constant region gene cluster. Bottaro A, et al. **Exp Clin Immmunogenet** 1989;6(1):55–9

Carboxylterminal deletion mutants of ribulosebisphosphate carboxylase from Rhodospirillum rubrum. Morell MK, et al. **FEBS Lett** 1990 Jun 4;265(1–2):41–5

Molecular cloning and deletion of the gene encoding aspergillopepsin A from Aspergillus awamori. Berka RM, et al. **Gene** 1990 Feb 14;86(2):153–62

Respiratory–competent yeast mitochondrial DNAs generated by deleting intergenic regions. Piškur J. **Gene** 1989 Sep 1;81(1):165–8

Functional topology of human tissue–type plasminogen activator: characterization of two deletion derivatives and of a duplication derivative. Stern A, et al. **Gene** 1989 Jul 15;79(2):333–44

Nucleotide sequence and deletion analysis of the cellulase–encoding gene celH of Clostridium thermocellum. Yagüe E, et al. **Gene** 1990 Apr 30;89(1):61–7

Effects of internal deletions on the priming activity of the phage phi 29 terminal protein. Zaballos A, et al. **Gene** 1989 Nov 30;83(2):187–95

The Drosophila zeste locus is nonessential. Goldberg ML, et al. **Genetics** 1989 Sep;123(1):145–55

Conversion of deletions during recombination in pneumococcal transformation. Lefèvre JC, et al. **Genetics** 1989 Nov;123(3):455–64

Molecular analysis of a transposon–induced deletion of the nivea locus in Antirrhinum majus. Lister C, et al. **Genetics** 1989 Oct;123(2):417–25

Localization of 27 DNA markers to the region of human chromosome 22q11–pter deleted in patients with the DiGeorge syndrome and duplicated in the der22 syndrome. Carey AH, et al. **Genomics** 1990 Jul;7(3):299–306

Multiplex DNA deletion detection and exon sequencing of the hypoxanthine phosphoribosyltransferase gene in Lesch–Nyhan families. Gibbs RA, et al. **Genomics** 1990 Jun;7(2):235–44

Analysis of molecular deletions with cDNA probes in patients with Duchenne and Becker muscular dystrophies. Gilgenkrantz H, et al. **Genomics** 1989 Oct;5(3):574–80

A highly polymorphic locus cloned from the breakpoint of a chromosome 11p13 deletion associated with the WAGR syndrome. Glaser T, et al. **Genomics** 1989 Nov;5(4):880–93

Molecular analysis of deletions in the human beta–globin gene cluster: deletion junctions and locations of breakpoints. Henthorn PS, et al. **Genomics** 1990 Feb;6(2):226–37

Constitutional and somatic deletions of two different regions of maternal chromosome 11 in Wilms tumor. Jeanpierre C, et al. **Genomics** 1990 Jul;7(3):434–8

A multigene deletion in the human IGH constant region locus involves highly homologous hot spots of recombination. Keyeux G, et al. **Genomics** 1989 Oct;5(3):431–41

Determination of deletion sizes in the MHC–linked complement C4 and steroid 21–hydroxylase genes by pulsed–field gel electrophoresis. Partanen J, et al. **Genomics** 1989 Aug;5(2):345–9

Deletion and linkage mapping of eight markers from the proximal short arm of chromosome 6. Zoghbi HY, et al.

Genomics 1990 Feb;6(2):352–7

5q– and t(2;11) in a patient with M2 acute non–lymphocytic leukemia. Case report. Testoni N, et al. **Haematologica** 1989 Nov–Dec;74(6):595–9

The use of in situ hybridization for detection of loss of the Y chromosome in males with pancytopenia. Przepiorka D, et al. **Hematol Pathol** 1989;3(4):177–83

Hb Bruxelles: alpha 2A beta (2)41 or 42(C7 or CD1)Phe deleted. Blouquit Y, et al. **Hemoglobin** 1989;13(5):465–74

Beta–thalassemia repository. Huisman TH. **Hemoglobin** 1989; 13(7–8):775–87

Developmental anomalies in Drosophila hybrids are apparently caused by loss of microchromosome. Orr HA. **Heredity (Edinburgh)** 1990 Apr;64 (Pt 2):255–62

Assignment of the apolipoprotein A–I gene to 11q23 based on RFLP in a case with a partial deletion of chromosome 11, del(11)(q23.3——qter). Arinami T, et al. **Hum Genet** 1990 Jun;85(1):39–40

Screening for steroid sulfatase (STS) gene deletions by multiplex DNA amplification. Ballabio A, et al. **Hum Genet** 1990 May;84(6):571–3

Distribution and characterization of a Sandhoff disease–associated 50–kb deletion in the gene encoding the human beta–hexosaminidase beta–chain. Bikker H, et al. **Hum Genet** 1990 Aug;85(3):327–9

Physical fine–mapping of a deletion spanning the Norrie gene. Diergaarde PJ, et al. **Hum Genet** 1989 Dec;84(1):22–6

Localization of the human HF.10 finger gene on a chromosome region (3p21–22) frequently deleted in human cancers. Donti E, et al. **Hum Genet** 1990 Apr;84(5):391–5

Molecular characterisation of three alpha–1–antitrypsin deficiency variants: proteinase inhibitor (Pi) nullcardiff (Asp256——Val); PiMmalton (Phe51——deletion) and PiI (Arg39——Cys). Graham A, et al. **Hum Genet** 1989 Dec; 84(1):55–8

Rapid detection of deletions in the Duchenne muscular dystrophy gene by PCR amplification of deletion–prone exon sequences. Hentemann M, et al. **Hum Genet** 1990 Feb; 84(3):228–32

Constitutional deletions predisposing to retinoblastoma. Janson M, et al. **Hum Genet** 1990 Jun;85(1):21–4

Deletion 3q27——3qter in an infant with mild dysmorphism, parietal meningocele, and neonatal miliaria rubra–like lesions. Jokiaho I, et al. **Hum Genet** 1989 Oct;83(3):302–4

Definition of an acquired 11q deletion in a tumorigenic human monocytic cell line [letter] Maserati E, et al. **Hum Genet** 1990 Mar;84(4):381

A normal male with an inherited deletion of one exon within the DMD gene. Nordenskjöld M, et al. **Hum Genet** 1990 Jan;84(2):207–9

Deletion mapping of 39 random isolated Y–chromosome DNA fragments. Oosthuizen CJ, et al. **Hum Genet** 1990 Jul;85(2):205–10

An interstitial deletion in Xp22.3 in a family with X–linked recessive chondrodysplasia punctata and short stature. Petit C, et al. **Hum Genet** 1990 Jul;85(2):247–50

Unusual X chromosome inactivation in a mentally retarded girl with an interstitial deletion Xq27: implications for the fragile X syndrome. Schmidt M, et al. **Hum Genet** 1990 Mar;84(4):347–52

Molecular and cytogenetic analysis of an interstitial 20p deletion associated with syndromic intrahepatic ductular hypoplasia (Alagille syndrome). Schnittger S, et al. **Hum Genet** 1989 Oct;83(3):239–44

The similarity of phenotypic effects caused by Xp and Xq deletions in the human female: a hypothesis. Therman E, et al. **Hum Genet** 1990 Jul;85(2):175–83

An insertion deletion polymorphism in the signal peptide of the human apolipoprotein B gene. Visvikis S, et al. **Hum Genet** 1990 Mar;84(4):373–5

A deletion panel of the long arm of the X chromosome: subregional localization of 22 DNA probes. Yang HM, et al. **Hum Genet** 1990 Jun;85(1):25–30

Excision of one of two defective P elements as the cause of alternate mutational events (sn+ and sne) of the singed bristle allele snw in Drosophila melanogaster. Nitasaka E, et al. **Idengaku Zasshi** 1988 Aug;63(4):303–12

A mutant rat major histocompatibility haplotype showing a large deletion of class I sequences. Wurst W, et al. **Immunogenetics** 1989;30(4):237–42

Human delta T cell receptor: rearrangement, deletion, and translocation. Korsmeyer SJ, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1988; 19:137–45

A herpes simplex type 1 ICPO deletion mutant demonstrates diminished pathogenicity during acute ocular infection in different host animals. Gordon YJ, et al. **Invest Ophthalmol Vis Sci** 1990 Apr;31(4):681–8

Nitrate regulation of anaerobic respiratory gene expression in narX deletion mutants of Escherichia coli K–12. Egan SM, et al. **J Bacteriol** 1990 Sep;172(9):5020–9

Complementation of a reaction center–deficient Rhodobacter sphaeroides pufLMX deletion strain in trans with pufBALM does not restore the photosynthesis–positive phenotype. Farchaus JW, et al. **J Bacteriol** 1990 Feb; 172(2):977–85

DNA amplification in Streptomyces achromogenes subsp. rubradiris is accompanied by a deletion, and the amplified sequences are conditionally stable and can be eliminated by two pathways. Hornemann U, et al. **J Bacteriol** 1989 Nov;171(11):5817–22

Identification and characterization of a new Escherichia coli gene that is a dosage–dependent suppressor of a dnaK deletion mutation. Kang PJ, et al. **J Bacteriol** 1990 Apr; 172(4):2055–64

Efficient incorporation of galactose into lipopolysaccharide by Escherichia coli K–12 strains with polar galE mutations. Schnaitman CA, et al. **J Bacteriol** 1990 Sep;172(9):5511–3

Molecular cloning of the C–terminal domain of Escherichia coli D–mannitol permease: expression, phosphorylation, and complementation with C–terminal permease deletion proteins. White DW, et al. **J Bacteriol** 1990 Mar; 172(3):1509–15

Escherichia coli rna gene encoding RNase I: cloning, overexpression, subcellular distribution of the enzyme, and use of an rna deletion to identify additional RNases. Zhu LQ, et al. **J Bacteriol** 1990 Jun;172(6):3146–51

Deletions in the cytoplasmic domain of the polymeric immunoglobulin receptor differentially affect endocytotic rate and postendocytotic traffic. Breitfeld PP, et al. **J Biol Chem** 1990 Aug 15;265(23):13750–7

Deletion of a highly conserved tetrapeptide sequence of the proinsulin connecting peptide (C–peptide) inhibits proinsulin to insulin conversion by transfected pituitary corticotroph (AtT20) cells. Gross DJ, et al. **J Biol Chem** 1989 Dec 25;264(36):21486–90

Deletion of cytoplasmic sequences of the nerve growth factor receptor leads to loss of high affinity ligand binding. Hempstead BL, et al. **J Biol Chem** 1990 Jun 15; 265(17):9595–8

Structure–function analysis of the human interferon gamma. The COOH terminus is not essential for functional activity. Luk SK, et al. **J Biol Chem** 1990 Aug 5;265(22):13314–9

Intracellular transport of rat serum albumin is altered by a genetically engineered deletion of the propeptide. McCracken AA, et al. **J Biol Chem** 1989 Dec 15; 264(35):20843–6

Hereditary alpha 2–plasmin inhibitor deficiency caused by a transport–deficient mutation (alpha 2–PI–Okinawa). Deletion of Glu137 by a trinucleotide deletion blocks intracellular transport. Miura O, et al. **J Biol Chem** 1989 Oct 25;264(30):18213–9

Minimal deletion of amino acids from the carboxyl terminus of the B subunit of heat–labile enterotoxin causes defects in its assembly and release from the cytoplasmic membrane of Escherichia coli. Sandkvist M, et al. **J Biol Chem** 1990 Sep 5;265(25):15239–44

Deletion analysis of the human insulin receptor ectodomain reveals independently folded soluble subdomains and insulin binding by a monomeric alpha–subunit. Schaefer EM, et al. **J Biol Chem** 1990 Aug 5;265(22):13248–53

A deleted variant of Bacillus anthracis protective antigen is non–toxic and blocks anthrax toxin action in vivo. Singh Y, et al. **J Biol Chem** 1989 Nov 15;264(32):19103–7

Activity and deletion analysis of recombinant human cathepsin L expressed in Escherichia coli. Smith SM, et al. **J Biol Chem** 1989 Dec 5;264(34):20487–95

Structural organization of the gene for human prolidase (peptidase D) and demonstration of a partial gene deletion in a patient with prolidase deficiency. Tanoue A, et al. **J Biol Chem** 1990 Jul 5;265(19):11306–11

Deletion of lysine 84 to lysine 89 enhances the cytotoxicity and the receptor binding affinity of human lymphotoxin. Wakabayashi T, et al. **J Biol Chem** 1990 May 5; 265(13):7604–9

Deficiency of the murine fifth complement component (C5). A 2–base pair gene deletion in a 5'–exon. Wetsel RA, et al. **J Biol Chem** 1990 Feb 15;265(5):2435–40

Deletion analysis of the mini–P1 plasmid origin of replication and the role of Escherichia coli DnaA protein. Wickner S, et al. **J Biol Chem** 1990 Jul 15;265(20):11622–7

Characterization of an insulin receptor mutant lacking the subunit processing site. Williams JF, et al. **J Biol Chem** 1990 May 25;265(15):8463–9

Deletion of a phenylalanine in the N–terminal region of human cytochrome P–450(17 alpha) results in partial combined 17 alpha–hydroxylase/17,20–lyase deficiency [published erratum appears in J Biol Chem 1989 Dec 15;264(35):21433] Yanase T, et al. **J Biol Chem** 1989 Oct 25;264(30):18076–82

Juvenile Pearson syndrome. Blaw ME, et al. **J Child Neurol** 1990 Jul;5(3):187–90

Use of polymerase chain reaction in detection of growth hormone gene deletions. Vnencak–Jones CL, et al. **J Clin Endocrinol Metab** 1990 Jun;70(6):1550–3

Qualitative and quantitative defects of thyroglobulin resulting in congenital goiter. Absence of gross gene deletion of coding sequences in the TG gene structure. Medeiros–Neto G, et al. **J Endocrinol Invest** 1989 Dec;12(11):805–13

Tolerance–related V beta clonal deletions in normal CD4–8–, TCR–alpha/beta + and abnormal lpr and gld cell populations. Singer PA, et al. **J Exp Med** 1989 Dec 1; 170(6):1869–77

RecA–independent high–frequency deletion of recombinant cosmid DNA in Escherichia coli. Ishiura M, et al. **J Gen Microbiol** 1990 Jan;136 (Pt 1):69–79

Loss of Tdn catabolic genes by deletion from and curing of plasmid pTDN1 in Pseudomonas putida: rate and mode of loss are substrate and pH dependent. Saint CP, et al. **J Gen Microbiol** 1990 Apr;136 (Pt 4):627–36

Inactivation of the thymidine kinase gene of a gI deletion mutant of pseudorabies virus generates a safe but still highly immunogenic vaccine strain. Moormann RJ, et al. **J Gen Virol** 1990 Jul;71 (Pt 7):1591–5

The JH2604 deletion variant of herpes simplex virus type 2 (HG52) fails to produce necrotizing encephalitis following intracranial inoculation of mice. Taha MY, et al. **J Gen Virol** 1990 Jul;71 (Pt 7):1597–601

Cloning of a defective gene encoding the pyruvate dehydrogenase E1 alpha subunit from a patient with its deficiency. Endo H, et al. **J Inherited Metab Dis** 1989; 12(3):363–7

Differently deleted mitochondrial genomes in maternally inherited chronic progressive external ophthalmoplegia. Tanaka M, et al. **J Inherited Metab Dis** 1989;12(3):359–62

Characterization of three new deletions at the 5' end of the HPRT structural gene. Wehnert M, et al. **J Inherited Metab Dis** 1990;13(2):178–83

Partial monosomy 8p with minimal dysmorphic signs. Blennow E, et al. **J Med Genet** 1990 May;27(5):327–9

Misdiagnosed normal fetus owing to undetected germinal mosaicism for DMD deletion. Boileau C, et al. **J Med Genet** 1989 Dec;26(12):790–1

Partial monosomy 3q in a boy with short stature, developmental delay, and mild dysmorphic features. Brueton LA, et al. **J Med Genet** 1989 Nov;26(11):729–30 (5 ref.)

Analysis of Scottish Duchenne and Becker muscular dystrophy families with dystrophin cDNA probes. Cooke A, et al. **J Med Genet** 1990 May;27(5):292–7

Interstitial deletion of chromosome 4, del(4)(q12q21.1), in a child with multiple congenital abnormalities. Curtis MA, et al. **J Med Genet** 1990 Jan;27(1):64–5

Interstitial deletion, del(4)(q33q35.1), in a mother and two children. Curtis MA, et al. **J Med Genet** 1989 Oct; 26(10):652–4

A new interstitial deletion of 4q (q21.1::q22.1). Fagan K, et al. **J Med Genet** 1989 Oct;26(10):644–7

Del(4)(q33——qter): another case report of a child with mild dysmorphism. Fagan KA, et al. **J Med Genet** 1989 Dec; 26(12):776–8

An apparent de novo terminal deletion of chromosome 2 (pter——p24:). Francis GL, et al. **J Med Genet** 1990 Feb; 27(2):137–8

A Chinese familial growth hormone deficiency with a deletion of 7.1 kb of DNA. He YA, et al. **J Med Genet** 1990 Mar;27(3):151–4

Correlation of clinical and deletion data in Duchenne and Becker muscular dystrophy. Hodgson S, et al. **J Med Genet** 1989 Nov;26(11):682–93

Association of 13q deletion and Hirschsprung's disease [letter; comment] Kiss P, et al. **J Med Genet** 1989 Dec;26(12):793–4 Comment on: J Med Genet 1989 Feb;26(2):100–4.

Smith–Lemli–Opitz syndrome. II: A disorder of the fetal adrenals? McKeever PA, et al. **J Med Genet** 1990 Jul; 27(7):465–6

Duchenne muscular dystrophy in Wales: impact of DNA linkage analysis and cDNA deletion screening. Norman AM, et al. **J Med Genet** 1989 Sep;26(9):565–71

Becker muscular dystrophy: correlation of deletion type with clinical severity. Norman AM, et al. **J Med Genet** 1990 Apr;27(4):236–9

Screening of deletions in the dystrophin gene with the cDNA probes Cf23a, Cf56a, and Cf115. Passos–Bueno MR, et al. **J Med Genet** 1990 Mar;27(3):145–50

Abnormal chromosome complement resulting from a familial inversion of chromosome 2. Richter S, et al. **J Med Genet** 1989 Nov;26(11):725–9

A constitutional 5q23 deletion. Rivera H, et al. **J Med Genet** 1990 Apr;27(4):267–8

Terminal deletion (14)(q32.3): a new case. Telford N, et al. **J Med Genet** 1990 Apr;27(4):261–3 (5 ref.)

Autism, profound mental retardation and atypical bipolar disorder in a 33–year–old female with a deletion of 15q12. Kerbeshian J, et al. **J Ment Defic Res** 1990 Apr;34 (Pt 2):205–10

Defining the structural requirements for a helix in 23 S ribosomal RNA that confers erythromycin resistance. Douthwaite S, et al. **J Mol Biol** 1989 Oct 20;209(4):655–65

Molecular basis of spontaneous mutation at the aprt locus of hamster cells. Phear G, et al. **J Mol Biol** 1989 Oct 20; 209(4):577–82

Presence of two members of c–erbA receptor gene family (c–erbA beta and c–erbA2) in smallest region of somatic homozygosity on chromosome 3p21–p25 in human breast carcinoma [see comments] Ali IU, et al. **J Natl Cancer Inst** 1989 Dec 6;81(23):1815–20 Comment in: J Natl Cancer Inst 1989 Dec 6;81(23):1764–5.

Loss of heterozygosity in breast cancer: cause or effect? [editorial; comment] [see comments] McGuire WL, et al. **J Natl Cancer Inst** 1989 Dec 6;81(23):1764–5 Comment on: J Natl Cancer Inst 1989 Dec 6;81(23):1815–20. Comment in: J Natl Cancer Inst 1990 May 2;82(9):793–5.

Marked amine and amine metabolite changes in Norrie disease patients with an X–chromosomal deletion affecting monoamine oxidase. Murphy DL, et al. **J Neurochem** 1990 Jan;54(1):242–7

Mitochondrial myopathies: divergences of genetic deletions, biochemical defects and the clinical syndromes. Gerbitz KD, et al. **J Neurol** 1990 Feb;237(1):5–10

Deletion screening in patients with Duchenne muscular dystrophy. Wulff K, et al. **J Neurol** 1989 Dec;236(8):470–3

Interstitial deletion of the short arm of chromosome 20 in arteriohepatic dysplasia (Alagille syndrome). Zhang F, et al. **J Pediatr** 1990 Jan;116(1):73–7

Prenatal diagnosis of and midtrimester pathology with

karyotype 46,XY,del(4)(q22q26). A case report. Koppitch FC 3d, et al. **J Reprod Med** 1990 Feb;35(2):182–6
Acute myelocytic leukemia after the use of cyclophosphamide in the treatment of polyarteritis nodosa. Escalante A, et al. **J Rheumatol** 1989 Aug;16(8):1147–9
Ambiguous genitalia, gonadoblastoma, aniridia and mental retardation with deletion of chromosome 11. Martinez-Mora J, et al. **J Urol** 1989 Nov;142(5):1298–300
A 6-month-old Doberman pinscher with ambiguous genitalia as a first case of X-chromosomal monosomy in the dog [letter; comment] Giger U, et al. **J Vet Intern Med** 1989 Oct-Dec;3(4):245 Comment on: J Vet Intern Med 1989 Apr-Jun;3(2):90–5.
Deletions in herpes simplex virus glycoprotein D define nonessential and essential domains. Feenstra V, et al. **J Virol** 1990 May;64(5):2096–102
Neutralization-resistant variants of a neurotropic coronavirus are generated by deletions within the amino-terminal half of the spike glycoprotein. Gallagher TM, et al. **J Virol** 1990 Feb;64(2):731–41
Construction of less neurovirulent polioviruses by introducing deletions into the 5' noncoding sequence of the genome. Iizuka N, et al. **J Virol** 1989 Dec; 63(12):5354–63
Conditional poliovirus mutants made by random deletion mutagenesis of infectious cDNA. Kirkegaard K, et al. **J Virol** 1990 Jan;64(1):185–94
Duck hepatitis B virus can tolerate insertion, deletion, and partial frameshift mutation in the distal pre-S region. Li JS, et al. **J Virol** 1989 Nov;63(11):4965–8
Effects of deletions in the N-terminal basic arm of brome mosaic virus coat protein on RNA packaging and systemic infection. Sacher R, et al. **J Virol** 1989 Nov;63(11):4545–52
Analysis of T4 bacteriophage deletion mutants that lack td and frd genes. Wang Y, et al. **J Virol** 1989 Nov; 63(11):4736–43
A deletion in the Friend spleen focus-forming virus env gene is necessary for its product (gp55) to be leukemogenic. Watanabe N, et al. **J Virol** 1990 Jun;64(6):2678–86
Gene deletions in Japanese patients with Duchenne and Becker muscular dystrophy. Asano J, et al. **Jinrui Idengaku Zasshi** 1990 Jun;35(2):159–68
A case of incomplete DiGeorge syndrome associated with partial monosomy 22q11.1 due to maternal 14;22 translocation. Nukina S, et al. **Jinrui Idengaku Zasshi** 1989 Sep;34(3):235–41
Genotypic differentiation of intrahepatically transplanted hyperplastic nodule cells of analbuminemic and normal rat origin by polymerase chain reaction. Nishikawa Y, et al. **Jpn J Cancer Res** 1990 Aug;81(8):711–4
Philadelphia chromosome-positive chronic myelogenous leukemia with deleted fusion of BCR and ABL genes. Ohyashiki K, et al. **Jpn J Cancer Res** 1990 Jan;81(1):35–42
A deletion mutation within the ligand binding domain is responsible for activation of epidermal growth factor receptor gene in human brain tumors. Yamazaki H, et al. **Jpn J Cancer Res** 1990 Aug;81(8):773–9
Rapid screening for delta F508 deletion in cystic fibrosis [letter] **Lancet** 1989 Dec 2;2(8675):1345–6
Evidence implicating at least two genes on chromosome 17p in breast carcinogenesis. Coles C, et al. **Lancet** 1990 Sep 29;336(8718):761–3
Molecular analysis of aldolase B genes in hereditary fructose intolerance [see comments] Cross NC, et al. **Lancet** 1990 Feb 10;335(8685):306–9 Comment in: Lancet 1990 Apr 7;335(8693):856.
Delta F508 gene deletion in cystic fibrosis in southern Europe [letter] Estivill X, et al. **Lancet** 1989 Dec 9;2(8676):1404
Prenatal detection of major cystic fibrosis mutation [letter] Halley DJ, et al. **Lancet** 1989 Oct 21;2(8669):972
Detection of delta F508 deletion by amplification refractory mutation system [letter] Newton CR, et al. **Lancet** 1990 May 19;335(8699):1217–9
Insulin-resistant diabetes associated with partial deletion of insulin-receptor gene. Shimada F, et al. **Lancet** 1990 May 19;335(8699):1179–81
Monosomy-7 in childhood hemopoietic disorders. Baranger L, et al. **Leukemia** 1990 May;4(5):345–9 (60 ref.)
A simple assay for the screening of the cystic fibrosis allele in carriers of the Phe508 deletion mutation. Chong GL, et al. **Mayo Clin Proc** 1990 Aug;65(8):1072–6
Deletions of chromosomal regions coding for fimbriae and hemolysins occur in vitro and in vivo in various extraintestinal Escherichia coli isolates. Hacker J, et al. **Microb Pathog** 1990 Mar;8(3):213–25
Genetic instability in streptomycetes. Cullum J, et al. **Microbiol Sci** 1988 Aug;5(8):233–5 (15 ref.)
Chromosome 9 from independent clones and isolates of Plasmodium falciparum undergoes subtelomeric deletions with similar breakpoints in vitro. Shirley MW, et al. **Mol Biochem Parasitol** 1990 Apr;40(1):137–45
Analysis of deletions at the human argininosuccinate synthetase locus. Jackson MJ, et al. **Mol Biol Med** 1989 Apr;6(2):179–86
Efficient immortalization by SV40 T DNA of skin fibroblasts from patients with Wilms' tumor associated with chromosome 11p deletion. Kano Y, et al. **Mol Carcinog** 1989;2(6):314–21
Human trk oncogenes activated by point mutation, in-frame deletion, and duplication of the tyrosine kinase domain. Coulier F, et al. **Mol Cell Biol** 1990 Aug;10(8):4202–10
Translocation of an erythroid-specific hypersensitive site in deletion-type hereditary persistence of fetal hemoglobin. Elder JT, et al. **Mol Cell Biol** 1990 Apr;10(4):1382–9
Chromosomal destabilization during gene amplification. Ruiz JC, et al. **Mol Cell Biol** 1990 Jun;10(6):3056–66
Deletion of the kinase insert sequence of the platelet-derived growth factor beta-receptor affects receptor kinase activity and signal transduction. Severinsson L, et al. **Mol Cell Biol** 1990 Feb;10(2):801–9
Molecular analysis of two mouse dilute locus deletion mutations: spontaneous dilute lethal20J and radiation-induced dilute prenatal lethal Aa2 alleles. Strobel MC, et al. **Mol Cell Biol** 1990 Feb;10(2):501–9
Aberrant membrane insertion of a cytoplasmic tail deletion mutant of the hemagglutinin-neuraminidase glycoprotein of Newcastle disease virus. Wilson C, et al. **Mol Cell Biol** 1990 Feb;10(2):449–57
Complete reversions of a gypsy retrotransposon-induced cut locus mutation in Drosophila melanogaster involving jockey transposon insertions and flanking gypsy sequence deletions. Flavell AJ, et al. **Mol Gen Genet** 1990 Jan; 220(2):181–5
The DNA gyrase of Escherichia coli participates in the formation of a spontaneous deletion by recA-independent recombination in vivo. Miura-Masuda A, et al. **Mol Gen Genet** 1990 Feb;220(3):345–52
Mini-Mu mediates deletion-inversions in vivo by intra-transposon transposition. Leach DR, et al. **Mol Microbiol** 1990 Apr;4(4):561–5
Human cells with multiple monosomies. An overlooked resource for readily isolating cells with autosomal recessive mutations? [letter] Busch DB. **Mutagenesis** 1989 Nov; 4(6):486
Overlapping direct repeats stimulate deletions in specially designed derivatives of plasmid pBR325 in Escherichia coli. Balbinder E, et al. **Mutat Res** 1989 Oct;214(2):233–52
Comparison of the nucleotide sequences of a yeast gene family. II. Analysis of spontaneous deletions and insertions. Gozalbo D, et al. **Mutat Res** 1989 Nov;215(1):89–94
Detection of deletions, insertions and single nucleotide substitutions in cloned beta-globin genes and new polymorphic nucleotide substitutions in beta-globin genes in a Japanese population using ribonuclease cleavage at mismatches in RNA:DNA duplexes. Hiyama K, et al. **Mutat Res** 1990 Aug;231(2):219–31
Deletions of interferon genes in acute lymphoblastic leukemia [see comments] Diaz MO, et al. **N Engl J Med** 1990 Jan 11;322(2):77–82 Comment in: N Engl J Med 1990 Jul 12;323(2):131–2.
Deletions of interferon genes in acute lymphoblastic leukemia [letter; comment] Graham WR. **N Engl J Med** 1990 Jul 12;323(2):131–2 Comment on: N Engl J Med 1990 Jan 11;322(2):77–82.
Mitochondrial DNA deletions and ophthalmoplegia [letter; comment] Sensi A, et al. **N Engl J Med** 1990 Mar 8; 322(10):701 Comment on: N Engl J Med 1989 May 18;320(20):1293–9.
PCR test for cystic fibrosis deletion [letter] Ballabio A, et al. **Nature** 1990 Jan 18;343(6255):220
Very mild muscular dystrophy associated with the deletion of 46% of dystrophin. England SB, et al. **Nature** 1990 Jan 11;343(6254):180–2
Homozygous deletion in Wilms tumours of a zinc-finger gene identified by chromosome jumping. Gessler M, et al. **Nature** 1990 Feb 22;343(6260):774–8
Hereditary spherocytosis associated with deletion of human erythrocyte ankyrin gene on chromosome 8. Lux SE, et al. **Nature** 1990 Jun 21;345(6277):736–9
New data on excisions of Mu from E. coli MCS2 cast doubt on directed mutation hypothesis [see comments] Mittler JE, et al. **Nature** 1990 Mar 8;344(6262):173–5 Comment in: Nature 1990 May 17;345(6272):213.
Additional deletion in sex-determining region of human Y chromosome resolves paradox of X,t(Y;22) female [see comments] Page DC, et al. **Nature** 1990 Jul 19; 346(6281):279–81 Comment in: Nature 1990 Jul 19;346(6281):216–7.
Familial X-linked myalgia and cramps: a nonprogressive myopathy associated with a deletion in the dystrophin gene. Gospe SM Jr, et al. **Neurology** 1989 Oct;39(10):1277–80
mtDNA deletions in Kearns-Sayre [letter] Johns DR. **Neurology** 1990 Aug;40(8):1322–3
Monoamine oxidase deficiency in males with an X chromosome deletion. Sims KB, et al. **Neuron** 1989 Jan; 2(1):1069–76
Sequence microheterogeneity is generated at junctions of programmed DNA deletions in Tetrahymena thermophila. Austerberry CF, et al. **Nucleic Acids Res** 1989 Sep 25; 17(18):7263–72
Four-base-pair deletion polymorphism at D5S71 (C11p11) linked to APC in the human chromosome 5q21-q22 region. Breukel C, et al. **Nucleic Acids Res** 1989 Dec 25; 17(24):10512
GST1 gene deletion determined by polymerase chain reaction. Comstock KE, et al. **Nucleic Acids Res** 1990 Jun 25;18(12):3670
Internal deletion mutants of Xenopus transcription factor IIIA. Hanas JS, et al. **Nucleic Acids Res** 1989 Dec 11; 17(23):9861–70
Catalytic activity is retained in the Tetrahymena group I intron despite removal of the large extension of element P5. Joyce GF, et al. **Nucleic Acids Res** 1989 Oct 11; 17(19):7879–89
Recombination via flanking direct repeats is a major cause of large-scale deletions of human mitochondrial DNA. Mita S, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):561–7
Mapping of heteroplasmic mitochondrial DNA deletions in Kearns-Sayre syndrome. Nelson I, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8117–24
Polymerase chain reaction based assay to detect allelic loss in human DNA: loss of beta-interferon gene in chronic myelogenous leukemia. Neubauer A, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):993–8
A BanI RFLP at a deletion hotspot in the human dystrophin gene. Read AP, et al. **Nucleic Acids Res** 1990 Jan 25; 18(2):385
The presence of the region on pBR322 that encodes resistance to tetracycline is responsible for high levels of plasmid DNA knotting in Escherichia coli DNA topoisomerase I deletion mutant. Shishido K, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):9749–59
Molecular cloning of the breakpoint region on chromosome 6 in cutaneous malignant melanoma: evidence for deletion in the c-myb locus and translocation of a segment of chromosome 12. Dasgupta P, et al. **Oncogene** 1989 Oct; 4(10):1201–5
The chromosome 11 region flanking the t(11;14) breakpoint in human T-ALL is deleted in Wilms' tumor hybrids. Finver SN, et al. **Oncogene Res** 1989;5(2):143–8
Heart disease associated with deletion of the short arm of chromosome 18. Pearl W. **Pediatr Cardiol** 1989 Summer; 10(3):174–6 (30 ref.)
Studies on the relationship between chromosome No15 and the biological characteristics of malignant transformed Syrian hamster fibroblast cell lines. Li S, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1990; 5(1):43–6
Deletion of stably integrated DNA is suppressed by cadmium and zinc. Abrams JM, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9380–4
Altered phenotypic expression of immunoglobulin heavy-chain variable-region (VH) genes in Alicia rabbits probably reflects a small deletion in the VH genes closest to the joining region. Allegrucci M, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5444–8
Regeneration of a functional RNA virus genome by recombination between deletion mutants and requirement for cowpea chlorotic mottle virus 3a and coat genes for systemic infection. Allison R, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1820–4
N-acetylation pharmacogenetics: a gene deletion causes absence of arylamine N-acetyltransferase in liver of slow acetylator rabbits. Blum M, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9554–7
Localization of the MEN1 gene to a small region within chromosome 11q13 by deletion mapping in tumors. Byström C, et al. **Proc Natl Acad Sci U S A** 1990 Mar; 87(5):1968–72
Constructing deletions with defined endpoints in Drosophila. Cooley L, et al. **Proc Natl Acad Sci U S A** 1990 Apr; 87(8):3170–3
Chromosomal jumping from the DXS165 locus allows molecular characterization of four microdeletions and a de novo chromosome X/13 translocation associated with choroideremia. Cremers FP, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7510–4
Complementation of adenovirus virus-associated RNA I gene deletion by expression of a mutant eukaryotic translation initiation factor. Davies MV, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9163–7
Gamma delta beta-thalassemia due to a de novo mutation deleting the 5' beta-globin gene activation-region hypersensitive sites. Driscoll MC, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7470–4
Z-DNA-forming sequences are spontaneous deletion hot spots. Freund AM, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7465–9
Characterization of the human growth hormone receptor gene and demonstration of a partial gene deletion in two patients with Laron-type dwarfism. Godowski PJ, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):8083–7
Directly repeated sequences associated with pathogenic mitochondrial DNA deletions. Johns DR, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):8059–62
Molecular mapping within the mouse albino-deletion complex. Johnson DK, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8862–6
Internal deletions in the yeast transcriptional activator HAP1 have opposite effects at two sequence elements. Kim KS, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4524–8
Mutations in the bglY gene increase the frequency of spontaneous deletions in Escherichia coli K-12. Lejeune P, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(1):360–3
Chromosome 17p deletions and p53 gene mutations associated with the formation of malignant neurofibrosarcomas in von Recklinghausen neurofibromatosis. Menon AG, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5435–9
Detection of "deleted" mitochondrial genomes in cytochrome-c oxidase-deficient muscle fibers of a patient with Kearns-Sayre syndrome. Mita S, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9509–13
Peripheral tolerance to allogeneic class II histocompatibility antigens expressed in transgenic mice: evidence against a clonal-deletion mechanism. Murphy KM, et al.

Proc Natl Acad Sci U S A 1989 Dec;86(24):10034–8
Dysfunctional C1 inhibitor Ta: deletion of Lys–251 results in acquisition of an N–glycosylation site. Parad RB, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6786–90
Broad spectrum of in vivo forward mutations, hypermutations, and mutational hotspots in a retroviral shuttle vector after a single replication cycle: deletions and deletions with insertions. Pathak VK, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6024–8
Generation of deletion derivatives by targeted transformation of human–derived yeast artificial chromosomes. Pavan WJ, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1300–4
Molecular studies of deletions at the human steroid sulfatase locus. Shapiro LJ, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8477–81
Spontaneous Kearns–Sayre/chronic external ophthalmoplegia plus syndrome associated with a mitochondrial DNA deletion: a slip–replication model and metabolic therapy. Shoffner JM, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(20):7952–6
Genesis by meiotic unequal crossover of a de novo deletion that contributes to steroid 21–hydroxylase deficiency. Sinnott P, et al. **Proc Natl Acad Sci U S A** 1990 Mar; 87(6):2107–11
Clusters of intragenic Alu repeats predispose the human C1 inhibitor locus to deleterious rearrangements. Stoppa–Lyonnet D, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1551–5
Genomic subtraction for cloning DNA corresponding to deletion mutations. Straus D, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1189–93
Amplification–control element ACE–3 is important but not essential for autosomal chorion gene amplification. Swimmer C, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(22):8823–7
An unusual insertion/deletion in the gene encoding the beta–subunit of propionyl–CoA carboxylase is a frequent mutation in Caucasian propionic acidemia. Tahara T, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1372–6
Role for the Wilms tumor gene in genital development? van Heyningen V, et al. **Proc Natl Acad Sci U S A** 1990 Jul; 87(14):5383–6
CpG island clones from a deletion encompassing the gene for adenomatous polyposis coli. Varesco L, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10018–22
Preferential loss of chromosomes containing amplified DNA regions in cultured cells. Bonatti S, et al. **Prog Clin Biol Res** 1989;318:271–6
Z–forming DNA sequences are deletion hot–spots. Freund AM, et al. **Prog Clin Biol Res** 1990;340A:41–9
Cytogenetic and molecular analysis of the deletions of chromosome 5 in myeloid disorders. Le Beau MM. **Prog Clin Biol Res** 1990;352:277–85
Meiotic effects of a mutator in Drosophila melanogaster that potentiates the recovery of terminal deletions. Mason JM, et al. **Prog Clin Biol Res** 1989;318:73–80
Identification of a chromosome 18q gene that is altered in colorectal cancers. Fearon ER, et al. **Science** 1990 Jan 5; 247(4938):49–56
Spontaneous CHO APRT heterozygotes reflect high–frequency, allele–specific deletion of the chromosome Z4 APRT gene. Adair GM, et al. **Somat Cell Mol Genet** 1989 Nov;15(6):535–44
A fine–structure deletion map of human chromosome 11p: analysis of J1 series hybrids. Glaser T, et al. **Somat Cell Mol Genet** 1989 Nov;15(6):477–501
Chromosomal evolution in secretory and nonsecretory subline of MOPC 21. Lambson BE, et al. **Somat Cell Mol Genet** 1990 Jan;16(1):91–5
Ivemark's "asplenia" syndrome: a single gene disorder. McChane RH, et al. **South Med J** 1989 Oct;82(10):1312–3
Teratogen susceptibility of XO mothers and XO embryos in mice. Endo A, et al. **Teratology** 1989 Nov;40(5):525–9
An improved method to make sequential deletion mutants for DNA sequencing. Nakayama K, et al. **Trends Genet** 1989 Oct;5(10):325
Transformation–defective mutants with 5' deletions of the src gene are frequently generated during replication of Rous sarcoma virus in established quail fibroblasts. Barnier JV, et al. **Virology** 1990 Aug;177(2):505–14
Deletion of repeated sequences from tobacco mosaic virus mutants with two coat protein genes. Beck DL, et al. **Virology** 1990 Aug;177(2):462–9
Targeted deletion mutagenesis of the beta subunit of cytochrome b559 protein destabilizes the reaction center of photosystem II. Pakrasi HB, et al. **Z Naturforsch [C]** 1990 May;45(5):423–9
[G–banding and high resolution chromosome study of a human lung adenocarcinoma cell line LGC–7910] Guo LR. **Chung Hua Chung Liu Tsa Chih** 1990 Jan;12(1):15–7 {Eng. Abstr.) **(Chi)**
[Studies on mechanism of carcinogenesis in vitro. IV. Studies on relationship between frequency of chromosome 15 monosomy and malignant expression of different clones from malignantly transformed baby hamster lung cells (BHL B4)] Li S. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1990 Apr; 12(2):126–30 (Eng. Abstr.) **(Chi)**
[An application of oligonucleotide–directed mutagenesis on making deletion mutation] Wei N, et al. **I Chuan Hsueh Pao** 1990;17(1):63–9 (Eng. Abstr.) **(Chi)**
[Deletion of the long arm of chromosome 18, primary hypothyroidism, Biermer's anemia and IgM hypogammaglobulinemia] Henrot B, et al. **Arch Fr Pediatr** 1989 Dec;46(10):729–32 (Eng. Abstr.) **(Fre)**
[Neonatal primary hyperparathyroidism, parathyroid adenoma, chromosomal deletion: an approach to localizing the gene? (letter)] Mettey R, et al. **Arch Fr Pediatr** 1990 Apr;47(4):313 **(Fre)**
[Nucleotide mapping and a kinetic model of a heteroplasmic deletion of 4,666 base pairs from mitochondrial DNA in the Kearns–Sayre syndrome] Nelson I, et al. **C R Acad Sci [III]** 1989;309(10):403–7 (Eng. Abstr.) **(Fre)**
[Detection of deletions by the amplification of exons (multiplex PCR) in Duchenne muscular dystrophy] Claustres M, et al. **J Genet Hum** 1989 Sep;37(3):251–7 (Eng. Abstr.) **(Fre)**
[Proximal trisomy 19q. Interstitial deletion and ring chromosome derived from 19q] Klein F, et al. **Pediatrie** 1989;44(9):717–20 (Eng. Abstr.) **(Fre)**
[Suppressor genes in the malignant transformation and genic deletions in human cancers] Frebourg T. **Presse Med** 1989 Oct 7;18(31):1519–22 (Eng. Abstr.) **(Fre)**
[The mitochondrial genome and its deletions (letter)] Nitsch J. **Dtsch Med Wochenschr** 1990 Sep 7;115(36):1373 **(Ger)**
[The mitochondrial genome and its deletions as a cause of disease] Reichmann H, et al. **Dtsch Med Wochenschr** 1990 Jun 22;115(25):980–3 (12 ref.) **(Ger)**
[Ophthalmoplegia–plus: clinical variability, biochemical defects of the mitochondria respiratory chain and deletions of the mitochondria genome] Zierz S, et al. **Nervenarzt** 1990 Jun;61(6):332–9 **(Ger)**
[Sipple's syndrome. Review of the literature and personal case load] Lamberto M, et al. **Minerva Endocrinol** 1989 Oct–Dec;14(4):199–205 (41 ref.) (Eng. Abstr.) **(Ita)**
[Monosomy 5 (–5), deletion of the long arm of chromosome 6 (6q) and acquisition of a chromosome 21 (+21) in a boy with acute leukemia at high–risk] Burattini MG, et al. **Minerva Pediatr** 1989 Jul;41(7):379–82 (Eng. Abstr.) **(Ita)**
[Oncogenes and malignant hemopathies] Pogliani EM, et al. **Recenti Prog Med** 1989 Oct;80(10):526–30 (20 ref.) (Eng. Abstr.) **(Ita)**
[Mitochondrial encephalomyopathy] Scarlato G, et al. **Recenti Prog Med** 1989 Dec;80(12):665–72 (Eng. Abstr.) **(Ita)**
[Recent trend in the research of hyperlipidemia in Japan. Three mutations including two deletions of the low density lipoprotein receptor gene in Japanese patients with homozygous familial hypercholesterolemia] Funahashi T, et al. **Nippon Naika Gakkai Zasshi** 1989 Oct;78(10):1406–7 **(Jpn)**
[Two siblings with interstitial deletion of chromosome 14 [46 XX, del (14) (q12 q13.3)]] Kodama M, et al. **No To Hattatsu** 1990 Jan;22(1):61–5 (Eng. Abstr.) **(Jpn)**
[Partial deletion of alpha–galactosidase A gene in a Japanese mutant of Fabry disease] Sakuraba H, et al. **No To Hattatsu** 1990 May;22(3):247–52 (Eng. Abstr.) **(Jpn)**
[Philadelphia–positive acute mixed leukemia with monosomy 7] Futaki M, et al. **Rinsho Ketsueki** 1989 Nov; 30(11):1997–2001 (Eng. Abstr.) **(Jpn)**
[The 5q–syndrome—report of two cases] Koyama A, et al. **Rinsho Ketsueki** 1989 May;30(5):707–12 (Eng. Abstr.) **(Jpn)**
[Human growth hormone gene deletion] Matsuda I. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):900–2 **(Jpn)**
[Molecular nature of oncogene HRAS1 damage in human breast carcinoma: G——T transversion in codon 12 of one allele during deletion of other allele] Kniazev PG, et al. **Bioorg Khim** 1990 Mar;16(3):419–23 (Eng. Abstr.) **(Rus)**
[Obtaining unidirectional deletions in a plasmid using a DNA–"protector" and Bal31 exonuclease] Nurminskiĭ DI, et al. **Bioorg Khim** 1989 Aug;15(8):1137–9 (Eng. Abstr.) **(Rus)**
[Structure of the recombination zone during abnormal excision of the transducing bacteriophage lambda plac9] Shpakovskiĭ GV, et al. **Bioorg Khim** 1989 Jul; 15(7):997–1000 (Eng. Abstr.) **(Rus)**
[Restriction analysis of deletions and deletion mapping of point mutations in the ADE2 gene of Saccharomyces cerevisiae yeasts] Gracheva LM, et al. **Genetika** 1989 Aug; 25(8):1356–63 (Eng. Abstr.) **(Rus)**
[The effect of high temperature on the frequency of nondisjunction and loss of sex chromosomes in females of Drosophila melanogaster strain I(1)ts403 with a defect in the heat shock protein system] Mamon LA, et al. **Genetika** 1990 Mar;26(3):554–6 (Eng. Abstr.) **(Rus)**
[Heterochromatin of the Y–chromosome and variability of human morphophysiological traits] Nazarenko SA, et al. **Genetika** 1989 Jul;25(7):1286–93 (Eng. Abstr.) **(Rus)**
[Jacob's syndrome (2 case reports)] Sršeň S, et al. **Cesk Pediatr** 1989 Jul;44(7):420–2 **(Slo)**
[Partial trisomy 14 and monosomy 21. Report of a case] Campos Tristán C, et al. **An Esp Pediatr** 1989 Jul;31(1):81–2 **(Spa)**
[Use of dystrophin c–DNA for the direct diagnosis of Duchenne muscular dystrophy in female carriers] Baiget M, et al. **Neurologia** 1989 Oct;4(8):268–76 (Eng. Abstr.) **(Spa)**
[Chromosomes and cancer of the colon (editorial)] De Juan Martín M. **Rev Esp Enferm Apar Dig** 1989 Nov;76(5):473 **(Spa)**

CHROMOSOME FRAGILE SITES

Fragility of the centromeric region of chromosome 1 associated with combined immunodeficiency in siblings. A recessively inherited entity? Fasth A, et al. **Acta Paediatr Scand** 1990 Jun–Jul;79(6–7):605–12
Genetic determination of fragile–site expression. Smeets D, et al. **Am J Hum Genet** 1990 Aug;47(2):196–201
Deletions in chromosome 2 and fragile sites. Palmer CG, et al. **Am J Med Genet** 1990 Jun;36(2):214–8
Analysing rearrangement breakpoint distributions by means of binomial confidence intervals. Vasarhelyi K, et al. **Ann Hum Genet** 1989 Oct;53 (Pt 4):375–80
Detection of rearrangement within the breakpoint cluster region of chromosome 22 in the diagnosis of chronic myeloid leukemia. Hutchins C, et al. **Aust N Z J Med** 1989 Oct;19(5):443–8
Fragile X syndrome. Reiss AL, et al. **Biol Psychiatry** 1990 Jan 15;27(2):223–40 (74 ref.)
Chromosome instability in bladder carcinoma patients. Barrios L, et al. **Cancer Genet Cytogenet** 1990 Oct 1; 49(1):107–11
Clonal duplication of the Y chromosome and fra(X)(q28) in a case of epidermoid carcinoma of the esophagus. Casalone R, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):269–71
Common fragile sites in chromosomes of bone marrow cells and peripheral blood lymphocytes from healthy persons and leukemia patients. Furuya T, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):131–8
A guide to fragile sites on human chromosomes. Hecht F, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):37–45
Location of FRAXD in Xq27.2. Fragile sites on the X chromosome. Hecht F, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):137–8
The expression frequency of common fragile sites and genetic susceptibility to lung cancers. Liu CX, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):107–14
No significant increase in spontaneous and ethyl methane sulfonate–induced sister chromatid exchanges at the Xq27.3 fragile site. Lukusa T, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):87–94
Patients with different lung cancers show normal expression of fra(3)(p14.2) in aphidicolin–treated lymphocyte cultures. Porfirio B, et al. **Cancer Genet Cytogenet** 1989 Nov; 43(1):95–101
Folate–sensitive fragile sites in Chinese hamster cell lines. Simi S, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):209–16
Chromosome abnormalities and fragile sites in human melanoma. Sozzi G, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):61–7
The cis–configuration effects of rare chromosomal fragile sites. Côté GB. **Clin Genet** 1990 Jun;37(6):470–2
The common fragile site in band q27 of the human X chromosome is not coincident with the fragile X. Sutherland GR, et al. **Clin Genet** 1990 Mar;37(3):167–72
Expression and distribution of aphidicolin–induced fragile sites in chronic myeloid leukaemia, acute lymphocytic leukaemia and acute myeloid leukaemia. Stopera SA, et al. **Cytobios** 1989;60(241):103–9
Common fragile sites in man and three closely related primate species. Smeets DF, et al. **Cytogenet Cell Genet** 1990; 53(1):8–14
Fragile sites induced by 5–azacytidine and 5–azadeoxycytidine in the murine genome. Djalali M, et al. **Hereditas** 1990;112(1):77–81
Autosomal fragile site at 2q13 in a proband with mental retardation. Kumada T, et al. **Hiroshima J Med Sci** 1990 Mar;39(1):19–21
Fragile sites and statistics [letter; comment] De Braekeleer M. **Hum Genet** 1989 Dec;84(1):103–4 Comment on: Hum Genet 1989 Mar;81(4):319–22.
Cell type–dependent difference in the distribution and frequency of excess thymidine–induced common fragile sites: T lymphocytes and skin fibroblasts. Kuwano A, et al. **Hum Genet** 1990 May;84(6):527–31
Improved fragile site detection with trimethoprim. McLean DA, et al. **Hum Genet** 1990 Jul;85(2):241–3
Cell type–dependent difference in the distribution and frequency of aphidicolin–induced fragile sites: T and B lymphocytes and bone marrow cells. Murano I, et al. **Hum Genet** 1989 Dec;84(1):71–4
Viral integration, fragile sites, and proto–oncogenes in human neoplasia. Popescu NC, et al. **Hum Genet** 1990 Apr; 84(5):383–6
Correlation of fragile sites and bleomycin induced chromosome break points. Murthy SK, et al. **Indian J Exp Biol** 1989 May;27(5):442–4
Nuclear enzymes, fragile sites, and cancer. Yunis JJ, et al. **J Gerontol** 1989 Nov;44(6):37–44
Cosegregation of hypertrophic cardiomyopathy and a fragile site on chromosome 16 in a large Italian family. Ferraro M, et al. **J Med Genet** 1990 Jun;27(6):363–6
Young adults with head and neck cancer express increased susceptibility to mutagen–induced chromosome damage. Schantz SP, et al. **JAMA** 1989 Dec 15;262(23):3313–5
Subtelomeric breakage and chromosome exchange [letter; comment] Hultén MA, et al. **Lancet** 1989 Dec 16; 2(8677):1449 Comment on: Lancet 1989 Oct 7;2(8667):819–24.
Possible evidence for acquired genetic activity at both

chromosomal breakpoints of the Philadelphia translocation in chronic myeloid leukemia. Yamada T, et al. **Leukemia** 1990 May;4(5):341–4

Vitamin C intake influences the bleomycin–induced chromosome damage assay: implications for detection of cancer susceptibility and chromosome breakage syndromes. Pohl H, et al. **Mutat Res** 1989 Oct;224(2):247–52

Fragile site analysis: its significance in environmental mutagenesis. Ahuja YR. **Prog Clin Biol Res** 1990; 340B:371–84 (57 ref.)

[Fragile sites of cultured peripheral blood lymphocyte chromosomes in patients with gestational trophoblastic tumor] Xu C. **Chung Hua Fu Chan Ko Tsa Chih** 1990 May; 25(3):159–61, 189 (Eng. Abstr.) **(Chi)**

[A preliminary investigation of human chromosomal fragile site 3p14 using scanning electron microscopy (SEM)] Cao LR, et al. **I Chuan Hsueh Pao** 1989;16(6):483–5 (Eng. Abstr.) **(Chi)**

[Study on common fragile sites in chorionic villi cells cultured in vitro] Ning E, et al. **I Chuan Hsueh Pao** 1989; 16(2):159–65 (Eng. Abstr.) **(Chi)**

[The types and breakpoints of somatic chromosome aberrations in small cell lung cancer (SCLC) patients and heavy smokers] Su YA, et al. **I Chuan Hsueh Pao** 1988; 15(2):150–60 (Eng. Abstr.) **(Chi)**

[Comparison of the common fragile sites and G–banding patterns of chromosomes among rhesus monkeys, white–eyebrow gibbons and human being] Wang Y, et al. **I Chuan Hsueh Pao** 1989;16(3):188–96 (Eng. Abstr.) **(Chi)**

[The fragile X chromosome] Yokoyama Y, et al. **Rinsho Byori** 1989 Feb;Spec No 80:129–37 **(Jpn)**

[Chromosome fragility as the cause of mental retardation] Fortun B. **Tidsskr Nor Laegeforen** 1989 Sep 10;109(25):2587 **(Nor)**

[Expression of new fragile sites detected in lymphoproliferative processes] Fundia AF, et al. **Sangre (Barc)** 1990 Feb;35(1):4–9 (Eng. Abstr.) **(Spa)**

CHROMOSOME MAPPING

Towards a physical map of the Listeria chromosome: the pulsed field electrophoresis approach. Vicente MF, et al. **Acta Microbiol Hung** 1989;36(2–3):193–7

Gene mapping in cystic fibrosis and its clinical applications. Williamson R. **Acta Paediatr Scand Suppl** 1989;363:7–9 (16 ref.)

Prolapse of the posterior leaflet of the mitral valve: chromosome studies in three sisters. Stannard M, et al. **Am Heart J** 1968 Feb;75(2):282–3

Mapping dysmorphic syndromes with the aid of the human/mouse homology map [comment] Erickson RP. **Am J Hum Genet** 1990 Jun;46(6):1013–6 (30 ref.) Comment on: Am J Hum Genet 1990 Jun;46(6):1017–23.

Genetic loci ordering instability: an example. Falk H, et al. **Am J Hum Genet** 1990 Jun;46(6):1156–7

Molecular studies of DiGeorge syndrome. Fibison WJ, et al. **Am J Hum Genet** 1990 May;46(5):888–95

Genomic imprinting: review and relevance to human diseases. Hall JG. **Am J Hum Genet** 1990 May;46(5):857–73 (106 ref.)

Order of genes on human chromosome 5q with respect to 5q interstitial deletions. Huebner K, et al. **Am J Hum Genet** 1990 Jan;46(1):26–36

Monte Carlo comparison of preliminary methods for ordering multiple genetic loci. Olson JM, et al. **Am J Hum Genet** 1990 Sep;47(3):470–82

Genetic counseling in rare syndromes: a resampling method for determining an approximate confidence interval for gene location with linkage data from a single pedigree. Suthers GK, et al. **Am J Hum Genet** 1990 Jul;47(1):53–61

Human Xq24–Xq28: approaches to mapping with yeast artificial chromosomes. Wada M, et al. **Am J Hum Genet** 1990 Jan;46(1):95–106

Gene mapping and cystic fibrosis. Barker PE. **Am J Med Sci** 1990 Jan;299(1):69–72 (25 ref.)

Neonatal hemochromatosis. Genetic analysis of transferrin–receptor, H–apoferritin, and L–apoferritin loci and of the human leukocyte antigen class I region. Hardy L, et al. **Am J Pathol** 1990 Jul;137(1):149–53

Mapping introns by exon excision. Leone A, et al. **Anal Biochem** 1989 Nov 15;183(1):64–73

21st International Conference on Animal Blood Groups and Biochemical Polymorphisms. Turin, Italy, 4–8 July 1988. Invited papers. **Anim Genet** 1989;20(3):324–50

Mapping human disease–associated genes. Ferguson–Smith MA. **Anim Genet** 1989;20(3):332–4

Strategies for the development of a bovine gene map. Womack JE. **Anim Genet** 1989;20(3):330–1

Cloning and chromosomal mapping of human cytochrome b5 reductase (DIA1). Bull PC, et al. **Ann Hum Genet** 1988 Oct;52 (Pt 4):263–8

The locus positioning problem. Edwards JH. **Ann Hum Genet** 1989 Jul;53 (Pt 3):271–5

Multilocus ordering strategies based on sperm typing. Goradia TM, et al. **Ann Hum Genet** 1990 Jan;54 (Pt 1):49–77

Chromosomal mapping of a human phenol UDP–glucuronosyltransferase, GNT1. Harding D, et al. **Ann Hum Genet** 1990 Jan;54 (Pt 1):17–21

Multipoint mapping and the emperor's clothes. Morton NE. **Ann Hum Genet** 1988 Oct;52 (Pt 4):309–18

Chromosome maps of man and mouse. IV. Searle AG, et al. **Ann Hum Genet** 1989 May;53 (Pt 2):89–140 (266 ref.)

Some simple methods for linkage analysis. Smith CA. **Ann Hum Genet** 1989 Jul;53 (Pt 3):277–83

R–banding and in situ hybridization localization of single copy genes on high resolution banded chromosomes. Rønne M, et al. **Anticancer Res** 1990 Mar–Apr; 10(2A):375–7

Application of an efficient strategy with a phage lambda vector for constructing a physical map of the amyloplast genome of sycamore (Acer pseudoplatanus). Ngernprasirtsiri J, et al. **Arch Biochem Biophys** 1990 Jan; 276(1):172–9

Mapping and characterization of neutralizing epitopes of glycoproteins gIII and gp50 of the Indiana–Funkhauser strain of pseudorabies virus. Coe NE, et al. **Arch Virol** 1990; 110(1–2):137–42

Mapping of viral epitopes with prokaryotic expression products. Lenstra JA, et al. **Arch Virol** 1990;110(1–2):1–24 (142 ref.)

Gene mapping of infectious bovine rhinotracheitis viral DNA genome. Simard C, et al. **Arch Virol** 1990;110(1–2):63–75

Gene mapping in marsupials and monotremes, V. Synteny between hypoxanthine phosphoribosyltransferase and phosphoglycerate kinase in the platypus. Watson JM, et al. **Aust J Biol Sci** 1988;41(2):231–7

Assignment of a gene encoding ornithine decarboxylase to the proximal region of chromosome 12 in the mouse. Berger FG. **Biochem Genet** 1989 Dec;27(11–12):745–53

Genetic and synteny mapping of parathyroid hormone and beta hemoglobin in cattle. Foreman ME, et al. **Biochem Genet** 1989 Oct;27(9–10):541–50

Mapping of the Es–4 locus and linear order of esterase genes (linkage group V; LGV) in the rat. Katoh H, et al. **Biochem Genet** 1989 Dec;27(11–12):641–6

The adenosine 2 locus of Drosophila melanogaster: clarification of the map position and eye phenotype of the ade2 mutant. Keizer C, et al. **Biochem Genet** 1989 Jun; 27(5–6):349–53

Novel restriction fragment length polymorphism of the growth hormone gene in inbred rats. Kunieda T, et al. **Biochem Genet** 1989 Oct;27(9–10):591–602

Mapping of the Hox–3.1 and Myc–1.2 genes on chromosome 15 of the mouse by restriction fragment length variations. Watanabe T, et al. **Biochem Genet** 1990 Jun;28(5–6):257–66

Restriction fragment length variations and chromosome mapping of two mouse metallothionein genes, Mt–1 and Mt–2. Watanabe T, et al. **Biochem Genet** 1989 Dec; 27(11–12):689–97

Chromosomal assignment of the gene for the ubiquinone–binding protein of human mitochondrial cytochrome bc1 complex. Hosokawa Y, et al. **Biochem Int** 1990;21(1):41–4

Isolation and characterization of the mouse liver/bone/kidney–type alkaline phosphatase gene. Terao M, et al. **Biochem J** 1990 Jun 15;268(3):641–8

Molecular analysis of the murine C4b–binding protein gene. Chromosome assignment and partial gene organization. Barnum SR, et al. **Biochemistry** 1989 Oct 17;28(21):8312–7

Short cuts for genomic walking: chromosome microdissection and the polymerase chain reaction. Saunders RD. **Bioessays** 1990 May;12(5):245–8 (39 ref.)

The human immunoglobulin kappa locus and some of its acrobatics. A review presented on the occasion of receiving the "Otto–Warburg–Medaille" of Gesellschaft für Biologische Chemie at Osnabrück on September 13, 1989. Zachau HG. **Biol Chem Hoppe Seyler** 1990 Jan;371(1):1–6 (19 ref.)

On the possibility of obtaining a physical map of genomes by photoelectron imaging. Griffith OH, et al. **Biophys J** 1990 May;57(5):935–41

Mapping unprocessed epitopes using deletion mutagenesis of gene fusions. Gross CH, et al. **Biotechniques** 1990 Feb; 8(2):196–202

Rapid Hfr mapping of Mu dlac fusions. Peruski LF Jr. **Biotechniques** 1990 Jul;9(1):40, 42

Restriction fragment length polymorphism (RFLP): applications in human chromosome mapping and genetic disease research. Watkins PC. **Biotechniques** 1988 Apr; 6(4):310–9, 322

The position of the M–BCR breakpoint does not predict the duration of chronic phase or survival in chronic myeloid leukemia. Jaubert J, et al. **Br J Haematol** 1990 Jan; 74(1):30–5

Concordance by sex in sibling pairs with schizophrenia is paternally inherited. Evidence for a pseudoautosomal locus [see comments] Crow TJ, et al. **Br J Psychiatry** 1989 Jul; 155:92–7 Comment in: Br J Psychiatry 1990 Mar;156:415–6.

Cancer and the human chromosome (Part 1). **Cancer Cells** 1989 Dec;1(4):111–8

A guide to fragile sites on human chromosomes. Hecht F, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):37–45

Location of FRAXD in Xq27.2. Fragile sites on the X chromosome. Hecht F, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):137–8

Genetic linkage and physical mapping of a cancer gene. Ataxia–telangiectasia [editorial; comment] Hecht F. **Cancer Genet Cytogenet** 1990 May;46(1):133–4 Comment on: Cancer Genet Cytogenet 1990 May;46(1):1–8.

A murine plasmacytoma with a variant (15;16)(D2/3;B1) translocation that involves the c–myc and lambda light chain gene–carrying chromosomes. Sugiyama H, et al. **Cancer Genet Cytogenet** 1990 May;46(1):93–7

Chromosome mapping using polymerase chain reaction on somatic cell hybrids. Zhang J, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):217–21

Two chromosomal locations for human ornithine decarboxylase gene sequences and elevated expression in colorectal neoplasia. Radford DM, et al. **Cancer Res** 1990 Oct 1;50(19):6146–53

11p13–15 is a specific region of chromosomal rearrangement in gastric and esophageal adenocarcinomas. Rodriguez E, et al. **Cancer Res** 1990 Oct 1;50(19):6410–6

Molecular cytogenetics: Rosetta stone for understanding cancer—twenty–ninth G. H. A. Clowes memorial award lecture. Rowley JD. **Cancer Res** 1990 Jul 1;50(13):3816–25 (69 ref.)

Mapping of the Hor2 locus in barley by pulsed field gel electrophoresis. Sørensen MB. **Carlsberg Res Commun** 1989;54(3):109–20

Genetic changes in skin tumor progression: correlation between presence of a mutant ras gene and loss of heterozygosity on mouse chromosome 7. Bremner R, et al. **Cell** 1990 May 4;61(3):407–17

Mitochondrial diseases: gene mapping and gene therapy. Lander ES, et al. **Cell** 1990 Jun 15;61(6):925–6 (15 ref.)

On the origins of tandemly repeated genes: does histone gene copy number in Drosophila reflect chromosomal location? Fitch DH, et al. **Chromosoma** 1990 Apr;99(2):118–24

The chromosomal distribution of the major and minor satellite is not conserved in the genus Mus. Wong AK, et al. **Chromosoma** 1990 Jul;99(3):190–5

Comparison of the three PLAP–related genes on human chromosome 2. Martin D, et al. **Clin Chim Acta** 1990 Jan 15;186(2):165–70

Retinitis pigmentosa: genetic mapping in X–linked and autosomal forms of the disease. Humphries P, et al. **Clin Genet** 1990 Jul;38(1):1–13 (56 ref.)

Families with X–linked liver glycogenosis due to phosphorylase kinase deficiency [letter] Willems P. **Clin Genet** 1990 Jul;38(1):80

A gene mapping expert system. Galland J, et al. **Comput Biomed Res** 1990 Aug;23(4):297–309

The Ah locus: genetic differences in toxicity, cancer, mutation, and birth defects. Nebert DW. **Crit Rev Toxicol** 1989;20(3):153–74 (192 ref.)

Chromosomal mapping of an alcC disruption with respect to amdA in Aspergillus nidulans [published erratum appears in Curr Genet 1990 Jun;17(6):547] Jones IG, et al. **Curr Genet** 1990 Jan;17(1):81–3

Genetic localization of the Saccharomyces cerevisiae genes tif1 and tif2. Müller PP, et al. **Curr Genet** 1989 Aug; 16(2):127–8

Chromosome location of a family of genes encoding different acidic ribosomal proteins in Saccharomyces cerevisiae. Remacha M, et al. **Curr Genet** 1990 Jun;17(6):535–6

Gene mapping and the human genome mapping project. Little PF. **Curr Opin Cell Biol** 1990 Jun;2(3):478–84 (17 ref.)

Gene mapping and genetic diseases. Smith MJ, et al. **Curr Opin Cell Biol** 1989 Jun;1(3):460–5 (17 ref.)

Human gene mapping 10. New Haven Conference (1989). Tenth International Workshop on Human Gene Mapping. New Haven, Connecticut, USA, June 11–17, 1989. **Cytogenet Cell Genet** 1989;51(1–4):1–1147

Fine localization of genes on distal murine chromosome 15. Adolph S, et al. **Cytogenet Cell Genet** 1989;52(3–4):177–9

Mapping of the phosphorylase kinase alpha subunit gene on the mouse X chromosome. Barnard PJ, et al. **Cytogenet Cell Genet** 1990;53(2–3):91–4

Assignment of the human 3 beta–hydroxysteroid dehydrogenase gene (HSDB3) to the p13 band of chromosome 1. Bérubé D, et al. **Cytogenet Cell Genet** 1989; 52(3–4):199–200

Assignment of the gene coding for human peroxisomal 3–oxoacyl–CoA thiolase (ACAA) to chromosome region 3p22——p23. Bout A, et al. **Cytogenet Cell Genet** 1989; 52(3–4):147–50

Chromosomal localization of two human genes inducible by interferons, double–stranded RNA, and viruses. Clauss IM, et al. **Cytogenet Cell Genet** 1990;53(2–3):166–8

Localization of the acetylcholine receptor gamma subunit gene to human chromosome 2q32——qter. Cohen–Haguenauer O, et al. **Cytogenet Cell Genet** 1989; 52(3–4):124–7

Assignment of cathepsin E (CTSE) to human chromosome region 1q31 by in situ hybridization and analysis of somatic cell hybrids. Couvreur JM, et al. **Cytogenet Cell Genet** 1990; 53(2–3):137–9

Assignment of the rat genes coding for phenylalanine hydroxylase (PAH), tyrosine aminotransferase (TAT), and pyruvate kinase (PKL) to chromosomes 7, 19, 2, respectively. Fulchignoni–Lataud MC, et al. **Cytogenet Cell Genet** 1990;53(2–3):172–4

Report of the committee on clinical disorders and chromosomal deletion syndromes. Harper PS, et al. **Cytogenet Cell Genet** 1989;51(1–4):563–611 (948 ref.)

Gene for parathyroid hormone–like peptide is on mouse chromosome 6. Hendy GN, et al. **Cytogenet Cell Genet** 1990;53(2–3):80–2

Regional assignment of the mouse alpha A2–crystallin gene (Crya–1) to chromosome 17A3——B by in situ hybridization. Kaye NW, et al. **Cytogenet Cell Genet** 1990; 53(2–3):95–6

Report of the committee on linkage and gene order. Keats B, et al. **Cytogenet Cell Genet** 1989;51(1–4):459–502

Report of the DNA committee and catalogs of cloned and mapped genes and DNA polymorphisms. Kidd KK, et al. **Cytogenet Cell Genet** 1989;51(1–4):622–947 (2441 ref.)

Rapid subchromosomal localization of cosmids by nonradioactive in situ hybridization. Kievits T, et al. **Cytogenet Cell Genet** 1990;53(2–3):134–6

Report of the committee on comparative mapping. Lalley PA, et al. **Cytogenet Cell Genet** 1989;51(1–4):503–32 (251 ref.)

Chromosome localization of two human serine protease genes to region 14q11.2——q12 by in situ hybridization. Lin CC, et al. **Cytogenet Cell Genet** 1990;53(2–3):169–71

Mapping of the gene for DNA polymerase beta to mouse chromosome 8. McBride OW, et al. **Cytogenet Cell Genet** 1990;53(2–3):108–11

The human endonexin II (ENX2) gene is located at 4q28——q32. Modi WS, et al. **Cytogenet Cell Genet** 1989; 52(3–4):167–9

Assignment of the gene coding for the alpha 1 chain of collagen type XIII (COL13A1) to human chromosome region 10q11——qter. Pajunen L, et al. **Cytogenet Cell Genet** 1989;52(3–4):190–3

Chromosomal assignment and regional localization of myeloperoxidase in the mouse. Robinson TJ, et al. **Cytogenet Cell Genet** 1990;53(2–3):83–6

Sigje, a member of the small inducible gene family that includes platelet factor 4 and melanoma growth stimulatory activity, is on mouse chromosome 11. Smith A, et al. **Cytogenet Cell Genet** 1989;52(3–4):194–6

Localization of the murine methylmalonyl CoA mutase (Mut) locus on chromosome 17 by in situ hybridization. Threadgill DW, et al. **Cytogenet Cell Genet** 1990; 53(2–3):112–4

Chromosome regional mapping for the human thyroid stimulating hormone beta subunit (TSHB) gene. Tokino T, et al. **Cytogenet Cell Genet** 1990;53(2–3):140–3

Closely linked loci on the long arm of chromosome 13 flank a specific 2;13 translocation breakpoint in childhood rhabdomyosarcoma. Valentine M, et al. **Cytogenet Cell Genet** 1989;52(3–4):128–32

Localization of the beta-like globin gene cluster and the genes for parathyroid hormone and c-Harvey-ras 1 to region q14——q21 of rabbit chromosome 1 by in situ hybridization. Xu J, et al. **Cytogenet Cell Genet** 1989; 52(3–4):157–61

Localization of the PRR1 gene coding for rat prostatic proline-rich polypeptides to chromosome 10 by in situ hybridization. Zhang J, et al. **Cytogenet Cell Genet** 1989; 52(3–4):197–8

High resolution mapping of Xenopus laevis 5S and ribosomal RNA genes by EM in situ hybridization. Narayanswami S, et al. **Cytometry** 1990;11(1):144–52

Analysis of the hotfoot (ho) locus by creation of an insertional mutation in a transgenic mouse. Gordon JW, et al. **Dev Biol** 1990 Feb;137(2):349–58

Promoter is an important determinant of developmentally regulated puffing at the Sgs-4 locus of Drosophila melanogaster. Korge G, et al. **Dev Biol** 1990 Apr; 138(2):324–37

Cooperative enhancement at the Drosophila Sgs-3 locus. Roark M, et al. **Dev Biol** 1990 May;139(1):121–33

Assignment of an anonymous DNA sequence IB/D22 (DXS371) to XP11.1–11.4. Spurr NK, et al. **Dis Markers** 1989 Oct-Dec;7(4):247–51

A compositional map of human chromosome 21. Gardiner K, et al. **EMBO J** 1990 Jun;9(6):1853–8

Analysis of human chromosome 21: correlation of physical and cytogenetic maps; gene and CpG island distributions. Gardiner K, et al. **EMBO J** 1990 Jan;9(1):25–34

A 6000 kb segment of chromosome 1 is conserved in human and mouse. Kingsmore SF, et al. **EMBO J** 1989 Dec 20; 8(13):4073–80

Genetic and molecular mapping of the Hmt region of mouse. Richards S, et al. **EMBO J** 1989 Dec 1;8(12):3749–57

Thyrotrope expression and thyroid hormone inhibition map to different regions of the mouse glycoprotein hormone alpha-subunit gene promoter. Sarapura VD, et al. **Endocrinology** 1990 Sep;127(3):1352–61

The structural genes encoding P450scc and P450arom are closely linked on mouse chromosome 9. Youngblood GL, et al. **Endocrinology** 1989 Nov;125(5):2784–6

Type 5 acid phosphatase. Sequence, expression and chromosomal localization of a differentiation-associated protein of the human macrophage [published erratum appears in Eur J Biochem 1990 Aug 17;191(3):775] Lord DK, et al. **Eur J Biochem** 1990 Apr 30;189(2):287–93

Determination of the DNA conformation of the simian virus 40 (SV40) enhancer in SV40 minichromosomes. Martínez-Balbás A, et al. **Eur J Biochem** 1990 Mar 10; 188(2):269–73

Structure of sea-urchin arylsulfatase gene. Yamada K, et al. **Eur J Biochem** 1989 Dec 8;186(1–2):405–10

Genetic mapping demonstrates that the alpha-subunit of retinal cGMP-phosphodiesterase is not the site of the rd mutation. Danciger M, et al. **Exp Eye Res** 1990 Aug; 51(2):185–9

Chromosomal localization of the mouse genes coding for alpha 2, alpha 3, alpha 4 and beta 2 subunits of neuronal nicotinic acetylcholine receptor. Bessis A, et al. **FEBS Lett** 1990 May 7;264(1):48–52

The angiotensinogen gene is located on mouse chromosome 8. Clouston WM, et al. **FEBS Lett** 1989 Sep 25; 255(2):419–22

Human embryonic myosin heavy chain cDNA. Interspecies sequence conservation of the myosin rod, chromosomal locus and isoform specific transcription of the gene. Eller M, et al. **FEBS Lett** 1989 Oct 9;256(1–2):21–8

Cloning, sequence analysis and chromosome localization of a Drosophila muscarinic acetylcholine receptor. Onai T, et al. **FEBS Lett** 1989 Sep 25;255(2):219–25

Chromosomal reallocation of the chicken c-myb locus and organization of 3'-proximal coding exons. Soret J, et al. **FEBS Lett** 1990 Apr 24;263(2):254–60

Assignment of cloned genes to electrophoretically separated chromosomes of the yeast Pachysolen tannophilus. Maleszka R, et al. **FEMS Microbiol Lett** 1990 May; 57(1–2):79–82

Physical mapping of a temperature-sensitive mutation of human cytomegalovirus by marker rescue. Dion M, et al. **Genet Anal Tech Appl** 1990 Apr;7(2):32–4

Complexity charts can be used to map functional domains in DNA. Konopka AK, et al. **Genet Anal Tech Appl** 1990 Apr;7(2):35–8

Complex segregation analysis for a three-allele locus: experience from an analysis of acid phosphatase activity. Iselius L, et al. **Genet Epidemiol** 1989;6(5):619–24

Isolation of omnipotent suppressors in an [eta+] yeast strain. All-Robyn JA, et al. **Genetics** 1990 Mar;124(3):505–14

Cytogenetic analysis of chromosome region 73AD of Drosophila melanogaster. Belote JM, et al. **Genetics** 1990 Aug;125(4):783–93

Mapping functions. Crow JF. **Genetics** 1990 Aug; 125(4):669–71

Genetic localization of foraging (for): a major gene for larval behavior in Drosophila melanogaster. de Belle JS, et al. **Genetics** 1989 Sep;123(1):157–63

The NXSM recombinant inbred strains of mice: genetic profile for 58 loci including the Mtv proviral loci. Eicher EM, et al. **Genetics** 1990 Jun;125(2):431–46

A genetic linkage map of mouse chromosome 10: localization of eighteen molecular markers using a single interspecific backcross. Justice MJ, et al. **Genetics** 1990 Aug; 125(4):855–66

A molecular genetic linkage map of mouse chromosome 9 with regional localizations for the Gsta, T3g, Ets-1 and Ldlr loci. Kingsley DM, et al. **Genetics** 1989 Sep; 123(1):165–72

L. C. Dunn and mouse genetic mapping. Lyon MF. **Genetics** 1990 Jun;125(2):231–6

Fine mapping of quantitative trait loci using selected overlapping recombinant chromosomes, in an interspecies cross of tomato. Paterson AH, et al. **Genetics** 1990 Mar; 124(3):735–42

Chromosomal assignment of mutations by specific chromosome loss in the yeast Saccharomyces cerevisiae. Wakem LP, et al. **Genetics** 1990 Jun;125(2):333–40

Isolation and characterization of omnipotent suppressors in the yeast Saccharomyces cerevisiae. Wakem LP, et al. **Genetics** 1990 Mar;124(3):515–22

Orientation of genes in the Bacillus subtilis chromosome. Zeigler DR, et al. **Genetics** 1990 Aug;125(4):703–8

Genetic location and biochemical characterization of eye-colour mutants from natural populations of Drosophila melanogaster. Aparisi ML, et al. **Genome** 1990 Apr; 33(2):203–8

Constructing chromosome- and region-specific cosmid maps of the human genome. Carrano AV, et al. **Genome** 1989; 31(2):1059–65 (30 ref.)

Phylogenetic relationships of Triticum tauschii, the D-genome donor to hexaploid wheat. 4. Variation and chromosomal location of 5S DNA. Lagudah ES, et al. **Genome** 1989 Dec;32(6):1017–25

Long-range mapping in the research and diagnosis of genetic disease. van Ommen GJ, et al. **Genome** 1989;31(2):730–6 (70 ref.)

Linkage maps of human chromosomes. White R, et al. **Genome** 1989;31(2):1066–72 (14 ref.)

Members of the human glyceraldehyde-3-phosphate dehydrogenase-related gene family map to dispersed chromosomal locations. Benham FJ, et al. **Genomics** 1989 Aug;5(2):209–14

Chromosomal localization of murine interleukin-1 alpha and beta genes. Boultwood J, et al. **Genomics** 1989 Oct; 5(3):481–5

A genetic linkage map of 32 loci on human chromosome 10. Bowden DW, et al. **Genomics** 1989 Nov;5(4):718–26

Physical maps of 4p16.3, the area expected to contain the Huntington disease mutation. Bućan M, et al. **Genomics** 1990 Jan;6(1):1–15

Chromosome localization of human ARH genes, a ras-related gene family. Cannizzaro LA, et al. **Genomics** 1990 Feb; 6(2):197–203

A molecular genetic linkage map of mouse chromosome 4 including the localization of several proto-oncogenes. Ceci JD, et al. **Genomics** 1989 Nov;5(4):699–709

An interspecific backcross linkage map of mouse chromosome 8. Ceci JD, et al. **Genomics** 1990 Jan;6(1):72–9

Report of the X chromosome workshop. Cook-Deegan RM, et al. **Genomics** 1990 Aug;7(4):647–54

Gene mapping by enzymatic amplification from flow-sorted chromosomes. Cotter F, et al. **Genomics** 1989 Oct; 5(3):470–4

Centre d'etude du polymorphisme humain (CEPH): collaborative genetic mapping of the human genome. Dausset J, et al. **Genomics** 1990 Mar;6(3):575–7

Comparison of the physical and recombination maps of the mouse X chromosome. Disteche CM, et al. **Genomics** 1989 Aug;5(2):177–84

The gene for human muscle-specific phosphoglycerate mutase, PGAM2, mapped to chromosome 7 by polymerase chain reaction. Edwards YH, et al. **Genomics** 1989 Nov; 5(4):948–51

On the use of DNA fingerprints for linkage studies in cattle. Georges M, et al. **Genomics** 1990 Mar;6(3):461–74

Deletion mapping of DNA markers to a region of chromosome 5 that cosegregates with schizophrenia. Gilliam TC, et al. **Genomics** 1989 Nov;5(4):940–4

Chiasma-based models of multilocus recombination: increased power for exclusion mapping and gene ordering. Goldgar DE, et al. **Genomics** 1989 Aug;5(2):283–90

Physical mapping of probes within 14q32, a subtelomeric region showing a high recombination frequency. Hofker MH, et al. **Genomics** 1990 Jan;6(1):33–8

The gene for the RNA component of the mitochondrial RNA-processing endoribonuclease is located on human chromosome 9p and on mouse chromosome 4. Hsieh CL, et al. **Genomics** 1990 Mar;6(3):540–4

Mapping of the thrombospondin gene to human chromosome 15 and mouse chromosome 2 by in situ hybridization. Jaffe E, et al. **Genomics** 1990 May;7(1):123–6

"Major minisatellite loci" detected by minisatellite clones 33.6 and 33.15 correspond to the cognate loci D1S111 and D7S437. Jeffreys AJ, et al. **Genomics** 1990 Jul;7(3):449–52

A primary map of 24 loci on human chromosome 16. Julier C, et al. **Genomics** 1990 Mar;6(3):419–27

A molecular genetic linkage map of mouse chromosome 13 anchored by the beige (bg) and satin (sa) loci. Justice MJ, et al. **Genomics** 1990 Feb;6(2):341–51

Genetic mapping in the region of the mouse X-inactivation center. Keer JT, et al. **Genomics** 1990 Aug;7(4):566–72

Twenty-five loci form a continuous linkage map of markers for human chromosome 7. Lathrop GM, et al. **Genomics** 1989 Nov;5(4):866–73

Physical mapping of human chromosome 17 using fragment-containing microcell hybrids. Leach RJ, et al. **Genomics** 1989 Aug;5(2):167–76

Rapid isolation of DNA probes within specific chromosome regions by interspersed repetitive sequence polymerase chain reaction. Ledbetter SA, et al. **Genomics** 1990 Mar; 6(3):475–81

Genomic mapping of murine Zp-2 and Zp-3, two oocyte-specific loci encoding zona pellucida proteins. Lunsford R, et al. **Genomics** 1990 Jan;6(1):184–7

Mapping of the two mouse engrailed-like genes: close linkage of En-1 to dominant hemimelia (Dh) on chromosome 1 and of En-2 to hemimelic extra-toes (Hx) on chromosome 5. Martin GR, et al. **Genomics** 1990 Feb;6(2):302–8

Linkage analysis of the mutation locus in the eye lens obsolescence (Elo) mouse. Masaki S, et al. **Genomics** 1989 Aug;5(2):259–63

A genetic map of mouse chromosome 1 near the Lah-Ity-Bcg disease resistance locus. Mock B, et al. **Genomics** 1990 May; 7(1):57–64

Ampd-2 maps to distal mouse chromosome 3 in linkage with Ampd-1. Moseley WS, et al. **Genomics** 1990 Mar;6(3):572–4

Efficient linkage of 10 loci in the proximal region of the mouse X chromosome. Mullins LJ, et al. **Genomics** 1990 May;7(1):19–30

Human laminin A chain (LAMA) gene: chromosomal mapping to locus 18p11.3. Nagayoshi T, et al. **Genomics** 1989 Nov;5(4):932–5

A genetic linkage map of markers for human chromosome 20. Nakamura Y, et al. **Genomics** 1989 Nov;5(4):945–7

Large-scale mapping and chromosome jumping in the q27 region of the human X chromosome. Nguyen C, et al. **Genomics** 1989 Aug;5(2):298–303

Twenty loci form a continuous linkage map of markers for human chromosome 2. O'Connell P, et al. **Genomics** 1989 Nov;5(4):738–45

Long-range physical mapping around the human steroid sulfatase locus. Ross MT, et al. **Genomics** 1990 Mar; 6(3):528–39

A method of sequencing without subcloning and its application to the identification of a novel ORF with a sequence suggestive of a transcriptional regulator in the water mold Achlya ambisexualis. Schowalter DB, et al. **Genomics** 1990 Jan;6(1):23–32

A molecular genetic linkage map of mouse chromosome 2. Siracusa LD, et al. **Genomics** 1990 Mar;6(3):491–504

Mapping of a gene determining tuberous sclerosis to human chromosome 11q14–11q23. Smith M, et al. **Genomics** 1990 Jan;6(1):105–14

Characterization and chromosomal mapping of a cDNA encoding tryptophan hydroxylase from a mouse mastocytoma cell line. Stoll J, et al. **Genomics** 1990 May; 7(1):88–96

The murine genes Hox-5.1 and Hox-4.1 belong to the same HOX complex on chromosome 2. Stubbs L, et al. **Genomics** 1990 Jul;7(3):422–7

The alpha-A-crystallin and cystathionine beta-synthase genes are physically very closely linked in proximal mouse chromosome 17. Stubbs L, et al. **Genomics** 1990 Jun; 7(2):284–8

Assignment of 12 loci to rat chromosome 5: evidence that

this chromosome is homologous to mouse chromosome 4 and to human chromosomes 9 and 1 (1p arm). Szpirer C, et al. **Genomics** 1990 Apr;6(4):679–84

DXS28 (C7) maps centromeric to DXS68 (L1–4) and DXS67 (B24) by deletion analysis. Towbin JA, et al. **Genomics** 1990 Jul;7(3):442–4

Location of the gene involving the small eye mutation on mouse chromosome 2 suggests homology with human aniridia 2 (AN2). van der Meer–de Jong R, et al. **Genomics** 1990 Jun;7(2):270–5

Linkage map of mouse chromosome 17: localization of 27 new DNA markers. Vincek V, et al. **Genomics** 1989 Nov; 5(4):773–86

cDNA sequence, tissue–specific expression, and chromosomal mapping of the human slow–twitch skeletal muscle isoform of troponin I. Wade R, et al. **Genomics** 1990 Jul;7(3):346–57

The CEPH consortium primary linkage map of human chromosome 10. White RL, et al. **Genomics** 1990 Mar; 6(3):393–412

Mapping and conservation of the group–specific component gene in mouse. Yang F, et al. **Genomics** 1990 Aug; 7(4):509–16

Regional localization of the fibronectin and gamma–crystallin genes to bovine chromosome 8. Zneimer SM, et al. **Genomics** 1989 Aug;5(2):215–20

Localization of the murine leukemia inhibitory factor gene near the centromere on chromosome 11. Kola I, et al. **Growth Factors** 1990;2(2–3):235–40

Expression and chromosomal assignment of a novel protein–tyrosine kinase gene related to the insulin receptor family. Bauskin AR, et al. **Hamatol Bluttransfus** 1989; 32:453–60

Close localization of the genes for GM–CSF and IL3 in human genome. Frolova EI, et al. **Hamatol Bluttransfus** 1989;32:390–2

Localization of the glucose phosphate isomerase gene to the p12——q21 segment of chromosome 6 in pig by in situ hybridization. Chowdhary BP, et al. **Hereditas** 1989; 111(1):73–8

Isolation, characterization and chromosomal assignment of a partial cDNA for porcine 6–phosphogluconate dehydrogenase. Harbitz I, et al. **Hereditas** 1990;112(1):83–8

A porcine genomic glucosephosphate isomerase probe detects a multiallelic restriction fragment length polymorphism assigned to chromosome 10pter in horse. Harbitz I, et al. **Hereditas** 1990;112(2):151–6

Chromosomal localization of the ovine major histocompatibility complex (OLA) by in situ hybridization. Mahdy EA, et al. **Hereditas** 1989;111(1):87–90

Localization of genes causing postzygotic isolation in two hybridizations involving Drosophila pseudoobscura. Orr HA. **Heredity (Edinburgh)** 1989 Oct;63 (Pt 2):231–7

The mapping of the locus for multiple endocrine neoplasia type 2A by linkage with chromosome 10 markers. Simpson NE, et al. **Horm Metab Res Suppl** 1989;21:5–9 (30 ref.)

Human alpha B–crystallin (CRYA2) gene mapped to chromosome 11q12–q23. Brakenhoff RH, et al. **Hum Genet** 1990 Jul;85(2):237–40

Identification of sequences of chromosome 7 that are expressed in sweat gland epithelial cells. Burns J, et al. **Hum Genet** 1990 Jul;85(2):151–6

Linkage of aspartylglucosaminuria (AGU) to marker loci on the long arm of chromosome 4. Grön K, et al. **Hum Genet** 1990 Jul;85(2):233–6

Analysis of 7 polymorphic markers at chromosome 11q22–23 in 35 ataxia telangiectasia families; further evidence of linkage. McConville CM, et al. **Hum Genet** 1990 Jul; 85(2):215–20

Deletion mapping of 39 random isolated Y–chromosome DNA fragments. Oosthuizen CJ, et al. **Hum Genet** 1990 Jul;85(2):205–10

Chromosomal localization of the human protamine genes, PRM1 and PRM2, to 16p13.3 by in situ hybridization. Viguié F, et al. **Hum Genet** 1990 Jul;85(2):171–4

Enhanced resolution of the SstI polymorphic variants of the C2 locus: description of a new size class. Ratanachaiyavong S, et al. **Hum Immunol** 1989 Dec;26(4):310–20

Sperm chromosome studies in an infertile man with partial, complete asynapsis of meiotic bivalents. Navarro J, et al. **Hum Reprod** 1990 Feb;5(2):227–9

Genetic mapping of mouse T3d and T3e between Apoa1 and Ncam. Miller RD, et al. **Immunogenetics** 1989; 30(6):511–4

Molecular cloning and chromosomal assignment of a human perforin (PFP) gene. Shinkai Y, et al. **Immunogenetics** 1989; 30(6):452–7

Mapping minor H genes. Simpson E, et al. **Immunol Suppl** 1989;2:42–8; discussion 49 (34 ref.)

Influence of different regions of the H–2 complex on the rate of clearance of Salmonella typhimurium. Nauciel C, et al. **Infect Immun** 1990 Feb;58(2):573–4

The locus of the polymorphic epithelial mucin (PEM) tumour antigen on chromosome 1q21 shows a high frequency of alteration in primary human breast tumours. Gendler SJ, et al. **Int J Cancer** 1990 Mar 15;45(3):431–5

Fine mapping of a putative rd cDNA and its co–segregation with rd expression. Danciger M, et al. **Invest Ophthalmol Vis Sci** 1990 Aug;31(8):1427–32

Resistance of Pseudomonas aeruginosa to cefsulodin: modification of penicillin–binding protein 3 and mapping of its chromosomal gene. Gotoh N, et al. **J Antimicrob Chemother** 1990 Apr;25(4):513–23

Mutations in a new Streptomyces coelicolor locus which globally block antibiotic biosynthesis but not sporulation. Adamidis T, et al. **J Bacteriol** 1990 Jun;172(6):2962–9

Physical and genetic maps of the genome of the heterocyst–forming cyanobacterium Anabaena sp. strain PCC 7120. Bancroft I, et al. **J Bacteriol** 1989 Nov; 171(11):5940–8

Characterization of a gene involved in histidine biosynthesis in Halobacterium (Haloferax) volcanii: isolation and rapid mapping by transformation of an auxotroph with cosmid DNA. Conover RK, et al. **J Bacteriol** 1990 Jun; 172(6):3244–9

Genetic mapping of the structural gene for phospholipase C of Pseudomonas aeruginosa PAO. Lindgren V, et al. **J Bacteriol** 1990 Feb;172(2):1155–6

Location of purine genes on the physical map of Escherichia coli [published erratum appears in J Bacteriol 1990 Jun;172(6):2825] Masters M. **J Bacteriol** 1990 Mar; 172(3):1173

Physical map location of the tdc operon of Escherichia coli. Schweizer HP, et al. **J Bacteriol** 1990 Jun;172(6):2825

A new gene located between pss and rrnG on the Escherichia coli chromosome. Seol W, et al. **J Bacteriol** 1990 Sep; 172(9):4745

New approaches for physical mapping of small genomes. Smith CL, et al. **J Bacteriol** 1990 Mar;172(3):1167–72 (40 ref.)

Copper–zinc superoxide dismutase of Caulobacter crescentus: cloning, sequencing, and mapping of the gene and periplasmic location of the enzyme. Steinman HM, et al. **J Bacteriol** 1990 Jun;172(6):2901–10

Physical and genetic mapping of the Rhodobacter sphaeroides 2.4.1 genome: genome size, fragment identification, and gene localization. Suwanto A, et al. **J Bacteriol** 1989 Nov;171(11):5840–9

Physical and genetic mapping of the Rhodobacter sphaeroides 2.4.1 genome: presence of two unique circular chromosomes. Suwanto A, et al. **J Bacteriol** 1989 Nov; 171(11):5850–9

Mapping of the glucoamylase gene of Trichosporon adeninovorans by mitotic haploidization using hybrids from protoplast fusions. Büttner R, et al. **J Basic Microbiol** 1990; 30(4):227–31

Structure and chromosomal location of the rat ribophorin I gene. Behal A, et al. **J Biol Chem** 1990 May 15; 265(14):8252–8

The two Caenorhabditis elegans basement membrane (type IV) collagen genes are located on separate chromosomes. Guo XD, et al. **J Biol Chem** 1989 Oct 15;264(29):17574–82

cDNA cloning and chromosomal assignment of the human O6–methylguanine–DNA methyltransferase. cDNA expression in Escherichia coli and gene expression in human cells. Rydberg B, et al. **J Biol Chem** 1990 Jun 5; 265(16):9563–9

Tissue–specific expression, developmental regulation, and chromosomal mapping of the lecithin: cholesterol acyltransferase gene. Evidence for expression in brain and testes as well as liver. Warden CH, et al. **J Biol Chem** 1989 Dec 25;264(36):21573–81

Human uncoupling protein gene: structure, comparison with rat gene, and assignment to the long arm of chromosome 4. Cassard AM, et al. **J Cell Biochem** 1990 Jul;43(3):255–64

rough deal: a gene required for proper mitotic segregation in Drosophila. Karess RE, et al. **J Cell Biol** 1989 Dec;109(6 Pt 1):2951–61

A new allele of the lpr locus, lprcg, that complements the gld gene in induction of lymphadenopathy in the mouse. Matsuzawa A, et al. **J Exp Med** 1990 Feb 1;171(2):519–31

Genomic organization of the mouse pore–forming protein (perforin) gene and localization to chromosome 10. Similarities to and differences from C9. Trapani JA, et al. **J Exp Med** 1990 Feb 1;171(2):545–57

Clustering of cytokine genes on mouse chromosome 11. Wilson SD, et al. **J Exp Med** 1990 Apr 1;171(4):1301–14

Genetic mapping in Streptomyces clavuligerus by protoplast fusion. Illing GT, et al. **J Gen Microbiol** 1989 Aug;135 (Pt 8):2299–305

The mouse mutation ulnaless on chromosome 2. Davisson MT, et al. **J Hered** 1990 Mar–Apr;81(2):151–3

Gene mapping of the three subunits of the high affinity FcR for IgE to mouse chromosomes 1 and 19. Hupp K, et al. **J Immunol** 1989 Dec 1;143(11):3787–91

Genetic variability at the human tumor necrosis factor loci. Webb GC, et al. **J Immunol** 1990 Aug 15;145(4):1278–85

Linkage disequilibrium in Huntington's disease: an improved localisation for the gene. Snell RG, et al. **J Med Genet** 1989 Nov;26(11):673–5

Gene map of mental retardation. Wahlström J. **J Ment Defic Res** 1990 Feb;34 (Pt 1):11–27

Avian keratin genes. II. Chromosomal arrangement and close linkage of three gene families. Presland RB, et al. **J Mol Biol** 1989 Oct 20;209(4):561–76

Mapping of insertion element IS5 in the Escherichia coli K–12 chromosome. Chromosomal rearrangements mediated by IS5. Umeda M, et al. **J Mol Biol** 1990 May 20;213(2):229–37

Genetics of N–methyl–N–nitrosourea induction of thymic lymphomas in AKR/J mice: assignment of a susceptibility gene to mouse chromosome 7. Angel JM, et al. **J Natl Cancer Inst** 1989 Nov 1;81(21):1652–5

N–cadherin gene maps to human chromosome 18 and is not linked to the E–cadherin gene. Walsh FS, et al. **J Neurochem** 1990 Sep;55(3):805–12

A voltage–clamp analysis of gene–dosage effects of the Shaker locus on larval muscle potassium currents in Drosophila. Haugland FN, et al. **J Neurosci** 1990 Apr; 10(4):1357–71

The gene encoding peripheral myelin protein zero is located on mouse chromosome 1. Kuhn R, et al. **J Neurosci** 1990 Jan;10(1):205–9

Gene mapping of farm animals. Thomsen PD. **J Reprod Fertil Suppl** 1989;38:135–44 (33 ref.)

Genetic mapping of a cloned sequence responsible for susceptibility to ecotropic murine leukemia viruses. Kozak CA, et al. **J Virol** 1990 Jun;64(6):3119–21

Identification of a locus on mouse chromosome 3 involved in differential susceptibility to Theiler's murine encephalomyelitis virus–induced demyelinating disease. Melvold RW, et al. **J Virol** 1990 Feb;64(2):686–90

Promising new technique may accelerate genome mapping [news] Merz B. **JAMA** 1989 Nov 3;262(17):2353

Mapping of genes encoding coagulation factors VII and X to the distal portion of the 13q34 by gene dose study in a patient with r(13). Kasai R, et al. **Jinrui Idengaku Zasshi** 1989 Sep;34(3):247–50

A domain responsible for the transformation suppressor activity in Krev–1 protein. Kitayama H, et al. **Jpn J Cancer Res** 1990 May;81(5):445–8

Spinal muscular atrophies. **Lancet** 1990 Aug 4; 336(8710):280–1 (5 ref.)

Schizophrenia and chromosomes [letter] Blackwood DH, et al. **Lancet** 1989 Dec 16;2(8677):1459

Evidence implicating at least two genes on chromosome 17p in breast carcinogenesis. Coles C, et al. **Lancet** 1990 Sep 29;336(8718):761–3

Close linkage of hypervariable marker DXS255 to disease locus of Wiskott–Aldrich syndrome. de Saint Basile G, et al. **Lancet** 1989 Dec 2;2(8675):1319–21

Simple non–radioactive method for detecting haemoglobin Constant Spring gene [letter] Fucharoen S, et al. **Lancet** 1990 Jun 23;335(8704):1527

Tyrosine hydroxylase polymorphisms associated with manic–depressive illness [letter] Leboyer M, et al. **Lancet** 1990 May 19;335(8699):1219

Mapping of acute (type I) spinal muscular atrophy to chromosome 5q12–q14. The French Spinal Muscular Atrophy Investigators. Melki J, et al. **Lancet** 1990 Aug 4;336(8710):271–3

Possible locus for polycystic kidney disease on chromosome 2 [letter] Nørby S, et al. **Lancet** 1990 Aug 4;336(8710):323–4

Linked marker haplotypes and the delta F508 mutation in adults with mild pulmonary disease and cystic fibrosis. Santis G, et al. **Lancet** 1990 Jun 16;335(8703):1426–9

Rapid detection of polymorphism near gene for adult polycystic kidney disease [letter] Saris JJ, et al. **Lancet** 1990 May 5;335(8697):1102–3

Location of facioscapulohumeral muscular dystrophy gene on chromosome 4. Wijmenga C, et al. **Lancet** 1990 Sep 15;336(8716):651–3

Absence of close linkage between maternal genes for susceptibility to pre–eclampsia/eclampsia and HLA DR beta. Wilton AN, et al. **Lancet** 1990 Sep 15;336(8716):653–7

Chromosomal mapping of the murine c–abl proto–oncogene by in situ hybridization. Trakhtenbrot L, et al. **Leukemia** 1990 Feb;4(2):136–7

Historical perspectives: the understanding and management of genetic disorders. McKusick VA. **Md Med J** 1989 Nov; 38(11):901–8

Linkage map of Escherichia coli K–12, edition 8. Bachmann BJ. **Microbiol Rev** 1990 Jun;54(2):130–97 (1222 ref.)

Ordering loci on human chromosome 22 [letter; comment] Duncan AM. **Mol Biol Med** 1989 Jun;6(3):251 Comment on: Mol Biol Med 1988 Feb;5(1):15–22.

Genetic activity of a trans–regulatory locus in hepatoma hybrid cells. Peterson TC, et al. **Mol Biol Med** 1989 Apr; 6(2):109–16

Structure and variability of human chromosome ends. de Lange T, et al. **Mol Cell Biol** 1990 Feb;10(2):518–27

The mouse immunoglobulin kappa light–chain genes are located in early– and late–replicating regions of chromosome 6. Hatton KS, et al. **Mol Cell Biol** 1990 Aug; 10(8):4314–23

Genomic organization, chromosomal localization, and developmentally regulated expression of the glycosyl–phosphatidylinositol–specific phospholipase C of Trypanosoma brucei. Mensa–Wilmot K, et al. **Mol Cell Biol** 1990 Feb;10(2):720–6

Structural analysis of Doc transposable elements associated with mutations at the white and suppressor of forked loci of Drosophila melanogaster. Driver A, et al. **Mol Gen Genet** 1989 Dec;220(1):49–52

Molecular linkage of the nif/fix and nod gene regions in Rhizobium leguminosarum biovar trifolii. Iismaa SE, et al. **Mol Microbiol** 1989 Dec;3(12):1753–64

Mapping of sequenced genes (700 kbp) in the restriction map of the Escherichia coli chromosome. Médigue C, et al. **Mol Microbiol** 1990 Feb;4(2):169–87

Mapping a gene for familial hypertrophic cardiomyopathy to chromosome 14q1. Jarcho JA, et al. **N Engl J Med** 1989 Nov 16;321(20):1372–8

Genetic mapping of chronic childhood–onset spinal muscular atrophy to chromosome 5q11.2–13.3. Brzustowicz LM, et al. **Nature** 1990 Apr 5;344(6266):540–1

HUGO physical mapping [letter] Cantor CR. **Nature** 1990 May 10;345(6271):106
Localization of the human GM-CSF receptor gene to the X-Y pseudoautosomal region. Gough NM, et al. **Nature** 1990 Jun 21;345(6277):734-6
Clone maps made simple [news] Little P. **Nature** 1990 Aug 16;346(6285):611-2
Localization of the malignant hyperthermia susceptibility locus to human chromosome 19q12-13.2. McCarthy TV, et al. **Nature** 1990 Feb 8;343(6258):562-4
Gene for chronic proximal spinal muscular atrophies maps to chromosome 5q. Melki J, et al. **Nature** 1990 Apr 19; 344(6268):767-8
Chromosomal localization of GABAA receptor subunit genes: relationship to human genetic disease. Buckle VJ, et al. **Neuron** 1989 Nov;3(5):647-54
The gene map and genome organization. Frézal J. **Nouv Rev Fr Hematol** 1990;32(2):121-3 (7 ref.)
Vector-Alu PCR: a rapid step in mapping cosmids and YACs. Breukel C, et al. **Nucleic Acids Res** 1990 May 25; 18(10):3097
Approaches to localizing disease genes as applied to cystic fibrosis. Dean M, et al. **Nucleic Acids Res** 1990 Jan 25; 18(2):345-50
Random-breakage mapping, a rapid method for physically locating an internal sequence with respect to the ends of a DNA molecule. Game JC, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4453-61
PvuII RFLP for the lecithin-cholesterol acyltransferase gene (LCAT) in baboons. Hixson JE, et al. **Nucleic Acids Res** 1990 Jan 25;18(2):384
Selective enrichment of a large size genomic DNA fragment by affinity capture: an approach for genome mapping. Kandpal RP, et al. **Nucleic Acids Res** 1990 Apr 11; 18(7):1789-95
Towards construction of a high resolution map of the mouse genome using PCR-analysed microsatellites. Love JM, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4123-30
Mapping of OGT in the E.coli chromosome. Potter PM, et al. **Nucleic Acids Res** 1989 Dec 25;17(24):10505
PCR amplification of DNA microdissected from a single polytene chromosome band: a comparison with conventional microcloning. Saunders RD, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9027-37
Supragenic loop organization: mapping in Drosophila embryos, of scaffold-associated regions on a 800 kilobase DNA continuum cloned from the 14B-15B first chromosome region. Surdej P, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):3713-22
Internal eliminated sequences are removed prior to chromosome fragmentation during development in Euplotes crassus. Tausta SL, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):845-53
Structure, chromosome mapping and expression of the murine Fgf-6 gene. de Lapeyriere O, et al. **Oncogene** 1990 Jun;5(6):823-31
Identification and chromosomal mapping of new human tyrosine kinase genes. Krolewski JJ, et al. **Oncogene** 1990 Mar;5(3):277-82
Chromosomal localization of the three members of the jun proto-oncogene family in mouse and man. Mattei MG, et al. **Oncogene** 1990 Jan;5(1):151-6
The putative oncogene Spi-1: murine chromosomal localization and transcriptional activation in murine acute erythroleukemias [published erratum appears in Oncogene 1990 Jun;5(6):941] Moreau-Gachelin F, et al. **Oncogene** 1989 Dec;4(12):1449-56
C-myc-S mu rearrangement in a murine plasmacytoma without visible chromosomal translocations. Ohno S, et al. **Oncogene** 1989 Dec;4(12):1513-7
Mapping of the gene for multiple endocrine neoplasia type I to chromosome 11q13. Nordenskjöld M, et al. **Pathol Biol (Paris)** 1989 Nov;37(9):951
Cloning, chromosomal assignment, and regulation of the rat thyrotropin receptor: expression of the gene is regulated by thyrotropin, agents that increase cAMP levels, and thyroid autoantibodies. Akamizu T, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5677-81
I/Lyn mouse phosphorylase kinase deficiency: mutation disrupts expression of the alpha/alpha'-subunit mRNAs. Bender PK, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(24):9996-10000
Nonrandom duplication of the chromosome bearing a mutated Ha-ras-1 allele in mouse skin tumors. Bianchi AB, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6902-6
Chromosome ends in Drosophila without telomeric DNA sequences. Biessmann H, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(5):1758-61
Constructing deletions with defined endpoints in Drosophila. Cooley L, et al. **Proc Natl Acad Sci U S A** 1990 Apr; 87(8):3170-3
Mapping small DNA sequences by fluorescence in situ hybridization directly on banded metaphase chromosomes. Fan YS, et al. **Proc Natl Acad Sci U S A** 1990 Aug; 87(16):6223-7
Construction and screening of a genomic library specific for mouse chromosome 16. Hochgeschwender U, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(21):8482-6
Pvt-1 transcripts are found in normal tissues and are altered by reciprocal(6;15) translocations in mouse plasmacytomas. Huppi K, et al. **Proc Natl Acad Sci U S A** 1990 Sep; 87(18):6964-8
Molecular mapping within the mouse albino-deletion complex. Johnson DK, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8862-6
Minisatellite linkage maps in the mouse by cross-hybridization with human probes containing tandem repeats. Julier C, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4585-9
Physical mapping of the Myxococcus xanthus genome by random cloning in yeast artificial chromosomes. Kuspa A, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8917-21
Histone H1 in two subspecies of Chironomus thummi with different genome sizes: homologous chromosome sites differ largely in their content of a specific H1 variant. Mohr E, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9308-12
Chromosomal protein HMG-14 gene maps to the Down syndrome region of human chromosome 21 and is overexpressed in mouse trisomy 16. Pash J, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3836-40
A strategy for fine-structure functional analysis of a 6- to 11-centimorgan region of mouse chromosome 7 by high-efficiency mutagenesis. Rinchik EM, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):896-900
Physical mapping of human chromosomes by repetitive sequence fingerprinting. Stallings RL, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6218-22
Ankyrin and the hemolytic anemia mutation, nb, map to mouse chromosome 8: presence of the nb allele is associated with a truncated erythrocyte ankyrin. White RA, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3117-21
Chromosomal organization of adrenergic receptor genes. Yang-Feng TL, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1516-20
Multipoint mapping and linkage based upon affected pedigree members--Genetic Analysis Workshop 6. Proceedings of a workshop. Long Beach, Mississippi, October 10-12, 1988. **Prog Clin Biol Res** 1989;329:1-218
A comparison of some sib-pair linkage methods and multiple locus extensions. Bailey-Wilson JE, et al. **Prog Clin Biol Res** 1989;329:129-34
Power and type I error in affected sib-pair methods under restricted estimation conditions. Dawson DV, et al. **Prog Clin Biol Res** 1989;329:189-94
A simple scheme for preliminary ordering of multiple loci: application to 45 CF families. Falk CT. **Prog Clin Biol Res** 1989;329:17-22
Multipoint analysis of 47 loci on chromosome 7q. Goldgar DE, et al. **Prog Clin Biol Res** 1989;329:23-8
The detection of linkage and heterogeneity in nuclear families when unaffected individuals are considered unknown. Goldin LR, et al. **Prog Clin Biol Res** 1989;329:195-200
A molecular map of the chicken B complex. Guillemot F, et al. **Prog Clin Biol Res** 1989;307:169-76
Linkage map of anonymous loci near the CF gene. Haines JL, et al. **Prog Clin Biol Res** 1989;329:29-34
Pairwise permutation algorithm for ordering loci. Hazout S, et al. **Prog Clin Biol Res** 1989;329:35-9
Analysis of DNA sequences in individual gametes: application to human genetic mapping. Li HH, et al. **Prog Clin Biol Res** 1990;340C:207-11 (12 ref.)
Use of fish gene maps to predict ancestral vertebrate genome organization. Morizot DC. **Prog Clin Biol Res** 1990; 344:207-34
Gene mapping of a simulated complex disease. Newman B, et al. **Prog Clin Biol Res** 1989;329:171-6
Ordering loci in the cystic fibrosis region. Petersen GM, et al. **Prog Clin Biol Res** 1989;329:53-6
Statistical inference in the gene order problem: theoretical aspects. Rogatko A, et al. **Prog Clin Biol Res** 1989;329:63-8
Mapping strategies for multiple linked markers. Speer MC, et al. **Prog Clin Biol Res** 1989;329:75-80
Genetic Analysis Workshop 6: Multipoint mapping of loci in the region of cystic fibrosis. Spence MA, et al. **Prog Clin Biol Res** 1989;329:1-9
On the use of affected individuals for linkage. Van Eerdewegh P, et al. **Prog Clin Biol Res** 1989;329:153-8
Mapping rare recessives from data on affected individuals: a comparative analysis. Walters E, et al. **Prog Clin Biol Res** 1989;329:213-8
Locating the cystic fibrosis gene on the basis of linkage disequilibrium with markers? Weir BS. **Prog Clin Biol Res** 1989;329:81-6
Multipoint linkage: statistical evaluation. Wilson SR, et al. **Prog Clin Biol Res** 1989;329:87-92
Computer-assisted analysis of chromosomal locations and transcriptional directions of Escherichia coli genes. Watanabe H, et al. **Protein Seq Data Anal** 1990 Jun; 3(2):149-56
A comparison of genetic linkage maps surrounding the Lsh/Ity/Bcg disease resistance locus. Mock B, et al. **Res Immunol** 1989 Oct;140(8):769-74
rRNA gene restriction patterns of Leptospira: a molecular typing system. Pérolat P, et al. **Res Microbiol** 1990 Feb; 141(2):159-71
Deoxyribonucleic acid sequence mapping on metaphase chromosomes by immunoelectron microscopy. Narayanswami S, et al. **Scanning Microsc Suppl** 1989; 3:65-76
Physical mapping, linkage analysis of a putative schizophrenia locus on chromosome 5q. Kaufmann CA, et al. **Schizophr Bull** 1989;15(3):441-52
Genetic and physical mapping of the human genome [letter; comment] Beckmann JS. **Science** 1990 Apr 6;248(4951):18 Comment on: Science 1989 Sep 29;245(4925):1434-5.
Mapping the Drosophila genome with yeast artificial chromosomes. Garza D, et al. **Science** 1989 Nov 3; 246(4930):641-6
High-resolution mapping of human chromosome 11 by in situ hybridization with cosmid clones. Lichter P, et al. **Science** 1990 Jan 5;247(4938):64-9
Whatever happened to the genetic map? [news] Roberts L. **Science** 1990 Jan 19;247(4940):281-2
The genetic map is back on track after delays [news] Roberts L. **Science** 1990 May 18;248(4957):804-5
New scissors for cutting chromosomes [news] Roberts L. **Science** 1990 Jul 13;249(4965):127
The worm project [news] Roberts L. **Science** 1990 Jun 15; 248(4961):1310-3
K+ current diversity is produced by an extended gene family conserved in Drosophila and mouse. Wei A, et al. **Science** 1990 May 4;248(4955):599-603
The mouse smooth muscle gamma actin gene is on chromosome 6. Kim E, et al. **Somat Cell Mol Genet** 1990 May;16(3):287-91
The mapping and sequencing of the human genome. Antonarakis SE. **South Med J** 1990 Aug;83(8):876-8
Simplified models for viability selection at multiple loci. Christiansen FB. **Theor Popul Biol** 1990 Feb;37(1):39-54
A new duplication C4B*1,12 at the C4B locus associated with BF*S07 in a Tunisian population. Gorgi Y, et al. **Tissue Antigens** 1990 May;35(5):217-9
Mapping the gene for X-linked cataracts and microcornea with facial, dental, and skeletal features to Xp22: an appraisal of the Nance-Horan syndrome. Lewis RA. **Trans Am Ophthalmol Soc** 1990;87:658-728
Molecular cloning of a testis-specific gene from mouse chromosome 17. Kasahara M, et al. **Transplant Proc** 1987 Feb;19(1 Pt 1):815-6
Chromosome crawling in the MHC. Bell J. **Trends Genet** 1989 Sep;5(9):289-90 (8 ref.)
Identification of three genes nonessential for growth in cell culture near the right terminus of the unique sequences of long component of herpes simplex virus 1. Barker DE, et al. **Virology** 1990 Aug;177(2):684-91
A genetic locus in mutant poliovirus genomes involved in overproduction of RNA polymerase and 3C proteinase. Dewalt PG, et al. **Virology** 1990 Feb;174(2):504-14
Genes and dreams. Grisolia JS. **West J Med** 1989 Nov; 151(5):564-6
Linkage methods for identifying genetic risk factors. Lange K, et al. **World Rev Nutr Diet** 1990;63:236-49 (31 ref.)
Genetic map of Saccharomyces cerevisiae, edition 10. Mortimer RK, et al. **Yeast** 1989 Sep-Oct;5(5):321-403
[Genetic analysis of Streptomyces erythreus heteroclones. II. Determination of the distances between genetic loci on the map] Pencheva R, et al. **Acta Microbiol Bulg** 1989; 24:61-8 (Eng. Abstr.) **(Bul)**
[Mapping and selective expression of nuclear antigens EBNA 3, 4 and 6 of Epstein-Barr virus (editorial)] Joab I, et al. **Pathol Biol (Paris)** 1989 Sep;37(7):783-4 **(Fre)**
[Chromosome analysis for determining paternity using the AMBA/R-Chro-H image evaluation system] Giebe W, et al. **Beitr Gerichtl Med** 1989;47:563-9 (Eng. Abstr.) **(Ger)**
[Motilin and GIP—molecular cloning, chromosomal localization, and tissue specific expression of these genes] Yano H, et al. **Nippon Rinsho** 1989 Oct;47(10):2260-4 **(Jpn)**
[The new-type gene map of human chromosomes] Nakai H, et al. **Rinsho Byori** 1989 Feb;Spec No 80:21-37 **(Jpn)**
[Multiple endocrine neoplasia type 2: mapping of the gene predisposing and alteration of genotypes in tumor] Nishisho I, et al. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):919-23 **(Jpn)**
[Chromosome mapping of metabolic disorder] Yoshida MC. **Tanpakushitsu Kakusan Koso** 1988 Apr;33(5):457-60 **(Jpn)**
[Cytogenetic mapping of cattle (Bos taurus L.). Quantitative analysis of the RBA-map of prometaphase chromosomes] Chiriaeva OG, et al. **Genetika** 1989 Aug;25(8):1436-48 (Eng. Abstr.) **(Rus)**
[Cytogenetic localization of Acph-1 and Lap-1 genes in virilis group Drosophila] Katokhin AV. **Genetika** 1989 Oct; 25(10):1786-92 (Eng. Abstr.) **(Rus)**
[Localization of the di gene in the fourth linkage group in Rattus norvegicus rats] Khegai II, et al. **Genetika** 1989 Aug; 25(8):1527-30 (Eng. Abstr.) **(Rus)**
[Genome mapping in silver fox. Syntenic genes in Carnivora] Rubtsov NB, et al. **Genetika** 1989 Dec;25(12):2199-208 (Eng. Abstr.) **(Rus)**
[Mapping of the UVS3, UVS4, UVS5 and UVS6 mutations in Streptomyces olivaceus V KX] Lavrenchuk VIa, et al. **Mikrobiol Zh** 1983 Sep-Oct;45(5):3-8 (Eng. Abstr.) **(Rus)**
[Genetic recombination and chromosome mapping of Streptomyces griseus 773] Podgorskaia ME, et al. **Mikrobiol Zh** 1983 Jul-Aug;45(4):3-9 (Eng. Abstr.) **(Rus)**
[The rules for electron microscopic mapping of polytene chromosomes in squashed preparations of Drosophila salivary glands] Semeshin VF, et al. **Tsitologiia** 1989 Jun; 31(6):728-31 (Eng. Abstr.) **(Rus)**

CHROMOSOME MARKERS see **GENETIC MARKERS**

CHROMOSOME 1 see **CHROMOSOMES, HUMAN, PAIR 1**

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CHROMOSOME 22 see **CHROMOSOMES, HUMAN, PAIR 22**

CHROMOSOMES

see related
KARYOTYPING

Chromosome-specific alpha satellite DNA from the centromere of human chromosome 16. Greig GM, et al. **Am J Hum Genet** 1989 Dec;45(6):862–72

A centromere map of the X chromosome from trisomies of maternal origin. Morton NE, et al. **Ann Hum Genet** 1990 Jan;54 (Pt 1):39–47

Chromosome maps of man and mouse. IV. Searle AG, et al. **Ann Hum Genet** 1989 May;53 (Pt 2):89–140 (266 ref.)

The chloroplast chromosomes in land plants. Sugiura M. **Annu Rev Cell Biol** 1989;5:51–70 (138 ref.)

Microcell-mediated chromosome transfer: a strategy for studying the genetics and molecular pathology of human hereditary diseases with abnormal responses to DNA damage. Friedberg EC, et al. **Basic Life Sci** 1990;52:257–67 (36 ref.)

Basal body chromosomes? Goodenough UW. **Cell** 1989 Oct 6;59(1):1–3 (18 ref.)

Distribution of non-telomeric sites of the (TTAGGG)n telomeric sequence in vertebrate chromosomes. Meyne J, et al. **Chromosoma** 1990 Apr;99(1):3–10

Premature centromeric divisions and prominent telomeres in a patient with persistent mullerian duct syndrome. Rangnekar GV, et al. **Clin Genet** 1990 Jan;37(1):69–73

Centromeres and telomeres: structural elements of eukaryotic chromosomes. Bloom K, et al. **Curr Opin Cell Biol** 1989 Jun;1(3):526–32 (22 ref.)

Genome comparison in the genus Mus: a study with B1, MIF (mouse interspersed fragment), centromeric, and Y-chromosomal repetitive sequences. Nishioka Y. **Cytogenet Cell Genet** 1989;50(4):195–200

Human gametes and zygotes studied by nonradioactive in situ hybridization. Pieters MH, et al. **Cytogenet Cell Genet** 1990;53(1):15–9

Localization of a mouse centromeric DNA repeat in interphase nuclei. Disteche CM, et al. **Cytometry** 1990; 11(1):119–25

Direct nonradioactive in situ hybridization of somatic cell hybrid DNA to human lymphocyte chromosomes. Kievits T, et al. **Cytometry** 1990;11(1):105–9

Quartet: a Drosophila developmental mutation affecting chromosome separation in mitosis. Zahner JE, et al. **Dev Genet** 1990;11(1):27–40

Effect of the X-linked gene Tabby (Ta) on eyelid opening and incisor eruption in neonatal mice is opposite to that of epidermal growth factor. Kapalanga J, et al. **Development** 1990 Feb;108(2):349–55

Restriction enzymes have limited access to DNA sequences in Drosophila chromosomes. Jack RS, et al. **EMBO J** 1990 Aug;9(8):2603–9

The scute (T4) gene acts as a numerator element of the X:a signal that determines the state of activity of sex-lethal in Drosophila. Torres M, et al. **EMBO J** 1989 Oct; 8(10):3079–86

Mapping of transcription units on Xenopus laevis lampbrush chromosomes by in situ hybridization with biotin-labeled cDNA probes. Weber T, et al. **Eur J Cell Biol** 1989 Oct; 50(1):144–53

The largest known chromosome number for a mammal, in a South American desert rodent. Contreras LC, et al. **Experientia** 1990 May 15;46(5):506–8

Genomic imprinting: normal complementation of murine chromosome 16. Berger CN, et al. **Genet Res** 1989 Dec; 54(3):227–30

Inter- and intra-individual chromosome variability in Thamnomys (Grammomys) gazellae (Rodentia, Muridae) B-chromosomes and structural heteromorphisms. Civitelli MV, et al. **Genetica** 1989;79(2):93–105

Synthesis of an attached autosome, C(3)RM, in Drosophila pseudoobscura. Harshman LG, et al. **Genetica** 1990; 80(2):87–91

Metaphase karyotype differentiation in eight species of the montium subgroup of Drosophila. Shyamala BV, et al. **Genetica** 1989;79(3):191–6

A cytogenetic description of a new species of the Anopheles culicifacies complex. Suguna SG, et al. **Genetica** 1988–89; 78(3):225–30

Gross genetic dissection and interaction of the chromosomal region 95E;96F of Drosophila melanogaster. González C, et al. **Genetics** 1989 Oct;123(2):371–7

Chromosome I duplications in Caenorhabditis elegans. McKim KS, et al. **Genetics** 1990 Jan;124(1):115–32

The genetics of the Dras3-Roughened-ecdysoneless chromosomal region (62B3–4 to 62D3–4) in Drosophila melanogaster: analysis of recessive lethal mutations. Sliter TJ, et al. **Genetics** 1989 Oct;123(2):327–36

Genetic analysis of the adenosine3 (Gart) region of the second chromosome of Drosophila melanogaster. Tiong SY, et al. **Genetics** 1990 Apr;124(4):889–97

Identification of crossbred buffalo genotypes and their chromosome segregation patterns. Harisah M, et al. **Genome** 1989 Dec;32(6):999–1002

Rapid analysis of mouse-hamster hybrid cell lines by in situ hybridization. Boyle AL, et al. **Genomics** 1990 May; 7(1):127–30

Establishment of the mouse chromosome 7 region with homology to the myotonic dystrophy region of human chromosome 19q. Cavanna JS, et al. **Genomics** 1990 May; 7(1):12–8

A molecular genetic linkage map of mouse chromosome 4 including the localization of several proto-oncogenes. Ceci JD, et al. **Genomics** 1989 Nov;5(4):699–709

Assignment of the interleukin-2 locus to mouse chromosome 3. Fiorentino L, et al. **Genomics** 1989 Oct;5(3):651–3

The human alpha 2(XI) collagen gene (COL11A2) maps to the centromeric border of the major histocompatibility complex on chromosome 6. Hanson IM, et al. **Genomics** 1989 Nov;5(4):925–31

Close linkage of the cytochrome P450IIA gene subfamily (Cyp2a) to Cyp2b and Coh on mouse chromosome 7. Miles JS, et al. **Genomics** 1990 Jul;7(3):445–8

Definition of mouse chromosome 1 and 3 gene linkage groups that are conserved on human chromosome 1: evidence that a conserved linkage group spans the centromere of human chromosome 1. Moseley WS, et al. **Genomics** 1989 Nov; 5(4):899–905

The syntenic relationship of proximal mouse chromosome 7 and the myotonic dystrophy gene region on human chromosome 19q. Saunders AM, et al. **Genomics** 1990 Feb; 6(2):324–32

Complementation of repair gene mutations on the hemizygous chromosome 9 in CHO: a third repair gene on human chromosome 19. Thompson LH, et al. **Genomics** 1989 Nov;5(4):670–9

Linkage map of mouse chromosome 17: localization of 27 new DNA markers. Vincek V, et al. **Genomics** 1989 Nov; 5(4):773–86

Mouse major (gamma) satellite DNA is highly conserved and organized into extremely long tandem arrays: implications for recombination between nonhomologous chromosomes. Vissel B, et al. **Genomics** 1989 Oct; 5(3):407–14

Centromere splitting in bladder cancer. Berrozpe G, et al. **Hum Genet** 1990 Jul;85(2):184–6

Centromeric heterochromatin instability of chromosomes 1, 9, and 16 in variable immunodeficiency syndrome--a virus-induced phenomenon? Haas OA. **Hum Genet** 1990 Jul;85(2):244–6 (19 ref.)

Premature centromere division of a translocation-carrier autosome. Méhes K, et al. **Hum Genet** 1990 Aug; 85(3):379–80

Metaphase chromosomes of four species of the Drosophila nasuta subgroup. Hatsumi M, et al. **Idengaku Zasshi** 1988 Oct;63(5):435–44

Fitting of a binomial distribution to the number of chiasmata per bivalent. Ukai Y. **Idengaku Zasshi** 1988 Jun; 63(3):259–65

The rat MHC and cystathionine beta-synthase gene are syntenic on chromosome 20. Locker J, et al. **Immunogenetics** 1990;31(4):271–4

IL9 maps to mouse chromosome 13 and human chromosome 5. Mock BA, et al. **Immunogenetics** 1990;31(4):265–70

Possible relationship between chromosome alterations and in vitro cellular radiosensitivity of human malignant melanoma. McBride H, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):349–55

Identification of species D, a new member of the Anopheles quadrimaculatus species complex: a biochemical key. Narang SK, et al. **J Am Mosq Control Assoc** 1989 Sep; 5(3):317–24

Chromosomal transformation in the cyanobacterium Agmenellum quadruplicatum. Essich E, et al. **J Bacteriol** 1990 Apr;172(4):1916–22

Three-dimensional arrangements of chromatin and chromosomes: old concepts and new techniques. Appels R. **J Cell Sci** 1989 Mar;92 (Pt 3):325–8 (31 ref.)

Evidence for chromosomal transmission of polydnavirus DNA. Stoltz DB. **J Gen Virol** 1990 May;71 (Pt 5):1051–6

Chromosomal and protein evolution in morphologically similar species of Praomys sensu lato (Rodentia, Muridae). Qumsiyeh MB, et al. **J Hered** 1990 Jan-Feb;81(1):58–65

Cancer family syndrome: cytogenetic investigations, in vitro tetraploidy, and biomarker studies in a large family. Guanti G, et al. **J Med Genet** 1990 Jul;27(7):441–5

Three different, non-mosaic sex chromosome abnormalities (direct cytotrophoblasts, mesenchymal core cultures, and abortus skin fibroblasts): implications for elucidating chorionic villi mosaicism. Shulman LP, et al. **J Med Genet** 1989 Dec;26(12):791–2

Three-dimensional optical microscopy using tilted views. Shaw PJ. **J Microsc** 1990 May;158 (Pt 2):165–72

In vivo assessment of the Z-DNA-forming potential of d(CA.GT)n and d(CG.GC)n sequences cloned into SV40 minichromosomes. Casasnovas JM, et al. **J Mol Biol** 1989 Aug 20;208(4):537–49

Triploid cells found in intramolluscan stages of Schistosoma mansoni. Hirai H, et al. **J Parasitol** 1989 Oct;75(5):800–2

Extensive homologies between Leishmania donovani chromosomes of markedly different size. Bishop RP. **Mol Biochem Parasitol** 1990 Jan 1;38(1):1–11

Size-conserved chromosomes and stability of molecular karyotype in cloned stocks of Leishmania major. Giannini SH, et al. **Mol Biochem Parasitol** 1990 Feb;39(1):9–21

Generation of chromosome size polymorphism during in vivo mitotic multiplication of Plasmodium berghei involves both loss and addition of subtelomeric repeat sequences. Ponzi M, et al. **Mol Biochem Parasitol** 1990 Jun;41(1):73–82

Chromosome 9 from independent clones and isolates of Plasmodium falciparum undergoes subtelomeric deletions with similar breakpoints in vitro. Shirley MW, et al. **Mol Biochem Parasitol** 1990 Apr;40(1):137–45

Functional analysis of a centromere from fission yeast: a role for centromere-specific repeated DNA sequences. Clarke L, et al. **Mol Cell Biol** 1990 May;10(5):1863–72

Parasitological teeth for evolutionary problems [news] Harvey PH. **Nature** 1989 Nov 16;342(6247):230

Telomere-telomere recombination provides an express pathway for telomere acquisition. Wang SS, et al. **Nature** 1990 May 31;345(6274):456–8

Study of mature cells in human myeloid malignancies by premature chromosome condensation. Tigaud JD. **Nouv Rev Fr Hematol** 1990;32(1):117–9

The mouse histone H2a.2 gene from chromosome 3. Hurt MM, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8876

Flow cytogenetics. Bartholdi MF. **Pathobiology** 1990; 58(2):118–28 (34 ref.)

First-trimester prenatal diagnosis of homozygous (14;21) translocation in a fetus with 44 chromosomes. Dallapiccola B, et al. **Prenat Diagn** 1989 Aug;9(8):555–8

An improved method of direct chromosome preparation from chorionic villus and high resolution banding technique. Xiao S, et al. **Prenat Diagn** 1989 Aug;9(8):589–93

G-DNA: a twice-folded DNA structure adopted by single-stranded oligo(dG) and its implications for telomeres. Panyutin IG, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):867–70

The macromolecular organization of human centromeric regions. Arn PH, et al. **Prog Clin Biol Res** 1989;318:1–8

Conditional dicentric chromosomes in yeast. Bloom K, et al. **Prog Clin Biol Res** 1989;318:149–58

A map of the centromere (primary constriction) in vertebrate chromosomes at metaphase. Earnshaw WC, et al. **Prog Clin Biol Res** 1989;318:33–42

Microtubule dynamics and the movement of chromosomes. Gorbsky GJ, et al. **Prog Clin Biol Res** 1989;318:159–69

The centromere and aneuploidy: I. Caffeine-induced detachment and fragmentation of kinetochores of

mammalian chromosomes. Zinkowski RP, et al. **Prog Clin Biol Res** 1989;318:43–60

In situ hybridization of Drosophila polytene chromosomes with digoxigenin–dUTP–labeled probes. Engels WR, et al. **Trends Genet** 1989 Nov;5(11):366

Chromosomes of malaria parasites. Foote SJ, et al. **Trends Genet** 1989 Oct;5(10):337–42 (29 ref.)

How does the end begin? Formation and maintenance of telomeres in ciliates and yeast. Zakian VA, et al. **Trends Genet** 1990 Jan;6(1):12–6 (33 ref.)

Mastomys natalensis or Mastomys coucha. Correct species designation in animal experiments. Kruppa TF, et al. **Trop Med Parasitol** 1990 Jun;41(2):219–20

Chromosomes of six species of Onchocerca (Nematoda: Filarioidea). Post RJ, et al. **Trop Med Parasitol** 1989 Sep; 40(3):292–4

Chromosome analysis of canine transmissible sarcoma cells. Fujinaga T, et al. **Zentralbl Veterinarmed [A]** 1989 Aug; 36(7):481–9

[Oscillatory changes in the transcription and supercoiling of minichromosomal DNA after the withdrawal of butyric acid from a mouse cell culture] Kraevskiĭ VA, et al. **Dokl Akad Nauk SSSR** 1989;309(4):1008–11 **(Rus)**

[Distribution of Drosophila melanogaster mobile genetic elements along X–chromosome and autosomes] Leibovich BA. **Genetika** 1990 May;26(5):817–25 (Eng. Abstr.) **(Rus)**

[Isolation of individual chromosomes and their use in studying the human and animal genome] Poletaev AI. **Mol Biol (Mosk)** 1989 Jul–Aug;23(4):917–23 (17 ref.) (Eng. Abstr.) **(Rus)**

[Acquisition of the sequence of a new subclass of human alpha– satellite DNA, localized in the centromere regions of two pairs of acrocentric chromosomes] Gar'kavtsev IV, et al. **Mol Gen Mikrobiol Virusol** 1989 Jun;(6):25–9 (Eng. Abstr.) **(Rus)**

ANALYSIS

The rapidly phosphorylated chromosomal 42–kDa protein is a subunit of larger protein complexes. Egyhazi E, et al. **Biochem Biophys Res Commun** 1989 Dec 15;165(2):895–901

The acentriolar state of the Drosophila cell lines 1182. Debec A, et al. **Biol Cell** 1989;67(3):307–11

Developmental expression pattern of a 800 kb DNA continuum cloned from the Drosophila X chromosome 14B–15B region. Surdej P, et al. **Biol Cell** 1990;68(2):105–18

Bands, interbands and puffs in native Drosophila polytene chromosomes are recognized by a monoclonal antibody to an epitope in the carboxy–terminal tail of histone H1. Hill RJ, et al. **Chromosoma** 1989 Dec;98(6):411–21

A 41–42 bp tandemly repeated sequence isolated from nuclear envelopes of chicken erythrocytes is located predominantly on microchromosomes. Matzke MA, et al. **Chromosoma** 1990 Apr;99(2):131–7

Differences in the organization and chromosomal allocation of satellite DNA between the European long tailed house mice Mus domesticus and Mus musculus. Redi CA, et al. **Chromosoma** 1990 Apr;99(1):11–7

Regional differences in immunostainability of isolated metaphase chromosomes of Indian muntjac with anti–Z–DNA antibody. Ueda T, et al. **Chromosoma** 1990 Jul;99(3):161–8

A nucleolar auto–antigen is part of a major chromosomal surface component. Yasuda Y, et al. **Chromosoma** 1990 Apr; 99(2):152–60

Chromosomal complements of five species of Indian mammals. Singh V, et al. **Cytobios** 1990;62(248):45–62

An improved procedure for the cultivation and in situ chromosome preparation of monolayer cell cultures. Speit G, et al. **Cytobios** 1990;62(248):39–44

Localization of the repetitive telomeric sequence (TTAGGG)n in two muntjac species and implications for their karyotypic evolution. Scherthan H. **Cytogenet Cell Genet** 1990;53(2–3):115–7

Isolation of giant DNA fragments from flow–sorted human chromosomes. Minoshima S, et al. **Cytometry** 1990; 11(4):539–46

Multiple fluorescence in situ hybridization. Nederlof PM, et al. **Cytometry** 1990;11(1):126–31

Automatic detection of fragile X chromosomes using an X centromere probe. Piper J, et al. **Cytometry** 1990;11(1):73–9

Flow cytometric quantification of human chromosome specific repetitive DNA sequences by single and bicolor fluorescent in situ hybridization to lymphocyte interphase nuclei. van Dekken H, et al. **Cytometry** 1990;11(1):153–64

Construction of gene libraries for each human chromosome. Van Dilla MA, et al. **Cytometry** 1990;11(1):208–18

Distribution patterns of HP1, a heterochromatin–associated nonhistone chromosomal protein of Drosophila. James TC, et al. **Eur J Cell Biol** 1989 Oct;50(1):170–80

DNA content of individual chromosomes of Protemnodon bicolor. Radley JM. **Exp Cell Res** 1966 Jan;41(1):217–20

Plasmodium falciparum: analysis of chromosomes separated by contour–clamped homogenous electric fields. Gu H, et al. **Exp Parasitol** 1990 Aug;71(2):189–98

Molecular evolution of centromere–associated nucleotide sequences in two species of canids. Fanning TG. **Gene** 1989 Dec 28;85(2):559–63

Analysis of an SD second chromosome from a natural population of Drosophila melanogaster. Cicchetti R, et al. **Genetica** 1988–89;78(3):159–67

Ag–NOR staining and in situ hybridization of rDNA in the chromosomes of the South American camelids. Vidal–Rioja L, et al. **Genetica** 1989;79(3):215–22

Genomic variation of Trypanosoma cruzi: involvement of multicopy genes. Wagner W, et al. **Infect Immun** 1990 Oct; 58(10):3217–24

Chromosomes of Blastocystis hominis. Upcroft JA, et al. **Int J Parasitol** 1989 Dec;19(8):879–83

CENP–B: a major human centromere protein located beneath the kinetochore. Cooke CA, et al. **J Cell Biol** 1990 May; 110(5):1475–88

Three–dimensional analysis of the organization of human chromosome domains in human and human–hamster hybrid interphase nuclei. van Dekken H, et al. **J Cell Sci** 1989 Oct;94 (Pt 2):299–306

A molecular karyotype of Eimeria tenella as revealed by contour–clamped homogeneous electric field gel electrophoresis. Shirley MW, et al. **Mol Biochem Parasitol** 1990 Jan 15;38(2):169–73

Chromosome site–specific immunohistochemical detection of DNA adducts in N–acetoxy–2–acetylaminofluorene—exposed Chinese hamster ovary cells. Olivero OA, et al. **Mol Carcinog** 1990; 3(1):37–43

Histone variants in mouse centromeric chromatin. Russanova V, et al. **Mol Cell Biochem** 1989 Oct 5;90(1):1–7

Chromatin digestion with restriction endonucleases reveals 150–160 bp of protected DNA in the centromere of chromosome XIV in Saccharomyces cerevisiae. Funk M, et al. **Mol Gen Genet** 1989 Oct;219(1–2):153–60

Studying single living cells and chromosomes by confocal Raman microspectroscopy [see comments] Puppels GJ, et al. **Nature** 1990 Sep 20;347(6290):301–3 Comment in: Nature 1990 Sep 20;347(6290):230.

Cloning regions of the Drosophila genome by microdissection of polytene chromosome DNA and PCR with nonspecific primer. Wesley CS, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):599–603

Site–specific mutagenesis by O6–alkylguanines located in the chromosomes of mammalian cells: influence of the mammalian O6–alkylguanine–DNA alkyltransferase. Ellison KS, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(22):8620–4

Autoantibodies from a patient with scleroderma CREST recognized kinetochores of the higher plant Haemanthus. Mole–Bajer J, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(9):3599–603

Biochemical analysis of CENP–A, a centromeric protein with histone–like properties. Palmer DK, et al. **Prog Clin Biol Res** 1989;318:61–72

Expression of the acidic nuclear immediate–early protein (IE1) of human cytomegalovirus in stable cell lines and its preferential association with metaphase chromosomes. Lafemina RL, et al. **Virology** 1989 Oct;172(2):584–600

[Attacus ricini chromosomal DNA fragments active as prokaryotic promoters in Escherichia coli] Liu XM, et al. **I Chuan Hsueh Pao** 1988;15(2):102–10 (Eng. Abstr.) **(Chi)**

[First demonstration of polytene chromosomes in adult Glossina] Elsen P, et al. **Ann Soc Belg Med Trop** 1989 Sep; 69(3):245–50 (Eng. Abstr.) **(Fre)**

[Chromosomes and chromosome disorders] Borgström GH. **Nord Med** 1990;105(1):8–9, 26 (Eng. Abstr.) **(Swe)**

DRUG EFFECTS

Italo–Hungarian Meeting on Genotoxicity of Environmental Chemicals: Scientific and Regulatory Aspects. Rome, April 28–29, 1988. **Ann Ist Super Sanita** 1989;25(4):541–612

Short–term tests, genotoxicity and carcinogenicity in light of a multivariate statistical exploration. Benigni R. **Ann Ist Super Sanita** 1989;25(4):573–5

Methods for assessing human exposure to and/or biological effects of genotoxic agents. Börzsönyi M, et al. **Ann Ist Super Sanita** 1989;25(4):611–2

Regulatory aspects of chemical mutagenesis in Italy and in the European Community. Carere A. **Ann Ist Super Sanita** 1989;25(4):605–9

Aspergillus nidulans as a test organism for the detection of chemically–induced mitotic crossing–over and chromosome malsegregation. Crebelli R. **Ann Ist Super Sanita** 1989;25(4):563–7

Genotoxicity of selected herbicides. Pintér A, et al. **Ann Ist Super Sanita** 1989;25(4):577–82

T–1, a mitotic arrester, alters centrosome configurations in fertilized sea urchin eggs. Itoh TJ, et al. **Cell Motil Cytoskeleton** 1990;16(2):146–54

Chromosome breakage induced by bleomycin in an ataxia telangiectasia lymphoblastoid line: correlation with fragile sites and Epstein–Barr virus DNA localization. Caporossi D, et al. **Cytogenet Cell Genet** 1989;52(3–4):180–5

Nocodazole sensitivity, age–related aneuploidy, and alterations in the cell cycle during maturation of mouse oocytes. Eichenlaub–Ritter U, et al. **Cytogenet Cell Genet** 1989;52(3–4):170–6

Cytogenetic analyses of mice exposed to dichloromethane. Allen J, et al. **Environ Mol Mutagen** 1990;15(4):221–8

Observation of frequencies of lymphocytes with micronuclei in human peripheral blood cultures from workers in a sulphuric acid factory. Meng ZQ, et al. **Environ Mol Mutagen** 1990;15(4):218–20

Effects of phenethyl alcohol on chromosomes of Allium cepa. Bammi RK, et al. **Exp Cell Res** 1966 Jan;41(1):124–30

Differential bleomycin susceptibility in cultured lymphocytes of fragile X patients and normal individuals. Li SY, et al. **Hum Genet** 1990 Aug;85(3):267–71

Bleomycin–induced chromosomal damage in tuberous sclerosis. Vorechovsky I, et al. **Jinrui Idengaku Zasshi** 1990 Jun;35(2):207–13

Antifolate drug selection results in duplication and rearrangement of chromosome 7 in Plasmodium chabaudi. Cowman AF, et al. **Mol Cell Biol** 1989 Nov;9(11):5182–8

Chloroacetaldehyde is a powerful inducer of mitotic aneuploidy in Aspergillus nidulans. Crebelli R, et al. **Mutagenesis** 1990 Mar;5(2):165–8

Concurrent detection of gene mutations and chromosomal aberrations induced in vivo in somatic cells. Heddle JA, et al. **Mutagenesis** 1990 Mar;5(2):179–84

Micronuclei, kinetochores and hypoploidy: tests with some agents. Sternes KL, et al. **Mutagenesis** 1989 Nov; 4(6):425–31

Clastogenic effects of copper sulphate on the bone marrow chromosomes of mice in vivo. Agarwal K, et al. **Mutat Res** 1990 Jan;243(1):1–6

Effects of theophylline on chromosomal breakage and sister–chromatid exchange. Day P, et al. **Mutat Res** 1989 Dec;224(4):409–13

Differential sensitivity of peripheral blood lymphocytes of untreated leprosy patients to mitomycin C. D'Souza D, et al. **Mutat Res** 1990 Feb;240(2):101–7

Localization of breaks induced by vinyl chloride in the human chromosomes of lymphocytes. Fucic A, et al. **Mutat Res** 1990 Feb;243(2):95–9

Cytotoxic effects of zirconium oxychloride on bone marrow cells of mice. Ghosh S, et al. **Mutat Res** 1990 Jan; 243(1):29–33

Cytogenetic analysis of peripheral blood lymphocytes in workers exposed to vinyl chloride. Hrivnak L, et al. **Mutat Res** 1990 Feb;240(2):83–5

DNA repair and chromosomal stability in the alkylating agent–hypersensitive Chinese hamster cell line 27–1. Kaina B, et al. **Mutat Res** 1990 Mar;243(3):219–24

Induction of chromosome damage by benzo[a]pyrene, 2–aminofluorene and cyclophosphamide in the root cells of Vicia faba. Kanaya N. **Mutat Res** 1990 Feb;228(2):187–92

Enhancement of cytogenetic and cytotoxic effects on multidrug–resistant (MDR) cells by a calcium antagonist (verapamil). Nito S. **Mutat Res** 1989 Oct;227(2):73–9

Suppressing effects of vanillin, cinnamaldehyde, and anisaldehyde on chromosome aberrations induced by X–rays in mice. Sasaki YF, et al. **Mutat Res** 1990 Apr; 243(4):299–302

Effects of trypsin on X–ray–induced cell killing, chromosome abnormalities and kinetics of DNA repair in mammalian cells. Sprunt EA, et al. **Mutat Res** 1990 Feb;228(2):211–9

The effect of retinoids, carotenoids and phenolics on chromosomal instability of bovine papillomavirus DNA–carrying cells. Stich HF, et al. **Mutat Res** 1990 Aug; 241(4):387–93

The induction of chromosomal aberrations and SCEs by visible light in combination with dyes. II. Cell cycle dependence, and the effect of hydroxyl radical scavengers during light exposure in cultures of Chinese hamster ovary cells sensitized with acridine orange. Uggla AH. **Mutat Res** 1990 Aug;231(2):233–42

Mutation and the environment. Part B: metabolism, testing methods, and chromosomes. Proceedings of the Fifth International Conference on Environmental Mutagens. Cleveland, Ohio, July 10–15, 1989. **Prog Clin Biol Res** 1990; 340B:1–475

Cytogenetic effects of phorbol ester tumor promoters: possible role in multistep tumorigenesis. Kinzel V, et al. **Prog Clin Biol Res** 1990;340D:133–41

The centromere and aneuploidy: II. Drug induced detachment and fragmentation of kinetochores of mammalian chromosomes. Zinkowski RP, et al. **Prog Clin Biol Res** 1990;340B:223–36

[Cytogenetic analysis of the effects of selected 2d generation cytostatics (iproplatin and oxoplatin) on human peripheral lymphocytes in vitro] Srb V, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1989;32(4):319–51 (Eng. Abstr.) **(Cze)**

[Telomeric fusion of the chromosomes in cells with micronuclei during the subsequent incorporation into the DNA of thymidine halogenated analogs] Stobetskiĭ VI, et al. **Tsitologiia** 1989 Oct;31(10):1242–4 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Anticentromere antibody in patients without CREST and scleroderma: association with active digital vasculitis, rheumatic and connective tissue disease. Goldman JA. **Ann Rheum Dis** 1989 Sep;48(9):771–5

Isotype analysis of the anti–CENP–B anticentromere autoantibody: evidence for restricted clonality. Eisenberg RA, et al. **Arthritis Rheum** 1989 Oct;32(10):1315–8

The IgG, IgM, and IgA isotypes of anti–topoisomerase I and anticentromere autoantibodies. Hildebrandt S, et al. **Arthritis Rheum** 1990 May;33(5):724–7

An antigen located in the kinetochore region in metaphase and on polar microtubule ends in the midbody region in anaphase, characterised using a monoclonal antibody. Pankov R, et al. **Chromosoma** 1990 Apr;99(2):95–101

Autoantibodies to mitochondrial and centromere antigens in primary biliary cirrhosis and systemic sclerosis. McHugh NJ, et al. **Clin Exp Immunol** 1990 Aug;81(2):244–9

Anti-centromere antibodies (ACA). Kallenberg CG. **Clin Rheumatol** 1990 Mar;9(1 Suppl 1):136–9 (24 ref.)
Anticentromere antibody positive CREST syndrome associated with polyarthritis, renal impairment and mixed cryoglobulinaemia. Shetty HG, et al. **Clin Rheumatol** 1989 Sep;8(3):381–5
A human centromere antigen (CENP-B) interacts with a short specific sequence in alphoid DNA, a human centromeric satellite. Masumoto H, et al. **J Cell Biol** 1989 Nov;109(5):1963–73
Ki-67 detects a nuclear matrix-associated proliferation-related antigen. II. Localization in mitotic cells and association with chromosomes. Verheijen R, et al. **J Cell Sci** 1989 Apr;92 (Pt 4):531–40
Use of an antikinetochore antibody to discriminate between micronuclei induced by aneuploidogens and clastogens. Tucker JD, et al. **Prog Clin Biol Res** 1990;340B:275–84
[Pulmonary manifestation of progressive systemic scleroderma: prognostic value of centromere antibodies and antibodies to Scl-70 nucleoprotein] Behr J, et al. **Pneumologie** 1990 Jun;44(6):822–5 (Eng. Abstr.) **(Ger)**
[Generalized morphea-like progressive systemic sclerosis with anticentromere antibodies and eosinophilic cellulitis] Sasaki T, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Apr; 99(4):469–76 (Eng. Abstr.) **(Jpn)**
[Clinical significance of anticentromere antibody assay] Moteki S. **Nippon Rinsho** 1990 Feb;48 Suppl:580–3 **(Jpn)**
[Frequency of anti-centromere antibodies in the anti-mitochondrial antibody positive sera] Okano T, et al. **Rinsho Byori** 1989 Dec;37(12):1367–72 (Eng. Abstr.) **(Jpn)**

METABOLISM

Calcium in mitosis: role of 51-kD protein in the centrosome of sea urchin egg in aster formation. Sakai H, et al. **Adv Exp Med Biol** 1989;255:471–80
Assembly and self-association of oxytricha telomeric nucleoprotein complexes. Raghuraman MK, et al. **Cell** 1989 Nov 17;59(4):719–28
The anchorosome, a special chromatin granule for the anchorage of the interphase chromosome to the nuclear envelope. Fais D, et al. **Cell Biol Int Rep** 1989 Sep; 13(9):747–58
Effects of brain microtubule-associated proteins on microtubule dynamics and the nucleating activity of centrosomes. Bré MH, et al. **Cell Motil Cytoskeleton** 1990; 15(2):88–98
BrdU pulse/reverse staining protocols for investigating chromosome replication. Aghamohammadi SZ, et al. **Chromosoma** 1990 Apr;99(1):76–82
Expression of 87A, 87C and 93D heat shock puffs in trisomic (2L and 3L) strains of Drosophila melanogaster: evidence for a functional relation between 93D and 87C. Ghosh AK, et al. **Chromosoma** 1990 Apr;99(1):71–5
Heteropycnosis of an underreplicating chromosome. Zacharias H. **Chromosoma** 1990 Apr;99(1):24–35
Control of transcription in vitro from simian virus 40 promoters by proteins from viral minichromosomes. Beard P, et al. **Curr Top Microbiol Immunol** 1989;144:47–54
In situ methylation of human chromosomes with methylase-AluI. Fernández-Piqueras J, et al. **Cytogenet Cell Genet** 1989;52(1-2):93–4
The claret locus in Drosophila encodes products required for eyecolor and for meiotic chromosome segregation. Yamamoto AH, et al. **EMBO J** 1989 Dec 1;8(12):3543–52
On the cell-free association of lamins A and C with metaphase chromosomes. Burke B. **Exp Cell Res** 1990 Jan; 186(1):169–76
The correlation between the chromosome pulverization effect and other biological activities of measles virus preparations. Norrby E, et al. **Exp Cell Res** 1966 Mar; 41(3):483–91
Precise excision of telomere-bearing transposons during Oxytricha fallax macronuclear development. Hunter DJ, et al. **Genes Dev** 1989 Dec;3(12B):2101–12
Early dihydrofolate reductase gene amplification events in CHO cells usually occur on the same chromosome arm as the original locus. Trask BJ, et al. **Genes Dev** 1989 Dec; 3(12A):1913–25
Segregation ratios within Segregation Distorter lines of Drosophila melanogaster conform to a beta-binomial distribution. Sharp CB, et al. **Genet Res** 1990 Jun; 55(3):165–70
Negative segregation distortion in the SD system of Drosophila melanogaster: a challenge to the concept of differential sensitivity of Rsp alleles. Hiraizumi Y. **Genetics** 1990 Jul;125(3):515–25
Centromeric regions control autonomous segregation tendencies in single-division meiosis of Saccharomyces cerevisiae. Sharon G, et al. **Genetics** 1990 Jul;125(3):487–94
The effects of chromosome rearrangements on the expression of heterochromatic genes in chromosome 2L of Drosophila melanogaster. Wakimoto BT, et al. **Genetics** 1990 May; 125(1):141–54
The genetic analysis of distributive segregation in Drosophila melanogaster. II. Further genetic analysis of the nod locus. Zhang P, et al. **Genetics** 1990 May;125(1):115–27
Recognition and elongation of telomeres by telomerase. Blackburn EH, et al. **Genome** 1989;31(2):553–60
Pulsed-field gel analysis of alpha-satellite DNA at the human X chromosome centromere: high-frequency polymorphisms and array size estimate. Mahtani MM, et al. **Genomics** 1990 Aug;7(4):607–13
Lamins A and C bind and assemble at the surface of mitotic chromosomes. Glass JR, et al. **J Cell Biol** 1990 Sep; 111(3):1047–57
Kinetochores capture astral microtubules during chromosome attachment to the mitotic spindle: direct visualization in live newt lung cells. Hayden JH, et al. **J Cell Biol** 1990 Sep;111(3):1039–45
Isolation of the gene encoding the Saccharomyces cerevisiae centromere-binding protein CP1. Baker RE, et al. **Mol Cell Biol** 1990 Jun;10(6):2458–67
Purification of a protein binding to the CDEI subregion of Saccharomyces cerevisiae centromere DNA. Jiang WD, et al. **Mol Cell Biol** 1989 Dec;9(12):5585–93
Double Ds elements are involved in specific chromosome breakage. Döring HP, et al. **Mol Gen Genet** 1989 Oct; 219(1-2):299–305
Two proteins of 220 kD and 230 kD bind to UV-damaged SV40 minichromosomes in irradiated monkey kidney cells. Brown-Luedi ML, et al. **Mutat Res** 1989 Dec; 227(4):227–31
A 595 nanometer band-pass filter enhances the contrast of in situ hybridization signals on chromosome observed after biotin/avidin-alkaline phosphatase localization. Yasue H, et al. **Stain Technol** 1989 May;64(3):139–42
Centromeres of budding and fission yeasts. Clarke L. **Trends Genet** 1990 May;6(5):150–4 (31 ref.)

PATHOLOGY

Roberts-SC phocomelia syndrome with exencephaly. Verloes A, et al. **Ann Genet** 1989;32(3):169–70
Alternate centromere inactivation in a pseudodicentric (15;20)(pter;pter) associated with a progressive neurological disorder. Rivera H, et al. **J Med Genet** 1989 Oct;26(10):626–30

PHYSIOLOGY

Optimization of in situ hybridization to human metaphase chromosomes. Lomholt B, et al. **Anal Biochem** 1989 Oct; 182(1):25–31
Chromosome reproduction: units of DNA for segregation. Taylor JH. **Bioessays** 1990 Jun;12(6):289–96 (41 ref.)
Traction fibres in chromosome movement: the pros and cons. Fuge H. **Biol Cell** 1989;66(3):209–13 (38 ref.)
Puffs, genes, and hormones revisited. Ashburner M. **Cell** 1990 Apr 6;61(1):1–3 (11 ref.)
Reverse transcriptase, the end of the chromosome, and the end of life. Boeke JD. **Cell** 1990 Apr 20;61(2):193–5 (16 ref.)
The Drosophila 74EF early puff contains E74, a complex ecdysone-inducible gene that encodes two ets-related proteins. Burtis KC, et al. **Cell** 1990 Apr 6;61(1):85–99
Yeast centromere binding protein CBF1, of the helix-loop-helix protein family, is required for chromosome stability and methionine prototrophy. Cai M, et al. **Cell** 1990 May 4;61(3):437–46
A kinesin-like protein required for distributive chromosome segregation in Drosophila. Zhang P, et al. **Cell** 1990 Sep 21;62(6):1053–62
Diffuse kinetochores and holokinetic anaphase chromatin movement during mitosis in the hemipteran Agallia constricta (leafhopper) cell line AC-20. Rieder CL, et al. **Cell Motil Cytoskeleton** 1990;15(4):245–59
Analysis of chromosome replication by a BrdU antibody technique. Vogel W, et al. **Chromosoma** 1989 Nov; 98(5):335–41
Centromeres and kinetochores: integrated domains on eukaryotic chromosomes. Brinkley BR. **Curr Opin Cell Biol** 1990 Jun;2(3):446–52 (14 ref.)
Functional properties of kinetochores in animal cells. Sluder G. **Curr Opin Cell Biol** 1990 Feb;2(1):23–7 (10 ref.)
Meiosis in trisomic female mice with Robertsonian translocations. II. Chromosome behaviour at first and second meiotic metaphases. Crolla JA, et al. **Cytogenet Cell Genet** 1989;52(3-4):118–23
Trivalent behavior during prophase I in male mice heterozygous for three Robertsonian translocations: an electron-microscopic study. Grao P, et al. **Cytogenet Cell Genet** 1989;52(3-4):105–10
Meiosis in trisomic female mice with Robertsonian translocations. I. Prophase pairing. Polani PE, et al. **Cytogenet Cell Genet** 1989;52(3-4):111–7
Specificity switching of the P1 plasmid centromere-like site. Davis MA, et al. **EMBO J** 1990 Apr;9(4):991–8
Characterization of Schizosaccharomyces pombe minichromosome deletion derivatives and a functional allocation of their centromere. Niwa O, et al. **EMBO J** 1989 Oct;8(10):3045–52
Telomere interactions may condition the programming of antigen expression in Trypanosoma brucei. Van der Werf A, et al. **EMBO J** 1990 Apr;9(4):1035–40
The arrangement of interphase chromosomes: structural and functional aspects. Hilliker AJ, et al. **Exp Cell Res** 1989 Dec;185(2):267–318 (139 ref.)
Transvection in the Ultrabithorax domain of the bithorax complex of Drosophila melanogaster. Mathog D. **Genetics** 1990 Jun;125(2):371–82
Megakaryocyte endomitosis: a review. Jackson CW. **Int J Cell Cloning** 1990 Jul;8(4):224–6 (10 ref.)
Chromosomes of amphibian oocytes as a model for gene expression: significance of lampbrush loops. Angelier N, et al. **Int J Dev Biol** 1990 Mar;34(1):69–80
Telomeres: structure and synthesis. Blackburn EH. **J Biol Chem** 1990 Apr 15;265(11):5919–21 (30 ref.)
Poleward force at the kinetochore in metaphase depends on the number of kinetochore microtubules. Hays TS, et al. **J Cell Biol** 1990 Feb;110(2):391–404
Parthenogenesis in Xenopus eggs requires centrosomal integrity. Klotz C, et al. **J Cell Biol** 1990 Feb;110(2):405–15
The motor for poleward chromosome movement in anaphase is in or near the kinetochore. Nicklas RB. **J Cell Biol** 1989 Nov;109(5):2245–55
Kinetochores are transported poleward along a single astral microtubule during chromosome attachment to the spindle in newt lung cells. Rieder CL, et al. **J Cell Biol** 1990 Jan; 110(1):81–95
Chromosomal recombination and breakage associated with instability in mouse centrometric satellite DNA. Chatterjee B, et al. **J Mol Biol** 1989 Nov 20;210(2):303–12
High-frequency homologous recombination between duplicate chromosomal immunoglobulin mu heavy-chain constant regions. Baker MD. **Mol Cell Biol** 1989 Dec; 9(12):5500–7
A 125-base-pair CEN6 DNA fragment is sufficient for complete meiotic and mitotic centromere functions in Saccharomyces cerevisiae. Cottarel G, et al. **Mol Cell Biol** 1989 Aug;9(8):3342–9
MER1, a yeast gene required for chromosome pairing and genetic recombination, is induced in meiosis. Engebrecht J, et al. **Mol Cell Biol** 1990 May;10(5):2379–89
Position effects on the timing of replication of chromosomally integrated simian virus 40 molecules in Chinese hamster cells. Gilbert DM, et al. **Mol Cell Biol** 1990 Aug; 10(8):4345–55
Chromosome instability mutants of Saccharomyces cerevisiae that are defective in microtubule-mediated processes. Hoyt MA, et al. **Mol Cell Biol** 1990 Jan;10(1):223–34
Telomere structure in Euplotes crassus: characterization of DNA-protein interactions and isolation of a telomere-binding protein. Price CM. **Mol Cell Biol** 1990 Jul;10(7):3421–31
Histone H1 represses transcription from minichromosomes assembled in vitro. Shimamura A, et al. **Mol Cell Biol** 1989 Dec;9(12):5573–84
Premature chromosome condensation is induced by a point mutation in the hamster RCC1 gene. Uchida S, et al. **Mol Cell Biol** 1990 Feb;10(2):577–84
Cis- and trans-acting factors involved in centromere function in Saccharomyces cerevisiae. Murphy M, et al. **Mol Microbiol** 1990 Mar;4(3):329–36 (39 ref.)
Scoring of SCE frequency per cell cycle in CHO chromosomes by means of a standardized 3-way-differential staining method. Escalza P, et al. **Mutat Res** 1989 Nov;215(1):139–45
Cell biology: telomeres sans frontières [news] Blackburn EH. **Nature** 1990 Jan 11;343(6254):122
Mediation of meiotic and early mitotic chromosome segregation in Drosophila by a protein related to kinesin [see comments] Endow SA, et al. **Nature** 1990 May 3; 345(6270):81–3 Comment in: Nature 1990 May 3;345(6270):22–3.
Focal points for chromosome condensation and decondensation revealed by three-dimensional in vivo time-lapse microscopy. Hiraoka Y, et al. **Nature** 1989 Nov 16;342(6247):293–6
Soviet doors opening up [news] Robertson M. **Nature** 1990 May 24;345(6273):281
DNA methylation and late replication probably aid cell memory, and type I DNA reeling could aid chromosome folding and enhancer function. Riggs AD. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1235):285–97
Developmental consequences of imprinting of parental chromosomes by DNA methylation. Surani MA, et al. **Philos Trans R Soc Lond [Biol]** 1990 Jan 30; 326(1235):313–27
Chromosome displacement and aneuploidy. Ford JH, et al. **Prog Clin Biol Res** 1989;318:231–40
Patterns of early centromere separation and aneuploidy in human carcinoma cells. Gebhart ER. **Prog Clin Biol Res** 1989;318:129–35
Chromosome interactions and number of centromeres per cell are important to chromosome stability in yeast. Resnick MA, et al. **Prog Clin Biol Res** 1989;318:317–24
Centromere separation and aneuploidy: a lesson from multicentric chromosomes. Vig BK, et al. **Prog Clin Biol Res** 1989;318:137–48 (17 ref.)
Telomeres and their synthesis. Blackburn EH. **Science** 1990 Aug 3;249(4968):489–90 (21 ref.)
[The effect of postsynthetic phosphorylation on the structure and function of histone H1 in the chromosomes (minireview)] Jerzmanowski A. **Postepy Biochem** 1989; 35(3):321–8 (15 ref.) **(Pol)**

RADIATION EFFECTS

Rapid metaphase and interphase detection of radiation-induced chromosome aberrations in human lymphocytes by chromosomal suppression in situ hybridization. Cremer T, et al. **Cytometry** 1990;11(1):110–8
Algorithms for the evaluation of radiation induced chromosome aberration yields per cell from flow karyotypes. Dietzel AH, et al. **Cytometry** 1990;11(6):708–15

Further observations on the nature of radiation-induced chromosomal interchanges recovered from Drosophila sperm. Eberl DF, et al. **Genome** 1989 Oct;32(5):847-55

Risk estimates: past, present, and future. Abrahamson S. **Health Phys** 1990 Jul;59(1):99-102

Micronuclei in cytokinesis-blocked lymphocytes of cancer patients following fractionated partial-body radiotherapy. Fenech M, et al. **Int J Radiat Biol** 1990 Feb;57(2):373-83

Production and repair of chromosome damage in an X-ray sensitive CHO mutant visualized and analysed in interphase using the technique of premature chromosome condensation. Iliakis GE, et al. **Int J Radiat Biol** 1990 Jun; 57(6):1213-23

Absence of adaptive response to low-level irradiation from tritiated thymidine and X-rays in lymphocytes of two individuals examined in serial experiments. Bauchinger M, et al. **Mutat Res** 1989 Oct;227(2):103-7

The effect of microwave radiation on the cell genome. Garaj-Vrhovac V, et al. **Mutat Res** 1990 Feb;243(2):87-93

The effect of low-dose X-irradiation on numerical and structural chromosome anomaly induction in mouse immature oocytes. Griffin CS, et al. **Mutat Res** 1990 Aug; 231(2):137-42

Dose-response relationship for the induction of structural chromosome aberrations in human spermatozoa after in vitro exposure to tritium beta-rays. Kamiguchi Y, et al. **Mutat Res** 1990 Feb;228(2):125-31

Types of structural chromosome aberrations and their incidences in human spermatozoa X-irradiated in vitro. Kamiguchi Y, et al. **Mutat Res** 1990 Feb;228(2):133-40

Enhanced mutability at the tk locus in the radiosensitive double-strand break repair mutant xrs5. Mussa TA, et al. **Mutat Res** 1990 Aug;231(2):187-93

Interaction between X-ray- and restriction endonuclease-induced lesions in the formation of chromosomal aberrations. Tanzarella C, et al. **Mutat Res** 1990 Jul;244(3):197-200

Light affects the structure of Chlamydomonas chloroplast chromosomes. Thompson RJ, et al. **Nucleic Acids Res** 1990 May 11;18(9):2625-31

Molecular and genetic characterization of a radiation-induced structural rearrangement in mouse chromosome 2 causing mutations at the limb deformity and agouti loci. Woychik RP, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(7):2588-92

Testing the notion of the one-hit exchange. Cornforth MN. **Radiat Res** 1990 Jan;121(1):21-7

Telomere staining of human chromosomes and the mechanism of radiation-induced dicentric formation. Cornforth MN, et al. **Radiat Res** 1989 Nov;120(2):205-12

X-ray-related potentially lethal damage expressed by chromosome condensation and the influence of caffeine. Sasaki H, et al. **Radiat Res** 1989 Oct;120(1):72-82

Changes in cellularity, CFU-S number and chromosome aberrations in bone marrow and blood of rats after neutron and continuous gamma irradiation. Brezáni P, et al. **Radiobiol Radiother (Berl)** 1989;30(5):431-8

Chromosome aberrations in peripheral lymphocytes of patients irradiated with 15-MeV-photons for Morbus Hodgkin. Stephan G, et al. **Strahlenther Onkol** 1990 Jul; 166(7):460-5

[Changes of the cytogenetic effectiveness of the therapeutic ray of fast neutrons in water phantoms] Gulko GM, et al. **Radiobiol Radiother (Berl)** 1989;30(5):459-63 (Eng. Abstr.) **(Ger)**

[A new mechanism for realization of radiation-induced chromosome aberrations] Zhloba AA, et al. **Dokl Akad Nauk SSSR** 1989;308(5):1240-3 **(Rus)**

[The UV sensitivity of the bromodeoxyuridine-substituted chromosomes in the Chinese hamster] Antoshchina MM, et al. **Radiobiologiia** 1990 Mar-Apr;30(2):261-3 (Eng. Abstr.) **(Rus)**

[Role of the processes of repair of DNA damage in the repair of cytogenetic disorders. Participation of the repair of DNA single-strand breaks in the repair of cytogenetic disorders] Rozanova OM, et al. **Radiobiologiia** 1989 Sep-Oct;29(5):585-8 (Eng. Abstr.) **(Rus)**

[The role of DNA repair processes in the repair of cytogenetic disorders. The participation of slow to repair DNA damage in the repair of cytogenetic disorders] Zaichkina SI, et al. **Radiobiologiia** 1989 Nov-Dec; 29(6):833-5 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

The G- and C-banding karyotype of the Arabian oryx (Oryx leucoryx). Cribiu EP, et al. **Ann Genet** 1989;32(4):200-3

Structure and function of telomeres. Zakian VA. **Annu Rev Genet** 1989;23:579-604 (150 ref.)

Analysis of false negative cytology by a chromosome study. Katayama KP, et al. **Asia Oceania J Obstet Gynaecol** 1990 Mar;16(1):85-7

Chromosome structure at interfaces between major chromatin types: alpha- and beta-heterochromatin. Miklos GL, et al. **Bioessays** 1990 Jan;12(1):1-6 (30 ref.)

The discovery (or rediscovery?) of the phenomenon of premature chromosome condensation. Rao PN. **Bioessays** 1990 Apr;12(4):193-7 (45 ref.)

Short cuts for genomic walking: chromosome microdissection and the polymerase chain reaction. Saunders RD. **Bioessays** 1990 May;12(5):245-8 (39 ref.)

Scaffold-like structures in mouse chromosomes revealed by restriction endonuclease digestion and electron microscopy. García de la Vega C, et al. **Biol Cell** 1990;68(2):101-4

Evolution of compound centromeres. A new phenomenon. Paweletz N, et al. **Cancer Genet Cytogenet** 1989 Oct 1; 42(1):75-86

Centromere structure and function in neoplasia. Vig BK, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):151-78 (108 ref.)

Model for the formation of double minutes from prematurely condensed chromosomes of replicating micronuclei in drug-treated Chinese hamster ovary cells undergoing DNA amplification. Sen S, et al. **Cancer Res** 1989 Dec 1;49(23):6731-7

Spatial and temporal patterns of E74 transcription during Drosophila development. Thummel CS, et al. **Cell** 1990 Apr 6;61(1):101-11

Monovalent cation-induced structure of telomeric DNA: the G-quartet model. Williamson JR, et al. **Cell** 1989 Dec 1; 59(5):871-80

Toward a structural and molecular definition of the kinetochore. Brinkley BR. **Cell Motil Cytoskeleton** 1990; 16(2):104-9 (53 ref.)

Composition and chromosomal localization of cetacean highly repetitive DNA with special reference to the blue whale, Balaenoptera musculus. Arnason U, et al. **Chromosoma** 1989 Nov;98(5):323-9

Transmission of three radiation-induced translations in the Syrian hamster. I. Chromosome studies of male meiosis: pachytene to metaphase II. Cawood AH, et al. **Chromosoma** 1989 Oct;98(4):301-6

DNA denaturation for ultrastructural banding and the mechanism underlying the fluorochrome-photolysis-Giemsa technique studied with anti-5-bromodeoxyuridine antibodies. Drouin R, et al. **Chromosoma** 1989 Sep;98(3):174-80

Centromere organization in meiotic chromosomes of Parascaris univalens. Goday C, et al. **Chromosoma** 1989 Sep;98(3):160-6

Electron microscopy and biochemical analysis of mouse metaphase chromosomes after digestion with restriction endonucleases. Gosálvez J, et al. **Chromosoma** 1990 Apr; 99(1):36-43

Centromeric dots in crane-fly spermatocytes: meiotic maturation and malorientation. Janicke MA, et al. **Chromosoma** 1989 Nov;98(5):358-67

Loop size in newt lampbrush chromosomes. León P, et al. **Chromosoma** 1990 Apr;99(1):83-6

Anti-topoisomerase II recognizes meiotic chromosome cores. Moens PB, et al. **Chromosoma** 1989 Nov;98(5):317-22

Satellite DNA I in chromatin loops of rat pachytene chromosomes and in spermatids. Moens PB, et al. **Chromosoma** 1989 Oct;98(4):287-94

Telomeric sequences derived from laser-microdissected polytene chromosomes. Ponelies N, et al. **Chromosoma** 1989 Nov;98(5):351-7

Electron microscopy of liquid crystalline DNA: direct evidence for cholesteric-like organization of DNA in dinoflagellate chromosomes. Rill RL, et al. **Chromosoma** 1989 Oct;98(4):280-6

Sequence of centromere separation: separation in a quasi-stable mouse-human somatic cell hybrid. Vig BK, et al. **Chromosoma** 1989 Sep;98(3):167-73

The mouse W/c-kit locus. Bernstein A, et al. **Ciba Found Symp** 1990;148:158-66; discussion 166-72 (19 ref.)

Culture of PNKT-4B cells at invasion permissive and restrictive temperatures. I. Chromosomal analysis. Williams JW 3d, et al. **Clin Exp Metastasis** 1990 May-Jun; 8(3):267-76

A dicentric variant of chromosome 6: characterization by use of in situ hybridisation with the biotinylated probe p308. Callen DF, et al. **Clin Genet** 1990 Feb;37(2):81-3

Centromeres and kinetochores: integrated domains on eukaryotic chromosomes. Brinkley BR. **Curr Opin Cell Biol** 1990 Jun;2(3):446-52 (14 ref.)

Chromosomes and chromatin structure: the extrachromosomal karyoskeleton. Fisher PA. **Curr Opin Cell Biol** 1989 Jun;1(3):447-53 (23 ref.)

Application of colour laser microscope for observing living biological specimens. Iino A, et al. **Cytobios** 1989; 60(240):7-10

Fine localization of genes on distal murine chromosome 15. Adolph S, et al. **Cytogenet Cell Genet** 1989;52(3-4):177-9

Chromosome banding and DNA replication patterns in bird karyotypes. Schmid M, et al. **Cytogenet Cell Genet** 1989; 52(3-4):139-46

Sigje, a member of the small inducible gene family that includes platelet factor 4 and melanoma growth stimulatory activity, is on mouse chromosome 11. Smith A, et al. **Cytogenet Cell Genet** 1989;52(3-4):194-6

Nonmodal chromosome gain and loss in human fibroblast cultures. Wenger SL. **Cytogenet Cell Genet** 1989; 52(3-4):201

Localization of the beta-like globin gene cluster and the genes for parathyroid hormone and c-Harvey-ras 1 to region q14——q21 of rabbit chromosome 1 by in situ hybridization. Xu J, et al. **Cytogenet Cell Genet** 1989; 52(3-4):157-61

Localization of the PRR1 gene coding for rat prostatic proline-rich polypeptides to chromosome 10 by in situ hybridization. Zhang J, et al. **Cytogenet Cell Genet** 1989; 52(3-4):197-8

System for flow sorting chromosomes on the basis of pulse shape. Bartholdi MF, et al. **Cytometry** 1990;11(1):165-72

Automatically inferred Markov network models for classification of chromosomal band pattern structures. Granum E, et al. **Cytometry** 1990;11(1):26-39

A unified model of eukaryotic chromosomes. Manuelidis L, et al. **Cytometry** 1990;11(1):8-25

Architectural organization in the interphase nucleus of the protozoan Trypanosoma brucei: location of telomeres and mini-chromosomes. Chung HM, et al. **EMBO J** 1990 Aug; 9(8):2611-9

Aspects of chromosome preparation [letter] Knierim M, et al. **Environ Mol Mutagen** 1990;15(2):106

Spindles and centrosomes during male meiosis in Drosophila melanogaster. Casal J, et al. **Eur J Cell Biol** 1990 Feb; 51(1):38-44

Electron microscopic analysis of the E polytene chromosome of Drosophila subobscura: divisions 57, 58 and 59. Cuenca JB, et al. **Eur J Cell Biol** 1989 Dec;50(2):370-5

Paired arrangement of nonhomologous centromeres during vertebrate spermiogenesis. Haaf T, et al. **Exp Cell Res** 1990 Mar;187(1):157-61

Effects of cold shock treatment on lampbrush chromosomes of amphibian oocytes. N'Da E, et al. **Exp Cell Res** 1990 Jul;189(1):118-32

Effects of in vivo heat treatment on lampbrush chromosome structure in amphibian oocytes. Rodriguez-Martin ML, et al. **Exp Cell Res** 1989 Dec;185(2):546-50

Cloning of chromosomal genes of Lactococcus by heterologous complementation: partial characterisation of a putative lactose transport gene. Ross R, et al. **FEMS Microbiol Lett** 1989 Oct 1;52(1-2):183-7

Karyotypes of Bembidion quadrimaculatum (L.) and Clivina fossor (L.) (Coleoptera: Carabidae). Rożek M. **Folia Biol (Krakow)** 1989;37(3-4):151-4

Balbiani ring 3 in Chironomus tentans encodes a 185-kDa secretory protein which is synthesized throughout the fourth larval instar. Dignam SS, et al. **Gene** 1990 Apr 16; 88(2):133-40

Triplex DNA in plasmids and chromosomes. Lee JS, et al. **Gene** 1989 Oct 30;82(2):191-9

Relationship between chromosome content and nuclear diameter in early spermatids of Drosophila melanogaster. González C, et al. **Genet Res** 1989 Dec;54(3):205-12

Genetic analysis of the claret locus of Drosophila melanogaster. Sequeira W, et al. **Genetics** 1989 Nov; 123(3):511-24

Protein:DNA interactions at chromosomal loop attachment sites. Blasquez VC, et al. **Genome** 1989;31(2):503-9 (38 ref.)

Synaptonemal complex analysis of hybrid cattle. I. Pachytene substaging and the normal full bloods. Dollin AE, et al. **Genome** 1989 Oct;32(5):856-64

Proteins of the inner and outer centromere of mitotic chromosomes. Earnshaw WC, et al. **Genome** 1989; 31(2):541-52 (78 ref.)

Chromosomal rearrangements in rock wallabies, Petrogale (Marsupialia: Macropodidae). II. G-banding analysis of Petrogale godmani. Eldridge MD, et al. **Genome** 1989 Dec; 32(6):935-40

Differential action of restriction endonucleases on chromosomes prepared for light and electron microscopy. Gosálvez J, et al. **Genome** 1990 Feb;33(1):155-7

Chromosomal organization of the amplified esterase B1 gene in organophosphate-resistant Culex pipiens quinquefasciatus Say (Diptera, Culicidae). Nance E, et al. **Genome** 1990 Feb;33(1):148-52

Molecular cloning of DNA from specific chromosomal regions by microdissection and sequence-independent amplification of DNA. Johnson DH. **Genomics** 1990 Feb; 6(2):243-51

Specific patterns of differential condensation induced photochemically in human chromosomes. Manolov G, et al. **Hereditas** 1989;111(2):205-6

Maturation at high frequency of germinal-vesicle-stage mouse oocytes after cryopreservation: alterations in cytoplasmic, nuclear, nucleolar and chromosomal structure and organization associated with vitrification. Van Blerkom J. **Hum Reprod** 1989 Nov;4(8):883-98

Post-metaphase mitotic events in cells treated with dinitrophenol. Ghosh S, et al. **Indian J Exp Biol** 1989 Apr; 27(4):317-23

Purification and characterization of an initiation protein for chromosomal replication, DnaA, in Bacillus subtilis. Fukuoka T, et al. **J Biochem (Tokyo)** 1990 May; 107(5):732-9

High-mobility group protein HMG-I localizes to G/Q- and C-bands of human and mouse chromosomes. Disney JE, et al. **J Cell Biol** 1989 Nov;109(5):1975-82

The RCC1 protein, a regulator for the onset of chromosome condensation locates in the nucleus and binds to DNA. Ohtsubo M, et al. **J Cell Biol** 1989 Oct;109(4 Pt 1):1389-97

Location of B- and Z-DNA in the chromosomes of a primitive eukaryote dinoflagellate. Soyer-Gobillard MO, et al. **J Cell Biol** 1990 Aug;111(2):293-304

Biotin-tubulin incorporates into kinetochore fiber microtubules during early but not late anaphase. Wadsworth P, et al. **J Cell Biol** 1989 Nov;109(5):2257-65

Regulation of anaphase chromosome motion in Tradescantia stamen hair cells by calcium and related signaling agents. Zhang DH, et al. **J Cell Biol** 1990 Jul;111(1):171-82

Telomere cloning and mammalian chromosome analysis. Brown WR, et al. **J Cell Sci** 1990 Apr;95 (Pt 4):521-6 (51 ref.)

Genomic in situ hybridization to sectioned nuclei shows

chromosome domains in grass hybrids. Leitch AR, et al. **J Cell Sci** 1990 Mar;95 (Pt 3):335–41

Three-dimensional chromosome arrangement of Crepis capillaris in mitotic prophase and anaphase as studied by confocal scanning laser microscopy. Oud JL, et al. **J Cell Sci** 1989 Mar;92 (Pt 3):329–39

Cis- and trans-acting factors affecting the structure of yeast centromeres. Bloom K, et al. **J Cell Sci Suppl** 1989; 12:231–42

Pneumocystis carinii karyotypes. Hong ST, et al. **J Clin Microbiol** 1990 Aug;28(8):1785–95

Lampbrush and mitotic chromosomes of the hemiclonally reproducing hybrid Rana esculenta and its parental species. Bucci S, et al. **J Exp Zool** 1990 Jul;255(1):37–56

Double insertion of homogeneously staining regions in chromosome 1 of wild Mus musculus musculus: effects on chromosome pairing and recombination. Borodin PM, et al. **J Hered** 1990 Mar–Apr;81(2):91–5

Fine structure of unstained human chromosome fibres dried with no fixative as observed by X-ray contact microscopy. Shinohara K, et al. **J Microsc** 1990 Jun;158 (Pt 3):335–42

Confocal microscopy as a tool for the study of the intranuclear topography of chromosomes. van Dekken H, et al. **J Microsc** 1990 May;158 (Pt 2):207–14

Molecular characterization of DNA puff II/9A genes in Sciara coprophila. DiBartolomeis SM, et al. **J Mol Biol** 1989 Dec 5;210(3):531–40

Higher order structure of Balbiani ring premessenger RNP particles depends on certain RNase A sensitive sites. Wurtz T, et al. **J Mol Biol** 1990 Sep 5;215(1):93–101

Conventional Giemsa-stained and C-banded chromosomes of seven strains of Schistosoma mansoni. Short RB, et al. **J Parasitol** 1989 Dec;75(6):920–6

A fractal model of chromosomes and chromosomal DNA replication. Takahashi M. **J Theor Biol** 1989 Nov 8; 141(1):117–36 (95 ref.)

Organization and evolution of the bacterial genome. Sukhodolets VV. **Microbiol Sci** 1988 Jul;5(7):202–6 (37 ref.)

Variation in the distribution of silver-staining nucleolar organizer regions on the chromosomes of the wild mouse, Mus musculus. Suzuki H, et al. **Mol Biol Evol** 1990 May; 7(3):271–82

Interaction of trans-acting factors and re-expression of liver functions in hepatoma hybrid cells. Fougère-Deschatrette C, et al. **Mol Biol Med** 1990 Apr;7(2):97–103

Organization of subtelomeric repeats in Plasmodium berghei. Dore E, et al. **Mol Cell Biol** 1990 May;10(5):2423–7

A mutation of Streptomyces lividans which prevents intraplasmid recombination has no effect on chromosomal recombination. Kieser HM, et al. **Mol Gen Genet** 1989 Dec; 220(1):60–4

Constraints in chromosomal inversions in Escherichia coli are not explained by replication pausing at inverted terminator-like sequences. François V, et al. **Mol Microbiol** 1990 Apr;4(4):537–42

Transposition of Tn916 to different sites in the chromosome of Neisseria meningitidis: a genetic tool for meningococcal mutagenesis. Kathariou S, et al. **Mol Microbiol** 1990 May; 4(5):729–35

Effect of culture conditions and media on the frequency of chromosomal abnormalities in human sperm chromosome complements. Martin RH, et al. **Mol Reprod Dev** 1990 Jun; 26(2):101–4

Repair kinetics in CHO cells of X-ray induced DNA damage and chromatid aberrations during a cell cycle extended by transient hypothermia. MacLeod RA, et al. **Mutagenesis** 1990 May;5(3):279–83

Application of antikinetochore antibody staining (CREST staining) to micronuclei in erythrocytes induced in vivo. Miller BM, et al. **Mutagenesis** 1990 Jul;5(4):411–5

The induction of aneuploidy by 3-nitrobenzo[a]pyrene in Chinese hamster ovary cells. Neft RE, et al. **Mutagenesis** 1990 May;5(3):221–7

Kinetochore localization in micronucleated cytokinesis-blocked Chinese hamster ovary cells: a new and rapid assay for identifying aneuploidy-inducing agents. Eastmond DA, et al. **Mutat Res** 1989 Dec;224(4):517–25

Modification of the kinetochore immunofluorescence staining method for human fibroblasts for use with a commercially available anticentromere antibody. Hennig UG. **Mutat Res** 1990 Jun–Aug;234(3–4):251–2

Microorganisms associated with chromosome destruction and reproductive isolation between two insect species. Breeuwer JA, et al. **Nature** 1990 Aug 9;346(6284):558–60

Telomeres shorten during ageing of human fibroblasts. Harley CB, et al. **Nature** 1990 May 31;345(6274):458–60

Telomere reduction in human colorectal carcinoma and with ageing. Hastie ND, et al. **Nature** 1990 Aug 30; 346(6287):866–8

Telomeres. All's well that ends well [news] Murray A. **Nature** 1990 Aug 30;346(6287):797–8

Cytoplasmic dynein is localized to kinetochores during mitosis [see comments] Pfarr CM, et al. **Nature** 1990 May 17;345(6272):263–5 Comment in: Nature 1990 May 17;345(6272):206–7.

Localization of cytoplasmic dynein to mitotic spindles and kinetochores [see comments] Steuer ER, et al. **Nature** 1990 May 17;345(6272):266–8 Comment in: Nature 1990 May 17;345(6272):206–7.

Telomeric DNA dimerizes by formation of guanine tetrads between hairpin loops. Sundquist WI, et al. **Nature** 1989 Dec 14;342(6251):825–9

Mitosis: dynein and the kinetochore [news; comment] Vallee R. **Nature** 1990 May 17;345(6272):206–7 Comment on: Nature 1990 May 17;345(6272):263–5. Comment on: Nature 1990 May 17;345(6272):266–8.

Nuclear matrix attachment occurs in several regions of the IgH locus. Cockerill PN. **Nucleic Acids Res** 1990 May 11; 18(9):2643–8

Minichromosome assembly accompanying repair-type DNA synthesis in Xenopus oocytes. Ryoji M, et al. **Nucleic Acids Res** 1989 Dec 25;17(24):10243–58

Rearrangement of the same chromosome regions in different SV40 transformed human skin keratinocyte lines is associated with tumourigenicity. Stacey M, et al. **Oncogene** 1990 May;5(5):727–39

Chromosomal instability in hereditary tyrosinemia type I. Gilbert-Barness E, et al. **Pediatr Pathol** 1990; 10(1–2):243–52

Tandemly repeated DNA sequences of the centromere resulting in 18p+ [letter] Verma RS, et al. **Prenat Diagn** 1989 Dec;9(12):863–5

Introduction of large linear minichromosomes into Schizosaccharomyces pombe by an improved transformation procedure. Allshire RC. **Proc Natl Acad Sci U S A** 1990 Jun;87(11):4043–7

Long-range organization of tandem arrays of alpha satellite DNA at the centromeres of human chromosomes: high-frequency array-length polymorphism and meiotic stability. Wevrick R, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9394–8

Direct measurement of chromosome repair by premature chromosome condensation. Hittelman WN. **Prog Clin Biol Res** 1990;340B:337–46 (20 ref.)

The role of nonhistone proteins in the structural organization of chromosomes. Jeppesen P. **Prog Clin Biol Res** 1989; 318:91–101 (22 ref.)

Mechanisms of chromosome aberrations. Savage JR. **Prog Clin Biol Res** 1990;340B:385–96 (31 ref.)

Association between radiation sensitivity, DNA repair and chromosome organization in the Chinese hamster ovary cell line xrs-5. Schwartz JL, et al. **Prog Clin Biol Res** 1990; 340A:255–64

DNA sequence analysis of newly formed telomeres in yeast. Wang SS, et al. **Prog Clin Biol Res** 1989;318:81–9

Human centromere structure: organization and potential role of alpha satellite DNA. Willard HF, et al. **Prog Clin Biol Res** 1989;318:9–18 (30 ref.)

Deoxyribonucleic acid sequence mapping on metaphase chromosomes by immunoelectron microscopy. Narayanswami S, et al. **Scanning Microsc Suppl** 1989; 3:65–76

Factors affecting preparation of chromosomes for scanning electron microscopy using osmium impregnation. Sumner AT, et al. **Scanning Microsc Suppl** 1989;3:87–97; discussion 97–9

High resolution techniques for study of human centromeric heterochromatin. Sanchez L, et al. **Stain Technol** 1989 Jul; 64(4):169–74

Transmission electron microscopic study of maize pachytene chromosome 6. Shen DL, et al. **Stain Technol** 1989 Mar; 64(2):65–73

Structure of the human centromere at metaphase. Pluta AF, et al. **Trends Biochem Sci** 1990 May;15(5):181–5 (30 ref.)

[Studies on chromosome ultrastructure in several animal species] Fei Q, et al. **I Chuan Hsueh Pao** 1988;15(5):362–7 (Eng. Abstr.) **(Chi)**

[A comparative study of the karyotypes of fetuses of spontaneous early abortions obtained by direct method and by long-term culture] Ogur G, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1990;19(4):427–32 (Eng. Abstr.) **(Fre)**

[Potential difference and puff patterns. Electrophysiologic and cytologic studies of the salivary glands of Chironomus thummi] Kroeger H. **Exp Cell Res** 1966 Jan;41(1):64–80 **(Ger)**

[The structure of the cDNA and the chromosomal localization of the gene of the immunoglobulin lambda-light chains in the American mink] Khlebodarova TM, et al. **Dokl Akad Nauk SSSR** 1990;311(2):487–91 **(Rus)**

[A family of repeated sequences in Drosophila genome with telomeric localization: properties and polymorphism] Danilevskaia ON, et al. **Genetika** 1990 Mar;26(3):474–84 (Eng. Abstr.) **(Rus)**

[Amplification of subtelomeric sequences in "long" telomers of Drosophila melanogaster polytene chromosomes] Danilevskaia ON, et al. **Genetika** 1990 Apr;26(4):670–8 (Eng. Abstr.) **(Rus)**

[Characteristics of structures of Drosophila polytene chromosomes formed by transposable DNA fragments] Semeshin VF, et al. **Genetika** 1989 Nov;25(11):1968–78 (Eng. Abstr.) **(Rus)**

[Formation of interdisks from the P-element DNA material in Drosophila polytene chromosomes] Semeshin VF, et al. **Genetika** 1990 Mar;26(3):448–56 (Eng. Abstr.) **(Rus)**

[Dynamics of heat shock puffs in highly-inbred strains and heterosis hybrids of Drosophila melanogaster] Shakhbazov VG, et al. **Genetika** 1990 Jan;26(1):43–8 (Eng. Abstr.) **(Rus)**

[Characteristics of reassociation of DNA in polytene chromosome preparations of malaria mosquito] Sharakhova MV. **Genetika** 1990 Feb;26(2):367–9 (Eng. Abstr.) **(Rus)**

[Parallel changes in the puffing of polytene chromosomes and bioelectric properties of salivary gland cell nuclei in Drosophila melanogaster after heat shock] Strashniuk VIu, et al. **Genetika** 1990 May;26(5):874–8 (Eng. Abstr.) **(Rus)**

[Chromocenters of interphase nuclei in the mouse liver contain satellite DNA] Stefanova EV, et al. **Mol Biol (Mosk)** 1990 Mar–Apr;24(2):501–5 (Eng. Abstr.) **(Rus)**

[Karyologic research on trematodes of the family Schistosomatidae from northwestern Chukota] Barshene IaV, et al. **Parazitologiia** 1989 Nov–Dec;23(6):496–503 (Eng. Abstr.) **(Rus)**

[The variability of the telomeric and of a number of internal regions of Drosophila chromosomes according to the intensity of hybridization in situ with labelled probes] Leibovich BA, et al. **Tsitol Genet** 1990 Jan–Feb;24(1):23–8 (Eng. Abstr.) **(Rus)**

[Synaptonemal complexes of the A- and B-chromosomes of the spermatocytes from the East Asian mouse Apodemus peninsulae] Borbiev TE, et al. **Tsitologiia** 1990;32(2):193–7 (Eng. Abstr.) **(Rus)**

[The characteristics of the morphofunctional organization of the lampbrush chromosomes from the oocytes of the rock dove] Khutinaeva MA, et al. **Tsitologiia** 1989 Oct; 31(10):1185–92 (Eng. Abstr.) **(Rus)**

[Meiotic chromosomes of the spermatocytes ejaculated by bulls] Kuznetsova TV, et al. **Tsitologiia** 1990;32(2):181–7 (Eng. Abstr.) **(Rus)**

[Heterochromatin regions of the chromosomes of the hen and Japanese quail in mitosis and at the lampbrush stage] Rodionov AV, et al. **Tsitologiia** 1989 Aug;31(8):867–73 (Eng. Abstr.) **(Rus)**

[The rules for electron microscopic mapping of polytene chromosomes in squashed preparations of Drosophila salivary glands] Semeshin VF, et al. **Tsitologiia** 1989 Jun; 31(6):728–31 (Eng. Abstr.) **(Rus)**

[The induction of specific dicentric chromosomes in CHO-6 Chinese hamster ovary cells] Stobetskiĭ VI. **Tsitologiia** 1990;32(1):92–4 (Eng. Abstr.) **(Rus)**

[The ultrastructure and argentophilic properties of the nucleolus organizer and centromeric regions of the chromosomes in early mouse embryogenesis] Zatsepina OV, et al. **Tsitologiia** 1989 Jun;31(6):626–32 (Eng. Abstr.) **(Rus)**

CHROMOSOMES, BACTERIAL

Towards a physical map of the Listeria chromosome: the pulsed field electrophoresis approach. Vicente MF, et al. **Acta Microbiol Hung** 1989;36(2–3):193–7

Characterization of the origin of DNA replication of the Coxiella burnetii chromosome. Chen SY, et al. **Ann N Y Acad Sci** 1990;590:491–503

Comparison of Coxiella burnetii plasmids to homologous chromosomal sequences present in a plasmidless endocarditis-causing isolate. Savinelli EA, et al. **Ann N Y Acad Sci** 1990;590:523–33

High-level chromosomal gentamicin resistance in Streptococcus agalactiae (group B). Buu-Hoï A, et al. **Antimicrob Agents Chemother** 1990 Jun;34(6):985–8

Polymerase chain reaction (PCR) amplification with a single specific primer. Kalman M, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):504–6

The Escherichia coli chromosome and its replication. Masters M. **Curr Opin Cell Biol** 1989 Apr;1(2):241–9 (38 ref.)

A physical genome map of Pseudomonas aeruginosa PAO. Römling U, et al. **EMBO J** 1989 Dec 20;8(13):4081–9

Tandem chromosomal duplications: role of REP sequences in the recombination event at the join-point. Shyamala V, et al. **EMBO J** 1990 Mar;9(3):939–46

Strand separation required for initiation of replication at the chromosomal origin of E.coli is facilitated by a distant RNA—DNA hybrid. Skarstad K, et al. **EMBO J** 1990 Jul; 9(7):2341–8

Nucleotide sequence of the Thiobacillus ferrooxidans chromosomal gene encoding mercuric reductase. Inoue C, et al. **Gene** 1989 Dec 7;84(1):47–54

The size and a physical map of the chromosome of Haemophilus parainfluenzae. Kauc L, et al. **Gene** 1989 Nov 30;83(2):377–80

Sequence analysis of the chromosomal and plasmid genes encoding phosphoribulokinase from Alcaligenes eutrophus. Kossmann J, et al. **Gene** 1989 Dec 21;85(1):247–52

Size of the Streptococcus mutans GS-5 chromosome as determined by pulsed-field gel electrophoresis. Tudor JJ, et al. **Infect Immun** 1990 Mar;58(3):838–40

Resistance of Pseudomonas aeruginosa to cefsulodin: modification of penicillin-binding protein 3 and mapping of its chromosomal gene. Gotoh N, et al. **J Antimicrob Chemother** 1990 Apr;25(4):513–23

Interactions of meropenem with class I chromosomal beta-lactamases. Yang YJ, et al. **J Antimicrob Chemother** 1989 Sep;24 Suppl A:207–17

Characterization of the genetic elements required for site-specific integration of plasmid pSE211 in Saccharopolyspora erythraea. Brown DP, et al. **J Bacteriol** 1990 Apr;172(4):1877–88

Locations of genes in the 52-minute region on the physical map of Escherichia coli K-12. Brun YV, et al. **J Bacteriol** 1990 Sep;172(9):4746–7

HlyB-dependent secretion of hemolysin by uropathogenic Escherichia coli requires conserved sequences flanking the

chromosomal hly determinant. Cross MA, et al. **J Bacteriol** 1990 Mar;172(3):1217–24

Circularity of the Caulobacter crescentus chromosome determined by pulsed-field gel electrophoresis. Ely B, et al. **J Bacteriol** 1990 Mar;172(3):1262–6

A chromosomal Agrobacterium tumefaciens gene required for effective plant signal transduction. Huang ML, et al. **J Bacteriol** 1990 Apr;172(4):1814–22

Characterization of chromosomal DNA amplifications with associated tetracycline resistance in Bacillus subtilis. Ives CL, et al. **J Bacteriol** 1990 Sep;172(9):4936–44

Physical map of the Bacillus cereus chromosome. Kolstø AB, et al. **J Bacteriol** 1990 Jul;172(7):3821–5

Physical analysis and mapping of the Mycoplasma pneumoniae chromosome. Krause DC, et al. **J Bacteriol** 1990 Sep;172(9):4790–7

Transcriptional analysis of the flagellar regulon of Salmonella typhimurium. Kutsukake K, et al. **J Bacteriol** 1990 Feb; 172(2):741–7

Presence of chromosomal elements resembling the composite structure Tn3701 in streptococci. Le Bouguénec C, et al. **J Bacteriol** 1990 Feb;172(2):727–34

Chromosome map of the thermophilic archaebacterium Thermococcus celer. Noll KM. **J Bacteriol** 1989 Dec; 171(12):6720–5

Location of a gene (ssrA) for a small, stable RNA (10Sa RNA) in the Escherichia coli chromosome. Oh BK, et al. **J Bacteriol** 1990 Aug;172(8):4708–9

Cloning and characterization of the hemA region of the Bacillus subtilis chromosome. Petricek M, et al. **J Bacteriol** 1990 May;172(5):2250–8

Locations of the speA, speB, speC, and metK genes on the physical map of Escherichia coli. Satishchandran C, et al. **J Bacteriol** 1990 Sep;172(9):4748

A locus affecting nucleoid segregation in Salmonella typhimurium. Schmid MB. **J Bacteriol** 1990 Sep; 172(9):5416–24

A new gene located between pss and rrnG on the Escherichia coli chromosome. Seol W, et al. **J Bacteriol** 1990 Sep; 172(9):4745

Physical and genetic mapping of the Rhodobacter sphaeroides 2.4.1 genome: presence of two unique circular chromosomes. Suwanto A, et al. **J Bacteriol** 1989 Nov; 171(11):5850–9

Chromosomal organization and expression of Escherichia coli pabA. Tran PV, et al. **J Bacteriol** 1990 Jan;172(1):397–410

Genetic mapping of the obligate methylotroph Methylobacillus flagellatum: characteristics of prime plasmids and mapping of the chromosome in time-of-entry units [published erratum appears in J Bacteriol 1990 Sep;172(9):5522] Tsygankov YD, et al. **J Bacteriol** 1990 May;172(5):2747–54

Genetic map of the Bacillus stearothermophilus NUB36 chromosome. Vallier H, et al. **J Bacteriol** 1990 Feb; 172(2):793–801

Precise mapping and comparison of two evolutionarily related regions of the Escherichia coli K-12 chromosome. Evolution of valU and lysT from an ancestral tRNA operon. Brun YV, et al. **J Mol Biol** 1990 Aug 20; 214(4):825–43

Mutagenesis by proximity to the recA gene of Escherichia coli. Liu SK, et al. **J Mol Biol** 1990 Jan 20;211(2):351–8

DNA replication in Escherichia coli is initiated by membrane detachment of oriC. A model. Norris V. **J Mol Biol** 1990 Sep 5;215(1):67–71

Mapping of insertion element IS5 in the Escherichia coli K-12 chromosome. Chromosomal rearrangements mediated by IS5. Umeda M, et al. **J Mol Biol** 1990 May 20;213(2):229–37

Linkage map of Escherichia coli K-12, edition 8. Bachmann BJ. **Microbiol Rev** 1990 Jun;54(2):130–97 (1222 ref.)

Methylation strongly enhances DNA bending in the replication origin region of the Escherichia coli chromosome. Kimura T, et al. **Mol Gen Genet** 1989 Oct; 219(1–2):69–74

DNA polymerase I and a protein complex bind specifically to E. coli palindromic unit highly repetitive DNA: implications for bacterial chromosome organization. Gilson E, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):3941–52

A simple method for the preparation of plasmid and chromosomal E. coli DNA. Grimberg J, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8893

Sequence limits of DNA strands in the arrest replication fork at the Bacillus subtilis chromosome terminus. Williams NK, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):9947–56

Juxtaposition of expressed variable antigen genes with a conserved telomere in the bacterium Borrelia hermsii. Kitten T, et al. **Proc Natl Acad Sci U S A** 1990 Aug; 87(16):6077–81

Chromosomal rearrangement during sporulation of Bacillus subtilis leads to the generation of a new sigma factor. Rapoport G. **Res Microbiol** 1989 May–Jun;140(4–5):275–6

Chromosomal location and evolutionary rate variation in enterobacterial genes. Sharp PM, et al. **Science** 1989 Nov 10;246(4931):808–10

[Dependence of the recA gene for the replication of the bacterial chromosome initiated by the integrated F' plasmid in Escherichia coli] Mao YM, et al. **I Chuan Hsueh Pao** 1989;16(1):56–66 (Eng. Abstr.) **(Chi)**

[Chromosome partitioning in bacteria] Niki H, et al. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(9):1175–87 **(Jpn)**

[Regulation of initiation of chromosomal replication in bacteria; role of DnaA protein and the regulation of its expression in Bacillus subtilis] Ogasawara N, et al. **Tanpakushitsu Kakusan Koso** 1989 Jul;34(9):1135–48 **(Jpn)**

ANALYSIS

Transcriptional control of the cysG gene of Escherichia coli K-12 during aerobic and anaerobic growth. Peakman T, et al. **Eur J Biochem** 1990 Jul 31;191(2):325–31

Nucleotide sequence, organisation and structural analysis of the products of genes in the nirB-cysG region of the Escherichia coli K-12 chromosome. Peakman T, et al. **Eur J Biochem** 1990 Jul 31;191(2):315–23

Structural and functional analysis of the mini-circle, a transposable element of Streptomyces coelicolor A3(2). Henderson DJ, et al. **Mol Microbiol** 1989 Oct;3(10):1307–18

Tn7 inserts in both orientations at a single chromosomal location and apparently forms cointegrates in Pasteurella multocida. Nnalue NA. **Mol Microbiol** 1990 Jan;4(1):107–17

DRUG EFFECTS

Immunoprotective oral whole cell vaccine for enterotoxigenic Escherichia coli diarrhea prepared by in situ destruction of chromosomal and plasmid DNA with colicin E2. Evans DJ Jr, et al. **FEMS Microbiol Immunol** 1988 Jan;1(1):9–18

ENZYMOLOGY

Chromosomal origin of acetyltransferase AAC(6') specifying amikacin resistance in Serratia marcescens. Gómez-Lus R, et al. **Microbiologia** 1987 Oct;3(3):185–94

METABOLISM

Integration and expression of alpha-amylase and endoglucanase genes in the Lactobacillus plantarum chromosome. Scheirlinck T, et al. **Appl Environ Microbiol** 1989 Sep;55(9):2130–7

Plasmid and chromosomal DNA replication and partitioning during the Caulobacter crescentus cell cycle. Marczynski GT, et al. **J Mol Biol** 1990 Apr 20;212(4):709–22

Chromosome replication pattern in dam mutants of Escherichia coli. Louarn J, et al. **Mol Gen Genet** 1990 Apr; 221(2):291–4

A general method for the transfer of plasmid-borne mutant alleles to the chromosome of Klebsiella pneumoniae using bacteriophage lambda: transfer of pqq genes. Meulenberg JJ, et al. **Mol Gen Genet** 1990 Feb;220(3):481–4

The terminus of the Escherichia coli chromosome is flanked by several polar replication pause sites. François V, et al. **Mol Microbiol** 1989 Aug;3(8):995–1002

Involvement of cell shape in the replication and segregation of chromosomes in Escherichia coli. Helmstetter CE, et al. **Res Microbiol** 1990 Jan;141(1):30–9 (20 ref.)

[Replication characteristics of plasmids and their dependence of recA gene for the initiation of Escherichia coli chromosome replication in the integrated state] Mao YM, et al. **I Chuan Hsueh Pao** 1990;17(1):53–62 (Eng. Abstr.) **(Chi)**

PHYSIOLOGY

Chromosome replication does not trigger cell division in E. coli. Bernander R, et al. **Cell** 1990 Feb 9;60(3):365–74

Expression of the rtp gene of Bacillus subtilis is required for replication fork arrest at the chromosome terminus. Smith MT, et al. **Gene** 1989 Dec 21;85(1):187–92

Delta dnaK52 mutants of Escherichia coli have defects in chromosome segregation and plasmid maintenance at normal growth temperatures. Bukau B, et al. **J Bacteriol** 1989 Nov;171(11):6030–8

Ti plasmid-controlled chromosome transfer in Agrobacterium tumefaciens. Dessaux Y, et al. **J Bacteriol** 1989 Nov;171(11):6363–6

Chromosome partition in Escherichia coli requires postreplication protein synthesis. Donachie WD, et al. **J Bacteriol** 1989 Oct;171(10):5405–9

Binding to collagen by Yersinia enterocolitica and Yersinia pseudotuberculosis: evidence for yopA-mediated and chromosomally encoded mechanisms. Emödy L, et al. **J Bacteriol** 1989 Dec;171(12):6674–9

Positioning of replicated chromosomes in Escherichia coli. Hiraga S, et al. **J Bacteriol** 1990 Jan;172(1):31–9

Overreplication of the origin region in the dnaB37 mutant of Bacillus subtilis: postinitiation control of chromosomal replication. Henckes G, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8660–4

Pseudomonas chromosomal replication origins: a bacterial class distinct from Escherichia coli-type origins. Yee TW, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1278–82

Role of the nucleoid in the toporegulation of division. Woldringh CL, et al. **Res Microbiol** 1990 Jan;141(1):39–49 (45 ref.)

ULTRASTRUCTURE

Mu gem3 as a tool to investigate the influence of chromosome supercoiling on gene expression in Escherichia coli K12. Bianchi E, et al. **FEMS Microbiol Lett** 1990 Jan 1; 54(1–3):135–40

Partitioning of nucleoids. Hiraga S. **Res Microbiol** 1990 Jan; 141(1):50–6 (25 ref.)

[Genetic recombination and chromosome mapping of Streptomyces griseus 773] Podgorskaia ME, et al. **Mikrobiol Zh** 1983 Jul–Aug;45(4):3–9 (Eng. Abstr.) **(Rus)**

CHROMOSOMES D see **CHROMOSOMES, HUMAN, 13–15**

CHROMOSOMES F see **CHROMOSOMES, HUMAN, 19–20**

CHROMOSOMES, FUNGAL

Localization of glucoamylase genes of Saccharomyces cerevisiae by pulsed field gel electrophoresis. Bignell GR, et al. **Antonie Van Leeuwenhoek** 1990 Jun;58(1):49–55

A procedure for cloning restriction fragments of DNA as single inserts in yeast artificial chromosomes. Sgaramella V, et al. **Biochem Int** 1990;20(3):503–10

YAC power. Jordan B. **Bioessays** 1990 Apr;12(4):183–7 (7 ref.)

Preparing chromosomes from protoplasts of a filamentous fungus for pulsed-field gel electrophoresis. Miao V, et al. **Biotechniques** 1990 Apr;8(4):393

Mitotic mapping in linkage group V of Aspergillus niger based on selection of auxotrophic recombinants by Novozym enrichment. Debets AJ, et al. **Can J Microbiol** 1989 Nov;35(11):982–8

Meiotic gene conversion and crossing over: their relationship to each other and to chromosome synapsis and segregation. Engebrecht J, et al. **Cell** 1990 Sep 7;62(5):927–37

The HOP1 gene encodes a meiosis-specific component of yeast chromosomes. Hollingsworth NM, et al. **Cell** 1990 Apr 6;61(1):73–84

Molecular cloning of chromosome I DNA from Saccharomyces cerevisiae: localization of a repeated sequence containing an acid phosphatase gene near a telomere of chromosome I and chromosome VIII. de Steensma HY, et al. **Curr Genet** 1989 Sep;16(3):131–7

The OGD1 gene, affecting 2-oxoglutarate dehydrogenase in S. cerevisiae, is closely linked to HIS5 on chromosome IX. Ruttkay-Nedecký B, et al. **Curr Genet** 1990 Jan; 17(1):85–8

Assignment of cloned genes to electrophoretically separated chromosomes of the yeast Pachysolen tannophilus. Maleszka R, et al. **FEMS Microbiol Lett** 1990 May; 57(1–2):79–82

Cloning of chromosome I DNA from Saccharomyces cerevisiae: mutational analysis of the FUN2 transcribed region. Crowley JC, et al. **Gene** 1989 Nov 30;83(2):381–5

Nucleotide sequence of the COR region: a cluster of six genes in the yeast Saccharomyces cerevisiae. Melnick L, et al. **Gene** 1990 Mar 15;87(2):157–66

Genetic instability of clathrin-deficient strains of Saccharomyces cerevisiae. Lemmon SK, et al. **Genetics** 1990 Jan;124(1):27–38

Mitotic transmission of artificial chromosomes in cdc mutants of the yeast, Saccharomyces cerevisiae. Palmer RE, et al. **Genetics** 1990 Aug;125(4):763–74

Mitotic chromosome transmission fidelity mutants in Saccharomyces cerevisiae. Spencer F, et al. **Genetics** 1990 Feb;124(2):237–49

Chromosomal assignment of mutations by specific chromosome loss in the yeast Saccharomyces cerevisiae. Wakem LP, et al. **Genetics** 1990 Jun;125(2):333–40

Distance-independence of mitotic intrachromosomal recombination in Saccharomyces cerevisiae. Yuan LW, et al. **Genetics** 1990 Feb;124(2):263–73

Complete human rDNA repeat units isolated in yeast artificial chromosomes. Labella T, et al. **Genomics** 1989 Nov; 5(4):752–60

Genomic structure of Candida stellatoidea: extra chromosomes and gene duplication. Rikkerink EH, et al. **Infect Immun** 1990 Apr;58(4):949–54

Chromosome engineering in Saccharomyces cerevisiae by using a site-specific recombination system of a yeast plasmid. Matsuzaki H, et al. **J Bacteriol** 1990 Feb; 172(2):610–8

Chromosomal rearrangements associated with morphological mutants provide a means for genetic variation of Candida albicans. Rustchenko-Bulgac EP, et al. **J Bacteriol** 1990 Mar;172(3):1276–83

Gene products required for chromosome separation. Yanagida M. **J Cell Sci Suppl** 1989;12:213–29

Encapsulation of cells in agarose beads for use in the construction of human DNA libraries as yeast artificial chromosomes (YAC). Yokoyama K, et al. **Jinrui Idengaku Zasshi** 1990 Jun;35(2):131–43

HPR1, a novel yeast gene that prevents intrachromosomal excision recombination, shows carboxy-terminal homology to the Saccharomyces cerevisiae TOP1 gene. Aguilera A, et al. **Mol Cell Biol** 1990 Apr;10(4):1439–51

Nuclear gene for mitochondrial leucyl-tRNA synthetase of Neurospora crassa: isolation, sequence, chromosomal mapping, and evidence that the leu-5 locus specifies structural information. Chow CM, et al. **Mol Cell Biol** 1989 Nov;9(11):4631–44

Meiotic recombination between dispersed repeated genes is associated with heteroduplex formation. Nag DK, et al. **Mol Cell Biol** 1990 Aug;10(8):4420–3

Modification and transfer into an embryonal carcinoma cell line of a 360-kilobase human-derived yeast artificial

chromosome. Pavan WJ, et al. **Mol Cell Biol** 1990 Aug; 10(8):4163–9
Mutational analysis of the consensus sequence of a replication origin from yeast chromosome III. Van Houten JV, et al. **Mol Cell Biol** 1990 Aug;10(8):3917–25
Sequencing of Saccharomyces telomeres cloned using T4 DNA polymerase reveals two domains. Wang SS, et al. **Mol Cell Biol** 1990 Aug;10(8):4415–9
High levels of chromosome instability in polyploids of Saccharomyces cerevisiae. Mayer VW, et al. **Mutat Res** 1990 Aug;231(2):177–86
A 3.5 genome equivalent multi access YAC library: construction, characterisation, screening and storage. Anand R, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):1951–6
A method for the preparative isolation and concentration of intact yeast artificial chromosomes. Couto LB, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):8010
Detection of Saccharomyces cerevisiae chromosome size markers directly on Southern blots of pulsed-field gels with a single DNA hybridization probe. Higgins MJ, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10136
Structural instability of human tandemly repeated DNA sequences cloned in yeast artificial chromosome vectors. Neil DL, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1421–8
Introduction of a yeast artificial chromosome vector into Saccharomyces cerevisiae cells by electroporation. Rech EL, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1313
Yeast artificial chromosomes: rapid extraction for high resolution analysis. Sheehan C, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2193
Transfer of a yeast artificial chromosome carrying human DNA from Saccharomyces cerevisiae into mammalian cells. Pachnis V, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5109–13
A yeast artificial chromosome containing the mouse homeobox cluster Hox-2. Rubock MJ, et al. **Proc Natl Acad Sci U S A** 1990 Jun;87(12):4751–5
Sequence of the yeast gene RVS 161 located on chromosome III. Urdaci M, et al. **Yeast** 1990 Mar–Apr;6(2):173–6

ANALYSIS

Characterization of telomere DNA from Neurospora crassa. Schechtman MG. **Gene** 1990 Apr 16;88(2):159–65
The identification of pathogenic yeast strains by electrophoretic analysis of their chromosomes. Monod M, et al. **J Med Microbiol** 1990 Jun;32(2):123–9
Chromatin digestion with restriction endonucleases reveals 150–160 bp of protected DNA in the centromere of chromosome XIV in Saccharomyces cerevisiae. Funk M, et al. **Mol Gen Genet** 1989 Oct;219(1–2):153–60

DRUG EFFECTS

Detection of induced mitotic chromosome loss in Saccharomyces cerevisiae--an interlaboratory assessment of 12 chemicals. Whittaker SG, et al. **Mutat Res** 1990 Jul; 241(3):225–42

METABOLISM

Centromeric regions control autonomous segregation tendencies in single-division meiosis of Saccharomyces cerevisiae. Sharon G, et al. **Genetics** 1990 Jul;125(3):487–94
Mixed segregation of chromosomes during single-division meiosis of Saccharomyces cerevisiae. Sharon G, et al. **Genetics** 1990 Jul;125(3):475–85
The dynamics of chromosome movement in the budding yeast Saccharomyces cerevisiae. Palmer RE, et al. **J Cell Biol** 1989 Dec;109(6 Pt 2):3355–66
Purification of a protein binding to the CDEI subregion of Saccharomyces cerevisiae centromere DNA. Jiang WD, et al. **Mol Cell Biol** 1989 Dec;9(12):5585–93
Transformation by integration in Podospora anserina. III. Replacement of a chromosome segment by a two-step process. Coppin-Raynal E, et al. **Mol Gen Genet** 1989 Oct; 219(1–2):270–6
Functional telomere formation in yeast using synthetic C4A2 sequences. Ascenzioni F, et al. **Plasmid** 1990 Jan; 23(1):16–26
Site-specific cleavage of a yeast chromosome by oligonucleotide-directed triple-helix formation. Strobel SA, et al. **Science** 1990 Jul 6;249(4964):73–5

PHYSIOLOGY

Effect of peroxisome proliferators on intrachromosomal and interchromosomal recombination in yeast. Schiestl RH, et al. **Carcinogenesis** 1990 Jan;11(1):173–6
Analysis of wild-type and rad50 mutants of yeast suggests an intimate relationship between meiotic chromosome synapsis and recombination. Alani E, et al. **Cell** 1990 May 4;61(3):419–36
Yeast centromere binding protein CBF1, of the helix-loop-helix protein family, is required for chromosome stability and methionine prototrophy. Cai M, et al. **Cell** 1990 May 4;61(3):437–46
RNA-dependent polymerase motifs in EST1: tentative identification of a protein component of an essential yeast telomerase [letter] Lundblad V, et al. **Cell** 1990 Feb 23; 60(4):529–30
Segregation of recombined chromosomes in meiosis I requires DNA topoisomerase II. Rose D, et al. **Cell** 1990 Mar 23; 60(6):1009–17
Characterization of Schizosaccharomyces pombe minichromosome deletion derivatives and a functional allocation of their centromere. Niwa O, et al. **EMBO J** 1989 Oct;8(10):3045–52
Properties of the transcriptional enhancer in Saccharomyces cerevisiae telomeres. Runge KW, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1783–7

ULTRASTRUCTURE

Synaptic adjustment of inversion loops in Neurospora crassa. Bojko M. **Genetics** 1990 Mar;124(3):593–8
Position effects in ectopic and allelic mitotic recombination in Saccharomyces cerevisiae. Lichten M, et al. **Genetics** 1989 Oct;123(2):261–8
Higher-order chromosome structure in yeast. Yanagida M. **J Cell Sci** 1990 May;96 (Pt 1):1–3 (25 ref.)
Many yeast chromosomes lack the telomere-specific Y' sequence. Jäger D, et al. **Mol Cell Biol** 1989 Dec; 9(12):5754–7
Yeast telomere length varies in response to changes in the amount of polyC1–3A in the cell. Constable A, et al. **Mol Gen Genet** 1990 Apr;221(2):280–2
An electrophoretic karyotype and assignment of ribosomal genes to resolved chromosomes of Pneumocystis carinii. Yoganathan T, et al. **Mol Microbiol** 1989 Nov; 3(11):1473–80
DNA homology and chromosome stability: a sensitive yeast genetic system for identifying double-stranded DNA damage. Resnick MA, et al. **Prog Clin Biol Res** 1990; 340B:363–9

CHROMOSOMES G see CHROMOSOMES, HUMAN, 21–22

CHROMOSOMES, HUMAN

Alpha 1 antitrypsin deficiency: a study of the relationship between the Pi system and genetic markers. Schmitt MG Jr, et al. **Am J Hum Genet** 1975 May;27(3):315–21
Excess of females in chromosomally normal spontaneous abortuses. Bartels I, et al. **Am J Med Genet** 1990 Feb; 35(2):297–8
Chromosome maps of man and mouse. IV. Searle AG, et al. **Ann Hum Genet** 1989 May;53 (Pt 2):89–140 (266 ref.)
Digoxigenin-labeled probes can detect single-copy genes in human metaphase chromosomes. Vernole P. **Biotechniques** 1990 Aug;9(2):200–4
Establishment and characterisation of a new tumorigenic cell line with a normal karyotype derived from a human breast adenocarcinoma. Gioanni J, et al. **Br J Cancer** 1990 Jul; 62(1):8–13
Cytogenetic follow-up in a case of Sézary syndrome. D'Alessandro E, et al. **Cancer Genet Cytogenet** 1990 Apr; 45(2):231–6
Chromosome analysis of cryopreserved cells. McConnell TS, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):179–91
Oligonucleotide-priming methods for the chromosome-specific labelling of alpha satellite DNA in situ. Koch JE, et al. **Chromosoma** 1989 Oct;98(4):259–65
Rapid isolation of human chromosome-specific DNA probes from a somatic cell hybrid. Cotter FE, et al. **Genomics** 1990 Jun;7(2):257–63
Monochromosomal rodent-human hybrids from microcell fusion of human lymphoblastoid cells containing an inserted dominant selectable marker. Warburton D, et al. **Genomics** 1990 Feb;6(2):358–66
Segregation analysis of 1885 DMD families: significant departure from the expected proportion of sporadic cases. Barbujani G, et al. **Hum Genet** 1990 May;84(6):522–6
On-line sorting of human chromosomes by centromeric index, and identification of sorted populations by GTG-banding and fluorescent in situ hybridization. Boschman GA, et al. **Hum Genet** 1990 Jun;85(1):41–8
Evolution of the Simiiformes and the phylogeny of human chromosomes. Clemente IC, et al. **Hum Genet** 1990 May; 84(6):493–506 (149 ref.)
Construction and characterization of band-specific DNA libraries. Lüdecke HJ, et al. **Hum Genet** 1990 May; 84(6):512–6
Microdissection of banded human chromosomes. Senger G, et al. **Hum Genet** 1990 May;84(6):507–11
A general diagram of the human genome. Cruz-Coke R. **J Med Genet** 1990 Jun;27(6):388–9
Structure and variability of human chromosome ends. de Lange T, et al. **Mol Cell Biol** 1990 Feb;10(2):518–27
An initiation zone of chromosomal DNA replication located upstream of the c-myc gene in proliferating HeLa cells. Vassilev L, et al. **Mol Cell Biol** 1990 Sep;10(9):4899–904
Exonuclease digestion of human chromosomes for in situ hybridization and R-banding. Bérubé D, et al. **Nucleic Acids Res** 1990 May 11;18(9):2831
Approaches to localizing disease genes as applied to cystic fibrosis. Dean M, et al. **Nucleic Acids Res** 1990 Jan 25; 18(2):345–50
Characterization and organization of DNA sequences adjacent to the human telomere associated repeat (TTAGGG)n. Weber B, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3353–61
Systematic screening of yeast artificial-chromosome libraries by use of the polymerase chain reaction. Green ED, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):1213–7
Fluorescence in situ hybridization with Alu and L1 polymerase chain reaction probes for rapid characterization of human chromosomes in hybrid cell lines. Lichter P, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6634–8
Physical mapping of human chromosomes by repetitive sequence fingerprinting. Stallings RL, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(16):6218–22
Chromosomal organization of adrenergic receptor genes. Yang-Feng TL, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1516–20
Human telomeres: fusion and interstitial sites. Hastie ND, et al. **Trends Genet** 1989 Oct;5(10):326–31 (40 ref.)
[Acquisition of the sequence of a new subclass of human alpha- satellite DNA, localized in the centromere regions of two pairs of acrocentric chromosomes] Gar'kavtsev IV, et al. **Mol Gen Mikrobiol Virusol** 1989 Jun;(6):25–9 (Eng. Abstr.) **(Rus)**

ANALYSIS

Unfixed and fixed human chromosomes show different staining patterns after restriction endonuclease digestion. Peretti D, et al. **Hereditas** 1990;112(2):187–92
[Photometric scanning of area and relative content of DNA in human metaphase chromosome with a microscope photometer] Zhou Y, et al. **I Chuan Hsueh Pao** 1988; 15(5):389–95 (Eng. Abstr.) **(Chi)**
[Triploidy in newborn infants; clinical course and cytogenetic aspects (letter)] Leschot NJ, et al. **Ned Tijdschr Geneeskd** 1989 Jul 22;133(29):1469–70 **(Dut)**
[A photographic microfluorimetric method for determining the DNA content in individual human chromosomes] Sukhikh TR, et al. **Tsitologiia** 1989 Nov;31(11):1329–38 (Eng. Abstr.) **(Rus)**
[Sézary syndrome: morpho-immuno-phenotypic, cytogenetic and molecular characterization] Benítez J, et al. **Med Clin (Barc)** 1989 Jun 17;93(3):103–7 (Eng. Abstr.) **(Spa)**

METABOLISM

Autonomous replication of a DNA fragment containing the chromosomal replication origin of the human c-myc gene. McWhinney C, et al. **Nucleic Acids Res** 1990 Mar 11; 18(5):1233–42
[A new method on in situ nick-translation of human metaphase chromosomes] Li GY, et al. **I Chuan Hsueh Pao** 1988;15(3):223–30 (Eng. Abstr.) **(Chi)**

RADIATION EFFECTS

Cytogenetic characterization of ataxia telangiectasia (AT) heterozygotes using lymphoblastoid cell lines and chronic gamma-irradiation. Waghray M, et al. **Hum Genet** 1990 May;84(6):532–4
Effect of nucleotide excision repair in human cells on intrachromosomal homologous recombination induced by UV and 1-nitrosopyrene. Bhattacharyya NP, et al. **Mol Cell Biol** 1990 Aug;10(8):3945–51
Chromosomal instability and cellular hypersensitivity to X-radiation of cultured fibroblasts derived from porokeratosis patients' skin. Watanabe R, et al. **Mutat Res** 1990 Jun;230(2):273–8
Frequency of intrachromosomal homologous recombination induced by UV radiation in normally repairing and excision repair-deficient human cells. Tsujimura T, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(4):1566–70

ULTRASTRUCTURE

An alternative approach for induction of chromosomal banding and preservation of chromosomal morphology for virus DNA mapping by in situ hybridization. Mincheva A. **Acta Virol (Praha)** 1989 Dec;33(6):582–5
Inheritance of chromosome heteromorphisms analyzed by high-resolution bivariate flow karyotyping. Trask B, et al. **Am J Hum Genet** 1989 Nov;45(5):753–60
Chromosome heteromorphism quantified by high-resolution bivariate flow karyotyping. Trask B, et al. **Am J Hum Genet** 1989 Nov;45(5):739–52
Mapping human disease-associated genes. Ferguson-Smith MA. **Anim Genet** 1989;20(3):332–4
Premature chromosome condensation in the study of minimal residual disease. Hittelman WN, et al. **Bone Marrow Transplant** 1990 Jul;6 Suppl 1:9–13 (20 ref.)
Human satellite III DNA: genomic location and sequence homogeneity of the TaqI-deficient polymorphic sequences. Fowler JC, et al. **Chromosoma** 1989 Oct;98(4):266–72
Concerted evolution of alpha satellite DNA: evidence for species specificity and a general lack of sequence conservation among alphoid sequences of higher primates. Waye JS, et al. **Chromosoma** 1989 Oct;98(4):273–9
Determination of the electrophoretic mobility of chromosomes by free flow electrophoresis. I. Morphology and stability. Bier FF, et al. **Electrophoresis** 1989 Oct; 10(10):690–7
Molecular cloning of the human CTP synthetase gene by functional complementation with purified human metaphase chromosomes. Yamauchi M, et al. **EMBO J** 1990 Jul;9(7):2095–9
Heterochromatic chromosome variation and reproductive failure. Bobrow M. **Exp Clin Immmunogenet** 1985; 2(2):97–105 (33 ref.)

Telomere association of chromosomes induced by aphidicolin in a normal individual. Fuster C, et al. **Hum Genet** 1990 Apr;84(5):424–6

Kinetochore formation in experimentally undercondensed chromosomes. Haaf T, et al. **Hum Genet** 1990 May; 84(6):535–8

The volumes and morphology of human chromosomes in mitotic reconstructions. Heslop-Harrison JS, et al. **Hum Genet** 1989 Dec;84(1):27–34

Demonstration of chromosome replication by BrdU antibody technique and electron microscopy. Vogel W, et al. **Hum Genet** 1990 Feb;84(3):237–40

Nucleolus organizer regions in human lymphocytes as studied with premature chromosome condensation. Wachtler F, et al. **Hum Genet** 1990 Feb;84(3):244–8

Correlation of fragile sites and bleomycin induced chromosome break points. Murthy SK, et al. **Indian J Exp Biol** 1989 May;27(5):442–4

Fusion of Rous-sarcoma-virus-transformed rat cells to morphologically normal human or rat cells results in transcriptional suppression of the provirus that depends on its chromosomal integration site. Green AR, et al. **Int J Cancer** 1990 Aug 15;46(2):220–7

Nucleolar organizer region activity in human chromosomes and interphase nuclei of normal, leukemic, and tumor cells as evaluated by silver staining. Mamaev NN, et al. **Int Rev Cytol** 1990;121:233–66 (240 ref.)

High-mobility group protein HMG-I localizes to G/Q- and C-bands of human and mouse chromosomes. Disney JE, et al. **J Cell Biol** 1989 Nov;109(5):1975–82

Asymmetry in chromosome pairing: a major factor in de novo mutation and the production of genetic disease in man. Chandley AC. **J Med Genet** 1989 Sep;26(9):546–52 (54 ref.)

Microspectrophotometry of trypsin-Leishman-stained human chromosomes. Lundsteen C, et al. **Nature** 1973 Apr 27;242(5400):613–5

Long-range organization of tandem arrays of alpha satellite DNA at the centromeres of human chromosomes: high-frequency array-length polymorphism and meiotic stability. Wevrick R, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9394–8

CHROMOSOMES, HUMAN, PAIR 1

Translocation t(1;3)(p36;q21) in sideroblastic anaemia. Fukuoka T, et al. **Acta Haematol (Basel)** 1989;82(3):146–9

Fragility of the centromeric region of chromosome 1 associated with combined immunodeficiency in siblings. A recessively inherited entity? Fasth A, et al. **Acta Paediatr Scand** 1990 Jun-Jul;79(6-7):605–12

Renal cortical tumors. Cytogenetic characterization. Dal Cin P, et al. **Am J Clin Pathol** 1989 Oct;92(4):408–14

Evidence against the reported linkage of the cutaneous melanoma-dysplastic nevus syndrome locus to chromosome 1p36. Cannon-Albright LA, et al. **Am J Hum Genet** 1990 May;46(5):912–8

Genes for two autosomal recessive forms of chronic granulomatous disease assigned to 1q25 (NCF2) and 7q11.23 (NCF1). Francke U, et al. **Am J Hum Genet** 1990 Sep;47(3):483–92

Infantile hypophosphatasia: localization within chromosome region 1p36.1–34 and prenatal diagnosis using linked DNA markers. Greenberg CR, et al. **Am J Hum Genet** 1990 Feb; 46(2):286–92

Linkage of an autosomal dominant clefting syndrome (Van der Woude) to loci on chromosome 1q. Murray JC, et al. **Am J Hum Genet** 1990 Mar;46(3):486–91

The gene for the human mast cell high-affinity IgE receptor alpha chain: chromosomal localization to 1q21–q23 and RFLP analysis. Tepler I, et al. **Am J Hum Genet** 1989 Nov;45(5):761–5

Distal deletion of chromosome 1q in an adult. Halal F, et al. **Am J Med Genet** 1990 Mar;35(3):379–82

Partial duplication 1q: report of four patients and review of the literature. Rasmussen SA, et al. **Am J Med Genet** 1990 Jun;36(2):137–43

Detection of numerical chromosome aberrations in bladder cancer by in situ hybridization. Hopman AH, et al. **Am J Pathol** 1989 Dec;135(6):1105–17

Isolation and use of chromosome 1 probes for linkage studies on Charcot-Marie-Tooth disease. Griffiths LR, et al. **Ann Hum Genet** 1990 Jan;54 (Pt 1):31–7

Close linkage of PUM and SPTA within chromosome band 1q21. Middleton-Price H, et al. **Ann Hum Genet** 1988 Oct; 52 (Pt 4):273–8

A case of squamous cell lung carcinoma with tetrasomy 7 and chromosome 1 C-band polymorphism. Rønne M, et al. **Anticancer Res** 1989 Jul-Aug;9(4):1101–3

Deletion mapping on the distal third region of chromosome 1p in multiple endocrine neoplasia type IIA. Yang KP, et al. **Anticancer Res** 1990 Mar-Apr;10(2B):527–33

Exclusion of the autosomal dominant retinitis pigmentosa gene from a substantial region of chromosome 1: study of a large Australian family. Chand A, et al. **Aust N Z J Ophthalmol** 1990 May;18(2):163–9

Agarose gel electrophoresis in isozyme separation and visualization. Hunt JD, et al. **Biochem Genet** 1989 Dec; 27(11-12):647–54

Poor prognosis of children with pre-B acute lymphoblastic leukemia is associated with the t(1;19)(q23;p13): a Pediatric Oncology Group study. Crist WM, et al. **Blood** 1990 Jul 1;76(1):117–22

An identical translocation t(1;20) (q12.3;p13) in two patients with multiple myeloma. Weh HJ, et al. **Br J Haematol** 1990 Mar;74(3):365–7

The unbalanced 1;7 translocation in de novo myelodysplastic syndrome and its clinical implication. Horiike S, et al. **Cancer** 1990 Mar 15;65(6):1350–4

Translocation (1;6)(p12;p23) in ANLL. Jacob AK, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):67–71

Establishment and characterization of a childhood pre-B acute lymphoblastic leukemia cell line, PER-278, with chromosome translocations t(1;19) and t(1;9). Kees UR, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):201–8

Chromosome 1 studies in Wilms' tumor. McDowell H, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):203–9

Abnormalities of chromosome 1 in relation to human malignant diseases. Oláh E, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):179–94

Parathyroid adenoma with t(1;5)(p22;q32) as the sole clonal chromosome abnormality. Orndal C, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):225–8

Trisomy for chromosome 1q in a pontine astrocytoma. Sawyer JR, et al. **Cancer Genet Cytogenet** 1990 Jul 1; 47(1):101–6

A translocation (1;10)(p32;q24) in a neuroblastoma cell line derived from marrow metastases. Skinnider L, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):131–5

Role of 1q trisomy in tumorigenicity, growth, and metastasis of human leukemic B-cell clones in nude mice. Ghose T, et al. **Cancer Res** 1990 Jun 15;50(12):3737–42

A new homeobox gene contributes the DNA binding domain of the t(1;19) translocation protein in pre-B ALL. Kamps MP, et al. **Cell** 1990 Feb 23;60(4):547–55

Chromosomal translocation t(1;19) results in synthesis of a homeobox fusion mRNA that codes for a potential chimeric transcription factor. Nourse J, et al. **Cell** 1990 Feb 23; 60(4):535–45

Complex familial translocation [letter] Cruz-Coke R. **Clin Genet** 1990 Feb;37(2):158–9

Deletion of chromosome 1p: a short review. Howard PJ, et al. **Clin Genet** 1990 Feb;37(2):127–31 (13 ref.)

Report of the committee on the genetic constitution of chromosome 1. Bruns GA, et al. **Cytogenet Cell Genet** 1989; 51(1-4):67–90 (302 ref.)

Chromosomal localization of two human genes inducible by interferons, double-stranded RNA, and viruses. Clauss IM, et al. **Cytogenet Cell Genet** 1990;53(2-3):166–8

Assignment of cathepsin E (CTSE) to human chromosome region 1q31 by in situ hybridization and analysis of somatic cell hybrids. Couvreur JM, et al. **Cytogenet Cell Genet** 1990; 53(2-3):137–9

Chromosome mapping of the human RAS-related RAP1A, RAP1B, and RAP2 genes to chromosomes 1p12——p13, 12q14, and 13q34, respectively. Rousseau-Merck MF, et al. **Cytogenet Cell Genet** 1990;53(1):2–4

Chromosome 1 localization of the gene for CD34, a surface antigen of human stem cells. Tenen DG, et al. **Cytogenet Cell Genet** 1990;53(1):55–7

Chromosome regional mapping for the human thyroid stimulating hormone beta subunit (TSHB) gene. Tokino T, et al. **Cytogenet Cell Genet** 1990;53(2-3):140–3

The tal gene undergoes chromosome translocation in T cell leukemia and potentially encodes a helix-loop-helix protein. Chen Q, et al. **EMBO J** 1990 Feb;9(2):415–24

A 6000 kb segment of chromosome 1 is conserved in human and mouse. Kingsmore SF, et al. **EMBO J** 1989 Dec 20; 8(13):4073–80

Chromosomal mapping and nucleotide sequence of a human DNA autonomously replicating sequence. Aguinaga M, et al. **Genomics** 1989 Oct;5(3):605–11

A human alphoid DNA clone from the EcoRI dimeric family: genomic and internal organization and chromosomal assignment. Baldini A, et al. **Genomics** 1989 Nov;5(4):822–8

Mapping the human amylase gene cluster on the proximal short arm of chromosome 1 using a highly informative (CA)n repeat. Dracopoli NC, et al. **Genomics** 1990 May; 7(1):97–102

The gene for the ubiquitous octamer-binding protein Oct-1 is on human chromosome 1, region cen-q32, and near Ly-22 and Ltw-4 on mouse chromosome 1. Hsieh CL, et al. **Genomics** 1990 Apr;6(4):666–72

Epidermolysis bullosa: evidence for linkage to genetic markers on chromosome 1 in a family with the autosomal dominant simplex form. Humphries MM, et al. **Genomics** 1990 Jul;7(3):377–81

"Major minisatellite loci" detected by minisatellite clones 33.6 and 33.15 correspond to the cognate loci D1S111 and D7S437. Jeffreys AJ, et al. **Genomics** 1990 Jul;7(3):449–52

Chromosomal assignment of genes encoding the alpha, beta, and gamma subunits of human complement protein C8: identification of a close physical linkage between the alpha and the beta loci. Kaufman KM, et al. **Genomics** 1989 Oct; 5(3):475–80

Localization of Usher syndrome type II to chromosome 1q. Kimberling WJ, et al. **Genomics** 1990 Jun;7(2):245–9

Long-range restriction site mapping of a syntenic segment conserved between human chromosome 1 and mouse chromosome 3. Kingsmore SF, et al. **Genomics** 1990 May; 7(1):75–83

Mapping recessive ophthalmic diseases: linkage of the locus for Usher syndrome type II to a DNA marker on chromosome 1q. Lewis RA, et al. **Genomics** 1990 Jun; 7(2):250–6

Cloning of the human genomic amiloride-sensitive Na+/H+ antiporter gene, identification of genetic polymorphisms, and localization on the genetic map of chromosome 1p. Lifton RP, et al. **Genomics** 1990 May; 7(1):131–5

Localization of three DNA segments encompassing tRNA genes to human chromosomes 1, 5, and 16: proposed mechanism and significance of tRNA gene dispersion. McBride OW, et al. **Genomics** 1989 Oct;5(3):561–73

Definition of mouse chromosome 1 and 3 gene linkage groups that are conserved on human chromosome 1: evidence that a conserved linkage group spans the centromere of human chromosome 1. Moseley WS, et al. **Genomics** 1989 Nov; 5(4):899–905

Assignment of the gene for the small nuclear ribonucleoprotein E (SNRPE) to human chromosome 1q25-q43. Neiswanger K, et al. **Genomics** 1990 Aug; 7(4):503–8

A genetic map of chromosome 1: comparison of different data sets and linkage programs. Rouleau GA, et al. **Genomics** 1990 Jul;7(3):313–8

Assignment of 12 loci to rat chromosome 5: evidence that this chromosome is homologous to mouse chromosome 4 and to human chromosomes 9 and 1 (1p arm). Szpirer C, et al. **Genomics** 1990 Apr;6(4):679–84

Transposition, amplification, and divergence in the origin of the DNF15 loci, a polymorphic repetitive sequence family on chromosomes 1 and 3. Welch HM, et al. **Genomics** 1989 Oct;5(3):423–30

Somatic pairing of chromosome 1 centromeres in interphase nuclei of human cerebellum. Arnoldus EP, et al. **Hum Genet** 1989 Oct;83(3):231–4

Assignment by in situ hybridization of the angiotensinogen gene to chromosome band 1q4, the same region as the human renin gene. Gaillard-Sanchez I, et al. **Hum Genet** 1990 Mar;84(4):341–3

Localization of the active type I DNA topoisomerase gene on human chromosome 20q11.2–13.1, and two pseudogenes on chromosomes 1q23–24 and 22q11.2–13.1. Kunze N, et al. **Hum Genet** 1989 Dec;84(1):6–10

Mapping the human gene coding for chromosomal protein HMG-17. Popescu N, et al. **Hum Genet** 1990 Aug; 85(3):376–8

Meiotic and sperm chromosome studies in a reciprocal translocation t(1;2)(q32;q36). Templado C, et al. **Hum Genet** 1990 Jan;84(2):159–62

CD1 defines conserved linkage group border between human chromosomes 1 and mouse chromosomes 1 and 3. Moseley WS, et al. **Immunogenetics** 1989;30(5):378–82

The locus of the polymorphic epithelial mucin (PEM) tumour antigen on chromosome 1q21 shows a high frequency of alteration in primary human breast tumours. Gendler SJ, et al. **Int J Cancer** 1990 Mar 15;45(3):431–5

Cytogenetics of pre-B-cell acute lymphoblastic leukemia with emphasis on prognostic implications of the t(1;19). Raimondi SC, et al. **J Clin Oncol** 1990 Aug;8(8):1380–8

Genomic organization of the selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. Watson ML, et al. **J Exp Med** 1990 Jul 1;172(1):263–72

Small marker chromosomes in man: origin from pericentric heterochromatin of chromosomes 1, 9, and 16. Callen DF, et al. **J Med Genet** 1990 Mar;27(3):155–9

Linkage of internal minisatellite loci on chromosome 1 and exclusion of autosomal dominant retinitis pigmentosa proximal to rhesus. Inglehearn CF, et al. **J Med Genet** 1990 Jan;27(1):14–6

Selective deficiency of antibody responses to polysaccharide antigens in a child mosaic for partial trisomy 1 (46,XX,dir dup (1) (q12——q23)/46,XX). Germain-Lee EL, et al. **J Pediatr** 1990 Jul;117(1 Pt 1):96–9

Problems of mass screening for neuroblastoma: analysis of false-negative cases. Ishimoto K, et al. **J Pediatr Surg** 1990 Apr;25(4):398–401

Loss of heterozygosity on chromosomes 1 and 11 in sporadic pheochromocytomas. Yokogoshi Y, et al. **Jpn J Cancer Res** 1990 Jun-Jul;81(6-7):632–8

Supernumerary chromosome 1 in interphase nuclei of atypical germ cells in paraffin-embedded human seminiferous tubules. Walt H, et al. **Lab Invest** 1989 Nov; 61(5):527–31

Detection of breakpoints in submicroscopic chromosomal translocation, illustrating an important mechanism for genetic disease [see comments] Lamb J, et al. **Lancet** 1989 Oct 7;2(8667):819–24 Comment in: Lancet 1989 Dec 16;2(8677):1449.

Association within a family of a balanced autosomal translocation with major mental illness. St Clair D, et al. **Lancet** 1990 Jul 7;336(8706):13–6

The hemopoietic stem cell antigen, CD34, is encoded by a gene located on chromosome 1. Molgaard HV, et al. **Leukemia** 1989 Nov;3(11):773–6

Amylase-producing plasmacytoma cell lines, AD3 and FR4, with der(14)t(8;14) and dic(8)t(1;8) established from ascites. Tagawa S, et al. **Leukemia** 1990 Aug;4(8):600–5

Locus for susceptibility to melanoma on chromosome 1p [letter; comment] Gruis NA, et al. **N Engl J Med** 1990 Mar 22;322(12):853–4 Comment on: N Engl J Med 1989 May 25;320(21):1367–72.

Genetic linkage of hereditary motor and sensory neuropathy type I (Charcot-Marie-Tooth disease) to markers of

chromosomes 1 and 17. Defesche JC, et al. **Neurology** 1990 Sep;40(9):1450–3

PstI RFLP at the medium chain acyl-coenzyme A dehydrogenase locus (ACADM chromosome 1). Blakemore AI, et al. **Nucleic Acids Res** 1990 May 11; 18(9):2838

BamHI and MspI RFLP's in strong linkage disequilibrium at the medium chain acyl-coenzyme A dehydrogenase locus (ACADM chromosome 1). Blakemore AI, et al. **Nucleic Acids Res** 1990 May 11;18(9):2838

Polymorphism in the APNH gene, detected by denaturing gradient gel electrophoresis. Dudley CR, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5326

A VNTR polymorphism, D1S110, at 1q21–1q31. Huey B, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1928

RFLP for human cathepsin E (CTSE). Johnson MP, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10147

MspI RFLP for SNRNPE gene on 1q. Nishimura DY, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8896

MspI and PvuII polymorphisms in the Na,K-ATPase beta subunit gene ATP1B1. Shull MM, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1087

Dinucleotide repeat polymorphism at the CRP locus. Weber JL, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4635

Dinucleotide repeat polymorphism at the D1S102 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2199

Dinucleotide repeat polymorphism at the D1S103 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2199

Dinucleotide repeat polymorphism at the D1S104 locus. Weber JL, et al. **Nucleic Acids Res** 1990 May 11;18(9):2835

The anonymous probe DR281 (D1S99) identifies a mspI polymorphism. Wiedorn KH, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1927

Multiple chromosomes carrying tumor suppressor activity for a uterine endometrial carcinoma cell line identified by microcell-mediated chromosome transfer. Yamada H, et al. **Oncogene** 1990 Aug;5(8):1141–7

TPR-MET oncogenic rearrangement: detection by polymerase chain reaction amplification of the transcript and expression in human tumor cell lines. Soman NR, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):738–42

Interphase and metaphase resolution of different distances within the human dystrophin gene. Lawrence JB, et al. **Science** 1990 Aug 24;249(4971):928–32

The gene for enhancer binding proteins E12/E47 lies at the t(1;19) breakpoint in acute leukemias. Mellentin JD, et al. **Science** 1989 Oct 20;246(4928):379–82

Induction of cellular senescence in immortalized cells by human chromosome 1. Sugawara O, et al. **Science** 1990 Feb 9;247(4943):707–10

Exclusion of unassigned blood group system loci from the regulator of complement activation gene cluster on chromosome 1q32. Lewis M, et al. **Vox Sang** 1989; 57(3):210–2

[The significance of molecular biology in hypertension research] Ganten D. **Fortschr Med** 1989 Nov 30; 107(34):725–6 **(Ger)**

[Genes and hypertension. Genetic analysis instead of fasting?] Ganten D. **Fortschr Med** 1990 Apr 30;108(13):250–2 **(Ger)**

[Tumor cytogenetics and prognosis in neuroblastoma] Christiansen H, et al. **Monatsschr Kinderheilkd** 1989 Oct; 137(10):666–71 (Eng. Abstr.) **(Ger)**

[Trisomy for distal segments of the long arm of chromosome 1] Lur'e IV, et al. **Genetika** 1989 Dec;25(12):2251–5 (Eng. Abstr.) **(Rus)**

[Genetic linkage of the autosomal dominant form of Charcot-Marie-Tooth amyotrophy and 3 genetic markers on chromosome 1] Ferák V, et al. **Cesk Neurol Neurochir** 1989 May;52(3):200–7 (Eng. Abstr.) **(Slo)**

[Translocation T (1;15) (Q21;P13) in a male with azoospermia] Antiñolo G, et al. **Actas Urol Esp** 1989 Nov–Dec;13(6):465–6 (Eng. Abstr.) **(Spa)**

[Usher syndrome II localized on chromosome 1] Möller C. **Lakartidningen** 1990 May 16;87(20):1758 **(Swe)**

ANALYSIS

Spatial topography of a pericentromeric region (1q12) in hemopoietic cells studied by in situ hybridization and confocal microscopy. van Dekken H, et al. **Cytometry** 1990; 11(5):570–8

Three-dimensional reconstruction of pericentromeric (1q12) DNA and ribosomal RNA sequences in HL60 cells after double-target in situ hybridization and confocal microscopy. van Dekken H, et al. **Cytometry** 1990; 11(5):579–85

The locus for the medium-chain acyl-CoA dehydrogenase gene on chromosome 1 is highly polymorphic. Kidd JR, et al. **Genomics** 1990 Jan;6(1):89–93

Centromeric heterochromatin instability of chromosomes 1, 9, and 16 in variable immunodeficiency syndrome—a virus-induced phenomenon? Haas OA. **Hum Genet** 1990 Jul;85(2):244–6 (19 ref.)

Ethnic-specific allelic variation within the D1Z2 locus. Tynan KM, et al. **Hum Hered** 1990;40(1):1–14

Linkage data for Marfan syndrome and markers on chromosomes 1 and 11. de Groote J, et al. **J Med Genet** 1990 Feb;27(2):82–5

ULTRASTRUCTURE

Apparent Fryns syndrome in a boy with a tandem duplication of 1q24–31.2. Clark RD, et al. **Am J Med Genet** 1989 Nov; 34(3):422–6

Child with deletion of 4q and duplication of 1q [letter] Wade J, et al. **Am J Med Genet** 1989 Aug;33(4):553–4

Assignment of the human 3 beta-hydroxysteroid dehydrogenase gene (HSDB3) to the p13 band of chromosome 1. Bérubé D, et al. **Cytogenet Cell Genet** 1989; 52(3–4):199–200

In situ hybridization and pulsed-field gel analysis define two major minisatellite loci: 1q23 for minisatellite 33.6 and 7q35–q36 for minisatellite 33.15. Chimini G, et al. **Genomics** 1989 Aug;5(2):316–24

Acute monocytic leukemia with translocation t(1;11) (p31;q23): simultaneous staining of chromosomes and cell surface antigens. Nölle I, et al. **Hamatol Bluttransfus** 1990; 33:145–9

Molecular characterization of human minichromosomes in Chinese hamster/human somatic cell hybrids. Scheffler IE, et al. **Prog Clin Biol Res** 1989;318:19–31

Characterization and localization to human chromosome 1 of human fast-twitch skeletal muscle calsequestrin gene. Fujii J, et al. **Somat Cell Mol Genet** 1990 Mar;16(2):185–9

CHROMOSOMES, HUMAN, PAIR 2

Assignment of the locus for Waardenburg syndrome type I to human chromosome 2q37 and possible homology to the Splotch mouse [see comments] Foy C, et al. **Am J Hum Genet** 1990 Jun;46(6):1017–23 Comment in: Am J Hum Genet 1990 Jun;46(6):1013–6.

Holoprosencephaly and cytogenetic findings: further information [letter; comment] Cohen MM Jr. **Am J Med Genet** 1989 Oct;34(2):265 Comment on: Am J Med Genet 1988 Aug;30(4):929–38.

Interstitial deletion 2q14q21. Frydman M, et al. **Am J Med Genet** 1989 Dec;34(4):476–9

Prenatal detection of cyclopia associated with interstitial deletion of 2p. Grundy HO, et al. **Am J Med Genet** 1989 Oct;34(2):268–70

Waardenburg syndrome type I in a child with de novo inversion (2)(q35q37.3). Ishikiriyama S, et al. **Am J Med Genet** 1989 Aug;33(4):505–7

Holoprosencephaly and interstitial deletion of 2(p21)p2109). Wilson WG, et al. **Am J Med Genet** 1989 Oct;34(2):252–4

Sotos syndrome with a balanced reciprocal translocation t(2;12)(q33.3;q15). Tamaki K, et al. **Ann Genet** 1989; 32(4):244–6

R-banding and in situ hybridization localization of single copy genes on high resolution banded chromosomes. Rønne M, et al. **Anticancer Res** 1990 Mar–Apr; 10(2A):375–7

Agarose gel electrophoresis in isozyme separation and visualization. Hunt JD, et al. **Biochem Genet** 1989 Dec; 27(11–12):647–54

Variant t(2;18) translocation in a Burkitt conversion of follicular lymphoma. Aventin A, et al. **Br J Haematol** 1990 Mar;74(3):367–9

Variant t(2;18) translocation in a follicular lymphoma [letter] Leroux D, et al. **Br J Haematol** 1990 Jun;75(2):290–2

t(2;14)(q23;q32.3) as the sole abnormality in a patient with acute nonlymphocytic leukemia (FAB-M4). Columbano-Green LM, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):255–7

del(2)(p23): a new recurrent abnormality in acute myeloid leukemia. Najfeld V, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):185–90

Translocation (2;6)(q36;p21.3) in a lipoma. Sreekantaiah C, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):81–4

Expression of human chromosome 2 ornithine decarboxylase gene in ornithine decarboxylase-deficient Chinese hamster ovary cells [published erratum appears in Cancer Res 1990 Jul 1;50(13):4174] Hsieh JT, et al. **Cancer Res** 1990 Apr 15;50(8):2239–44

Two chromosomal locations for human ornithine decarboxylase gene sequences and elevated expression in colorectal neoplasia. Radford DM, et al. **Cancer Res** 1990 Oct 1;50(19):6146–53

Acute monocytic leukaemia and t(2;6) (p21;q26) translocation. Love EM, et al. **Clin Lab Haematol** 1989; 11(3):277–80

Involvement of immunoglobulin heavy- and light-chain (kappa) gene clusters in a human B-cell translocation, t(2;14). Kennedy MA, et al. **Cytogenet Cell Genet** 1989; 52(1–2):50–6

Report of the committee on the genetic constitution of chromosome 2. Povey S, et al. **Cytogenet Cell Genet** 1989; 51(1–4):91–105 (208 ref.)

Transposition of human immunoglobulin V kappa genes within the same chromosome and the mechanism of their amplification. Zimmer FJ, et al. **EMBO J** 1990 May; 9(5):1535–42

Chromosomal mapping and nucleotide sequence of a human DNA autonomously replicating sequence. Aguinaga M, et al. **Genomics** 1989 Oct;5(3):605–11

A glutaminase (gls) gene maps to mouse chromosome 1, rat chromosome 9, and human chromosome 2 [published erratum appears in Genomics 1989 Nov;5(4):957] Mock B, et al. **Genomics** 1989 Aug;5(2):291–7

Assignment of the S-antigen gene (SAG) to human chromosome 2q24–q37. Ngo JT, et al. **Genomics** 1990 May; 7(1):84–7

Twenty loci form a continuous linkage map of markers for human chromosome 2. O'Connell P, et al. **Genomics** 1989 Nov;5(4):738–45

Assignment of the human gene for CREB1 to chromosome 2q32.3–q34. Taylor AK, et al. **Genomics** 1990 Jul; 7(3):416–21

5q- and t(2;11) in a patient with M2 acute non-lymphocytic leukemia. Case report. Testoni N, et al. **Haematologica** 1989 Nov–Dec;74(6):595–9

Marfan syndrome: exclusion of genetic linkage to five genes coding for connective tissue components in the long arm of chromosome 2. Kainulainen K, et al. **Hum Genet** 1990 Feb;84(3):233–6

Meiotic and sperm chromosome studies in a reciprocal translocation t(1;2)(q32;q36). Templado C, et al. **Hum Genet** 1990 Jan;84(2):159–62

Genomic organization and chromosomal localization of the human nucleolin gene. Srivastava M, et al. **J Biol Chem** 1990 Sep 5;265(25):14922–31

Abnormal chromosome complement resulting from a familial inversion of chromosome 2. Richter S, et al. **J Med Genet** 1989 Nov;26(11):725–9

Childhood chronic lymphocytic leukemia with (2;14) translocation. Yoffe G, et al. **J Pediatr** 1990 Jan; 116(1):114–7

Possible locus for polycystic kidney disease on chromosome 2 [letter] Nørby S, et al. **Lancet** 1990 Aug 4;336(8710):323–4

The t(2;5)(p23;q35): a recurring chromosomal abnormality in Ki-1-positive anaplastic large cell lymphoma. Le Beau MM, et al. **Leukemia** 1989 Dec;3(12):866–70

Excision of N-myc from chromosome 2 in human neuroblastoma cells containing amplified N-myc sequences. Hunt JD, et al. **Mol Cell Biol** 1990 Feb; 10(2):823–9

Two polymorphisms for the human elastin gene. Kainulainen K, et al. **Nucleic Acids Res** 1990 May 25;18(10):3114

MspI RFLP in intron 8 of the human protein C gene. Koenhen E, et al. **Nucleic Acids Res** 1989 Oct 25; 17(20):8401

Dinucleotide repeat polymorphism at the D2S72 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2200

Dinucleotide repeat polymorphism at the D2S71 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2203

Tetranucleotide repeat polymorphism in the apolipoprotein B gene. Zuliani G, et al. **Nucleic Acids Res** 1990 Jul 25; 18(14):4299

Expansion of the alpha 2-adrenergic receptor family: cloning and characterization of a human alpha 2-adrenergic receptor subtype, the gene for which is located on chromosome 2. Lomasney JW, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5094–8

[Initial symptoms of hematemesis from gastric varix with chromosomal abnormalities of t(2; 8) and 14q+ in a patient with acute lymphoblastic leukemia (FAB: L3)] Amano M, et al. **Rinsho Ketsueki** 1989 Oct;30(10):1830–4 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Human CD28 and CTLA-4 Ig superfamily genes are located on chromosome 2 at bands q33–q34. Lafage-Pochitaloff M, et al. **Immunogenetics** 1990;31(3):198–201

PHYSIOLOGY

Autosomal fragile site at 2q13 in a proband with mental retardation. Kumada T, et al. **Hiroshima J Med Sci** 1990 Mar;39(1):19–21

ULTRASTRUCTURE

Partial duplication of the short arm of chromosome 2 (dup(2)(p13——p21) associated with mental retardation and an Aarskog-like phenotype. Fryns JP, et al. **Ann Genet** 1989;32(3):174–6

The human immunoglobulin kappa locus and some of its acrobatics. A review presented on the occasion of receiving the "Otto-Warburg-Medaille" of Gesellschaft für Biologische Chemie at Osnabrück on September 13, 1989. Zachau HG. **Biol Chem Hoppe Seyler** 1990 Jan;371(1):1–6 (19 ref.)

Localization of the acetylcholine receptor gamma subunit gene to human chromosome 2q32——qter. Cohen-Haguenauer O, et al. **Cytogenet Cell Genet** 1989; 52(3–4):124–7

Localization of a human brain sodium channel gene (SCN2A) to chromosome 2. Litt M, et al. **Genomics** 1989 Aug; 5(2):204–8

An apparent de novo terminal deletion of chromosome 2 (pter——p24:). Francis GL, et al. **J Med Genet** 1990 Feb; 27(2):137–8

CHROMOSOMES, HUMAN, PAIR 3

Translocation t(1;3)(p36;q21) in sideroblastic anaemia. Fukuoka T, et al. **Acta Haematol (Basel)** 1989;82(3):146–9

Abnormality of platelet membrane glycoprotein GPIIb in a myelodysplastic syndrome with 3q inversion presenting with marked dysmegakaryopoiesis. Yufu Y, et al. **Acta Haematol (Basel)** 1990;83(2):107–10

The transferrin receptor system is not involved in the pathogenesis of hematological disorders with 3q inversion. Abe Y, et al. **Am J Hematol** 1990 Mar;33(3):215–9

Apparent duplication of inv(3)(q21q26) in one of five cases with inv (3) in myelodysplastic syndromes and acute leukemia. Walter TA, et al. **Am J Hematol** 1990 Mar; 33(3):210–4 (20 ref.)

Three genes for enzymes of the pyruvate dehydrogenase complex map to human chromosomes 3, 7, and X [published erratum appears in Am J Hum Genet 1990 Jun;46(6):1235] Olson S, et al. **Am J Hum Genet** 1990 Feb; 46(2):340–9

Mild phenotypic abnormalities in combined del 9p2 and dup 3p2. Game K, et al. **Am J Med Genet** 1990 Mar;35(3):370–2

Terminal deletion of chromosome 3p in adults: a fourth observation [letter] Meinecke P. **Am J Med Genet** 1990 Aug;36(4):519–20

Penile enlargement in 3q23–q25 deletion syndrome [letter] Naguib KK, et al. **Am J Med Genet** 1990 Jul;36(3):361–2

Loss of the 3p25.3 band is critical in the manifestation of del(3p) syndrome: karyotype–phenotype correlation in cases with deficiency of the distal portion of the short arm of chromosome 3. Narahara K, et al. **Am J Med Genet** 1990 Feb;35(2):269–73 (19 ref.)

Gene of type II autosomal dominant retinitis pigmentosa maps on the long arm of chromosome 3. Olsson JE, et al. **Am J Med Genet** 1990 Apr;35(4):595–9

Case of direct insertion within a chromosome 3 leading to a chromosome 3p duplication in an offspring. Watson MS, et al. **Am J Med Genet** 1990 Jun;36(2):172–4

A de novo X;3 translocation in Rett syndrome. Zoghbi HY, et al. **Am J Med Genet** 1990 Jan;35(1):148–51

Expression in lung cancer of a transcribed sequence at the DNF15S2 locus at chromosome 3P21. Harbour JW, et al. **Anticancer Res** 1990 Jan–Feb;10(1):23–7

t(3;22)(q27;q11): a novel translocation associated with diffuse non–Hodgkin's lymphoma [see comments] Offit K, et al. **Blood** 1989 Nov 1;74(6):1876–9 Comment in: Blood 1990 May 15;75(10):2094.

Cytogenetic characterization of renal cell carcinoma in von Hippel–Lindau syndrome. Goodman MD, et al. **Cancer** 1990 Mar 1;65(5):1150–4

A complex t(3;8;17) involving breakpoint 8p11 in a case of M5 acute nonlymphocytic leukemia with erythrophagocytosis. Bertheas MF, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):67–73

Long-range restriction enzyme maps of DNF15S2, D3S2, and c-raf1 loci on the short arm of human chromosome 3. Boldog F, et al. **Cancer Genet Cytogenet** 1989 Oct 15; 42(2):295–306

Translocation t(3;21)(q26;q22) in acute myeloblastic leukemia secondary to polycythemia vera. Dastugue N, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):275–6

Chromosome 3 and 12p rearranged in a well-differentiated peritoneal mesothelioma [letter] Decker HJ, et al. **Cancer Genet Cytogenet** 1990 May;46(1):135–7

Trisomy 3 in cold agglutinin disease. Gordon J, et al. **Cancer Genet Cytogenet** 1990 May;46(1):89–92

Monosomy 3 and isochromosome 8q in a uveal melanoma. Horsman DE, et al. **Cancer Genet Cytogenet** 1990 Apr; 45(2):249–53

Patients with different lung cancers show normal expression of fra(3)(p14.2) in aphidicolin-treated lymphocyte cultures. Porfirio B, et al. **Cancer Genet Cytogenet** 1989 Nov; 43(1):95–101

Clonal chromosome abnormalities with preferential involvement of chromosome 3 in patients with porokeratosis of Mibelli. Scappaticci S, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):89–94

The common acute lymphoblastic leukemia antigen (neutral endopeptidase–3.4.24.11) gene is located on human chromosome 3. Tran-Paterson R, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):129–34

Expression of alternatively terminated unusual human butyrylcholinesterase messenger RNA transcripts, mapping to chromosome 3q26–ter, in nervous system tumors. Gnatt A, et al. **Cancer Res** 1990 Apr 1;50(7):1983–7

Case of cyclopia with an unbalanced karyotype attributable to a balanced 3/7 translocation [see comments] Bürrig KF, et al. **Clin Genet** 1989 Oct;36(4):262–5 Comment in: Clin Genet 1990 Mar;37(3):238.

Duplication 3p and cyclopia [letter] Dallapiccola B, et al. **Clin Genet** 1990 Jun;37(6):490–1

Sotos syndrome and de novo balanced autosomal translocation (t(3;6)(p21;p21)). Schrander-Stumpel CT, et al. **Clin Genet** 1990 Mar;37(3):226–9

Report of the committee on the genetic constitution of chromosome 3. Naylor SL, et al. **Cytogenet Cell Genet** 1989; 51(1–4):106–20 (167 ref.)

Chromosomal localization to 3q21——qter and two TaqI RFLPs of the human prostate-specific acid phosphatase gene (ACPP). Winqvist R, et al. **Cytogenet Cell Genet** 1989; 52(1–2):68–71

The gene for human thioredoxin maps on the short arm of chromosome 3 at bands 3p11–p12. Lafage-Pochitaloff-Huvalé M, et al. **FEBS Lett** 1989 Sep 11;255(1):89–91

Assignment of 35 single-copy and 17 repetitive sequence DNA probes to human chromosome 3: high-resolution physical mapping of 7 DNA probes by in situ hybridization. Atchison L, et al. **Genomics** 1990 Mar;6(3):441–50

Human delta-aminolevulinate synthase: assignment of the housekeeping gene to 3p21 and the erythroid-specific gene to the X chromosome. Bishop DF, et al. **Genomics** 1990 Jun;7(2):207–14

Isolation and chromosomal localization of the human glutathione peroxidase gene. Chada S, et al. **Genomics** 1990 Feb;6(2):268–71

At least four different chromosomal regions are involved in loss of heterozygosity in human breast carcinoma. Devilee P, et al. **Genomics** 1989 Oct;5(3):554–60

No evidence for linkage between late onset autosomal dominant retinitis pigmentosa and chromosome 3 locus D3S47 (C17): evidence for genetic heterogeneity. Inglehearn CF, et al. **Genomics** 1990 Jan;6(1):168–73

Autosomal dominant retinitis pigmentosa (ADRP): localization of an ADRP gene to the long arm of chromosome 3. McWilliam P, et al. **Genomics** 1989 Oct; 5(3):619–22

Confirmation of linkage in von Hippel–Lindau disease. Vance JM, et al. **Genomics** 1990 Mar;6(3):565–7

Assignment of the human gene for histidine-rich glycoprotein to chromosome 3. van den Berg EA, et al. **Genomics** 1990 Jun;7(2):276–9

Transposition, amplification, and divergence in the origin of the DNF15 loci, a polymorphic repetitive sequence family on chromosomes 1 and 3. Welch HM, et al. **Genomics** 1989 Oct;5(3):423–30

Localization of the human HF.10 finger gene on a chromosome region (3p21–22) frequently deleted in human cancers. Donti E, et al. **Hum Genet** 1990 Apr;84(5):391–5

Deletion 3q27——3qter in an infant with mild dysmorphism, parietal meningocele, and neonatal miliaria rubra–like lesions. Jokiaho I, et al. **Hum Genet** 1989 Oct;83(3):302–4

Premature centromere division of a translocation–carrier autosome. Méhes K, et al. **Hum Genet** 1990 Aug; 85(3):379–80

Gene mapping on chorionic villi chromosomes by hybridization in situ: localization of cholinesterase cDNA binding sites to chromosomes 3q21, 3q26–ter and 16q21. Zakut H, et al. **Hum Reprod** 1989 Nov;4(8):941–6

Application of molecular cytogenetic techniques to the evaluation of renal parenchymal tumors. Kovacs G. **J Cancer Res Clin Oncol** 1990;116(4):318–23 (49 ref.)

Partial monosomy 3q in a boy with short stature, developmental delay, and mild dysmorphic features. Brueton LA, et al. **J Med Genet** 1989 Nov;26(11):729–30 (5 ref.)

Cornelia de Lange syndrome with ring chromosome 3. Lakshminarayana P, et al. **J Med Genet** 1990 Jun; 27(6):405–6

Presence of two members of c-erbA receptor gene family (c-erbA beta and c-erbA2) in smallest region of somatic homozygosity on chromosome 3p21–p25 in human breast carcinoma [see comments] Ali IU, et al. **J Natl Cancer Inst** 1989 Dec 6;81(23):1815–20 Comment in: J Natl Cancer Inst 1989 Dec 6;81(23):1764–5.

Loss of heterozygosity in breast cancer: cause or effect? [editorial; comment] [see comments] McGuire WL, et al. **J Natl Cancer Inst** 1989 Dec 6;81(23):1764–5 Comment on: J Natl Cancer Inst 1989 Dec 6;81(23):1815–20. Comment in: J Natl Cancer Inst 1990 May 2;82(9):793–5.

Molecular analysis of the short arm of chromosome 3 in five renal oncocytomas. Brauch H, et al. **J Urol** 1990 Mar; 143(3):622–4

Change in methylation status of DNA of remaining allele in human lung cancers with loss of heterozygosity on chromosomes 3p and 13q. Shiraishi M, et al. **Jpn J Cancer Res** 1989 Oct;80(10):924–7

Translocation t(3;22)(q23;q11) in three patients with diffuse large B cell lymphoma. Leroux D, et al. **Leukemia** 1990 May;4(5):373–6 (17 ref.)

Blast crisis accompanied with occurrence of the point-mutational activation of N-ras proto-oncogene and the chromosomal abnormality inv(3q) in chronic myelogenous leukemia presenting thrombocytosis [letter] Okabe M, et al. **Leukemia** 1990 May;4(5):381–2

Human GAP-43: its deduced amino acid sequence and chromosomal localization in mouse and human. Kosik KS, et al. **Neuron** 1988 Apr;1(2):127–32

MspI and DraI polymorphisms at the ERBA beta locus on chromosome 3p. Brauch H, et al. **Nucleic Acids Res** 1990 May 11;18(9):2833

A new polymorphic probe on chromosome 3p: lambda LIB32–90′ (D3S216). Daniel LN, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1089

A new polymorphic probe on chromosome 3p: lambda LIB45–82 (D3S232). Latif F, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1662

A new polymorphic probe on chromosome 3p: lambda LIB31–57′ (D3S213). Latif F, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1089

A new polymorphic probe on chromosome 3p: lambda LIB28–56″ (D3S207). Latif F, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1088

A new polymorphic probe on chromosome 3p: lambda LIB38–96 (D3S191). Latif F, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1088

A new polymorphic probe on chromosome 3p: lambda LIB28–77 (D3S169E). Lerman MI, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):205

A new polymorphic probe on chromosome 3p: lambda LIB49–63 (D3S192E). Lerman MI, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):206

Two EcoRI RFLPs at the GLUT2 locus. Patel P, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4956

Dinucleotide repeat polymorphism at the D3S196 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4635

Dinucleotide repeat polymorphism at the D3S240 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2201

Loss of heterozygosity on chromosomal segments 3p, 6q and 11p in human ovarian carcinomas. Ehlen T, et al. **Oncogene** 1990 Feb;5(2):219–23

A gene near the D3F15S2 site on 3p is expressed in normal human kidney but not or only at a severely reduced level in 11 of 15 primary renal cell carcinomas (RCC). Erlandsson R, et al. **Oncogene** 1990 Aug;5(8):1207–11

Introduction of normal chromosome 3p modulates the tumorigenicity of a human renal cell carcinoma cell line YCR. Shimizu M, et al. **Oncogene** 1990 Feb;5(2):185–94

The human Evi-1 gene is located on chromosome 3q24–q28 but is not rearranged in three cases of acute nonlymphocytic leukemias containing t(3;5)(q25;q34) translocations. Morishita K, et al. **Oncogene Res** 1990; 5(3):221–31

Seven cases of trisomy 3 mosaicism in chorionic villi. Guerneri S, et al. **Prenat Diagn** 1989 Oct;9(10):691–5

Genetics of renal cell carcinoma. Daniel LN, et al. **Semin Urol** 1989 Nov;7(4):258–63 (32 ref.)

[Fragile sites of cultured peripheral blood lymphocyte chromosomes in patients with gestational trophoblastic tumor] Xu C. **Chung Hua Fu Chan Ko Tsa Chih** 1990 May; 25(3):159–61, 189 (Eng. Abstr.) **(Chi)**

[Hereditary paracentric inversion of chromosome 3] Neetens A, et al. **Ophtalmologie** 1989 Jan–Mar;3(1):69–72 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Restriction fragment length polymorphism of chromosome 3 (3p) and the epidermal growth factor receptor gene in human non-small cell lung carcinomas. Grunberger D, et al. **Cancer Lett** 1990 May 30;51(2):133–41

ULTRASTRUCTURE

"Pure" partial trisomy 3p due to the malsegregation of a balanced maternal translocation t (X;3) (p22.3;p21). de Almeida JC, et al. **Ann Genet** 1989;32(3):181–3

Assignment of the gene coding for human peroxisomal 3-oxoacyl-CoA thiolase (ACAA) to chromosome region 3p22——p23. Bout A, et al. **Cytogenet Cell Genet** 1989; 52(3–4):147–50

Transferrin and structural anomalies of chromosome 3 in the blastic phase of chronic myelocytic leukemia. Maserati E, et al. **Hereditas** 1989;111(3):305–8

[A preliminary investigation of human chromosomal fragile site 3p14 using scanning electron microscopy (SEM)] Cao LR, et al. **I Chuan Hsueh Pao** 1989;16(6):483–5 (Eng. Abstr.) **(Chi)**

CHROMOSOMES, HUMAN, PAIR 4

A yeast artificial chromosome telomere clone spanning a possible location of the Huntington disease gene. Bates GP, et al. **Am J Hum Genet** 1990 Apr;46(4):762–75

Huntington disease in Finland: linkage disequilibrium of chromosome 4 RFLP haplotypes and exclusion of a tight linkage between the disease and D4S43 locus. Ikonen E, et al. **Am J Hum Genet** 1990 Jan;46(1):5–11

A large deletion of the long arm of chromosome No. 4 in a child with limb abnormalities. Ockey CH, et al. **Arch Dis Child** 1967 Aug;42(224):428–34

Chromosome assignment by polymerase chain reaction techniques: assignment of the oncogene FGF-5 to human chromosome 4. Dionne CA, et al. **Biotechniques** 1990 Feb; 8(2):190–4

A new human B-cell non-Hodgkin's lymphoma cell line (Karpas 422) exhibiting both t (14;18) and t(4;11) chromosomal translocations. Dyer MJ, et al. **Blood** 1990 Feb 1;75(3):709–14

Juvenile chronic myelogenous leukemia with abnormalities of chromosomes 4 and 5. Berg SL, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):55–9

Trisomy 4 in a case of acute biphenotypic leukemia. Britton V, et al. **Cancer Genet Cytogenet** 1990 Jul 15;47(2):265–9

Trisomy 4 in a case of acute undifferentiated myeloblastic leukemia with hand-mirror cells. Kao YS, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):265–8

Acute lymphoblastic leukemia with t(4;11) in a patient previously exposed to a carcinogen. Solé F, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):133–6

Four cases of acute leukemia with trisomy 4. Thompson PW, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):211–7

Report of the committee on the genetic constitution of chromosome 4. Cox DR, et al. **Cytogenet Cell Genet** 1989; 51(1–4):121–36 (186 ref.)

Linkage analysis of human chromosome 4: exclusion of autosomal dominant retinitis pigmentosa (ADRP) and detection of new linkage groups. Daiger SP, et al. **Cytogenet Cell Genet** 1989;50(4):181–7

The human mineralocorticoid receptor gene (MLR) is located on chromosome 4 at q31.2. Fan YS, et al. **Cytogenet Cell Genet** 1989;52(1–2):83–4

Factor XI gene (F11) is located on the distal end of the long arm of human chromosome 4. Kato A, et al. **Cytogenet Cell Genet** 1989;52(1–2):77–8

Isolation of a novel mildly repetitive DNA sequence that is predominantly located at the terminus of the short arm of chromosome 4 near the Huntington disease gene. Altherr

MR, et al. **Genomics** 1989 Oct;5(3):581–8
The human class I alcohol dehydrogenase gene cluster: three genes are tandemly organized in an 80-kb-long segment of the genome. Yasunami M, et al. **Genomics** 1990 Jun; 7(2):152–8
cDNA cloning, mRNA distribution and heterogeneity, chromosomal location, and RFLP analysis of human osteopontin (OPN). Young MF, et al. **Genomics** 1990 Aug; 7(4):491–502
A new DNA marker (D4S90) is located terminally on the short arm of chromosome 4, close to the Huntington disease gene. Youngman S, et al. **Genomics** 1989 Nov;5(4):802–9
The human PDGF receptor alpha-subunit gene maps to chromosome 4 in close proximity to c-kit. Gronwald RG, et al. **Hum Genet** 1990 Aug;85(3):383–5
The human homeobox gene HOX7 maps to chromosome 4p16.1 and may be implicated in Wolf–Hirschhorn syndrome. Ivens A, et al. **Hum Genet** 1990 Apr;84(5):473–6
Regional chromosomal assignment of the human mineralocorticoid receptor gene to 4q31.1. Morrison N, et al. **Hum Genet** 1990 Jun;85(1):130–2
Human bone sialoprotein. Deduced protein sequence and chromosomal localization. Fisher LW, et al. **J Biol Chem** 1990 Feb 5;265(4):2347–51
Molecular analysis of a hybrid gene encoding human glycophorin variant Miltenberger V-like molecule. Kudo S, et al. **J Biol Chem** 1990 Aug 15;265(23):13825–9
Human uncoupling protein gene: structure, comparison with rat gene, and assignment to the long arm of chromosome 4. Cassard AM, et al. **J Cell Biochem** 1990 Jul;43(3):255–64
Interstitial deletion of chromosome 4, del(4)(q12q21.1), in a child with multiple congenital abnormalities. Curtis MA, et al. **J Med Genet** 1990 Jan;27(1):64–5
Interstitial deletion, del(4)(q33q35.1), in a mother and two children. Curtis MA, et al. **J Med Genet** 1989 Oct; 26(10):652–4
A new interstitial deletion of 4q (q21.1::q22.1). Fagan K, et al. **J Med Genet** 1989 Oct;26(10):644–7
Del(4)(q33——qter): another case report of a child with mild dysmorphism. Fagan KA, et al. **J Med Genet** 1989 Dec; 26(12):776–8
Familial cerebellar ataxia and possible cosegregation with an inversion in chromosome 4 [letter] Young ID, et al. **J Neurol Neurosurg Psychiatry** 1990 May;53(5):441–2
Frequent loss of heterozygosity on chromosomes 16 and 4 in human hepatocellular carcinoma. Zhang WD, et al. **Jpn J Cancer Res** 1990 Feb;81(2):108–11
Predictive testing for Huntington's disease with linked DNA markers [letter; comment] Quinn N. **Lancet** 1989 Oct 14; 2(8668):921 Comment on: Lancet 1989 Aug 26;2(8661):463–6.
Location of facioscapulohumeral muscular dystrophy gene on chromosome 4. Wijmenga C, et al. **Lancet** 1990 Sep 15;336(8716):651–3
Trisomy 4: a specific karyotype anomaly in primary and secondary acute myeloid leukemia. Weber E, et al. **Leukemia** 1990 Mar;4(3):219–21 (18 ref.)
Phenotypic variation in 2 Huntington's disease families with linkage to chromosome 4. Sax DS, et al. **Neurology** 1989 Oct;39(10):1332–6
A ScaI RFLP demonstrated for the GRO gene on chromosome 4. Beck JS, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8895
RFLP for intron E of factor XI gene. Butler MG, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5327
An MspI RFLP in the human ADH5 gene. Edman K, et al. **Nucleic Acids Res** 1990 May 11;18(9):2836
RFLPs for ATP1BL1 (beta subunit Na+/K+ ATPase pseudogene) on chromosome 4. Georgiou C, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8894
A biallelic RFLP of the human alpha 2-C4 adrenergic receptor gene (ADRA2RL2) localized on the short arm of chromosome 4 and encoding the putative alpha 2B receptor is identified with Bsu 36 I, using a 1.5 kb probe (p ADRA2RL2). Hoehe MR, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10148
Isolation and characterization of a hypervariable region [D4S163] on chromosome 4. Neuweiler J, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):691
PvuII RFLP detected by a human beta ADH cDNA probe. Parsian A, et al. **Nucleic Acids Res** 1989 Dec 11; 17(23):10145
Structural analysis of the short length ribosomal DNA variant from Pisum sativum L. cv. Alaska. Piller KJ, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3135–45
A PvuII RFLP in the human ADH2 gene. Shah T, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7549
An anonymous DNA probe E20 [D4S143] on chromosome 4 detects a TaqI polymorphism. Warnich L, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):690
Dinucleotide repeat polymorphism at the D4S174 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4636
Dinucleotide repeat polymorphism at the D4S171 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2202
The human basic fibroblast growth factor gene is located on the long arm of chromosome 4 at bands q26–q27. Lafage-Pochitaloff M, et al. **Oncogene Res** 1990;5(3):241–4
Trisomy 4q with morning glory disc anomaly. Nucci P, et al. **Ophthalmic Paediatr Genet** 1990 Jun;11(2):143–5
Anophthalmia in a retarded girl with partial trisomy 4p and 22 following a maternal translocation, rcp(4;22)(p15.2;q11.2). Schinzel A, et al. **Ophthalmic Paediatr Genet** 1990 Jun;11(2):139–42
Loss of heterozygosity suggests tumor suppressor gene responsible for primary hepatocellular carcinoma. Buetow KH, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(22):8852–6
The Huntington disease locus is most likely within 325 kilobases of the chromosome 4p telomere. Doggett NA, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10011–4
A cloned DNA segment from the telomeric region of human chromosome 4p is not detectably rearranged in Huntington disease patients. Pritchard C, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7309–13
Huntington's gene: so near, yet so far [news] Roberts L. **Science** 1990 Feb 9;247(4943):624–7
Probable assignment of the dihydropteridine reductase gene to 4p15.31. Sumi S, et al. **Tohoku J Exp Med** 1990 Jan; 160(1):93–4
[Chromosomal abnormality of trisomy 4 in a patient with acute nonlymphocytic leukemia (FAB: M2)] Banno S, et al. **Rinsho Ketsueki** 1989 Nov;30(11):1987–91 (9 ref.) (Eng. Abstr.) **(Jpn)**
[Phenotype and "critical segments" of chromosomes during partial aneuploidy for chromosome 4 in man] Ivanov VI, et al. **Genetika** 1990 May;26(5):912–24 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Linkage of aspartylglucosaminuria (AGU) to marker loci on the long arm of chromosome 4. Grön K, et al. **Hum Genet** 1990 Jul;85(2):233–6

PATHOLOGY

Prenatal diagnosis of and midtrimester pathology with karyotype 46,XY,del(4)(q22q26). A case report. Koppitch FC 3d, et al. **J Reprod Med** 1990 Feb;35(2):182–6

ULTRASTRUCTURE

Child with deletion of 4q and duplication of 1q [letter] Wade J, et al. **Am J Med Genet** 1989 Aug;33(4):553–4
The human endonexin II (ENX2) gene is located at 4q28——q32. Modi WS, et al. **Cytogenet Cell Genet** 1989; 52(3–4):167–9
Physical maps of 4p16.3, the area expected to contain the Huntington disease mutation. Bućan M, et al. **Genomics** 1990 Jan;6(1):1–15

CHROMOSOMES, HUMAN, PAIR 5

Calla-positive acute leukaemia with t(5q;14q) translocation and hypereosinophilia--a unique entity? Baumgarten E, et al. **Acta Haematol (Basel)** 1989;82(2):85–90
Human chromosome 5 complements the DNA double-strand break-repair deficiency and gamma-ray sensitivity of the XR-1 hamster variant. Giaccia AJ, et al. **Am J Hum Genet** 1990 Sep;47(3):459–69
Order of genes on human chromosome 5q with respect to 5q interstitial deletions. Huebner K, et al. **Am J Hum Genet** 1990 Jan;46(1):26–36
Exclusion of a schizophrenia susceptibility gene from the chromosome 5q11-q13 region: new data and a reanalysis of previous reports. McGuffin P, et al. **Am J Hum Genet** 1990 Sep;47(3):524–35
Double chromosome anomaly: interstitial deletion 5q and reciprocal translocation (1;11)(p22;q21). de Michelena MI, et al. **Am J Med Genet** 1990 May;36(1):29–32 (10 ref.)
Chromosome 5 variation [letter] Fitchett M. **Am J Med Genet** 1990 Aug;36(4):523
Familial 5q11.2——q13.3 segmental duplication cosegregating with multiple anomalies, including schizophrenia. McGillivray BC, et al. **Am J Med Genet** 1990 Jan;35(1):10–3
Translocation t(5;11)(q13.1;p13) associated with familial isolated aniridia. Pettenati MJ, et al. **Am J Med Genet** 1989 Oct;34(2):230–2
An unusually large 5q duplication in an adult female subject: spreading of inactivation and in vitro instability of the derivative Xp/5q chromosome. Rovescalli A, et al. **Ann Genet** 1989;32(4):235–40
The assignment of the genes coding for human complement components C6 and C7 to chromosome 5. Jeremiah SJ, et al. **Ann Hum Genet** 1990 May;54 (Pt 2):141–7
Molecular anatomy of a 5q interstitial deletion. Nagarajan L, et al. **Blood** 1990 Jan 1;75(1):82–7
Chromosome aberrations and prognostic factors in therapy-related myelodysplasia and acute nonlymphocytic leukemia. Pedersen-Bjergaard J, et al. **Blood** 1990 Sep 15; 76(6):1083–91
Are different events involved in the development of sporadic versus hereditary tumours? The possible importance of the microenvironment in hereditary cancer. Paraskeva C, et al. **Br J Cancer** 1990 Jun;61(6):828–30
Localisation of a susceptibility locus for schizophrenia on chromosome 5. Owen M, et al. **Br J Psychiatry** 1990 Jul; 157:123–7 (16 ref.)
5q deletion. The sole chromosome change in a carcinoma of the bladder. Atkin NB, et al. **Cancer Genet Cytogenet** 1990 May;46(1):129–31
Juvenile chronic myelogenous leukemia with abnormalities of chromosomes 4 and 5. Berg SL, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):55–9
Involvement of both chromosomes 5 in a patient with leukemia secondary to myelodysplastic syndrome [letter] Berkowicz M, et al. **Cancer Genet Cytogenet** 1990 Sep; 48(2):279–80
Translocations (5;17) and (7;17) in patients with de novo or therapy-related myelodysplastic syndromes or acute nonlymphocytic leukemia. A possible association with acquired pseudo-Pelger-Huët anomaly and small vacuolated granulocytes. Laï JL, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):173–83
High-resolution karyotypes of eighteen Norwegian polyposis patients. Lothe RA, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):69–72
Parathyroid adenoma with t(1;5)(p22;q32) as the sole clonal chromosome abnormality. Orndal C, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):225–8
Acute myelogenous leukemia (FAB M1) associated with t(5;16) and eosinophilia. Report of an additional case. Sanada I, et al. **Cancer Genet Cytogenet** 1989 Nov; 43(1):139–41
Blastic transformation associated with 5q- and 12p- [letter] Silva ML, et al. **Cancer Genet Cytogenet** 1990 Jul 15; 47(2):275–6
Deletion of 5q by t(5;17) in therapy-related myelodysplastic syndrome. Vandenberghe EA, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):49–52
5p;12q translocation with manifestations of cri du chat syndrome and Marfanoid arachnodactyly. Zhang SZ, et al. **Clin Genet** 1990 Feb;37(2):153–7
5q- syndrome: complete response to chemotherapy. Conneally E, et al. **Clin Lab Haematol** 1990;12(1):101–3
The receptors for prolactin and growth hormone are localized in the same region of human chromosome 5. Arden KC, et al. **Cytogenet Cell Genet** 1990;53(2–3):161–5
Report of the committee on the genetic constitution of chromosome 5. Wasmuth JJ, et al. **Cytogenet Cell Genet** 1989;51(1–4):137–48 (145 ref.)
Evaluation of polymorphic genetic markers for linkage to the familial adenomatous polyposis locus on chromosome 5. Paul P, et al. **Dis Colon Rectum** 1990 Sep;33(9):740–4
The Iowa multiplex family study of schizophrenia: linkage analyses on chromosome 5. Crowe RR, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(5):290–2
The human homolog of the Moloney leukemia virus integration 2 locus (MLV12) maps to band p14 of chromosome 5. Anagnou NP, et al. **Genomics** 1989 Aug; 5(2):354–8
A human alphoid DNA clone from the EcoRI dimeric family: genomic and internal organization and chromosomal assignment. Baldini A, et al. **Genomics** 1989 Nov;5(4):822–8
Localization of the murine macrophage colony-stimulating factor gene to chromosome 3 using interspecific backcross analysis. Buchberg AM, et al. **Genomics** 1989 Aug; 5(2):363–7
Linkage analysis in familial adenomatous polyposis: order of C11P11 (D5S71) and pi 227 (D5S37) loci at the apc gene. Dunlop MG, et al. **Genomics** 1989 Aug;5(2):350–3
Deletion mapping of DNA markers to a region of chromosome 5 that cosegregates with schizophrenia. Gilliam TC, et al. **Genomics** 1989 Nov;5(4):940–4
Chromosomal localization of the gene encoding GTPase-activating protein (RASA) to human chromosome 5, bands q13-q15. Lemons RS, et al. **Genomics** 1990 Feb; 6(2):383–5
Localization of three DNA segments encompassing tRNA genes to human chromosomes 1, 5, and 16: proposed mechanism and significance of tRNA gene dispersion. McBride OW, et al. **Genomics** 1989 Oct;5(3):561–73
Molecular characterization of human and bovine rod photoreceptor cGMP phosphodiesterase alpha-subunit and chromosomal localization of the human gene. Pittler SJ, et al. **Genomics** 1990 Feb;6(2):272–83
5q- and t(2;11) in a patient with M2 acute non-lymphocytic leukemia. Case report. Testoni N, et al. **Haematologica** 1989 Nov-Dec;74(6):595–9
Regional chromosomal assignment of the human glucocorticoid receptor gene to 5q31. Theriault A, et al. **Hum Genet** 1989 Oct;83(3):289–91
No evidence for linkage between chromosome 5 markers and schizophrenia. Aschauer HN, et al. **Hum Hered** 1990; 40(2):109–15
Genotype markers and proto-oncogene analysis in the CD30-positive "malignant histiocytosis" DEL cell line with t(5;6)(q35;p21). Gogusev J, et al. **Int J Cancer** 1990 Jul 15;46(1):106–12
Chromosome 5 allele loss in human gastric, ampullary and pancreatic carcinomas. Michelassi F, et al. **Ital J Surg Sci** 1989;19(4):341–4
Human facilitative glucose transporters. Isolation, functional characterization, and gene localization of cDNAs encoding an isoform (GLUT5) expressed in small intestine, kidney, muscle, and adipose tissue and an unusual glucose transporter pseudogene-like sequence (GLUT6). Kayano T, et al. **J Biol Chem** 1990 Aug 5;265(22):13276–82
A constitutional 5q23 deletion. Rivera H, et al. **J Med Genet** 1990 Apr;27(4):267–8
Facioscapulohumeral muscular dystrophy gene in Dutch families is not linked to markers for familial adenomatous polyposis on the long arm of chromosome 5. Wijmenga C, et al. **J Neurol Sci** 1990 Feb;95(2):225–9
Spinal muscular atrophies. **Lancet** 1990 Aug 4; 336(8710):280–1 (5 ref.)

Schizophrenia and chromosomes [letter] Blackwood DH, et al. **Lancet** 1989 Dec 16;2(8677):1459

Risk estimates for screening adenomatous polyposis coli [letter] [see comments] Houlston R, et al. **Lancet** 1990 Feb 24;335(8687):484 Comment in: Lancet 1990 Mar 31;335(8692):791.

Mapping of acute (type I) spinal muscular atrophy to chromosome 5q12–q14. The French Spinal Muscular Atrophy Investigators. Melki J, et al. **Lancet** 1990 Aug 4;336(8710):271–3

5q– anomaly in lymphoid disorders. Kerim S, et al. **Leukemia** 1990 Jan;4(1):12–5 (28 ref.)

The t(2;5)(p23;q35): a recurring chromosomal abnormality in Ki-1–positive anaplastic large cell lymphoma. Le Beau MM, et al. **Leukemia** 1989 Dec;3(12):866–70

Acute lymphoblastic leukemia with eosinophilia. Fishel RS, et al. **Medicine (Baltimore)** 1990 Jul;69(4):232–43

Genetic mapping of chronic childhood-onset spinal muscular atrophy to chromosome 5q11.2–13.3. Brzustowicz LM, et al. **Nature** 1990 Apr 5;344(6266):540–1

Gene for chronic proximal spinal muscular atrophies maps to chromosome 5q. Melki J, et al. **Nature** 1990 Apr 19; 344(6268):767–8

Human dopamine D1 receptor encoded by an intronless gene on chromosome 5. Sunahara RK, et al. **Nature** 1990 Sep 6;347(6288):80–3

Four-base-pair deletion polymorphism at D5S71 (C11p11) linked to APC in the human chromosome 5q21–q22 region. Breukel C, et al. **Nucleic Acids Res** 1989 Dec 25; 17(24):10512

EcoRI restriction polymorphism at the 5' end of human acidic FGF gene. Heitz D, et al. **Nucleic Acids Res** 1990 May 25;18(10):3111

A further RFLP of the cosmid KK5.33 (D5S85) on chromosome 5q. Krömer A, et al. **Nucleic Acids Res** 1990 May 25;18(10):3112

Multiple RFLPs of human complement component nine (C9) detected by TaqI. Rogne S, et al. **Nucleic Acids Res** 1990 May 25;18(10):3112

A polymorphic DNA sequence from the terminal part of chromosome 5p [D5S109] Rouyer F, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1663

An anonymous DNA probe E141 (D5S99) on chromosome 5 detects an EcoRI polymorphism. Warnich L, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3428

Dinucleotide repeat polymorphisms at the D5S107, D5S108, D5S111, D5S117 and D5S118 loci. Weber JL, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):4035

High frequency of APC loss in sporadic colorectal carcinoma due to breaks clustered in 5q21–22. Ashton-Rickardt PG, et al. **Oncogene** 1989 Oct;4(10):1169–74

A rearranged transforming gene, tre, is made up of human sequences derived from chromosome regions 5q, 17q and 18q. Huebner K, et al. **Oncogene** 1988 Oct;3(4):449–55

The human Evi-1 gene is located on chromosome 3q24–q28 but is not rearranged in three cases of acute nonlymphocytic leukemias containing t(3;5)(q25;q34) translocations. Morishita K, et al. **Oncogene Res** 1990; 5(3):221–31

CpG island clones from a deletion encompassing the gene for adenomatous polyposis coli. Varesco L, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):10018–22

Chromosome 5 and schizophrenia: implications for genetic linkage studies. Bassett AS. **Schizophr Bull** 1989; 15(3):393–402

Physical mapping, linkage analysis of a putative schizophrenia locus on chromosome 5q. Kaufmann CA, et al. **Schizophr Bull** 1989;15(3):441–52

Molecular genetic studies in schizophrenia. Kennedy JL, et al. **Schizophr Bull** 1989;15(3):383–91

Chromosome localization and cDNA sequence of murine and human genes for ras p21 GTPase activating protein (GAP). Hsieh CL, et al. **Somat Cell Mol Genet** 1989 Nov; 15(6):579–90

[Familial nystagmus and hypoplasia of the macular in reciprocal, balanced translocation 5/16] Hammerstein W, et al. **Fortschr Ophthalmol** 1989;86(6):718–21 (Eng. Abstr.) **(Ger)**

[Monosomy 5 (–5), deletion of the long arm of chromosome 6 (6q) and acquisition of a chromosome 21 (+21) in a boy with acute leukemia at high-risk] Burattini MG, et al. **Minerva Pediatr** 1989 Jul;41(7):379–82 (Eng. Abstr.) **(Ita)**

[The 5q-syndrome—report of two cases] Koyama A, et al. **Rinsho Ketsueki** 1989 May;30(5):707–12 (Eng. Abstr.) **(Jpn)**

ANALYSIS

A long-range restriction map of the interleukin-4 and interleukin-5 linkage group on chromosome 5. Chandrasekharappa SC, et al. **Genomics** 1990 Jan;6(1):94–9

DRUG EFFECTS

[Characteristics of chromosomal and mitotic disorders in patients with acute non-lymphoblastic leukemia exposed to chemical factors] Zedginidze AG, et al. **Gematol Transfuziol** 1990 Jan;35(1):25–7 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

CD30-positive large cell lymphomas ('Ki-1 lymphoma') are associated with a chromosomal translocation involving 5q35. Mason DY, et al. **Br J Haematol** 1990 Feb;74(2):161–8

Association of GP40/CD7+ acute myeloblastic leukemia and chromosome 5 aberrations. Lutz D, et al. **Hamatol Bluttransfus** 1990;33:141–4

Cytogenetic and molecular analysis of the deletions of chromosome 5 in myeloid disorders. Le Beau MM. **Prog Clin Biol Res** 1990;352:277–85

CHROMOSOMES, HUMAN, PAIR 6

Autosomal dominant ataxia: genetic evidence for locus heterogeneity from a Cuban founder-effect population. Auburger G, et al. **Am J Hum Genet** 1990 Jun; 46(6):1163–77

Familial agnathia-holoprosencephaly caused by an inherited unbalanced translocation and not autosomal recessive inheritance [letter] Krassikoff N, et al. **Am J Med Genet** 1989 Oct;34(2):255–7

Terminal deletion of 6q and Fryns syndrome: a microdeletion/syndrome pair? [letter] Krassikoff N, et al. **Am J Med Genet** 1990 Jul;36(3):363–4

Chromosome 6q deletions: a report of two additional cases and a review of the literature. McLeod DR, et al. **Am J Med Genet** 1990 Jan;35(1):79–84 (28 ref.)

Distal deletion of the short arm of chromosome 6. Zurcher VL, et al. **Am J Med Genet** 1990 Feb;35(2):261–5

The gene for the alpha 2 chain of the human fibrillar collagen type XI (COL11A2) assigned to the short arm of chromosome 6. Law ML, et al. **Ann Hum Genet** 1990 Jan; 54 (Pt 1):23–9

Confirmation of the relationship of HLA (chromosome 6) genes to depression and manic depression. II. The Ontario follow-up and analysis of 117 kindreds. Stancer HC, et al. **Ann Hum Genet** 1988 Oct;52 (Pt 4):279–98

Nucleotide ectoenzyme activities of human and Chinese hamster fibroblasts in tissue culture. Boyle JM, et al. **Biochem Genet** 1989 Dec;27(11–12):655–71

Nucleotide and deduced amino acid sequence of a human cDNA (NQO2) corresponding to a second member of the NAD(P)H:quinone oxidoreductase gene family. Extensive polymorphism at the NQO2 gene locus on chromosome 6. Jaiswal AK, et al. **Biochemistry** 1990 Feb 20; 29(7):1899–906

Translocation t(6;9) occurring in acute myelofibrosis, myelodysplastic syndrome, and acute nonlymphocytic leukemia suggests multipotent stem cell involvement. Cuneo A, et al. **Cancer Genet Cytogenet** 1989 Oct 15; 42(2):209–19

New example of 6p involvement in lipoma [letter] Haus O, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):281–3

Translocation (1;6)(p12;p23) in ANLL. Jacob AK, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):67–71

A new case of myelodysplastic syndrome with 6p rearrangement. Jotterand-Bellomo M, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):271–4

c-myb gene analysis in T-cell malignancies with del(6q). Okada M, et al. **Cancer Genet Cytogenet** 1990 Sep; 48(2):229–36

Abnormalities involving chromosome 6 in newly diagnosed patients with non-Hodgkin's lymphoma. Nebraska Lymphoma Study Group. Schouten HC, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):73–82

Translocation (2;6)(q36;p21.3) in a lipoma. Sreekantaiah C, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):81–4

A translocation (6;9)(p32;q34) and trisomy 13 in a case of childhood acute nonlymphocytic leukemia [letter] Stejskalova E, et al. **Cancer Genet Cytogenet** 1990 Mar; 45(1):139–41

Frequent loss of heterozygosity on chromosomes 6q, 11, and 17 in human ovarian carcinomas. Lee JH, et al. **Cancer Res** 1990 May 1;50(9):2724–8

Molecular nature of in vivo mutations in human cells at the autosomal HLA-A locus. Morley AA, et al. **Cancer Res** 1990 Aug 1;50(15):4584–7

Two rare cases of 6p partial deletion. Jalal SM, et al. **Clin Genet** 1989 Sep;36(3):196–9

Tandem Y/6 translocation with partial deletion 6 (p23——pter). Kelly PC, et al. **Clin Genet** 1989 Sep; 36(3):204–7

Sotos syndrome and de novo balanced autosomal translocation (t(3;6)(p21;p21)). Schrander-Stumpel CT, et al. **Clin Genet** 1990 Mar;37(3):226–9

Report of the committee on the genetic constitution of chromosome 6. Spence MA, et al. **Cytogenet Cell Genet** 1989;51(1–4):149–65 (240 ref.)

Assignment of human pepsinogen C (PGC) gene to chromosome 6. Takahara K, et al. **Cytogenet Cell Genet** 1989;52(1–2):100–1

Polymorphism of the human complement component C4. Campbell RD, et al. **Exp Clin Immmunogenet** 1990; 7(1):69–84 (73 ref.)

DNA polymorphism of the C2 and factor B gene. Cross SJ, et al. **Exp Clin Immmunogenet** 1990;7(1):53–63

Identification of two human ferritin H genes on the short arm of chromosome 6. Dugast IJ, et al. **Genomics** 1990 Feb;6(2):204–11

Autosomal dominant retinitis pigmentosa: exclusion of a gene from extensive regions of chromosomes 6, 13, 20, and 21. Farrar GJ, et al. **Genomics** 1989 Oct;5(3):612–8

The human alpha 2(XI) collagen gene (COL11A2) maps to the centromeric border of the major histocompatibility complex on chromosome 6. Hamon IM, et al. **Genomics** 1989 Nov;5(4):925–31

A novel human DNA polymorphism resulting from transfer of DNA from chromosome 6 to chromosome 16. Wong Z, et al. **Genomics** 1990 Jun;7(2):222–34

Deletion and linkage mapping of eight markers from the proximal short arm of chromosome 6. Zoghbi HY, et al. **Genomics** 1990 Feb;6(2):352–7

Trophoblast glycoprotein recognised by monoclonal antibody 5T4 maps to human chromosome 6q14–q15. Boyle JM, et al. **Hum Genet** 1990 Apr;84(5):455–8

Localisation of a dystrophin-related autosomal gene to 6q24 in man, and to mouse chromosome 10 in the region of the dystrophia muscularis (dy) locus. Buckle VJ, et al. **Hum Genet** 1990 Aug;85(3):324–6

Human interferon gamma receptor 1 (IFNGR1) gene maps to chromosome region 6q23–6q24. Le Coniat M, et al. **Hum Genet** 1989 Dec;84(1):92–4

Uniparental isodisomy 6 associated with deficiency of the fourth component of complement. Welch TR, et al. **J Clin Invest** 1990 Aug;86(2):675–8

Absence of close linkage between maternal genes for susceptibility to pre-eclampsia/eclampsia and HLA DR beta. Wilton AN, et al. **Lancet** 1990 Sep 15;336(8716):653–7

Chromosome 6p rearrangements appear to be secondary changes in various haematological malignancies. Huret JL, et al. **Leuk Res** 1989;13(9):819–24

The (6;9) chromosome translocation, associated with a specific subtype of acute nonlymphocytic leukemia, leads to aberrant transcription of a target gene on 9q34. von Lindern M, et al. **Mol Cell Biol** 1990 Aug;10(8):4016–26

Presentation of viral antigen controlled by a gene in the major histocompatibility complex. Cerundolo V, et al. **Nature** 1990 May 31;345(6274):449–52

Protein structure: one enzyme from two genes? [news] Luzzatto L. **Nature** 1989 Sep 28;341(6240):286–7

A stuI RFLP in the human COL11A2 gene. Cheah KS, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4964

An EcoRI RFLP in the human alpha 2 (XI) (COL 11A2) gene. Cheah KS, et al. **Nucleic Acids Res** 1990 Jan 25; 18(2):387

A polymorphic DNA probe, p1-10-2, from chromosome 6. Duvick L, et al. **Nucleic Acids Res** 1990 May 25;18(10):3105

BglII and EcoRV RFLPs on the human DQB locus. Goldberg AC, et al. **Nucleic Acids Res** 1990 May 25; 18(10):3106

RFLP in human F13A gene. Jagadeeswaran P. **Nucleic Acids Res** 1990 Mar 11;18(5):1317

Dinucleotide repeat polymorphism at the D6S89 locus. Litt M, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4301

Two novel HLA-DRB Taq I RFLPs distinguish HLA-Bw57-DR7-DRB4-null from DRB4-positive haplotypes. Segurado OG, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1084

Dinucleotide repeat polymorphism at the D6S87 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4636

Molecular cloning of the breakpoint region on chromosome 6 in cutaneous malignant melanoma: evidence for deletion in the c-myb locus and translocation of a segment of chromosome 12. Dasgupta P, et al. **Oncogene** 1989 Oct; 4(10):1201–5

Loss of heterozygosity on chromosomal segments 3p, 6q and 11p in human ovarian carcinomas. Ehlen T, et al. **Oncogene** 1990 Feb;5(2):219–23

Multiple chromosomes carrying tumor suppressor activity for a uterine endometrial carcinoma cell line identified by microcell-mediated chromosome transfer. Yamada H, et al. **Oncogene** 1990 Aug;5(8):1141–7

A balanced chromosomal translocation partially co-segregating with psychotic illness in a family. Holland T, et al. **Psychiatry Res** 1990 Apr;32(1):1–8

Tumorigenicity in human melanoma cell lines controlled by introduction of human chromosome 6. Trent JM, et al. **Science** 1990 Feb 2;247(4942):568–71

Characterization of human IFN-gamma response using somatic cell hybrids of hematopoietic and nonhematopoietic origin. Bono MR, et al. **Somat Cell Mol Genet** 1989 Nov;15(6):513–23

[Monosomy 5 (–5), deletion of the long arm of chromosome 6 (6q) and acquisition of a chromosome 21 (+21) in a boy with acute leukemia at high-risk] Burattini MG, et al. **Minerva Pediatr** 1989 Jul;41(7):379–82 (Eng. Abstr.) **(Ita)**

[Acute myelogenous leukemia (M2) simultaneously associated with multiple myeloma with special reference to chromosome abnormality of t(6; 14) (p21.1; q32.3)] Yashige H, et al. **Rinsho Ketsueki** 1990 Mar;31(3):359–64 (Eng. Abstr.) **(Jpn)**

[Isolation and molecular cytogenetic characteristics of the alpha-satellite DNA of human chromosome 6] Gar'kavtsev IV, et al. **Biull Eksp Biol Med** 1989 Jun;107(6):735–7 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Infantile hemangioendothelioma of the liver in patient with interstitial deletion of chromosome 6q: report of an autopsy case. Ito H, et al. **Am J Med Genet** 1989 Nov;34(3):325–9

Distal monosomy of the long arm of chromosome 6 (6q25——6qter) inherited by maternal translocation t(6q;17q). Oliveira-Duarte MH, et al. **Ann Genet** 1990; 33(1):56–9 (9 ref.)

Favorable prognosis associated with hyperdiploidy in

children with acute lymphocytic leukemia correlates with extra chromosome 6. A Pediatric Oncology Group study. Jackson JF, et al. **Cancer** 1990 Sep 15;66(6):1183–9

A dicentric variant of chromosome 6: characterization by use of in situ hybridisation with the biotinylated probe p308. Callen DF, et al. **Clin Genet** 1990 Feb;37(2):81–3

CHROMOSOMES, HUMAN, PAIR 7

Long arm deletion of chromosome 7 unrelated to original karyotype in recurrent t(8;21) acute myeloblastic leukemia. Taniwaki M, et al. **Acta Haematol (Basel)** 1990;83(3):159–62

Gene mapping in cystic fibrosis and its clinical applications. Williamson R. **Acta Paediatr Scand Suppl** 1989;363:7–9 (16 ref.)

Renal cortical tumors. Cytogenetic characterization. Dal Cin P, et al. **Am J Clin Pathol** 1989 Oct;92(4):408–14

Genes for two autosomal recessive forms of chronic granulomatous disease assigned to 1q25 (NCF2) and 7q11.23 (NCF1). Francke U, et al. **Am J Hum Genet** 1990 Sep;47(3):483–92

Three genes for enzymes of the pyruvate dehydrogenase complex map to human chromosomes 3, 7, and X [published erratum appears in Am J Hum Genet 1990 Jun;46(6):1235] Olson S, et al. **Am J Hum Genet** 1990 Feb; 46(2):340–9

Human carboxypeptidase A identifies a BglII RFLP and maps to 7q31–qter. Stewart EA, et al.
Am J Hum Genet 1990 Apr;46(4):795–800

Consistent linkage of dominantly inherited osteogenesis imperfecta to the type I collagen loci: COL1A1 and COL1A2. Sykes B, et al. **Am J Hum Genet** 1990 Feb; 46(2):293–307

Chromosome abnormality in Kallmann syndrome. Best LG, et al. **Am J Med Genet** 1990 Mar;35(3):306–9

Terminal deletions of the long arm of chromosome 7: five new cases. Bogart MH, et al. **Am J Med Genet** 1990 May; 36(1):53–5

De novo direct tandem duplication of the short arm of chromosome 7(p21.1–p14.2). Dębiec–Rychter M, et al.
Am J Med Genet 1990 Jul;36(3):316–20

Myelodysplasia and leukemia syndrome with monosomy 7: a genetic perspective. Gilchrist DM, et al.
Am J Med Genet 1990 Mar;35(3):437–41

Could acrocallosal syndrome and Greig syndrome affect the same developmental gene? [letter] Hall JG.
Am J Med Genet 1990 Jul;36(3):368

Inheritance and phenotypic expression of a t(7;9)(q36;q34)mat. Krauss CM, et al. **Am J Med Genet** 1989 Dec;34(4):514–9

Chromosome 7 abnormalities in parents of children with holoprosencephaly and hydronephrosis. Lurie IW, et al.
Am J Med Genet 1990 Feb;35(2):286–8

Emerging phenotype of duplication (7p): a report of three cases and review of the literature. Milunsky JM, et al.
Am J Med Genet 1989 Jul;33(3):364–8 (13 ref.)

Ectro-amelia syndrome associated with an interstitial deletion of 7q. Morey MA, et al. **Am J Med Genet** 1990 Jan;35(1):95–9

Proximal interstitial deletion of 7q: a case report and review of the literature. Zackowski JL, et al.
Am J Med Genet 1990 Jul;36(3):328–32 (25 ref.)

Discovery of the cystic fibrosis gene: the interface of basic science and clinical medicine. Brody JS.
Am J Respir Cell Mol Biol 1989 Nov;1(5):347–8 (7 ref.)

Duplication 7p de novo and literature review. Zerres K, et al. **Ann Genet** 1989;32(4):225–9 (15 ref.)

Evidence for a human mitotic mutant with pleiotropic effect. Papi L, et al. **Ann Hum Genet** 1989 Jul;53 (Pt 3):243–8

Isolation of a human cytochrome P-450 reductase cDNA clone and localization of the corresponding gene to chromosome 7q11.2. Shephard EA, et al.
Ann Hum Genet 1989 Oct;53 (Pt 4):291–301

Mild cystic fibrosis linked to chromosome 7q22 markers with an uncommon haplotype. McConkie–Rosell A, et al.
Ann Intern Med 1989 Nov 15;111(10):797–801

Isolated and combined deficiencies of the alpha-keto acid dehydrogenase complexes. Robinson BH, et al.
Ann N Y Acad Sci 1989;573:337–46

A human adenolymphoma showing the chromosomal aberrations del (7)(p12p14–15) and t(11;19)(q21;p12–13). Mark J, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1565–6

A case of squamous cell lung carcinoma with tetrasomy 7 and chromosome 1 C-band polymorphism. Rønne M, et al. **Anticancer Res** 1989 Jul–Aug;9(4):1101–3

Molecular cloning of cDNAs derived from a novel human intestinal mucin gene. Gum JR, et al.
Biochem Biophys Res Commun 1990 Aug 31;171(1):407–15

Localisation of the gene encoding the catalytic gamma subunit of phosphorylase kinase to human chromosome bands 7p12–q21. Jones TA, et al. **Biochim Biophys Acta** 1990 Jan 30;1048(1):24–9

Chromosome aberrations and prognostic factors in therapy-related myelodysplasia and acute nonlymphocytic leukemia. Pedersen–Bjergaard J, et al. **Blood** 1990 Sep 15; 76(6):1083–91

Inversion of chromosome 7 in ataxia telangiectasia is generated by a rearrangement between T-cell receptor beta and T-cell receptor gamma genes. Stern MH, et al.
Blood 1989 Nov 1;74(6):2076–80

Deletion of 7p: lymphoid and non–lymphoid disorders cluster in different break points [letter] Pedersen B.
Br J Haematol 1989 Oct;73(2):281–2

The unbalanced 1;7 translocation in de novo myelodysplastic syndrome and its clinical implication. Horiike S, et al.
Cancer 1990 Mar 15;65(6):1350–4

Change in a complex translocation involving band 7q34 and 9p– in a case of T-cell lymphoblastic lymphoma. Ohyashiki K, et al. **Cancer** 1990 Apr 1;65(7):1533–7 (25 ref.)

Double minute chromosomes and monosomy 7 in a lymphatic blast crisis of chronic myeloid leukemia [letter] Cigudosa JC, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):133–4

Monosomy 7 syndrome. Clinical heterogeneity in children and adolescents. Daghistani D, et al.
Cancer Genet Cytogenet 1990 Feb;44(2):263–9

A case of renal lymphangioma with a karyotype 45,X,–X,i dic(7q). Dębiec–Rychter M, et al.
Cancer Genet Cytogenet 1990 May;46(1):29–33

Translocations (5;17) and (7;17) in patients with de novo or therapy-related myelodysplastic syndromes or acute nonlymphocytic leukemia. A possible association with acquired pseudo–Pelger–Huët anomaly and small vacuolated granulocytes. Laï JL, et al.
Cancer Genet Cytogenet 1990 Jun;46(2):173–83

Biclonal chromosome evolution of chronic myelomonocytic leukemia in a child. Massaad L, et al.
Cancer Genet Cytogenet 1990 Jan;44(1):131–7

A new variant translocation 11;17 in a patient with acute promyelocytic leukemia together with t(7;12). Najfeld V, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):103–8

Possible correlation between a specific alteration t(7;14) and the rearrangement of TCR observed in a Sézary's syndrome. Santos M, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):281–3

Two chromosomal locations for human ornithine decarboxylase gene sequences and elevated expression in colorectal neoplasia. Radford DM, et al. **Cancer Res** 1990 Oct 1;50(19):6146–53

Case of cyclopia with an unbalanced karyotype attributable to a balanced 3/7 translocation [see comments] Bürrig KF, et al. **Clin Genet** 1989 Oct;36(4):262–5 Comment in: Clin Genet 1990 Mar;37(3):238.

Complex familial translocation [letter] Cruz–Coke R.
Clin Genet 1990 Feb;37(2):158–9

Terminal 7q deletion as a cause of holoprosencephaly [letter; comment] Masuno M, et al. **Clin Genet** 1990 Mar;37(3):238
Comment on: Clin Genet 1989 Oct;36(4):262–5.

Trisomy 7, trisomy 10, and loss of the Y chromosome in short-term cultures of normal kidney tissue. Elfving P, et al. **Cytogenet Cell Genet** 1990;53(2–3):123–5

Chromosome 7 long-arm deletions in myeloid disorders: terminal DNA sequences are commonly conserved and breakpoints vary. Kere J, et al. **Cytogenet Cell Genet** 1989; 50(4):226–9

Report of the committee on the genetic constitution of chromosomes 7 and 8. Tsui LC, et al.
Cytogenet Cell Genet 1989;51(1–4):166–201 (318 ref.)

Epidermal growth factor receptor overexpression and trisomy 7 in a case of Barrett's esophagus. Garewal H, et al. **Dig Dis Sci** 1990 Sep;35(9):1115–20

Ring chromosome 7: report of the fifth case. Caramia GM, et al. **Eur J Pediatr** 1990 Apr;149(7):475–6 (7 ref.)

The gene for human muscle-specific phosphoglycerate mutase, PGAM2, mapped to chromosome 7 by polymerase chain reaction. Edwards YH, et al. **Genomics** 1989 Nov; 5(4):948–51

The gene for insulin–like growth factor–binding protein–1 is localized to human chromosomal region 7p14–p12. Ekstrand J, et al. **Genomics** 1990 Mar;6(3):413–8

Isolation, chromosomal localization, and nucleotide sequence of the human HOX 1.4 homeobox. Ferguson–Smith AC, et al. **Genomics** 1989 Aug;5(2):250–8

"Major minisatellite loci" detected by minisatellite clones 33.6 and 33.15 correspond to the cognate loci D1S111 and D7S437. Jeffreys AJ, et al. **Genomics** 1990 Jul;7(3):449–52

Twenty-five loci form a continuous linkage map of markers for human chromosome 7. Lathrop GM, et al.
Genomics 1989 Nov;5(4):866–73

Owl monkey gene map: evidence for a homologous human chromosome 7q region near the cystic fibrosis locus. Ma NS, et al. **Genomics** 1989 Oct;5(3):389–96

Isolation of clones on chromosome 7 that contain recognition sites for rare–cutting enzymes by oligonucleotide hybridization. Melmer G, et al. **Genomics** 1990 Jun; 7(2):173–81

Linkage between the Colton blood group locus and ASSP11 on chromosome 7. Zelinski T, et al. **Genomics** 1990 Apr; 6(4):623–5

Isochromosome 7q as the sole abnormality in an unusual case of T-cell lineage malignancy. Colwill R, et al.
Hematol Pathol 1990;4(1):53–8

The gene encoding human low–molecular weight insulin–like growth–factor binding protein (IGF–BP25): regional localization to 7p12–p13 and description of a DNA polymorphism. Alitalo T, et al. **Hum Genet** 1989 Nov; 83(4):335–8

Cytogenetic and molecular analysis of an unbalanced translocation (X;7) (q28;p15) in a dysmorphic girl. Caiulo A, et al. **Hum Genet** 1989 Dec;84(1):51–4

In situ mapping of the muscle–specific form of phosphoglycerate mutase gene to human chromosome 7p12–7p13. Castella–Escola J, et al. **Hum Genet** 1990 Jan; 84(2):210–2

Regional assignment of 41 human DNA fragments on chromosome 7 by means of a somatic cell hybrid panel. Jobs A, et al. **Hum Genet** 1990 Jan;84(2):147–50

Gene assignment of Zellweger syndrome to 7q11.23: report of the second case associated with a pericentric inversion of chromosome 7. Naritomi K, et al. **Hum Genet** 1989 Dec; 84(1):79–80

Application of molecular cytogenetic techniques to the evaluation of renal parenchymal tumors. Kovacs G.
J Cancer Res Clin Oncol 1990;116(4):318–23 (49 ref.)

Hybrid T cell receptor genes formed by interlocus recombination in normal and ataxia–telangiectasia lymphocytes. Lipkowitz S, et al. **J Exp Med** 1990 Aug 1;172(2):409–18

DNA markers near the cystic fibrosis locus: further analysis of the British population. Harris A. **J Med Genet** 1990 Jan; 27(1):39–41

No evidence for genetic linkage of Gilles de la Tourette syndrome on chromosomes 7 and 18. Heutink P, et al.
J Med Genet 1990 Jul;27(7):433–6

Ring chromosome 7 in a man with multiple congenital anomalies and mental retardation. Koiffmann CP, et al.
J Med Genet 1990 Jul;27(7):462–4

Monosomy–7 in childhood hemopoietic disorders. Baranger L, et al. **Leukemia** 1990 May;4(5):345–9 (60 ref.)

Relation of cytogenetic abnormalities and clinical outcome in metastatic melanoma. Trent JM, et al.
N Engl J Med 1990 May 24;322(21):1508–11

A new HincII polymorphism at the epidermal growth factor receptor locus on chromosome 7. Abrahamson G, et al.
Nucleic Acids Res 1990 May 25;18(10):3104

A polymorphic DNA probe from chromosome 7 (7q22). Casals T, et al. **Nucleic Acids Res** 1990 May 25;18(10):3108

Sequence analysis of the D7S8 locus. Curran ME, et al.
Nucleic Acids Res 1989 Sep 25;17(18):7534

TaqI and MspI RFLPs are detected by the human 2,3–biphosphoglycerate mutase (BPGM) cDNA. Dracopoli NC, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1928

StyI RFLP of the human platelet derived growth factor (PDGF) A–chain gene. Ferns GA, et al.
Nucleic Acids Res 1990 Jan 11;18(1):208

BglII polymorphism in the human interleukin 6 (IL 6) gene. Fugger L, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7548

MspI/HpaII polymorphism in the human multidrug resistance gene 1. Haber DA, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10142

PCR detection of the pKM.19/ScrfI RFLP (D7S23), a marker closely linked to the cystic fibrosis mutation. Nunes V, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4957

ScrfI restriction fragment length polymorphism at the D7S23 locus (probe pKM. 19), closely linked to cystic fibrosis. Nunes V, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1318

An anonymous DNA probe M7 (D7S422) on chromosome 7 associated with two RFLP's. Warnich L, et al.
Nucleic Acids Res 1990 Sep 11;18(17):5328

Dinucleotide repeat polymorphisms at the D7S435 and D7S440 loci. Weber JL, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):4039

The anonymous probe DR258 (D7S438) identifies a HindIII polymorphism. Wiedorn KH, et al. **Nucleic Acids Res** 1990 May 25;18(10):3105

TPR–MET oncogenic rearrangement: detection by polymerase chain reaction amplification of the transcript and expression in human tumor cell lines. Soman NR, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):738–42

Multipoint analysis of 47 loci on chromosome 7q. Goldgar DE, et al. **Prog Clin Biol Res** 1989;329:23–8

Genetic Analysis Workshop 6: Multipoint mapping of loci in the region of cystic fibrosis. Spence MA, et al.
Prog Clin Biol Res 1989;329:1–9

Winning candidate. A painstaking search identifies the gene for cystic fibrosis. Beardsley TM. **Sci Am** 1989 Nov; 261(5):28–30

[G–banding and high resolution chromosome study of a human lung adenocarcinoma cell line LGC–7910] Guo LR. **Chung Hua Chung Liu Tsa Chih** 1990 Jan;12(1):15–7 (Eng. Abstr.) **(Chi)**

[Cystic fibrosis: a breakthrough in diagnosis, prevention and research] Galjaard H. **Ned Tijdschr Geneeskd** 1989 Dec 2;133(48):2371–3 **(Dut)**

[Isolation of the cystic fibrosis gene] Kere J. **Duodecim** 1990; 106(2):157–9 (14 ref.) **(Fin)**

[Partial trisomy of chromosome 7 due to balanced chromosome translocation in the father] Stumpner P.
Geburtshilfe Frauenheilkd 1989 Dec;49(12):1090–2 (Eng. Abstr.) **(Ger)**

[Genetic study in 8 families with a child with cystic fibrosis] Riedler J, et al. **Wien Klin Wochenschr** 1989 Sep 1; 101(16):548–51 (Eng. Abstr.) **(Ger)**

[A case of chronic neutrophilic leukemia with abnormal karyotype] Kunishima S, et al. **Rinsho Byori** 1989 Aug; 37(8):943–7 (Eng. Abstr.) **(Jpn)**

[Philadelphia–positive acute mixed leukemia with monosomy 7] Futaki M, et al. **Rinsho Ketsueki** 1989 Nov; 30(11):1997–2001 (Eng. Abstr.) **(Jpn)**

[Characteristic features of leukemia in infants during the first year of life] Balakirev SA. **Gematol Transfuziol** 1990 Jan; 35(1):6–8 (Eng. Abstr.) **(Rus)**

[Identification of the cystic fibrosis gene. Better therapeutic methods can be expected] Kollberg H. **Lakartidningen** 1989 Nov 29;86(48):4237–8 **(Swe)**

ANALYSIS

Isochromosome 7q is restricted to the lymphoid lineage in T cell acute lymphoblastic leukaemia. Yamada T, et al. **Br J Haematol** 1990 May;75(1):137–8

A new polymorphic locus, D7S411, isolated by cloning from preparative pulse–field gels is close to the mutation causing cystic fibrosis. Ramsay M, et al. **Genomics** 1990 Jan; 6(1):39–47

Identification of sequences of chromosome 7 that are expressed in sweat gland epithelial cells. Burns J, et al. **Hum Genet** 1990 Jul;85(2):151–6

[Use of the polymerase chain reaction technic in the genetic analysis of cystic fibrosis] Chillón M, et al. **Med Clin (Barc)** 1990 Mar 31;94(12):444–7 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

[Characteristics of chromosomal and mitotic disorders in patients with acute non–lymphoblastic leukemia exposed to chemical factors] Zedginidze AG, et al. **Gematol Transfuziol** 1990 Jan;35(1):25–7 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Apparent Smith–Lemli–Opitz syndrome and Miller–Dieker syndrome in a family with segregating translocation t(7;17)(q34;p13.1). Berry R, et al. **Am J Med Genet** 1989 Nov;34(3):358–65

Trisomy 7 and sex chromosome loss in human brain tissue. Heim S, et al. **Cytogenet Cell Genet** 1989;52(3–4):136–8

In situ hybridization and pulsed–field gel analysis define two major minisatellite loci: 1q23 for minisatellite 33.6 and 7q35–q36 for minisatellite 33.15. Chimini G, et al. **Genomics** 1989 Aug;5(2):316–24

Microdissection and microcloning of human chromosome 7q22–32 region. Weber J, et al. **Somat Cell Mol Genet** 1990 Mar;16(2):123–8

CHROMOSOMES, HUMAN, PAIR 8

Picture of the month. Trisomy 8/mosaic syndrome. Buttross S, et al. **Am J Dis Child** 1990 Apr;144(4):507–8

The polymorphic human DNA sequence D8S8 assigned to 8q13–21.1, close to the carbonic anhydrase gene cluster, by isotopic and nonisotopic in situ hybridization and by linkage analysis. Edwards Y, et al. **Ann Hum Genet** 1990 May;54 (Pt 2):131–9

Evidence for a human mitotic mutant with pleiotropic effect. Papi L, et al. **Ann Hum Genet** 1989 Jul;53 (Pt 3):243–8

Chromosomal assignment of the gene for the ubiquinone–binding protein of human mitochondrial cytochrome bc1 complex. Hosokawa Y, et al. **Biochem Int** 1990;21(1):41–4

Localization of breakpoints by polymerase chain reactions in Burkitt's lymphoma with 8;14 translocations. Shiramizu B, et al. **Blood** 1990 May 1;75(9):1848–52

Cytogenetic characterization of renal cell carcinoma in von Hippel–Lindau syndrome. Goodman MD, et al. **Cancer** 1990 Mar 1;65(5):1150–4

Acute myelogenous leukemia with an 8;21 translocation. A report on 148 cases from the Groupe Français de Cytogénétique Hématologique. **Cancer Genet Cytogenet** 1990 Feb;44(2):169–79

A case of follicular small cleaved cell lymphoma with t(14;18) and t(8;11). Bal S, et al. **Cancer Genet Cytogenet** 1990 Sep; 48(2):199–201

A complex t(3;8;17) involving breakpoint 8p11 in a case of M5 acute nonlymphocytic leukemia with erythrophagocytosis. Bertheas MF, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):67–73

Monosomy 3 and isochromosome 8q in a uveal melanoma. Horsman DE, et al. **Cancer Genet Cytogenet** 1990 Apr; 45(2):249–53

Translocation (8;9)(q12;p21). A new non–random rearrangement in lymphoid malignancies. Huret JL, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):125–9

Translocation between chromosomes 8q24 and 14q11 in T–cell acute lymphoblastic leukemia. Inaba T, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):69–74

Isochromosome (8q) in four patients with adenocarcinoma of the lung. Miura I, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):203–7

American Burkitt lymphoma stage II with 47,XY,+20,t(8;14)(q24;q32). Xiao H, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):275–7

Joining of the c–myc gene and a line 1 family member on chromosome 8 in a human primary giant cell carcinoma of the lung. Iizuka M, et al. **Cancer Res** 1990 Jun 1; 50(11):3345–50

Inv(8)(p23q22) and recombinant derivative in a Sicilian family. Mattina T, et al. **Clin Genet** 1989 Oct;36(4):256–61 (18 ref.)

Deficiency of distal 8p—report of two cases and review of the literature. Pecile V, et al. **Clin Genet** 1990 Apr; 37(4):271–8 (17 ref.)

Trisomy 17p due to a t(8;17) (p23;p11.2)pat translocation. Case report and review of the literature. Schrander–Stumpel C, et al. **Clin Genet** 1990 Feb; 37(2):148–52 (7 ref.)

The human genes for calbindin 27 and 29 kDa proteins are located on chromosomes 8 and 16, respectively. Parmentier M, et al. **Cytogenet Cell Genet** 1989;52(1–2):85–7

Report of the committee on the genetic constitution of chromosomes 7 and 8. Tsui LC, et al. **Cytogenet Cell Genet** 1989;51(1–4):166–201 (318 ref.)

Severe mental retardation in a patient with tricho–rhino–phalangeal syndrome type I and 8q deletion. Hamers A, et al. **Eur J Pediatr** 1990 Jun;149(9):618–20

cDNA isolation, expression analysis, and chromosomal localization of two human zinc finger genes. Lania L, et al. **Genomics** 1990 Feb;6(2):333–40

Immortal clones of NM1 keratinocytes contain an isochromosome of the long arm of chromosome 8 [letter] Goldaber ML, et al. **In Vitro Cell Dev Biol** 1990 Jan; 26(1):7–8

Partial monosomy 8p with minimal dysmorphic signs. Blennow E, et al. **J Med Genet** 1990 May;27(5):327–9

Familial mental retardation associated with balanced chromosome rearrangement rcp t(8;11)(q24.3;p15.1). Sato H, et al. **J Med Genet** 1989 Oct;26(10):642–4

Rothmund–Thomson syndrome associated with trisomy 8 mosaicism. Ying KL, et al. **J Med Genet** 1990 Apr; 27(4):258–60

Molecular targets for cancer therapy [editorial] **Lancet** 1990 Apr 7;335(8693):826

Amylase–producing plasmacytoma cell lines, AD3 and FR4, with der(14)t(8;14) and dic(8)t(1;8) established from ascites. Tagawa S, et al. **Leukemia** 1990 Aug;4(8):600–5

Activated T cells express a novel gene on chromosome 8 that is closely related to the murine ecotropic retroviral receptor. MacLeod CL, et al. **Mol Cell Biol** 1990 Jul; 10(7):3663–74

Effects of translocations on transcription from PVT. Shtivelman E, et al. **Mol Cell Biol** 1990 Apr;10(4):1835–9

Hereditary spherocytosis associated with deletion of human erythrocyte ankyrin gene on chromosome 8. Lux SE, et al. **Nature** 1990 Jun 21;345(6277):736–9

Physical mapping of D8S7 and D8S11 to the band 8p23.1 of the short arm of chromosome 8. Alkan M, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8395

An STS in the human IL7 gene located at 8q12–13 [published erratum appears in Nucleic Acids Res 1990 May 11;18(9):2852] Brunton LL, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1315

Two RFLPs at the lipoprotein lipase (LPL) gene. Hegele RA, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10146

A TaqI DNA polymorphism in the human cathepsin B gene (CTSB). Hsieh WT, et al. **Nucleic Acids Res** 1990 Jun 11; 18(11):3430

Dinucleotide repeat polymorphisms at the D8S85, D8S87, and D8S88 loci. Weber JL, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):4038

Dinucleotide repeat polymorphism at the PENK locus. Weber JL, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2200

XmnI polymorphism in the human TPA gene. Wohn KD, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5326

Tetranucleotide repeat polymorphism in the LPL gene. Zuliani G, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4958

An oncogenic chromosome 8–9 gene fusion isolated following transfection of human ovarian carcinoma cell line DNA. Halverson D, et al. **Oncogene** 1990 Jul; 5(7):1085–9

The human erg gene maps to chromosome 21, band q22: relationship to the 8; 21 translocation of acute myelogenous leukemia. Rao VN, et al. **Oncogene** 1988 Nov;3(5):497–500

Oncogene expression and immunoglobulin synthesis in a North American Burkitt (NAB–2) lymphoma cell line with a 8;22 chromosome translocation. Popescu NC, et al. **Oncogene Res** 1990;5(4):295–303

Activation of MYC in a masked t(8;17) translocation results in an aggressive B–cell leukemia. Gauwerky CE, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8867–71

Molecular resemblance of an AIDS–associated lymphoma and endemic Burkitt lymphomas: implications for their pathogenesis. Haluska FG, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8907–11

Ankyrin and the hemolytic anemia mutation, nb, map to mouse chromosome 8: presence of the nb allele is associated with a truncated erythrocyte ankyrin. White RA, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3117–21

[8;21 translocation and leukemia] Rochon M, et al. **Union Med Can** 1989 Nov–Dec;118(6):238–41 (Eng. Abstr.) **(Fre)**

[Initial symptoms of hematemesis from gastric varix with chromosomal abnormalities of t(2; 8) and 14q+ in a patient with acute lymphoblastic leukemia (FAB: L3)] Amano M, et al. **Rinsho Ketsueki** 1989 Oct;30(10):1830–4 (Eng. Abstr.) **(Jpn)**

[Acquisition of Philadelphia chromosome with bcr rearrangement concomitant with transformation of refractory anemia with excess of blasts with 8 trisomy into acute myelogenous leukemia] Niikura H, et al. **Rinsho Ketsueki** 1990 Mar;31(3):335–40 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

De novo inverted interstitial ("mirror") duplication of chromosome 8(q13——q24.1) in a liveborn male. Donnenfeld AE, et al. **Am J Med Genet** 1990 Apr; 35(4):529–31

Normal phenotype and slight mental retardation in de novo distal 8p deletion (8pter——8p23.1:). Fryns JP, et al. **Ann Genet** 1989;32(3):171–3

Assignment of defensin gene(s) to human chromosome 8p23. Sparkes RS, et al. **Genomics** 1989 Aug;5(2):240–4

Inverted tandem duplication of 8p12——p23.1 in a child with increased activity of glutathione reductase. Nevin NC, et al. **J Med Genet** 1990 Feb;27(2):135–6

[Molecular analysis in Argentinian patients with Burkitt's lymphoma] Gutiérrez MI, et al. **Sangre (Barc)** 1990 Feb; 35(1):10–4 (Eng. Abstr.) **(Spa)**

CHROMOSOMES, HUMAN, PAIR 9

The t(9;22) translocation in Philadelphia–positive essential thrombocythaemia does not involve the T lymphocyte lineage. Browett PJ, et al. **Acta Haematol (Basel)** 1990; 83(4):203–5

The Friedreich ataxia gene is assigned to chromosome 9q13–q21 by mapping of tightly linked markers and shows linkage disequilibrium with D9S15. Hanauer A, et al. **Am J Hum Genet** 1990 Jan;46(1):133–7

Mild phenotypic abnormalities in combined del 9p2 and dup 3p2. Game K, et al. **Am J Med Genet** 1990 Mar;35(3):370–2

Inheritance and phenotypic expression of a t(7;9)(q36;q34)mat. Krauss CM, et al. **Am J Med Genet** 1989 Dec;34(4):514–9

Post–mortem studies on two patients with 1–2 band cytogenetic deletions: 10q26——qter and r(9)(p24q34). Smith A, et al. **Ann Genet** 1989;32(4):220–4

Localization of the Surfeit gene cluster containing the ribosomal protein gene L7a to chromosome bands 9q33–34. Yon J, et al. **Ann Hum Genet** 1989 May;53 (Pt 2):149–55

Dystonia gene in Ashkenazi Jewish population is located on chromosome 9q32–34. Kramer PL, et al. **Ann Neurol** 1990 Feb;27(2):114–20

Pericentric inversion chromosome 9 and personality disorder. Kumar HV, et al. **Br J Psychiatry** 1989 Sep;155:408–10

Involvement of 9p in metastatic ovarian adenocarcinomas. Bello MJ, et al. **Cancer Genet Cytogenet** 1990 Apr; 45(2):223–9

Translocation t(6;9) occurring in acute myelofibrosis, myelodysplastic syndrome, and acute nonlymphocytic leukemia suggests multipotent stem cell involvement. Cuneo A, et al. **Cancer Genet Cytogenet** 1989 Oct 15; 42(2):209–19

Translocation (8;9)(q12;p21). A new non–random rearrangement in lymphoid malignancies. Huret JL, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):125–9

Establishment and characterization of a childhood pre–B acute lymphoblastic leukemia cell line, PER–278, with chromosome translocations t(1;19) and t(1;9). Kees UR, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):201–8

A new case of dic(9;12)(p13;p11) in acute lymphocytic leukemia [letter] Lai JL, et al. **Cancer Genet Cytogenet** 1989 Oct 15;42(2):307–8

Complex translocations in a patient with chronic myelocytic leukemia: t(9;22;17) and t(10;18;19) after two failed bone marrow transplantations. Melnyk A, et al. **Cancer Genet Cytogenet** 1990 May;46(1):83–7

A clonal t(9;12)(q32;q21) in cultured fibroblasts from a case of Bowen's disease [letter; comment] Scappaticci S, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):249–50 Comment on: Cancer Genet Cytogenet 1988 Dec;36(2):149–53.

Translocation t(9;9)(p13;q34) in Philadelphia–negative chronic myeloid leukemia with breakpoint cluster region rearrangement. Sessarego M, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):51–6

A translocation (6;9)(p32;q34) and trisomy 13 in a case of childhood acute nonlymphocytic leukemia [letter] Stejskalova E, et al. **Cancer Genet Cytogenet** 1990 Mar; 45(1):139–41

Rearrangement of the human ABL oncogene in a glioblastoma. Heisterkamp N, et al. **Cancer Res** 1990 Jun 1;50(11):3429–34

Molecular cytogenetics: Rosetta stone for understanding cancer—twenty–ninth G. H. A. Clowes memorial award lecture. Rowley JD. **Cancer Res** 1990 Jul 1;50(13):3816–25 (69 ref.)

Allelic losses of chromosomes 9, 11, and 17 in human bladder cancer. Tsai YC, et al. **Cancer Res** 1990 Jan 1;50(1):44–7

Atrioventricular canal associated with trisomy 9. Marino B, et al. **Chest** 1989 Dec;96(6):1420–1

Cloning a fragment from the telomere of the long arm of human chromosome 9 in a YAC vector. Guerrini AM, et al. **Chromosoma** 1990 Apr;99(2):138–42

High resolution banding of an unusual reciprocal translocation in recurrent abortions. Kroisel PM, et al. **Clin Genet** 1990 Mar;37(3):230–4

Refined sublocalization of the human gene encoding the beta subunit of the S100 protein (S100B) and confirmation of a subtle t(9;21) translocation using in situ hybridization. Duncan AM, et al. **Cytogenet Cell Genet** 1989;50(4):234–5

Report of the committee on the genetic constitution of chromosomes 9 and 10. Smith M, et al. **Cytogenet Cell Genet** 1989;51(1–4):202–25 (308 ref.)

Chromosomal localization of the human hexabrachion (tenascin) gene and evidence for recent reduplication within the gene. Gulcher JR, et al. **Genomics** 1990 Apr; 6(4):616–22

The gene for the RNA component of the mitochondrial RNA–processing endoribonuclease is located on human chromosome 9p and on mouse chromosome 4. Hsieh CL, et al. **Genomics** 1990 Mar;6(3):540–4

Chromosomal assignment of genes encoding the alpha, beta,

and gamma subunits of human complement protein C8: identification of a close physical linkage between the alpha and the beta loci. Kaufman KM, et al. **Genomics** 1989 Oct; 5(3):475–80

Multilocus linkage analysis with the human argininosuccinate synthetase gene. Northrup H, et al. **Genomics** 1989 Oct; 5(3):442–4

Assignment of 12 loci to rat chromosome 5: evidence that this chromosome is homologous to mouse chromosome 4 and to human chromosomes 9 and 1 (1p arm). Szpirer C, et al. **Genomics** 1990 Apr;6(4):679–84

Molecular analysis of the translocation breakpoint in a Philadelphia-positive, bcr-negative ALL patient. van der Feltz MJ, et al. **Hamatol Bluttransfus** 1989;32:331–4

Replication error, a new hypothesis to explain the origin of a supernumerary marker chromosome in a mentally retarded boy. Wik Sjöstedt A, et al. **Hereditas** 1989; 111(2):115–23

Regional localization by in situ hybridization of a human chromosome 9 marker tightly linked to the Friedreich's ataxia locus. Raimondi E, et al. **Hum Genet** 1990 Jun; 85(1):125–6

Small marker chromosomes in man: origin from pericentric heterochromatin of chromosomes 1, 9, and 16. Callen DF, et al. **J Med Genet** 1990 Mar;27(3):155–9

Maternal translocation (9;18) with two abnormal offspring each with different chromosome derivatives. Pearson M, et al. **J Med Genet** 1989 Oct;26(10):655–8

9;22 translocation and bcr rearrangements in chronic myelocytic leukemia patients among atomic bomb survivors. Tanaka K, et al. **J Radiat Res (Tokyo)** 1989 Dec; 30(4):352–8

Satellited chromosome 9 in a boy with multiple anomalies. Harada N, et al. **Jinrui Idengaku Zasshi** 1989 Dec; 34(4):297–305

Two additional cases of t dic(9;12) in acute lymphocytic leukemia (ALL): prognosis in ALL with dic(9;12). Huret JL, et al. **Leukemia** 1990 Jun;4(6):423–5 (18 ref.)

Possible evidence for acquired genetic activity at both chromosomal breakpoints of the Philadelphia translocation in chronic myeloid leukemia. Yamada T, et al. **Leukemia** 1990 May;4(5):341–4

The (6;9) chromosome translocation, associated with a specific subtype of acute nonlymphocytic leukemia, leads to aberrant transcription of a target gene on 9q34. von Lindern M, et al. **Mol Cell Biol** 1990 Aug;10(8):4016–26

Human chromosome 9 can complement UV sensitivity of xeroderma pigmentosum group A cells. Ishizaki K, et al. **Mutat Res** 1990 May;235(3):209–15

Human gene for torsion dystonia located on chromosome 9q32–q34. Ozelius L, et al. **Neuron** 1989 May;2(5):1427–34

Structural alterations of the BCR and ABL genes in Ph1 positive acute leukemias with rearrangements in the BCR gene first intron: further evidence implicating Alu sequences in the chromosome translocation. Chen SJ, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):7631–42

RFLP for human DBH (dopamine beta-hydroxylase). Schuback DE, et al. **Nucleic Acids Res** 1990 Jan 25; 18(2):387

An anonymous DNA probe H35 (D9S41) on chromosome 9 detects a TaqI polymorphism. Warnich L, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3429

Dinucleotide repeat polymorphism at the D9S43 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2203

A TaqI RFLP in the locus D9S29 on human chromosome 9. Weitnauer L, et al. **Nucleic Acids Res** 1989 Dec 25; 17(24):10514

An oncogenic chromosome 8–9 gene fusion isolated following transfection of human ovarian carcinoma cell line DNA. Halverson D, et al. **Oncogene** 1990 Jul; 5(7):1085–9

Multiple chromosomes carrying tumor suppressor activity for a uterine endometrial carcinoma cell line identified by microcell-mediated chromosome transfer. Yamada H, et al. **Oncogene** 1990 Aug;5(8):1141–7

Prenatal diagnosis of a case of tetrasomy 9p. McDowall AA, et al. **Prenat Diagn** 1989 Nov;9(11):809–11

Prenatal detection of trisomy 9 mosaicism. Schwartz S, et al. **Prenat Diagn** 1989 Aug;9(8):549–54

Complementation of a DNA repair defect in xeroderma pigmentosum cells by transfer of human chromosome 9. Kaur GP, et al. **Proc Natl Acad Sci U S A** 1989 Nov; 86(22):8872–6

Molecular analysis of a chromosomal translocation, t(9;14)(p13;q32), in a diffuse large-cell lymphoma cell line expressing the Ki-1 antigen. Ohno H, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):628–32

Beta-amyloid protein probe hybridized to chromosome 9 in 3 Alzheimer disease individuals. Jenkins EC, et al. **Prog Clin Biol Res** 1989;317:269–75

Molecular biology of the Philadelphia positive leukaemias. Morgan GJ, et al. **Recenti Prog Med** 1989 Oct; 80(10):508–19 (164 ref.)

[Trisomy of the short arm of chromosome 9] Rogóyski A, et al. **Pediatr Pol** 1989 Apr;64(4):248–52 **(Pol)**

[Genetic analysis of Friedreich's ataxia using polymorphic DNA markers] Palau F, et al. **Med Clin (Barc)** 1990 May 5;94(17):651–4 (Eng. Abstr.) **(Spa)**

ANALYSIS

Centromeric heterochromatin instability of chromosomes 1, 9, and 16 in variable immunodeficiency syndrome—a virus-induced phenomenon? Haas OA. **Hum Genet** 1990 Jul;85(2):244–6 (19 ref.)

ULTRASTRUCTURE

Detection of numerical chromosomal abnormalities in neoplastic hematopoietic cells by in situ hybridization with a chromosome-specific probe. Anastasi J, et al. **Am J Pathol** 1990 Jan;136(1):131–9

Incontinentia pigmenti: Xp breakpoint is not the same in a case of r(X) and in X/autosome translocations. Sefiani A, et al. **Ann Genet** 1989;32(3):149–51

Abnormal chromosome 9 in a neonate program. Report of three cases. Nakamura Y, et al. **Arch Pathol Lab Med** 1990 Feb;114(2):185–7

Relationship of bcr breakpoint to chronic phase duration, survival, and blast crisis lineage in chronic myelogenous leukemia patients presenting in early chronic phase. Morris SW, et al. **Blood** 1990 May 15;75(10):2035–41

[Familial translocation t(9;10) (q34;q22) discovered in a child with various phenotypic abnormalities] Gregori Romero M, et al. **An Esp Pediatr** 1989 Nov;31(5):481–2 **(Spa)**

CHROMOSOMES, HUMAN, PAIR 10

Loss of constitutional heterozygosity in chromosome 10 in human glioblastoma. Watanabe K, et al. **Acta Neuropathol (Berl)** 1990;80(3):251–4

Terminal deletion of chromosome 10q and its clinical features. Kogasaka R, et al. **Acta Paediatr Jpn Overseas Ed** 1990 Feb;32(1):83–7

Assignment of the gene coding for the alpha-subunit of prolyl 4-hydroxylase to human chromosome region 10q21.3–23.1. Pajunen L, et al. **Am J Hum Genet** 1989 Dec;45(6):829–34

The genetic defect in multiple endocrine neoplasia type 2A maps next to the centromere of chromosome 10. Wu JS, et al. **Am J Hum Genet** 1990 Mar;46(3):624–30

Terminal deletion of the long arm of chromosome 10: case report and review of the literature. Gorinati M, et al. **Am J Med Genet** 1989 Aug;33(4):502–4 (12 ref.)

Post-mortem studies on two patients with 1–2 band cytogenetic deletions: 10q26——qter and r(9)(p24q34). Smith A, et al. **Ann Genet** 1989;32(4):220–4

Regional localization of polymorphic markers on chromosome 10 by physical and genetic mapping. Mathew CG, et al. **Ann Hum Genet** 1990 May;54 (Pt 2):121–9

Rearrangement of band 10q22 in leiomyoma and leiomyosarcoma of the uterus. Kiechle-Schwarz M, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):95–100

Complex translocations in a patient with chronic myelocytic leukemia: t(9;22;17) and t(10;18;19) after two failed bone marrow transplantations. Melnyk A, et al. **Cancer Genet Cytogenet** 1990 May;46(1):83–7

Molecular analysis of a myxoid chondrosarcoma with rearrangements of chromosomes 10 and 22. Shen WP, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):207–15

Is chromosome 10 a primary chromosomal abnormality in endometrial adenocarcinoma? Simon D, et al. **Cancer Genet Cytogenet** 1990 Jul 15;47(2):155–62

A translocation (1;10)(p32;q24) in a neuroblastoma cell line derived from marrow metastases. Skinnider L, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):131–5

Detection of minimal residual disease in leukemic patients with the t(10;14)(q24;q11) chromosomal translocation. Kagan J, et al. **Cancer Res** 1990 Sep 1;50(17):5240–4

High resolution banding of an unusual reciprocal translocation in recurrent abortions. Kroisel PM, et al. **Clin Genet** 1990 Mar;37(3):230–4

Trisomy 7, trisomy 10, and loss of the Y chromosome in short-term cultures of normal kidney tissue. Elfving P, et al. **Cytogenet Cell Genet** 1990;53(2–3):123–5

Report of the committee on the genetic constitution of chromosomes 9 and 10. Smith M, et al. **Cytogenet Cell Genet** 1989;51(1–4):202–25 (308 ref.)

A genetic linkage map of 32 loci on human chromosome 10. Bowden DW, et al. **Genomics** 1989 Nov;5(4):718–26

Rapid cloning and characterization of new chromosome 10 DNA markers by Alu element-mediated PCR. Brooks-Wilson AR, et al. **Genomics** 1990 Aug;7(4):614–20

Localization of the choline acetyltransferase (CHAT) gene to human chromosome 10. Cohen-Haguenauer O, et al. **Genomics** 1990 Feb;6(2):374–8

The CEPH consortium primary linkage map of human chromosome 10. White RL, et al. **Genomics** 1990 Mar; 6(3):393–412

Allele loss on chromosome 10 and point mutation of ras oncogenes are infrequent in tumors of MEN 2A. Okazaki M, et al. **Henry Ford Hosp Med J** 1989;37(3–4):112–5

Closing in on the MEN2A locus. Simpson NE, et al. **Henry Ford Hosp Med J** 1989;37(3–4):100–5

Assignment of the gene(s) involved in the expression of the proliferation-related Ki-67 antigen to human chromosome 10. Schonk DM, et al. **Hum Genet** 1989 Oct;83(3):297–9

Extensive sequence polymorphisms associated with chromosome 10 alpha satellite DNA and its close linkage to markers from the pericentromeric region. Wu JS, et al. **Hum Genet** 1990 Feb;84(3):279–82

The beta subunit locus of the human fibronectin receptor: DNA restriction fragment length polymorphism and linkage mapping studies. Wu JS, et al. **Hum Genet** 1989 Nov;83(4):383–90

The human mannose-binding protein gene. Exon structure reveals its evolutionary relationship to a human pulmonary surfactant gene and localization to chromosome 10. Sastry K, et al. **J Exp Med** 1989 Oct 1;170(4):1175–89

Trisomy 10p syndrome owing to maternal pericentric inversion. Ohba K, et al. **J Med Genet** 1990 Apr;27(4):264–6 (9 ref.)

Multiple abnormalities in a child with partial duplications of 10p and 13q from a 3:1 segregation of a maternal t(10;13) translocation. Yip MY, et al. **J Med Genet** 1990 Mar; 27(3):188–91

Assignment of the vascular smooth muscle actin gene ACTSA to human chromosome 10. Ueyama H, et al. **Jinrui Idengaku Zasshi** 1990 Jun;35(2):145–50

Two polymorphisms at the D10S94 locus. Brooks-Wilson AR, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4959

Two HinfI RFLPs detected by p alpha 10RP8 at D10Z1. Carson NL, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1932

Three polymorphisms at the D10S85 locus. Goodfellow PJ, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4960

An XmnI RFLP detected with a probe for the CYP2E gene locus on chromosome 10. Kelsell DP, et al. **Nucleic Acids Res** 1990 May 25;18(10):3111

Bgl I reveals two polymorphic sites in the human inter-alpha-trypsin inhibitor heavy chain gene ITI H2. Léveillard T, et al. **Nucleic Acids Res** 1990 Jan 25;18(2):386

An hypervariable polymorphism detected in the human inter-alpha-trypsin inhibitor heavy chain gene ITIH2. Léveillard T, et al. **Nucleic Acids Res** 1990 Mar 11; 18(5):1319

HincII RFLP at the human hexokinase I (HK1) locus on chromosome 10. Nishi S, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7547

TaqI polymorphism in the 3' flanking region of the human aortic smooth muscle actin gene. Ueyama H, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1318

Dinucleotide repeat polymorphism at the D10S89 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4637

HincII polymorphism at the D10S95 locus. Wu J, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4965

An EcoRI polymorphism identified by KW6 (D10S97) on chromosome 10. Wu JS, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1316

High frequency PvuII and PstI polymorphisms identified by KW31 (D10S96) on chromosome 10. Wu JS, et al. **Nucleic Acids Res** 1990 Mar 11;18(5):1316

Human ret proto-oncogene mapped to chromosome 10q11.2. Ishizaka Y, et al. **Oncogene** 1989 Dec;4(12):1519–21

Complete sequence of human vinculin and assignment of the gene to chromosome 10. Weller PA, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5667–71

The t(10;14)(q24;q11) of T-cell acute lymphoblastic leukemia juxtaposes the delta T-cell receptor with TCL3, a conserved and activated locus at 10q24. Zutter M, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3161–5

[Pre-natal examinations: cruel dilemmas] Lorho Y. **Psychiatr Enfant** 1989;32(2):351–413 (74 ref.) (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Genetic mechanisms of neoplasia in MEN 2. Jackson CE, et al. **Henry Ford Hosp Med J** 1989;37(3–4):116–9

ULTRASTRUCTURE

Assignment of the gene coding for the alpha 1 chain of collagen type XIII (COL13A1) to human chromosome region 10q11——qter. Pajunen L, et al. **Cytogenet Cell Genet** 1989;52(3–4):190–3

Linked markers flanking the gene for multiple endocrine neoplasia type 2A. Nakamura Y, et al. **Genomics** 1989 Aug; 5(2):199–203

A human ADP/ATP translocase gene has seven pseudogenes and localizes to chromosome X. Chen ST, et al. **Somat Cell Mol Genet** 1990 Mar;16(2):143–9

Generation of a panel of somatic cell hybrids containing unselected fragments of human chromosome 10 by X-ray irradiation and cell fusion: application to isolating the MEN2A region in hybrid cells. Goodfellow PJ, et al. **Somat Cell Mol Genet** 1990 Mar;16(2):163–71

[Familial translocation t(9;10) (q34;q22) discovered in a child with various phenotypic abnormalities] Gregori Romero M, et al. **An Esp Pediatr** 1989 Nov;31(5):481–2 **(Spa)**

CHROMOSOMES, HUMAN, PAIR 11

Genomic imprinting and the Beckwith-Wiedemann syndrome [letter] Brown KW, et al. **Am J Hum Genet** 1990 May;46(5):1000–1

The ataxia-telangiectasia gene (ATA) on chromosome 11 is distinct from the ETS-1 gene. Concannon P, et al. **Am J Hum Genet** 1990 Apr;46(4):789–94

The human dopamine D2 receptor gene is located on chromosome 11 at q22–q23 and identifies a TaqI RFLP. Grandy DK, et al. **Am J Hum Genet** 1989 Nov;45(5):778–85

Parental origin of de novo constitutional deletions of chromosomal band 11p13. Huff V, et al. **Am J Hum Genet** 1990 Jul;47(1):155–60

Mosaic normal/unbalanced karyotype and recurrent fetal wastage [letter] Kleczkowska A, et al. **Am J Med Genet** 1990 Jul;36(3):379

Translocation t(5;11)(q13.1;p13) associated with familial isolated aniridia. Pettenati MJ, et al. **Am J Med Genet** 1989 Oct;34(2):230–2

Partial deletion of the long arm of chromosome 11 [del(11)(q23.3——qter)] with abnormal white matter. Wardinsky TD, et al. **Am J Med Genet** 1990 Jan;35(1):60–3
Paracentric inversion 11. Miller K, et al. **Ann Genet** 1989; 32(4):233–4 (15 ref.)
Isolation of a cDNA clone and localization of the human glutathione S-transferase 3 genes to chromosome bands 11q13 and 12q13–14. Board PG, et al. **Ann Hum Genet** 1989 Jul;53 (Pt 3):205–13
Regional localization of the sperm-specific lactate dehydrogenase, LDHC, gene on human chromosome 11. Edwards Y, et al. **Ann Hum Genet** 1989 Jul;53 (Pt 3):215–9
A human adenolymphoma showing the chromosomal aberrations del (7)(p12p14–15) and t(11;19)(q21;p12–13). Mark J, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1565–6
Evidence against close linkage of unipolar affective illness to human chromosome 11p markers HRAS1 and INS and chromosome Xq marker DXS52. Neiswanger K, et al. **Biol Psychiatry** 1990 Jul 1;28(1):63–72
A new human B-cell non-Hodgkin's lymphoma cell line (Karpas 422) exhibiting both t (14;18) and t(4;11) chromosomal translocations. Dyer MJ, et al. **Blood** 1990 Feb 1;75(3):709–14
An additional breakpoint region in the BCL-1 locus associated with the t(11;14)(q13;q32) translocation of B-lymphocytic malignancy. Meeker TC, et al. **Blood** 1989 Oct;74(5):1801–6
Loss of chromosome 11p alleles in cultured cells derived from Wilms' tumours. Brown KW, et al. **Br J Cancer** 1989 Jul;60(1):25–9
Infant acute lymphoblastic leukaemia with t(11; 19). Gibbons B, et al. **Br J Haematol** 1990 Mar;74(3):264–9
11p13 deletion, Wilms' tumour, and aniridia: unusual genetic, non-ocular and ocular features of three cases. Jotterand V, et al. **Br J Ophthalmol** 1990 Sep;74(9):568–70
A case of follicular small cleaved cell lymphoma with t(14;18) and t(8;11). Bal S, et al. **Cancer Genet Cytogenet** 1990 Sep; 48(2):199–201
No evidence of trisomy 12 or t(11;14) by molecular genetic techniques in chronic lymphocytic leukemia cells with a normal karyotype. Einhorn S, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):183–92
Cancer in ataxia-telangiectasia patients. Hecht F, et al. **Cancer Genet Cytogenet** 1990 May;46(1):9–19 (59 ref.)
Molecular cytogenetic analysis discloses complex genetic imbalance in a t(11;21) myelodysplastic syndrome. Kerim S, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):243–50
A new variant translocation 11;17 in a patient with acute promyelocytic leukemia together with t(7;12). Najfeld V, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):103–8
Isochromosome 11q in acute monoblastic leukemia (M5a). Niiya K, et al. **Cancer Genet Cytogenet** 1990 Aug 1; 48(1):61–5
Translocation (11;22) in small cell osteosarcoma. Noguera R, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):121–4
ETS1 gene in myelodysplastic syndrome with chromosome change at 11q23. Ohyashiki K, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):73–80
11q23 abnormalities in children with acute nonlymphocytic leukemia (M4–M5). Association with previous chemotherapy. Prieto F, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):1–11
Acute lymphoblastic leukemia with t(4;11) in a patient previously exposed to a carcinogen. Solé F, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):133–6
Physical mapping of the human chromosome 11q23 region containing the ataxia-telangiectasia locus [see comments] Wei S, et al. **Cancer Genet Cytogenet** 1990 May;46(1):1–8 Comment in: Cancer Genet Cytogenet 1990 May;46(1):133–4.
Molecular characterization of a t(11;14)(q23;q32) chromosome translocation in a B-cell lymphoma. Akao Y, et al. **Cancer Res** 1990 Aug 15;50(16):4856–9
Frequent loss of heterozygosity on chromosomes 6q, 11, and 17 in human ovarian carcinomas. Lee JH, et al. **Cancer Res** 1990 May 1;50(9):2724–8
Loss of heterozygosity in Wilms' tumors, studied for six putative tumor suppressor regions, is limited to chromosome 11. Mannens M, et al. **Cancer Res** 1990 Jun 1;50(11):3279–83
11p13–15 is a specific region of chromosomal rearrangement in gastric and esophageal adenocarcinomas. Rodriguez E, et al. **Cancer Res** 1990 Oct 1;50(19):6410–6
Loss of heterozygosity for genes on 11p and the clinical course of patients with lung carcinoma. Skinner MA, et al. **Cancer Res** 1990 Apr 15;50(8):2303–6
Allelic losses of chromosomes 9, 11, and 17 in human bladder cancer. Tsai YC, et al. **Cancer Res** 1990 Jan 1;50(1):44–7
Isolation and characterization of a zinc finger polypeptide gene at the human chromosome 11 Wilms' tumor locus. Call KM, et al. **Cell** 1990 Feb 9;60(3):509–20
An internal deletion within an 11p13 zinc finger gene contributes to the development of Wilms' tumor. Haber DA, et al. **Cell** 1990 Jun 29;61(7):1257–69
Complete physical map of the WAGR region of 11p13 localizes a candidate Wilms' tumor gene. Rose EA, et al. **Cell** 1990 Feb 9;60(3):495–508
Dysplastic naevi in association with partial deletion of chromosome 11. McDonagh AJ, et al. **Clin Exp Dermatol** 1990 Jan;15(1):44–5
Precise in situ localization of NCAM, ETS1, and D11S29 on human meiotic chromosomes. Bello MJ, et al. **Cytogenet Cell Genet** 1989;52(1–2):7–10
Report of the committee on the genetic constitution of chromosome 11. Junien C, et al. **Cytogenet Cell Genet** 1989; 51(1–4):226–58 (282 ref.)
Autosomal dominant aniridia linked to the chromosome 11p13 markers catalase and D11S151 in a large Dutch family. Mannens M, et al. **Cytogenet Cell Genet** 1989; 52(1–2):32–6
Loss of heterozygosity in human germinal tumors. Radice P, et al. **Cytogenet Cell Genet** 1989;52(1–2):72–6
Insulin gene in diabetes. Analysis through RFLP. Permutt MA, et al. **Diabetes Care** 1990 Mar;13(3):364–74 (77 ref.)
An unusual structure of a putative T cell oncogene which allows production of similar proteins from distinct mRNAs. Boehm T, et al. **EMBO J** 1990 Mar;9(3):857–68
Linkage of c-Harvey-ras-1 and INS DNA markers to unipolar depression and alcoholism is ruled out in 18 families. Wesner RB, et al. **Eur Arch Psychiatry Neurol Sci** 1990;239(6):356–60
Gene amplification on chromosome band 11q13 and oestrogen receptor status in breast cancer. Fantl V, et al. **Eur J Cancer** 1990 Apr;26(4):423–9
Trisomy 11 in myelodysplastic syndrome-derived acute myeloblastic leukaemias. Avanzi GC, et al. **Eur J Haematol** 1989 Aug;43(2):173–7
Physical mapping of the CD3 gene cluster. Tunnacliffe A. **Exp Clin Immmunogenet** 1990;7(1):43–52 (41 ref.)
Localization of the gene encoding a type I protein phosphatase catalytic subunit to human chromosome band 11q13. Barker HM, et al. **Genomics** 1990 Jun;7(2):159–66
CpG islands surround a DNA segment located between translocation breakpoints associated with genitourinary dysplasia and aniridia. Bickmore WA, et al. **Genomics** 1989 Nov;5(4):685–93
A primary linkage map of the human chromosome 11q22–23 region. Charmley P, et al. **Genomics** 1990 Feb;6(2):316–23
Definition of the limits of the Wilms tumor locus on human chromosome 11p13. Compton DA, et al. **Genomics** 1990 Feb;6(2):309–15
A highly polymorphic locus cloned from the breakpoint of a chromosome 11p13 deletion associated with the WAGR syndrome. Glaser T, et al. **Genomics** 1989 Nov;5(4):880–93
A cosmid clone map derived from a small region of human chromosome 11. Harrison-Lavoie KJ, et al. **Genomics** 1989 Oct;5(3):501–9
Constitutional and somatic deletions of two different regions of maternal chromosome 11 in Wilms tumor. Jeanpierre C, et al. **Genomics** 1990 Jul;7(3):434–8
A detailed genetic map of the long arm of chromosome 11. Julier C, et al. **Genomics** 1990 Jul;7(3):335–45
cDNA cloning of human oxysterol-binding protein and localization of the gene to human chromosome 11 and mouse chromosome 19. Levanon D, et al. **Genomics** 1990 May;7(1):65–74
Assignment of the alpha B-crystallin gene to human chromosome 11. Ngo JT, et al. **Genomics** 1989 Nov; 5(4):665–9
Human-mouse hybrids carrying fragments of single human chromosomes selected by tumor growth. Porteous DJ, et al. **Genomics** 1989 Nov;5(4):680–4
Mapping of a gene determining tuberous sclerosis to human chromosome 11q14–11q23. Smith M, et al. **Genomics** 1990 Jan;6(1):105–14
5q- and t(2;11) in a patient with M2 acute non-lymphocytic leukemia. Case report. Testoni N, et al. **Haematologica** 1989 Nov–Dec;74(6):595–9
Chromosomal translocations involving the T-cell receptor delta chain locus and two loci on the short arm of chromosome 11. Boehm T, et al. **Hamatol Bluttransfus** 1989;32:357–9
Assignment of the apolipoprotein A-I gene to 11q23 based on RFLP in a case with a partial deletion of chromosome 11, del(11)(q23.3——qter). Arinami T, et al. **Hum Genet** 1990 Jun;85(1):39–40
Human pepsinogen A (PGA): an informative gene complex located at 11q13. Boudi FH, et al. **Hum Genet** 1990 Feb; 84(3):293–5
Human alpha B-crystallin (CRYA2) gene mapped to chromosome 11q12–q23. Brakenhoff RH, et al. **Hum Genet** 1990 Jul;85(2):237–40
A panel of restriction fragment length polymorphisms for chromosomal band 11p13. Huff V, et al. **Hum Genet** 1990 Feb;84(3):253–7
Unusual segregation of constitutional 11q;22q translocation may be explained by crossover in interchange segment, followed by 3:1 segregation at meiosis I [letter; comment] Lindenbaum RH. **Hum Genet** 1990 Jun;85(1):143 Comment on: Hum Genet 1989 Oct;83(3):287–8.
Not all chromosome imbalance resulting from the 11q;22q translocation is due to 3:1 segregation in first meiosis [see comments] Lockwood DH, et al. **Hum Genet** 1989 Oct; 83(3):287–8 Comment in: Hum Genet 1990 Jun;85(1):143.
Analysis of 7 polymorphic markers at chromosome 11q22–23 in 35 ataxia telangiectasia families; further evidence of linkage. McConville CM, et al. **Hum Genet** 1990 Jul; 85(2):215–20
Paracentric inversion inv(11)(q21q23) in The Netherlands. Madan K, et al. **Hum Genet** 1990 Jun;85(1):15–20
Definition of an acquired 11q deletion in a tumorigenic human monocytic cell line [letter] Maserati E, et al. **Hum Genet** 1990 Mar;84(4):381
Localization of the human oncogene SPI1 on chromosome 11, region p11.22. Nguyen VC, et al. **Hum Genet** 1990 May; 84(6):542–6
Regional assignment of the human C1-inhibitor gene to 11q11-q13.1. Theriault A, et al. **Hum Genet** 1990 Apr; 84(5):477–9
Isolation and regional localisation of DNA sequences from a human chromosome 11-specific cosmid library. Wadey RB, et al. **Hum Genet** 1990 Apr;84(5):417–23
Genetic linkage is excluded for the D2-dopamine receptor lambda HD2G1 and flanking loci on chromosome 11q22-q23 in Tourette syndrome. Devor EJ, et al. **Hum Hered** 1990;40(2):105–8
Further speculations on the mutant AT allele [letter] Laderoute MP. **Immunol Today** 1990 Jul;11(7):230
Transfer of a normal human chromosome 11 suppresses tumorigenicity of some but not all tumor cell lines. Oshimura M, et al. **J Cell Biochem** 1990 Mar;42(3):135–42
Genetic abnormalities in sporadic parathyroid adenomas. Friedman E, et al. **J Clin Endocrinol Metab** 1990 Aug; 71(2):293–7
Chromosome 11 allele loss in sporadic insulinoma. Patel P, et al. **J Clin Pathol** 1990 May;43(5):377–8
The chromosome translocation (11;14)(p13;q11) associated with T cell acute leukemia. Asymmetric diversification of the translocational junctions. Cheng JT, et al. **J Exp Med** 1990 Feb 1;171(2):489–501
Ambiguous genitalia, gonadoblastoma, aniridia and mental retardation with deletion of chromosome 11. Martinez-Mora J, et al. **J Urol** 1989 Nov;142(5):1298–300
Loss of heterozygosity on chromosomes 1 and 11 in sporadic pheochromocytomas. Yokogoshi Y, et al. **Jpn J Cancer Res** 1990 Jun–Jul;81(6–7):632–8
Association within a family of a balanced autosomal translocation with major mental illness. St Clair D, et al. **Lancet** 1990 Jul 7;336(8706):13–6
Isochromosome 11q in a case of acute myelomonocytic leukemia FAB type M4. Xue YQ, et al. **Leuk Res** 1990; 14(6):545–7
Efficient immortalization by SV40 T DNA of skin fibroblasts from patients with Wilms' tumor associated with chromosome 11p deletion. Kano Y, et al. **Mol Carcinog** 1989;2(6):314–21
Restoration of radiation resistance in ataxia telangiectasia cells by the introduction of normal human chromosome 11. Komatsu K, et al. **Mutat Res** 1990 Mar;235(2):59–63
Relation of cytogenetic abnormalities and clinical outcome in metastatic melanoma. Trent JM, et al. **N Engl J Med** 1990 May 24;322(21):1508–11
Homozygous deletion in Wilms tumours of a zinc-finger gene identified by chromosome jumping. Gessler M, et al. **Nature** 1990 Feb 22;343(6260):774–8
Segmental and developmental regulation of a presumptive T-cell oncogene in the central nervous system. Greenberg JM, et al. **Nature** 1990 Mar 8;344(6262):158–60
Re-evaluation of the linkage relationship between chromosome 11p loci and the gene for bipolar affective disorder in the Old Order Amish [see comments] Kelsoe JR, et al. **Nature** 1989 Nov 16;342(6247):238–43 Comment in: Nature 1989 Nov 16;342(6247):222.
BamHI and EcoRI restriction fragment length polymorphisms at the glutathione S-transferase 3 locus. Board PG, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7550
An STS in the human T-ALL breakpoint cluster region (T-ALLbcr) located at 11p13. Boehm T, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4298
Two polymorphisms for amino acid substitutions in the APOA4 gene. Boerwinkle E, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4966
A frequent human CD20 (B1) differentiation antigen DNA polymorphism detected with MspI is located near 11q12–13. Charmley P, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):207
RFLP for MboI in the human tyrosinase (TYR) gene detected by PCR. Giebel LB, et al. **Nucleic Acids Res** 1990 May 25;18(10):3103
Isolation and mapping of a polymorphic DNA sequence (CJ52.193) on chromosome 11 [D11S384] Julier C, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9501
Isolation and mapping of a polymorphic DNA sequence (CJ52.15) on chromosome 11 [D11S383] Julier C, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10149
Isolation and mapping of a polymorphic DNA sequence (CJ52.4) on chromosome 11 [D11S388] Julier C, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9502
Isolation and mapping of a polymorphic DNA sequence (CJ52.5) on chromosome 11 [D11S386] Julier C, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9503
Isolation and mapping of a polymorphic DNA sequence (pCJ52.99M2) on chromosome 11 [D11S389] Julier C, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9504
Isolation and mapping of a polymorphic DNA sequence (pCJ52.75M1) on chromosome 11 [D11S385] Julier C, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9505
Isolation and mapping of a polymorphic DNA sequence (2CJ52.208M2) on chromosome 11 [D11S351] Julier C, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9507
Isolation and mapping of a polymorphic DNA sequence (p1CJ52.208M2) on chromosome 11 [D11S351] Julier C, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9508
Isolation and mapping of a polymorphic DNA sequence (pCJ52.102T1) on chromosome 11 [D11S387] Julier C, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9509

Isolation and mapping of a polymorphic DNA sequence (HBI18P1) on chromosome 11 [D11S147] Julier C, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9510

Fine mapping of the chromosome 11q22–23 region using PFGE, linkage and haplotype analysis; localization of the gene for ataxia telangiectasia to a 5cM region flanked by NCAM/DRD2 and STMY/CJ52.75, phi 2.22. McConville CM, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4335–43

An anonymous marker [HGM provisional #D11S415] maps to human chromosome 11 near the catalase (CAT) gene. Malhotra U, et al. **Nucleic Acids Res** 1990 Jan 25;18(2):386

RFLP for BgIII at the human tyrosinase (TYR) locus. Spritz RA, et al. **Nucleic Acids Res** 1990 Jun 25;18(12):3672

A BglII RFLP detected by the probe JA8–1 at human chromosome band 11p13 (D11S417). Ton CC, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1084

An anonymous DNA probe H31 (D11S348) on chromosome 11 detects a HindIII polymorphism. Warnich L, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3429

Dinucleotide repeat polymorphisms at the D11S419 and CD3D loci. Weber JL, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):4036

An XmnI polymorphism detected by a human genomic clone from chromosomal band 11p13 [D11S416] Weil MM, et al. **Nucleic Acids Res** 1990 Feb 11;18(3):689

Two RFLPs at the glutathione S–transferase 3 gene. Wong EL, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4964

Tetranucleotide repeat polymorphism in the apolipoprotein C–III gene. Zuliani G, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4299

Loss of heterozygosity on chromosomal segments 3p, 6q and 11p in human ovarian carcinomas. Ehlen T, et al. **Oncogene** 1990 Feb;5(2):219–23

Co–amplification of integrated hepatitis B virus DNA and transforming gene hst–1 in a hepatocellular carcinoma. Hatada I, et al. **Oncogene** 1988 Nov;3(5):537–40

A new RFLP in intron 1 of the human c–Ha–ras1 gene and its close relationship with the variable tandem repeats in the region 3' to the gene. Iwahana H, et al. **Oncogene** 1990 Jul;5(7):1049–53

BCL–1 participates in the 11q13 amplification found in breast cancer. Theillet C, et al. **Oncogene** 1990 Jan;5(1):147–9

Multiple chromosomes carrying tumor suppressor activity for a uterine endometrial carcinoma cell line identified by microcell–mediated chromosome transfer. Yamada H, et al. **Oncogene** 1990 Aug;5(8):1141–7

The chromosome 11 region flanking the t(11;14) breakpoint in human T–ALL is deleted in Wilms' tumor hybrids. Finver SN, et al. **Oncogene Res** 1989;5(2):143–8

Aniridia, Wilms' tumor and human chromosome 11. Bickmore WA, et al. **Ophthalmic Paediatr Genet** 1989 Dec; 10(4):229–48 (75 ref.)

Mapping of the gene for multiple endocrine neoplasia type I to chromosome 11q13. Nordenskjöld M, et al. **Pathol Biol (Paris)** 1989 Nov;37(9):951

Localization of the MEN1 gene to a small region within chromosome 11q13 by deletion mapping in tumors. Byström C, et al. **Proc Natl Acad Sci U S A** 1990 Mar; 87(5):1968–72

Simultaneous localization of cosmids and chromosome R–banding by fluorescence microscopy: application to regional mapping of human chromosome 11. Cherif D, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6639–43

Single–sperm typing: determination of genetic distance between the G gamma–globin and parathyroid hormone loci by using the polymerase chain reaction and allele–specific oligomers. Cui XF, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(23):9389–93

Somatic cell hybrid and long–range physical mapping of 11p13 microdissected genomic clones. Davis LM, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(18):7005–9

Mapping small DNA sequences by fluorescence in situ hybridization directly on banded metaphase chromosomes. Fan YS, et al. **Proc Natl Acad Sci U S A** 1990 Aug; 87(16):6223–7

A model for embryonal rhabdomyosarcoma tumorigenesis that involves genome imprinting. Scrable H, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7480–4

Rhabdomyosarcoma–associated locus and MYOD1 are syntenic but separate loci on the short arm of human chromosome 11. Scrable HJ, et al. **Proc Natl Acad Sci U S A** 1990 Mar;87(6):2182–6

Role for the Wilms tumor gene in genital development? van Heyningen V, et al. **Proc Natl Acad Sci U S A** 1990 Jul; 87(14):5383–6

A balanced chromosomal translocation partially co–segregating with psychotic illness in a family. Holland T, et al. **Psychiatry Res** 1990 Apr;32(1):1–8

Manic depression gene put in limbo [news] Barinaga M. **Science** 1989 Nov 17;246(4932):886–7

One Wilms' tumor gene is cloned; are there more? [news] Hoffman M. **Science** 1989 Dec 15;246(4936):1387

High–resolution mapping of human chromosome 11 by in situ hybridization with cosmid clones. Lichter P, et al. **Science** 1990 Jan 5;247(4938):64–9

Long–range restriction map around 11p13 aniridia locus. Davis LM, et al. **Somat Cell Mol Genet** 1989 Nov; 15(6):605–15

A fine–structure deletion map of human chromosome 11p: analysis of J1 series hybrids. Glaser T, et al. **Somat Cell Mol Genet** 1989 Nov;15(6):477–501

Molecular analysis of the DNA segments cross–hybridizable to the tyrosinase gene in patients affected with oculocutaneous albinism. Takeda A, et al. **Tohoku J Exp Med** 1989 Dec;159(4):333–40

[Chromosomal localization of transforming oncogene BGC–Ha–ras in gastric cancer cell line] Hou Y. **Chung Hua Chung Liu Tsa Chih** 1990 Mar;12(2):95–7 (Eng. Abstr.) **(Chi)**

[Trisomy of chromosome 11 in a case of common ALL antigen–positive acute myeloblastic leukemia (FAB–M1)] Nakamura H, et al. **Rinsho Ketsueki** 1989 Dec; 30(12):2220–4 (15 ref.) (Eng. Abstr.) **(Jpn)**

[Abnormal cluster formation in a patient with myelodysplastic syndrome with trisomy–11—periodical approach by colony assay] Tanabe N, et al. **Rinsho Ketsueki** 1990 Mar;31(3):381–5 (Eng. Abstr.) **(Jpn)**

[Jacob's syndrome (2 case reports)] Sršeň S, et al. **Cesk Pediatr** 1989 Jul;44(7):420–2 **(Slo)**

ANALYSIS

Linkage data for Marfan syndrome and markers on chromosomes 1 and 11. de Groote J, et al. **J Med Genet** 1990 Feb;27(2):82–5

PHYSIOLOGY

The short arm of chromosome 11 likely is involved in the regulation of the human papillomavirus type 16 early enhancer–promoter and in the suppression of the transforming activity of the viral DNA. Smits PH, et al. **Virology** 1990 May;176(1):158–65

ULTRASTRUCTURE

Localization of stromelysin 2 gene to the q22.3–23 region of chromosome 11 by in situ hybridization. Jung JY, et al. **Ann Genet** 1990;33(1):21–3

The decrease of catalase or esterase D activity in patients with microdeletions of 11p or 13q does not increase their radiosensitivity. Sabatier L, et al. **Ann Genet** 1989; 32(3):144–8

A panel of irradiation–reduced hybrids selectively retaining human chromosome 11p13: their structure and use to purify the WAGR gene complex. Glaser T, et al. **Genomics** 1990 Jan;6(1):48–64

Acute monocytic leukemia with translocation t(1;11)(p31;q23): simultaneous staining of chromosomes and cell surface antigens. Nölle I, et al. **Hamatol Bluttransfus** 1990; 33:145–9

Loss of heterozygosity in Wilms' tumour involves two distinct regions of chromosome 11. Wadey RB, et al. **Oncogene** 1990 Jun;5(6):901–7

CHROMOSOMES, HUMAN, PAIR 12

Renal cortical tumors. Cytogenetic characterization. Dal Cin P, et al. **Am J Clin Pathol** 1989 Oct;92(4):408–14

Multiple polyposis coli associated with Gardner's syndrome and chromosomal mosaicism: a family analysis. Dhaliwal MK, et al. **Am J Gastroenterol** 1990 Jul;85(7):880–3

A human alpha satellite DNA subset specific for chromosome 12. Baldini A, et al. **Am J Hum Genet** 1990 Apr;46(4):784–8

Mapping autosomal recessive vitamin D dependency type I to chromosome 12q14 by linkage analysis. Labuda M, et al. **Am J Hum Genet** 1990 Jul;47(1):28–36

Linkage disequilibrium between two restriction sites in the COL2A1 gene [letter] Schwartz RC, et al. **Am J Hum Genet** 1990 Jun;46(6):1214–5

Distal 12p deletion in a stillborn infant. Baroncini A, et al. **Am J Med Genet** 1990 Jul;36(3):358–60

Chromosome abnormality in Kallmann syndrome. Best LG, et al. **Am J Med Genet** 1990 Mar;35(3):306–9

Cytogenetic and molecular study of Angelman syndrome. Imaizumi K, et al. **Am J Med Genet** 1990 Mar;35(3):314–8

A case of de novo i(12p) with 12q whole–arm translocation mosaicism. Marques–de–Faria AP, et al. **Am J Med Genet** 1989 Aug;33(4):453–6

Mosaicism in Pallister i(12p) syndrome. Wenger SL, et al. **Am J Med Genet** 1990 Apr;35(4):523–5

Sotos syndrome with a balanced reciprocal translocation t(2;12)(q33.3;q15). Tamaki K, et al. **Ann Genet** 1989; 32(4):244–6

Isolation of a cDNA clone and localization of the human glutathione S–transferase 3 genes to chromosome bands 11q13 and 12q13–14. Board PG, et al. **Ann Hum Genet** 1989 Jul;53 (Pt 3):205–13

The INT1 oncogene is not rearranged or amplified in lipomas with structural chromosomal abnormalities of 12q13–15. Arheden K, et al. **Cancer Genet Cytogenet** 1989 Oct 1; 42(1):143–6

Isochromosome 12p in mediastinal germ cell tumor. Dal Cin P, et al. **Cancer Genet Cytogenet** 1989 Oct 15;42(2):243–51

Chromosome 3 and 12p rearranged in a well–differentiated peritoneal mesothelioma [letter] Decker HJ, et al. **Cancer Genet Cytogenet** 1990 May;46(1):135–7

No evidence of trisomy 12 or t(11;14) by molecular genetic techniques in chronic lymphocytic leukemia cells with a normal karyotype. Einhorn S, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):183–92

Localization of the chromosomal breakpoints of the t(12;16) in liposarcoma to subbands 12q13.3 and 16p11.2. Eneroth M, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):101–7

A new case of dic(9;12)(p13;p11) in acute lymphocytic leukemia [letter] Lai JL, et al. **Cancer Genet Cytogenet** 1989 Oct 15;42(2):307–8

A new variant translocation 11;17 in a patient with acute promyelocytic leukemia together with t(7;12). Najfeld V, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):103–8

Trisomy 12 in uterine leiomyomas. A new cytogenetic subgroup. Nilbert M, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):63–6

Complex karyotypic changes, including rearrangements of 12q13 and 14q24, in two leiomyosarcomas. Nilbert M, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):217–23

Complex chromosome rearrangements involving 12q14 in two uterine leiomyomas. Pandis N, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):51–6

Human papillomavirus type 16 DNA is integrated into chromosome region 12q14–q15 in a cell line derived from a vulvar intraepithelial neoplasia. Sastre–Garau X, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):243–51

A clonal t(9;12)(q32;q21) in cultured fibroblasts from a case of Bowen's disease [letter; comment] Scappaticci S, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):249–50 Comment on: Cancer Genet Cytogenet 1988 Dec;36(2):149–53.

Blastic transformation associated with 5q– and 12p– [letter] Silva ML, et al. **Cancer Genet Cytogenet** 1990 Jul 15; 47(2):275–6

i(12p) in a malignant ovarian tumor. Speleman F, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):49–53

Complex familial translocation [letter] Cruz–Coke R. **Clin Genet** 1990 Feb;37(2):158–9

Trisomy of chromosome 20/isochrome 12p [letter] Steele MW, et al. **Clin Genet** 1990 Jul;38(1):79

5p;12q translocation with manifestations of cri du chat syndrome and Marfanoid arachnodactyly. Zhang SZ, et al. **Clin Genet** 1990 Feb;37(2):153–7

In vitro transformation by the SV40 'early region' of cells from a human benign salivary gland tumor with a 12q13——q15 rearrangement. Kazmierczak B, et al. **Cytogenet Cell Genet** 1990;53(1):37–9

Report of the committee on the genetic constitution of chromosomes 12 and 13. Ropers HH, et al. **Cytogenet Cell Genet** 1989;51(1–4):259–79 (308 ref.)

Chromosome mapping of the human RAS–related RAP1A, RAP1B, and RAP2 genes to chromosomes 1p12——p13, 12q14, and 13q34, respectively. Rousseau–Merck MF, et al. **Cytogenet Cell Genet** 1990;53(1):2–4

Myf–6, a new member of the human gene family of myogenic determination factors: evidence for a gene cluster on chromosome 12. Braun T, et al. **EMBO J** 1990 Mar; 9(3):821–31

Trisomy 12p syndrome: a chromosomal disorder associated with generalized 3–Hz spike and wave discharges. Guerrini R, et al. **Epilepsia** 1990 Sep–Oct;31(5):557–66

A cluster of alpha 2–macroglobulin–related genes (alpha 2 M) on human chromosome 12p: cloning of the pregnancy–zone protein gene and an alpha 2M pseudogene. Devriendt K, et al. **Gene** 1989 Sep 30;81(2):325–34

Chromosomal assignment of human uracil–DNA glycosylase to chromosome 12. Aasland R, et al. **Genomics** 1990 May; 7(1):139–41

The gene for the microsomal glutathione S–transferase is on human chromosome 12. DeJong JL, et al. **Genomics** 1990 Feb;6(2):379–82

Localization of PGI (biglycan, BGN) and PGII (decorin, DCN, PG–40) genes on human chromosomes Xq13–qter and 12q, respectively. McBride OW, et al. **Genomics** 1990 Feb;6(2):219–25

The human ATP synthase beta subunit gene: sequence analysis, chromosome assignment, and differential expression. Neckelmann N, et al. **Genomics** 1989 Nov; 5(4):829–43

Localization of the gene for human simple epithelial keratin 18 to chromosome 12 using polymerase chain reaction. Waseem A, et al. **Genomics** 1990 Jun;7(2):188–94

Trisomy 12 in benign fibroma and granulosa cell tumor of the ovary. Leung WY, et al. **Gynecol Oncol** 1990 Jul; 38(1):28–31

Trisomy of chromosome 12 in a case of thecoma of the ovary. Mrózek K, et al. **Gynecol Oncol** 1990 Mar;36(3):413–6

Sperm chromosome analysis in a man heterozygous for a reciprocal translocation 46,XY t(12;20)(q24.3;q11). Martin RH, et al. **Hum Reprod** 1990 Jul;5(5):606–9

Molecular structure, chromosome assignment, and promoter organization of the human matrix Gla protein gene. Cancela L, et al. **J Biol Chem** 1990 Sep 5;265(25):15040–8

Duplication of distal 17q from a maternal translocation: an additional case with some unique features. Caine A, et al. **J Med Genet** 1989 Sep;26(9):577–89

Trisomy 12p mosaicism syndrome. Karki CB, et al. **J Ment Defic Res** 1990 Feb;34 (Pt 1):75–80

Isochromosome of the short arm of chromosome 12: clinically useful markers for male germ cell tumors [published erratum appears in J Natl Cancer Inst 1990 Apr 4;82(7):627] [see comments] Bosl GJ, et al. **J Natl Cancer Inst** 1989 Dec 20;81(24):1874–8 Comment in: J Natl Cancer Inst 1989 Dec 20;81(24):1852–3.

Isochromosome of chromosome 12: clinically useful marker for male germ cell tumors [letter] Duncan AM. **J Natl Cancer Inst** 1990 Sep 5;82(17):1433

Human chromosome 12 encodes a species–specific factor which increases human immunodeficiency virus type 1 tat–mediated trans activation in rodent cells. Newstein M, et al. **J Virol** 1990 Sep;64(9):4565–7

Human type II collagen gene (COL2A1) assigned to chromosome 12q13.1–q13.2 by in situ hybridization with biotinylated DNA probe. Takahashi E, et al. **Jinrui Idengaku Zasshi** 1989 Dec;34(4):307–11

Translocation t(12;16)(q13;p11) in myxoid liposarcoma of a child and implication of the human int–1 gene in tumorigenesis. Fujii Y, et al. **Jpn J Cancer Res** 1989 Oct; 80(10):958–62

Molecular analyses of chromosome 12 in chronic lymphocytic leukemia. Einhorn S, et al. **Leukemia** 1989 Dec;3(12):871–4

Two additional cases of t dic(9:12) in acute lymphocytic leukemia (ALL): prognosis in ALL with dic(9:12). Huret JL, et al. **Leukemia** 1990 Jun;4(6):423–5 (18 ref.)

Human islet amyloid polypeptide gene: complete nucleotide sequence, chromosomal localization, and evolutionary history. Nishi M, et al. **Mol Endocrinol** 1989 Nov; 3(11):1775–81

Is isochromosome i(12p) present in gonadal precancerous tissue? Vořechovský I, et al. **Neoplasma** 1989;36(6):697–700

A KpnI DNA polymorphism in the human von Willebrand factor (VWF) gene. Driscoll CM, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4968

Human parathyroid hormone–like peptide gene: HindIII and TaqI RFLPs. Hendy GN, et al. **Nucleic Acids Res** 1990 Sep 11;18(17):5327

Two TaqI polymorphisms in the 5' region of the von Willebrand factor (vWF) gene. Inbal A, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10143

StuI polymorphisms in the vWF gene. Inbal A, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4959

EcoRI polymorphism within the GLI gene (chromosome 12q13.3–14.1). Kinzler KW, et al. **Nucleic Acids Res** 1990 May 11;18(9):2834

RsaI polymorphism in von Willebrand factor (vWF) at codon 789. Kunkel GR, et al. **Nucleic Acids Res** 1990 Aug 25; 18(16):4961

BamHI RFLP at the GLUT3 locus. Patel P, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4967

A polymorphic DNA sequence from the terminal part of chromosome 12q [D12S37] Rouyer F, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1664

Tetranucleotide repeat polymorphism in the vWF gene. van Amstel HK, et al. **Nucleic Acids Res** 1990 Aug 25; 18(16):4957

Dinucleotide repeat polymorphism at the D12S43 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4637

Human collagen, type II, alpha 1, (COL2A1) gene: VNTR polymorphism detected by gene amplification. Wu S, et al. **Nucleic Acids Res** 1990 May 25;18(10):3102

Molecular cloning of the breakpoint region on chromosome 6 in cutaneous malignant melanoma: evidence for deletion in the c–myb locus and translocation of a segment of chromosome 12. Dasgupta P, et al. **Oncogene** 1989 Oct; 4(10):1201–5

Isochromosome 12p in non–seminoma cell lines: karyologic amplification of c–ki–ras2 without point–mutational activation. Dmitrovsky E, et al. **Oncogene** 1990 Apr; 5(4):543–8

Molecular and functional characterization of amylin, a peptide associated with type 2 diabetes mellitus. Roberts AN, et al. **Proc Natl Acad Sci U S A** 1989 Dec; 86(24):9662–6

Human chromosome 12 is required for elevated HIV–1 expression in human–hamster hybrid cells. Hart CE, et al. **Science** 1989 Oct 27;246(4929):488–91

[Tetrasomy 12p (Pallister–Killian syndrome): possible diagnosis before the age of a year] Chrzanowska K, et al. **J Genet Hum** 1989 Sep;37(3):259–61 (Eng. Abstr.) **(Fre)**

[Chronic myelomonocytic leukemia transformed from refractory anemia with ring sideroblasts with a rare abnormal chromosome, inv (12)] Hasegawa Y, et al. **Rinsho Ketsueki** 1990 Jan;31(1):75–9 (12 ref.) (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Prenatal diagnosis of Pallister–Killian syndrome. Soukup S, et al. **Am J Med Genet** 1990 Apr;35(4):526–8

Interstitial deletion of the short arm of chromosome 12. Report of a new patient and review of the literature. Fryns JP, et al. **Ann Genet** 1990;33(1):43–5 (14 ref.)

Malignant myxoid liposarcoma: an immunohistochemical, electron–microscopical and cytogenetical analysis. López–Ginés C, et al. **Appl Pathol** 1989;7(5):285–93

The human islet amyloid polypeptide (IAPP) gene. Organization, chromosomal localization and functional identification of a promoter region. Christmanson L, et al. **FEBS Lett** 1990 Jul 2;267(1):160–6

Molecular analysis of the isochromosome 12P in the Pallister–Killian syndrome. Construction of a mouse–human hybrid cell line containing an i(12p) as the sole human chromosome. Zhang J, et al. **Hum Genet** 1989 Nov;83(4):359–63

CHROMOSOMES, HUMAN, PAIR 13

Partial trisomy 13q: report of a case. Lin SJ, et al. **Acta Paediatr Sin** 1988 Jul–Aug;29(4):270–3

Exclusion of the retinoblastoma gene and chromosome 13q as the site of a primary lesion for human breast cancer. Bowcock AM, et al. **Am J Hum Genet** 1990 Jan;46(1):12–7

Esterase D assay in Brazilian retinoblastoma families. Costanzi E, et al. **Am J Med Genet** 1989 Nov;34(3):391–6

Trisomy 13 syndrome and neural tube defects. Rodríguez JI, et al. **Am J Med Genet** 1990 Aug;36(4):513–6 (26 ref.)

Retinoblastoma associated with holoprosencephaly. Desai VN, et al. **Am J Ophthalmol** 1990 Mar 15;109(3):355–6

Trisomy 13 and myelodysplastic syndrome. Beverstock GC, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):179–82

Structural alterations at the putative retinoblastoma locus in some human leukemias and preleukemia. Hansen MF, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):15–23

First cytogenetic evidence of homozygosity for the retinoblastoma deletion in chromosome 13. Lemieux N, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):73–8

Detection by electron microscopy of a small subband 13q14.11 deletion in an hereditary retinoblastoma. Lemieux N, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):265–9

Translocation t(13;17)(q12–14;p12–13) in two patients with lymphocytic lymphoma. Leroux D, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):243–7

A translocation (6;9)(p32;q34) and trisomy 13 in a case of childhood acute nonlymphocytic leukemia [letter] Stejskalova E, et al. **Cancer Genet Cytogenet** 1990 Mar; 45(1):139–41

A deletion linked to a poly(ADP–ribose) polymerase gene on chromosome 13q33–qter occurs frequently in the normal black population as well as in multiple tumor DNA. Bhatia KG, et al. **Cancer Res** 1990 Sep 1;50(17):5406–13

A somatic cell hybrid mapping panel for regional assignment of human chromosome 13 DNA sequences. Cowell JK, et al. **Cytogenet Cell Genet** 1989;52(1–2):1–6

Report of the committee on the genetic constitution of chromosomes 12 and 13. Ropers HH, et al. **Cytogenet Cell Genet** 1989;51(1–4):259–79 (308 ref.)

Chromosome mapping of the human RAS–related RAP1A, RAP1B, and RAP2 genes to chromosomes 1p12——p13, 12q14, and 13q34, respectively. Rousseau–Merck MF, et al. **Cytogenet Cell Genet** 1990;53(1):2–4

Structure and partial genomic sequence of the human retinoblastoma susceptibility gene. McGee TL, et al. **Gene** 1989 Aug 1;80(1):119–28

Evolution of alpha–satellite DNA on human acrocentric chromosomes. Choo KH, et al. **Genomics** 1989 Aug; 5(2):332–44

Autosomal dominant retinitis pigmentosa: exclusion of a gene from extensive regions of chromosomes 6, 13, 20, and 21. Farrar GJ, et al. **Genomics** 1989 Oct;5(3):612–8

An alpha satellite DNA polymorphism specific for the centromeric region of chromosome 13. Warren AC, et al. **Genomics** 1990 May;7(1):110–4

Analysis of meiotic segregation in a man heterozygous for a 13;15 Robertsonian translocation and a review of the literature. Pellestor F. **Hum Genet** 1990 Jun;85(1):49–54

Choroideremia associated with an X–autosomal translocation. Siu VM, et al. **Hum Genet** 1990 Apr;84(5):459–64

Echocardiographic evaluation of the spectrum of cardiac anomalies associated with trisomy 13 and trisomy 18. Musewe NN, et al. **J Am Coll Cardiol** 1990 Mar 1; 15(3):673–7

Two human lysosomal membrane glycoproteins, h–lamp–1 and h–lamp–2, are encoded by genes localized to chromosome 13q34 and chromosome Xq24–25, respectively. Mattei MG, et al. **J Biol Chem** 1990 May 5; 265(13):7548–51

Multiple abnormalities in a child with partial duplications of 10p and 13q from a 3:1 segregation of a maternal t(10;13) translocation. Yip MY, et al. **J Med Genet** 1990 Mar; 27(3):188–91

Trisomy 13 (Patau's syndrome): a rare case of survival into adulthood. Singh KS. **J Ment Defic Res** 1990 Feb;34 (Pt 1):91–3

Mapping of genes encoding coagulation factors VII and X to the distal portion of the 13q34 by gene dose study in a patient with r(13). Kasai R, et al. **Jinrui Idengaku Zasshi** 1989 Sep;34(3):247–50

Change in methylation status of DNA of remaining allele in human lung cancers with loss of heterozygosity on chromosomes 3p and 13q. Shiraishi M, et al. **Jpn J Cancer Res** 1989 Oct;80(10):924–7

The anonymous probe pR1–4 which identifies the locus D13S59 detects a BanII RFLP. Bowcock AM, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8396

The anonymous probe pF5A identifying the locus D13S61 detects RFLPs with XmnI and BanII. Bowcock AM, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8397

The single copy probe pG24E2.4 [D13S21] reveals a Bsp1286 RFLP at 13q14.1–q14.2. Bowcock AM, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8398

The anonymous probe pG50 identifying the locus D13S24 detects a two allele RFLP with SspI. Bowcock AM, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8399

The alpha chain of human propionyl CoA carboxylase (PCCA) mapped to chromosome 13) detects an RFLP with XmnI. Bowcock AM, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8400

A new, low frequency MspI allele at the D13S3 locus. Chidambaram A, et al. **Nucleic Acids Res** 1990 Mar 11; 18(5):1317

Detection of the XbaI RFLP within the retinoblastoma locus by PCR. McGee TL, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):207

MspI and PvuII polymorphisms in the Na,K–ATPase alpha subunit related gene ATP1AL1. Shull MM, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):205

PCR detection of the Tth 111 I RFLP at the RB locus. Vaughn GL, et al. **Nucleic Acids Res** 1990 Aug 25; 18(16):4965

Dinucleotide repeat polymorphism at the D13S71 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4638

Ocular abnormalities in Patau syndrome (chromosome 13 trisomy syndrome). Koole FD, et al. **Ophthalmic Paediatr Genet** 1990 Mar;11(1):15–21

Chromosomal jumping from the DXS165 locus allows molecular characterization of four microdeletions and a de novo chromosome X/13 translocation associated with choroideremia. Cremers FP, et al. **Proc Natl Acad Sci U S A** 1989 Oct;86(19):7510–4

Construction of the physical map for three loci in chromosome band 13q14: comparison to the genetic map. Higgins MJ, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(9):3415–9

Trisomy 13 in the fetus. Fujinaga M, et al. **Teratology** 1990 Feb;41(2):233–8

Robertsonian translocation associated with azoospermia. Sasagawa I, et al. **Urol Int** 1989;44(6):379–80

[A case of chromosome–13–abnormality (letter)] Conradie JM. **S Afr Med J** 1989 Dec 16;76(12):701–2 **(Afr)**

[An alpha–satellite DNA sequence, alpha–RI–6, specific for human chromosomes 13 and 21, detected using the RFLP technic with digoxigenin labelled probes] Mazura I, et al. **Cas Lek Cesk** 1989 Sep 29;128(40):1269–71 (Eng. Abstr.) **(Cze)**

[The placenta and trisomies 13, 18, 21] Labbé S, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(8):989–96 (Eng. Abstr.) **(Fre)**

[Analysis of the relative rates of synthesis of G gamma and A gamma globin chains in the erythropoietic bursts in patients with trisomy 13 syndrome] Sasaki H, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 May;52(3):583–7 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

[Gene–dosage effect of esterase D enzyme on erythrocytes in a patient with Patau's syndrome] Spano B, et al. **Pediatr Med Chir** 1990 Jan–Feb;12(1):67–9 (Eng. Abstr.) **(Ita)**

ULTRASTRUCTURE

Mosaic 13 trisomy due to de novo 13/13 translocation with subsequent fission. Karyotype: 46,XX,–13, +t(13;13)(p11;q11)/46,XX,del(13)(p11). A second example. Fryns JP, et al. **Ann Genet** 1989;32(3):177–9

The decrease of catalase or esterase D activity in patients with microdeletions of 11p or 13q does not increase their radiosensitivity. Sabatier L, et al. **Ann Genet** 1989; 32(3):144–8

Closely linked loci on the long arm of chromosome 13 flank a specific 2;13 translocation breakpoint in childhood rhabdomyosarcoma. Valentine M, et al. **Cytogenet Cell Genet** 1989;52(3–4):128–32

DXS165 detects a translocation breakpoint in a woman with choroideremia and a de novo X; 13 translocation. Merry DE, et al. **Genomics** 1990 Apr;6(4):609–15

CHROMOSOMES, HUMAN, PAIR 14

Calla–positive acute leukaemia with t(5q;14q) translocation and hypereosinophilia—a unique entity? Baumgarten E, et al. **Acta Haematol (Basel)** 1989;82(2):85–90

The human chromogranin A gene: chromosome assignment and RFLP analysis. Modi WS, et al. **Am J Hum Genet** 1989 Nov;45(5):814–8

A locus for familial hypertrophic cardiomyopathy is closely linked to the cardiac myosin heavy chain genes, CRI–L436, and CRI–L329 on chromosome 14 at q11–q12. Solomon SD, et al. **Am J Hum Genet** 1990 Sep;47(3):389–94

Krabbe disease locus mapped to chromosome 14 by genetic linkage. Zlotogora J, et al. **Am J Hum Genet** 1990 Jul; 47(1):37–44

Partial deletion of 14q and partial duplication of 14q in sibs: testicular mosaicism for t(14q;14q) as a common mechanism. Masada CT, et al. **Am J Med Genet** 1989 Dec; 34(4):528–34

Transmission of ring 14 chromosome from mother to two sons. Matalon R, et al. **Am J Med Genet** 1990 Aug; 36(4):381–5 (30 ref.)

Expression of the bcl–2 oncogene protein is not specific for the 14;18 chromosomal translocation. Pezzella F, et al. **Am J Pathol** 1990 Aug;137(2):225–32

Direct sequence analysis of the 14q+ and 18q– chromosome junctions in follicular lymphoma. Cotter F, et al. **Blood** 1990 Jul 1;76(1):131–5

A new human B–cell non–Hodgkin's lymphoma cell line (Karpas 422) exhibiting both t (14;18) and t(4;11) chromosomal translocations. Dyer MJ, et al. **Blood** 1990 Feb 1;75(3):709–14

14q32 translocations are associated with mixed–lineage expression in childhood acute leukemia. Hayashi Y, et al. **Blood** 1990 Jul 1;76(1):150–6

An additional breakpoint region in the BCL–1 locus associated with the t(11;14)(q13;q32) translocation of B–lymphocytic malignancy. Meeker TC, et al. **Blood** 1989 Oct;74(5):1801–6

Localization of breakpoints by polymerase chain reactions

in Burkitt's lymphoma with 8;14 translocations. Shiramizu B, et al. **Blood** 1990 May 1;75(9):1848–52
A case of follicular small cleaved cell lymphoma with t(14;18) and t(8;11). Bal S, et al. **Cancer Genet Cytogenet** 1990 Sep; 48(2):199–201
Characterization of the breakpoint of a t(14;14)(q11.2;q32) from the leukemic cells of a patient with T-cell acute lymphoblastic leukemia. Bertness VL, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):47–54
t(2;14)(q23;q32.3) as the sole abnormality in a patient with acute nonlymphocytic leukemia (FAB–M4). Columbano–Green LM, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):255–7
No evidence of trisomy 12 or t(11;14) by molecular genetic techniques in chronic lymphocytic leukemia cells with a normal karyotype. Einhorn S, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):183–92
Translocation between chromosomes 8q24 and 14q11 in T-cell acute lymphoblastic leukemia. Inaba T, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):69–74
Trisomy 14: a new entity within acute nonlymphocytic leukemia. Meloni–Ballliet A, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):35–8
Complex karyotypic changes, including rearrangements of 12q13 and 14q24, in two leiomyosarcomas. Nilbert M, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):217–23
Trisomy 14q in myelodysplastic syndromes. Pinkerton PH, et al. **Cancer Genet Cytogenet** 1990 Oct 1;49(1):113–6
Possible correlation between a specific alteration t(7;14) and the rearrangement of TCR observed in a Sézary's syndrome. Santos M, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):281–3
Inv(14)(q11q32) in one of four different clones in a case of angioimmunoblastic lymphadenopathy. Schlegelberger B, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):77–81
American Burkitt lymphoma stage II with 47,XY,+20,t(8;14)(q24;q32). Xiao H, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):275–7
Molecular characterization of a t(11;14)(q23;q32) chromosome translocation in a B-cell lymphoma. Akao Y, et al. **Cancer Res** 1990 Aug 15;50(16):4856–9
Amplified and rearranged bcl–2 gene in two lymphoma cell lines, FL–218 and FL–318, carrying a 14;18 translocation. Amakawa R, et al. **Cancer Res** 1990 Apr 15;50(8):2423–8
Rearrangements in the human T-cell–receptor alpha–chain locus in patients with adult T-cell leukemia carrying translocations involving chromosome 14q11. Isobe M, et al. **Cancer Res** 1990 Oct 1;50(19):6171–5
Detection of minimal residual disease in leukemic patients with the t(10;14)(q24;q11) chromosomal translocation. Kagan J, et al. **Cancer Res** 1990 Sep 1;50(17):5240–4
Unusual cytogenetic mosaicism involving chromosome 14 abnormalities in a child with an MR/MCA syndrome and abnormal pigmentation. Cantú ES, et al. **Clin Genet** 1989 Sep;36(3):189–95 (16 ref.)
Report of the committee on the genetic constitution of chromosomes 14 and 15. Cox DW, et al. **Cytogenet Cell Genet** 1989;51(1–4):280–98 (250 ref.)
Immunoglobulin heavy chain and alpha T-cell receptor genes rearrange in T-cell leukemia associated with a t(14;14)(q11.2;q32) translocation. Jhanwar SC, et al. **Cytogenet Cell Genet** 1990;53(2–3):155–60
Involvement of immunoglobulin heavy- and light-chain (kappa) gene clusters in a human B-cell translocation, t(2;14). Kennedy MA, et al. **Cytogenet Cell Genet** 1989; 52(1–2):50–6
Chromosome localization of two human serine protease genes to region 14q11.2——q12 by in situ hybridization. Lin CC, et al. **Cytogenet Cell Genet** 1990;53(2–3):169–71
The tal gene undergoes chromosome translocation in T cell leukemia and potentially encodes a helix–loop–helix protein. Chen Q, et al. **EMBO J** 1990 Feb;9(2):415–24
Novel use of a chimpanzee pseudogene for chromosomal mapping of human cytochrome c oxidase subunit IV. Lomax MI, et al. **Gene** 1990 Feb 14;86(2):209–16
Evolution of alpha–satellite DNA on human acrocentric chromosomes. Choo KH, et al. **Genomics** 1989 Aug; 5(2):332–44
Structure and chromosome localization of the human eosinophil–derived neurotoxin and eosinophil cationic protein genes: evidence for intronless coding sequences in the ribonuclease gene superfamily. Hamann KJ, et al. **Genomics** 1990 Aug;7(4):535–46
A physical map of the human PI and AACT genes. Sefton L, et al. **Genomics** 1990 Jul;7(3):382–8
Cloning of the breakpoint junction of the translocation 14;19 in chronic lymphocytic leukemia. McKeithan T, et al. **Hematol Bluttransfus** 1989;32:335–6
Isolation of a cDNA clone encoding a novel form of granzyme B from human NK cells and mapping to chromosome 14. Dahl CA, et al. **Hum Genet** 1990 Apr; 84(5):465–70
Partial trisomy of the distal segment 14q. Nakamura Y, et al. **Hum Genet** 1990 May;84(6):574–6
Segregation of acrocentric chromosome association in familial dicentric Robertsonian translocation t(14p;22p), aneuploidy (trisomy–21) and heteromorphism. Murthy DS, et al. **Indian J Exp Biol** 1990 Jun;28(6):511–5
Application of molecular cytogenetic techniques to the evaluation of renal parenchymal tumors. Kovacs G. **J Cancer Res Clin Oncol** 1990;116(4):318–23 (49 ref.)
The chromosome translocation (11;14)(p13;q11) associated with T cell acute leukemia. Asymmetric diversification of the translocational junctions. Cheng JT, et al. **J Exp Med** 1990 Feb 1;171(2):489–501
Childhood chronic lymphocytic leukemia with (2;14) translocation. Yoffe G, et al. **J Pediatr** 1990 Jan; 116(1):114–7
A case of incomplete DiGeorge syndrome associated with partial monosomy 22q11.1 due to maternal 14;22 translocation. Nukina S, et al. **Jinrui Idengaku Zasshi** 1989 Sep;34(3):235–41
Recent advances in the study of B-lymphoma with 14q+ chromosome marker in Japan. Fukuhara S. **Jpn J Clin Oncol** 1990 Mar;20(1):16–20 (33 ref.)
Trisomy 14 in atypical chronic myeloid leukemia. Mertens F, et al. **Leukemia** 1990 Feb;4(2):117–20
Amylase–producing plasmacytoma cell lines, AD3 and FR4, with der(14)t(8;14) and dic(8)t(1;8) established from ascites. Tagawa S, et al. **Leukemia** 1990 Aug;4(8):600–5
Serine proteinase inhibitors on chromosome 14 and the genetics of familial chronic obstructive airways disease. Kalsheker N. **Med Hypotheses** 1990 Jan;31(1):67–70
Relevance to prenatal diagnosis of the identification of a human Y/autosome translocation by Y–chromosome–specific in situ hybridisation. Ellis PM, et al. **Mol Reprod Dev** 1990 Jan;25(1):37–41
Mapping a gene for familial hypertrophic cardiomyopathy to chromosome 14q1. Jarcho JA, et al. **N Engl J Med** 1989 Nov 16;321(20):1372–8
Dinucleotide repeat polymorphism at the D14S34 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4638
The chromosome 11 region flanking the t(11;14) breakpoint in human T-ALL is deleted in Wilms' tumor hybrids. Finver SN, et al. **Oncogene Res** 1989;5(2):143–8
Molecular resemblance of an AIDS–associated lymphoma and endemic Burkitt lymphomas: implications for their pathogenesis. Haluska FG, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8907–11
A cluster of hematopoietic serine protease genes is found on the same chromosomal band as the human alpha/delta T-cell receptor locus. Hanson RD, et al. **Proc Natl Acad Sci U S A** 1990 Feb;87(3):960–3
Molecular analysis of a chromosomal translocation, t(9;14)(p13;q32), in a diffuse large–cell lymphoma cell line expressing the Ki–1 antigen. Ohno H, et al. **Proc Natl Acad Sci U S A** 1990 Jan;87(2):628–32
The t(10;14)(q24;q11) of T-cell acute lymphoblastic leukemia juxtaposes the delta T-cell receptor with TCL3, a conserved and activated locus at 10q24. Zutter M, et al. **Proc Natl Acad Sci U S A** 1990 Apr;87(8):3161–5
Robertsonian translocation associated with azoospermia. Sasagawa I, et al. **Urol Int** 1989;44(6):379–80
[Two siblings with interstitial deletion of chromosome 14 [46 XX, del (14) (q12 q13.3)]] Kodama M, et al. **No To Hattatsu** 1990 Jan;22(1):61–5 (Eng. Abstr.) **(Jpn)**
[Initial symptoms of hematemesis from gastric varix with chromosomal abnormalities of t(2; 8) and 14q+ in a patient with acute lymphoblastic leukemia (FAB: L3)] Amano M, et al. **Rinsho Ketsueki** 1989 Oct;30(10):1830–4 (Eng. Abstr.) **(Jpn)**
[Acute myelogenous leukemia (M2) simultaneously associated with multiple myeloma with special reference to chromosome abnormality of t(6; 14) (p21.1; q32.3)] Yashige H, et al. **Rinsho Ketsueki** 1990 Mar;31(3):359–64 (Eng. Abstr.) **(Jpn)**
[Epilepsy in ring chromosome 14 syndrome] Duarte MH, et al. **Arq Neuropsiquiatr** 1989 Jun;47(2):205–11 (Eng. Abstr.) **(Por)**
[Partial trisomy 14 and monosomy 21. Report of a case] Campos Tristán C, et al. **An Esp Pediatr** 1989 Jul;31(1):81–2 **(Spa)**

ANALYSIS

Deletion of 14q in non–Hodgkin's lymphoma. Kristoffersson U, et al. **Eur J Haematol** 1990 Apr;44(4):261–4
Physical mapping of probes within 14q32, a subtelomeric region showing a high recombination frequency. Hofker MH, et al. **Genomics** 1990 Jan;6(1):33–8

ULTRASTRUCTURE

Inv(14) with distal breakpoint in 14q32.1 in three cases of T cell lymphoma. Schlegelberger B, et al. **Hum Genet** 1990 Jun;85(1):80–4
Terminal deletion (14)(q32.3): a new case. Telford N, et al. **J Med Genet** 1990 Apr;27(4):261–3 (5 ref.)
Prenatal diagnosis of trisomy for the distal two–thirds of the long arm of chromosome 14 (q21——qter). Duckett DP, et al. **Prenat Diagn** 1990 Apr;10(4):261–4
[Molecular analysis in Argentinian patients with Burkitt's lymphoma] Gutiérrez MI, et al. **Sangre (Bare)** 1990 Feb; 35(1):10–4 (Eng. Abstr.) **(Spa)**

CHROMOSOMES, HUMAN, PAIR 15

Angelman syndrome: three molecular classes identified with chromosome 15q11q13–specific DNA markers. Knoll JH, et al. **Am J Hum Genet** 1990 Jul;47(1):149–55
Prader–Willi syndrome: current understanding of cause and diagnosis. Butler MG. **Am J Med Genet** 1990 Mar; 35(3):319–32
Craniosynostosis in an infant with an interstitial deletion of 15q [46,XY,del(15)(q15q22.1)]. Fukushima Y, et al. **Am J Med Genet** 1990 Jun;36(2):209–13
Detection of molecular rearrangements in Prader–Willi syndrome patients by using genomic probes recognizing four loci within the PWCR. Gregory CA, et al. **Am J Med Genet** 1990 Apr;35(4):536–45
Partial expression of Angelman syndrome in mother most likely to be due to mosaicism involving both somatic and germline cells [letter; comment] Hall JG. **Am J Med Genet** 1990 Jul;36(3):369–70 Comment on: Am J Med Genet 1989 Mar;32(3):333–8.
Rare 15q duplication in an abortus [letter] Jalal SM, et al. **Am J Med Genet** 1989 Jul;33(3):422–3
Comparison of the 15q deletions in Prader–Willi and Angelman syndromes: specific regions, extent of deletions, parental origin, and clinical consequences. Magenis RE, et al. **Am J Med Genet** 1990 Mar;35(3):333–49
Duplication of 16q and deletion of 15q. Nyhan WL, et al. **Am J Med Genet** 1989 Oct;34(2):183–6
Autistic disorder and additional inv dup(15)(pter——q13) chromosome [comment] Schinzel A. **Am J Med Genet** 1990 Mar;35(3):447–8 Comment on: Am J Med Genet 1989 Jan;32(1):19–21.
Maternal origin of 15q11–13 deletions in Angelman syndrome suggests a role for genomic imprinting. Williams CA, et al. **Am J Med Genet** 1990 Mar;35(3):350–3
A new family with extra material on proximal 15q. Turolla L, et al. **Ann Genet** 1989;32(4):230–2
Acute myeloid leukaemia with chromosomal rearrangement involving breakpoints on chromosomes 15 and 22; 46XY, t(15;22)(q12;q13). Ng JP, et al. **Br J Haematol** 1989 Oct; 73(2):270–2
Proximal 15q variant as possible pitfall in the cytogenetic diagnosis of Prader–Willi syndrome. Hoo JJ, et al. **Clin Genet** 1990 Mar;37(3):161–6
Report of the committee on the genetic constitution of chromosomes 14 and 15. Cox DW, et al. **Cytogenet Cell Genet** 1989;51(1–4):280–98 (250 ref.)
Microdissection of the Prader–Willi syndrome chromosome region and identification of potential gene sequences. Buiting K, et al. **Genomics** 1990 Mar;6(3):521–7
Evolution of alpha–satellite DNA on human acrocentric chromosomes. Choo KH, et al. **Genomics** 1989 Aug; 5(2):332–44
Identification of two distinct subfamilies of alpha satellite DNA that are highly specific for human chromosome 15. Choo KH, et al. **Genomics** 1990 Jun;7(2):143–51
Mapping of the thrombospondin gene to human chromosome 15 and mouse chromosome 2 by in situ hybridization. Jaffe E, et al. **Genomics** 1990 May;7(1):123–6
Assignment of the gene for neuroendocrine protein 7B2 (SGNE1 locus) to mouse chromosome region 2[E3–F3] and to human chromosome region 15q11–q15. Mattei MG, et al. **Genomics** 1990 Mar;6(3):436–40
Structure and chromosomal localization of the human thrombospondin gene. Wolf FW, et al. **Genomics** 1990 Apr; 6(4):685–91
A case of ring chromosome 15 accompanied by almost normal intelligence. Kitatani M, et al. **Hum Genet** 1990 Jun;85(1):138–9
Analysis of meiotic segregation in a man heterozygous for a 13;15 Robertsonian translocation and a review of the literature. Pellestor F. **Hum Genet** 1990 Jun;85(1):49–54
Angelman's syndrome, abnormality of 15q11–13, and imprinting [letter] Hall JG. **J Med Genet** 1990 Feb;27(2):141
Autism, profound mental retardation and atypical bipolar disorder in a 33–year–old female with a deletion of 15q12. Kerbeshian J, et al. **J Ment Defic Res** 1990 Apr;34 (Pt 2):205–10
Location on chromosome 15 of the gene defect causing Marfan syndrome [see comments] Kainulainen K, et al. **N Engl J Med** 1990 Oct 4;323(14):935–9 Comment in: N Engl J Med 1990 Oct 4;323(14):987–9.
Genetic imprinting suggested by maternal heterodisomy in nondeletion Prader–Willi syndrome. Nicholls RD, et al. **Nature** 1989 Nov 16;342(6247):281–5
PstI polymorphism at the human P1450 gene on chromosome 15. Haugen A, et al. **Nucleic Acids Res** 1990 May 25; 18(10):3114
Three allele TaqI RFLP for probe 3–21 [D15S10] on chromosome 15q. Nicholls RD, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10140
RFLPs for beta 2–microglobulin. Nicholls RD, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10141
An additional MspI RFLP at the human hepatic lipase (HL) gene locus. van Eyk R, et al. **Nucleic Acids Res** 1990 May 25;18(10):3110
Dinucleotide repeat polymorphism at the D15S87 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4640
Familial marker chromosome due to 3:1 disjunction of t(9;15) in a grandparent. Winsor EJ, et al. **Prenat Diagn** 1989 Dec; 9(12):851–5
Fine assignment of beta–hexosaminidase A alpha–subunit on 15q23–q24 by high resolution in situ hybridization. Takeda K, et al. **Tohoku J Exp Med** 1990 Mar;160(3):203–11
[Acute promyelocytic leukemia and 15;17 chromosome translocation] Xue YQ. **Chung Hua I Hsueh Tsa Chih** 1989 Aug;69(8):434–7, 30 (Eng. Abstr.) **(Chi)**
[Translocation T (1;15) (Q21;P13) in a male with azoospermia] Antiñolo G, et al. **Actas Urol Esp** 1989 Nov–Dec;13(6):465–6 (Eng. Abstr.) **(Spa)**

CHROMOSOMES, HUMAN, PAIR 16

Myelodysplastic syndrome preceding acute myelomonocytic leukemia with dysplastic marrow eosinophilia and inv(16). Horiike S, et al. **Acta Haematol (Basel)** 1989;82(3):161–4

Identification of a locus which shows no genetic recombination with the autosomal dominant polycystic kidney disease gene on chromosome 16. Germino GG, et al. **Am J Hum Genet** 1990 May;46(5):925–33

Chromosome-specific alpha satellite DNA from the centromere of human chromosome 16. Greig GM, et al. **Am J Hum Genet** 1989 Dec;45(6):862–72

Clinical features and molecular analysis of the alpha thalassemia/mental retardation syndromes. I. Cases due to deletions involving chromosome band 16p13.3. Wilkie AO, et al. **Am J Hum Genet** 1990 Jun;46(6):1112–26

Duplication of euchromatin without phenotypic effects: a variant of chromosome 16. Bryke CR, et al. **Am J Med Genet** 1990 May;36(1):43–4

Duplication of 16q and deletion of 15q. Nyhan WL, et al. **Am J Med Genet** 1989 Oct;34(2):183–6

Mosaic trisomy 16 in a live newborn infant. Gilbertson NJ, et al. **Arch Dis Child** 1990 Apr;65(4 Spec No):388–9

Translocation of chromosomes 16 and 18 in oxygen radical–transformed human lung fibroblasts. Weitberg AB, et al. **Biochem Biophys Res Commun** 1990 May 31; 169(1):70–4

Hemoglobin H disease caused by two gene deletions. Zago MA, et al. **Braz J Med Biol Res** 1989;22(6):675–81

Acute nonlymphocytic leukemia with t(16;21) [letter; comment] Berkowicz M, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):139–40 Comment on: Cancer Genet Cytogenet 1988 Dec;36(2):221–3.

Localization of the chromosomal breakpoints of the t(12;16) in liposarcoma to subbands 12q13.3 and 16p11.2. Eneroth M, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):101–7

Is trisomy 22 in acute myeloid leukemia a primary abnormality or only a secondary change associated with inversion 16? Grois N, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):119–29

Cytogenetic study of a sclerosing stromal tumor of the ovary. Lopes JM, et al. **Cancer Genet Cytogenet** 1990 Oct 1; 49(1):103–6

Acute myelogenous leukemia (FAB M1) associated with t(5;16) and eosinophilia. Report of an additional case. Sanada I, et al. **Cancer Genet Cytogenet** 1989 Nov; 43(1):139–41

Rearrangement of the human ABL oncogene in a glioblastoma. Heisterkamp N, et al. **Cancer Res** 1990 Jun 1;50(11):3429–34

The cis–configuration effects of rare chromosomal fragile sites. Côté GB. **Clin Genet** 1990 Jun;37(6):470–2

Batten disease (Spielmeyer–Sjøgren disease) and haptoglobins (HP): indication of linkage and assignment to chr. 16. Eiberg H, et al. **Clin Genet** 1989 Oct;36(4):217–8

Genetic variation on chromosome 16 is associated with abdominal aortic aneurysm. Powell JT, et al. **Clin Sci** 1990 Jan;78(1):13–6

Rapid detection of chromosome 16 inversion in acute nonlymphocytic leukemia, subtype M4: regional localization of the breakpoint in 16p. Dauwerse JG, et al. **Cytogenet Cell Genet** 1990;53(2–3):126–8

Rapid subchromosomal localization of cosmids by nonradioactive in situ hybridization. Kievits T, et al. **Cytogenet Cell Genet** 1990;53(2–3):134–6

Localisation of human PGP and HAGH genes to 16p13.3. Mulley JC, et al. **Cytogenet Cell Genet** 1990;53(2–3):175–6

The human genes for calbindin 27 and 29 kDa proteins are located on chromosomes 8 and 16, respectively. Parmentier M, et al. **Cytogenet Cell Genet** 1989;52(1–2):85–7

Report of the committee on the genetic constitution of chromosome 16. Reeders ST, et al. **Cytogenet Cell Genet** 1989;51(1–4):299–318 (147 ref.)

Novel use of a chimpanzee pseudogene for chromosomal mapping of human cytochrome c oxidase subunit IV. Lomax MI, et al. **Gene** 1990 Feb 14;86(2):209–16

A long-range restriction map between the alpha-globin complex and a marker closely linked to the polycystic kidney disease 1 (PKD1) locus. Harris PC, et al. **Genomics** 1990 Jun;7(2):195–206

Completion of the primary structure of the human type IV collagenase preproenzyme and assignment of the gene (CLG4) to the q21 region of chromosome 16. Huhtala P, et al. **Genomics** 1990 Mar;6(3):554–9

A primary map of 24 loci on human chromosome 16. Julier C, et al. **Genomics** 1990 Mar;6(3):419–27

Chromosomal localization and structure of the human P1 protamine gene. Krawetz SA, et al. **Genomics** 1989 Oct; 5(3):639–45

Localization of three DNA segments encompassing tRNA genes to human chromosomes 1, 5, and 16: proposed mechanism and significance of tRNA gene dispersion. McBride OW, et al. **Genomics** 1989 Oct;5(3):561–73

Gene mapping on mouse chromosome 8 by interspecific crosses: new data on a linkage group conserved on human chromosome 16q. Scherer G, et al. **Genomics** 1989 Aug; 5(2):275–82

The human metallothionein gene cluster is not disrupted in myelomonocytic leukemia. Sutherland GR, et al. **Genomics** 1990 Jan;6(1):144–8

A novel human DNA polymorphism resulting from transfer of DNA from chromosome 6 to chromosome 16. Wong Z, et al. **Genomics** 1990 Jun;7(2):222–34

Probe, VK5B, is located in the same interval as the autosomal dominant adult polycystic kidney disease locus, PKD1. Hyland VJ, et al. **Hum Genet** 1990 Feb;84(3):286–8

Replication studies in the 16p+ variant. Thompson PW, et al. **Hum Genet** 1990 Mar;84(4):371–2

Chromosomal localization of the human protamine genes, PRM1 and PRM2, to 16p13.3 by in situ hybridization. Viguié F, et al. **Hum Genet** 1990 Jul;85(2):171–4

Gene mapping on chorionic villi chromosomes by hybridization in situ: localization of cholinesterase cDNA binding sites to chromosomes 3q21, 3q26–ter and 16q21. Zakut H, et al. **Hum Reprod** 1989 Nov;4(8):941–6

Tissue-specific expression, developmental regulation, and chromosomal mapping of the lecithin: cholesterol acyltransferase gene. Evidence for expression in brain and testes as well as liver. Warden CH, et al. **J Biol Chem** 1989 Dec 25;264(36):21573–81

Mapping of PRM1 to human chromosome 16 and tight linkage of Prm–1 and Prm–2 on mouse chromosome 16. Reeves RH, et al. **J Hered** 1989 Nov–Dec;80(6):442–6

Small marker chromosomes in man: origin from pericentric heterochromatin of chromosomes 1, 9, and 16. Callen DF, et al. **J Med Genet** 1990 Mar;27(3):155–9

Recombination or heterogeneity: is there a second locus for adult polycystic kidney disease? Elles RG, et al. **J Med Genet** 1990 Jul;27(7):413–7

Cosegregation of hypertrophic cardiomyopathy and a fragile site on chromosome 16 in a large Italian family. Ferraro M, et al. **J Med Genet** 1990 Jun;27(6):363–6

Translocation t(12;16)(q13;p11) in myxoid liposarcoma of a child and implication of the human int–1 gene in tumorigenesis. Fujii Y, et al. **Jpn J Cancer Res** 1989 Oct; 80(10):958–62

Frequent loss of heterozygosity on chromosomes 16 and 4 in human hepatocellular carcinoma. Zhang WD, et al. **Jpn J Cancer Res** 1990 Feb;81(2):108–11

Detection of breakpoints in submicroscopic chromosomal translocation, illustrating an important mechanism for genetic disease [see comments] Lamb J, et al. **Lancet** 1989 Oct 7;2(8667):819–24 Comment in: Lancet 1989 Dec 16;2(8677):1449.

Non–mosaic trisomy 16 confined to villi [letter] Verp MS, et al. **Lancet** 1989 Oct 14;2(8668):915–6

Molecular genetics of alpha thalassemia. Igbokwe EC. **Med Hypotheses** 1989 Oct;30(2):75–9

A TaqI polymorphism identified by 26–6 (D16S125) proximal to the locus affecting adult polycystic kidney disease (PKD1) on chromosome 16. Breuning MH, et al. **Nucleic Acids Res** 1990 May 25;18(10):3106

A new AvaII RFLP in the human alpha–globin gene cluster. Fodde R, et al. **Nucleic Acids Res** 1990 May 25;18(10):3104

Isolation and mapping of a polymorphic DNA sequence (CJ52.161) on chromosome 16 [D16S150] Julier C, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8402

Isolation and mapping of a polymorphic DNA sequence (CJ52.96) on chromosome 16 [D16S157] Julier C, et al. **Nucleic Acids Res** 1989 Nov 25;17(22):9506

Isolation and mapping of a polymorphic DNA sequence (pCJ52.209M1) on chromosome 16 [D16S151] Julier C, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7542

Isolation and mapping of a polymorphic DNA sequence (pCJ52.94T1) on chromosome 16 [D16S159] Julier C, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7543

Isolation and mapping of a polymorphic DNA sequence (CJ52.10) on chromosome 16 [D16S153] Julier C, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):8012

Isolation and mapping of a polymorphic DNA sequence (CJ52.27) on chromosome 16 [D16S149] Julier C, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):8013

Isolation and mapping of a polymorphic DNA sequence (CJ52.1) on chromosome 16 [D16S152] Julier C, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):8014

Isolation and mapping of a polymorphic DNA sequence (CJ52.197) on chromosome 16 [D16S156] Julier C, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):8015

Isolation and mapping of a polymorphic DNA sequence (CJ52.105) on chromosome 16 [D16S154] Julier C, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):8016

Isolation and mapping of a polymorphic DNA sequence (pCJ52.95M1) on chromosome 16 [D16S148] Julier C, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):8017

Isolation and mapping of a polymorphic DNA sequence (pCJ52.196M1) on chromosome 16 [D16S160] Julier C, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):8018

Isolation and mapping of a polymorphic DNA sequence (CJ52.112) on chromosome 16 [D16S158] Julier C, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):8019

Isolation and mapping of a polymorphic DNA sequence (CJ52.199) on chromosome 16 [D16S155] Julier C, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):8020

Isolation and mapping of a polymorphic DNA sequence (pCJ52.209M2) on chromosome 16 [D16S151] Julier C, et al. **Nucleic Acids Res** 1989 Oct 11;17(19):8021

Two RFLPs detected by a cosmid at locus D16S144. Lerner TJ, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4962

Probe 218EP6 (D16S246) detects RFLP's close to the locus affecting adult polycystic kidney disease (PKD1) on chromosome 16. Snijdewint FG, et al. **Nucleic Acids Res** 1990 May 25;18(10):3108

Dinucleotide repeat polymorphisms at the D16S260, D16S261, D16S265, D16S266, and D16S267 loci. Weber JL, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):4034

EcoN I polymorphism in the human cholesteryl ester transfer protein (CEPT) gene. Zuliani G, et al. **Nucleic Acids Res** 1990 May 11;18(9):2834

Prenatal diagnosis of adult polycystic kidney disease with DNA markers on chromosome 16 and the genetic heterogeneity problem. Novelli G, et al. **Prenat Diagn** 1989 Nov;9(11):759–67

Genetic linkage map of 46 DNA markers on human chromosome 16. Keith TP, et al. **Proc Natl Acad Sci U S A** 1990 Aug;87(15):5754–8

Allele loss on chromosome 16 associated with progression of human hepatocellular carcinoma. Tsuda H, et al. **Proc Natl Acad Sci U S A** 1990 Sep;87(17):6791–4

[Cytogenetic studies of spontaneous abortions in humans] Zhou CR. **Chung Hua Fu Chan Ko Tsa Chih** 1990 Mar; 25(2):89–91, 124 (Eng. Abstr.) **(Chi)**

[16q+ partial trisomy in a 7–day–old surviving neonate] Zidovská J, et al. **Cesk Pediatr** 1989 Oct;44(10):608–9 (Eng. Abstr.) **(Cze)**

[Autosomal dominant polycystic kidney and genetic markers of chromosome 16] Ferec C, et al. **Nephrologie** 1990; 11(2):79–82 (Eng. Abstr.) **(Fre)**

[Familial nystagmus and hypoplasia of the macular in reciprocal, balanced translocation 5/16] Hammerstein W, et al. **Fortschr Ophthalmol** 1989;86(6):718–21 (Eng. Abstr.) **(Ger)**

[Symptomatic calcification in the newborn. Phenocopies of chondrodysplasia punctata] Leicher–Düber A, et al. **ROFO** 1990 Apr;152(4):463–8 (Eng. Abstr.) **(Ger)**

[A case of chronic neutrophilic leukemia with abnormal karyotype] Kunishima S, et al. **Rinsho Byori** 1989 Aug; 37(8):943–7 (Eng. Abstr.) **(Jpn)**

[Acute leukemia with active hemophagocytosis, positive immunologic markers for the megakaryocyte–platelet lineage, and translocation (16; 21) (p11; q22)] Shimizu H, et al. **Rinsho Ketsueki** 1990 Jan;31(1):70–4 (Eng. Abstr.) **(Jpn)**

[Acute myelomonocytic leukemia with inv (16) (p13 q22) disappeared abnormal karyotype during complete remission] Tsushima Y, et al. **Rinsho Ketsueki** 1989 Dec; 30(12):2178–82 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Centromeric heterochromatin instability of chromosomes 1, 9, and 16 in variable immunodeficiency syndrome—a virus–induced phenomenon? Haas OA. **Hum Genet** 1990 Jul;85(2):244–6 (19 ref.)

Rapid detection of polymorphism near gene for adult polycystic kidney disease [letter] Saris JJ, et al. **Lancet** 1990 May 5;335(8697):1102–3

ULTRASTRUCTURE

Direct duplication 16q11.1——16q13 is not associated with a typical dysmorphic syndrome. Fryns JP, et al. **Ann Genet** 1990;33(1):46–8 (16 ref.)

Ring chromosome 16: a new case. Vianello MG, et al. **Ann Genet** 1990;33(1):36–9 (8 ref.)

Malignant myxoid liposarcoma: an immunohistochemical, electron–microscopical and cytogenetical analysis. López–Ginés C, et al. **Appl Pathol** 1989;7(5):285–93

A truncated human chromosome 16 associated with alpha thalassaemia is stabilized by addition of telomeric repeat (TTAGGG)n. Wilkie AO, et al. **Nature** 1990 Aug 30; 346(6287):868–71

CHROMOSOMES, HUMAN, PAIR 17

Renal cortical tumors. Cytogenetic characterization. Dal Cin P, et al. **Am J Clin Pathol** 1989 Oct;92(4):408–14

Refined physical and genetic mapping of the NF1 region on chromosome 17. Fain PR, et al. **Am J Hum Genet** 1989 Nov;45(5):721–8

Identification of the functional profilin gene, its localization to chromosome subband 17p13.3, and demonstration of its deletion in some patients with Miller–Dieker syndrome. Kwiatkowski DJ, et al. **Am J Hum Genet** 1990 Mar; 46(3):559–67

Linkage of hereditary motor and sensory neuropathy type I to the pericentromeric region of chromosome 17. Middleton–Price HR, et al. **Am J Hum Genet** 1990 Jan; 46(1):92–4

Genetic mapping of autosomal dominant Charcot–Marie–Tooth disease in a large French–Acadian kindred: identification of new linked markers on chromosome 17 [published erratum appears in Am J Hum Genet 1990 Jul;47(1):172] Patel PI, et al. **Am J Hum Genet** 1990 Apr;46(4):801–9

Localization of the mutation in an extended family with Charcot–Marie–Tooth neuropathy (HMSN I). Raeymaekers P, et al. **Am J Hum Genet** 1989 Dec; 45(6):953–8

Consistent linkage of dominantly inherited osteogenesis imperfecta to the type I collagen loci: COL1A1 and COL1A2. Sykes B, et al. **Am J Hum Genet** 1990 Feb; 46(2):293–307

Localization of the human UbB polyubiquitin gene to chromosome band 17p11.1–17p12. Webb GC, et al. **Am J Hum Genet** 1990 Feb;46(2):308–15

p53 gene mRNA expression and chromosome 17p allele loss in breast cancer. Thompson AM, et al. **Br J Cancer** 1990

Jan;61(1):74–8
High incidence of 17p13 chromosomal abnormalities in malignant histiocytosis. Abe R, et al. **Cancer** 1990 Jun 15; 65(12):2689–96 (20 ref.)
A complex t(3;8;17) involving breakpoint 8p11 in a case of M5 acute nonlymphocytic leukemia with erythrophagocytosis. Bertheas MF, et al. **Cancer Genet Cytogenet** 1989 Oct 1;42(1):67–73
Deletion of part of the short arm of chromosome 17 in a congenital fibrosarcoma. Gorman PA, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):193–8 (17 ref.)
Translocations (5;17) and (7;17) in patients with de novo or therapy-related myelodysplastic syndromes or acute nonlymphocytic leukemia. A possible association with acquired pseudo-Pelger-Huët anomaly and small vacuolated granulocytes. Lai JL, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):173–83
Translocation t(13;17)(q12–14;p12–13) in two patients with lymphocytic lymphoma. Leroux D, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):243–7
Molecular analysis of Philadelphia-negative myeloproliferative syndromes with i(17q). Mareni C, et al. **Cancer Genet Cytogenet** 1989 Dec;43(2):195–201
Complex translocations in a patient with chronic myelocytic leukemia: t(9;22;17) and t(10;18;19) after two failed bone marrow transplantations. Melnyk A, et al. **Cancer Genet Cytogenet** 1990 May;46(1):83–7
A new variant translocation 11;17 in a patient with acute promyelocytic leukemia together with t(7;12). Najfeld V, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):103–8
Deletion of 5q by t(5;17) in therapy-related myelodysplastic syndrome. Vandenberghe EA, et al. **Cancer Genet Cytogenet** 1990 Aug 1;48(1):49–52
Loss of heterozygosity for loci on chromosome 17p in human malignant astrocytoma. Fults D, et al. **Cancer Res** 1989 Dec 1;49(23):6572–7
Frequent loss of heterozygosity on chromosomes 6q, 11, and 17 in human ovarian carcinomas. Lee JH, et al. **Cancer Res** 1990 May 1;50(9):2724–8
Assignment of common allele loss in osteosarcoma to the subregion 17p13 [see comments] Toguchida J, et al. **Cancer Res** 1989 Nov 15;49(22):6247–51 Comment in: Cancer Res 1990 Apr 15;50(8):2543.
Allelic losses of chromosomes 9, 11, and 17 in human bladder cancer. Tsai YC, et al. **Cancer Res** 1990 Jan 1;50(1):44–7
Deletions and a translocation interrupt a cloned gene at the neurofibromatosis type 1 locus. Viskochil D, et al. **Cell** 1990 Jul 13;62(1):187–92
Trisomy 17p due to a t(8;17) (p23;p11.2)pat translocation. Case report and review of the literature. Schrander-Stumpel C, et al. **Clin Genet** 1990 Feb; 37(2):148–52 (7 ref.)
Loss of heterozygosity on 17p in human breast carcinomas: defining the smallest common region of deletion. Devilee P, et al. **Cytogenet Cell Genet** 1990;53(1):52–4
Report of the committee on the genetic constitution of chromosome 17. Solomon E, et al. **Cytogenet Cell Genet** 1989;51(1–4):319–37 (208 ref.)
Acute nonlymphocytic leukemia (ANLL) with isochromosome i(17q) as the sole chromosomal anomaly: a distinct entity? Weh HJ, et al. **Eur J Haematol** 1990 May; 44(5):312–4
Human embryonic myosin heavy chain cDNA. Interspecies sequence conservation of the myosin rod, chromosomal locus and isoform specific transcription of the gene. Eller M, et al. **FEBS Lett** 1989 Oct 9;256(1–2):21–8
Generation of a full-length human perinatal myosin heavy-chain-encoding cDNA. Karsch-Mizrachi I, et al. **Gene** 1990 May 14;89(2):289–94
Isolation and characterization of cDNA encoding the gamma-subunit of cGMP phosphodiesterase in human retina. Tuteja N, et al. **Gene** 1990 Apr 16;88(2):227–32
The 5' flanking region and chromosomal localization of the gene encoding human platelet membrane glycoprotein Ib alpha. Wenger RH, et al. **Gene** 1989 Dec 28;85(2):517–24
At least four different chromosomal regions are involved in loss of heterozygosity in human breast carcinoma. Devilee P, et al. **Genomics** 1989 Oct;5(3):554–60
Localization of a human T-cell-specific gene, RANTES (D17S136E), to chromosome 17q11.2–q12. Donlon TA, et al. **Genomics** 1990 Mar;6(3):548–53
Human chromosome 17 NotI linking clones and their use in long-range restriction mapping of the Miller-Dieker chromosome region (MDCR) in 17p13.3. Ledbetter SA, et al. **Genomics** 1990 Jun;7(2):264–9
Localization of a locus for Charcot-Marie-Tooth neuropathy type Ia (CMT1A) to chromosome 17. McAlpine PJ, et al. **Genomics** 1990 Jul;7(3):408–15
Characterization of a translocation within the von Recklinghausen neurofibromatosis region of chromosome 17. Menon AG, et al. **Genomics** 1989 Aug;5(2):245–9
The human homolog of murine Evi-2 lies between two von Recklinghausen neurofibromatosis translocations. O'Connell P, et al. **Genomics** 1990 Aug;7(4):547–54
Localization of the Miller-Dieker critical region is proximal to locus D17S34 (p144D6) in 17p13.3. Schwartz CE, et al. **Genomics** 1990 Aug;7(4):621–4
Human embryonic/atrial myosin alkali light chain gene: characterization, sequence, and chromosomal location. Scharaseyon J, et al. **Genomics** 1990 Jun;7(2):289–93
A genetic map of human chromosome 17p. Wright EC, et al. **Genomics** 1990 May;7(1):103–9
Chromosomes 17 and 22 involved in marker formation in neurofibrosarcoma in von Recklinghausen disease. A cytogenetic and in situ hybridization study. Decker HJ, et al. **Hum Genet** 1990 Aug;85(3):337–42
The achondroplasia gene is not linked to the locus for neurofibromatosis 1 on chromosome 17. Pulst SM, et al. **Hum Genet** 1990 Jun;85(1):12–4
Localization of the cell surface antigen CD7 by chromosomal in situ hybridization. Baker E, et al. **Immunogenetics** 1990; 31(5–6):412–3
Regulation of the gene for estrogenic 17-ketosteroid reductase lying on chromosome 17cen——q25. Tremblay Y, et al. **J Biol Chem** 1989 Dec 5;264(34):20458–62
Application of molecular cytogenetic techniques to the evaluation of renal parenchymal tumors. Kovacs G. **J Cancer Res Clin Oncol** 1990;116(4):318–23 (49 ref.)
Duplication of distal 17q from a maternal translocation: an additional case with some unique features. Caine A, et al. **J Med Genet** 1989 Sep;26(9):577–89
Five cases demonstrating the distinctive behavioural features of chromosome deletion 17(p11.2 p11.2) (Smith-Magenis syndrome). Colley AF, et al. **J Paediatr Child Health** 1990 Feb;26(1):17–21
Characterization of two mRNA species encoding human estradiol 17 beta-dehydrogenase and assignment of the gene to chromosome 17. Labrie F, et al. **J Steroid Biochem** 1989;34(1–6):189–97
Evidence implicating at least two genes on chromosome 17p in breast carcinogenesis. Coles C, et al. **Lancet** 1990 Sep 29;336(8718):761–3
Increased expression of mutant forms of p53 oncogene in primary lung cancer. Iggo R, et al. **Lancet** 1990 Mar 24; 335(8691):675–9
Human genetics. Neurofibromatosis gene cloned [news] Ponder B. **Nature** 1990 Aug 23;346(6286):703–4
Genetic linkage of hereditary motor and sensory neuropathy type I (Charcot-Marie-Tooth disease) to markers of chromosomes 1 and 17. Defesche JC, et al. **Neurology** 1990 Sep;40(9):1450–3
Codon 72 polymorphism of the TP53 gene. Ara S, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4961
A HindIII polymorphism identified by a DNA clone which maps to chromosome 17 (D17S245). Brook JD, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1085
Biallelic Bgl II DNA polymorphism of the human p53 oncogene. de la Calle O, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):206
AccII polymorphism of the p53 gene. de la Calle-Martín O, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4963
MspI polymorphism of the human p53 gene. de la Calle-Martín O, et al. **Nucleic Acids Res** 1990 Aug 25; 18(16):4963
Two inflammatory mediator cytokine genes are closely linked and variably amplified on chromosome 17q. Irving SG, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3261–70
Isolation of a polymorphic DNA sequence (LL101) from the short arm of chromosome 17 [D17S251] Patel PI, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1087
Three polymorphisms at the D17S29 locus. Ray R, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4958
PstI RFLP at the MYH2 locus on chromosome 17. Schwartz C. **Nucleic Acids Res** 1990 May 11;18(9):2837
A StuI polymorphism in the human granulocyte colony-stimulating factor gene. Tani K, et al. **Nucleic Acids Res** 1989 Sep 25;17(18):7544
Identification of an RsaI RFLP at the acid alpha glucosidase (GAA) locus. Tzall S, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1661
Further characterization of SacI RFLPs at the acid alpha glucosidase (GAA) locus. Tzall S, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1930
Dinucleotide repeat polymorphisms at the D17S250 and D17S261 loci. Weber JL, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4640
A rearranged transforming gene, tre, is made up of human sequences derived from chromosome regions 5q, 17q and 18q. Huebner K, et al. **Oncogene** 1988 Oct;3(4):449–55
Activation of MYC in a masked t(8;17) translocation results in an aggressive B-cell leukemia. Gauwerky CE, et al. **Proc Natl Acad Sci U S A** 1989 Nov;86(22):8867–71
Chromosome 17p deletions and p53 gene mutations associated with the formation of malignant neurofibrosarcomas in von Recklinghausen neurofibromatosis. Menon AG, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(14):5435–9
Genetic and physical map of the von Recklinghausen neurofibromatosis (NF1) region on chromosome 17. Yagle MK, et al. **Proc Natl Acad Sci U S A** 1990 Sep; 87(18):7255–9
[Acute promyelocytic leukemia and 15;17 chromosome translocation] Xue YQ. **Chung Hua I Hsueh Tsa Chih** 1989 Aug;69(8):434–7, 30 (Eng. Abstr.) **(Chi)**
[Chromosomes and cancer of the colon (editorial)] De Juan Martín M. **Rev Esp Enferm Apar Dig** 1989 Nov;76(5):473 **(Spa)**

ANALYSIS

The gene for the muscle-specific enolase is on the short arm of human chromosome 17. Feo S, et al. **Genomics** 1990 Jan;6(1):192–4

ULTRASTRUCTURE

Apparent Smith-Lemli-Opitz syndrome and Miller-Dieker syndrome in a family with segregating translocation t(7;17)(q34;p13.1). Berry R, et al. **Am J Med Genet** 1989 Nov;34(3):358–65
Interstitial deletion of (17)(p11.2). A microdeletion syndrome. Another example. de Almeida JC, et al. **Ann Genet** 1989; 32(3):184–6
Distal monosomy of the long arm of chromosome 6 (6q25——6qter) inherited by maternal translocation t(6q;17q). Oliveira-Duarte MH, et al. **Ann Genet** 1990; 33(1):56–9 (9 ref.)
Isochromosome 17q in Ph1-negative leukemia: a clinical, cytogenetic, and molecular study. Becher R, et al. **Blood** 1990 Apr 15;75(8):1679–83
Physical mapping of human chromosome 17 using fragment-containing microcell hybrids. Leach RJ, et al. **Genomics** 1989 Aug;5(2):167–76
[Ring chromosome 17 and recurring pneumopathy] Lambruschini Ferri N, et al. **An Esp Pediatr** 1989 Nov; 31(5):478–80 (10 ref.) **(Spa)**

CHROMOSOMES, HUMAN, PAIR 18

The isochromosome 18p syndrome: confirmation of cytogenetic diagnosis in nine cases by in situ hybridization. Callen DF, et al. **Am J Hum Genet** 1990 Sep;47(3):493–8
Novel isodicentric chromosome 18 in an abnormal infant with a mosaic karyotype [46,XY/46,XY,–18,+dic(18)(q12.2)]. Bryke CR, et al. **Am J Med Genet** 1990 Jun;36(2):247–50
Hypomelanosis of Ito—a nonspecific marker of somatic mosaicism: report of case with trisomy 18 mosaicism. Chitayat D, et al. **Am J Med Genet** 1990 Mar;35(3):422–4
Holoprosencephaly and cytogenetic findings: further information [letter; comment] Cohen MM Jr. **Am J Med Genet** 1989 Oct;34(2):265 Comment on: Am J Med Genet 1988 Aug;30(4):929–38.
Familial agnathia-holoprosencephaly caused by an inherited unbalanced translocation and not autosomal recessive inheritance [letter] Krassikoff N, et al. **Am J Med Genet** 1989 Oct;34(2):255–7
Abnormal maternal serum levels of human chorionic gonadotropin free subunits in trisomy 18. Ozturk M, et al. **Am J Med Genet** 1990 Aug;36(4):480–3
Tetrasomy 18p in a child with trisomy 18 phenotype. Singer TS, et al. **Am J Med Genet** 1990 Jun;36(2):144–7
Trisomy 18 at age 21 years. Smith A, et al. **Am J Med Genet** 1989 Nov;34(3):338–9
Partial trisomy 18 with minimal anomalies: lack of correspondence between phenotypic manifestations and triplicated loci along chromosome 18. Wilson GN, et al. **Am J Med Genet** 1990 Aug;36(4):506–10 (24 ref.)
Growth of linear parameters in trisomy 18 fetuses. Droste S, et al. **Am J Obstet Gynecol** 1990 Jul;163(1 Pt 1):158–61
Microphthalmos with cyst and Edwards' syndrome. Guterman C, et al. **Am J Ophthalmol** 1990 Feb 15; 109(2):228–30
Expression of the bcl-2 oncogene protein is not specific for the 14;18 chromosomal translocation. Pezzella F, et al. **Am J Pathol** 1990 Aug;137(2):225–32
Diagnosis of trisomy 18 using spontaneously dividing cells from fetal umbilical cord blood: a novel approach for rapid late second and third trimester prenatal diagnosis. Tharapel AT, et al. **Am J Perinatol** 1990 Jul;7(3):211–3
Growth hormone deficiency in children with chromosomal abnormalities [letter; comment] Schwarz HP, et al. **Arch Dis Child** 1990 Mar;65(3):334 Comment on: Arch Dis Child 1988 Sep;63(9):1090–1.
Translocation of chromosomes 16 and 18 in oxygen radical-transformed human lung fibroblasts. Weitberg AB, et al. **Biochem Biophys Res Commun** 1990 May 31; 169(1):70–4
Clinical value of a pathological examination in a case of first trimester trisomy 18. Moscoso G, et al. **Biol Neonate** 1989; 56(3):147–50
Direct sequence analysis of the 14q+ and 18q- chromosome junctions in follicular lymphoma. Cotter F, et al. **Blood** 1990 Jul 1;76(1):131–5
A new human B-cell non-Hodgkin's lymphoma cell line (Karpas 422) exhibiting both t (14;18) and t(4;11) chromosomal translocations. Dyer MJ, et al. **Blood** 1990 Feb 1;75(3):709–14
Variant t(2;18) translocation in a Burkitt conversion of follicular lymphoma. Aventin A, et al. **Br J Haematol** 1990 Mar;74(3):367–9
Variant t(2;18) translocation in a follicular lymphoma [letter] Leroux D, et al. **Br J Haematol** 1990 Jun;75(2):290–2
Dendritic arborization in the human fetus and infant with the trisomy 18 syndrome. Jay V, et al. **Brain Res Dev Brain Res** 1990 Jul 1;54(2):291–4
A case of follicular small cleaved cell lymphoma with t(14;18) and t(8;11). Bal S, et al. **Cancer Genet Cytogenet** 1990 Sep; 48(2):199–201
Double i(18q) in lymphoma [letter] Mandal AK, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):279–81
Complex translocations in a patient with chronic myelocytic leukemia: t(9;22;17) and t(10;18;19) after two failed bone marrow transplantations. Melnyk A, et al. **Cancer Genet Cytogenet** 1990 May;46(1):83–7
Amplified and rearranged bcl-2 gene in two lymphoma cell lines, FL-218 and FL-318, carrying a 14;18 translocation. Amakawa R, et al. **Cancer Res** 1990 Apr 15;50(8):2423–8

Report of the committee on the genetic constitution of chromosomes 18 and 19. Le Beau MM, et al. **Cytogenet Cell Genet** 1989;51(1–4):338–57 (263 ref.)
Distribution of chromosome 18 and X centric heterochromatin in the interphase nucleus of cultured human cells. Popp S, et al. **Exp Cell Res** 1990 Jul; 189(1):1–12
Human laminin A chain (LAMA) gene: chromosomal mapping to locus 18p11.3. Nagayoshi T, et al. **Genomics** 1989 Nov;5(4):932–5
Genetic characterization of a human endogenous retroviral element located on chromosome 18q21. Leib-Mösch C, et al. **Hamatol Bluttransfus** 1989;32:461–3
Trisomy 18 mosaicism in an adult woman with normal intelligence and history of miscarriage. Gersdorf E, et al. **Hum Genet** 1990 Feb;84(3):298–9
Trisomy 18 in monozygotic twins. Mulder AF, et al. **Hum Genet** 1989 Oct;83(3):300–1
Partial trisomy of chromosome 18 (pter——q12) following a familial 18;21 translocation rcp(18;21)(q12;q11). Binkert F, et al. **Hum Hered** 1990;40(2):81–4
Edward syndrome with multiple chromosomal defects. Bhat BV, et al. **Indian J Pediatr** 1989 Jan–Feb;56(1):137–9
Echocardiographic evaluation of the spectrum of cardiac anomalies associated with trisomy 13 and trisomy 18. Musewe NN, et al. **J Am Coll Cardiol** 1990 Mar 1; 15(3):673–7
No evidence for genetic linkage of Gilles de la Tourette syndrome on chromosomes 7 and 18. Heutink P, et al. **J Med Genet** 1990 Jul;27(7):433–6
Maternal translocation (9;18) with two abnormal offspring each with different chromosome derivatives. Pearson M, et al. **J Med Genet** 1989 Oct;26(10):655–8
N–cadherin gene maps to human chromosome 18 and is not linked to the E–cadherin gene. Walsh FS, et al. **J Neurochem** 1990 Sep;55(3):805–12
An anonymous DNA segment (p phi 91) located to chromosome 18 identifies an MspI polymorphism (D18S9). Deed RW, et al. **Nucleic Acids Res** 1990 May 25;18(10):3109
Identification and characterization of a hypervariable region [D18S27] on chromosome 18. Ip NY, et al. **Nucleic Acids Res** 1989 Oct 25;17(20):8404
The human gene for plasminogen activator inhibitor 2 (PAI2) exhibits an EcoRI RFLP. van den Berg EA, et al. **Nucleic Acids Res** 1990 May 11;18(9):2837
Dinucleotide repeat polymorphism at the D18S34 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3431
Dinucleotide repeat polymorphism at the D18S34 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2201
Sublocalisation of the X breakpoint in the translocation (X; 18)(p11.2; q11.2) primary change in synovial sarcomas. Gilgenkrantz S, et al. **Oncogene** 1990 Jul;5(7):1063–6
A rearranged transforming gene, tre, is made up of human sequences derived from chromosome regions 5q, 17q and 18q. Huebner K, et al. **Oncogene** 1988 Oct;3(4):449–55
Ocular pathology in trisomy 18. A histopathological report of three cases. Velzeboer CM, et al. **Ophthalmic Paediatr Genet** 1989 Dec;10(4):263–9
Congenital polyvalvular disease in trisomy 18: echocardiographic diagnosis. Balderston SM, et al. **Pediatr Cardiol** 1990 Jul;11(3):138–42
Heart disease associated with deletion of the short arm of chromosome 18. Pearl W. **Pediatr Cardiol** 1989 Summer; 10(3):174–6 (30 ref.)
Thirty–one autopsy cases of trisomy 18: clinical features and pathological findings. Kinoshita M, et al. **Pediatr Pathol** 1989;9(4):445–57
Clinical management considerations in long–term survivors with trisomy 18. Van Dyke DC, et al. **Pediatrics** 1990 May; 85(5):753–9
Prospective study on trisomy 18 and fetal choroid plexus cysts [letter] Camurri L, et al. **Prenat Diagn** 1989 Oct; 9(10):742
Umbilical cord pseudocyst in trisomy 18 [letter; comment] Constantine G, et al. **Prenat Diagn** 1990 Apr;10(4):274–5 Comment on: Prenat Diagn 1988 Oct;8(8):557–63.
Use of yeast artificial chromosome clones for mapping and walking within human chromosome segment 18q21.3. Silverman GA, et al. **Proc Natl Acad Sci U S A** 1989 Oct; 86(19):7485–9
Identification of a chromosome 18q gene that is altered in colorectal cancers. Fearon ER, et al. **Science** 1990 Jan 5; 247(4938):49–56
[The placenta and trisomies 13, 18, 21] Labbé S, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(8):989–96 (Eng. Abstr.) **(Fre)**
[Early prenatal detection of trisomy 18 by transvaginal sonography] Bronstein M, et al. **Harefuah** 1990 Jan 1; 118(1):12–3 (Eng. Abstr.) **(Heb)**
[Clinical spectrum and congenital anomalies in trisomy 18] Arizawa M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Oct;41(10):1545–50 (Eng. Abstr.) **(Jpn)**
[A case of 18 q–syndrome associated with status epilepticus] Kanazawa O, et al. **No To Hattatsu** 1989 Sep;21(5):470–4 (Eng. Abstr.) **(Jpn)**
[bcl–2 gene involved in Japanese follicular lymphoma] Amakawa R, et al. **Rinsho Ketsueki** 1990 May;31(5):541–6 (Eng. Abstr.) **(Jpn)**
[Chromosomes and cancer of the colon (editorial)] De Juan Martín M. **Rev Esp Enferm Apar Dig** 1989 Nov;76(5):473 **(Spa)**

ANALYSIS

Chromosomal organization and localization of the human urokinase inhibitor gene: perfect structural conservation with ovalbumin. Samia JA, et al. **Genomics** 1990 Jan; 6(1):159–67

ULTRASTRUCTURE

Paracentric inversion inv(18)(q21.1q23) in a woman with recurrent spontaneous abortions [letter] Bocian E, et al. **Am J Med Genet** 1990 Apr;35(4):592–3
The 18p– syndrome. Report of five cases. Zumel RM, et al. **Ann Genet** 1989;32(3):160–3
Tandemly repeated DNA sequences of the centromere resulting in 18p+ [letter] Verma RS, et al. **Prenat Diagn** 1989 Dec;9(12):863–5
[Cytogenetic analysis of chorionic biopsy samples in prenatal diagnosis of chromosome abnormalities] Baranov VS, et al. **Akush Ginekol (Mosk)** 1990 May;(5):35–7 (Eng. Abstr.) **(Rus)**

CHROMOSOMES, HUMAN, PAIR 19

A new polymorphic probe which defines the region of chromosome 19 containing the myotonic dystrophy locus. Johnson K, et al. **Am J Hum Genet** 1990 Jun;46(6):1073–81
The human ryanodine receptor gene: its mapping to 19q13.1, placement in a chromosome 19 linkage group, and exclusion as the gene causing myotonic dystrophy. MacKenzie AE, et al. **Am J Hum Genet** 1990 Jun; 46(6):1082–9
A long–range restriction map of the human chromosome 19q13 region: close physical linkage between CKMM and the ERCC1 and ERCC2 genes. Smeets H, et al. **Am J Hum Genet** 1990 Mar;46(3):492–501
Paracentric inversion of chromosome 19 in three generations. Phelan MC, et al. **Am J Med Genet** 1989 Dec;34(4):525–7
Origin of 46,XY/46,XY,r(19) mosaicism. Yung JF, et al. **Am J Med Genet** 1990 Aug;36(4):391–3
Expression of the myeloid differentiation antigen CD33 depends on the presence of human chromosome 19 in human–mouse hybrids. Adriaansen HJ, et al. **Ann Hum Genet** 1990 May;54 (Pt 2):115–9
Assignment of the coding sequence for carcinoembryonic antigen (CEA) and normal cross–reacting antigen (NCA) to human chromosome 19q13. Willcocks TC, et al. **Ann Hum Genet** 1989 May;53 (Pt 2):141–8
A human adenolymphoma showing the chromosomal aberrations del (7)(p12p14–15) and t(11;19)(q21;p12–13). Mark J, et al. **Anticancer Res** 1989 Nov–Dec;9(6):1565–6
The human pregnancy–specific glycoprotein genes are tightly linked on the long arm of chromosome 19 and are coordinately expressed [published erratum appears in Biochem Biophys Res Commun 1990 May 16;168(3):1325] Thompson J, et al. **Biochem Biophys Res Commun** 1990 Mar 16;167(2):848–59
Localization of the malignant hyperthermia susceptibility locus to human chromosome 19q12–q13.2. Healy JM, et al. **Biochem Soc Trans** 1990 Apr;18(2):326
cDNA cloning and sequence and cDNA–directed expression of human P450 IIB1: identification of a normal and two variant cDNAs derived from the CYP2B locus on chromosome 19 and differential expression of the IIB mRNAs in human liver. Yamano S, et al. **Biochemistry** 1989 Sep 5;28(18):7340–8
Poor prognosis of children with pre–B acute lymphoblastic leukemia is associated with the t(1;19)(q23;p13): a Pediatric Oncology Group study. Crist WM, et al. **Blood** 1990 Jul 1;76(1):117–22
Infant acute lymphoblastic leukaemia with t(11; 19). Gibbons B, et al. **Br J Haematol** 1990 Mar;74(3):264–9
Trisomy 19 in a patient with myelodysplastic syndrome and thrombocytosis. Humphries JE, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):187–91
Establishment and characterization of a childhood pre–B acute lymphoblastic leukemia cell line, PER–278, with chromosome translocations t(1;19) and t(1;9). Kees UR, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):201–8
Complex translocations in a patient with chronic myelocytic leukemia: t(9;22;17) and t(10;18;19) after two failed bone marrow transplantations. Melnyk A, et al. **Cancer Genet Cytogenet** 1990 May;46(1):83–7
A new homeobox gene contributes the DNA binding domain of the t(1;19) translocation protein in pre–B ALL. Kamps MP, et al. **Cell** 1990 Feb 23;60(4):547–55
Chromosomal translocation t(1;19) results in synthesis of a homeobox fusion mRNA that codes for a potential chimeric transcription factor. Nourse J, et al. **Cell** 1990 Feb 23; 60(4):535–45
The candidate proto–oncogene bcl–3 is related to genes implicated in cell lineage determination and cell cycle control. Ohno H, et al. **Cell** 1990 Mar 23;60(6):991–7
A linkage study of malignant hyperthermia (MH). Bender K, et al. **Clin Genet** 1990 Mar;37(3):221–5
Linkage between alpha 1B–glycoprotein (A1BG) and Lutheran (LU) red blood group system: assignment to chromosome 19: new genetic variants of A1BG. Eiberg H, et al. **Clin Genet** 1989 Dec;36(6):415–8
Localization of the human gene for the El alpha subunit of branched chain keto acid dehydrogenase (BCKDHA) to chromosome 19q13.1——q13.2. Fekete G, et al. **Cytogenet Cell Genet** 1989;50(4):236–7
Regional assignment of nonspecific cross–reacting antigen (NCA) of the CEA gene family to chromosome 19 at band q13.2. Inazawa J, et al. **Cytogenet Cell Genet** 1989; 52(1–2):28–31
Report of the committee on the genetic constitution of chromosomes 18 and 19. Le Beau MM, et al. **Cytogenet Cell Genet** 1989;51(1–4):338–57 (263 ref.)
Refined mapping of the three DNA repair genes, ERCC1, ERCC2, and XRCC1, on human chromosome 19. Mohrenweiser HW, et al. **Cytogenet Cell Genet** 1989; 52(1–2):11–4
Regional localization of the gene encoding pregnancy specific beta–1–glycoprotein 1 (PSBG1) to human chromosome 19q13.1. Niemann SC, et al. **Cytogenet Cell Genet** 1989;52(1–2):95–7
Restriction fragment length polymorphism of the human C3 complement gene. Dandieu S, et al. **Exp Clin Immunogenet** 1986;3(1):34–7
A human alphoid DNA clone from the EcoRI dimeric family: genomic and internal organization and chromosomal assignment. Baldini A, et al. **Genomics** 1989 Nov;5(4):822–8
A multipoint linkage map around the locus for myotonic dystrophy on chromosome 19. Brunner HG, et al. **Genomics** 1989 Oct;5(3):589–95
Establishment of the mouse chromosome 7 region with homology to the myotonic dystrophy region of human chromosome 19q. Cavanna JS, et al. **Genomics** 1990 May; 7(1):12–8
Recombination events that locate myotonic dystrophy distal to APOC2 on 19q. Johnson K, et al. **Genomics** 1989 Nov; 5(4):746–51
A reordering of human chromosome 19 long–arm DNA markers and identification of markers flanking the myotonic dystrophy locus. Korneluk RG, et al. **Genomics** 1989 Oct; 5(3):596–604
Chromosome mapping of the human ras–related rab3A gene to 19p13.2. Rousseau–Merck MF, et al. **Genomics** 1989 Nov;5(4):694–8
Isolation of cDNAs encoding a substrate for protein kinase C: nucleotide sequence and chromosomal mapping of the gene for a human 80K protein. Sakai K, et al. **Genomics** 1989 Aug;5(2):309–15
The syntenic relationship of proximal mouse chromosome 7 and the myotonic dystrophy gene region on human chromosome 19q. Saunders AM, et al. **Genomics** 1990 Feb; 6(2):324–32
The locus for Japanese myotonic dystrophy is alao linked to D19S19 on the long arm of chromosome 19. Takemoto Y, et al. **Genomics** 1990 Jan;6(1):195–6
Complementation of repair gene mutations on the hemizygous chromosome 9 in CHO: a third repair gene on human chromosome 19. Thompson LH, et al. **Genomics** 1989 Nov;5(4):670–9
Cloning of the breakpoint junction of the translocation 14;19 in chronic lymphocytic leukemia. McKeithan T, et al. **Hamatol Bluttransfus** 1989;32:335–6
Molecular cloning, expression, and chromosome 19 localization of a human Ro/SS–A autoantigen. McCauliffe DP, et al. **J Clin Invest** 1990 May;85(5):1379–91
Cytogenetics of pre–B–cell acute lymphoblastic leukemia with emphasis on prognostic implications of the t(1;19). Raimondi SC, et al. **J Clin Oncol** 1990 Aug;8(8):1380–8
Localization of the malignant hyperthermia susceptibility locus to human chromosome 19q12–13.2. McCarthy TV, et al. **Nature** 1990 Feb 8;343(6258):562–4
Tight linkage of creatine kinase (CKMM) to myotonic dystrophy on chromosome 19. Yamaoka LH, et al. **Neurology** 1990 Feb;40(2):222–6
EcoRI polymorphism in the human third complement component (C3) gene. Botto M, et al. **Nucleic Acids Res** 1990 May 11;18(9):2833
RFLP for a DNA clone which maps to 19q13.2–19qter (D19S63). Brook JD, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1085
RFLP for a DNA clone which maps to 19q13.2–19qter (D19S63). Brook JD, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4962
A polymorphic DNA clone which maps to 19q13.2–19qter (D19S62). Brook JD, et al. **Nucleic Acids Res** 1990 Feb 25;18(4):1086
MspI and SstI RFLPs at the human insulin receptor locus on chromosome 19. Elbein SC, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):209
An MspI RFLP detected by the human glandular kallikrein gene (hGK) on chromosome 19q. Hermens R, et al. **Nucleic Acids Res** 1990 Jan 11;18(1):208
A polymorphic DNA sequence (174–3.7) on chromosome 19 [D19S58] Lee JE, et al. **Nucleic Acids Res** 1989 Dec 11;17(23):10144
Human ApoCI HpaI restriction site polymorphism revealed by the polymerase chain reaction. Nillesen WM, et al. **Nucleic Acids Res** 1990 Jun 11;18(11):3428
Dinucleotide repeat polymorphism at the D19S75 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4639
Dinucleotide repeat polymorphism at the D19S76 locus. Weber JL, et al. **Nucleic Acids Res** 1990 May 11;18(9):2835
Dinucleotide repeat polymorphism at the D19S49 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1927
Dinucleotide repeat polymorphism at the 3' end of the LDL receptor gene. Zuliani G, et al. **Nucleic Acids Res** 1990 Jul 25;18(14):4300

Multiple chromosomes carrying tumor suppressor activity for a uterine endometrial carcinoma cell line identified by microcell–mediated chromosome transfer. Yamada H, et al. **Oncogene** 1990 Aug;5(8):1141–7

The gene for enhancer binding proteins E12/E47 lies at the t(1;19) breakpoint in acute leukemias. Mellentin JD, et al. **Science** 1989 Oct 20;246(4928):379–82

The gene encoding CD23 leukocyte antigen (FCE2) is located on human chromosome 19. Wendel–Hansen V, et al. **Somat Cell Mol Genet** 1990 May;16(3):283–6

Genetic evidence that the gene controlling Aub is located on chromosome 19. Zelinski T, et al. **Vox Sang** 1990; 58(2):126–8

[Proximal trisomy 19q. Interstitial deletion and ring chromosome derived from 19q] Klein F, et al. **Pediatrie** 1989;44(9):717–20 (Eng. Abstr.) (Fre)

[Genetic analysis of Spanish families with myotonic dystrophy] Cobo AM, et al. **Neurologia** 1990 Mar; 5(3):86–91 (Eng. Abstr.) (Spa)

ANALYSIS

Recent developments in the molecular genetics of malignant hyperthermia: implications for future diagnosis at the DNA level. McCarthy TV, et al. **Acta Anaesthesiol Belg** 1990; 41(2):107–12 (36 ref.)

CHROMOSOMES, HUMAN, PAIR 20

Alagille syndrome (arteriohepatic dysplasia) and del(20)(p11.2). Legius E, et al. **Am J Med Genet** 1990 Apr; 35(4):532–5

Trisomy 20q caused by der (X)t(X;20)(q28;q11.2). Waters JJ, et al. **Am J Med Genet** 1990 Jul;36(3):310–2

Trisomy 20p from maternal translocation and anencephaly. Case report and genetic review. Zumel RM, et al. **Ann Genet** 1989;32(4):247–9

Localization of the SRC oncogene to chromosome band 20q11.2 and loss of this gene with deletion (20q) in two leukemic patients. Morris CM, et al. **Blood** 1989 Oct; 74(5):1768–73

An identical translocation t(1;20) (q12.3;p13) in two patients with multiple myeloma. Web HJ, et al. **Br J Haematol** 1990 Mar;74(3):365–7

Balanced reciprocal translocation (X;20) limited to Wilms' tumor in a Wiedemann–Beckwith syndrome. Diaz de Bustamante A, et al. **Cancer Genet Cytogenet** 1990 Mar; 45(1):35–9

Hepatoblastoma characterized by trisomy 20 and double minutes. Mascarello JT, et al. **Cancer Genet Cytogenet** 1990 Jul 15;47(2):243–7

American Burkitt lymphoma stage II with 47,XY,+20,t(8;14)(q24;q32). Xiao H, et al. **Cancer Genet Cytogenet** 1990 Sep;48(2):275–7

Report of the committee on the genetic constitution of chromosomes 20 and 21. Carritt B, et al. **Cytogenet Cell Genet** 1989;51(1–4):358–71 (174 ref.)

Regional localization of the human thrombomodulin gene to 20p12–cen. Espinosa R 3d, et al. **Genomics** 1989 Oct; 5(3):649–50

Autosomal dominant retinitis pigmentosa: exclusion of a gene from extensive regions of chromosomes 6, 13, 20, and 21. Farrar GJ, et al. **Genomics** 1989 Oct;5(3):612–8

cDNA isolation, expression analysis, and chromosomal localization of two human zinc finger genes. Lania L, et al. **Genomics** 1990 Feb;6(2):333–40

A genetic linkage map of markers for human chromosome 20. Nakamura Y, et al. **Genomics** 1989 Nov;5(4):945–7

Localization of the active type I DNA topoisomerase gene on human chromosome 20q11.2–13.1, and two pseudogenes on chromosomes 1q23–24 and 22q11.2–13.1. Kunze N, et al. **Hum Genet** 1989 Dec;84(1):6–10

Unusual chromosome 20 anomaly arising "de novo" to give dic(20)qs. Pimentel D, et al. **Hum Genet** 1989 Dec; 84(1):97–8

Molecular and cytogenetic analysis of an interstitial 20p deletion associated with syndromic intrahepatic ductular hypoplasia (Alagille syndrome). Schnittger S, et al. **Hum Genet** 1989 Oct;83(3):239–44

Sperm chromosome analysis in a man heterozygous for a reciprocal translocation 46,XY t(12;20)(q24.3;q11). Martin RH, et al. **Hum Reprod** 1990 Jul;5(5):606–9

cDNA cloning and chromosomal assignment of the gene encoding endothelin 3. Bloch KD, et al. **J Biol Chem** 1989 Oct 25;264(30):18156–61

Interstitial deletion of the short arm of chromosome 20 in arteriohepatic dysplasia (Alagille syndrome). Zhang F, et al. **J Pediatr** 1990 Jan;116(1):73–7

Polymorphism at the D20S13 (p phi 64) locus. Chappell PB, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4956

An AluI RFLP detected in the human prion protein (PrP) gene. Harris MS, et al. **Nucleic Acids Res** 1990 Jan 25; 18(2):385

A codon 129 polymorphism in the PRIP gene. Owen F, et al. **Nucleic Acids Res** 1990 May 25;18(10):3103

A polymorphic DNA sequence from the terminal part of chromosome 20q [D20S25] Rouyer F, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1661

A polymorphic DNA sequence from the terminal part of chromosome 20q [D20S26] Rouyer F, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1662

An MspI RFLP detected by probe pFMS76 [D20S23] isolated from a flow–sorted chromosome 20–specific DNA library. Stolz FM, et al. **Nucleic Acids Res** 1990 Apr 11; 18(7):1929

An MspI and PstI RFLP detected by probe pFMS22–1.4 [D20S22] Stolz FM, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1665

Dinucleotide repeat polymorphism at the D20S27 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2202

Confirmation of prenatally ascertained trisomy 20 mosaicism [letter; comment] Punnett HH, et al. **Prenat Diagn** 1990 Feb;10(2):136–7 Comment on: Prenat Diagn 1989 Jul;9(7):501–4.

Trisomy 20 mosaicism identified prenatally and confirmed in foreskin fibroblasts [letter] Van Dyke DL, et al. **Prenat Diagn** 1989 Aug;9(8):601–2

Molecular cloning and chromosome mapping of the human gene encoding protein phosphotyrosyl phosphatase 1B. Brown–Shimer S, et al. **Proc Natl Acad Sci U S A** 1990 Jul;87(13):5148–52

[Sipple's syndrome. Review of the literature and personal case load] Lamberto M, et al. **Minerva Endocrinol** 1989 Oct–Dec;14(4):199–205 (41 ref.) (Eng. Abstr.) (Ita)

ULTRASTRUCTURE

A new case of pericentric inversion 20. Miller K, et al. **Ann Genet** 1989;32(3):187–8

Trisomy 20q. A new case and further phenotypic delineation. Herens C, et al. **Clin Genet** 1990 May;37(5):363–6 (10 ref.)

CHROMOSOMES, HUMAN, PAIR 21

Genetics of Alzheimer's disease. Goate AM, et al. **Adv Neurol** 1990;51:197–8 (7 ref.)

Linkage studies of late–onset familial Alzheimer's disease. Roses AD, et al. **Adv Neurol** 1990;51:185–96

Renal cortical tumors. Cytogenetic characterization. Dal Cin P, et al. **Am J Clin Pathol** 1989 Oct;92(4):408–14

Slot blot method for the quantification of DNA sequences and mapping of chromosome rearrangements: application to chromosome 21. Blouin JL, et al. **Am J Hum Genet** 1990 Mar;46(3):518–26

Molecular definition of a region of chromosome 21 that causes features of the Down syndrome phenotype. Korenberg JR, et al. **Am J Hum Genet** 1990 Aug; 47(2):236–46

Physical mapping around the Alzheimer disease locus on the proximal long arm of chromosome 21. Owen MJ, et al. **Am J Hum Genet** 1990 Feb;46(2):316–22

Holoprosencephaly in an infant with a minute deletion of chromosome 21(q22.3). Estabrooks LL, et al. **Am J Med Genet** 1990 Jul;36(3):306–9

Growth hormone deficiency in children with chromosomal abnormalities [letter; comment] Schwarz HP, et al. **Arch Dis Child** 1990 Mar;65(3):334 Comment on: Arch Dis Child 1988 Sep;63(9):1090–1.

Induction of a human carbonyl reductase gene located on chromosome 21. Forrest GL, et al. **Biochim Biophys Acta** 1990 Apr 6;1048(2–3):149–55

The genetics of Alzheimer's disease. Schellenberg GD, et al. **Biomed Pharmacother** 1989;43(7):463–8 (40 ref.)

Familial manic–depressive illness with deleted short arm of chromosome 21: coincidental or causal? el–Badramany MH, et al. **Br J Psychiatry** 1989 Dec;155:856–7

Developmental immunohistochemistry of membrane proteins in the brain coded by a gene on human chromosome 21. Takashima S, et al. **Brain Res Dev Brain Res** 1990 May 1;53(2):295–8

Molecular genetics of familial Alzheimer's disease. St. George–Hyslop PH, et al. **Can J Neurol Sci** 1989 Nov;16(4 Suppl):465–7 (14 ref.)

Acute myelogenous leukemia with an 8;21 translocation. A report on 148 cases from the Groupe Français de Cytogénétique Hématologique. **Cancer Genet Cytogenet** 1990 Feb;44(2):169–79

Acute nonlymphocytic leukemia with t(16;21) [letter; comment] Berkowicz M, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):139–40 Comment on: Cancer Genet Cytogenet 1988 Dec;36(2):221–3.

Pentasomy 21q in a neonatal case of acute myeloblastic leukemia [letter] Brothman AR, et al. **Cancer Genet Cytogenet** 1990 Jul 1;47(1):135–7

Translocation t(3;21)(q26;q22) in acute myeloblastic leukemia secondary to polycythemia vera. Dastugue N, et al. **Cancer Genet Cytogenet** 1990 Feb;44(2):275–6

Molecular cytogenetic analysis discloses complex genetic imbalance in a t(11;21) myelodysplastic syndrome. Kerim S, et al. **Cancer Genet Cytogenet** 1990 Jun;46(2):243–50

Novel translocations in acute nonlymphocytic leukemia. Two cases involving chromosome 21, band q22. Peters GB, et al. **Cancer Genet Cytogenet** 1990 Jan;44(1):99–105

Sequential flow cytometric analysis of cell–cycle related changes in LFA–1 (CD18/CD11a) expression by trisomy 21 (Down's syndrome) lymphoblastoid cells. McMurray BP, et al. **Cell Tissue Kinet** 1989 May;22(3):223–33

Expression of LFA–1 by a lymphoblastoid cell line from a patient with monosomy 21: effects on intercellular adhesion. Taylor GM, et al. **Clin Exp Immunol** 1990 Sep; 81(3):501–6

Rate of recombination of chromosomes 21 in parents of children with Down syndrome. Hamers AJ, et al. **Clin Genet** 1990 Jun;37(6):463–9

A familial interstitial deletion of the long arm of chromosome 21. Roland B, et al. **Clin Genet** 1990 Jun;37(6):423–8

Report of the committee on the genetic constitution of chromosomes 20 and 21. Carritt B, et al. **Cytogenet Cell Genet** 1989;51(1–4):358–71 (174 ref.)

Refined sublocalization of the human gene encoding the beta subunit of the S100 protein (S100B) and confirmation of a subtle t(9;21) translocation using in situ hybridization. Duncan AM, et al. **Cytogenet Cell Genet** 1989;50(4):234–5

Analysis of human chromosome 21: correlation of physical and cytogenetic maps; gene and CpG island distributions. Gardiner K, et al. **EMBO J** 1990 Jan;9(1):25–34

Molecular genetics of familial Alzheimer's disease. St. George–Hyslop PH, et al. **Eur Neurol** 1989;29 Suppl 3:25–7 (10 ref.)

Evolution of alpha–satellite DNA on human acrocentric chromosomes. Choo KH, et al. **Genomics** 1989 Aug; 5(2):332–44

Autosomal dominant retinitis pigmentosa: exclusion of a gene from extensive regions of chromosomes 6, 13, 20, and 21. Farrar GJ, et al. **Genomics** 1989 Oct;5(3):612–8

Linkage analysis of the human HMG14 gene on chromosome 21 using a GT dinucleotide repeat as polymorphic marker. Petersen MB, et al. **Genomics** 1990 May;7(1):136–8

The mouse neurological mutant weaver maps within the region of chromosome 16 that is homologous to human chromosome 21. Reeves RH, et al. **Genomics** 1989 Oct; 5(3):522–6

The pericentromeric 21 DNA marker pGSM21 (D21S13) contains an expressed HTF island. Stinissen P, et al. **Genomics** 1990 May;7(1):119–22

Expression of the human ETS–2 oncogene in normal fetal tissues and in the brain of a fetus with trisomy 21. Baffico M, et al. **Hum Genet** 1989 Oct;83(3):295–6

Coincident maternal meiotic nondisjunction of chromosomes X and 21 without evidence of autosomal asynapsis. Ikonen RS, et al. **Hum Genet** 1989 Oct;83(3):235–8

Distribution of meiotic recombination along nondisjunction chromosomes 21 in Down syndrome determined using cytogenetics and RFLP haplotyping. Meijer H, et al. **Hum Genet** 1989 Oct;83(3):280–6

A new EcoRI polymorphism at the D21S13 locus. Pulst SM, et al. **Hum Genet** 1990 May;84(6):580

Homologous Robertsonian translocation (21q21q) and abortions. Sudha T, et al. **Hum Genet** 1990 Jul;85(2):253–5

Partial trisomy of chromosome 18 (pter——q12) following a familial 18;21 translocation rcp(18;21)(q12;q11). Binkert F, et al. **Hum Hered** 1990;40(2):81–4

Designer genes: current fad or lasting fashion? [editorial] Bartus RT. **Neurobiol Aging** 1989 Sep–Oct;10(5):415

Modelling the occurrence and pathology of Alzheimer's disease. Hardy JA, et al. **Neurobiol Aging** 1989 Sep–Oct; 10(5):429–31; discussion 446–8

Genetic studies of typical Alzheimer's disease. Mohs RC, et al. **Neurobiol Aging** 1989 Sep–Oct;10(5):438–9; discussion 446–8

A conservative viewpoint on linkage in Alzheimer's disease. Roses AD. **Neurobiol Aging** 1989 Sep–Oct;10(5):427–9; discussion 446–8

Familial Alzheimer's disease: genetic analysis related to disease heterogeneity, Down syndrome and human brain evolution. Schapiro MB, et al. **Neurobiol Aging** 1989 Sep–Oct;10(5):435–6; discussion 446–8

Molecular genetic analysis of early onset familial Alzheimer's disease. Van Broeckhoven CL. **Neurobiol Aging** 1989 Sep–Oct;10(5):437–8; discussion 446–8

Dinucleotide repeat polymorphism located at D21S120. Burmelster M, et al. **Nucleic Acids Res** 1990 Aug 25; 18(16):4969

An anonymous DNA segment (p phi 11) located to chromosome 21 identifies a PvuII polymorphism (D21S74). Deed RW, et al. **Nucleic Acids Res** 1990 May 25;18(10):3109

TG repeat polymorphism at the D21S167 locus. Guo Z, et al. **Nucleic Acids Res** 1990 Aug 25;18(16):4967

PvuII and XhoI/EcoRV polymorphisms adjacent to the alpha A–crystallin (CRYA1) gene on human chromosome 21. Petersen MB, et al. **Nucleic Acids Res** 1990 Jul 25; 18(14):4300

Two PstI DNA polymorphisms adjacent to the human gene for the interferon–induced p78 protein (MX1 gene). Petersen MB, et al. **Nucleic Acids Res** 1989 Sep 25; 17(18):7546

A polymorphic DNA sequence from the terminal part of chromosome 21q [D21S154] Rouyer F, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1663

A high frequency EcoRI RFLP detected at the D21S13 locus. Stinissen P, et al. **Nucleic Acids Res** 1990 Mar 11; 18(5):1319

PCR detection of two RFLP's at the D21S13 locus. Stinissen P, et al. **Nucleic Acids Res** 1990 Jun 25;18(12):3672

D21S194, a jump clone from D21S16. Walker AP, et al. **Nucleic Acids Res** 1990 Apr 11;18(7):1931

The human erg gene maps to chromosome 21, band q22: relationship to the 8; 21 translocation of acute myelogenous leukemia. Rao VN, et al. **Oncogene** 1988 Nov;3(5):497–500

Construction of human chromosome 21–specific yeast artificial chromosomes. McCormick MK, et al. **Proc Natl Acad Sci U S A** 1989 Dec;86(24):9991–5

Chromosomal protein HMG–14 gene maps to the Down syndrome region of human chromosome 21 and is overexpressed in mouse trisomy 16. Pash J, et al. **Proc Natl Acad Sci U S A** 1990 May;87(10):3836–40

Characterization of human IFN–gamma response using somatic cell hybrids of hematopoietic and

nonhematopoietic origin. Bono MR, et al. **Somat Cell Mol Genet** 1989 Nov;15(6):513–23

Sublocalization on chromosome 21 of human interferon–alpha receptor gene and the gene for an interferon–gamma response protein. Langer JA, et al. **Somat Cell Mol Genet** 1990 May;16(3):231–40

Physical mapping of chromosome 21 DNA markers in Alzheimer's disease region using somatic cell hybrids. Van Camp G, et al. **Somat Cell Mol Genet** 1990 May;16(3):241–9

[Molecular cytogenetic study of a 21p+ variant in a family with Crouzon syndrome] Fu SM. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Jun; 11(3):165–9 (Eng. Abstr.) **(Chi)**

[An alpha–satellite DNA sequence, alpha–RI–6, specific for human chromosomes 13 and 21, detected using the RFLP technic with digoxigenin labelled probes] Mazura I, et al. **Cas Lek Cesk** 1989 Sep 29;128(40):1269–71 (Eng. Abstr.) **(Cze)**

[The placenta and trisomies 13, 18, 21] Labbé S, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(8):989–96 (Eng. Abstr.) **(Fre)**

[8;21 translocation and leukemia] Rochon M, et al. **Union Med Can** 1989 Nov–Dec;118(6):238–41 (Eng. Abstr.) **(Fre)**

[Monosomy 5 (–5), deletion of the long arm of chromosome 6 (6q) and acquisition of a chromosome 21 (+21) in a boy with acute leukemia at high–risk] Burattini MG, et al. **Minerva Pediatr** 1989 Jul;41(7):379–82 (Eng. Abstr.) **(Ita)**

[Down's syndrome caused by robertsonian translocation with cystic hygroma] Abrate M, et al. **Pathologica** 1989 Nov–Dec;81(1076):647–50 (Eng. Abstr.) **(Ita)**

[Acute leukemia with active hemophagocytosis, positive immunologic markers for the megakaryocyte–platelet lineage, and translocation (16; 21) (p11; q22] Shimizu H, et al. **Rinsho Ketsueki** 1990 Jan;31(1):70–4 (Eng. Abstr.) **(Jpn)**

[Transient myeloproliferative disorder (TMD) with transiently increased tetrasomy–21 cells in a phenotypically normal newborn] Takeda T, et al. **Rinsho Ketsueki** 1989 Jul;30(7):1010–5 (Eng. Abstr.) **(Jpn)**

[Identification of families with increased risk of Down's syndrome caused by translocation of chromosome 9] Rogóyski A, et al. **Pediatr Pol** 1989 Apr;64(4):209–15 (Eng. Abstr.) **(Pol)**

[Characteristic features of leukemia in infants during the first year of life] Balakirev SA. **Gematol Transfuziol** 1990 Jan; 35(1):6–8 (Eng. Abstr.) **(Rus)**

[A case of familial paracentric inversion associated with Down's syndrome. 47, XX, +21, inv (1) (p22p36)] Alonso Villa MJ, et al. **An Esp Pediatr** 1990 Mar;32(3):257–8 **(Spa)**

[Partial trisomy 14 and monosomy 21. Report of a case] Campos Tristán C, et al. **An Esp Pediatr** 1989 Jul;31(1):81–2 **(Spa)**

ANALYSIS

Direct electronic radioisotope detection yields improved gene dosage analysis. Chettouh Z, et al. **Biotechniques** 1990 Aug;9(2):162–4

Restriction fragment length polymorphism (RFLP): applications in human chromosome mapping and genetic disease research. Watkins PC. **Biotechniques** 1988 Apr; 6(4):310–9, 322

A compositional map of human chromosome 21. Gardiner K, et al. **EMBO J** 1990 Jun;9(6):1853–8

[Genetic coupling study using DNA markers in the familial form of Alzheimer's disease] Vandenberghe A, et al. **Acta Neurol Belg** 1989 May–Oct;89(3–4):300–1 **(Dut)**

ULTRASTRUCTURE

Characterization of an unusual and complex chromosome 21 rearrangement using somatic cell genetics and cloned DNA probes. Van Keuren ML, et al. **Am J Med Genet** 1989 Jul;33(3):369–75

Ring chromosome 21 transmitted from mother to daughter: its stability in a lymphoblastoid cell line. Ikeuchi T, et al. **Ann Genet** 1990;33(1):32–5

Molecular structure of human chromosome 21. Stewart GD, et al. **Annu Rev Genet** 1989;23:409–23 (109 ref.)

Molecular genetic approach to the characterization of the "Down syndrome region" of chromosome 21. McCormick MK, et al. **Genomics** 1989 Aug;5(2):325–31

[Cytogenetic analysis of chorionic biopsy samples in prenatal diagnosis of chromosome abnormalities] Baranov VS, et al. **Akush Ginekol (Mosk)** 1990 May;(5):35–7 (Eng. Abstr.) **(Rus)**

CHROMOSOMES, HUMAN, PAIR 22

see related

PHILADELPHIA CHROMOSOME

The t(9;22) translocation in Philadelphia–positive essential thrombocythaemia does not involve the T lymphocyte lineage. Browett PJ, et al. **Acta Haematol (Basel)** 1990; 83(4):203–5

Clonal evolution in Ph–negative, bcr–positive chronic myeloid leukaemia before and after bone marrow transplantation. Secker–Walker LM, et al. **Acta Haematol (Basel)** 1989;82(4):205–9

Trisomy 22 mosaicism limited to skin fibroblasts in a mentally retarded, dysmorphic girl. Lund HT, et al. **Acta Paediatr Scand** 1990 Jun–Jul;79(6–7):714–8

Fine mapping of chromosome 22 breakpoints within the breakpoint cluster region (bcr) implies a role for bcr exon 3 in determining disease duration in chronic myeloid leukemia. Grossman A, et al. **Am J Hum Genet** 1989 Nov; 45(5):729–38

Flanking markers bracket the neurofibromatosis type 2 (NF2) gene on chromosome 22. Rouleau GA, et al. **Am J Hum Genet** 1990 Feb;46(2):323–8

Midtrimester diagnosis and anomalies in the dup(22q) syndrome: correlation of aneuploidy with low maternal serum alpha–fetoprotein and oligohydramnios. Johnson MP, et al. **Am J Med Genet** 1990 May;36(1):94–6

Rett phenotype with X/autosome translocation: possible mapping to the short arm of chromosome X. Journel H, et al. **Am J Med Genet** 1990 Jan;35(1):142–7

Trisomy 22: no longer an enigma. Kukolich MK, et al. **Am J Med Genet** 1989 Dec;34(4):541–4

Trisomy 22 in a liveborn infant with multiple congenital anomalies. McPherson E, et al. **Am J Med Genet** 1990 May; 36(1):11–4

Chromosome mosaicism in hypomelanosis of Ito. Ritter CL, et al. **Am J Med Genet** 1990 Jan;35(1):14–7

22q distal duplication syndrome [letter; comment] Rivera H. **Am J Med Genet** 1989 Dec;34(4):616 Comment on: Am J Med Genet 1989 Mar;32(3):346–9.

Apparently nonmosaic trisomy 22: clinical report and review. Sundareshan TS, et al. **Am J Med Genet** 1990 May; 36(1):7–10 (16 ref.)

Detection of rearrangement within the breakpoint cluster region of chromosome 22 in the diagnosis of chronic myeloid leukemia. Hutchins C, et al. **Aust N Z J Med** 1989 Oct;19(5):443–8

t(3;22)(q27;q11): a novel translocation associated with diffuse non–Hodgkin's lymphoma [see comments] Offit K, et al. **Blood** 1989 Nov 1;74(6):1876–9 Comment in: Blood 1990 May 15;75(10):2094.

Acute myeloid leukaemia with chromosomal rearrangement involving breakpoints on chromosomes 15 and 22; 46XY, t(15;22)(q12;q13). Ng JP, et al. **Br J Haematol** 1989 Oct; 73(2):270–2

Pseudodicentric isochromosome(22) in meningiomas [published erratum appears in Cancer Genet Cytogenet 1990 Sep;48(2):following 283] Casalone R, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):273–5

Assessment of chromosome 22 anomalies in neurinomas by combined karyotype and RFLP analyses. Couturier J, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):55–62

Is trisomy 22 in acute myeloid leukemia a primary abnormality or only a secondary change associated with inversion 16? Grois N, et al. **Cancer Genet Cytogenet** 1989 Nov;43(1):119–29

Complex translocations in a patient with chronic myelocytic leukemia: t(9;22;17) and t(10;18;19) after two failed bone marrow transplantations. Melnyk A, et al. **Cancer Genet Cytogenet** 1990 May;46(1):83–7

Translocation (11;22) in small cell osteosarcoma. Noguera R, et al. **Cancer Genet Cytogenet** 1990 Mar;45(1):121–4

Molecular analysis of a myxoid chondrosarcoma with rearrangements of chromosomes 10 and 22. Shen WP, et al. **Cancer Genet Cytogenet** 1990 Apr;45(2):207–15

Molecular genetic analysis of chromosome 22 in 81 cases of meningioma. Dumanski JP, et al. **Cancer Res** 1990 Sep 15;50(18):5863–7

Molecular cytogenetics: Rosetta stone for understanding cancer—twenty–ninth G. H. A. Clowes memorial award lecture. Rowley JD. **Cancer Res** 1990 Jul 1;50(13):3816–25 (69 ref.)

Human differentiation–stimulating factor (leukemia inhibitory factor, human interleukin DA) gene maps distal to the Ewing sarcoma breakpoint on 22q. Budarf M, et al. **Cytogenet Cell Genet** 1989;52(1–2):19–22

Report of the committee on the genetic constitution of chromosome 22. Kaplan JC, et al. **Cytogenet Cell Genet** 1989;51(1–4):372–83 (136 ref.)

Localization of 27 DNA markers to the region of human chromosome 22q11–pter deleted in patients with the DiGeorge syndrome and duplicated in the der22 syndrome. Carey AH, et al. **Genomics** 1990 Jul;7(3):299–306

Evolution of alpha–satellite DNA on human acrocentric chromosomes. Choo KH, et al. **Genomics** 1989 Aug; 5(2):332–44

The neuroepithelioma breakpoint on chromosome 22 is proximal to the meningioma locus. Zhang FR, et al. **Genomics** 1990 Jan;6(1):174–7

Mapping of human chromosome 22 by in situ hybridization. Zhang FR, et al. **Genomics** 1990 Jul;7(3):319–24

Variant breakpoint positions on chromosome 22 in Ph'–positive chronic myelogenous leukemias. Guerrasio A, et al. **Hematol Bluttransfus** 1989;32:337–8

A hereditary bisatellite–dicentric supernumerary chromosome in a case of cat–eye syndrome. Lüleci G, et al. **Hereditas** 1989;111(1):7–10

The gene encoding the human preproacrosin (ACR) maps to the q13–qter region on chromosome 22. Adham IM, et al. **Hum Genet** 1989 Dec;84(1):59–62

Chromosomes 17 and 22 involved in marker formation in neurofibrosarcoma in von Recklinghausen disease. A cytogenetic and in situ hybridization study. Decker HJ, et al. **Hum Genet** 1990 Aug;85(3):337–42

Isolation of anonymous, polymorphic DNA fragments from human chromosome 22q12–qter. Dumanski JP, et al. **Hum Genet** 1990 Feb;84(3):219–22

Localization of the active type I DNA topoisomerase gene on human chromosome 20q11.2–13.1, and two pseudogenes on chromosomes 1q23–24 and 22q11.2–13.1. Kunze N, et al. **Hum Genet** 1989 Dec;84(1):6–10

Unusual segregation of constitutional 11q;22q translocation may be explained by crossover in interchange segment, followed by 3:1 segregation at meiosis I [letter; comment] Lindenbaum RH. **Hum Genet** 1990 Jun;85(1):143 Comment on: Hum Genet 1989 Oct;83(3):287–8.

Not all chromosome imbalance resulting from the 11q;22q translocation is due to 3:1 segregation in first meiosis [see comments] Lockwood DH, et al. **Hum Genet** 1989 Oct; 83(3):287–8 Comment in: Hum Genet 1990 Jun;85(1):143.

Sublocalization of von Willebrand factor pseudogene to 22q11.22–q11.23 by in situ hybridization in a 46,X,t(X;22)(pter;q11.21) translocation. Patracchini P, et al. **Hum Genet** 1989 Oct;83(3):264–6

Isolation and characterization of DNA sequences from flow–sorted human chromosome 22 libraries. Metzdorf R, et al. **Hum Hered** 1990;40(3):145–52

Segregation of acrocentric chromosome association in familial dicentric Robertsonian translocation t(14p;22p), aneuploidy (trisomy–21) and heteromorphism. Murthy DS, et al. **Indian J Exp Biol** 1990 Jun;28(6):511–5

Structure and expression of the human immunoglobulin lambda genes. Vasicek TJ, et al. **J Exp Med** 1990 Aug 1;172(2):609–20

9;22 translocation and bcr rearrangements in chronic myelocytic leukemia patients among atomic bomb survivors. Tanaka K, et al. **J Radiat Res (Tokyo)** 1989 Dec; 30(4):352–8

A case of incomplete DiGeorge syndrome associated with partial monosomy 22q11.1 due to maternal 14;22 translocation. Nukina S, et al. **Jinrui Idengaku Zasshi** 1989 Sep;34(3):235–41

Genotyping of poor metabolisers of debrisoquine by allele–specific PCR amplification. Heim M, et al. **Lancet** 1990 Sep 1;336(8714):529–32

Translocation t(3;22)(q23;q11) in three patients with diffuse large B cell lymphoma. Leroux D, et al. **Leukemia** 1990 May;4(5):373–6 (17 ref.)

Further evidence that the site of the breakpoint in the major breakpoint cluster region (M–bcr) may be a prognostic indicator. Mills KI, et al. **Leukemia** 1989 Dec;3(12):837–40

Possible evidence for acquired genetic activity at both chromosomal breakpoints of the Philadelphia translocation in chronic myeloid leukemia. Yamada T, et al. **Leukemia** 1990 May;4(5):341–4

Ordering loci on human chromosome 22 [letter; comment] Duncan AM. **Mol Biol Med** 1989 Jun;6(3):251 Comment on: Mol Biol Med 1988 Feb;5(1):15–22.

Effects of translocations on transcription from PVT. Shtivelman E, et al. **Mol Cell Biol** 1990 Apr;10(4):1835–9

Structural features of transposed human VK genes and implications for the mechanism of their transpositions. Borden P, et al. **Nucleic Acids Res** 1990 Apr 25;18(8):2101–7

An anonymous DNA segment (p phi 82) located to chromosome 22 identifies polymorphisms with RsaI and MspI (D22S12). Deed RW, et al. **Nucleic Acids Res** 1990 May 25;18(10):3110

ABR, an active BCR–related gene. Heisterkamp N, et al. **Nucleic Acids Res** 1989 Nov 11;17(21):8821–31

The human interleukin–2 receptor beta–chain gene: genomic organization, promoter analysis and chromosomal assignment. Shibuya H, et al. **Nucleic Acids Res** 1990 Jul 11;18(13):3697–703

MspI RFLP in the human heparin cofactor II (HCF2) gene. Turner J, et al. **Nucleic Acids Res** 1990 Mar 25;18(6):1664

Dinucleotide repeat polymorphism at the D22S156 locus. Weber JL, et al. **Nucleic Acids Res** 1990 Aug 11;18(15):4639

Oncogene expression and immunoglobulin synthesis in a North American Burkitt (NAB–2) lymphoma cell line with a 8;22 chromosome translocation. Popescu NC, et al. **Oncogene Res** 1990;5(4):295–303

Spatial relationship between Ph and normal chromosome 22 at somatic metaphase in chronic myelogenous leukemia. Krishna M, et al. **Oncology** 1990;47(3):267–8

Anophthalmia in a retarded girl with partial trisomy 4p and 22 following a maternal translocation, rcp(4;22)(p15.2;q11.2). Schinzel A, et al. **Ophthalmic Paediatr Genet** 1990 Jun;11(2):139–42

Trisomic 22 placenta in a case of severe intrauterine growth retardation. Stioui S, et al. **Prenat Diagn** 1989 Sep; 9(9):673–6

Human interleukin 2 receptor beta–chain gene: chromosomal localization and identification of 5' regulatory sequences. Gnarra JR, et al. **Proc Natl Acad Sci U S A** 1990 May; 87(9):3440–4

Molecular biology of the Philadelphia positive leukaemias. Morgan GJ, et al. **Recenti Prog Med** 1989 Oct; 80(10):508–19 (164 ref.)

Molecular rearrangements of chromosome 22 in chronic myeloid leukemia in a multi–ethnic Malaysian population. Bosco JJ, et al. **Singapore Med J** 1989 Aug;30(4):363–7

Mapping the gene for X–linked cataracts and microcornea with facial, dental, and skeletal features to Xp22: an appraisal of the Nance–Horan syndrome. Lewis RA. **Trans Am Ophthalmol Soc** 1990;87:658–728

[Complete chromosome 22 trisomy syndrome in 2 children with microcephaly and mental retardation] Novikov PV,

et al. **Pediatriia** 1990;(2):89–92 **(Rus)**

PHYSIOLOGY

Interstitial insertion of varying amounts of ABL-containing genetic material into chromosome 22 in Ph-negative CML. Rassool F, et al. **Leukemia** 1990 Apr;4(4):273–7

ULTRASTRUCTURE

Fine mapping of chromosome 22 breakpoints within the breakpoint cluster region (bcr) implies a role for bcr exon 3 in determining disease duration in chronic myeloid leukemia. Grossman A, et al. **Am J Hum Genet** 1989 Nov; 45(5):729–38

Relationship of bcr breakpoint to chronic phase duration, survival, and blast crisis lineage in chronic myelogenous leukemia patients presenting in early chronic phase. Morris SW, et al. **Blood** 1990 May 15;75(10):2035–41

CHROMOSOMES, HUMAN, 13–15

ANALYSIS

Heterogeneities in the distribution of (GACA)n simple repeats in the karyotypes of primates and mouse. Nanda I, et al. **Hum Genet** 1990 Jul;85(2):187–94

CHROMOSOMES, HUMAN, 19–20

Delta F508 gene deletion in cystic fibrosis in southern Europe [letter] Estivill X, et al. **Lancet** 1989 Dec 9;2(8676):1404

Frequency of delta F508 mutation on cystic fibrosis chromosomes in UK [letter] McIntosh I, et al. **Lancet** 1989 Dec 9;2(8676):1404–5

CHROMOSOMES, HUMAN, 21–22

see related
PHILADELPHIA CHROMOSOME

ANALYSIS

Heterogeneities in the distribution of (GACA)n simple repeats in the karyotypes of primates and mouse. Nanda I, et al. **Hum Genet** 1990 Jul;85(2):187–94

CHRONAXY

DRUG EFFECTS

Dietary-induced changes in lipid and fatty acid composition can modify chronaxie values in the rat sciatic nerve. Tarozzi G, et al. **Ann Nutr Metab** 1989;33(2):108–13 (19 ref.)

CHRONIC DISEASE

Chronic illness and sexuality. Katzin L. **Am J Nurs** 1990 Jan;90(1):54–9

The anemia of chronic disorders: studies of marrow regulation and iron metabolism. Douglas SW, et al. **Blood** 1975 Jan;45(1):55–65

Assessment of social relationships in elderly patients. Oxman TE, et al. **Int J Psychiatry Med** 1990;20(1):65–84 (68 ref.)

Reduced supine cardiac volumes and diastolic filling rates in elderly patients with chronic medical conditions. Implications for postural blood pressure homeostasis. Lipsitz LA, et al. **J Am Geriatr Soc** 1990 Feb;38(2):103–7

Computer held chronic disease registers in general practice: a validation study. Coulter A, et al. **J Epidemiol Community Health** 1989 Mar;43(1):25–8

Occupational history, self reported chronic illness, and mortality: a follow up of 25,586 Swedish men and women. Ostlin P. **J Epidemiol Community Health** 1990 Mar; 44(1):12–6

The chronically ill child and recurring family grief. Worthington RC. **J Fam Pract** 1989 Oct;29(4):397–400

CDC moves on chronic diseases [news] Burklow J. **J Natl Cancer Inst** 1989 Dec 6;81(23):1776–7

Life beyond pediatrics. Transition of chronically ill adolescents from pediatric to adult health care systems. Schidlow DV, et al. **Med Clin North Am** 1990 Sep; 74(5):1113–20 (13 ref.)

Can first-year medical students contribute to better care for patients with a chronic disease? Kamien M. **Med Educ** 1990 Jan;24(1):23–6

Sexual function in chronic disease [editorial; comment] Nankervis A. **Med J Aust** 1989 Nov 20;151(10):548–9 Comment on: Med J Aust 1989 Nov 20;151(10):550–2.

A pediatrician's view [editorial] Hoekelman RA. **Pediatr Ann** 1990 Jan;19(1):11–2

Dental care for the chronically ill child. Boraz RA. **Pediatrician** 1989;16(3–4):193–9 (59 ref.)

Private health insurance of chronically ill children. Fox HB, et al. **Pediatrics** 1990 Jan;85(1):50–7

Health care research on the aged & chronically ill. Mor V. **R I Med J** 1989 Sep;72(9):323–7 (33 ref.)

Qualitative research on chronic illness. **Soc Sci Med** 1990; 30(11):1149–263

Relation of chronic disease and immune response to influenza vaccine in the elderly. Gross PA, et al. **Vaccine** 1989 Aug; 7(4):303–8

[Medicine in chronic conditions] Pacovský V. **Cas Lek Cesk** 1989 Sep 8;128(37):1153–6 (Eng. Abstr.) **(Cze)**

[The significance of concomitant internal diseases for hip endoprosthesis in elderly patients] Mach J, et al. **Beitr Orthop Traumatol** 1990 Apr;37(4):203–7 (Eng. Abstr.) **(Ger)**

[Which patients should be excluded from airplane travel?] von Mülmann M. **Verh Dtsch Ges Inn Med** 1989;95:597–605 **(Ger)**

[Diagnosis in the aged] Falck I. **Z Gerontol** 1989 Nov–Dec; 22(6):269–70 **(Ger)**

[Determination of stages in the course of chronic diseases] Zhiugzhda AIu, et al. **Klin Med (Mosk)** 1990 Apr; 68(4):146–8 (Eng. Abstr.) **(Rus)**

[Interdepartmental approach to the prevention of chronic noninfectious diseases in children] Leparskiĭ EA, et al. **Pediatriia** 1989;(12):5–9 **(Rus)**

[Mechanism of the development of chronicity of pathologic processes in the North] Vasil'ev NV, et al. **Vestn Akad Med Nauk SSSR** 1989;(9):34–9 (Eng. Abstr.) **(Rus)**

ECONOMICS

Health maintenance organizations vs indemnity insurance for children with chronic illness. Trading gaps in coverage. Horwitz SM, et al. **Am J Dis Child** 1990 May;144(5):581–6

Individual correlates of health service utilization and the cost of poor adjustment to chronic illness. Browne GB, et al. **Med Care** 1990 Jan;28(1):43–58

Aggregate economic losses from disability in the United States: a preliminary assay. Chirikos TN. **Milbank Q** 1989; 67 Suppl 2 Pt 1:59–91

Policy and epidemiology: financing health services for the chronically ill and disabled, 1930–1990. Fox DM. **Milbank Q** 1989;67 Suppl 2 Pt 2:257–87 (71 ref.)

Financing the health care of children with chronic illnesses. Newacheck PW. **Pediatr Ann** 1990 Jan;19(1):60–3 (14 ref.)

EPIDEMIOLOGY

Chronic medical conditions in a sample of the general population with anxiety, affective, and substance use disorders. Wells KB, et al. **Am J Psychiatry** 1989 Nov; 146(11):1440–6

Chronic disease in the 1990s. Rothenberg RB, et al. **Annu Rev Public Health** 1990;11:267–96 (55 ref.)

Chronic noncommunicable diseases in native residents and newcoming populations of circumpolar areas. Nikitin YuP. **Arctic Med Res** 1988;47 Suppl 1:426–33

Chronic diseases among Canadian Indians: towards an epidemiology of culture change. Young TK. **Arctic Med Res** 1988;47 Suppl 1:434–41 (46 ref.)

Chronic disease reports in the morbidity and mortality weekly report (MMWR). **Epidemiol Bull** 1989;10(2):6–9

Do health care needs of indigent Mexican-American, black, and white adolescents differ? Fitzpatrick SB, et al. **J Adolesc Health Care** 1990 Mar;11(2):128–32

From the Centers for Disease Control. Comorbidity of chronic conditions and disability among older persons—United States, 1984. **JAMA** 1990 Jan 12; 263(2):209–10

The effect of preexisting conditions on mortality in trauma patients. Morris JA Jr, et al. **JAMA** 1990 Apr 11; 263(14):1942–

The compression of morbidity: near or far? Fries JF. **Milbank Q** 1989;67(2):208–32 (70 ref.)

Epidemiological, demographic, and social correlates of disability among the elderly. Manton KG. **Milbank Q** 1989; 67 Suppl 2 Pt 1:13–58

Comorbidity and its impact on disability. Verbrugge LM, et al. **Milbank Q** 1989;67(3–4):450–84

Comorbidity of chronic conditions and disability among older persons—United States, 1984. **MMWR** 1989 Nov 24; 38(46):788–91

Two steps forward—and one back? Lang S, et al. **World Health Forum** 1989;10(2):265–7

[Quantitative evaluation of screening programs for chronic diseases] Yamaguchi N, et al. **Sangyo Ika Daigaku Zasshi** 1990 Mar 1;12(1):83–8 (Eng. Abstr.) **(Jpn)**

[Risk factors in chronic noncommunicable diseases] Avramenko TV, et al. **Sov Zdravookhr** 1990;(4):23–7 (Eng. Abstr.) **(Rus)**

MORTALITY

From the Centers for Disease Control. Deaths from nine chronic diseases—United States, 1986. **JAMA** 1990 Feb 9; 263(6):798–800

Chronic disease reports: deaths from nine chronic diseases—United States, 1986. **MMWR** 1990 Jan 19; 39(2):17, 19–20

Chronic non-communicable diseases and their impact on Caribbean women. Hagley KE. **West Indian Med J** 1990 Mar;39(1):4–11

[Diagnosis in the aged from the pathologic-anatomic viewpoint] Pfuhl JP, et al. **Z Gerontol** 1989 Nov–Dec; 22(6):271–8 (Eng. Abstr.) **(Ger)**

[Motivations for determining biological aging] Ries W. **Z Gerontol** 1990 May–Jun;23(3):160–2 (Eng. Abstr.) **(Ger)**

NURSING

Role-playing as a method in nursing research. Maerker M, et al. **J Adv Nurs** 1990 Feb;15(2):180–6

The school nurse as case manager for chronically ill children. Joachim G. **J Sch Health** 1989 Nov;59(9):406–7

Being related and separate: a standard for therapeutic relationships. Barnsteiner JH, et al. **MCN** 1990 Jul–Aug; 15(4):223–8

Development of the family needs assessment tool. Rawlins PS, et al. **West J Nurs Res** 1990 Apr;12(2):201–14

PSYCHOLOGY

Emotional coping, age, and physical disorder. Labott SM, et al. **Behav Med** 1990 Summer;16(2):53–61

Family interviewing and pediatric training. Teaching how to recognize and deal with family situations in which emotional problems aggravate chronic illness. Russak S, et al. **Clin Pediatr (Phila)** 1970 Oct;9(10):594–8

Chronic physical illness in childhood: psychological and social effects in adolescence and adult life. Pless IB, et al. **Dev Med Child Neurol** 1989 Dec;31(6):746–55

Measurement of health status in patients with chronic illness: comparison of the Nottingham health profile and the general health questionnaire. Jenkinson C, et al. **Fam Pract** 1990 Jun;7(2):121–4

The impact of discussion of non-medical problems in the physician's office. Martin FJ, et al. **Fam Pract** 1989 Dec; 6(4):254–8

Affective, substance use, and anxiety disorders in persons with arthritis, diabetes, heart disease, high blood pressure, or chronic lung conditions. Wells KB, et al. **Gen Hosp Psychiatry** 1989 Sep;11(5):320–7

Assessment of social relationships in elderly patients. Oxman TE, et al. **Int J Psychiatry Med** 1990;20(1):65–84 (68 ref.)

Psychophysiological processes of stress in chronic physical illness: a theoretical perspective. Kline Leidy N, et al. **J Adv Nurs** 1990 Apr;15(4):478–86

A physiological analysis of stress and chronic illness. Leidy NK. **J Adv Nurs** 1989 Oct;14(10):868–76 (51 ref.)

Additional psychiatric insight into chronically ill adolescents [letter] Dekker A. **J Am Osteopath Assoc** 1990 Aug; 90(8):656

Psychiatric aspects of chronic disease in adolescence. Magen J. **J Am Osteopath Assoc** 1990 Jun;90(6):521–5 (21 ref.)

Psychological effects of chronic disease. Eiser C. **J Child Psychol Psychiatry** 1990 Jan;31(1):85–98 (94 ref.)

Prevalence and correlates of family dysfunction and poor adjustment to chronic illness in specialty clinics. Arpin K, et al. **J Clin Epidemiol** 1990;43(4):373–83

Depression and chronic medical illness. Katon W, et al. **J Clin Psychiatry** 1990 Jun;51 Suppl:3–11; discussion 12–4 (136 ref.)

Anxiety and physical illness in the elderly. Turnbull JM. **J Clin Psychiatry** 1989 Nov;50 Suppl:40–5 (11 ref.)

Mental health referral: a weak link in comprehensive care of children with chronic physical illness. Sabbeth B, et al. **J Dev Behav Pediatr** 1990 Apr;11(2):73–8

Assessing psychosocial adjustment of children with chronic illnesses: a review of the technical properties of PARS III. Walker DK, et al. **J Dev Behav Pediatr** 1990 Jun; 11(3):116–21

Health-related quality of life in the evaluation of medical therapy for chronic illness. Revicki DA. **J Fam Pract** 1989 Oct;29(4):377–80 (24 ref.)

Social consequences of pediatric conditions: fertile area for future investigation and intervention. La Greca AM. **J Pediatr Psychol** 1990 Jun;15(3):285–307 (115 ref.)

Assessment of coping mechanisms used by parents and children with chronic illness. Austin JK. **MCN** 1990 Mar–Apr;15(2):98–102

Characteristics of interactional research. Haller KB. **MCN** 1990 Jul–Aug;15(4):272

A test of the Self-Help Model: learned response to chronic illness experience. Braden CJ. **Nurs Res** 1990 Jan–Feb; 39(1):42–7

Chronic illness and early development: parent-child relationships. Goldberg S. **Pediatr Ann** 1990 Jan; 19(1):35–41 (21 ref.)

Chronic conditions, socioeconomic risks, and behavioral problems in children and adolescents. Gortmaker SL, et al. **Pediatrics** 1990 Mar;85(3):267–76

The child with chronic or debilitating illness. Webster M, et al. **Practitioner** 1989 Sep 8;233(1474):1168, 1170–1

Further observational data on the behavioral and social world of institutions for the aged. Baltes MM, et al. **Psychol Aging** 1987 Dec;2(4):390–403

Locus of control and patient role adjustment of the elderly in acute-care hospitals. Cicirelli VG. **Psychol Aging** 1987 Jun;2(2):138–43

Age differences in coping with chronic illness. Felton BJ, et al. **Psychol Aging** 1987 Jun;2(2):164–70

Quality of life of adults with chronic illness: a psychometric study. Burckhardt CS, et al. **Res Nurs Health** 1989 Dec; 12(6):347–54

Depression and anxiety among chronically ill heart patients: age differences in risk and predictors. Nickel JT, et al. **Res Nurs Health** 1990 Apr;13(2):87–97

Social support for women during chronic illness: the relationship among sources and types to adjustment. Primomo J, et al. **Res Nurs Health** 1990 Jun;13(3):153–61

Patterns of functioning in families with a chronically ill

parent: an exploratory study. Stuifbergen AK. **Res Nurs Health** 1990 Feb;13(1):35–44

A reappraisal of the Malaise Inventory. Grant G, et al. **Soc Psychiatry Psychiatr Epidemiol** 1990 Jul;25(4):170–8

Use of the genealogical method in the exploration of chronic illness: a research note. Armstrong D. **Soc Sci Med** 1990; 30(11):1225–7

'Discovering' chronic illness: using grounded theory. Charmaz K. **Soc Sci Med** 1990;30(11):1161–72

Qualitative research on chronic illness: a commentary on method and conceptual development. Conrad P. **Soc Sci Med** 1990;30(11):1257–63

Qualitative research on chronic illness: the issue and the story. Gerhardt U. **Soc Sci Med** 1990;30(11):1149–59 (161 ref.)

[Ethical challenges at bedside. Attitude and treatment philosophy] Anschütz F. **Fortschr Med** 1990 Apr 15; 108(11):217–8 (Ger)

[Quality of life in internal medicine. The difficulty, to scientifically assess the quality of life] Vaitl D. **Fortschr Med** 1990 Apr 15;108(11):215–7 (Ger)

[Psychosocial management in pediatrics. Do we really mean the patient?] Ullrich G. **Monatsschr Kinderheilkd** 1989 Dec; 137(12):756–61 (13 ref.) (Eng. Abstr.) (Ger)

[Some philosophical aspects of chronic diseases] Eichel M. **Z Arztl Fortbild (Jena)** 1989;83(22):1135–6 (Ger)

[Career choice of youths with chronic diseases] Hartmann H, et al. **Z Gesamte Hyg** 1989;35(8):510–1 (Eng. Abstr.) (Ger)

REHABILITATION

Home care management in chronic illness and the self-care movement: an analysis of ideologies and economic processes influencing policy decisions. Anderson JM. **ANS** 1990 Jan;12(2):71–83

The role of the GP in the management of chronic disease. Diabetes as a model. Buttfield I, et al. **Aust Fam Physician** 1990 Aug;19(8):1187–9, 1193–6, 1199

Drugs in old age. New perspectives. Introduction. Williamson J. **Br Med Bull** 1990 Jan;46(1):1–8

Geriatric assessment and long-term rehabilitation work. Kines M. **Dimens Health Serv** 1989 Sep;66(6):28–31

Chronic care: a future delivery model? Eubanks P. **Hospitals** 1990 Mar 20;64(6):42–6

The family's functioning with chronic illness in the mother: the spouse's perspective. Lewis FM, et al. **Soc Sci Med** 1989;29(11):1261–9

[Geriatric day clinics and rehabilitation] Summa JD, et al. **Fortschr Med** 1989 Oct 30;107(31):650–4 (Eng. Abstr.) (Ger)

[Preservation, protection and control of medicinal springs with special reference to federally recognized medicinal springs] Artz J. **Off Gesundheitswes** 1989 Aug–Sep; 51(8–9):428–34 (Eng. Abstr.) (Ger)

[The principles of health resort treatment] Jungmann H. **Off Gesundheitswes** 1989 Aug–Sep;51(8–9):426–7 (Eng. Abstr.) (Ger)

[Indications and successes of climate therapy of children] Menger W. **Off Gesundheitswes** 1989 Aug–Sep; 51(8–9):470–6 (Eng. Abstr.) (Ger)

[Medical rehabilitation of disability insurance—determination of the status and future perspectives] Wille G. **Off Gesundheitswes** 1989 Aug–Sep;51(8–9):435–41 (Eng. Abstr.) (Ger)

[Focus of criticism—inpatient rehabilitation] Wirth A. **Off Gesundheitswes** 1990 Apr;52(4):191–5 (13 ref.) (Eng. Abstr.) (Ger)

[Information and counseling by rehabilitation carriers] Brückel S. **Rehabilitation (Stuttg)** 1989 Nov;28(4):163–8 (Eng. Abstr.) (Ger)

[Vocational and occupational counseling of handicapped patients—a comprehensive social federal responsibility] Gedon W, et al. **Rehabilitation (Stuttg)** 1989 Nov; 28(4):169–74 (Eng. Abstr.) (Ger)

[Limits and possibilities of counseling in the general practice of the established physician] Gosciniak HT. **Rehabilitation (Stuttg)** 1989 Nov;28(4):183–5 (Eng. Abstr.) (Ger)

[Counseling at the hospital] Hahn M. **Rehabilitation (Stuttg)** 1989 Nov;28(4):186–93 (Eng. Abstr.) (Ger)

[Rehabilitation aids] Seidel C, et al. **Z Arztl Fortbild (Jena)** 1989;83(19):989–90 (Ger)

[Rehabilitation in advanced age] Zippel C. **Z Arztl Fortbild (Jena)** 1989;83(19):981–4 (11 ref.) (Ger)

THERAPY

Medical complications in pregnancy. Maresh M. **Baillieres Clin Obstet Gynaecol** 1990 Mar;4(1):129–47 (63 ref.)

Combatting chronic disease [letter; comment] Levine LI. **Can Med Assoc J** 1990 Jan 1;142(1):13–4 Comment on: Can Med Assoc J 1989 Oct 15;141(8):797.

General practitioners' opinions about their responsibility for medical tasks: comparison between England and The Netherlands. Whitfield M, et al. **Fam Pract** 1989 Dec; 6(4):274–8

Quality of ambulatory care. Epidemiology and comparison by insurance status and income. Brook RH, et al. **Med Care** 1990 May;28(5):392–433 (105 ref.)

Patients who seek unorthodox medical treatment. Feldman MK. **Mian Med** 1990 Jun;73(6):19–25

Quackery and the elderly. Hollmann PA. **R I Med J** 1990 Apr;73(4):149–51

[Gerontology—necessary information for all practicing physicians] Gross R. **Fortschr Med** 1990 Jun 30; 108(19):369–70 (Ger)

[Do patients with acute and chronic diseases need different management structures today?] Halhuber MJ. **Versicherungsmedizin** 1990 Jun 1;42(3):91–2 (Eng. Abstr.) (Ger)

[Effects of family status on the geriatric hospital or geriatric nursing homes] Falck I. **Z Gerontol** 1989 Jul–Aug; 22(4):189–91 (Eng. Abstr.) (Ger)

[Medical long-term services for patients suffering from diseases with unfavorable prognosis] Fedorova GV, et al. **Sov Med** 1989;(11):50–2 (Rus)

CHRONIC FATIGUE SYNDROME see **FATIGUE SYNDROME, CHRONIC**

CHRONIC LIMITATION OF ACTIVITY see **ACTIVITIES OF DAILY LIVING**

CHRONIC OBSTRUCTIVE PULMONARY DISEASE see **LUNG DISEASES, OBSTRUCTIVE**

CHRONOBIOLOGY

Clinical chronobiology. Cagnoni M, et al. **Ann Ital Med Int** 1986;1 Suppl 1:36–41 (10 ref.)

Chronobiology: a frontier in biology and medicine. Cornélissen G, et al. **Chronobiologia** 1989 Oct–Dec; 16(4):383–408 (120 ref.)

Insects as novel models for research in chronobiology. Hayes DK. **Chronobiologia** 1989 Oct–Dec;16(4):417–20 (19 ref.)

Chronobiology in the clinical laboratory. Montalbetti N. **Chronobiologia** 1989 Oct–Dec;16(4):409–15 (41 ref.)

T cell subpopulations in vitiligo: a chronobiologic study. Mozzanica N, et al. **J Am Acad Dermatol** 1990 Feb;22(2 Pt 1):223–30

Chronobiology: timing may optimize treatments [news] Corliss J. **J Natl Cancer Inst** 1989 Dec 6;81(23):1768–9

Proceedings of the 3rd Workshop for the Clinical Research on Chronobiology. September 25–26, 1988, Tokyo. Abstracts. **Jpn J Psychiatry Neurol** 1989 Jun;43(2):255–301

Proceedings of the 4th Workshop for the Clinical Research on Chronobiology. September 28–29, 1989, Tokyo. **Jpn J Psychiatry Neurol** 1990 Mar;44(1):159–98

Chronopharmacological study of furosemide; (IV). Examination in aged rats. Fujimura A, et al. **Life Sci** 1990; 47(1):51–6

[Gastroenterology and chronobiology] Reinberg A. **Gastroenterol Clin Biol** 1989 Oct;13(10):791–2 (Fre)

[The chronobiology of sudden cardiac death. The evidence for a circadian, circaseptimanal and circannual periodicity in its incidence] Pasqualetti P, et al. **Minerva Med** 1990 May;81(5):391–8 (Eng. Abstr.) (Ita)

[Chronobiological medicine and hypertension] Tamura K. **Kokyu To Junkan** 1990 Feb;38(2):115–23 (33 ref.) (Jpn)

[Introduction of chronopharmacologic therapy of depressive disorders—a double-blind study using clomipramine] Nagayama H, et al. **Seishin Shinkeigaku Zasshi** 1989; 91(9):642–7 (Jpn)

[Current problems and the outlook for the development of chronopharmacology] Arushanian EB. **Farmakol Toksikol** 1989 Sep–Oct;52(5):10–6 (27 ref.) (Eng. Abstr.) (Rus)

DRUG EFFECTS

[Chronopharmacologic characteristics of the development of tolerance for the narcotic effect of ethanol in a hot climate] Khodzhagel'diev T, et al. **Biull Eksp Biol Med** 1989 Sep; 108(9):304–6 (Eng. Abstr.) (Rus)

[The chronopharmacology of the antidepressants] Arushanian EB, et al. **Farmakol Toksikol** 1990 Mar–Apr; 53(2):70–5 (46 ref.) (Eng. Abstr.) (Rus)

PHYSIOLOGY

Chronobiologic reference values in clinical chemistry. Nicolau GY, et al. **Endocrinologie** 1989 Oct–Dec; 27(4):197–230

Chronobiology of the endocrine system. Nicolau GY, et al. **Endocrinologie** 1989 Jul–Sep;27(3):153–83 (94 ref.)

Signalling elements in the ultradian rhythm of circulating growth hormone regulating expression of sex-dependent forms of hepatic cytochrome P450. Shapiro BH, et al. **Endocrinology** 1989 Dec;125(6):2935–44

Central pattern-generating neurons and the search for general principles. Lydic R. **FASEB J** 1989 Nov; 3(13):2457–68 (60 ref.)

Chronobiology, growth hormone and healthy and malignant growth. Halberg F, et al. **J Endocrinol Invest** 1989;12(8 Suppl 3):41–7 (18 ref.)

Clinical chronobiology: relevance and applications to the practice of occupational medicine. Smolensky MH, et al. **Occup Med** 1990 Apr–Jun;5(2):239–72 (111 ref.)

Blood glucose prior to meal request in humans isolated from all temporal cues. Pollak CP, et al. **Physiol Behav** 1989 Sep;46(3):529–34

Playing the numbers. Wallich P. **Sci Am** 1990 Feb;262(2):23–4

[Chronobiologic organization of sleep] Tiberge M, et al. **C R Soc Biol (Paris)** 1989;183(5):443–8 (Eng. Abstr.) (Fre)

[Chronobiological aspects of studying the cardiovascular system] Komarov FI, et al. **Ter Arkh** 1990;62(4):151–6 (84 ref.) (Rus)

CHRONOLOGY

Group sequential procedures: calendar versus information time. Demets DL. **Stat Med** 1989 Oct;8(10):1191–8

CHRYSENES see under **PHENANTHRENES**

CHRYSOSPORIUM see under **HYPHOMYCETES**

CHURG-STRAUSS SYNDROME

Rheumatoid papule, cutaneous extravascular necrotizing granuloma, and Churg–Strauss granuloma: are they the same entity? [letter; comment] Finan MC. **J Am Acad Dermatol** 1990 Jan;22(1):142–3 Comment on: J Am Acad Dermatol 1989 Feb;20(2 Pt 2):348–52.

Cronkhite–Canada syndrome: an analysis of clinical features and follow-up studies of 80 cases reported in Japan. Goto A, et al. **Nippon Geka Hokan** 1988 Nov 1;57(6):506–26 (79 ref.)

Granulomatous vasculitis. Wegener's granulomatosis and Churg–Strauss syndrome. Specks U, et al. **Rheum Dis Clin North Am** 1990 May;16(2):377–97 (70 ref.)

[Report of a case of allergic granulomatous vasculitis (Churg–Strauss syndrome)] Albert F, et al. **G Ital Dermatol Venereol** 1989 Mar;124(3):115–9 (Eng. Abstr.) (Ita)

CLASSIFICATION

The American College of Rheumatology 1990 criteria for the classification of Churg–Strauss syndrome (allergic granulomatosis and angiitis). Masi AT, et al. **Arthritis Rheum** 1990 Aug;33(8):1094–100

Allergic granulomatosis without asthma: a rare 'forme fruste' of the Churg–Strauss syndrome. Lipworth BJ, et al. **Respir Med** 1989 May;83(3):249–50

COMPLICATIONS

Churg–Strauss syndrome (allergic granulomatous angiitis) with peculiar multiple colonic ulcers. Shimamoto C, et al. **Am J Gastroenterol** 1990 Mar;85(3):316–9 (28 ref.)

Churg–Strauss vasculitis and ascaris infection. Chauhan A, et al. **Ann Rheum Dis** 1990 May;49(5):320–2

Cardiac involvement in Churg–Strauss syndrome shown by echocardiography. Morgan JM, et al. **Br Heart J** 1989 Dec; 62(6):462–6

Acute cerebrovascular disorder induced by allergic vasculitis. A case report. Dong CS, et al. **Chin Med J [Engl]** 1989 Apr;102(4):303–5

Allergic granulomatosis and angiitis (Churg–Strauss syndrome) presenting as acute acalculous cholecystitis. Imai H, et al. **J Rheumatol** 1990 Feb;17(2):247–9

Renal involvement in Churg–Strauss syndrome. Clutterbuck EJ, et al. **Nephrol Dial Transplant** 1990;5(3):161–7

[Asthma in allergic granulomatous angiitis of Churg and Strauss] M'Raihi ML, et al. **Tunis Med** 1990 Jan;68(1):33–6 (24 ref.) (Eng. Abstr.) (Fre)

[Granulomatous angiitis] Merazzi D, et al. **Pediatr Med Chir** 1989 Mar–Apr;11 Suppl 1:37–42 (37 ref.) (Eng. Abstr.) (Ita)

[Clinical study of allergic granulomatous angitis (AGA) with accompanying gastrointestinal perforations—our case and other cases in Japanese literature] Kin Y, et al. **Arerugi** 1989 Oct;38(10):1173–9 (16 ref.) (Eng. Abstr.) (Jpn)

[A case of allergic granulomatous angitis complicated with myositis and eosinophilia] Kawaguchi R, et al. **Nippon Naika Gakkai Zasshi** 1989 Dec;78(12):1791–2 (Jpn)

[Granulomatous angiitis of the basilar artery related to herpes zoster of the 7th cranial nerve] Romero López J, et al. **Neurologia** 1990 Mar;5(3):98–101 (Eng. Abstr.) (Spa)

DIAGNOSIS

Churg–Strauss pulmonary vasculitis. High-resolution computed tomography scanning and pathologic findings. Buschman DL, et al. **Am Rev Respir Dis** 1990 Aug; 142(2):458–61

[Churg–Strauss syndrome] Laumen R, et al. **Pneumologie** 1990 Feb;44 Suppl 1:546–7 (Eng. Abstr.) (Ger)

[A rare systemic vasculitis with asthmatic syndrome] Camassa M, et al. **Recenti Prog Med** 1989 Jul–Aug; 80(7–8):442–6 (Eng. Abstr.) (Ita)

[Churg–Strauss disease. Diagnosis of a fiction?] Guerra Sanz FJ. **Rev Clin Esp** 1989 Oct;185(5):274–7 (Spa)

ENZYMOLOGY

Cholinesterase deficiency and the Churg–Strauss syndrome. Taylor BL, et al. **Anaesthesia** 1990 Aug;45(8):649–52

IMMUNOLOGY

Allergic granulomatosis and angiitis of Churg–Strauss. Case report in a patient with antibodies to human immunodeficiency virus and hepatitis B virus. Cooper LM, et al. **Int J Dermatol** 1989 Nov;28(9):597–9

PATHOLOGY

Small blood vessel disease in allergic granulomatous angiitis (Churg–Strauss syndrome) [letter] Lichtig C, et al. **J Clin Pathol** 1989 Sep;42(9):1001–2

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 38–1990. A 32–year–old woman with asthma, eosinophilia, and a sensorimotor neuropathy. **N Engl J Med** 1990 Sep 20;323(12):812–22

Churg–Strauss syndrome [clinical conference] **N Y State J Med** 1990 Apr;90(4):190–5

[Sudden death of a young asthmatic patient—allergic granulomatous angiitis (Churg–Strauss syndrome)] Tributsch W, et al. **Z Rechtsmed** 1990;103(5):385–91 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

[Allergic granulomatous angiitis (Churg–Strauss syndrome): description of 2 clinical cases] Spaghi A, et al. **Medicina (Firenze)** 1989 Jul–Sep;9(3):286–8 (Eng. Abstr.) (Ita)

SURGERY

Heart transplantation for Churg–Strauss syndrome. Thomson D, et al. **Br Heart J** 1989 Nov;62(5):409–10

THERAPY

Treatment of polyarteritis nodosa and Churg–Strauss angiitis: indications of plasma exchange. Results of three prospective trials in 162 patients. The Cooperative Study Group for the Study of Polyarteritis Nodosa. Guillevin L. **Prog Clin Biol Res** 1990;337:309–17

CHYLE

Chyloptysis. Wetherill SF, et al. **Am J Med** 1990 Apr; 88(4):437–8

Primary idiopathic chylopericardium [letter] Mask WK, et al. **J Thorac Cardiovasc Surg** 1990 Mar;99(3):569–71 (7 ref.)

Chyluria treated with renal autotransplantation: a case report. Brunkwall J, et al. **J Urol** 1990 Apr;143(4):793–6

Experiences in the treatment of chyluria in Taiwan. Tan LB, et al. **J Urol** 1990 Sep;144(3):710–3

Post–nephrolithotomy chyluria. Thrasher JB, et al. **J Urol** 1990 Mar;143(3):578–9

The management of chyle fistula. Spiro JD, et al. **Laryngoscope** 1990 Jul;100(7):771–4

Primary chylocolporrhea successfully managed by division and ligation of retroperitoneal lymphatics. Zelikovski A, et al. **Lymphology** 1989 Sep;22(3):132–4

Treatment of intractable chyluria by stripping of the kidneys [letter] Pool MO, et al. **N Engl J Med** 1990 Aug 23; 323(8):552–3

[Chyluria caused by congenital retroperitoneal lymphangiectasis] van Olden RW, et al. **Ned Tijdschr Geneeskd** 1989 Aug 26;133(34):1701–3 (Eng. Abstr.) (Dut)

[Pulmonary involvement in primary chylopericardium] Tanaka S, et al. **Nippon Naika Gakkai Zasshi** 1989 Dec; 78(12):1771–2 (Jpn)

[Primary chylopericardium. Diagnosis and therapy] Cieśliński A, et al. **Kardiol Pol** 1989;32(10–12):471–9 (22 ref.) (Eng. Abstr.) (Pol)

[Lymphangioma of the mediastinum as a cause of chylopericardium] de Menezes IC, et al. **Acta Med Port** 1990 Mar–Apr;3(2):119–21 (7 ref.) (Eng. Abstr.) (Por)

PHYSIOLOGY

Recurrent supraclavicular chylous collection and chylothorax. Pantin CF, et al. **Respir Med** 1989 Sep; 83(5):445–6

SECRETION

Generalized lymphangiectasis in a dog with subcutaneous chyle and lymphangioma. Fossum TW, et al. **J Am Vet Med Assoc** 1990 Jul 15;197(2):231–6

CHYLOMICRONS

Metabolism of [3H]arachidonic acid– and [14C]linoleic acid–labelled chylomicrons in essential fatty acid–deficient rats. Hjelte L, et al. **Biochim Biophys Acta** 1990 May 1; 1044(1):101–10

The distribution of oleic acid between chylomicron–like emulsions, phospholipid bilayers, and serum albumin. A model for fatty acid distribution between lipoproteins, membranes, and albumin. Spooner PJ, et al. **J Biol Chem** 1990 Jul 25;265(21):12650–5

ANALYSIS

Phospholipids as modulators of hepatic recognition of chylomicron remnants. Observations with emulsified lipoprotein lipids. Borensztajn J, et al. **Biochem J** 1990 Jul 15;269(2):539–42

A rapid method for staining large chylomicrons. Anderson LJ, et al. **J Lipid Res** 1989 Nov;30(11):1819–24

BLOOD

Testosterone regulates metabolism of plasma chylomicrons in rats. Staprans I, et al. **Arterioscler Thromb** 1990 Jul–Aug; 10(4):591–6

Metabolism of chylomicrons in subjects with dysbetalipoproteinaemia (type III hyperlipoproteinaemia). Haffner SM, et al. **Eur J Clin Invest** 1989 Oct;19(5):486–90

Catabolism of chylomicron remnants in patients with previous acute pancreatitis. Rollán A, et al. **Gastroenterology** 1990 Jun;98(6):1649–54

RRR– and SRR–alpha–tocopherols are secreted without discrimination in human chylomicrons, but RRR–alpha–tocopherol is preferentially secreted in very low density lipoproteins. Traber MG, et al. **J Lipid Res** 1990 Apr;31(4):675–85

Use of ketamine–HCl anesthesia in studies of chylomicron–triglyceride metabolism in the rat. Brown CM, et al. **Lab Anim Sci** 1990 Mar;40(2):183–5

Postprandial plasma vitamin A metabolism in humans: a reassessment of the use of plasma retinyl esters as markers for intestinally derived chylomicrons and their remnants. Krasinski SD, et al. **Metabolism** 1990 Apr;39(4):357–65

[Autoimmune chylomicronemia—pathogenesis and pathophysiology] Matsuzawa Y, et al. **Nippon Rinsho** 1990 Jun;48(6):1344–50 (11 ref.) (Jpn)

METABOLISM

Experimental nephrotic syndrome: removal and tissue distribution of chylomicrons and very–low–density lipoproteins of normal and nephrotic origin. Levy E, et al. **Biochim Biophys Acta** 1990 Apr 17;1043(3):259–66

Inhibition of hepatic lipase activity impairs chylomicron remnant–removal in rats. Sultan F, et al. **Biochim Biophys Acta** 1990 Jan 16;1042(1):150–2

Lipolysis of polyenoic fatty acid esters of human chylomicrons by lipoprotein lipase. Ekström B, et al. **Eur J Clin Invest** 1989 Jun;19(3):259–64

Protein ingestion does not affect postprandial lipaemia or chylomicron–triglyceride clearance. Cohen JC. **Eur J Clin Nutr** 1989 Jul;43(7):497–9

Chylomicron metabolism. Chylomicron uptake by bone marrow in different animal species. Hussain MM, et al. **J Biol Chem** 1989 Oct 25;264(30):17931–8

Uptake of chylomicron remnant retinyl ester via the low density lipoprotein receptor: implications for the role of vitamin A as a possible preventive for some forms of cancer. Blomhoff R, et al. **J Intern Med** 1990 Sep; 228(3):207–10 (24 ref.)

Modulation of chylomicron remnant metabolism by an hepatic hydroxymethylglutaryl coenzyme A reductase inhibitor. Cianflone K, et al. **Metabolism** 1990 Mar; 39(3):274–80

[Chylomicron metabolism in experimental cholestasis] Damião AO, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Sep–Oct;44(5):207–10 (Eng. Abstr.) (Por)

[Chylomicron metabolism] Damião AO, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1989 Sep–Oct; 44(5):267–70 (34 ref.) (Eng. Abstr.) (Por)

PHARMACOKINETICS

The effect of monostearoylglycerol on the metabolism of chylomicron–like lipid emulsions injected intravenously in rats. Mortimer BC, et al. **Biochim Biophys Acta** 1990 Aug 28;1046(1):46–56

PHARMACOLOGY

The effect of chylomicron remnants on bile acid synthesis in cultured rat hepatocytes. Fry RP, et al. **Biochim Biophys Acta** 1990 Feb 23;1042(3):413–6

Human very low density lipoproteins and chylomicrons can protect against endotoxin–induced death in mice. Harris HW, et al. **J Clin Invest** 1990 Sep;86(3):696–702

ULTRASTRUCTURE

Size and shape determination of fixed chylomicrons and emulsions with fluid or solid surfaces by three–dimensional analysis of shadows. Gantz D, et al. **J Lipid Res** 1990 Jan; 31(1):163–71

CHYLOPERITONEUM

Chylous ascites. Newer insights and many remaining enigmas. Lesser GT, et al. **Arch Intern Med** 1970 Jun;125(6):1073–7 (36 ref.)

Chylous peritonitis in children: case report and literature review. Holcomb GW 3d, et al. **J Pediatr Gastroenterol Nutr** 1990 Jan;10(1):114–6 (18 ref.)

COMPLICATIONS

Thoracic duct lymph in a patient with chylous ascites and a carcinoid tumor. Dumont AE, et al. **Lymphology** 1989 Dec;22(4):199–201

[A case of idiopathic plasmacytic lymph–adenopathy with polyclonal hyperimmunoglobulinemia (IPL) associated with pleural and peritoneal chylous effusion] Toyoshima T, et al. **Nippon Naika Gakkai Zasshi** 1989 Dec; 78(12):1795–6 (Jpn)

[Chylous ascites and nephrotic syndrome (letter)] Simón C, et al. **Rev Clin Esp** 1989 Sep;185(4):219 (Spa)

DIAGNOSIS

Postoperative chylous ascites: diagnosis and treatment. A series report and literature review. Ablan CJ, et al. **Arch Surg** 1990 Feb;125(2):270–3 (20 ref.)

DIET THERAPY

Dietary treatment of chylous ascites in yellow nail syndrome. Tan WC. **Gut** 1989 Nov;30(11):1622–3

ETIOLOGY

Chronic lymphocytic leukemia presenting with massive chylous ascites. Davis MN, et al. **Am J Gastroenterol** 1990 May;85(5):593–6 (17 ref.)

Dilated cardiomyopathy associated with chylous ascites. Hurley MK, et al. **Am J Gastroenterol** 1989 Dec; 84(12):1567–9

Combined occurrence of chyloperitoneum and chylothorax after surgery and chemotherapy for Wilms' tumor. Jayabose S, et al. **Cancer** 1989 Nov 1;64(9):1790–5 (42 ref.)

Chylous ascites after whole–abdomen irradiation for gynecologic malignancy. Lentz SS, et al. **Int J Radiat Oncol Biol Phys** 1990 Aug;19(2):435–8

[Refractory anasarca (clinical conference)] Gonvers JJ, et al. **Schweiz Med Wochenschr** 1989 Oct 21;119(42):1470–8 (Eng. Abstr.) (Ger)

[A case of acute chylous peritonitis] Hrgovic Z. **Zentralbl Chir** 1990;115(9):575–6 (Ger)

[Biliary peritonitis caused hy hydatid disease] Melita P, et al. **Minerva Chir** 1990 Apr 30;45(8):581–4 (9 ref.) (Eng. Abstr.) (Ita)

THERAPY

[Chylous ascites in infancy] Chiu NC, et al. **Chung Hua I Hsueh Tsa Chih** 1990 Feb;45(2):130–3 (Eng. Abstr.) (Chi)

CHYLOTHORAX

Nontraumatic chylothorax: a review of diagnosis and treatment. Ossorio MA, et al. **J Ky Med Assoc** 1989 Dec; 87(12):605–7 (15 ref.)

Massive primary chylopericardium: a case report. Musemeche CA, et al. **J Pediatr Surg** 1990 Aug;25(8):840–2

Primary idiopathic chylopericardium [letter] Mask WK, et al. **J Thorac Cardiovasc Surg** 1990 Mar;99(3):569–71 (7 ref.)

Image interpretation session. Neonatal bilateral chylothoraces secondary to obstruction of the superior vena cava (as complication of inadvertent placement of a umbilical vein catheter). **Radiographics** 1990 Jan;10(1):152–6

[Idiopathic unilateral chylothorax] Lakatoš F, et al. **Vnitr Lek** 1989 Sep;35(9):924–8 (Eng. Abstr.) (Slo)

COMPLICATIONS

Congenital chylothorax and persistent pulmonary hypertension of the neonate. Carmant L, et al. **Acta Paediatr Scand** 1989 Sep;78(5):789–92

[A case of idiopathic plasmacytic lymph–adenopathy with polyclonal hyperimmunoglobulinemia (IPL) associated with pleural and peritoneal chylous effusion] Toyoshima T, et al. **Nippon Naika Gakkai Zasshi** 1989 Dec; 78(12):1795–6 (Jpn)

[Tuberculous pseudochylothorax with thoracic wall involvement (letter)] Bargay J, et al. **Med Clin (Barc)** 1990 Jan 20;94(2):76–7 (Spa)

DIAGNOSIS

Massive edema and bilateral pleural effusions in a newborn infant [clinical conference] Zito L, et al. **Ann Allergy** 1989 Oct;63(4):277–80

ETIOLOGY

Chylothorax: a complication of the nephrotic syndrome. Moss R, et al. **Am Rev Respir Dis** 1989 Nov;140(5):1436–7

Generalised lymphangiomatosis with chylothorax. Dunkelman H, et al. **Arch Dis Child** 1989 Jul;64(7):1058–60

Generalised lymphangiomatosis with chylothorax [letter] Thomas HM, et al. **Arch Dis Child** 1990 Mar;65(3):334

Combined occurrence of chyloperitoneum and chylothorax after surgery and chemotherapy for Wilms' tumor. Jayabose S, et al. **Cancer** 1989 Nov 1;64(9):1790–5 (42 ref.)

Cutaneous masses, rib lesions, and chylous pleural effusion in a 20–year–old man. Duckett JG, et al. **Chest** 1990 May; 97(5):1227–8

Intrathoracic lymphangiomatosis mimicking lymphangioleiomyomatosis in a young woman. Swank DW, et al. **Mayo Clin Proc** 1989 Oct;64(10):1264–8

Subclavian vein puncture is used by many physicians as the preferred mode of access to the central circulation [letter] Mullins PA, et al. **PACE** 1990 Jul;13(7):948–9

Chylothorax in a patient with AIDS and Kaposi's sarcoma. Judson MA, et al. **South Med J** 1990 Mar;83(3):322–4

Chylothorax and respiratory failure in Kaposi's sarcoma. Pennington DW, et al. **West J Med** 1990 Apr;152(4):421–2

[Chylothorax after cardiothoracic surgery] Wang TY. **Chung Hua Wai Ko Tsa Chih** 1990 Apr;28(4):218–9, 252–3 (Eng. Abstr.) (Chi)

[Thoracic duct collaterals of lymphatic and pulmonary origin. Anatomy and chylothorax after pulmonary surgery] Riquet M, et al. **Ann Chir** 1989;43(8):646–57 (49 ref.) (Eng. Abstr.) (Fre)

[Bilateral chylothorax] Romand P, et al. **Rev Mal Respir** 1989; 6(4):385–7 (Eng. Abstr.) (Fre)

[Chylothorax and pseudochylothorax] Hamm H, et al.

Dtsch Med Wochenschr 1989 Dec 22;114(51–52):2017–22 (39 ref.) **(Ger)**
[Chylothorax in liver cirrhosis: a case report] Lenci G. **Pneumologie** 1990 Mar;44(3):704–7 (Eng. Abstr.) **(Ger)**
[Refractory anasarca (clinical conference)] Gonvers JJ, et al. **Schweiz Med Wochenschr** 1989 Oct 21;119(42):1470–8 (Eng. Abstr.) **(Ger)**
[Chylothorax following pneumonectomy] Plate H, et al. **Zentralbl Chir** 1989;114(19):1290–2 **(Ger)**
[Bilateral traumatic chylothorax] Lorenzo R, et al. **Arch Monaldi Mal Torace** 1988 Mar–Apr;43(2):177–82 (Eng. Abstr.) **(Ita)**

GENETICS

Noonan syndrome with spontaneous chylothorax at birth. Chan DK, et al. **Aust Paediatr J** 1989 Oct;25(5):296–8

PATHOLOGY

Chylopericardium and chylothorax, resulting from a catheter to the left subclavian vein: an autopsy report. Smedts F, et al. **Klin Wochenschr** 1989 Dec 4;67(23):1214–7

PHYSIOPATHOLOGY

Recurrent supraclavicular chylous collection and chylothorax. Pantin CF, et al. **Respir Med** 1989 Sep; 83(5):445–6

RADIOGRAPHY

Chyloptysis. Wetherill SF, et al. **Am J Med** 1990 Apr; 88(4):437–8

SURGERY

Surgical treatment of bilateral chylothorax due to benign lymphangioma of the thoracic duct. Nilles A, et al. **Eur J Cardiothorac Surg** 1990;4(1):51–3
[Idiopathic chylothorax in an adult—a case report and a review of 14 cases in Japan] Yamaguchi T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jul;37(7):1400–5 (23 ref.) (Eng. Abstr.) **(Jpn)**

THERAPY

Current treatment of chylothorax: a case series and literature review. Meurer MF, et al. **Tex Med** 1990 Aug;86(8):82–5
[The treatment of traumatic chylothorax] Sasai T, et al. **Kyobu Geka** 1989 Sep;42(10):838–41 (Eng. Abstr.) **(Jpn)**

CHYMOPAPAIN

The amino acid sequence of chymopapain from Carica papaya. Watson DC, et al. **Biochem J** 1990 Feb 15; 266(1):75–81

ADMINISTRATION & DOSAGE

[The use of lekozim phonophoresis for the treatment of eye burns] Iakimenko SA, et al. **Oftalmol Zh** 1989;(8):492–7 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Anaphylaxis and chymopapain [letter; comment] Allison CW, et al. **Anaesthesia** 1990 Feb;45(2):164 Comment on: Anaesthesia 1989 Sep;44(9):767–9.
Anaphylactoid reaction to chymopapain [see comments] Smith MB, et al. **Anaesthesia** 1989 Sep;44(9):767–9 Comment in: Anaesthesia 1990 Feb;45(2):164.
Treatment of sciatica. A comparative survey of complications of surgical treatment and nucleolysis with chymopapain. Bouillet R. **Clin Orthop** 1990 Feb;(251):144–52
The response of nerve tissue to chymopapain. Moon MS, et al. **Int Orthop** 1990;14(1):79–83
Epidural adhesions after chymopapain chemonucleolysis [letter; comment] Russell T. **J R Coll Surg Edinb** 1989 Aug; 34(4):227 Comment on: J R Coll Surg Edinb 1989 Feb;34(1):30–2.

IMMUNOLOGY

[Relation of papaya ingestion and the presence of chymopapain-specific immunoglobulins E (letter)] Guérin B, et al. **Presse Med** 1990 Mar 10;19(9):429 **(Fre)**

METABOLISM

Interaction between chicken cystatin and the cysteine proteinases actinidin, chymopapain A, and ficin. Björk I, et al. **Biochemistry** 1990 Feb 20;29(7):1770–6
The thiol proteinases from the latex of Carica papaya L. IV. Proteolytic specificities of chymopapain and papaya proteinase omega determined by digestion of alpha-globin chains. Jacquet A, et al. **Biol Chem Hoppe Seyler** 1989 Aug; 370(8):819–29

PHARMACOLOGY

Effect of repeated injections of chymopapain in the epidural space. Nguyen CM, et al. **Radiology** 1990 Feb;174(2):417–9
Water, fixed charge density, protein contents, and lysine incorporation into protein in chymopapain-digested intervertebral disc of rabbit. Kitano S, et al. **Spine** 1989 Nov;14(11):1226–33

THERAPEUTIC USE

Chemonucleolysis: advantages and disadvantages. Boccanera L, et al. **Chir Organi Mov** 1990 Jan–Mar;75(1):25–32 **(Eng, Ita)**
Experimental chemonucleolysis with chondroitinase ABC. Kato F, et al. **Clin Orthop** 1990 Apr;(253):301–8
Impact of certain proteolytic agents on the development of different types of cataract. Krasnov MM, et al. **Dev Ophthalmol** 1989;17:199–205
An update on chymopapain for treating lumbar disc ruptures. Ford LT. **Mo Med** 1990 Mar;87(3):152–4
[Chemonucleolysis] Deutman R. **Ned Tijdschr Geneeskd** 1990 Jan 13;134(2):53–4 **(Dut)**
[Chemonucleolysis. A therapeutic alternative in extra-canalicular lumbar disk hernias] Milbouw G, et al. **Acta Neurol Belg** 1989 Mar–Apr;89(2):71–80 (Eng. Abstr.) **(Fre)**
[Treatment of lumbar disk hernia by intra-disk injection of chymopapain or triamcinolone hexacetonide. Comparative study of 80 cases] Bontoux D, et al. **Rev Rhum Mal Osteoartic** 1990 Apr 25;57(4):327–31 **(Fre)**
[Effects of a proteolytic enzyme lekozim on the course of some types of cataract] Polunin GS. **Vestn Oftalmol** 1989 Jul–Aug;105(4):44–8 (Eng. Abstr.) **(Rus)**

CHYMOSIN see **RENNIN**

CHYMOTRYPSIN

Degradation of Hageman factor by chymotrypsin-like protease released from rat mast cells during degranulation. Majima M, et al. **Adv Exp Med Biol** 1989;247A:487–92
Attenuated total reflectance Fourier transform infrared analysis of an acyl-enzyme intermediate of alpha-chymotrypsin. Swedberg SA, et al. **Anal Biochem** 1990 Apr;186(1):153–8
Conformations of N-(2-fluorophenyl)-N-phenylcarbamoyl-alpha-chymotrypsin. Kairi M, et al. **Arch Biochem Biophys** 1990 Jun;279(2):305–14
The nature of protein dipole moments: experimental and calculated permanent dipole of alpha-chymotrypsin. Antosiewicz J, et al. **Biochemistry** 1989 Dec 26; 28(26):10072–8
Is gamma-chymotrypsin a tetrapeptide acyl-enzyme adduct of alpha-chymotrypsin? Dixon MM, et al. **Biochemistry** 1989 Aug 22;28(17):7033–8
Limited proteolysis as a probe of the conformation and nucleic acid binding regions of nucleolin. Olson MO, et al. **Biochemistry** 1990 Jun 19;29(24):5682–6
Direct observation of the titration of substrate carbonyl groups in the active site of alpha-chymotrypsin by resonance Raman spectroscopy. Tonge PJ, et al. **Biochemistry** 1989 Aug 8;28(16):6701–9
Raman spectroscopic study of the changes in secondary structure of chymotrypsin: effect of pH and pressure on the salt bridge. Heremans L, et al. **Biochim Biophys Acta** 1989 Nov 30;999(2):192–7
Effect of calcium ion on the dimerization of alpha-chymotrypsin. Shearwin KE, et al. **Biochim Biophys Acta** 1990 Mar 29;1038(1):136–8
Catalytic activity and denaturation of enzymes in water/organic cosolvent mixtures. Alpha-chymotrypsin and laccase in mixed water/alcohol, water/glycol and water/formamide solvents. Mozhaev VV, et al. **Eur J Biochem** 1989 Oct 1;184(3):597–602
Fixation of a highly reactive form of alpha-chymotrypsin by micellar matrix. Levashov AV, et al. **FEBS Lett** 1990 Jul 30;268(1):238–40
Assignment of the positions of chymotryptic fragments and cysteinyl groups in the primary structure of caldesmon in relation to a conformational change. Katayama E. **J Biochem (Tokyo)** 1989 Dec;106(6):988–93
Preliminary crystallographic data on the complex of bovine alpha-chymotrypsin with the recombinant proteinase inhibitor eglin c from Hirudo medicinalis. Pugliese L, et al. **J Mol Biol** 1989 Aug 5;208(3):511–3
A new principle of enzyme catalysis: coupled vibrations facilitate conformational changes. Havsteen BH. **J Theor Biol** 1989 Sep 11;140(1):101–27
Electrostatic potential maps at the quantum chemistry level of the active sites of the serine peptidases, alpha-chymotrypsin and subtilisin. Lamotte-Brasseur J, et al. **J Theor Biol** 1990 Jul 24;145(2):183–98

ADMINISTRATION & DOSAGE

The control of post-operative oedema: a clinical controlled trial of high-dosage oral chymotrypsin ("Avazyme"). Saad MN, et al. **Br J Plast Surg** 1966 Jul;19(3):245–50
[Ways of increasing the effectiveness of the treatment of male patients with genital tuberculosis] Stepanov PI. **Probl Tuberk** 1990;(3):44–8 (Eng. Abstr.) **(Rus)**

ANALYSIS

Comparison of BT-PABA test and fecal chymotrypsin measurements in normal subjects and diabetic patients. Montalto G, et al. **Acta Diabetol Lat** 1990 Apr–Jun; 27(2):157–64
Exocrine pancreatic function in children and adolescents with insulin-dependent diabetes mellitus. Lorini R, et al. **Diabetes Res Clin Pract** 1990 Mar;8(3):263–7
[Fecal chymotrypsin in the evaluation of exocrine pancreatic function] Caiulo VA, et al. **Pediatr Med Chir** 1989 Jul–Aug; 11(4):427–8 (Eng. Abstr.) **(Ita)**

ANTAGONISTS & INHIBITORS

Studies on new synthetic inhibitors of kallikreins and chymotrypsin. Yokoyama T, et al. **Adv Exp Med Biol** 1989; 247B:271–6
Specific inhibitory conformation of dipeptides for chymotrypsin. Shimohigashi Y, et al. **Biochem Biophys Res Commun** 1990 Feb 14;166(3):1460–6
Aged and non-aged pyrenebutyl-containing organophosphoryl conjugates of chymotrypsin. Preparation and comparison by 31P-NMR spectroscopy. Grunwald J, et al. **Biochem Pharmacol** 1989 Oct 1; 38(19):3157–68
Alternate substrate inhibitors of an alpha-chymotrypsin: enantioselective interaction of aryl-substituted enol lactones. Baek DJ, et al. **Biochemistry** 1990 May 8; 29(18):4305–11
pH dependence of the inhibition of chymotrypsin by a peptidyl trifluoromethyl ketone. Brady K, et al. **Biochemistry** 1989 Nov 14;28(23):9066–70
Structure and activity of two photoreversible cinnamates bound to chymotrypsin. Stoddard BL, et al. **Biochemistry** 1990 May 22;29(20):4871–9
Design of an aprotinin variant with inhibitory activity against chymotrypsin and cathepsin G by recombinant DNA technology. Brinkmann T, et al. **Biol Chem Hoppe Seyler** 1990 May;371 Suppl:43–52
A 39 kD barley seed protein of the serpin superfamily inhibits alpha-chymotrypsin. Lundgard R, et al. **Carlsberg Res Commun** 1989;54(5):173–80
Production of extracellular trypsin and chymotrypsin inhibitors by a Streptomyces Sp. Kourteva Y, et al. **J Basic Microbiol** 1989;29(7):413–7
Alpha-diketone and alpha-keto ester derivatives of N-protected amino acids and peptides as novel inhibitors of cysteine and serine proteinases. Angelastro MR, et al. **J Med Chem** 1990 Jan;33(1):11–3
O'-(epoxyalkyl)tyrosines and (epoxyalkyl)phenylalanine as irreversible inactivators of serine proteases: synthesis and inhibition mechanism. Tous G, et al. **J Med Chem** 1990 Jun;33(6):1620–34
Crystallization of a chymotrypsin inhibitor from Erythrina caffra seeds. Shieh HS, et al. **J Mol Biol** 1990 Mar 5; 212(1):15–6
[Correlation of enzyme thermostability and its surface hydrophobicity (using a modified alpha-chymotrypsin as an example)] Melik-Nubarov NS, et al. **Mol Biol (Mosk)** 1990 Mar–Apr;24(2):346–57 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Mosquito oostatic factor: a novel decapeptide modulating trypsin-like enzyme biosynthesis in the midgut. Borovsky D, et al. **FASEB J** 1990 Sep;4(12):3015–20

BLOOD

[Clinical significance of chymotrypsin analysis in biochemical laboratory tests] Kato M. **Nippon Rinsho** 1989 Dec;48 Suppl:261–3 **(Jpn)**
[Clinical value of determining the activity of elastase- and chymotrypsin-like proteinases in the plasma of patients with nonspecific aortoarteritis and arteriosclerosis] Parfenkova GA, et al. **Kardiologiia** 1989 Sep;29(9):94–6 **(Rus)**

CHEMICAL SYNTHESIS

Design and synthesis of a peptide having chymotrypsin-like esterase activity. Hahn KW, et al. **Science** 1990 Jun 22; 248(4962):1544–7

DEFICIENCY

[Substantiation of the use of pepsidil in secretory insufficiency of the digestive glands caused by antituberculer drugs] Storozhuk PG, et al. **Probl Tuberk** 1990;(1):43–6 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Enzyme sensors based on an ion-sensitive field effect transistor coated with Langmuir-Blodgett membranes. Use of polyethyleneimine as a spacer for immobilizing alpha-chymotrypsin. Anzai J, et al. **Chem Pharm Bull (Tokyo)** 1989 Dec;37(12):3320–2
The stereochemical resolution of enantiomeric free and derivatized amino acids using an HPLC chiral stationary phase based on immobilized alpha-chymotrypsin: chiral separation due to solute structure or enzyme activity. Jadaud P, et al. **Chirality** 1989;1(1):38–44
Limited proteolysis of the vasoactive intestinal peptide receptor: comparison of its folded structure in the membrane-bound and detergent-solubilized states. Provow SA, et al. **Regul Pept** 1990 Mar 27;28(1):71–82

GENETICS

Genetic studies on pancreatic proteinase in Japanese quail. Hou DX, et al. **Biochem Genet** 1989 Aug;27(7–8):469–79

Specific regulation of the gene expression of some pancreatic enzymes during postnatal development and weaning in the calf. Le Huërou I, et al. **Biochim Biophys Acta** 1990 Apr 6;1048(2–3):257–64

Pan: a transcriptional regulator that binds chymotrypsin, insulin, and AP-4 enhancer motifs. Nelson C, et al. **Genes Dev** 1990 Jun;4(6):1035–43

The chymotrypsin enhancer core. Specific factor binding and biological activity. Meister A, et al. **J Biol Chem** 1989 Dec 5;264(34):20744–51

IMMUNOLOGY

A chymotryptic-type serine protease is required for IL-2 production by Jurkat T cells. Auberger P, et al. **Immunology** 1990 Aug;70(4):547–50

ISOLATION & PURIFICATION

One-step purification of trypsin and alpha-chymotrypsin by affinity chromatography on Eupergit-aprotinin, a novel carrier for purification of serine proteases. Schmitt S, et al. **J Chromatogr** 1990 Jun 27;510:239–42

Characteristics of neutral proteases present in inflamed human gingiva. Suomalainen K, et al. **Scand J Dent Res** 1989 Aug;97(4):346–54

METABOLISM

Trypsin-like, chymotrypsin-like and glycylprolyl dipeptidase activities in gingival crevicular fluid from human periodontal sites with gingivitis. Beighton D, et al. **Arch Oral Biol** 1989;34(11):843–6

Mode of cleavage of pig big endothelin-1 by chymotrypsin. Production and degradation of mature endothelin-1. Takaoka M, et al. **Biochem J** 1990 Sep 1;270(2):541–4

Multinuclear magnetic resonance studies on the calcium (II) binding site in trypsin, chymotrypsin, and subtilisin. Adebodun F, et al. **Biochemistry** 1989 Sep 19; 28(19):7524–31

Human alpha- to zeta-thrombin cleavage occurs with neutrophil cathepsin G or chymotrypsin while fibrinogen clotting activity is retained. Brezniak DV, et al. **Biochemistry** 1990 Apr 10;29(14):3536–42

Conformational dynamics in fluorophenylcarbamoyl-alpha-chymotrypsins. Kairi M, et al. **Biochim Biophys Acta** 1990 Jun 19;1039(2):157–70

Chemistry in a microenvironment of low pH, generated with the aid of an immobilized proteinase. Silver MS, et al. **Biochim Biophys Acta** 1990 May 31;1039(1):25–32

Generation of a different type of beta-kallikrein from porcine pancreatic alpha-kallikrein by the action of chymotrypsin—observation of proteolytic processing occurring around "kallikrein autolysis loop" region. Kamada M, et al. **Chem Pharm Bull (Tokyo)** 1990 Apr; 38(4):1053–7

Characterization of the S'-subsite specificity of bovine pancreatic alpha-chymotrypsin via acyl transfer to added nucleophiles. Schellenberger V, et al. **Eur J Biochem** 1990 Jan 12;187(1):163–7

Proteolytic activation of the plant plasma membrane H(+)-ATPase by removal of a terminal segment. Palmgren MG, et al. **J Biol Chem** 1990 Aug 15;265(23):13423–6

Blood clotting factor IX BM Nagoya. Substitution of arginine 180 by tryptophan and its activation by alpha-chymotrypsin and rat mast cell chymase. Suehiro K, et al. **J Biol Chem** 1989 Dec 15;264(35):21257–65

Probing stability and dynamics of proteins by protease digestion. II: Identification of the initial chymotryptic cleavage sites of homologous cytochromes c. Miki Y, et al. **J Biomol Struct Dyn** 1988 Aug;6(1):1–21

Comparison of the physical properties of the nuclear progesterone receptor, bound to antiprogestin RU 486 or progestin ORG 2058, following limited proteolysis. Geier A, et al. **Steroids** 1990 Jun;55(6):283–8

[Effects of ethanol and acetaldehyde on proteolytic enzyme activity of the small intestine and pancreas] Skrzydlewska E. **Rocz Akad Med Bialymstoku** 1986–87;31–32:19–28 (Eng. Abstr.) **(Pol)**

[Interconnection between activity and conformational mobility of alpha-chymotrypsin in reverse micelle systems] Kliachko NL, et al. **Biokhimiia** 1989 Jul;54(7):1224–30 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

[The cutaneous bioavailability of alpha-chymotrypsin from ointments] Gafiţanu E, et al. **Rev Med Chir Soc Med Nat Iasi** 1989 Apr-Jun;93(2):353–6 (Eng. Abstr.) **(Rum)**

PHARMACOLOGY

Separation of different receptor-mediated effects of a prostaglandin H2 analogue (U46619) on human platelets by means of human granulocytic elastase and chymotrypsin. Lukasiewicz H, et al. **Biochem Pharmacol** 1989 Oct 1;38(19):3213–7

Chymotrypsin treatment of HLA-A and B molecules reveals 1D-IEF variation. Guttridge MG, et al. **Immunogenetics** 1989;30(6):506–10

Proteolytic activation of aldosterone biosynthesis in rabbit adrenal capsular cells by alpha-chymotrypsin. Higaki J, et al. **Methods Find Exp Clin Pharmacol** 1989 Sep; 11(9):555–8

PHYSIOLOGY

[Modification of the human pancreas with a feedback mechanism and possible consequences in chronic pancreatitis] Adler G, et al. **Z Gastroenterol** 1989 Dec;27 Suppl 3:38–40 (28 ref.) **(Ger)**

THERAPEUTIC USE

[Functional indices of the hypophysis, gonads and adrenal cortex during the treatment of patients with gonorrheal inflammation of the scrotal organs using proteolytic enzymes] Barabanov LG. **Vestn Dermatol Venerol** 1989; (8):46–8 (Eng. Abstr.) **(Rus)**

CHYMOTRYPSINOGEN

A new principle of enzyme catalysis: coupled vibrations facilitate conformational changes. Havsteen BH. **J Theor Biol** 1989 Sep 11;140(1):101–27

GENETICS

Changes in growth and pancreatic mRNA concentrations during postnatal development of rat pancreas. Iovanna JL, et al. **Pancreas** 1990 Jul;5(4):421–6

METABOLISM

Unusual fucoidin-binding properties of chymotrypsinogen and trypsinogen. Jones R. **Biochim Biophys Acta** 1990 Feb 9;1037(2):227–32

[Effects of ethanol and acetaldehyde on proteolytic enzyme activity of the small intestine and pancreas] Skrzydlewska E. **Rocz Akad Med Bialymstoku** 1986–87;31–32:19–28 (Eng. Abstr.) **(Pol)**

CI-581 see **KETAMINE**

CIALIT see under **ETHYLMERCURY COMPOUNDS**

CICATRIX

Mammaplasty: shape, volume, and scar size. de Pina DP. **Aesthetic Plast Surg** 1990 Winter;14(1):27–33

Incision and scar analysis in open (external) rhinoplasty. Adamson PA, et al. **Arch Otolaryngol Head Neck Surg** 1990 Jun;116(6):671–5

A keloidal scar of the floor of the mouth and its associations. Case report. Ow RK. **Aust Dent J** 1989 Dec;34(6):522–3

Nonsurgical aesthetic alteration of the eyelids in pathological conditions. Hurwitz JJ, et al. **Can J Ophthalmol** 1990 Jun; 25(4):197–201

Development of BCG scar in relation to the age and nutritional status. Agarwal RK, et al. **Indian Pediatr** 1990 Mar;27(3):291–3

Untreated bacteriuria in asymptomatic girls with renal scarring. Hansson S, et al. **Pediatrics** 1989 Dec;84(6):964–8

Keloids and hypertrophic scars: a comprehensive review. Rockwell WB, et al. **Plast Reconstr Surg** 1989 Nov; 84(5):827–37 (122 ref.)

Glabellar frown lines: direct excision, an evaluation of the scars. Vecchione TR. **Plast Reconstr Surg** 1990 Jul; 86(1):46–52

Scar endometriosis. Brenner C, et al. **Surg Gynecol Obstet** 1990 Jun;170(6):538–40 (15 ref.)

[Benelux Society of Phlebology. 12 November 1988. Cicatrization] **Phlebologie** 1990 Jan-Mar;43(1):1–48 **(Fre)**

[Diagnosis and therapy of an in the cesarean section scar implanted early pregnancy] Rempen A, et al. **Z Geburtshilfe Perinatol** 1990 Jan-Feb;194(1):46–8 (Eng. Abstr.) **(Ger)**

BLOOD

Secretor state and renal scarring in girls with recurrent pyelonephritis. Lomberg H, et al. **FEMS Microbiol Immunol** 1989 Jun;1(6-7):371–5

Non-secretion of ABO blood group antigens: a host factor predisposing to recurrent urinary tract infections and renal scarring. May SJ, et al. **FEMS Microbiol Immunol** 1989 Jun;1(6-7):383–7

CHEMICALLY INDUCED

Blistering, erosions and scarring in a patient on etretinate. Ramsay B, et al. **Br J Dermatol** 1989 Sep;121(3):397–400

COMPLICATIONS

Cancer complicating chronic ulcerative and scarifying mucocutaneous disorders. Kaplan RP. **Adv Dermatol** 1987; 2:19–46 (147 ref.)

Basal cell burn carcinoma. Stromberg BV, et al. **Ann Plast Surg** 1990 Feb;24(2):186–8

Squamous carcinoma in scars: clinicopathological correlations. Visuthikosol V, et al. **Ann Plast Surg** 1986 Jan;16(1):42–8

Vimentin-positive squamous cell carcinoma arising in a burn scar. A highly malignant neoplasm composed of acantholytic round keratinocytes. Ikegawa S, et al. **Arch Dermatol** 1989 Dec;125(12):1672–6

Scar carcinomas of the lung in a histoplasmosis endemic area. Yoneda K. **Cancer** 1990 Jan 1;65(1):164–8

Desmoplastic trichoepithelioma nosology. Reappraisal about a case developed on a varicella scar. Blanc D, et al. **Dermatologica** 1990;180(1):44–7

Pretibial myxedema localized to scar tissue. Wright AL, et al. **Int J Dermatol** 1990 Jan-Feb;29(1):54–5

Cancers arising from burn scars. A literature review and report of twenty-one cases. Bartle EJ, et al. **J Burn Care Rehabil** 1990 Jan-Feb;11(1):46–9 (45 ref.)

Scar-associated malignant melanoma and squamous carcinoma in situ. Walker AN, et al. **South Med J** 1989 Nov;82(11):1419–21

[Scalp expansion in the treatment of cicatricial alopecia] Jin YT. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1990 Mar;6(1):22–3, 74–5 (Eng. Abstr.) **(Chi)**

[Prevention, early diagnosis and treatment of carcinoma developing at a postburn scar] Lu KH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Dec;1(4):258–60 **(Chi)**

[Delivery in the scarred uterus. Apropos of 606 cases in 62,193 deliveries] Picaud A, et al. **Rev Fr Gynecol Obstet** 1990 Jun;85(6):387–92 (Eng. Abstr.) **(Fre)**

[Radiologic diagnosis of silicotic cicatricial cancer. Incidence and correlation with pathologic-anatomic results] Tschakert H, et al. **Radiologe** 1990 Apr;30(4):172–7 (Eng. Abstr.) **(Ger)**

[Endometriosis on a cesarean cicatrix. Apropos of 3 cases] Sartori CA, et al. **Minerva Chir** 1989 Sep 30;44(18):2043–5 (Eng. Abstr.) **(Ita)**

[Complications after surgical treatment of post-burn cicatricial deformities in children] Vozdvizhenskiĭ SI, et al. **Khirurgiia (Mosk)** 1989 Nov;(11):107–10 **(Rus)**

[Treatment of postburn cicatricial deformations and contractures of the neck] Iudenich AA, et al. **Sov Med** 1989;(7):34–8 (Eng. Abstr.) **(Rus)**

[Laser recanalization of cicatricial stricture of esophagogastric anastomosis] Mamontov AS, et al. **Sov Med** 1989;(8):115–6 **(Rus)**

[Classification of post-burn cicatricial deformities of the neck and chest and clinico-anatomic substantiation of the use of cutaneofascial flaps from the thoracic wall] Iudenich AA, et al. **Vestn Khir** 1989 Nov;143(11):90–3 **(Rus)**

[Cicatricial stenosis of the pharynx, esophagus and stomach after chemical burns] Mumladze RB. **Vestn Khir** 1989 Apr; 142(4):106–8 **(Rus)**

[Surgical treatment of postburn cicatricial inversions of the lower eyelids with involvement of the lid edge and conjunctival ectopia] Grishkevich VM, et al. **Vestn Oftalmol** 1989 Jul-Aug;105(4):33–8 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Gd-DTPA enhanced MR imaging of the breast in patients with postoperative scarring and silicon implants. Heywang SH, et al. **J Comput Assist Tomogr** 1990 May-Jun; 14(3):348–56

Pigmented streaks in melanoma scars. Ho VC, et al. **J Dermatol Surg Oncol** 1990 Jul;16(7):663–6

[Magnetic resonance tomography using gadolinium-DTPA in the diskectomy syndrome—a reliable method of identifying a recurrent prolapse in scar tissue] Majewski A, et al. **Rontgenblatter** 1989 Dec;42(12):499–504 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Ocular cicatricial disease. Drug effects in vitro on cell proliferation, contraction, and viability. Heath TD, et al. **Invest Ophthalmol Vis Sci** 1990 Jul;31(7):1245–51

[The effect of chondroitin sulfate preparations on wound healing and the strength of the surgical scar] Fialkova MA, et al. **Biull Eksp Biol Med** 1989 Sep;108(9):350–1 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Incidence of hypertrophic scarring in burn-injured children. Spurr ED, et al. **Burns** 1990 Jun;16(3):179–81

ETIOLOGY

Cutaneous anthrax leading to corneal scarring from cicatricial ectropion. Yorston D, et al. **Br J Ophthalmol** 1989 Oct; 73(10):809–11

BCG vaccination and development of a scar. Sivarajah N, et al. **Ceylon Med J** 1990 Jun;35(2):75–7

The scars of newborn intensive care. Cartlidge PH, et al. **Early Hum Dev** 1990 Jan;21(1):1–10

Gluteal pouching: a complication of perineal burn scar contracture. A case report. Alghanem AA, et al. **J Burn Care Rehabil** 1990 Mar-Apr;11(2):137–9

Microcirculation in hypertrophic scars after burn injury. Leung KS, et al. **J Burn Care Rehabil** 1989 Sep-Oct; 10(5):436–44

Bacterial attachment as a predictor of renal abnormalities in boys with urinary tract infection. de Man P, et al. **J Pediatr** 1989 Dec;115(6):915–22

Relation of urinary tract infection and vesicoureteral reflux to scars: follow-up of thirty-eight patients. Holland NH, et al. **J Pediatr** 1990 May;116(5):S65–71

Eyelid complications in trachoma. I. Cicatricial entropion. Nasr AM. **Ophthalmic Surg** 1989 Nov;20(11):800–7

*U.S. GOVERNMENT PRINTING OFFICE: 1991—281-855

